GRE

PROJECT ID: WITH: **1480-29-71**

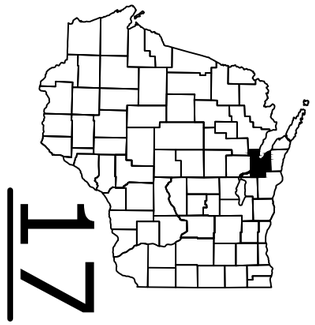
COUNTY: **BROWN**

NOVEMBER 2021

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 = 186



DESIGN DESIGNATION 1480-29-00

A.A.D.T.	2018	=	21,100
A.A.D.T.	2043	=	23,300
D.H.V.		=	2,726
D.D.		=	50/50
T.		=	13.8%
DESIGN SPEED		=	70 MPH
ESALS		=	8,800,000

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

GREEN BAY - DYCKESVILLE

CTH K INTERSECTION

STH 57

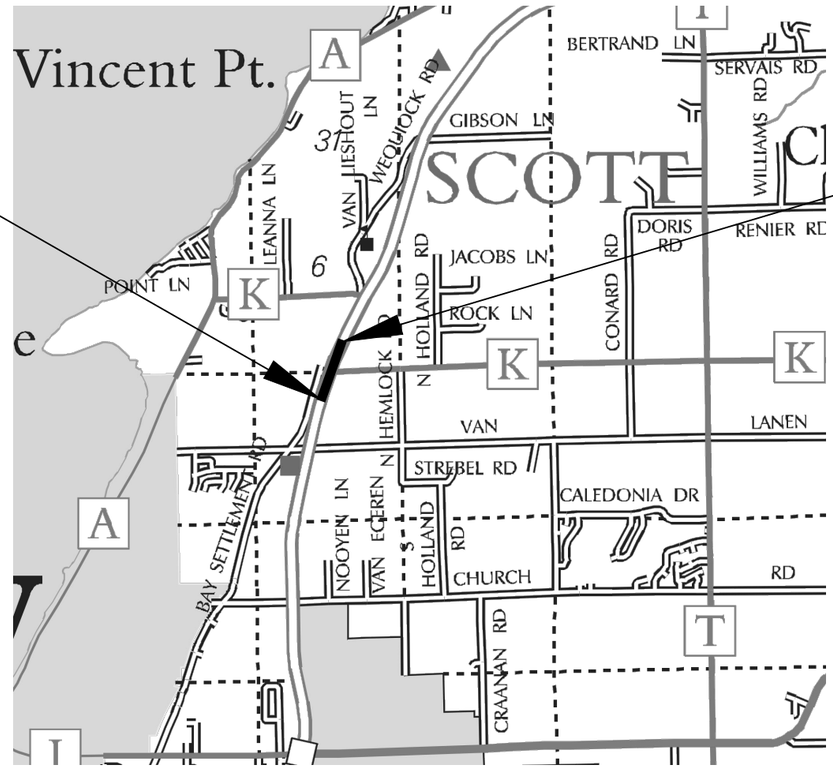
BROWN COUNTY

STATE PROJECT NUMBER
1480-29-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1480-29-71	WISC 2022013	1

BEGIN PROJECT
STA 372+41.58NB
N = 588,261.68
E = 135,842.03

END PROJECT
STA 393+55.20 NB
N = 590,244.86
E = 136,582.46



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.73 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

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 (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	A. DUMS
Project Manager	A. FULCER
Regional Examiner	NE REGION
Regional Supervisor	D. SEGERSTROM

APPROVED FOR THE DEPARTMENT

DATE: 7/22/2021 Andrew D. Fulcer (Signature)

E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\010101-TI.DWG PLOT DATE : 5/12/2021 8:21 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME :

2

STANDARD ABBREVIATIONS

AEW	APRON END WALL
AGG	AGGREGATE
ASPH	ASPHALTIC
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
BMP	BEST MANAGEMENT PRACTICES
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CMCP	CULVERT PIPE CORRUGATED METAL
CONC	CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
EB	EASTBOUND
FE	FIELD ENTERANCE
FL	FLOW LINE
HE	HIGH EASEMENT
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LP	LOW POINT
LT	LEFT
M/L	MATCHLINE
MIN	MINIMUM
NB	NORTHBOUND
NC	NORMAL CROWN
NOR	NORMAL
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTERANCE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PRC	POINT OF REVERSE CURVE
PRW	PROPOSED RIGHT OF WAY
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RIGHT
SALV	SALVAGE
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
WB	WESTBOUND

UTILITIES

MATT GUNDERSON
CENTURYLINK - COMMUNICATION LINE
212 CHURCH AVE
CASCO, WI 54205
(920) 896-2867, (920) 837-2344
MATT.GUNDERSON@LUMEN.COM

RICK VINCENT
NET LEC LLC - COMMUNICATION LINE
450 SECURITY BLVD
P.O. BOX 19079
GREEN BAY, WI 54307-9079
(920) 617-7316
RICK.VINCENT@NSIGHT.COM

RYAN VOSKUIL
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
2850 S ASHLAND AVE
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RYAN.VOSKUIL@WISCONSINPUBLICSERVICE.COM

JIM EIDEN
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GREEN BAY, WI 54304
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JAMES.EIDEN@WISCONSINPUBLICSERVICE.COM

ERIC BECKER
WINDSTREAM KDL, LLC - COMMUNICATION LINE
314 N DANZ AVE
GREEN BAY, WI 54302-3526
(920) 461-9825
ERIC.BECKER@WINDSTREAM.COM

GENERAL NOTES

1. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE.
2. HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112LB/SY/IN.
3. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
4. EXISTING PERMANENT SIGNS ARE TO REMAIN IN PLACE UNLESS SPECIALLY CALLED FOR REMOVAL ON MISCELLANEOUS QUANTITY TABLE.
5. CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING, SEEDING AND MULCHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.
6. THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER. DETAILS OF CONSTRUCTION NOT SHOWN ON THE PLAN SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
7. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
8. ALL DISTURBED AREAS, NOT OTHERWISE SURFACED, ARE TO BE TOPSOILED, FERTILIZED, SEEDED AND COVERED WITH MULCH OR EROSION MAT, AS SHOWN ON THE PLANS.
9. THE EXACT LOCATIONS OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER.
10. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST THREE WORKING DAYS PRIOR TO BEGINNING WORK. ALL DIMENSIONS TO FLANGE LINE OF CURB UNLESS OTHERWISE NOTED IN PLANS.
11. ALL DIMENSIONS TO FLANGE LINE OF CURB UNLESS OTHERWISE NOTED IN PLANS.

2

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

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL
REMOVALS
PERMANENT SIGNING
PAVEMENT MARKING
STAGING

NE REGION DESIGN CONTACT PERSON

ANDREW FULCER
WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHEAST REGION
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: 920-362-6126
E-MAIL: ANDREW.FULCER@DOT.WI.GOV

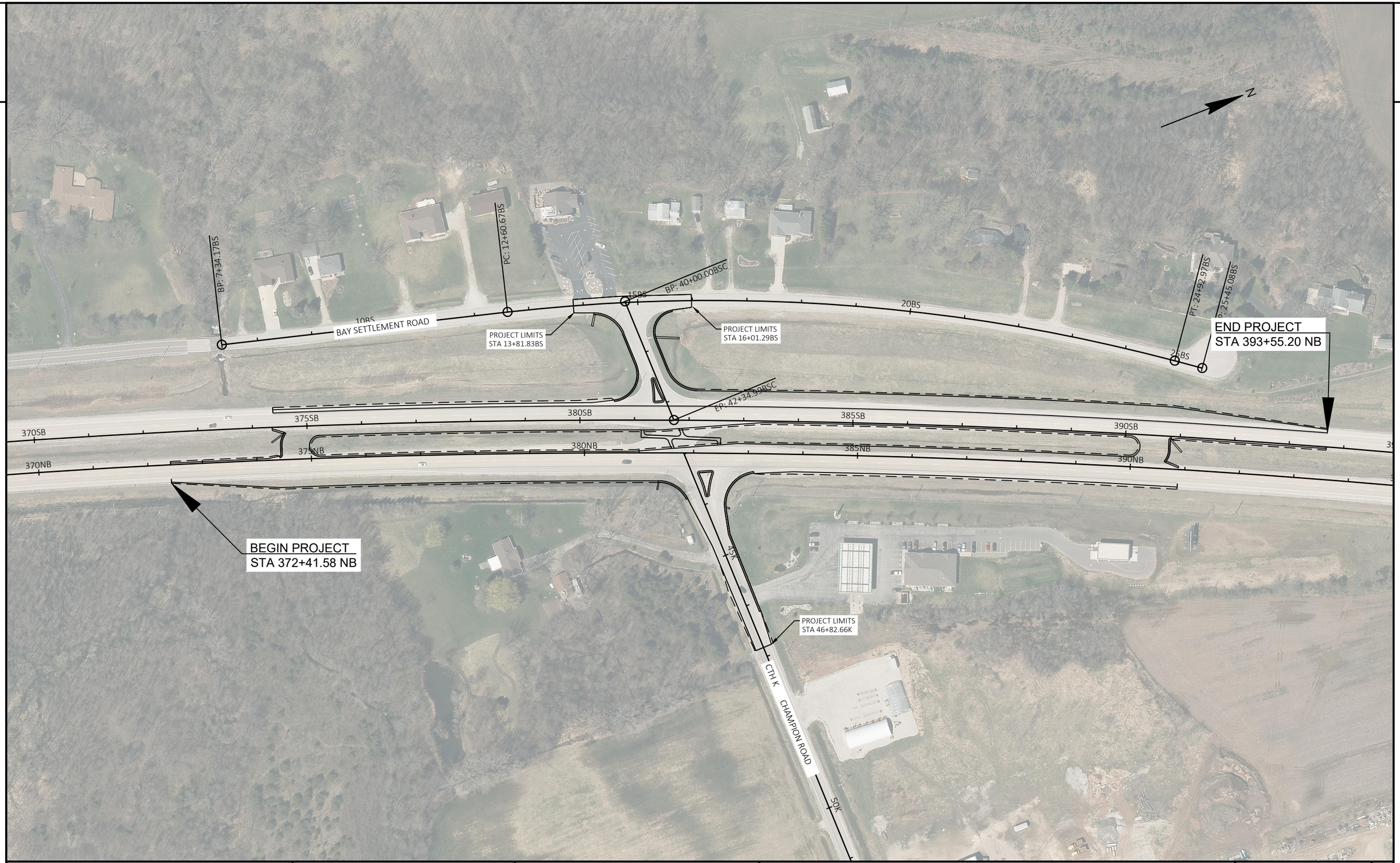
NE REGION SURVEY CONTACT PERSON

CORMAC MCINNIS
WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHEAST REGION
944 VANDERPERREN WAY
GREEN BAY, WI 54304
TEL: 920-492-5638
E-MAIL: CORMAC.MCINNIS@DOT.WI.GOV

DNR AREA LIAISON

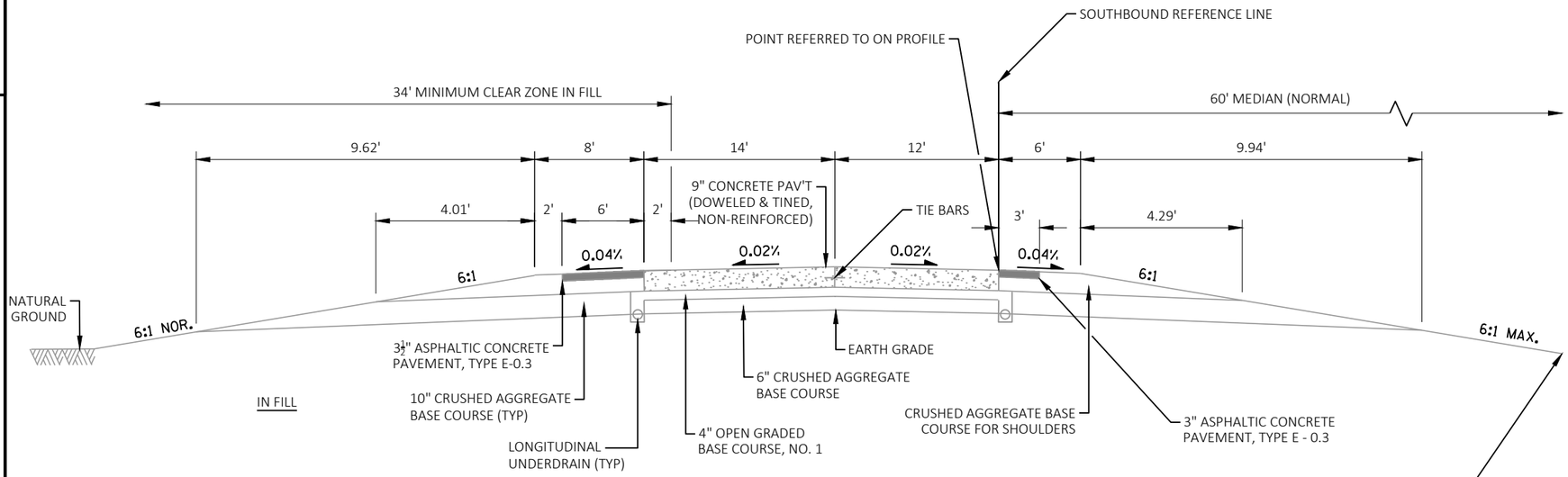
JIM DOPERALSKI JR.
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2984 SHAWANO AVENUE
GREEN BAY, WI 54313-6727
PHONE: 920-662-5119
FAX: 920-662-5159
E-MAIL: JAMES.DOPERALSKI@WISCONSIN.GOV

2

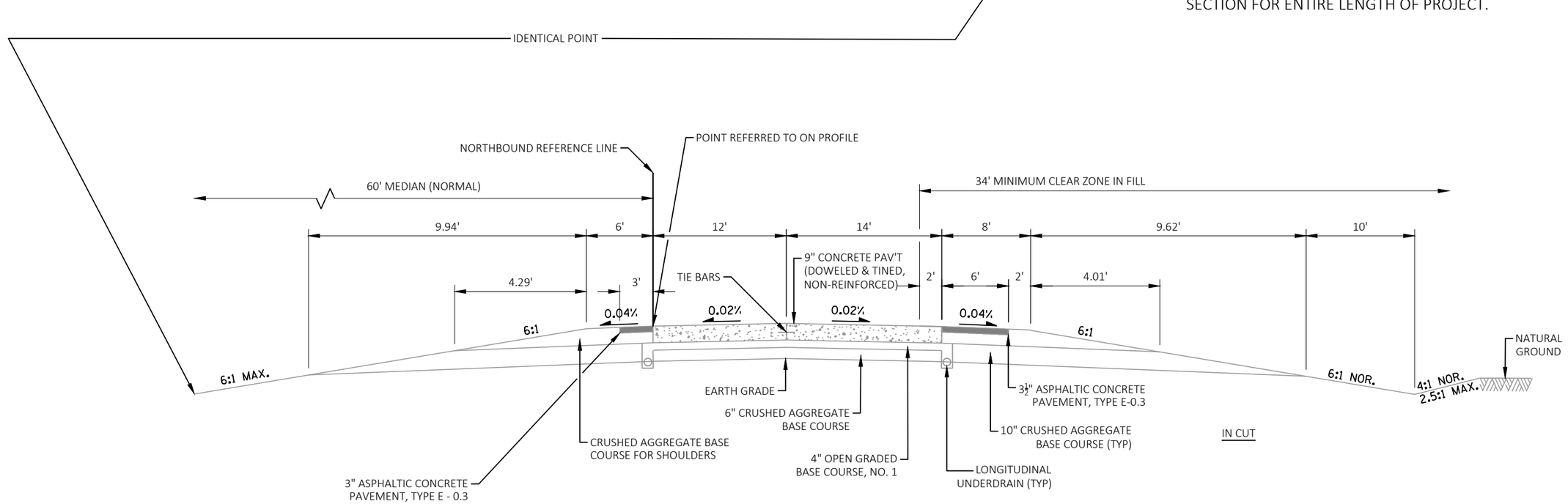


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PROJECT OVERVIEW	SHEET 3	E

2



NOTE: STH 57 NB AND STH 57 SB ARE LOCATED WITHIN A FULL 2% SUPERELEVATED SECTION FOR ENTIRE LENGTH OF PROJECT.

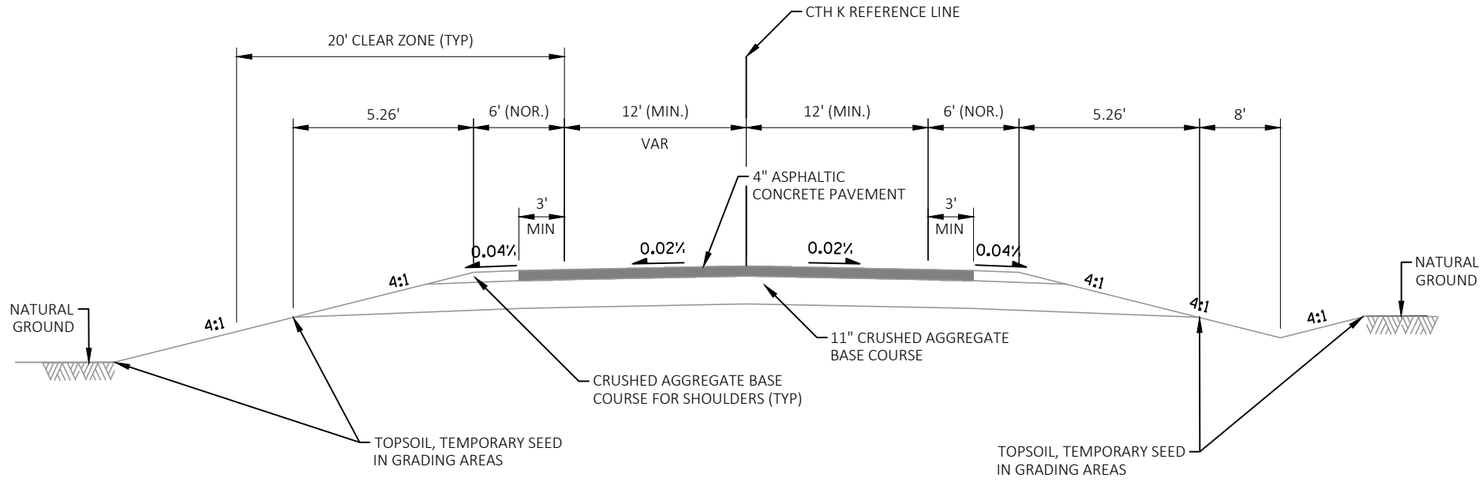


EXISTING TYPICAL SECTION STH 57

STA 373+08.68NB TO STA 392+11.45NB

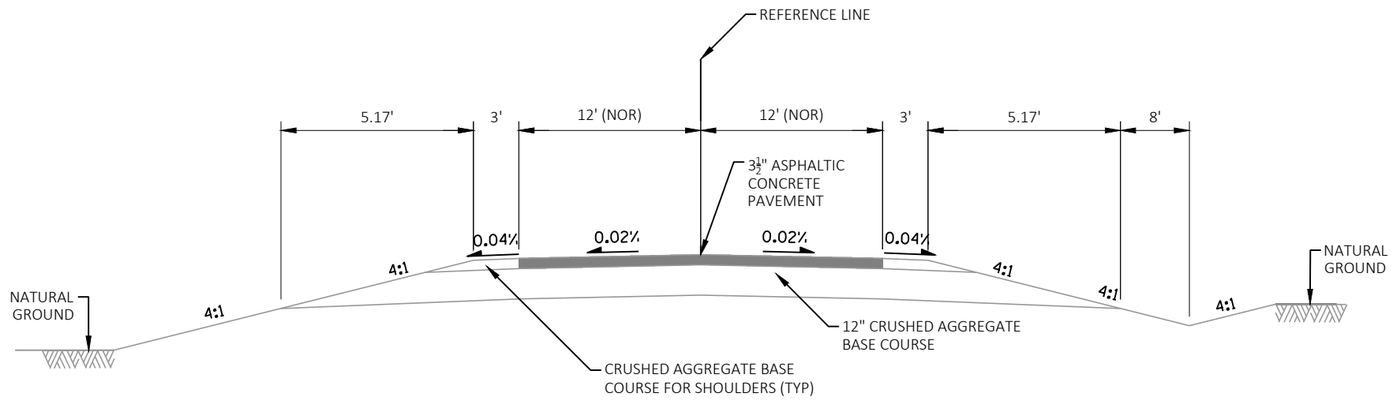
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 4	E

2



EXISTING TYPICAL SECTION CTH K

STA 43+26.05 TO STA 46+82.66

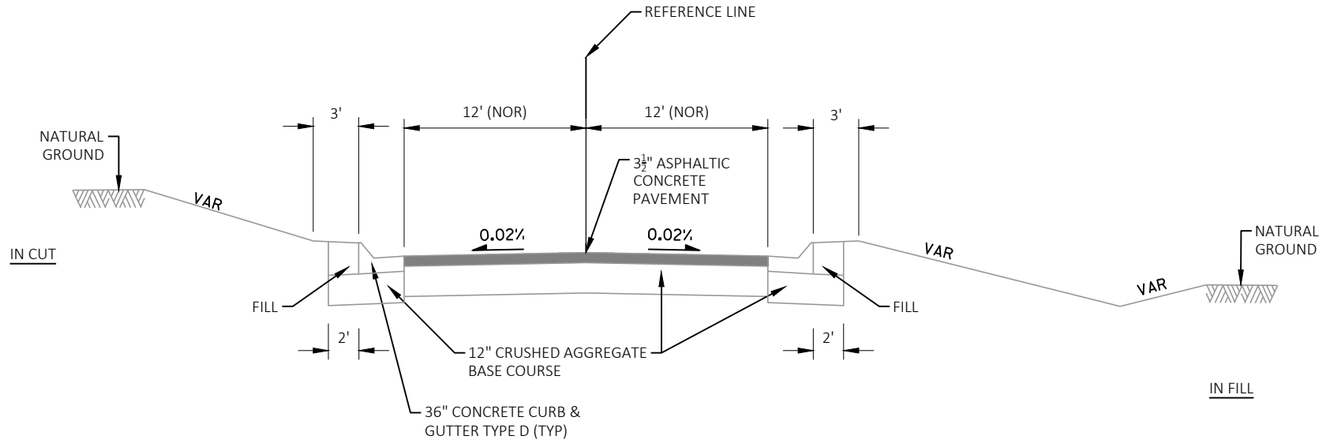


EXISTING TYPICAL SECTION BAY SETTLEMENT ROAD

STA 13+81.83 TO STA 16+01.29

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 5	E

2



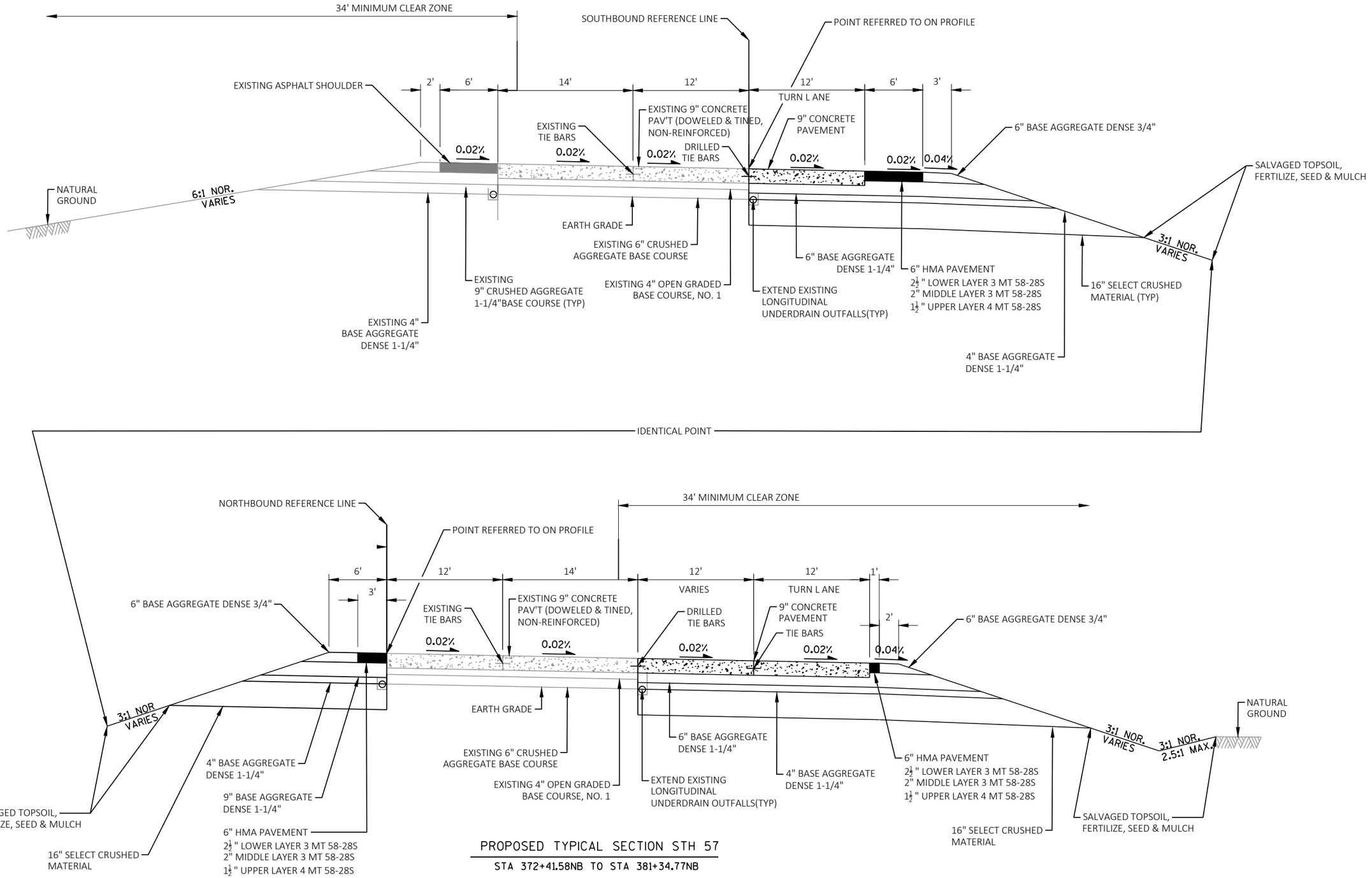
EXISTING TYPICAL SECTION BAY CONNECTOR ROAD

STA 40+02.15 TO STA 42+06.99

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020303-ts
PLOT DATE : 9/9/2021 10:44 AM
PLOT BY : DUMS, ALEXANDER T
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

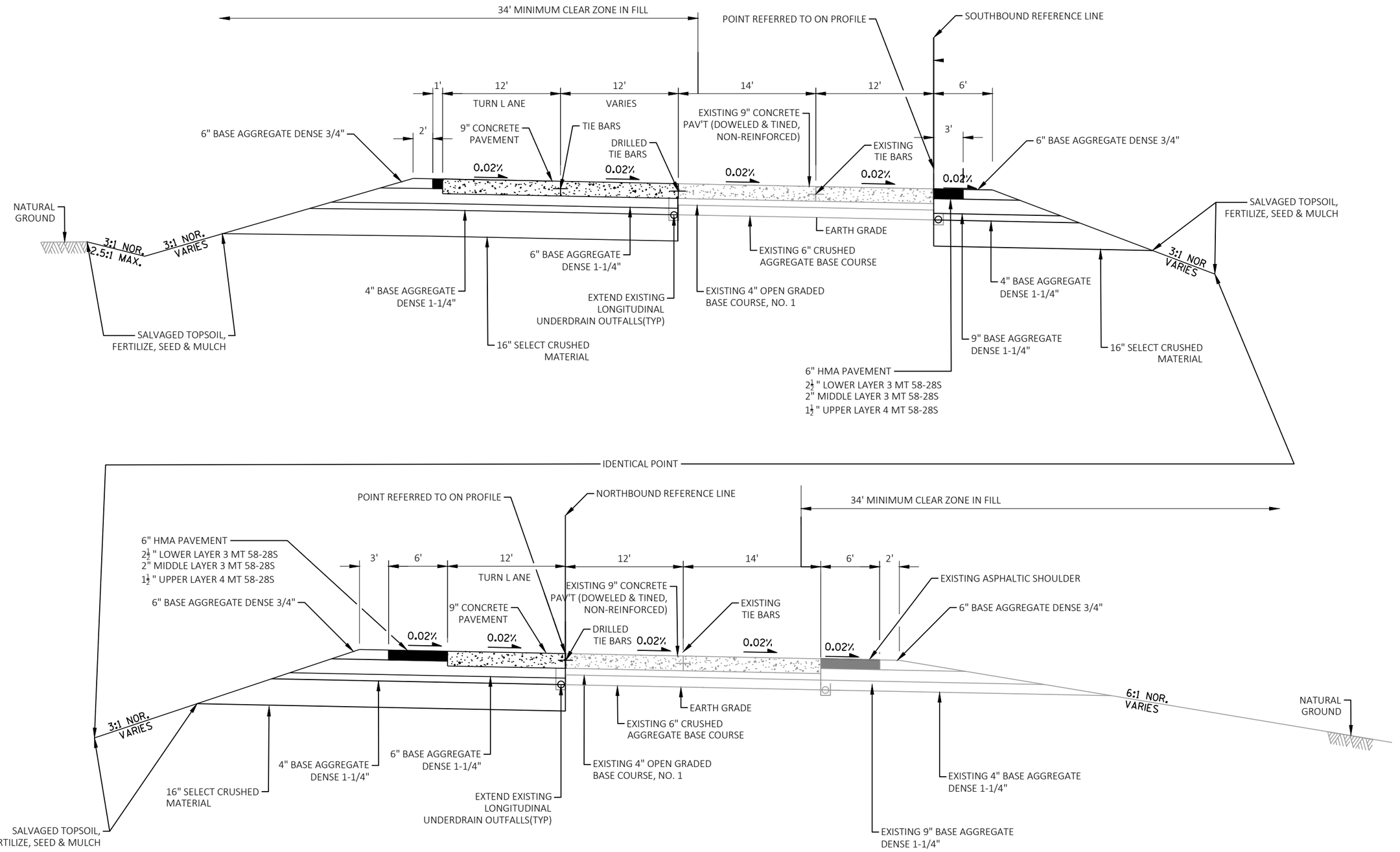


PROPOSED TYPICAL SECTION STH 57

STA 372+41.58NB TO STA 381+34.77NB

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 7	E

2

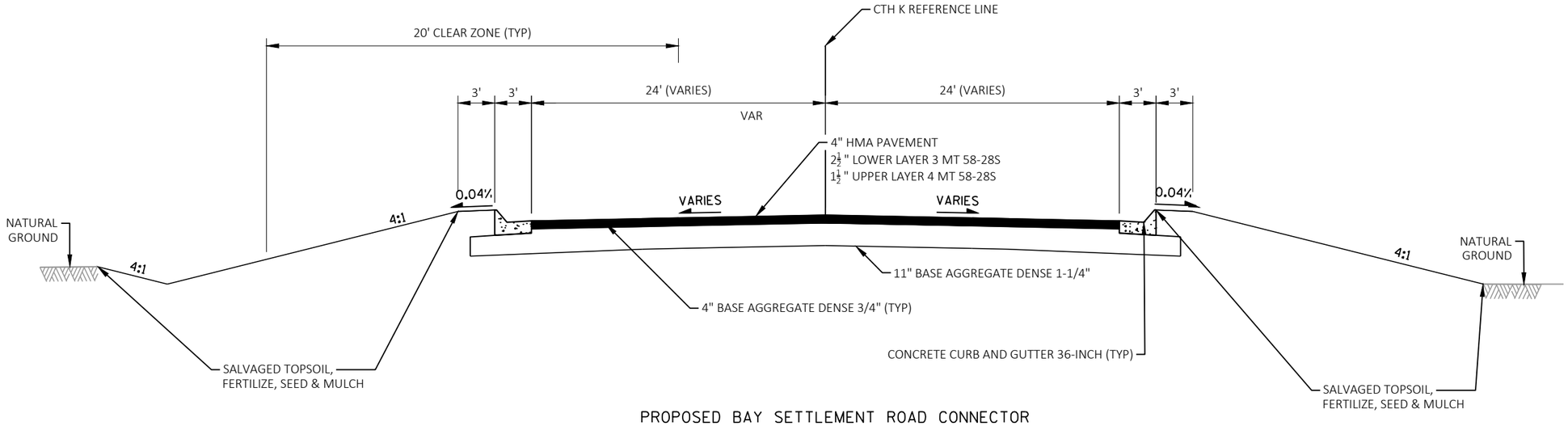


PROPOSED TYPICAL SECTION STH 57

STA 381+34.77NB TO STA 393+55.20NB

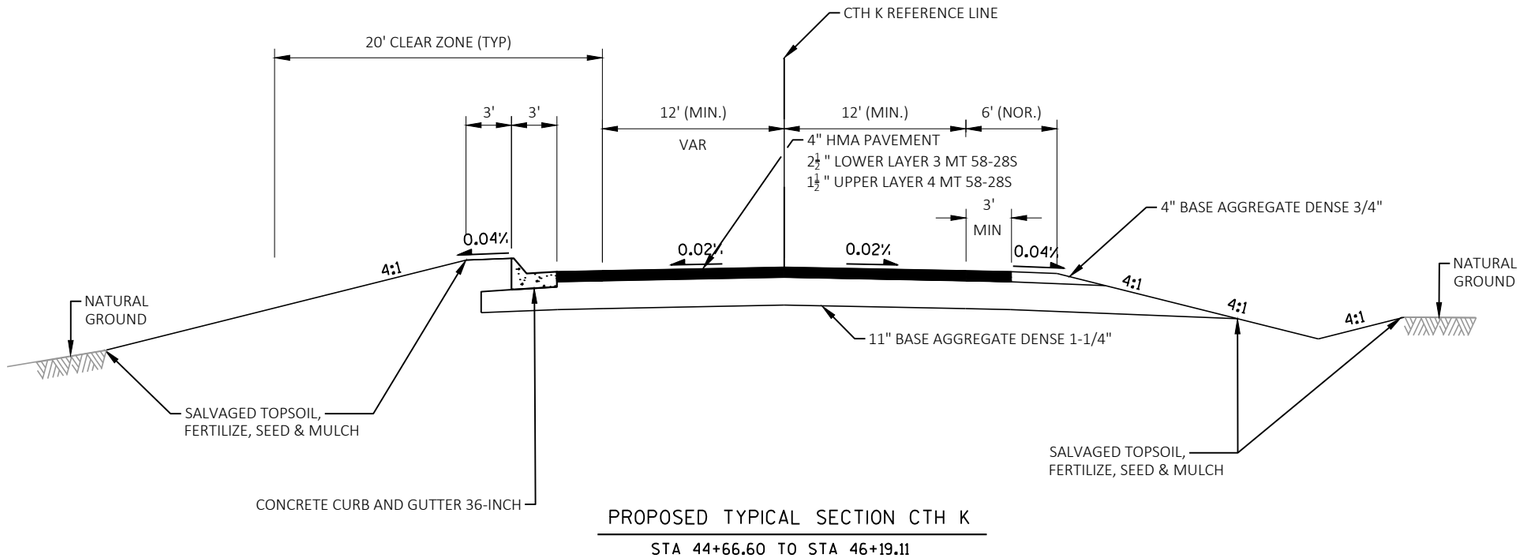
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 8	E

2



PROPOSED BAY SETTLEMENT ROAD CONNECTOR

STA 40+02.15 TO STA 41+19.00

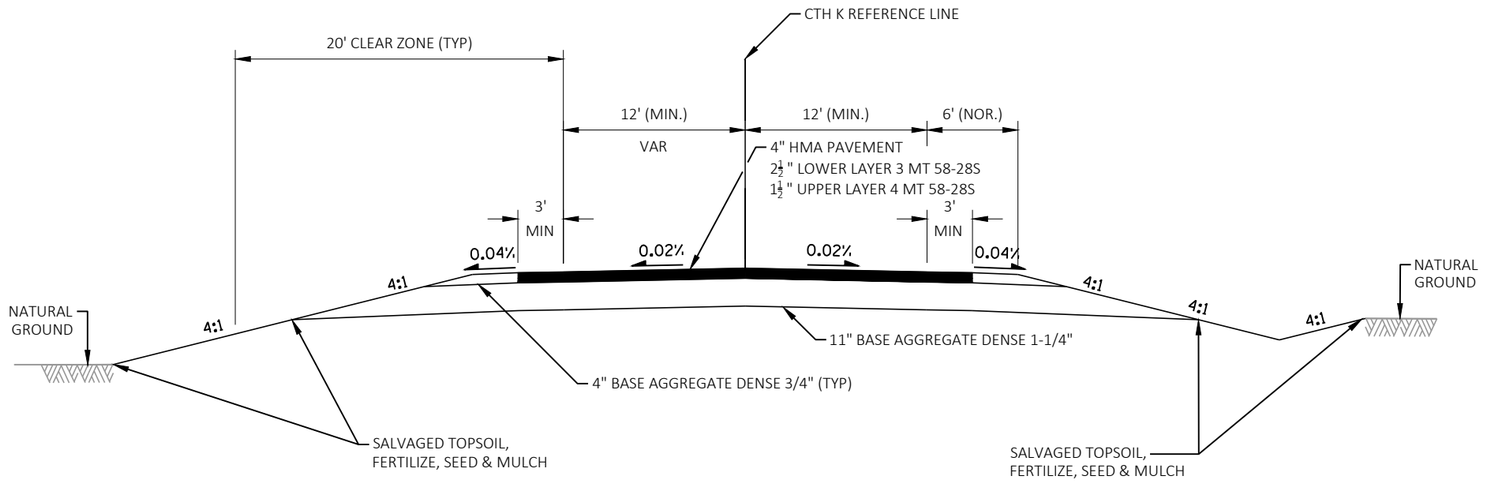


PROPOSED TYPICAL SECTION CTH K

STA 44+66.60 TO STA 46+19.11

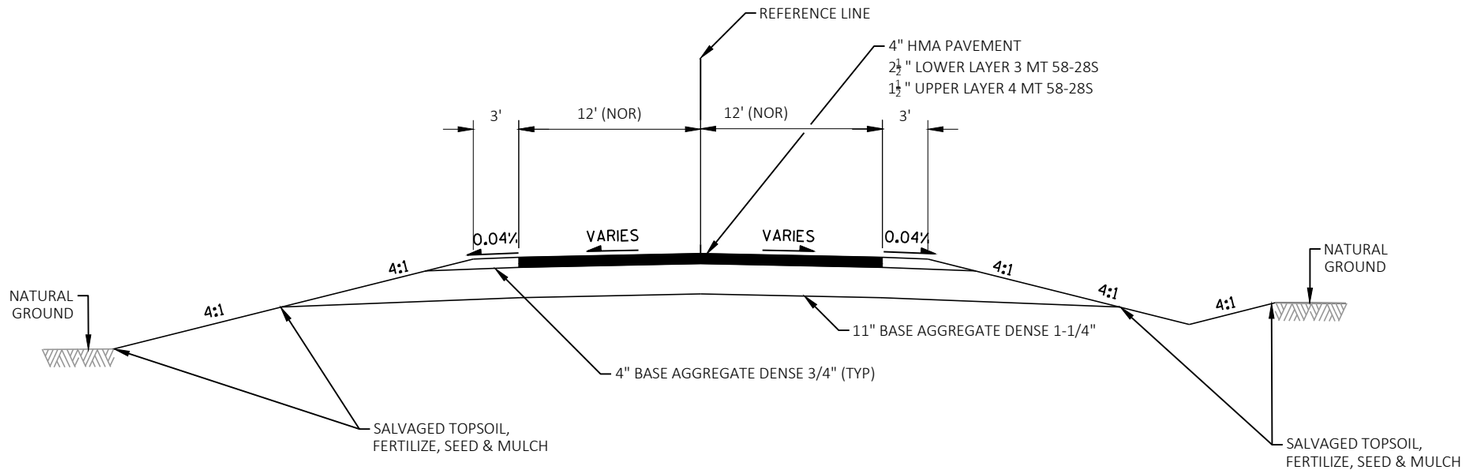
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	TYPICAL SECTIONS	SHEET 9	E

2



PROPOSED TYPICAL SECTION CTH K

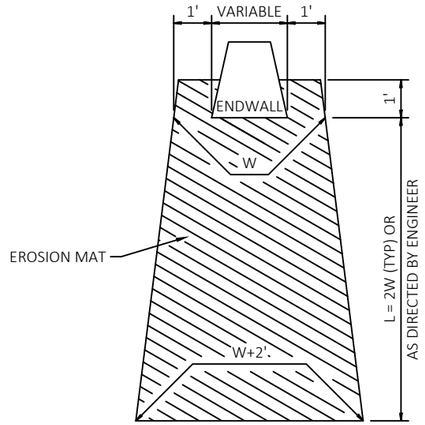
STA 46+19.11 TO STA 46+82.66



PROPOSED TYPICAL SECTION BAY SETTLEMENT ROAD

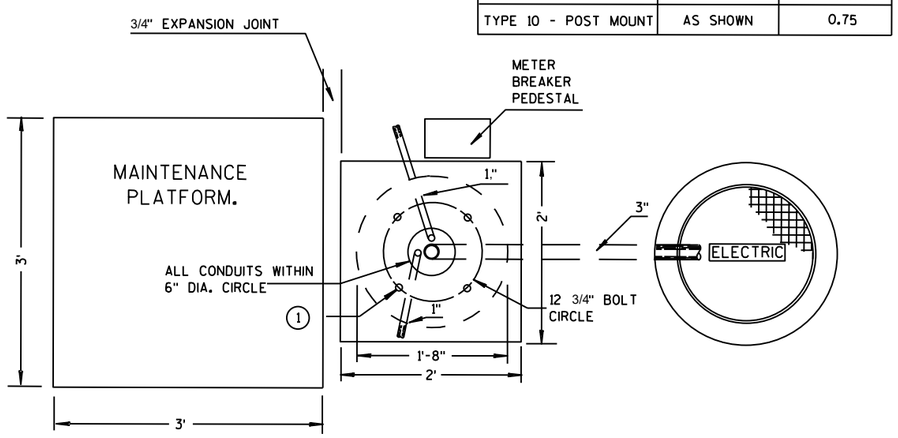
STA 13+81.83 TO STA 16+01.29

2

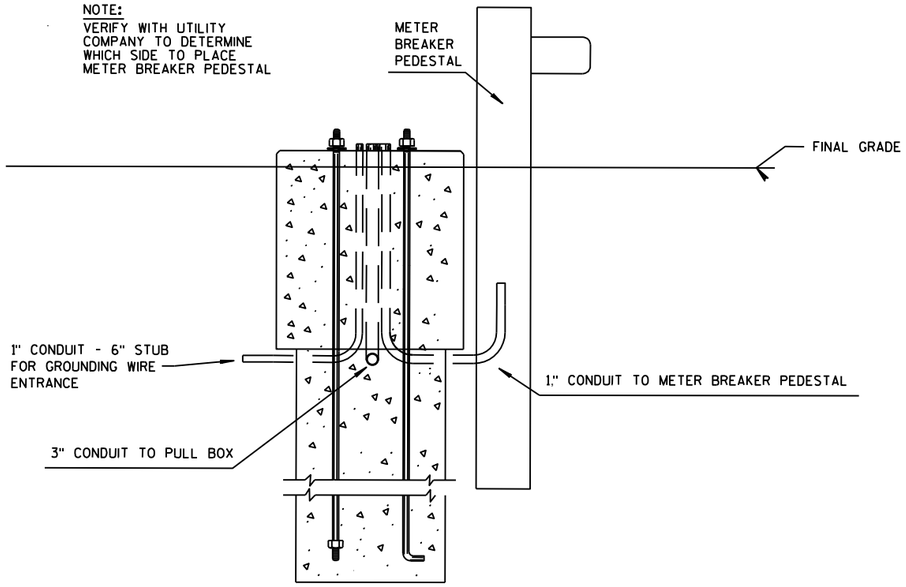


EROSION MAT TREATMENT AT CULVERTS

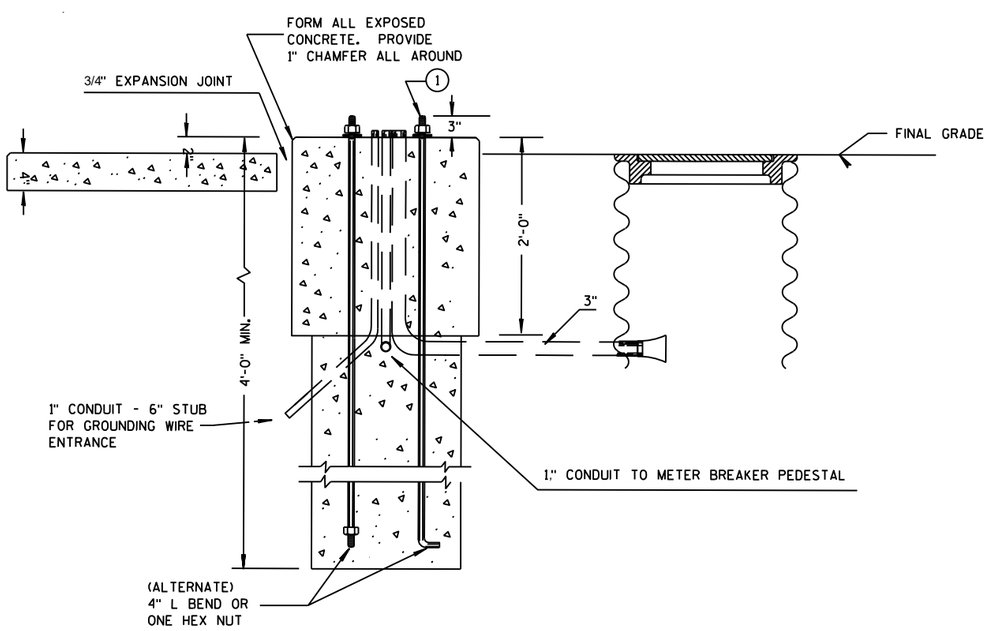
CONTROL CABINET BASE TYPE	DIMENSIONS	C.Y. CONCRETE (APPROX.)
TYPE 10 - POST MOUNT	AS SHOWN	0.75



PLAN VIEW



FRONT VIEW



PROFILE VIEW

GENERAL NOTES

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

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.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

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

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

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

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6"
ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449, OR ASTM. A-687 (GRADE 105).

120/240 VOLT ELECTRIC SERVICE

DATE: 8/9/2018

SHEET NO. 1 OF 1

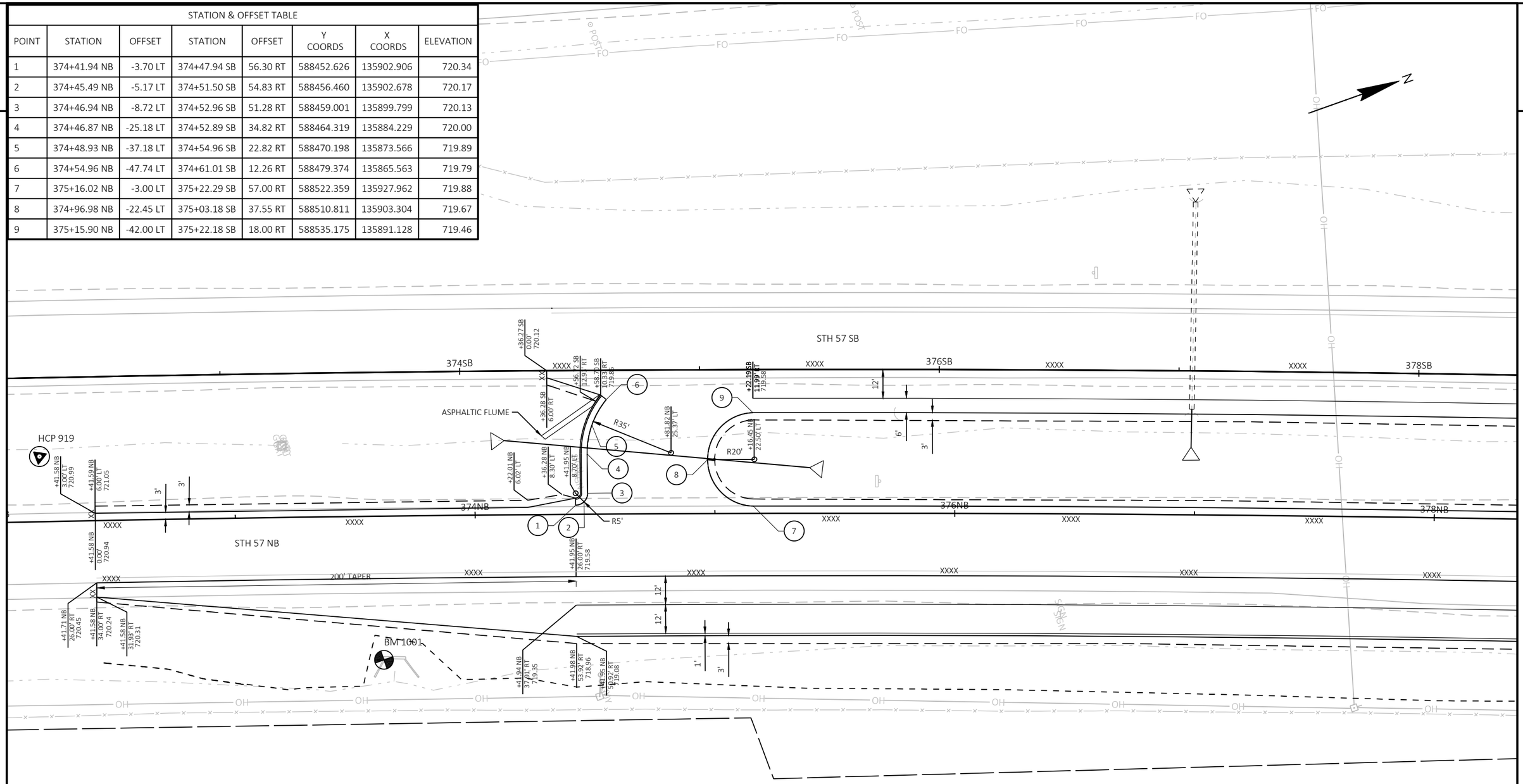
PROJECT NO: 1480-29-00	HWY: STH 57	COUNTY: BROWN	CONSTRUCTION DETAIL - LIGHTING CABINET TYPE 10 NER	SHEET 12	E

FILE NAME : C:\USERS\DOTMXT\DESKTOP\57 & K RAB\57 & K LIGHITNG.DWG
LAYOUT NAME - Plan 1 IN 40 FT (2)

PLOT DATE : 2/15/2021 1:30 PM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : _____ PLOT SCALE : ########## WISDOT/CADDS SHEET 42

2

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
1	374+41.94 NB	-3.70 LT	374+47.94 SB	56.30 RT	588452.626	135902.906	720.34
2	374+45.49 NB	-5.17 LT	374+51.50 SB	54.83 RT	588456.460	135902.678	720.17
3	374+46.94 NB	-8.72 LT	374+52.96 SB	51.28 RT	588459.001	135899.799	720.13
4	374+46.87 NB	-25.18 LT	374+52.89 SB	34.82 RT	588464.319	135884.229	720.00
5	374+48.93 NB	-37.18 LT	374+54.96 SB	22.82 RT	588470.198	135873.566	719.89
6	374+54.96 NB	-47.74 LT	374+61.01 SB	12.26 RT	588479.374	135865.563	719.79
7	375+16.02 NB	-3.00 LT	375+22.29 SB	57.00 RT	588522.359	135927.962	719.88
8	374+96.98 NB	-22.45 LT	375+03.18 SB	37.55 RT	588510.811	135903.304	719.67
9	375+15.90 NB	-42.00 LT	375+22.18 SB	18.00 RT	588535.175	135891.128	719.46



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
919	372+18.83	HCP - IRON PIPE WITH CAP	718.04	588,248.62	135,809.13
1001	373+61.12	BM - HMOD BRASS CAP	718.59	588,355.78	135,936.96

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN DETAILS	SHEET 13	E

2

2

N

+14.35 K
68.25' RT

+57.55 SB
83.21' LT

R50'

+14.49 K
23.25' RT
720.53

+46.46 K
23.58' RT
721.15

R60'

+14.70 SB
114.00' LT

+46.49 K
89.58' LT

+43.00 SB
90.08' LT

FENCE CHAIN LINK 5-FT

+57.37 SB
39.92' LT
???

+63.09 SB
36.54' LT
720.94

+00.44 SB
57.87' LT
720.67

ASPHALTIC SURFACE

+81.47 SB
64.21' LT
721.55

+14.70 SB
57.00' LT
722.36

+14.69 SB
54.08' LT
721.96

+14.67 SB
41.08' LT
721.70

+22.77 SB
31.98' LT
???

+63.46 SB
33.56' LT
720.88

+14.68 SB
26.06' LT
721.40

42K

381+71.98 SB
42+35.01K

380SB

382SB

384SB

378NB

380NB

382NB

384NB

+46.59 SB
17.00' RT
720.31

+46.57 SB
0.00'
720.56

+46.63 SB
21.00' RT
720.08

+36.38 SB
0.00'
721.44

+36.51 SB
6.00' RT
721.25

+36.38 SB
3.00' RT
721.38

190' TAPER

HCP 920

187' TAPER

+46.96 NB
46.00' LT
720.28

+93.03 NB
6.00' LT
720.20

+79.60 NB
20.68' LT
721.55

+79.63 NB
18.00' LT
721.48

+79.63 NB
0.00'
721.13

+80.68 NB
12.00' LT
721.38

381+81.82 NB
42+97.57K

+93.14 NB
3.00' LT
720.26

+93.14 NB
0.00'
720.32

+34.91 NB
38.28' RT
719.64

+34.95 NB
76.07' RT
719.88

+10.34 NB
33.31' RT
720.63

+85.52 NB
32.00' RT
???

ASPHALTIC SURFACE

+69.30 NB
56.80' RT
720.80

+17.69 NB
36.29' RT
720.56

+21.91 NB
37.65' RT
???

+82.59 NB
36.37' RT
???

+66.72 NB
59.69' RT
719.32

+35.09 NB
51.28' RT
719.38

+35.27 NB
54.27' RT
719.26

+77.35
25.17' RT
719.16

R60'

ASPHALTIC FLUME

+35.90 NB
111.27' RT

+82.80 K
84.92' RT

44K

+17.45 NB
92.89' RT

+35.71 K
88.53' LT

+21.52 K
30.13' LT
719.27

ASPHALTIC FLUME

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
920	380+91.71	HCP - IRON PIPE WITH CAP	719.98	589,073.76	136,098.79

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN DETAILS	SHEET 14	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021202-pd

PLOT DATE : 7/30/2021 7:26 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

+20.70 SB
96.66' LT

FENCE CHAIN LINK 5-FT

+55.66 SB
87.92' LT

1'
3'
12'
15'

XXXX

384SB
386SB
388SB
390SB

3'
6'
12'

+96.18 NB
37.51' LT

384NB
386NB
388NB
390NB

+96.63 NB
12.00' LT
724.44

+96.63 NB
0.00'
724.20

+88.52 NB
32.00' RT
???

+82.59 NB
36.37' RT
???

BM 1004

OH

BENCH MARKS

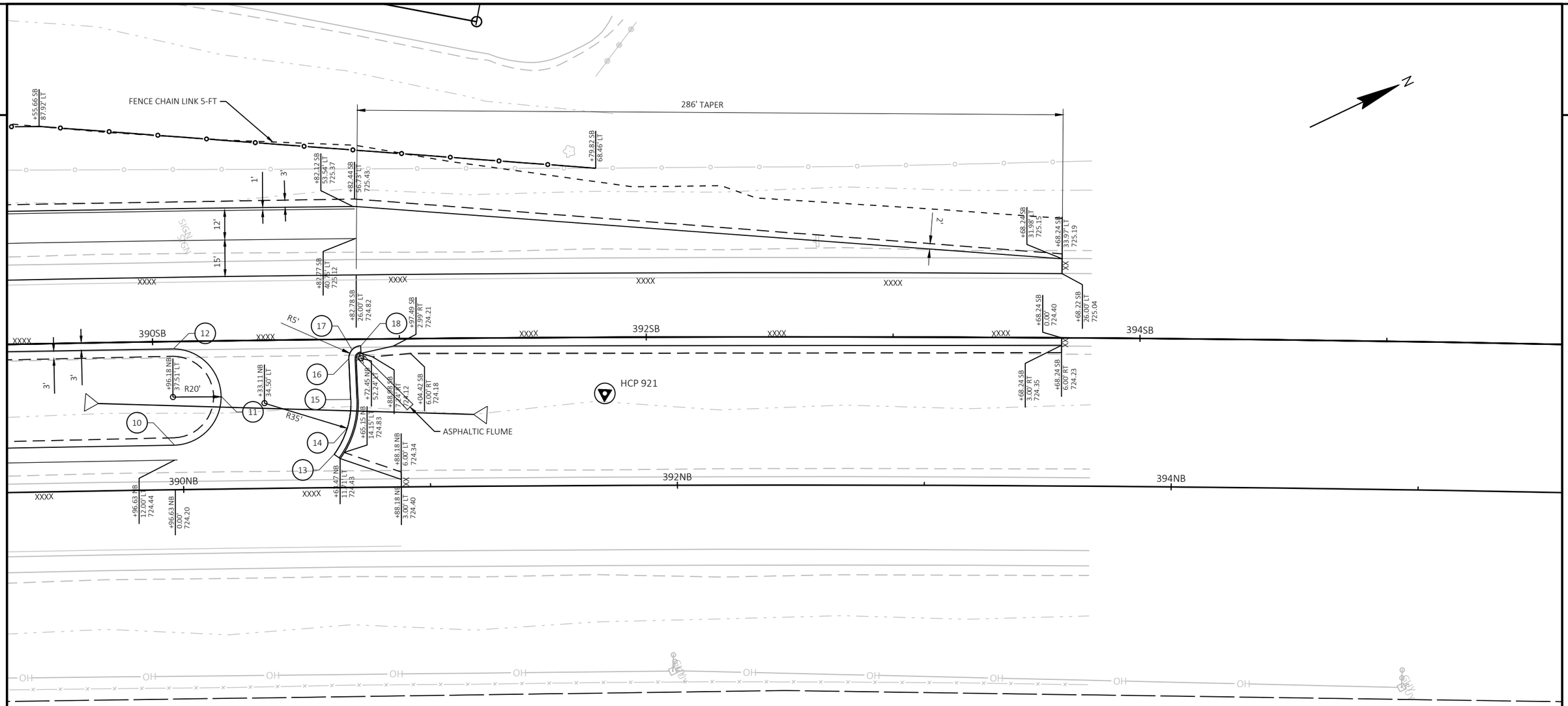
NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
1004	386+07.50	BM - MAG IN PPOL 2422 6R2	722.43	--	--

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN DETAILS	SHEET 15	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 7/30/2021 7:26 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
921	390+70.7	HCP - IRON PIPE WITH CAP	721.86	590,067.93	136,523.51

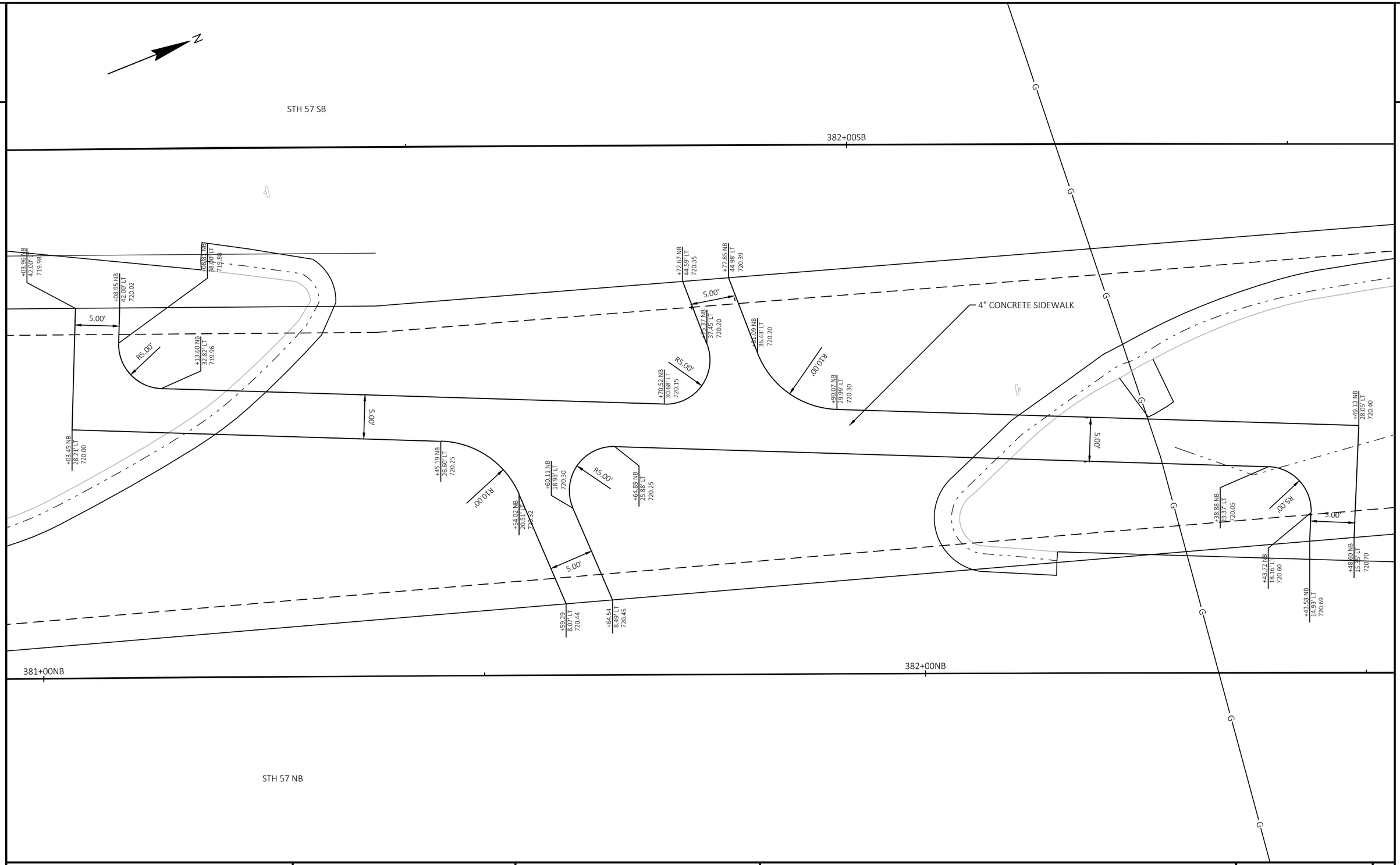
STATION & OFFSET TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
10	389+96.63 NB	-18.01 LT	390+08.34 SB	41.99 RT	589901.692	136467.588	724.56
11	390+15.64 NB	-37.52 LT	390+27.41 SB	22.48 RT	589927.119	136457.767	724.31
12	389+96.63 NB	-57.00 LT	390+08.34 SB	3.00 RT	589917.886	136432.120	724.06
13	390+61.07 NB	-13.51 LT	390+73.02 SB	46.49 RT	589958.439	136498.587	724.43
14	390+66.43 NB	-23.98 LT	390+78.39 SB	36.02 RT	589967.693	136491.332	724.37
15	390+68.02 NB	-35.63 LT	390+79.99 SB	24.37 RT	589974.022	136481.422	724.30
16	390+67.47 NB	-52.07 LT	390+79.44 SB	7.93 RT	589980.423	136466.265	724.21
17	390+68.83 NB	-55.66 LT	390+80.80 SB	4.34 RT	589983.161	136463.572	724.19
18	390+72.32 NB	-57.23 LT	390+84.30 SB	2.77 RT	589987.001	136463.615	724.30

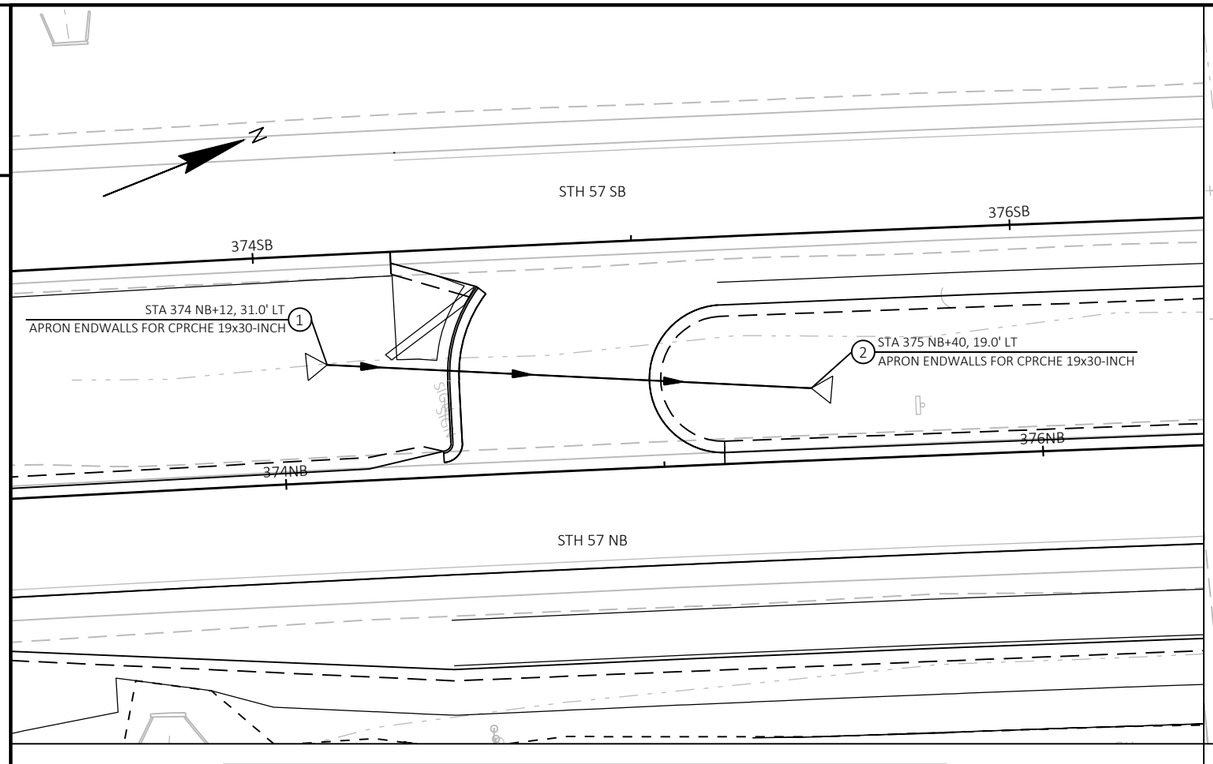
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN DETAILS	SHEET 16	E

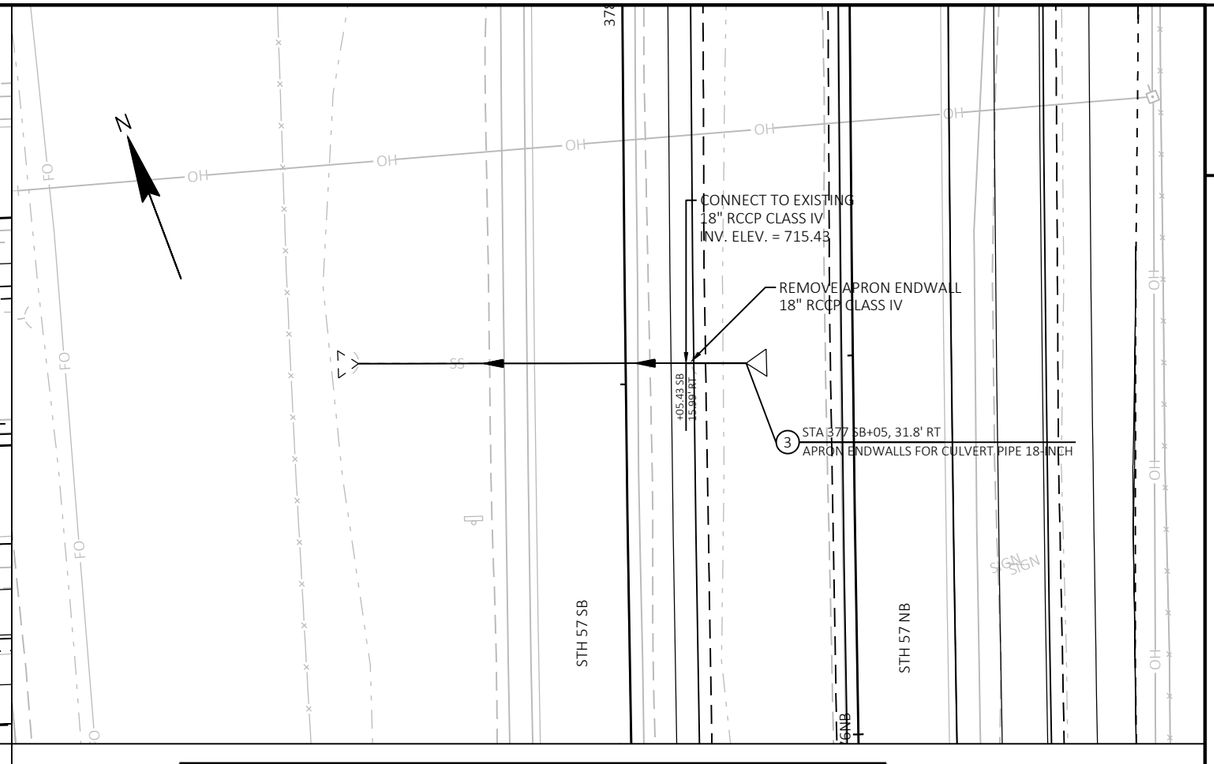
FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021204-pd
PLOT DATE : 7/30/2021 7:26 AM
PLOT BY : DUMS, ALEXANDER T
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

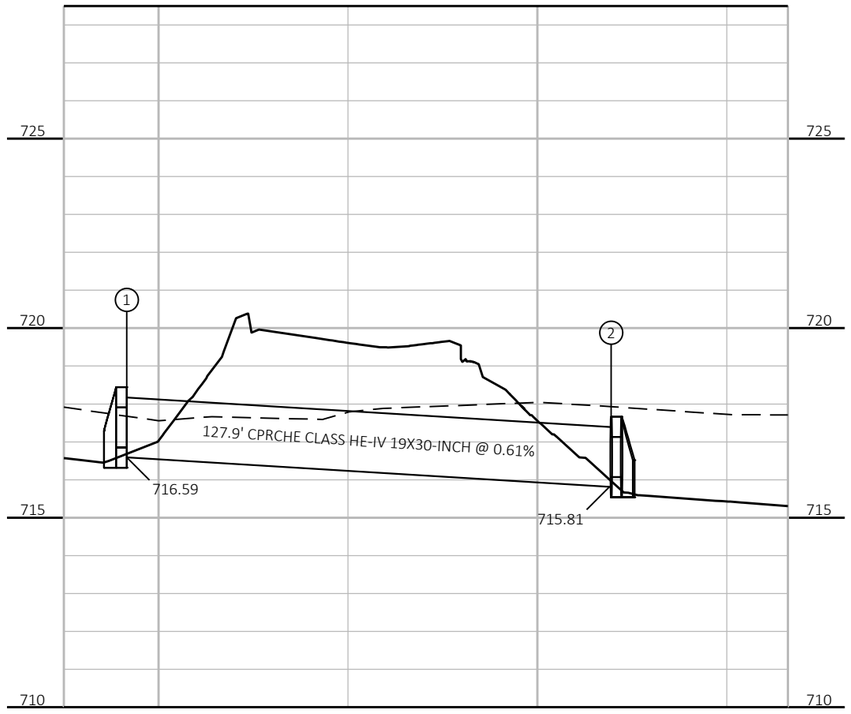
2

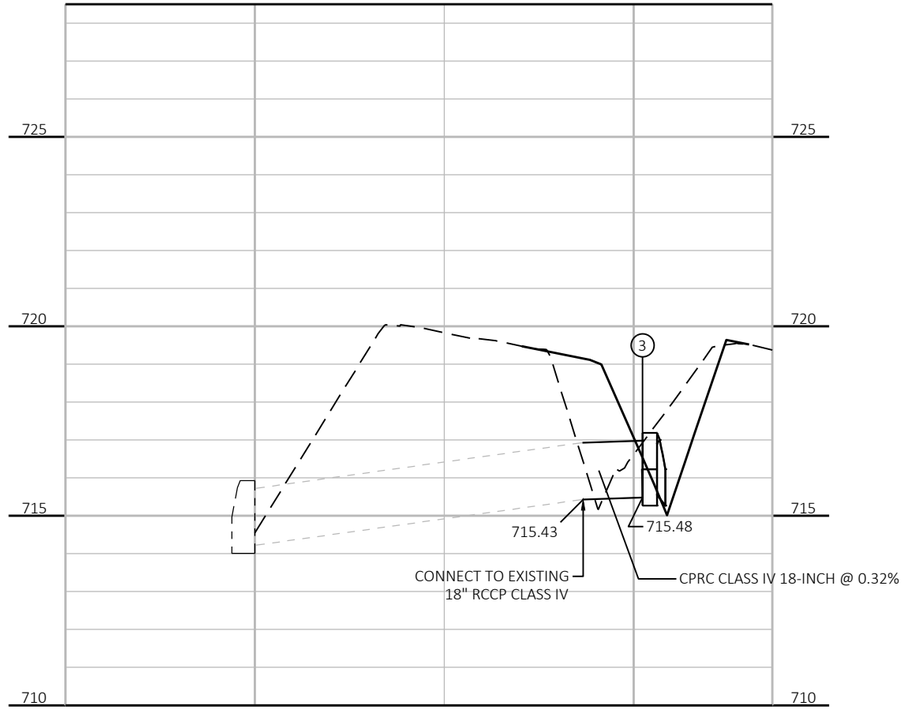


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	MEDIAN BIKE CROSSING DETAILS	SHEET 17	E

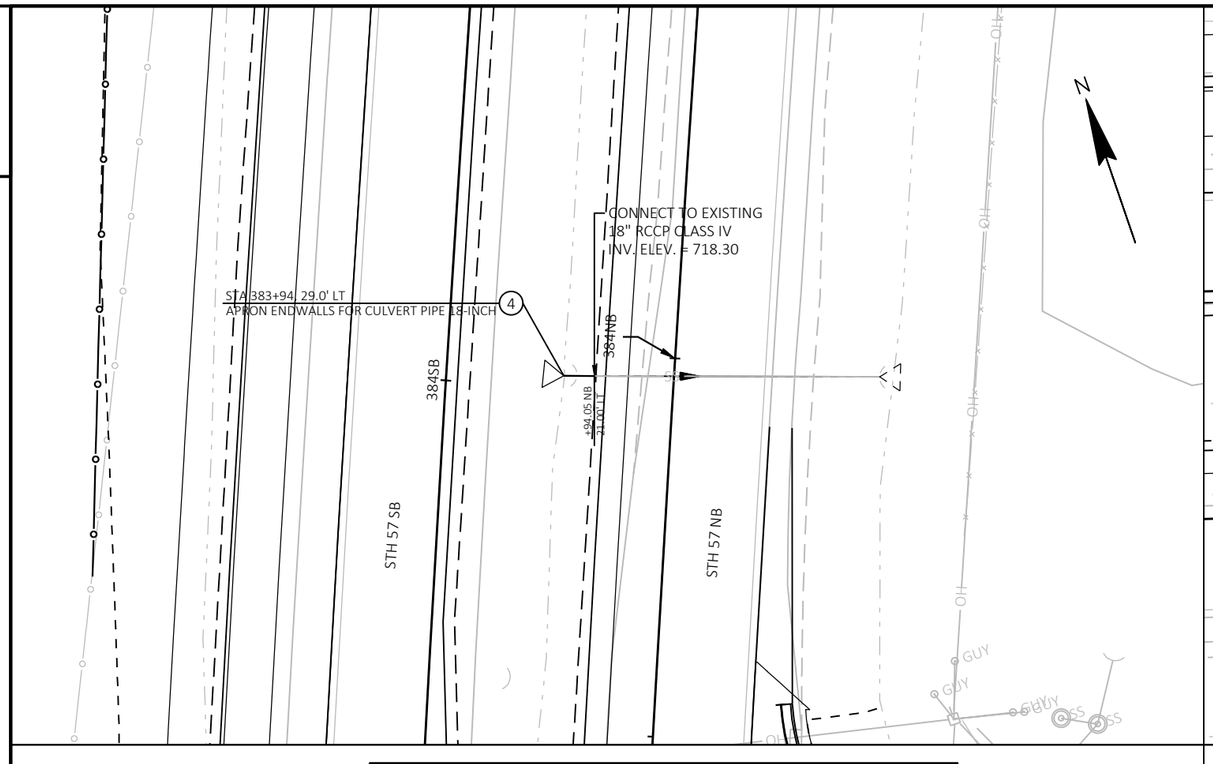


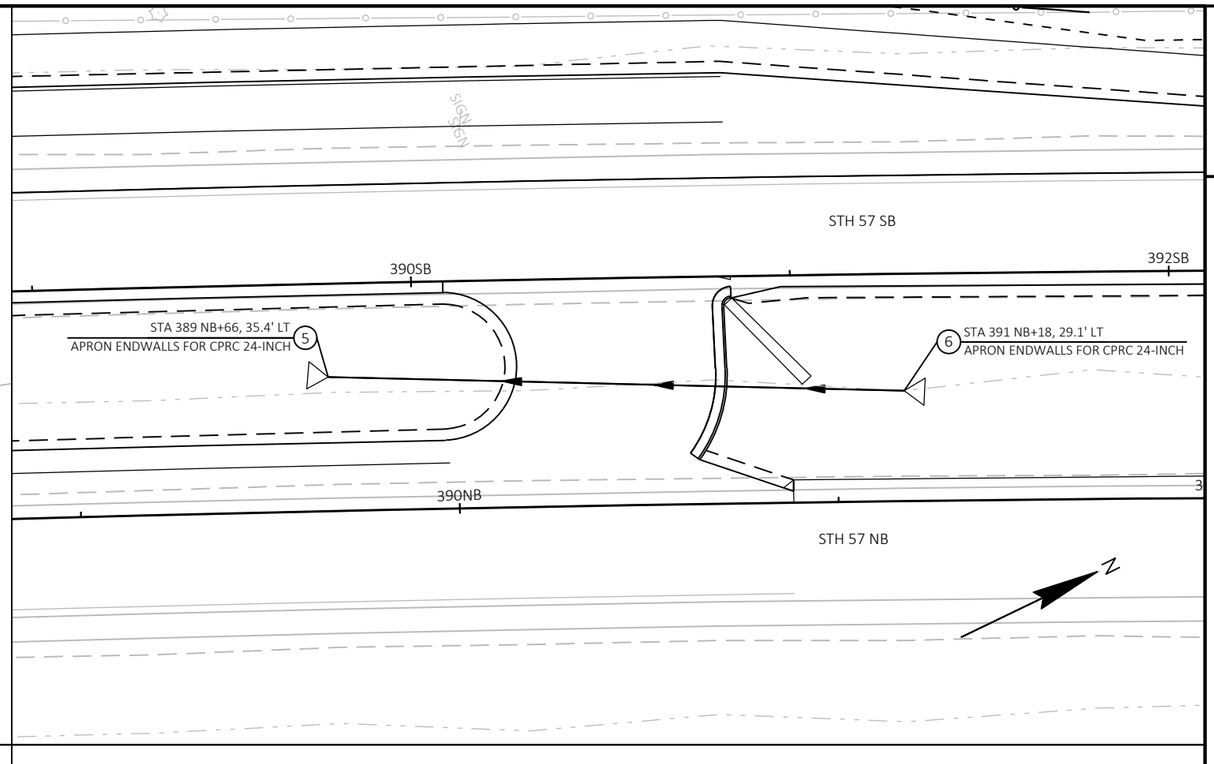


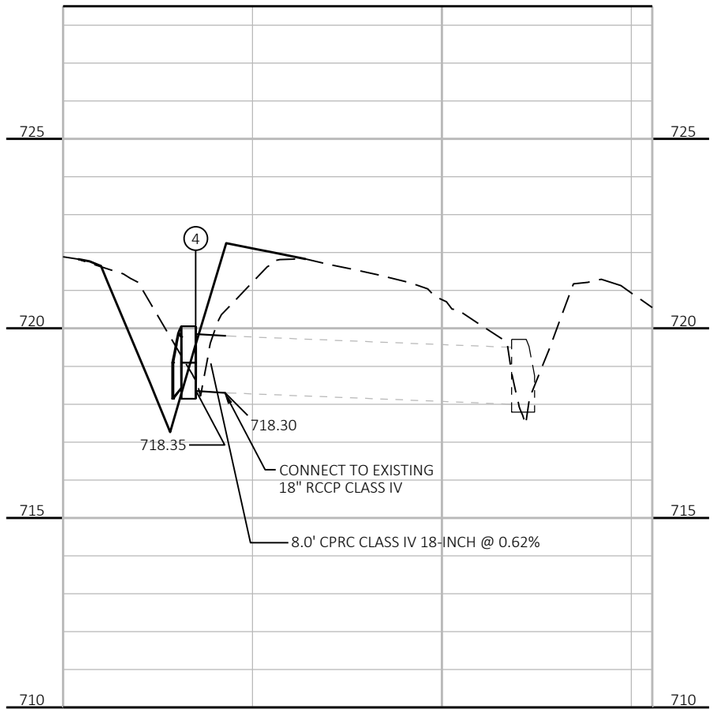


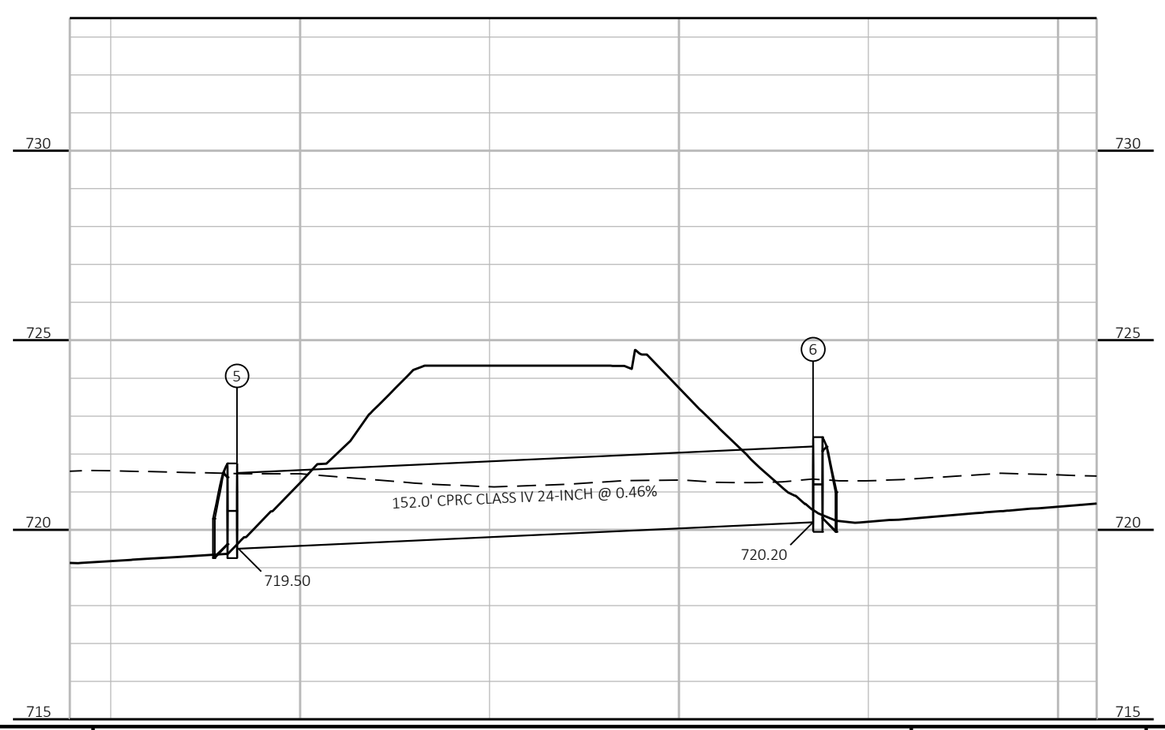


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CULVERT PIPE PLAN DETAILS	SHEET 18	E



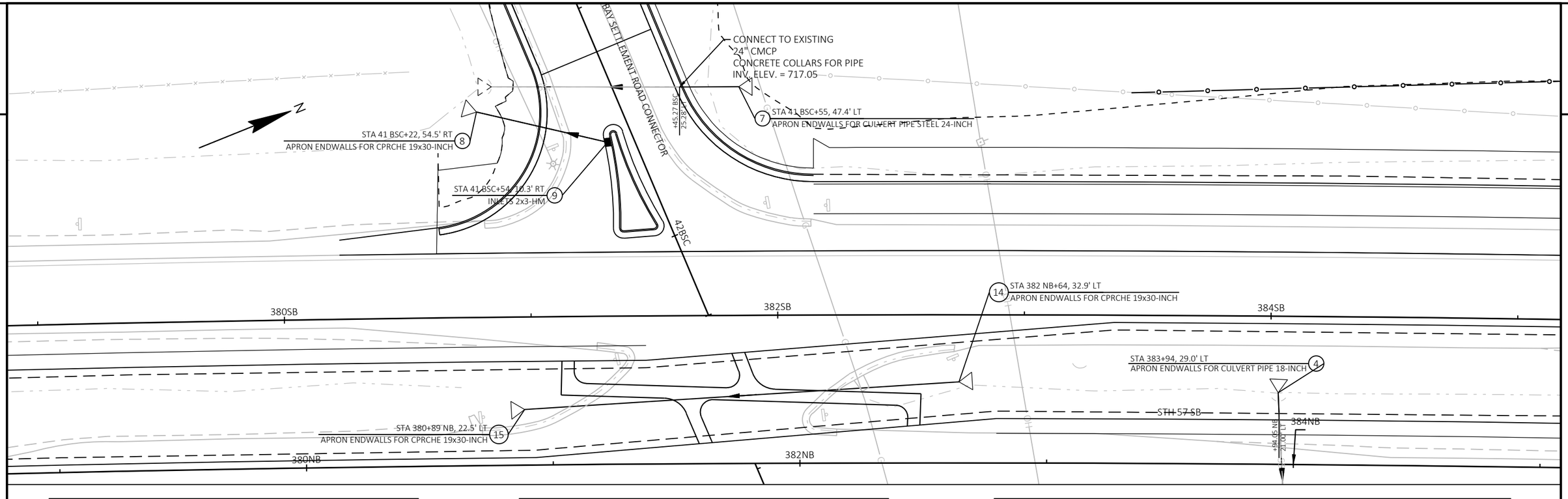


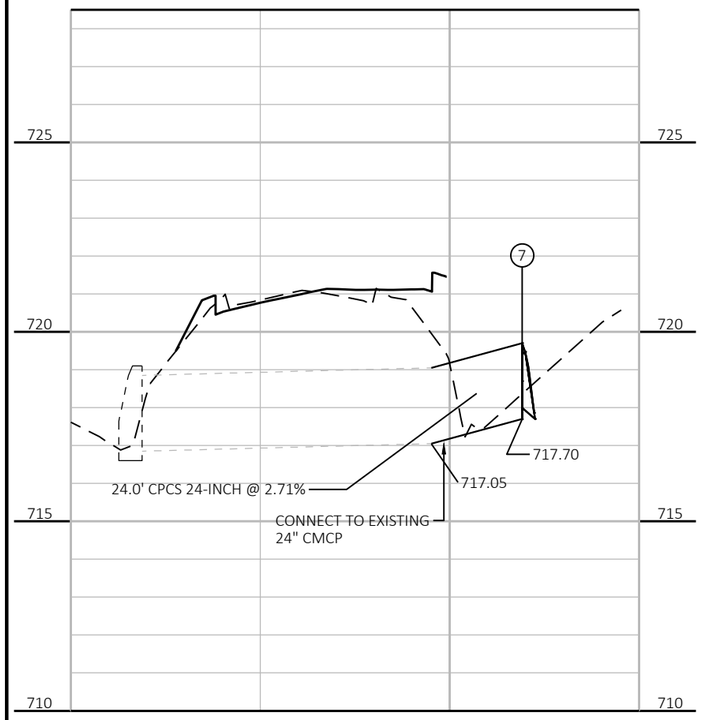


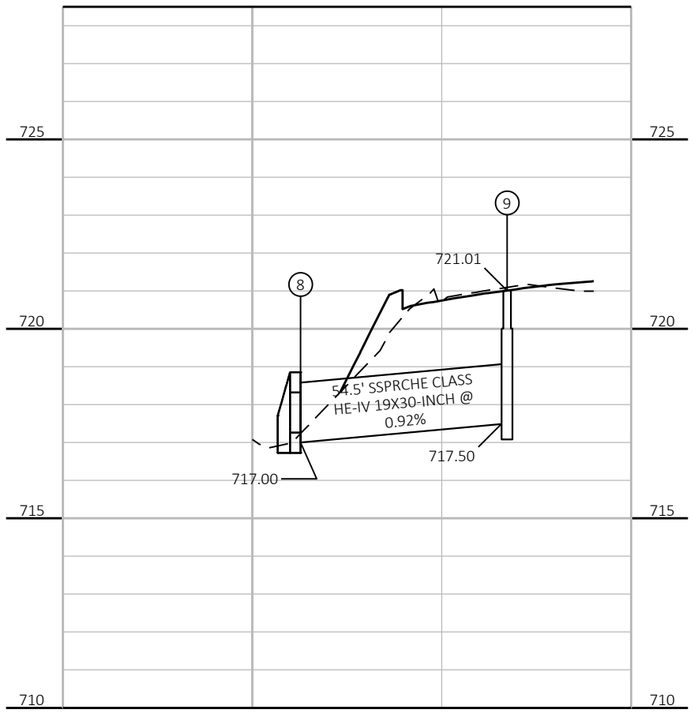


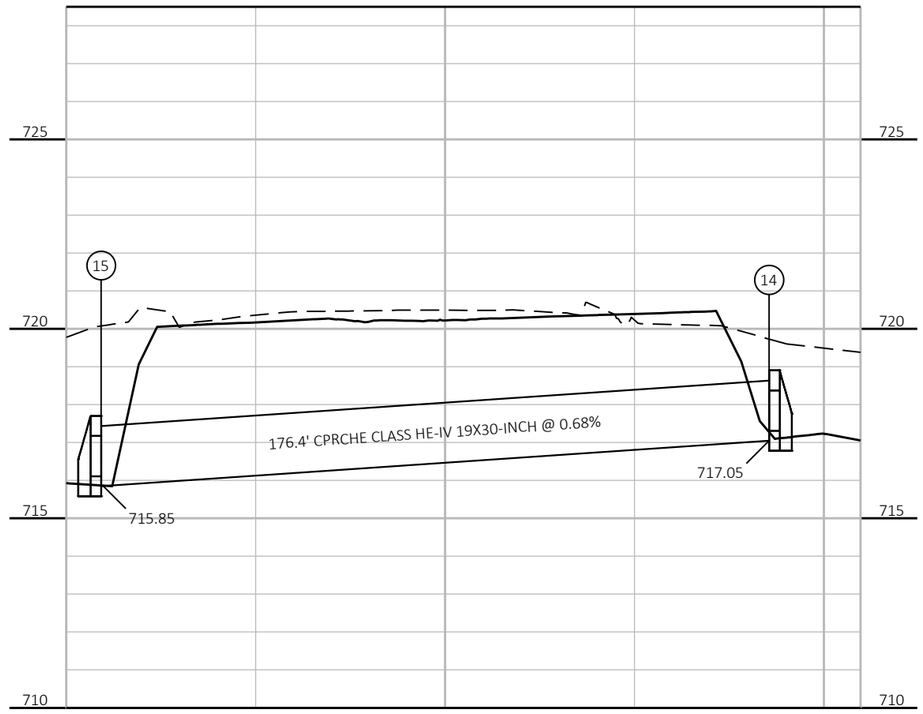
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CULVERT PIPE PLAN DETAILS	SHEET 19	E

2

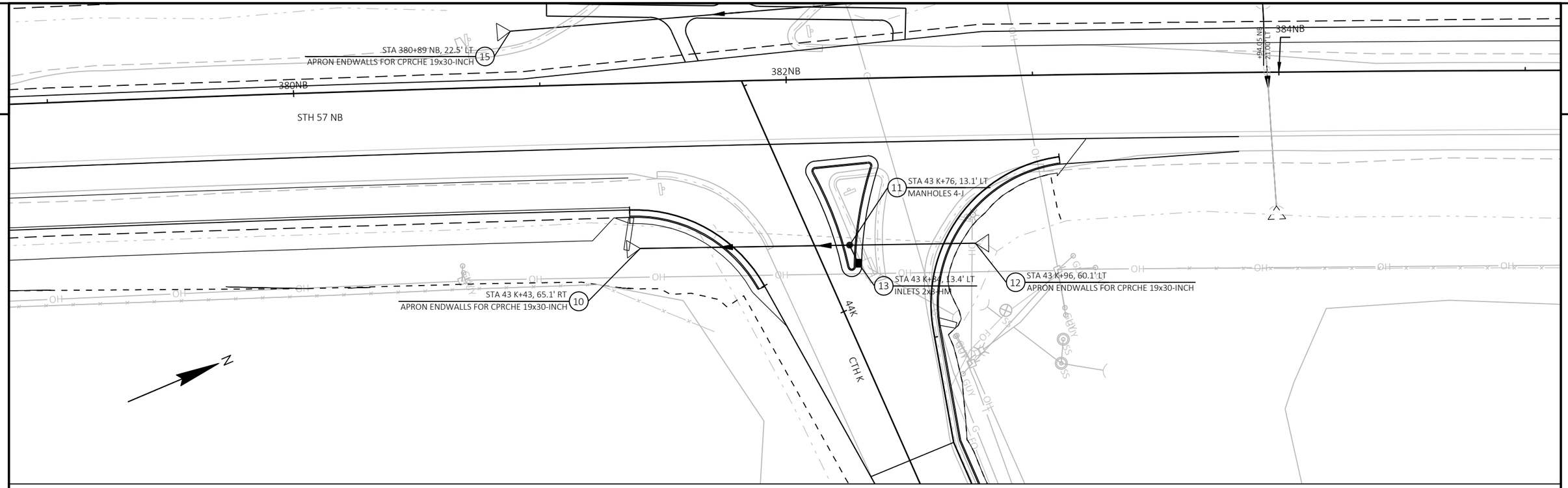


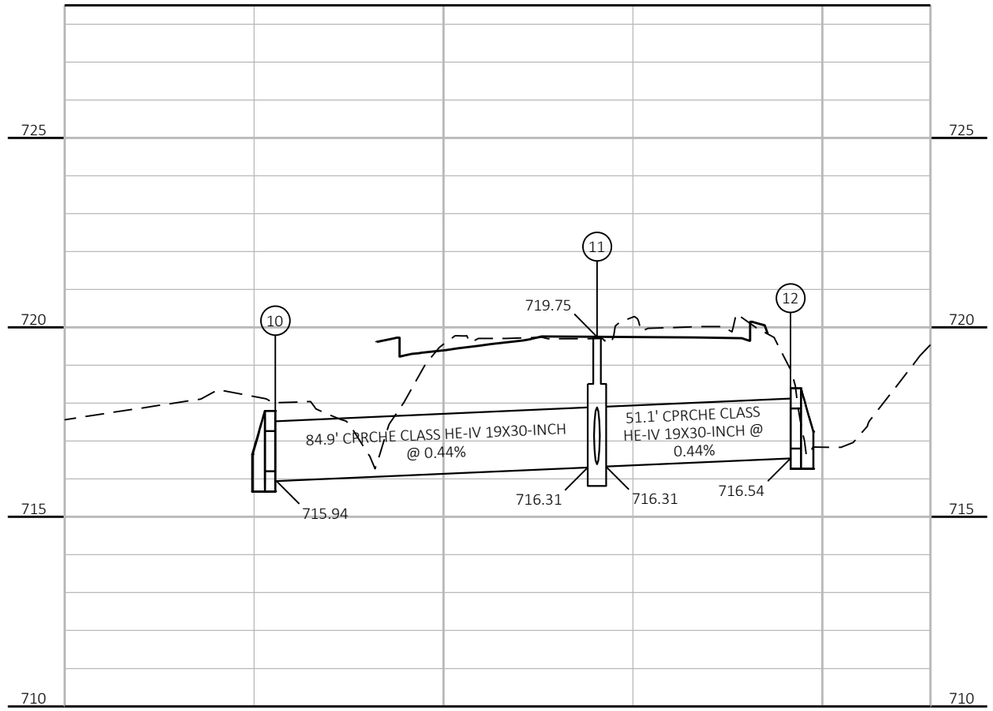


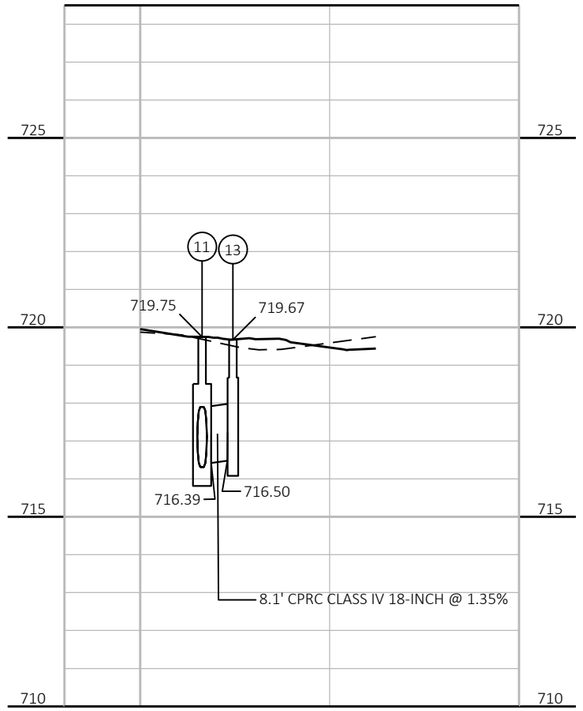




PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CULVERT PIPE PLAN DETAILS	SHEET 20	E







PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CULVERT PIPE PLAN DETAILS	SHEET 21	E

2

2

STH 57 SB

373SB 374SB 375SB 376SB 377SB 378SB

720.13 720.08 719.98 719.90 719.81 719.76 719.72 719.64 719.57 719.53 719.48 719.48 719.47 719.45 719.43 719.46 719.50

719.79 719.57 719.52 719.48 719.40 719.33 719.29 719.25 719.24 719.23 719.21 719.19 719.22 719.26

719.92 719.46

720.00 719.67

720.13

373NB 374NB 375NB 376NB 377NB 378NB

720.34 720.22 720.11 720.00 719.90 719.85

STH 57 NB

720.45 720.34 720.20 720.06 719.94 719.82 719.74 719.65 719.55 719.44 719.33 719.23 719.20 719.16 719.08 719.01 718.99 718.96 718.91 718.88 718.88 718.90 718.94 718.9

720.35 720.17 719.92 719.80 719.63 719.48 719.34 719.21 719.10 719.07 718.96 718.85 718.76 718.73 718.68 718.61 718.54 718.51 718.49 718.44 718.40 718.41 718.42 718.47 718.5

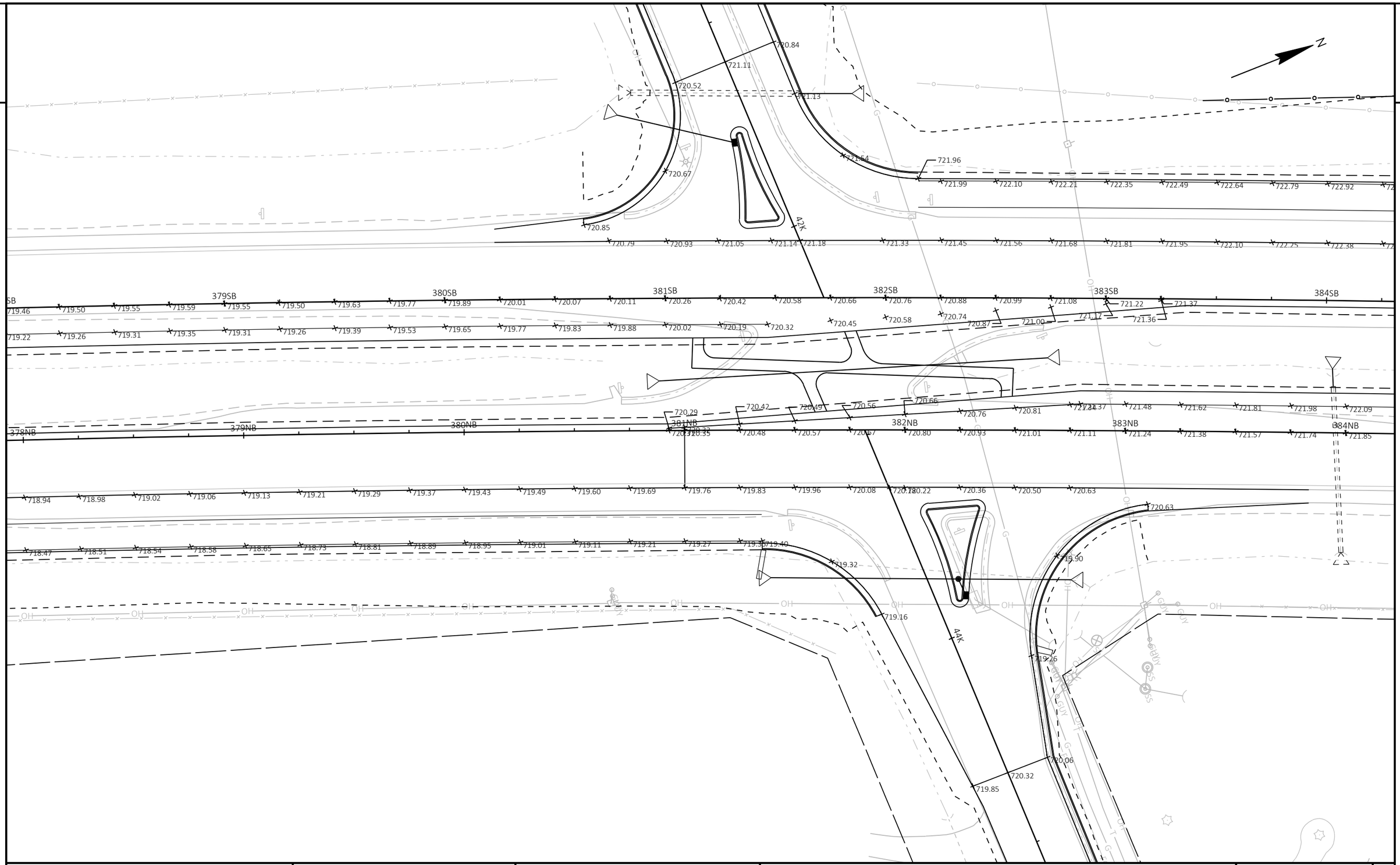
OH FO GUY

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CONCRETE PAVING GRADES	SHEET 22	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\021210-PD.DWG
LAYOUT NAME - 021210-pd

PLOT DATE : 7/30/2021 7:13 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

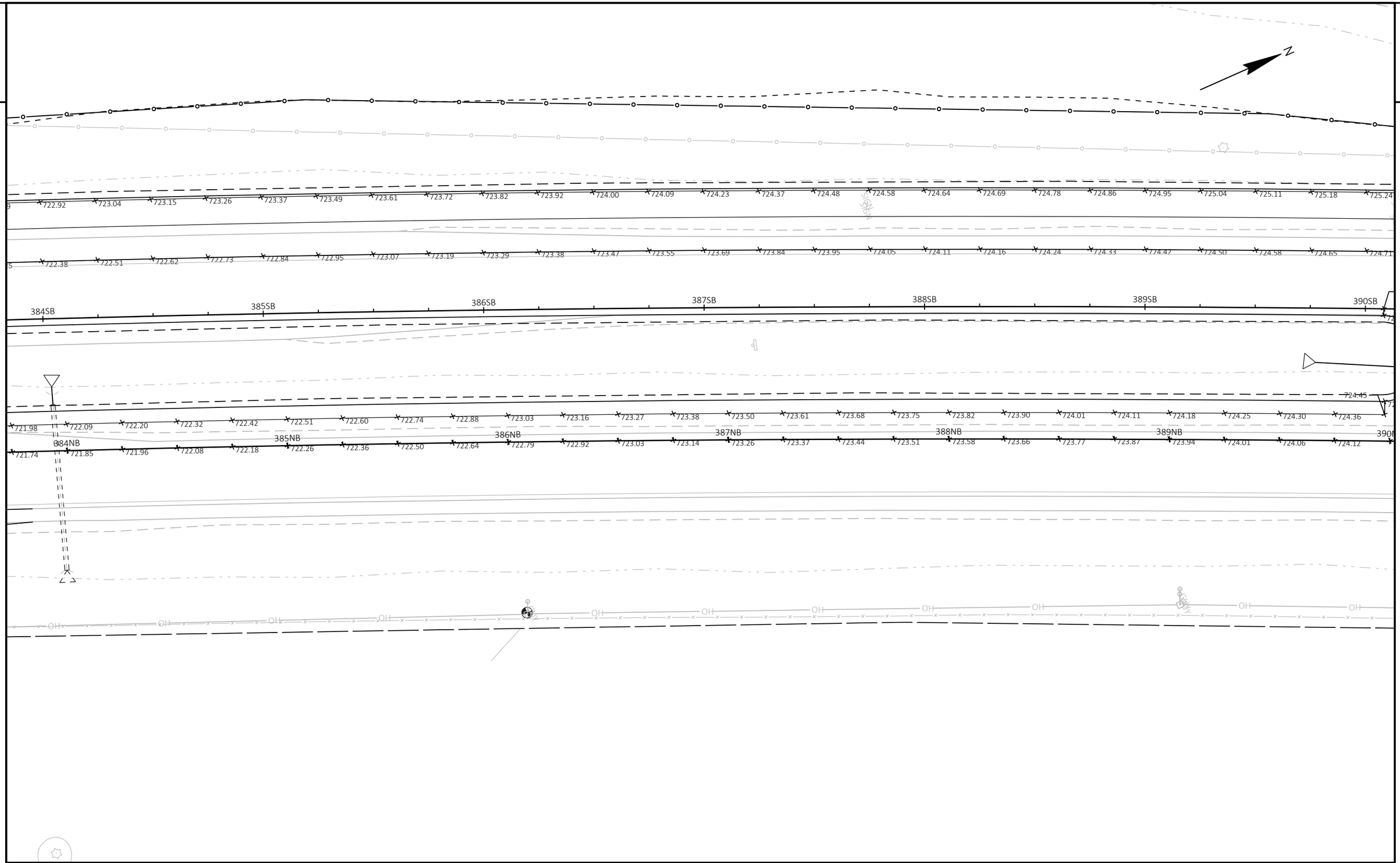
2



PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CONCRETE PAVING GRADES	SHEET 23	E

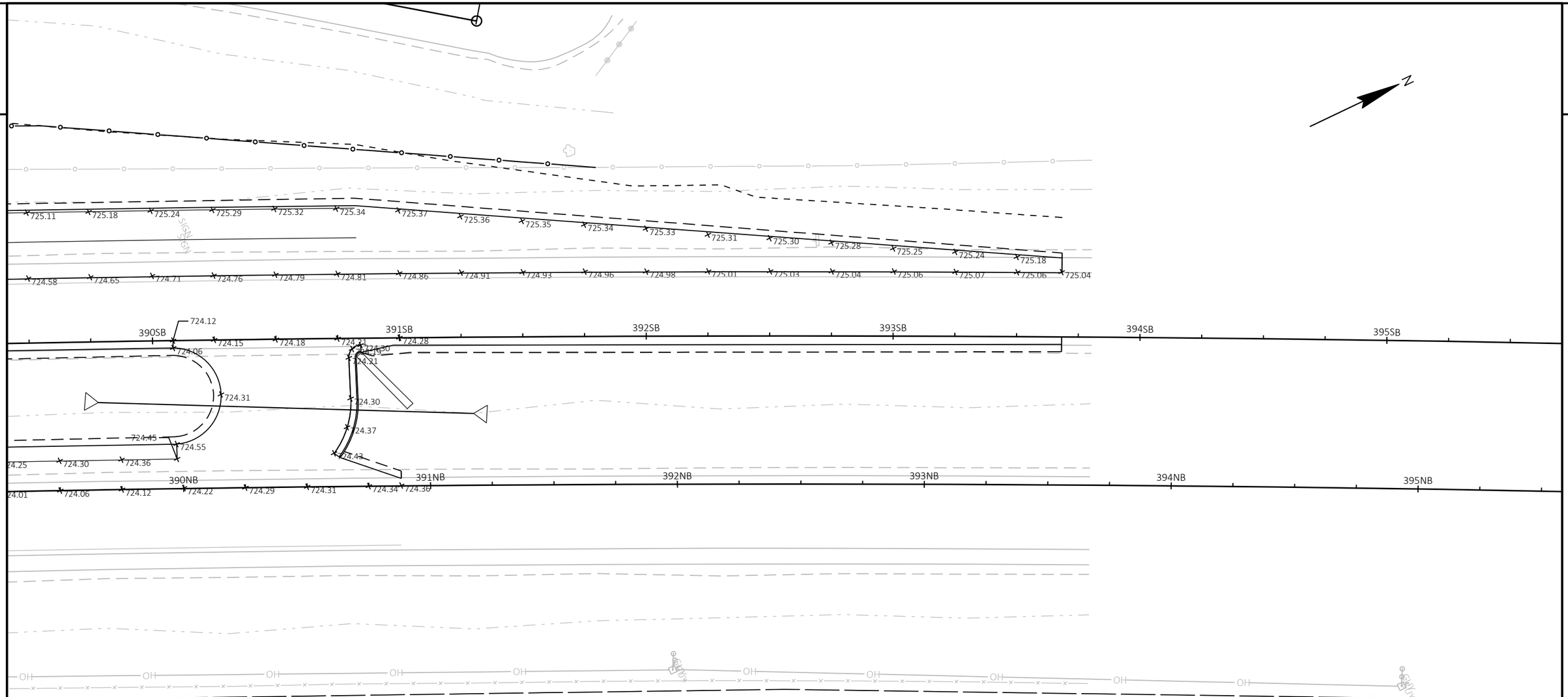
FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\021210-PD.DWG
LAYOUT NAME - 021211-pd
PLOT DATE : 7/30/2021 7:13 AM
PLOT BY : DUMS, ALEXANDER T
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



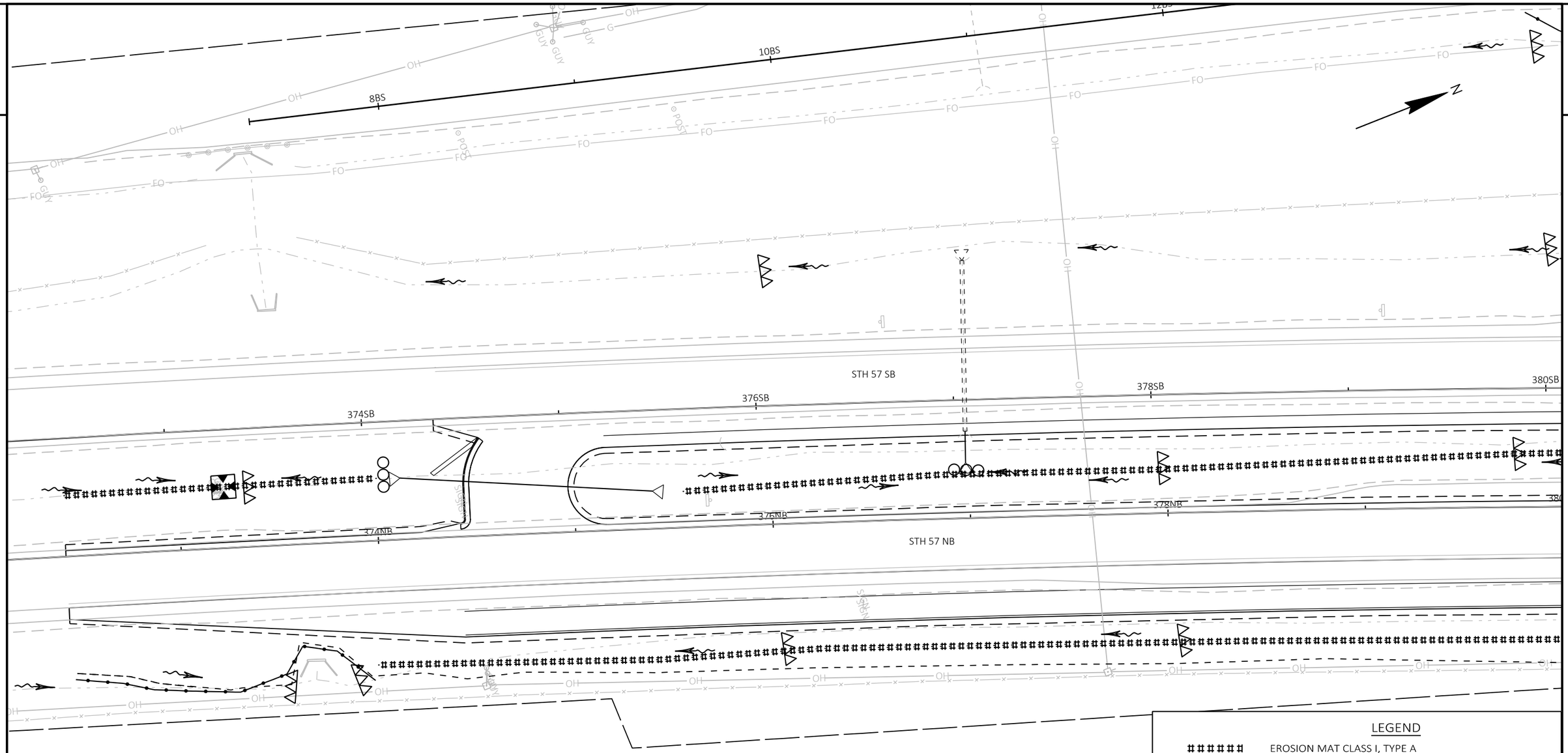
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CONCRETE PAVING GRADES	SHEET 24	E

2



PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CONCRETE PAVING GRADES	SHEET 25	E

2



PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	EROSION CONTROL PLAN	SHEET 26	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 9/8/2021 8:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

BAY SETTLEMENT ROAD CONNECTOR

42RSC

380SB

382SB

384SB

386SB

STH 57 SB

380NB

382NB

384NB

386NB

STH 57 NB

44K

CTH K

N

LEGEND

- EROSION MAT CLASS I, TYPE A
- SILT FENCE
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	EROSION CONTROL PLAN	SHEET 27	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 9/8/2021 8:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

22BS

24BS

N

FO

FO

FO

FO

STH 57 SB

386SB

388SB

390SB

392SB

386NB

STH 57 NB

388NB

390NB

392NB

OH

OH

OH

OH

OH

OH

OH

OH

OH

OH

LEGEND

######	EROSION MAT CLASS I, TYPE A
	SILT FENCE
	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
	INLET PROTECTION
	TEMPORARY DITCH CHECK
	CULVERT PIPE DITCH CHECK
	SURFACE WATER FLOW

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	EROSION CONTROL PLAN	SHEET 28	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 9/8/2021 8:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

BAY SETTLEMENT ROAD

14BS

42BSC

BAY SETTLEMENT
ROAD CONNECTOR

382SB

382NB

384SB

384NB

STH 57 SB

STH 57 NB

380SB

380NB

44K

46K

CTH K

LEGEND

- EROSION MAT CLASS I, TYPE A
- SILT FENCE
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	EROSION CONTROL PLAN	SHEET 29	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022004-ec

PLOT DATE : 9/8/2021 8:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

STH 57 SB

374SB

376SB

378SB

+36.28 SB
0.00'

+41.58 NB
0.00'

374NB

376NB

378NB

RAE

18" RCCP ENDWALL

STH 57 NB

XXXX

OH

FO

LEGEND

RF	REMOVING FENCE
RP	REMOVING PAVEMENT
RCG	REMOVING CURB AND GUTTER
RC	REMOVING SMALL PIPE CULVERT
RI	REMOVING INLET
RAE	REMOVE APRON ENDWALL
XXXX	SAWING ASPHALT

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	REMOVAL DETAILS	SHEET 30	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022401-RM.DWG
LAYOUT NAME - 022401-rm

PLOT DATE : 6/10/2021 2:10 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

BAY SETTLEMENT ROAD CONNECTOR

RAE

R60'

24" CMCP ENDWALL

RF

RCG

42K

RCG

STH 57 SB

380SB

382SB

384SB

RCG

RCG

RAE

18" RCCP ENDWALL

378NB

380NB

382NB

384NB

STH 57 NB

RCG

RCG

RCG

RAE

24" CMCP
107 LF

RC

RAE

RI

44K

15" RCCP
35 LF

RAE

CTH K

LEGEND

RF	REMOVING FENCE
RP	REMOVING PAVEMENT
RCG	REMOVING CURB AND GUTTER
RC	REMOVING SMALL PIPE CULVERT
RI	REMOVING INLET
RAE	REMOVE APRON ENDWALL
XXXX	SAWING ASPHALT

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	REMOVAL DETAILS	SHEET 31 E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022401-RM.DWG
LAYOUT NAME - 022402-rm

PLOT DATE : 6/10/2021 2:10 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

RF

STH 57 SB

384SB

386SB

388SB

390SB

RAE

18" RCCP ENDWALL

384NB

386NB

388NB

390N

STH 57 NB

XXXX

OH

LEGEND

RF	REMOVING FENCE
RP	REMOVING PAVEMENT
RCG	REMOVING CURB AND GUTTER
RC	REMOVING SMALL PIPE CULVERT
RI	REMOVING INLET
RAE	REMOVE APRON ENDWALL
XXXX	SAWING ASPHALT

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	REMOVAL DETAILS	SHEET 32	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022401-RM.DWG
LAYOUT NAME - 022403-rm

PLOT DATE : 6/10/2021 2:10 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

RF

+79.82 SB
68.46' LT

SIGN

XXXX

XX

STH 57 SB

390SB

392SB

394SB

+68.24 SB
0.00'

390NB

392NB

394NB

STH 57 NB

+87.92 NB
26.00' RT

OH

LEGEND

RF	REMOVING FENCE
RP	REMOVING PAVEMENT
RCG	REMOVING CURB AND GUTTER
RC	REMOVING SMALL PIPE CULVERT
RI	REMOVING INLET
RAE	REMOVE APRON ENDWALL
XXXX	SAWING ASPHALT

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	REMOVAL DETAILS	SHEET 33	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022401-RM.DWG
LAYOUT NAME - 022404-rm

PLOT DATE : 6/10/2021 2:10 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

BAY SETTLEMENT ROAD

16BS

+98.52 BS
0.00'

BP: 40+00.00K

24" CMCP ENDWALL

RAE

RCG

42K

BAY SETTLEMENT ROAD CONNECTOR

RCG

14BS

+81.93 BS
0.00'

PC: 12+60.67BS

38258

STH 57 SB

38058

38258

RCG

38258

38208

STH 57 NB

RCG

RAE

15" RCCP
35 LF

RAE

RC

RI

RCG

44K

CTH K

24" CMCP
107 LF

RC

RCG

RAE

24" CMCP ENDWALL

LEGEND

RF	REMOVING FENCE
RP	REMOVING PAVEMENT
RCG	REMOVING CURB AND GUTTER
RC	REMOVING SMALL PIPE CULVERT
RI	REMOVING INLET
RAE	REMOVE APRON ENDWALL
XXXX	SAWING ASPHALT

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	REMOVAL PLAN	SHEET 34	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022401-RM.DWG
LAYOUT NAME - 022405-rm

PLOT DATE : 6/10/2021 2:10 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

24" CMCP ENDWALL

BAY SETTLEMENT ROAD CONNECTOR

42K

44K

46K

CTH K

STH 57 SB

STH 57 NB

382SB

382NB

380SB

380NB

RAE

RCG

RC

RI

RF

RP

XXXX

LEGEND

RF	REMOVING FENCE
RP	REMOVING PAVEMENT
RCG	REMOVING CURB AND GUTTER
RC	REMOVING SMALL PIPE CULVERT
RI	REMOVING INLET
RAE	REMOVE APRON ENDWALL
XXXX	SAWING ASPHALT

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	REMOVAL PLAN	SHEET 35 E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\022401-RM.DWG
LAYOUT NAME - 022406-rm

PLOT DATE : 6/10/2021 2:10 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

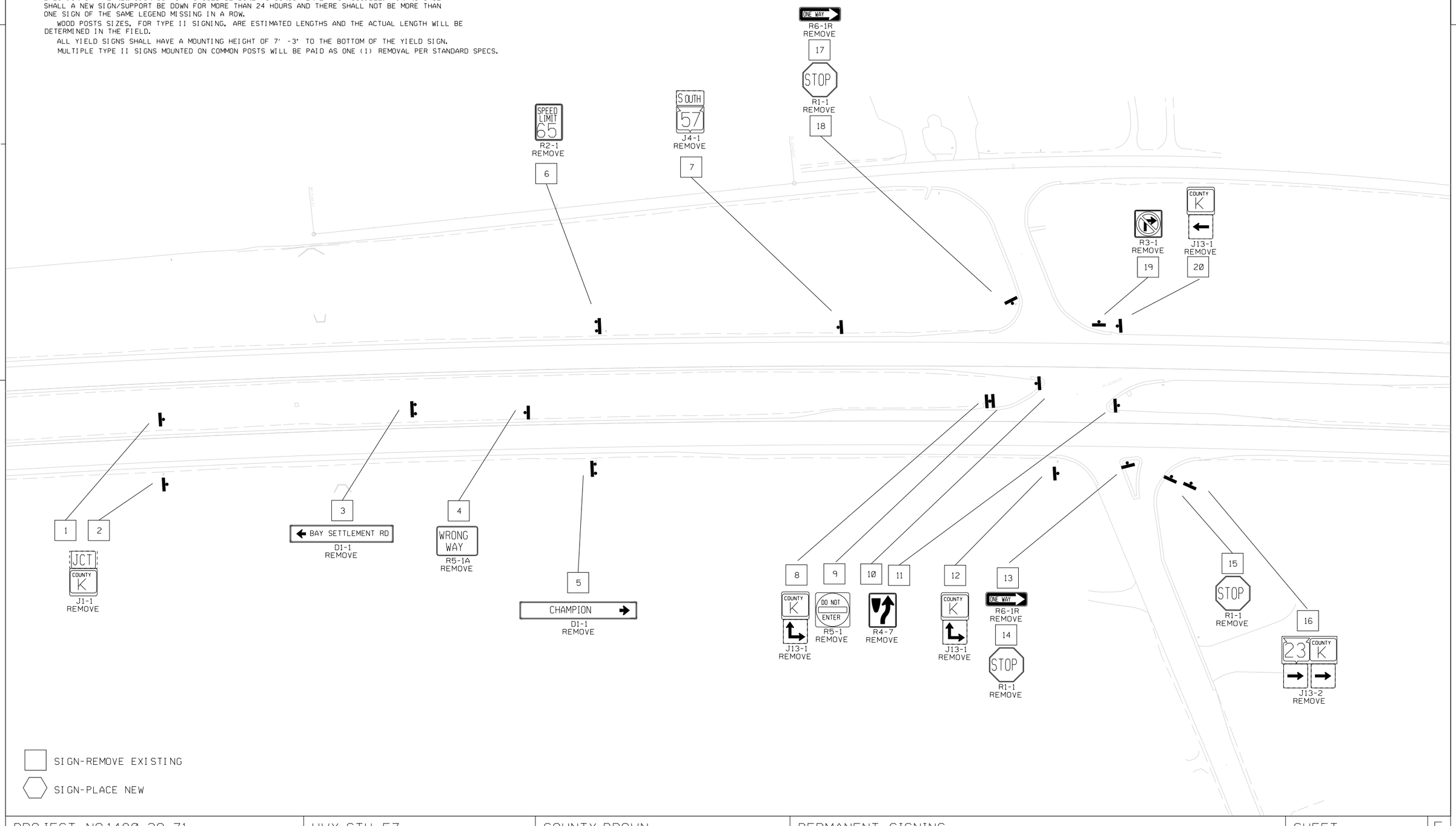
SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

ALL YIELD SIGNS SHALL HAVE A MOUNTING HEIGHT OF 7' -3" TO THE BOTTOM OF THE YIELD SIGN.

MULTIPLE TYPE II SIGNS MOUNTED ON COMMON POSTS WILL BE PAID AS ONE (1) REMOVAL PER STANDARD SPECS.



SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PROJECT NO:1480-29-71	HWY:STH 57	COUNTY:BROWN	PERMANENT SIGNING	SHEET	E

FILE NAME :$$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADD

SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

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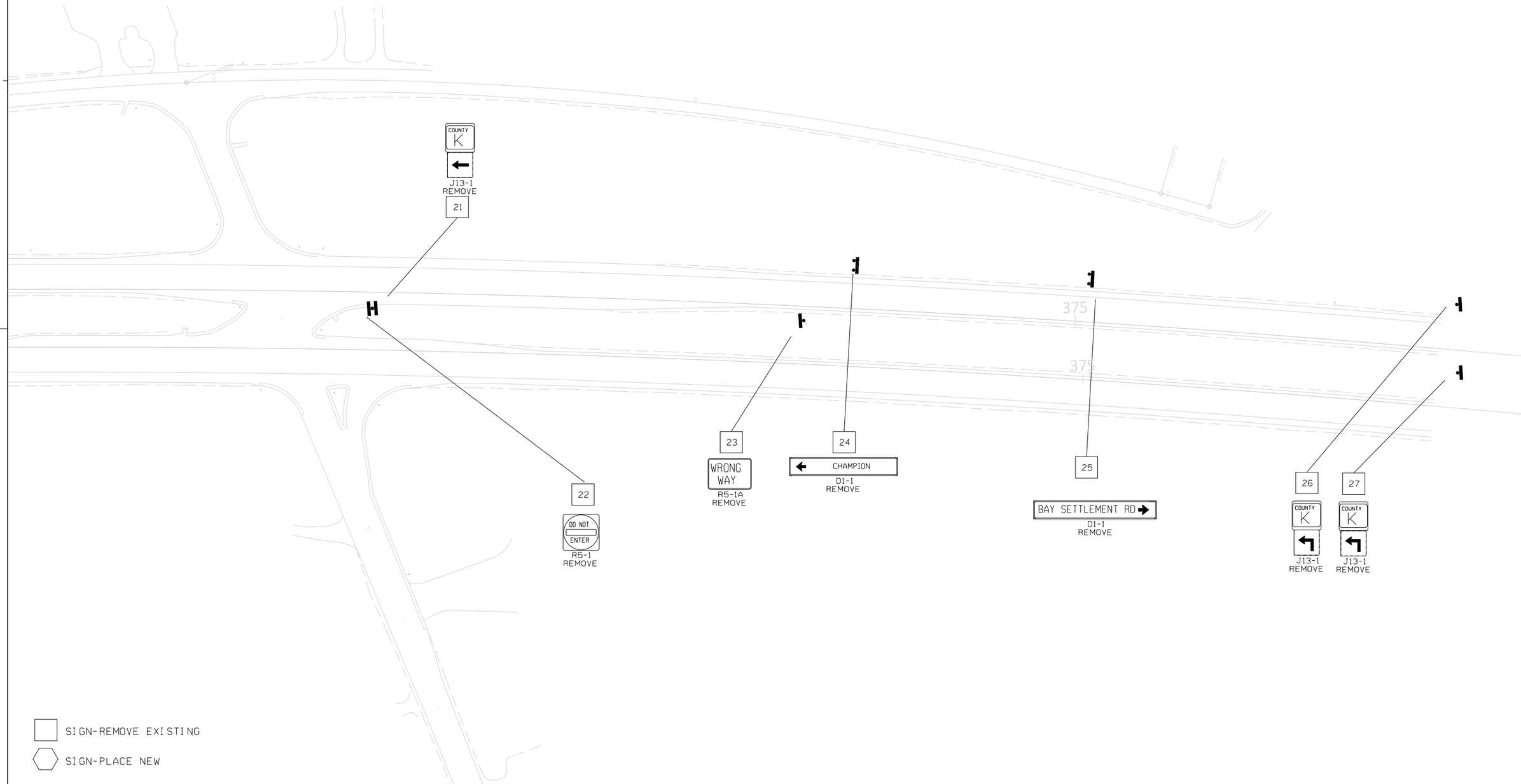
MULTIPLE TYPE II SIGNS MOUNTED ON COMMON POSTS WILL BE PAID AS ONE (1) REMOVAL PER STANDARD SPECS.



PROJECT NO:1480-29-71	HWY:STH 57	COUNTY:BROWN	PERMANENT SIGNING	SHEET	E

FILE NAME :$$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CAD

SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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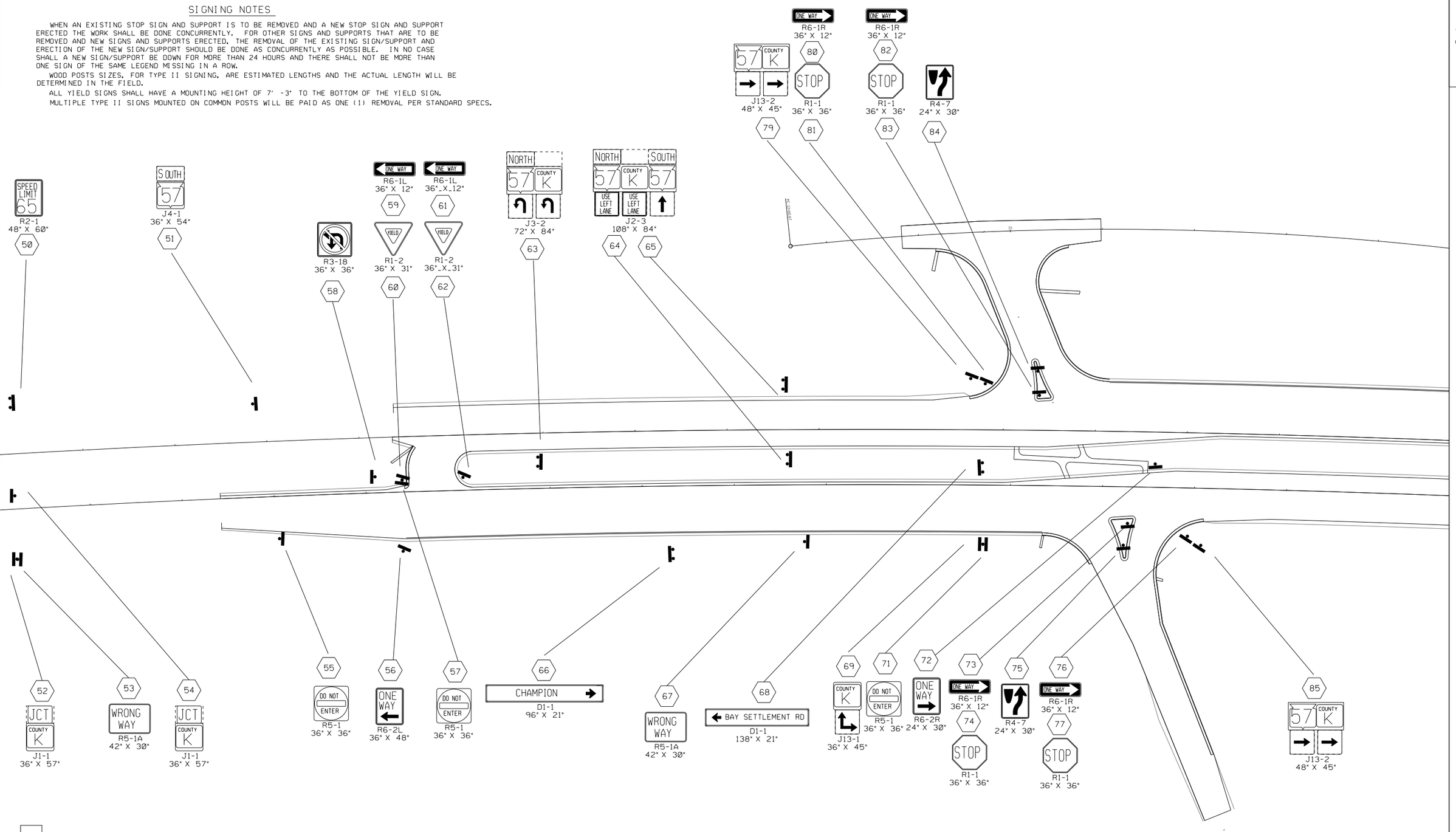
ALL YIELD SIGNS SHALL HAVE A MOUNTING HEIGHT OF 7' -3" TO THE BOTTOM OF THE YIELD SIGN.

MULTIPLE TYPE II SIGNS MOUNTED ON COMMON POSTS WILL BE PAID AS ONE (1) REMOVAL PER STANDARD SPECS.



SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PROJECT NO:1480-29-71	HWY:STH 57	COUNTY:BROWN	PERMANENT SIGNING	SHEET	E

FILE NAME :$$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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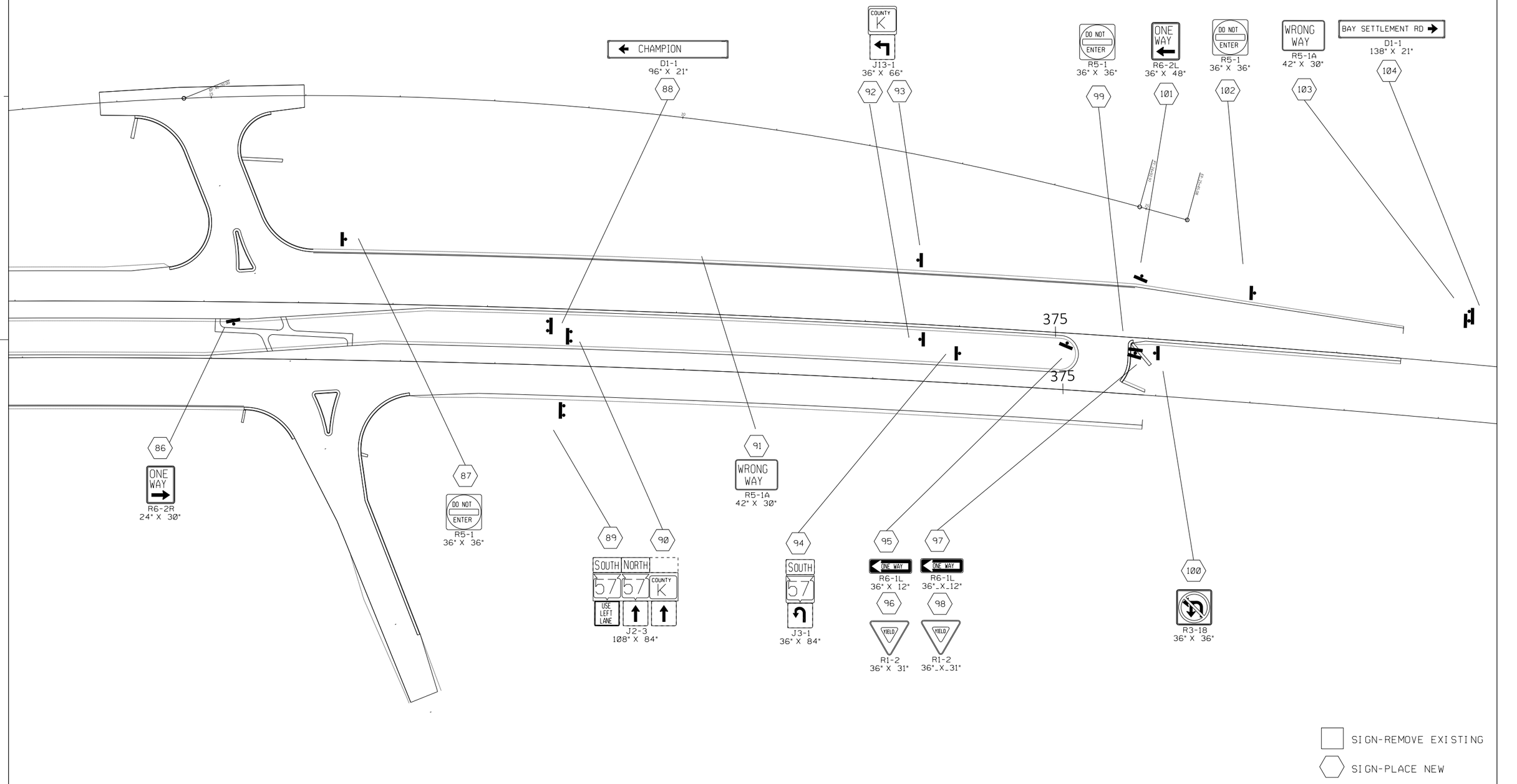


PROJECT NO:1480-29-71	HWY:STH 57	COUNTY:BROWN	PERMANENT SIGNING	SHEET 39 E

FILE NAME :$$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

LEGEND

- LIGHTING CONTROL CABINET WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT
- PULL BOX 24" X 42"
- UTILITY POLE
- ELECTRIC, UNDERGROUND — E —
- ELECTRIC, OVERHEAD — OH —

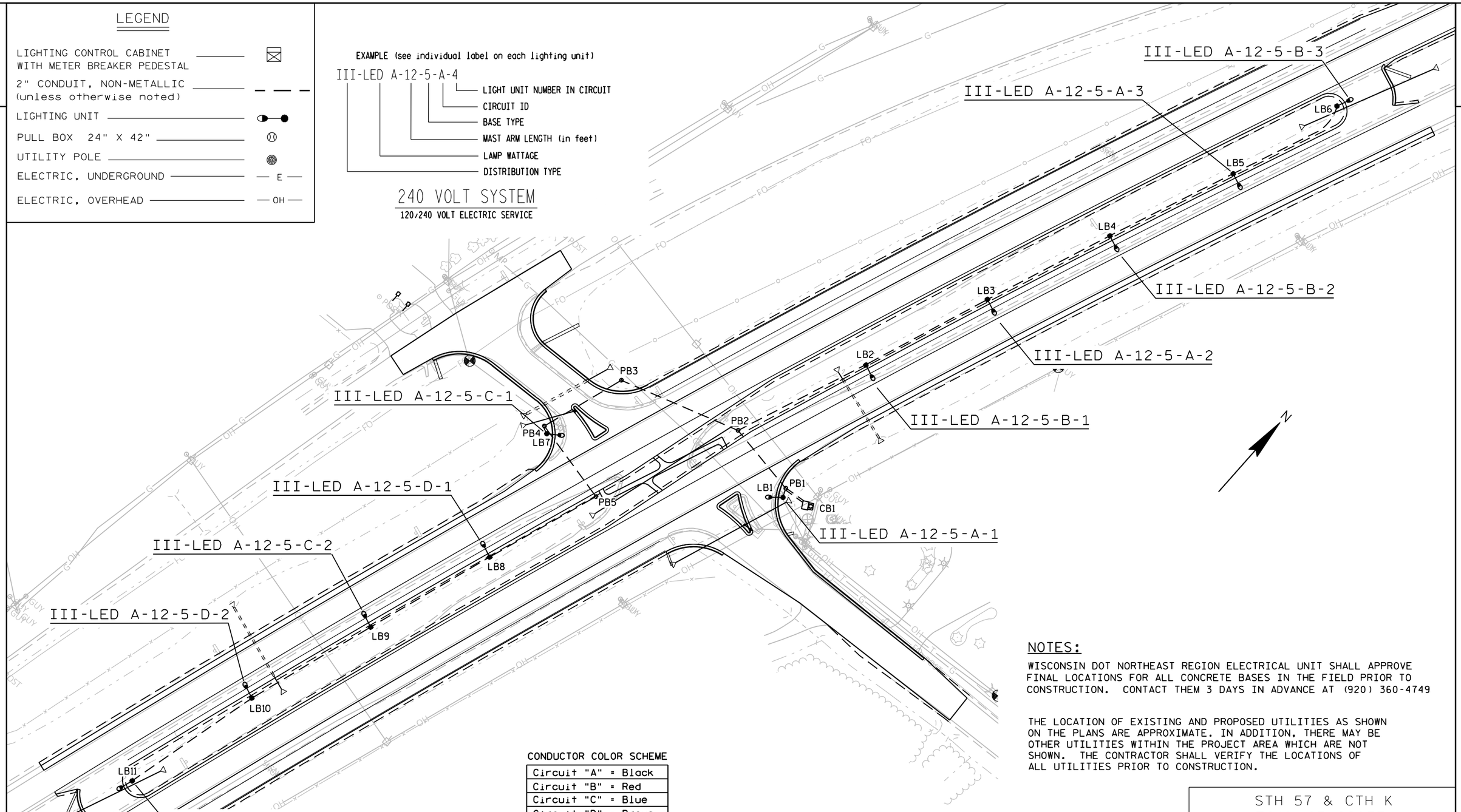
EXAMPLE (see individual label on each lighting unit)

III-LED A-12-5-A-4

- LIGHT UNIT NUMBER IN CIRCUIT
- CIRCUIT ID
- BASE TYPE
- MAST ARM LENGTH (in feet)
- LAMP WATTAGE
- DISTRIBUTION TYPE

240 VOLT SYSTEM

120/240 VOLT ELECTRIC SERVICE



CONDUCTOR COLOR SCHEME

Circuit "A" = Black
Circuit "B" = Red
Circuit "C" = Blue
Circuit "D" = Brown
Circuit "E" = Orange
Circuit "F" = Yellow

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 360-4749

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

STH 57 & CTH K
TOWN OF SCOTT
BROWN COUNTY

LIGHTING NO. 05-2054

DESIGNER: WISDOT NE REGION TRAFFIC UNIT

DATE: 02/15/2021 SHEET NO. 1 OF 1

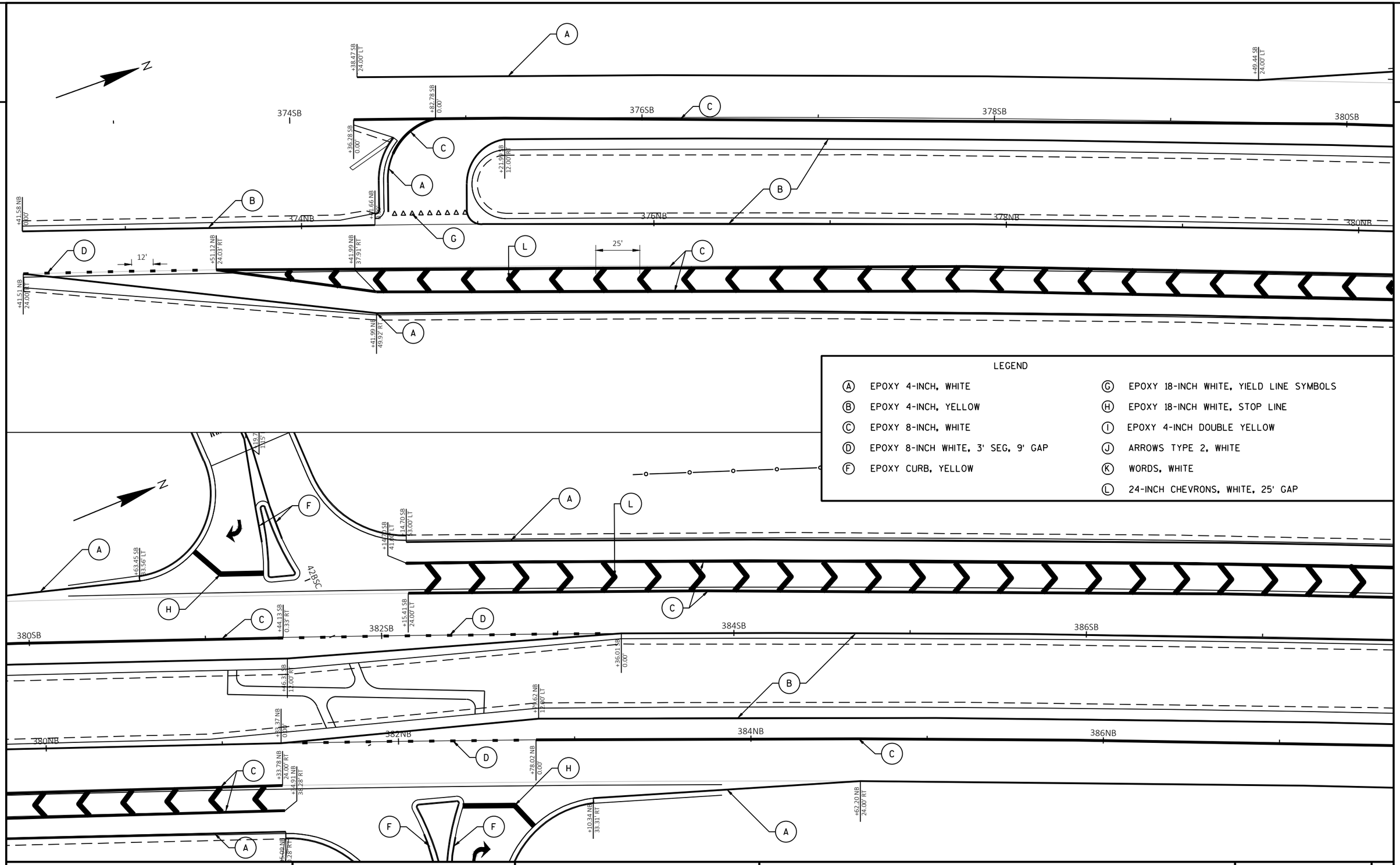
PROJECT NO: 1480-29-00	HWY: STH 57	COUNTY: BROWN	CONSTRUCTION DETAIL - J TURN LIGHTING	SHEET 40	E

FILE NAME : C:\USERS\DOTMXT\DESKTOP\57 & K RAB\57 & K LIGHITNG.DWG
LAYOUT NAME - Plan 1 IN 40 FT

PLOT DATE : 2/15/2021 12:56 PM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : _____ PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

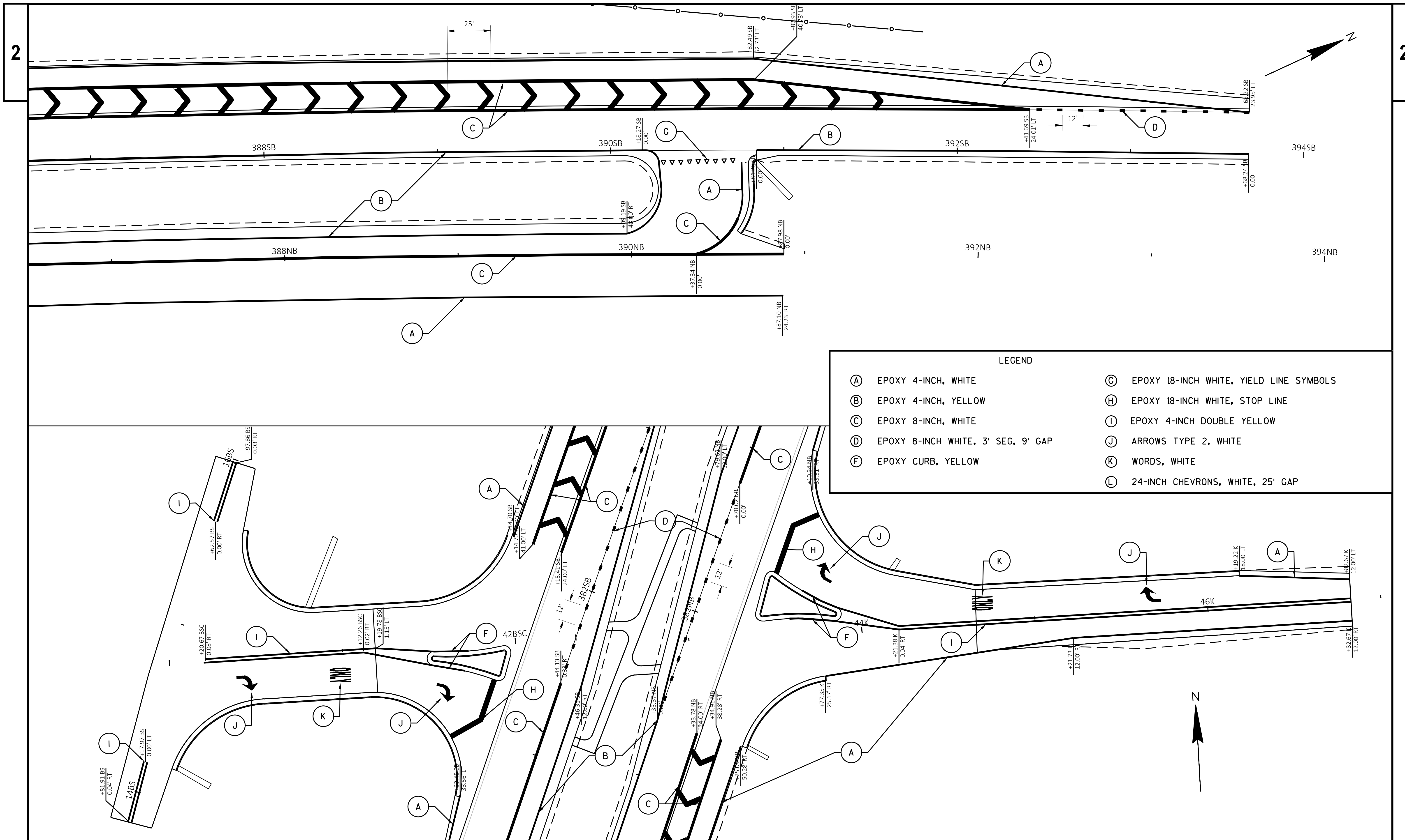
2



LEGEND

- (A) EPOXY 4-INCH, WHITE
- (B) EPOXY 4-INCH, YELLOW
- (C) EPOXY 8-INCH, WHITE
- (D) EPOXY 8-INCH WHITE, 3' SEG, 9' GAP
- (F) EPOXY CURB, YELLOW
- (G) EPOXY 18-INCH WHITE, YIELD LINE SYMBOLS
- (H) EPOXY 18-INCH WHITE, STOP LINE
- (I) EPOXY 4-INCH DOUBLE YELLOW
- (J) ARROWS TYPE 2, WHITE
- (K) WORDS, WHITE
- (L) 24-INCH CHEVRONS, WHITE, 25' GAP

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PAVEMENT MARKING PLAN	SHEET 41	E



LEGEND

(A)	EPOXY 4-INCH, WHITE	(G)	EPOXY 18-INCH WHITE, YIELD LINE SYMBOLS
(B)	EPOXY 4-INCH, YELLOW	(H)	EPOXY 18-INCH WHITE, STOP LINE
(C)	EPOXY 8-INCH, WHITE	(I)	EPOXY 4-INCH DOUBLE YELLOW
(D)	EPOXY 8-INCH WHITE, 3' SEG, 9' GAP	(J)	ARROWS TYPE 2, WHITE
(F)	EPOXY CURB, YELLOW	(K)	WORDS, WHITE
		(L)	24-INCH CHEVRONS, WHITE, 25' GAP

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PAVEMENT MARKING PLAN	SHEET 42	E

NOTES:

1. THERE ARE NO TRAFFIC CONTROL SHEETS FOR THIS STAGE AS ONLY STANDARD DETAIL DRAWINGS WILL BE USED.
2. FOR CLOSURES ALONG MAINLINE AND SIDE ROADS, REFER TO STANDARD DETAIL DRAWINGS FOR APPROPRIATE SIGNING AND TRAFFIC CONTROL DEVICES.
3. REFER TO SDD 15D12B FOR ALL MAINLINE ADVANCED WARNING. REFER TO SDD 15C4 FOR ALL SIDE ROAD ADVANCED WARNING.
4. MAINTAIN A 3' AGGREGATE SHOULDER WITH A MINIMUM OF 3:1 SLOPES WHEN ROADWAY FULLY OPENS ON WEEKENDS ALONG THE DROP-OFF FOR THE MEDIAN WORK. MAINTAIN SHOULDER CLOSURE THROUGHOUT WEEKENDS.
5. PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES. IF INTERFERENCE BECOMES UNAVOIDABLE DURING CONSTRUCTION OPERATIONS, CONTACT OWNERS TO SEEK ALTERNATIVES TO ACCESS. NOTIFY BUSINESSES AND PRIVATE RESIDENTS AT LEAST 48 HOURS PRIOR TO RESTRICTING ACCESS FOR CONSTRUCTION.
6. DRUMS SHOULD DELINEATE THE SLOPED AGGREGATE DROP-OFF EDGE LONGITUDINALLY WHEN THE LANE CLOSURES ARE PULLED BACK FOR THE WEEKEND RESTRICTION TIMES.

TRAFFIC:

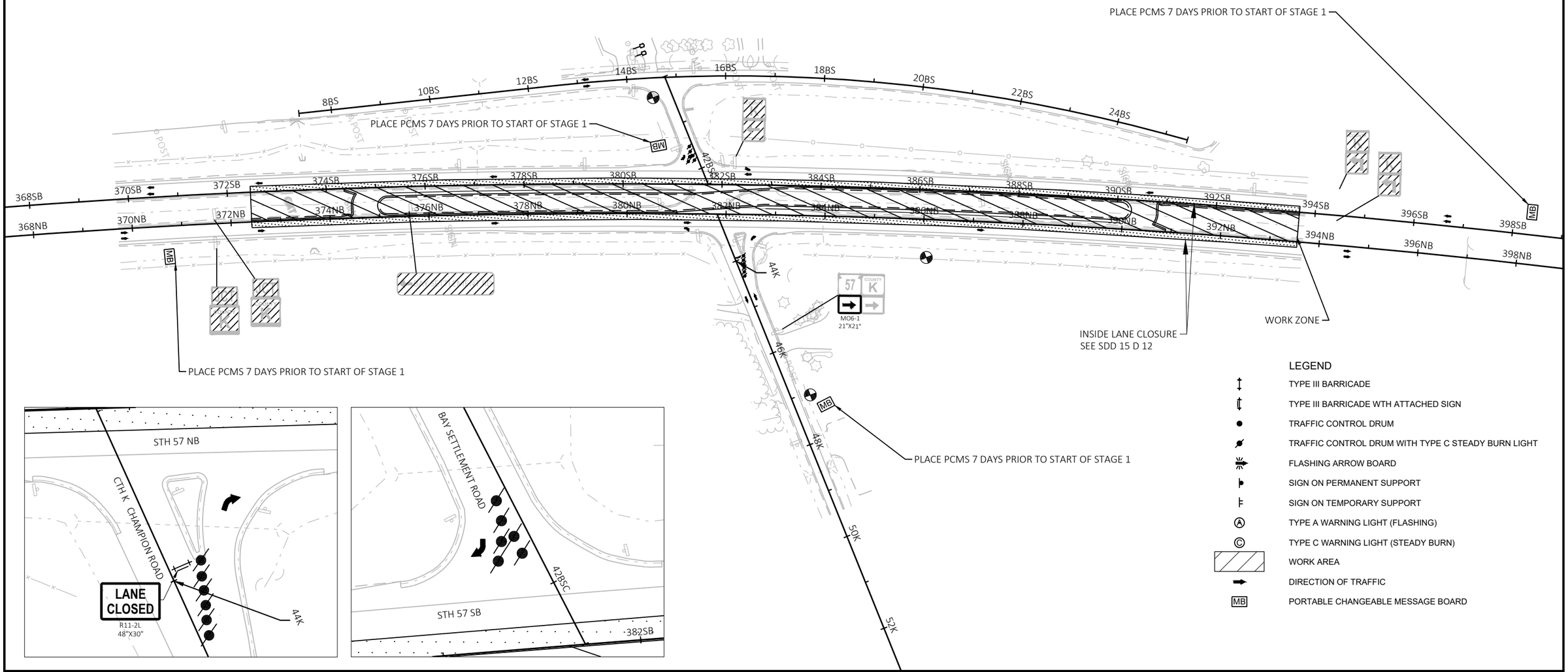
STAGE 1

* TRAFFIC FOR STH 57 WILL BE UTILIZING ONE LANE DURING THE WEEK AND BOTH LANES ON WEEKENDS.
* INSIDE LANE OF STH 57 NB AND STH 57 SB WILL BE CLOSED TO TRAFFIC.
* CTH K AND BAY SETTLEMENT ROAD WILL UTILIZE EXISTING TRAFFIC PATTERN. NO LEFT OR THROUGH MOVEMENTS WILL BE ALLOWED FROM CTH K AND BAY SETTLEMENT ROAD.

CONSTRUCTION:

STAGE 1

* BEGIN AND COMPLETE CONSTRUCTION OF STH 57 NB AND STH 57 SB INSIDE TURN LANES, SHOULDERS AND MEDIAN TURNAROUNDS.



PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	STAGING PLAN - STAGE 1	SHEET 43	E

NOTES:

1. THERE ARE NO TRAFFIC CONTROL SHEETS FOR THIS STAGE AS ONLY STANDARD DETAIL DRAWINGS WILL BE USED.
2. FOR CLOSURES ALONG MAINLINE AND SIDE ROADS, REFER TO STANDARD DETAIL DRAWINGS FOR APPROPRIATE SIGNING AND TRAFFIC CONTROL DEVICES.
3. REFER TO SDD 15D12B FOR ALL MAINLINE ADVANCED WARNING. REFER TO SDD 15C4 FOR ALL SIDE ROAD ADVANCED WARNING.
4. MAINTAIN A 3' AGGREGATE SHOULDER WITH A MINIMUM OF 3:1 SLOPES WHEN ROADWAY FULLY OPENS ON WEEKENDS ALONG THE DROP-OFF. MAINTAIN SHOULDER CLOSURE THROUGHOUT WEEKENDS.
5. PROVIDE ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES. IF INTERFERENCE BECOMES UNAVOIDABLE DURING CONSTRUCTION OPERATIONS, CONTACT OWNERS TO SEEK ALTERNATIVES TO ACCESS. NOTIFY BUSINESSES AND PRIVATE RESIDENTS AT LEAST 48 HOURS PRIOR TO RESTRICTING ACCESS FOR CONSTRUCTION.
6. DRUMS SHOULD DELINEATE THE SLOPED AGGREGATE DROP-OFF EDGE LONGITUDINALLY WHEN THE LANE CLOSURES ARE PULLED BACK FOR THE WEEKEND RESTRICTION TIMES.

TRAFFIC:

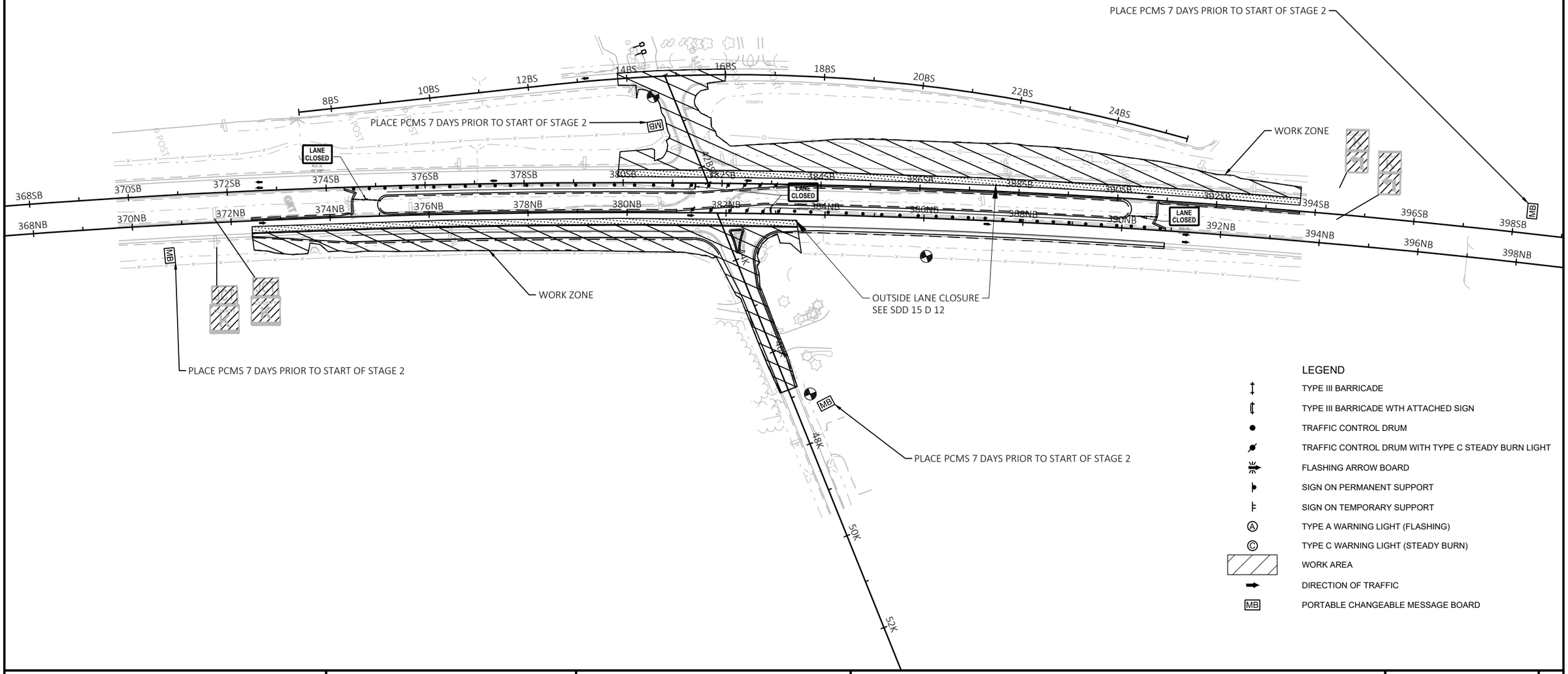
STAGE 2

* TRAFFIC FOR STH 57 WILL BE UTILIZING ONE LANE DURING THE WEEK AND BOTH LANES ON WEEKENDS.
* OUTSIDE LANE OF STH 57 NB AND STH 57 SB WILL BE CLOSED TO TRAFFIC.
* CTH K WILL BE CLOSED. LOCAL TRAFFIC ONLY WILL BE ALLOWED. LOCAL TRAFFIC WILL ONLY HAVE ACCESS TO CTH K FROM THE EAST. RIGHT TURN MOVEMENTS SHALL NOT BE ALLOWED FROM STH 57 NB THROUGH THE WORK ZONE TO CTH K.
* BAY SETTLEMENT ROAD WILL BE CLOSED. LOCAL TRAFFIC ONLY WILL BE ALLOWED.
* CLOSE MEDIAN TURN LANES AND TURNAROUNDS CONSTRUCTED IN STAGE 1.

CONSTRUCTION:

STAGE 2

* BEGIN AND COMPLETE CONSTRUCTION OF STH 57 NB AND STH 57 SB OUTSIDE TURN LANES AND SHOULDERS.
* BEGIN AND COMPLETE CONSTRUCTION OF CTH K, BAY SETTLEMENT ROAD CONNECTOR, AND BAY SETTLEMENT ROAD.



PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	STAGING PLAN - STAGE 2	SHEET 44	E

Estimate Of Quantities

1480-29-71

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0004	204.0150	Removing Curb & Gutter	LF	1,074.000	1,074.000
0006	204.0170	Removing Fence	LF	840.000	840.000
0008	204.0220	Removing Inlets	EACH	1.000	1.000
0010	204.9060.S	Removing (item description) 01. Apron Endwall	EACH	6.000	6.000
0012	205.0100	Excavation Common	CY	18,228.000	18,228.000
0014	213.0100	Finishing Roadway (project) 01. 1480-29-71	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,042.000	1,042.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	12,012.000	12,012.000
0020	312.0110	Select Crushed Material	TON	15,162.000	15,162.000
0022	415.0090	Concrete Pavement 9-Inch	SY	10,074.000	10,074.000
0024	416.0610	Drilled Tie Bars	EACH	1,691.000	1,691.000
0026	455.0605	Tack Coat	GAL	493.000	493.000
0028	460.2000	Incentive Density HMA Pavement	DOL	630.000	630.000
0030	460.6223	HMA Pavement 3 MT 58-28 S	TON	560.000	560.000
0032	460.6224	HMA Pavement 4 MT 58-28 S	TON	403.000	403.000
0034	465.0305	Asphaltic Surface Safety Islands	TON	15.000	15.000
0036	465.0315	Asphaltic Flumes	SY	45.000	45.000
0038	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0040	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	1.000	1.000
0042	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	24.000	24.000
0044	522.0418	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	24.000	24.000
0046	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	152.000	152.000
0048	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000
0050	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0052	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	440.000	440.000
0054	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	7.000	7.000
0056	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	703.000	703.000
0058	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	400.000	400.000
0060	602.0405	Concrete Sidewalk 4-Inch	SF	1,041.000	1,041.000
0062	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0064	611.0627	Inlet Covers Type HM	EACH	2.000	2.000
0066	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0068	611.3230	Inlets 2x3-FT	EACH	2.000	2.000
0070	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	43.000	43.000
0072	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	5.000	5.000
0074	616.0205	Fence Chain Link 5-FT	LF	843.000	843.000
0076	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1480-29-71	EACH	1.000	1.000
0078	619.1000	Mobilization	EACH	1.000	1.000
0080	624.0100	Water	MGAL	168.000	168.000
0082	625.0500	Salvaged Topsoil	SY	14,640.000	14,640.000
0084	627.0200	Mulching	SY	11,657.000	11,657.000
0086	628.1504	Silt Fence	LF	1,130.000	1,130.000
0088	628.1520	Silt Fence Maintenance	LF	1,130.000	1,130.000
0090	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0092	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0094	628.2002	Erosion Mat Class I Type A	SY	2,983.000	2,983.000
0096	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0098	628.7015	Inlet Protection Type C	EACH	2.000	2.000

1480-29-71

Line	Item	Item Description	Unit	Total	Qty
0100	628.7504	Temporary Ditch Checks	LF	24.000	24.000
0102	628.7555	Culvert Pipe Checks	EACH	18.000	18.000
0104	628.7570	Rock Bags	EACH	50.000	50.000
0106	629.0210	Fertilizer Type B	CWT	9.220	9.220
0108	630.0130	Seeding Mixture No. 30	LB	218.000	218.000
0110	630.0170	Seeding Mixture No. 70	LB	9.000	9.000
0112	630.0500	Seed Water	MGAL	328.000	328.000
0114	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	22.000	22.000
0116	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	30.000	30.000
0118	637.2210	Signs Type II Reflective H	SF	739.860	739.860
0120	638.2602	Removing Signs Type II	EACH	23.000	23.000
0122	638.3000	Removing Small Sign Supports	EACH	27.000	27.000
0124	642.5001	Field Office Type B	EACH	1.000	1.000
0126	643.0300	Traffic Control Drums	DAY	12,447.000	12,447.000
0128	643.0420	Traffic Control Barricades Type III	DAY	2,410.000	2,410.000
0130	643.0705	Traffic Control Warning Lights Type A	DAY	4,820.000	4,820.000
0132	643.0715	Traffic Control Warning Lights Type C	DAY	1,553.000	1,553.000
0134	643.0800	Traffic Control Arrow Boards	DAY	286.000	286.000
0136	643.0900	Traffic Control Signs	DAY	2,653.000	2,653.000
0138	643.0920	Traffic Control Covering Signs Type II	EACH	10.000	10.000
0140	643.1050	Traffic Control Signs PCMS	DAY	56.000	56.000
0142	643.1200.S	Portable Automated Real-Time Traffic Queue Warning System	DAY	130.000	130.000
0144	643.5000	Traffic Control	EACH	1.000	1.000
0146	646.1020	Marking Line Epoxy 4-Inch	LF	8,345.000	8,345.000
0148	646.3020	Marking Line Epoxy 8-Inch	LF	5,339.000	5,339.000
0150	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0152	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0154	646.6120	Marking Stop Line Epoxy 18-Inch	LF	90.000	90.000
0156	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	18.000	18.000
0158	646.7220	Marking Chevron Epoxy 24-Inch	LF	1,297.000	1,297.000
0160	646.8120	Marking Curb Epoxy	LF	85.000	85.000
0162	650.4000	Construction Staking Storm Sewer	EACH	6.000	6.000
0164	650.4500	Construction Staking Subgrade	LF	6,921.000	6,921.000
0166	650.6000	Construction Staking Pipe Culverts	EACH	6.000	6.000
0168	650.7000	Construction Staking Concrete Pavement	LF	6,141.000	6,141.000
0170	650.8500	Construction Staking Electrical Installations (project) 01. 1480-29-71	LS	1.000	1.000
0172	650.9910	Construction Staking Supplemental Control (project) 01. 1480-29-71	LS	1.000	1.000
0174	650.9920	Construction Staking Slope Stakes	LF	6,921.000	6,921.000
0176	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,834.000	1,834.000
0178	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	5.000	5.000
0180	654.0105	Concrete Bases Type 5	EACH	11.000	11.000
0182	654.0220	Concrete Control Cabinet Bases Type 10	EACH	1.000	1.000
0184	655.0610	Electrical Wire Lighting 12 AWG	LF	1,650.000	1,650.000
0186	655.0615	Electrical Wire Lighting 10 AWG	LF	10,259.000	10,259.000
0188	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 57 and CTH K	LS	1.000	1.000
0190	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	11.000	11.000
0192	657.0322	Poles Type 5-Aluminum	EACH	11.000	11.000
0194	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	11.000	11.000
0196	659.1115	Luminaires Utility LED A	EACH	11.000	11.000

Estimate Of Quantities

1480-29-71

Line	Item	Item Description	Unit	Total	Qty
0198	690.0150	Sawing Asphalt	LF	6,336.000	6,336.000
0200	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	3,022.000	3,022.000
0202	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	600.000	600.000
0204	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,200.000	1,200.000

3

REMOVALS

STATION	OFFSET	LOCATION	203.0100 REMOVING SMALL PIPE PIPE CULVERTS EACH	204.0220 REMOVING INLETS EACH	204.9060.S REMOVING EXISTING ENDWALL EACH
CATEGORY 0010					
377+05 SB	17' RT	MEDIAN	--	--	1
384+94 NB	26' LT	MEDIAN	--	--	1
41+47 K	31' LT	CTH K	--	--	1
43+49 K	34' LT	CTH K	--	--	1
43+66 K	0	CTH K	1	--	--
43+89 K	15' LT	CTH K	--	1	--
43+97 K	62' LT	CTH K	--	--	1
44+00 K	24' LT	CTH K	1	--	--
44+19 K	40' LT	CTH K	--	--	1
		TOTAL	**2**	**1**	**6**

REMOVING CURB & GUTTER

STATION TO	STATION TO	204.0150 REMOVING CURB & GUTTER LF	LOCATION
CATEGORY 0010			
380+71 NB -	381+33 NB	87	MEDIAN
382+10 SB -	382+71 SB	83	MEDIAN
40+00 K -	41+68 K	223	BAY SETTLEMENT ROAD SOUTH SIDE
40+41 K -	42+16 K	227	BAY SETTLEMENT ROAD NORTH SIDE
43+19 K -	43+65 K	57	CHAMPION ROAD SOUTH SIDE
43+49 K -	43+93 K	107	CHAMPION ROAD SPLITTER ISLAND
43+75 K -	46+19 K	290	CHAMPION ROAD NORTH SIDE
	TOTAL	**1,074**	

3

REMOVING FENCE

STATION TO	STATION TO	204.0170 REMOVING FENCE LF	LOCATION
CATEGORY 0010			
383+43 SB -	391+80 SB	840	SOUTHBOUND LT
	TOTAL	**840**	

CONCRETE PAVEMENT

STATION TO	STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	416.0610 DRILLED TIE BARS EACH	602.0405 CONCRETE SIDEWALK 4-INCH SF	REMARKS
CATEGORY 0010						
374+42 -	374+97	MEDIAN	400	--	--	MEDIAN TURNAROUND
372+42 -	381+35	STH 57 NB	2,120	298	--	OUTSIDE LANE AND SHOULDER
374+97 -	390+15	STH 57 NB	1,151	506	--	MEDIAN LANE AND SHOULDER
381+03 -	382+49	STH 57 NB	--	--	1,041	MEDIAN SIDEWALK CROSSING
389+97 -	390+88	MEDIAN	421	--	--	MEDIAN TURNAROUND
375+21 -	390+27	STH 57 SB	974	502	--	MEDIAN LANE AND SHOULDER
382+14 -	393+68	STH 57 SB	3,029	385	--	OUTSIDE LANE AND SHOULDER
13+82 -	15+98	BAY SET ROAD	804	--	--	BAY SET ROAD AND CONNECTOR AND 57 SB INTERSECTION
43+25 -	44+66	CTH K	1,176	--	--	CONCRETE PORTION
	TOTAL		**10,074**	**1,691**	**1,041**	

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE	COMMENT
		CUT (2)	EBS EXCAVATION (3)				FACTOR 1.25			
DIVISION 1										
BAY SETTLEMENT ROAD	13+81.826/15+99.392	401	0	64	337	3	4	333	333	
BS ROAD CONNECTOR	40+45.951/42+06	907	0	48	859	92	115	744	744	
CTH K	43+25/46+82.661	1,560	0	131	1,429	1	1	1,428	1,428	
STH 57 NB	372+43.967/393+55.153	6,958	0	343	6,615	281	351	6,264	6,264	
STH 57 SB	372+46.858/393+68.244	8,402	0	398	8,004	266	333	7,672	7,672	
DIVISION 1 SUBTOTAL		18,228	0	984	17,244	643	804	16,440	16,440	
GRAND TOTAL		18,228	0	984	17,244	643	804	16,440	16,440	
TOTAL COMMON EXC		18,228								

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(13) EXPANDED FILL FACTOR = 1.25

DEPENDING ON SELECTIONS **EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR**

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHI

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

BASE AGGREGATE DENSE

STATION	TO STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	REMARKS
CATEGORY 0010						
372+42 -	374+42	STH 57 NB	33	161	252	MEDIAN SHOULDER
374+42 -	374+97	MEDIAN	--	245	320	MEDIAN TURNAROUND
372+42 -	381+35	STH 57 NB	141	1,793	2,705	OUTSIDE LANE AND SHOULDER
374+97 -	390+15	STH 57 NB	250	2,043	3,033	MEDIAN LANE AND SHOULDER
381+03 -	382+49	STH 57 NB	--	44	--	MEDIAN SIDEWALK CROSSING
389+97 -	390+88	MEDIAN	--	234	337	MEDIAN TURNAROUND
390+63 -	390+88	STH 57 NB	4	14	24	MEDIAN SHOULDER
374+36 -	374+58	STH 57 SB	4	12	21	MEDIAN SHOULDER
375+21 -	390+27	STH 57 SB	250	1,900	2,838	MEDIAN LANE AND SHOULDER
382+14 -	393+68	STH 57 SB	182	2,444	3,690	OUTSIDE LANE AND SHOULDER
390+85 -	393+68	STH 57 SB	46	230	359	MEDIAN SHOULDER
13+82 -	15+98	BAY SET ROAD	74	--	--	WEST SHOULDER
13+82 -	15+98	BAY SET ROAD	--	1,538	643	BAY SET ROAD AND CONNECTOR AND 57 SB INTERSECTION
13+82 -	14+10	BAY SET ROAD	6	--	--	EAST SHOULDER
15+63 -	15+98	BAY SET ROAD	8	--	--	EAST SHOULDER
43+25 -	44+66	CTH K	--	767	941	CONCRETE PORTION
44+66 -	46+83	CTH K	--	588	--	ASPHALT PORTION
44+65 -	46+83	CTH K	37	--	--	NORTH SHOULDER
46+19 -	46+83	CTH K	8	--	--	SOUTH SHOULDER
		TOTAL	**1,042**	**12,012**	**15,162**	

3

CONCRETE CURB & GUTTER

STATION TO STATION			LOCATION	601.0551 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0553 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	REMARKS
CATEGORY 0010						
374+40	-	374+55	STH 57 NB	47	--	MEDIAN TURNAROUND SOUTH SIDE
40+00	-	41+19	BAY SET ROAD	--	133	CONNECTOR SOUTH SIDE
41+19	-	41+63	BAY SET ROAD	83	--	CONNECTOR SOUTH SIDE
41+48	-	41+97	BAY SET ROAD	101	--	CONNECTOR ISLAND
40+41	-	41+19	BAY SET ROAD	--	114	CONNECTOR NORTH SIDE
41+19	-	42+02	BAY SET ROAD	114	--	CONNECTOR NORTH SIDE
43+27	-	43+77	CTH K	63	--	SOUTH SIDE
43+39	-	43+89	CTH K	114	--	ISLAND
43+78	-	44+66	CTH K	136	--	NORTH SIDE
44+66	-	46+19	CTH K	--	153	NORTH SIDE
390+61	-	390+71	STH 57 NB	45	--	MEDIAN TURNAROUND NORTH SIDE
TOTAL				**703**	**400**	

ASPHALTIC FLUMES

STATION TO STATION			LOCATION	465.0315 SY	REMARKS
CATEGORY 0010					
374+33	-	374+57	STH 57 SB	7	MEDIAN TURNAROUND SOUTH SIDE
14+17	-	14+20	BAY SET ROAD	8	EAST SIDE
40+80	-	41+00	CONNECTOR	15	NORTH SIDE
43+30	-	43+42	CTH K	3	SOUTH SIDE
44+19	-	44+24	CTH K	3	NORTH SIDE
390+83	-	391+05	STH 57 SB	9	MEDIAN LANE AND SHOULDER
TOTAL				**45**	

3

ASPHALTIC MATERIALS

STATION TO STATION			LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT LOWER LAYER 3 LT 58-28S TON	460.6224 HMA PAVEMENT UPPER LAYER 4 LT 58-28S TON	465.0305 ASPHALTIC SURFACE SAFETY ISLAND TON	REMARKS
CATEGORY 0010								
372+42	-	374+42	STH 57 NB	--	10	7	--	MEDIAN SHOULDER
372+42	-	381+35	STH 57 NB	22	25	18	--	OUTSIDE LAND AND SHOULDER
374+97	-	390+15	STH 57 NB	94	105	75	--	MEDIAN LANE AND SHOULDER
375+21	-	390+27	STH 57 SB	87	97	70	--	MEDIAN LANE AND SHOULDER
382+14		393+68	STH 57 SB	23	26	18	--	OUTSIDE LANE AND SHOULDER
390+85	-	393+68	STH 57 SB	13	14	10	--	MEDIAN SHOULDER
13+82	-	15+98	BAY SET ROAD	156	174	125	6	BAY SET ROAD AND CONNECTOR AND 57 SB INTERSECTION
44+66		46+83	CTH K	99	110	79	9	ASPHALT PORTION
			TOTAL	**493**	**560**	**403**	**15**	

3

CULVERT PIPE AND STORM SEWER ITEMS

STRUCTURE NUMBER	STATION	OFFSET* FT	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE RCP 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE RCP 24-INCH EACH	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONAL ELLIPTICAL 19X30-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0627 INLET COVERS TYPE HM EACH	611.3230 INLETS 2X3 - FT EACH	611.2004 MAHOLES 4-FT DIAMETER EACH	RIM OR FLANGE ELEV	STR DEPTH** FT	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE %
CATEGORY 0010																	
1	374+12NB	31.0' LT	--	--	--	1	--	--	--	--	--	--	--	--	716.59	--	--
2	375+40NB	19.0' LT	--	--	--	1	--	--	--	--	--	--	1	2	716.59	715.81	0.61%
3	377+05SB	31.8' RT	--	1	--	--	--	--	--	--	--	--	--	--	715.48	--	--
4	383+94NB	29.0' LT	--	1	--	--	--	--	--	--	--	--	--	--	718.35	--	--
5	389+66NB	35.4' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	719.50	--
6	391+18NB	29.1' LT	--	--	1	--	--	--	--	--	--	--	6	5	720.20	719.50	0.46%
7	41+55BSC	47.4' LT	1	--	--	--	--	--	--	--	--	--	--	--	717.70	--	2.71%
8	41+22BSC	54.5' RT	--	--	--	1	--	--	--	--	--	--	--	--	--	717.00	--
9	41+54BSC	10.3' RT	--	--	--	--	--	1	1	--	721.01	2.56	9	8	717.50	717.00	0.92%
10	43+43K	65.1' RT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
11	43+76K	13.1' LT	--	--	--	--	1	--	--	1	719.75	2.49	11	10	716.31	715.94	0.44%
12	43+96K	60.1' LT	--	--	--	1	--	--	--	--	--	--	12	11	716.54	716.31	0.44%
13	43+84K	13.4' LT	--	--	--	--	--	1	1	--	719.67	2.22	13	11	716.50	716.39	1.35%
14	382+64K	32.9' LT	--	--	--	1	--	--	--	--	--	--	14	15	717.05	715.85	0.68%
15	380+89K	22.5' LT	--	--	--	1	--	--	--	--	--	--	14	15	717.05	715.85	0.68%
	TOTAL		**1**	**2**	**2**	**7**	**1**	**2**	**2**	**1**							

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT; HAND POUR STRUCTURE FLOWLINES TO MATCH PIPE INVERTS AFTER STRUCTURE AND PIPE ARE INSTALLED

CULVERT PIPE AND STORM SEWER ITEMS

STRUCTURE NUMBER	STATION	OFFSET* FT	520.8000 CONCRETE COLLARS FOR PIPE LF	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH *** LF	522.0418 CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	RIM OR FLANGE ELEV	STR DEPTH** FT	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE %
CATEGORY 0010														
1	374+12NB	31.0' LT	--	--	--	--	--	--	--	--	--	716.59	--	--
2	375+40NB	19.0' LT	--	--	--	--	128	--	--	1	2	716.59	715.81	0.61%
3	377+05SB	31.8' RT	--	--	8	--	--	--	--	--	--	715.48	--	--
4	383+94NB	29.0' LT	--	--	8	--	--	--	--	--	--	718.35	--	--
5	389+66NB	35.4' LT	--	--	--	--	--	--	--	--	--	--	719.50	--
6	391+18NB	29.1' LT	--	--	--	152	--	--	--	6	5	720.20	719.50	0.46%
7	41+55BSC	47.4' LT	1	24	--	--	--	--	--	--	--	717.70	--	2.71%
8	41+22BSC	54.5' RT	--	--	--	--	--	--	--	--	--	--	717.00	--
9	41+54BSC	10.3' RT	--	--	--	--	--	721.01	2.56	9	8	717.50	717.00	0.92%
10	43+43K	65.1' RT	--	--	--	--	--	--	--	--	--	--	--	--
11	43+76K	13.1' LT	--	--	--	--	85	719.75	2.49	11	10	716.31	715.94	0.44%
12	43+96K	60.1' LT	--	--	--	--	51	--	--	12	11	716.54	716.31	0.44%
13	43+84K	13.4' LT	--	--	8	--	--	719.67	2.22	13	11	716.50	716.39	1.35%
14	382+64K	32.9' LT	--	--	--	--	176	--	--	14	15	717.05	715.85	0.68%
15	380+89K	22.5' LT	--	--	--	--	--	--	--	14	15	717.05	715.85	0.68%
	TOTAL		**1**	**24**	**24**	**152**	**440**							

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT; HAND POUR STRUCTURE FLOWLINES TO MATCH PIPE INVERTS AFTER STRUCTURE AND PIPE ARE INSTALLED

*** MINIMUM PIPE THICKNESS SHALL BE 0.064 INCHES

PIPE UNDERDRAIN, UNPERFORATED, 6-INCH

STATION	LOCATION	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONRETE 6-INCH EACH	REMARKS
375+00	STH 57 NB RT	9	1	EXTEND TO NEW DITCH LOCATION
377+79	STH 57 NB RT; STH 57 SB RT	17	2	EXTEND TO NEW DITCH LOCATION
380+00	STH 57 NB RT; STH 57 SB RT	17	2	EXTEND TO NEW DITCH LOCATION
TOTAL		**43**	**5**	

3

WATER

STATION		TO STATION	624.0100 WATER MGAL	630.0500 SEED WATER MGAL	LOCATION
CATEGORY 0010					
COMPACTION AND DUST CONTROL					
372+42	-	374+42	2	--	MEDIAN SHOULDER
374+42	-	374+97	3	--	MEDIAN TURNAROUND
372+42	-	381+35	25	--	OUTSIDE LANE AND SHOULDER
374+97	-	390+15	29	--	MEDIAN LANE AND SHOULDER
381+03	-	382+49	1	--	MEDIAN SIDEWALK CROSSING
389+97	-	390+88	3	--	MEDIAN TURNAROUND
390+63	-	390+88	0	--	MEDIAN SHOULDER
374+36	-	374+58	0	--	MEDIAN SHOULDER
375+21	-	390+27	27	--	MEDIAN LANE AND SHOULDER
382+14	-	393+68	34	--	OUTSIDE LANE AND SHOULDER
390+85	-	393+68	3	--	MEDIAN SHOULDER
13+82	-	15+98	22	--	BAY SET ROAD AND CONNECTOR & 57 SB INTERSECTION
43+25	-	44+66	11	--	CONCRETE PORTION
44+66	-	46+83	8	--	ASPHALT PORTION
WATER FOR SOD/SEEDED AREAS					
372+42	-	381+80	--	50	NB OUTSIDE SHOULDER
372+39	-	374+47	--	24	MEDIAN
374+98	-	390+11	--	120	MEDIAN
390+70	-	393+54	--	34	MEDIAN
382+14	-	393+67	--	85	SB OUTSIDE SHOULDER
40+02	-	41+67	--	3	CONNECTOR SOUTH SIDE
40+48	-	41+95	--	7	CONNECTOR NORTH SIDE
43+78	-	46+82	--	3	CTH K SOUTH SIDE
44+26	-	46+20	--	1	CTH K NORTH SIDE
TOTAL			**168**	**328**	

FENCE

STATION		TO STATION		TO	616.0205 FENCE CHAIN LINK 5-FT LF	LOCATION
CATEGORY 0010						
383+43	SB	-	391+80	SB	843	SOUTHBOUND LT
TOTAL					**843**	

LANDSCAPING

STATION		TO STATION	LOCATION	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0170 SEEDING MIXTURE NO. 70 LB	REMARKS
372+42	-	381+80	NB OUTSIDE SHOULDER	1.41	28.0	2.4	PLACE NO. 70 SEED ON BACKSLOPE
372+39	-	374+47	MEDIAN	0.68	19.6	--	
374+98	-	390+11	MEDIAN	3.38	96.6	--	
390+70	-	393+54	MEDIAN	0.94	26.9	--	
382+14	-	393+67	SB OUTSIDE SHOULDER	2.40	35.5	6.6	PLACE NO. 70 SEED ON BACKSLOPE
40+02	-	41+67	CONNECTOR SOUTH SIDE	0.09	2.6	--	
40+48	-	41+95	CONNECTOR NORTH SIDE	0.20	5.8	--	
43+78	-	46+82	CTH K SOUTH SIDE	0.08	2.2	--	
44+26	-	46+20	CTH K NORTH SIDE	0.04	1.2	--	
TOTAL				**9.22**	**218**	**9**	

SAWING

STATION		TO STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
CATEGORY 0010					
372+41	-	383+10	STH 57	1,085	NB OUTSIDE
372+41	-	390+88	STH 57	1,853	NB MEDIAN
374+36	-	393+68	STH 57	1,938	SB MEDIAN
380+75	-	393+68	STH 57	1,309	SB OUTSIDE
13+82	-	15+98	BAY SET	51	BAY SETTLEMENT ROAD
43+26	-	46+83	CTH K	100	CTH K
TOTAL				**6,336**	

EROSION CONTROL

STATION	TO STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2002 EROSION MAT CLASS I TYPE A SY	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS EACH	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
UNDISTRIBUTED		PROJECT	--	--	--	--	4	2	--	--	--	--	--	50
372+42	- 381+80	NB OUTSIDE SHOULDER	2,231	1,586	167	167	--	--	645	--	--	5	--	--
372+39	- 374+47	MEDIAN	1,086	946	--	--	--	--	140	1	--	1	3	--
374+98	- 390+11	MEDIAN	5,365	4,261	--	--	--	--	1,104	--	--	6	7	--
390+70	- 393+54	MEDIAN	1,496	1,296	--	--	--	--	200	--	--	1	2	--
382+14	- 393+67	SB OUTSIDE SHOULDER	3,809	2,915	163	163	--	--	894	--	--	6	--	--
40+02	- 41+67	CONNECTOR SOUTH SIDE	143	143	210	210	--	--	--	--	1	2	--	--
40+48	- 41+95	CONNECTOR NORTH SIDE	325	325	120	120	--	--	--	--	--	1	3	--
43+78	- 46+82	CTH K SOUTH SIDE	122	122	270	270	--	--	--	--	1	1	--	--
44+26	- 46+20	CTH K NORTH SIDE	64	64	200	200	--	--	--	--	--	1	3	--
TOTAL			**14,640**	**11,657**	**1,130**	**1,130**	**4**	**2**	**2,983**	**1**	**2**	**24**	**18**	**50**

PAVEMENT MARKING

STATION	TO STATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.5020 MARKING ARROW EPOXY WHITE EACH	646.5120 MARKING WORD EPOXY WHITE EACH	646.6120 MARKING STOP LINE EPOXY 18- INCH WHITE LF	646.6220 MARKING YIELD LINE EPOXY WHITE EACH	646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF	646.8120 MARKING CURB EPOXY YELLOW LF	LOCATION
CATEGORY 0010											
372+41	- 381+35 NB	893	--	1,590	--	--	--	--	480	--	NB OUTSIDE TURN LANE AND SHOULDER
383+10	- 390+87 NB	625	--	--	--	--	--	--	--	--	NB OUTSIDE SHOULDER
372+41	- 390+88 NB	33	1,760	875	--	--	--	9	--	--	NB INSIDE TURN LANE AND SHOULDER
374+36	- 393+68 SB	33	1,844	784	--	--	--	9	--	--	SB INSIDE TURN LANE AND SHOULDER
374+38	- 380+63 SB	626	--	--	--	--	--	--	--	--	SB OUTSIDE SHOULDER
382+15	- 393+68 SB	1,158	--	2,090	--	--	--	--	817	--	SB OUTSIDE TURN LANE AND SHOULDER
13+82	- 14+18 BS	--	72	--	--	--	--	--	--	--	BAY SETTLEMENT ROAD - SOUTH OF INTERSECTION
15+62	- 15+98 BS	--	72	--	--	--	--	--	--	--	BAY SETTLEMENT ROAD - NORTH OF INTERSECTION
40+21	- 42+00 BS	--	264	--	2	1	44	--	--	39	BAY SETTLEMENT ROAD CONNECTOR
43+50	- 46+82 K	368	597	--	2	1	46	--	--	46	CTH K
SUBTOTAL		3,736	4,609								
TOTAL		**8,345**		**5,339**	**4**	**2**	**90**	**18**	**1,297**	**85**	

TRAFFIC CONTROL

LOCATION	STAGE DURATION	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL PCMS DAY	REMARKS
CATEGORY 0010															
STAGE 1															
STH 57 NB	32	70	2,240	10	320	20	640	6	192	2	64	15	480	7	NB INSIDE LANE CLOSURE
STH 57 SB	32	70	2,240	10	320	20	640	6	192	2	64	15	480	7	SB INSIDE LANE CLOSURE
CTH K	32	6	192	1	32	2	64	6	192	--	--	2	64	7	CTH K RIGHT TURN ONLY
BAY SETTLEMENT	32	7	224	--	--	--	--	7	224	--	--	--	--	7	BAY SETTLEMENT RIGHT TURN ONLY
SUBTOTAL STAGE 1		140	4,480	20	640	40	1,280	12	384	4	128	30	960	28	
STAGE 2															
STH 57 NB	33	100	3,300	20	660	40	1,320	12	396	2	66	17	561	7	NB OUTSIDE LANE CLOSURE
STH 57 SB	33	100	3,300	20	660	40	1,320	12	396	2	66	17	561	7	SB OUTSIDE LANE CLOSURE
CTH K	33	6	198	6	198	12	396	6	198	--	--	9	297	7	ROAD CLOSURE; LOCAL TRAFFIC ONLY
BAY SETTLEMENT	33	--	--	10	330	20	660	--	--	--	--	9	297	7	ROAD CLOSURE; LOCAL TRAFFIC ONLY
SUBTOTAL STAGE 2		206	6,798	46	1,518	92	3,036	30	990	4	132	43	1,419	28	
UNDISRIBUTED QUANTITY		--	1,169	--	252	--	504	--	179	--	26	--	274	--	10% OF TOTAL
TOTAL	**TOTAL**		**12,447**		**2,410**		**4,820**		**1,553**		**286**		**2,653**	**56**	

TRAFFIC CONTROL COVERING SIGNS TYPE II

643.0900

LOCATION	EACH	NO. CYCLES	NO. SIGNS	REMARKS
CATEGORY 0010				
STAGE 1				
STH 57 NB	3	1	3	NB INSIDE LANE CLOSURE
STH 57 SB	3	1	3	SB INSIDE LANE CLOSURE
STAGE 2				
STH 57 NB	2	1	2	NB OUTSIDE LANE CLOSURE
STH 57 SB	2	1	2	SB OUTSIDE LANE CLOSURE
TOTAL	**10**			

TRAFFIC CONTROL QUEUE WARNING SYSTEM

643.1200.S

PORTABLE AUTOMATED REAL-TIME
REAL-TIME TRAFFIC QUEUE
WARNING SYSTEM

LOCATION/STAGE	DAY	REMARKS
CATEGORY 0010		
STH 57 NB	65	2 MILES OF COVERAGE
STH 57 SB	65	2 MILES OF COVERAGE
	130	

FILE NAME : _____ PLOT DATE : _____ PLOT BY : DUMS, ALEXANDER T PLOT NAME : _____ PLOT SCALE : 1:1

REMOVING TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
1	STH 57, S. of CTH K	J1-1	1	1
2	"	J1-1	1	1
3	"	D1-1	1	2
4	"	R5-1A	1	1
5	"	D1-1	1	2
6	"	R2-1	1	1
7	"	J4-1	1	1
8	"	J13-1	1	1
9	"	R5-1	---	---
10	"	R4-7	1	1
11	"	R4-7	1	1
12	"	J13-1	1	1
13	CTH K	R6-1R	---	---
14	"	R1-1	1	1
15	"	R1-1	1	1
16	"	J13-2	1	1
17	BAY SETTLEMENT RD	R6-1R	---	---
18	"	R1-1	1	1
19	"	R5-1	1	1
20	STH 57, N. OF CTH K	J13-1	1	1
21	"	J13-1	1	1
22	"	R5-1	---	---
23	"	R5-1A	1	1
24	"	D1-1	1	2
25	"	D1-1	1	2
26	"	J13-1	1	1
27	"	J13-1	1	1
	TOTALS		**23**	**27**

3

3

ERECTION OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
50	STH 57, S. OF CTH K	R2-1	48" X 60"	20.00	---	2	65 MPH
51	"	J4-1	36" X 54"	13.50	---	1	SEE PLAN SHEET
52	"	J1-1	36" X 57"	14.25	---	1	SEE PLAN SHEET
53	"	R5-1A	42" X 30"	8.75	---	---	MOUNT TO BACK OF SIGN 52
54	"	J1-1	36" X 57"	14.25	---	1	SEE PLAN SHEET
55	"	R5-1	36" X 36"	9.00	1	---	
56	"	R6-2L	36" X 48"	12.00	1	---	
57	"	R5-1	36" X 36"	9.00	1	---	
58	"	R3-18	36" X 36"	9.00	1	---	
59	"	R6-1L	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 60
60	"	R1-2	36" X 31"	3.88	---	1	
61	"	R6-1L	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 62
62	"	R1-2	36" X 31"	3.88	---	1	
63	"	J3-2	72" X 84"	42.00	---	2	SEE PLAN SHEET
64	"	J2-3	108" X 84"	63.00	---	2	SEE PLAN SHEET
65	"	J2-3	108" X 84"	63.00	---	2	SEE PLAN SHEET
66	"	D1-1	96" X 21"	14.00	2	---	SEE SIGN DETAILS
67	"	R5-1A	42" X 30"	8.75	1	---	
68	"	D1-1	138" X 21"	20.13	---	2	SEE SIGN DETAILS
69	"	J13-1	36" X 45"	11.25	1	---	SEE PLAN SHEET
70	VACANT		X	0.00	---	---	
71	STH 57, S. OF CTH K	R5-1	36" X 36"	9.00	---	---	MOUNT TO BACK OF SIGN 69
72	"	R6-2R	24" X 30"	5.00	1	---	
73	CTH K	R6-1R	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 74
74	"	R1-1	36" X 36"	7.46	---	1	
75	"	R4-7	24" X 30"	5.00	1	---	
76	"	R6-1R	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 76
77	"	R1-1	36" X 36"	7.46	---	1	
78	VACANT		X	0.00	---	---	
79	BAY SETTLEMENT RD	J13-2	48" X 45"	15.00	1	---	SEE PLAN SHEET
80	"	R6-1R	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 81
81	"	R1-1	36" X 36"	7.46	---	1	
82	"	R6-1R	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 83
83	"	R1-1	36" X 36"	7.46	---	1	
84	"	R4-7	24" X 30"	5.00	1	---	
	PAGE SUBTOTALS			426.48	12	19	

ERECTION OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
85	CTH K	J13-2	48" X 45"	15.00	1	---	SEE PLAN SHEET
86	STH 57, N. OF CTH K	R6-2R	24" X 30"	5.00	1	---	
87	"	R5-1	36" X 36"	9.00	1	---	
88	"	D1-1	96" X 21"	14.00	---	2	SEE SIGN DETAILS
89	"	J2-3	108" X 84"	63.00	---	2	SEE PLAN SHEET
90	"	J2-3	108" X 84"	63.00	---	2	SEE PLAN SHEET
91	"	R5-1A	42" X 30"	8.75	1	---	
92	"	J13-1	36" X 66"	16.50	---	1	SEE PLAN SHEET
93	"	J13-1	36" X 66"	16.50	---	1	SEE PLAN SHEET
94	"	J3-1	36" X 84"	21.00	---	1	SEE PLAN SHEET
95	"	R6-1L	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 96
96	"	R1-2	36" X 31"	3.88	---	1	
97	"	R6-1L	36" X 12"	3.00	---	---	MOUNT ABOVE SIGN 98
98	"	R1-2	36" X 31"	3.88	---	1	
99	"	R5-1	36" X 36"	9.00	1	---	
100	"	R3-18	36" X 36"	9.00	1	---	
101	"	R6-2L	36" X 48"	12.00	1	---	
102	"	R5-1	36" X 36"	9.00	1	---	
103	"	R5-1A	42" X 30"	8.75	---	---	MOUNT TO BACK OF SIGN 104
104	"	D1-1	138" X 21"	20.13	2	---	SEE SIGN DETAILS
	PAGE SUBTOTALS			313.39	10	11	
	PROJECT TOTALS			**739.86**	**22**	**30**	

3

3

Electrical Wire Lighting

			10AWG	12AWG	
LOCATION					655.0610
STH 57 & CTH K			655.0615	655.0610	Equipment
			Ungrounded	Ungrounded	Grounding
(240 VOLT SYSTEM)			Conductor	Conductor	Conductor
			(see Circuit Color)	(Black)/(Red)	(Green)
Circuit	FROM	TO	LF	LF	LF
A	CB1	LB1	146		
(Black)	LB1	Luminaires		100	50
	LB1	LB3	908		
	LB3	Luminaires		100	50
	LB3	LB5	660		
	LB5	Luminaires		100	50
B	CB1	LB2	630		
(Red)	LB2	Luminaires		100	50
	LB2	LB4	660		
	LB4	Luminaires		100	50
	LB4	LB6	636		
	LB6	Luminaires		100	50
C	CB1	LB7	862		
(Blue)	LB7	Luminaires		100	50
	LB7	LB9	858		
	LB9	Luminaires		100	50
	LB9	LB11	676		
	LB11	Luminaires		100	50
D	CB1	LB8	1326		
(Brown)	LB8	Luminaires		100	50
	LB8	LB10	660		
	LB10	Luminaires		100	50
		SUB-TOTALS	8,022	1,100	550
		TOTAL	8,022	1,650	

Electrical Wire Lighting 10AWG

LOCATION		655.0615
STH 57 & CTH K		Equipment
		Grounding
(240 VOLT SYSTEM)		Conductor
		(Green)
FROM	TO	LF
CB1	LB1	73
LB1	LB2	293
LB2	LB3	169
LB3	LB4	169
LB4	LB5	169
LB5	LB6	157
LB1	LB7	409
LB7	LB8	283
LB8	LB9	169
LB9	LB10	169
LB10	LB11	177
	TOTAL	2,237

Electric Service

	656.0200
	Meter Breaker Pedestal
LOCATION	LS
STH 57 & CTH K	1

Conduit Rigid Nonmetallic Schedule 40

LOCATION		652.0225
STH 57 & CTH K		2-Inch
FROM	TO	LF
CB1	PB1	25
CB1	PB1	25
PB1	LB1	10
PB1	PB2	80
PB2	LB2	157
LB2	LB3	153
LB3	LB4	153
LB4	LB5	153
LB5	LB6	141
PB2	PB3	137
PB3	PB4	96
PB4	LB7	10
PB4	PB5	94
PB5	LB8	133
LB8	LB9	153
LB9	LB10	153
LB10	LB11	161
	TOTAL	1,834

Lighting Summary

	657.0255	657.0322	657.0710	659.1115
	Transformer Bases	Poles	Luminaire Arms	Luminaires
	Breakaway	Type 5	Truss Type	Utility
	11 1/2-Inch	(Aluminum)	4 1/2-Inch Clamp	LED-A
	Bolt Circle		12-FT	
LOCATION	EACH	EACH	EACH	EACH
STH 57 & CTH K	11	11	11	11

Concrete Bases

		654.0220
	654.0105	Control
	Type 5	Cabinet
		NER Type 10
LOCATION	EACH	EACH
STH 57 & CTH K	11	1

Pull Boxes, Non-Conductive

	563.0164
	24x42-Inch
LOCATION	EACH
STH 57 & CTH K	5

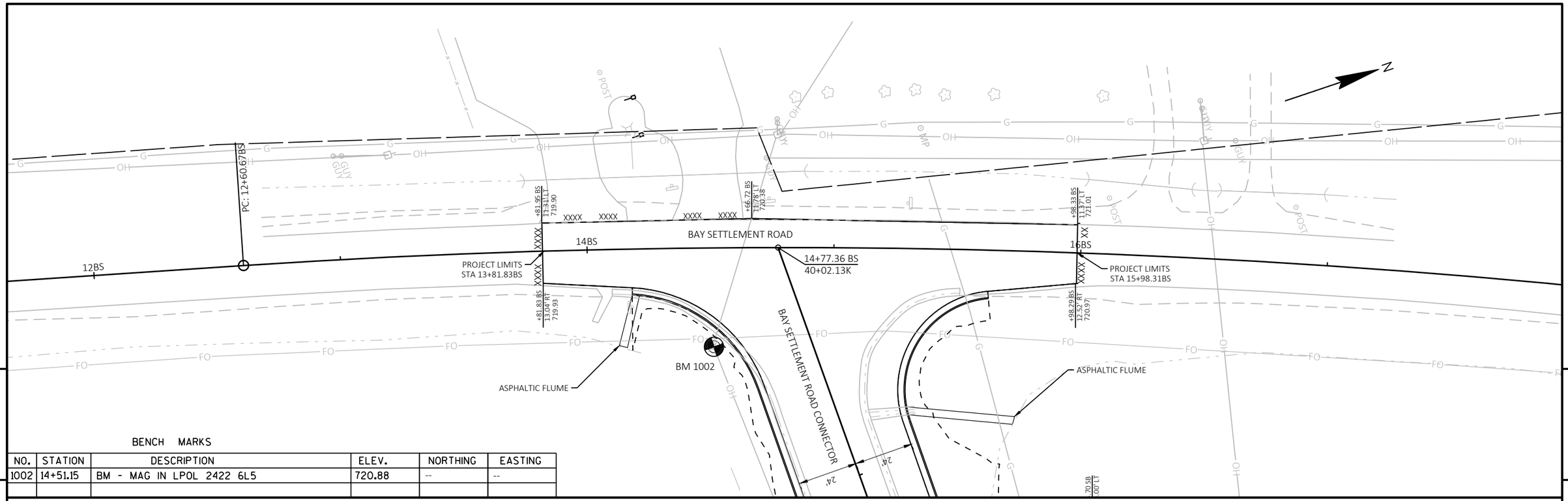
3

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	REMARKS
CATEGORY 0010						
372+41 - 383+10	STH 57	--	1,069	--	1,069	NB OUTSIDE
372+41 - 390+88	STH 57	--	1,847	4	1,847	NB MEDIAN
374+36 - 393+68	STH 57	--	1,932	1	1,932	SB MEDIAN
380+75 - 393+68	STH 57	--	1,293	--	1,293	SB OUTSIDE
13+82 - 15+98	BAY SET	--	216	--	--	BAY SETTLEMENT ROAD
40+00 - 42+07	CONNECTOR	--	207	1	--	BAY SETTLEMENT ROAD CONNECTOR
43+26 - 46+83	CTH K	--	357	--	--	CTH K
PROJECT		6	--	--	--	
	TOTAL	**6**	**6,921**	**6**	**6,141**	

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS LS	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
CATEGORY 0010					
372+41 - 383+10	STH 57	--	--	1,069	NB OUTSIDE
372+41 - 390+88	STH 57	--	--	1,847	NB MEDIAN
374+36 - 393+68	STH 57	--	--	1,932	SB MEDIAN
380+75 - 393+68	STH 57	--	--	1,293	SB OUTSIDE
13+82 - 15+98	BAY SET	--	--	216	BAY SETTLEMENT ROAD
40+00 - 42+07	CONNECTOR	--	--	207	BAY SETTLEMENT ROAD CONNECTOR
43+26 - 46+83	CTH K	--	--	357	CTH K
PROJECT		1	1	--	
	TOTAL	**1**	**1**	**6,921**	

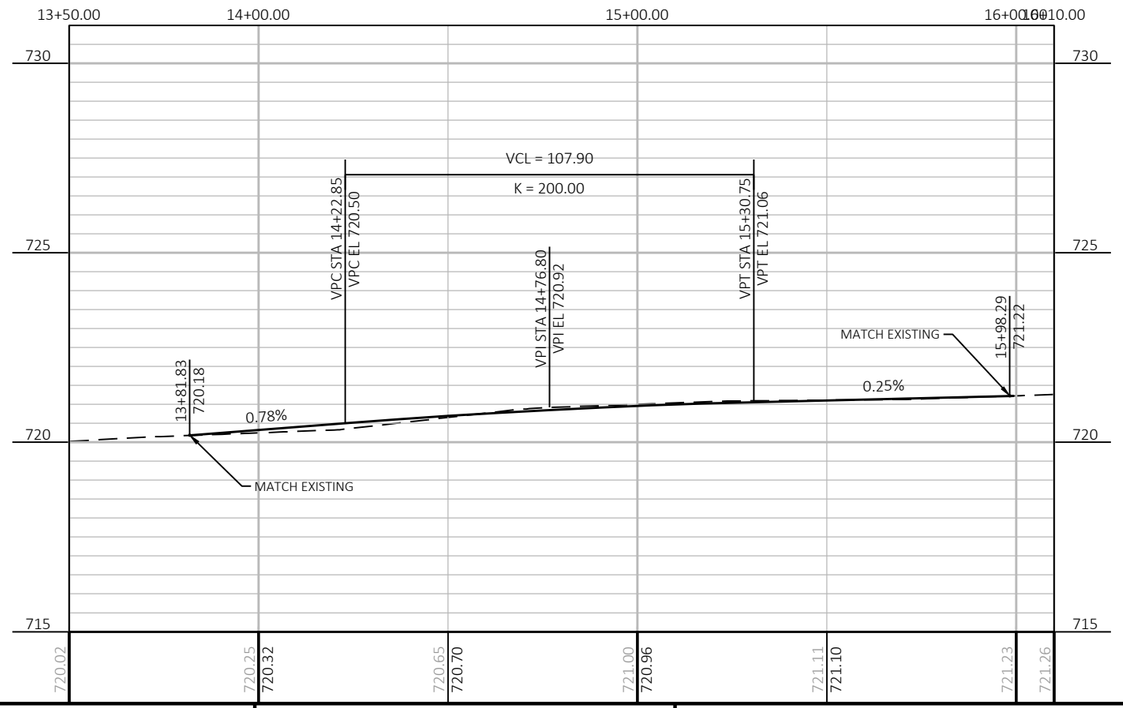


5

5

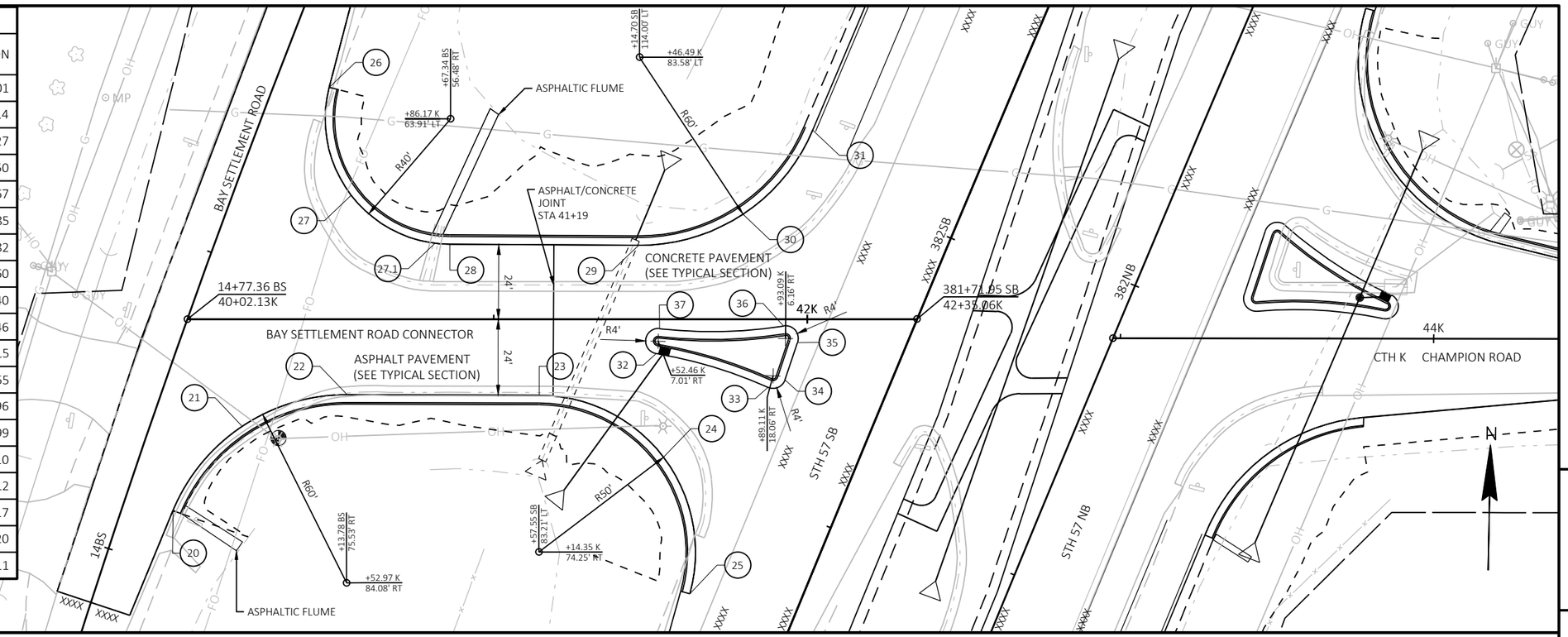
BENCH MARKS

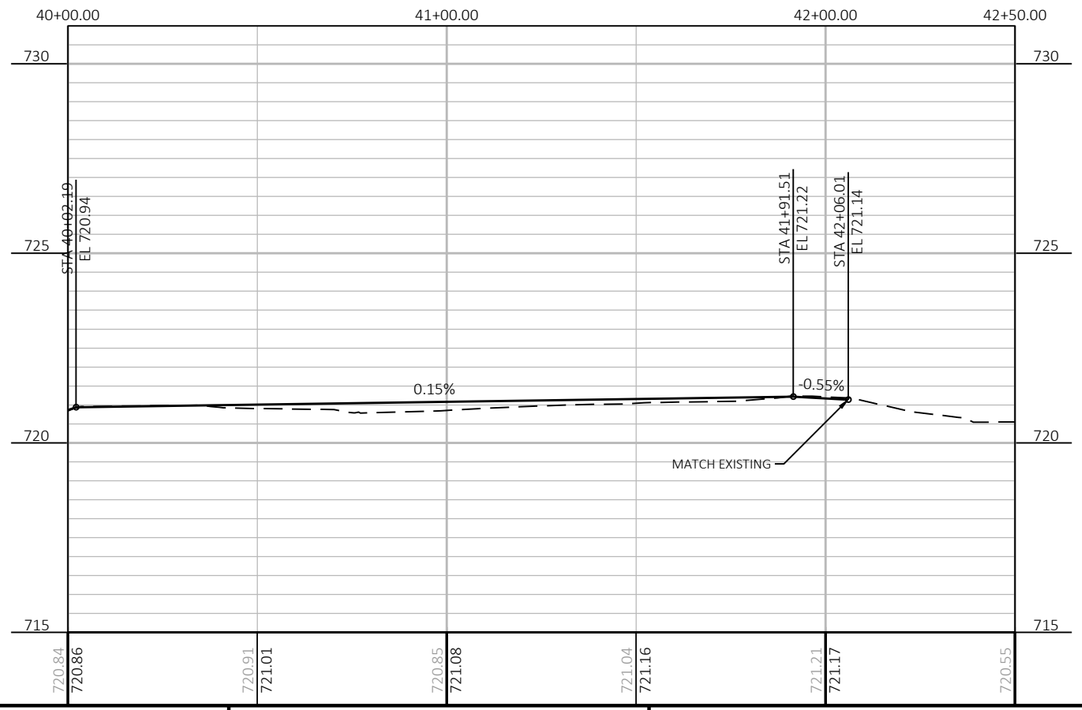
NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
1002	14+51.15	BM - MAG IN LPOL 2422 6L5	720.88	--	--



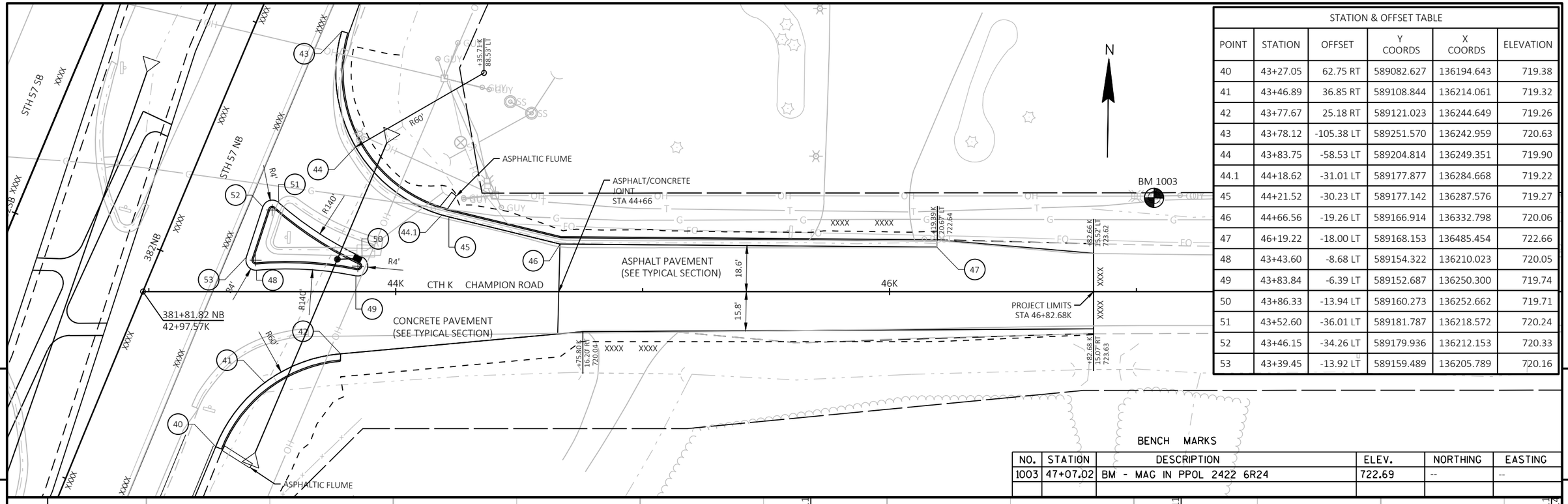
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN AND PROFILE: BAY SETTLEMENT ROAD	SHEET 61	E

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
20	39+97.60	60.98 RT	589084.566	135865.210	720.01
21	40+19.69	34.16 RT	589111.778	135886.815	720.14
22	40+53.13	24.08 RT	589122.455	135920.068	720.27
23	41+14.49	24.25 RT	589123.397	135981.417	720.50
24	41+54.18	44.02 RT	589104.340	136021.465	720.67
25	41+62.54	87.58 RT	589060.941	136030.607	720.85
26	40+47.46	-73.99 LT	589220.408	135912.631	720.82
27	40+54.45	-39.53 LT	589186.086	135920.246	720.60
27.1	40+81.16	-24.22 LT	589171.260	135947.226	720.40
28	40+85.95	-23.91 LT	589171.033	135952.017	720.46
29	41+46.16	-23.58 LT	589171.787	136012.222	721.15
30	41+79.55	-33.51 LT	589182.320	136045.432	721.55
31	42+01.80	-60.33 LT	589209.530	136067.191	721.96
32	41+51.79	10.96 RT	589137.355	136018.479	720.99
33	41+87.49	21.71 RT	589127.243	136054.364	721.10
34	41+92.91	19.33 RT	589129.728	136059.735	721.12
35	41+96.89	7.43 RT	589141.692	136063.500	721.17
36	41+92.48	2.21 RT	589146.834	136059.002	721.20
37	41+52.91	3.04 RT	589145.293	136019.450	721.11





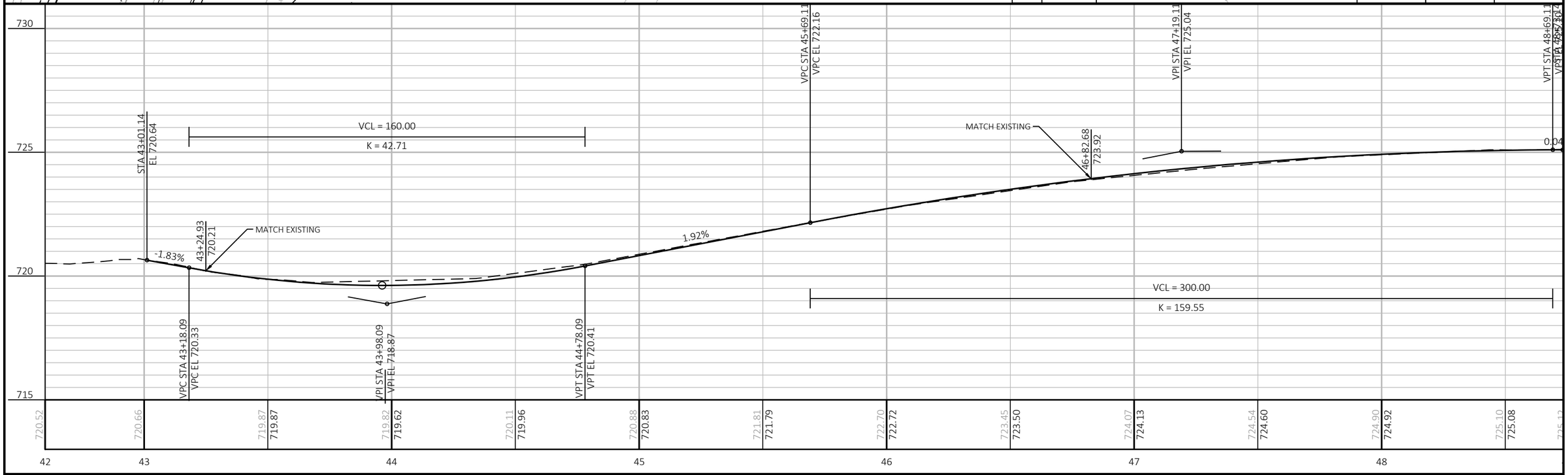
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN AND PROFILE: BAY SETTLEMENT ROAD CONNECTOR	SHEET 62	E



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
40	43+27.05	62.75 RT	589082.627	136194.643	719.38
41	43+46.89	36.85 RT	589108.844	136214.061	719.32
42	43+77.67	25.18 RT	589121.023	136244.649	719.26
43	43+78.12	-105.38 LT	589251.570	136242.959	720.63
44	43+83.75	-58.53 LT	589204.814	136249.351	719.90
44.1	44+18.62	-31.01 LT	589177.877	136284.668	719.22
45	44+21.52	-30.23 LT	589177.142	136287.576	719.27
46	44+66.56	-19.26 LT	589166.914	136332.798	720.06
47	46+19.22	-18.00 LT	589168.153	136485.454	722.66
48	43+43.60	-8.68 LT	589154.322	136210.023	720.05
49	43+83.84	-6.39 LT	589152.687	136250.300	719.74
50	43+86.33	-13.94 LT	589160.273	136252.662	719.71
51	43+52.60	-36.01 LT	589181.787	136218.572	720.24
52	43+46.15	-34.26 LT	589179.936	136212.153	720.33
53	43+39.45	-13.92 LT	589159.489	136205.789	720.16

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.	NORTHING	EASTING
1003	47+07.02	BM - MAG IN PPOL 2422 6R24	722.69	--	--



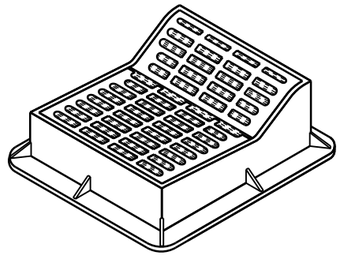
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	PLAN AND PROFILE: CTH K	SHEET 63	E

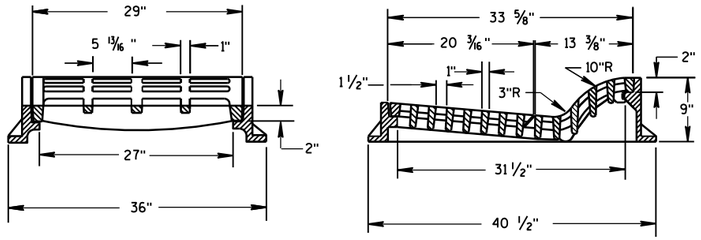
FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\050301-PP.DWG
LAYOUT NAME - 050301-pp
PLOT DATE : 6/23/2021 3:31 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:40 FT

Standard Detail Drawing List

08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
10A01-03	ELECTRICAL HANDHOLE WIRING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-07G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-05	MEDIAN ISLAND MARKING
15C20-02	YIELD MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-09E	TRAFFIC CONTROL, LANE CLOSURE, TRAFFIC QUEUE WARNING SYSTEM
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING

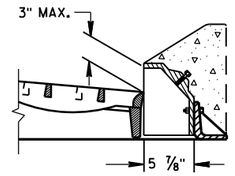
6





TYPE "F"

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

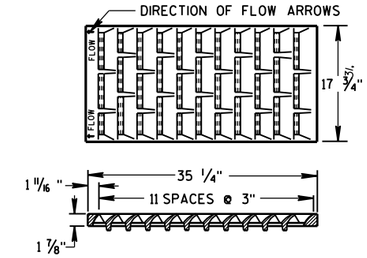
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

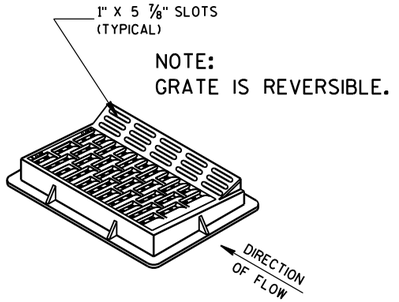
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

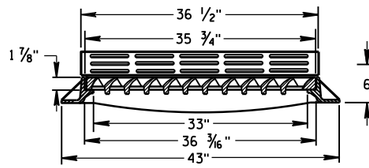
GENERAL NOTES

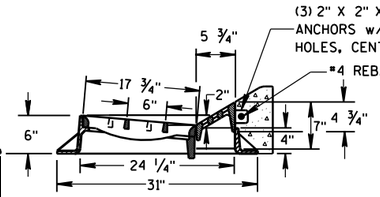
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.





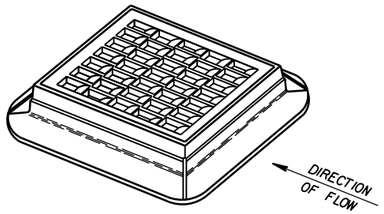


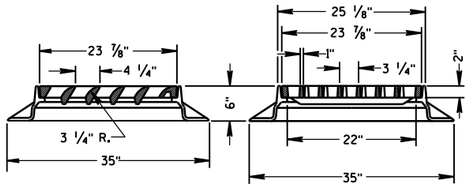


TYPE "HM"

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





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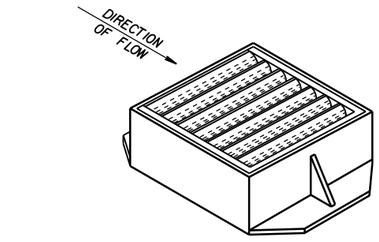
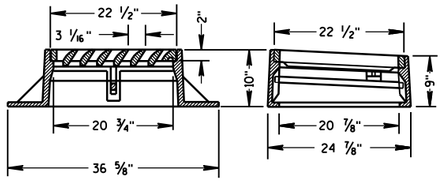
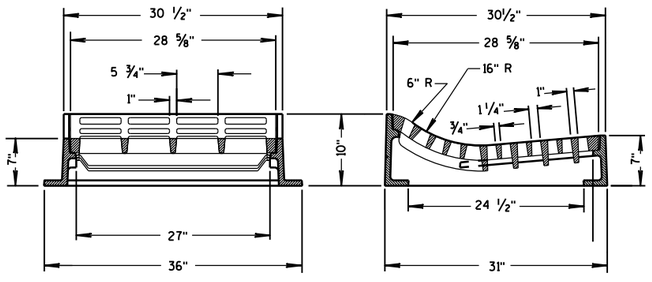
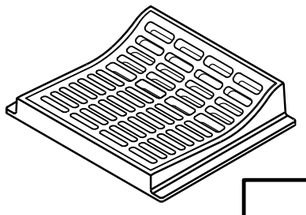




TYPE "V"





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

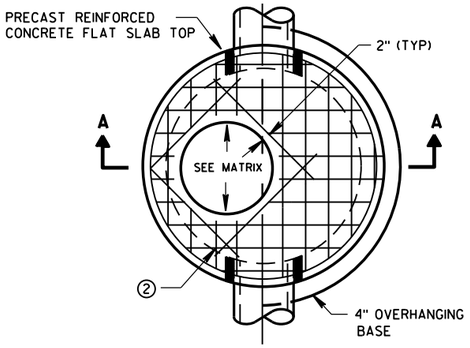
FHWA

6

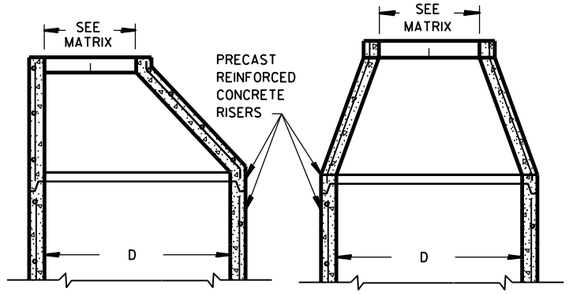
S.D.D. 8 A 5-19c

6

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

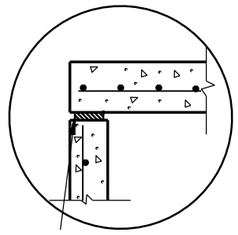


PLAN VIEW CIRCULAR OPENING

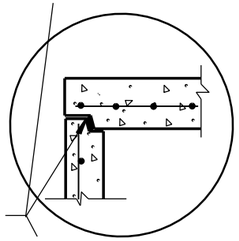


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

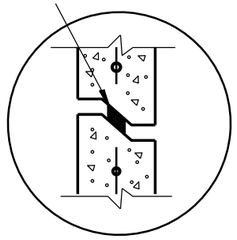


TOP WITH PLAIN END JOINT



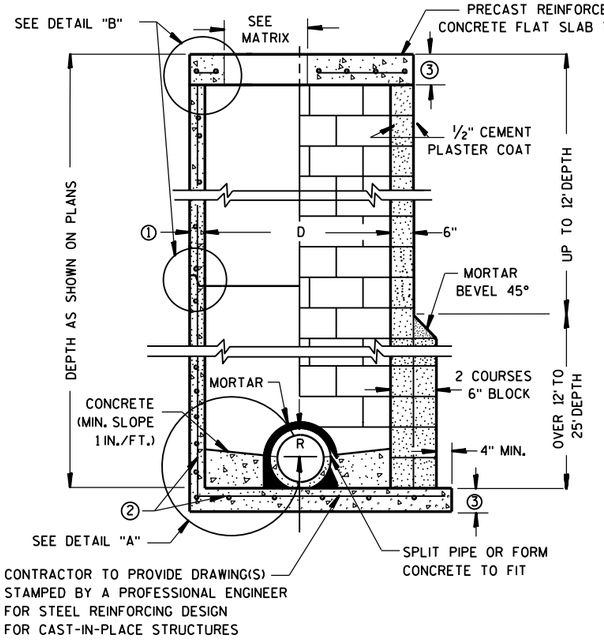
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



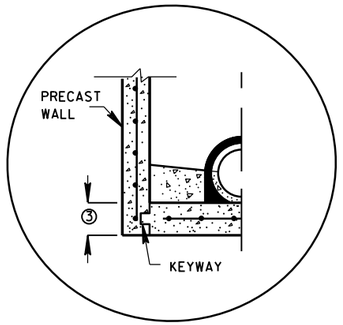
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

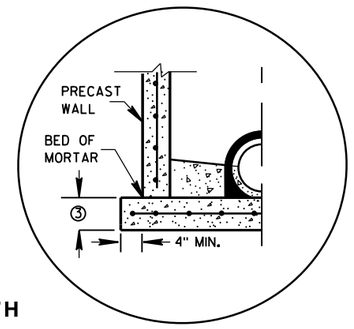


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

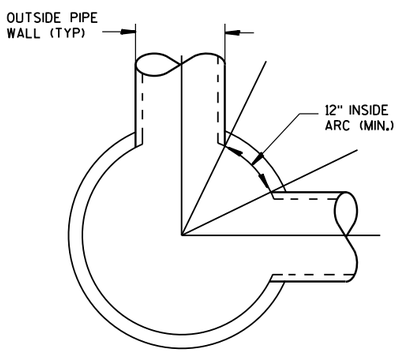


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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

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

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

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

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

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

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

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

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

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

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

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

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

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

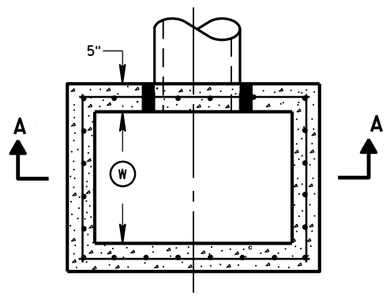
APPROVED

Sept., 2016
DATE

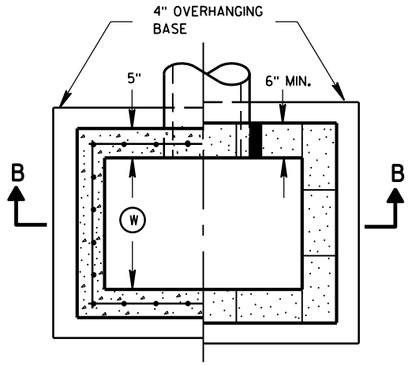
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

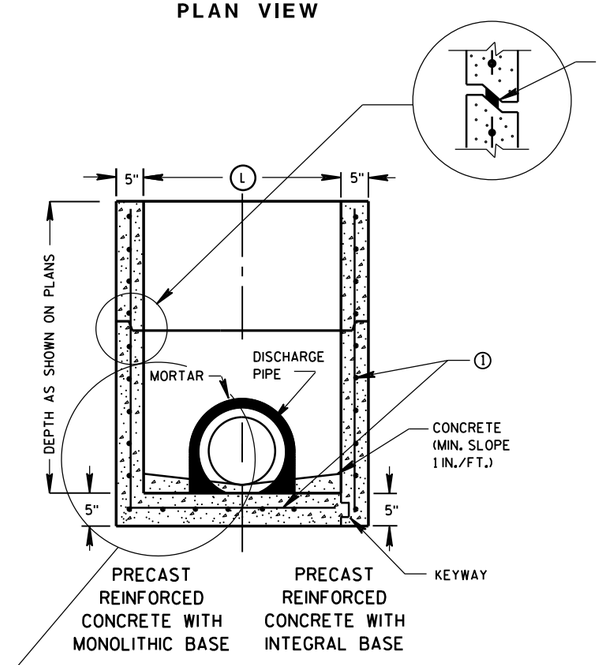
6
S.D.D. 8 B 9-2



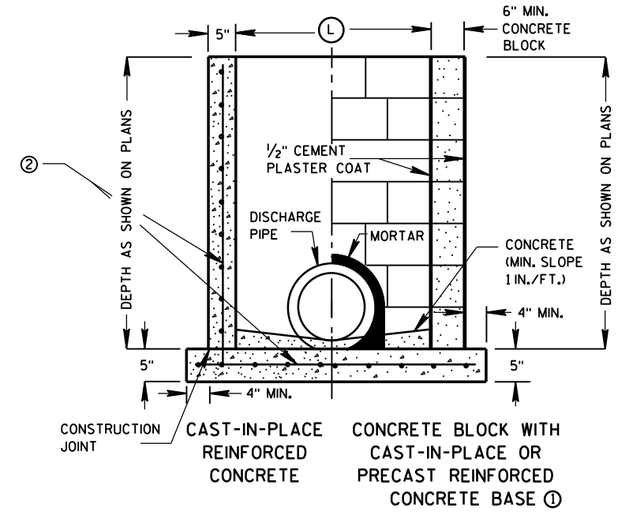
PLAN VIEW



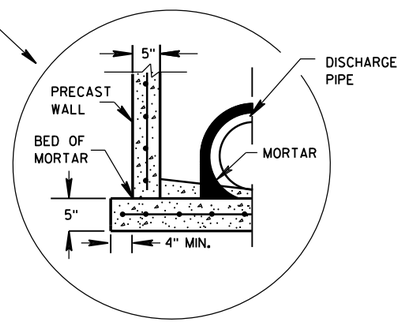
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

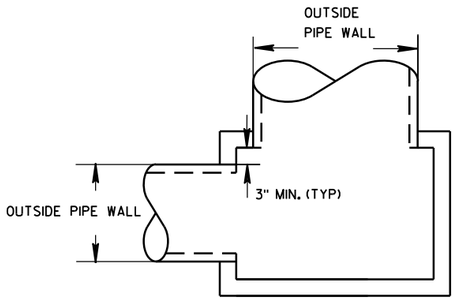
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH Ⓦ (FT)	LENGTH Ⓛ (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



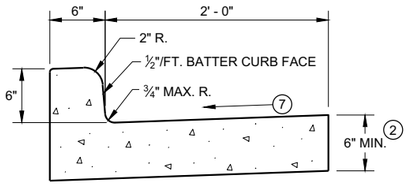
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

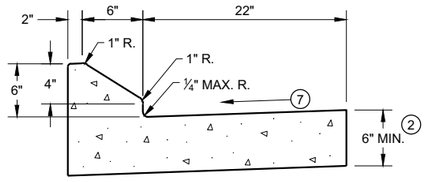
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT UNIT SUPERVIS
FHWA

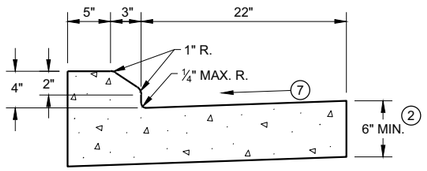
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



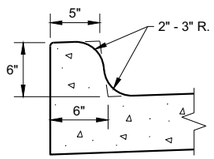
TYPES A (1) & D



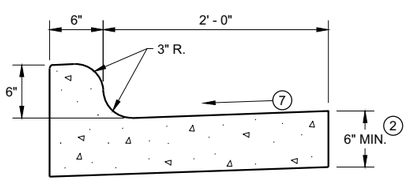
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

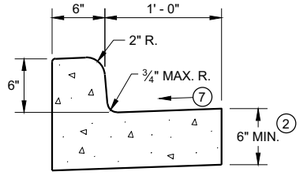


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



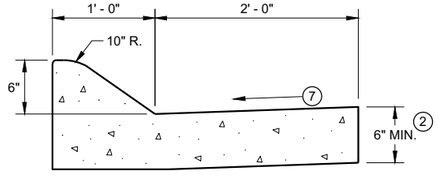
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

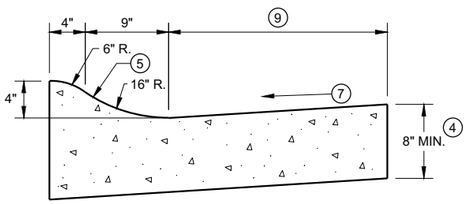
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

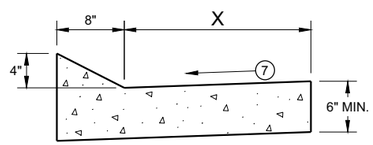
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

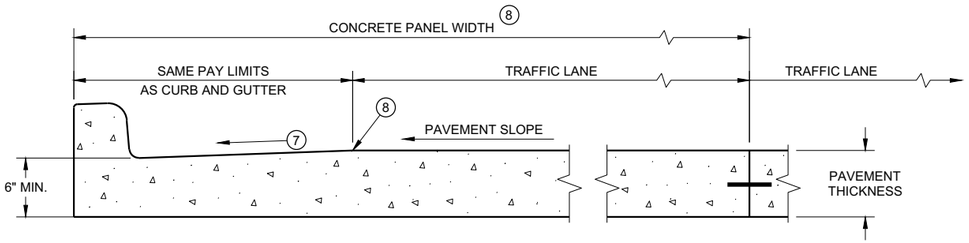


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

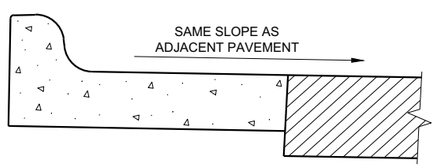
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS TYPES A, G, K, R, AND TBTT.

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

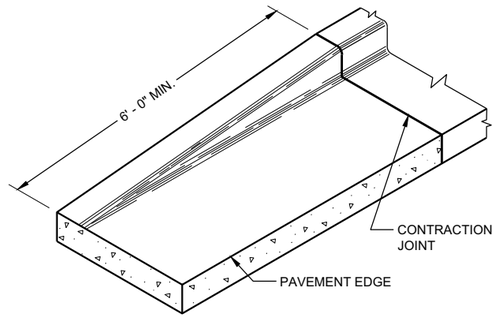
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

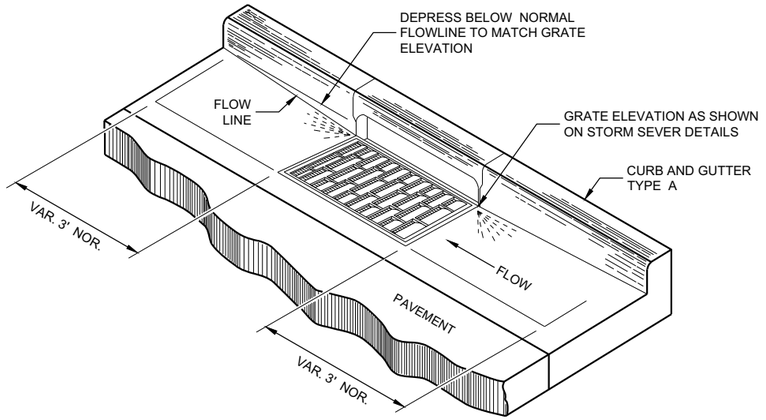
CONCRETE CURB AND GUTTER

SDD 08D01 - 22a

6



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

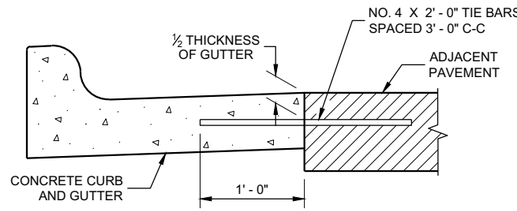
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

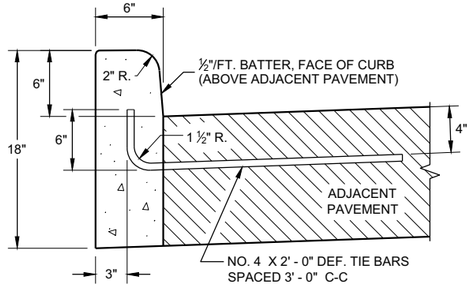
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

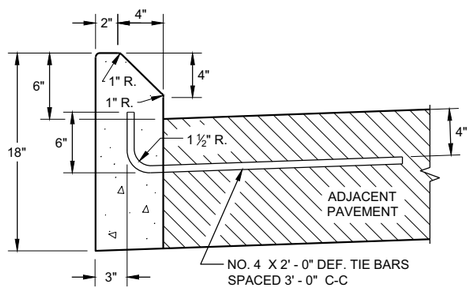
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

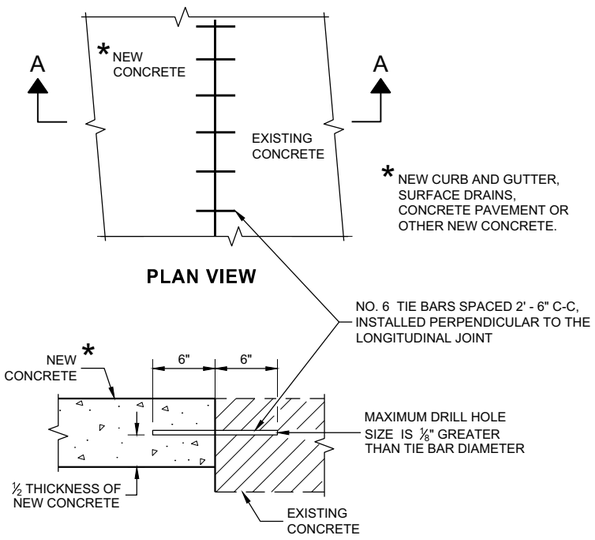


TYPES A (1) & D



TYPES G (1) & J

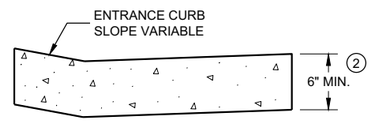
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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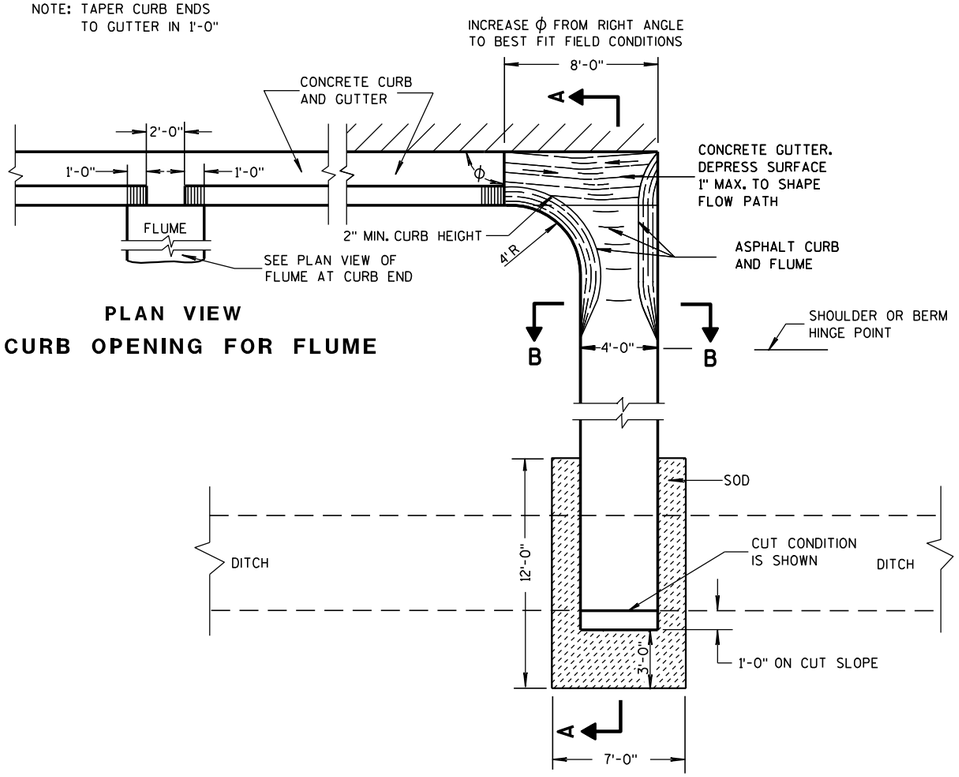
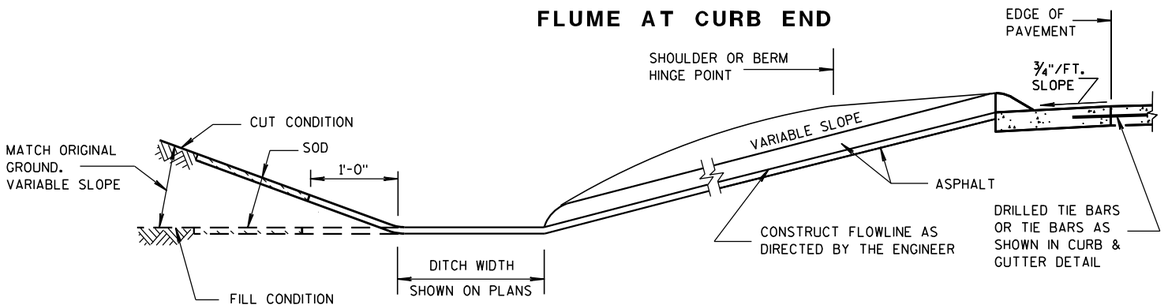
SDD08D01 - 22b

ASPHALTIC FLUME

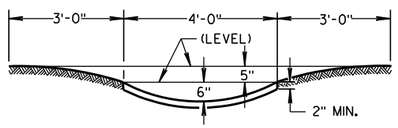


PLAN VIEW
CURB OPENING FOR FLUME

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.

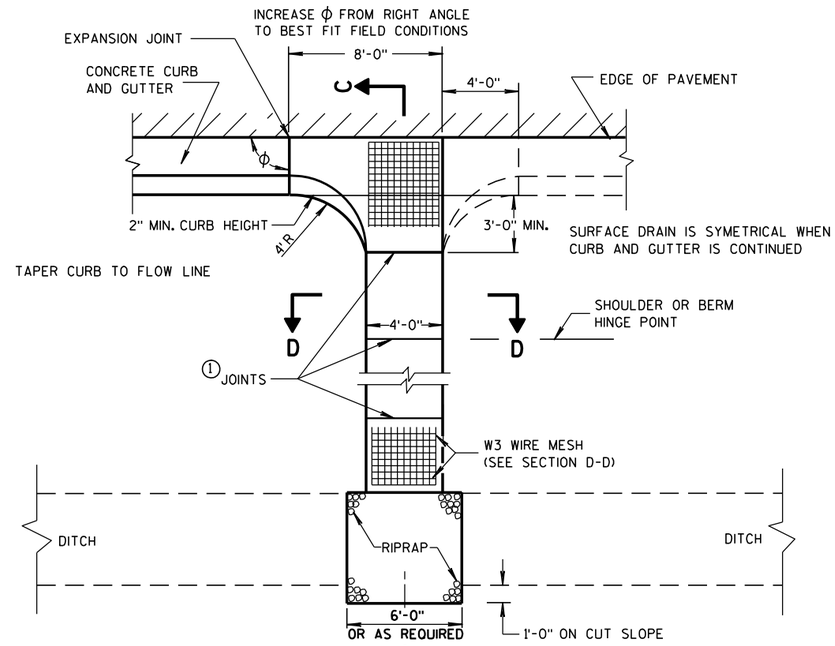
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

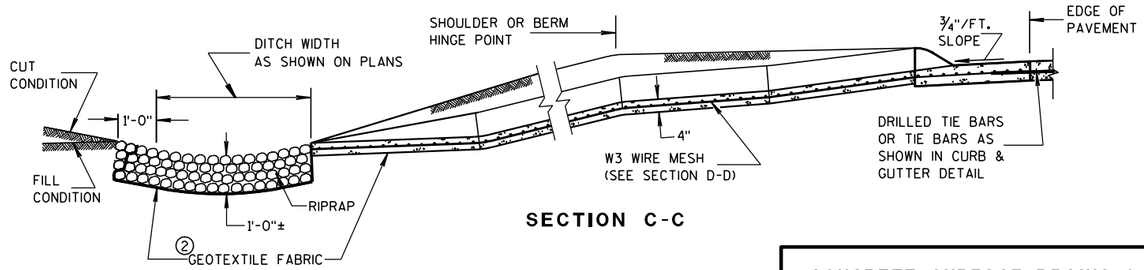
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

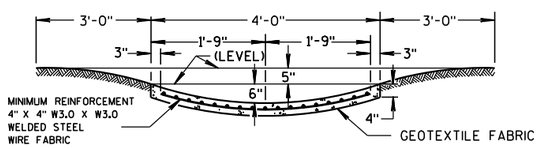
③ CONCRETE SURFACE DRAIN



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
70
MENT
FHWA

6

S.D.D. 8 D 4-5

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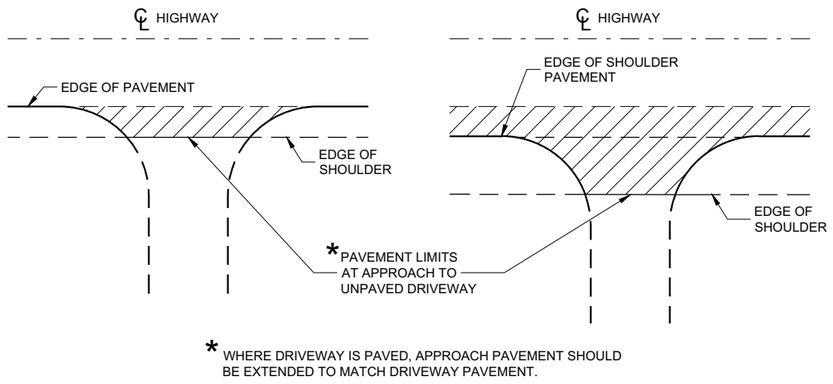
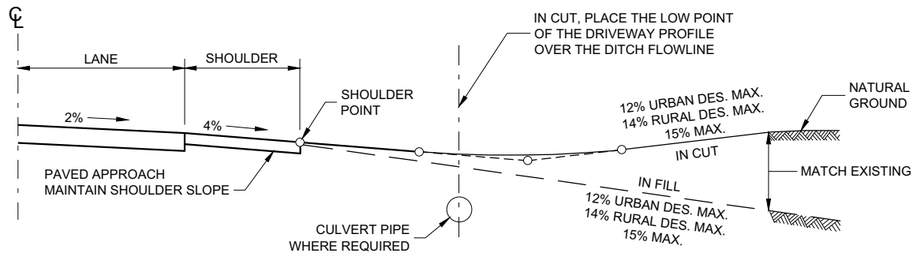
S.D.D. 8 D 4-5



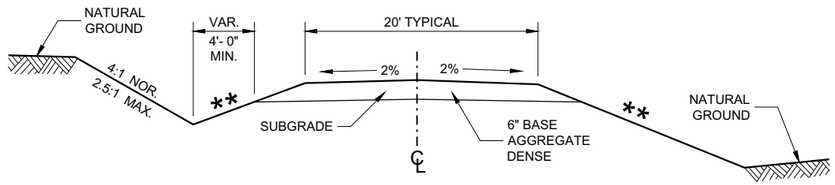
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

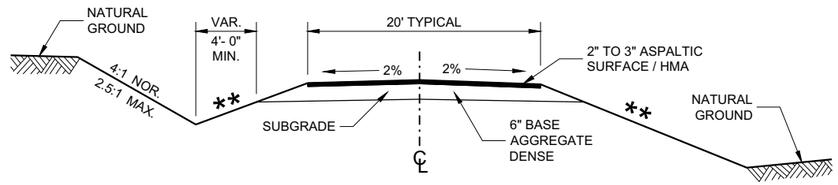


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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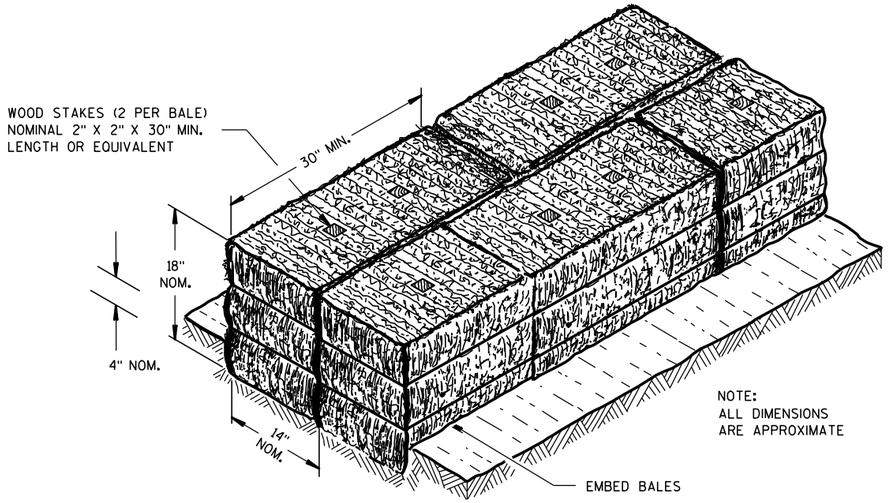
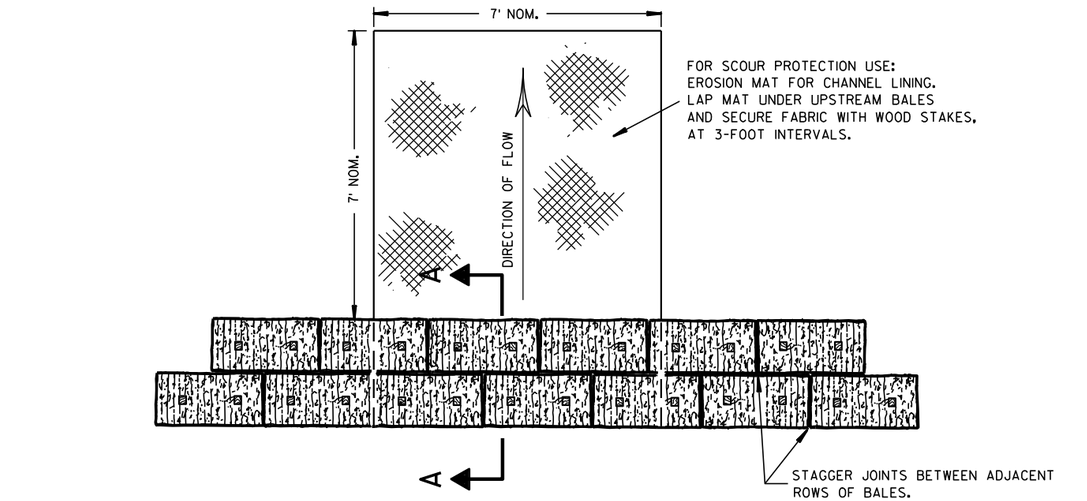
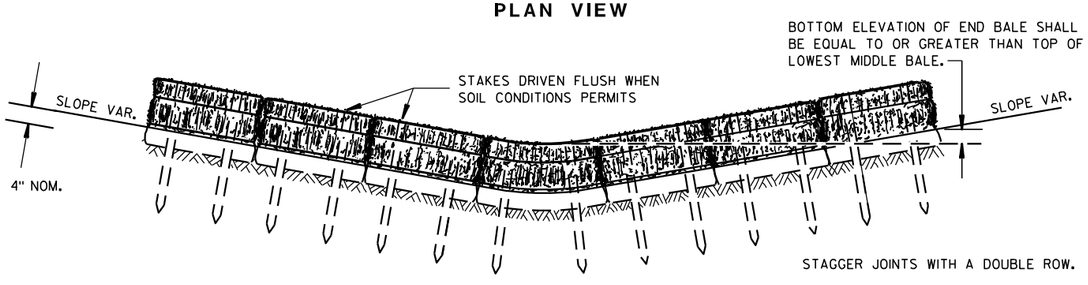
SDD 08D21 - 01



SECTION A-A



PLAN VIEW



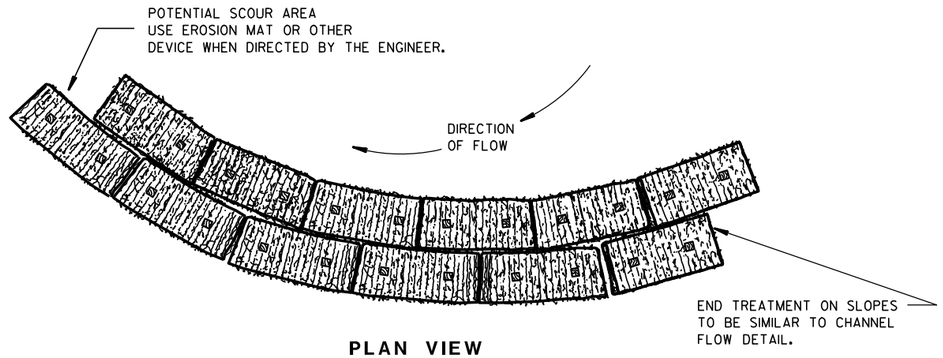
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

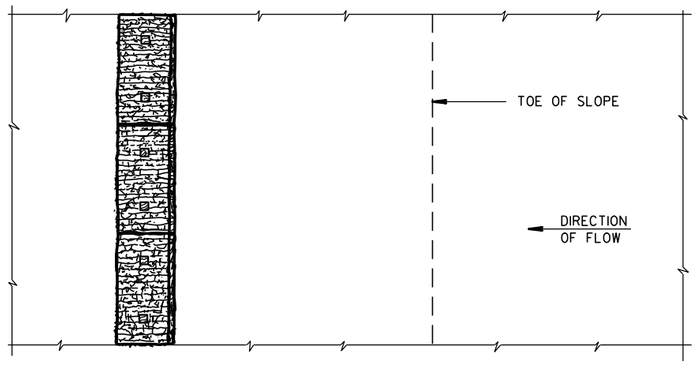
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

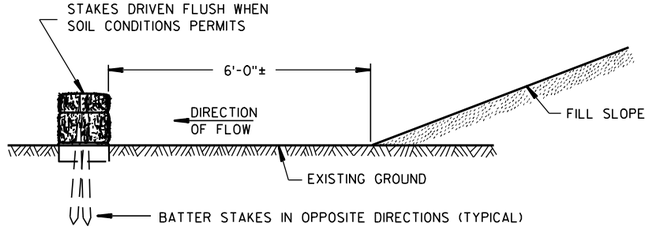


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

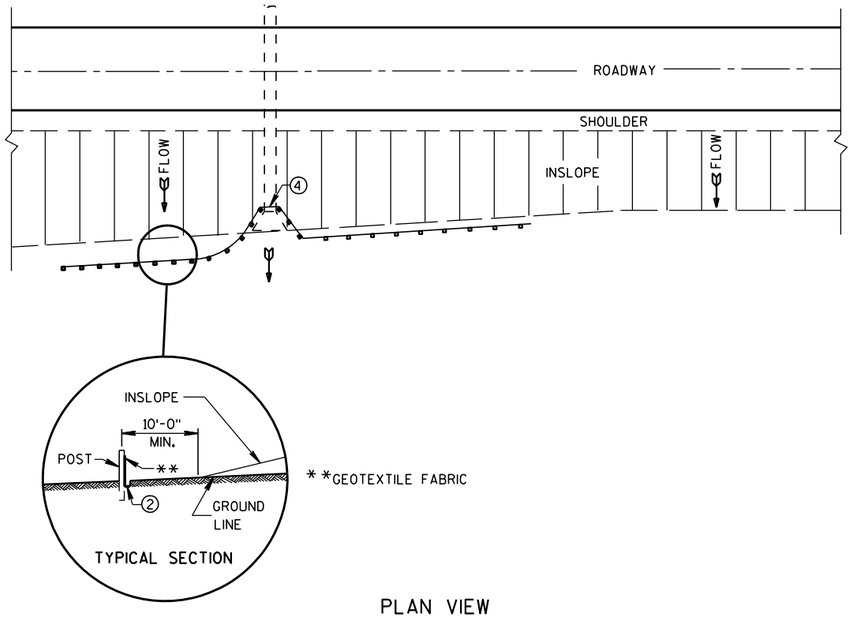
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

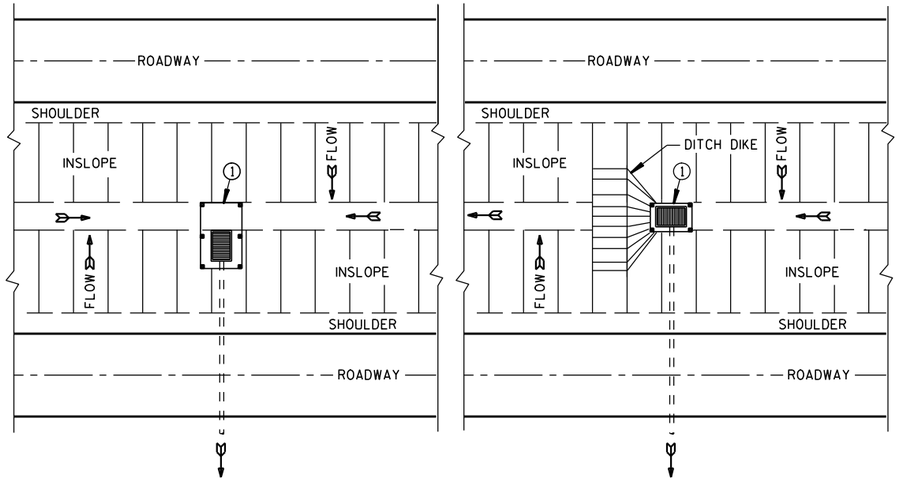
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



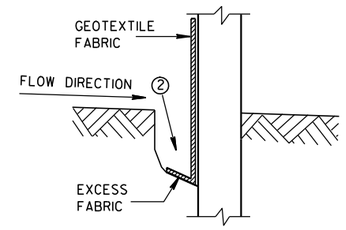
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

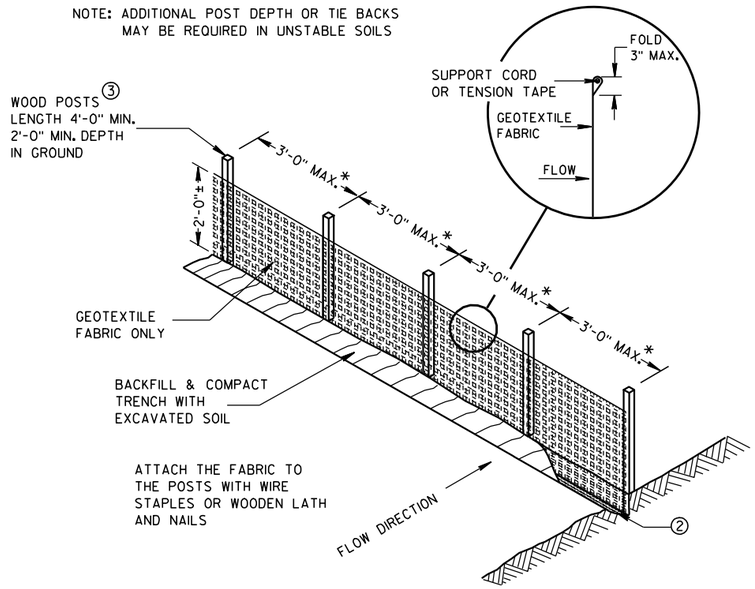
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

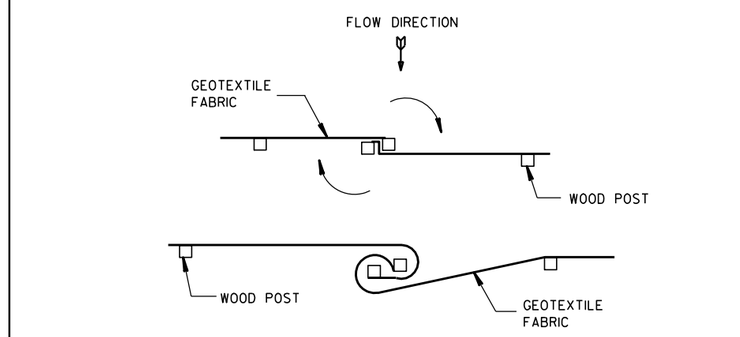


TRENCH DETAIL

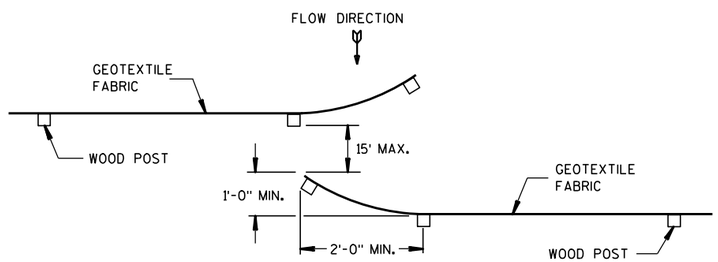


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

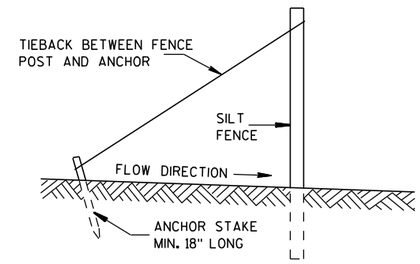


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 E 9-6

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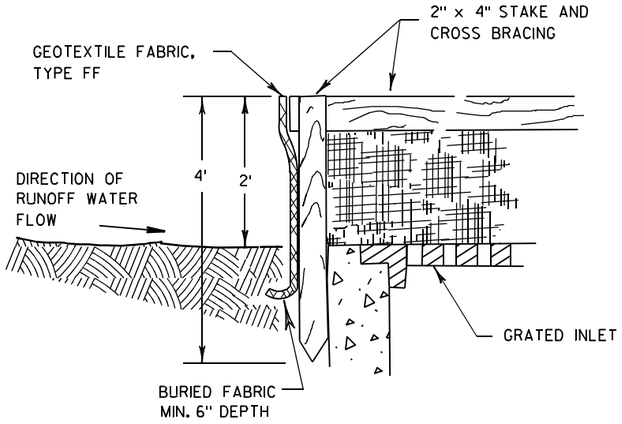
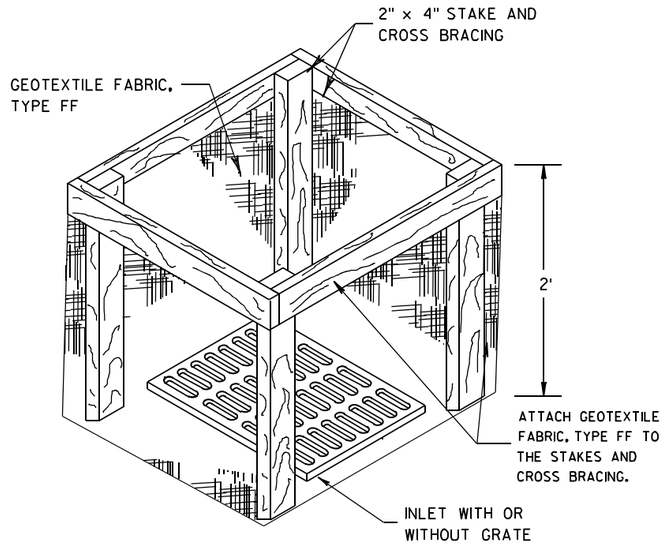
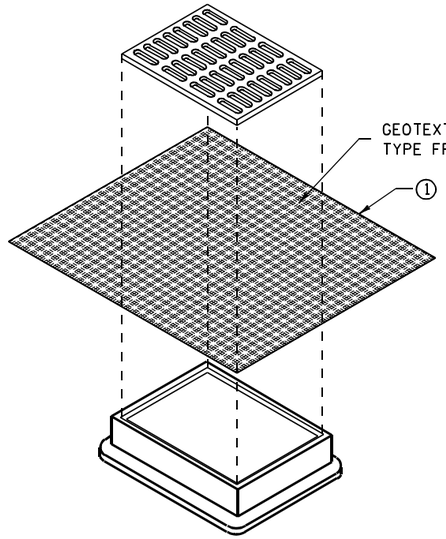
S.D.D. 8 E 9-6



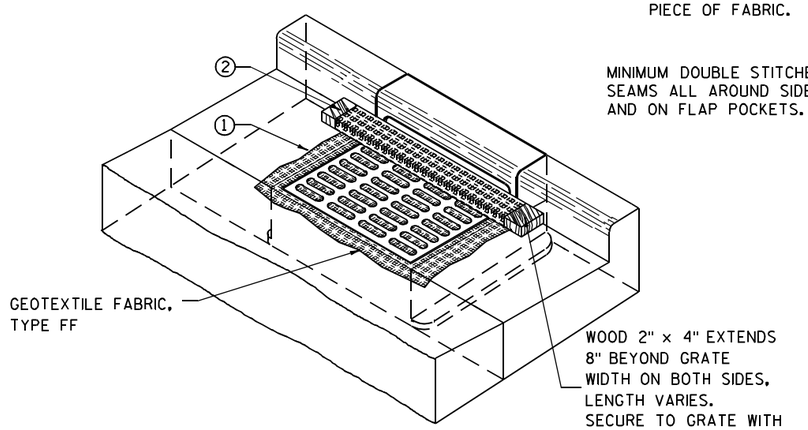


INLET PROTECTION, TYPE A

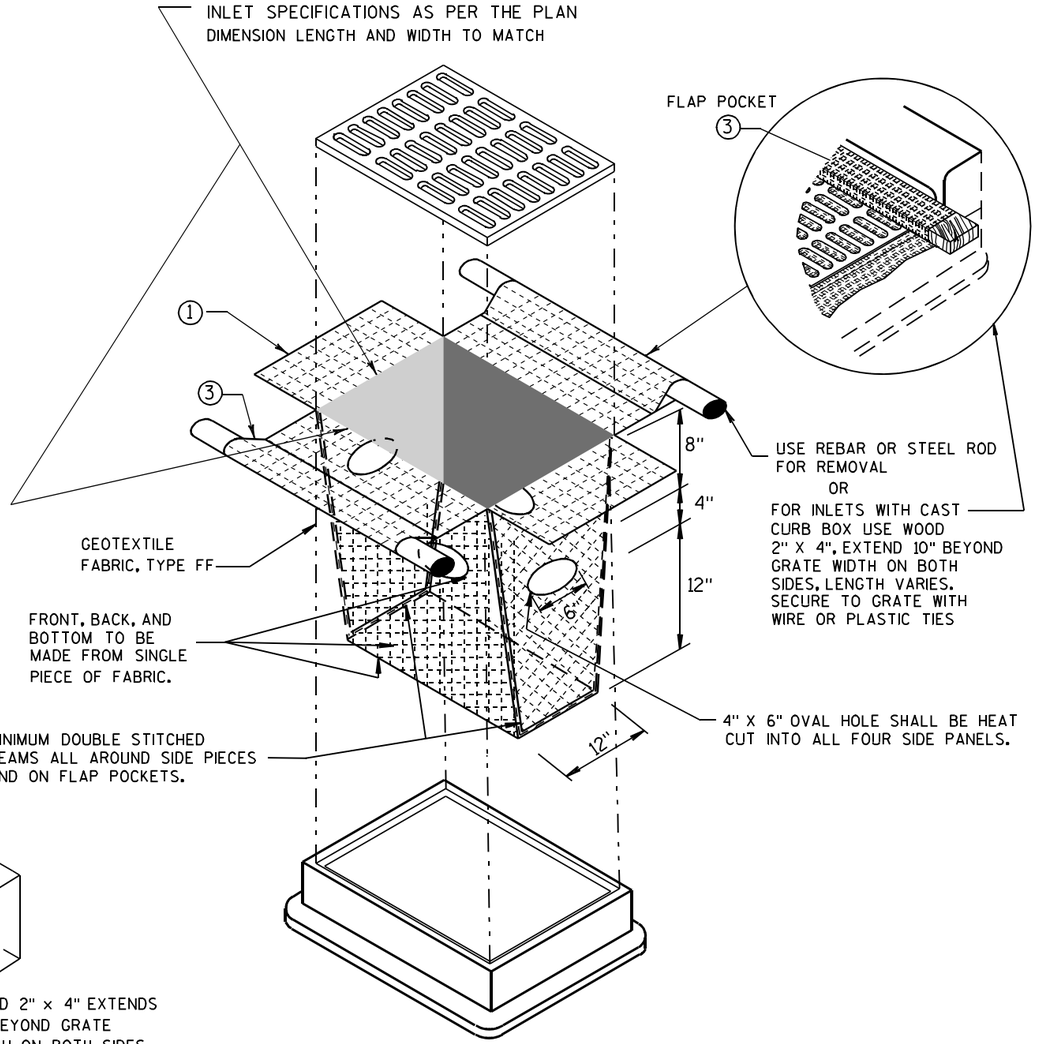


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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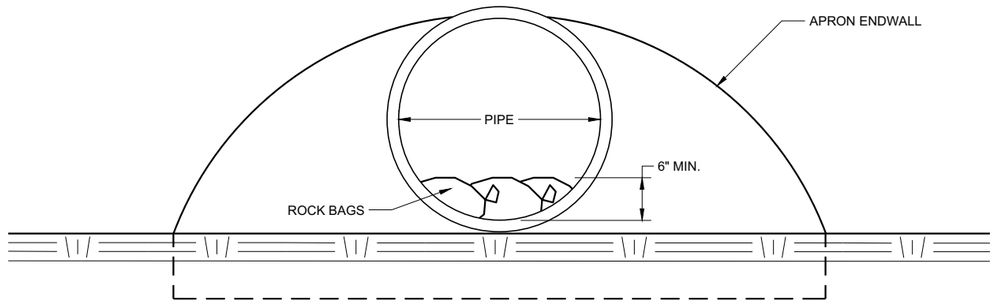
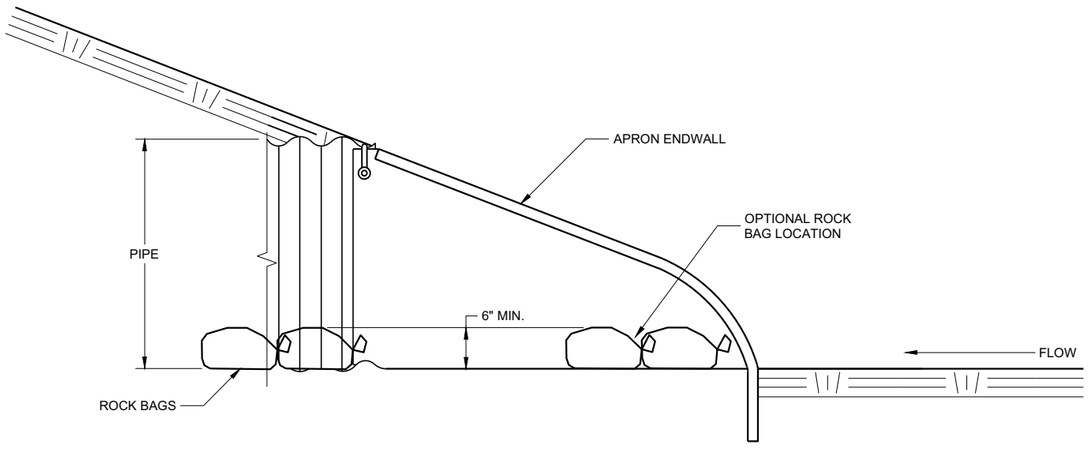
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

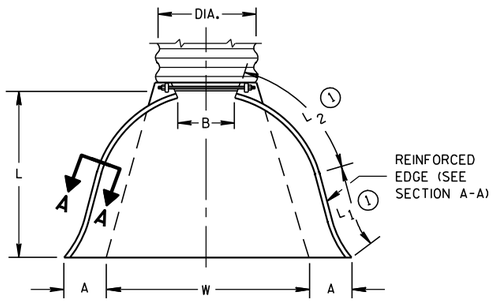
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

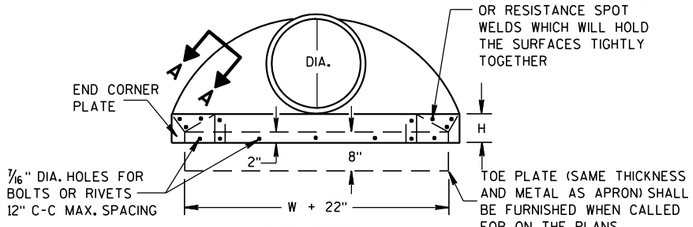
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

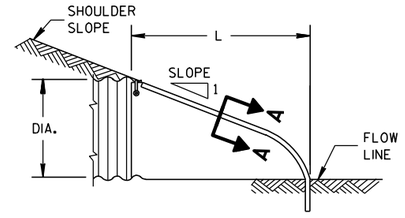
*MINIMUM
**MAXIMUM



PLAN VIEW

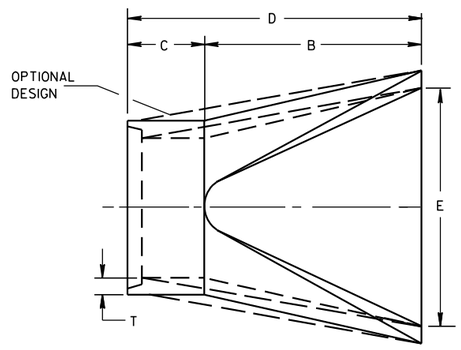


END VIEW

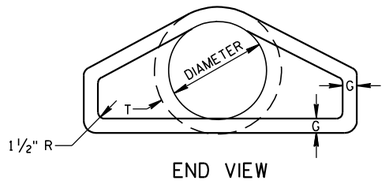


SIDE ELEVATION

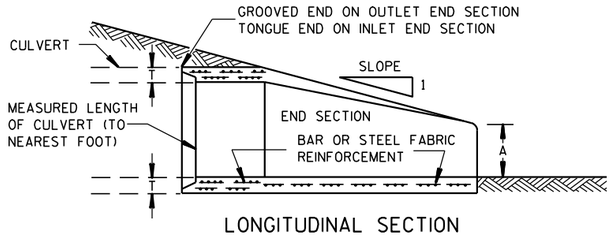
METAL ENDWALLS



PLAN

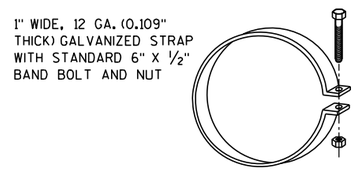


END VIEW



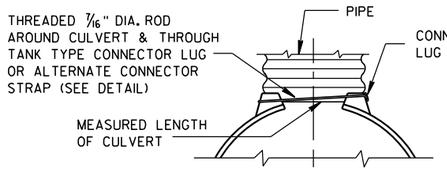
LONGITUDINAL SECTION

CONCRETE ENDWALLS

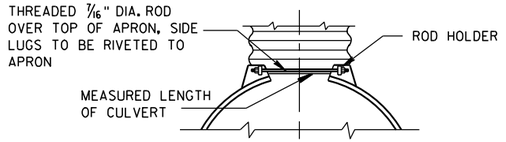


ALTERNATE FOR TYPE 1 CONNECTION

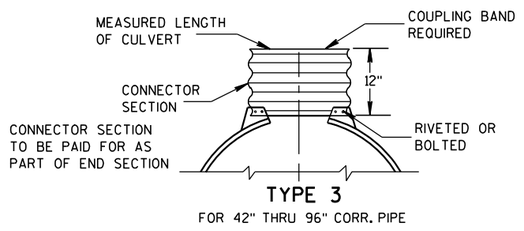
END SECTION CONNECTOR STRAP



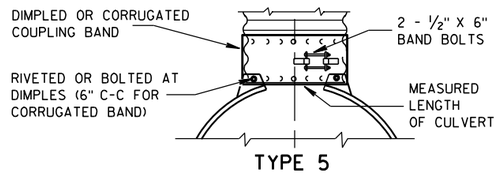
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

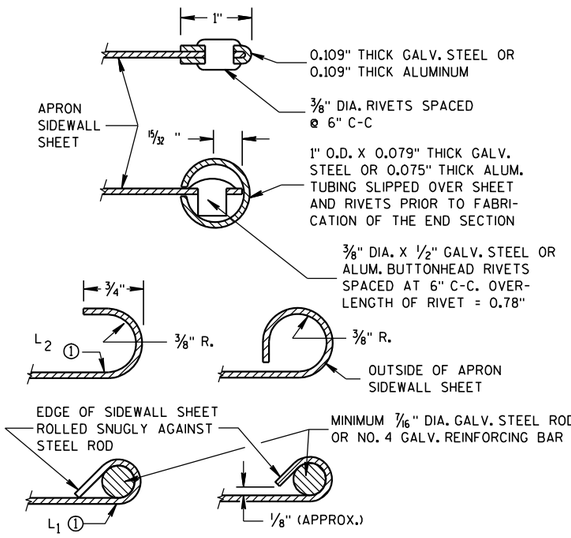
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

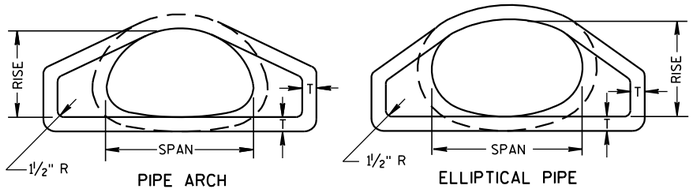
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

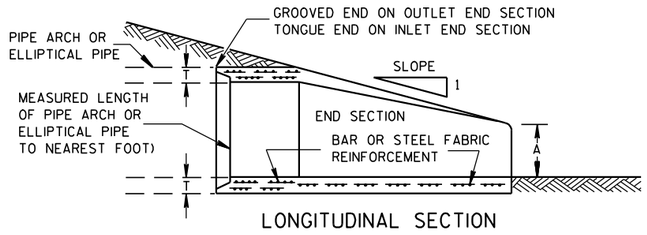
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

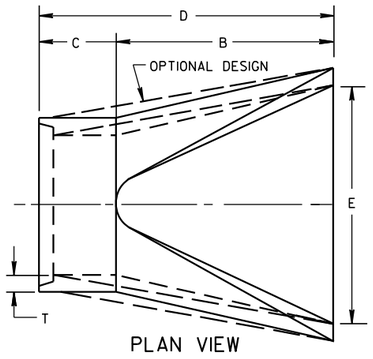
6
S.D.D. 8 F 1-11



END VIEW

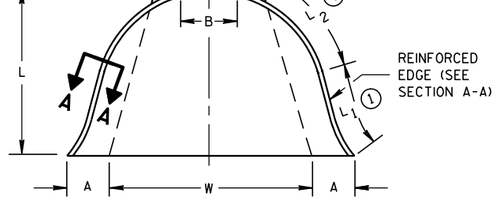


LONGITUDINAL SECTION

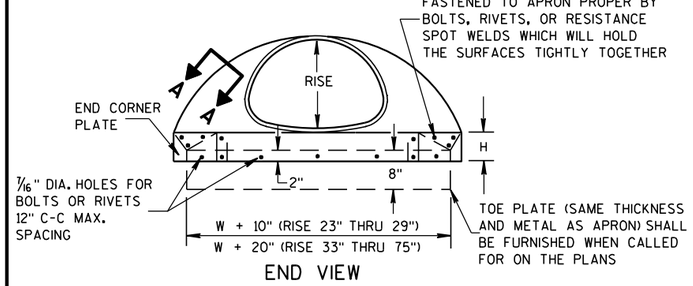


PLAN VIEW

CONCRETE ENDWALLS

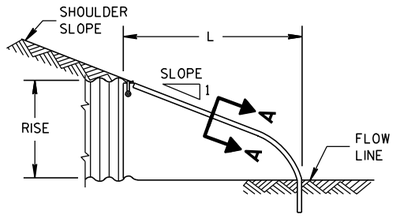


PLAN VIEW



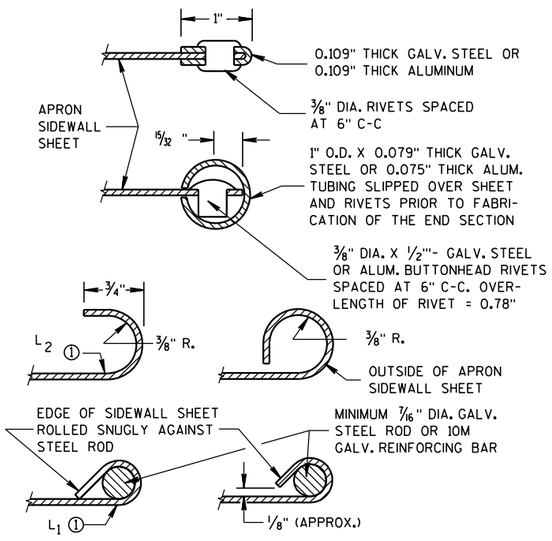
END VIEW

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



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

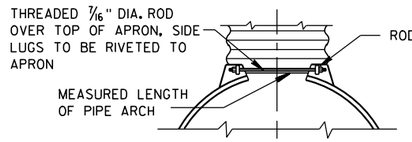
REINFORCED CONCRETE PIPE ARCH

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

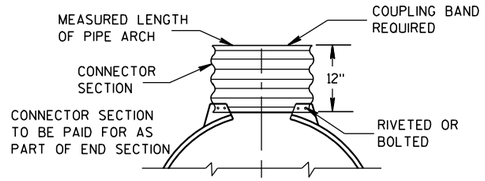
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



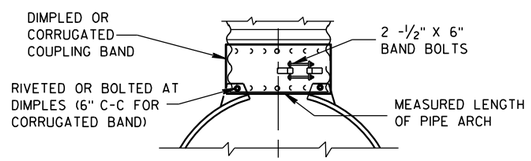
TYPE 2

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

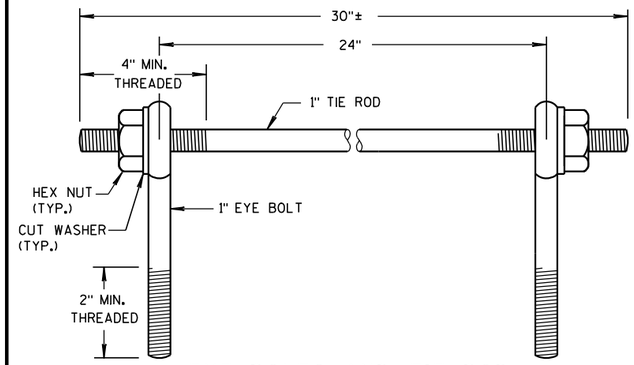
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

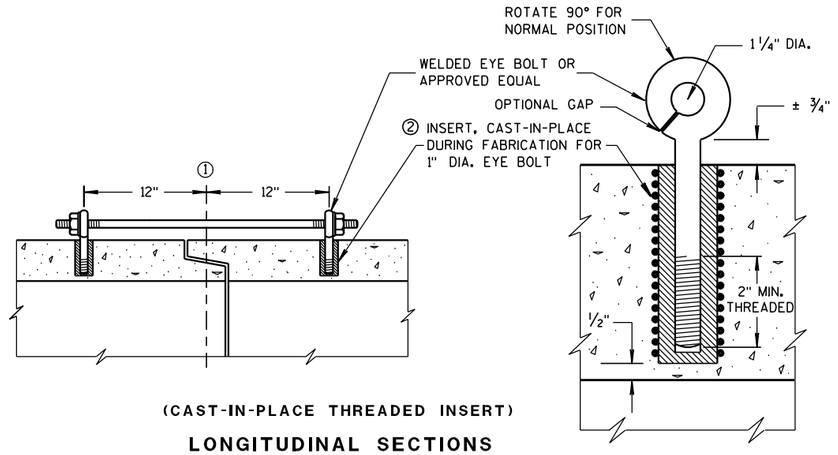
11/30/94 — DATE

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

FHWA



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

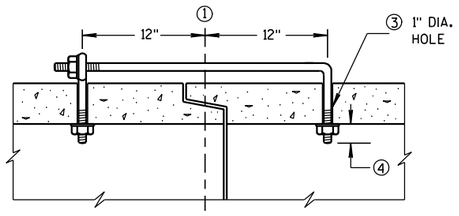
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

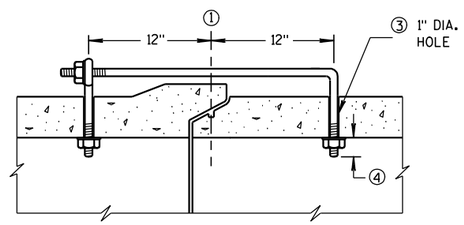
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

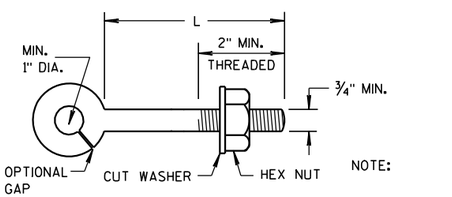


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

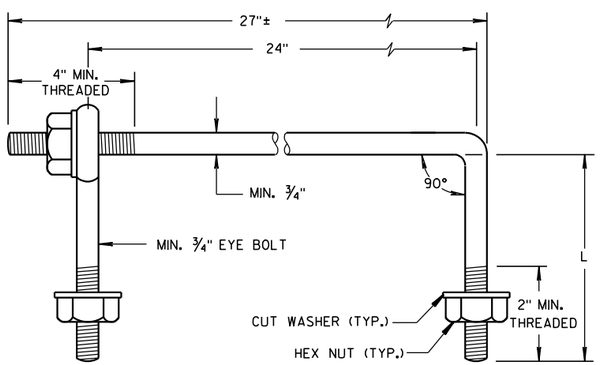
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

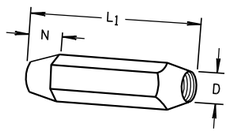
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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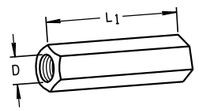
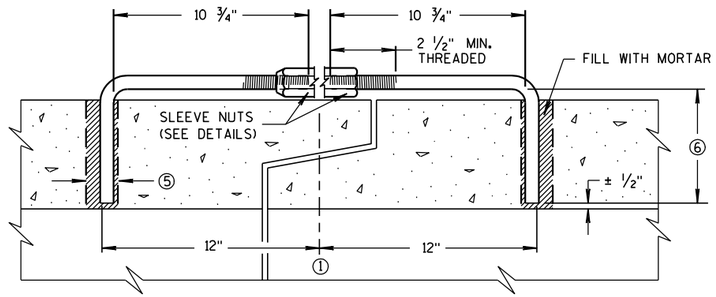


PLAIN

RIGHT AND LEFT THREADS

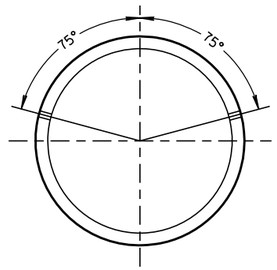
SLEEVE NUTS



LONGITUDINAL SECTION

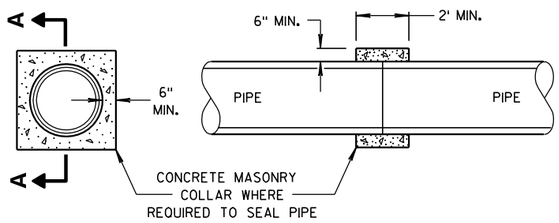
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
78
FHWA

6

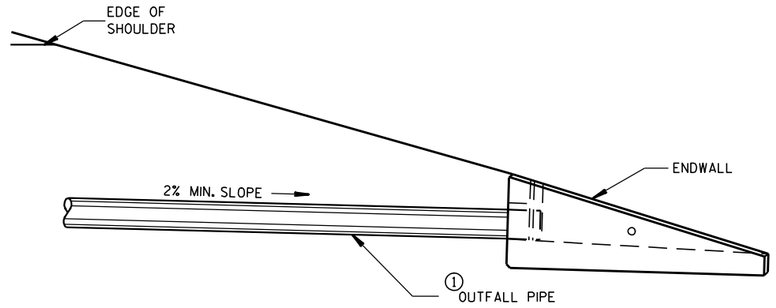
S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

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

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

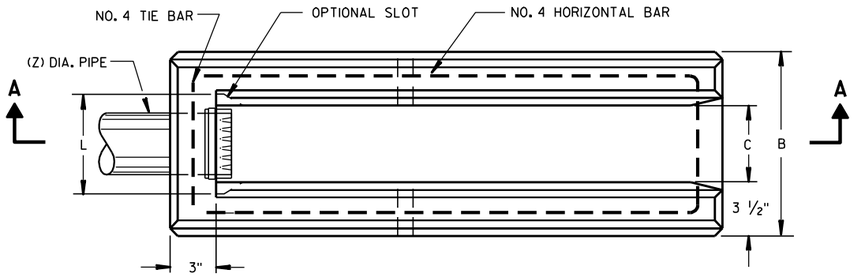
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

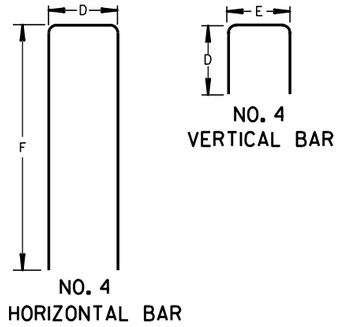
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

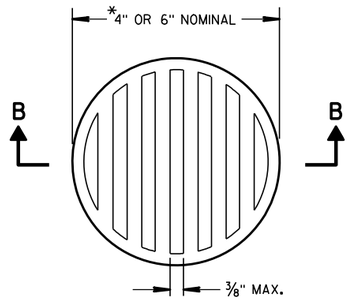
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

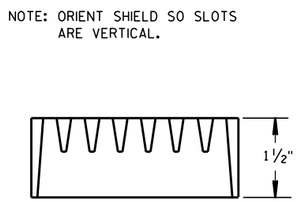


PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

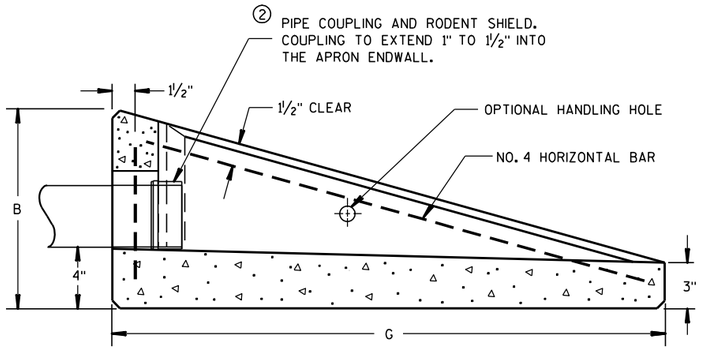




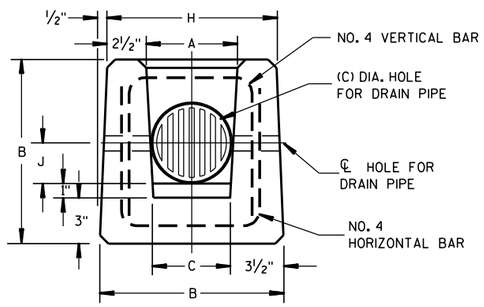
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

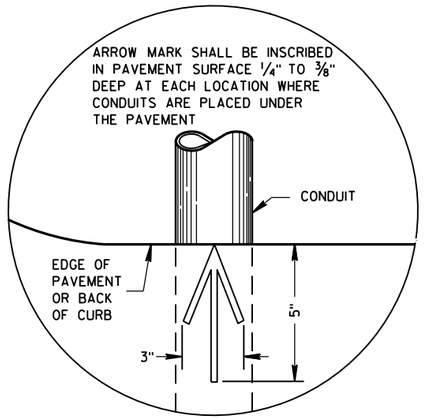
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

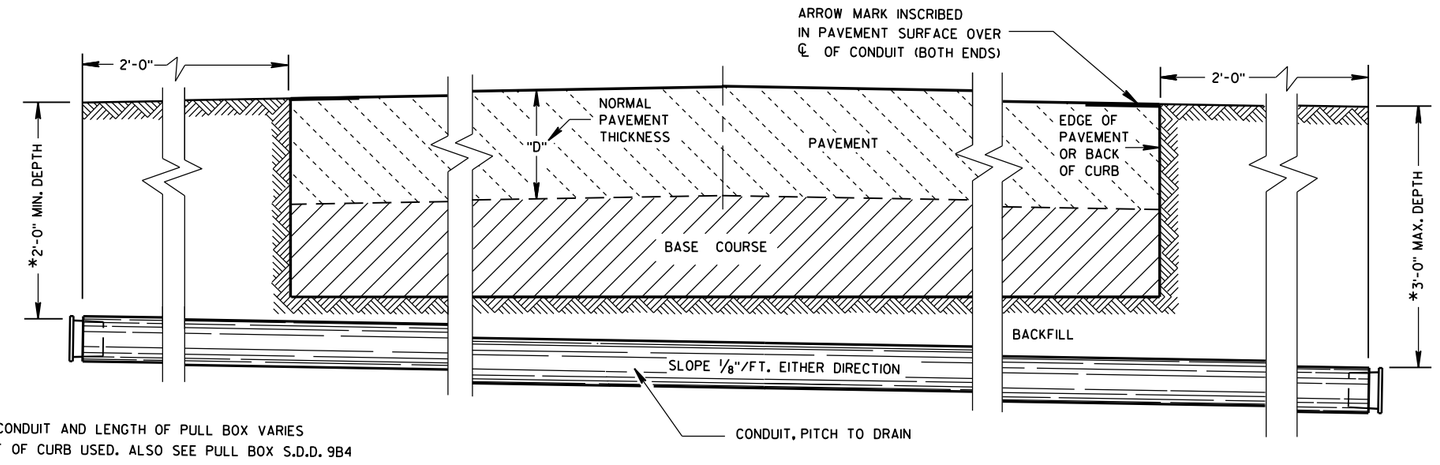
6

S.D.D. 8 F 6-4



PLAN VIEW

ARROW MARK



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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".

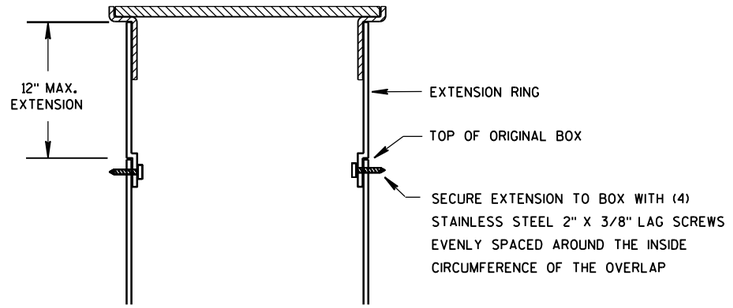
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

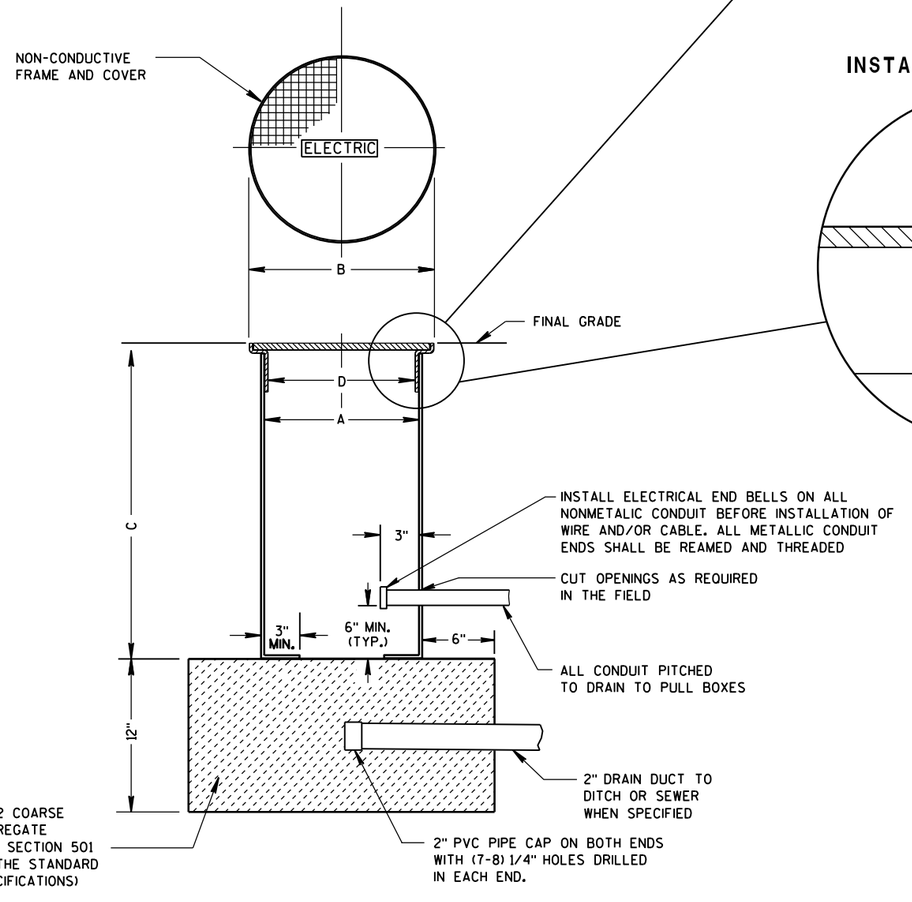
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

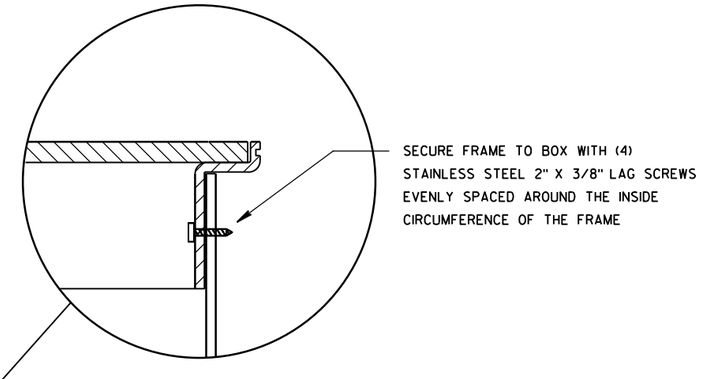


BOX EXTENSION

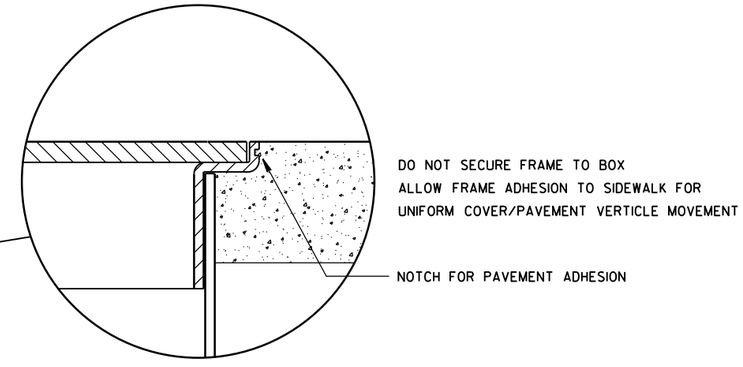


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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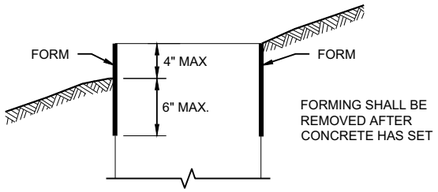
S.D.D. 9 B 16-1

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



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 DRAWINGSHALL 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 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 A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X 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 NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC 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 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES 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.

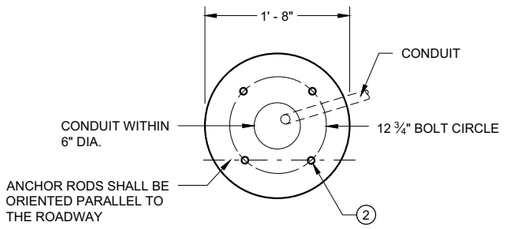
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

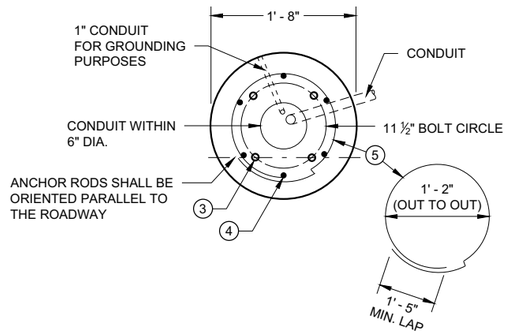
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

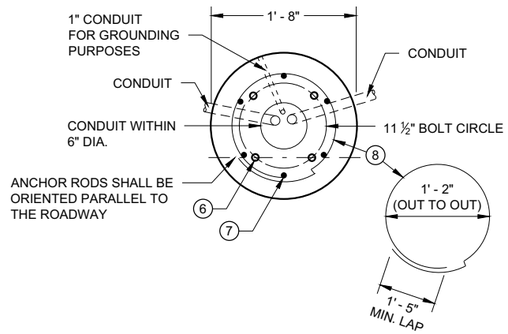
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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 OF 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 STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

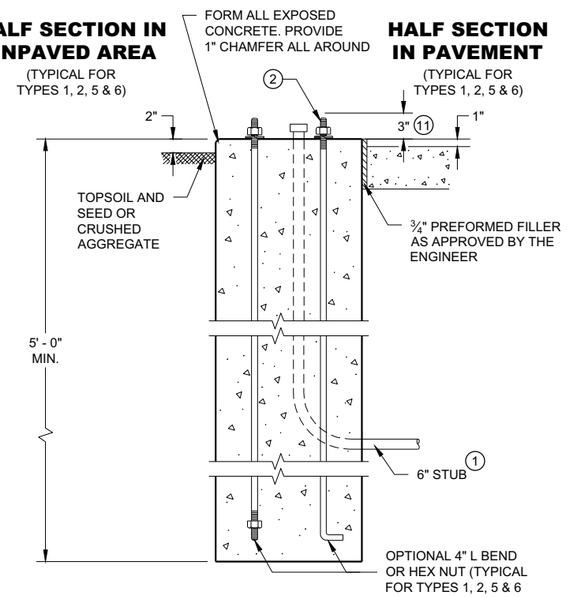
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

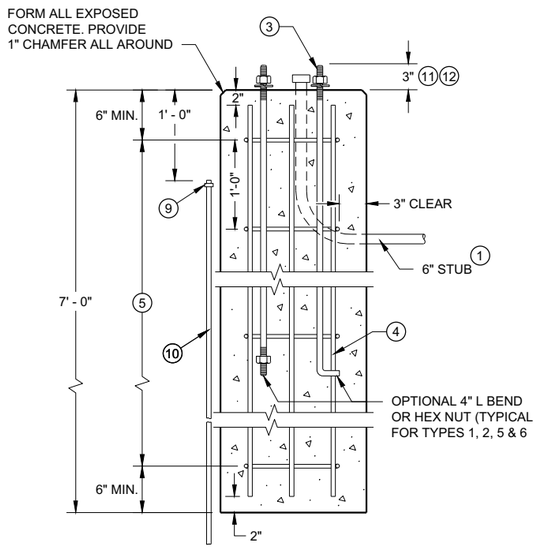
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



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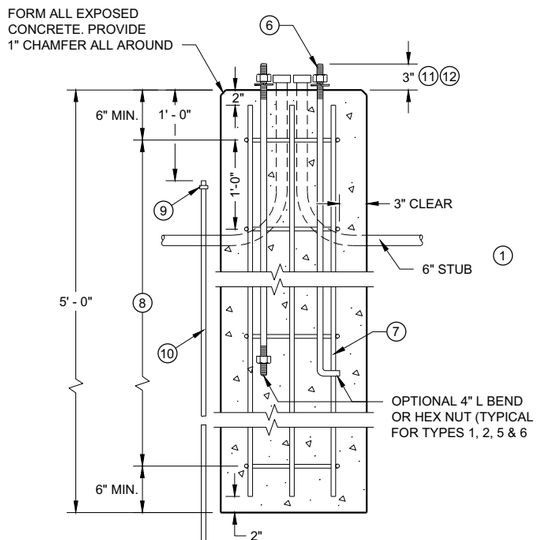


TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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 531.2.2 OF THE STANDARD SPECIFICATIONS.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

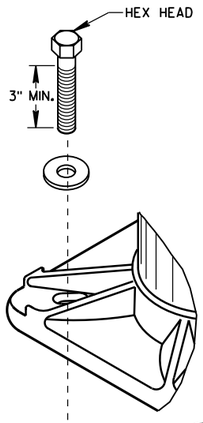
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

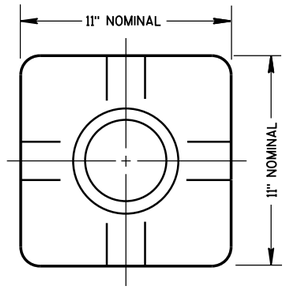
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

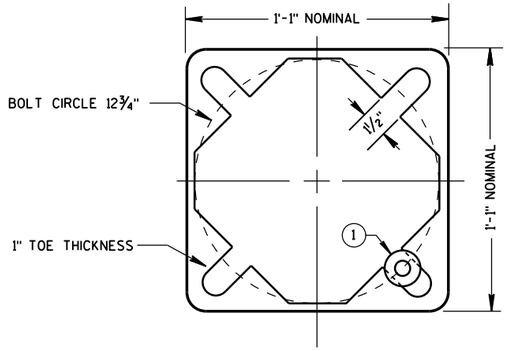
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

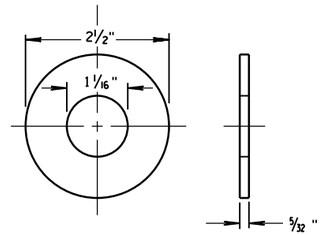




TOP VIEW
(PEDESTAL BASE)

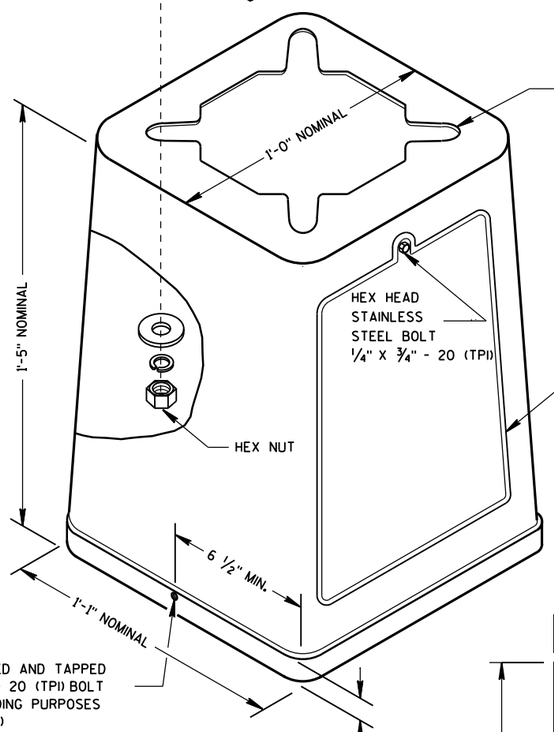


BOTTOM VIEW
(PEDESTAL BASE)

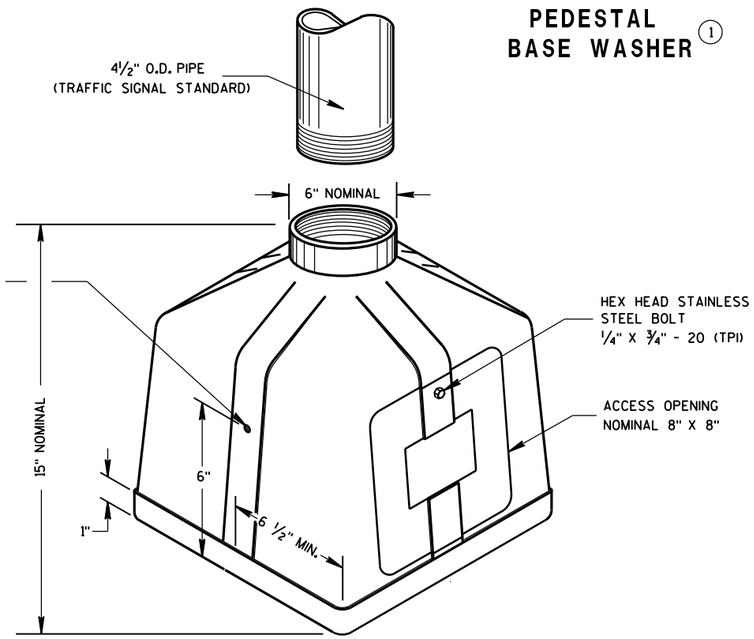


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

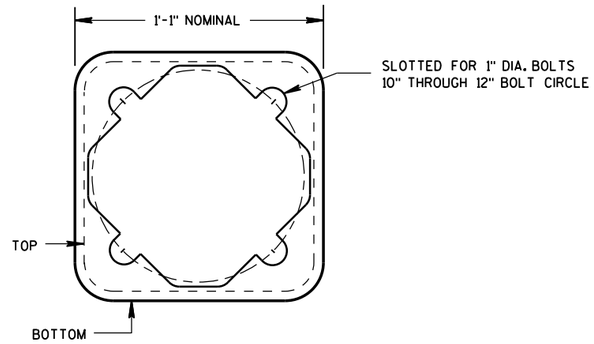


ISOMETRIC VIEW

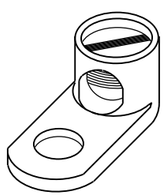


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

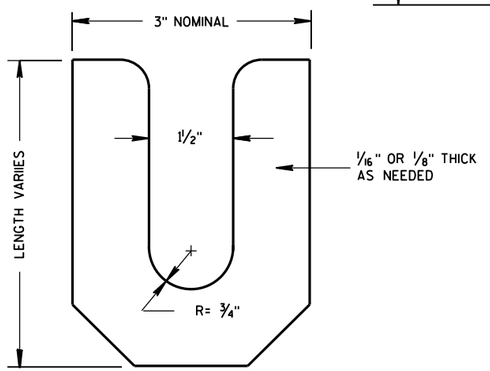


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 9 C 3-4

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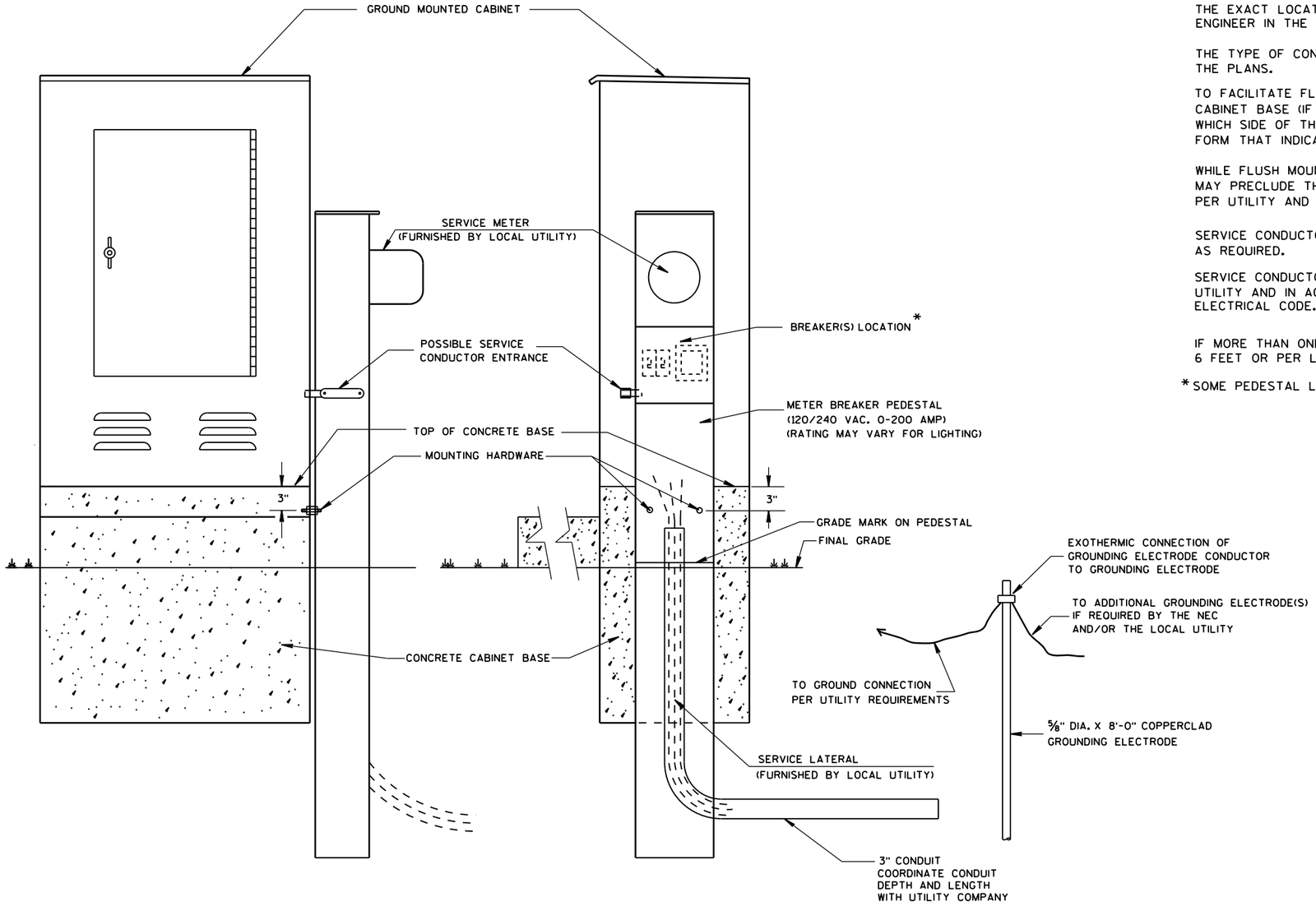
S.D.D. 9 C 3-4



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.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

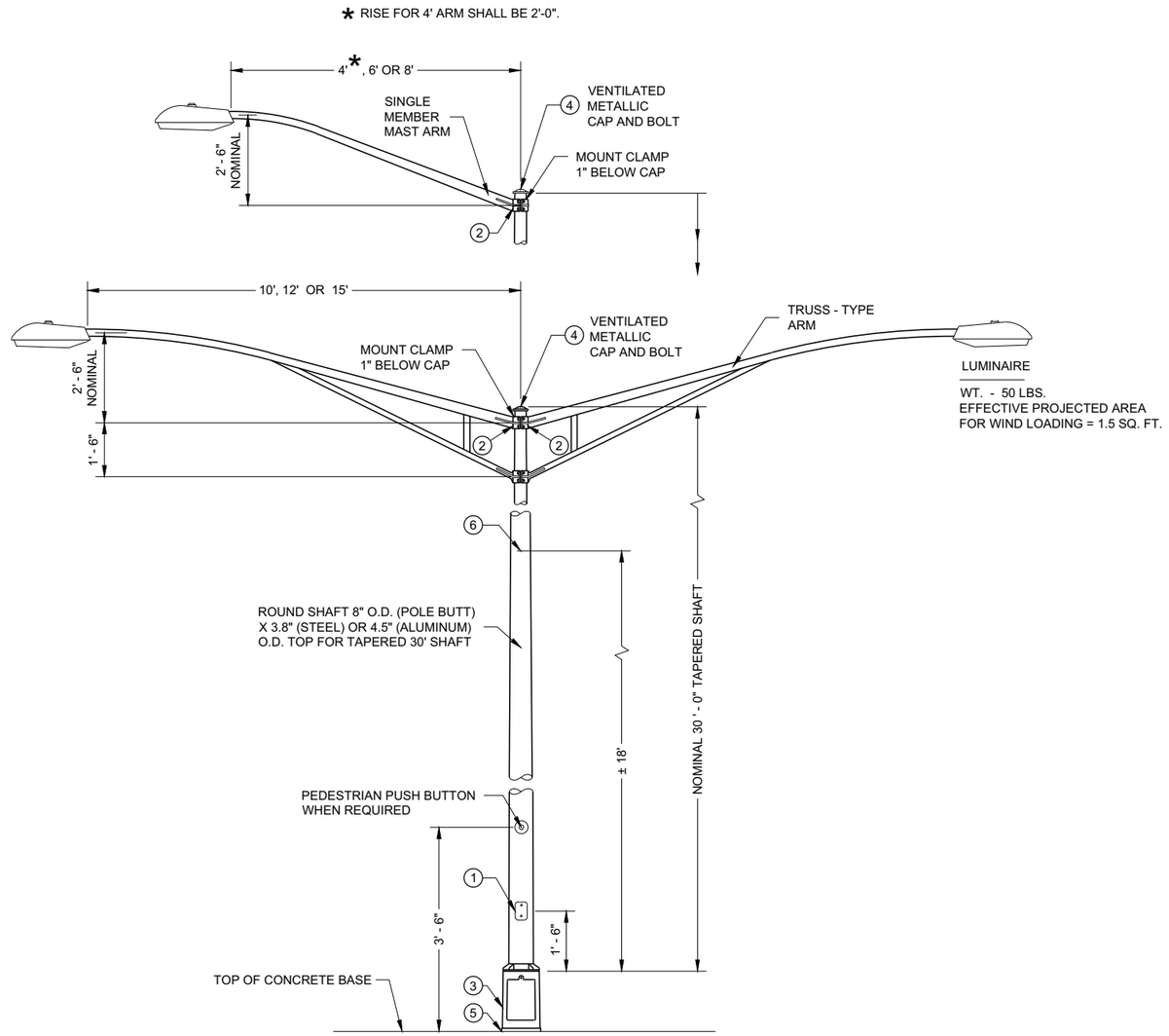
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA



TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

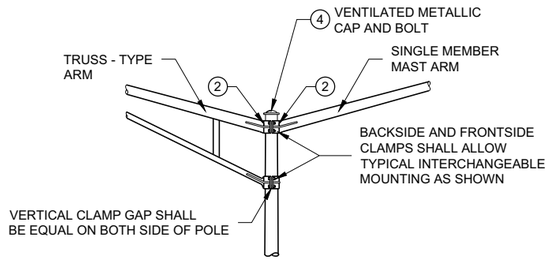
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

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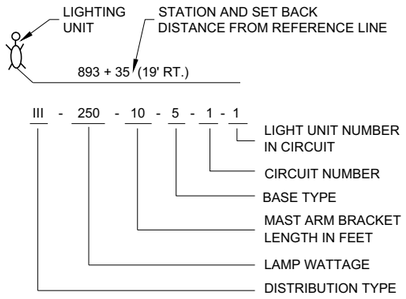
SDD 09E01 - 15d

GENERAL NOTES

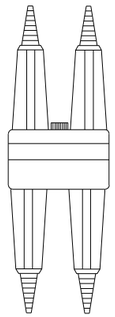
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

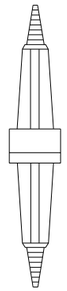
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



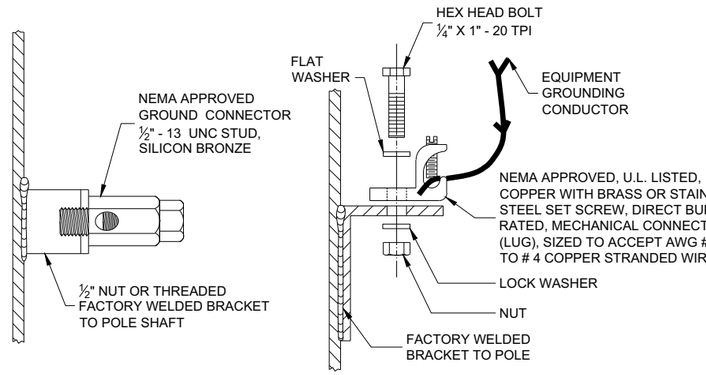
LIGHTING UNIT CODE
(TYPICAL)



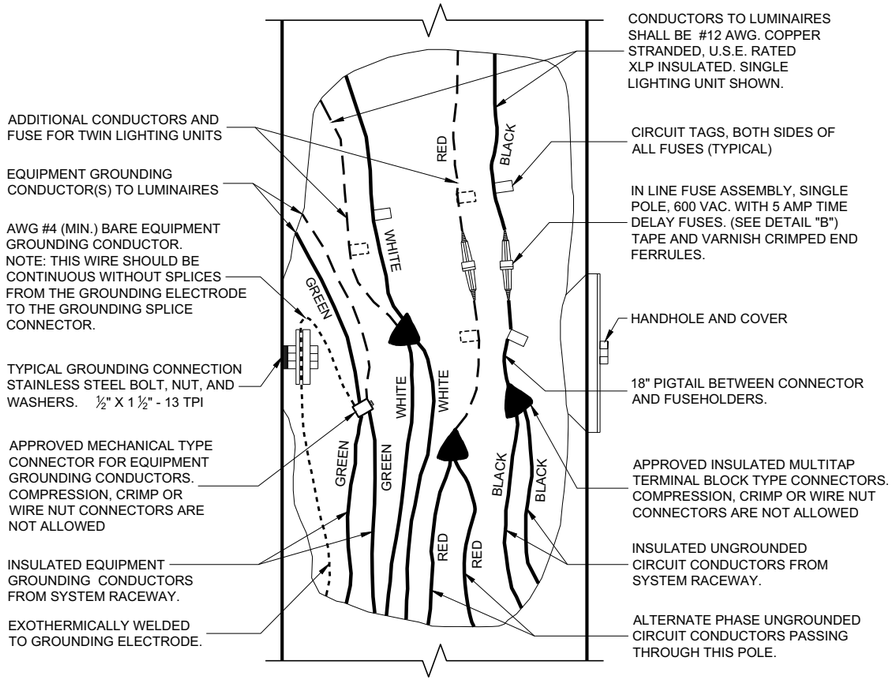
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



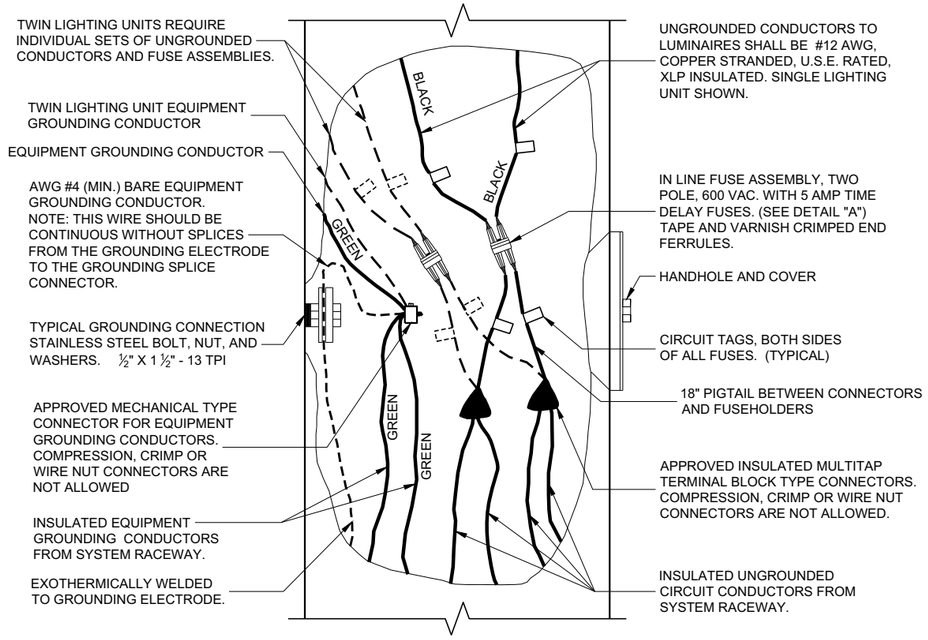
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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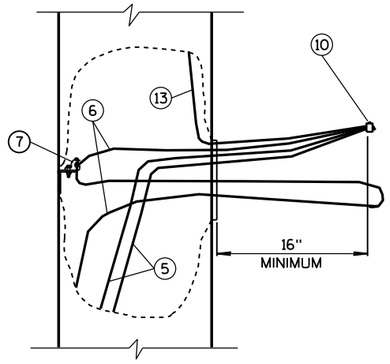
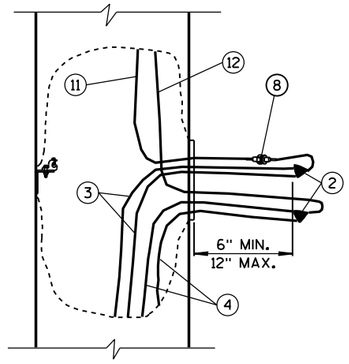
SDD 09E03 - 06

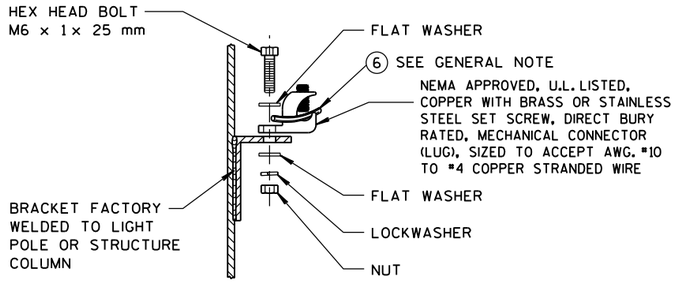


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



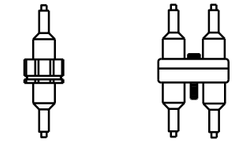
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

GENERAL NOTES

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

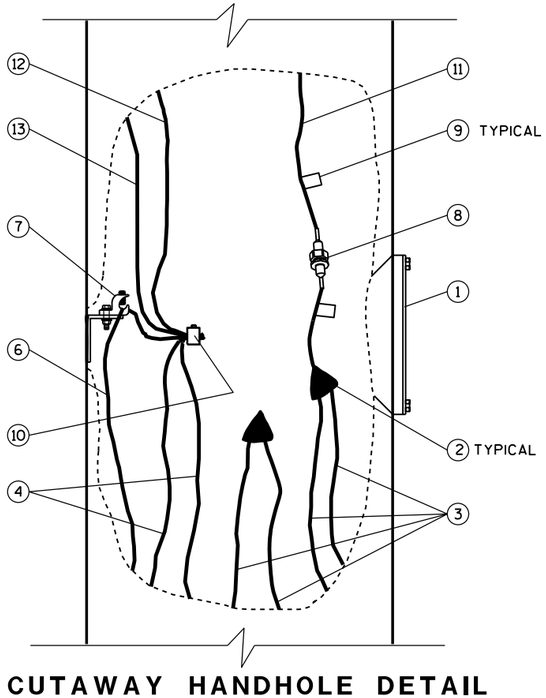
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

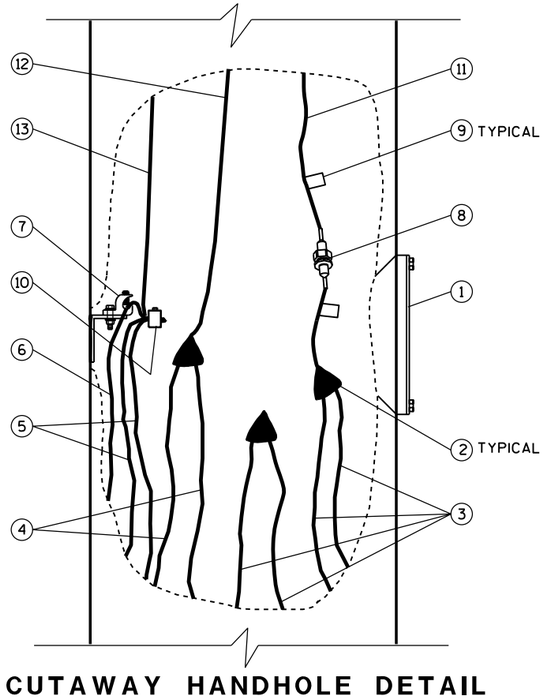
IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



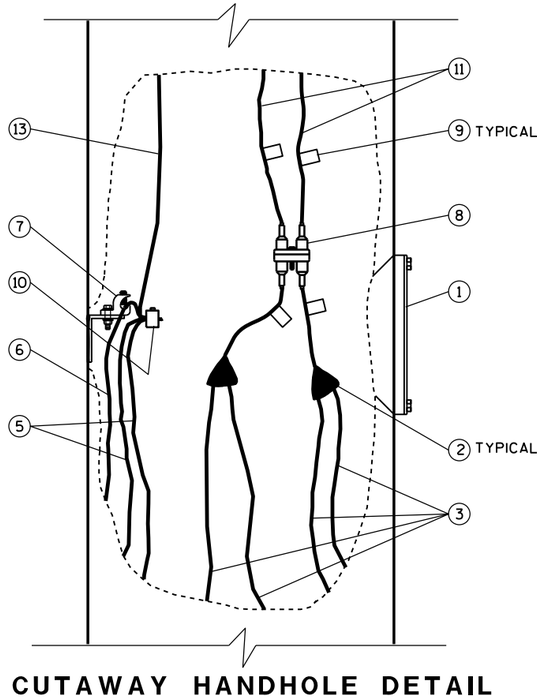
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

(1) HANDHOLE AND COVER
(2) INSULATED SPLICE
(3) UNGROUNDED LINE WIRE
(4) GROUNDED LINE WIRE
(5) SYSTEM GROUNDING LINE WIRE
(6) GROUNDING ELECTRODE CONDUCTOR
(7) HANDHOLE GROUNDING LUG
(8) FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
(9) CIRCUIT TAG (SEE GENERAL NOTE)
(10) REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
(11) UNGROUNDED POLE WIRE
(12) GROUNDED POLE WIRE
(13) EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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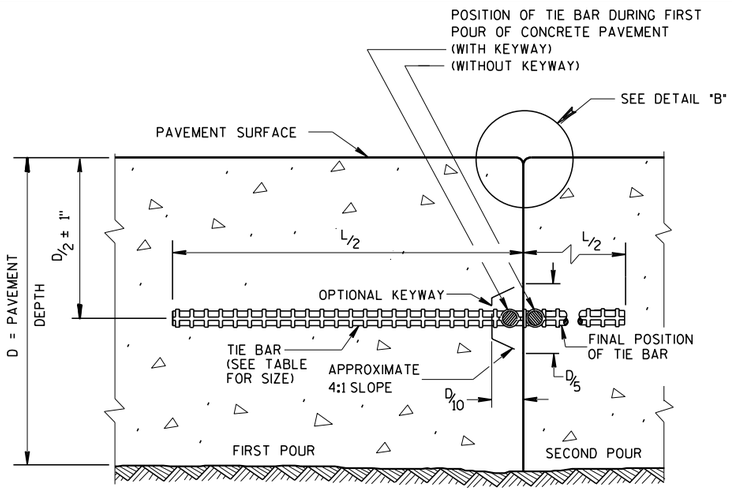
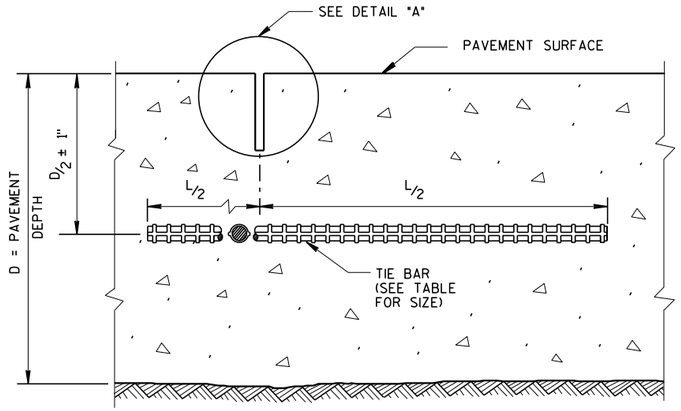


CONSTRUCTION JOINT



SAWED JOINT

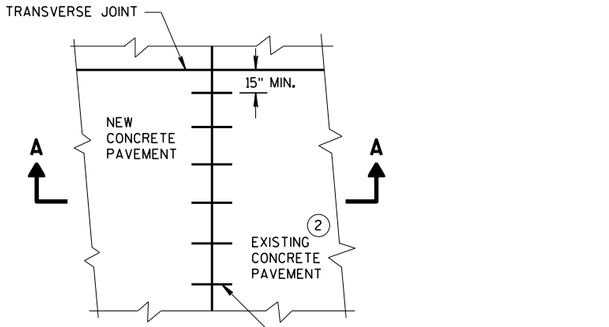
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

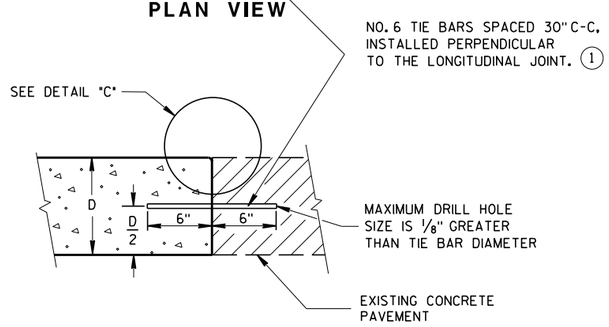
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

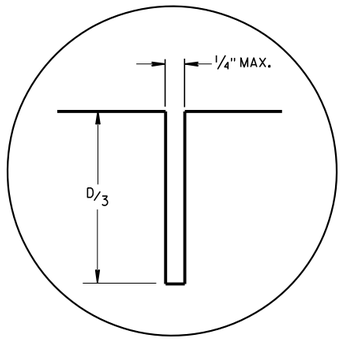


PLAN VIEW

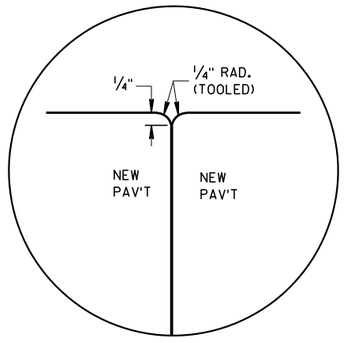


SECTION A-A

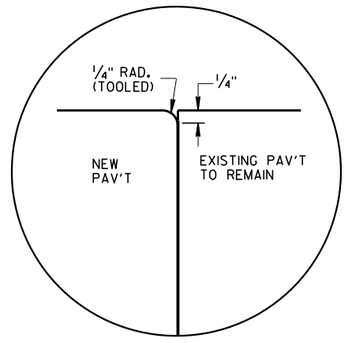
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



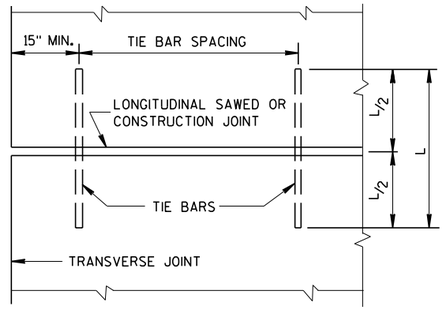
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

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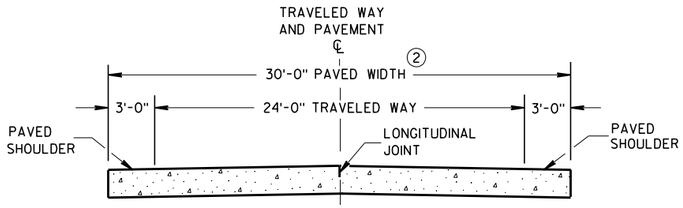
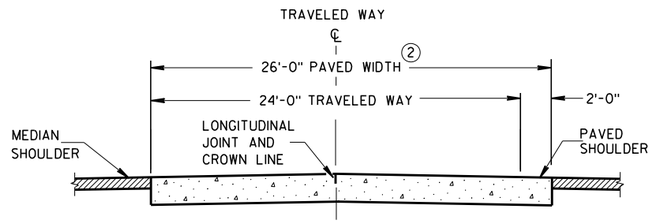
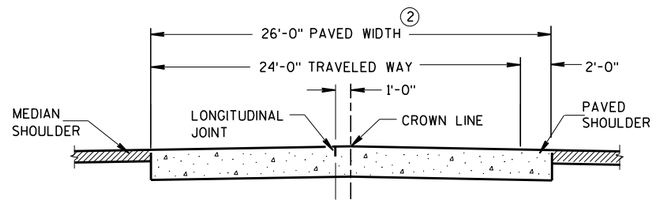


SECTION A-A
TWO-LANE TWO-WAY HIGHWAY ①



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.

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

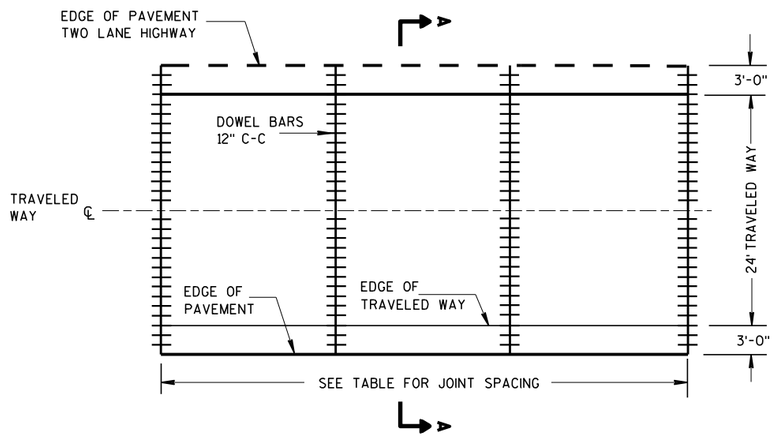
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

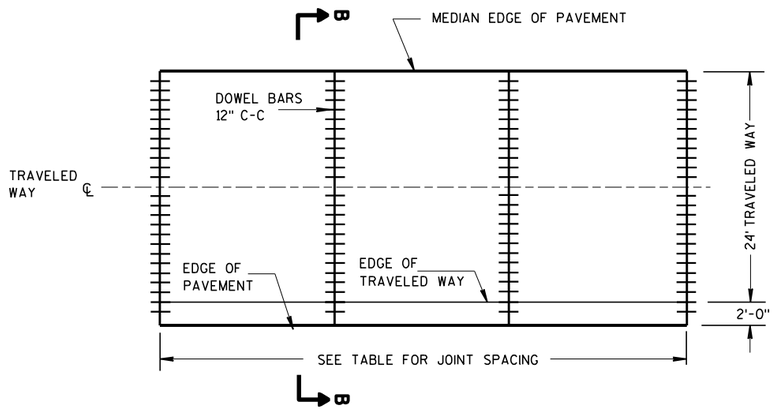
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

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 TRANSPORTATION

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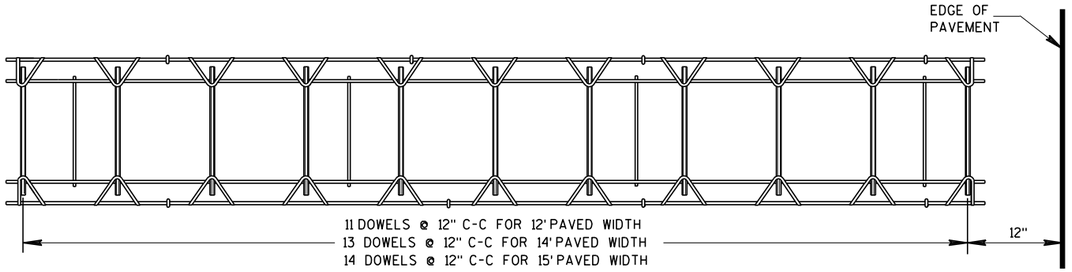
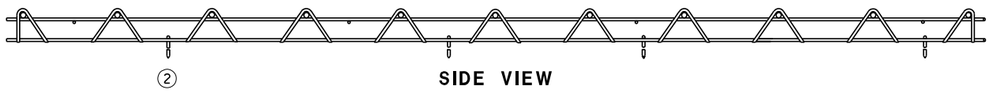


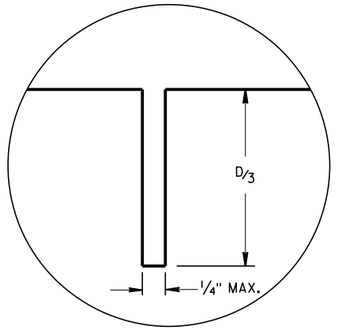
PLAN VIEW



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.

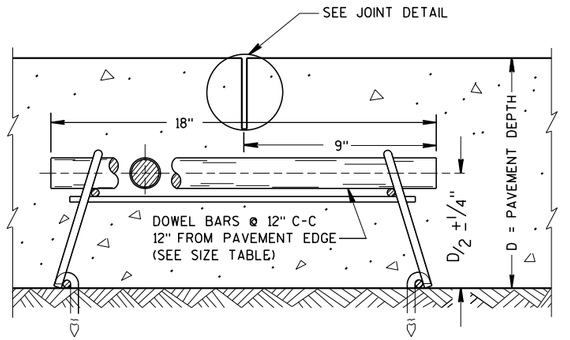
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

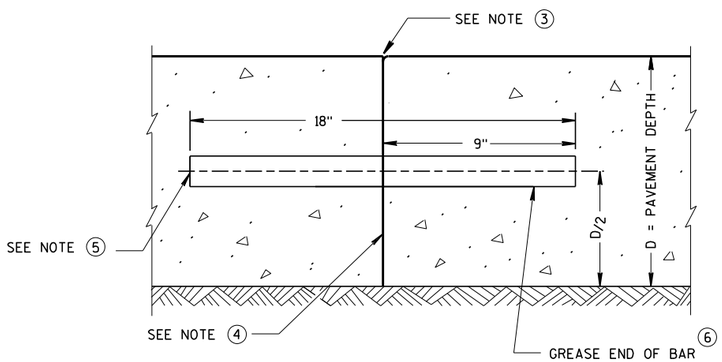
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

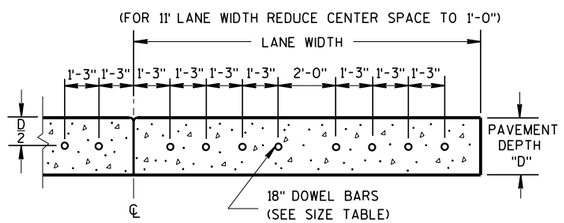
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUP

FHWA

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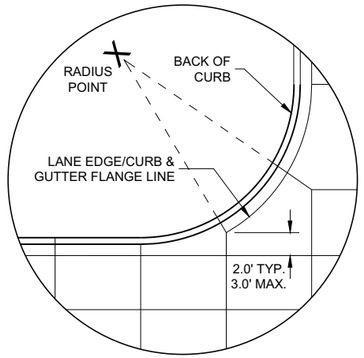
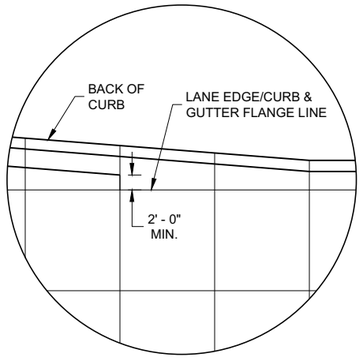
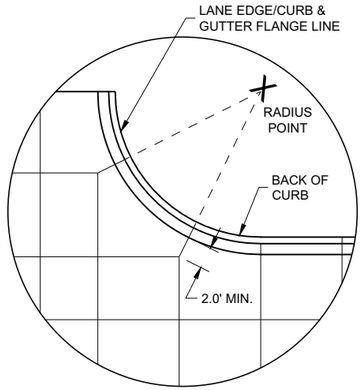
S.D.D. 13 C 11-12b



DETAIL "A"



DETAIL "B"



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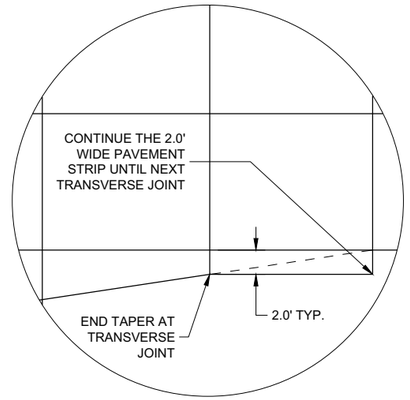


DETAIL "D"

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.

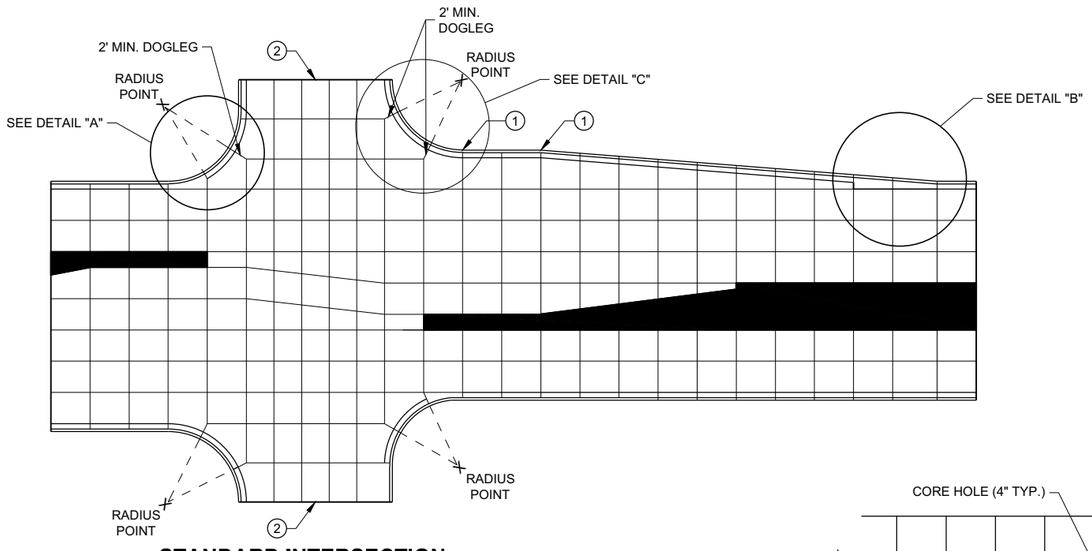
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

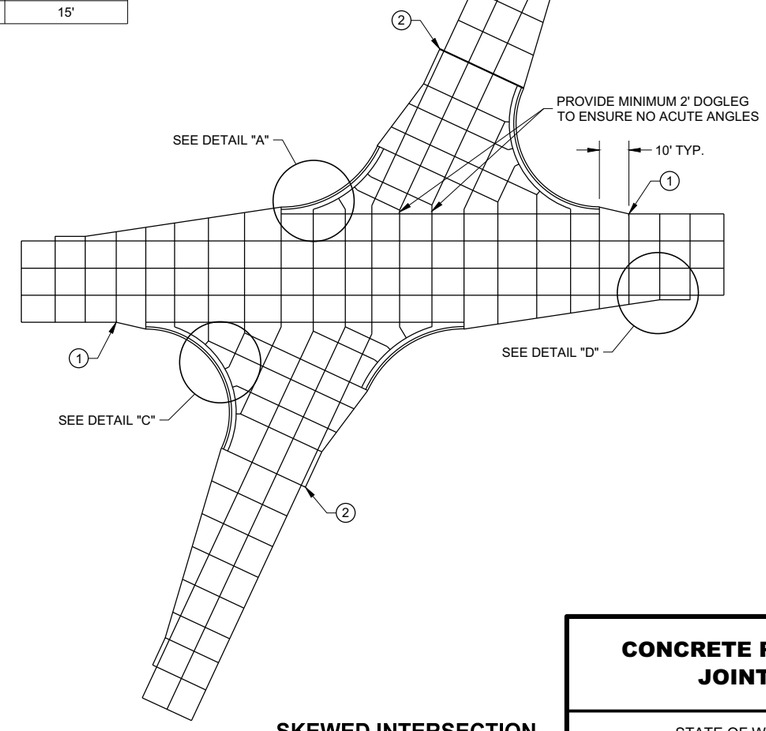
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



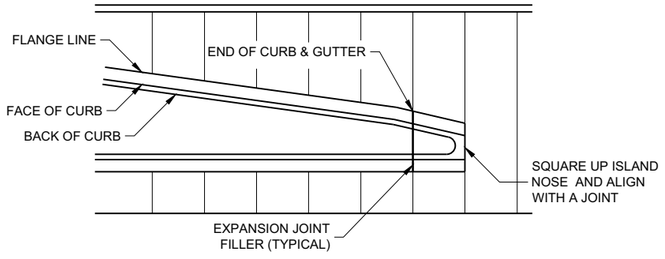
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

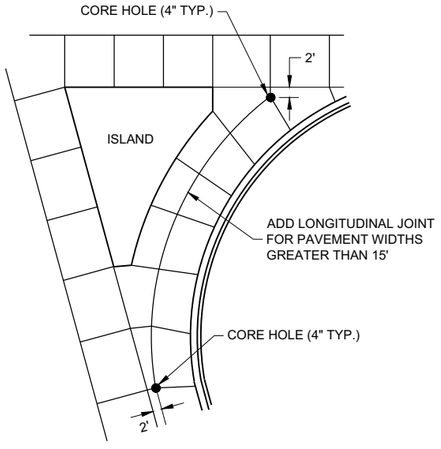
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13C18 - 07a

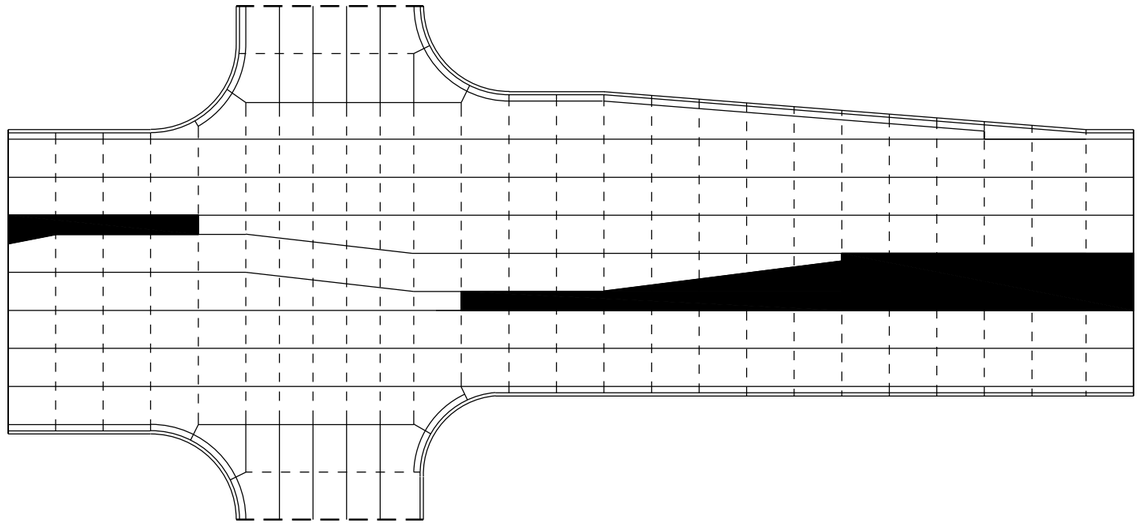
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

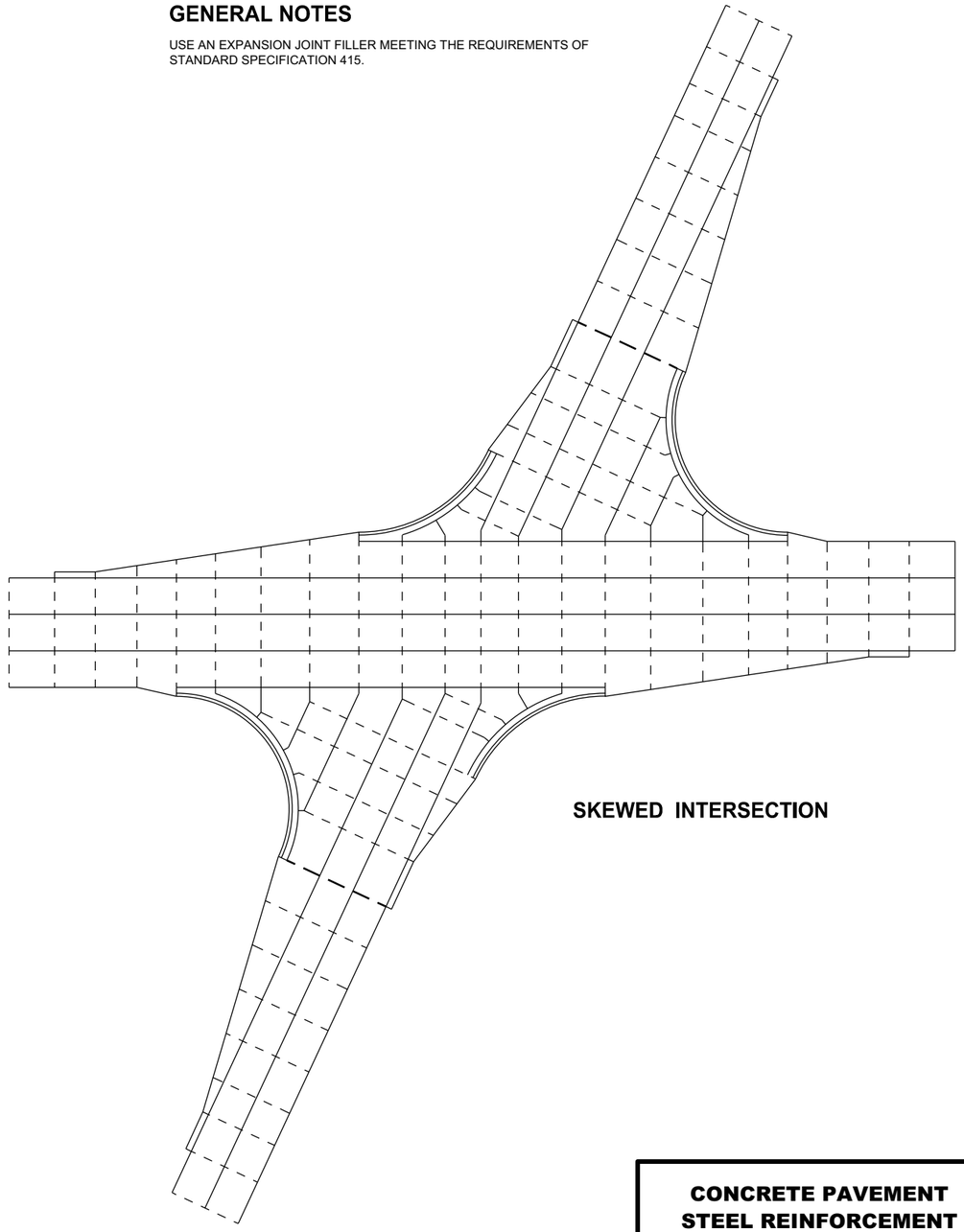
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

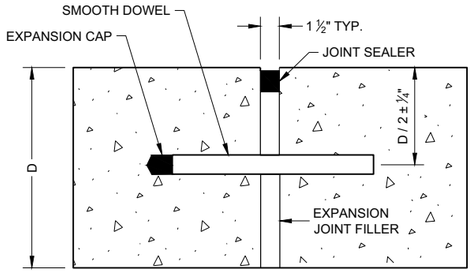
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

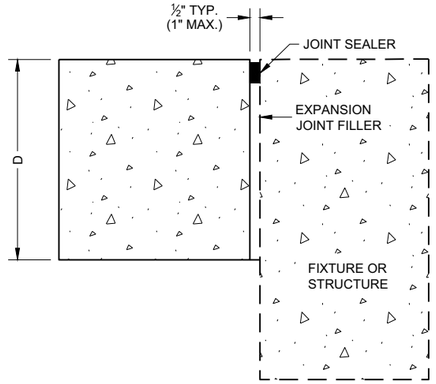
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

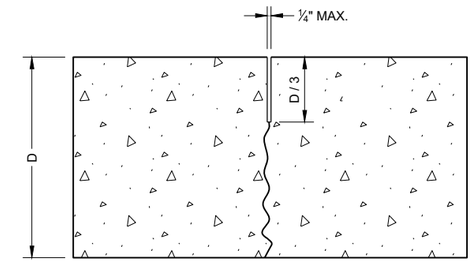
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

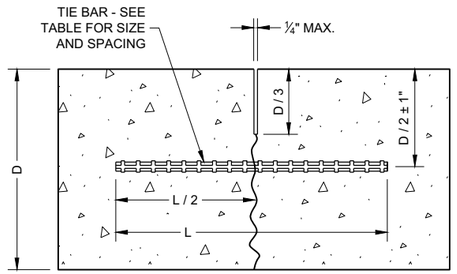
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

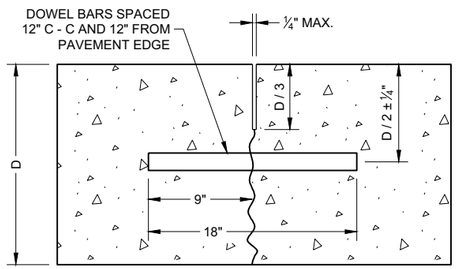
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM 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 ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

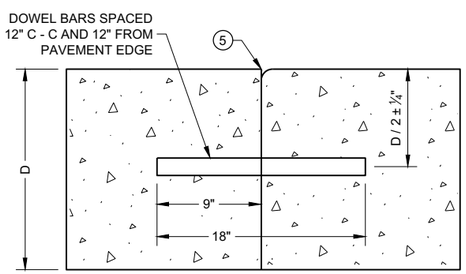


TIED LONGITUDINAL

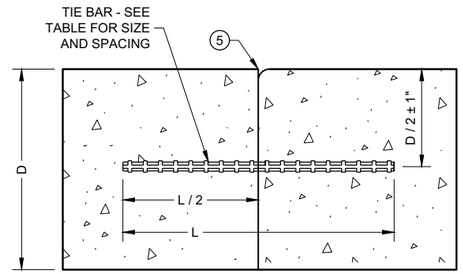


DOWELED TRANSVERSE

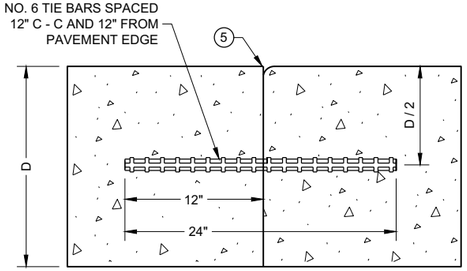
CONTRACTION JOINTS (2)



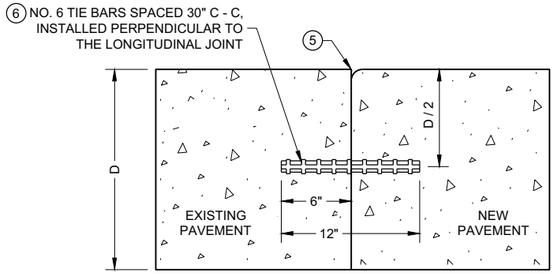
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



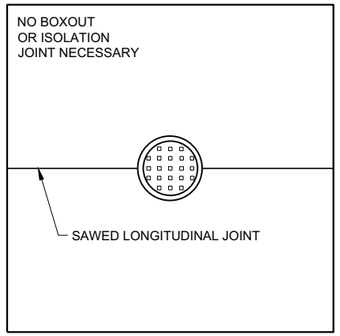
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

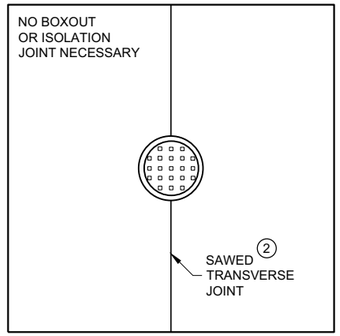
CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

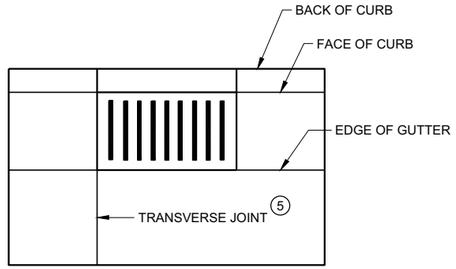
6
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



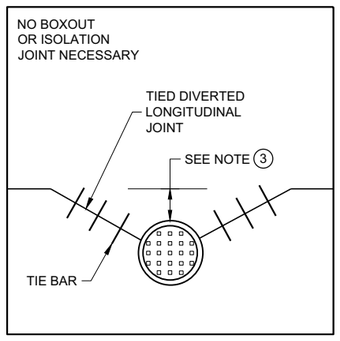
MANHOLE WITH TRANSVERSE JOINT



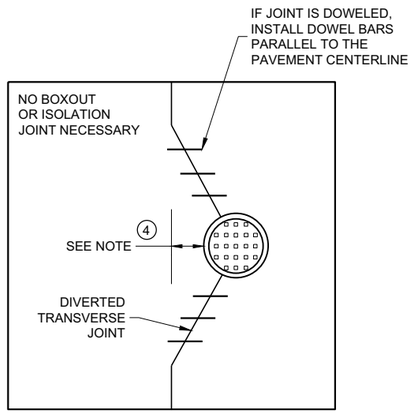
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

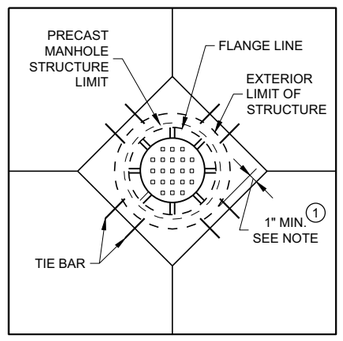
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

6

SDD13C18 - 07d

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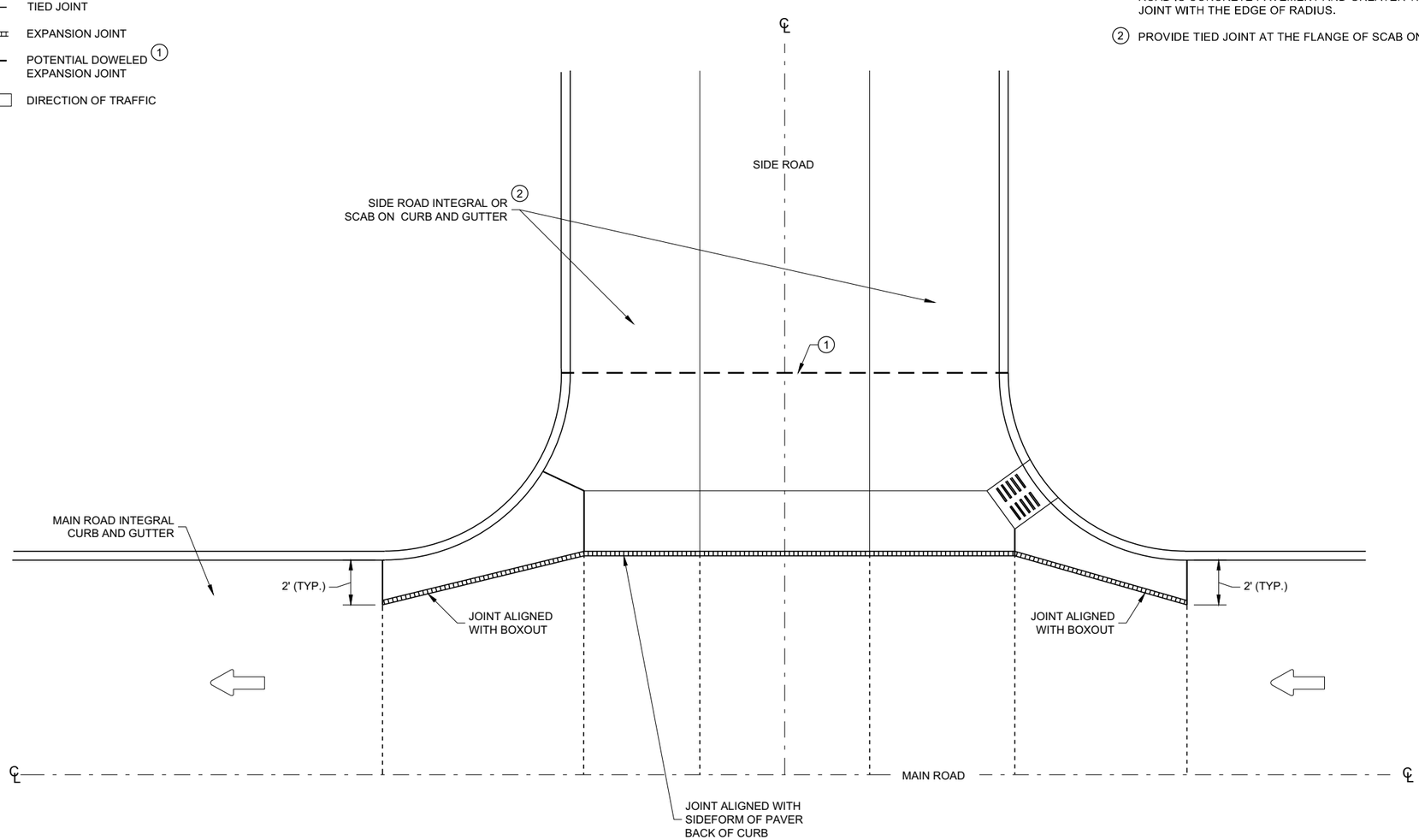
SDD13C18 - 07d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 13C18 - 07f

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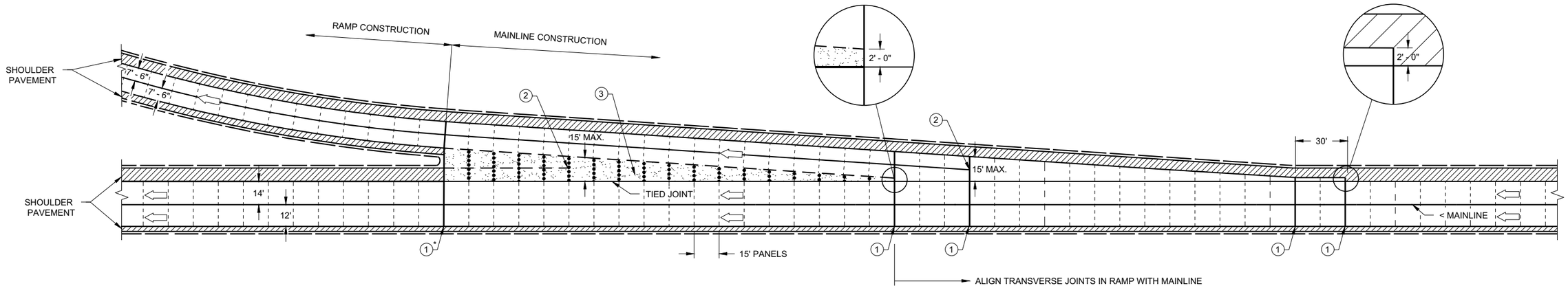
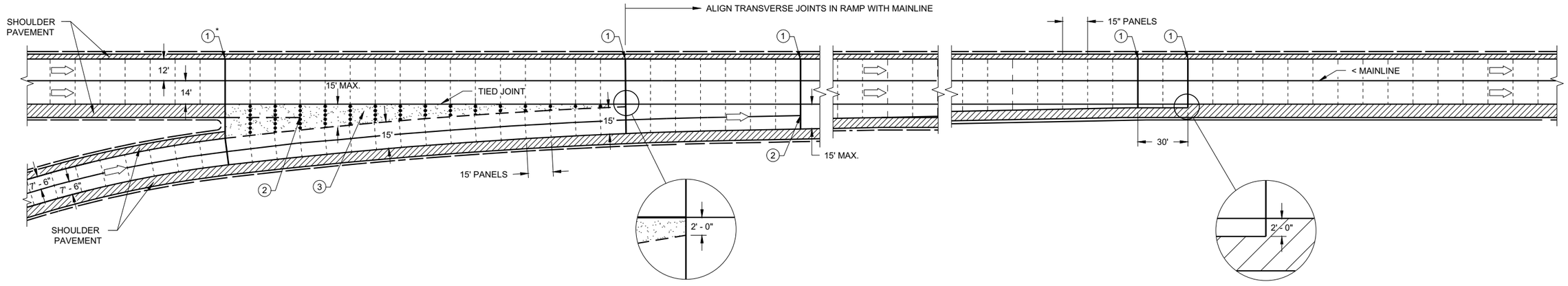
SDD 13C18 - 07f



DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES.
((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Peter Kemp P.E. — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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SDD 13C18 - 07g

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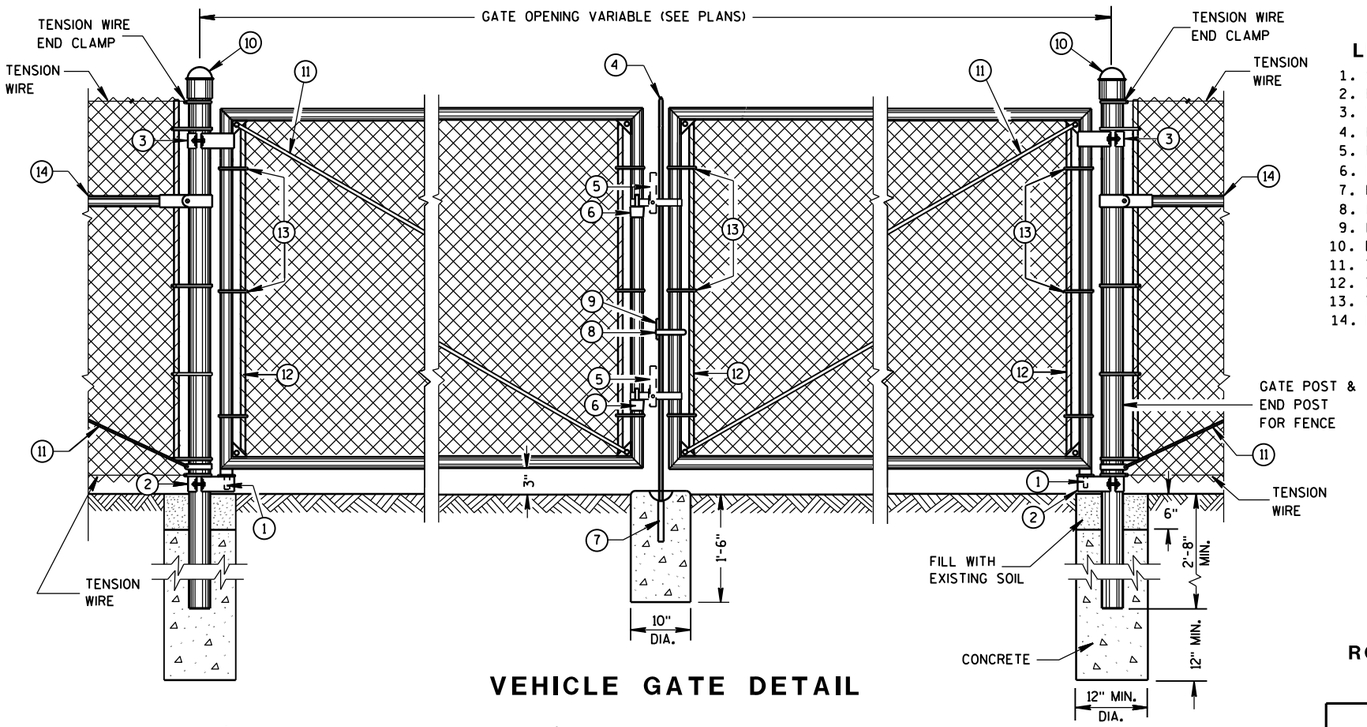
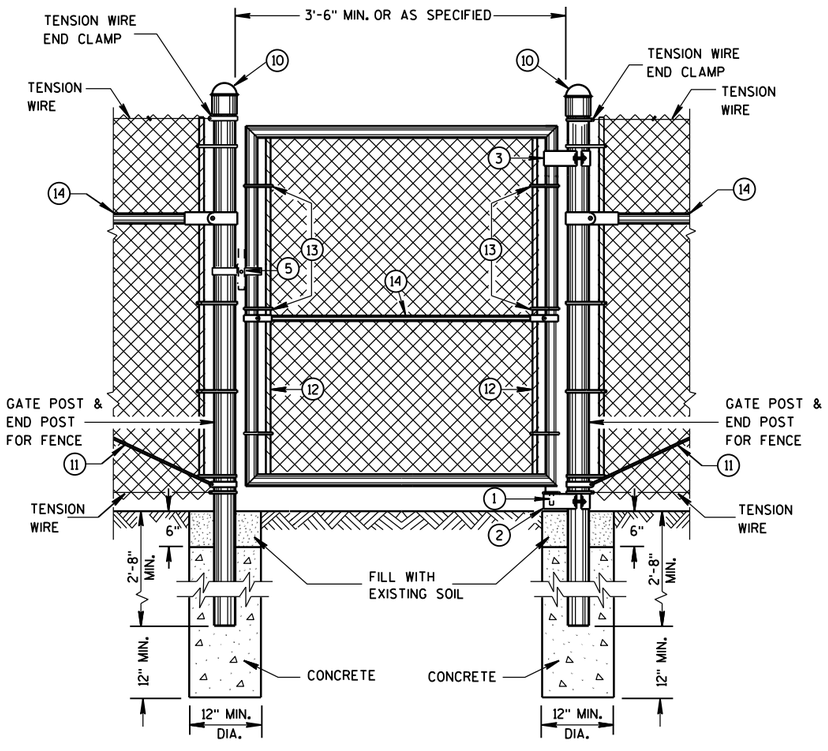
SDD 13C18 - 07g



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

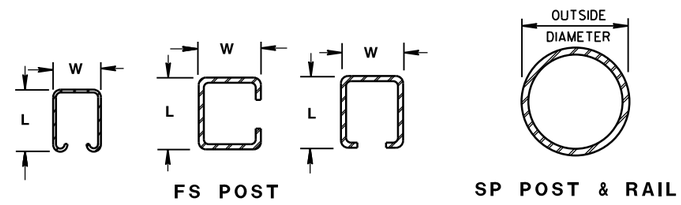
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST

SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

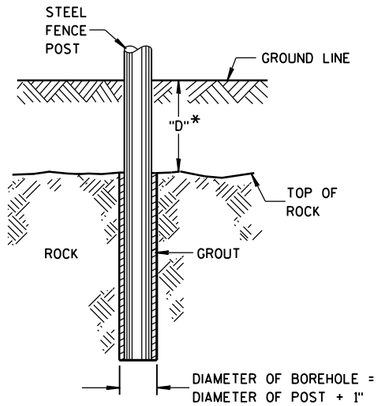
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

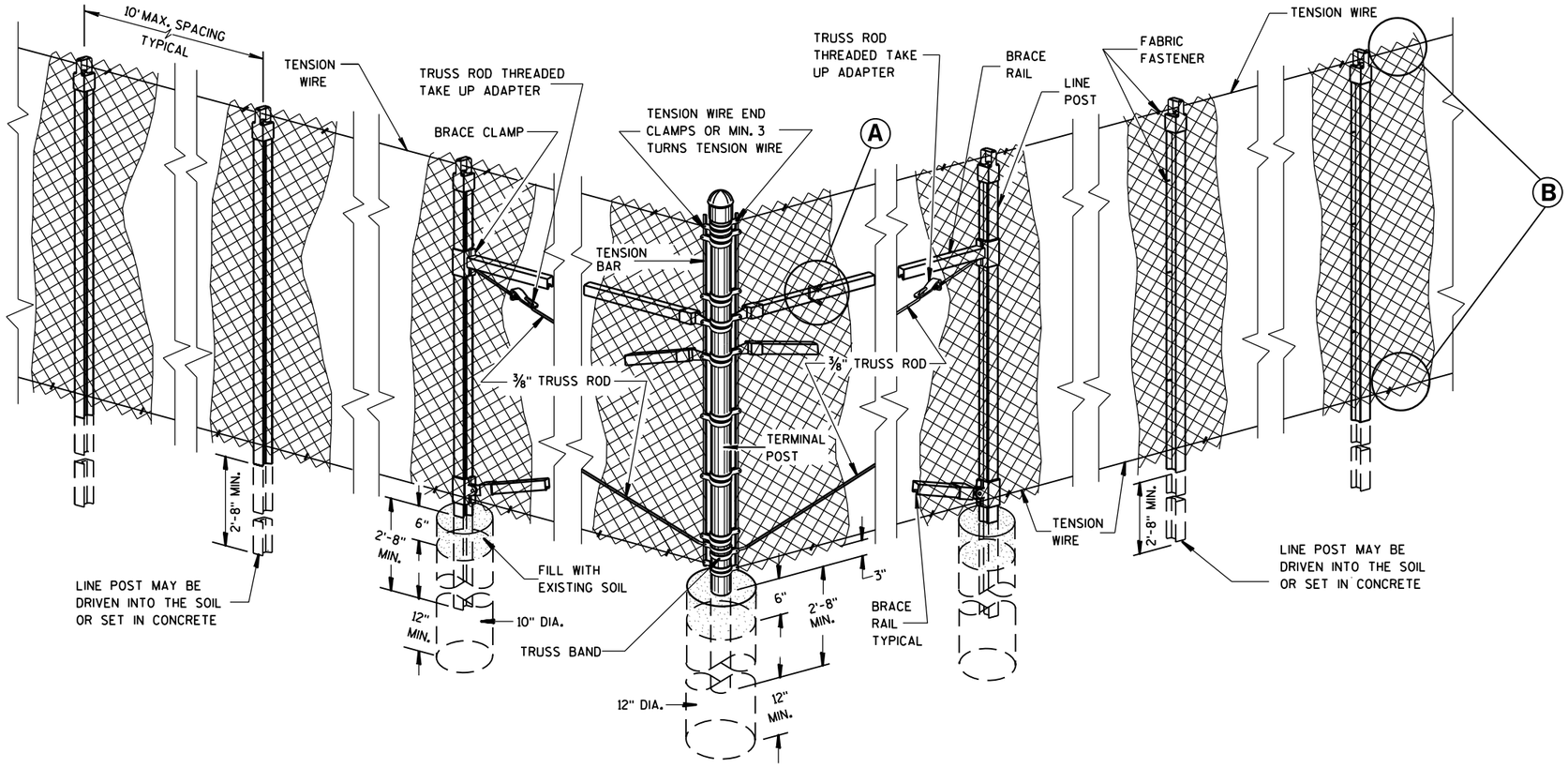
6

S.D.D. 15 B 3-15a

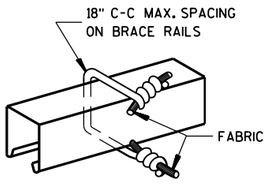


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



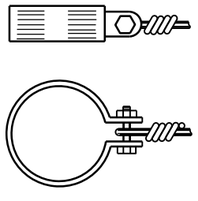
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



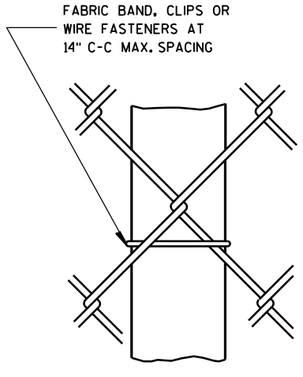
BRACE RAIL

FABRIC FASTENER

Ⓐ



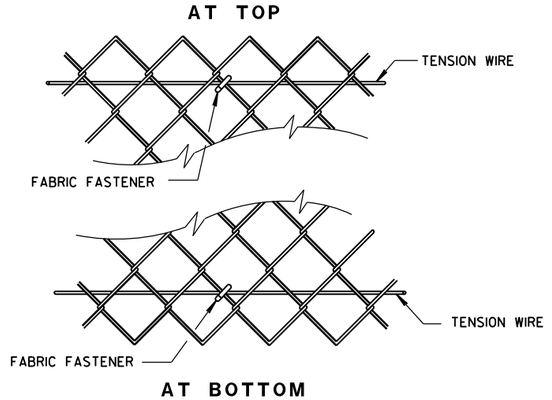
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

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FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

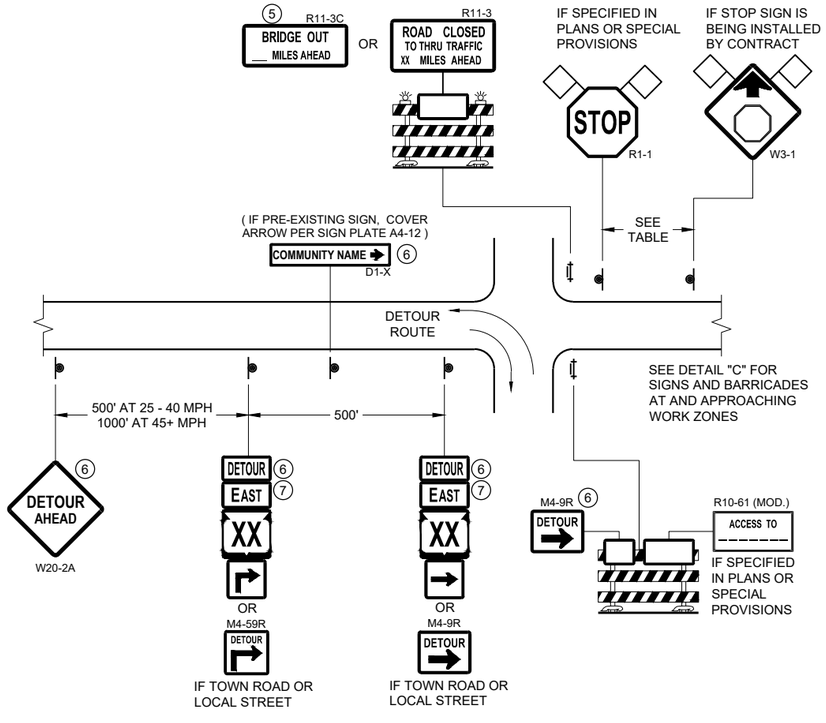
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

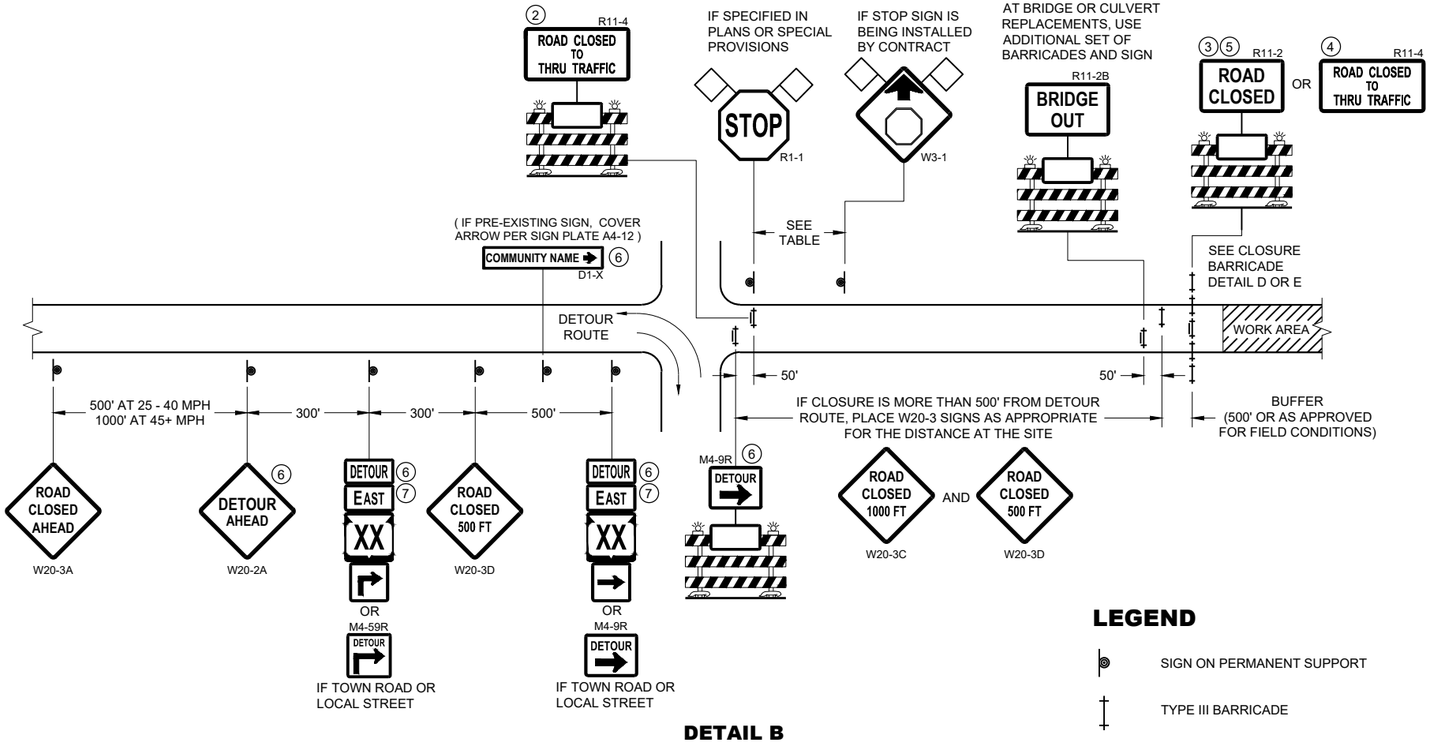
6

S.D.D. 15 B 3-15b



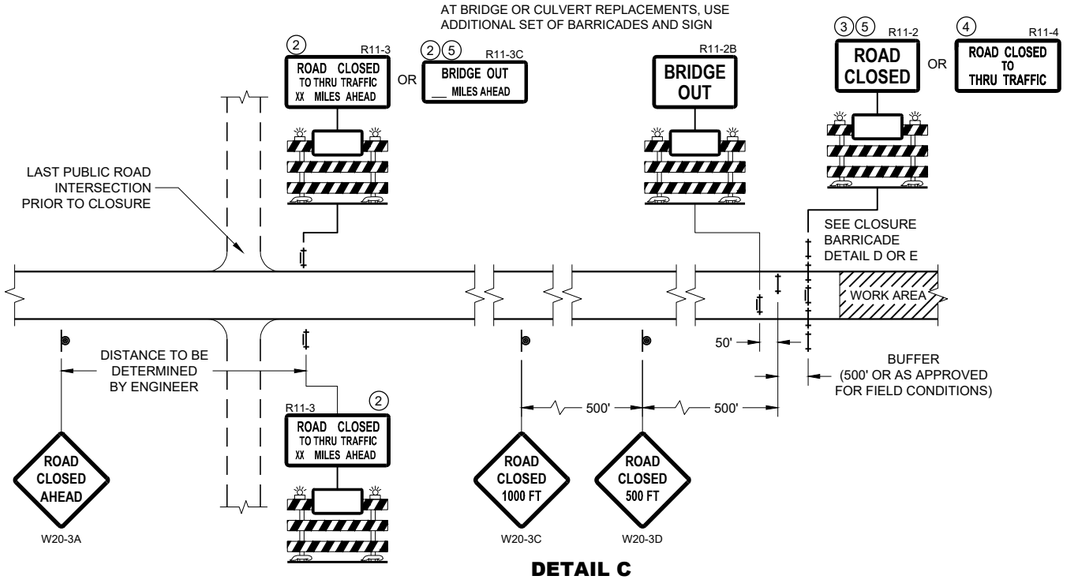
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

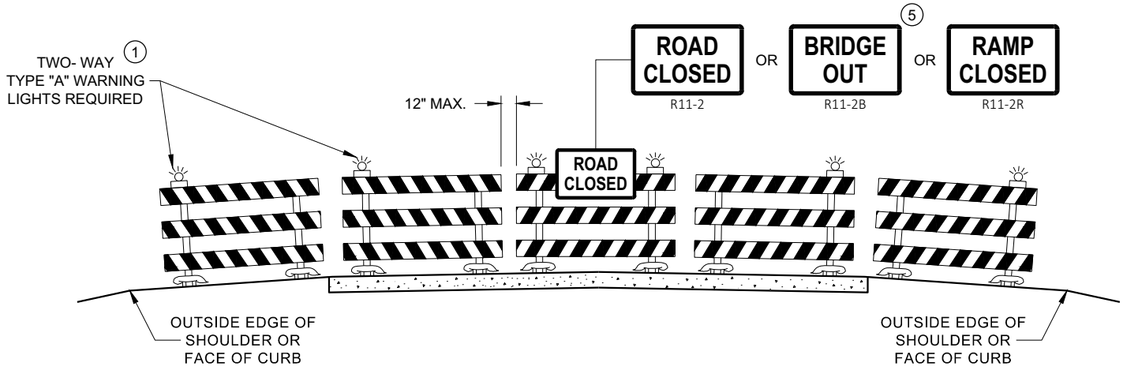
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

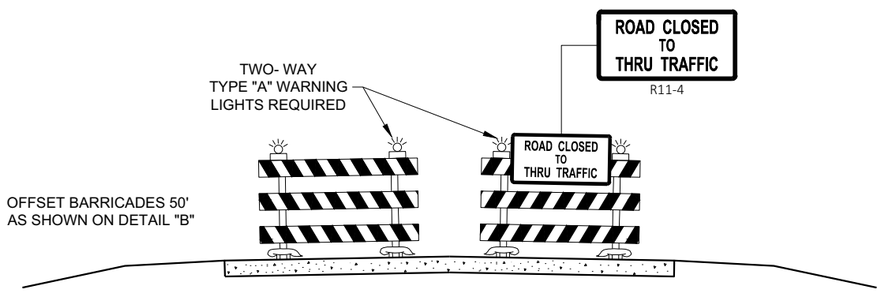
6

SDD 15C02 - 08a

SDD 15C02 - 08a



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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" X 18" 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)
- 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 AN 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 ROAD 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 VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

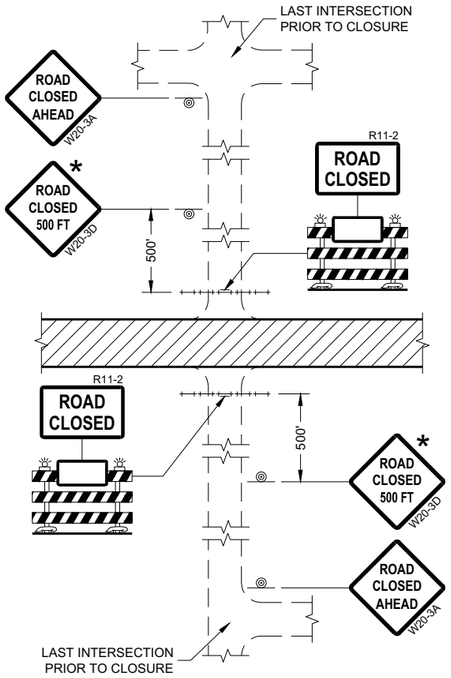
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

6

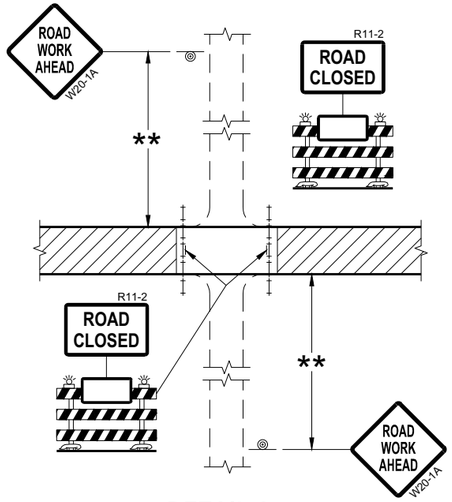
SDD 15C02 - 08b

6

SDD 15C02 - 08b



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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 (500 FEET DESIRABLE) 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 REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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.

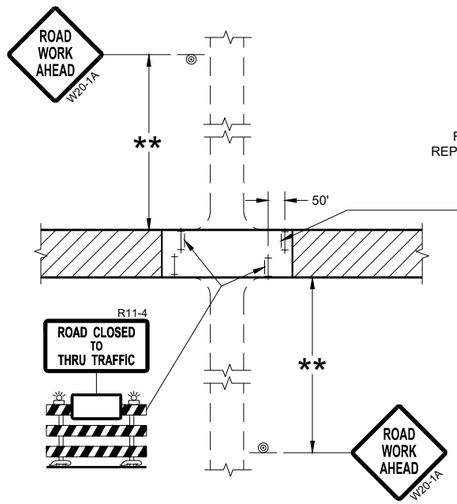
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

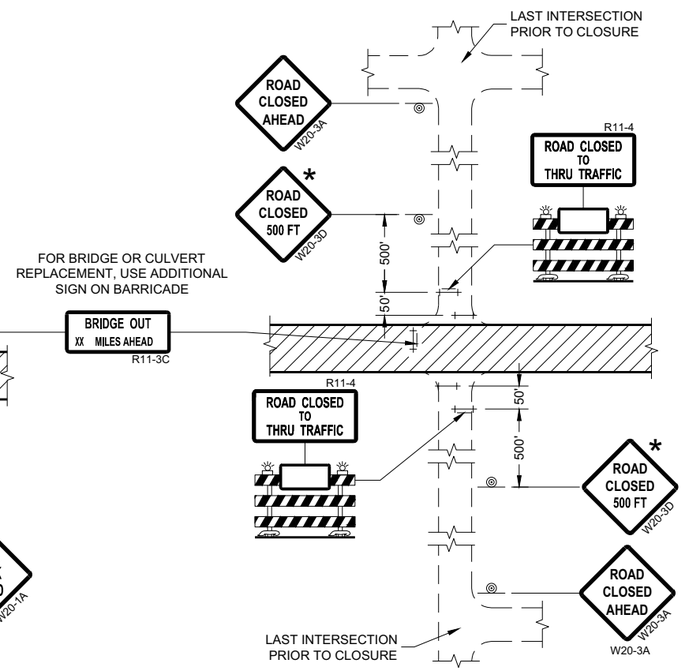
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

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.

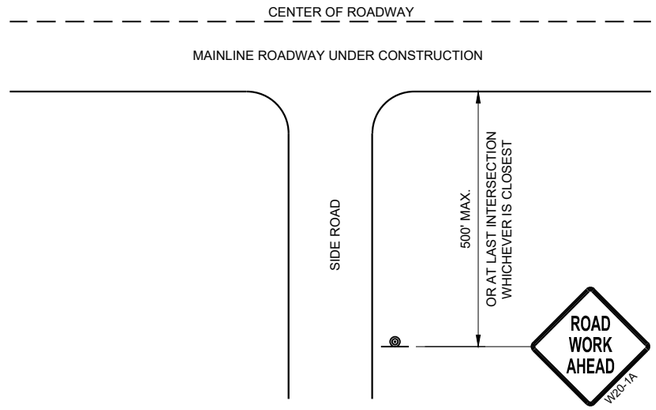
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

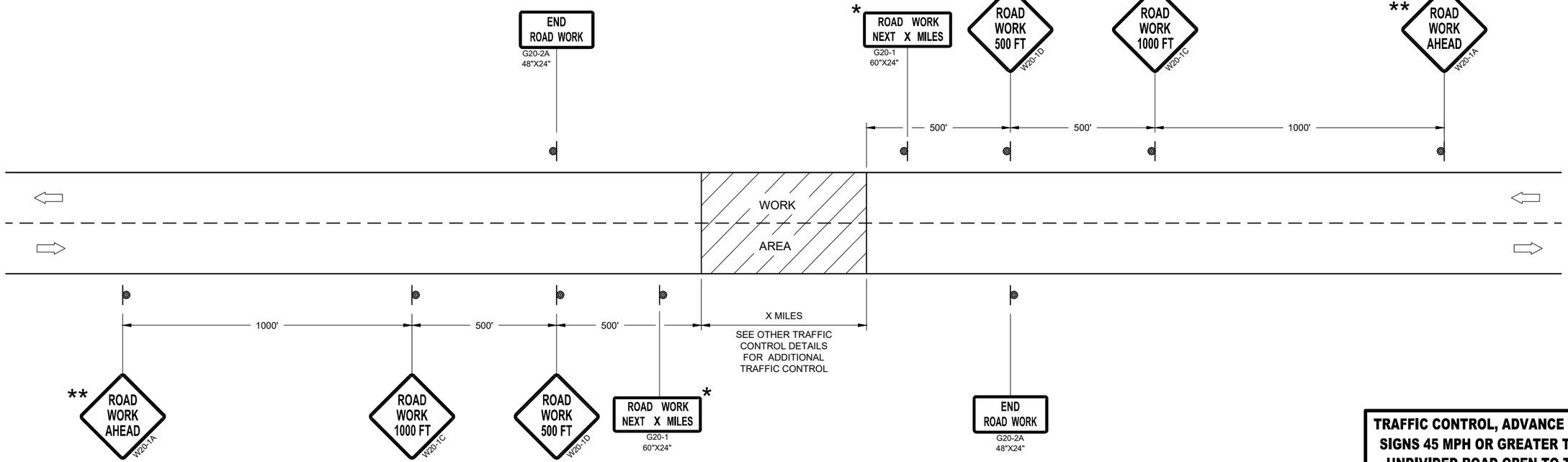
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

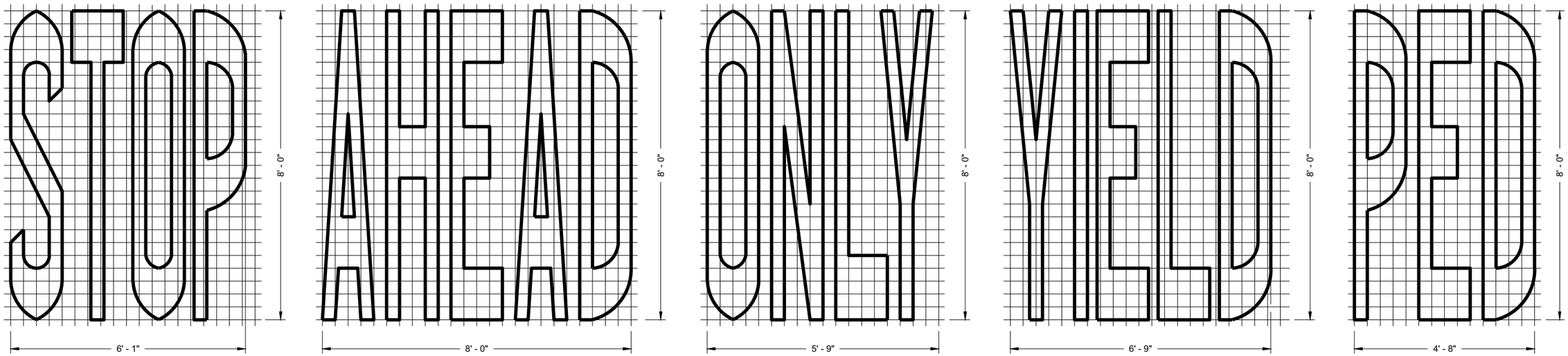
APPROVED
July 2018
DATE

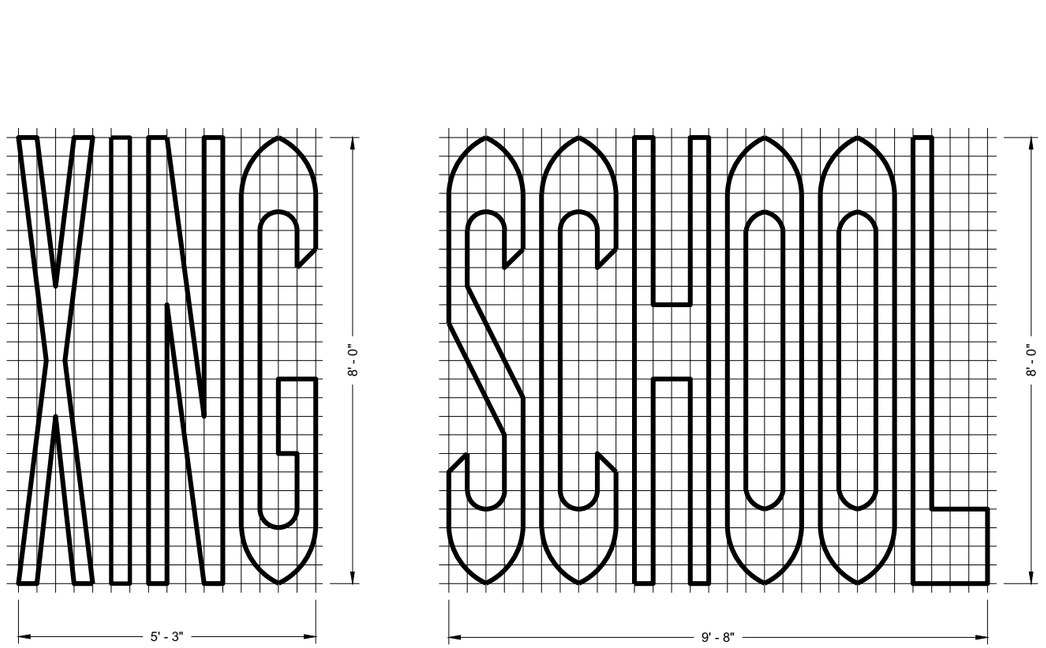
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

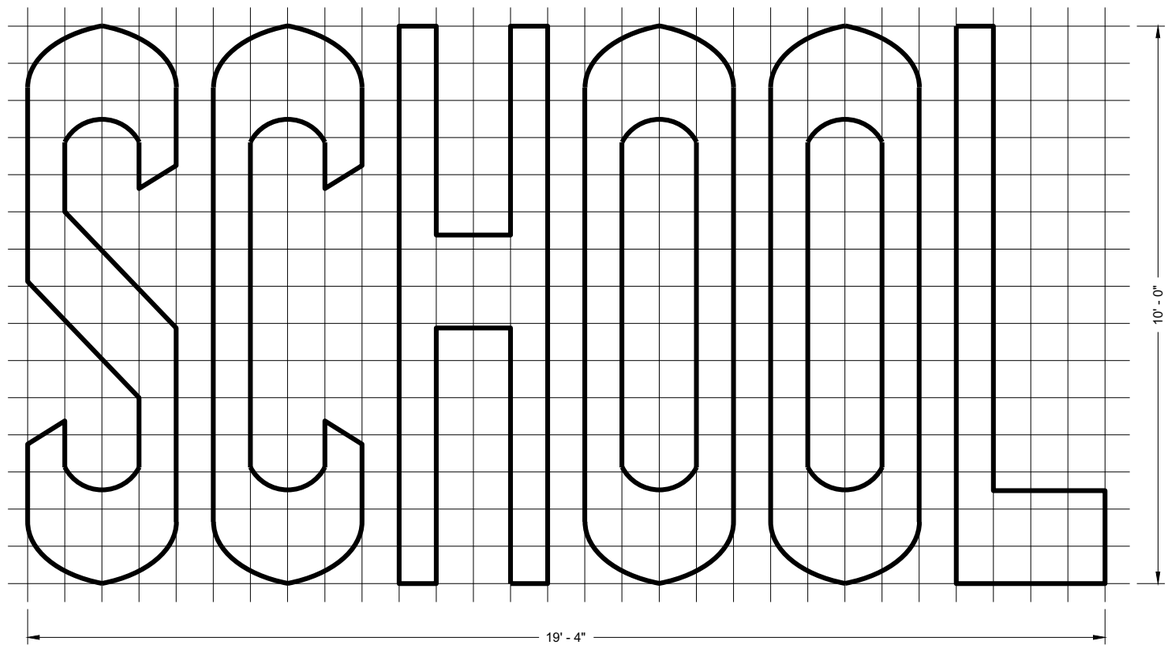
6

SDD 15C04 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

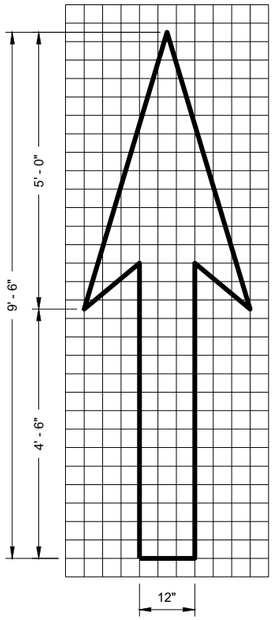
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

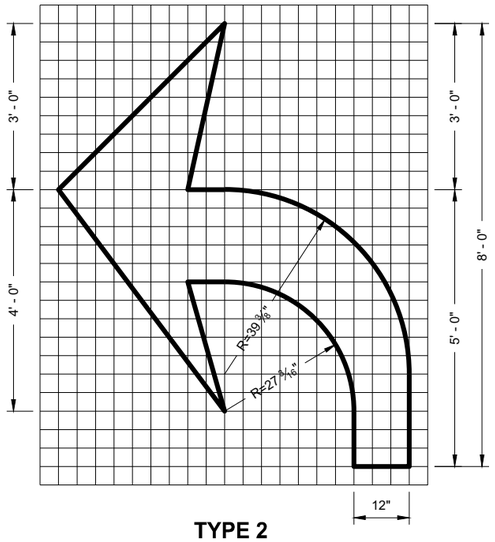
6

SDD 15C07 - 15b

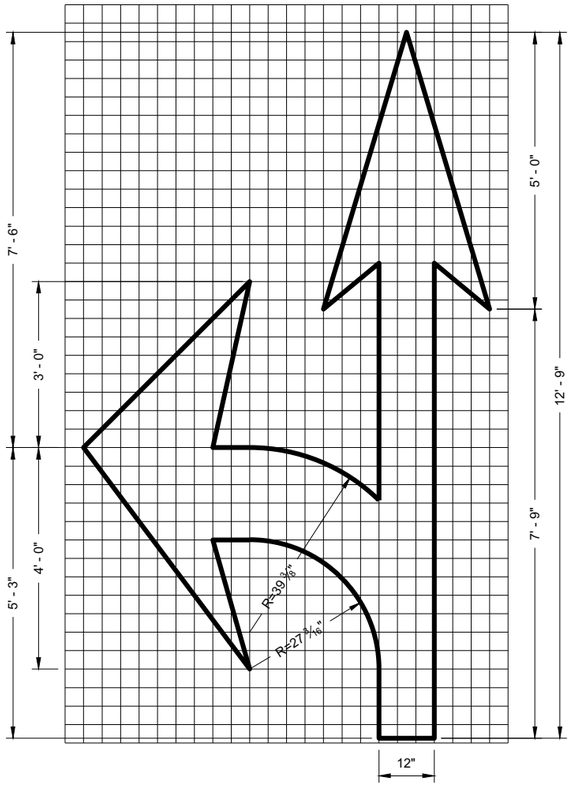
SDD 15C07 - 15b



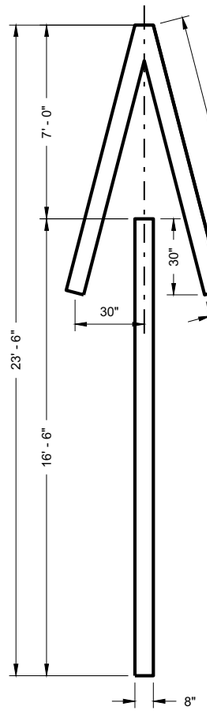
TYPE 1



TYPE 2



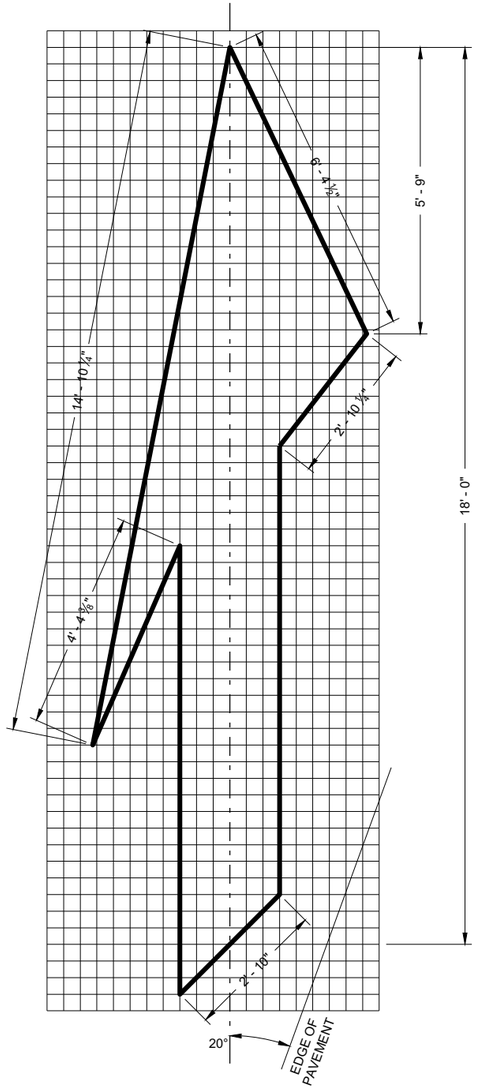
TYPE 3



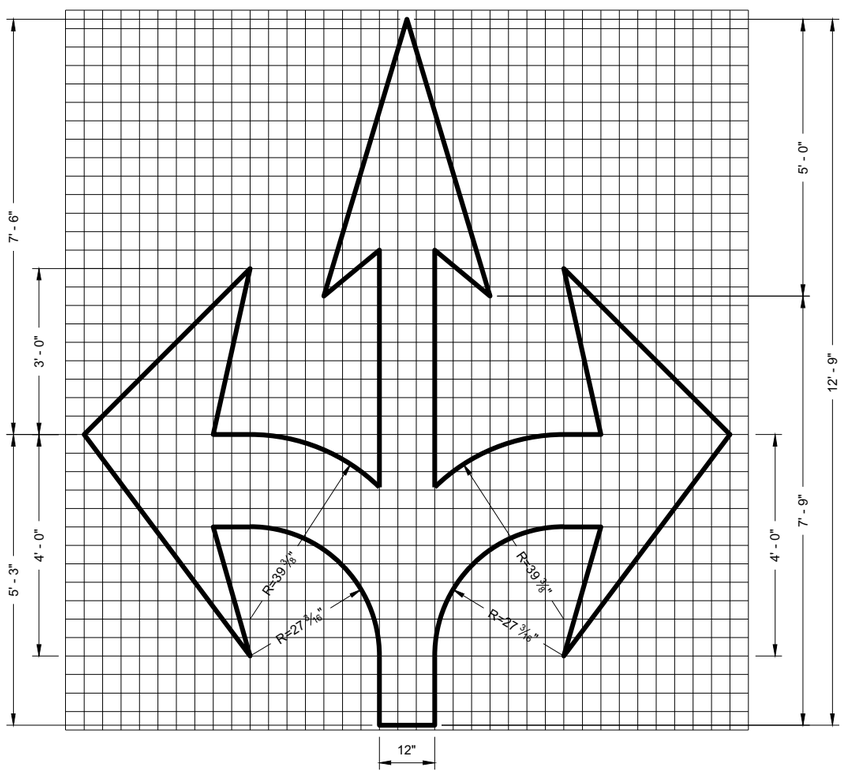
TYPE 4

GENERAL NOTES

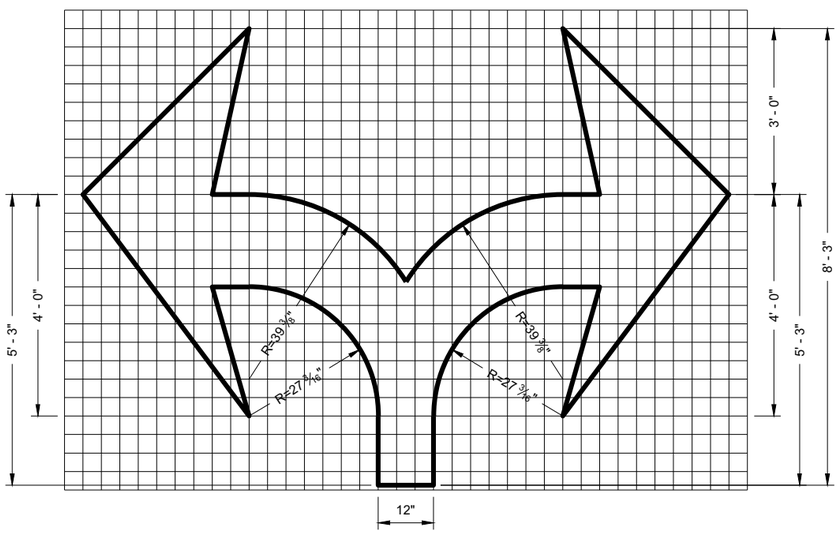
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

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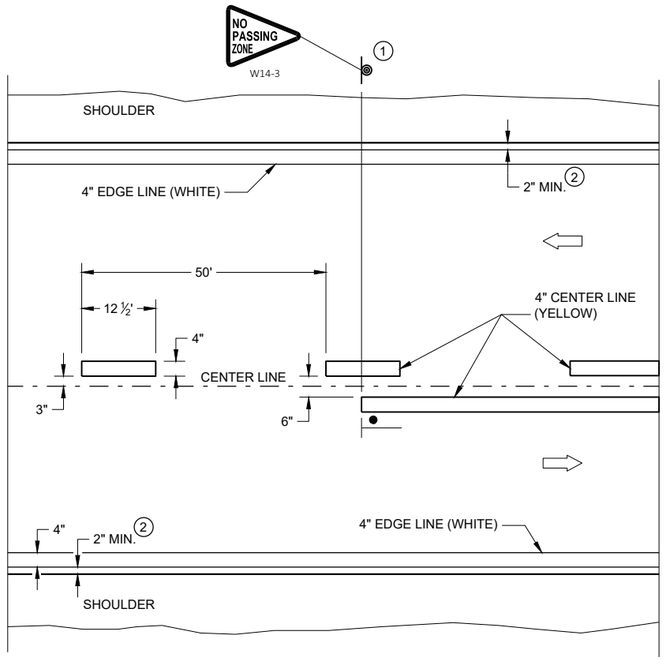
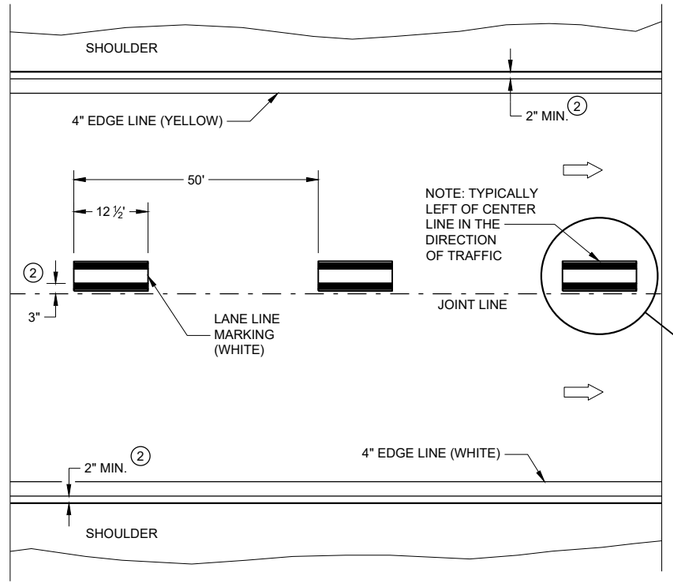
SDD 15C07 - 15c

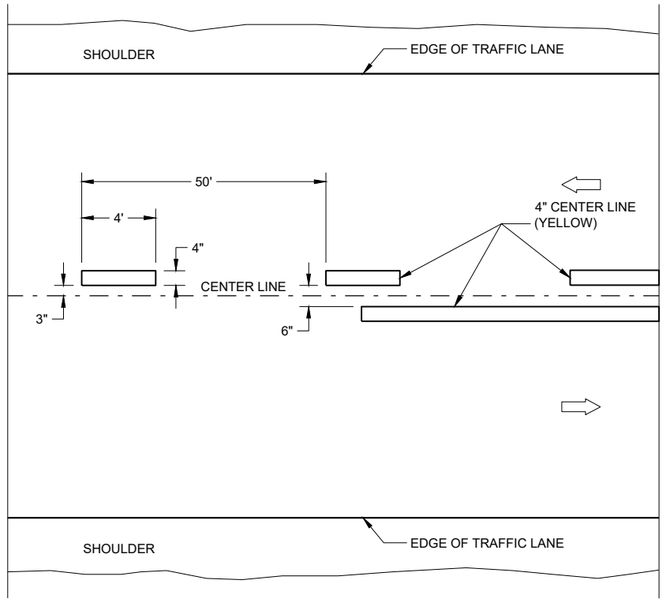


TWO WAY TRAFFIC

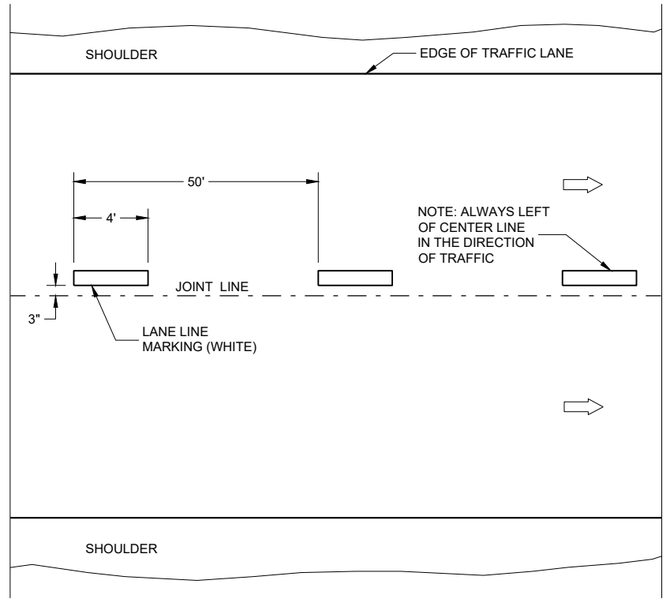


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

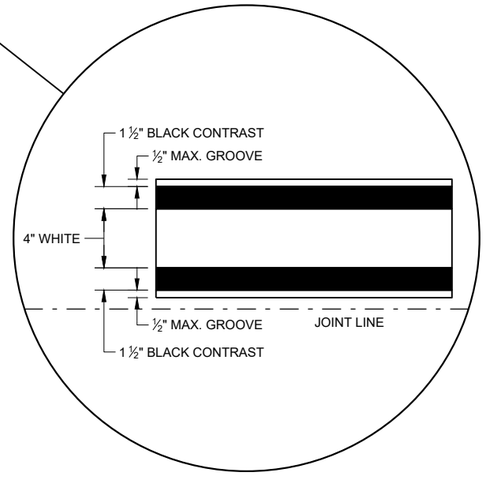
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

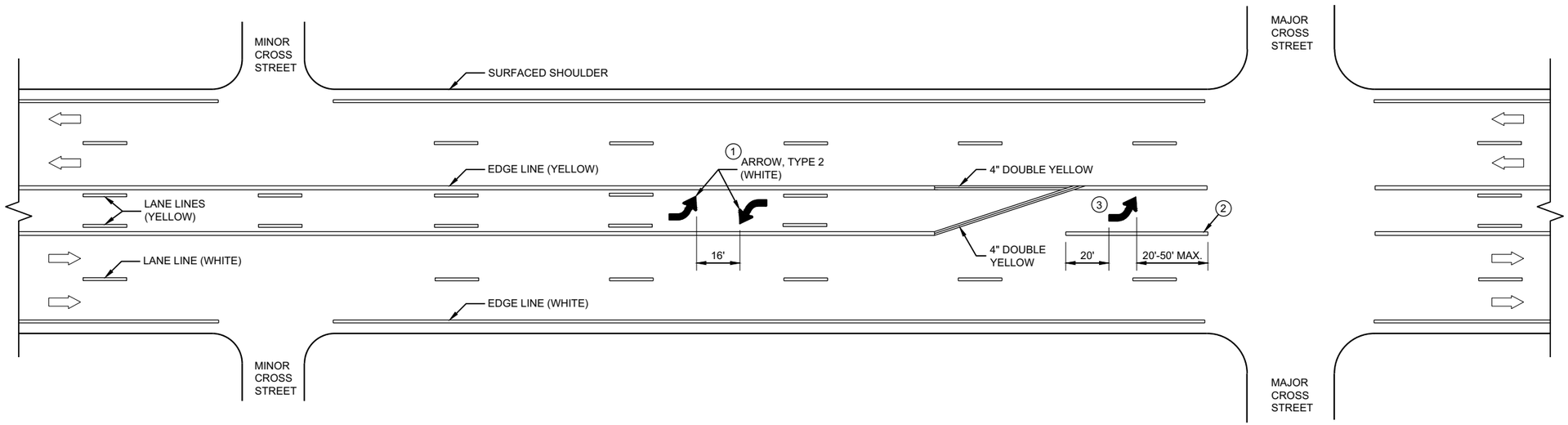
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

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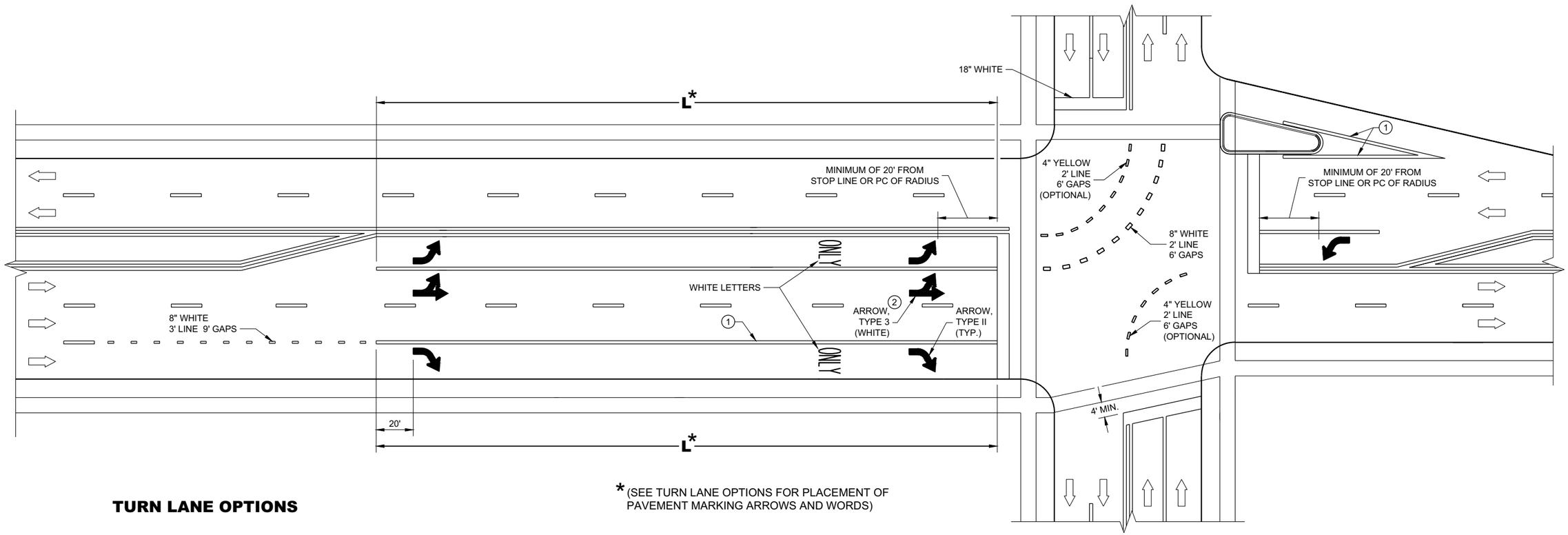
SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

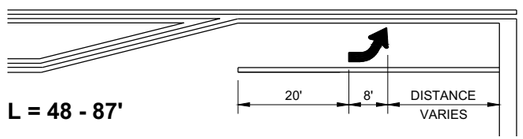
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



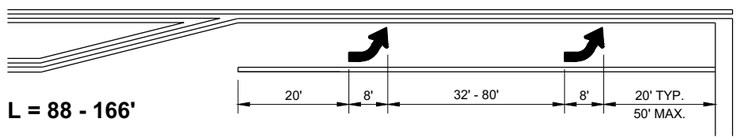
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

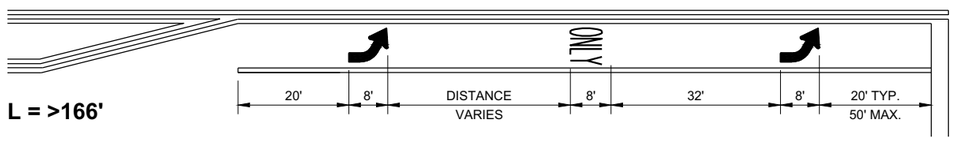
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

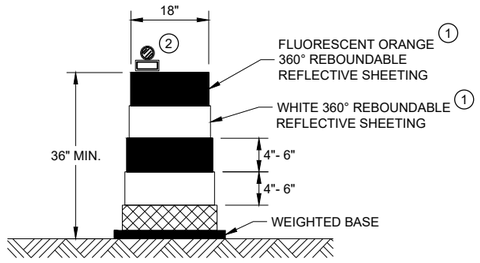
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

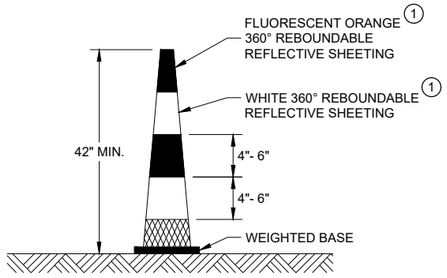
SDD 15C08 - 20c

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

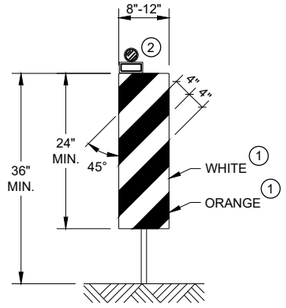


DRUM



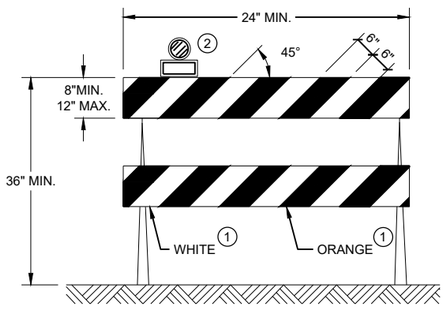
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



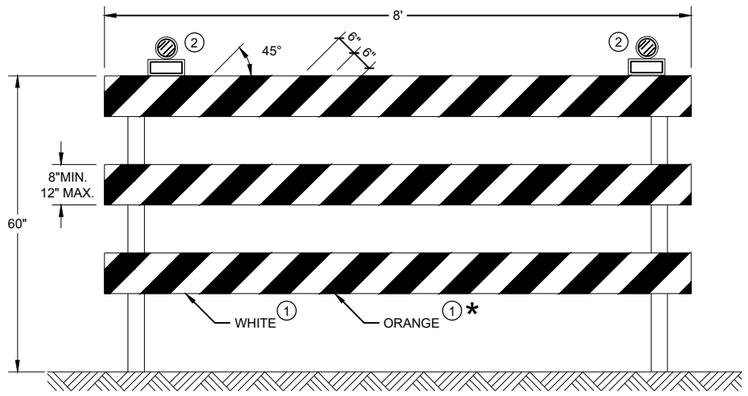
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 09b

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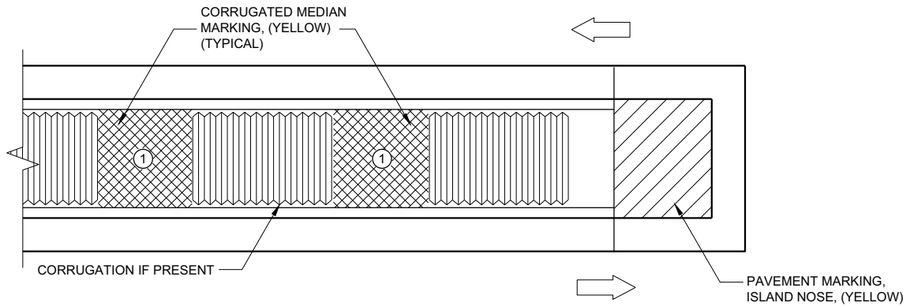
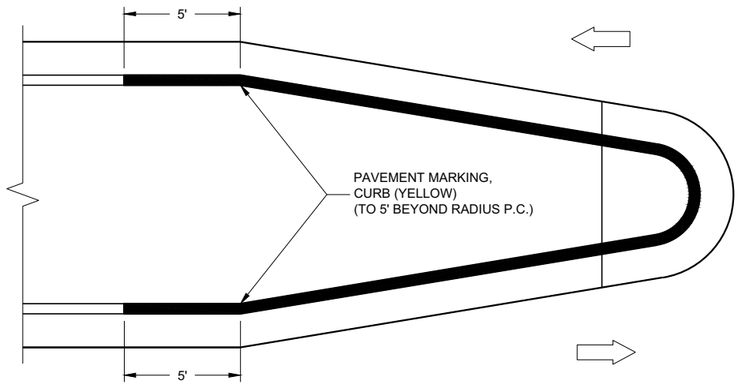
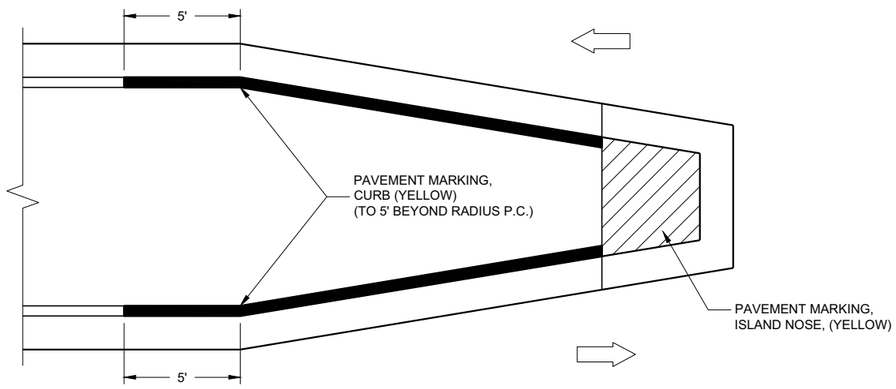
SDD 15C11 - 09b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE

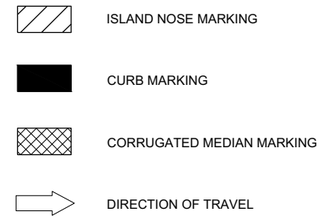


MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C18 - 05b

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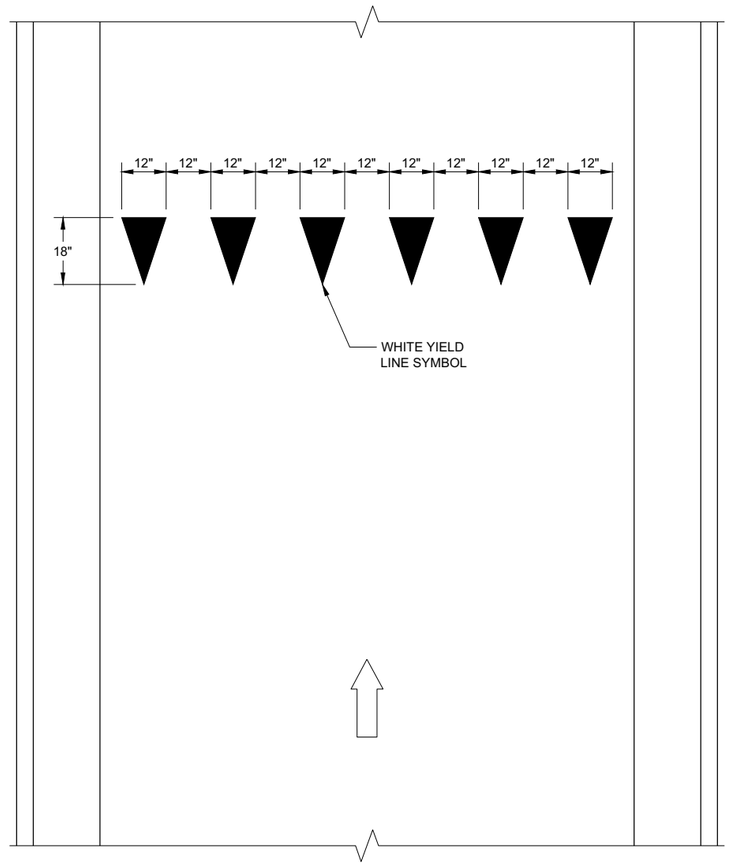
SDD15C18 - 05b

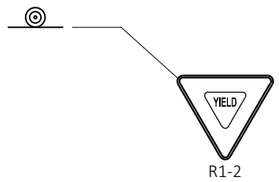


YIELD LINE

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



R1-2

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-81-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

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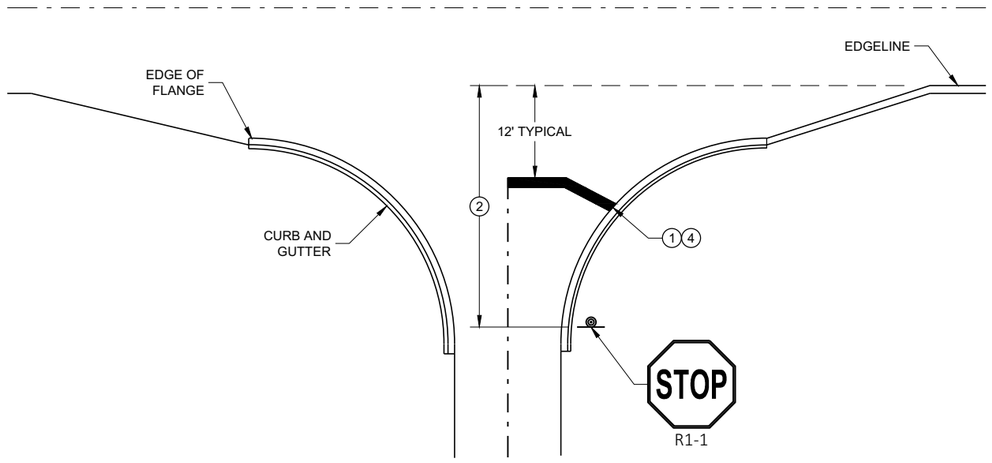
SDD 15C20 - 02

SDD 15C20 - 02

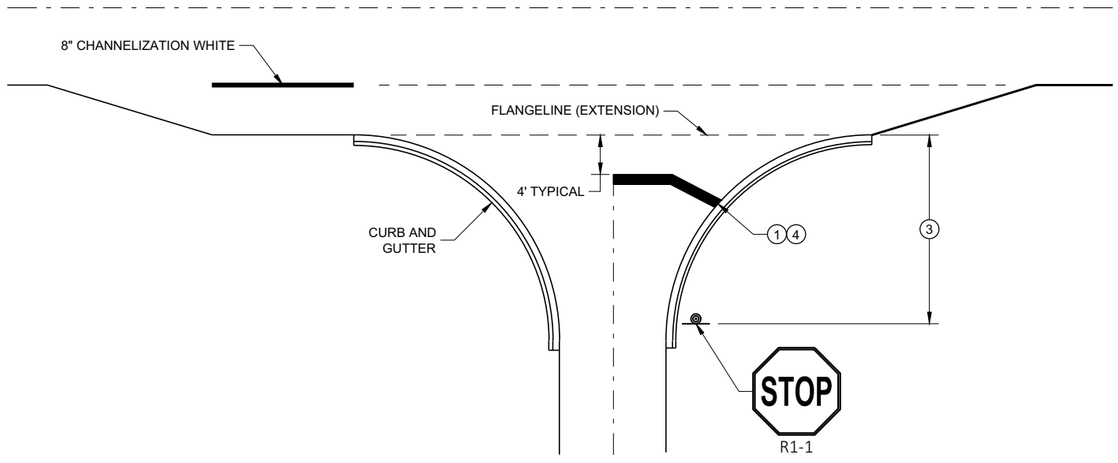
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

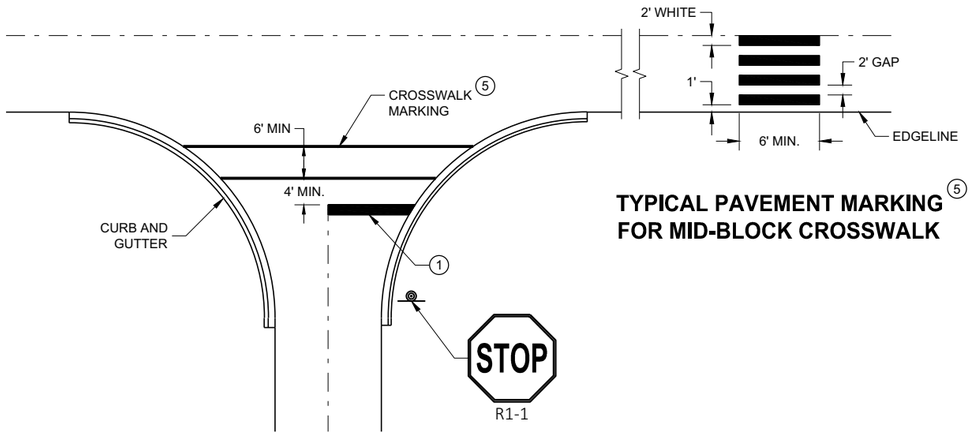
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

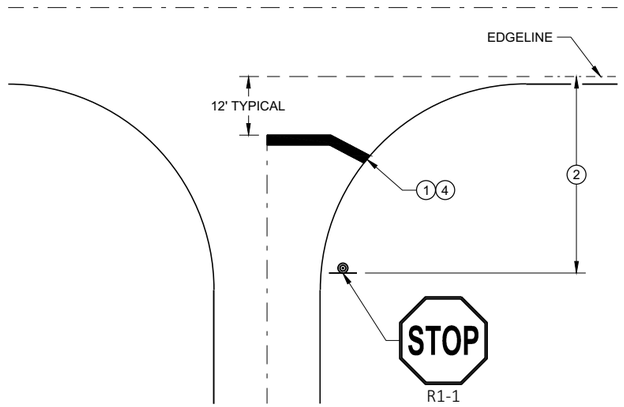


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C33 - 04

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SDD 15C33 - 04

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

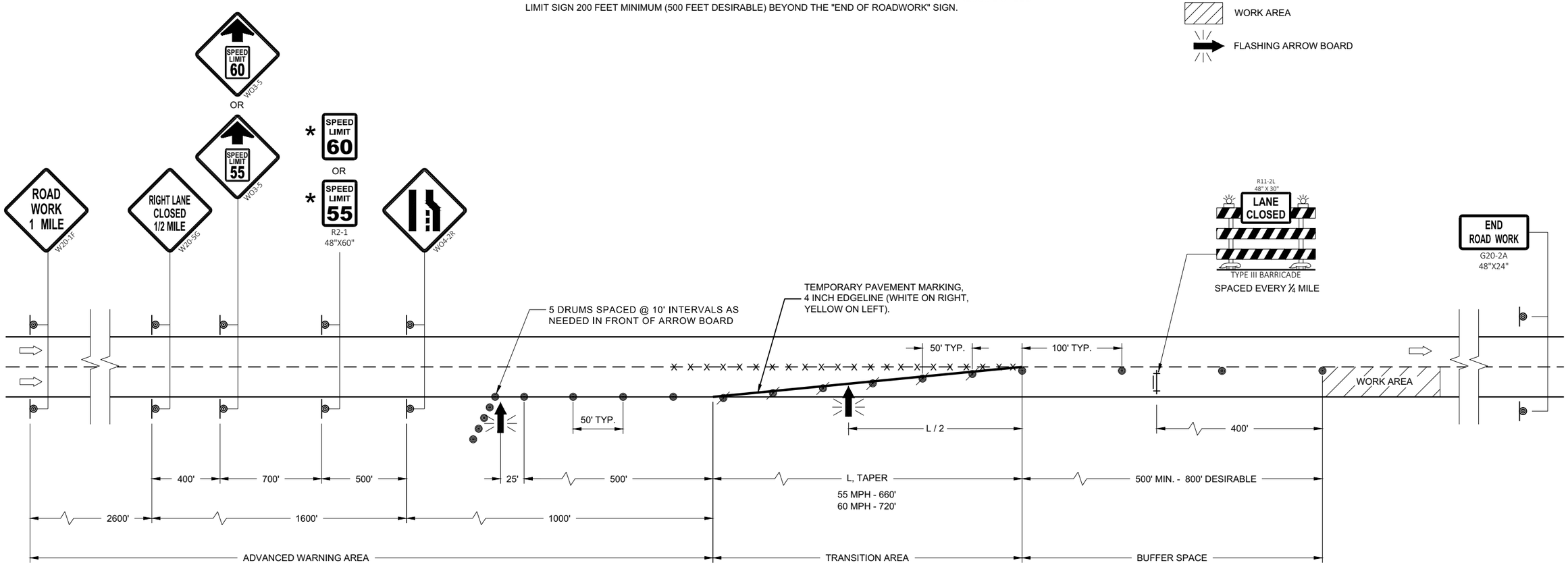
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D12 - 09b

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SDD 15D12 - 09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING FBS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

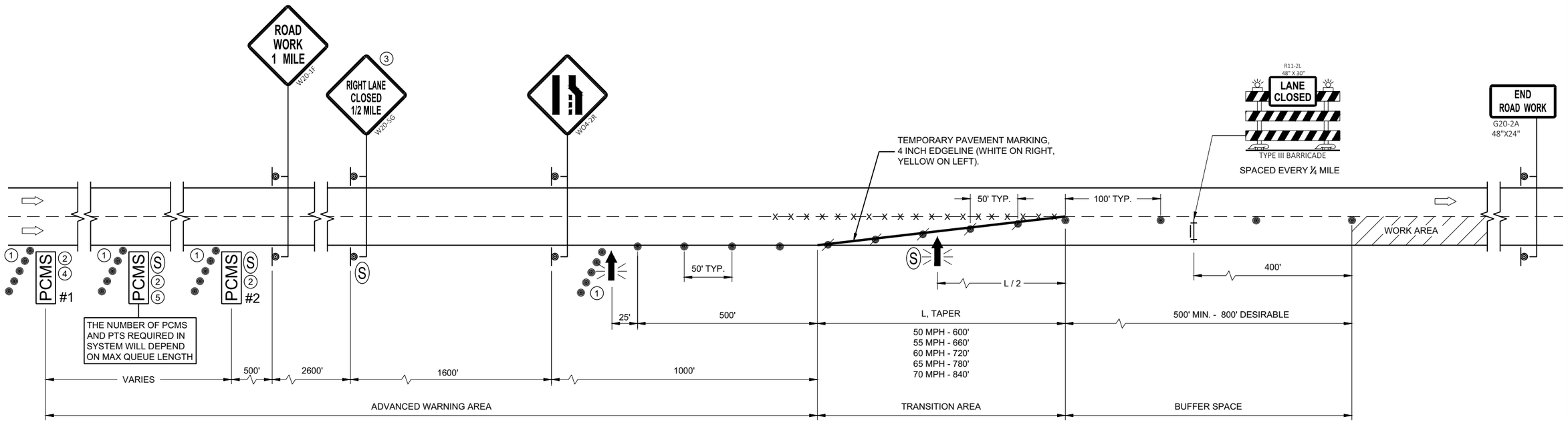
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON PCMS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
2. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE PCMS ON BOTH SIDES OF THE ROADWAY.
3. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.
4. PLACE PCMS #1 ONE MILE BEYOND ESTIMATED MAXIMUM QUEUE LENGTH, OR AS THE ENGINEER DIRECTS.
5. PLACE PCMS EVERY ONE MILE BETWEEN PCMS #1 AND PCMS #2, OR AS THE ENGINEER DIRECTS. THE NUMBER OF PCMS MAY BE MORE THAN SHOWN ON THIS DETAIL.
6. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE OR FLASHING ARROW MERGE MODE.



(6) PCMS MESSAGING

SPEEDS 0 MPH TO 19 MPH		SPEEDS 20 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	FRAME 1	FRAME 2	
STOPPED TRAFFIC AHEAD	EXPECT DELAYS	SLOW TRAFFIC AHEAD	PREPARE TO STOP	(FLASHING CAUTION MODE)

TRAFFIC CONTROL, LANE CLOSURE, TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

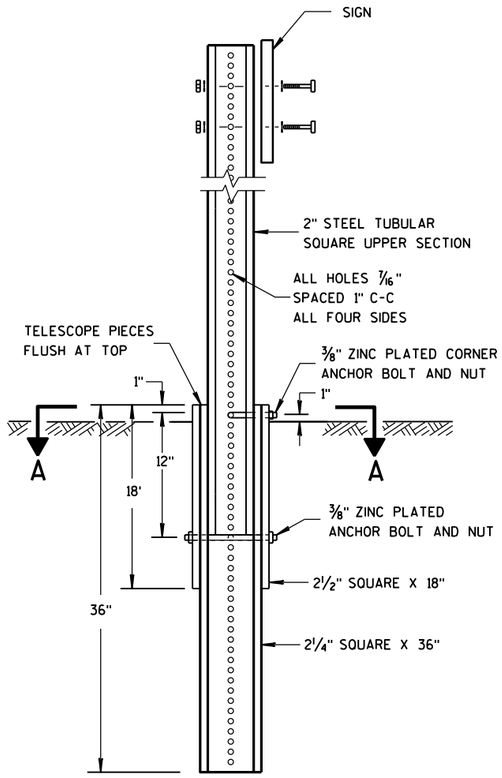
APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

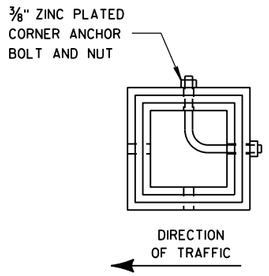
FHWA

SDD 15D12 - 09e

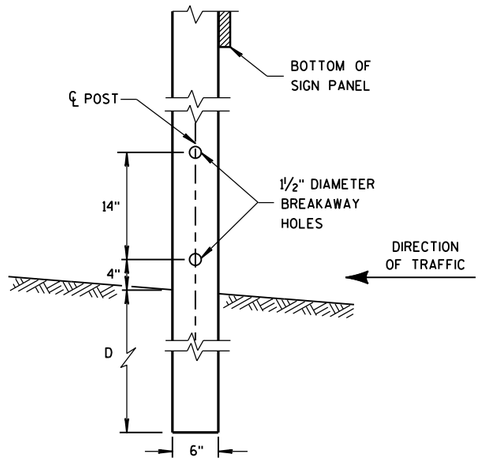
SDD 15D12 - 09e



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



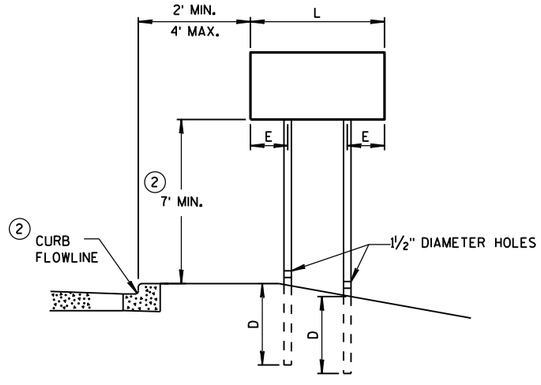
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

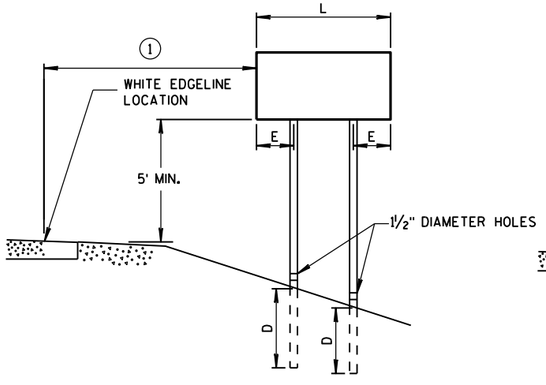
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

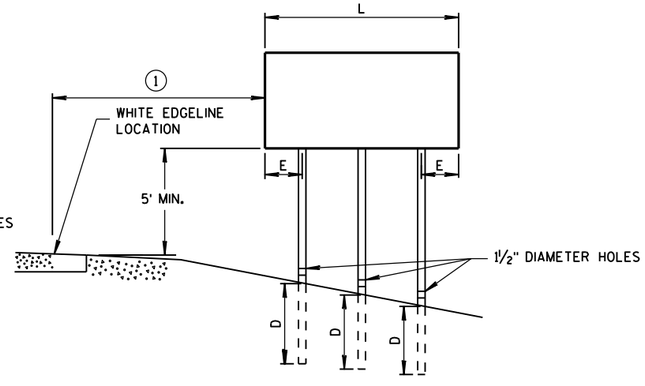
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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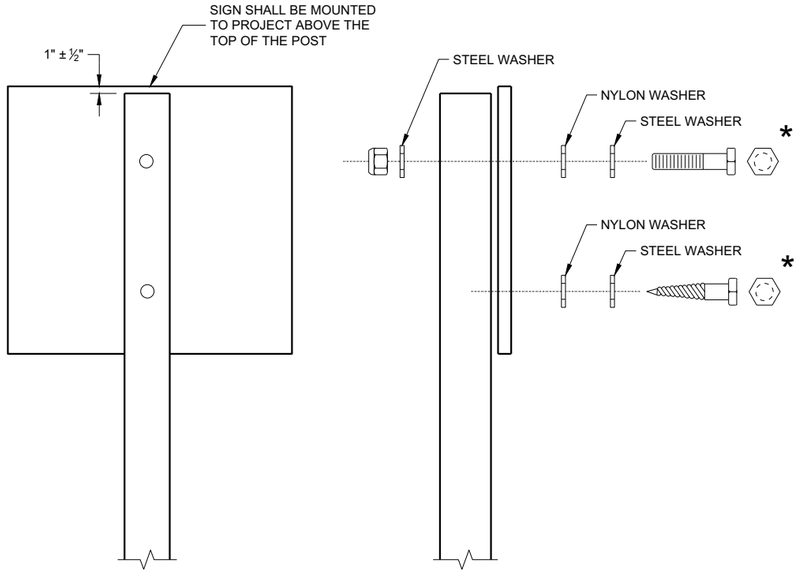
S.D.D. 15 D 38-2a



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 POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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SDD 15D38 - 02b

SDD 15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

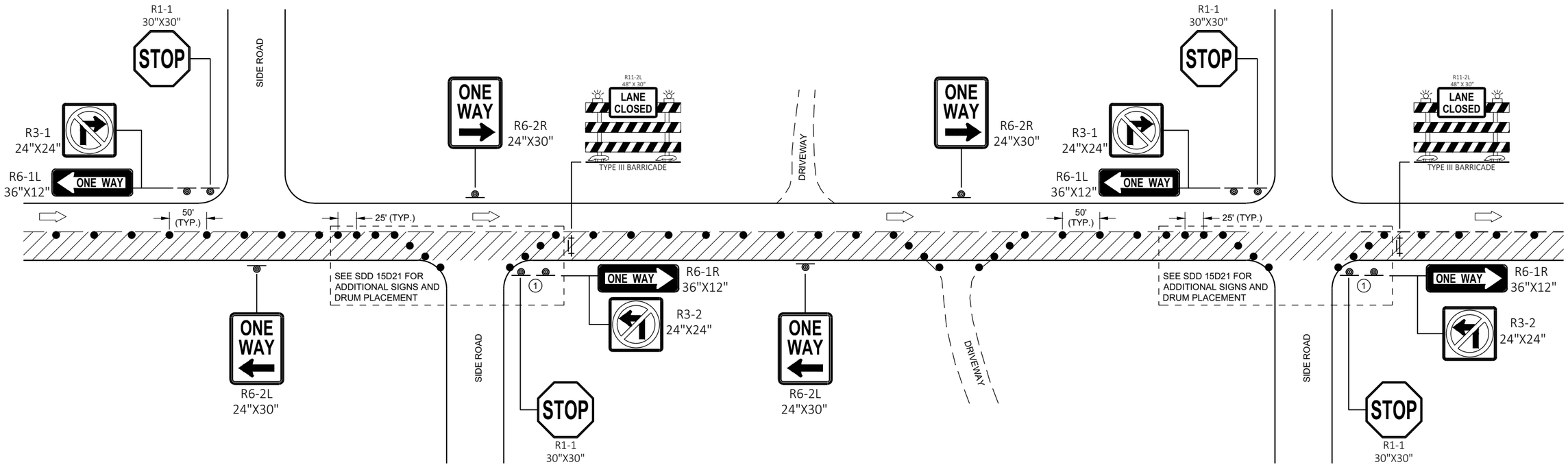
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED 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.

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.



TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL
ONE-WAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D46 - 01

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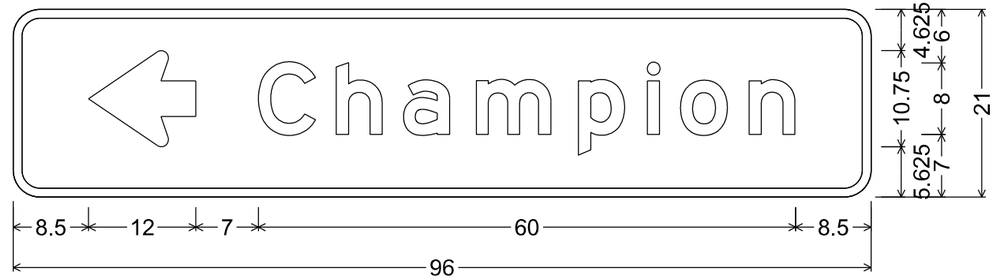
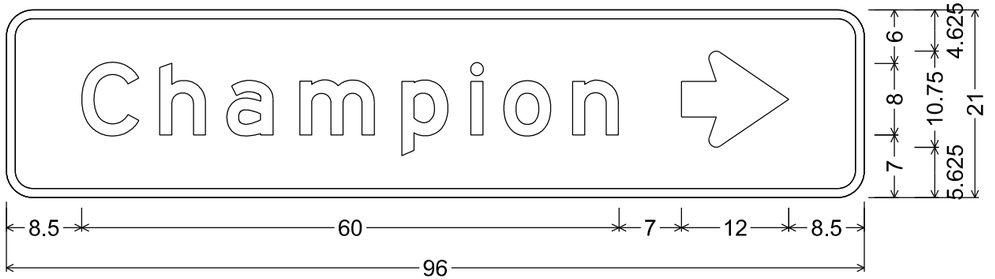
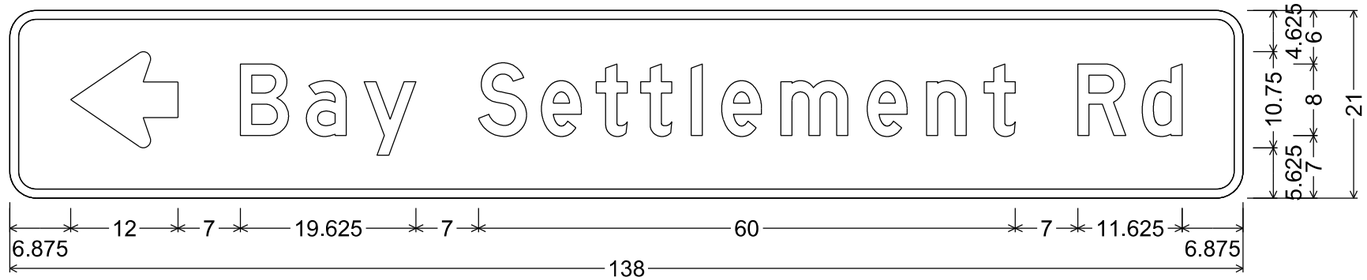
SDD 15D46 - 01



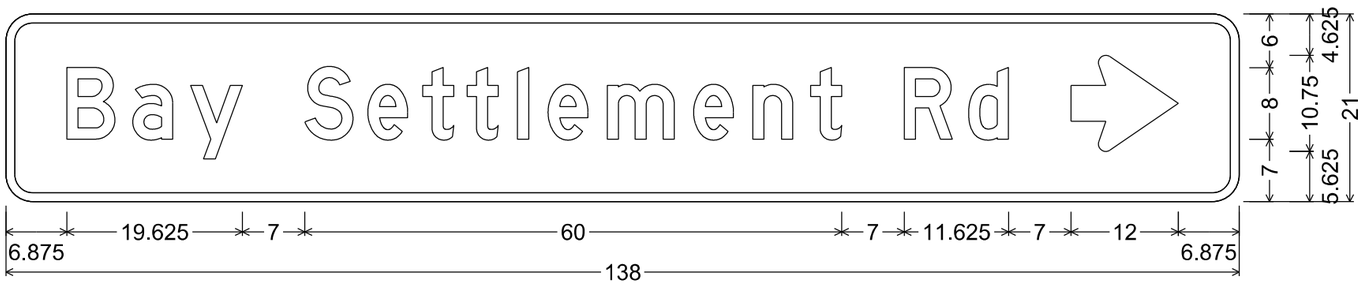
D1-1; 3.000" Radius, 1.000" Border



D1-1; 3.000" Radius, 1.000" Border



D1-1; 3.000" Radius, 1.000" Border;
"Bay", D; "Settlement", D; "Rd", D;

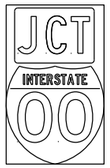


D1-1; 3.000" Radius, 1.000" Border;
"Bay", D; "Settlement", D; "Rd", D;

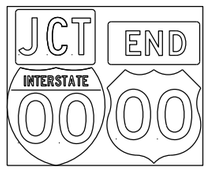
NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted.

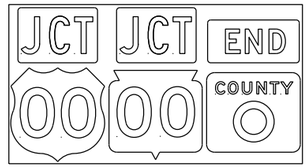
TYPICAL ASSEMBLIES



J1-1



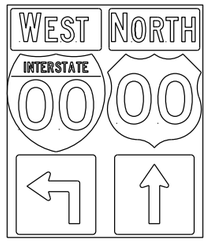
J1-2



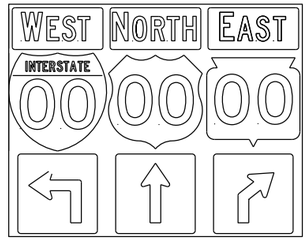
J1-3

JR1-1

J2-1

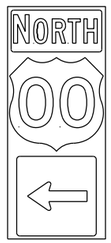


J2-2

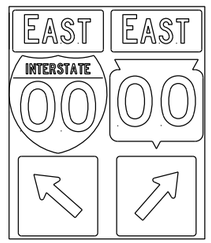


J2-3

JV
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1



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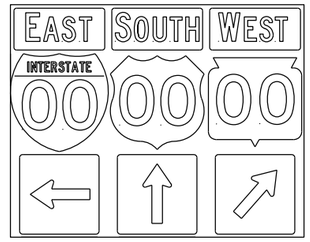

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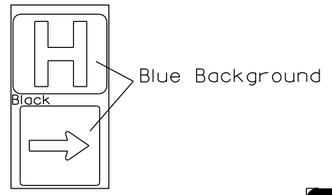
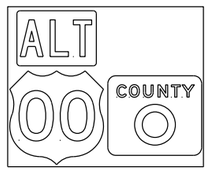
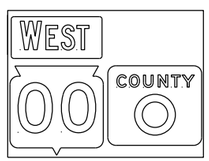


JH-1

J4-1

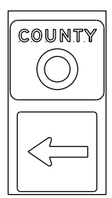


J4-2



J4-2

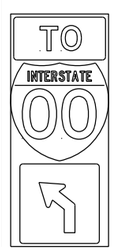
J12-1



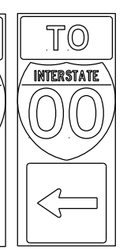
J13-1

J32-1

J33-1



J22-1

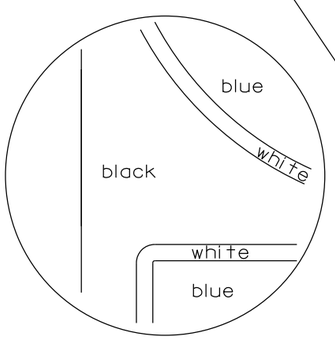


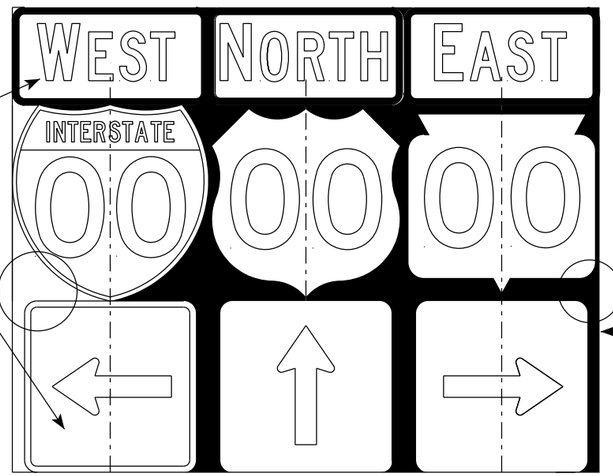
J23-1

JR13-1

JR23-1

JR99-1





NOTES

1. Signs are Type II - Type H Reflective
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 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

SHEET NO: 118 **E**

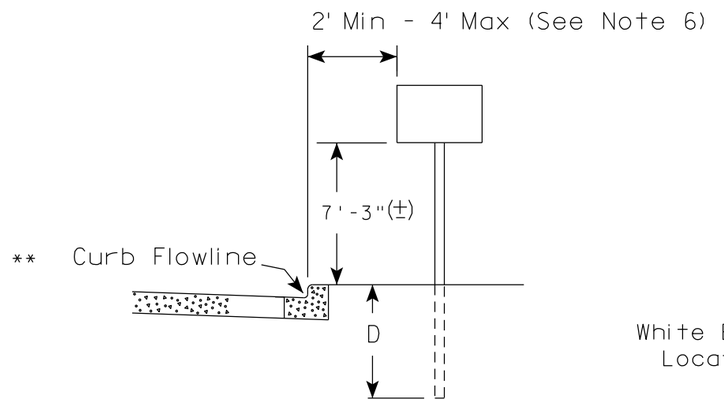
FILE NAME : C:\CAEfiles\Projects\tr_stdplate_A21S.dgn PLOT DATE : 18-MAR 2021 1:37 PLOT BY : mscj9h PLOT NAME :

WISDOT/CADDS SHEET 42

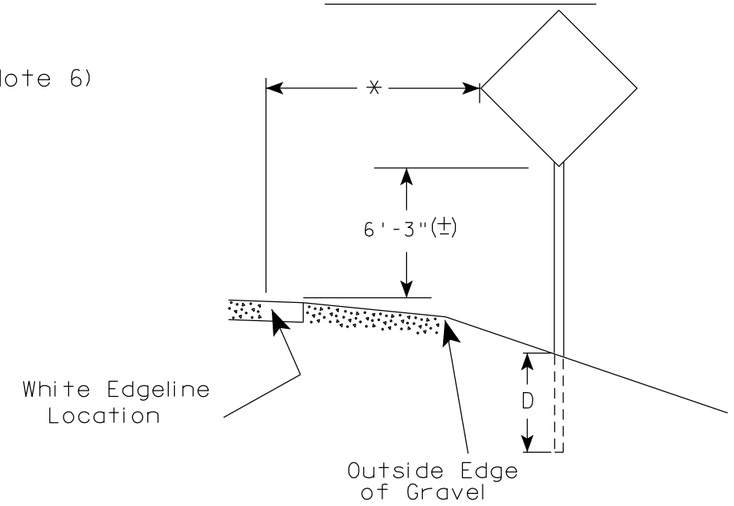
7

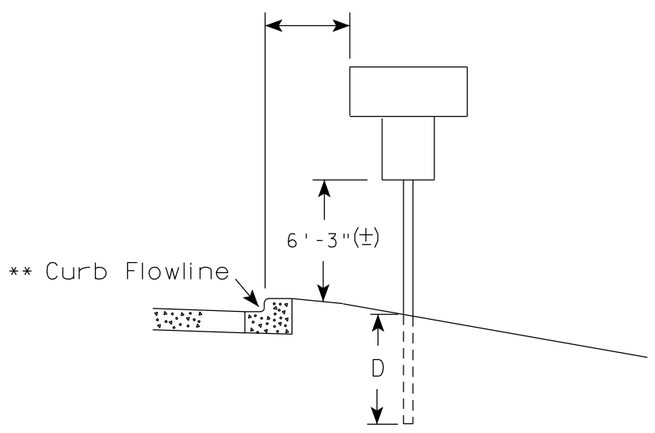
7

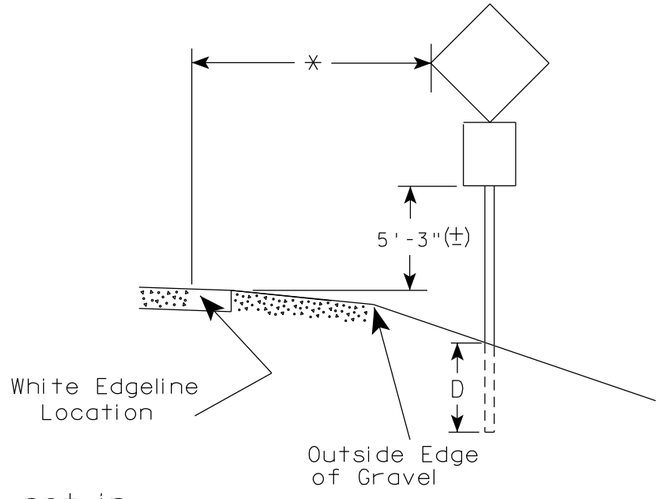
URBAN AREA



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 or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

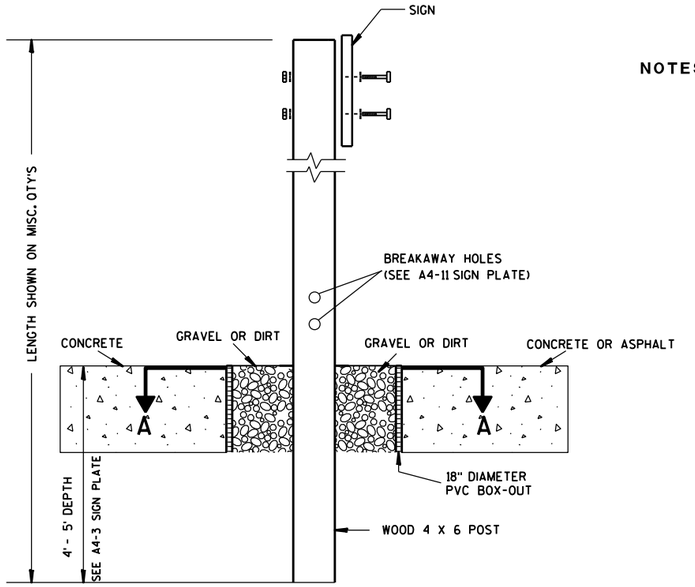
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

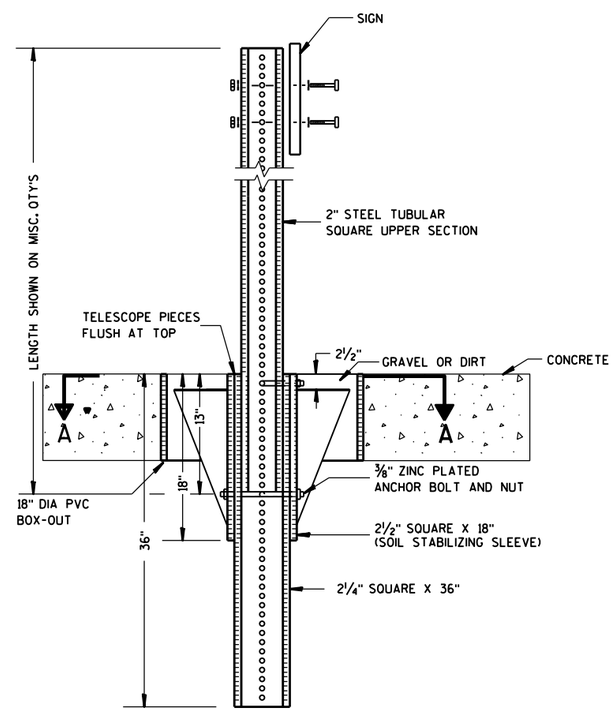
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 119	E



ELEVATION VIEW

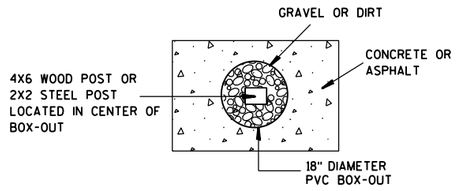
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

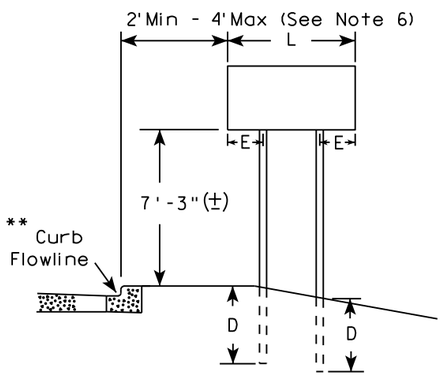
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

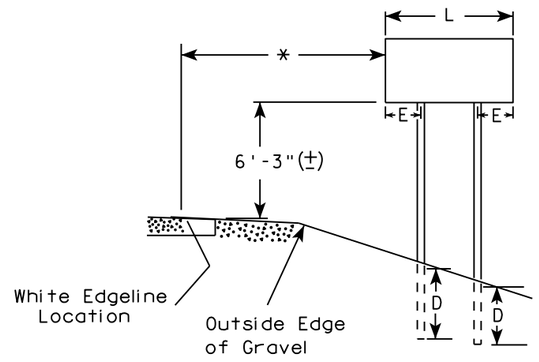
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

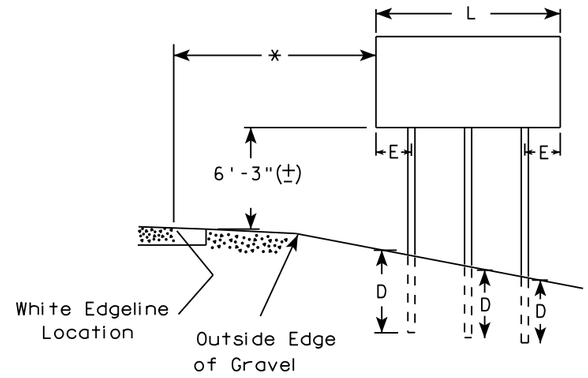
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

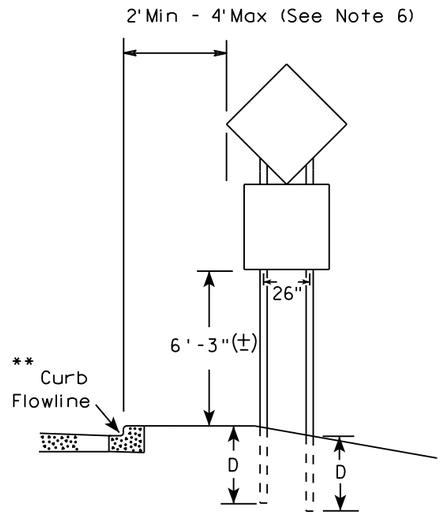
URBAN AREA



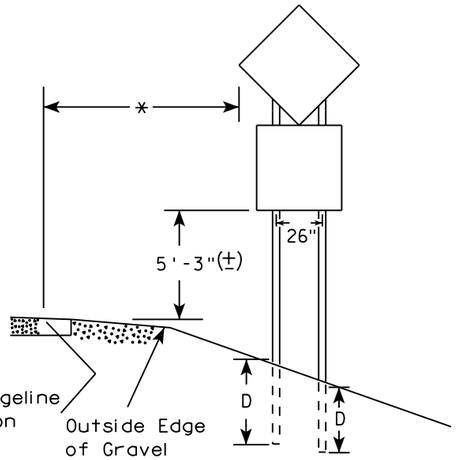
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

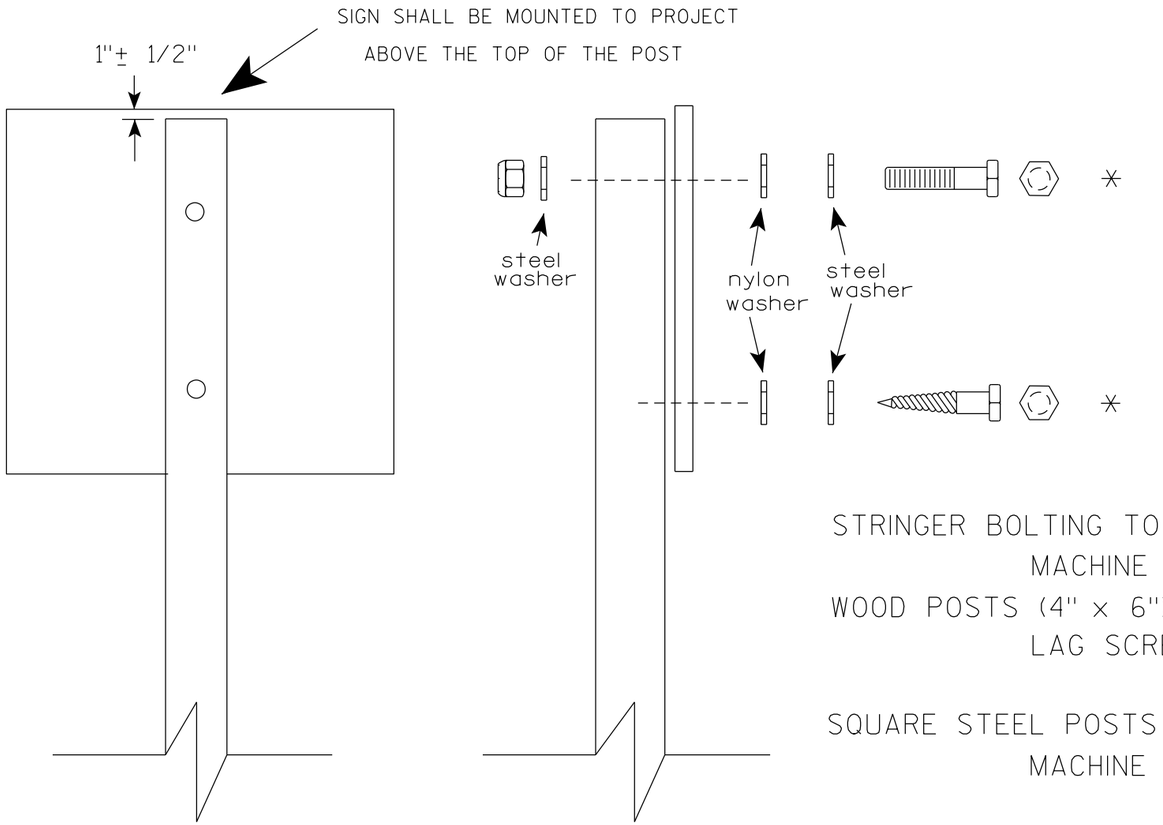
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 121	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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

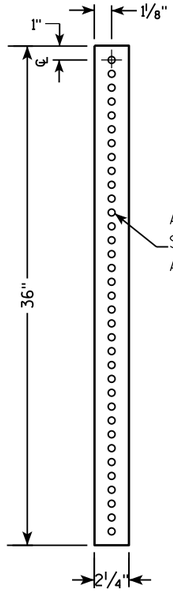
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

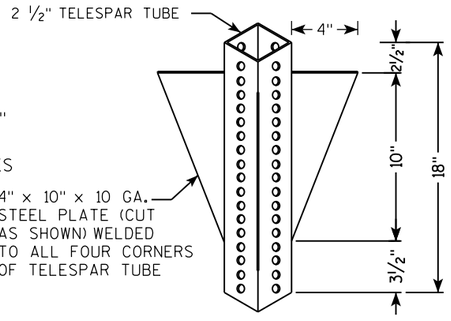
SHEET NO: 122 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

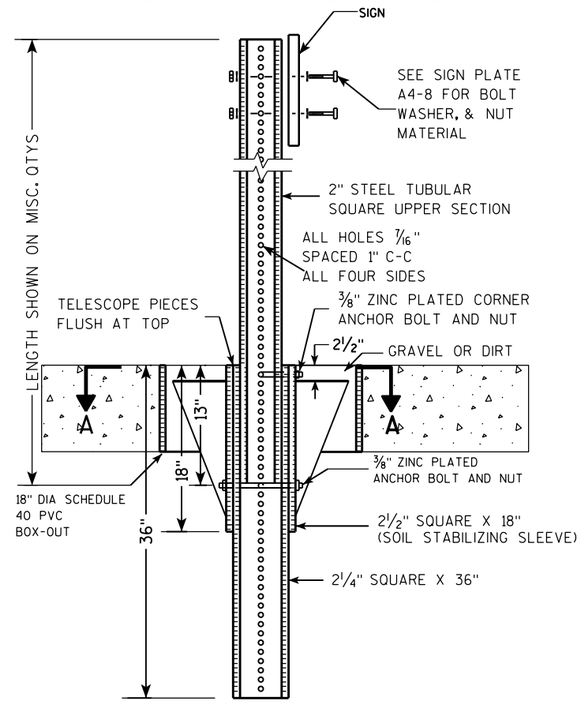
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



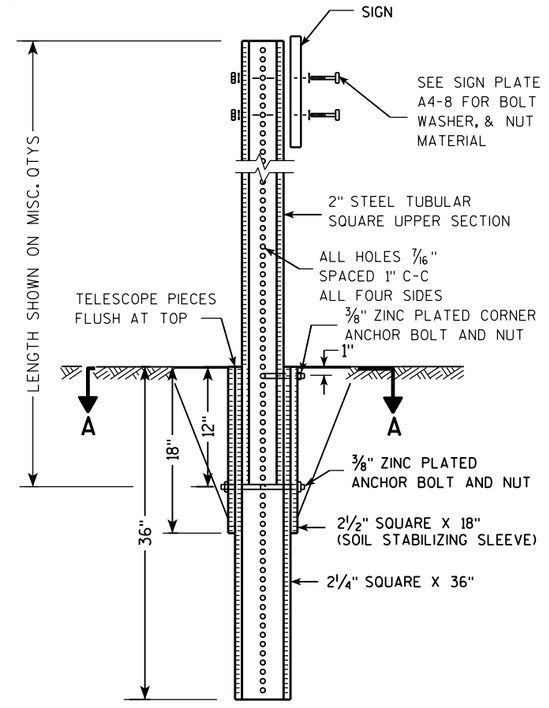
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

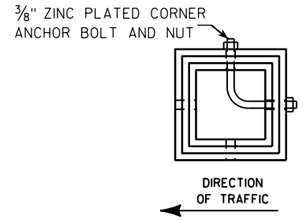


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

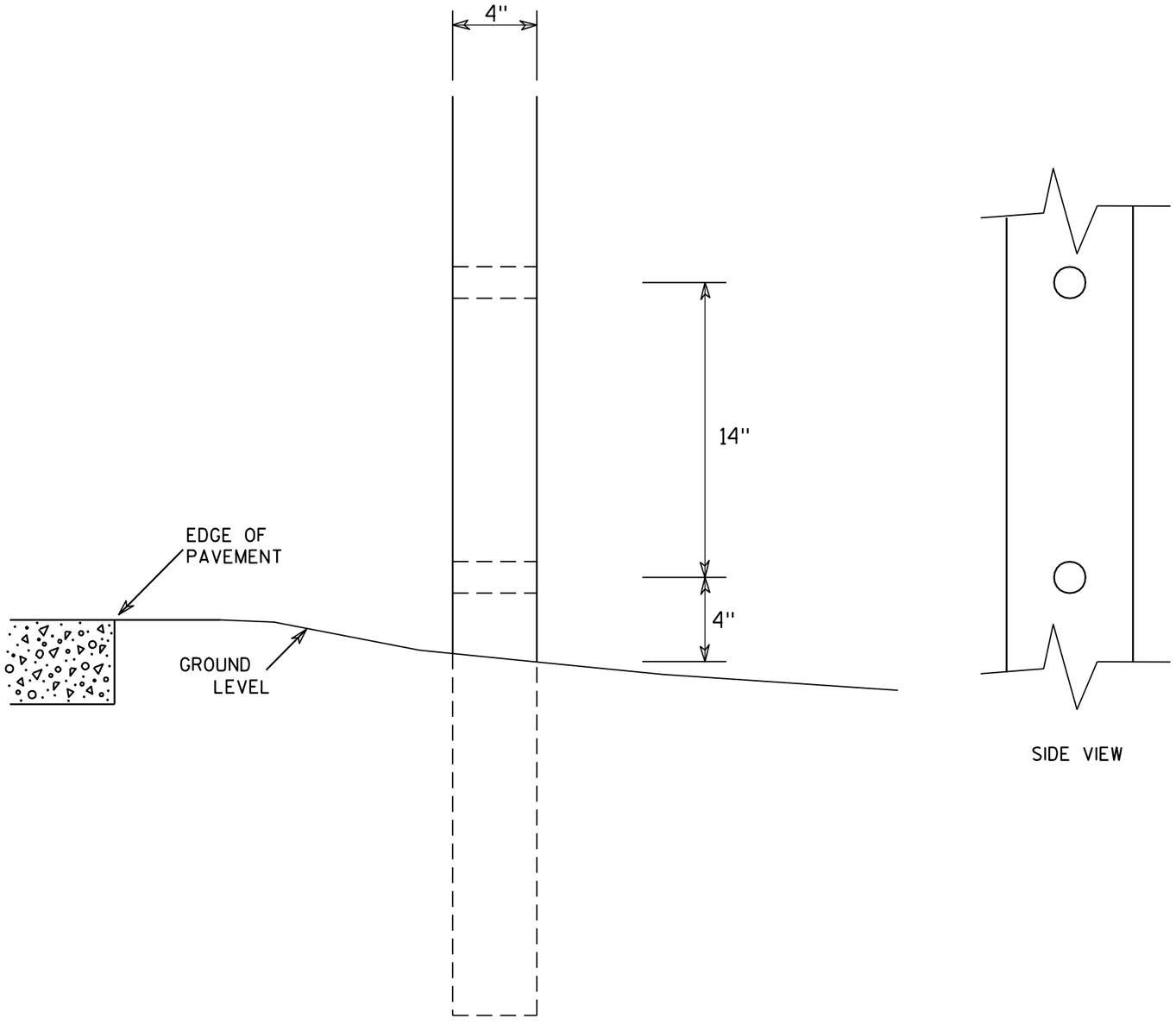
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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.

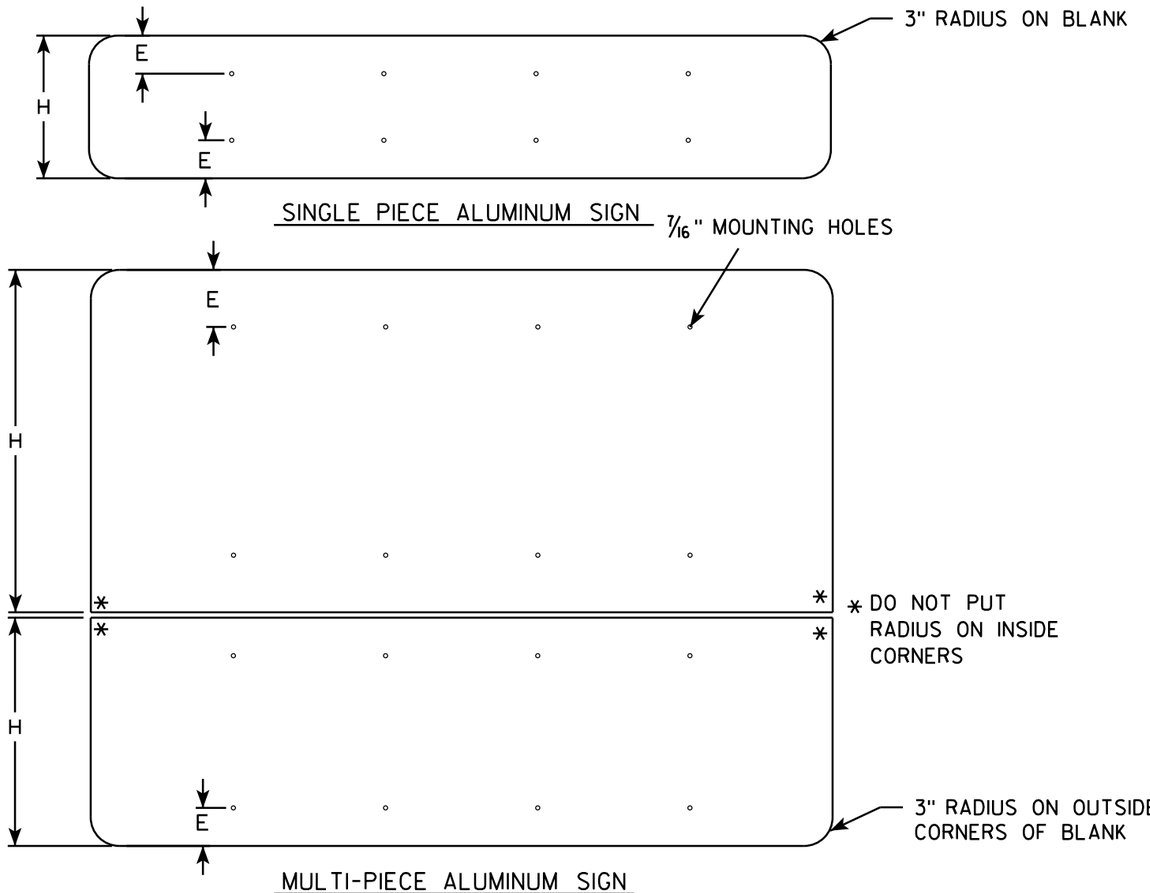
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

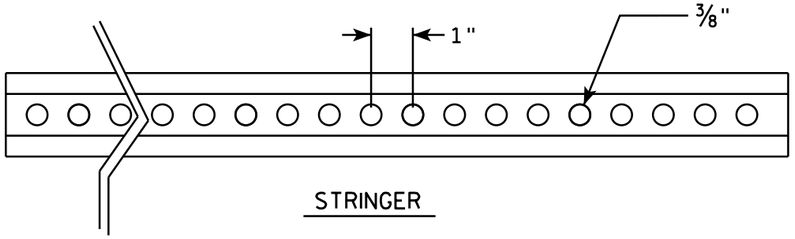
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 124	E



GENERAL NOTES

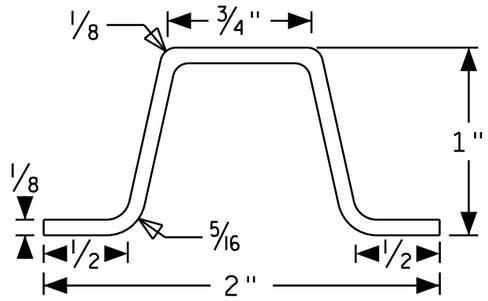
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

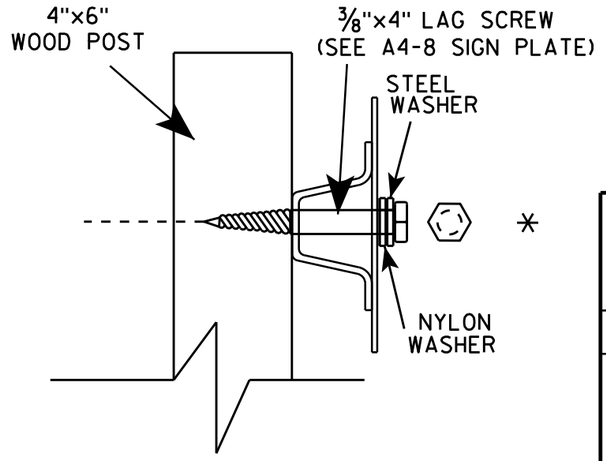


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

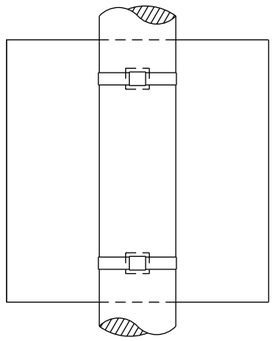
DATE 4/26/16 PLATE NO A4-18.1

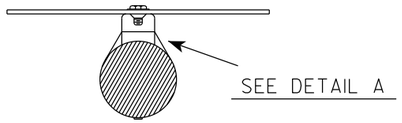
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

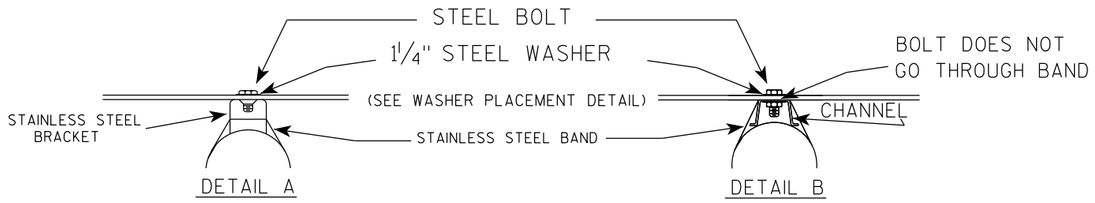
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



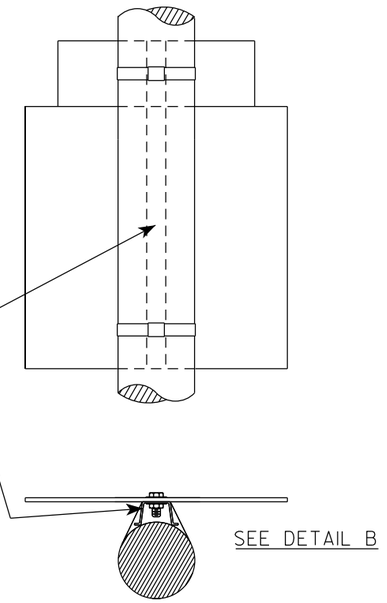




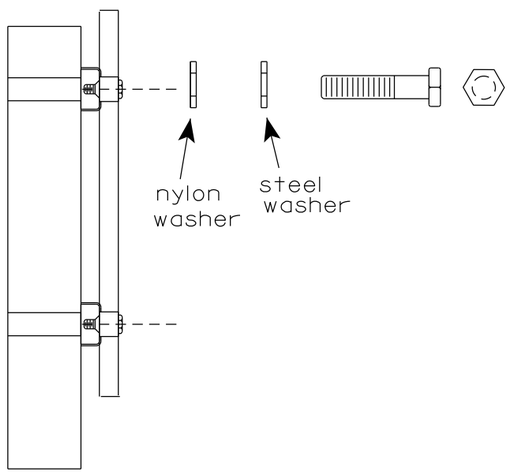
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

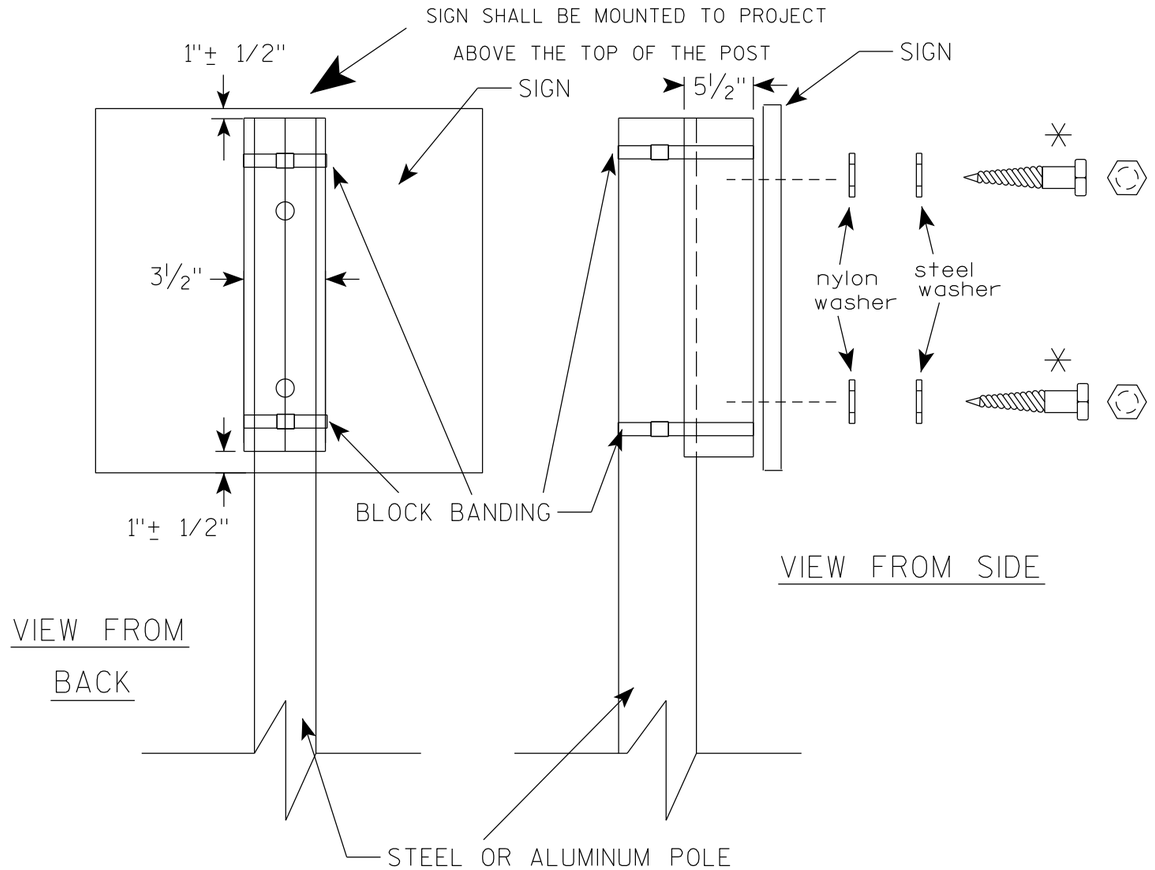
WISCONSIN DEPT OF TRANSPORTATION

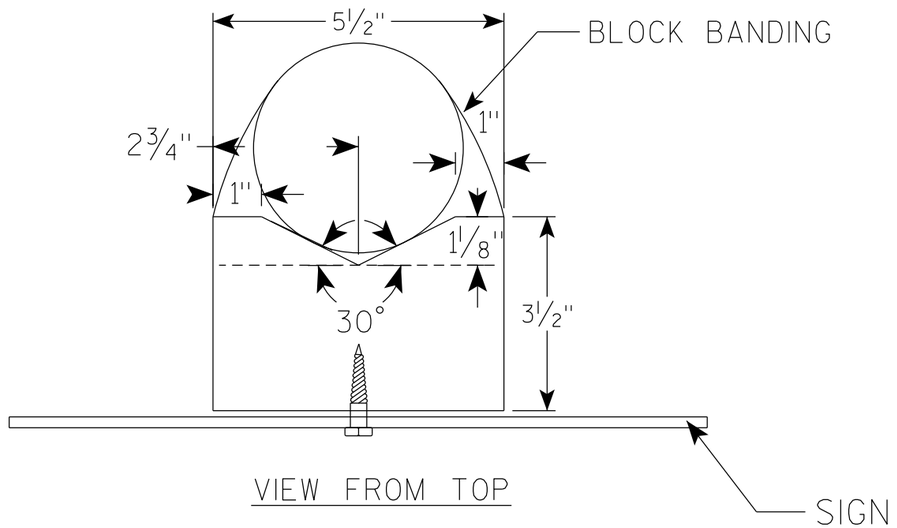
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 126	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

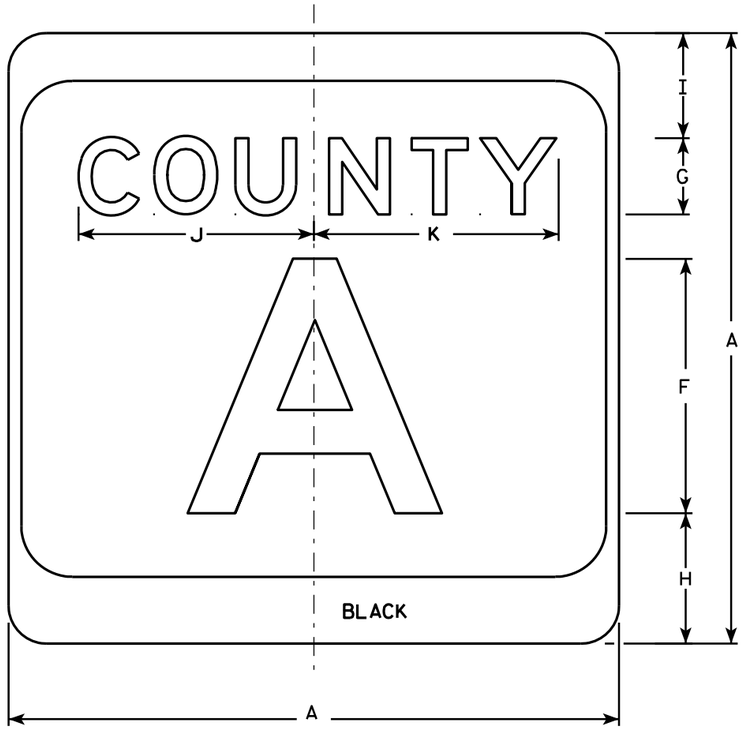
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

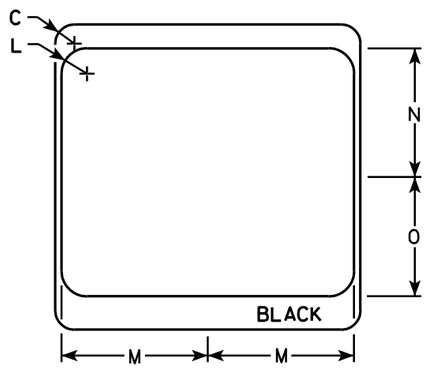
APPROVED Matthew R Rauch
For State Traffic Engineer

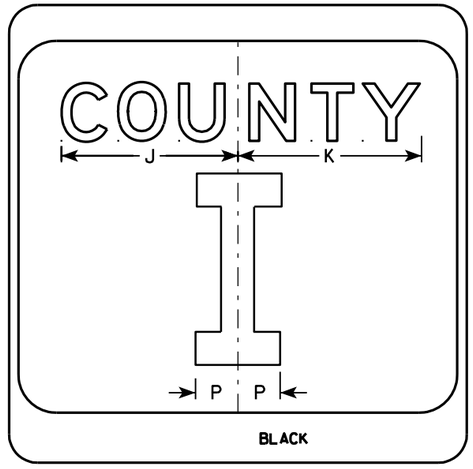
DATE 6/10/19 PLATE NO. A5-10.2

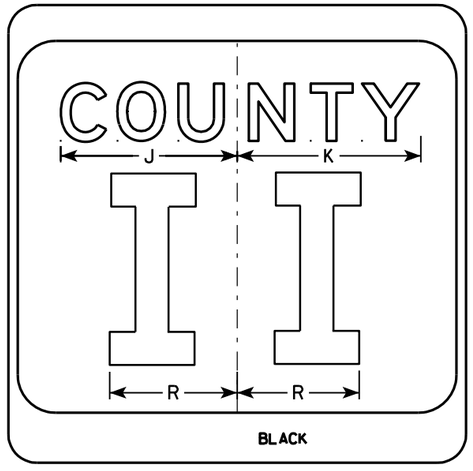
PROJECT NO: | SHEET NO: 127 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

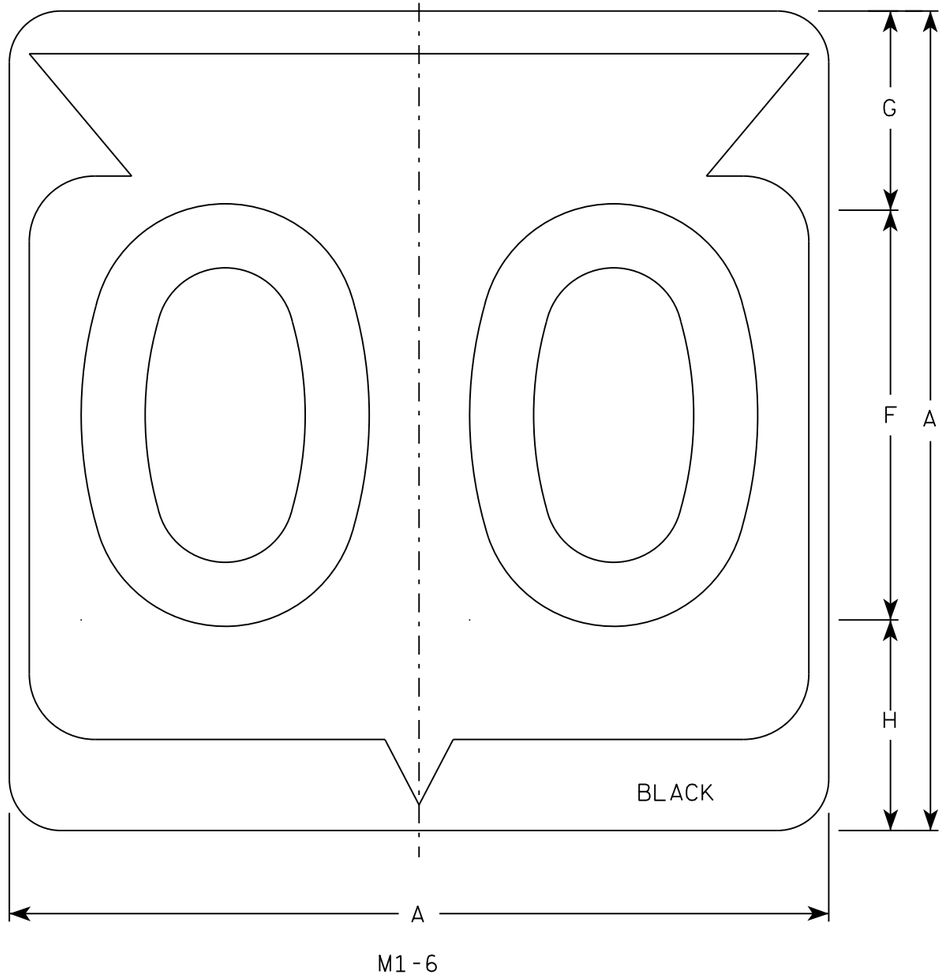
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

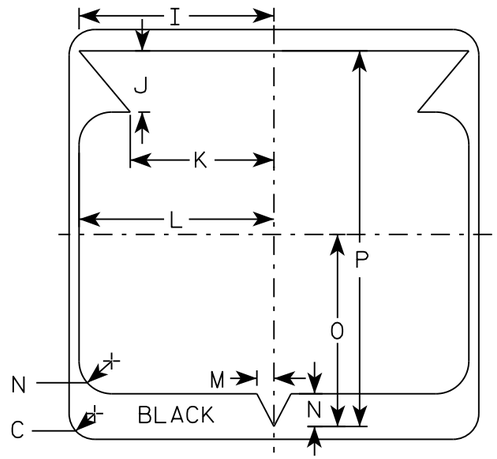
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 128	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		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
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
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
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

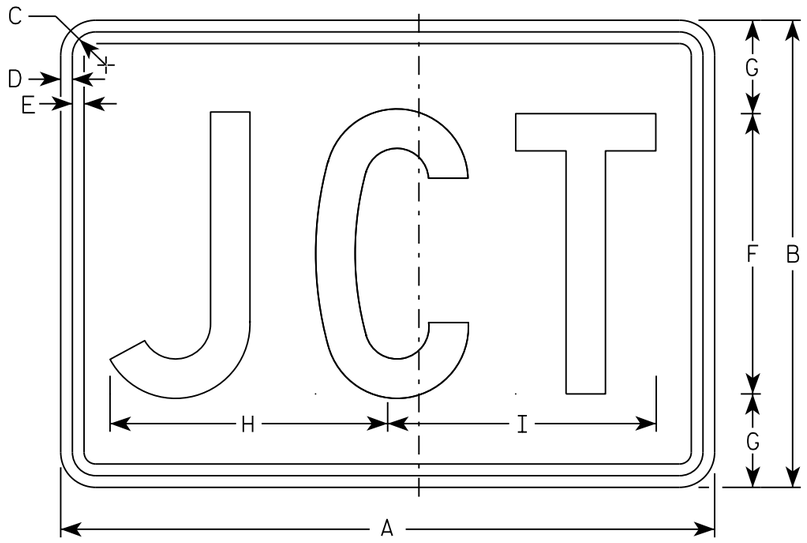
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

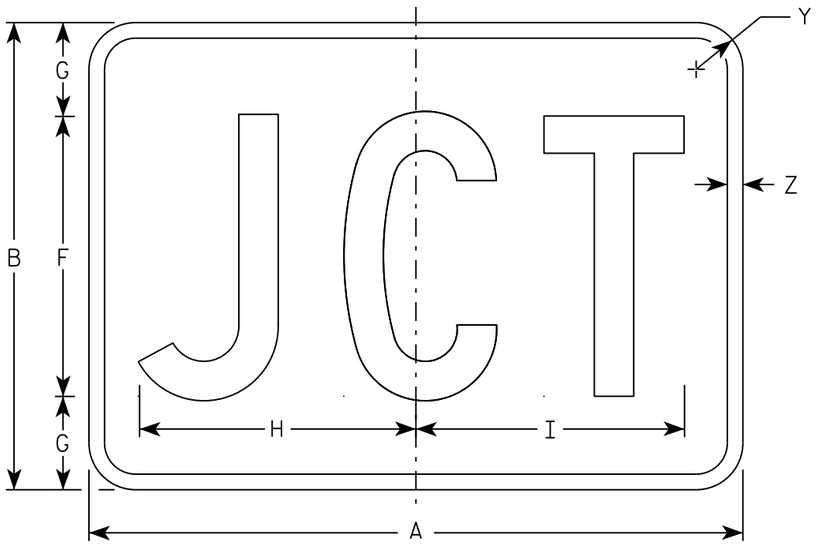
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 129 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

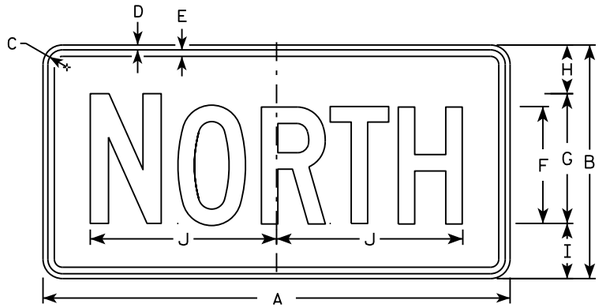
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

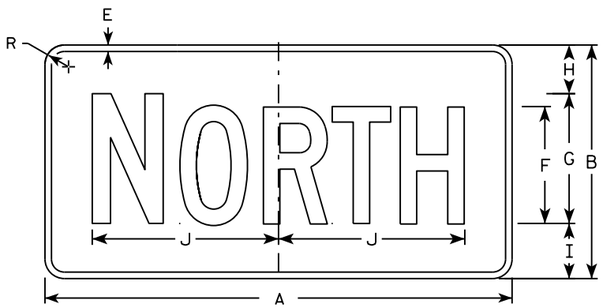
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 130 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



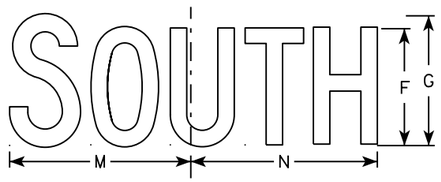
M3-1
MM3-1
MP3-1



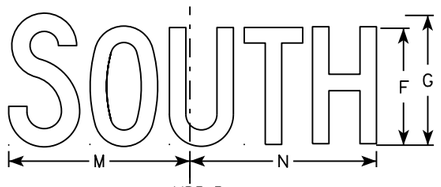
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

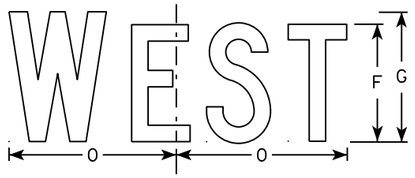
MB3-2
MK3-2
MN3-2



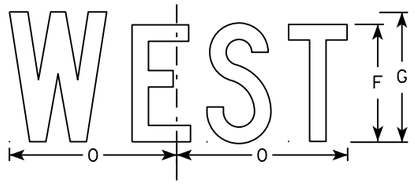
M3-3
MM3-3
MP3-3



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

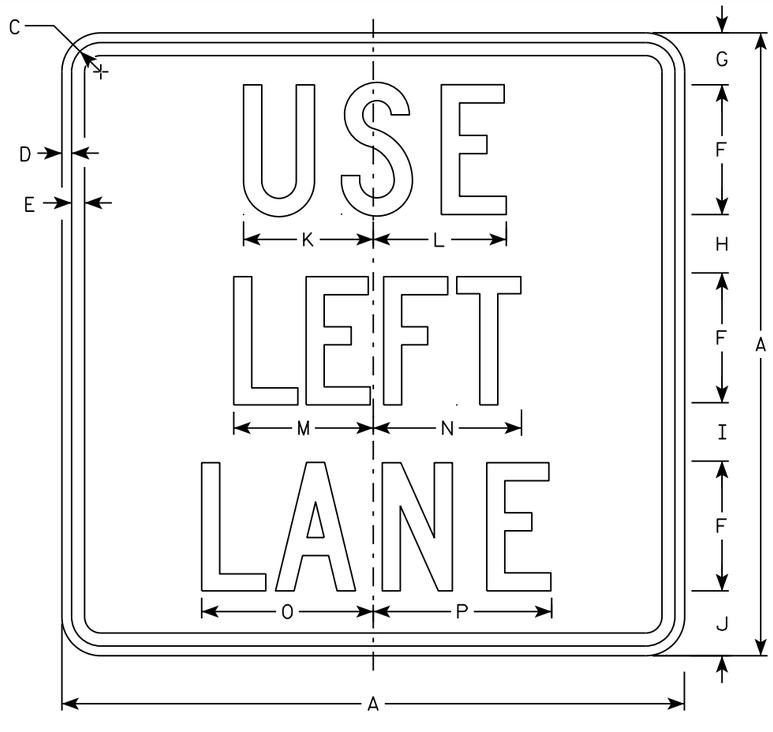
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

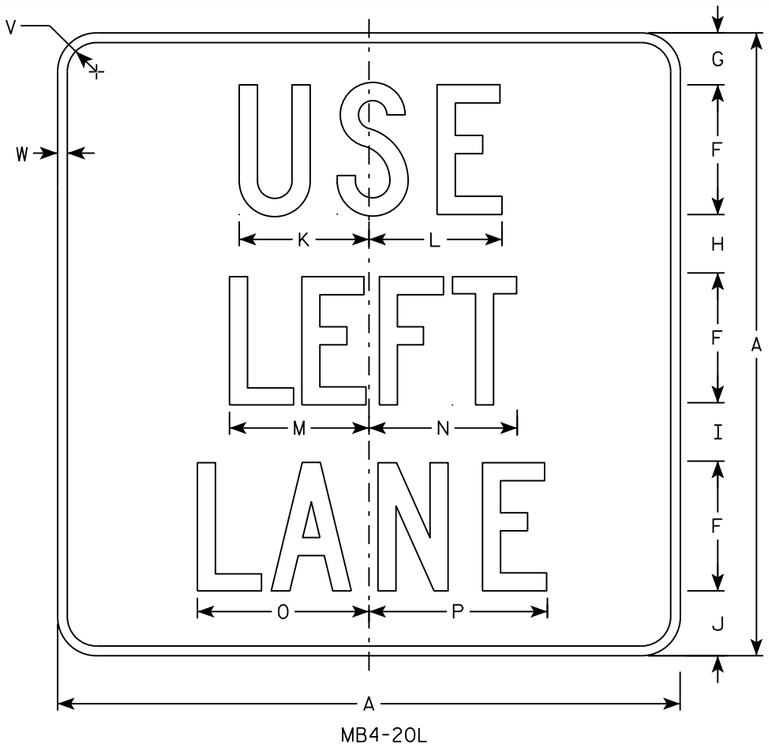
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

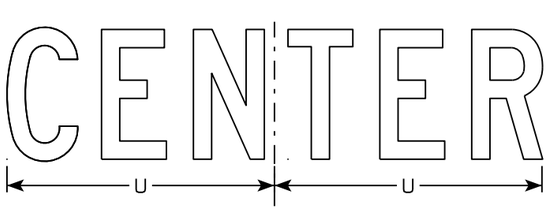
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-20L
MM4-20L
M04-20L
MP4-20L



MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
M04-20C
MP4-20C
MR4-20C

M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
M04-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
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. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   M04-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 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		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	5 3/8	5 3/4	6 5/8	6 7/8			7	7 5/8	10 1/4	1 1/2	1/2				4.0
3	36		1 5/8	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0
4																											
5																											

STANDARD SIGN
M4-20

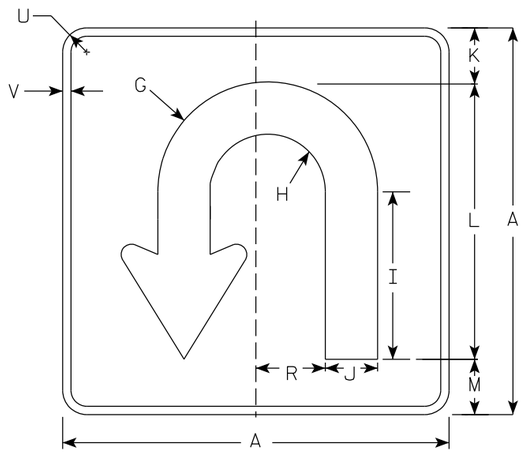
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

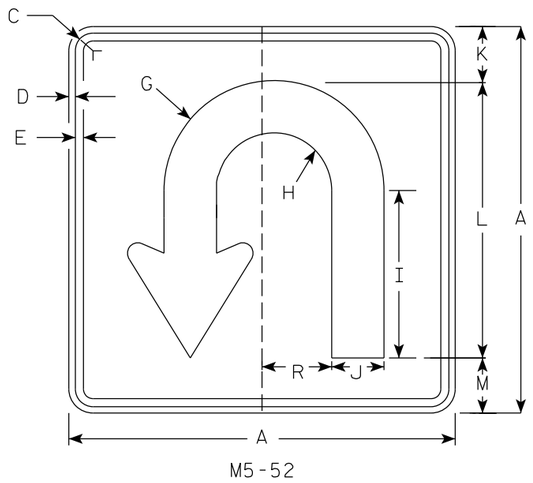
DATE 10/15/15 PLATE NO M4-20.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M420.DGN PLOT DATE : 01-DEC-2015 18:03 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



M5-52



M5-52

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See note 4
3. M5-52 Background - White
   Message - Black

   MB5-52 Background - Blue
   Message - White

   MK5-52 Background - Green
   Message - White

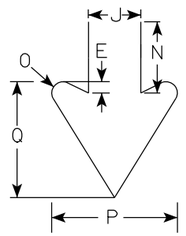
   MM5-52 Background - White
   Message - Green

   MN5-52 Background - Brown
   Message - White

   M05-52 Background - Orange - Type F Reflective
   Message - Black

   MP5-52 Background - White
   Message - Blue

   MR5-52 Background - Brown
   Message - Yellow



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																											
2	21		1 1/8	3/8	3/8		6	3 1/8	9 1/8	2 7/8	3	15	3	3 7/8	5/8	6 7/8	6 3/4	3 3/4			1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		8 1/2	4 1/2	13	4 1/8	4 3/8	21 3/8	4 1/4	5 1/2	7/8	9 3/4	8 1/8	5 1/4			2 1/2	5/8					6.25
4																											
5																											

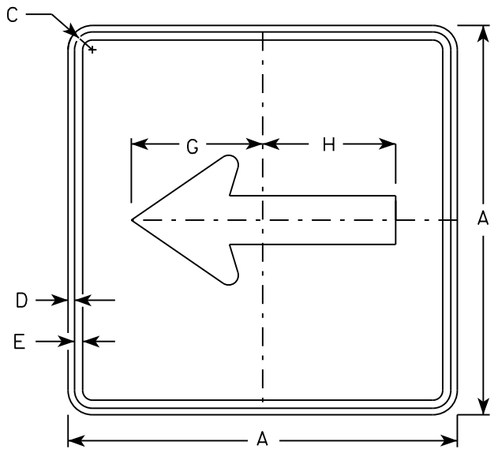
STANDARD SIGN
M5-52
SERIES

WISCONSIN DEPT OF TRANSPORTATION

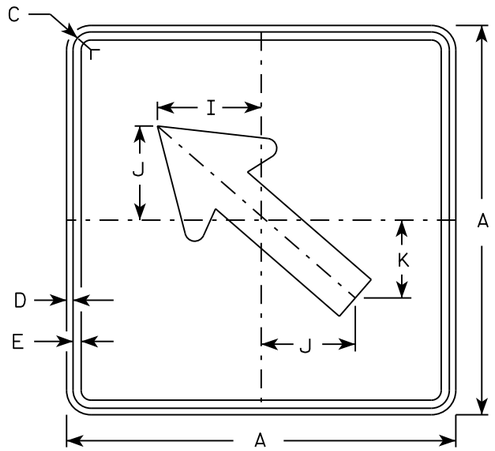
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. M5-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 133	E



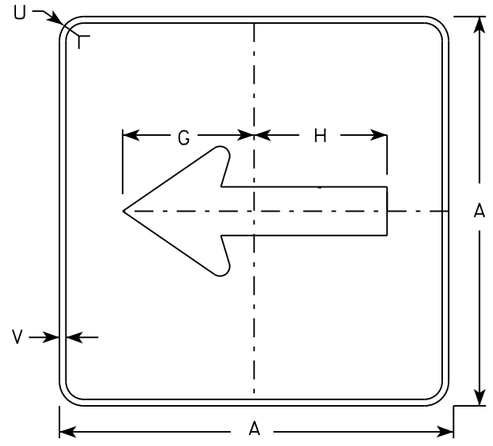
M6-1
MM6-1
MO6-1
MP6-1



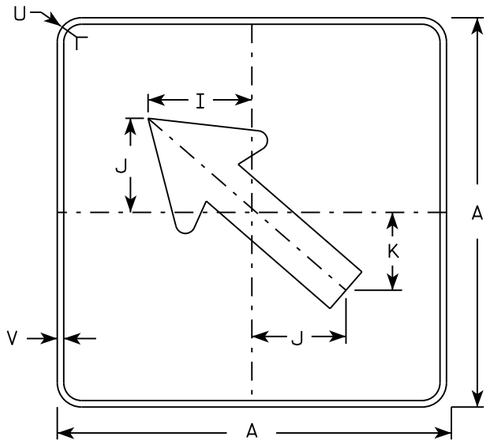
M6-2
MM6-2
MO6-2
MP6-2

NOTES

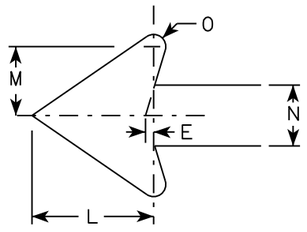
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

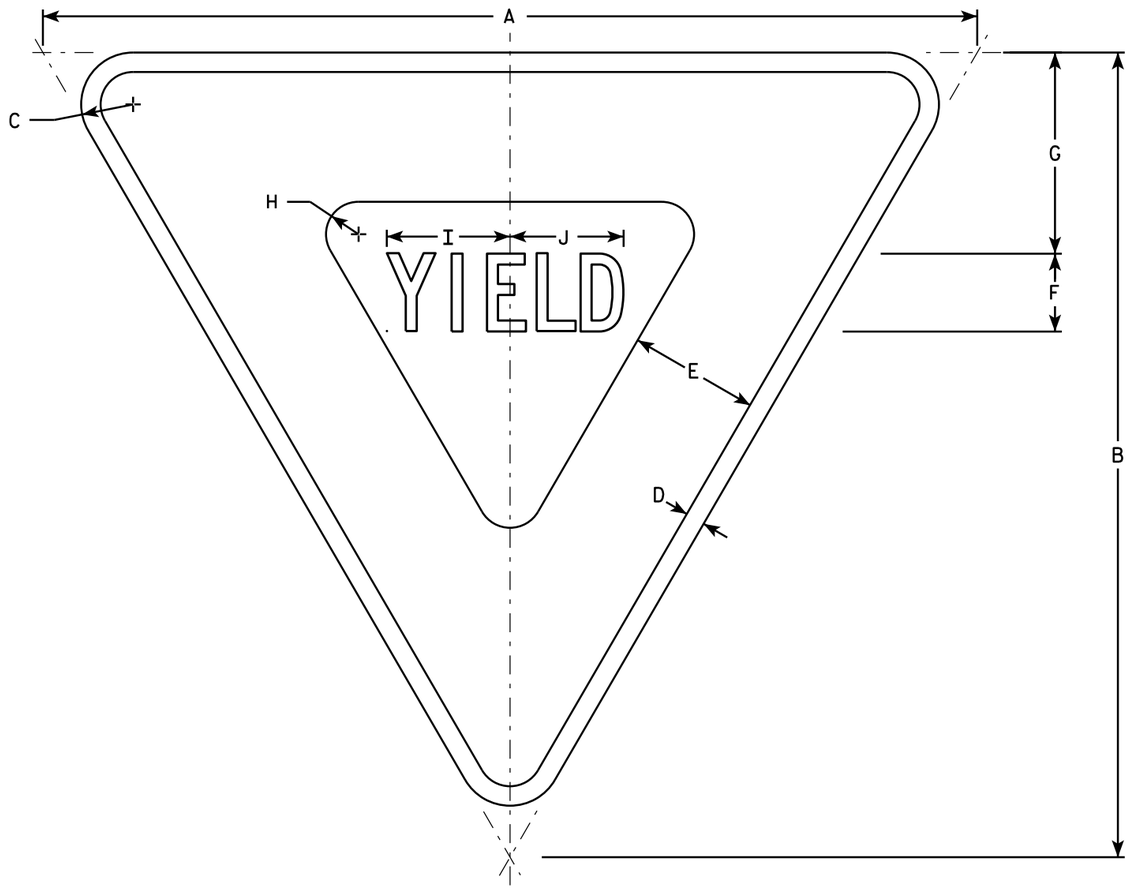
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 134 M6-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

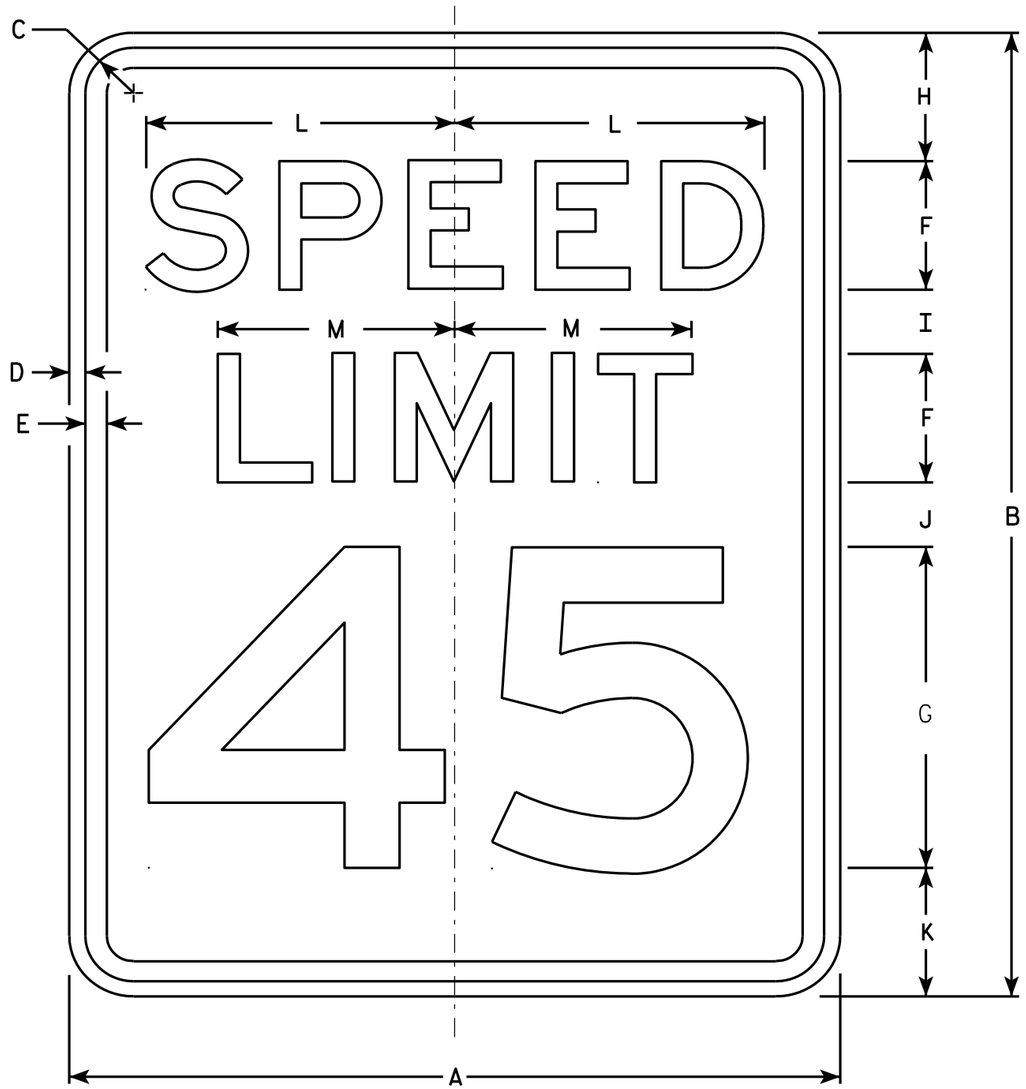
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

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



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

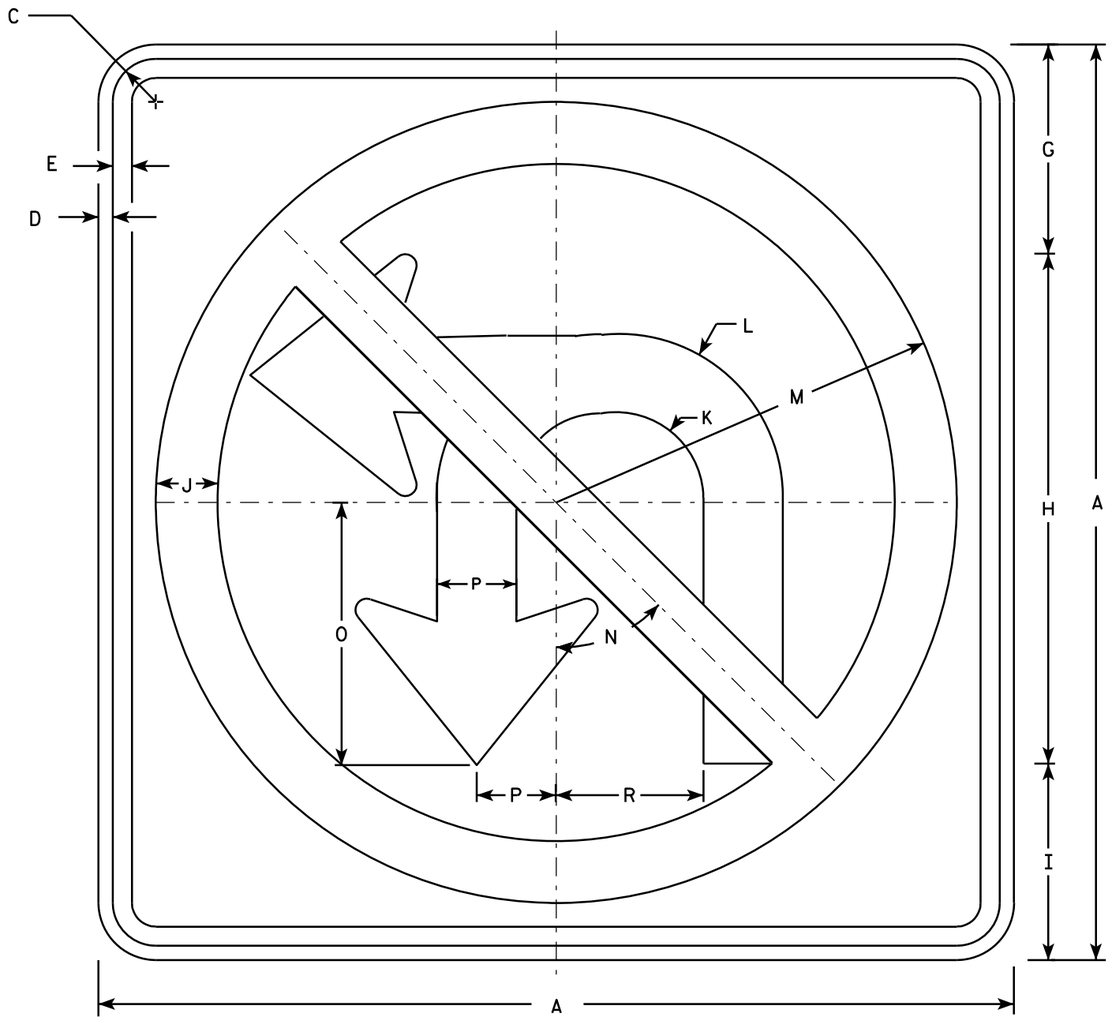
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 136 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000 WISDOT/CADDS SHEET 42



R3-18

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

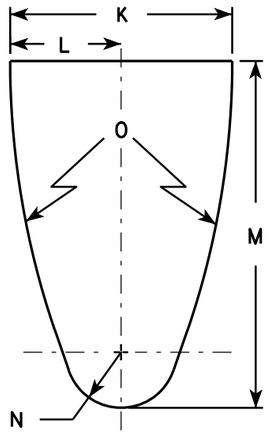
STANDARD SIGN
R3-18

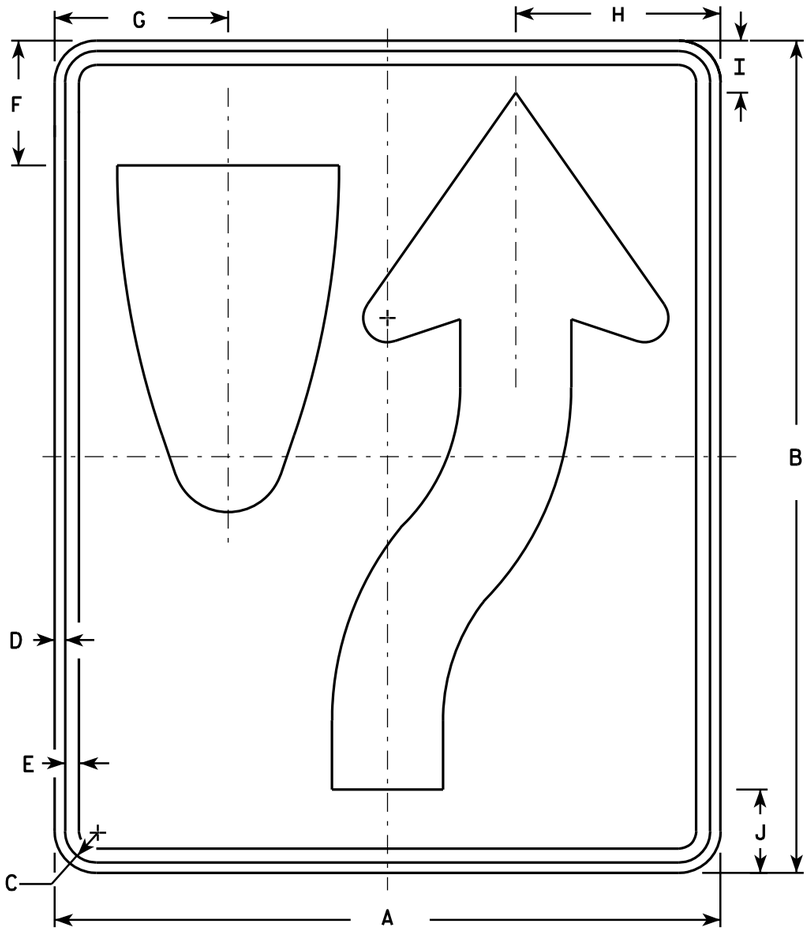
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 137	E

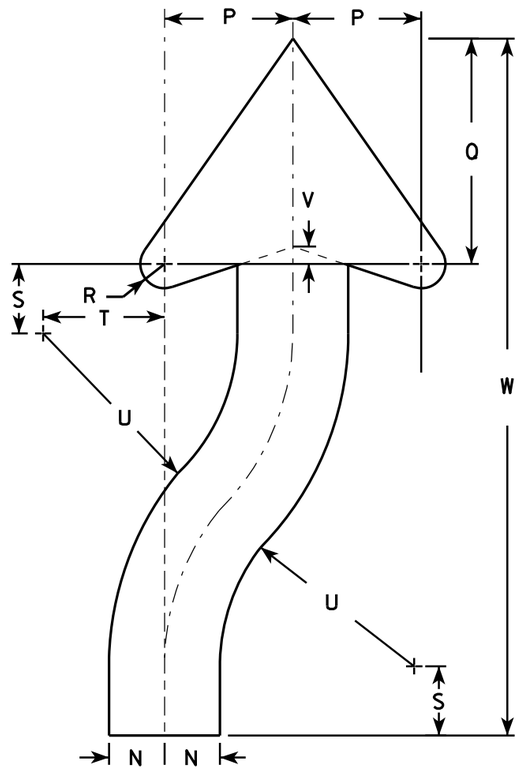




R4-7

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

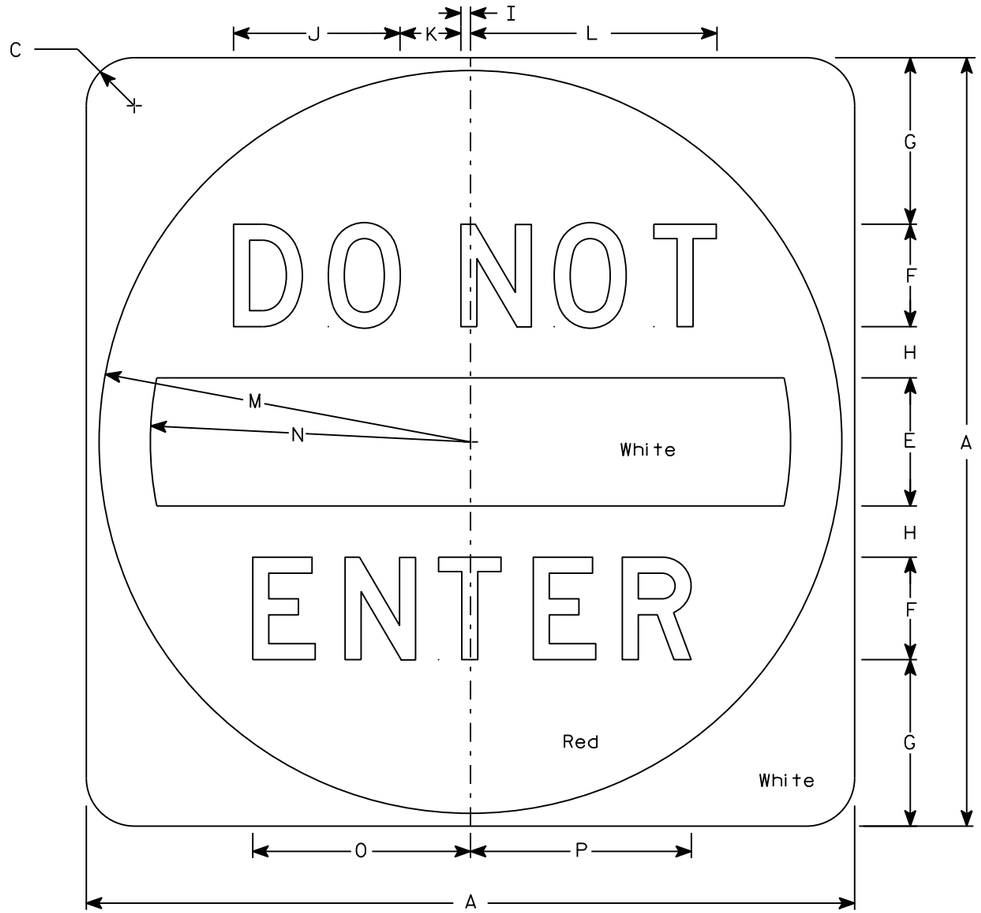
STANDARD SIGN
R4-7 & R4-8

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: 138	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	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											6.25
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

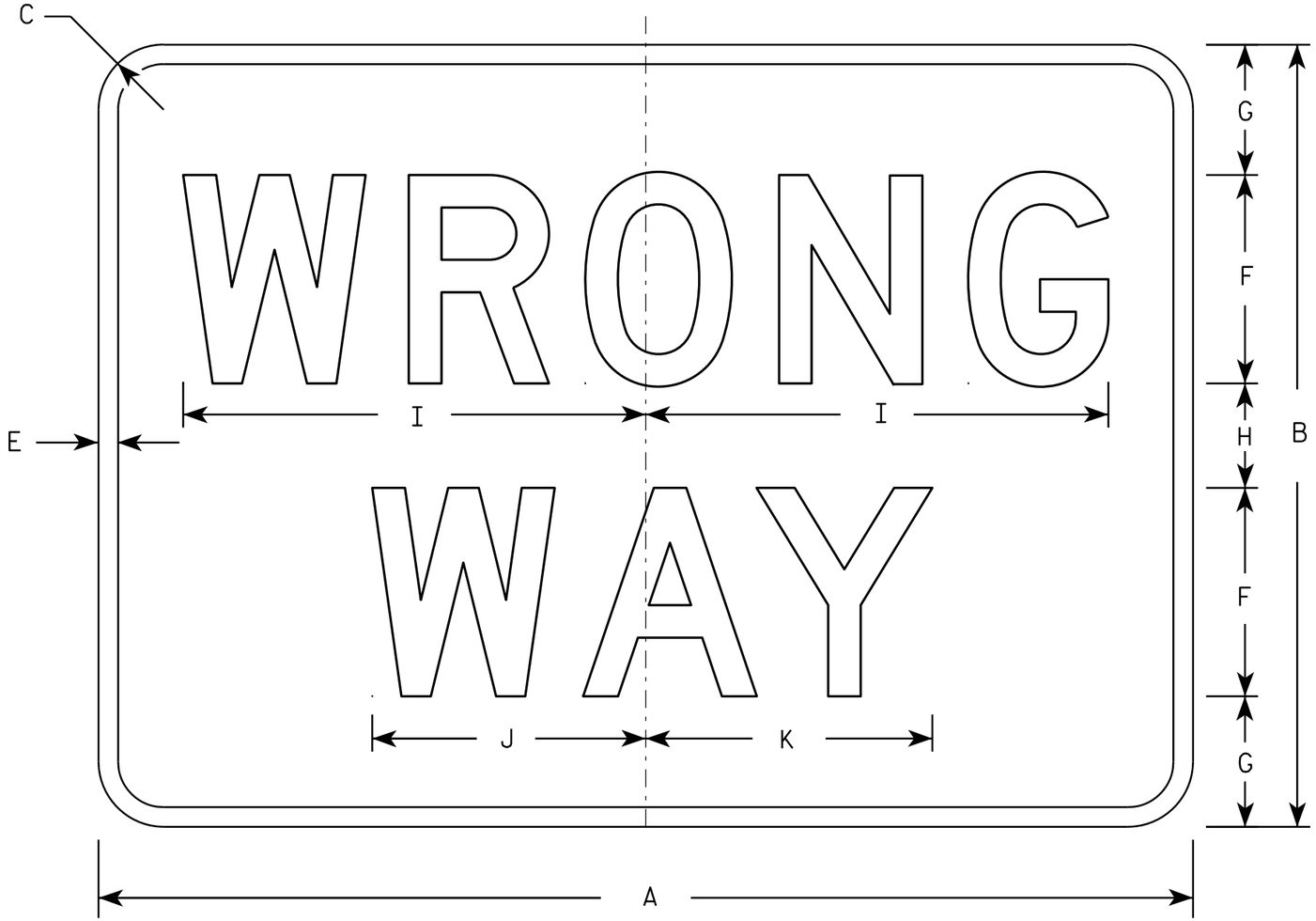
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 139 | 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

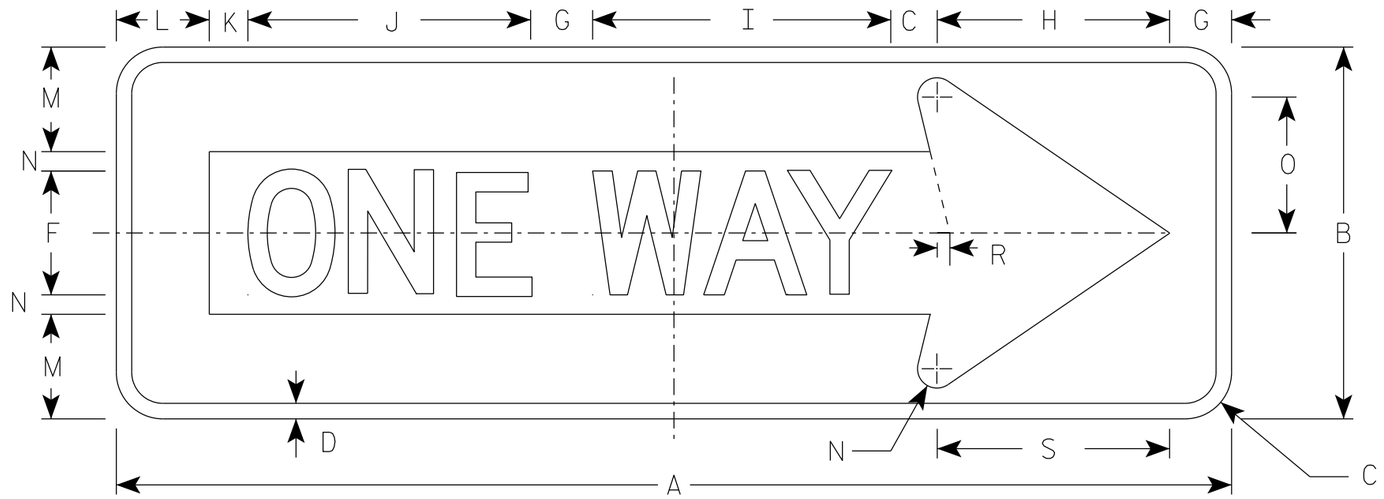
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

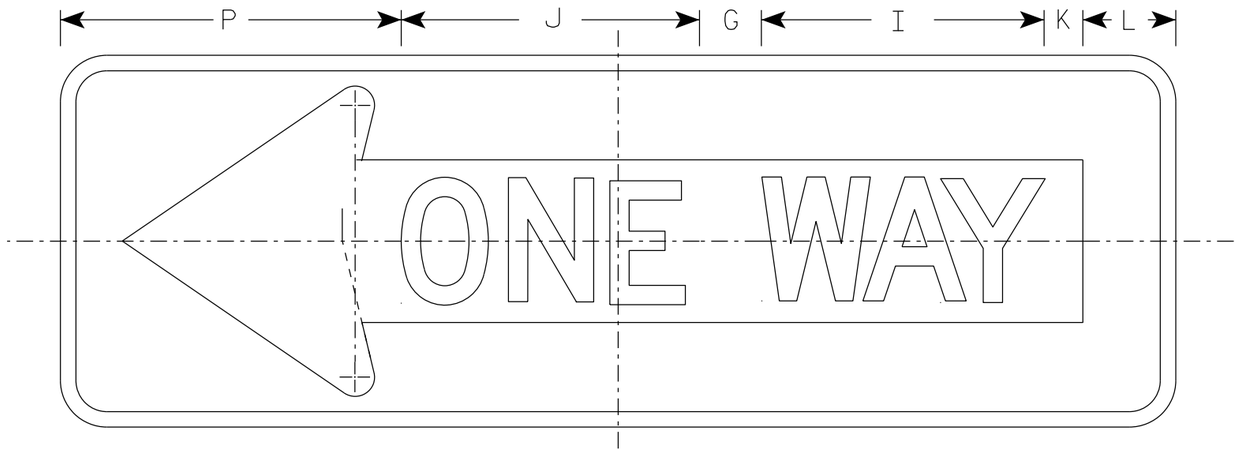
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 140 | E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



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 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

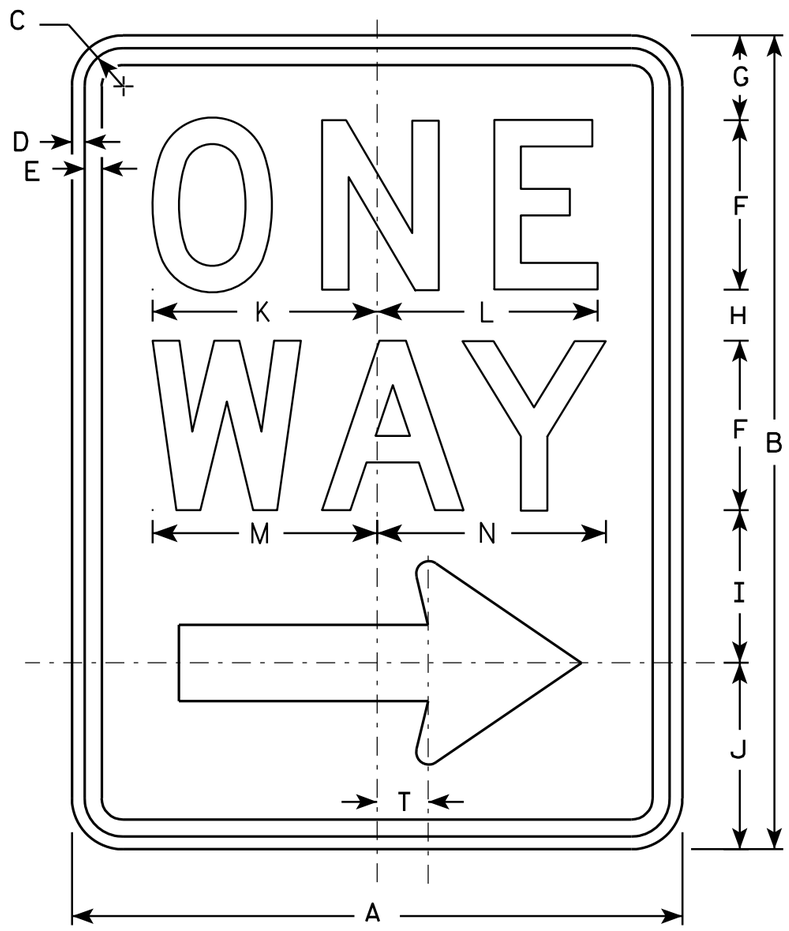
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

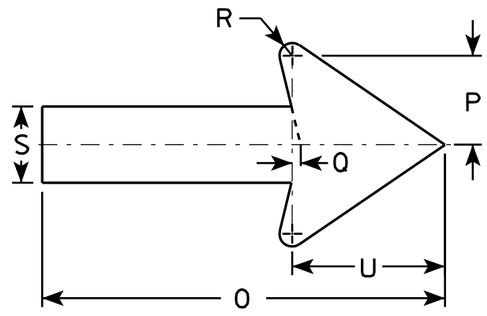
SHEET NO: 141 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

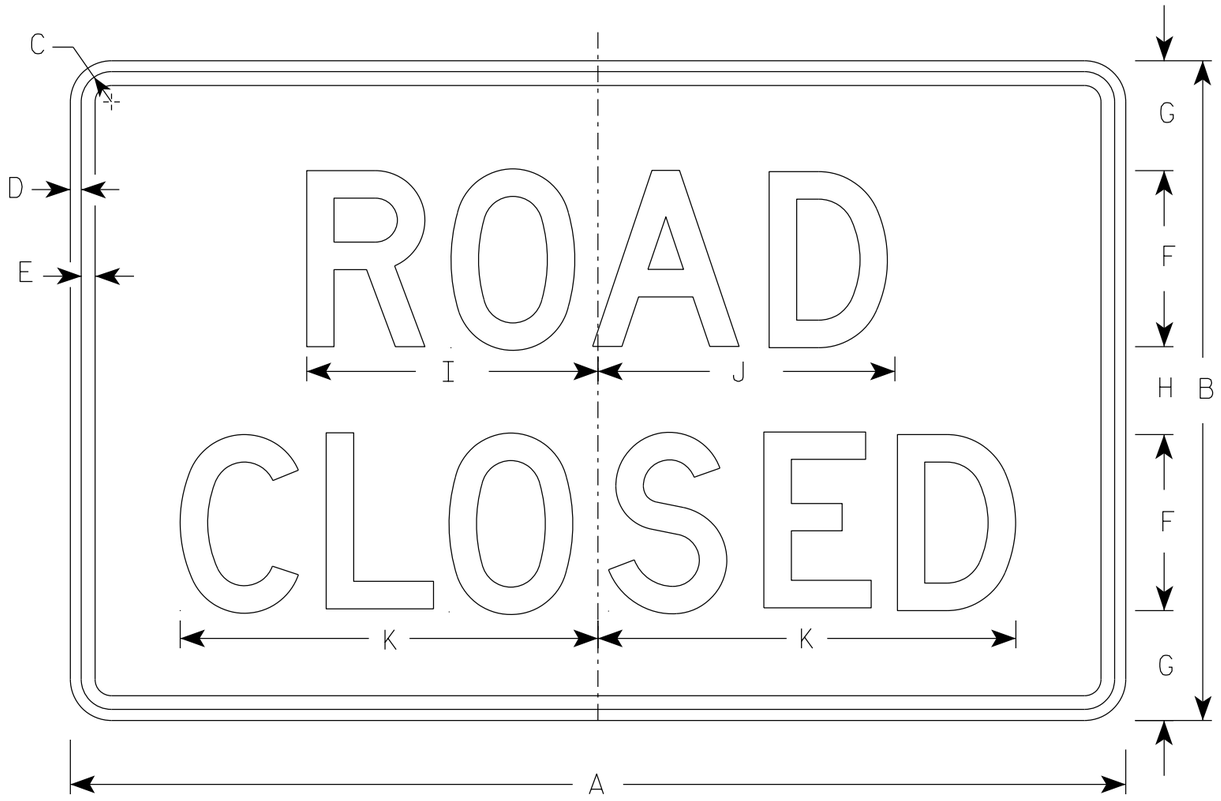
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

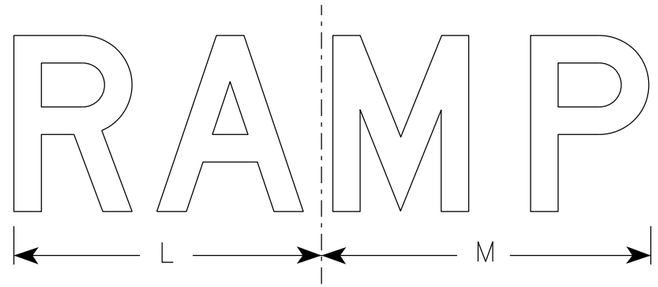
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 142	E



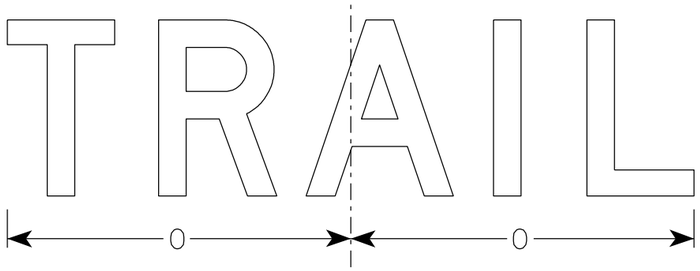
R11-2

NOTES

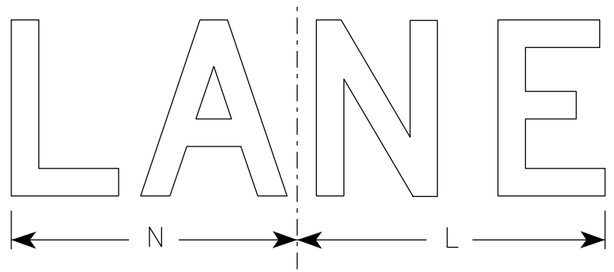
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

BAY SETTLEMENT ROAD

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.25	
				NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
13+81.826	30.10	8.00	0.00	0	0	0	0	0	0
14+00	31.53	8.00	0.00	21	5	0	21	0	16
14+17.133	33.51	8.00	2.70	21	5	1	42	1	31
14+19.571	40.83	8.00	1.53	3	1	0	45	1	33
14+51.132	62.09	8.00	0.00	60	9	1	105	3	83
14+68.905	84.44	8.00	0.00	48	5	0	153	3	126
15+00	65.21	8.00	0.00	86	9	0	239	3	203
15+32.509	49.34	8.00	0.00	69	10	0	308	3	262
15+61.25	41.35	8.00	2.28	48	9	1	356	4	299
15+65.035	34.82	8.00	0.00	5	1	0	361	4	303
15+99.392	28.27	8.00	0.00	40	10	0	401	4	333

BAY SETTLEMENT CONNECTOR

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.25	
				NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
40+45.951	136.32	8.00	0.05	0	0	0	0	0	0
40+59.994	97.63	8.00	1.01	61	4	0	61	0	57
40+82.551	74.41	8.00	2.07	72	7	1	133	1	121
41+00	74.28	8.00	4.94	48	5	2	181	4	161
41+16.879	166.89	8.00	20.78	75	5	8	256	14	221
41+49.58	186.61	8.00	33.11	214	10	33	470	55	384
41+77.959	243.14	8.00	31.21	226	8	34	696	98	560
42+00	181.00	8.00	2.46	173	7	14	869	115	708
42+06	165.14	8.00	0.00	38	2	0	907	115	744

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
5 - Expanded EBS	Will be backfilled with Foundation Backfill
8 - Mass Ordinate	[(Cut - Salvaged Pavt) - ((Fill) * Fill Factor)]

CTH K/CHAMPION ROAD

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.25	
				NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
43+25	164.93	10.00	0.00	0	0	0	0	0	0
43+80.033	294.82	10.00	0.79	469	20	1	469	1	448
44+00	236.92	10.00	0.03	197	7	0	666	1	638
44+34.95	184.41	10.00	0.00	273	13	0	939	1	898
44+66	150.01	10.00	0.00	192	11	0	1,131	1	1,079
44+75	58.78	10.00	0.05	35	3	0	1,166	1	1,111
45+00	55.21	10.00	0.04	53	9	0	1,219	1	1,155
46+00	52.15	10.00	0.04	199	37	0	1,418	1	1,317
46+18.194	51.53	10.00	0.16	35	7	0	1,453	1	1,345
46+20	45.93	10.00	0.00	3	1	0	1,456	1	1,347
46+82.661	43.40	10.00	0.00	104	23	0	1,560	1	1,428

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
5 - Expanded EBS	Will be backfilled with Foundation Backfill
8 - Mass Ordinate	[(Cut - Salvaged Pavt) - ((Fill) * Fill Factor)]

9

9

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	EARTHWORK DATA	SHEET: 145	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : DUMS, ALEXANDER T PLOT NAME : _____ PLOT SCALE : 1:1

STH 57 NB

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.25	
				NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
372+43.967	98.81	2.25	0.31	0	0	0	0	0	0
373+00	100.95	2.25	2.27	207	5	3	207	4	198
373+50.252	156.36	2.25	0.00	239	4	2	446	6	431
373+53.005	118.82	2.25	0.00	14	0	0	460	6	445
373+76.162	114.84	2.25	0.00	100	2	0	560	6	543
373+78.789	139.02	2.25	0.00	12	0	0	572	6	555
374+00	126.25	2.25	0.00	104	2	0	676	6	657
374+20.059	109.59	2.25	2.29	88	2	1	764	8	742
374+39.913	109.55	2.25	5.29	81	2	3	845	11	817
374+55.103	111.85	2.25	5.95	62	1	3	907	15	874
374+79.469	112.27	2.25	5.71	101	2	5	1,008	21	967
375+00	109.52	2.25	7.49	84	2	5	1,092	28	1,043
375+16.848	91.03	2.25	4.32	63	1	4	1,155	33	1,100
376+00	124.36	2.25	0.00	332	7	7	1,487	41	1,416
377+00	139.97	3.25	0.00	489	10	0	1,976	41	1,895
377+01.99	140.50	3.25	0.00	10	0	0	1,986	41	1,905
378+00	146.72	3.25	0.00	521	12	0	2,507	41	2,414
379+00	147.58	5.50	0.00	545	16	0	3,052	41	2,943
379+86.616	161.37	5.50	0.00	496	18	0	3,548	41	3,421
380+00	151.06	5.50	0.03	77	3	0	3,625	41	3,495
380+49.117	154.31	5.50	0.02	278	10	0	3,903	41	3,763
381+00	165.86	5.50	0.00	302	10	0	4,205	41	4,055
381+14.675	158.45	18.00	0.00	88	6	0	4,293	41	4,137
381+33.815	176.21	18.00	12.79	119	13	5	4,412	48	4,237
381+37.217	177.86	18.00	11.22	22	2	2	4,434	50	4,254
381+62.978	176.54	18.00	11.98	169	17	11	4,603	64	4,392
381+69.092	81.47	18.00	0.00	29	4	1	4,632	65	4,416
381+88.629	294.21	18.00	0.00	136	13	0	4,768	65	4,539

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
5 - Expanded EBS	Will be backfilled with Foundation Backfill
8 - Mass Ordinate	[(Cut - Salvaged Pavt) - ((Fill) * Fill Factor)]

STH 57 NB

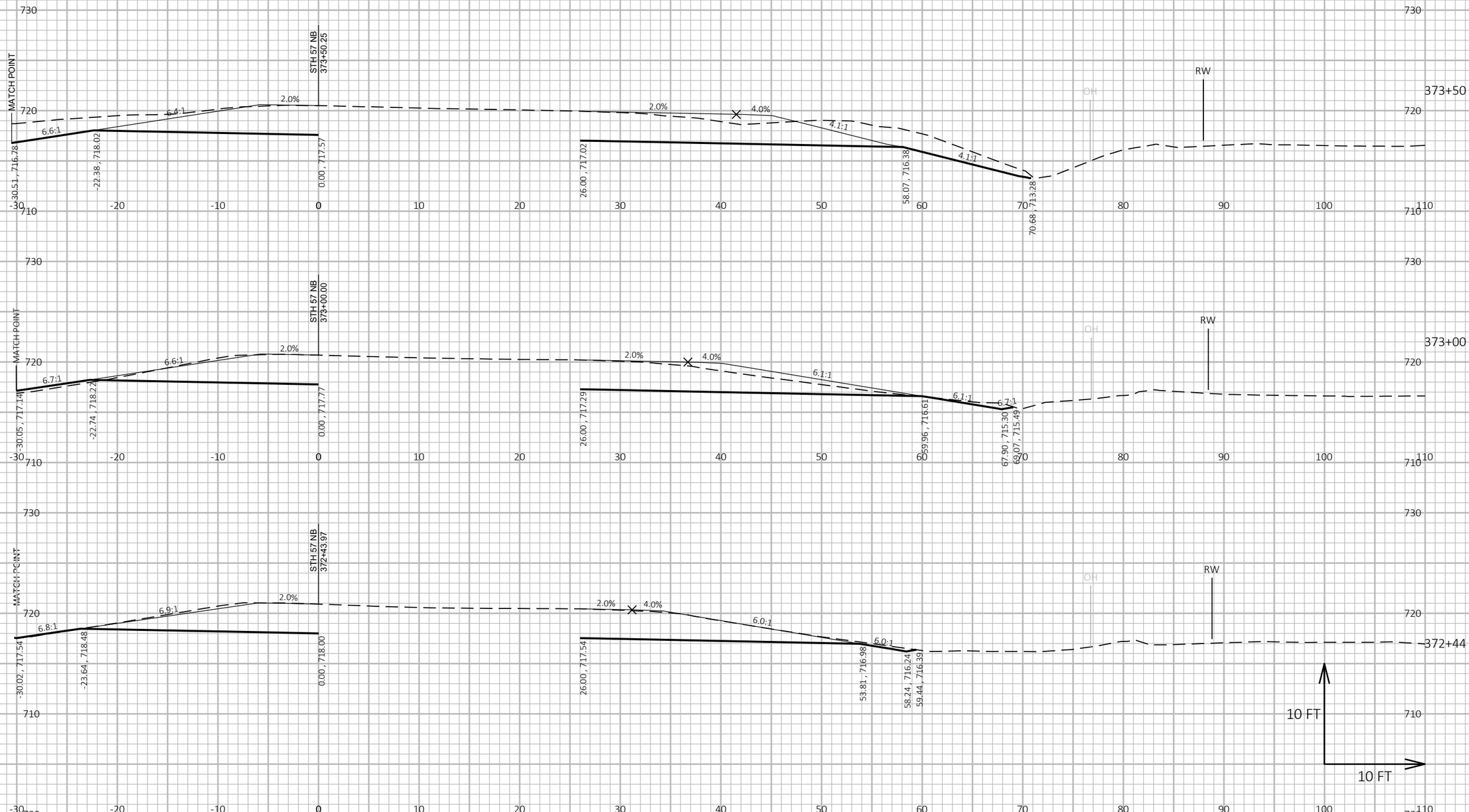
STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.25	
				NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
382+00	85.62	18.00	0.00	80	8	0	4,848	65	4,611
382+06.957	90.87	18.00	0.00	23	5	0	4,871	65	4,629
382+26.661	85.72	18.00	0.00	64	13	0	4,935	65	4,680
382+56.649	193.44	18.00	0.00	155	20	0	5,090	65	4,815
382+75.197	142.84	15.00	0.00	116	11	0	5,206	65	4,920
382+78.527	141.50	11.00	0.00	18	2	0	5,224	65	4,936
383+00	109.59	11.00	0.05	100	9	0	5,324	65	5,027
383+14.371	88.00	11.00	0.53	53	6	0	5,377	65	5,074
384+00	57.35	4.00	2.15	230	24	4	5,607	70	5,275
385+00	51.49	2.25	2.80	202	12	9	5,809	81	5,454
385+83.518	48.47	2.25	5.01	155	7	12	5,964	96	5,587
386+00	48.73	2.25	4.70	30	1	3	5,994	100	5,612
387+00	49.68	2.25	4.27	182	8	17	6,176	121	5,765
388+00	52.19	2.25	2.56	189	8	13	6,365	138	5,930
389+00	51.87	2.25	2.23	193	8	9	6,558	149	6,103
389+95.185	43.25	2.25	46.22	168	8	85	6,726	255	6,157
390+00	44.20	2.25	47.36	8	0	8	6,734	265	6,155
390+12.205	46.20	2.25	13.22	20	1	14	6,754	283	6,157
390+39.607	48.02	2.25	2.19	48	2	8	6,802	293	6,193
390+61.159	50.08	2.25	0.99	39	2	1	6,841	294	6,228
390+75.164	32.81	2.25	38.03	21	1	10	6,862	306	6,236
390+87.629	16.34	2.25	24.27	11	1	14	6,873	324	6,228
391+00	0.14	2.25	8.04	4	1	7	6,877	333	6,223
391+01.827	0.13	2.25	7.46	0	0	1	6,877	334	6,221
392+00	16.49	2.25	0.00	30	8	14	6,907	351	6,226
393+00	6.37	2.25	0.00	42	8	0	6,949	351	6,260
393+55.153	2.54	2.25	0.00	9	5	0	6,958	351	6,264

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
5 - Expanded EBS	Will be backfilled with Foundation Backfill
8 - Mass Ordinate	[(Cut - Salvaged Pavt) - ((Fill) * Fill Factor)]

STH 57 SB

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.25	
				NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
372+46.858	0.00	2.50	0.00	0	0	0	0	0	0
373+00	0.70	2.50	2.85	1	5	3	1	4	-8
374+00	16.60	2.50	0.00	32	9	5	33	10	9
374+45.906	38.29	2.50	0.00	47	4	0	80	10	52
375+00	54.06	2.50	0.00	93	5	0	173	10	140
375+23.124	51.81	2.50	3.57	45	2	2	218	13	181
376+00	57.96	2.50	0.00	156	7	5	374	19	323
377+00	48.97	2.50	3.30	198	9	6	572	26	505
377+08.946	49.96	2.50	3.03	16	1	1	588	28	519
378+00	77.75	2.50	0.00	215	8	5	803	34	719
379+00	73.87	2.50	0.00	281	9	0	1,084	34	991
380+00	72.22	2.50	0.00	271	9	0	1,355	34	1,253
380+61.484	97.88	2.50	0.00	194	6	0	1,549	34	1,441
380+63.297	148.05	5.00	1.31	8	0	0	1,557	34	1,449
381+00	243.18	7.50	3.12	266	8	3	1,823	38	1,704
382+00	172.17	20.00	22.65	769	51	48	2,592	98	2,362
382+13.538	156.52	20.00	17.47	82	10	10	2,674	110	2,421
382+15.889	155.30	20.00	19.13	14	2	2	2,688	113	2,431
383+00	148.35	11.00	0.00	473	48	30	3,161	150	2,818
384+00	152.67	11.00	2.31	557	41	4	3,718	155	3,329
385+00	156.64	11.00	1.78	573	41	8	4,291	165	3,851
385+93.709	156.20	11.00	0.46	543	38	4	4,834	170	4,351
386+00	156.56	9.00	0.41	36	2	0	4,870	170	4,385
387+00	162.70	2.50	0.00	591	21	1	5,461	171	4,954
388+00	157.84	2.50	1.13	594	9	2	6,055	174	5,536
389+00	150.54	2.50	2.32	571	9	6	6,626	181	6,091
390+00	86.64	2.50	16.34	439	9	35	7,065	225	6,477
390+06.887	76.66	2.50	29.16	21	1	6	7,086	233	6,490
390+23.97	99.57	2.50	21.05	56	2	16	7,142	253	6,524
390+51.473	99.21	2.50	10.87	101	3	16	7,243	273	6,602
390+79.441	105.42	2.50	6.58	106	3	9	7,349	284	6,693
391+00	91.89	2.50	18.82	75	2	10	7,424	296	6,754
391+13.39	99.30	2.50	8.64	47	1	7	7,471	305	6,791
392+00	111.81	2.50	2.37	339	8	18	7,810	328	7,100
393+00	104.07	2.50	0.00	400	9	4	8,210	333	7,486
393+68.244	47.84	2.50	0.25	192	6	0	8,402	333	7,672

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
5 - Expanded EBS	Will be backfilled with Foundation Backfill
8 - Mass Ordinate	[(Cut - Salvaged Pavt) - ((Fill) * Fill Factor)]



9

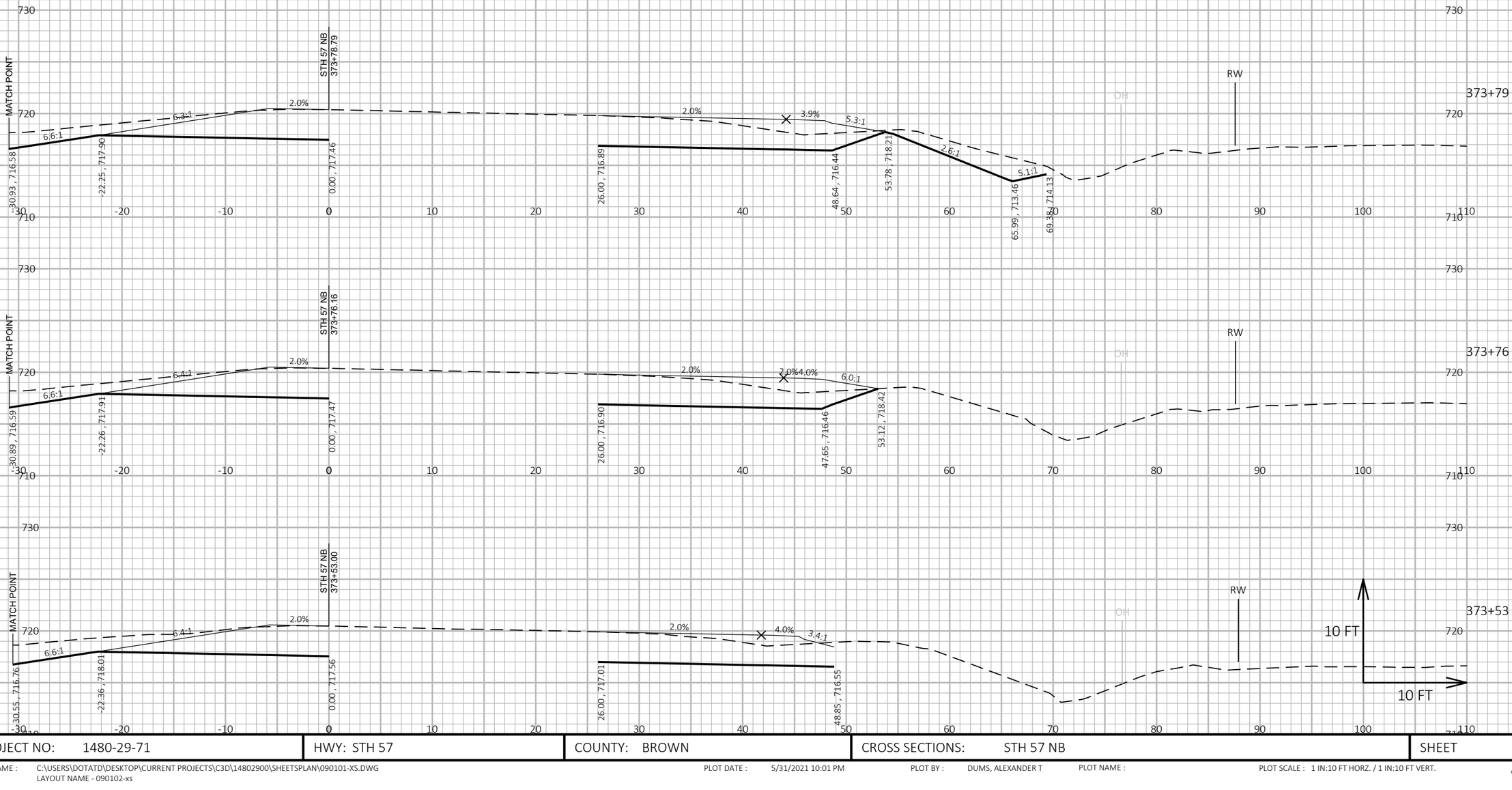
9

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 149	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090101-xs

PLOT DATE : 5/31/2021 10:00 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

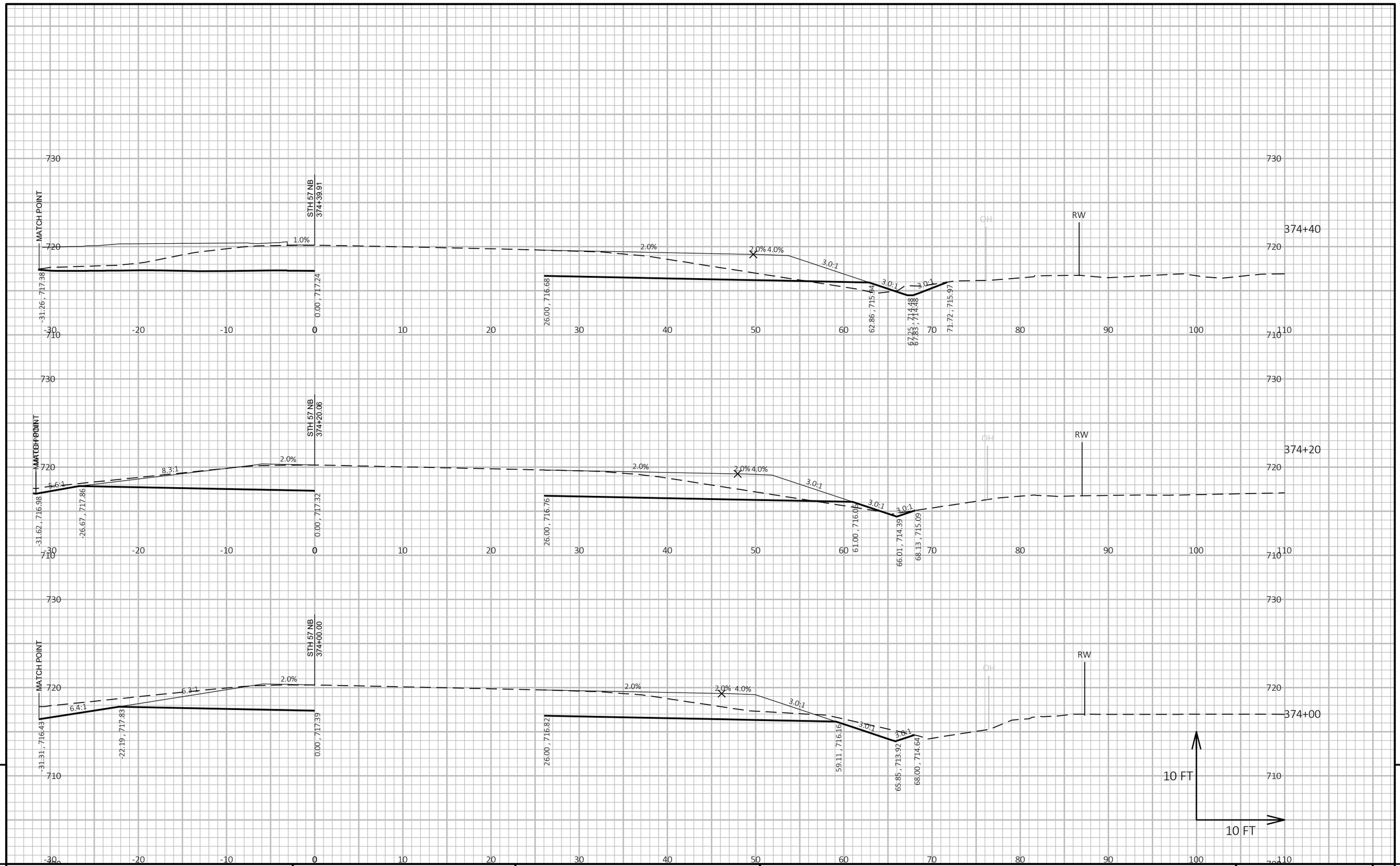


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 150	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090102-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

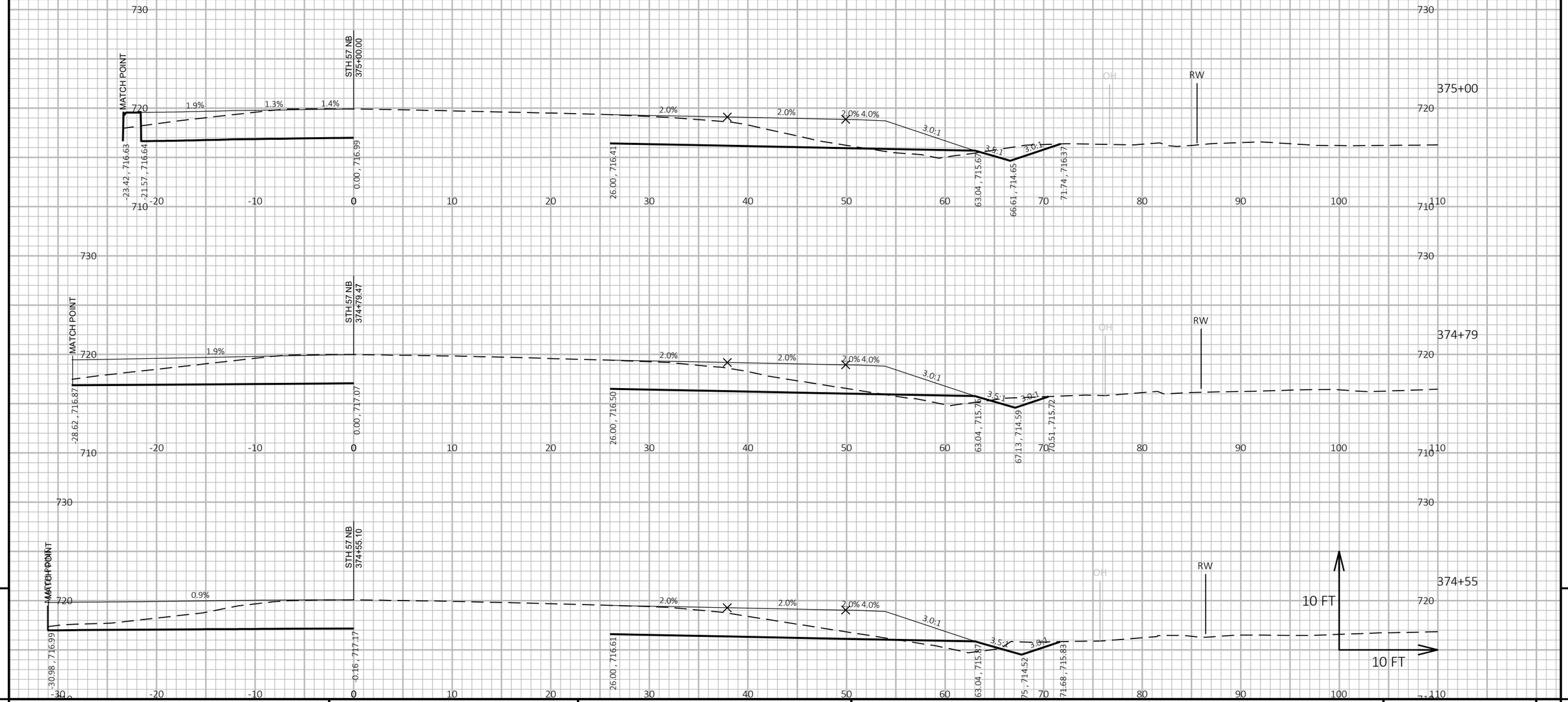


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 151	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090103-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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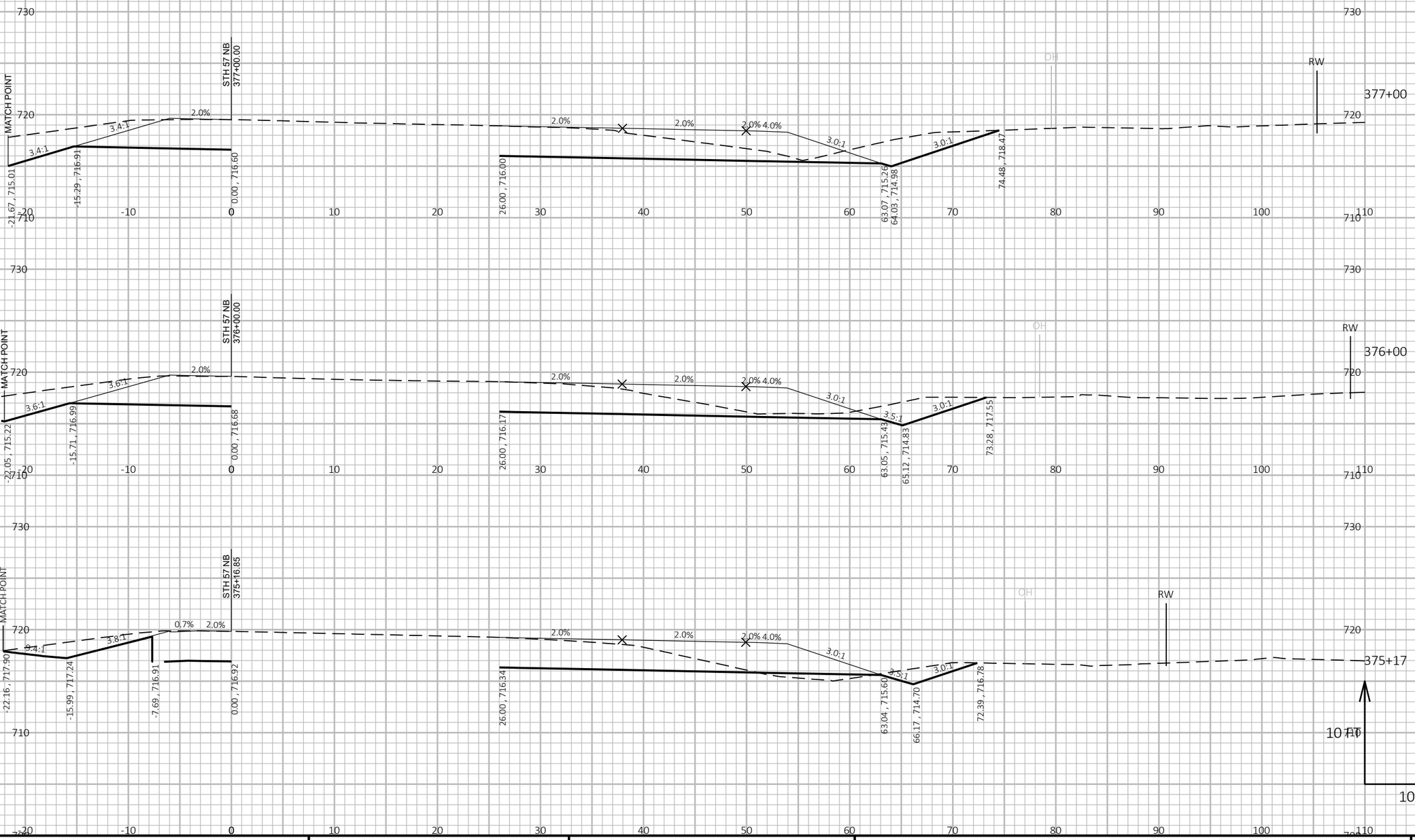
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 152	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090104-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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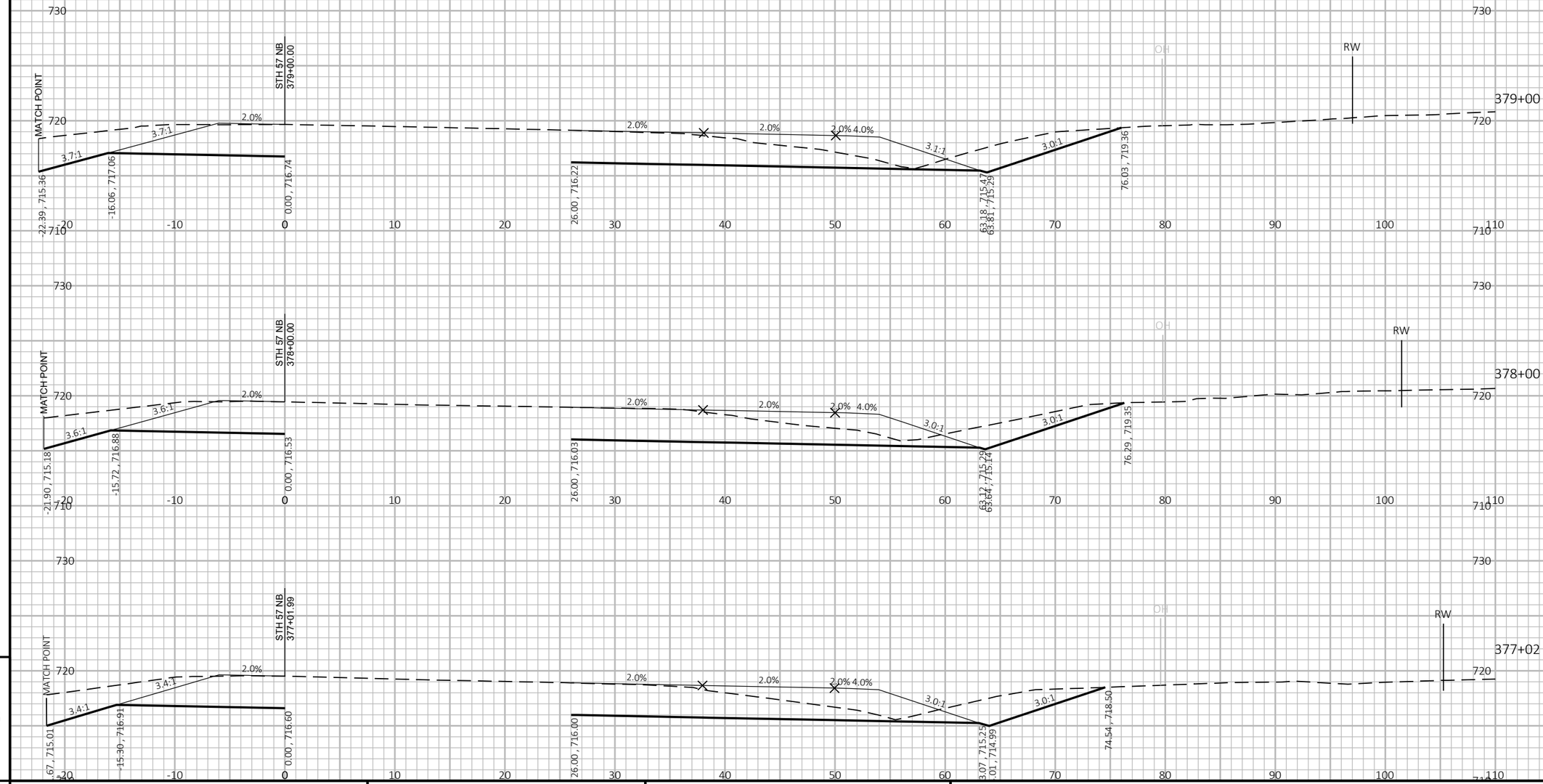
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 153	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090105-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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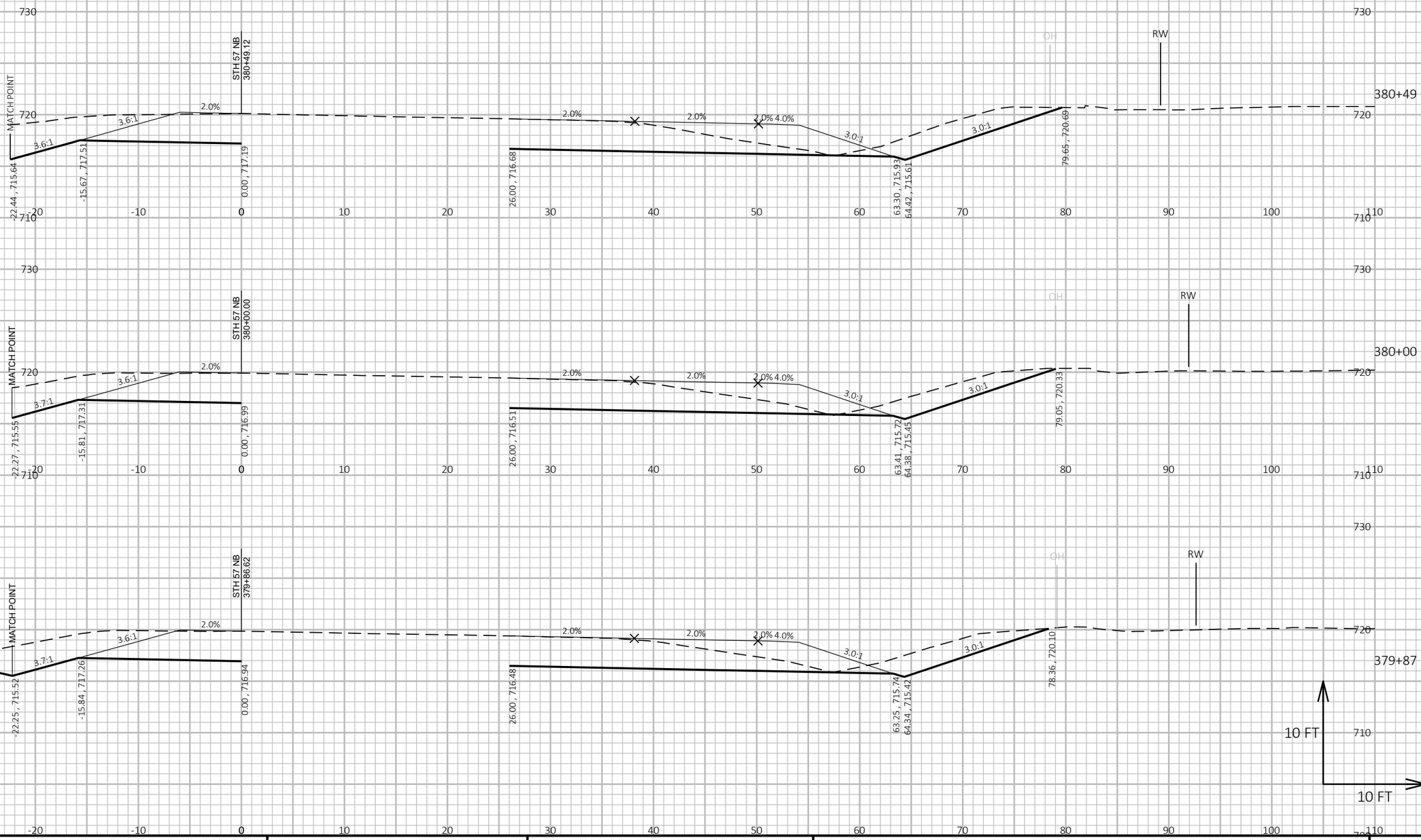
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 154	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090106-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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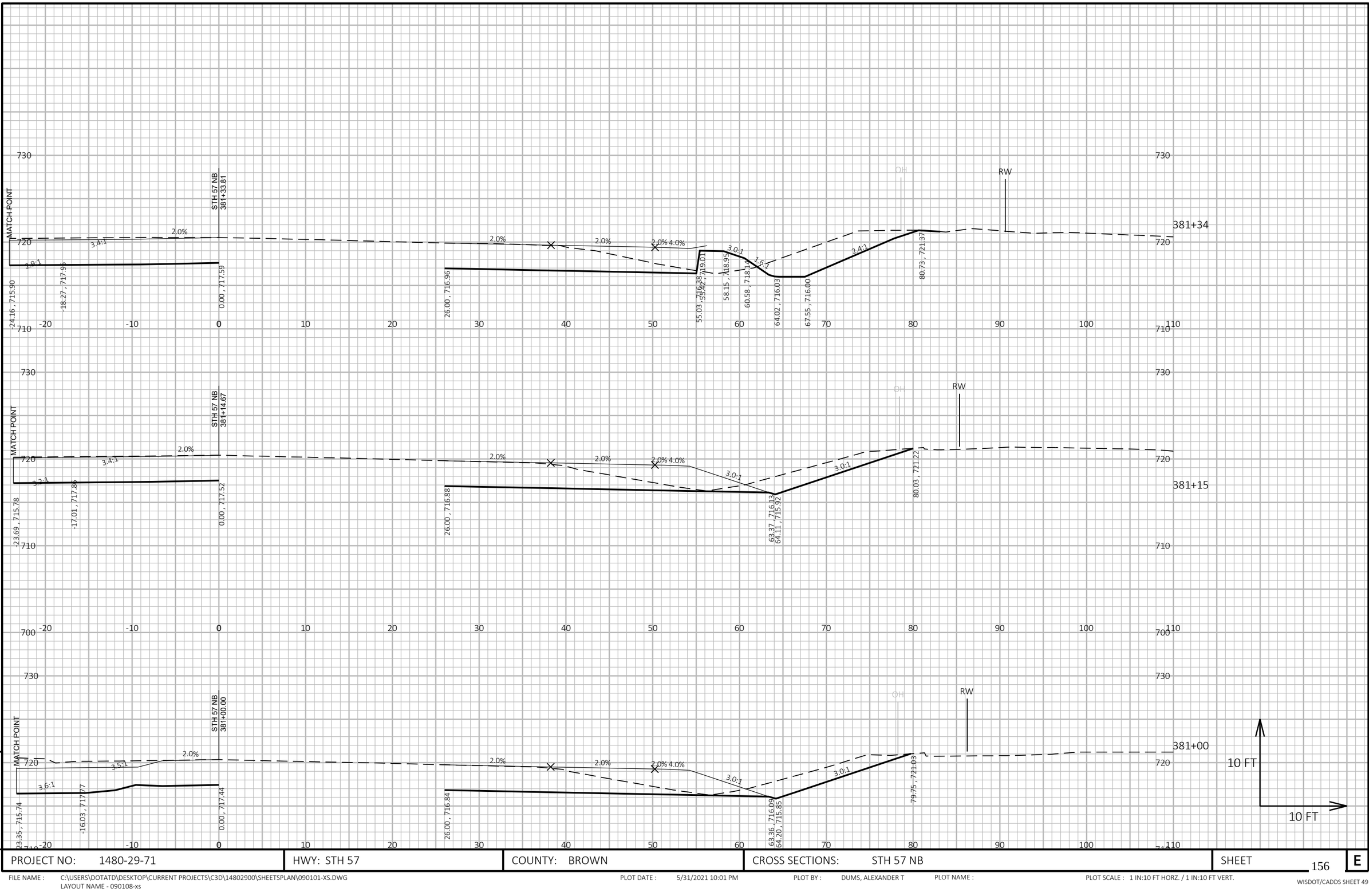
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 155	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090107-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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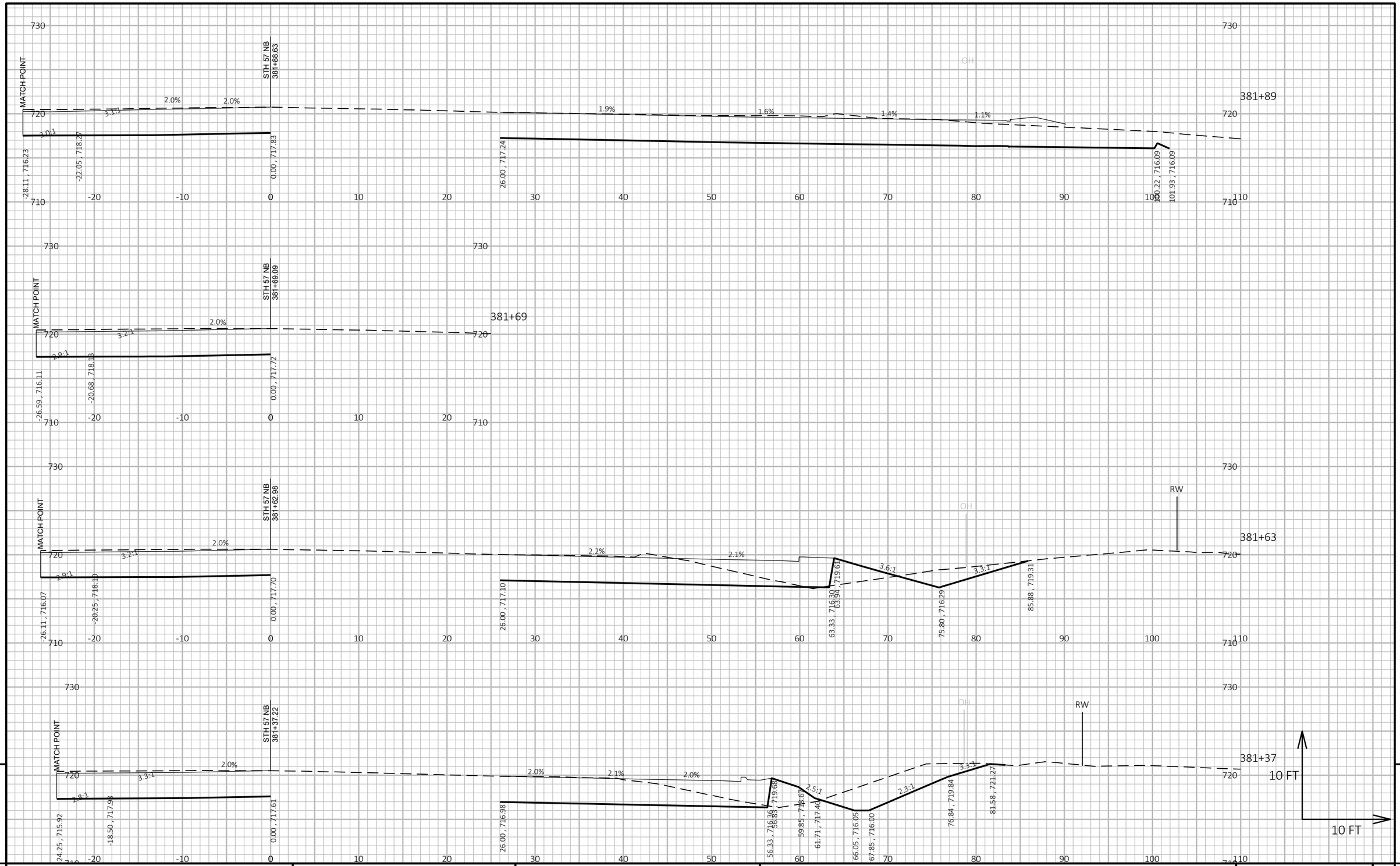
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 156	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090108-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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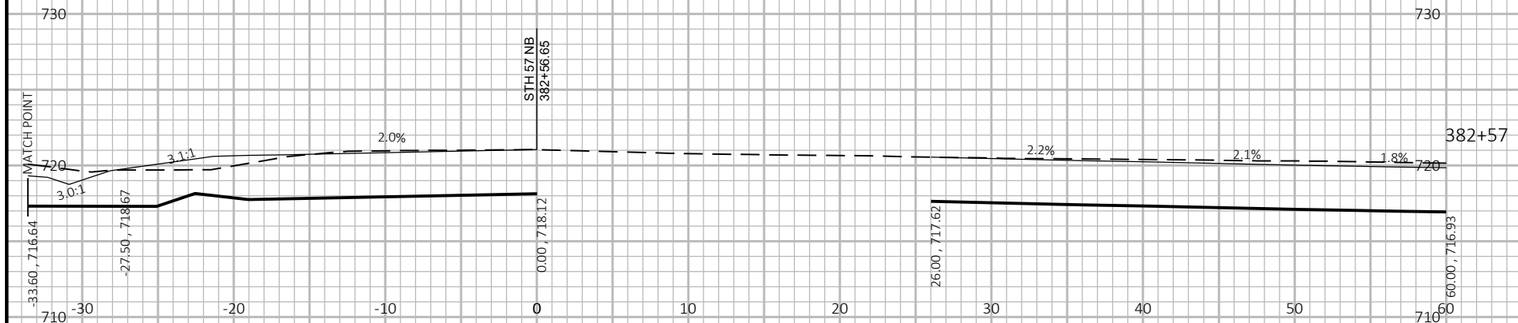
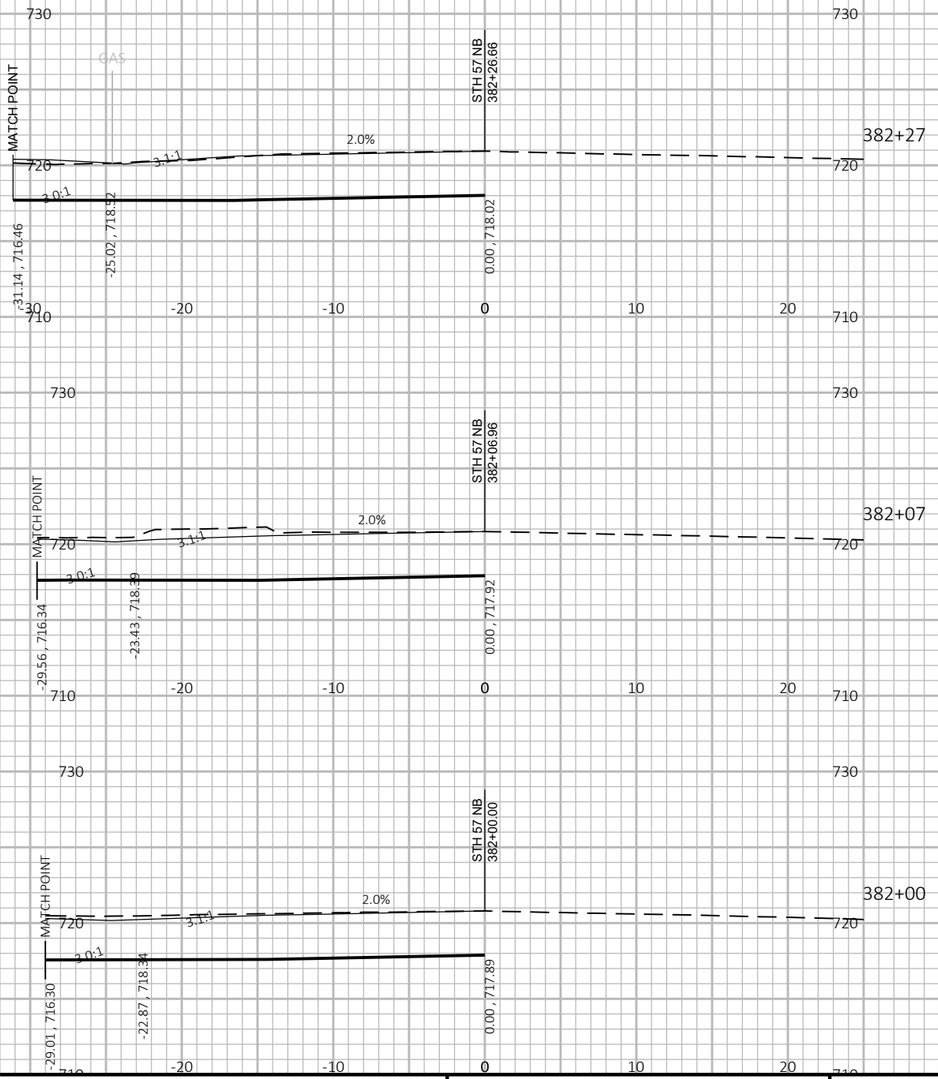
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 157	E

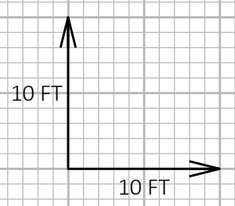
FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090109-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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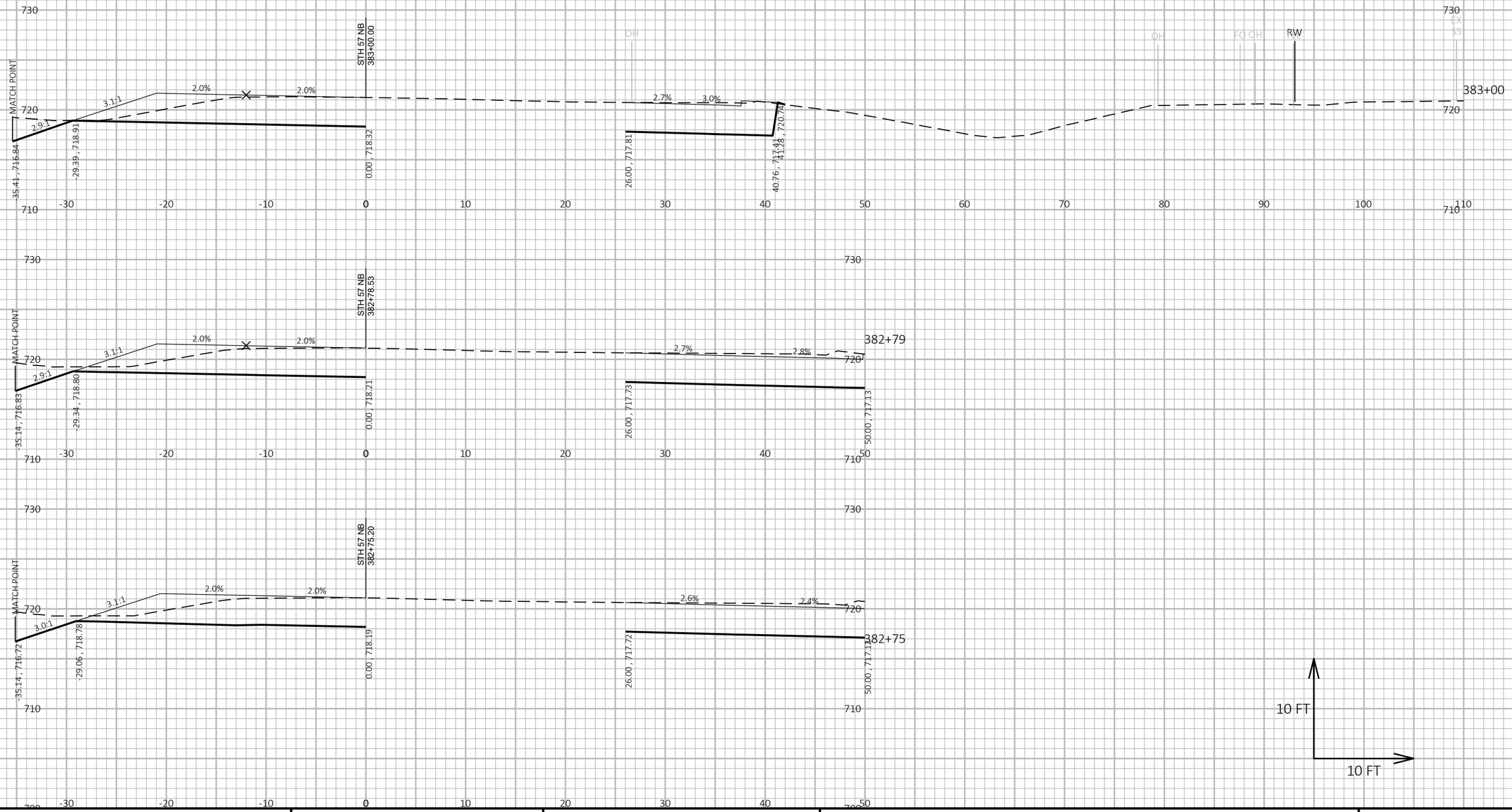
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 158	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090110-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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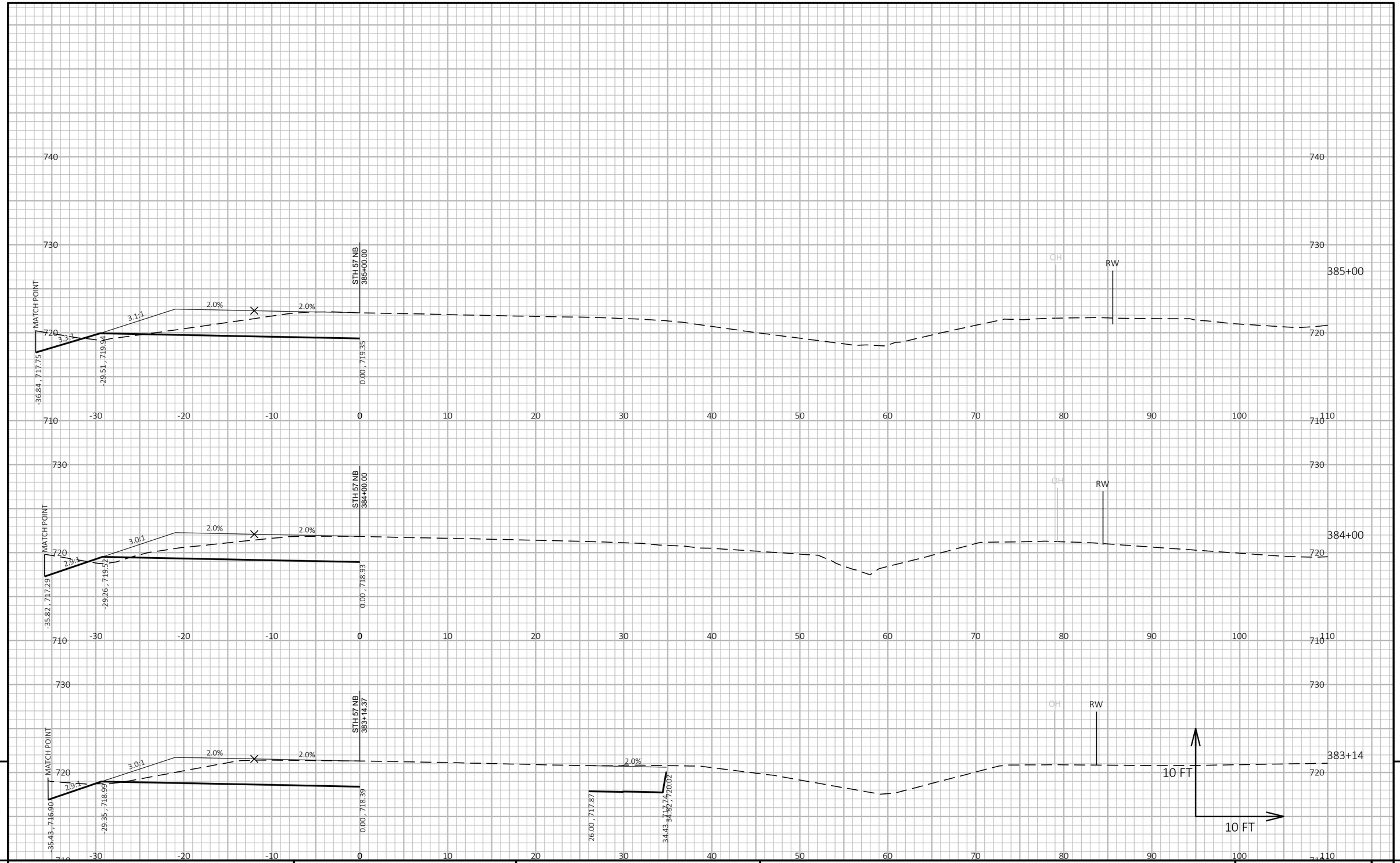
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 159	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090111-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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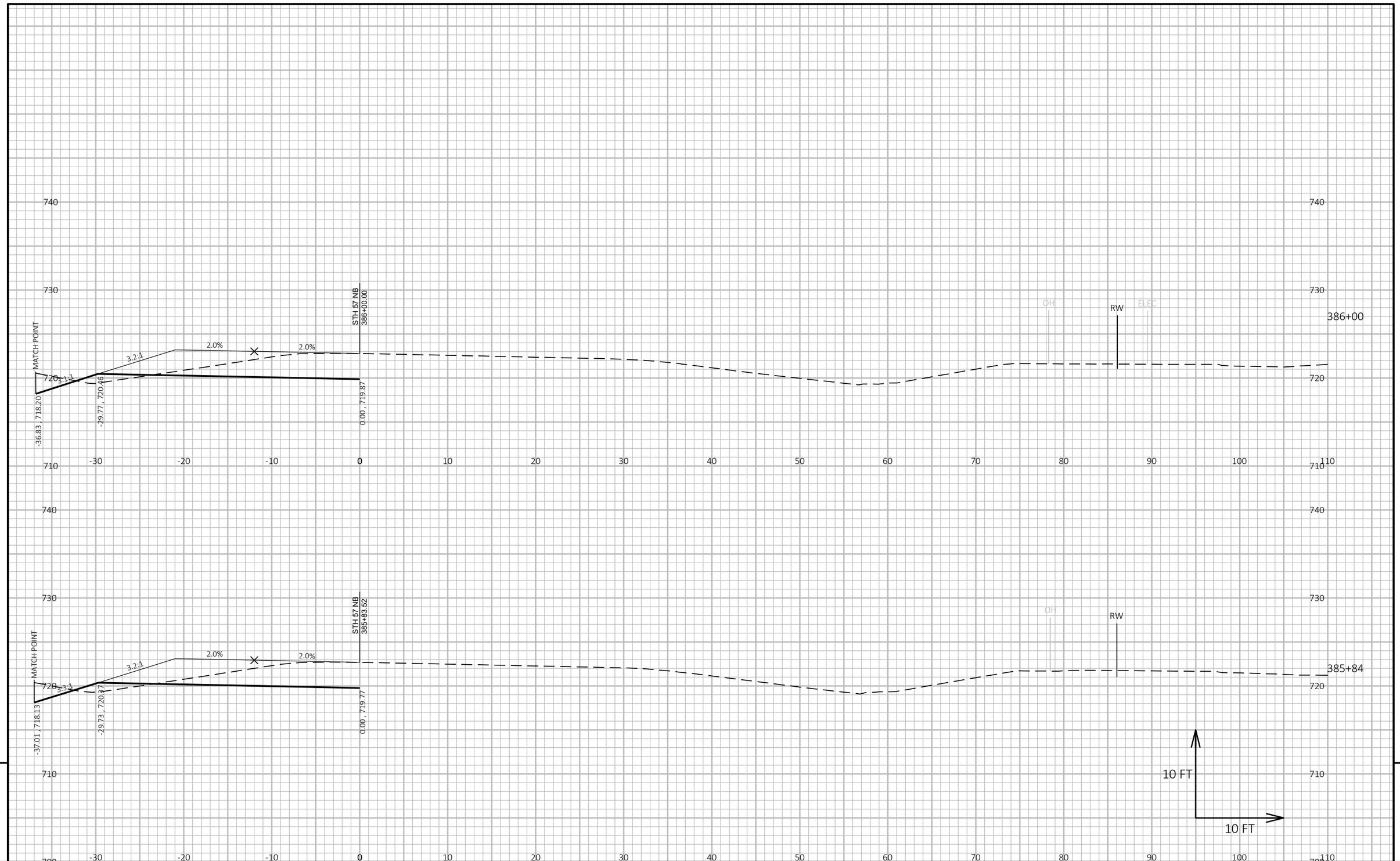
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 160	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090112-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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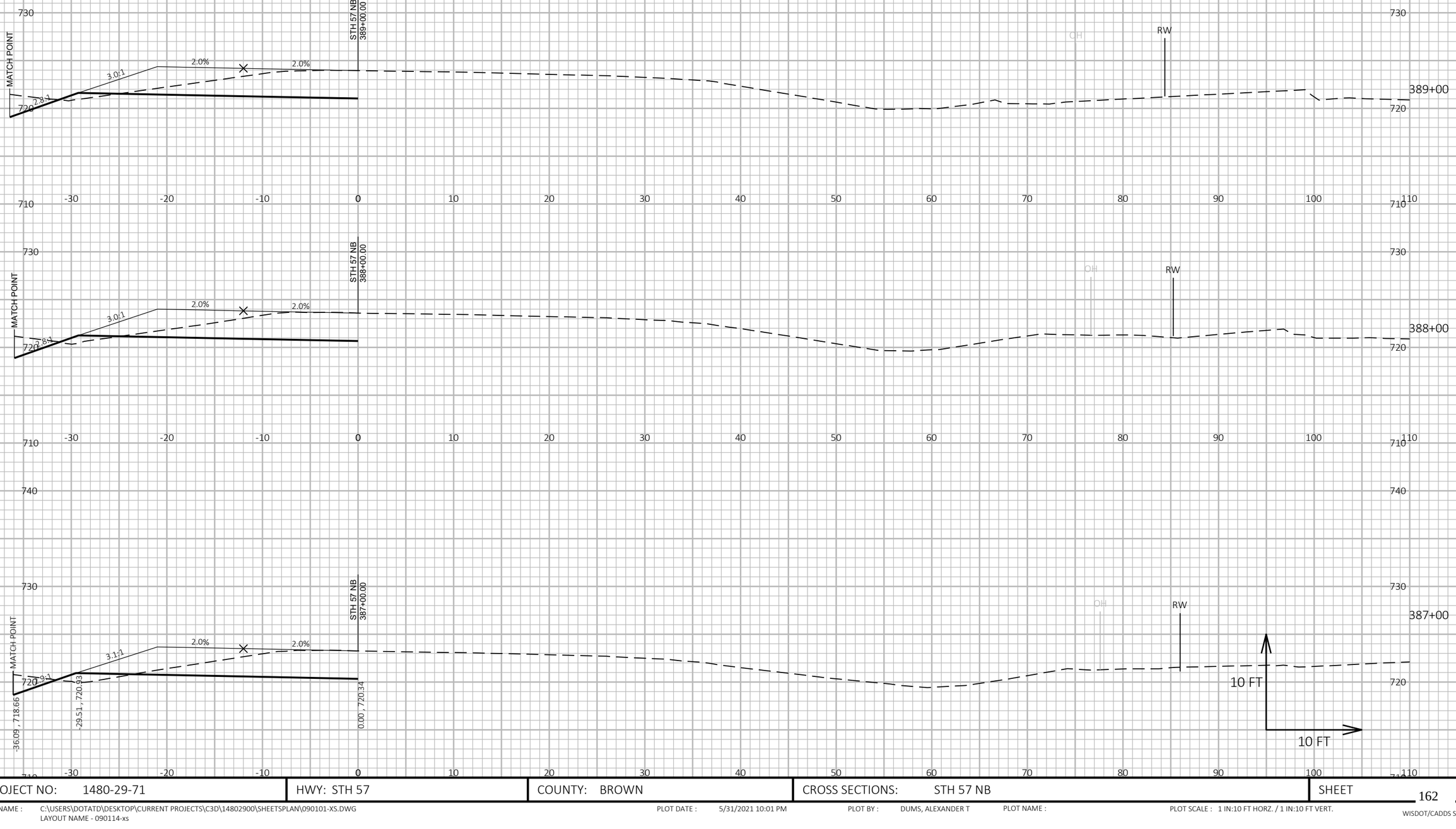
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 161	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090113-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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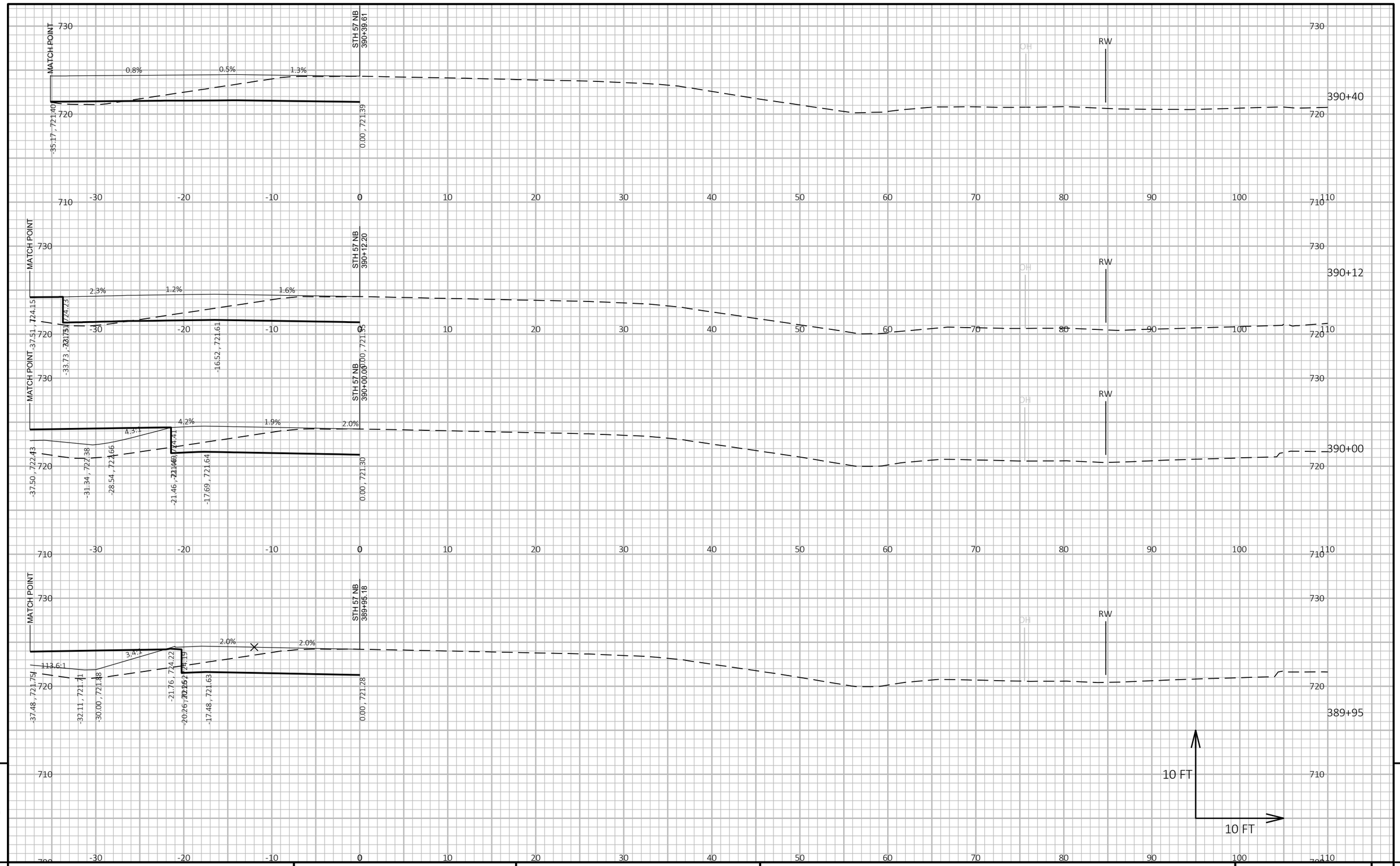
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 162	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090114-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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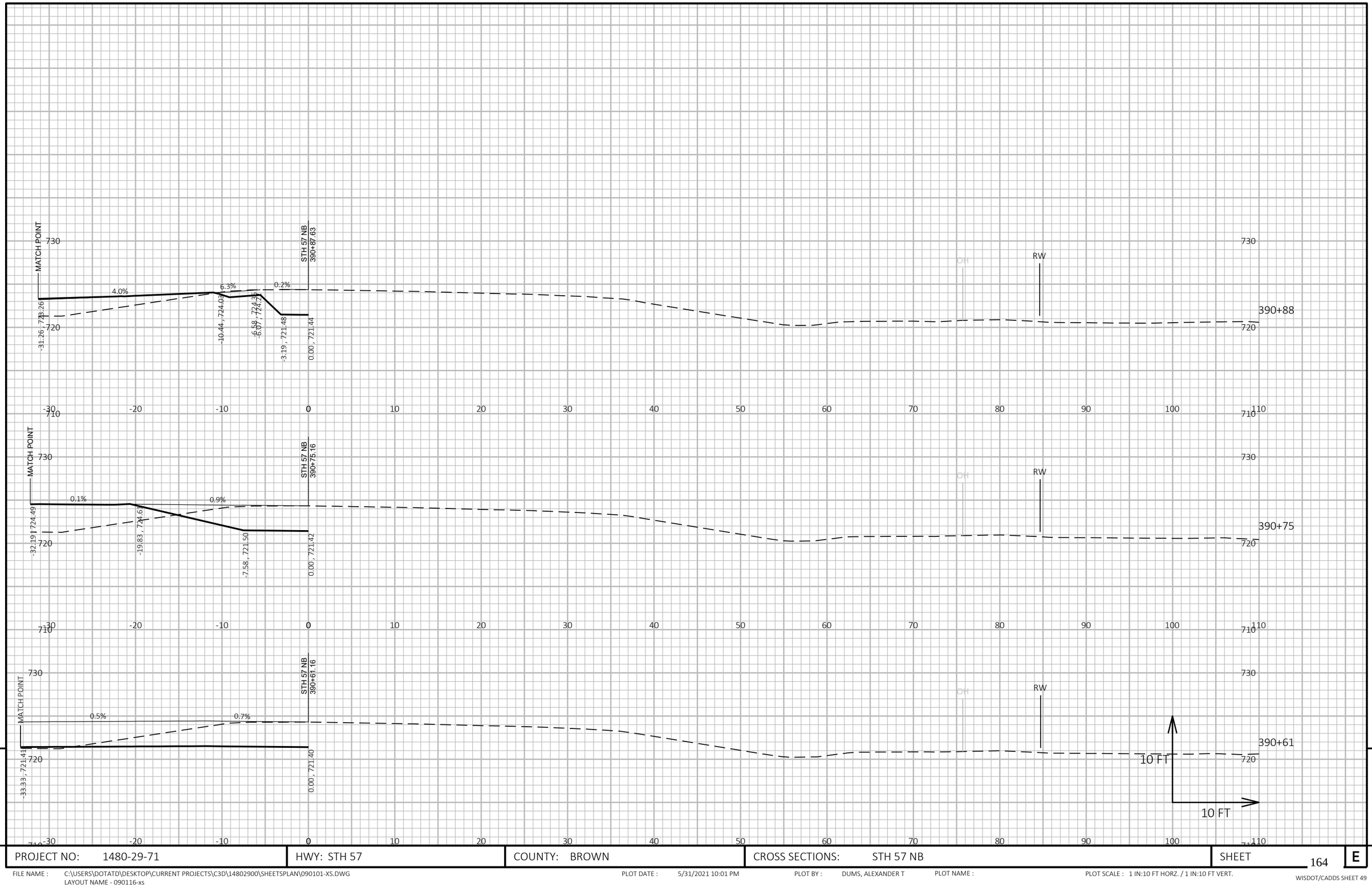
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 163	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090115-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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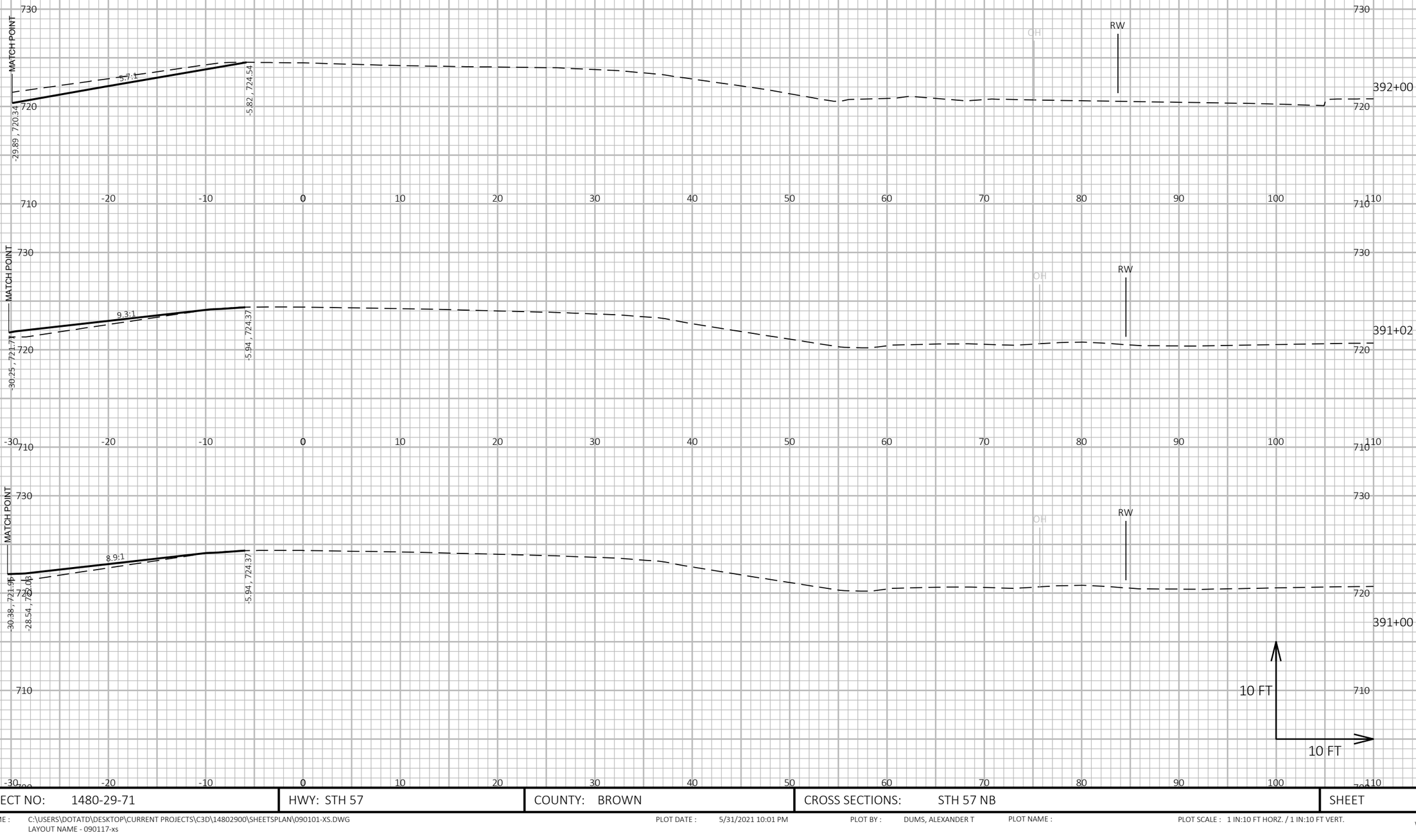
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 164	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090116-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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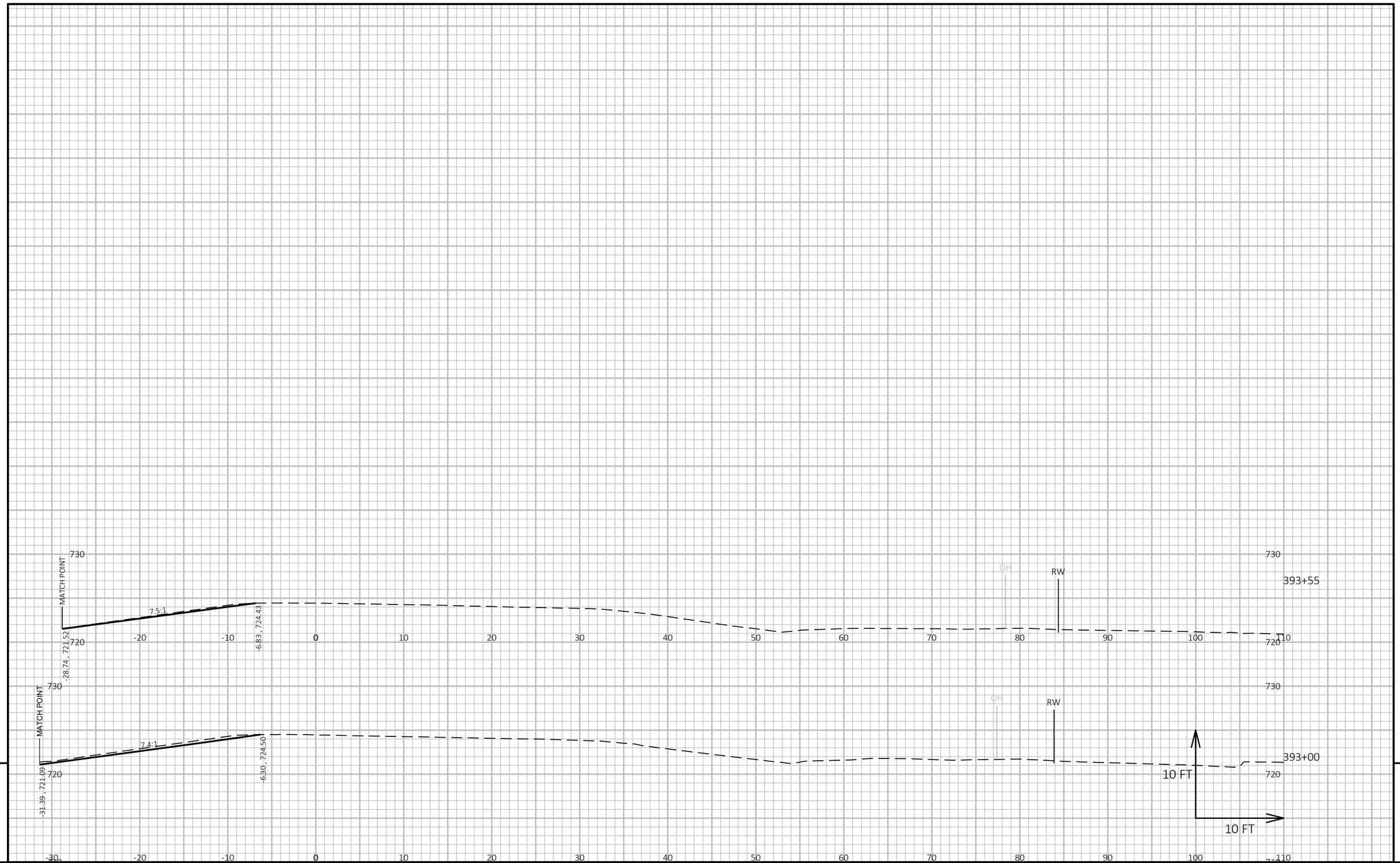
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 165	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090117-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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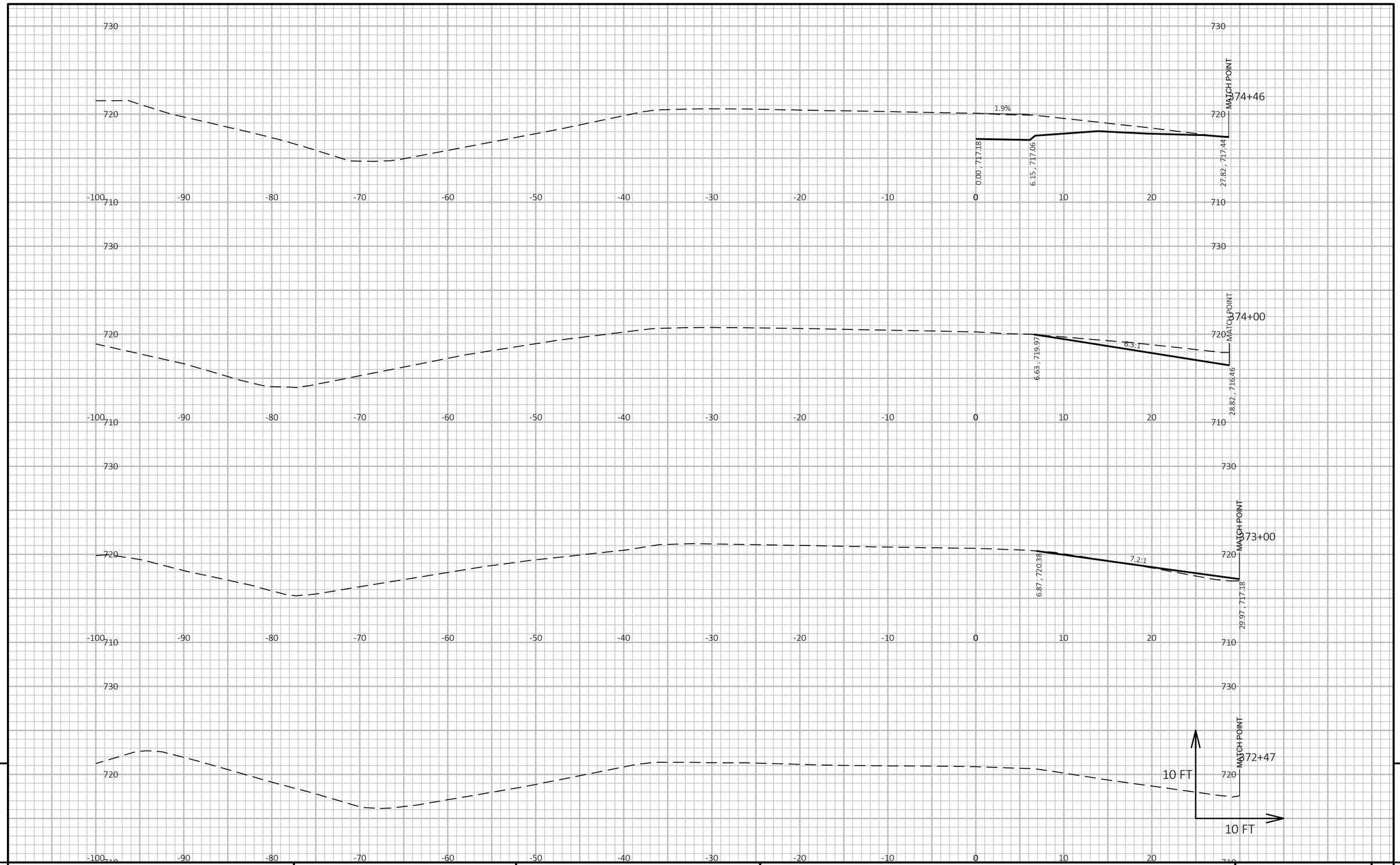
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 NB	SHEET 166	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090118-xs

PLOT DATE : 5/31/2021 10:01 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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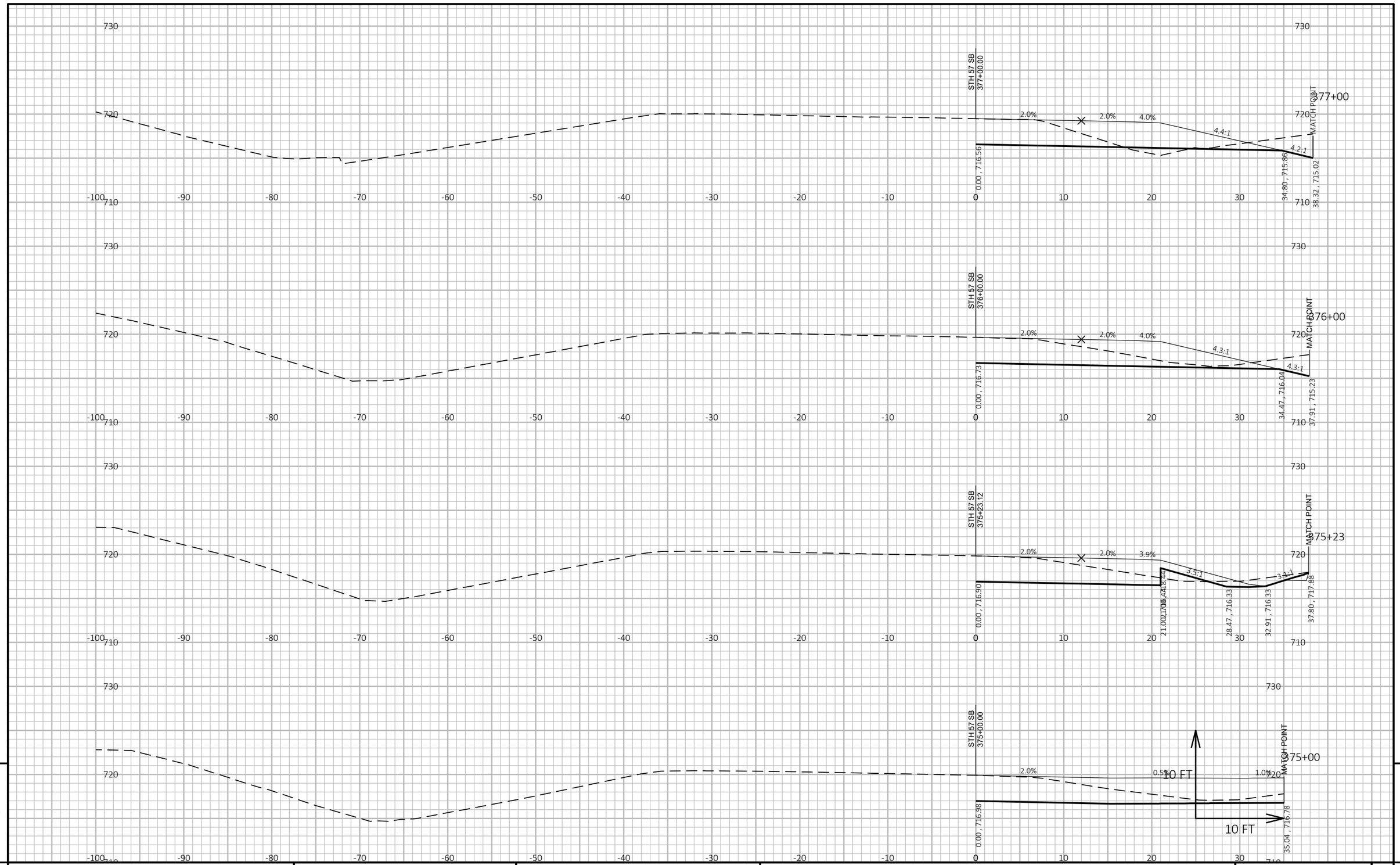
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 167	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 5/31/2021 10:02 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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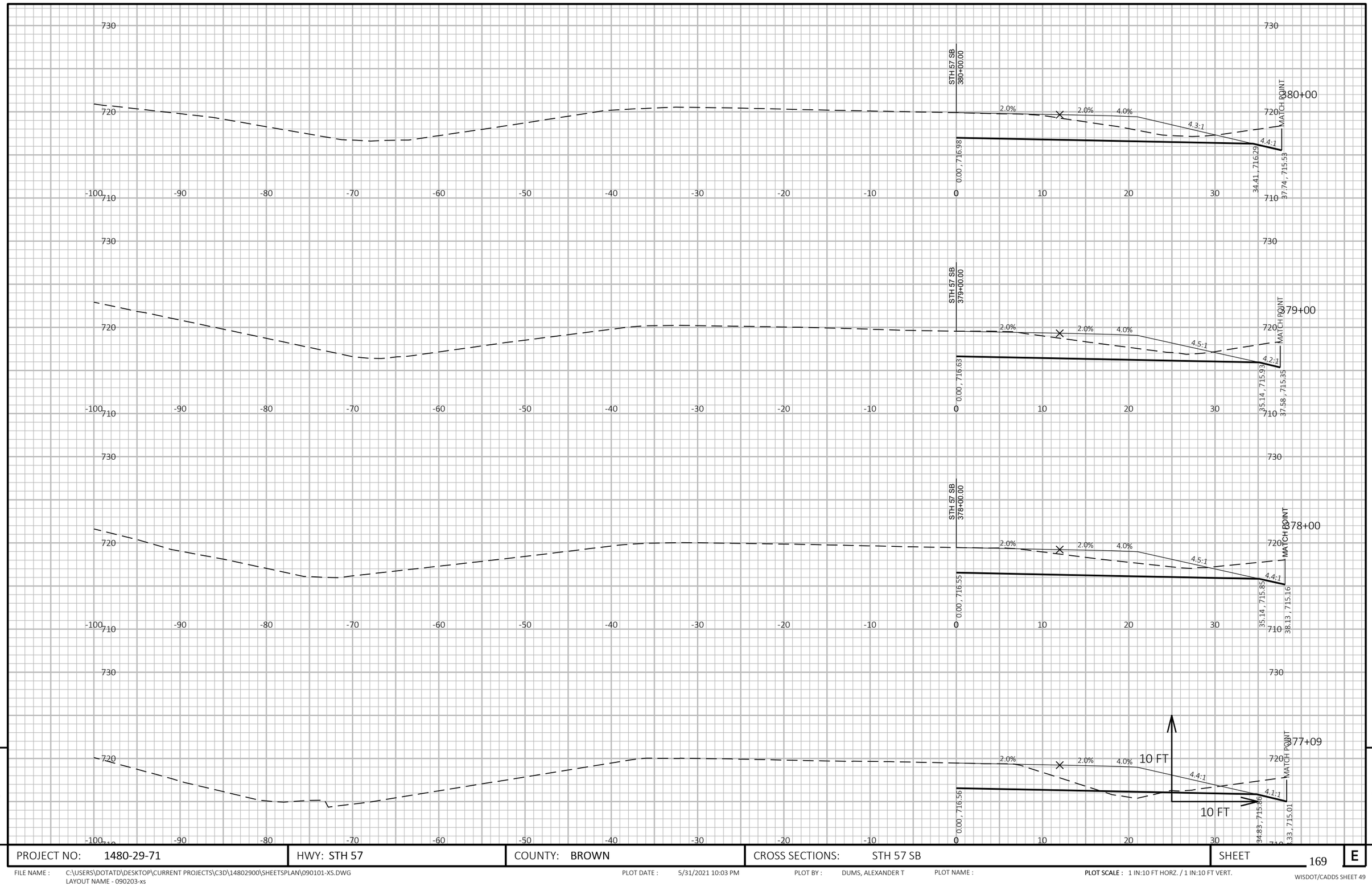
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 168	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090202-xs

PLOT DATE : 5/31/2021 10:02 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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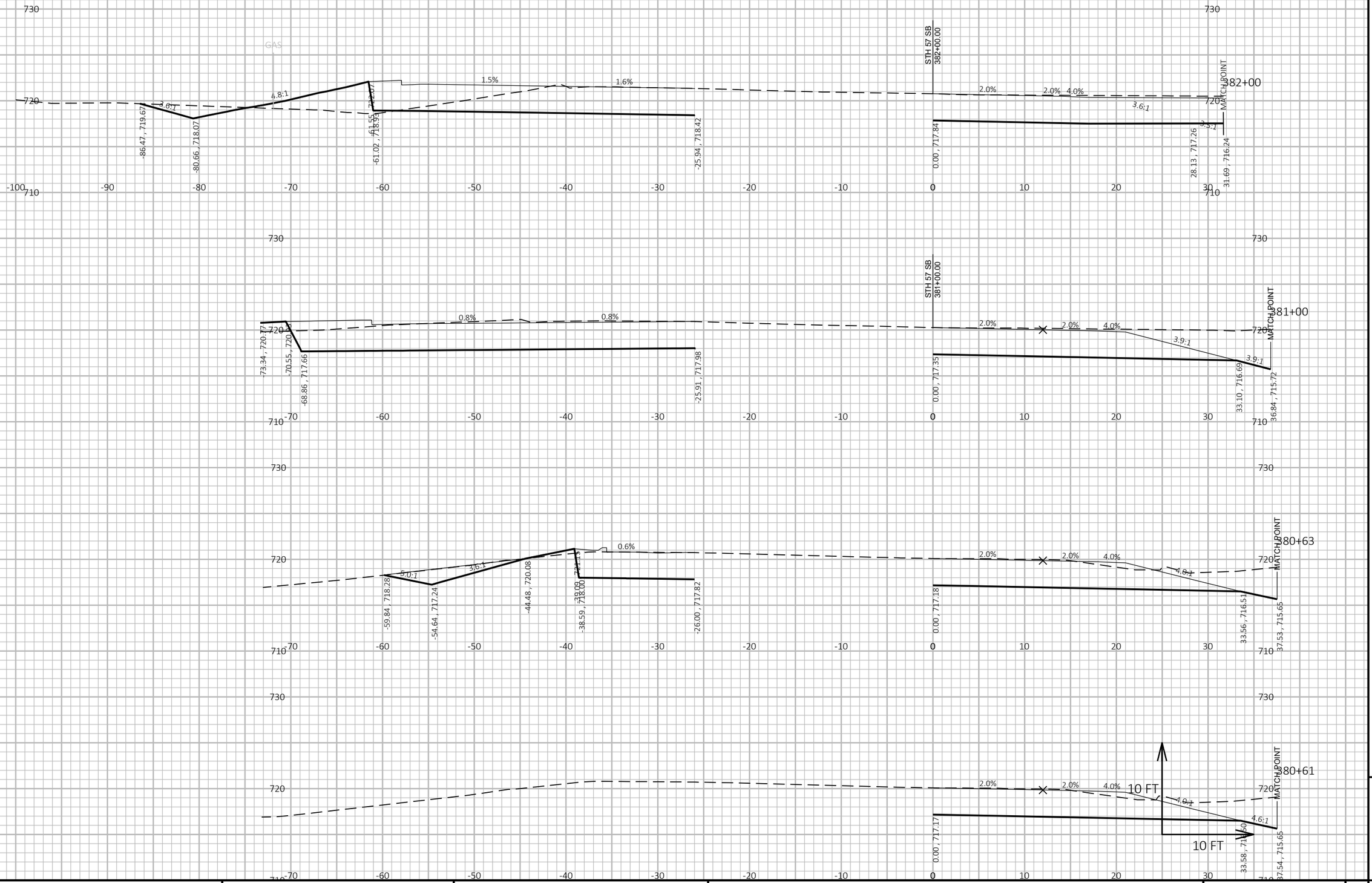
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 169	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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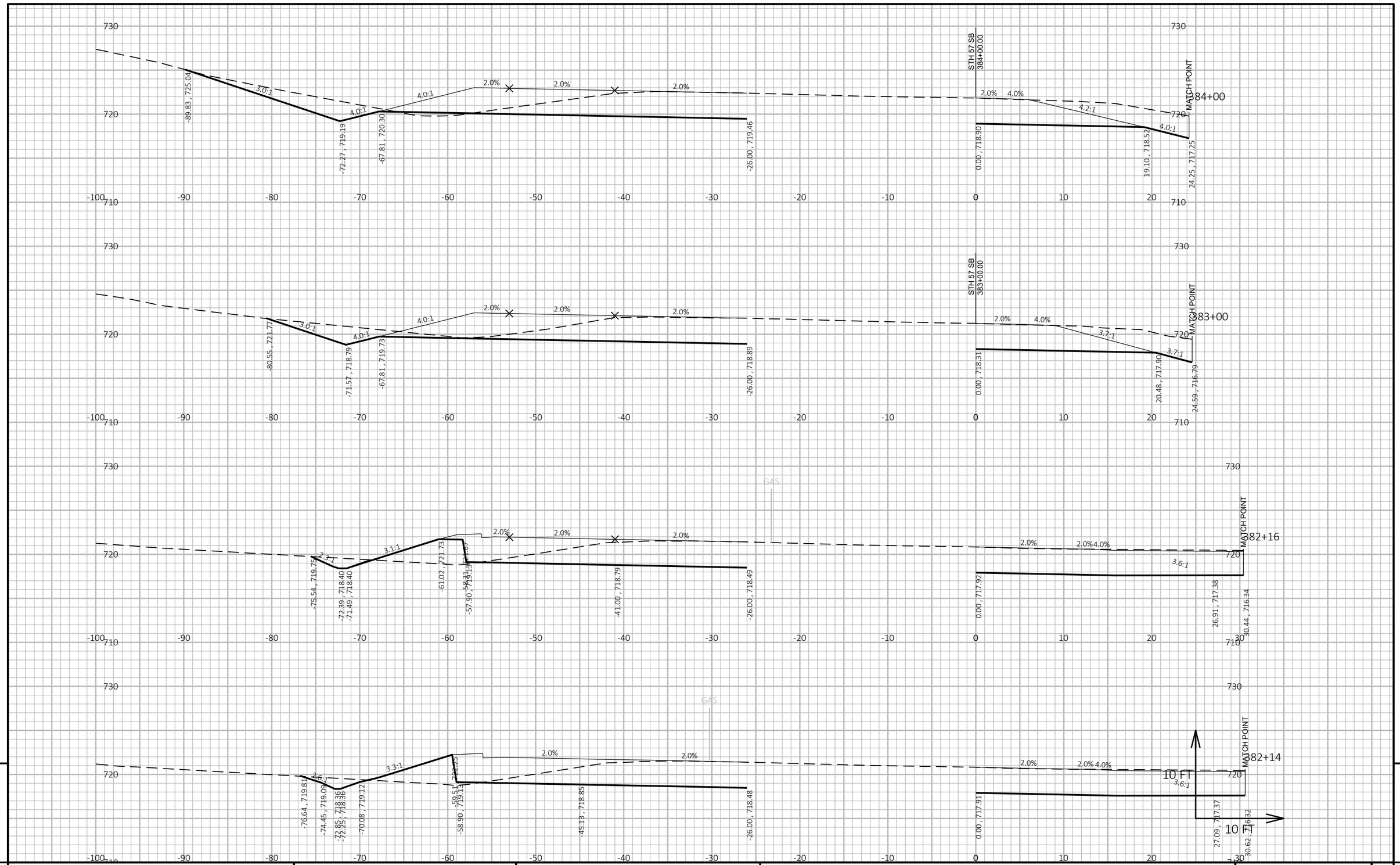
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 170	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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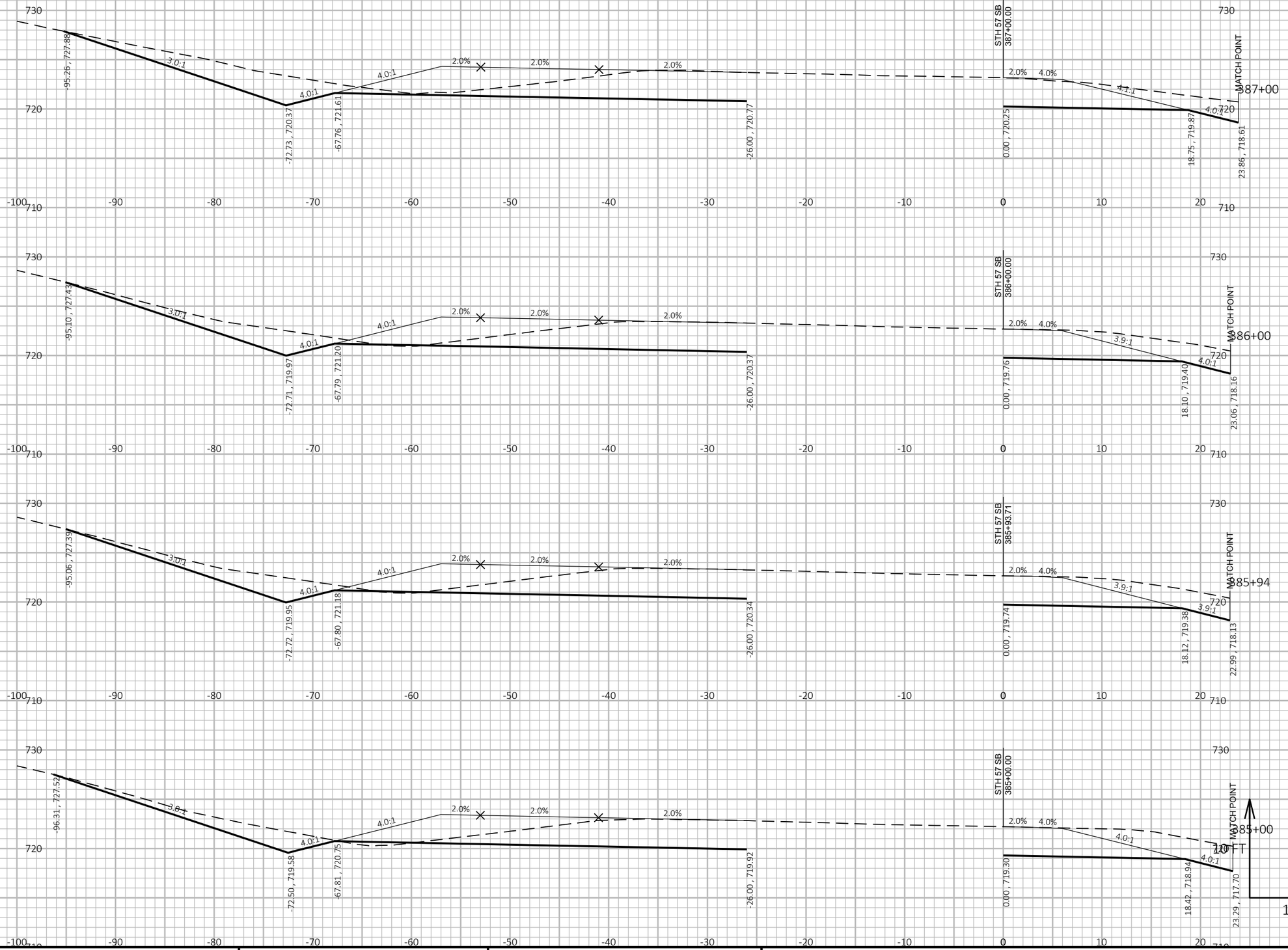
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 171	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090205-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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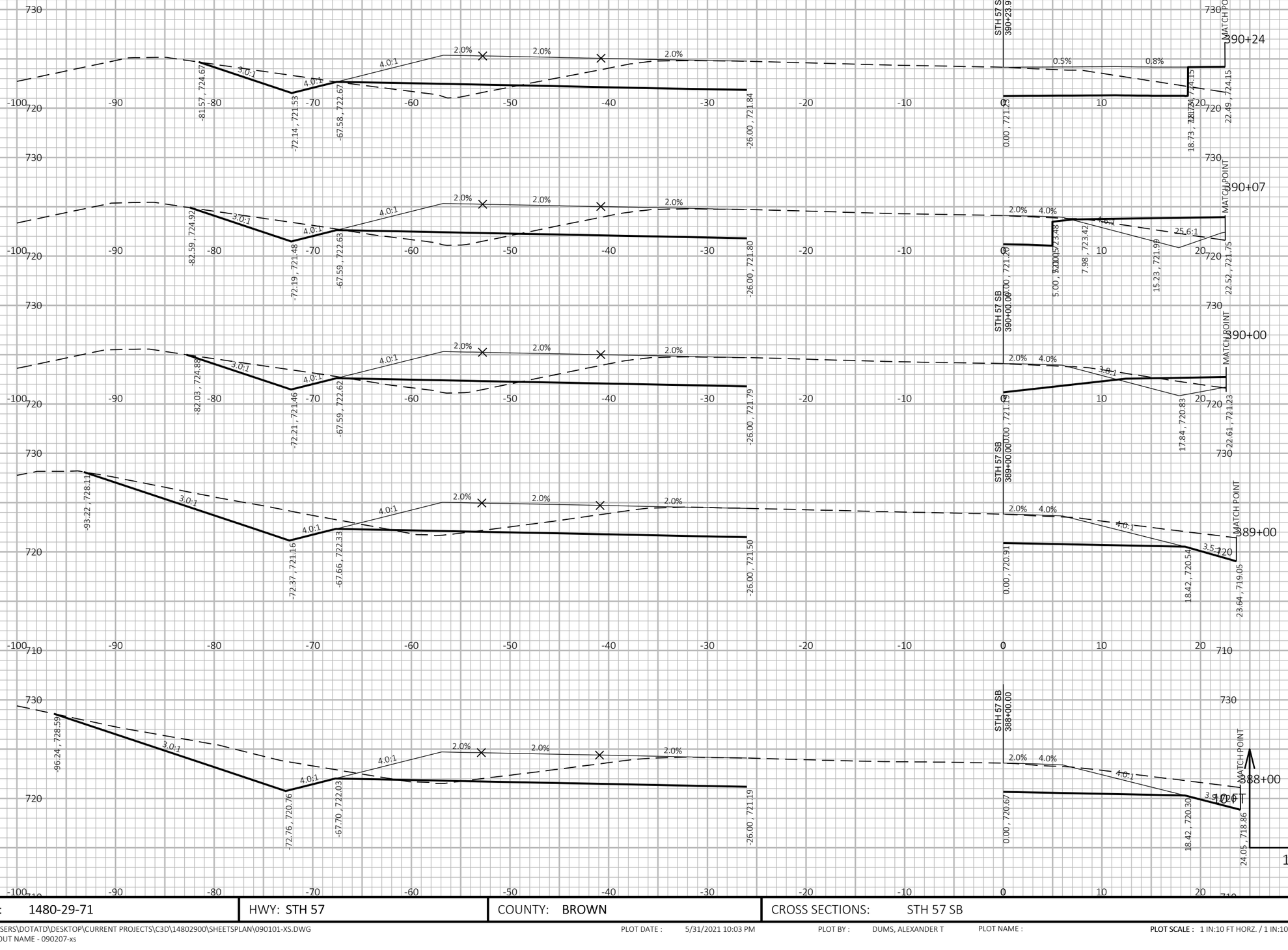
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 172	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090206-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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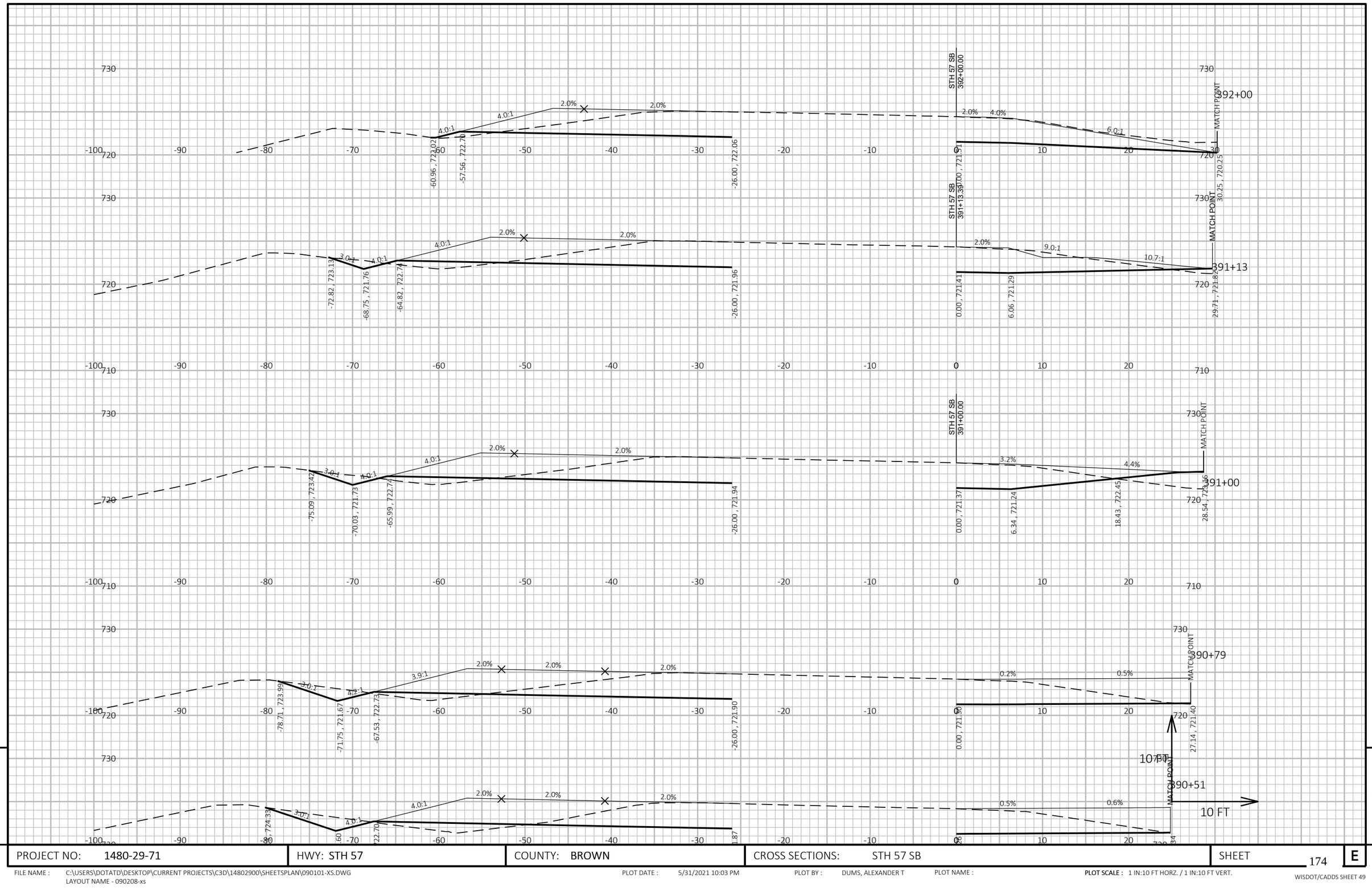
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 173	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090207-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

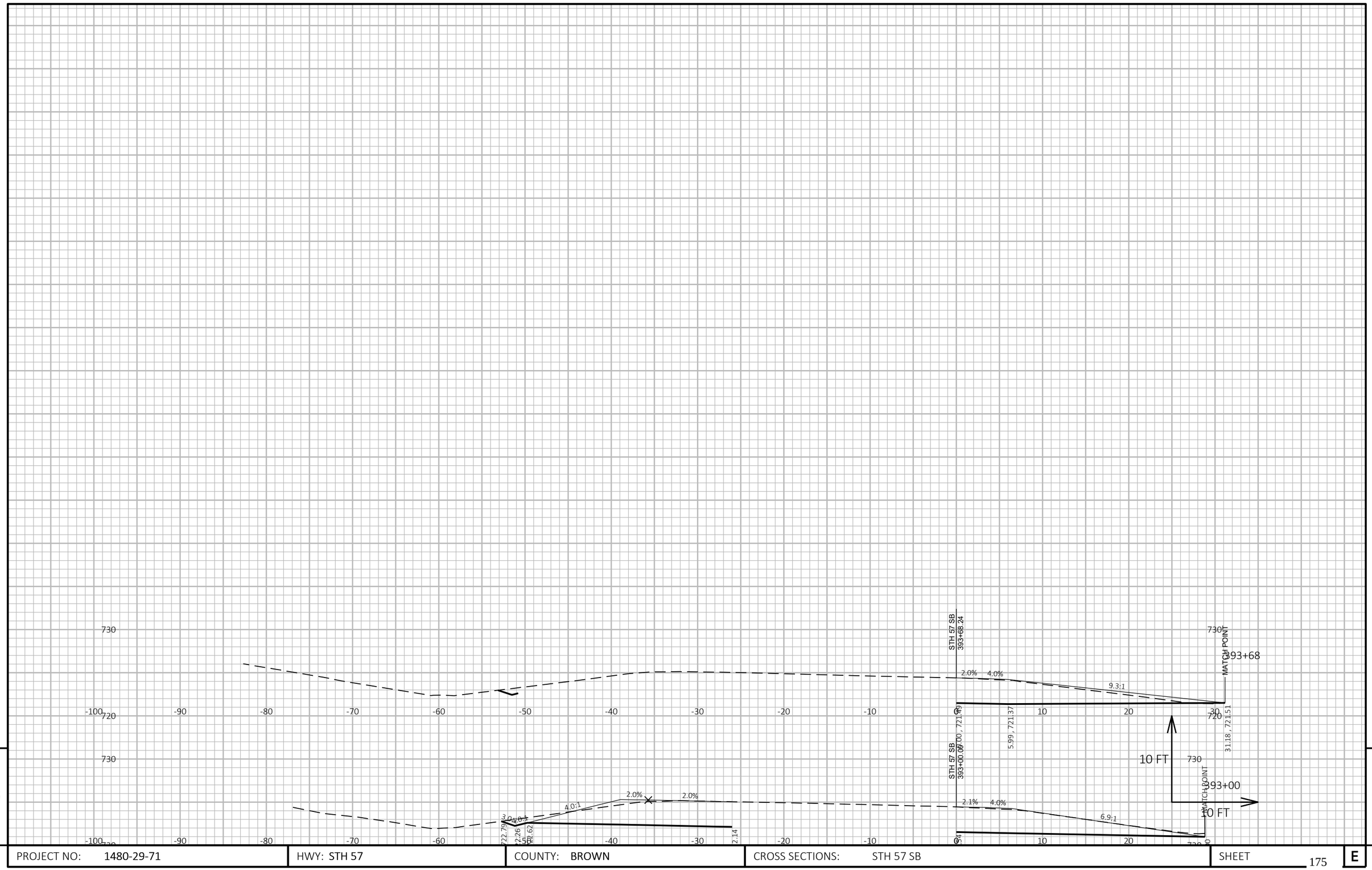


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 174

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090208-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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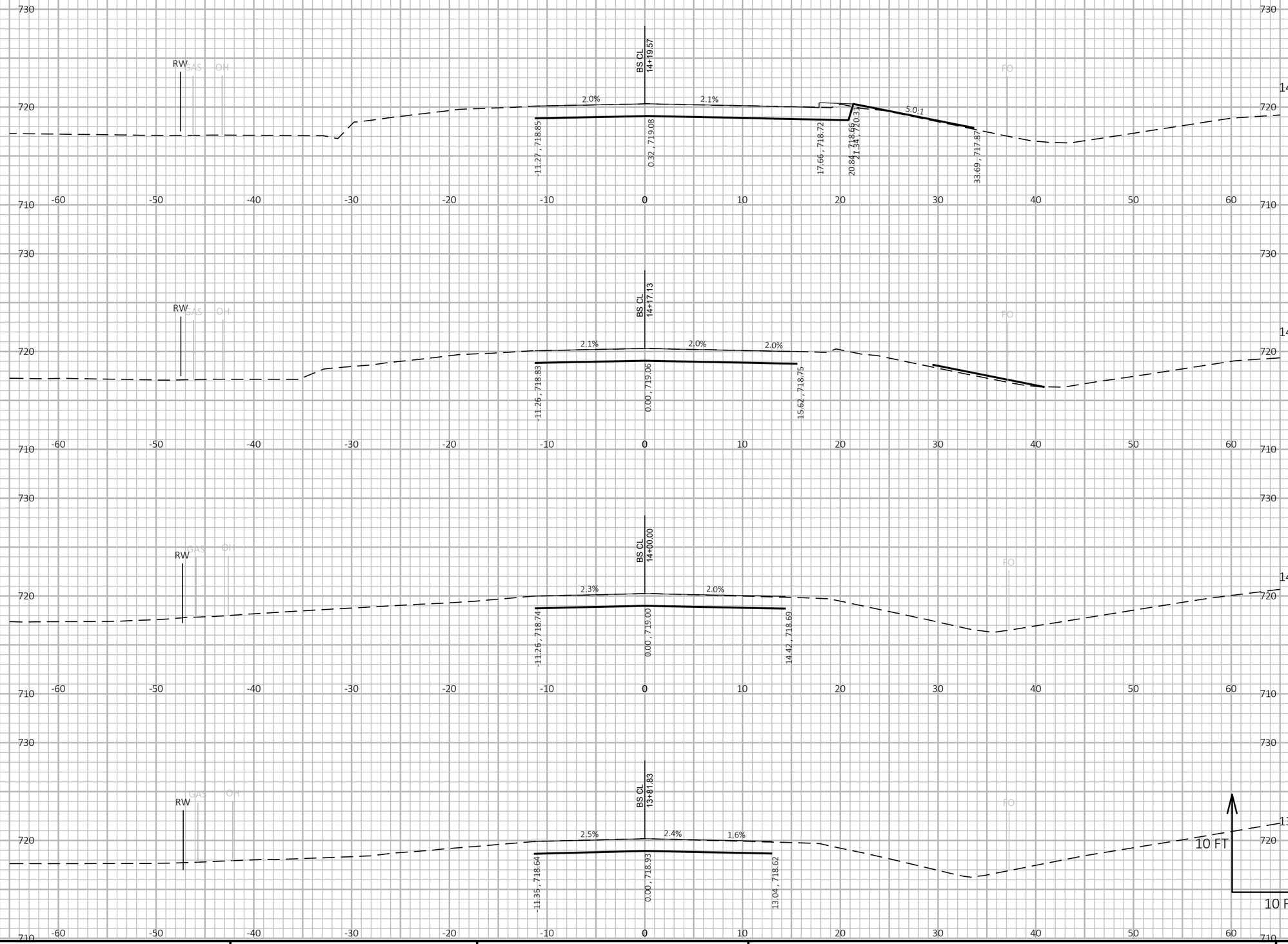
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: STH 57 SB	SHEET 175	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090209-xs

PLOT DATE : 5/31/2021 10:03 PM PLOT BY : DUMS, ALEXANDER T PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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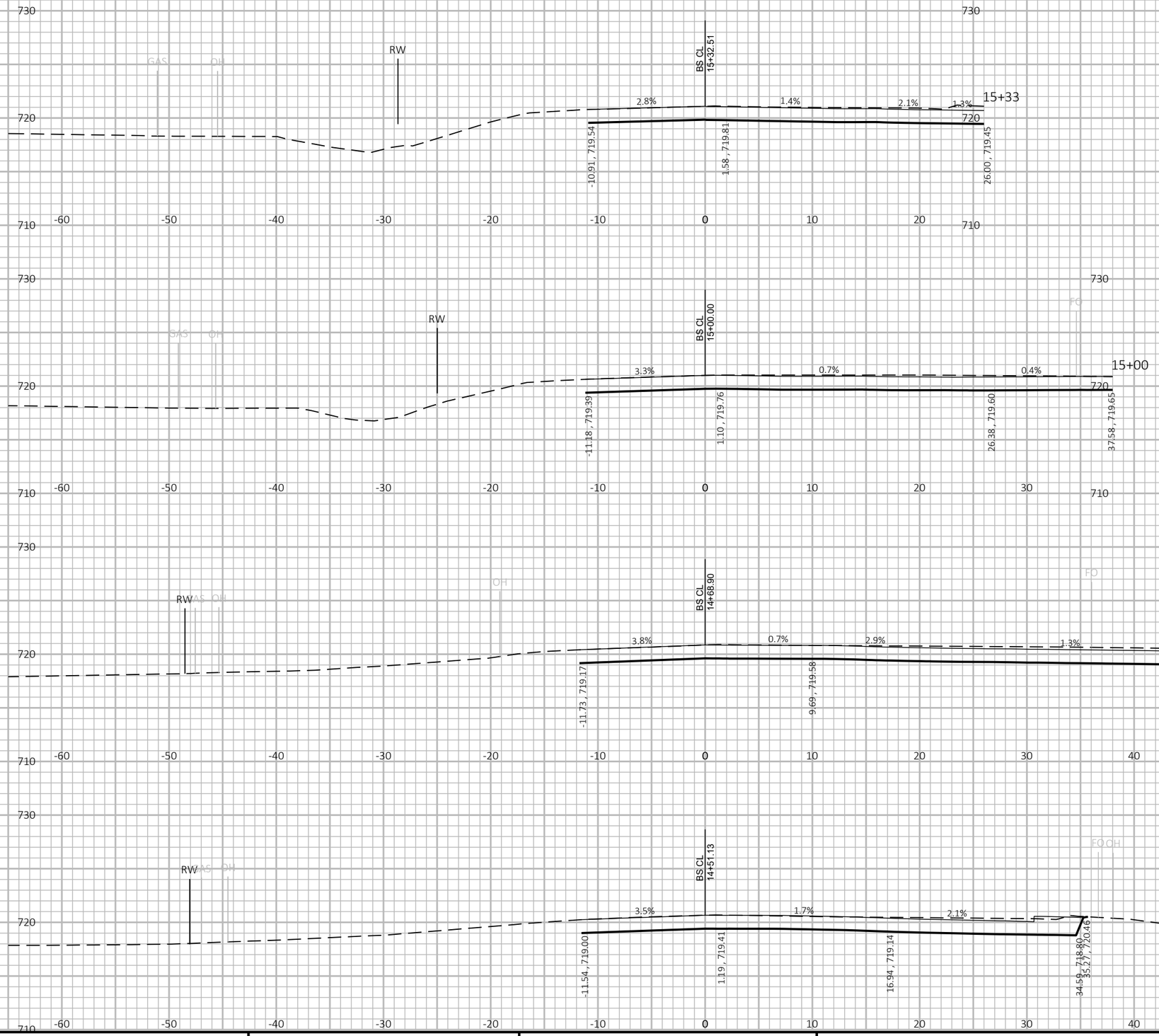
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: BAY SETTLEMENT ROAD	SHEET 176	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090301-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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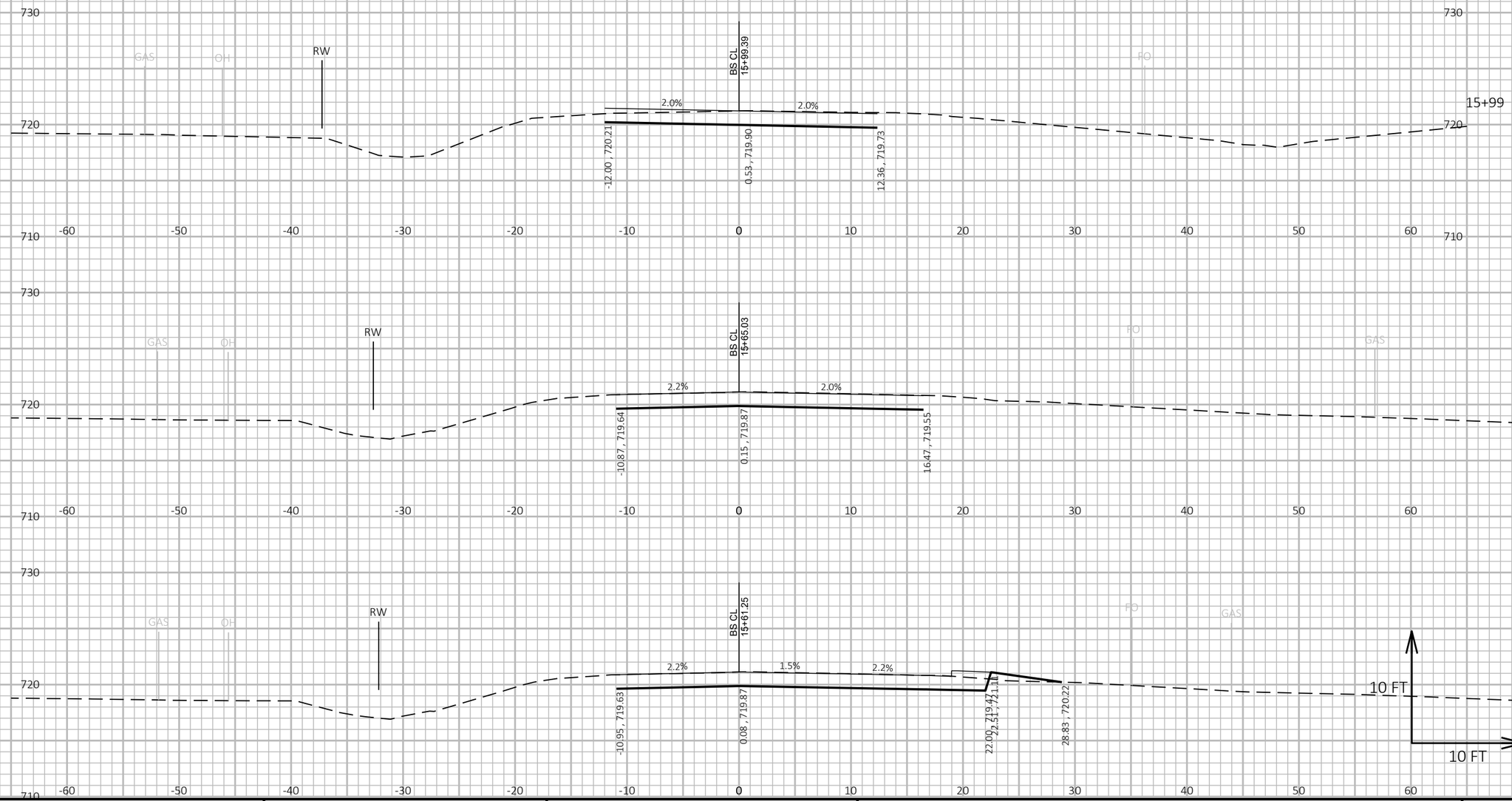
9

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: BAY SETTLEMENT ROAD	SHEET 177	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090302-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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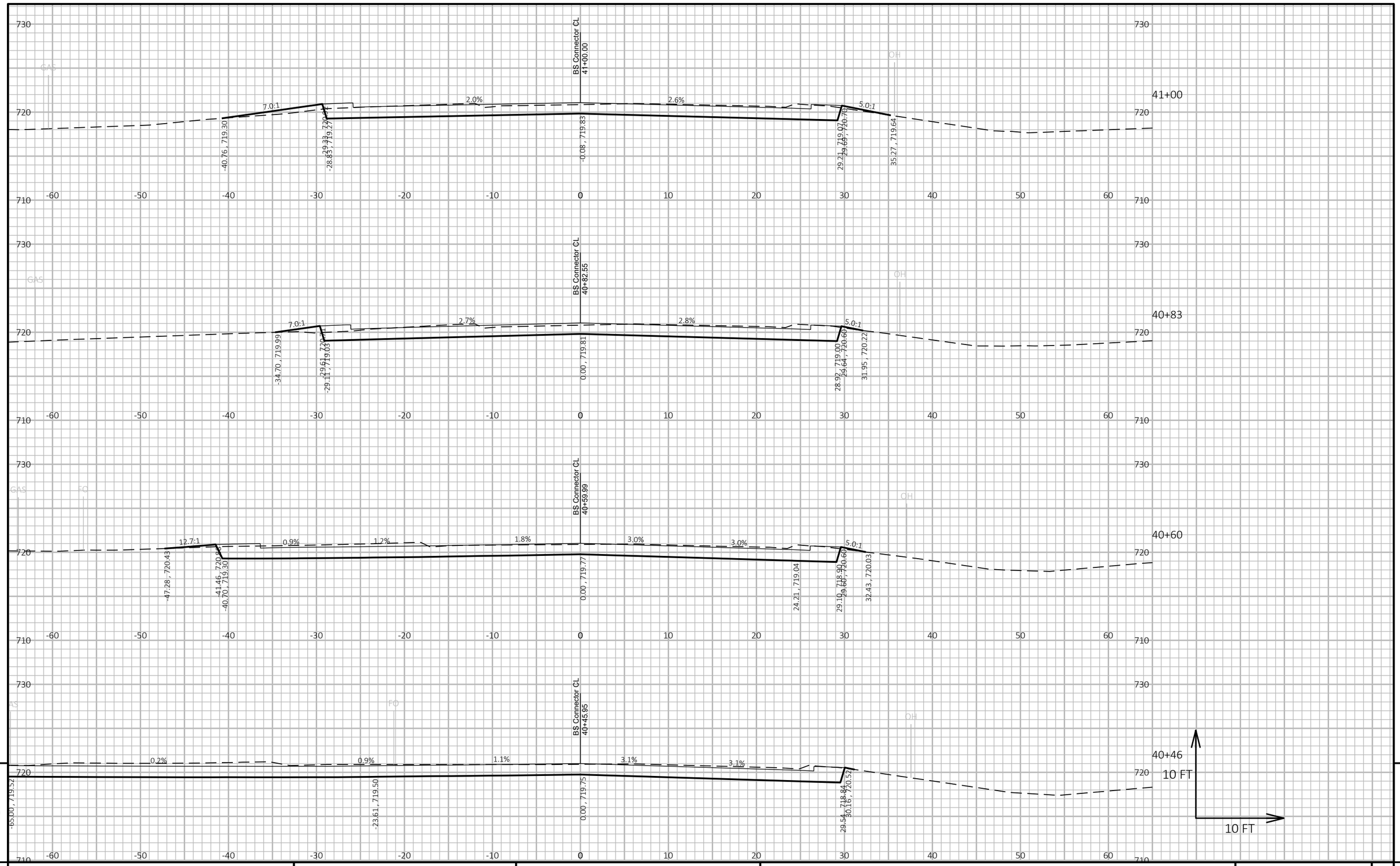
9

PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: BAY SETTLEMENT ROAD	SHEET 178	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090303-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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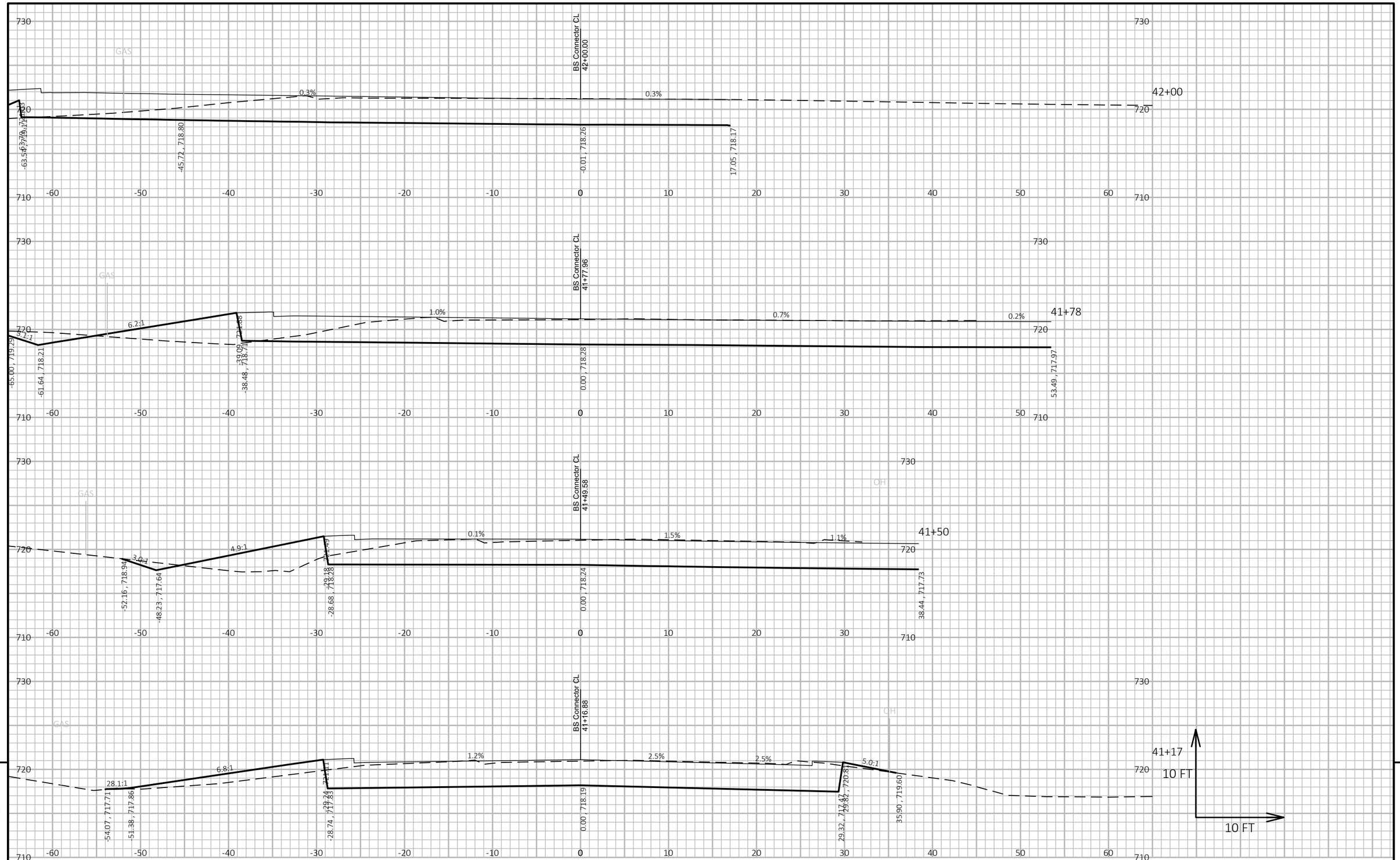
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: BAY SETTLEMENT ROAD CONNECTOR	SHEET 179	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090401-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

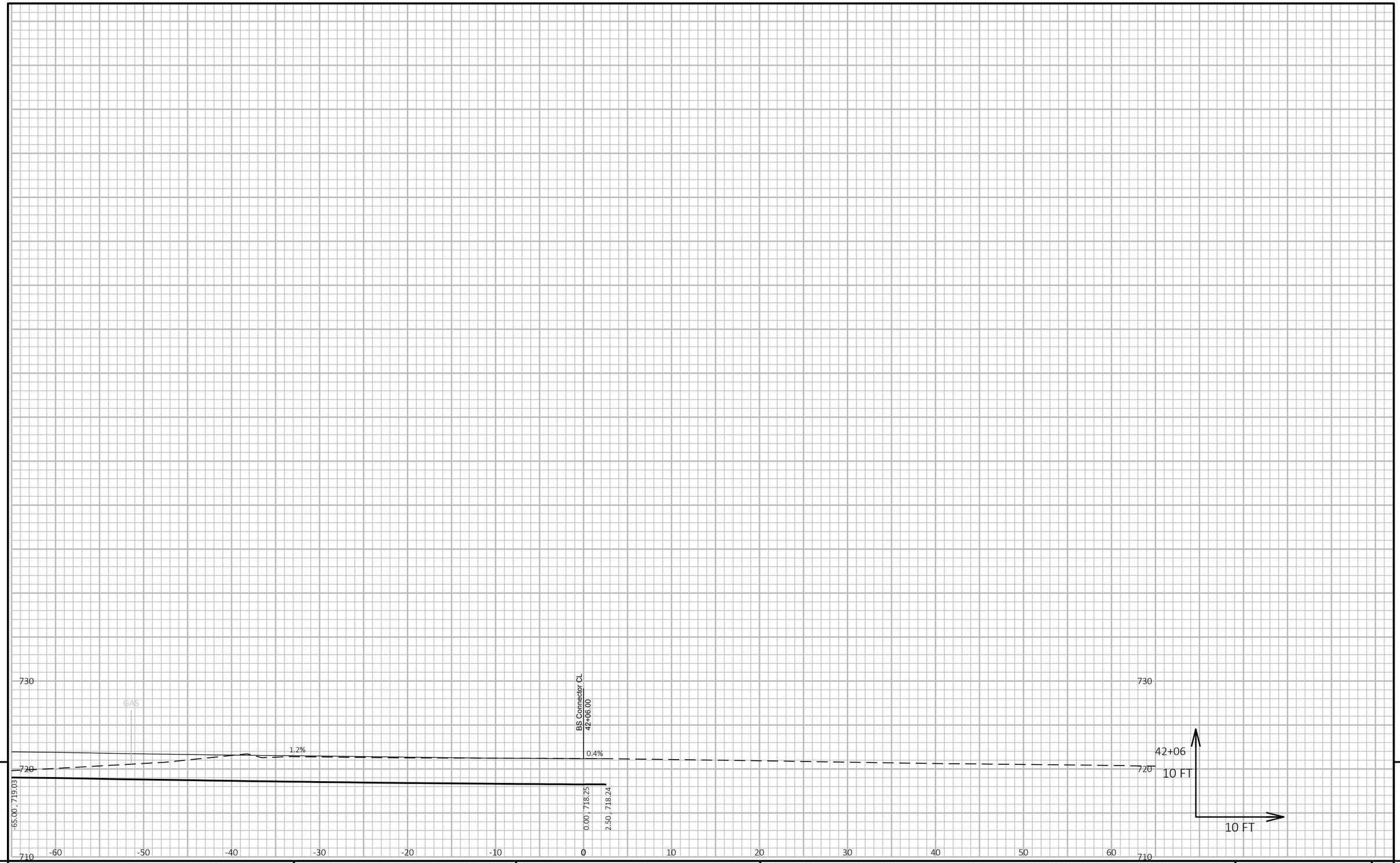


PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: BAY SETTLEMENT ROAD CONNECTOR	SHEET 180	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090402-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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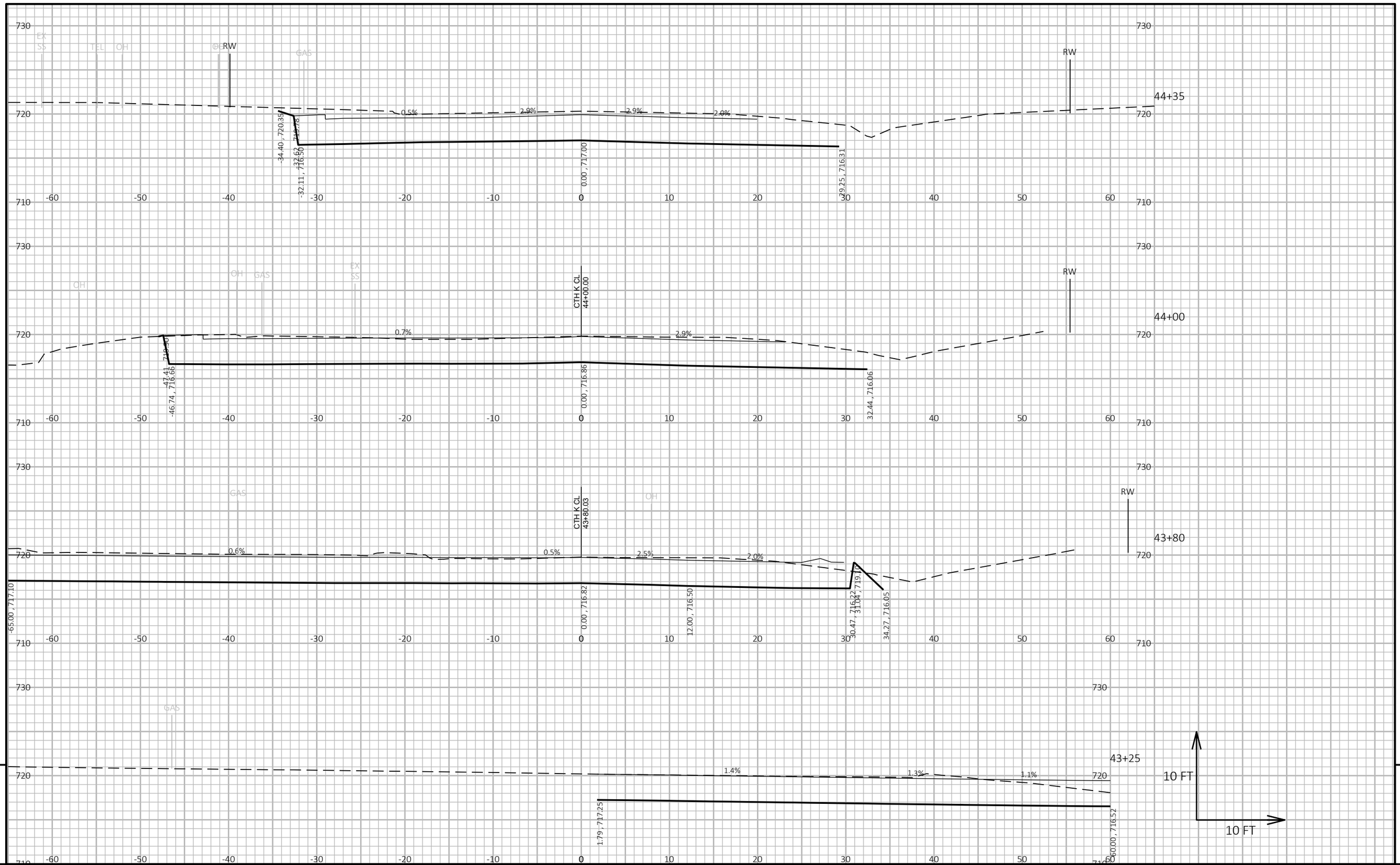
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: BAY SETTLEMENT ROAD CONNECTOR	SHEET 181	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090403-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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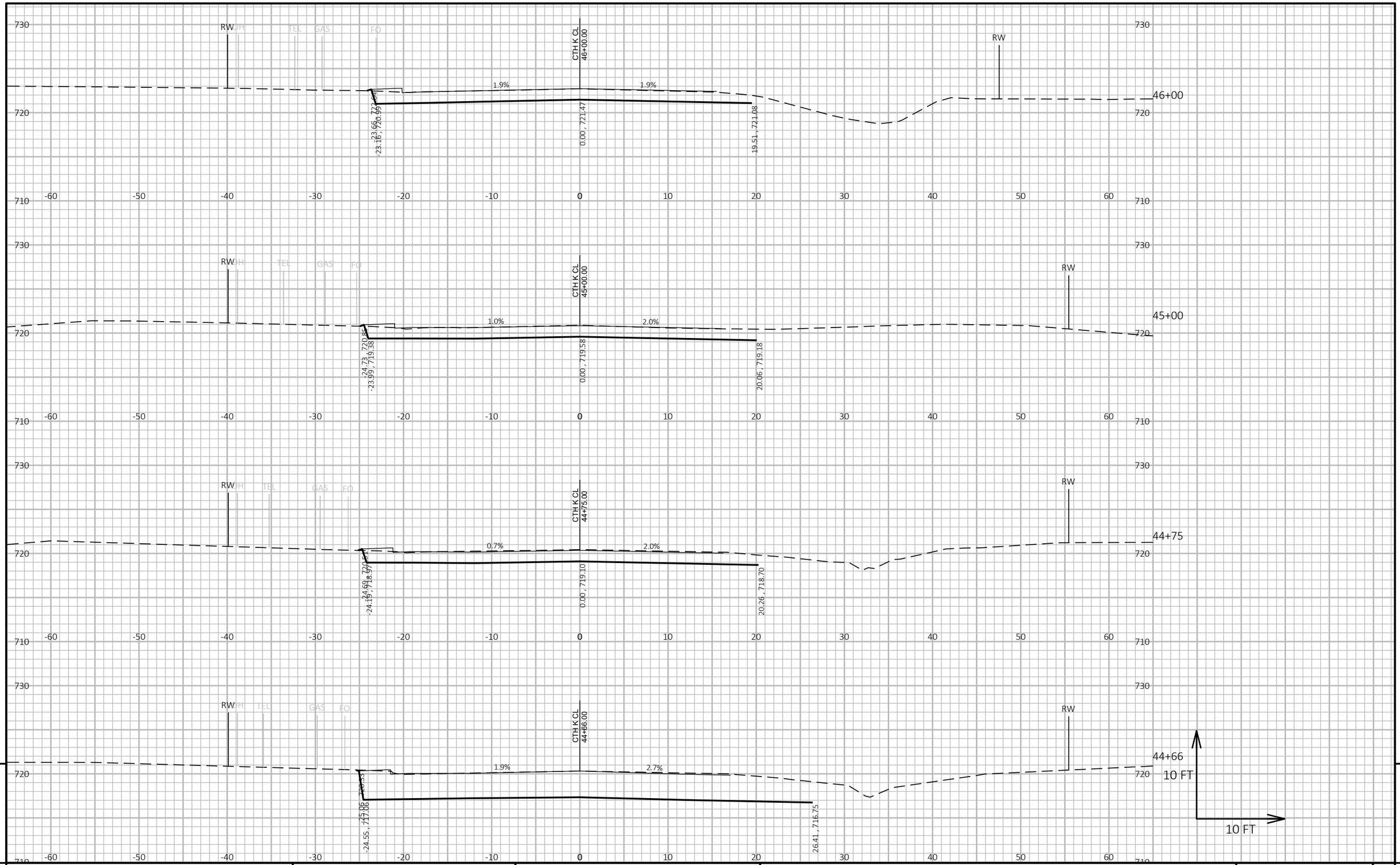
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: CTH K	SHEET 182	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090501-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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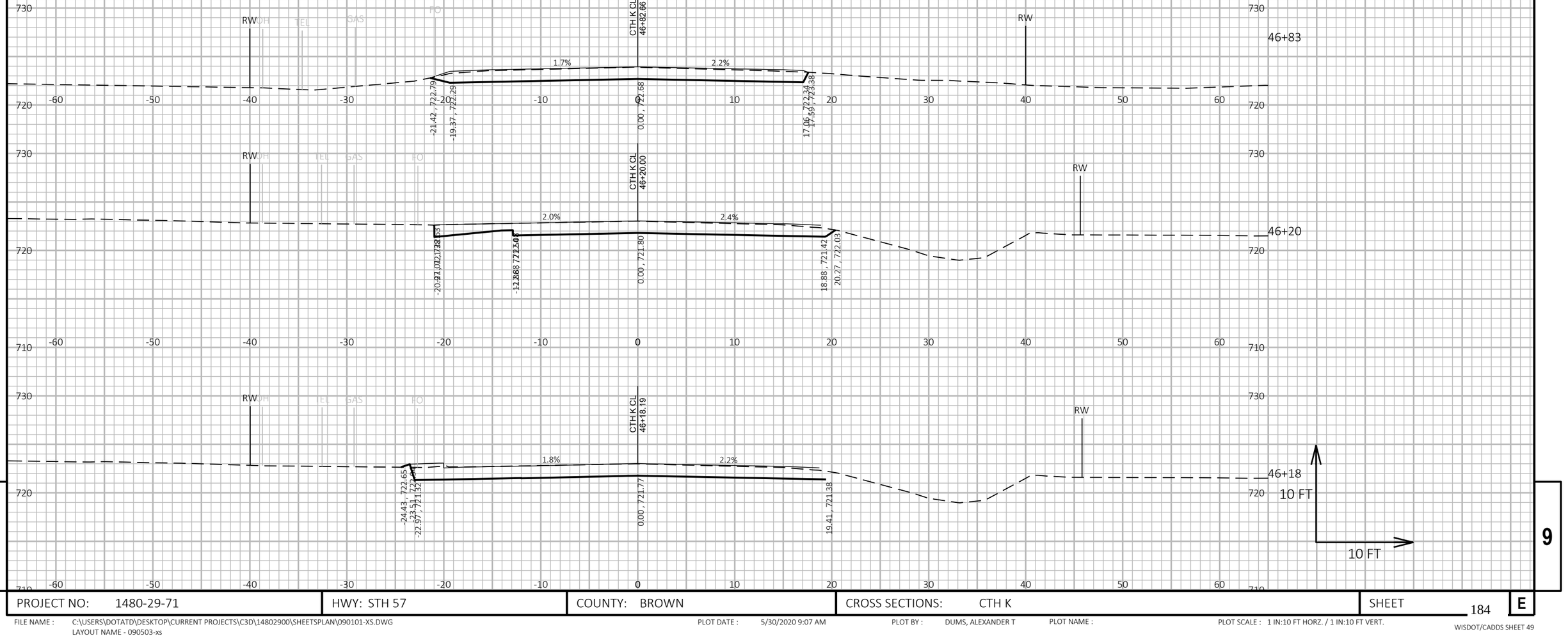
PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: CTH K	SHEET 183	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090502-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1480-29-71	HWY: STH 57	COUNTY: BROWN	CROSS SECTIONS: CTH K	SHEET 184	E

FILE NAME : C:\USERS\DOTATD\DESKTOP\CURRENT PROJECTS\C3D\14802900\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 090503-xs

PLOT DATE : 5/30/2020 9:07 AM PLOT BY : DUMS, ALEXANDER T PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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