RHI MAY 2016

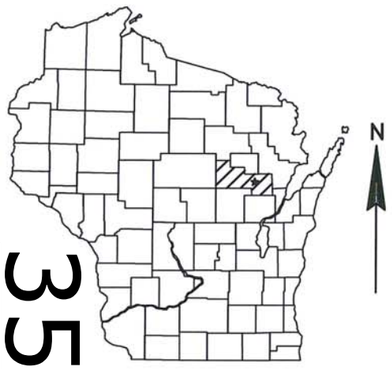
PROJECT ID: WITH: 6243-07-70, 6243-07-71

COUNTY: SHAWANO

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 = 310



35

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CITY OF SHAWANO, AIRPORT DRIVE

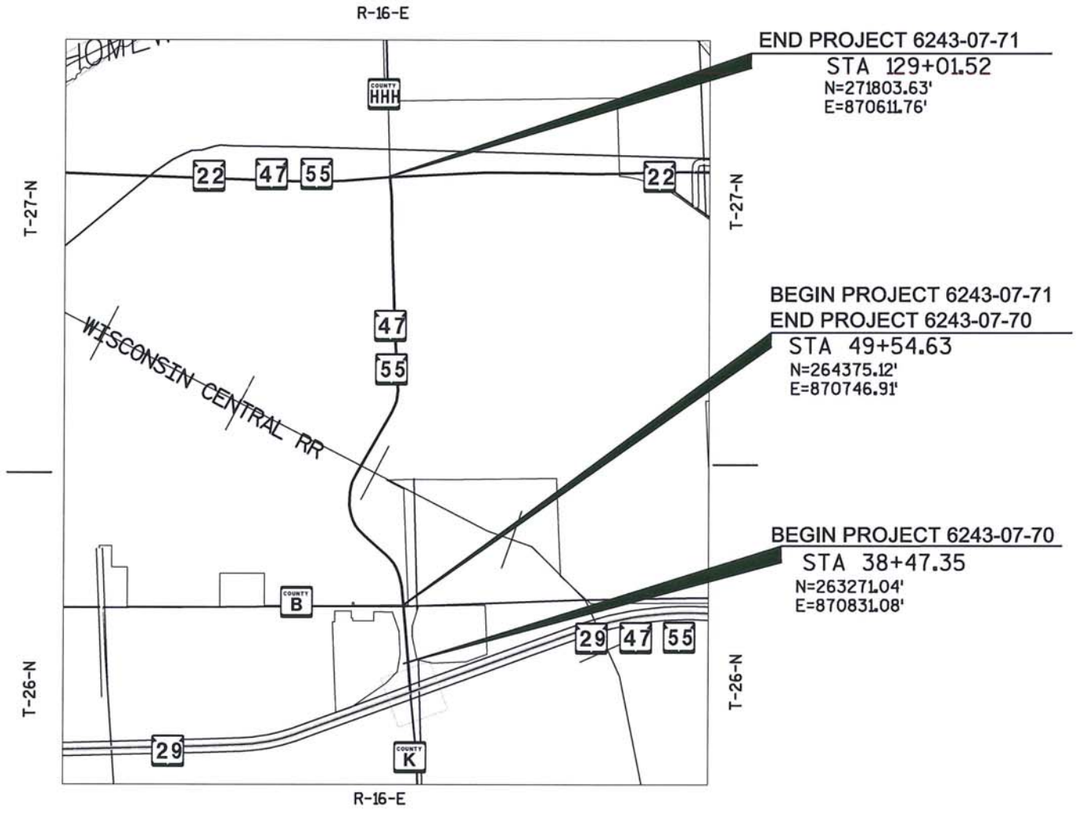
STH 29 TO CTH B
STH 47
SHAWANO COUNTY

STATE PROJECT NUMBER
6243-07-70

CTH B TO STH 22
STH 47
SHAWANO COUNTY

STATE PROJECT NUMBER
6243-07-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6243-07-70	WISC 2016177	1
6243-07-71	WISC 2016178	1



LAYOUT
SCALE 0 0.5 MI.

6243-07-70 TOTAL NET LENGTH OF CENTERLINE = 0.210 MI.
6243-07-01 TOTAL NET LENGTH OF CENTERLINE = 1.505 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), SHAWANO COUNTY.
ELEVATIONS ON THIS PLAN ARE REFERENCED TO NAVD 88

DESIGN DESIGNATION 6243-07-70 6243-07-71

A.A.D.T.	2016	=	9000	6900
A.A.D.T.	2036	=	11100	8400
D.H.V.		=	-----	-----
D.D.		=	64/36	64/36
T.		=	5.7%	5.7%
DESIGN SPEED		=	50 MPH	50 MPH
ESALS		=	-----	-----

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
CITY of SHAWANO
1-22-16 (Date)
(Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
QUEST
Civil Engineers, LLC
320 West Grand Ave, Suite 302
Wisconsin Rapids, WI 54495

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
- Surveyor: QUEST Civil Engineers
- Designer: QUEST Civil Engineers
- Project Manager: JIM VOLKMAN
- Regional Examiner: CHERYL SIMON
- Regional Supervisor: MIKE WENDT

APPROVED FOR THE DEPARTMENT
DATE: 1/26/2016 (Signature)

E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\010101_TI_6243-07-70.DWG PLOT DATE : 8/5/2011 11:50 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : ----------

WISDOT/CADDS SHEET 10

HMA PAVEMENT LAYER THICKNESS

TOTAL LAYER THICKNESS	LAYERS	HMA PAVEMENT	LOCATION
2″	2″ UPPER LAYER	4 MT 58-28 H	STH 47 STA 38+47-STA 49+27 ENGEL DR BEAUPREY RD EAST RICHMOND ST
4″	1.75″ UPPER LAYER 2.25″ LOWER LAYER	4 MT 58-28 H 3 MT 58-28 S	STH 47 STA 49+27-STA 129+00 CTH B

GENERAL NOTES

THE ALIGNMENT IN THIS PLAN IS BASED ON FIELD SURVEY SHOTS TAKEN ON THE CENTERLINE AND/OR EDGELINE. ACTUAL ROADWAY CENTERLINE MAY DEVIATE FROM THE PLAN. NEW HMA PAVEMENT SHALL FOLLOW EXISTING ROADWAY CENTERLINE. ANY ADJUSTMENTS SHALL BE INCIDENTAL TO OTHER ITEMS IN THE CONTRACT.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF ALL LANDMARKS, BENCHMARKS, AND OTHER CONTROL POINTS IN ALL AREAS WHERE SUCH LANDMARKS, BENCHMARKS, OR OTHER CONTROL POINTS MAY EXIST.

THE CONTRACTOR SHALL PROTECT ALL SURVEY MARKERS. SURVEY MARKERS SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

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

ALL WASTE MATERIAL RESULTING FROM THE VARIOUS CONSTRUCTION OPERATIONS SHALL BE ENTIRELY REMOVED AND PROPERLY DISPOSED OF IMMEDIATELY OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND RESTORATION (INCLUDING, BUT NOT LIMITED TO, SEED, FERTILIZER, MULCH, AND EROSION MAT) OF ANY DISTURBED AREAS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AS DETERMINED BY THE ENGINEER.

THE LOCATION 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.

MARSH LOCATIONS AND ELEVATIONS WERE DETERMINED FROM THE EXISTING AS BUILT PLANS FOR THE CORRIDOR. ACTUAL LOCATIONS AND ELEVATIONS MAY VARY FROM THE PLAN.

PRESERVE ALL EXISTING DRIVEWAY ACCESS CURB CUTS AS IDENTIFIED IN THE FIELD, EXCEPT FOR THOSE LOCATIONS TO BE MODIFIED AS SHOWN IN THE PLAN.

DNR CONTACT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: JIM DOPERALSKI JR.
2984 SHAWANO AVE
GREEN BAY, WI 54313
TELEPHONE: (920) 662-5119
EMAIL: james.doperalski@wisconsin.gov

UTILITY CONTACTS

ATC MANAGEMENT, INC, - ELECTRIC TRANSMISSION
ATTN: DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
608-877-7650
dvosberg@atcllc.com

FRONTIER COMMUNICATIONS OF WI, LLC – COMMUNICATION
ATTN: JAMES A JASKOLSKI
26 W 12TH ST
CLINTONVILLE, WI 54929
715-823-1227
james.jaskolski@ftr.com

SHAWANO LAKE SANITARY DISTRICT 1 – SANITARY SEWER
ATTN: BRUCE SCHULTZ
PO BOX 452
SHAWANO, WI 54166
OFFICE: 715-524-2176
CELL: 715-853-6435
shawls@granitewave.com

SHAWANO LAKE SANITARY DISTRICT 1- WATER
ATTN: BRUCE SCHULTZ
PO BOX 452
SHAWANO, WI 54166
OFFICE: 715-524-2176
CELL: 715-853-6435
shawls@granitewave.com

SHAWANO MUNICIPAL UTILITIES - ELECTRICITY
ATTN: ROBERT KOEPP
122 NORTH SAWYER STREET
PO BOX 436
SHAWANO, WI 54166-0436
OFFICE: 715-701-8983
CELL: 715-853-9314
rkoepp@shawanonet.net

SHAWANO MUNICIPAL UTILITIES – SANITARY SEWER
ATTN: SCOTT KROENING
2905 EAST RICHMOND STREET
SHAWANO, WI 54166
OFFICE: 715-526-3512
CELL: 715-853-6238
skroening@shawanonet.net

SHAWANO MUNICIPAL UTILITIES – WATER
ATTN: SCOTT KROENING
2905 EAST RICHMOND STREET
SHAWANO, WI 54166
OFFICE: 715-526-3512
CELL: 715-853-6238
skroening@shawanonet.net

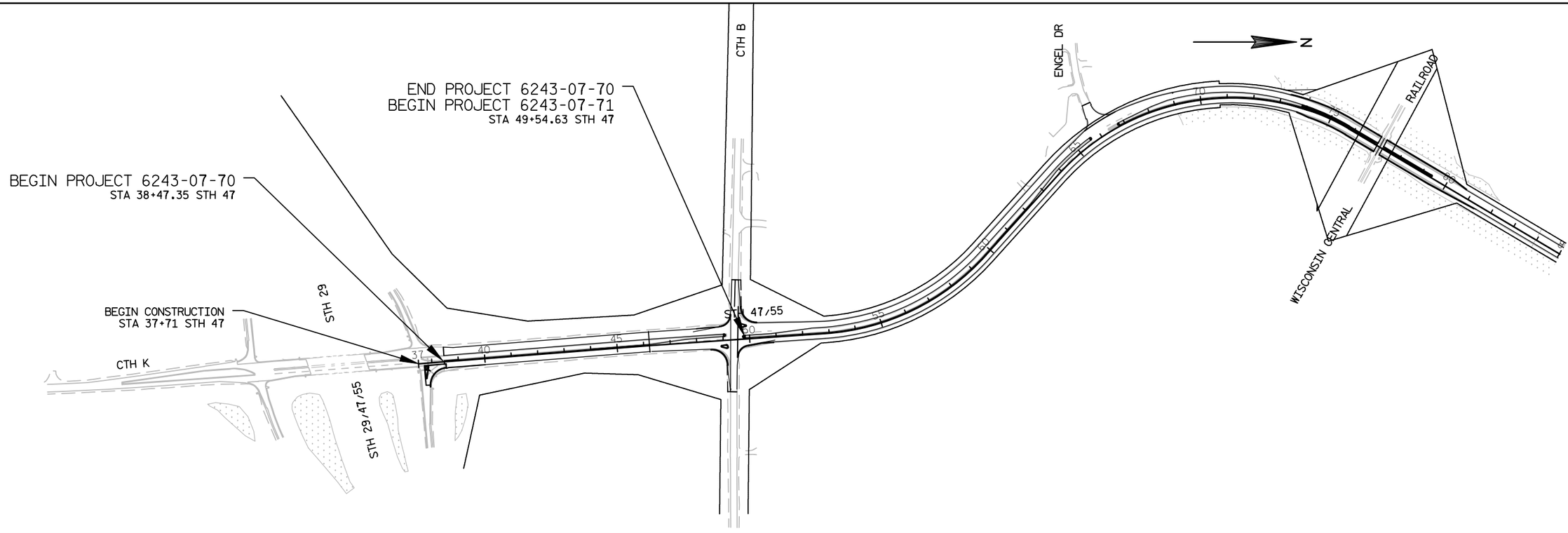
WE ENERGIES - ELECTRICITY
ATTN: STEVE ARMSTRONG
800 SOUTH LYNNDALE DRIVE
APPLETON, WI 54912-1699
OFFICE: 920-380-3563
steven.armstrong@we-energies.com

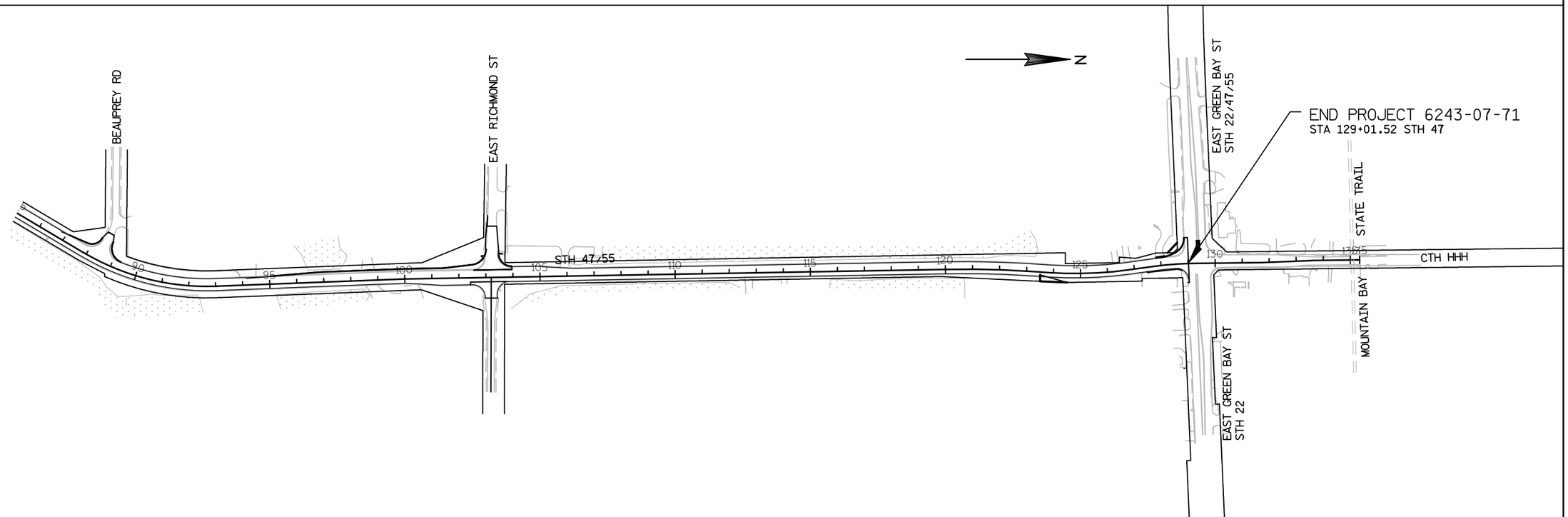
WE ENERGIES - GAS
ATTN: TOM BORCHART
800 SOUTH LYNNDALE DRIVE
APPLETON, WI 54912-1699
OFFICE: 920-380-3449
thomas.borchart@we-energies.com

PAVEMENT CORING LOG

CORE NO.	STA	OFFSET FROM NB REF LINE	PAVEMENT THICKNESS (INCHES)	BASE COURSE DEPTH (INCHES)
1	59+17	0.1' LT	3.5	4
2	59+58	44.9' LT	3.75	5.5
3	75+29	9.9' RT	3.25	4.25
4	88+26	5.2' LT	4.375	6.5
5	91+73	24.8' LT	2.5	7
6	113+14	15.2' LT	3.5	6*
* 1/2" SAND BETWEEN BASE AND ASPHALT				

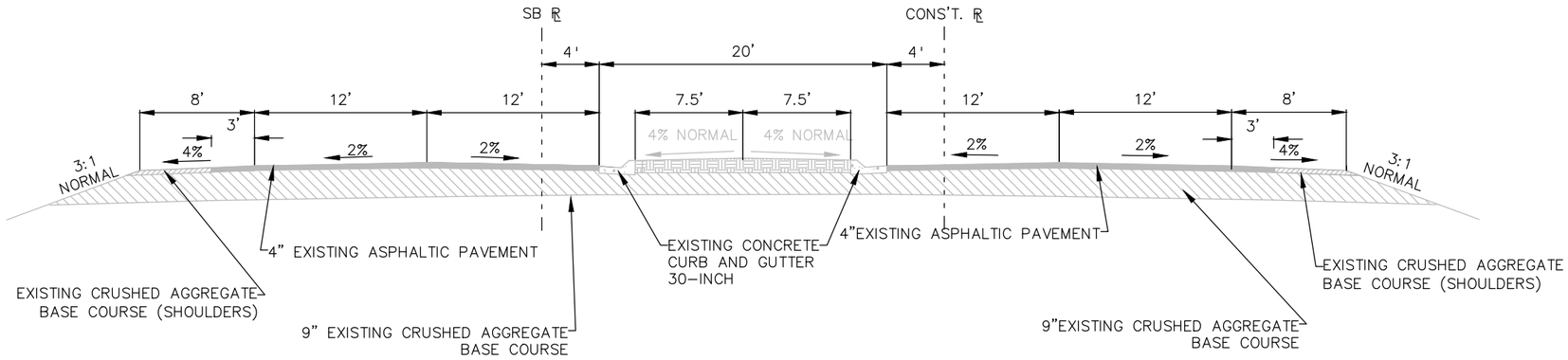
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com





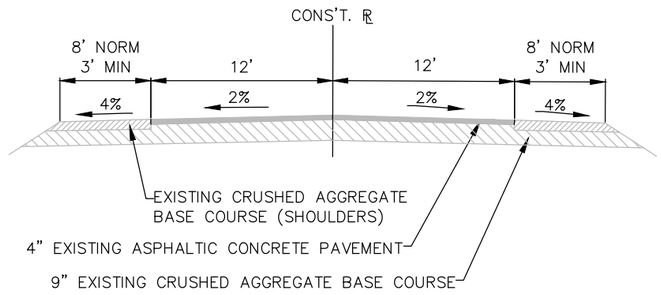
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\020201_PO_6243-07-70.DWG PLOT DATE : 1/7/2016 8:53 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : ---------- PLOT SCALE : 1" = 400'_XREF
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

STH 47 STA 38+47 – STA 49+54



EXISTING TYPICAL SECTION

CTH B STA 7+75 – STA 11+96

LEGEND

EXIST

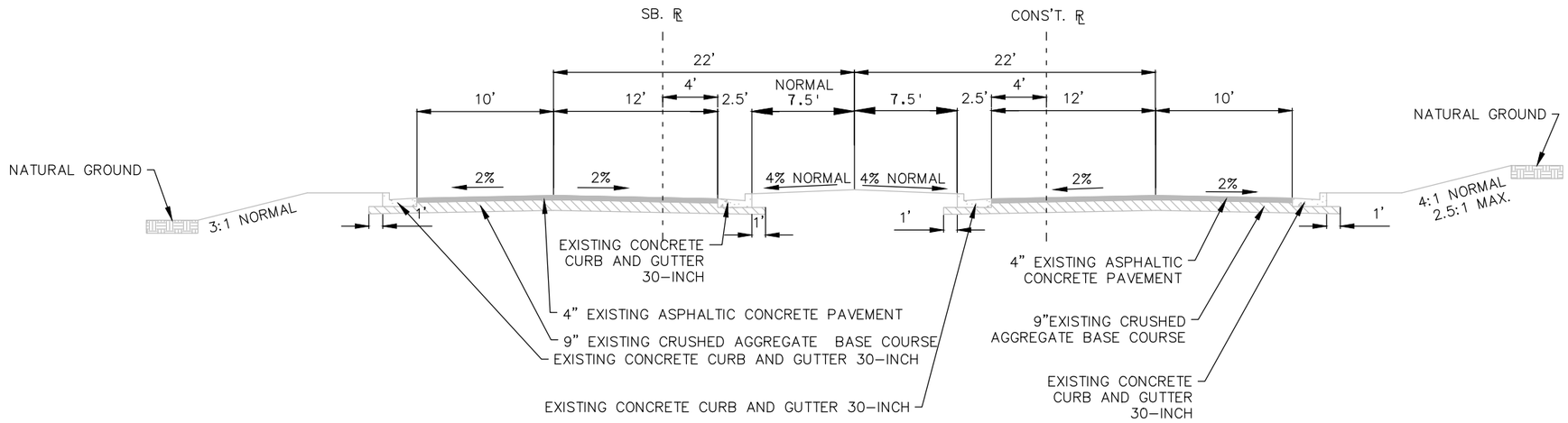
- P.C.C. PAVEMENT
- BASE AGGREGATE DENSE
- ASPHALTIC PAVEMENT
- BASE AGGREGATE DENSE (SHOULDERS)
- TOPSOIL

NOTE: EXISTING PAVEMENT DEPTHS ARE APPROXIMATE FROM AS-BUILT PLANS. ACTUAL FIELD MEASUREMENTS MAY DIFFER.

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 4	E

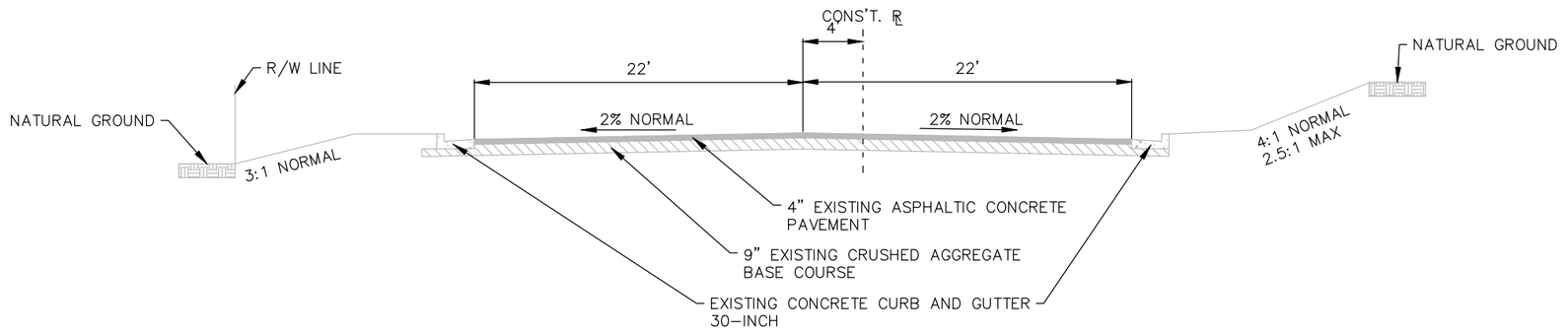
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\020301_TS_6243-07-70.DWG PLOT DATE : 3/9/2016 9:38 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : _____ PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



EXISTING TYPICAL SECTION

STH 47 STA 49+54 – STA 74+00



EXISTING TYPICAL SECTION

STH 47 STA 74+00 – STA 129+02

LEGEND

EXIST

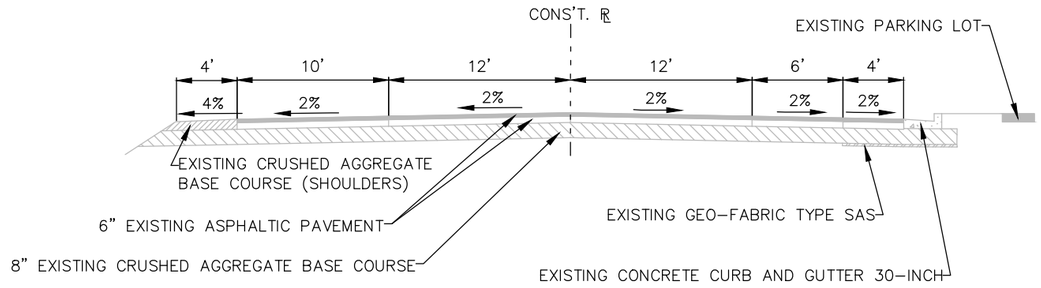
- P.C.C. PAVEMENT
- BASE AGGREGATE DENSE
- ASPHALTIC PAVEMENT
- BASE AGGREGATE DENSE (SHOULDERS)
- TOPSOIL

NOTE: EXISTING PAVEMENT DEPTHS ARE APPROXIMATE FROM AS–BUILT PLANS. ACTUAL FIELD MEASUREMENTS MAY DIFFER. SEE CORING LOG FOR MORE INFORMATION.

PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 5	E

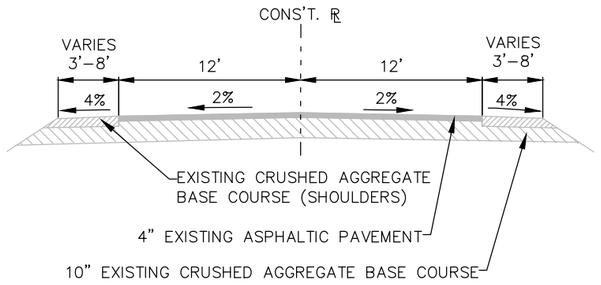
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243–07–00 (STH 47)\C3D\SHEETSPLAN\020301_TS_6243–07–70.DWG PLOT DATE : 3/9/2016 9:38 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : _____ PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



EXISTING TYPICAL SECTION

CTH HHH STA 129+70 – STA 132+00



EXISTING LOCAL ROAD TYPICAL SECTION

ENGEL ROAD
BEAUPREY ROAD
EAST RICHMOND STREET

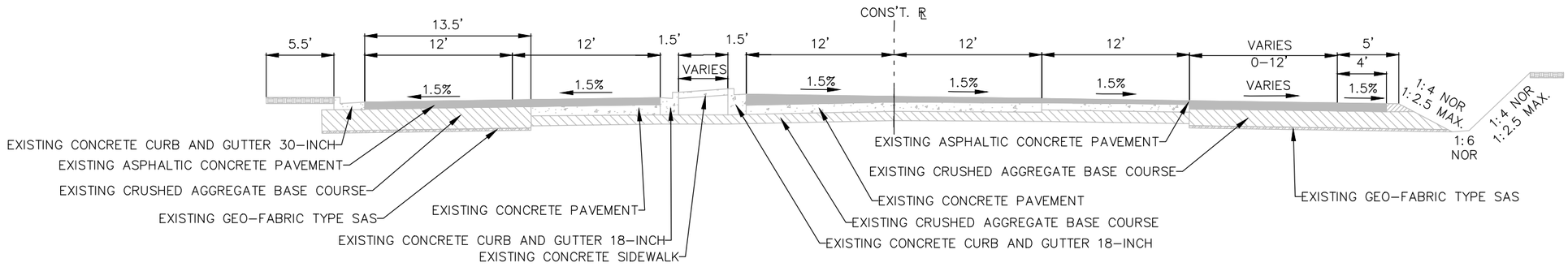
LEGEND

EXIST

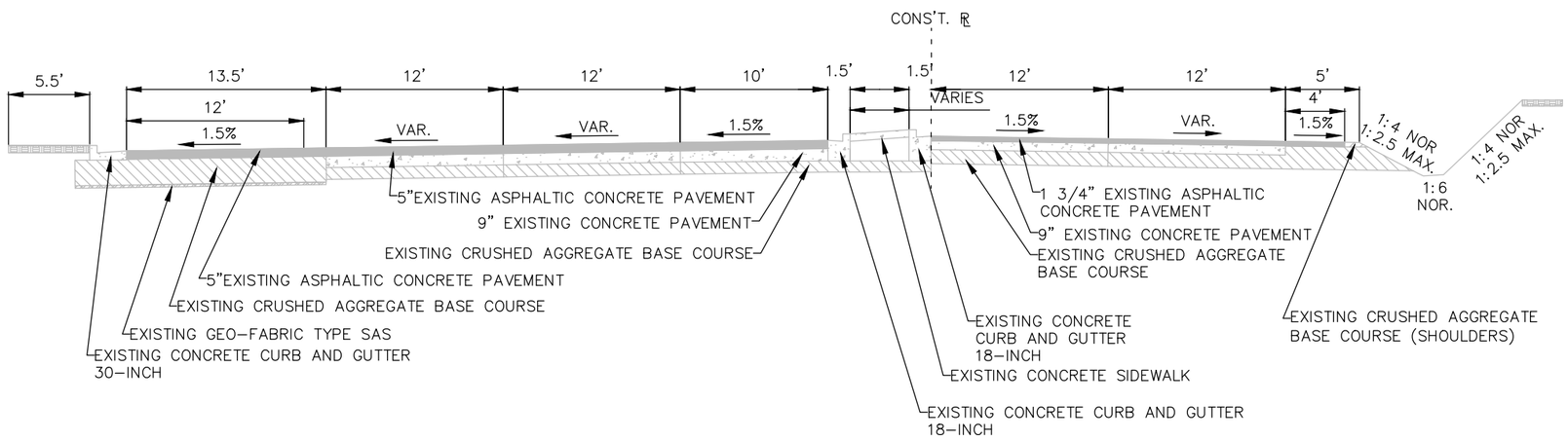
- P.C.C. PAVEMENT
- BASE AGGREGATE DENSE
- ASPHALTIC PAVEMENT
- BASE AGGREGATE DENSE (SHOULDERS)
- TOPSOIL

NOTE: EXISTING PAVEMENT DEPTHS ARE APPROXIMATE FROM AS-BUILT PLANS. ACTUAL FIELD MEASUREMENTS MAY DIFFER. SEE CORING LOG FOR MORE INFORMATION.

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 6	E



EXISTING TYPICAL SECTION
STH 22 STA 18+05S – STA 19+50S



EXISTING TYPICAL SECTION
STH 22 STA 20+39S – STA 21+95S

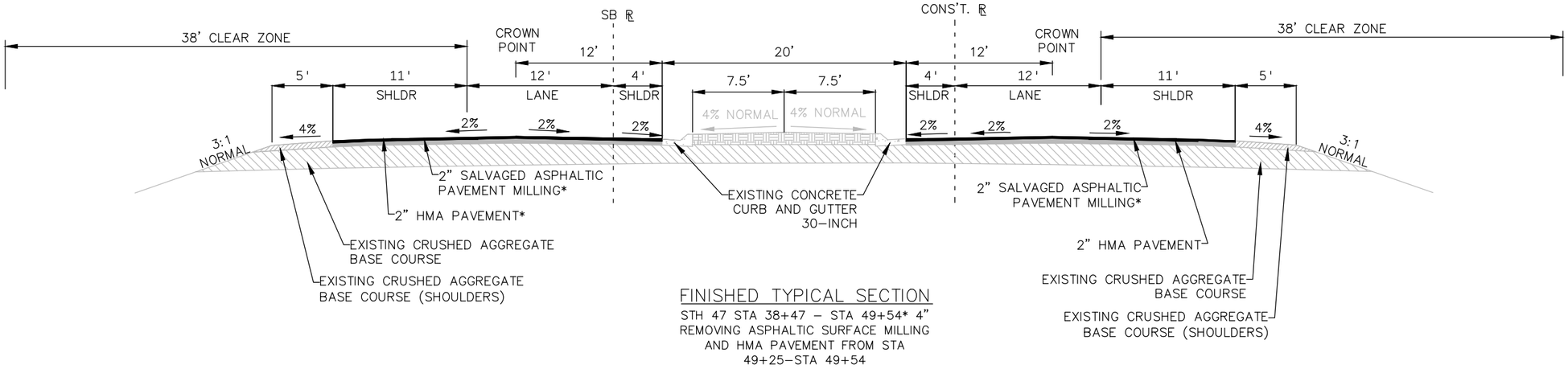
LEGEND

EXIST

- P.C.C. PAVEMENT
- BASE AGGREGATE DENSE
- ASPHALTIC PAVEMENT
- BASE AGGREGATE DENSE (SHOULDERS)
- TOPSOIL

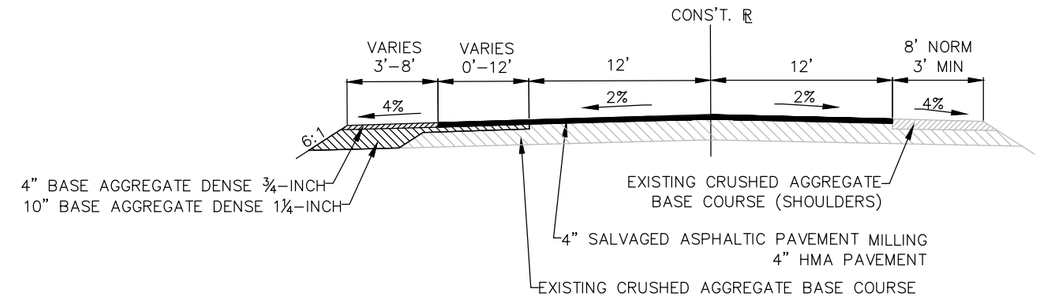
NOTE: EXISTING PAVEMENT DEPTHS ARE APPROXIMATE FROM AS–BUILT PLANS. ACTUAL FIELD MEASUREMENTS MAY DIFFER.

PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY:SHAWANO	TYPICAL SECTION	SHEET 7	E



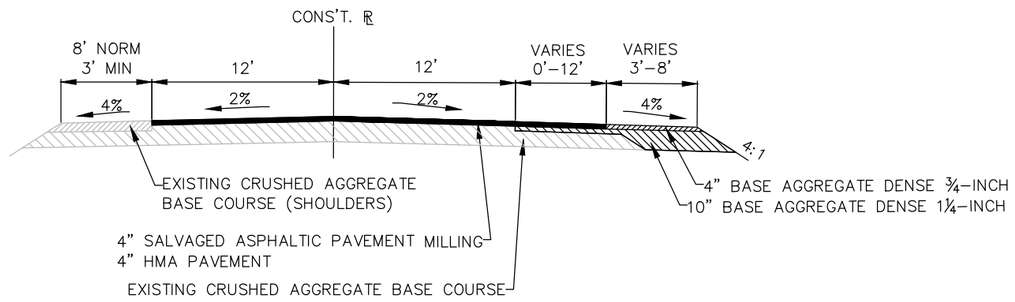
FINISHED TYPICAL SECTION

STH 47 STA 38+47 – STA 49+54* 4" REMOVING ASPHALTIC SURFACE MILLING AND HMA PAVEMENT FROM STA 49+25–STA 49+54



FINISHED TYPICAL SECTION

CTH B STA 7+75 – STA 09+40



FINISHED TYPICAL SECTION

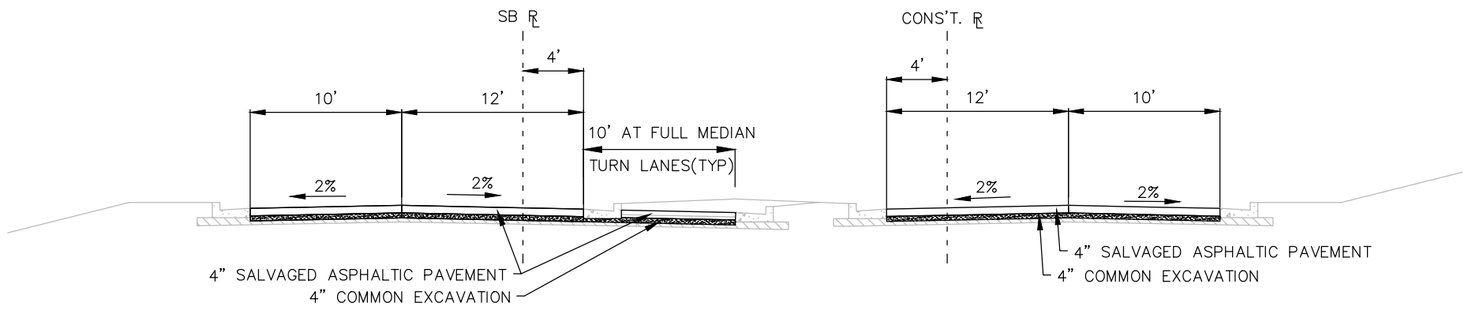
CTH B STA 10+30 – STA 11+96

LEGEND

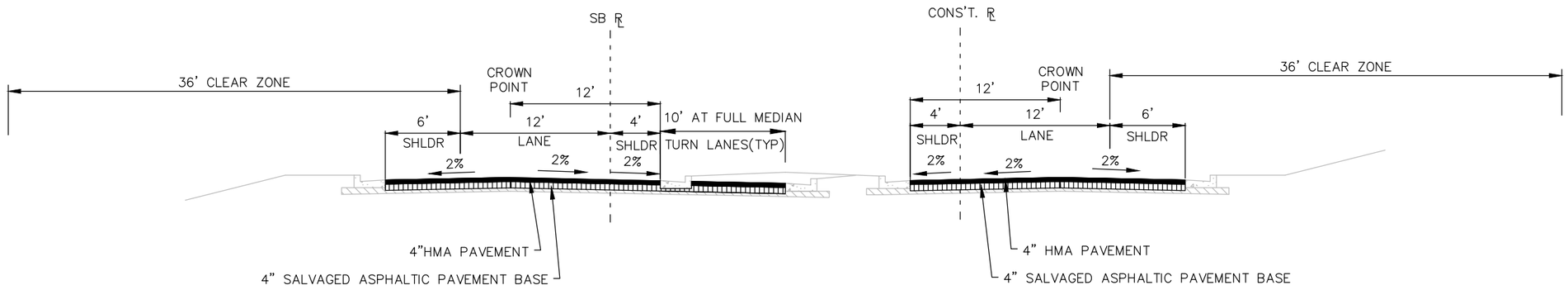
EXIST PROP

- SALVAGED ASPHALTIC PAVEMENT BASE
- COMMON EXCAVATION
- HMA PAVEMENT
- BASE AGGREGATE DENSE 1¼–INCH
- BASE AGGREGATE DENSE ¾–INCH
- TOP SOIL, SEED, FERTILIZER AND MULCH

PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 8	E



REMOVAL TYPICAL SECTION
STH 47 STA 49+54 – STA 74+01.89



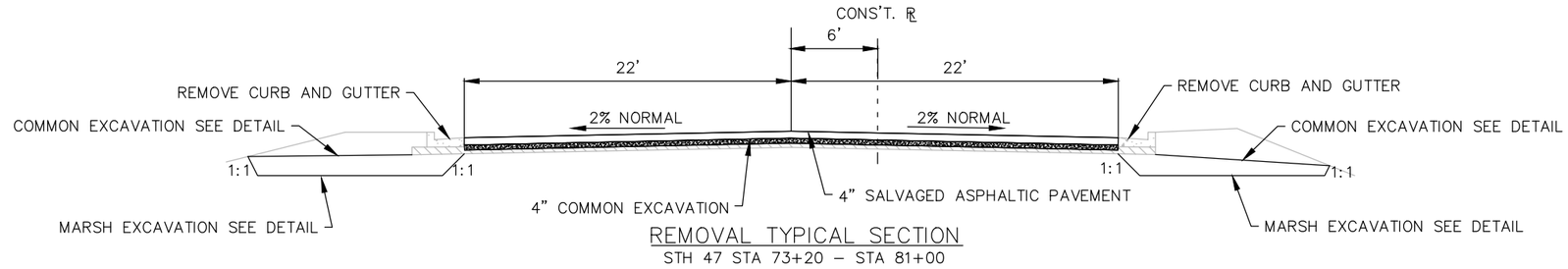
FINISHED TYPICAL SECTION
STH 47 STA 49+54 – STA 73+20

LEGEND

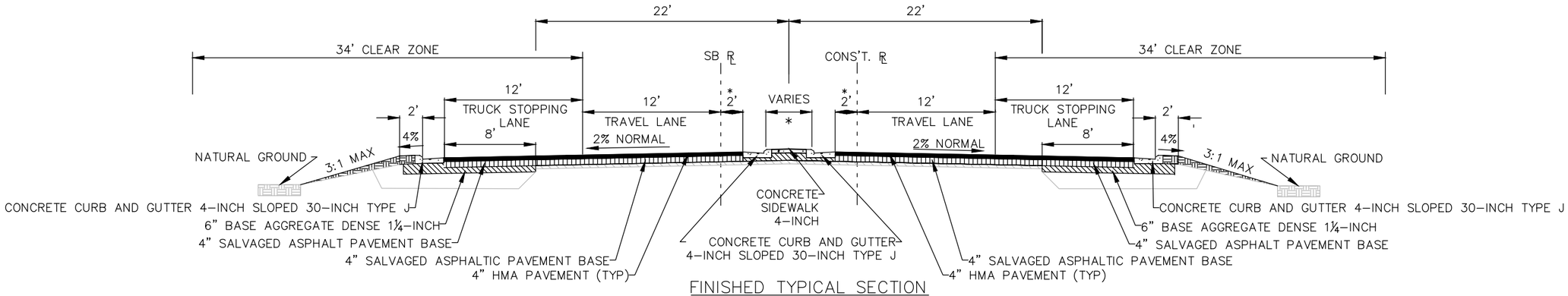
EXIST PROP

- SALVAGED ASPHALTIC PAVEMENT BASE
- STOCKPILED MATERIAL
- COMMON EXCAVATION
- HMA PAVEMENT
- BASE AGGREGATE DENSE 1¼–INCH
- BASE AGGREGATE DENSE ¾–INCH
- TOP SOIL, SEED, FERTILIZER AND MULCH

PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 9	E



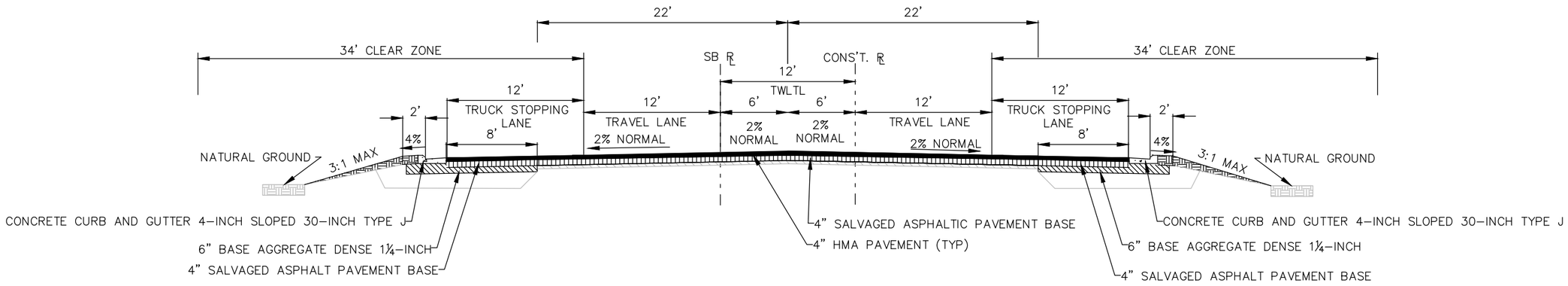
REMOVAL TYPICAL SECTION
STH 47 STA 73+20 – STA 81+00



FINISHED TYPICAL SECTION
STH 47 STA 73+20 STA 79+30

*VARIES 2'–4' STA 74+01.89 – 75+77.50 STH 47
2' TYPICAL STA 75+77.50 – 79+30 STH 47

** CONCRETE CURB AND GUTTER 18–INCH STA
76+75 TO 77+50



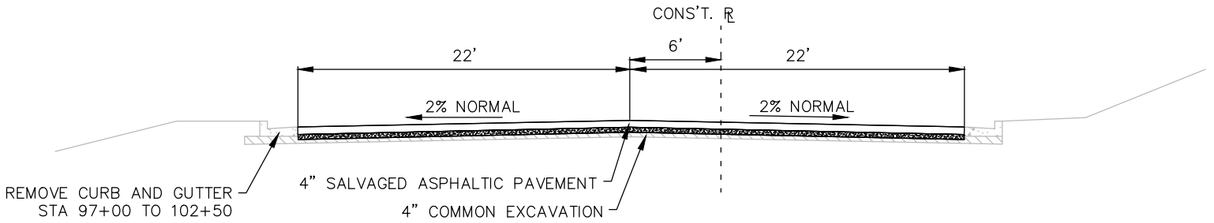
FINISHED TYPICAL SECTION
STH 47 STA 79+30 – STA 81+40

LEGEND

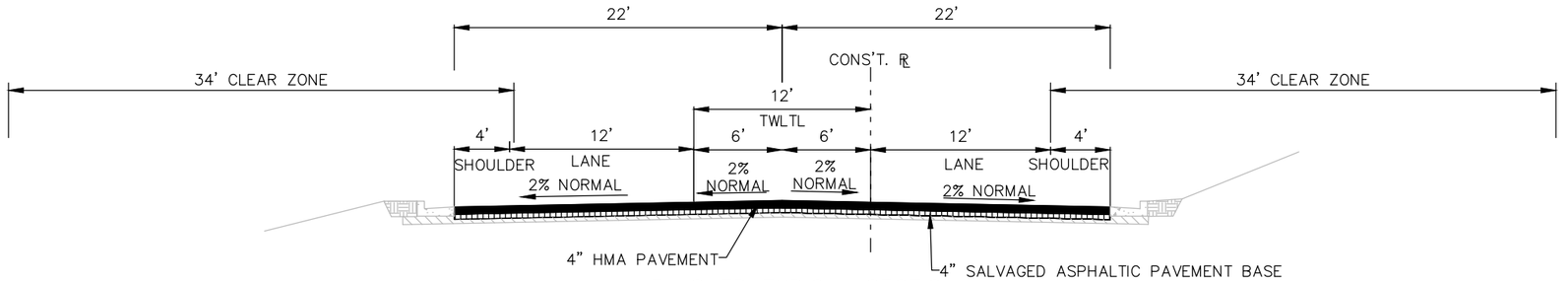
EXIST PROP

- SALVAGED ASPHALTIC PAVEMENT BASE
- COMMON EXCAVATION
- HMA PAVEMENT
- BASE AGGREGATE DENSE 1¼–INCH
- BASE AGGREGATE DENSE ¾–INCH
- TOP SOIL, SEED, FERTILIZER AND MULCH

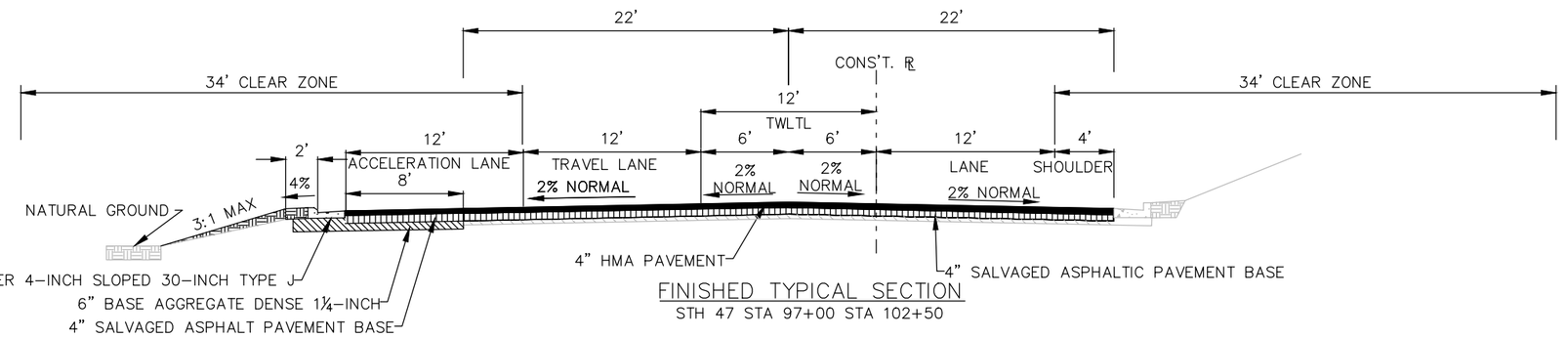
PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 10	E



REMOVAL TYPICAL SECTION
STH 47 STA 81+00 – STA 129+02



FINISHED TYPICAL SECTION
STH 47 STA 81+40 – STA 97+00
STA 102+50 –STA 129+01.52



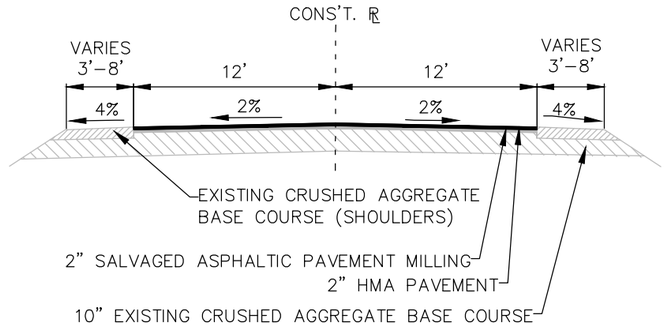
FINISHED TYPICAL SECTION
STH 47 STA 97+00 STA 102+50

LEGEND

EXIST PROP

- SALVAGED ASPHALTIC PAVEMENT BASE
- COMMON EXCAVATION
- HMA PAVEMENT
- BASE AGGREGATE DENSE 1¼–INCH
- BASE AGGREGATE DENSE ¾–INCH
- TOP SOIL, SEED, FERTILIZER AND MULCH

PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 11	E



LOCAL ROAD TYPICAL SECTION

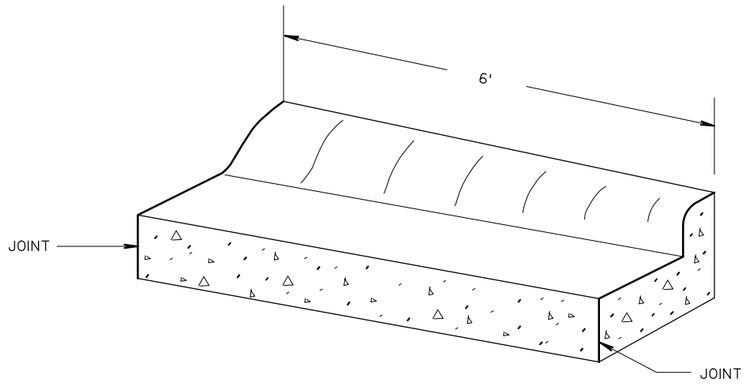
ENGEL ROAD
BEAUPREY ROAD
EAST RICHMOND STREET

LEGEND

EXIST PROP

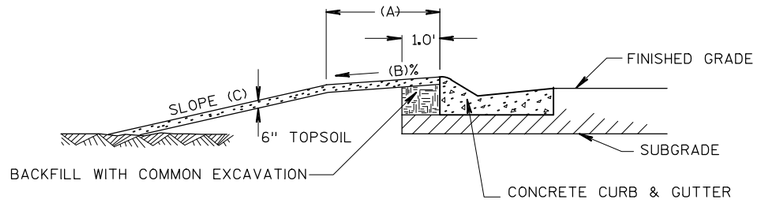
- SALVAGED ASPHALTIC PAVEMENT BASE
- STOCKPILED MATERIAL
- COMMON EXCAVATION
- HMA PAVEMENT
- BASE AGGREGATE DENSE 1¼–INCH
- BASE AGGREGATE DENSE ¾–INCH
- TOP SOIL, SEED, FERTILIZER AND MULCH

PROJECT NO:6243–07–70/71	HWY: STH 47	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 12	E



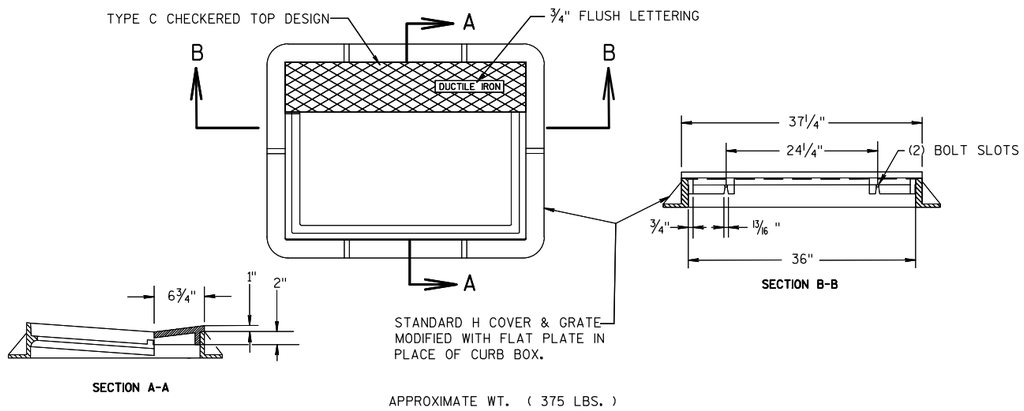
TRANSITION DETAIL

36" TYPE "D" CURB & GUTTER TO 30" TYPE "D" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" CONC. C&G)



CURB AND GUTTER AT INTERSECTIONS

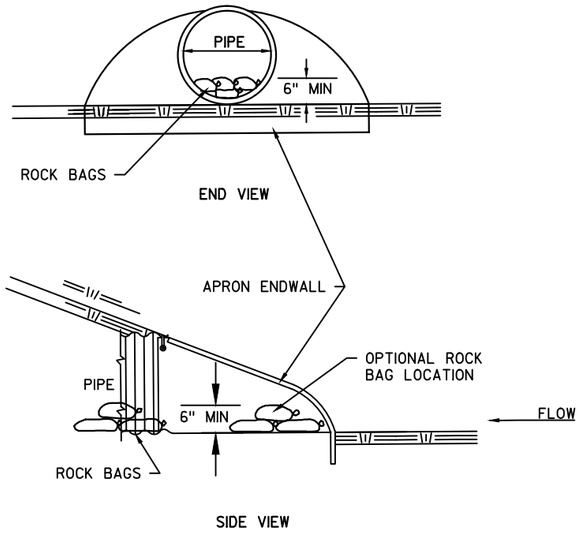
LOCATION	CURB TYPE	TERRACE WIDTH (A)	TERRACE SLOPE (B)	SLOPE (C)
STH 29 RAMP NE	HES 6 IN SLOPED 36 INCH TYPE A	3'	−2%	MATCH BEHIND EX CURB
CTH B SE	6 IN SLOPED 36 INCH TYPE D	3'	−4%	4:1
CTH B SW	6 IN SLOPED 36 INCH TYPE D	3'	−4%	10:1
CTH B NE	6 IN SLOPED 36 INCH TYPE D	3'	−4%	6%
CTH B NW	6 IN SLOPED 36 INCH TYPE D	3'	4%	10:1
BEAUPREY SW	30 INCH TYPE D	1.5'	−4%	3:1
BEAUPREY NW	30 INCH TYPE D	1.5'	4%	3:1
RICHMOND SW	4 IN SLOPED 30 INCH TYPE J	1.5'	−4%	3:1
RICHMOND NW	4 IN SLOPED 30 INCH TYPE J	1.5'	4%	3:1
STH 22 SW	6 IN SLOPED 36 INCH TYPE D	3'	4%	4:1
STH 22 SE	6 IN SLOPED 36 INCH TYPE D	MATCH 2' BEHIND CURB WITH ASPHALT		



APPROXIMATE WT. (375 LBS.)

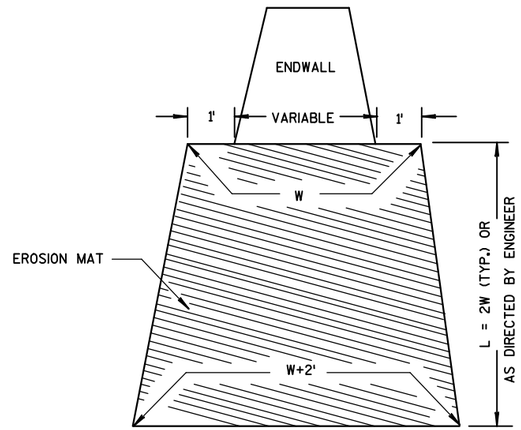
INLET COVER TYPE H-D
(WITH MOUNTABLE CURB PLATE)

2

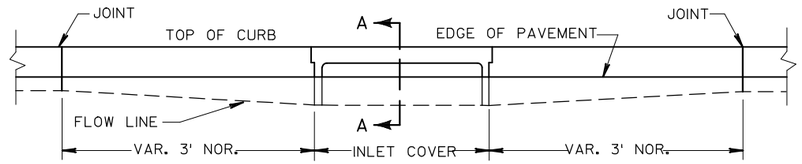


CULVERT PIPE CHECK

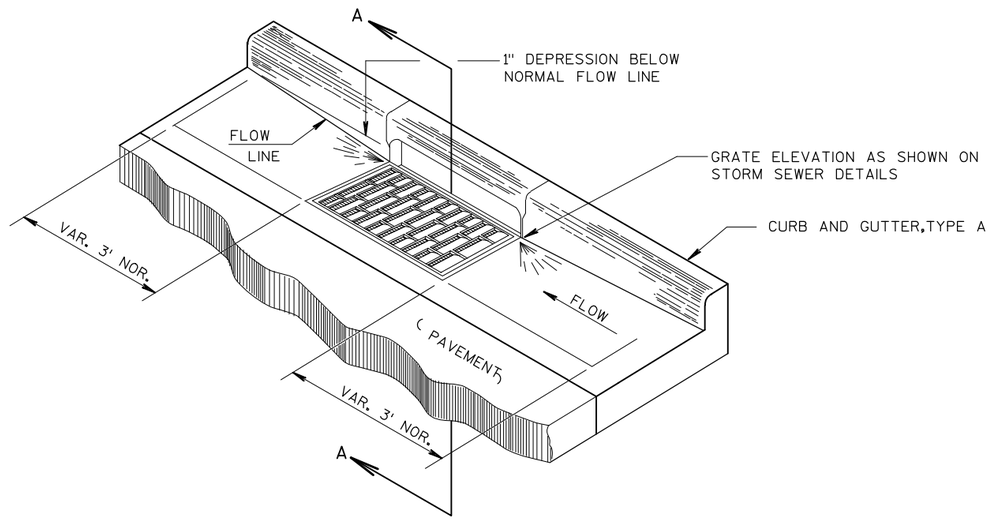
(INSTALL ON INLET END ONLY)

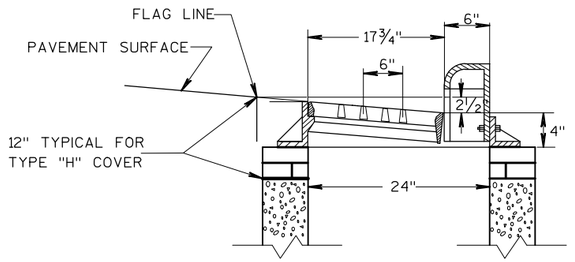


EROSION MAT TREATMENT AT CULVERTS



ELEVATION



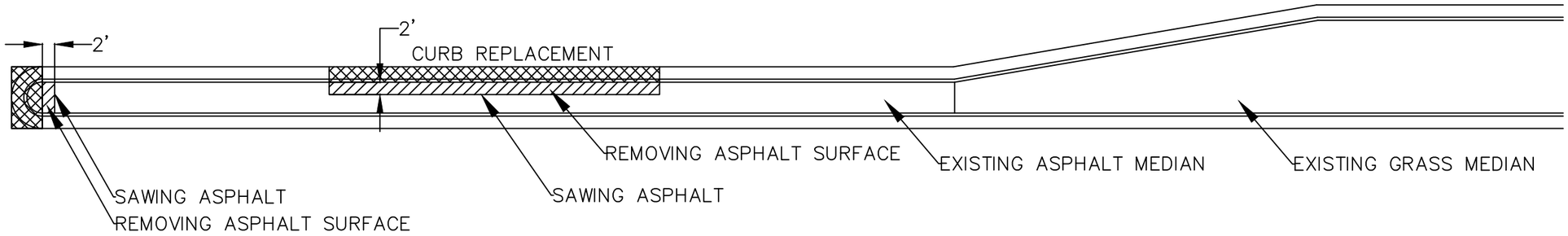


SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)

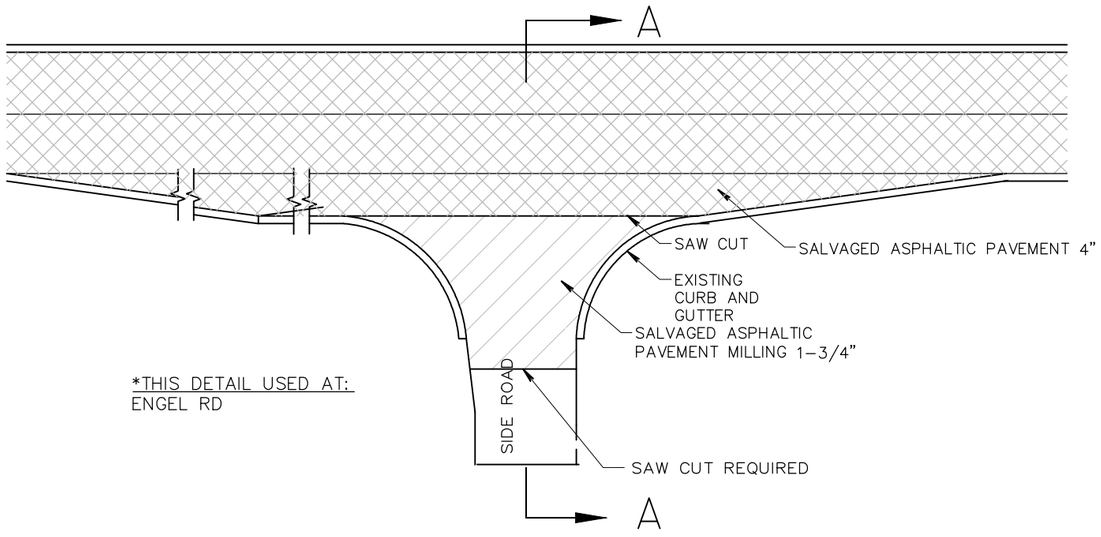
2



(PLAN VIEW)

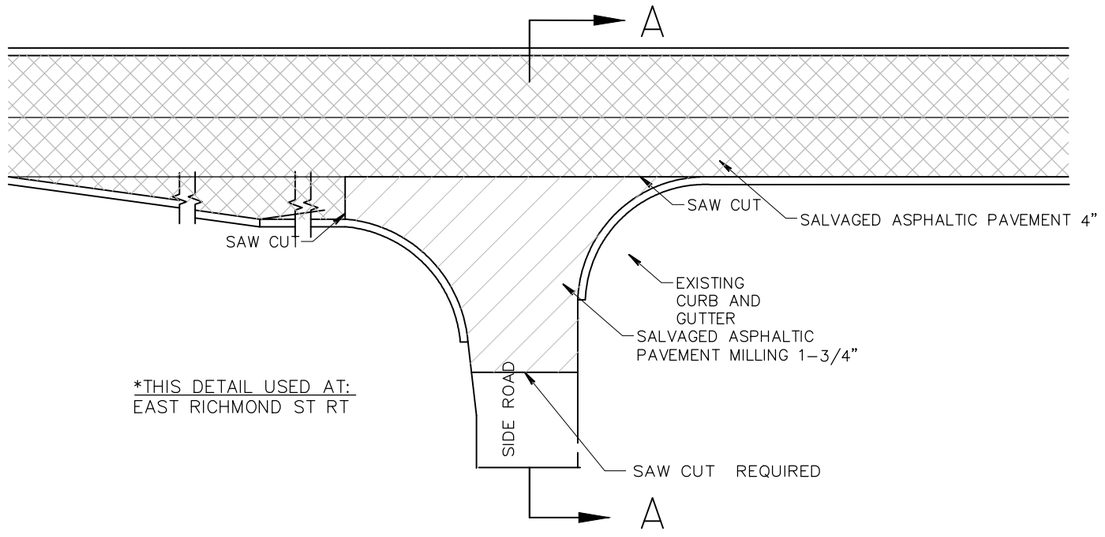
REMOVING ASPHALT IN MEDIAN AREAS

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CONSTRUCTION DETAIL	SHEET 15	E



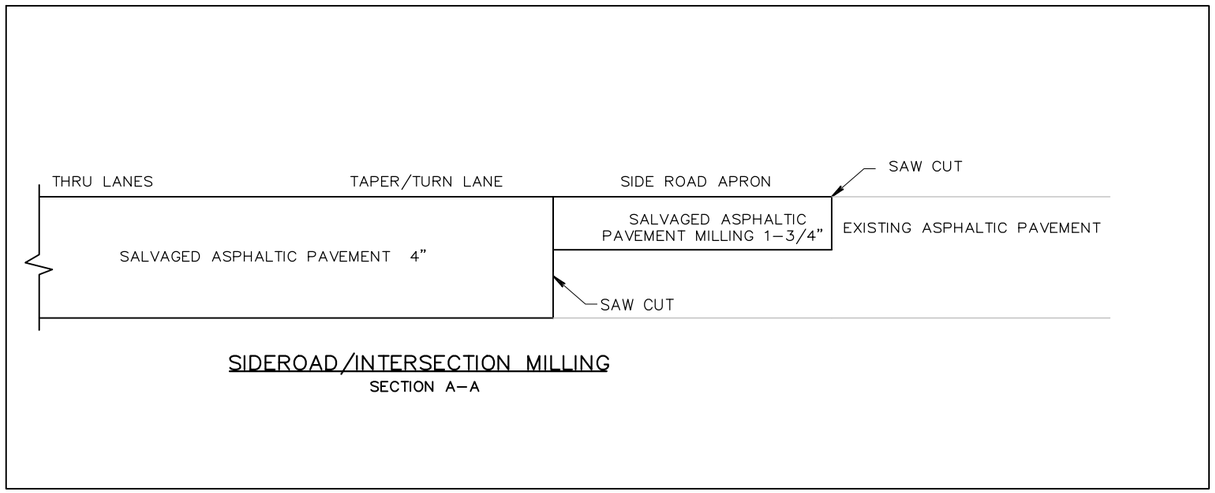
*THIS DETAIL USED AT:
ENGEL RD

(TURNING TAPERS)



*THIS DETAIL USED AT:
EAST RICHMOND ST RT

(TURN LANES)



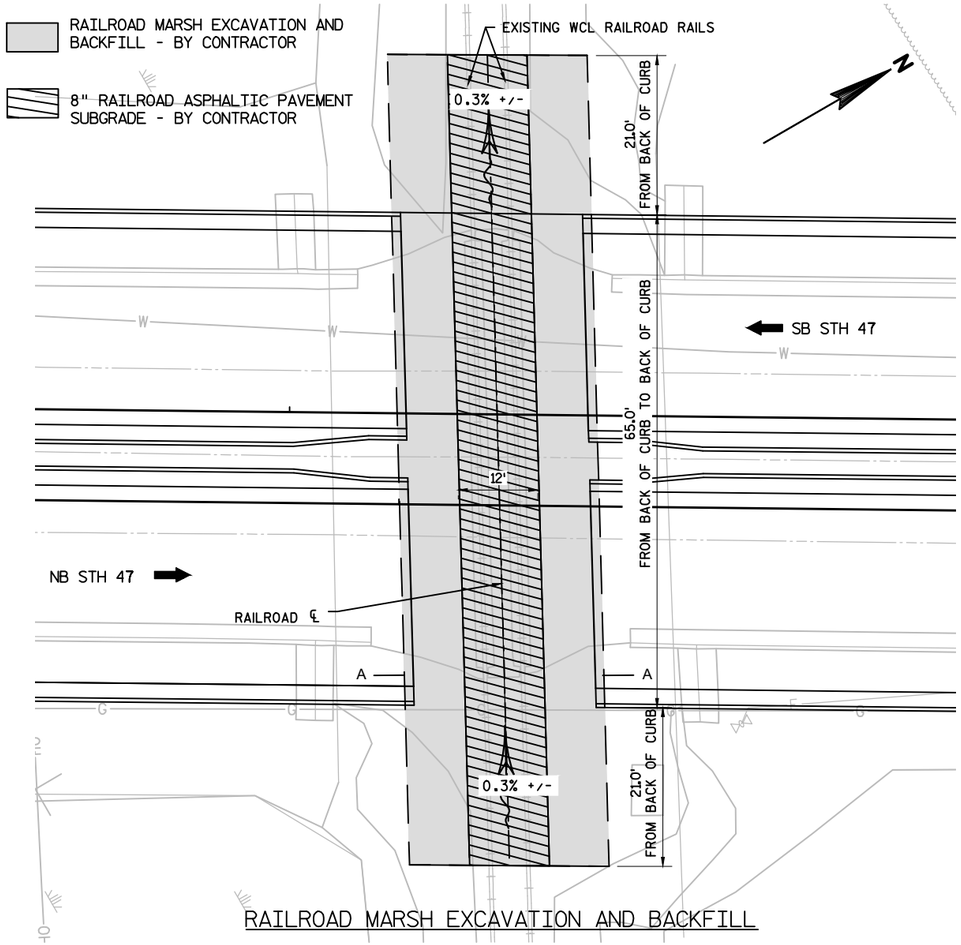
SIDEROAD/INTERSECTION MILLING
SECTION A–A

REMOVING ASPHALTIC SURFACE MILLING AT INTERSECTIONS

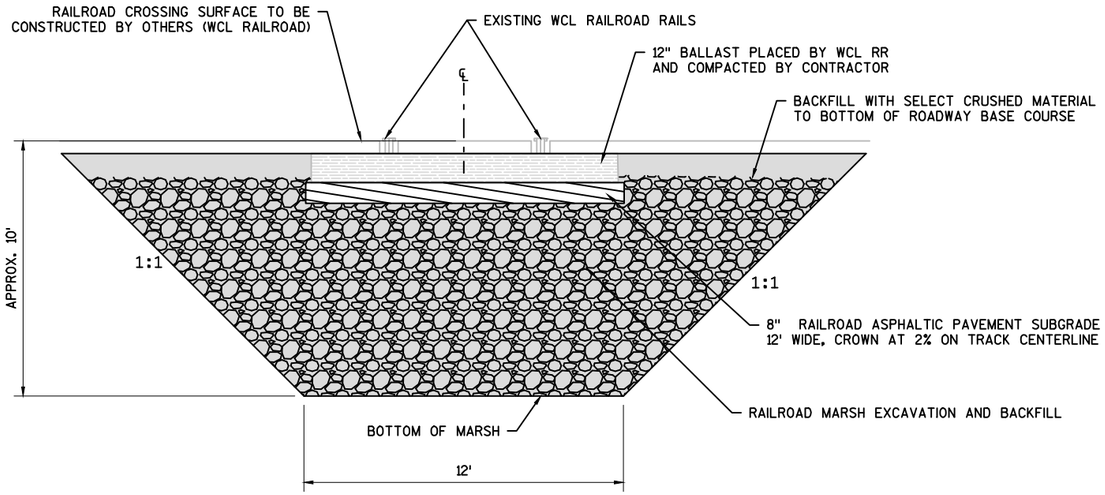
PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CONSTRUCTION DETAIL	SHEET 16	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021001_CD_6243-07-70.DWG PLOT DATE : 3/9/2016 9:50 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



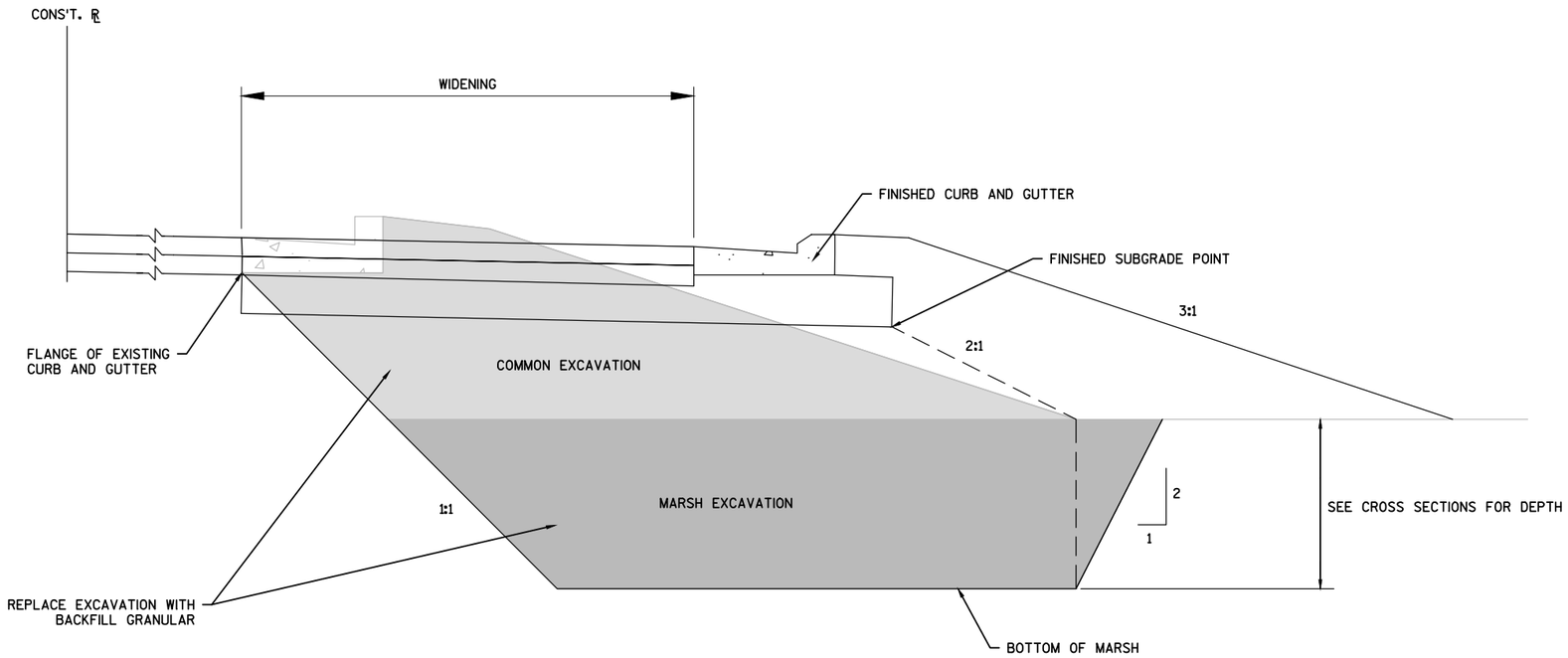
RAILROAD MARSH EXCAVATION AND BACKFILL



RAILROAD MARSH EXCAVATION AND BACKFILL
(SECTION A-A)

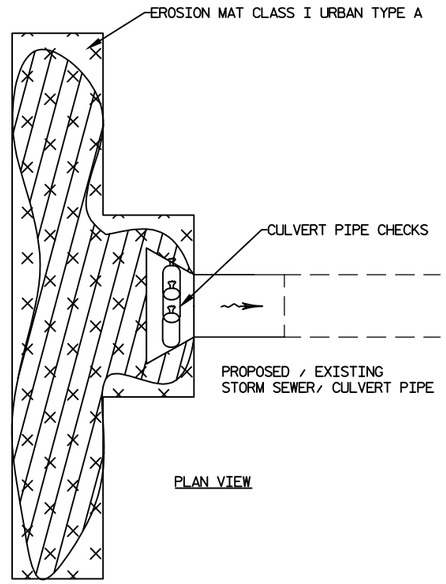
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CONSTRUCTION DETAIL:	SHEET 17	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021002_CD_6243-07-70_RR EXCAVATION.DWG PLOT DATE : 3/8/2016 7:47 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1 IN:20 FT
LAYOUT NAME - ****
WISDOT/CADDS SHEET 42



EXCAVATION MARSH

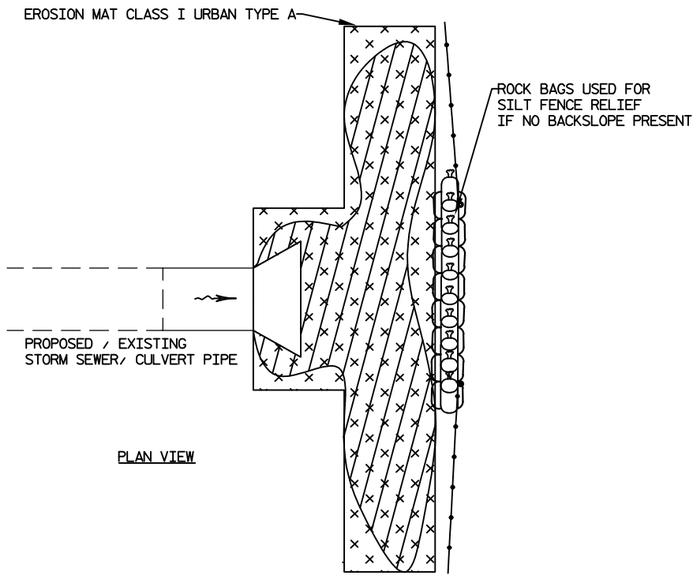
PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CONSTRUCTION DETAIL	SHEET 18	E



EROSION CONTROL AT INLET

DISTURBED AREA

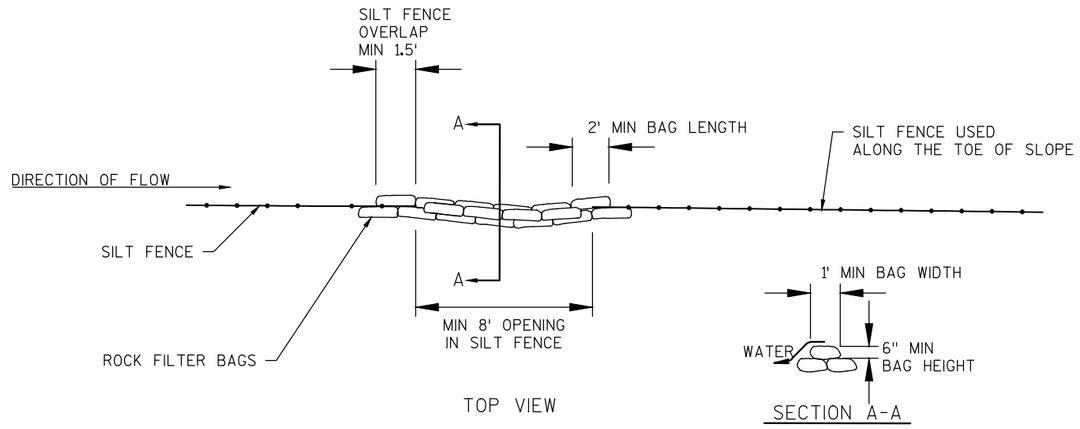
EROSION MAT URBAN CLASS I TYPE A



EROSION CONTROL AT OUTFALL

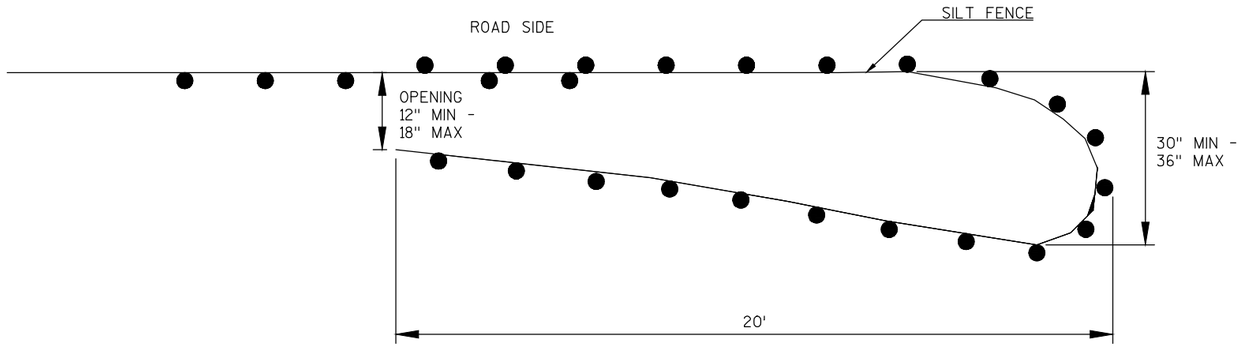
EROSION CONTROL AT APRON ENDWALLS

FOR USE IN DITCH CLEANING, PIPE EXTENSIONS AND ENDWALL REPLACEMENTS



ROCK BAGS USED FOR SILT FENCE RELIEF

2

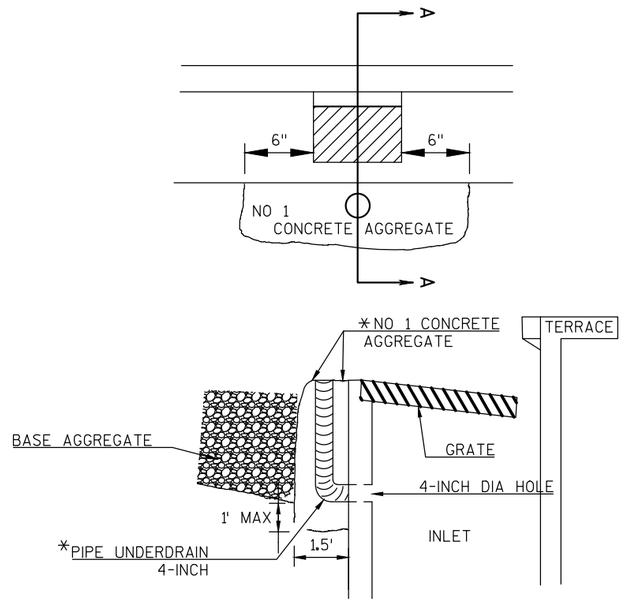


PLAN VIEW

GENERAL NOTES:

SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

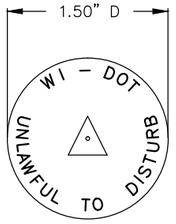
TEMPORARY SMALL ANIMAL TURN-AROUND



* INCIDENTAL TO TEMPORARY WATER PASSAGE

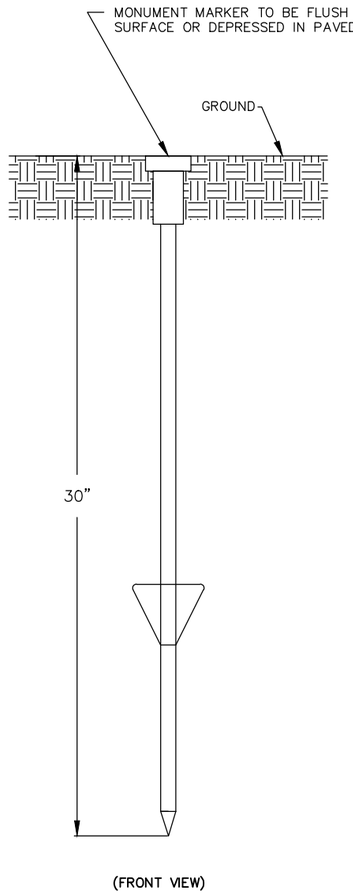
SECTION A-A

TEMPORARY WATER PASSAGE



WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

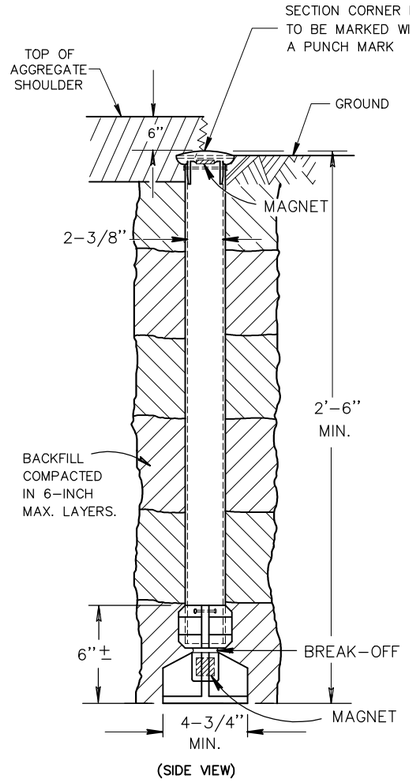
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

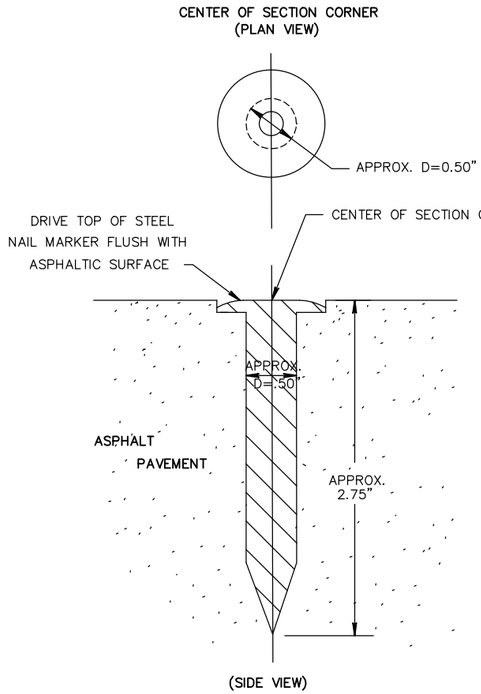
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

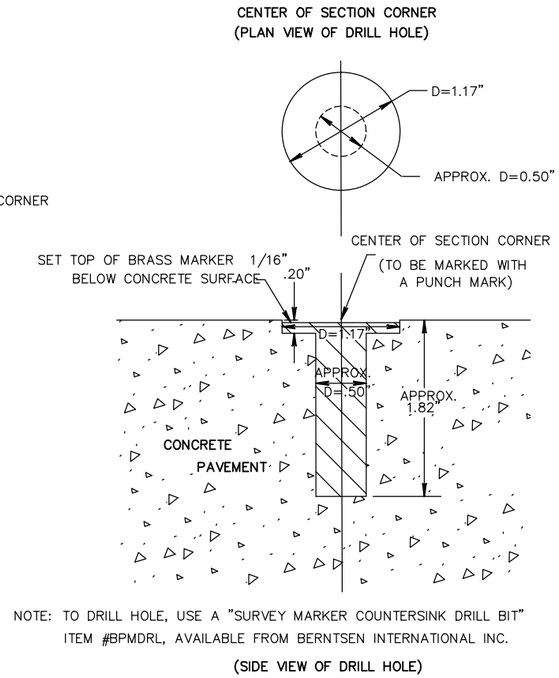
BERNTSEN A1BR30 ALUMINUM BREAK–OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM #BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP – 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

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.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY:SHAWANO	CONSTRUCTION DETAILS	SHEET 21	E

NOTES:
1) FINAL SIGN LOCATION TO BE VERIFIED BY EDDIE SHEPPARD 2905 E. RICHMOND ST. 715.760.5455

PROPOSED SIGN LOCATION (FINAL LOCATION TO BE VERIFIED BY EDDIE SHEPPARD FROM CITY OF SHAWANO PUBLIC WORKS)

18'-0"

SIGN RELOCATED BY CITY OF SHAWANO

SIGN RELOCATED TO THIS APPROXIMATE LOCATION BY CITY OF SHAWANO

150

50

Pi: 9+95.99B

8B

10B

12B

14B

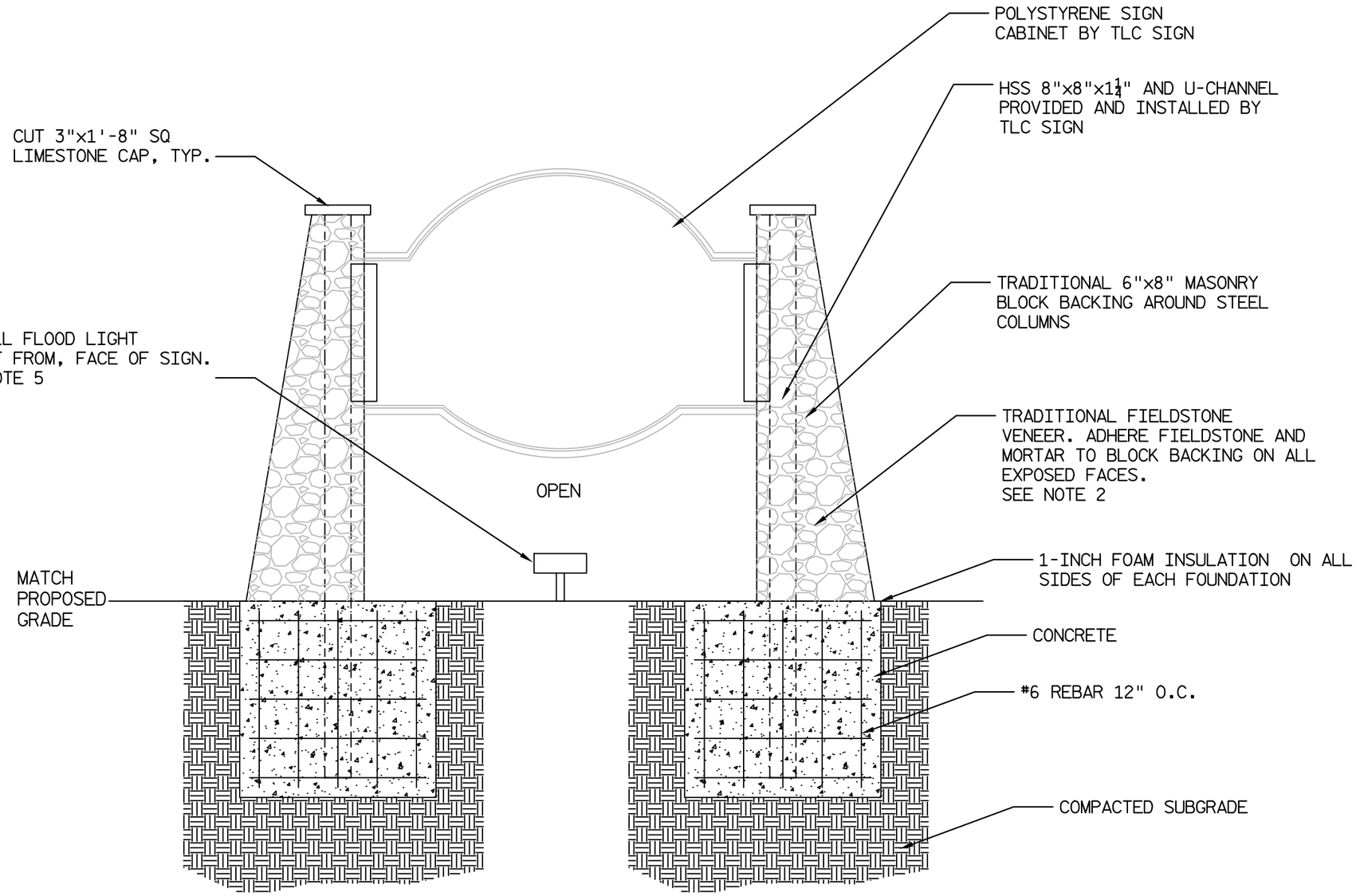
Pi: 149+44.78

Pi: 43+48.00

CITY OF SHAWANO WELCOME SIGN - LOCATION

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY:SHAWANO	CONSTRUCTION DETAILS	SHEET 22	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021010_CD_SHAWANO-CSST.DWG PLOT DATE : 2/12/2016 PLOT BY : QUEST CIVIL ENG PLOT NAME : _____PLOT SCALE : $$.....plotscale.....$$



NOTES:

1) COORDINATE STEEL COLUMN INSTALLATION AND CONCRETE FOUNDATION WITH
   TLC SIGN
   920.731.4852
   558 EISENHOWER DR. SUITE A
   KIMBERLY, WI 54136
2) MASONRY COLUMN SPECS:
   TRADITIONAL FIELDSTONE
   TYPE S MORTAR
   6"x8" MASONRY BLOCK
3) FOUNDATION SPECS:
   FROST WALL INSTALLATION
   1" FOAM INSULATION AROUND FOUNDATIONS
4) COORDINATE INSTALLATION OF SIGN CABINET AND CONNECTION TO STEEL COLUMNS BY TLC SIGN.
5) LED FLOOD LIGHT SPECS:
   FFLED 52
   CONSTANT CURRENT
   120V:0.45A
   INPUT WATTS: 54W
   EFFICIENCY: 97%
   WATTS: 52W
   COLOR TEMP: 5000K (COOL)
   COLOR ACCURACY: 67 CRI
   L70 LIFESPAN: 100,000
   LUMENS: 5,496
   EFFICACY: 102 LPW
   FOR ELECTRIC CONNECTION TO FLOOD LIGHT, CONTACT:
   ROB KOEPP FROM SHAWANO MUNICIPAL UTILITIES.
   122 NORTH SAWYER ST.
   715.853.9314

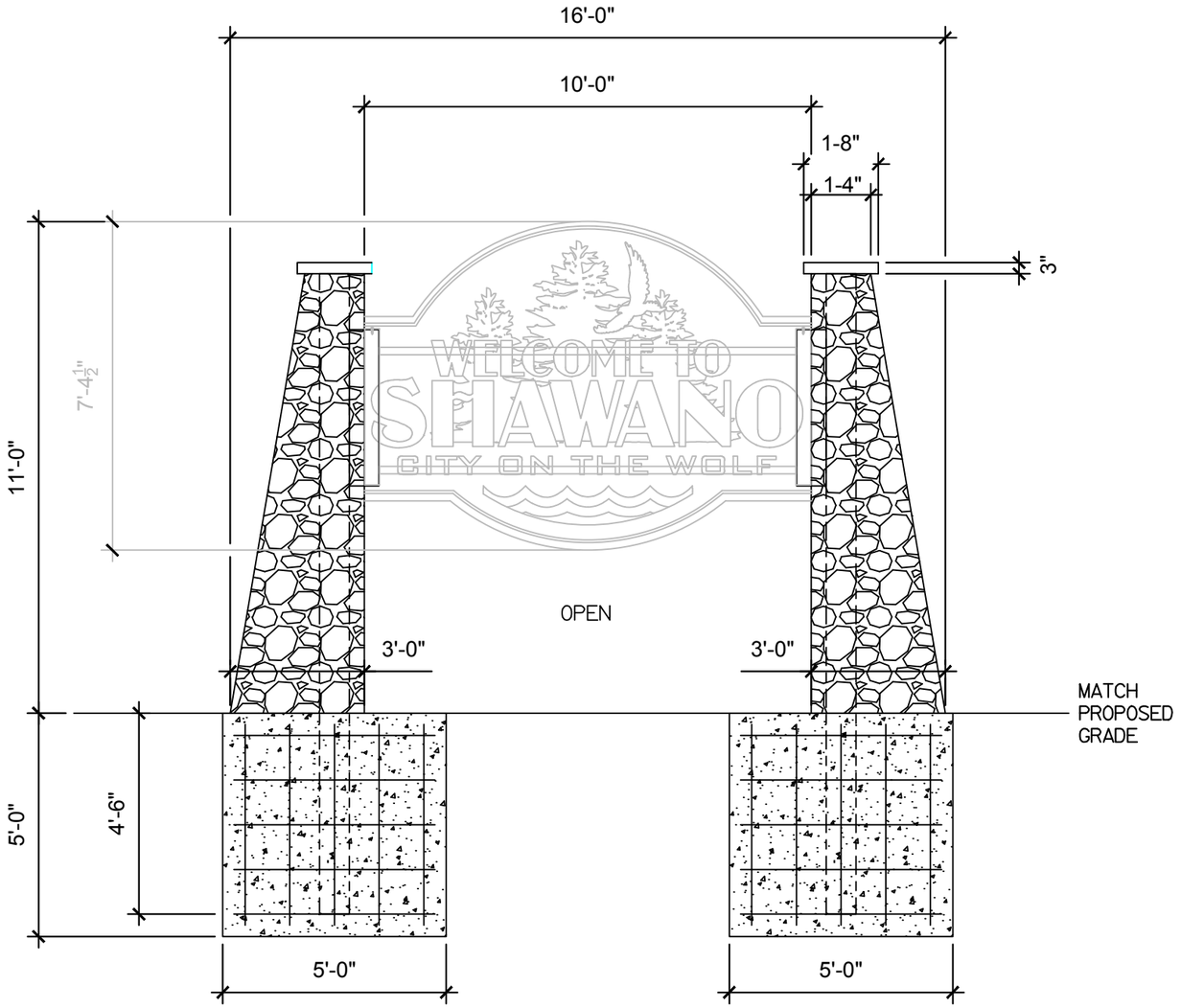
VERTICAL SLAB FOUNDATION
REQUIRED REINFORCEMENT
#6 BARS @ 12" O.C.
E.W. EACH FACE

CITY OF SHAWANO WELCOME SIGN - MATERIAL AND LIGHTING DETAIL

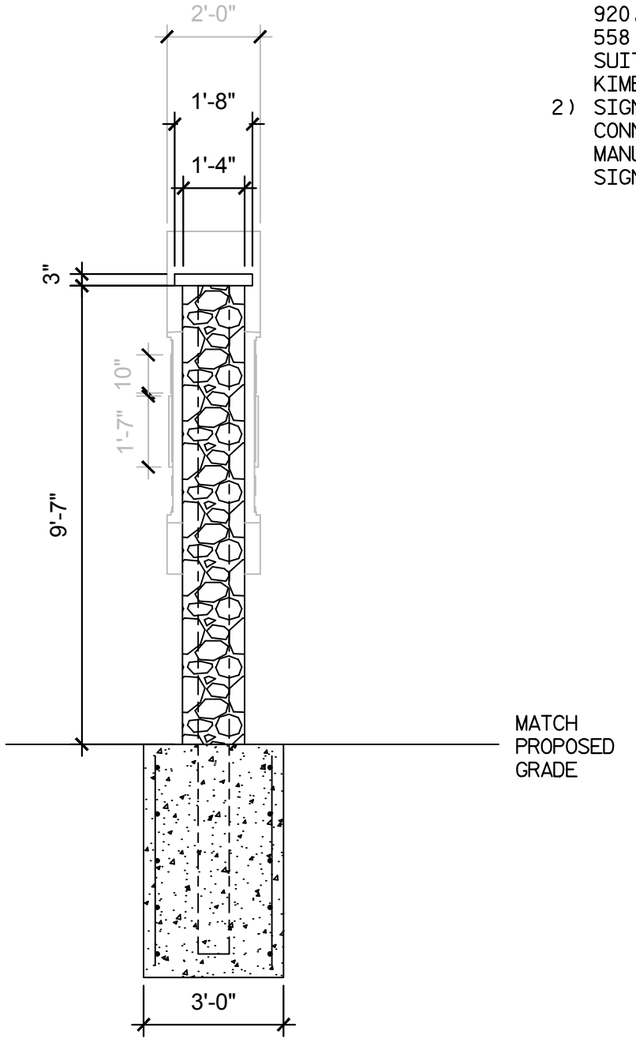
PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY:SHAWANO	CONSTRUCTION DETAILS	SHEET 23	E

2

NOTES:
1) SEE SIGN MANUFACTURERS DRAWINGS FOR ADDITIONAL DETAIL AND DIMENSIONS. CONTACT TLC SIGN @ 920.731.4852 558 EISENHOWER DR. SUITE A KIMBERLY, WI 54136
2) SIGN CABINET AND CONNECTION BY MANUFACTURER (TLC SIGN).



FRONT VIEW W/ VERTICAL SLAB FOUNDATIONS (2 REQ'D) ①
SCALE: N.T.S

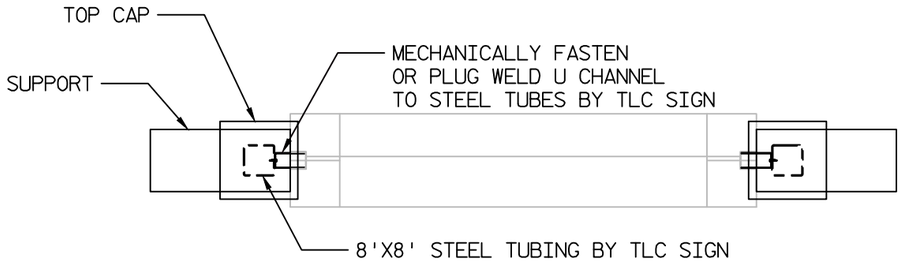


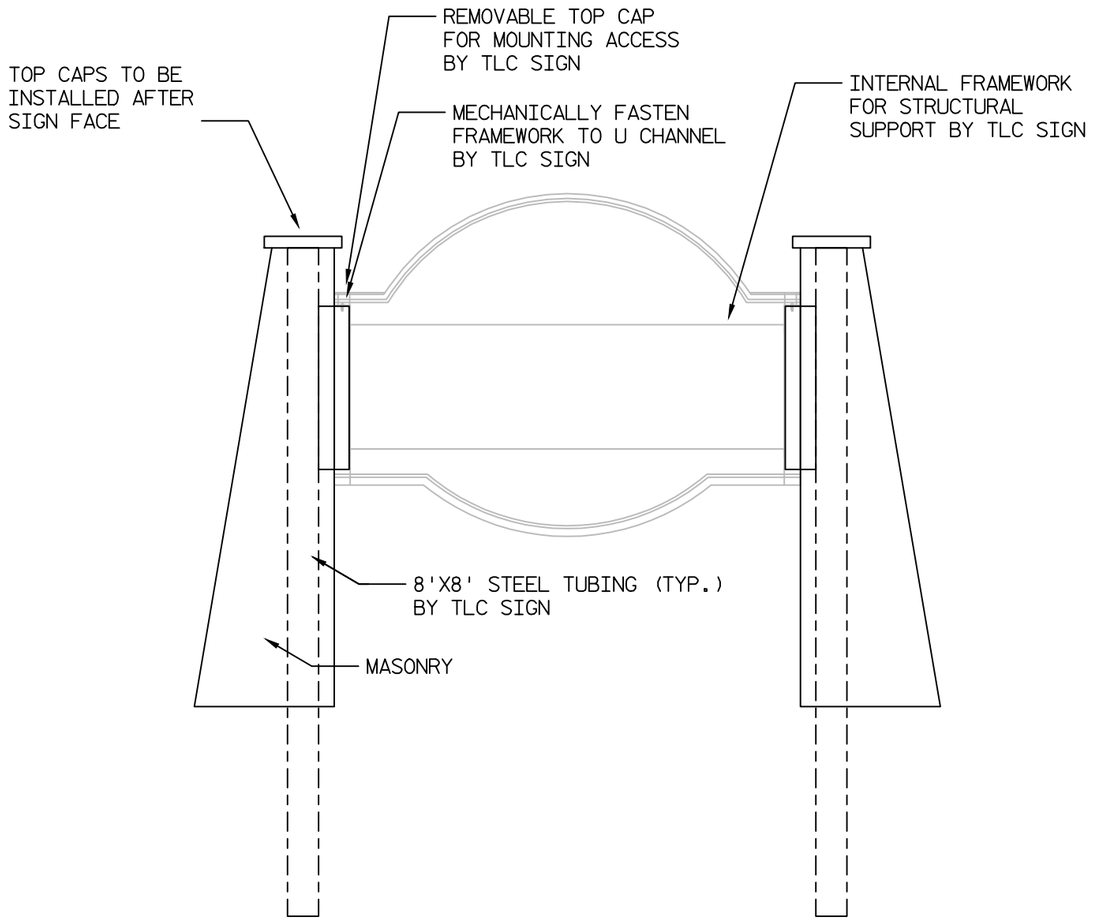
SIDE VIEW W/ VERTICAL SLAB FOUNDATIONS ②
SCALE: N.T.S

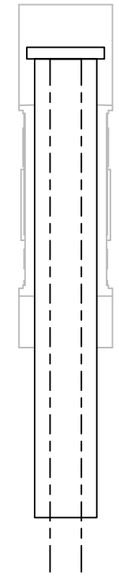
CITY OF SHAWANO WELCOME SIGN - DIMENSION DETAILS

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY:SHAWANO	CONSTRUCTION DETAILS	SHEET 24	E

NOTES:
1) SEE SIGN MANUFACTURERS DRAWINGS FOR ADDITIONAL DETAIL AND DIMENSIONS. CONTACT TLC SIGN @ 920.731.4852 558 EISENHOWER DR. SUITE A KIMBERLY, WI 54136
2) SIGN INSTALLATION CONNECTIONS TO BE INSTALLED BY TLC SIGN. SHOWN HERE FOR INFORMATION ONLY.



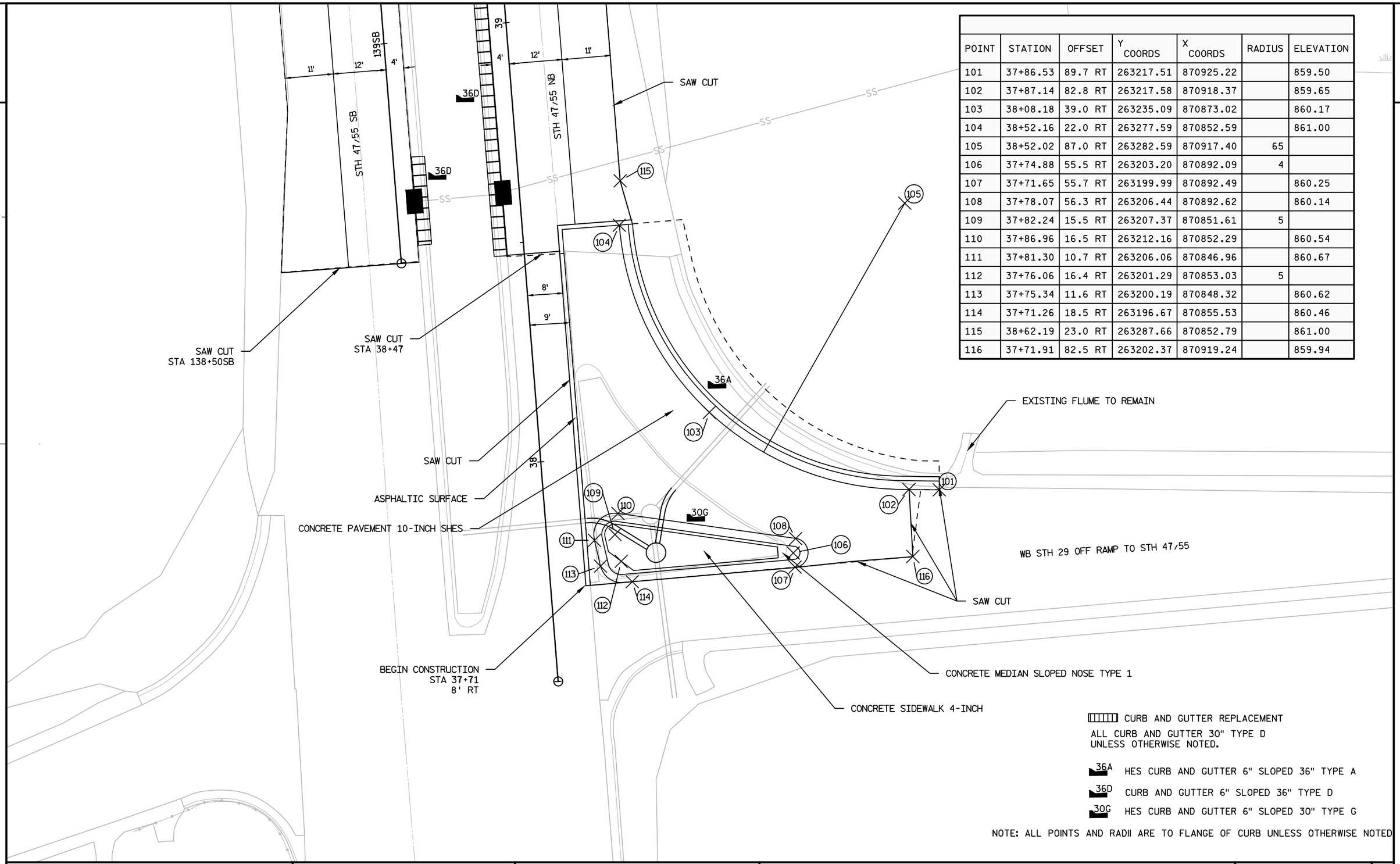




CITY OF SHAWANO WELCOME SIGN - SIGN CONNECTION DETAILS

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY:SHAWANO	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021010_CD_SHAWANO-CSST.DWG PLOT DATE : 2/12/2016 PLOT BY : QUEST CIVIL ENG PLOT NAME : ----------PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS	ELEVATION
101	37+86.53	89.7 RT	263217.51	870925.22		859.50
102	37+87.14	82.8 RT	263217.58	870918.37		859.65
103	38+08.18	39.0 RT	263235.09	870873.02		860.17
104	38+52.16	22.0 RT	263277.59	870852.59		861.00
105	38+52.02	87.0 RT	263282.59	870917.40	65	
106	37+74.88	55.5 RT	263203.20	870892.09	4	
107	37+71.65	55.7 RT	263199.99	870892.49		860.25
108	37+78.07	56.3 RT	263206.44	870892.62		860.14
109	37+82.24	15.5 RT	263207.37	870851.61	5	
110	37+86.96	16.5 RT	263212.16	870852.29		860.54
111	37+81.30	10.7 RT	263206.06	870846.96		860.67
112	37+76.06	16.4 RT	263201.29	870853.03	5	
113	37+75.34	11.6 RT	263200.19	870848.32		860.62
114	37+71.26	18.5 RT	263196.67	870855.53		860.46
115	38+62.19	23.0 RT	263287.66	870852.79		861.00
116	37+71.91	82.5 RT	263202.37	870919.24		859.94

CURB AND GUTTER REPLACEMENT
ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

36A HES CURB AND GUTTER 6" SLOPED 36" TYPE A

36D CURB AND GUTTER 6" SLOPED 36" TYPE D

30G HES CURB AND GUTTER 6" SLOPED 30" TYPE G

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 26	E

2

2

N

CONCRETE SIDEWALK 4-INCH

STA 7+75B

STA 8+75B

100'

STA 50+95

STA 50+45

50'

SALVAGE ASPHALTIC PAVEMENT, COMMON EXCAVATION, AND SALVAGED ASPHALTIC PAVEMENT BASE
STA 49+54.63
SALVAGED ASPHALTIC PAVEMENT MILLING 4"

STA 49+95

STA 10+67

7+00 8+00 9+00 10+00 11+00 12+00

CTH B

CTH B

STA 9+04

SALVAGED ASPHALTIC PAVEMENT MILLING 4"
STA 148+92SB
SALVAGED ASPHALTIC PAVEMENT MILLING 2"

STA 10+96B

CONCRETE SIDEWALK 4-INCH

STA 11+96B

SALVAGED ASPHALTIC PAVEMENT MILLING 4"
STA 48+51
SALVAGED ASPHALTIC PAVEMENT MILLING 2"

STA 147+92SB

STH 47/55

151SB 150SB 149SB 148SB

CURB AND GUTTER REPLACEMENT

ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

36D CURB AND GUTTER 6" SLOPED 36" TYPE D

30J CURB AND GUTTER 4" SLOPED 30" TYPE J

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 27	E

2

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS	ELEV
201	48+51.74	30.00 RT	10+35.96 B	86.00 RT	264274.55	870783.91		877.79
202	48+95.50	49.05 RT	10+51.98 B	41.05 RT	264319.51	870799.90		877.36
203	48+51.64	90.00 RT	10+95.83 B	82.00 RT	264278.59	870843.78	60	
204	49+11.50	94.10 RT	10+95.83 B	22.00 RT	264338.59	870843.74		877.61
205	48+93.85	21.50 RT	10+24.61 B	44.57 RT	264315.97	870772.53	4	
206	48+93.58	18.01 RT	10+21.14 B	45.08 RT	264315.46	870769.07		877.83
207	48+92.72	24.82 RT	10+27.99 B	45.48 RT	264315.07	870775.91		877.75
208	49+12.04	31.44 RT	10+33.28 B	25.74 RT	264334.81	870781.19		877.67
209	49+13.50	27.18 RT	10+28.93 B	24.58 RT	264335.97	870776.84	5	
210	49+17.89	26.18 RT	10+27.63 B	20.27 RT	264340.28	870775.54		877.75
211	49+16.39	19.59 RT	10+21.16 B	22.22 RT	264338.32	870769.07		877.81
212	49+12.00	20.59 RT	10+22.46 B	26.53 RT	264334.01	870770.37	5	
213	49+11.53	16.12 RT	10+18.03 B	27.30 RT	264333.23	870765.94		877.85
215	49+49.65	66.02 RT	10+65.23 B	14.00 LT	264374.57	870813.12		877.09
216	49+63.80	36.14 RT	10+34.49 B	26.14 LT	264386.69	870782.37		877.10
217	49+94.55	24.00 RT	10+20.33 B	56.02 LT	264416.56	870768.20		877.06
218	49+94.55	69.00 RT	10+65.23 B	59.00 LT	264419.57	870813.09	45	
219	49+78.00	9.00 LT	9+87.65 B	37.14 LT	264397.84	870736.37	5	

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS	ELEV
220	49+71.28	44.04 LT	9+53.36 B	27.33 LT	264388.79	870701.87		877.65
221	49+87.77	46.02 LT	9+49.91 B	43.58 LT	264405.11	870698.78		877.40
222	49+88.61	52.79 LT	9+43.10 B	43.81 LT	264405.49	870691.97		877.16
223	49+71.02	59.23 LT	9+38.25 B	25.72 LT	264387.52	870686.73		877.30
224	49+65.06	54.14 LT	9+43.85 B	20.24 LT	264381.91	870692.20		877.54
225	49+66.33	47.64 LT	9+50.21 B	22.08 LT	264383.61	870698.60		877.67
226	49+70.74	48.50 LT	9+48.95 B	26.40 LT	264387.96	870697.45	5	
227	49+87.41	49.50 LT	9+46.48 B	42.91 LT	264404.51	870695.33	4	
228	49+69.47	55.00 LT	9+42.60 B	24.56 LT	264386.25	870691.05	5	
230	50+29.63	57.64 LT	9+34.62 B	84.24 LT	264446.10	870684.39		876.52
231	49+87.40	78.17 LT	9+17.93 B	40.36 LT	264402.59	870666.73		876.54
232	49+72.88	122.91 LT	8+74.65 B	21.92 LT	264385.12	870623.06		876.47
233	50+32.65	117.58 LT	8+74.65 B	81.92 LT	264445.10	870624.39	60	
240	49+34.33	92.90 LT	9+08.00 B	14.00 RT	264348.47	870655.61		877.17
241	49+19.86	63.76 LT	9+38.33 B	25.77 RT	264336.04	870685.67		877.41
242	48+89.52	52.00 LT	9+52.81 B	54.91 RT	264306.58	870699.50		877.69
243	48+89.52	97.00 LT	9+07.99 B	59.00 RT	264303.48	870654.61	45	
244	49+05.00	19.09 LT	9+84.17 B	36.49 RT	264324.30	870731.27	5	

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

STA 172+05

300'
25:1 TAPER

172SB

STH 47/55 SB

173SB

STH 47/55 NB

STA 173+55

STA 175+05

174SB

175SB

176SB

177SB

CONCRETE SIDEWALK
4-INCH

STA 73+70

STA 73+20

100'

STA 74+20

SOUTHBOUND INSIDE SHOULDER
TAPER 4 FT TO 2 FT
RADIUS: 875.99'
TO FLANGE OF CURB AND GUTTER
CENTER:
N: 266232.05
E: 870698.36

ASPHALTIC FLUME

NORTHBOUND INSIDE SHOULDER
TAPER 4 FT TO 2FT
RADIUS: 871.86'
TO FLANGE OF CURB AND GUTTER
CENTER:
N: 266231.01
E: 870702.24

RAILROAD
24' ℄ 24'

DETAIL A

WISCONSIN CENTRAL RR

RAILROAD ℄

STH 47/55 SB

STH 47/55

CURB AND GUTTER REPLACEMENT
ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

30J CURB AND GUTTER 4" SLOPED 30" TYPE J

18D CURB AND GUTTER 18" TYPE D

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 29	E

2

ASPHALTIC FLUME

SEE DETAIL A ON PREVIOUS SHEET

RAILROAD ℄

WISCONSIN CENTRAL RR

177SB

178SB

179SB

180SB

181SB

182SB

STH 47/55 SB

STH 47/55 NB

ASPHALTIC FLUME

30J

30D

STA 180+25SB

STA 180+91SB

STA 181+05SB

STA 79+40

R4'
STA 79+50

300'
25:1 TAPER

STA 81+40

STA 82+40

12'

2'

80

81

82

83

100'

309 308 360 362 364 361 363 311 313 365 310 312 315 314 366 367 317 316 368 369 318 319

N

CURB AND GUTTER REPLACEMENT

ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

30J CURB AND GUTTER 4" SLOPED 30" TYPE J

18D CURB AND GUTTER 18" TYPE D

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 30	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021101_ID_NEW.DWG PLOT DATE : 3/9/2016 10:07 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

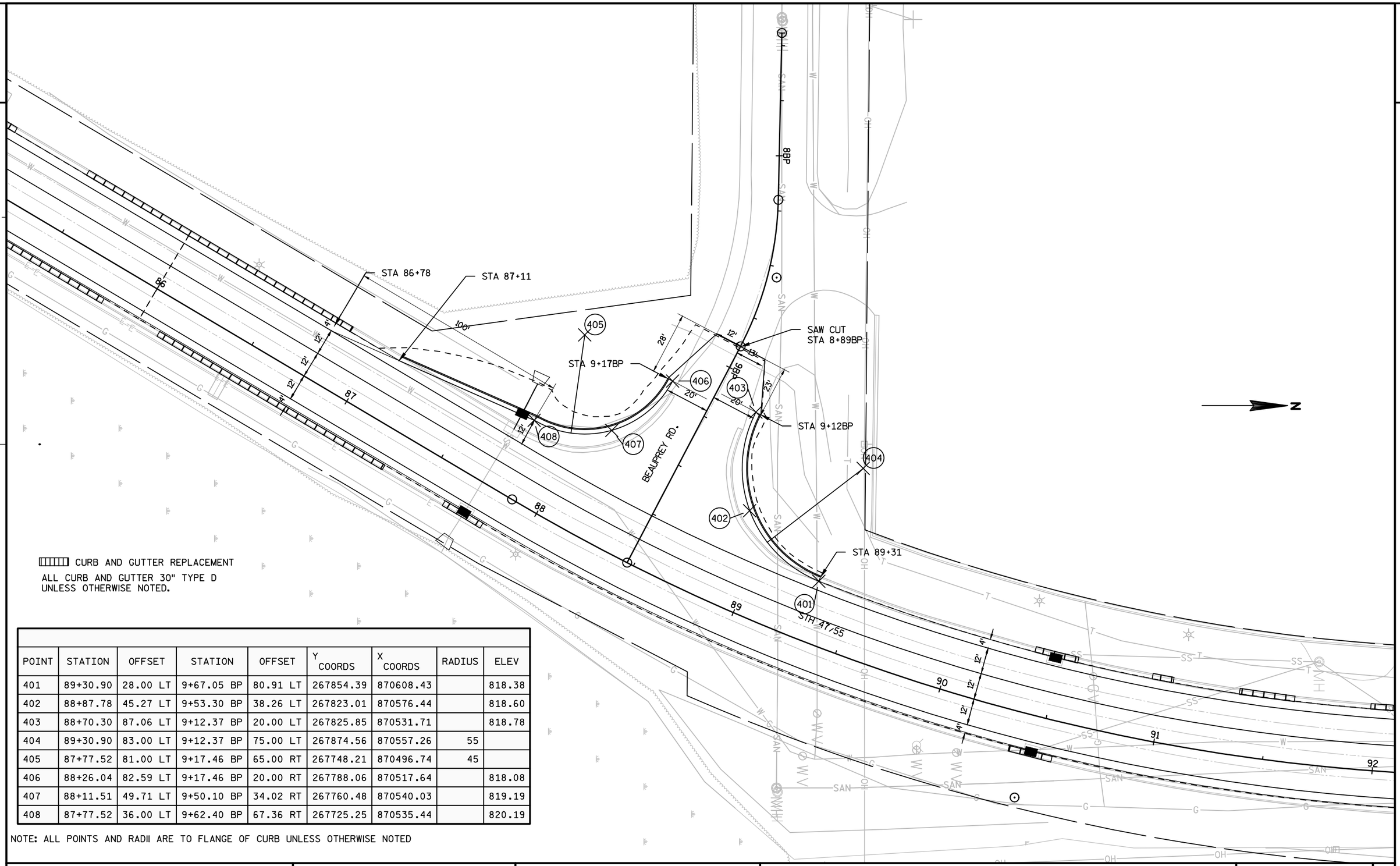
2

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
300	73+70.00	18.00 RT	173+82.43 SB	35.55 RT	266479.61	869890.27	821.52
301	73+70.00	4.00 LT	173+81.44 SB	13.57 RT	266485.59	869869.10	822.84
302	74+20.00	24.00 RT	174+33.53 SB	39.33 RT	266524.34	869910.58	820.90
303	74+20.00	3.61 LT	174+32.35 SB	11.74 RT	266533.39	869884.49	822.56
304	74+94.00	24.00 RT	175+08.09 SB	36.98 RT	266590.90	869937.25	820.53
305	74+94.00	2.45 LT	175+07.47 SB	10.54 RT	266601.89	869913.20	822.12
306	75+61.00	24.00 RT	175+75.51 SB	36.05 RT	266648.74	869966.74	820.73
307	75+61.00	2.02 LT	175+75.36 SB	10.04 RT	266661.54	869944.09	821.77
308	76+27.00	24.00 RT	176+41.56 SB	36.00 RT	266705.15	870000.01	821.03
309	76+27.00	2.00 LT	176+41.56 SB	10.00 RT	266718.41	869977.65	821.55
310	76+94.00	24.00 RT	177+08.56 SB	36.00 RT	266762.77	870034.20	821.32
311	76+94.00	2.00 LT	177+08.56 SB	10.00 RT	266776.04	870011.84	821.32
312	77+02.21	24.00 RT	177+16.77 SB	36.00 RT	266769.84	870038.39	821.36
313	77+01.20	2.00 LT	177+15.76 SB	10.00 RT	266782.23	870015.51	821.30
314	77+26.23	24.00 RT	177+40.79 SB	36.00 RT	266790.49	870050.64	821.36
315	77+25.22	1.98 LT	177+39.78 SB	10.02 RT	266802.88	870027.78	821.30
316	78+00.00	24.00 RT	178+14.56 SB	36.00 RT	266853.94	870088.28	821.03
317	78+00.00	2.00 LT	178+14.56 SB	10.00 RT	266867.20	870065.92	821.55
318	79+40.00	24.00 RT	179+54.56 SB	36.00 RT	266974.34	870159.71	821.58
319	81+40.00	16.00 RT	181+54.56 SB	28.00 RT	267150.43	870254.88	822.54

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
350	73+45.37	36.64 LT	173+55.00 SB	18.00 LT	266469.73	869831.06	824.28
351	73+44.51	14.65 LT	173+55.00 SB	4.00 RT	266463.47	869852.15	822.96
352	74+92.33	37.04 LT	175+05.00 SB	24.00 LT	266614.67	869881.01	823.92
353	74+91.75	10.56 LT	175+05.00 SB	2.48 RT	266603.18	869904.87	822.33
354	74+95.57	36.96 LT	175+08.32 SB	24.00 LT	266617.73	869882.49	823.90
355	74+95.02	10.53 LT	175+08.32 SB	2.44 RT	266606.18	869906.28	822.31
356	75+61.00	36.05 LT	175+75.18 SB	24.00 LT	266678.28	869914.46	823.10
357	75+60.87	10.04 LT	175+75.18 SB	2.02 RT	266665.36	869937.04	822.06
358	76+26.76	36.00 LT	176+41.32 SB	24.00 LT	266735.56	869948.29	822.23
359	76+26.76	10.00 LT	176+41.32 SB	2.00 RT	266722.29	869970.65	821.71
360	76+94.00	36.00 LT	177+08.56 SB	24.00 LT	266793.38	869982.59	821.33
361	76+94.00	10.00 LT	177+08.56 SB	2.00 RT	266780.12	870004.96	821.33
362	76+99.87	36.00 LT	177+14.43 SB	24.00 LT	266798.44	869985.59	821.22
363	77+00.89	10.00 LT	177+15.45 SB	2.00 RT	266786.04	870008.47	821.28
364	77+23.89	36.00 LT	177+38.45 SB	24.00 LT	266819.09	869997.85	821.22
365	77+24.91	10.00 LT	177+39.47 SB	2.00 RT	266806.70	870020.73	822.28
366	78+00.00	36.00 LT	178+14.56 SB	24.00 LT	266884.55	870036.68	821.10
367	78+00.00	10.00 LT	178+14.56 SB	2.00 RT	266871.28	870059.04	821.62
368	80+10.00	36.00 LT	180+24.56 SB	24.00 LT	267065.16	870143.83	821.87
369	80+76.44	28.00 LT	180+91.00 SB	16.00 LT	267118.22	870184.61	822.32

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

2



CURB AND GUTTER REPLACEMENT

ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS	ELEV
401	89+30.90	28.00 LT	9+67.05 BP	80.91 LT	267854.39	870608.43		818.38
402	88+87.78	45.27 LT	9+53.30 BP	38.26 LT	267823.01	870576.44		818.60
403	88+70.30	87.06 LT	9+12.37 BP	20.00 LT	267825.85	870531.71		818.78
404	89+30.90	83.00 LT	9+12.37 BP	75.00 LT	267874.56	870557.26	55	
405	87+77.52	81.00 LT	9+17.46 BP	65.00 RT	267748.21	870496.74	45	
406	88+26.04	82.59 LT	9+17.46 BP	20.00 RT	267788.06	870517.64		818.08
407	88+11.51	49.71 LT	9+50.10 BP	34.02 RT	267760.48	870540.03		819.19
408	87+77.52	36.00 LT	9+62.40 BP	67.36 RT	267725.25	870535.44		820.19

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 32	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021101_ID_NEW.DWG PLOT DATE : 3/9/2016 10:07 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

N

STA 94+13

270'

STA 96+83

STA 95+03

30J

30J

STH 47/55 SB

94

95

96

97

98

99

4'

12'

12'

12'

12'

4'

CURB AND GUTTER REPLACEMENT

ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

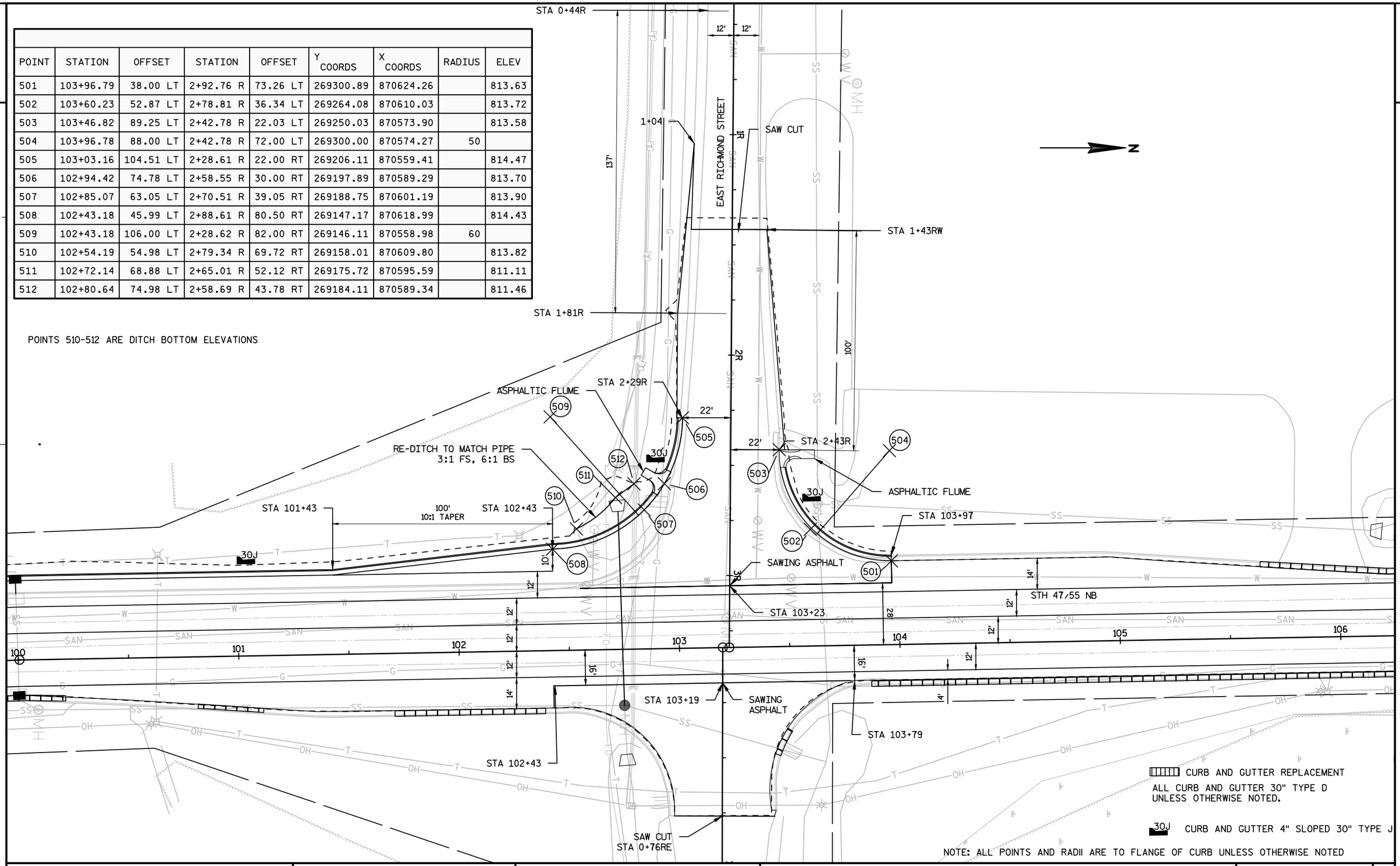
30J CURB AND GUTTER 4" SLOPED 30" TYPE J

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 33	E

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS	ELEV
501	103+96.79	38.00 LT	2+92.76 R	73.26 LT	269300.89	870624.26		813.63
502	103+60.23	52.87 LT	2+78.81 R	36.34 LT	269264.08	870610.03		813.72
503	103+46.82	89.25 LT	2+42.78 R	22.03 LT	269250.03	870573.90		813.58
504	103+96.78	88.00 LT	2+42.78 R	72.00 LT	269300.00	870574.27	50	
505	103+03.16	104.51 LT	2+28.61 R	22.00 RT	269206.11	870559.41		814.47
506	102+94.42	74.78 LT	2+58.55 R	30.00 RT	269197.89	870589.29		813.70
507	102+85.07	63.05 LT	2+70.51 R	39.05 RT	269188.75	870601.19		813.90
508	102+43.18	45.99 LT	2+88.61 R	80.50 RT	269147.17	870618.99		814.43
509	102+43.18	106.00 LT	2+28.62 R	82.00 RT	269146.11	870558.98	60	
510	102+54.19	54.98 LT	2+79.34 R	69.72 RT	269158.01	870609.80		813.82
511	102+72.14	68.88 LT	2+65.01 R	52.12 RT	269175.72	870595.59		811.11
512	102+80.64	74.98 LT	2+58.69 R	43.78 RT	269184.11	870589.34		811.46

POINTS 510-512 ARE DITCH BOTTOM ELEVATIONS



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\021101_ID_NEW.DWG PLOT DATE : 3/9/2016 10:07 AM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
625	19+44.57 S	16.59 LT	271841.78	870555.37	
626	19+32.12 S	17.96 LT	271842.61	870542.88	
627	19+16.13 S	17.90 LT	271841.84	870526.91	
628	19+16.13 S	10.25 LT	271834.20	870527.25	
629	19+37.63 S	10.32 LT	271835.22	870548.72	
630	19+44.21 S	10.68 LT	271835.86	870555.28	
631	19+32.34 S	37.04 RT	271787.67	870545.51	55
632	19+37.42 S	75.32 LT	271900.14	870545.66	65

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS	ELEV
601	127+84.62	28.25 LT	19+75.42 S	143.13 RT	271683.57	870593.21		
602	127+98.26	28.25 LT	19+74.34 S	129.19 RT	271697.45	870591.52		
603	128+19.07	29.97 LT	19+71.30 S	108.01 RT	271718.48	870587.55		814.28
604	128+37.33	34.44 LT	19+65.99 S	89.45 RT	271736.79	870581.44		814.10
605	128+59.53	44.11 LT	19+55.70 S	66.76 RT	271759.00	870570.16		813.84
606	128+70.16	51.47 LT	19+48.17 S	56.16 RT	271769.26	870562.17		813.67
607	128+82.27	65.74 LT	19+33.71 S	44.27 RT	271780.50	870547.20		813.99
608	128+88.34	79.19 LT	19+20.16 S	38.42 RT	271785.76	870533.41		814.24
609	128+90.97	96.01 LT	19+03.31 S	36.05 RT	271787.38	870516.46		814.34
610	127+98.26	178.25 LT	18+24.72 S	139.86 RT	271680.22	870442.51	150	
611	128+33.43	97.33 LT	19+03.31 S	96.00 RT	271727.49	870519.10	60	

NOTE: ALL POINTS AND RADII ARE TO FLANGE OF CURB UNLESS OTHERWISE NOTED

ASPHALTIC SURFACE
CONCRETE MEDIAN SLOPED NOSE
SAWCUT REDQ'D
CONCRETE SIDEWALK 4-INCH
SLOPE INTERCEPT
R/W
STH 22
STH 47
16S
17S
18S
19S
20S
21S
130
128
127
12'
4'

CURB AND GUTTER REPLACEMENT
ALL CURB AND GUTTER 30" TYPE D UNLESS OTHERWISE NOTED.
36D CURB AND GUTTER 6" SLOPED 36" TYPE D
18D CURB AND GUTTER 18" TYPE D

PROJECT NO:6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN DETAIL	SHEET 35	E

2

N

WB STH 29 ON RAMP

INLET PROTECTION
TYPE C

138SB 139SB 140SB 141SB 142SB 143

STH 47/55

37 38 39 40 41 42

MATCHLINE STA 43+00

INLET PROTECTION
TYPE C

BEGIN PROJECT 6243-07-70
STA 140SB+00
STA 38+47 STH 47

WB STH 29 OFF RAMP

SS

OH

LEGEND

- INLET PROTECTION (TYPE)
- SILT FENCE
- EROSION MAT URBAN CLASS 1 TYPE A
- WETLAND AREA / PERMITTED WETLAND AREA
- ROCK BAGS
- CULVERT PIPE CHECKS
- DITCH CHECKS

N

INLET PROTECTION
TYPES A AND C

B 144SB 145SB 146SB 147SB 148SB 149SB

STH 47/55

44 45 46 47 48 49

MATCHLINE STA 43+00

INLET PROTECTION
TYPE C

INSTALL SILT FENCE RELIEF

END PROJECT 6243-07-70
BEGIN PROJECT 6243-07-71
STA 49+55 STH 47

INLET PROTECTION
TYPE C

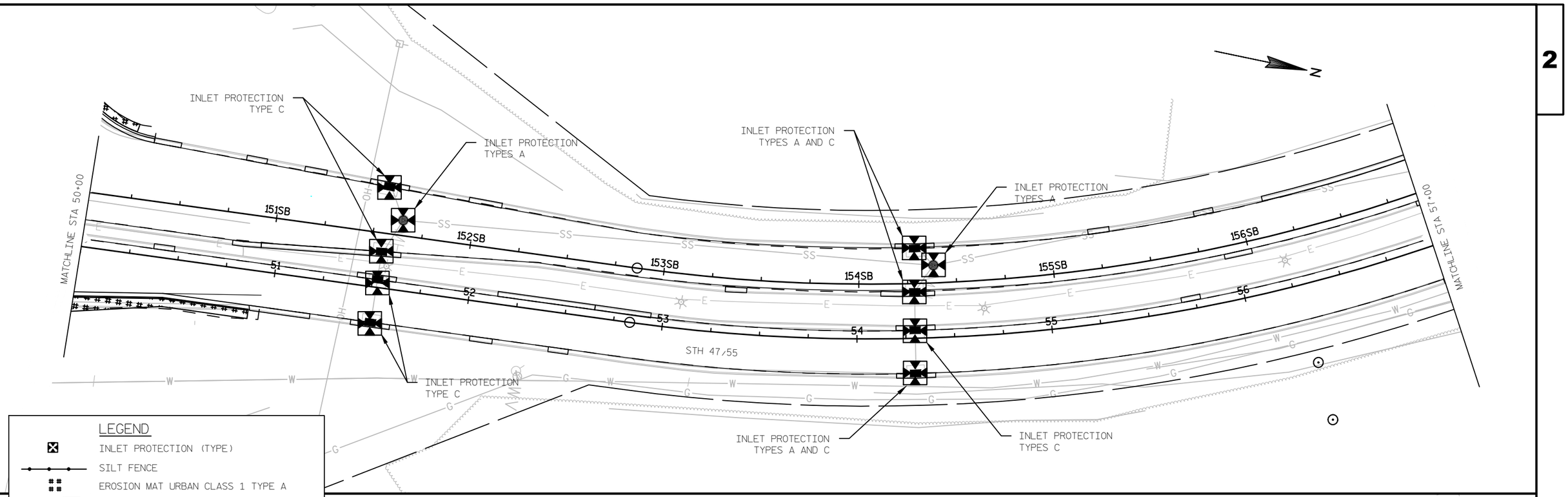
INLET PROTECTION
TYPE C

MATCHLINE STA 50+00

SAN

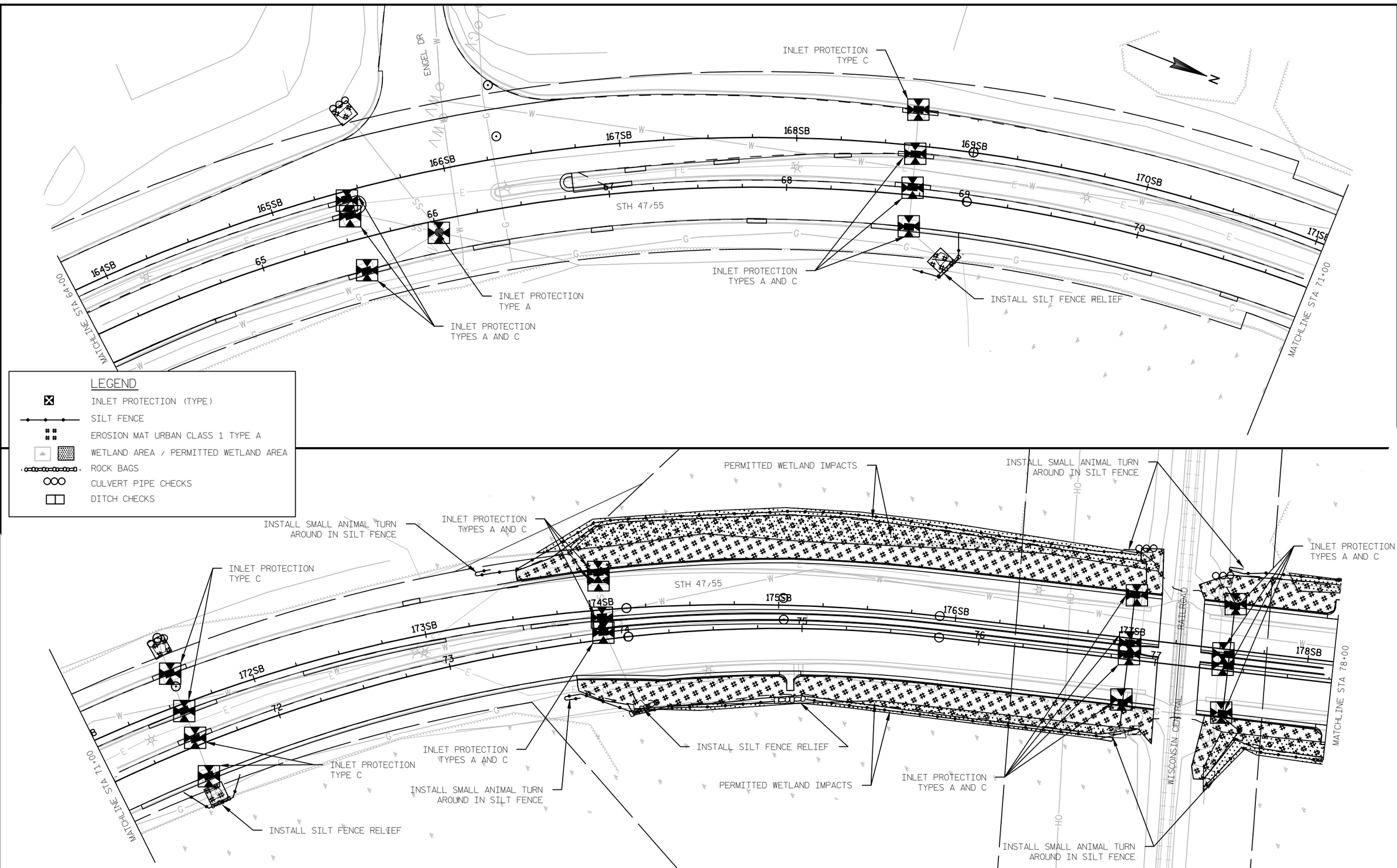
CTH B

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 36	E



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 37	E

2



LEGEND

- INLET PROTECTION (TYPE)
- SILT FENCE
- EROSION MAT URBAN CLASS 1 TYPE A
- WETLAND AREA / PERMITTED WETLAND AREA
- ROCK BAGS
- CULVERT PIPE CHECKS
- DITCH CHECKS

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 38	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\022001_EC_STH47_6243-07-70.DWG PLOT DATE : 2/1/2016 10:38 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

2

PERMITTED WETLAND IMPACTS

INSTALL SILT FENCE RELIEF

MATCHLINE STA 78+00

179SB 180SB 181SB STH47/55 182SB182SB

79 80 81 82 83 84

MATCHLINE STA 85+00

INSTALL SILT FENCE RELIEF

PERMITTED WETLAND IMPACTS

INSTALL SILT FENCE RELIEF

N

LEGEND

- INLET PROTECTION (TYPE)
- SILT FENCE
- EROSION MAT URBAN CLASS 1 TYPE A
- WETLAND AREA / PERMITTED WETLAND AREA
- ROCK BAGS
- CULVERT PIPE CHECKS
- DITCH CHECKS

INSTALL SILT FENCE RELIEF

ADDRESS ENDWALL EC

INLET PROTECTION TYPES A AND C

BEAUPREY RD.

MATCHLINE STA 85+00

86 87 88 89 90 91

STH 47/55

INLET PROTECTION TYPE C

INSTALL SILT FENCE RELIEF

ADDRESS ENDWALL EC

N

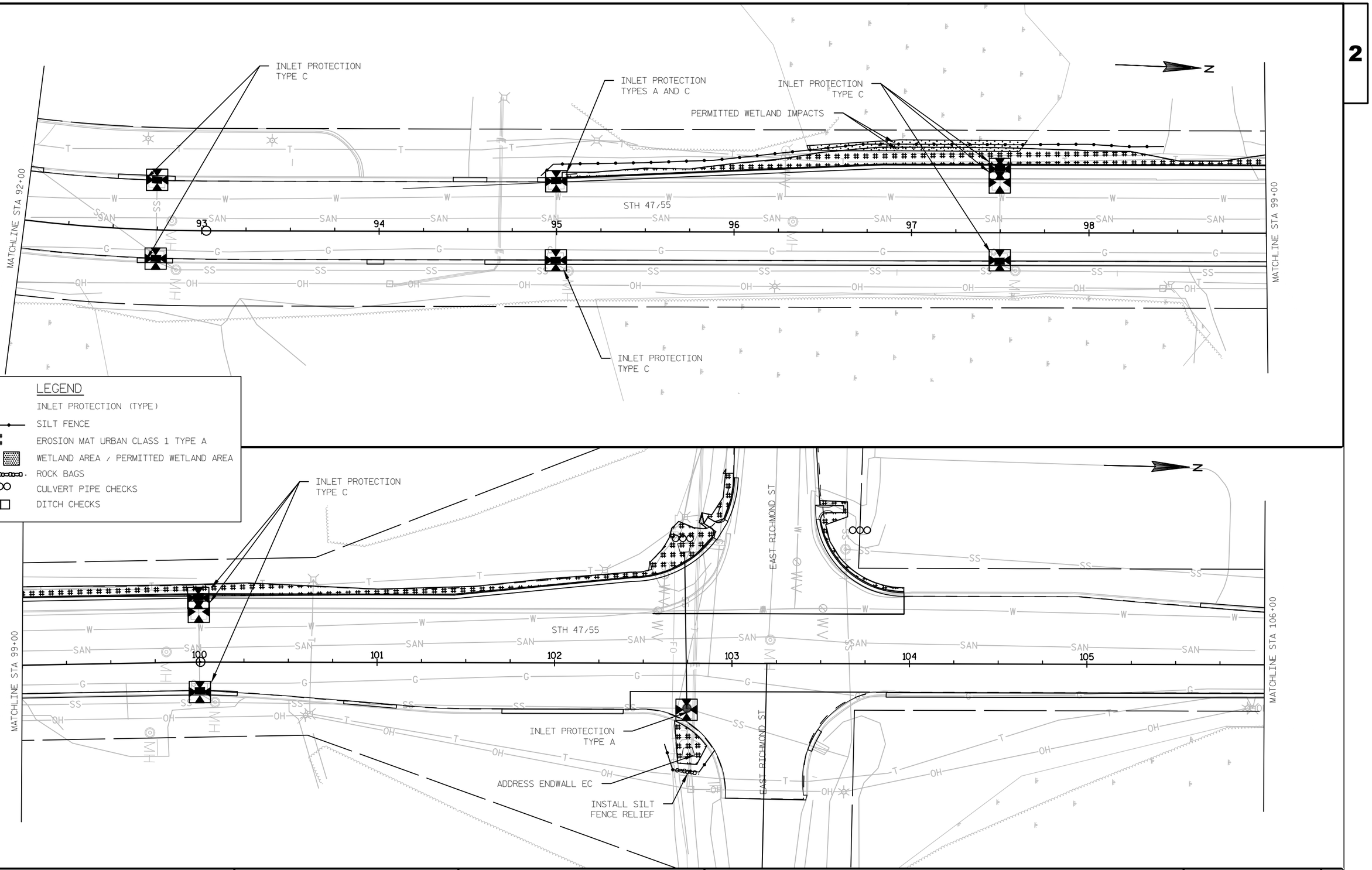
INLET PROTECTION TYPES A AND C

MATCHLINE STA 92+00

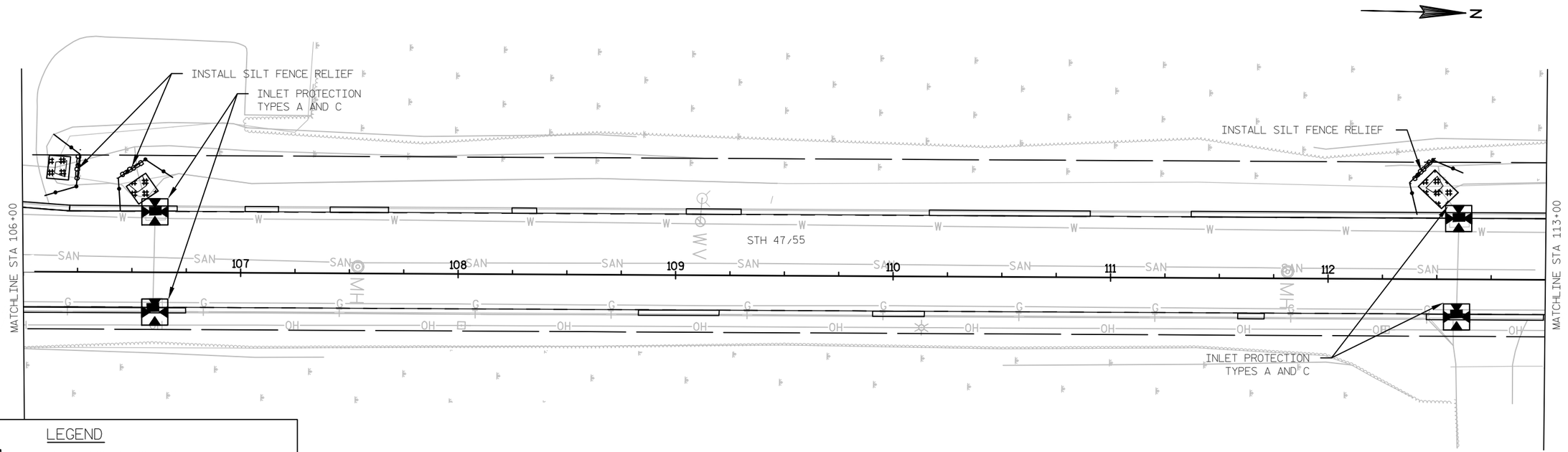
INLET PROTECTION TYPE C

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 39	E

2

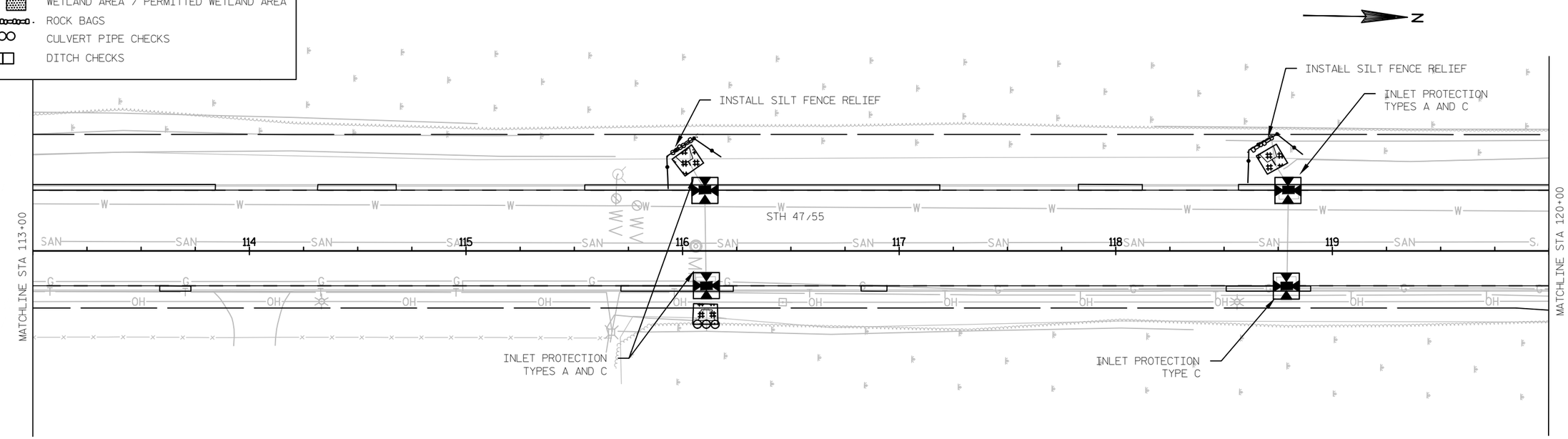


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 40	E



LEGEND

- INLET PROTECTION (TYPE)
- SILT FENCE
- EROSION MAT URBAN CLASS 1 TYPE A
- WETLAND AREA / PERMITTED WETLAND AREA
- ROCK BAGS
- CULVERT PIPE CHECKS
- DITCH CHECKS



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 41	E

2

INSTALL SILT FENCE RELIEF

INLET PROTECTION TYPES A AND C

MATCHLINE STA 120+00

121 122 123 124 125 126

STH 47/55

MATCHLINE STA 127+00

INLET PROTECTION TYPES A AND C

N

LEGEND

- INLET PROTECTION (TYPE)
- SILT FENCE
- EROSION MAT URBAN CLASS 1 TYPE A
- WETLAND AREA / PERMITTED WETLAND AREA
- ROCK BAGS
- CULVERT PIPE CHECKS
- DITCH CHECKS

INLET PROTECTION TYPE A

INLET PROTECTION TYPES A AND C

EAST GREEN BAY ST STH 22/47/55

END PROJECT 6243-07-71
STA 129+00 STH 47

CTH HHH

MOUNTAIN BAY STATE TRAIL

MATCHLINE STA 127+00

STH 47/55

128 129 130 131 132 133 134

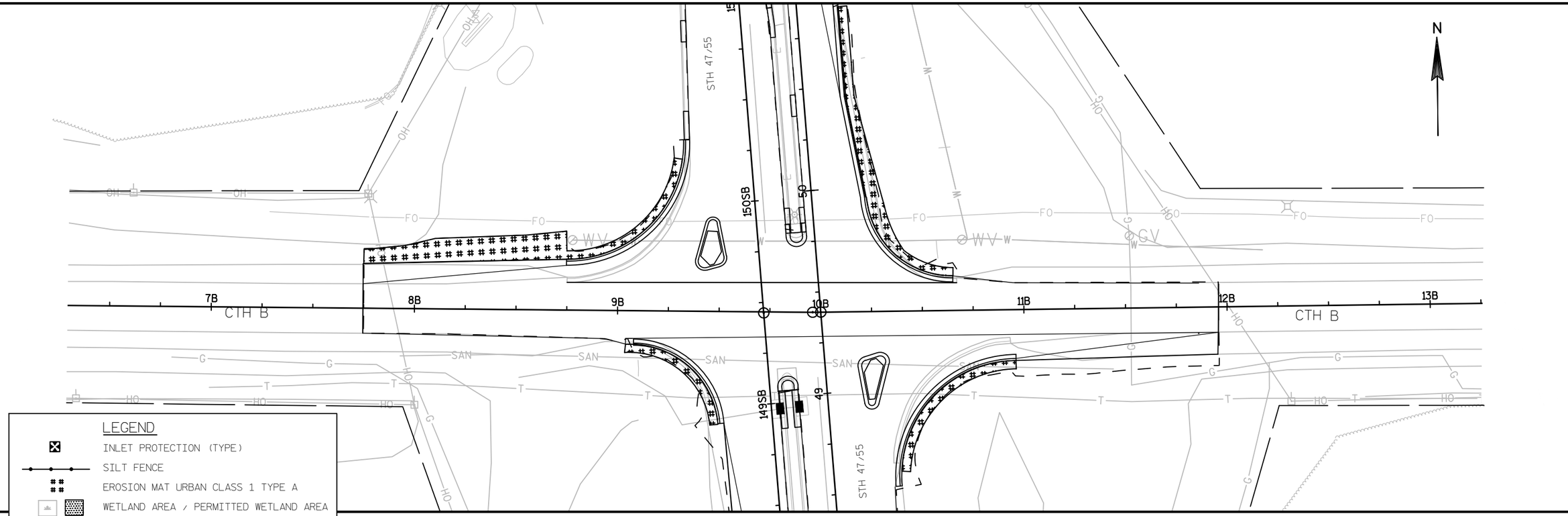
INLET PROTECTION TYPE A

INLET PROTECTION TYPES A AND C

EAST GREEN BAY ST STH 22

MOUNTAIN BAY STATE TRAIL

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 42	E



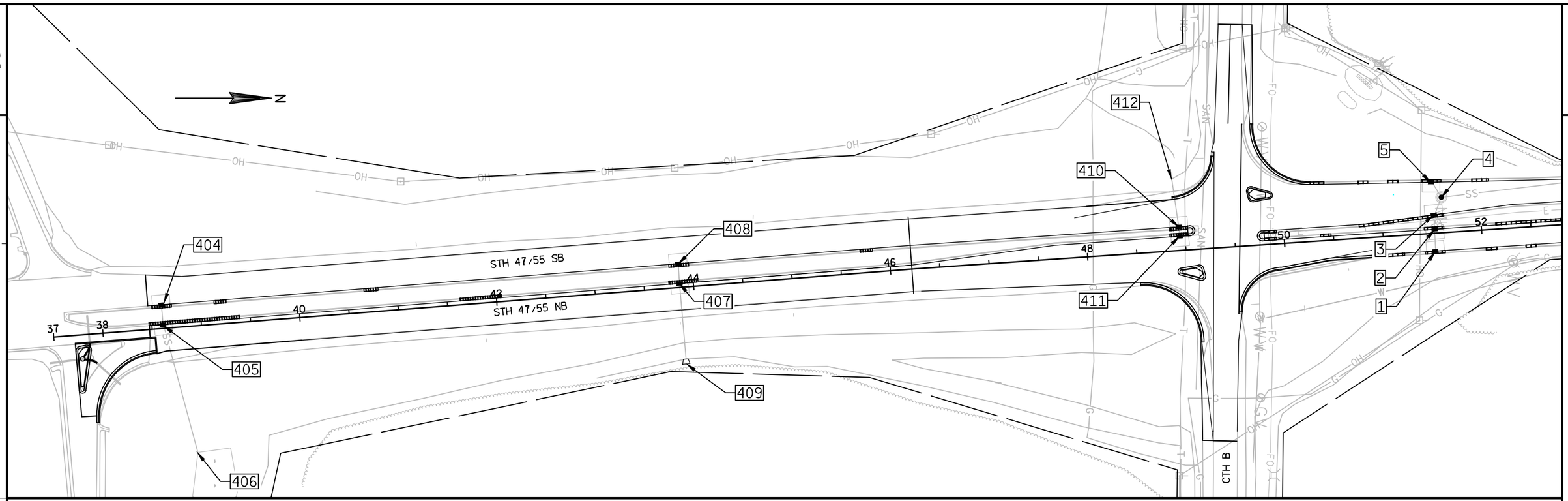
LEGEND

- INLET PROTECTION (TYPE)
- SILT FENCE
- EROSION MAT URBAN CLASS 1 TYPE A
- WETLAND AREA / PERMITTED WETLAND AREA
- ROCK BAGS
- CULVERT PIPE CHECKS
- DITCH CHECKS

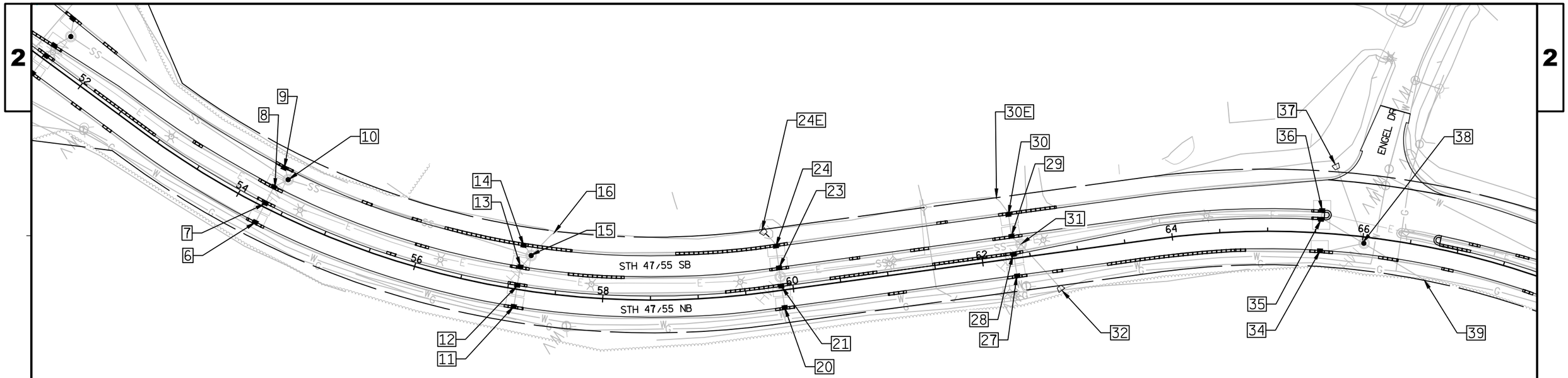
2

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	EROSION CONTROL: STH 47	SHEET 43	E

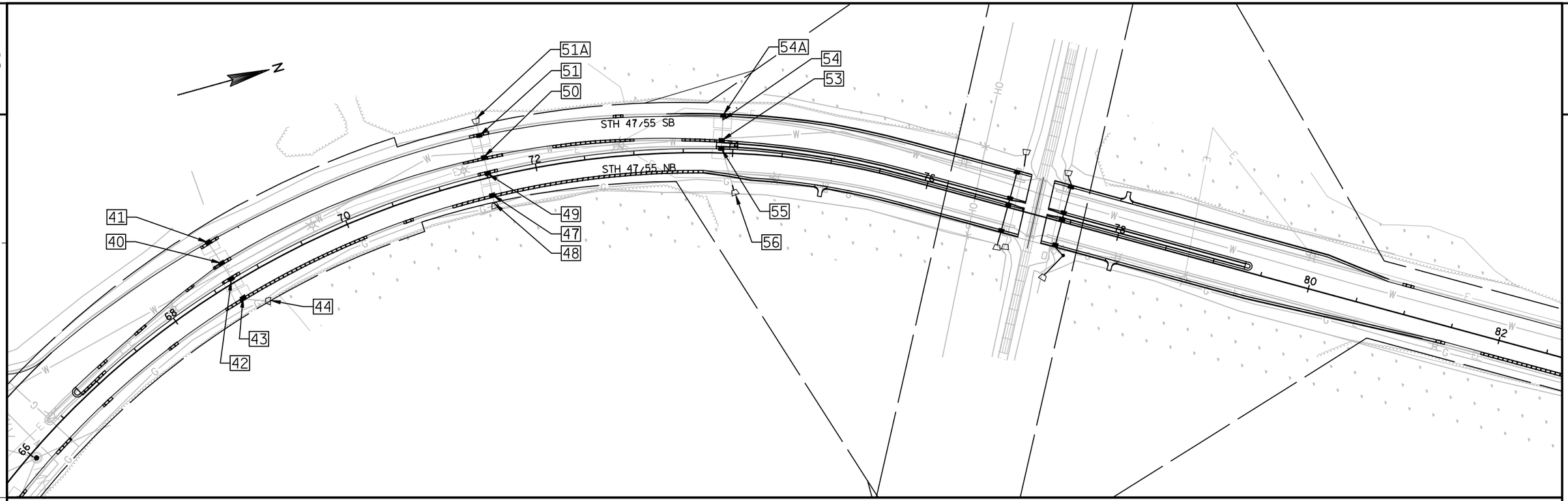
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\022001_EC_STH47_6243-07-70.DWG PLOT DATE : 2/1/2016 10:39 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF



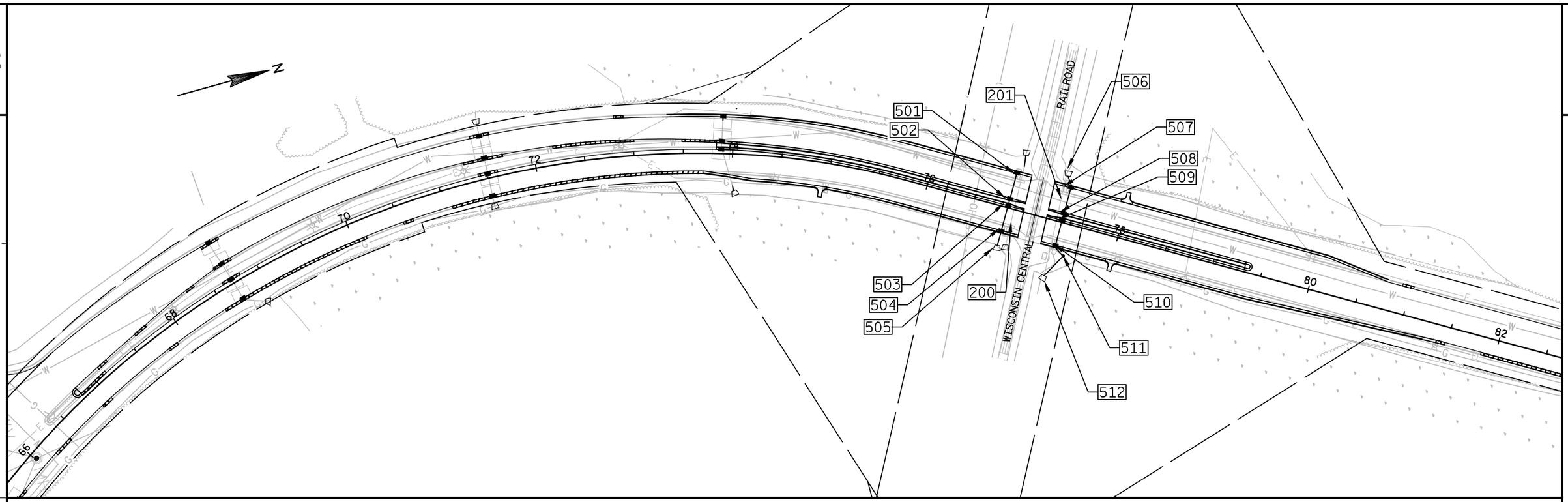
STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
404	38+61	2'	LT	ADJUST	INLET	RECT	HM	860.90		EXISTING		405	12		EXISTING				RISER REPAIR		
405	38+61	20'	LT	ADJUST	INLET	RECT	HM	860.84		EXISTING		406	12		EXISTING				RISER REPAIR		
406	38+89	132'	RT	EXISTING	STEEL AEW	15-IN	-	UNKNOWN		-		-	-		-				NONE-TO REMAIN		
407	43+86	6'	LT	ADJUST	INLET	RECT	HM	870.19		EXISTING		409	12		EXISTING				RISER REPAIR		
408	43+86	22'	LT	RECST	INLET	RECT	HM	870.37		EXISTING		407	12		EXISTING				RISER AND PIPE CONNECTION REPAIR		
409	43+86	73'	RT	REPLACE	CONC AEW	12-IN	-	INV 863.72		-		-	-		-				REMOVE AND REPLACE AEW 12" CONC	DITCH REST; PIPE	
410	48+94.5	22'	LT	ADJUST	INLET	RECT	HM	877.37		EXISTING		412	12		EXISTING				RISER REPAIR		
411	48+94.5	16'	LT	ADJUST	INLET	RECT	HM	877.25		EXISTING		410	12		EXISTING				RISER REPAIR		
412	48+90	73'	LT	EXISTING	CONC AEW	12-IN	-	INV 871.55		-		-	-		-				NONE-TO REMAIN	DITCH REST; PIPE	
1	51+52.5	20'	RT	ADJUST	CB	RECT	H	874.06		EXISTING		2	12		EXISTING				RISER REPAIR		
2	51+52.5	6'	LT	ADJUST	CB	RECT	H	874.05		EXISTING		3	12		EXISTING				RISER REPAIR		
3	51+52.5	16	LT	ADJUST	CB	RECT	H	873.81		EXISTING		4	12		EXISTING				RISER REPAIR		
4	51+61.5	36'	LT	ADJUST	MH	ROUND	J	874.01		EXISTING		10	15		EXISTING				ADJUSTING MANHOLE		
5	51+52.5	54	LT	ADJUST	CB	RECT	H	873.74		EXISTING		4	12		EXISTING				RISER REPAIR		



STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
6	54+29	20'	RT	ADJUST	CB	RECT	H	864.45	EXISTING			7	12	EXISTING					RISER REPAIR		
7	54+30	6'	LT	RECST	CB	RECT	H	863.08	EXISTING			8	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
8	54+30	22'	LT	RECST	CB	RECT	H	863.11	EXISTING			10	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
9	54+30	48'	LT	RECST	CB	RECT	H	861.72	EXISTING			10	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
10	54+40	37'	LT	ADJUST	MH	ROUND	J	861.84	EXISTING			15	15	EXISTING					ADJUSTING MANHOLE		
11	57+09.5	20'	RT	RECST	CB	RECT	H	850.76	EXISTING			12	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
12	57+09.5	6'	LT	RECST	CB	RECT	H	849.47	EXISTING			13	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
13	57+09.5	22'	LT	RECST	CB	RECT	H	849.47	EXISTING			15	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
14	57+09.5	48'	LT	RECST	CB	RECT	H	848.11	EXISTING			15	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
15	57+19	37'	LT	ADJUST	MH	ROUND	J	848.16	EXISTING			16	18	EXISTING					ADJUSTING MANHOLE		
16	57+38	62'	LT	EXISTING	CONC AEW	18-IN	-	INV 843.78	-			-	-	-					NONE - TO REMAIN	DITCH RESTORATION	
20	59+88	20'	RT	ADJUST	CB	RECT	H	840.37	EXISTING			21	12	EXISTING					RISER REPAIR		
21	59+88	6'	LT	ADJUST	CB	RECT	H	839.56	EXISTING			23	12	EXISTING					RISER REPAIR		
23	59+88	22'	LT	RECST	CB	RECT	H	839.64	EXISTING			24	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
24	59+88	48'	LT	ADJUST	CB	RECT	H	838.81	EXISTING			24E	12	EXISTING					RISER REPAIR		
24E	59+83.5	61'	LT	REPLACE	CONC AEW	12-IN	-	836.67	-			-	-	-					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 12"		EXTEND EXISTING 12" PIPE 5'; MATCH EXISTING SLOPE ~5.6%
27	62+33.5	20'	RT	ADJUST	CB	RECT	H	834.33	EXISTING			28	12	EXISTING					RISER REPAIR		
28	62+33	6'	LT	RECST	CB	RECT	H	834.39	EXISTING			31	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
29	62+33.5	22'	LT	ADJUST	CB	RECT	H	834.37	EXISTING			31	12	EXISTING					RISER REPAIR		
30	62+33.5	48'	LT	ADJUST	CB	RECT	H	834.47	EXISTING			29	12	EXISTING					RISER REPAIR		
30E	62+27	61'	LT	EXISTING	STEEL AEW	12-IN	-	INV 832.47	-			30	12	EXISTING					NONE		
31	62+43	14'	LT	EXISTING	MH	ROUND	EXIST J	834.74	EXISTING			32	15	EXISTING					NONE		
32	62+78	40'	RT	REPLACE	CONC AEW	15-IN	-	INV 829.34	-			-	-	-					REMOVE AND INSTALL NEW AEW FOR CPRC 15"	DITCH RESTORATION	
34	65+56	20'	RT	RECST	CB	RECT	H	825.83	EXISTING			38	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
35	65+55	16'	LT	RECST	CB	RECT	H	827.68	EXISTING			38	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
36	65+55	22'	LT	RECST	CB	RECT	H	828.03	EXISTING			35	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
37	65+64	68'	LT	RE-SET	CONC AEW	30-IN	-	INV 825.37	-			38	30	EXISTING					REMOVE AND INSTALL NEW AEW FOR CPRC 30" WITH TIES		RE-SET ENDWALL WITH TIES
38	66+00	~6'	RT	RECST	MH	ROUND	J	~825.95	EXISTING			39	30	EXISTING					RECONSTRUCT MANHOLE		EXISTING MANHOLE OBSCURED UNDER ASPHALT
39	66+67	33'	RT	EXISTING	CONC AEW	30-IN	-	INV 820.48	-			-	-	-					NONE	DITCH RESTORATION	

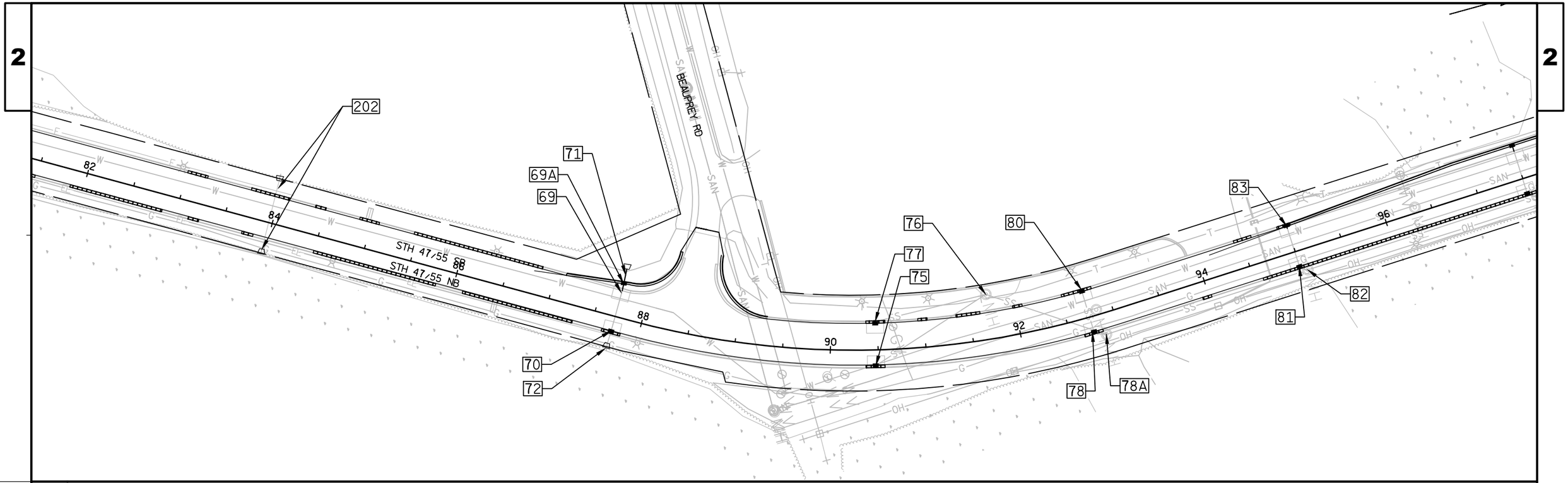


STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
40	68+70	21.5'	LT	RECST	CB	RECT	H	825.00	EXISTING			42	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
41	68+70	50'	LT	ADJUST	CB	RECT	H	826.56	EXISTING			40	12	EXISTING					RISER REPAIR		
42	68+71	6'	LT	RECST	CB	RECT	H	824.72	EXISTING			43	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
43	68+71	20'	RT	RECST	CB	RECT	H	823.32	EXISTING			44	24	EXISTING					RISER AND PIPE CONNECTION REPAIR		
44	68+88.5	32'	RT	REPLACE	CONC AEW	24-IN	-	INV 819.09	-			-	-	-					REMOVE AND INSTALL NEW AEW FOR CPRC 24"	DITCH RESTORATION	
47	71+50	20'	RT	ADJUST	CB	RECT	H	822.50	EXISTING			48	24	EXISTING					RISER REPAIR		
48	71+50	26.5'	RT	REPLACE	CONC AEW	24-IN	-	INV 818.86	-			-	-	-					REMOVE AND INSTALL NEW AEW FOR CPRC 24"	DITCH RESTORATION	
49	71+51	6'	LT	ADJUST	CB	RECT	H	823.79	EXISTING			47	24	EXISTING					RISER REPAIR		
50	71+52	20'	LT	ADJUST	CB	RECT	H	823.74	EXISTING			49	24	EXISTING					RISER REPAIR		
51	71+51	46'	LT	ADJUST	CB	RECT	H	824.99	EXISTING			50	24	EXISTING					RISER REPAIR		
51A	71+52	56'	LT	REPLACE	CONC AEW	24-IN	-	INV 819.52	-			51	24	EXISTING					REMOVE AND INSTALL NEW AEW FOR CPRC 24"	DITCH RESTORATION	
53	73+89	16'	LT	RECST	CB	RECT	H	822.54	EXISTING			55	12	EXISTING		819.2	EXISTING		RISER AND PIPE CONNECTION REPAIR		
54	73+89	36'	LT	REMOVE	CB	RECT	-	-	REMOVE EXISTING			-	12	EXISTING TO REMAIN-CONNECT WITH 54A					REMOVE CATCH BASIN		
54A	73+89	38'	LT	NEW	CB	2X3	HM-GJ	823.89	823.06	818.80	4.26	53	12	22	820.8	819.2	6	7.2	INSTALL NEW CATCH BASIN 2'X3' IN NEW CURB LINE		CONNECT TO PIPE FROM EXISTING 54 TO DISCHARGE
55	73+89	6'	LT	REPLACE	CB	2X3	H	822.48	821.65	817.20	4.44	56	15	EXISTING	819.2	EXISTING			REMOVE AND INSTALL NEW CATCH BASIN 2'X3'		
56	74+01	37'	RT	REPLACE	CONC AEW	15-IN	-	INV 817.16	-			-	-	-					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 15"		EXTEND EXISTING 125" PIPE 5'; MATCH EXISTING SLOPE ~4.23%



STRUCT NO.	STATION	OFFSET LT	OFFSET RT	STRUCTURE TYPE		EX INV LT	EX INV RT	PROP INV LT	PROP INV RT	REPAIR	DITCH RESTORATION/ PIPE CLEANING
200	76+91	56'	37'	CPRC	EXIST	816.62	816.07	816.68	EX 816.07	EXTEND LEFT END 11' AT EXISTING SLOPE AND INSTALL NEW AEW FOR CPRC 24" LT AND RT	DITCH RESTORATION LT /RT ; PIPE CLEANING

STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
501	76+84.5	37.25'	LT	NEW	CB	2X3	HM-GJ	821.36	820.53	815.96	4.57	502	12	28.5	817.96	817.39	28.5	2			
502	76+84.5	8.75'	LT	NEW	CB	2X3	H	821.28	820.45	815.39	5.06	503	12	5.5	817.39	817.28	5.5	2			
503	76+84.5	3.25'	LT	NEW	CB	2X3	H	821.26	820.43	815.28	5.15	504	12	28.5	817.28	816.71	28.5	2			
504	76+84.5	25.25'	RT	NEW	CB	2X3	HM-GJ	821.18	820.35	814.71	5.64	505	12	14	816.71	816.29	14	3			
505	76+84.5	39.25'	RT	NEW	CONC AEW	12-IN	-	INV 816.29		-		-	-			-					
506	77+35	45'	LT	NEW	CONC AEW	24-IN	-	INV 816.77		-		507	24	14	816.77	816.72	14	0.3			
507	77+41	37.25'	LT	NEW	CB	4-FT	HM-GJ	821.11	820.28	814.72	5.56	508	24	28.5	816.72	816.64	28.5	0.3			
508	77+41	8.75'	LT	NEW	CB	4-FT	H	821.26	820.43	814.64	5.79	509	24	5.5	816.64	816.62	5.5	0.3			
509	77+41	3.25'	LT	NEW	CB	4-FT	H	821.27	820.44	814.62	5.82	510	24	28.5	816.62	816.54	28.5	0.3			
510	77+41	25.25'	RT	NEW	CB	4-FT	HM-GJ	821.22	820.39	814.54	5.85	511	24	13	816.54	816.49	15	0.3			
511	77+52	32.5'	RT	NEW	MH	4 FT	J	819.85	818.60	816.41	2.19	512	24	28	816.49	816.41	27	0.3			
512	77+38	56.7'	RT	NEW	CONC AEW	24-IN	-	INV 816.41		-		-	-			-					

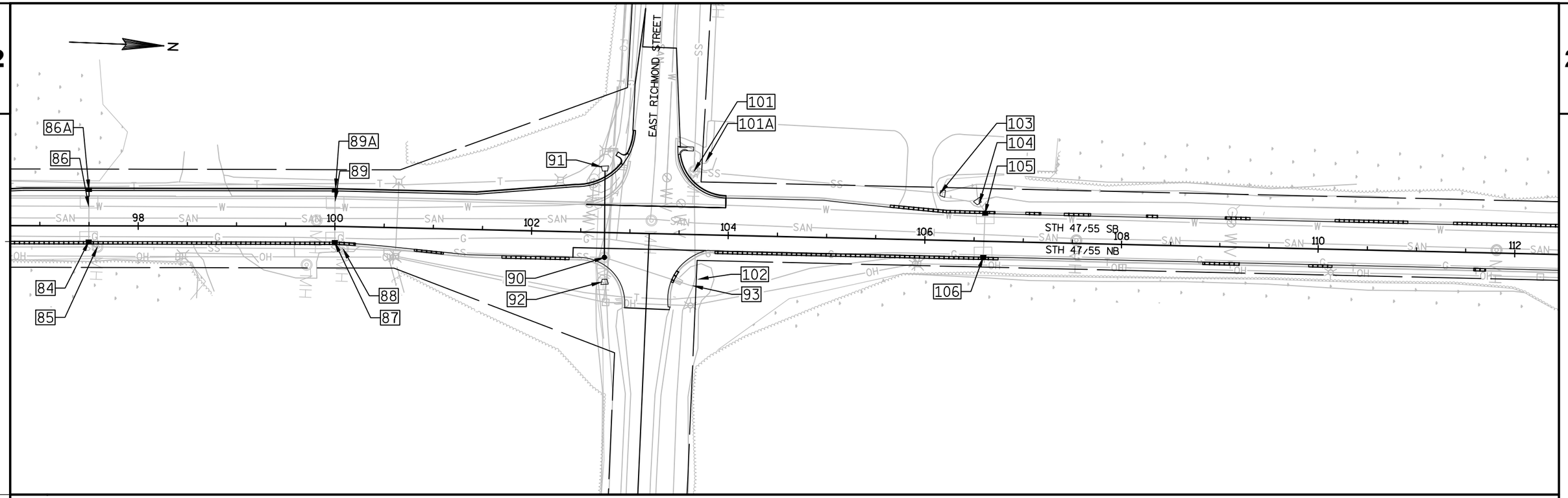


STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
69	87+71	29'	LT	REMOVE	CB	RECT	-	-	REMOVE EXISTING			-	24	EXISTING TO REMAIN-CONNECT WITH 69A					REMOVE CATCH BASIN		
69A	87+71	36.25'	LT	NEW	CB	2X3	H	820.10	819.27	814.80	4.47	70	24	54	816.8	816.45	8	0.64	INSTALL NEW CATCH BASIN 2'X3' IN NEW CURB LINE		CONNECT TO PIPE FROM EXISTING 69 TO DISCHARGE
70	87+71.5	17.25'	RT	ADJUST	CB	RECT	H	821.24	EXISTING			72	24	EXISTING					RISER REPAIR		.
71	87+71	52'	LT	REPLACE	CONC AEW	24-IN	-	INV 816.85	-			69A	24	15	816.85	816.8	15	0.56	REMOVE AND REPLACE 24" PIPE AND ENDWALL	DITCH RESTORATION	REPLACE PIPE CONNECTING 71 AND 69A
72	87+71	29'	RT	REPLACE	CONC AEW	24-IN	-	INV 816.17	-			-	-	-					REMOVE AND INSTALL NEW AEW FOR CPRC 24"	DITCH REST; PIPE	
75	90+47	18'	LT	ADJUST	CB	RECT	H	820.85	EXISTING			76	12	EXISTING					RISER REPAIR		
76	91+71	47'	LT	EXISTING	MH	ROUND	EXIST J	819.55	EXISTING			78A	15	EXISTING					NONE		
77	90+47.5	30'	RT	RECST	CB	RECT	H	818.22	EXISTING			76	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
78	92+75	18'	RT	ADJUST	CB	RECT	H	819.76	EXISTING			78A	12	EXISTING					RISER REPAIR		
78A	92+88	22.'	RT	EXISTING	MH	ROUND	EXIST J	820.41	EXISTING			82	15	EXISTING					NONE		
80	92+74	30'	LT	ADJUST	CB	RECT	H	817.45	EXISTING			78A	12	EXISTING					RISER REPAIR		
81	94+99.5	18'	RT	ADJUST	CB	RECT	H	817.27	EXISTING			82	12	EXISTING					RISER REPAIR		
82	95+07	22'	RT	EXIST	MH	ROUND	-	818.02	EXISTING			85	15	EXISTING					NONE		
83	94+99.5	30'	LT	ADJUST	CB	RECT	H	817.33	EXISTING			81	12	EXISTING					RISER REPAIR		

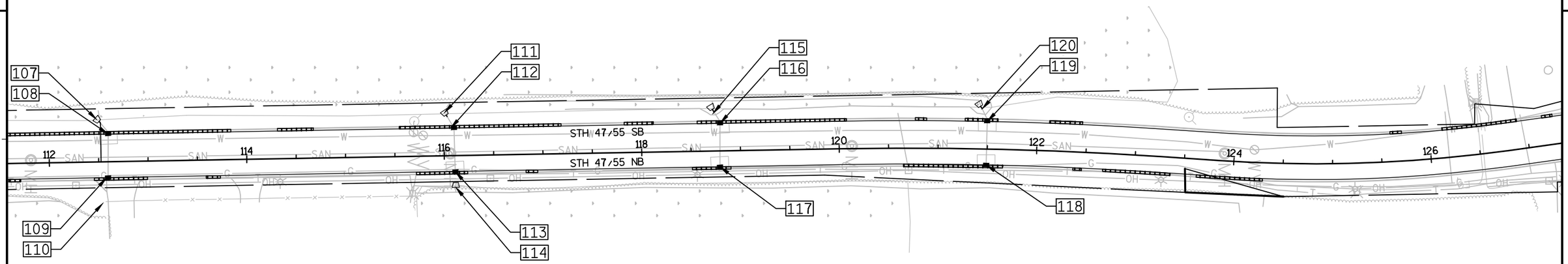
STRUCT NO.	STATION	OFFSET LT RT	STRUCTURE TYPE	EX INV LT	EX INV RT	PROP INV LT	PROP INV RT	REMARKS	CLEANING

PROJECT NO: 6243-07-70/71 | HWY: STH 47 | COUNTY: SHAWANO | STORM SEWER AND CULVERT PIPES | SHEET 48 | E

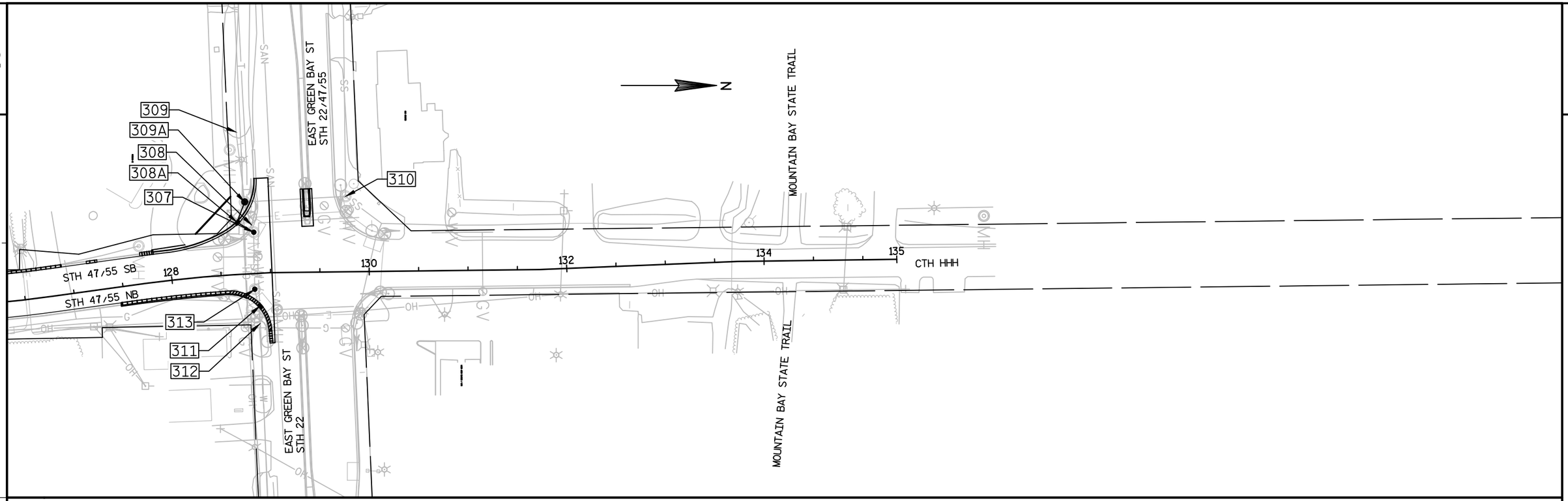
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\022501_SS_6243-07-70.DWG PLOT DATE : 2/1/2016 10:47 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 100'_XREF



STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
84	97+49.5	18.0'	RT	ADJUST	CB	RECT	H	816.33	EXISTING			85	12	EXISTING					RISER REPAIR		
85	97+59	21.5'	RT	EXISTING	MH	ROUND	EXIST-J	816.85	EXISTING			88	18	EXISTING					NONE		
86	97+49.5	29.0'	LT	REMOVE	CB	RECT	-	-	REMOVE EXISTING			-	12	EXISTING TO REMAIN-CONNECT WITH 86A					REMOVE CATCH BASIN		
86A	97+49.5	37'	LT	NEW	CB	2X3	HM-GJ	816.07	815.24	811.23	4.01	84	12	54.5	813.23	813.23	8	FLAT	INSTALL NEW CATCH BASIN 2'X3' IN NEW CURB LINE		CONNECT TO PIPE FROM EXISTING 86 TO DISCHARGE
87	100+00	18.0'	RT	ADJUST	CB	RECT	H	815.35	EXISTING			88	12	EXISTING					ADJUSTING CATCH BASIN (RISER REPAIR)		
88	100+09	23'	RT	EXISTING	MH	ROUND	-	815.98	EXISTING			90	18	EXISTING					NONE		
89	100+00	29.0'	LT	REMOVE	CB	RECT	-	-	REMOVE EXISTING			-	12	EXISTING TO REMAIN-CONNECT WITH 89A					REMOVE CATCH BASIN		
89A	100+00	37'	LT	NEW	CB	2X3	HM-GJ	815.14	814.31	810.10	4.21	87	12	54.5	812.1	812.1	8	FLAT	INSTALL NEW CATCH BASIN 2'X3' IN NEW CURB LINE		CONNECT TO PIPE FROM EXISTING 89 TO DISCHARGE
90	102+75	25.4'	RT	RECST	MH	ROUND	J	814.28	EXISTING			93	24S	EXISTING					NEW CONC PIPE CONNECTION TO 91		NEED DOWNSTREAM FROM 91 FOR CUTOUT
91	102+73.2	62.6'	LT	REPLACE	CONC AEW	19x30	-	INV 811.11	-			90	19x30	88	811.11	~810.78	88	0.38	REPLACE ENTIRE EXISTING 20X28 STEEL PIPE AND AEW WITH 19X30 CONC		
92	102+75.5	47.5'	RT	REPLACE	STEEL AEW	18-IN	-	INV 810.68	-			90	18S	EXISTING					REMOVE AND REPLACE AEW 18" STEEL	DITCH RESTORATION	
93	103+60	51.0'	RT	EXISTING	STEEL AEW	35X25	-	INV 808.66	-			-	-	-					NONE		
101	103+65	64.0'	LT	EXISTING	MH	ROUND	EXIST J	814.21	EXISTING			102	42	EXISTING					NONE		
101A	103+74	77.0'	LT	EXISTING	CONC AEW		-	INV 811.19	-			101	12	EXISTING					NONE		
102	103+68	43.0'	RT	EXISTING	CONC AEW	42-IN	-	INV 807.88	-			-	-	-					NONE		
103	106+14.5	48.0'	LT	REPLACE	CONC AEW	24-IN	-	INV 808.88	-			101	24	EXISTING					REMOVE AND REPLACE 24" CONC AEW		
104	106+54	38.4'	LT	REPLACE	CONC AEW	12-IN	-	INV 809.48	-			-	-	-					REMOVE AND REPLACE 1 SECTION OF 12"SPRC CLASS III AND AEW 12" CONC		
105	106+60.5	30.0'	LT	RECST	CB	RECT	H	812.66	EXISTING			104	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
106	106+60	18.0'	RT	RECST	CB	RECT	H	812.63	EXISTING			105	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		



STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
107	112+52.0	40.0'	LT	REPLACE	CONC AEW	18-IN	-	809.22	-			-	-	-					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 18"		EXTEND EXISTING 18" PIPE 2'; MATCH EXISTING SLOPE ~2.2%
108	112+60	30'	LT	RECST	CB	RECT	H	812.55	EXISTING			107	18	EXISTING					RISER AND PIPE CONNECTION REPAIR		
109	112+60	18'	RT	RECST	CB	RECT	H-D	812.55	EXISTING			108	18	EXISTING					RISER AND PIPE CONNECTION REPAIR		
110	---	---	---	EXIST	MH	ROUND	EXIST	UNKNOWN	EXISTING			109	12	EXISTING					NONE		
111	116+04.0	39.6'	LT	REPLACE	CONC AEW	18-IN	-	INV 810.22	-			-	-	-					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 18"		EXTEND EXISTING 18" PIPE 2'; MATCH EXISTING SLOPE ~2.5%
112	116+10.5	30'	LT	REPLACE	CB	RECT	H	813.89	813.06	808.75	4.31	111	18	EXISTING	810.75	EXISTING			REMOVE EXISTING AND INSTALL NEW CATCH BASIN 2'X3'		
113	116+11	18'	RT	RECST	CB	RECT	H	814.01	EXISTING			112	18	EXISTING		810.75	EXISTING		RISER AND PIPE CONNECTION REPAIR		
114	116+11	27'	RT	REPLACE	CONC AEW	18-IN	-	INV 811.20	-			113	18	EXISTING					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 18"	DITCH RESTORATION	EXTEND EXISTING 18" PIPE 2'; MATCH EXISTING SLOPE ~5%
115	118+74	39.7'	LT	REPLACE	CONC AEW	12-IN	-	INV 811.17	-			-	-	-					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 12"		EXTEND EXISTING 12" PIPE 3'; MATCH EXISTING SLOPE ~1%
116	118+79.5	30'	LT	RECST	CB	RECT	H	815.15	EXISTING			115	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
117	118+79	18'	RT	ADJUST	CB	RECT	H	815.01	EXISTING			116	12	EXISTING					RISER REPAIR		
118	121+49	18'	RT	ADJUST	CB	RECT	H	816.13	EXISTING			119	12	EXISTING					RISER REPAIR		
119	121+49.5	30'	LT	RECST	CB	RECT	H	816.15	EXISTING			120	12	EXISTING					RISER AND PIPE CONNECTION REPAIR		
120	121+44	40.7'	LT	REPLACE	CONC AEW	12-IN	-	INV 812.08	-			-	-	-					REMOVE EXISTING ENDWALL, INSTALL NEW AEW FOR CPRC 12"		EXTEND EXISTING 12" PIPE 3'; MATCH EXISTING SLOPE ~4%



STRUCT NO.	STATION	OFFSET		STRUCTURE TYPE			COVER	PROP RIM (FLOW LINE)	T.O.S. ELEV	B.O.S ELEV	DEPTH (FT)	DISCHARGE PIPE TO STRUCT	SIZE (IN)	C-C (FT)	INLET ELEV	DISCHARGE ELEV	LENGTH (FT)	SLOPE (%)	REPAIR	DITCH RESTORATION/ PIPE CLEANING	REMARKS
307	128+86	41.7'	LT	EXIST	MH	ROUND	J	814.03	EXISTING			308A	18	19.5	UNKNOWN	809.93	20	UNK	RECONSTRUCT MANHOLE TO ACCEPT NEW PIPE 307-308A (REMOVE OLD OPENING, MATCH EXISTING ELEVATION)		REMOVE OLD PIPE 307-308
308	128+83.5	48'	LT	REMOVE	INLET	RECT	-	-	-			-	-	-					REMOVE CATCH BASIN		REMOVE OLD PIPE 308-309
308A	128+83.5	52.5'	LT	NEW	INLET	2X3	HM	813.55	812.72	807.93	4.79	309A	18	22	809.93	809.71	22	1	INSTALL NEW CATCH BASIN 2'X3' IN NEW CURB LINE		
309	128+74	144'	LT	EXIST	STEEL AEW	18-IN	-	INV 810.39	-			309A	18S	EXISTING					NONE	DITCH RESTORATION	
309A	128+78	73'	LT	RECST	MH	6-FT	J (MOD)*	813.91	EXISTING			310	30	EXISTING					RECONSTRUCT MANHOLE TO ACCEPT NEW PIPE 308A-309A (REMOVE OLD OPENING)		*SALVAGE EXISTING CASTING
310	129+77	76.3'	LT	EXISTING	MH	ROUND	EXIST J	814.81	EXISTING			EXISTING PIPE TO DITCH NORTH OF PROJECT									
311	128+87.5	33'	RT	REPLACE	CB	2X3	HM	813.52	812.69	808.5	4.19	313	15	EXISTING	810.5	EXISTING			REMOVE EXISTING INLET AND INSTALL NEW CATCH BASIN 2'X3'		
312	128+86.5	52.5'	RT	EXISTING	STEEL AEW	15-IN	-	INV 810.65	-			311	15S	EXISTING		810.5	EXISTING		NONE	DITCH REST; PIPE	
313	123+83.1	16'	RT	EXISTING	MH	ROUND	J	813.92	EXISTING			307	15	EXISTING					ADJUSTING MANHOLE		

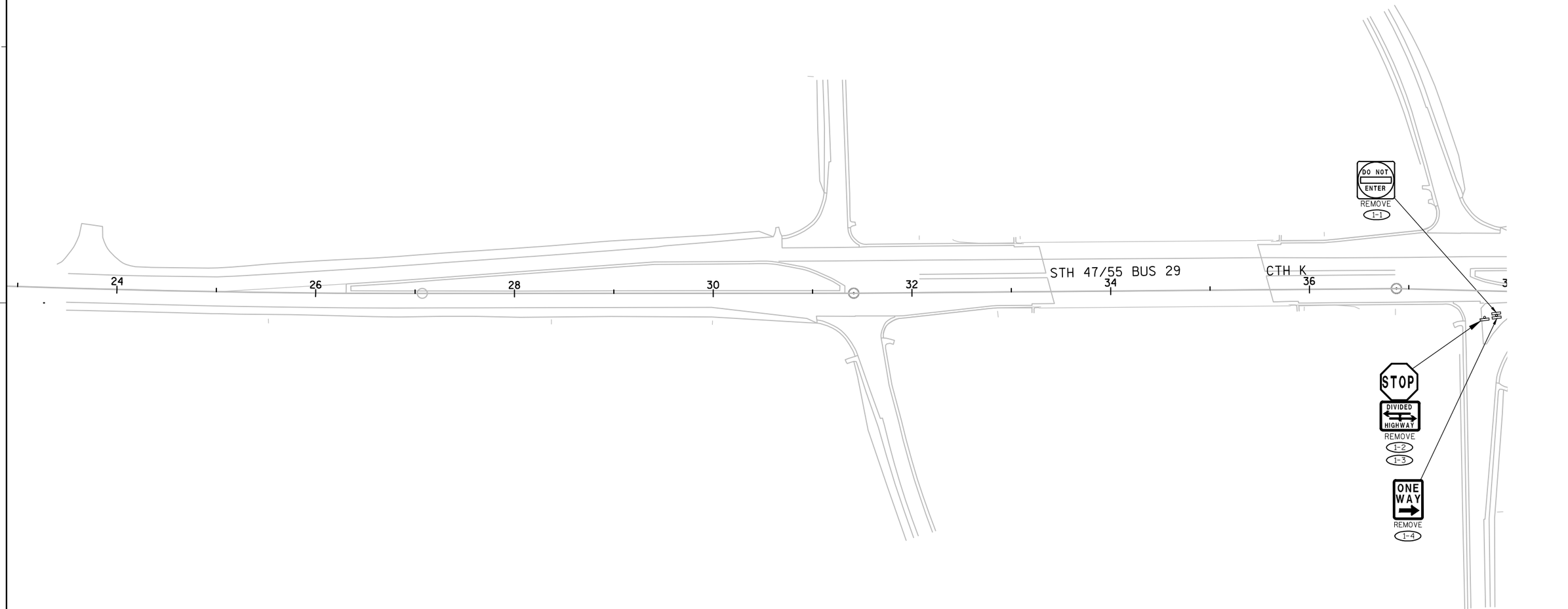
2

LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 ½" 1"	SHEET 52	E

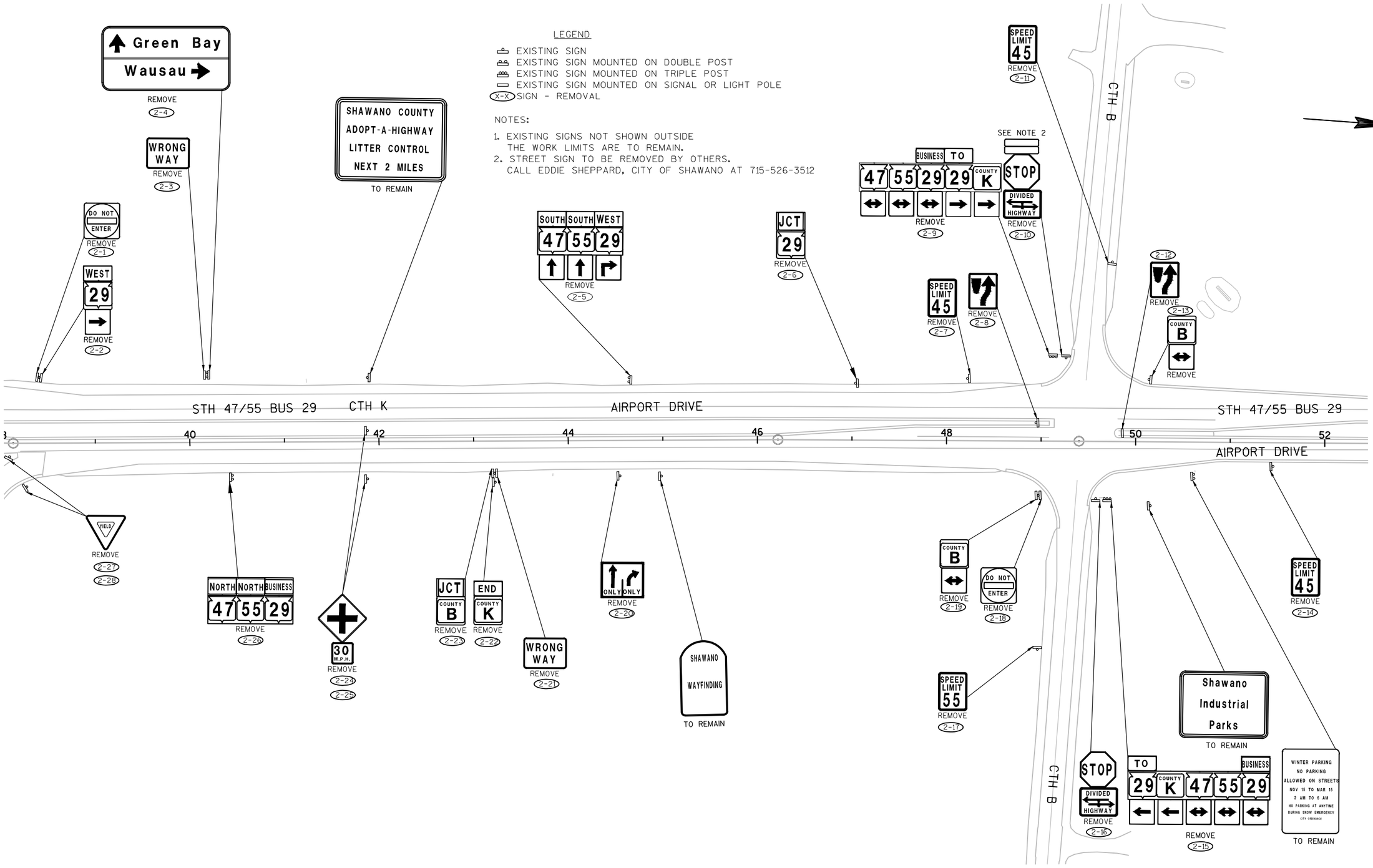
2

LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.
2. STREET SIGN TO BE REMOVED BY OTHERS. CALL EDDIE SHEPPARD, CITY OF SHAWANO AT 715-526-3512



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 ½" 1"	SHEET 53	E

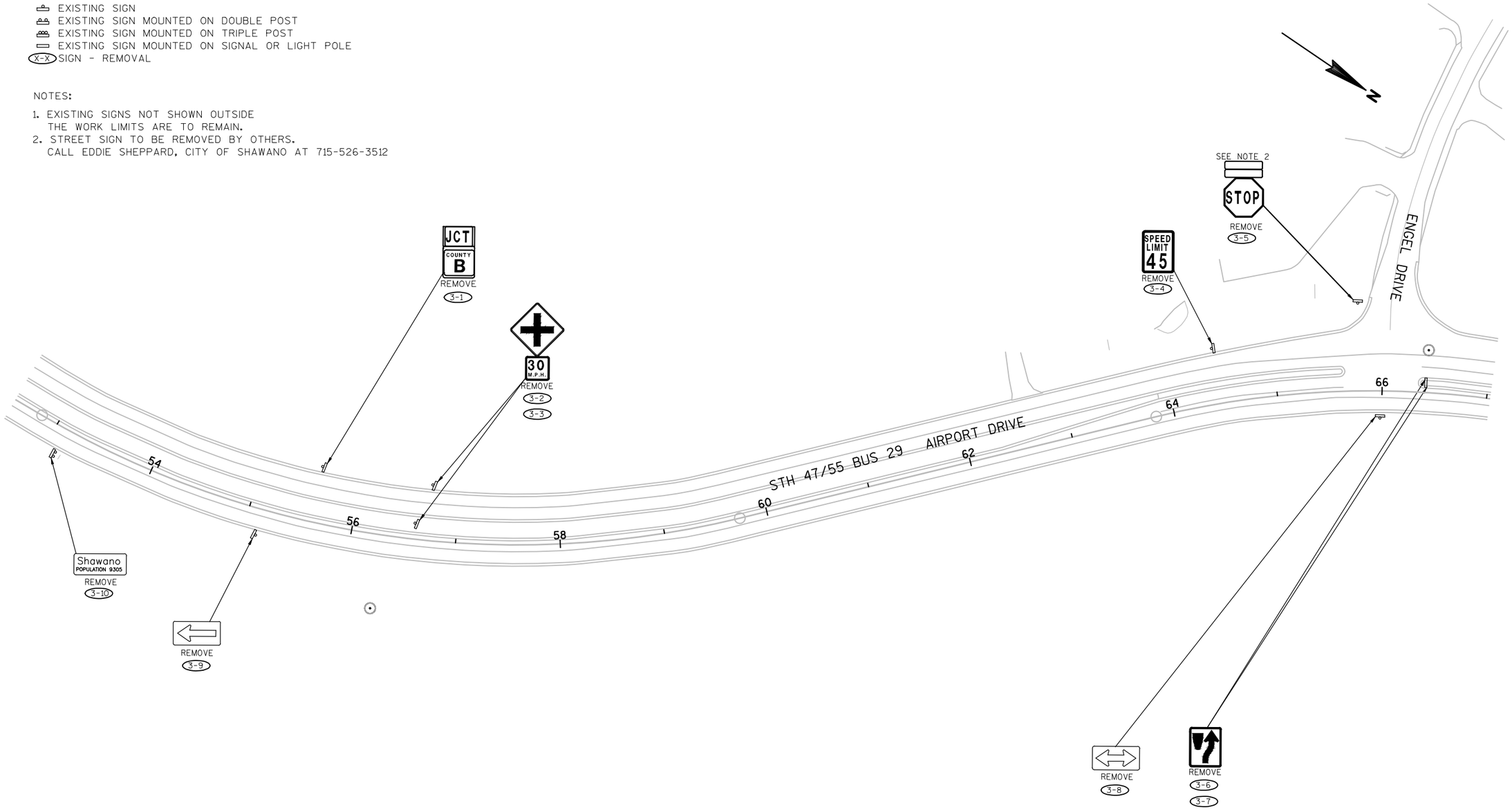
2

LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.
2. STREET SIGN TO BE REMOVED BY OTHERS. CALL EDDIE SHEPPARD, CITY OF SHAWANO AT 715-526-3512



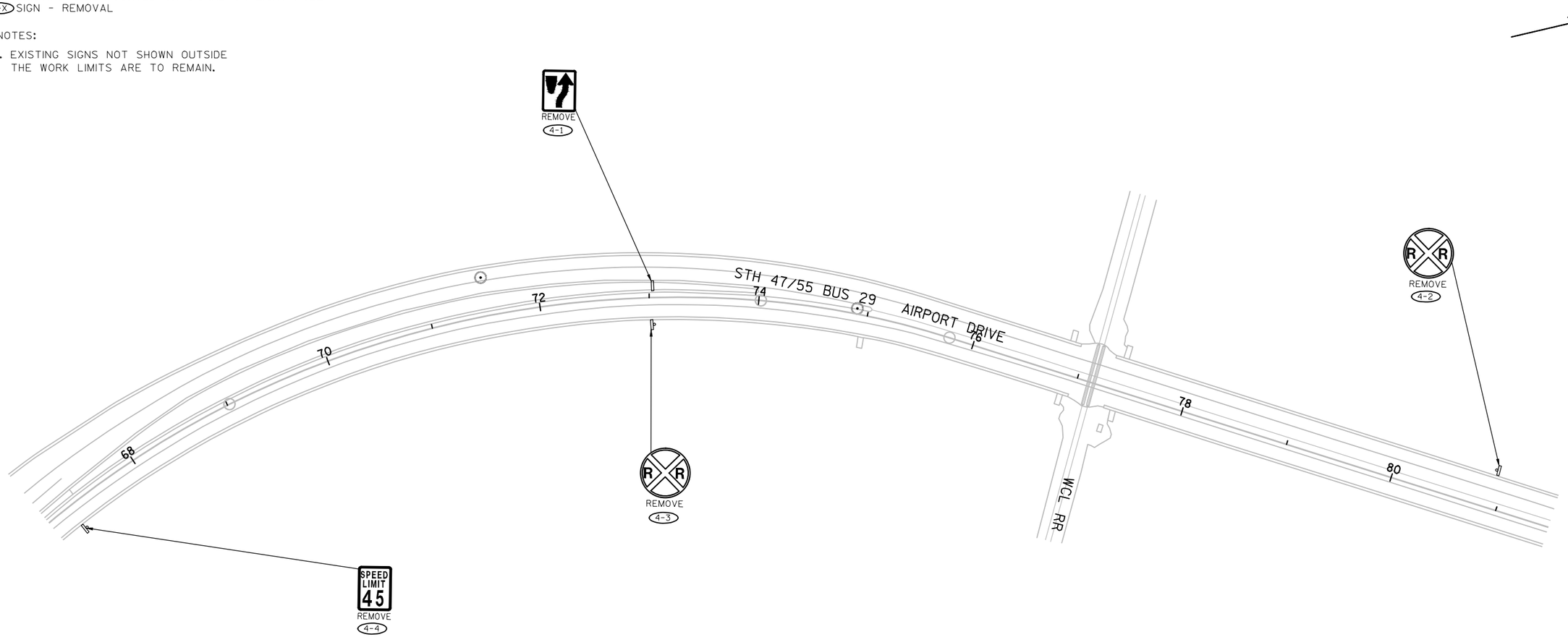
PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 1/2" 1"	SHEET 54	E

LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

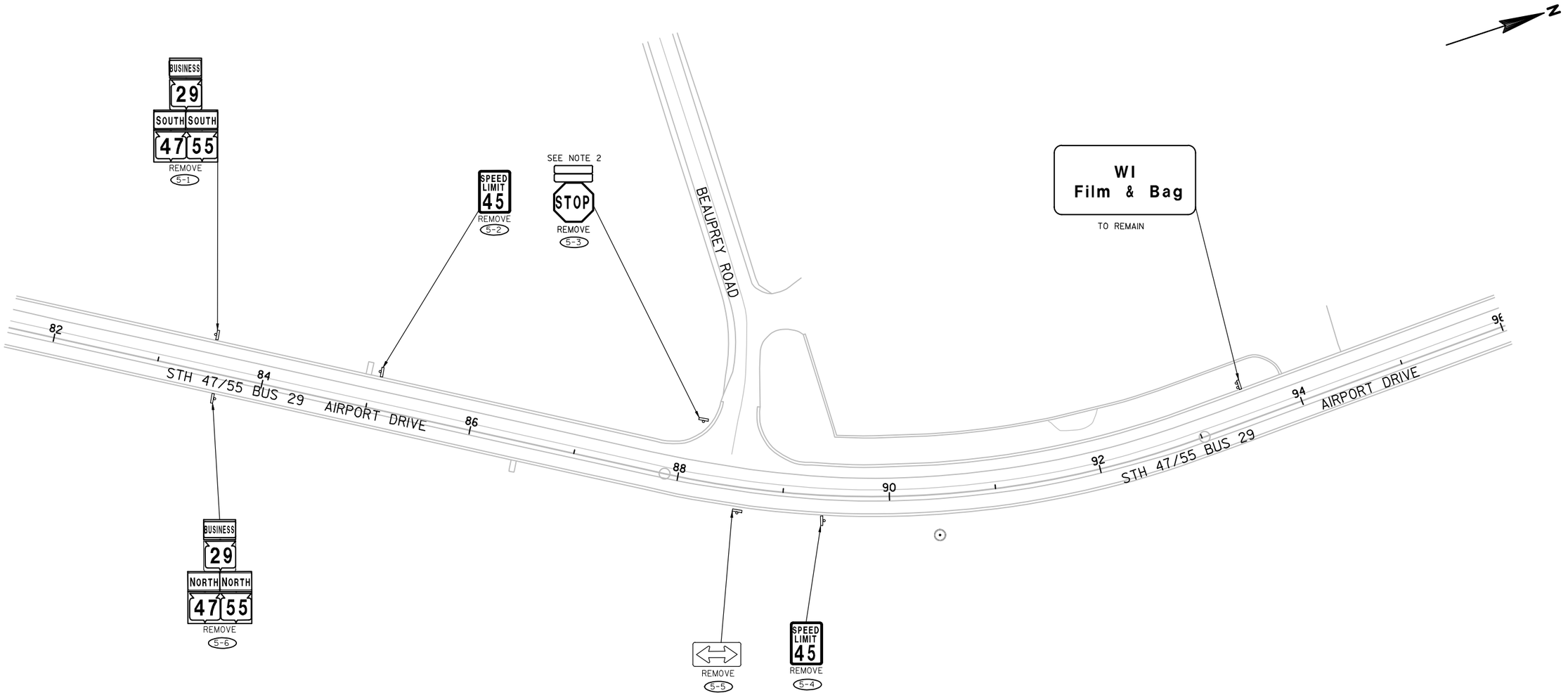
NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 1/2" 1"	SHEET 55	E

2



LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.
2. STREET SIGN TO BE REMOVED BY OTHERS. CALL EDDIE SHEPPARD, CITY OF SHAWANO AT 715-526-3512

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 1/2" 1"	SHEET 56	E

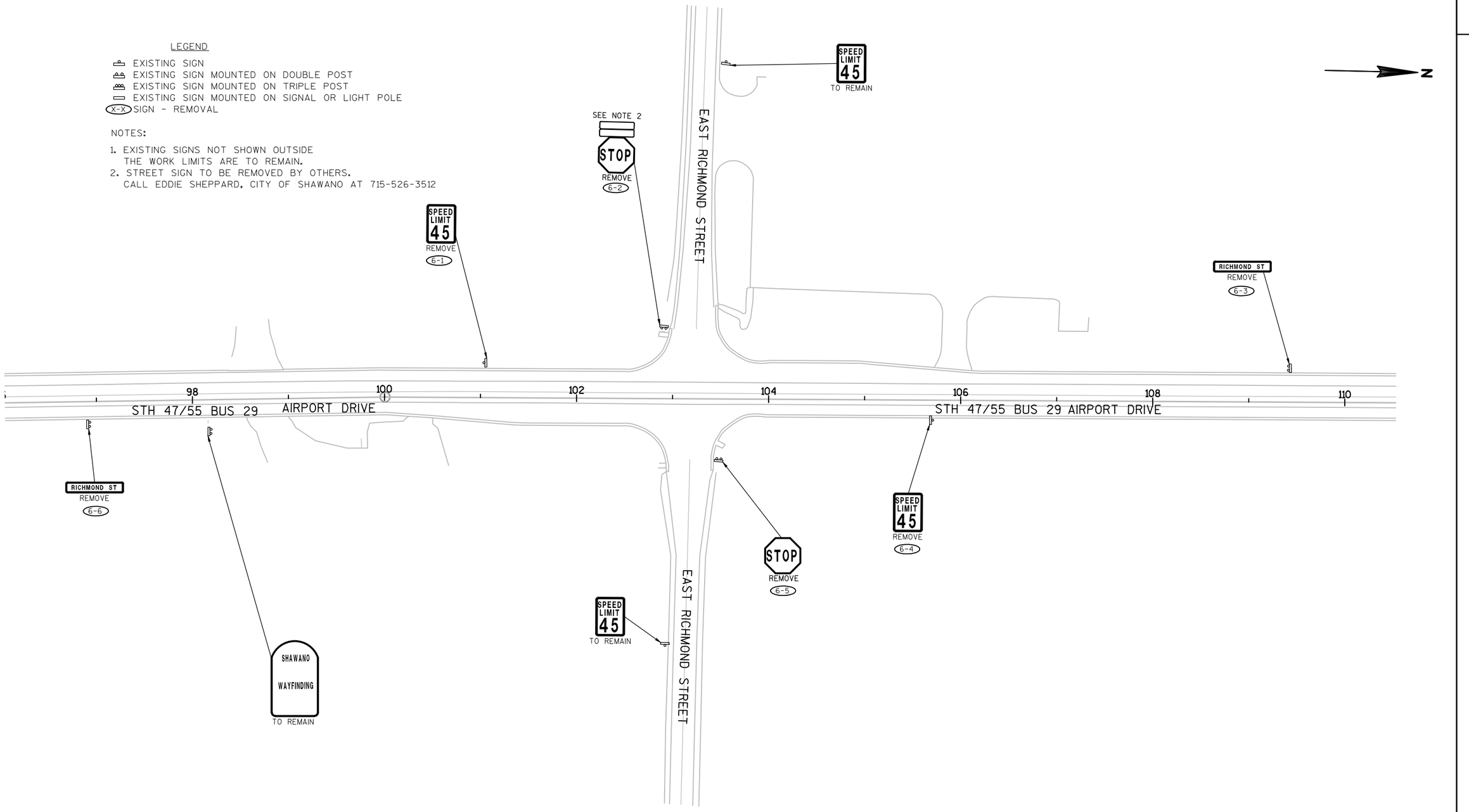
2

LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.
2. STREET SIGN TO BE REMOVED BY OTHERS. CALL EDDIE SHEPPARD, CITY OF SHAWANO AT 715-526-3512



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 1/2" 1"	SHEET 57	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_PSE.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : BRIAN GENSKOW PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 47

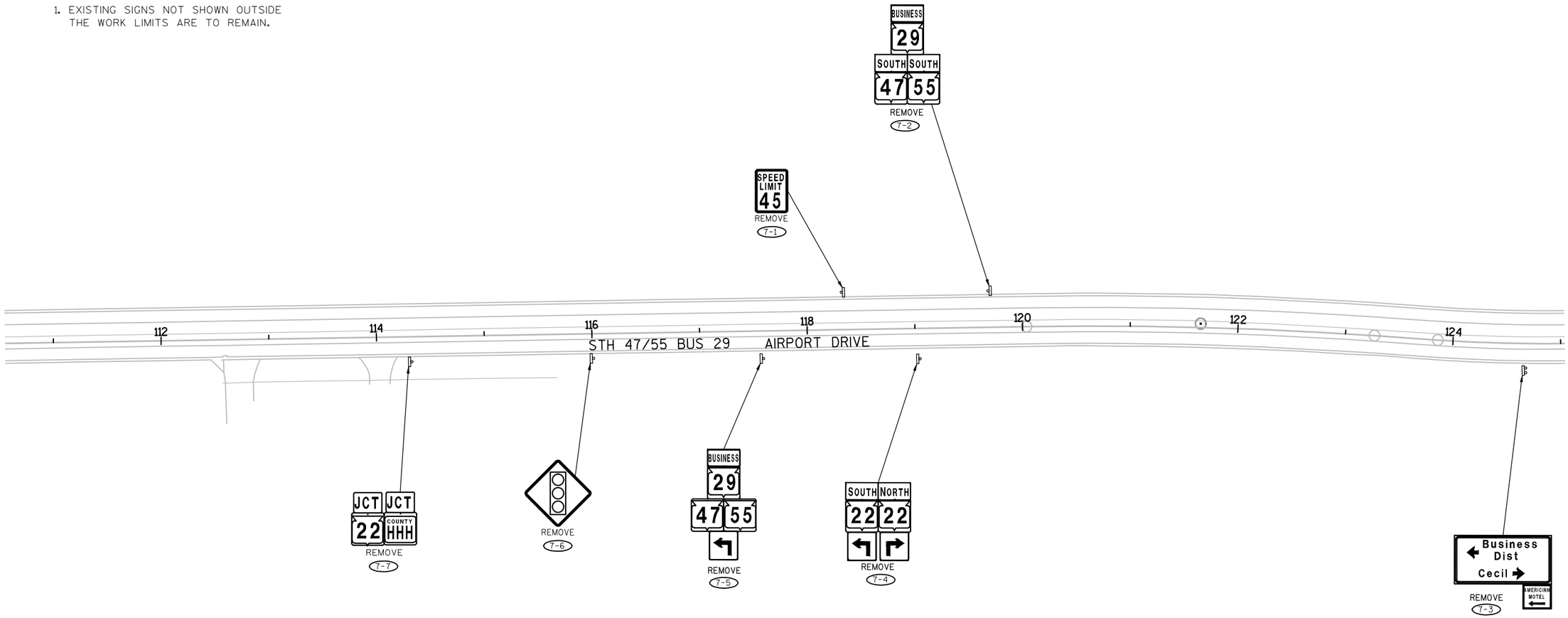
LEGEND

- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

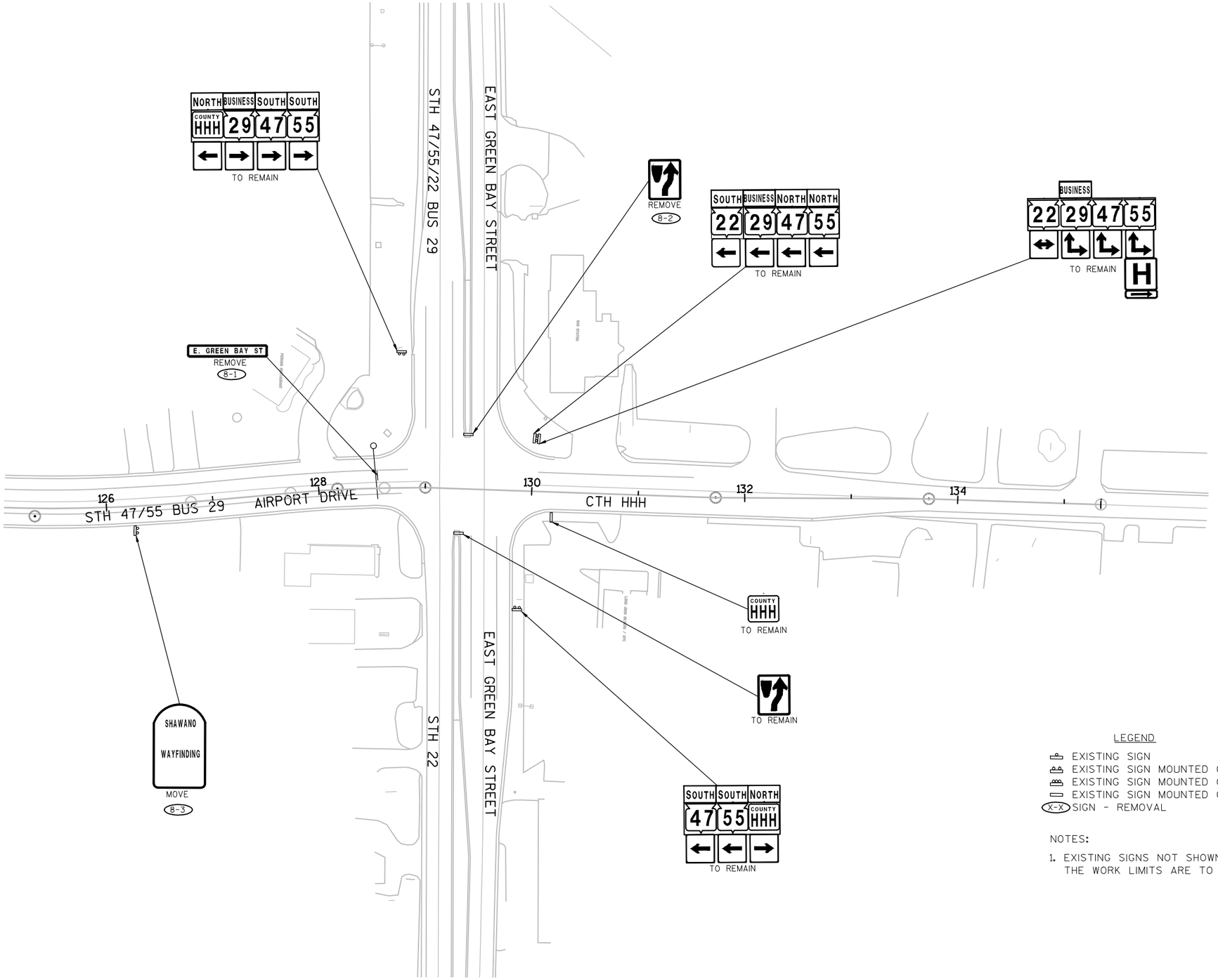
1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.

N



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 ½" 1"	SHEET 58	E

2



LEGEND

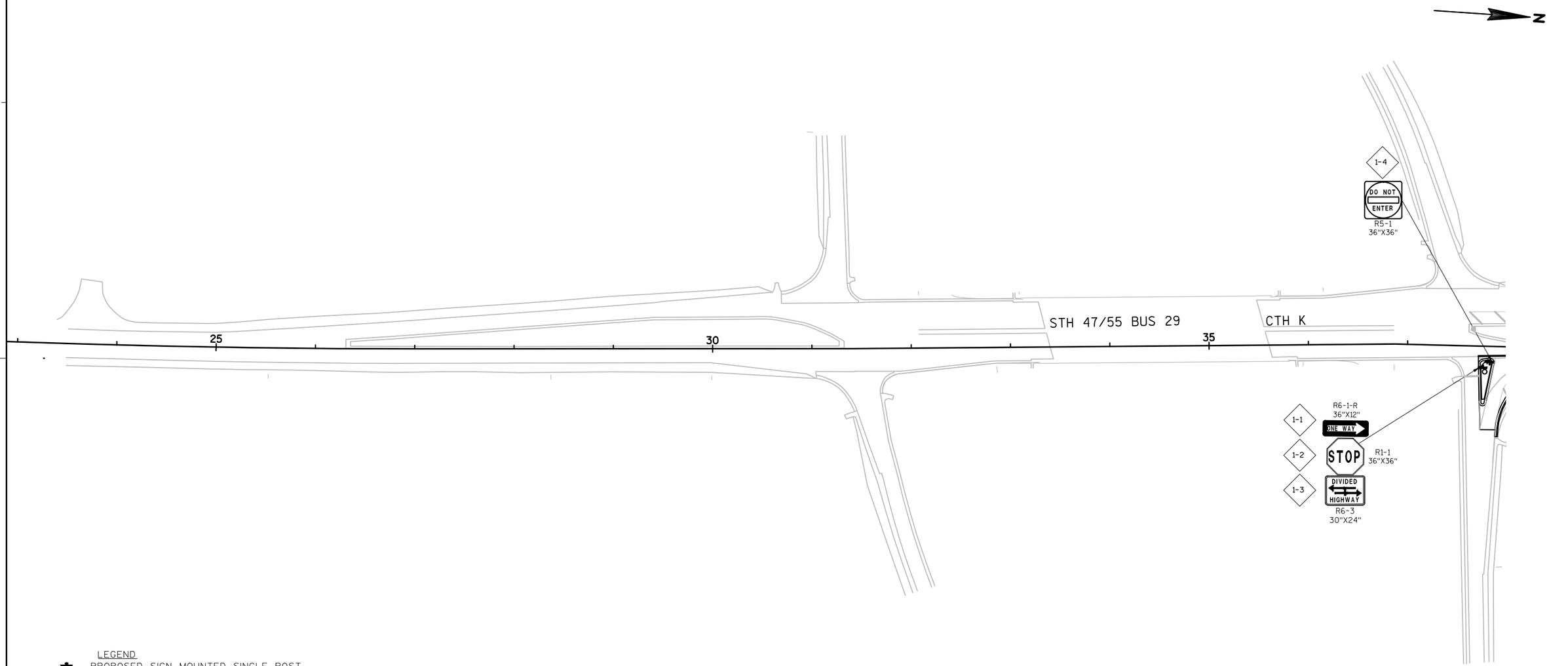
- EXISTING SIGN
- EXISTING SIGN MOUNTED ON DOUBLE POST
- EXISTING SIGN MOUNTED ON TRIPLE POST
- EXISTING SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- (X-X) SIGN - REMOVAL

NOTES:

1. EXISTING SIGNS NOT SHOWN OUTSIDE THE WORK LIMITS ARE TO REMAIN.

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	SIGNING REMOVALS - STH 47	SCALE: 0 ½" 1"	SHEET 59	E

2



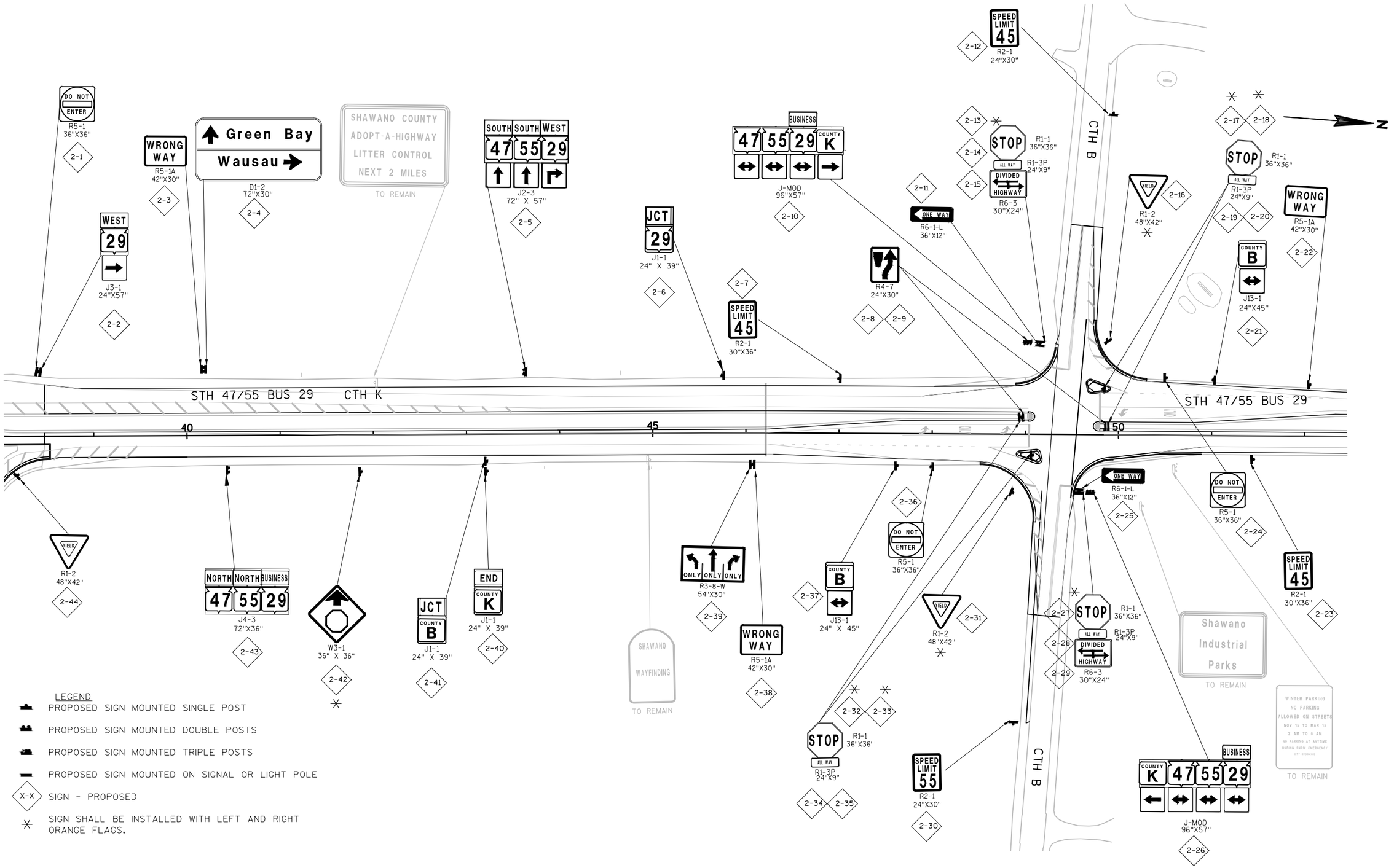
LEGEND

- PROPOSED SIGN MOUNTED SINGLE POST
- PROPOSED SIGN MOUNTED DOUBLE POSTS
- PROPOSED SIGN MOUNTED TRIPLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- X-X SIGN - PROPOSED
- SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 ½" 1"	SHEET 60	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_PS.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : BRIAN GENSKOW PLOT NAME : _____ PLOT SCALE : 1" = 100'_XREF

2



LEGEND

- PROPOSED SIGN MOUNTED SINGLE POST
- PROPOSED SIGN MOUNTED DOUBLE POSTS
- PROPOSED SIGN MOUNTED TRIPLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- X-X SIGN - PROPOSED
- SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 1/2" 1"	SHEET 61	E

LEGEND

PROPOSED SIGN MOUNTED SINGLE POST

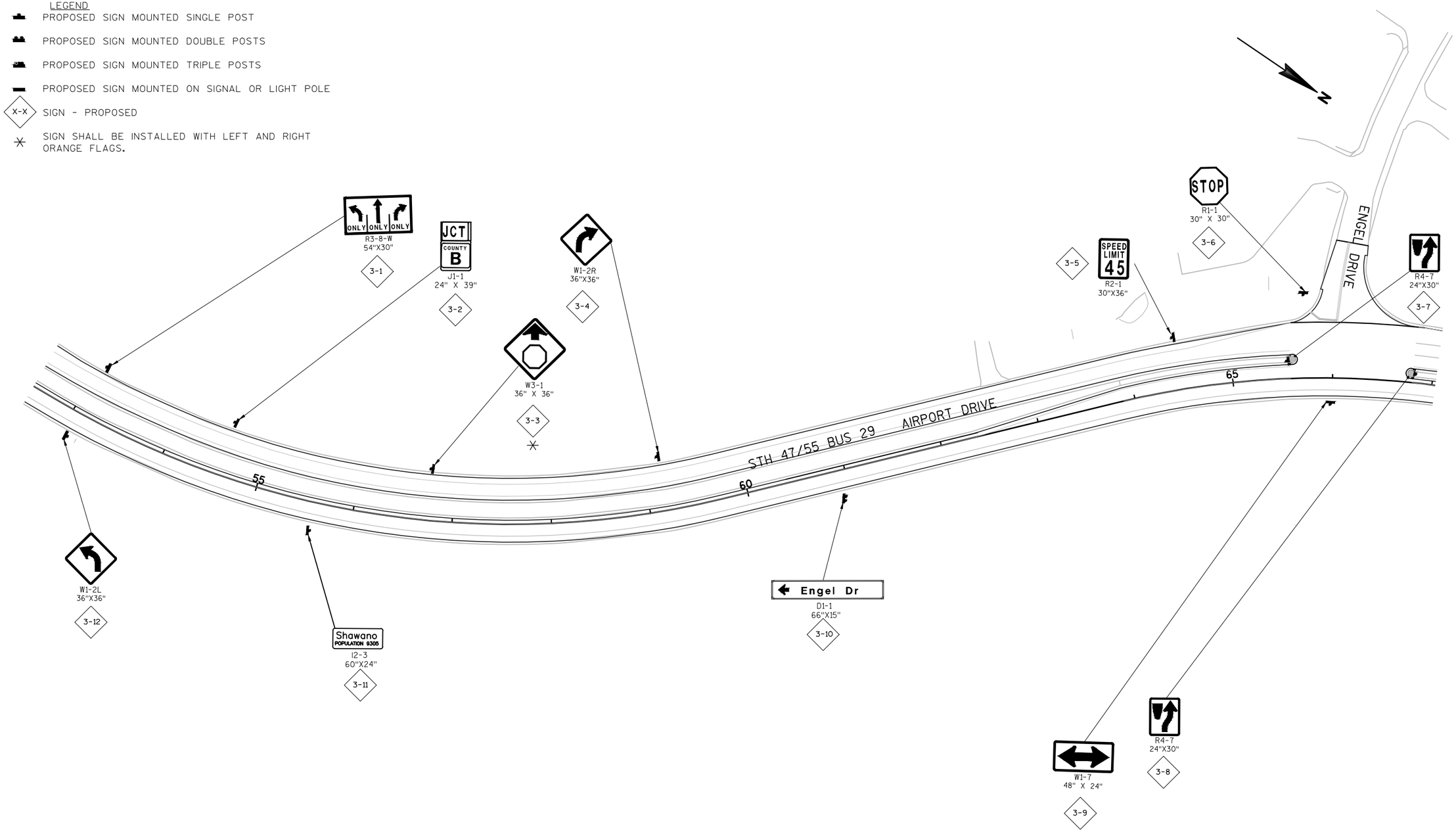
PROPOSED SIGN MOUNTED DOUBLE POSTS

PROPOSED SIGN MOUNTED TRIPLE POSTS

PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE

X-X SIGN - PROPOSED

SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.

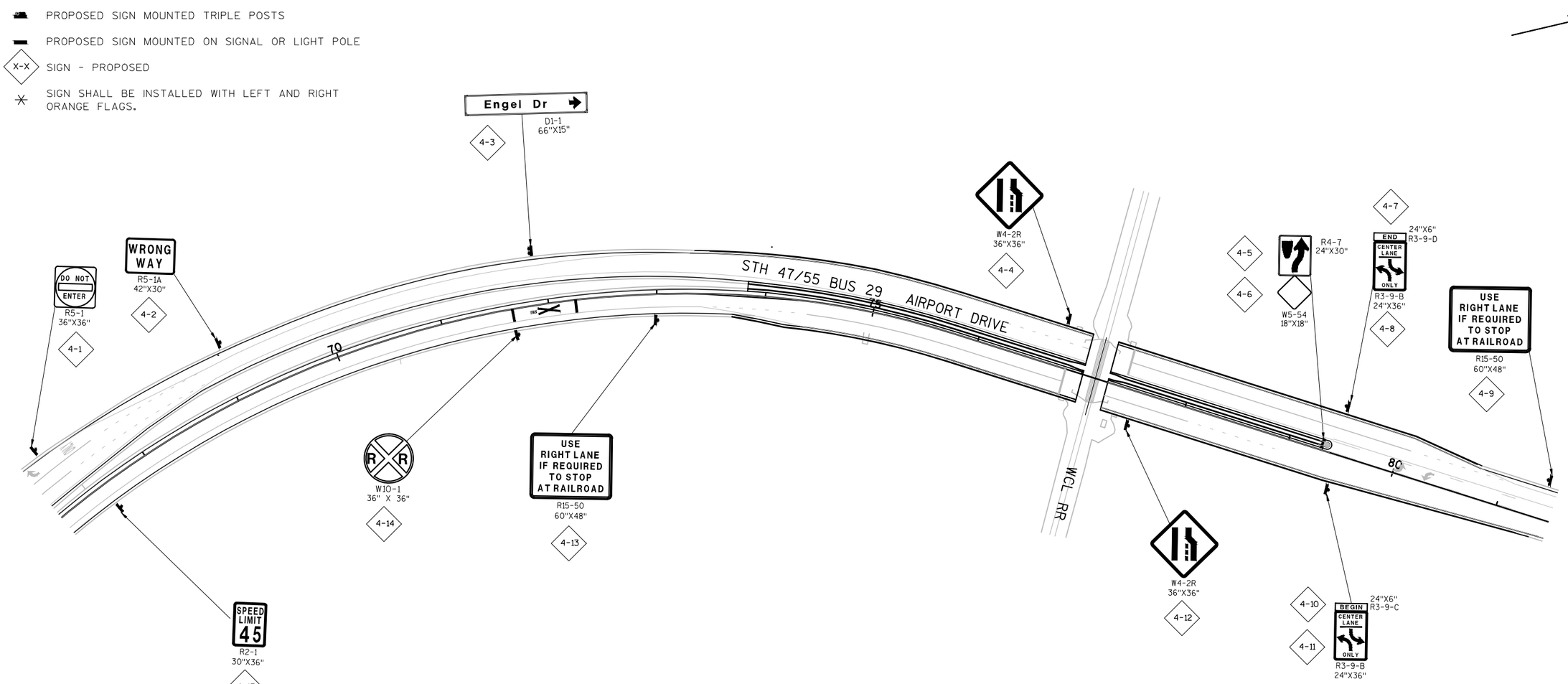


PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 ½" 1"	SHEET 62	E

2

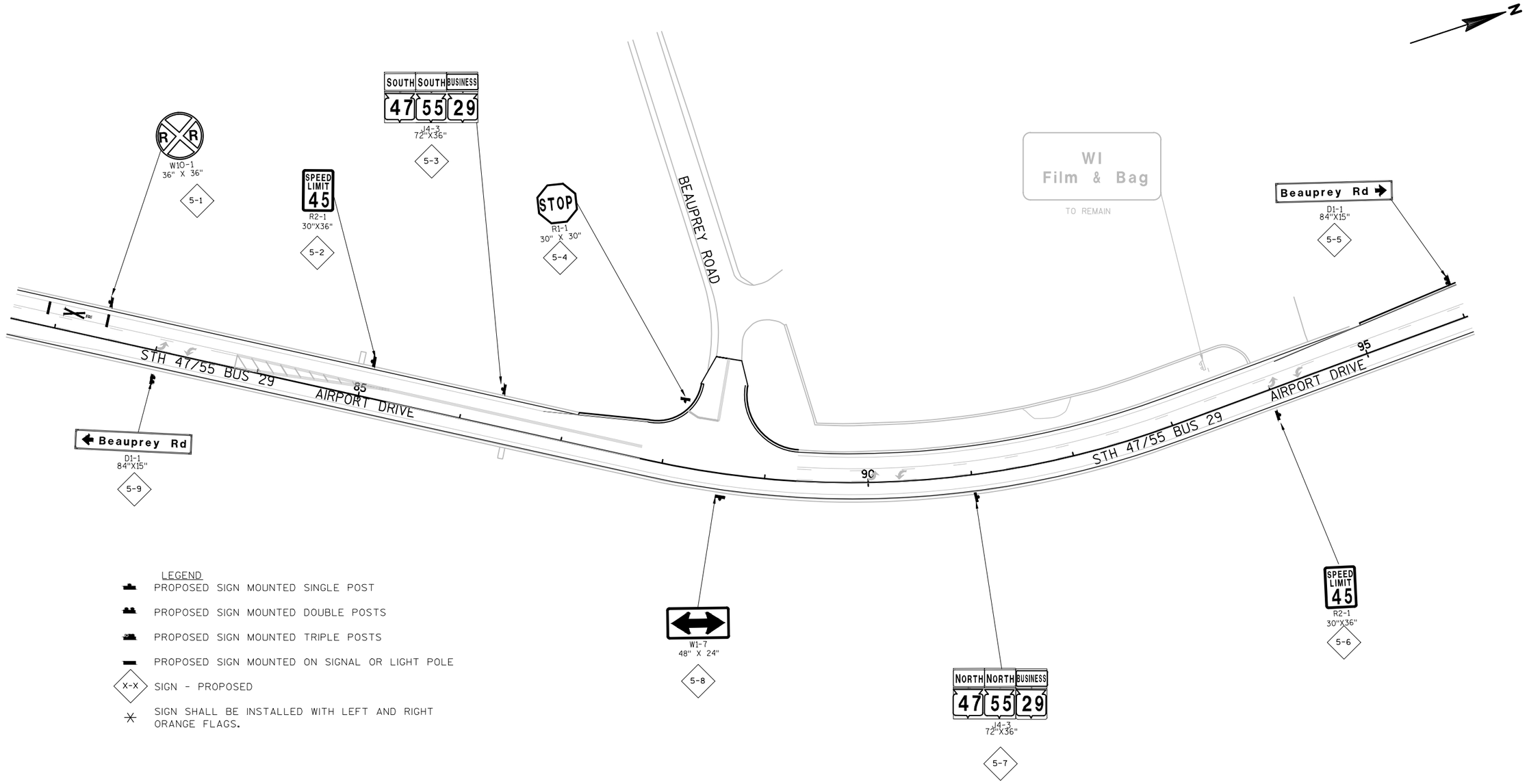
LEGEND

- PROPOSED SIGN MOUNTED SINGLE POST
- PROPOSED SIGN MOUNTED DOUBLE POSTS
- PROPOSED SIGN MOUNTED TRIPLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- X-X SIGN - PROPOSED
- SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 ½" 1"	SHEET 63	E

2



LEGEND

- PROPOSED SIGN MOUNTED SINGLE POST
- PROPOSED SIGN MOUNTED DOUBLE POSTS
- PROPOSED SIGN MOUNTED TRIPLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- X-X SIGN - PROPOSED
- SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 1/2" 1"	SHEET 64	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_PS.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : BRIAN GENSKOW PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

2

LEGEND

PROPOSED SIGN MOUNTED SINGLE POST

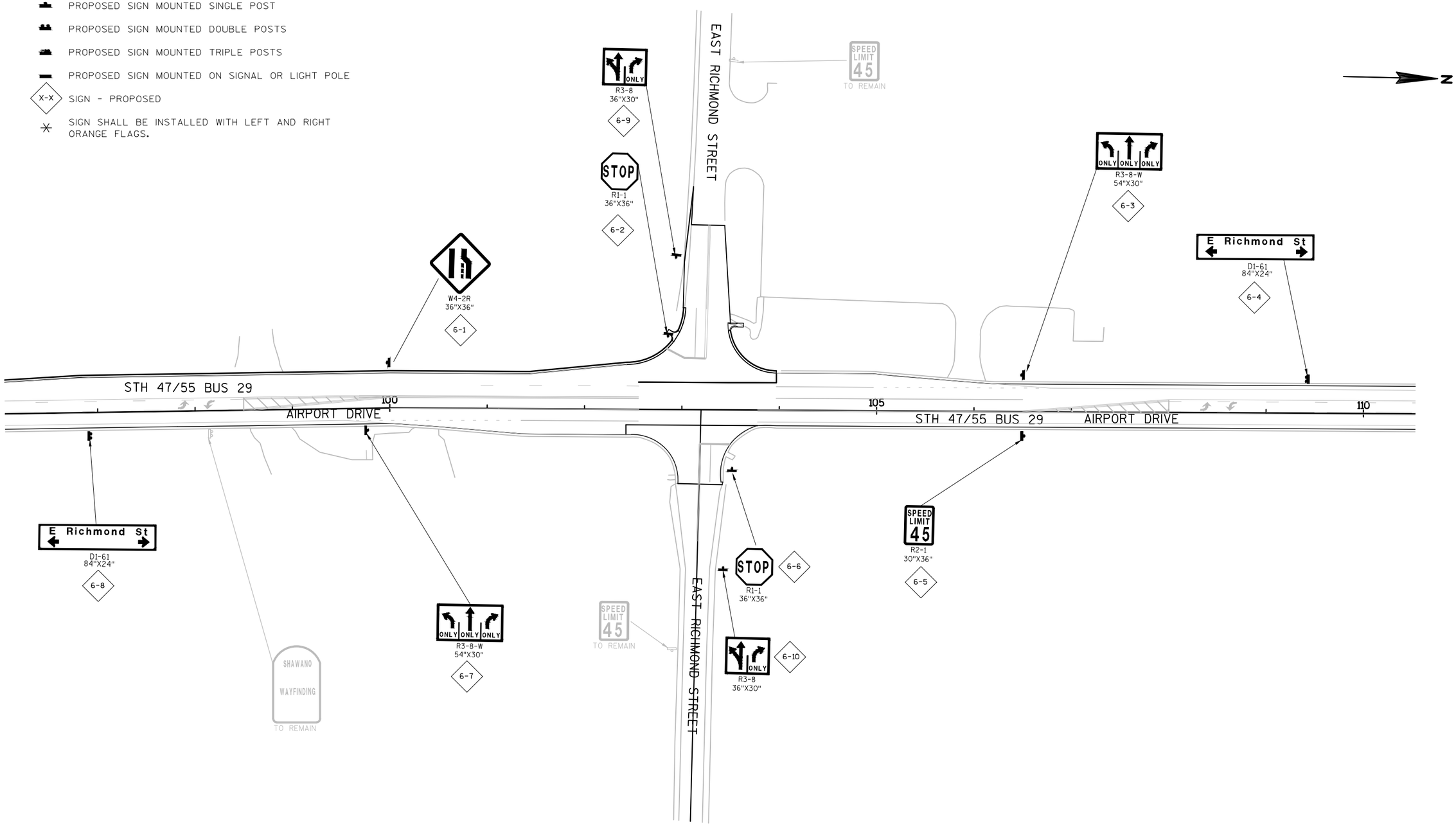
PROPOSED SIGN MOUNTED DOUBLE POSTS

PROPOSED SIGN MOUNTED TRIPLE POSTS

PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE

X-X SIGN - PROPOSED

SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 ½" 1"	SHEET 65	E

2

LEGEND

PROPOSED SIGN MOUNTED SINGLE POST

PROPOSED SIGN MOUNTED DOUBLE POSTS

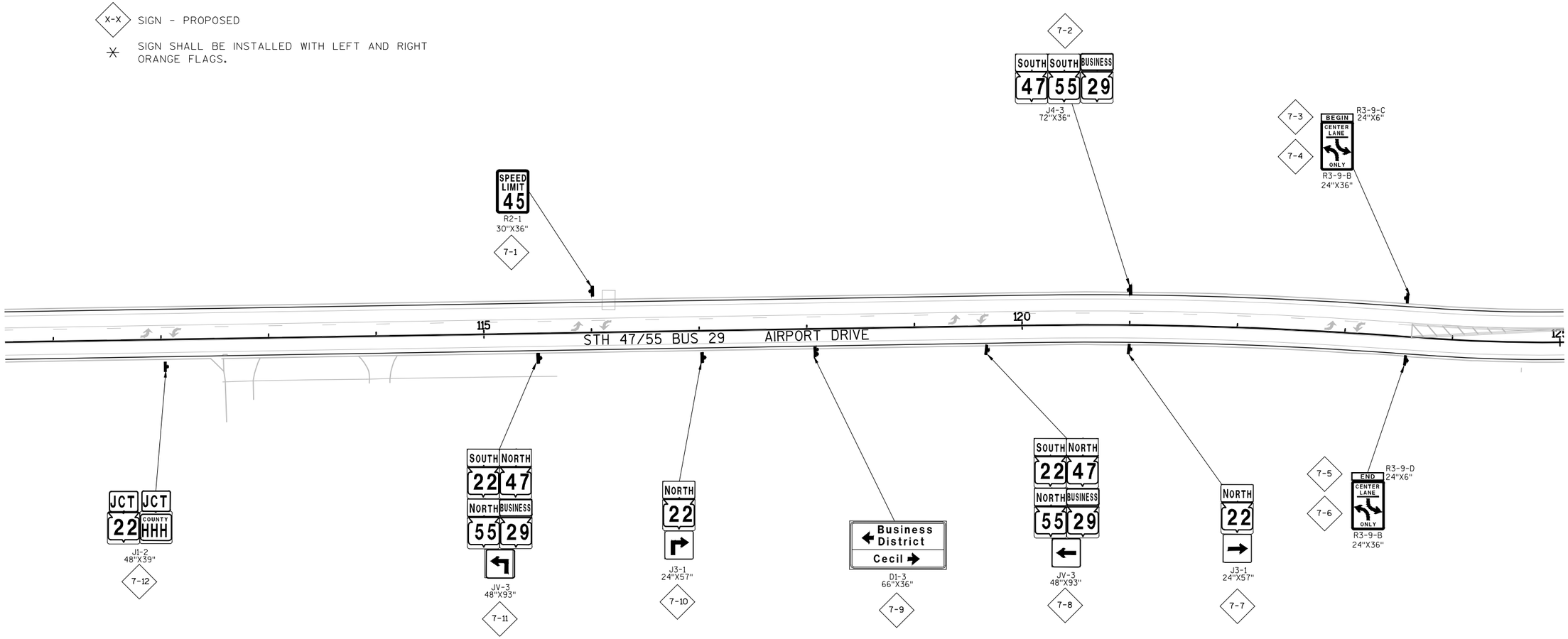
PROPOSED SIGN MOUNTED TRIPLE POSTS

PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE

X-X SIGN - PROPOSED

SIGN SHALL BE INSTALLED WITH LEFT AND RIGHT ORANGE FLAGS.

N

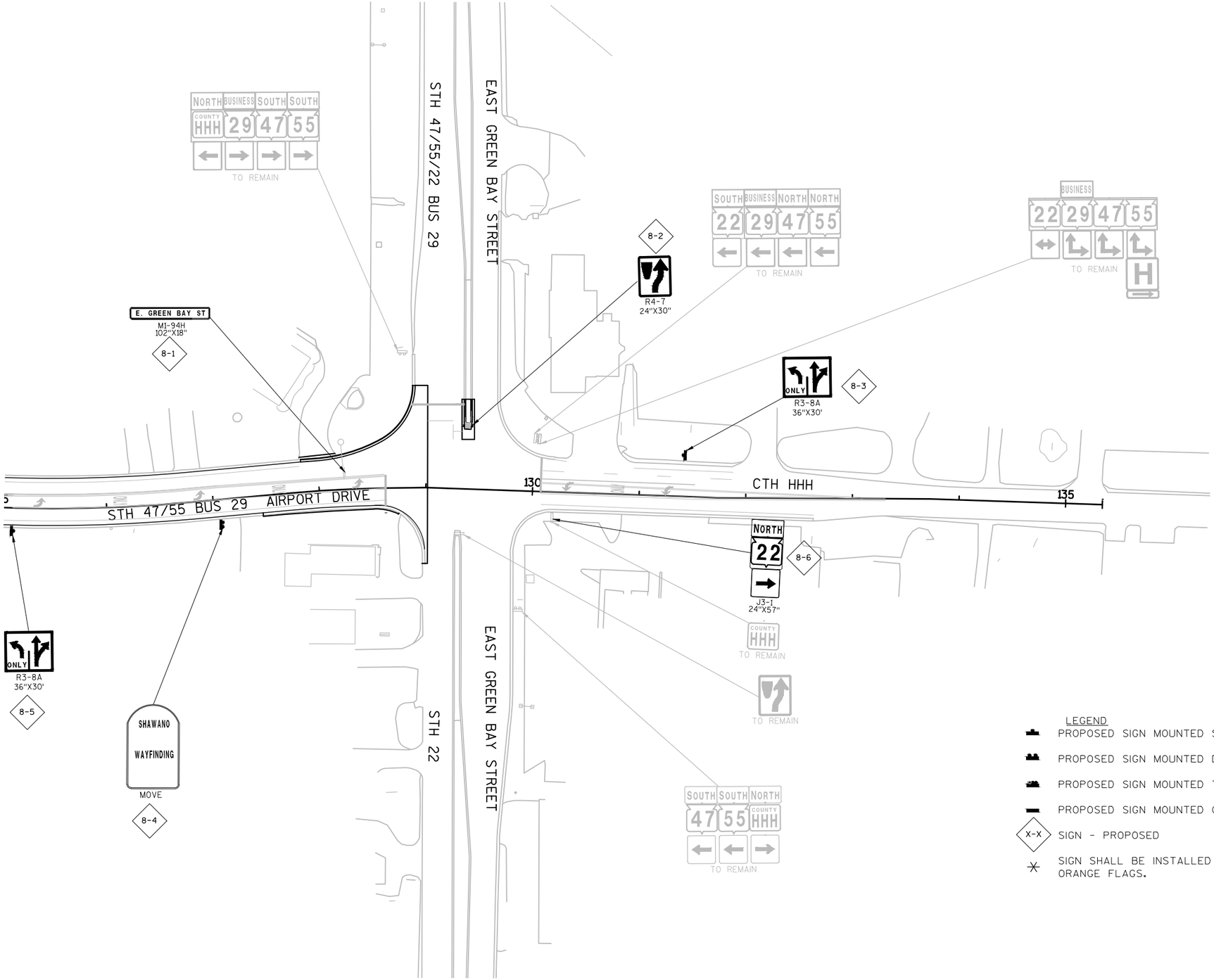


PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 1/2" 1"	SHEET 66	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_PS.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : BRIAN GENSKOW PLOT NAME : ---------- PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 47

2



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING - STH 47	SCALE: 0 ½" 1"	SHEET 67	E

2

2

N

GAS STATON

LONG JOHN SILVERS / KFC

CTH HHH

STH 22, 47, 55

STH 22

GREEN BAY STREET

AIRPORT DRIVE

STH 47, 55

AURANT

R/W

17+00 18+00 19+00 20+00 21+00 22+00

131+00 130+00 129+00 128+00

PB1 PB2 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB12 PB13 PB14 PB15 PB16

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10

CB1

REMOVE ELECTRICAL SUPPLY LEAD

LEGEND

- SIGNAL CONTROL CABINET AND BASE
- NON METALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LOOP DETECTOR
- LANE DESIGNATION (FOR REFERENCE ONLY)
- LOCAL LUMINAIRE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 12" X 24"
- 5A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)

CONSTRUCTION NOTES:

1. DISPOSE OF ALL CABLE AND WIRING EXCEPT LOOP DETECTOR WIRE.
2. BOLD CONDUIT TO BE ABANDONED IN PLACE
3. BOLD LOOP DETECTORS TO BE ABANDONED IN PLACE

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED
GRAY SHADE REPRESENTS ITEMS TO REMAIN

TRAFFIC CONTROL SIGNAL
STH 47/55/22
CITY OF SHAWANO
SHAWANO COUNTY

10/12/98
INTERSECTION RECONSTRUCTION AND JURISDICTIONAL TRANSFER
1979 ORIGINAL INSTALLATION

MUNICIPAL CONTACT: EDDIE SHEPPARD
DESIGNED BY:
REVISED BY: SRF CONSULTING GROUP, INC.

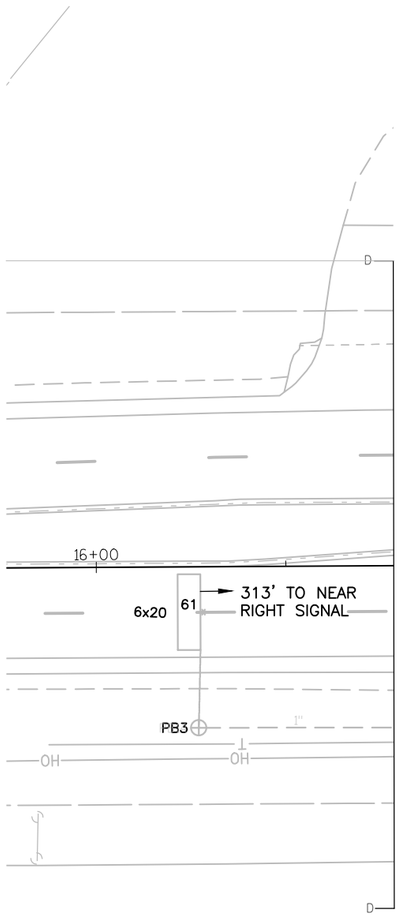
PAGE 1 OF 2

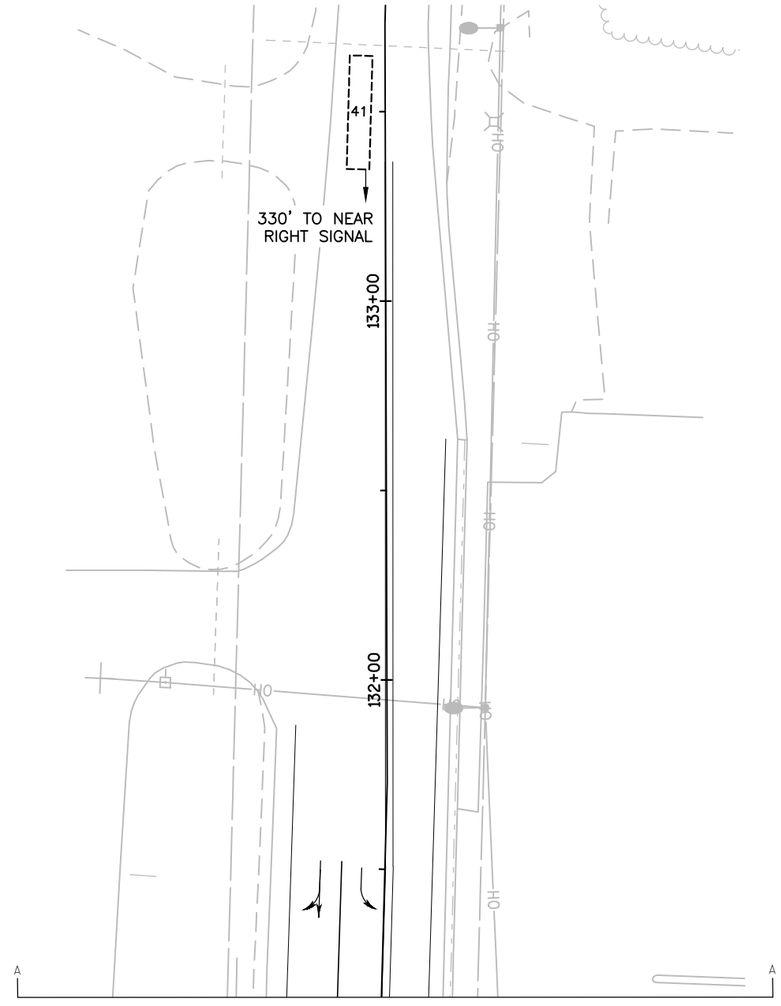
PROJECT NO: 6243-07-71	HWY: STH 47 AT CTH HHH	COUNTY: SHAWANO	TRAFFIC SIGNAL REMOVAL PLAN	SCALE: 0 20 40	SHEET 68 - E

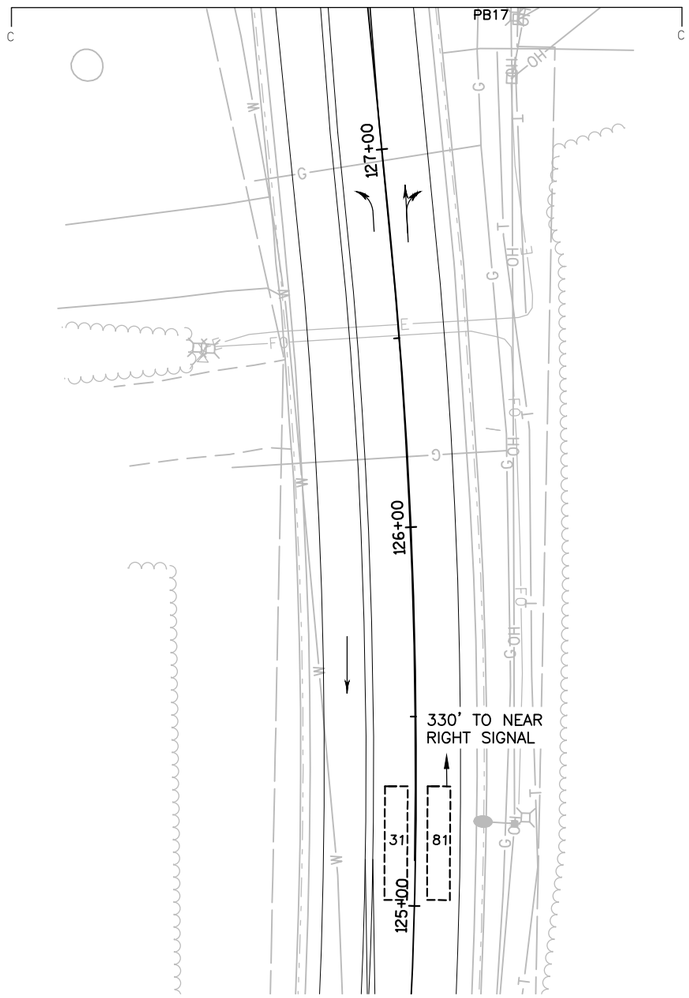
FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_SSA_REM.DWG PLOT DATE : 8/3/2015 6:14 PM PLOT BY : RACHEL BURNHAM PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

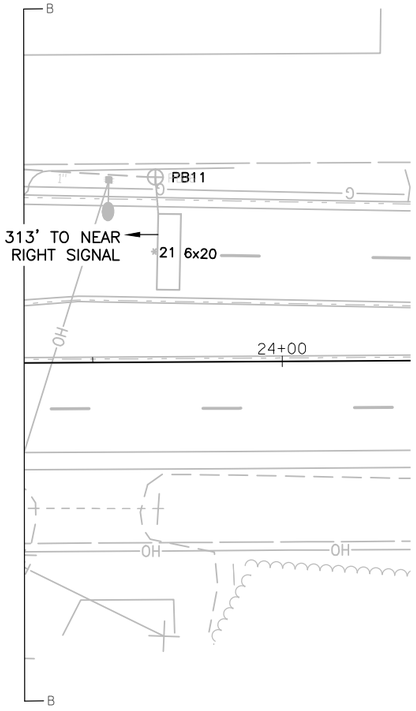
WISDOT/CADDS SHEET 42

2









TRAFFIC CONTROL SIGNAL
STH 47/55/22
CITY OF SHAWANO
SHAWANO COUNTY

MUNICIPAL CONTACT: EDDIE SHEPPARD
DESIGNED BY:
REVISED BY: SRF CONSULTING GROUP, INC.

PAGE 2 OF 4

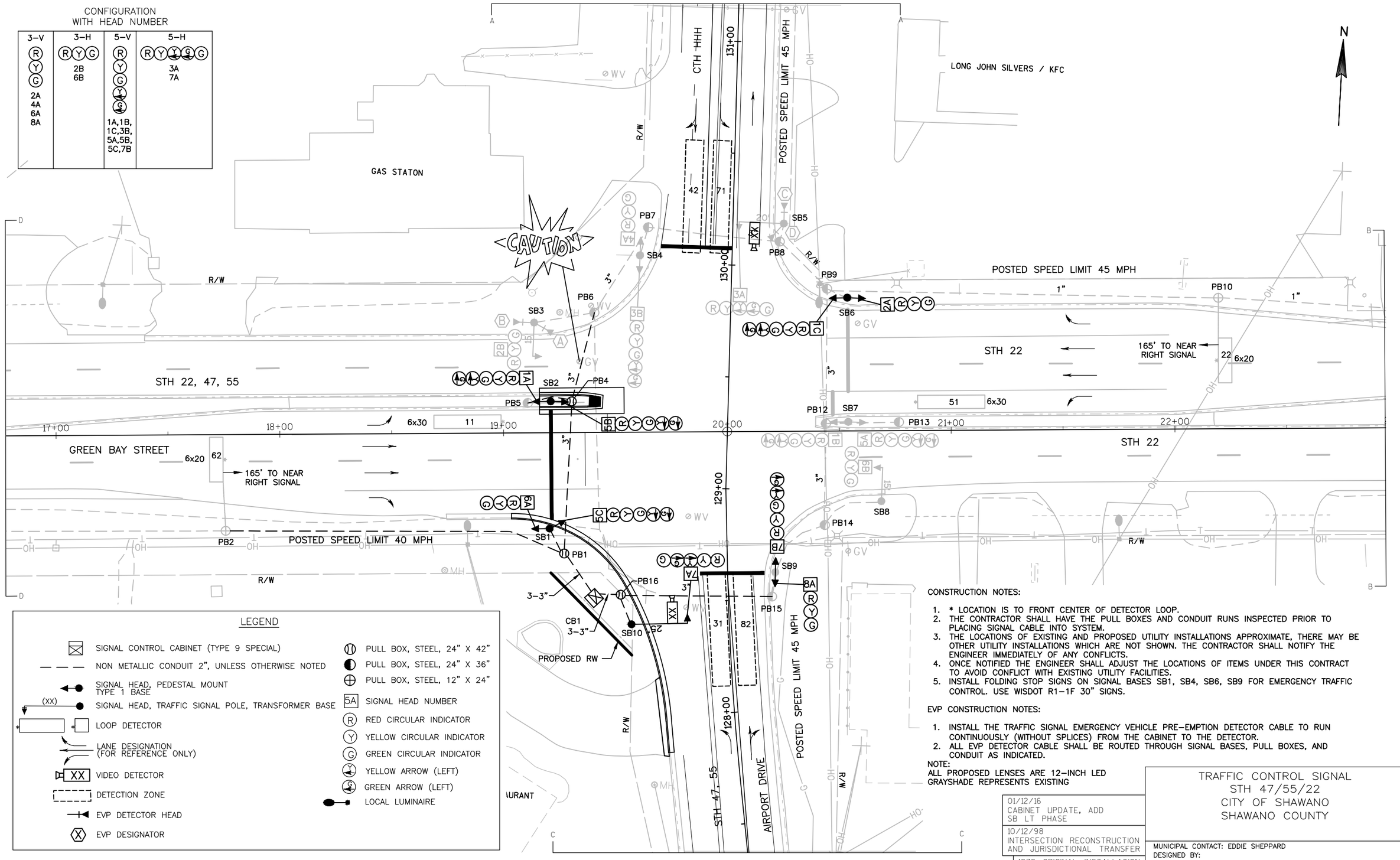
PROJECT NO:6243-07-71	HWY:STH 47 AT CTH HHH	COUNTY:SHAWANO	REVISED TRAFFIC SIGNAL PLAN	SCALE: 0 20 40	SHEET 69	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_SSA.DWG PLOT DATE : 8/3/2015 6:30 PM PLOT BY : RACHEL BURNHAM PLOT NAME : _____ PLOT SCALE : 1:1

WISDOT/CADDS SHEET 42

CONFIGURATION
WITH HEAD NUMBER

3-V	3-H	5-V	5-H
R Y G 2A 4A 6A 8A	R Y G 2B 6B	R Y G 1A,1B, 1C,3B, 5A,5B, 5C,7B	R Y Y G G 3A 7A



LEGEND

- SIGNAL CONTROL CABINET (TYPE 9 SPECIAL)
- NON METALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LOOP DETECTOR
- LANE DESIGNATION (FOR REFERENCE ONLY)
- XX VIDEO DETECTOR
- DETECTION ZONE
- EVP DETECTOR HEAD
- X EVP DESIGNATOR
- PULL BOX, STEEL, 24" X 42"
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 12" X 24"
- 5A SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- LOCAL LUMINAIRE

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS APPROXIMATE, THERE MAY BE OTHER UTILITY INSTALLATIONS WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICTS.
4. ONCE NOTIFIED THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. INSTALL FOLDING STOP SIGNS ON SIGNAL BASES SB1, SB4, SB6, SB9 FOR EMERGENCY TRAFFIC CONTROL. USE WISDOT R1-1F 30" SIGNS.

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR.
2. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED.

NOTE:
ALL PROPOSED LENSES ARE 12-INCH LED
GRAYSHADE REPRESENTS EXISTING

01/12/16	CABINET UPDATE, ADD SB LT PHASE
10/12/98	INTERSECTION RECONSTRUCTION AND JURISDICTIONAL TRANSFER
1979	ORIGINAL INSTALLATION

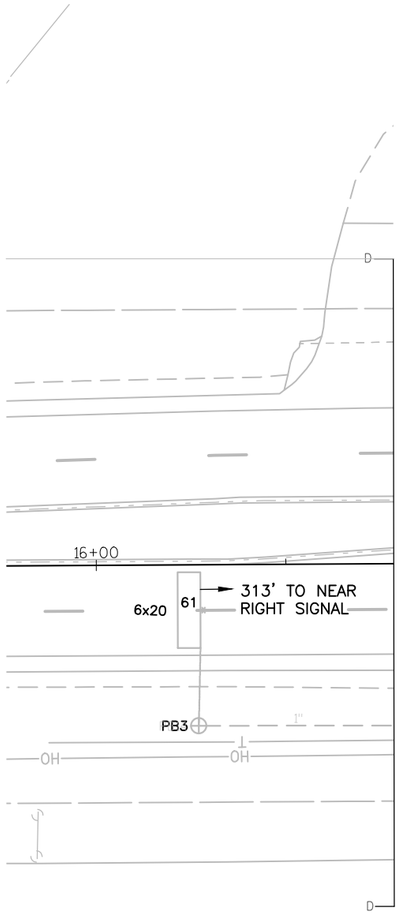
TRAFFIC CONTROL SIGNAL
STH 47/55/22
CITY OF SHAWANO
SHAWANO COUNTY

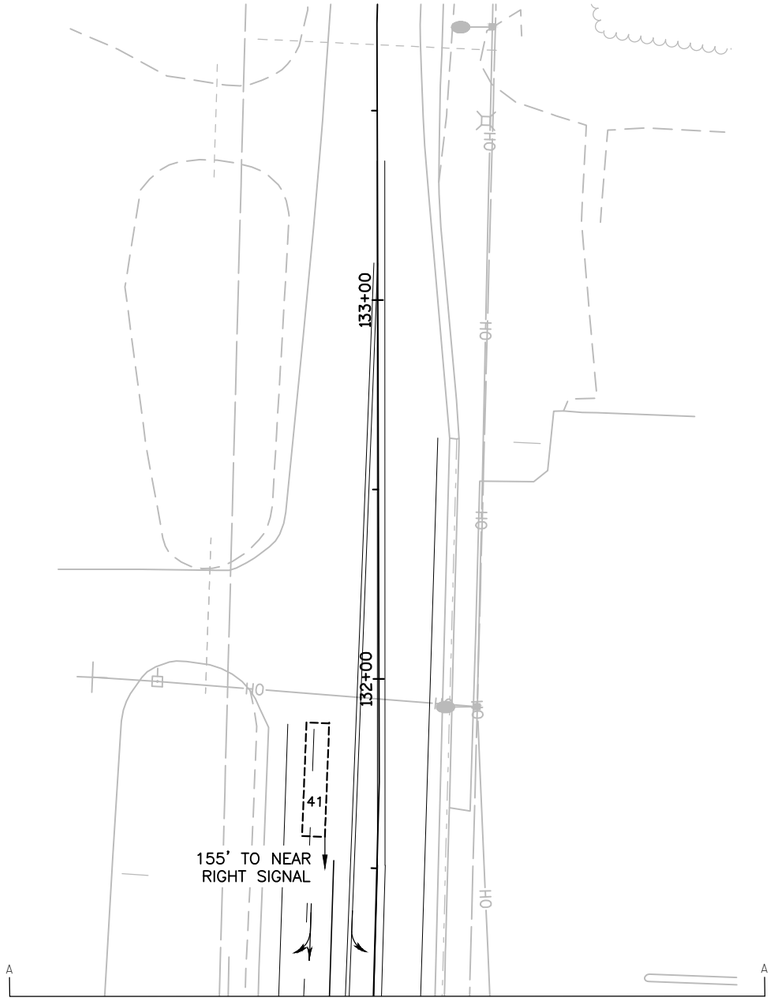
MUNICIPAL CONTACT: EDDIE SHEPPARD
DESIGNED BY:
REVISED BY: SRF CONSULTING GROUP, INC.

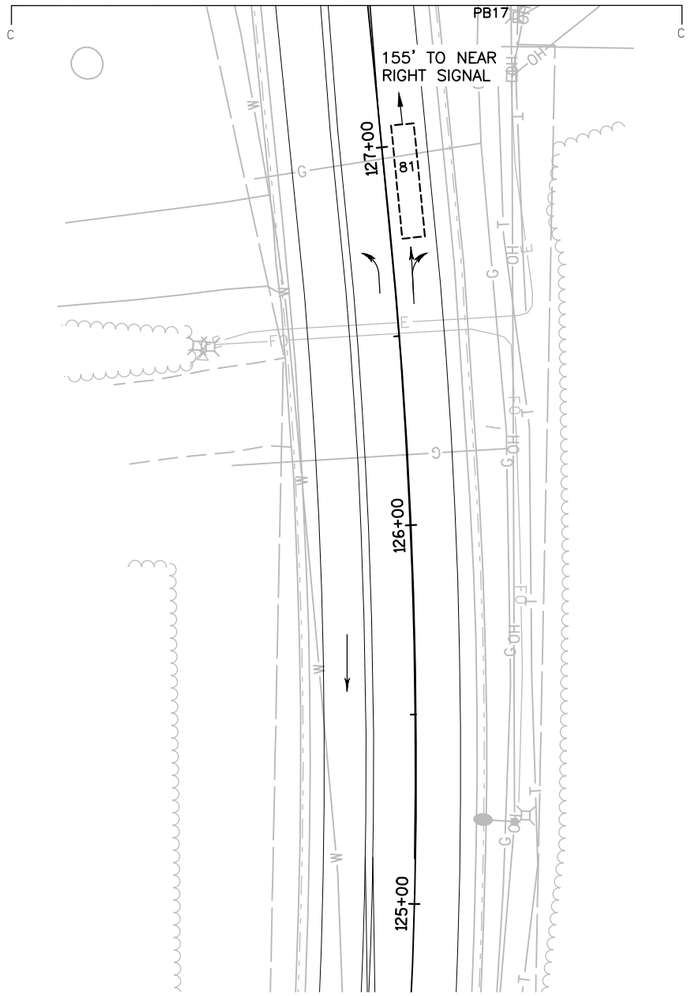
PROJECT NO: 6243-07-71	HWY: STH 47 AT CTH HHH	COUNTY: SHAWANO	REVISED TRAFFIC SIGNAL PLAN	SCALE: 0 20 40	SHEET 70	E

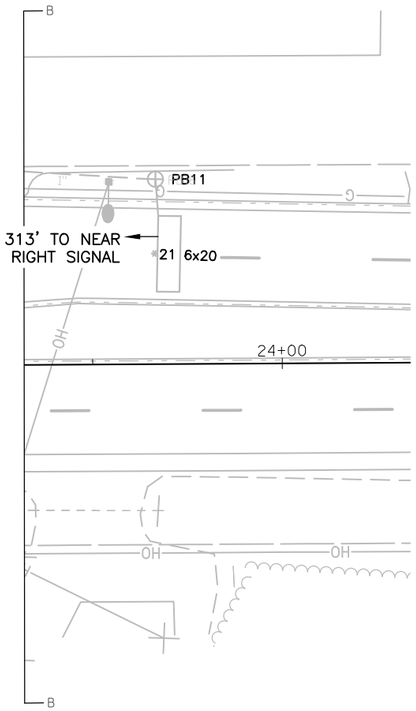
FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_SSA.DWG PLOT DATE : 1/12/2016 12:42 PM PLOT BY : RACHEL BURNHAM PLOT NAME : ---------- PLOT SCALE : 1 IN:40 FT

2









TRAFFIC CONTROL SIGNAL
STH 47/55/22
CITY OF SHAWANO
SHAWANO COUNTY

MUNICIPAL CONTACT: EDDIE SHEPPARD
DESIGNED BY:
REVISED BY: SRF CONSULTING GROUP, INC.

PAGE 2 OF 4

PROJECT NO: 6243-07-71	HWY: STH 47 AT CTH HHH	COUNTY: SHAWANO	REVISED TRAFFIC SIGNAL PLAN	SCALE: 0 20 40	SHEET 71	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_SSA.DWG PLOT DATE : 1/12/2016 12:42 PM PLOT BY : RACHEL BURNHAM PLOT NAME : ---------- PLOT SCALE : 1:1

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **						Ø2 R/W	Ø2 CLEAR TO **					
Ø1	1A,1B,1C	G	Y	–					–	–	–				
Ø2	2A,2B,5A,5B,5C	R	R	R					G	Y	R				
Ø3	3A,3B	–	–	–					–	–	–				
Ø4	4A,7A,7B	R	R	R					R	R	R				
Ø5	5A,5B,5C	–	–	–					–	–	–				
Ø6	1A,1B,1C,6A,6B	R	R	R					R	R	R				
Ø7	7A,7B	–	–	–					–	–	–				
Ø8	3A,3B,8A	R	R	R					R	R	R				

	HEAD NUMBERS	Ø3 R/W	Ø3 CLEAR TO **						Ø4 R/W	Ø4 CLEAR TO **					
Ø1	1A,1B,1C	–	–	–					–	–	–				
Ø2	2A,2B,5A,5B,5C	R	R	R					R	R	R				
Ø3	3A,3B	G	Y	–					–	–	–				
Ø4	4A,7A,7B	R	R	R					G	Y	R				
Ø5	5A,5B,5C	–	–	–					–	–	–				
Ø6	1A,1B,1C,6A,6B	R	R	R					R	R	R				
Ø7	7A,7B	–	–	–					–	–	–				
Ø8	3A,3B,8A	R	R	R					R	R	R				

FLASH: – R – R – R – R – – – –

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **						Ø6 R/W	Ø6 CLEAR TO **					
Ø1	1A,1B,1C	–	–	–					–	–	–				
Ø2	2A,2B,5A,5B,5C	R	R	R					R	R	R				
Ø3	3A,3B	–	–	–					–	–	–				
Ø4	4A,7A,7B	R	R	R					R	R	R				
Ø5	5A,5B,5C	G	Y	–					–	–	–				
Ø6	1A,1B,1C,6A,6B	R	R	R					G	Y	R				
Ø7	7A,7B	–	–	–					–	–	–				
Ø8	3A,3B,8A	R	R	R					R	R	R				

	HEAD NUMBERS	Ø7 R/W	Ø7 CLEAR TO **						Ø8 R/W	Ø8 CLEAR TO **					
Ø1	1A,1B,1C	–	–	–					–	–	–				
Ø2	2A,2B,5A,5B,5C	R	R	R					R	R	R				
Ø3	3A,3B	–	–	–					–	–	–				
Ø4	4A,7A,7B	R	R	R					R	R	R				
Ø5	5A,5B,5C	–	–	–					–	–	–				
Ø6	1A,1B,1C,6A,6B	R	R	R					R	R	R				
Ø7	7A,7B	G	Y	–					–	–	–				
Ø8	3A,3B,8A	R	R	R					G	Y	R				

BARRIER

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

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		X		6X30	EXIST
21	2	X			2	2				6X20	EXIST
22	2	X			2	2				6X20	EXIST
31		X			3	3		X		6X30	VIDEO
41				X		4			X	6X30	VIDEO
42		X			4	4		X		6X30	VIDEO
51	3	X			5	5		X		6X30	EXIST
61	4	X			6	6				6X20	EXIST
62	4	X			6	6				6X20	EXIST
71		X			7	7		X		6X30	VIDEO
81				X		8			X	6X30	VIDEO
82		X			8	8		X		6X30	VIDEO

CONTROLLER LOGIC

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

OVERLAPS

O.L. "A" = NONE
O.L. "B" = NONE
O.L. "C" = NONE
O.L. "D" = NONE

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5OR6	2,3,4,7,8
2	6OR5	1,3,4,7,8
3	7OR8	1,2,4,5,6
4	8OR7	1,2,3,5,6
5	1OR2	3,4,6,7,8
6	2OR1	3,4,5,7,8
7	3OR4	1,2,5,6,8
8	4OR3	1,2,5,6,7

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

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

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

GENERAL NOTES:

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

EMERGENCY VEHICLE PREEMPTION AT STH 22 & 47, 55, CTH HHH:

– DURING PREEMPTION, AN ALL–RED PHASE SHALL BE UTILIZED PRIOR TO ADVANCING TO PHASE 2+5, 6+1, 4+7, OR 8+3 GREEN.
– AFTER PREEMPTION, SEQUENCE 2, 6, 4, OR 8 CONTROLLER SHALL RETURN TO PHASES 2, 6, 4, OR 8.

N

TRAFFIC CONTROL SIGNAL
STH 47/55/22
CITY OF SHAWANO
SHAWANO COUNTY

MUNICIPAL CONTACT: EDDIE SHEPPARD
DESIGNED BY:
REVISED BY: SRF CONSULTING GROUP, INC.

PROJECT NO:6243-07-71 | HWY:STH 47 AT CTH HHH | COUNTY:SHAWANO | SEQUENCE OF OPERATIONS | SHEET 72 | E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_SSA.DWG PLOT DATE : 1/13/2016 8:54 AM PLOT BY : RACHEL BURNHAM PLOT NAME : ---------- PLOT SCALE : 1:1
WISDOT/CADDS SHEET 42

2

PROJECT ID: 6243-07-71	
INTERSECTION:	STH 47 & CTH HHH

SIGNAL WIRE COLOR CODING	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

DATE	August-15

2

CB1 TO	AWG #14 OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR								PED BUTTON	OTHER
				RED	YELLOW	GREEN	<RED	<YELLOW>	<GREEN>	D/WALK	WALK		
SB1	12	6A	6	RED	ORG	GRN							
		5C	2,5	RED/BLK	ORG/BLK	GRN/BLK		BLK/WHT	BLU/BLK				
SB2	12	1A	1,6	RED	ORG	GRN		ORG/BLK	GRN/BLK				
	12	5B	2,5	RED	ORG	GRN		ORG/BLK	GRN/BLK				
SB3	12	2B	2	RED	ORG	GRN							
SB4	12	3B	3,8	RED	ORG	GRN		ORG/BLK	GRN/BLK				
		4A	4	RED/BLK	BLK/WHT	BLU/BLK							
SB5	12	3A	3,8	RED	ORG	GRN		ORG/BLK	GRN/BLK				
SB6	12	1C	1,6	RED	ORG	GRN		ORG/BLK	GRN/BLK				
		2A	2	RED/BLK	BLK/WHT	BLU/BLK							
SB7	12	1B	1,6	RED	ORG	GRN		ORG/BLK	GRN/BLK				
	12	5A	2,5	RED	ORG	GRN		ORG/BLK	GRN/BLK				
SB8	12	6B	6	RED	ORG	GRN							
SB9	12	8A	8	RED	ORG	GRN							
		7B	4,7	RED/BLK	ORG/BLK	GRN/BLK		BLK/WHT	BLU/BLK				
SB10	12	7A	4,7	RED	ORG	GRN		ORG/BLK	GRN/BLK				

EQUIPMENT GROUNDING CONDUCTOR	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	CB1

PULL BOX BONDING	
From	To
PB1	SB1
PB4	SB2
PB6	SB3
PB7	SB4
PB8	SB5
PB9	SB6
PB12	SB7
PB14	SB8
PB15	SB9
PB16	SB10

TYPE UF #6 W/GROUND	
From	To

Wireless Antenna Cable	
From	To

EMERGENCY VEHICLE	
From	To
CB1	EVP A
CB1	EVP B
CB1	EVP C
CB1	EVP D

***USE THE WHITE CONDUCTOR IN THE CABLE ASSEMBLY AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.**

***ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.**

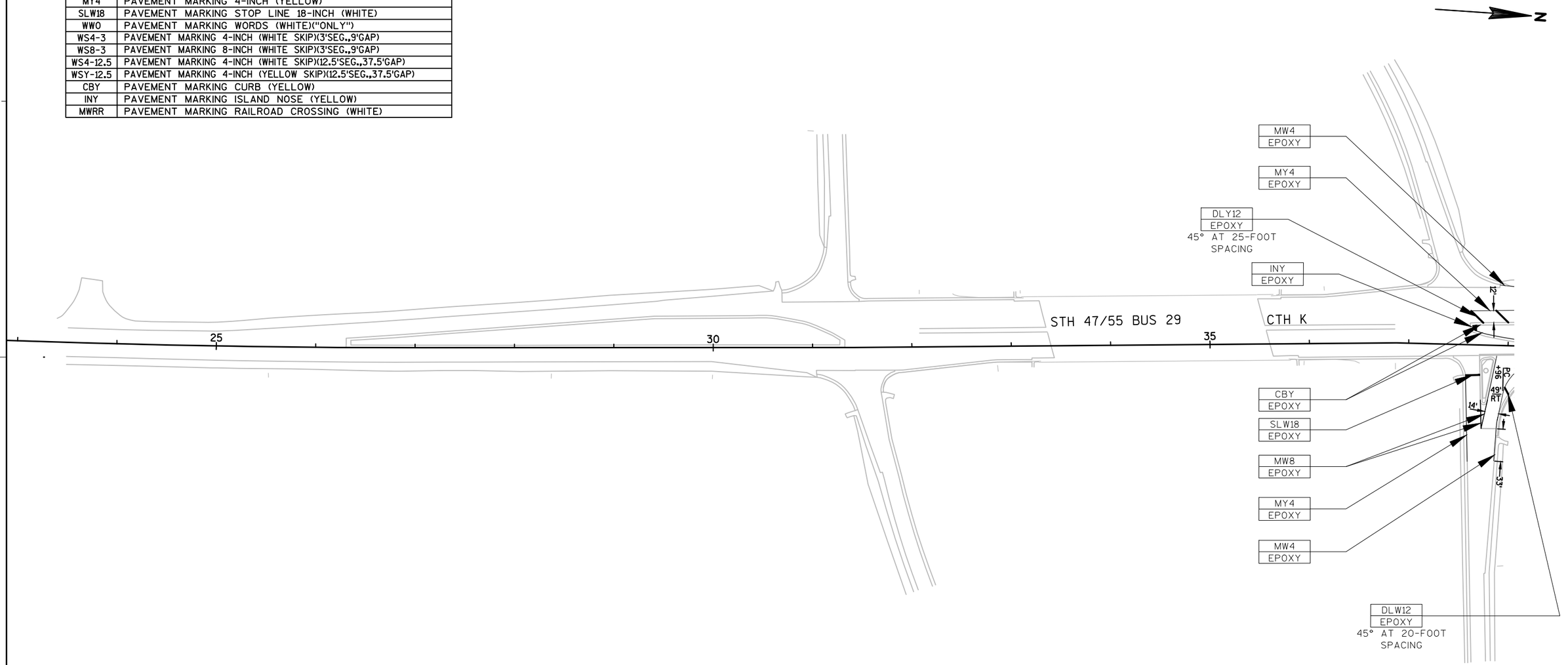
TRAFFIC CONTROL SIGNAL
STH 47/55/22
CITY OF SHAWANO
SHAWANO COUNTY

MUNICIPAL CONTACT: EDDIE SHEPPARD
DESIGNED BY:
REVISED BY: SRF CONSULTING GROUP, INC.

2

LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE)
MW8	PAVEMENT MARKING 8-INCH (WHITE)
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WWO	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5'SEG.,37.5'GAP)
WSY-12.5	PAVEMENT MARKING 4-INCH (YELLOW SKIP)(12.5'SEG.,37.5'GAP)
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)

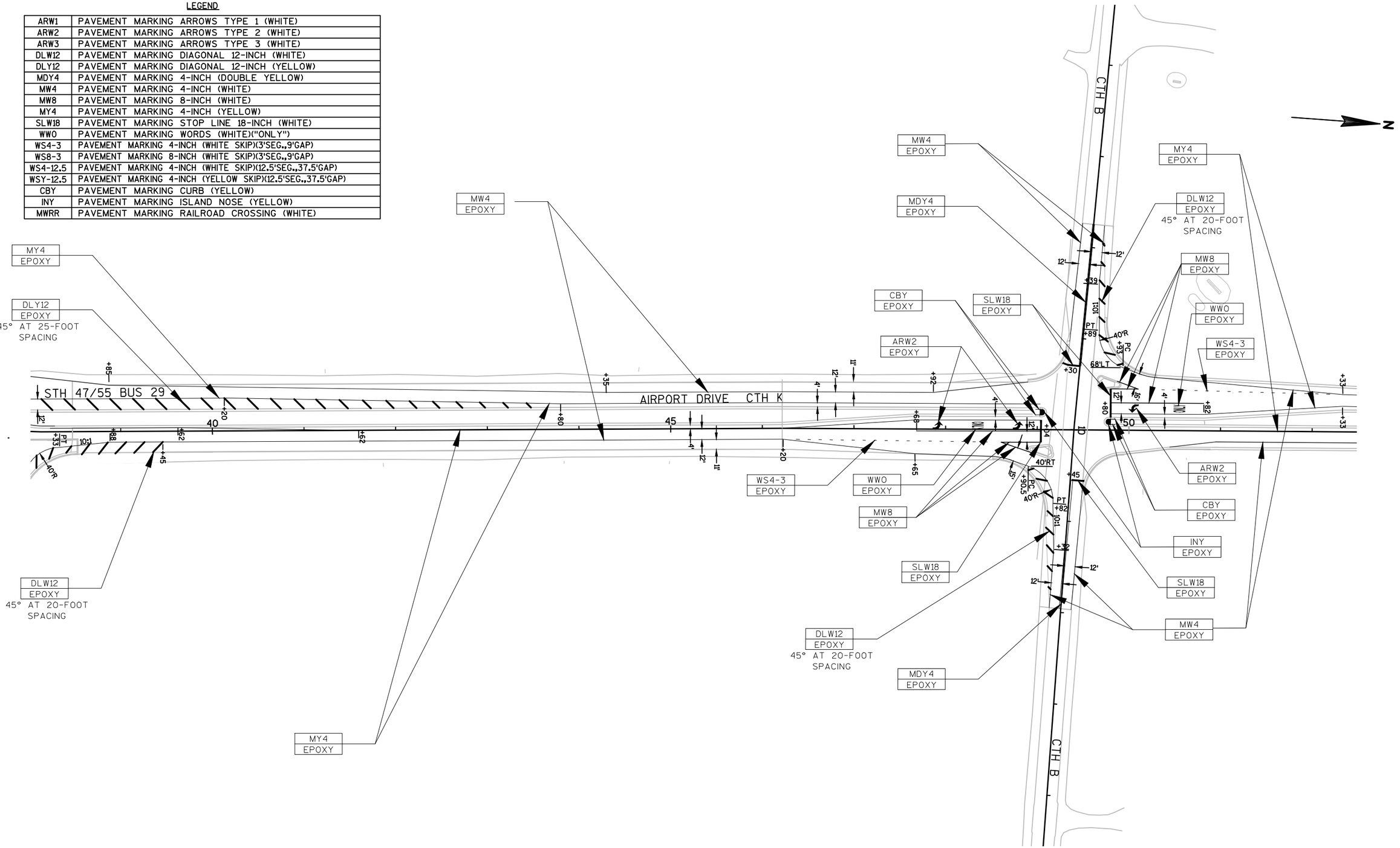


PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 ½" 1"	SHEET 74 E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\PLAN\8167_PM01.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : BRIAN GENSKOW PLOT NAME : _____ PLOT SCALE : 1" = 100'_XREF

LEGEND

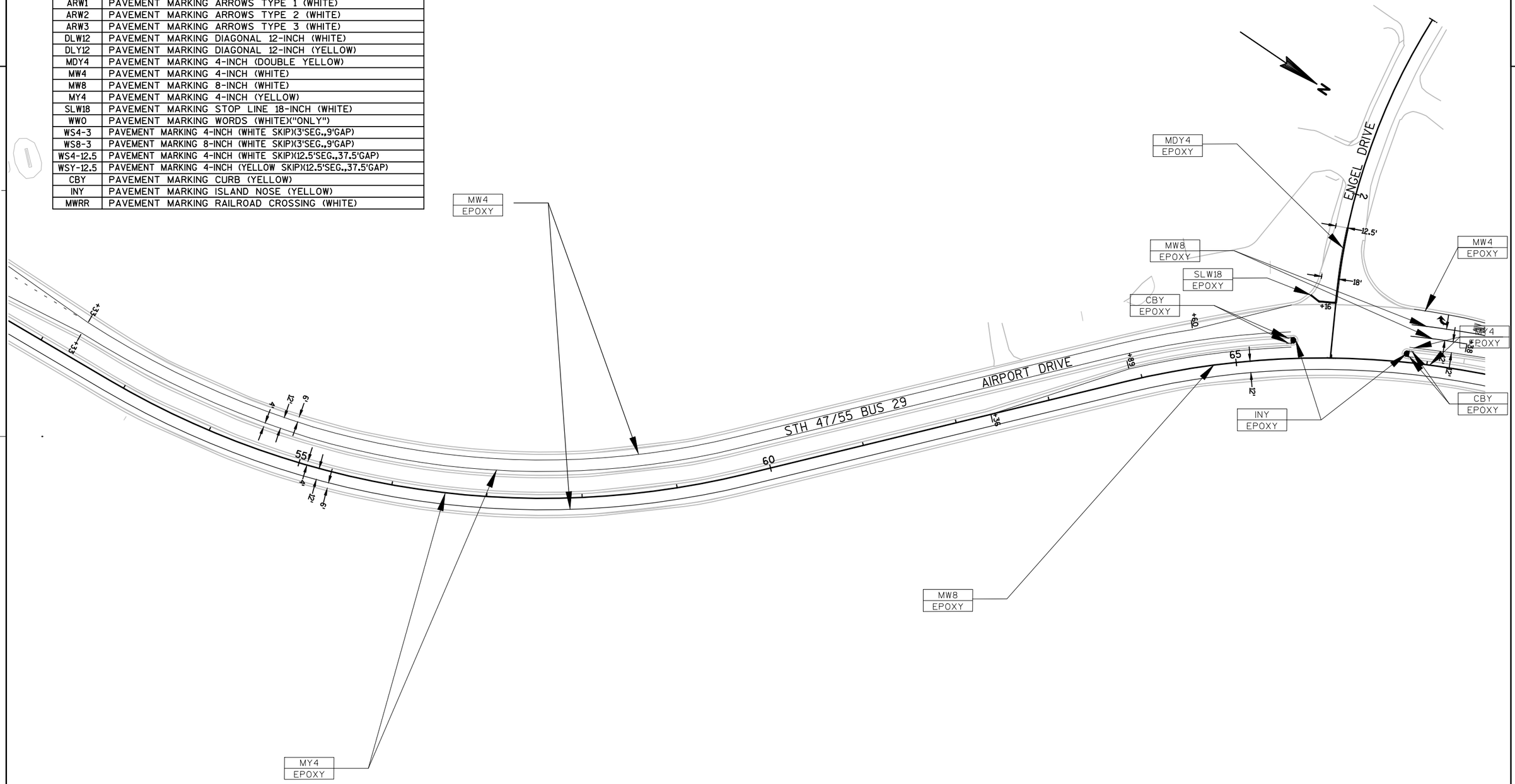
ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE)
MW8	PAVEMENT MARKING 8-INCH (WHITE)
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WWO	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5'SEG.,37.5'GAP)
WSY-12.5	PAVEMENT MARKING 4-INCH (YELLOW SKIP)(12.5'SEG.,37.5'GAP)
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 1/2" 1"	SHEET 75 E

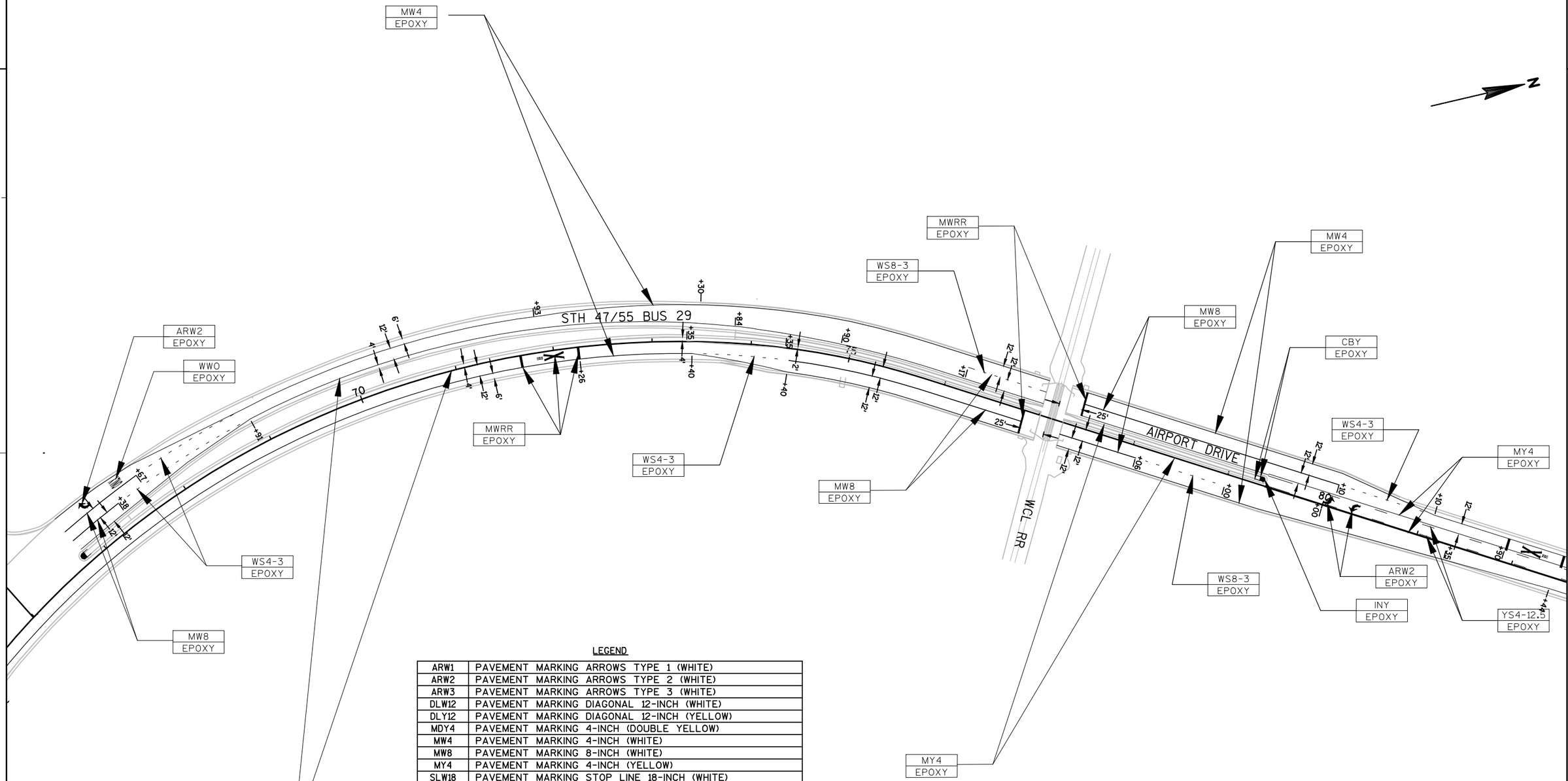
LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE)
MW8	PAVEMENT MARKING 8-INCH (WHITE)
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WW0	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5'SEG.,37.5'GAP)
WSY-12.5	PAVEMENT MARKING 4-INCH (YELLOW SKIP)(12.5'SEG.,37.5'GAP)
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 ½" 1"	SHEET 76 E

2



LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE)
MW8	PAVEMENT MARKING 8-INCH (WHITE)
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WWO	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3'SEG.,9'GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3'SEG.,9'GAP)
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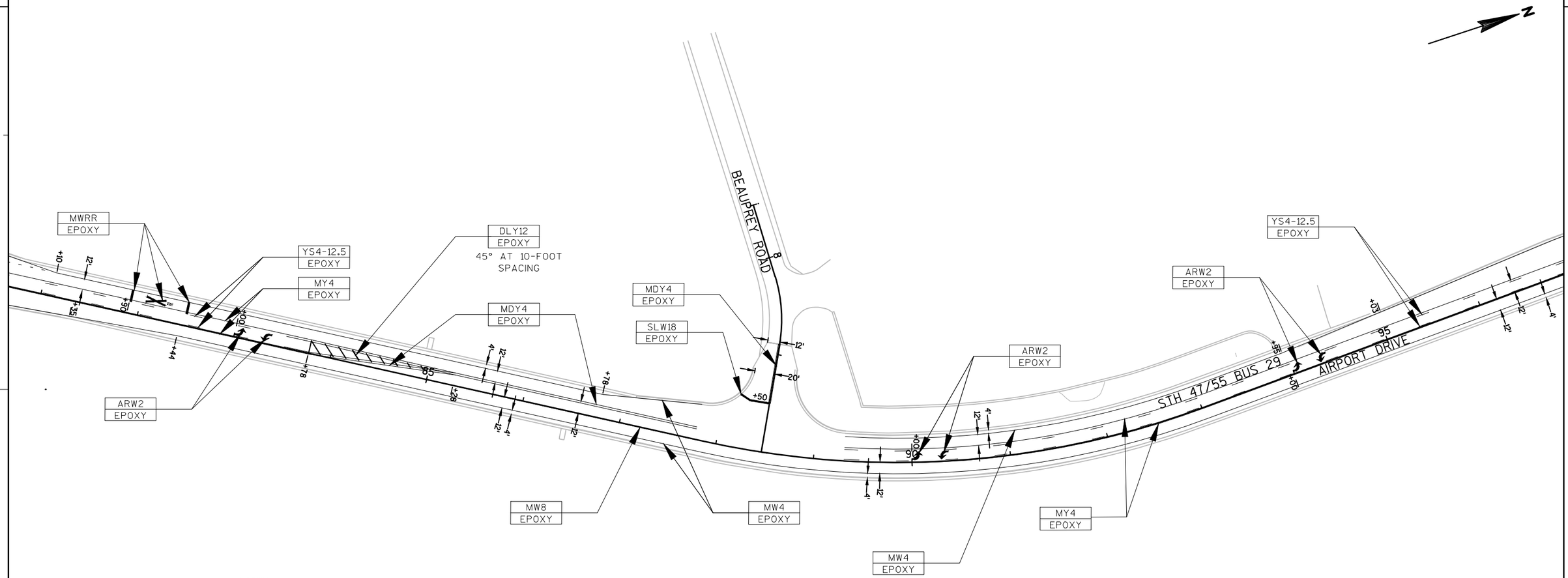
WSY-12.5	PAVEMENT MARKING 4-INCH (YELLOW SKIP)(12.5'SEG.,37.5'GAP)
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 ½" 1"	SHEET 77 E

2



LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE)
MW8	PAVEMENT MARKING 8-INCH (WHITE)
MY4	PAVEMENT MARKING 4-INCH (YELLOW)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WWO	PAVEMENT MARKING WORDS (WHITE)("ONLY")
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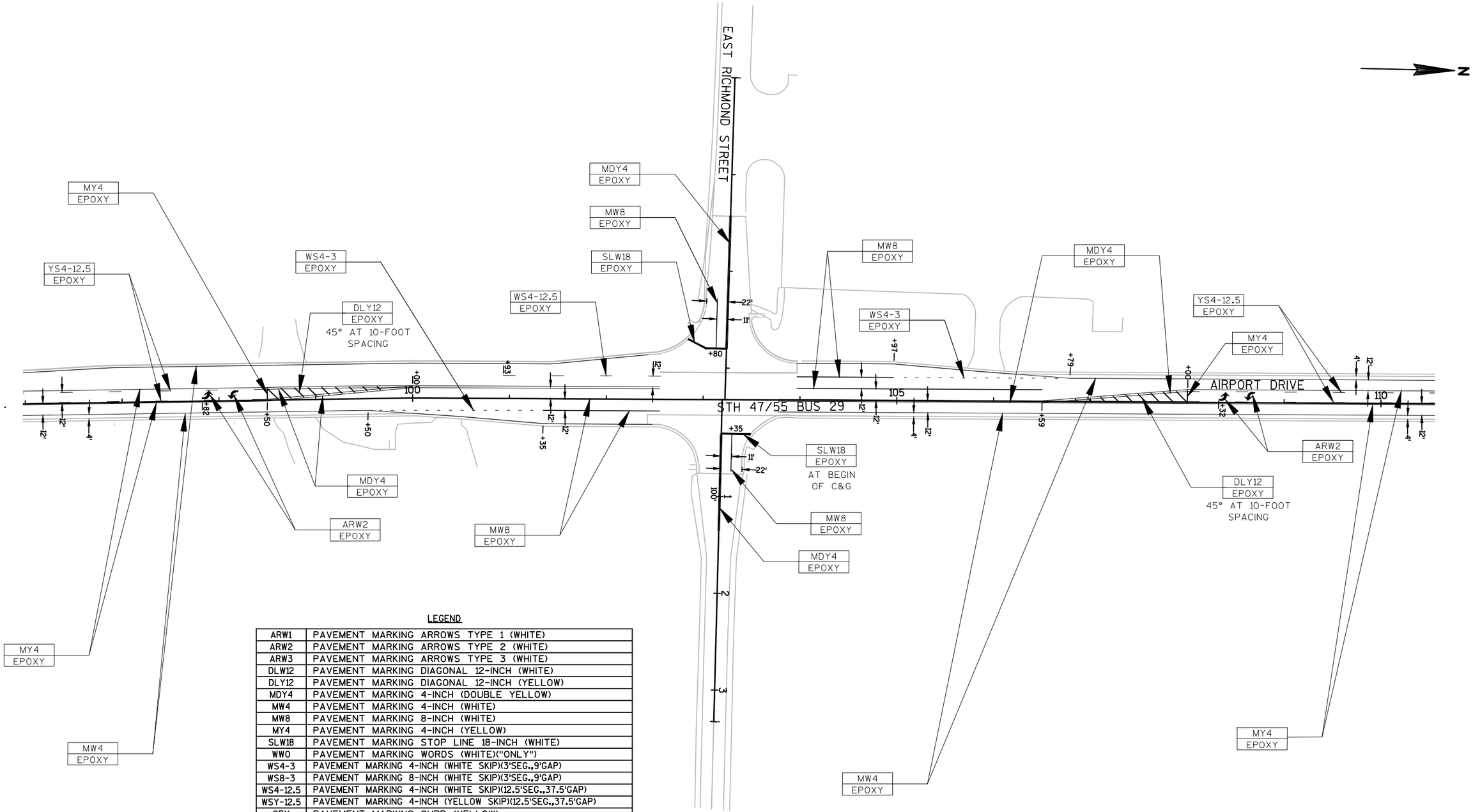
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 ½" 1"	SHEET 78	E

2



LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
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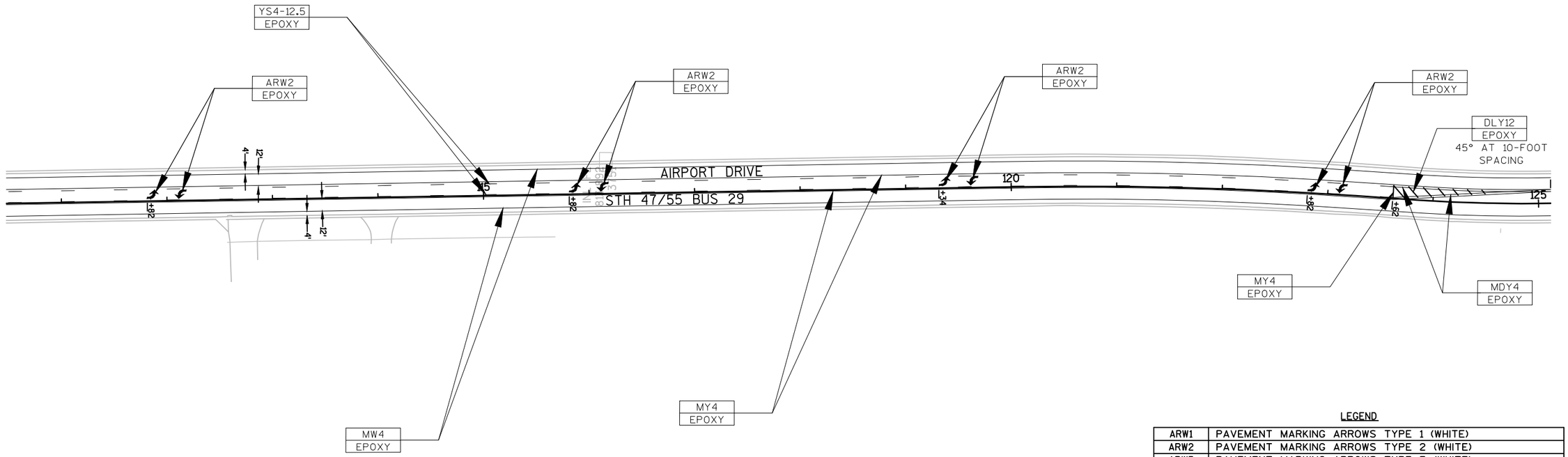
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 ½" 1"	SHEET 79	E

2

N



LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
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MW8	PAVEMENT MARKING 8-INCH (WHITE)
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CBY	PAVEMENT MARKING CURB (YELLOW)
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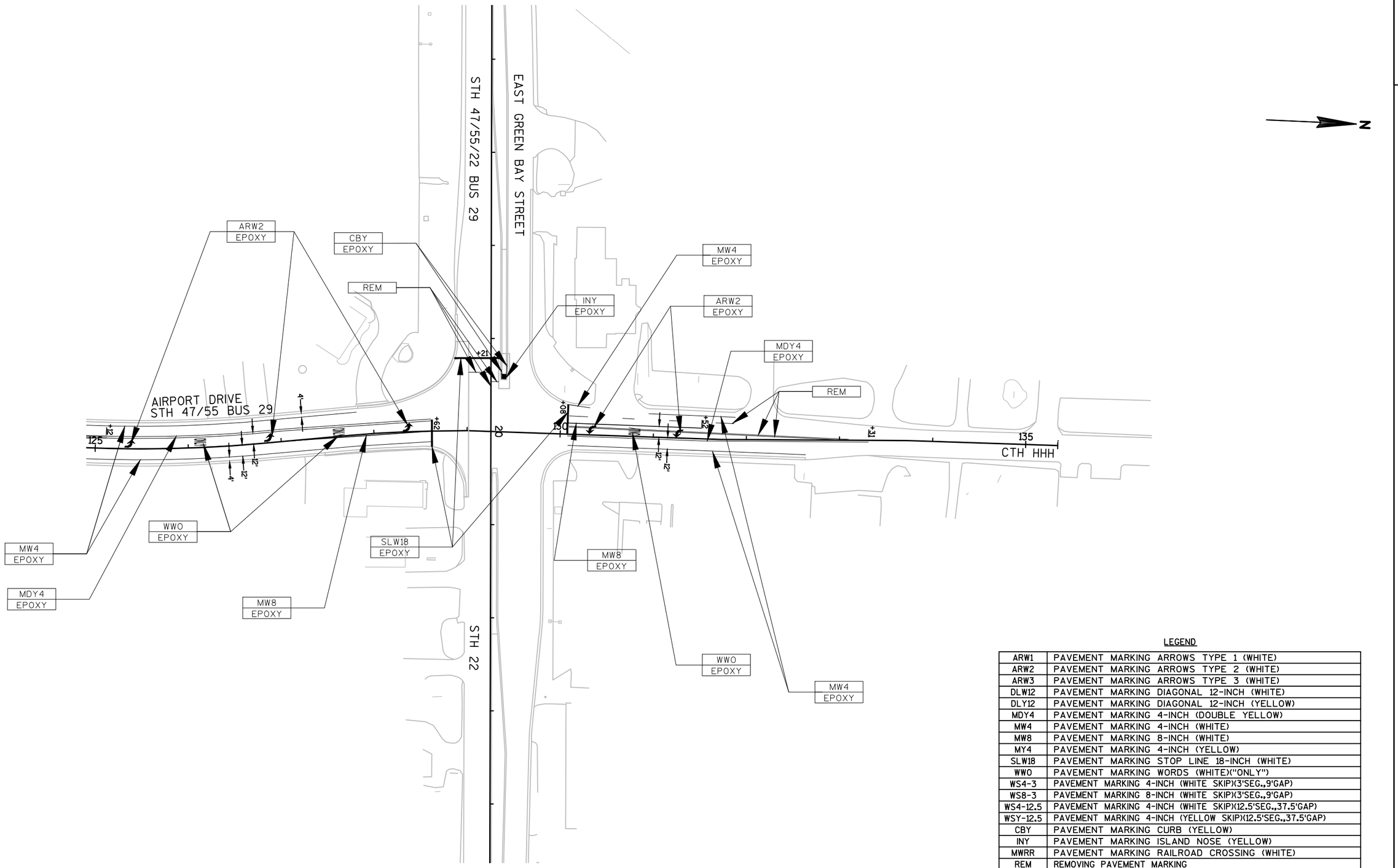
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 ½" 1"	SHEET 80	E

2



LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
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WSY-12.5	PAVEMENT MARKING 4-INCH (YELLOW SKIP)(12.5'SEG.,37.5'GAP)
CBY	PAVEMENT MARKING CURB (YELLOW)
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWRR	PAVEMENT MARKING RAILROAD CROSSING (WHITE)
REM	REMOVING PAVEMENT MARKING

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PAVEMENT MARKING - STH 47	SCALE: 0 1/2" 1"	SHEET 81	E

2

GENERAL TRAFFIC CONTROL NOTES

THE ROAD SHALL BE CLOSED TO THRU TRAFFIC ON STH 47/55 BUS 29 FROM CTH B TO STH 22. AT THE INTERSECTIONS OF STH 47 AND BEAUPREY RD AND ENGEL DR, SIGNS/BARRICADES SHALL BE PLACED IN ACCORDANCE WITH SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 1.

E RICHMOND ST SHALL REMAIN OPEN WITH SIGNS/BARRICADES PLACED IN ACCORDANCE WITH SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 2 EXCEPT DURING A TWO WEEK CLOSURE PERIOD. DURING THE TWO WEEKS, SIGNS/BARRICADES SHALL BE PLACED IN ACCORDANCE WITH SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 1.

MILLING AND OVERLAY WORK OPERATIONS THAT ENTER INTERSECTIONS OR ROADWAYS UNDER TRAFFIC SHALL BE DONE IN ACCORDANCE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)."

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

ALL SIGNS SHALL BE FURNISHED BY THE CONTRACTOR.

ALL TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE "WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (WMUTCD) AND STANDARD DETAIL DRAWINGS.

LEGEND

- WORK ZONE CLOSED TO TRAFFIC
- WORK ZONE OPEN TO TRAFFIC
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL - DETOUR OVERVIEW	SHEET 82	E

LEGEND

- WORK ZONE CLOSED TO TRAFFIC
- WORK ZONE OPEN TO TRAFFIC
- DIRECTION OF TRAFFIC
- DETOUR ROUTE
- EXISTING SIGN
- MB PORTABLE CHANGEABLE MESSAGE SIGN

PLACE 7 DAYS PRIOR TO DETOUR FOR NOTIFICATION OF ROAD CLOSURE:

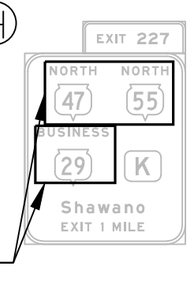
FRAME 1	FRAME 2
HWY47/55 BUS 29 TO CLOSE	MONTH ** TO MONTH **

DURING CLOSURE:

FRAME 1	FRAME 2
HWY47/55 BUS 29 CLOSED	USE DETOUR ROUTE

N

H



NORTH M3-1 24"X12" | NORTH M3-1 24"X12" | BUSINESS M4-3 24"X12"
47 | 55 | 29
M1-6 24"X24" | M1-6 24"X24" | M1-6 24"X24"

DETOUR AHEAD W20-2-A

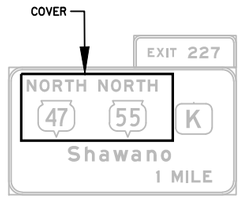
A

DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12"
NORTH M3-1 24"X12" | NORTH M3-1 24"X12" | BUSINESS M4-3 24"X12"
47 | 55 | 29
M1-6 24"X24" | M1-6 24"X24" | M1-6 24"X24"
M05-2R 21"X21" | M05-2R 21"X21" | M05-2R 21"X21"

B C

DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12"
NORTH M3-1 24"X12" | NORTH M3-1 24"X12" | BUSINESS M4-3 24"X12"
47 | 55 | 29
M1-6 24"X24" | M1-6 24"X24" | M1-6 24"X24"
M06-2 21"X21" | M06-2 21"X21" | M06-2 21"X21"

D

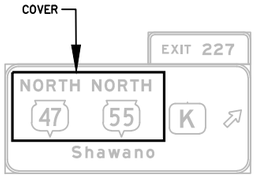


DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12" | SOUTH M3-3 24"X12"
47 | 55
M1-6 24"X24" | M1-6 24"X24"
M06-1 21"X21" | M06-1 21"X21"

E

DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12"
NORTH M3-1 24"X12" | NORTH M3-1 24"X12" | BUSINESS M4-3 24"X12"
47 | 55 | 29
M1-6 24"X24" | M1-6 24"X24" | M1-6 24"X24"
M05-2R 21"X21" | M05-2R 21"X21" | M05-2R 21"X21"

F



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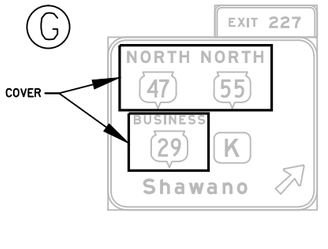


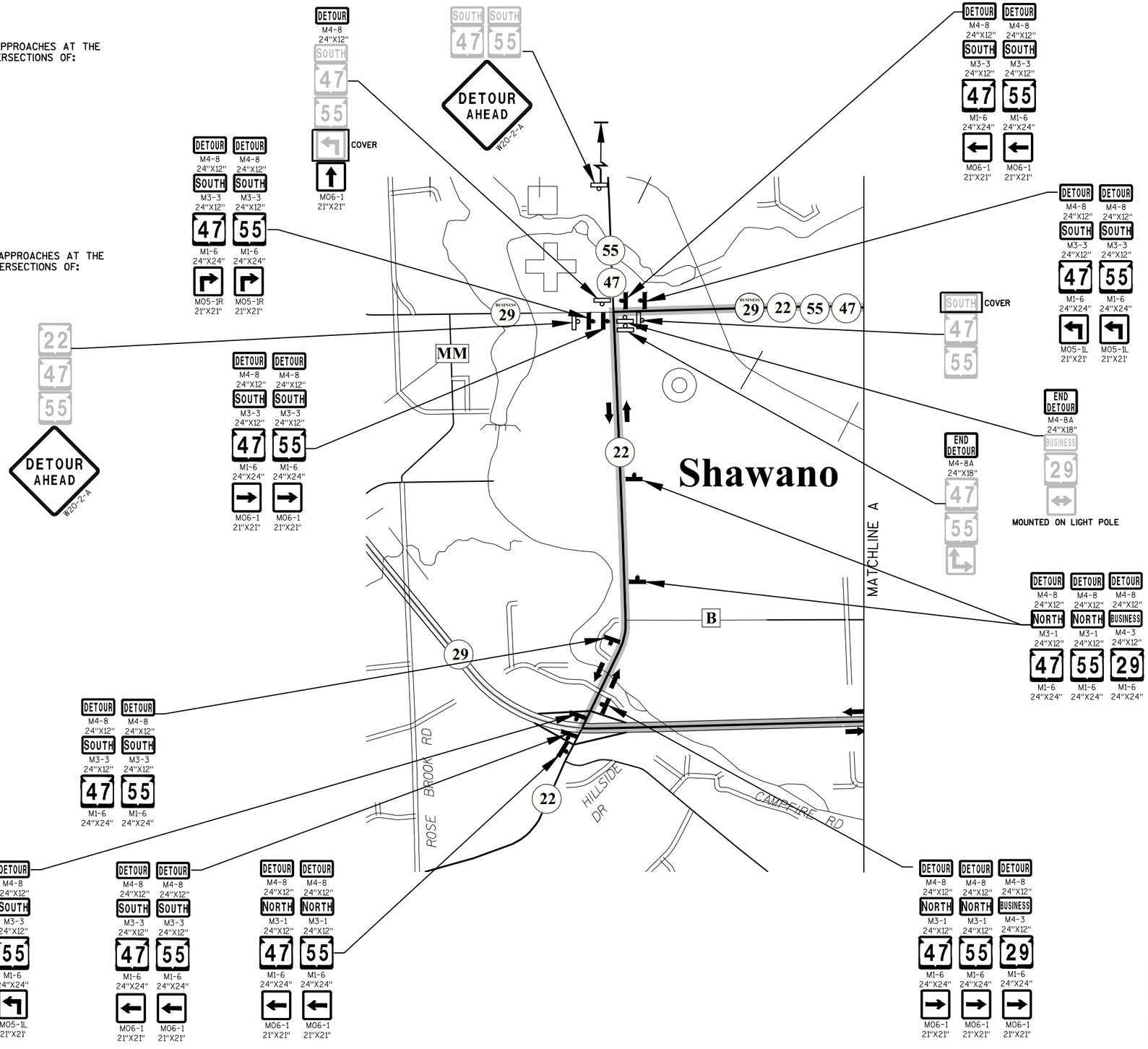
DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12" | DETOUR M4-8 24"X12"
NORTH M3-1 24"X12" | NORTH M3-1 24"X12" | BUSINESS M4-3 24"X12"
47 | 55 | 29
M1-6 24"X24" | M1-6 24"X24" | M1-6 24"X24"
M06-1 21"X21" | M06-1 21"X21" | M06-1 21"X21"

PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL - DETOUR	SHEET 83	E

2

PLACE ON THE SOUTH APPROACHES AT THE STH 47/55/BUS 29 INTERSECTIONS OF:
LINCOLN STREET
FAIRVIEW AVENUE
WAUKECHON STREET
EBERLEIN PARK DRIVE

PLACE ON THE NORTH APPROACHES AT THE STH 47/55/BUS 29 INTERSECTIONS OF:
LINCOLN STREET
FAIRVIEW AVENUE
CEDAR DRIVE



NOTE

ALL SIGNS ON SHEET ARE PAID FOR AS TRAFFIC CONTROL DETOUR SIGNS. TYPE I SIGNS BEING COVERED ARE PAID FOR AS TRAFFIC CONTROL COVERING SIGNS.

COVER ALL EASTBOUND STH 47 AND STH 55 SIGNS BETWEEN STH 22/MAIN ST AND CTH HHH.

LEGEND

- DETOUR SIGNS ON EXISTING SIGN SUPPORT
- DETOUR SIGNS ON PERMANENT SIGN SUPPORT
- WORK ZONE CLOSED TO TRAFFIC
- WORK ZONE OPEN TO TRAFFIC
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

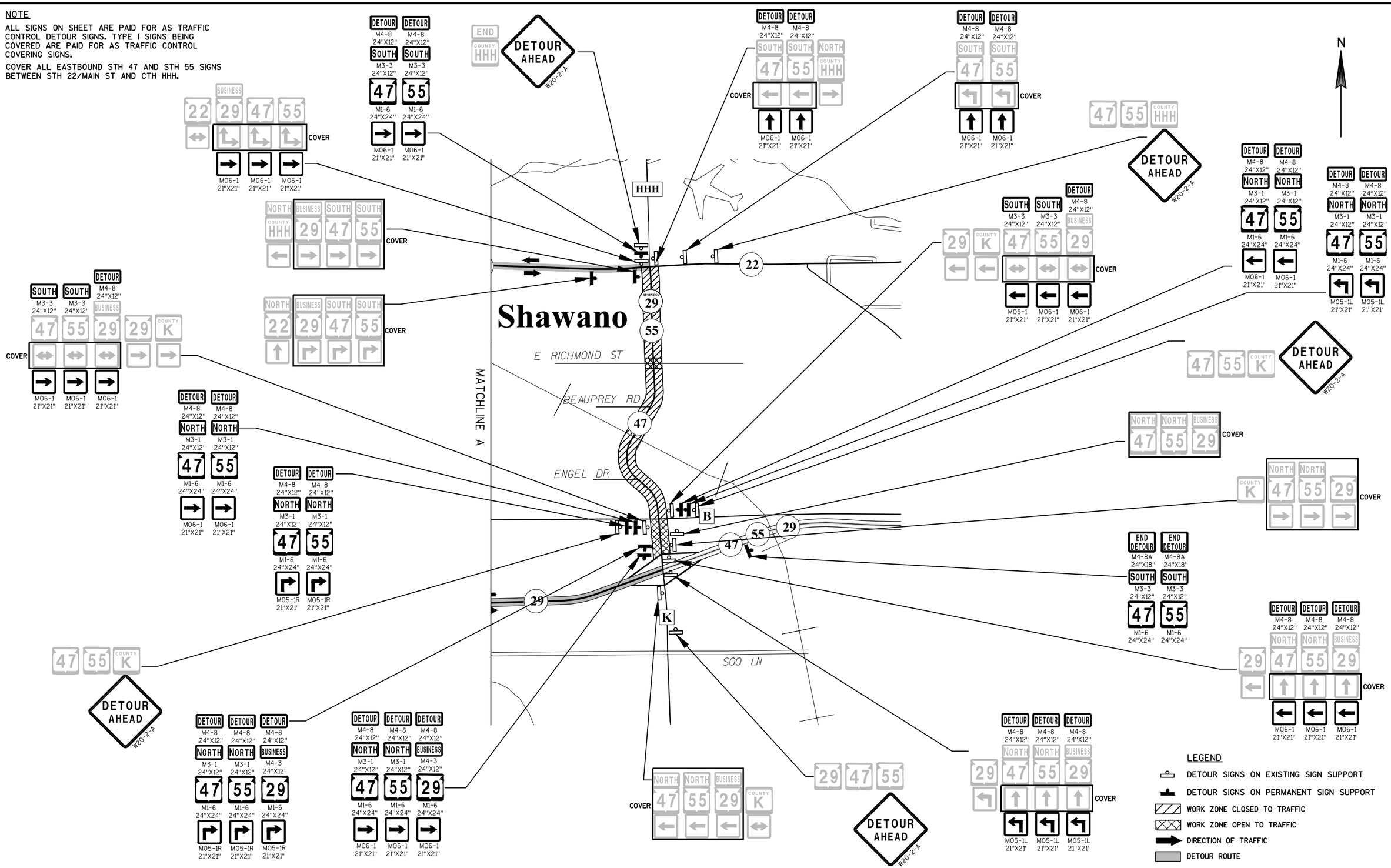
PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL - DETOUR	SHEET 84	E

FILE NAME : H:\PROJMDSN\8167\CAD_BIM\BASE\8167_TC.DWG
LAYOUT NAME - 8167_TC - DETOUR2
PLOT DATE : 1/28/2016 1:38 PM
PLOT BY : BRIAN GENSKOW
PLOT NAME :
PLOT SCALE : 1 IN:0.5 MI
WISDOT/CADDS SHEET 42

NOTE

ALL SIGNS ON SHEET ARE PAID FOR AS TRAFFIC CONTROL DETOUR SIGNS. TYPE I SIGNS BEING COVERED ARE PAID FOR AS TRAFFIC CONTROL COVERING SIGNS.

COVER ALL EASTBOUND STH 47 AND STH 55 SIGNS BETWEEN STH 22/MAIN ST AND CTH HHH.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL - DETOUR	SHEET 85	E

LEGEND

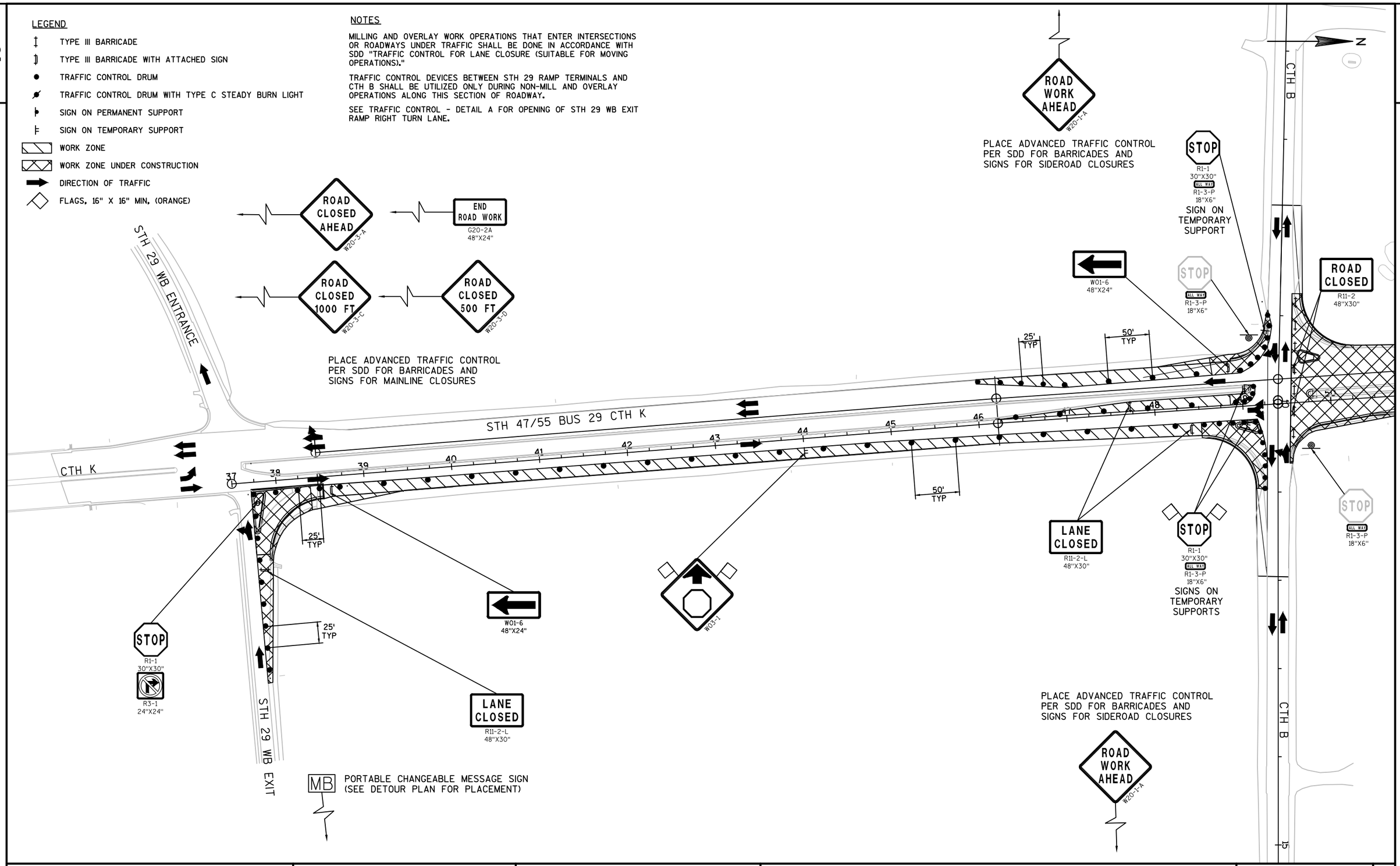
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK ZONE
- WORK ZONE UNDER CONSTRUCTION
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, (ORANGE)

NOTES

MILLING AND OVERLAY WORK OPERATIONS THAT ENTER INTERSECTIONS OR ROADWAYS UNDER TRAFFIC SHALL BE DONE IN ACCORDANCE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)."

TRAFFIC CONTROL DEVICES BETWEEN STH 29 RAMP TERMINALS AND CTH B SHALL BE UTILIZED ONLY DURING NON-MILL AND OVERLAY OPERATIONS ALONG THIS SECTION OF ROADWAY.

SEE TRAFFIC CONTROL - DETAIL A FOR OPENING OF STH 29 WB EXIT RAMP RIGHT TURN LANE.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL	SHEET 86	E

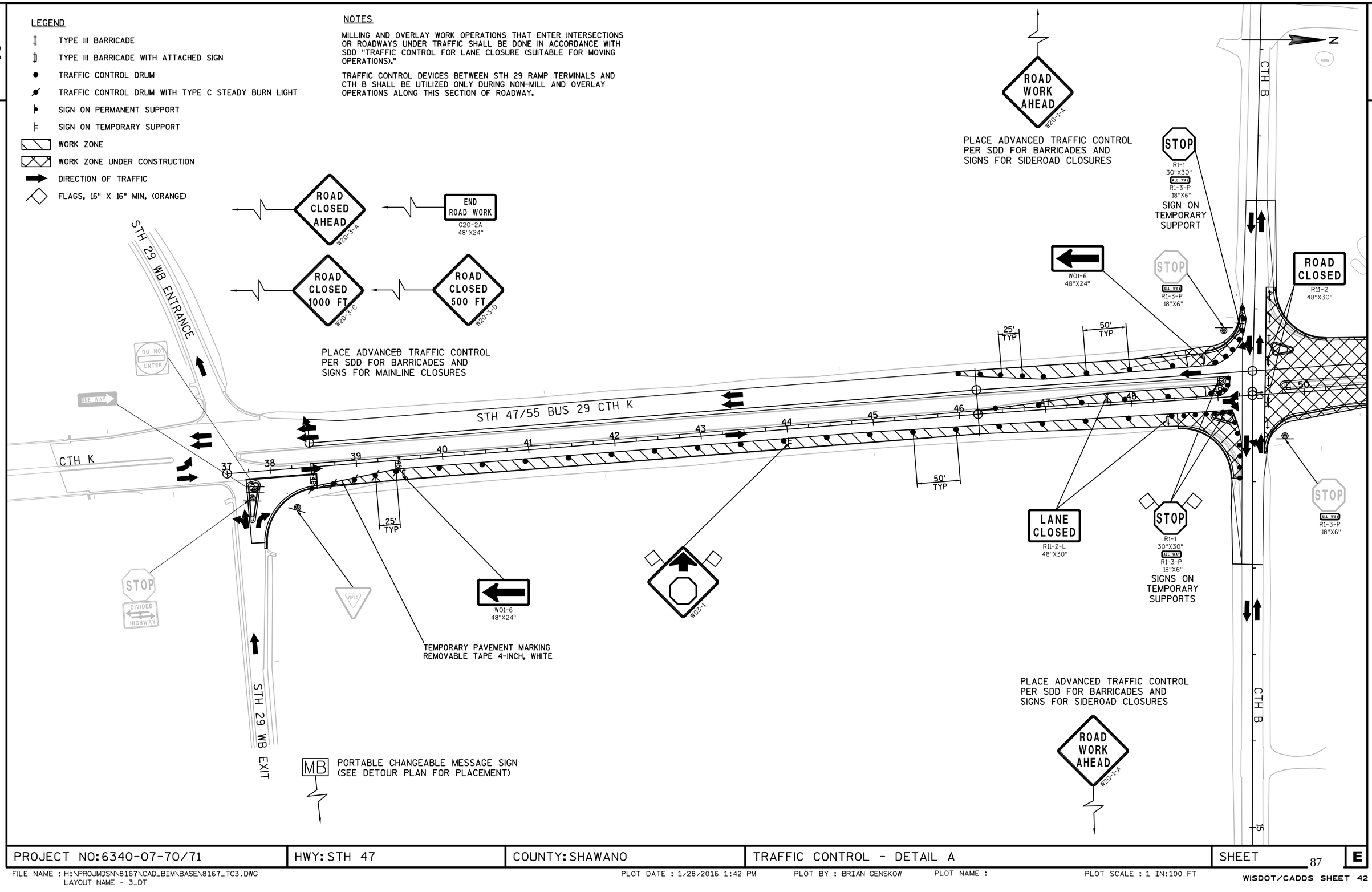
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK ZONE
- WORK ZONE UNDER CONSTRUCTION
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, (ORANGE)

NOTES

MILLING AND OVERLAY WORK OPERATIONS THAT ENTER INTERSECTIONS OR ROADWAYS UNDER TRAFFIC SHALL BE DONE IN ACCORDANCE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)."

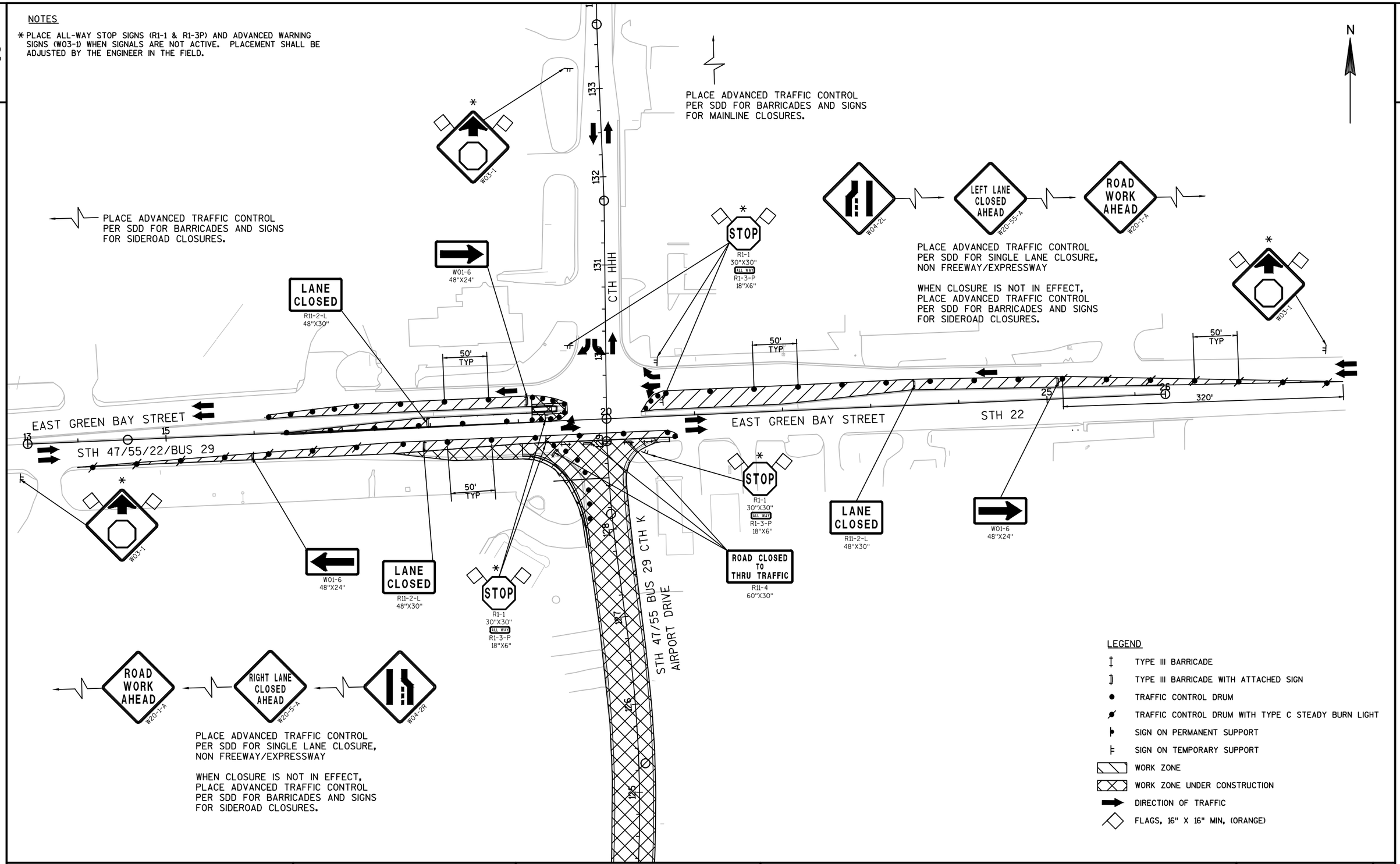
TRAFFIC CONTROL DEVICES BETWEEN STH 29 RAMP TERMINALS AND CTH B SHALL BE UTILIZED ONLY DURING NON-MILL AND OVERLAY OPERATIONS ALONG THIS SECTION OF ROADWAY.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL - DETAIL A	SHEET 87	E

NOTES

* PLACE ALL-WAY STOP SIGNS (R1-1 & R1-3P) AND ADVANCED WARNING SIGNS (W03-1) WHEN SIGNALS ARE NOT ACTIVE. PLACEMENT SHALL BE ADJUSTED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	TRAFFIC CONTROL	SHEET 88	E

2

STH 47 SB
CURVE 1

PI STA = 156+37.98SB
Y = 265052.16
X = 870673.46
DELTA = 44°09'16"
D = 6°36'18"
T = 351.84
L = 668.51
R = 867.47
PC STA = 152+86.14SB
PT STA = 159+54.65SB
SUPER=6.0%

STH 47 SB
CURVE 2

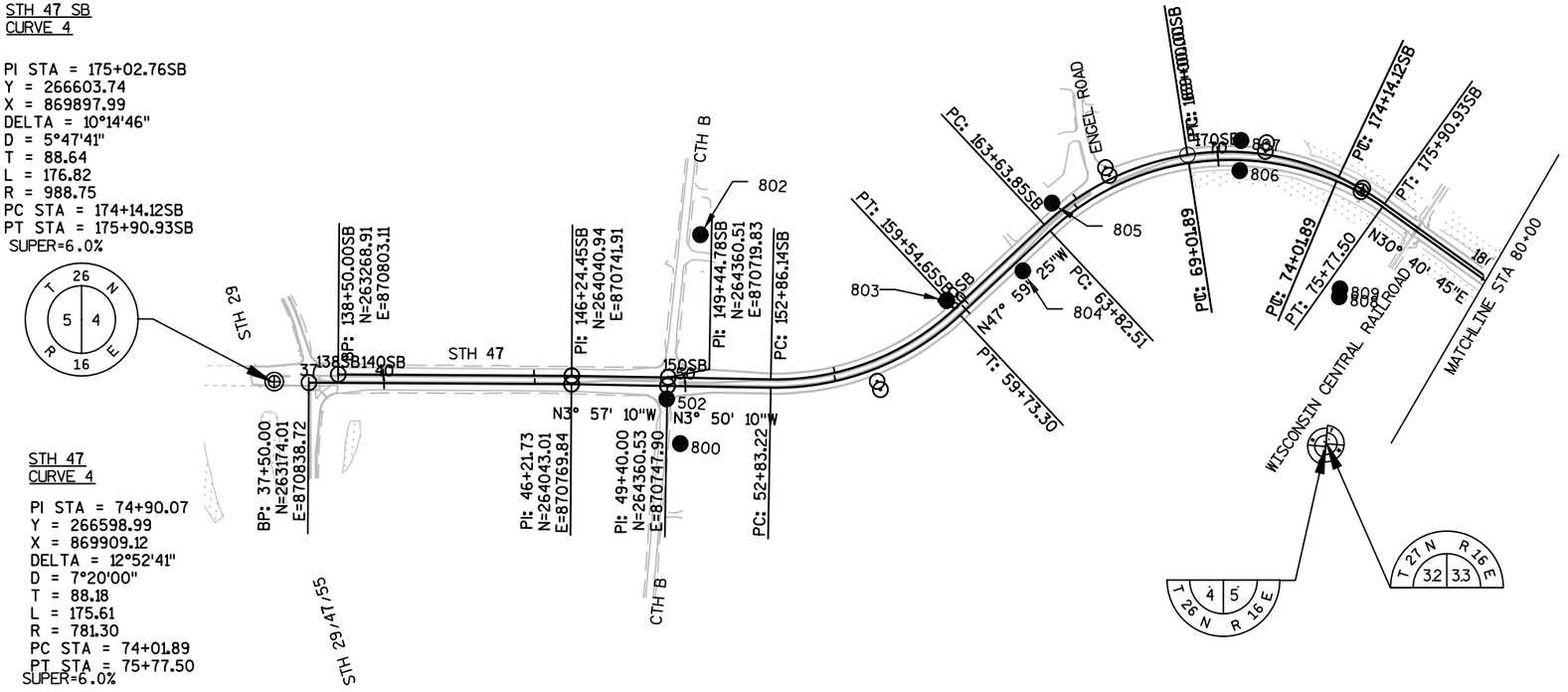
PI STA = 166+40.23SB
Y = 265746.46
X = 869902.62
DELTA = 34°18'18"
D = 6°23'54"
T = 276.38
L = 536.15
R = 895.47
PC STA = 163+63.85SB
PT STA = 169+00.00SB
SUPER=6.0%

STH 47 SB
CURVE 3

PI STA = 171+64.94SB
Y = 266272.41
X = 869774.55
DELTA = 34°07'06"
D = 6°38'11"
T = 264.93
L = 514.11
R = 863.36
PC STA = 169+00.01SB
PT STA = 174+14.12SB
SUPER=6.0%

STH 47 SB
CURVE 4

PI STA = 175+02.76SB
Y = 266603.74
X = 869897.99
DELTA = 10°14'46"
D = 5°47'41"
T = 88.64
L = 176.82
R = 988.75
PC STA = 174+14.12SB
PT STA = 175+90.93SB
SUPER=6.0%



STH 47
CURVE 1

PI STA = 56+46.42
Y = 265065.36
X = 870700.64
DELTA = 44°09'15"
D = 6°23'54"
T = 363.19
L = 690.08
R = 895.47
PC STA = 52+83.22
PT STA = 59+73.30
SUPER=6.0%

STH 47
CURVE 2

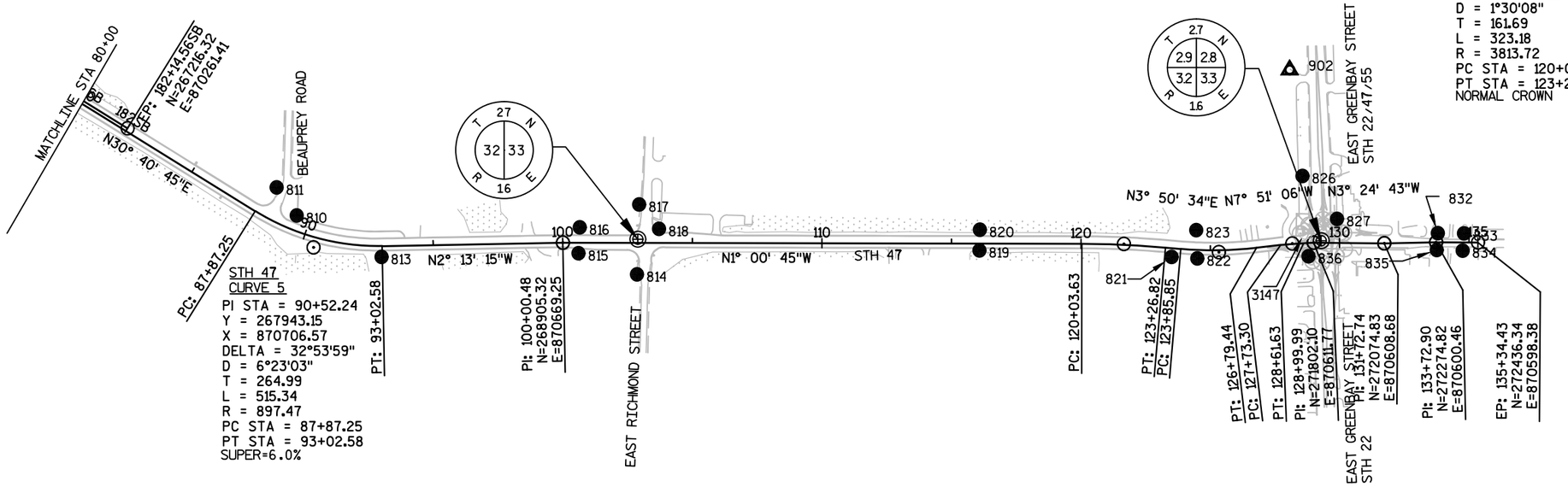
PI STA = 66+50.25
Y = 265761.48
X = 869927.78
DELTA = 34°18'18"
D = 6°36'18"
T = 267.74
L = 519.38
R = 867.47
PC STA = 63+82.51
PT STA = 69+01.89
SUPER=6.0%

STH 47
CURVE 3

PI STA = 71+58.38
Y = 266270.82
X = 869803.76
DELTA = 31°29'11"
D = 6°17'50"
T = 256.49
L = 500.00
R = 909.85
PC STA = 69+01.89
PT STA = 74+01.89
SUPER=6.0%

STH 47
CURVE 4

PI STA = 74+90.07
Y = 266598.99
X = 869909.12
DELTA = 12°52'41"
D = 7°20'00"
T = 88.18
L = 175.61
R = 781.30
PC STA = 74+01.89
PT STA = 75+77.50
SUPER=6.0%



STH 47
CURVE 6

PI STA = 121+65.32
Y = 271069.82
X = 870631.00
DELTA = 4°51'19"
D = 1°30'08"
T = 161.69
L = 323.18
R = 3813.72
PC STA = 120+03.63
PT STA = 123+26.82
NORMAL CROWN

STH 47
CURVE 7

PI STA = 125+33.16
Y = 271437.02
X = 870655.67
DELTA = 11°41'40"
D = 3°59'00"
T = 147.31
L = 293.59
R = 1438.39
PC STA = 123+85.85
PT STA = 126+79.44
NORMAL CROWN

STH 47
CURVE 8

PI STA = 128+17.49
Y = 271719.70
X = 870616.69
DELTA = 4°26'23"
D = 5°01'35"
T = 44.19
L = 88.33
R = 1139.92
PC STA = 127+73.30
PT STA = 128+61.63
NORMAL CROWN

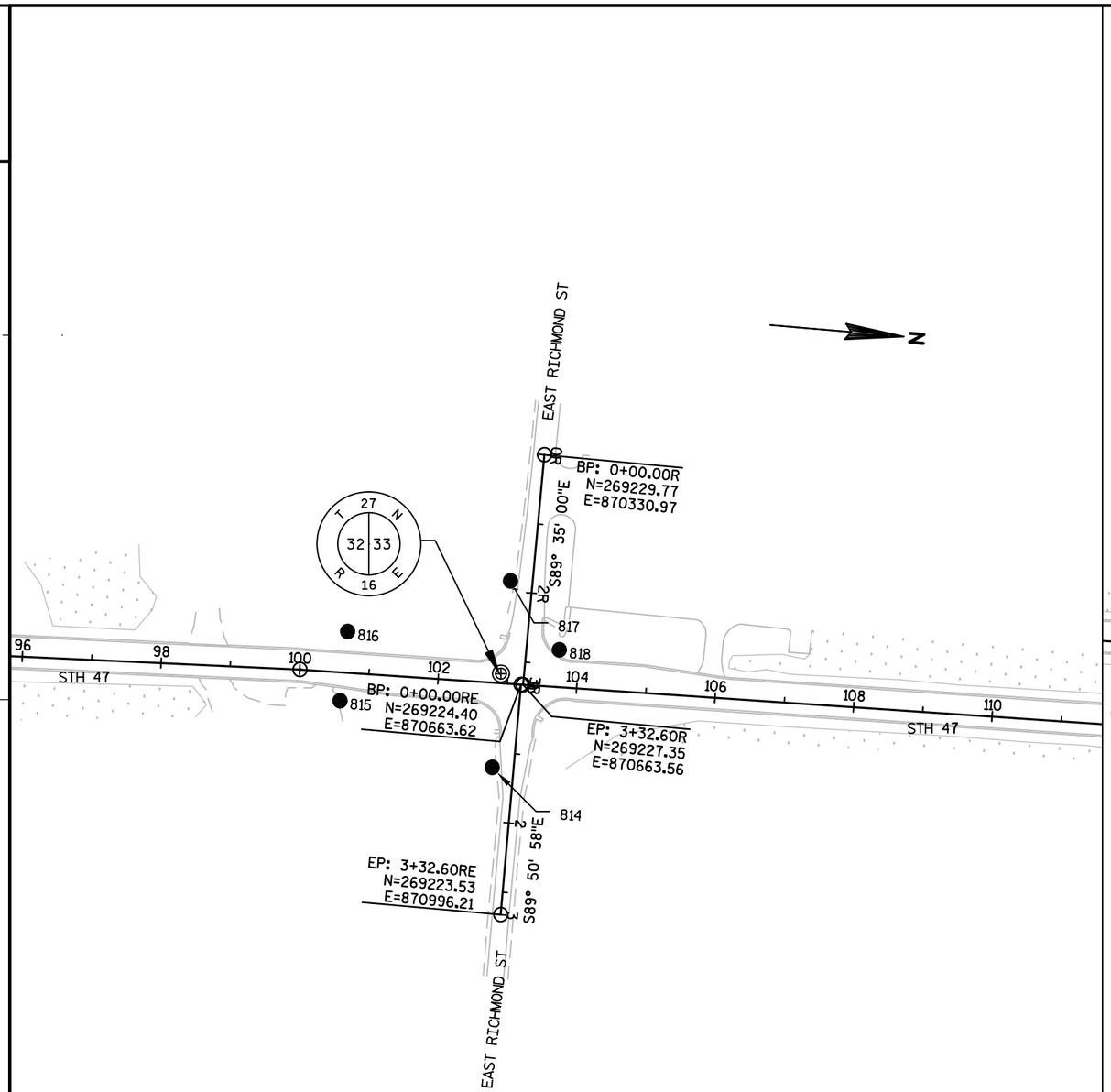
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	ALIGNMENT DETAIL	SHEET 89	E

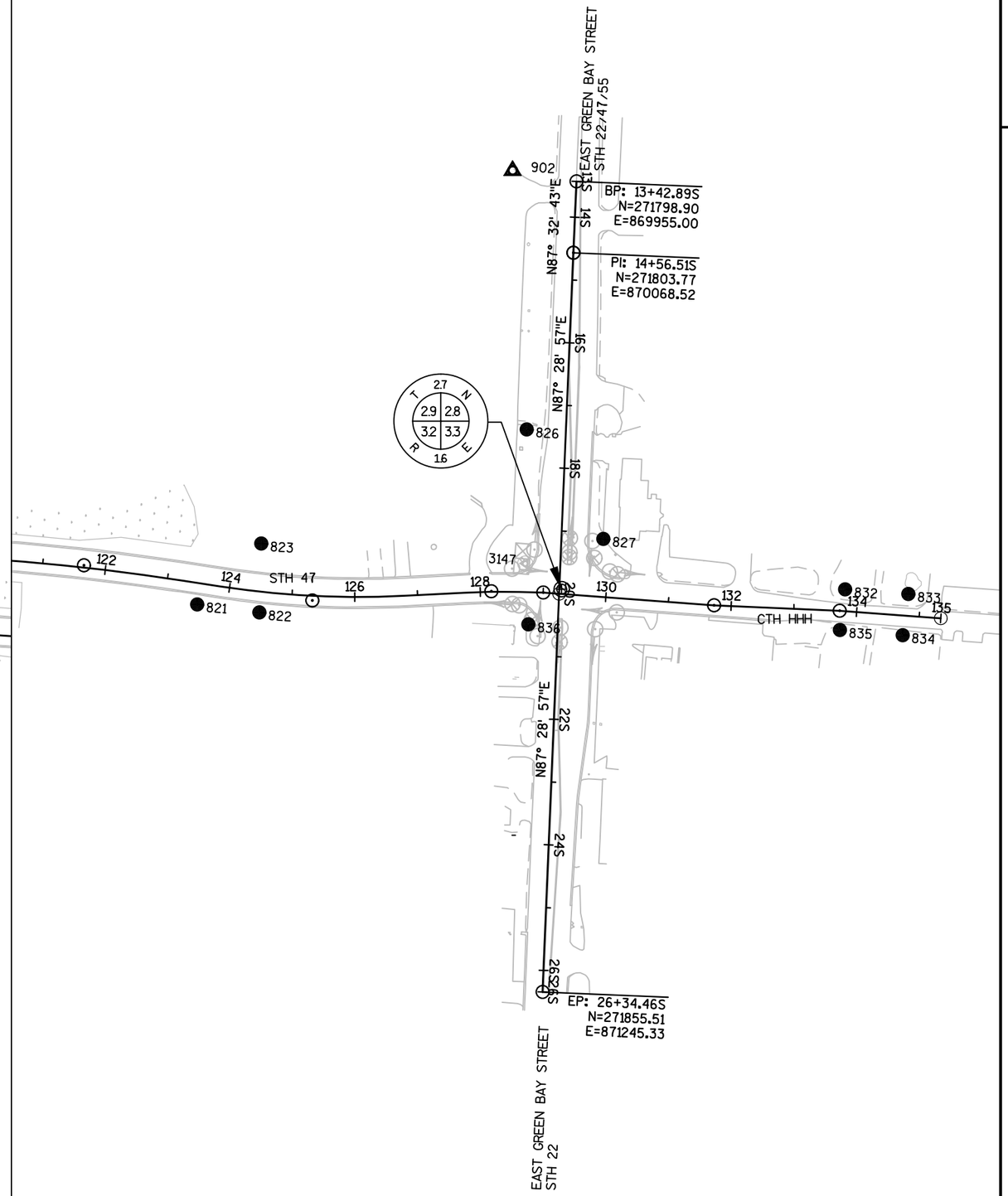
CONTROL POINTS						
POINT*	NORTHING	EASTING	STA	OFFSET	ELEVATION	TYPE
502	264361.97	870791.76	49.38.42	43.86	877.16	CP PK
800	264418.95	870935.46	49+85.74	191.05	878.93	IP20D
802	264426.26	870239.42	50+39.61	-502.95	860.95	IP1
803	265259.65	870386.70	59+73.40	-65.74	836.78	IP1 LEAN
804	265502.56	870267.07	62+24.86	34.68	832.78	IP1
805	265579.65	870035.36	64+44.03	-65.45	830.71	IP1
806	266191.65	869874.44	70+72.17	34.66	818.17	IP1 LEAN
807	266187.28	869774.52	70+72.91	-65.35	822.56	IP3/4
808	266556.11	870263.50	76+33.26	326.66	817.60	IP1
809	266556.24	870237.20	76+19.95	303.97	817.32	IP1
810	267875.44	870585.38	89+42.79	-57.09	818.25	IP2
811	267796.12	870478.62	88+12.93	-120.70	815.89	IP20D
813	268206.06	870738.50	92+99.23	42.10	822.81	IP1
814	269193.16	870786.10	102+86.22	121.91	811.51	IP2 LEANING
815	268966.40	870709.18	100+60.85	41.00	815.01	IP20D
816	268968.93	870608.97	100+65.15	-59.15	814.16	IP20D LEAN
817	269196.33	870516.15	102+94.15	-147.94	812.21	IP20D
818	269274.95	870608.96	103+71.12	-53.75	814.20	IP1
819	270513.00	870667.19	116+07.95	26.34	812.33	IP1
820	270513.10	870587.27	116+09.46	-53.56	809.54	IP1 BENT
821	271254.92	870677.59	123+52.94	34.08	814.79	IP1
822	271354.42	870681.79	124+51.02	33.11	818.08	IP1
823	271348.24	870572.44	124+41.98	-76.05	823.54	IP1
826	271753.85	870355.30	128+67.09	-258.89	813.00	IP1
827	271890.30	870518.41	129+89.24	-92.35	814.95	IP1
832	272280.68	870565.63	133+79.21	-34.75	812.35	IP1
833	272381.57	870564.52	134+80.10	-34.56	814.66	IP1
834	272377.95	870630.65	134+75.63	31.51	815.69	IP1
835	272277.79	870630.76	133+75.48	30.33	814.15	IP1
836	271782.95	870664.35	128.77.74	51.34	814.60	IP1
902	271696.16	869946.31	128+44.14	-670.80	814.51	CP PK
3147	271769.63	870568.41	128+70.16	-45.22	814.69	MON ALUM TIE

SUPERELEVATION DATA

CURVE 1				
	NORTHBOUND	LEFT OF CROWN	RIGHT OF CROWN	SOUTHBOUND
NORMAL	51+33.44	-2.00%	-2.00%	151+36.37
LEVEL	51+83.44	-2.00%	0.00%	151+86.37
REVERSE	52+33.44	-2.00%	2.00%	152+36.37
FULL	53+34.24	-6.00%	6.00%	153+35.57
FULL	59+20.41	-6.00%	6.00%	159+03.4
REVERSE	60+21.23	-2.00%	2.00%	160+02.58
LEVEL	60+71.23	-2.00%	0.00%	160+52.58
NORMAL	61+21.23	-2.00%	-2.00%	161+02.58
CURVE 2 - CURVE 3- CURVE 4				
	NORTHBOUND	LEFT OF CROWN	RIGHT OF CROWN	SOUTHBOUND
NORMAL	62+31.23	-2.00%	-2.00%	162+12.58
LEVEL	62+83.23	0.00%	-2.00%	162+62.58
REVERSE	63+31.23	2.00%	-2.00%	163+12.58
FULL	64+30.46	6.00%	-6.00%	164+13.35
FULL	74+94.	6.00%	-6.00%	175+08.32
REVERSE	76+27.	2.00%	-2.00%	176+41.32
LEVEL	76+94.	0.00%	0.00%	177+08.56
RAILROAD APPROACH	77+02.	-0.24%	0.24%	177+16.56
RAILROAD DEPART	77+26.	-0.24%	0.24%	177+40.56
NORMAL	78+00.	-2.00%	-2.00%	178+14.56
CURVE 5				
	NORTHBOUND	LEFT OF CROWN	RIGHT OF CROWN	
NORMAL	86+43.24	-2.00%	-2.00%	
LEVEL	86+91.24	-2.00%	0.00%	
REVERSE	87+39.24	-2.00%	2.00%	
BEGIN SB TRANS	87+83.	-2.00%	3.30%	
NB FULL SUPER	88+35.	-4.00%	6.00%	
INTERSECTION	88+60.	-4.50%	6.00%	
INTERSECTION	88+60.	-4.50%	6.00%	
FULL	89+30.	-6.00%	6.00%	
FULL	92+54.59	-6.00%	6.00%	
REVERSE	93+50.59	-2.00%	2.00%	
LEVEL	93+98.59	-2.00%	0.00%	
NORMAL	94+46.59	-2.00%	-2.00%	

SUPERELEVATION TRANSITIONS SHOWN ARE BASED ON EXISTING DATA, APPROXIMATE AND SHOWN FOR INFORMATION ONLY.
USE EXISTING CURB AND CROWN POINTS PRIOR TO REMOVING PAVEMENT TO DETERMINE ACTUAL TRANSITION LIMITS.





PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	ALIGNMENT DETAIL - SIDE ROADS	SHEET 91	E

DATE 17MAR16 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	6243-07-70 QUANTITY	6243-07-71 QUANTITY
0010	203.0100	Removing Small Pipe Culverts	EACH	1.000		1.000
0020	204.0100	Removing Pavement	SY	300.000	300.000	
0030	204.0110	Removing Asphaltic Surface	SY	257.000	138.000	119.000
0040	204.0150	Removing Curb & Gutter	LF	10,228.000	701.000	9,527.000
0050	204.0155	Removing Concrete Sidewalk	SY	16.000		16.000
0060	204.0195	Removing Concrete Bases	EACH	4.000		4.000
0070	204.0215	Removing Catch Basins	EACH	8.000		8.000
0080	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	36.000	6.000	30.000
0090	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	6.000		6.000
0100	204.0245	Removing Storm Sewer (size) 03. 18-Inch	LF	24.000		24.000
0110	204.0245	Removing Storm Sewer (size) 04. 24-Inch	LF	36.000		36.000
0120	204.0245	Removing Storm Sewer (size) 05. 30-Inch	LF	6.000		6.000
0130	204.0270	Abandoning Culvert Pipes	EACH	1.000		1.000
0140	205.0100	Excavation Common	CY	8,999.000	184.000	8,815.000
0150	205.0400	Excavation Marsh	CY	3,540.000		3,540.000
0160	209.0100	Backfill Granular	CY	6,055.000		6,055.000
0170	213.0100	Finishing Roadway (project) 01. 6243-07-70	EACH	1.000	1.000	
0180	213.0100	Finishing Roadway (project) 02. 6243-07-71	EACH	1.000		1.000
0190	305.0110	Base Aggregate Dense 3/4-Inch	TON	206.000	136.000	70.000
0200	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,001.000	145.000	1,856.000
0210	306.0115	Salvaged Asphaltic Pavement Base	CY	4,743.000	14.000	4,729.000
0220	416.0610	Drilled Tie Bars	EACH	30.000	30.000	
0230	416.0620	Drilled Dowel Bars	EACH	10.000	10.000	
0240	440.4410	Incentive IRI Ride	DOL	3,800.000	800.000	3,000.000
0250	455.0605	Tack Coat	GAL	3,225.000	501.000	2,724.000
0260	460.2000	Incentive Density HMA Pavement	DOL	7,193.000	743.000	6,450.000
0270	460.4000	HMA Cold Weather Paving	TON	2,235.000	235.000	2,000.000
0280	460.6223	HMA Pavement 3 MT 58-28 S	TON	5,104.000	207.000	4,897.000
0290	460.6424	HMA Pavement 4 MT 58-28 H	TON	6,182.000	959.000	5,223.000
0300	465.0105	Asphaltic Surface	TON	22.000	1.000	21.000
0310	465.0315	Asphaltic Flumes	SY	23.000		23.000
0320	490.0100	Salvaged Asphaltic Pavement	SY	40,599.000		40,599.000
0330	490.0200	Salvaged Asphaltic Pavement Milling	SY	10,097.000	7,263.000	2,834.000
0340	520.8700	Cleaning Culvert Pipes	EACH	5.000	2.000	3.000
0350	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	1.000		1.000
0360	522.0115	Culvert Pipe Reinforced Concrete Class III 15-Inch	LF	10.000		10.000
0370	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	12.000		12.000
0380	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	6.000	1.000	5.000
0390	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	4.000		4.000
0400	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	3.000		3.000
0410	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	10.000		10.000
0420	523.0519	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	1.000		1.000
0430	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	84.000		84.000
0440	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	7,181.000		7,181.000

3

DATE 17MAR16 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	6243-07-70 QUANTITY	6243-07-71 QUANTITY
0450	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	72.000	72.000	
0460	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	1,129.000	711.000	418.000
0470	601.0576	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type J	LF	2,411.000		2,411.000
0480	602.0405	Concrete Sidewalk 4-Inch	SF	2,198.000	368.000	1,830.000
0490	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	117.000		117.000
0500	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	20.000		20.000
0510	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	48.000		48.000
0520	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	143.000		143.000
0530	609.0130	Relaid Storm Sewer 30-Inch	LF	6.000		6.000
0540	610.0119	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	LF	88.000		88.000
0550	611.0410	Reconstructing Catch Basins	EACH	24.000		24.000
0560	611.0420	Reconstructing Manholes	EACH	4.000		4.000
0570	611.0430	Reconstructing Inlets	EACH	1.000	1.000	
0580	611.0530	Manhole Covers Type J	EACH	9.000		9.000
0590	611.0624	Inlet Covers Type H	EACH	57.000		57.000
0600	611.0627	Inlet Covers Type HM	EACH	8.000	6.000	2.000
0610	611.0630	Inlet Covers Type HM-GJ	EACH	7.000		7.000
0620	611.1230	Catch Basins 2x3-FT	EACH	17.000		17.000
0630	611.2004	Manholes 4-FT Diameter	EACH	1.000		1.000
0640	611.8105	Adjusting Catch Basin Covers	EACH	26.000		26.000
0650	611.8110	Adjusting Manhole Covers	EACH	4.000		4.000
0660	611.8115	Adjusting Inlet Covers	EACH	5.000	5.000	
0670	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6243.07-70	EACH	1.000	1.000	
0680	618.0100	Maintenance And Repair of Haul Roads (project) 02. 6243-07-71	EACH	1.000		1.000
0690	619.1000	Mobilization	EACH	1.000	0.100	0.900
0700	620.0300	Concrete Median Sloped Nose	SF	640.000	270.000	370.000
0710	621.0100	Landmark Reference Monuments	EACH	4.000		4.000
0720	624.0100	Water	MGAL	194.000	5.000	189.000
0730	625.0100	Topsoil	SY	9,500.000	242.000	9,258.000
0740	627.0200	Mulching	SY	5,490.000	227.000	5,263.000
0750	628.1504	Silt Fence	LF	2,545.000	45.000	2,500.000
0760	628.1520	Silt Fence Maintenance	LF	2,545.000	45.000	2,500.000
0770	628.1905	Mobilizations Erosion Control	EACH	8.000	2.000	6.000
0780	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	2.000	4.000
0790	628.2006	Erosion Mat Urban Class I Type A	SY	5,081.000	286.000	4,795.000
0800	628.7005	Inlet Protection Type A	EACH	64.000	1.000	63.000
0810	628.7015	Inlet Protection Type C	EACH	86.000	6.000	80.000
0820	628.7555	Culvert Pipe Checks	EACH	30.000		30.000
0830	628.7570	Rock Bags	EACH	263.000	13.000	250.000
0840	629.0210	Fertilizer Type B	CWT	6.040	0.210	5.830
0850	630.0120	Seeding Mixture No. 20	LB	264.000	14.000	250.000
0860	631.0300	Sod Water	MGAL	221.000	11.000	210.000
0870	633.5200	Markers Culvert End	EACH	33.000	2.000	31.000
0880	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	15.000		15.000

3

DATE 17MAR16 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	6243-07-70 QUANTITY	6243-07-71 QUANTITY
0890	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	75.000	19.000	56.000
0900	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	15.000	11.000	4.000
0910	637.0620	Sign Flags Permanent Type II	EACH	20.000	12.000	8.000
0920	637.2210	Signs Type II Reflective H	SF	886.560	330.420	556.140
0930	637.2230	Signs Type II Reflective F	SF	95.390	9.000	86.390
0940	638.2102	Moving Signs Type II	EACH	2.000		2.000
0950	638.2602	Removing Signs Type II	EACH	68.000	27.000	41.000
0960	638.3000	Removing Small Sign Supports	EACH	67.000	28.000	39.000
0970	642.5201	Field Office Type C	EACH	1.000	1.000	
0980	643.0100	Traffic Control (project) 01. 6243-07-70	EACH	1.000	1.000	
0990	643.0100	Traffic Control (project) 02. 6243-07-71	EACH	1.000		1.000
1000	643.0300	Traffic Control Drums	DAY	11,070.000	5,986.000	5,084.000
1010	643.0420	Traffic Control Barricades Type III	DAY	3,608.000	410.000	3,198.000
1020	643.0705	Traffic Control Warning Lights Type A	DAY	4,920.000	820.000	4,100.000
1030	643.0715	Traffic Control Warning Lights Type C	DAY	1,148.000		1,148.000
1040	643.0900	Traffic Control Signs	DAY	4,339.000	820.000	3,519.000
1050	643.0910	Traffic Control Covering Signs Type I	EACH	6.000		6.000
1060	643.0920	Traffic Control Covering Signs Type II	EACH	19.000		19.000
1070	643.1050	Traffic Control Signs PCMS	DAY	70.000	28.000	42.000
1080	643.2000	Traffic Control Detour (project) 02. 6243-07-71	EACH	1.000		1.000
1090	643.3000	Traffic Control Detour Signs	DAY	25,420.000		25,420.000
1100	646.0106	Pavement Marking Epoxy 4-Inch	LF	40,273.000	5,769.000	34,504.000
1110	646.0126	Pavement Marking Epoxy 8-Inch	LF	2,668.000	160.000	2,508.000
1120	646.0600	Removing Pavement Markings	LF	994.000		994.000
1130	647.0110	Pavement Marking Railroad Crossings Epoxy	EACH	2.000		2.000
1140	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	29.000	2.000	27.000
1150	647.0356	Pavement Marking Words Epoxy	EACH	6.000	1.000	5.000
1160	647.0456	Pavement Marking Curb Epoxy	LF	235.000	105.000	130.000
1170	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	344.000	71.000	273.000
1180	647.0606	Pavement Marking Island Nose Epoxy	EACH	9.000	3.000	6.000
1190	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	855.000	535.000	320.000
1200	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	1,600.000	600.000	1,000.000
1210	650.4000	Construction Staking Storm Sewer	EACH	101.000	6.000	95.000
1220	650.4500	Construction Staking Subgrade	LF	11,273.000	185.000	11,088.000
1230	650.5000	Construction Staking Base	LF	11,288.000	100.000	11,188.000
1240	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,450.000	230.000	4,220.000
1250	650.6000	Construction Staking Pipe Culverts	EACH	3.000	1.000	2.000
1260	650.7000	Construction Staking Concrete Pavement	LF	85.000	85.000	
1270	650.8000	Construction Staking Resurfacing Reference	LF	13,302.000	2,214.000	11,088.000
1280	650.8500	Construction Staking Electrical Installations (project) 01. 6243-07-70	LS	1.000	1.000	
1290	650.8500	Construction Staking Electrical Installations (project) 02. 6243-07-71	LS	1.000		1.000
1300	650.9910	Construction Staking Supplemental Control (project) 01. 6243-07-70	LS	1.000	1.000	
1310	650.9910	Construction Staking Supplemental Control (project) 02.6243-07-71	LS	1.000		1.000
1320	650.9920	Construction Staking Slope Stakes	LF	2,715.000	185.000	2,530.000
1330	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	230.000	30.000	200.000

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DATE 17MAR16 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	6243-07-70 QUANTITY	6243-07-71 QUANTITY
1340	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	130.000		130.000
1350	652.0615	Conduit Special 3-Inch	LF	125.000		125.000
1360	652.0700.S	Install Conduit into Existing Item	EACH	2.000		2.000
1370	653.0135	Pull Boxes Steel 24x36-Inch	EACH	1.000	1.000	
1380	653.0140	Pull Boxes Steel 24x42-Inch	EACH	3.000		3.000
1390	653.0905	Removing Pull Boxes	EACH	4.000	1.000	3.000
1400	654.0101	Concrete Bases Type 1	EACH	3.000		3.000
1410	654.0102	Concrete Bases Type 2	EACH	1.000		1.000
1420	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000		1.000
1430	655.0230	Cable Traffic Signal 5-14 AWG	LF	200.000		200.000
1440	655.0240	Cable Traffic Signal 7-14 AWG	LF	300.000		300.000
1450	655.0260	Cable Traffic Signal 12-14 AWG	LF	2,200.000		2,200.000
1460	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,300.000		1,300.000
1470	655.0700	Loop Detector Lead In Cable	LF	1,730.000		1,730.000
1480	655.0900	Traffic Signal EVP Detector Cable	LF	1,150.000		1,150.000
1490	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. Green Bay Street and Airport Drive	LS	1.000		1.000
1500	657.0100	Pedestal Bases	EACH	3.000		3.000
1510	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	1.000		1.000
1520	657.0305	Poles Type 2	EACH	1.000		1.000
1530	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	3.000		3.000
1540	657.0595	Trombone Arms 25-FT	EACH	1.000		1.000
1550	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	3.000		3.000
1560	658.0120	Traffic Signal Face 5-12 Inch Vertical	EACH	5.000		5.000
1570	658.0165	Traffic Signal Face 5-12 Inch Horizontal	EACH	1.000		1.000
1580	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	3.000		3.000
1590	658.0225	Backplates Signal Face 5 Section 12-Inch	EACH	6.000		6.000
1600	658.0600	Led Modules 12-Inch Red Ball	EACH	9.000		9.000
1610	658.0605	Led Modules 12-Inch Yellow Ball	EACH	9.000		9.000
1620	658.0610	Led Modules 12-Inch Green Ball	EACH	9.000		9.000
1630	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	6.000		6.000
1640	658.0625	Led Modules 12-Inch Green Arrow	EACH	6.000		6.000
1650	658.5069	Signal Mounting Hardware (location) 01. Green Bay Street and Airport Drive	LS	1.000		1.000
1660	690.0150	Sawing Asphalt	LF	1,963.000	470.000	1,493.000
1670	690.0250	Sawing Concrete	LF	837.000	160.000	677.000
1680	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000		300.000
1690	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,200.000		1,200.000
1700	SPV.0060	Special 01. Inlet Covers Type H-D	EACH	1.000		1.000
1710	SPV.0060	Special 02. Adjusting Water Valve Boxes	EACH	10.000		10.000
1720	SPV.0060	Special 03. Adjust Sanitary Manhole Covers	EACH	9.000		9.000
1730	SPV.0060	Special 04. Reestablish Section Corner Monuments	EACH	1.000		1.000
1740	SPV.0060	Special 05. Temporary Water Passage	EACH	67.000		67.000
1750	SPV.0090	Special 01. Ditch Restoration	LF	240.000	30.000	210.000
1760	SPV.0090	Special 02. Concrete Curb and Gutter HES 6-Inch Sloped 30-Inch Type G	LF	85.000	85.000	
1770	SPV.0090	Special 03. Concrete Curb and GutterHES 6-Inch Sloped 36-Inch Type A	LF	100.000	100.000	

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DATE 17MAR16 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	6243-07-70 QUANTITY	6243-07-71 QUANTITY
1780	SPV.0105	Special 01. Railroad Marsh Excavation and Backfill	LS	1.000		1.000
1790	SPV.0105	Special 02. Remove and Salvage Signals, Green Bay Street and Airport Drive	LS	1.000		1.000
1800	SPV.0105	Special 03. Video Detection System, Green Bay Street and Airport Drive	LS	1.000		1.000
1810	SPV.0105	Special 04. Traffic Signal Controller Equipment Green Bay Street and Airport Drive	LS	1.000		1.000
1820	SPV.0105	Special 05. Salvage and Reinstall Emergency Vehicle Preemption	LS	1.000		1.000
1830	SPV.0105	Special 06. City of Shawano Welcome Sign	LS	1.000		1.000
1840	SPV.0180	Special 01. Concrete Pavement 10-Inch SHES	SY	260.000	260.000	
1850	SPV.0195	Special 01. Railroad Asphaltic Pavement Subgrade	TON	65.000		65.000

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REMOVING PAVEMENT

CATEGORY	LOCATION	204.0100 REMOVING PAVEMENT SY
0010	STH 29 NE RAMP TERMINAL	300
	TOTAL	**300**

REMOVING ASPHALTIC SURFACE

CATEGORY	STA - STA	LOCATION	DEPTH IN	204.0110 REMOVING ASPHALTIC SURFACE SY	490.0200 SALVAGED ASPHALTIC PAVEMENT MILLING SY
0010	38+47 - 49+27	NB	2	---	3,240
	49+27 - 49+55	NB	4	---	84
	138+50 - 149+32	SB	2	---	3,246
	149+32 - 149+60	SB	4	---	84
	46+22 - 47+69	NB LT TURN TAPER	2	---	41
	47+69 - 49+27	NB LT TURN LANE	2	---	176
	49+27 - 49+55	NB MEDIAN	4	---	34
	49+10 - 49+27	NB LT TURN LANE	2	---	19
	49+27 - 49+55	SB MEDIAN	4	---	31
	CTH B	EAST	4	---	195
	CTH B	WEST	4	---	113
		STH 29 TERMINAL		87	---
	CTH B	SW TAPER		51	---
		TOTAL		**138**	**7,263**

EXCAVATION COMMON

CATEGORY	LOCATION	205.0100 EXCAVATION COMMON CY
0010	STH 29 NE RAMP TERMINAL	75
	CTH B SE	94
	CTH B SW	15
	TOTAL	**184**

CURB & GUTTER

CATEGORY	STA - STA	NB/SB	RT LT	204.0150 REMOVING CURB & GUTTER LF	601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	SPV.0090.02 CONCRETE CURB & GUTTER HES 6-INCH SLOPED 30-INCH TYPE G LF	SPV.0090.03 CONCRETE CURB& GUTTER HES 6-INCH SLOPED 36-INCH TYPE A LF
0010	38+47 - 39+39	NB	LT	92	---	92	---	---
	41+63 - 42+05	NB	LT	42	---	42	---	---
	43+75 - 44+03	NB	LT	28	---	28	---	---
	48+85 - 49+04	NB	RT	19	---	19	---	---
	138+50 - 138+70	SB	RT	20	---	20	---	---
	139+15 - 139+27	SB	RT	12	---	12	---	---
	140+66 - 140+81	SB	RT	15	---	15	---	---
	143+77 - 143+97	SB	RT	20	---	20	---	---
	145+21 - 145+84	SB	RT	63	---	63	---	---
	148+85 - 149+04	SB	LT	19	---	19	---	---
		CTHB	ISLAND	---	72	---	---	---
		CTHB	SW CORNER	57	---	67	---	---
		CTHB	SE CORNER	93	---	93	---	---
		STH 29 RAMP TERMINAL		---	---	---	85	100
UNDISTRIBUTED				221	---	221	---	---
			TOTALS	**701**	**72**	**711**	**85**	**100**

REMOVING STORM SEWER

CATEGORY	STATION	LOCATION	204.0245 REMOVING STORM SEWER 01. 12-INCH LF
0010	43+86	AEW 409	6
		TOTAL	**6**

SALVAGED ASPHALTIC PAVEMENT BASE

CATEGORY	STA - STA	LOCATION	306.0115 SALVAGED ASPHALTIC PAVEMENT BASE CY
0010	INTERSECTION	CTH B SE WIDENING	14
		TOTAL	**14**

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BASE AGGREGATE DENSE

CATEGORY	STA	-	STA	LOCATION		305.0110 BASE AGGREGATE DENSE 3/4" TON	305.0120 BASE AGGREGATE DENSE 1 1/4" TON
0010	38+80	-	49+55	SB SHOULDER	STH 47	60	---
	38+47	-	49+55	NB SHOULDER	STH 47	61	---
	10+95	-	11+95	SHOULDER	CTH B	15	---
				RAMP TERMINAL	STH 29	---	145
					TOTAL	**136**	**145**

CONCRETE PAVEMENT

CATEGORY	LOCATION	SPV.0180.01 CONCRETE PAVEMENT 10-INCH SHES SY
0010	STH 29 RAMP TERMINAL	260
	TOTAL	**260**

TIE BARS AND DOWEL BARS

CATEGORY	LOCATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
0010	STH 29 RAMP TERMINAL	30	10
	TOTAL	**30**	**10**

ASPHALTIC SURFACE

CATEGORY	LOCATION		465.0105 ASPHALTIC SURFACE TON
0010	STH 29 RAMP TERMINAL	PATCHING	1
		TOTAL	**1**

WATER

CATEGORY		624.0100 WATER MGAL
0010	6243-07-70	5
	TOTAL	5

CONCRETE SIDEWALK

CATEGORY	LOCATION	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	602.0405 CONCRETE SIDEWALK 4-INCH SF
0010	STH 29 NE ISLAND	90	248
	CTH B SE ISLAND	130	120
	MEDIAN STA 49+05	50	---
	TOTAL	**270**	**368**

HMA PAVEMENT

CATEGORY	STA	-	STA	LOCATION		455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6424 HMA PAVEMENT 4 MT 58-28 H TON
0010	38+47	-	48+50	NB	STH 47	180.5	---	346
	48+50	-	49+55	NB	STH 47	18.9	36	36
	46+22	-	48+50	NB RADIUS TAPER	STH 47	2.7	---	5
	46+22	-	47+69	NB TURN TAPER	STH 47	2.5	5	5
	47+69	-	48+50	NB TURN LANE	STH 47	2.7	---	5
	48+50	-	49+55	NB TURN LANE	STH 47	3.5	7	7
	49+01	-	49+55	MEDIAN	STH 47	3.6	7	7
	138+99	-	149+00	SB	STH 47	180.2	---	345
	149+00	-	149+55	SB	STH 47	9.9	19	19
	148+02		149+00	SB RADIUS	STH 47	3.3	---	6
	9+04	-	9+49	WEST TURN RADIUS	CTH B	6.8	---	13
	7+77	-	9+49	WEST LANES	CTH B	31.0	59	59
	10+22	-	11+95	EAST TURN RADIUS	CTH B	16.6	---	32
	10+23	-	11+96	IDEN EAST TURN RADIU	CTH B	7.4	14	14
	10+22	-	11+95	EAST LANES	CTH B	31.1	60	60
					TOTALS	**501**	**207**	**959**

STORM SEWER STRUCTURES

CATEGORY	LOCATION	STRUCTURE #	522.1012 AEW FOR CPRC 12-INCH EACH	611.0430 RECONSTRUCTING INLETS EACH	611.0627 INLET COVERS TYPE HM EACH	622.8115 ADJUSTING INLET COVERS EACH
0010	STH 47	404	---	---	1	1
	STH 47	405	---	---	1	1
	STH 47	407	---	---	1	1
	STH 47	408	---	1	1	---
	STH 47	409	1	---	---	---
	STH 47	410	---	---	1	1
	STH 47	411	---	---	1	1
		TOTALS	**1**	**1**	**6**	**5**

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EROSION CONTROL ITEMS FOR DRAINAGE

CATEGORY	STRUCTURE #	STRUCTURE DISC	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.1504 SILT FENCE FT	628.1520 SILT FENCE MAINT FT	628.7570 ROCK BAGS EACH
0010	404	IN	---	1	---	---	---
	405	IN	---	1	---	---	---
	407	IN	---	1	---	---	---
	408	IN	1	1	---	---	---
	409	AEW	---	---	45	45	13
	410	IN	---	1	---	---	---
	411	IN	---	1	---	---	---
	TOTAL		**1**	**6**	**45**	**45**	**13**

CLEANING PIPES AND DITCHES

CATEGORY	STRU #	TYPE	LOCATION	520.8700 CLEANING CULVERT PIPES EA	SPV.0090.01 DITCH RESTORATION LF
0010	409	AEW	STH 47	1	15
	412	AEW	STH 47	1	15
			TOTALS	**2**	**30**

EROSION CONTROL MOBILIZATION

CATEGORY	PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	6243-07-70	2	2
	TOTAL	2	2

EROSION CONTROL

CATEGORY	STA	-	STA	LOCATION		625.0100 TOPSOIL SY	627.0200 MULCH SY	628.2006 E MAT URBAN CLASS 1 TYPE A SY	629.021 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	631.0300 SOD WATER MGAL
0010	37+88	-	38+54	NB	RT	173	---	173	0.01	4.68	3.90
	38+47	-	39+39	NB	LT	41	41	---	0.03	1.10	0.90
	41+63	-	42+05	NB	LT	19	19	---	0.01	0.50	0.40
	43+75	-	44+03	NB	LT	12	12	---	0.01	0.34	0.30
	43+84	AEW		NB	RT	14	---	---	0.01	0.38	0.40
	48+58	-	49+09	NB	RT	41	---	41	0.03	1.10	0.90
	48+85	-	49+04	NB	RT	8	8	---	0.01	0.23	0.20
	138+51	-	138+71	SB	RT	9	9	---	0.01	0.24	0.20
	139+15	-	139+27	SB	RT	5	5	---	0.00	0.14	0.10
	140+66	-	140+81	SB	RT	7	7	---	0.00	0.18	0.10
	143+77	-	143+97	SB	RT	9	9	---	0.01	0.24	0.20
	145+21	-	145+84	SB	RT	28	28	---	0.02	0.76	0.60
	148+85	-	149+04	SB	LT	8	8	---	0.01	0.23	0.20
	148+90	-	149+33	SB	LT	29	---	29	0.02	0.78	0.60
				UNDISTRIBUTED		81	81	43	0.05	3.09	2.00
				TOTAL		**242**	**227**	**286**	**0.21**	**14**	**11**

MARKERS CULVERT END

CATEGORY	STA	LOCATION	OUTFALL #	633.5200 MARKERS CULVERT END EACH
0010	44+50	NB STH 47 RT	409	1
	49+00	SB STH 47 LT	412	1
		TOTAL		**2**

ELECTRICAL

CATEGORY	LOCATION	652.0225 CONDUIT RIGID SCHEDULE 40 NONMETALLIC 2-INCH LF	653.0135 PULL BOXES STEEL 24X36-INCH EACH	653.0905 REMOVING PULL BOXES EACH
0010	STH 29 RAMP TERMINAL	30	1	1
	TOTAL	**30**	**1**	**1**

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SIGN REMOVAL ITEMS

CATEGORY	SIGN NO.	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVE SMALL SIGN SUPPORTS EACH	COMMENTS
0010	1-1	DO NOT ENTER	1	1	
	1-2	STOP	1	1	
	1-3	DIVIDED HWY	1	--	SAME SIGN SUPPORT AS 1-5
	1-4	ONE WAY	1	--	SAME SIGN SUPPORT AS 1-4
	2-1	DO NOT ENTER	1	--	SAME SIGN SUPPORT AS 2-2
	2-2	J-ASSEMBLY	1	1	
	2-3	WRONG WAY	1	--	SAME SIGN SUPPORT AS 2-4
	2-4	DESTINATION (2)	1	2	
	2-5	J-ASSEMBLY	1	2	
	2-6	JCT	1	1	
	2-7	SPEED LIMIT	1	1	
	2-8	KEEP RIGHT	1	1	
	2-9	J-ASSEMBLY	1	3	
	2-10	STOP, DIVIDED HWY	2	1	OTHERS TO REMOVE STREET NAME SIGNS
	2-11	SPEED LIMIT	1	1	
	2-15	J-ASSEMBLY	1	3	
	2-16	STOP, DIVIDED HWY	2	1	
	2-17	SPEED LIMIT	1	1	
	2-18	DO NOT ENTER	1	--	SAME SIGN SUPPORT AS 2-20
	2-19	J-ASSEMBLY	1	1	
	2-20	INTERSECTION LANE CONTROL	1	1	
	2-21	WRONG WAY	1	--	SAME SIGN SUPPORT AS 2-24
	2-22	END HWY	1	1	
	2-23	JCT	1	1	
	2-24	CROSS ROAD, SPEED REDUCTION AHEAD	1	1	
	2-25	CROSS ROAD, SPEED REDUCTION AHEAD	1	1	
	2-26	J-ASSEMBLY	1	2	
	2-27	YIELD	1	1	
	2-28	YIELD	1	1	
TOTAL			**27**	**28**	

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TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NO.	SIGN CODE	SIGN SIZE W (IN)	x	SIGN SIZE H (IN)	634.0614 POST WOOD 4"x6"x14' EACH	634.0616 POST WOOD 4"x6"x16' EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	BOX OUT REQUIRED	COMMENTS
0010	1-1	R6-1R(2S)	36	x	12			3.00				SAME SIGN SUPPORT AS 1-2; MOUNT ABOVE STOP SIGN
	1-2	R1-1(2M)	36	x	36		1	7.46			x	
	1-3	R6-3(2M)	30	x	24			5.00				SAME SIGN SUPPORT AS 1-2; MOUNT BELOW STOP SIGN
	1-4	R5-1(2M)	36	x	36	1		9.00			x	
	2-1	R5-1(2M)	36	x	36			9.00				SAME SIGN SUPPORT AS 2-2
	2-2	J3-1(2)	24	x	57	1		9.06				
	2-3	R5-1A(2M)	42	x	30			8.75				SAME SIGN SUPPORT AS 2-4
	2-4	D1-2	72	x	30	2		15.00				DESTINATION SIGN "GREEN BAY", "WAUSAU"
	2-5	J2-3(2)	72	x	57		2	27.18				
	2-6	J1-1(2)	24	x	39	1		6.19				
	2-7	R2-1(2M)	30	x	36	1		7.50				
	2-8	R4-7(2M)	24	x	30			5.00				SAME SIGN SUPPORT AS 2-32; 45 DEGREE ANGLE FOR CTH B WB LEFT TURN
	2-10	J-MOD	96	x	57		3	38.00				
	2-11	R6-1L(2S)	36	x	12			3.00				MOUNT ON THE BACK SIDE OF STOP SIGN POST (2-13) ABOVE THE STOP SIGN
	2-12	R2-1(2S)	24	x	30	1		5.00				
	2-13	R1-1(2M)	36	x	36		1	7.46		2		
	2-14	R1-3P(2M)	24	x	9			1.50				SAME SIGN SUPPORT AS 2-12
	2-15	R6-3(2M)	30	x	24			5.00				SAME SIGN SUPPORT AS 2-12
	2-25	R6-1L(2S)	36	x	12			3.00				MOUNT ON THE BACK SIDE OF STOP SIGN POST (2-27) ABOVE THE STOP SIGN
	2-26	J-MOD	96	x	57		3	38.00				
	2-27	R1-1(2M)	36	x	36		1	7.46		2		
	2-28	R1-3P(2M)	24	x	9			1.50				SAME SIGN SUPPORT AS 2-27
	2-29	R6-3(2M)	30	x	24			5.00				SAME SIGN SUPPORT AS 2-27
	2-30	R2-1(2S)	24	x	30	1		5.00				
	2-31	R1-2(2M)	48	x	42	1		7.00		2		
	2-32	R1-1(2M)	36	x	36	1		7.46		2		
	2-33	R1-1(2M)	36	x	36	1		7.46		2	x	
	2-34	R1-3P(2M)	24	x	9			1.50				SAME SIGN SUPPORT AS 2-32
	2-35	R1-3P(2M)	24	x	9			1.50				SAME SIGN SUPPORT AS 2-33
	2-36	R5-1(2M)	36	x	36	1		9.00				
	2-37	J13-1(2)	24	x	45	1		7.06				
	2-38	R5-1A(2M)	42	x	30	1		8.75				
	2-39	R3-8W(2M)	54	x	30			11.25				SAME SIGN SUPPORT AS 2-38
	2-40	J1-1(2)	24	x	39	1		6.19				
	2-41	J1-1(2)	24	x	39			6.19				SAME SIGN SUPPORT AS 2-40
	2-42	W3-1(2M)	36	x	36	1			9.00	2		
	2-43	J4-3(2)	72	x	36	2		18.00				
	2-44	R1-2(2M)	48	x	42	1		7.00				
TOTAL						**19**	**11**	**330.42**	**9**	**12**		

3

PAVEMENT MARKING EPOXY

CATEGORY	LOCATION			646.0106 EPOXY 4-INCH WHITE LF	646.0106 EPOXY 4-INCH YELLOW LF	646.0126 EPOXY 8-INCH WHITE LF	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY EACH	647.0456 CURB EPOXY YELLOW LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY YELLOW EACH	647.0726 DIAGONAL EPOXY 12-INCH WHITE LF	647.0726 DIAGONAL EPOXY 12-INCH YELLOW LF
0010	STH 29 OFF RAMP												
	37+57	-	37+72	33	90	---	---	---	---	15	---	---	---
	37+72	-	37+79	---	---	80	---	---	65	---	1	---	---
	STH 47/55, BUS 29, CTH K												
	37+62	-	49+10	2225	2,250	80	2	1	40	24	2	115	280
	CTH B												
	49+10	-	49+70	655	516	---	---	---	---	32	---	140	---
			TOTAL	**2,913**	**2,856**	**160**	**2**	**1**	**105**	**71**	**3**	**255**	**280**
				5,769								**535**	

TRAFFIC CONTROL DEVICES

CATEGORY	LOCATION	SERVICE DAYS	643.0300 TC DRUMS IN SERVICE	643.0300 TC DRUMS DAYS	643.0420 BARRICADES TYPE III IN SERVICE	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A IN SERVICE	643.0705 WARNING LIGHTS TYPE A DAYS	643.0100 TRAFFIC CONTROL PROJECT EACH	643.0900 TC SIGNS IN SERVICE	643.0900 TC SIGNS DAYS	643.1050 TC SIGNS PCMS IN SERVICE	643.1050 TC SIGNS PCMS DAYS	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH LF
0010														
	PROJECT	---	---	---	---	---	---	---	1	---	---	---	---	---
	ADVANCE PCMS	14	---	---	---	---	---	---	---	---	---	2	28	---
	SOUTH END OF PROJECT	82	73	5986	5	410	10	820	---	10	820	---	---	100
	UNDISTRIBUTED	---	---	---	---	---	---	---	---	---	---	---	---	500
	TOTAL			**5,986**		**410**		**820**	**1**		**820**		**28**	**600**

CONSTRUCTION STAKING

CATEGORY	STA	- STA	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB AND GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS LS	650.9910 CONSTRUCTION STAKING SUPPLIMENTAL CONTROL LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	PROJECT		STH 47	6	---	---	---	1	---	---	1	1	---
	38+47	- 49+55	STH 47NB	---	---	---	---	---	---	1,108	---	---	---
	138+50	149+56	STH 47NB	---	---	---	---	---	---	1,106	---	---	---
			STH 29 TERMINAL	---	85	---	---	---	85	---	---	---	85
			CTH B INTERSECTION	---	100	100	230	---	---	---	---	---	100
			TOTALS	**6**	**185**	**100**	**230**	**1**	**85**	**2,214**	**1**	**1**	**185**

SAWING

CATEGORY	STA	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010		STH 29 RAMP	---	100
	37+71-38+53	NB STH 47	82	---
	38+47	NB STH 47	12	---
	38+53	NB STH 47	17	---
	138+50	SB STH 47	27	---
	49+55	NB/SB STH 47	250	---
	CTH B	EAST	24	---
	CTH B	WEST	24	---
	INLET 408		34	---
	CURB AND GUTTER		---	60
		TOTALS	**470**	**160**

REMOVING CATCH BASINS

CATEGORY	STRUC #	LOCATION	204.0215 REMOVING CATCH BASINS EACH
0010	54	STH 47	1
	55	STH 47	1
	69	STH 47	1
	86	STH 47	1
	89	STH 47	1
	112	STH 47	1
	308	STH 47	1
	311	STH 47	1
		TOTAL	**8**

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	STR #	PIPE SIZE INCH	TYPE	204.0270 ABANDONING CULVERT PIPES EACH	203.0100 REMOVING SMALL PIPE CULVERTS EACH
0010	77+35	201	24"	CMCP	1	0
	83+96	202	24"	CMCP	0	1
				TOTALS	**1**	**1**

REMOVING SIDEWALK

CATEGORY	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	STH 22 MEDIAN	16
	TOTALS	**16**

REMOVING ASPHALTIC SURFACE

CATEGORY	STA	-	STA	LOCATION			204.0110 REMOVING ASPHALTIC SURFACE SY	490.0200 SALVAGED ASPHALTIC PAVEMENT MILLING SY	490.0100 SALVAGED ASPHALTIC PAVEMENT SY
0010	49+55	-	49+78	MEDIAN		STH 47	---	---	56
	49+55	-	76+97	LANE	NB	STH 47	---	---	6,703
	62+47	-	63+89	TURN TAPER	NB	STH 47	---	---	32
	63+89	-	66+80	TURN LANE	NB	STH 47	---	---	323
	49+55	-	50+82	TURN LANE	SB	STH 47	---	---	141
	50+82	-	52+32	TURN LANE TAPER	SB	STH 47	---	---	83
	49+55	-	76+97	LANE	SB	STH 47	---	---	6,703
	65+66	-	68+11	TURN LANE	SB	STH 47	---	---	272
	68+11	-	69+75	TURN TAPER	SB	STH 47	---	---	91
	64+50	-	69+45	RADIUS TAPER	SB	STH 47	---	---	337
	77+31	-	128+54	LANE	NB	STH 47	---	---	12,523
	100+00	-	101+35	TURN LANE TAPER	NB	STH 47	---	---	75
	101+35	-	102+48	TURN LANE	NB	STH 47	---	---	126
	77+28	-	128+55	LANE	SB	STH 47	---	---	12,533
	104+02	-	104+95	TURN LANE	SB	STH 47	---	---	103
	104+95	-	106+19	TURN LANE TAPER	SB	STH 47	---	---	69
	INTERSECTION			WEST	---	CTH B	---	362	---
	INTERSECTION			EAST	---	CTH B	---	146	---
	INTERSECTION			WEST	---	ENGEL DR	---	446	---
	INTERSECTION			WEST	---	BEAUPREY RD	---	446	---
	INTERSECTION			EAST	---	RICHMOND ST	---	453	---
	INTERSECTION			WEST	---	RICHMOND ST	---	981	---
	INTERSECTION					STH 22	---	---	429
	49+84	-	49+92	NOSE/CURB		STH 47	4	---	---
	50+37	-	50+48	CURB		STH 47	2	---	---
	50+77	-	50+82	CURB		STH 47	1	---	---
	65+45	-	65+58	NOSE/CURB		STH 47	8	---	---
	66+41			NOSE		STH 47	25	---	---
	66+80	-	67+13	CURB		STH 47	12	---	---
	67+10	-	67+21	CURB		STH 47	3	---	---
	127+46	-	128+60	BEHIND CURB (LOT)		STH 22	13	---	---
				FLUME					
	76+89			FLUME NBRT		STH 47	13	---	---
	77+39			FLUME NBRT		STH 47	13	---	---
	177+00			FLUME SBLT		STH 47	13	---	---
	177+50			FLUME SBLT		STH 47	13	---	---
						TOTALS	**119**	**2,834**	**40,599**

3

REMOVING STORM SEWER

			204.0245 REMOVING STORM SEWER				
			01. 12-INCH	02. 15-INCH	03. 18-INCH	04. 24-INCH	05. 19X30-INCH
CATEGORY	STATION	LOCATION	LF	LF	LF	LF	LF
0010	59+83	AEW 24E	6	---	---	---	---
	62+78	AEW 32	---	---	---	---	---
	68+89	AEW 44	---	---	---	6	---
	71+50	AEW 48	---	---	---	6	---
	71+52	AEW 51A	---	---	---	6	---
	74+01	AEW 56	---	6	---	---	---
	87+71	AEW 71	---	---	---	6	---
	87+71	AEW 72	---	---	---	6	---
	102+73	AEW 91	---	---	---	---	6
	102+76	AEW 92	---	---	6	---	---
	106+14	AEW 103	---	---	---	6	---
	106+54	AEW 104	12	---	---	---	---
	112+52	AEW 107	---	---	6	---	---
	116+04	AEW 111	---	---	6	---	---
	116+11	AEW 114	---	---	6	---	---
	118+74	AEW 115	6	---	---	---	---
	121+44	AEW 120	6	---	---	---	---
		TOTAL	**30**	**6**	**24**	**36**	**6**

EXCAVATION

CATEGORY	STA	-	STA	LOCATION	205.0100 EXCAVATION COMMON CY	205.0400 EXCAVATION MARSH CY	209.0100 BACKFILL GRANULAR CY	SPV.0105.01 RAILROAD MARSH EXCAVATION AND BACKFILL *CY*	SPV.0105.01 RAILROAD MARSH EXCAVATION AND BACKFILL LS	REMARKS
0010	49+53	-	128+98	STH 47	4,419	---	---	---	---	REMOVAL OF BASE MATERIAL
	73+50		81+40	RR XING	2,635	3,540	5,305	---	---	WIDENING-OUTSIDE EXISTING PAVEMENT
	95+03.00		102+43	RICHMOND ACCEL	325	---	---	---	---	WIDENING LT-OUTSIDE EXISTING PAVEMENT
	CTH B NW				120	---	---	---	---	
	CTH B NE				15	---	---	---	---	
	BEAUPREY SW				65	---	---	---	---	
	BEAUPREY NW				45	---	---	---	---	
	RICHMOND SW				64	---	---	---	---	
	RICHMOND NW				35	---	---	---	---	
	STH 22 SW				92	---	---	---	---	
	UNDISTRIBUTED EXCAVATION BELOW SUBGRADE				1000	---	750	---	---	REPLACEMENT OF BASE LAYER PAID FOR AS BASE AGGREGATE
	RAILROAD MARSH EXC/BACKFILL				---	---	---	793	1	
				TOTAL	**8,815**	**3,540**	**6,055**	**793 ***	**1**	

*ESTIMATED QUANTITY FOR INFORMATION ONLY

BASE AGGREGATE DENSE

CAT	STA	-	STA	LOCATION			305.0110 BASE AGGREGATE DENSE 3/4" TON	305.0120 BASE AGGREGATE DENSE 1/4" TON
0010	73+91	-	74+36	WIDENING TAPER	NB	STH 47	---	9
	74+36	-	76+97	WIDENING	NB	STH 47	---	102
	73+28	-	74+94	WIDENING TAPER	SB	STH 47	---	32
	74+94	-	76+97	WIDENING	SB	STH 47	---	79
	77+28	-	79+44	WIDENING TAPER	NB	STH 47	---	88
	79+44	-	81+38	WIDENING	NB	STH 47	---	36
	77+28	-	79+35	WIDENING	SB	STH 47	---	81
	79+35	-	80+09	WIDENING	SB	STH 47	---	29
	80+09	-	80+75	WIDENING TAPER	SB	STH 47	---	12
	94+91	-	96+93	WIDENING TAPER	SB	STH 47	---	39
	96+93	-	101+75	WIDENING	SB	STH 47	---	187
	INTERSECTION			WEST	---	CTH B	26	---
	INTERSECTION			WEST ADDITIONAL	---	CTH B	---	384
	INTERSECTION			WEST	---	ENGEL DR	7	---
	INTERSECTION			WEST	---	BEAUPREY RD	7	---
	INTERSECTION			WEST ADDITIONAL	---	BEAUPREY RD	---	54
	INTERSECTION			WEST	---	RICHMOND ST	30	---
	INTERSECTION			WEST ADDITIONAL	---	RICHMOND ST	---	130
				---	---	STH 22 RADIUS	---	94
	UNDISTRIBUTED			REPLACEMENT IN EBS			---	500
						TOTALS	**70**	**1,856**

SALVAGED ASPHALTIC PAVEMENT BASE

CATEGORY	STA	-	STA	LOCATION			306.0115 SALVAGED ASPHALTIC PAVEMENT BASE CY
0010	49+55	-	49+78	MEDIAN		STH 47	6
	49+55	-	76+97	LANE	NB	STH 47	737
	62+47	-	63+89	TURN TAPER	NB	STH 47	3
	63+89	-	66+80	TURN LANE	NB	STH 47	36
	49+55	-	50+82	TURN LANE	SB	STH 47	16
	50+82	-	52+32	TURN LANE TAPER	SB	STH 47	9
	49+55	-	76+97	LANE	SB	STH 47	737
	65+66	-	68+11	TURN LANE	SB	STH 47	30
	68+11	-	69+75	TURN TAPER	SB	STH 47	10
	64+50	-	69+45	RADIUS TAPER	SB	STH 47	37
	77+31	-	128+54	LANE	NB	STH 47	1,378
	100+00	-	101+35	TURN LANE TAPER	NB	STH 47	8
	101+35	-	102+48	TURN LANE	NB	STH 47	14
	77+28	-	128+55	LANE	SB	STH 47	1,379
	104+02	-	104+95	TURN LANE	SB	STH 47	11
	104+95	-	106+19	TURN LANE TAPER	SB	STH 47	8
	128+55	-	129+01	EX INTERSECTION		STH 22	47
	73+91	-	74+36	WIDENING TAPER	NB	STH 47	2
	74+36	-	76+97	WIDENING	NB	STH 47	26
	73+28	-	74+94	WIDENING TAPER	SB	STH 47	8
	74+94	-	76+97	WIDENING	SB	STH 47	20
	77+28	-	79+44	WIDENING TAPER	NB	STH 47	21
	79+44	-	81+38	WIDENING	NB	STH 47	9
	77+28	-	79+35	WIDENING	SB	STH 47	20
	79+35	-	80+09	WIDENING	SB	STH 47	7
	80+09	-	80+75	WIDENING TAPER	SB	STH 47	3
	94+91	-	96+93	WIDENING TAPER	SB	STH 47	10
	96+93	-	101+75	WIDENING	SB	STH 47	47
	INTERSECTION			WEST ADDITIONAL	---	CTH B	17
	INTERSECTION			WEST ADDITIONAL	---	BEAUPREY RD	18
	INTERSECTION			WEST ADDITIONAL	---	RICHMOND ST	43
	INTERSECTION			WEST ADDITIONAL	---	STH 22	12
						TOTALS	**4,729**

WATER

CATEGORY		624.0100 WATER MGAL	NOTES
0010	6243-07-71	189	FOR BASE AGGREGATES AND SALVAGED ASPHALTIC PAVEMENT BASE
	TOTAL	189	

3

HMA PAVEMENT

CATEGORY	STA	-	STA	LOCATION			455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6424 HMA PAVEMENT 4 MT 58-28 H TON
0010	49+55	-	49+78	MEDIAN		STH 47	2	3	3
	49+55	-	73+91	LANE	NB	STH 47	357	685	685
	62+47	-	63+89	TURN TAPER	NB	STH 47	5	9	9
	63+89	-	66+80	TURN LANE	NB	STH 47	19	37	37
	73+91	-	74+36	LANE WIDENING TAPER	NB	STH 47	7	14	14
	74+36	-	76+97	LANE WIDENING	NB	STH 47	45	87	87
	49+55	-	50+82	TURN LANE	SB	STH 47	8	16	16
	50+82	-	52+32	TURN LANE TAPER	SB	STH 47	5	10	10
	49+55	-	73+34	LANE	SB	STH 47	349	669	669
	65+66	-	68+11	TURN LANE	SB	STH 47	16	31	31
	68+11	-	69+75	TURN TAPER	SB	STH 47	5	10	10
	64+50	-	69+45	RADIUS TAPER	SB	STH 47	20	39	39
	73+34	-	74+93	LANE WIDENING TAPER	SB	STH 47	25	49	49
	74+94	-	76+97	LANE WIDENING	SB	STH 47	35	67	67
	77+28	-	79+44	LANE WIDENING	NB	STH 47	37	72	72
	79+44	-	81+38	LANE WIDENING TAPER	NB	STH 47	34	64	64
	81+38	-	128+55	LANE	NB	STH 47	692	1,326	1,326
	100+00	-	101+35	TURN LANE TAPER	NB	STH 47	5	9	9
	101+35	-	102+48	TURN LANE	NB	STH 47	8	14	14
	77+28	-	79+35	LANE WIDENING	SB	STH 47	36	69	69
	79+35	-	80+09	LANE WIDENING	SB	STH 47	15	28	28
	80+09	-	80+75	LANE WIDENING TAPER	SB	STH 47	11	22	22
	80+75	-	94+91	LANE	SB	STH 47	208	398	398
	94+91	-	96+93	LANE WIDENING TAPER	SB	STH 47	35	67	67
	96+93	-	101+75	LANE WIDENING	SB	STH 47	96	185	185
	101+75	-	106+19	LANE	SB	STH 47	65	125	125
	104+02	-	104+95	TURN LANE	SB	STH 47	6	12	12
	104+95	-	106+19	TURN LANE TAPER	SB	STH 47	4	8	8
	106+19	-	128+55	LANE	SB	STH 47	328	629	629
	INTERSECTION			WEST	---	CTH B	22	---	42
	INTERSECTION			WEST ADDITIONAL	---	CTH B	9	17	17
	INTERSECTION			EAST	---	CTH B	9	---	17
	INTERSECTION			WEST	---	ENGEL DR	27	---	51
	INTERSECTION			WEST	---	BEAUPREY RD	27	---	51
	INTERSECTION			WEST ADDITIONAL	---	BEAUPREY RD	10	19	19
	INTERSECTION			EAST	---	RICHMOND ST	27	---	52
	INTERSECTION			WEST	---	RICHMOND ST	59	---	113
	INTERSECTION			WEST ADDITIONAL	---	RICHMOND ST	23	45	45
	INTERSECTION			NORTH END	---	STH 22	26	49	49
	INTERSECTION			NORTH END ADDITIONAL	---	STH 22	7	13	13
						TOTALS	**2,724**	**4,897**	**5,223**

ASPHALTIC SURFACE

CATEGORY	STA	-	STA	DISCRIPTION		LOCATION		465.0105 ASPHALTIC SURFACE TON	SPV.0195.01 RAILROAD ASPHALTIC PAVEMENT SUBGRADE TON
0010	49+84	-	49+92	NOSE/CURB	--	MED	STH 47	.50	---
	50+37	-	50+48	CURB	NB	LT	STH 47	.25	---
	50+77	-	50+82	CURB	SB	RT	STH 47	.25	---
	65+45	-	65+58	NOSE/CURB	---	MED	STH 47	1.00	---
	66+41			NOSE	---	MED	STH 47	.25	---
	66+80	-	67+13	CURB	NB	LT	STH 47	1.25	---
	67+10	-	67+21	CURB	SB	RT	STH 47	.25	---
	128+00			DRIVE ENTRANCE				2.75	---
	127+45	-	128+75	PARKING LOT	NB	RT		5.00	---
	---			INTERSECTION	STH 22	MEDIAN		8.75	---
	76+97		77+30	RAILROAD	STH 47	NB/SB	STH 47	---	65
				UNDISTRIBUTED				.75	
							TOTALS	**21**	**65**

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION		465.0315 ASPHALTIC FLUMES SY
0010	74+94.00	RT	STH 47	5
	78+00.00	RT	STH 47	5
	78+00.00	LT	STH 47	5
	NW		RICHMOND	4
	SW		RICHMOND	4
			TOTAL	**23**

CONCRETE SIDEWALK

CATEGORY	STA	-	STA	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	620.0300 CONCRETE MEDIAN SLOPED NOSE (TYPE I) SF
0010	CTH B			NW ISLAND	120	130
	49+80			STH 47	---	50
	65+64			STH 47	---	50
	66+80			STH 47	---	50
	76+88			STH 47	1,015	---
	77+37			STH 47	595	---
	79+35			STH 47	---	40
	MEDIAN			STH 22	100	50
				TOTALS	**1,830**	**370**

CURB & GUTTER

CAT	STA	-	STA		RT LT	204.0150 REMOVING CURB & GUTTER LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0576 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J LF
0010	09+37	-	09+51	CTHB	NW ISLAND	---	---	---	---	25
	49+49		49+94	NB	RT RAD	87	---	---	87	---
	49+85	-	49+92	NB	LT	16	---	14	---	---
	149+83	-	149+95	SB	RT	16	---	14	---	---
	149+75	-	150+32	SB	LT RAD	106	---	---	97	---

	49+94	-	51+21	NB	RT	127	---	127	---	---
	50+37	-	50+47	NB	LT	10	---	10	---	---
	51+42	-	51+62	NB	RT	20	---	20	---	---
	51+42	-	51+62	NB	LT	20	---	20	---	---
	52+03	-	52+15	NB	RT	12	---	12	---	---
	52+14	-	52+64	NB	LT	50	---	50	---	---
	52+44	-	52+54	NB	RT	10	---	10	---	---
	53+31	-	53+42	NB	LT	11	---	11	---	---
	54+20	-	54+40	NB	RT	20	---	20	---	---
	54+20	-	54+40	NB	LT	20	---	20	---	---
	55+68	-	55+78	NB	LT	10	---	10	---	---
	150+32	-	150+47	SB	LT	15	---	15	---	---
	150+79	-	151+65	SB	RT	86	---	86	---	---
	150+80	-	150+91	SB	LT	11	---	11	---	---
	151+10	-	151+22	SB	LT	12	---	12	---	---
	151+44	-	151+64	SB	LT	20	---	20	---	---
	151+95	-	152+13	SB	LT	18	---	18	---	---
	153+32	-	153+43	SB	RT	11	---	11	---	---
	154+11	-	154+39	SB	RT	28	---	28	---	---
	154+19	-	154+39	SB	LT	20	---	20	---	---
	155+20	-	155+31	SB	LT	11	---	11	---	---
	155+78	-	155+88	SB	LT	10	---	10	---	---
	155+87	-	156+01	SB	RT	14	---	14	---	---
	156+12	-	157+51	SB	LT	139	---	139	---	---

	57+00	-	57+20	NB	RT	20	---	20	---	---
	57+00	-	57+20	NB	LT	20	---	20	---	---
	59+28	-	59+98	NB	LT	70	---	70	---	---
	59+78	-	59+98	NB	RT	20	---	20	---	---
	60+39	-	60+89	NB	RT	50	---	50	---	---
	60+98	-	61+17	NB	RT	19	---	19	---	---
	61+48	-	62+45	NB	LT	97	---	97	---	---
	62+24	-	62+45	NB	RT	21	---	21	---	---
	62+71	-	62+83	NB	RT	12	---	12	---	---
	63+29	-	64+77	NB	RT	148	---	148	---	---
	156+88	-	157+08	SB	RT	20	---	20	---	---
	157+49	-	158+07	SB	RT	58	---	58	---	---
	158+62	-	159+80	SB	LT	118	---	118	---	---
	159+60	-	159+80	SB	RT	20	---	20	---	---
	160+43	-	160+53	SB	RT	10	---	10	---	---
	161+08	-	161+27	SB	RT	19	---	19	---	---
	161+39	-	161+50	SB	LT	11	---	11	---	---
	161+95	-	162+25	SB	RT	30	---	30	---	---
	162+04	-	162+66	SB	LT	62	---	62	---	---
					SUBTOTAL	1,755	0	1,558	184	25

CURB & GUTTER CONTNUED

CAT	STA	-	STA		RT LT	204.0150 REMOVING CURB & GUTTER LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0576 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J LF
0010	65+45	-	65+65	NB	RT	20	---	20	---	---
	65+45	-	65+58	NB	LT	13	---	13	---	---
	66+19	-	66+40	NB	RT	21	---	21	---	---
	66+34	-	66+80	NB	RT	46	---	---	---	---
	66+80		67+13	NB	LT	79	---	79	---	---
	66+88	-	66+99	NB	RT	11	---	11	---	---
	67+78	-	67+89	NB	RT	11	---	11	---	---
	68+49	-	70+13	NB	RT	164	---	164	---	---
	68+60	-	68+80	NB	LT	20	---	20	---	---
	70+55	-	70+65	NB	RT	10	---	10	---	---
	165+30	-	165+50	SB	RT	20	---	20	---	---
	166+23		166+71	SB	RT	48	---	---	---	---
	167+00	-	167+20	SB	RT	20	---	20	---	---
	167+53	-	167+67	SB	RT	14	---	14	---	---
	168+21	-	168+30	SB	RT	9	---	9	---	---
	168+58	-	168+78	SB	RT	20	---	20	---	---
	168+58	-	168+78	SB	LT	20	---	20	---	---

	71+08	-	73+70	NB	RT	262	---	262	---	---
	71+41	-	71+61	NB	LT	20	---	20	---	---
	73+70	-	77+02	NB	RT	332	---	---	---	332
	73+70		76+92	NB	LT	---	---	322	---	---
	76+92		77+02	NB	LT	---	10	---	---	---
	171+34	-	171+76	SB	RT	42	---	42	---	---
	171+46	-	171+66	SB	LT	20	---	20	---	---
	172+27	-	173+10	SB	RT	83	---	83	---	---
	172+90	-	173+00	SB	LT	10	---	10	---	---
	173+55		177+14	SB	LT	359	---	---	---	359
	173+59	-	173+95	SB	RT	36	---	36	---	---
	173+95		177+05	SB	RT	---	---	310	---	---
	177+05		177+15	SB	RT	---	10	---	---	---
	77+27	-	81+40	NB	RT	413	---	---	---	413
	77+27		77+37	NB	LT	---	10	---	---	---
	77+37		79+32	NB	LT	---	---	195	---	---
	177+38	-	180+91	SB	LT	353	---	---	---	353
	177+39		177+49	SB	RT	---	10	---	---	---
	177+49		179+46	SB	RT	---	---	197	---	---
	80+90	-	81+03		LT	13	---	13	---	---
	81+86	-	82+83		RT	97	---	97	---	---
	83+00	-	83+22		LT	22	---	22	---	---
	83+14	-	83+25		RT	11	---	11	---	---
	83+70	-	84+11		LT	41	---	41	---	---
	83+70	-	83+84		RT	14	---	14	---	---
	84+39	-	84+50		LT	11	---	11	---	---
	84+49	-	85+82		RT	133	---	133	---	---
	84+88	-	85+08		LT	20	---	20	---	---
CONTUNUE ON NEXT PAGE					SUBTOTAL	2,838	40	2,311	0	1,457

CURB & GUTTER CONTNUED

CAT	STA	-	STA		RT LT	204.0150 REMOVING CURB & GUTTER LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0576 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J LF
0010	85+47	-	86+85		LT	138	---	138	---	---
	86+11	-	87+30		LT	119	---	119	---	---
	87+11		88+23		LT	145	---	140	---	---
	88+73		89+31		LT	91	---	92	---	---
	87+61	-	87+82		RT	21	---	21	---	---
	90+37	-	90+59		RT	22	---	22	---	---
	90+37	-	90+58		LT	21	---	21	---	---
	90+93	-	91+04		RT	11	---	11	---	---
	91+35	-	91+61		LT	26	---	26	---	---
	92+00	-	92+08		LT	8	---	8	---	---
	92+51	-	92+85		LT	34	---	34	---	---
	92+65	-	92+85		RT	20	---	20	---	---
	93+94	-	94+03		RT	9	---	9	---	---
	94+42	-	94+62		LT	20	---	20	---	---
	94+61	-	100+25		RT	564	---	564	---	---
	94+90	-	102+43		LT	753	---	---	---	753
	100+82	-	101+11		RT	29	---	29	---	---
	101+71	-	102+39		RT	68	---	68	---	---
	02+29		02+87	RICH SW		67	---	---	---	91
	02+38	-	02+89	RICH NW		95	---	---	---	85
	00+36	-	00+48	RICH NE		12	---	12	---	---
	103+87	-	106+75		RT	288	---	288	---	---
	105+63	-	106+70		LT	107	---	107	---	---
	107+03	-	107+17		LT	14	---	14	---	---
	107+41	-	107+68		LT	27	---	27	---	---
	108+24	-	108+36		LT	12	---	12	---	---
	108+83	-	109+20		RT	37	---	37	---	---
	109+05	-	109+30		LT	25	---	25	---	---
	109+91	-	110+15		RT	24	---	24	---	---
	110+17	-	110+90		LT	73	---	73	---	---
	111+37	-	113+85		LT	248	---	248	---	---
	111+59	-	111+70		RT	11	---	11	---	---
	112+46	-	113+00		RT	54	---	54	---	---
					SUBTOTAL	3,193	0	2,274	0	929

CURB & GUTTER CONTNUED

CAT	STA	-	STA	NB/SB	RT LT	204.0150 REMOVING CURB & GUTTER LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0576 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J LF
0010	113+59	-	113+76		RT	17	---	17	---	---
	114+35	-	114+89		LT	54	---	54	---	---
	115+56	-	117+19		LT	163	---	163	---	---
	115+72	-	116+24		RT	52	---	52	---	---
	116+82		116+94		RT	12	---	12	---	---
	117+83	-	118+13		LT	30	---	30	---	---
	118+52	-	118+89		RT	37	---	37	---	---
	118+56	-	120+08		LT	152	---	152	---	---
	120+65	-	121+66		RT	101	---	101	---	---
	120+78	-	120+84		LT	6	---	6	---	---
	121+28	-	121+60		LT	32	---	32	---	---
	122+12	-	122+45		LT	33	---	33	---	---
	122+37	-	122+47		RT	10	---	10	---	---
	122+67	-	123+37		RT	70	---	70	---	---
	123+63	-	124+25		RT	62	---	62	---	---
	125+59	-	125+71		LT	12	---	12	---	---
	126+13	-	126+91		LT	78	---	78	---	---
	127+17	-	127+28		LT	11	---	11	---	---
	127+71	-	127+85		LT	14	---	0	14	---
	127+85	-	128+85	22 SW	LT	160	---	---	142	
	127+46	-	128+52		RT	106	---	106	---	---
	128+52	-	128+85	22 SE	RT	78	---	---	78	---
	19+16	-	19+46	STH 22	LT	30	22	---	---	---
	19+16		19+46	STH 22	MEDIAN	30	22	---	---	---
	UNDISTRIBUTED					391	---	---	---	---
					SUBTOTAL	1,741	44	1,038	234	0
					TOTALS	**9,527**	**84**	**7,181**	**418**	**2,411**

3

CULVERT AND STORM SEWER PIPES

CATEGORY	STRUCTURE #	TYPE	LOCATION	522.0115 CULVERT PIPE RCCP CLASS III 15-INCH LF	522.0124 CULVERT PIPE RCCP CLASS III 24-INCH LF	608.0312 STORM SEWER PIPE RCCP CLASS IIIA 12-INCH LF	608.0315 STORM SEWER PIPE RCCP CLASS IIIA 15-INCH LF	608.0318 STORM SEWER PIPE RCCP CLASS IIIA 18-INCH LF	608.0324 STORM SEWER PIPE RCCP CLASS IIIA 24-INCH LF	610.0119 STORM SEWER PIPE RCCP HORIZ-ELLIP CLASS HE-III 19X30-INCH LF
0010	24E	AEW	STH 47	---	---	5	---	---	---	---
	54A	CB	STH 47	---	---	6	---	---	---	---
	55	CB		---	---	---	5	---	---	---
	56	AEW	STH 47	---	---	---	5	---	---	---
	501	CB	STH 47	---	---	29	---	---	---	---
	502	CB	STH 47	---	---	6	---	---	---	---
	503	CB	STH 47	---	---	29	---	---	---	---
	504	CB	STH 47	---	---	14	---	---	---	---
	200	CULV	STH 47	---	12	---	---	---	---	---
	506	AEW	STH 47	---	---	---	---	---	14	---
	507	CB	STH 47	---	---	---	---	---	29	---
	508	CB	STH 47	---	---	---	---	---	6	---
	509	CB	STH 47	---	---	---	---	---	29	---
	510	CB	STH 47	---	---	---	---	---	15	---
	511	MH	STH 47	---	---	---	---	---	27	---
	202	CULV	STH 47	10	---	---	---	---	---	---
	69A	CB	STH 47	---	---	---	---	---	8	---
	71	AEW	STH 47	---	---	---	---	---	15	---
	86A	CB	STH 47	---	---	8	---	---	---	---
	89A	CB	STH 47	---	---	8	---	---	---	---
	91	AEW	STH 47	---	---	---	---	---	---	88
	104	AEW	STH 47	---	---	6	---	---	---	---
	107	AEW	STH 47	---	---	---	---	2	---	---
	111	AEW	STH 47	---	---	---	---	2	---	---
	114	AEW	STH 47	---	---	---	---	2	---	---
	115	AEW	STH 47	---	---	3	---	---	---	---
	120	AEW	STH 47	---	---	3	---	---	---	---
	307	MH	STH 47	---	---	---	---	20	---	---
	308A	CB	STH 47	---	---	---	---	22	---	---
	311	CB	STH 47	---	---	---	10	---	---	---
			TOTALS	**10**	**12**	**117**	**20**	**48**	**143**	**88**

RELAID STORM SEWER

CATEGORY	STATION	LOCATION	609.0130 RELAID STORM SEWER 30-INCH LF
0010	59+83	AEW 37	6
		TOTAL	**6**

TEMPORARY WATER PASSAGE

CATEGORY	SPV.0060.05 TEMP WATER PASSAGE EACH
0010	67
TOTAL	67

STORM SEWER STRUCTURES

CATEGORY	STRU #	TYPE	LOCATION	521.1018 AEW FOR CP STEEL 18-INCH LF	522.1012 AEW FOR CPRC 12-INCH EACH	522.1015 AEW FOR CPRC 15-INCH EACH	522.1018 AEW FOR CPRC 18-INCH EACH	522.1024 AEW FOR CPRC 24-INCH EACH	523.0519 AEW FOR CPRCHE 19X30-INCH EACH	611.0410 RECONST CATCH BASIN EACH	611.0420 RECONST MANHOLES EACH	611.053 MANHOLE COVERS TYPE J EACH	SPV.0060.03 INLET COVERS TYPE H-D EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVER TYPE HM EACH	611.0630 INLET COVER TYPE HM-GJ EACH	611.123 CATCH BASIN 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.8105 ADJUSTING CATCH BASIN COVERS EACH	611.8110 ADJUSTING MANHOLE COVERS EACH
0010	1	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	2	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	3	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	4	MH	STH 47	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1
	5	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	6	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	7	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	8	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	9	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	10	MH	STH 47	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1
	11	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	12	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	13	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	14	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	15	MH	STH 47	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1
	20	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	21	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	23	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	24	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	24E	AEW	STH 47	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	27	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	28	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	29	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	30	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	32	AEW	STH 47	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	34	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	35	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	36	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	38	MH	STH 47	---	---	---	---	---	---	---	1	1	---	---	---	---	---	---	---	---
	40	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	41	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	42	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	43	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	44	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	47	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	48	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	49	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	50	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	51	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	51A	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	53	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	54A	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	55	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---
	56	AEW	STH 47	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---
			SUBTOTALS	---	1	2	---	3		16	1	4	---	33	---	1	2	---	16	3

CONTINUE ON NEXT PAGE

STORM SEWER STRUCTURES CONTINUED

CATEGORY	STRU #	TYPE	LOCATION	521.1018 AEW FOR CP STEEL 18-INCH LF	522.1012 AEW FOR CPRC 12-INCH EACH	522.1015 AEW FOR CPRC 15-INCH EACH	522.1018 AEW FOR CPRC 18-INCH EACH	522.1024 AEW FOR CPRC 24-INCH EACH	523.0519 AEW FOR CPRCHE 19X30-INCH EACH	611.0410 RECONST CATCH BASIN EACH	611.0420 RECONST MANHOLES EACH	611.0530 MANHOLE COVERS TYPE J EACH	SPV.0060.03 INLET COVERS TYPE H-D EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVER TYPE HM EACH	611.0630 INLET COVER TYPE HM-GJ EACH	611.1230 CATCH BASIN 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.8105 ADJUSTING CATCH BASIN COVERS EACH	611.8110 ADJUSTING MANHOLE COVERS EACH
0010	200	CULVERT	STH 47	---	---	---	---	2	---	---	---	---	---	1	---	---	1	---	---	---
	501	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	502	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---
	503	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---
	504	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	505	AEW	STH 47	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	506	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	507	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	508	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---
	509	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---
	510	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	511	MH	STH 47	---	---	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---
	512	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	202	CULVERT	STH 47	---	---	2	---	---	---	---	---	---	---	---			---	---	---	---
	69A	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---
	70	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	71	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	72	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	75	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	77	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	78	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	80	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	81	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	83	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	84	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	86A	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	87	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	89A	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
	90	MH	STH 47	---	---	---	---	---	---	---	1	1	---	---	---	---	---	---	---	---
	91	AEW	STH 47	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---
	92	AEW	STH 47	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	103	AEW	STH 47	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	104	AEW	STH 47	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	105	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	106	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	107	AEW	STH 47	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---
	108	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	109	CB	STH 47	---	---	---	---	---	---	1	---	---	1	---	---	---	---	---	---	---
	111	AEW	STH 47	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---
	112	CB	STH 47	---	---	---		---	---	---	---	---	---	1	---	---	1	---	---	---
	113	CB	STH 47	---	---	---		---	---	1	---	---	---	1	---	---	---	---	---	---
	114	AEW	STH 47	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---
	115	AEW	STH 47	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	116	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	117	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	118	CB	STH 47	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---
	119	CB	STH 47	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
	120	AEW	STH 47	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	307	MH	STH 47	---	---	---	---	---	---	---	1	1	---	---	---	---	---	---	---	---
	308A	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---
	309A	MH	STH 47	---	---	---	---	---	---	---	1	1	---	---	---	---	---	---	---	---
	311	CB	STH 47	---	---	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---
	313	MH	STH 47	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1
			SUBTOTALS	1	4	2	3	7	1	8	3	5	1	24	2	6	15	1	10	1
			TOTALS	**1**	**5**	**4**	**3**	**10**	**1**	**24**	**4**	**9**	**1**	**57**	**2**	**7**	**17**	**1**	**26**	**4**

INLET PROTECTION

CATEGORY	#	STRUCTURE DISCRIPTION	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH
0010	1	CB	---	1
	2	CB	---	1
	3	CB	---	1
	4	MH	1	---
	5	CB	---	1
	6	CB	---	1
	7	CB	1	1
	8	CB	1	1
	9	CB	1	1
	10	MH	1	---
	11	CB	1	1
	12	CB	1	1
	13	CB	1	1
	14	CB	1	1
	15	MH	1	---
	20	CB	---	1
	21	CB	---	1
	23	CB	1	1
	24	CB	---	1
	27	CB	---	1
	28	CB	1	1
	29	CB	---	1
	30	CB	---	1
	34	CB	1	1
	35	CB	1	1
	36	CB	1	1
	38	MH	1	---
	40	CB	1	1
	41	CB	---	1
	42	CB	1	1
	43	CB	1	1
	47	CB	---	1
	49	CB	---	1
	50	CB	---	1
	51	CB	---	1
	53	CB	1	1
	54	CB	1	1
	54A	CB	1	1
	55	CB	1	1
	501	CB	1	1
	502	CB	1	1
	503	CB	1	1
	504	CB	1	1
		SUBTOTALS	27	39

CONT. NEXT PAGE

INLET PROTECTION CONTINUED

CATEGORY	#	STRUCTURE DISCRIPTION	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH
0010	507	CB	1	1
	508	CB	1	1
	509	CB	1	1
	510	CB	1	1
	511	MH	1	---
	69	CB	1	1
	69A	CB	1	1
	70	CB	---	1
	75	CB	---	1
	77	CB	1	1
	78	CB	---	1
	80	CB	---	1
	81	CB	---	1
	83	CB	1	1
	84	CB	---	1
	86	CB	2	2
	87	CB	---	1
	89	CB	2	2
	90	MH	1	---
	105	CB	1	1
	106	CB	1	1
	108	CB	1	1
	109	CB	1	1
	112	CB	1	1
	113	CB	1	1
	116	CB	1	1
	117	CB	---	1
	118	CB	---	1
	119	CB	1	1
	307	MH	1	---
	308	CB	1	1
	309	CB	1	---
	311	CB	1	1
		UNDISTRIBUTED	10	10
		SUBTOTALS	36	41
		TOTALS	**63**	**80**

SILT FENCE AND ROCK BAGS

CATEGORY	LOCATION			628.1504 SILT FENCE FT	628.1520 SILT FENCE MAINT FT	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
0010	24E	AEW		45	45	---	13
	32	AEW		45	45	---	13
	37	AEW		---	---	3	---
	44	AEW		45	45	---	13
	48	AEW		45	45	---	13
	51A	AEW		---	---	3	---
	73+80	77+15	RT	380	380	---	---
	73+30	77+15	LT	420	420	---	---
	77+30	80+78	RT	390	390	---	---
	77+30	80+84	LT	385	385	---	---
	200 LT	AEW		---	---	3	---
	200 RT	AEW		---	---	---	13
	506	AEW		---	---	3	---
	512	AEW		---	---	---	13
	202RT	CPRC/AEW		45	45	---	13
	202LT	CPRC/AEW		---	---	3	---
	71	AEW		---	---	3	13
	72	AEW		45	45	---	13

	94+75	98+40	LT	46	46	---	---
	91	AEW		---	---	3	---
	92	AEW		45	45	---	13
	103	AEW		45	45	---	13
	104	AEW		45	45	---	13
	107	AEW		45	45	---	13
	111	AEW		45	45	---	13
	114	AEW		---	---	3	---
	115	AEW		45	45	---	13
	120	AEW		45	45	---	13
	UNDISTRIBUTED			294	294	6	42
	TOTALS			**2,500**	**2,500**	**30**	**250**

EROSION CONTROL MOBILIZATION

CATEGORY	PROJECT	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	6243-07-71	6	4
	TOTAL	6	4

EROSION CONTROL

CATEGORY	STA	-	STA	STRUCTURE #	DISC	625.0100 TOPSOIL SY	628.2006 E MAT URBAN CLASS1 TYPE A SY	627.0200 MULCHING SY	629.021 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	631.0300 SOD WATER MGAL
0010	49+82	-	50+22	SB	LT	124	124	---	.08	3.36	2.8
	49+52	-	50+80	NB	RT	90	90	---	.06	2.43	2.0
	50+30	-	50+44	SB	LT	6	---	6	.00	.17	0.1
	50+37	-	50+47	NB	LT	4	---	4	.00	.12	0.1
	50+80	-	51+21	NB	RT	18	---	18	.01	.49	0.4
	50+77	-	51+62	SB	RT	38	---	38	.02	1.02	0.8
	50+78	-	50+89	SB	LT	5	---	5	.00	.13	0.1
	51+08	-	51+20	SB	LT	5	---	5	.00	.14	0.1
	51+42	-	51+62	NB	RT	9	---	9	.01	.24	0.2
	51+42	-	51+62	NB	LT	9	---	9	.01	.24	0.2
	51+42	-	51+62	SB	LT	9	---	9	.01	.24	0.2
	51+49	-	52+11	SB	LT	28	---	28	.02	.74	0.6
	52+03	-	52+15	NB	RT	5	---	5	.00	.14	0.1
	52+14	-	52+64	NB	LT	22	---	22	.01	.60	0.5
	52+44	-	52+54	NB	RT	4	---	4	.00	.12	0.1
	53+31	-	53+42	NB	LT	5	---	5	.00	.13	0.1
	54+20	-	54+40	NB	RT	9	---	9	.01	.24	0.2
	54+20	-	54+40	NB	LT	9	---	9	.01	.24	0.2
	54+12	-	54+40	SB	RT	12	---	12	.01	.34	0.3
	54+20	-	54+40	SB	LT	9	---	9	.01	.24	0.2
	55+25	-	55+37	SB	LT	5	---	5	.00	.14	0.1
	55+68	-	55+78	NB	LT	4	---	4	.00	.12	0.1
	55+83	-	55+93	SB	LT	4	---	4	.00	.12	0.1
	55+95	-	56+09	SB	RT	6	---	6	.00	.17	0.1
	56+21	-	57+62	SB	LT	63	---	63	.04	1.69	1.4
	57+00	-	57+20	NB	RT	9	---	9	.01	.24	0.2
	57+00	-	57+20	NB	LT	9	---	9	.01	.24	0.2
	57+00	-	57+20	SB	RT	9	---	9	.01	.24	0.2
	57+62	-	58+22	SB	RT	27	---	27	.02	.72	0.6
	58+78	-	59+98	SB	LT	53	---	53	.03	1.44	1.2
	59+28	-	59+98	NB	LT	31	---	31	.02	.84	0.7
	59+78	-	59+98	SB	RT	9	---	9	.01	.24	0.2
	59+78	-	59+98	NB	RT	9	---	9	.01	.24	0.2
59+75	AEW 24E			SB	LT	15	15	---	.01	.41	0.3
	60+39	-	60+89	NB	RT	22	---	22	.01	.60	0.5
	60+63	-	60+73	SB	RT	4	---	4	.00	.12	0.1
	60+98	-	61+17	NB	RT	8	---	8	.01	.23	0.2
	61+27	-	61+46	SB	RT	8	---	8	.01	.23	0.2
	61+48	-	62+45	NB	LT	43	---	43	.03	1.16	1.0
	61+59	-	61+69	SB	LT	4	---	4	.00	.12	0.1
	62+14	-	62+45	SB	RT	14	---	14	.01	.37	0.3
				SUBTOTAL		780	230	551	.49	21.07	17.3

EROSION CONTROL CONTINUED

CATEGORY	STA	-	STA	STRUCTURE #	DISC	625.0100 TOPSOIL SY	628.2006 E MAT URBAN CLASS1 TYPE A SY	627.0200 MULCHING SY	629.021 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	631.0300 SOD WATER MGAL
0010	62+24	-	62+45	NB	RT	9	---	9	.01	.25	0.2
	62+24	-	62+83	SB	LT	26	---	26	.02	.71	0.6
	62+71	-	62+83	NB	RT	5	---	5	.00	.14	0.1
62+75	AEW 32			NB	RT	12	12	---	.01	.32	0.3
	63+29	-	64+77	NB	RT	66	---	66	.04	1.78	1.5
	65+45	-	65+70	NB	RT	11	---	11	.01	.30	0.2
	65+45	-	65+58	NB	LT	6	---	6	.00	.16	0.1
	65+45	-	65+58	SB	RT	6	---	6	.00	.16	0.1
65+67	AEW 37			SB	LT	12	12	---	.01	.32	0.3
	66+19	-	66+40	NB	RT	9	---	9	.01	.25	0.2
	66+41	-	67+13	NB	LT	32	---	32	.02	.86	0.7
	66+88	-	66+99	NB	RT	5	---	5	.00	.13	0.1
	67+10	-	67+21	SB	RT	5	---	5	.00	.13	0.1
	67+60	-	67+73	SB	RT	6	---	6	.00	.16	0.1
	67+78	-	67+89	NB	RT	5	---	5	.00	.13	0.1
	68+26	-	68+35	SB	RT	4	---	4	.00	.11	0.1
	68+49	-	70+13	NB	RT	73	---	73	.05	1.97	1.6
	68+60	-	68+80	NB	LT	9	---	9	.01	.24	0.2
	68+60	-	68+80	SB	RT	9	---	9	.01	.24	0.2
	68+60	-	68+80	SB	LT	9	---	9	.01	.24	0.2
68+98	AEW 44			NB	RT	12	12	---	.01	.32	0.3
	70+55	-	70+65	NB	RT	4	---	4	.00	.12	0.1
	71+08	-	73+62	NB	RT	113	---	113	.07	3.05	2.5
	71+41	-	71+60	NB	LT	8	---	8	.01	.23	0.2
	71+30	-	71+70	SB	RT	18	---	18	.01	.48	0.4
	71+41	-	71+61	SB	LT	9	---	9	.01	.24	0.2
71+55	AEW 51A			SB	LT	12	12	---	.01	.32	0.3
71+75	5AEW 48			NB	RT	12	12	---	.01	.32	0.3
	72+20	-	73+01	SB	RT	36	---	36	.02	.97	0.8
	72+82	-	72+92	SB	LT	4	---	4	.00	.12	0.1
	73+49	-	73+84	SB	RT	16	---	16	.01	.42	0.3
	73+34		77+00	SB	LT	859	859	---	.54	23.18	19.3
	73+70		77+02	NB	RT	553	553	---	.35	14.93	12.4
	77+21		81+39	SB	LT	630	630	---	.40	17.02	14.2
	77+27		81+39	NB	RT	699	699	---	.44	18.86	15.7
	81+39	-	81+48		RT	4	---	4	.00	.11	0.1
	81+86	-	82+83		RT	43	---	43	.03	1.16	1.0
	83+01	-	83+23		LT	10	---	10	.01	.26	0.2
CONT. NEXT PAGE					SUBTOTAL	3,359	2,799	560	2.12	90.70	75.4

EROSION CONTROL CONTINUED

CATEGORY	STA - STA	#	STRUCTURE DISC	625.0100 TOPSOIL SY	628.2006 E MAT URBAN CLASS1 TYPE A SY	627.0200 MULCHING SY	629.021 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	631.0300 SOD WATER MGAL
0010	83+13 - 83+26		RT	6	---	6	.00	.16	0.1
	83+70 - 84+11		LT	18	---	18	.01	.49	0.4
	83+70 - 83+84		RT	6	---	6	.00	.17	0.1
	83+97 AEW CP 202		LT	24	24	---	.01	.64	0.5
	83+97 AEW CP 202		RT	12	12	---	.01	.32	0.3
	84+39 - 84+50		LT	5	---	5	.00	.13	0.1
	84+49 - 85+81		RT	59	---	59	.04	1.58	1.3
	84+88 - 85+08		LT	9	---	9	.01	.24	0.2
	85+46 - 86+85		LT	62	---	62	.04	1.67	1.4
	86+11 - 87+30		RT	53	---	53	.03	1.43	1.2
	87+11 - 88+23		LT	132	132	---	.08	3.57	3.0
	87+62 - 87+81		RT	8	---	8	.01	.23	0.2
	88+63 89+31		LT	48	48	---	.03	1.30	1.4
	90+37 - 90+58		RT	9	---	9	.01	.25	0.2
	90+37 - 90+58		LT	9	---	9	.01	.25	0.2
	90+93 - 91+03		LT	4	---	4	.00	.12	0.1
	91+35 - 91+61		LT	12	---	12	.01	.31	0.3
	92+00 - 92+08		LT	4	---	4	.00	.10	0.1
	92+51 - 92+85		LT	15	---	15	.01	.41	0.3
	92+65 - 92+85		RT	9	---	9	.01	.24	0.2
	93+94 - 94+03		RT	4	---	4	.00	.11	0.1
	94+42 - 94+62		LT	9	---	9	.01	.24	0.2
	94+61 - 100+25		RT	251	---	251	.16	6.77	5.6
	94+90 - 103+00		LT	529	529	---	.33	14.27	11.9
	100+82 - 101+11		RT	13	---	13	.01	.35	0.3
	101+71 - 102+39		RT	30	---	30	.02	.82	0.7
	102+75 AEW 92		RT	32	32	---	.02	.86	0.7
	103+42 - 103+48		RT	3	---	3	.00	.07	0.1
	103+48 - 103+97		LT	26	26	---	.02	.69	0.6
	103+87 - 106+75		RT	128	---	128	.08	3.46	2.9
	105+63 - 106+70		LT	48	---	48	.03	1.28	1.1
	106+17 AEW 103		LT	12	12	---	.01	.32	0.3
	106+57 AEW 104		LT	12	12	---	.01	.32	0.3
	107+03 - 107+17		LT	6	---	6	.00	.17	0.1
	107+41 - 107+68		LT	12	---	12	.01	.32	0.3
	108+24 - 108+36		LT	5	---	5	.00	.14	0.1
			SUBTOTAL	1,622	825	796	1.02	43.79	36.9

EROSION CONTROL CONTINUED

CATEGORY	STA - STA	#	STRUCTURE DISC	625.0100 TOPSOIL SY	628.2006 E MAT URBAN CLASS1 TYPE A SY	627.0200 MULCHING SY	629.021 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	631.0300 SOD WATER MGAL
0010	108+83 - 109+20		RT	16	---	16	.01	.44	0.4
	109+05 - 109+30		LT	11	---	11	.01	.30	0.2
	109+91 - 110+15		RT	11	---	11	.01	.29	0.2
	110+17 - 110+90		LT	32	---	32	.02	.88	0.7
	111+37 - 113+85		LT	110	---	110	.07	2.98	2.5
	111+59 - 111+70		LT	5	---	5	.00	.13	0.1
	112+46 - 113+00		RT	24	---	24	.02	.65	0.5
	112+51 AEW 107		LT	18	18	---	.01	.48	0.4
	113+59 - 113+76		RT	8	---	8	.00	.20	0.2
	114+35 - 114+89		LT	24	---	24	.02	.65	0.5
	115+56 - 117+19		LT	72	---	72	.05	1.96	1.6
	115+72 - 116+24		RT	23	---	23	.01	.62	0.5
	116+05 AEW 111		LT	12	12	---	.01	.32	0.3
	116+11 AEW 114		RT	12	12	---	.01	.32	0.3
	117+83 - 118+13		LT	13	---	13	.01	.36	0.3
	118+52 - 118+89		RT	16	---	16	.01	.44	0.4
	118+56 - 120+08		LT	68	---	68	.04	1.82	1.5
	118+74 AEW 115		LT	12	12	---	.01	.32	0.3
	120+65 - 121+66		RT	45	---	45	.03	1.21	1.0
	120+78 - 120+84		LT	3	---	3	.00	.07	0.1
	121+28 - 121+60		LT	14	---	14	.01	.38	0.3
	121+43 AEW 120		LT	12	12	---	.01	.32	0.3
	122+12 - 122+45		LT	15	---	15	.01	.40	0.3
	122+37 - 122+47		RT	4	---	4	.00	.12	0.1
	122+67 - 123+37		RT	31	---	31	.02	.84	0.7
	124+22 - 124+31		RT	4	---	4	.00	.11	0.1
	125+59 - 125+71		LT	5	---	5	.00	.14	0.1
	126+13 - 126+91		LT	35	---	35	.02	.94	0.8
	127+17 - 127+28		LT	5	---	5	.00	.13	0.1
	127+71 - 127+85		LT	6	---	6	.00	.17	0.1
	127+47 - 128+58		RT	49	---	49	.03	1.33	1.1
	127+84 - 128+89		LT	76	76	---	.05	2.06	1.7
	128+58 - 128+94		RT	16	---	16	.01	.43	0.4
	UNDISTRIBUTED (20%)			2,689	800	2,689	1.69	72.63	60.4
			SUBTOTALS	3,497	941	3,356	2.20	94.44	78.5
			TOTALS	**9,258**	**4,795**	**5,263**	**5.83**	**250**	**210**

MARKERS CULVERT PIPE

CATEGORY	STATION	LOCATION	PIPES #	633.5200 MARKERS CULVERT END EACH
0010	57+21	STH 47	16	1
	59+83	STH 47	24E	1
	62+21	STH 47	30E	1
	62+72	STH 47	32	1
	65+59	STH 47	37	1
	66+74	STH 47	39	1
	68+86	STH 47	44	1
	71+48	STH 47	48	1
	71+51	STH 47	51A	1
	74+00	STH 47	56	1
	76+91	STH 47	200	2
	77+35	STH 47	201	2
	83+95	STH 47	202	2
	87+68	STH 47	71	1
	87+71	STH 47	72	1
	102+58	STH 47	91	1
	102+71	STH 47	92	1
	103+64	STH 47	93	1
	103+71	STH 47	101A	1
	103+73	STH 47	102	1
	106+09	STH 47	103	1
	106+51	STH 47	104	1
	112+47	STH 47	107	1
	116+01	STH 47	111	1
	116+07	STH 47	114	1
	118+69	STH 47	115	1
	121+40	STH 47	120	1
UNDISTRIBUTED				1
			TOTAL	**31**

CLEANING PIPES AND DITCHES

CATEGORY	STRU #	TYPE	LOCATION	520.8700 CLEANING CULVERT PIPES EA	SPV.0090.01 DITCH RESTORATION LF
0010	16	AEW	STH 47	---	15
	32	AEW	STH 47	---	15
	39	AEW	STH 47	---	15
	44	AEW	STH 47	---	15
	48	AEW	STH 47	---	15
	51A	AEW	STH 47	---	15
	71	AEW	STH 47	---	15
	72	AEW	STH 47	1	15
	200	CULVERT	STH 47	1	30
	202	CULVERT	STH 47	1	---
	92	AEW	STH 47	---	15
	114	AEW	STH 47	---	15
	309	AEW	STH 47	---	15
	312	AEW	STH 47	---	15
			TOTALS	**3**	**210**

LANDMARK REFERENCE MONUMENTS

CATEGORY	LANDMARK LOCATION	LANDMARK SECTIONS	621.0100 LANDMARK REFERENCE MONUMENTS EACH	SPV.0060.04 REESTABLISH SECTION CORNER MONUMENTS EACH	REMARKS
0010	QUARTER CORNER	32/33	4	1	T27N R16E
		TOTAL	**4**	**1**	

SIGN MOVE/REMOVAL ITEMS

CATEGORY	SIGN NO.	SIGN MESSAGE	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVE SMALL SIGN SUPPORTS EACH	COMMENTS
0010	2-12	KEEP RIGHT	--	1	--	SIGN ON LIGHT POLE
	2-13	J-ASSEMBLY	--	1	1	
	2-14	SPEED LIMIT	--	1	1	
			--			
	3-1	JCT	--	1	1	
	3-2	CROSS ROAD, SPEED REDUCTION AHEAD	--	2	1	
	3-3	CROSS ROAD, SPEED REDUCTION AHEAD	--	2	1	
	3-4	SPEED LIMIT	--	1	1	
	3-5	STOP	--	1	1	OTHERS TO REMOVE STREET NAME SIGNS
	3-6	KEEP RIGHT	--	1	--	SIGN ON LIGHT POLE
	3-7	KEEP RIGHT	--	1	--	SIGN ON LIGHT POLE
	3-8	TWO DIRECTION LARGE ARROW	--	1	1	
	3-9	ONE DIRECTION LARGE ARROW	--	1	1	
	3-10	SHAWANO POPULATION SIGN	--	1	2	
			--			
	4-1	KEEP RIGHT	--	1	--	SIGN ON LIGHT POLE
	4-2	RR CROSSING	--	1	1	
	4-3	RR CROSSING	--	1	1	
	4-4	SPEED LIMIT	--	1	1	
			--			
	5-1	ROUTE ASSEMBLY	--	1	1	
	5-2	SPEED LIMIT	--	1	1	
	5-3	STOP	--	1	1	OTHERS TO REMOVE STREET NAME SIGNS
	5-4	SPEED LIMIT	--	1	1	
	5-5	TWO DIRECTION LARGE ARROW	--	1	1	
	5-6	ROUTE ASSEMBLY	--	1	1	
			--			
	6-1	SPEED LIMIT	--	1	1	
	6-2	STOP	--	1	2	OTHERS TO REMOVE STREET NAME SIGNS
	6-3	"RICHMOND ST"	--	1	2	
	6-4	SPEED LIMIT	--	1	1	
	6-5	STOP	--	1	2	
	6-6	"RICHMOND ST"	--	1	2	
	7-1	SPEED LIMIT	--	1	1	
	7-2	ROUTE MARKER	--	1	1	
	7-3	DESTINATION SIGNS	--	2	2	
	7-4	ADVANCE ROUTE MARKER	--	1	1	
	7-5	ADVANCE ROUTE MARKER	--	1	1	
	7-6	SIGNAL AHEAD	--	1	1	
	7-7	JCT HWYS	--	1	1	
	8-1	STREET NAME SIGN, "E. GREEN BAY ST"	1	--	--	EXISTING SIGN ON OVERHEAD SIGNAL SUPPORT INSTALL ON NEW OVERHEAD SIGNAL SUPPORT
	8-2	KEEP RIGHT	--	1	--	SIGN ON SIGNAL POLE
	8-3	J-ASSEMBLY	--	1	--	EXISTING SIGN SUPPORTS TO REMAIN
	8-4	SHAWANO WAYFINDING	1	--	1	NEW LOCATION: STA 127+00RT
TOTAL			**2**	**41**	**39**	

TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NO.	SIGN CODE	SIGN SIZE W (IN)	x	H (IN)	634.0612 POST WOOD 4"x6"x12' EACH	634.0614 POST WOOD 4"x6"x14' EACH	634.0616 POST WOOD 4"x6"x16' EACH	634.0618 POST WOOD 4"x6"x18' EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	BOX OUT REQUIRED	COMMENTS
0010	2-9	R4-7(2M)	24	x 30						5.00				PLACE ON LIGHT POLE; 45 DEGREE ANGLE FOR CTH B EB LEFT TURN
	2-16	R1-2(2M)	48	x 42		1				7.00		2		
	2-17	R1-1(2M)	36	x 36		1				7.46		2	x	
	2-18	R1-1(2M)	36	x 36						7.46		2		PLACE ON LIGHTPOLE
	2-19	R1-3P(2M)	24	x 9						1.50				SAME SIGN SUPPORT AS 2-17
	2-20	R1-3P(2M)	24	x 9						1.50				SAME SIGN SUPPORT AS 2-18
	2-21	J13-1(2)	24	x 45		1				7.06				
	2-22	R5-1A(2M)	42	x 30		1				8.75				
	2-23	R2-1(2M)	30	x 36		1				7.50				
	2-24	R5-1(2M)	36	x 36		1				9.00				
	3-1	R3-8W(2M)	54	x 30		1				11.25				
	3-2	J1-1(2)	24	x 39		1				6.19				
	3-3	W3-1(2M)	36	x 36		1					9.00	2		
	3-4	W1-2R(2M)	36	x 36		1					9.00			
	3-5	R2-1(2M)	30	x 36		1				7.50				
	3-6	R1-1(2S)	30	x 30		1				5.18				
	3-7	R4-7(2M)	24	x 30						5.00				INSTALL SIGN ON LIGHT POLE
	3-8	R4-7(2M)	24	x 30		1				5.00				45 DEGREE ANGLE FOR ENGEL DRIVE EB LEFT TURN
	3-9	W1-7(2M)	48	x 24		1					8.00			
	3-10	D1-1	66	x 15	2					6.88				ADVANCE STREET NAME SIGN, "ENGEL DR"
	3-11	I2-3	60	x 24	2					10.00				POPULATION = 9305 BASED ON 2010 CENSUS
	3-12	W1-2L(2M)	36	x 36		1					9.00			
	4-1	R5-1(2M)	36	x 36		1				9.00				
	4-2	R5-1A(2M)	42	x 30		1				8.75				
	4-3	D1-1	66	x 15	2					6.88				ADVANCE STREET NAME SIGN, "ENGEL DR"
	4-4	W4-2R(2)	36	x 36		1					9.00			
	4-5	R4-7(2M)	24	x 30		1				5.00				
	4-6	W5-54(2M)	18	x 18							2.25			SAME SIGN SUPPORT AS 4-5
	4-7	R3-9D(2M)	24	x 6		1				1.00				
	4-8	R3-9B(2M)	24	x 36						6.00				SAME SIGN SUPPORT AS 4-7
	4-9	R15-50(4)	60	x 48		2				20.00				
	4-10	R3-9D(2M)	24	x 6		1				1.00				
	4-11	R3-9B(2M)	24	x 36						6.00				SAME SIGN SUPPORT AS 4-10
	4-12	W4-2R(2)	36	x 36		1					9.00			
	4-13	R15-50(4)	60	x 48		2				20.00				
	4-14	W10-1(2M)	36	x 36		1					7.07			
	4-15	R2-1(2M)	30	x 36		1				7.50				
SUBTOTAL					6	28	0	0		210.35	62.32	8		CONTINUED NEXT PAGE

TYPE II SIGNS AND SUPPORTS CONTINUED

CATEGORY	SIGN NO.	SIGN CODE	SIGN SIZE W (IN)	x	H (IN)	634.0612 POST WOOD 4"x6"x12' EACH	634.0614 POST WOOD 4"x6"x14' EACH	634.0616 POST WOOD 4"x6"x16' EACH	634.0618 POST WOOD 4"x6"x18' EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	BOX OUT REQUIRED	COMMENTS
0010	5-1	W10-1(2M)	36	x	36		1				7.07			
	5-2	R2-1(2M)	30	x	36		1			7.50				
	5-3	J4-3(2)	72	x	36		2			18.00				
	5-4	R1-1(2M)	30	x	30		1			5.18				
	5-5	D1-1	84	x	15	2				8.75				ADVANCE STREET NAME SIGN, "BEAUPREY RD"
	5-6	R2-1(2M)	30	x	36		1			7.50				
	5-7	J4-3(2)	72	x	36		2			18.00				
	5-8	W1-7(2M)	48	x	24	1					8.00			
	5-9	D1-1	84	x	15	2				8.75				ADVANCE STREET NAME SIGN, "BEAUPREY RD"
	6-1	W4-2R(2)	36	x	36		1				9.00			
	6-2	R1-1(2M)	36	x	36			1		7.46				
	6-3	R3-8W(2M)	54	x	30		1			11.25				
	6-4	D1-61	84	x	24	2				14.00				ADVANCE STREET NAME SIGN, "E RICHMOND ST"
	6-5	R2-1(2M)	30	x	36		1			7.50				
	6-6	R1-1(2M)	36	x	36			1		7.46				
	6-7	R3-8W(2M)	54	x	30		1			11.25				
	6-8	D1-61	84	x	24	2				14.00				ADVANCE STREET NAME SIGN, "E RICHMOND ST"
	6-9	R3-8(2M)	36	x	30		1			7.50				
	6-10	R3-8(2M)	36	x	30		1			7.50				
	7-1	R2-1(2M)	30	x	36		1			7.50				
	7-2	J4-3(2)	72	x	36		2			18.00				
	7-3	R3-9C(2M)	24	x	6		1			1.00				
	7-4	R3-9B(2M)	24	x	36					6.00				SAME SIGN SUPPORT AS 7-3
	7-5	R3-9D(2M)	24	x	6		1			1.00				
	7-6	R3-9B(2M)	24	x	36					6.00				SAME SIGN SUPPORT AS 7-5
	7-7	J3-1(2)	24	x	57		1			9.50				
	7-8	JV-3(2)	48	x	93			1		27.50				
	7-9	D1-3	66	x	36		2			16.50				DESTINATION SIGN "BUSINESS DISTRICT, CECIL"
	7-10	J3-1(2)	24	x	57		1			9.50				
	7-11	JV-3(2)	48	x	93			1		27.50				
	7-12	J1-2(2)	48	x	39		1			12.38				
	8-1	M1-94H	102	x	18					12.75				STREET NAME SIGN (E GREEN BAY ST) MOUNT ON OVERHEAD SIGNAL POLE (SB10)
	8-2	R4-7(2M)	24	x	30					5.00				MOUNT ON SIGNAL POLE (SB2); MOUNT AT 45 DEGREE ANGLE FOR WIS 47 NB LEFT TURN
	8-3	R3-8A(2M)	36	x	30		1			7.50				
	8-4	SHAWANO WAYFINDING-MOVED SIGN. SEE SIGN REMOVAL PLANS, SIGN 8-4					2							NEW LOCATION: STA 127+00RT
	8-5	R3-8A(2M)	36	x	30		1			7.50				
	8-6	J3-1(2)	24	x	57					9.06				MOUNT ON SIGNAL POLE (SB5) ABOVE COUNTY HHH
		SUBTOTAL				9	28	4	0	345.79	24.07	0		
TOTAL						**15**	**56**	**4**	**0**	**556.14**	**86.39**	**8**		

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PAVEMENT MARKING REMOVALS

CATEGORY	LOCATION			DESCRIPTION	646.0600 REMOVING PAVEMENT MARKINGS LF	COMMENTS
0010	128+62	-	130+08	EAST GREEN BAY STREET	140	18-INCH STOP LINE
	128+62	-	130+08	EAST GREEN BAY STREET	20	8-INCH CHANNELIZING LINE
	130+08	-	134+00	CTH HHH	50	4-INCH SKIPS
	130+08	-	134+00	CTH HHH	784	4-INCH DOUBLE YELLOW CENTERLINE
TOTAL					994	

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PAVEMENT MARKING EPOXY

CATEGORY	LOCATION			646.0106 EPOXY 4-INCH WHITE LF	646.0106 EPOXY 4-INCH YELLOW LF	646.0126 EPOXY 8-INCH WHITE LF	647.0110 RAILROAD CROSSINGS EPOXY EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY EACH	647.0456 CURB EPOXY YELLOW LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY YELLOW EACH	647.0726 DIAGONAL EPOXY 12-INCH YELLOW LF
0010	STH 47/55, BUS 29												
	49+70	-	66+70	3,259	3,160	428	---	1	1	40	31	2	---
	ENGEL DRIVE												
	65+60	-	66+70	110	100	---	---	---	---	---	29	---	---
	STH 47/55, BUS 29												
	66+70	-	88+00	4,344	4,737	1,120	2	5	1	60	---	3	80
	BEAUPREY ROAD												
	88+00	-	89+30	130	60	---	---	---	---	---	31	---	---
	STH 47/55, BUS 29												
	89+30	-	102+60	2,750	3,732	385		6	---	---	---	---	80
	EAST RICHMOND STREET												
	102+60	-	103+80	---	270	81	---	---	---	---	72	---	---
	STH 47/55, BUS 29												
	103+80	-	128+62	4,915	5,833	350	---	13	2	---	28	---	160
	EAST GREEN BAY STREET												
	128+62	-	130+08	---	---	---	---	---	---	30	50	1	---
	CTH HHH												
	130+08	-	134+00	320	784	144		2	1		32		
			TOTAL	**15,828**	**18,676**	**2,508**	**2**	**27**	**5**	**130**	**273**	**6**	**320**
				34,504									

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MISCELLANEOUS ITEMS FOR TRAFFIC SIGNALS

CATEGORY: 0010

ITEM	QUANTITY
656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL, GREEN BAY STREET AND AIRPORT DRIVE	1 LS
658.5069 TRAFFIC SIGNAL MOUNTING HARDWARE, GREEN BAY STREET AND AIRPORT DRIVE	1 LS
655.0515 ELECTRICAL WIRE, TRAFFIC SIGNALS, 10 AWG	1300 LF
655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG	200 LF
655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG	300 LF
655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG	2200 LF
655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE	1150 LF
SPV.0105.02 REMOVE AND SALVAGE SIGNALS, GREEN BAY STREET AND AIRPORT DRIVE	1 LS
SPV.0105.03 VIDEO DETECTION SYSTEM, GREEN BAY STREET AND AIRPORT DRIVE	1 LS
SPV.0105.04 TRAFFIC SIGNAL CONTROLLER EQUIPMENT, GREEN BAY STREET AND AIRPORT DRIVE	1 LS
SPV.0105.05 SALVAGE AND REINSTALL EMERGENCY VEHICLE PREEMPTION	1 LS

REMOVING CONCRETE BASES

CATEGORY	BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES (EACH)
0010	SB1	128+84.4, 67.2 LT	1
	SB2	129+36.8, 66.9 LT	1
	SB6	129+86.8, 52.0 RT	1
	SB10	128+49.9, -37.0 LT	1
	PROJECT TOTAL		4

REMOVING PULL BOXES

CATEGORY	NUMBER	STATION	653.0905 REMOVING PULL BOXES (EACH)
0010	PB1	128+83.0, 56.8 LT	1
	PB4	129+37.2, 59.2 LT	1
	PB16	128+55.7, 63.5 LT	1
	PROJECT TOTAL		3

PULL BOXES

CATEGORY	NUMBER	STATION	653.0140 24X42 (EACH)	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM (EACH)
0010	PB1	128+72.6, 72.8 LT	1	--
	PB4	129+37.1, 69.9 LT	1	--
	PB6	129+77.1, 60.8 LT	--	1
	PB16	128+41.1, 43.6 LT	1	--
	PROJECT TOTAL		3	1

3

BASES AND POLES

CATEGORY	BASE NO.	LOCATION	654.0101 CONC. BASES TYPE 1 (EACH)	654.0102 CONC. BASES TYPE 2 (EACH)	654.0217 CONC. CONTROL CABINET BASES, TYPE 9 SPECIAL (EACH)	657.0425 15-FT TRAFFIC SIGNAL STANDARD (EACH)	657.0305 POLES TYPE 2 (EACH)	657.0100 PEDESTAL BASE (EACH)	657.0255 TRANSF. BASE (EACH)	657.0595 TROMBONE ARMS, 25-FT (EACH)
0010	CB1	128+53.5, 59.2 LT	--	--	1	--	--	--	--	--
	SB1	128+83.9, 79.1 LT	1	--	--	1	--	1	--	--
	SB2	129+36.9, 79.3 LT	1	--	--	1	--	1	--	--
	SB6	129+86.8, 52.0 RT	1	--	--	1	--	1	--	--
	SB10	128+41.1, 43.6 LT	--	1	--	--	1	--	1	1
PROJECT TOTAL			3	1	1	3	1	3	1	1

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CONDUIT RIGID NONMETALLIC SCHEDULE 40

CATEGORY	LOC	TO	LOC	652.0225 2-INCH (LF)	652.0235 3-INCH (LF)	BORE	652.0615 3-INCH SPECIAL (LF)	652.0700.S RECONNECT EXISTING CONDUIT INTO NEW CONCRETE BASE (EACH)
0010	CB1	--	PB1	--	60	3 @ 20'	--	--
	PB1	--	SB1	13	--		--	--
	PB1	--	PB2	155	--		--	--
	PB1	--	PB4	--	19		50	--
	PB4	--	PB5	20	--		--	--
	PB4	--	PB6	--	--		30	--
	PB9	--	SB6	--	--		--	1
	PB15	--	PB16	--	21		45	--
	PB16	--	SB10	12	--		--	--
	CB1	--	PB16	--	30		--	--
PROJECT TOTAL				200	130		125	1

LOOP DETECTOR LEAD IN CABLE

CATEGORY	DETECTOR NUMBER	STATION/OFFSET*	SIZE FT X FT	655.0700 LOOP DETECTOR LEAD IN CABLE (FT)
0010	11	EB LT LANE	6'X 30'	119
	21	WB ADVANCE	6'X 20'	512
	22	WB NEAR	6'X 20'	407
	51	WB LT LANE	6'X 30'	166
	61	EB ADVANCE	6'X 20'	338
	62	EB NEAR	6'X 20'	188
PROJECT TOTAL				1730

TRAFFIC SIGNAL FACES AND BACKPLATES

CAT	BASE NO.	658.0110 LED TRAFFIC SIGNAL FACES 3-12 INCH VERTICAL (EACH)	658.0120 LED TRAFFIC SIGNAL FACES 5-12 INCH VERTICAL (EACH)	658.0165 LED TRAFFIC SIGNAL FACES 5-12 INCH HORIZONTAL (EACH)	658.0215 BACKPLATES 3 SECTION 12-INCH (EACH)	658.0225 BACKPLATES 5 SECTION 12-INCH (EACH)	R1-1F FOLDING STOP SIGN (EACH)	658.0600	658.0605	658.0610	658.0620	658.0625
								LED MODULES 12- INCH				
								RED BALL (EACH)	YELLOW BALL (EACH)	GREEN BALL (EACH)	YELLOW ARROW (EACH)	GREEN ARROW (EACH)
0010	SB1	1	1	--	1	1	1	2	2	2	1	1
	SB2	--	2	--	--	2	--	2	2	2	2	2
	SB6	1	1	--	1	1	1	2	2	2	1	1
	SB9	1	1	--	1	1	1	2	2	2	1	1
	SB10	--	--	1	--	1	--	1	1	1	1	1
	TOTAL	**3**	5	1	3	6	3	9	9	9	6	6

3

TRAFFIC CONTROL DEVICES

CAT	LOCATION	SERVICE DAYS	643.0300 TC DRUMS IN SERVICE	643.0300 TC DRUMS DAYS	643.0420 BARRICADES TYPE III IN SERVICE	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A IN SERVICE	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C IN SERVICE	643.0715 WARNING LIGHTS TYPE C DAYS	643.0100 TRAFFIC CONTROL PROJECT EACH	643.2000 TRAFFIC CONTROL DETOUR EACH	643.1050 TC SIGNS PCMS IN SERVICE	643.1050 TC SIGNS PCMS DAYS	643.0900 TC SIGNS IN SERVICE	643.0900 TC SIGNS DAYS	643.0910 TC COVERING SIGNS TYPE I CYCLES	643.0910 TC COVERING SIGNS TYPE I EACH	643.0920 TC COVERING SIGNS TYPE II CYCLES	643.0920 TC COVERING SIGNS TYPE II EACH	643.3000 TC DETOUR SIGNS IN SERVICE	643.3000 TC DETOUR SIGNS DAYS	649.0400 TEMP PAVT MARKING REMOVABLE TAPE 4-INCH LF
0010																							
	PROJECT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---
	ADVANCE PCMS	14	---	---	---	---	---	---	---	---	---	---	3	42	---	---	---	---	---	---	---	---	---
	NORTH END OF PROJECT	77	62	4774	6	462	12	924	14	1078	---	---	---	---	6	462	---	---	---	---	---	---	---
	NORTH END OF PROJECT - AWSC	5	62	310	6	30	12	60	14	70	---	---	---	---	21	105	---	---	---	---	---	---	---
	ADVANCED WARNING SIGNS	82	---	---	---	---	---	---	---	---	---	---	---	---	16	1,312	---	---	---	---	---	---	---
	DETOUR	82	---	---	---	---	---	---	---	---	---	1	---	---			1	6	1	19	310	25,420	---
	CTH B - STH 22	82	---	---	33	2706	38	3116	---	---	---	---	---	---	20	1,640	---	---	---	---	---	---	---
	UNDISTRIBUTED	---	---	---	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1000
	TOTAL			**5,084**		**3,198**		**4,100**		**1,148**	**1**	**1**		**42**		**3,519**		**6**		**19**		**25,420**	**1,000**

3

CONSTRUCTION STAKING

CATEGORY	STA	- STA	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB AND GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS LS	650.9910 CONSTRUCTION STAKING SUPPLIMENTAL CONTROL LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	PROJECT		STH 47	95	---	---	---	2	---	1	1	---
	49+55	- 128+98	NB STH 47	---	7,943	7,943	---	---	7,943	---	---	---
	149+55	181+00	SB STH 47	---	3,145	3,145	---	---	3,145	---	---	---
			CTH B	---	---	100	200	---	---	---	---	100
	73+70	79+40	RAILROAD NB	---	---	---	1140	---	---	---	---	570
	173+55	179+50	RAILROAD SB	---	---	---	1190	---	---	---	---	595
	79+40	81+40	RAILROAD NB	---	---	---	400	---	---	---	---	200
			BEAUPREY	---	---	---	200	---	---	---	---	100
	95+03	102+43	RICHMOND ACCEL	---	---	---	740	---	---	---	---	740
			RICHMOND	---	---	---	150	---	---	---	---	100
			STH 22	---	---	---	200	---	---	---	---	125
			TOTALS	**95**	**11,088**	**11,188**	**4,220**	**2**	**11,088**	**1**	**1**	**2,530**

SAWING

CATEGORY	STA	-	STA	DISCRIPTION	LOCATION		690.015 SAWING ASPHALT LF	691.0250 SAWING CONCRETE LF
0010	49+84	-	49+92	NOSE/CURB MED	---	STH 47	5	---
	50+37	-	50+48	CURB	NB LT	STH 47	15	---
	50+77	-	50+82	CURB	SB RT	STH 47	8	---
	65+45	-	65+58	NOSE/CURB MED		STH 47	5	---
	66+41			NOSE MED	---	STH 47	8	---
	66+41	-	67+13	CURB	NB LT	STH 47	71	---
	67+10	-	67+21	CURB	SB RT	STH 47	15	---
	49+54			---	NB/SB	STH 47	190	---
	ENGEL DR			---	WEST	---	124	---
	ENGEL DR			---	WEST	---	32	---
	76+97			---	NB/SB	STH 47	44	---
	77+29			---	NB/SB	STH 47	44	--
	BEAUPREY RD			---	WEST	---	134	---
	BEAUPREY RD			---	WEST	---	33	---
	EAST RICHMOND ST			---	EAST	---	140	---
	EAST RICHMOND ST			---	EAST	---	44	---
	EAST RICHMOND ST			---	WEST	---	156	---
	EAST RICHMOND ST			---	WEST	---	45	---
	EAST GREEN BAY ST			---	NB/SB	STH 47	126	---
	EAST GREEN BAY ST			MEDIAN	WEST	STH 22	92	8
	127+46	-	128+60	BEHIND CURB (LOT)	NB RT	STH 47	130	--
			128+00	DRIVE ENTRANCE	NB LT	STH 47	34	
				REMOVING CURB	---	STH 47	---	669
						TOTALS	**1,493**	**677**

WELCOME SIGN

CATEGORY	LOCATION	DISCRIPTION	SPV.0105.06 CITY OF SHAWANO WELCOME SIGN LS
0020	NE CORNER CTH B	WELCOME SIGN	1
		TOTALS	**1**

ADJUSTING VALVES AND COVERS

CATEGORY	STA	LOCATION	DISCRIPTION	SPV.0060.02 ADJUSTING WATER VALVE BOXES EACH	SPV.0060.03 ADJUSTING SANITARY MANHOLE COVERS EACH
0030	8+76	CTH B WEST	WATER VALVE	1	---
	66+16	STH 47/ENGEL DR	WATER VALVE	1	---
	66+17	STH 47/ENGEL DR	WATER VALVE	1	---
	92+82	STH 47	SAN MH COVER	---	1
	96+33	STH 47	SAN MH COVER	---	1
	99+81	STH 47	SAN MH COVER	---	1
	102+58	STH 47/RICHMOND WEST	WATER VALVE	1	---
	103+22	STH 47	SAN MH COVER	---	1
	103+37	STH 47/RICHMOND WEST	WATER VALVE	1	---
	103+52	STH 47/RICHMOND WEST	WATER VALVE	1	---
	107+54	STH 47	SAN MH COVER	---	1
	109+12	STH 47	WATER VALVE	1	---
	111+83	STH 47	SAN MH COVER	---	1
	115+70	STH 47	WATER VALVE	1	---
	115+79	STH 47	WATER VALVE	1	---
	116+06	STH 47	SAN MH COVER	---	1
	120+13	STH 47	SAN MH COVER	---	1
	123+90	STH 47	SAN MH COVER	---	1
	124+20	STH 47	WATER VALVE	1	---
	128+48	STH 47	WATER VALVE	BY OTHERS	---
	128+88	STH 47	WATER VALVE	BY OTHERS	---
			TOTALS	**10**	**9**

DOC# 707627

TRANSPORTATION PROJECT PLAT NO: 6243-07-21 - 4.01

LOCATED IN PART OF LOT 2, CITY OF SHAWANO RAACH INDUSTRIAL PARK ACRES LOCATED IN THE FRACTIONAL NE 1/4 - NE 1/4 OF SECTION 5, TOWNSHIP 26 NORTH, RANGE 16 EAST, CITY OF SHAWANO, SHAWANO COUNTY, WISCONSIN

RELOCATION ORDER STH "47" CITY OF SHAWANO, AIRPORT DRIVE (C.T.H. "B" - S.T.H. "22") SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF SHWAWANO DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 68.22, WISCONSIN STATUTES, THE CITY OF SHAWANO HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF SHAWANO, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

DOC # 707627
Recorded
May 28, 2015 2:25 PM
AMY DILLENBURG
REGISTER OF DEEDS
SHAWANO WI
Fee Amount: $25.00
Slide B-311

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6243-07-21 - 4.01
AMENDMENT NO:__

S.T.H. 47 SB R/L CURVE DATA
CURVE C3
PI = 175+02.76
Y = 266603.738
X = 869897.990
Δ = 10°14'46"
D = 5°47'41"
T = 88.64'
L = 176.82'
R = 988.75'
LCH = 176.58'
LCB = N25°33'22"E
PC = 174+14.12
PT = 175+90.93

LOT 1
CSM #1121
V.4/P.127-128

SEC 102
FND MONUMENT
County Coordinates
Y = 266564.328
X = 868088.979

SECTION LINE

SECTION LINE =
STA 174+53.75
Y = 266557.523
X = 869881.520

SECTION LINE =
STA 74+46.90
Y = 266557.464
X = 869897.153

SECTION LINE

SEC 111
FND ALUM. MONUMENT
County Coordinates
Y = 266554.181
X = 870761.979

PROP453
PROP452

EXIST R/W
VARIES
TLE601
TLE600
TLE FOR SLOPES
199
1
PCC: 174+14.12
PCC: 74+01.89
175+00SB
CURVE C3
75+00NB
CURVE C5
174+00SB
74+00NB
173+00SB
73+00NB
172+00SB
72+00NB
171+00SB
71+00NB
CURVE C2
CURVE C4
80.00'
EXIST R/W
EXIST R/W
VARIES

CITY

OF

SHAWANO

S.T.H. 47 (S. AIRPORT DR.)

SECTION COURSE TABLE		
COURSE	BEARING	DISTANCE
102-111	S 89°46'57" E	2673.02'
102-TLE601	S 89°46'57" E	1717.64'
111-TLE601	N 89°46'57" W	955.38'
TLE601-STA174+53.75	S 89°46'57" E	75.02'
TLE-STA74+46.90	S 89°46'57" E	90.55'

CURVE 199-600
L = 64.75'
LC = 64.74'
LCB = S15° 18' 00"W
R = 931.47'

LOT 2

CITY OF SHAWANO RAACH INDUSTRIAL PARK ACRES

OUTLOT 1

CITY OF SHAWANO RAACH INDUSTRIAL PARK ACRES

FRACTIONAL
NE-NE
SEC-5

S.T.H. 47 NB R/L CURVE DATA
CURVE C5
PI = 74+90.07
Y = 266598.988
X = 869909.125
Δ = 12°52'41"
D = 7°20'00"
T = 88.18'
L = 175.61'
R = 781.30'
LCH = 175.24'
LCB = N24°14'24"E
PC = 74+01.89
PT = 75+77.50

S.T.H. 47 SB R/L CURVE DATA
CURVE C2
PI = 171+64.94
Y = 266272.408
X = 869774.553
Δ = 34°07'06"
D = 6°38'11"
T = 264.93'
L = 514.11'
R = 863.36'
LCH = 506.55'
LCB = N3°22'26"E
PC = 169+00.01
PT = 174+14.12

S.T.H. 47 NB R/L CURVE DATA
CURVE C4
PI = 71+58.38
Y = 266270.825
X = 869803.756
Δ = 31°29'11"
D = 6°17'50"
T = 256.49'
L = 500.00'
R = 909.85'
LCH = 493.73'
LCB = N2°03'28"E
PC = 69+01.89
PT = 74+01.89

PROP451
PROP450
P.L.

R/W COORDINATE TABLE		
Point #	Y	X
199	266502.821	869825.790
TLE600	266440.377	869808.707
TLE601	266557.808	869806.604

EXISTING MONUMENTS			
Point #	Y	X	DESCRIPTION
450	266191.574	869874.394	1" IRON PIPE
451	266187.294	869774.485	3/4" IRON ROD
452	266556.073	870263.501	1" IRON PIPE
453	266556.173	870237.202	1" IRON PIPE

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
TLE601-199	S 19°14'04" E	58.24'
199-TLE600	CURVE	
TLE600-TLE601	N 01°01'33" W	117.45'

R/W STATION AND OFFSET TABLE TO S.T.H. "47" NB ALIGNMENT		
POINT #	STATION	OFFSET
199	73+74.54	50.38'L
450	70+72.09	34.61'R
451	70+72.93	65.38'L
452	76+33.23	326.67'R
453	76+19.90	304.00'R
TLE600	73+13.24	51.68'L
TE601	74+17.79	85.20'L

R/W STATION AND OFFSET TABLE TO S.T.H. "47" SB ALIGNMENT		
POINT #	STATION	OFFSET
199	173+84.13	32.97'L
450	170+76.42	61.20'R
451	170+75.62	38.80'L
452	176+47.79	338.67'R
453	176+34.46	316.00'R
TLE600	173+21.73	31.76'L
TE601	174+26.92	69.69'L

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

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

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

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS, WI.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

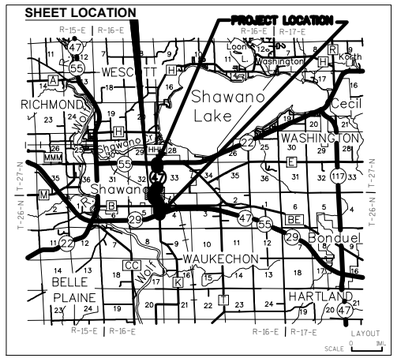
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR S.T.H. 47 ESTABLISHED FROM PREVIOUS CSM #1172 AS LOT 1 RECORDED IN VOLUME 4 OF CERTIFIED SURVEYS, PAGES 206-208, AS DOCUMENT NO. 465668

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LANDS TO THE CITY OF SHAWANO.

BASIS OF EXISTING R/W TABLE				
ROAD NAME	PROJECT / SURVEY	P=PARCEL L=LOT NO.	VOL./PAGE	YEAR
S.T.H. 47 (S. AIRPORT DR.)	CSM #1172	2	206-208	1994

SCHEDULE OF LANDS AND INTERESTS REQUIRED		OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT				
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F. REQUIRED
1	CITY OF SHAWANO	TLE	-	-	-	1044

SHEET LOCATION



GRID NORTH

SCALE, FEET
0 25 50

QUEST
Civil Engineers, LLC

2701 Larsen Road, Suite 123
Green Bay, WI 54303
Office: 920-309-3318
Fax: 920-496-6009

I, KOLBY F. SCHERTZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF SHAWANO, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KOLBY F. SCHERTZ S-2862 SEYMOUR WI LAND SURVEYOR

SIGNATURE: Kolby Schertz DATE: 05/28/2015
PRINT NAME: KOLBY F. SCHERTZ
REGISTRATION NUMBER: S-2862

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF SHAWANO

SIGNATURE: Eddie Sheppard DATE: 5-28-15
PRINT NAME: EDDIE SHEPPARD

CONVENTIONAL UTILITY SYMBOLS

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

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
FOUND	FND		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

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	(1" UNLESS NOTED)	BUILDING	
R/W MONUMENT SET	(1"I.D.x24" IRON PIPE SET)	PROPOSED R/W LINE	
FOUND R/W GUARD POST		EXISTING H.E. LINE	
SIGN	SIGN	PROPERTY LINE	
SECTION CORNER MONUMENT		LOT & TIE LINES	
SECTION CORNER SYMBOL		SLOPE INTERCEPTS	
		CORPORATE LIMITS	
FEE (HATCH VARIES)		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY ACQUISITION)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
EXISTING MONUMENT NUMBER	(PROP ## ##)	SECTION LINE	
R/W BOUNDARY POINT NUMBER	(***)	QUARTER LINE	
PARCEL NUMBER	(1)	SIXTEENTH LINE	
UTILITY INTEREST	(UI)	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	(S1-)	PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

TRANSPORTATION PROJECT PLAT NO: 6243-07-21 - 4.02

PART OF LOT'S 1 AND 2, CSM NO. 432 AND LOT 2, CSM NO. 2024 LOCATED IN AND INCLUDING THE NE 1/4 - NE 1/4 OF SECTION 32; AND PART OF LOT 3, CSM NO. 432 AND LOT 1, CSM NO. 778 LOCATED IN AND INCLUDING THE NW 1/4 - NW 1/4 OF SECTION 33; ALL IN TOWNSHIP 27 NORTH, RANGE 16 EAST, CITY OF SHAWANO, SHAWANO COUNTY, WISCONSIN

RELOCATION ORDER STH "47" CITY OF SHAWANO, AIRPORT DRIVE (C.T.H. "B" - S.T.H. "22") SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF SHWAVANO DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 68.22, WISCONSIN STATUTES, THE CITY OF SHAWANO HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF SHAWANO, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

DOC # 707626
Recorded
May 28, 2015 2:25 PM
AMY DILLENBURG
REGISTER OF DEEDS
SHAWANO WI
Fee Amount: $25.00
Slide B-311

126

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6243-07-21 - 4.02
AMENDMENT NO:___

DOC # 707626

STA. 129+50.00, 0.00' RT.
Y = 271852.107
X = 870611.205

STA. 22+00.00, 0.00' RT.
Y = 271836.427
X = 870811.290

STA. 18+00.00, 0.00' RT.
Y = 271818.858
X = 870411.676

FND PK NAIL
County Coordinates
Y = 271852.901
X = 867938.345

FND PK NAIL
County Coordinates
Y = 271830.861
X = 870603.852

FND PK NAIL
County Coordinates
Y = 271870.416
X = 873251.821

FND SURVEY NAIL
County Coordinates
Y = 269194.289
X = 870650.366

SECTION LINE = STA 129+28.866, Y = 271830.974, X = 870611.445

SECTION LINE 21+14.91

400.00'

129+25.53= 20+00.00, Y=271827.642, X=870611.483

50.01' R/L= N0°39'01"W

PI: 128+99.99

129+00NB

208

128+79.23

PT: 128+61.63

38.36' R/L= N3°24'43"W

S.T.H. 22 / 47 / 55 (E. GREEN BAY ST.)

S.T.H. 22 / 55 (E. GREEN BAY ST.)

18+00

19+00

21+00

R/L= N87°28'57"E

S.T.H. 47 NB R/L CURVE DATA
CURVE C9
PI = 128+17.49
Y = 271719.700
X = 870616.685
Δ = 4°26'23"
D = 5°01'35"
T = 44.19'
L = 88.33'
R = 1139.92'
LCH = 88.31'
LCB = N5°37'54"W
PC = 127+73.30
PT = 128+61.63

CURVE C9

60.00'

P.L.

EXIST R/W

33.00'

128+00NB

PC: 127+73.30

93.86'

PERKINS RESTAURANT

VARIES

NE-NE SEC-32

LOT 1 CSM #432 V.2/P.125

LOT 1 CSM #355 V.2/P.36

CITY

OF

SHAWANO

R/L= N1°45'06"W

127+00NB

70.00'

PT: 126+79.44

NW-NW SEC-33

LOT 3 CSM #432 V.2/P.125

LOT 2 CSM #432 V.2/P.125

S.T.H. 47 (S. AIRPORT DR.)

126+00NB

125+00NB

S.T.H. 47 NB R/L CURVE DATA
CURVE C8
PI = 125+33.16
Y = 271437.023
X = 870655.667
Δ = 11°41'40"
D = 3°59'00"
T = 147.31'
L = 293.59'
R = 1438.39'
LCH = 293.08'
LCB = N2°00'16"W
PC = 123+85.85
PT = 126+79.44

124+00NB

PC: 123+85.85

35.57' R/L= N3°50'34"E

LOT 2 CSM #2024 V.7/P.300

LOT 1 CSM #778 V.3/P.122

40.00'

STA. 123+50.28, 0.00' RT.
Y = 271254.556
X = 870643.410

GRID NORTH

SCALE, FEET
0 25 50

SHEET LOCATION

PROJECT LOCATION

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
200-201	S 88°35'23" W	40.00'
201-467	N 01°00'39" W	95.04'
467-202	S 89°29'11" E	40.01'
202-203	N 01°00'39" W	200.00'
203-204	N 89°32'03" W	20.49'
204-205	N 04°34'16" E	60.06'
205-469	N 14°39'28" W	77.81'
469-206	N 01°00'39" W	42.96'
206-207	N 46°43'00" W	51.65'
207-208	N 74°14'01" E	72.36'
208-209	N 88°59'21" E	60.00'
209-210	S 01°00'39" E	150.51'
210-211	N 89°08'10" E	10.00'
211-466	S 01°00'39" E	277.50'
466-465	S 02°28'33" W	99.66'
465-212	S 89°23'20" W	34.55'
212-200	S 89°23'20" W	29.39'

R/W COORDINATE TABLE		
Point #	Y	X
200	271254.243	870614.025
201	271253.258	870574.036
202	271347.926	870612.372
203	271547.895	870608.844
204	271548.062	870588.355
205	271607.931	870593.141
206	271726.161	870572.694
207	271761.572	870535.094
208	271781.232	870604.728
209	271782.290	870664.718
210	271631.799	870667.373
211	271631.950	870677.372
212	271254.556	870643.410

R/W STATION AND OFFSET TABLE TO STH 47 NB ALIGNMENT		
POINT #	STATION	OFFSET
200	123+48.00	29.30'L
201	123+44.34	69.13'L
202	124+42.81	36.13'L
203	126+47.68	30.90'L
204	126+50.29	51.23'L
205	127+09.98	38.59'L
206	128+27.81	44.05'L
207	128+64.10	78.95'L
208	128+79.58	8.27'L
209	128+77.06	51.67'R
210	127+23.49	38.21R
211	127+22.27	48.13'R
465	123+52.96	34.45'R
466	124+51.09	33.59'R
467	124+42.02	76.13'L
469	127+86.68	47.90'L

SECTION COURSE TABLE		
COURSE	BEARING	DISTANCE
110-105	S 01°00'39" E	2636.98'
110-106	N 89°08'39" E	2648.26'
110-107	N 89°31'35" W	2665.60'
110-208	S 01°00'39" E	49.64'
105-200	N 01°00'39" W	2060.27'

BASIS OF EXISTING R/W TABLE				
ROAD NAME	PROJECT/ SURVEY	P=PARCEL L=LOT NO.	VOL./PAGE	YEAR
S.T.H. 22/47/55 (N. GREEN BAY ST)	9180-12-21	4	850/650	1997
S.T.H. 22/47/55 (N. GREEN BAY ST)	F 09-1(6)	4	-	-
S.T.H. 22/47/55 (N. GREEN BAY ST)	F 09-1(6)	7	-	-
S.T.H. 47 (S. AIRPORT DR.)	WARRANTY DEED	4	582/786	1983
S.T.H. 47 (S. AIRPORT DR.)	WARRANTY DEED	4	885/221	1998
S.T.H. 47 (S. AIRPORT DR.)	WARRANTY DEED	-	582/788	1983
S.T.H. 47 (S. AIRPORT DR.)	CSM #778	LOT 1	3/122	1987
S.T.H. 47 (S. AIRPORT DR.)	CSM #2024	LOT 2	7/300	2009

UTILITY INTERESTS REQUIRED		
UTILITY #	OWNER (S)	INTEREST REQUIRED
101	FRONTIER COMMUNICATIONS OF WI LLC	RELEASE OF RIGHTS

UTILITY INTREST TABLE			
UTILITY #	PARCEL #	INTEREST DESCRIPTION	RECORDING DATA
101	5	NO EASEMENT OF RECORD	---

SCHEDULE OF LANDS AND INTERESTS REQUIRED		OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT				
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F. REQUIRED
			NEW	EXISTING	TOTAL	
4	NORTH LAKE RESTAURANTS, INC	FEE	540	5656	6,196	-
5	G.E.M. LAND HOLDINGS, LLC	FEE	1,191	-	1,191	-

EXISTING MONUMENTS			
Point #	Y	X	DESCRIPTION
426	271782.189	870674.387	3/4" IRON ROD LEANING
435	271746.137	870572.342	3/4" IRON ROD W/CAP
436	271761.887	870555.629	3/4" IRON ROD W/CAP
437	271788.898	870814.895	1" IRON PIPE
465	271254.925	870677.962	1" IRON PIPE
466	271354.491	870682.267	1" IRON PIPE
467	271348.285	870572.359	1" IRON PIPE
469	271683.210	870573.452	PK NAIL

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(1" UNLESS NOTED)	BUILDING	
R/W MONUMENT SET	(1.0"x24" IRON PIPE SET)	PROPOSED R/W LINE	
FOUND R/W GUARD POST		EXISTING H.E. LINE	
SIGN	ISIGN	PROPERTY LINE	
SECTION CORNER MONUMENT		LOT & TIE LINES	
SECTION CORNER SYMBOL		SLOPE INTERCEPTS	
		CORPORATE LIMITS	
FEE (HATCH VARIES)		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY ACQUISITION)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
EXISTING MONUMENT NUMBER	PROP X	SECTION LINE	
R/W BOUNDARY POINT NUMBER	X	QUARTER LINE	
PARCEL NUMBER	4	SIXTEENTH LINE	
UTILITY INTEREST	4E	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-	PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
FOUND	FND		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	P/L		
RECORDED AS	(100')		

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 UTILITY SYMBOLS

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

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

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

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS, WI.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR S.T.H. 22 & S.T.H. 47 ESTABLISHED FROM PREVIOUS PROJECTS 9180-12-21 & F 09-1(6)

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LANDS TO THE CITY OF SHAWANO

QUEST
Civil Engineers, LLC
2701 Larsen Road, Suite 123
Green Bay, WI 54303
Office: 920-309-3318
Fax: 920-496-6009

I, KOLBY F. SCHERTZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF SHAWANO, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KOLBY F. SCHERTZ S-2862 SEYMOUR WI LAND SURVEYOR

SIGNATURE: Kolby Schertz DATE: 05/28/2015
PRINT NAME: KOLBY F. SCHERTZ
REGISTRATION NUMBER: S-2862

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF SHAWANO

SIGNATURE: Eddie Sheppard DATE: 5-29-15
PRINT NAME: EDDIE SHEPPARD

PLOT SCALE : 1" = 50' PLOT NAME : STH 47 PLOT BY : KOLBY SCHERTZ PLOT DATE : June 8, 2015
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\SURVEY\TPP\DRAWING\TPP-STH47_6243072311X17.DWG
APPRAISAL PLAT DATE :

6243-07-21 - 4.02

WE ENERGIES – ELECTRIC

WB STH 29 ON RAMP

BEGIN PROJECT 6243-07-70
STA 38+47 STH 47 NB

BEGIN CONSTRUCTION SB
STA 138SB+50 STH 47 SB

SAWING ASPHALT

BP: 138+50.00SB

138SB 139SB 140SB 141SB 142SB 143

36D

STH 47/55

MATCHLINE STA 43+00

BEGIN CONSTRUCTION
37+71 STH 47 NB

37 38 39 40 41 42

T 26 N
R 5 4 E
16

30G

BP: 37+50.00

36A

SAWING CONCRETE

SAWING ASPHALT

SAWING ASPHALT

SAWING CONCRETE

WB STH 29 OFF RAMP

CURB AND GUTTER REPLACEMENT

ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

36A HES CURB AND GUTTER 6" SLOPED 36" TYPE A

36D CURB AND GUTTER 6" SLOPED 36" TYPE D

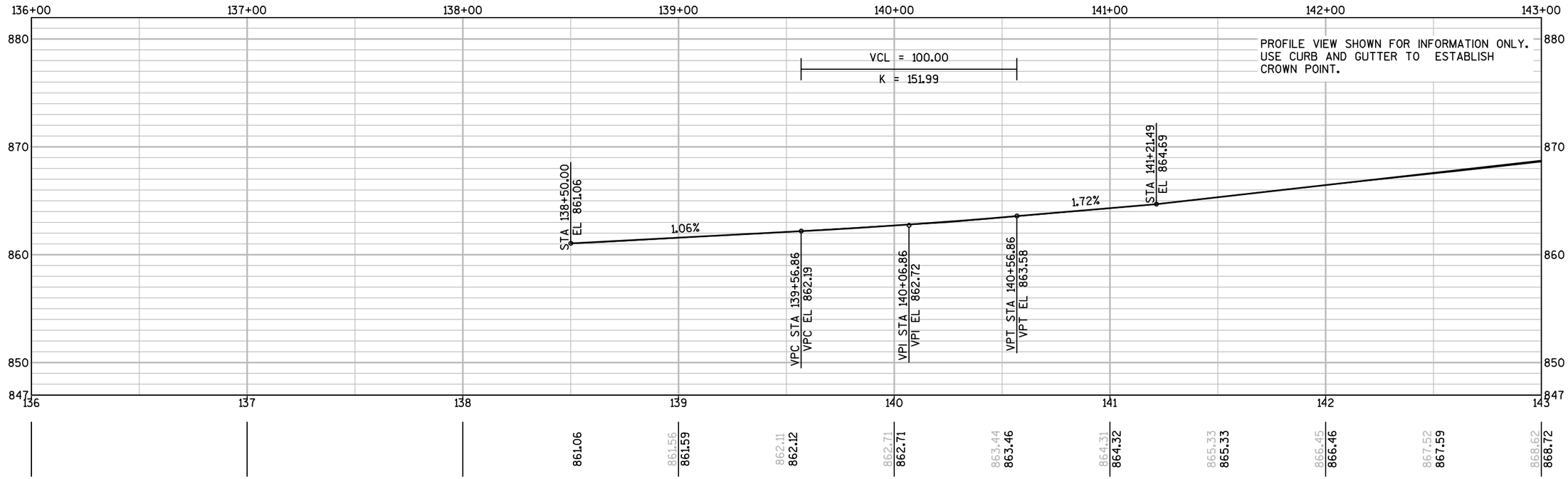
30G HES CURB AND GUTTER 6" SLOPED 30" TYPE G

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PLAN	SHEET 127	E

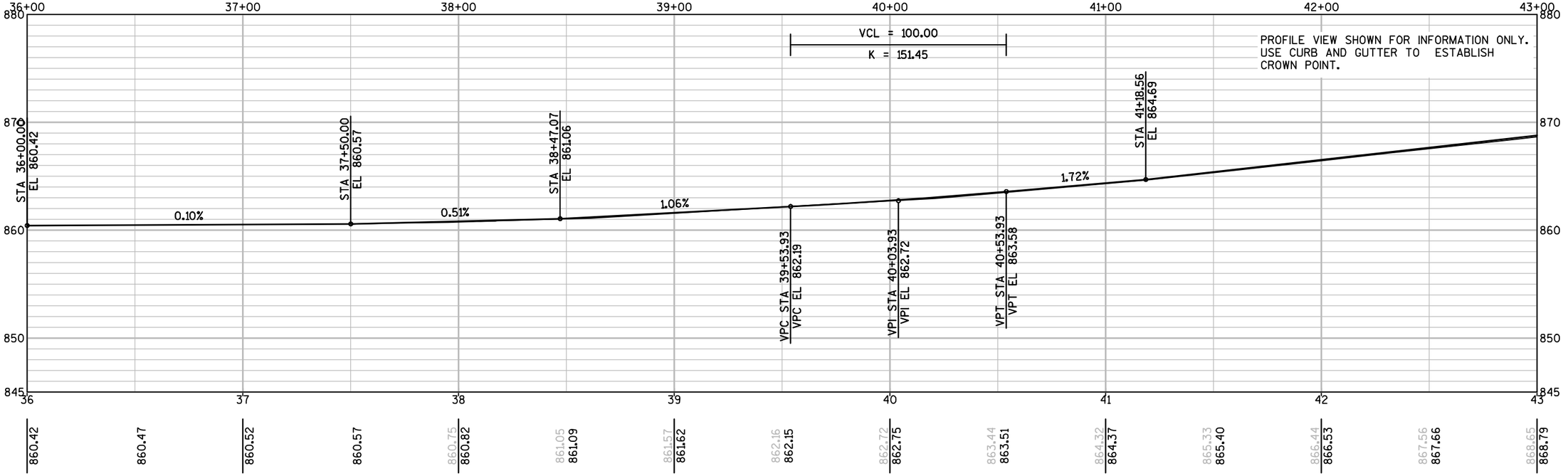
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:20 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

SOUTHBOUND PROFILE VIEW



NORTHBOUND PROFILE VIEW



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PROFILE	SHEET 128 E

N

SAWING ASPHALT

S88° 44' 09"E

ADJUSTING WATER VALVE BOXES

SAWING ASPHALT

CITY OF SHAWANO WATER

FRONTIER COMMUNICATIONS OF WI LLC

SAWING ASPHALT

WE ENERGIES – ELECTRIC

END PROJECT 6243-07-70
BEGIN PROJECT 6243-07-71
STA 49+54.63 STH 47

PI: 146+24.45SB

PI: 149+44.78SB

MATCHLINE STA 43+00

MATCHLINE STA 50+00

STH 47/55

CONCRETE MEDIAN
SLOPED NOSE TYPE 1

N3° 57' 10"W

SAWING ASPHALT

PI: 9+95.99

WE ENERGIES – GAS

FRONTIER COMMUNICATIONS OF WI LLC

CITY OF SHAWANO – SEWER

PI: 46+21.73

PI: 49+40.00

N89° 57' 53"E

CTH B

CONCRETE MEDIAN
SLOPED NOSE TYPE 1

SAWING ASPHALT

CURB AND GUTTER REPLACEMENT

ALL CURB AND GUTTER 30" TYPE D
UNLESS OTHERWISE NOTED.

36D CURB AND GUTTER 6" SLOPED 36" TYPE D

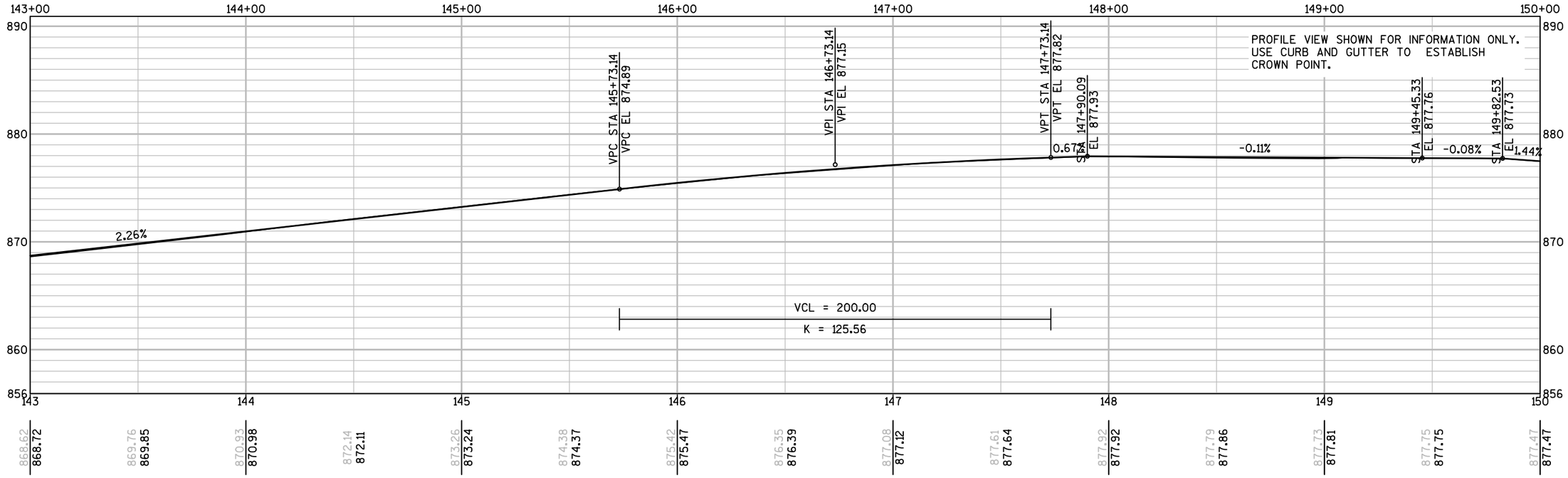
30J CURB AND GUTTER 4" SLOPED 30" TYPE J

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PLAN	SHEET 129	E

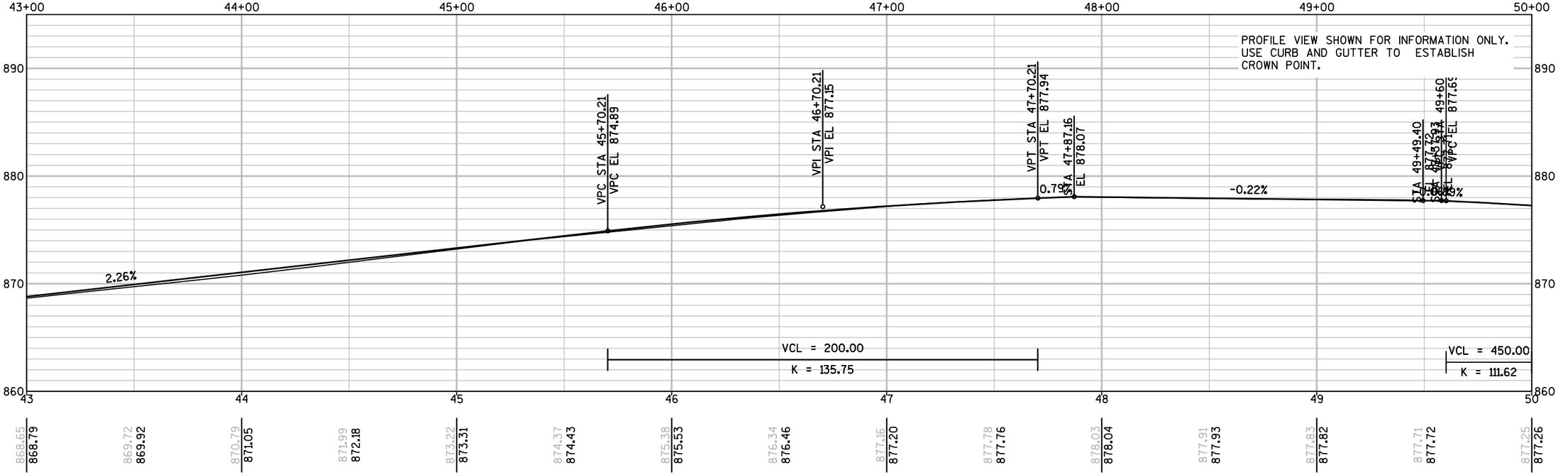
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:21 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

SOUTHBOUND PROFILE VIEW



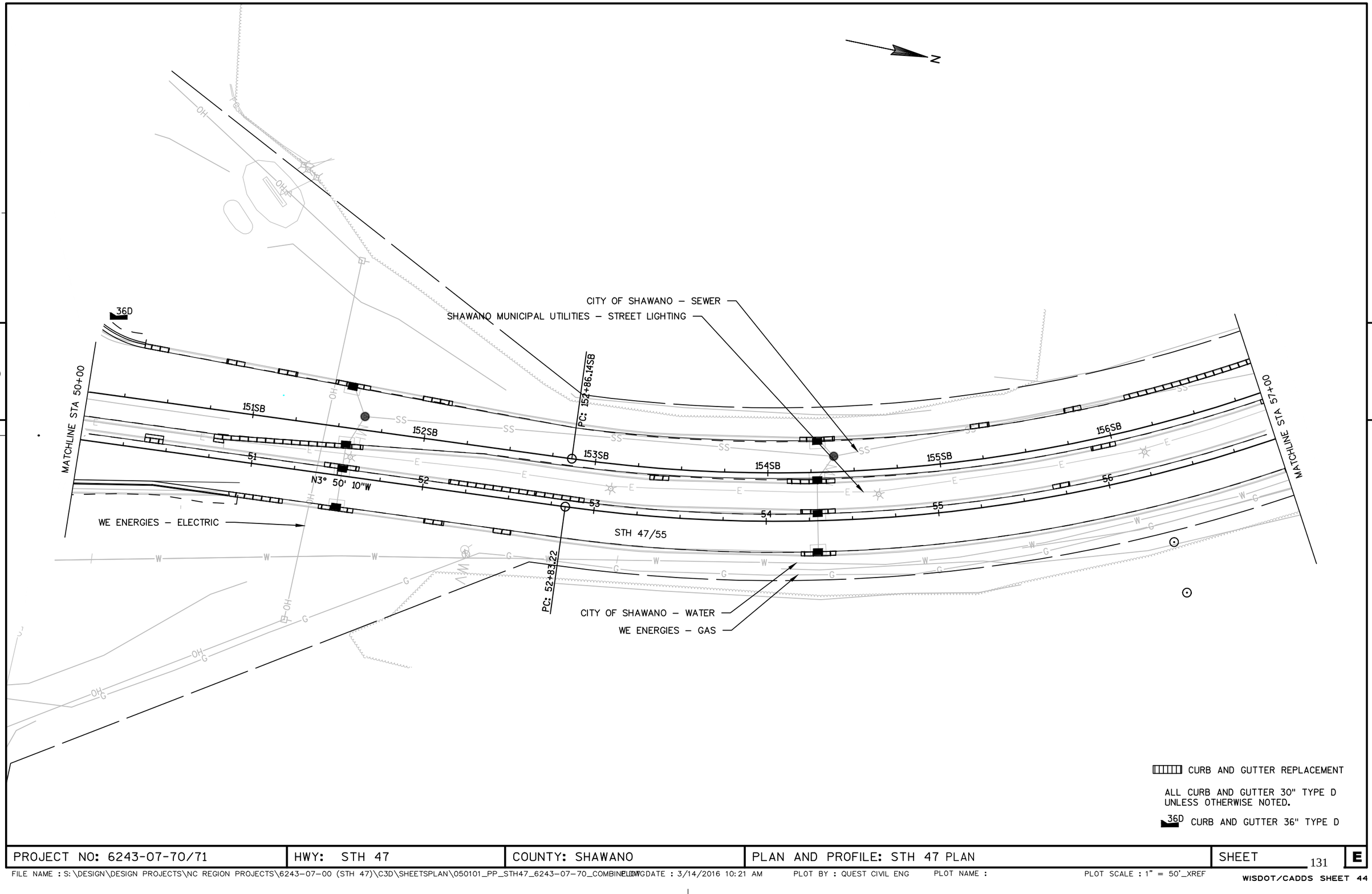
NORTHBOUND PROFILE VIEW



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PROFILE	SHEET 130	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:21 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

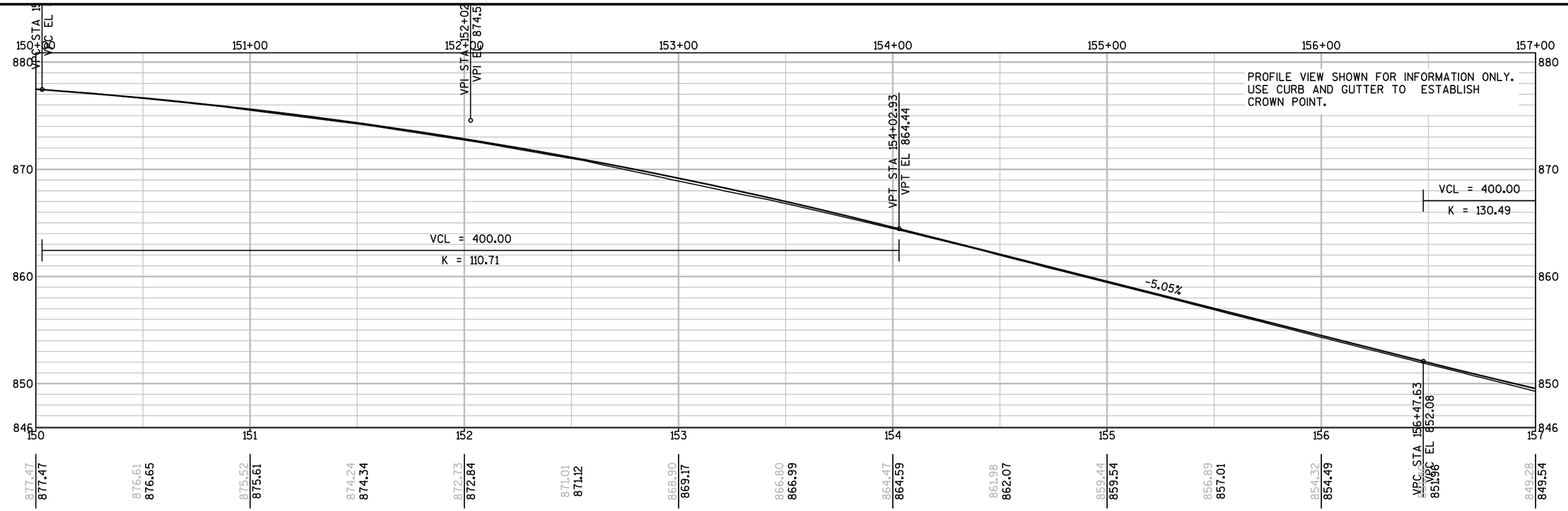


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PLAN	SHEET 131 E

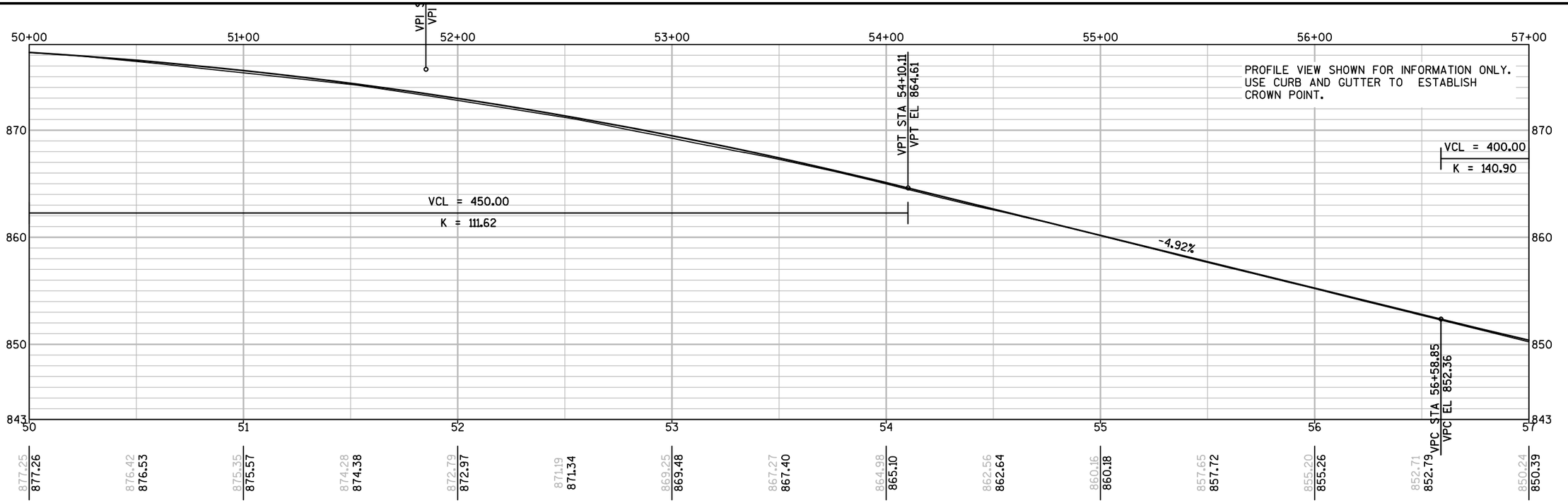
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTTING DATE : 3/14/2016 10:21 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

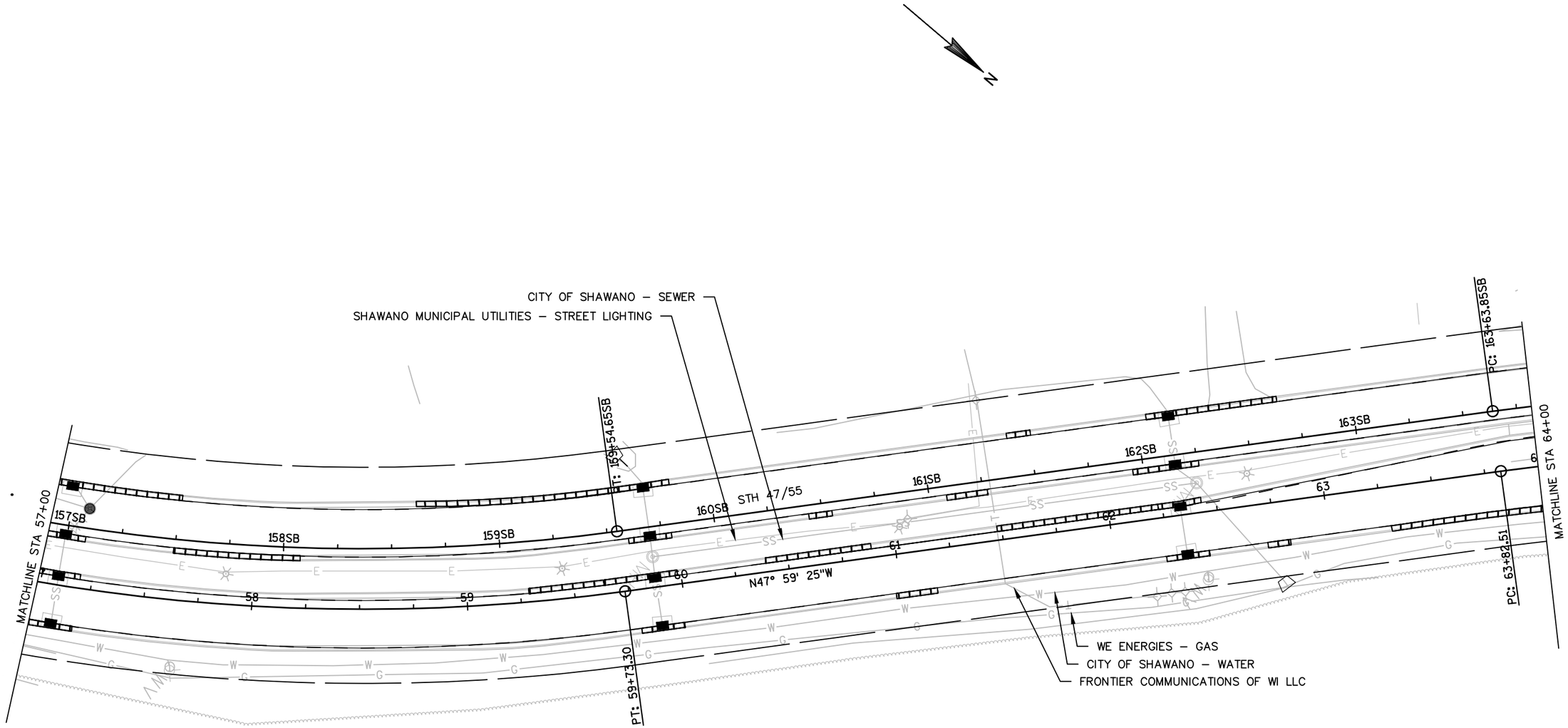
SOUTHBOUND PROFILE VIEW



NORTHBOUND PROFILE VIEW



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PROFILE	SHEET 132	E



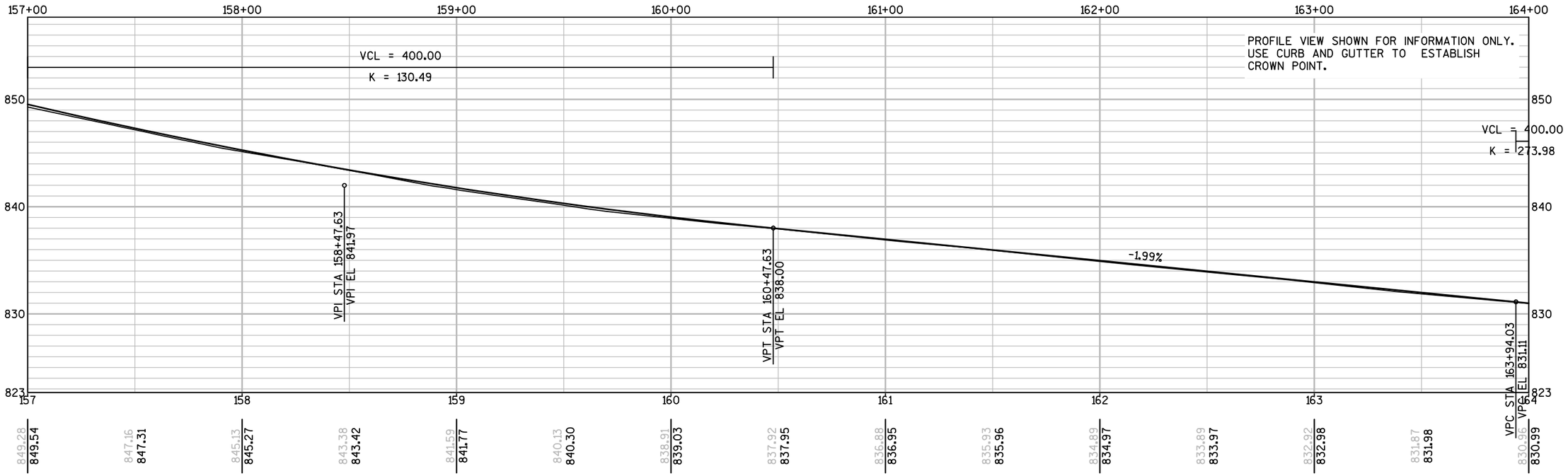
CURB AND GUTTER REPLACEMENT
ALL CURB AND GUTTER 30" TYPE D UNLESS OTHERWISE NOTED.

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PLAN	SHEET 133	E

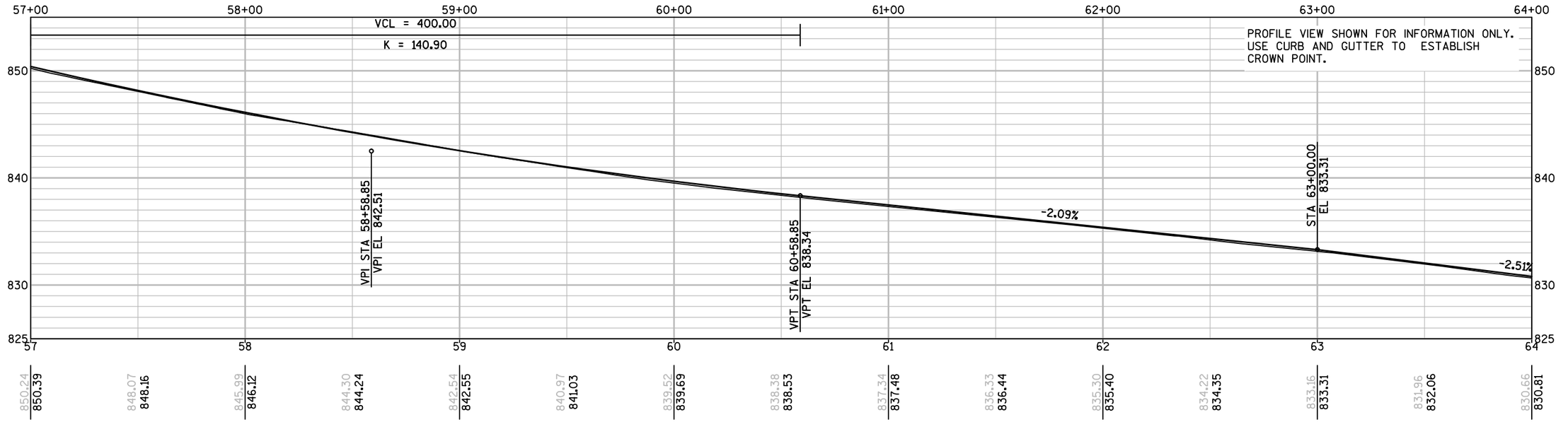
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:21 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

SOUTHBOUND PROFILE VIEW

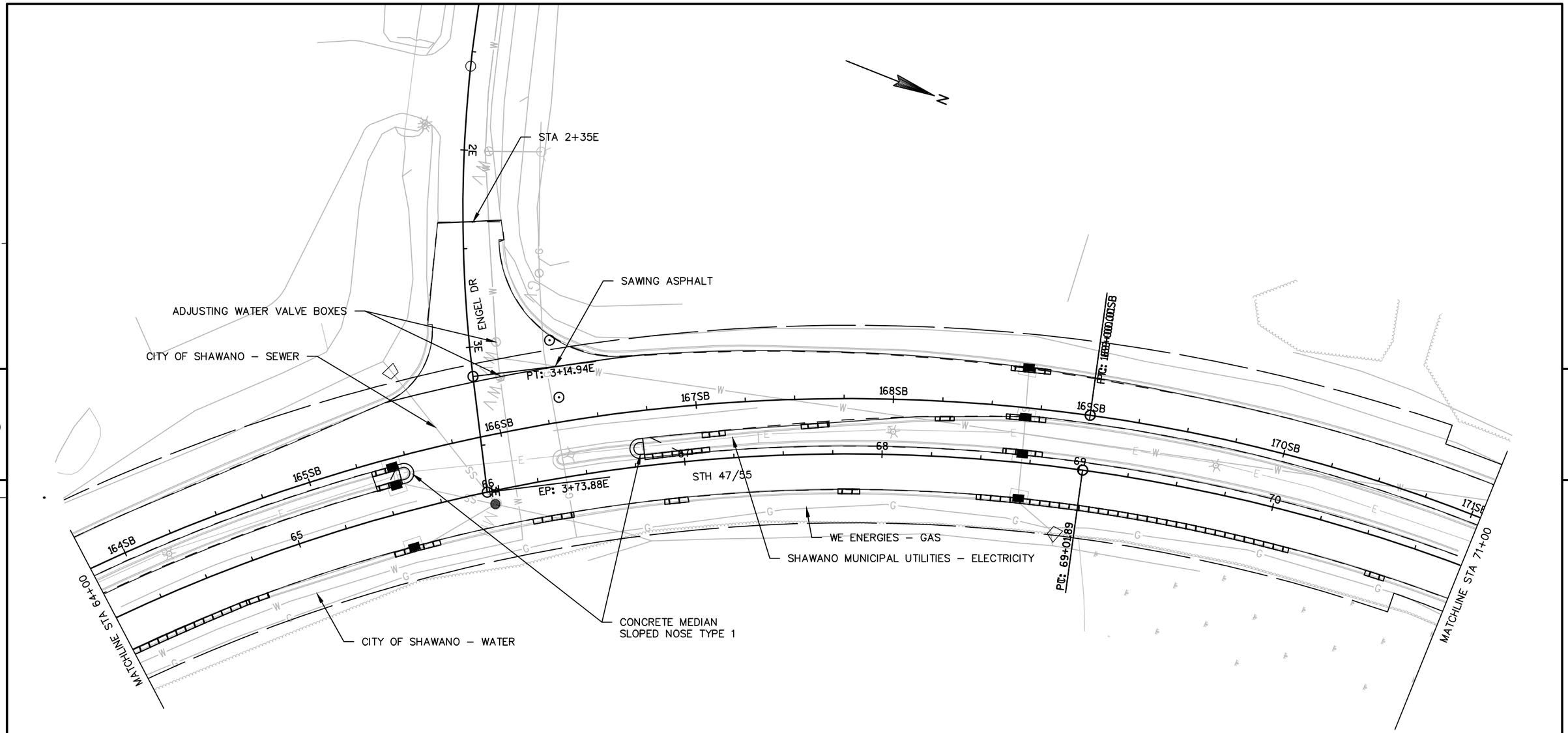


NORTHBOUND PROFILE VIEW



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PROFILE	SHEET 134	E

5

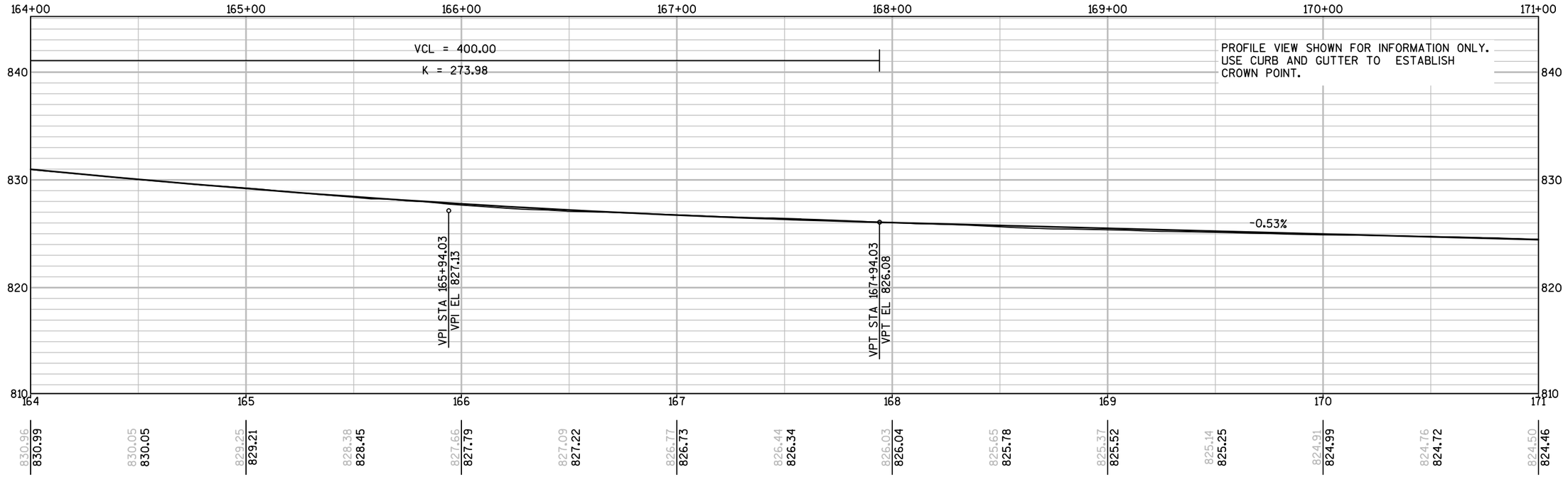


CURB AND GUTTER REPLACEMENT

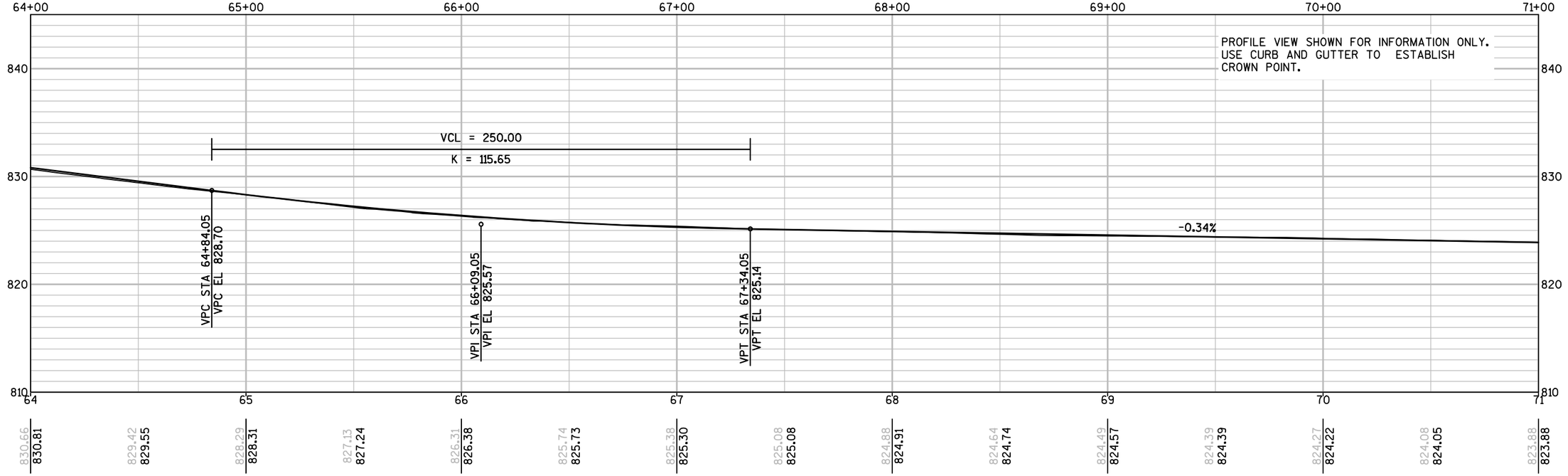
ALL CURB AND GUTTER 30" TYPE D UNLESS OTHERWISE NOTED.

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET 135	E

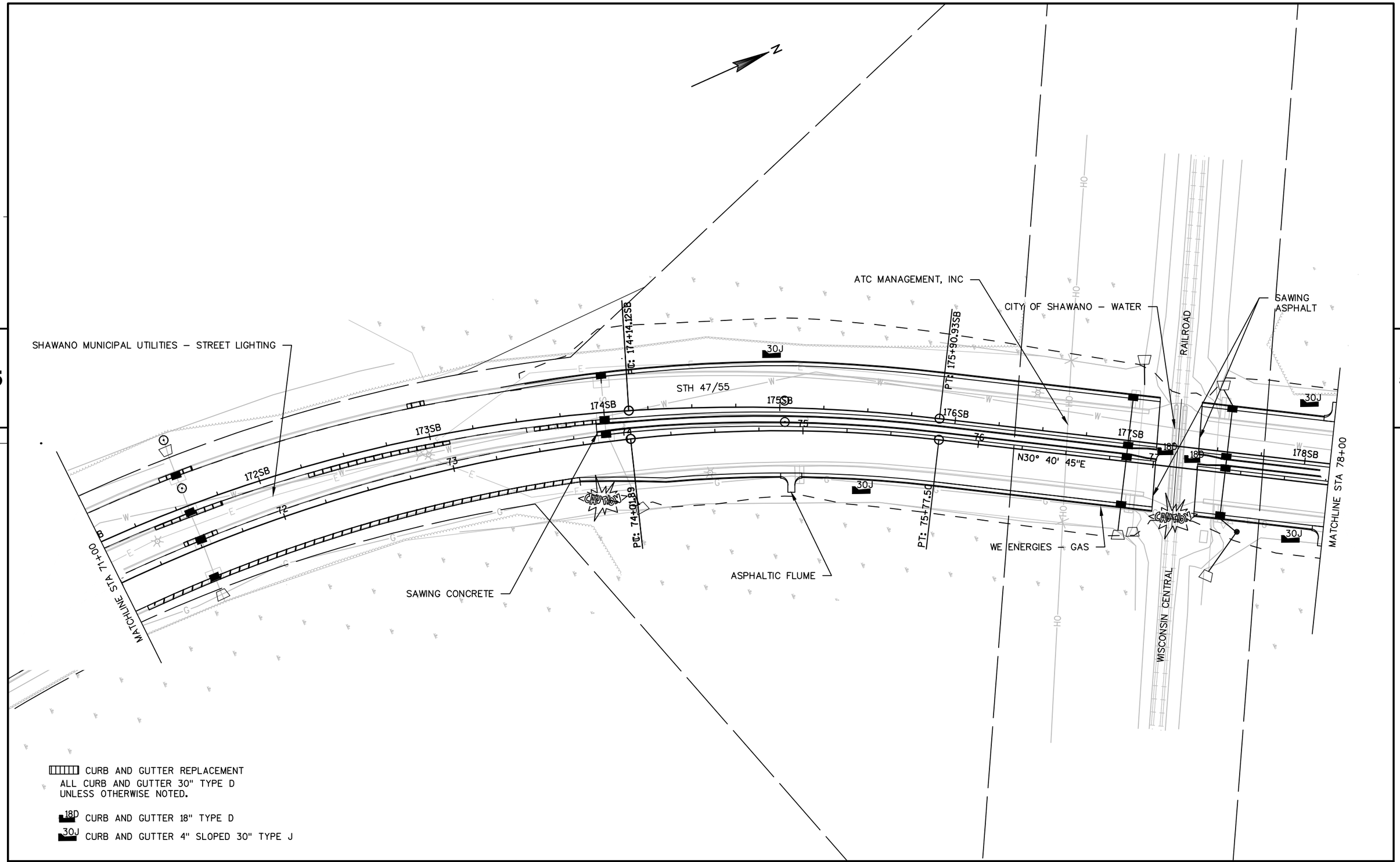
SOUTHBOUND PROFILE VIEW



NORTHBOUND PROFILE VIEW



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PROFILE	SHEET 136 E

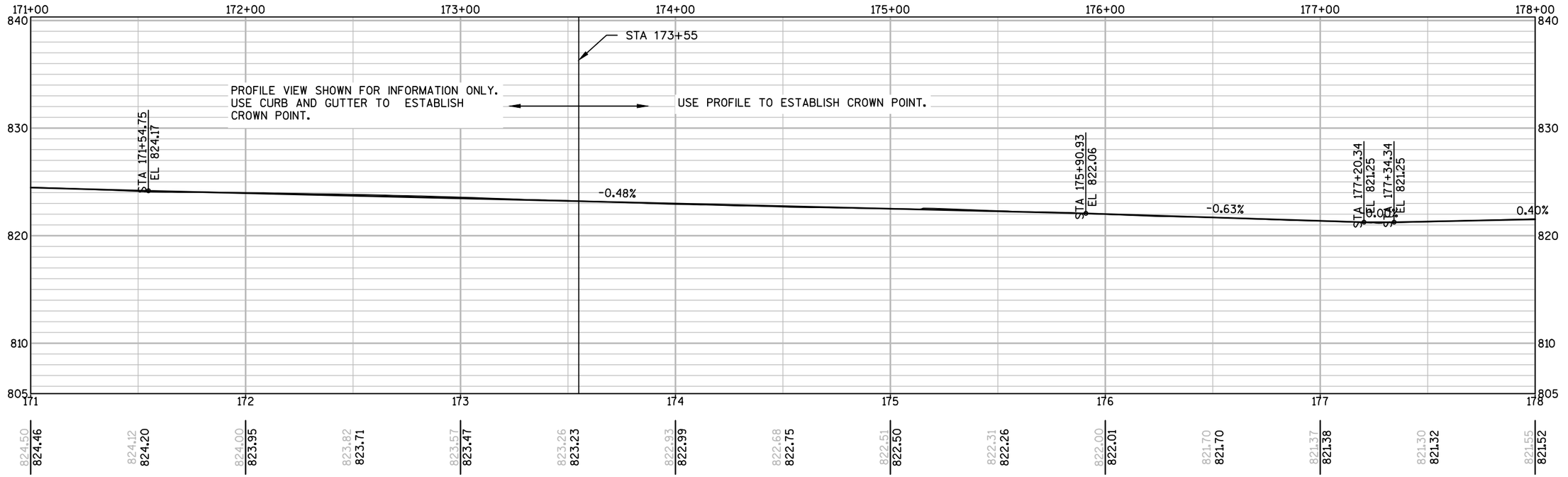


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PLAN	SHEET 137 E

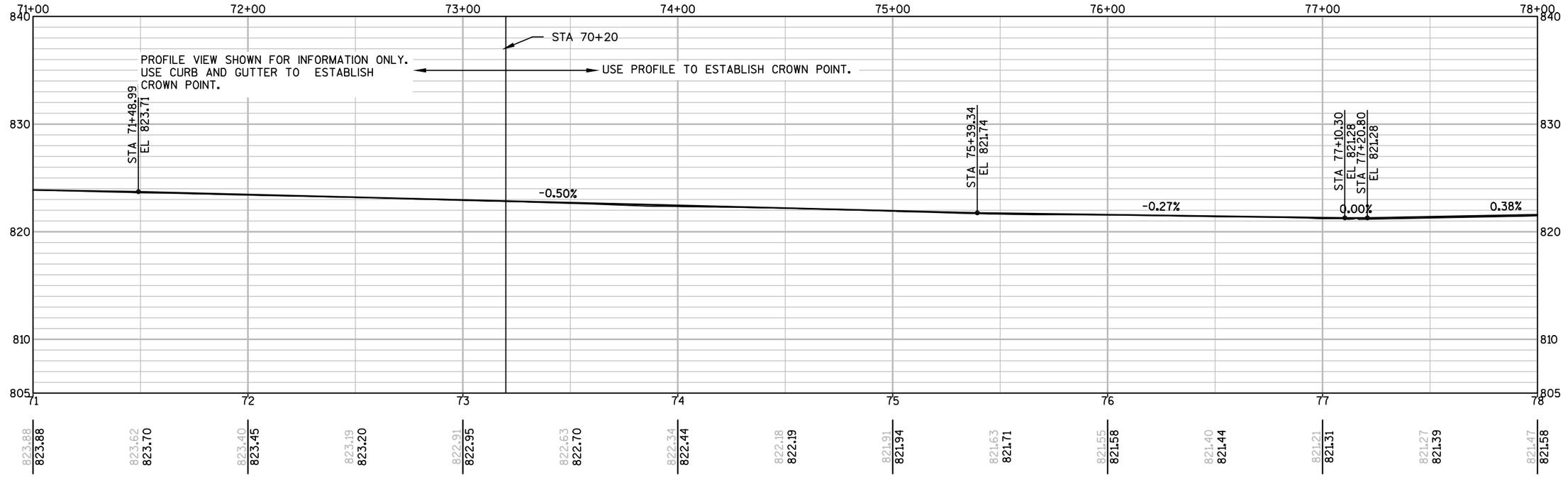
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:22 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

SOUTHBOUND PROFILE VIEW



NORTHBOUND PROFILE VIEW



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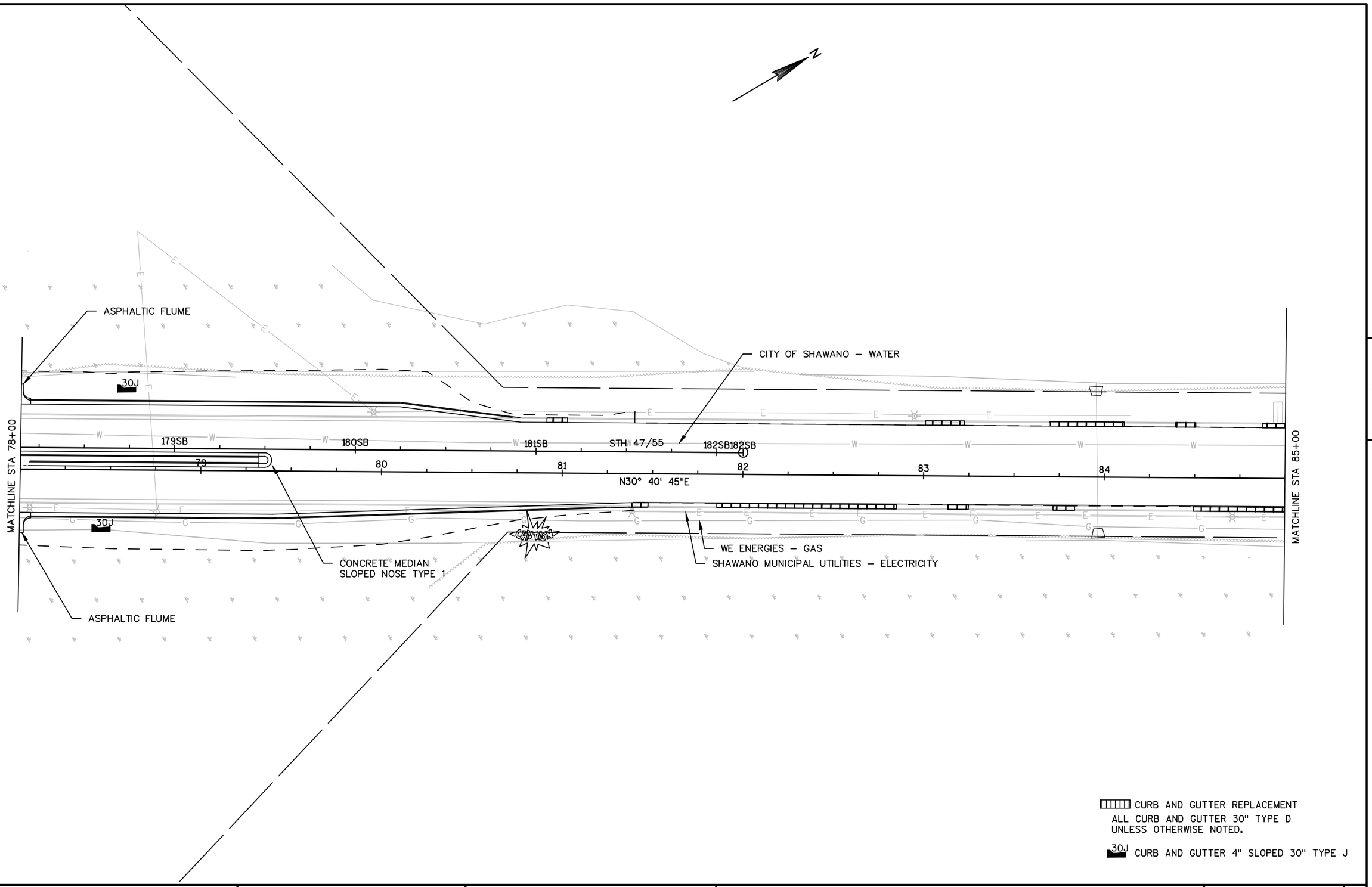

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47 PLAN	SHEET 139 E

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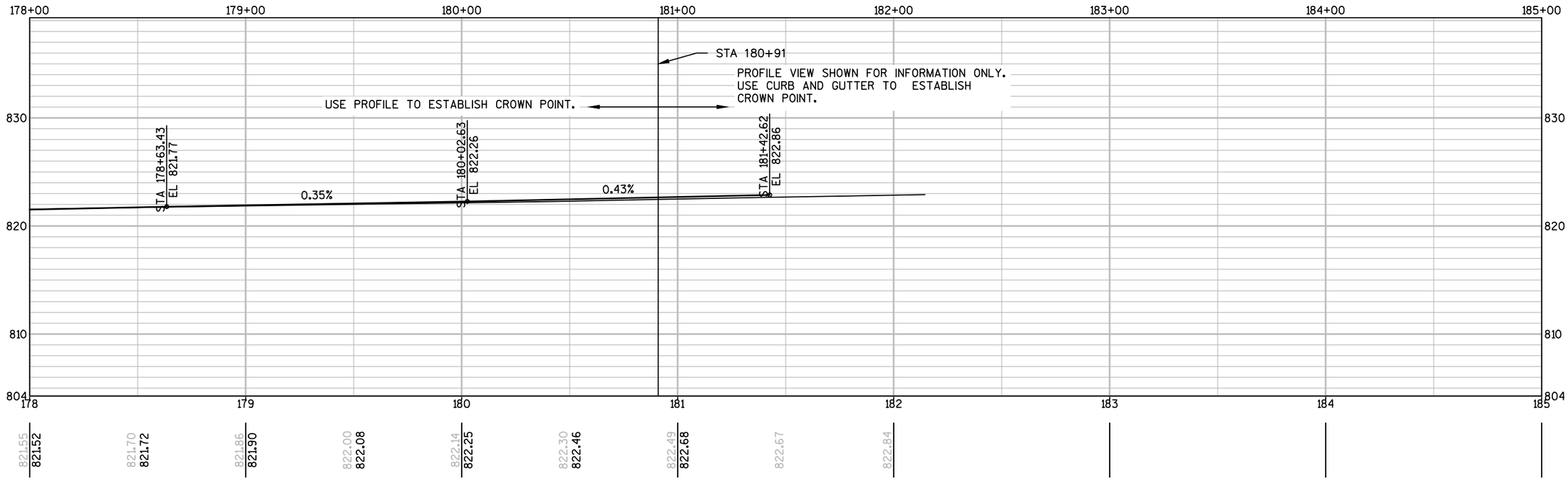
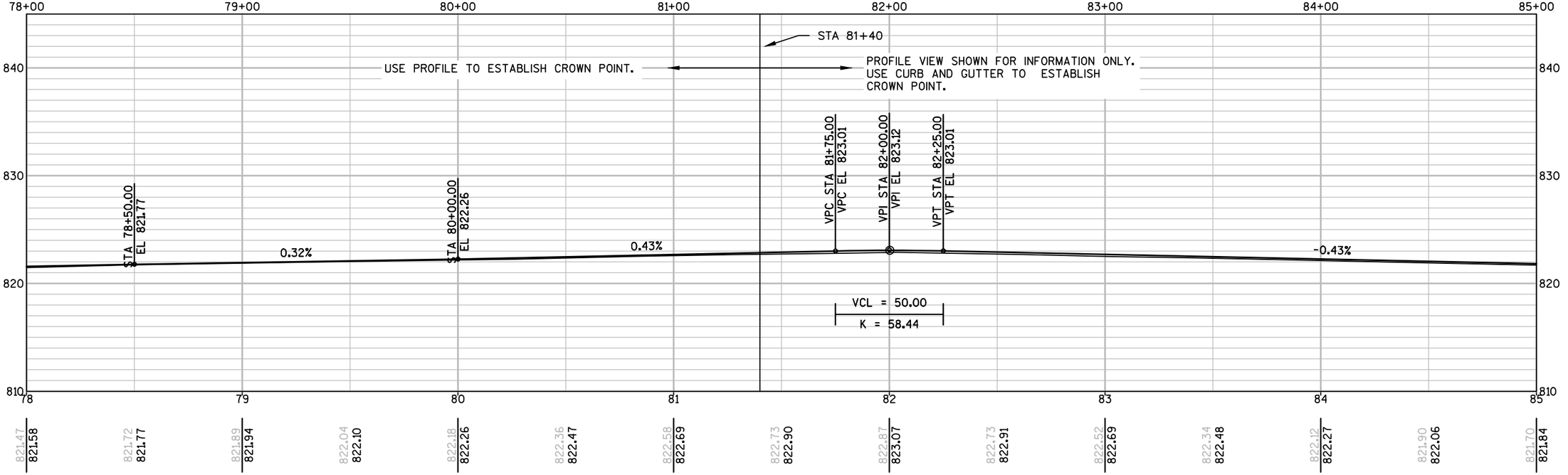
WISDOT/CADDS SHEET 44

SOUTHBOUND PROFILE VIEW



NORTHBOUND PROFILE VIEW



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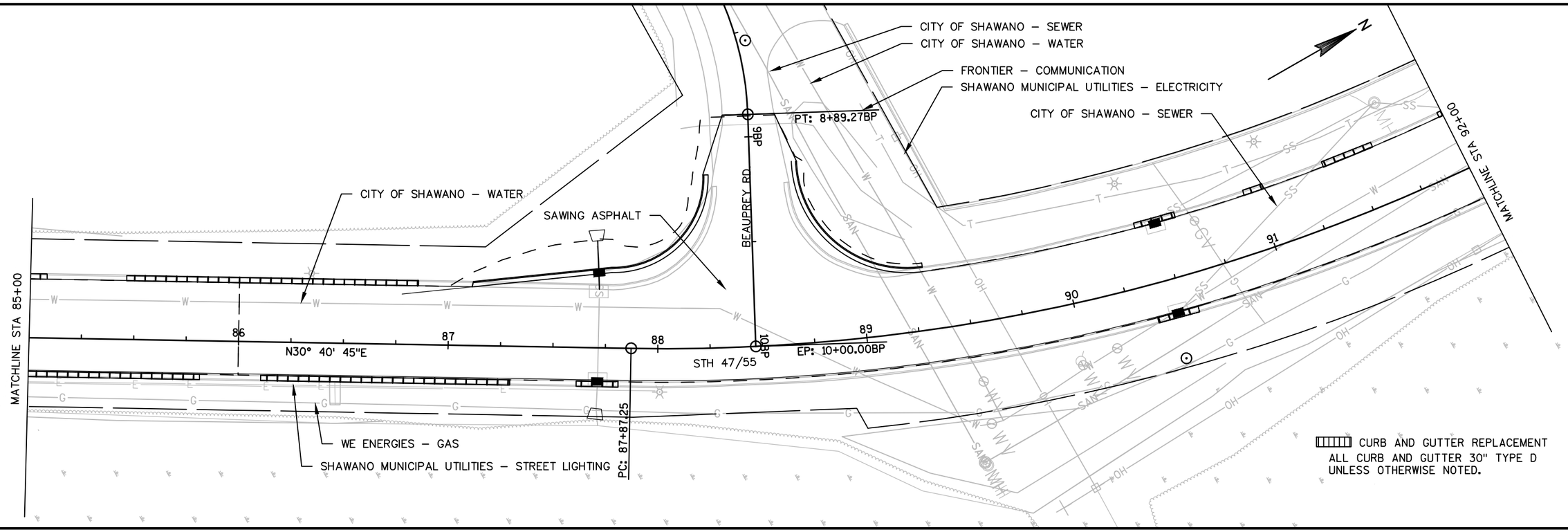
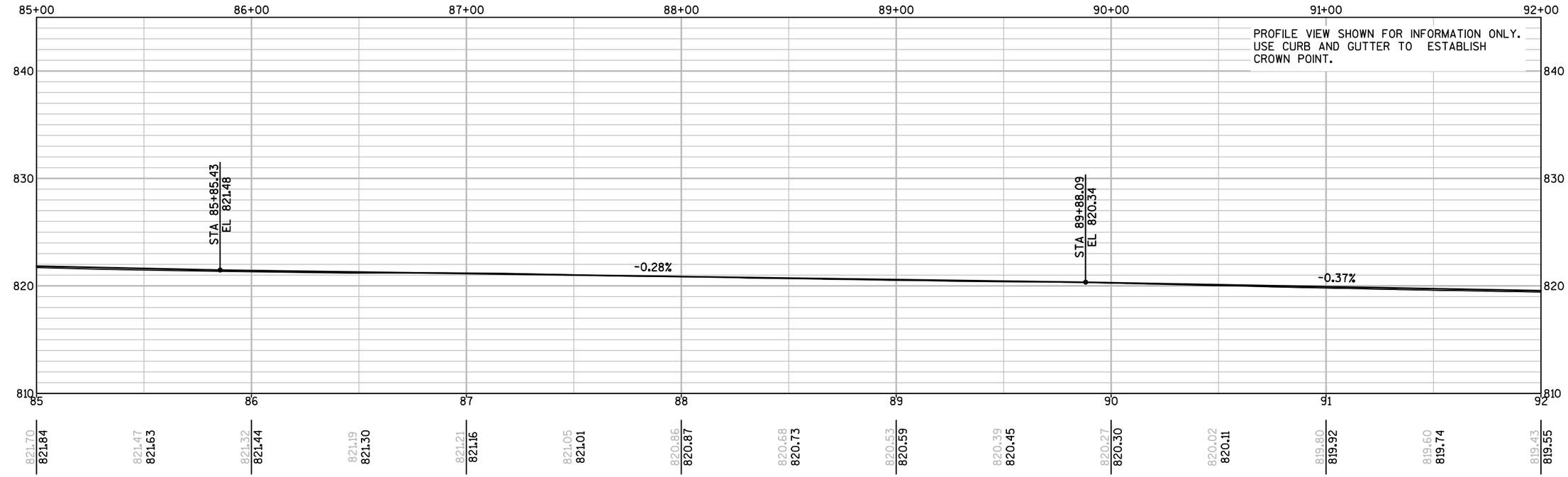
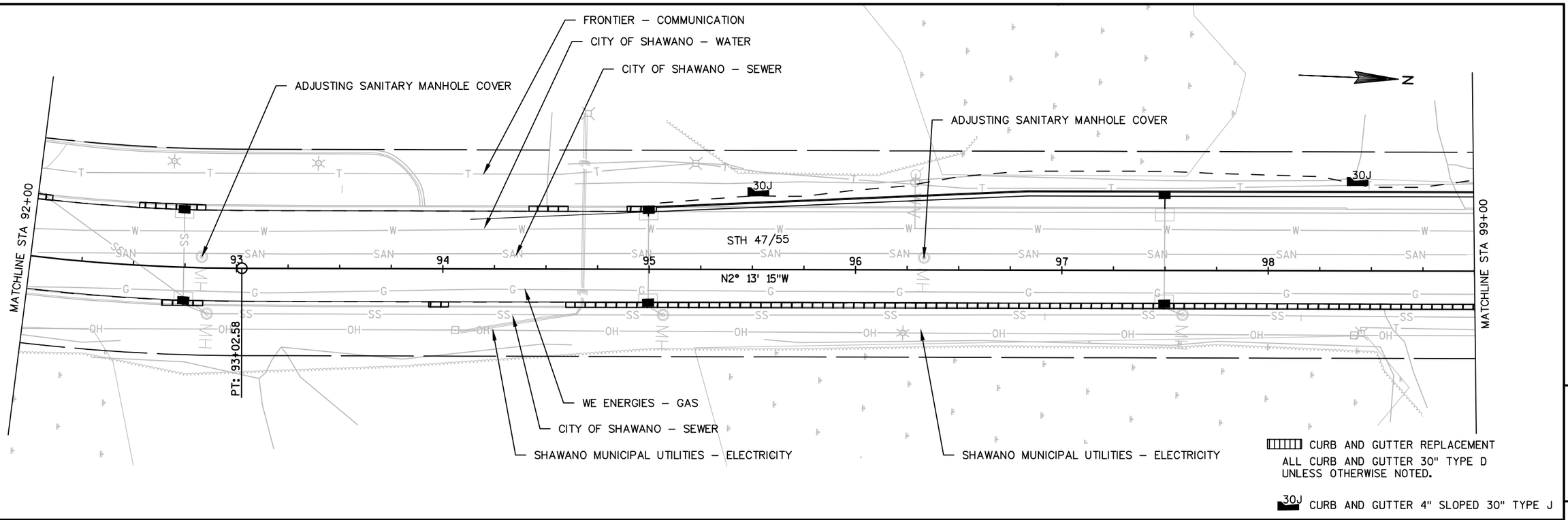
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:22 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : ############

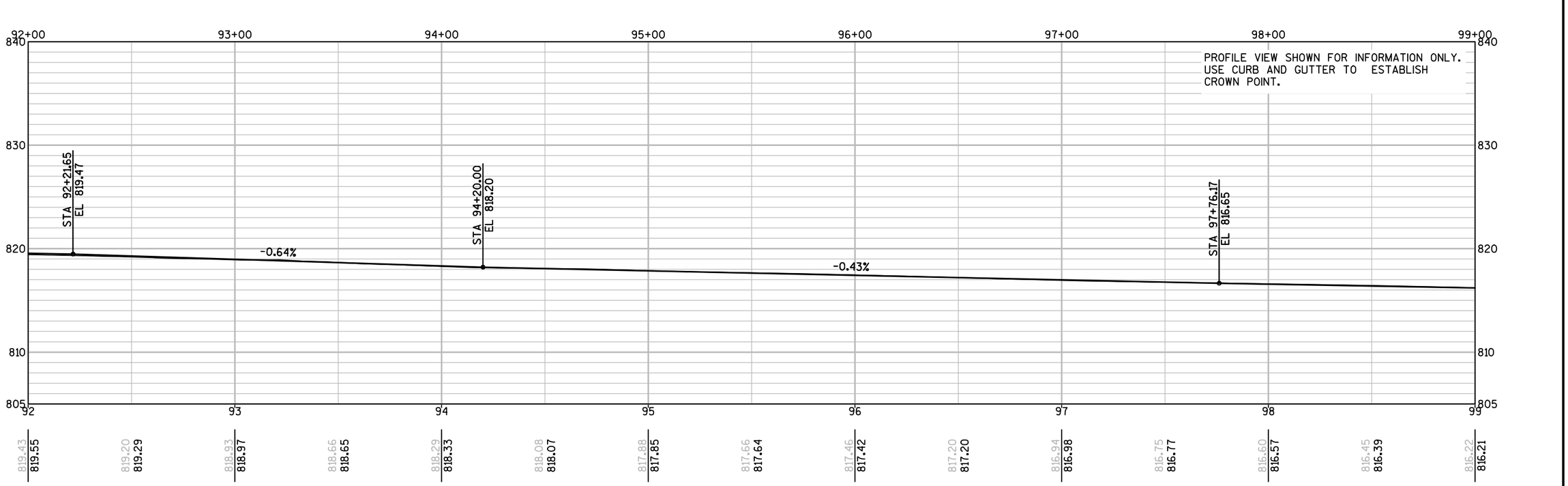
WISDOT/CADDS SHEET 44





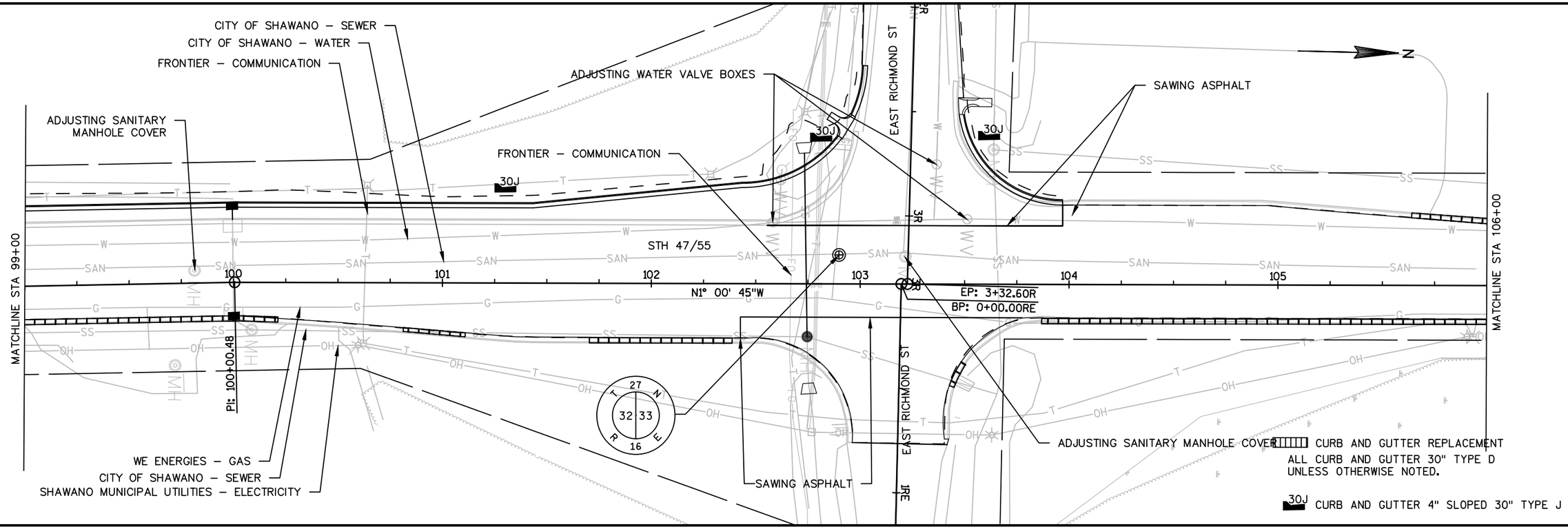
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET 141 E

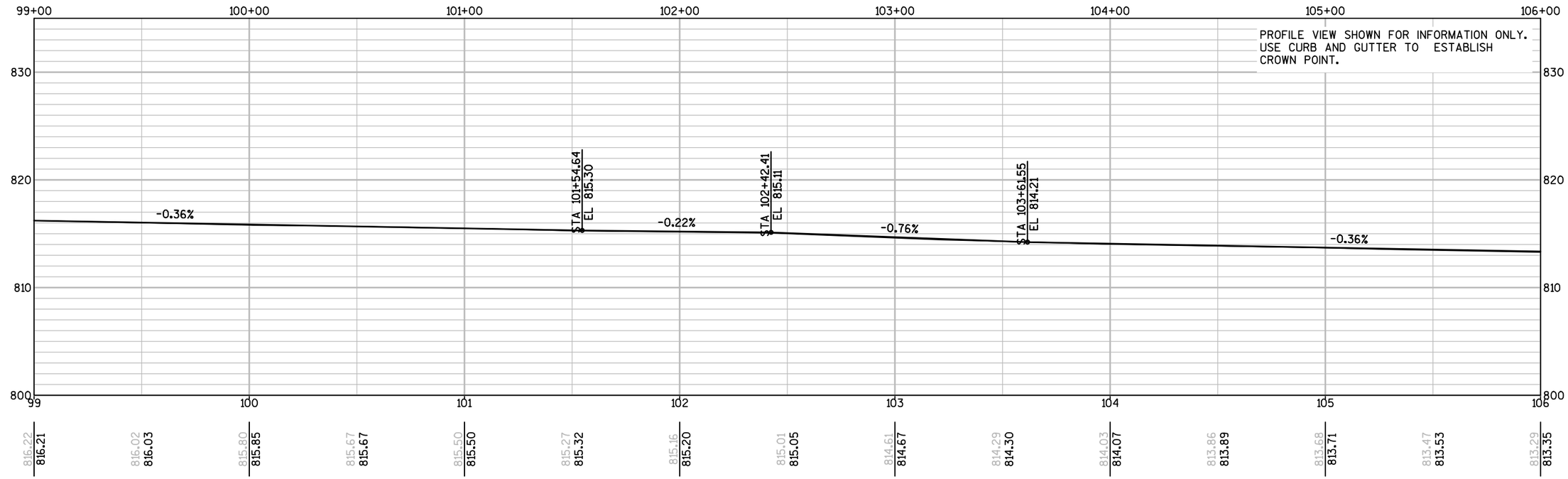




PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:22 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF
WISDOT/CADDS SHEET 44





PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET 143 E

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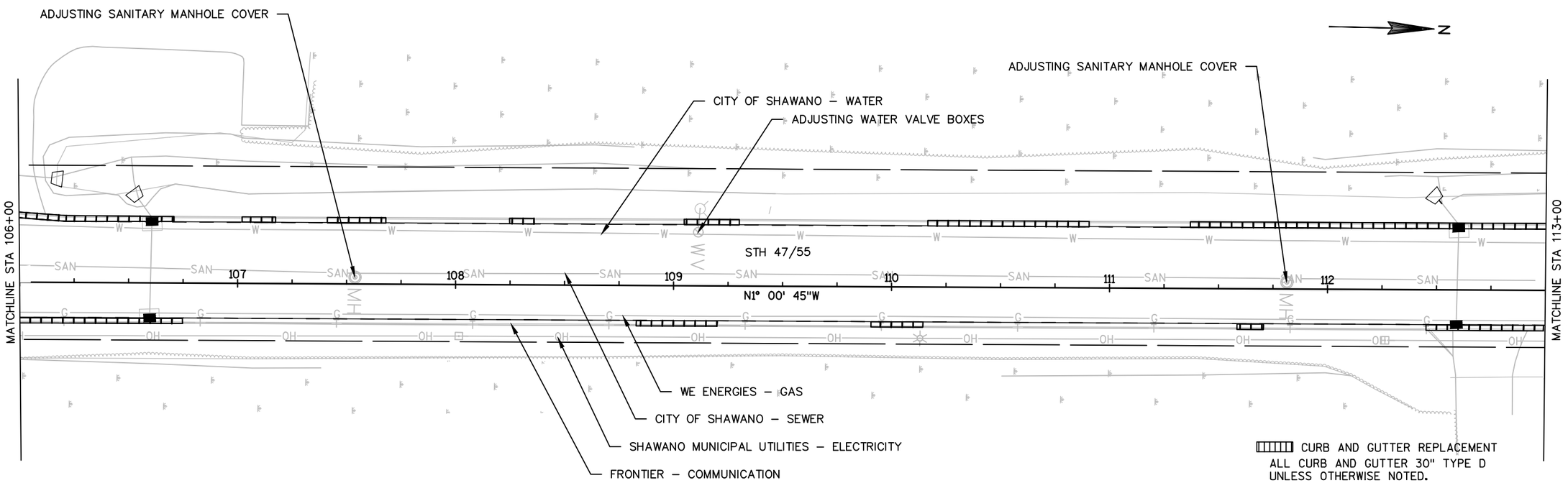
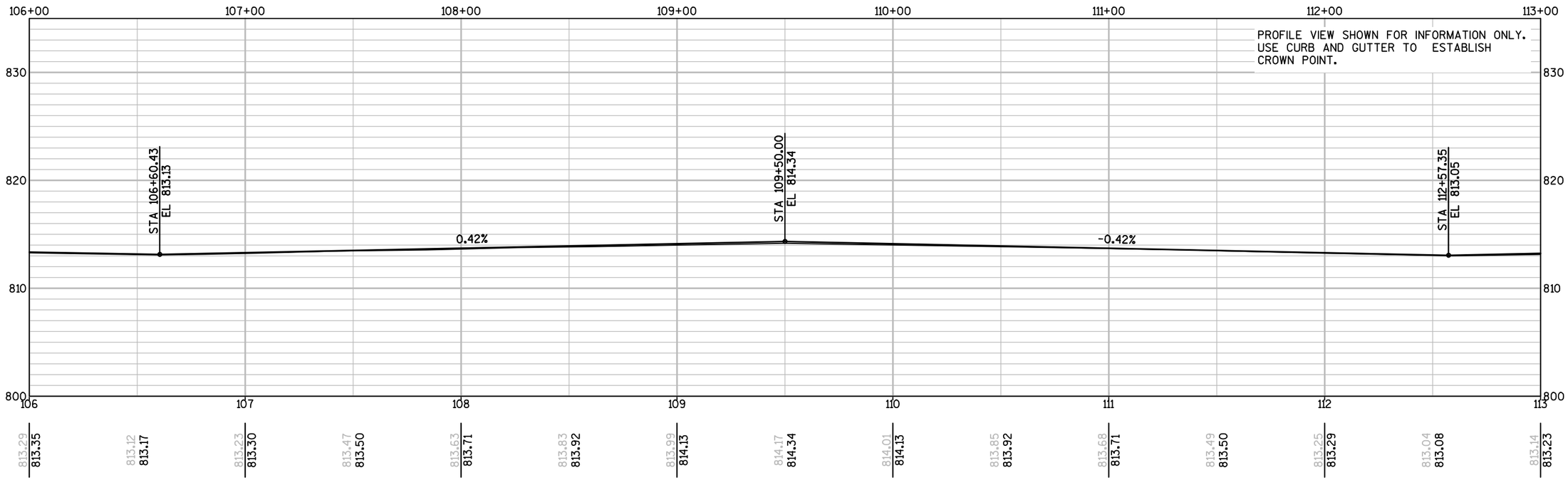
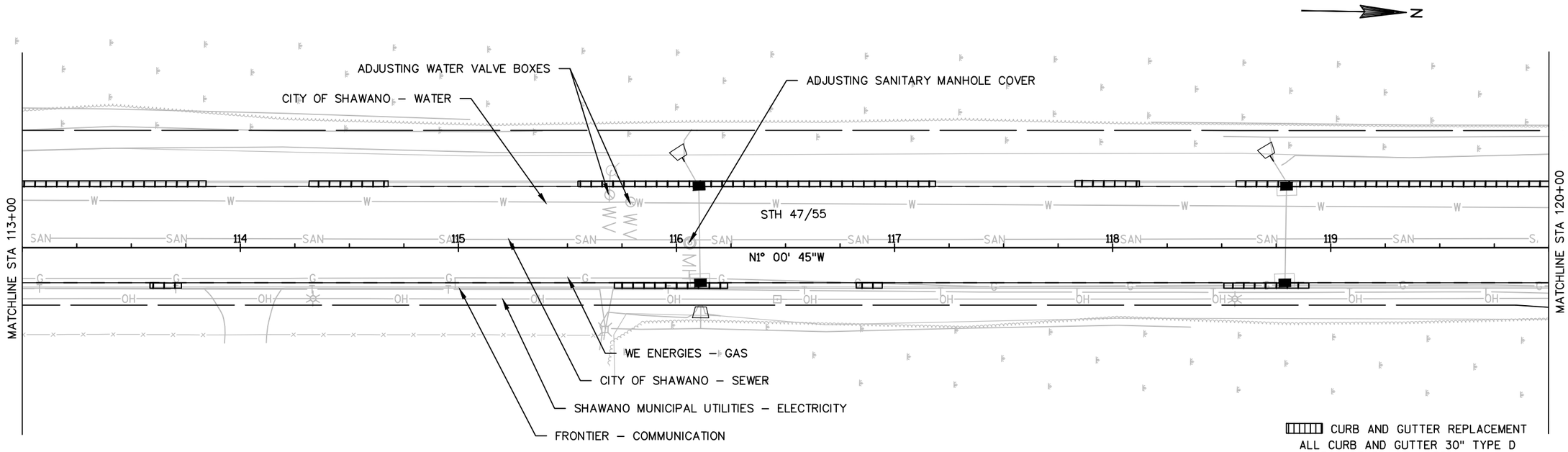
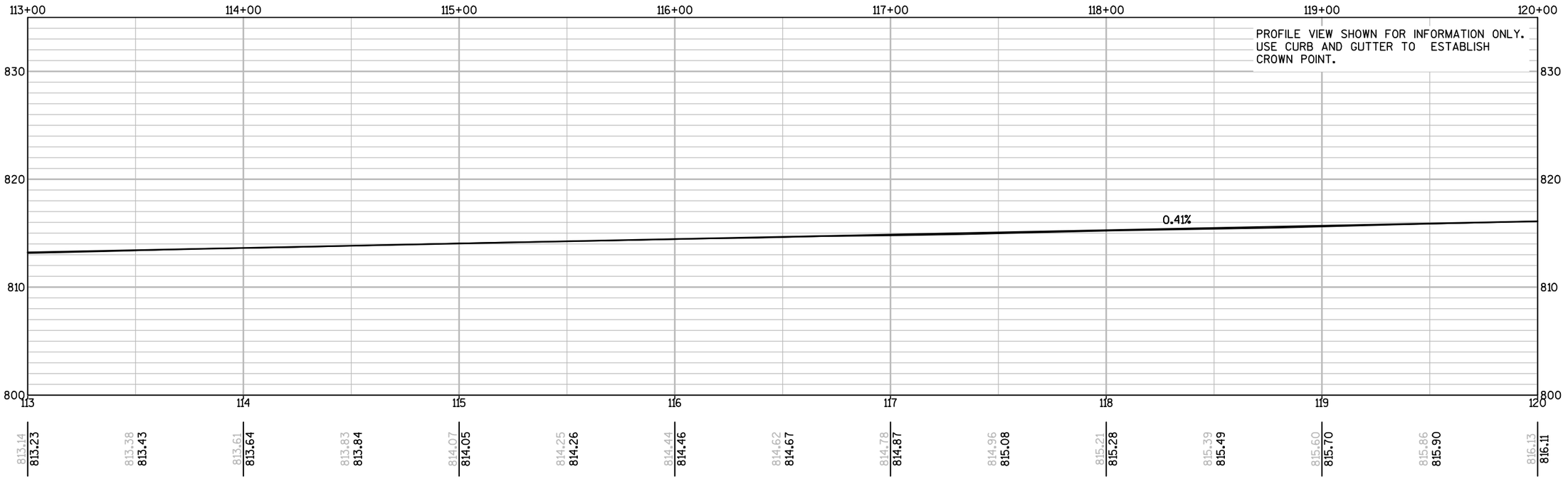




PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:22 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF
WISDOT/CADDS SHEET 44





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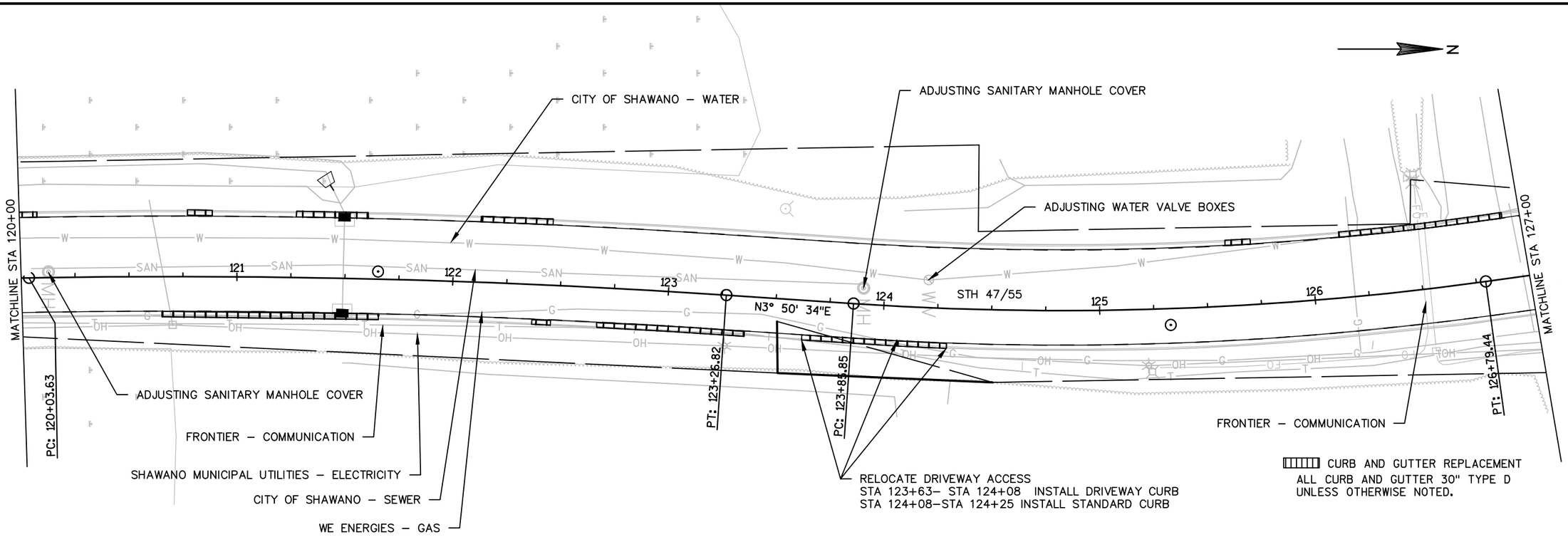
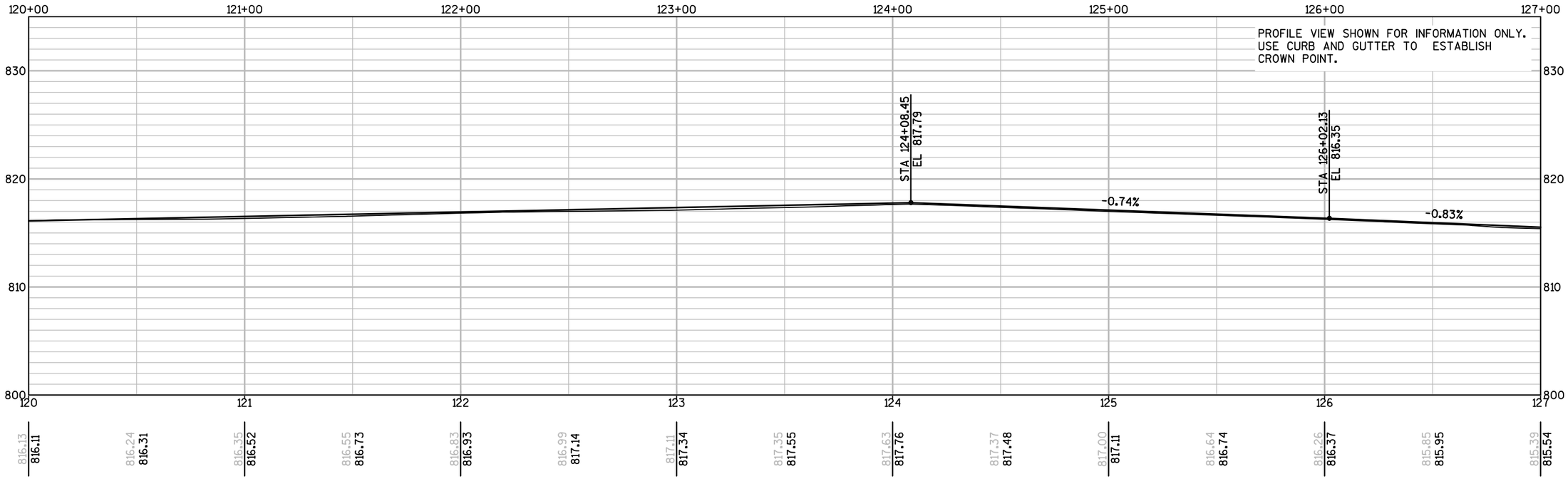
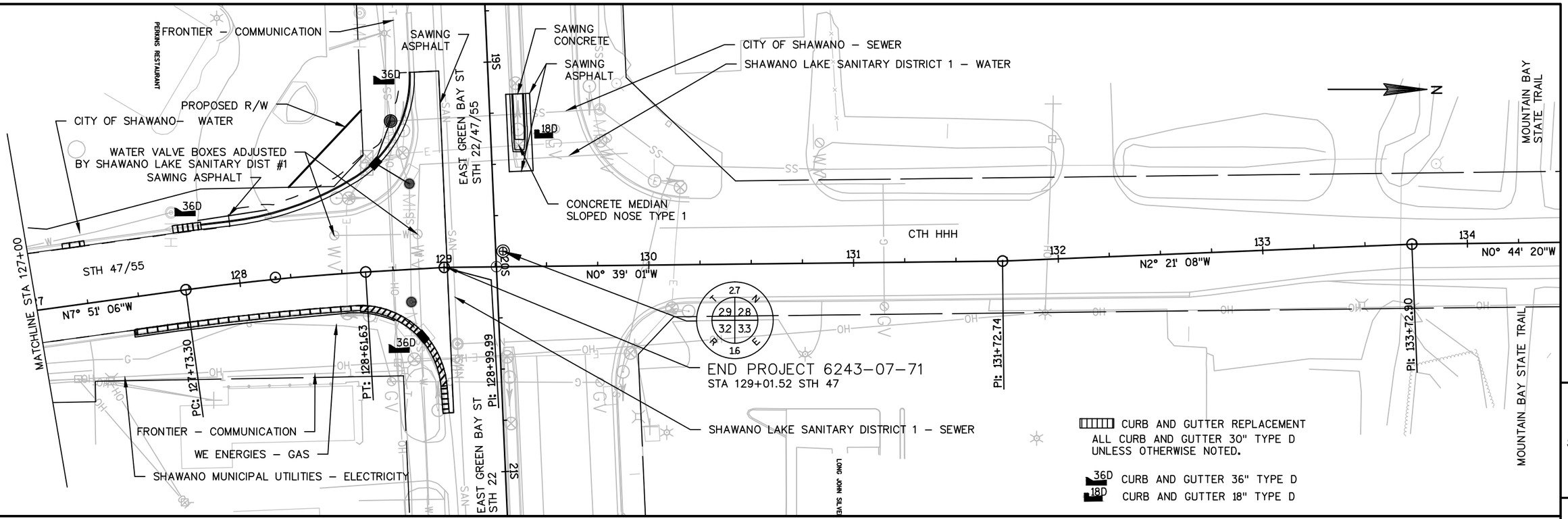
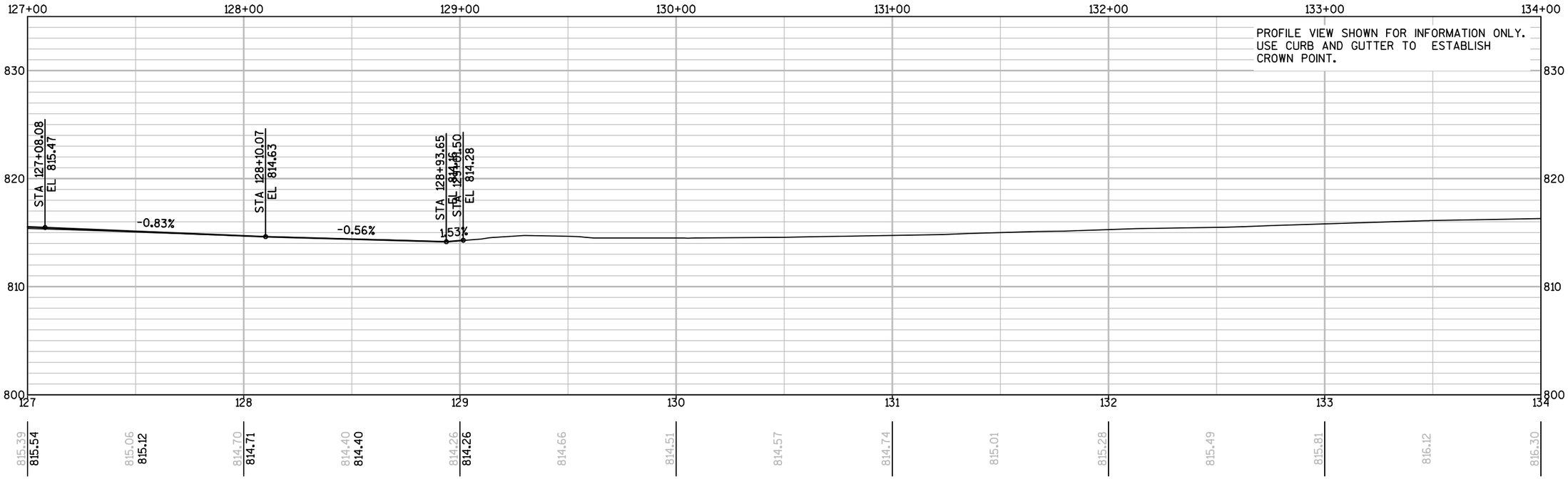




PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET 146 E





PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PLAN AND PROFILE: STH 47	SHEET 147 E

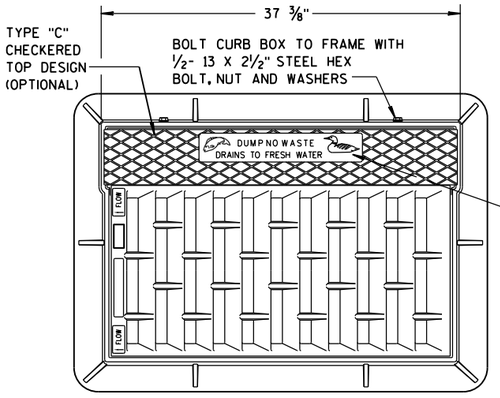
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\050101_PP_STH47_6243-07-70_COMBINED.DWG PLOTDATE : 3/14/2016 10:23 AM PLOT BY : QUEST CIVIL ENG PLOT NAME : PLOT SCALE : 1" = 50'_XREF

WISDOT/CADDS SHEET 44

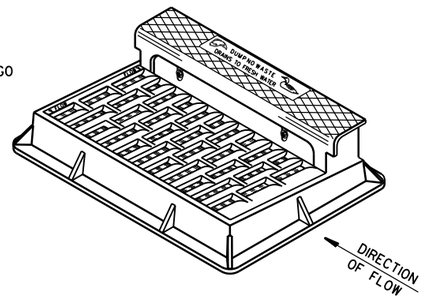
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D02-06	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-14A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
11B02-02	CONCRETE MEDIAN NOSE
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C09-09B	TRUCK STOPPING LANE PAVEMENT MARKINGS
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-03B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
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
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

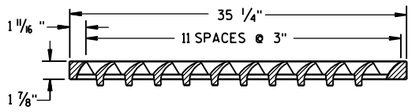
6

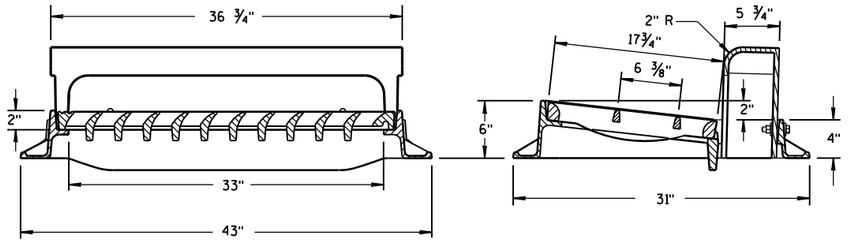


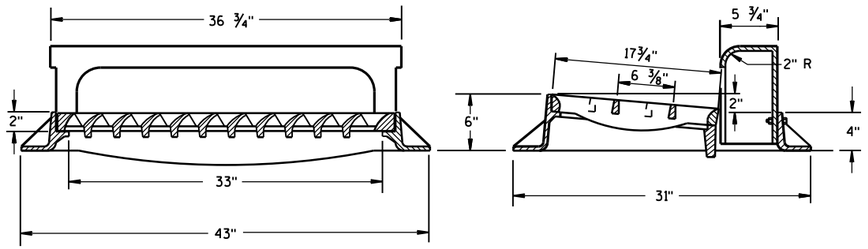
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

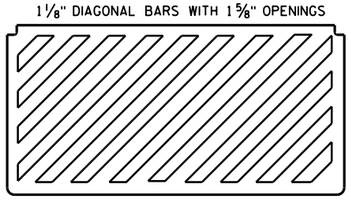






TYPE "H"

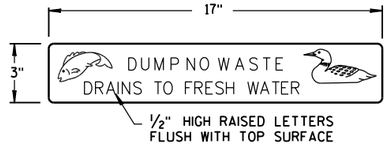
NOTE: EITHER CASTING IS ACCEPTABLE



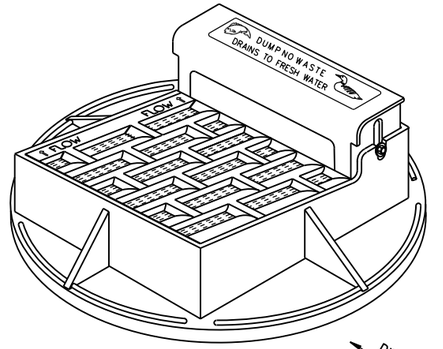
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

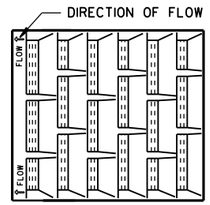


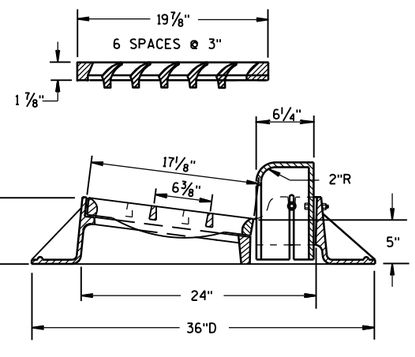
LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.





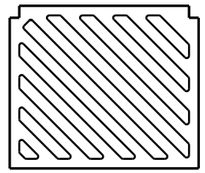
TYPE "A"

GENERAL NOTES

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

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

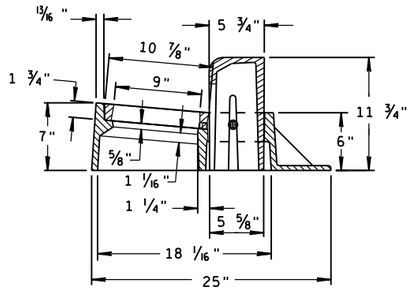
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

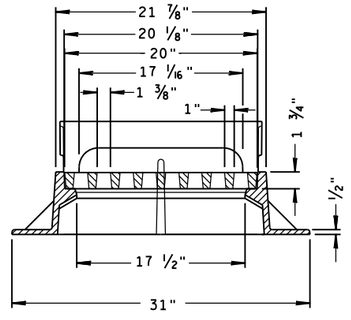


SPECIAL GRATE FOR TYPE "A" COVER

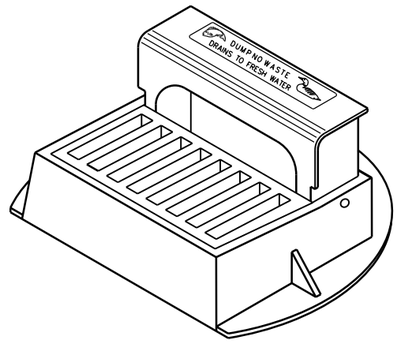
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



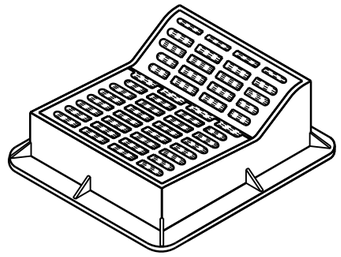
INLET COVERS TYPE A, H, A-S, H-S & Z

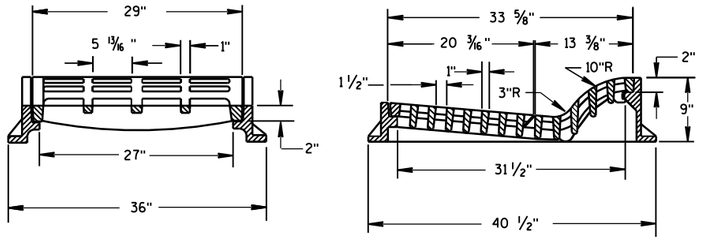
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

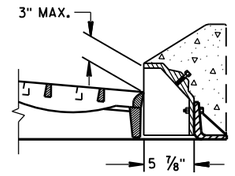
S.D.D. 8 A 5-19a





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

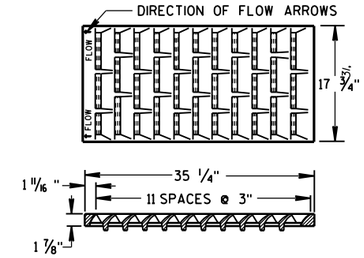
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

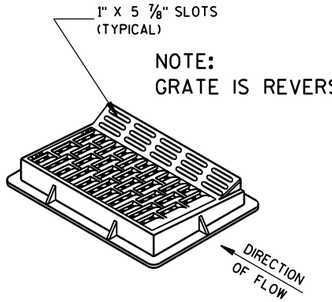
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

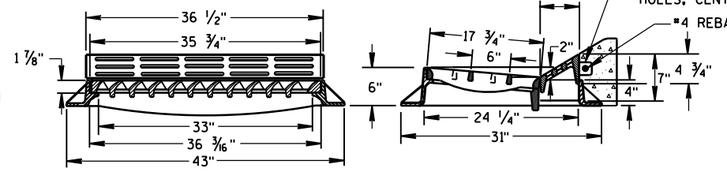
GENERAL NOTES

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

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



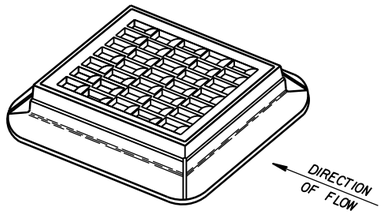


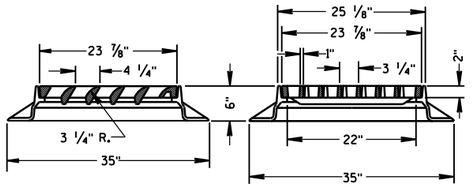


TYPE "HM"

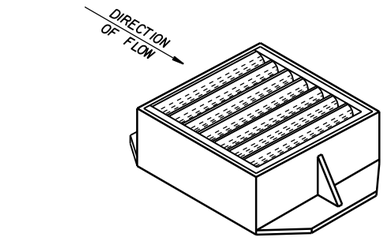
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

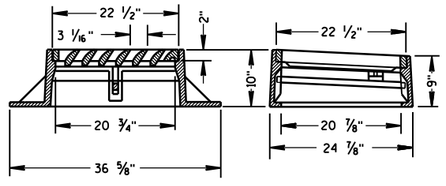
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



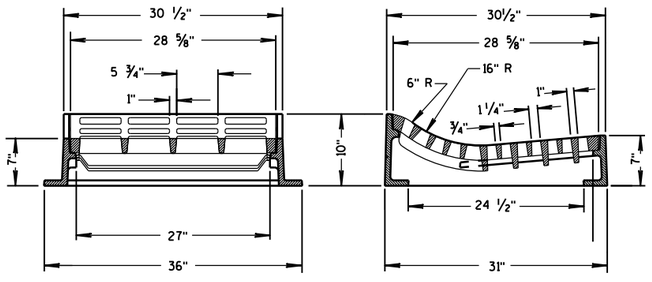


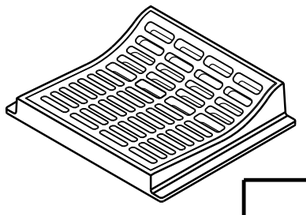
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

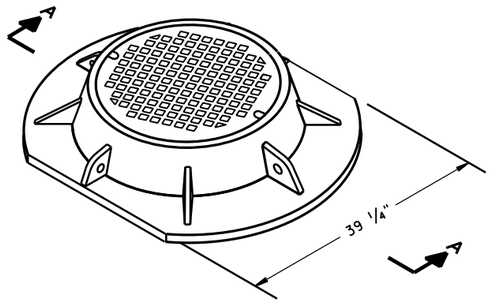
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

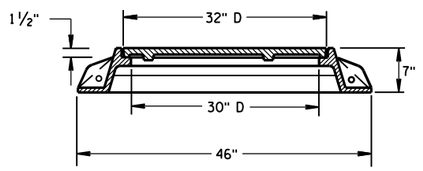
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

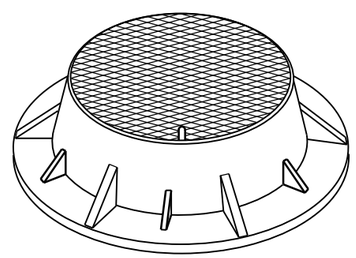
FHWA

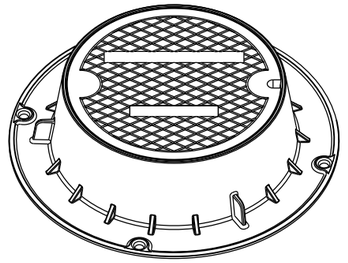
6
S.D.D. 8 A 5-19c

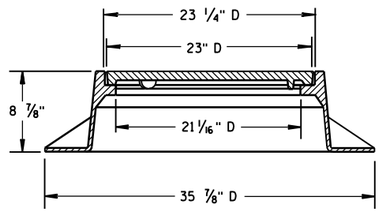


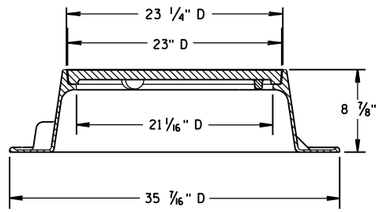


SECTION A-A
TYPE "K"









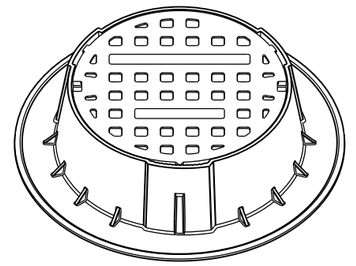
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

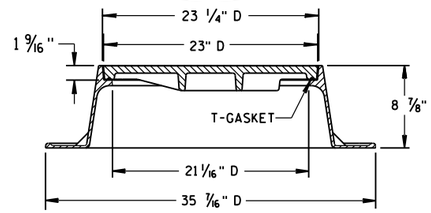
GENERAL NOTES

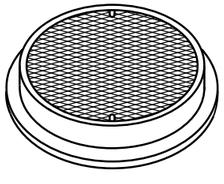
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

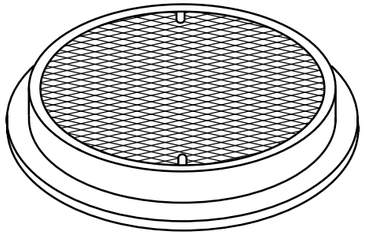
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

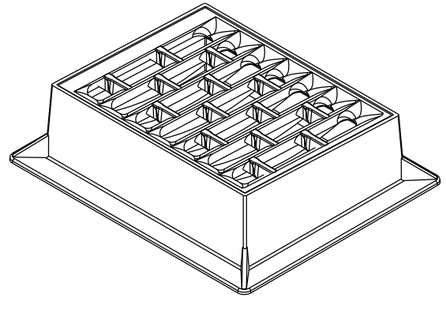
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

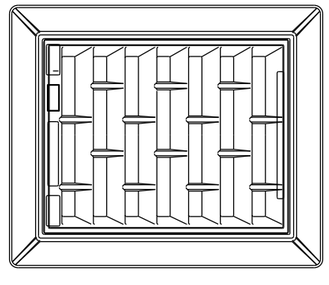


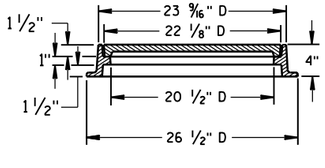




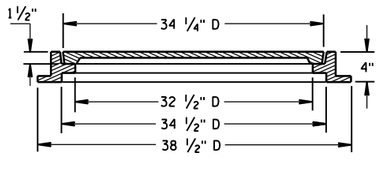




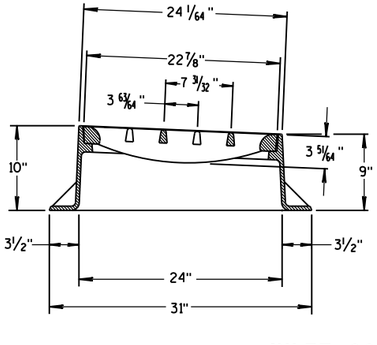


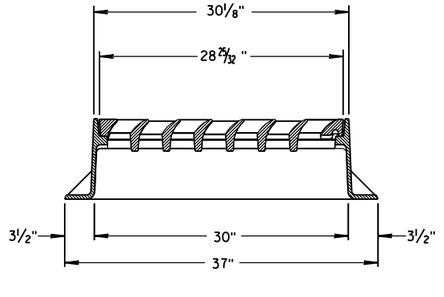


TYPE "L"

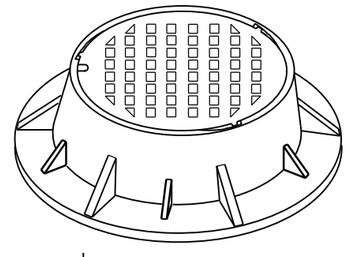


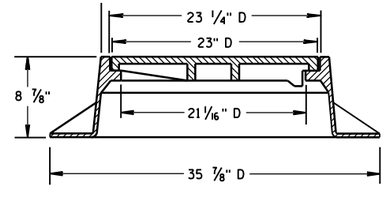
TYPE "M"





INLET COVER TYPE "BW"





TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE

INLET COVER TYPE BW MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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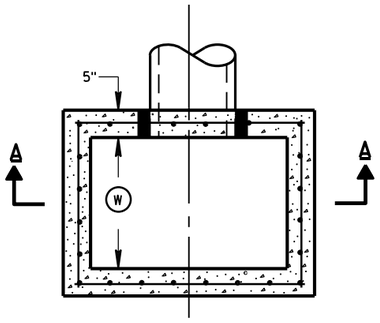
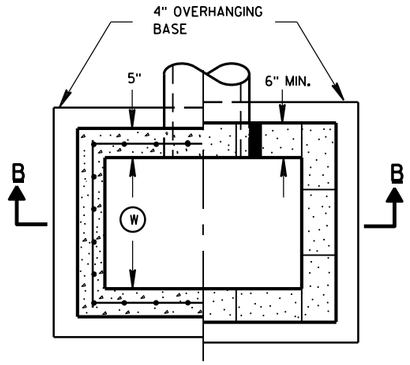
S.D.D. 8 A 5-19d

6

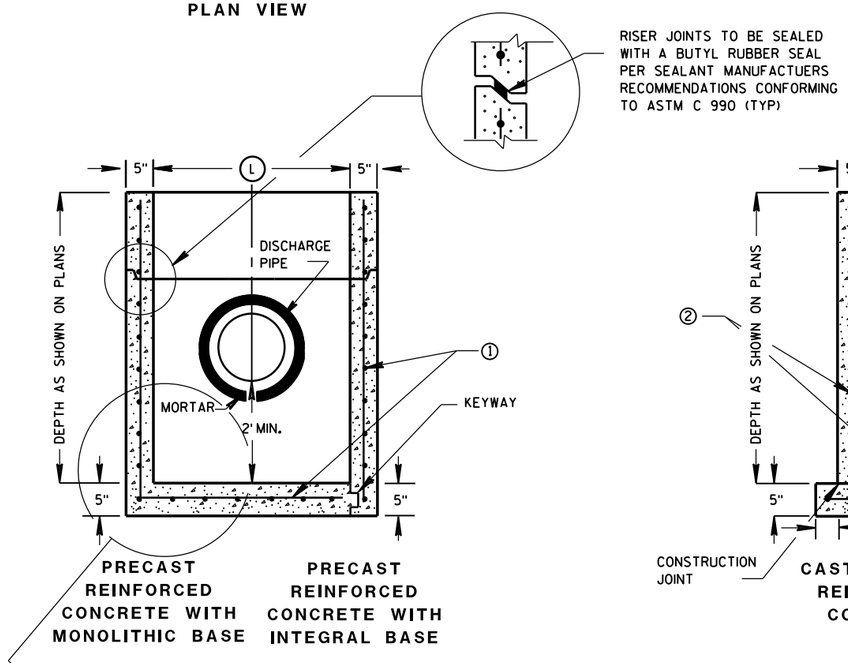
S.D.D. 8 A 5-19d



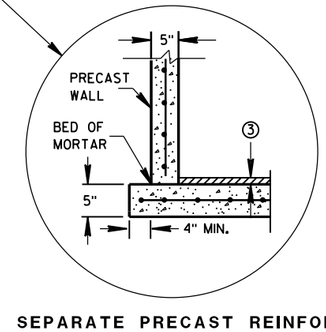
PLAN VIEW



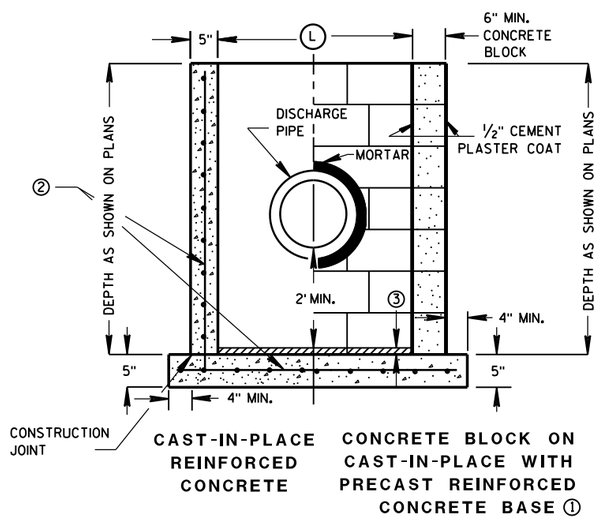
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

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

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

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

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

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

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

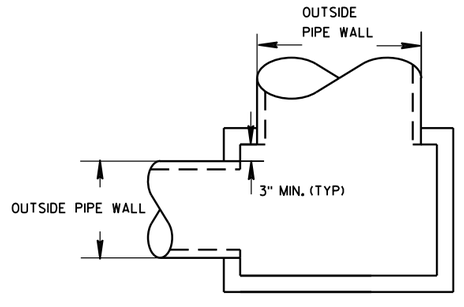
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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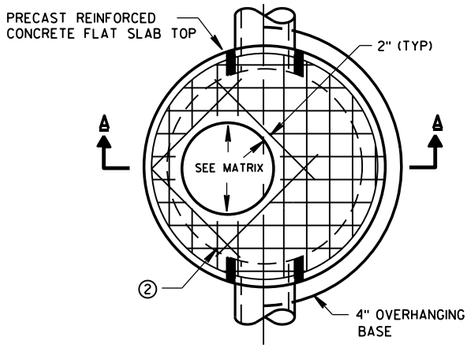
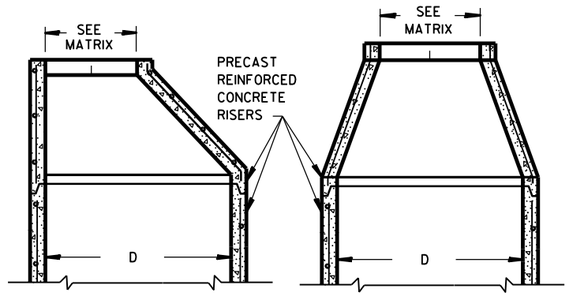
S.D.D. 8 A 9-1

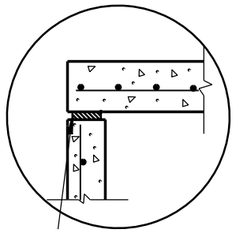


PLAN VIEW CIRCULAR OPENING

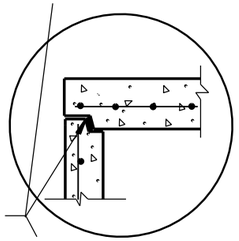


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

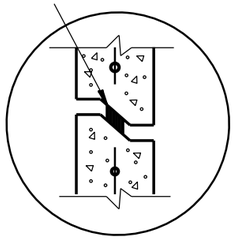


TOP WITH PLAIN END JOINT



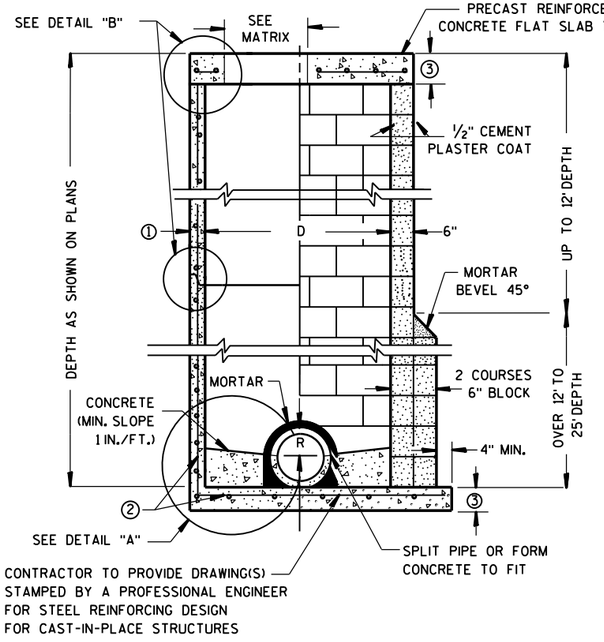
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



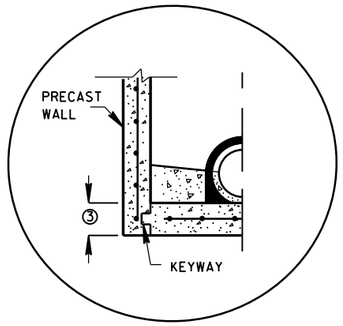
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

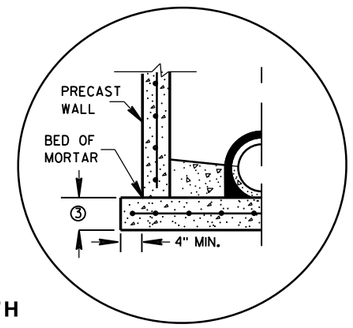


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

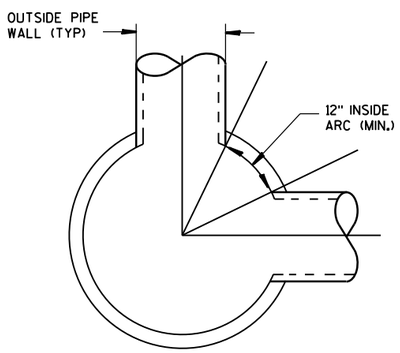


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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

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

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

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

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

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

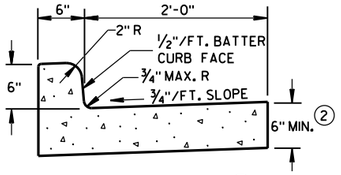
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

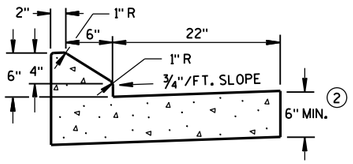
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

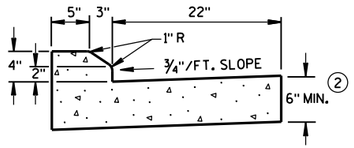
6
S.D.D. 8 B 9-1



TYPES A & D ①

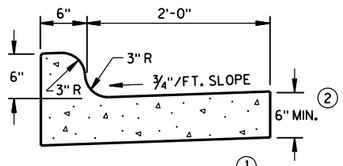


6" SLOPED CURB TYPES G & J ①

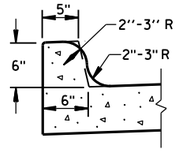


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

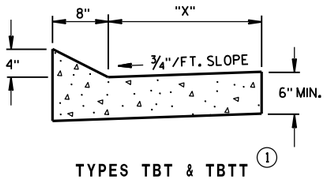


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

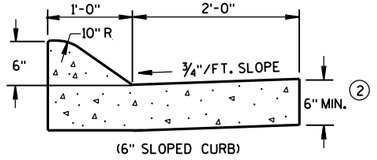
CONCRETE CURB & GUTTER 30"



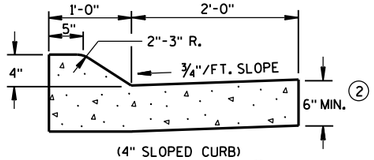
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

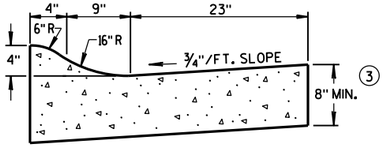


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

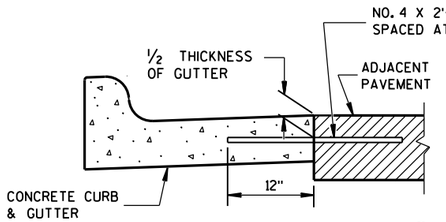
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

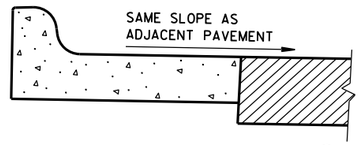
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

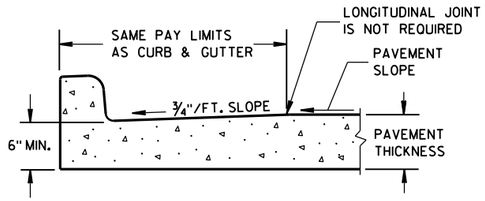
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



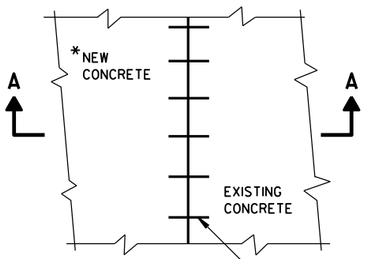
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

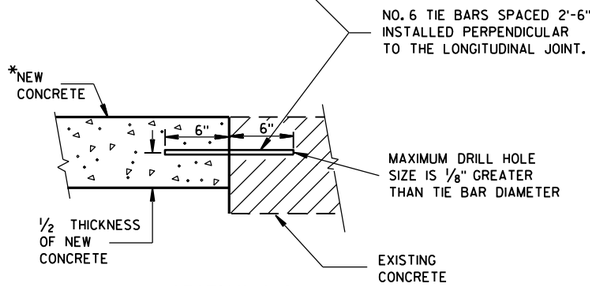


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



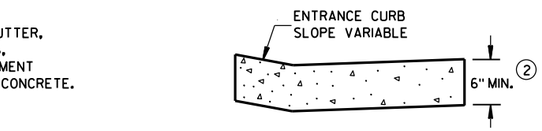
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

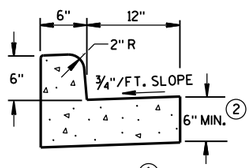


SECTION A-A

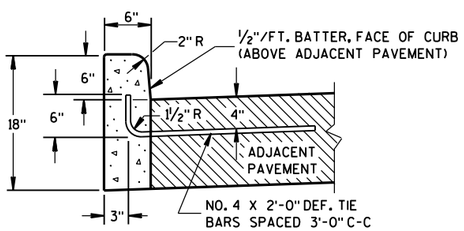
TIE BARS DRILLED
INTO EXISTING PAVEMENT



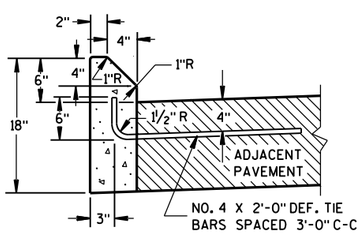
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



①
TYPES A & D
CONCRETE CURB & GUTTER 18"

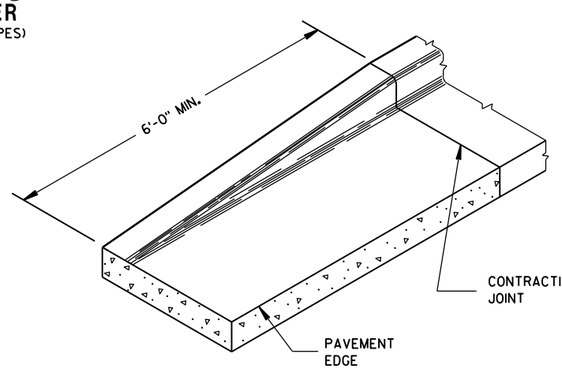


① TYPES A & D



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

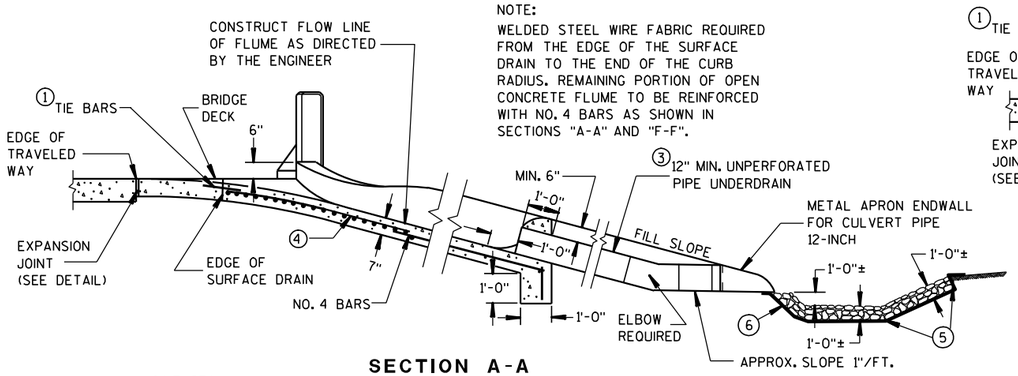
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

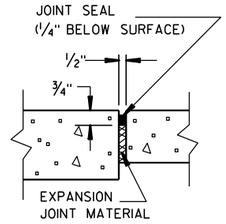
S.D.D. 8 D 1-18

6

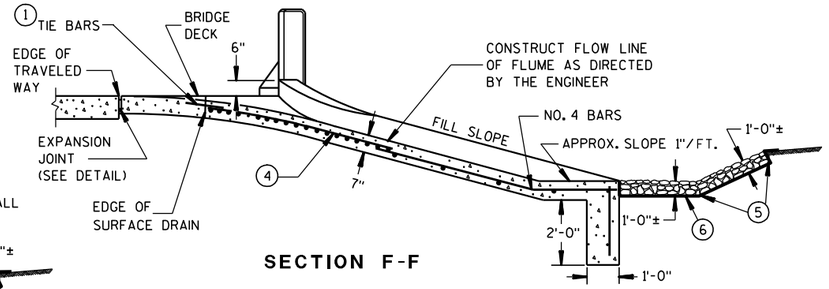
S.D.D. 8 D 1-18



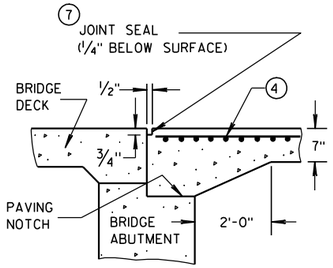
SECTION A-A



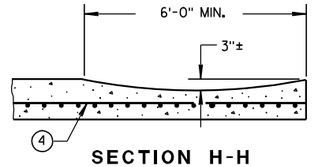
EXPANSION JOINT DETAIL



SECTION F-F



SECTION D-D



SECTION H-H

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.

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

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

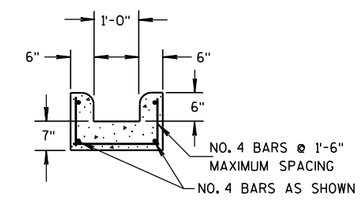
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

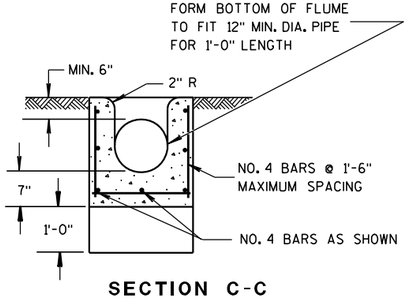
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

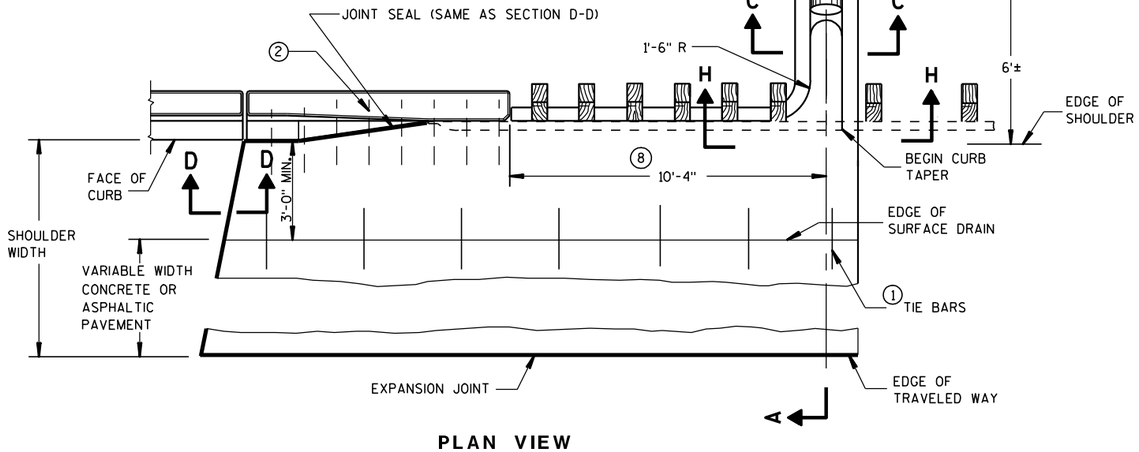
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



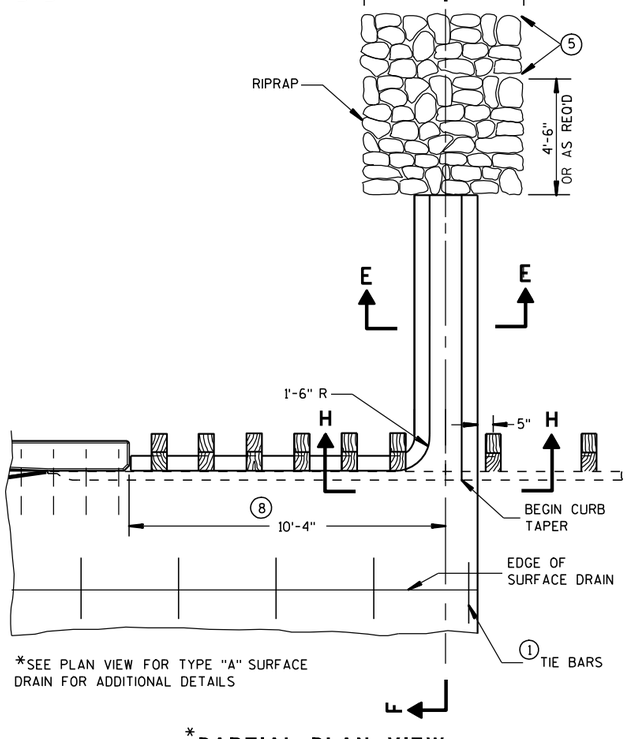
SECTION E-E



SECTION C-C

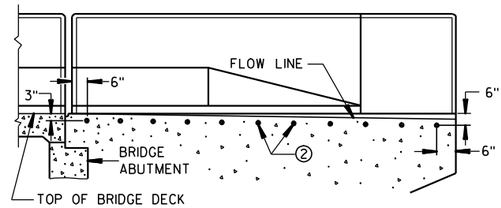


PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"



*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"



LOCATION OF
TIE BARS IN WINGWALL

CONCRETE SURFACE DRAINS
FLUME TYPE
AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

155

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S.D.D. 8 D 2-6

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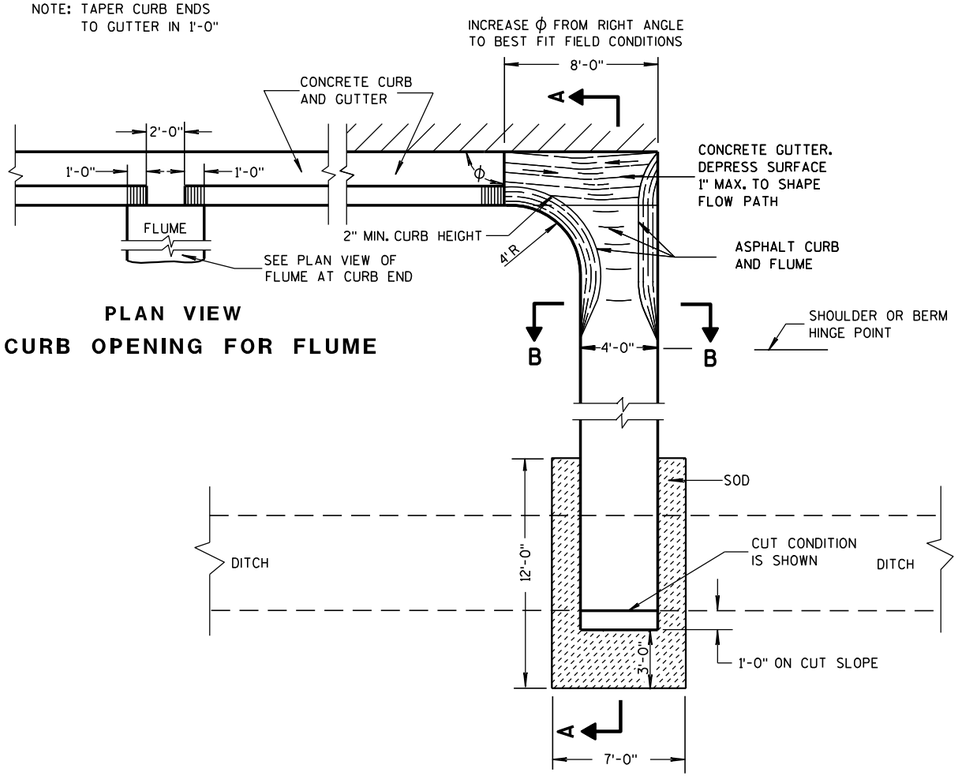
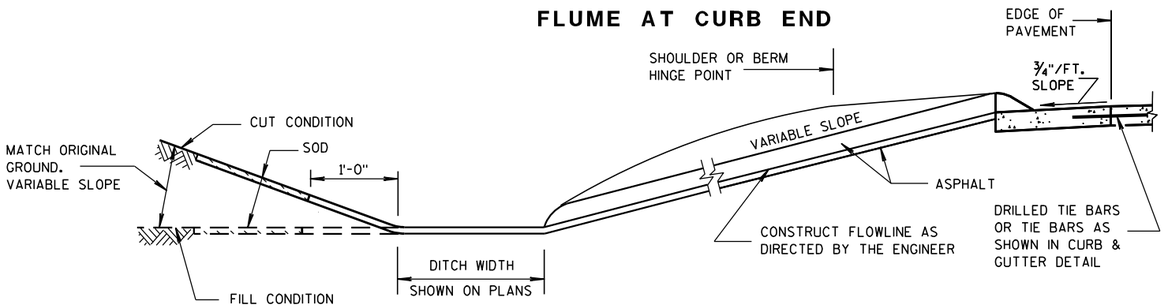
S.D.D. 8 D 2-6

ASPHALTIC FLUME

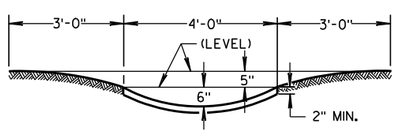


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

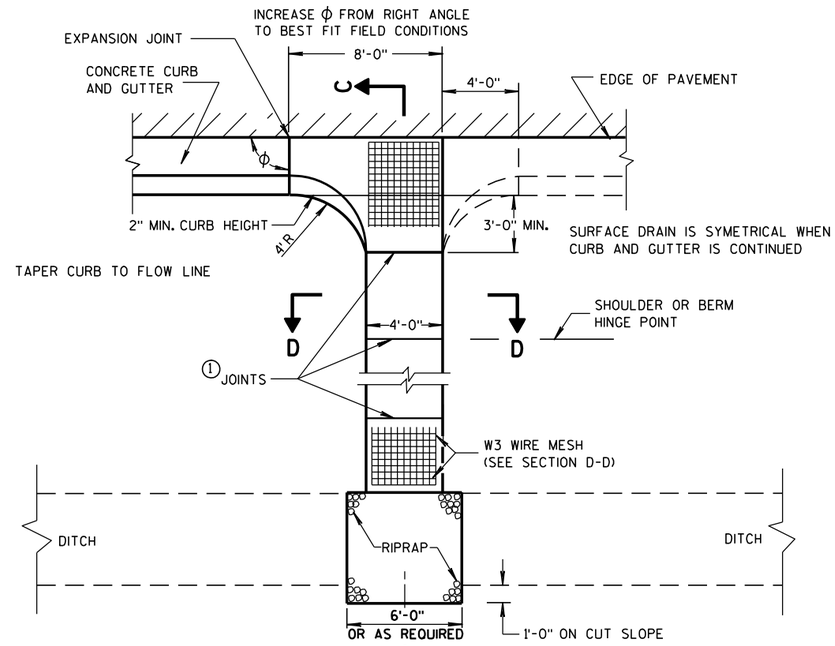
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

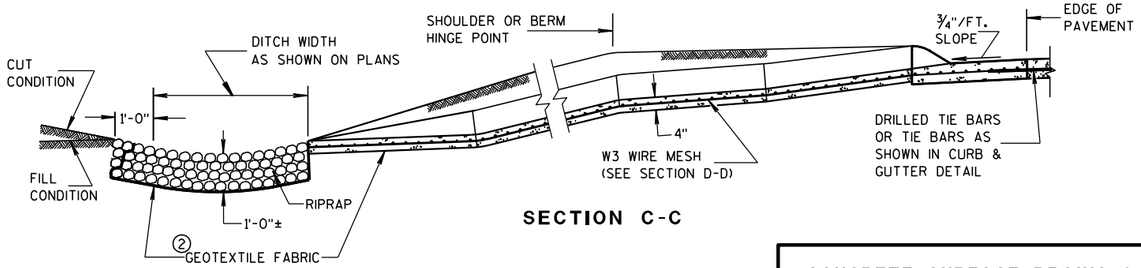
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

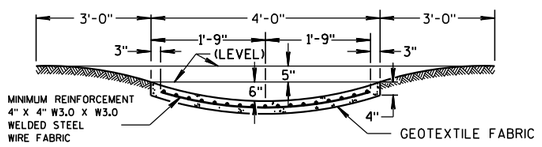
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
156
MENT
FHWA

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S.D.D. 8 D 4-5

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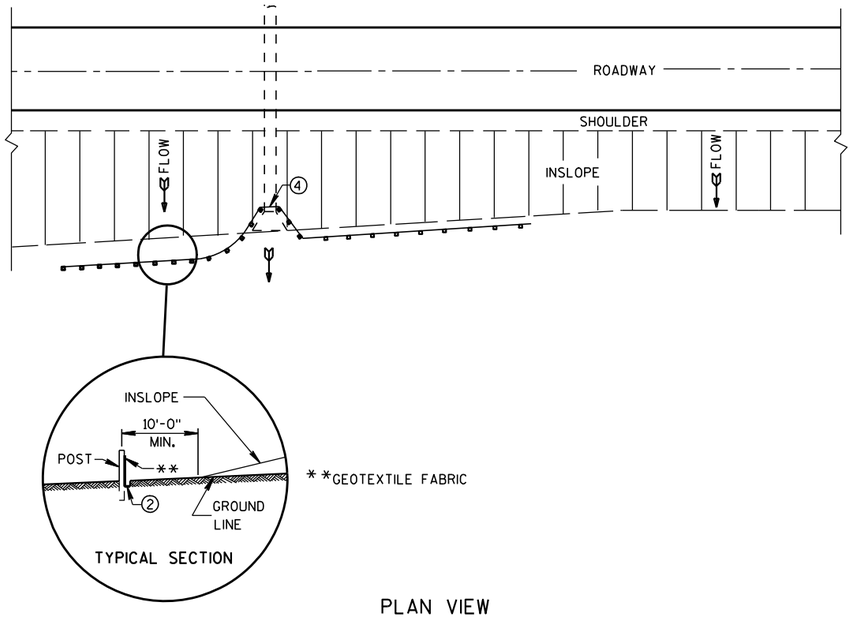
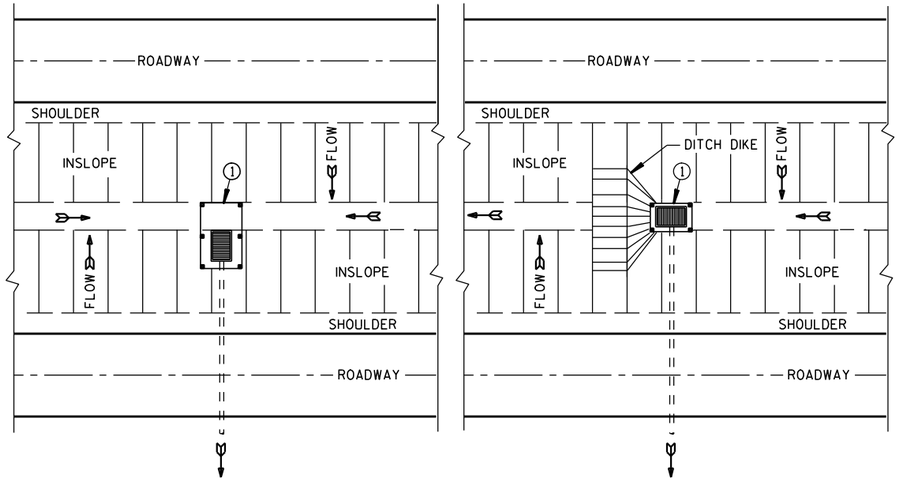
S.D.D. 8 D 4-5



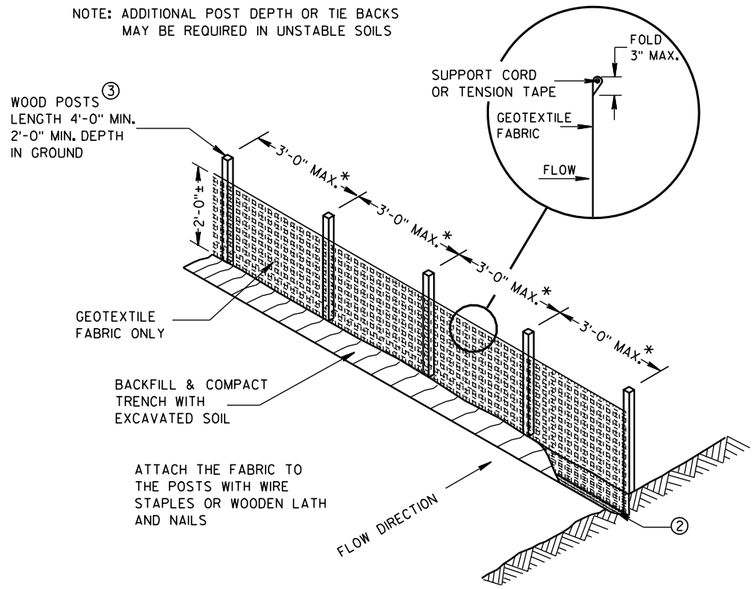
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



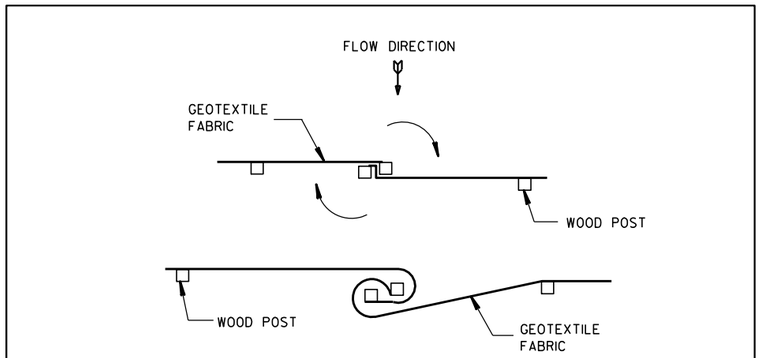
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

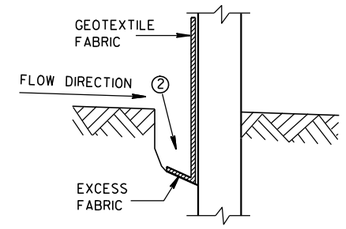


JOINING TWO LENGTHS OF SILT FENCE 5

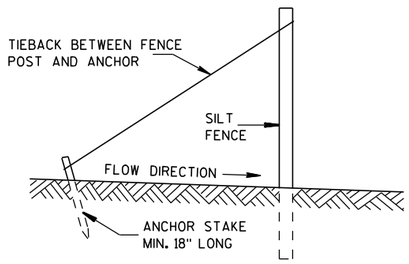
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 9-6

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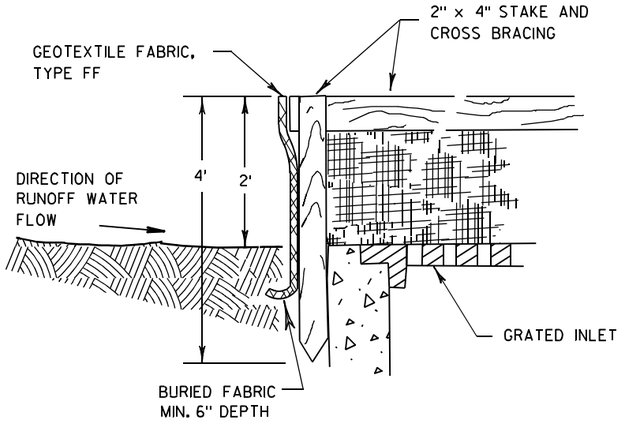
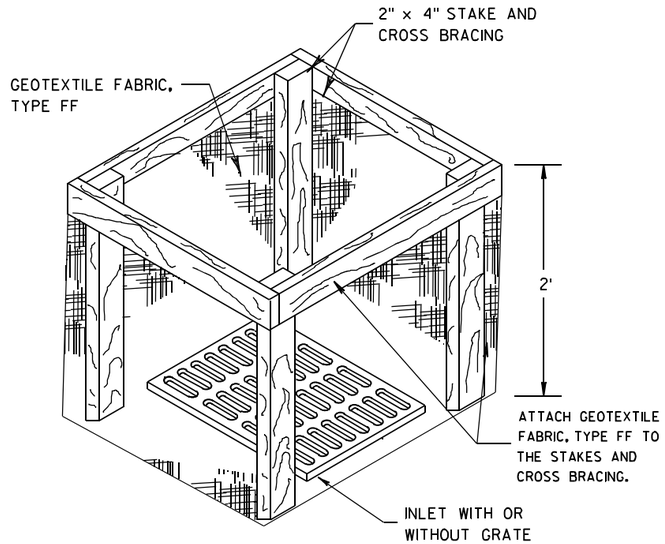
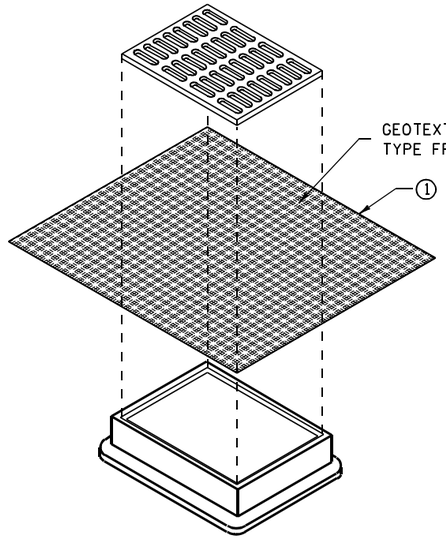
S.D.D. 8 E 9-6



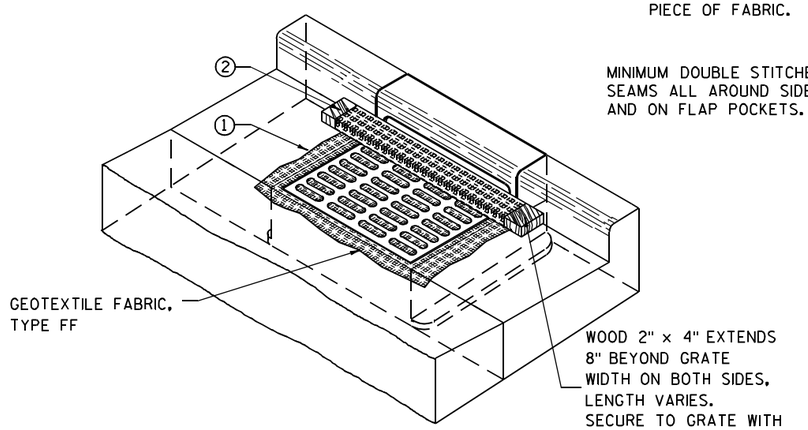


INLET PROTECTION, TYPE A

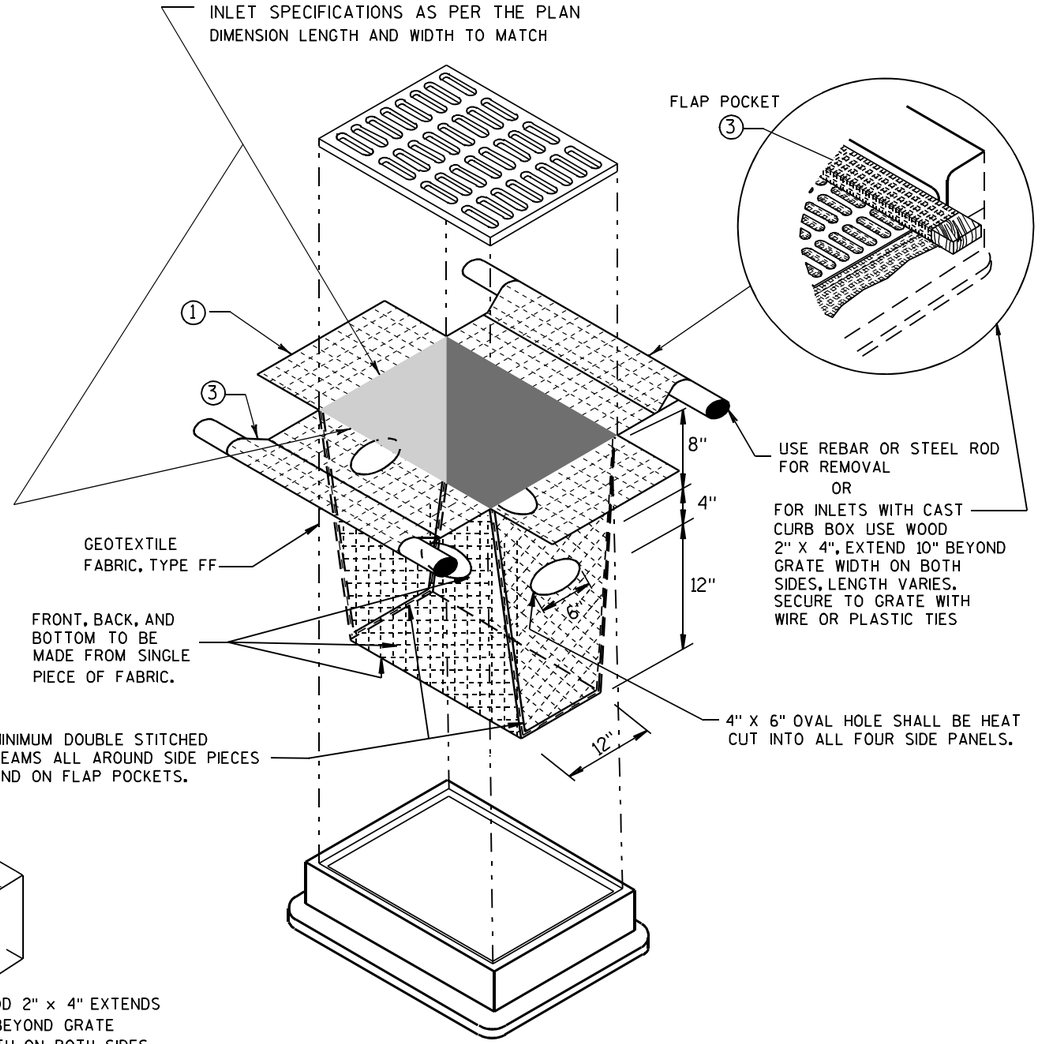


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 8 E 10-2

METAL APRON ENDWALLS

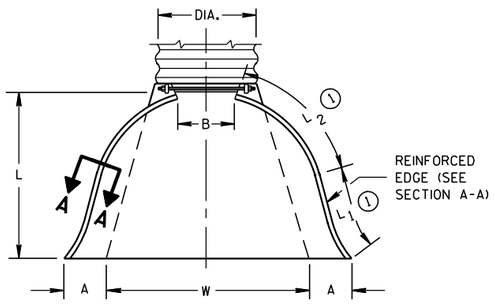
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

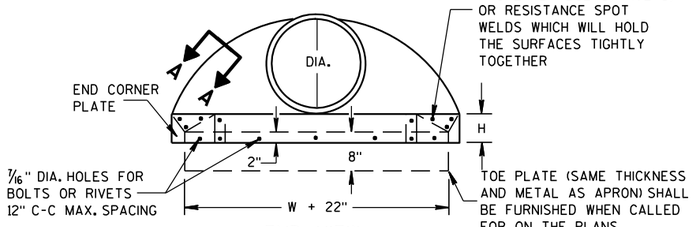
REINFORCED CONCRETE APRON ENDWALLS

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

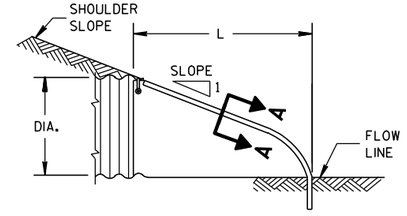
*MINIMUM
**MAXIMUM



PLAN VIEW

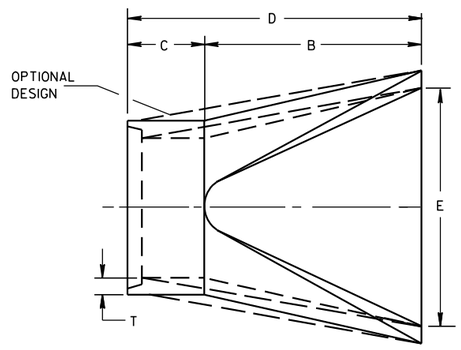


END VIEW

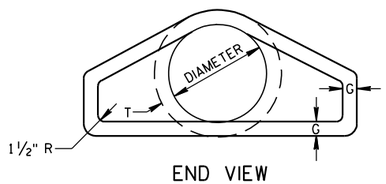


SIDE ELEVATION

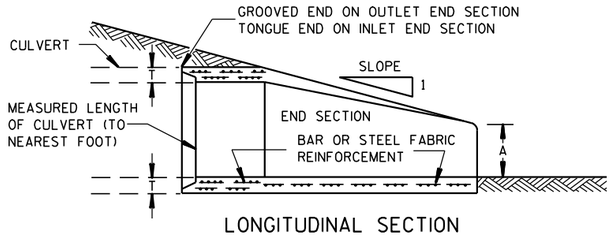
METAL ENDWALLS



PLAN

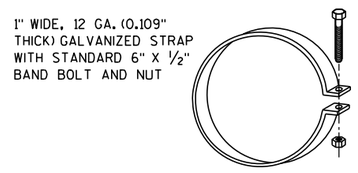


END VIEW



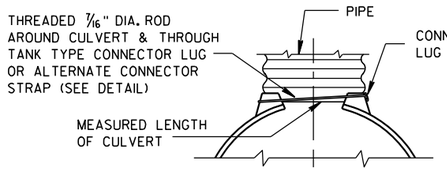
LONGITUDINAL SECTION

CONCRETE ENDWALLS

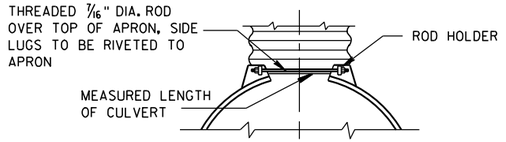


ALTERNATE FOR TYPE 1 CONNECTION

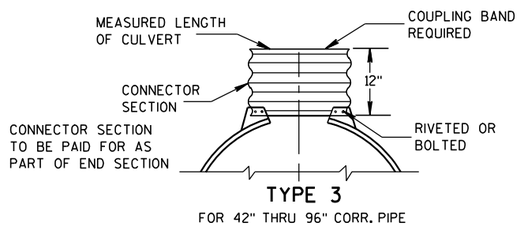
END SECTION CONNECTOR STRAP



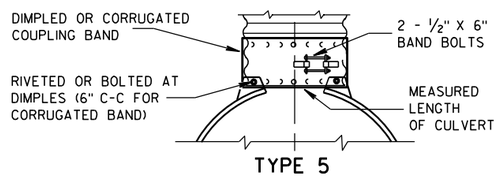
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

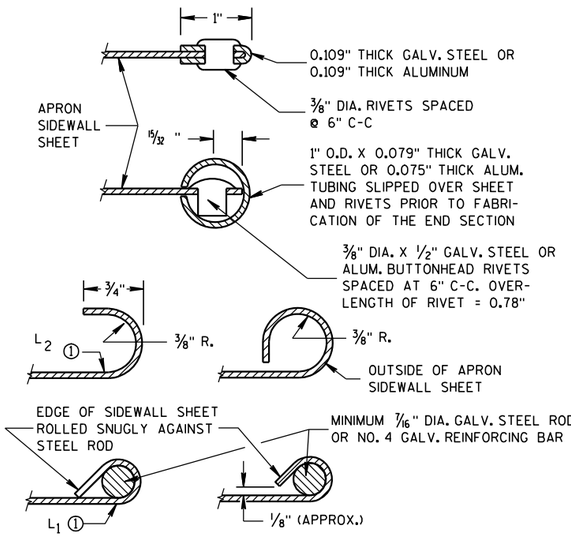
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

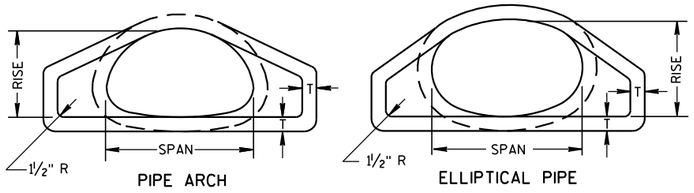
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

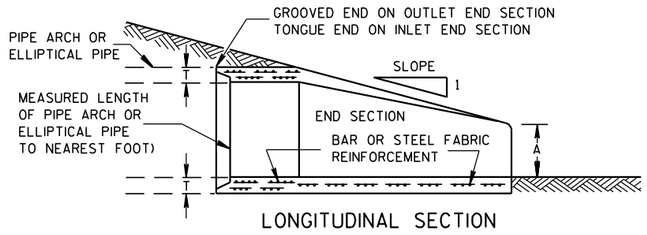
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

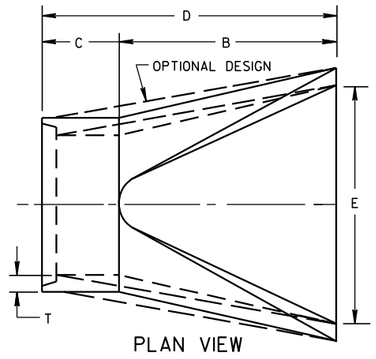
6
S.D.D. 8 F 1-11



END VIEW

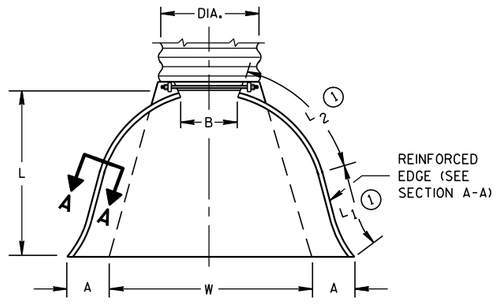


LONGITUDINAL SECTION



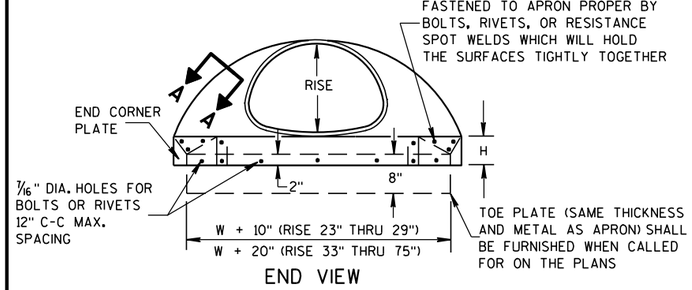
PLAN VIEW

CONCRETE ENDWALLS



REINFORCED EDGE (SEE SECTION A-A)

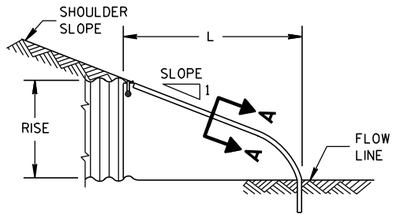
PLAN VIEW



END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

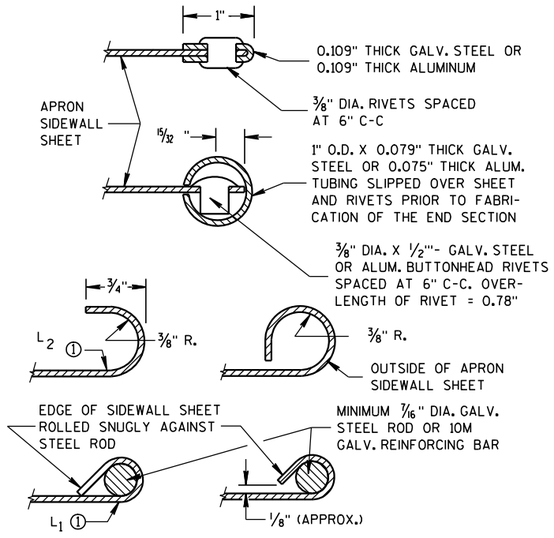
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

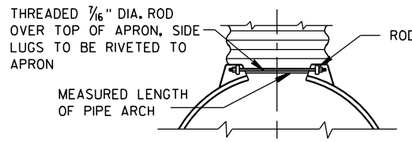
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

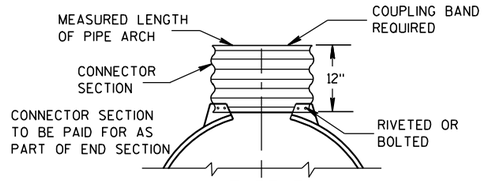
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



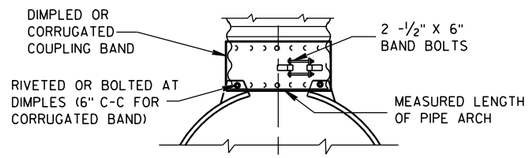
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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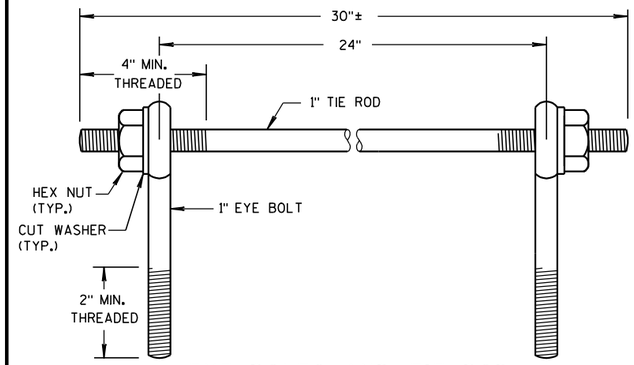
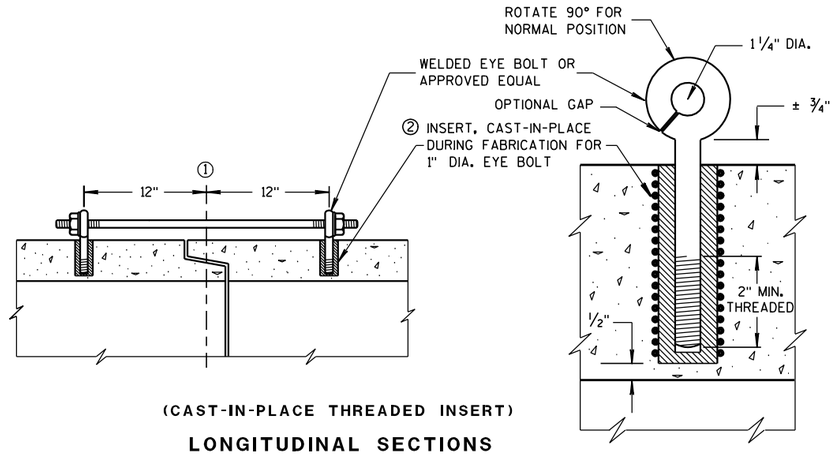


EYE BOLTS AND TIE ROD



(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.

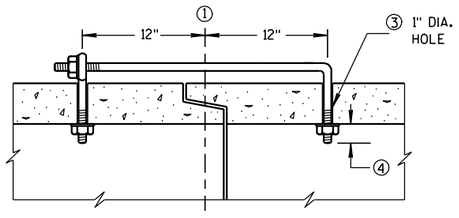
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

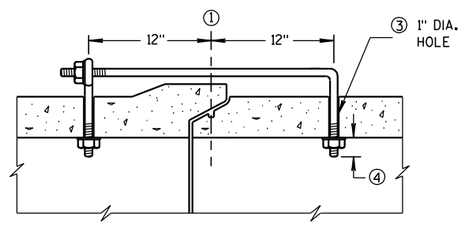
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

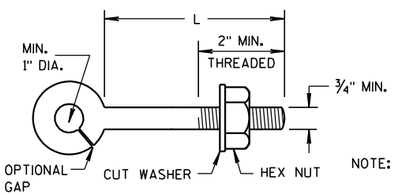


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

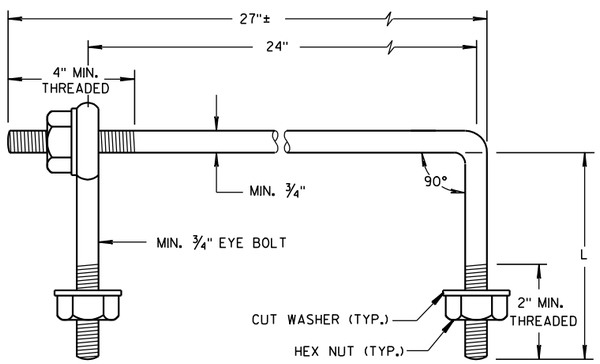
EYE BOLT DIMENSION TABLE

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"	



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

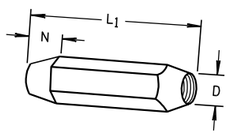
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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



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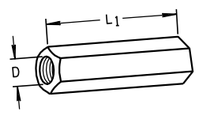
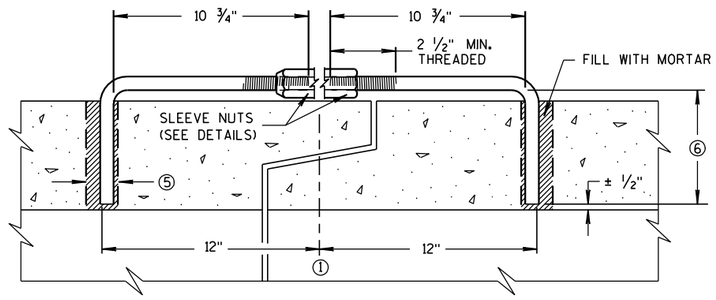


PLAIN

RIGHT AND LEFT THREADS

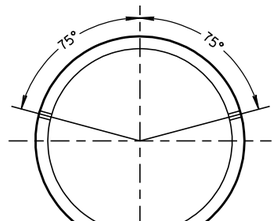
SLEEVE NUTS



LONGITUDINAL SECTION

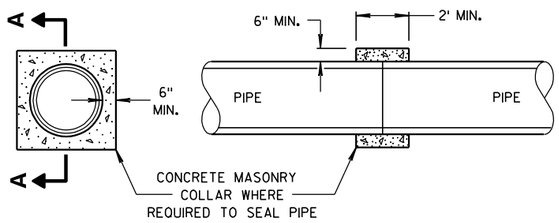
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
FHWA

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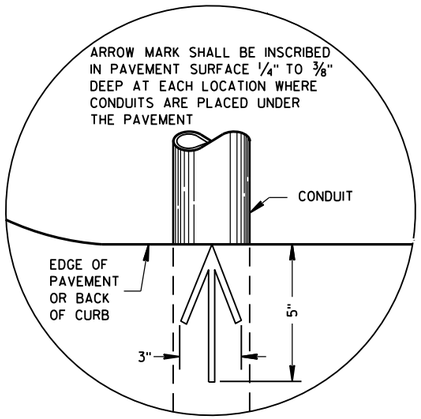
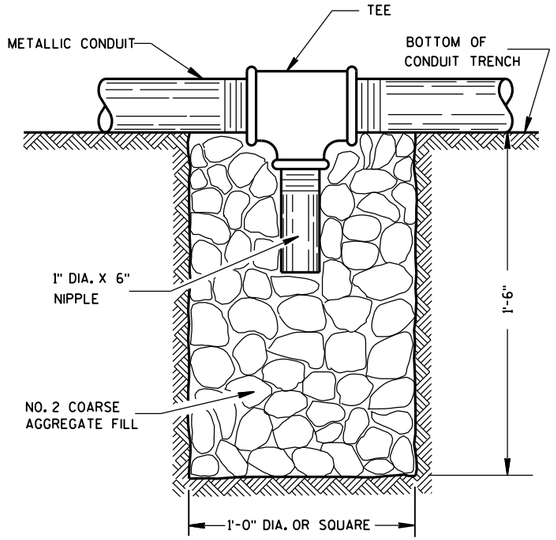
S.D.D. 8 F 4-7



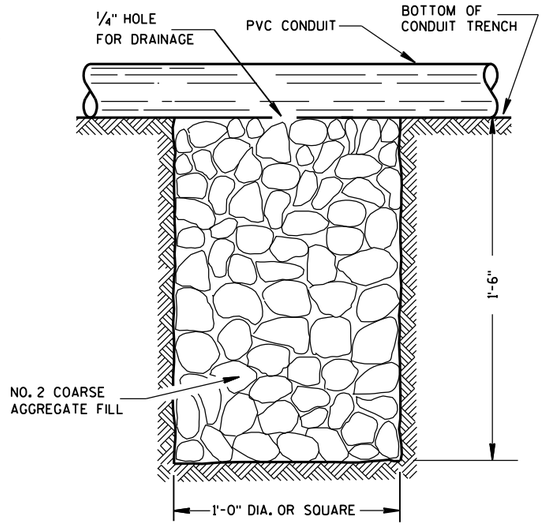
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

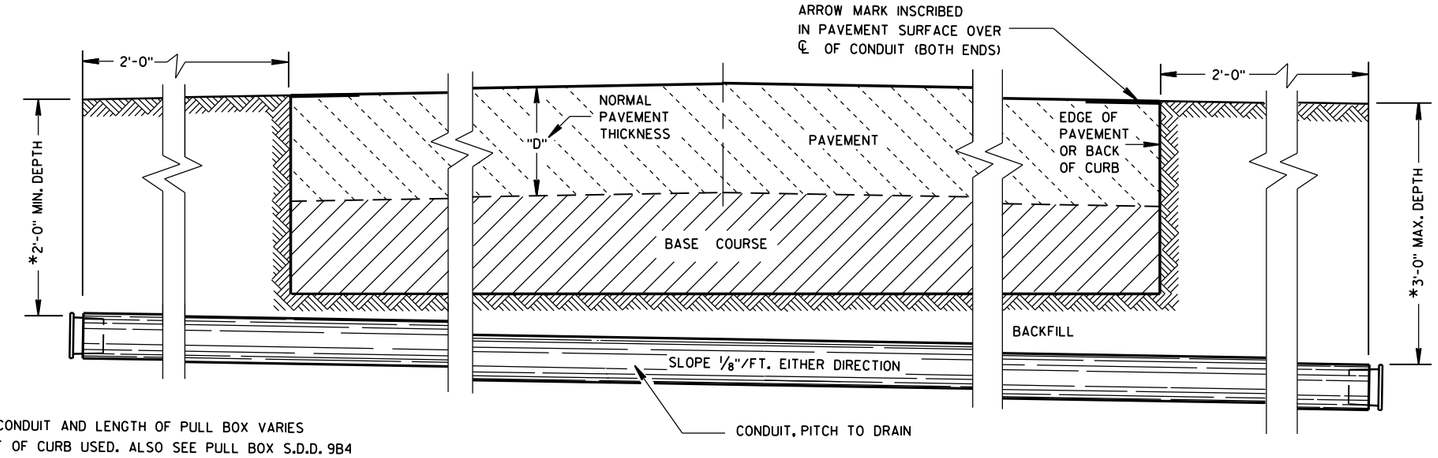
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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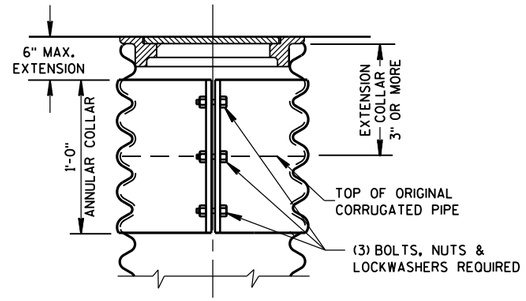
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

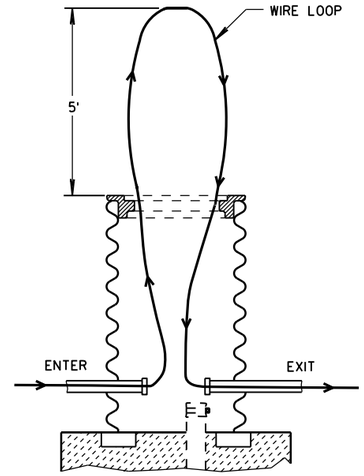
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

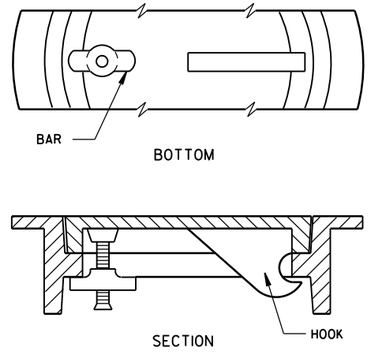
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

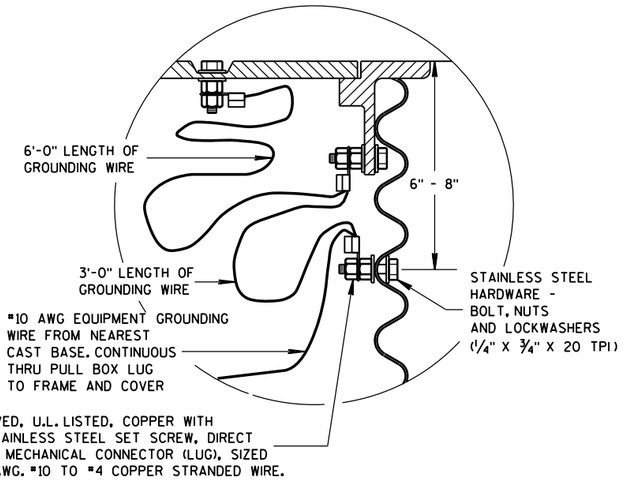


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

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.

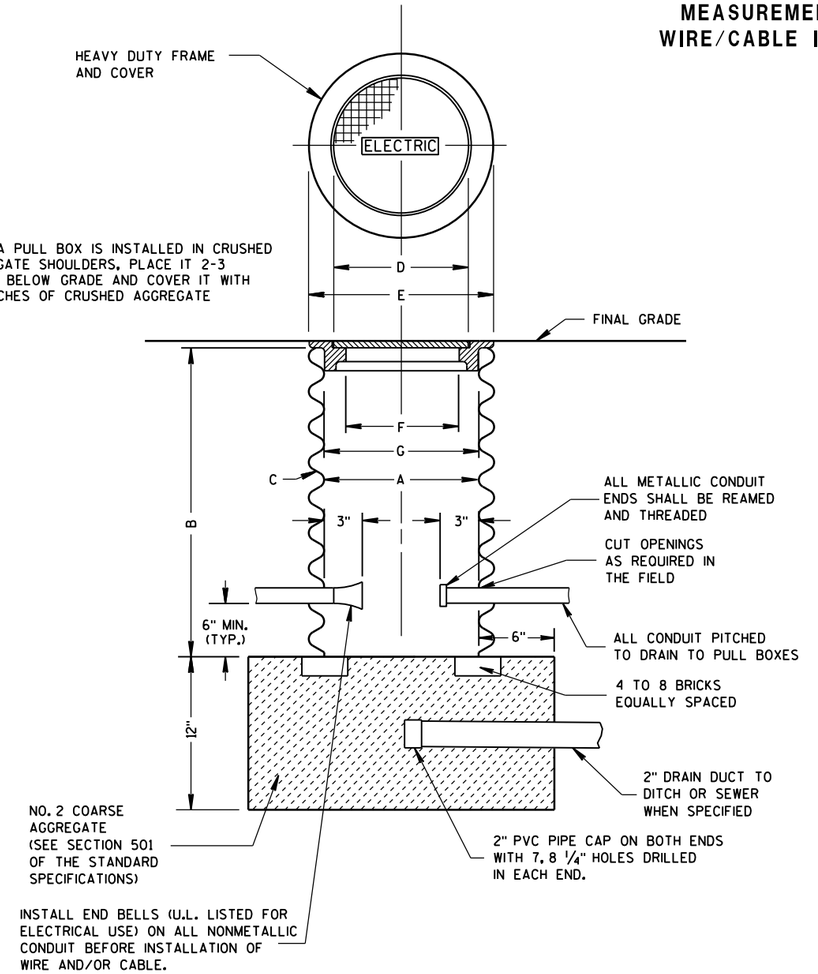
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

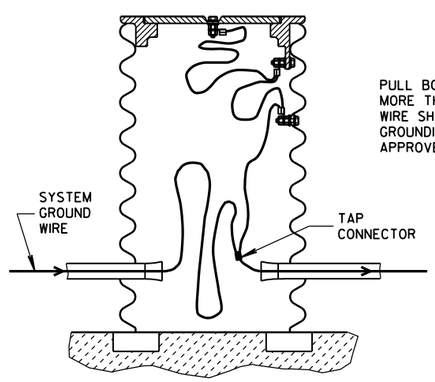
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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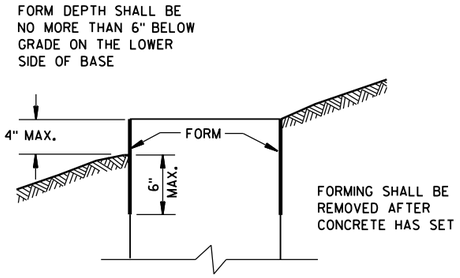


FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

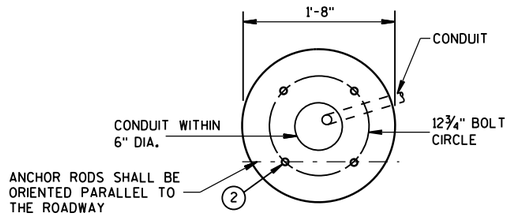
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

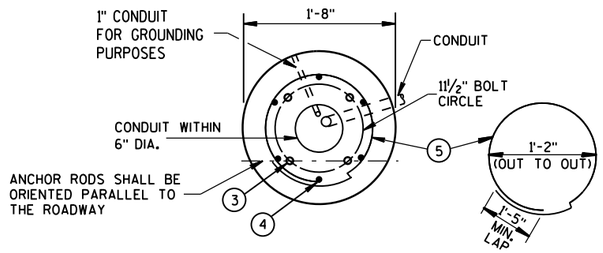
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

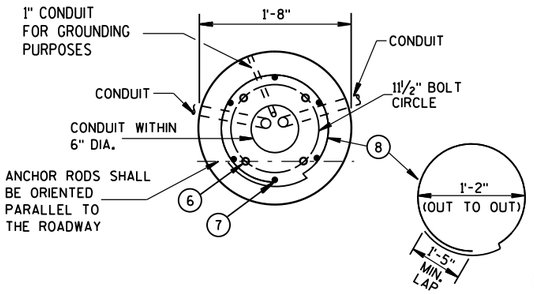
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

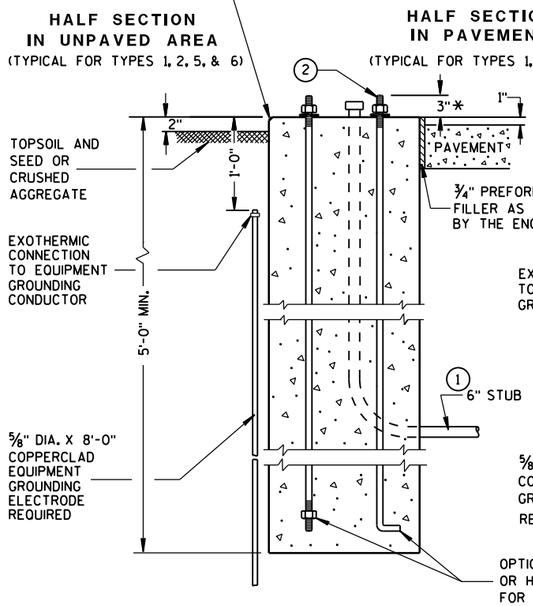
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

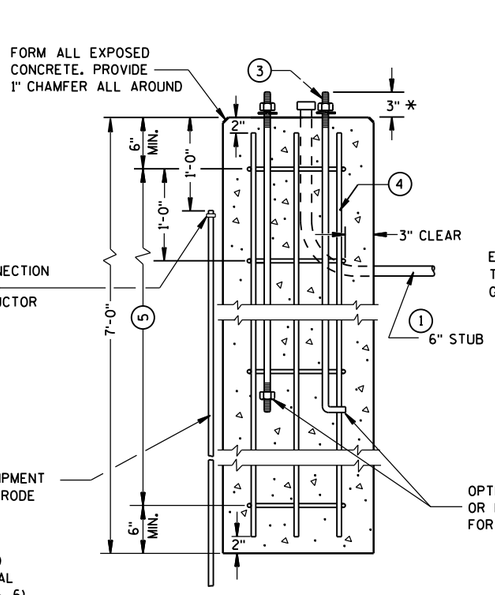
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



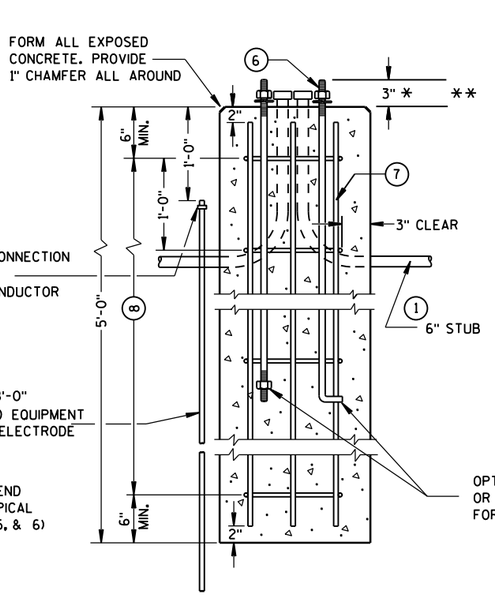








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 2-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

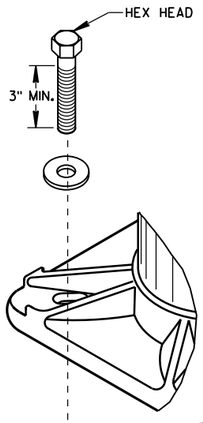
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

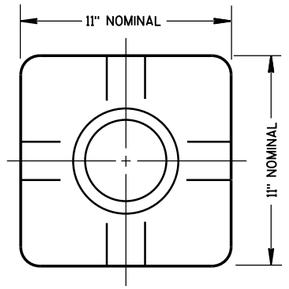
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

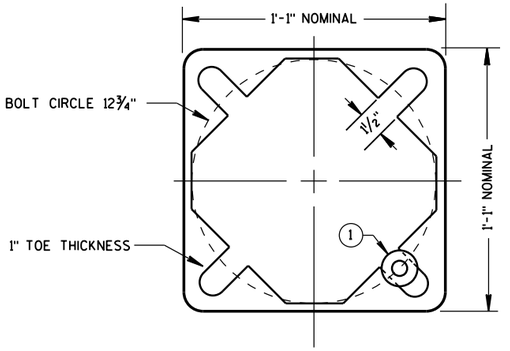
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

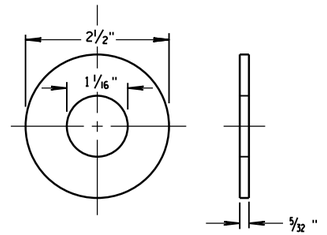




TOP VIEW
(PEDESTAL BASE)

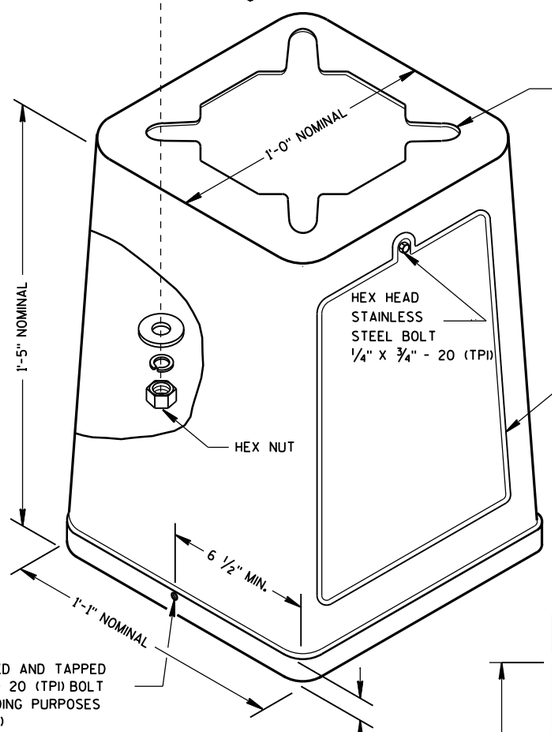


BOTTOM VIEW
(PEDESTAL BASE)

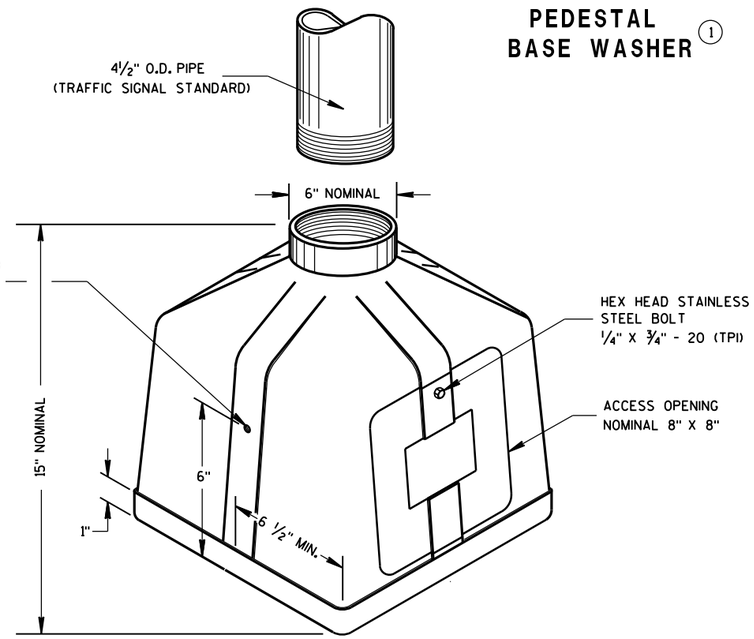


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

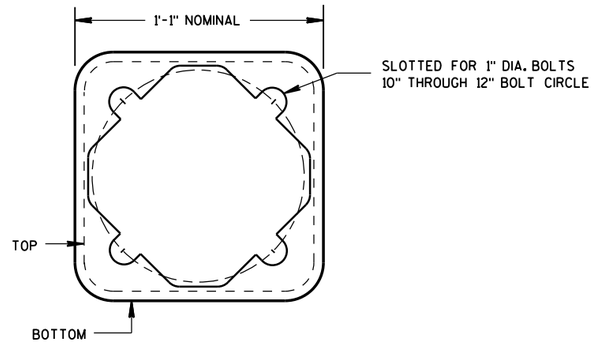
PEDESTAL BASE WASHER (1)



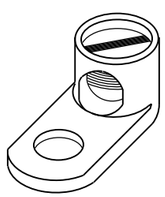
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE

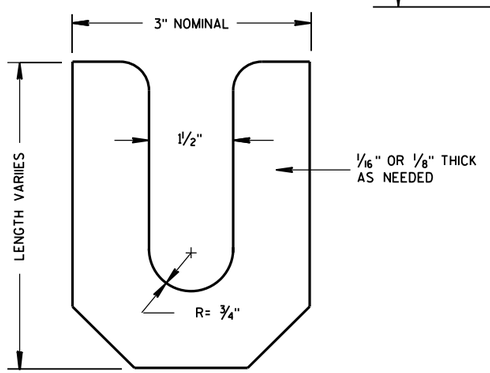


BOTTOM VIEW
(TRANSFORMER BASE)



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
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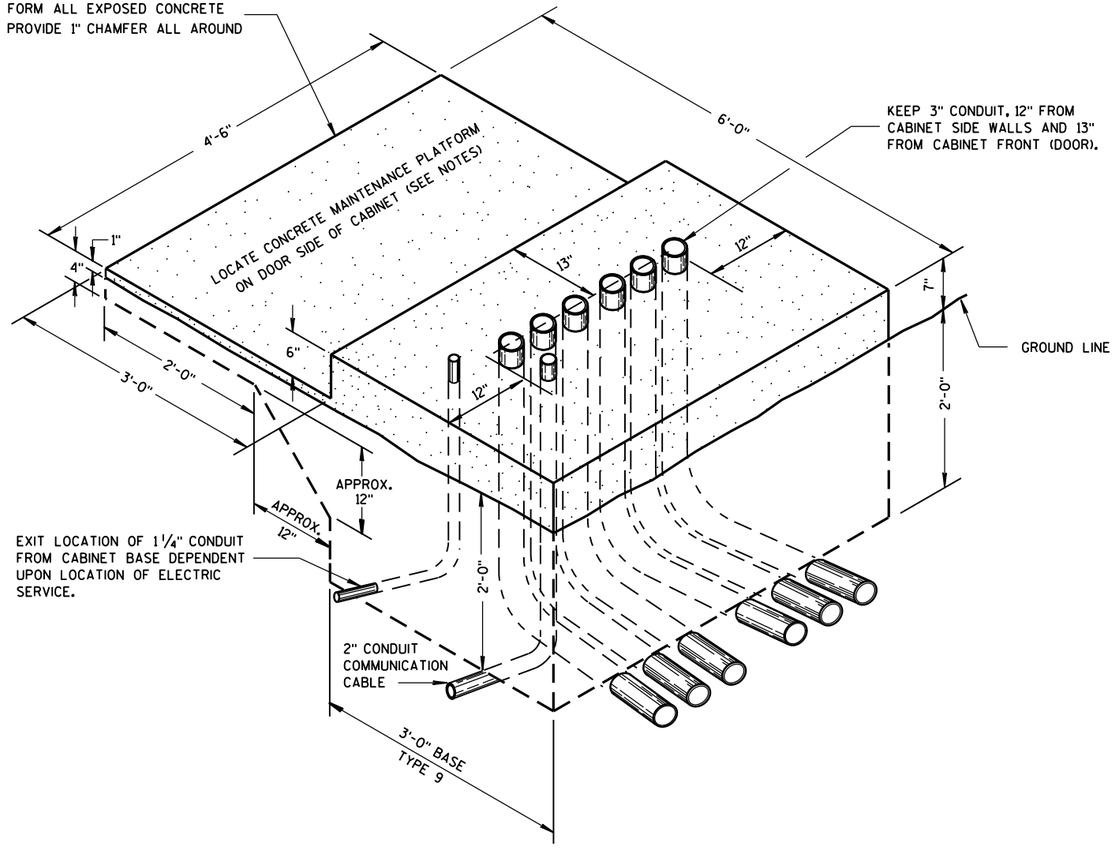
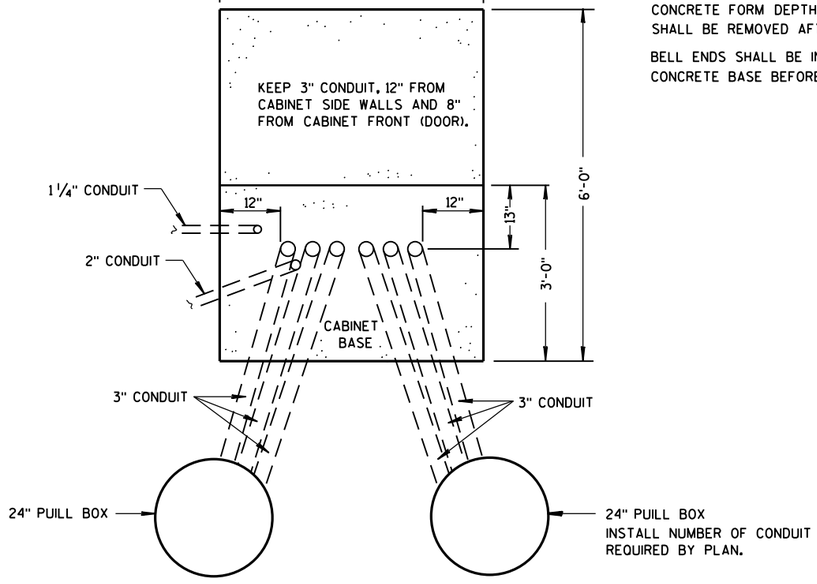


ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

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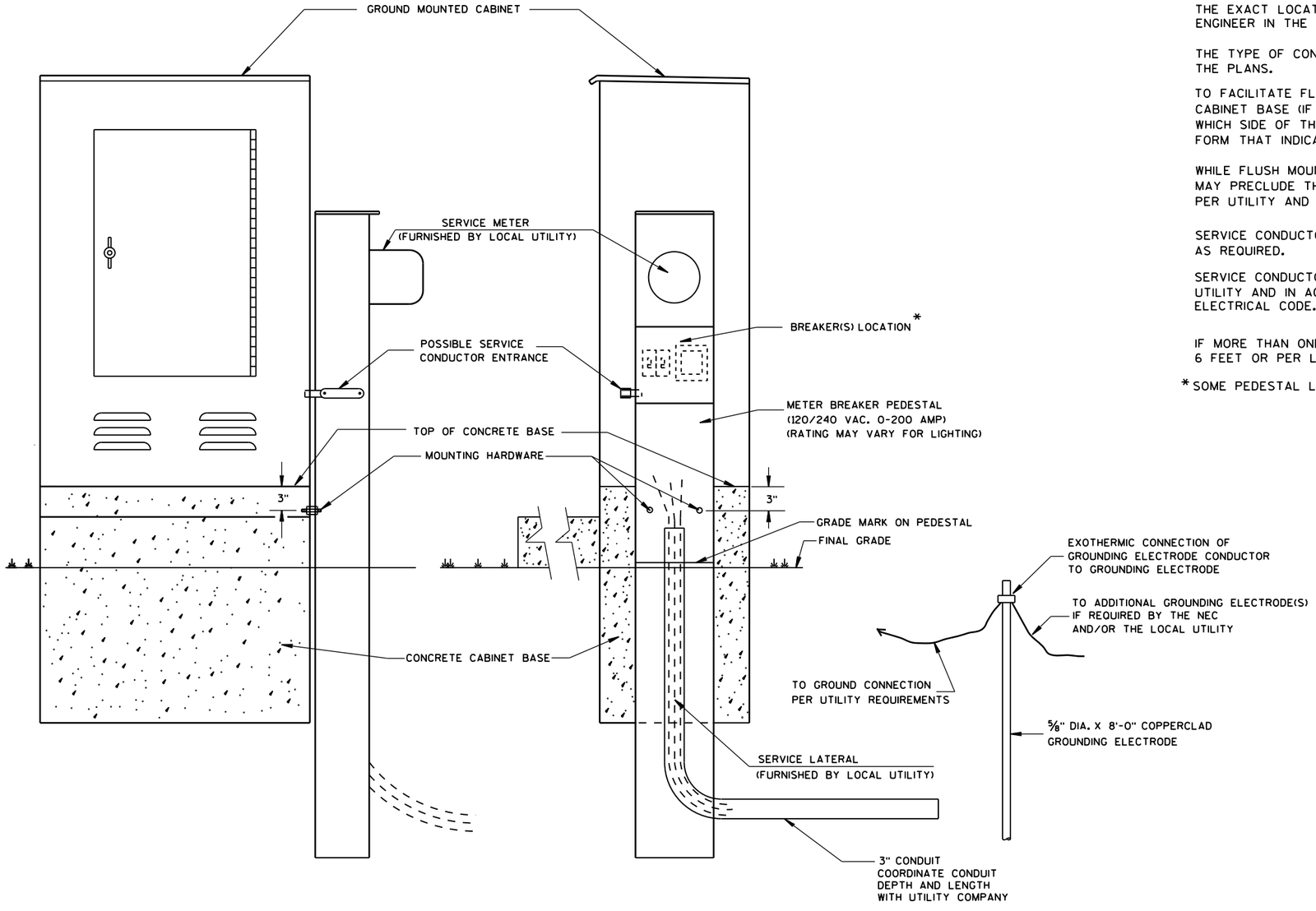

TYPICAL CABINET SERVICE INSTALLATION

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
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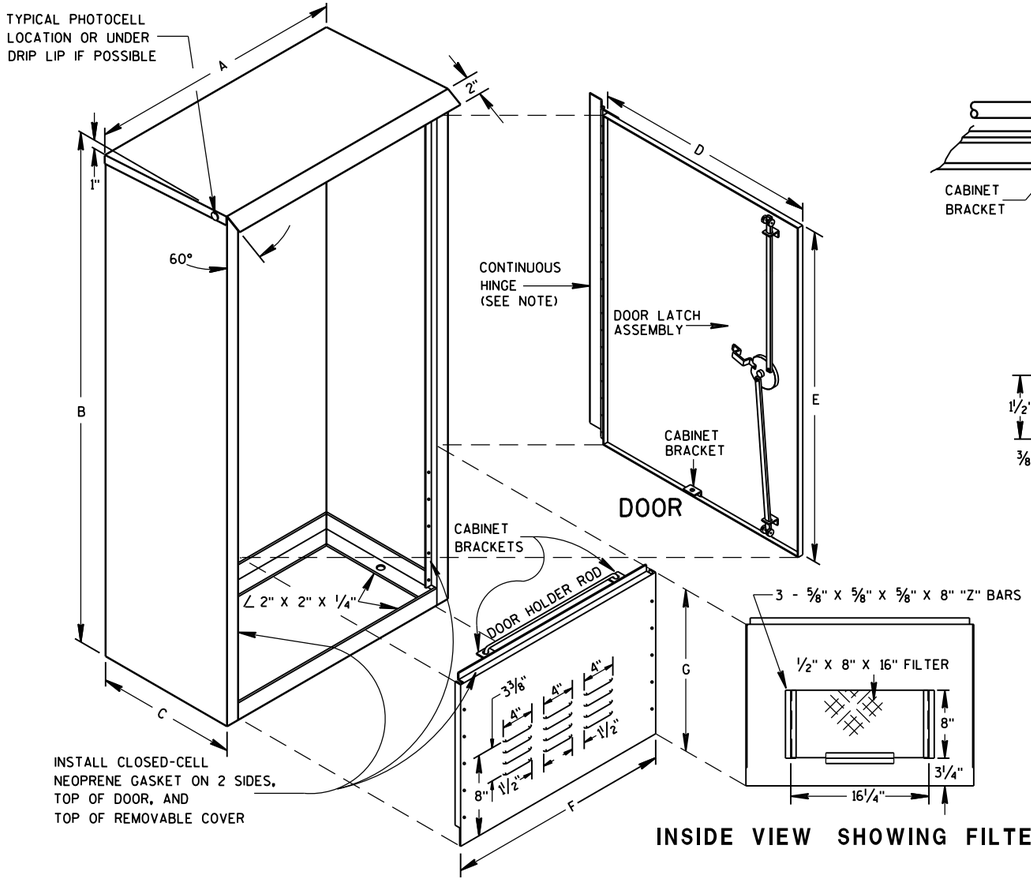
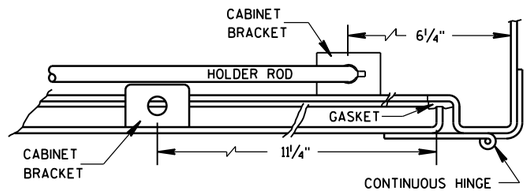
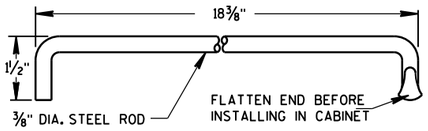


REMOVABLE COVER

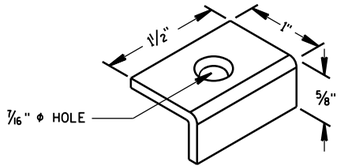
INSIDE VIEW SHOWING FILTER



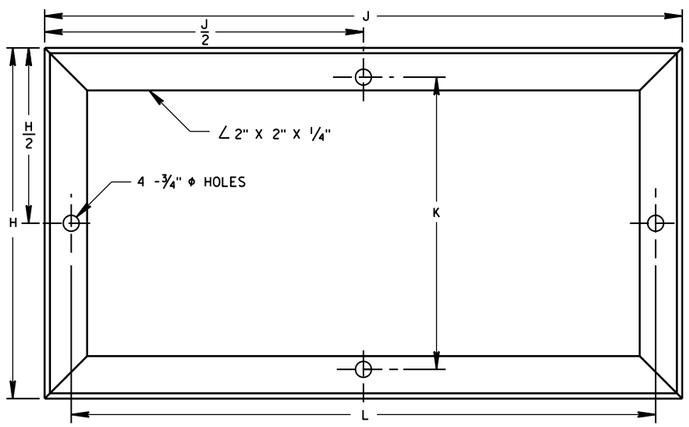
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

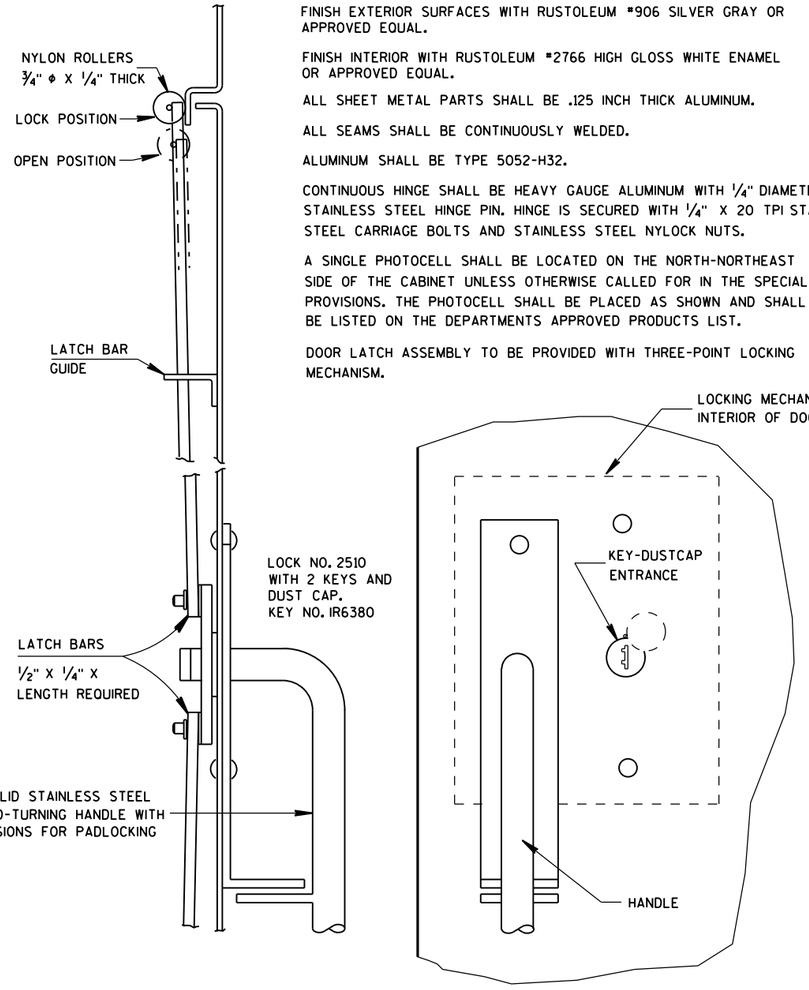
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

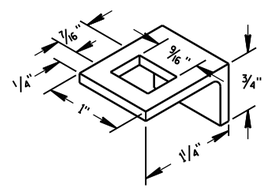
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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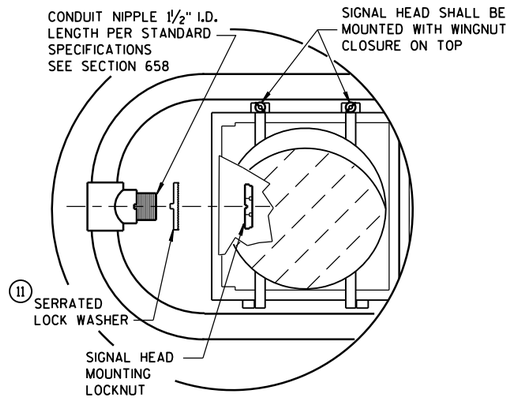
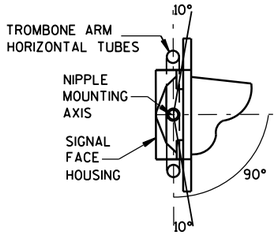


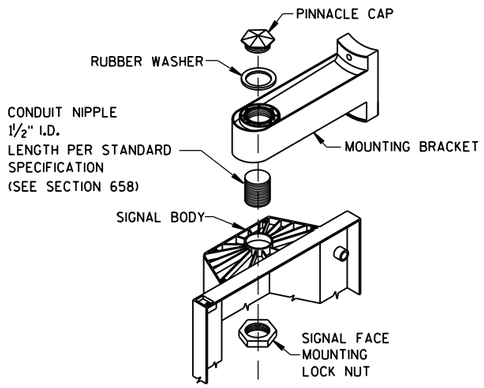
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* 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.

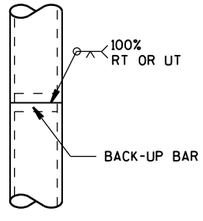
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

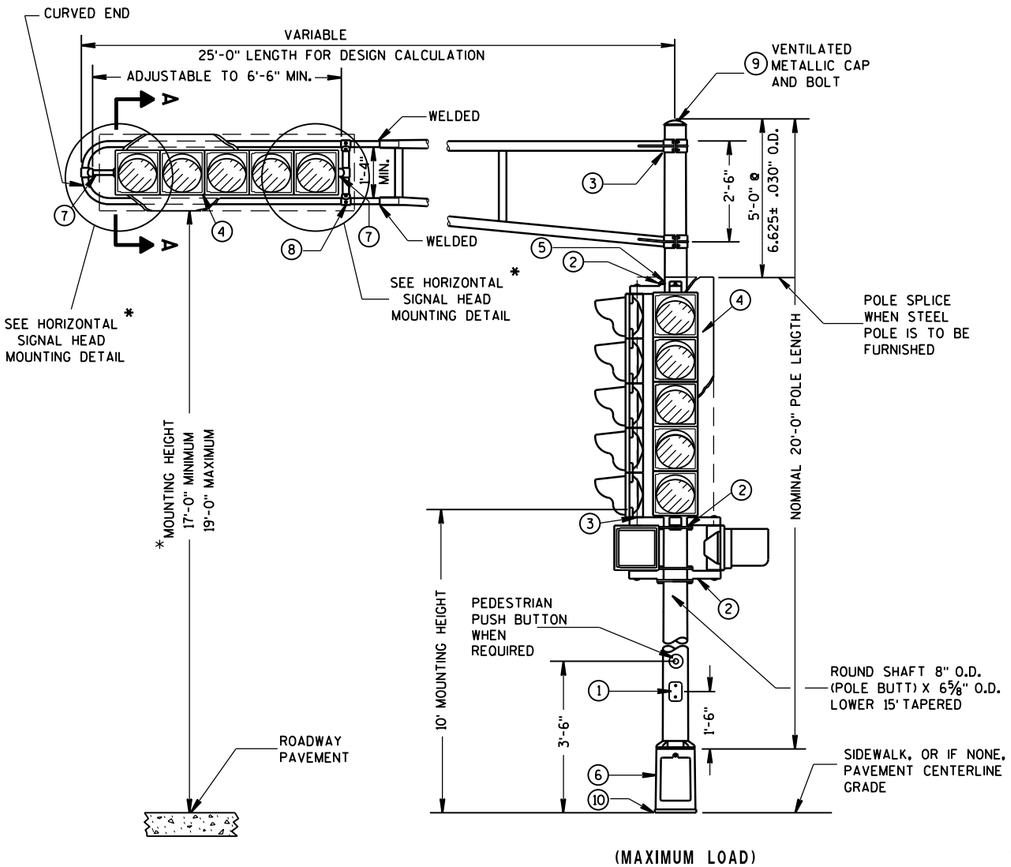
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

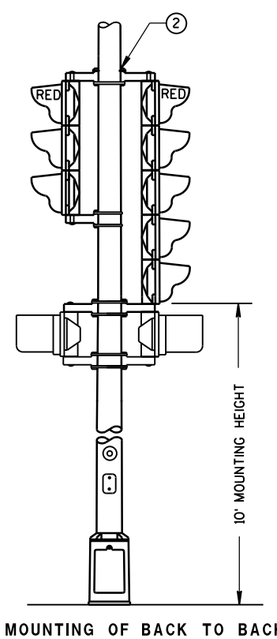
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



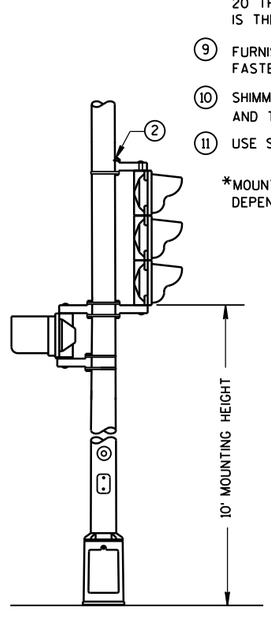
POLE SPLICE DETAIL



(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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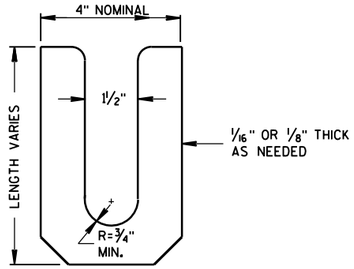
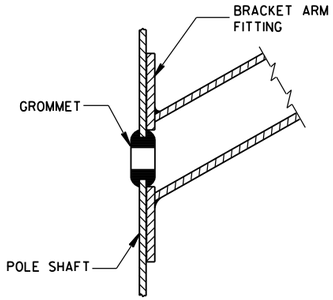
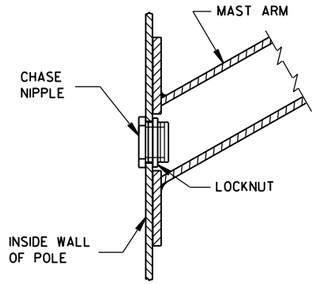


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

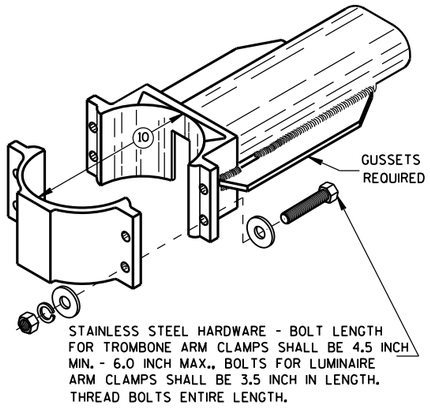
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

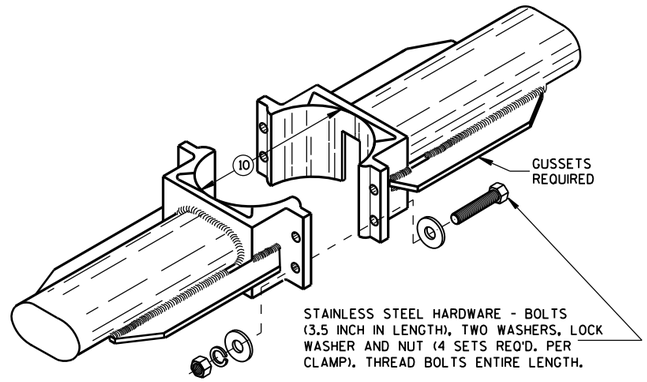
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

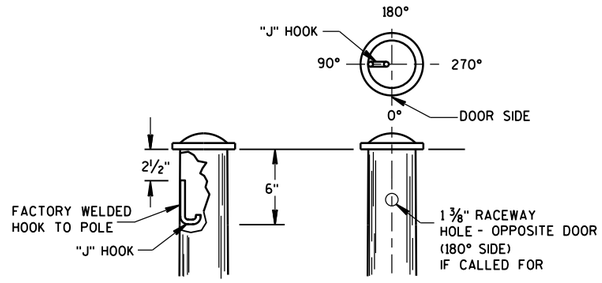
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



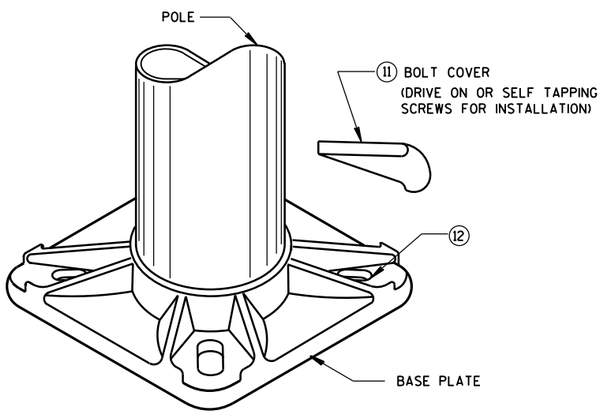
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



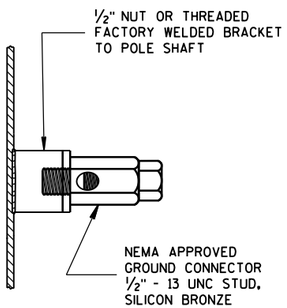
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

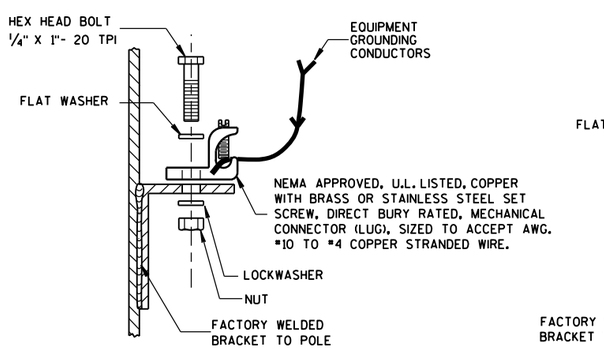


TYPICAL "J" HOOK LOCATION



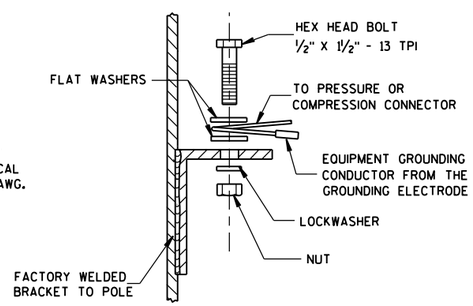
BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

/S/ Ahmet Demirbilek
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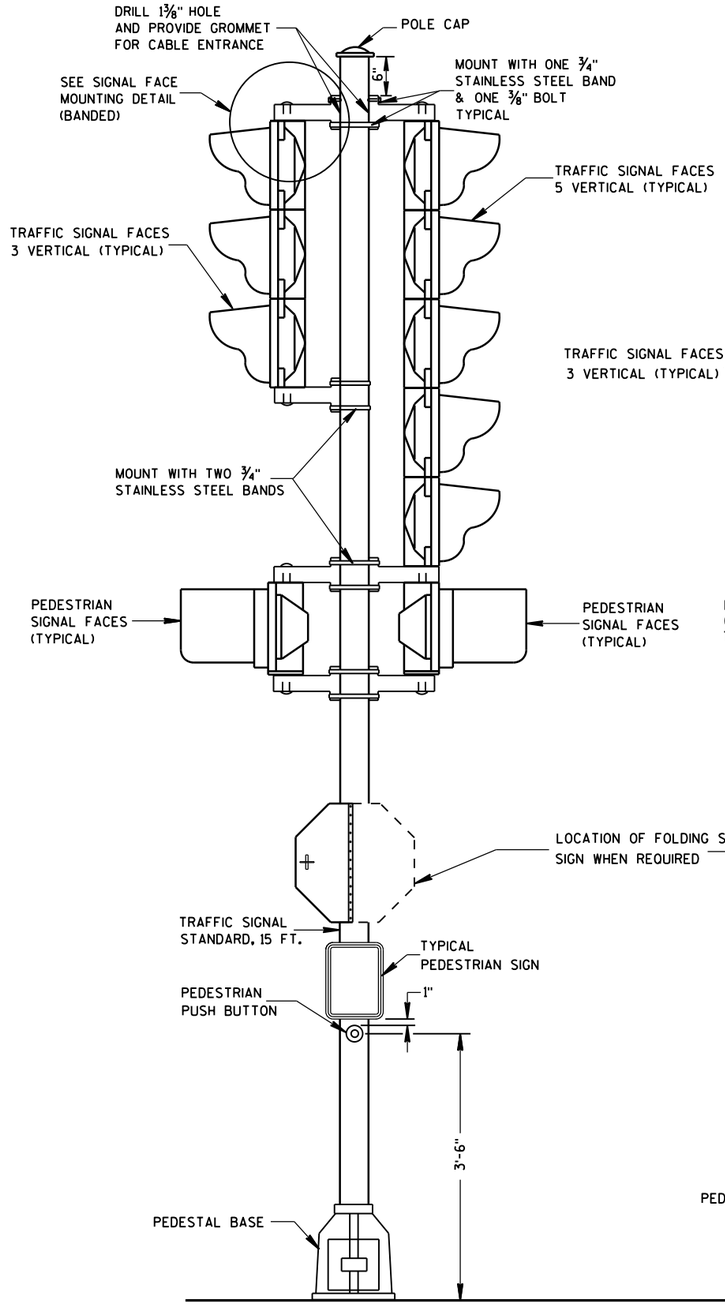
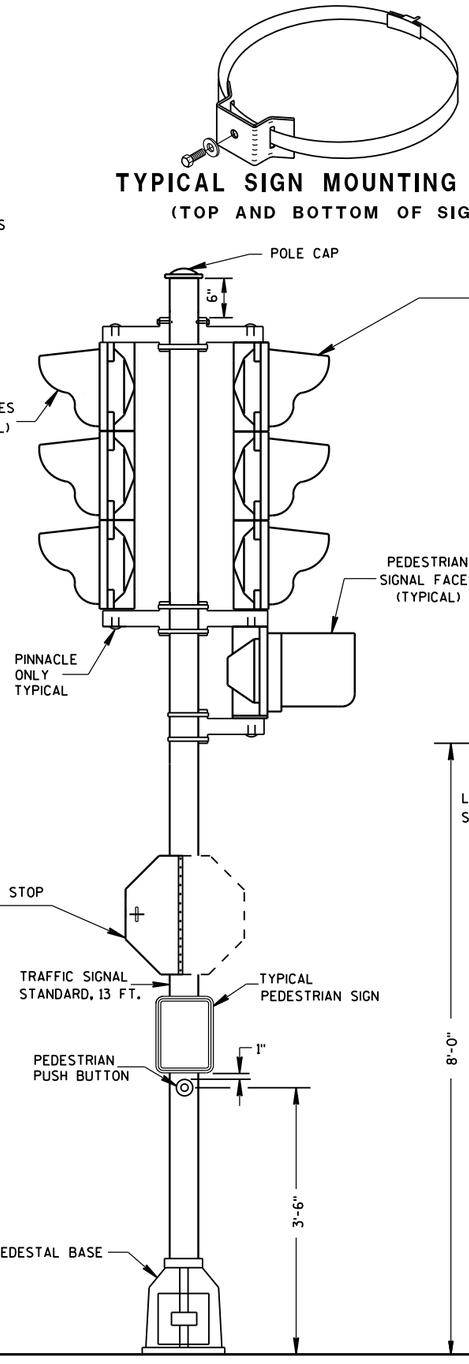
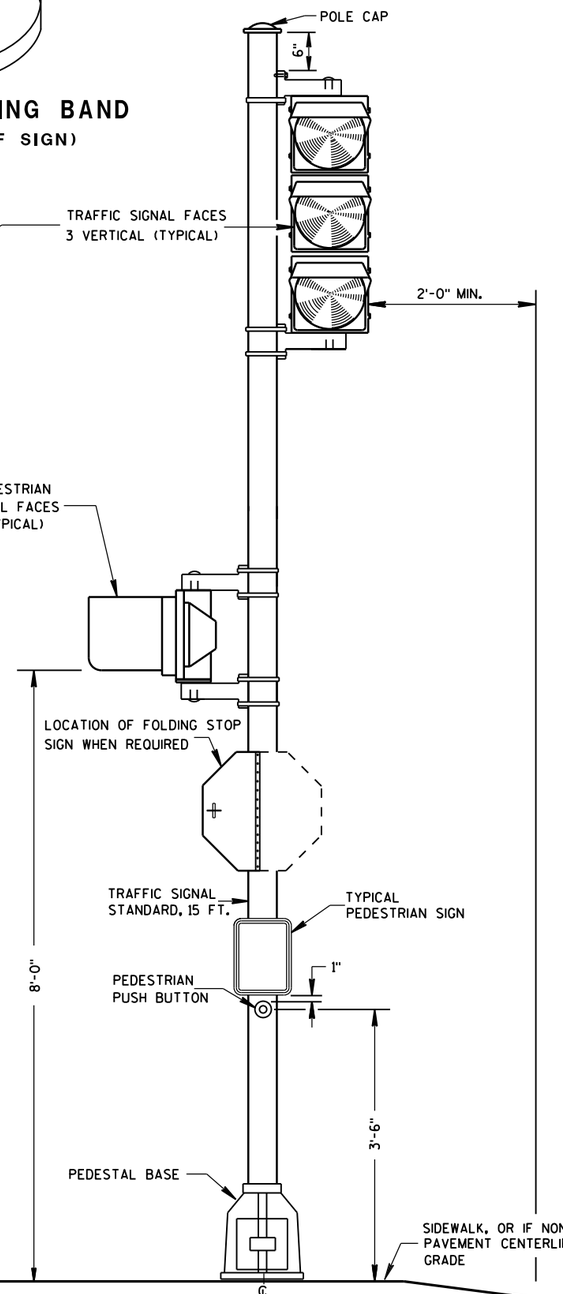


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

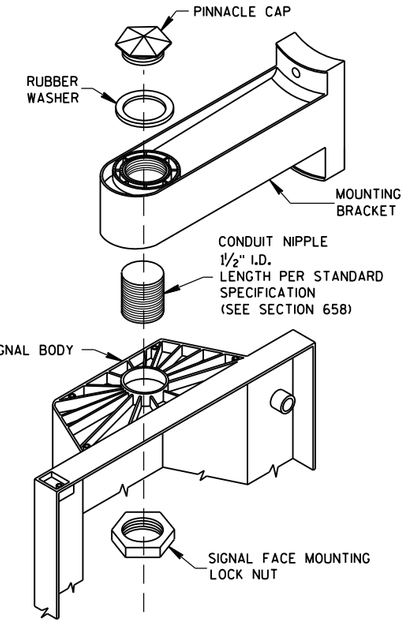
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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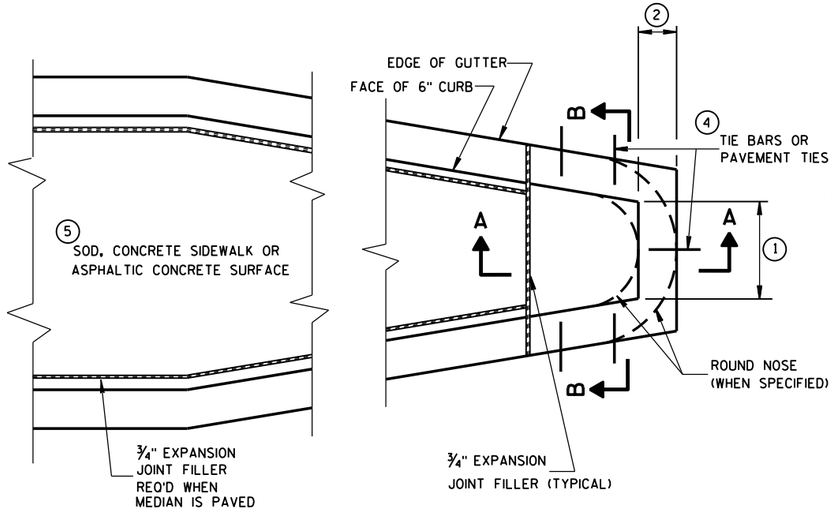
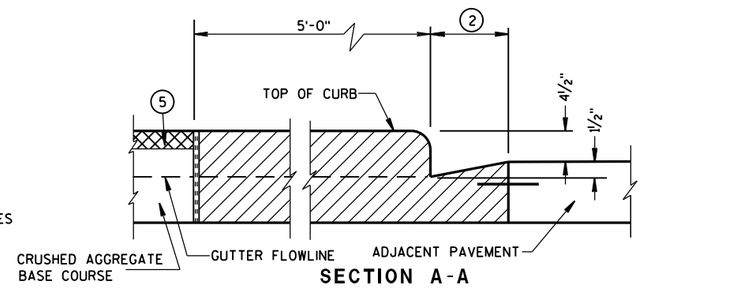




CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

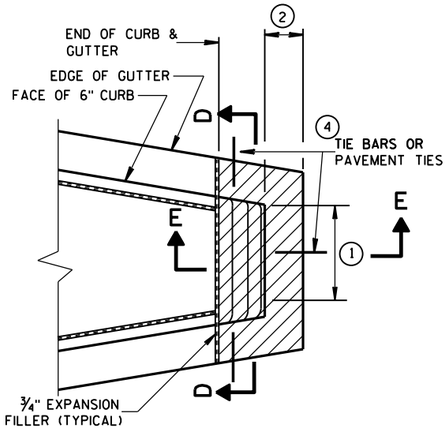
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

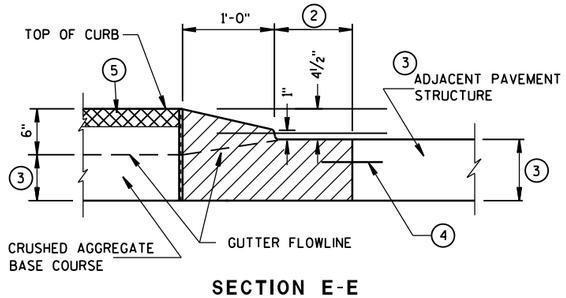
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

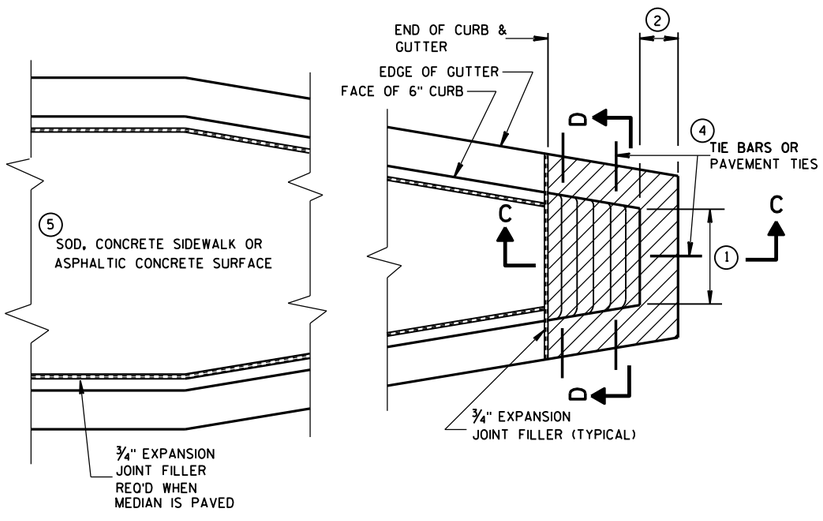
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

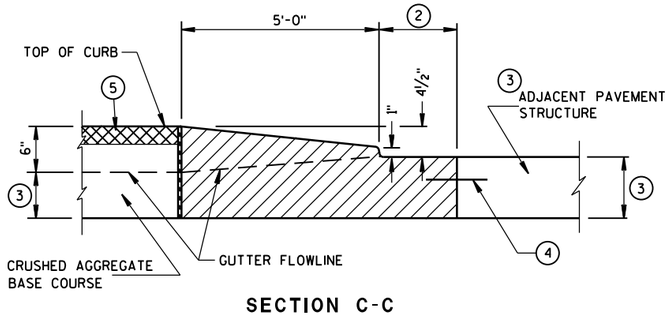
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



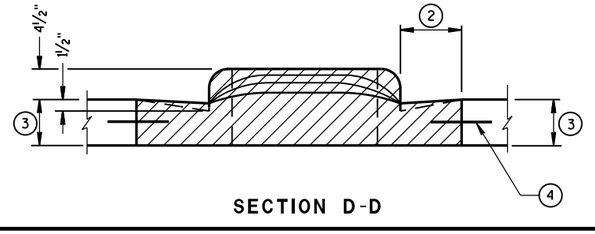


CONCRETE MEDIAN SLOPED NOSE TYPE 2





CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS D ENGINEER

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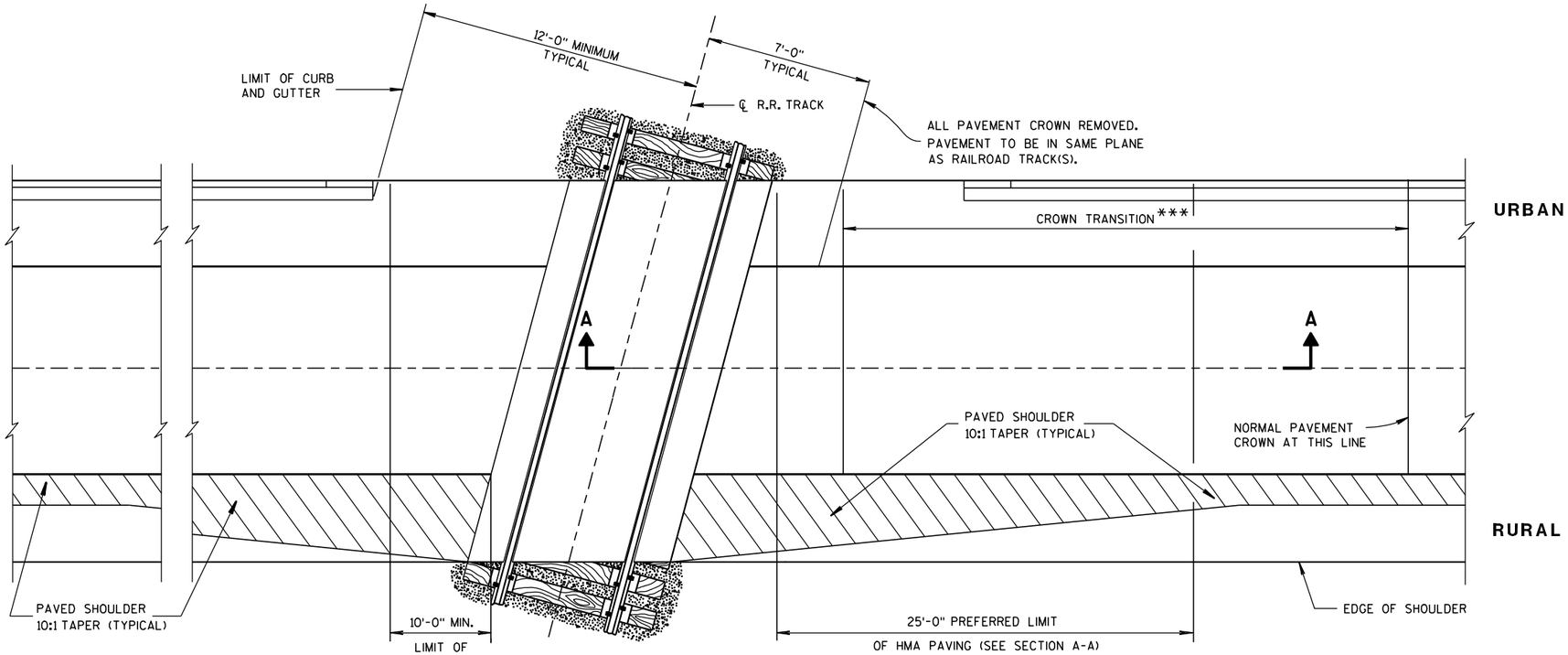
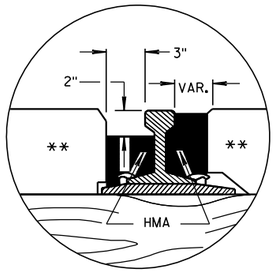




DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

GENERAL NOTES

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

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

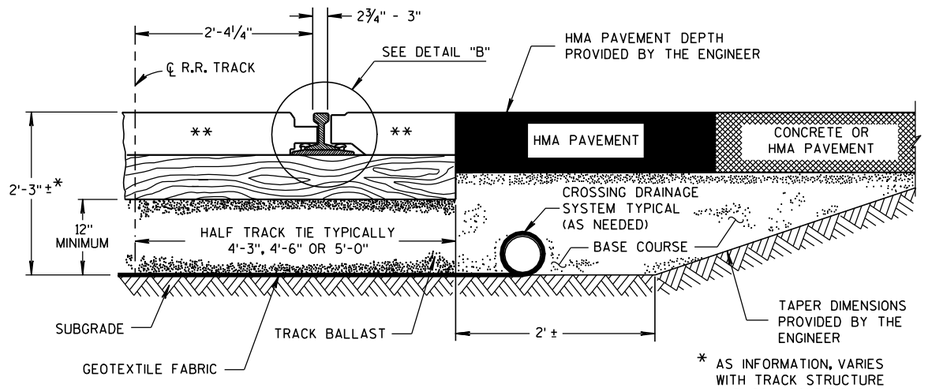
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

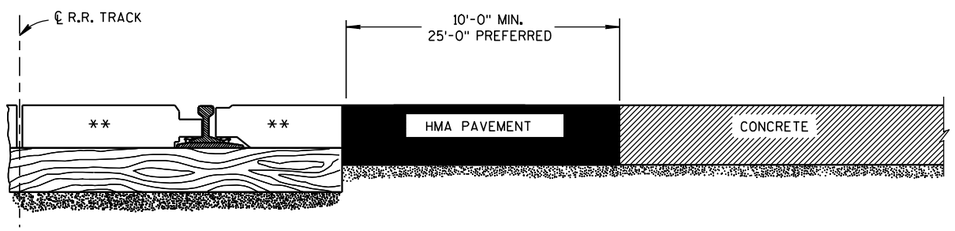
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

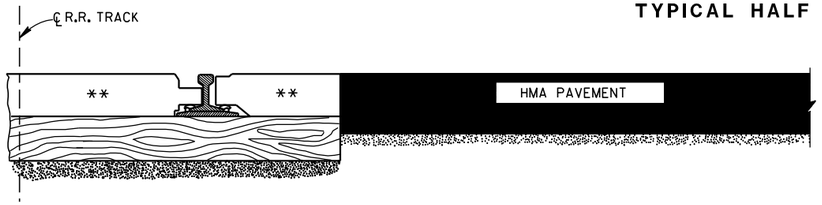


TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH



SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI CTION
FHWA

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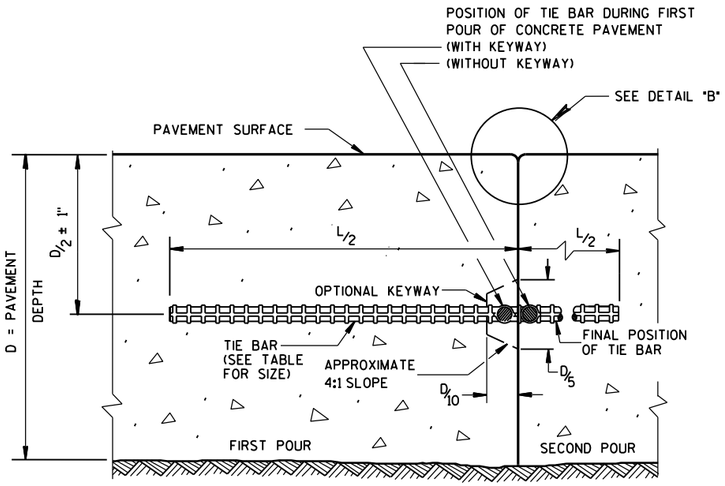
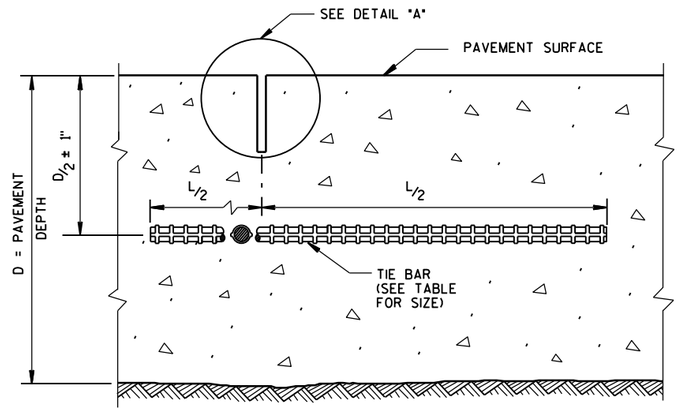
S.D.D. 13 B 1-10



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.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

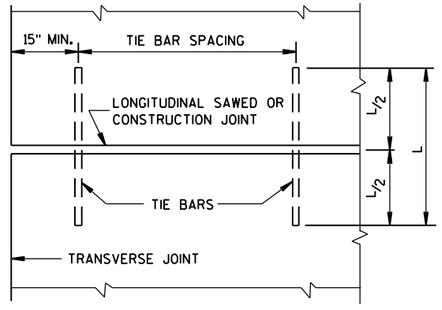
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPER

FHWA

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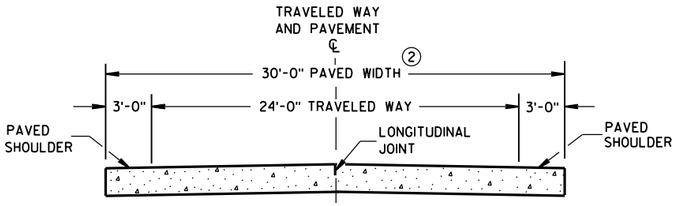
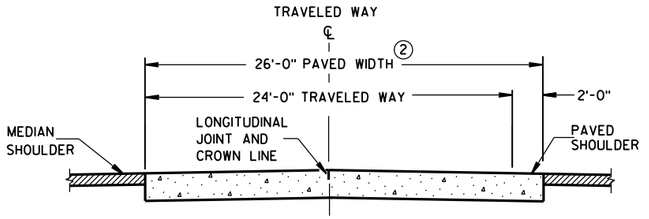
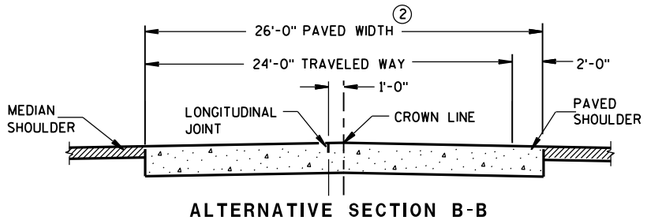


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

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 FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

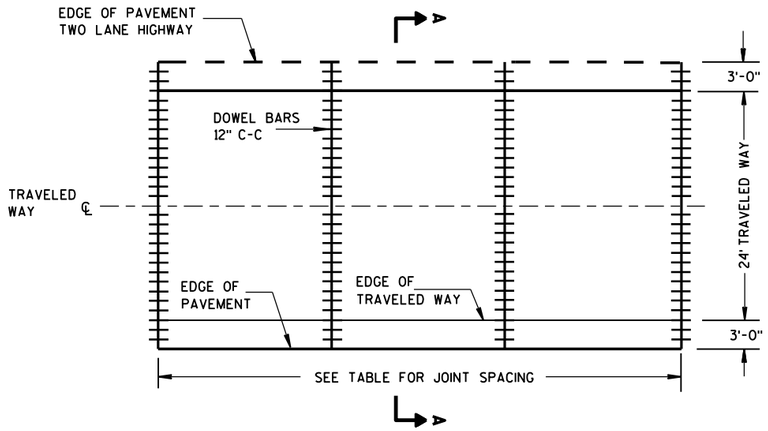
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

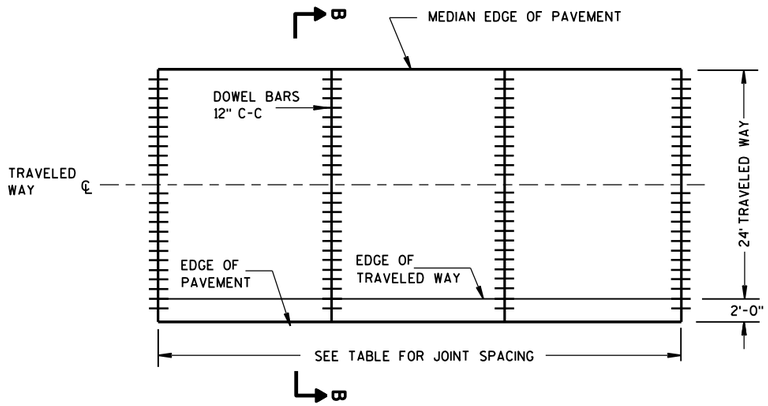
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

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'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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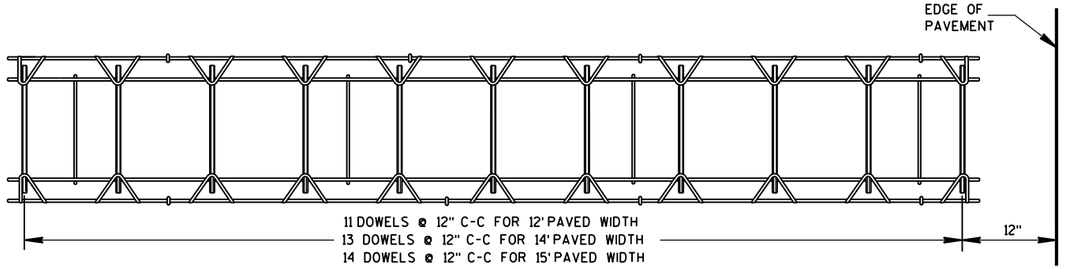
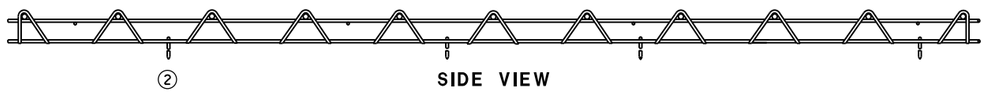


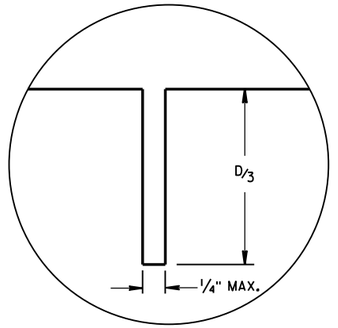
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

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.

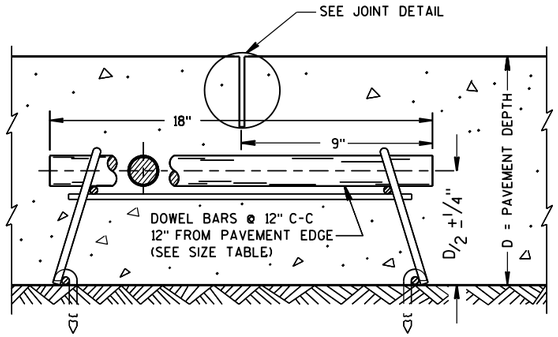
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

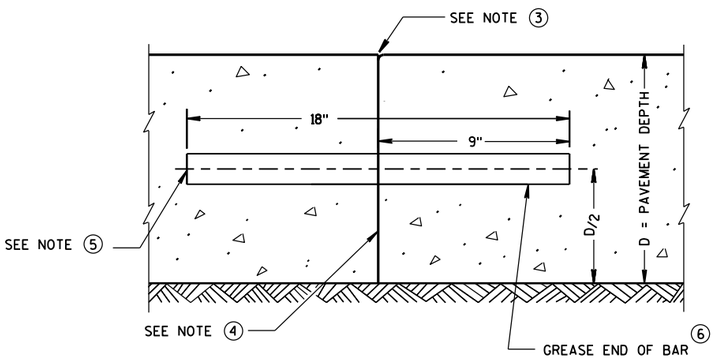
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

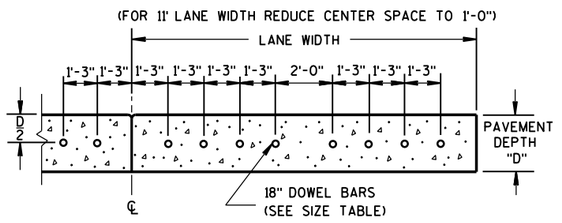
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff PAVEMENT POLICY & DE ...NEER
FHWA

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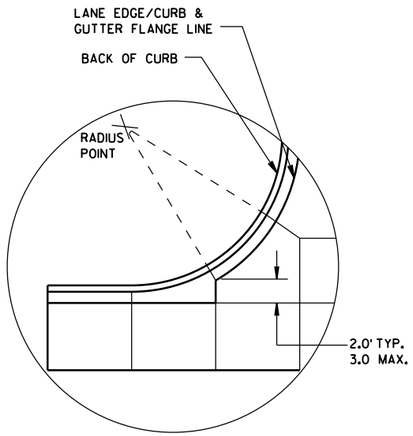
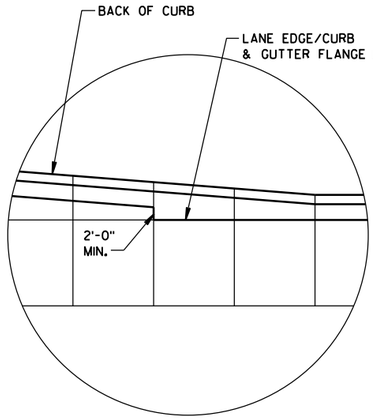
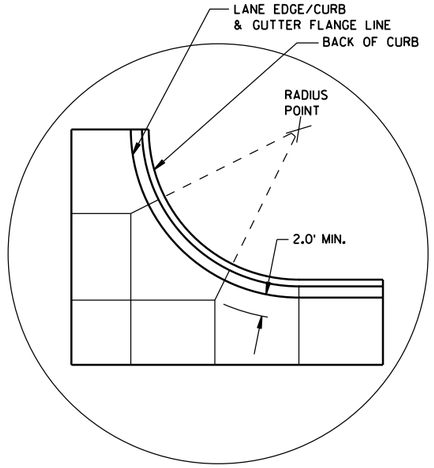


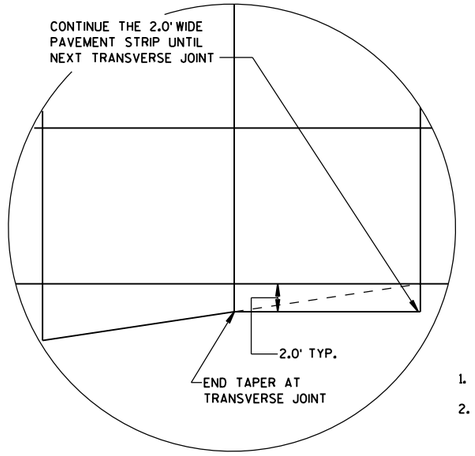
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

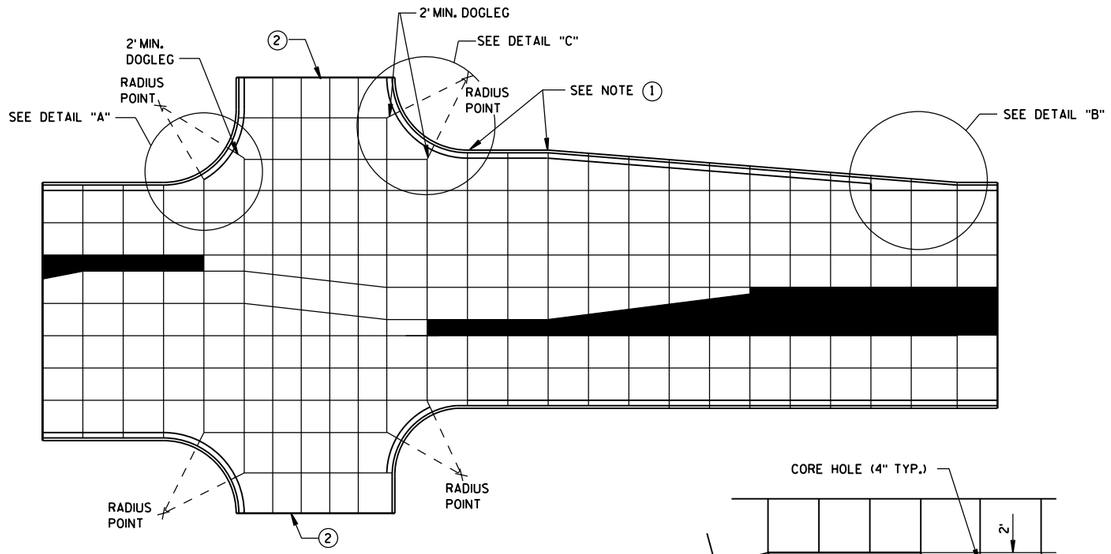
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

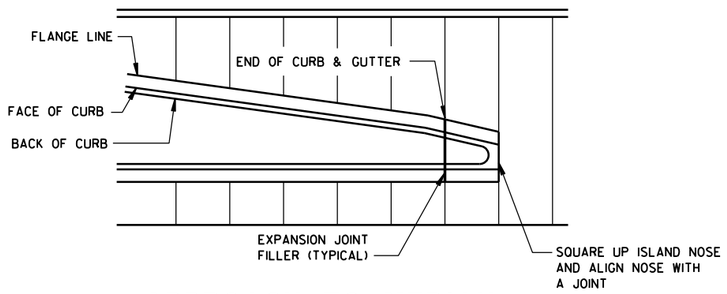
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



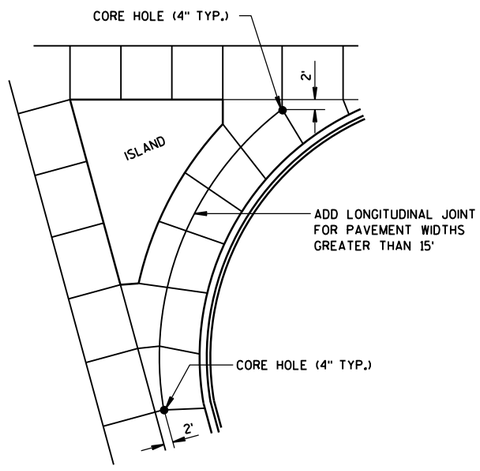
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

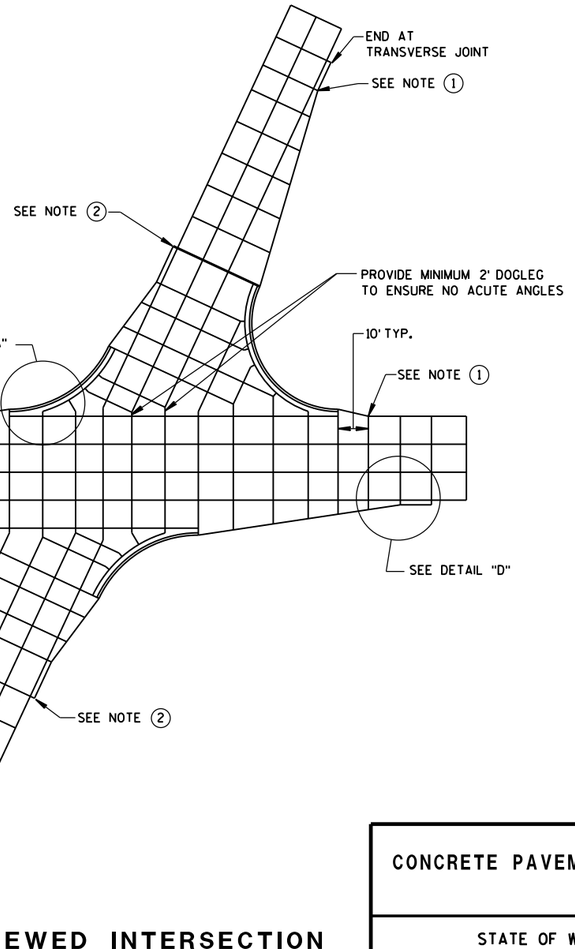
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

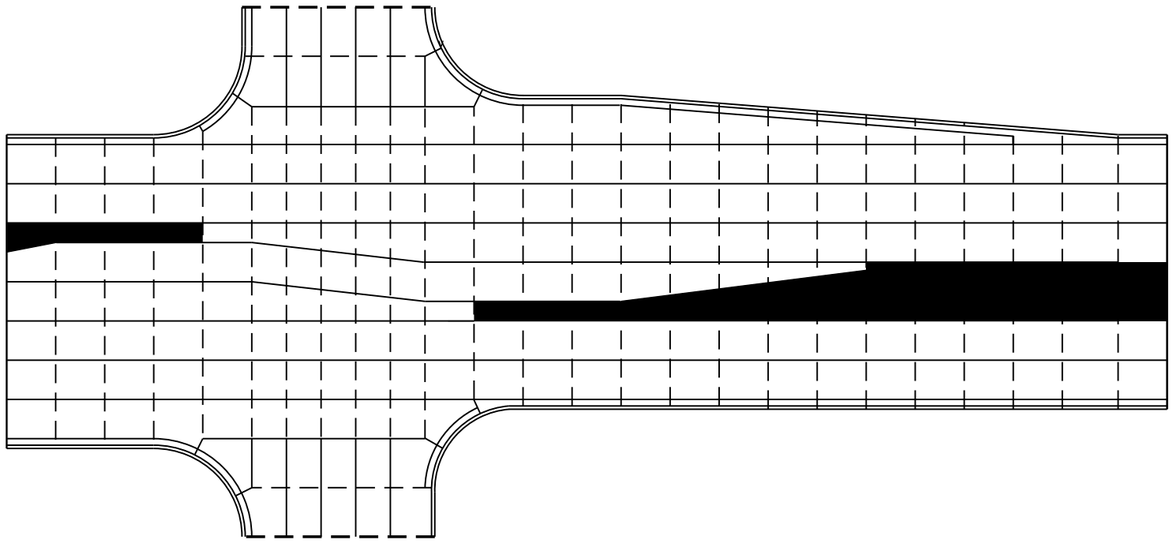
6
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

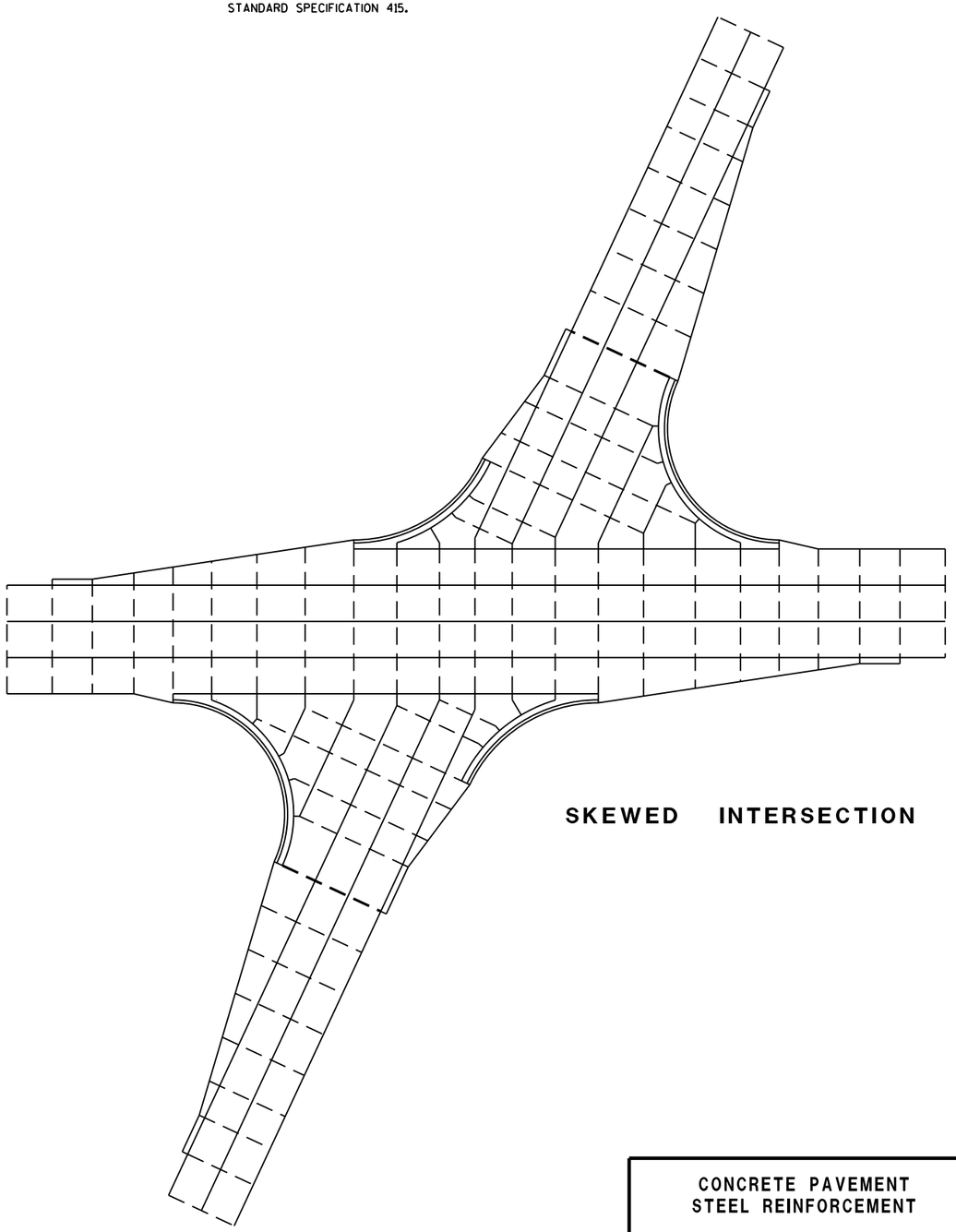
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

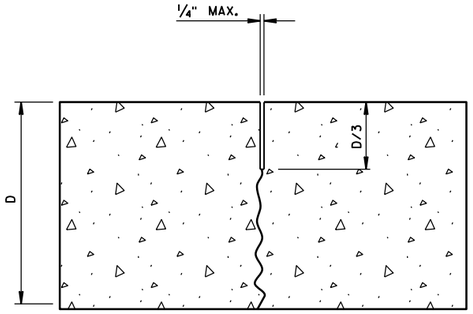
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

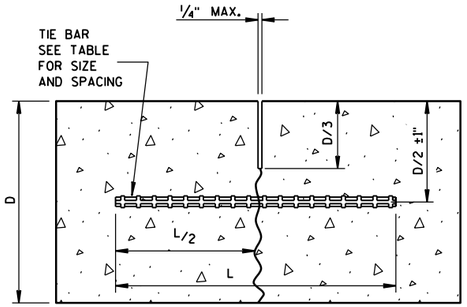
S.D.D. 13 C 18-3b

6

S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

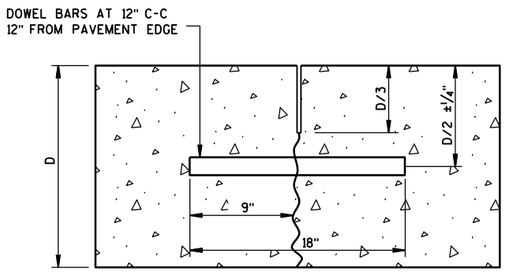
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

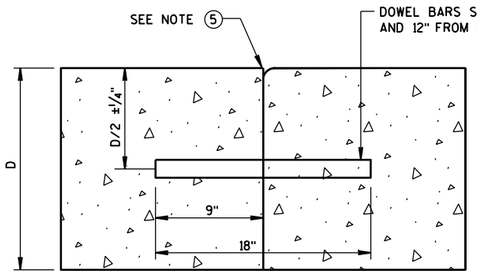
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



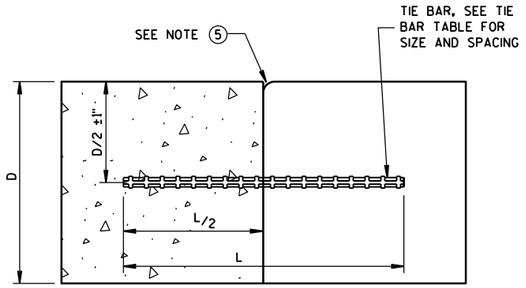
DOWELED-TRANSVERSE

CONTRACTION JOINTS

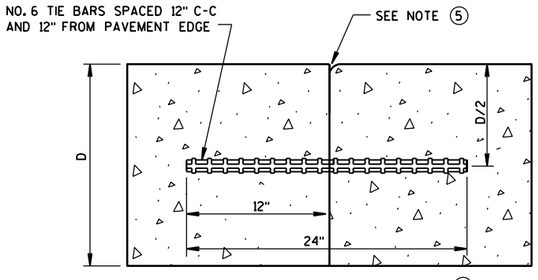
SEE NOTE (2)



DOWELED TRANSVERSE (3)

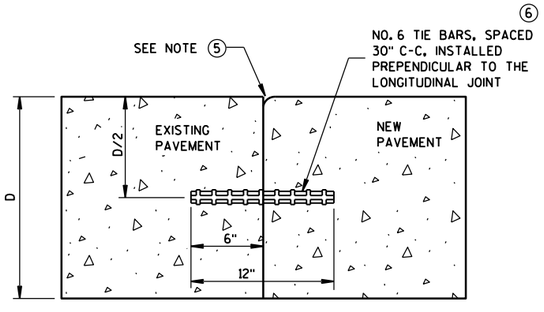


TIED LONGITUDINAL



TIED TRANSVERSE (3)

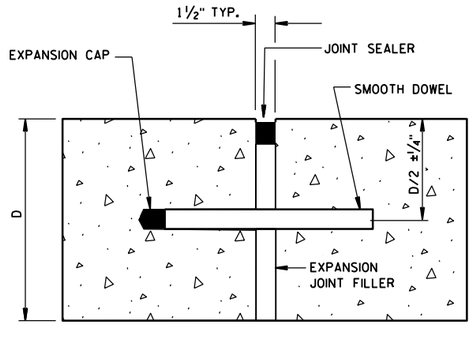
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

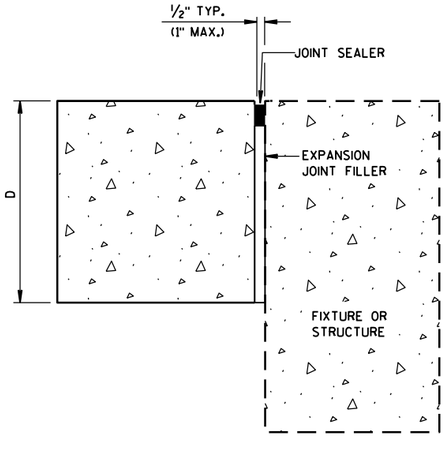
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

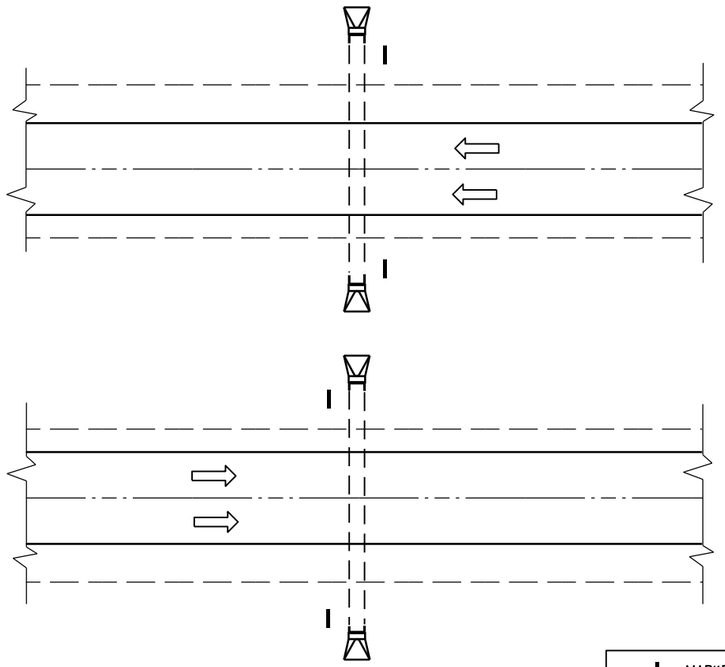
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

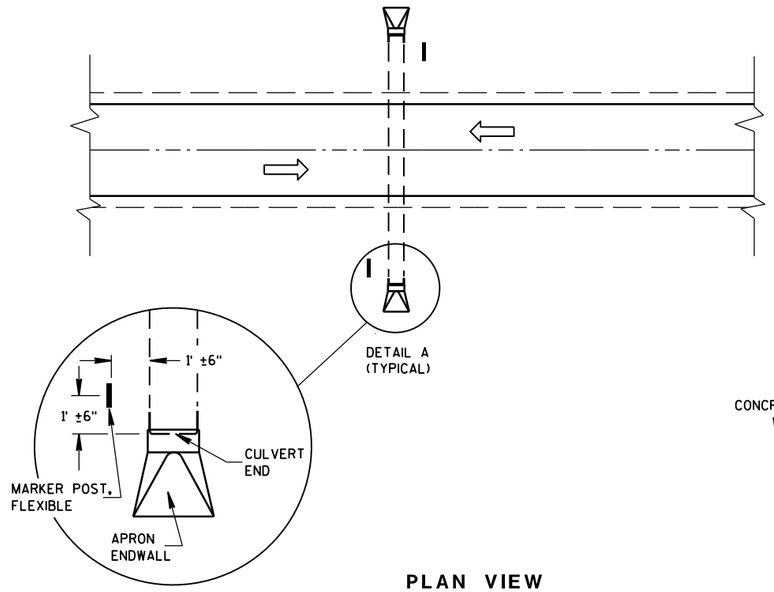
6

S.D.D. 13 C 18-3c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

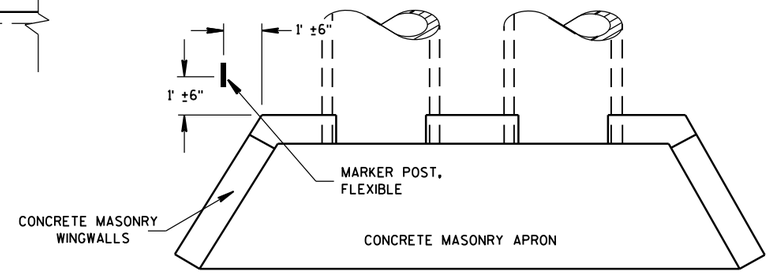
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

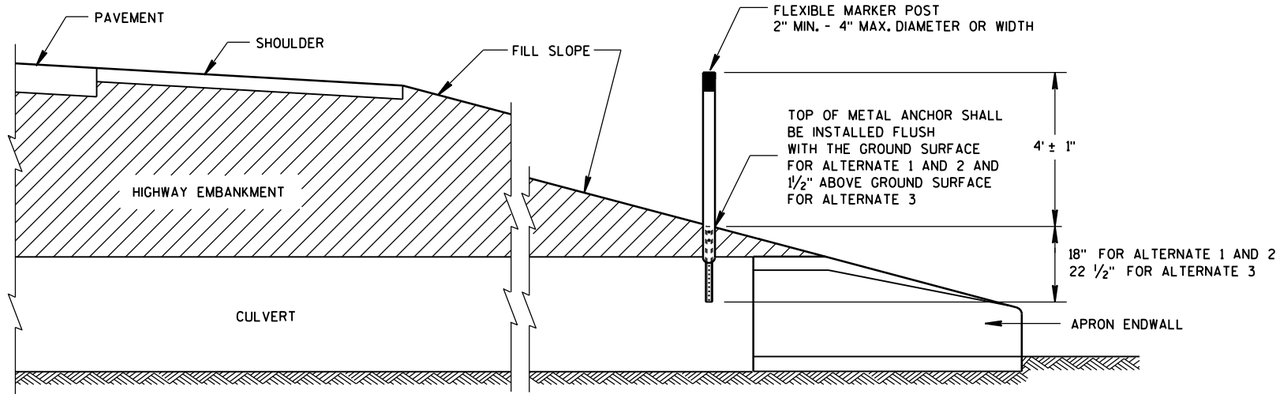
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 A 3-2a

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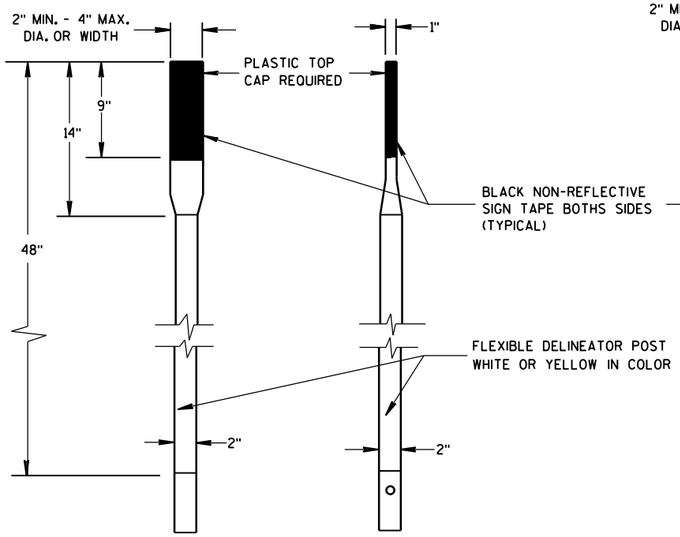
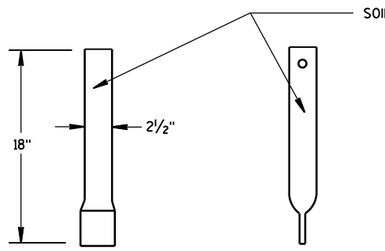
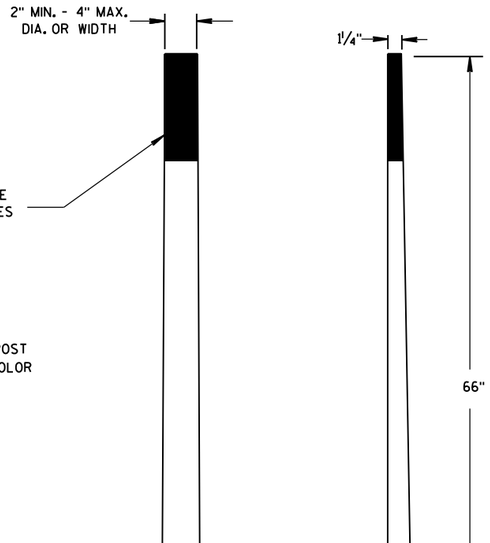
S.D.D. 15 A 3-2a





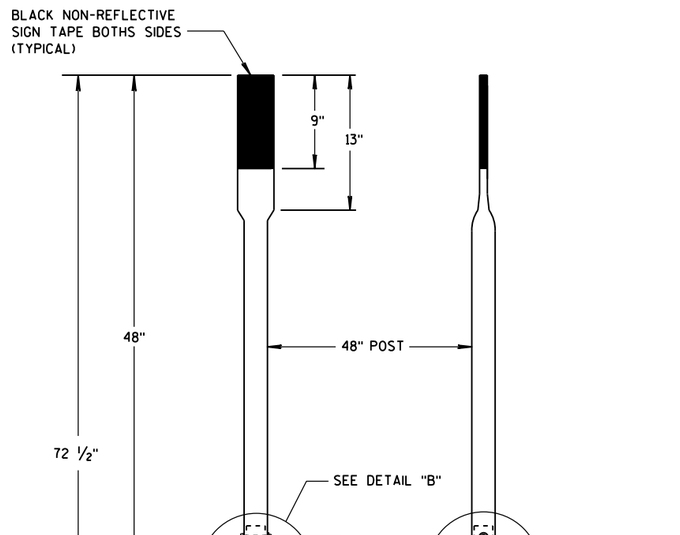
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

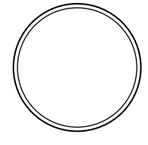
ALTERNATE 2



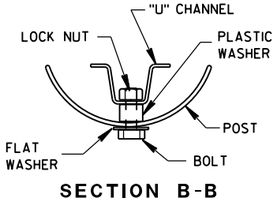
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS



SECTION A-A



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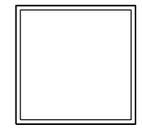
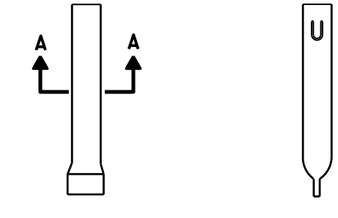
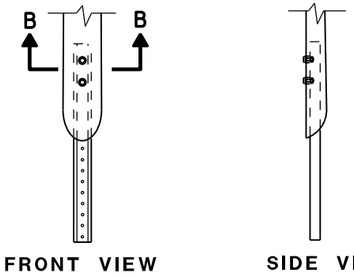


SECTION C-C



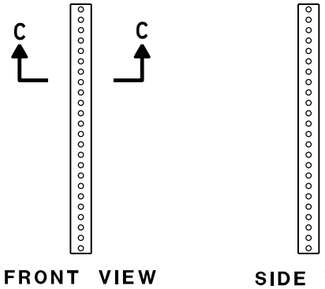
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

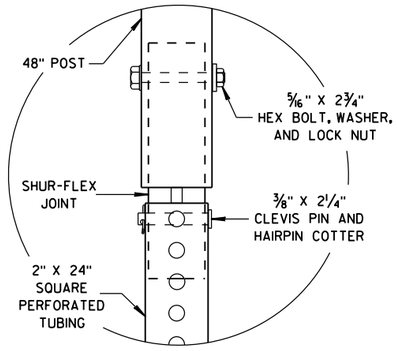
ALTERNATE 2



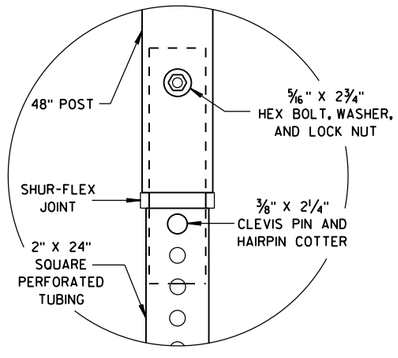
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

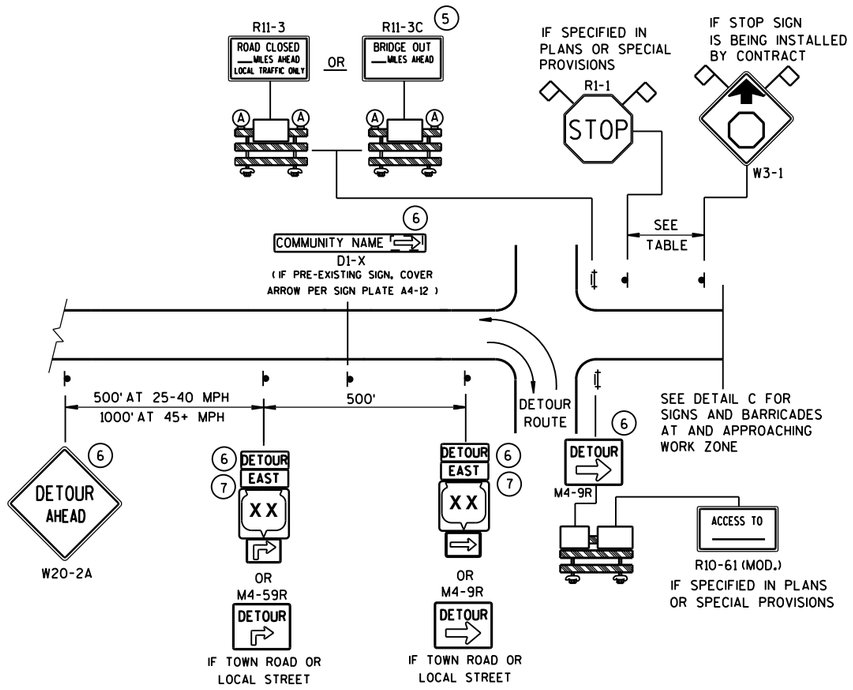
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

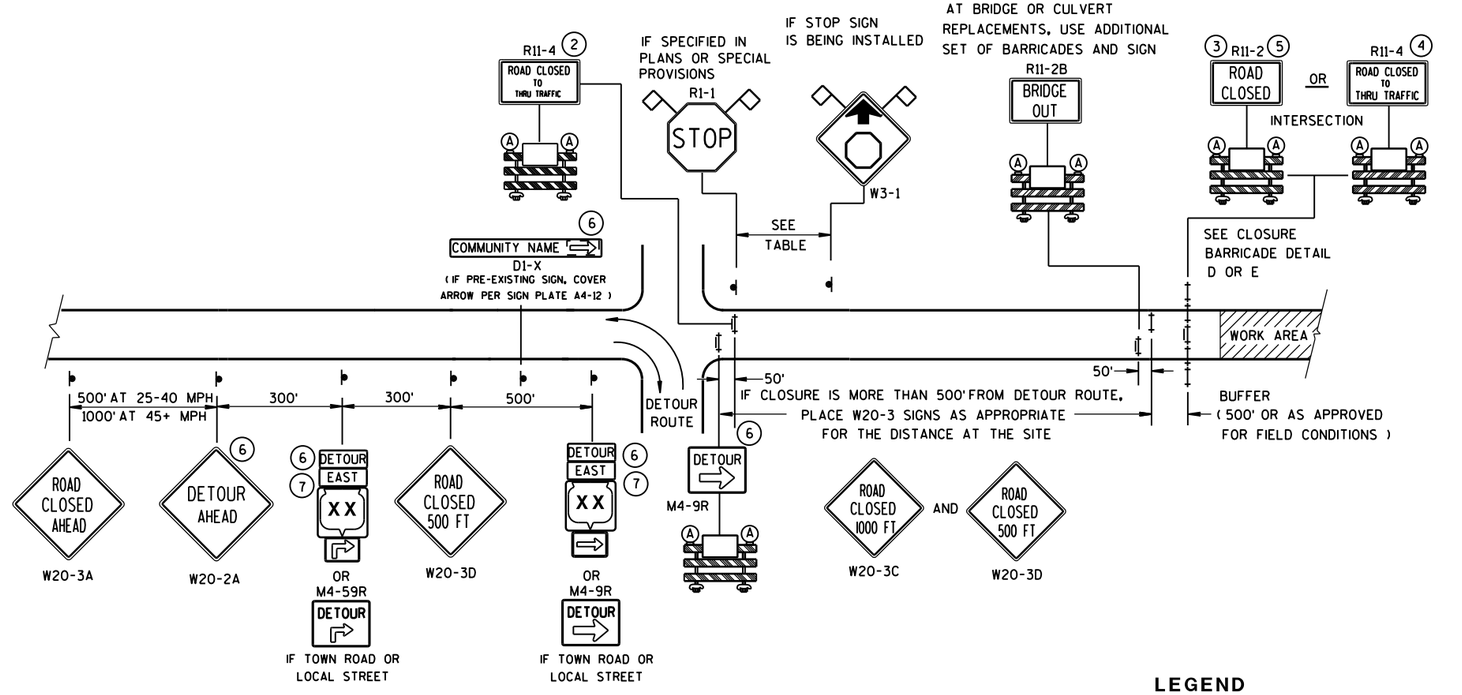
6

S.D.D. 15 A 3-2b



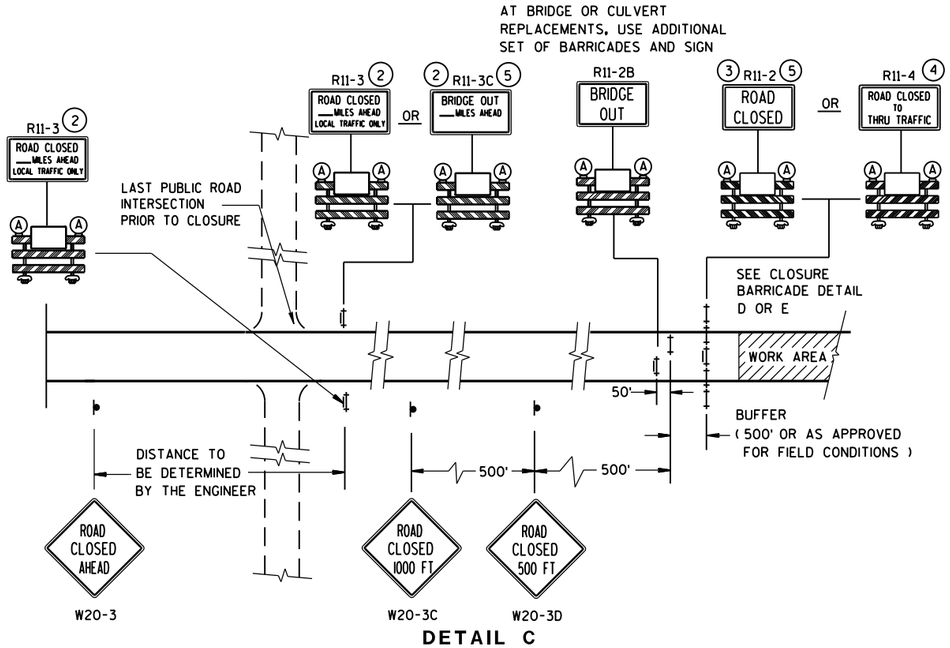
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

S.D.D. 15 C 2-6a

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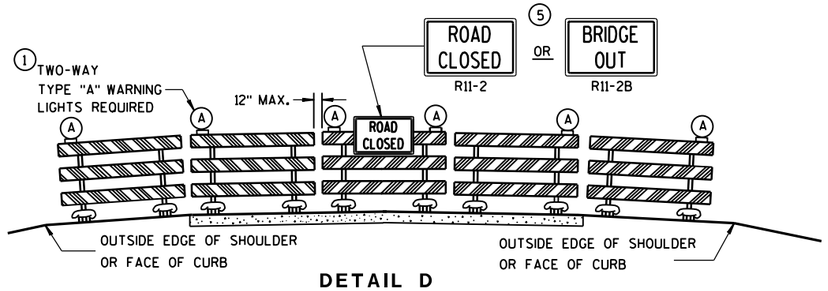
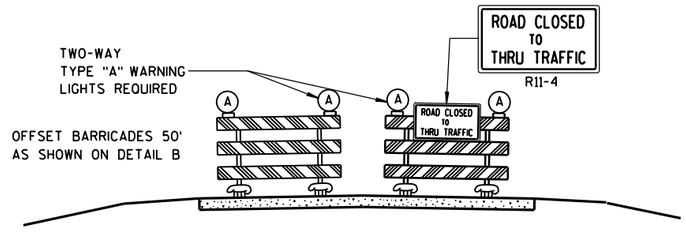


DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

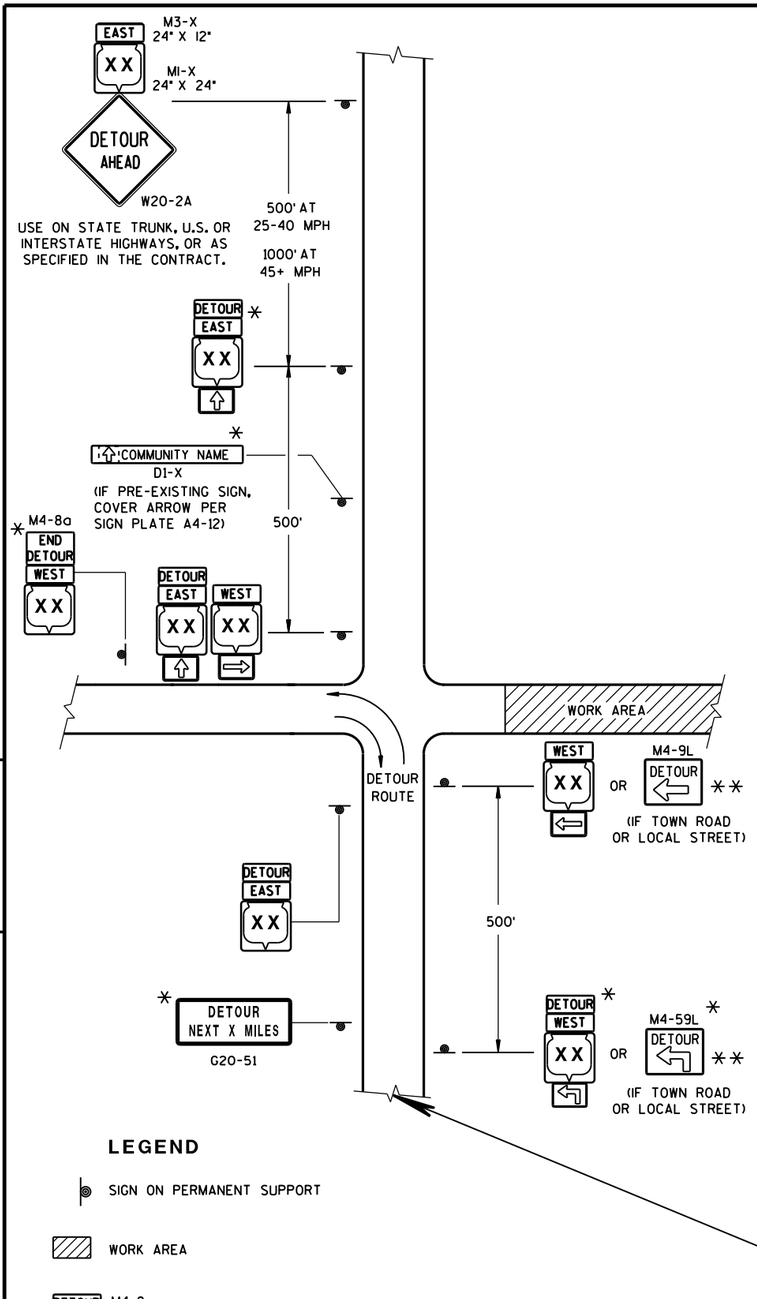
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

FHWA

6

S.D.D. 15 C 2-6b



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

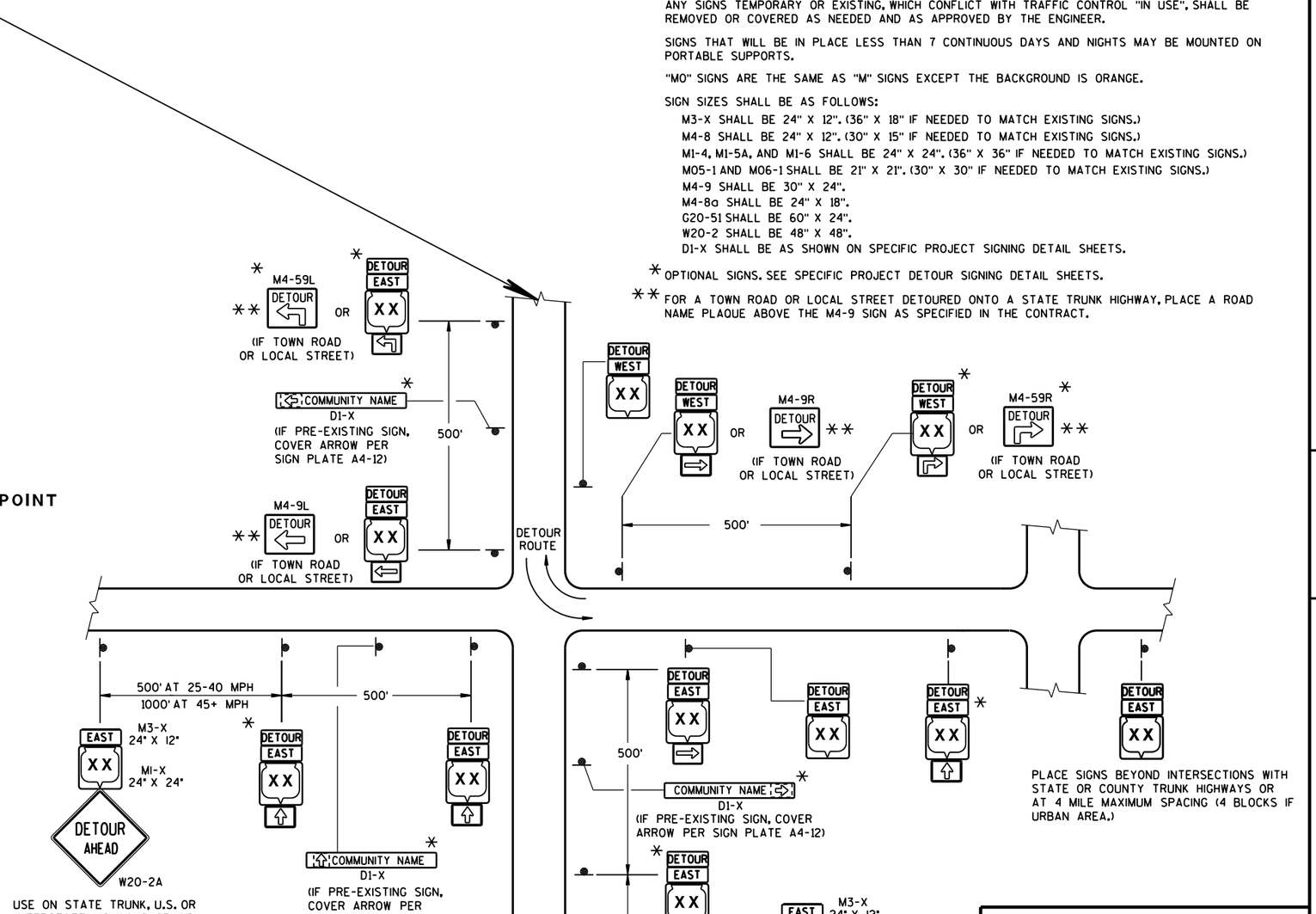
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4
- COUNTY XX — M1-5A
- XX — M1-6
- MO5-1
- MO6-1
- MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015
DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] FIC
SAFETY ENGI[illegible]

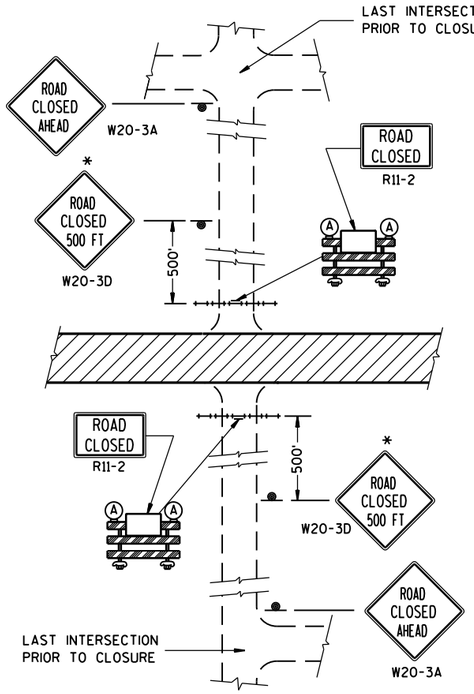
FHWA

6

S.D.D. 15 C 2-6c

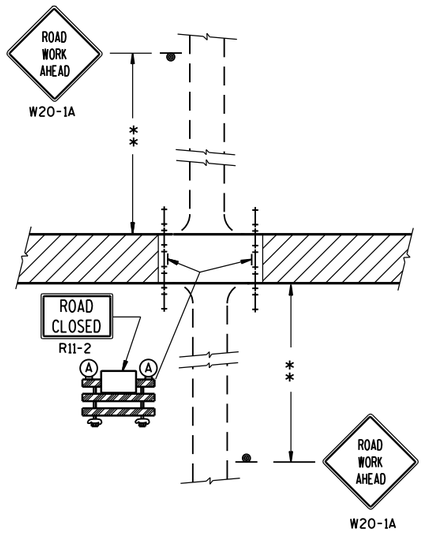
6

S.D.D. 15 C 2-6c



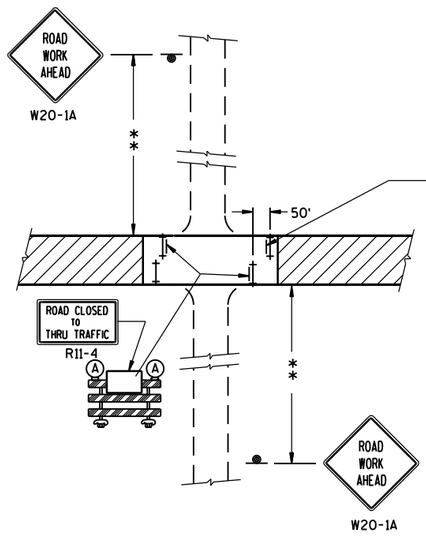
DETAIL 1

(NO ACCESS TO PROJECT)



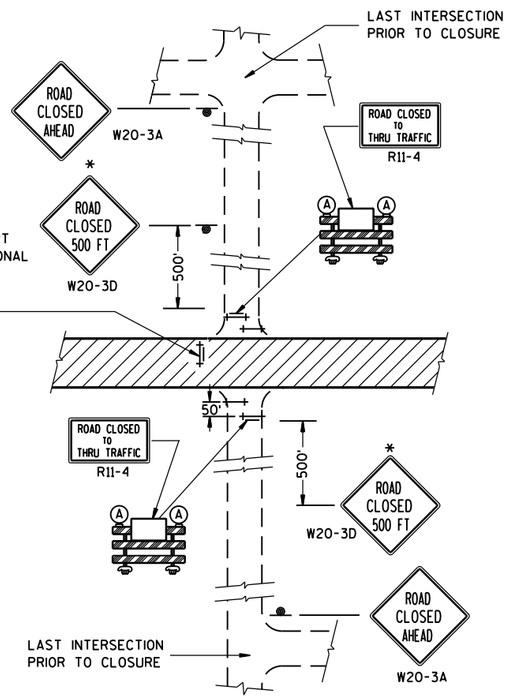
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

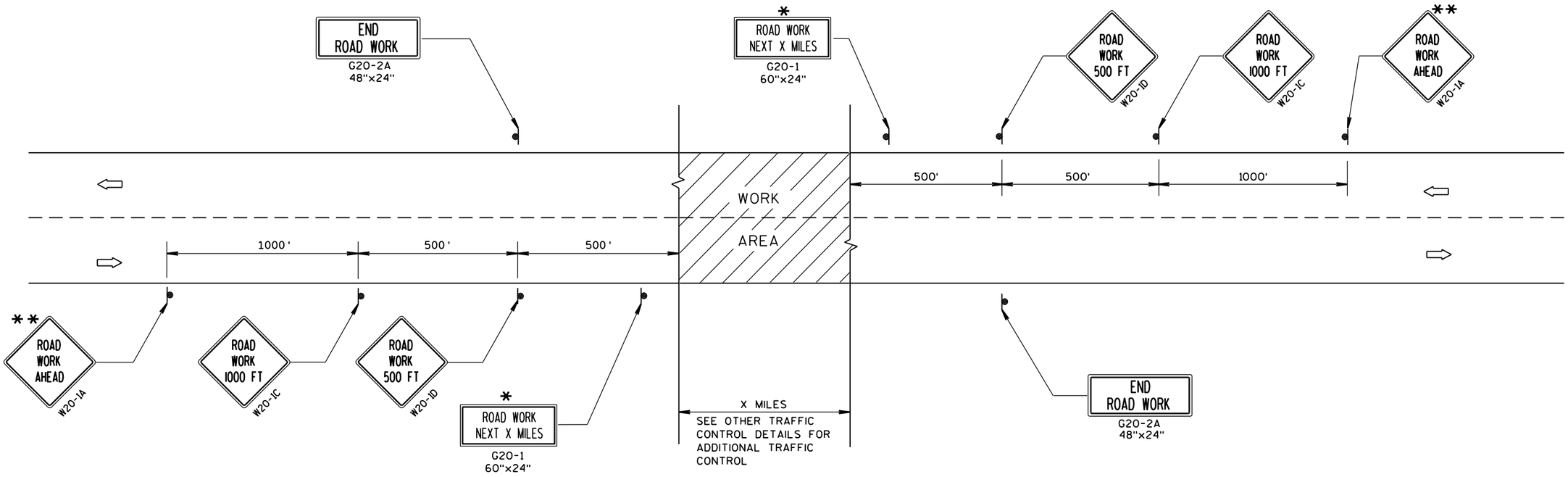
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

6

S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

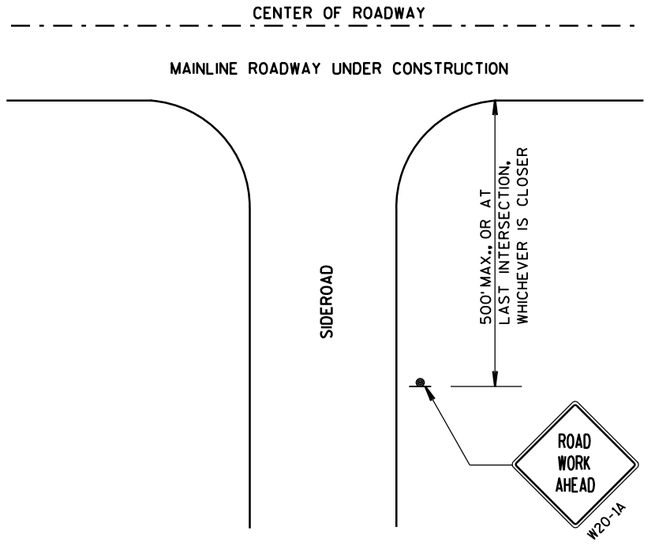
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

FHWA

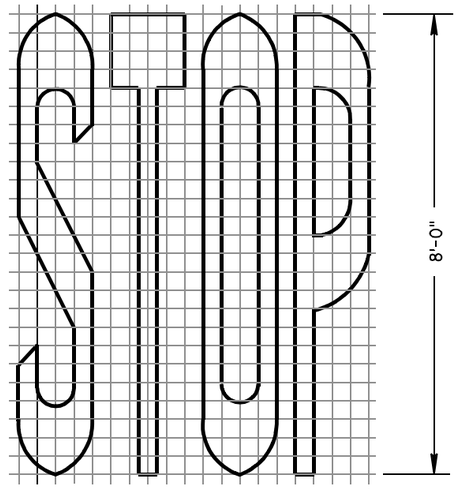
6

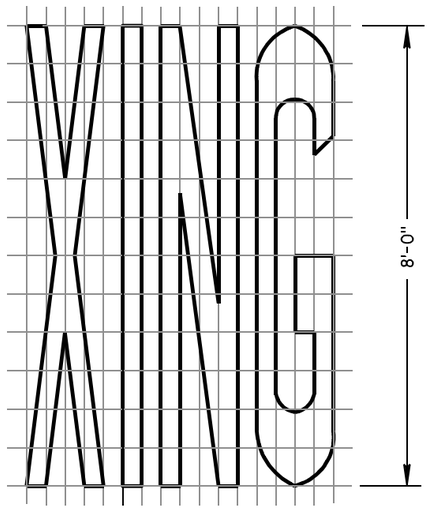
S.D.D. 15 C 4-3

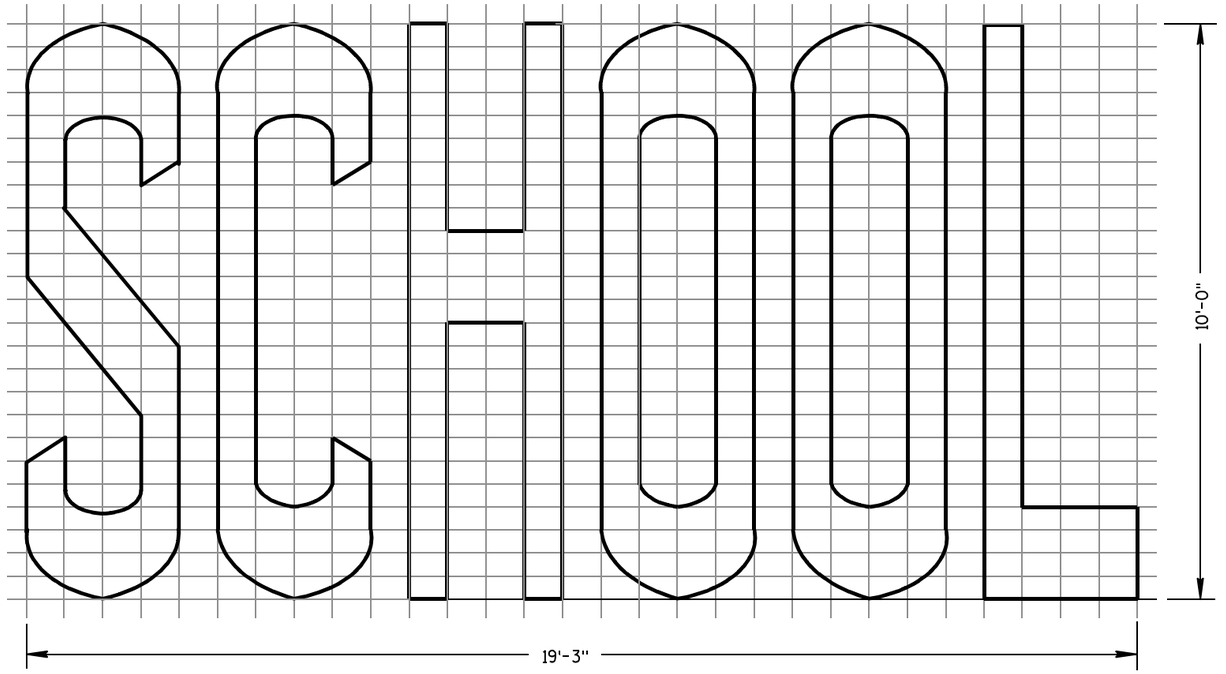
GENERAL NOTES

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

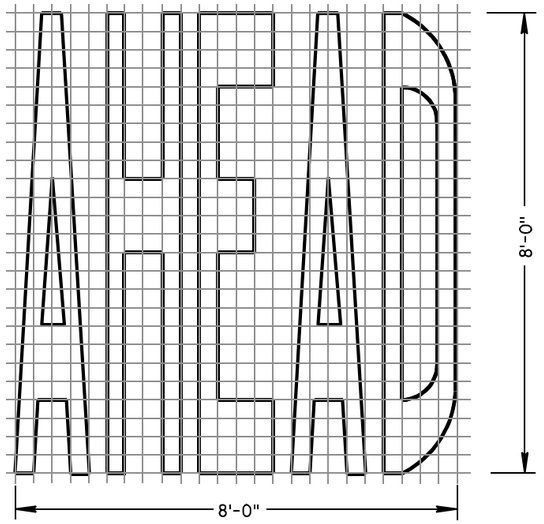
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

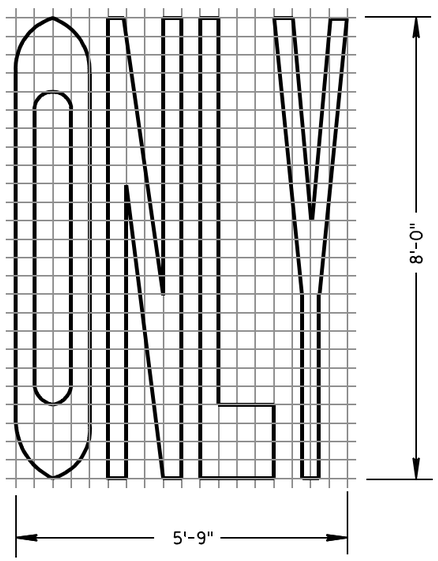


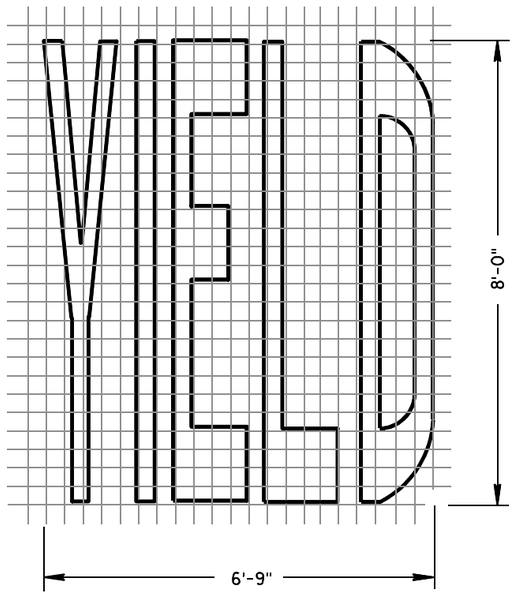


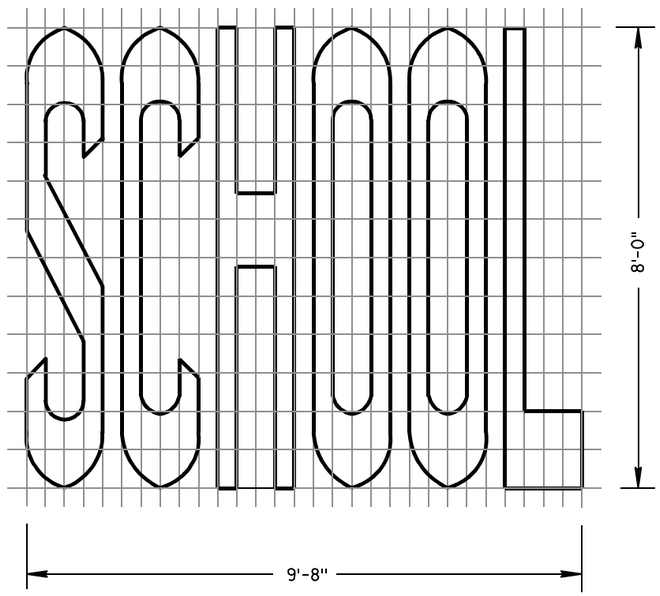


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12b

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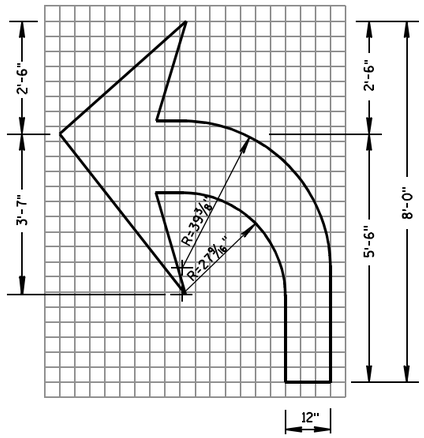
S.D.D. 15 C 7-12b

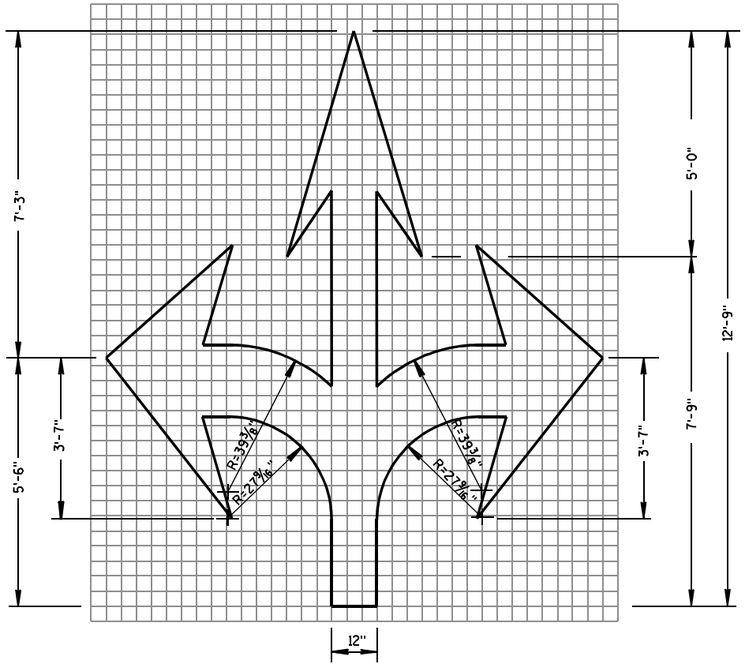
GENERAL NOTES

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.

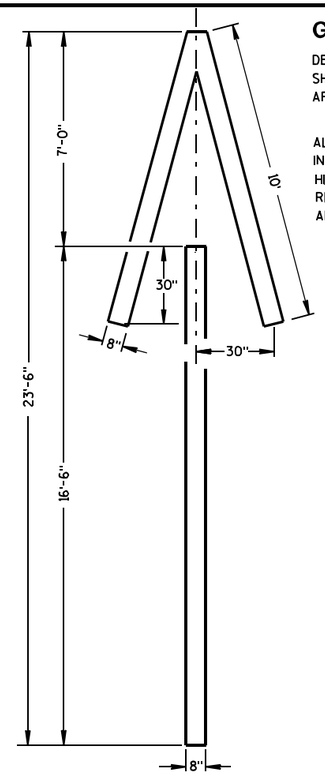
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



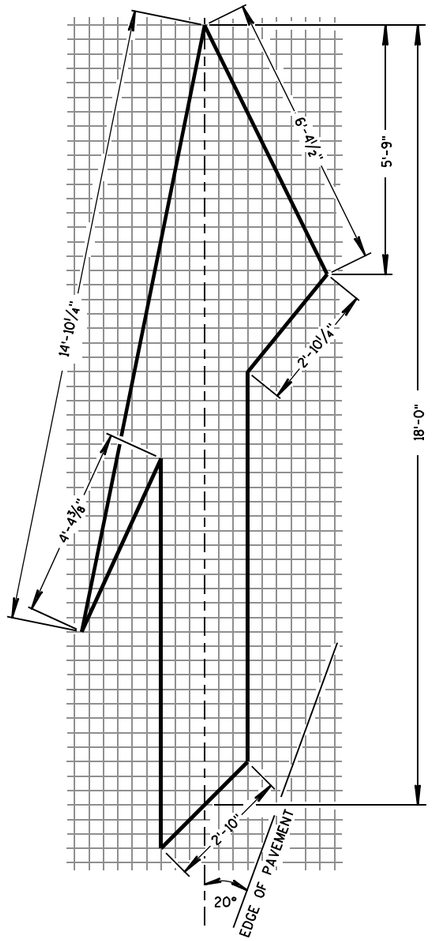
TYPE 2



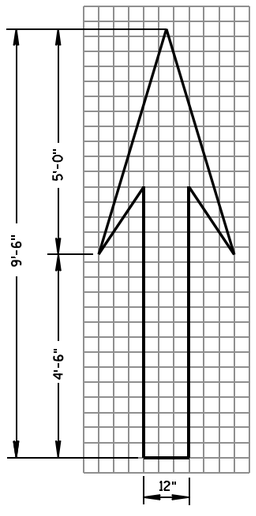
TYPE 6



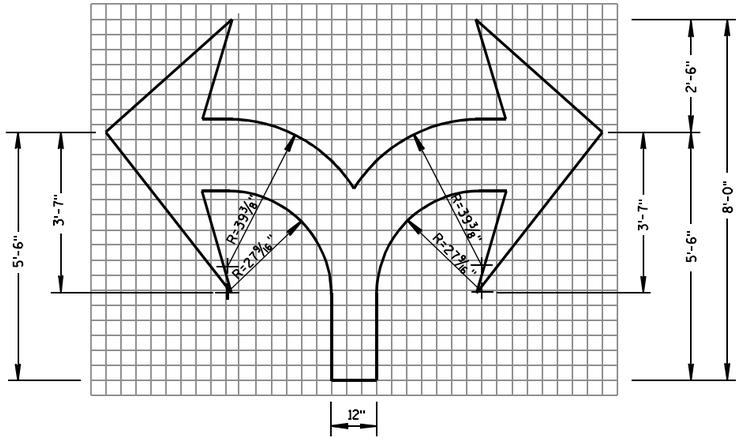
TYPE 4



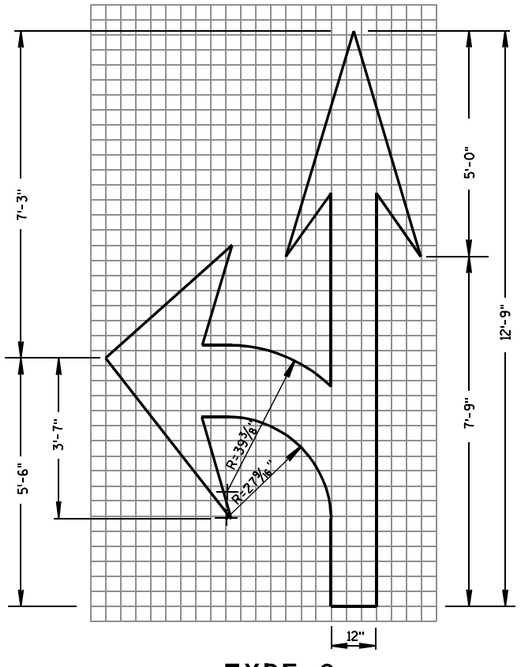
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12c

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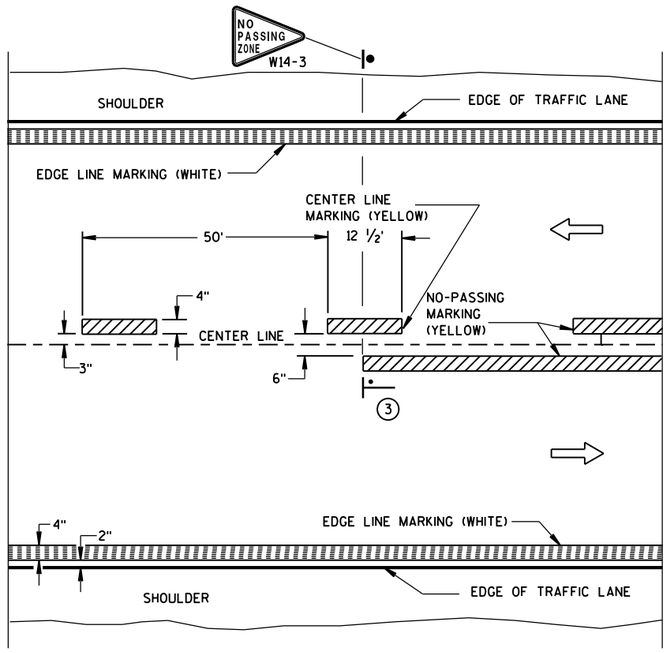
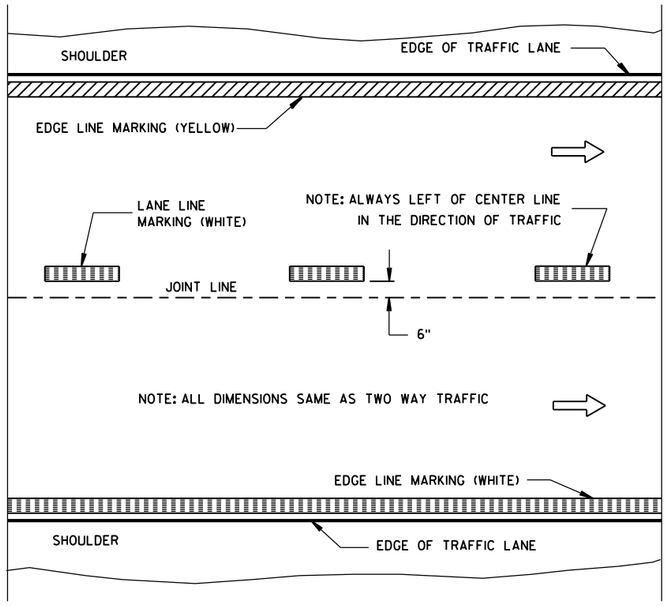
S.D.D. 15 C 7-12c

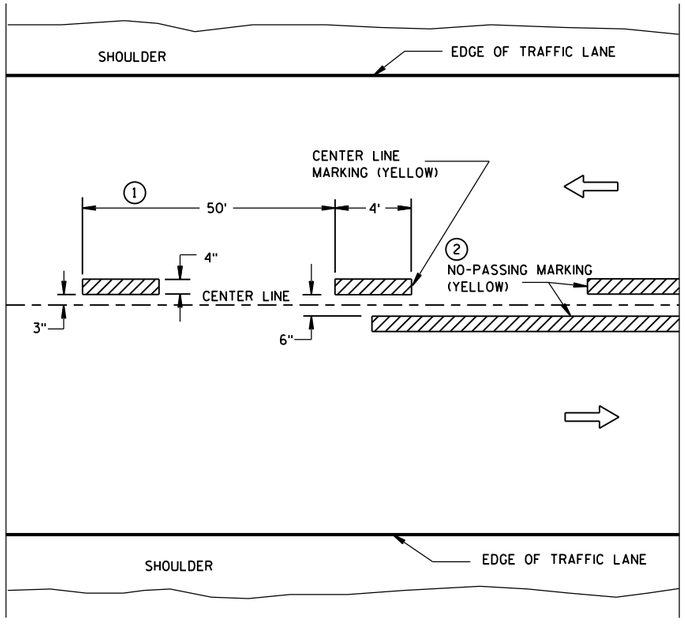


TWO WAY TRAFFIC

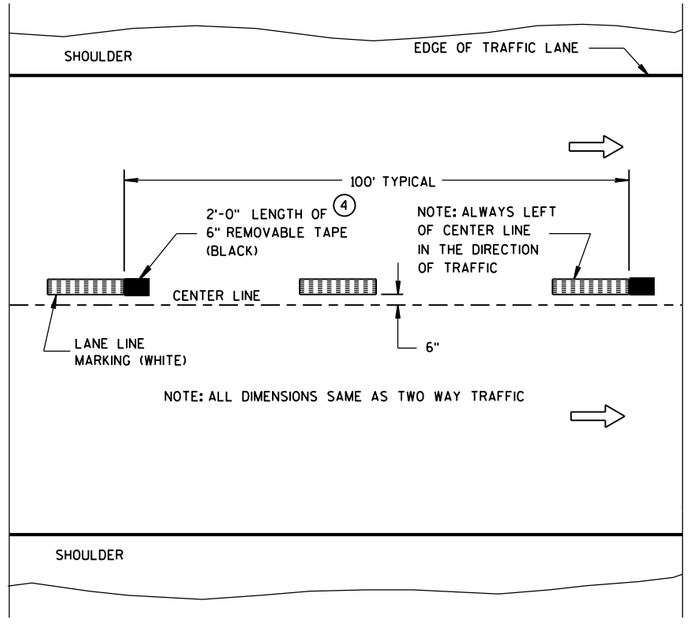


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

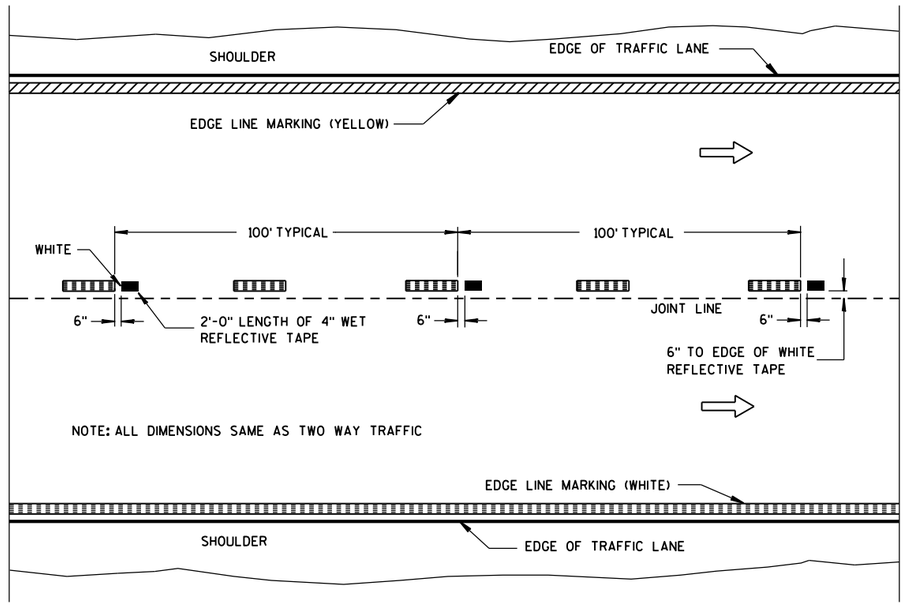
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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S.D.D. 15 C 8-16a

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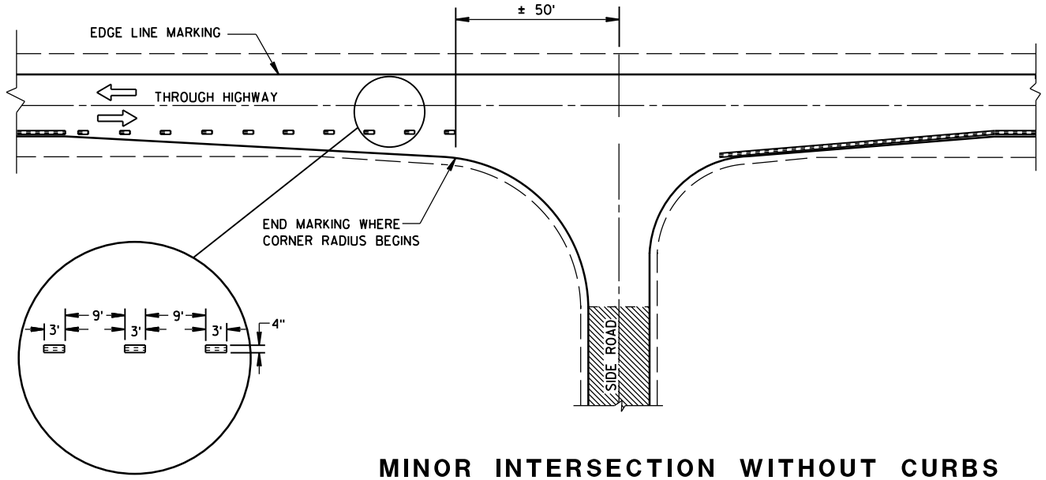
S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

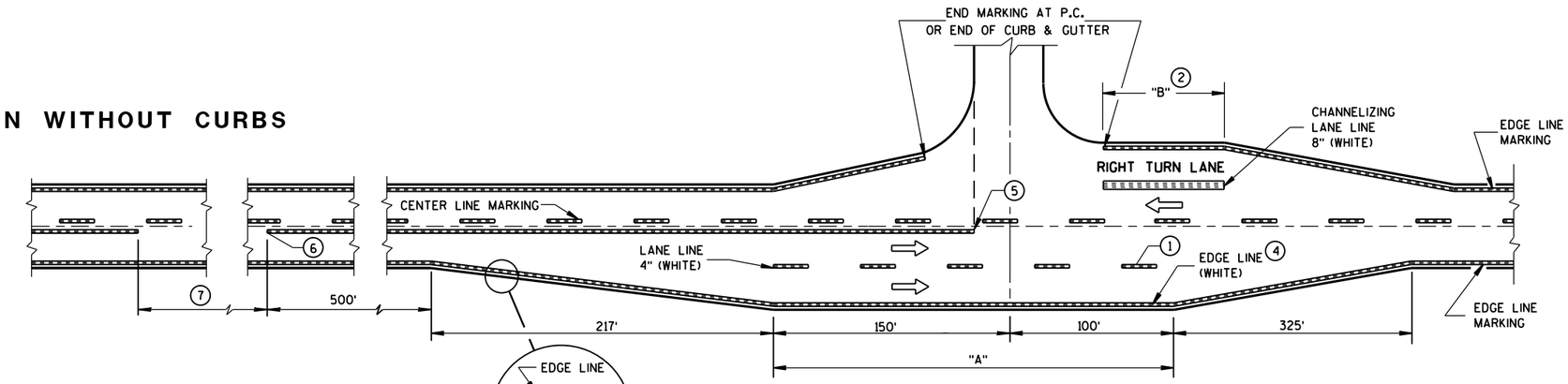
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

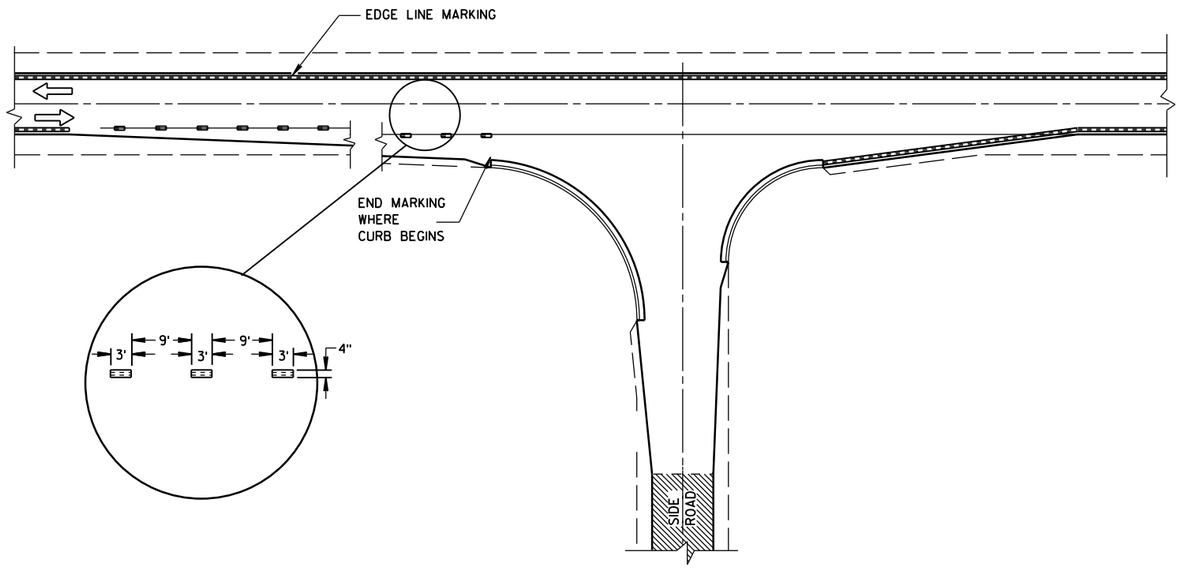
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



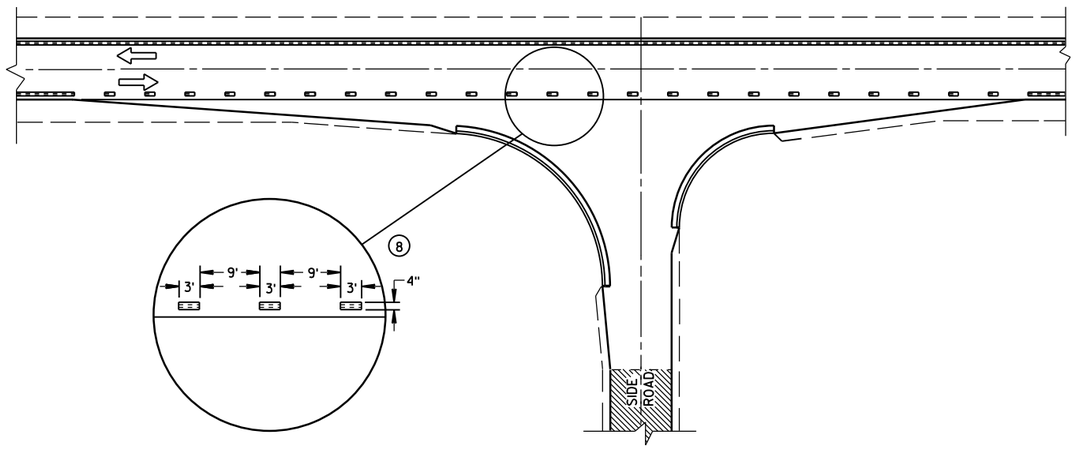
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

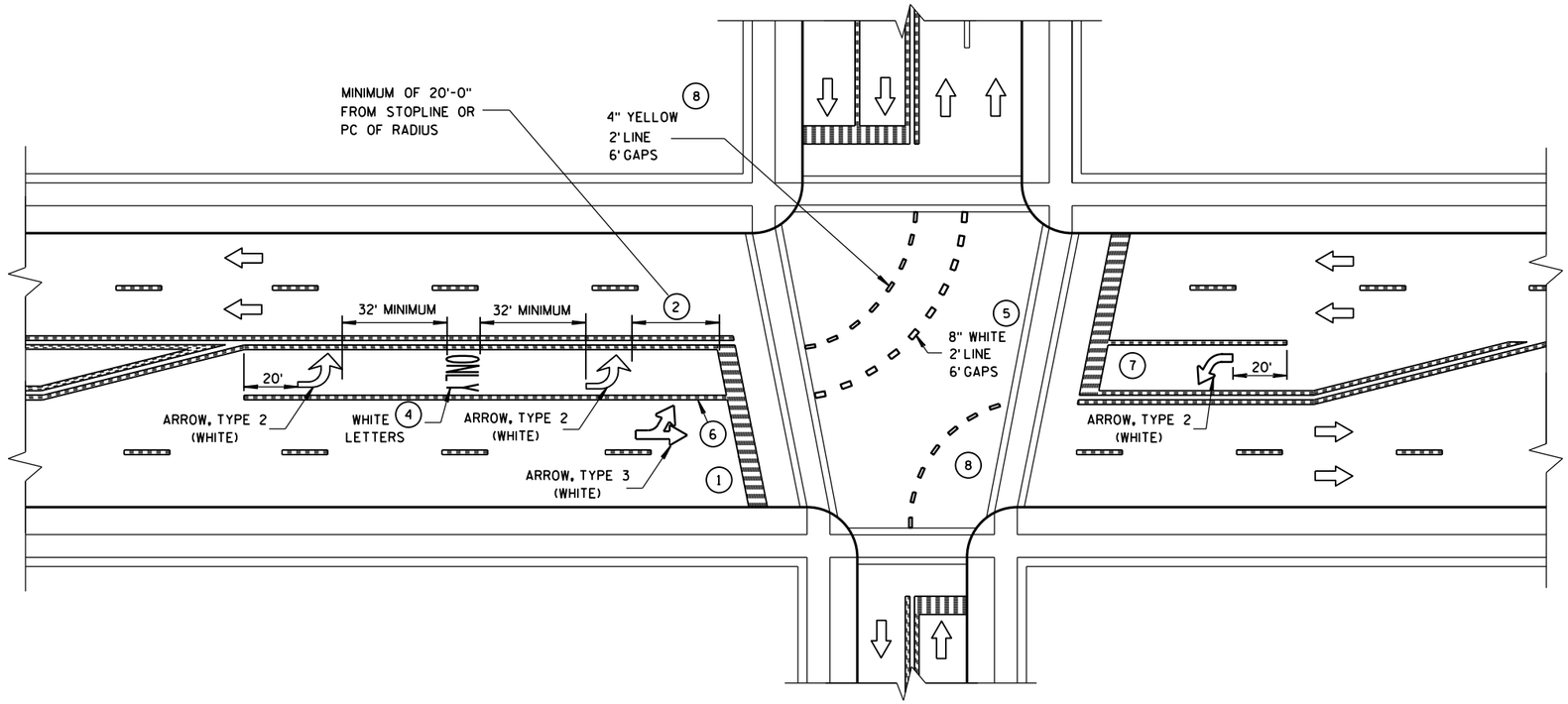
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-16b

6

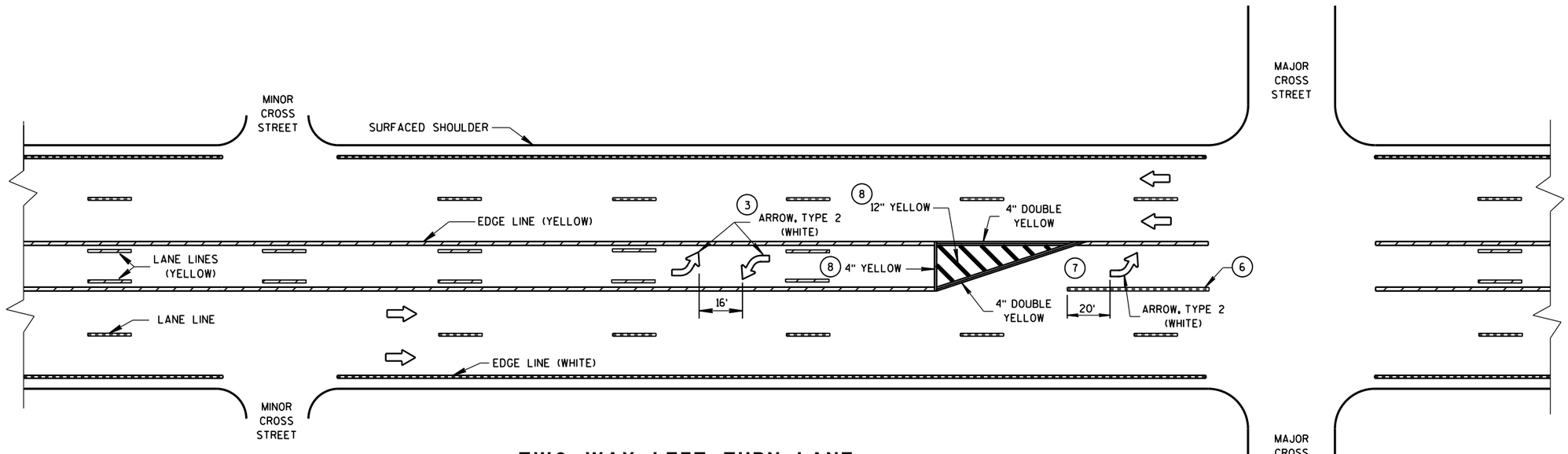
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

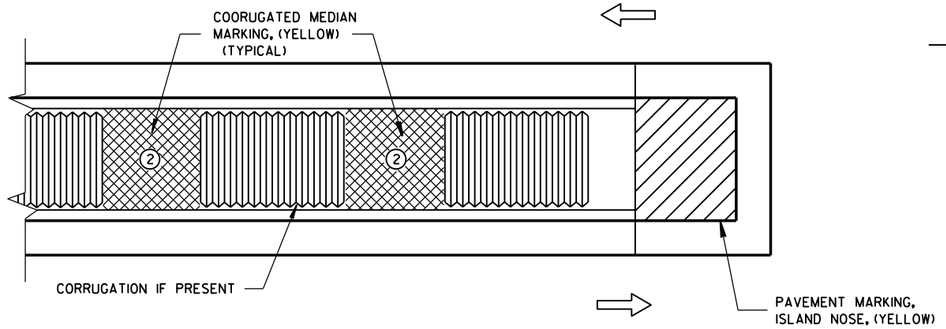
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

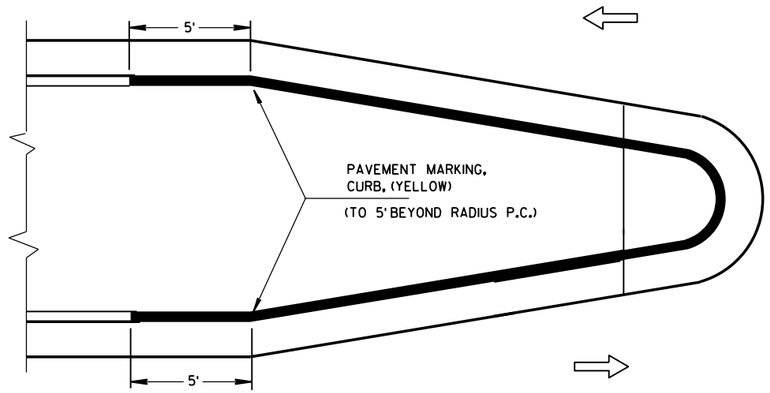
S.D.D. 15 C 8-16e

6

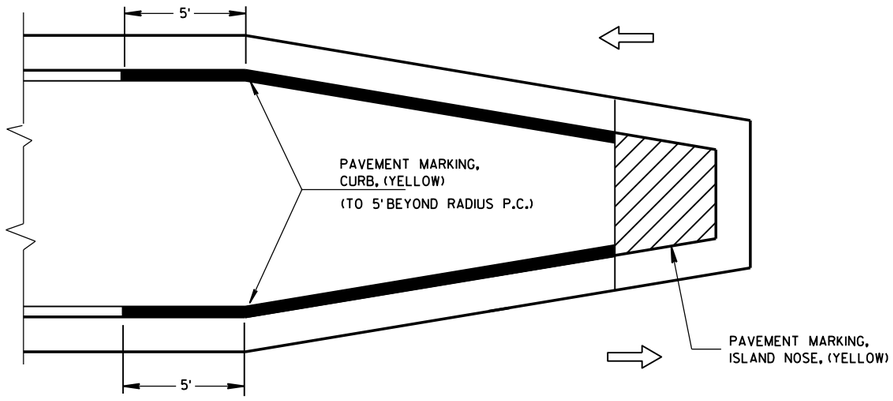
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

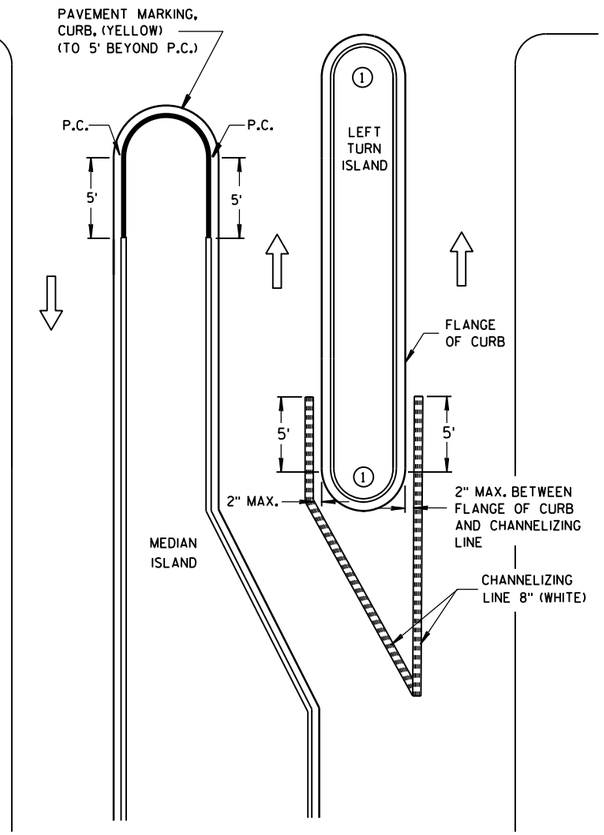


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

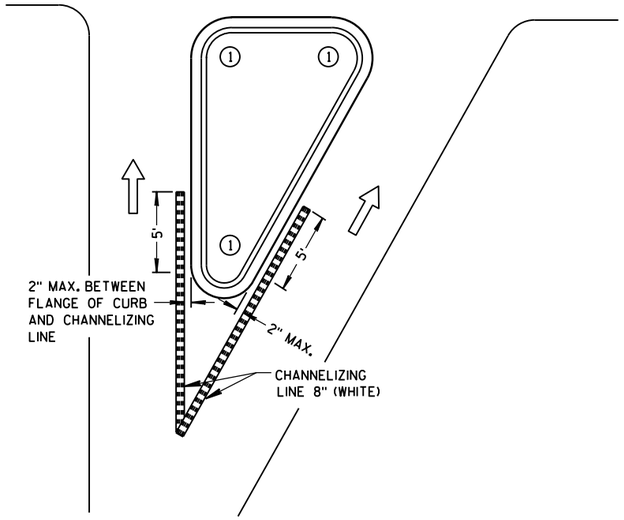


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

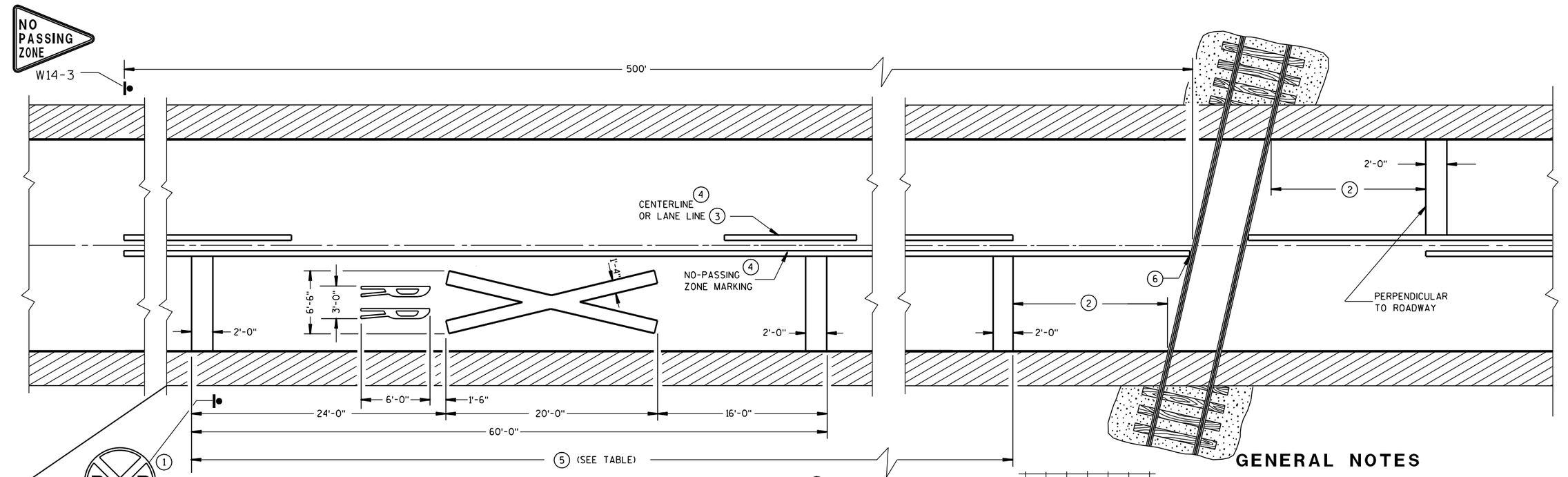
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

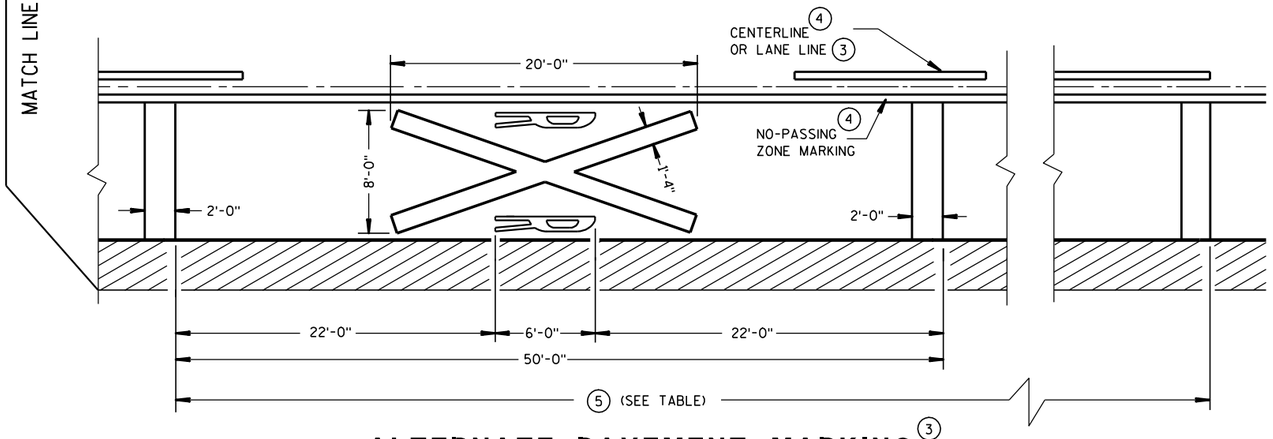
S.D.D. 15 C 8-16f

6

S.D.D. 15 C 8-16f



PREFERRED PAVEMENT MARKING 3

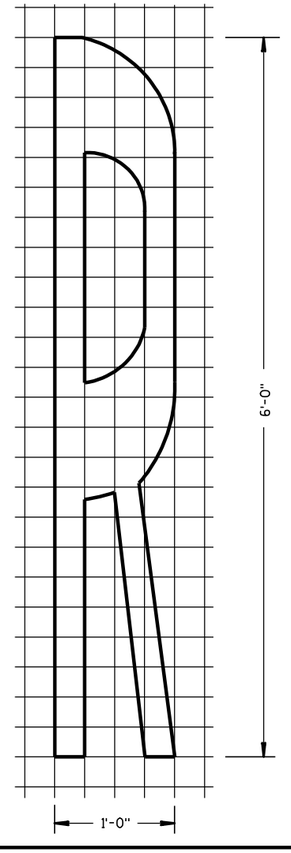


ALTERNATE PAVEMENT MARKING 3

5

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



GENERAL NOTES

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

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

1. A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
2. MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
3. REFLECTIVE WHITE.
4. REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
5. TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
6. FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1-9-2012
DATE

/S/ Thomas N. [illegible]
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 9-9a

6

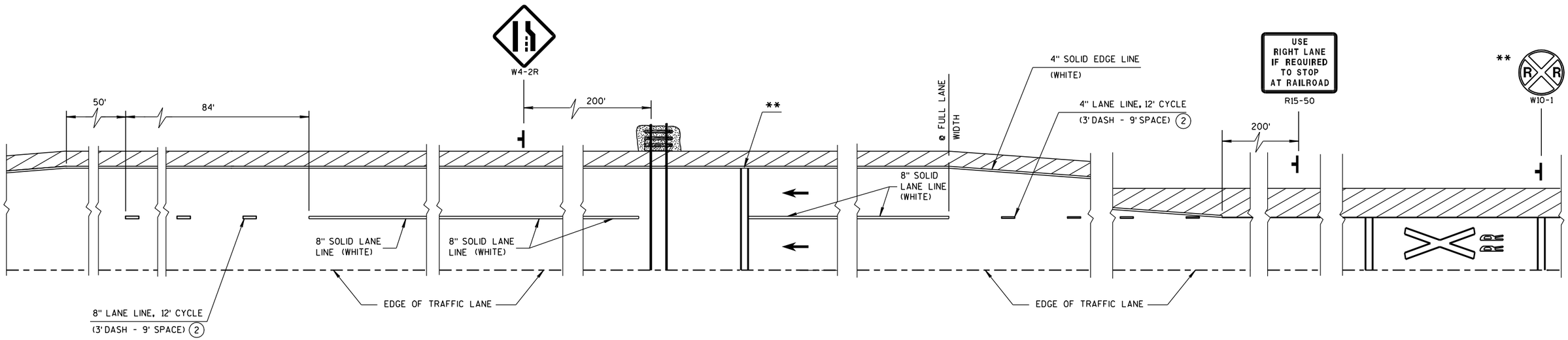
S.D.D. 15 C 9-9a

GENERAL NOTES

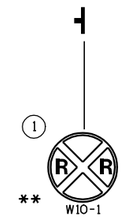
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) INSTALLED FOR EXPRESSWAYS.

(2) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.



DETAIL FOR TRUCK STOPPING LANE PAVEMENT MARKINGS



LEGEND

DIRECTION OF TRAFFIC FLOW

** SEE "SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSING" FOR LOCATION OF ADVANCE MARKINGS.

POST MOUNTED SIGN

TRUCK STOPPING LANE PAVEMENT MARKINGS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 1/9/2012 DATE /S/ Thomas N. N STATE TRAFFIC ENGINE ESIGN FHWA

6

S.D.D. 15 C 9-9b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

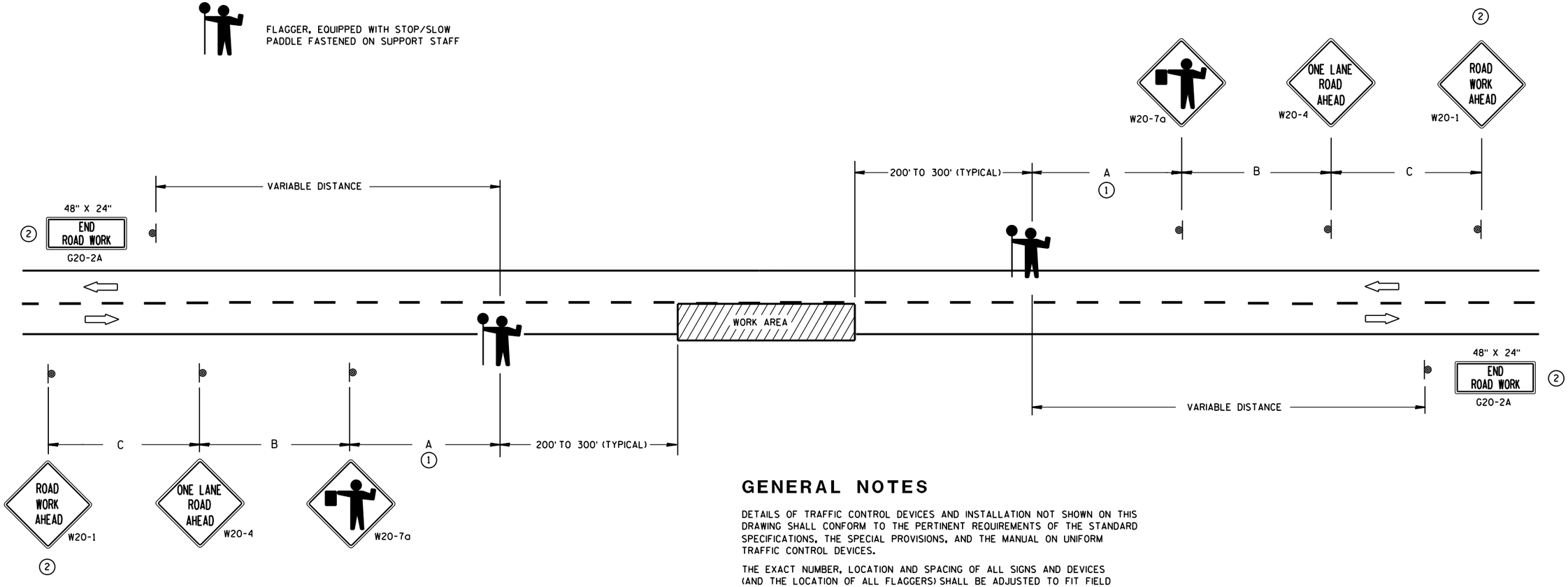
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

BE PREPARED TO STOP
W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

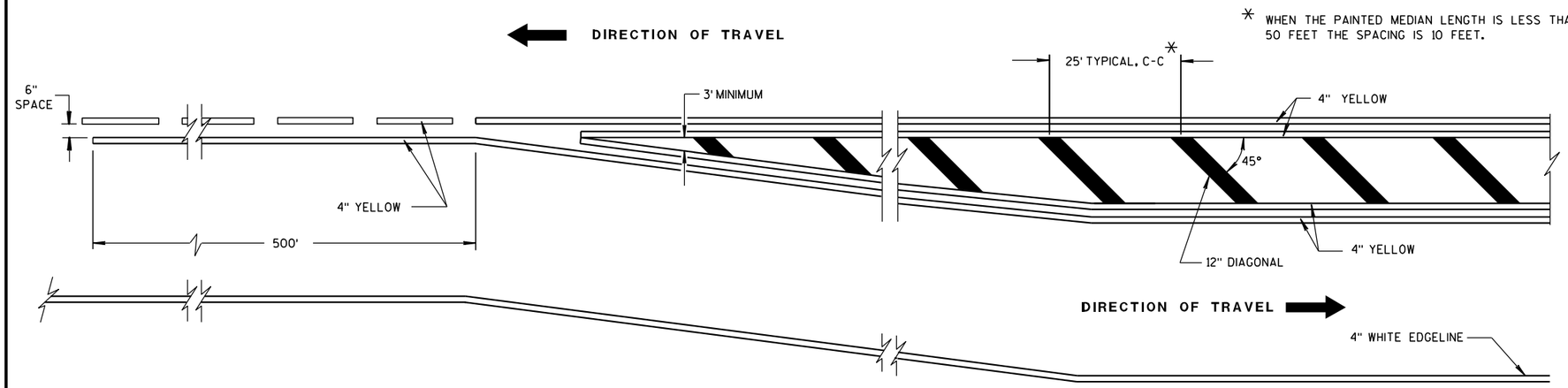
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

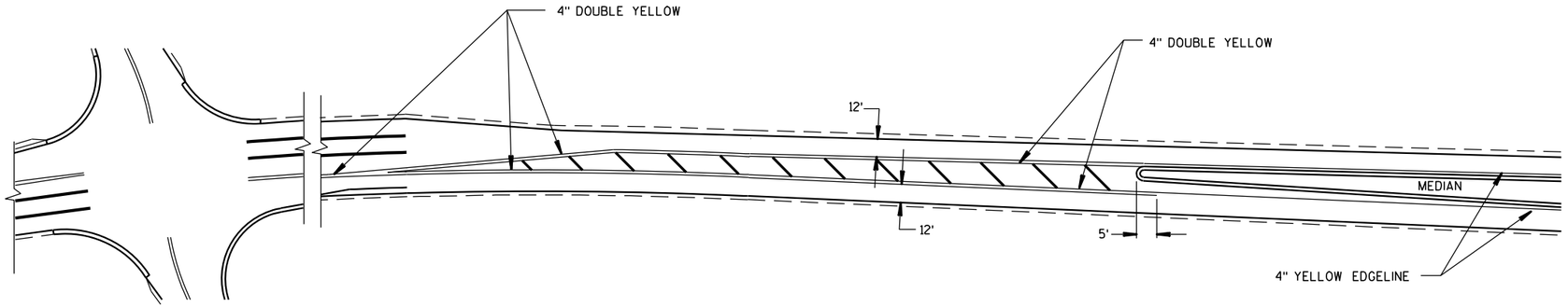
S.D.D. 15 C 12-4



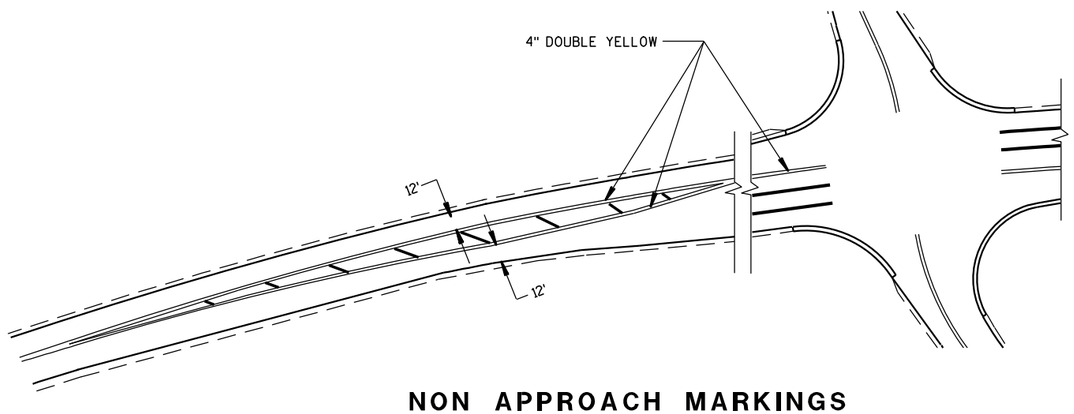
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

6

6

S.D.D. 15 C 18-3

S.D.D. 15 C 18-3

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

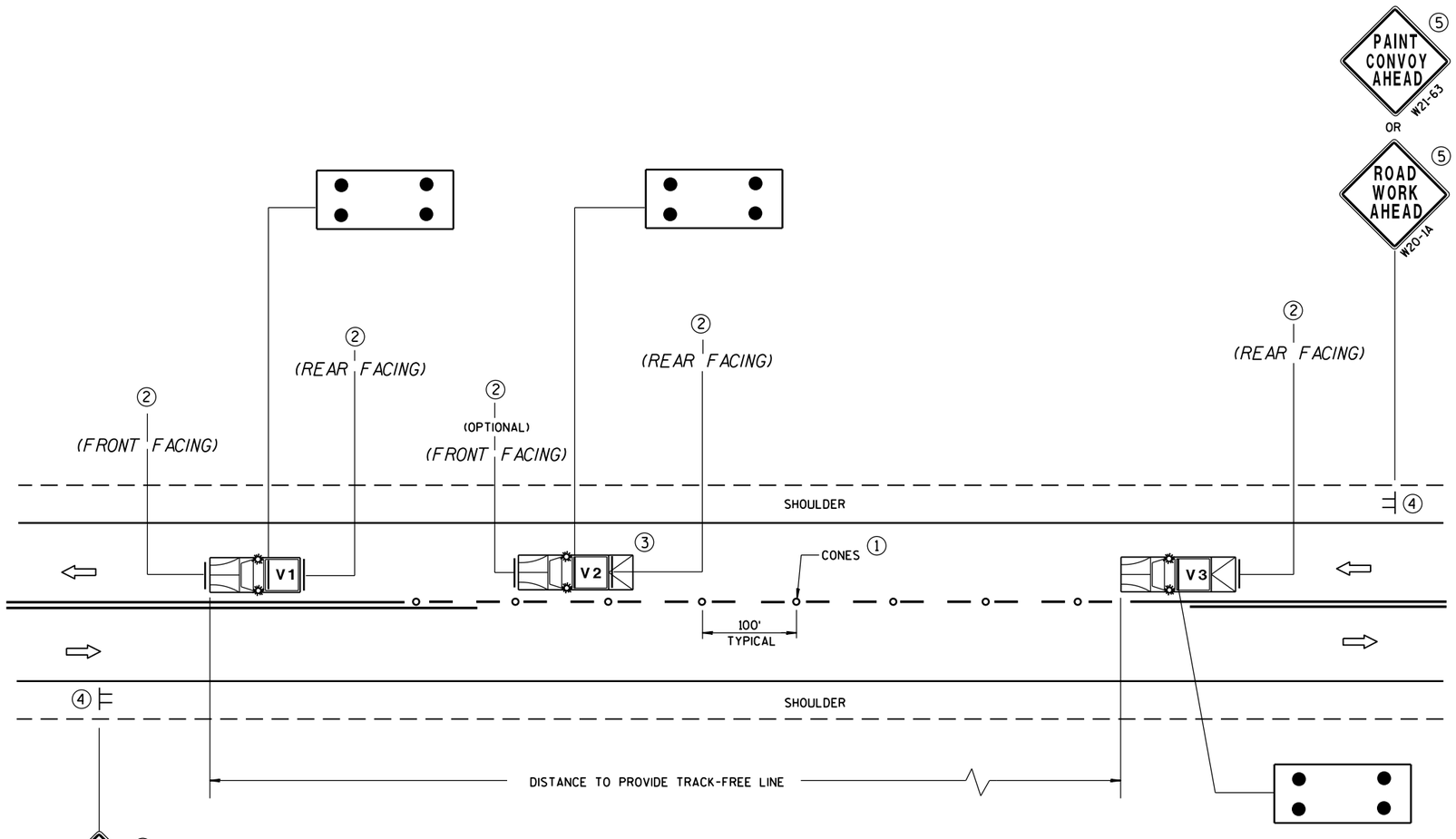
2-5-09 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

196

IGN

FHWA



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- **V1** LEAD VEHICLE
- **V2** SHADOW VEHICLE
- **V3** TRAIL VEHICLE WITH TMA
- **TMA** TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (CAUTION)

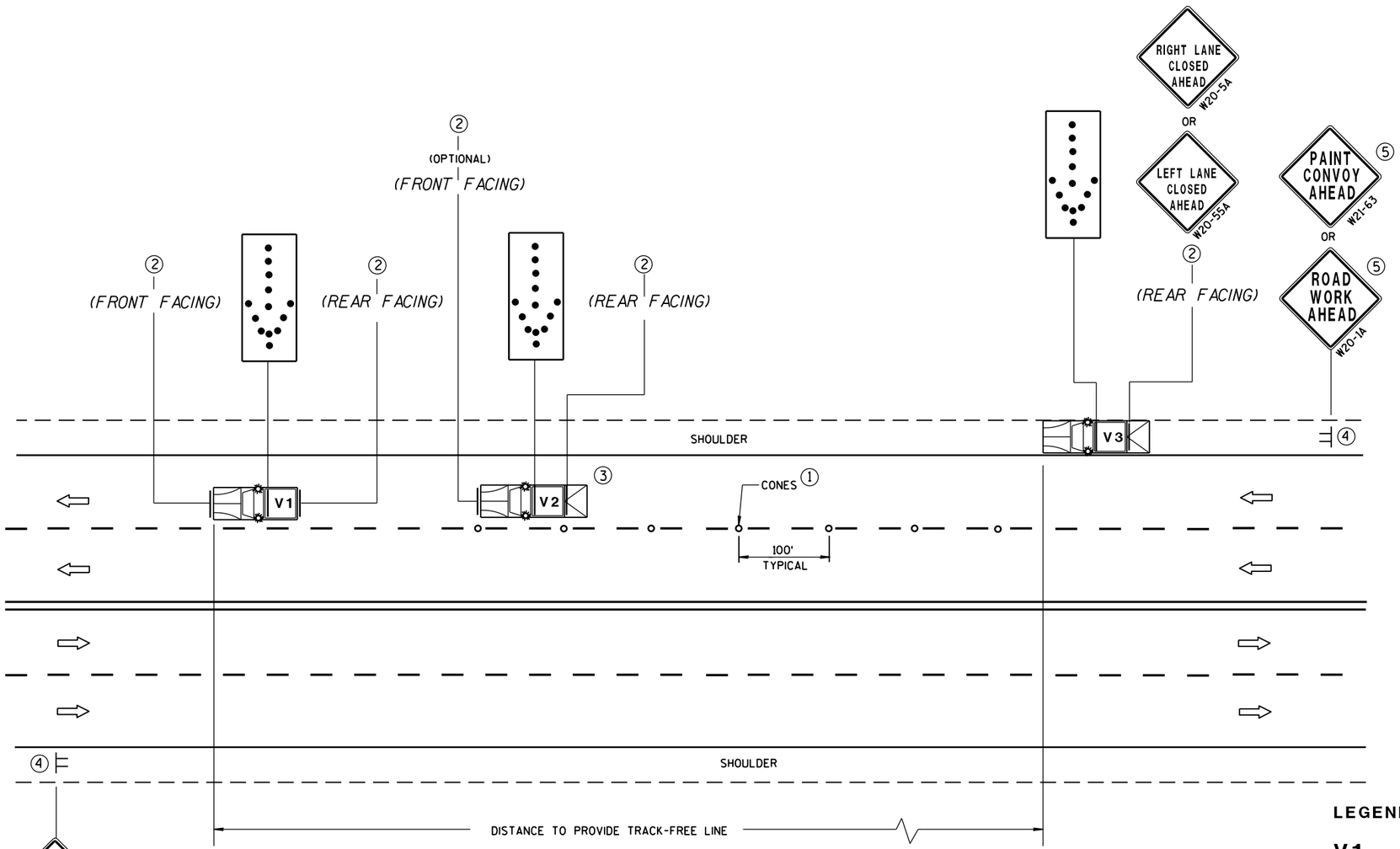
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE FHWA	/S/ Peter Amakobe Atepe STATEWIDE WORK ZOI SAFETY ENGIN

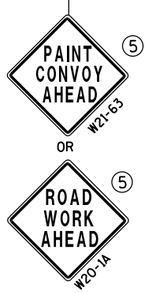
6

S.D.D. 15 C 19-3a

6

S.D.D. 15 C 19-3a





MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE UNDIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZON SAFETY ENGINE
FHWA

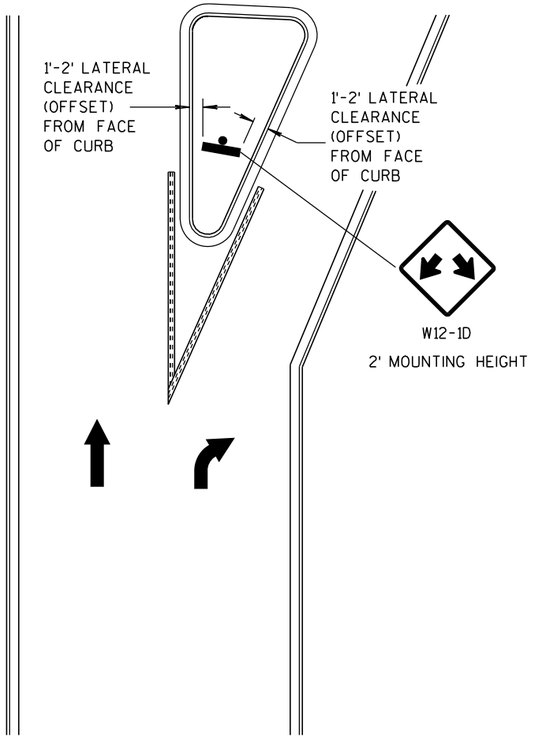
6

S.D.D. 15 C 19-3b

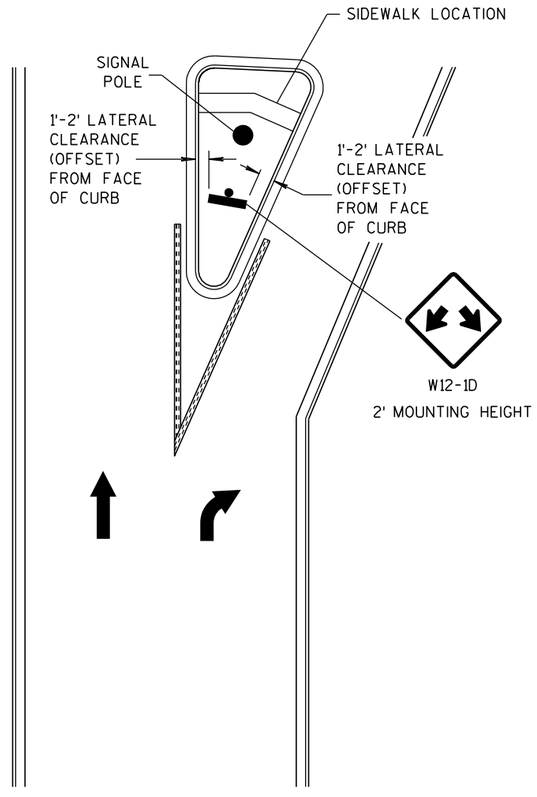
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

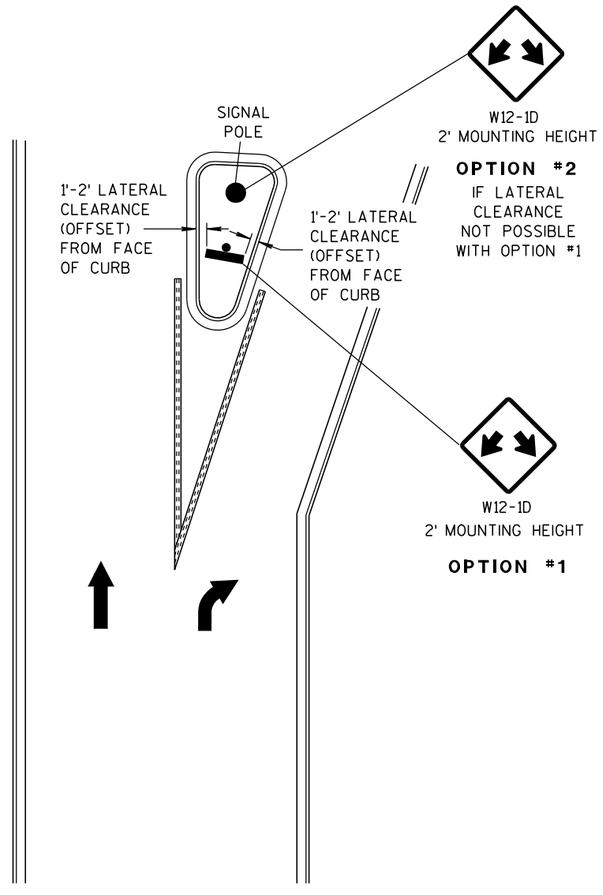
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



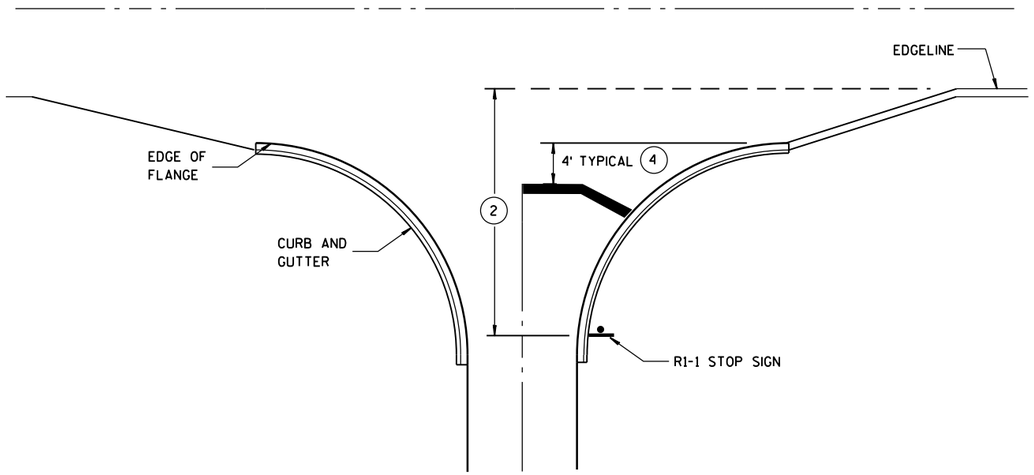
LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



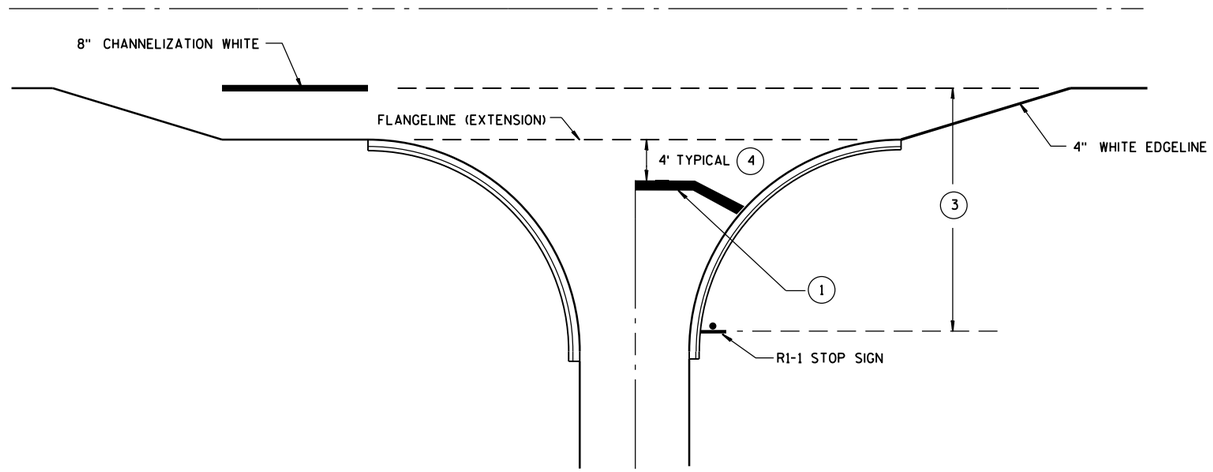
SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

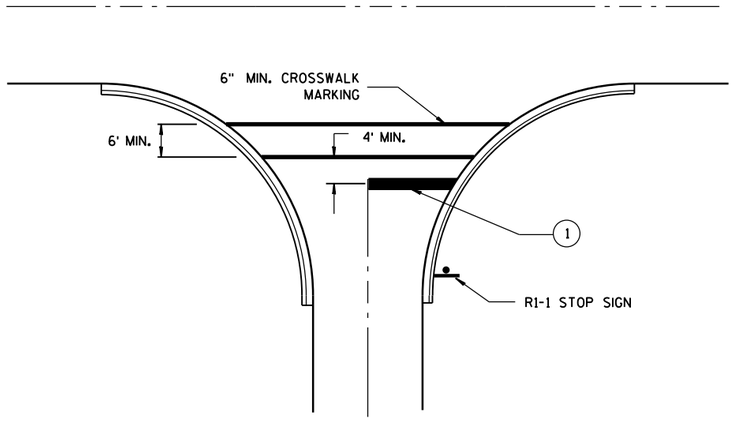
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothem STATE TRAFFIC ENGINEER
FHWA	199 IGN



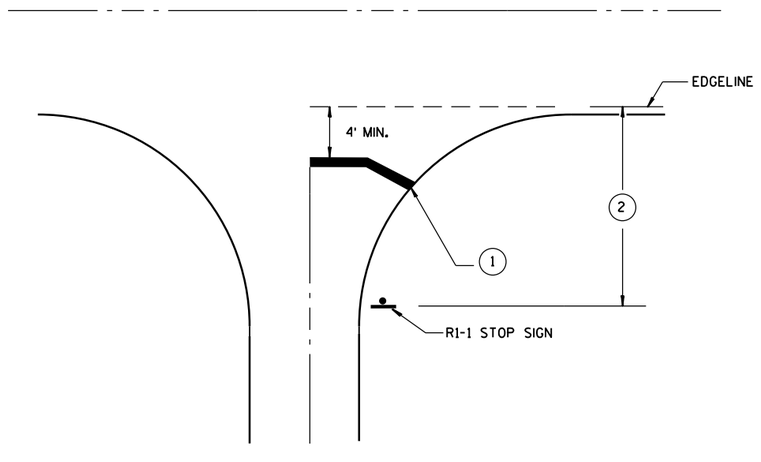
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

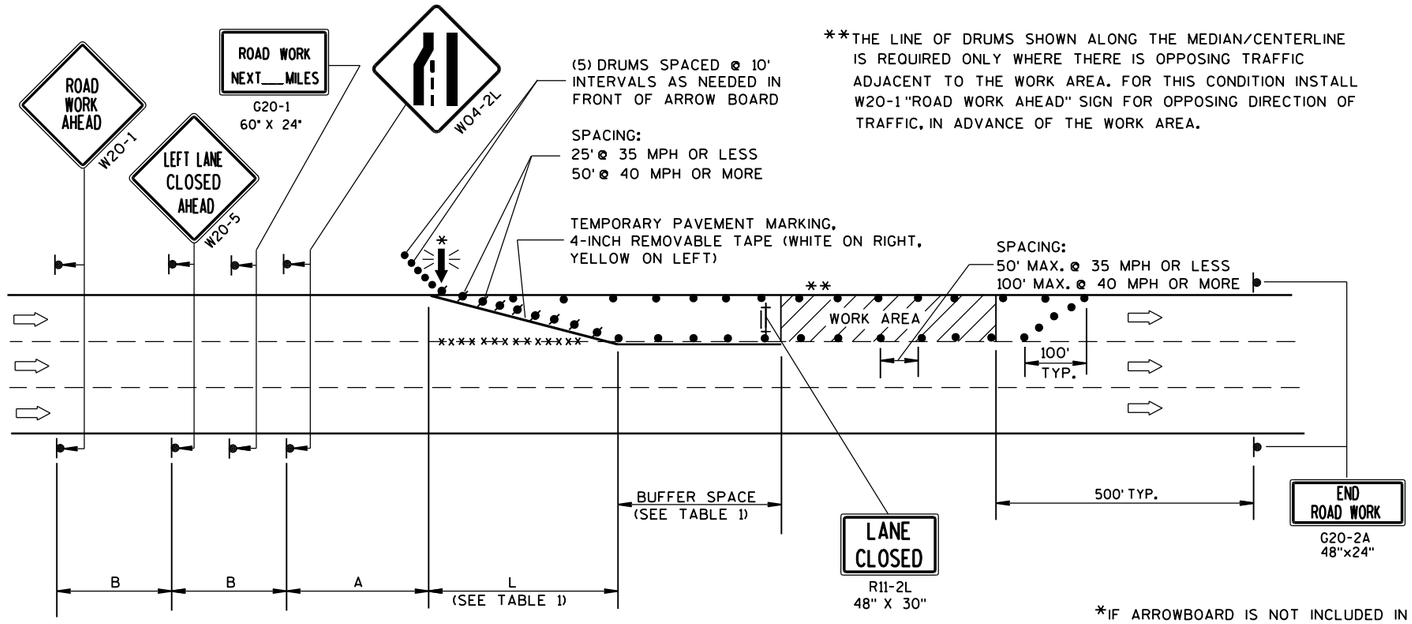
4/30/2013
DATE

/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"

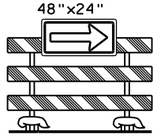


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

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.

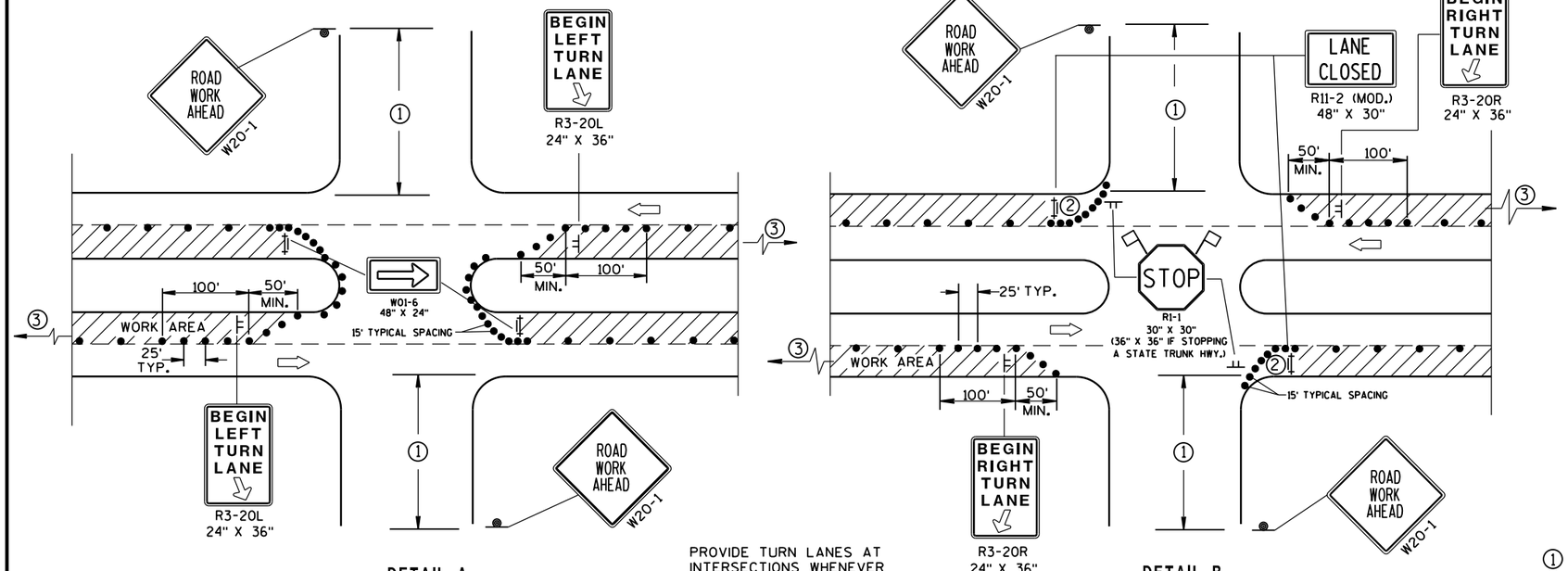
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 20-3



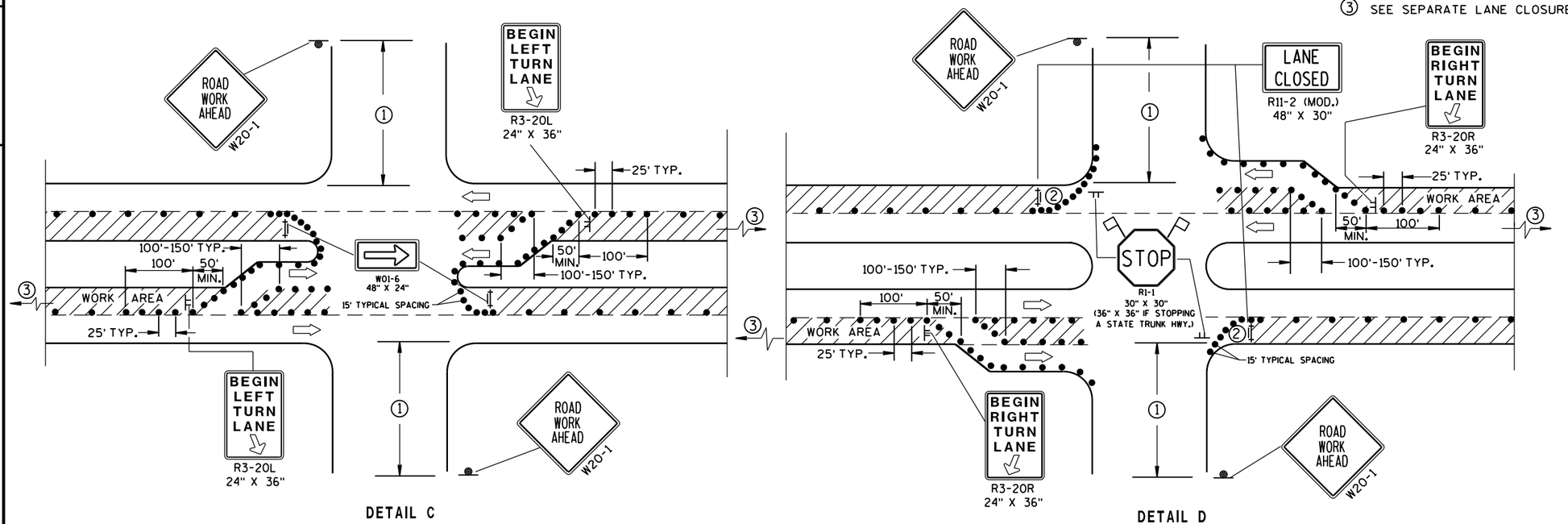
DETAIL A

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



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

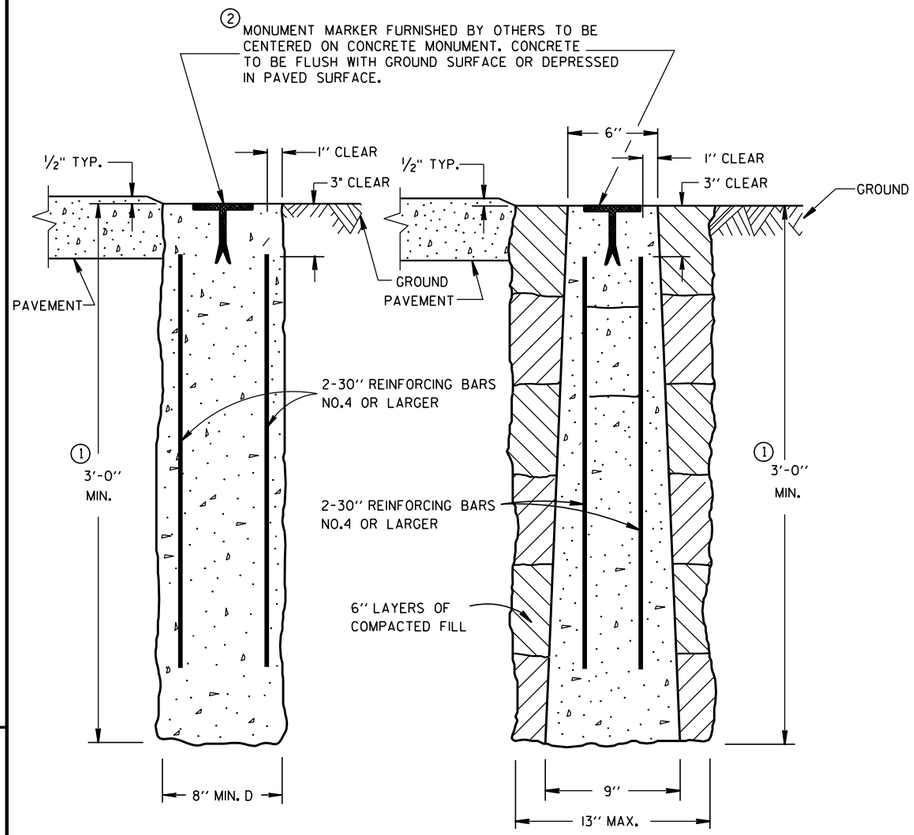
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

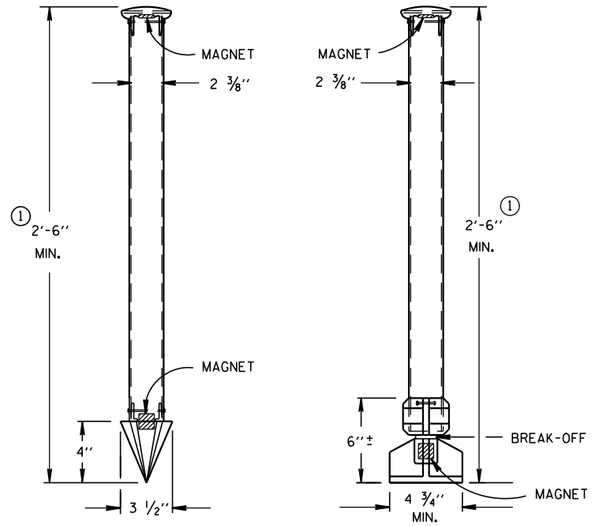
S.D.D. 15 D 21-3



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

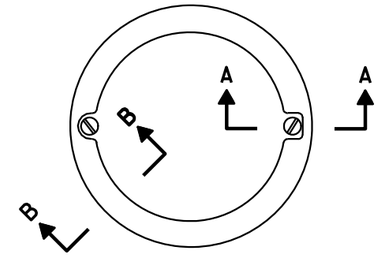
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

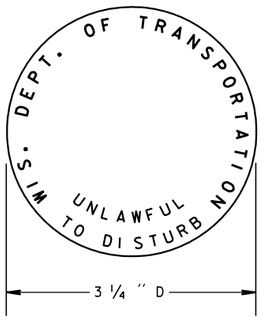
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

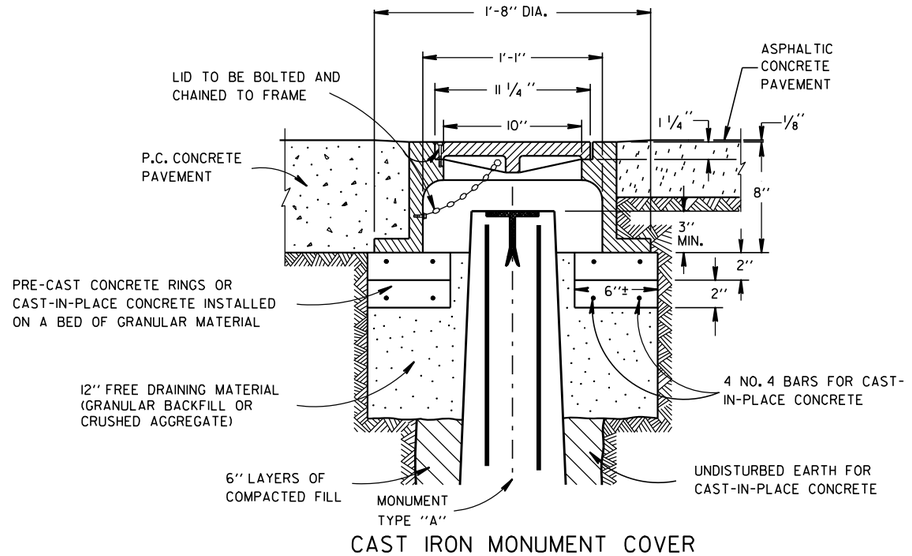
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

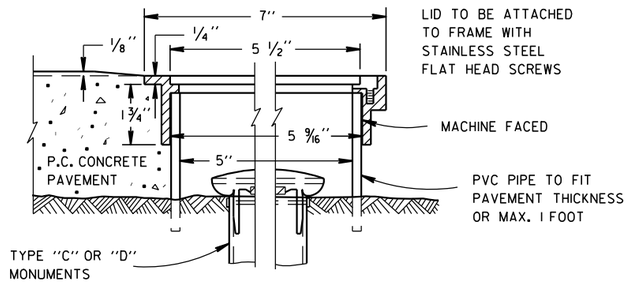


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

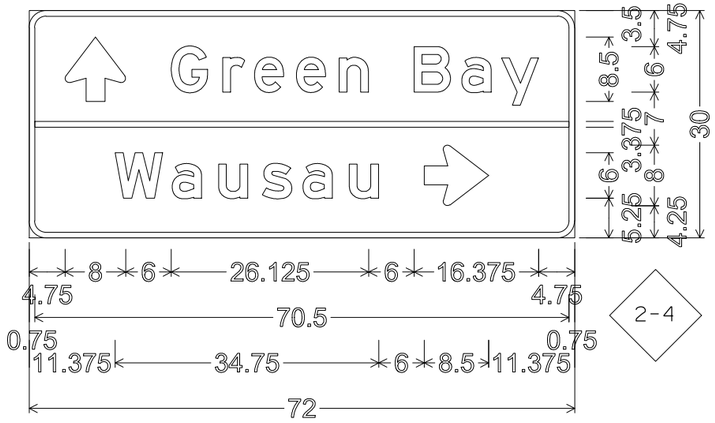
S.D.D. 16 A 1-6

6

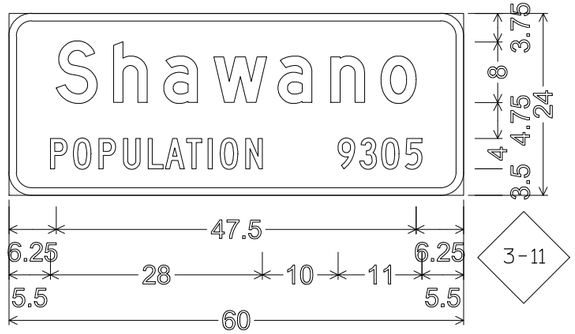
S.D.D. 16 A 1-6

NOTES

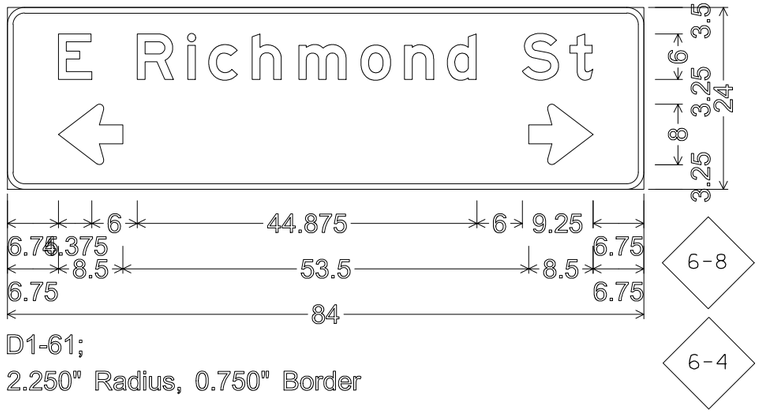
1. All Signs Type II – Type H Reflective
2. Color:
   Background – GREEN
   Message – WHITE
3. Message Series – E exceot as Shown



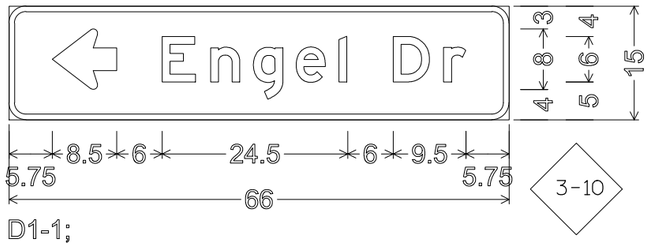
D1-2;
2.250" Radius, 0.750" Border



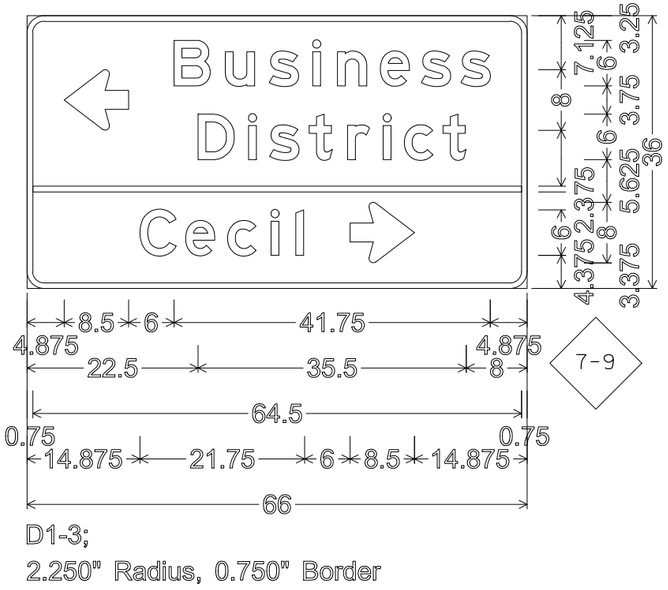
I2-3;
3.000" Radius, 1.000" Border
"Shawano" D; "POPULATION" C; "9305" C



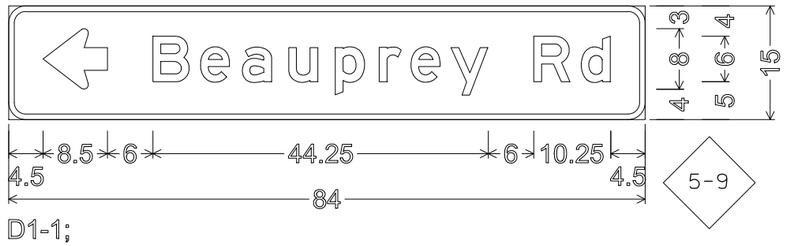
D1-61;
2.250" Radius, 0.750" Border



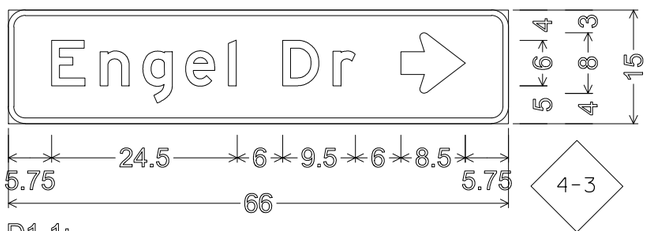
D1-1;
2.250" Radius, 0.750" Border



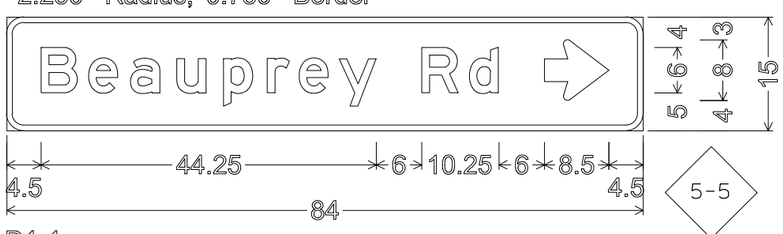
D1-3;
2.250" Radius, 0.750" Border



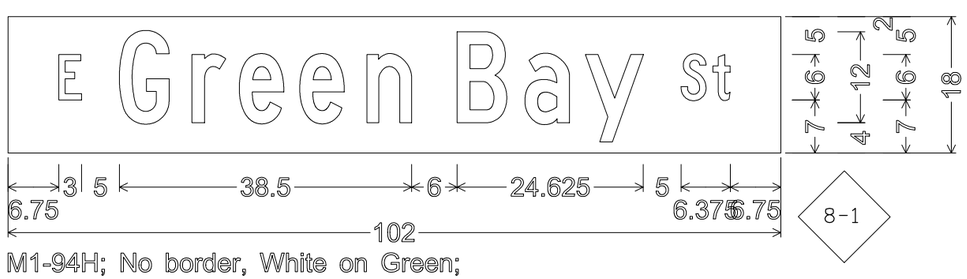
D1-1;
2.250" Radius, 0.750" Border



D1-1;
2.250" Radius, 0.750" Border



D1-1;
2.250" Radius, 0.750" Border



M1-94H; No border, White on Green;
"E" C; "Green" C; "Bay" C; "St" C;

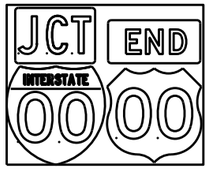
7

7

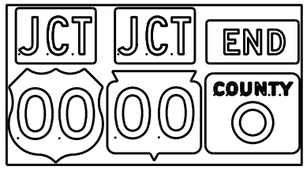
PROJECT NO: 6340-07-70/71	HWY: STH 47	COUNTY: SHAWANO	PERMANENT SIGNING	SHEET 204	E

TYPICAL ASSEMBLIES

J1-1

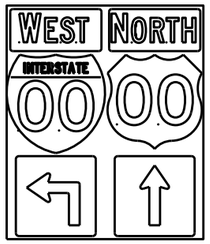


J1-2

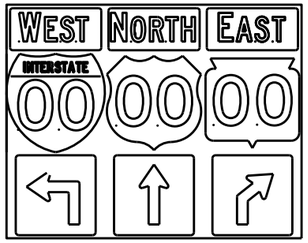


J1-3

J2-1



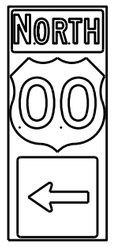
J2-2



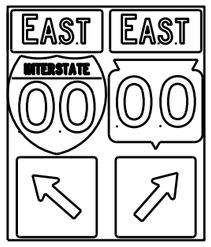
J2-3

JV

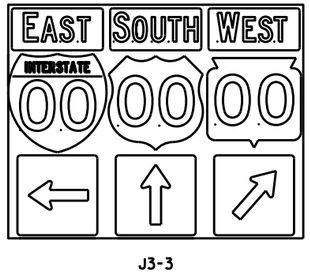
(Typical Vertical J-Assembly
See Note 10 and 11)



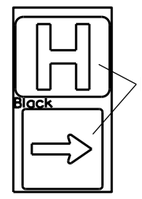
J3-1



J3-2



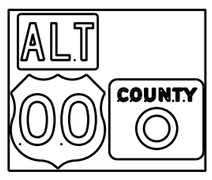
J3-3



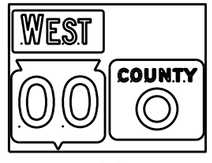
Blue Background

JH-1

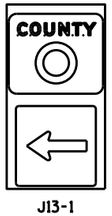
J4-1



J4-2



J4-2



J13-1

J12-1

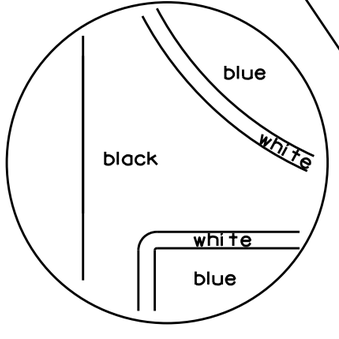
J32-1

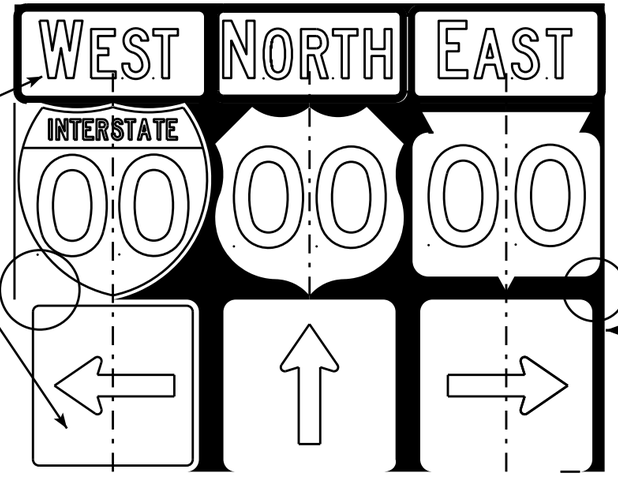
J33-1

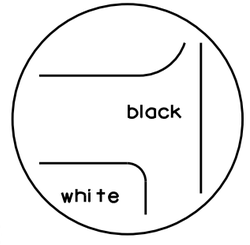
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

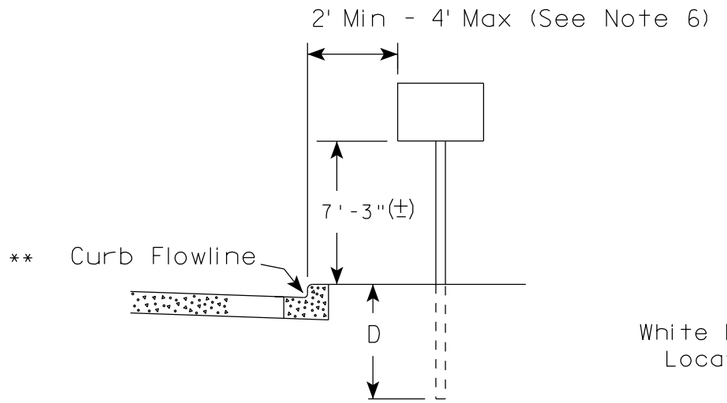
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

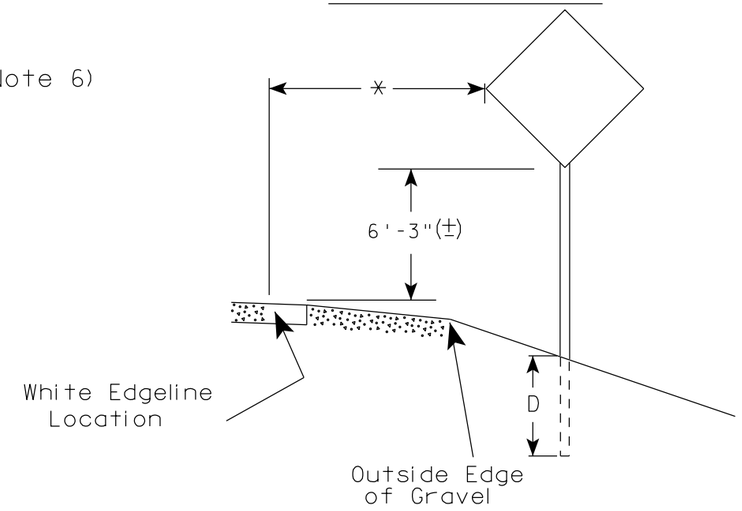
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

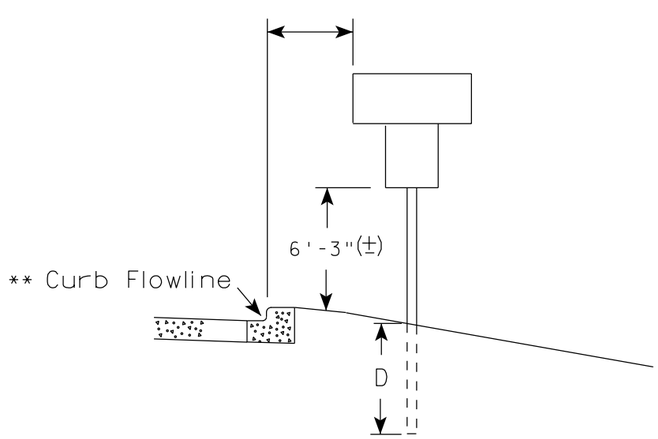
WISDOT/CADDS SHEET 42

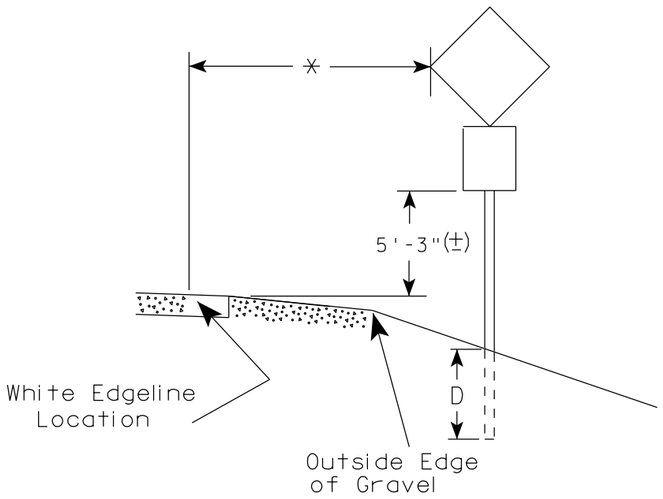
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

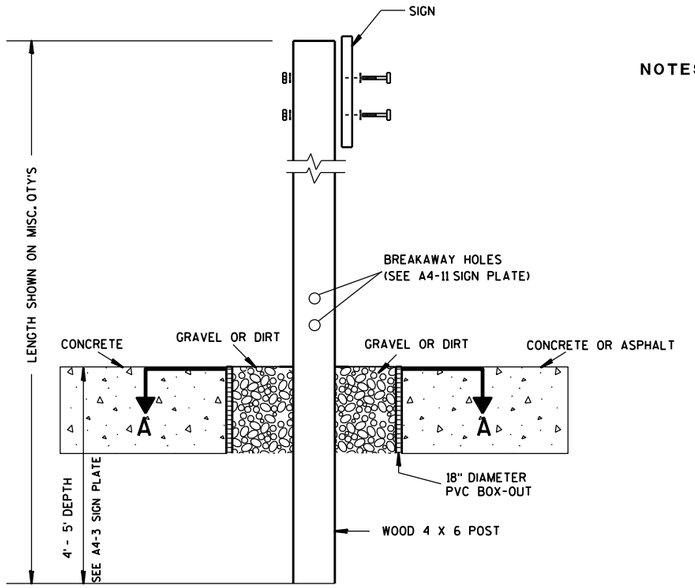
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

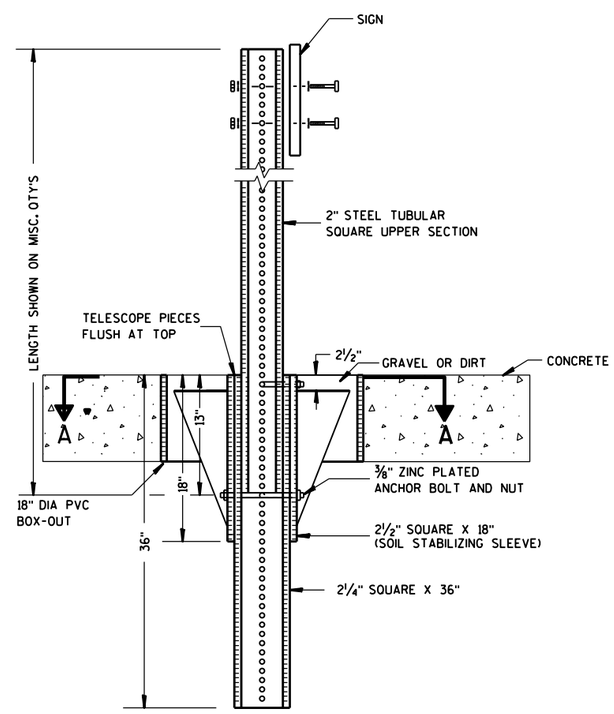
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

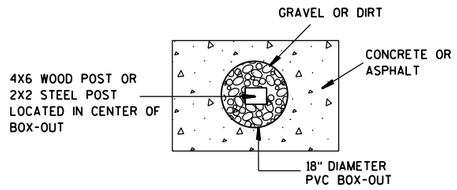
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

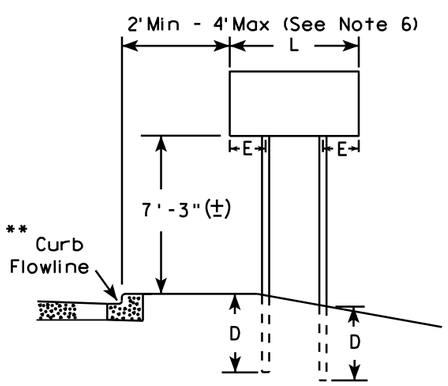
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

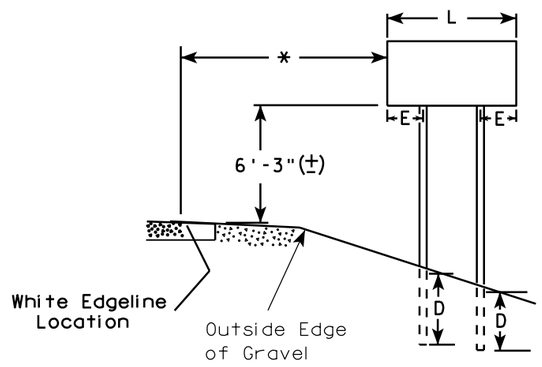
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

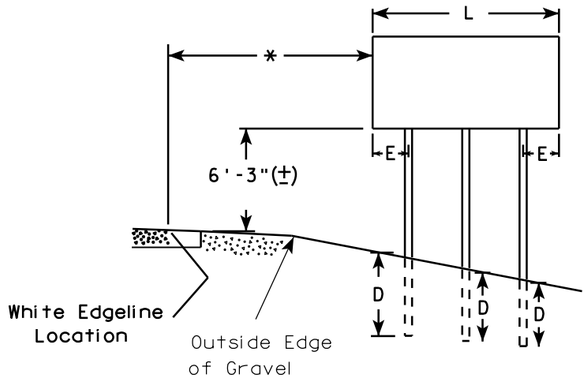
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

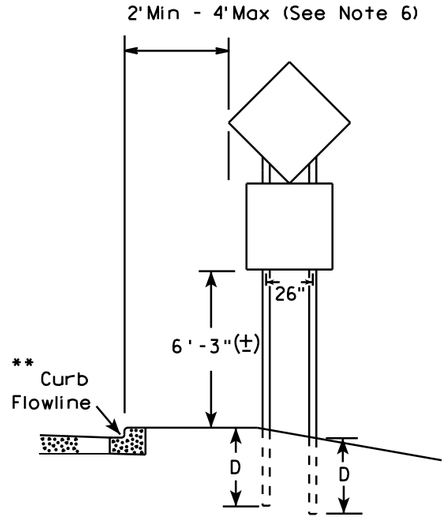
URBAN AREA



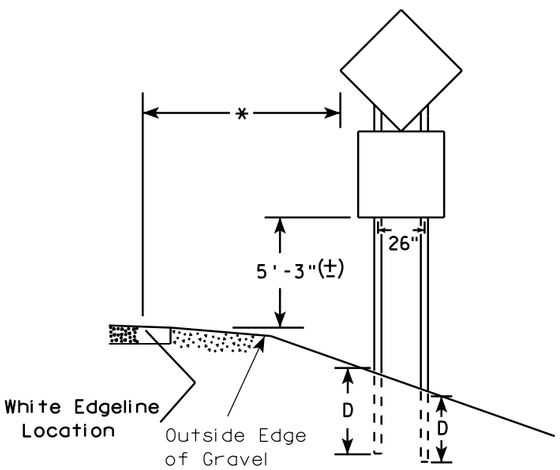
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

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'

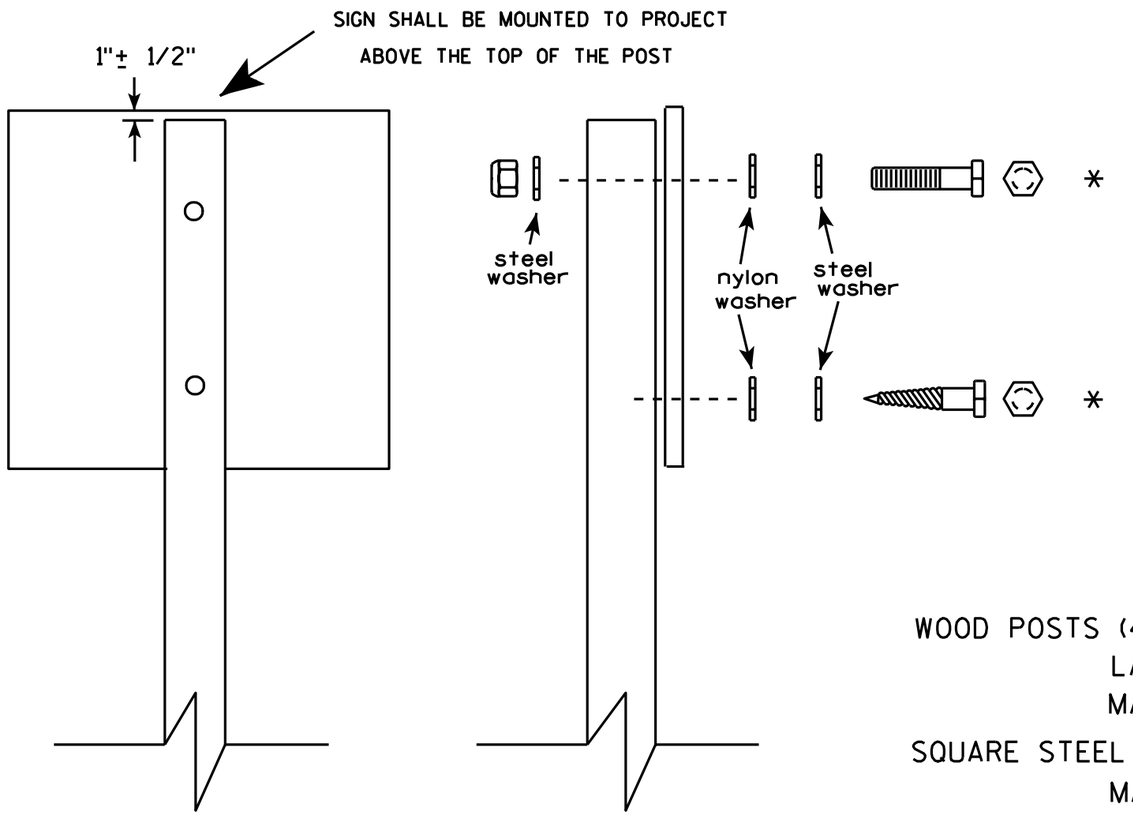
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 208 14

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

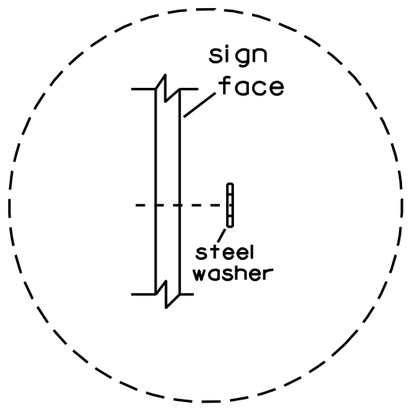
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

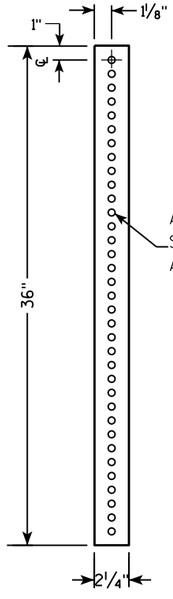
7

PROJECT NO:

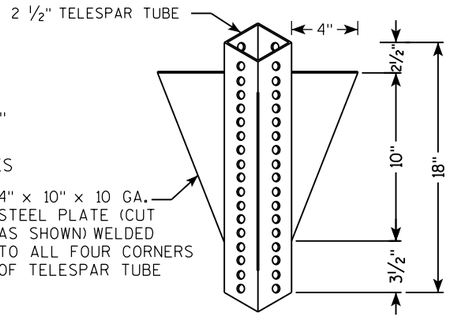
SHEET NO: 209 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

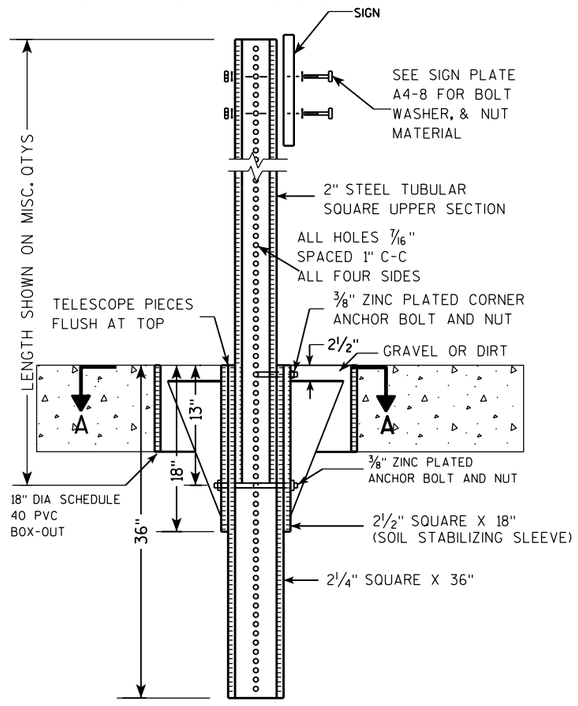
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



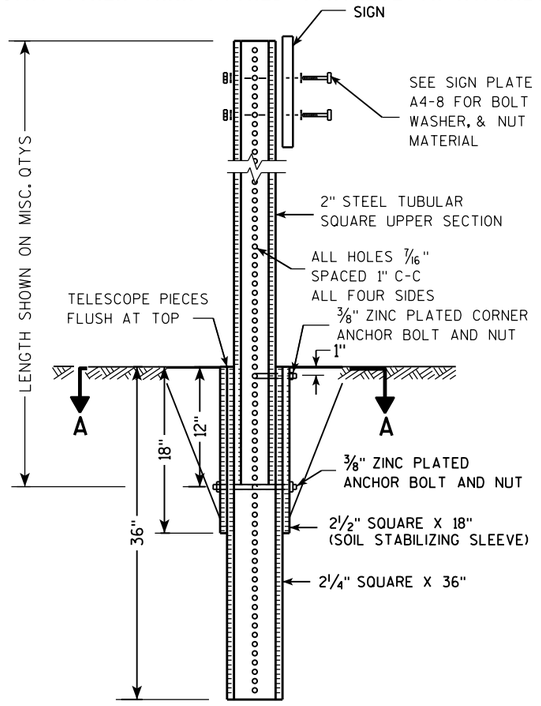
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

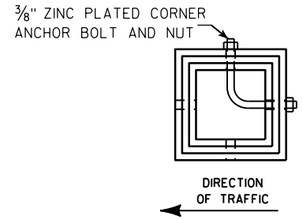


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

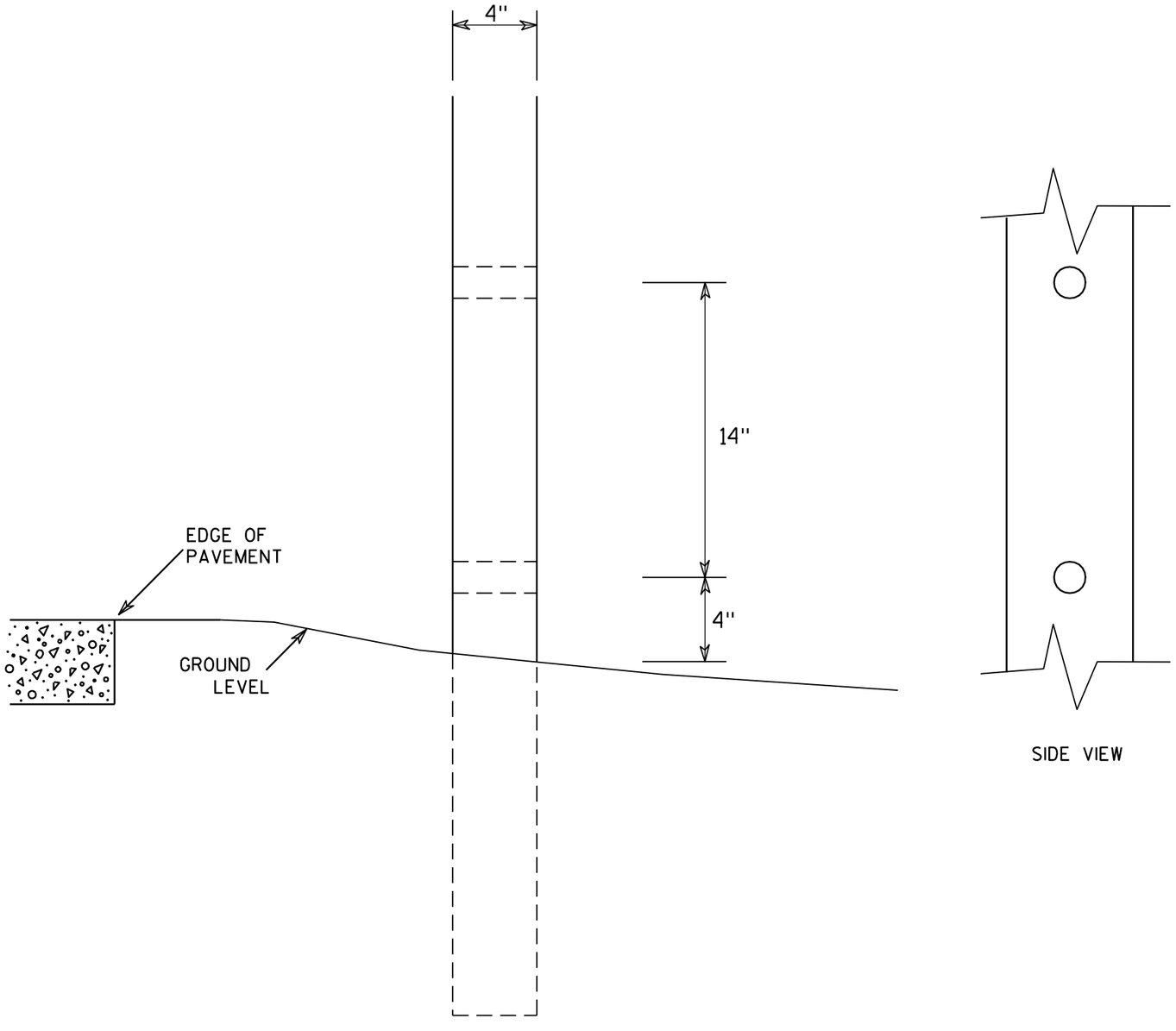
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 210 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

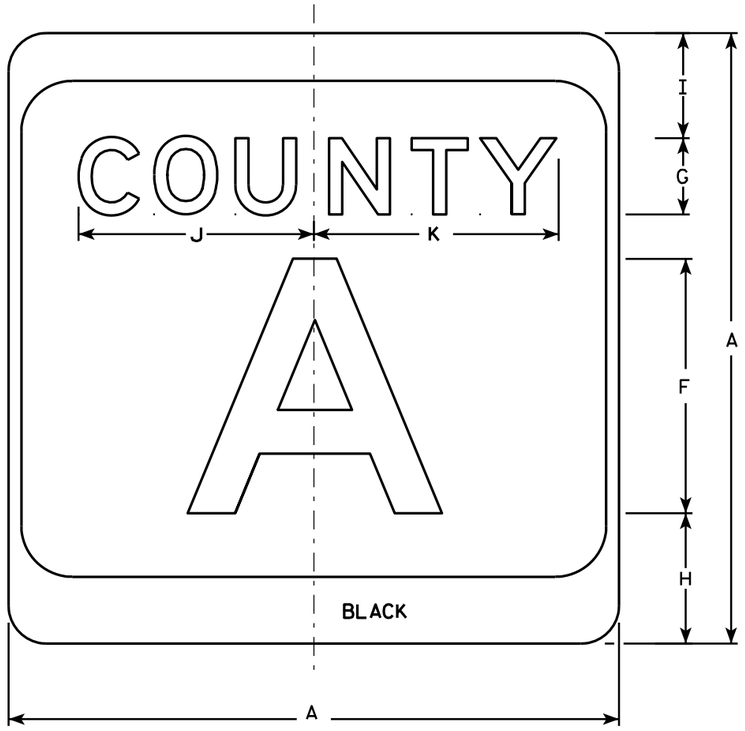
4 X 6 WOOD POST MODIFICATIONS

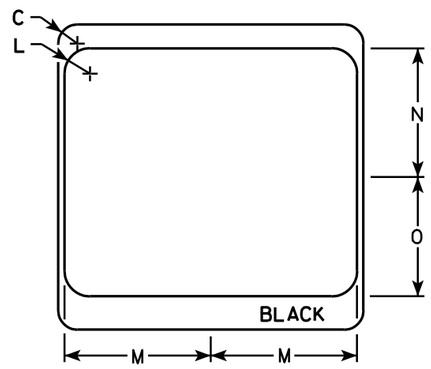
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

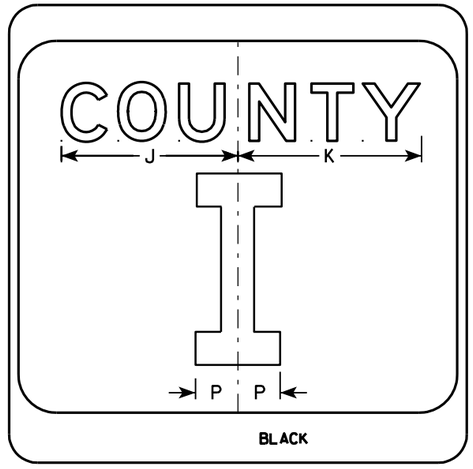
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 211	E

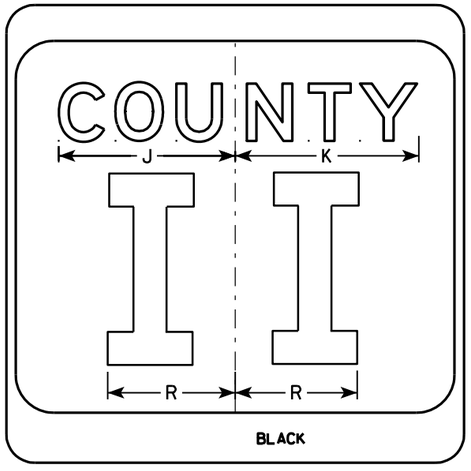




NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective





SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

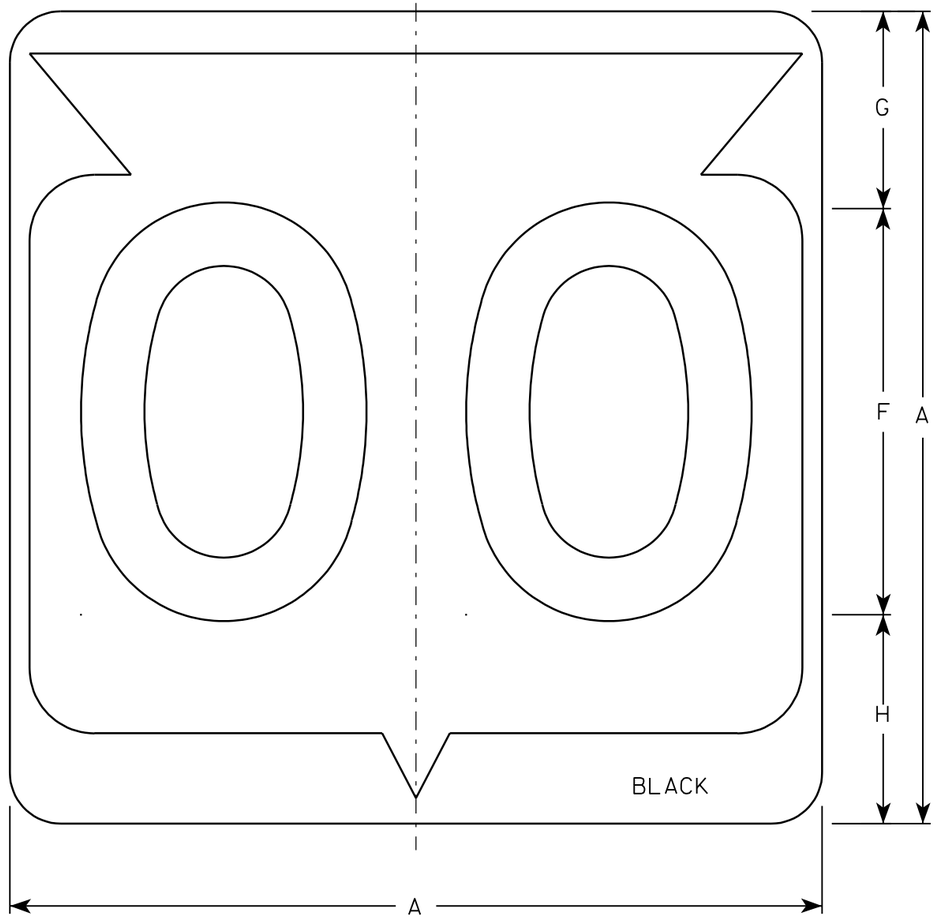
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 212	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN PLOT DATE : 29-SEP-2011 11:25 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

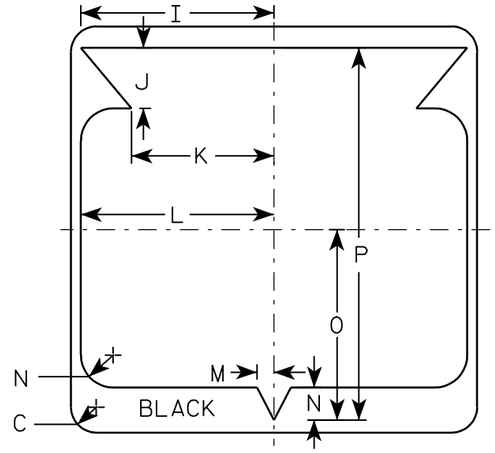
WISDOT/CADDS SHEET 42



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

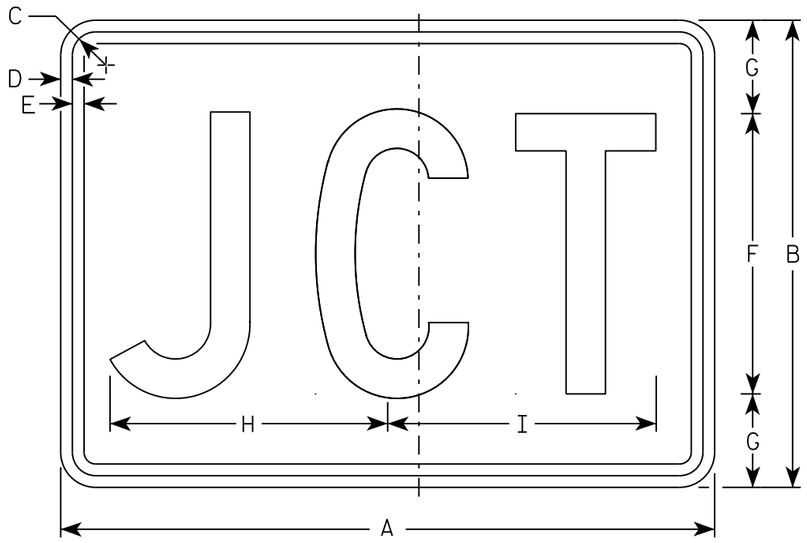
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

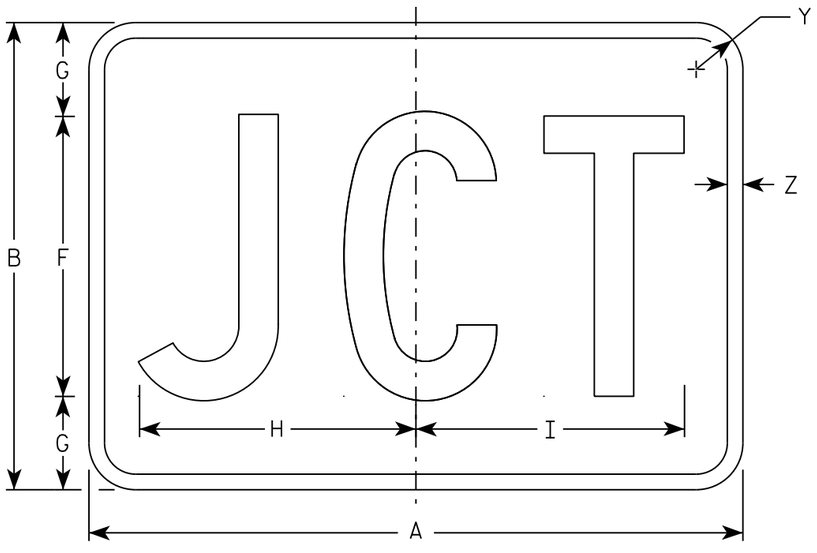
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 213	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

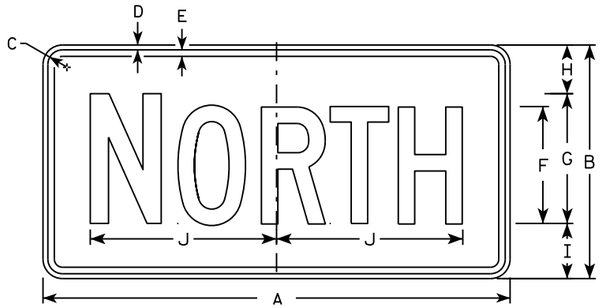
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

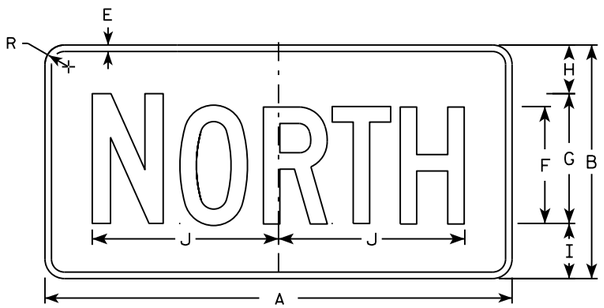
DATE 10/15/15 PLATE 214 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



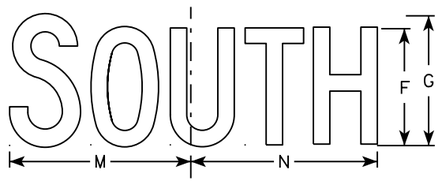
M3-1
MM3-1
MP3-1



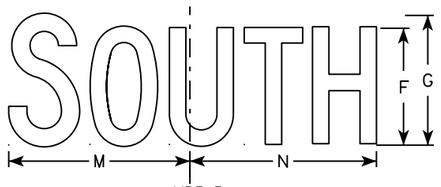
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

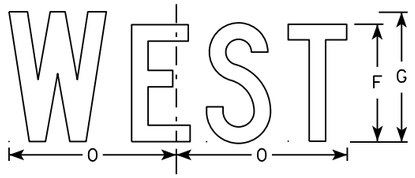
MB3-2
MK3-2
MN3-2



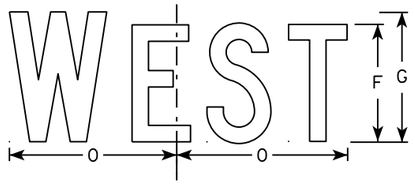
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

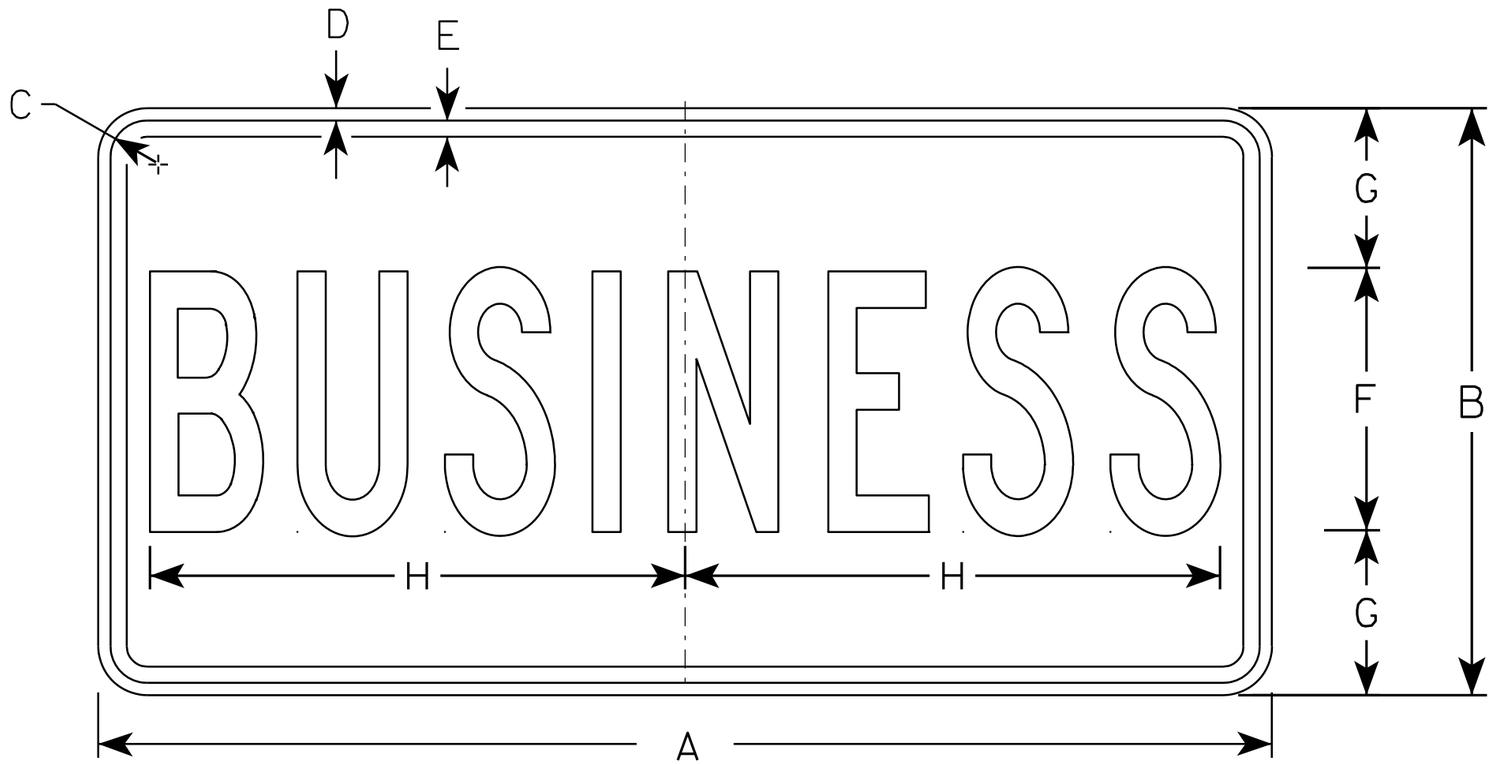
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-3

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White - See Note 5
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	9 5/8																			2.0
3	36	18	1 1/8	3/8	1/2	8	5	16 3/8																			4.5
4																											
5																											

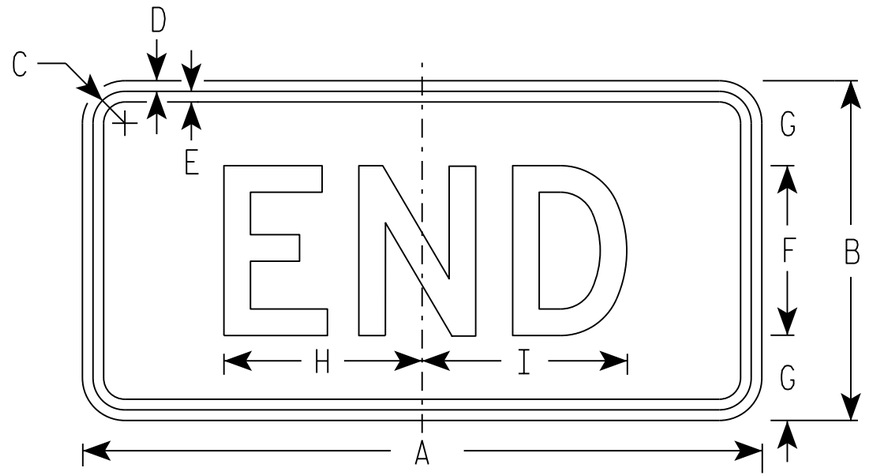
STANDARD SIGN
M4-3

WISCONSIN DEPT OF TRANSPORTATION

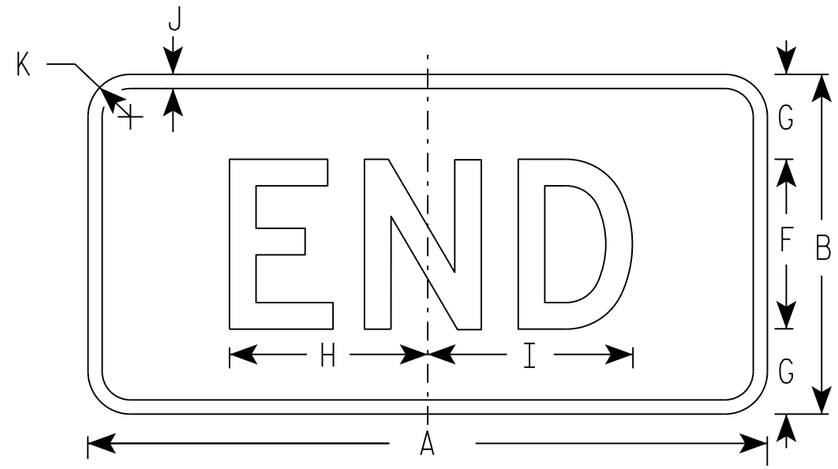
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-3.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 216 | E



M4-6
MM4-6
MP4-6



MB4-6
MK4-6
MN4-6
MR4-6

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-6

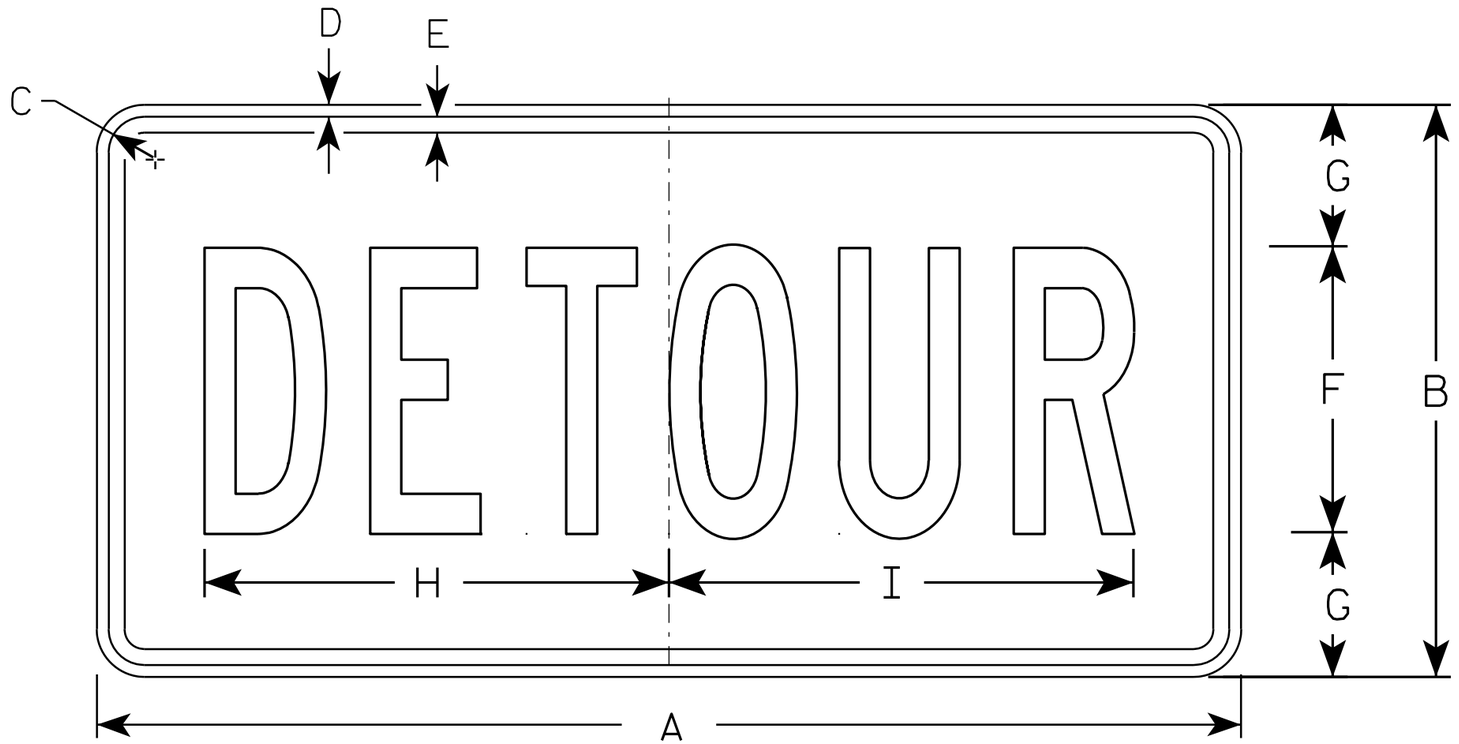
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 217 '14-7.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M46.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

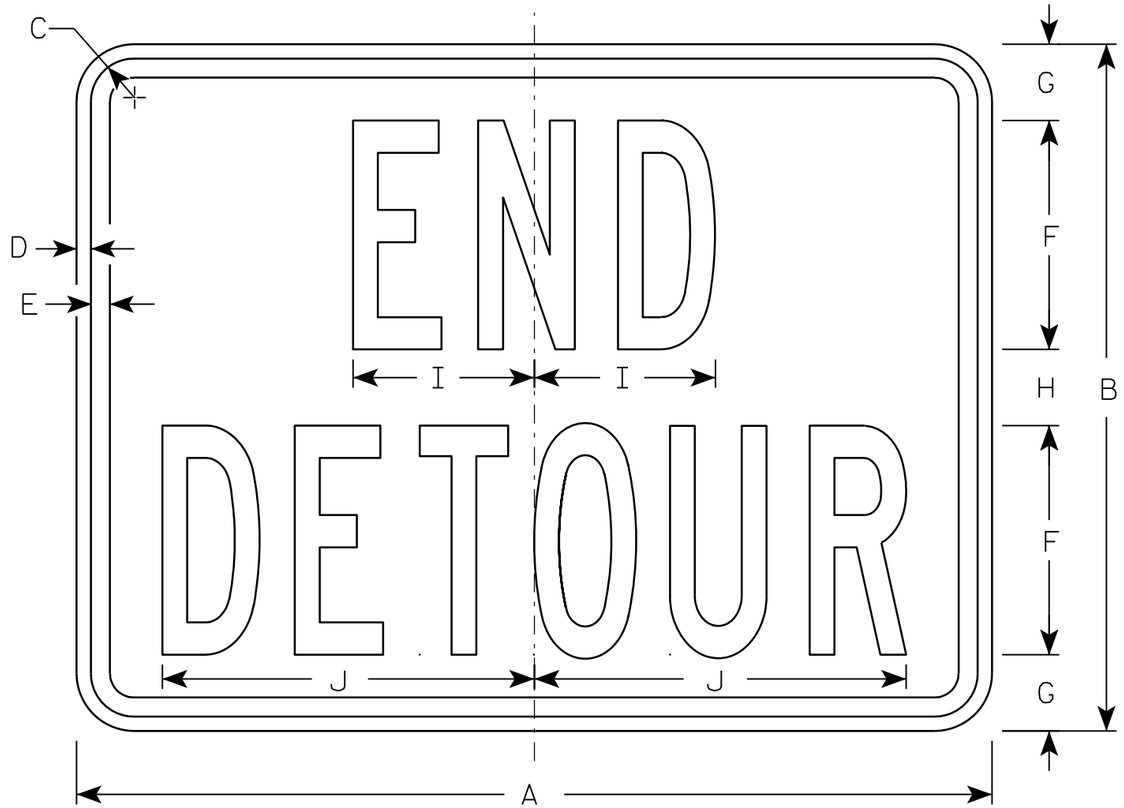
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 218	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

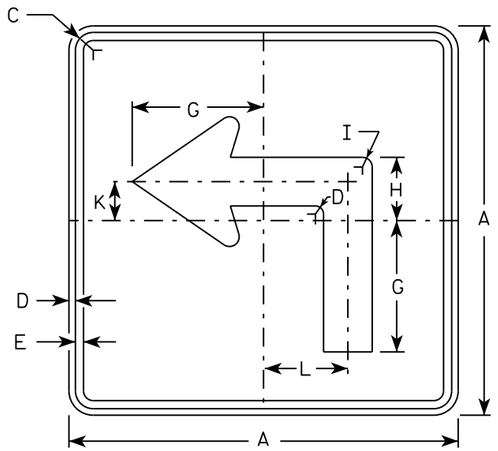
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

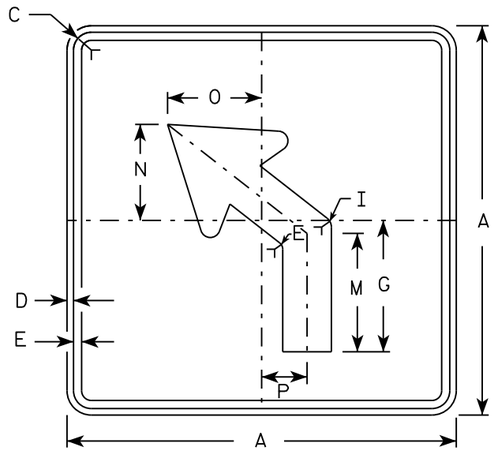
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

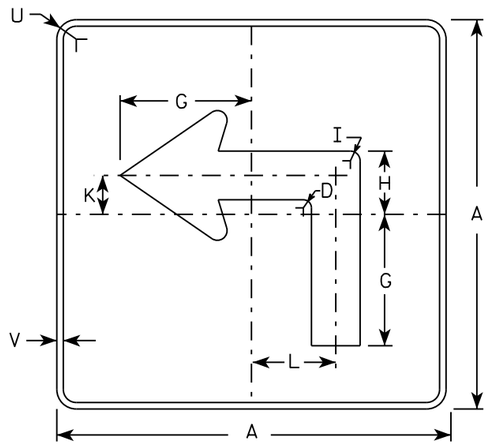
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 219	E



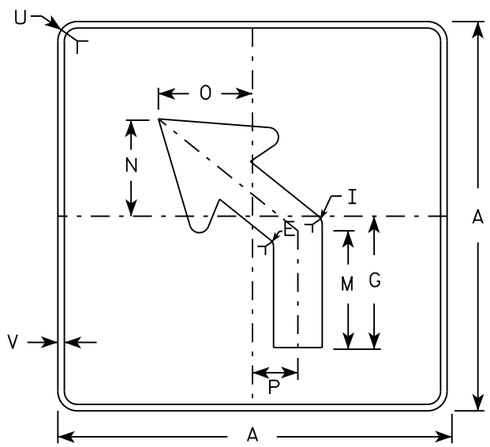
M5-1L
MM5-1L
MO5-1L
MP5-1L



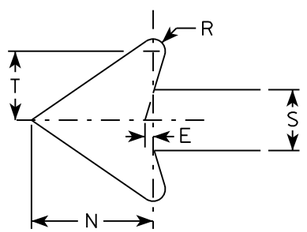
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

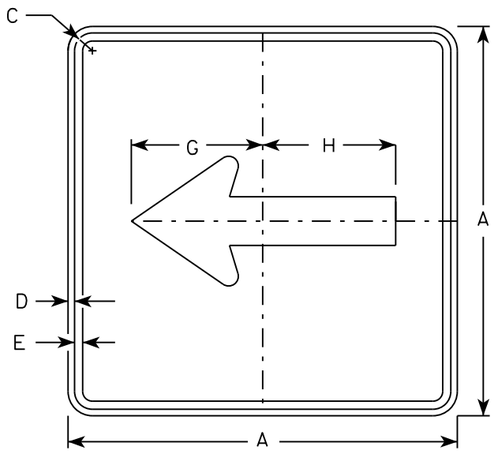
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

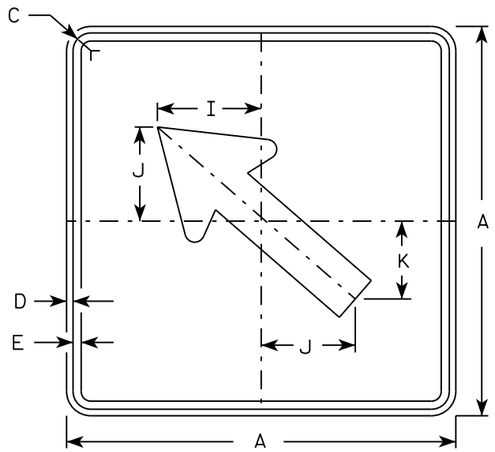
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



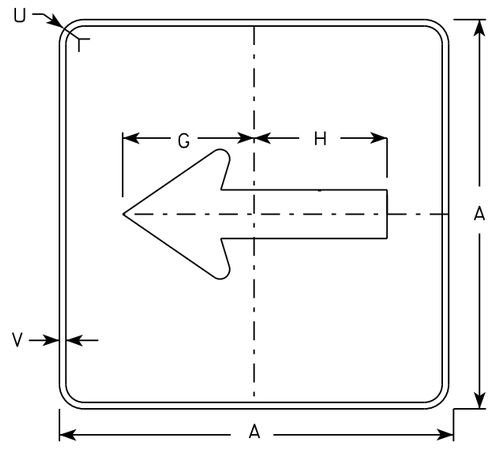
M6-1
MM6-1
MO6-1
MP6-1



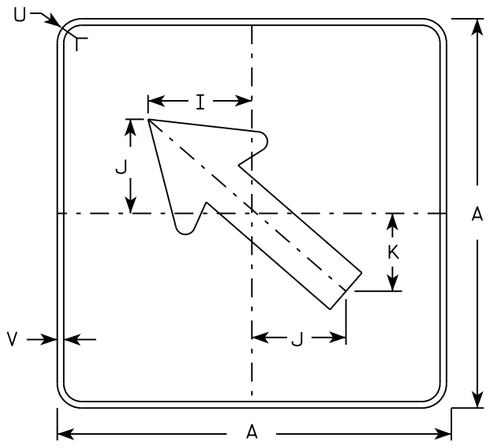
M6-2
MM6-2
MO6-2
MP6-2

NOTES

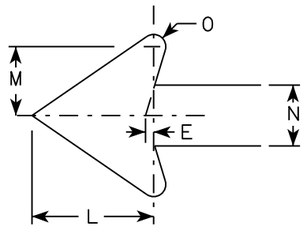
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

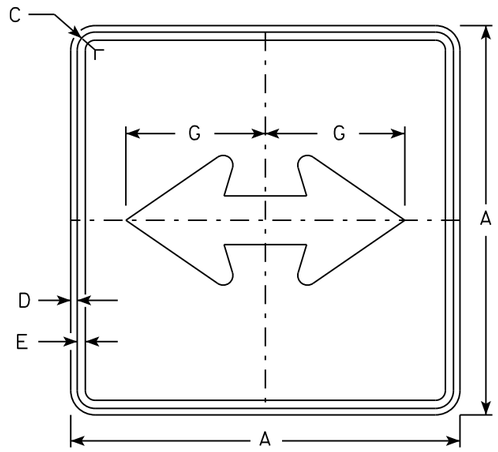
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

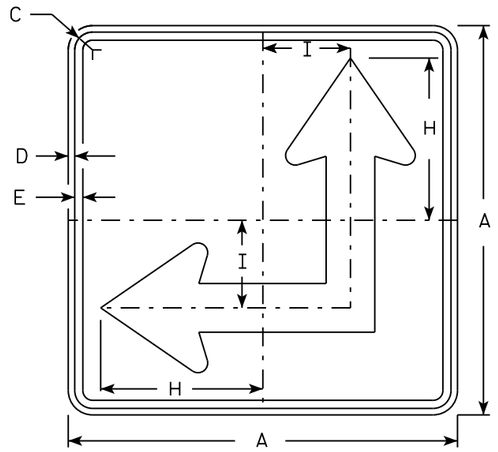
DATE 10/15/15 PLATE 221 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



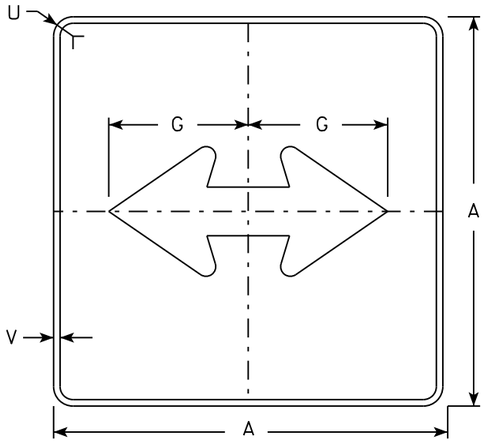
M6-4
MM6-4
MO6-4
MP6-4



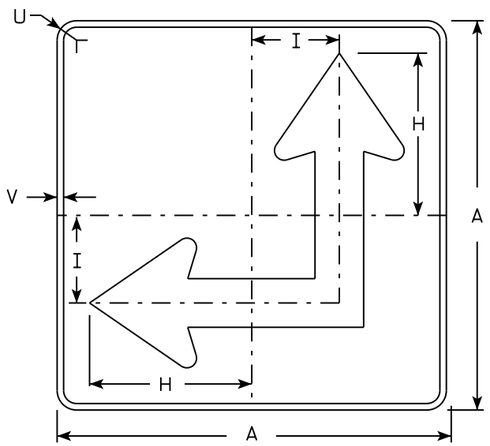
M6-6
MM6-6
MO6-6
MP6-6

NOTES

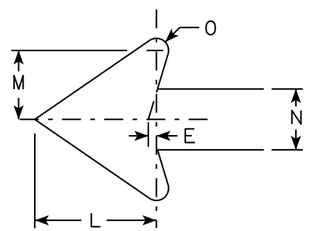
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

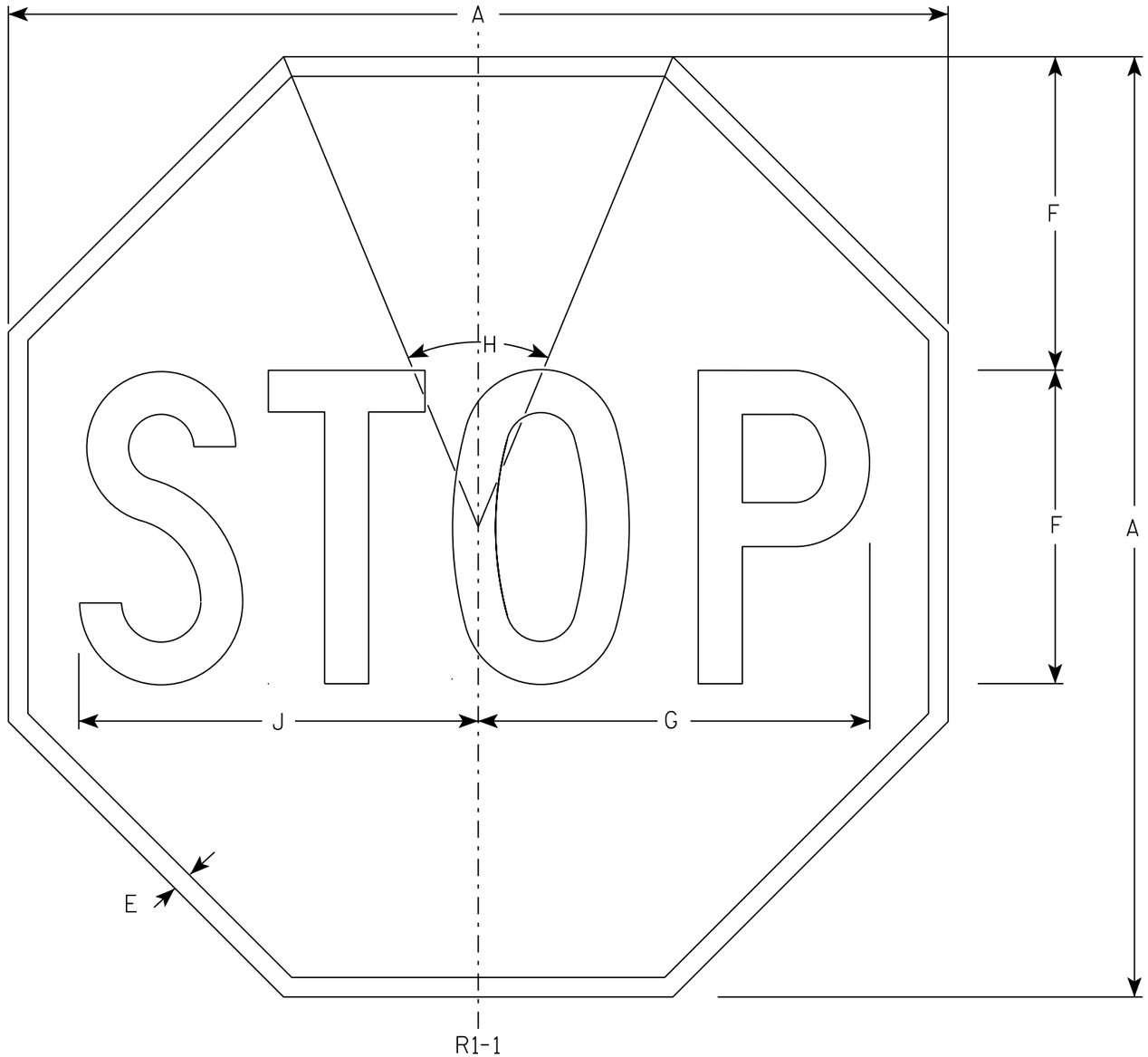
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE 222 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

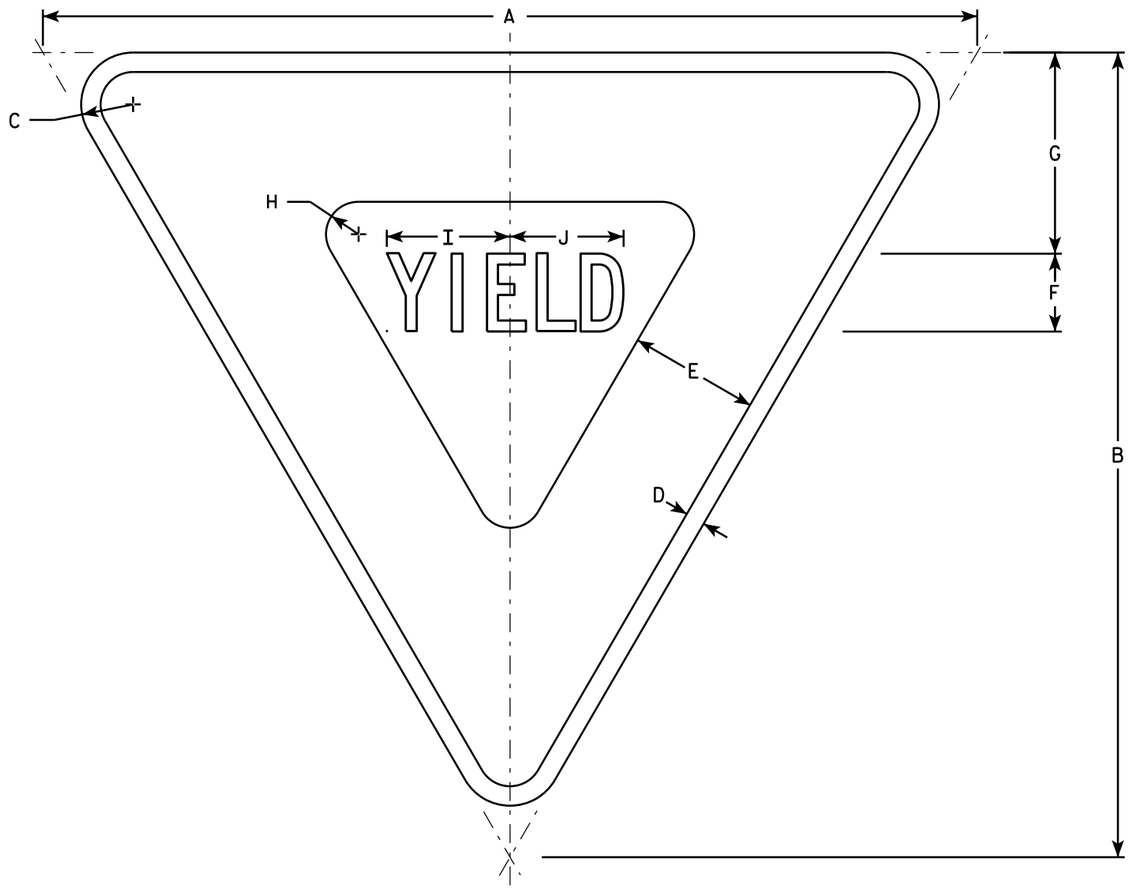
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 223 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

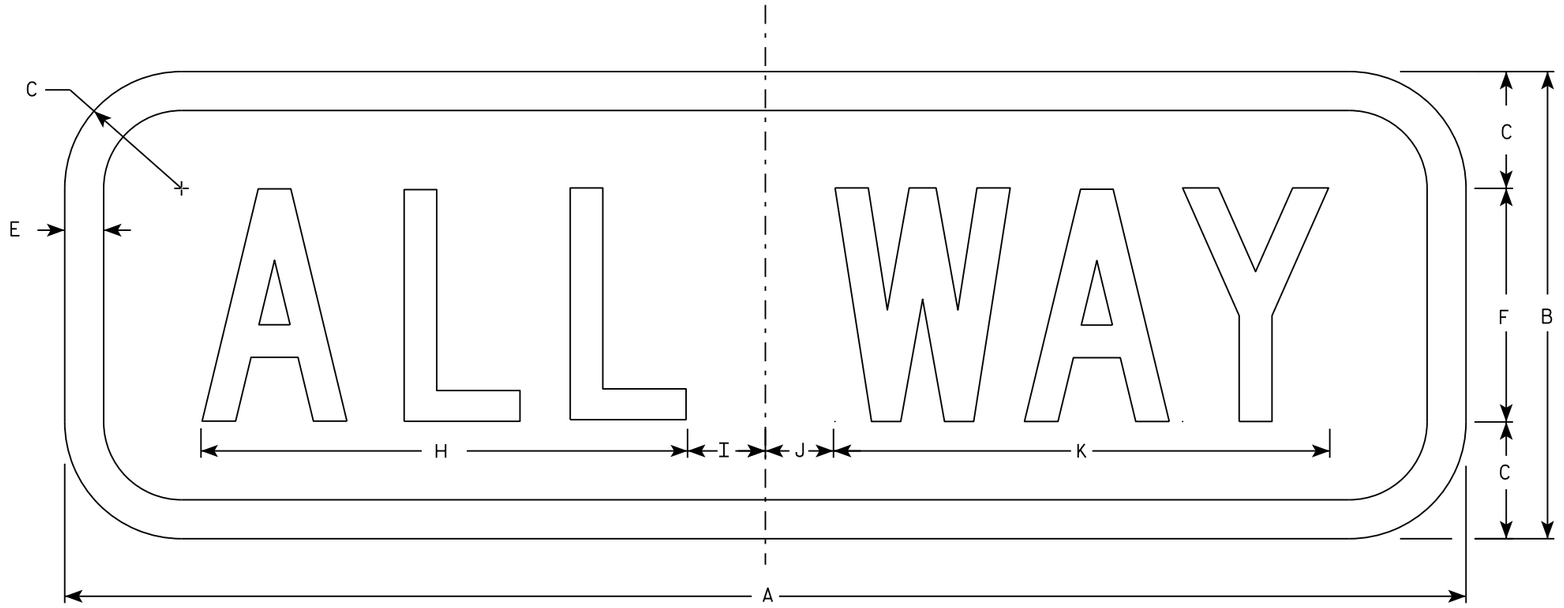
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000



R1-3P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																0.75
2S	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																1.5
2M	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
3	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
4	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5
5	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5

STANDARD SIGN
R1-3P

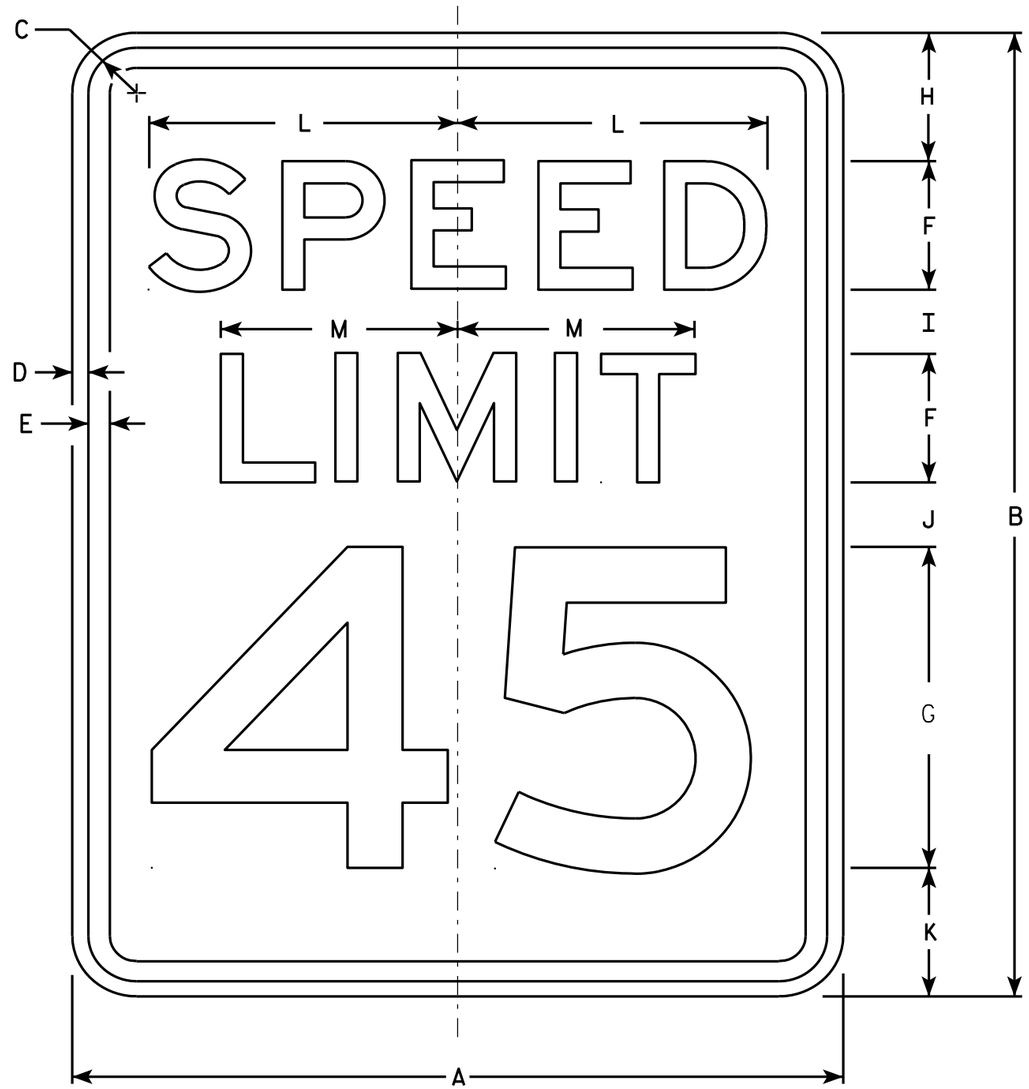
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/24/15 PLATE No. R1-3P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R13P.DGN PLOT DATE : 01-DEC-2015 18:08 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 1.945842:1.000000



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

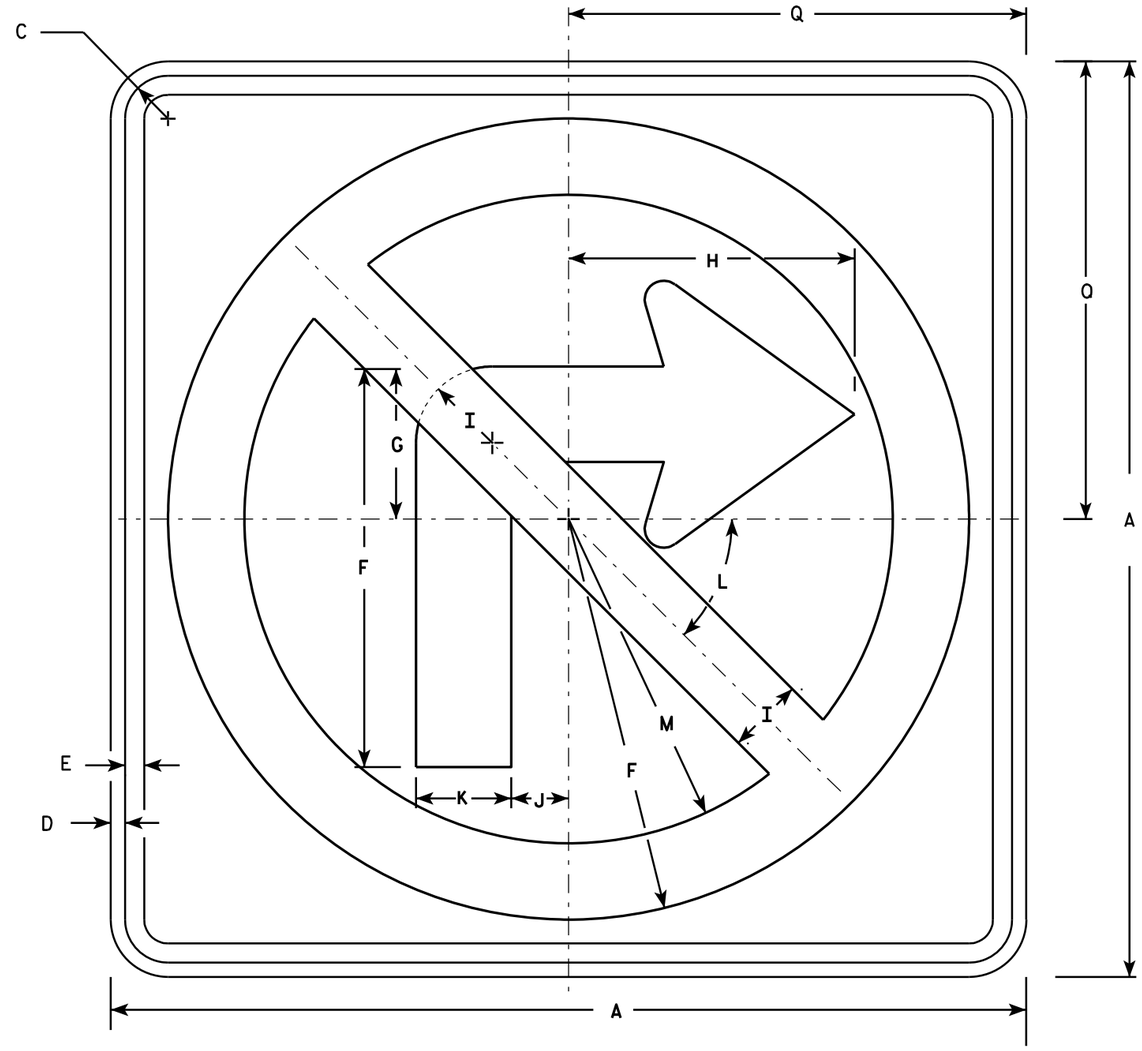
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

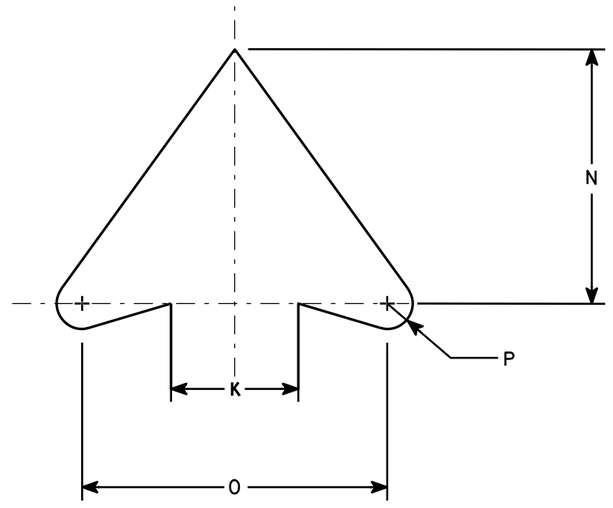
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 226 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

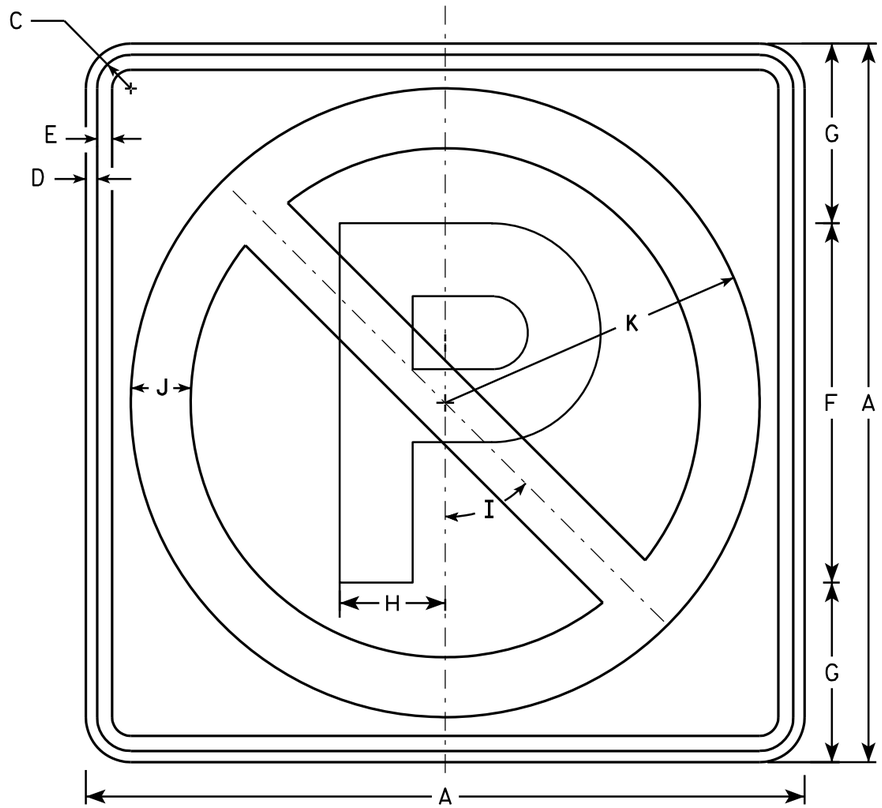
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 227	E



R3-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Letter P are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
2M	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
3																											
4																											
5																											

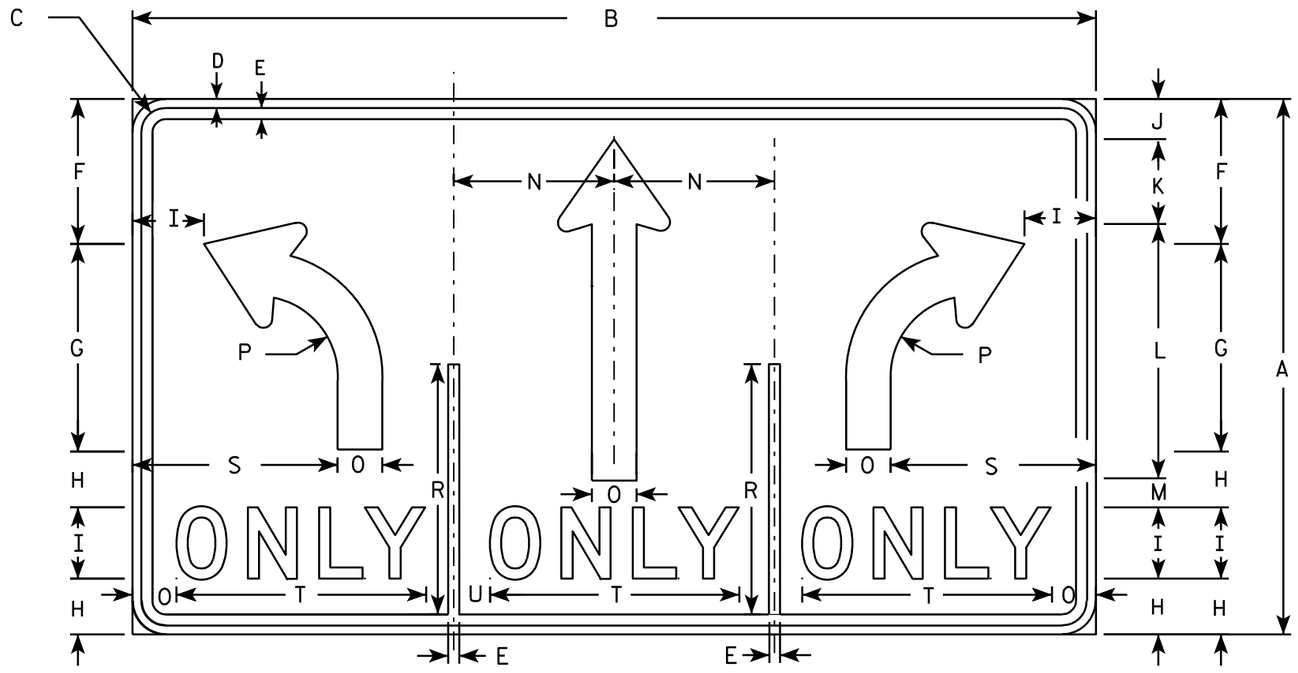
STANDARD SIGN
R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/01/12 PLATE NO. R3-8A.1

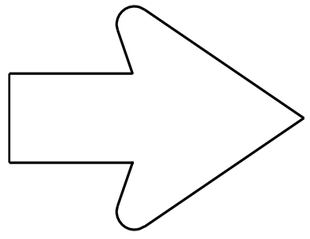
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 228 | E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

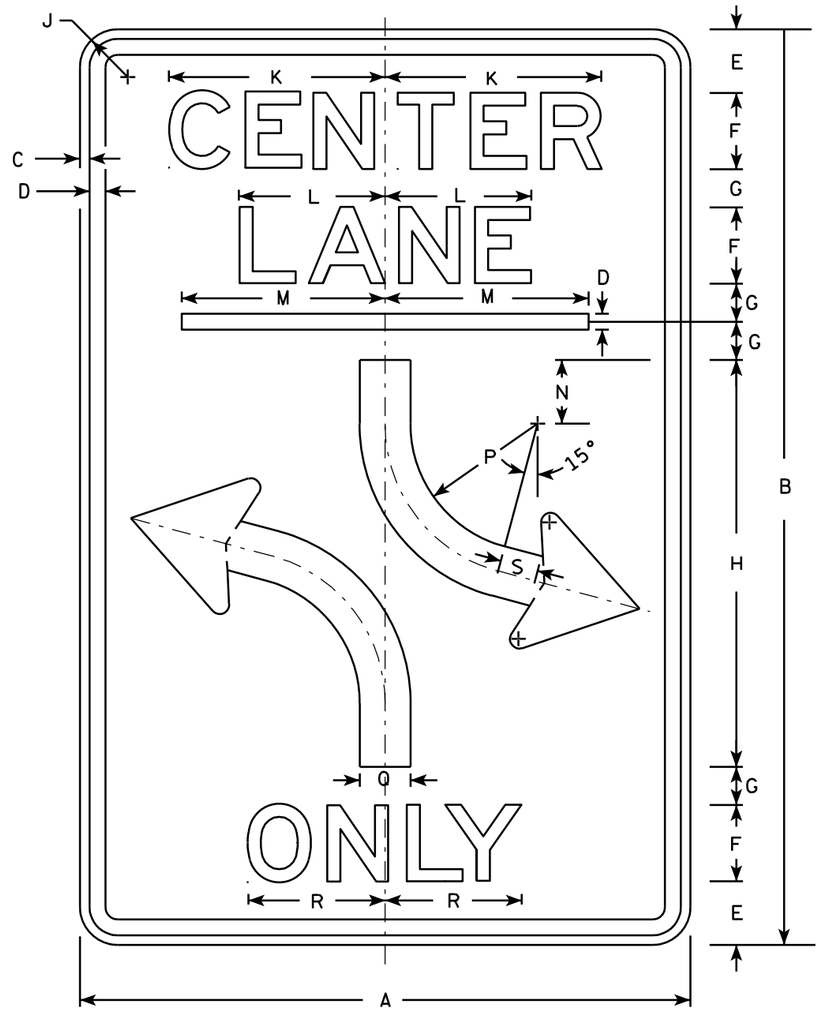
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

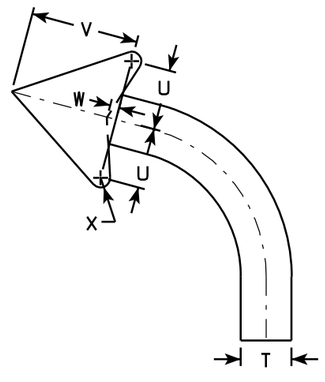
SHEET NO: 229 E



R3-9B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
2M	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
3	36	48	5/8	7/8	3 1/2	5	1 1/2	20		2 1/4	14 1/8	9 1/2	12	3		4	3	9 7/8	2		3 1/2	6 1/8	1/2				12.0
4																											
5																											

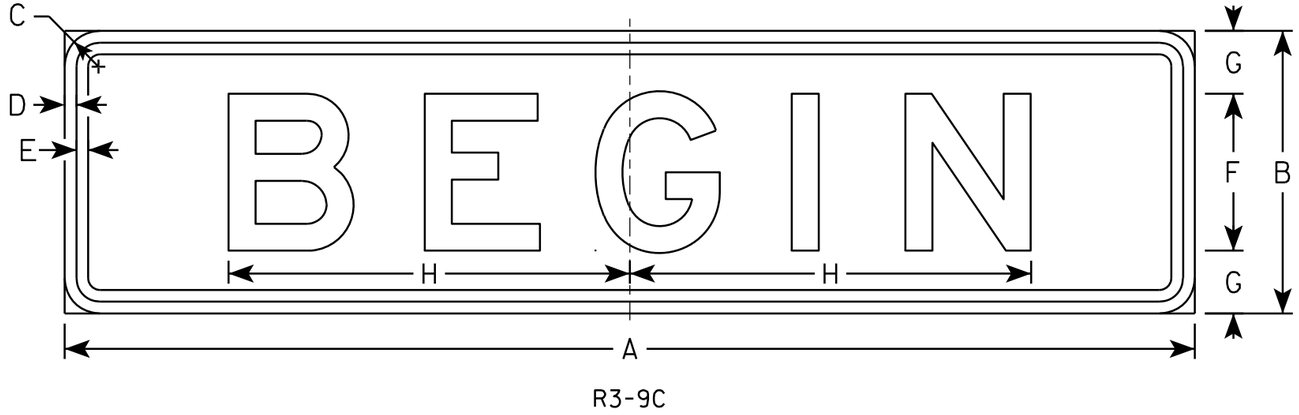
STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9B.5

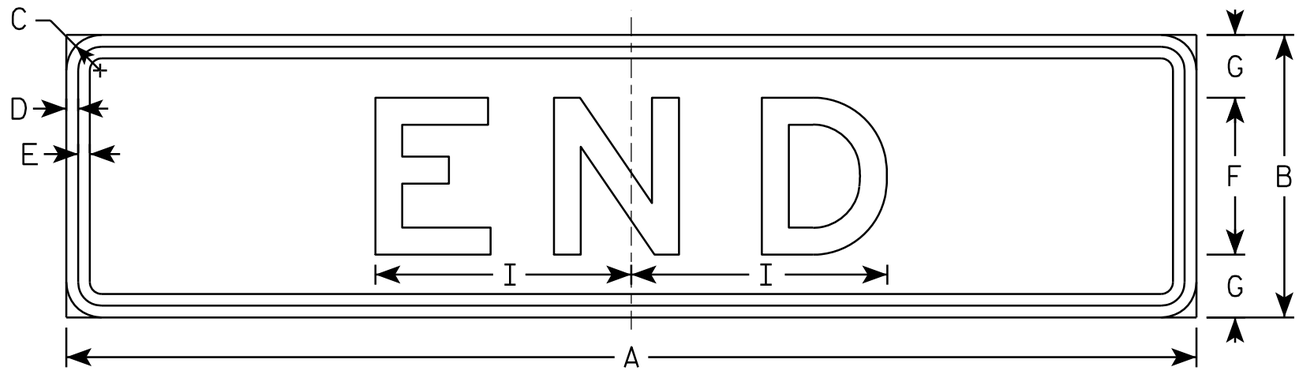
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 230 | E



R3-9C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-9D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	6	1 1/8	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
2M	24	6	1 1/8	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
3	36	9	1 1/8	3/8	3/8	5	2	12 3/4	8 1/8																		1.86
4																											
5																											

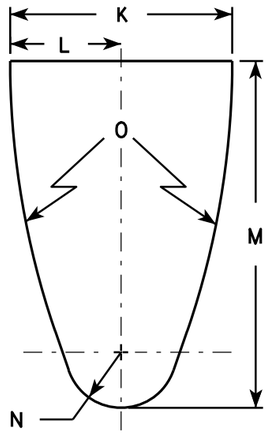
STANDARD SIGN
R3-9C & R3-9D

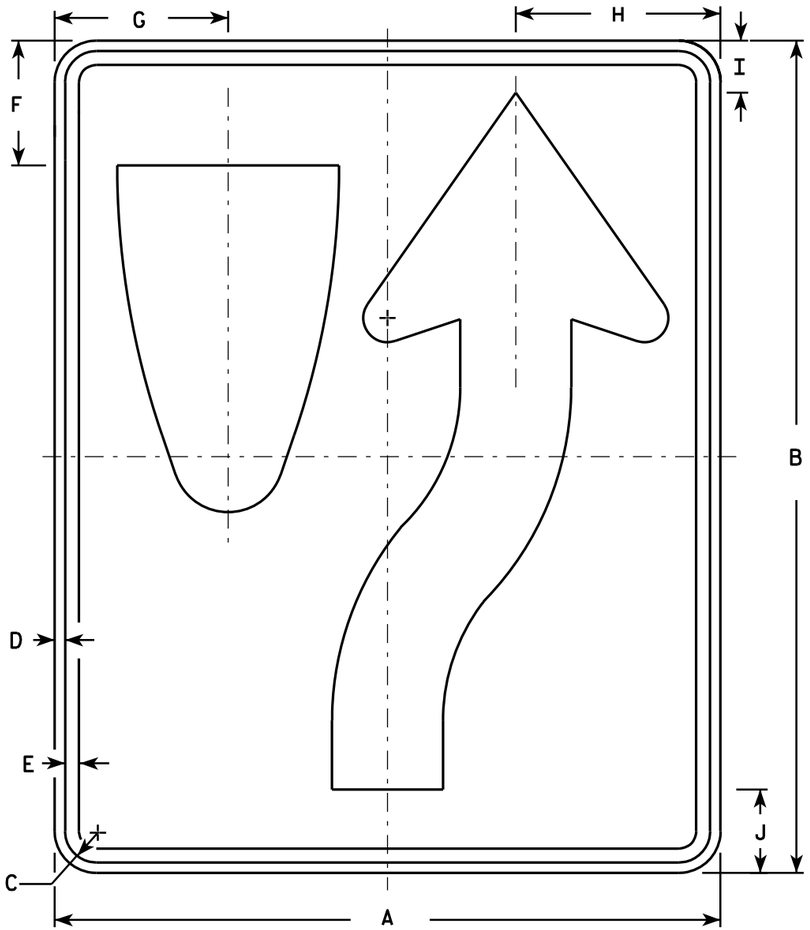
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9C.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 231	E

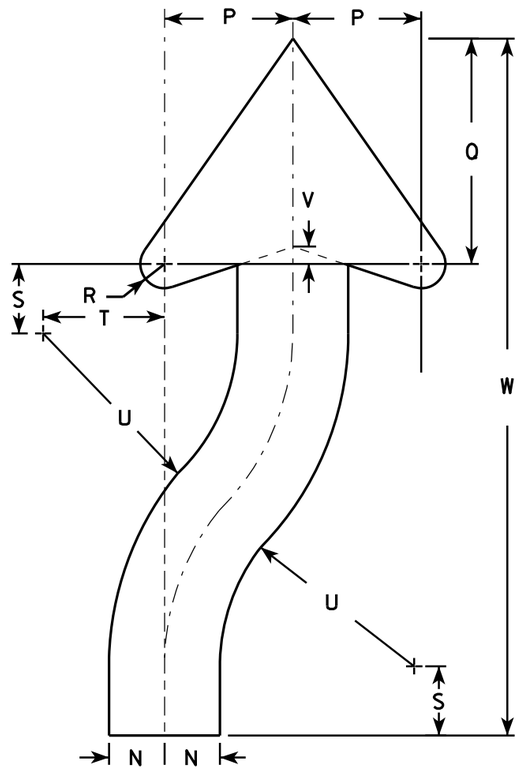




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

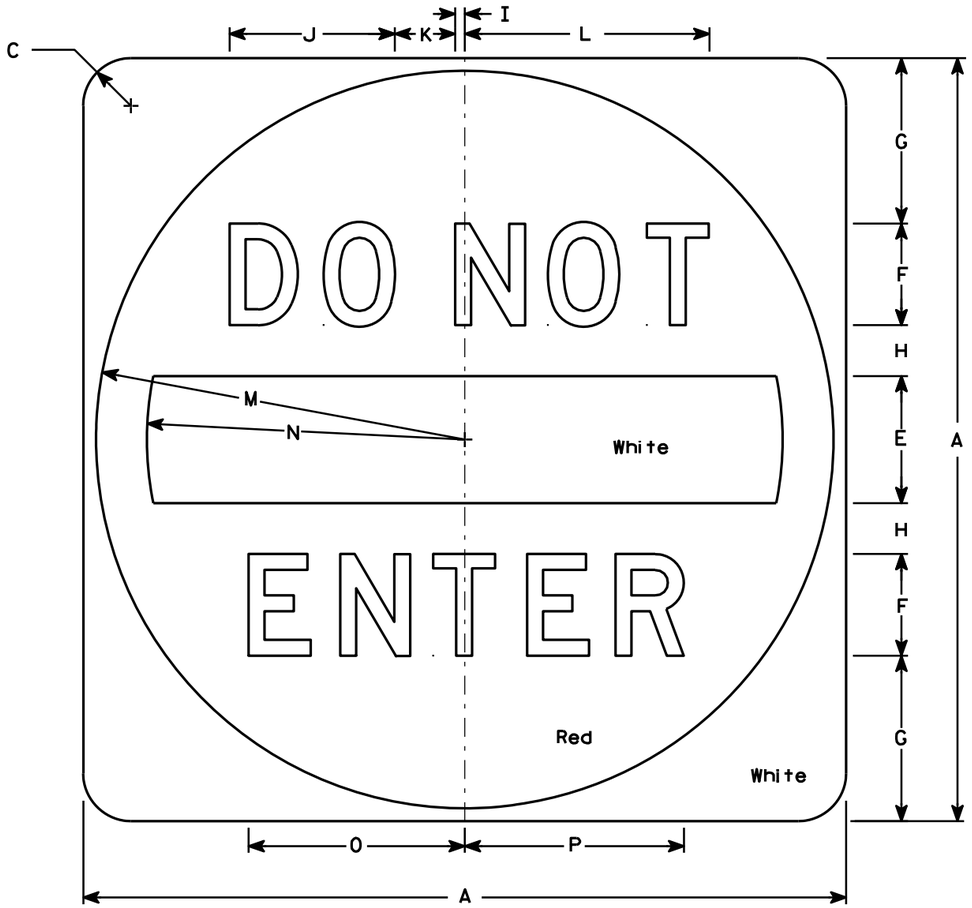
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 232	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

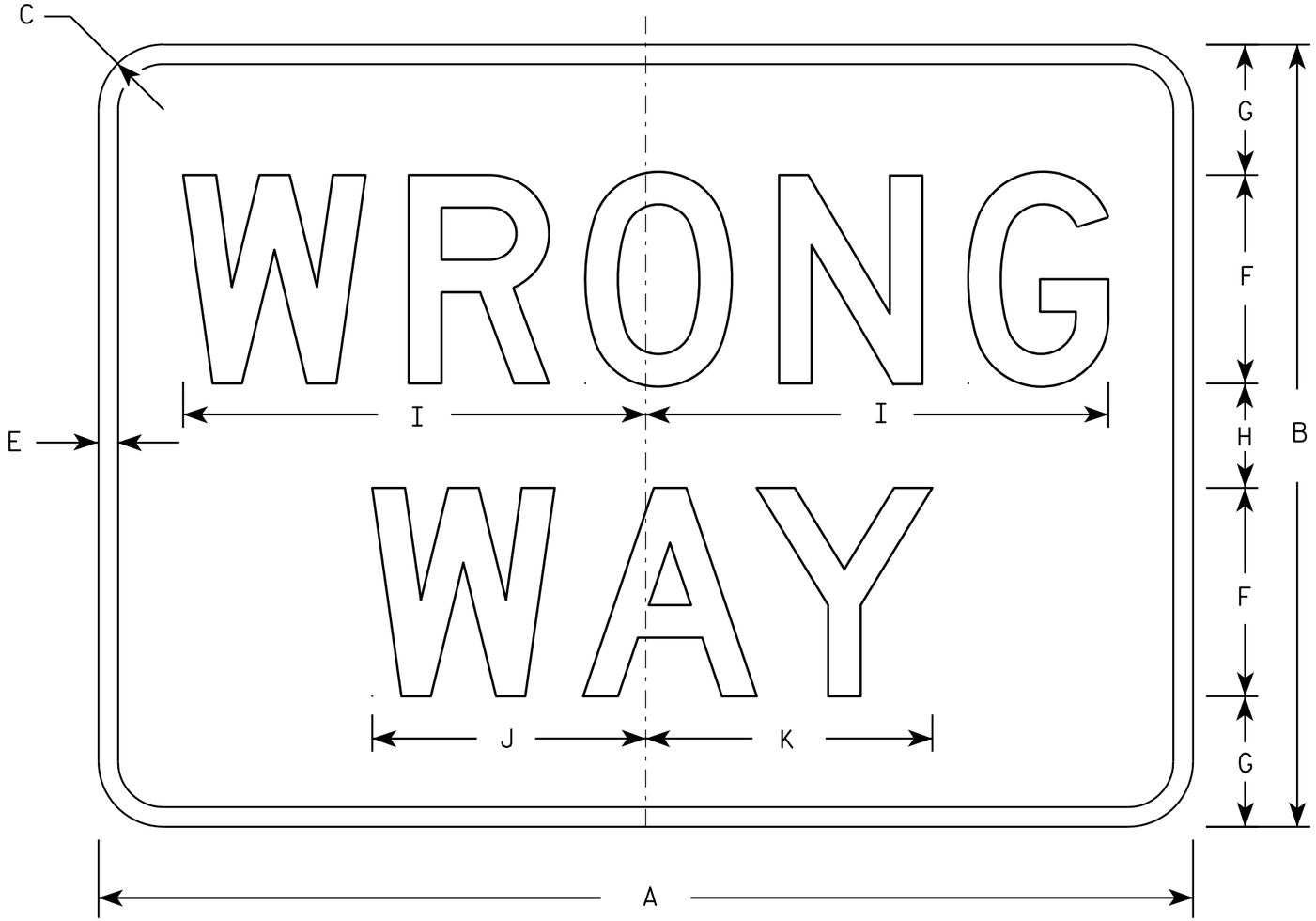
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 233 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

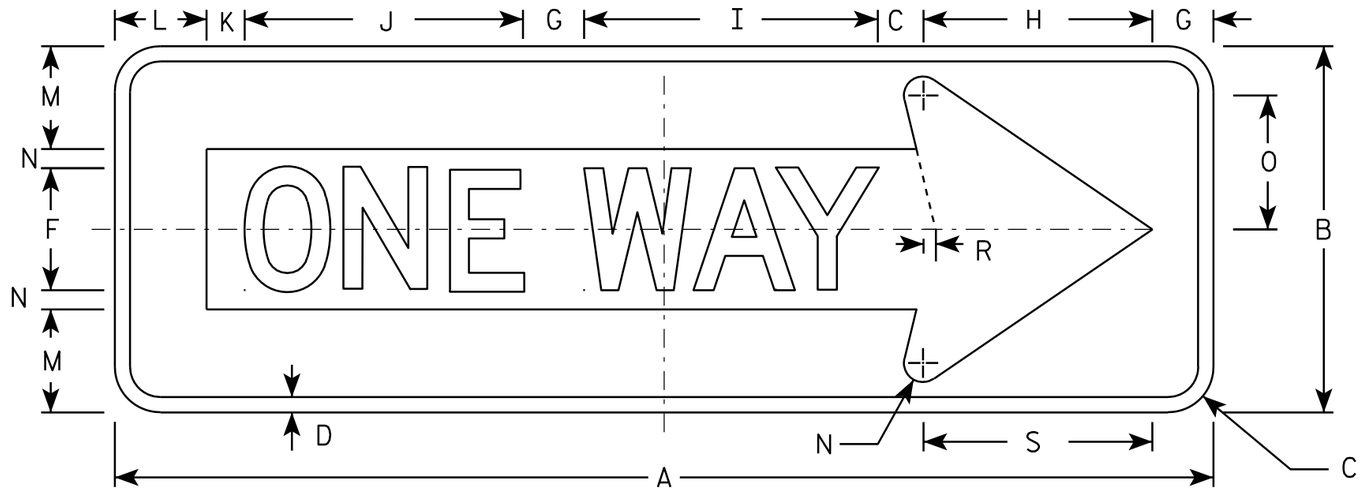
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

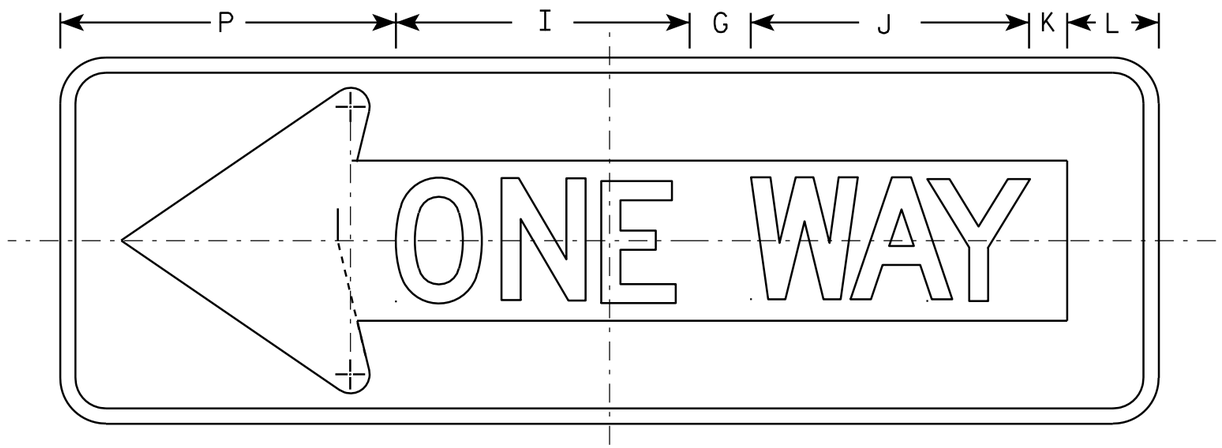
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 234 | E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

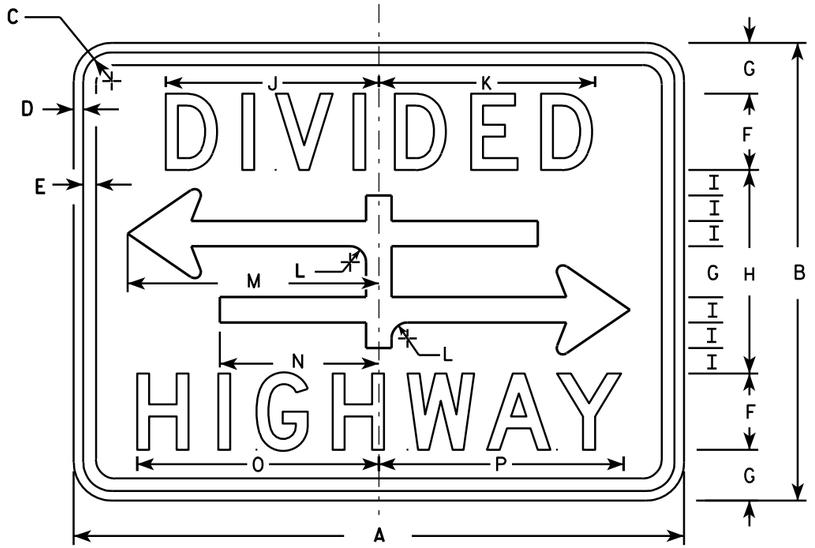
SHEET NO: 235 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R61.DGN PLOT DATE : 17-DEC-2010 14:11 PLOT BY : dotsja

WISDOT/CADDS SHEET 42

7

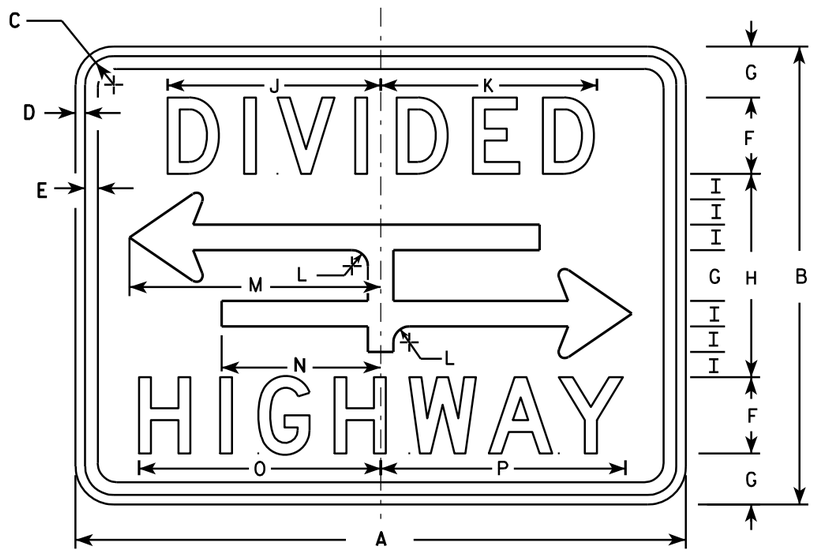
7



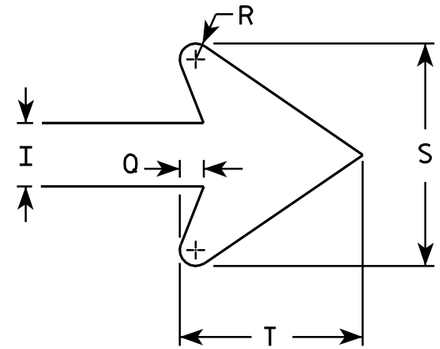
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-3A



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

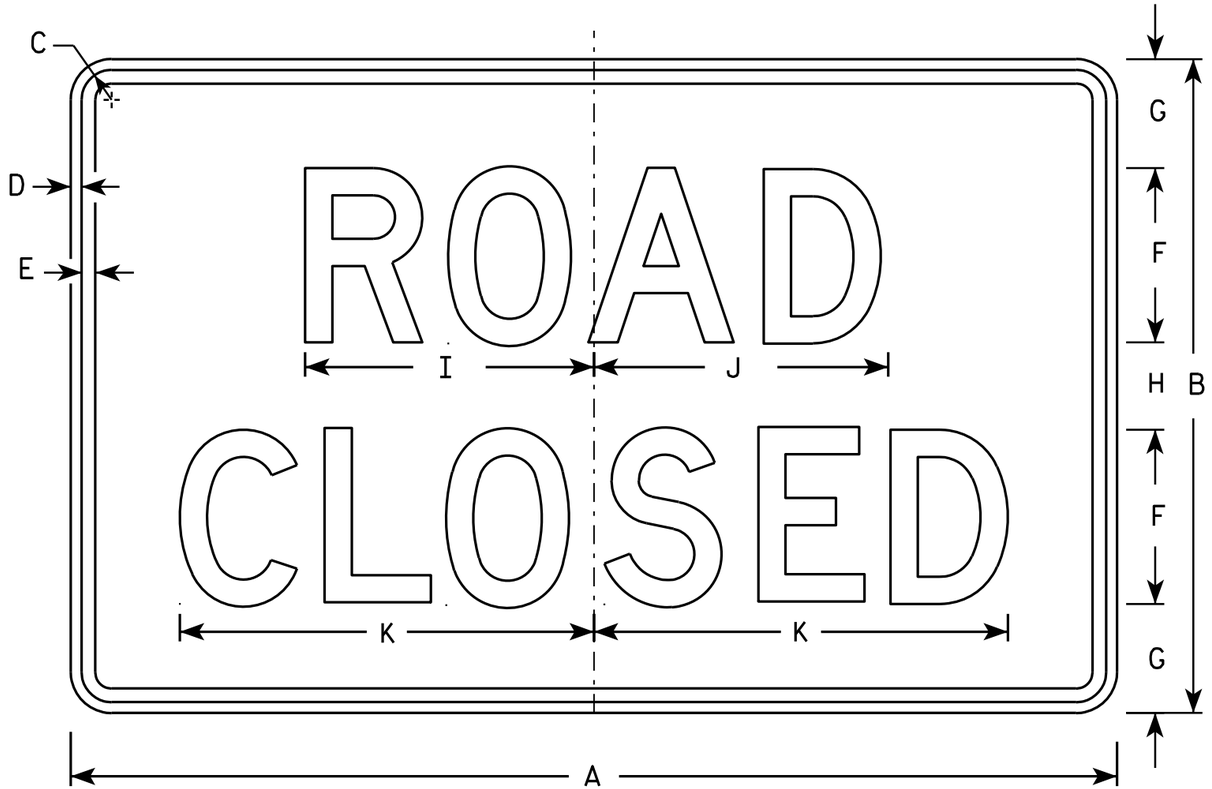
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

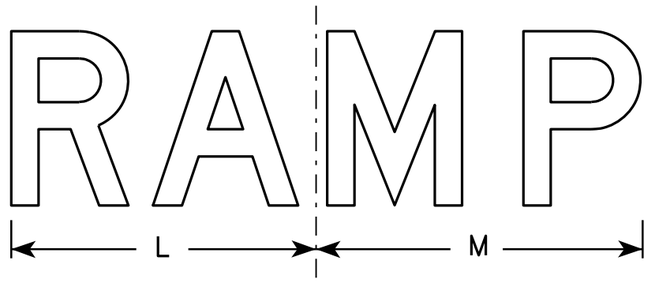
SHEET NO: 236 E



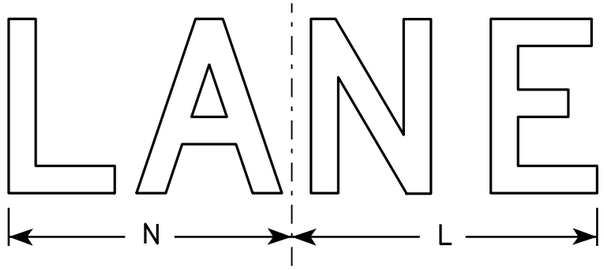
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

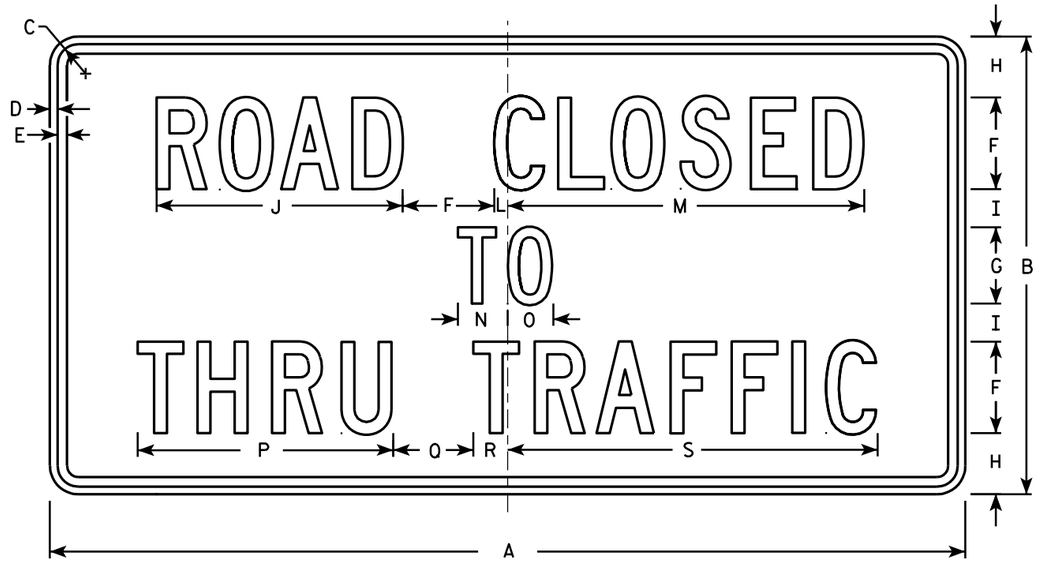
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

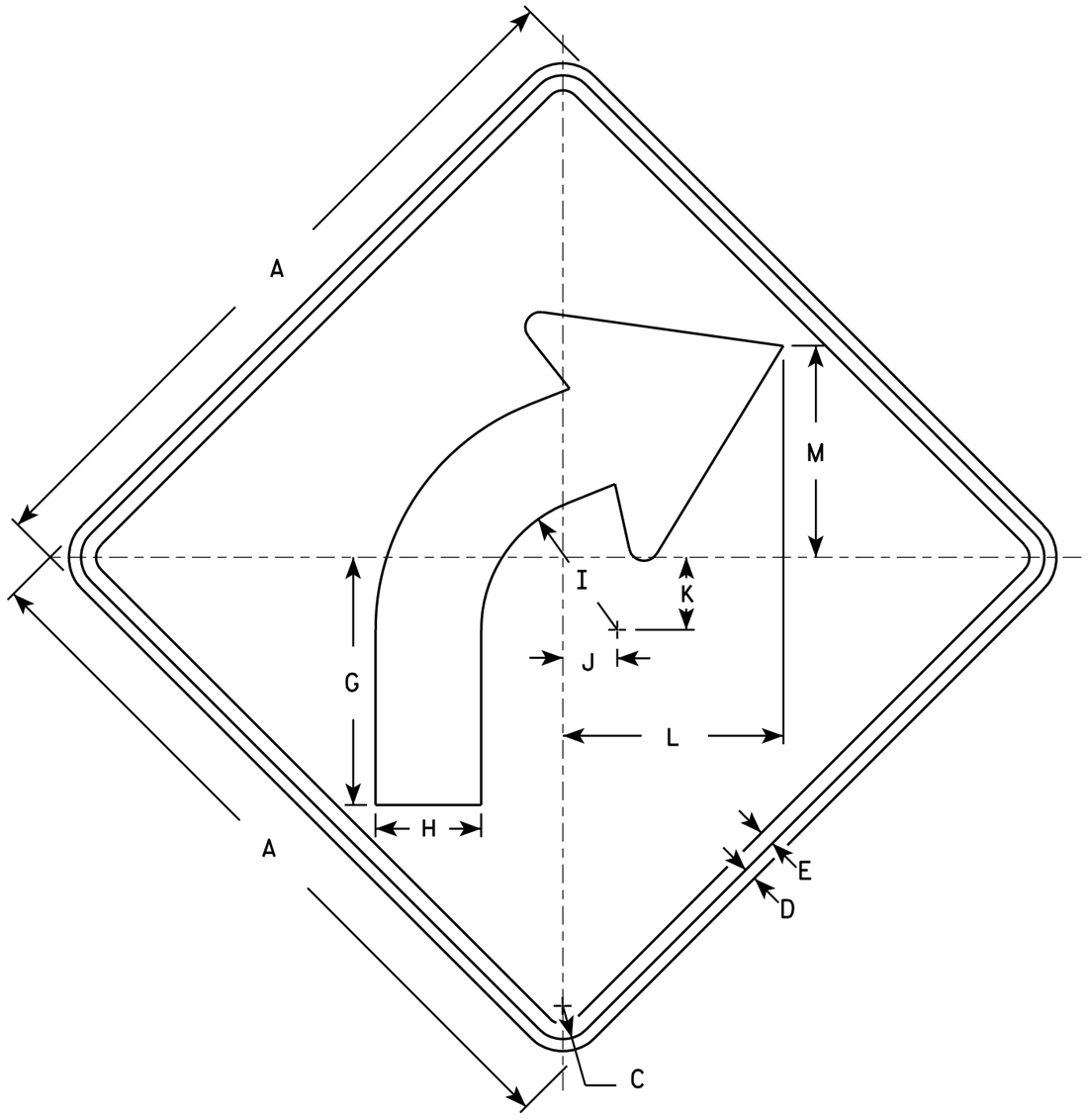
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

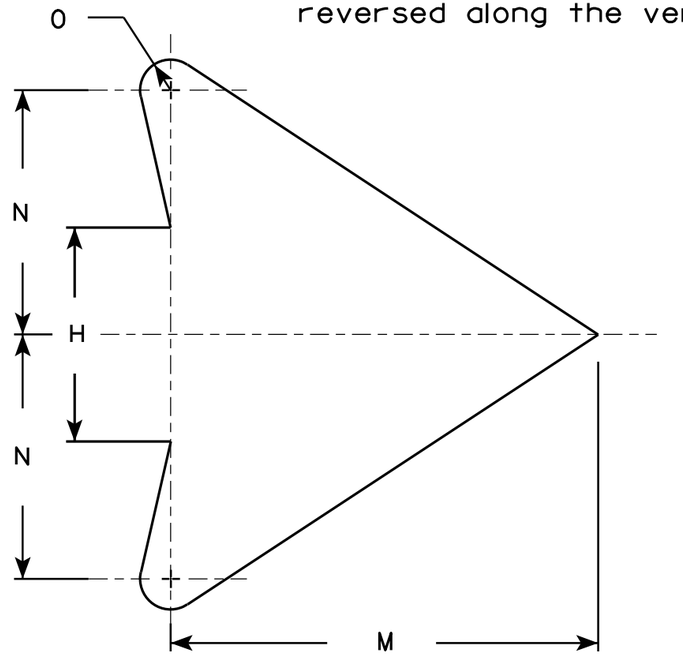
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 238 | E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

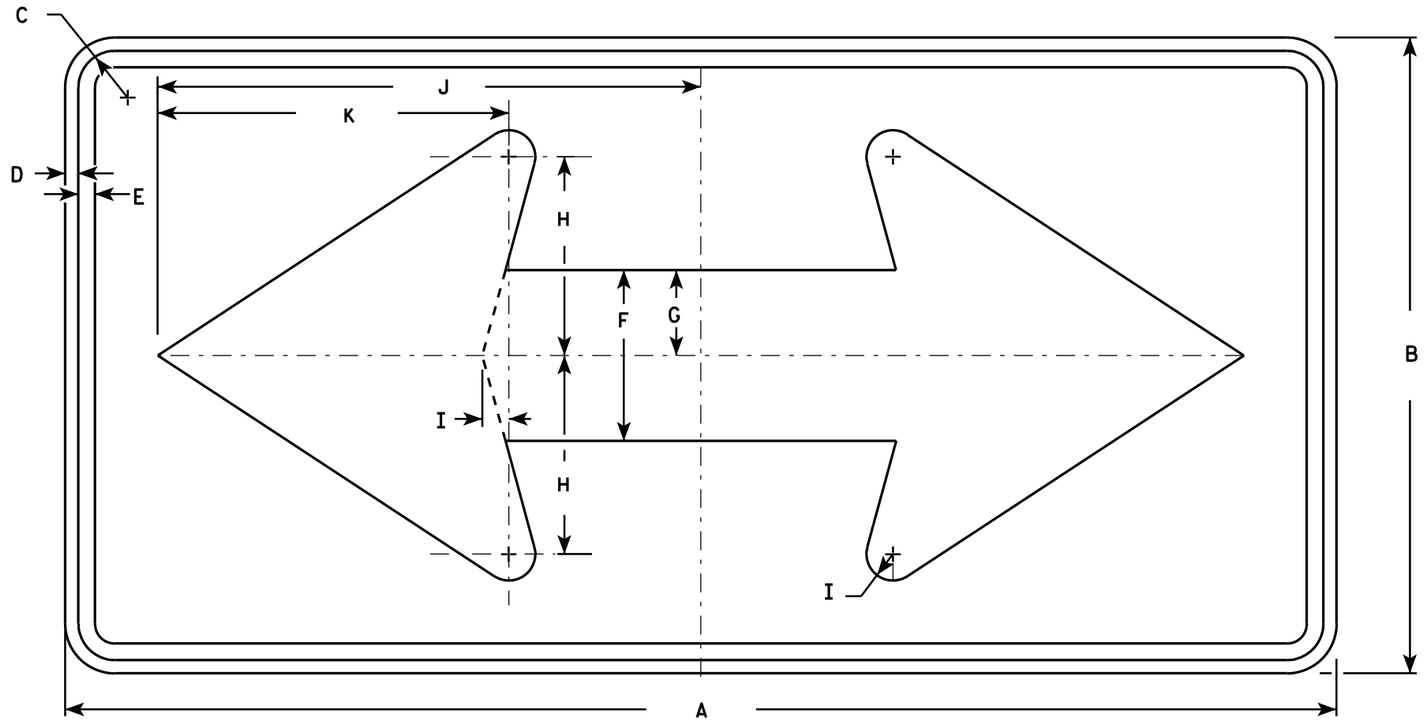
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 239	E



W1-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

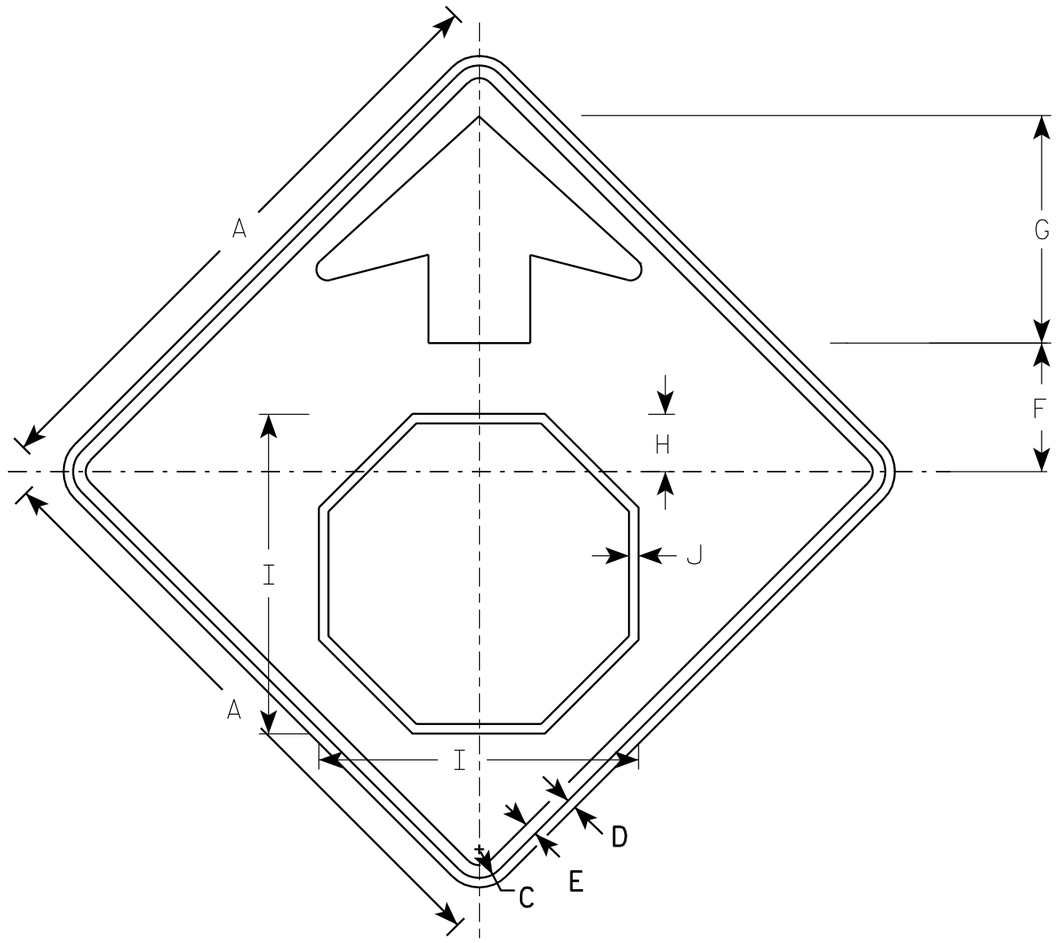
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

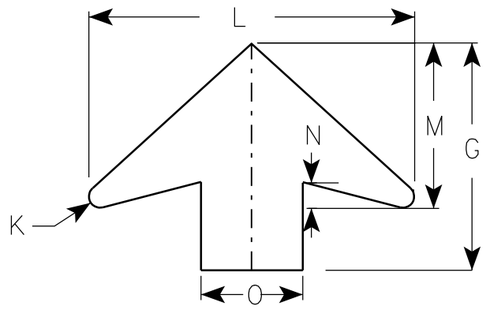
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 240 | E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

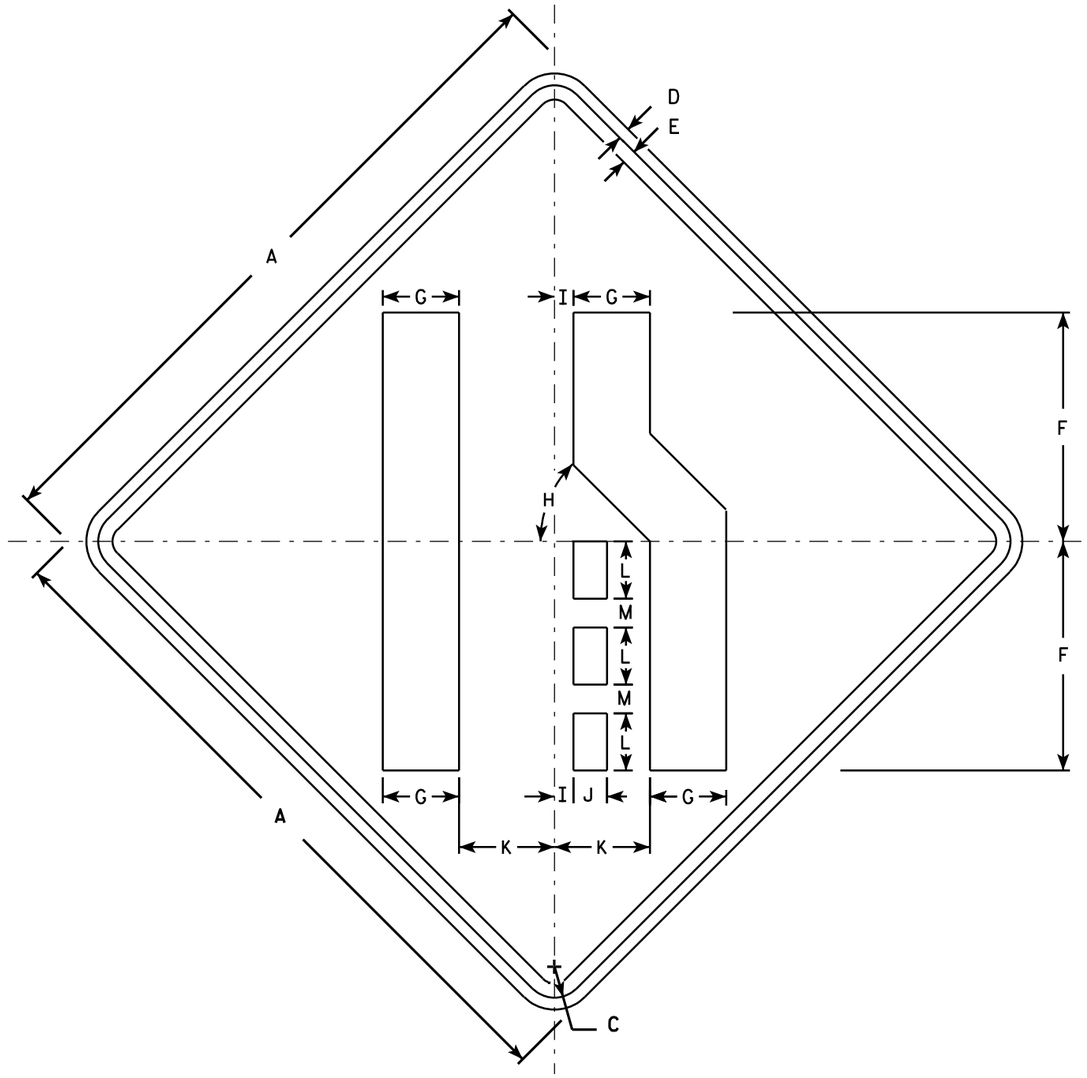
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 241 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

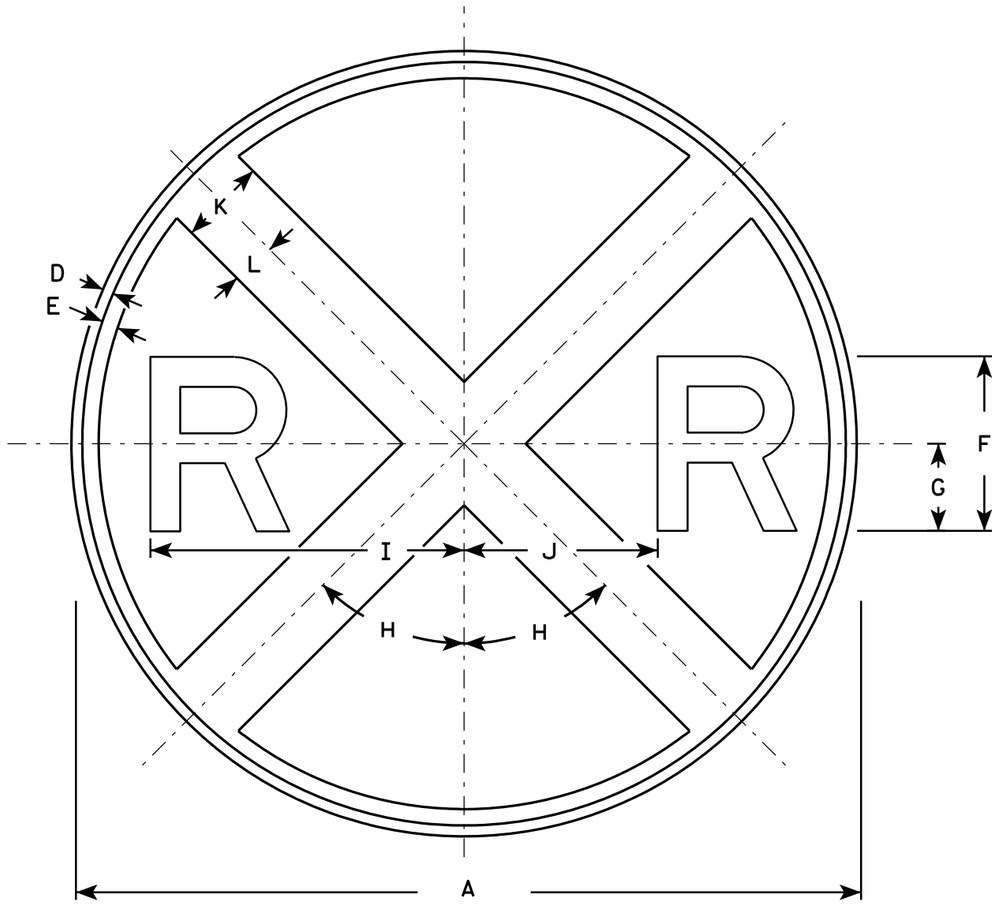
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 242 E



W10-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

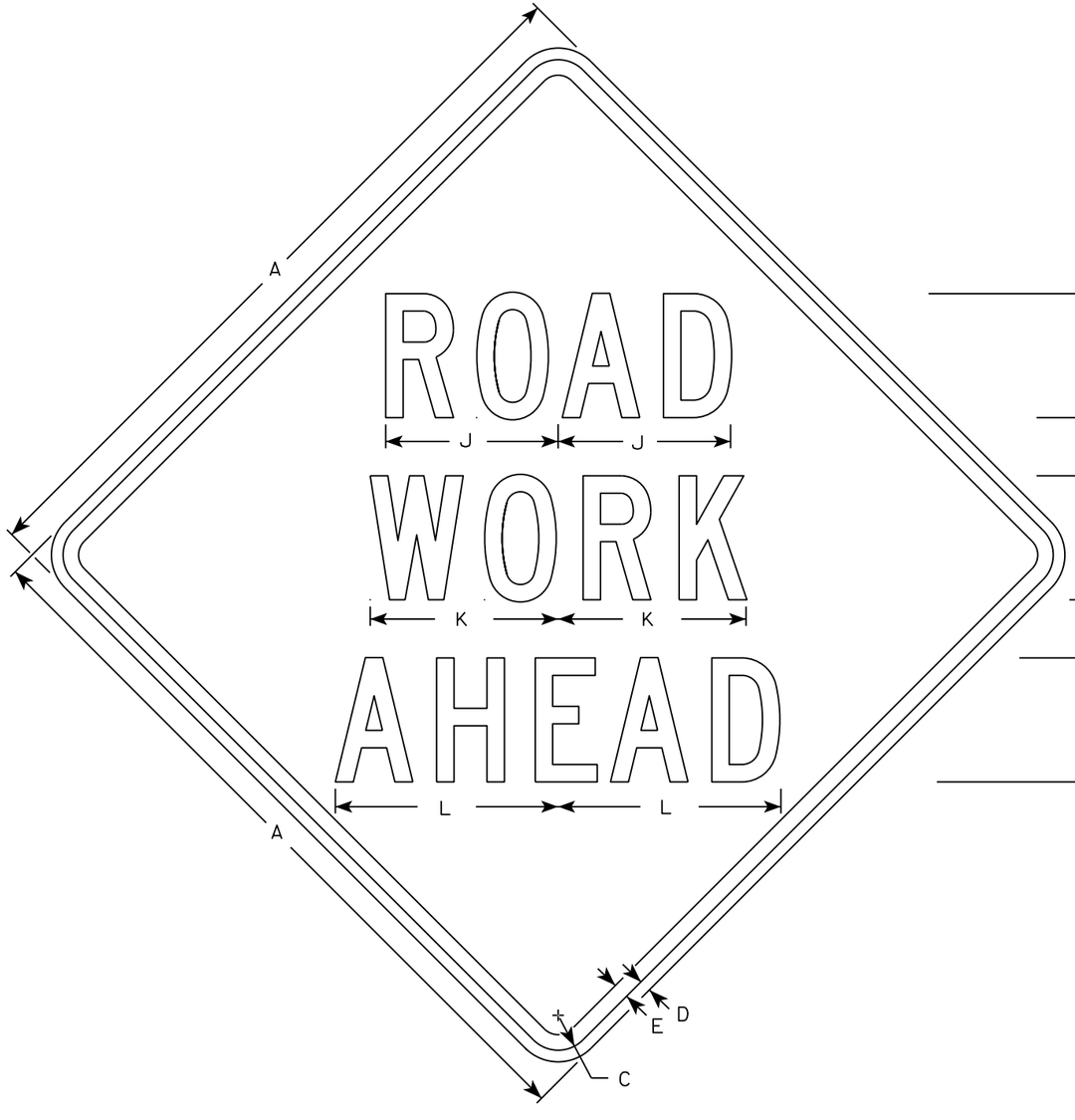
STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

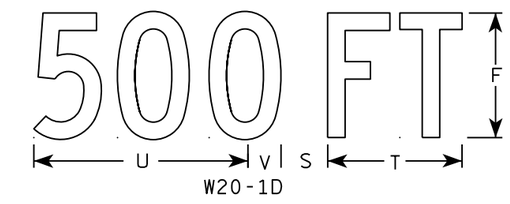
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-1.8

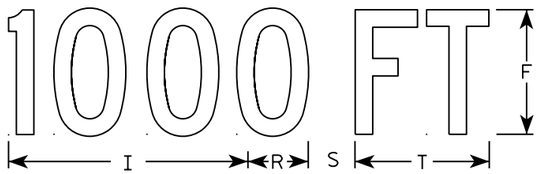
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 243	E



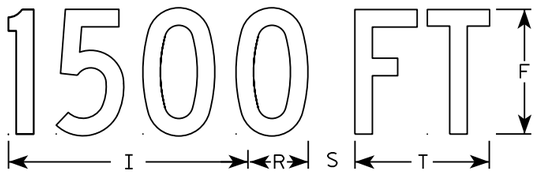
W20-1A



W20-1D

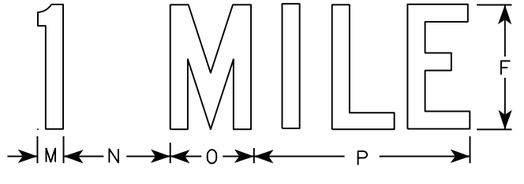


W20-1C

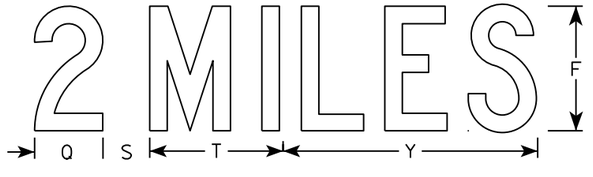


W20-1B

W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

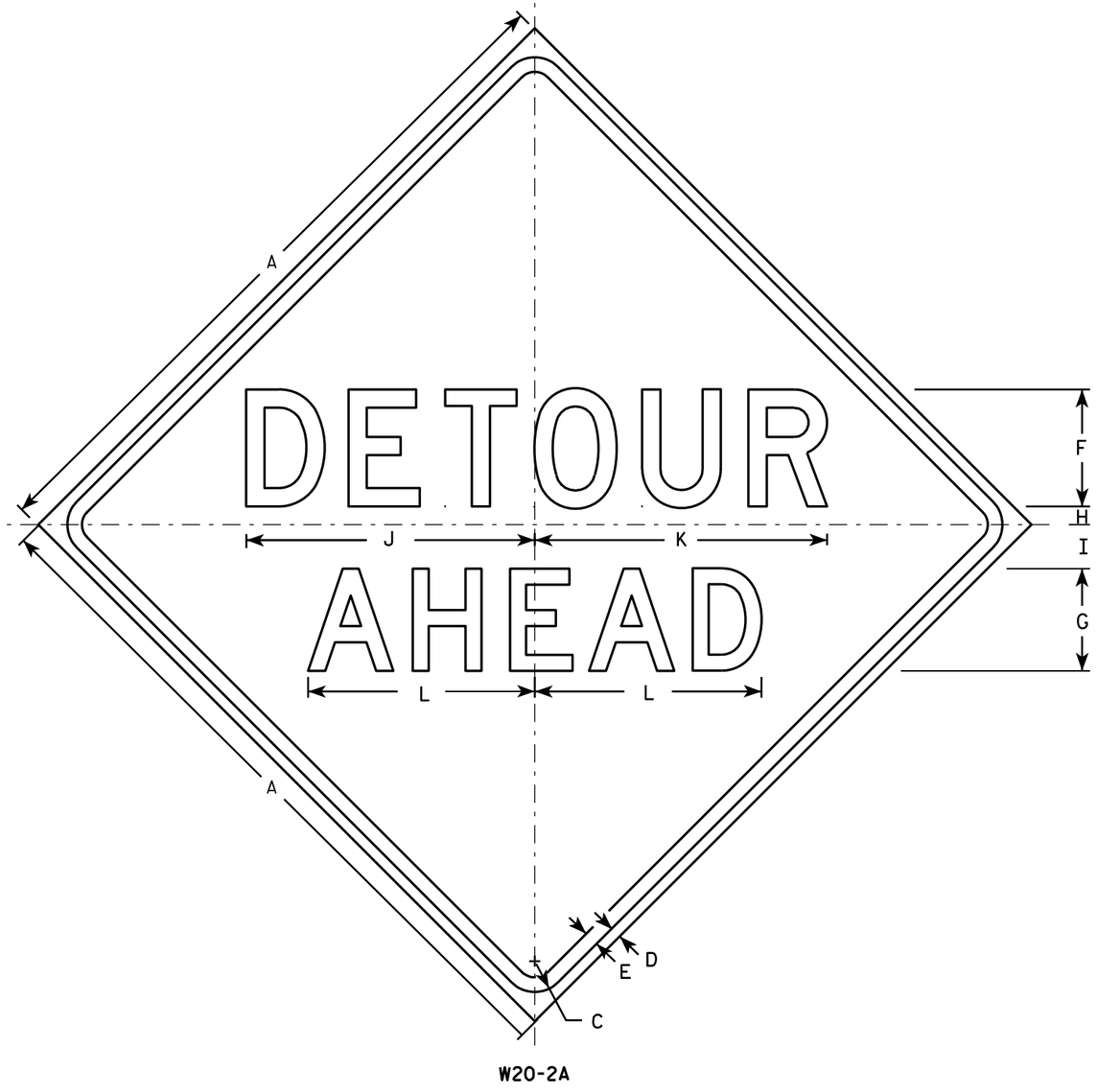
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

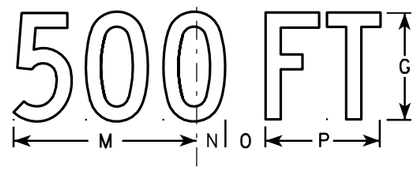
PROJECT NO:

SHEET NO: E

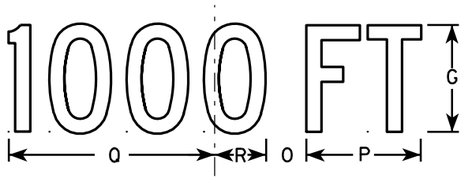
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



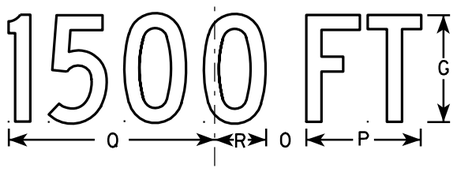
W20-2A



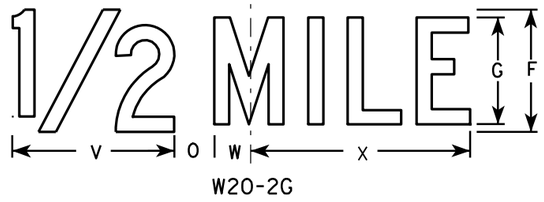
W20-2D



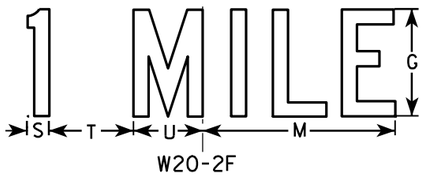
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

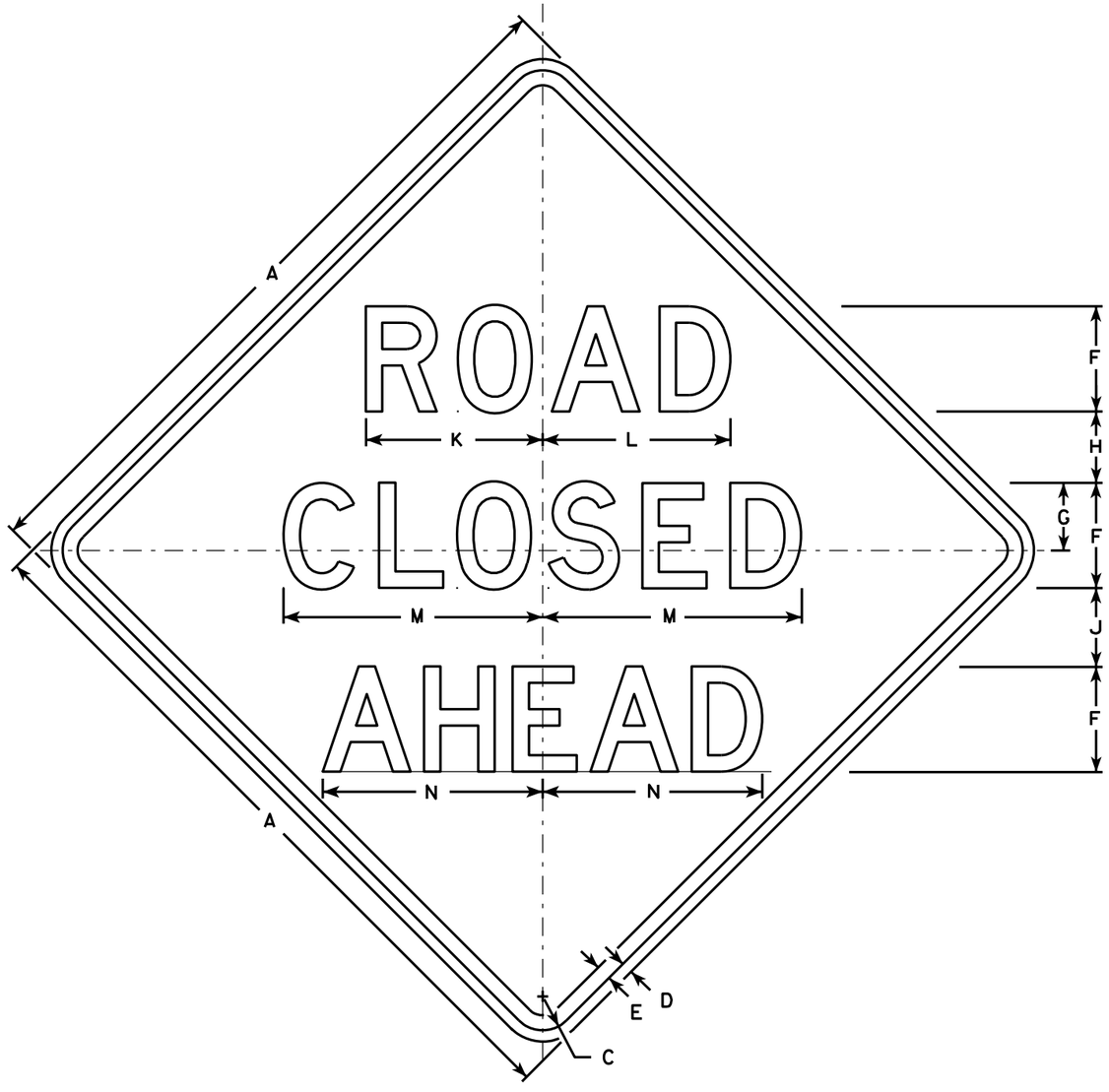
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

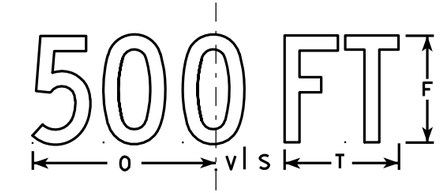
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 | E

7

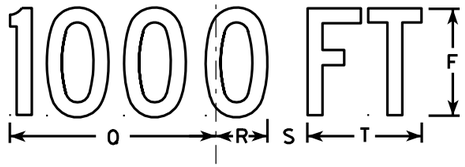
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



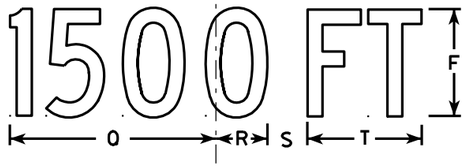
W20-3A



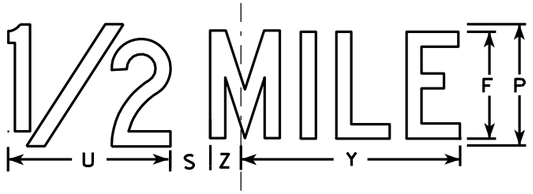
W20-3D



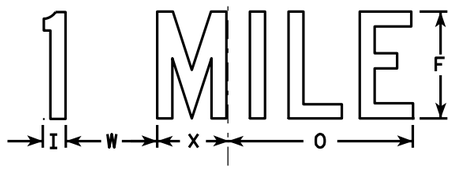
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

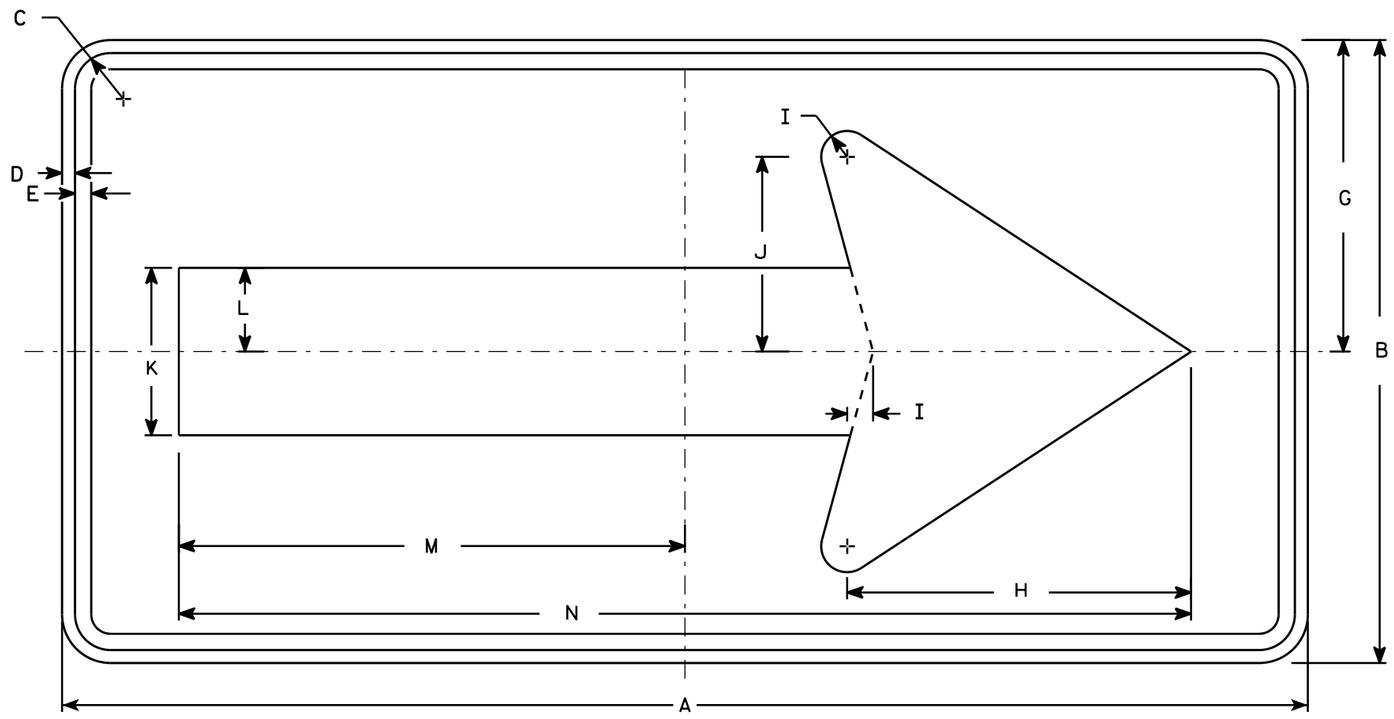
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 246 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

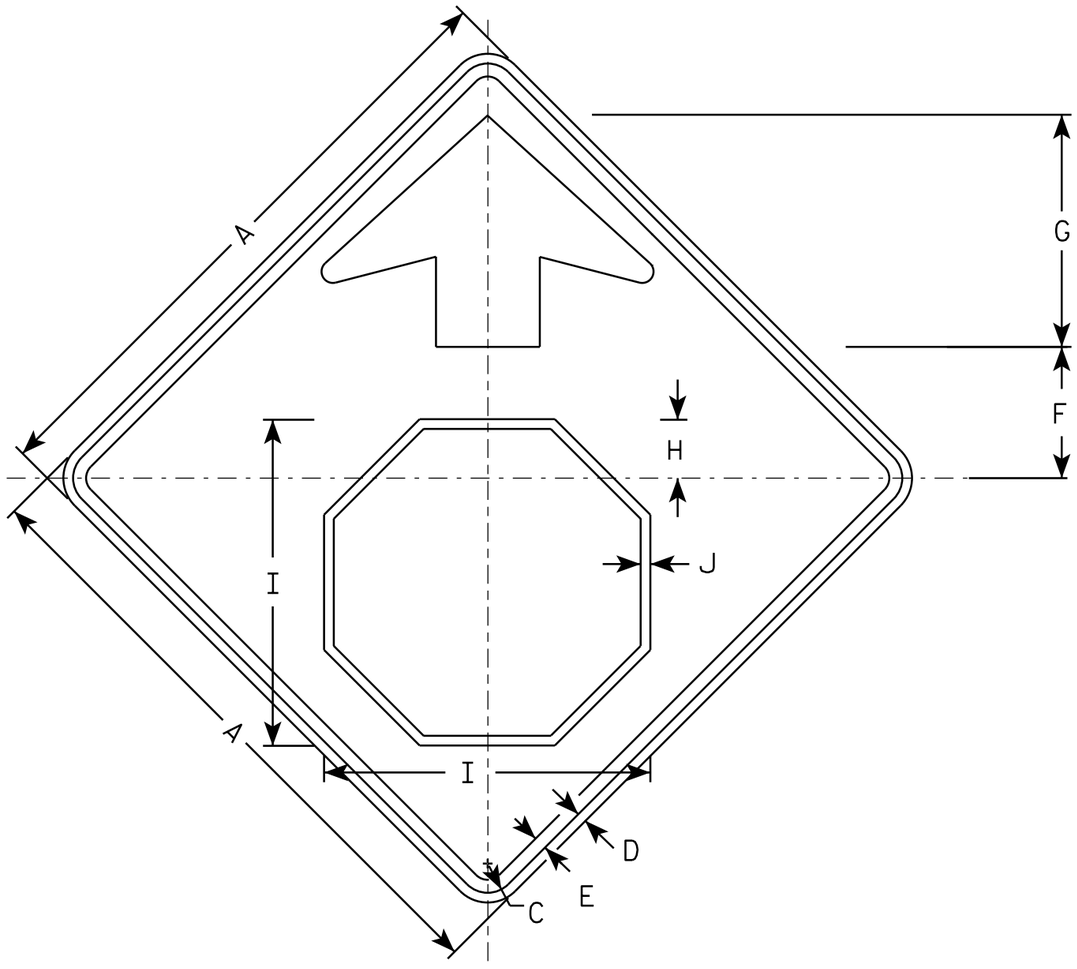
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

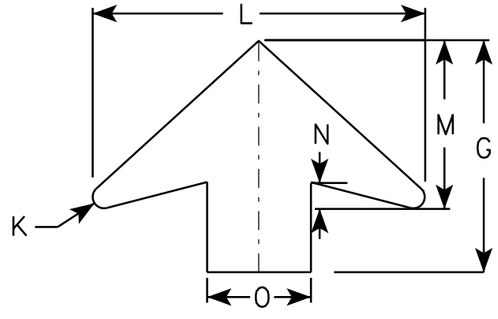
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W03-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 248 03-1.1

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W031.DGN PLOT DATE : 20-NOV-2013 10:54 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

Division	From / To Station	Location	Common Excavation Cut (2)	Unusable Material - See Comment A	Available Material (1)	Marsh Excavation (2)	Reduced Marsh in Fill See Comment B Factor 0.60	Expanded Marsh Backfill (3) Factor 1.50	Unexpanded Fill	Expanded Fill (4) Factor 1.25	Mass Ordinate + / - (5)	Waste	Comment:
1	49+53 to 128+98	Removal of Base Material	4419	0	4419	0	0	0	0	0	4419		
	73+50-81+40	Railroad Widening	2631	1316	1316	3536	0	5304	3355	4194	-2878		A) Assumes 50% of cut Above the Marsh Excavation is Unusable previous Marsh spoil. Determine usability upon excavation B) Minimal fill outside of 1:1 slopes assumes no re-use of Marsh material
	95+03-102+43	Richmond Accel Widening	325	0	325				82	103	223		
Division 1 Subtotal			7375	1316	6060	3536	0	5304	3437	4296	1763	3079	
2	Intersections	CTH B NW	120	0	120	0	0	0	1	1	119		
		CTH B NE	15	0	15	0	0	0	6	8	8		
		BEAUPREY SW	65	0	65	0	0	0	29	36	29		
		BEAUPREY NW	45	0	45	0	0	0	1	1	44		
		RICHMOND SW	64	0	64	0	0	0	14	18	47		
		RICHMOND NW	35	0	35	0	0	0	1	1	34		
		STH 22 SW	92	0	92	0	0	0	2	3	90		
Division 2 Subtotal			436	0	436	0	0	0	54	68	369	369	
Grand Total			7811	1316	6496	3536	0	5304	3491	4364	2132	1724	0

1) Available Material = Cut -Unusuable Material
2) Marsh Excavation - to be backfilled with Granular Backfill.
3) Expanded Marsh Backfill - This is to be filled with Granular Backfill material. Marsh Backfill Factor = 1.5.
4) Expanded Fill. Factor = 1.25
5) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

Excavation located within the excavation limits of the item Railroad Marsh Excavation and Backfill (SPV.0105.01) is not shown in this table and is included in the item Railroad Marsh Excavation and Backfill .

Earthwork Volumes*- Widening at Railroad, STA 73+46-STA 81+40

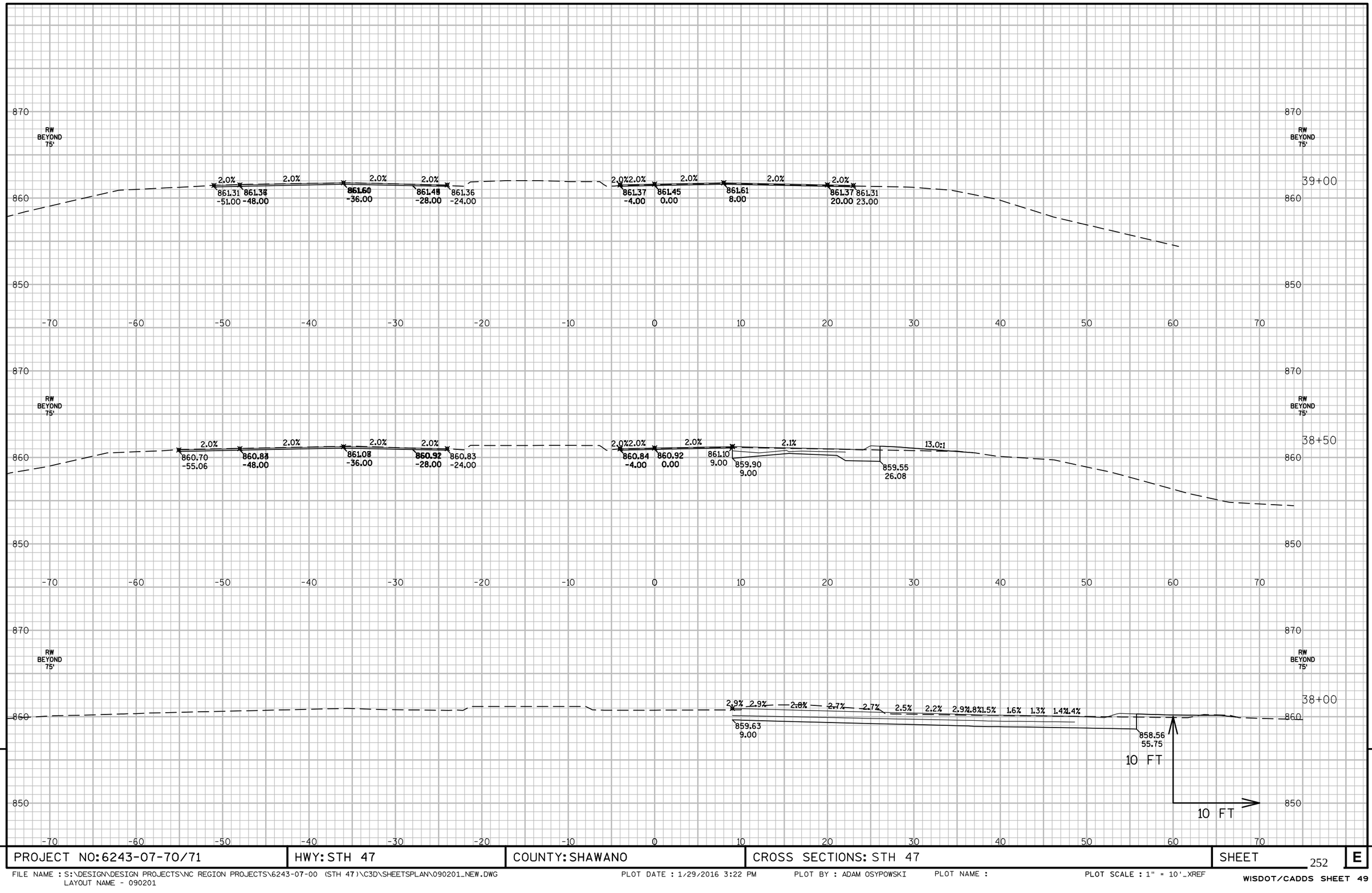
	Common Excavation											
Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)		Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)		Marsh Excavation Area (Sq. ft.)	Marsh Excavation Volume (Cu. Yd.)	Cumulative Marsh Excavation Volume (Cu. Yd.)
73+46	73.29	0.00	0.00		70.8	0.00	0.00	0.00		25.11	0.00	0.00
73+50	74.25	10.93	10.93		71.42	10.53	10.53	0.39		26.01	3.79	3.79
73+70	78.29	56.50	67.43		77.74	55.24	65.78	1.65		30.75	21.02	24.81
74+00	115.94	107.91	175.33		139.88	120.90	186.68	-11.35		68.62	55.21	80.01
74+20	124.14	88.92	264.25		145.37	105.65	292.33	-28.08		81.79	55.71	135.72
74+50	138.67	146.01	410.25		157.38	168.19	460.52	-50.27		96.17	98.87	234.59
74+93	132.88	216.23	626.49		176.14	265.58	726.10	-99.61		107.15	161.90	396.49
75+00	138.56	35.19	661.68		175.76	45.62	771.72	-110.04		107.3	27.80	424.29
75+50	128.15	246.95	908.63		171.79	321.81	1093.52	-184.90		120.54	210.96	635.25
76+00	130.47	239.46	1148.09		168.62	315.19	1408.72	-260.63		138.71	240.05	875.30
76+50	83.51	198.13	1346.22		113.42	261.15	1669.87	-323.65		159.78	276.38	1151.68
77+00	0.46	77.75	1423.97		16.63	120.42	1790.28	-366.31		183.6	317.94	1469.62
77+50	10.54	10.19	1434.16		30.37	43.52	1833.80	-399.65		156.56	314.96	1784.59
78+00	88.28	91.50	1525.66		119.29	138.57	1972.38	-446.72		135.64	270.56	2055.14
78+50	102.67	176.81	1702.46		127.56	228.56	2200.94	-498.48		157.58	271.50	2326.64
79+00	111.02	197.86	1900.32		141.51	249.14	2450.08	-549.76		176.14	309.00	2635.64
79+40	122.35	172.87	2073.19		149.03	215.21	2665.30	-592.10		168.54	255.32	2890.96
79+50	121.33	45.13	2118.32		145.94	54.62	2719.92	-601.60		166.5	62.04	2953.01
80+00	124.57	227.69	2346.00		135.79	260.86	2980.78	-634.78		146.75	290.05	3243.05
80+07	125.21	32.38	2378.38		132.32	34.76	3015.54	-637.15		145.42	37.87	3280.93
80+50	118.06	193.72	2572.10		98.6	183.88	3199.42	-627.32		107.39	201.31	3482.24
80+77	0	59.03	2631.13		68.47	83.54	3282.95	-651.83		0	53.70	3535.93
81+00	0	0.00	2631.13		3.59	30.69	3313.64	-682.52		0	0.00	3535.93
81+40	0	0.00	2631.13		0	2.66	3316.30	-685.18		0	0.00	3535.93

* Volumes are for outside of the existing pavement limits only. Common Excavation for removing the base material below the asphalt is noted separately

Earthwork Volumes*- Widening at Richmond Street Acceleration Lane,
STA 95+03-STA 102+43

	Common Excavation						
Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
94+13	0	0.00	0.00	0	0.00	0.00	0.00
95+50	7.48	18.98	18.98	0.39	0.99	0.99	17.99
96+00	10.05	16.23	35.21	0.77	1.07	2.06	33.15
96+50	11.27	19.74	54.95	3.87	4.30	6.36	48.59
96+83	10.38	13.23	68.18	7.52	6.96	13.32	54.86
97+00	9.97	6.41	74.59	8.15	4.93	18.25	56.33
97+50	8.86	17.44	92.02	9.66	16.49	34.74	57.28
98+00	10.75	18.16	110.18	6.61	15.06	49.81	60.37
98+50	13.45	22.41	132.59	0.15	6.26	56.07	76.52
99+00	12.29	23.83	156.42	3.22	3.12	59.19	97.23
99+50	11.67	22.19	178.60	2.94	5.70	64.89	113.71
100+00	9.59	19.69	198.29	3.36	5.83	70.73	127.56
100+50	12.37	20.33	218.62	1.98	4.94	75.67	142.95
101+00	13.68	24.12	242.74	0.4	2.20	77.87	164.87
101+43	12.61	20.93	263.68	0.94	1.07	78.94	184.74
101+50	12.99	3.32	267.00	0.87	0.23	79.18	187.82
102+00	18.16	28.84	295.84	0.58	1.34	80.52	215.32
102+43	17.29	28.23	324.07	0.42	0.80	81.31	242.75

* Volumes are for outside of the existing pavement limits only. Common Excavation for removing the base material below the asphalt is noted separately



9

9

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 252	E

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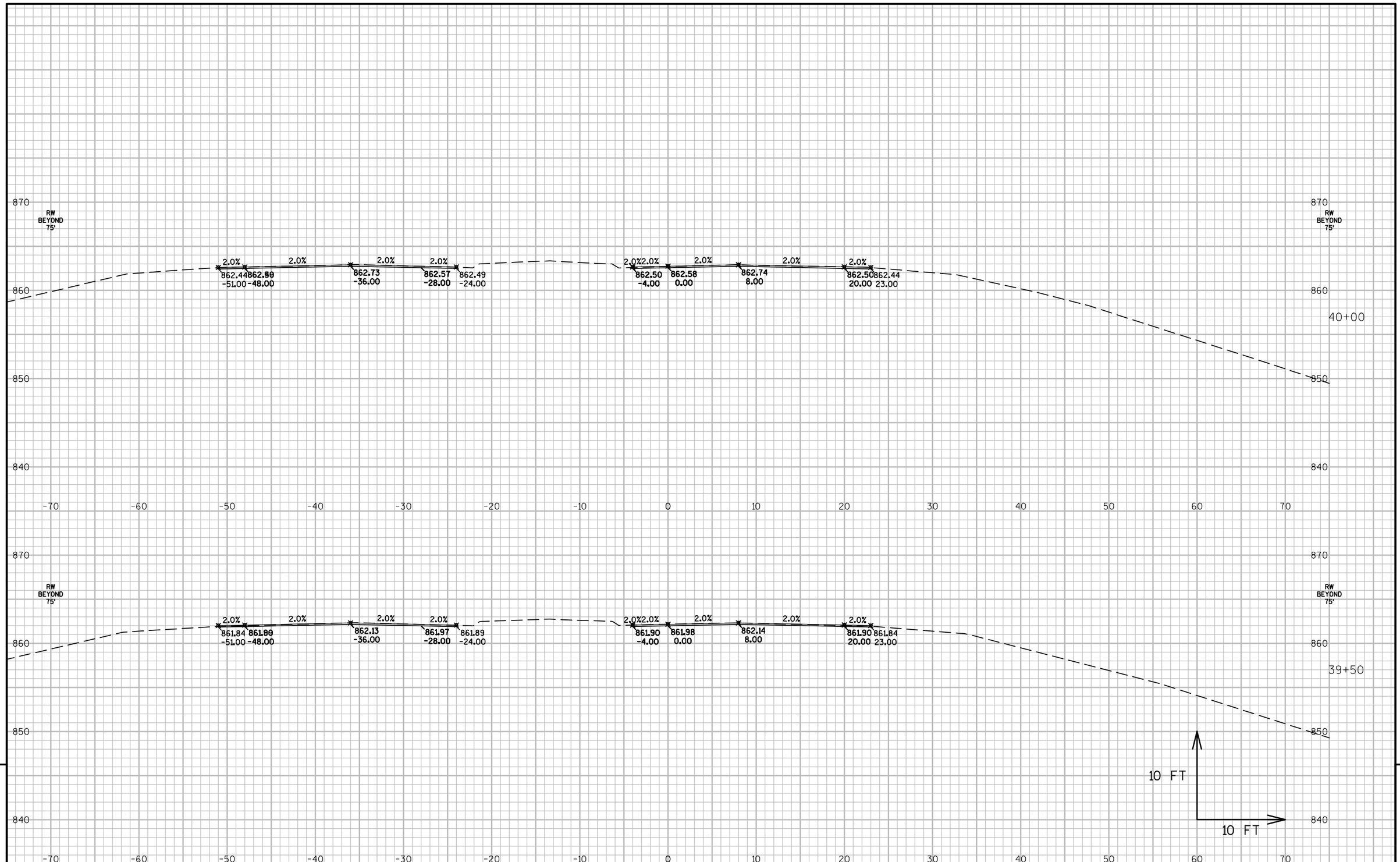
LAYOUT NAME - 090201

PLOT DATE : 1/29/2016 3:22 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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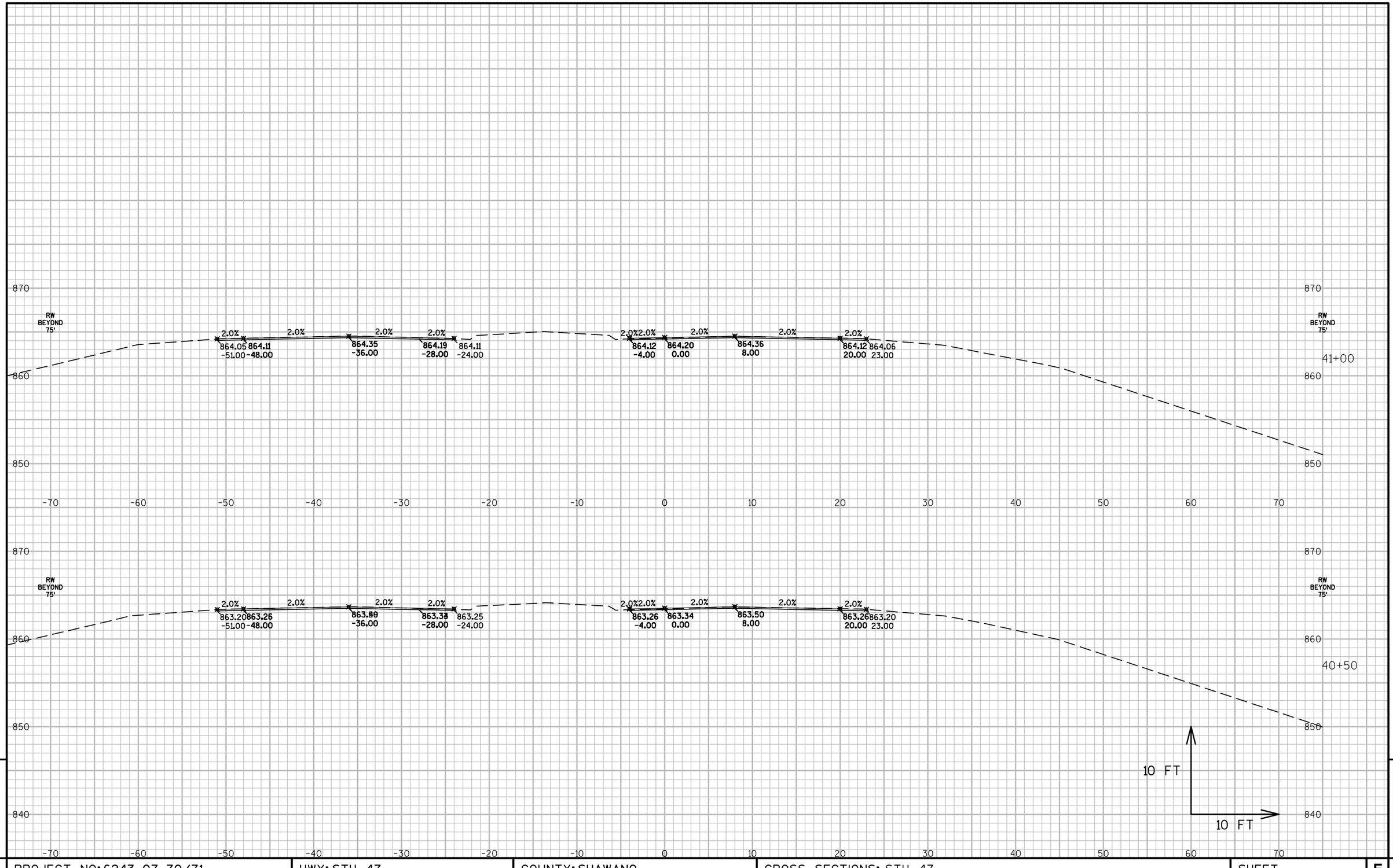

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 254	E

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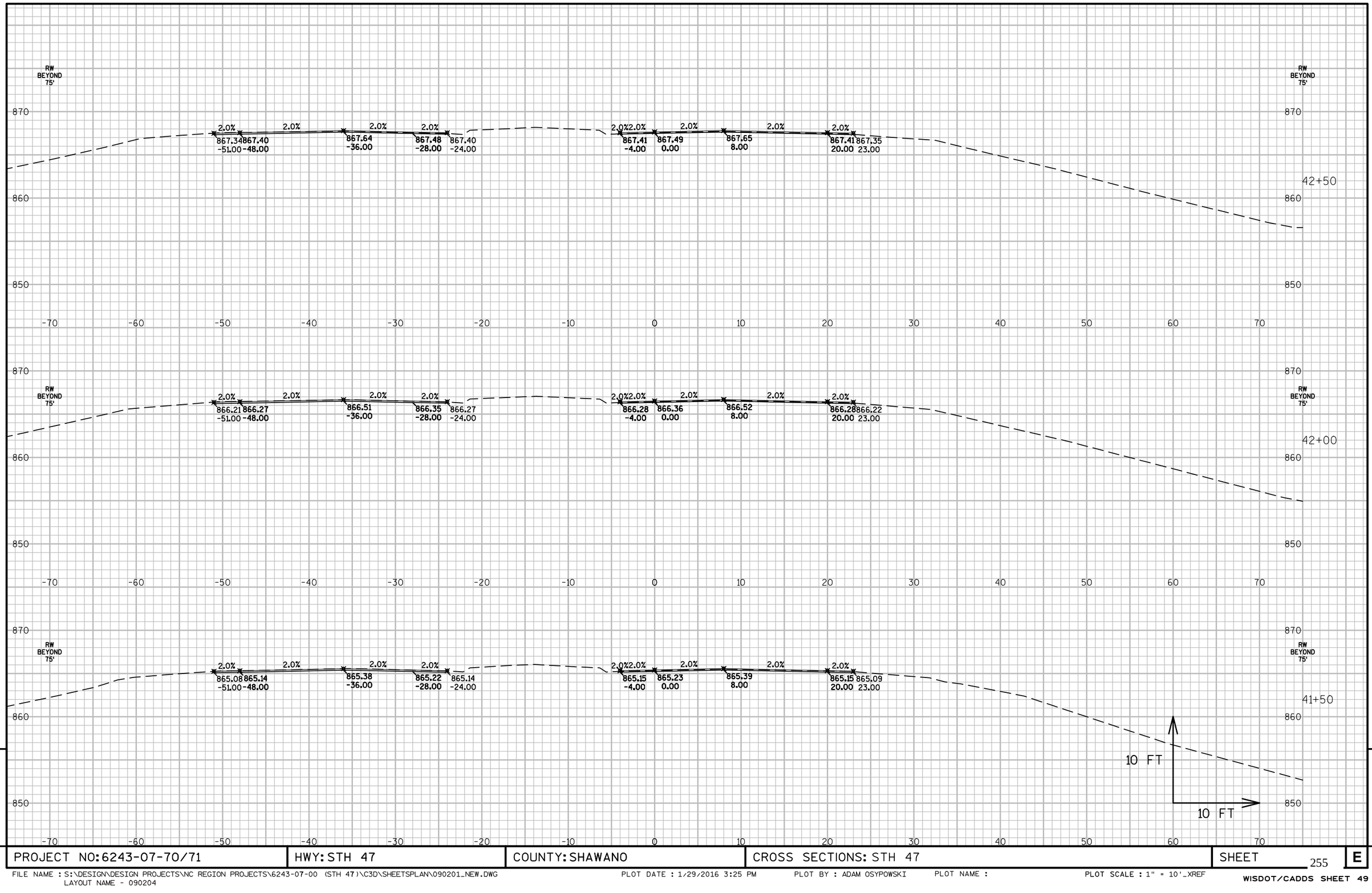

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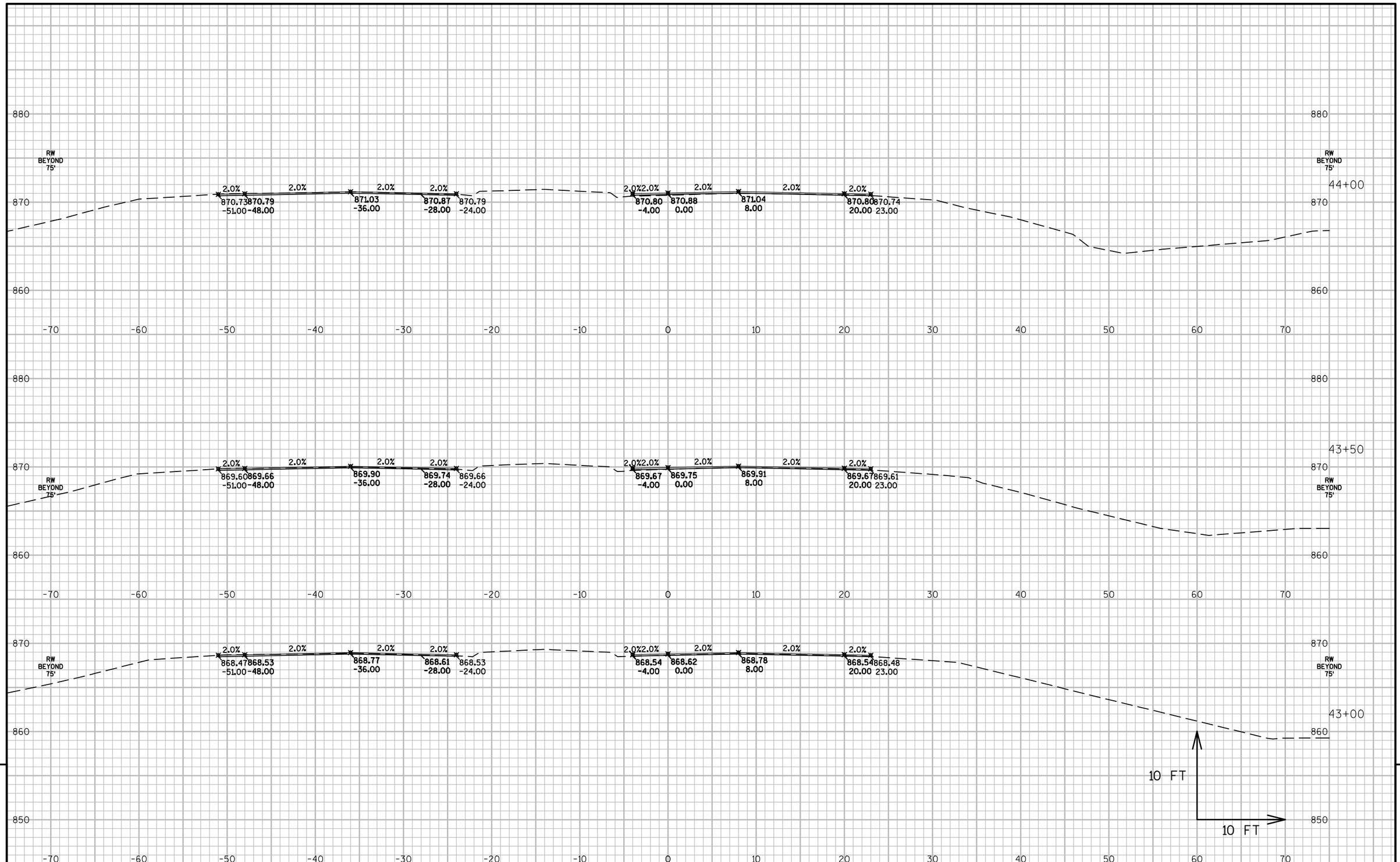

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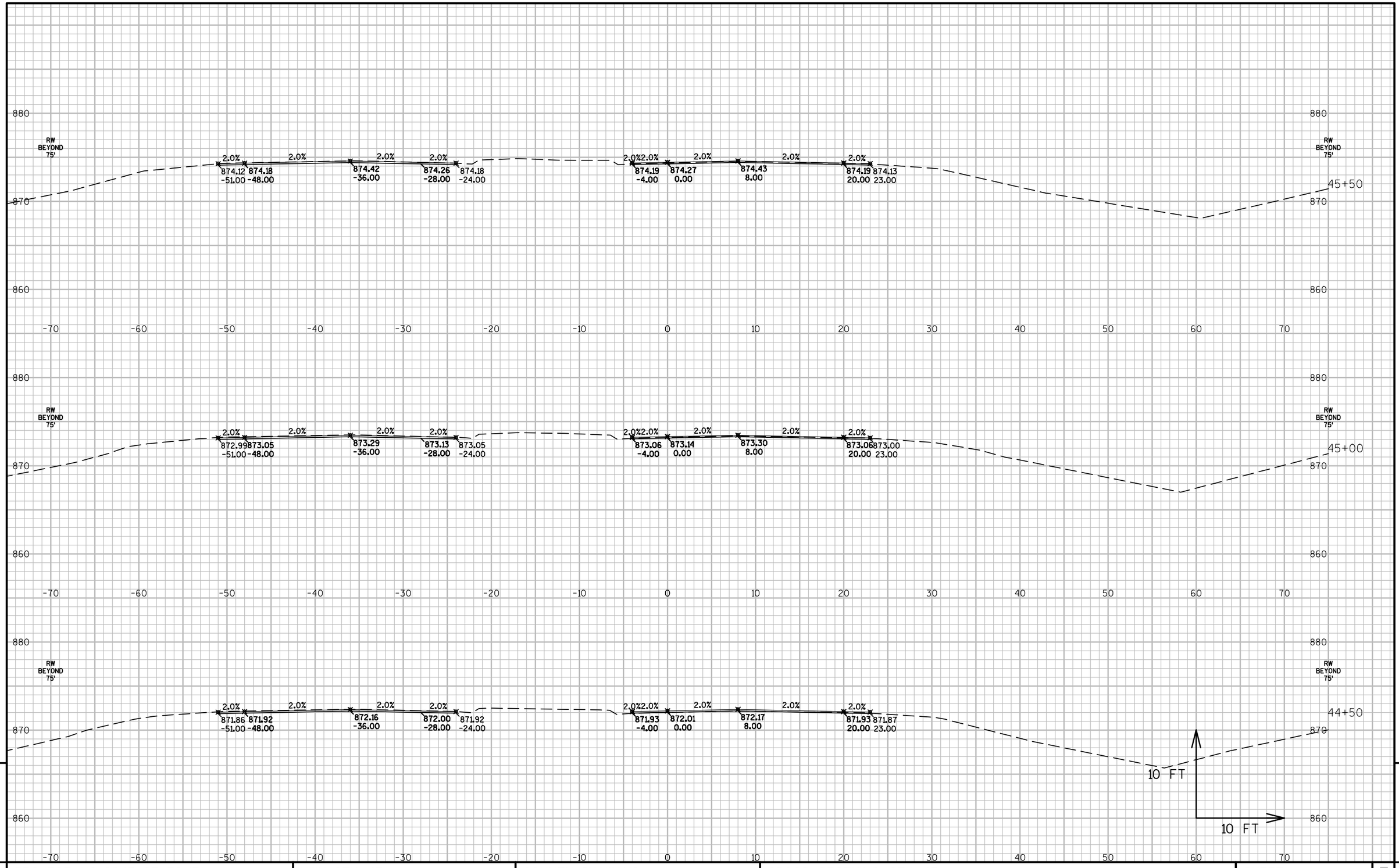

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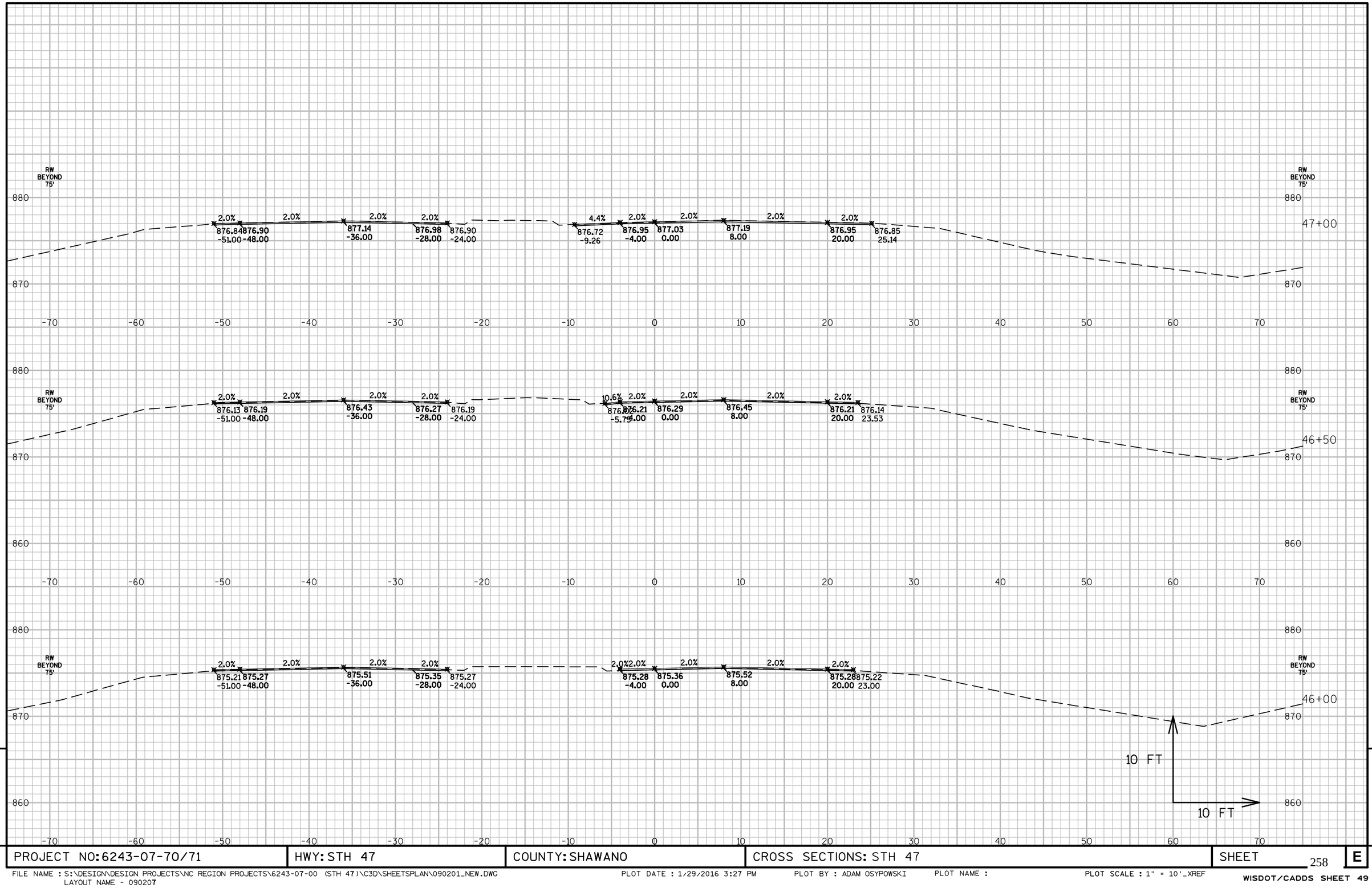

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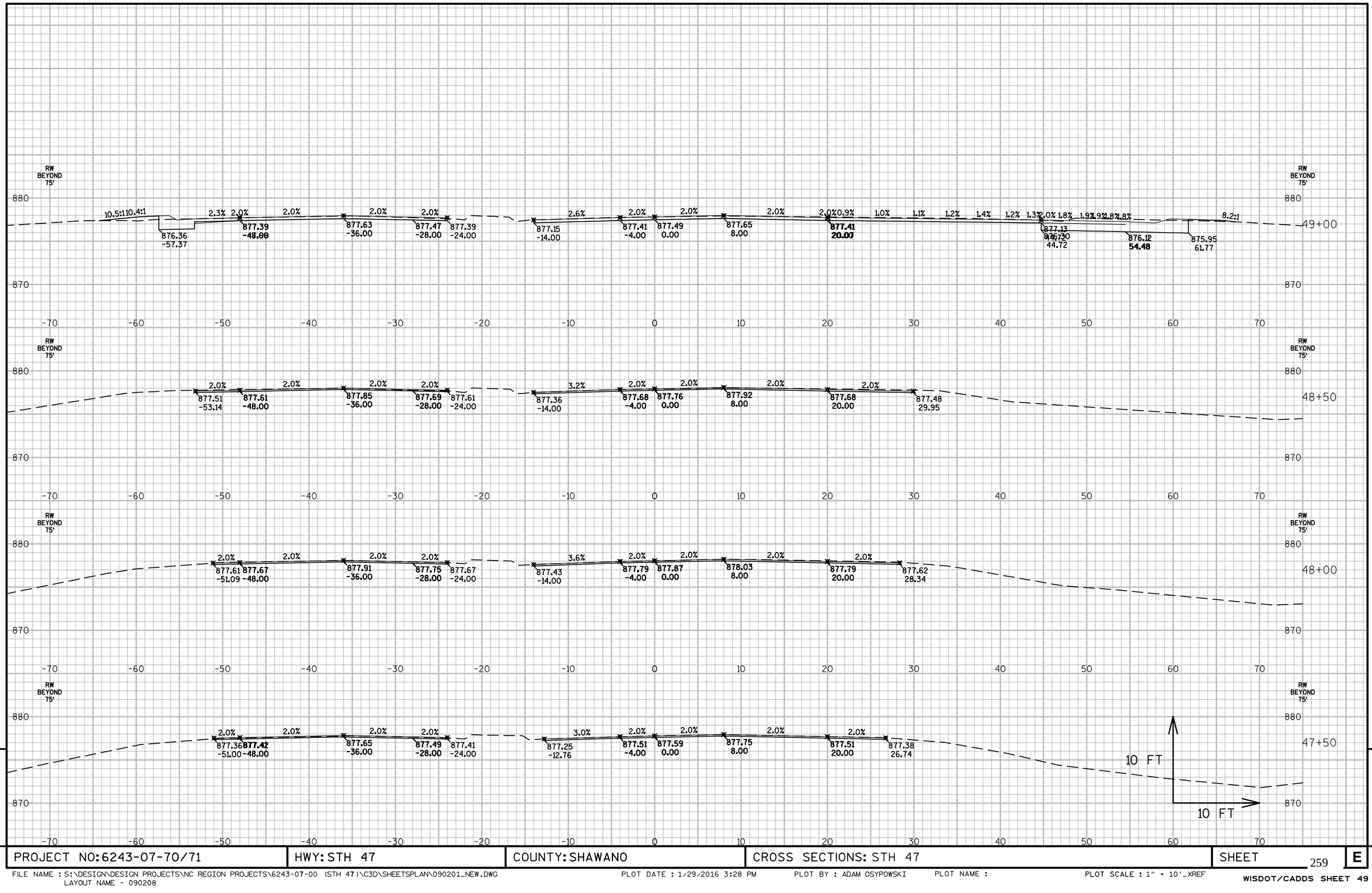

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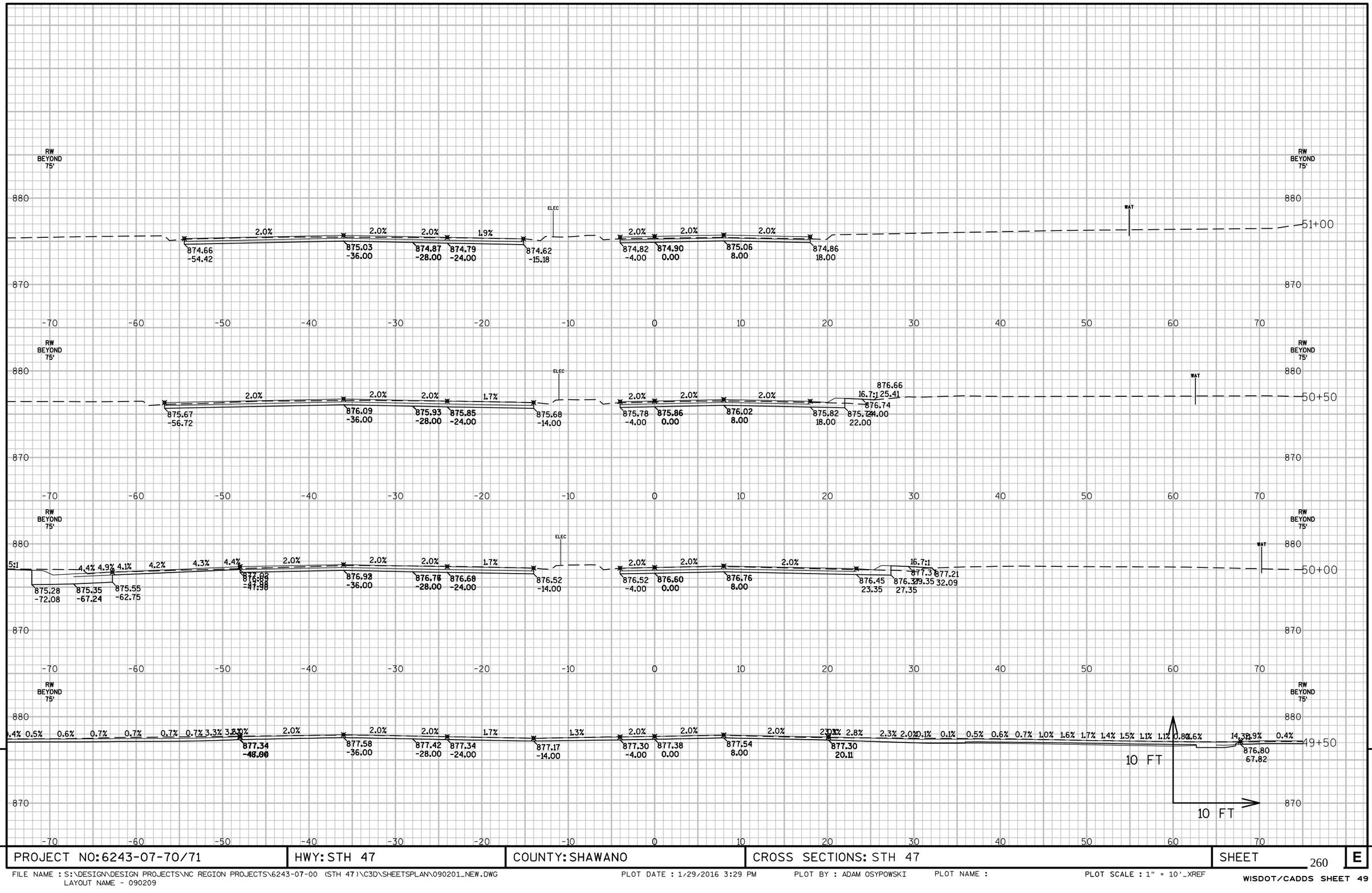

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PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 260	E

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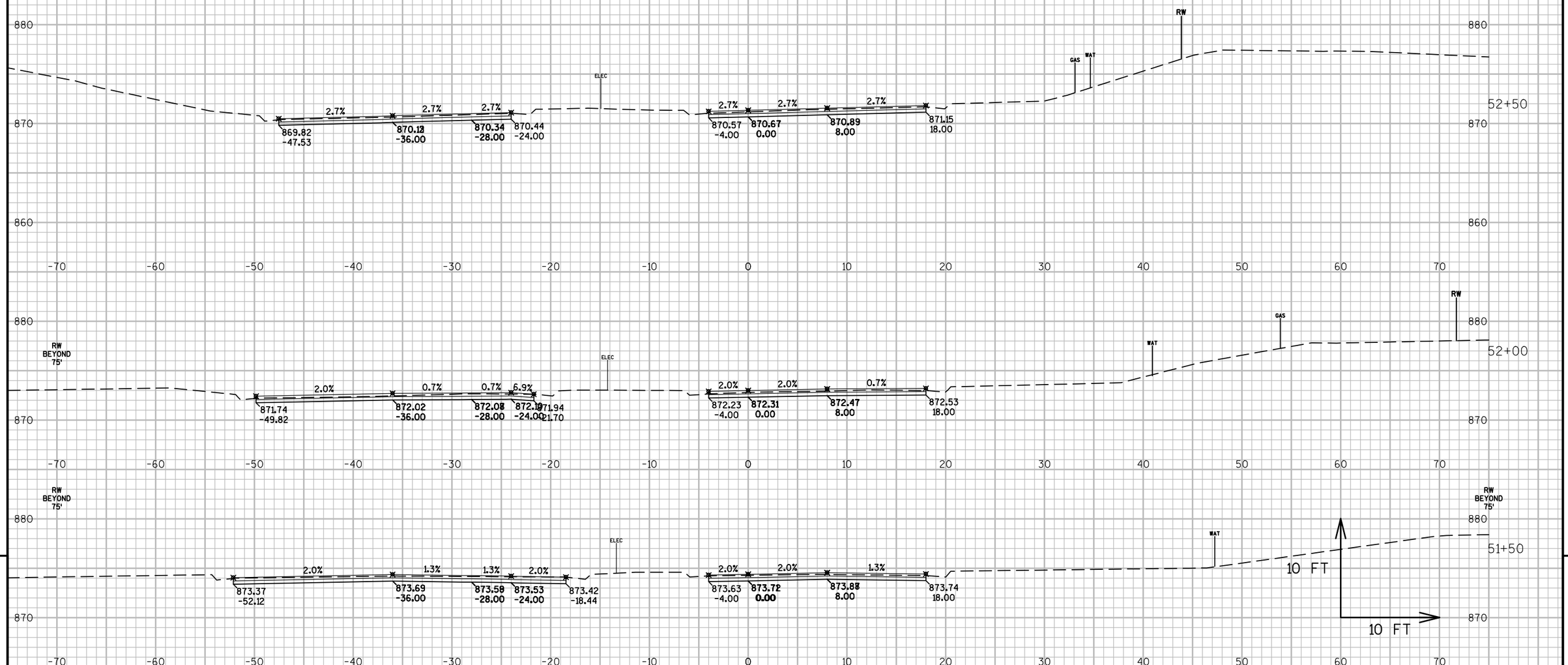
LAYOUT NAME - 090209

PLOT DATE : 1/29/2016 3:29 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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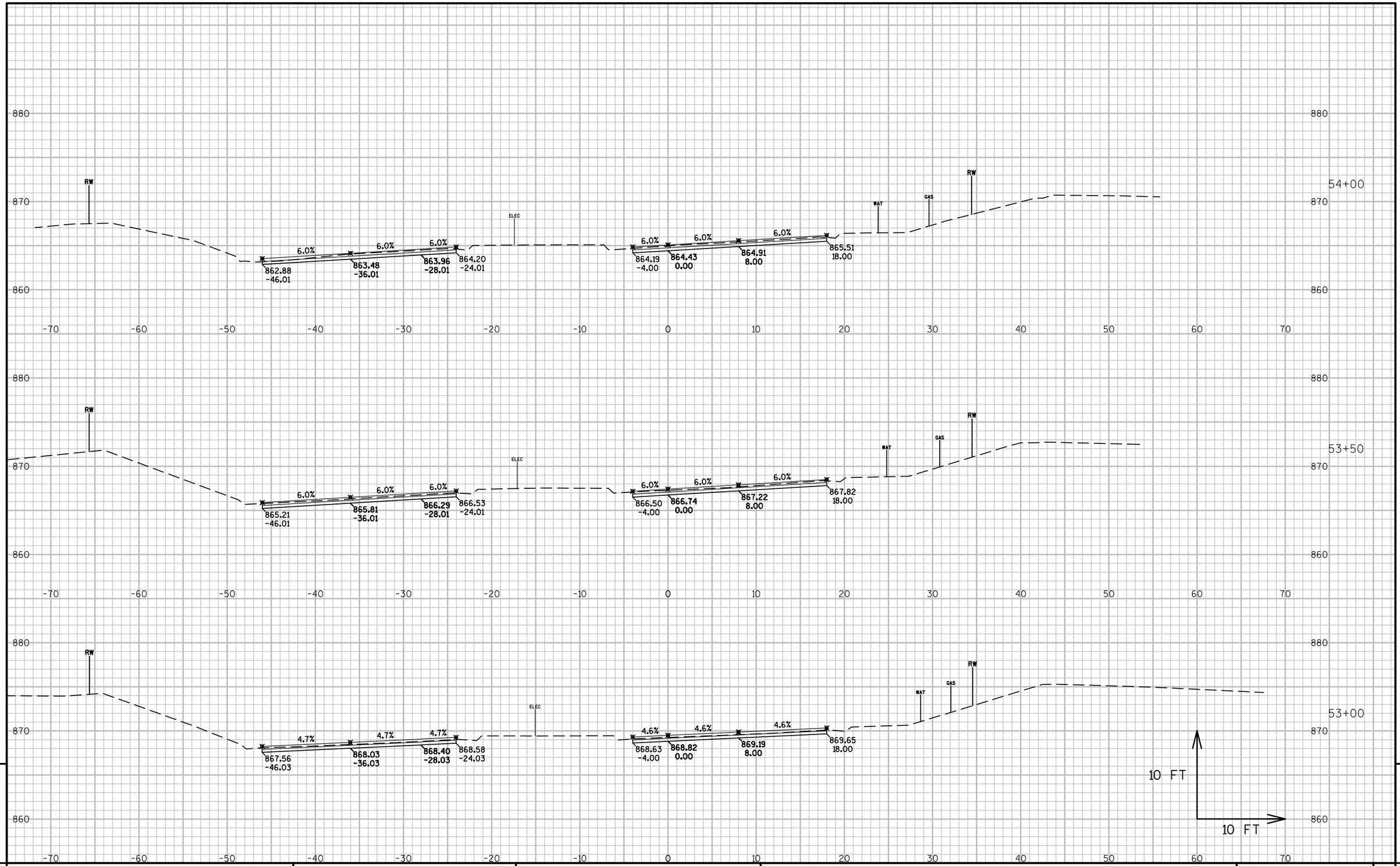
9

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 261	E



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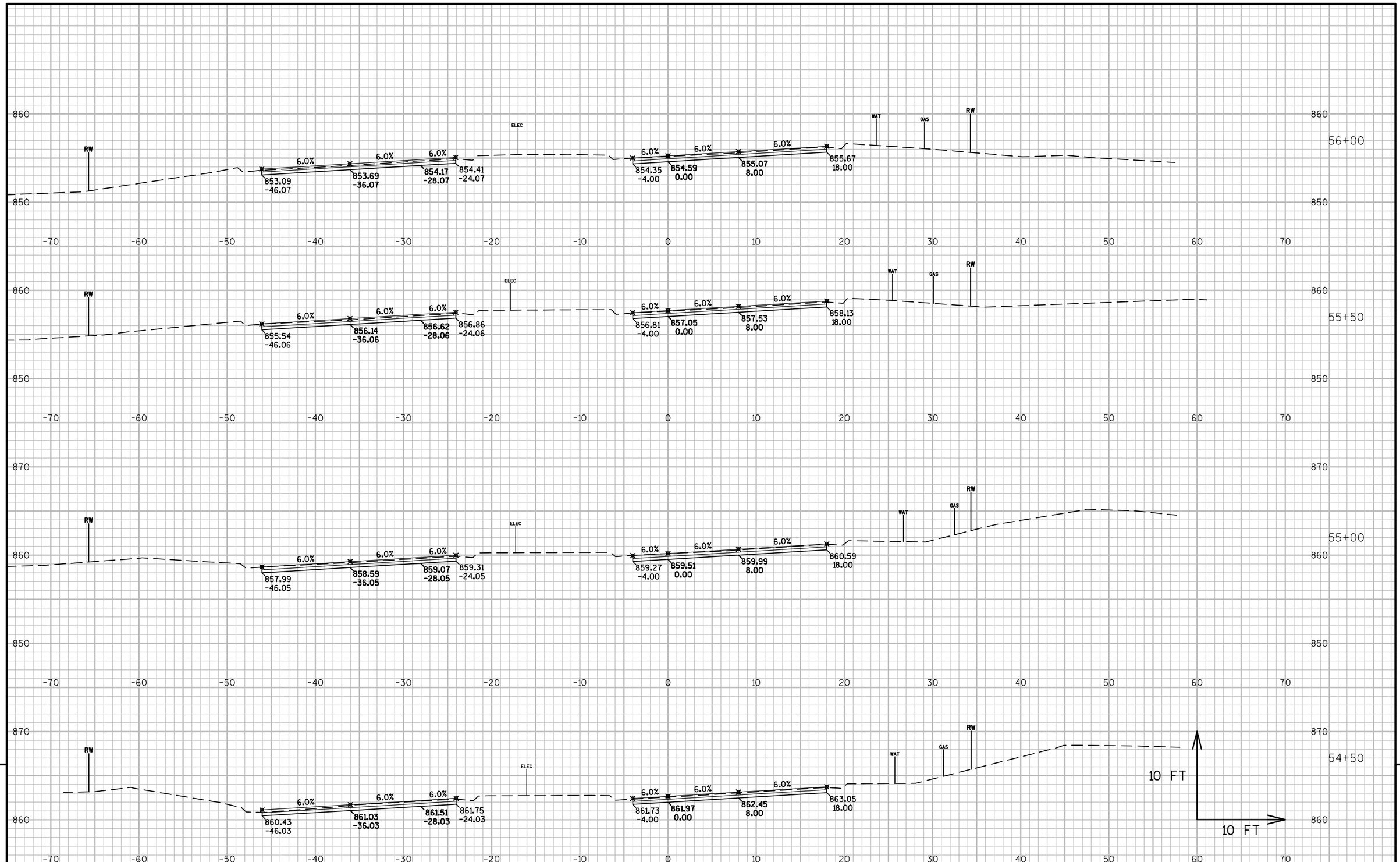

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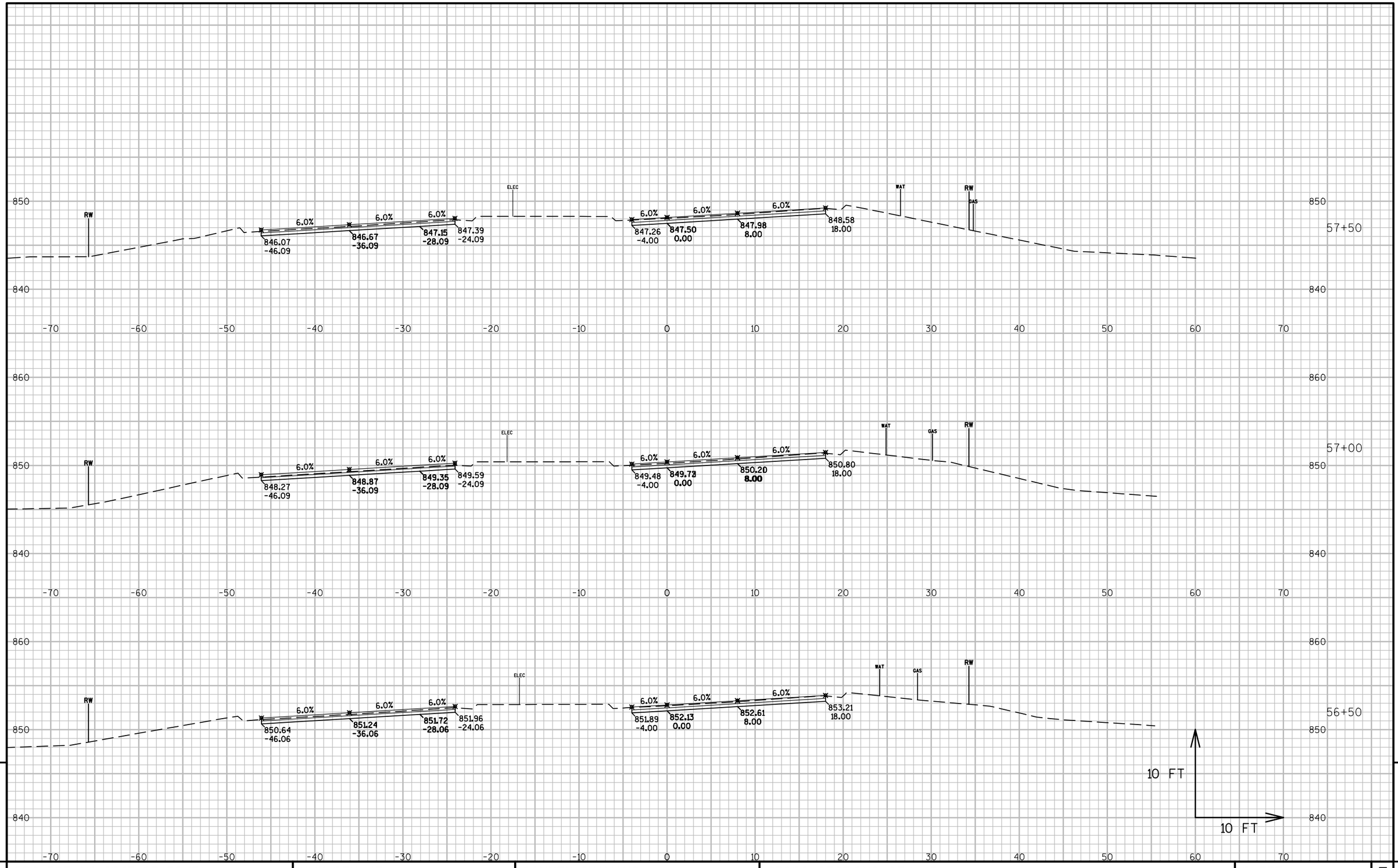
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 263	E



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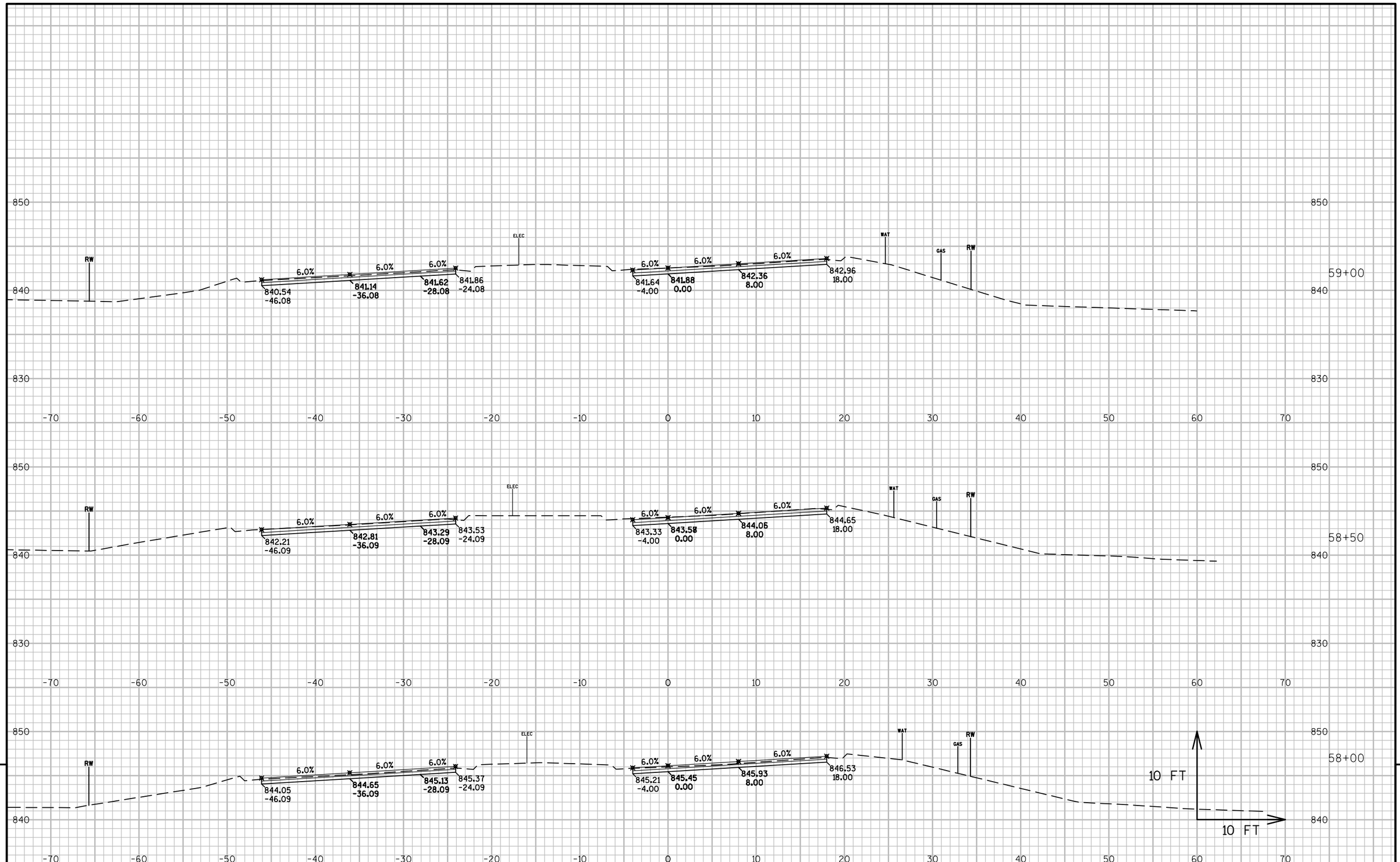
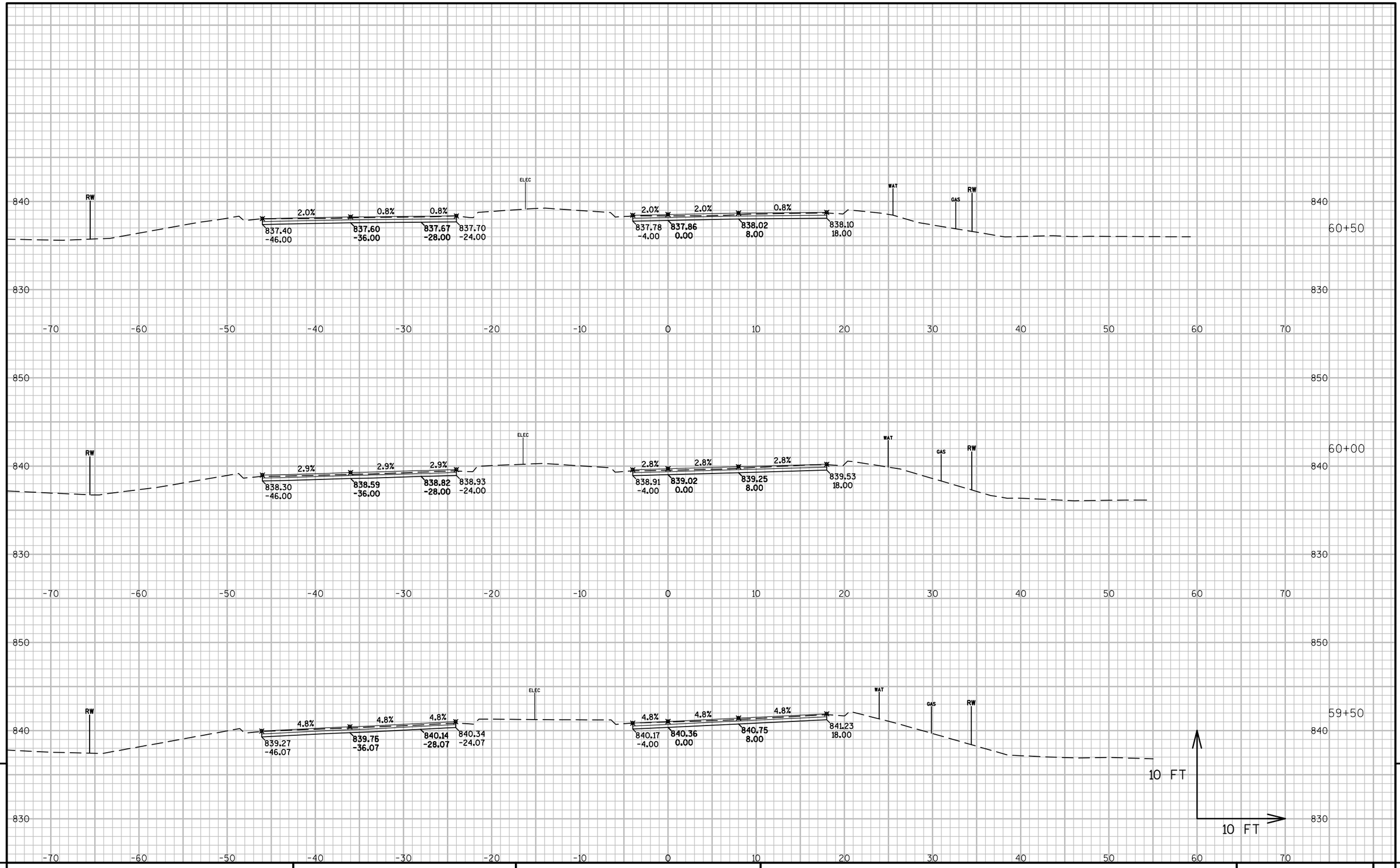
9

PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 264	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902013
PLOT DATE : 1/29/2016 3:33 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

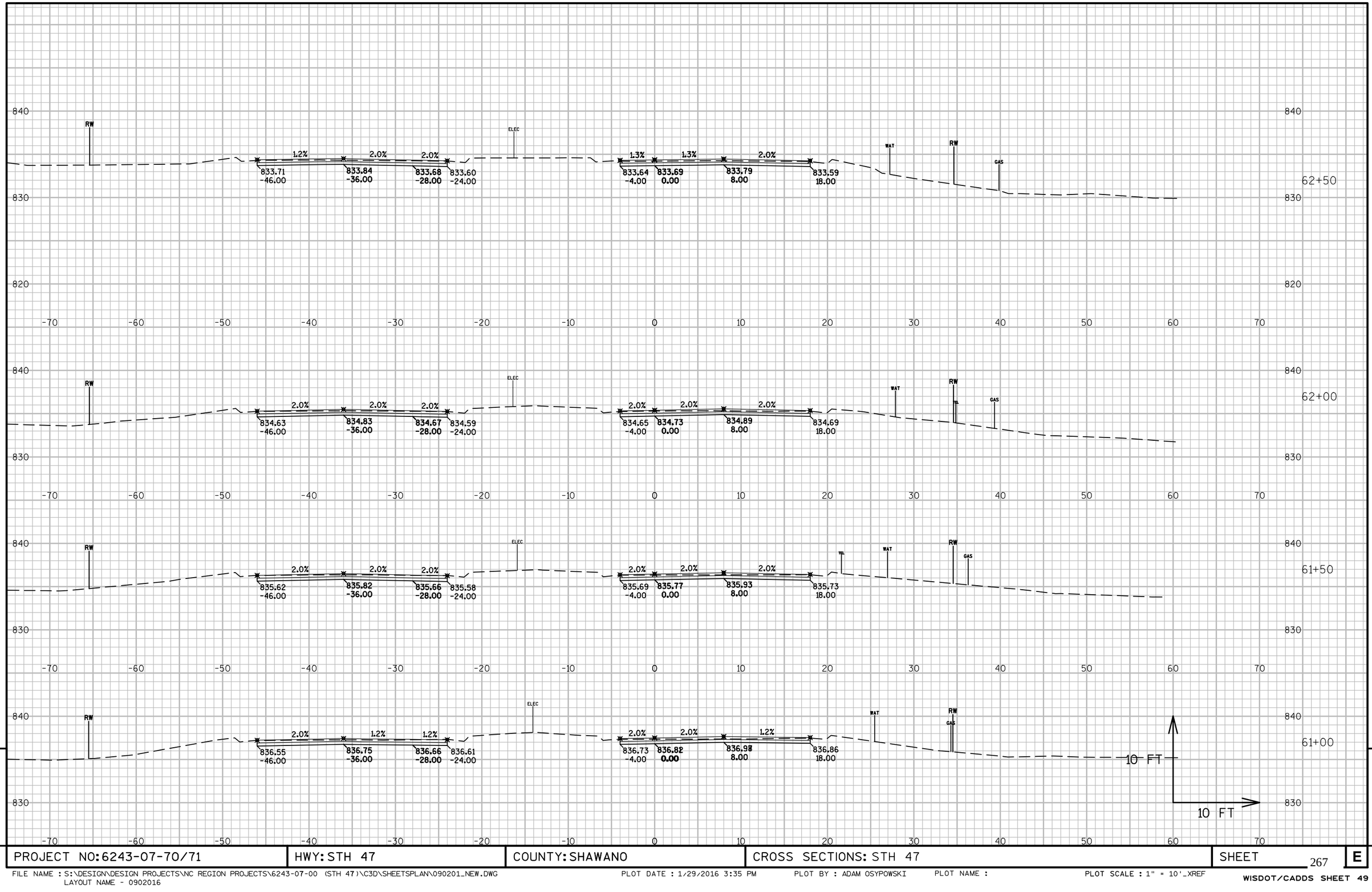


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 265	E



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 266	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902015
PLOT DATE : 1/29/2016 3:35 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



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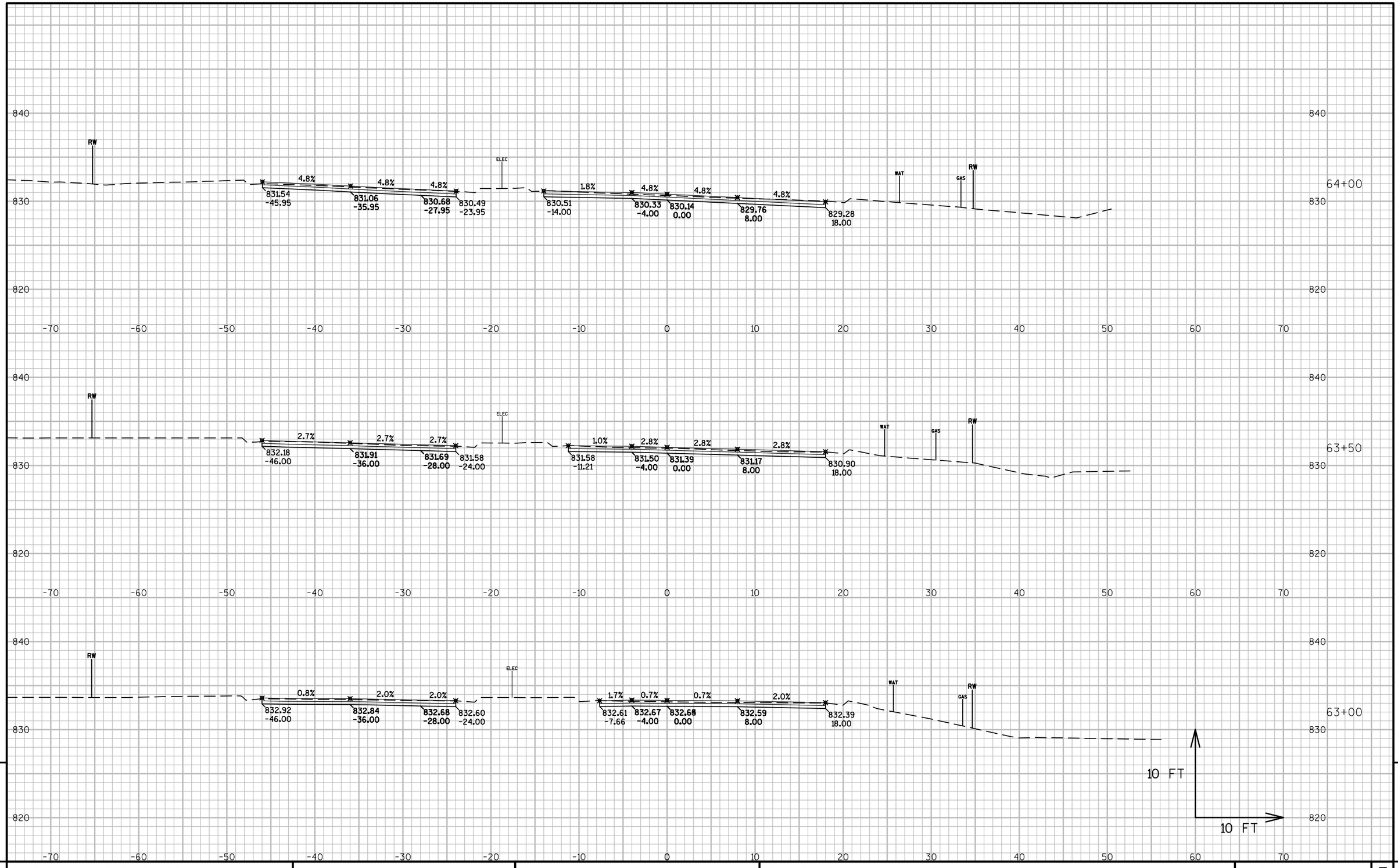
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 267	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902016

PLOT DATE : 1/29/2016 3:35 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

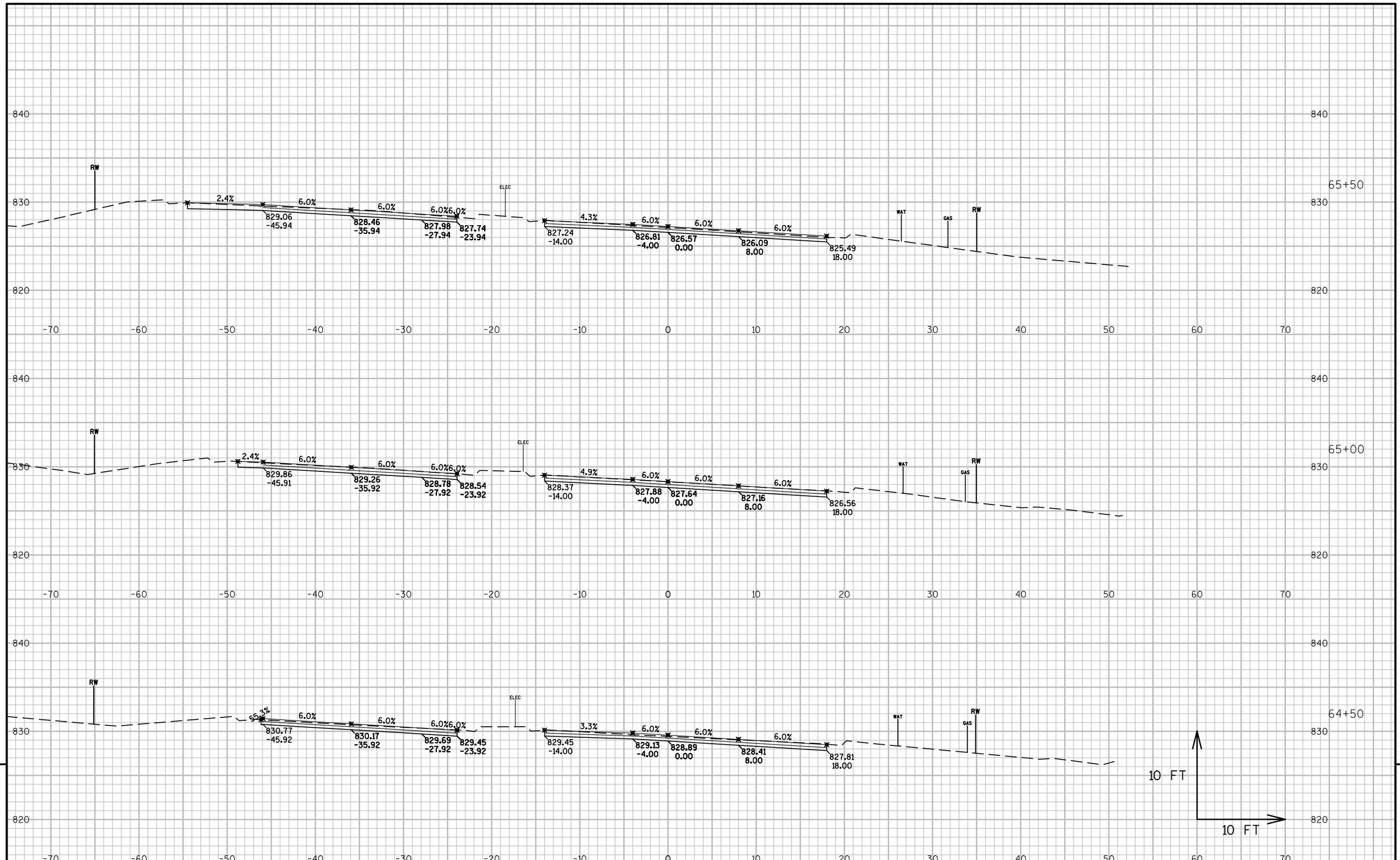


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 268	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902017

PLOT DATE : 1/29/2016 3:36 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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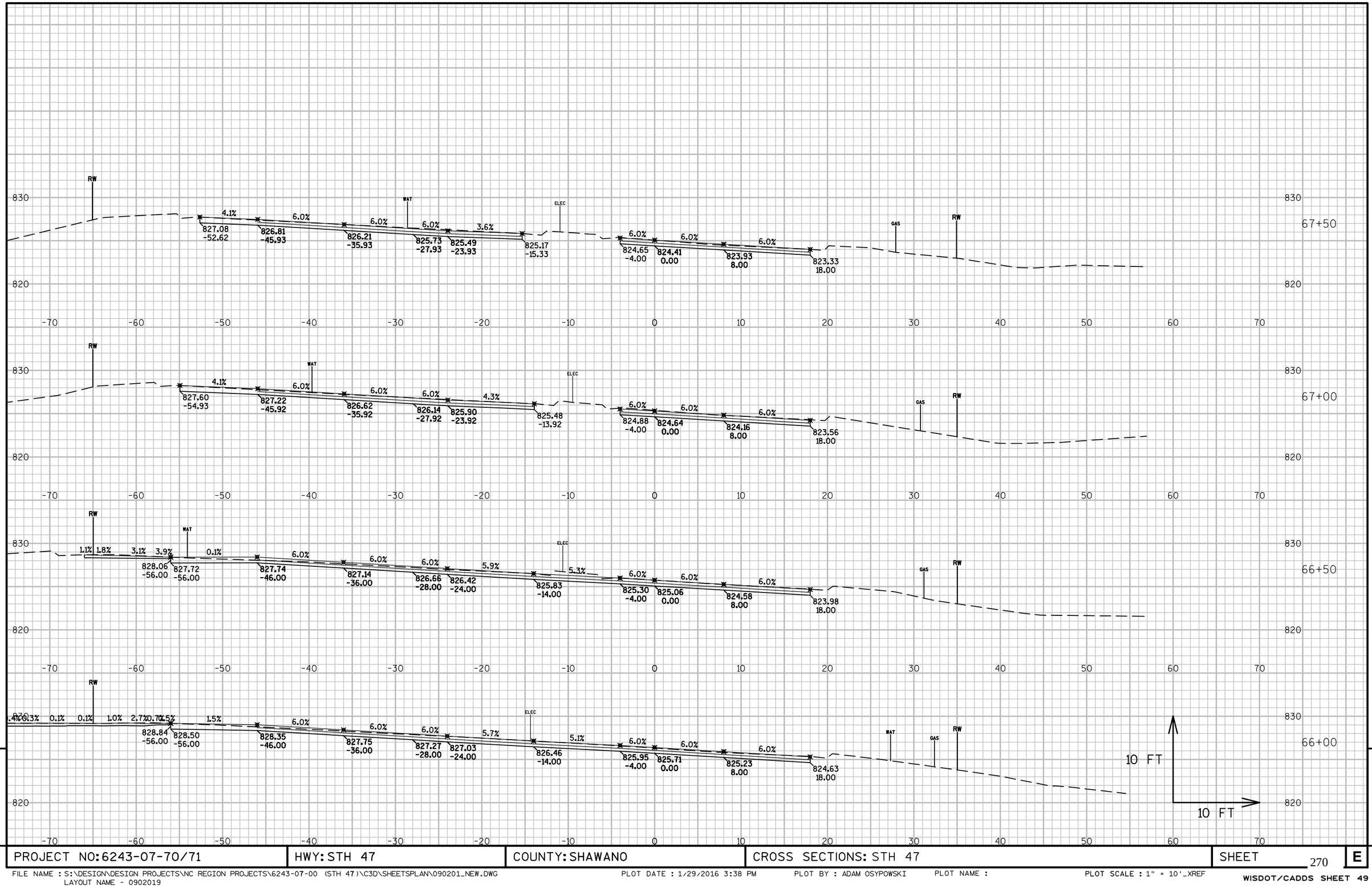
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 269	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902018

PLOT DATE : 1/29/2016 3:37 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

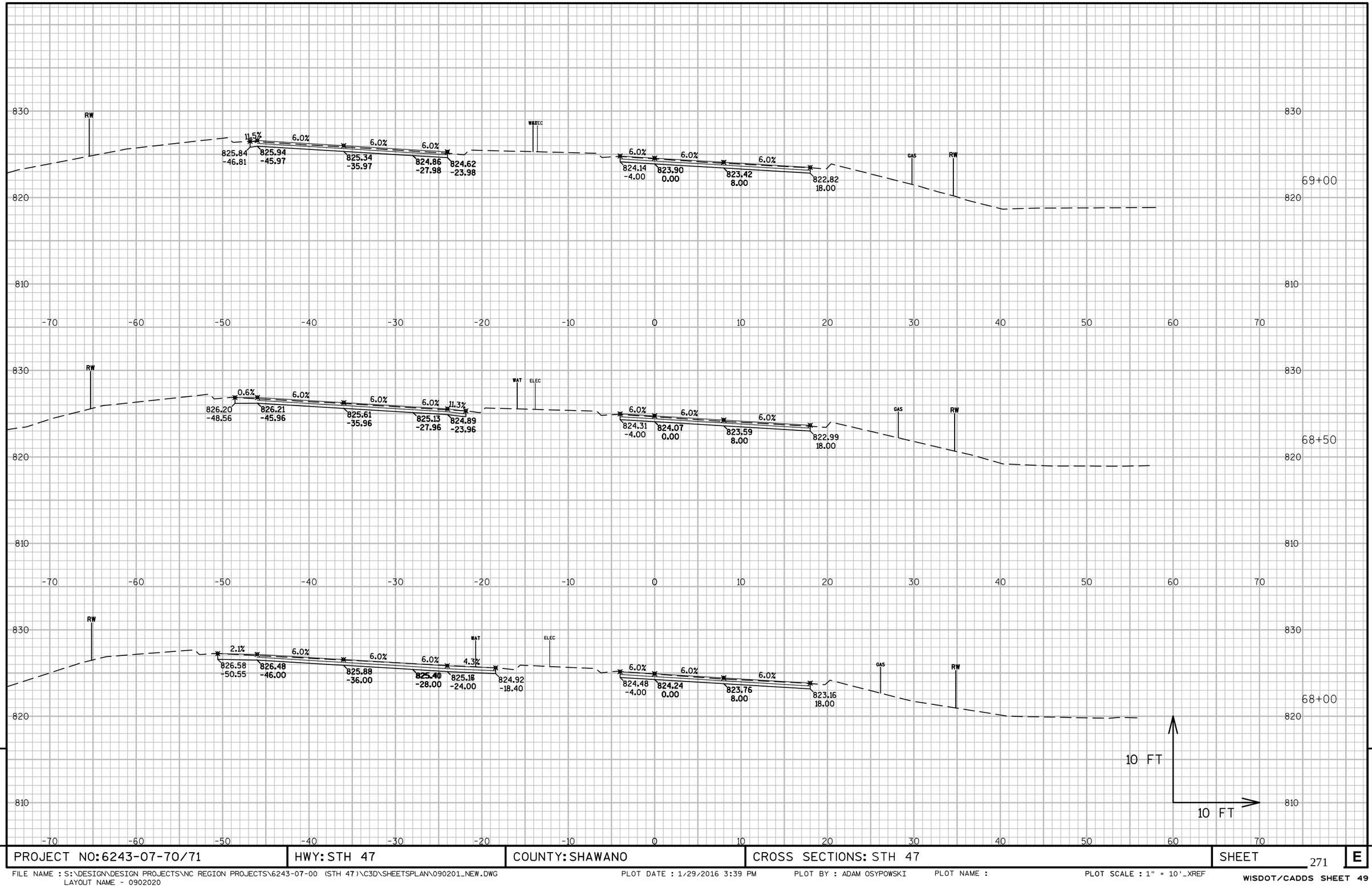


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 270	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902019

PLOT DATE : 1/29/2016 3:38 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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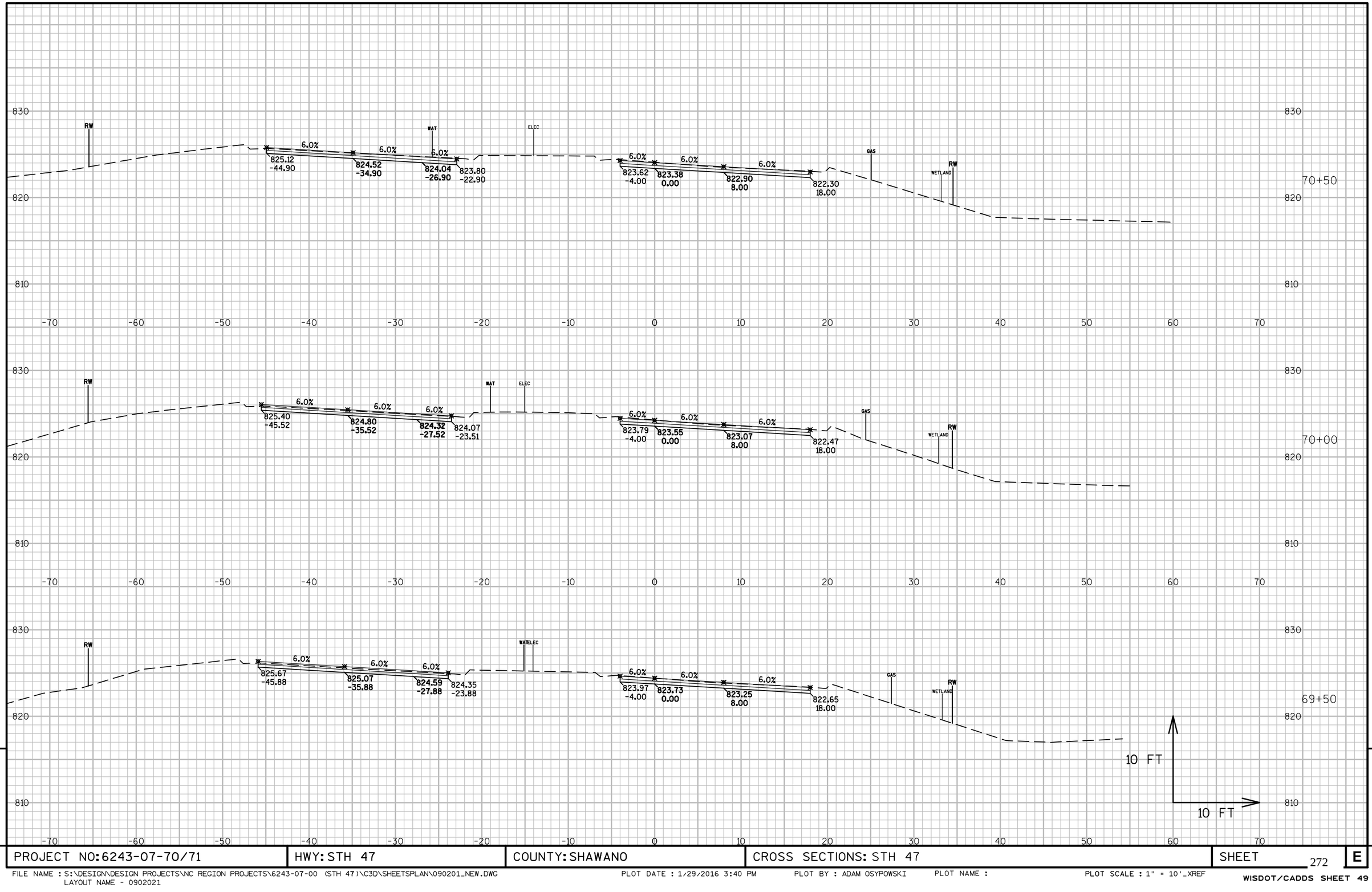
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 271	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902020

PLOT DATE : 1/29/2016 3:39 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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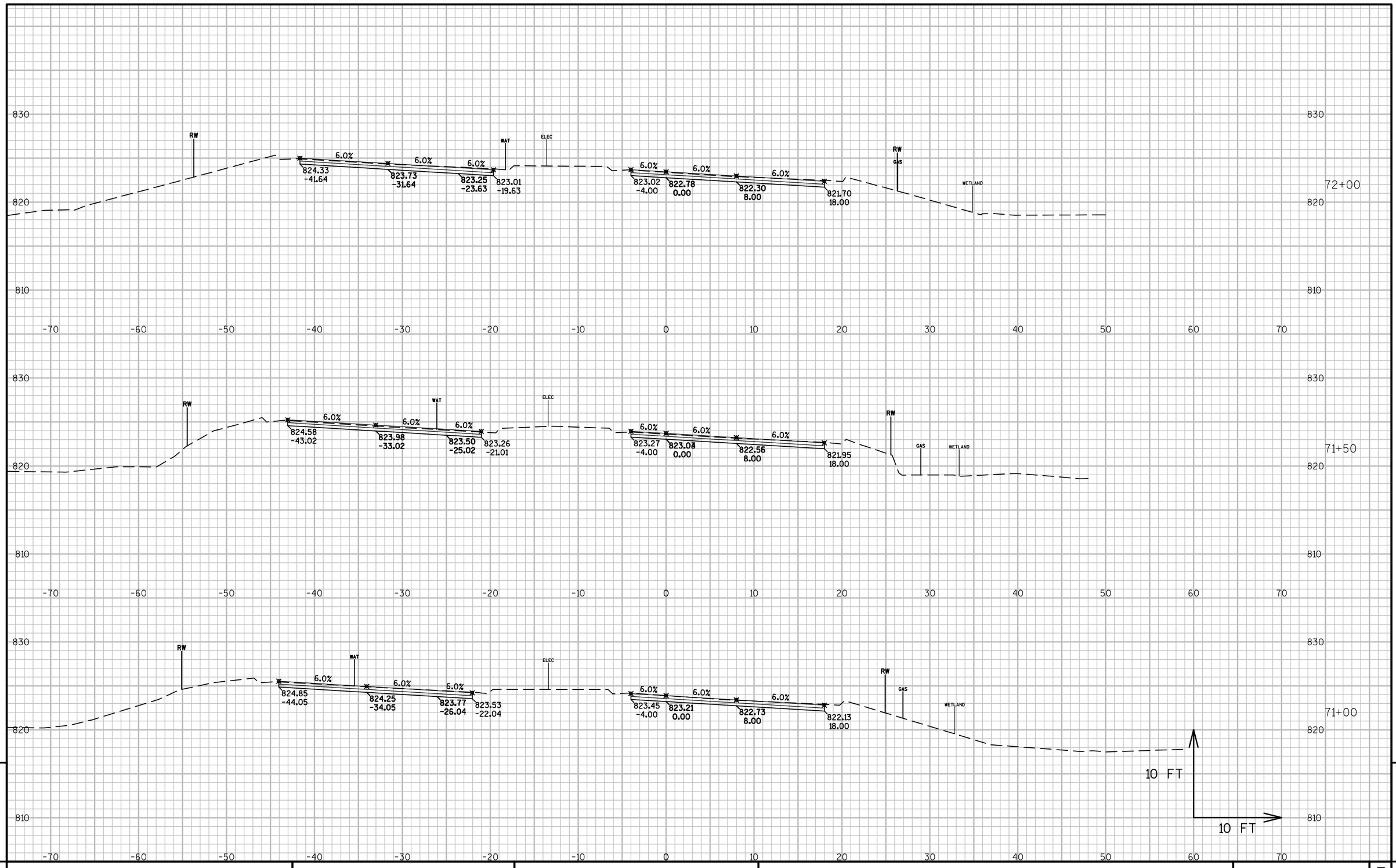
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 272	E



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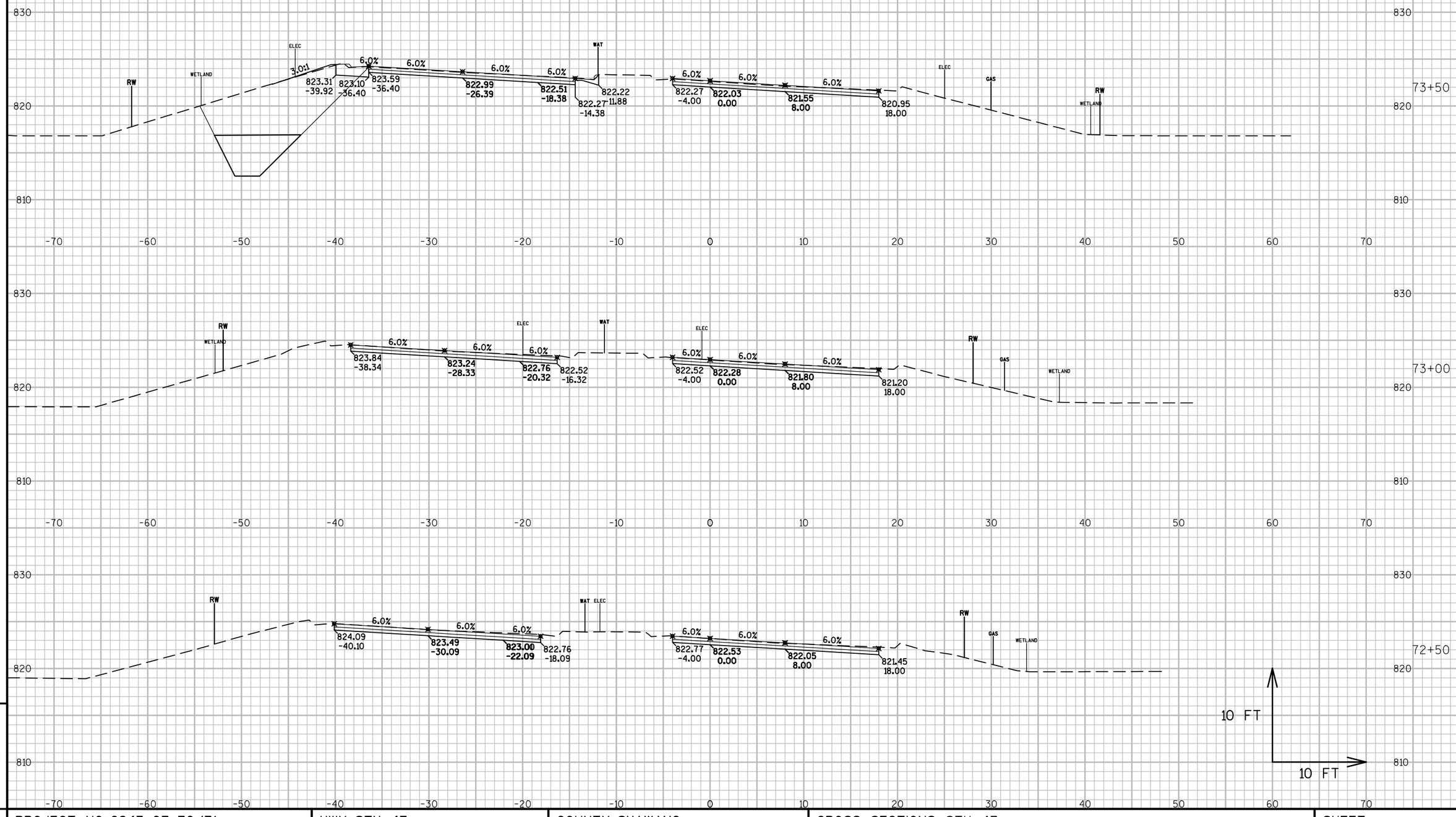
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 273	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902022
PLOT DATE : 1/29/2016 3:41 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

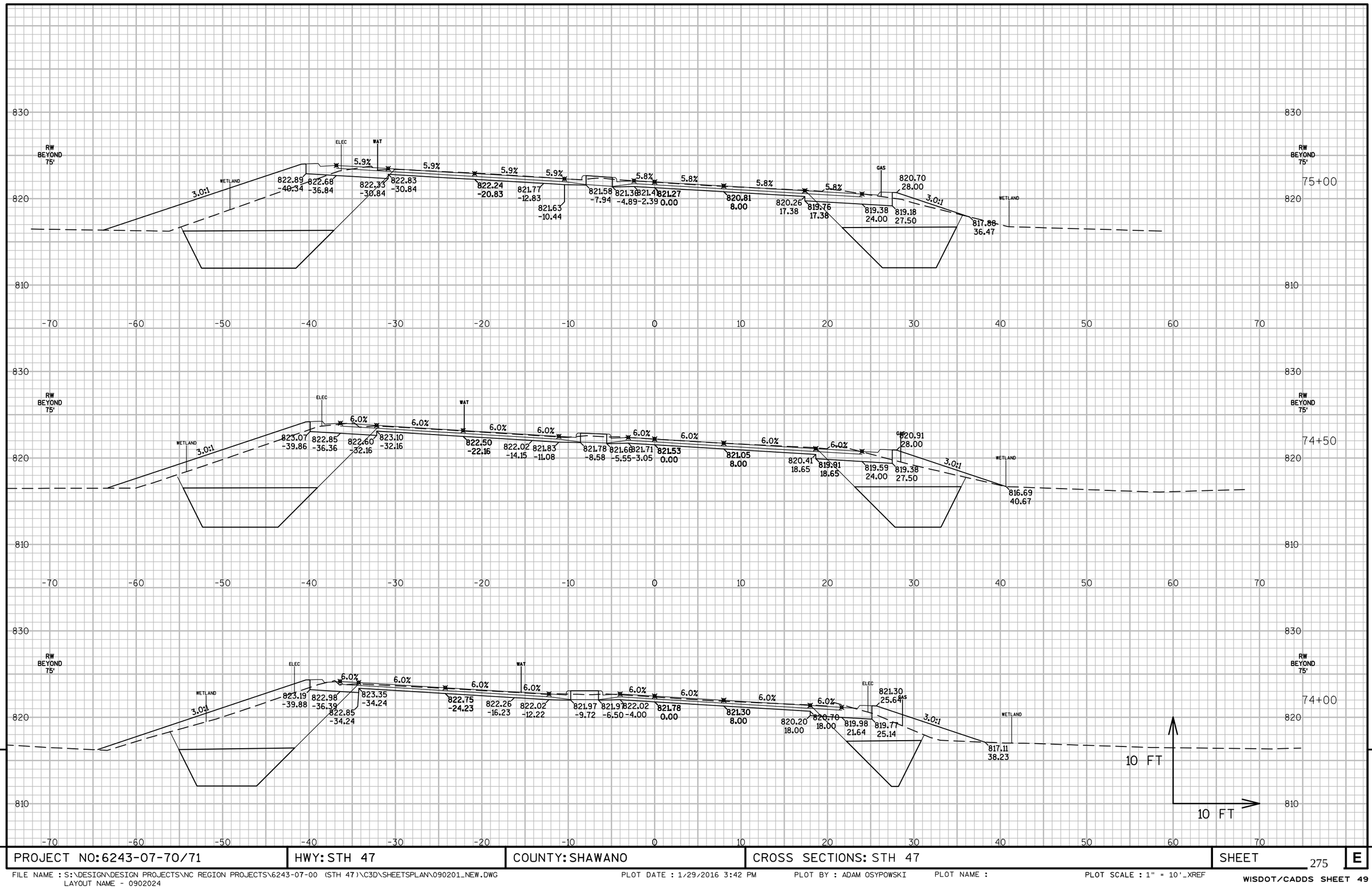


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 274	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902023

PLOT DATE : 1/29/2016 3:42 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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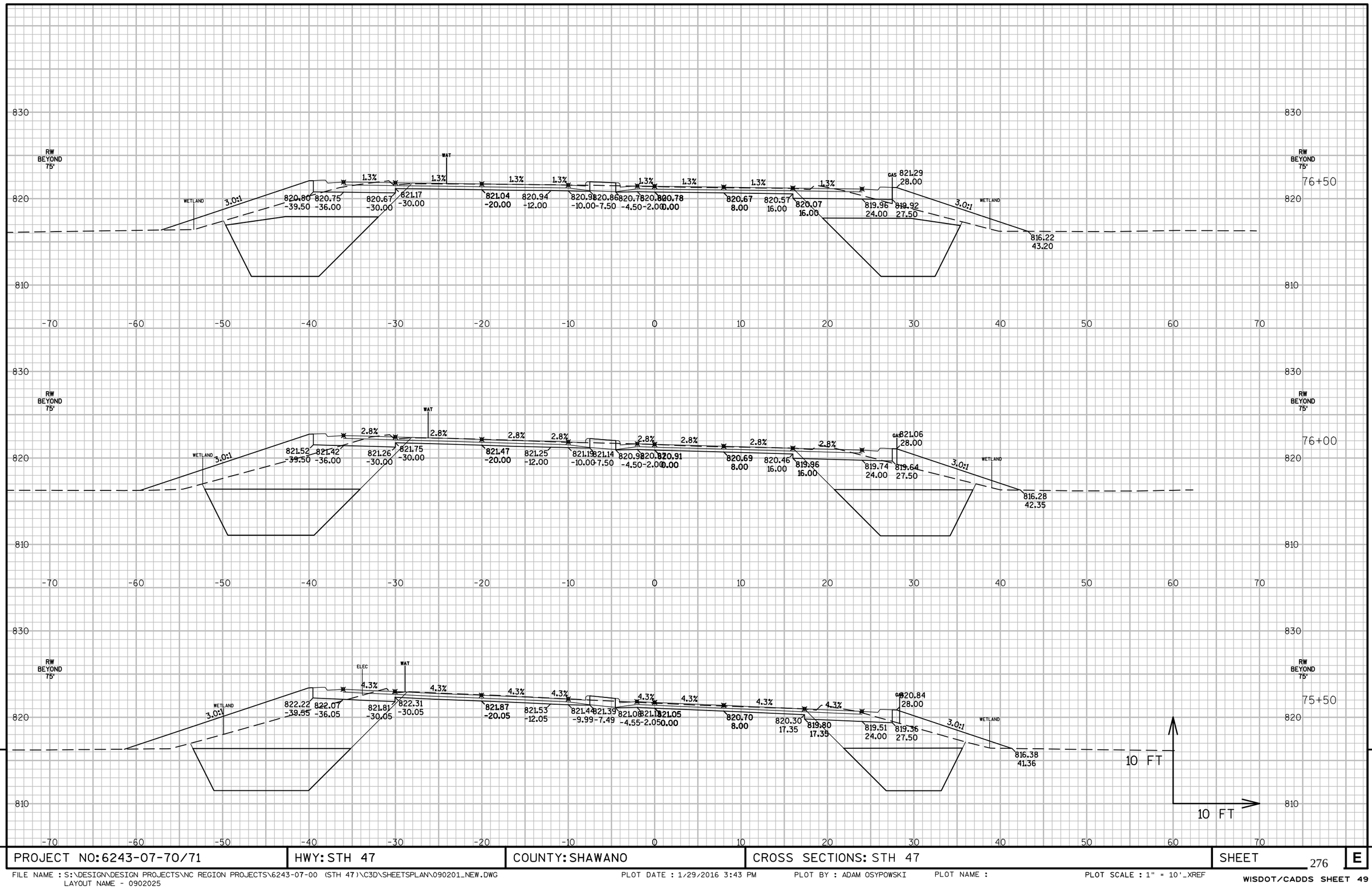
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 275	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902024

PLOT DATE : 1/29/2016 3:42 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

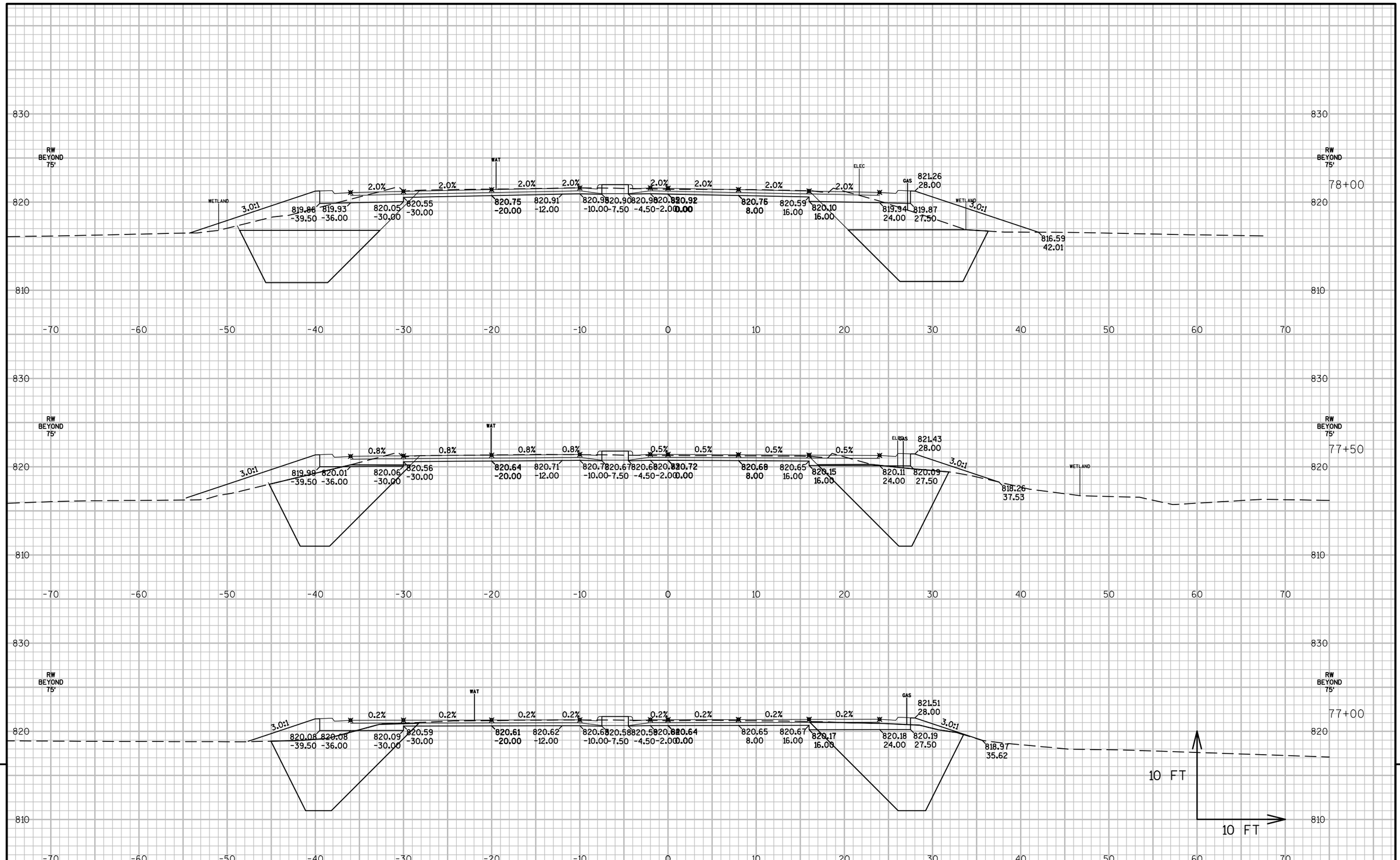


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 276	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902025

PLOT DATE : 1/29/2016 3:43 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

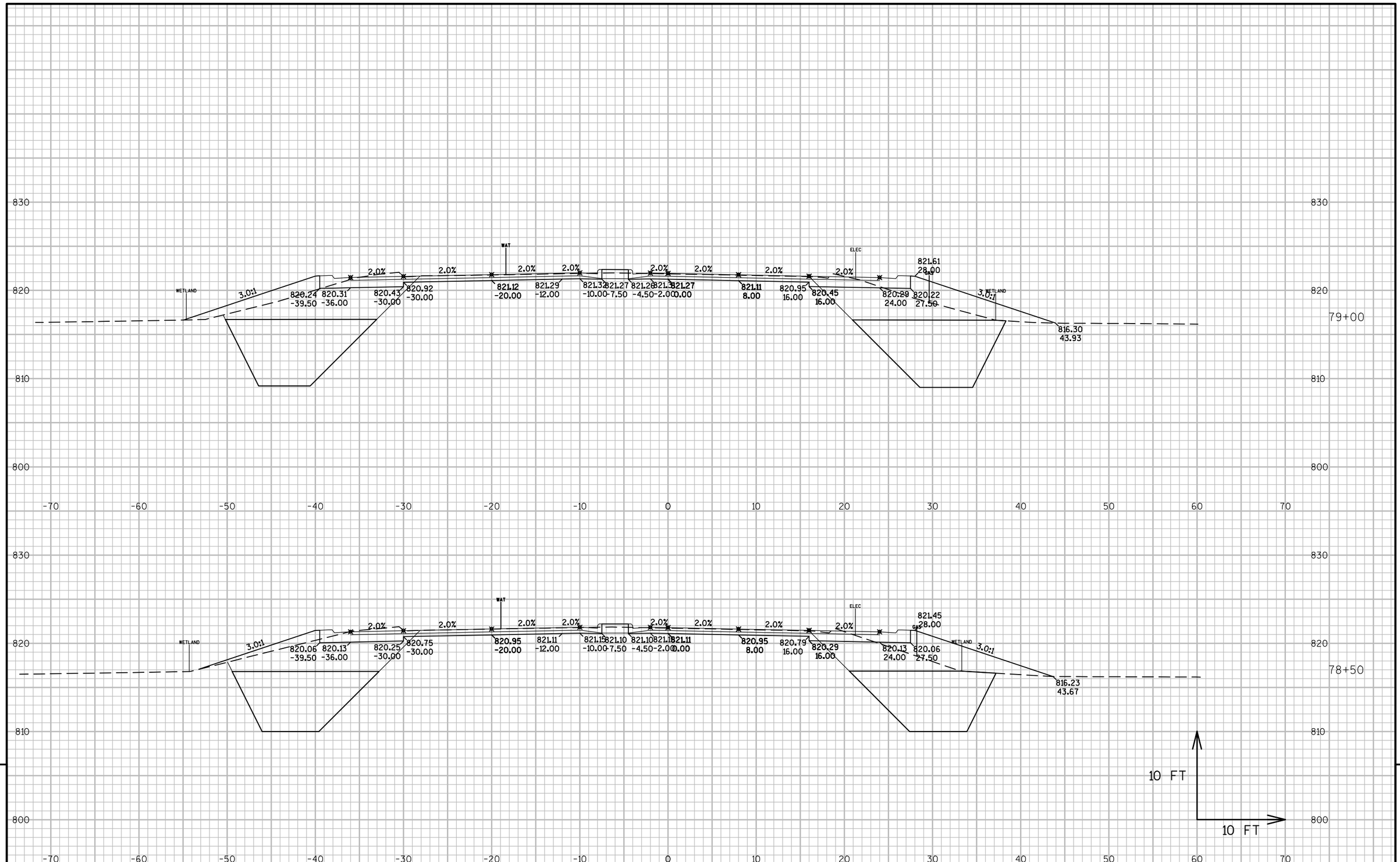


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 277	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902026

PLOT DATE : 1/29/2016 3:44 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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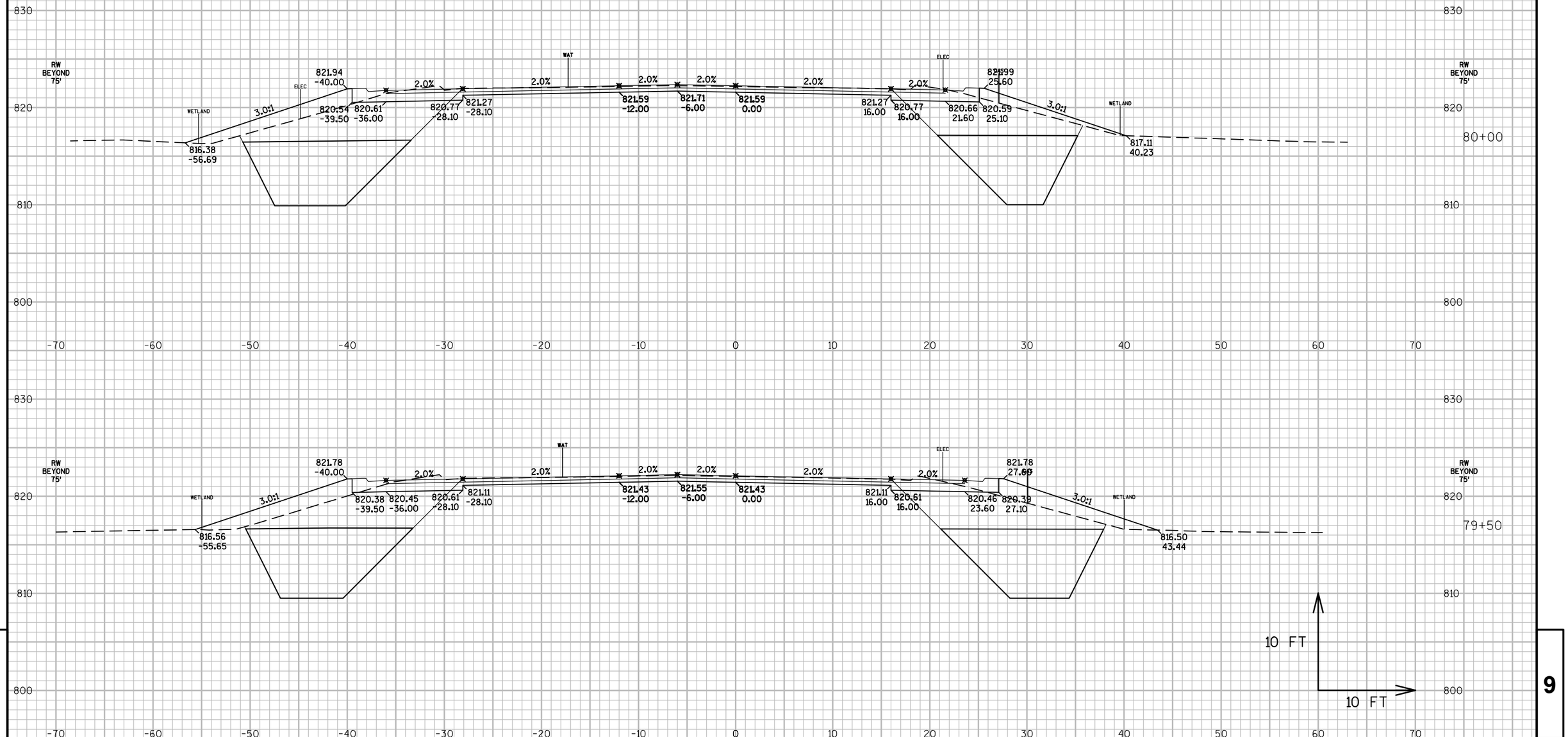
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 278	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902027

PLOT DATE : 1/29/2016 3:45 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

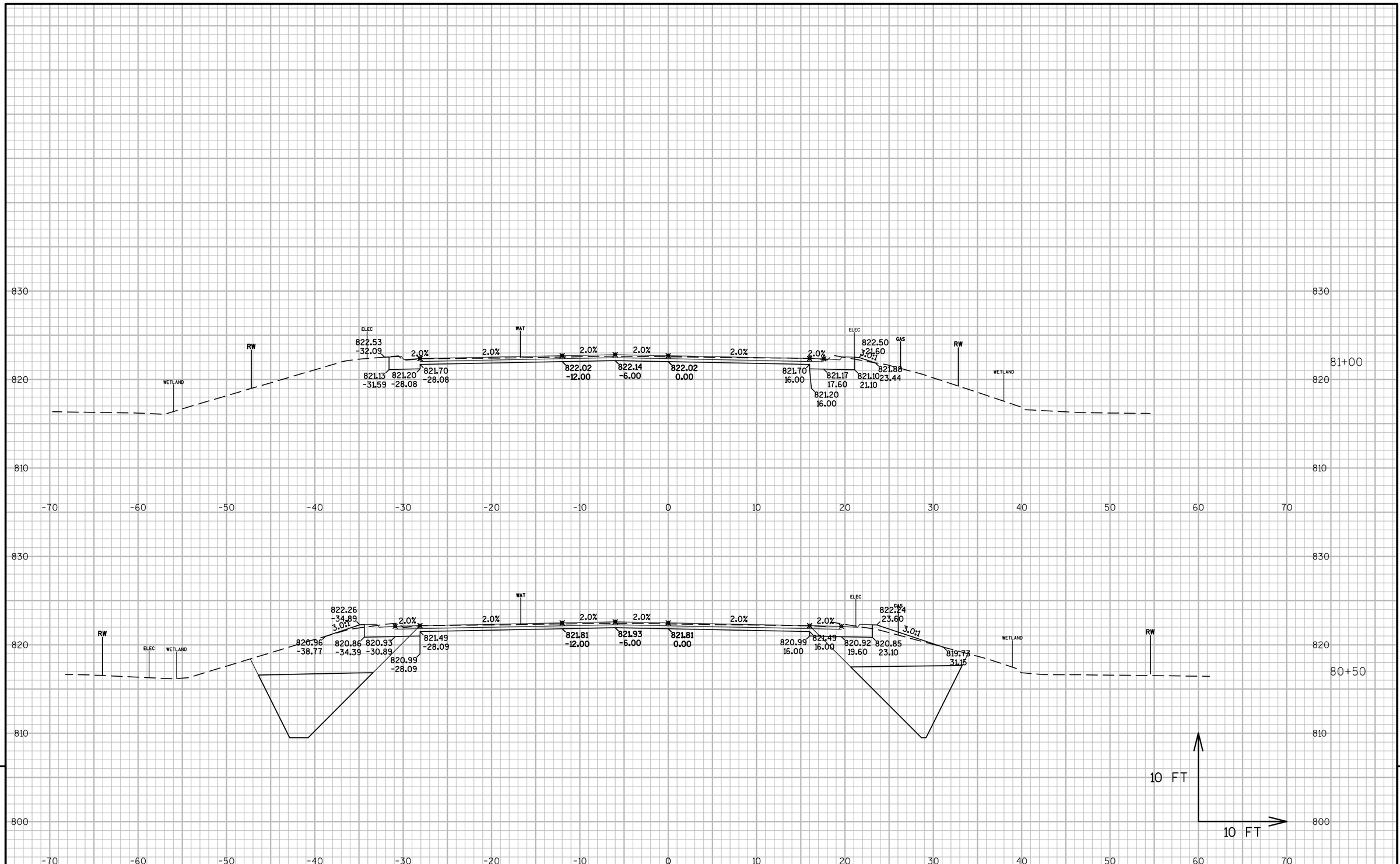
WISDOT/CADDS SHEET 49



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 279	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902028
PLOT DATE : 1/29/2016 3:46 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

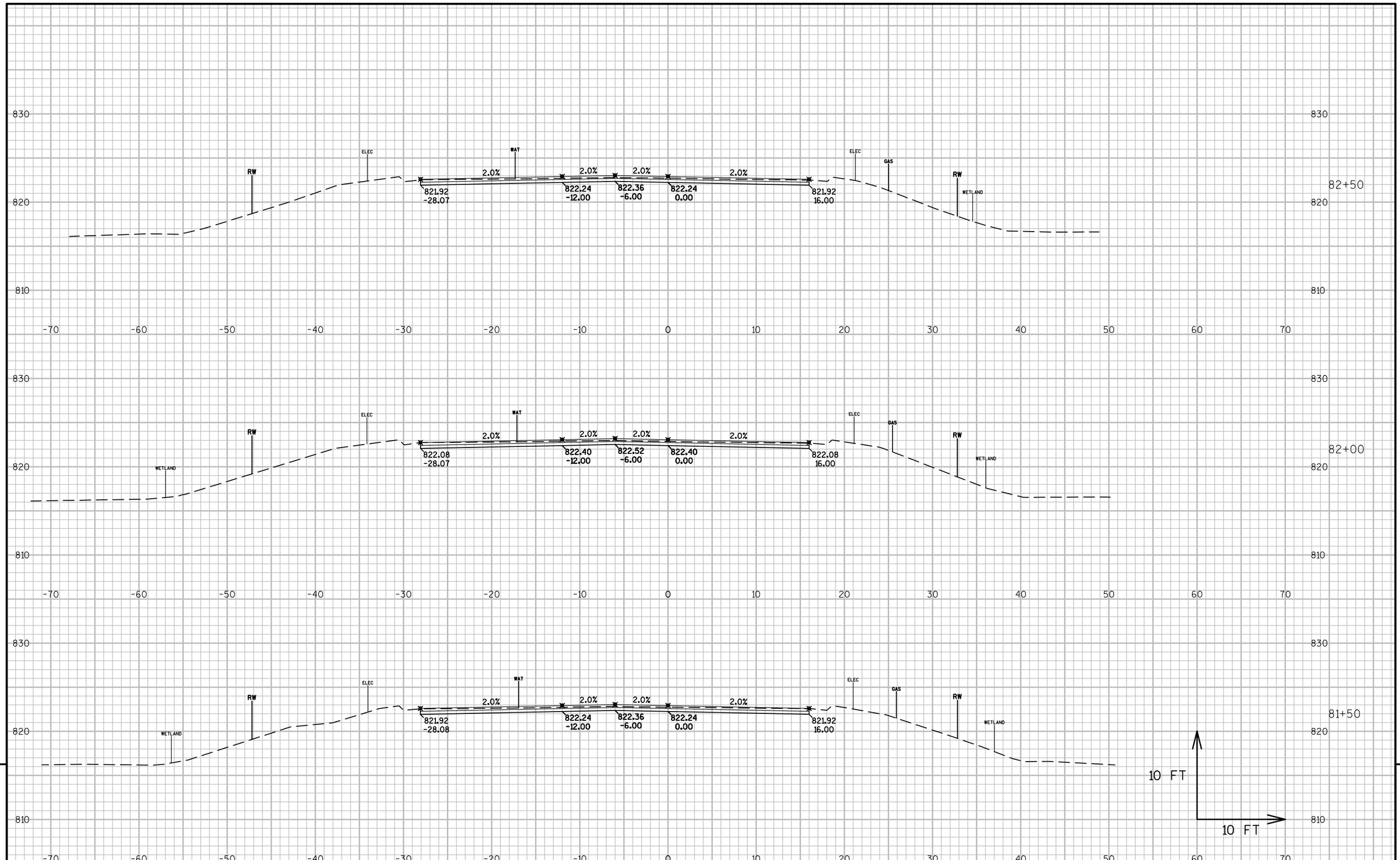


9	PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 280 E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902029

PLOT DATE : 1/29/2016 3:47 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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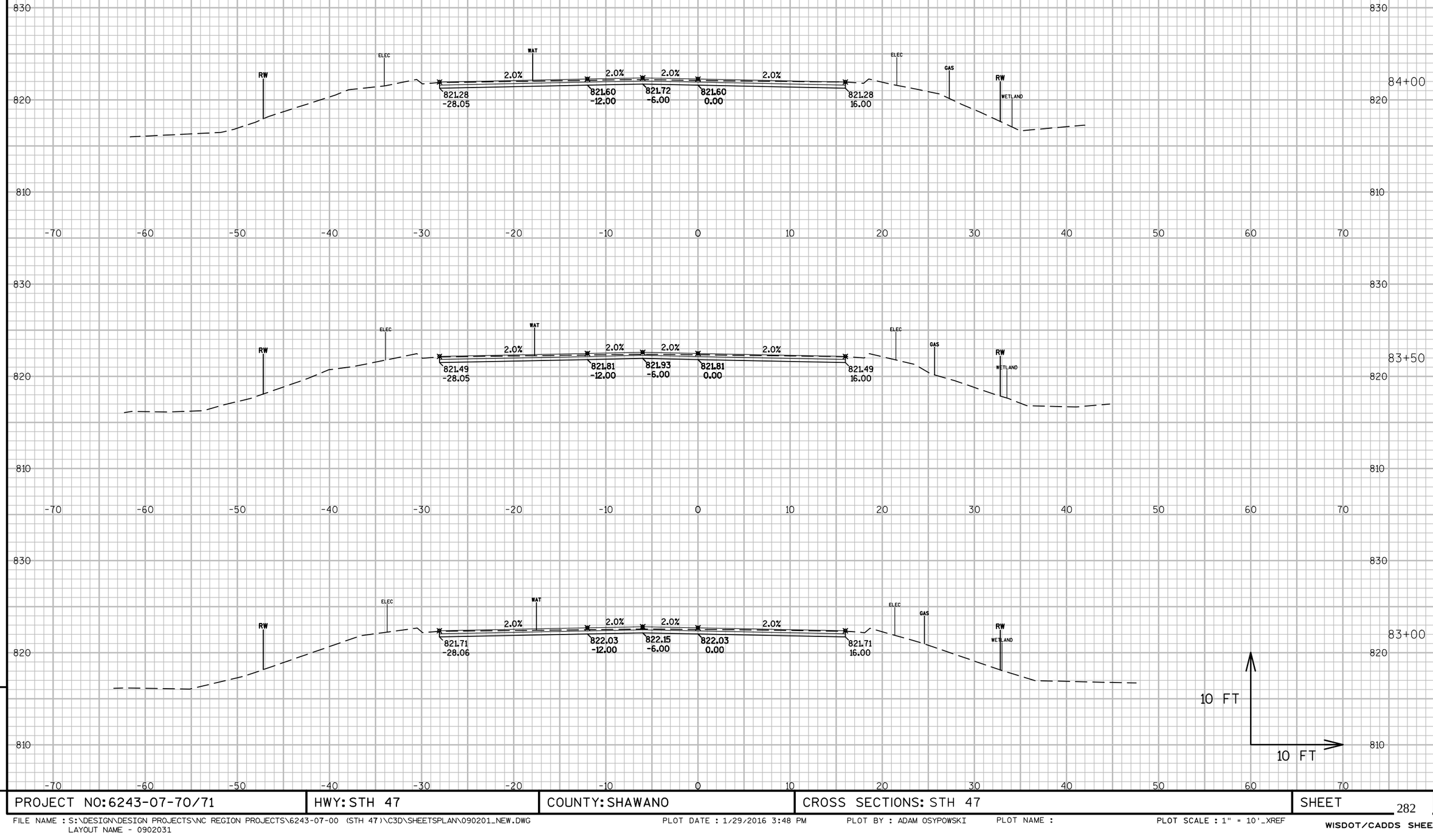
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 281	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902030

PLOT DATE : 1/29/2016 3:47 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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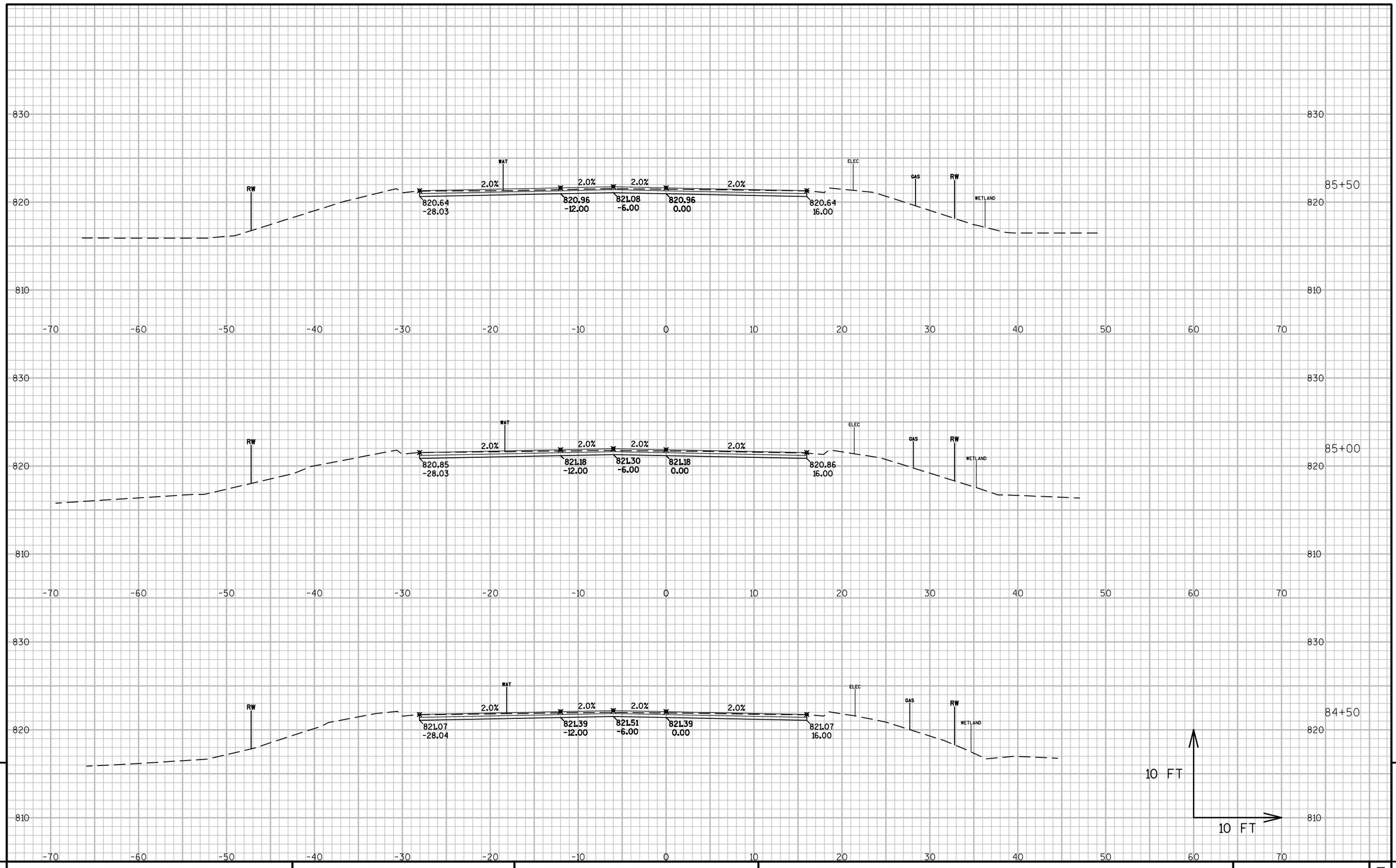
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 282	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902031

PLOT DATE : 1/29/2016 3:48 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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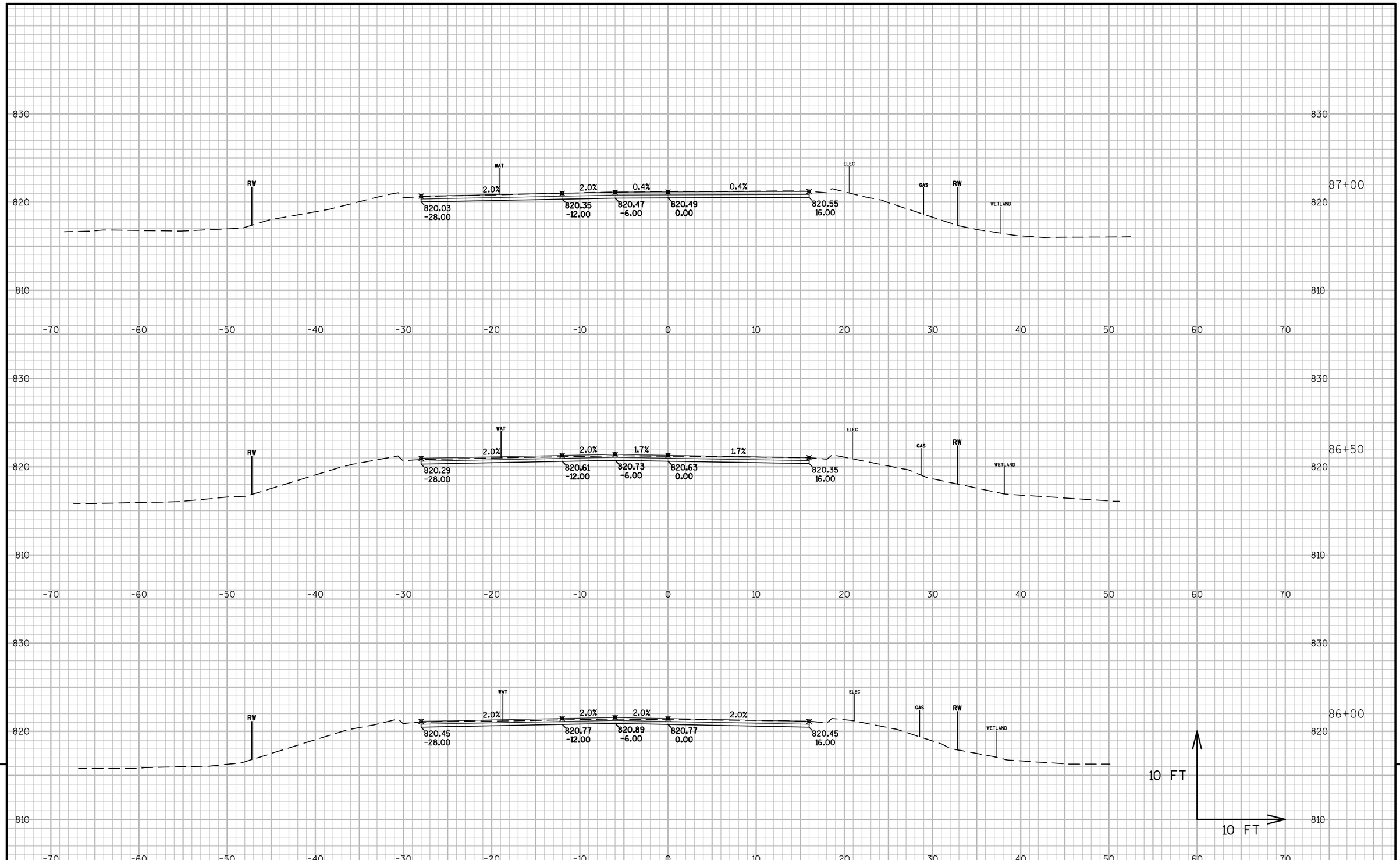
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 283	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902032

PLOT DATE : 1/29/2016 3:49 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF



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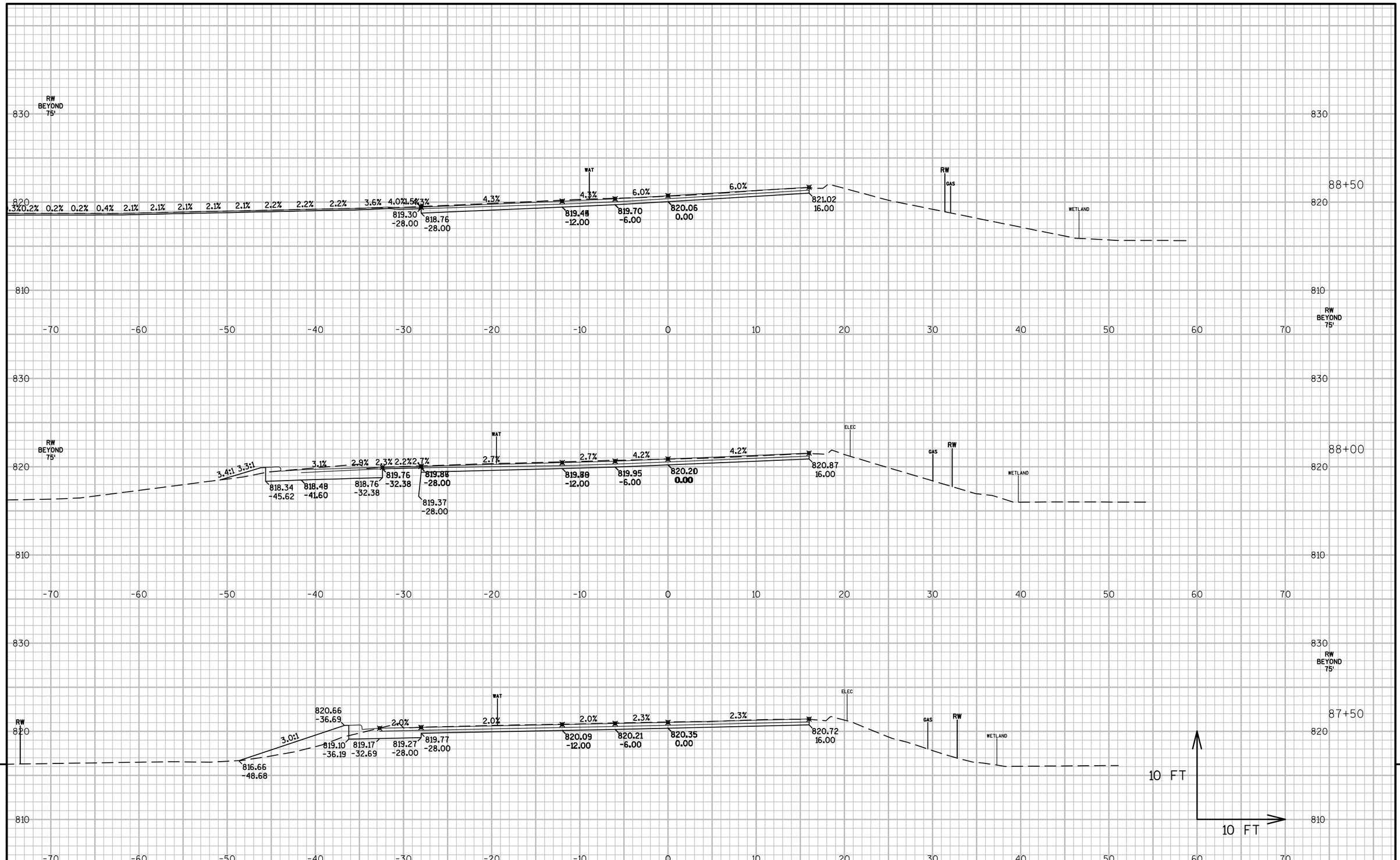
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 284	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902033

PLOT DATE : 1/29/2016 3:50 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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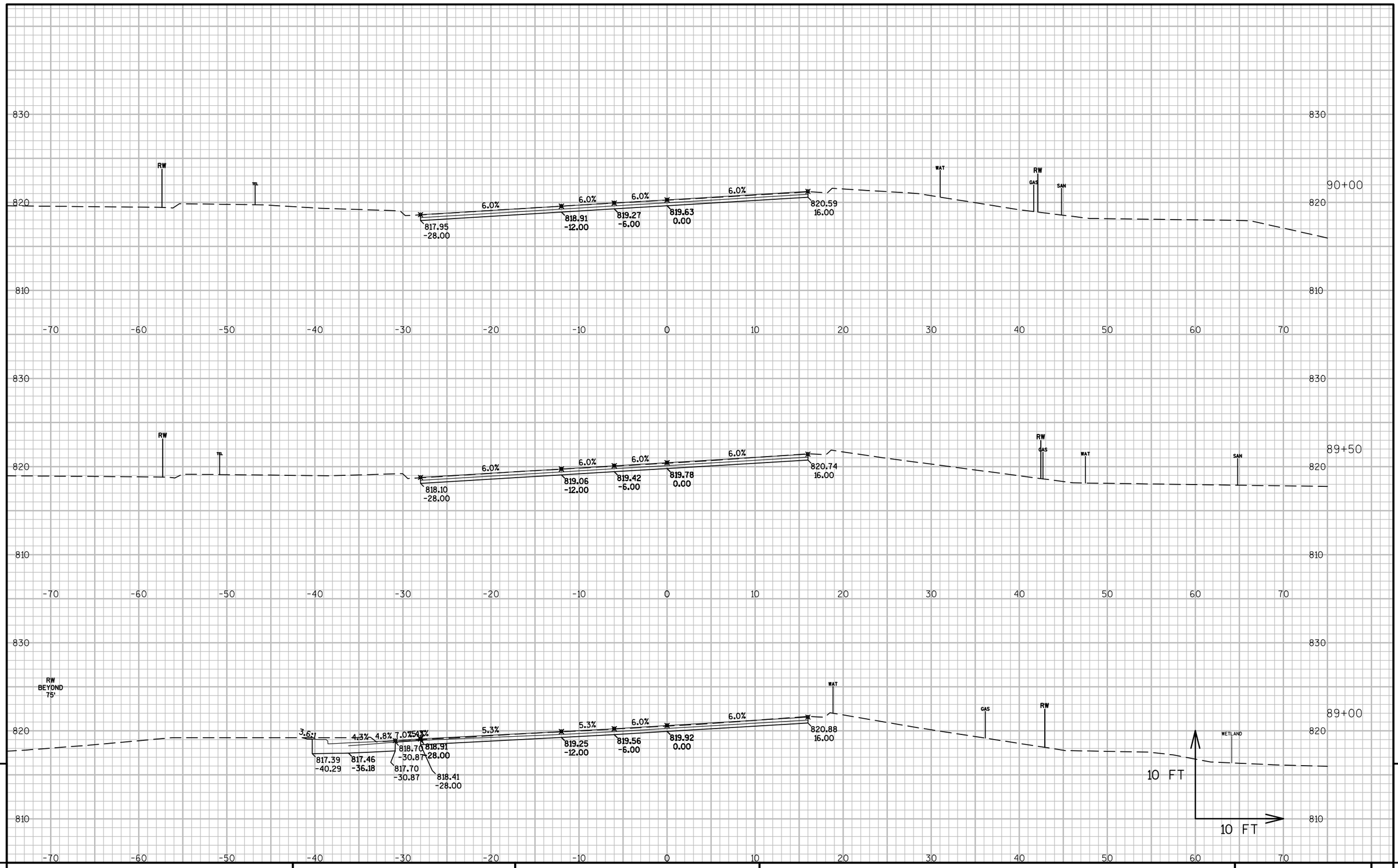
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 285	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902034
PLOT DATE : 1/29/2016 3:51 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 286	E

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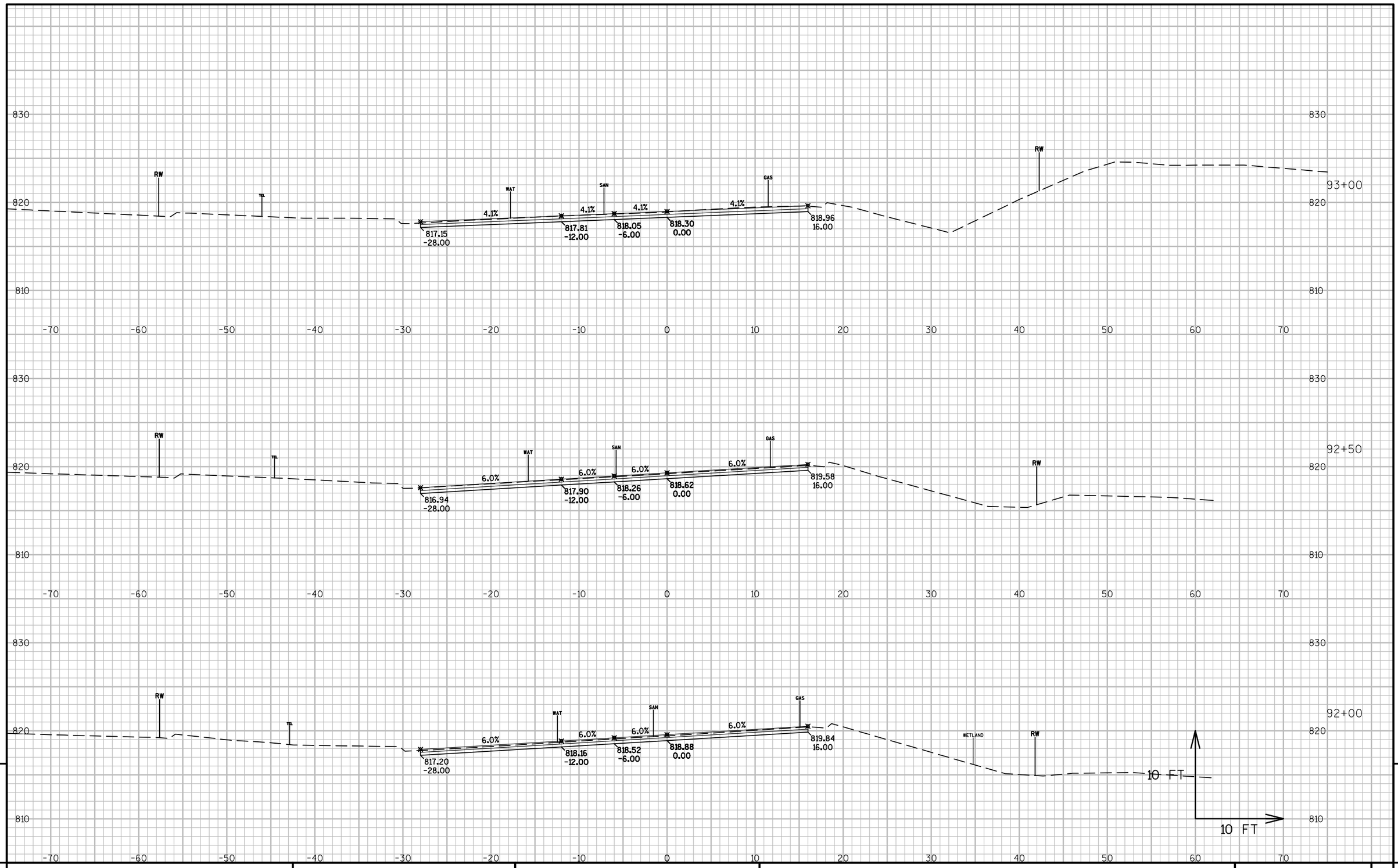
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 287	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902036
PLOT DATE : 1/29/2016 3:52 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



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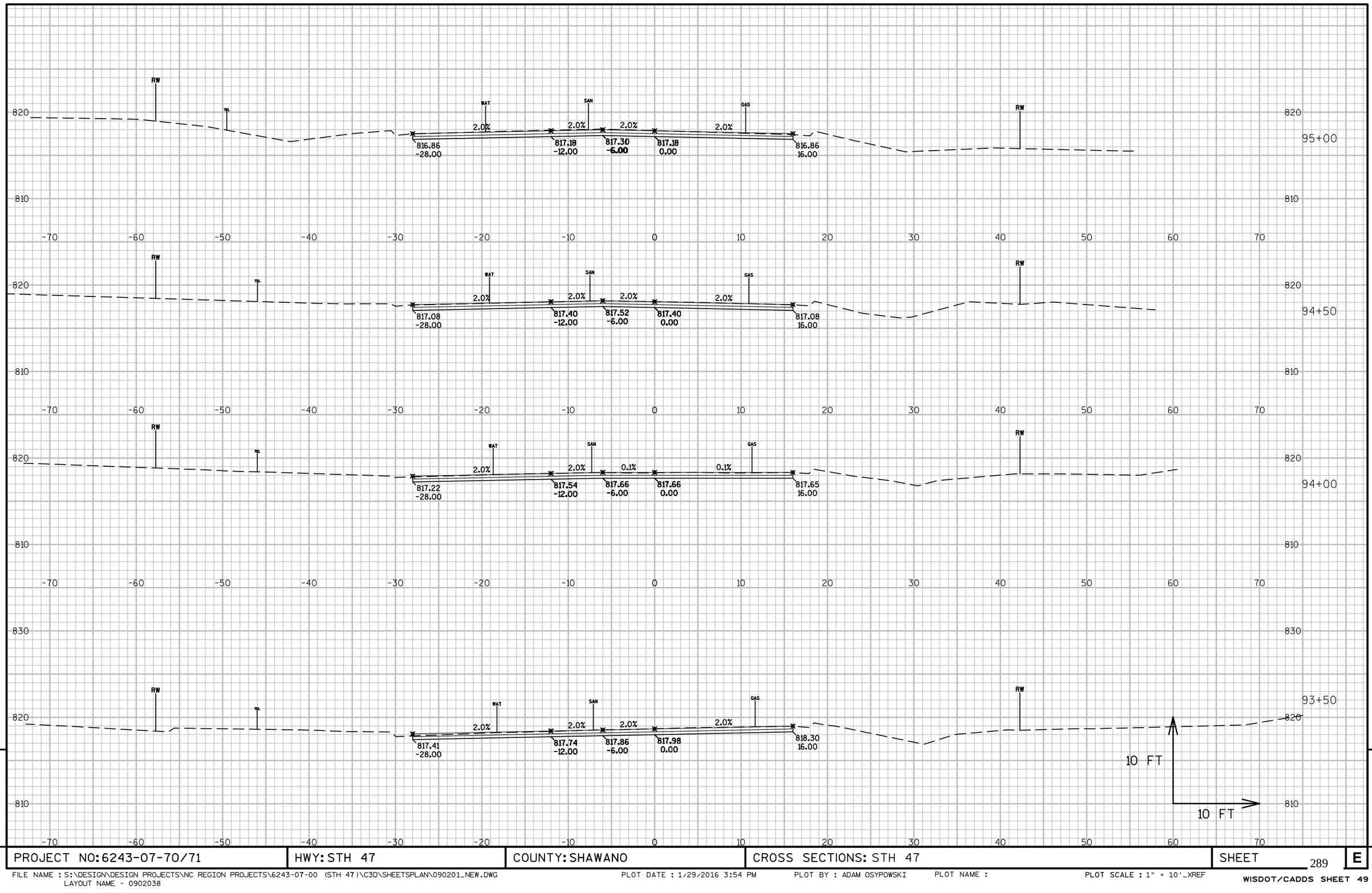
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 288	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902037
PLOT DATE : 1/29/2016 3:53 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



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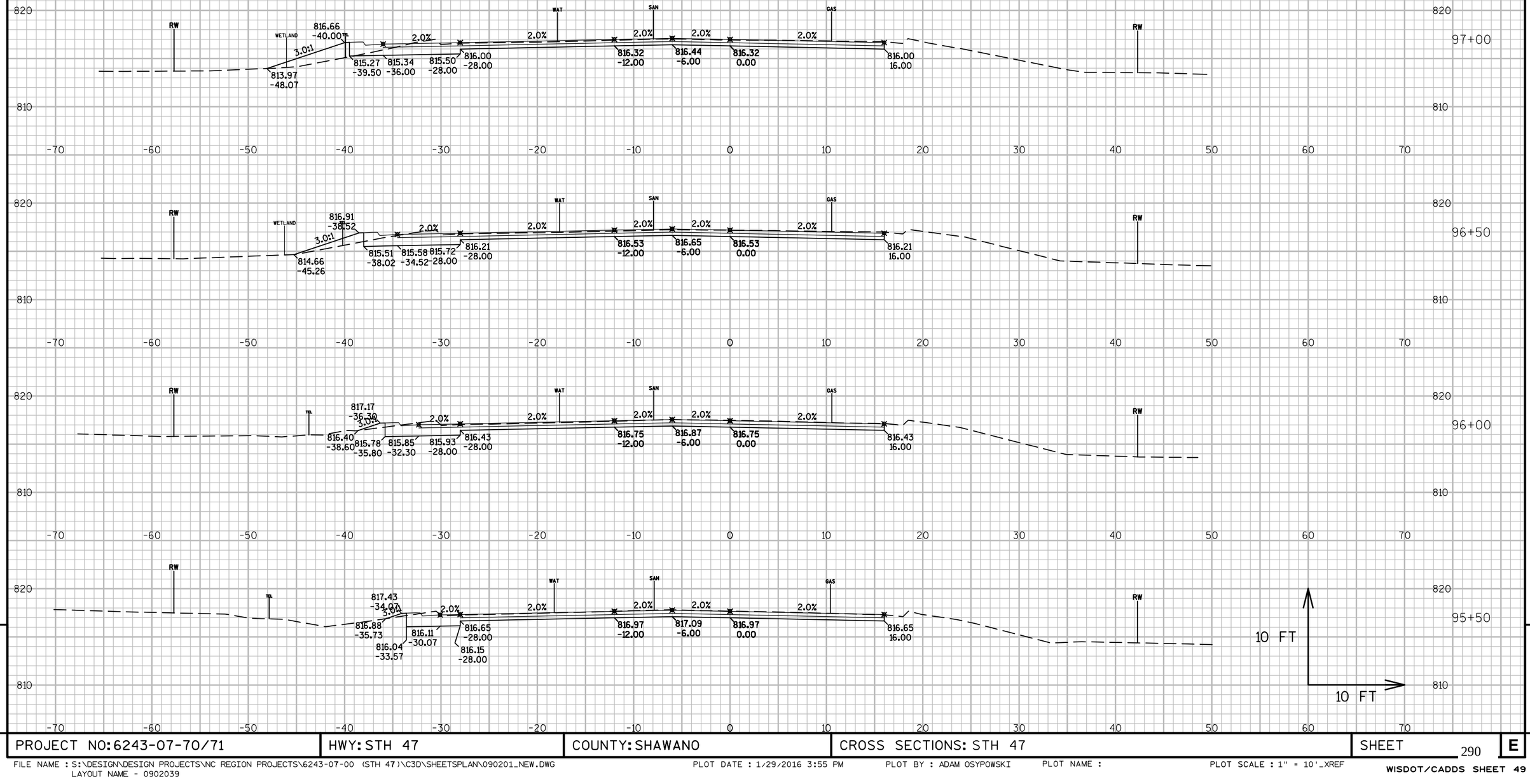
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 289	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902038
PLOT DATE : 1/29/2016 3:54 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

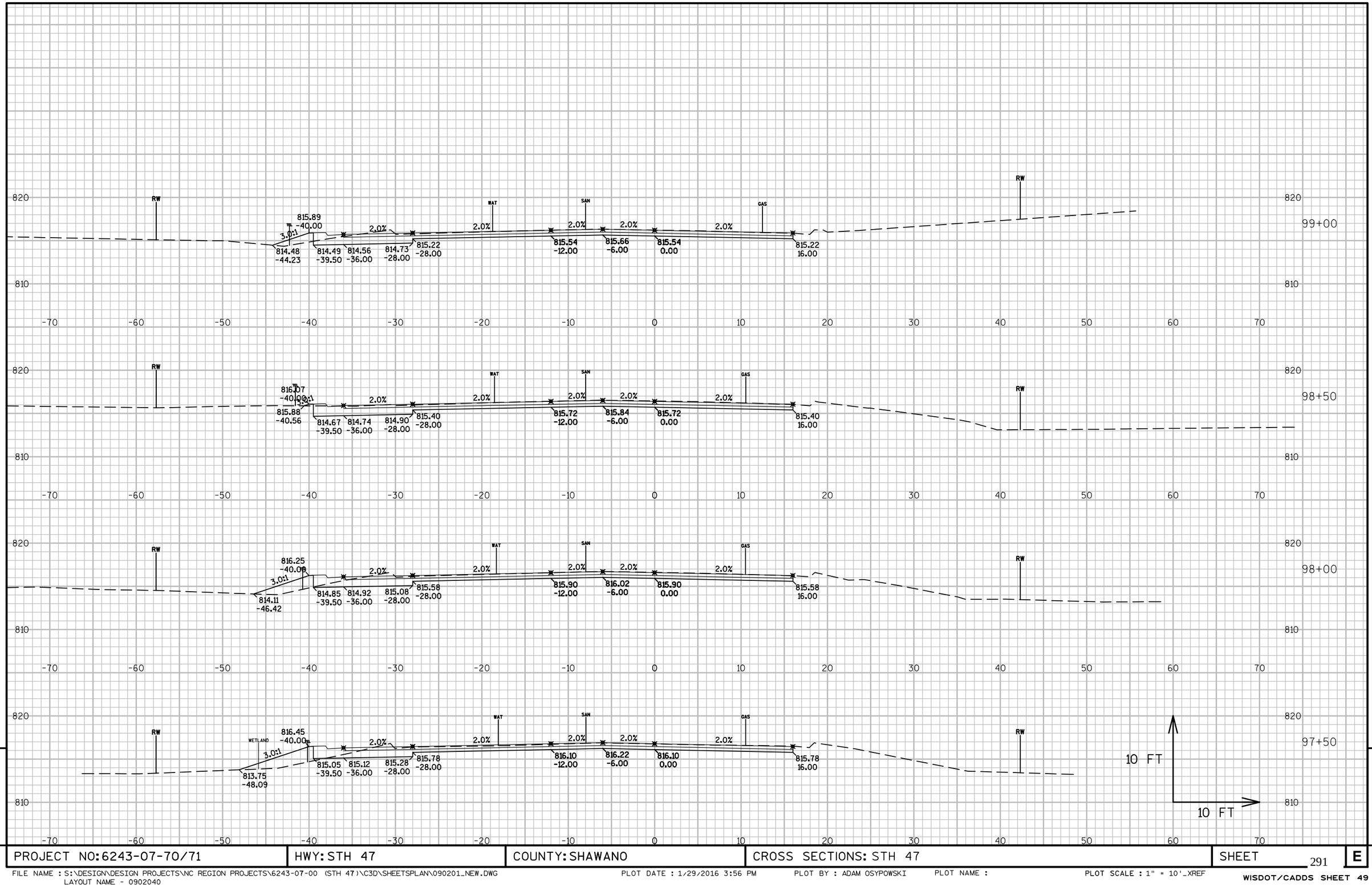


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 290	E

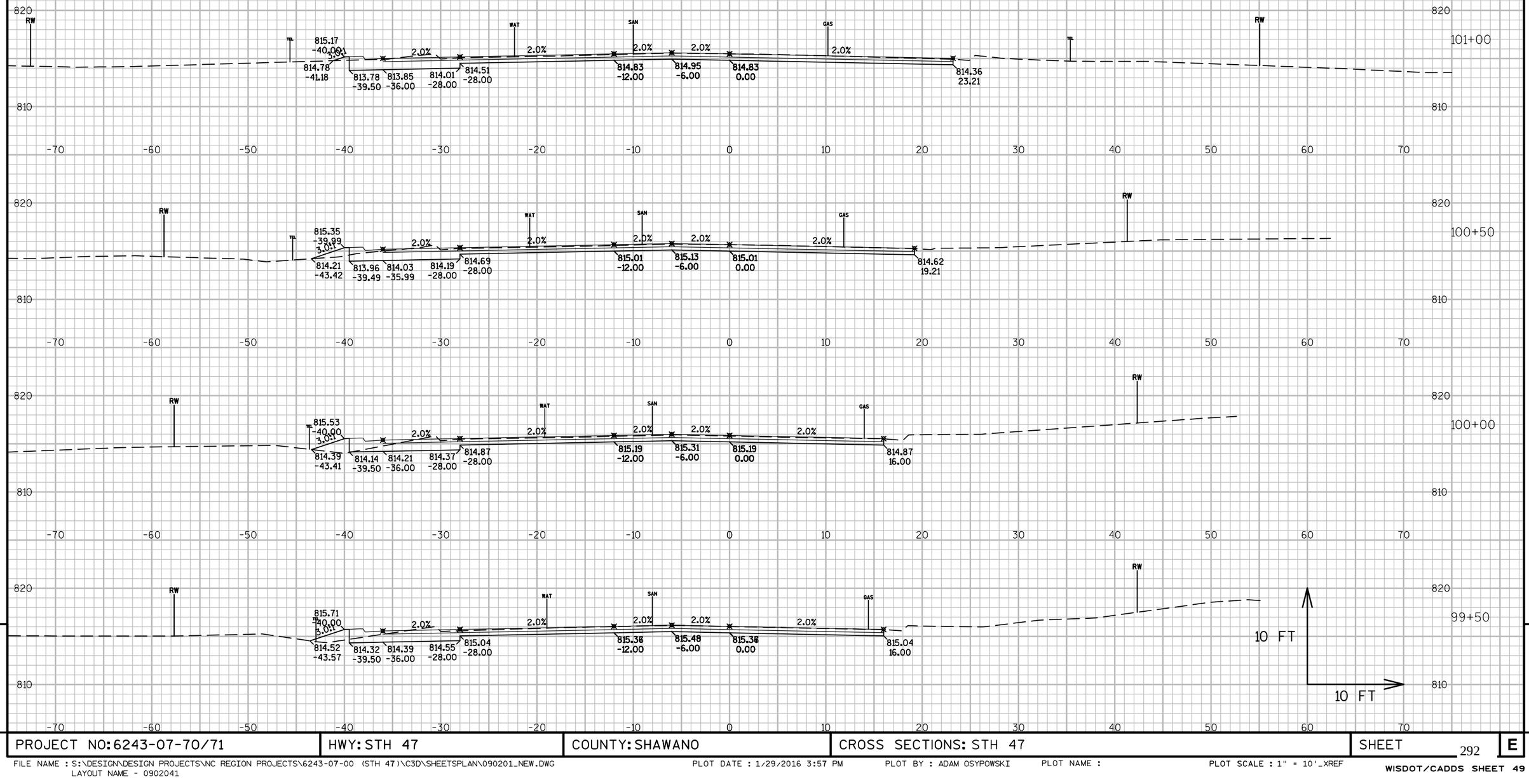
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902039

PLOT DATE : 1/29/2016 3:55 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 291	E



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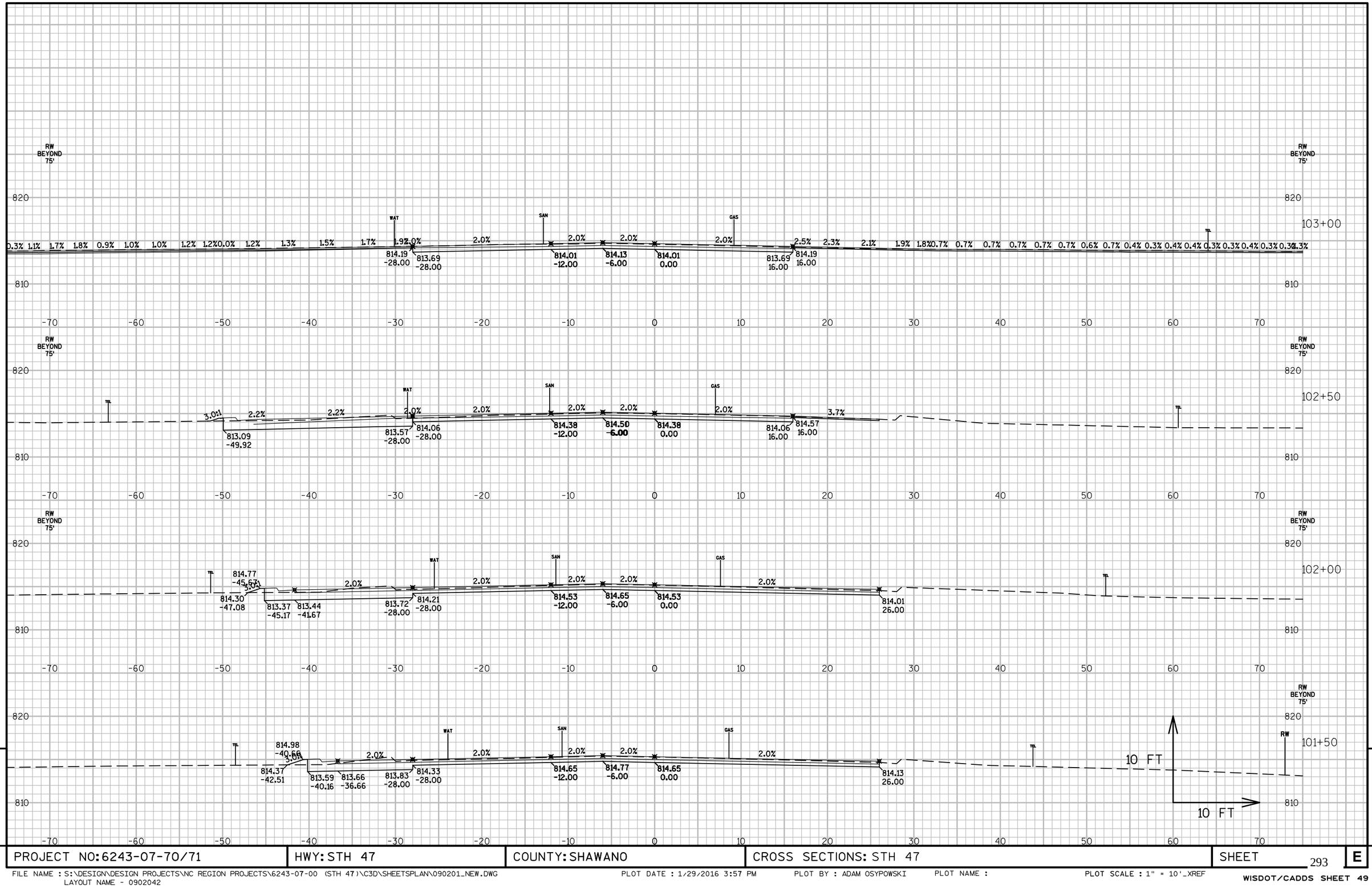
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 292	E



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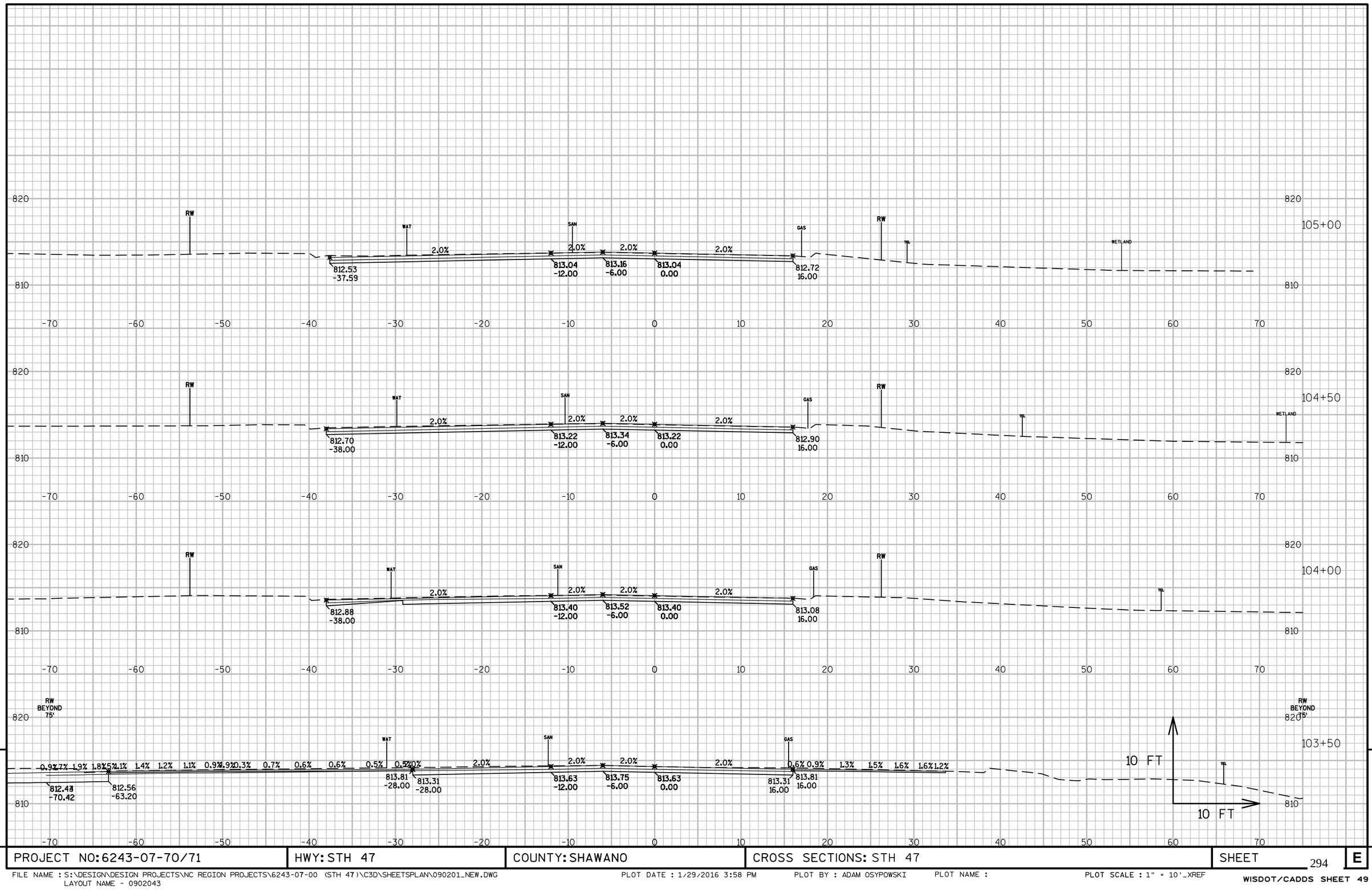
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 293	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902042
PLOT DATE : 1/29/2016 3:57 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



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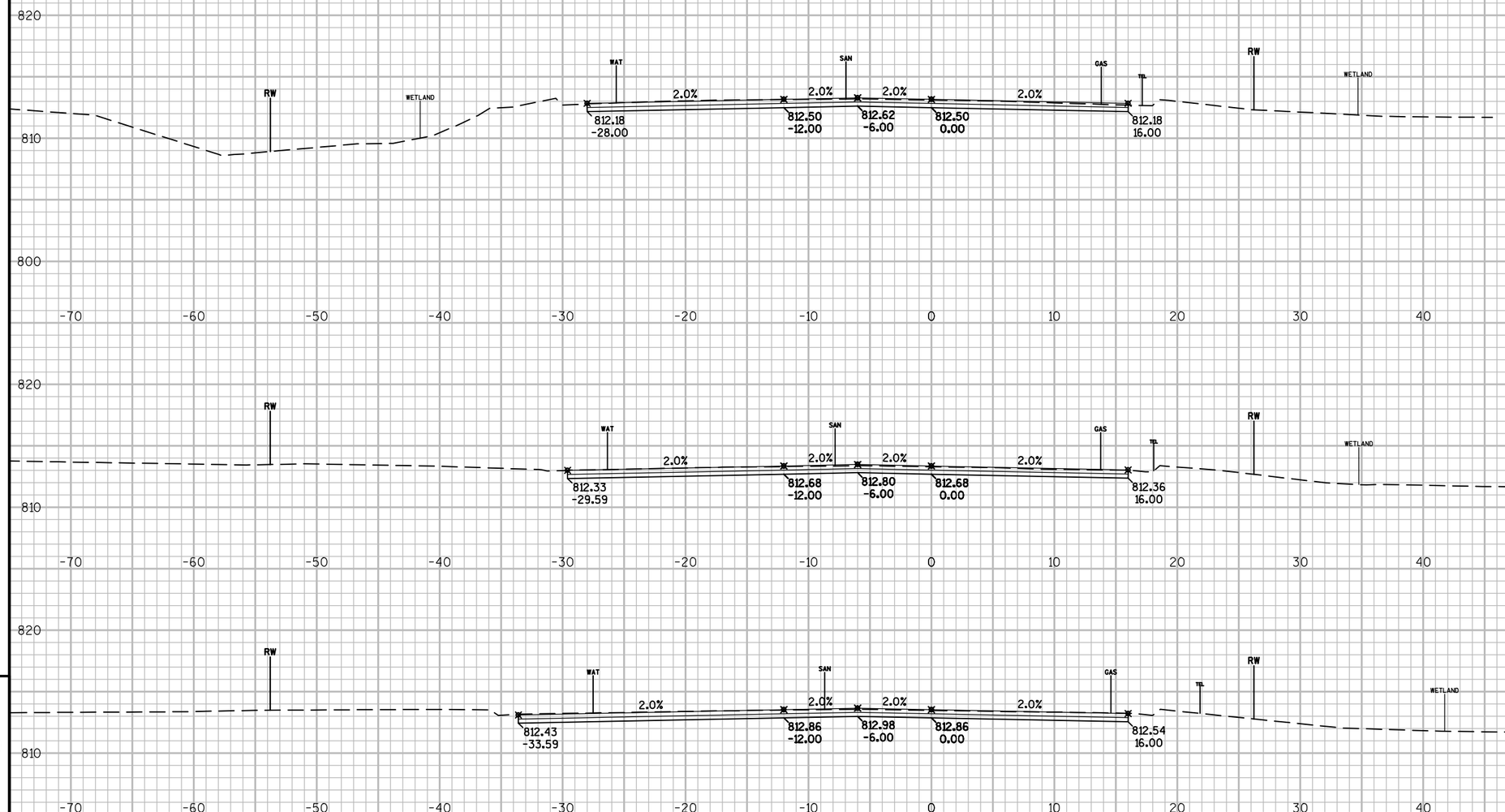
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 294	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902043

PLOT DATE : 1/29/2016 3:58 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 295	E

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PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 296	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902045
PLOT DATE : 1/29/2016 4:00 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

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PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 297	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902046

PLOT DATE : 1/29/2016 4:01 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

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PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 298	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902047
PLOT DATE : 1/29/2016 4:02 PM
PLOT BY : ADAM OSYPOWSKI
PLOT NAME :
PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

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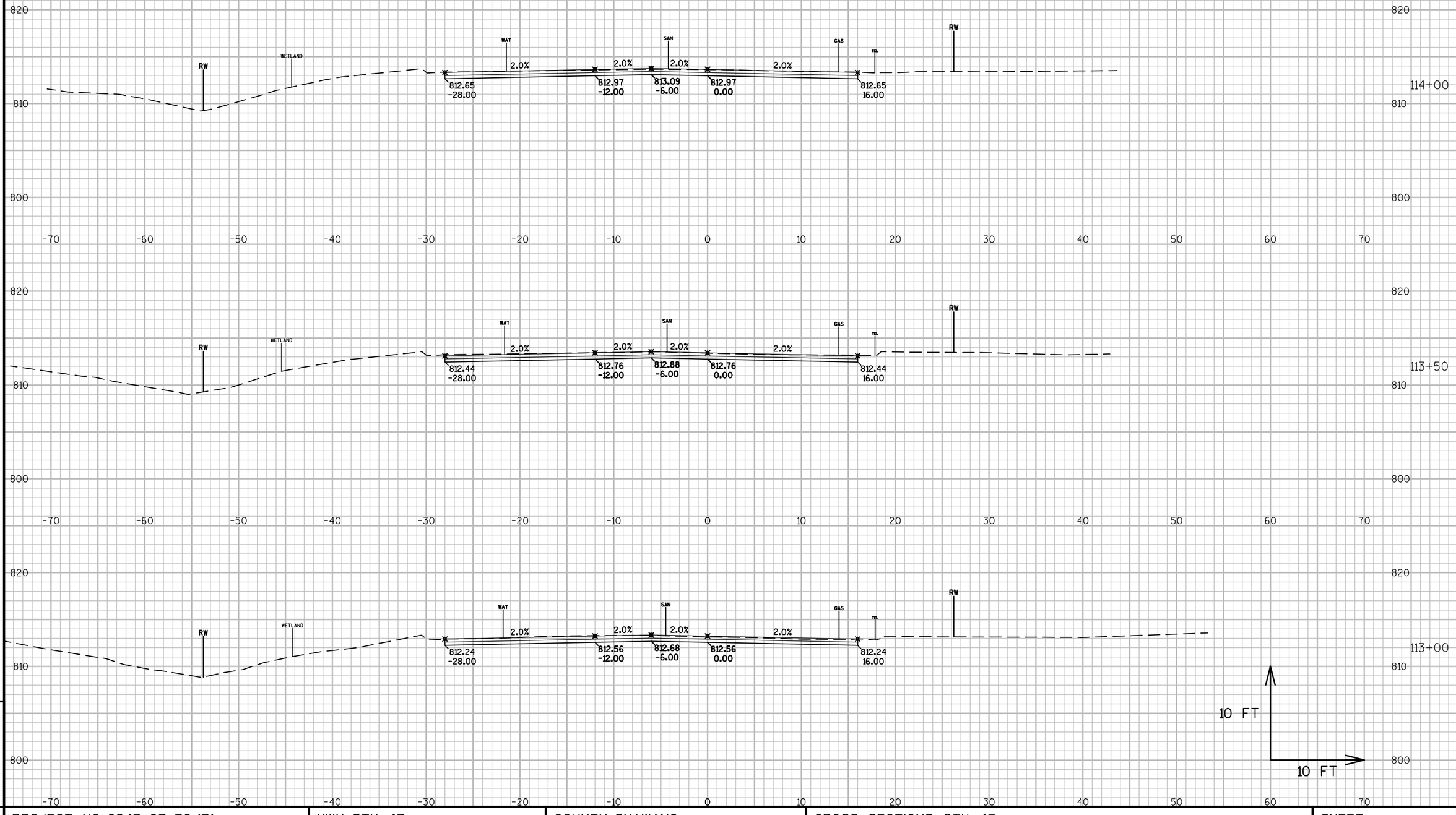
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 299	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902048

PLOT DATE : 1/29/2016 4:02 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

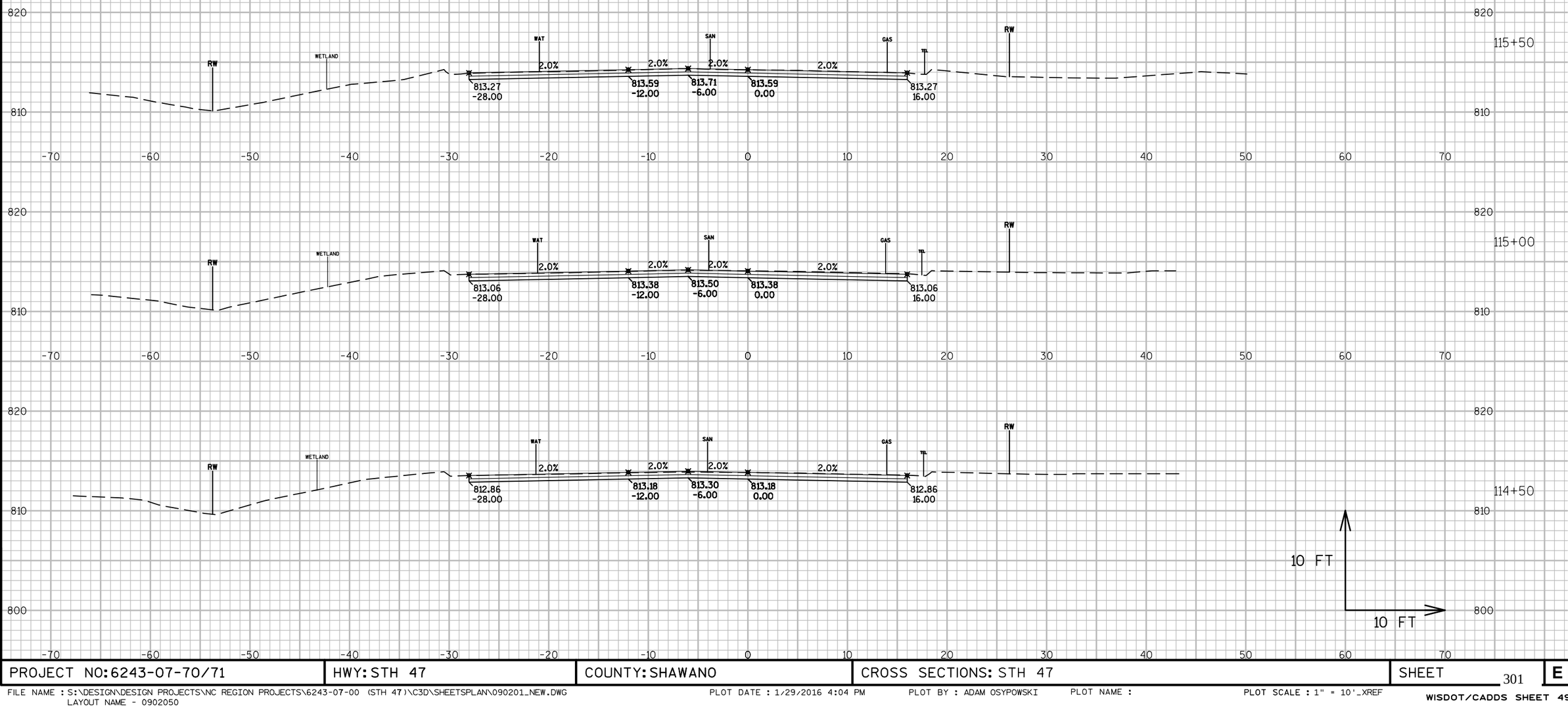
WISDOT/CADDS SHEET 49



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 300	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902049
PLOT DATE : 1/29/2016 4:03 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

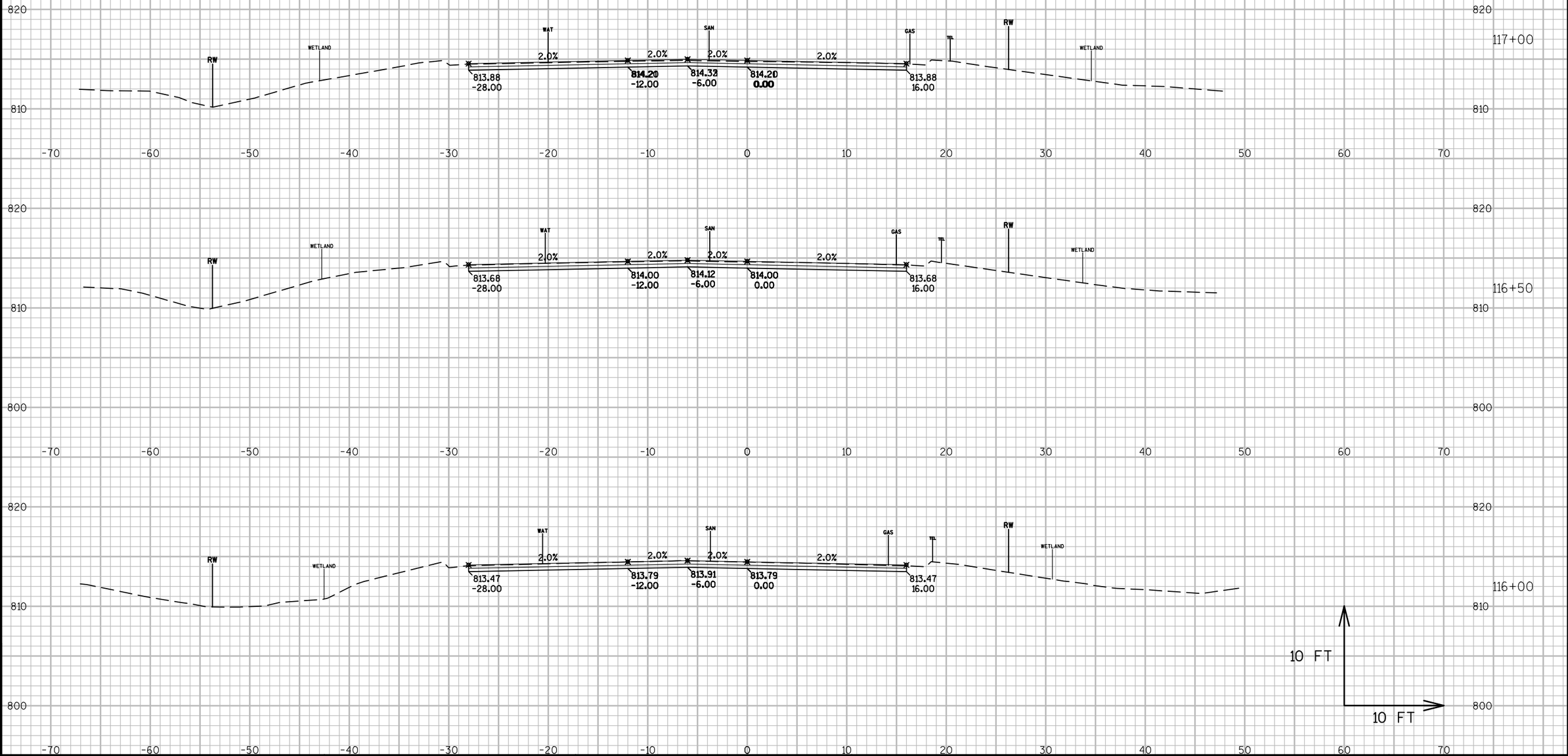


PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 301	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902050

PLOT DATE : 1/29/2016 4:04 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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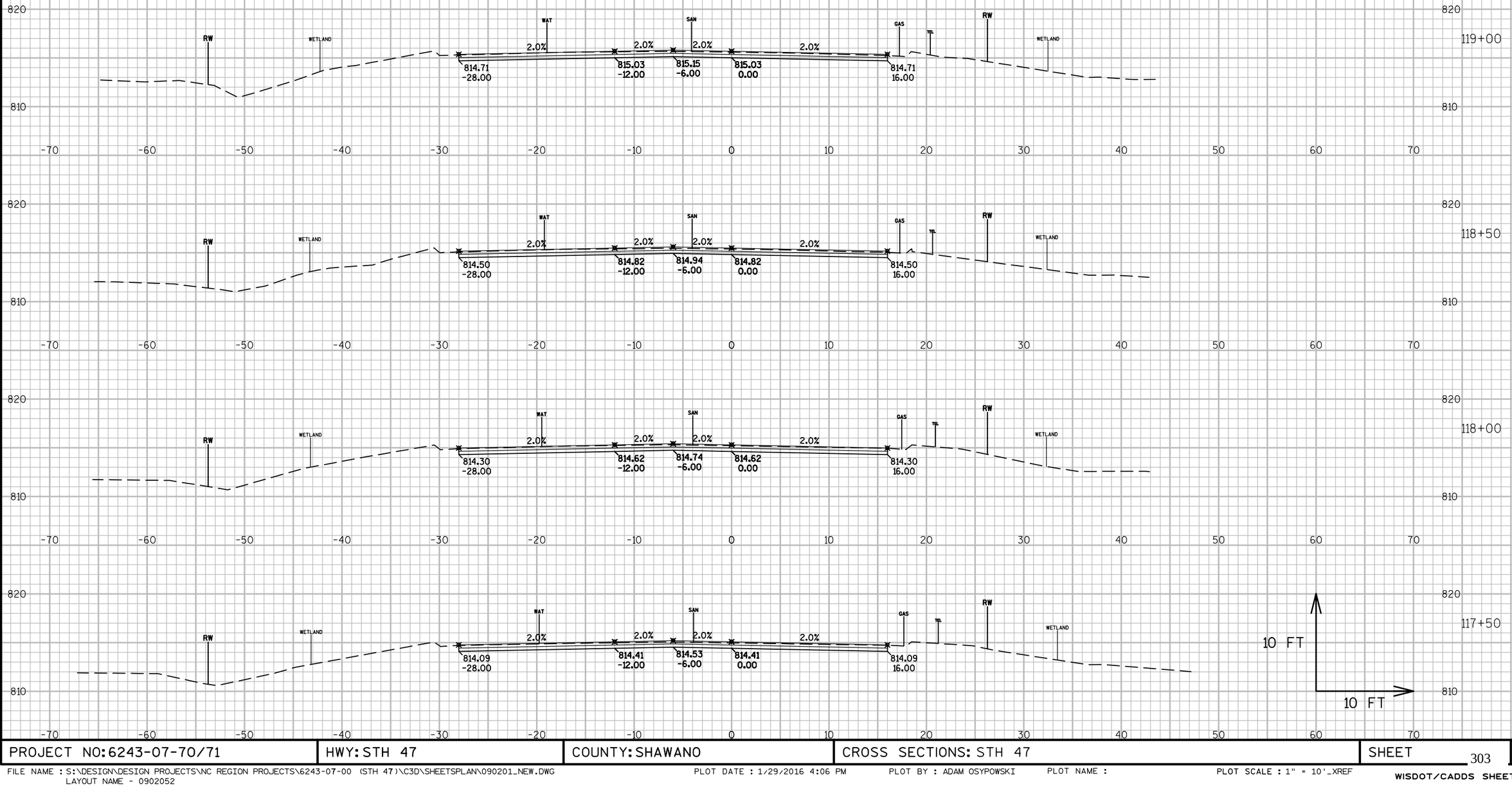
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 302	E



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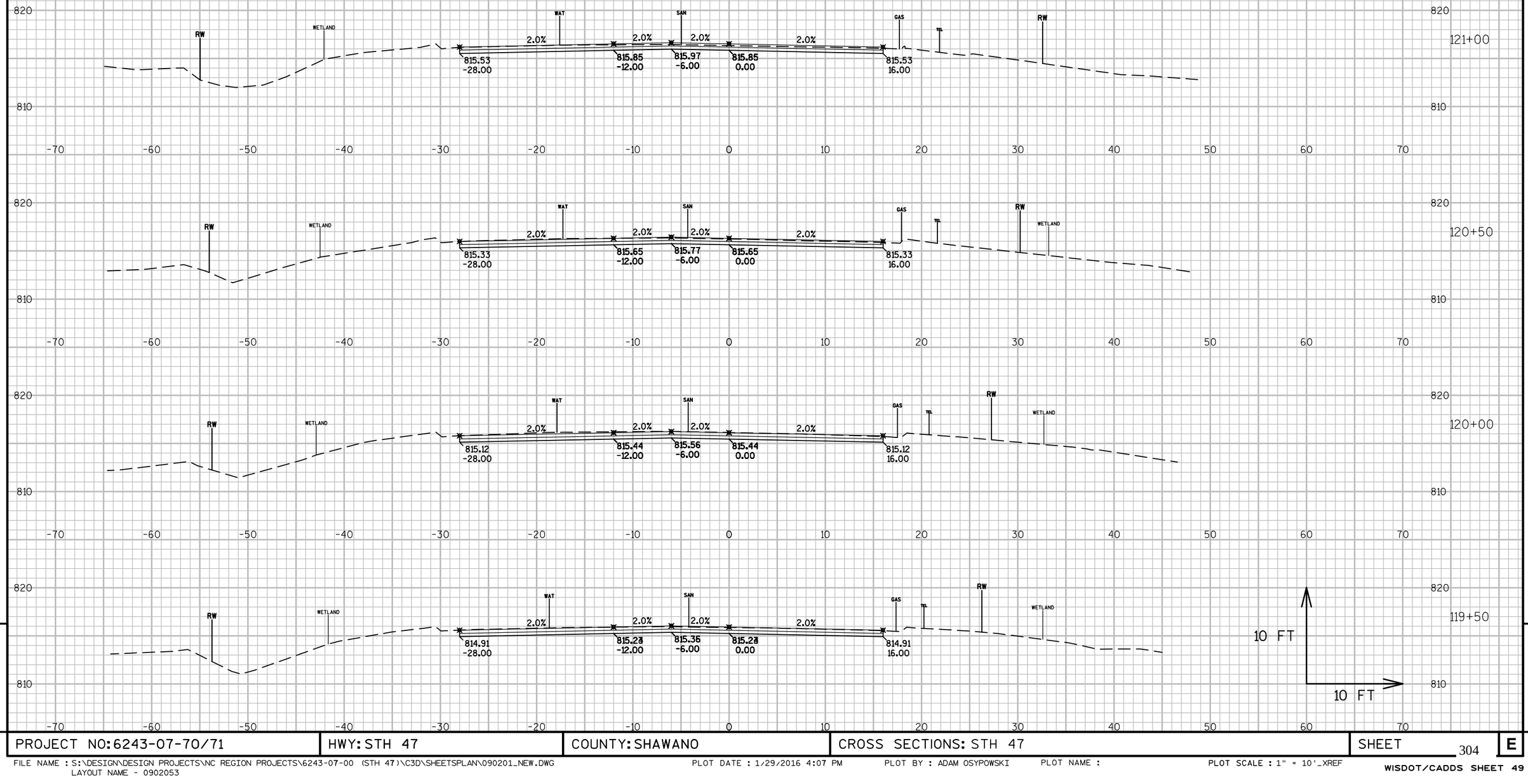
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 303	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902052

PLOT DATE : 1/29/2016 4:06 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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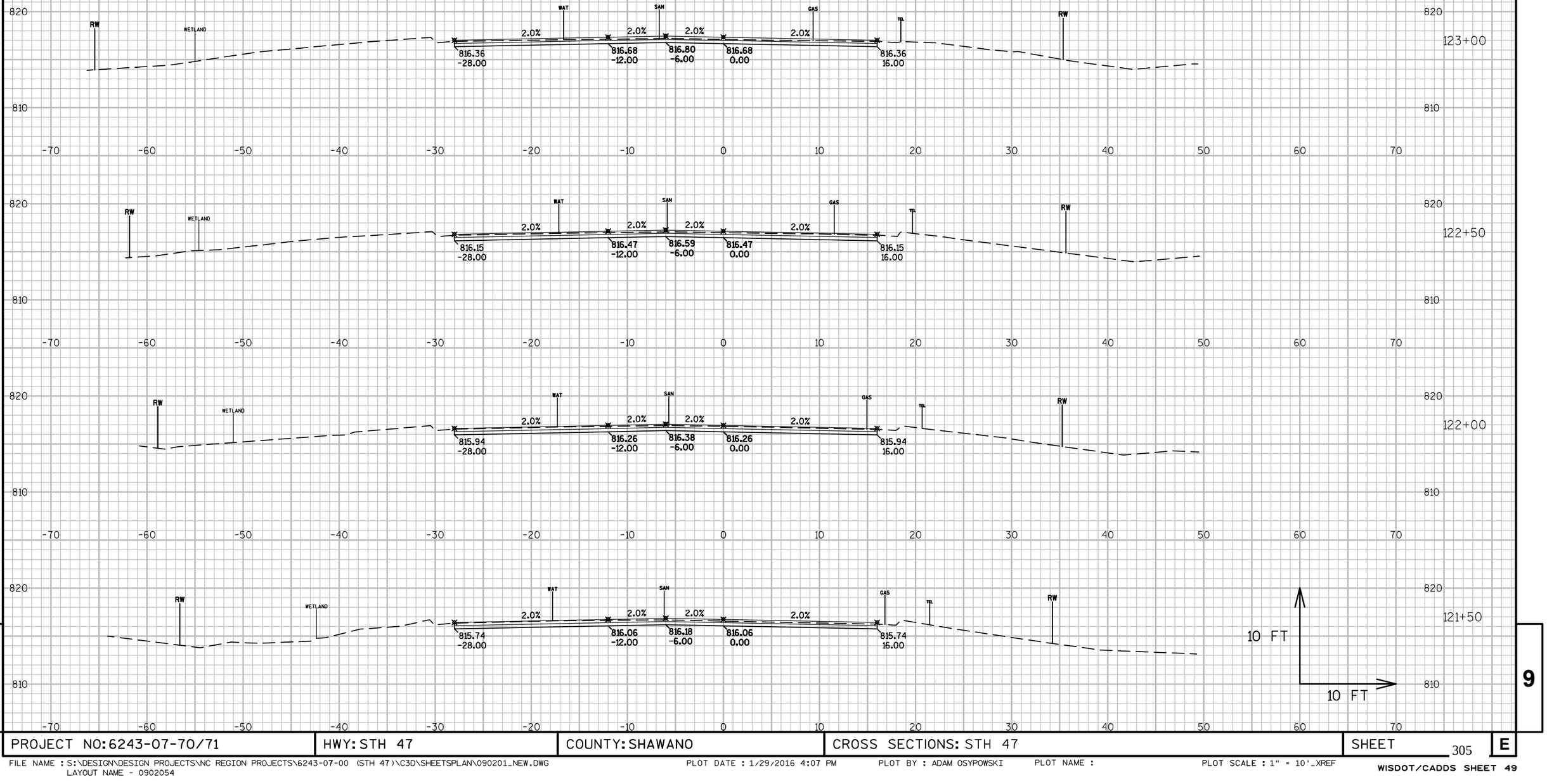
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 304	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902053

PLOT DATE : 1/29/2016 4:07 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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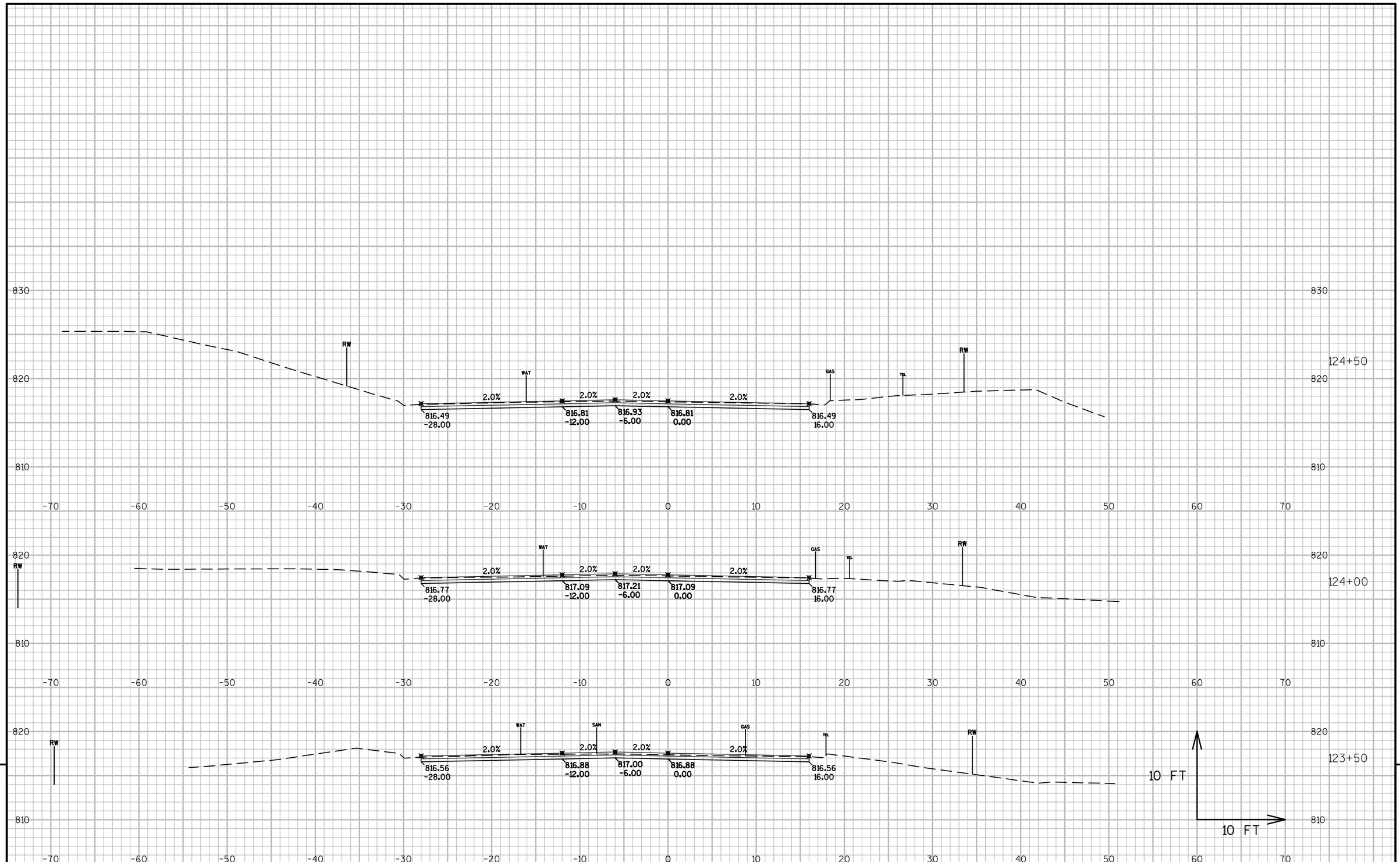
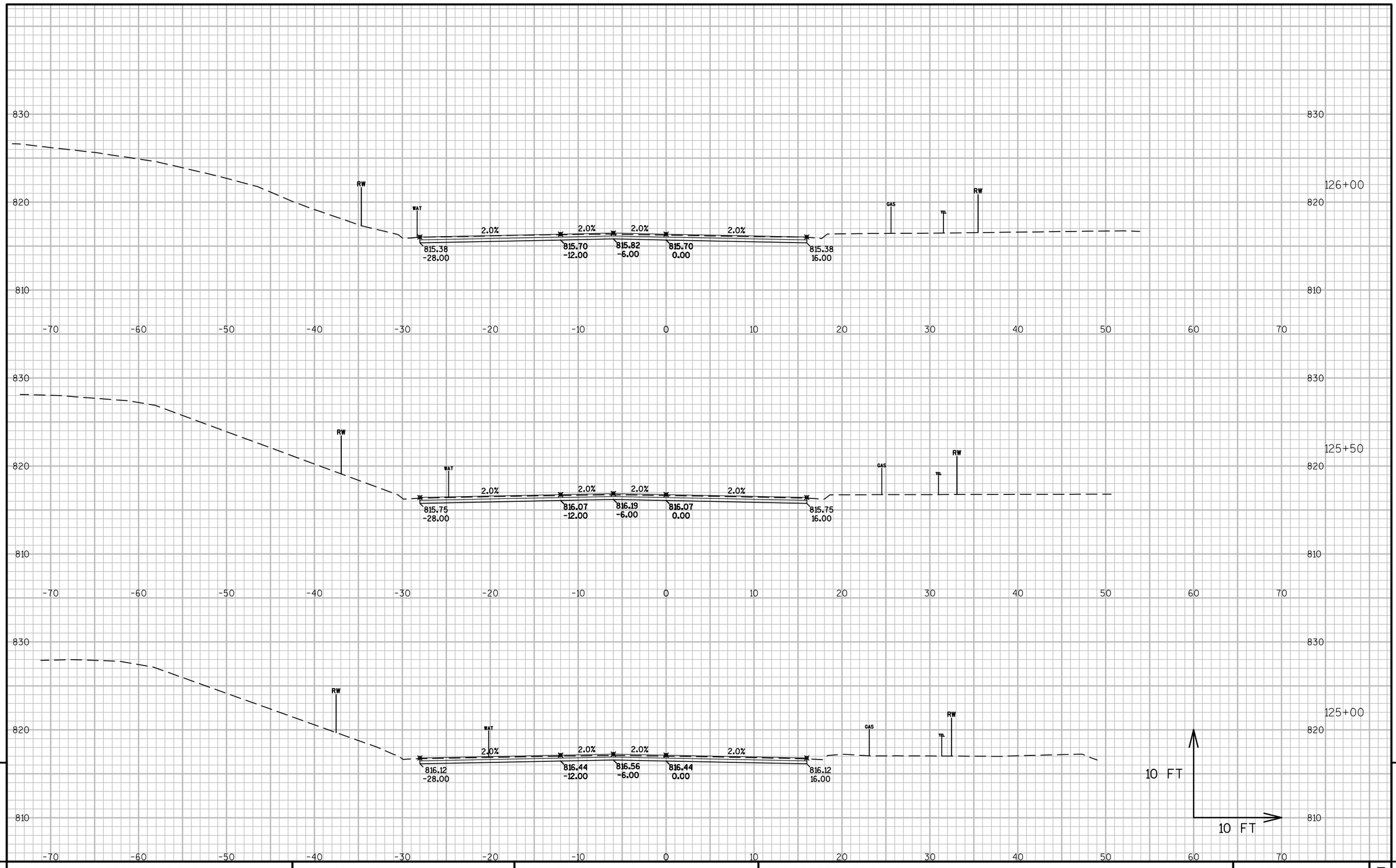
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 305	E

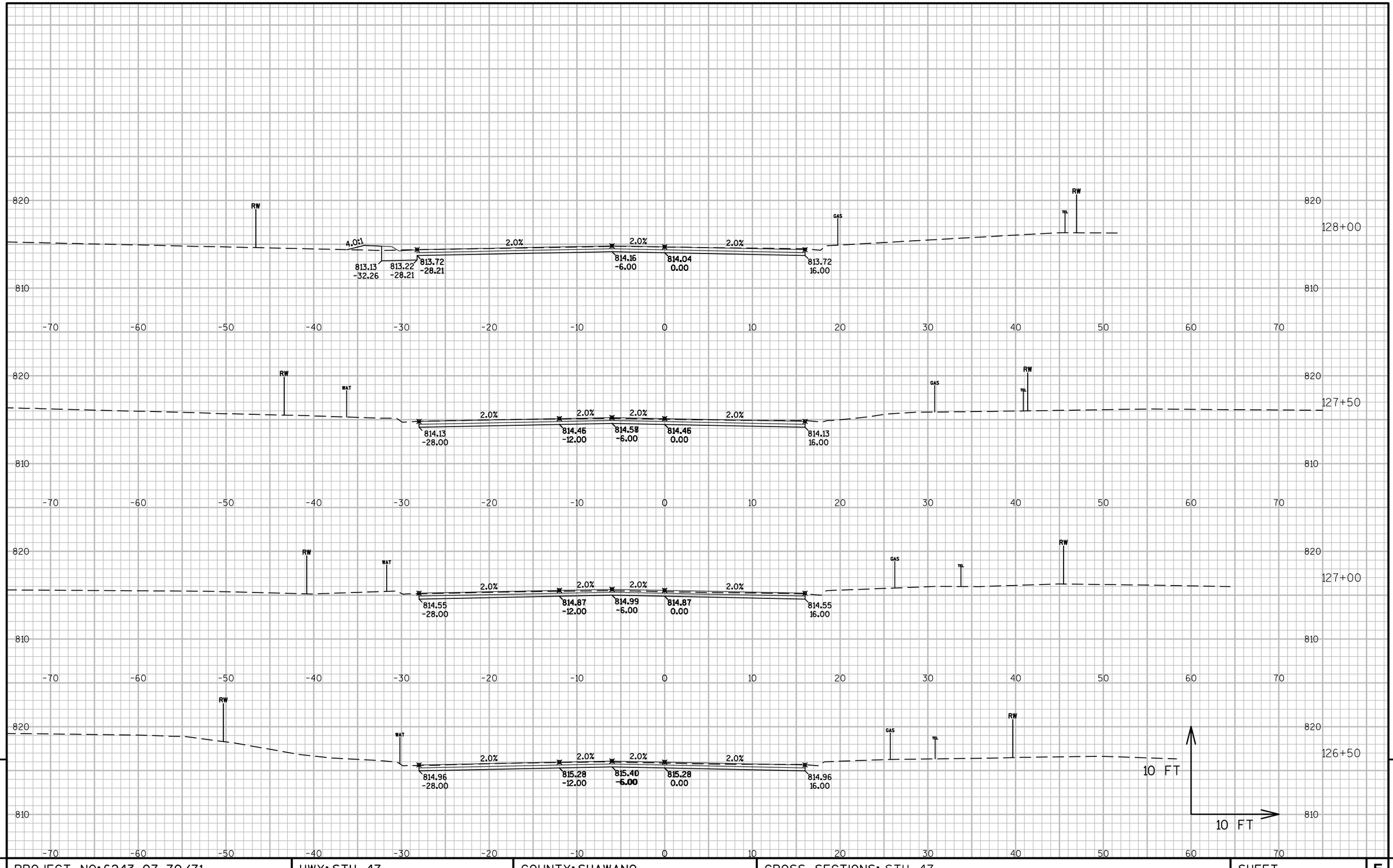
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902054
PLOT DATE : 1/29/2016 4:07 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 306	E



PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 307	E



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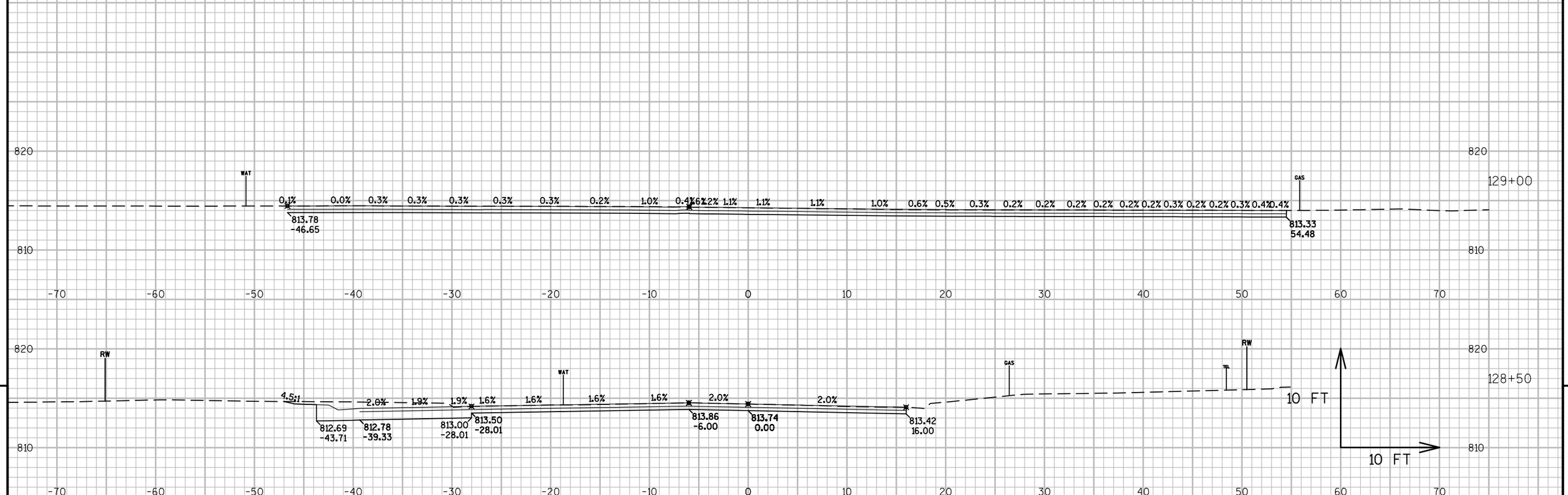
PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 308	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902057

PLOT DATE : 1/29/2016 4:10 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF



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PROJECT NO: 6243-07-70/71	HWY: STH 47	COUNTY: SHAWANO	CROSS SECTIONS: STH 47	SHEET 309	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NC REGION PROJECTS\6243-07-00 (STH 47)\C3D\SHEETSPLAN\090201_NEW.DWG
LAYOUT NAME - 0902058

PLOT DATE : 1/29/2016 4:11 PM PLOT BY : ADAM OSYPOWSKI PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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