WIS

NOVEMBER 2019

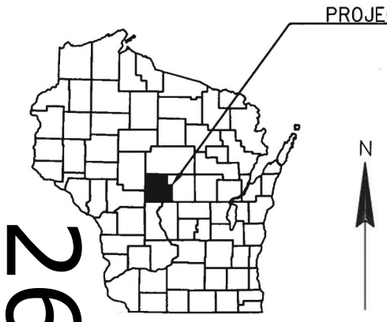
PROJECT ID: 6934-06-70, 6934-06-71

COUNTY: WOOD

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections & Details (Includes Erosion Control Plan)
Section No.	3	Estimate of Quantities
Section No.	3	Miscelloneous 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 = 250



DESIGN DESIGNATION

A.A.D.T.	(202D)	=	2,000
A.A.D.T.	(204D)	=	2,200
D.H.V.	(K100)	=	304
O.D.		=	59/41
T. (DHV)		=	15.1%
DESIGN SPEED		=	40 mph
ESALS		=	2,900,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (955.36)
- CULVERT (Profile View)

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

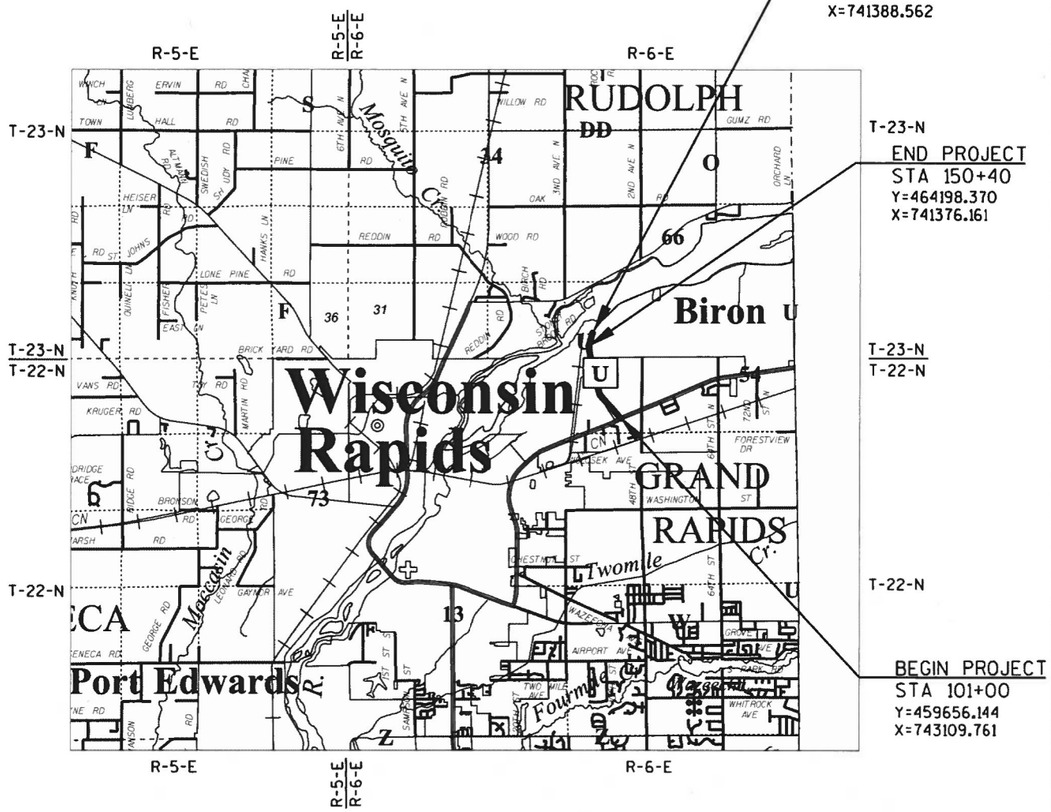
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6934-06-70	WISC 2019693	1
6934-06-71	———	———

V BIRON, CTH U
STH 54 - SOUTH BIRON DRIVE
CTH U
WOOD COUNTY

STATE PROJECT NUMBER
6934-06-70

V BIRON, CTH U
STH 54 - SOUTH BIRON DRIVE
CTH U
WOOD COUNTY

STATE PROJECT NUMBER
6934-06-71



LAYOUT
SCALE 0 2 MILE
TOTAL NET LENGTH OF CENTERLINE = 0.936 MI

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

ACCEPTED FOR
VILLAGE OF BIRON
(Signature)
4-22-2019 (Date) DPW (Title of Official)

ACCEPTED FOR
COUNTY OF WOOD
(Signature)
4-22-2019 (Date) Commissioner (Title of Official)

ORIGINAL PLANS PREPARED BY
OMNNI ASSOCIATES

WISCONSIN PROFESSIONAL ENGINEER
DAVID S. GALE
E-26283
Luxemburg, Wis.
4/17/19

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	OMNNI ASSOCIATES
Designer	OMNNI ASSOCIATES
Regional Examiner	J. SCHAEFFER
Regional Supervisor	R. STAFFORD

APPROVED FOR THE DEPARTMENT
DATE: 4/25/19 (SIGNATURE)

E

2

GENERAL NOTES

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

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

FILL AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENTS CONSTRUCTED FROM COMMON EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 25 PERCENT. ALL FILL VOLUMES SHOWN ARE THE ACTUAL VOLUMES.

ALL DISTURBED AREAS NOT OTHERWISE SURFACED ARE TO BE TOPSOILED, FERTILIZED, SEEDED AND MULCHED. DISTURBED AREAS ADJACENT TO LAWNS SHALL BE SEEDED WITH MIXTURE NO. 40, WETLANDS AND WETLAND DITCH BOTTOMS SHALL BE SEEDED WITH SEED MIX NO. 60, AND ALL OTHER AREAS SHALL BE SEEDED WITH MIXTURE NO. 20.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED WITH THE ENGINEER IN THE FIELD.

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

THE EXACT LOCATIONS OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. INSTALL EROSION CONTROL WITHIN R/W AND TEMPORARY LIMITED EASEMENTS.

CURB AND GUTTER RADII ARE SHOWN TO THE CURB FLANGE LINE.

WETLAND AREAS ARE SHOWN ON THE PLANS. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO WORK WITHIN THE SLOPE INTERCEPTS IN THE WETLAND AREAS.

A BUTT JOINT SHALL BE PLACED AT ALL LOCATION WHERE NEW PAVEMENT IS TO MATCH EXISTING PAVEMENT. ALL BUTT JOINTS SHALL BE SAWCUT OR REMOVED AS APPROVED BY THE ENGINEER TO PROVIDE A VERTICAL FACE.

ORDER OF "SECTION 2" SHEETS

SHEET TITLE
GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING PLAN
EROSION CONTROL PLAN
STORM SEWER PLAN
UTILITY PLANS
PERMANENT SIGNING AND PAVEMENT MARKING PLAN
TRAFFIC CONTROL PLAN
DETOUR PLAN

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

ABBREVIATIONS

CWPC	CONSOLIDATED WATER POWER COMPANY
WRWWLC	WISCONSIN RAPIDS WATER WORKS & LIGHT COMPANY

UTILITIES

ELECTRIC	CONSOLIDATED WATER POWER COMPANY TOM WITT OR BRAD MENNING 610 HIGH ST WISCONSIN RAPIDS, WI 54494 TEL: 715-422-3481 OR 715-422-3927 CELL: 715-213-3427 OR 715-573-1991 EMAIL: tom.witt@versoco.com
ELECTRIC & LIGHT	WISCONSIN RAPIDS WATER WORKS & LIGHT COMMISSION JACOB JOHNSON 221 16TH ST SOUTH WISCONSIN RAPIDS, WI 54495 TEL: 715-423-6328 EMAIL: JACOB.JOHNSON@wrwwlc.com
GAS	WE ENERGIES TRAVIS KAHL 1921 8TH ST SOUTH WISCONSIN RAPIDS, WI 54494 TEL: 715-421-7256 EMAIL: Travis.Kahl@we-energies.com
WATER & SANITARY	VILLAGE OF BIRON BILL VRUWINK 541 KAHOUN RD WISCONSIN RAPIDS, WI 54494 TEL: 715-323-2001 EMAIL: Bironsuper@gmail.com
ELECTRIC & LIGHTS	ND PAPER MITCH WAYNE 621 NORTH BIRON DR WISCONSIN RAPIDS, WI 54494 TEL: 715-422-2464 CELL: 715-213-5136 EMAIL: Mitch.wayne@ndpaper.com
COMMUNICATION	SOLARUS (DESIGN CONTACT) RICK SCHMUTZER 440 E GRAND AVE WISCONSIN RAPIDS, WI 54494 TEL: 715-421-8193 EMAIL: Schmutz@solarus.net
	SOLARUS (CONSTRUCTION CONTACT) DENNIS PIERCE 440 E GRAND AVE WISCONSIN RAPIDS, WI 54494 TEL: 715-421-8172 CELL: 715-572-0152 EMAIL: Pierce@solarus.net
	CHARTER COMMUNICATIONS JESSE GRUNY 503 E IVES ST #103 MARSHFIELD, WI 54449 TEL: 715-898-1616 CELL: 715-651-5605 EMAIL: Jesse.gruny@charter.com

OTHER CONTACTS

DNR LIAISON	WI DEPARTMENT OF NATURAL RESOURCES BRAD BETTHAUSER 473 GRIFFITH AVE WISCONSIN RAPIDS, WI 54494 TEL: 715-421-7851 EMAIL: Brad.Betthauser@wisconsin.gov
ND PAPER - BIRON DIVISION	MITCH WAYNE 621 N. BIRON DRIVE WISCONSIN RAPIDS, WI 54494 TEL: 715-422-2464 CELL: 715-213-5136 EMAIL: mitch.wayne@us.ndpaper.com

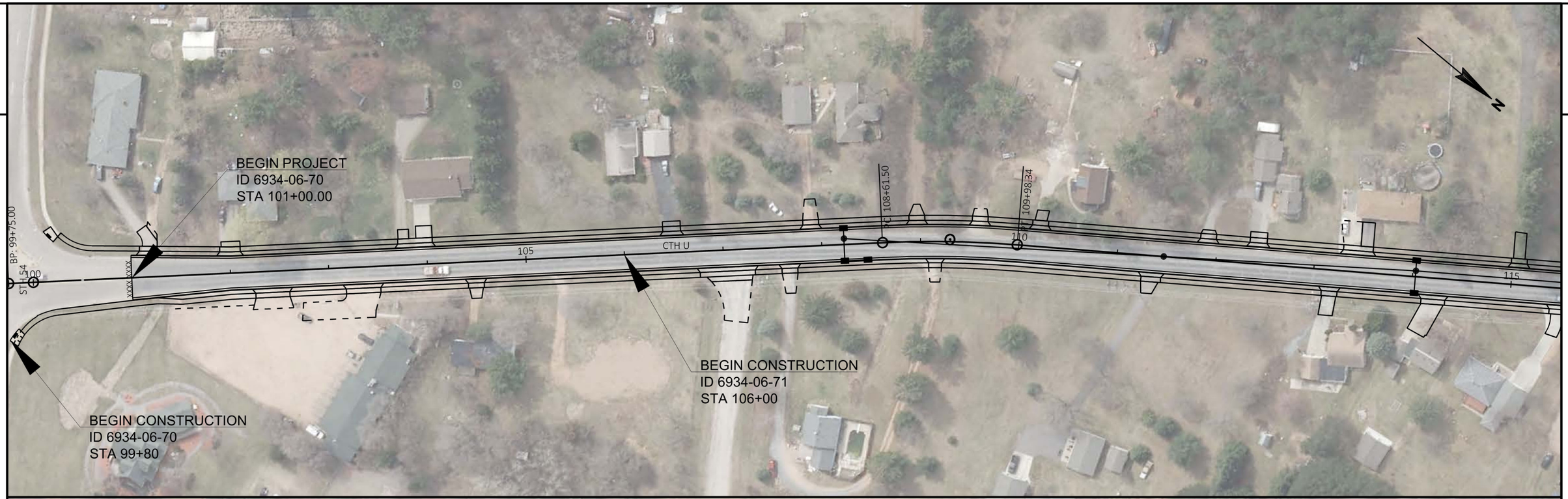
RUNOFF COEFFICIENT TABLE

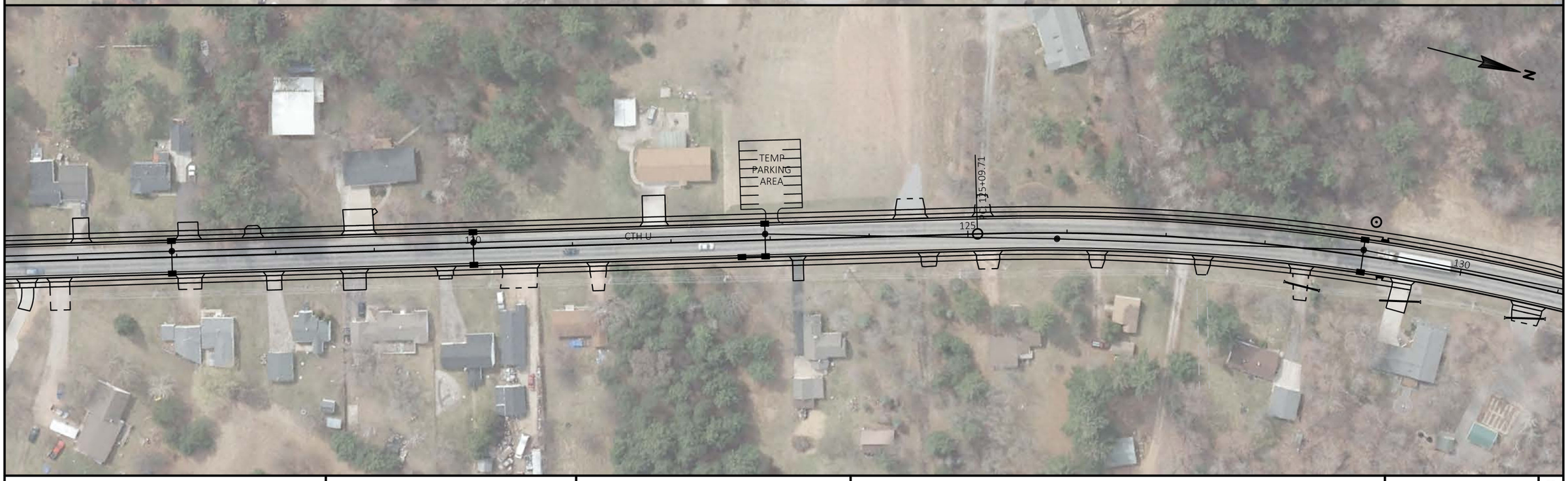
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08	0.16	0.22	0.12	0.20	0.27	0.15	0.24	0.33	0.19	0.28	0.38
	0.22	0.30	0.38	0.26	0.34	0.44	0.30	0.37	0.50	0.34	0.41	0.56
MEDIAN STRIP	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25	0.30
- TURF	0.24	0.26	0.30	0.25	0.28	0.33	0.26	0.30	0.37	0.27	0.32	0.40
SIDE SLOPE -			0.25			0.27			0.28			0.30
TURF			0.32			0.34			0.36			0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 9.58 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.18 ACRES

2





PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	PROJECT OVERVIEW - CTH U	SHEET 3	E

2

2

DEER ST

BUFFALO ST

PI: 133+07.35

PC: 133+76.44

PT: 134+06.04

135

CTH U

140

PI: 144+00.00

145

N

XXXX

XXXX

XXXX

PI: 32+00.01

S. BIRON DR

PT: 147+41.66

150

EP: 34+81.03

BEGIN 12-INCH WATERMAIN EXTENSION
(ID 6934-06-71)

END PROJECT
ID 6934-06-70
STA 150+40.00

CTH U

PI: 153+19.42

TEMPORARY MILL ACCESS

PC: 155+30.39

155

PT: 157+25.82

PI: 158+40.28

160

PC: 160+13.93

MATCH LINE
STA 160+13.93

END CONSTRUCTION
ID 6934-06-71
STA 160+83.78

MATCH LINE
STA 160+13.93

PC: 160+13.93

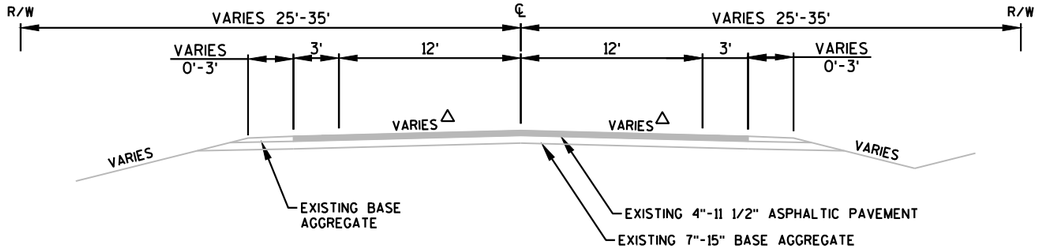
EP: 162+05.15

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	PROJECT OVERVIEW - CTH U	SHEET 4	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-020201-PO.DWG
LAYOUT NAME - 69340670-020202-po

PLOT DATE : 4/12/2019 11:27 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : ##########

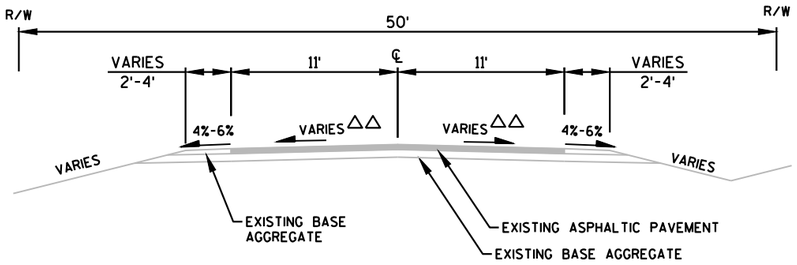
WISDOT/CADDS SHEET 44



△ VARIES: -6% TO +2% LT SIDE
0% TO -5% RT SIDE

TYPICAL EXISTING SECTION FOR CTH U

STA 101+00 TO STA 150+40

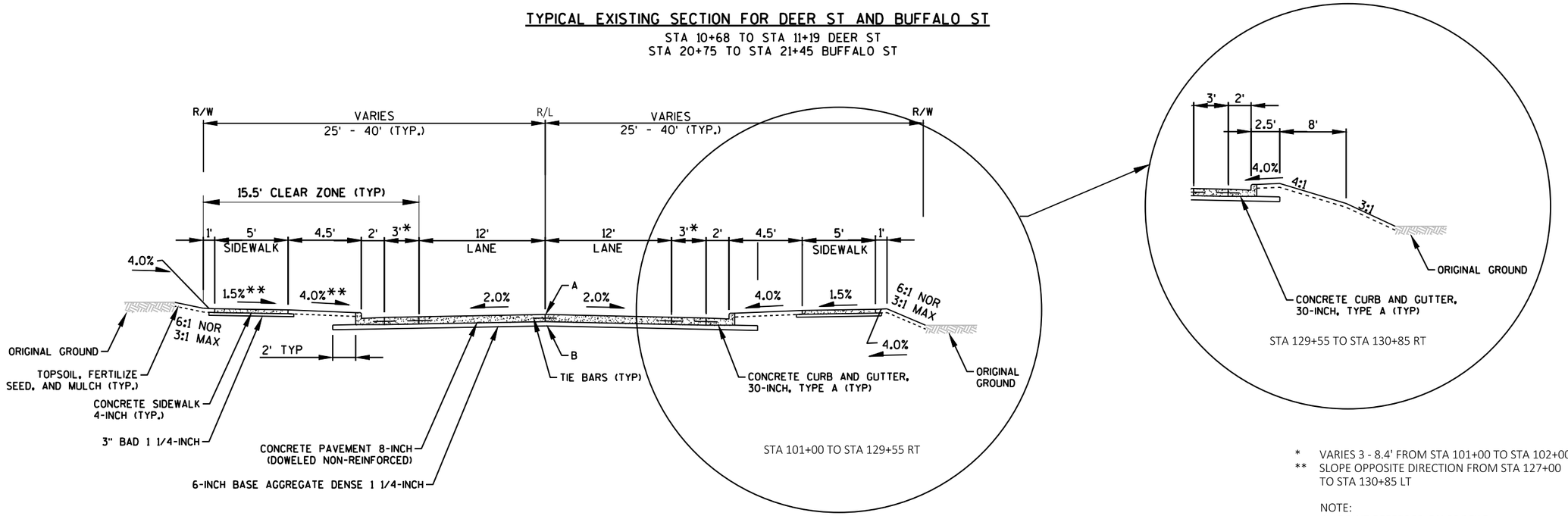


△△ VARIES: DEER ST.
1.4 - 3.1% LT
1.3 - 3.3% RT

BUFFALO ST
-0.3% - +0.8%
-2.6% - 5.4%

TYPICAL EXISTING SECTION FOR DEER ST AND BUFFALO ST

STA 10+68 TO STA 11+19 DEER ST
STA 20+75 TO STA 21+45 BUFFALO ST



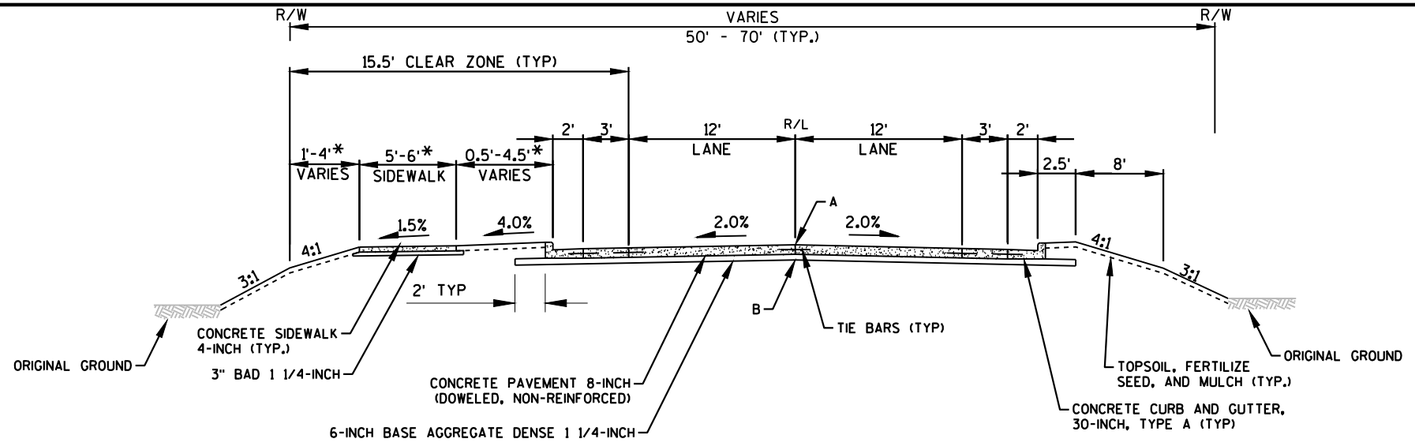
TYPICAL FINISHED SECTION

STA 101+00 TO STA 130+85 (CTH U)
STA 31+81 TO STA 34+66 (S. BIRON DR.)

* VARIES 3 - 8.4' FROM STA 101+00 TO STA 102+00
** SLOPE OPPOSITE DIRECTION FROM STA 127+00 TO STA 130+85 LT

NOTE:
A - POINT REFERRED ON PROFILE
B - POINT REFERRED ON CROSS SECTIONS

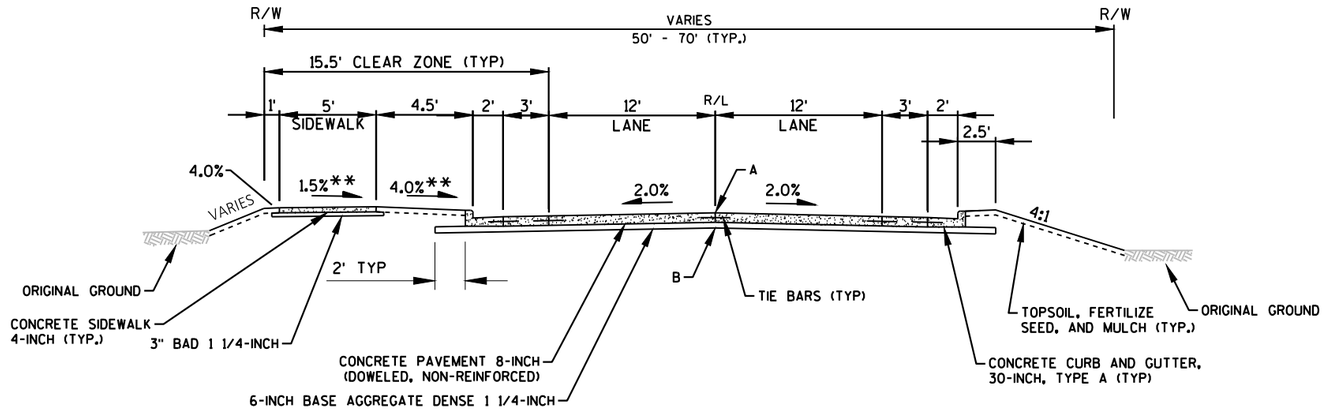
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	TYPICAL SECTIONS	SHEET 5	E



TYPICAL FINISHED SECTION FOR CTH U

STA 130+85 TO STA 135+25

* SEE PLAN VIEW AND CROSS SECTIONS

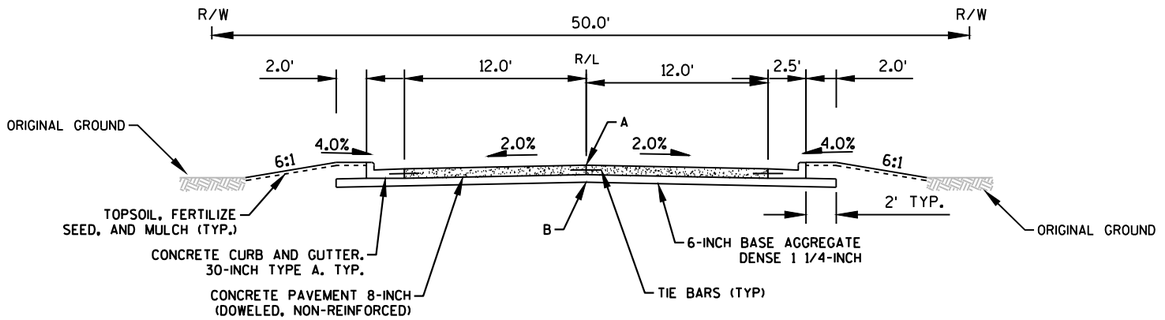


** SLOPE OPPOSITE DIRECTION FROM STA 135+25 TO STA 136+00 LT.

NOTE:
A - POINT REFERRED ON PROFILE
B - POINT REFERRED ON CROSS SECTIONS

TYPICAL FINISHED SECTION FOR CTH U

STA 135+25 TO STA 150+30



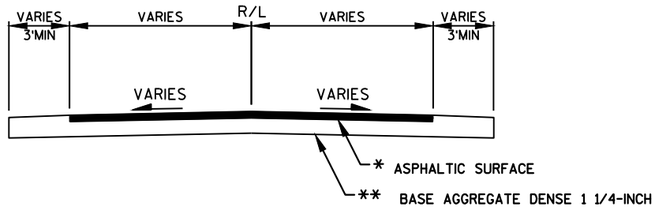
NOTE:
A - POINT REFERRED ON PROFILE
B - POINT REFERRED ON CROSS SECTIONS

TYPICAL FINISHED SECTION FOR DEER ST AND BUFFALO ST

STA 10+78 TO STA 11+19 DEER ST
STA 20+85 TO STA 21+45 BUFFALO ST

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	TYPICAL SECTIONS	SHEET 6	E

2

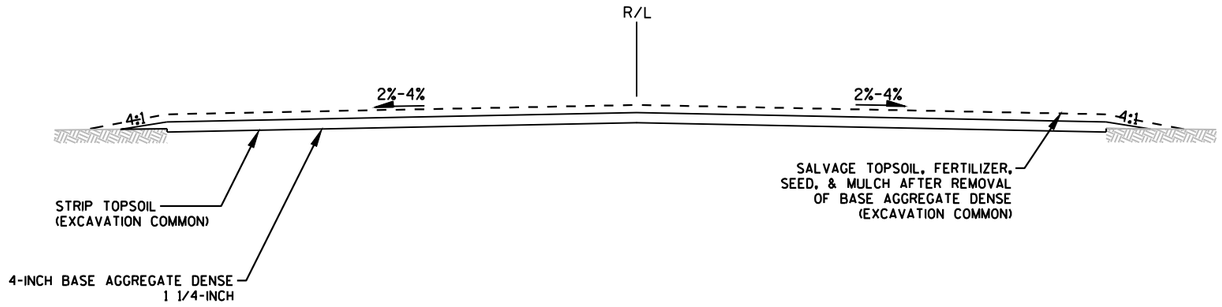


TYPICAL ASPHALT TRANSITION

STA 150+30.00 TO STA 150+40.00 CTH U
STA 31+75.00 TO STA 31+80.00 S. BIRON DR.
STA 10+68.00 TO STA 10+78.00 DEER ST.
STA 20+75.00 TO STA 20+85.00 BUFFALO ST.

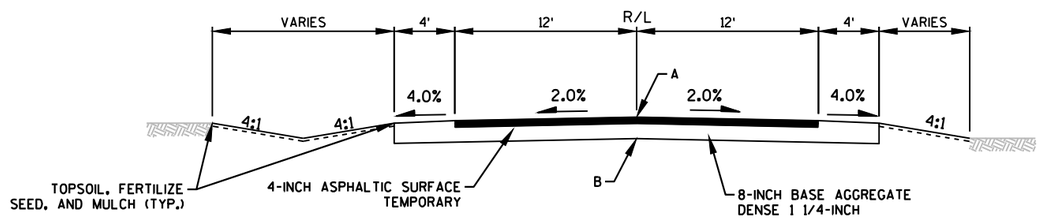
* CTH U & S. BIRON DR 6-INCHES ASPHALTIC SURFACE
DEER ST. & BUFFALO ST. 4-INCHES ASPHALTIC SURFACE

** CTH U & S. BIRON DR. 11-INCHES BASE AGGREGATE DENSE 1 1/4-INCH
DEER ST. & BUFFALO ST. 10-INCHES BASE AGGREGATE DENSE 1 1/4-INCH



TYPICAL FINISHED SECTION FOR TEMP. PARKING AREA

STA 0+00 TO STA 0+69



IN CUT

IN FILL

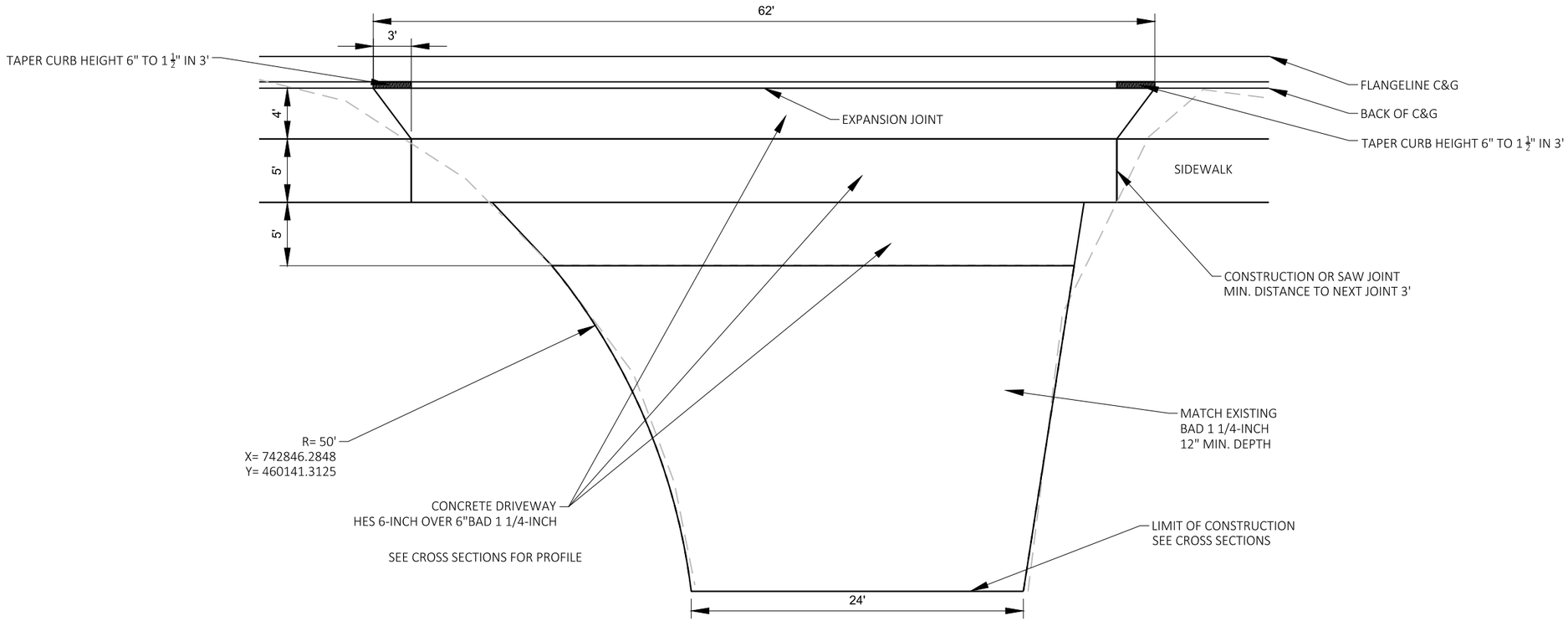
NOTE:
A - POINT REFERRED ON PROFILE
B - POINT REFERRED ON CROSS SECTIONS

TYPICAL FINISHED SECTION FOR TEMPORARY MILL ACCESS ROAD

STA 0+12 TO STA 2+80

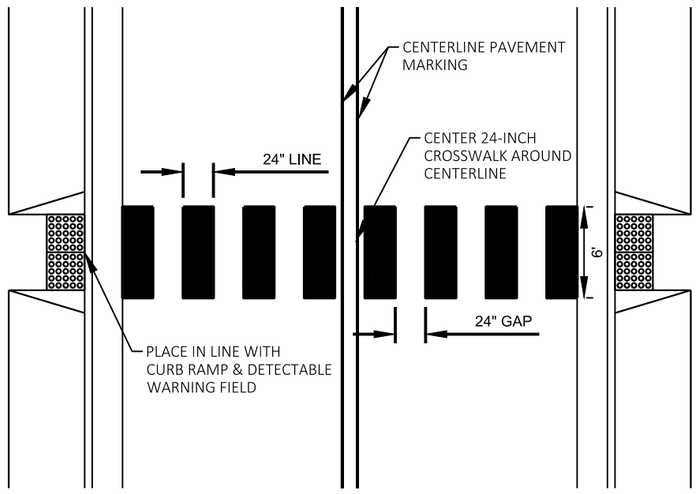
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-020301-TS.DWG
LAYOUT NAME - 69340670-020303-ts
PLOT DATE : 4/16/2019 10:22 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

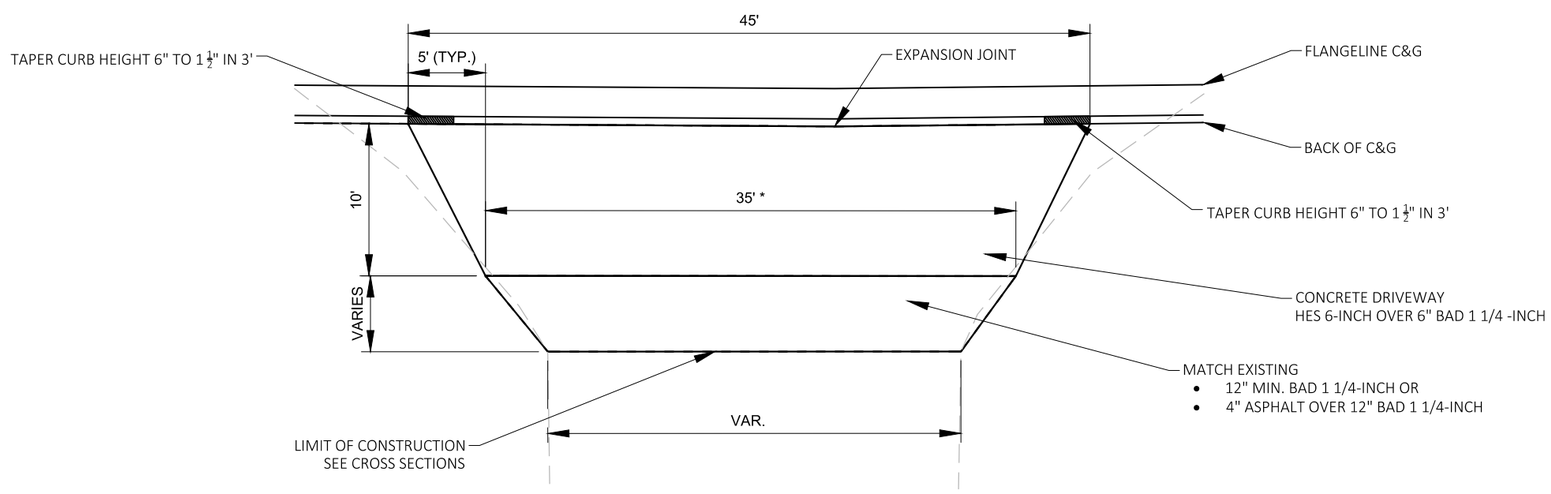


COMMERCIAL ENTRANCE WITH SIDEWALK DETAIL

STA 107+04 RT



MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH



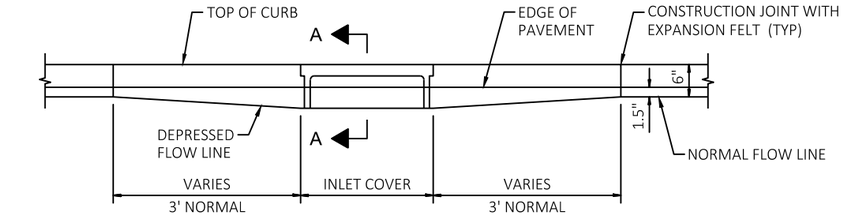
COMMERCIAL ENTRANCE WITHOUT SIDEWALK DETAIL

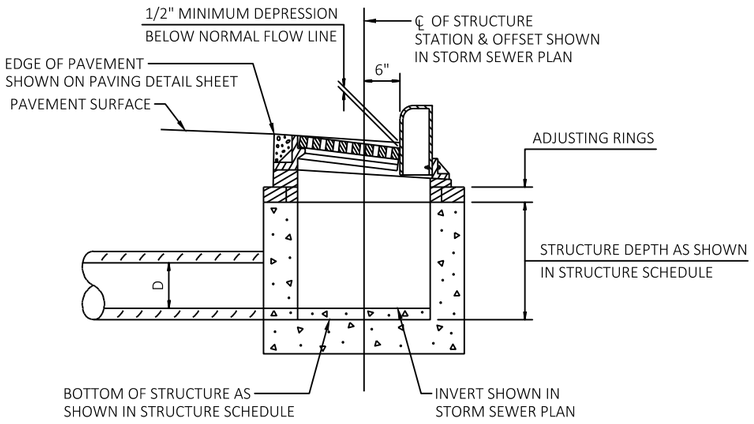
STA 132+84 RT*
STA 143+94 RT
STA 147+48 RT

*30' AT STA 132+84 RT

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CONSTURCTION DETAIL	SHEET 8	E

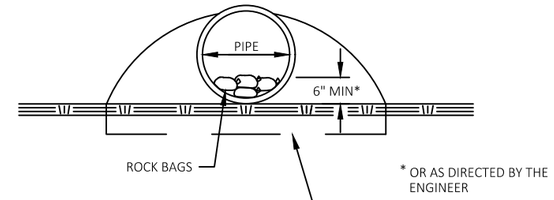
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021001-CD.DWG
LAYOUT NAME - 69340670-021001-cd
PLOT DATE : 8/26/2019 8:03 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



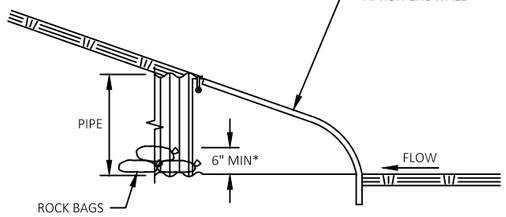


SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

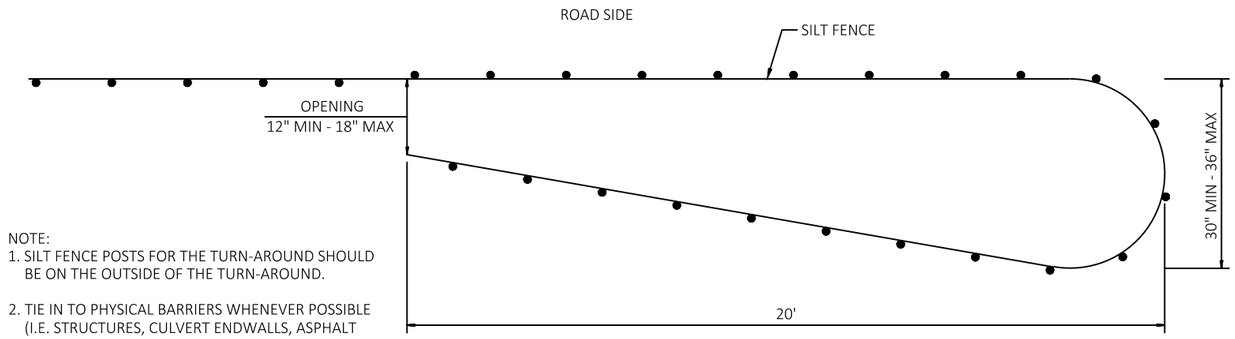


END VIEW



SIDE VIEW

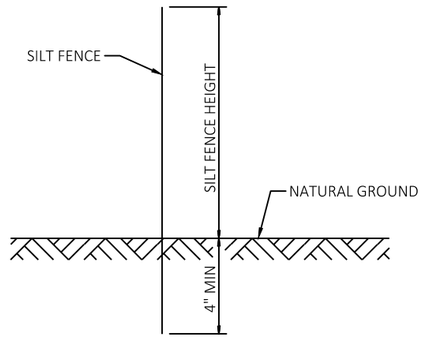
DRIVE CULVERT PIPE CHECKS



NOTE:
1. SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.

2. TIE IN TO PHYSICAL BARRIERS WHENEVER POSSIBLE (I.E. STRUCTURES, CULVERT ENDWALLS, ASPHALT DRIVES, ETC.)

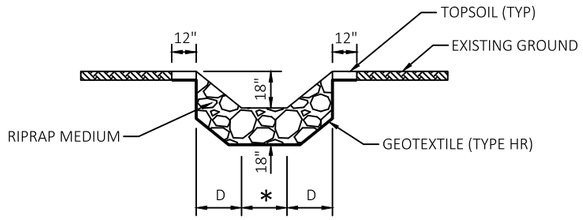
PLAN VIEW



SIDE VIEW

SILT FENCE TURN-AROUND DETAIL

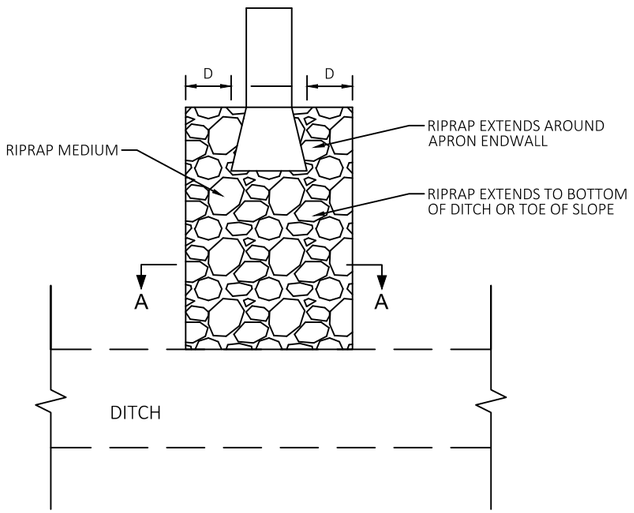
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CONSTURCTION DETAIL	SHEET 9	E



SECTION A-A

* APRON ENDWALL WIDTH

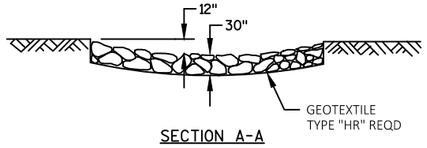
D = PIPE DIAMETER



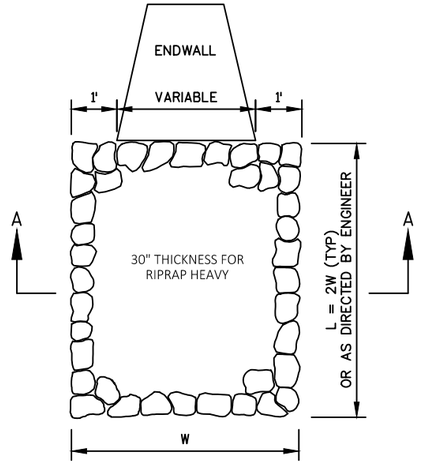
PLAN VIEW

RIPRAP TREATMENT AT STORM SEWER OUTFALLS

STA 32+25, S. BIRON DR. LT.
STA 33+25, S. BIRON DR. LT.

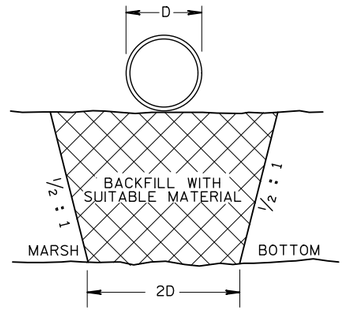


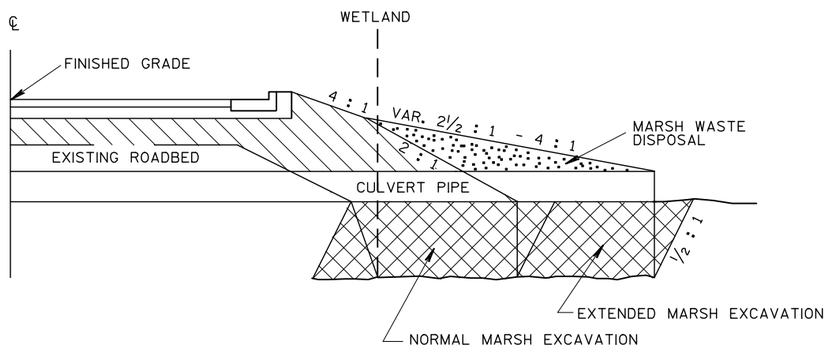
SECTION A-A



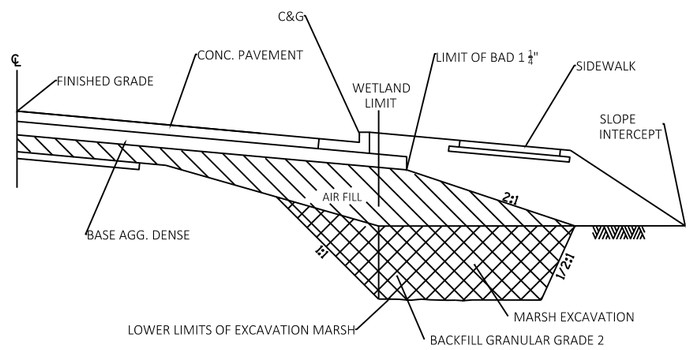
RIPRAP HEAVY TREATMENT AT CROSS CULVERTS AND STORM OUTLETS

STA 134+10 LT
STA 134+28 LT & RT
STA 134+38 LT & RT
STA 134+49 LT



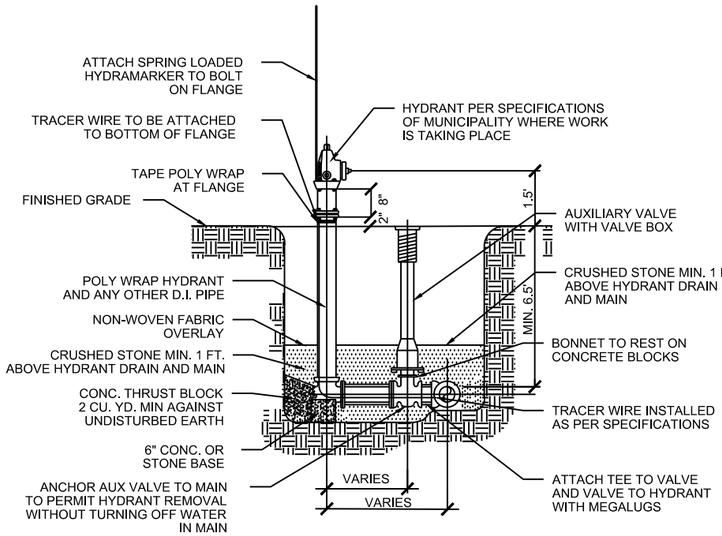


MARSH EXCAVATION AT CULVERT EXTENSIONS



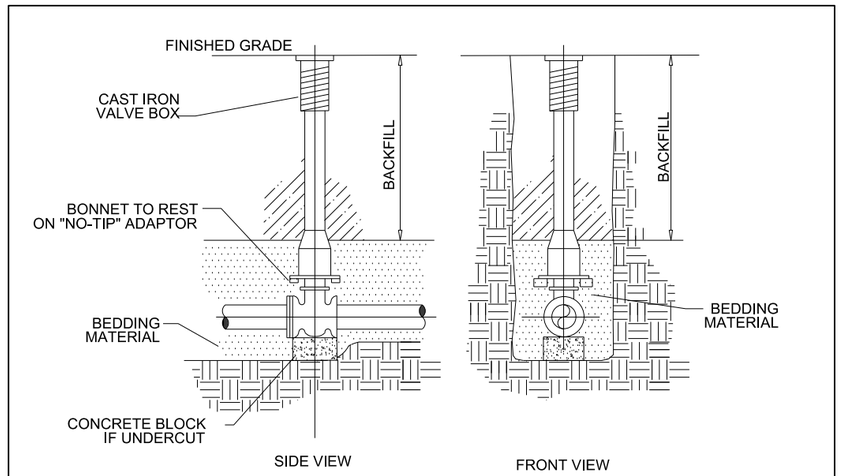
TYPICAL MARSH EXCAVATION FOR RECONSTRUCTION

2



HYDRANT & VALVE INSTALLATION DETAIL

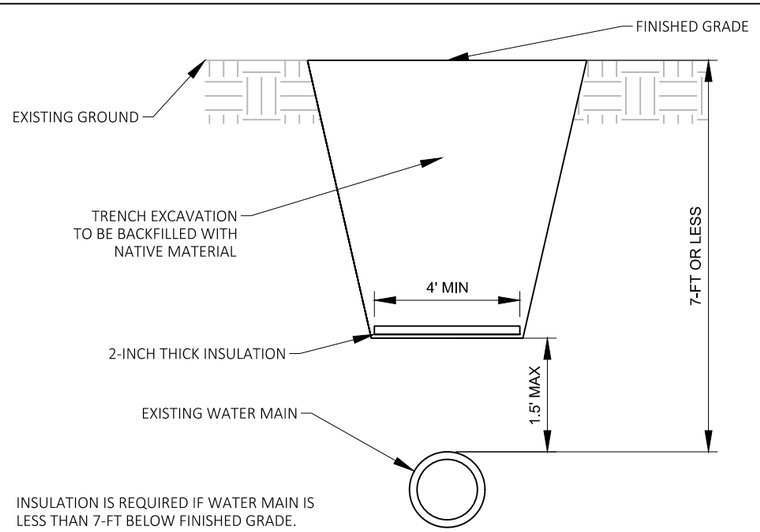
NOT TO SCALE



NOTE: ALL MATERIALS TO BE MADE IN AMERICA

STANDARD VALVE & VALVE BOX SETTING

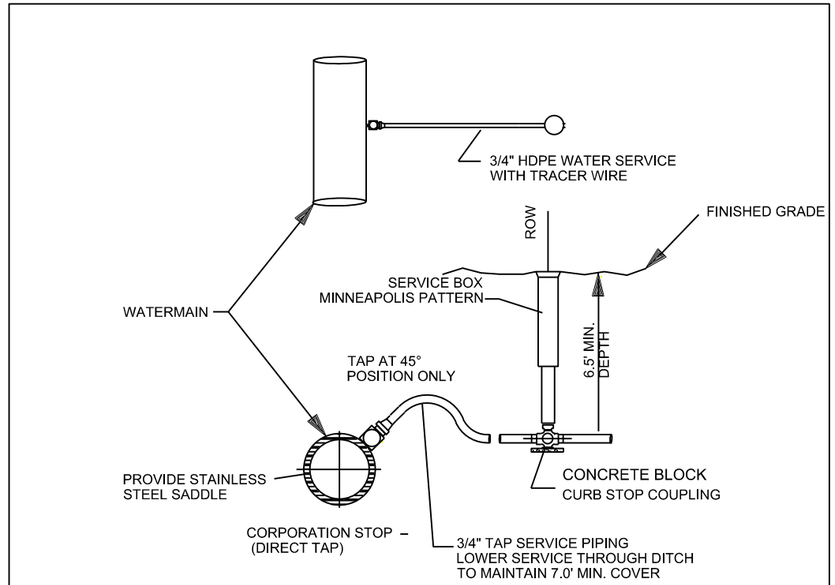
NOT TO SCALE



NOTE: INSULATION IS REQUIRED IF WATER MAIN IS LESS THAN 7-FT BELOW FINISHED GRADE. UNLESS NOTED ON P LAN SHEETS

WATER MAIN INSULATION DETAIL

CTH U STA 106+00 TO STA 124+00



STANDARD WATER SERVICE

NOT TO SCALE

PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CONSTURCTION DETAIL	SHEET 11	E

0 10 20 Feet
SCALE

N

EXISTING R/W PINE COURT

69'

TLE

PROPOSED R/W

EXISTING R/W

CTH U

R/L CTH U

CONCRETE SIDEWALK
6-INCH
(PAID AS CONC.
DRIVEWAY 6-INCH)

CONCRETE DRIVEWAY
6-INCH

18'

9' TYP

BP: 0+00.00

STA 0+00.00, 0.00
Y : 461501.839
X : 741902.753

STA 0+78.93, -11.00 LT
Y : 461548.439
X : 741967.406
RADIUS = 5'

STA 0+74.00, -11.00 LT
Y : 461546.135
X : 741963.045
RADIUS = 5'

EP: 1+00.50

R/L TEMP. PARKING AREA

26'

12'

N62° 09' 01"E
100.50'

90°0'0"

1+00

123+00

ALI-CTH U-PROP STA 123+02.20 =
ALI- TEMP PARKING STA 1+00.50
Y : 461548.788
X : 741991.613

62'

APPROXIMATE LIMITS OF PARKING. NO
DELINEATION NECESSARY. TYP

LIMITS OF BASE
AGGREGATE DENSE

COVER PLATE
TEMPORARY

MH

INLET (TYP)

STA 0+74.00, 11.00 RT
Y : 461526.684
X : 741973.322
RADIUS = 5'

STA 0+79.05, 11.00 RT
Y : 461529.042
X : 741977.786
RADIUS = 5'

N27° 50' 59"W
1511.37'

EXISTING EDGE OF ASPHALT

CONCRETE CURB & GUTTER
30-INCH, TYPE A

CONCRETE SIDEWALK
4-INCH

EXISTING R/W PINE COURT

STRIP TOPSOIL, (EXCAVATION COMMON) FOR
TEMPORARY PARKING,
ADD 4" BASE AGGREGATE DENSE 1 1/4-INCH
SEE TYPICAL SECTION

CONSTRUCTION OF TEMPORARY PARKING TO BE COMPLETED AT BEGINNING OF STAGE 3.
REMOVAL OF TEMPORARY PARKING, SALVAGED TOPSOIL, FERTILIZER, SEED & MULCHING TO BE
COMPLETED ONCE ALL DRIVEWAYS IN THE VICINITY OF THE TEMPORARY PARKING AREA, AS
APPROVED BY THE ENGINEER, HAVE ACCESS.

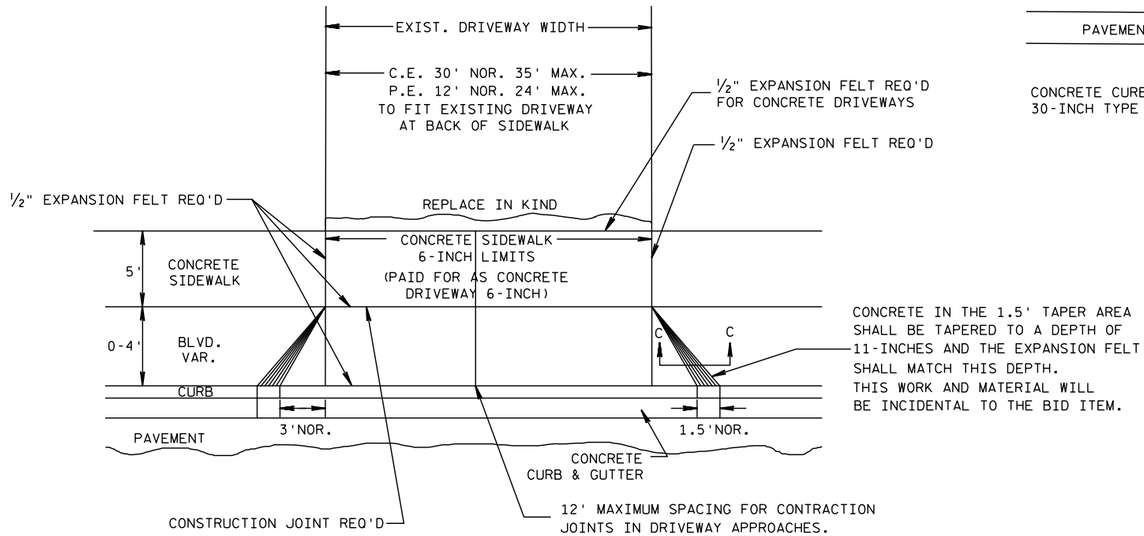
TLE

PROPOSED R/W

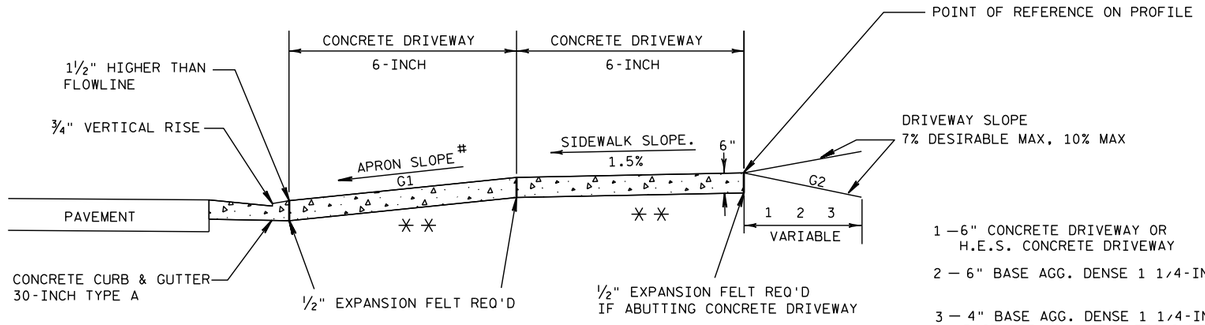
EXISTING R/W

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CONSTRUCTION DETAIL - TEMPORARY PARKING AREA STA 123+02.20 LT	SHEET 12	E

2



PLAN VIEW



TYPICAL SIDEWALK SECTION

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

2 — 6" BASE AGG. DENSE 1 1/4-INCH

3 — 4" BASE AGG. DENSE 1 1/4-INCH
BASE WITH 2" ASPHALTIC SURFACE

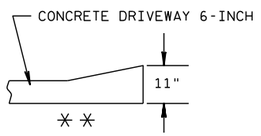
** = 6" BASE AGG. DENSE 1 1/4-INCH
REQ'D UNDER CONCRETE DRWY

\#

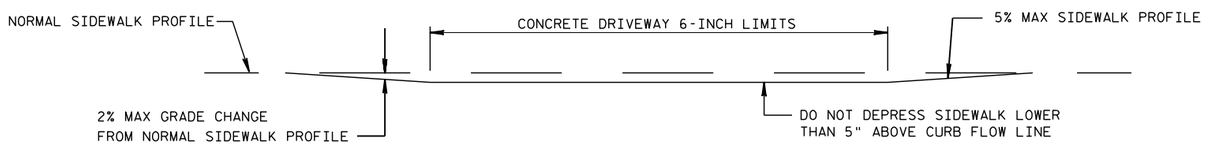
TERRACE WIDTH	APRON SLOPE (G1) MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

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

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



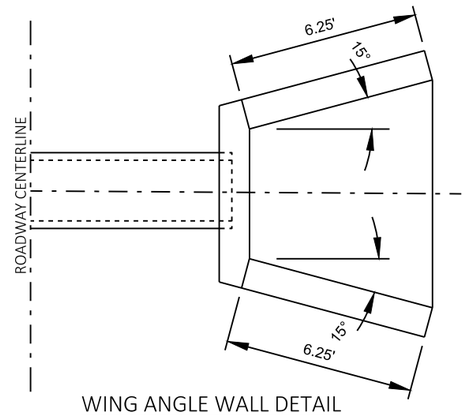
SECTION C-C



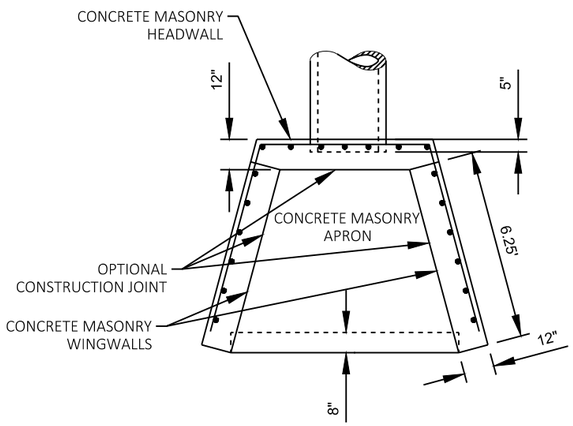
DEPRESSED SIDEWALK PROFILE DETAIL

URBAN DRIVEWAY WITH SIDEWALK DETAIL

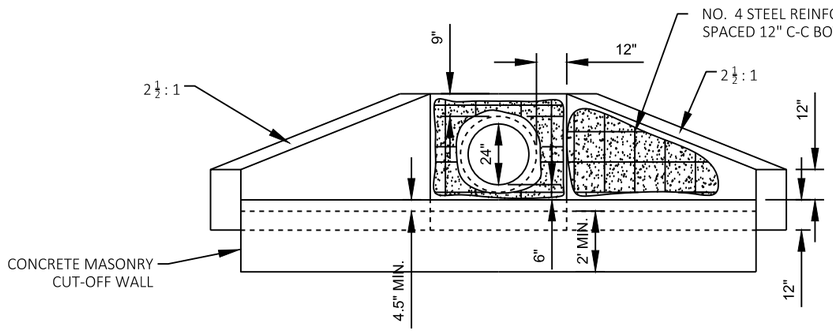
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CONSTURCTION DETAIL	SHEET 13	E



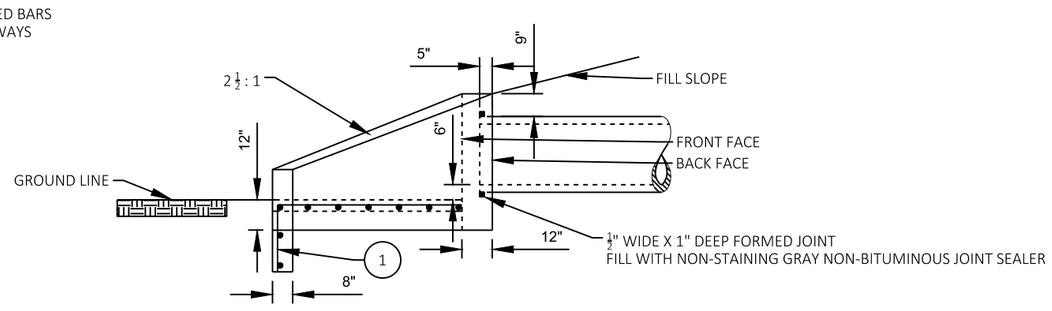
WING ANGLE WALL DETAIL



PLAN VIEW



END ELEVATION



SIDE ELEVATION

NOTES

FILL SLOPED FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

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

PIPE THICKNESS IS ASSUMED TO BE 3".

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

CONCRETE MASONRY ENDWALL FOR CULVERT PIPE

STA 134+07
STA 134+52

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CONSTRUCTION DETAIL	SHEET 14	E

2

N

CONCRETE SIDEWALK

5'

EXISTING CONCRETE CURB & GUTTER

R/L CTH U

CTH U

CONCRETE SIDEWALK

6'

EXISTING CONCRETE CURB & GUTTER

5'

N = 459570.378
E = 743114.968
MATCH EXISTING
(1035.37)

N = 459569.336
E = 743121.868
MATCH EXISTING
(1035.22)

N = 459566.229
E = 743113.245
MATCH EXISTING
(1035.27)

N = 459569.857
E = 743118.404
MATCH EXISTING
(1035.31)

N = 459561.544
E = 743111.298
MATCH EXISTING
(1035.33)

N = 459564.436
E = 743121.167
MATCH EXISTING
(1034.86)

N = 459558.959
E = 743110.224
MATCH EXISTING
(1035.37)

CURB RAMP TYPE 1
DETECTABLE WARNING FIELD, TYP

N = 459560.577
E = 743115.565
(1035.13)

N = 459565.372
E = 743117.031
(1035.06)

N = 459557.153
E = 743114.518
(1035.34)

N = 459559.556
E = 743120.076
MATCH EXISTING
(1034.86)

N = 459555.291
E = 743118.794
MATCH EXISTING
(1035.32)

EX. CONC. SIDEWALK

(CONC)

100+00

BP: 99+75.00

STH 54

N = 459595.125
E = 743220.516
(1035.75)

N = 459595.419
E = 743225.567
(1035.85)

N = 459595.344
E = 743215.504
(1035.65)

N = 459596.041
E = 743230.302
MATCH EXISTING
(1035.92)

N = 459590.423
E = 743214.461
(1035.55)

N = 459591.052
E = 743229.997
MATCH EXISTING
(1035.82)

EX. CONC. SIDEWALK

N = 459587.601
E = 743213.884
MATCH EXISTING
(1035.49)

N = 459590.346
E = 743225.082
(1035.60)

N = 459590.124
E = 743220.038
(1035.46)

N = 459586.062
E = 743229.692
MATCH EXISTING
(1035.80)

N = 459586.876
E = 743219.727
MATCH EXISTING
(1035.23)

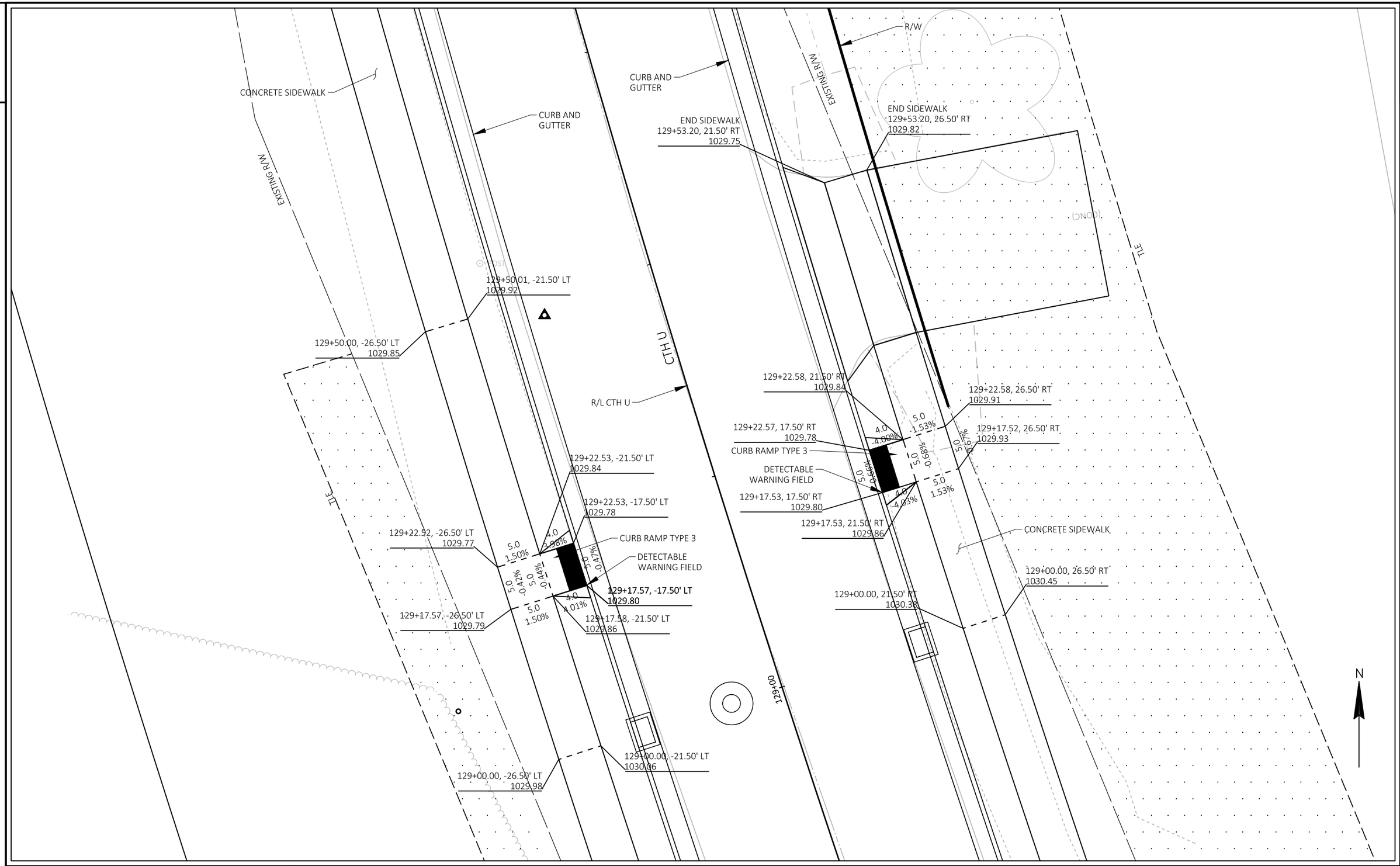
N = 459586.400
E = 743224.704
MATCH EXISTING
(1035.36)

CURB RAMP TYPE 1
DETECTABLE
WARNING FIELD

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN: CONSTRUCTION DETAIL - CURB RAMPS	SHEET 15	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021002-CD.DWG
LAYOUT NAME - 69340670-021008-cd
PLOT DATE : 4/12/2019 9:35 AM
PLOT BY : MATT TOMSOVIC
PLOT NAME :
PLOT SCALE : 1 IN : 10 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN: CONSTRUCTION DETAIL - CURB RAMPS	SHEET 16	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021002-CD.DWG
LAYOUT NAME - 69340670-021009-cd

PLOT DATE : 4/12/2019 9:35 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : ##########

2

2

N

CONCRETE SIDEWALK

EXISTING R/W

136+56.90, -26.50' LT
1025.84

136+56.90, -21.50' LT
1025.77

136+56.90, -40.00' LT
R = 25.0'

136+48.74, -26.50' LT
1025.62

136+48.70, -21.50' LT
1025.53

TLE

TLE

R/W

EXISTING R/W

136+44.39, -21.50' LT
1025.34

136+38.85, -26.50' LT
1025.47

DETECTABLE WARNING FIELD RADIAL

CURB RAMP TYPE 4B1

POST

CONCTRETE
CURB &
GUTTER

R/L DEER ST.

DEER ST

11+00

EXISTING R/W

136+00

CTH U

CONCTRETE
CURB &
GUTTER

CURB RAMP TYPE 4B1

136+00.21, -26.50' LT
1025.99

DETECTABLE WARNING FIELD RADIAL

135+95.02, -21.50' LT
1025.85

135+91.13, -26.50' LT
1025.99

135+91.13, -21.50' LT
1025.91

EXISTING R/W

TLE

IP

IP

CONCRETE SIDEWALK

135+82.21, -21.50' LT
1026.32

135+82.29, -40.00' LT
R = 25.0'

135+82.21, -26.50' LT
1026.25

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN: CONSTRUCTION DETAIL - CURB RAMPS	SHEET 17	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021002-CD.DWG
LAYOUT NAME - 69340670-021010-cd

PLOT DATE : 4/12/2019 9:35 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

2

N

CONCRETE SIDEWALK

TLE

139+46.57, -26.50' LT
1025.71

139+46.57, -40.00' LT
R = 25.0'

139+37.22, -26.50' LT
1025.59

5.0
1.50%

139+46.57, -21.50' LT
1025.63

9.4
1.28%

9.4
1.38%

139+37.22, -21.50' LT
1025.50

R/W

5.0
1.80%

9.3
1.40%

139+32.91, -21.50' LT
1025.44

EXISTING R/W

IP

9.3
0.33%

7.0
1.70%

139+27.95, -26.50' LT
1025.56

DETECATABLE WARNING
FIELD RADIAL

CURB RAMP TYPE 4B1

POST

POST

CONCTRETE
CURB &
GUTTER

R/L BUFFALO ST.

BUFFALO ST

21+00

139+00

CONCTRETE
CURB &
GUTTER

138+89.79, -26.50' LT
1024.94

CURB RAMP TYPE 4B1

DETECATABLE WARNING
FIELD RADIAL

138+84.60, -21.50' LT
1024.92

7.2
0.33%

138+80.73, -26.50' LT
1025.05

9.1
1.33%

138+80.73, -21.50' LT
1024.98

IP

9.9
1.54%

EXISTING R/W

5.0
1.50%

8.9
4.83%

8.9
4.83%

138+71.79, -21.50' LT
1025.41

CTH U

5.0
1.5%

138+71.89, -40.00' LT
R = 25.0'

138+71.79, -26.50' LT
1025.48

CONCRETE SIDEWALK

EXISTING R/W

IP

IP

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN: CONSTRUCTION DETAIL - CURB RAMPS	SHEET 18	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021002-CD.DWG
LAYOUT NAME - 69340670-021011-cd

PLOT DATE : 4/12/2019 9:35 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

N

EX. TRAIL (ASPH.)

TLE

31+88.92, -35.00' LT
1025.12

31+86.90, -33.03' LT
1025.25

TLE

31+91.91, -31.43' LT
1025.18

32+00.38, -26.50' LT
1026.50

IP

EXISTING R/W

31+92.01, -26.50' LT
1025.55

31+86.93, -26.50' LT
1025.58

CONCRETE SIDEWALK

31+86.96, -21.50' LT
1025.68

32+00.31, -21.50' LT
1026.42

31+91.96, -21.50' LT
1025.65

31+86.98, -17.50' LT
1025.84

31+91.98, -17.50' LT
1025.86

DETECTABLE
WARNING FIELD

CURB RAMP TYPE 3

CONCTRETE CURB & GUTTER

R/L S. BIRON DR.

S. BIRON DR.

32+00

CONSTRUCTION LIMITS.
STA 31+75

CURB RAMP TYPE 3

DETECTABLE WARNING FIELD, TYP

31+92.16, 17.50' RT
1025.87

CONCTRETE CURB & GUTTER

31+87.18, 17.50' RT
1025.84

31+92.18, 21.50' RT
1025.94

32+00.00, 21.50' RT
1026.42

EXISTING R/W

31+87.18, 21.50' RT
1025.91

PROPOSED R/W

32+00.00, 26.50' RT
1026.50

31+87.21, 26.50' RT
1025.98

CONCRETE SIDEWALK

31+92.18, 26.50' RT
1026.01

TLE

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN: CONSTRUCTION DETAIL - CURB RAMPS	SHEET 19	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021002-CD.DWG
LAYOUT NAME - 69340670-021012-cd
PLOT DATE : 4/12/2019 9:35 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN : 10FT
WISDOT/CADDS SHEET 42

2

LEGEND
XXXX SAWCUT

STH 54

BP: 100+00.00

MH

CONCRETE SIDEWALK, TYP.

BEGIN PROJECT
STA 101+00.00
MATCH EXISTING
SAW CUT REQ'D

CONCRETE DRIVEWAY
6-INCH (TYP. EXCEPT AS NOTED)

+00.00
20.49' LT

+00.00
15.00' LT

JOINT LINE (TYP.)

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

SLOPE INTERCEPT

CONCRETE SIDEWALK, TYP.

EXIST R/W

CTH U

1038.14±	1035.46	1035.79	1036.06	1036.32	1036.59	1036.86	1037.13	1037.27		1037.25
101+00		102+00		103+00		104+00		105+00		
1035.55	1035.82	1036.09	1036.36	1036.62	1036.89	1037.16	1037.43	1037.57		1037.55
1038.14±	1035.46	1035.79	1036.06	1036.32	1036.59	1036.86	1037.13	1037.27		1037.25

15'
15'

(ASPH)
(CONC)
(GRAV)

+02.19
33.90' RT

+23.24
28.36' RT
34.36' RT

+99.97
20.40' RT

+25.00
21.55' RT
27.55' RT

+50.00
24.18' RT
29.18' RT

+00.00
15.00' RT

+00.00
21.5' RT
26.5' RT

CONCRETE SIDEWALK, TYP.

SEE PLAN AND PROFILE
FOR ALIGNMENT
INFORMATION

SLOPE INTERCEPT

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

CONCRETE SIDEWALK, TYP.

REMOVE PE
STA 105+35 RT

UTILITY EASEMENT

MATCH LINE STA 105+90

SEE PLAN AND PROFILE
FOR ALIGNMENT
INFORMATION

CONCRETE DRIVEWAY
6-INCH (TYP. EXCEPT AS NOTED)

CONCRETE SIDEWALK, TYP.

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

SLOPE INTERCEPT

JOINT LINE (TYP.)

PC: 108+61.50

PT: 109+98.34

CONCRETE SIDEWALK

R/W

EXIST R/W

CTH U

1037.10	1036.95	1036.81	1036.66	1036.51	1036.45	1036.52	1036.68	1036.82	1036.98	1037.12	1037.11
106+00		107+00		108+00			109+00		110+00		
1037.40	1037.25	1037.11	1036.96	1036.81	1036.62	1036.82	1036.98	1037.12	1037.28	1037.42	1037.28
										111+00	
										1037.58	
1037.10	1036.95	1036.81	1036.66	1036.51	1036.45	1036.52	1036.68	1036.82	1036.98	1037.12	1037.11
										1037.28	1037.41

15'
15'

(ASPH)
(FE)
(GRAV)
(CONC)

SEE CONSTRUCTION
DETAIL FOR DRIVE
CONFIGURATION

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

CONCRETE SIDEWALK, TYP.

SLOPE INTERCEPT

CONCRETE SIDEWALK

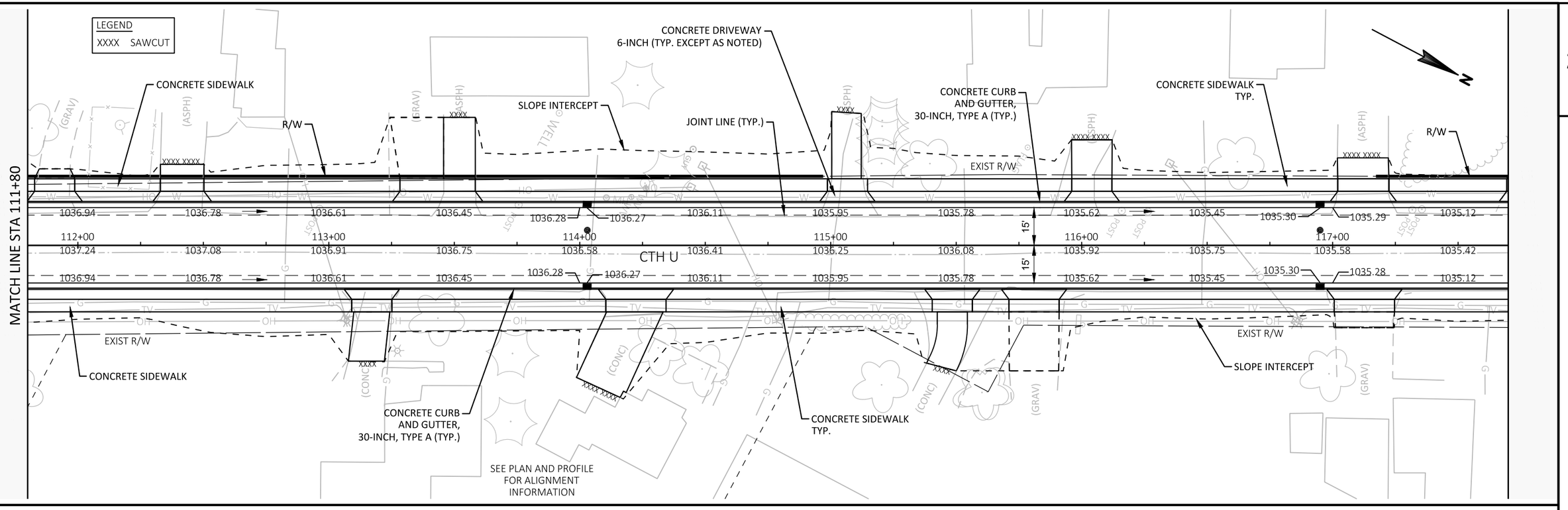
MATCH LINE STA 105+90

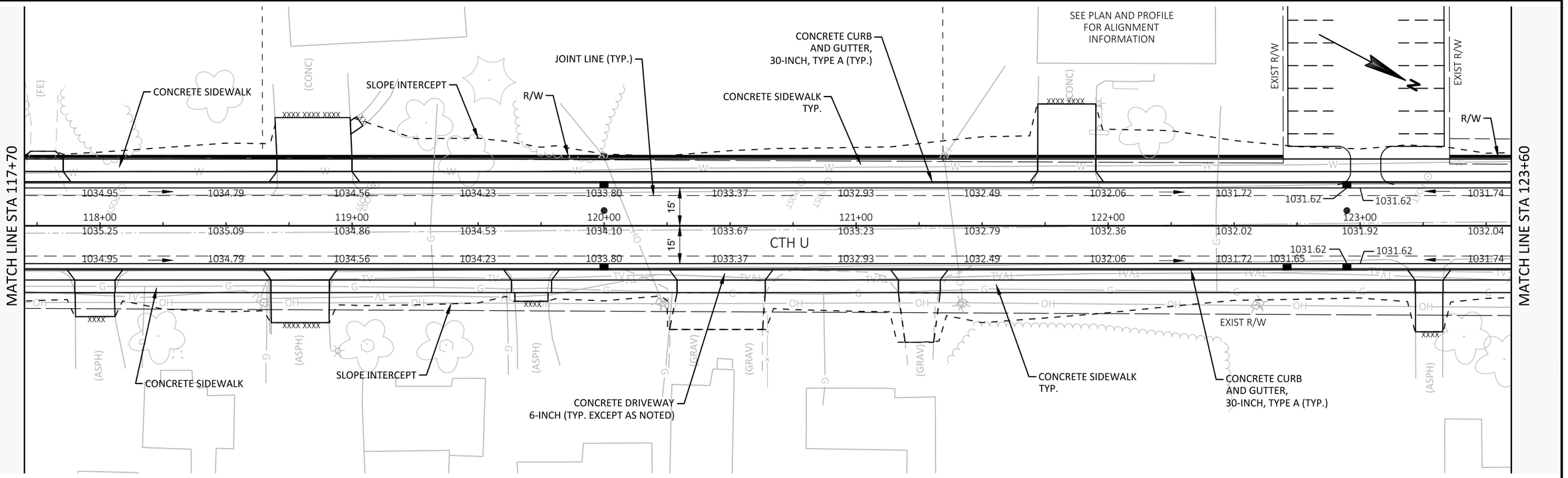
MATCH LINE STA 111+80

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PAVING DETAILS: CTH U	SHEET 20	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021201-PD.DWG
LAYOUT NAME - 69340670-021201-pd

PLOT DATE : 2/26/2019 1:55 PM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PAVING DETAILS: CTH U	SHEET 21	E

LEGEND
XXXX SAWCUT

CONCRETE DRIVEWAY
6-INCH (TYP. EXCEPT AS NOTED)

SEE PLAN AND PROFILE FOR
ALIGNMENT INFORMATION

SLOPE INTERCEPT

CONCRETE SIDEWALK
TYP.

JOINT LINE (TYP.)

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

R/W

CURB RAMP DETECTABLE WARNING FIELD

CONCRETE SIDEWALK

N

MATCH LINE STA 123+60

MATCH LINE STA 129+50

PC: 125+09.71

EXIST R/W

CTH U

124+00 1032.19 1031.89
1032.03 1032.33 1032.03
1032.06 1032.36 1032.06
125+00 1032.33 1032.03
1031.80 1032.10 1031.80
126+00 1031.73 1031.43
1031.43 1031.35 1031.05
127+00 1030.96 1030.66
1030.66 1030.62 1030.32
128+00 1030.38 1030.08
1030.32 1030.23 1029.93
129+00 1030.10 1029.80
1030.08 1029.93 1029.80

15'
15'

SLOPE INTERCEPT

CONCRETE SIDEWALK
TYP.

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

REMOVE PE
STA 127+19 RT

CONCRETE SIDEWALK

CURB RAMP DETECTABLE WARNING FIELD

R/W

SEE PLAN AND PROFILE FOR
ALIGNMENT INFORMATION

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

UTILITY EASEMENT

R/W

CONCRETE SIDEWALK
TYP.

SLOPE INTERCEPT

+90.00
26.50' LT

+24.50
17.50' LT
18.59' LT

+39.41
23.50' LT

JOINT LINE (TYP.)

CONCRETE SIDEWALK

PT: 133+07.35

PC: 133+76.44

PT: 134+86.04

+25.00
21.50' LT

+90.11
17.50' LT
18.70' LT

N

MATCH LINE STA 129+50

MATCH LINE STA 135+40

EXIST R/W

CTH U

1029.66 1029.53 1029.39
1029.69 1029.25 1029.12
130+00 1029.83 1029.55 131+00 1029.42 1029.28 132+00 1029.15 1029.01 133+00
1028.98 1028.85 1028.83 1028.71
1029.96 1029.66 1029.53
1029.39 1029.25 1029.12
1028.98 1028.85 1028.83 1028.71
1028.54 1028.19 1027.65 1027.05
1028.84 1028.49 1027.95 134+00 1027.35 135+00
1028.54 1028.19 1027.65 1027.05

15'
15'

R/W

END CONCRETE
SIDEWALK

CONCRETE DRIVEWAY
6-INCH (TYP. EXCEPT AS NOTED)

CONCRETE CURB
AND GUTTER,
30-INCH, TYPE A (TYP.)

SLOPE INTERCEPT

EXIST R/W

SEE CONSTRUCTION
DETAIL FOR DRIVE
CONFIGURATION

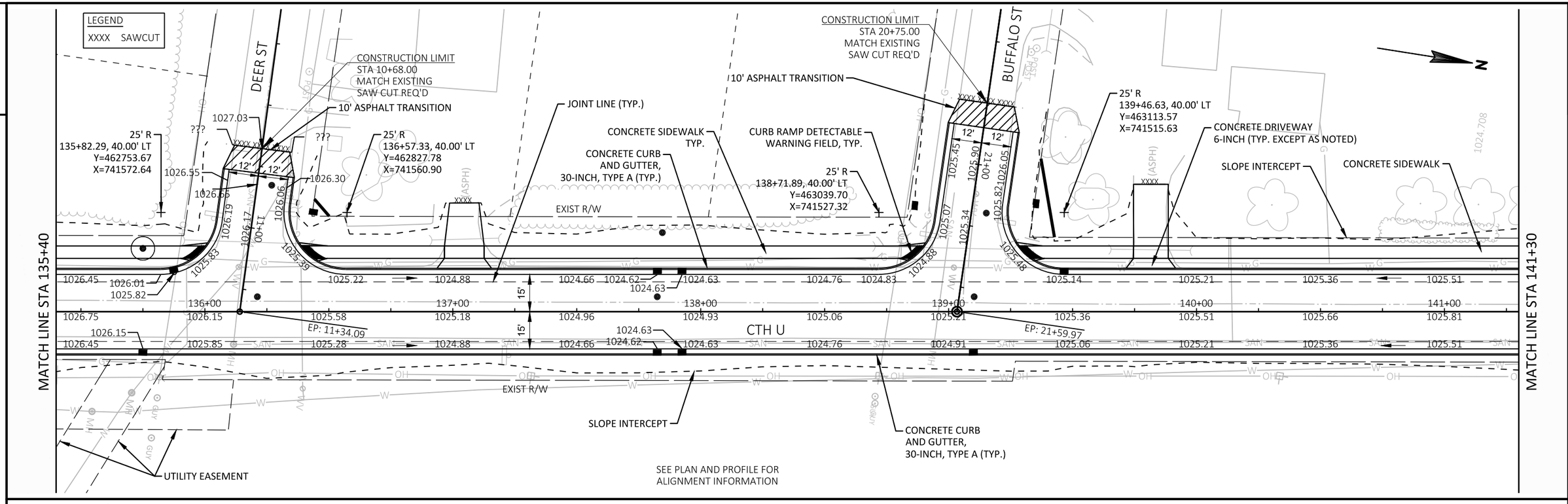
R/W

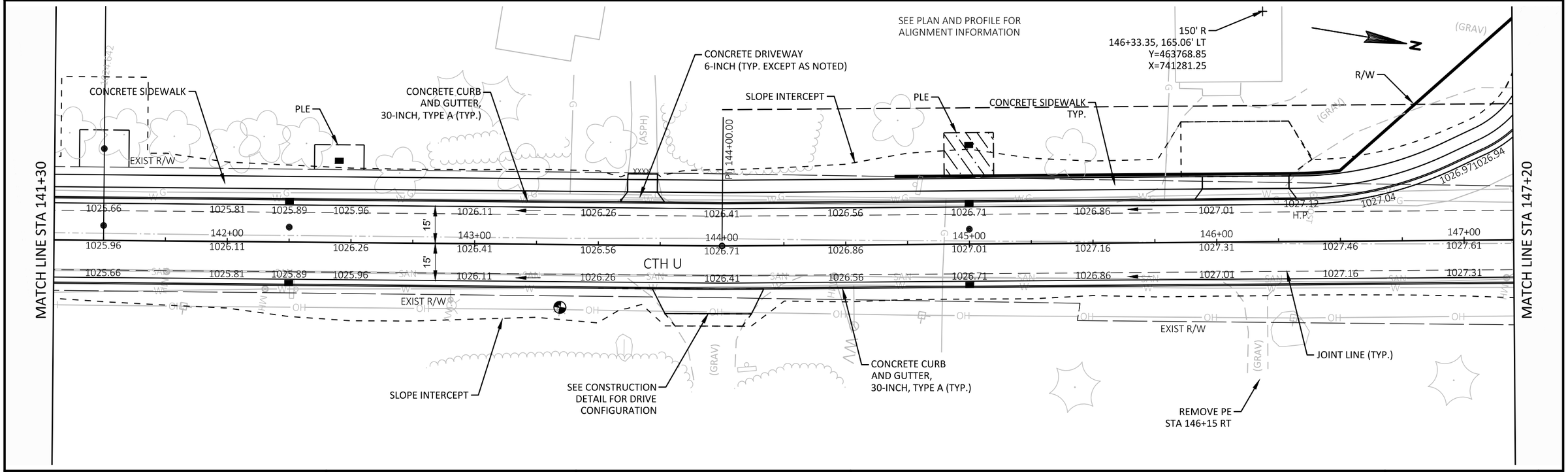
UTILITY EASEMENT

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PAVING DETAILS: CTH U	SHEET 22	E

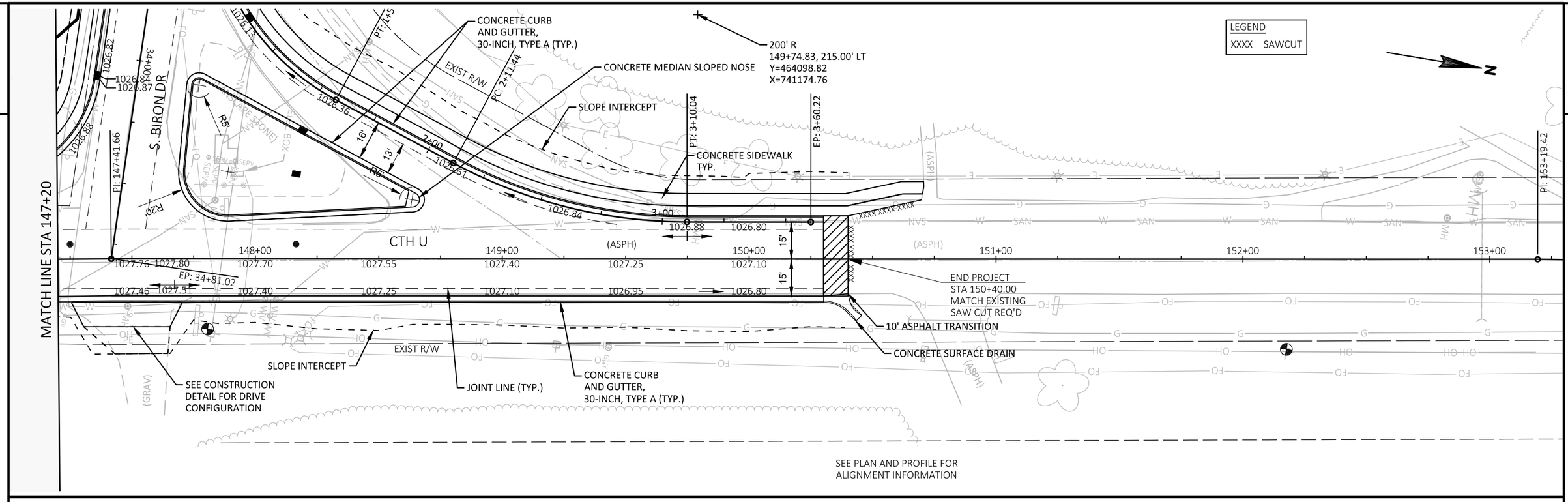
FILE NAME : F:\TR\JOBS\E22268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-021201-PD.DWG
LAYOUT NAME - 69340670-021203-pd

PLOT DATE : 3/14/2019 11:45 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : ##########





PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PAVING DETAILS: CTH U	SHEET 23	E



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PAVING DETAILS: CTH U	SHEET 24	E

2

2

MATCH LINE STA 106+00

100+00 101+00 102+00 103+00 104+00 105+00 106

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE WITH TURN-AROUND END
- RIPRAP MEDIUM
- RIPRAP HEAVY
- SLOPE INTERCEPT
- CONCRETE SURFACE DRAIN
- INLET PROTECTION
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- A — INLET PROTECTION TYPE A, B, C, OR D

MATCH LINE STA 106+00

107+00 108+00 109+00 110+00 111+00 112

MATCH LINE STA 112+00

A/D A/C A/D

PC: 108+41.50

Angle Point: 109+98.34

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	EROSION CONTROL	SHEET 25	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022001-EC.DWG
LAYOUT NAME - 69340670-022001-ec

PLOT DATE : 4/12/2019 7:08 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE STA 112+00

MATCH LINE STA 118+00

MATCH LINE STA 118+00

MATCH LINE STA 124+00

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE WITH TURN-AROUND END
- RIPRAP MEDIUM
- RIPRAP HEAVY
- SLOPE INTERCEPT
- CONCRETE SURFACE DRAIN
- INLET PROTECTION
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- A — INLET PROTECTION TYPE A, B, C, OR D

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	EROSION CONTROL	SHEET 26	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022001-EC.DWG
LAYOUT NAME - 69340670-022002-ec

PLOT DATE : 4/12/2019 7:08 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE STA 124+00

MATCH LINE STA 130+00

MATCH LINE STA 130+00

MATCH LINE STA 136+00

PC: 125+09.71

PC: 133+07.35

PT: 134+05.04

Standard : 6
Area : 4726.7

Standard : 4
Area : 1453.13

Standard : 5
Area : 3038.2

Standard : 4
Area : 1453.13

Standard : 5
Area : 3786.3

125+00

126+00

127+00

128+00

129+00

131+00

132+00

133+00

134+00

135+00

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE WITH TURN-AROUND END
- RIPRAP MEDIUM
- RIPRAP HEAVY
- SLOPE INTERCEPT
- CONCRETE SURFACE DRAIN
- INLET PROTECTION
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- A — INLET PROTECTION TYPE A, B, C, OR D

A/C

TIE SILT FENCE INTO STORM SEWER OUTLET END SECTION

TIE SILT FENCE INTO STORM SEWER OUTLET END SECTION

TIE SILT FENCE INTO PAVED DRIVE

TIE SILT FENCE INTO STORM SEWER OUTLET END SECTION

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	EROSION CONTROL	SHEET 27	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022001-EC.DWG
LAYOUT NAME - 69340670-022003-ec

PLOT DATE : 4/12/2019 7:08 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT

MATCH LINE STA 136+00

MATCH LINE STA 142+00

MATCH LINE STA 142+00

MATCH LINE STA 148+00

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE WITH TURN-AROUND END
- RIPRAP MEDIUM
- RIPRAP HEAVY
- SLOPE INTERCEPT
- CONCRETE SURFACE DRAIN
- INLET PROTECTION
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- A — INLET PROTECTION TYPE A, B, C, OR D

PI: 144+00.00

EP: 34+81.02

PI: 147+41.66

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	EROSION CONTROL	SHEET 28	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022001-EC.DWG
LAYOUT NAME - 69340670-022004-ec

PLOT DATE : 4/12/2019 7:08 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MATCH LINE STA 148+00

A/C

A/B

TOPSOIL, SEED, FERTILZER AND MULCH

149+00

150+00

151+00

152+00

CTH U

RIPRAP MEDIUM

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE WITH TURN-AROUND END
- RIPRAP MEDIUM
- RIPRAP HEAVY
- SLOPE INTERCEPT
- CONCRETE SURFACE DRAIN
- INLET PROTECTION
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- A — INLET PROTECTION TYPE A, B, C, OR D

BP: 30+00.00

RP: 32+00.01

Standard: 10
Area: 2707.48

31+00

32+00

33+00

34+00

S. BIRON DR

TOPSOIL, SEED, FERTILZER AND MULCH

PI: 147+41.66

EP: 34+81.02

148+00

147+00

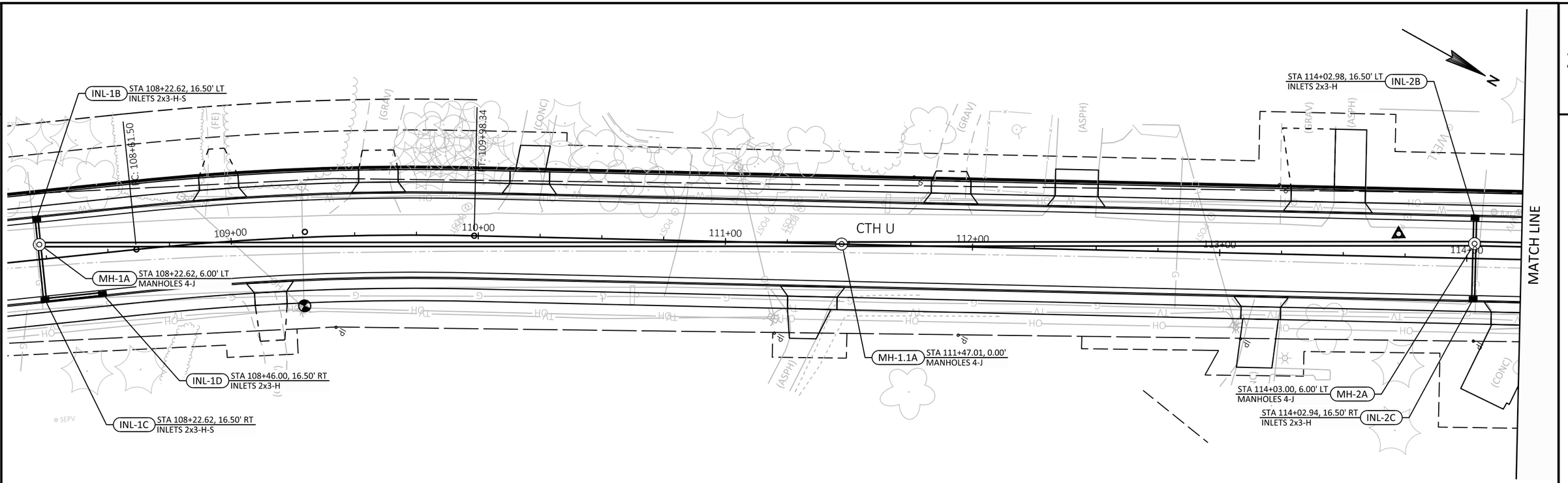
Standard: 10
Area: 5607.88

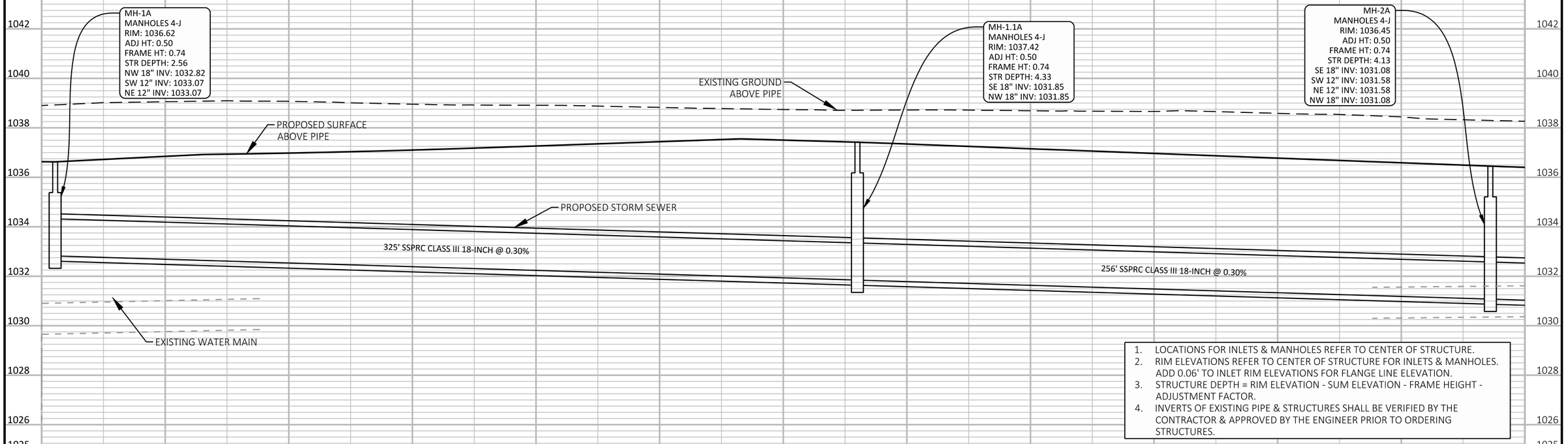
CTH U

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	EROSION CONTROL	SHEET 29	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022001-EC.DWG
LAYOUT NAME - 69340670-022010-ec

PLOT DATE : 4/12/2019 7:09 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT





1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 30 E

2

MATCH LINE

MATCH LINE

STA 116+95.00, 16.50' LT
INLETS 2x3-H
INL-3B

STA 120+00.00, 16.50' LT
INLETS 2x3-H
INL-4B

115+00 116+00 117+00 118+00 119+00 120+00

CTH U

MH-3A STA 116+95.00, 6.00' LT
MANHOLES 4-J

INL-3C STA 116+95.00, 16.50' RT
INLETS 2x3-H

STA 120+00.00, 6.00' LT
MANHOLES 4-J
MH-4A

STA 120+00.00, 16.50' RT
INLETS 2x3-H
INL-4C

1038 1036 1034 1032 1030 1028 1026 1024 1022 1020

PROPOSED SURFACE ABOVE PIPE

EXISTING GROUND ABOVE PIPE

292' SSPRC CLASS III 18-INCH @ 0.30%

PROPOSED STORM SEWER

305' SSPRC CLASS III 18-INCH @ 0.50%

EXISTING WATER MAIN

EXISTING WATER MAIN

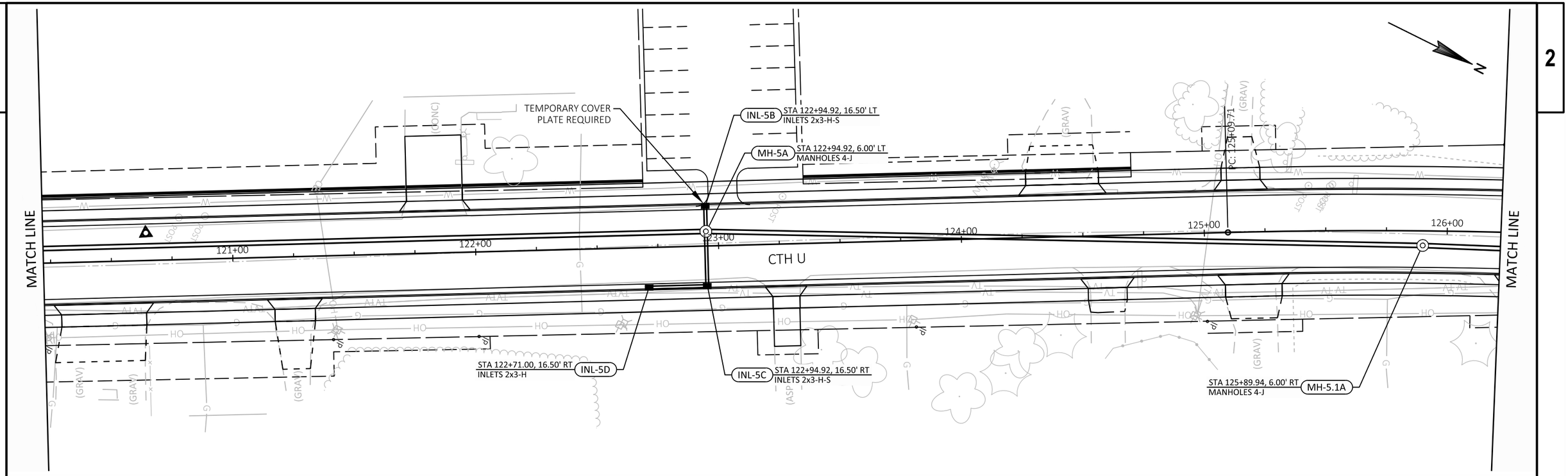
MH-3A
MANHOLES 4-J
RIM: 1035.48
ADJ HT: 0.50
FRAME HT: 0.74
STR DEPTH: 4.04
SE 18" INV: 1030.20
NW 18" INV: 1030.20
SW 12" INV: 1030.70
NE 12" INV: 1030.70

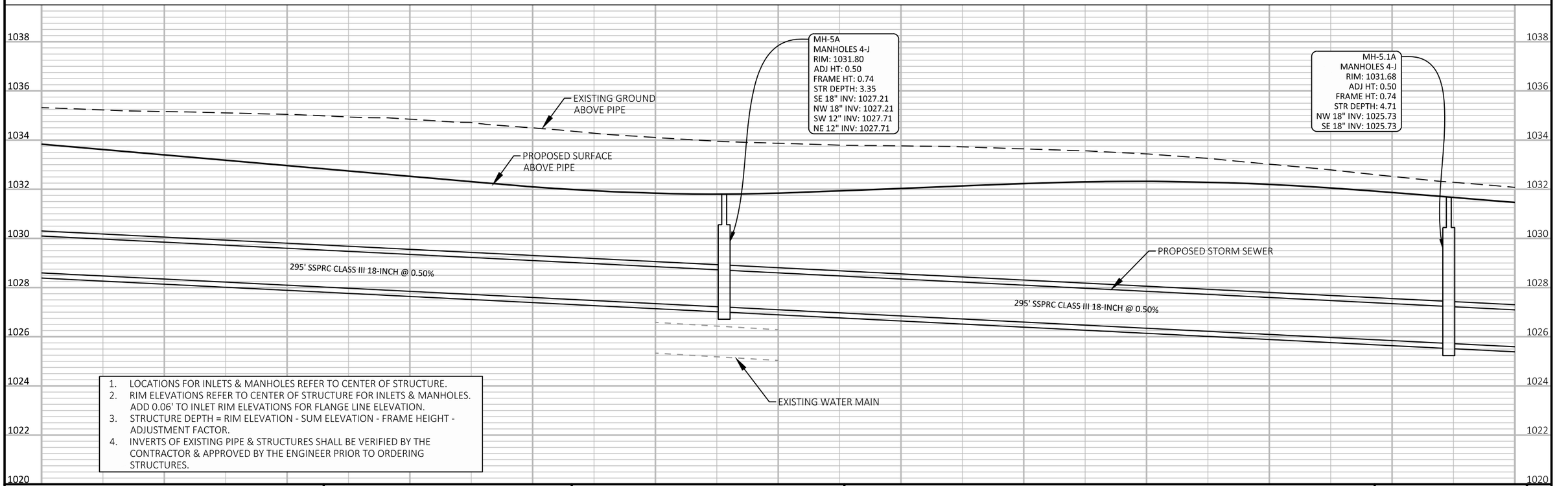
MH-4A
MANHOLES 4-J
RIM: 1033.98
ADJ HT: 0.50
FRAME HT: 0.74
STR DEPTH: 4.06
SE 18" INV: 1028.68
NW 18" INV: 1028.68
SW 12" INV: ~~1029.18~~
NE 12" INV: 1029.18

1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 31	E

2



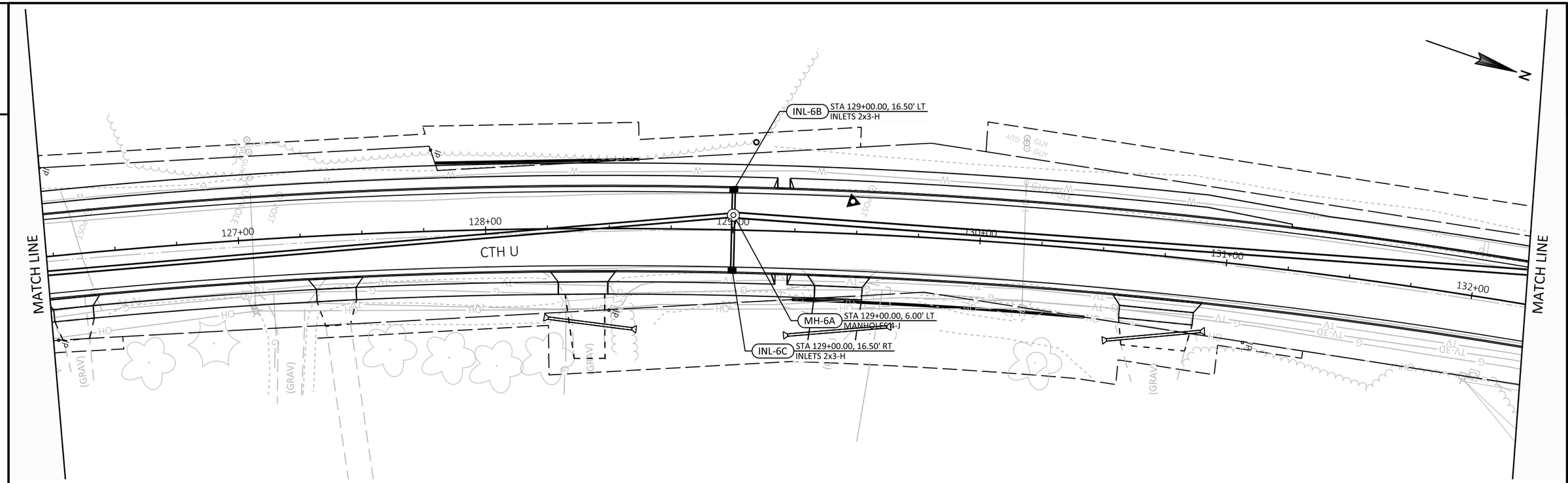


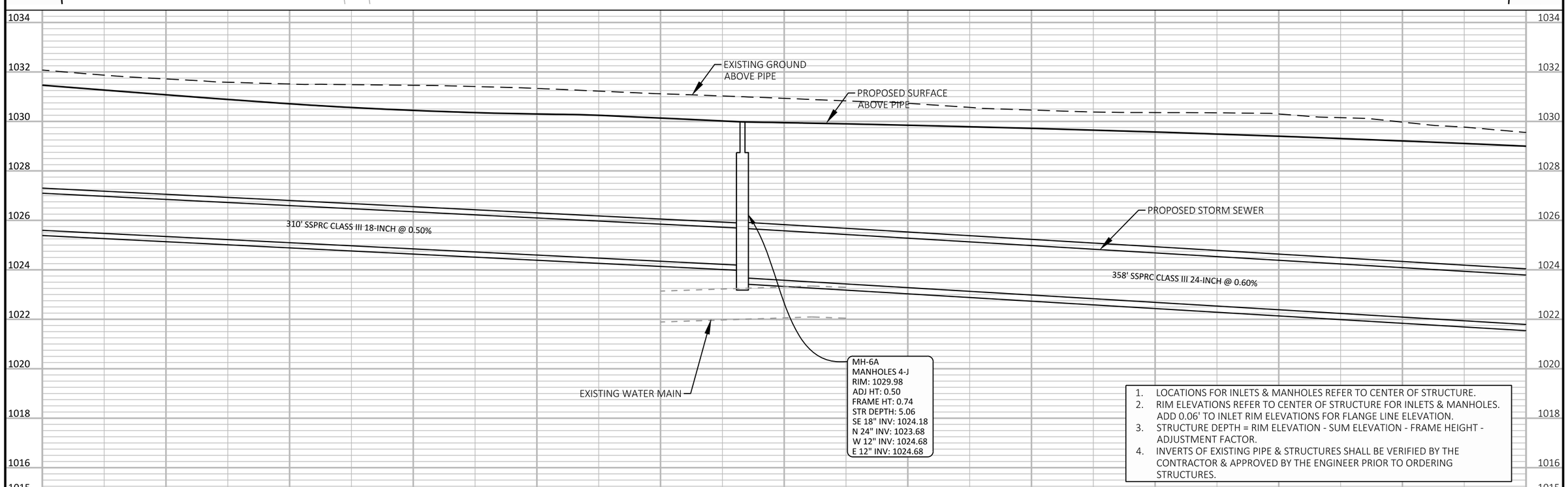
1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET	E

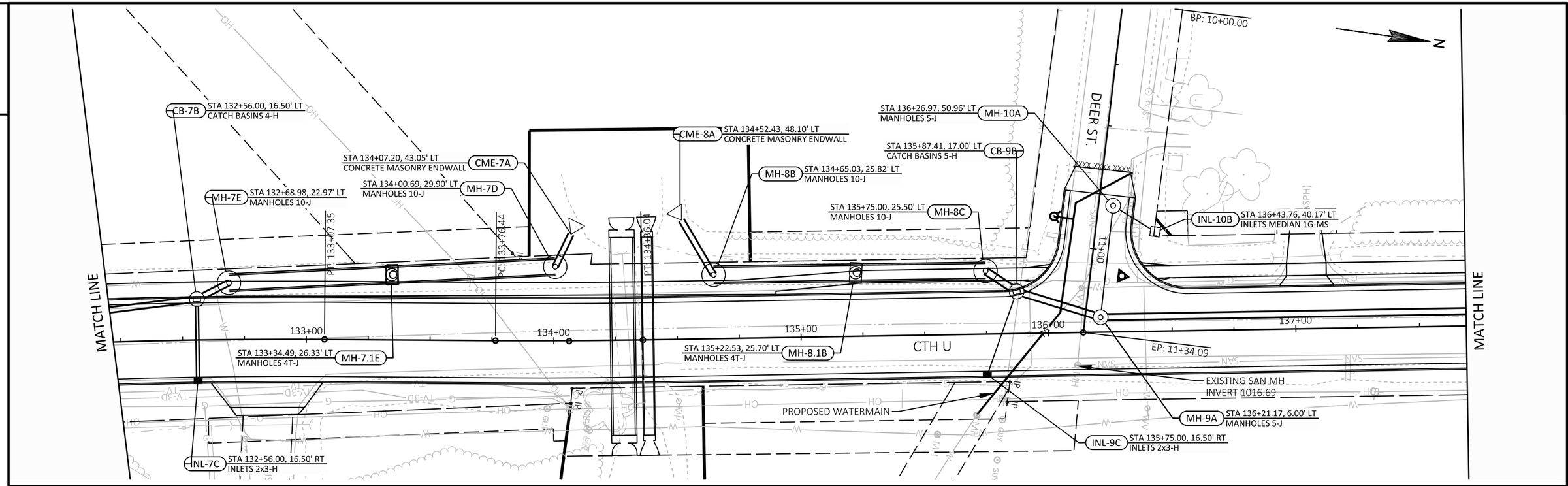
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022501-SS.DWG
LAYOUT NAME - 69340670-022503-ss

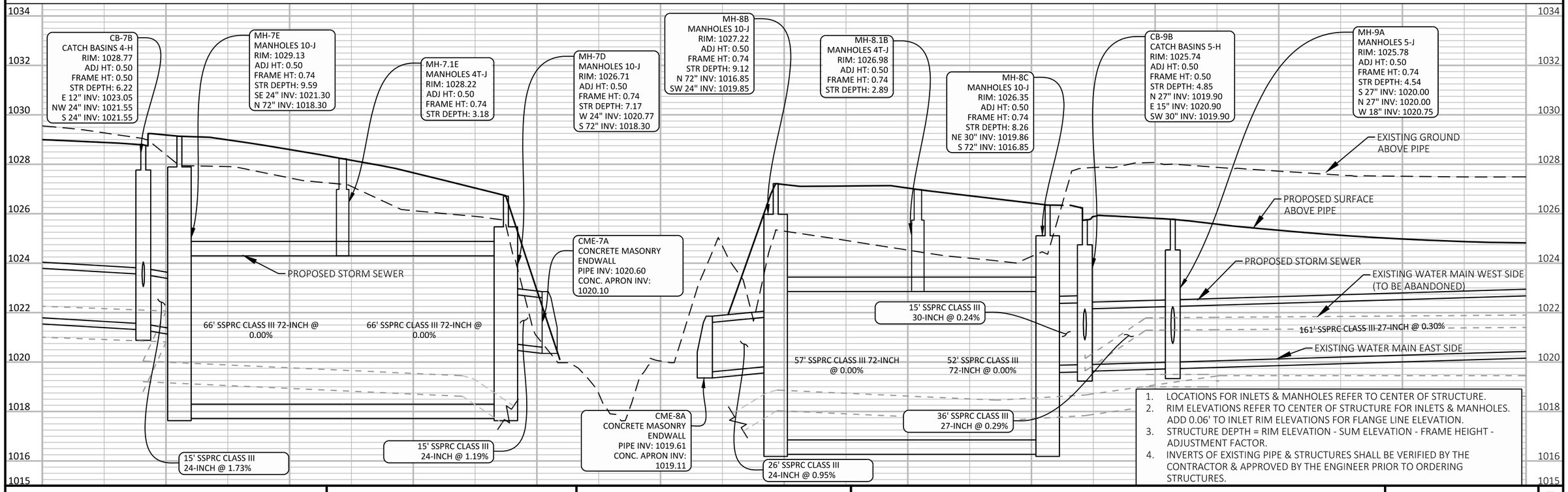
PLOT DATE : 3/8/2019 3:00 PM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 33	E

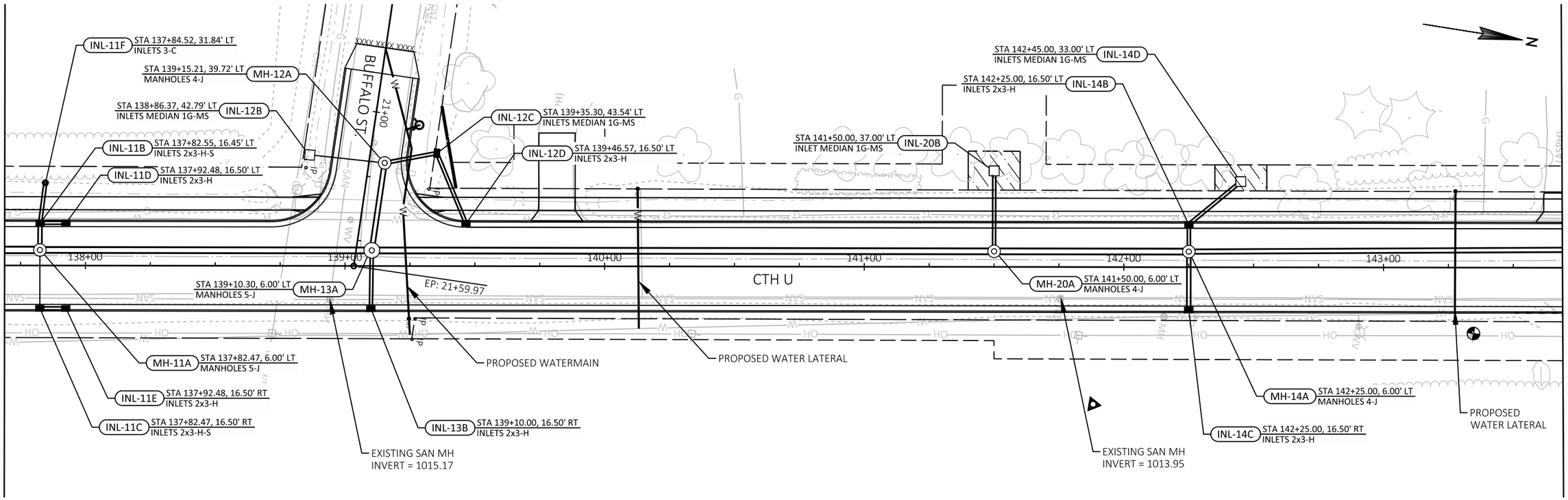




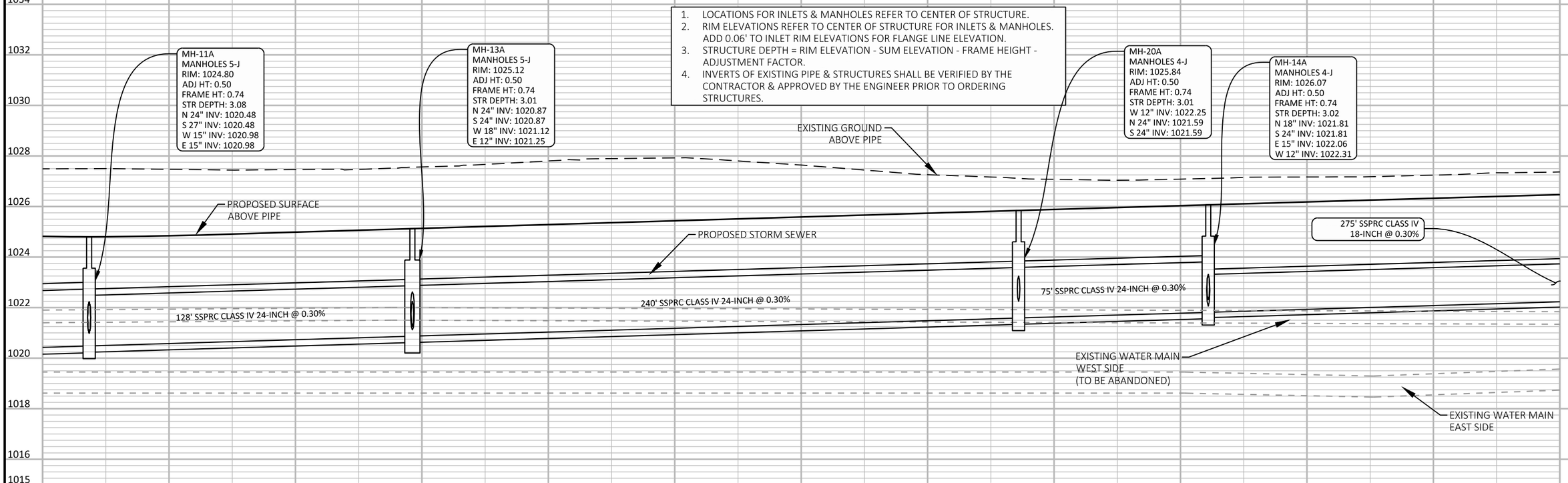
1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 34	E

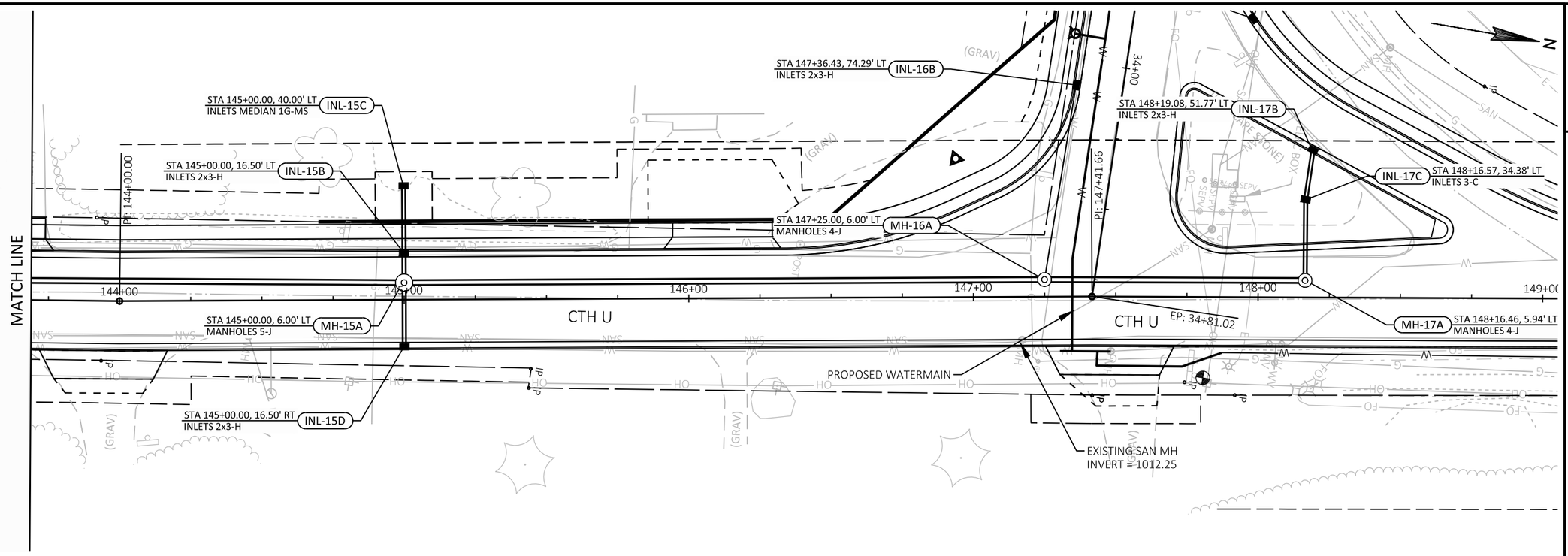
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022501-SS.DWG
LAYOUT NAME - 69340670-022505-ss
PLOT DATE : 3/19/2019 10:57 AM
PLOT BY : MATT TOMSOVIC
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

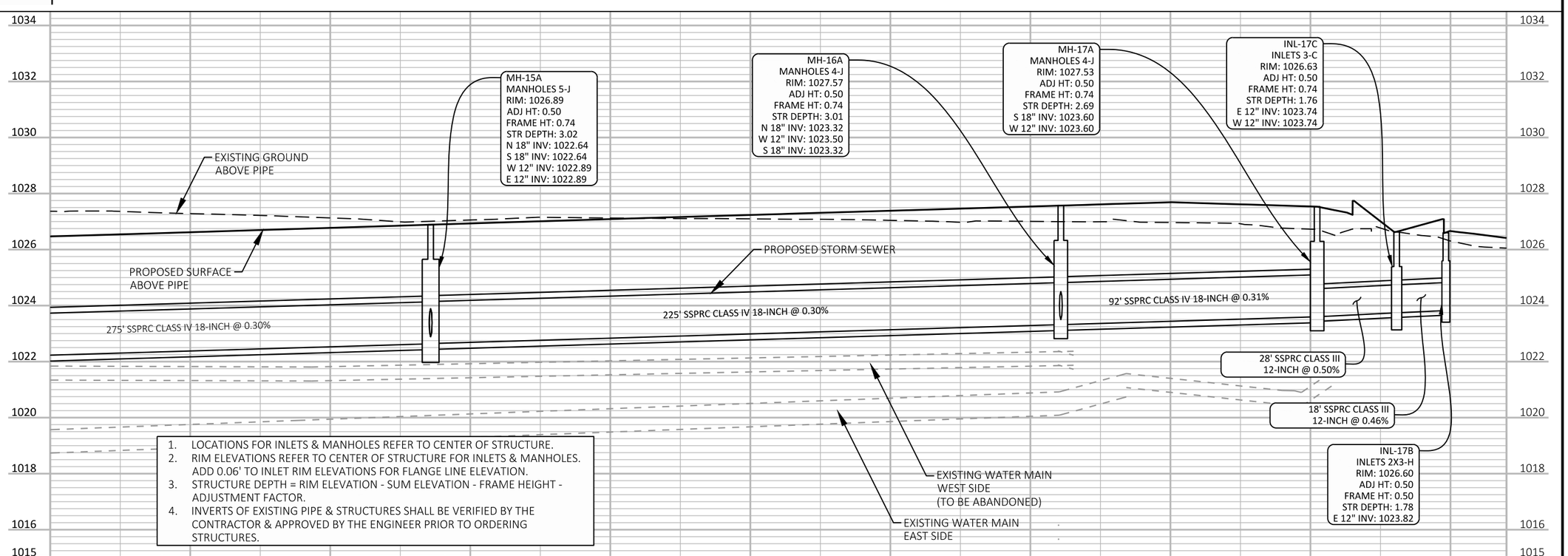


1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.



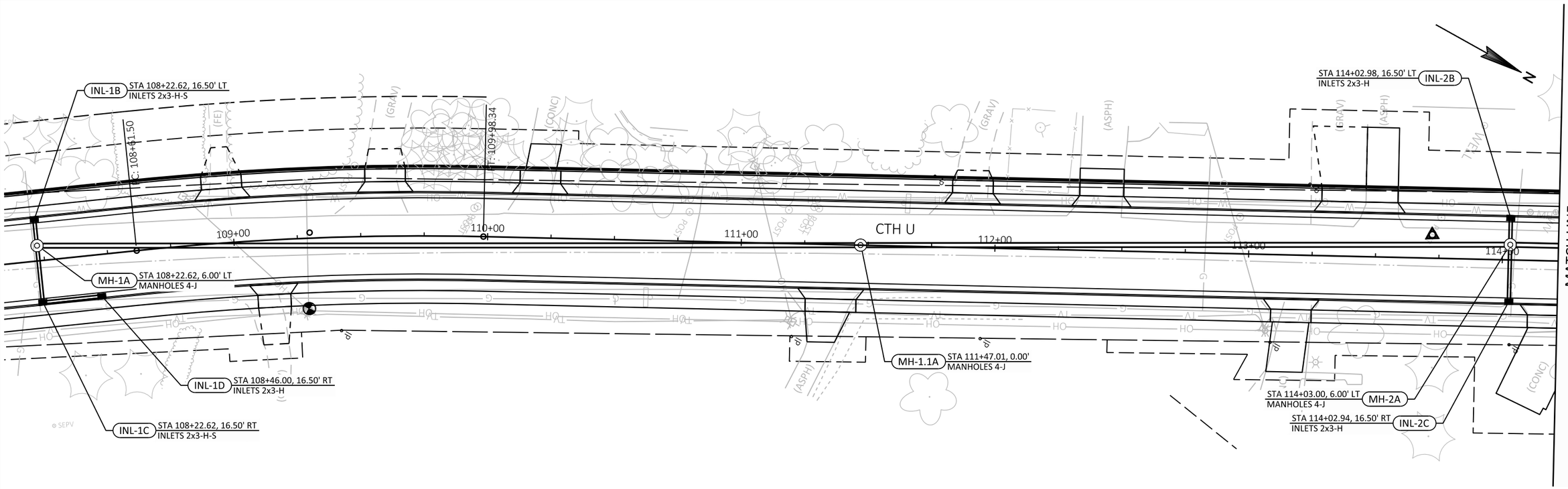
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 35 E

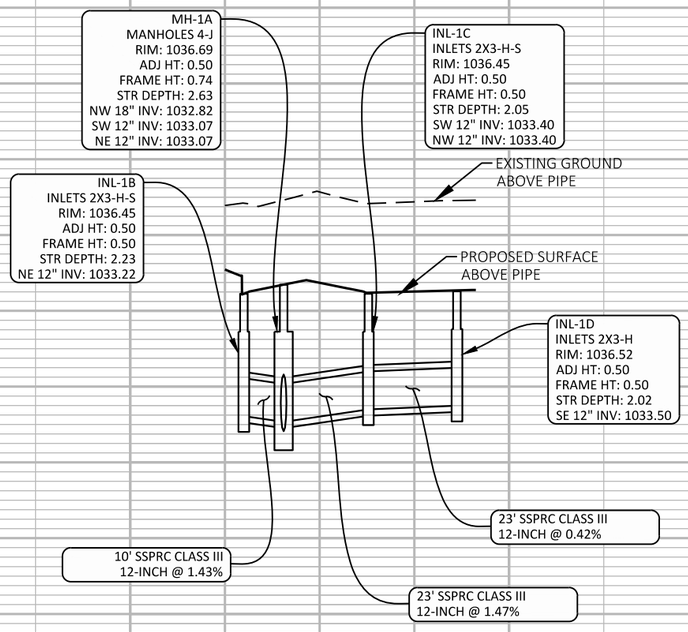


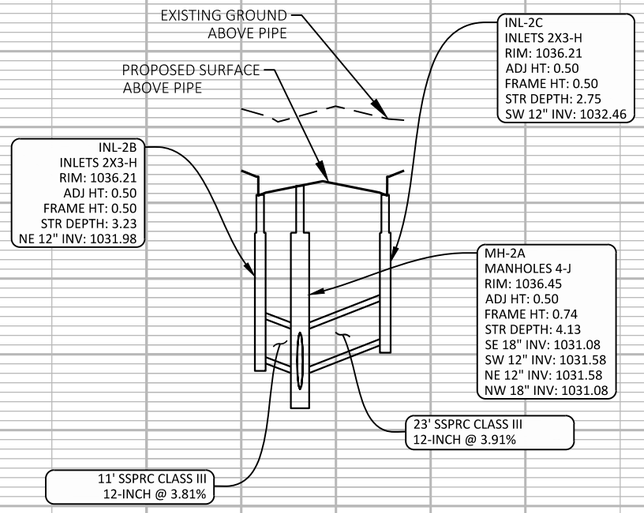


1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 36 E



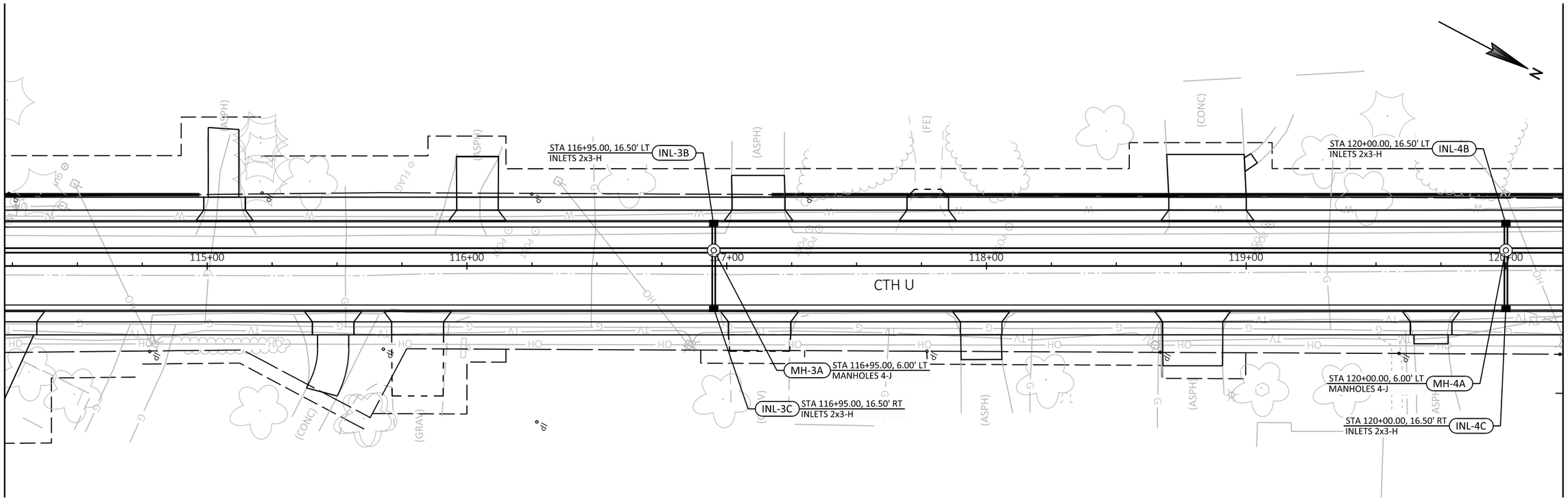


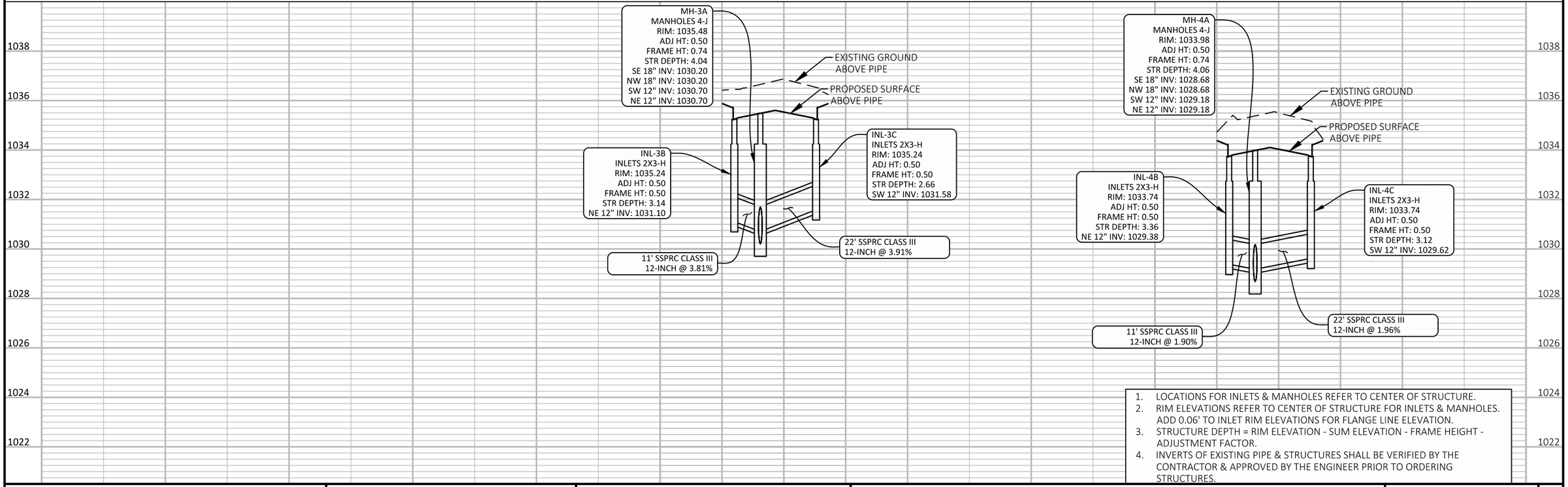


1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 37	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022501-SS.DWG
LAYOUT NAME - 69340670-022508-ss
PLOT DATE : 3/14/2019 1:47 PM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

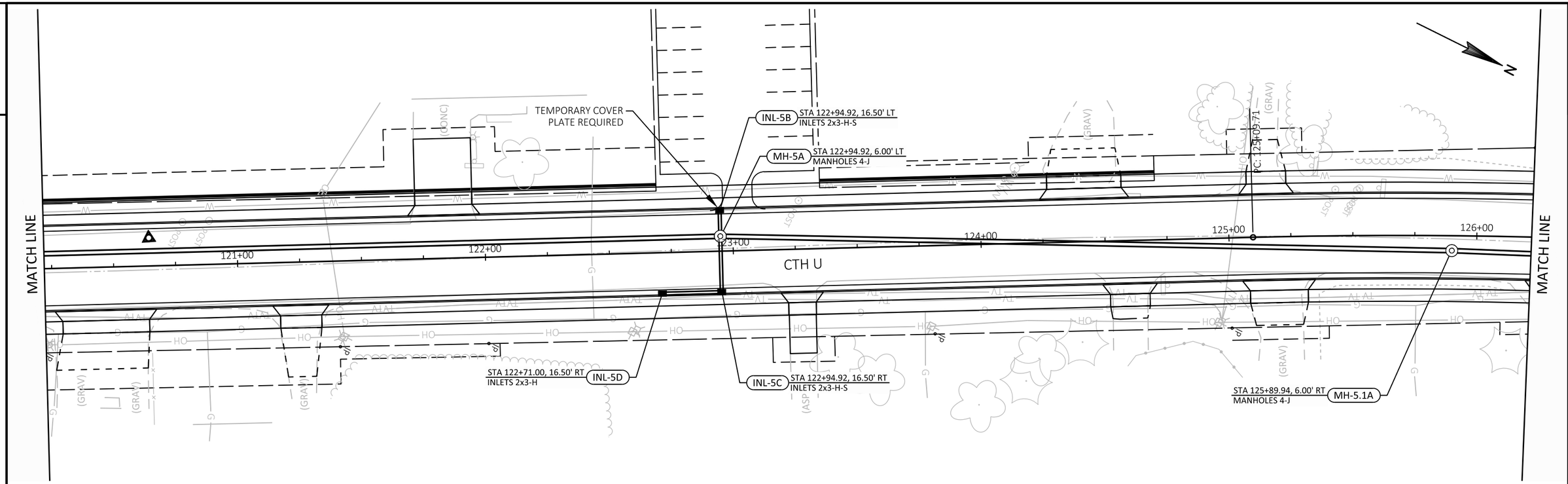


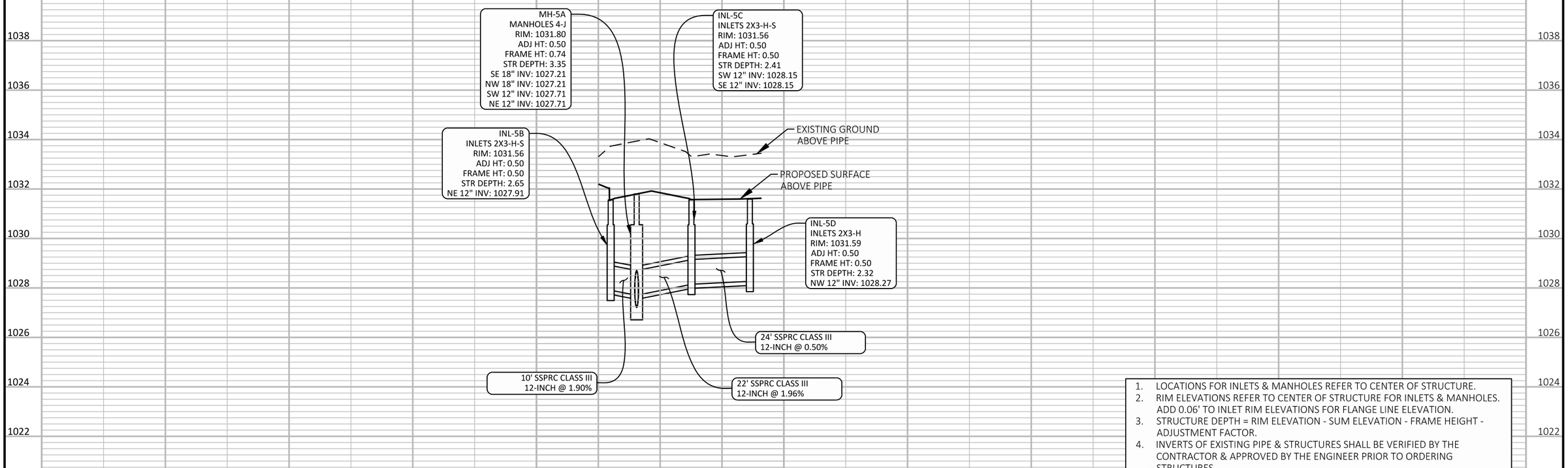


1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 38	E

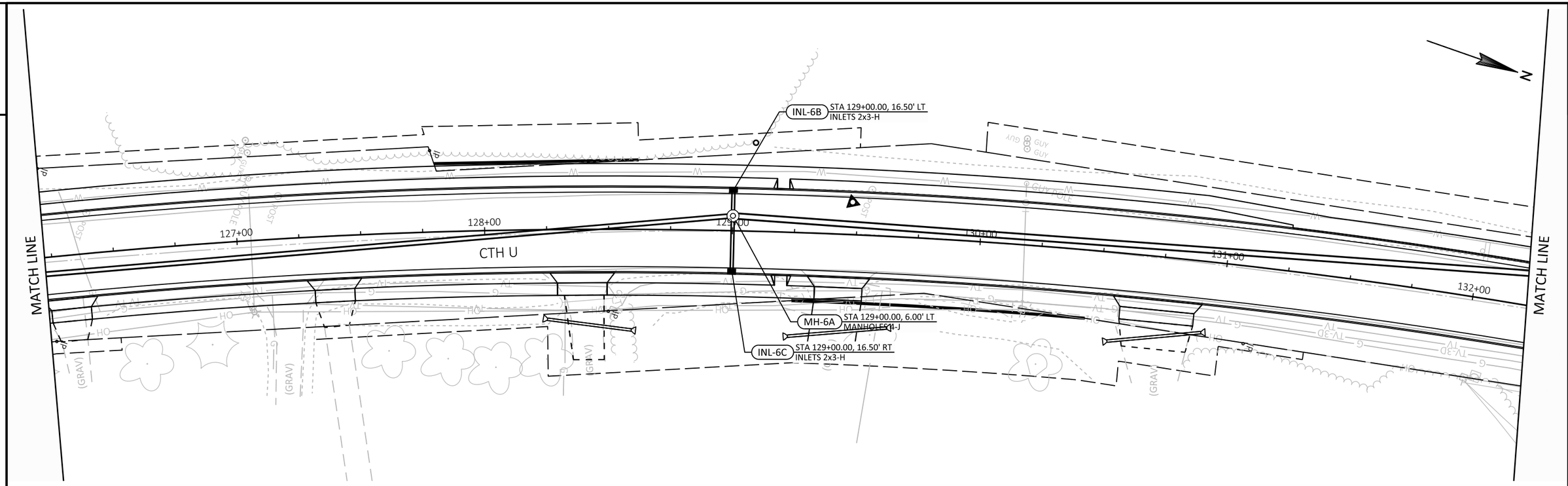
2

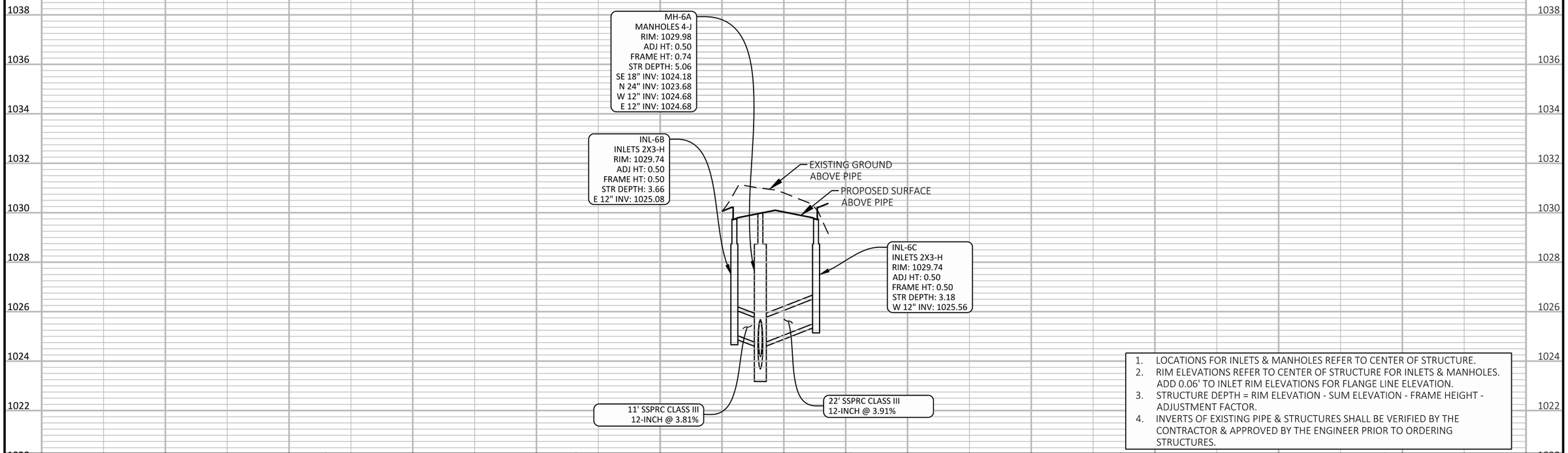




1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

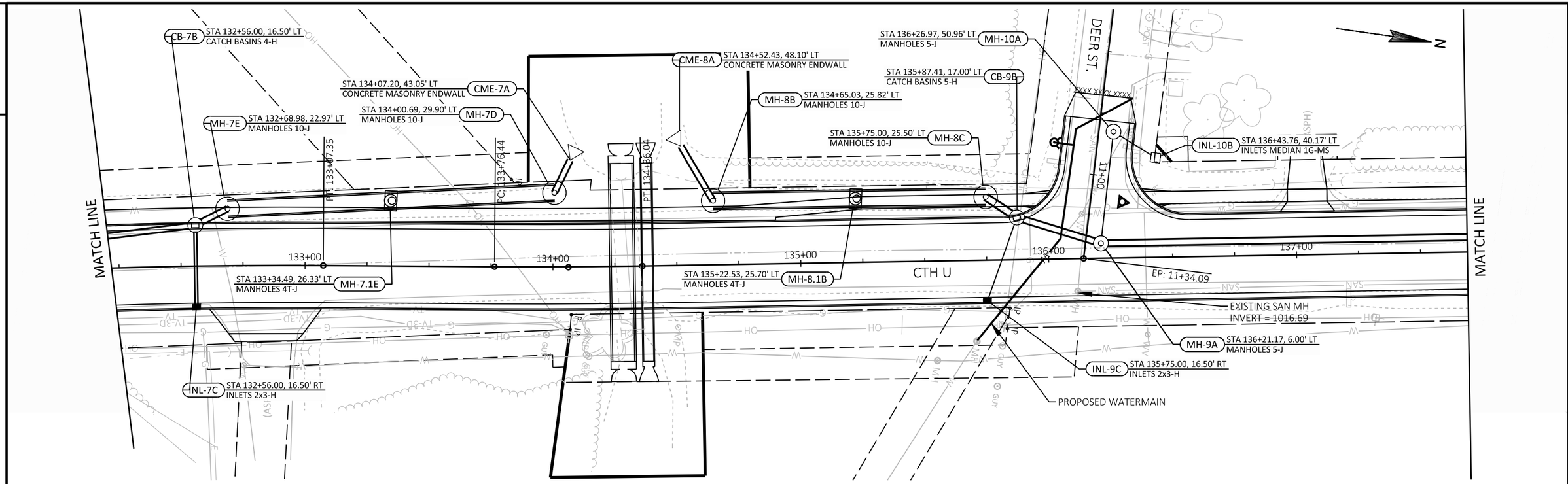
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 39	E

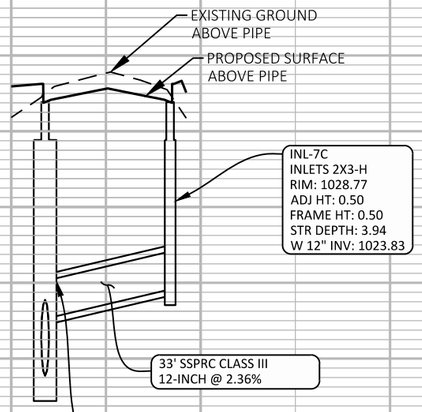


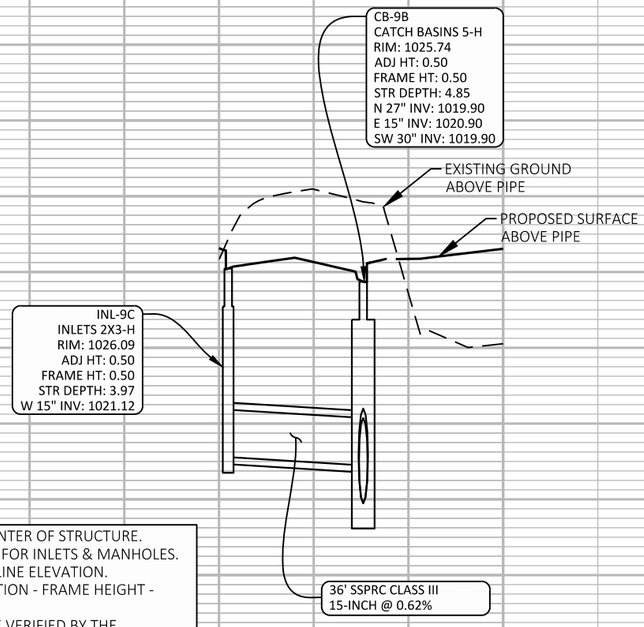


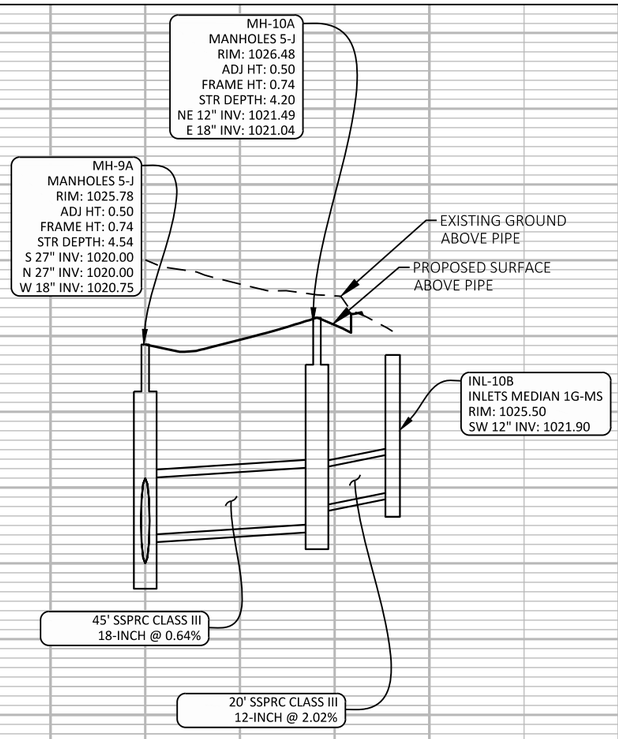
1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 40	E



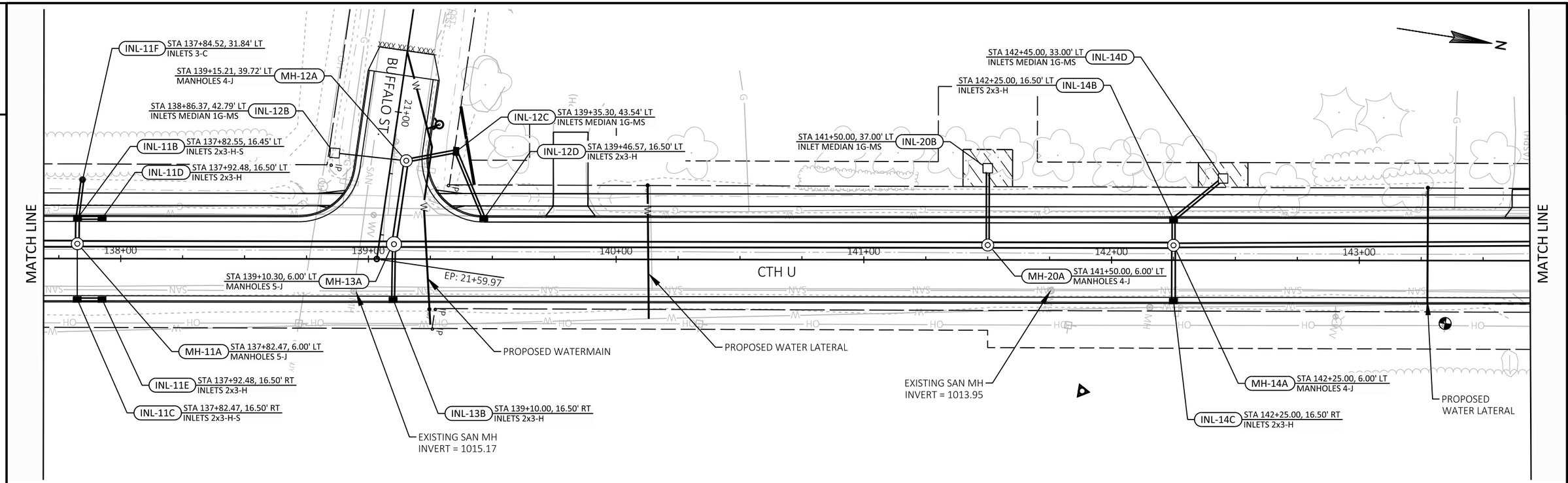


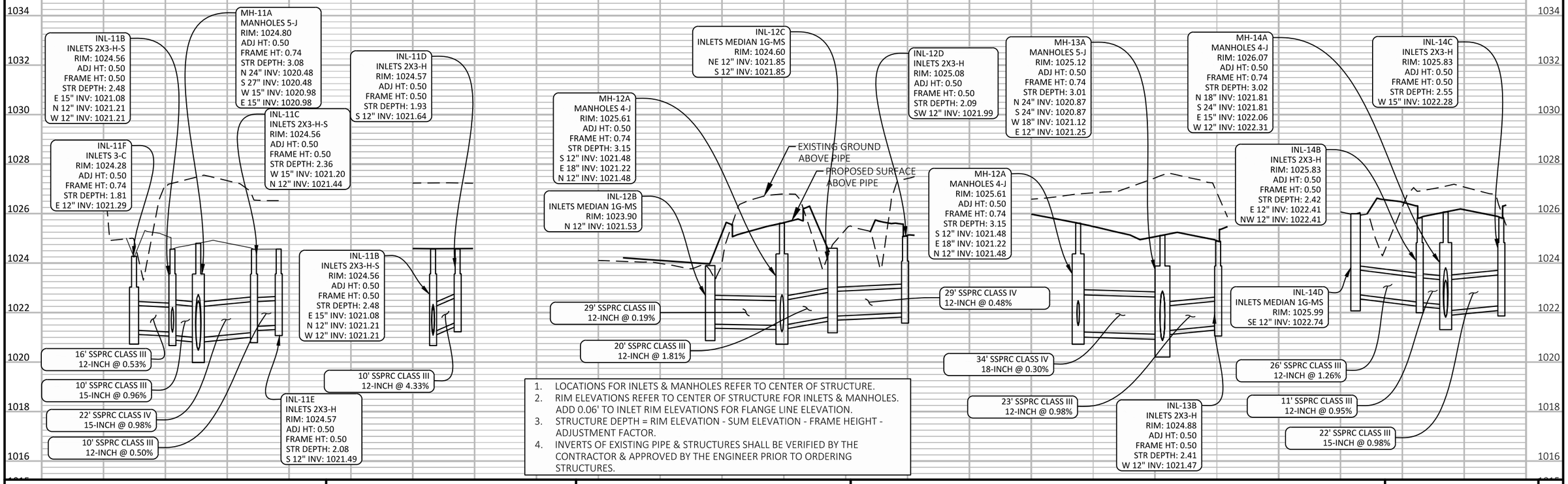




1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

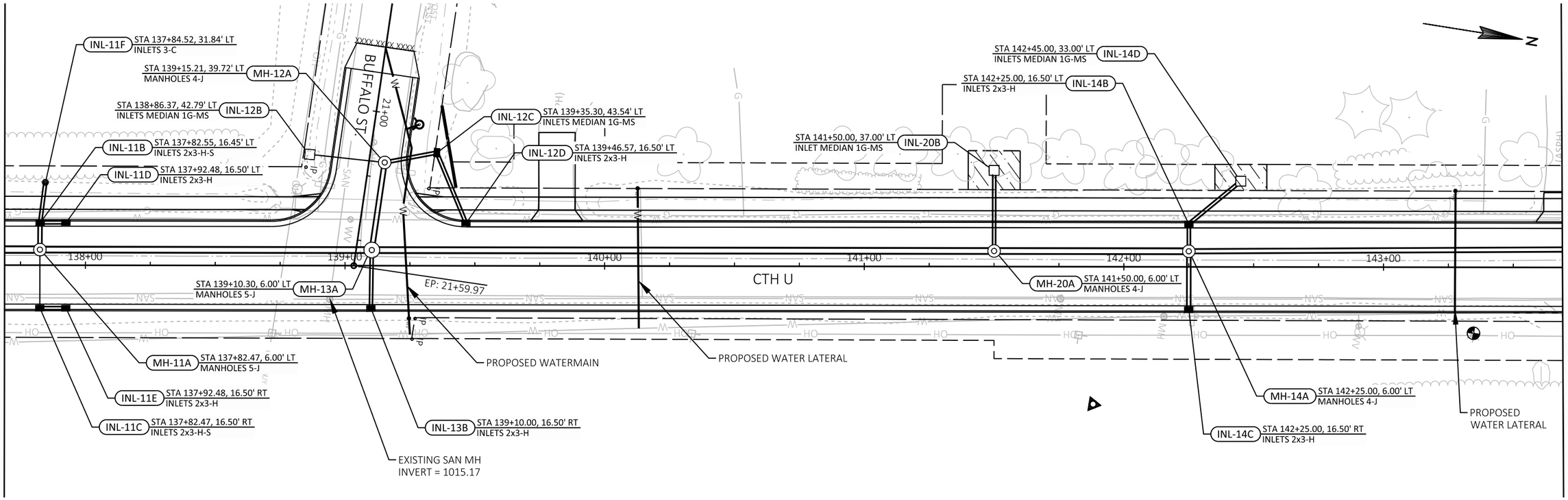
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 41	E

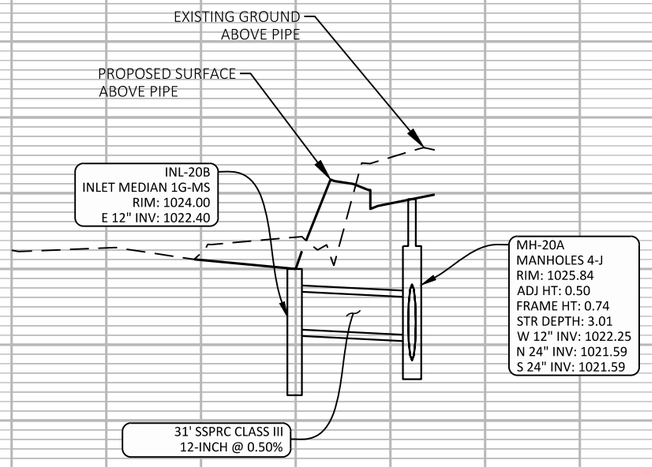




1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 42 E

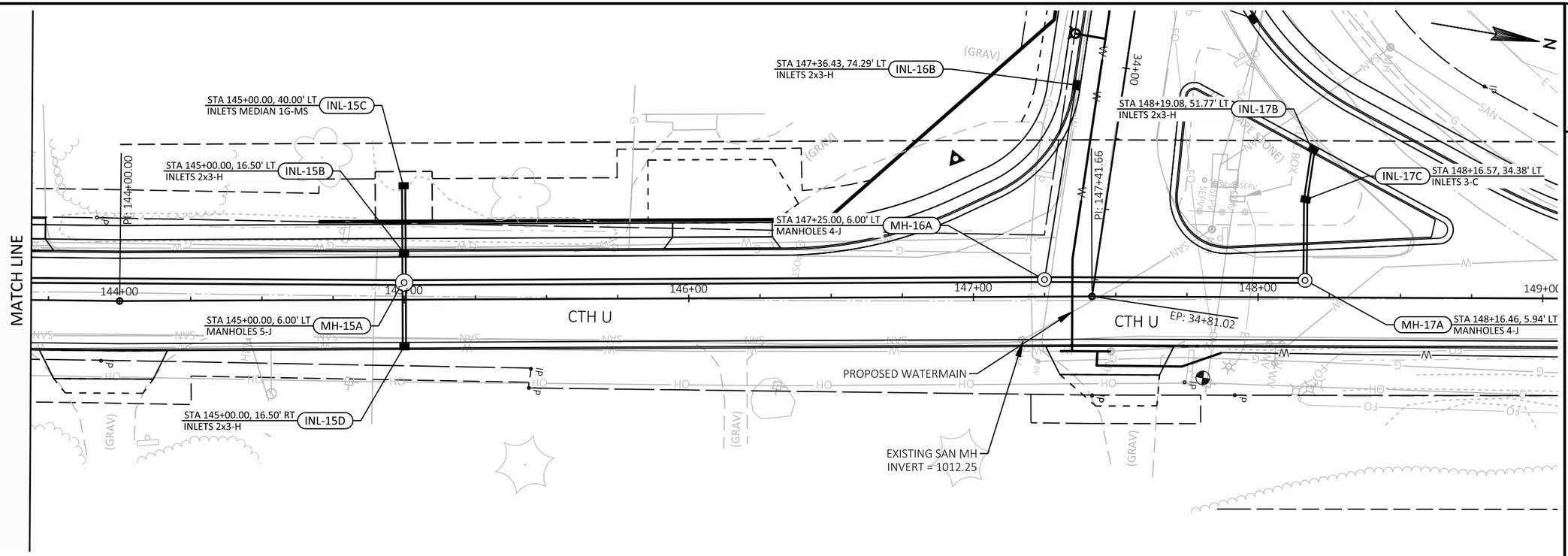


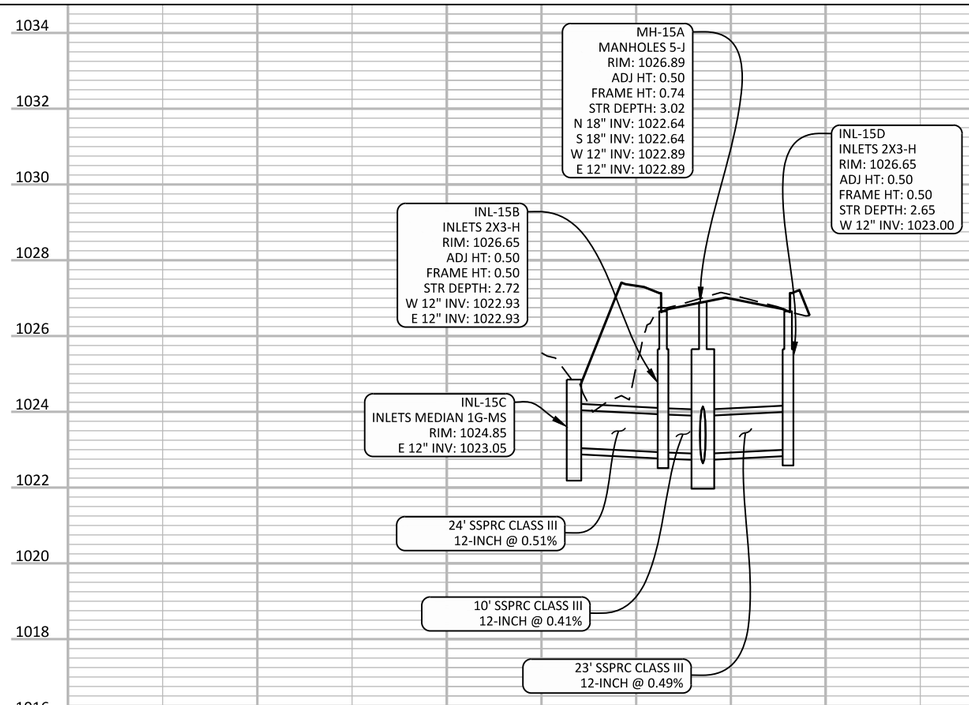


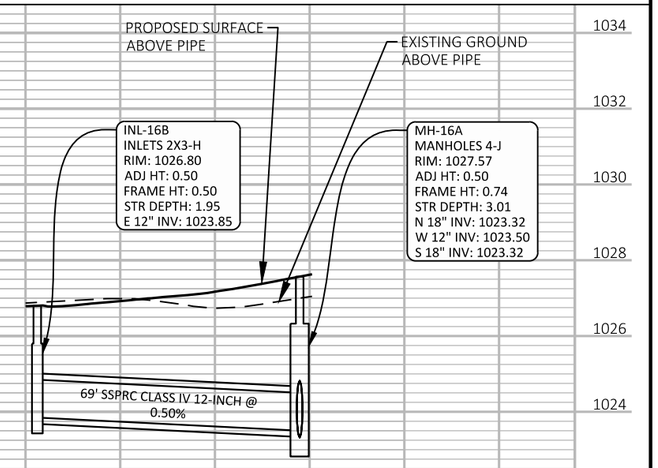
1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 43	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-022501-SS.DWG
LAYOUT NAME - 69340670-022513.1-ss
PLOT DATE : 3/19/2019 10:58 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

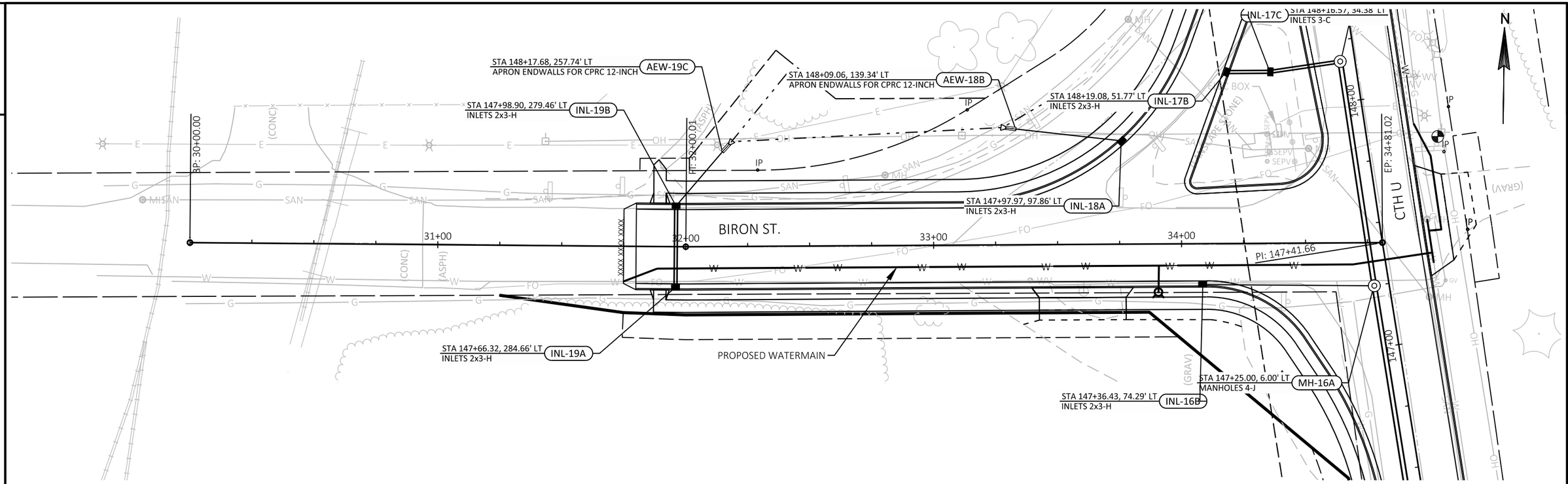


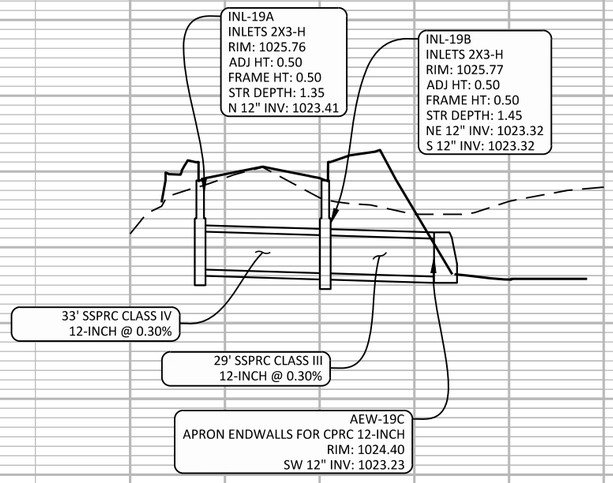


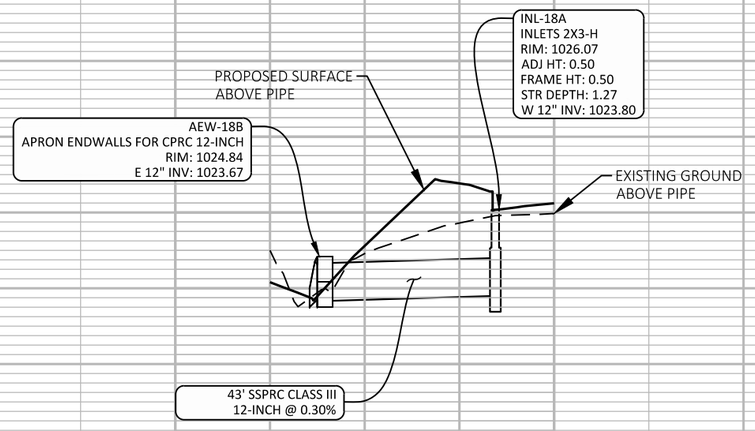


1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 44 E

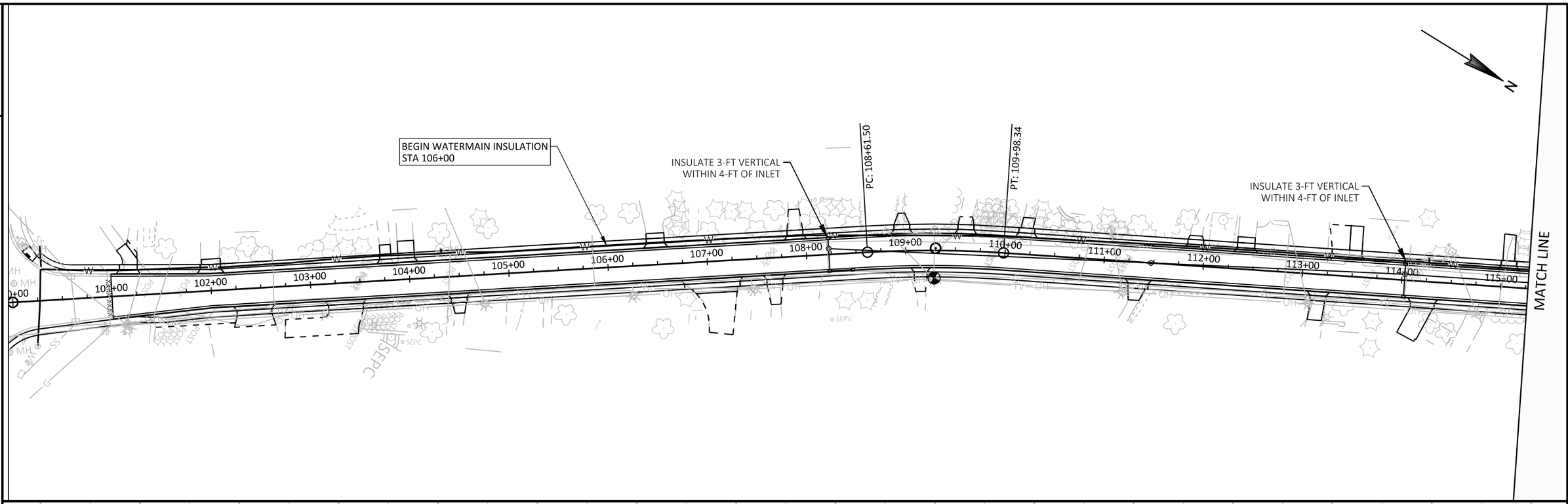


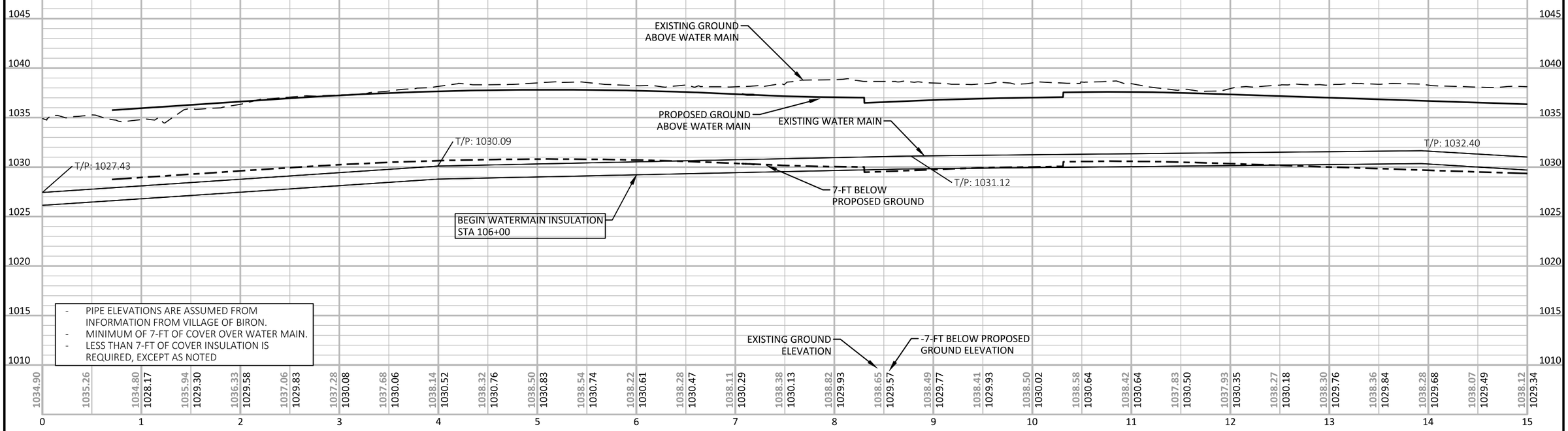




1. LOCATIONS FOR INLETS & MANHOLES REFER TO CENTER OF STRUCTURE.
2. RIM ELEVATIONS REFER TO CENTER OF STRUCTURE FOR INLETS & MANHOLES. ADD 0.06' TO INLET RIM ELEVATIONS FOR FLANGE LINE ELEVATION.
3. STRUCTURE DEPTH = RIM ELEVATION - SUM ELEVATION - FRAME HEIGHT - ADJUSTMENT FACTOR.
4. INVERTS OF EXISTING PIPE & STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR & APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	STORM SEWER	SHEET 45	E





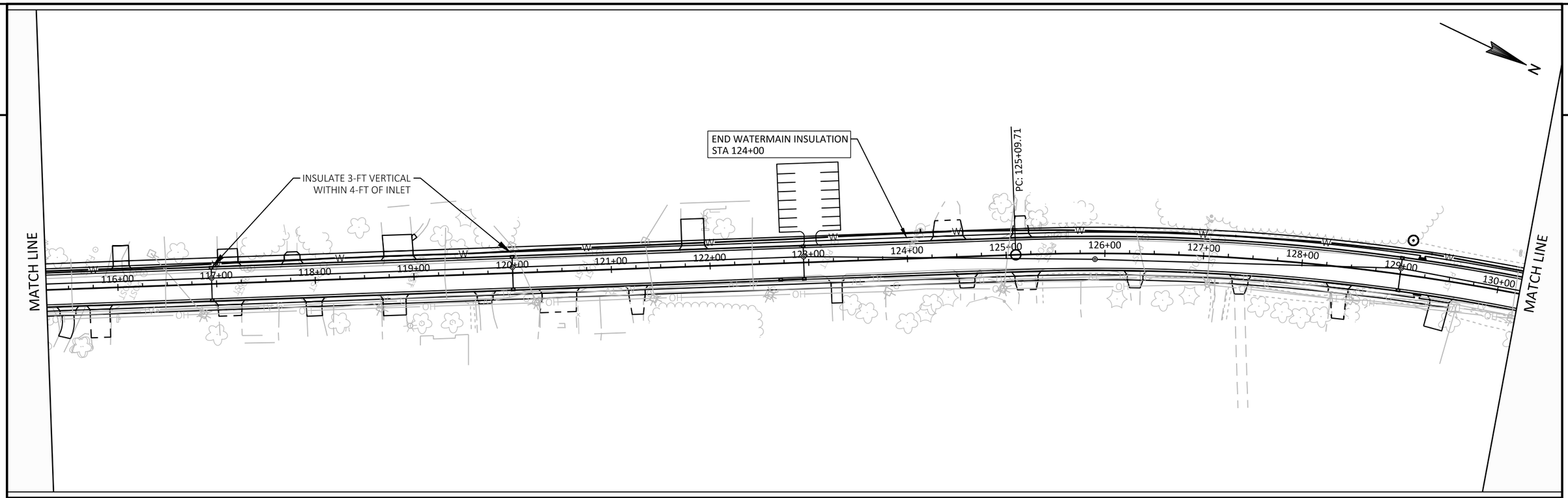
- PIPE ELEVATIONS ARE ASSUMED FROM INFORMATION FROM VILLAGE OF BIRON.
- MINIMUM OF 7-FT OF COVER OVER WATER MAIN.
- LESS THAN 7-FT OF COVER INSULATION IS REQUIRED, EXCEPT AS NOTED

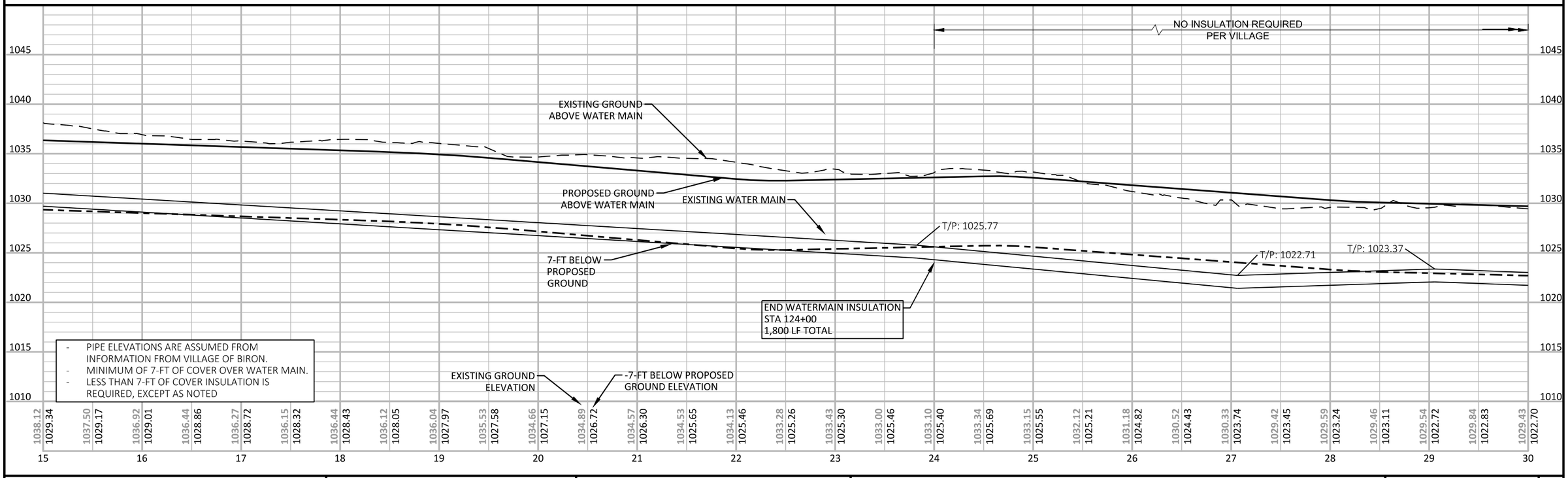
PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	UTILITY PLAN: CTH U - WATER MAIN INSULATION	SHEET 46	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-023001-UP_WM.DWG
LAYOUT NAME - 69340670-023001-up_INSUL

PLOT DATE : 4/15/2019 11:16 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:100 FT

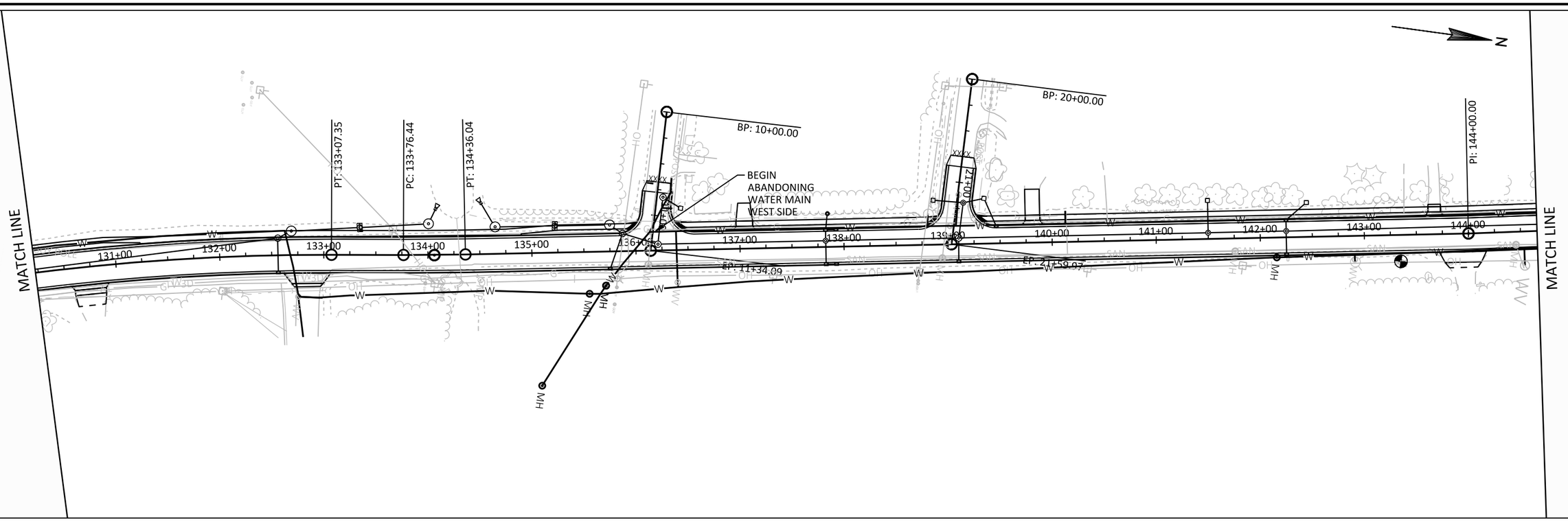
WISDOT/CADDS SHEET 42

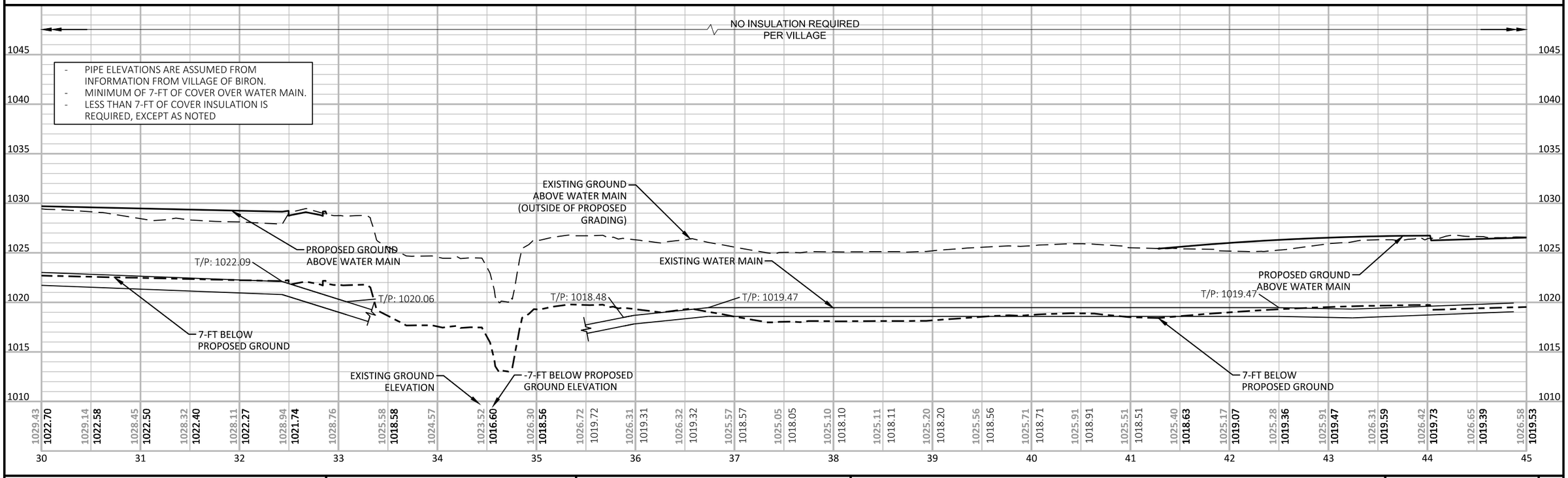




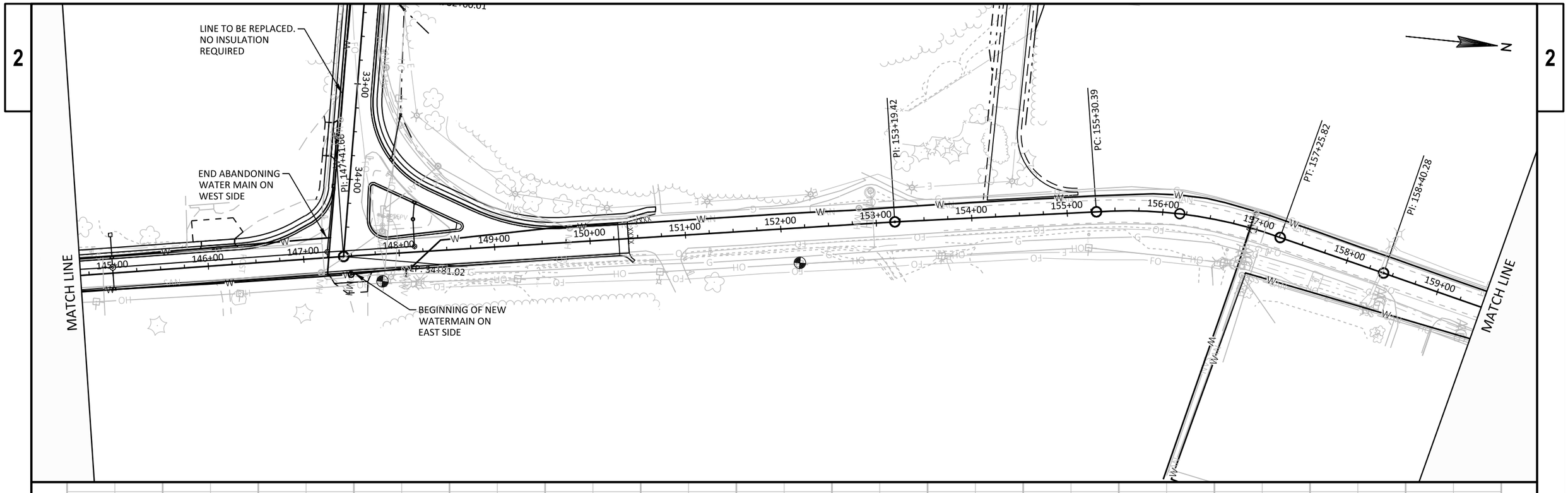
PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	UTILITY PLAN: CTH U - WATER MAIN INSULATION	SHEET 47	E

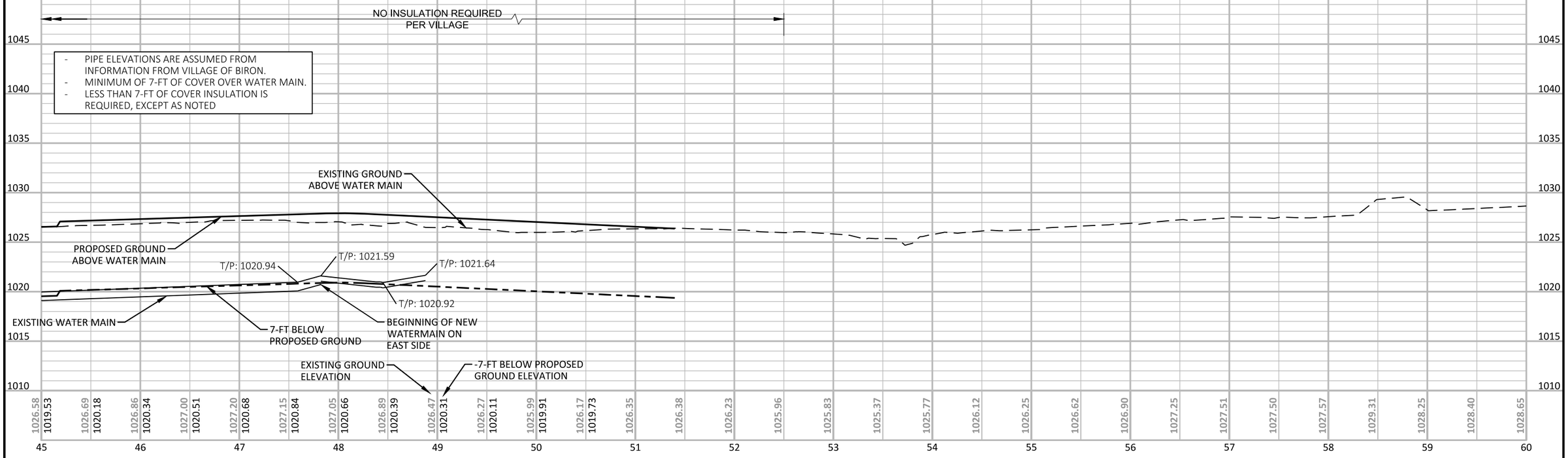
2





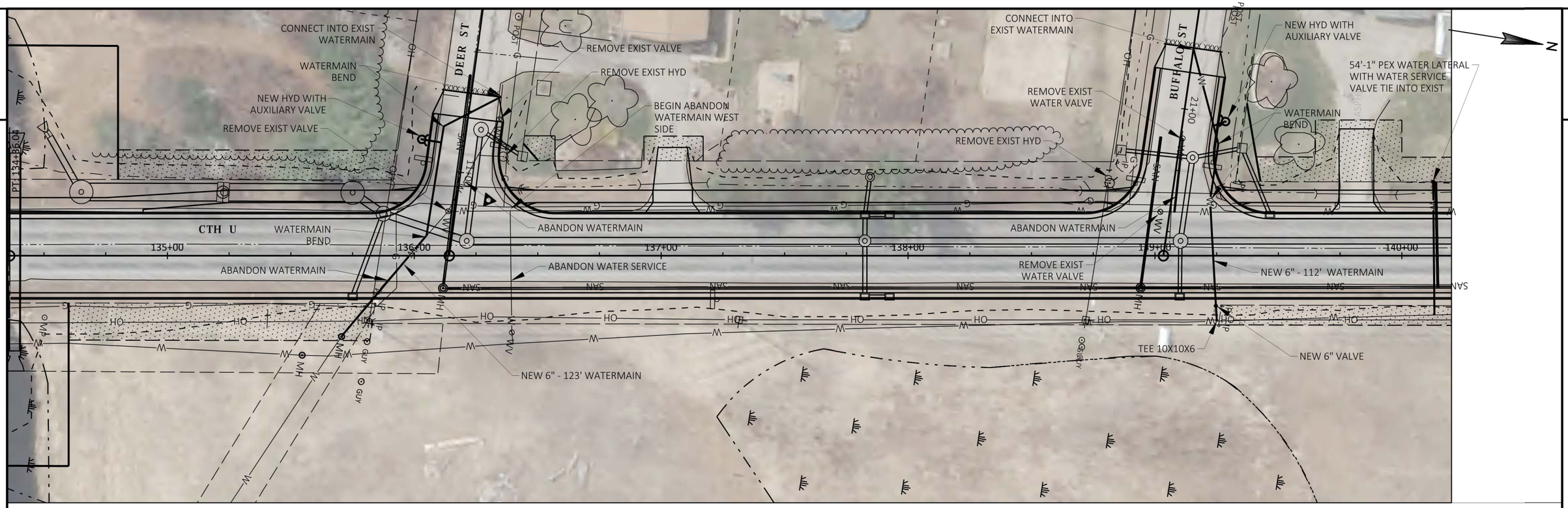
PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	UTILITY PLAN: CTH U - WATER MAIN INSULATION	SHEET 48	E

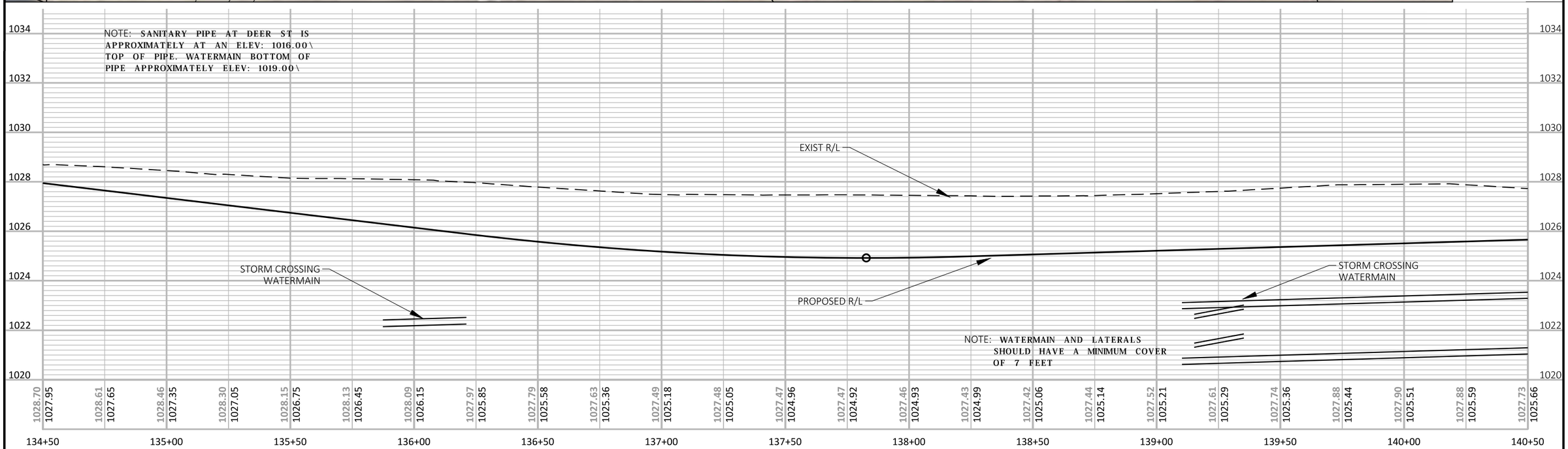




PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	UTILITY PLAN: CTH U - WATER MAIN INSULATION	SHEET 49	E

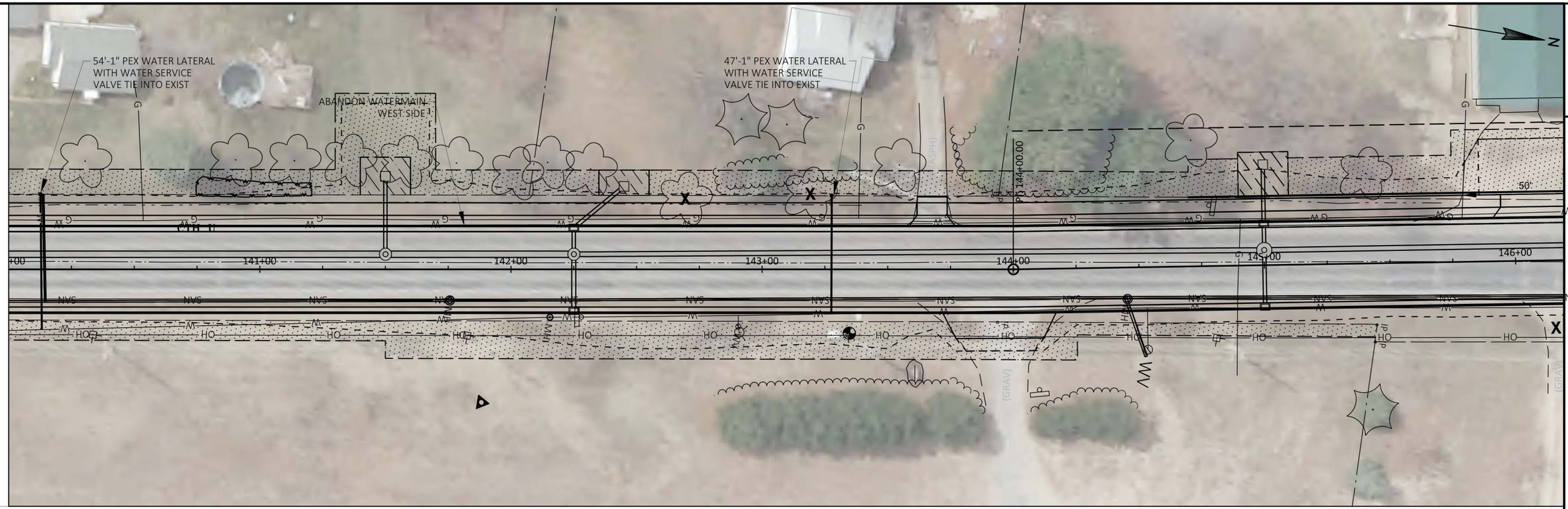
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-023001-UP_WM.DWG
LAYOUT NAME - 69340670-023004-up_INSUL
PLOT DATE : 4/15/2019 11:19 AM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

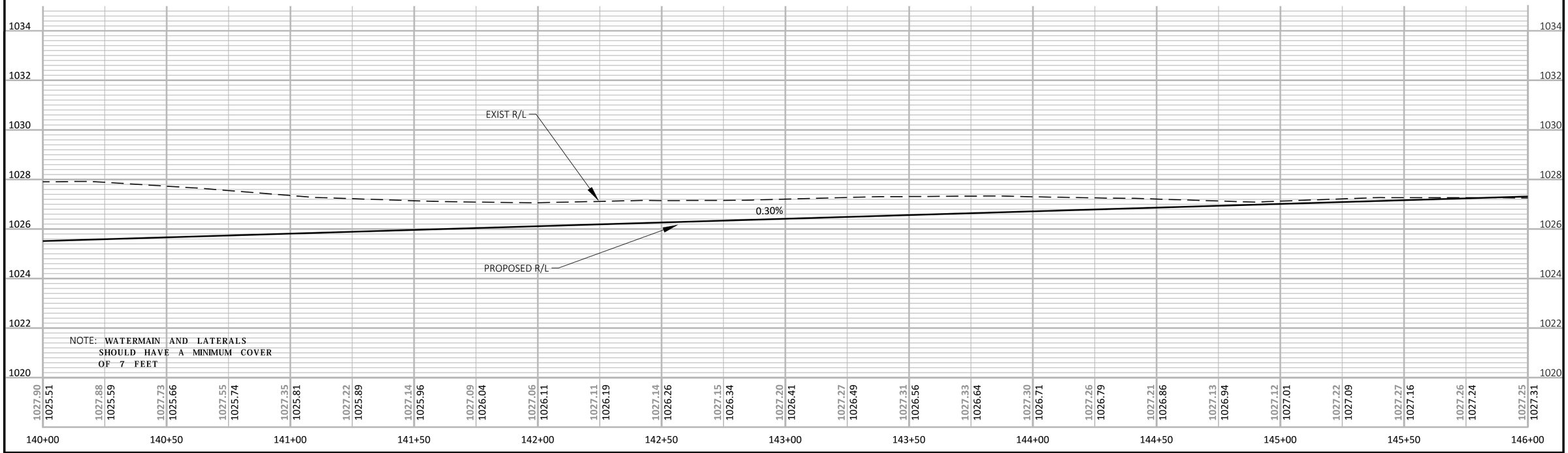




PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CTH U WATERMAIN PLAN	SHEET 50	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP-VILLAGE-WM.DWG
LAYOUT NAME - 69340670-050121-pp
PLOT DATE : 4/16/2019 10:07 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42





PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CTH U WATERMAIN PLAN	SHEET 51	E

2

2

END ABANDON WATERMAIN WEST SIDE

S BIRCH

PI: 147+41.66
N88° 48' 31"E

34+00

ILANSKA STONE

FO

SAN

PC: 1+11.44

N19° 48' 31"E 160'

ND PAPER UTILITY (APPROX. LOCATION)

PT: 3+10.04

EP: 3+60.22

N9° 26' 23"W

3+80.04

50'

146+00 147+00 148+00 149+00 150+00 151+00 152

NEW 6" - 327' WATERMAIN

EXIST WATERMAIN TO REMAIN

CTH U

20'

NEW 12" WATERMAIN DIRECTIONAL BORE

SOLARUS FIBER OPTIC DEPTH 36" - 42"

CAUTION UTILITIES

BEGIN DIRECTIONAL BORE
12" WATERMAIN INSTALLATION
EXTEND 1,290' NORTH

MATCH LINE STA 152+00

SANITARY AND WATER DISTANCE APPROXIMATELY 5' APART. TOP OF SANITARY PIPE IS APPROXIMATELY AT AN ELEVATION OF 1012 +\-

EXIST SURFACE OVER PROPOSED 12" WATERMAIN

SOLARUS FIBER OPTIC APPROXIMATE DEPTH AND LOCATION

BEGIN DIRECTIONAL BORE
12" WATERMAIN INSTALLATION
EXTEND 1,290' NORTH

MINIMUM 7' OF COVER

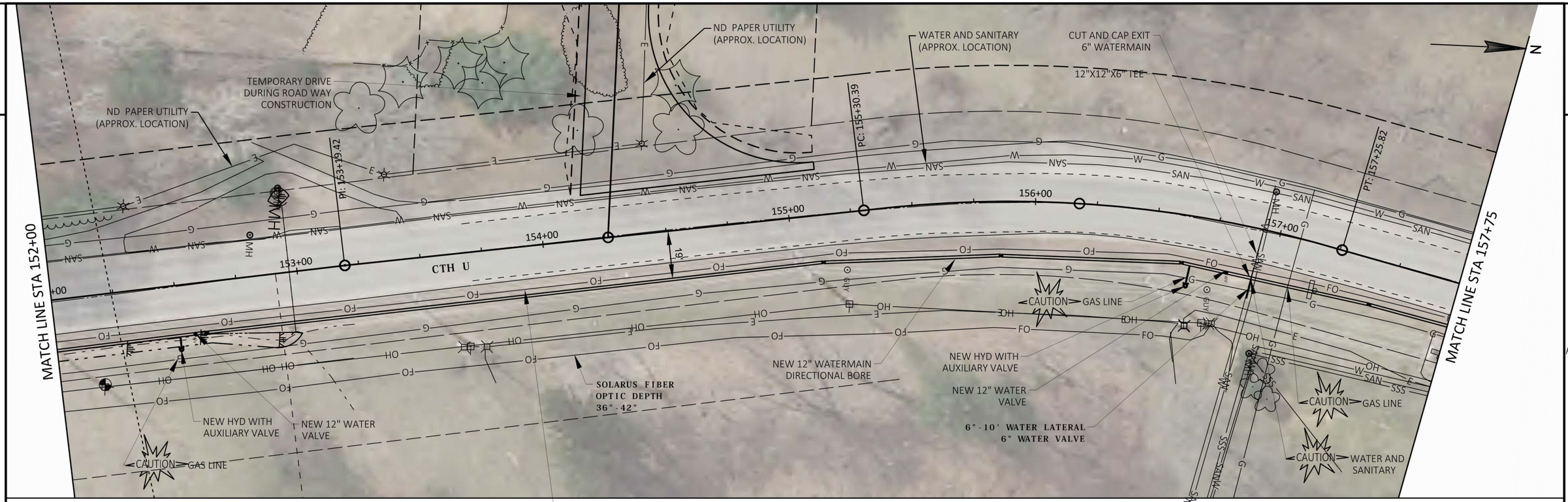
1028 1026 1024 1022 1020 1018 1016 1014 1013

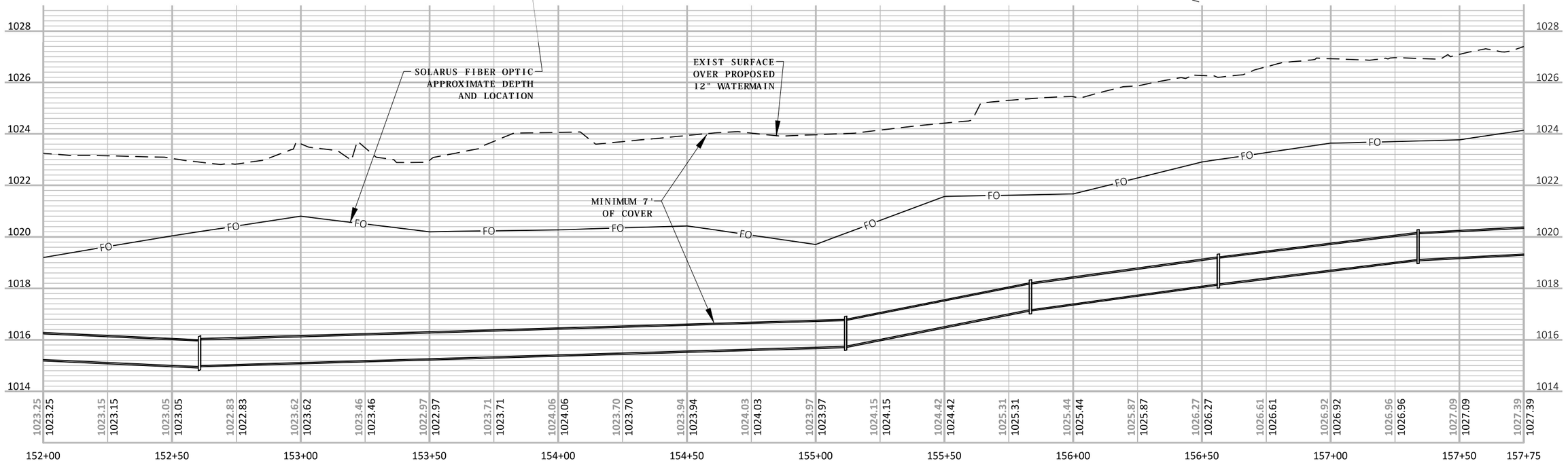
1026.98 1026.85 1026.56 1026.17 1025.43 1025.14 1024.81 1024.70 1024.36 1024.25 1024.23 1024.39 1024.82 1026.44 1025.22 1024.08 1023.73 1023.45 1023.25

146+00 146+50 147+00 147+50 148+00 148+50 149+00 149+50 150+00 150+50 151+00 151+50 152+00

PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CTH U WATERMAIN PLAN	SHEET 52	E

2



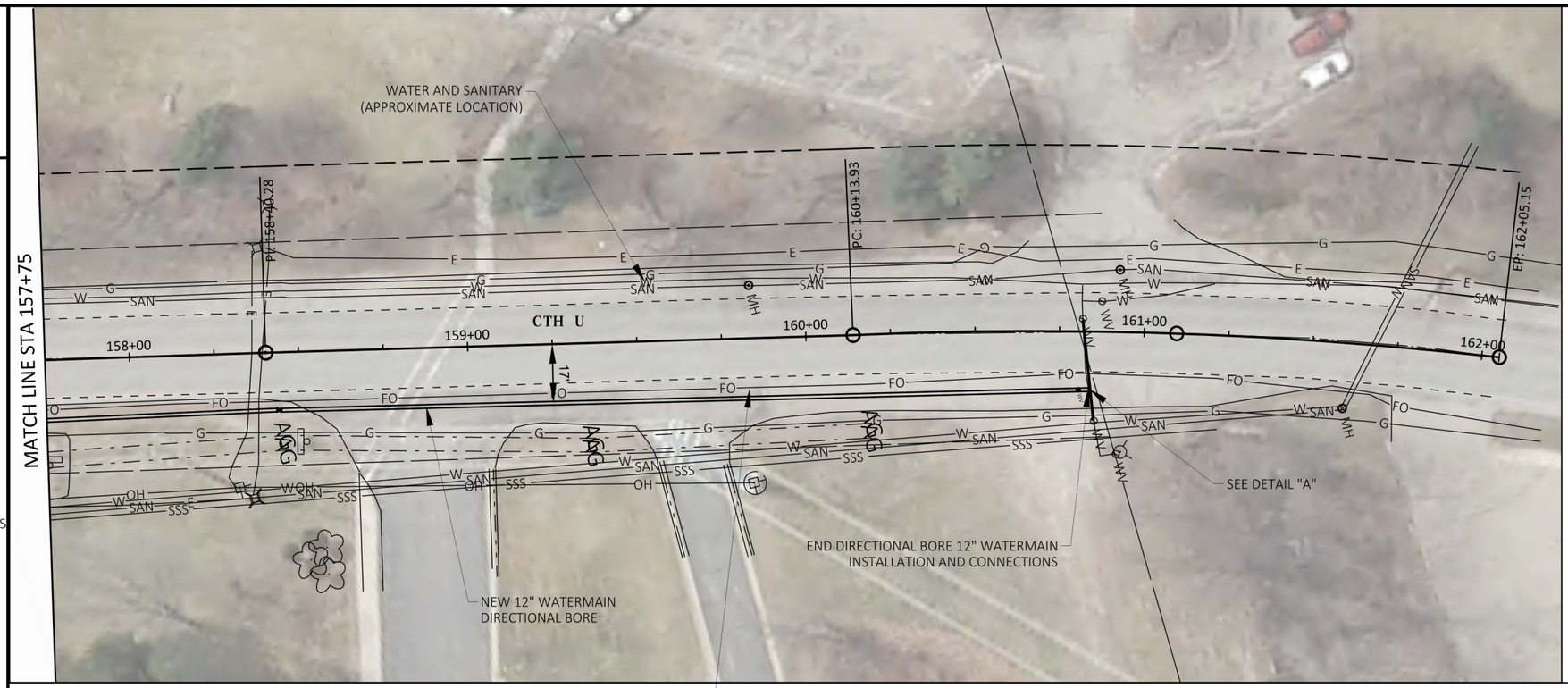


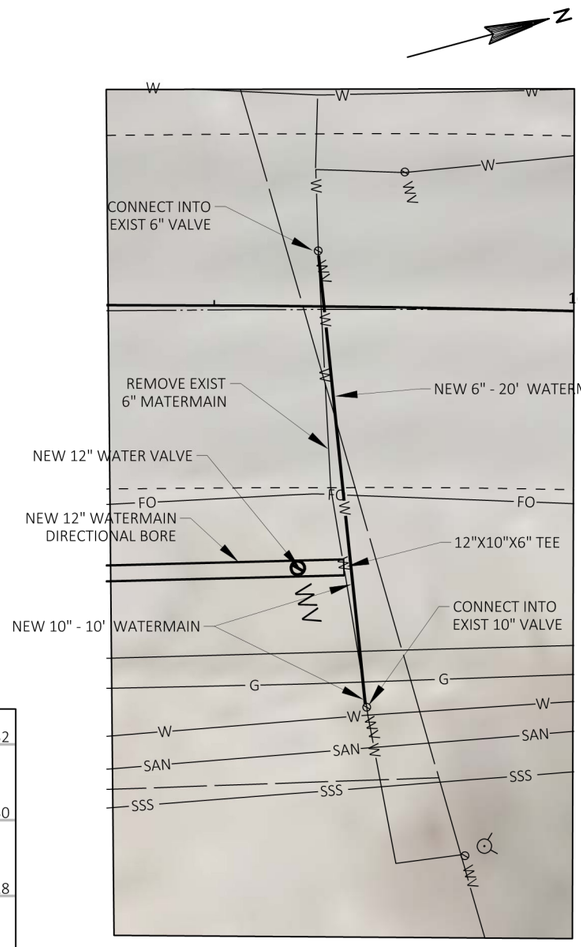
PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CTH U WATERMAIN PLAN	SHEET 53 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP-VILLAGE-WM.DWG
LAYOUT NAME - 69340670-050124-pp

PLOT DATE : 4/16/2019 10:08 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1:40

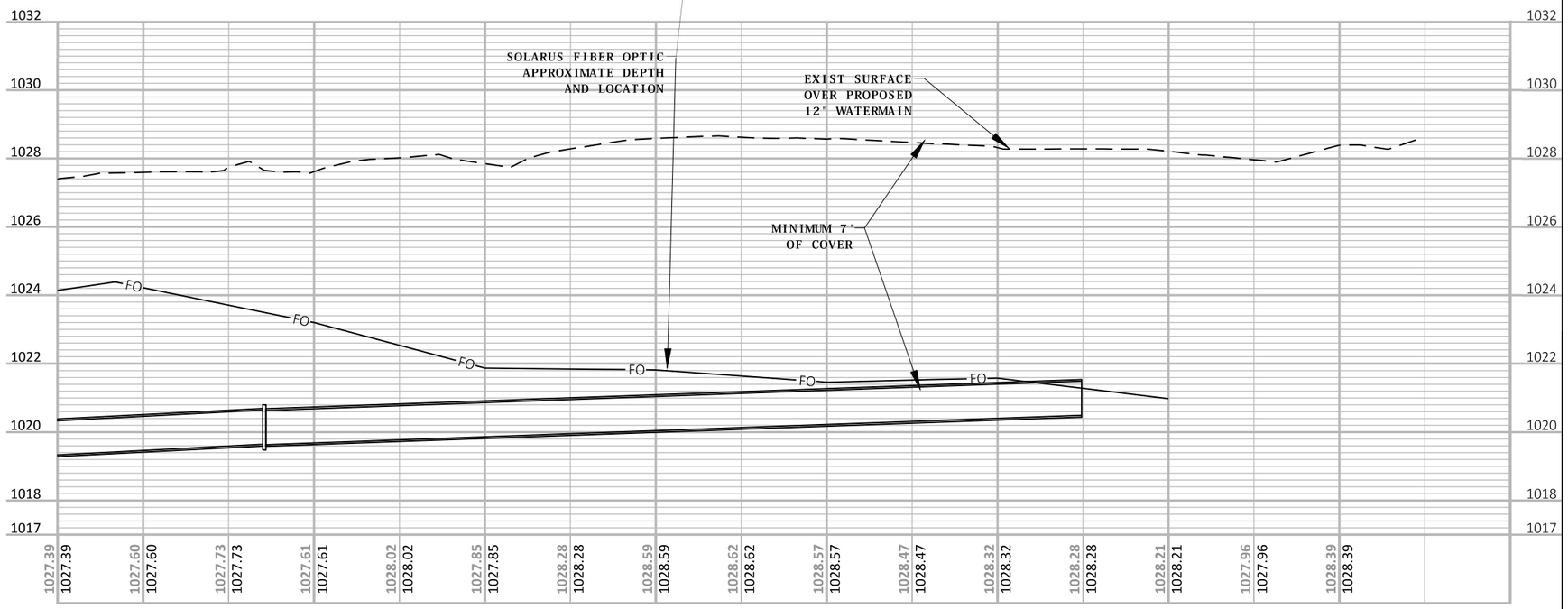
WISDOT/CADDS SHEET 42





DETAIL "A"

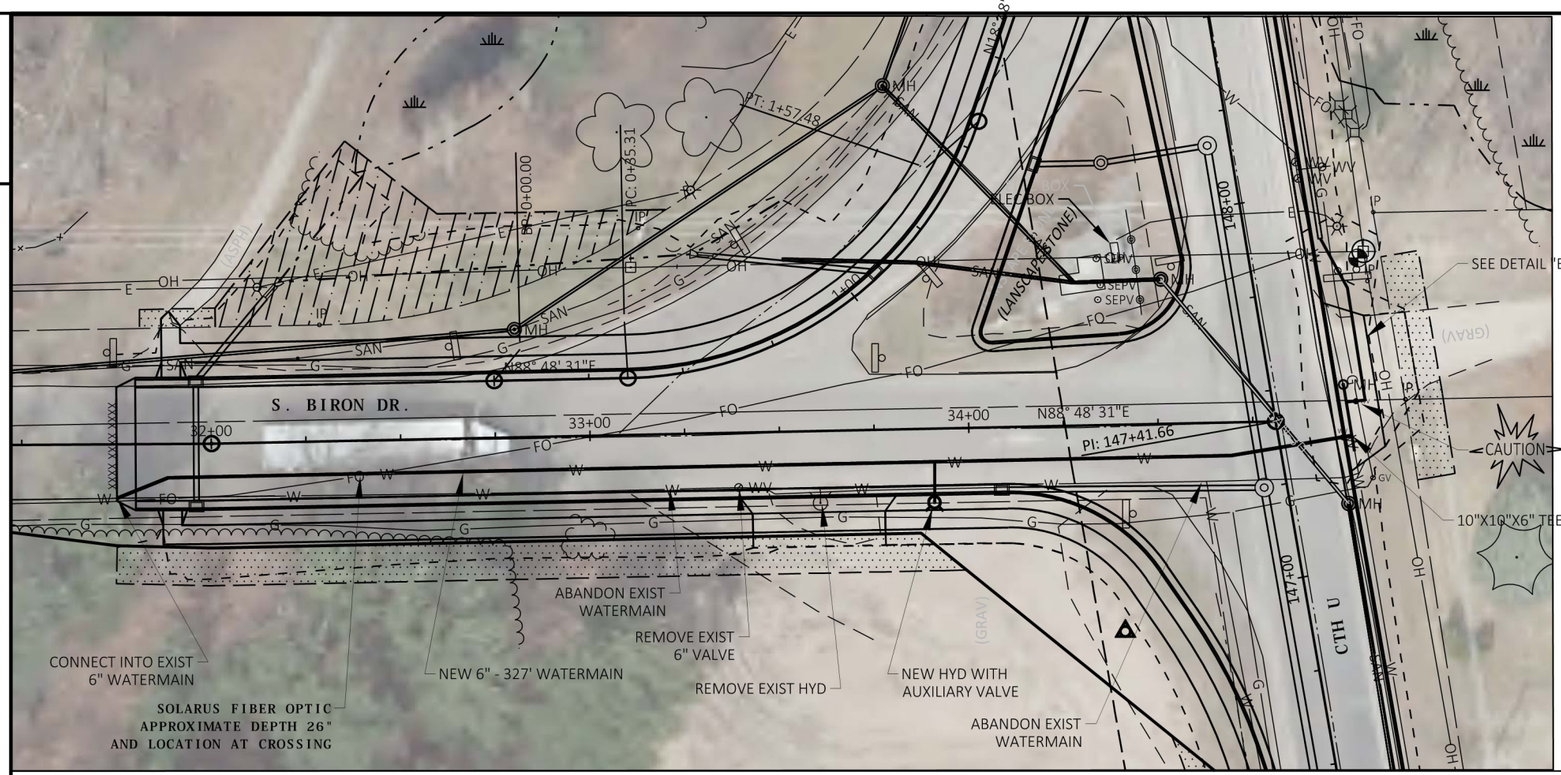
SCALE: 1" = 10'

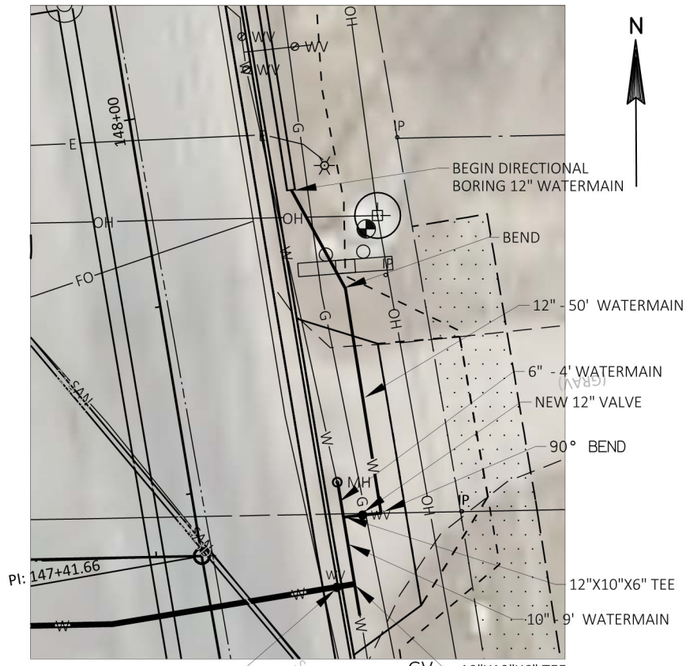


PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CTH U WATERMAIN PLAN	SHEET 54	E

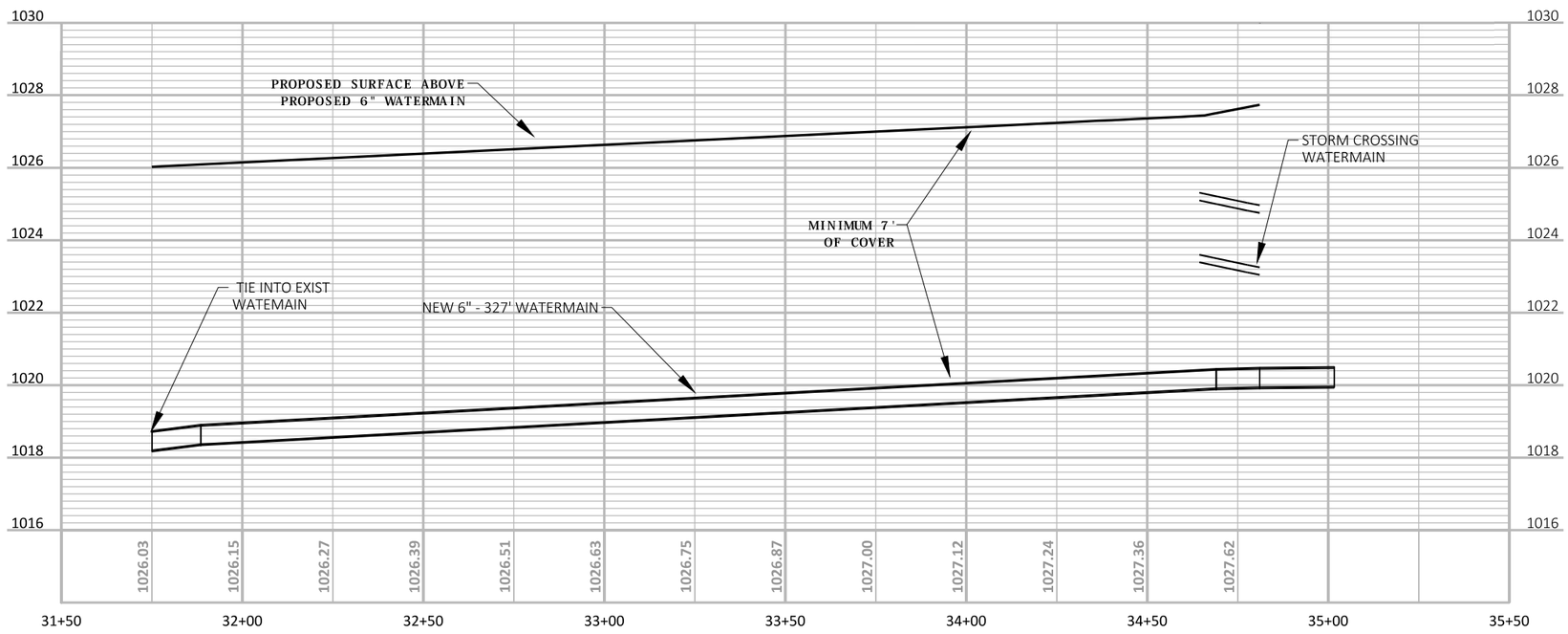
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP-VILLAGE-WM.DWG
LAYOUT NAME - 69340670-050125-pp

PLOT DATE : 4/16/2019 10:09 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1:40





DETAIL "B"
SCALE: 1"=20'

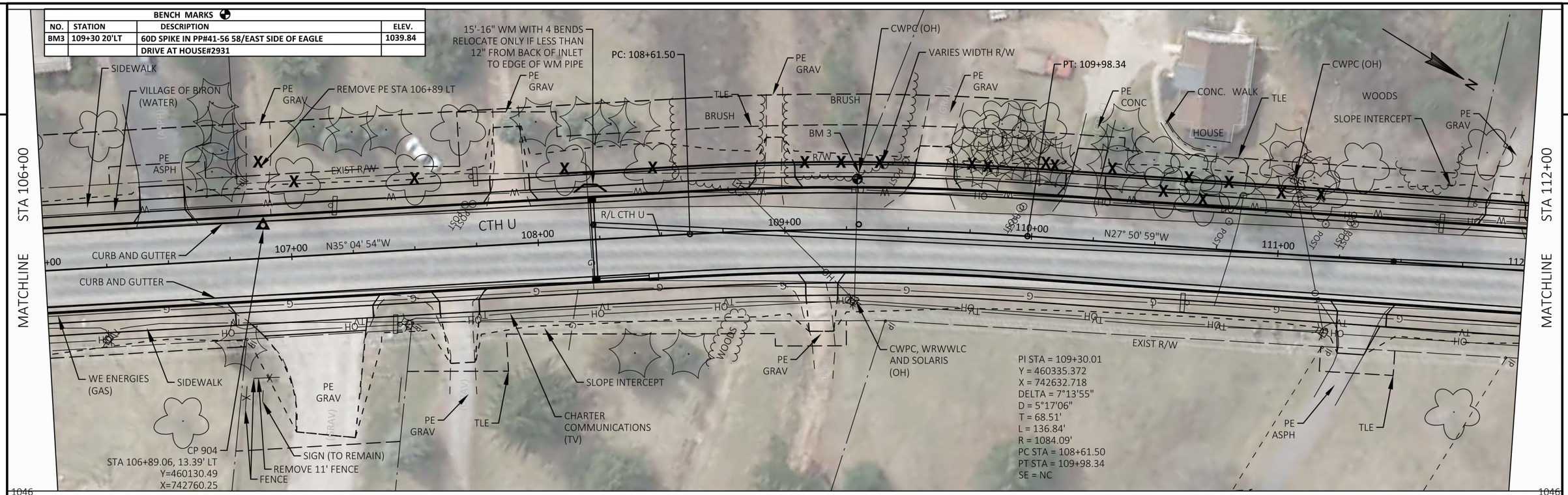


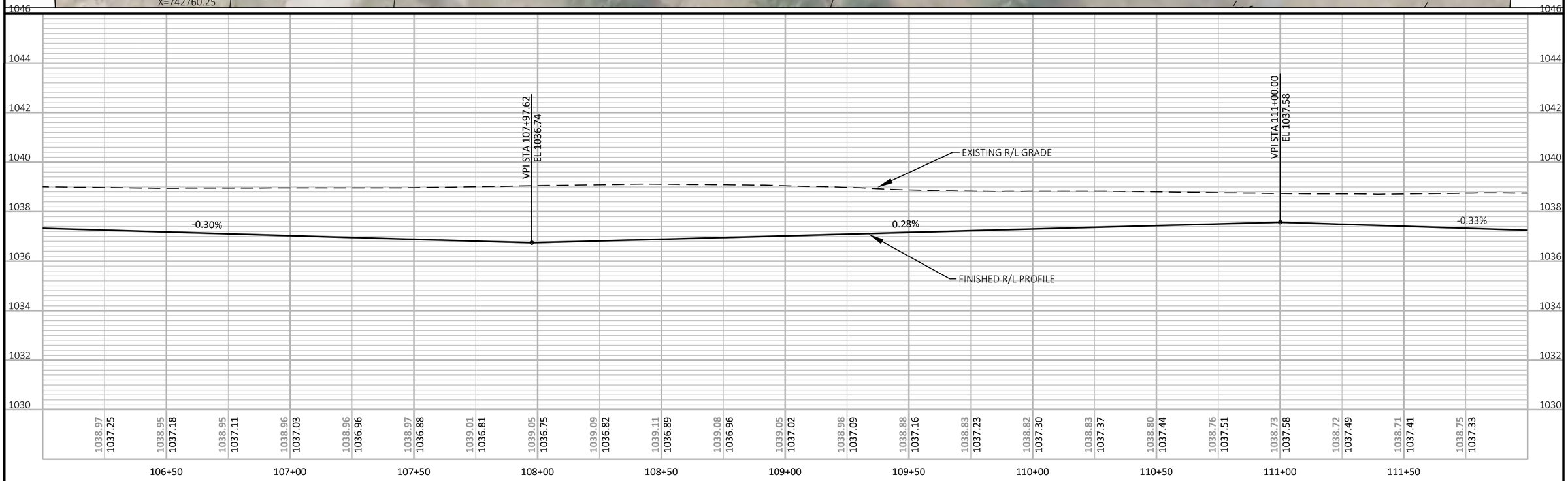
NOTE:
SANITARY SEWER TOP OF PIPE IS AT AN ELEVATION OF 1012.00 +\-

PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	CTH U WATERMAIN PLAN	SHEET 55	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP-VILLAGE-WM.DWG
LAYOUT NAME - 69340670-050126-pp
PLOT DATE : 4/16/2019 10:09 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1:40

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM3	109+30 20'LT	60D SPIKE IN PP#41-56 58/EAST SIDE OF EAGLE	1039.84
		DRIVE AT HOUSE#2931	





PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U VILLAGE WATERMAIN	SHEET 56	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP-VILLAGE-WM-ADD.DWG
LAYOUT NAME - 69340670-050127-pp
PLOT DATE : 4/16/2019 9:59 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : ##########

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM4	114+44 23'LT	60D SPIKE IN PP#45/AT HOUSE 3021	1036.78

MATCHLINE STA 112+00

MATCHLINE STA 118+00

CP 905
STA 113+72.21, 9.22' LT
Y=460722.21
X=742417.91

15'-16" WM WITH 4 BENDS
RELOCATE ONLY IF LESS THAN
12" FROM BACK OF INLET
TO EDGE OF WM PIPE

NEW HYDRANT
LOCATION

ADJUST WATER
VALVE BOX

CWPC (OH)

VILLAGE OF BIRON
(WATER)

SLOPE INTERCEPT

PLANTER

WRWWLC
(OH)

HOUSE

R/W

PE
ASPH

PE
GRAV

TLE

CTH U

BM 4

R/L CTH U

CURB AND GUTTER

SIDEWALK

EXIST R/W

WOODS

N27° 50' 59"W
1511.37'

CHARTER
COMMUNICATIONS
(TV)

WE ENERGIES
(GAS)

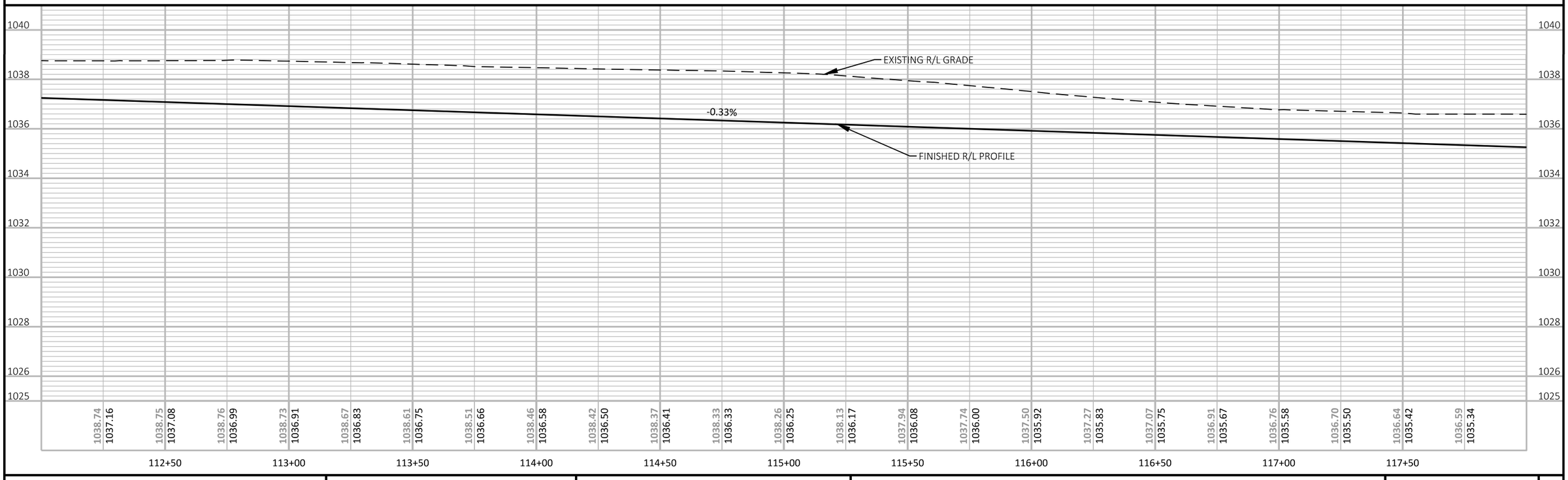
CONC. WALK

PE
CONC

PATIO

BUSHES

CWPC, WRWWLC
AND SOLARIS
(OH)



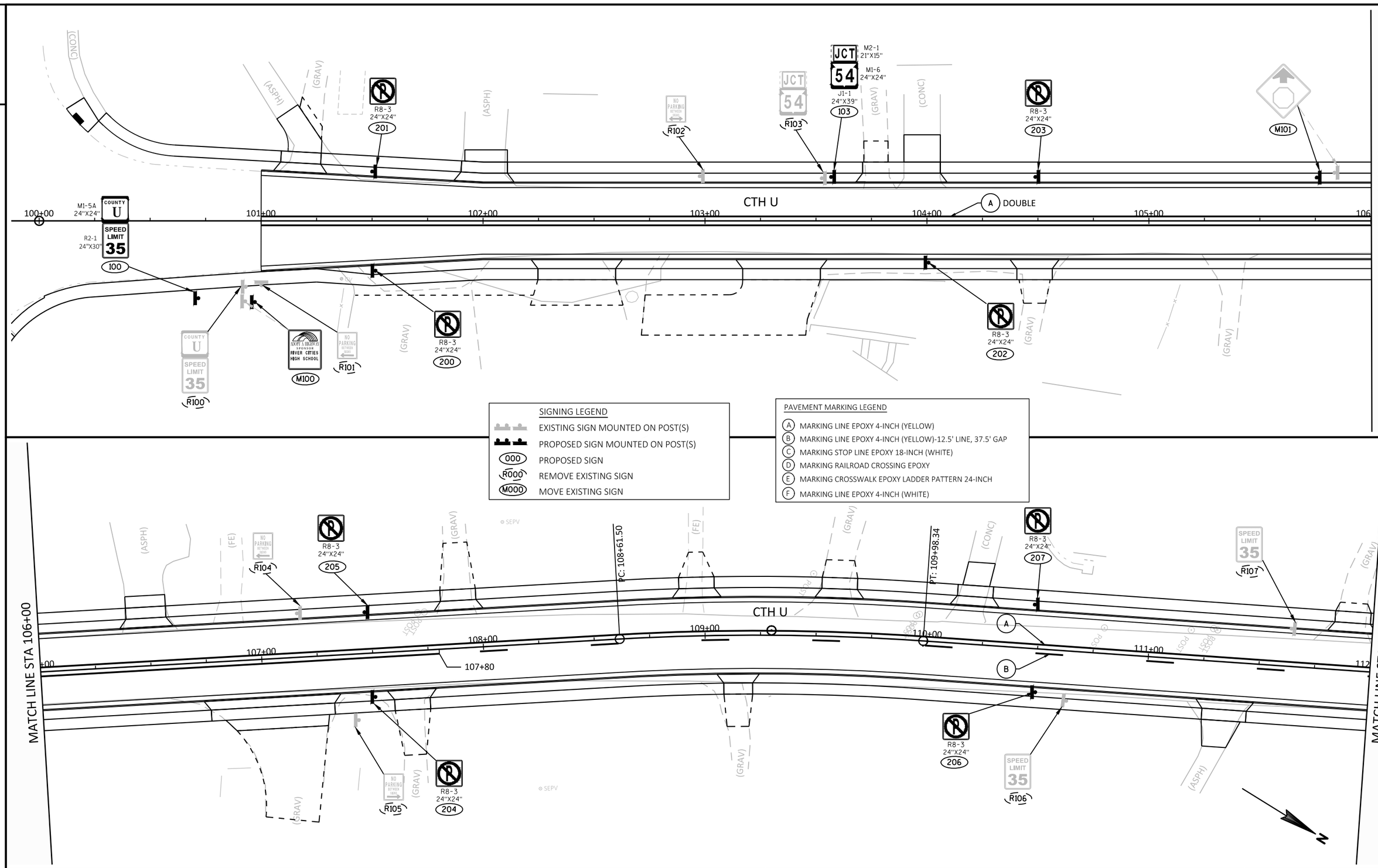
PROJECT NO: 6934-06-71	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U VILLAGE WATERMAIN	SHEET 57	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP-VILLAGE-WM-ADD.DWG
LAYOUT NAME - 69340670-050128-pp

PLOT DATE : 4/16/2019 9:59 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2



SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 000 PROPOSED SIGN
- R000 REMOVE EXISTING SIGN
- M000 MOVE EXISTING SIGN

PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW)-12.5' LINE, 37.5' GAP
- (C) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) MARKING RAILROAD CROSSING EPOXY
- (E) MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH
- (F) MARKING LINE EPOXY 4-INCH (WHITE)

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 58	E

2

MATCH LINE STA 112+00

MATCH LINE STA 118+00

CTH U

+00 113+00 114+00 115+00 116+00 117+00 118

114+75

R8-3 24"X24" 208

R2-1 24"X30" SPEED LIMIT 35 106

R8-3 24"X24" 210

R8-3 24"X24" 209

R2-1 24"X30" SPEED LIMIT 35 107

R8-3 24"X24" 211

(ASPH) (GRAV) (CONC) (FE)

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 000 PROPOSED SIGN
- R000 REMOVE EXISTING SIGN
- M000 MOVE EXISTING SIGN

PAVEMENT MARKING LEGEND

- A MARKING LINE EPOXY 4-INCH (YELLOW)
- B MARKING LINE EPOXY 4-INCH (YELLOW)-12.5' LINE, 37.5' GAP
- C MARKING STOP LINE EPOXY 18-INCH (WHITE)
- D MARKING RAILROAD CROSSING EPOXY
- E MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH
- F MARKING LINE EPOXY 4-INCH (WHITE)

MATCH LINE STA 118+00

MATCH LINE STA 124+00

CTH U

+00 119+00 120+00 121+00 122+00 123+00 124

121+00

R8-3 24"X24" 213

R8-3 24"X24" 215

R8-3 24"X24" 212

R108

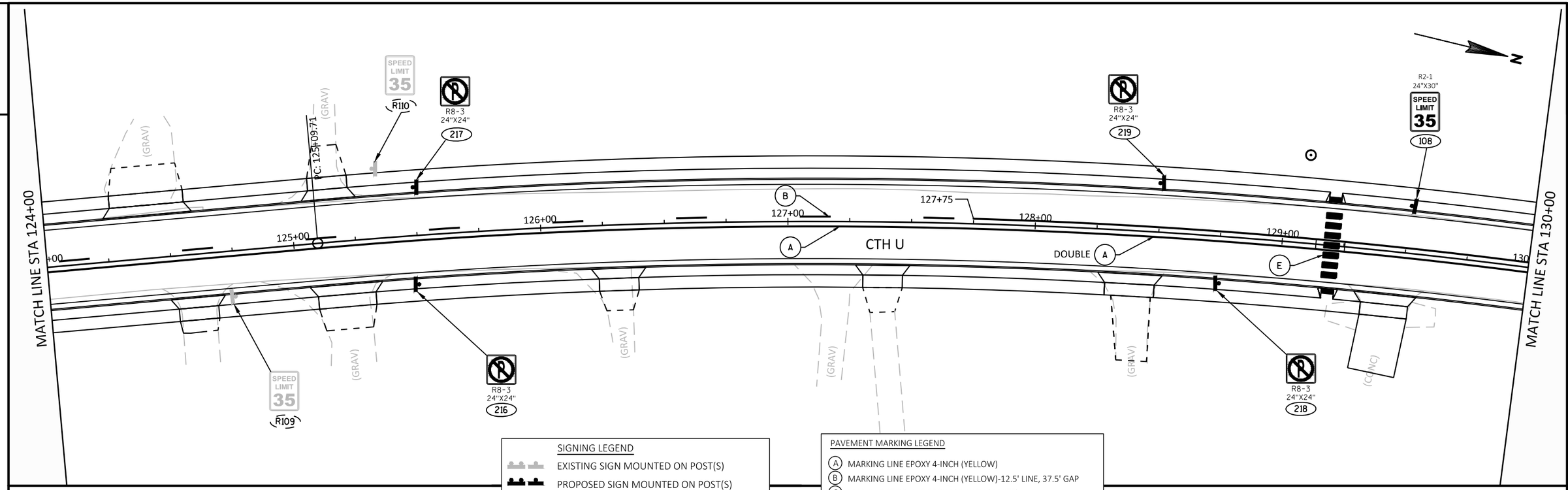
R8-3 24"X24" 214

(ASPH) (GRAV) (CONC)

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-023201-PS.DWG
LAYOUT NAME - 69340670-023202-PS

PLOT DATE : 3/15/2019 7:54 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT

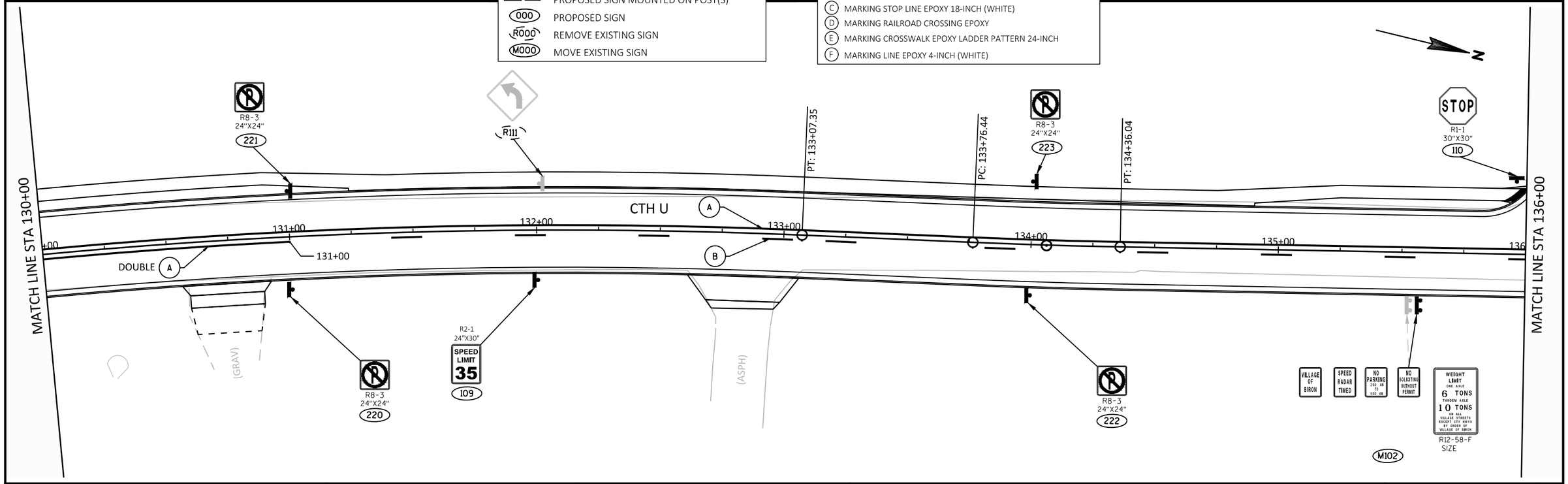


SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- (000) PROPOSED SIGN
- (R000) REMOVE EXISTING SIGN
- (M000) MOVE EXISTING SIGN

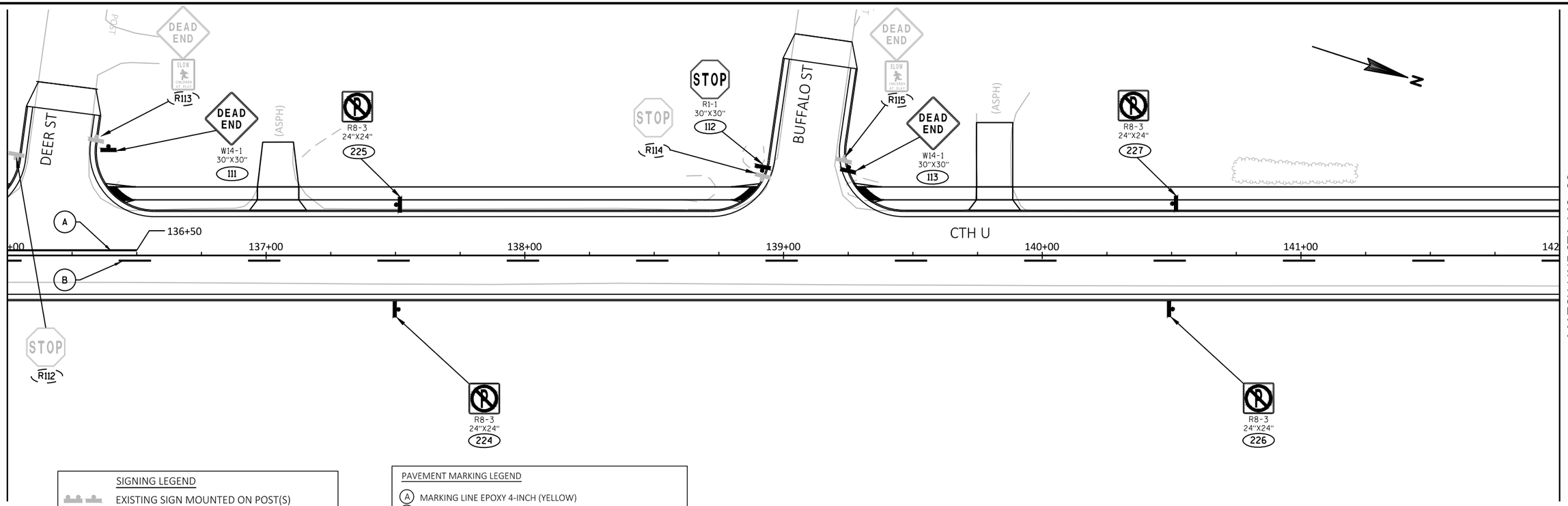
PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW)-12.5' LINE, 37.5' GAP
- (C) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) MARKING RAILROAD CROSSING EPOXY
- (E) MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH
- (F) MARKING LINE EPOXY 4-INCH (WHITE)



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 60	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-023201-PS.DWG
LAYOUT NAME - 69340670-023203-PS
PLOT DATE : 3/15/2019 7:54 AM
PLOT BY : MATT TOMSOVIC
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

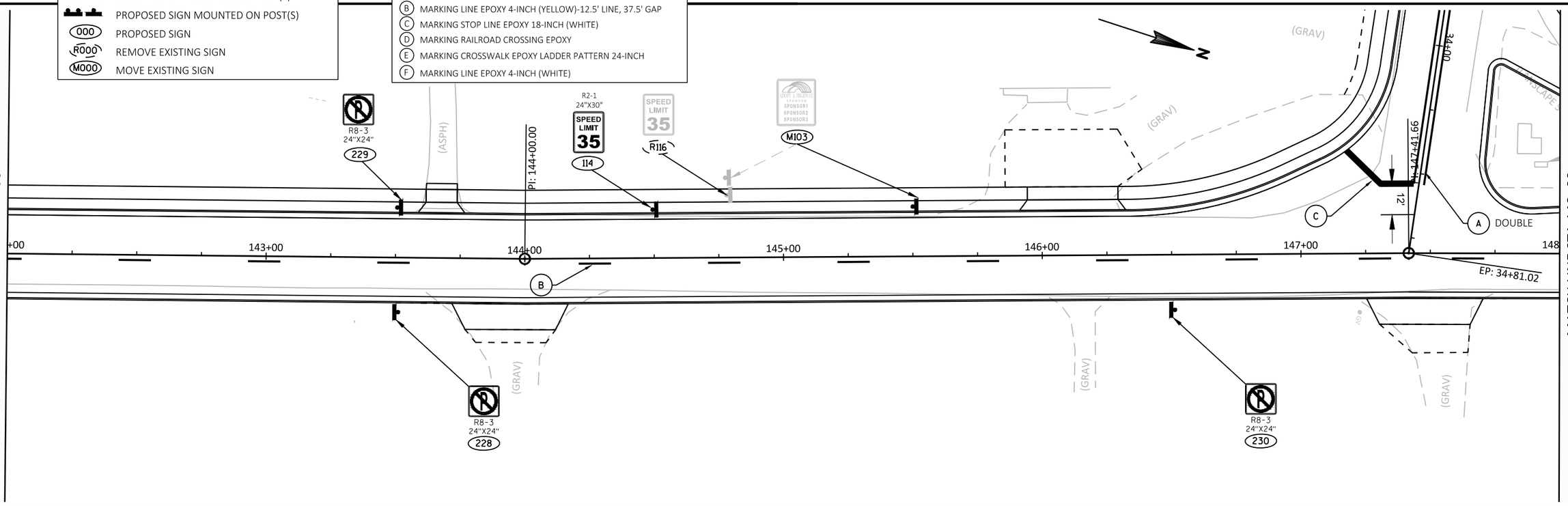


SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 000 PROPOSED SIGN
- R000 REMOVE EXISTING SIGN
- M000 MOVE EXISTING SIGN

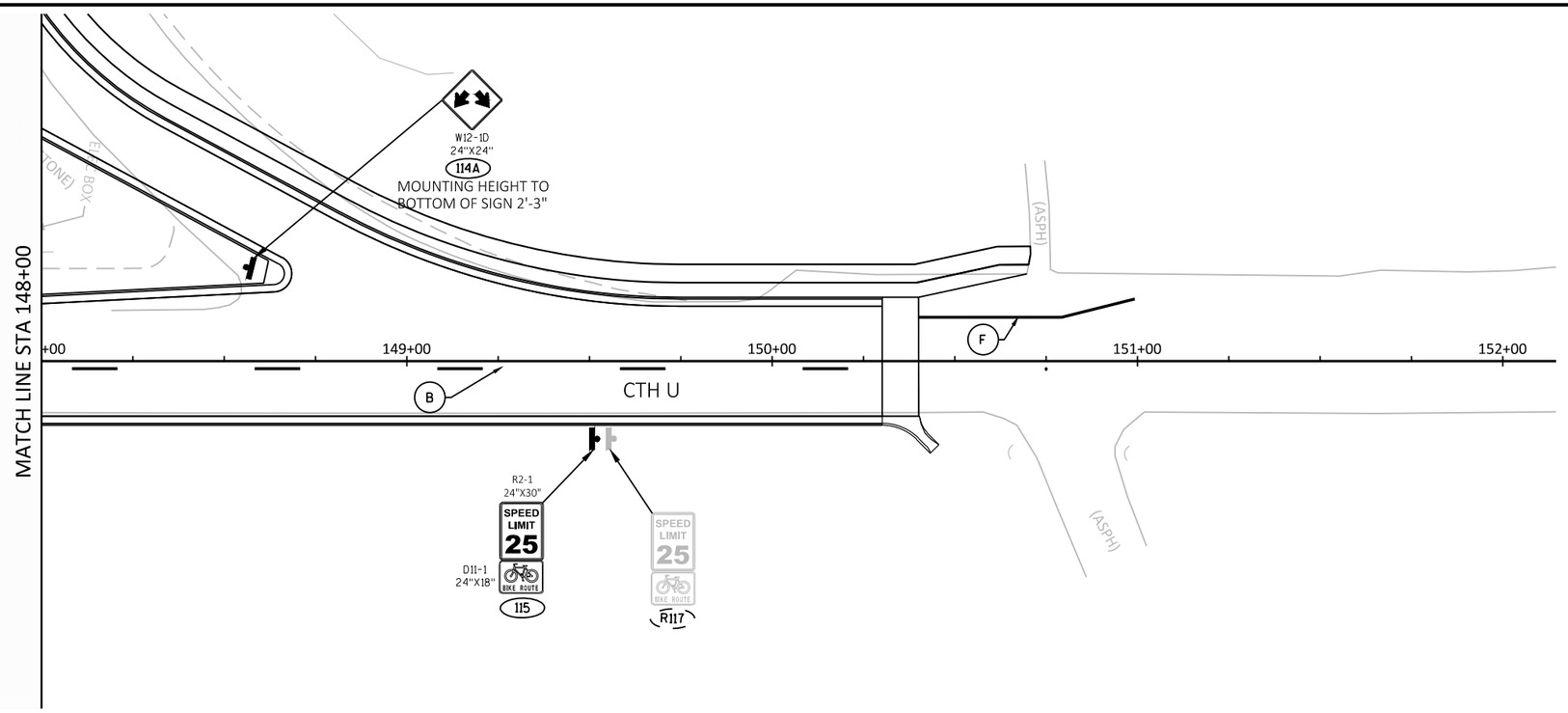
PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW)-12.5' LINE, 37.5' GAP
- (C) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) MARKING RAILROAD CROSSING EPOXY
- (E) MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH
- (F) MARKING LINE EPOXY 4-INCH (WHITE)



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 61	E

2

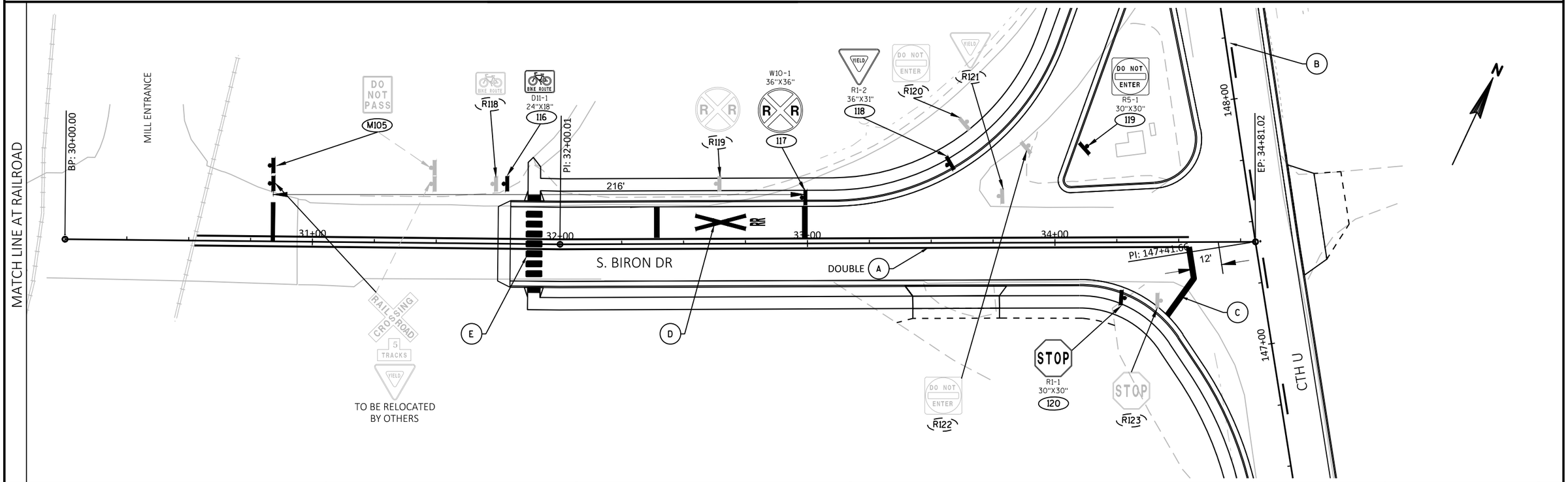


PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW)-12.5' LINE, 37.5' GAP
- (C) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) MARKING RAILROAD CROSSING EPOXY
- (E) MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH
- (F) MARKING LINE EPOXY 4-INCH (WHITE)

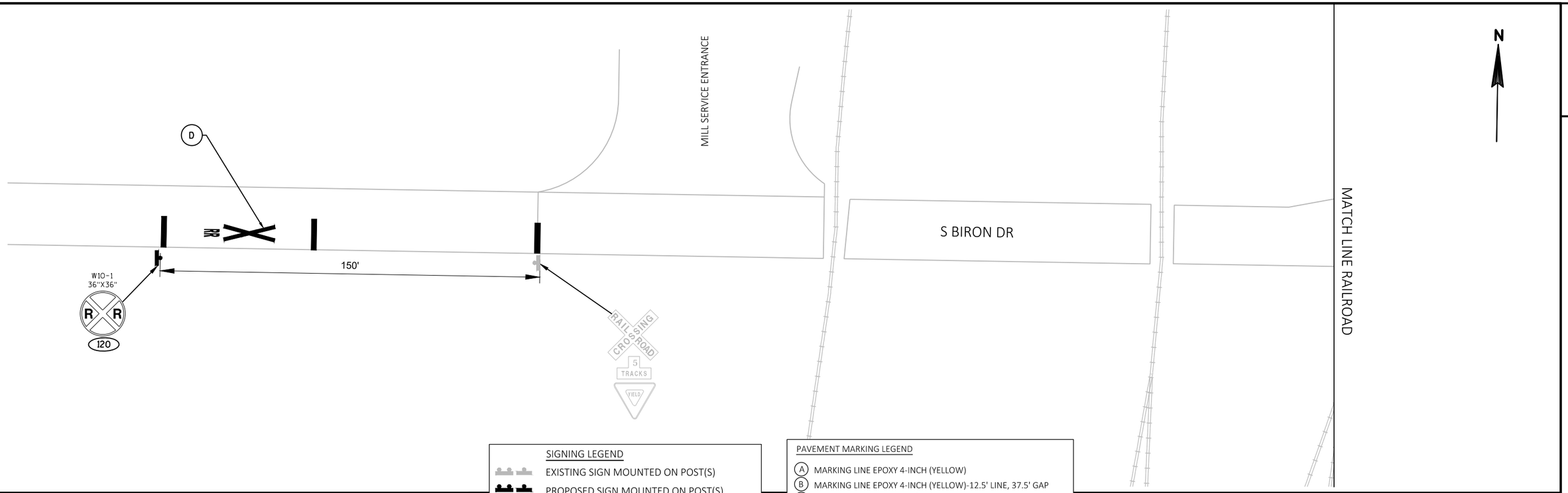
SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- (000) PROPOSED SIGN
- (R000) REMOVE EXISTING SIGN
- (M000) MOVE EXISTING SIGN



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 62	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-023201-PS.DWG
LAYOUT NAME - 69340670-023205-PS
PLOT DATE : 4/25/2019 2:05 PM
PLOT BY : CRAIG KNUTH
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
69340670-023205-ps
WISDOT/CADDS SHEET 44



SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 000 PROPOSED SIGN
- R000 REMOVE EXISTING SIGN
- M000 MOVE EXISTING SIGN

PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW)-12.5' LINE, 37.5' GAP
- (C) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) MARKING RAILROAD CROSSING EPOXY
- (E) MARKING CROSSWALK EPOXY LADDER PATTERN 24-INCH
- (F) MARKING LINE EPOXY 4-INCH (WHITE)

2

N

BEGIN PROJECT
ID 6934-06-70

CONSTRUCTION LIMIT
ID 6934-06-71

CTH U

DEER ST

BUFFALO ST

S. BIRON DR

PHASE 1

PHASE 2

END PROJECT
ID 6934-06-70

PHASE 3

CTH U
(N. BIRON DR)

PHASE 1 AND 2

STH 54

PHASE 4

CONSTRUCTION LIMITS
ID 6934-06-71

TRAFFIC CONTROL LEGEND:

- PHASE1
- PHASE 2
- PHASE 3
- PHASE 4

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - OVERVIEW	SHEET 64	E

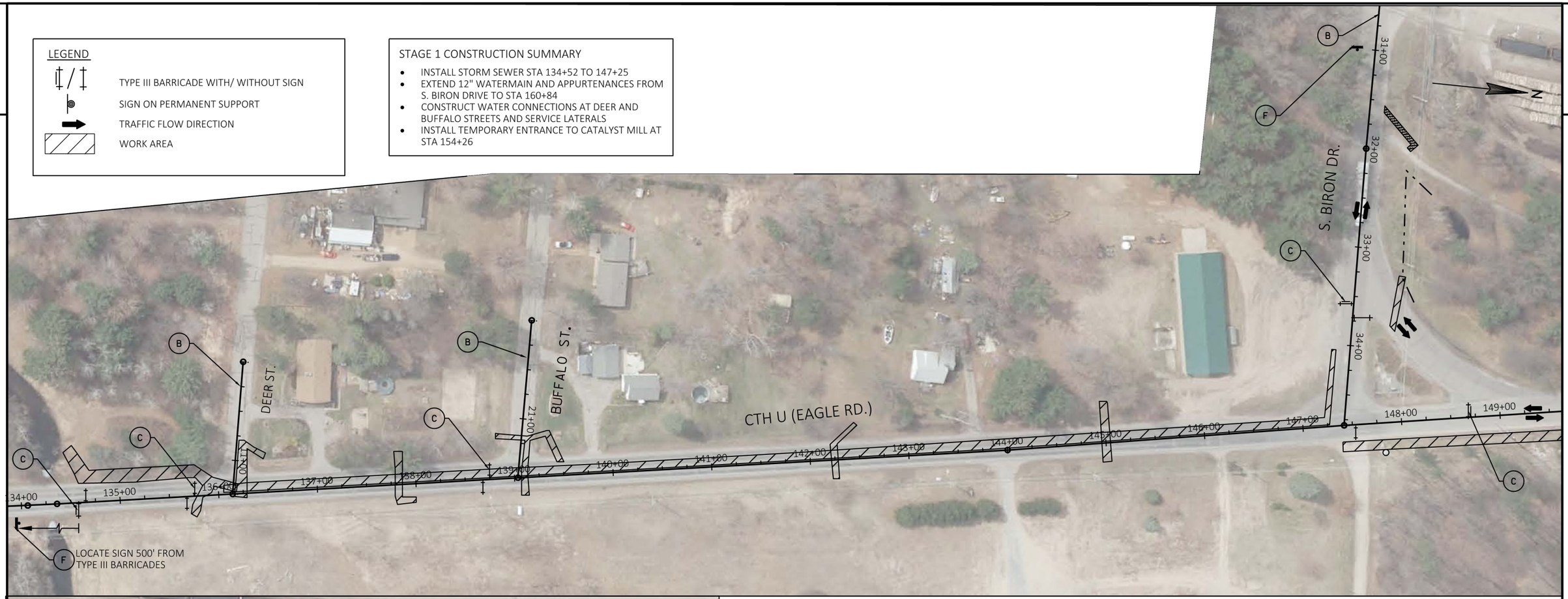
2

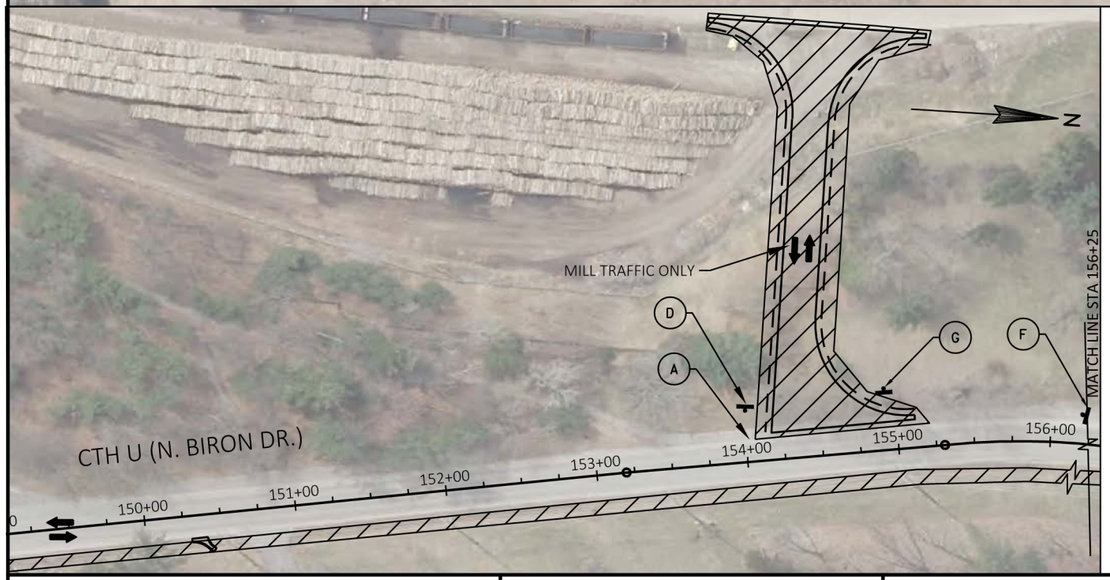
LEGEND

- TYPE III BARRICADE WITH/ WITHOUT SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC FLOW DIRECTION
- WORK AREA

STAGE 1 CONSTRUCTION SUMMARY

- INSTALL STORM SEWER STA 134+52 TO 147+25
- EXTEND 12" WATERMAIN AND APPURTENANCES FROM S. BIRON DRIVE TO STA 160+84
- CONSTRUCT WATER CONNECTIONS AT DEER AND BUFFALO STREETS AND SERVICE LATERALS
- INSTALL TEMPORARY ENTRANCE TO CATALYST MILL AT STA 154+26





NOTES:

A. USE SDD "TRAFFIC CONTROL, WORK ON SHOULDER, PARKING LANE, UNDIVIDED ROADWAY

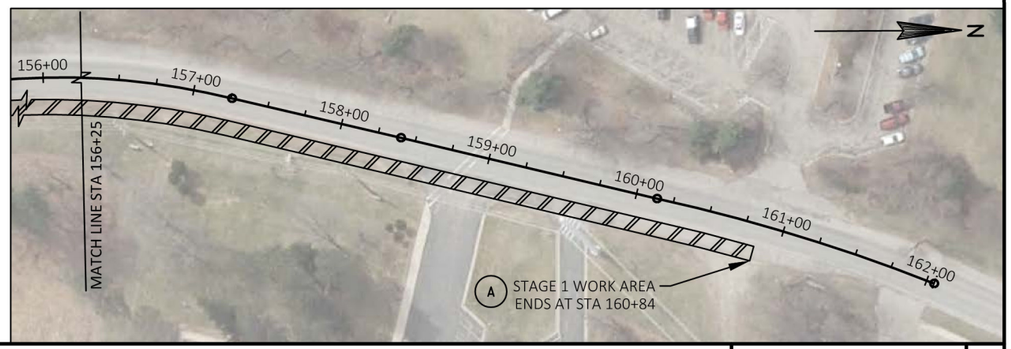
B. USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 3

C. ROAD CLOSED TO THRU TRAFFIC — R11-4 60"X30"

D. STOP — R1-1 30"X30"

F. ROAD CLOSED 500 FT — W20-3D

G. MILL TRAFFIC ONLY



PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - STAGE 1	SHEET 65	E

NOTES:

A — USE SDD "TRAFFIC CONTROL, WORK ON SHOULDER, PARKING LANE, UNDIVIDED ROADWAY

F — ROAD CLOSED 500 FT (W20-3D)

B — USE SDD "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES" DETAIL 1

G — MILL TRAFFIC ONLY

K — STOP (R1-1 30"X30")

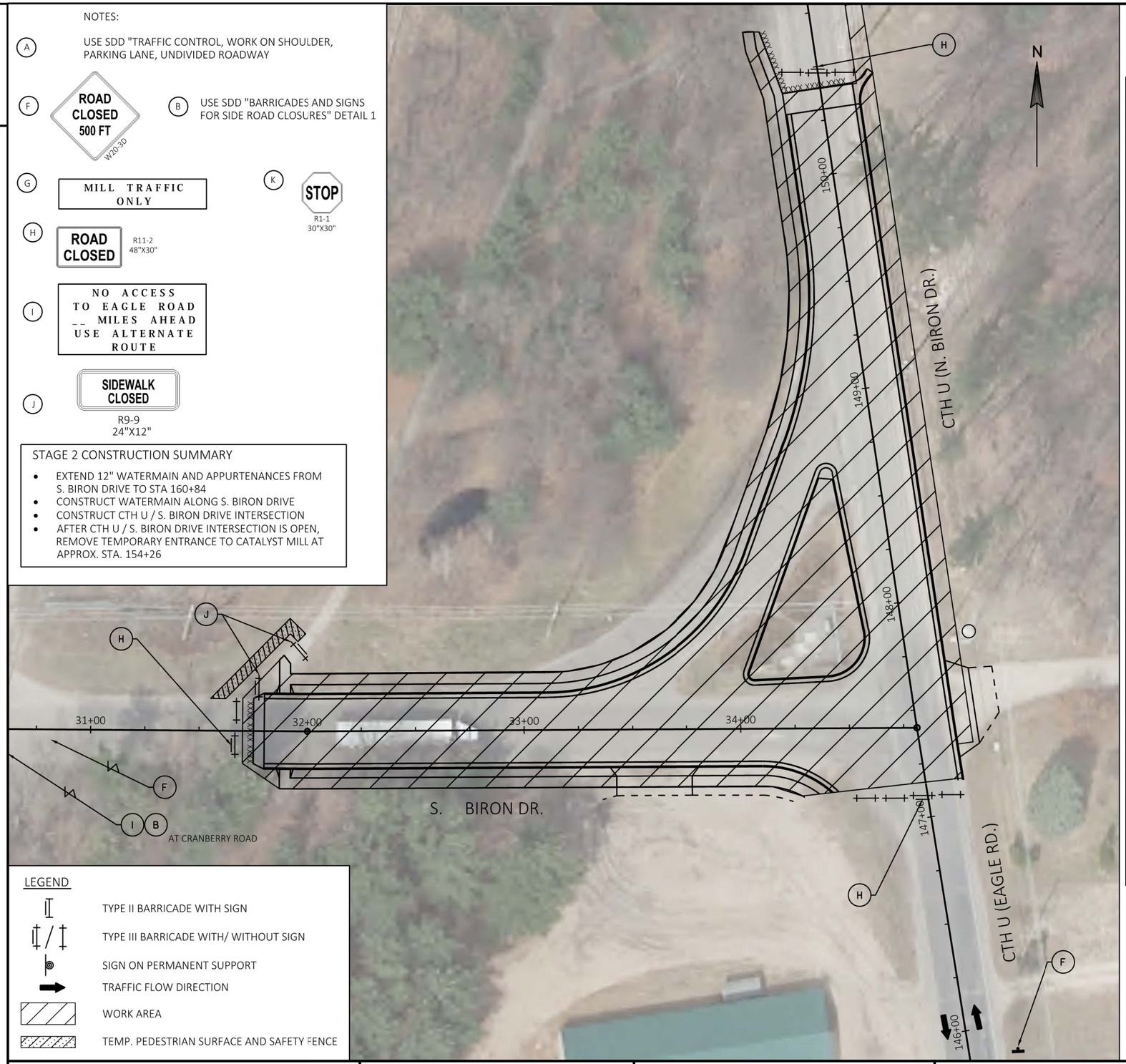
H — ROAD CLOSED (R11-2 48"X30")

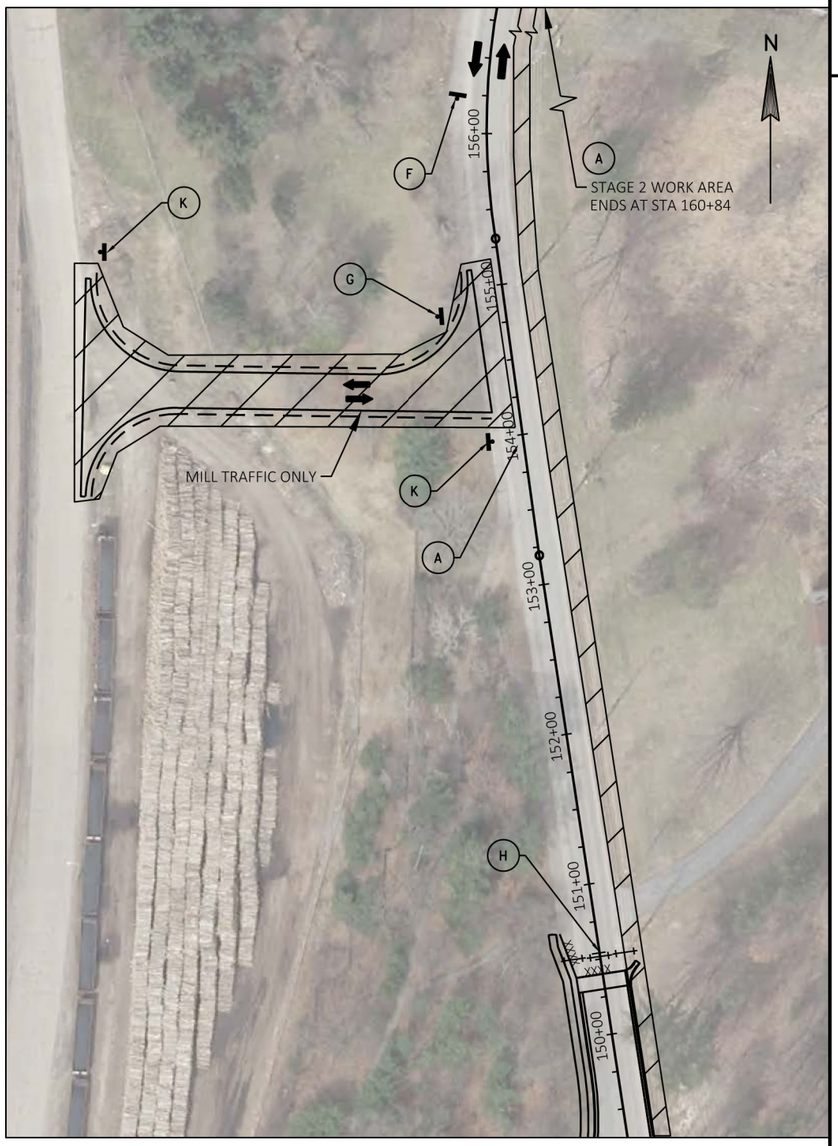
I — NO ACCESS TO EAGLE ROAD __ MILES AHEAD USE ALTERNATE ROUTE

J — SIDEWALK CLOSED (R9-9 24"X12")

STAGE 2 CONSTRUCTION SUMMARY

- EXTEND 12" WATERMAIN AND APPURTENANCES FROM S. BIRON DRIVE TO STA 160+84
- CONSTRUCT WATERMAIN ALONG S. BIRON DRIVE
- CONSTRUCT CTH U / S. BIRON DRIVE INTERSECTION
- AFTER CTH U / S. BIRON DRIVE INTERSECTION IS OPEN, REMOVE TEMPORARY ENTRANCE TO CATALYST MILL AT APPROX. STA. 154+26





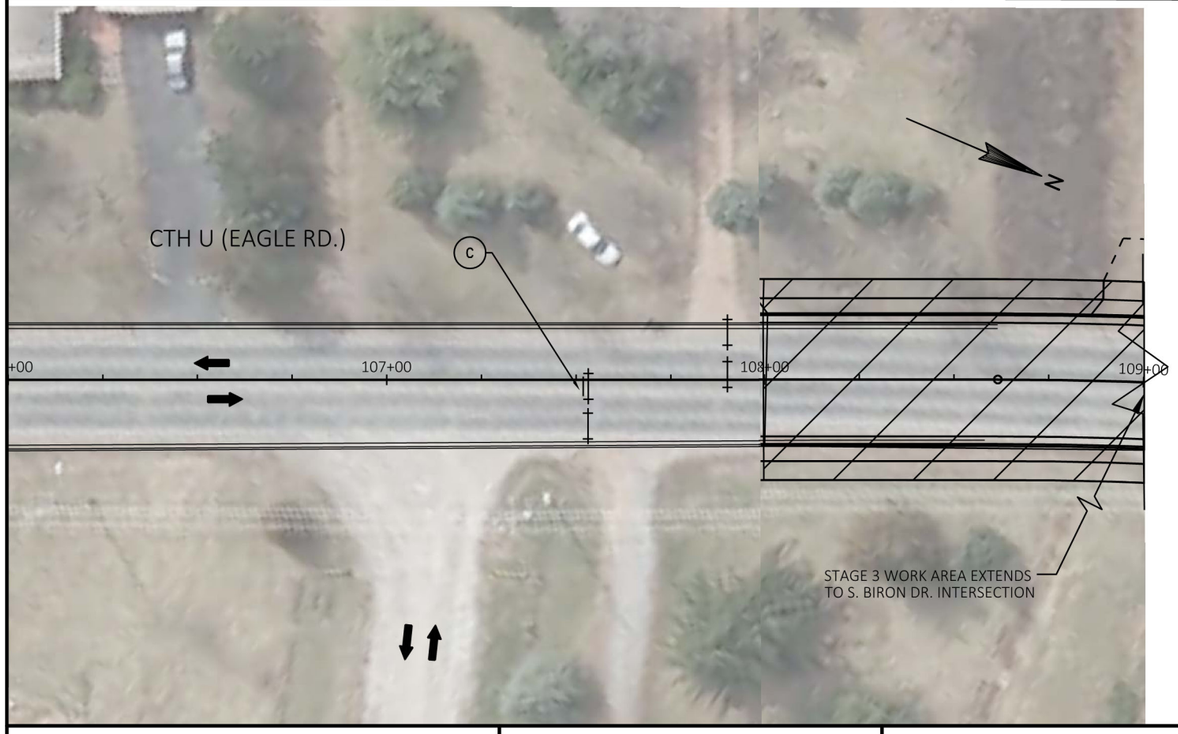
LEGEND

- TYPE II BARRICADE WITH SIGN
- TYPE III BARRICADE WITH/ WITHOUT SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC FLOW DIRECTION
- WORK AREA
- TEMP. PEDESTRIAN SURFACE AND SAFETY FENCE

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - STAGE 2	SHEET 66	E

2





C — ROAD CLOSED TO THRU TRAFFIC — R11-4 60"X30"

D — DETOUR — M4-9R 30"X24"

E — ROAD OPEN TO LOCAL BUSINESSES

F — ROAD CLOSED 500 FT — W20-3D

STAGE 3 CONSTRUCTION SUMMARY

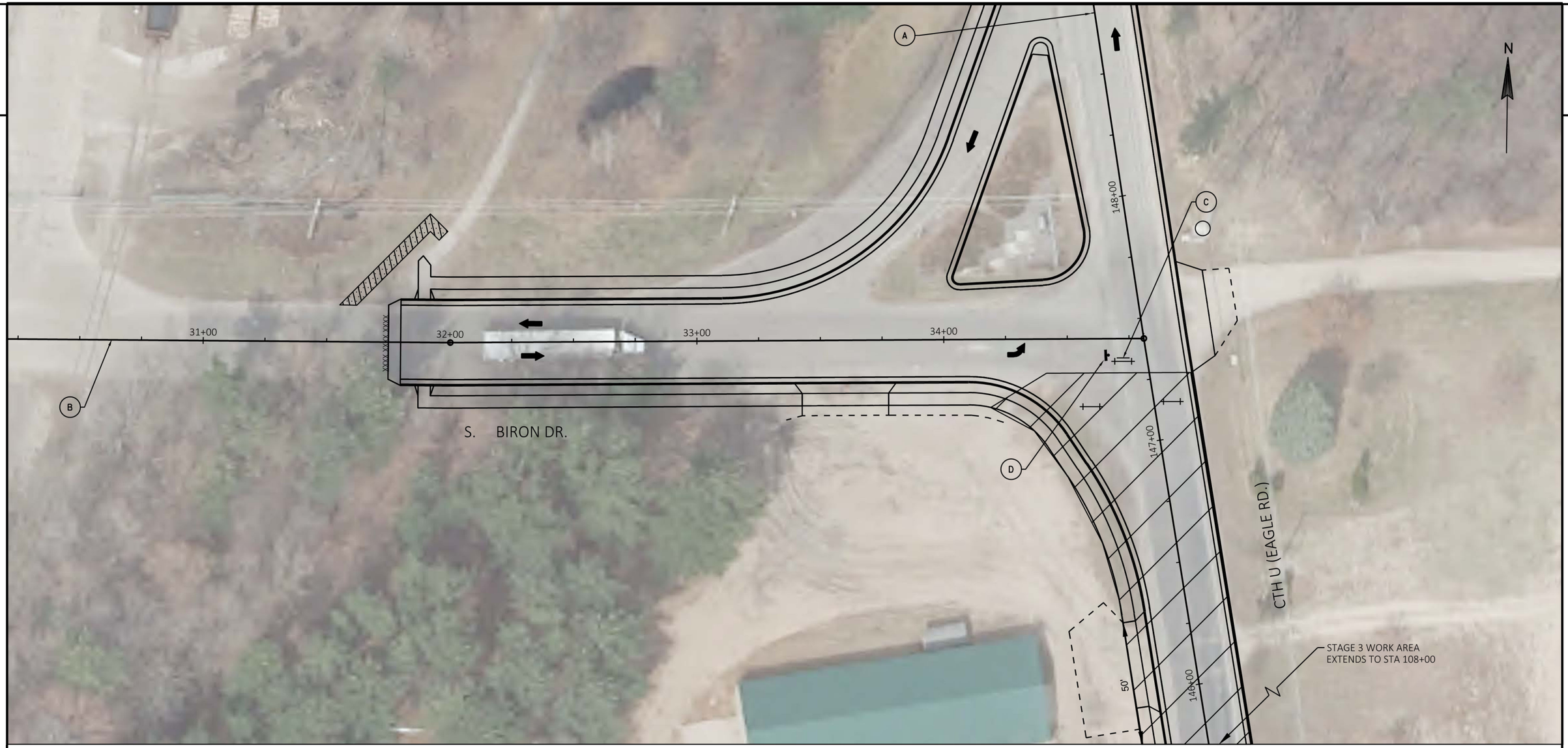
- CONSTRUCTION OF TEMPORARY PARKING TO BE COMPLETED AT BEGININNG OF STAGE 3.
- INSULATE EXISTING WATERMAIN STA 108+00 TO STA 124+00
- INSTALL TEMPORARY DIVERSION AND CULVERTS
- CONSTRUCT CTH U FROM STA. 108+00 TO S. BIRON DRIVE
- REMOVAL OF TEMP. PARKING, SALVAGED TOPSOIL, FERTILIZER, SEED & MULCHING TO BE COMPLETED ONCE ALL DRIVEWAYS IN THE VICINITY OF THE TEMP. PARKING AREA, AS APPROVED BY THE ENGINEER, HAVE ACCESS.

LEGEND

- TYPE III BARRICADE WITH/ WITHOUT SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC FLOW DIRECTION
- WORK AREA

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - STAGE 3	SHEET 67	E

2



NOTES:

(A) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAILS A AND E FOR ADVANCE WARNING SIGNING.

(B) USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 2 AND 3.
ALSO APPLY TO BUFFALO STREET AND DEER STREET

(C) ROAD CLOSED TO THRU TRAFFIC — R11-4 60"X30"

(D) STOP — R1-1 30"X30" — ON TEMPORARY SUPPORT

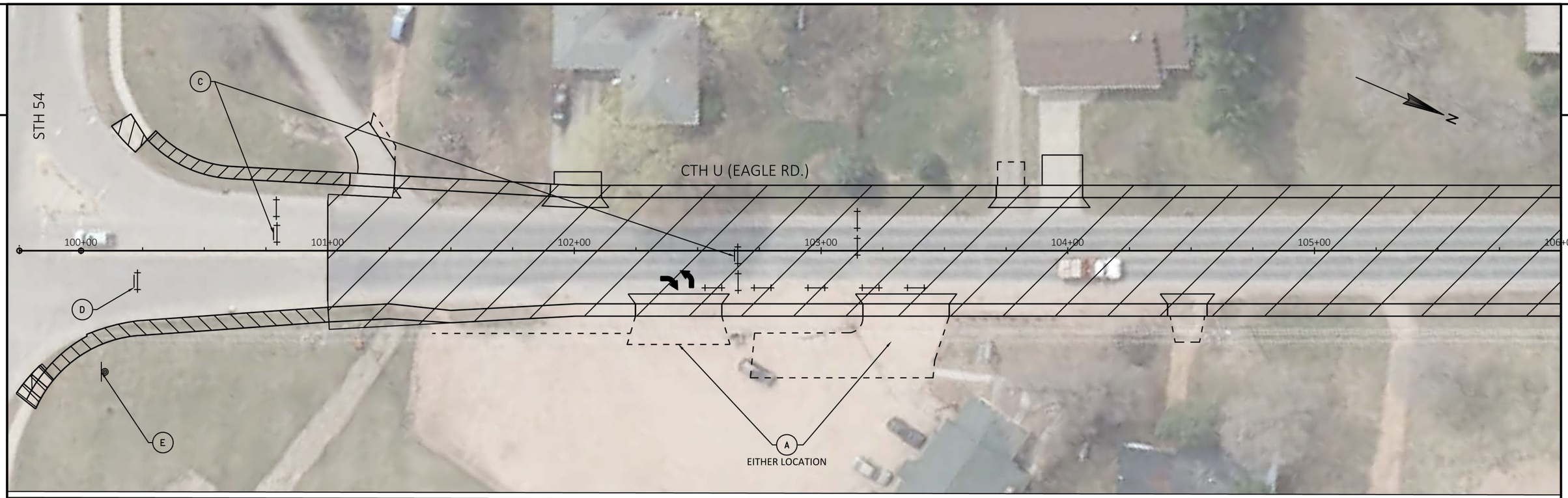
STAGE 3 CONSTRUCTION SUMMARY

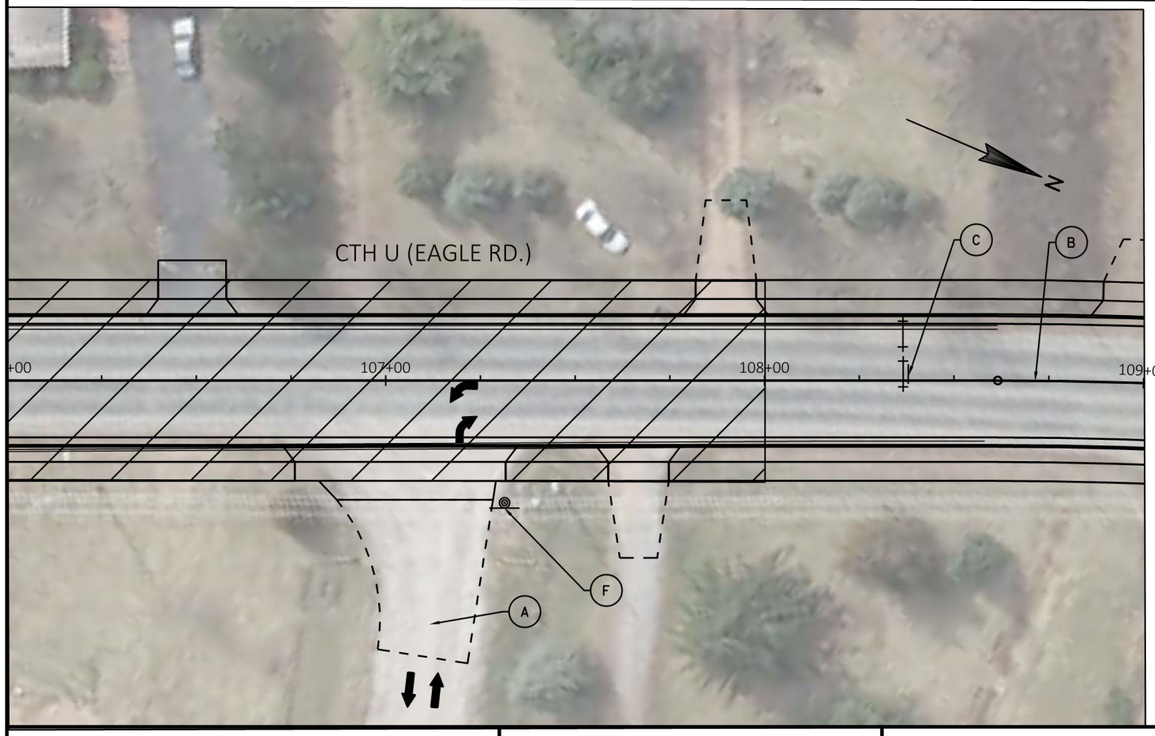
- CONSTRUCTION OF TEMPORARY PARKING TO BE COMPLETED AT BEGININNG OF STAGE 3.
- INSULATE EXISTING WATERMAIN STA 108+00 TO STA 124+00
- INSTALL TEMPORARY DIVERSION AND CULVERTS
- CONSTRUCT CTH U FROM STA. 108+00 TO S. BIRON DRIVE
- REMOVAL OF TEMP. PARKING, SALVAGED TOPSOIL, FERTILIZER, SEED & MULCHING TO BE COMPLETED ONCE ALL DRIVEWAYS IN THE VICINITY OF THE TEMP. PARKING AREA, AS APPROVED BY THE ENGINEER, HAVE ACCESS.

LEGEND

- TYPE III BARRICADE WITH/ WITHOUT SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC FLOW DIRECTION
- WORK AREA

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - STAGE 3	SHEET 68	E





NOTES:

(A) PROVIDE ACCESS AT ALL TIMES EXCEPT WHEN SHORT-TERM CLOSURE IS COORDINATED WITH LANDOWNER

(B) USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAILS A AND E FOR ADVANCE WARNING SIGNING

(C) ROAD CLOSED TO THRU TRAFFIC — R11-4 60"X30"

(D) DETOUR — M4-9R 30"X24"

(E) ROAD OPEN TO LOCAL BUSINESSES

(F) R3-2 24"X24"

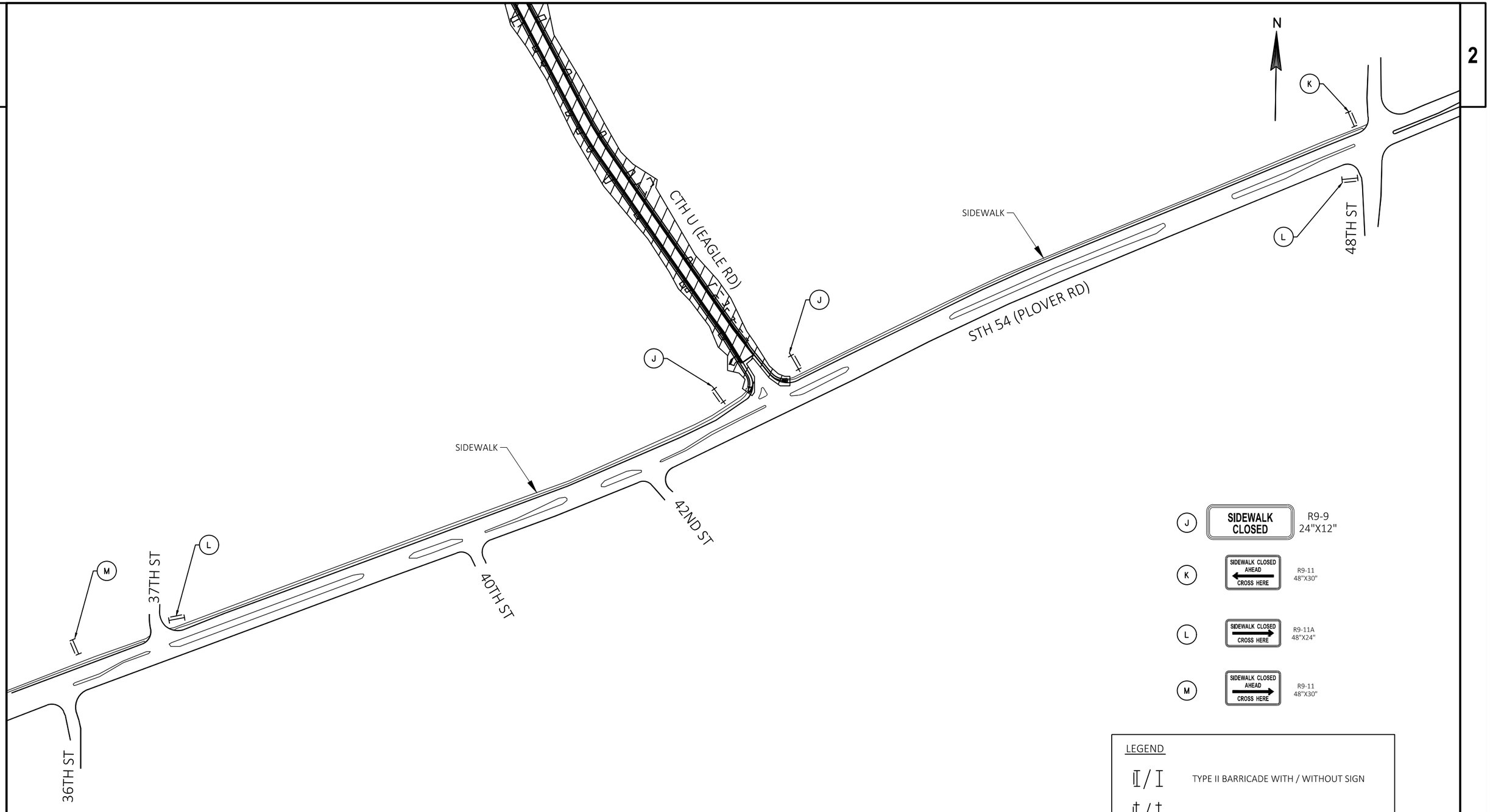
STAGE 4 CONSTRUCTION SUMMARY

- INSULATE EXISTING WATEMAIN STA 106+00 TO STA 108+00
- CONSTRUCT CTH U STA. 101+00 TO STA. 108+00

LEGEND

- TYPE III BARRICADE WITH/ WITHOUT SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC FLOW DIRECTION
- WORK AREA

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - STAGE 4	SHEET 69	E



J — SIDEWALK CLOSED — R9-9 24"X12"

K — SIDEWALK CLOSED AHEAD / CROSS HERE — R9-11 48"X30"

L — SIDEWALK CLOSED / CROSS HERE — R9-11A 48"X24"

M — SIDEWALK CLOSED AHEAD / CROSS HERE — R9-11 48"X30"

LEGEND

- TYPE II BARRICADE WITH / WITHOUT SIGN
- TYPE III BARRICADE WITH/ WITHOUT SIGN
- WORK AREA

N.T.S.

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATIONS STAGE 4	SHEET 70	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-025001-TC.DWG
LAYOUT NAME - 69340670-025006-tc

PLOT DATE : 4/18/2019 2:58 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : ##########

DURING STAGE 2, COVER SIGNS 25, 26, 27 AND INSTALL TYPE III BARRICADES AND SIGNS. USE SDD "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES" DETAIL 1.

1 COUNTY U M1-5A 24"X24" / DETOUR AHEAD W20-2-A

2 COVER EAGLE ROAD

3 FROM COUNTY U TO DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21"

4 COVER COUNTY U

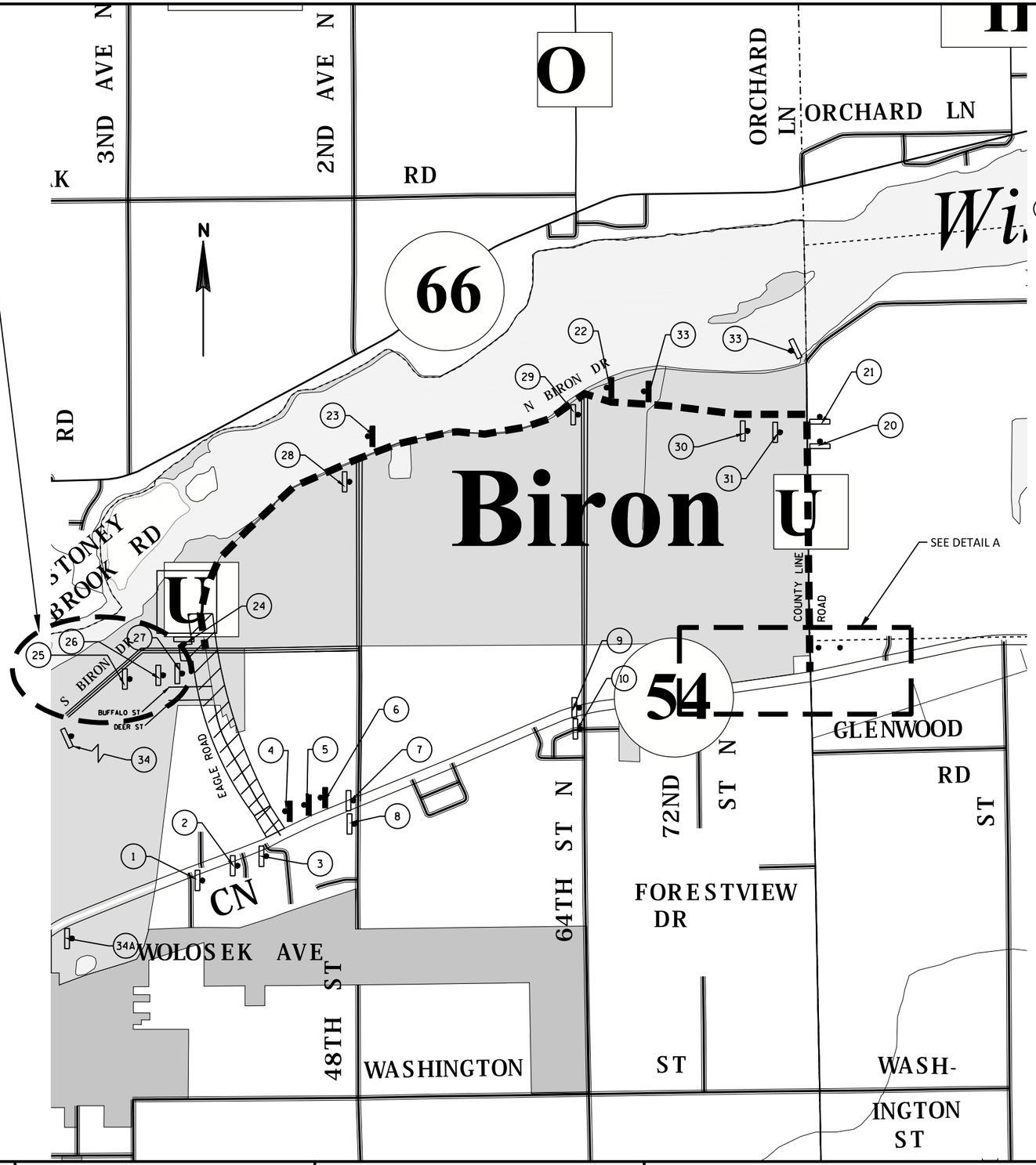
5 COVER EAGLE ROAD

6 COVER JCT COUNTY U

7 8 9 10 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21"

34A HWY U ROAD WORK BEGINS XXX-XX
G20-57 96"X48"

PLACE 7 DAYS IN ADVANCE OF CONSTRUCTION



20 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / COUNTY U M1-5A 24"X24" / M05-1L 21"X21"

21 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21" / M6-1

22 23 DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21" / M6-1

24 END DETOUR M4-8A 24"X18" / COUNTY U M1-5A 24"X24"

25 COUNTY U M1-5A 24"X24" / DETOUR AHEAD W20-2-A

26 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / COUNTY U M1-5A 24"X24" / M05-1L 21"X21"

27 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21" / M6-1

28 29 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21" / M6-1

30 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / COUNTY U M1-5A 24"X24" / M05-1R 21"X21"

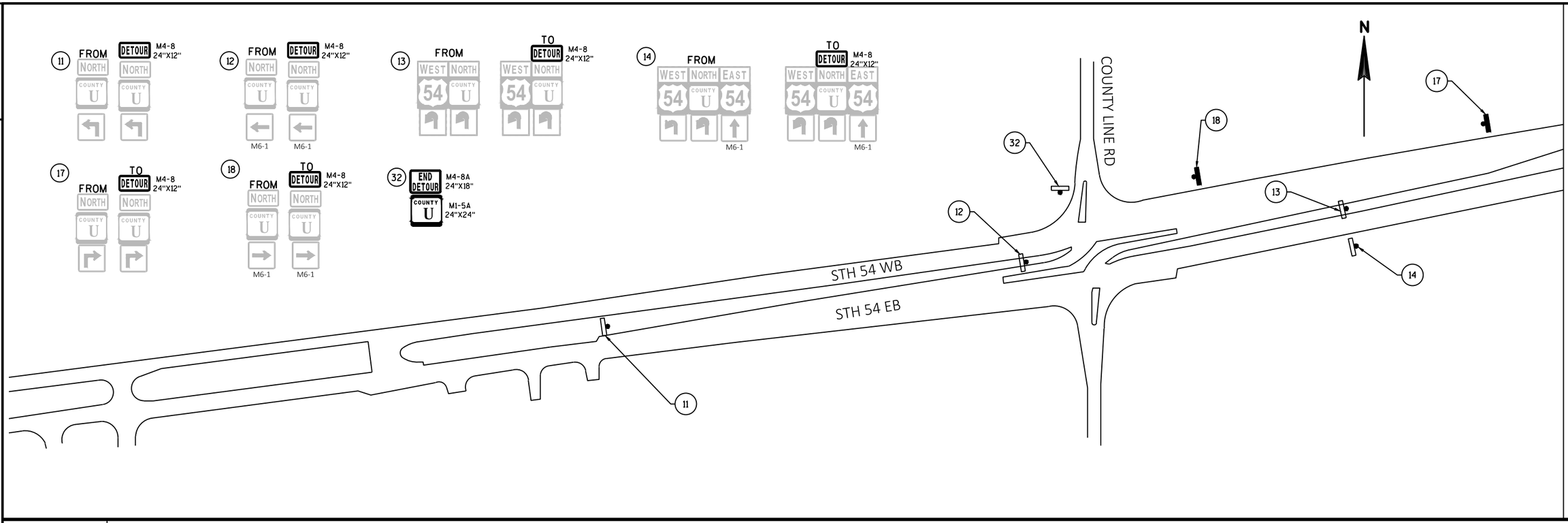
31 DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / COUNTY U M1-5A 24"X24" / M06-1 21"X21" / M6-1

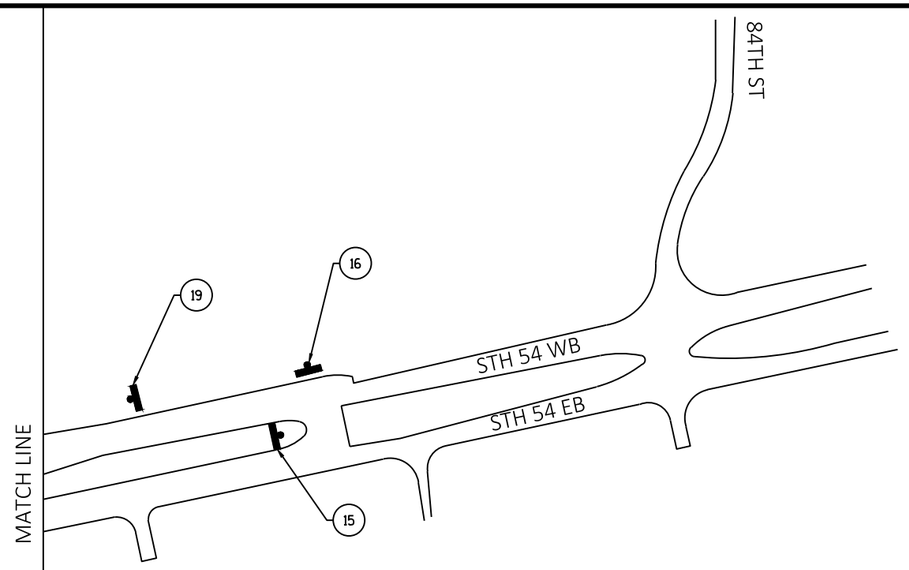
33 ROAD CLOSED AT S BIRON DR THROUGH TRAFFIC USE ALTERNATE ROUTE

34 ROAD CLOSED AT EAGLE RD THROUGH TRAFFIC USE ALTERNATE ROUTE

LEGEND
- 00 SIGN NUMBER
- POST MOUNTED SIGN
- DETOUR ROUTE
- WORK AREA

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	DETOUR PLAN	SHEET 71	E





15 FROM WEST NORTH 54 COUNTY U
TO DETOUR M4-8 24"X12"

16 DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY U M1-5A 24"X24"
M6-1 21"X21"
M6-1

19
EAGLE ROAD
CLOSED AHEAD
FOLLOW HWY U
DETOUR

N

LEGEND
00 SIGN NUMBER
POST MOUNTED SIGN
DETOUR ROUTE
WORK AREA

PROJECT NO: 6934-06-70 AND 6934-06-71	HWY: CTH U	COUNTY: WOOD	DETOUR PLAN - DETAIL A	SHEET 72	E

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	6934-06-70 Qty	6934-06-71 Qty
0002	201.0205	Grubbing	STA	17.000	17.000	
0004	201.0220	Grubbing	ID	22.000	22.000	
0006	203.0100	Removing Small Pipe Culverts	EACH	7.000	7.000	
0008	203.0200	Removing Old Structure (station) 01. STA 134+30	LS	1.000	1.000	
0010	204.0100	Removing Pavement	SY	587.000	552.000	35.000
0012	204.0150	Removing Curb & Gutter	LF	290.000	290.000	
0014	204.0155	Removing Concrete Sidewalk	SY	27.000	27.000	
0016	204.0170	Removing Fence	LF	70.000	70.000	
0018	204.9060.S	Removing (item description) 01. Wood Posts	EACH	15.000	15.000	
0020	205.0100	Excavation Common	CY	21,905.000	21,905.000	
0022	205.0400	Excavation Marsh	CY	91.000	91.000	
0024	209.2100	Backfill Granular Grade 2	CY	109.000	109.000	
0026	213.0100	Finishing Roadway (project) 01. 6934-06-70	EACH	1.000	1.000	
0028	213.0100	Finishing Roadway (project) 02. 6934-06-71	EACH	1.000		1.000
0030	214.0100	Obliterating Old Road	STA	3.000	3.000	
0032	305.0110	Base Aggregate Dense 3/4-Inch	TON	790.000	790.000	
0034	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	11,491.000	11,468.000	23.000
0036	415.0080	Concrete Pavement 8-Inch	SY	18,440.000	18,440.000	
0038	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000	
0040	415.4100	Concrete Pavement Joint Filling	SY	21,400.000	21,400.000	
0042	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000	
0044	416.0160	Concrete Driveway 6-Inch	SY	1,386.000	1,386.000	
0046	416.0260	Concrete Driveway HES 6-Inch	SY	214.000	214.000	
0048	416.0620	Drilled Dowel Bars	EACH	32.000	32.000	
0050	416.1010	Concrete Surface Drains	CY	1.000	1.000	
0052	465.0105	Asphaltic Surface	TON	42.000	34.000	8.000
0054	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	70.000	70.000	
0056	465.0125	Asphaltic Surface Temporary	TON	250.000	250.000	
0058	504.0900	Concrete Masonry Endwalls	CY	8.400	8.400	
0060	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	6.000	6.000	
0062	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	112.000	112.000	
0064	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	80.000	80.000	
0066	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000	
0068	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000	
0070	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	2.000	
0072	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	10,590.000	10,590.000	
0074	602.0405	Concrete Sidewalk 4-Inch	SF	37,020.000	37,020.000	

					6934-06-70	6934-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0076	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	60.000	60.000	
0078	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	56.000	56.000	
0080	606.0200	Riprap Medium	CY	9.000	9.000	
0082	606.0300	Riprap Heavy	CY	240.000	240.000	
0084	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	633.000	633.000	
0086	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	67.000	67.000	
0088	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	2,123.000	2,123.000	
0090	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	414.000	414.000	
0092	608.0327	Storm Sewer Pipe Reinforced Concrete Class III 27-Inch	LF	196.000	196.000	
0094	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	15.000	15.000	
0096	608.0372	Storm Sewer Pipe Reinforced Concrete Class III 72-Inch	LF	241.000	241.000	
0098	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	132.000	132.000	
0100	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	22.000	22.000	
0102	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	626.000	626.000	
0104	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	443.000	443.000	
0106	611.0420	Reconstructing Manholes	EACH	3.000		3.000
0108	611.0530	Manhole Covers Type J	EACH	24.000	24.000	
0110	611.0612	Inlet Covers Type C	EACH	2.000	2.000	
0112	611.0624	Inlet Covers Type H	EACH	27.000	27.000	
0114	611.0639	Inlet Covers Type H-S	EACH	6.000	6.000	
0116	611.0642	Inlet Covers Type MS	EACH	6.000	6.000	
0118	611.1004	Catch Basins 4-FT Diameter	EACH	1.000	1.000	
0120	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000	
0122	611.2004	Manholes 4-FT Diameter	EACH	14.000	14.000	
0124	611.2005	Manholes 5-FT Diameter	EACH	4.000	4.000	
0126	611.2504	Manholes Variable Tee 4-FT Diameter	EACH	2.000	2.000	
0128	611.3003	Inlets 3-FT Diameter	EACH	2.000	2.000	
0130	611.3230	Inlets 2x3-FT	EACH	31.000	31.000	
0132	611.3901	Inlets Median 1 Grate	EACH	6.000	6.000	
0134	611.8110	Adjusting Manhole Covers	EACH	3.000		3.000
0136	611.8120.S	Cover Plates Temporary	EACH	1.000	1.000	

					6934-06-70	6934-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0138	619.1000	Mobilization	EACH	1.000	0.807	0.193
0140	620.0300	Concrete Median Sloped Nose	SF	60.000	60.000	
0142	624.0100	Water	MGAL	74.200	74.200	
0144	625.0100	Topsoil	SY	15,455.000	15,305.000	150.000
0146	625.0500	Salvaged Topsoil	SY	500.000	500.000	
0148	627.0200	Mulching	SY	29,480.000	29,330.000	150.000
0150	628.1504	Silt Fence	LF	4,185.000	4,185.000	
0152	628.1520	Silt Fence Maintenance	LF	4,185.000	4,185.000	
0154	628.1905	Mobilizations Erosion Control	EACH	10.000	10.000	
0156	628.1910	Mobilizations Emergency Erosion Control	EACH	10.000	10.000	
0158	628.2008	Erosion Mat Urban Class I Type B	SY	3,475.000	3,475.000	
0160	628.7005	Inlet Protection Type A	EACH	41.000	41.000	
0162	628.7010	Inlet Protection Type B	EACH	8.000	8.000	
0164	628.7015	Inlet Protection Type C	EACH	29.000	29.000	
0166	628.7020	Inlet Protection Type D	EACH	6.000	6.000	
0168	628.7555	Culvert Pipe Checks	EACH	6.000	6.000	
0170	628.7560	Tracking Pads	EACH	5.000	5.000	
0172	629.0210	Fertilizer Type B	CWT	25.000	23.000	2.000
0174	630.0120	Seeding Mixture No. 20	LB	295.000	275.000	20.000
0176	630.0140	Seeding Mixture No. 40	LB	195.000	195.000	
0178	630.0160	Seeding Mixture No. 60	LB	10.000	10.000	
0180	630.0200	Seeding Temporary	LB	210.000	210.000	
0182	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	1.000	1.000	
0184	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	41.000	41.000	
0186	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	7.000	7.000	
0188	637.2210	Signs Type II Reflective H	SF	210.680	210.680	
0190	637.2230	Signs Type II Reflective F	SF	18.140	18.140	
0192	638.2102	Moving Signs Type II	EACH	5.000	5.000	
0194	638.2602	Removing Signs Type II	EACH	24.000	24.000	
0196	638.3000	Removing Small Sign Supports	EACH	24.000	24.000	
0198	642.5001	Field Office Type B	EACH	1.000	0.807	0.193
0200	643.0300	Traffic Control Drums	DAY	14,394.000	14,394.000	
0202	643.0410	Traffic Control Barricades Type II	DAY	471.000	471.000	
0204	643.0420	Traffic Control Barricades Type III	DAY	2,976.000	2,976.000	
0206	643.0705	Traffic Control Warning Lights Type A	DAY	5,951.000	5,951.000	
0208	643.0715	Traffic Control Warning Lights Type C	DAY	4,571.000	4,571.000	
0210	643.0900	Traffic Control Signs	DAY	13,369.000	13,369.000	
0212	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000	
0214	643.1000	Traffic Control Signs Fixed Message	SF	177.000	177.000	
0216	643.5000	Traffic Control	EACH	1.000	1.000	

					6934-06-70	6934-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0218	644.1430.S	Temporary Pedestrian Surface Plate	SF	275.000	275.000	
0220	644.1616.S	Temporary Pedestrian Safety Fence	LF	110.000	110.000	
0222	645.0120	Geotextile Type HR	SY	415.000	415.000	
0224	646.1020	Marking Line Epoxy 4-Inch	LF	5,870.000	5,870.000	
0226	646.5320	Marking Railroad Crossings Epoxy	EACH	2.000	2.000	
0228	646.6120	Marking Stop Line Epoxy 18-Inch	LF	30.000	30.000	
0230	646.7520	Marking Crosswalk Epoxy Ladder Pattern 24-Inch	LF	96.000	96.000	
0232	650.4000	Construction Staking Storm Sewer	EACH	69.000	69.000	
0234	650.4500	Construction Staking Subgrade	LF	5,885.000	5,885.000	
0236	650.5000	Construction Staking Base	LF	304.000	304.000	
0238	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000	
0240	650.7000	Construction Staking Concrete Pavement	LF	5,581.000	5,581.000	
0242	650.9000	Construction Staking Curb Ramps	EACH	10.000	10.000	
0244	650.9910	Construction Staking Supplemental Control (project) 01. 6934-06-70	LS	1.000	1.000	
0246	650.9920	Construction Staking Slope Stakes	LF	5,885.000	5,885.000	
0248	690.0150	Sawing Asphalt	LF	590.000	517.000	73.000
0250	690.0250	Sawing Concrete	LF	205.000	205.000	
0252	715.0415	Incentive Strength Concrete Pavement	DOL	5,532.000	5,532.000	
0254	715.0710	Optimized Aggregate Gradation Incentive	DOL	18,670.000	18,670.000	
0256	740.0440	Incentive IRI Ride	DOL	3,735.000	3,735.000	
0258	999.1500.S	Crack and Damage Survey	LS	1.000	1.000	
0260	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000	
0262	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,260.000	1,260.000	
0264	SPV.0060	Special 01. Manholes 10-FT Diameter	EACH	4.000	4.000	
0266	SPV.0060	Special 02. Removing Hydrant & Auxiliary Valve	EACH	3.000		3.000
0268	SPV.0060	Special 03. Remove 6-Inch Valve	EACH	5.000		5.000
0270	SPV.0060	Special 04. Hydrant Complete, Auxiliary Valve & All Fittings	EACH	5.000		5.000
0272	SPV.0060	Special 05. Watermain 6-Inch Valve	EACH	3.000		3.000
0274	SPV.0060	Special 06. Watermain 12-Inch Valve	EACH	4.000		4.000
0276	SPV.0060	Special 07. Watermain 6-Inch Bend	EACH	9.000		9.000
0278	SPV.0060	Special 08. Watermain 12-Inch Bend	EACH	3.000		3.000
0280	SPV.0060	Special 09. Watermain 10 x 10 x 6 Tee	EACH	2.000		2.000
0282	SPV.0060	Special 10. Watermain 12 x 12 x 6 Tee	EACH	1.000		1.000
0284	SPV.0060	Special 11. Watermain 12 x 10 x 6 Tee	EACH	2.000		2.000
0286	SPV.0060	Special 12. Service Brass, Tap, Box, Saddle, Corp & Valve	EACH	2.000		2.000
0288	SPV.0060	Special 13. 6-Inch Watermain Connection	EACH	7.000		7.000
0290	SPV.0060	Special 14. 10-Inch Watermain Connection	EACH	3.000		3.000

					6934-06-70	6934-06-71
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0292	SPV.0060	Special 15. Flap Gate 24-Inch	EACH	2.000	2.000	
0294	SPV.0060	Special 16. AEW For CPRCHE Class HE-III 72X113-INCH	EACH	2.000	2.000	
0296	SPV.0060	Special 17. Relocating Hydrant	EACH	1.000		1.000
0298	SPV.0060	Special 18. Adjusting Manhole Covers and Replace Cone	EACH	2.000		2.000
0300	SPV.0060	Special 19. Ajusting Water Valve Boxes	EACH	1.000		1.000
0302	SPV.0060	Special 20. Watermain 16-Inch Bend	EACH	12.000		12.000
0304	SPV.0060	Special 21. 16-Inch Watermain Connection	EACH	6.000		6.000
0306	SPV.0090	Special 01. CPRCHE Class HE-III 72X113-INCH	LF	80.000	80.000	
0308	SPV.0090	Special 02. Water Main Insulation	LF	1,800.000		1,800.000
0310	SPV.0090	Special 03. 6-Inch Watermain, Open Cut	LF	600.000		600.000
0312	SPV.0090	Special 04. 10-Inch Watermain, Open Cut	LF	30.000		30.000
0314	SPV.0090	Special 05. 12-Inch Watermain, Open Cut	LF	50.000		50.000
0316	SPV.0090	Special 06. 12-Inch Watermain, Directionally Bored	LF	1,290.000		1,290.000
0318	SPV.0090	Special 07. Watermain Construction Staking	LF	1,970.000		1,970.000
0320	SPV.0090	Special 08. 1-Inch PEX Water Service	LF	101.000		101.000
0322	SPV.0090	Special 09. 16-Inch Watermain Open Cut	LF	45.000		45.000
0324	SPV.0105	Special 01. Construction Staking Temporary Parking Area	LS	1.000	1.000	
0326	SPV.0105	Special 02. Temporary Water Diversion	LS	1.000	1.000	
0328	SPV.0120	Special 01. Water for Seeded Areas	MGAL	9.600	9.600	

3

EARTHWORK - CTH U

Division	From/To Station	Location	205.0100 Common Excavation (1)		Salvaged / Unusable Pavement Material	Available Material (5)	205.0400 Marsh Excavation (6)	Expanded Marsh Backfill	Unexpanded Fill	Expanded Fill	Mass Ordinate +/-	Waste	Comment:
			Cut (2)	EBS Excavation (3)				Item 209.2100 Backfill Granular Grade 2 Factor 1.20		Factor 1.25	(7)	(8)	
Division 1													
Stage 1	0+12.13 - 2+80	Temp Mill Access	780	0	0	780	0	0	1	1	779	779	
Division 1 Subtotal			780	0	0	780	0	0	1	1	779	779	
Division 2													
Stage 2	147+15 - 150+50	CTH U	330	0	99	231	65	78	247	309	-78	65	
Stage 2	31+75 - 34+50	S Biron Dr	480	0	81	399	0	0	167	209	190	190	
Stage 2	1+00 - 2+25	S Biron Dr Turn Lane	81	0	34	47	0	0	102	128	-81	0	
Division 2 Subtotal			891	0	215	677	65	78	516	645	31	255	
Division 3													
Stage 3	108+00 - 147+15	CTH U	17,036	0	2,175	14,861	26	31	1,156	1,445	13,415	13,441	
Stage 3	10+68 - 11+19	Deer St	150	0	17	133	0	0	11	13	120	120	
Stage 3	20+75 - 21+45	Buffalo St	229	0	24	205	0	0	23	28	177	177	
Stage 3	123+00	Install Temp Parking	41	0	0	41	0	0	0	0	41	41	
Stage 3	123+00	Remove Temp Parking	55	0	0	55	0	0	0	0	55	55	
Division 3 Subtotal			17,511	0	2,216	15,295	26	31	1,190	1,487	13,808	13,834	
Division 4													
Stage 4	99+80 - 108+00	CTH U	2,722	0	403	2,319	0	0	46	58	2,262	2,262	
Division 4 Subtotal			2,722	0	403	2,319	0	0	46	58	2,262	2,262	
Grand Total			21,905	0	2,834	19,071	91	109	1,753	2,191	16,880	17,130	
Total Common Exc			21,905										

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.

(5) Available Material = Cut - Salvaged/Unusuable Pavement Material

(6) Marsh Excavation - to be backfilled with Granular Backfill Grade 2, Item 209.2100. Marsh Excavation assumed to be wasted.

(7) Mass Ordinate = Cut - Salvaged Pavement - Expanded Fill (Does not include marsh excavation)

(8) Includes Marsh Excavation Waste

CLEARING AND GRUBBING

STATION	TO	STATION	LOCATION	201.0105 CLEARING STA **	201.0120 CLEARING ID **	201.0205 GRUBBING STA	201.0220 GRUBBING ID
6934-06-70							
STAGE 1							
1+00	-	3+00	TEMP MILL ENTRANCE	2	---	2	---
			SUBTOTALS	2	0	2	0
STAGE 2							
32+00	-	33+00	S BIRON DR	1	---	1	---
			SUBTOTALS	1	0	1	0
STAGE 3							
108+00	-	112+00	CTH U	4	---	4	---
113+00	-	116+00	CTH U	3	---	3	---
119+00	-	120+00	CTH U	1	---	1	---
126+00	-	129+00	CTH U	3	---	3	---
129+55 RT			CTH U	---	4	0	4
134+00	-	135+00	CTH U	1	---	1	---
142+70 LT			CTH U	---	4	---	4
143+20 LT			CTH U	---	4	---	4
141+35 LT			CTH U	---	5	---	5
141+60 LT			CTH U	---	5	---	5
			SUBTOTALS	12	22	12	22
STAGE 4							
103+00	-	104+00	CTH U	1	---	1	---
107+00	-	108+00	CTH U	1	---	1	---
			SUBTOTALS	2	0	2	0
			PROJECT TOTALS	17	22	17	22

** COMPLETED BY OTHERS PRIOR TO CONSTRUCTION, NOT PART OF CONTRACT

REMOVING FENCE

STATION	TO	STATION	LOCATION	204.0170 REMOVING FENCE LF
6934-06-70				
STAGE 1				
1+84	-	2+02	TEMP MILL ENTRANCE	60
			SUBTOTAL	60
STAGE 3				
107+80	-	107+90	CTH U	10
			SUBTOTAL	10
			PROJECT TOTAL	70

REMOVING CULVERTS

STATION	LOCATION	203.0100 REMOVING SMALL CULVERT PIPES EACH	203.0200 REMOVING OLD STRUCTURE STA 134+30 EACH	REMARKS
6934-06-70				
STAGE 3				
128+40 RT	CTH U	1	---	15-INCH PLASTIC
129+40 RT	CTH U	1	---	15-INCH PLASTIC
134+30	CTH U	---	1	10' x 7' SPPA
11+06	DEER ST	1	---	24-INCH CMP
137+05 LT	CTH U	1	---	12-INCH PVC
21+39	BUFFALO ST	2	---	24-INCH PLASTIC
139+80 LT	CTH U	1	---	24-INCH CMP
	PROJECT TOTALS	7	1	

REMOVING CURB AND GUTTER

STATION	TO	STATION	DIR	LOCATION	204.0150 REMOVING CURB AND GUTTER LF
6934-06-70					
STAGE 2					
33+70	-	34+60	LT	S BIRON DR	290
				PROJECT TOTAL	290

REMOVING WOOD POSTS

STATION	TO	STATION	DIR	LOCATION	204.9060.S REMOVING WOOD POSTS EACH
6934-06-70					
STAGE 4					
101+55	-	101+90	RT	CTH U	5
103+35	-	103+95	RT	CTH U	10
				PROJECT TOTAL	15

REMOVING PAVEMENT

STATION	LOCATION	204.0100 REMOVING PAVEMENT SY
6934-06-70		
STAGE 3		
110+15 LT	CTH U	40
113+15 RT	CTH U	50
114+20 RT	CTH U	72
115+50 RT	CTH U	75
118+85 LT	CTH U	102
121+85 LT	CTH U	86
129+40 RT	CTH U	82
	SUBTOTAL	507
STAGE 4		
104+00 LT	CTH U	45
	SUBTOTAL	45
	PROJECT TOTAL	552

REMOVING CONCRETE SIDEWALK

STATION	DIR	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY
6934-06-70			
STAGE 3			
119+02	LT	CTH U	2
		SUBTOTAL	2
STAGE 4			
99+80	RT	CTH U	12
100+10	LT	CTH U	13
		SUBTOTAL	25
		PROJECT TOTAL	27

OBLITERATING OLD ROAD

STATION	TO	STATION	LOCATION	214.0100 OBLITERATING OLD ROAD STA
6934-06-70				
STAGE 2				
0+12	-	2+80	TEMP MILL ACCESS	3
			PROJECT TOTAL	3

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0110 3/4-INCH TONS *	305.0120 1 1/4-INCH TONS *	624.0100 WATER MGAL *
6934-06-70						
STAGE 1						
0+12	-	2+80	MILL TEMP ACCESS	0	690	4
			SUBTOTAL	0	690	4
STAGE 2						
147+15	-	150+40	CTH U	3	500	3.0
147+70	-	148+60	ISLAND	---	60	0.4
31+75	-	34+62	S BIRON DR	2	690	4.2
			SUBTOTALS	5	1,250	7.5
STAGE 3						
108+00	-	147+15	CTH U	---	5,970	35.8
10+68	-	11+15	DEER ST	3	90	0.6
20+75	-	21+40	BUFFALO ST	3	110	0.7
123+00			TEMP PARKING	---	120	1.4
			SUBTOTALS	6	6,290	38.5
STAGE 4						
99+80	-	108+00	CTH U	---	1,085	6.5
			SUBTOTALS	0	1,085	6.5
UNDISTRIBUTED						
101+00	-	150+40	CTH U	4	85	0.5
			SUBTOTALS	4	85	0.5
			PROJECT TOTALS	15	9,400	57

*ADDITION QUANTITIES SHOWN ELSEWHERE

DRILLED DOWEL BARS

STATION	LOCATION	416.0620 DRILLED DOWEL BARS EACH
6934-06-70		
STAGE 4		
101+00	CTH U	32
	PROJECT TOTAL	32

CONCRETE PAVEMENT

STATION	TO	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.4100 CONCRETE PAVEMENT JOINT FILLING SY
6934-06-70						
STAGE 2						
147+15	-	150+30	CTH U	1,060	---	1,250
31+81	-	34+62	S BIRON DR	1,550	---	1,710
			SUBTOTALS	2,610	0	2,960
STAGE 3						
108+00	-	147+15	CTH U	13,125	2	15,265
10+78	-	11+15	DEER ST	135	---	165
20+85	-	21+40	BUFFALO ST	175	---	225
			SUBTOTALS	13,435	2	15,655
STAGE 4						
101+00	-	108+00	CTH U	2,395	2	2,785
			SUBTOTALS	2,395	2	2,785
			PROJECT TOTALS	18,440	4	21,400

CONCRETE SURFACE DRAIN

STATION	LOCATION	416.1010 CONCRETE SURFACE DRAIN CY
6934-06-70		
STAGE 2		
150+30	CTH U	1
	PROJECT TOTAL	1

CONCRETE DRIVES

STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON *	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON *	416.0160 CONCRETE DRIVEWAY 6-INCH SY	416.0260 CONCRETE DRIVEWAY HES 6-INCH SY	624.0100 WATER MGAL *
6934-06-70						
STAGE 2						
147+50	CTH U	30	20	---	45	0.3
33+55	S BIRON DR	10	20	22	---	0.2
	SUBTOTALS	40	40	22	45	0.5
STAGE 3						
109+14 RT	CTH U	14	6	15	---	0.1
111+35 RT	CTH U	---	7	22	---	0.0
113+35 RT	CTH U	---	17	50	---	0.1
114+25 RT	CTH U	---	35	100	---	0.2
115+50 RT	CTH U	---	17	48	---	0.1
115+80 RT	CTH U	38	8	22	---	0.3
117+10 RT	CTH U	12	10	26	---	0.1
118+00 RT	CTH U	---	20	18	---	0.1
118+78 RT	CTH U	---	32	26	---	0.2
119+70 RT	CTH U	---	10	18	---	0.1
120+45 RT	CTH U	42	14	37	---	0.3
121+25 RT	CTH U	24	20	18	---	0.3
123+25 RT	CTH U	---	12	14	---	0.1
124+60 RT	CTH U	10	10	18	---	0.1
125+20 RT	CTH U	15	10	26	---	0.2
126+30 RT	CTH U	10	7	18	---	0.1
127+40 RT	CTH U	10	7	18	---	0.1
128+35 RT	CTH U	30	8	22	---	0.2
129+45 RT	CTH U	---	32	68	---	0.2
130+75 RT	CTH U	28	12	32	---	0.2
132+80 RT	CTH U	---	24	---	42	0.1
143+95 RT	CTH U	14	14	---	45	0.2
108+95 LT	CTH U	10	7	18	---	0.1
109+60 LT	CTH U	8	7	18	---	0.1
110+20 LT	CTH U	---	12	30	---	0.1
111+90 LT	CTH U	---	7	18	---	0.0
112+40 LT	CTH U	---	14	20	---	0.1
113+50 LT	CTH U	38	35	32	---	0.4
115+05 LT	CTH U	---	32	18	---	0.2
116+05 LT	CTH U	---	26	18	---	0.2
117+10 LT	CTH U	---	20	22	---	0.1
117+75 LT	CTH U	---	7	18	---	0.0
118+85 LT	CTH U	---	30	82	---	0.2
121+85 LT	CTH U	---	28	76	---	0.2
124+40 LT	CTH U	22	12	32	---	0.2
125+15 LT	CTH U	12	7	18	---	0.1
137+05 LT	CTH U	---	25	18	---	0.2
139+80 LT	CTH U	---	34	16	---	0.2
143+65 LT	CTH U	---	8	14	---	0.0
146+10 LT	CTH U	78	13	38	---	0.5
	SUBTOTALS	415	656	1,122	87	6.4

CONCRETE DRIVES

STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON *	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON *	416.0160 CONCRETE DRIVEWAY 6-INCH SY	416.0260 CONCRETE DRIVEWAY HES 6-INCH SY	624.0100 WATER MGAL *
6934-06-70						
STAGE 4						
102+45 RT	CTH U	36	14	38	---	0.3
103+35 RT	CTH U	125	14	38	---	0.8
104+50 RT	CTH U	10	7	18	---	0.1
107+00 RT	CTH U	100	30	---	82	0.8
107+67 RT	CTH U	20	7	18	---	0.2
101+15 LT	CTH U	---	30	20	---	0.2
102+00 LT	CTH U	---	17	24	---	0.1
103+75 LT	CTH U	15	7	19	---	0.1
104+00 LT	CTH U	---	22	28	---	0.1
106+50 LT	CTH U	---	12	20	---	0.1
107+90 LT	CTH U	14	7	18	---	0.1
	SUBTOTALS	320	167	242	82	2.9
	PROJECT TOTALS	775	863	1,386	214	9.8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

3

ASPHALTIC DRIVES AND TRANSITIONS

STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON *	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	624.0100 WATER MGAL *
6934-06-70						
STAGE 1						
0+12/2+80	MILL TEMP ACCESS	0	0	0	250	0.0
	SUBTOTALS	0	0	0	250	0.0
STAGE 2						
150+30	CTH U	25	14	---	---	0.2
31+75	S BIRON DR	15	6	---	---	0.1
	SUBTOTALS	40	20	0	0	0.2
STAGE 3						
10+68	DEER ST	20	7	---	---	0.1
20+75	BUFFALO ST	20	7	---	---	0.1
111+35 RT	CTH U	5	0	4	---	0.0
118+00 RT	CTH U	15	---	4	---	0.1
118+78 RT	CTH U	25	---	6	---	0.2
119+70 RT	CTH U	5	---	1	---	0.0
121+25 RT	CTH U	15	---	4	---	0.1
132+80 RT	CTH U	10	---	3	---	0.1
112+40 LT	CTH U	10	---	3	---	0.1
113+50 LT	CTH U	25	---	6	---	0.2
115+05 LT	CTH U	25	---	6	---	0.2
116+05 LT	CTH U	20	---	5	---	0.1
117+10 LT	CTH U	15	---	4	---	0.1
137+05 LT	CTH U	20	---	5	---	0.1
139+80 LT	CTH U	30	---	7	---	0.2
143+65 LT	CTH U	5	---	2	---	0.0
	SUBTOTALS	265	14	60	0	1.6
STAGE 4						
101+15 LT	CTH U	25	---	6	---	0.2
102+00 LT	CTH U	10	---	2	---	0.1
106+50 LT	CTH U	5	---	2	---	0.0
	SUBTOTALS	40	0	10	0	0.2
	PROJECT TOTALS	345	34	70	250	2.1

CONCRETE MASONRY ENDWALLS

STATION	LOCATION	504.0900 CONCRETE MASONRY ENDWALLS CY
6934-06-70		
STAGE 1		
134+52 LT	CTH U	4.2
	SUBTOTAL	4.2
STAGE 3		
134+07 LT	CTH U	4.2
	SUBTOTAL	4.2
	PROJECT TOTAL	8.4

CULVERT PIPES

STATION	LOCATION	521.3112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	522.0148 CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH LF	SPV.0090.01 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 72X113-INCH LF	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH	SPV.0060.16 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 72X113-INCH EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	STEEL THICKNESS (INCHES)
6934-06-70									
STAGE 3									
128+42, RT	CTH U	34	---	---	2	---	---	---	0.064
129+43, RT	CTH U	40	---	---	2	---	---	---	0.064
134+28	CTH U	---	---	80	---	---	2	1	---
130+73, RT	CTH U	38	---	---	2	---	---	---	0.064
134+38	CTH U	---	80	---	---	2	---	1	---
	PROJECT TOTALS	112	80	80	6	2	2	2	

CONCRETE MEDIAN SLOPED NOSES

STATION	LOCATION	620.0300 CONCRETE MEDIAN SLOPED NOSES SF
6934-06-70		
STAGE 2		
148+63 LT	CTH U	60
	PROJECT TOTAL	60

CONCRETE CURB AND GUTTER

STATION TO STATION			DIR	LOCATION	601.0409 CONCRETE CURB AND GUTTER 30-INCH TYPE A LF
6934-06-70					
STAGE 2					
147+15	-	150+30	RT	CTH U	315
148+85	-	150+30	LT	CTH A	120
31+81	-	34+40	RT	S BIRON DR	270
31+81	-	34+20	LT	S BIRON DR	295
34+02	-	34+60	LT	S BIRON DR ISLAND	240
				SUBTOTAL	1240
STAGE 3					
108+00	-	147+15	RT	CTH U	3915
108+00	-	147+15	LT	CTH U	3785
10+78	-	11+20	RT & LT	DEER ST	105
20+85	-	21+45	RT & LT	BUFFALO ST	145
				SUBTOTAL	7950
STAGE 4					
101+00	-	108+00	RT	CTH U	700
101+00	-	108+00	LT	CTH U	700
				SUBTOTAL	1,400
				PROJECT TOTAL	10,590

CONCRETE SIDEWALK

STATION	TO	STATION	DIR	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON *	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	624.0100 WATER MGAL *
6934-06-70									
STAGE 2									
148+85	-	150+70	LT	CTH U	25	1,090	---	---	0.2
31+85	-	34+55	RT	S BIRON DR	30	1,170	10	---	0.2
31+85	-	34+20	LT	S BIRON DR	30	1,370	10	---	0.2
				SUBTOTALS	85	3,630	20	0	0.5
STAGE 3									
108+00	-	129+34	RT	CTH U	210	9,150	10	---	1.3
108+00	-	147+15	LT	CTH U	405	17,360	10	56	2.4
				SUBTOTALS	615	26,510	20	56	3.7
STAGE 4									
99+80	-	108+00	RT	CTH U	80	3,440	10	---	0.5
100+10	-	108+00	LT	CTH U	80	3,440	10	---	0.5
				SUBTOTALS	160	6880	20	0	1.0
				PROJECT TOTALS	860	37,020	60	56	5.2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER STRUCTURES

STRUCTURE	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	SPV.0060.1 MANHOLES 10-FT DIAMETER EACH	611.2504 MANHOLES VARIABLE TEE 4-FT DIAMETER EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
6934-06-70																		
STAGE 1																		
AEW-8A	CTH U	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1
MH-8B	CTH U	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	1
MH-8.1B	CTH U	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1
INL-9C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-8C	CTH U	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	1
CB-9B	CTH U	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1
MH-9A	CTH U	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
MH-10A	CTH U	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
INL-10B	CTH U	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
INL-11B	CTH U	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
INL-11C	CTH U	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
MH-11A	CTH U	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
INL-11F	CTH U	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
INL-11D	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-11E	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-12B	CTH U	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
INL-13B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-13A	CTH U	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	1
MH-12A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-12C	CTH U	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
INL-12D	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-14B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-14C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-14A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-14D	CTH U	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
INL-15B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-15C	CTH U	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
INL-15D	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-15A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
MH-16A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
MH-20A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-20B	CTH U	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
	SUBTOTALS	0	1	12	1	10	2	6	0	1	5	4	2	1	1	11	6	32

STORM SEWER STRUCTURES

STRUCTURE	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	SPV.0060.1 MANHOLES 10-FT DIAMETER EACH	611.2504 MANHOLES VARIABLE TEE 4-FT DIAMETER EACH	611.3003 INLETS 3-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
6934-06-70																		
STAGE 2																		
INL-16B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-19A	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-18A	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---		1	---	1
INL-19B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
AEW-18B	CTH U	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1
MH-17A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-17C	CTH U	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	1
AEW-19C	CTH U	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1
INL-17B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
	SUBTOTALS	2	0	1	1	5	0	0	0	0	1	0	0	0	1	5	0	9
STAGE 3																		
INL-1B	CTH U	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
INL-1C	CTH U	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
MH-1A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-1D	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-1.1A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-2B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-2C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-2A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-3B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-3C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-3A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-4B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-4C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-4A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-5D	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-5B	CTH U	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
INL-5C	CTH U	---	---	---	---	---	1	---	---	---	---	---	---	---	---	1	---	1
MH-5A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
MH-5.1A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
INL-6B	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
INL-6C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-6A	CTH U	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	---	1
CB-7B	CTH U	---	---	---	---	1	---	---	1	---	---	---	---	---	---	---	---	1
INL-7C	CTH U	---	---	---	---	1	---	---	---	---	---	---	---	---	---	1	---	1
MH-7E	CTH U	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	1
MH-7.1E	CTH U	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1
MH-7D	CTH U	---	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	1
AEW-7A	CTH U	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1
	SUBTOTALS	0	1	11	0	12	4	0	1	0	8	0	2	1	0	15	0	28
	PROJECT TOTALS	2	2	24	2	27	6	6	1	1	14	4	4	2	2	31	6	69

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 4-INCH ADJUSTMENT RING HEIGHT

3

ADJUSTING MANHOLES

STATION	OFFSET	DIR	LOCATION	611.0420 RECONSTRUCTING MANHOLES EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	SPV.0060.18 ADJUSTING MANHOLE COVERS AND REPLACE CONE EACH	COMMENT
6934-06-71							
STAGE 2							
147+83	23.8	LT	CTH U	---	1	---	SANITARY MH
149+80	14.9	LT	CTH U	---	---	1	SANITARY MH
32+80	28.4	LT	BIRON	1	---	---	SANITARY MH
			SUBTOTAL	1	1	1	
STAGE 3							
136+11	13.2	RT	CTH U	1	---	---	SANITARY MH
138+94	13.0	RT	CTH U	1	---	---	SANITARY MH
141+75	12.4	RT	CTH U	---	1	---	SANITARY MH
144+45	12.5	RT	CTH U	---	1	---	SANITARY MH
147+17	15.2	RT	CTH U	---	---	1	SANITARY MH
			SUBTOTAL	2	2	1	
			PROJECT TOTAL	3	3	2	

RIPRAP & GEOTEXTILE

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE TYPE HR SY
6934-06-70				
STAGE 2				
AEW-19C	S BIRON DR	4	---	15
AEW-18B	S BIRON DR	4	---	15
150+30	CTH U	1	---	10
	SUBTOTALS	9	0	40
STAGE 3				
STA 134+30 RT	CTH U	---	100	160
STA 134+30 LT	CTH U	---	140	215
	SUBTOTALS	0	240	375
	PROJECT TOTALS	9	240	415

STORM SEWER PIPE

FROM	-	TO	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0327 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 27-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0372 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 72-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF
6934-06-70														
STAGE 1														
AEW-8A	-	MH-8B	CTH U	---	---	---	26	---	---	---	---	---	---	---
INL-10B	-	MH-10A	CTH U	12	---	---	---	---	---	---	---	---	---	---
INL-11B	-	MH-11A	CTH U	---	10	---	---	---	---	---	---	---	---	---
INL-11C	-	MH-11A	CTH U	---	---	---	---	---	---	---	---	22	---	---
INL-11D	-	INL-11B	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-11E	-	INL-11C	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-11F	-	INL-11B	CTH U	16	---	---	---	---	---	---	---	---	---	---
INL-12B	-	MH-12A	CTH U	29	---	---	---	---	---	---	---	---	---	---
INL-12C	-	MH-12A	CTH U	20	---	---	---	---	---	---	---	---	---	---
INL-12D	-	INL-12C	CTH U	---	---	---	---	---	---	---	30	---	---	---
INL-13B	-	MH-13A	CTH U	22	---	---	---	---	---	---	---	---	---	---
INL-14C	-	MH-14A	CTH U	---	22	---	---	---	---	---	---	---	---	---
INL-14D	-	INL-14B	CTH U	26	---	---	---	---	---	---	---	---	---	---
INL-15B	-	MH-15A	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-15C	-	INL-15B	CTH U	24	---	---	---	---	---	---	---	---	---	---
INL-15D	-	MH-15A	CTH U	23	---	---	---	---	---	---	---	---	---	---
CB-9B	-	MH-8C	CTH U	---	---	---	---	---	15	---	---	---	---	---
CB-9B	-	MH-9A	CTH U	---	---	---	---	35	---	---	---	---	---	---
INL-9C	-	CB-9B	CTH U	---	35	---	---	---	---	---	---	---	---	---
MH-10A	-	MH-9A	CTH U	---	---	45	---	---	---	---	---	---	---	---
MH-12A	-	MH-13A	CTH U	---	---	---	---	---	---	---	---	---	34	---
MH-13A	-	MH-11A	CTH U	---	---	---	---	---	---	---	---	---	---	128
MH-14A	-	MH-20A	CTH U	---	---	---	---	---	---	---	---	---	---	75
MH-20A	-	MH-13A	CTH U	---	---	---	---	---	---	---	---	---	---	240
MH-20A	-	INL-20B	CTH U	31	---	---	---	---	---	---	---	---	---	---
MH-14A	-	INL-14B	CTH U	10	---	---	---	---	---	---	---	---	---	---
MH-14A	-	MH-15A	CTH U	---	---	---	---	---	---	---	---	---	275	---
MH-15A	-	MH-16A	CTH U	---	---	---	---	---	---	---	---	---	225	---
MH-8.1B	-	MH-8C	CTH U	---	---	---	---	---	---	52	---	---	---	---
MH-8B	-	MH-8.1B	CTH U	---	---	---	---	---	---	57	---	---	---	---
MH-9A	-	MH-11A	CTH U	---	---	---	---	161	---	---	---	---	---	---
			SUBTOTALS	243	67	45	26	196	15	109	30	22	534	443
STAGE 2														
AEW-18B	-	INL-18A	CTH U	43	---	---	---	---	---	---	---	---	---	---
AEW-19C	-	INL-19B	CTH U	29	---	---	---	---	---	---	---	---	---	---
INL-17C	-	INL-17B	CTH U	18	---	---	---	---	---	---	---	---	---	---
INL-19B	-	INL-19A	CTH U	---	---	---	---	---	---	---	33	---	---	---
MH-16A	-	MH-17A	CTH U	---	---	---	---	---	---	---	---	---	92	---
MH-16A	-	INL-16B	CTH U	---	---	---	---	---	---	---	69	---	---	---
MH-17A	-	INL-17C	CTH U	28	---	---	---	---	---	---	---	---	---	---
			SUBTOTALS	118	0	0	0	0	0	0	102	0	92	0

STORM SEWER PIPE

FROM	-	TO	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0327 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 27-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0372 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 72-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF
6934-06-70														
STAGE 3														
AEW-7A	-	MH-7D	CTH U	---	---	---	15	---	---	---	---	---	---	---
INL-1B	-	MH-1A	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-1C	-	MH-1A	CTH U	22	---	---	---	---	---	---	---	---	---	---
INL-1D	-	INL-1C	CTH U	24	---	---	---	---	---	---	---	---	---	---
INL-2B	-	MH-2A	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-3B	-	MH-3A	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-4B	-	MH-4A	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-5B	-	MH-5A	CTH U	10	---	---	---	---	---	---	---	---	---	---
INL-5D	-	INL-5C	CTH U	24	---	---	---	---	---	---	---	---	---	---
INL-6B	-	MH-6A	CTH U	10	---	---	---	---	---	---	---	---	---	---
CB-7B	-	MH-7E	CTH U	---	---	---	15	---	---	---	---	---	---	---
CB-7B	-	INL-7C	CTH U	32	---	---	---	---	---	---	---	---	---	---
MH-1.1A	-	MH-2A	CTH U	---	---	256	---	---	---	---	---	---	---	---
MH-1A	-	MH-1.1A	CTH U	---	---	325	---	---	---	---	---	---	---	---
MH-2A	-	INL-2C	CTH U	22	---	---	---	---	---	---	---	---	---	---
MH-3A	-	MH-4A	CTH U	---	---	305	---	---	---	---	---	---	---	---
MH-3A	-	INL-3C	CTH U	22	---	---	---	---	---	---	---	---	---	---
MH-3A	-	MH-2A	CTH U	---	---	292	---	---	---	---	---	---	---	---
MH-4A	-	MH-5A	CTH U	---	---	295	---	---	---	---	---	---	---	---
MH-4A	-	INL-4C	CTH U	22	---	---	---	---	---	---	---	---	---	---
MH-5.1A	-	MH-6A	CTH U	---	---	310	---	---	---	---	---	---	---	---
MH-5.1A	-	MH-5A	CTH U	---	---	295	---	---	---	---	---	---	---	---
MH-5A	-	INL-5C	CTH U	22	---	---	---	---	---	---	---	---	---	---
MH-6A	-	CB-7B	CTH U	---	---	---	358	---	---	---	---	---	---	---
MH-6A	-	INL-6C	CTH U	22	---	---	---	---	---	---	---	---	---	---
MH-7.1E	-	MH-7E	CTH U	---	---	---	---	---	---	66	---	---	---	---
MH-7D	-	MH-7.1E	CTH U	---	---	---	---	---	---	66	---	---	---	---
			SUBTOTALS	272	0	2078	388	0	0	132	0	0	0	0
			PROJECT TOTALS	633	67	2123	414	196	15	241	132	22	626	443

COVER PLATE TEMPORARY

STR	DIR	LOCATION	611.8120.S COVER PLATE TEMPORARY EA
6934-06-70			
STAGE 3			
INL 5B	LT	CTH U	1
		PROJECT TOTAL	1

3

LANDSCAPING

STATION	TO	STATION	DIR	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2008 EROSION MAT CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEED MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
6934-06-70														
STAGE 1														
0+12	-	2+80	LT/RT	MILL TEMP ACCESS	165	0	165	0	0.10	4	0	0	2	0.08
				SUBTOTALS	165	0	165	0	0.10	4	0	0	2	0.08
STAGE 2														
147+15	-	150+70	RT	CTH U	310	---	---	310	0.20	8	---	---	4	0.16
148+85	-	150+70	LT	CTH U	210	---	210	---	0.13	9	3	---	3	0.11
ISLAND				CTH U	310	---	310	---	0.20	8	---	---	4	0.16
31+70	-	34+55	RT	S BIRON DR	270	---	270	---	0.17	3	3	---	4	0.14
31+70	-	34+20	LT	S BIRON DR	830	---	410	420	0.52	11	1	---	11	0.42
0+15		2+80	R/L	TEMP MILL ACCESS	1,210	---	1,210	---	0.76	33	---	---	16	0.61
UNDISTRIBUTED					480	---	300	180	0.32	---	1	10	5	0.24
				SUBTOTALS	3,620	0	2,710	910	2.30	73	8	10	47	1.81
STAGE 3														
108+00	-	147+15	RT	CTH U	3,730	---	2,700	1,030	2.35	44	38	---	50	1.87
108+00	-	147+15	LT	CTH U	4,210	---	3,190	1,020	2.65	---	76	---	57	2.11
123+00			LT	TEMP PARKING	0	500	500	---	0.32	---	9	---	7	0.00
UNDISTRIBUTED					1,990	---	1,475	515	1.28	---	35	---	25	1.00
				SUBTOTALS	9,930	500	7,865	2,565	6.60	44	158	0	139	4.98
STAGE 4														
99+80	-	108+00	RT	CTH U	670	---	670	---	0.42	---	12	---	9	0.34
100+10	-	108+00	LT	CTH U	600	---	600	---	0.38	---	11	---	8	0.30
UNDISTRIBUTED					320	---	320	---	0.24	---	7	---	5	0.16
				SUBTOTALS	1,590	0	1,590	0	1.00	0	30	0	22	0.80
WASTE SITE														
UNDISTRIBUTED					0	0	17,000	0	13.00	154	0	0	0	1.93
				PROJECT TOTALS	15,305	500	29,330	3,475	23.00	275	195	10	210	9.60

3

EROSION CONTROL

STATION	TO	STATION	DIR	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628-7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH
6934-06-70														
STAGE 1														
134+50	-	147+15	RT & LT	CTH U	1,530	1,530	---	---	19	7	10	2	---	1
UNDISTRIBUTED					305	305	2	2	---	---	---	---	---	---
				SUBTOTALS	1835	1835	2	2	19	7	10	2	0	1
STAGE 2														
147+15	-	150+70	RT	CTH U	330	330	---	---	---	---	---	---	---	---
148+85	-	150+70	LT	CTH U	185	185	---	---	---	---	---	---	---	---
31+75	-	34+55	RT	S BIRON DR	---	---	---	---	2	---	2	---	---	---
31+75	-	34+20	LT	S BIRON DR	140	140	---	---	4	1	3	---	---	---
UNDISTRIBUTED					130	130	2	2	---	---	---	---	---	1
				SUBTOTALS	785	785	2	2	6	1	5	0	0	1
STAGE 3														
108+00	-	134+50	RT	CTH U	445	445	---	---	9	---	7	2	3	---
108+00	-	134+50	LT	CTH U	860	860	---	---	7	---	5	2	---	---
UNDISTRIBUTED					260	260	4	4	---	---	---	---	3	2
				SUBTOTALS	1,565	1,565	4	4	16	0	12	4	6	2
STAGE 4														
99+80	-	108+00	RT	CTH U	---	----	---	---	---	---	1	---	---	---
100+10	-	108+00	LT	CTH U	----	----	---	---	---	---	1		---	---
UNDISTRIBUTED					---	---	2	2	---	---	---	---	---	1
				SUBTOTALS	0	0	2	2	0	0	2	0	0	1
				PROJECT TOTALS	4,185	4,185	10	10	41	8	29	6	6	5

SIGNS TYPE II, MOVING SIGNS, & WOOD POSTS

SIGN NUMBER	STATION	DIR	LOCATION	SIGN CODE	SIZE	634.0612 POSTS WOOD 4x6-INCH x 12-FT EACH	634.0614 POSTS WOOD 4x6-INCH x 14-FT EACH	634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	COMMENTS
6934-06-70												
STAGE 2												
230	146+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
114A	148+55	LT	CTH U	W12-1D	24x24	1	---	---	---	4.00	---	
115	149+50	RT	CTH U	R2-1	24x30	---	---	1	5.00	---	---	
115	149+50	RT	CTH U	D11-1	24x18	---	---	---	3.00	---	---	INSTALL ON SAME POST AS SIGN 115
M105	31+00	LT	S BIRON DR	-	-	---	---	---	---	---	1	
116	31+78	LT	S BIRON DR	D11-1	24x18	---	1	---	3.00	---	---	
117	33+00	LT	S BIRON DR	W10-1	36x36	---	---	1	---	7.07	---	
118	33+58	LT	S BIRON DR	R1-2	36x31	---	---	1	3.88	---	---	
119	34+10	LT	S BIRON DR	R5-1	30x30	---	1	---	6.25	---	---	
120	--	RT	S BIRON DR	W10-1	36x36	---	---	1	---	7.07	---	WEST OF RR TRACKS
			SUBTOTALS			1	2	4	21.13	18.14	1	
STAGE 3												
206	110+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
207	110+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
208	113+00	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
209	113+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
106	114+50	LT	CTH U	R2-1	24x30	---	1	---	5.00	---	---	
107	116+00	RT	CTH U	R2-1	24x30	---	1	---	5.00	---	---	
210	116+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
211	116+75	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
212	119+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
213	119+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
214	122+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
215	122+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
216	125+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
217	125+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
218	128+75	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
219	128+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
108	129+50	LT	CTH U	R2-1	24x30	---	1	---	5.00	---	---	
220	131+00	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
221	131+00	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
109	132+00	RT	CTH U	R2-1	24x30	---	1	---	5.00	---	---	
222	134+00	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
223	134+00	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
M102	135+55	RT	CTH U	-	-	---	---	---	---	---	1	MOUNT SIGNS ON SAME ASSEMBLY
224	137+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
225	137+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
226	140+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
227	140+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
228	143+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
229	143+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
230	146+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
110	11+05	RT	DEER ST	R1-1	30x30	---	1	---	5.18	---	---	
111	10+85	LT	DEER ST	W14-1	30x30	---	---	1	6.25	---	---	
112	21+30	RT	BUFFALO ST	R1-1	30x30	---	1	---	5.18	---	---	
113	21+15	LT	BUFFALO ST	W14-1	30x30	---	---	1	6.25	---	---	
114	144+50	LT	CTH U	R2-1	24x30	---	1	---	5.00	---	---	
M103	145+50	LT	CTH U	-	-	---	---	---	---	---	1	
			SUBTOTALS			0	32	2	148	0	2	

3

SIGNS TYPE II, MOVING SIGNS, & WOOD POSTS

SIGN NUMBER	STATION	DIR	LOCATION	SIGN CODE	SIZE	634.0612 POSTS WOOD 4x6-INCH x 12-FT EACH	634.0614 POSTS WOOD 4x6-INCH x 14-FT EACH	634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	COMMENTS
6934-06-70												
100	100+85	RT	CTH U	M1-5A	24x24	---	---	1	4.00	---	---	
100	100+85	RT	CTH U	R2-1	24x30	---	---	---	5.00	---	---	INSTALL ON SAME POST AS SIGN 100
M100	100+95	RT	CTH U	-	-	---	---	---	---	---	1	
200	101+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
201	101+50	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
103	103+55	LT	CTH U	M2-1	21x15	---	1	---	2.19	---	---	
103	103+55	LT	CTH U	J1-1	24x39	---	---	---	6.50	---	---	INSTALL ON SAME POST AS SIGN 103
204	104+00	RT	CTH U	R8-3	24x24	---	1	---	4	---	---	
203	104+25	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
M101	105+75	LT	CTH U	-	-	---	---	---	---	---	1	
204	107+45	LT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
205	107+50	RT	CTH U	R8-3	24x24	---	1	---	4.00	---	---	
			SUBTOTALS			0	7	1	41.69	0.00	2	
			PROJECT TOTALS			1	41	7	210.68	18.14	5	

3

REMOVING SIGNS & SMALL SIGN SUPPORTS

STATION	TO	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
6934-06-70					
STAGE 2					
31+75	-	34+50	S BIRON DR	6	6
147+15	-	150+40	CTH U	1	1
			SUBTOTALS	7	7
STAGE 3					
108+00	-	147+15	CTH U	7	7
10+68	-	11+15	DEER ST	2	2
20+75	-	21+40	BUFFALO ST	2	2
			SUBTOTALS	11	11
STAGE 4					
100+50	-	108+00	CTH U	6	6
			SUBTOTALS	6	6
			PROJECT TOTALS	24	24

TEMP. PED ACCESS

STATION	TO	STATION	DIR	LOCATION	644.1430.S TEMP. PED. SURFACE PLATE SF	644.1616.S TEMP. PED. SAFETY FENCE LF
6934-06-70						
STAGE 2						
31+75	-	32+00	LT	BIRON	275	110
				PROJECT TOTAL	275	110

PAVEMENT MARKING

STATION TO STATION			LOCATION	646.1020 LINE EPOXY 4-INCH (YELLOW) LF	646.1020 LINE EPOXY 4-INCH (WHITE) LF	646.5320 RAILROAD CROSSING EPOXY EACH	646.6120 STOP LINE EPOXY 18-INCH (WHITE) LF	646.7520 CROSSWALK EPOXY LADDER PATTERN 24-INCH (WHITE) LF
6934-06-70								
STAGE 1								
TEMPORARY MILL ACCESS				75	---	---	---	---
			SUBTOTALS	75	0	0	0	0
STAGE 4								
101+00	-	112+00	CTH U	1,885	---	---	---	---
112+00	-	124+00	CTH U	875	---	---	---	---
124+00	-	136+00	CTH U	1,750	---	---	---	48
136+00	-	148+00	CTH U	350	---	---	---	---
148+00	-	150+80	CTH U	65	60	---	---	---
25+25	-	34+65	S BIRON DR	810	---	2	30	48
			SUBTOTALS	5,735	60	2	30	96
			PROJECT TOTALS	5,870		2	30	96

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.7000 CONCRETE PAVEMENT LF	650.9000 CURB RAMPS EACH	650.9910 SUPPLEMENTAL CONTROL EACH	650.9920 SLOPE STAKES LF	SPV.0105.01 TEMP. PARKING AREA LS
6934-06-70										
STAGE 1										
0+12	-	2+80	MILL TEMP ACCESS	268	268	0	0	0	268	0
			SUBTOTALS	268	268	0	0	0	268	0
STAGE 2										
147+15	-	150+40	CTH U	325	10	315	---	---	325	---
31+75	-	34+50	S BIRON DR	275	6	269	2	---	275	---
0+00	-	3+00	S BIRON DR RT TURN LANE	300	---	300	---	---	300	---
			SUBTOTALS	900	16	884	2	0	900	0
STAGE 3										
108+00	-	147+15	CTH U	3,915	---	3,915	2	1	3,915	---
10+68	-	11+10	DEER ST	42	10	32	2	---	42	---
20+75	-	21+35	BUFFALO ST	60	10	50	2	---	60	---
123+02			TEMP PARKING	---	---	---	---	---	---	1
			SUBTOTALS	4,017	20	3,997	6	1	4,017	1
STAGE 4										
101+00	-	108+00	CTH U	700	---	700	2	---	700	---
			SUBTOTALS	700	0	700	2	0	700	0
			PROJECT TOTALS	5,885	304	5,581	10	1	5,885	1

TRAFFIC CONTROL

LOCATION	EST. SERVICE PERIOD DAYS	643.0300 NO	643.0300 DRUMS DAYS	643.0410 BARRICADES TYPE II NO	643.0410 DAYS	643.0420 BARRICADES TYPE III NO	643.0420 DAYS	643.0705 WARNING LIGHTS TYPE A NO	643.0705 DAYS	643.0715 WARNING LIGHTS TYPE C NO	643.0715 DAYS	643.0900 SIGNS NO	643.0900 DAYS	643.1000 SIGNS FIXED MESSAGE SF	643.5000 TRAFFIC CONTROL EACH
6934-06-70															
STAGE 1															
CTH U	22	75	1,650	--	--	16	352	32	704	25	550	16	352	10	1
DEER ST	22	5	110	--	--	2	44	4	88	--	--	2	44	--	---
BUFFALO ST	22	5	110	--	--	2	44	4	88	--	--	2	44	--	---
S BIRON DR	22	--	--	--	--	2	44	4	88	--	--	2	44	--	---
DETOUR	22	--	--	--	--	--	--	--	--	--	--	58	1,276	104	---
	SUBTOTALS		1,870		0		484		968		550		1,760	114	1
STAGE 2															
CTH U	27	15	405	--	--	9	243	18	486	5	135	11	297	--	---
DEER ST	27	--	--	--	--	--	--	--	--	--	--	1	27	--	---
BUFFALO ST	27	--	--	--	--	--	--	--	--	--	--	1	27	--	---
S BIRON DR	27	--	--	--	--	4	108	8	216	--	--	4	108	38	---
DETOUR	27	--	--	--	--	--	--	--	--	--	--	58	1,566	--	---
	SUBTOTALS		405		0		351		702		135		2,025	38	0
STAGE 3															
CTH U	80	125	10,000	--	--	10	800	20	1,600	40	3,200	10	800	13	---
DEER ST	80	--	--	--	--	4	320	8	640	--	--	3	240	--	---
BUFFALO ST	80	--	--	--	--	4	320	8	640	--	--	3	240	--	---
S BIRON DR	80	--	--	--	--	--	--	--	--	--	--	2	160	--	---
DETOUR	80	--	--	4	320	2	160	4	320	--	--	64	5,120	--	---
	SUBTOTALS		10,000		320		1,600		3,200		3,200		6,560	13	0
STAGE 4															
CTH U	27	30	810	4	108	10	270	20	540	10	270	9	243	13	---
DETOUR	27	--	--	--	--	--	--	--	--	--	--	58	1,566	--	---
	SUBTOTALS		810		108		270		540		270		1,809	13	0
UNDISTRIBUTED	---		1309		43	0	271	0	541	0	416	0	1215	0	0
	SUBTOTALS		1309		43		271		541		416		1215	0	0
	PROJECT TOTALS		14,394		471		2,976		5,951		4,571		13,369	177	1

COVERING SIGNS

LOCATION	STAGE	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPP II EACH	NUMBER OF CYCLES	NUMBER OF SIGNS
CATEGORY 0010				
CTH U DETOUR	1	4	1	4
	PROJECT TOTAL	4		

SAWING

STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
6934-06-70					
STAGE 1					
154+17	-	155+12	CTH U	101	---
			SUBTOTALS	101	0
STAGE 2					
150+40			CTH U	30	---
150+40	-	150+70	CTH U	32	---
150+70			CTH U	6	---
31+75			S BIRON DR	30	---
31+90 LT			S BIRON DR	5	---
			SUBTOTALS	103	0
STAGE 3					
110+20 LT			CTH U	---	12
111+30 RT			CTH U	11	---
112+40 LT			CTH U	18	---
113+15 RT			CTH U	---	15
113+50 LT			CTH U	14	---
114+10 RT			CTH U	---	21
115+05 LT			CTH U	12	---
115+40 RT			CTH U	---	12
116+05 LT			CTH U	16	---
117+10 LT			CTH U	20	---
118+00 RT			CTH U	16	---
118+80 RT			CTH U	24	---
118+85 LT			CTH U	---	30
119+05 LT			CTH U	---	5
119+70 RT			CTH U	13	---
121+85 LT			CTH U	---	23
123+25 RT			CTH U	11	---
129+35 RT			CTH U	---	20
132+80 RT			CTH U	25	---
10+68			DEER ST	23	---
137+05 LT			CTH U	12	---
20+75			BUFFALO ST	22	---
139+80 LT			CTH U	15	---
143+65 LT			CTH U	12	---
			SUBTOTALS	264	138
STAGE 4					
99+82 RT			CTH U	---	5
101+00			CTH U	---	46
101+10 LT			CTH U	12	---
102+00 LT			CTH U	19	---
104+00 LT			CTH U	---	16
106+50 LT			CTH U	18	---
			SUBTOTALS	49	67
			PROJECT TOTALS	517	205

FLAP GATE

STATION	LOCATION	SPV.0060.15 FLAP GATE 24-INCH EACH
6934-06-70		
STAGE 1		
134+52	48' LT	1
	SUBTOTAL	1
STAGE 2		
134+87	43' LT	1
	SUBTOTAL	1
	PROJECT TOTALS	2

PAVEMENT

STATION	TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	465.0105 ASPHALTIC SURFACE TON	690.0150 SAWING ASPHALT LF
6934-06-71							
160+85			CTH U	35	23	8	73
			PROJECT TOTALS	35	23	8	73

LANDSCAPING

STATION	TO	STATION	DIR	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEED MIXTURE NO. 20 LB
6934-06-71								
152+45	-	152+60	RT	CTH U	14	14	0.2	2
156+60	-	156+95	RT	CTH U	28	28	0.2	2
160+80	-	160+90	RT	CTH U	8	8	0.2	2
UNDISTRIBUTED				CTH U	100	100	1.4	14
				PROJECT TOTALS	150	150	2.0	20

WATERMAIN CONNECTIONS & LATERALS

STATION	DIR	LOCATION	SPV.0090.08 1-INCH PEX WATER SERVICE LF	SPV.0060.12 SERVICE BRASS, TAP, BOX, SADDLE, CORP & VALVE EACH	SPV.0060.13 6-INCH WATERMAIN CONNECTION EACH	SPV.0060.14 10-INCH WATERMAIN CONNECTION EACH	SPV.0060.21 16-INCH WATERMAIN CONNECTION EACH
6934-06-71							
10+70	LT	DEER ST	---	---	1	---	---
20+80	---	BUFFALO ST	---	---	1	---	---
31+80	RT	S BIRON DR	---	---	1	---	---
114+03	LT	CTH U	---	---	---	---	2
114+26	LT	CTH U	---	---	---	---	2
116+95	LT	CTH U	---	---	---	---	2
135+70	RT	CTH U	---	---	1	---	---
139+25	RT	CTH U	---	---	---	1	---
140+15	R/L	CTH U	54	1	---	---	---
143+30	R/L	CTH U	47	1	---	---	---
147+25	RT	CTH U	---	---	---	1	---
147+50	RT	CTH U	---	---	1	---	---
156+90	RT	CTH U	---	---	1	---	---
160+85	R/L	CTH U	---	---	1	1	---
		PROJECT TOTALS	101	2	7	3	6

WATERMAIN BENDS & TEES

STATION	DIR	LOCATION	SPV.0060.07 WATERMAIN 6-INCH BEND EACH	SPV.0060.08 WATERMAIN 12-INCH BEND EACH	SPV.0060.09 WATERMAIN 10X10X6 TEE EACH	SPV.0060.10 WATERMAIN 12X12X6 TEE EACH	SPV.0060.11 WATERMAIN 12X10X6 TEE EACH	SPV.0060.20 WATERMAIN 16-INCH BEND EACH
6934-06-71								
10+70	LT	DEER ST	1	---	---	---	---	---
10+85	RT	DEER ST	1	---	---	---	---	---
11+25	RT	DEER ST	1	---	---	---	---	---
20+80	---	BUFFALO ST	1	---	---	---	---	---
21+10	LT	BUFFALO ST	1	---	---	---	---	---
21+35	LT	BUFFALO ST	1	---	---	---	---	---
31+80	RT	S BIRON DR	1	---	---	---	---	---
31+90	RT	S BIRON DR	1	---	---	---	---	---
34+70	RT	S BIRON DR	1	---	---	---	---	---
114+03	LT	CTH U	---	---	---	---	---	4
114+26	LT	CTH U	---	---	---	---	---	4
116+95	LT	CTH U	---	---	---	---	---	4
139+25	RT	CTH U	---	---	1	---	---	---
147+35	RT	CTH U	---	---	1	---	---	---
147+45	RT	CTH U	---	1	---	---	1	---
147+75	RT	CTH U	---	1	---	---	---	---
147+85	RT	CTH U	---	1	---	---	---	---
156+90	RT	CTH U	---	---	---	1	---	---
160+85	RT	CTH U	---	---	---	---	1	---
		PROJECT TOTALS	9	3	2	1	2	12

WATER MAIN INSULATION

STATION	TO	STATION	DIR	LOCATION	SPV.0090.02 WATER MAIN INSULATION LF
6934-06-71					
STAGE 3					
108+00	-	124+00	LT	CTH U	1,600
				SUBTOTALS	1,600
STAGE 4					
106+00	-	108+00	LT	CTH U	200
				SUBTOTALS	200
				PROJECT TOTALS	1,800

WATERMAIN

STATION	TO	STATION	DIR	LOCATION	SPV.0090.03 6-INCH WATERMAIN, OPEN CUT LF	SPV.0090.04 10-INCH WATERMAIN, OPEN CUT LF	SPV.0090.05 12-INCH WATERMAIN, OPEN CUT LF	SPV.0090.06 12-INCH WATERMAIN, DIRECTIONALLY BORED LF	SPV.0090.07 WATERMAIN CONSTRUCTION STAKING LF	SPV.0090.09 16-INCH WATERMAIN, OPEN CUT LF
6934-06-71										
114+03			LT	CTH U	---	---	---	---	---	15
114+26			LT	CTH U	---	---	---	---	---	15
116+95			LT	CTH U	---	---	---	---	---	15
135+70	-	136+35	R/L	CTH U	124	---	---	---	124	---
139+15	-	139+25	R/L	CTH U	112	---	---	---	112	---
147+25	-	147+45	RT	CTH U	---	20	---	---	20	---
147+45	-	147+85	RT	CTH U	5	---	50	---	55	---
147+85	-	160+85	RT	CTH U	---	---	---	1290	1290	---
156+90			RT	CTH U	10	---	---	---	10	---
160+85			R/L	CTH U	21	10	---	---	31	---
147+35			R/L	CTH U	33	---	---	---	33	---
31+75	-	34+70	RT	S BIRON DR	295	---	---	---	295	---
				PROJECT TOTALS	600	30	50	1290	1970	45

WATERMAIN HYDRANTS & VALVES

STATION	DIR	LOCATION	SPV.0060.02 REMOVING HYDRANT & AUXILIARY VALVE EACH	SPV.0060.03 REMOVING 6-INCH VALVE EACH	SPV.0060.04 HYDRANT COMPLETE, AUXILIARY VALVE AND ALL FITTINGS EACH	SPV.0060.05 WATERMAIN 6-INCH VALVE EACH	SPV.0060.06 WATERMAIN 12-INCH VALVE EACH	SPV.0060.17 RELOCATING HYDRANT EACH	SPV.0060.19 ADJUSTING WATER VALVE BOXES EACH
6934-06-71									
10+75	LT	DEER ST	---	1	---	---	---	---	---
10+90	R/L	DEER ST	1	---	1	---	---	---	---
11+15	RT	DEER ST	---	1	---	---	---	---	---
21+00	LT	BUFFALO ST	---	---	1	---	---	---	---
21+10	---	BUFFALO ST	---	1	---	---	---	---	---
21+35	RT	BUFFALO ST	1	---	---	---	---	---	---
21+40	RT	BUFFALO ST	---	1	---	---	---	---	---
114+25	LT	CTH U	---	---	---	---	---	1	1
139+25	RT	CTH U	---	---	---	1	---	---	---
147+35	RT	CTH U	---	---	---	1	---	---	---
147+45	RT	CTH U	---	---	---	---	1	---	---
152+50	RT	CTH U	---	---	1	---	---	---	---
152+55	RT	CTH U	---	---	---	---	1	---	---
156+65	RT	CTH U	---	---	1	---	---	---	---
156+80	RT	CTH U	---	---	---	---	1	---	---
156+90	RT	CTH U	---	---	---	1	---	---	---
160+80	RT	CTH U	---	---	---	---	1	---	---
33+40	RT	S BIRON DR	---	1	---	---	---	---	---
33+60	RT	S BIRON DR	1	---	---	---	---	---	---
33+90	RT	S BIRON DR	---	---	1	---	---	---	---
		PROJECT TOTALS	3	5	5	3	4	1	1

Conventional Signs and Abbreviations

- SECTION LINE
- QUARTER LINE
- TOWNSHIP AND RANGE LINE
- PROPOSED OR NEW CENTERLINE
- PROPOSED OR NEW R/W LINE
- EXISTING R/W LINE
- LOT LINE
- P.L. PROPERTY LINE
- COUNTY LINE LIMITS
- SLOPE INTERGEPTS
- EXISTING MONUMENTATION
- FENGE
- SECTION OR QUARTER GORNER
- T — T TELEPHONE
- G — G GAS
- W — W WATER
- E — E ELECTRIC
- FO — FO FIBER OPTIC
- SAN — SAN SANITARY
- SS — SS STORM SEWER
- NO ACCESS (BY ACQUISITION)
- NO ACCESS (BY STATUTORY AUTHORITY)
- NO AGCESS (BY PREVIOUS PROJEGT)
- TEMPORARY LIMITED EASEMENT
- PERMANENT LIMITED EASEMENT
- FEE TITLE
- RIGHT-OF-WAY MONUMENTS SET AT NEWLY ACQUIRED R/W ANGLE POINTS
- (6) PARCEL NUMBER
- (92) UTILITY PARCEL NUMBER
- [12] NEW R/W POINT
- △12 EXISTING R/W POINT
- [11] TLE POINT
- [11-PLE] PLE POINT

AC	ACRES
△	CENTRAL ANGLE
G/L	CENTERLINE
COR.	CORNER
CTH	COUNTY TRUNK HIGHWAY
D	DEGREE OF CURVE
E.	EAST
L	LENGTH OF GURVE
LG	LONG CHORO
LGB	LONG CHORO BEARING
MI	MILE
N.	NORTH
N.T.S.	NOT TO SCALE
PG	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PLE	PERMANENT LIMITED EASEMENT
P/L	PROPERTY LINE
PC LINE	PRIVATE CLAIM LINE
R	RADIUS
R.	RANGE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
¼LINE	QUARTER LINE
1/16LINE	SIXTEENTH LINE
S.	SOUTH
SEC	SECTION
SEC LINE	SEGTION LINE
STH	STATE TRUNK HIGHWAY
SF	SQUARE FEET
STA	STATION
T.	TOWN
T	TANGENT LENGTH OF CURVE
TLE	TEMPORARY LIMITED EASEMENT
USH	UNITED STATES HIGHWAY
W.	WEST

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	■	□
TELEPHONE POLE	●	⊘
TELEPHONE PEDESTAL	▣	⊡

Revised
3-8-2019
6-6-2019

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
6934-06-00	4.01	9
FEDERAL PROJECT NUMBER		

PLAT OF RIGHT-OF-WAY REQUIRED FOR

V BIRON, CTH U
STH 54 - SOUTH BIRON DRIVE

TOWN OF GRAND RAPIDS
VILLAGE OF BIRON

WOOD COUNTY

CONSTRUCTION PROJECT NUMBER
6934-06-70

N

BEGIN RELOCATION ORDER
STATION 100+00.00

900.00 FEET NORTH OF ANO 1829.42 FEET WEST OF THE SOUTHEAST CORNER, SEC 3, T22N, R6E, TOWN OF GRAND RAPIOS, WOOO COUNTY, WISCONSIN
Y=459574.311
X=743167.235



END RELOCATION ORDER
STATION 155+30.39

755.97 FEET NORTH OF AND 1042.13 FEET WEST OF THE NORTH QUARTER CORNER, SECTION 3, T22N, R6E, VILLAGE OF BIRON, WOOD COUNTY, WISCONSIN
Y=464682.536
X=741298.327

LAYOUT

SCALE 0 — 2 MILE — 4 MILES

TOTAL NET LENGTH OF CENTERLINE = 1.047 MI.

Notes:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATES REFERENCE SYSTEM COOROINATES (WISCRS) WOOD COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, ANO GRID OISTANCES. GRID DISTANCES MAY BE USEO AS GROUND OISTANCES.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORO.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED OF MAPS AND OOCUMENTS OF PUBLIC RECORD AND/ OR EXISTING OCCUPATION LINES. EXCLUDING RIGHT-OF-WAY BOUNOARIES, THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULO NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELO SURVEY.

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

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE THE NECESSARY EQUIPMENT THEREON ANO THE RIGHT OF INGRESS ANO EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUOING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY OEEM NECESSARY OR OESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAIO LANDS OR TO FLATTEN THE SLOPES, PROVIOING SAIO ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4 X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

PINE COURT RIGHT-OF-WAY DEFINED FROM PINE KNOLL SUBDIVISION. BUFFALO STREET AND DEER STREET RIGHT-OF-WAY DEFINED FROM SCHALLA'S ADDITION AND REIMER ADDITION TO THE VILLAGE OF BIRON. CTH-U RIGHT-OF-WAY DEFINED FROM DASHNER'S SUBOIVISION, SCHENKS UNPLATTED SUBDIVISION, SCHALLA'S ADDITION ANO REIMER'S ADDITION TO THE VILLAGE OF BIRON, ANO NUMEROUS WOOO COUNTY CSM'S ALONG CTH-U.

ACCEPTED FOR
WOOD COUNTY

9-21-18 (Date) Commissioner (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
OMNI ASSOCIATES
APPLETON, WISCONSIN

WISCONSIN DAVID A. YURK S-2648 OSHKOSH, WI PROFESSIONAL LAND SURVEYOR

9-19-2018 (Date) David A. Yurk (Signature)

WOOD COUNTY

4

4

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE COUNTY OF WOOD.

PARCEL NUMBER	PLAT SHEET NUMBER	OWNER	INT. REQD.	AREA ACRES REQUIRED NEW	EXISTING	TOTAL	TLE Area	PLE Area
1	4.04	GOLDEN EAGLE LOG HOMES, INC	TLE	----	----	----	4627 SQ FT	----
2	4.04	JUSTIN WEST	TLE	----	----	----	680 SQ FT	----
3	4.04	FAITH E. RUBIN	TLE	----	----	----	1514 SQ FT	----
4	4.04	JAMMERS, LLC	TLE	----	----	----	2794 SQ FT	----
6	4.04	JAMES J. KIMBALL & TIFFANY K. GOLOMSKI	TLE	----	----	----	550 SQ FT	----
7	4.04	DOUGLAS H. KRUMMEL & JILL M. KRUMMEL	TLE	----	----	----	273 SQ FT	----
8	4.04	MAD CW INVESTMENTS, LLC	TLE	----	----	----	283 SQ FT	----
9	4.04	RONALD C. MILER & JEAN L. MILLER	FEE TLE	347 SQ FT	----	347 SQ FT	3174 SQ FT	----
11	4.04	DANIEL T. CHAMBERS & CAROL A. CHAMBERS TRUSTEES OR THEIR SUCCESSORS IN TRUST, UNDER THE CHAMBERS LIVINH TRUST DATED 10-14-2008	TLE	----	----	----	1636 SQ FT	----
12	4.04	JERRY. MEDDAUGH & JANET MEDDAUGH	TLE	----	----	----	300 SQ FT	----
13	4.04	MARK R. SIEGLER	FEE TLE	1090 SQ FT	----	1090 SQ FT	2958 SQ FT	----
14	4.04 4.05	SHANE L. KOESHALL	FEE TLE	371 SQ FT	----	371 SQ FT	1643 SQ FT	----
16	4.05	RUSSELL L. JINSKEY & JESSICA M. JINSKEY	FEE TLE	125 SQ FT	----	125 SQ FT	2195 SQ FT	----
17	4.04 4.05	KEVIN M. KRUTZA & MALINDA M. KRUTZA	TLE	----	----	----	890 SQ FT	----
18	4.05	LORRAINE E. SCHMUTZER	TLE	----	----	----	1934 SQ FT	----
19	4.05	VANG THAO & DOUAJEE VANG	FEE TLE	27 SQ FT	----	27 SQ FT	1908 SQ FT	----
21	4.05	ERIC L. SKAAR	TLE	----	----	----	458 SQ FT	----
22	4.05	BENJAMIN P. LAMB & MAKENZU C. LIEBENSTEIN	TLE	----	----	----	1673 SQ FT	----
23	4.05	WILLIAM G. SIEGLER	FEE TLE	1 SQ FT	----	1 SQ FT	1020 SQ FT	----
24	4.05	ENDRIZZI FAMILY TRUST DATED 8-17-1990, GILBERT D. ENDRIZZI AND KATHLEEN K. ENDRIZZI TRUSTORS AND\OR TRUSTEE	TLE	----	----	----	822 SQ FT	----
26	4.05	TAYLOR R. DOWNING	TLE	----	----	----	200 SQ FT	----
27	4.05	GAIL M. DOUGLAS	TLE	----	----	----	450 SQ FT	----
28	4.05	KELLY STEWARD & JOLENE STEWARD CO-TRUSTEES, OR ANY SUCCESSORS TRUSTEE, OF THE STELZER FAMILY TRUST DATED 4-13-2017	FEE TLE	190 SQ FT	----	190 SQ FT	3250 SQ FT	----
29	4.05	EDWARDLAWRENCE, LLC	TLE	----	----	----	324 SQ FT	----
31	4.05	BRUCE M. KUCZYNSKI	FEE TLE	540 SQ FT	----	540 SQ FT	3697 SQ FT	----
32	4.05	MARK C.KUEHL	TLE	----	----	----	675 SQ FT	----
33	4.05	GINA MAE CALDWELL	TLE	----	----	----	1145 SQ FT	----
34	4.05	PEGGY L. SULLIVAN, KATHLEEN L. SULLIVAN & PATRICK A. SULLIVAN	TLE	----	----	----	379 SQ FT	----
36	4.05	LAVERNE J. BLAZEL	TLE	----	----	----	199 SQ FT	----
37	4.05 4.06 4.07	JJW CRANBERRIES, LLC	FEE TLE PLE	15225 SQ FT	----	15225 SQ FT	25275 SQ FT	350 SQ FT
38	4.05	DANIEL W. BLAZEL & GINGER R. BLAZEL	TLE	----	----	----	631 SQ FT	----
39	4.05	ALEXANDER D. HALLINAN	TLE	----	----	----	261 SQ FT	----
40	4.05	DONALD D. FISHER	TLE	----	----	----	131 SQ FT	
41	4.05 4.06	DANIEL L. MAGUIRE & MONICA L. MAGUIRE	TLE	----	----	----	90 SQ FT	----
42	4.05 4.06	MATTHEW F. OLESON	TLE	----	----	----	1028 SQ FT	----
43	4.06	JOSEPH A. HARLESS & KAYLEIGH N. HARLESS	FEE TLE	303 SQ FT	----	303 SQ FT	5785 SQ FT	----
44	4.06	VILLAGE OF BIRON	TLE	----	----	----	1519 SQFT	----
46	4.06	BRIAN A. JINSKY	FEE TLE PLE	146 SQ FT	----	146 SQ FT	4100 SQ FT	300 SQ FT
47	4.06 4.07	BRIAN P. BURR & SARAH S. TREDER	TLE PLE	----	----	----	1670 SQ FT	201 SQ FT
49	4.07	CATALYST PAPER OPERATIONS, INC	TLE PLE	----	----	----	42660 SQ FT	2745 SQ FT
90	4.06	VILLAGE OF BIRON	RELEASE OF RIGHTS	----	----	----	----	----
91	4.06 4.07	WE ENERGIES	RELEASE OF RIGHTS	----	----	----	----	----
92	4.05 4.06 4.07	CONSOLIDATED WATER & POWER CO.	RELEASE OF RIGHTS	----	----	----	----	----

4

4

4

STH-54

SW-SE SEC - 3

GRAND RAPIDS

NE-SW SEC - 3

TOWN

SE-NW SEC - 3

CTH U (EAGLE ROAD)

NW-SE SEC - 3

OF

SW-SE SEC - 3

GN

BIRON

TOWN

GRAND RAPIDS

DEER ST

BUFFALO ST

S. BIRON DR

VILLAGE

CTH U (EAGLE ROAD)

CTH U (N. BIRON DR)

OF

NE-NW SEC - 3

OF

SE-NW SEC - 3

SE-SW SEC - 34

REVISION DATE 3-8-19 NR 6-6-19 NR	DATE 9-19-2018	SCALE, FEET 0 100 200	HWY: CTH U	STATE R/W PROJECT NUMBER 6934-06-00	PLAT SHEET 4.03	
	GRID FACTOR		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6934-06-70	PS&E SHEET	100 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\RW\CTH U PLAT.DWG
LAYOUT NAME - 4.3

PLOT DATE : 6/6/2019 2:07 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 75

4

GRAND RAPIDS

TOWN

STH 54
(R/W WIDTH VARIES)

SW-SE SEC. - 3

NE-SW SEC. - 3

NW-SE SEC. - 3

1/4 LINE

1/16 LINE

CURVE A

PI 109+30.01
Y 460335.372
X 742632.718
△ = 07°13'55"
R = 1084.10'
T = 68.51'
L = 136.84'
LC = 136.75'
LCB = N31°27'56"W
PC 108+61.50
Y 460279.31
X 742672.09
PT 109+98.34
Y 460395.95
X 742600.71

GN

LOT 1
CSM 1147

② JUSTIN WEST

LOT 1
CSM 1022

③ FAITH E. RUBIN

⑥ JAMES J. KIMBALL &
TIFFANY K. GOLOMSKI
LOT 2
CSM 1216

⑦ DOUGLAS H. KRUMMEL &
JILL M. KRUMMEL

LOT 1
CSM 335

⑨ RONALD C. MILLER &
JEAN L. MILLER

78'±

⑬ MARK R. SIEGLER

⑭ SHANE L. KOESHALL

LOT 2
CSM 118

16'±

24'±

SLOPE INTERCEPT

214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 276 277 278 279 280 281 282 283

103 104 105 209

1"IP

3/4"IR

100+00

105+00

110+00

S35°04'54"E

R/L

N35°04'54"W
475.61'

CTH U

R/L

861.50'

N27°50'59"W
1511.37'

PC: 108+61.50

CURVE A

PT: 109+98.34

66'

R/L - 1/16 INT.
STA 104+75.61
Y=459963.519
X=742893.882

SLOPE INTERCEPT

MATCH STA 113+00

④ JAMMERS, LLC

LOT 1
CSM 7896

⑧ MAD CW INVESTMENT, LLC

5'&10' EASEMENT
WE ENERGIES - GAS
F/K/A WIS GAS COMPANY
V. 754 OF RECORDS, PG. 516,
DOC. NO. 680773

S89°10'40"W
2113.32' TO P.I.

⑪ DANIEL T. CHAMBERS &
CAROL A. CHAMBERS
TRUSTEES OR THEIR SUCCESSORS IN
TRUST UNDER THE CHAMBEN'S TRUST
DATED 10-14-2008

LOT 1
CSM 7298

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

⑫ JERRY L. MEDDAUGH &
JANET MEDDAUGH

⑰ KEVIN M. KRUTZA &
MALINDA M. KRUTZA

MALINDA M. KRUTZA &

DASHNIER'S
SUBDIVISION

LOT 2
CSM 1405

LOT 1
CSM 8802

① GOLDEN EAGLE LOG HOMES, INC.

BEGIN RELOCATION ORDER
STATION 100+00.00
900.00 FEET NORTH OF AND 1829.42 FEET
WEST OF THE SOUTHEAST CORNER,
SECTION 3, T22N, R6E, TOWN OF GRAND
RAPIDS, WOOD COUNTY, WISCONSIN
Y=459574.311
X=743167.235

MAG NAIL FOUND
Y=458657.305
X=744998.562

ALUMINUM DISK FOUND
Y=461313.399
X=745013.310

N00°21'41"E
2639.07'

N00°21'41"E
1319.535'

T 22 N R 6 E
SEC. 3
10 11 2

NOTE:
TLE'S ON THIS SHEET ARE FOR DRIVEWAY
CONSTRUCTION AND SLOPING

OF

REVISION DATE	3-8-19 NR	6-6-19 NR		DATE 9-19-2018	SCALE, FEET 0 50 100	HWY: CTH U	STATE R/W PROJECT NUMBER 6934-06-00	PLAT SHEET 4. 04	
				GRID FACTOR		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6934-06-70	PS&E SHEET 101	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\RW\CTH U PLAT.DWG
LAYOUT NAME - 4.4

PLOT DATE : 6/6/2019 2:09 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75

4

GRAND RAPIDS

TOWN

CURVE B

PI	129+12.72
Y	462088.596
X	741706.407
△	= 20°12'44"
R	= 2261.08'
T	= 403.01'
L	= 797.64'
LC	= 793.51'
LCB	= N17°44'37"W
PC	125+09.71
Y	461732.27
X	741894.67
PT	133+07.35
Y	462488.03
X	741652.85

HARRISON MONUMENT FOUND Y=458633.120 X=742362.110

T 22 N R 6 E S 3 10

SW-NE SEC - 3

NE-SW SEC - 3

SE-NW SEC - 3

NW-SE SEC - 3

SW-SE SEC - 3

PINE KNOLL SUBDIVISION

LOT 7 LOT 8 LOT 9 LOT 6 LOT 5 LOT 4 LOT 3 LOT 2 LOT 1

PINE KNOLL SUBDIVISION

LOT 10 LOT 1

JJW CRANBERRIES, LLC

LOT 1 CSM 118

SHANE L. KOESHALL

RUSSELL L. JINSKY & JESSICA M. JINSKY

VANG THAO & DOUAJEE VANG

BENJAMIN P. LAMB & MAKENZI C. LIEBENSTEIN

WILLIAM G. SIEGLER

KELLY STEWARD & JOLENE STEWARD CO-TRUSTEES, OR ANY SUCCESSORS TRUSTEE OF THE STELZER FAMILY TRUST DATED 4-13-2017

BRUCE M. KUCZYNSKI

JJW CRANBERRIES, LLC

LOT 1 CSM 4512

DANIEL W. BLAZEL & GINGER R. BLAZEL

JJW CRANBERRIES, LLC

N00°14'04"W 2171.79' (TO NEW R/W)

N00°14'04"W 2251.12' TO R/W

1"IP

32±

93±

47±

44±

37±

SLOPE INTERCEPT

DETAIL A DETAIL B DETAIL C DETAIL D

PINE CT (66')

MATCH STA 113+00

MATCH STA 128+00

115+00 N27°50'59"W 188.63'

1/4 LINE - R/L INT. STA 115+28.63 *

N27°50'59"W

R/L

120+00

CTH U

806.85'

1511.37'

125+00

PC: 125+09.71

CURVE B

3/4"IP

60'

70'

L1 L2

TAYLOR R. DOWNING

EDWARDLAWRENCE LLC

GAIL M. DOUGLAS

JUNE G. MUNRO

GINA MAE CALDWELL

MARK C. KUEHL

PEGGY L. SULLIVAN, KATHLEEN L. SULLIVAN & PATRICK A. SULLIVAN

LAVERNE J. BLAZEL

ALEXANDER D. HALLINAN

LOT 1 CSM 6940

DONALD E. FISHER

DANIEL L. MAGUIRE & MONICA L. MAGUIRE

MATTHEW F. OLESON

KEVIN M. KRUTZA & MALINDA M. KRUTZA

LORRAINE E. SCHMUTZER

ERIC L. SKAAR

LOT 1 CSM 2333

OUTLOT 1 CSM 2333

ENDRIZZI FAMILY TRUST DATED 8-17-1990, GILBERT D. ENDRIZZI AND KATHLEEN K. ENDRIZZI TRUSTORS AND\OR TRUSTEE

LOT 1 CSM 8781

SCHENKS UNPLATTED SUBDIVISION

5292.90' (CORNER TO CORNER)

1/4 LINE

LOT 5 DASHNIER'S SUBDIVISION LOT 6

* 1/4 LINE - R/L INTERSECTION
STA 115+28.63
Y=460864.821
X=742352.985

NOTE:
TLE'S ON THIS SHEET ARE FOR DRIVEWAY CONSTRUCTION AND SLOPING

DETAIL A N.T.S. — EX R/W

DETAIL B N.T.S. — EX R/W

DETAIL C N.T.S. — EX R/W

DETAIL D N.T.S. — EX R/W — MATCH LINE

5" ROUND CONCRETE MONUMENT FOUND Y=456926.571 X=742340.460

T 22 N R 6 E S 34

REVISION DATE	3-8-19 NR	6-6-19 NR			
DATE 9-19-2018	SCALE, FEET 0 50 100	HWY: CTH U	STATE R/W PROJECT NUMBER 6934-06-00	PLAT SHEET 4. 05	
GRID FACTOR		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6934-06-70	PS&E SHEET 102	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\RW\CTH U PLAT.DWG
LAYOUT NAME - 4.5

PLOT DATE : 6/6/2019 2:09 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75

CURVE B
PI 129+12.72
Y 462088.596
X 741706.407
△ = 20°12'44"
R = 2261.08'
T = 403.01'
L = 797.64'
LC = 793.51'
LCB = N17°44'37"W
PC 125+09.71
Y 461732.27
X 741894.67
PT 133+07.35
Y 462488.03
X 741652.85

CURVE C
PI 134+06.25
Y 462586.047
X 741639.702
△ = 01°21'57"
R = 2500.00'
T = 29.80'
L = 59.60'
LC = 59.60'
LCB = N08°19'14"W
PC 133+76+45
Y 462556.51
X 741643.60
PT 134+36.05
Y 462615.48
X 741635.04

TOWN OF BIRON
SE-NW SEC - 3
OUTLOT 2 CSM 8605
OUTLOT 3 CSM 8605
1/16 LINE
SCHALLA'S ADDITION
LOT 5
LOT 6
LOT 7
LOT 8
BLOCK 2
LOT 9
LOT 10
LOT 11
DEER ST (50' R/W)
RIEMER
LOT L
LOT E
LOT M
LOT D
NE-NW SEC - 3
BUFFALO ST (50' R/W)
SCHALLA'S ADDITION
VILLAGE OF BIRON
LOT 1 CSM 6058
LOT 2 CSM 6058
BRIAN P. BURR & SARAH S. TREDER
PLE FOR DRAINAGE FACILITY
LOT A
LOT B
LOT C
OUTLOT 2 CSM 3750
JJW CRANBERRIES, LLC
BRIAN A. JINSKY
JOSEPH A HARLESS & KAYLEIGH N. HARLESS
MATTHEW F. OLESON
VILLAGE OF BIRON
LOT 1 CSM 5703
LOT 1 CSM 271
LOT 2 CSM 271
LOT 3 CSM 271
50' EASEMENT CONSOLIDATED WATER AND POWER COMPANY. VOL 545. PGS 321-328, DOC. NO. 664556
MEMORANDUM OF LEASE & 20' INGRESS EGRESS EASEMENT VILLAGE OF BIRON TO AIRADIGM COMMUNICATIONS, INC., VOL 863, PGS 79-82, DOC. NO. 820892
20' WATERMAIN EASEMENT VILLAGE OF BIRON VOL 483, PGS 853-858. DOC. NO. 580450
40' WATERMAIN EASEMENT VILLAGE OF BIRON VOL 592, PGS 415-418. DOC. NO. 705091
SLOPE INTERCEPT
DETAIL E
DETAIL F
CURVE B
CURVE C
CTH U
MATCH STA 128+00
MATCH STA 143+00
GRAND RAPIDS
S22°24'45"E 118.21'
S10°25'35"E 442.09'
N07°38'15"W 69.10'
N09°00'12"W
N08°53'49"W 207.38'
N08°53'49"W 302.38'
963.95'
130+00
135+00
140+00
PT: 133+07.35
PC: 133+76.44
PT: 134+36.04
STA 136+37.23
Y=462814.191
X=741603.553
S89°24'46"W 1/16 LINE
S89°24'46"W 738.30'
S89°45'56"W 780.40' (TO W. R/W LINE CTH U)
S89°45'56"W 741.45' (TO R/L)
S89°45'56"W 816.13' (TO R/W LINE)
S89°04'39"W 738.30'
630.36'
617.94'
S00°14'04"E 1109.36'
S00°14'04"E 821.99'
1267.67'
N00°14'04"W 3609.70'
N00°14'04"W
1324.35'
5292.90' (CORNER TO CORNER)
HARRISON MONUMENT FOUND Y=458633.720 X=742362.110
5" ROUND CONCRETE MONUMENT FOUND Y=463926.571 X=742340.460
NOTE: TLE'S ON THIS SHEET ARE FOR DRIVEWAY CONSTRUCTION AND SLOPING
DETAIL E N.T.S.
DETAIL F N.T.S.
EX R/W
1/16 LINE

REVISION DATE 3-8-19 6-6-19	DATE 9-19-2018	SCALE, FEET 0 50 100	HWY: CTH U	STATE R/W PROJECT NUMBER 6934-06-00	PLAT SHEET 4.06
	GRID FACTOR		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6934-06-70	PS&E SHEET 103 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\RW\CTH U PLAT.DWG
LAYOUT NAME - 4.6
PLOT DATE : 6/6/2019 2:11 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:100 FT

4

4

SCHALLA'S ADDITION

BIRON

NE-NW SEC - 3

NW-NW SEC - 3

1/16 LINE

1/16 LINE

50'

S. BIRON DR

MAG SPIKE FOUND
Y=463876.356
X=739961.854

SW-SW SEC - 34

SE-SW SEC - 34

VILLAGE OF BIRON

GN

STA 0+00.00
Y 464579.801
X 741015.731

452

453

TEMPORARY LIMITED EASEMENT FOR TEMPORARY MILL ENTRANCE

MILL R/L
N09°00'00"W
298.36'

450

451

49
CATALYST PAPER OPERATIONS, INC.
LOT 1
CSM 9854

37
JJW CRANBERRIES, LLC

47
BRIAN P. BURR &
SARAH S. TREDER
LOT 1
CSM 5220

P/L

PLE FOR DRAINAGE FACILITY

91

18
17
390
389
12

L1
L2

S88°55'05"W

SLOPE INTERCEPT

3/4"IP

391
392
419-PLE
420-PLE
PLE FOR DRAINAGE FACILITY
393-PLE
422-PLE
423-PLE

444
445

1"IP

LOT 2
CSM 3806
(ROAD DEDICATION)

11

SLOPE INTERCEPT

395
396
397
398
399

438

385
388
386
387

185-PLE
184-PLE
381
380
379
382
384
383

37'±

9
8

PI: 144+00.00
463567.558
741484.185

1"IP

187-PLE

R/L-1 N09°00'12" W 963.95'

R/L-1

50'

N09°57'36"W

145+00

CTH U

10

341.67'

R/L

N09°26'23"W

150+00

577.76'

CTH U (N.BIRON DR)

107.03'
N09°26'23"W
N09°26'23"W

155+00

210.97'

66'

186-PLE

57'

3/4"IP

1"IP

LOT 1
CSM 3806

(ROAD DEDICATION)

407
408
409
403
402
400
401

SLOPE INTERCEPT

PI: 147+41.66
463904.074
741425.091

PI: 153+19.42
Y:464474.006
X:741330.333

STA 154+26.45 (CTH U)
STA 2+98.36 (MILL)
Y 464579.801
X 741314.095

MATCH STA 143+00

92

37
JJW CRANBERRIES, LLC

LOT 1
CSM 3646

NE-NW SEC - 3

1/4 LINE

S88°55'05"W

P/L

1195.02'

1271.89'

2659.08' (CORNER TO CORNER)

5" ROUND CONCRETE MONUMENT FOUND
Y=463926.571
X=742340.460

CONSOLIDATED PAPERS, INC

SE-SW SEC - 34

END RELOCATION ORDER
STATION 155+30.39
755.97 FEET NORTH OF AND 1042.13 FEET WEST OF THE NORTH QUARTER CORNER, SECTION 3, T22N, R6E, VILLAGE OF BIRON, WOOD COUNTY, WISCONSIN
Y=464682.536
X=741298.327

NOTE:
TLE'S ON THIS SHEET ARE FOR DRIVEWAY CONSTRUCTION AND SLOPING

REVISION DATE 3-8-19 NR, 6-6-19 NR	DATE 9-19-2018	SCALE, FEET 0 50 100	HWY: CTH U	STATE R/W PROJECT NUMBER 6934-06-00	PLAT SHEET 4.07
	GRID FACTOR		COUNTY: WOOD	CONSTRUCTION PROJECT NUMBER 6934-06-70	PS&E SHEET 104 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\RW\CTH U PLAT.DWG
LAYOUT NAME - 4.7

PLOT DATE : 6/6/2019 2:11 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75

4

LINE TABLE - SHEET 4.04 (R/W)

FROM-TO	BEARING	DISTANCE
102-209	S28°25'55"E	556.19'
209-103	S31°59'28"E	133.75'
103-104	N35°04'54"W	51.39'
104-105	CURVE	---
105-208	N27°50'59"W	477.80'

LINE CURVE TABLE - SHEET 4.04 (R/W)

FROM-TO	RADIUS	LENGTH	LC	LCB
104-105	1110.98'	140.23'	140.14'	N31°28'03"W

LINE TABLE - SHEET 4.05 (R/W)

FROM-TO	BEARING	DISTANCE
208-102	N27°50'59"W	20.92'
102-209	S28°25'55"E	556.19'
105-208	N27°50'59"W	477.80'
81-82	N27°50'59"W	552.21'
82-415	N62°02'03"E	2.65'
415-81	S27°34'29"E	552.22'
412-166	S62°02'03"W	2.97'
166-165	N27°50'59"W	135.00'
165-416	N62°02'18"E	3.61'
416-412	S27°34'29"E	135.00'
417-50	S52°15'13"W	3.17'
50-49	N20°17'23"W	82.65'
49-417	S22°24'45"E	81.75'
L1	S62°09'01"W	27.50'
L2	S62°09'01"W	24.53'

LINE TABLE - SHEET 4.06 (R/W AND PLE)

FROM-TO	BEARING	DISTANCE
49-417	S22°24'45"E	81.75'
50-49	N20°17'23"W	82.65'
60-59	CURVE	---
59-428	N22°24'45"W	53.62'
428-60	N10°25'35"W	65.59'
192-193	S08°43'24"E	62.47'
193-146	S89°34'10"W	60.34'
146-433	S86°19'45"W	6.10'
433-147	N08°53'49"W	52.91'
147-192	N80°59'48"E	65.95'
434-435	S89°04'39"W	4.24'
435-164	S10°25'35"E	25.48'
164-197	S82°03'07"W	50.90'
197-196	N08°40'58"W	88.43'
196-140	N80°59'48"E	54.08'
140-434	S08°53'49"E	64.50'
429-182	S89°12'56"W	7.00'
182-181	N40°09'33"E	9.17'
181-429	S08°53'49"E	7.00'
436-179	S89°19'11"W	32.02'
179-180	N71°15'28"E	32.16'
180-436	S08°53'49"E	10.07'
188-189	S80°59'48"W	10.00'
189-190	N09°05'00"W	20.00'
190-191	N80°59'48"E	10.07'
191-188	S08°53'49"E	20.00'
454-455	S80°59'48"W	15.00'
455-456	N08°53'49"W	20.00'
456-457	N80°59'48"E	15.00'
457-454	S08°53'49"E	20.00'

LINE CURVE TABLE - SHEET 4.06 R/W

FROM-TO	RADIUS	LENGTH	LC	LCB
60-59	2233.58'	118.58'	118.57'	S15°48'55"E

LINE TABLE - SHEET 4.07 (R/W AND PLE)

FROM-TO	BEARING	DISTANCE
L1	S01°04'55"E	25.00'
18-438	N88°55'05"E	337.47'
438-8	S08°38'18"E	255.12'
8-9	N09°57'36"W	160.95'
9-10	CURVE	---
10-11	N51°01'14"W	104.59'
11-12	S88°48'31"W	187.22'
12-17	N88°42'55"W	25.04'
17-18	N82°51'26"W	50.43'
8-187	N09°57'36"W	20.04'
187-185	S80°02'24"W	17.50'
185-184	N09°57'36"W	20.00'
184-186	N80°02'24"E	17.50'
186-187	S09°57'36"E	20.00'
L2	N01°04'55"W	25.00'
419-420	N01°04'55"W	5.00'
420-393	N37°51'02"E	55.80'
393-422	S51°45'42"E	31.06'
422-423	N88°55'05"E	60.41'
423-445	S57°02'13"W	8.68'
445-444	CURVE	---
444-419	S88°55'05"W	27.63'

LINE CURVE TABLE - SHEET 4.07 (R/W)

FROM-TO	RADIUS	LENGTH	LC	LCB
9-10	146.72'	19.10'	19.09'	N13°07'18"W
445-444	160.00'	89.03'	87.89'	S72°58'39"W

SHEET 4.04 (R/W)

STATION & OFFSET AND COORDINATES TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
103	108+10.11	27.50 LT	460221.45	742679.12	RW
104	108+61.50	27.50 LT	460263.50	742649.59	RW
105	109+98.34	27.50 LT	460383.03	742576.43	RW

SHEET 4.05 (R/W)

STATION & OFFSET AND COORDINATES TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
50	127+80.35	27.50 LT	461968.69	741757.17	RW
81	117+17.27	27.50 LT	461018.76	742240.55	RW
82	122+69.48	27.50 LT	461507.01	741982.58	RW
102	114+96.98	27.50 LT	460823.99	742343.46	RW
165	124+70.48	27.50 LT	461684.73	741888.69	RW
166	123+35.48	27.50 LT	461565.37	741951.75	RW
208	114+76.07	27.50 LT	460805.49	742353.23	RW

SHEET 4.07 (R/W AND PLE)

STATION & OFFSET AND COORDINATES TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
8	144+69.96	27.50 LT	463631.71	741445.00	RW
9	146+30.91	27.50 LT	463790.24	741417.16	RW
10	146+49.97	28.55 LT	463808.83	741412.83	RW
11	147+28.84	97.26 LT	463874.62	741331.52	RW
12	147+54.82	282.42 LT	463870.73	741144.34	RW
17	147+59.48	307.02 LT	463871.29	741119.31	RW
18	147+73.87	355.35 LT	463877.56	741069.27	RW
184	145+10.00	45.00 LT	463668.12	741420.84	PLE
185	144+90.00	45.00 LT	463648.42	741424.30	PLE
186	145+10.00	27.50 LT	463671.15	741438.07	PLE
187	144+90.00	27.50 LT	463651.45	741441.53	PLE
393	148+54.96	230.30 LT	463978.06	741179.33	PLE
419	148+12.16	272.03 LT	463929.00	741145.19	PLE
420	148+17.11	271.30 LT	463934.00	741145.09	PLE
422	148+31.99	209.38 LT	463958.84	741203.73	PLE
423	148+23.21	149.61 LT	463959.98	741264.13	PLE

SHEET 4.06 (R/W AND PLE)

STATION & OFFSET AND COORDINATES TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
49	128+61.99	27.98 LT	462046.21	741728.51	RW
59	129+24.59	27.50 RT	462122.97	741761.76	RW
60	130+44.65	27.50 RT	462237.05	741729.44	RW
140	134+80.00	30.84 LT	462654.07	741597.70	RW
146	134+06.82	25.27 RT	462590.25	741664.45	RW
147	134+60.00	19.12 RT	462642.13	741650.18	RW
164	133+90.00	34.11 LT	462565.22	741608.05	RW
179	139+37.26	61.68 LT	463100.87	741495.68	RW
180	139+42.70	29.98 LT	463111.20	741526.14	RW
181	136+50.17	38.48 LT	462820.95	741563.53	RW
182	136+44.17	45.42 LT	462813.94	741557.61	RW
188	142+35.00	29.45 LT	463399.98	741480.92	PLE
189	142+35.00	39.44 LT	463398.42	741471.05	PLE
190	142+55.00	39.47 LT	463418.17	741467.90	PLE
191	142+55.00	29.40 LT	463419.74	741477.84	PLE
192	134+60.00	85.07 RT	462652.45	741715.31	RW
193	133+98.79	85.06 RT	462590.71	741724.79	RW
196	134+80.00	84.92 LT	462645.61	741544.29	RW
197	133+90.00	85.00 LT	462558.19	741557.64	RW
454	141+40.00	29.62 LT	463306.13	741495.62	PLE
455	141+40.00	44.62 LT	463303.78	741480.81	PLE
456	141+60.00	44.58 LT	463323.54	741477.71	PLE
457	141+60.00	29.58 LT	463325.89	741492.53	PLE

4

REVISION DATE 3-8-19 6-6-19 NR

DATE 9-19-2018

GRID FACTOR

SCALE, FEET 0 50 100

HWY: CTH U

COUNTY: WOOD

STATE R/W PROJECT NUMBER 6934-06-00

CONSTRUCTION PROJECT NUMBER 6934-06-70

PLAT SHEET 4. 08

PS&E SHEET 105

E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\RW\CTH U PLAT.DWG
LAYOUT NAME - 4.8

PLOT DATE : 6/6/2019 2:11 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 75

4

SHEET 4.04 (TLE)

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
214	101+00.41	49.65 LT
215	101+08.66	62.24 LT
216	101+36.02	47.28 LT
217	101+80.00	47.39 LT
218	101+80.00	52.51 LT
219	102+30.00	52.51 LT
220	102+30.00	32.51 LT
221	103+60.00	32.84 LT
222	103+60.00	42.84 LT
223	104+15.00	42.98 LT
224	104+15.00	32.98 LT
225	100+93.69	38.83 RT
226	102+15.00	38.52 RT
227	102+15.00	43.52 RT
228	102+64.25	43.40 RT
229	102+54.07	58.42 RT
230	103+60.00	58.16 RT
231	103+60.00	38.16 RT
232	104+31.10	37.97 RT
233	104+27.71	42.98 RT
234	104+65.00	42.89 RT
235	104+65.01	35.89 RT
236	106+79.46	35.34 RT
237	106+72.91	77.36 RT
238	107+39.62	77.19 RT
239	107+44.01	49.05 RT
240	107+85.00	51.29 RT
241	107+85.00	36.27 RT
242	108+95.00	41.73 RT
243	108+95.00	46.74 RT
244	109+25.00	47.02 RT
245	109+25.00	37.02 RT
246	106+28.00	33.53 LT
247	106+28.00	40.53 LT
248	106+67.00	40.62 LT
249	106+67.00	33.62 LT
250	107+70.00	32.67 LT
251	107+70.00	54.70 LT
252	108+10.11	52.54 LT
253	108+10.11	42.50 LT

SHEET 4.04 (TLE)-CONTINUED

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
254	110+35.00	42.50 LT
255	110+35.00	37.50 LT
276	111+20.00	36.33 RT
277	111+20.00	46.34 RT
278	111+50.00	46.03 RT
279	111+50.00	36.03 RT
280	112+45.01	35.06 RT
281	112+45.02	40.06 RT
282	113+00.48	39.50 RT
283	112+95.16	49.56 RT

SHEET 4.05 (TLE)

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
256	113+15.00	37.50 LT
257	113+15.00	57.50 LT
258	113+70.00	57.50 LT
259	113+70.00	42.50 LT
260	114+90.00	42.50 LT
261	114+90.00	57.30 LT
262	115+20.72	57.33 LT
263	115+85.00	42.39 LT
264	115+85.00	50.00 LT
265	116+15.00	50.00 LT
266	116+15.00	37.41 LT
267	118+55.00	37.50 LT
268	118+55.00	47.50 LT
269	119+10.00	47.50 LT
270	119+10.00	37.50 LT
271	121+60.00	37.50 LT
272	121+60.00	52.50 LT
273	122+05.00	52.50 LT
274	122+05.00	42.50 LT
275	122+69.48	42.50 LT
287	113+35.00	49.15 RT
288	113+35.00	39.15 RT
289	113+90.00	38.59 RT
290	113+90.04	68.49 RT
291	114+40.04	68.08 RT
292	114+40.00	43.08 RT
293	114+72.38	42.75 RT
294	114+75.04	37.73 RT
295	115+12.48	37.35 RT
296	115+60.42	62.75 RT
297	115+63.59	56.76 RT
298	116+00.00	56.94 RT
299	116+00.00	36.94 RT
300	116+15.00	37.01 RT
301	116+15.00	32.01 RT
302	116+90.00	32.37 RT
303	116+90.00	37.37 RT
304	117+30.00	37.56 RT
305	117+30.00	32.56 RT
306	117+77.03	32.79 RT

SHEET 4.05 (TLE)-CONTINUED

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
307	117+77.24	37.79 RT
308	118+67.33	38.22 RT
309	118+67.54	43.22 RT
310	118+99.79	43.38 RT
311	118+99.84	33.38 RT
312	120+19.10	48.95 RT
313	121+40.46	49.53 RT
314	121+40.51	39.55 RT
315	122+05.00	40.00 RT
316	122+05.00	34.84 RT
317	123+15.00	35.37 RT
318	123+15.00	45.37 RT
319	123+40.00	45.49 RT
320	123+40.00	35.49 RT
321	123+35.48	32.50 LT
322	124+20.00	32.50 LT
323	124+20.00	42.50 LT
324	124+70.48	42.50 LT
325	125+00.00	33.74 LT
326	125+00.00	43.74 LT
327	125+30.00	43.69 LT
328	125+30.00	33.69 LT
329	125+00.32	41.26 RT
330	125+40.00	41.25 RT
331	125+40.00	36.25 RT
332	126+10.00	34.59 RT
333	126+10.00	39.59 RT
334	126+50.00	40.06 RT
335	126+50.00	35.06 RT
336	126+22.73	35.98 LT
337	126+22.95	40.98 LT
338	127+76.84	39.36 LT
339	127+75.90	42.57 LT
344	127+29.83	41.25 RT
410	115+20.75	42.33 RT
425	120+19.17	34.00 RT
426	125+00.34	36.26 RT
427	127+29.36	36.26 RT

SHEET 4.06 (TLE)

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
340	128+61.64	42.98 LT
341	128+61.81	35.99 LT
342	129+50.00	43.21 LT
343	129+50.00	35.17 LT
345	128+25.00	39.06 RT
346	128+25.00	59.08 RT
347	129+25.73	52.50 RT
348	130+60.00	53.52 RT
349	130+60.00	43.50 RT
350	131+00.02	45.54 RT
351	131+00.08	33.53 RT
352	131+35.00	34.74 RT
353	131+35.00	31.74 RT
354	130+00.00	36.15 LT
355	130+00.00	48.20 LT
356	133+90.00	46.12 LT
357	132+60.00	31.73 RT
358	132+60.00	41.73 RT
359	133+99.82	35.55 RT
360	133+99.87	40.55 RT
361	134+04.85	40.36 RT
362	134+60.00	34.12 RT
363	135+81.92	34.35 RT
364	135+82.93	27.40 RT
365	134+80.04	42.84 LT
366	135+93.25	42.63 LT
367	136+44.61	48.49 LT
368	136+56.94	48.49 LT
369	136+56.94	38.47 LT
370	136+93.00	38.40 LT
371	136+93.00	48.40 LT
372	137+17.00	48.35 LT
373	137+17.00	38.35 LT
374	139+40.98	39.99 LT
375	139+65.00	39.94 LT
376	139+65.00	54.94 LT
377	140+00.00	54.88 LT
378	140+00.00	39.88 LT
404	139+25.77	27.99 RT
405	141+50.00	28.40 RT

SHEET 4.06 (TLE)-CONTINUED

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
406	141+50.00	35.40 RT
458	141+30.00	39.63 LT
459	141+30.00	70.00 LT
460	141+70.00	70.00 LT
461	141+70.00	39.56 LT

SHEET 4.07 (TLE)

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
379	144+70.19	37.50 LT
380	144+70.31	42.50 LT
381	144+90.00	42.50 LT
382	145+10.00	42.50 LT
383	145+75.00	42.50 LT
384	145+75.00	52.50 LT
385	146+39.71	52.61 LT
386	146+40.00	37.71 LT
387	146+64.68	41.37 LT
388	147+17.15	87.07 LT
389	147+49.65	308.88 LT
390	147+59.48	307.02 LT
391	148+15.08	291.87 LT
392	148+20.00	291.00 LT
395	149+50.00	37.18 LT
396	149+50.00	42.52 LT
397	149+79.17	37.11 LT
398	150+45.00	37.32 LT
399	150+45.00	32.32 LT
400	147+80.00	34.52 RT
401	147+80.00	44.53 RT
402	147+20.00	44.27 RT
403	147+20.00	34.27 RT
407	144+25.00	36.48 RT
408	144+25.00	26.48 RT
409	145+43.78	29.22 RT

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
450	153+50.69	33.68 LT
451	155+12.95	36.22 LT

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
452	0+00.00	80.00 RT
453	0+00.00	80.00 LT
MILL ENTRANCE ALINGMENT		

4

REVISION DATE 3-8-19 6-6-19 NR

DATE 9-19-2018

GRID FACTOR

SCALE, FEET 0 50 100

HWY: CTH U

COUNTY: WOOD

STATE R/W PROJECT NUMBER 6934-06-00

CONSTRUCTION PROJECT NUMBER 6934-06-70

PLAT SHEET 4. 09

PS&E SHEET 106

E

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM1	----- ----	CHS "+" ON NW BOLT HIGH TENSION POLE SOUTHSIDE OF	1034.57
		STH 54 AND EAGLE DRIVE	
BM2	103+14, 30'RT	60D SPIKE IN PP# 37 AT JAMMERS BAR / EAST SIDE OF	1039.99
		EAGLE DRIVE	

EXISTING SEPTIC: DO NOT DISTURB
PE ASPH
PE GRAV
TLE
HOUSE
WRWWLC (OH)
EXIST R/W
SIDEWALK
SLOPE INTERCEPT
PE CONC
VILLAGE OF BIRON (WATER)
BEGIN WATER MAIN INSULATION STA 106+00
MH
STH 54
CONC.
ASPH
CTH U
R/L CTH U
N35° 04' 54"W
886.50'
CURB AND GUTTER
100+00
101+00
102+00
103+00
104+00
105+00
106
MATCHLINE STA 106+00
BM 1
BM 2
SIGN (TO REMAIN)
CWPC, WRWWLC AND SOLARIS (OH)
CP 903
STA 100+72.09, 51.84 RT
Y=459663.10
X=743168.22
REMOVING POST, TYP
CHARTER COMMUNICATIONS (TV)
GRAV
PARKING
BUILDING
CONC WALK
REMOVING POST
FENCE
REMOVE PE STA 105+36 RT
BEGIN PROJECT
STA 101+00.00
MATCH EXISTING
SAW CUT REQ'D
Y: 459656.144
X: 743109.761
WE ENERGIES (GAS)

VPI STA 100+75.00
EL 1035.55
VPC STA 104+15.00
VPC EL 1037.38
HP STA = 104+92.35
HP ELEV = 1037.58HP
VPT STA 105+35.00
VPT EL 1037.52
EXISTING R/L GRADE
FINISHED R/L PROFILE
0.54%
-0.30%
VPI STA = 104+75.00
VPI ELEV = 1037.70
g1 = 0.54%
g2 = -0.30%
L = 120.00
K = 144

1042 1040 1038 1036 1034 1032 1030 1028

1035.33	1035.37	1035.43	1035.55	1035.55	1035.68	1035.74	1035.82	1036.02	1035.95	1036.28	1036.09	1036.51	1036.22	1036.68	1036.36	1036.83	1036.49	1037.07	1036.62	1037.36	1036.76	1037.59	1036.89	1037.81	1037.03	1038.03	1037.16	1038.25	1037.30	1038.46	1037.43	1038.65	1037.52	1038.80	1037.57	1038.94	1037.58	1039.00	1037.55	1039.05	1037.48	1039.03	1037.40

100+50 101+00 101+50 102+00 102+50 103+00 103+50 104+00 104+50 105+00 105+50

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 107	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050101-pp
PLOT DATE : 9/13/2019 9:52 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : ##########

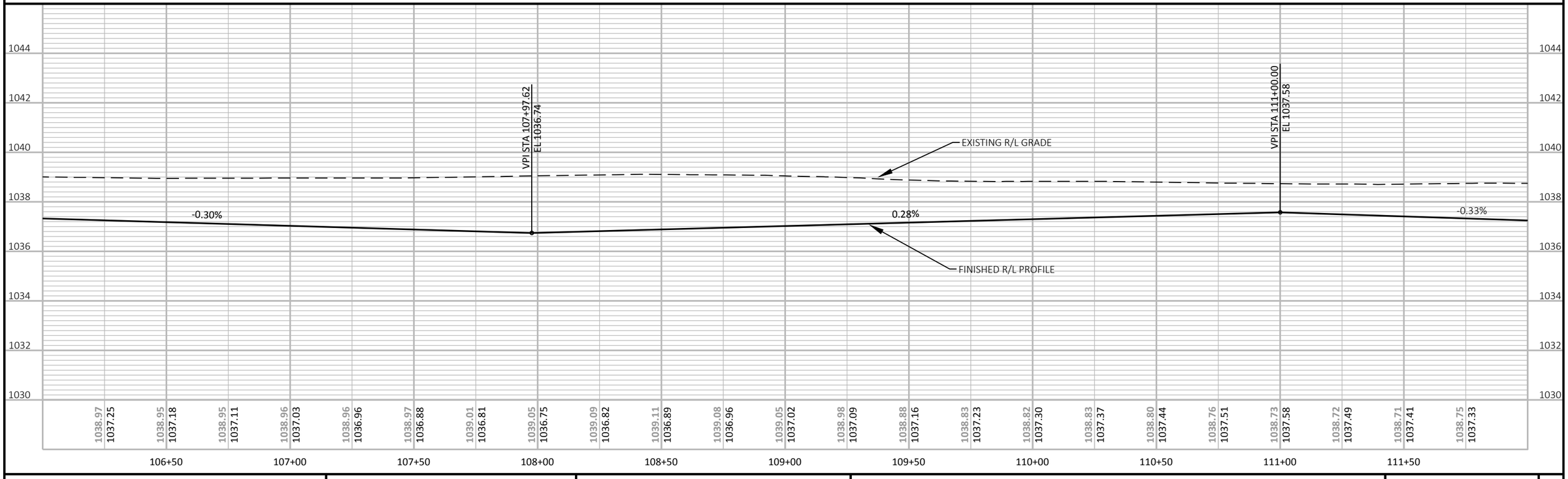
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM3	109+30 20'LT	60D SPIKE IN PP#41-56 58/EAST SIDE OF EAGLE	1039.84
		DRIVE AT HOUSE#2931	

MATCHLINE STA 106+00

MATCHLINE STA 112+00

SIDEWALK
VILLAGE OF BIRON (WATER)
PE ASPH
PE GRAV
REMOVE PE STA 106+89 LT
EXIST R/W
CURB AND GUTTER
CURB AND GUTTER
CTH U
R/L CTH U
107+00
108+00
109+00
110+00
111+00
N35° 04' 54"W
N27° 50' 59"W
PC: 108+61.50
PT: 109+98.34
TLE
BRUSH
BM 3
R/W
CWPC (OH)
VARIES WIDTH R/W
PE CONC
CONC. WALK
HOUSE
WOODS
SLOPE INTERCEPT
EXIST R/W
WE ENERGIES (GAS)
SIDEWALK
CP 904
STA 106+89.06, 13.39' LT
Y=460130.49
X=742760.25
FENCE
REMOVE 11' FENCE
SIGN (TO REMAIN)
CHARTER COMMUNICATIONS (TV)
SLOPE INTERCEPT
CWPC, WRWWLC AND SOLARIS (OH)

PI STA = 109+30.01
Y = 460335.372
X = 742632.718
DELTA = 7°13'55"
D = 5°17'06"
T = 68.51'
L = 136.84'
R = 1084.09'
PC STA = 108+61.50
PT STA = 109+98.34
SE = NC



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 108	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050102-pp
PLOT DATE : 9/13/2019 9:52 AM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : ##########

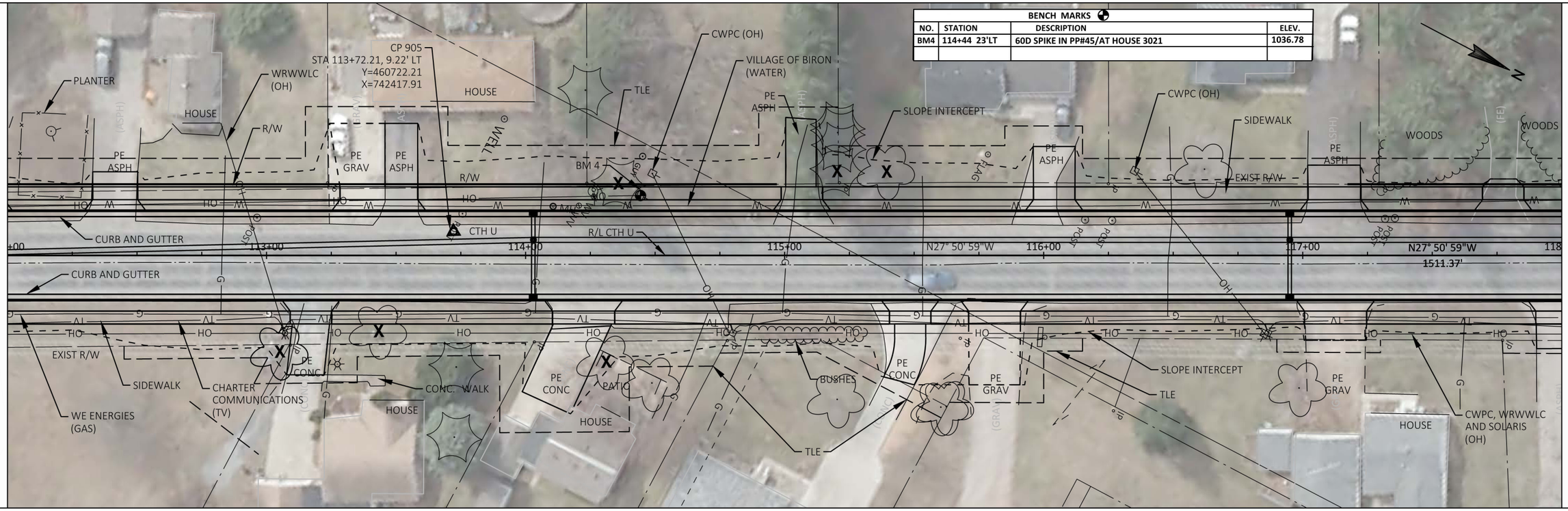
MATCHLINE STA 112+00

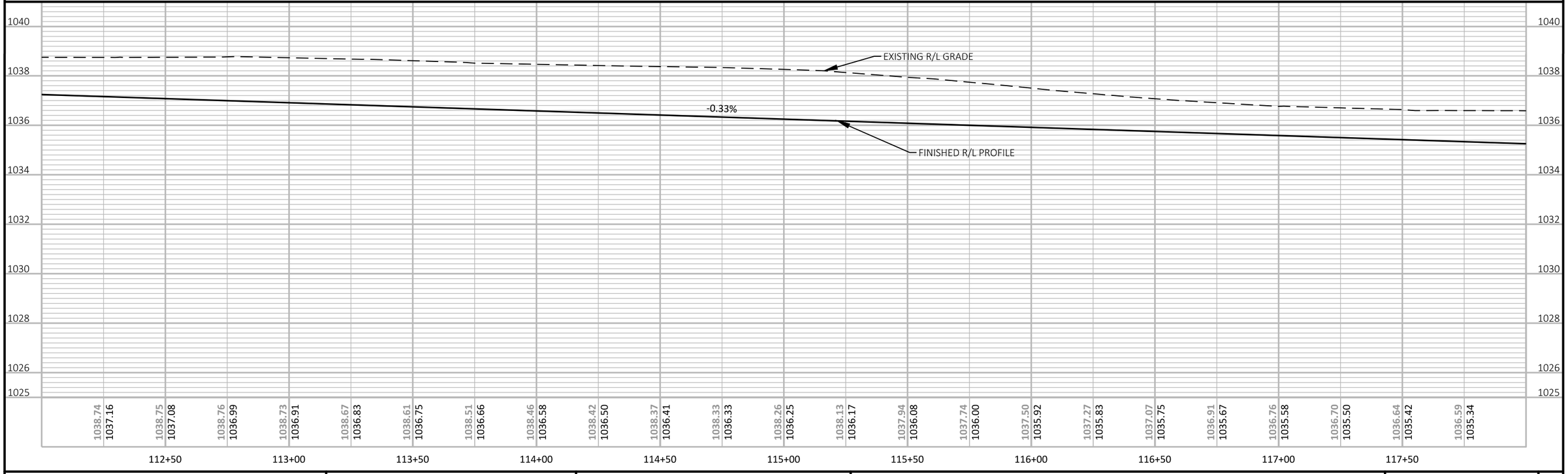
MATCHLINE STA 118+00

5

5

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM4	114+44 23'LT	60D SPIKE IN PP#45/AT HOUSE 3021	1036.78

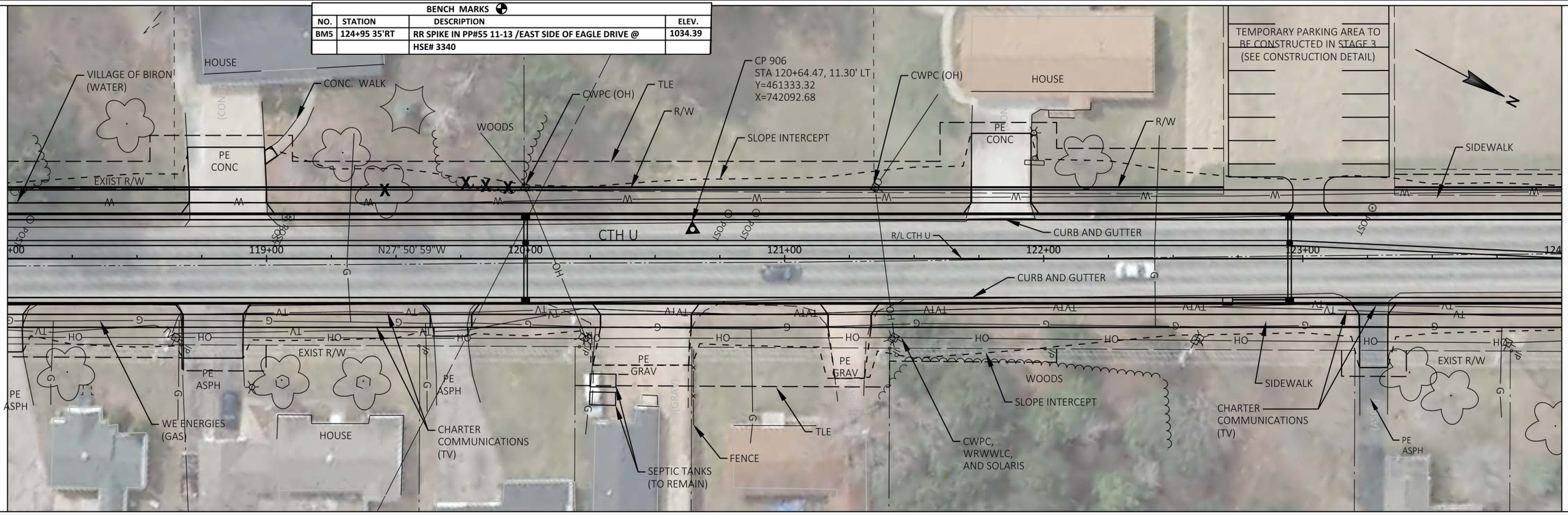


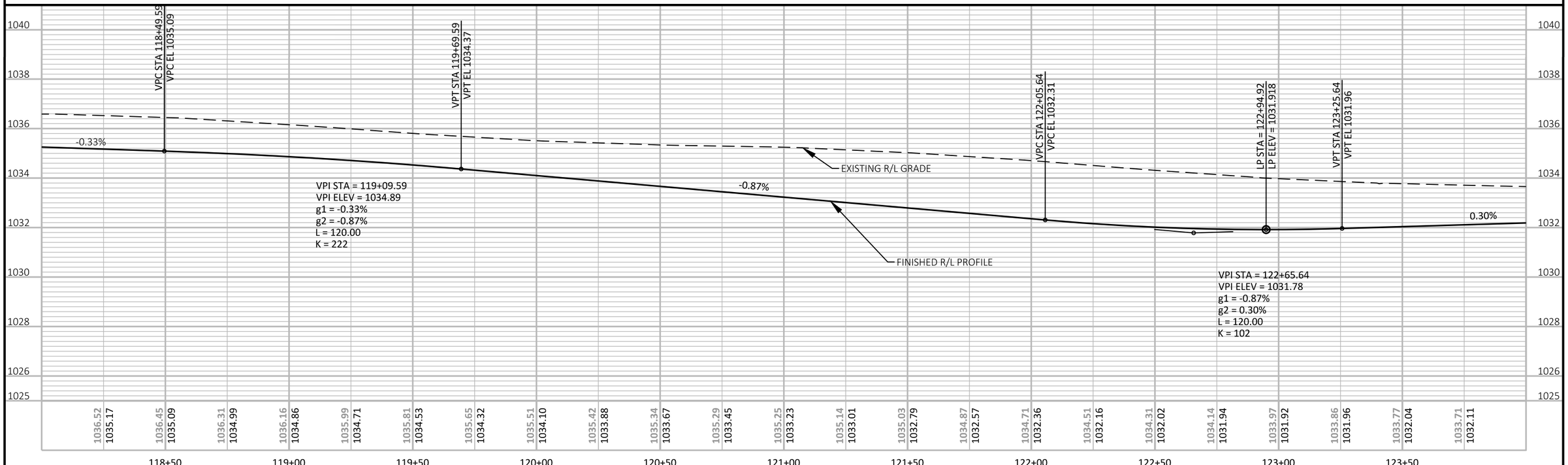


PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET	E

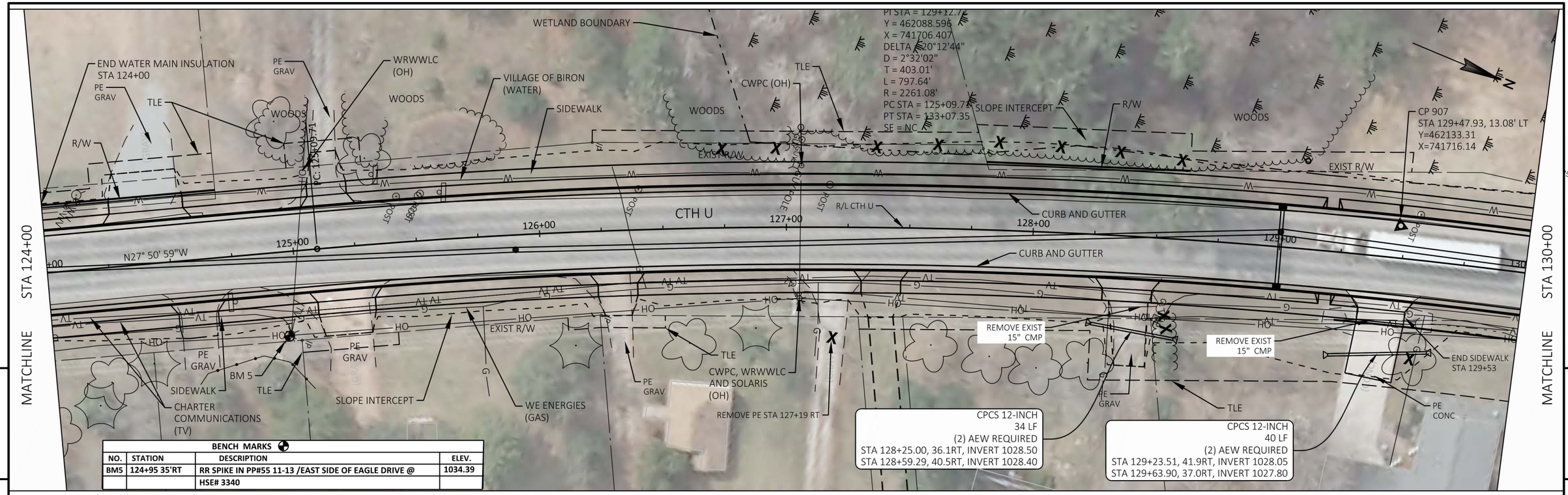
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050103-pp
PLOT DATE : 3/7/2019 1:27 PM
PLOT BY : KYLE SKENANDORE
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM5	124+95 35'RT	RR SPIKE IN PP#55 11-13 /EAST SIDE OF EAGLE DRIVE @	1034.39
		HSE# 3340	

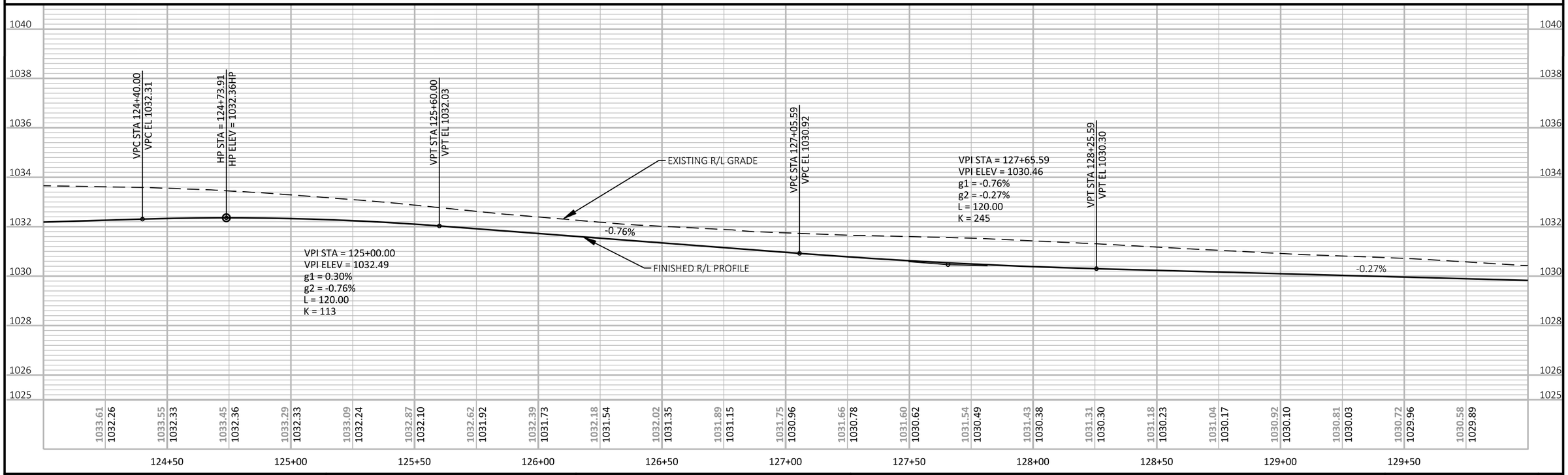




PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 110	E



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM5	124+95 35'RT	RR SPIKE IN PP#55 11-13 /EAST SIDE OF EAGLE DRIVE @	1034.39
		HSE# 3340	



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 111 E

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM6	130+18 25'RT	60D SPIKE IN PP# 55 /EAST SIDE OF EAGLE DRIVE	1029.28

MATCHLINE STA 130+00

MATCHLINE STA 136+00

CWPC (OH)

GUY POLE

SIDEWALK

VILLAGE OF BIRON (WATER)

PT: 133+07.35

PC: 133+76.44

SLOPE INTERCEPT TLE

PT: 134+36.04

WETLAND BOUNARY

REMOVE EXIST 10' X 7' SPPA

WOODS

EXIST R/W

R/W

CURB AND GUTTER

R/L CTH U

CTH U

131+00

132+00

133+00

134+00

135+00

N7° 38' 15"W

69.10'

N9° 00' 12"W

REMOVE EXIST 15" CMP

NEW WATER MAIN AND CONNECTION

BM 6

FE

GRAV

WE ENERGIES (GAS)

CHARTER COMMUNICATIONS (TV)

WOODS

CPCS 12-INCH
38 LF
(2) AEW REQUIRED
STA 130+54.54, 35.9RT, INVERT 1027.40
STA 130+92.40, 28.8RT, INVERT 1027.00

CWPC, WRWWLC AND SOLARIS (OH)

TLE

PE WATER TOWER (ASPH)

EXIST 15" CPP (TO REMAIN)

WRWWLC (OH)

WETLAND BOUNDARY

SLOPE INTERCEPT

CPRCHE CLASS HE-III 72 X 113-INCH
80 LF
(2) AEW REQUIRED
STA 134+27.98, -41.5LT, INVERT 1017.68
STA 134+28.02, 38.5RT, INVERT 1017.83

PI STA = 134+06.25
Y = 462586.047
X = 741639.702
DELTA = 1°21'57"
D = 2°17'31"
T = 29.80'
L = 59.60'
R = 2500.00'
PC STA = 133+76.44
PT STA = 134+36.04

CPRC CLASS III 48-INCH
80 LF
(2) AEW REQUIRED
STA 134+38.21, -41.5LT, INVERT 1018.68
STA 134+38.02, 38.5RT, INVERT 1018.83

1032

1030
1028
1026
1024
1022
1020
1018
1016

EXISTING R/L GRADE

-0.27%

FINISHED R/L PROFILE

-1.20%

VPC STA 133+19.27
VPC EL 1028.96

VPI STA = 133+79.27
VPI ELEV = 1028.79
g1 = -0.27%
g2 = -1.20%
L = 120.00
K = 130

VPT STA 134+39.27
VPT EL 1028.08

REMOVE EXIST 10' X 7' SPPA

CPRC CLASS III 48-INCH
80 LF
(2) AEW REQUIRED
STA 134+38.21, -41.5LT, INVERT 1018.68
STA 134+38.02, 38.5RT, INVERT 1018.83

CPRCHE CLASS HE-III 72 X 113-INCH
80 LF
(2) AEW REQUIRED
STA 134+27.98, -41.5LT, INVERT 1017.68
STA 134+28.02, 38.5RT, INVERT 1017.83

OBSERVED WATER ELEVATION 1020.62
(MAY, 12 2017)

Q2 = 17 CFS
ELEV Q2 = 1019.64
Q5 = 23 CFS
ELEV Q5 = 1019.79

1030.35	1030.29	1030.27	1030.23	1030.18	1030.09	1030.01	1029.89	1029.79	1029.59	1029.42	1029.32	1029.20	1029.08	1028.98	1028.85	1028.77	1028.70	1028.61	1028.46	1028.30	1028.15	1028.13
1029.76	1029.69	1029.62	1029.55	1029.49	1029.42	1029.35	1029.28	1029.21	1029.15	1029.08	1029.01	1028.94	1028.84	1028.69	1028.49	1028.24	1027.95	1027.65	1027.35	1027.05	1026.75	1026.45

130+50 131+00 131+50 132+00 132+50 133+00 133+50 134+00 134+50 135+00 135+50

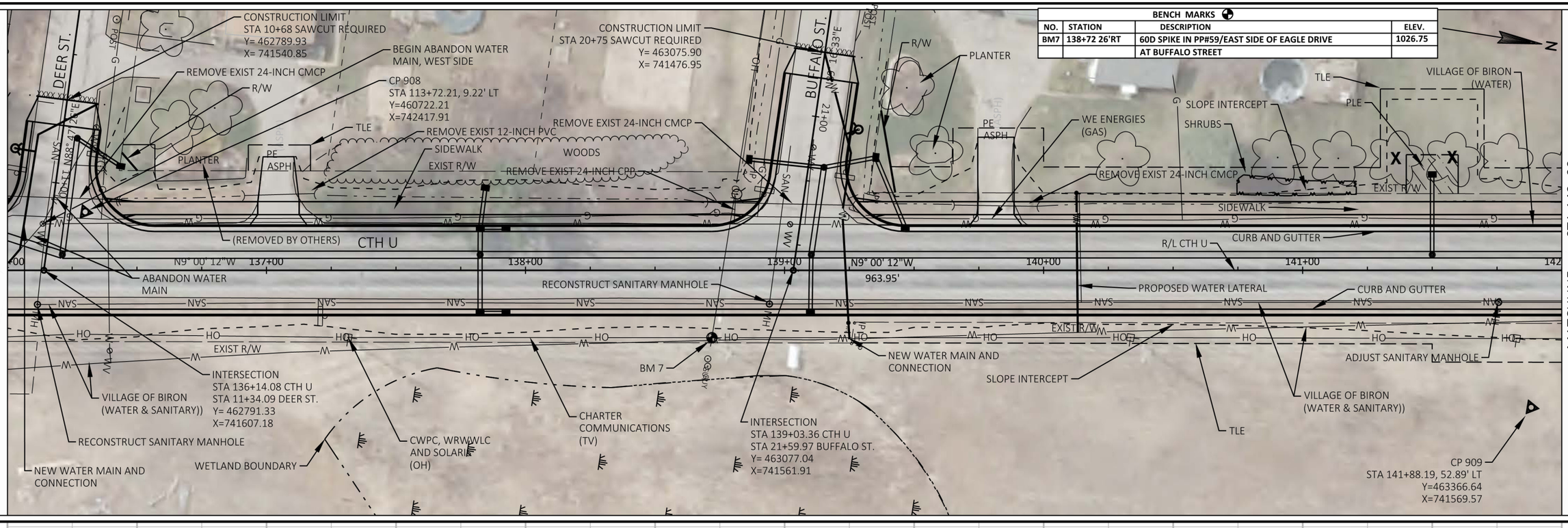
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 112	E

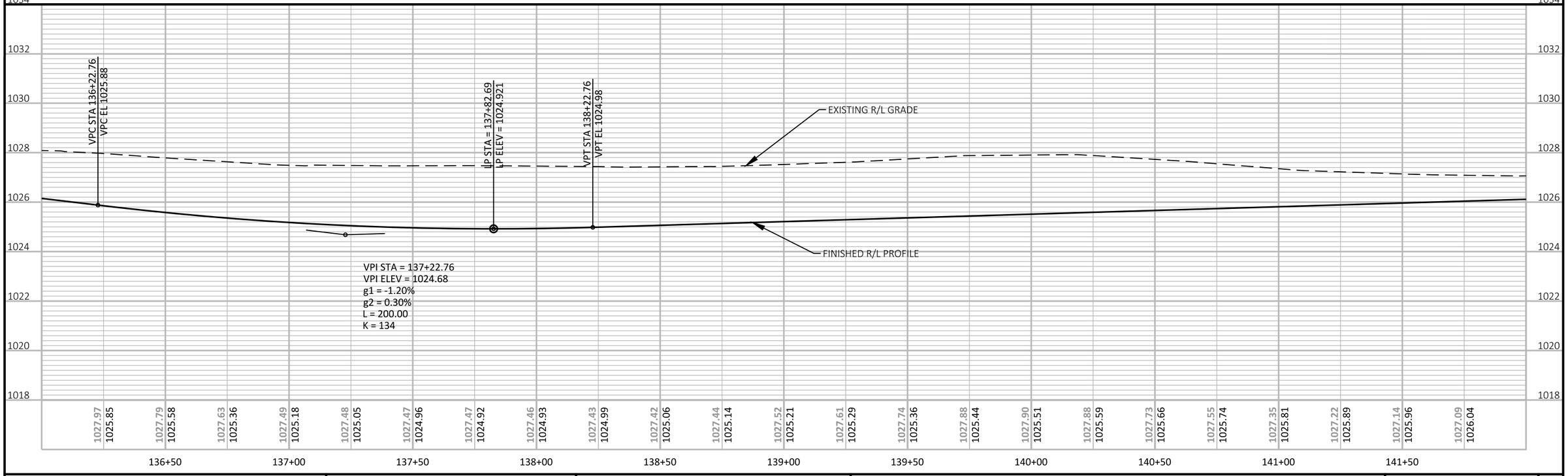
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050106-pp

PLOT DATE : 3/11/2019 10:46 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : ##########

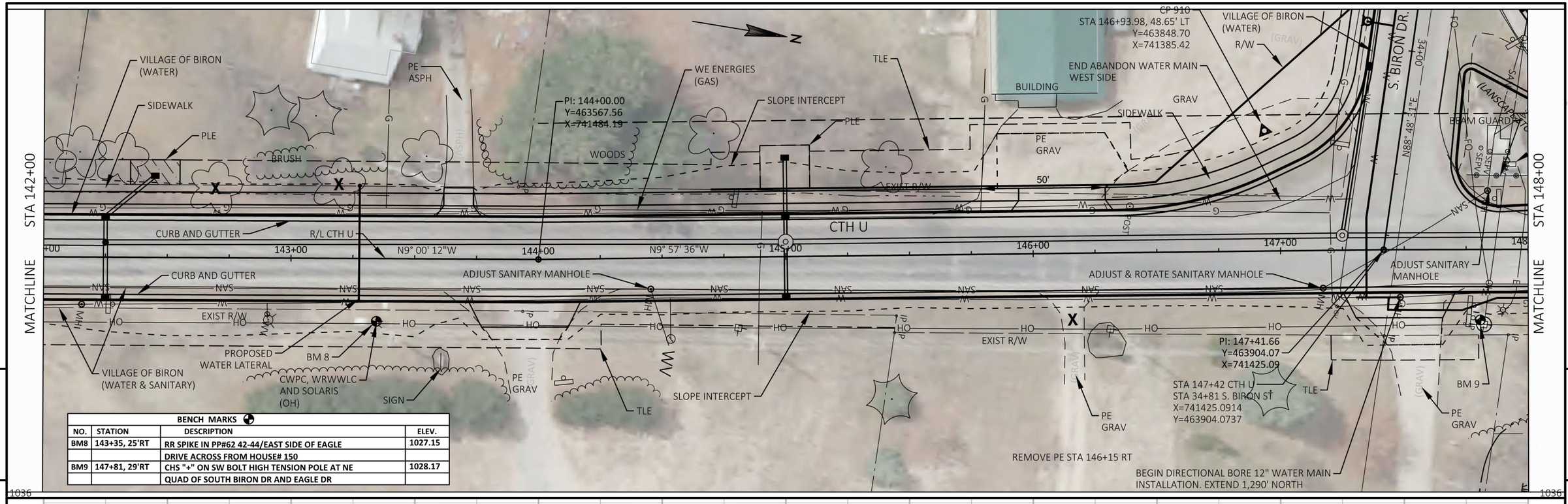
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM7	138+72 26'RT	60D SPIKE IN PP#59/EAST SIDE OF EAGLE DRIVE	1026.75
		AT BUFFALO STREET	

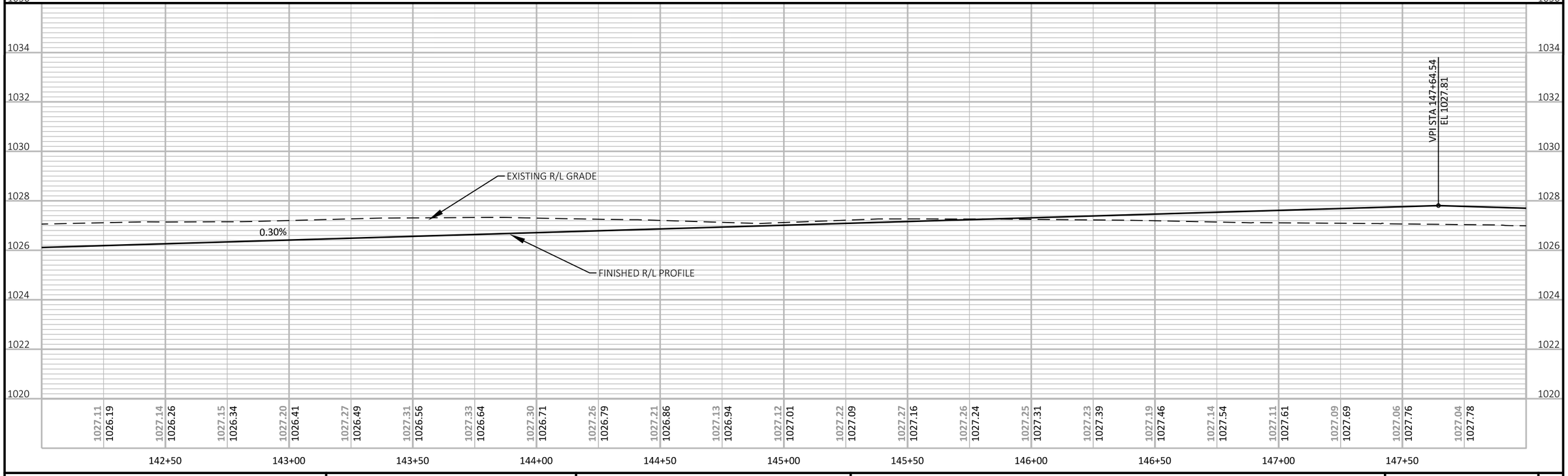




PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 113	E



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM8	143+35, 25'RT	RR SPIKE IN PP#62 42-44/EAST SIDE OF EAGLE	1027.15
		DRIVE ACROSS FROM HOUSE# 150	
BM9	147+81, 29'RT	CHS "+" ON SW BOLT HIGH TENSION POLE AT NE	1028.17
		QUAD OF SOUTH BIRON DR AND EAGLE DR	



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 114	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050108-pp
PLOT DATE : 3/14/2019 2:23 PM
PLOT BY : MATT TOMSOVIC
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM10	152+18 37'RT	60D SPIKE IN PP#67/3RD POLE NORTH OF SOUTH	1027.12
		BIRON DR ON EAST S BIRON DR	

STA 148+00

MATCHLINE

SIDEWALK

VILLAGE OF BIRON (SANITARY)

ND PAPER (APPROX. LOCATION)

WOODS

SLOPE INTERCEPT

PC: 2+11.44

PT: 1+47.48

N18°48'31"E

2+00

PT: 3+10.04

ADJUST & ROTATE SANITARY MANHOLE

TLE

ASPH PATH

WE ENERGIES (GAS)

EXIST R/W

CONSTRUCT AND REMOVE 275' LONG X 28' WIDE TEMPORARY ENTRANCE TO CATALYST MILL.

ASPH PATH

WETLAND BOUNDARY

PT: 153+39.42

R/L CTH U

CURB AND GUTTER

3+00

N9° 26' 23"W

149+00

N9° 26' 23"W

577.76'

150+00

151+00

CTH U

152+00

153+00

CURB AND GUTTER

REMOVE CURB & GUTTER

ASPH

EXIST R/W

PFL ASPH

CONCRETE SURFACE DRAIN

SLOPE INTERCEPT

CWPC, WRWWLC AND SOLARIS (OH)

WOODS

WOODS

WETLAND BOUNDARY

WE ENERGIES (GAS)

BM 10

NEW 12" DIRECTIONAL BORED WATER MAIN TO EXTEND FROM START POINT AND CONNECT TO 10" EXISTING WATER MAIN BY VERSO TECH CENTER AT STA 160+83.78

END PROJECT
STA 150+40.00
Y=464198.370
X=741376.161
MATCH EXISTING
SAW CUT REQ'D

CHARTER COMMUNICATIONS (TV)

VPI STA 150+40.07
EL 1026.98

FINISHED R/L PROFILE

0.30%

EXISTING R/L GRADE

1036 1034 1032 1030 1028 1026 1024 1022 1020

1026.97 1027.63 | 1026.94 1027.55 | 1026.92 1027.48 | 1026.89 1027.40 | 1026.86 1027.33 | 1026.92 1027.25 | 1026.97 1027.18 | 1027.00 1027.10 | 1026.99 1027.03 | 1026.97 | 1026.95 | 1026.93 | 1026.87 | 1026.82 | 1026.75 | 1026.67 | 1026.58 | 1026.43 | 1026.29 | 1026.16 | 1026.10

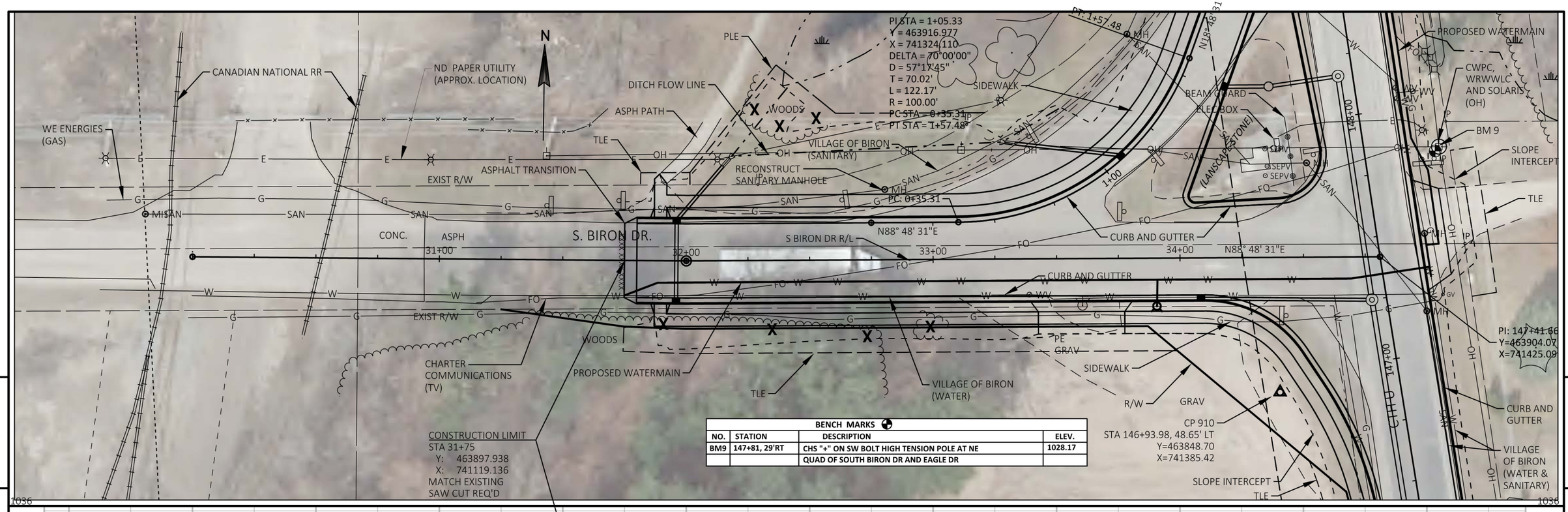
148+50 149+00 149+50 150+00 150+50 151+00 151+50 152+00 152+50 153+00

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U	SHEET 115	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050109-pp

PLOT DATE : 3/14/2019 2:23 PM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: S. BIRON DR.	SHEET E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050110-pp
PLOT DATE : 3/14/2019 2:23 PM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : ##########

PI STA = 1+05.33
Y = 463916.977
X = 741324.110
DELTA = 70°00'00"
D = 57°17'45"
T = 70.02'
L = 122.17'
R = 100.00'
PC STA = 0+35.31
PT STA = 1+57.48

PI STA = 2+61.76
Y = 464081.974
X = 741380.307
DELTA = 28°14'54"
D = 28°38'52"
T = 50.33'
L = 98.61'
R = 200.00'
PC STA = 2+11.44
PT STA = 3+10.04

PLE
PC: 0+35.31
ND PAPER UTILITY (APPROX. LOCATION)
ND PAPER UTILITY (APPROX. LOCATION)
WE ENERGIES (GAS)
WE ENERGIES (GAS)
EXISTING R/W
EXISTING R/W
PT 3+10.04
TLE
SAW CUT
10' ASPHALT TRANSITION
WE ENERGIES (GAS)
CONCRETE SURFACE DRAIN
CURB AND GUTTER
VILLAGE OF BIRON (WATER & SANITARY)
SIDEWALK
PT: 1+57.48
PC: 2+11.44
N88° 48' 31"E
33+00
N9° 26' 23"W
150+00
3+00
N9° 26' 23"W
577.76'
CURB AND GUTTER
S BIRON DR
1+00
2+00
N18° 48' 31"E
R/L CTH U
RIGHT TURN LANE
CTH U RT TURN LANE
149+00
CTH U
VILLAGE OF BIRON (WATER)
SLOPE INTERCEPT, TYP
CHARTER COMMUNICATIONS (TV)
34+00
(LANSCAPE STONE)
CWPC, WRWWLC AND SOLARIS (OH)
WETLAND BOUNDARY
WOODS
SIDEWALK
N88° 48' 31"E
R/L CTH U
148+00
151+00

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM9	147+81, 29'RT	CHS "+" ON SW BOLT HIGH TENSION POLE AT NE QUAD OF SOUTH BIRON DR AND EAGLE DR	1028.17

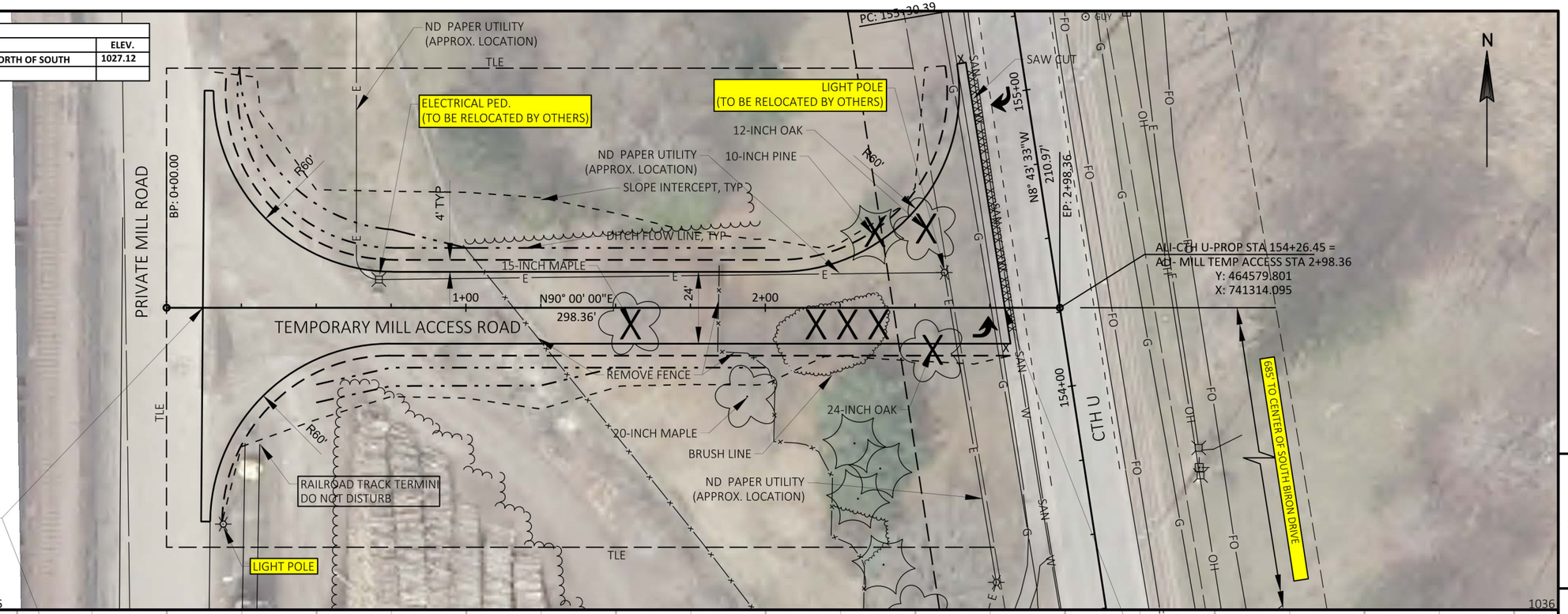
VPI STA 0+35.31
EL 1026.35
VPI STA 0+50.00
EL 1026.40
VPI STA 1+08.42
EL 1026.13
VPI STA 2+79.80
EL 1026.93
VPI STA 3+10.04
EL 1026.86
FINISHED R/L PROFILE
0.31%
-0.45%
0.47%
-0.24%
EXISTING R/L GRADE
MATCH MAINLINE GRADE
STA 33+10.30, 15' LEFT
MATCH MAINLINE GRADE
STA 149+74.83, 15' LEFT

1026.40 1026.40
1026.28 1026.28
1026.17 1026.17
1026.21 1026.21
1026.32 1026.32
1026.44 1026.44
1026.56 1026.56
1026.68 1026.68
1026.79 1026.79
1026.91 1026.91
1026.88 1026.88

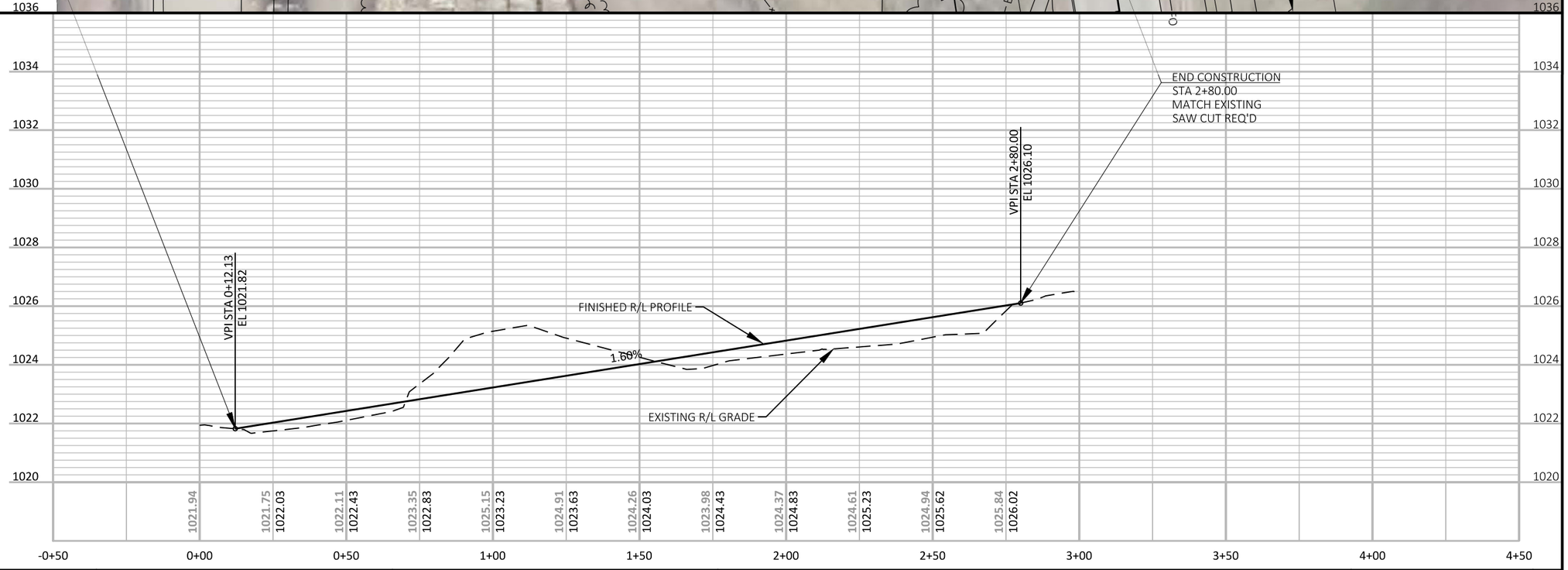
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: CTH U RIGHT TURN LANE	SHEET E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050120-pp
PLOT DATE : 3/7/2019 1:28 PM
PLOT BY : KYLE SKENANDORE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM10	152+17, 37.4' RT	60D SPIKE IN POWER POLE #67, 3RD POLE NORTH OF SOUTH	1027.12
		BIRON ON EAST SIDE	



BEGIN CONSTRUCTION
STA 0+12.13
MATCH EXISTING
Y: 464579.801
X: 741027.859



NOTE: MILL TEMPORARY ACCESS ROAD WILL BE INSTALLED DURING PHASE 1 TRAFFIC CONTROL, USED DURING CONSTRUCTION OF THE CTH U/S. BIRON DRIVE INTERSECTION IN PHASE 2, THEN REMOVED AFTER INTERSECTION IS COMPLETE.

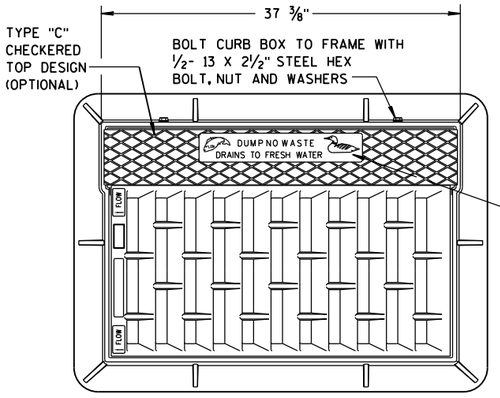
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	PLAN AND PROFILE: MILL TEMPORARY ACCESS ROAD	SHEET 118 E

FILE NAME : F:\TR\OBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-050101-PP.DWG
LAYOUT NAME - 69340670-050150-pp
PLOT DATE : 3/11/2019 6:55 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

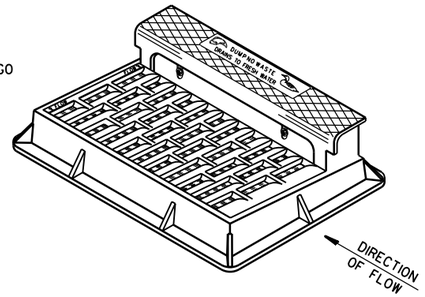
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B11-02	MANHOLES VARIABLE TEE AND SPECIAL 4-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
11B02-02	CONCRETE MEDIAN NOSE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-09	URBAN 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
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-07C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C09-11A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C27-03A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-04A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-04C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

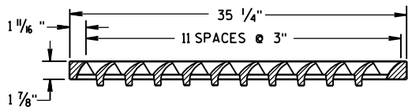
6

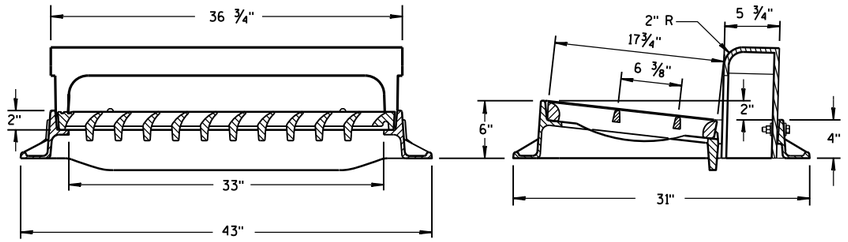


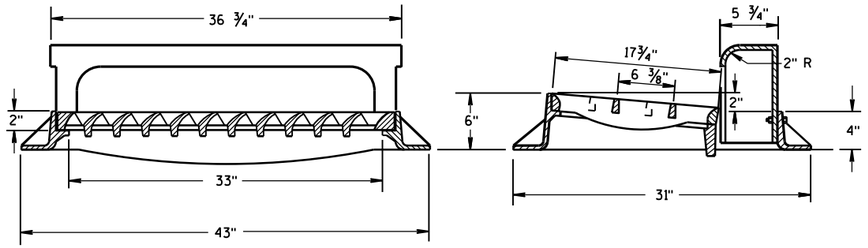
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

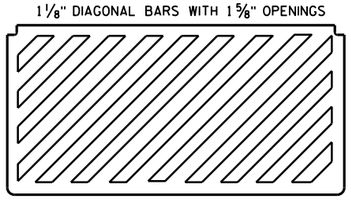






TYPE "H"

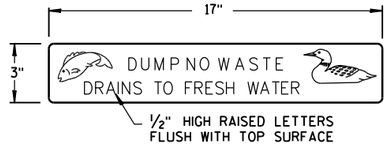
NOTE: EITHER CASTING IS ACCEPTABLE



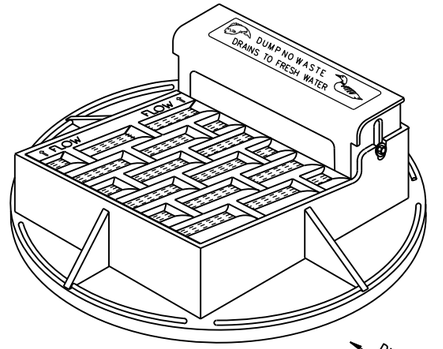
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

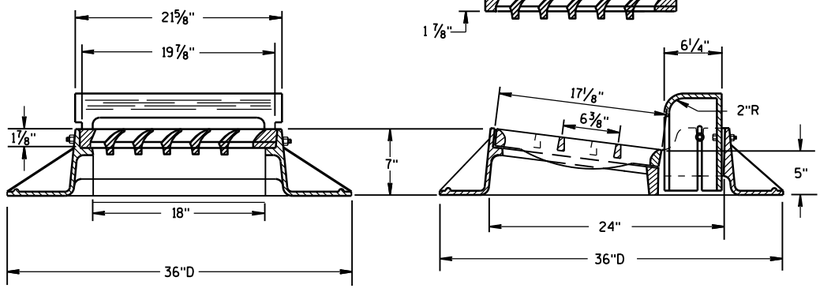


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



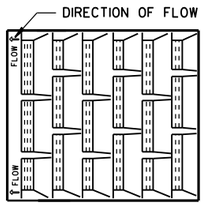
TYPE "A"

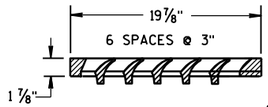
GENERAL NOTES

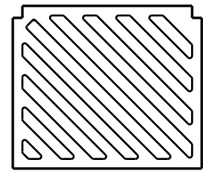
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



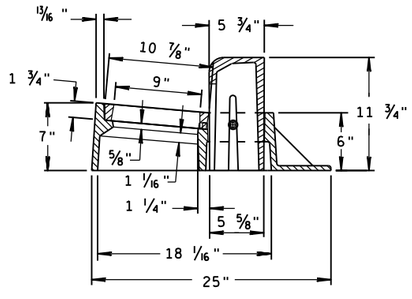


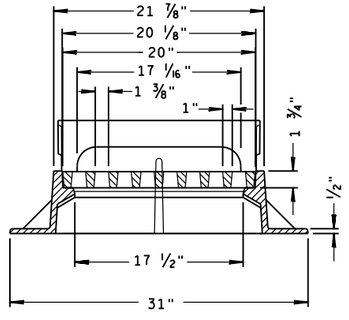


SPECIAL GRATE FOR TYPE "A" COVER

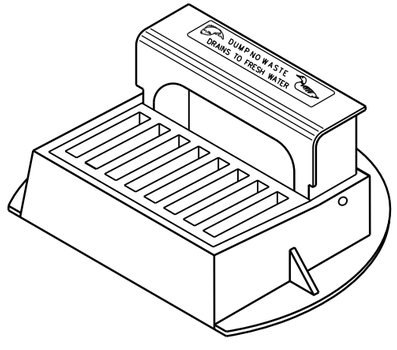
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



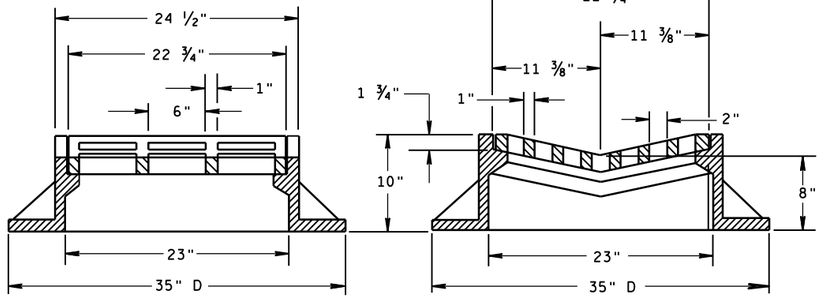
INLET COVERS TYPE A, H, A-S, H-S & Z

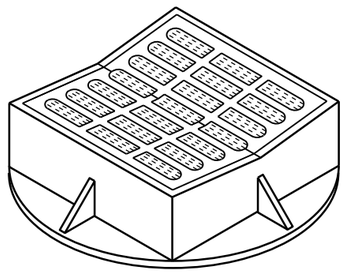
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

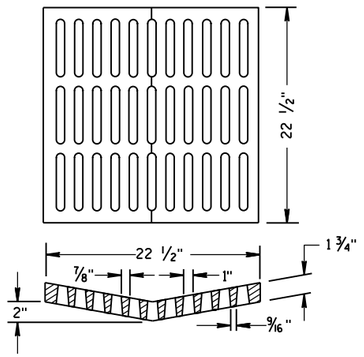
6

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



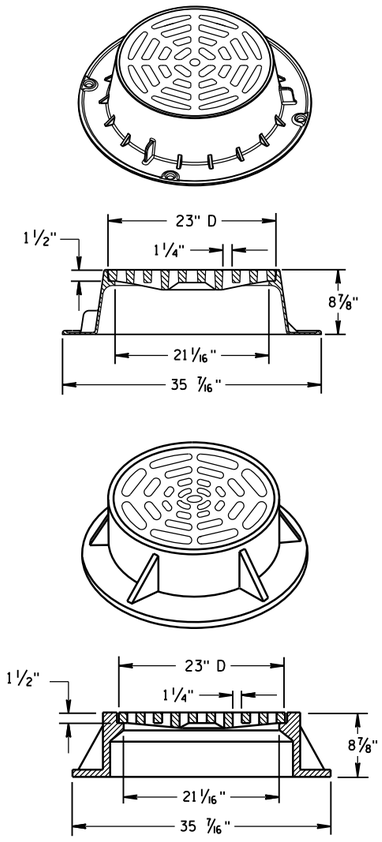


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

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



TYPE "C"

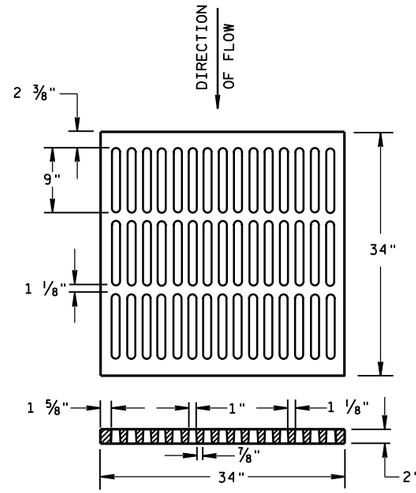
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

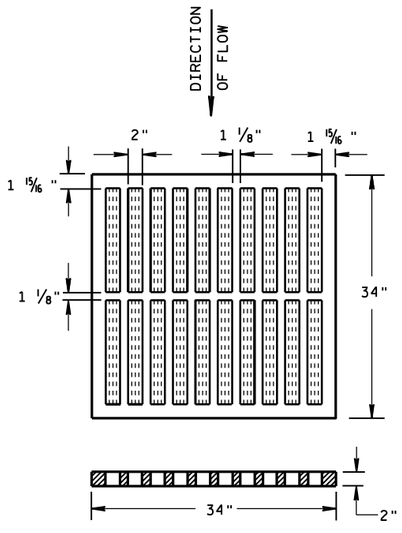
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



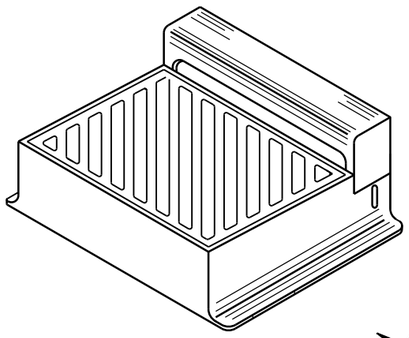
ALTERNATIVE TYPE "MS"

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

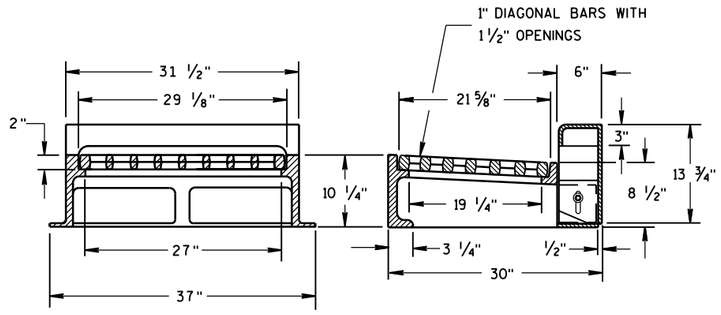


TYPE "MS"

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



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

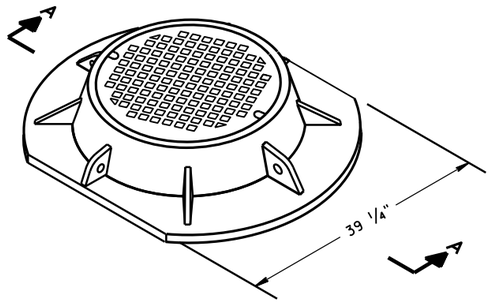
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

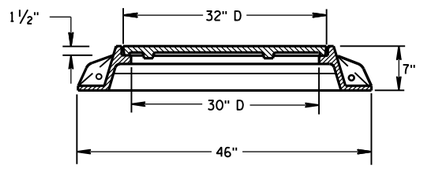
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

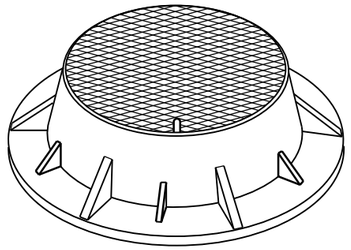
6

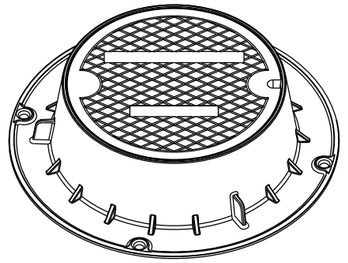
S.D.D. 8 A 5-19b

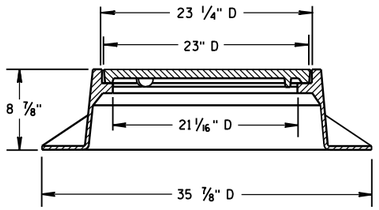


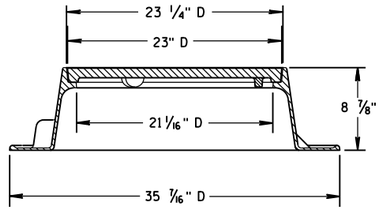


SECTION A-A
TYPE "K"









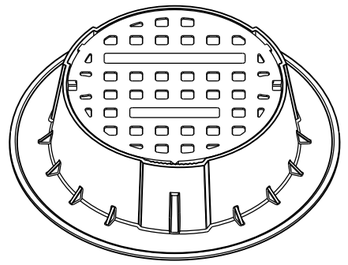
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

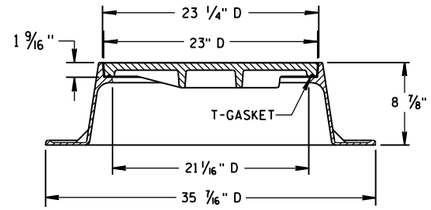
GENERAL NOTES

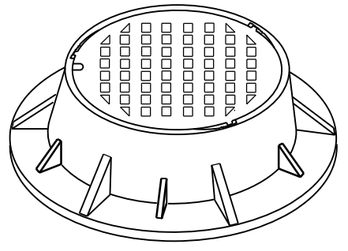
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

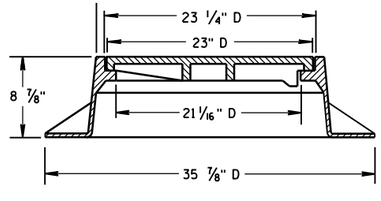
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

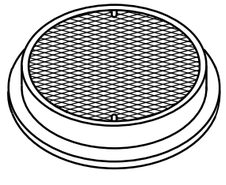


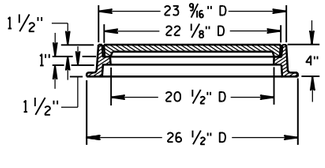




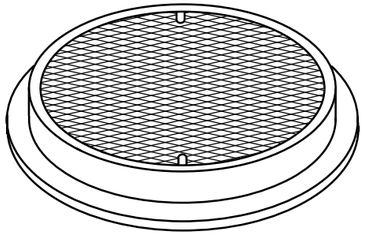


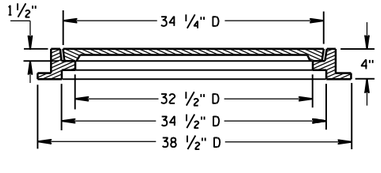
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



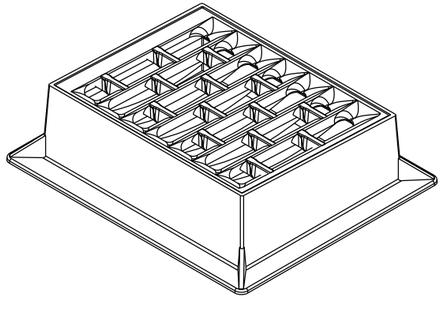


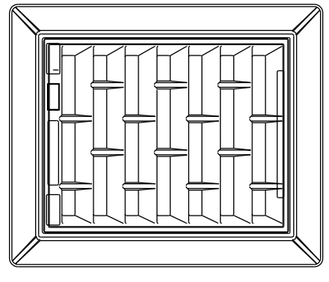
TYPE "L"

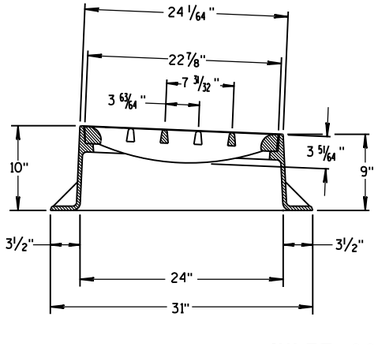


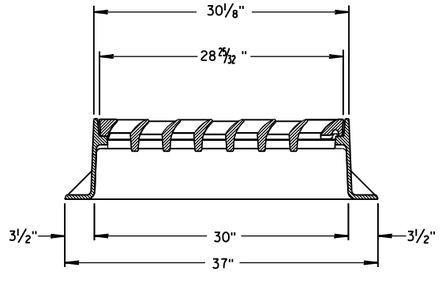


TYPE "M"









INLET COVER TYPE "BW"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

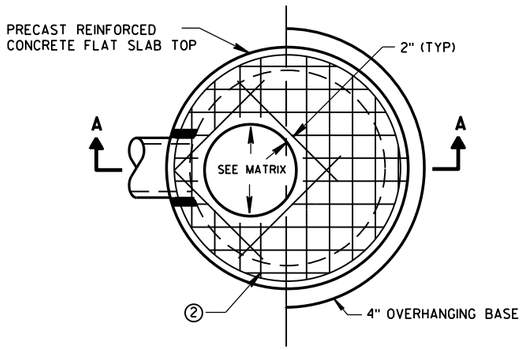
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

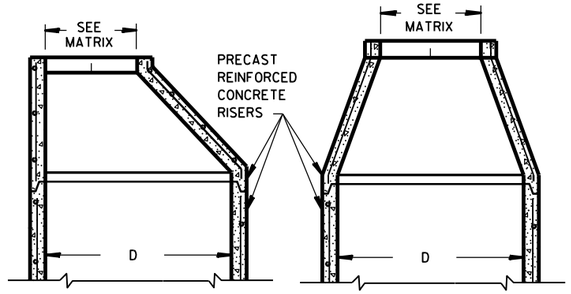
S.D.D. 8 A 5-19d

6

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

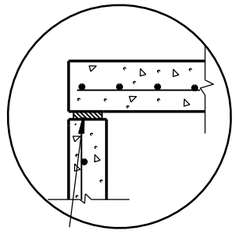


PLAN VIEW CIRCULAR OPENING

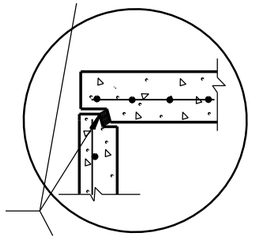


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

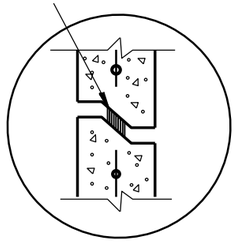
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

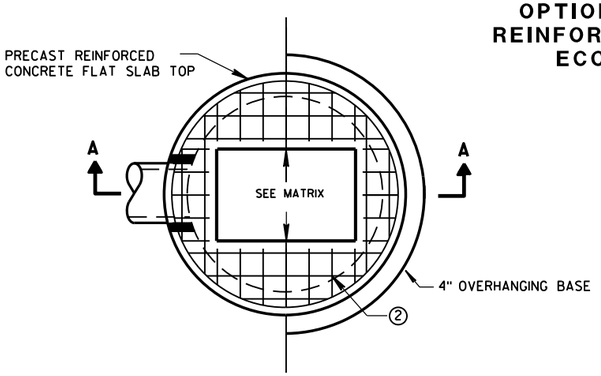


TOP WITH TONGUE AND GROOVE JOINT

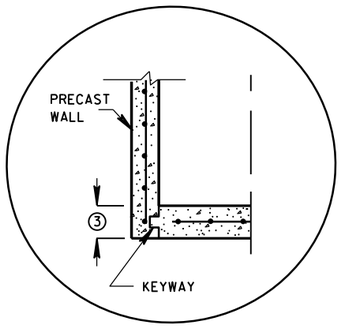


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

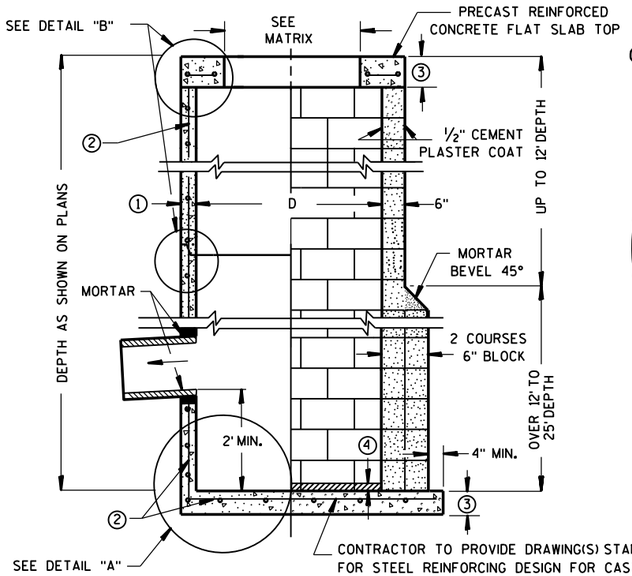


PLAN VIEW RECTANGULAR OPENING



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

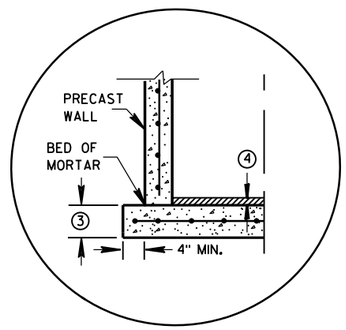
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SECTION A-A

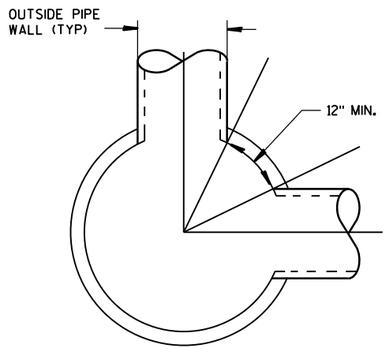
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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



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 CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

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

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 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

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

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

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

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

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

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

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

CATCH BASIN COVER OPENING MATRIX

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

PIPE MATRIX

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

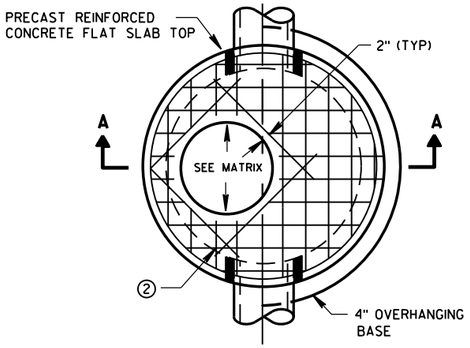
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

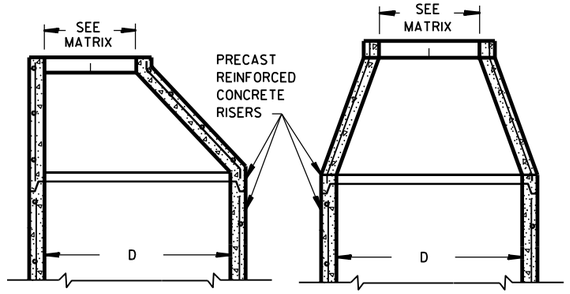
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

S.D.D. 8 A 8-2

S.D.D. 8 A 8-2

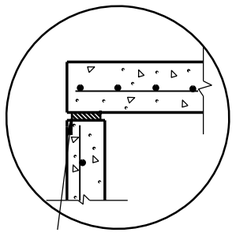


PLAN VIEW CIRCULAR OPENING

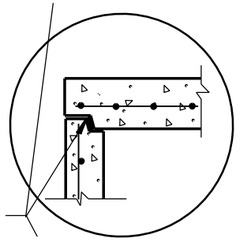


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

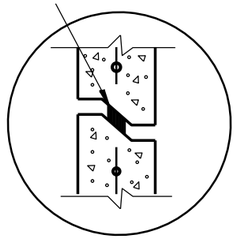


TOP WITH PLAIN END JOINT



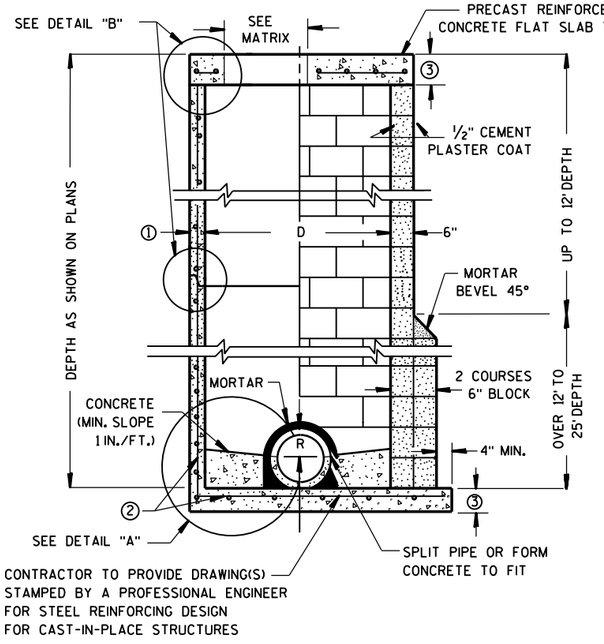
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



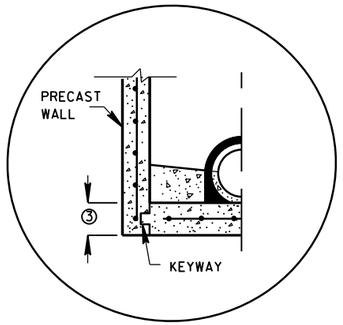
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

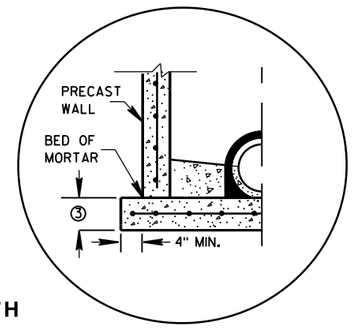


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

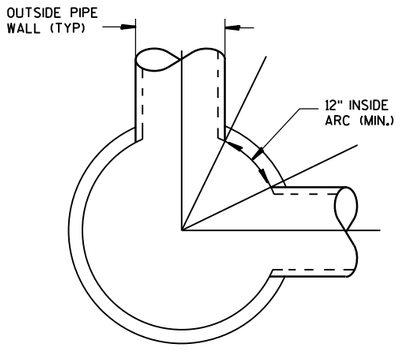


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

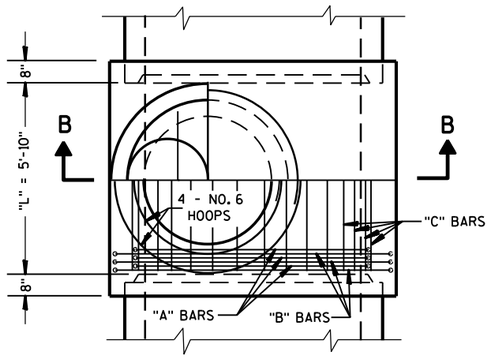
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

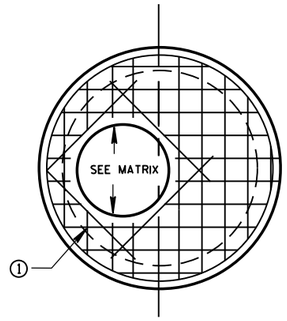
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

S.D.D. 8 B 9-2

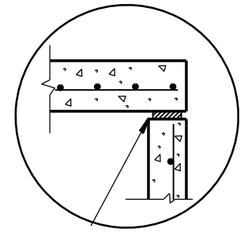
6



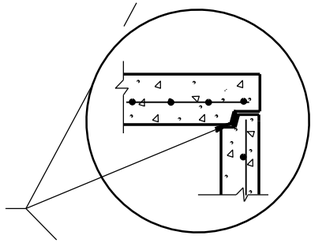
HALF SECTION A-A



PLAN VIEW PRECAST REINFORCED CONCRETE FLAT SLAB TOP WITH ECCENTRIC OPENING

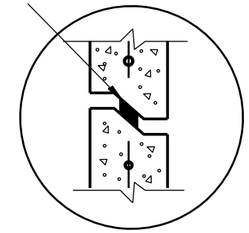


TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

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



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "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.

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 4T-L", "MANHOLES 4S-M", ETC. THE VARIABLE TEE IS DENOTED BY 4T AND THE VARIABLE SPECIAL IS DENOTED BY 4S. THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

STEPS MEETING 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 $\frac{1}{2}$ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

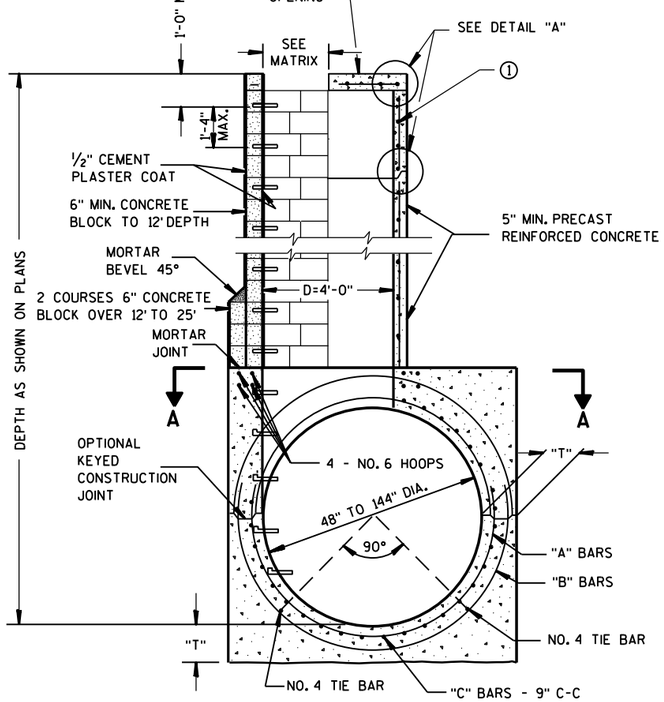
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE WITH AASHTO M 199.

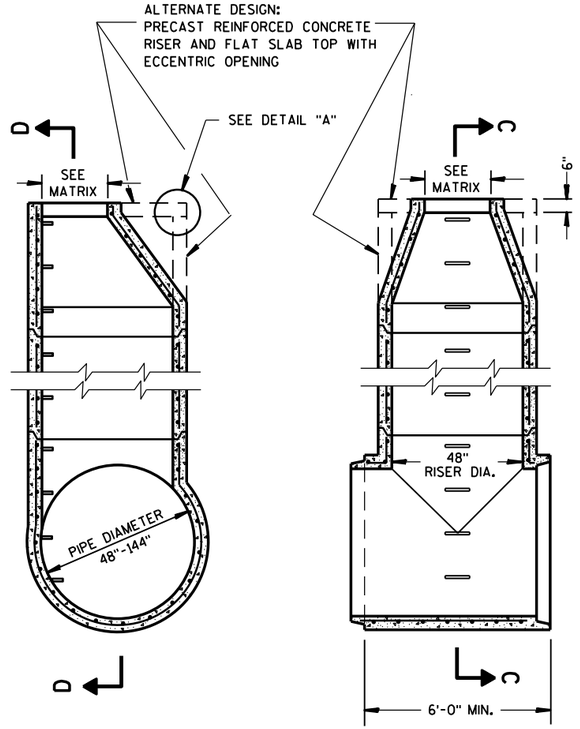
MANHOLE COVER OPENING MATRIX

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



SECTION B-B

MANHOLE VARIABLE SPECIAL 4-FT DIAMETER



SECTION C-C

SECTION D-D

MANHOLE VARIABLE TEE 4-FT DIAMETER

NOTES FOR MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

NOTE: ALL "A", "B", AND "C" BAR STEEL REINFORCING IS THE SAME DIAMETER WHICH VARIES WITH DEPTH.
NO. 5 BARS TO 20' DEPTH
NO. 6 BARS OVER 20' TO 30' DEPTH
NO. 7 BARS OVER 30' TO 40' DEPTH

THE "A" AND "B" BARS MAY BE PLACED IN ONE OR TWO SEGMENTS, AND SHALL LAP 24 BAR DIAMETERS.

"C" BARS SHALL HAVE STANDARD HOOKED ENDS.

NOTE: "T" THROUGHOUT LENGTH "L" SHALL BE 13" FOR PIPE DIAMETER 48" TO 84" AND 15" FOR PIPE DIAMETER GREATER THAN 84".

MANHOLE VARIABLE TEE AND SPECIAL 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

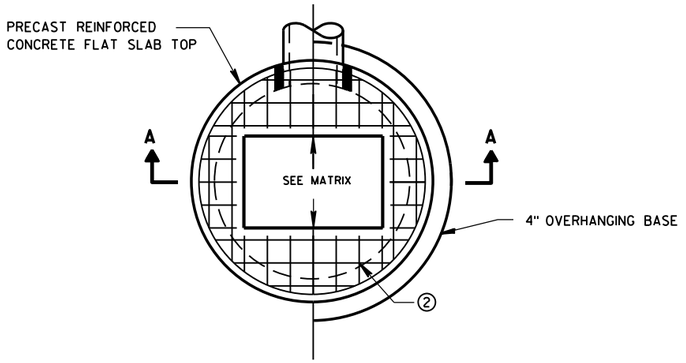
APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6

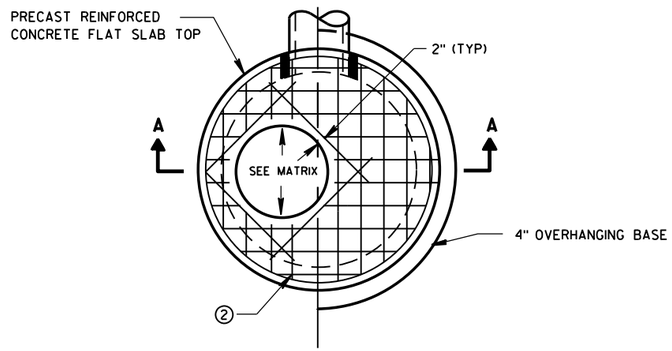
S.D.D. 8 B 11-2

6

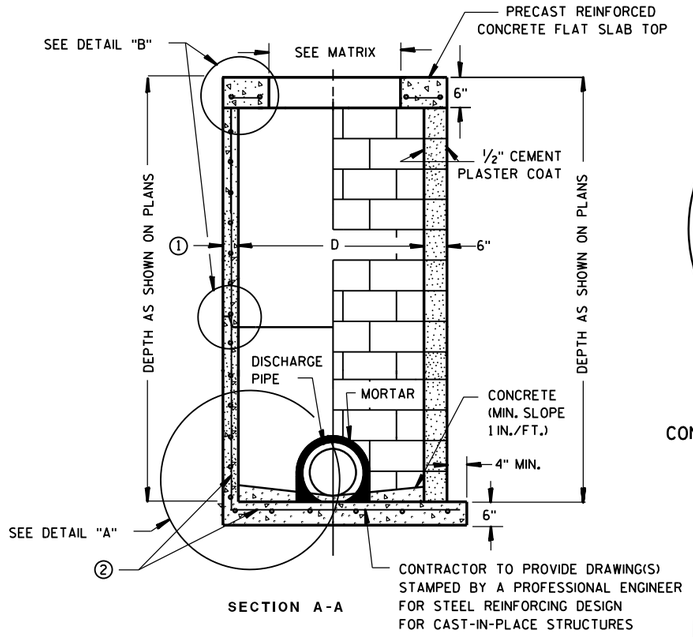
S.D.D. 8 B 11-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

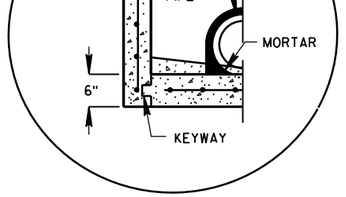


SECTION A-A

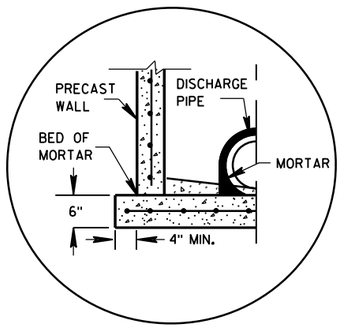
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

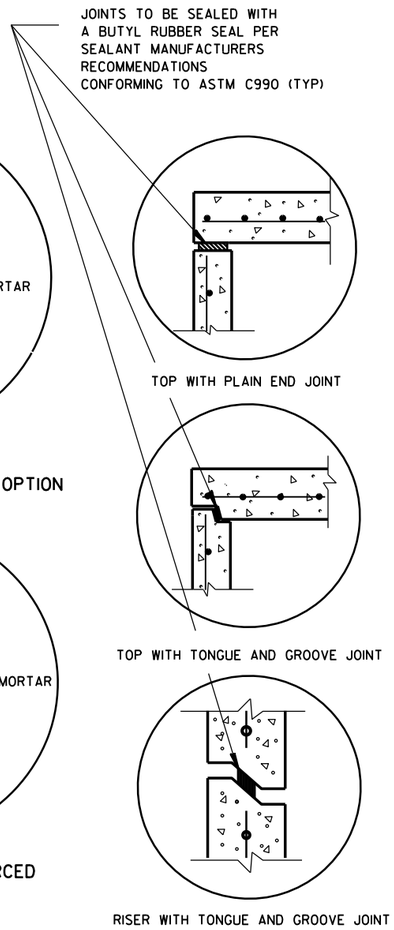


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

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

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

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

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF 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.

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

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

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

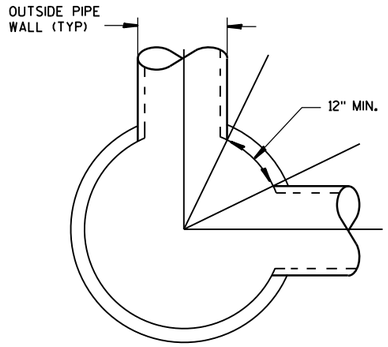
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

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

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

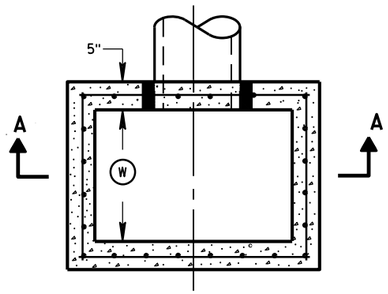
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA

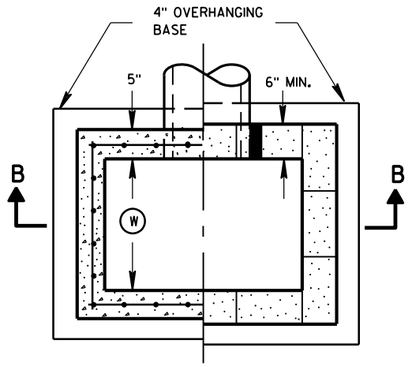
INLETS 3-FT AND 4-FT DIAMETER

6

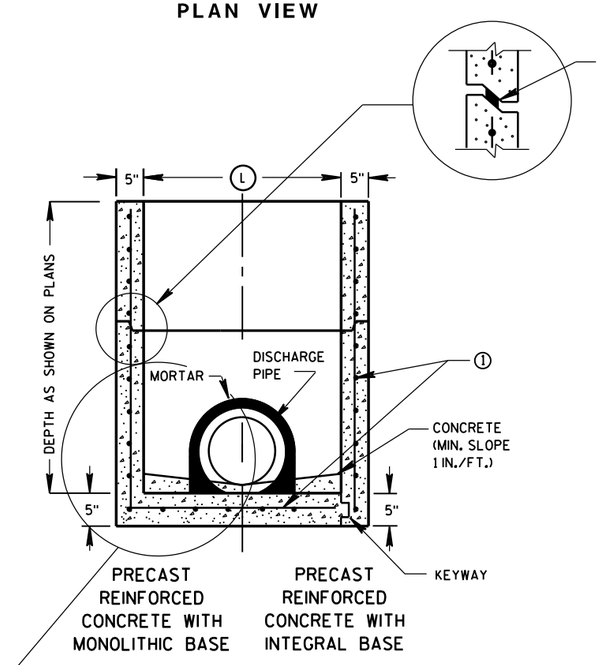
S.D.D. 8 C 6-2



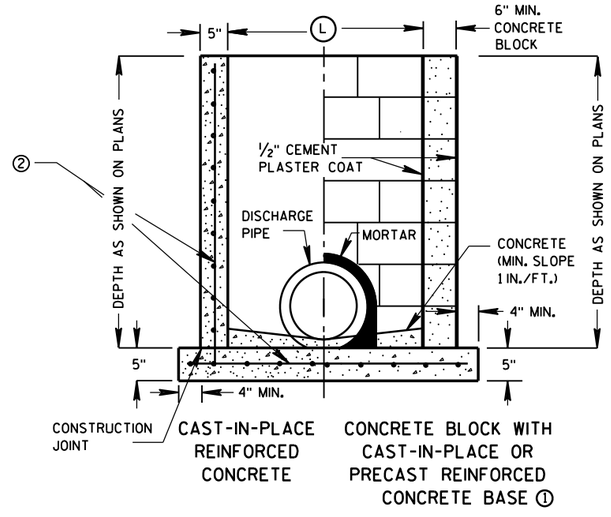
PLAN VIEW



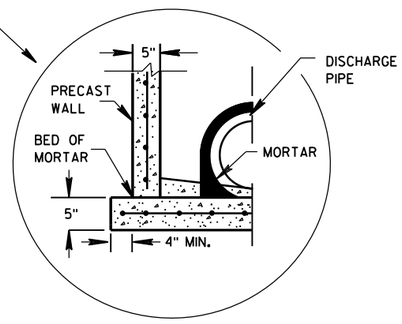
PLAN VIEW



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.

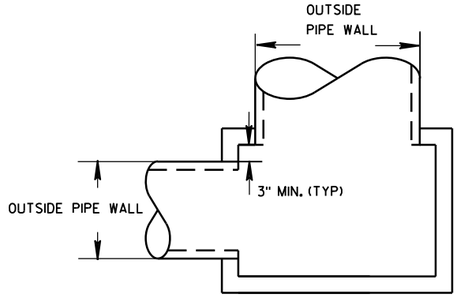
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



DETAIL "A"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

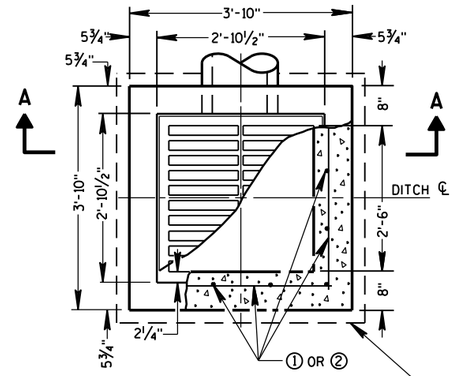
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

6

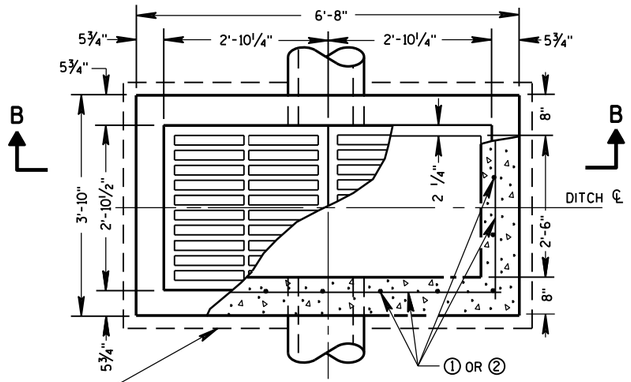
S.D.D. 8 C 7-2

6

S.D.D. 8 C 7-2

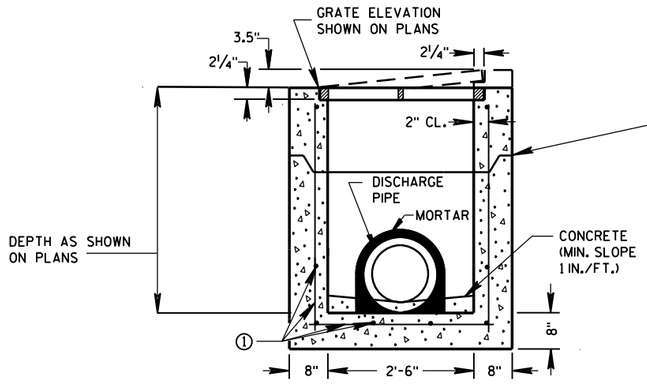


PLAN VIEW

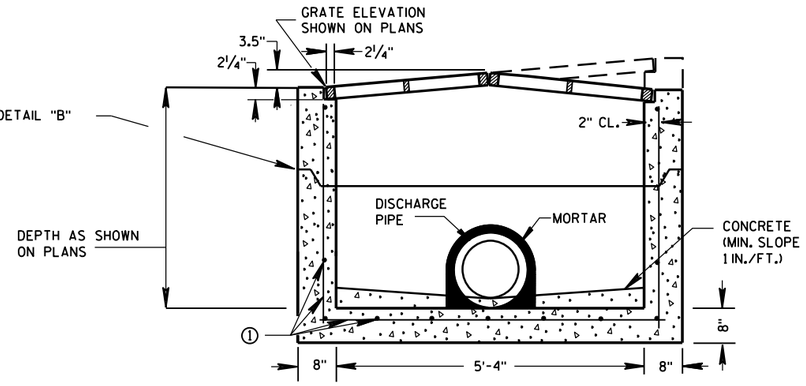


PLAN VIEW

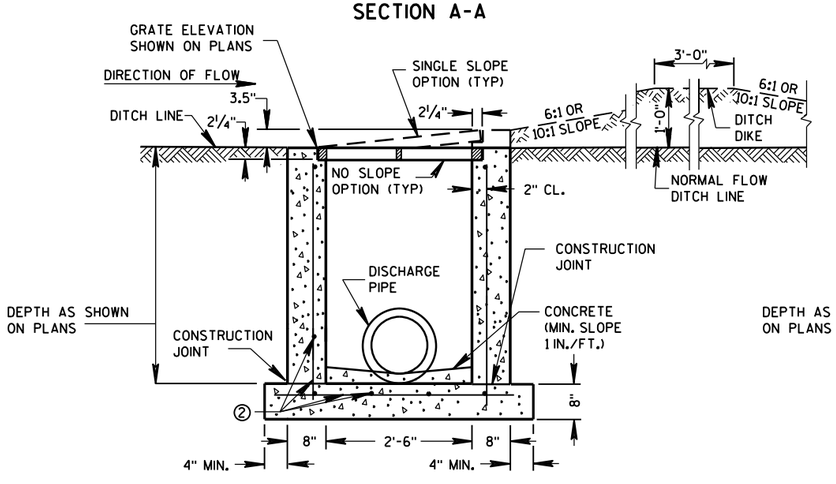
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



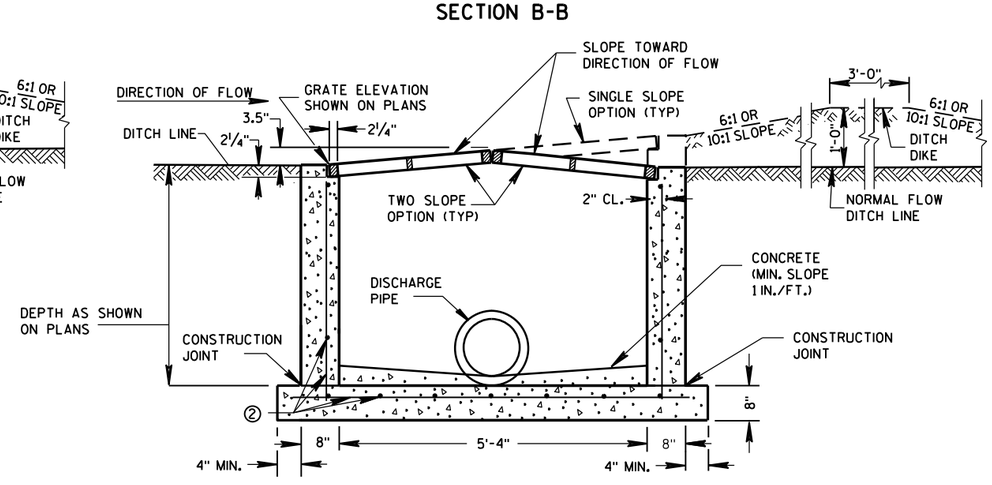
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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.

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

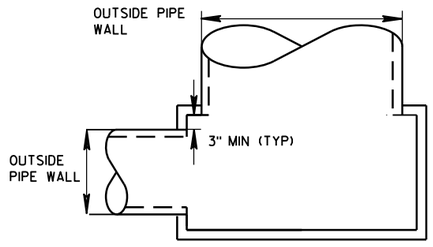
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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

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

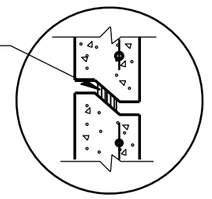
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



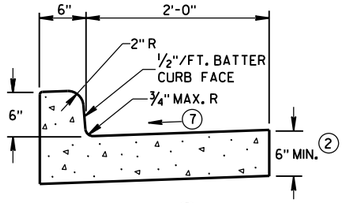
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

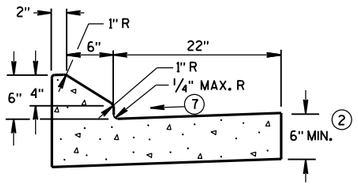
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

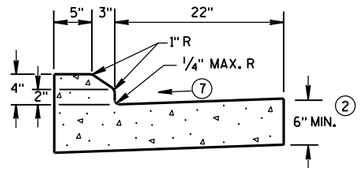
6
S.D.D. 8 C 8-2



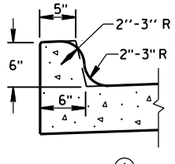
TYPES A (1) & D



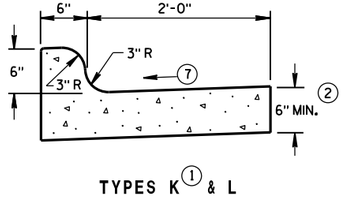
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

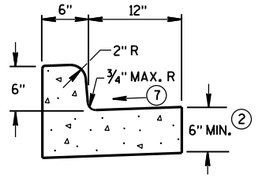


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



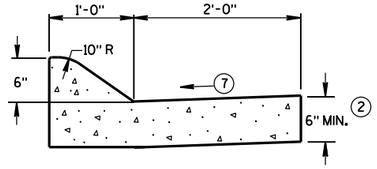
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

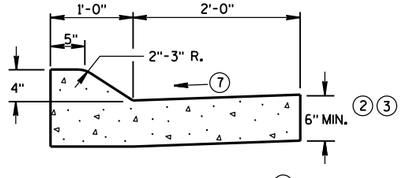


TYPES A (1) & D

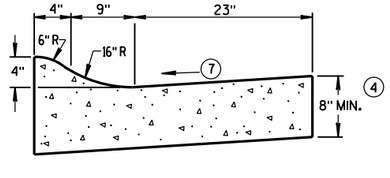
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

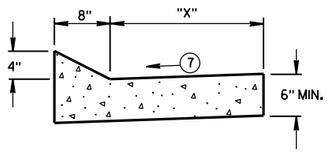


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

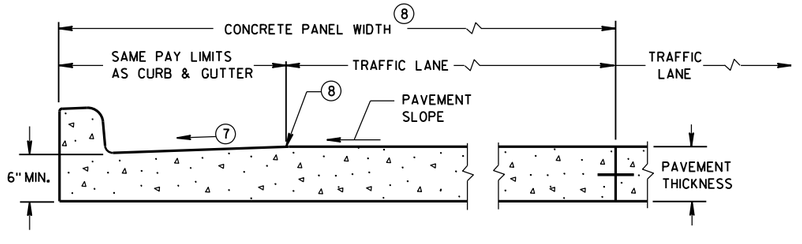
CONCRETE CURB & GUTTER 36"



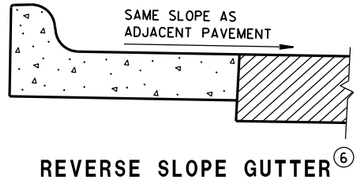
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



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

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

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

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

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

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

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

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

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

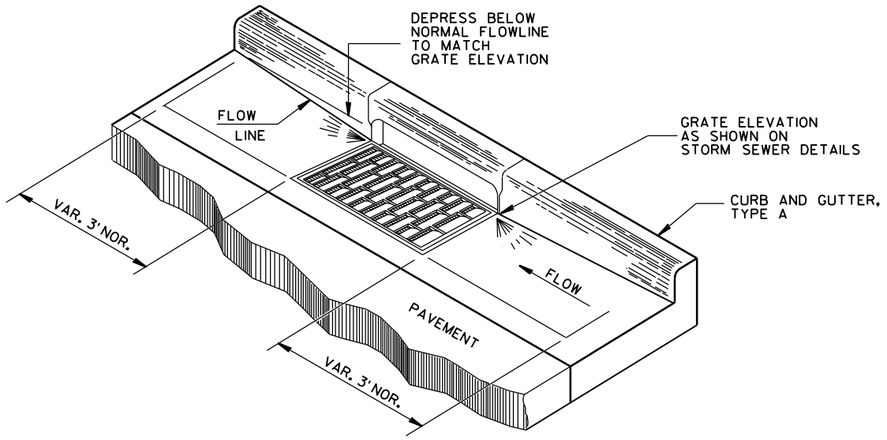
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

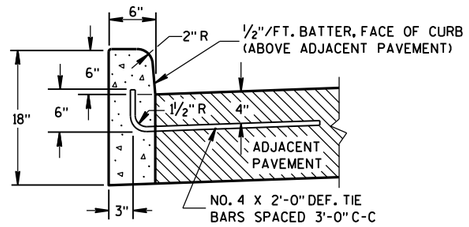
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

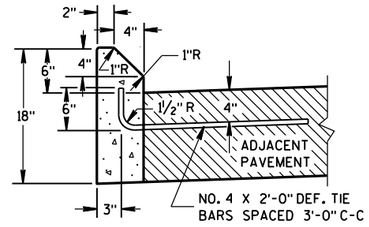
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

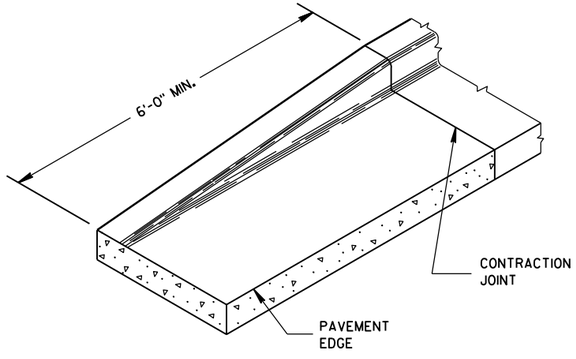


TYPES A (1) & D

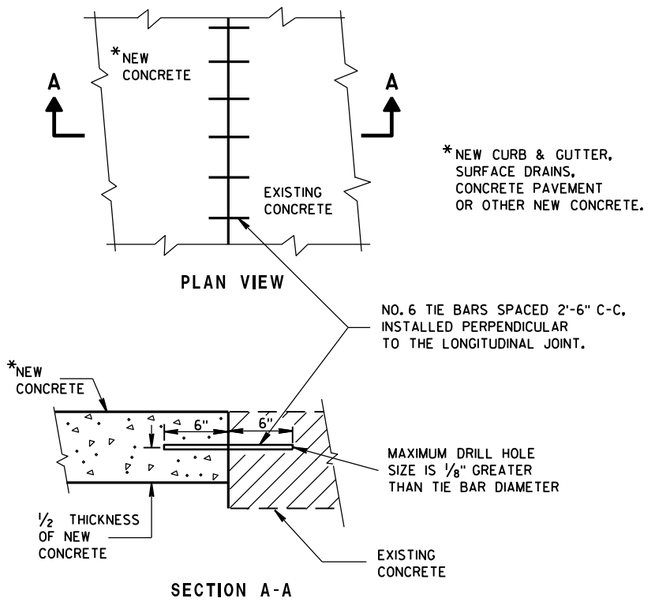


TYPES G (1) & J

CONCRETE CURB



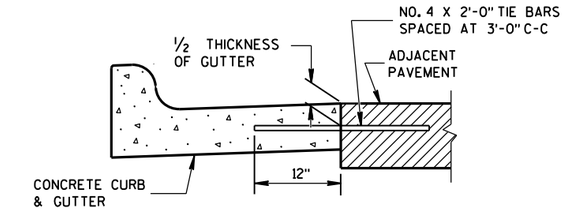
END SECTION CURB & GUTTER



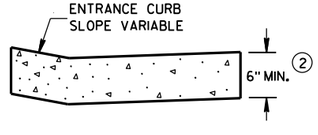
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

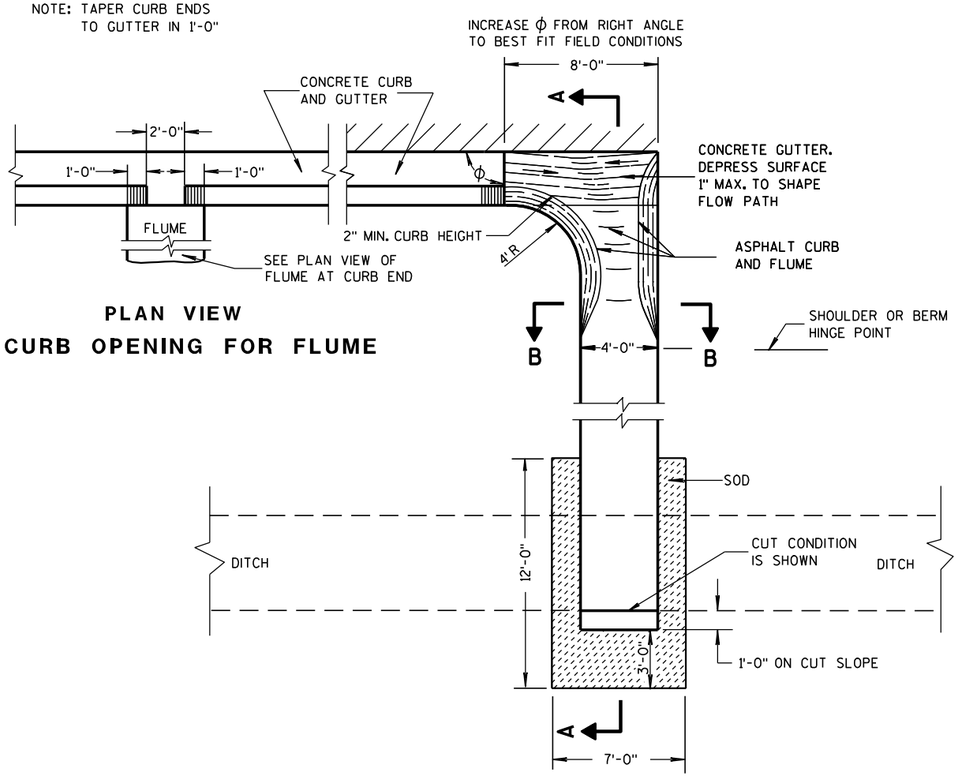
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA
ENT

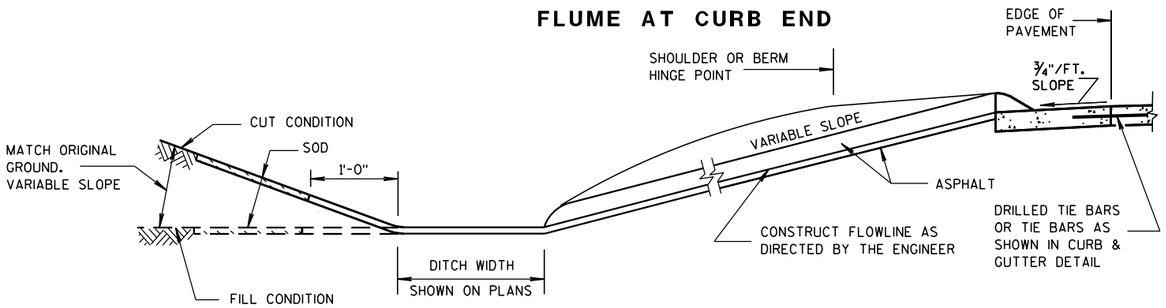
6
S.D.D. 8 D 1-20b

ASPHALTIC FLUME

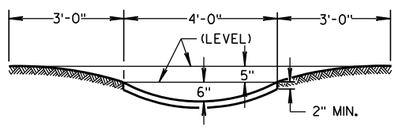


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

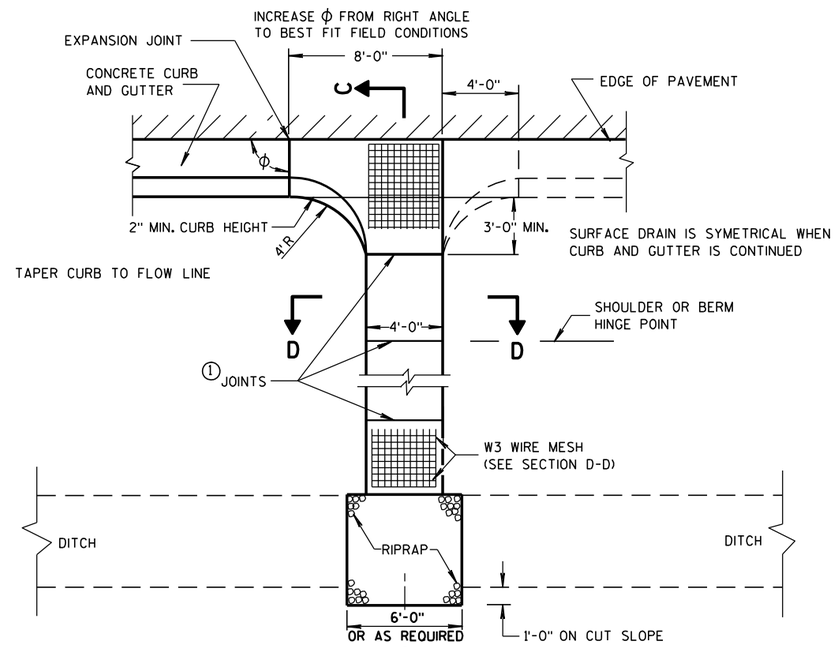
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

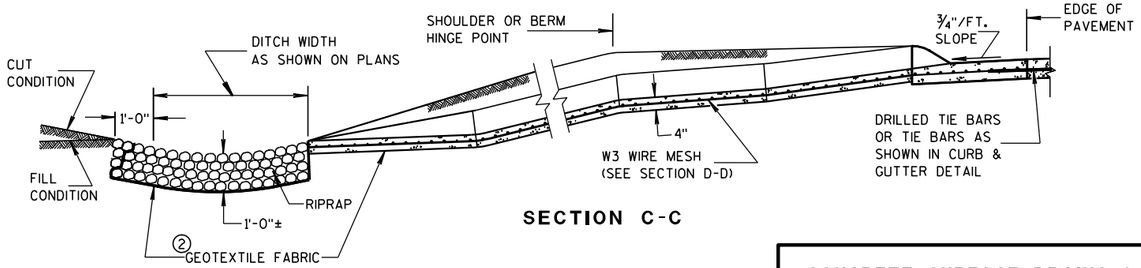
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

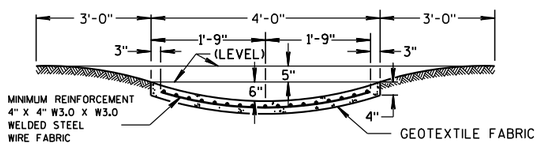
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

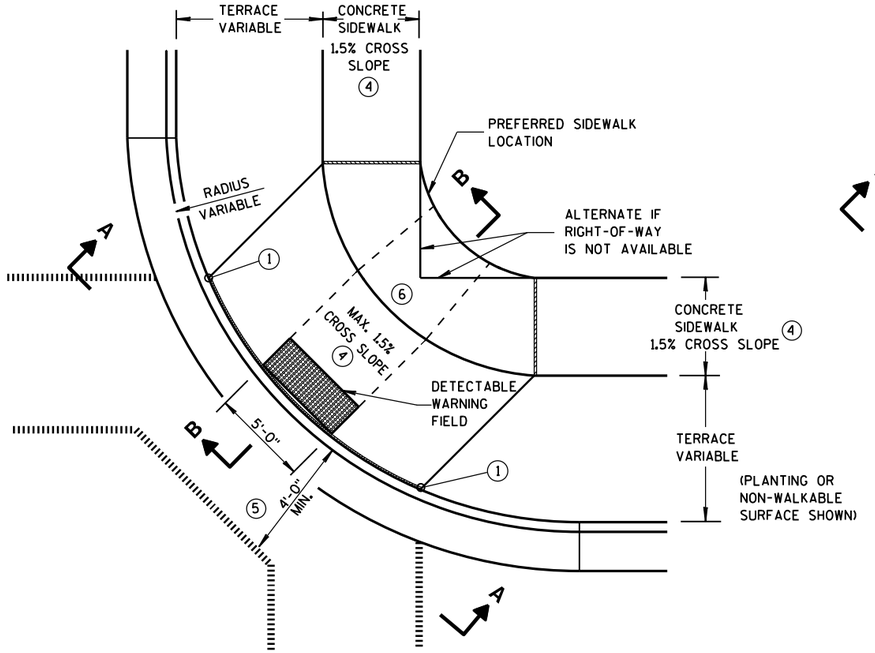
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

S.D.D. 8 D 4-5

6

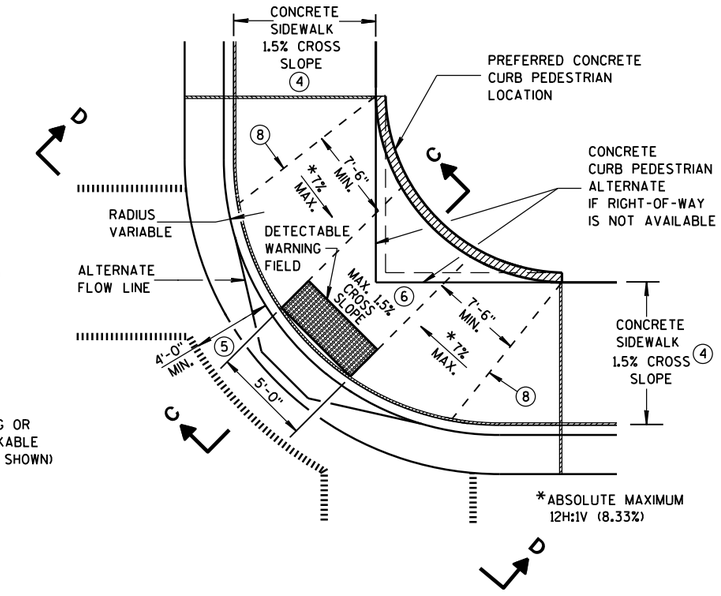
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

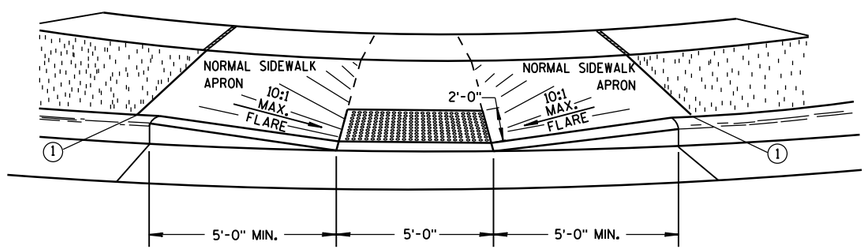
(CENTER OF CORNER RADIUS)



PLAN VIEW

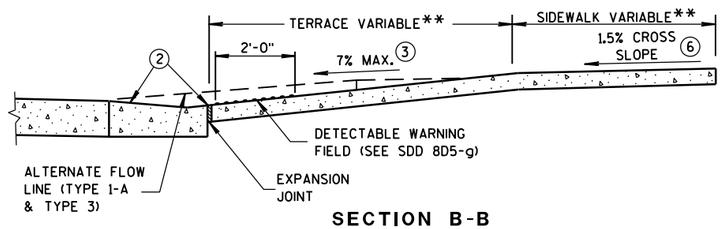
TYPE 1-A RAMP

(NO TERRACE)

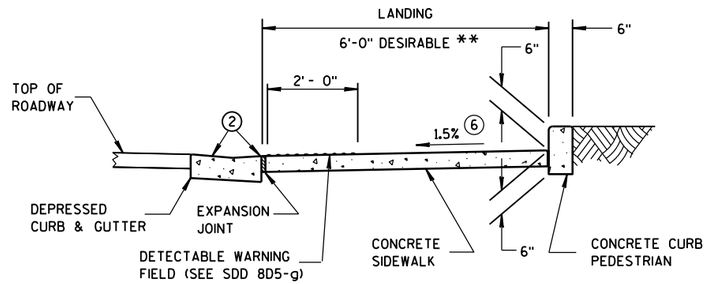


VIEW A-A

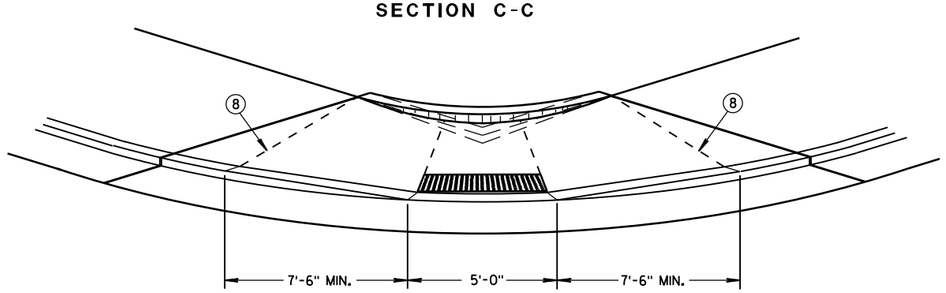
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

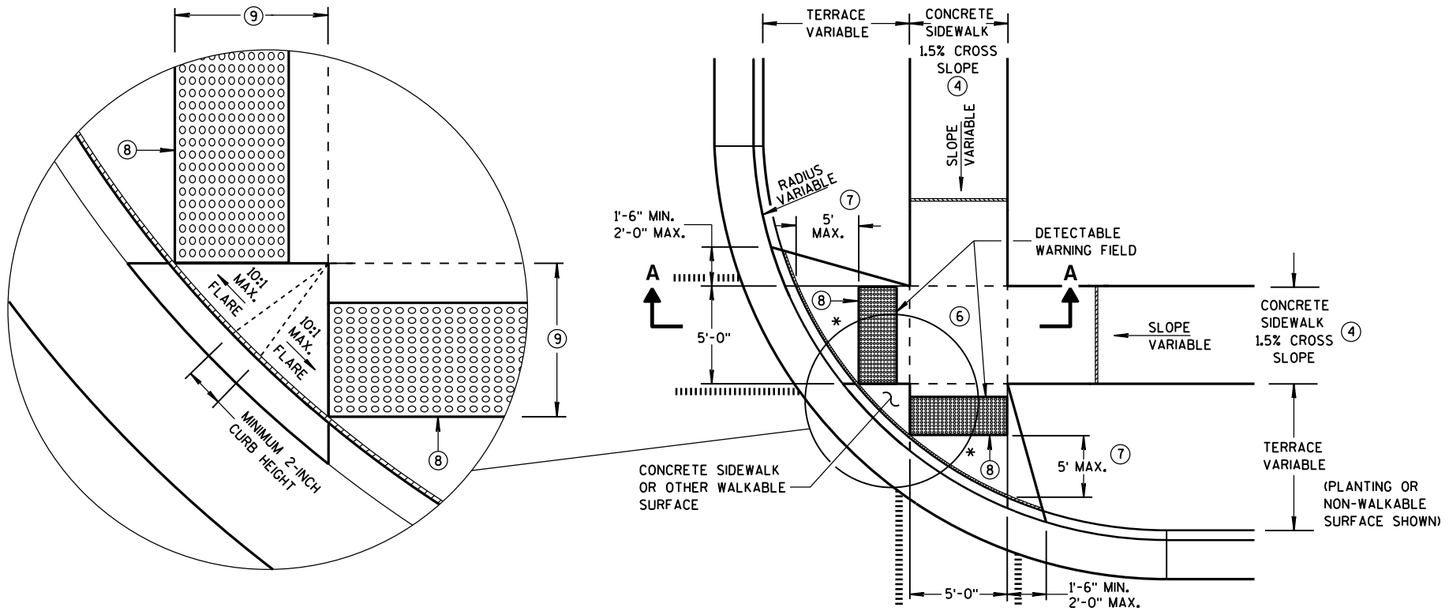
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

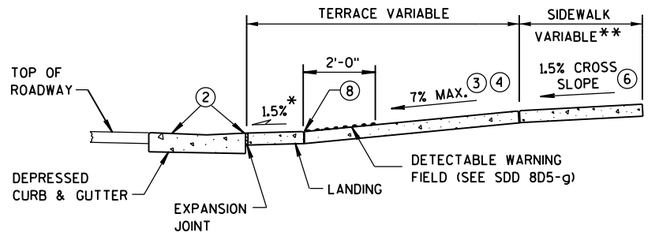


PLAN VIEW

TYPE 2 RAMP

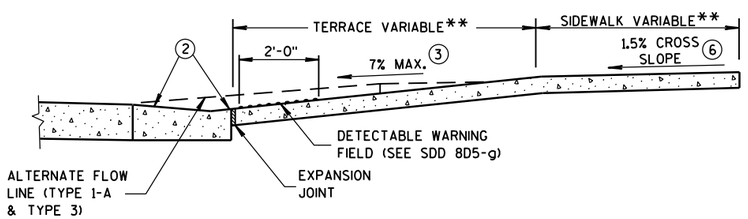
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

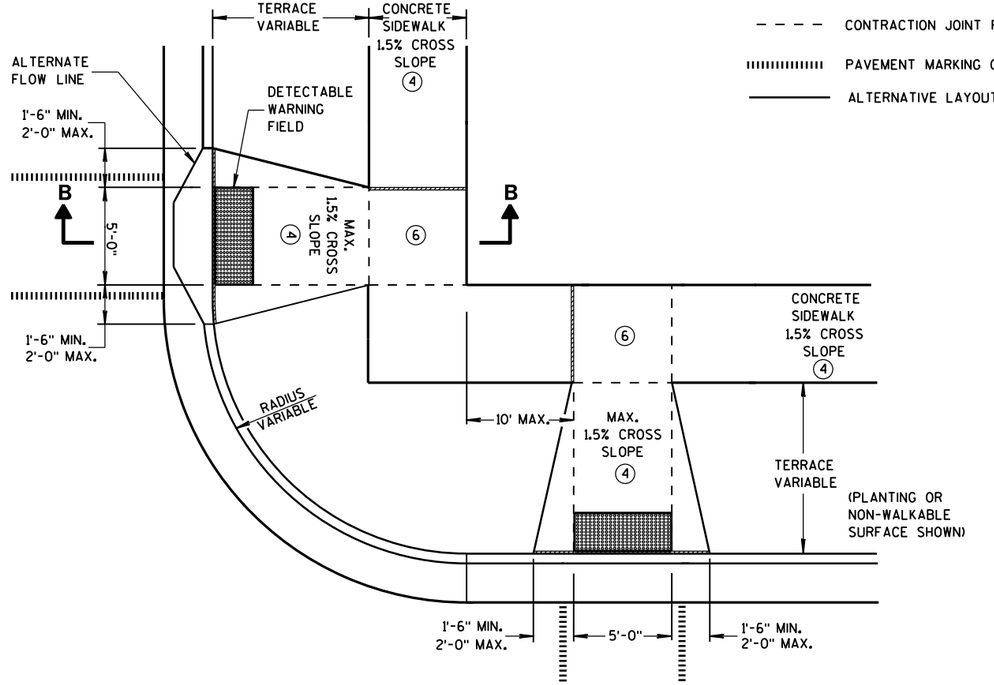
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

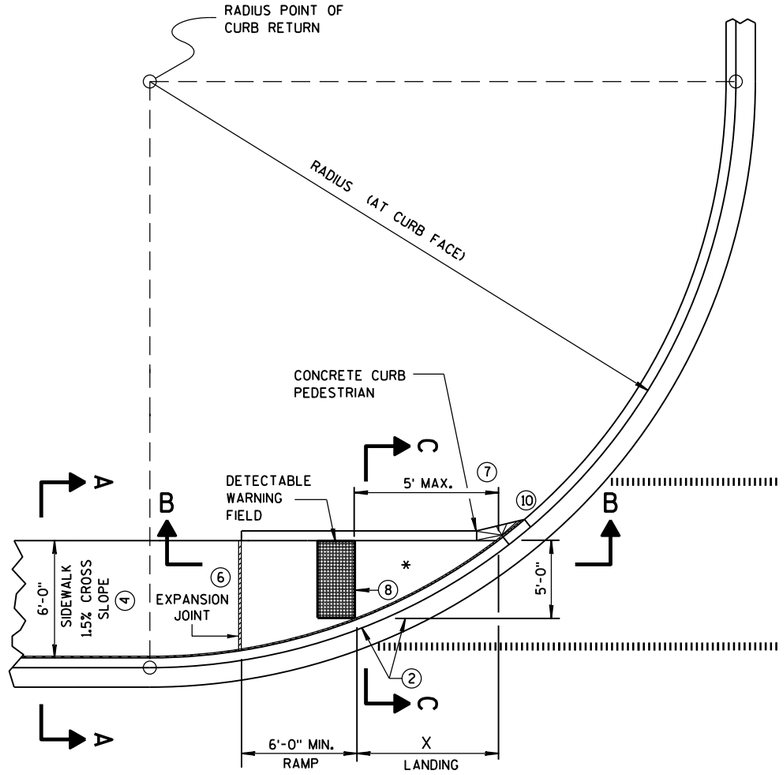
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

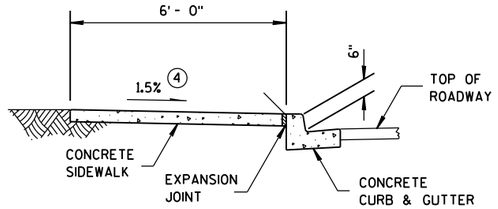
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

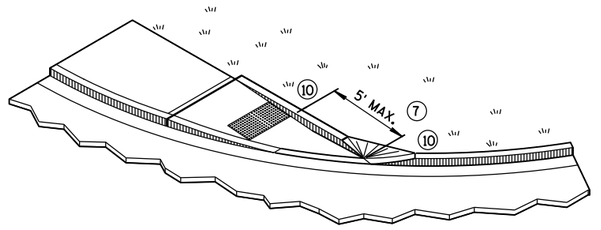
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

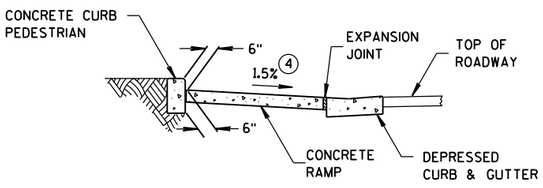
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

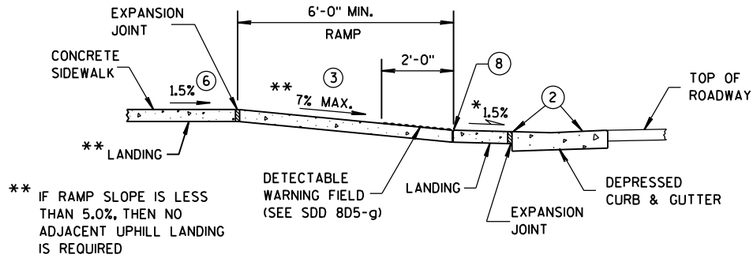
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



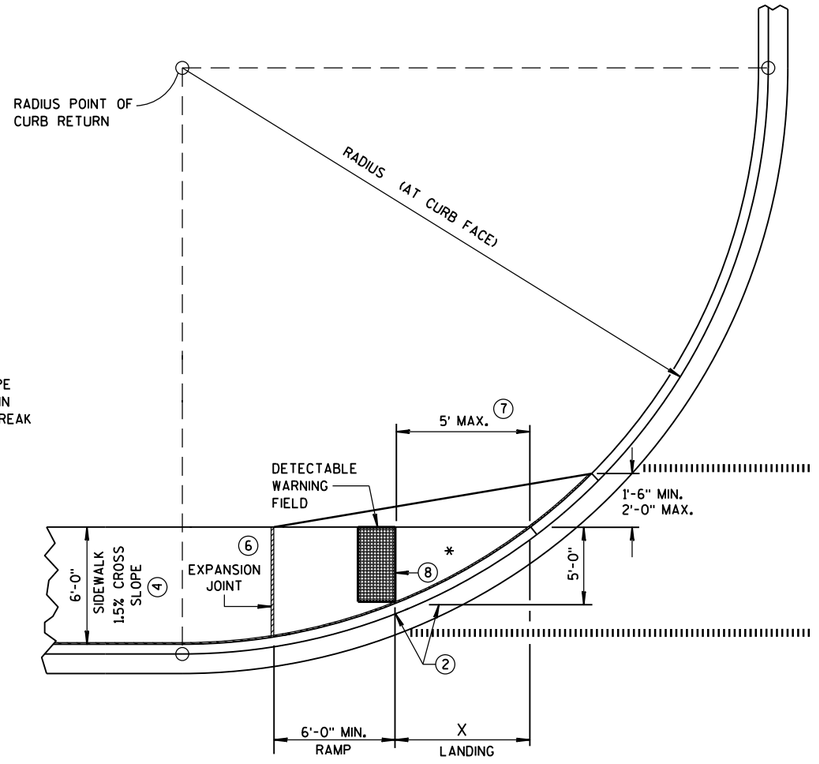
SECTION C-C FOR TYPE 4A



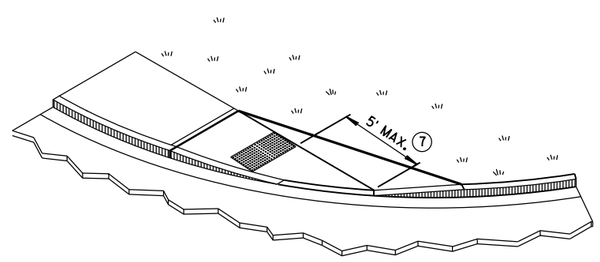
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

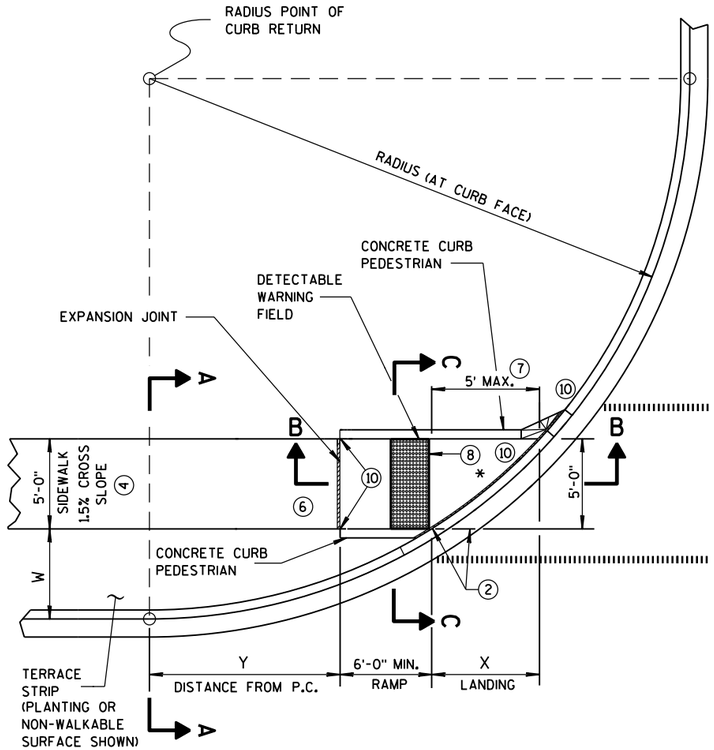
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

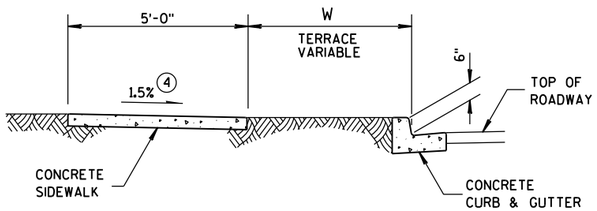
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

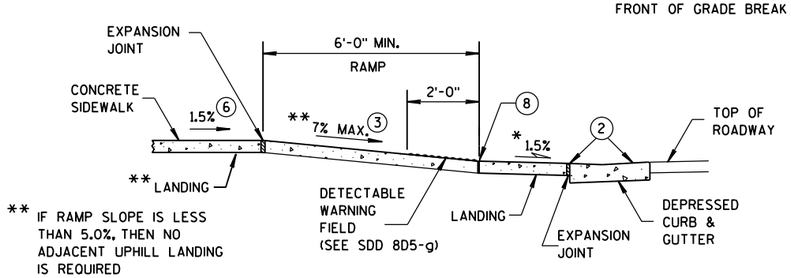
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



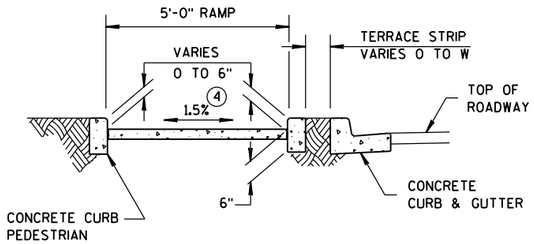
SECTION A-A FOR TYPE 4B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

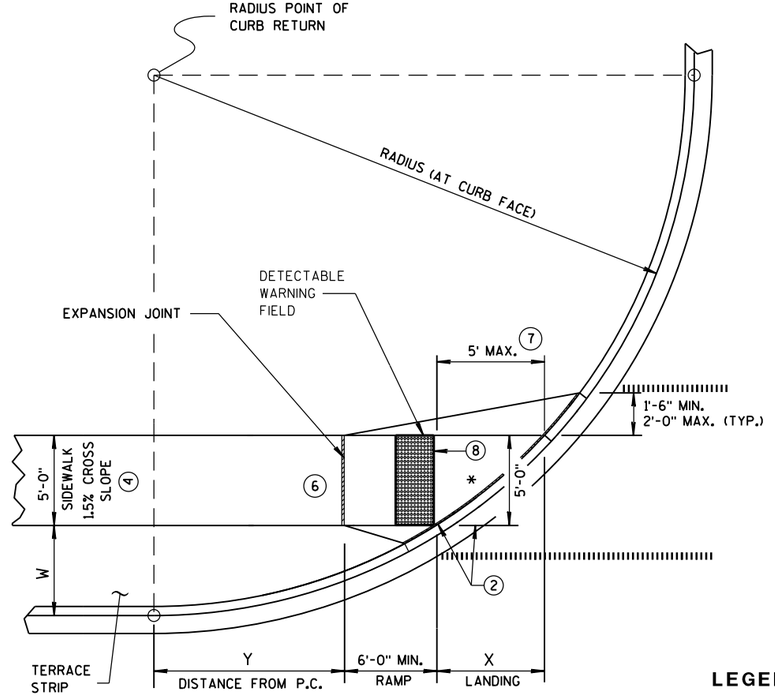
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

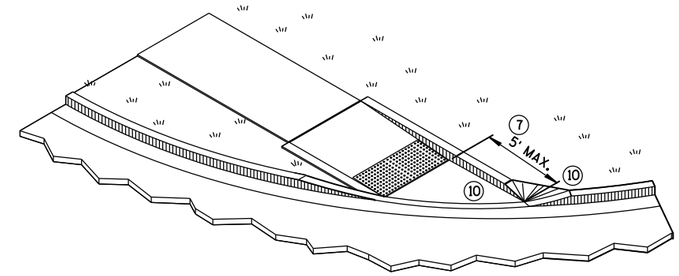
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

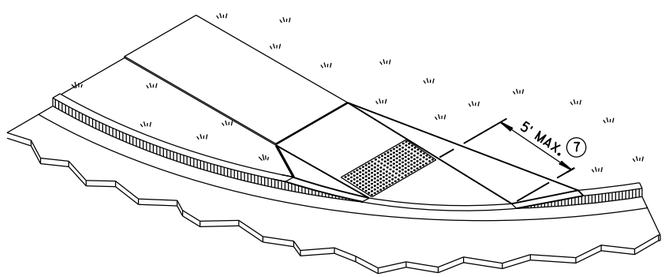
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

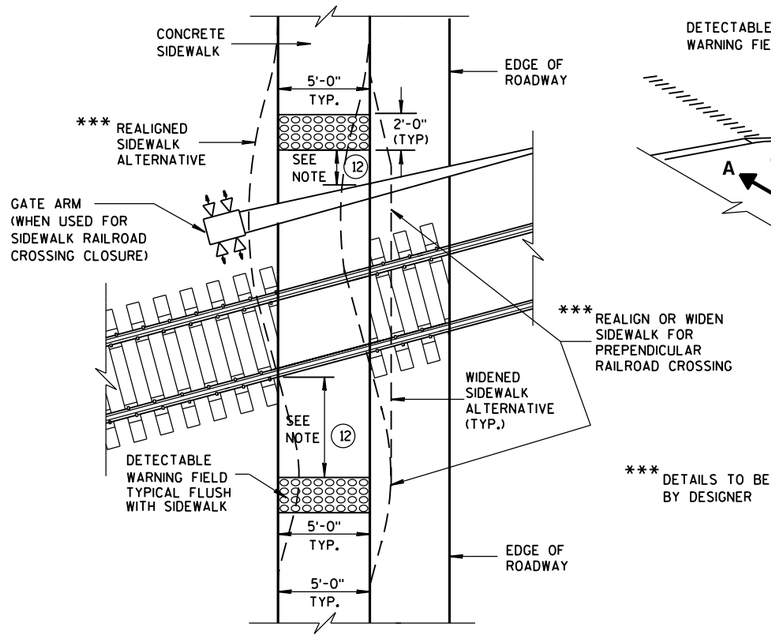
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

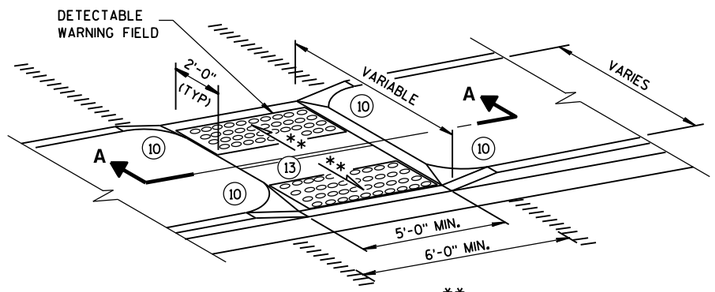
6

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



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

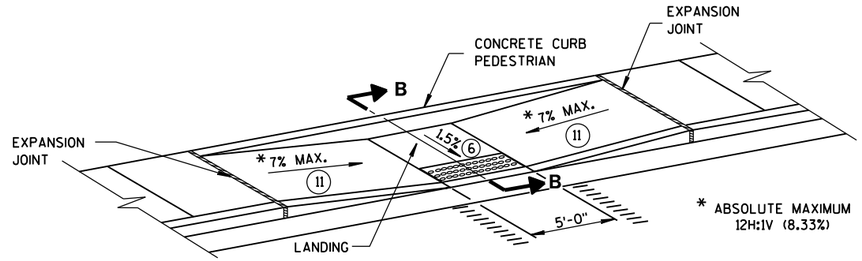
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

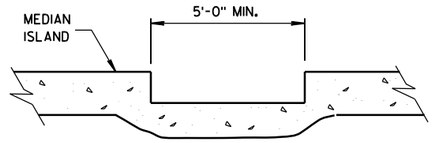
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

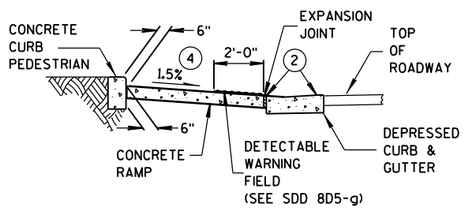
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

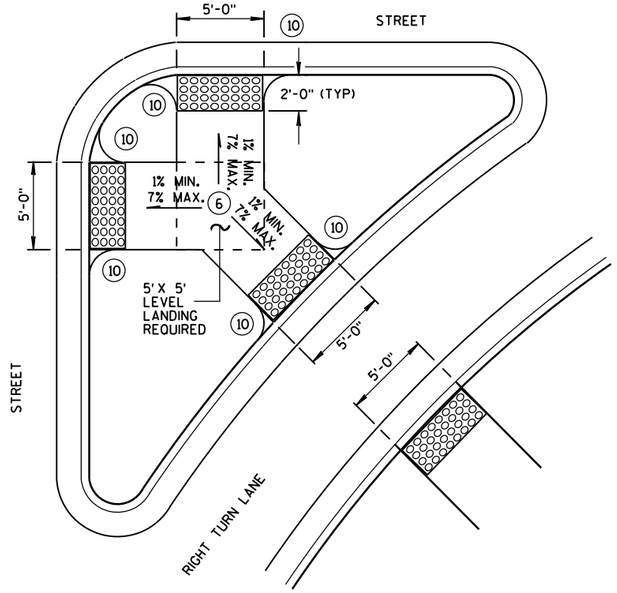


SECTION A-A

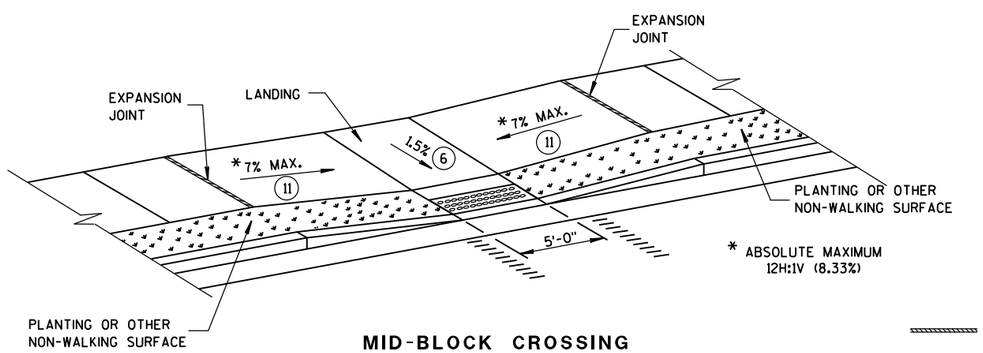


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

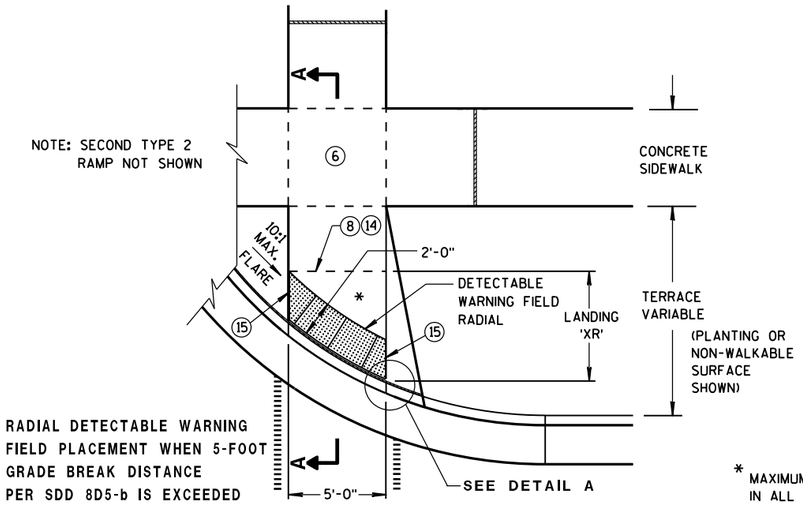
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

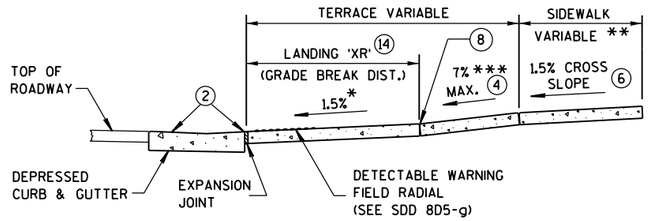
6

S.D.D. 8 D 5-19e



TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

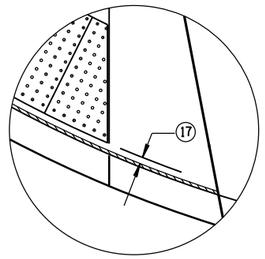
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



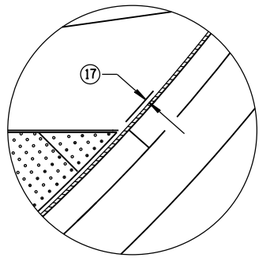
** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

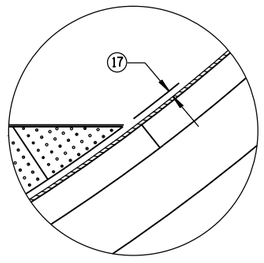
SECTION A-A



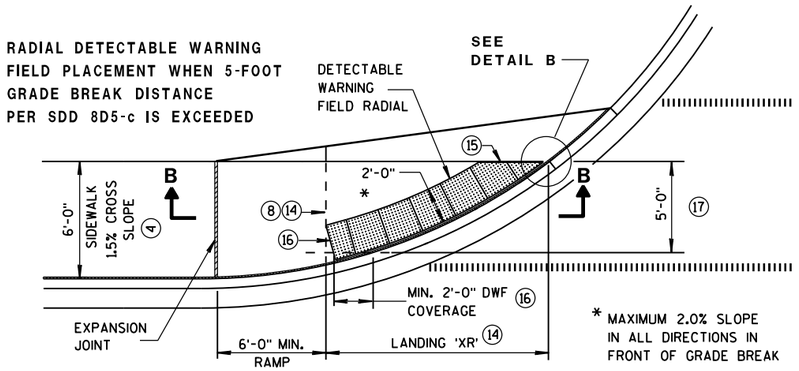
DETAIL A



DETAIL C

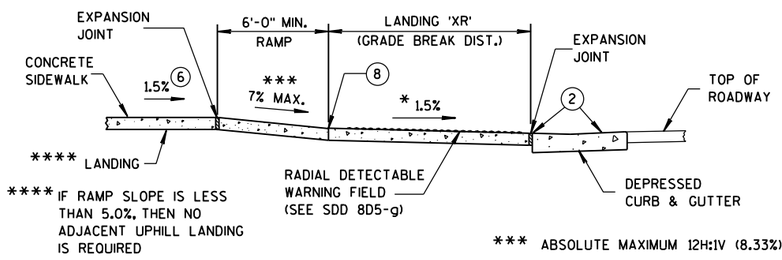


DETAIL B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

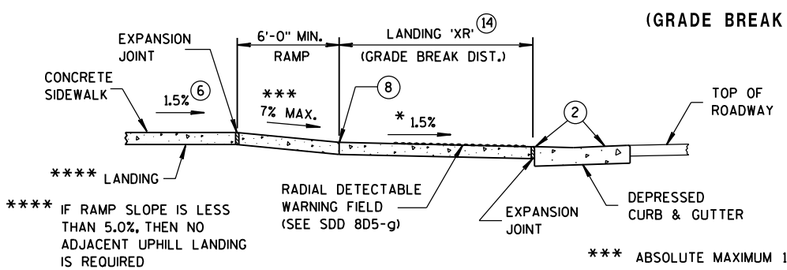
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

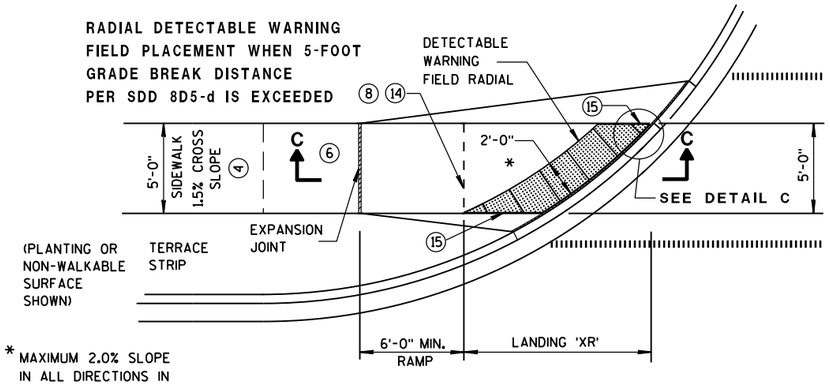
SECTION B-B FOR TYPE 4A1



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

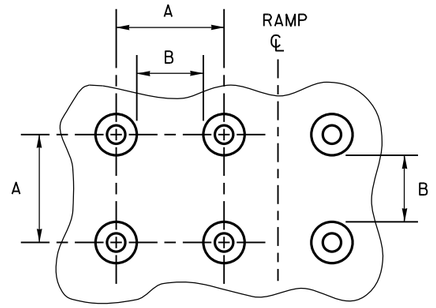
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

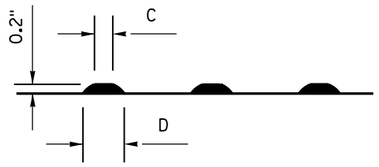
S.D.D. 8 D 5-19f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

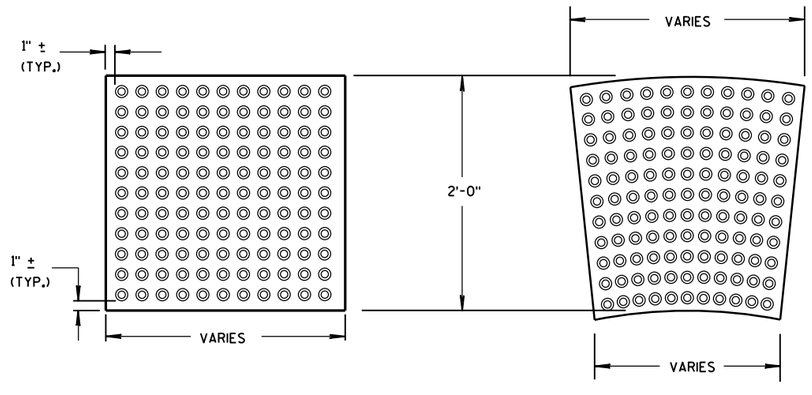
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

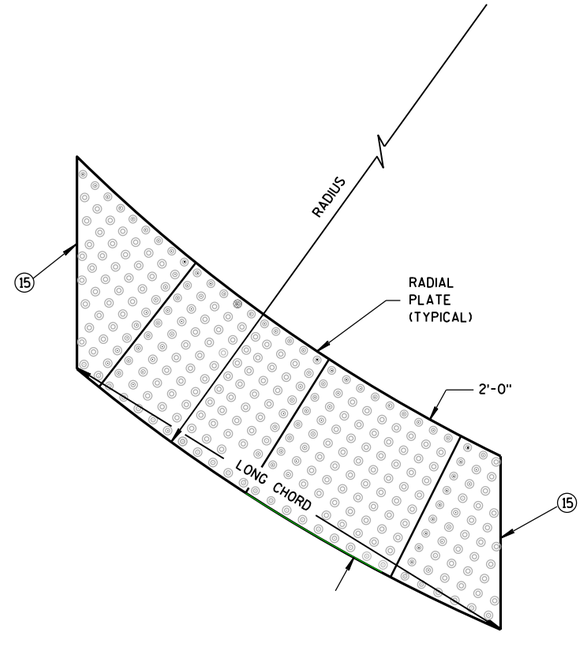


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV

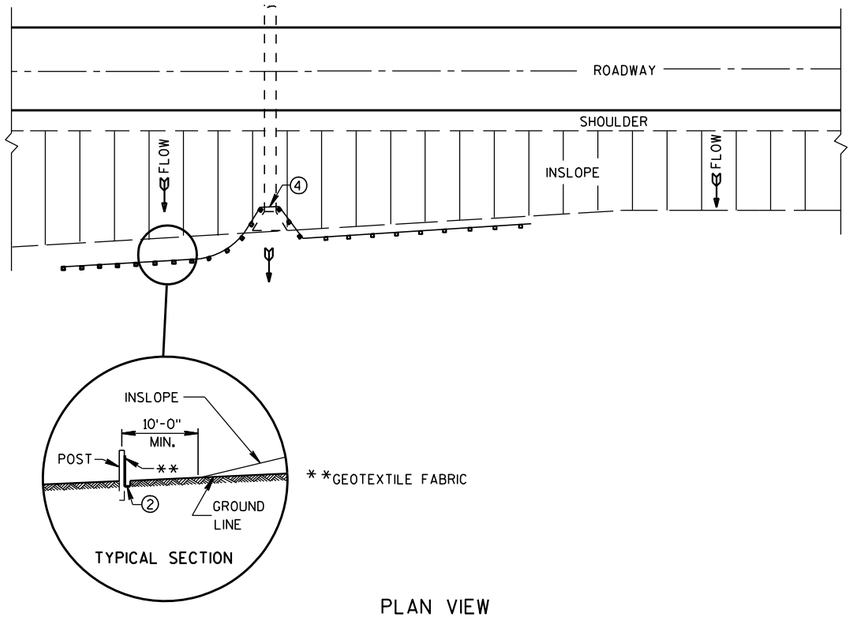
ENT

6

S.D.D. 8 D 5-19g

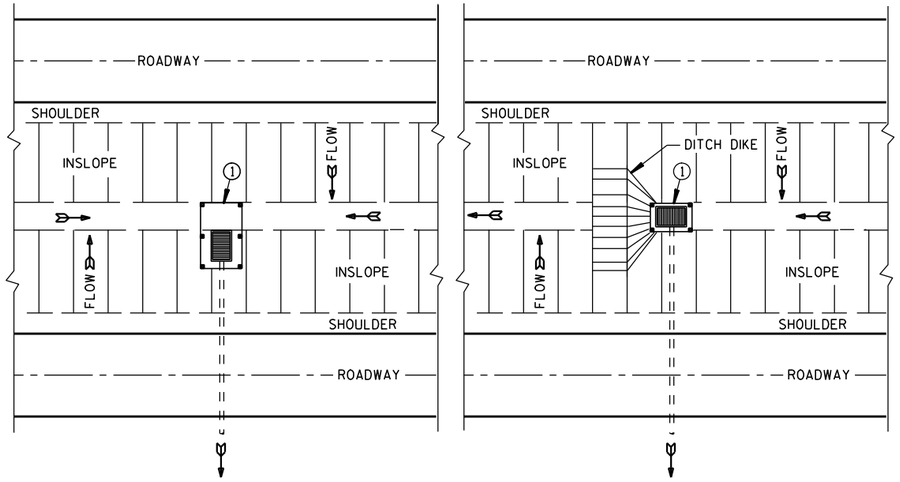
6

S.D.D. 8 D 5-19g



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



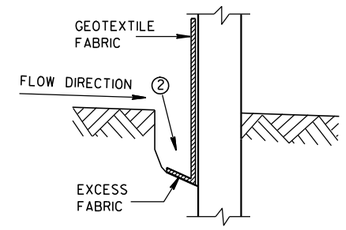
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

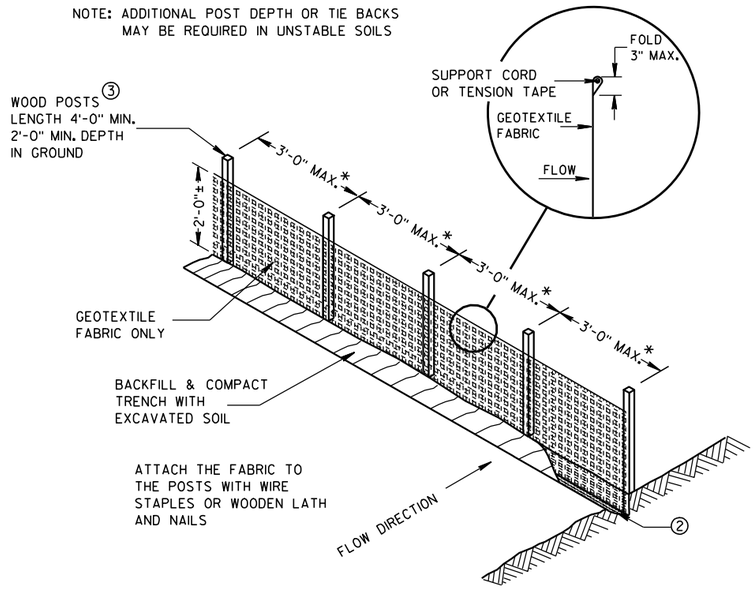
GENERAL NOTES

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

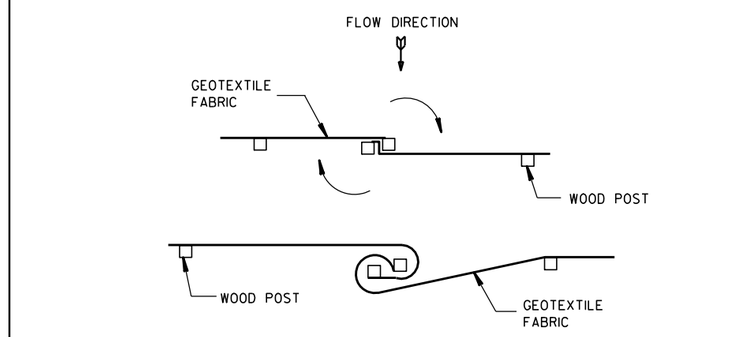
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



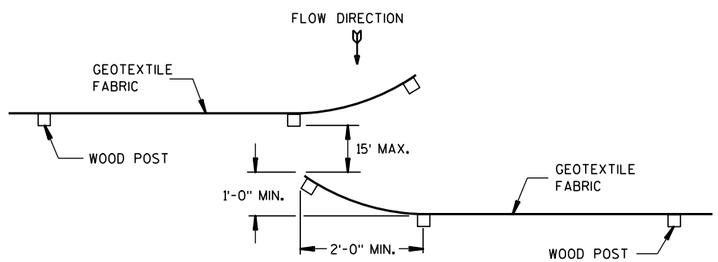
TRENCH DETAIL



SILT FENCE

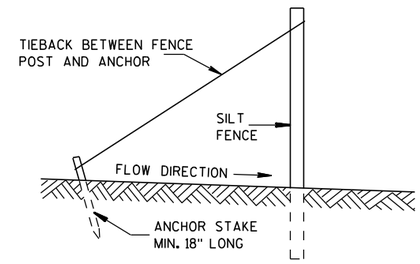


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

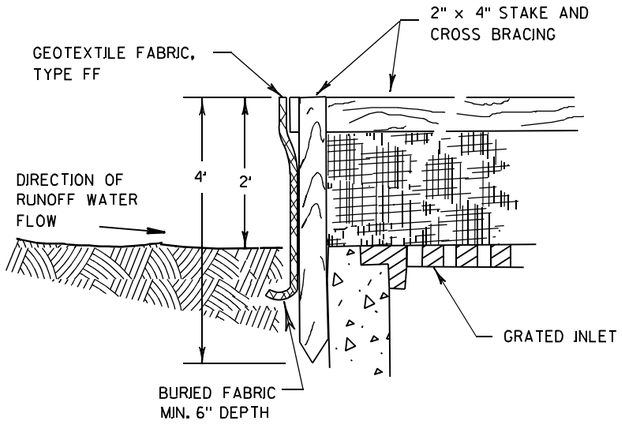
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

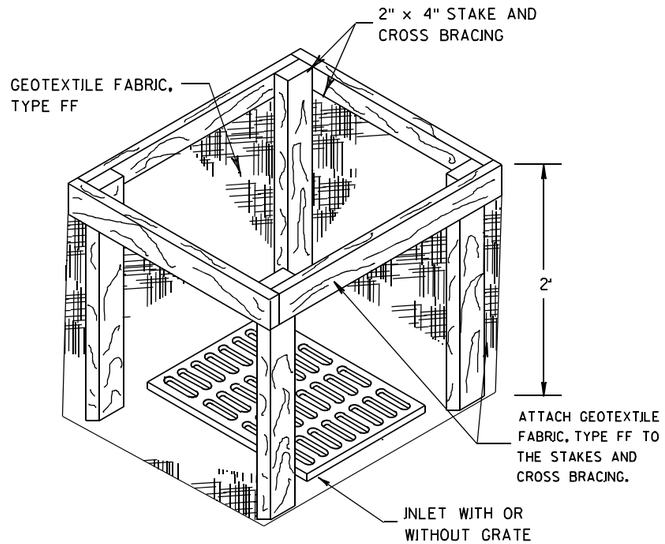
6

S.D.D. 8 E 9-6

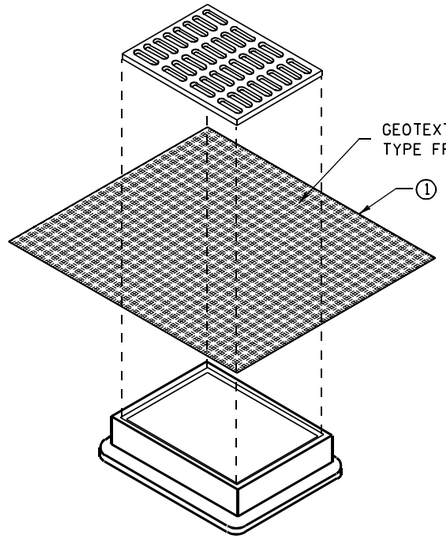
6

S.D.D. 8 E 9-6



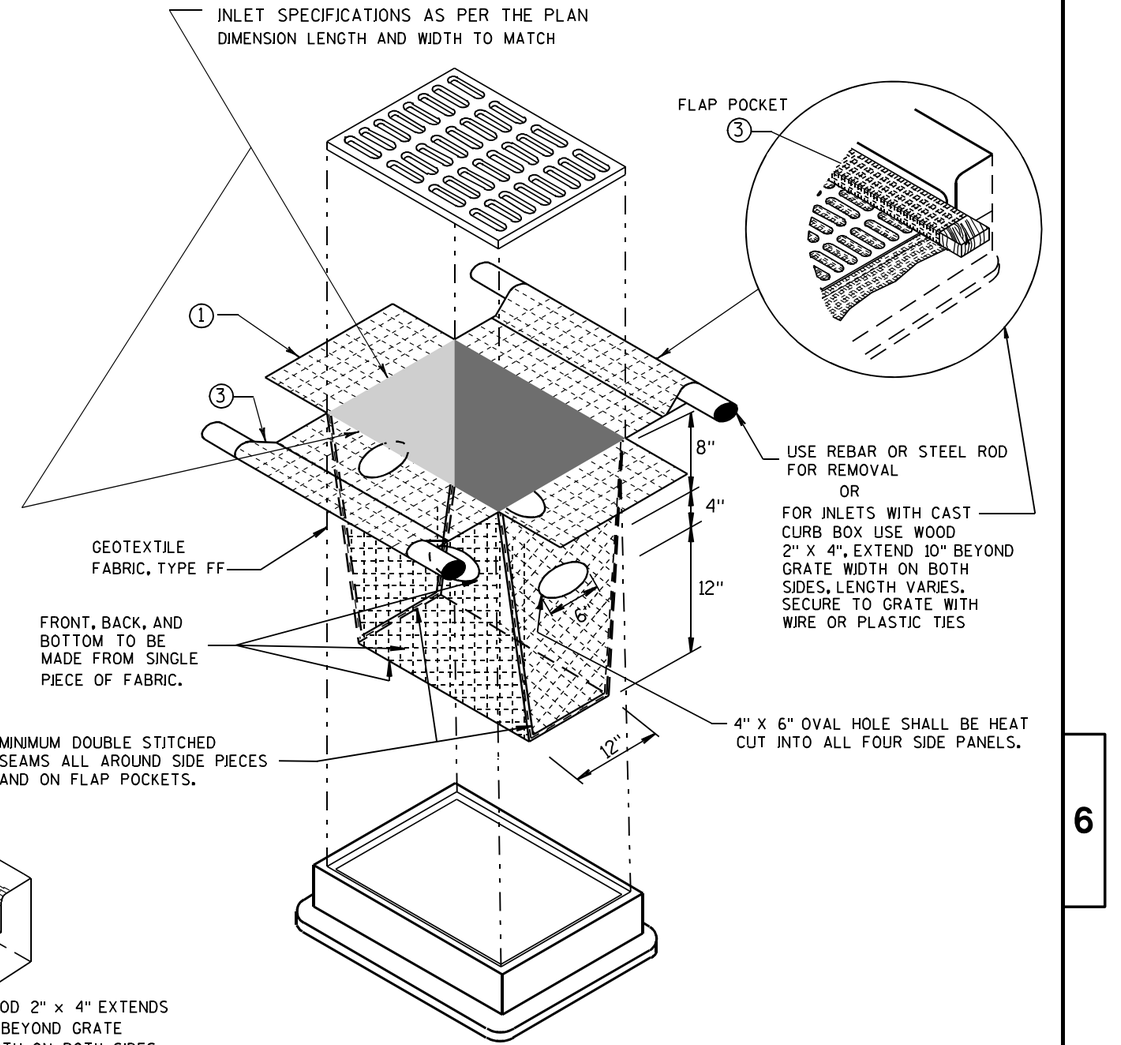


INLET PROTECTION, TYPE A



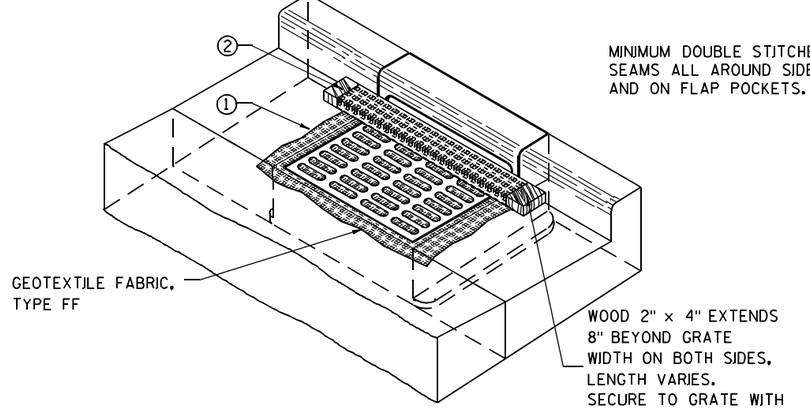
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

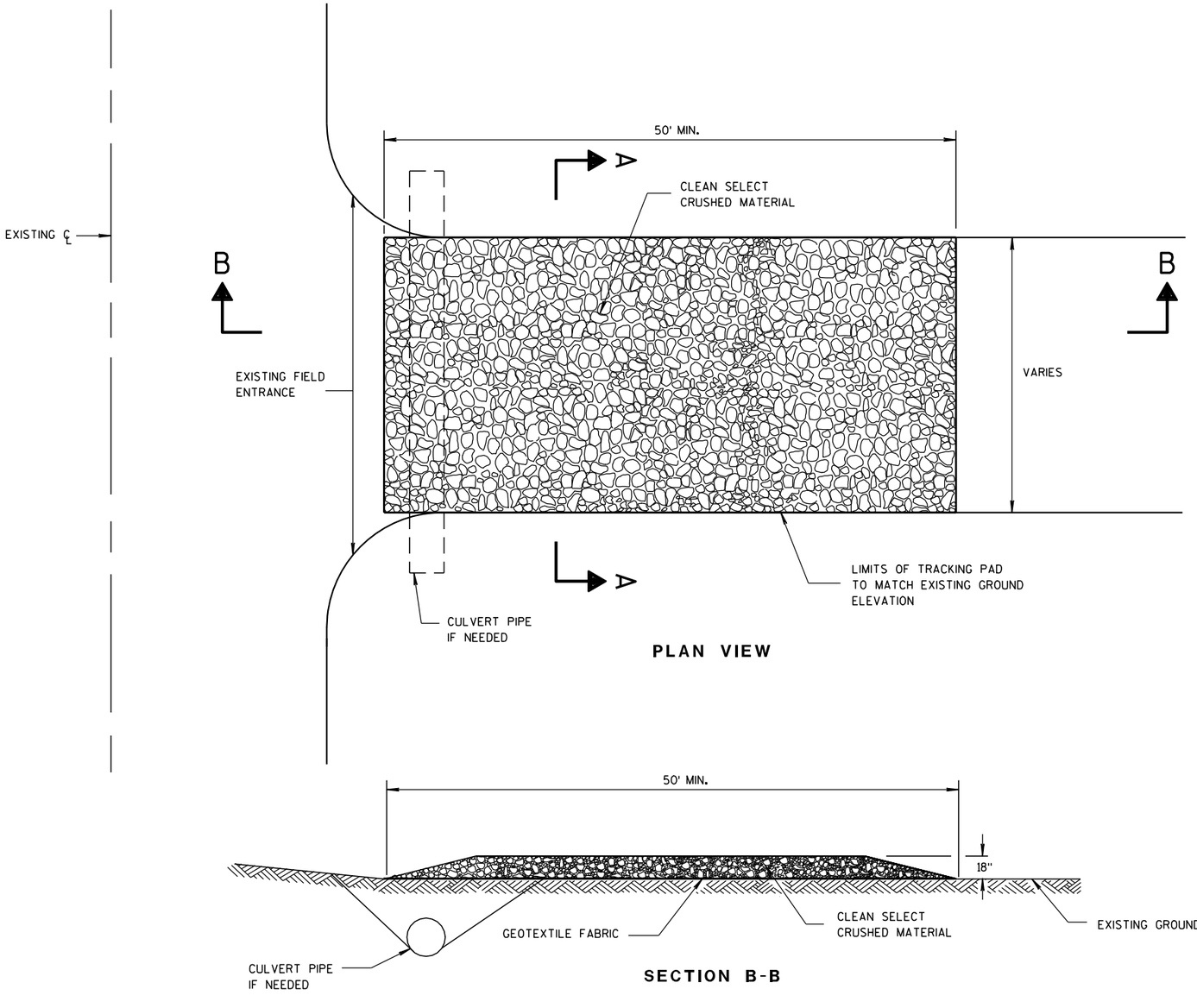
APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

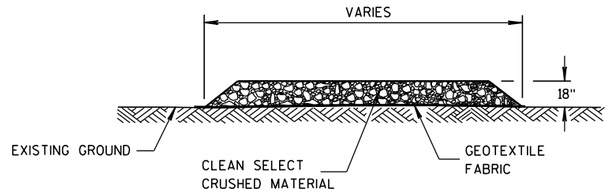
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

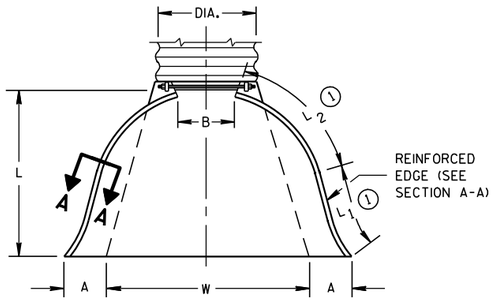
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

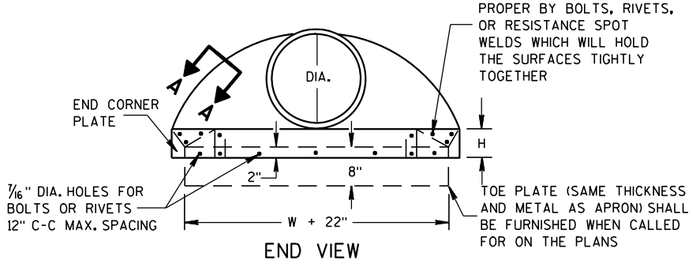
REINFORCED CONCRETE APRON ENDWALLS

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

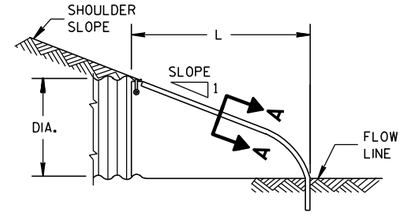
*MINIMUM
**MAXIMUM



PLAN VIEW

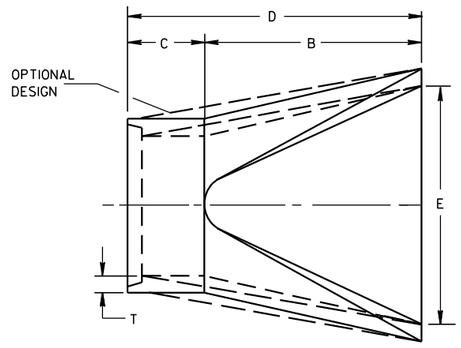


END VIEW

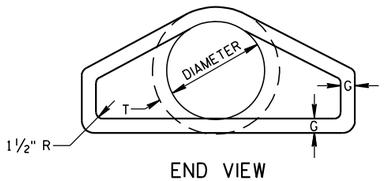


SIDE ELEVATION

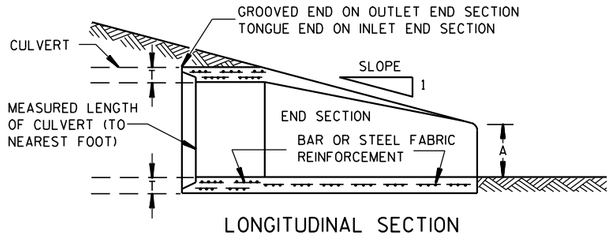
METAL ENDWALLS



PLAN

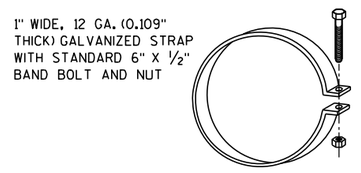


END VIEW



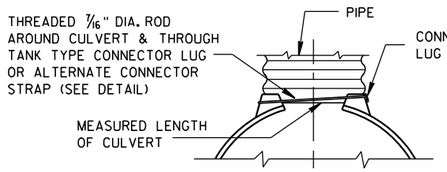
LONGITUDINAL SECTION

CONCRETE ENDWALLS

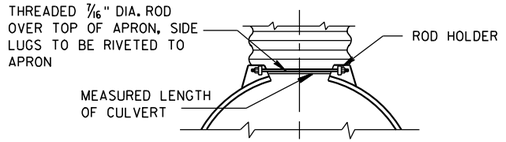


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

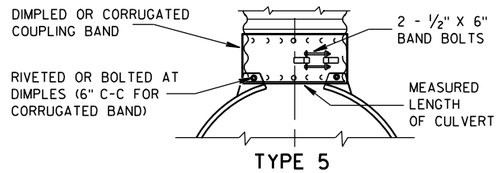


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

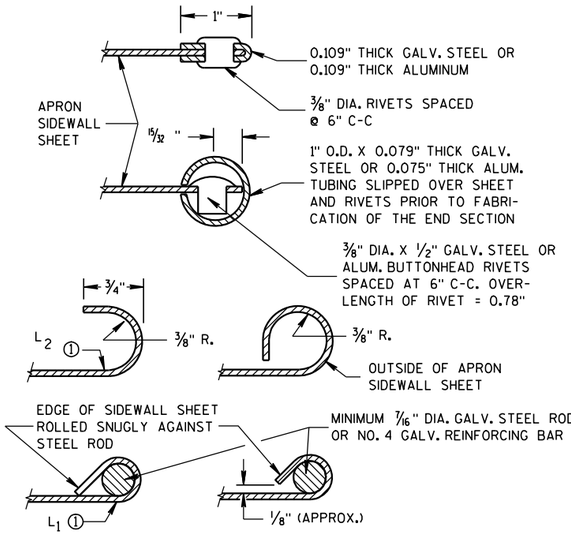
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

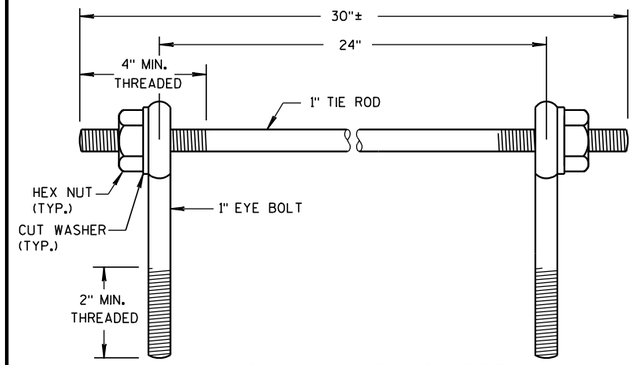
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

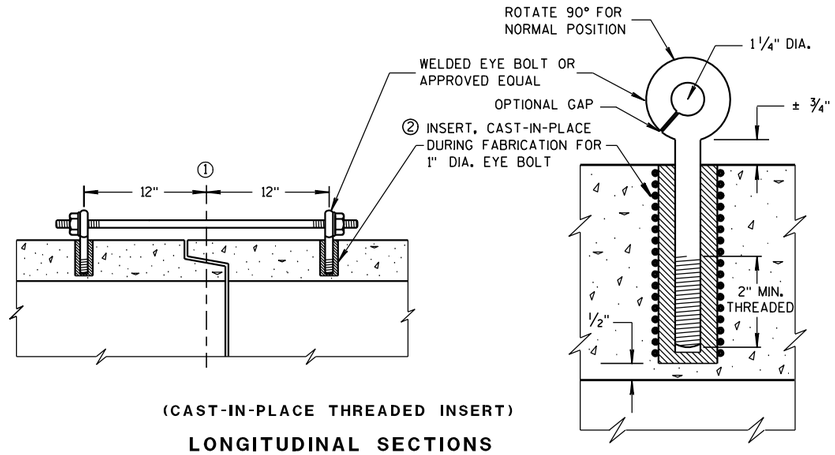
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

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

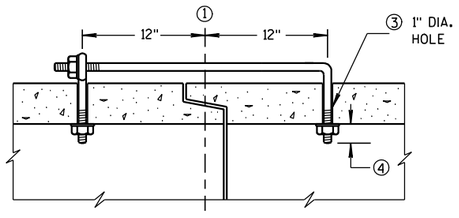
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

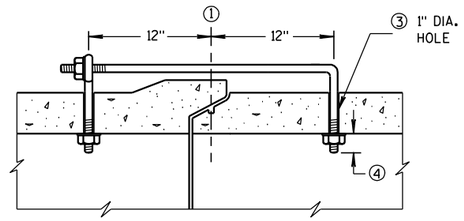
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

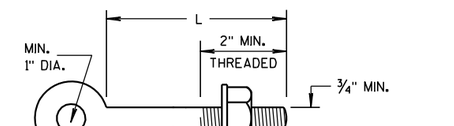


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

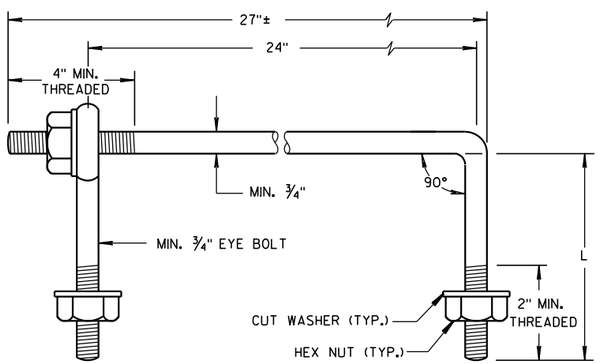
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

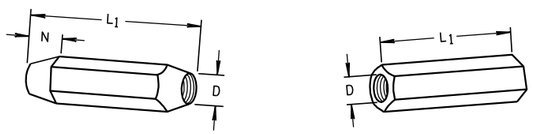
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

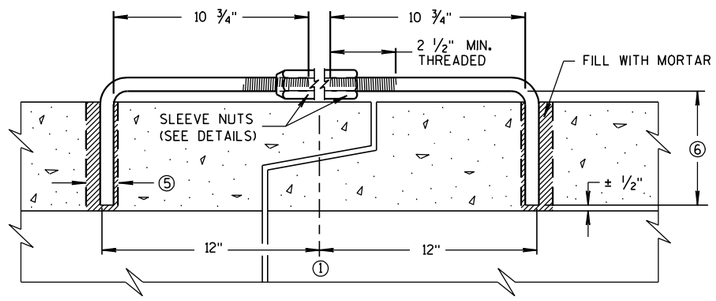
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

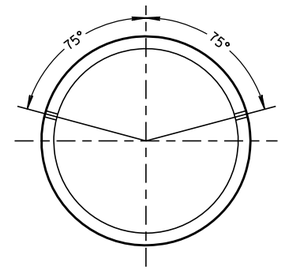
SLEEVE NUTS



LONGITUDINAL SECTION

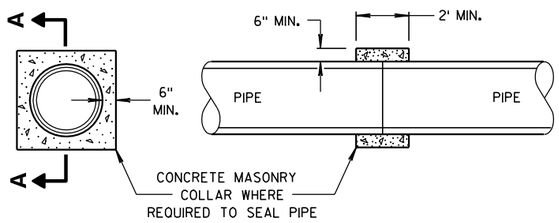
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

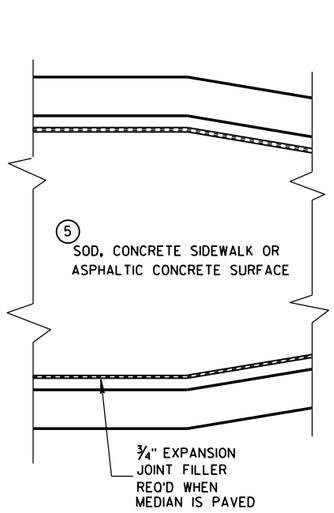
APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

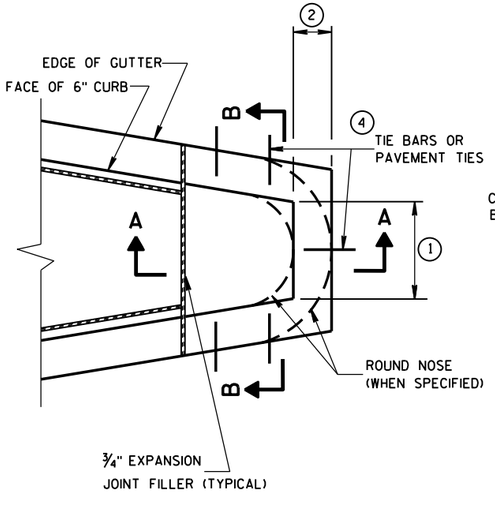
6

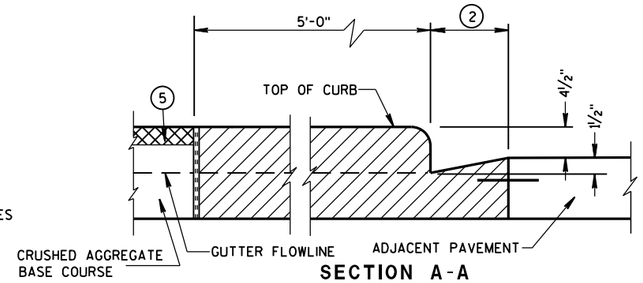
S.D.D. 8 F 4-7

6

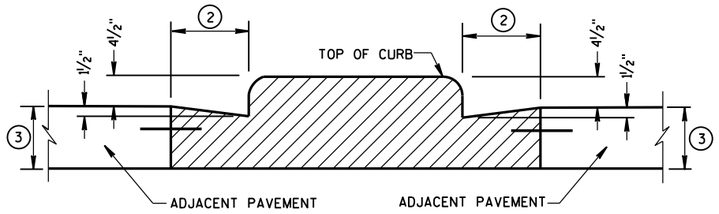
S.D.D. 8 F 4-7







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

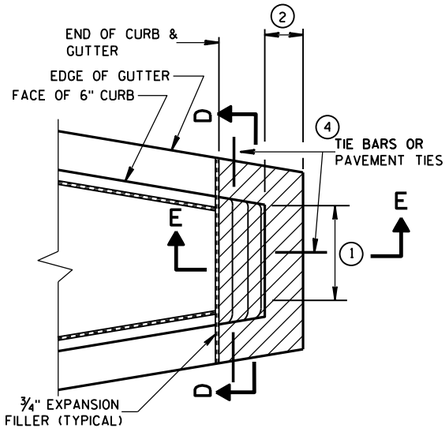
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

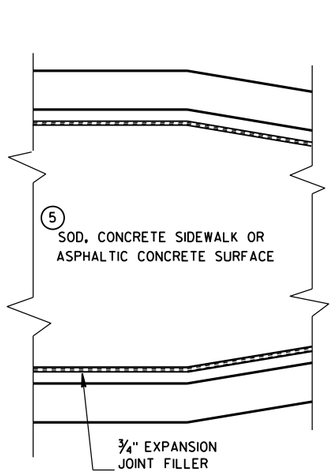
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

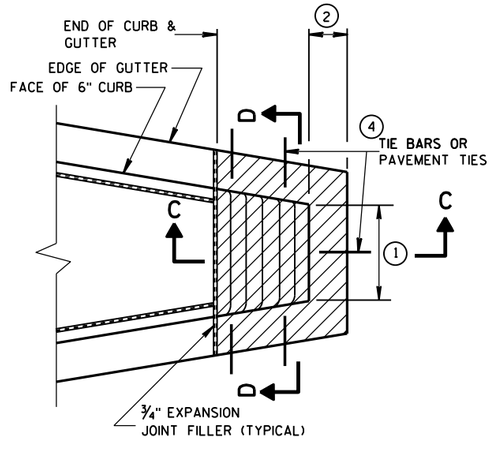
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

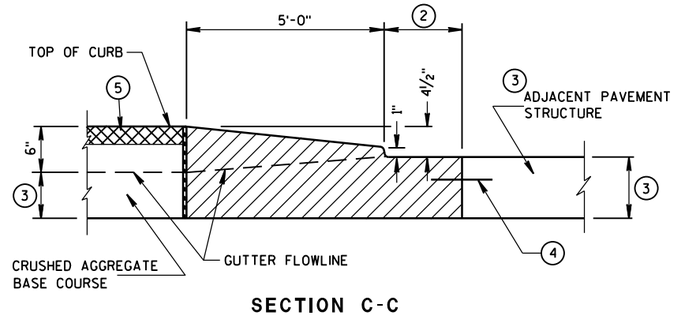
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



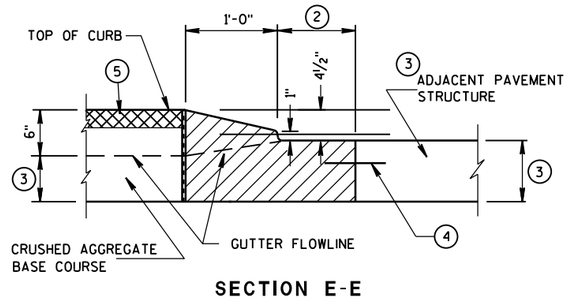




CONCRETE MEDIAN SLOPED NOSE TYPE 1

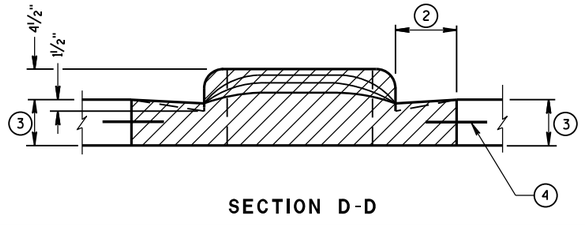


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2

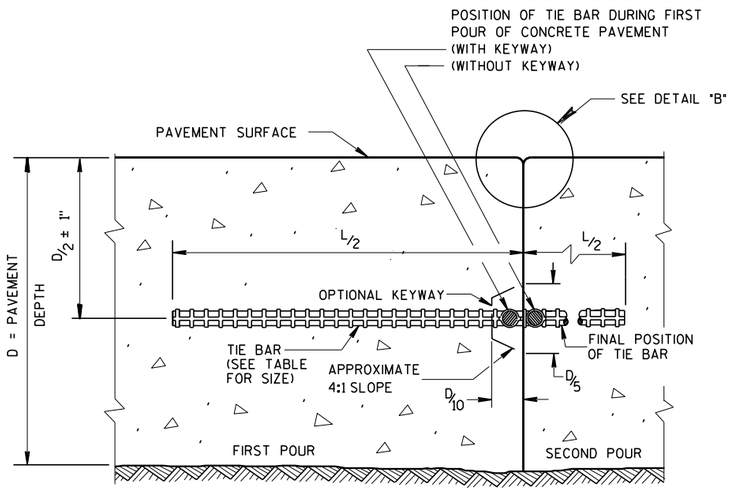


SECTION D-D

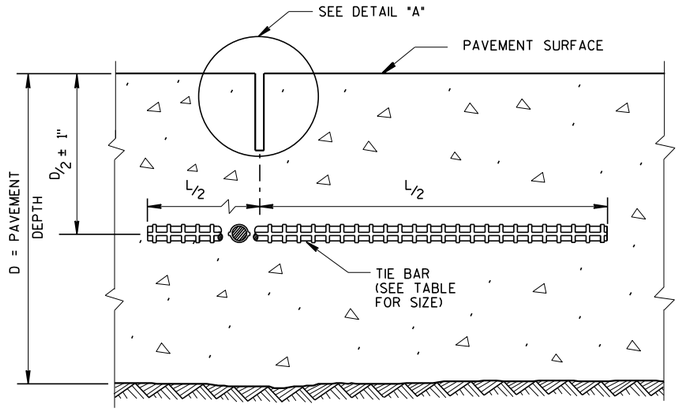
CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA



CONSTRUCTION JOINT



SAWED JOINT

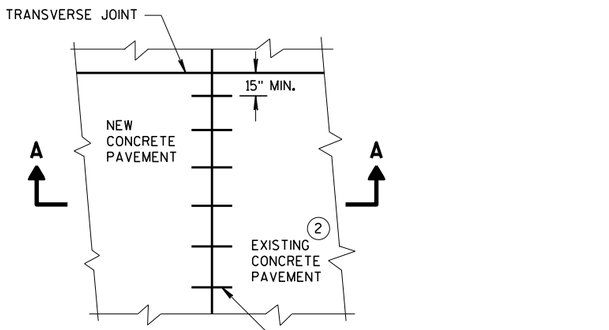
GENERAL NOTES

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

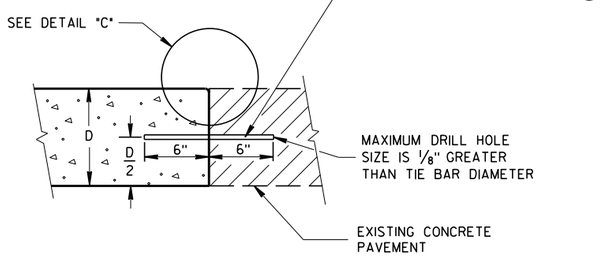
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

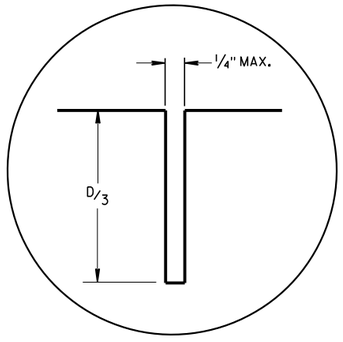


PLAN VIEW

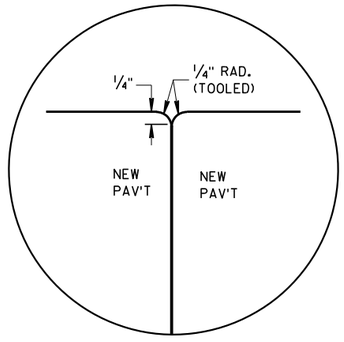


SECTION A-A

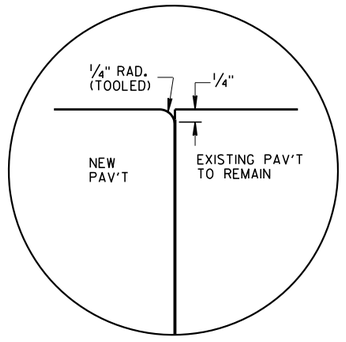
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



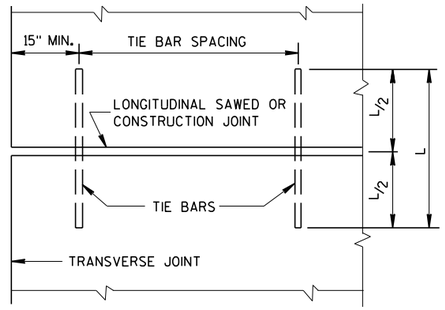
DETAIL "C"

TIE BAR TABLE

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

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

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

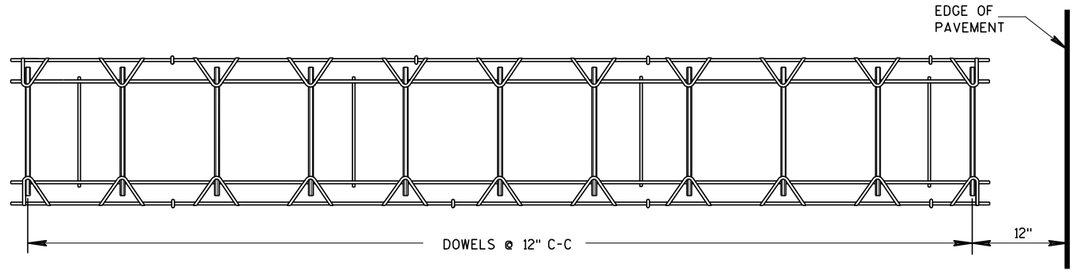


PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

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

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

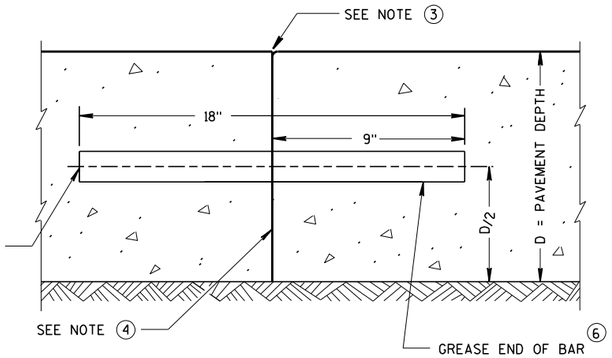
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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

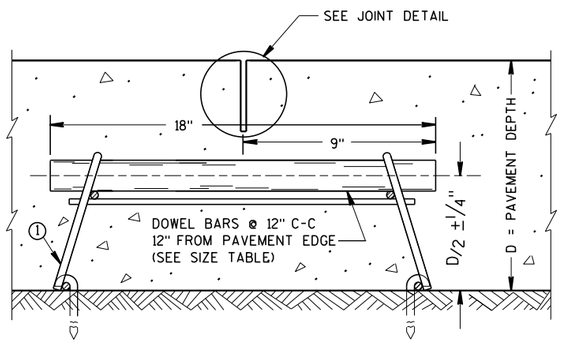
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL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

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

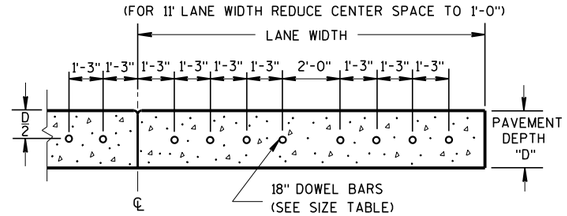
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



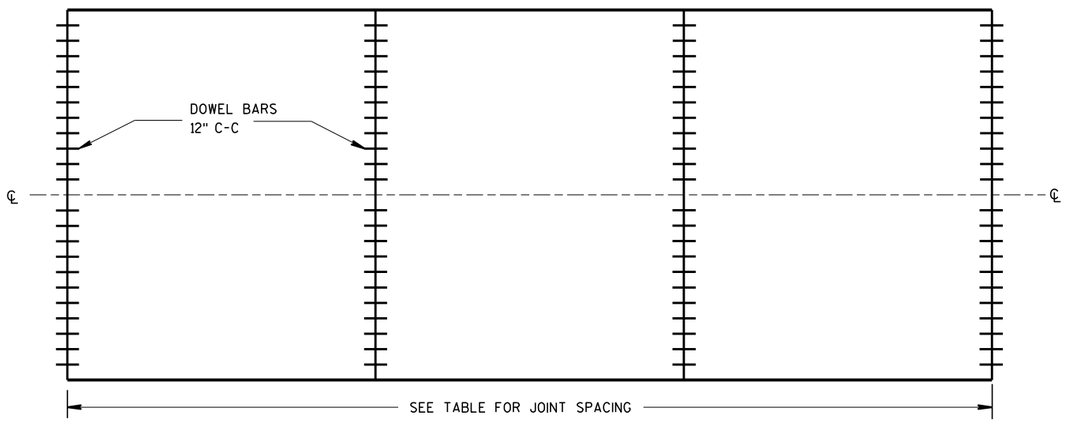
TRANSVERSE CONSTRUCTION JOINT



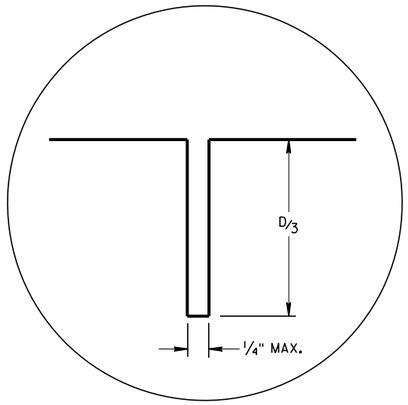
DOWELED CONTRACTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

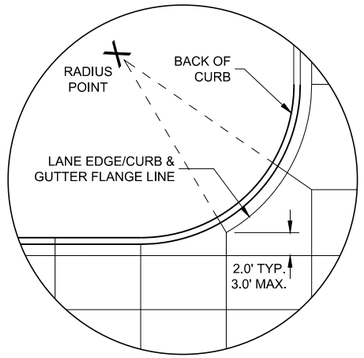
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

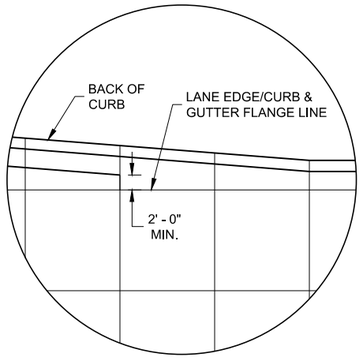
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

6

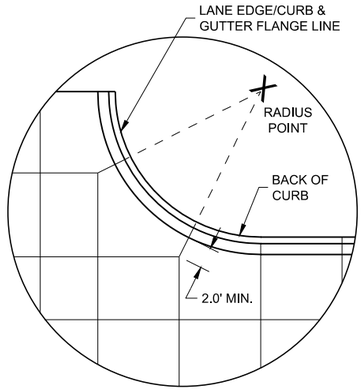
S.D.D. 13 C 13-9



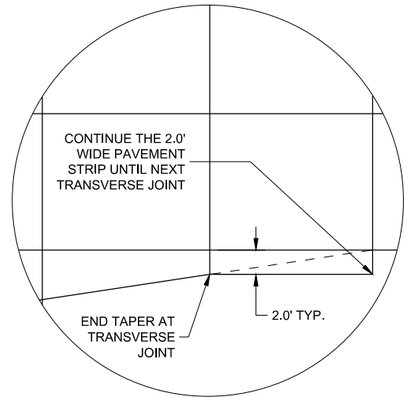
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

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

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

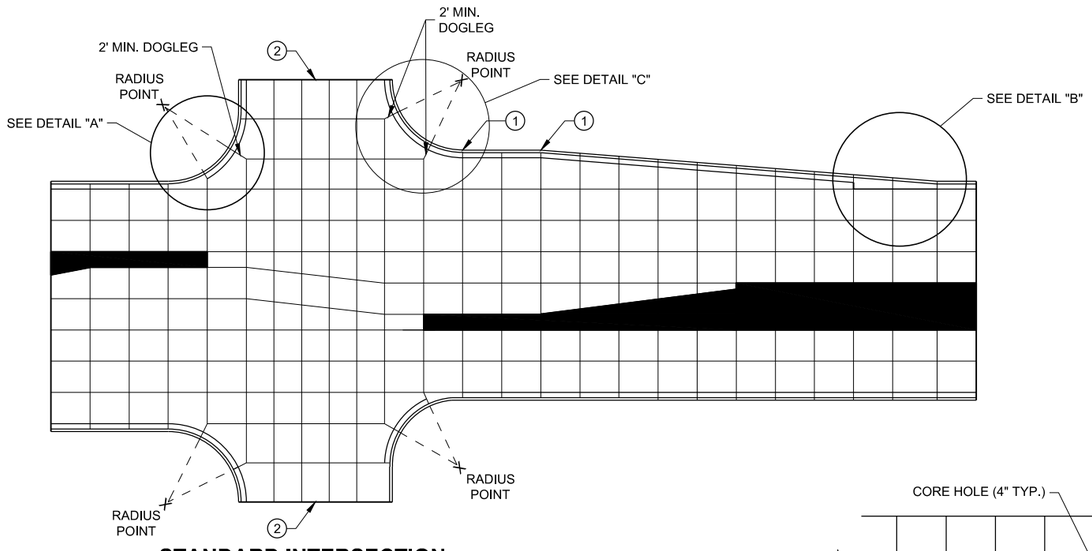
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

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

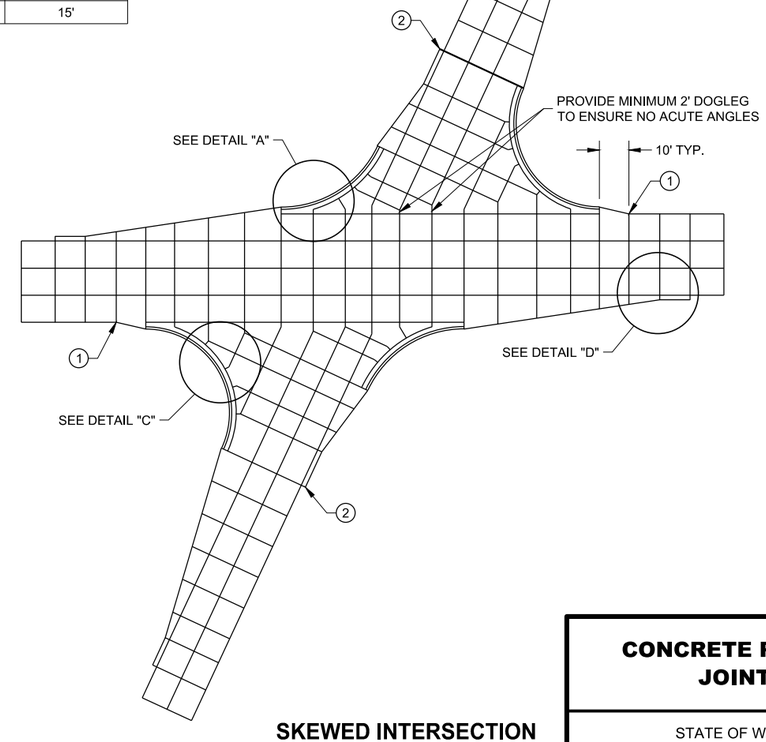
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



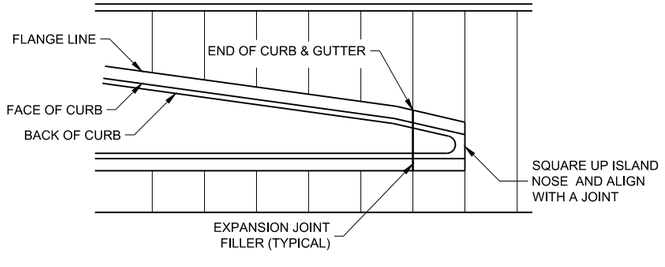
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

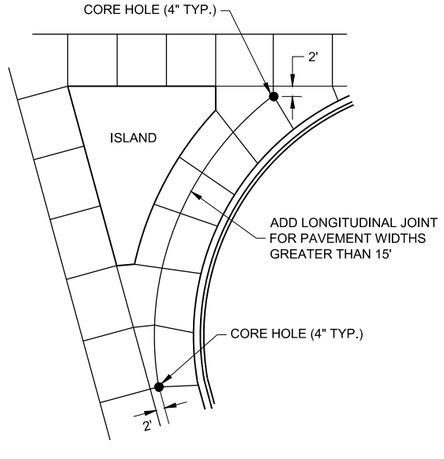
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT 147

SDD 13C18 - 07a

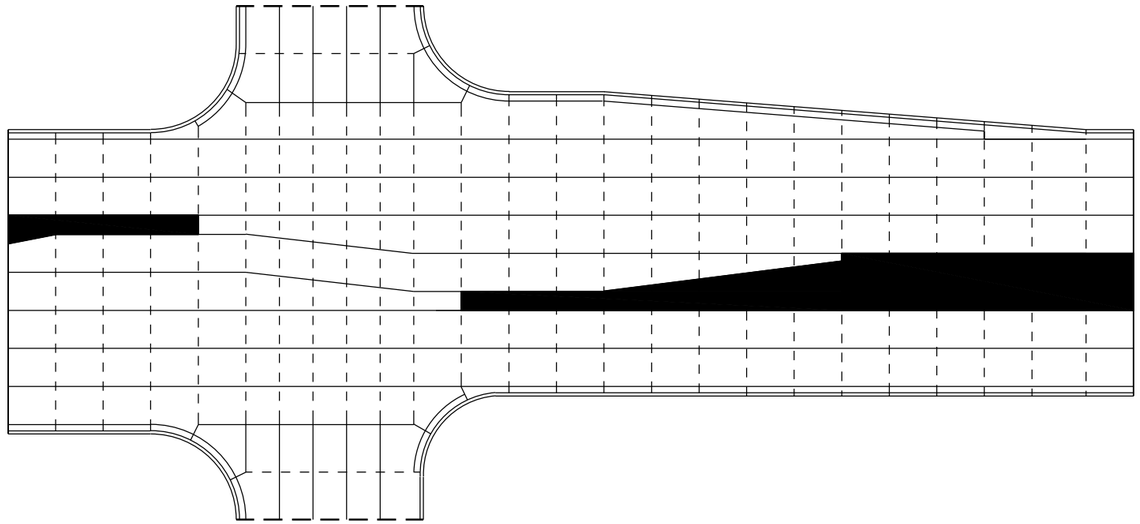
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

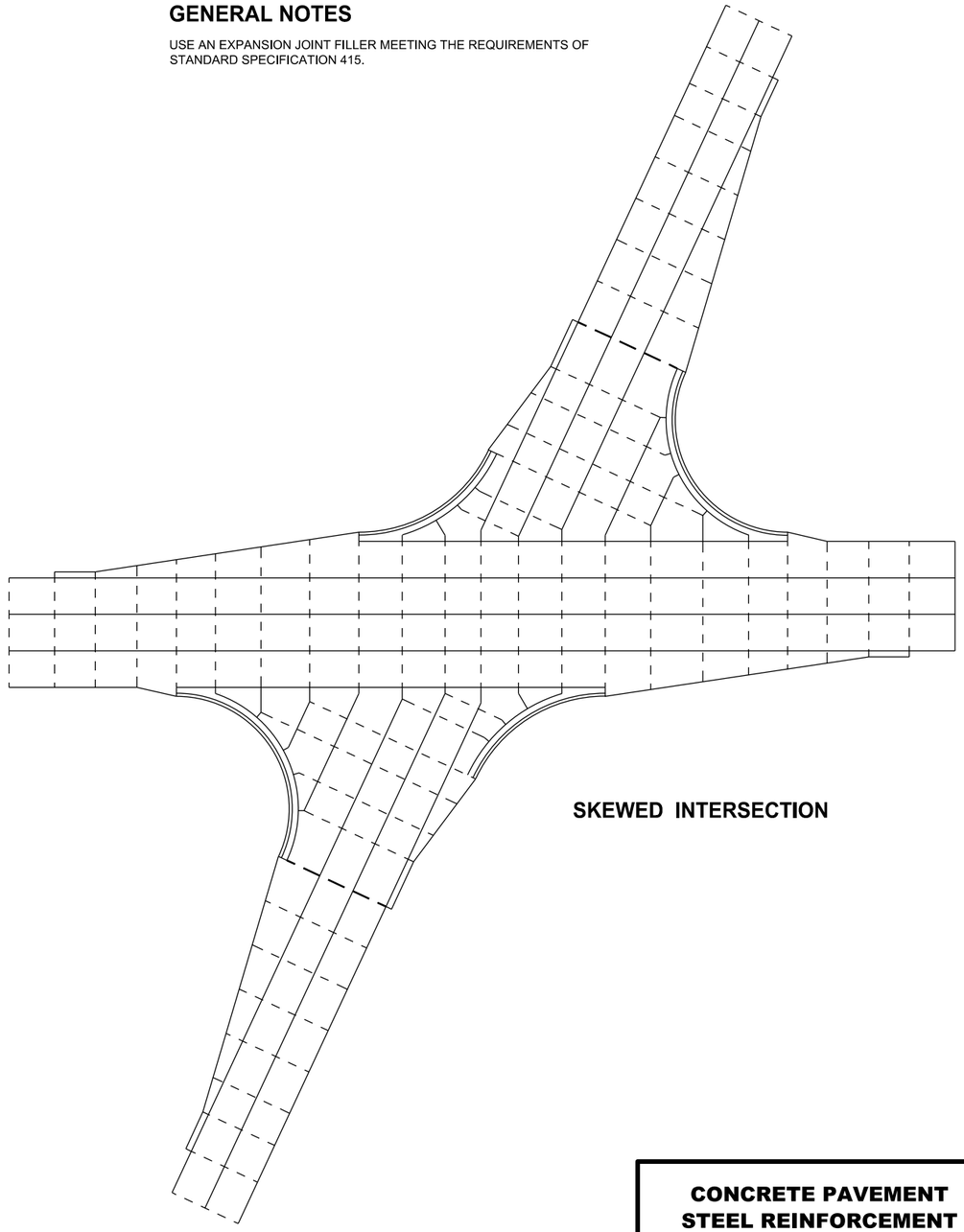
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

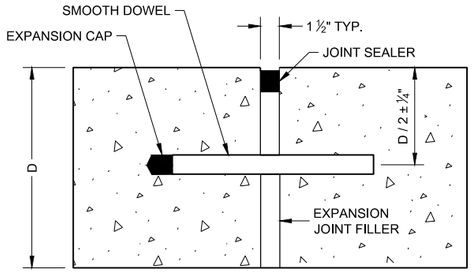
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

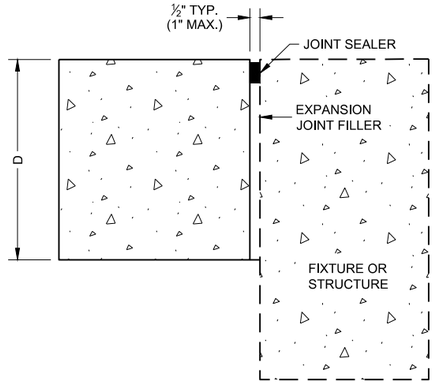
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

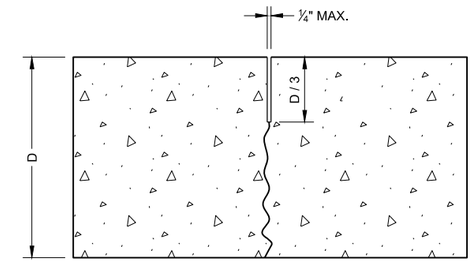
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

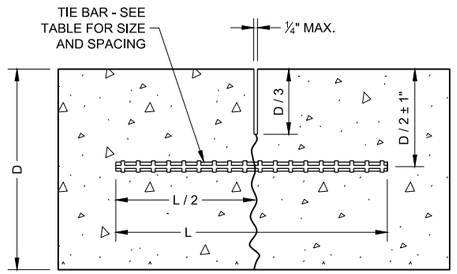
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

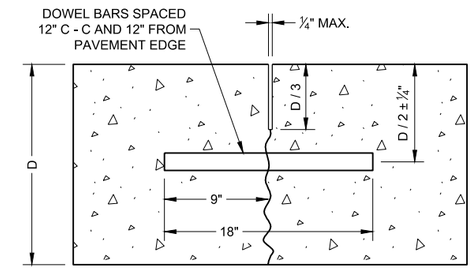
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM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

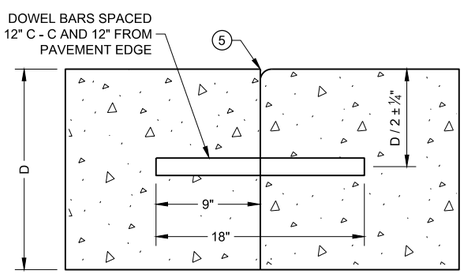


TIED LONGITUDINAL

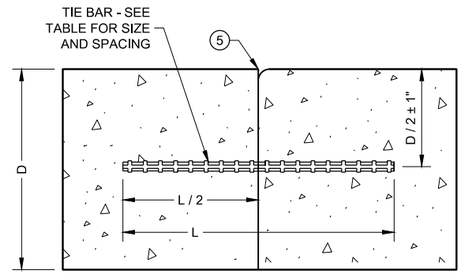


DOWELED TRANSVERSE

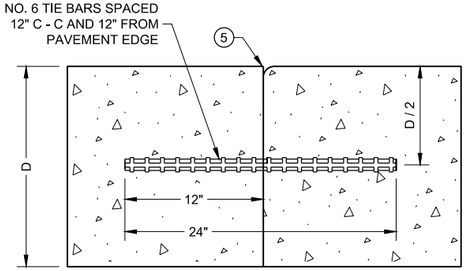
CONTRACTION JOINTS (2)



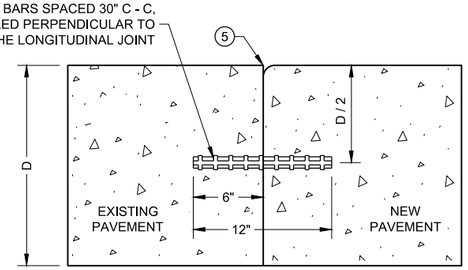
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



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



TIED LONGITUDINAL TO EXISTING

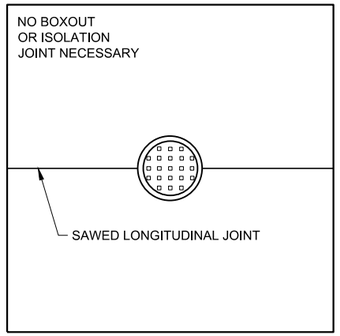
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

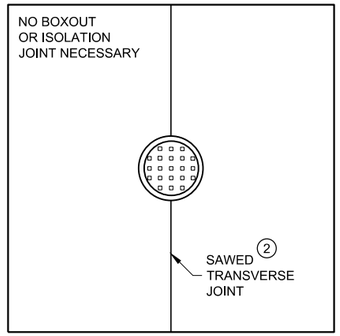
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

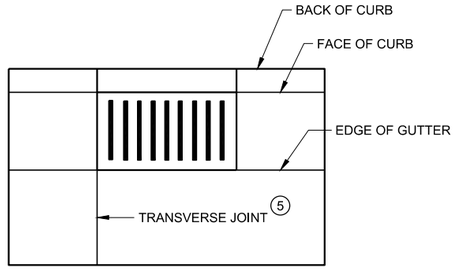
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



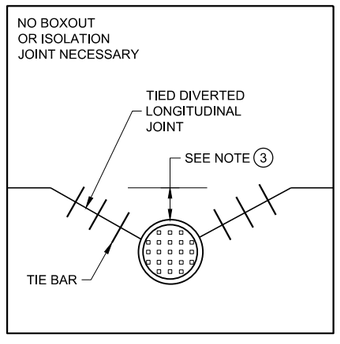
MANHOLE WITH TRANSVERSE JOINT



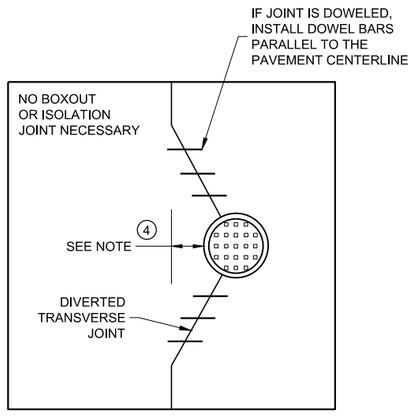
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

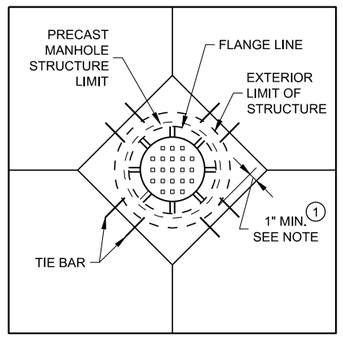
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF 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

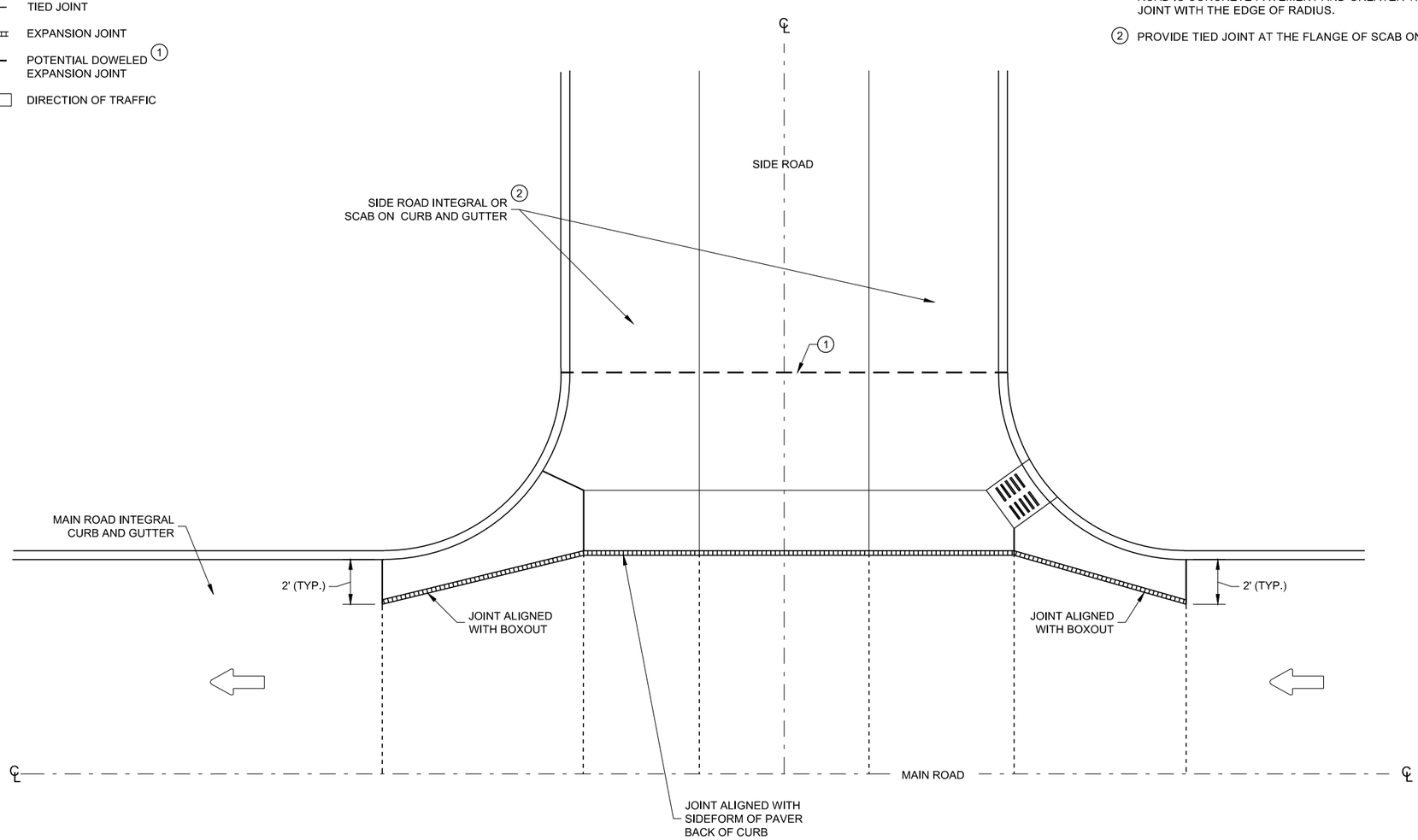
FHWA

6

SDD 13C18 - 07d
SDD 13C18 - 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

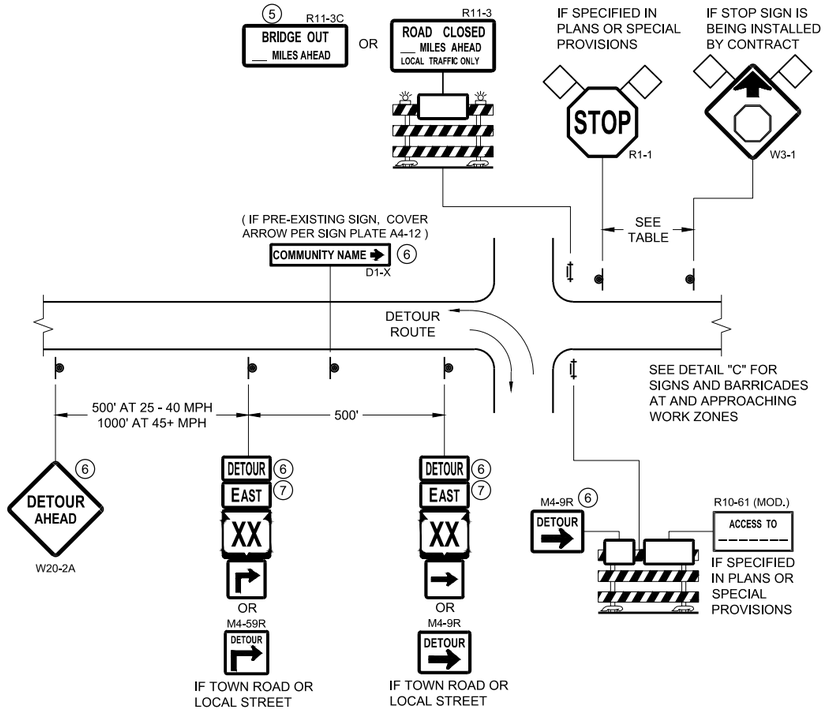
FHWA

6

SDD 13C18 - 07f

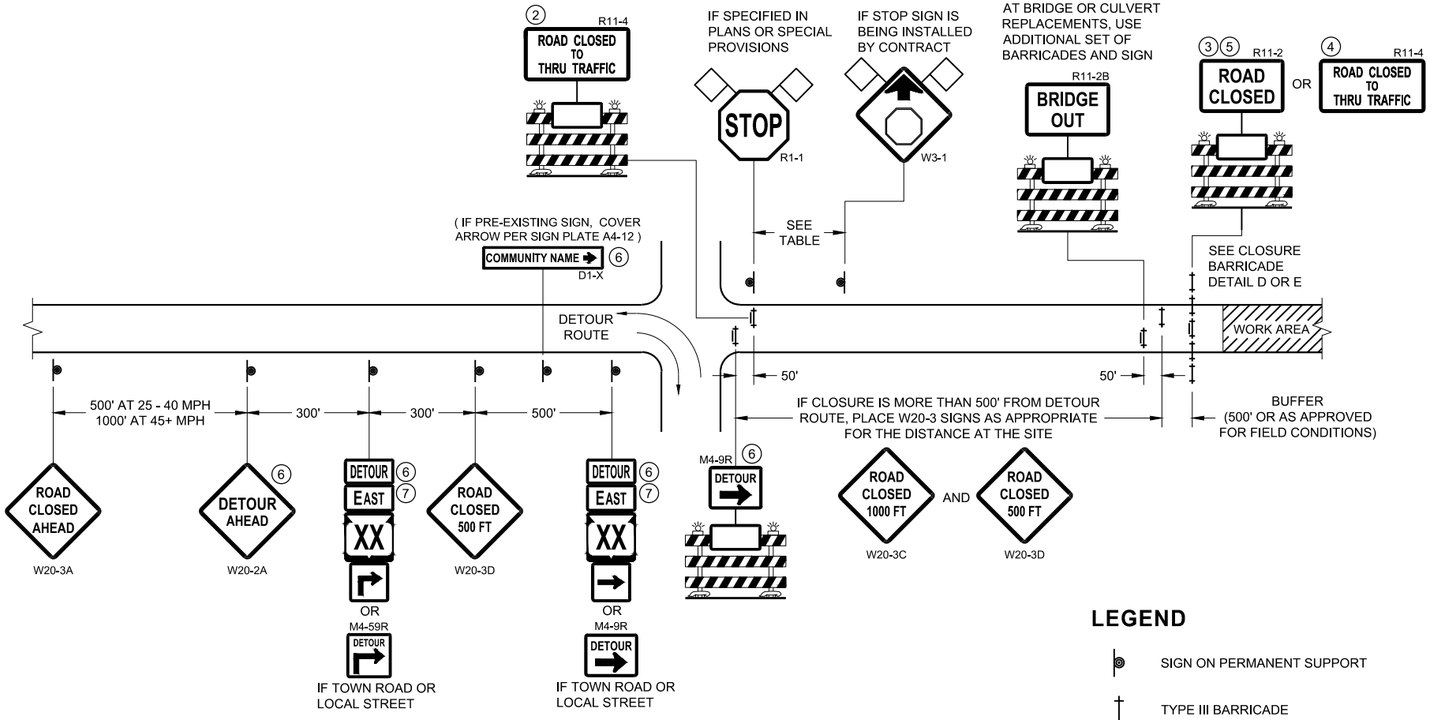
6

SDD 13C18 - 07f



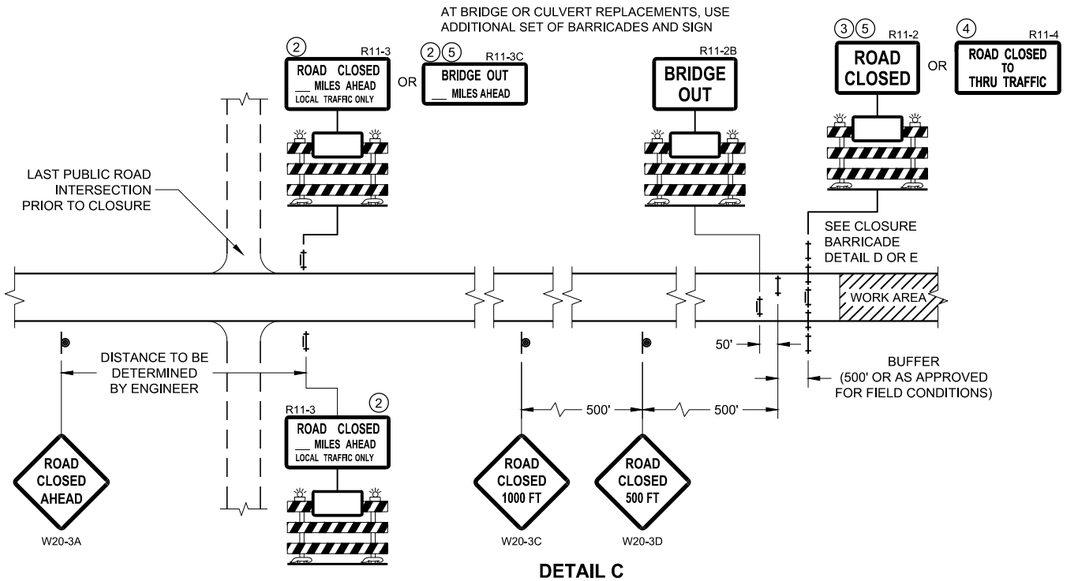
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

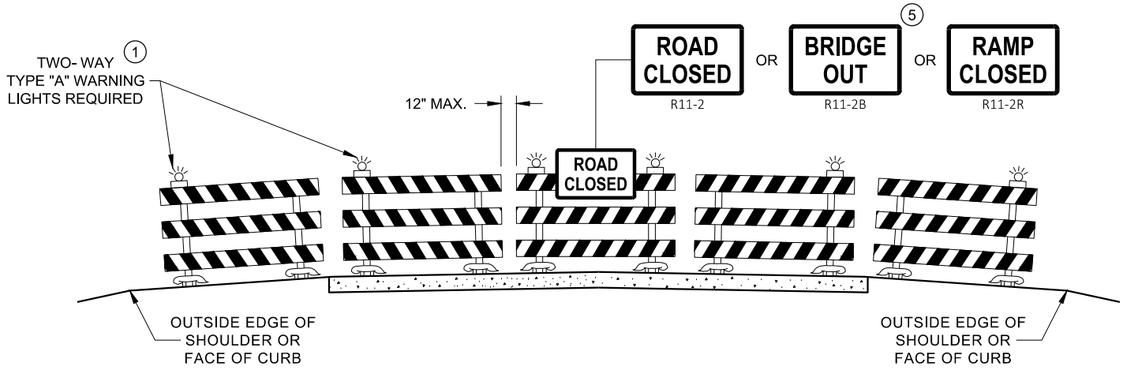
APPROVED
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

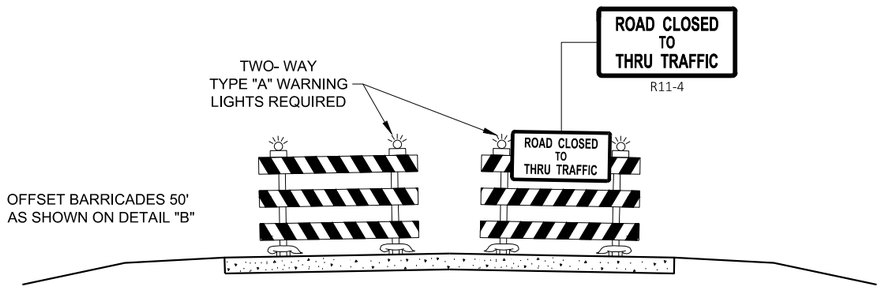
6

SDD 15C02 - 07a

SDD 15C02 - 07a



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
November 2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

6

SDD 15C02 - 07b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

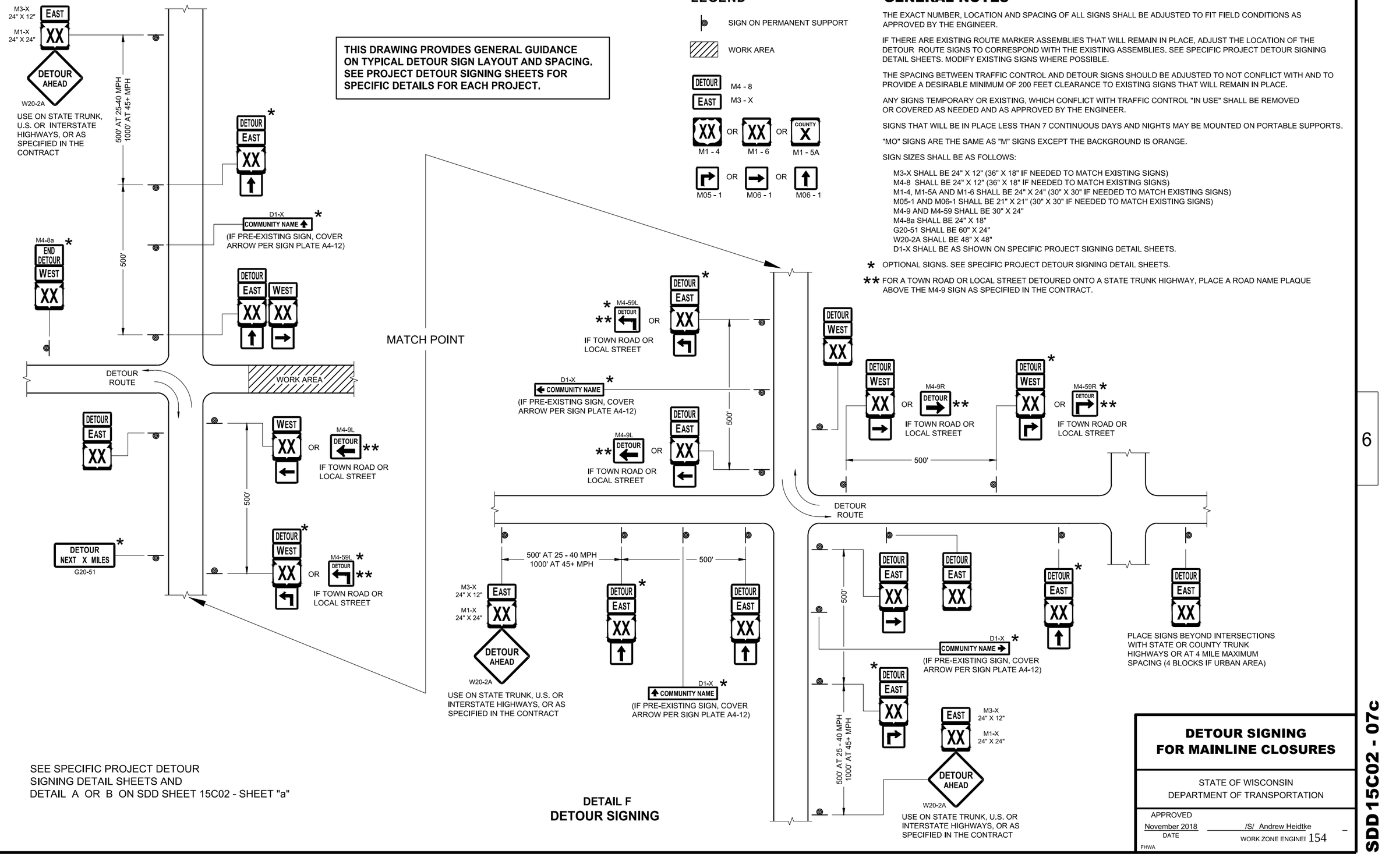
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
M4-9 AND M4-59 SHALL BE 30" X 24"
M4-8a SHALL BE 24" X 18"
G20-51 SHALL BE 60" X 24"
W20-2A SHALL BE 48" X 48"
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

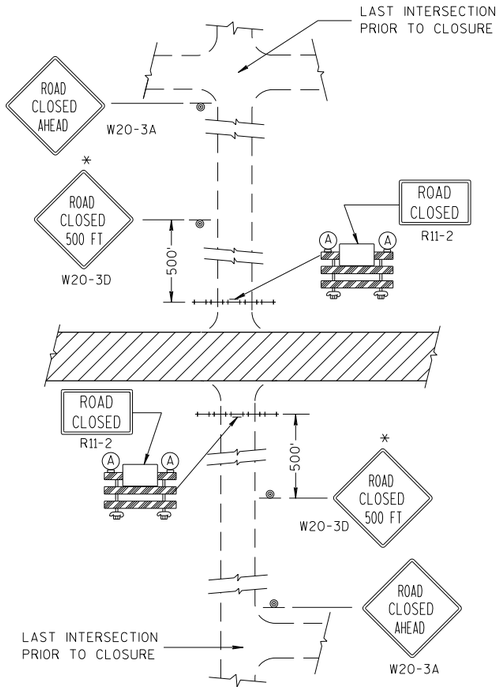
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

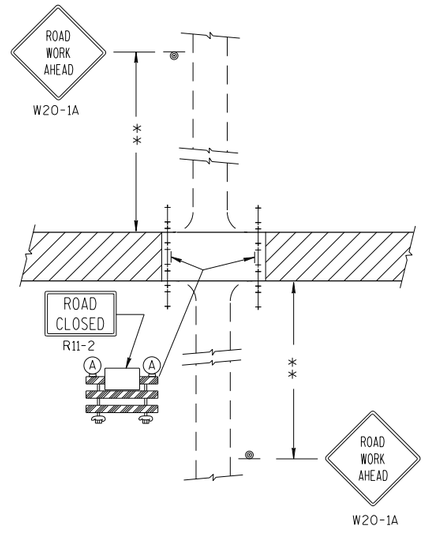
FHWA

SDD 15C02 - 07c



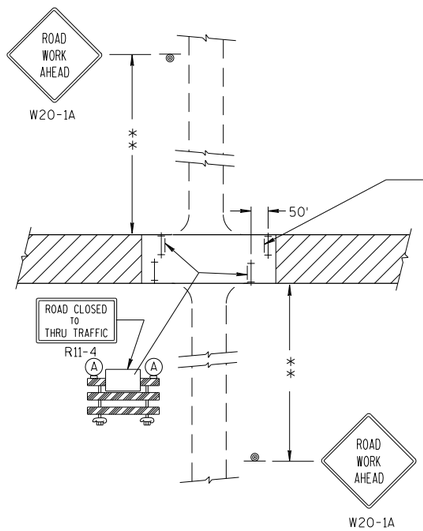
DETAIL 1

(NO ACCESS TO PROJECT)



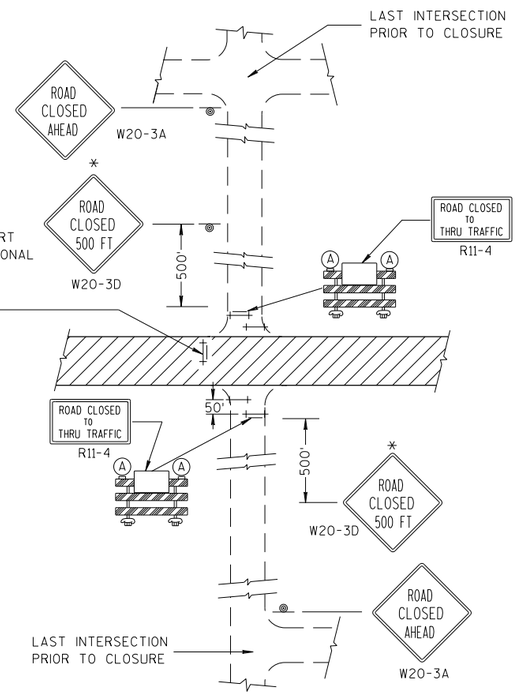
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

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

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

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

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

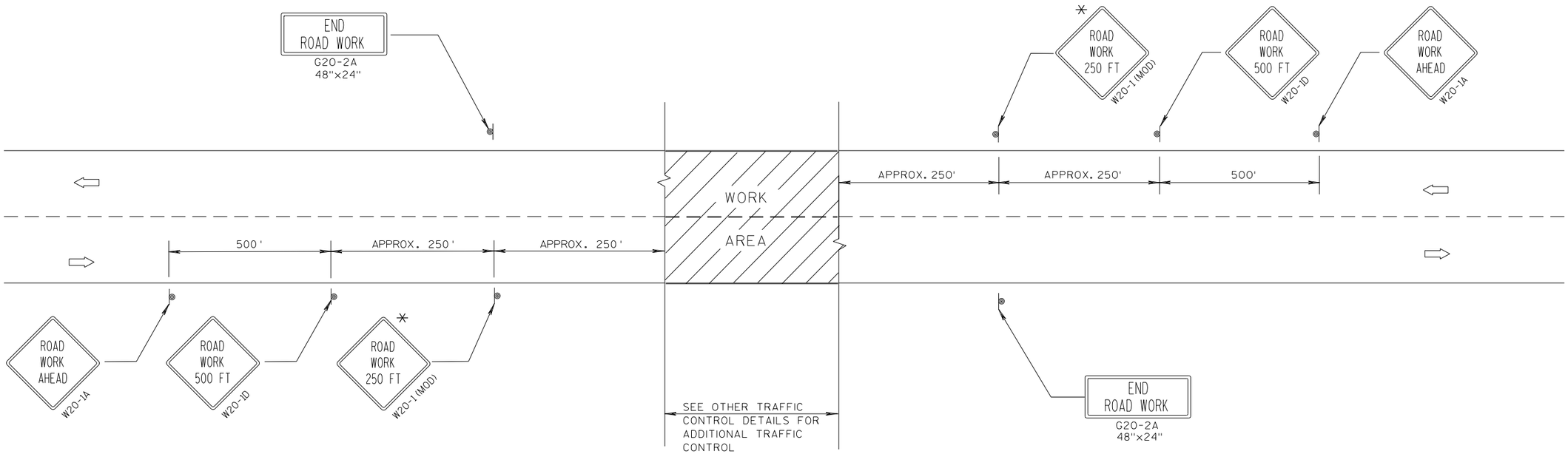
/S/ Andrew Heidtke
WORK ZONE ENGI

FHWA

6

S.D.D. 15 C 3-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

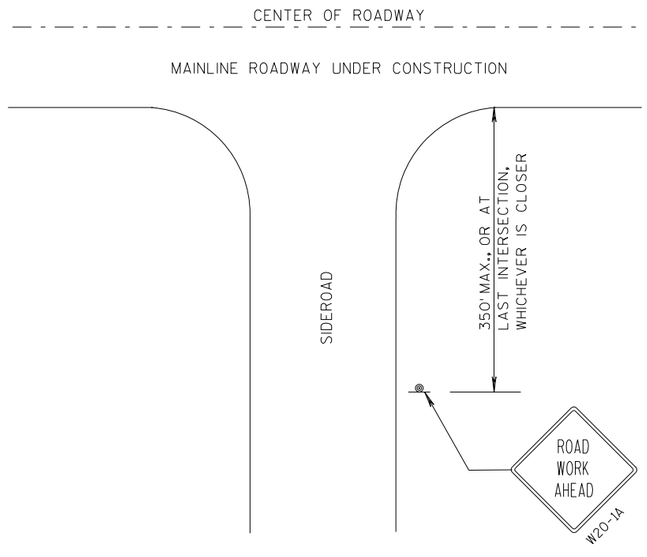
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

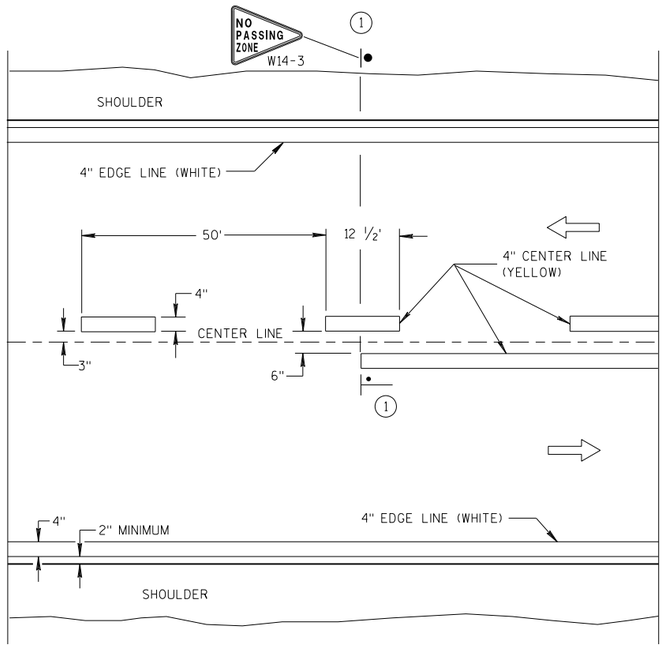
7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENGI

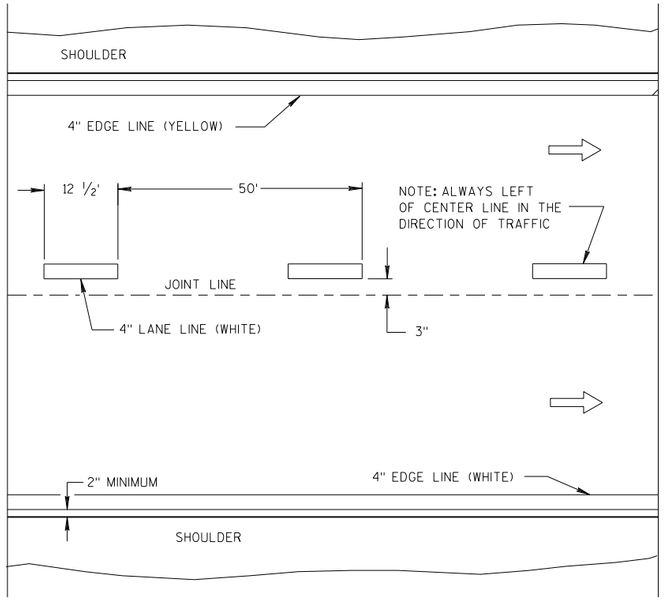
FHWA

6

S.D.D. 15 C 5-5



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

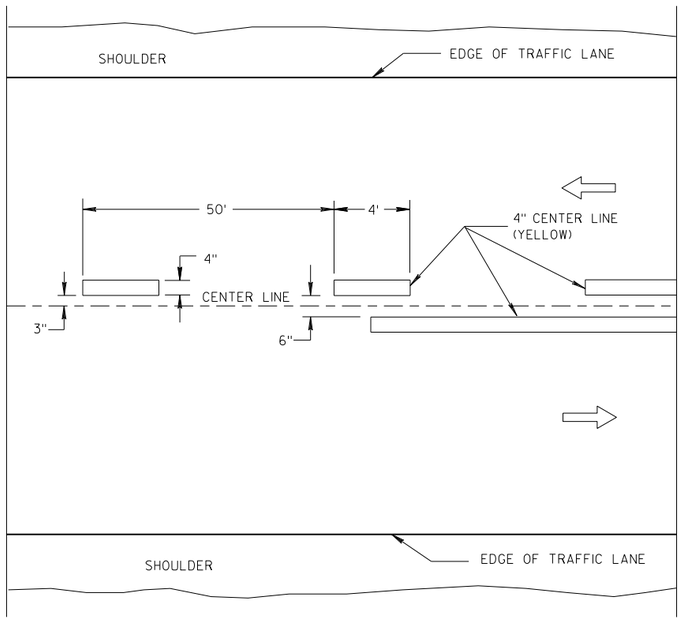
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

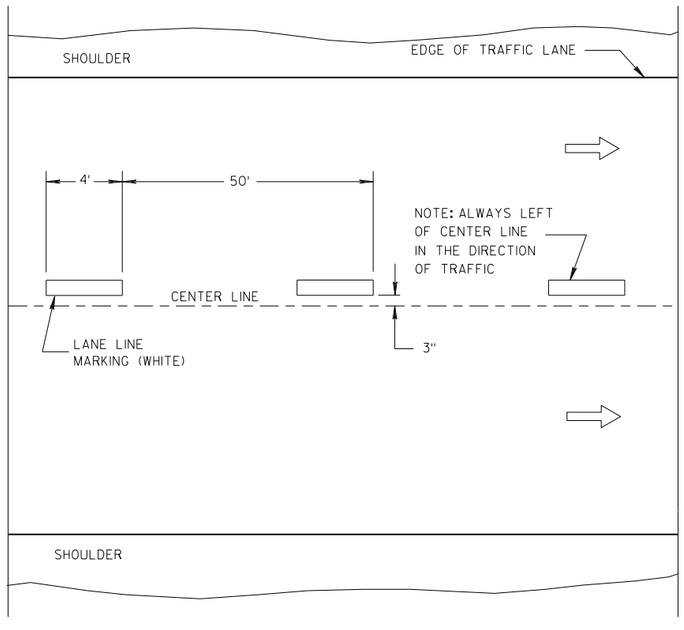
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

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

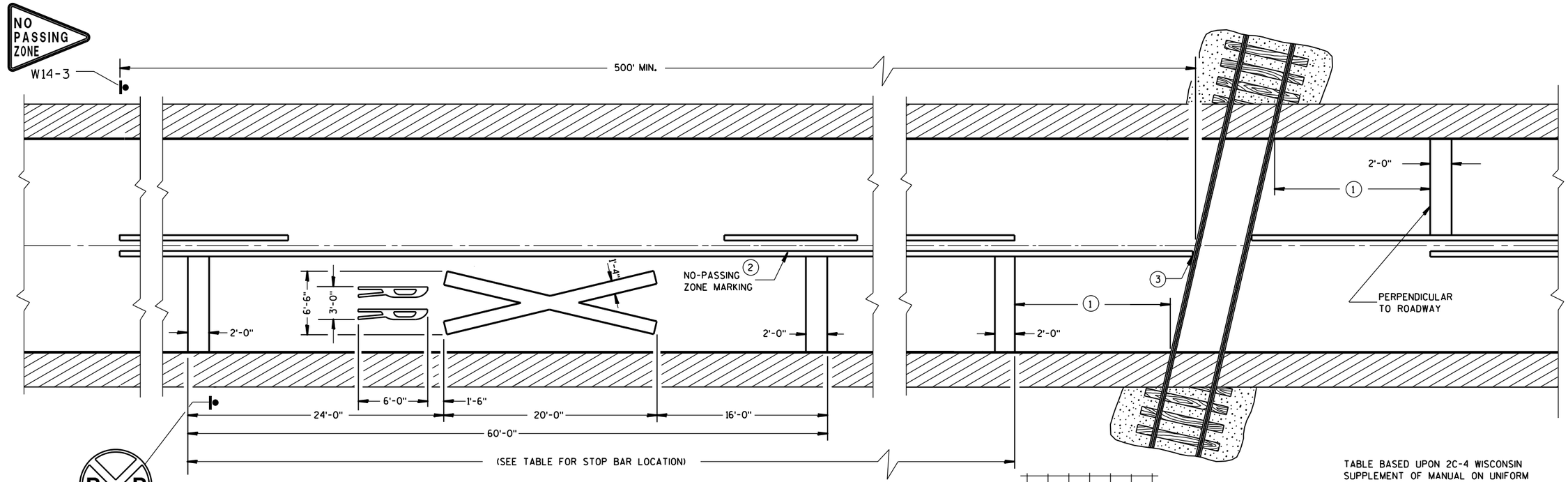
FHWA

6

S.D.D. 15 C 8-19a

6

S.D.D. 15 C 8-19a



PAVEMENT MARKING

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

GENERAL NOTES

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

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

RETRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAI[illegible]GINEER
FHWA

6

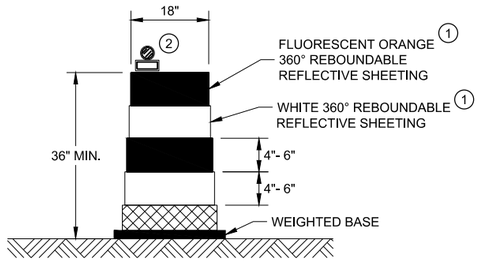
S.D.D. 15 C 9-11a

6

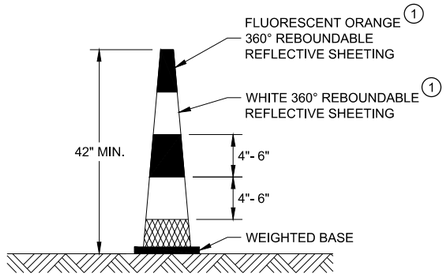
S.D.D. 15 C 9-11a

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.

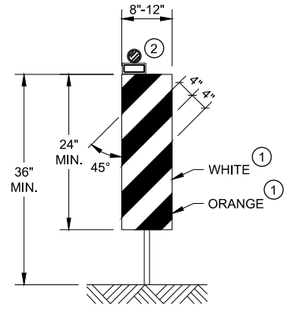


DRUM



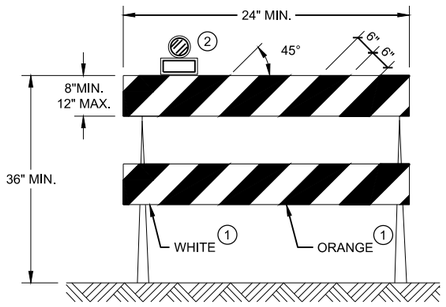
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



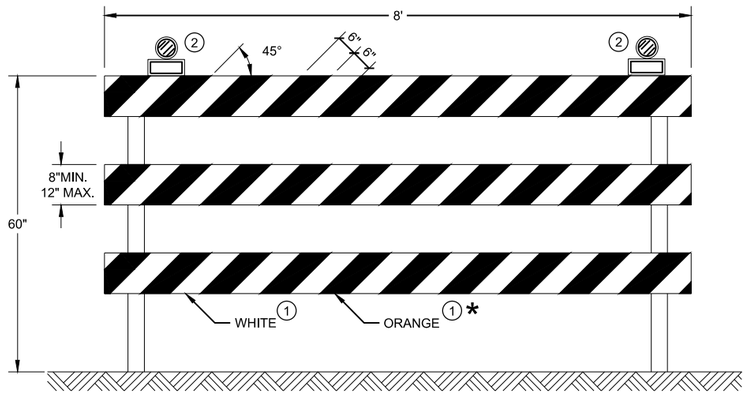
VERTICAL PANEL

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
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 07b

6

SDD 15C11 - 07b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

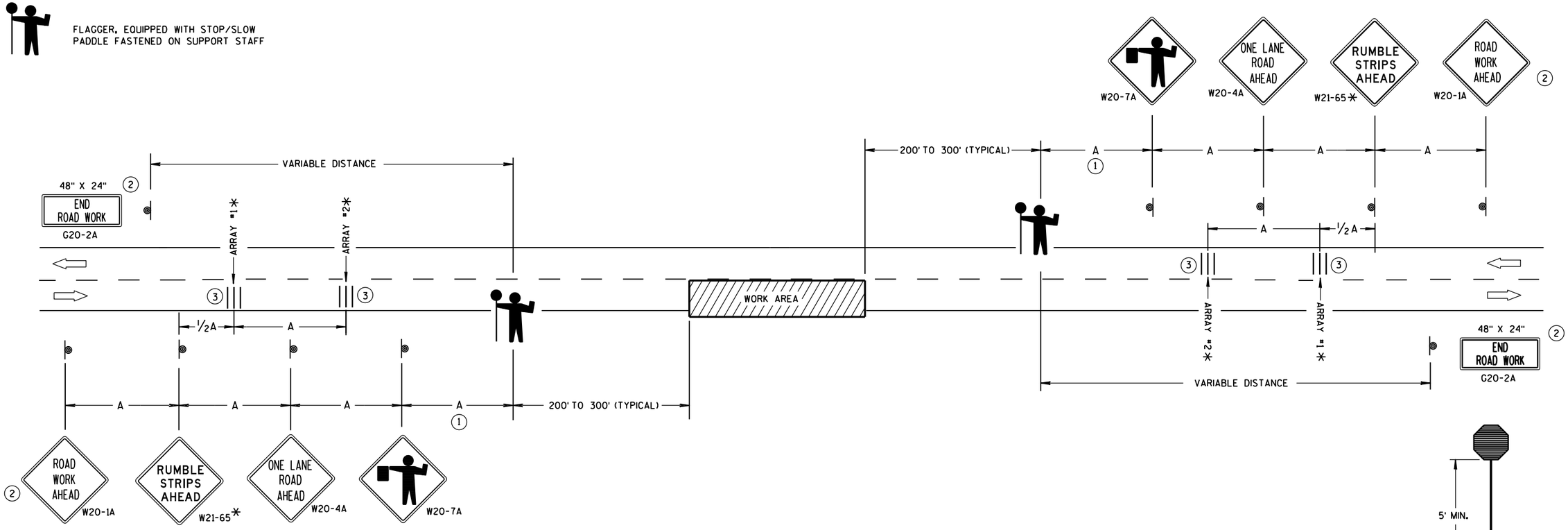
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

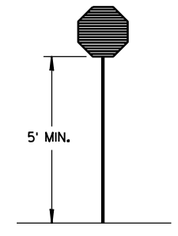
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.





STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

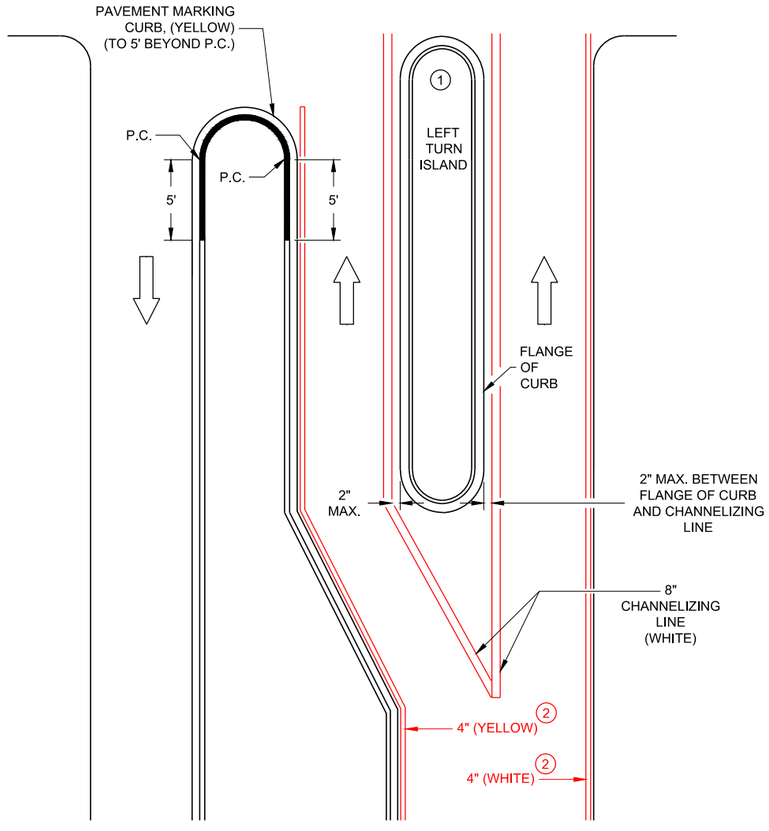
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

6

S.D.D. 15 C 12-6

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

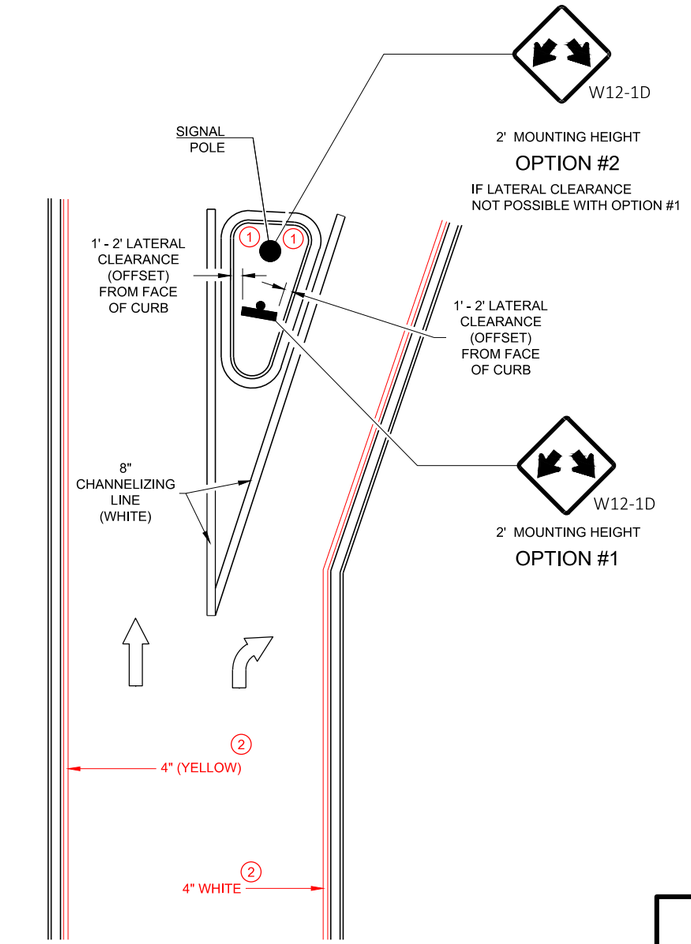
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

DOUBLE ARROW
WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

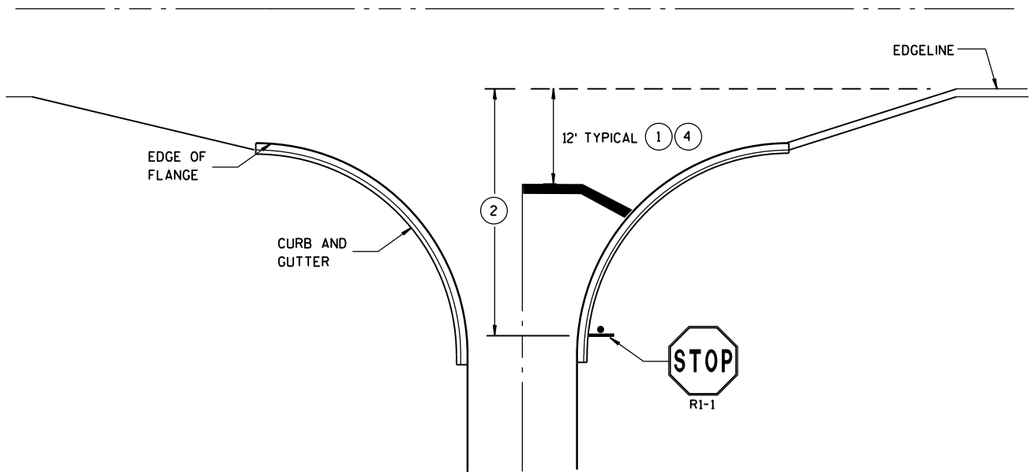
FHWA

6

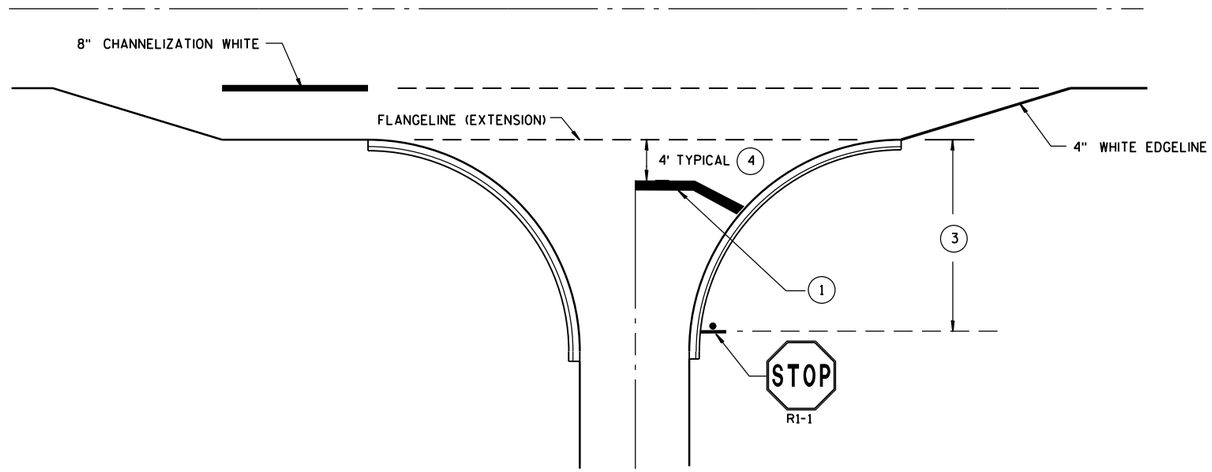
SDD 15C27 - 03a

6

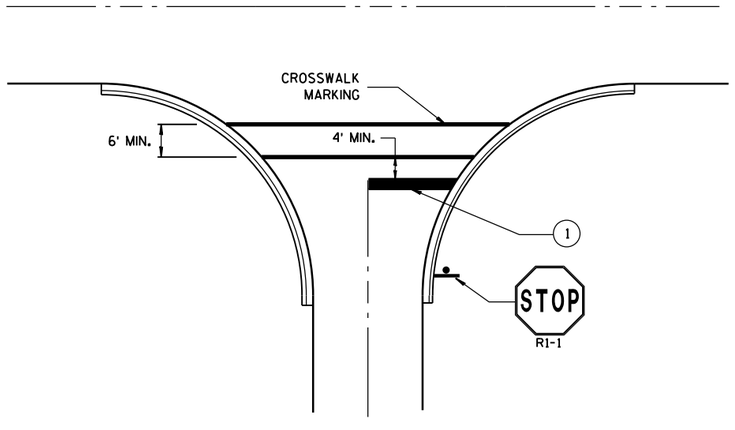
SDD 15C27 - 03a



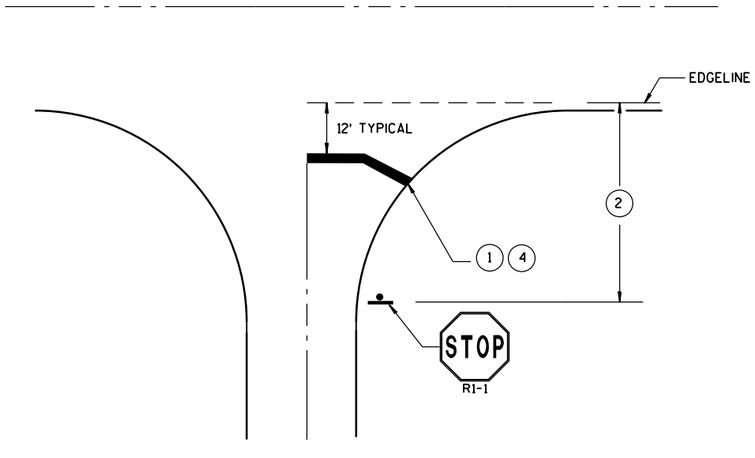
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 33-3

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
W / S	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L= WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

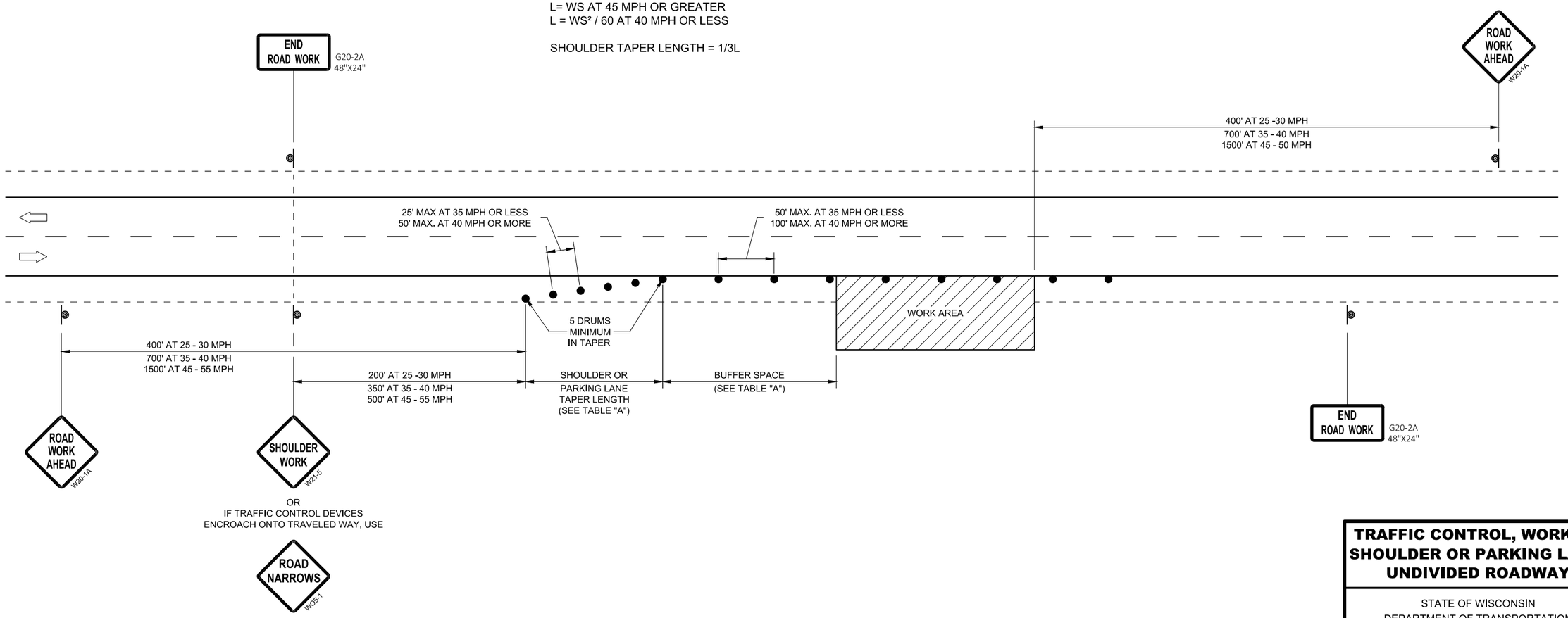
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY RESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

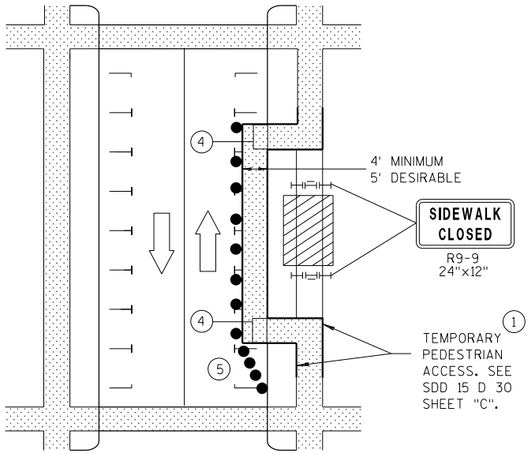
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

6

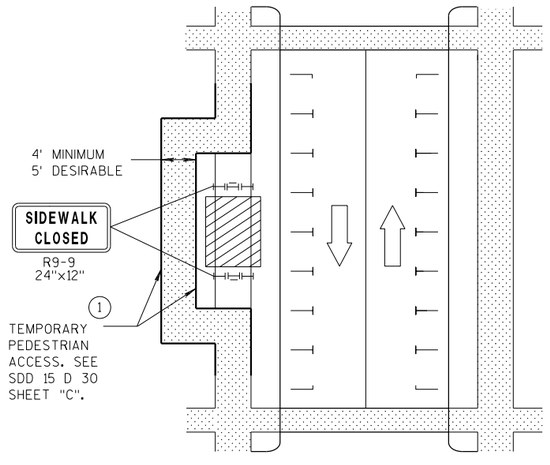
SDD 15D28 - 03

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

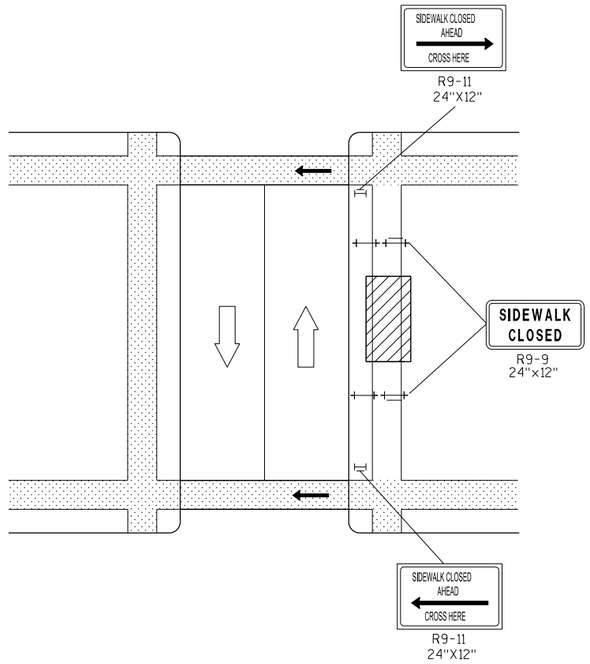


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

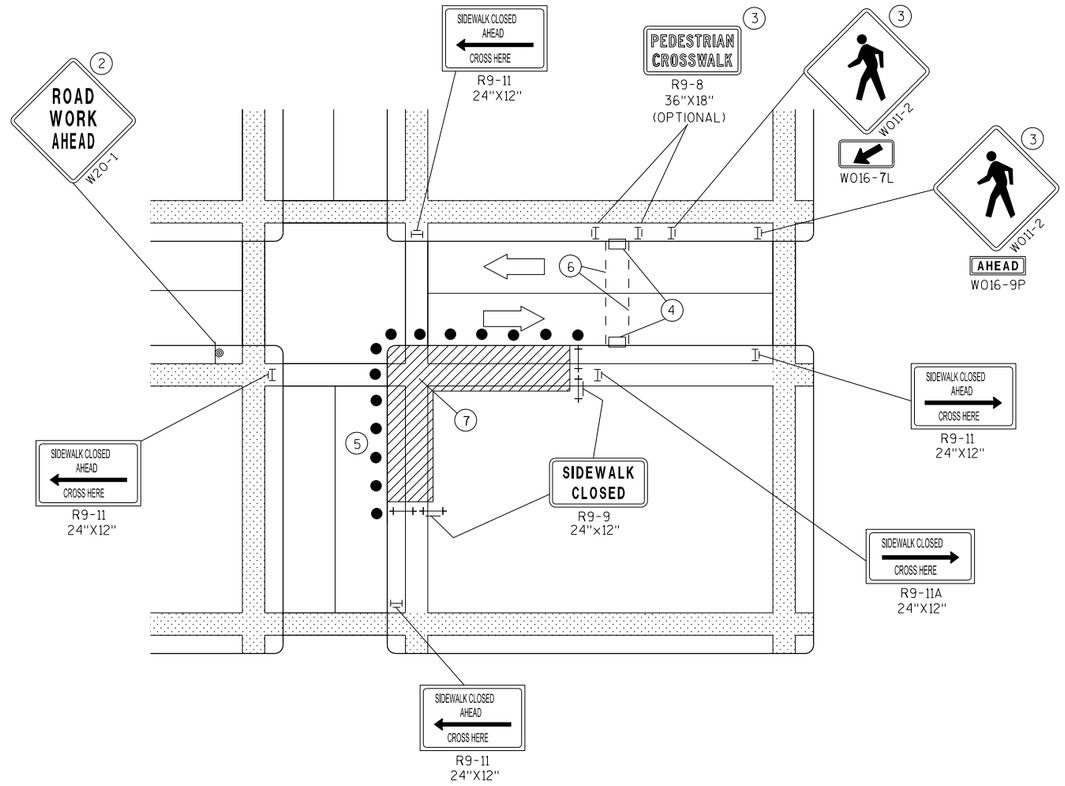
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

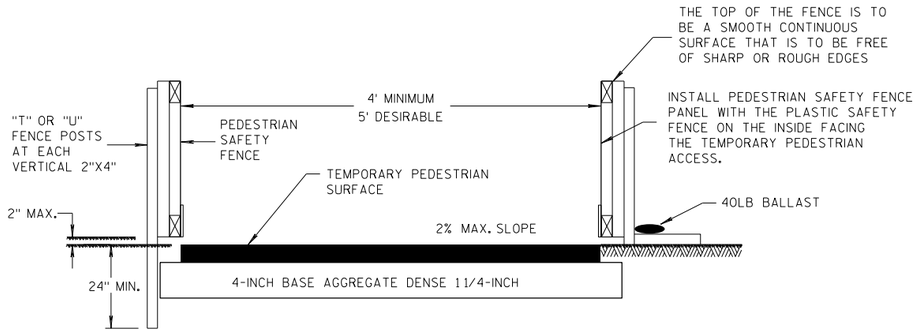
LEGEND

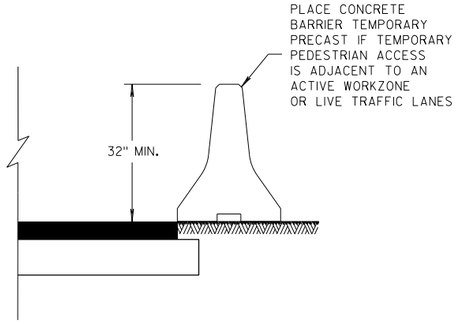
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

S.D.D. 15 D 30-4a

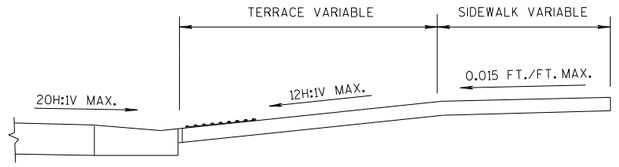




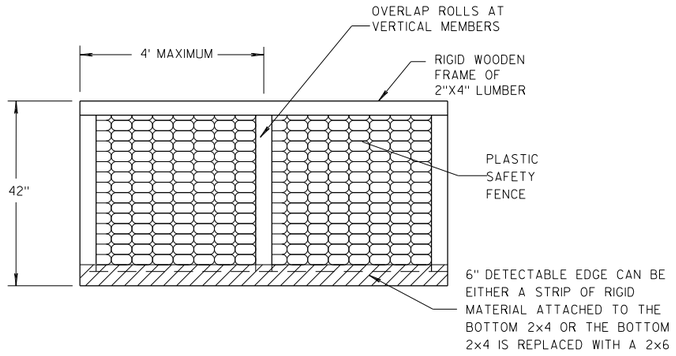
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

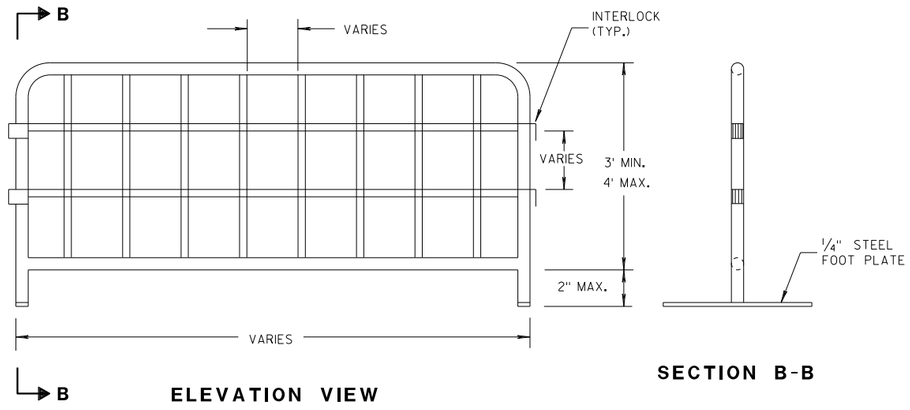
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



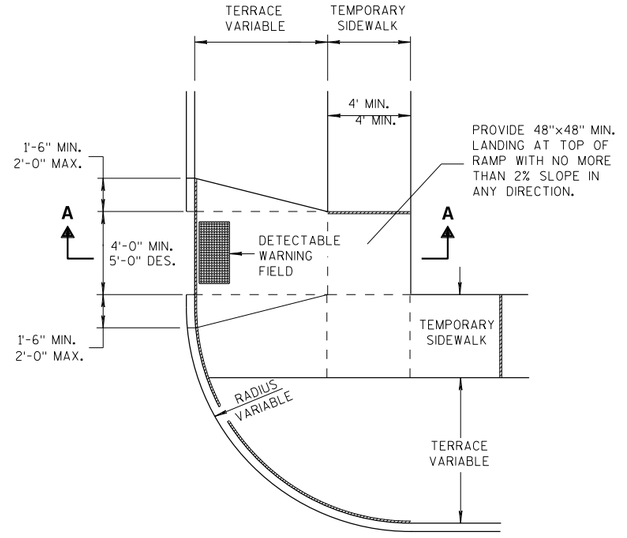
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

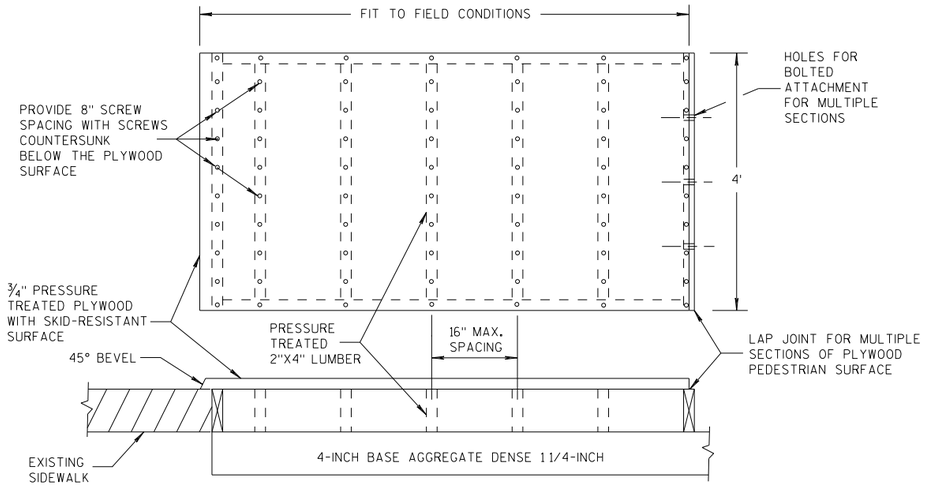
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



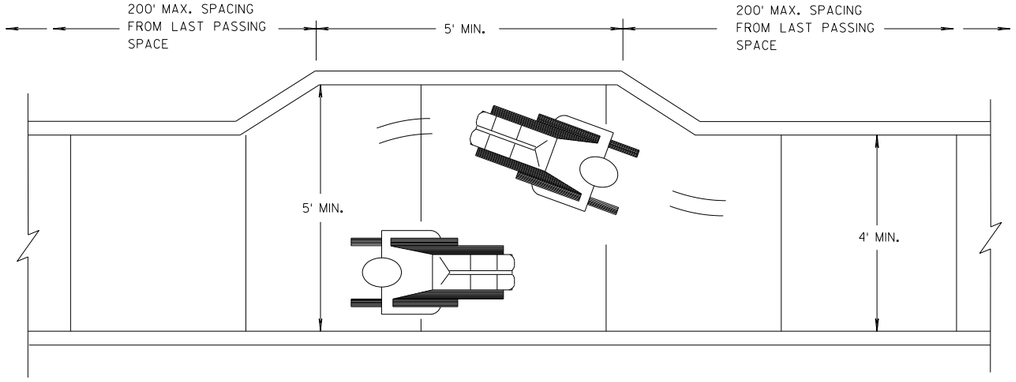
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

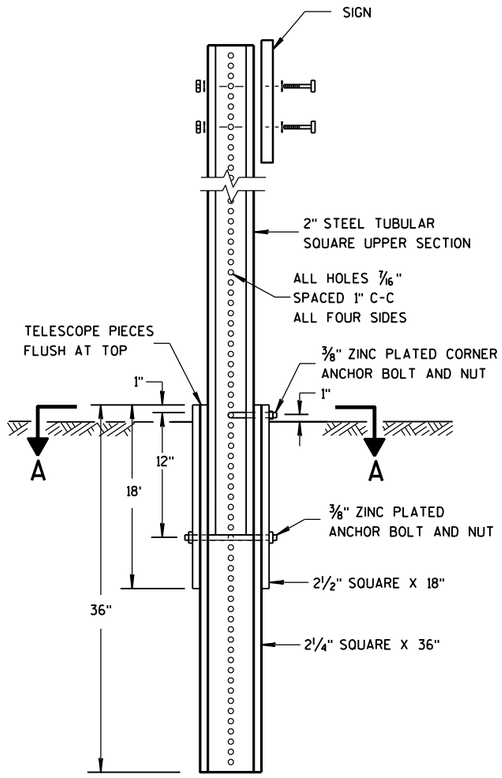
APPROVED

7/2018
DATE

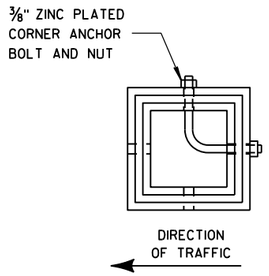
/S/ Andrew Heidtke
WORK ZONE ENG

FHWA

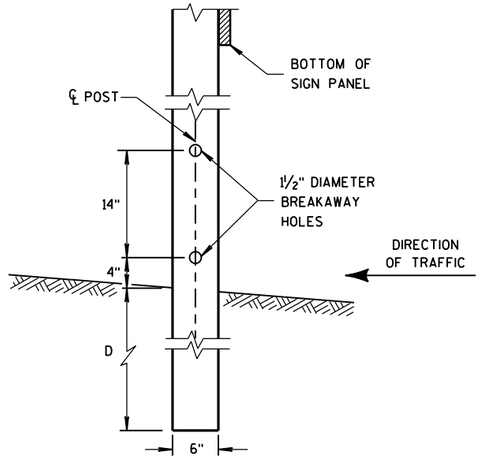
6
S.D.D. 15 D 30-4c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



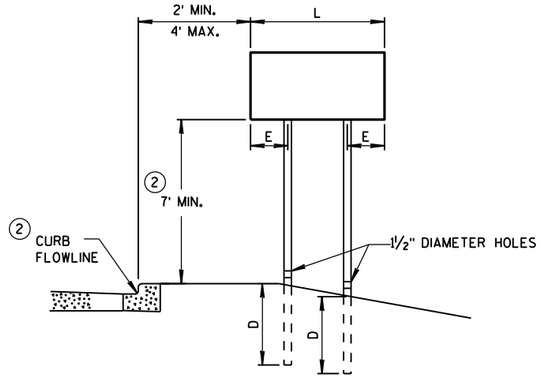
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

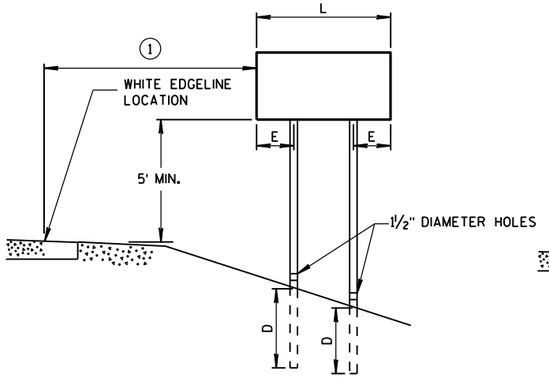
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

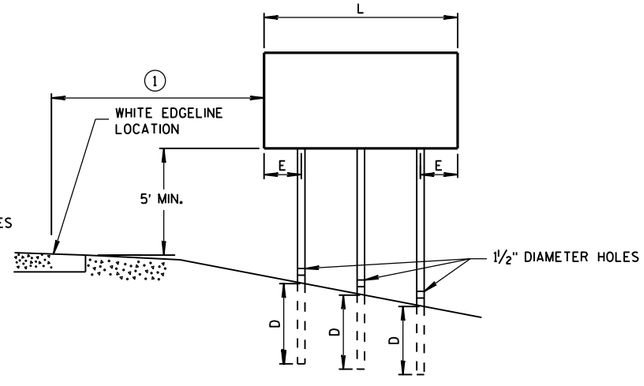
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

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



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

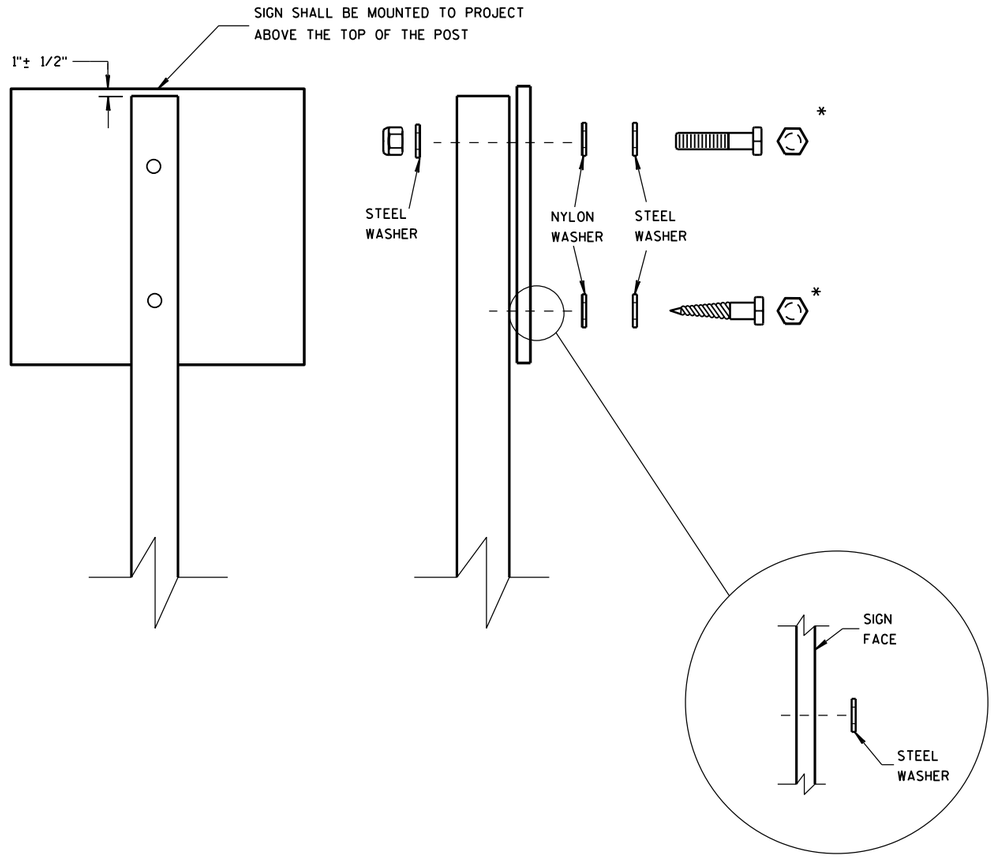
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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

WASHERS (ALL POSTS) -

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

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

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

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

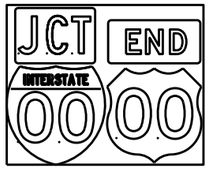
/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

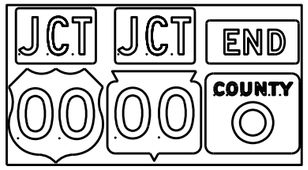
TYPICAL ASSEMBLIES



J1-1



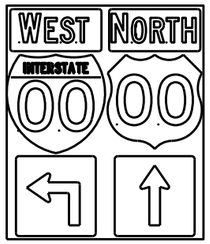
J1-2



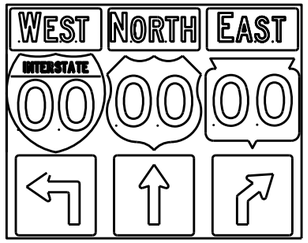
J1-3



J2-1



J2-2

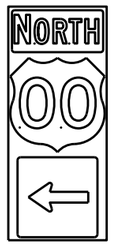


J2-3

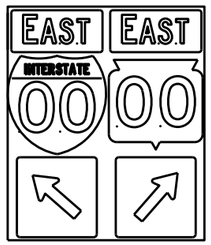


JV

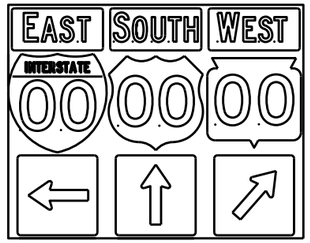
(Typical Vertical J-Assembly
See Note 10 and 11)



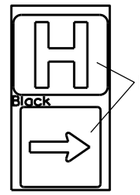
J3-1



J3-2



J3-3

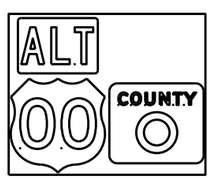


Blue Background

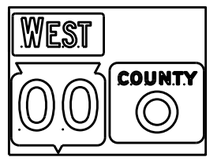
JH-1



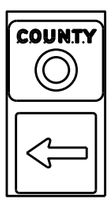
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

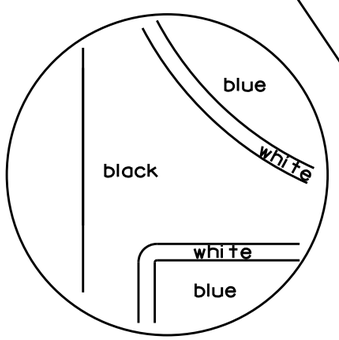


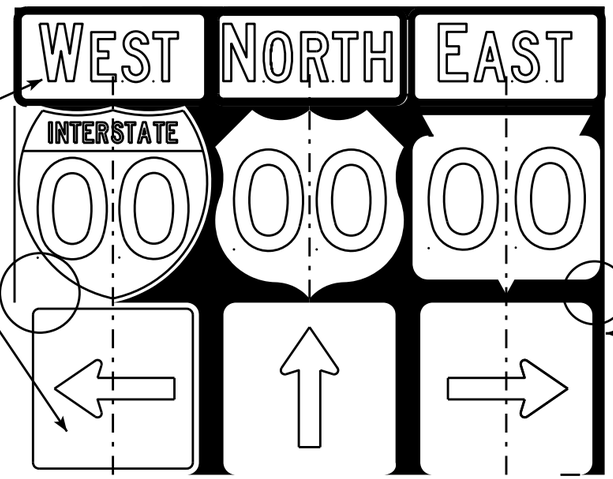
J23-1

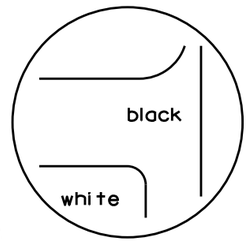


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

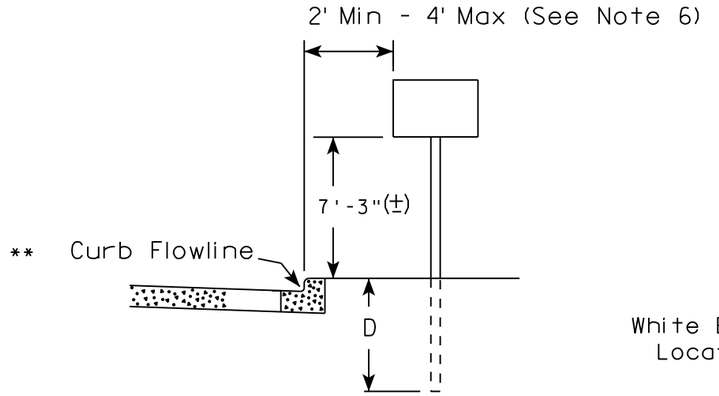
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

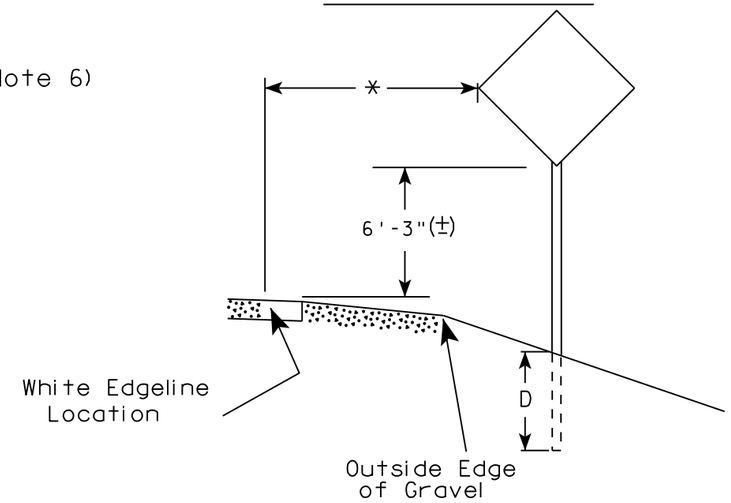
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

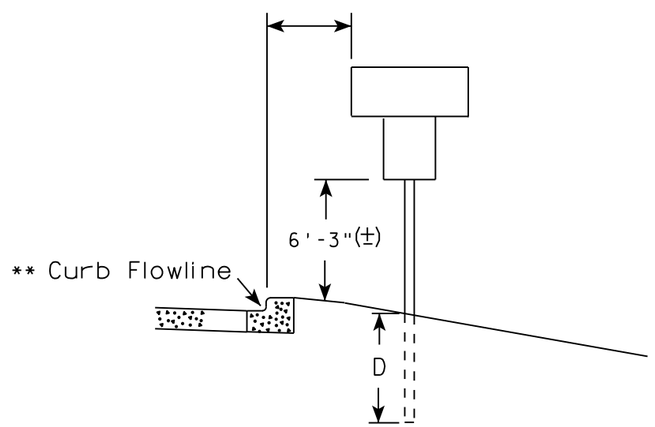
WISDOT/CADDS SHEET 42

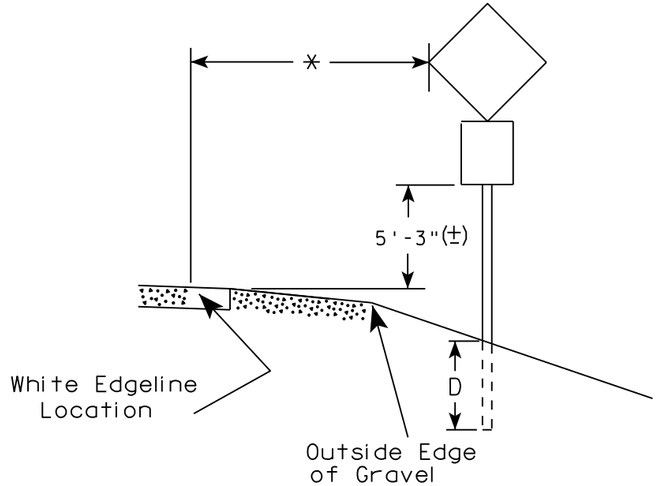
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

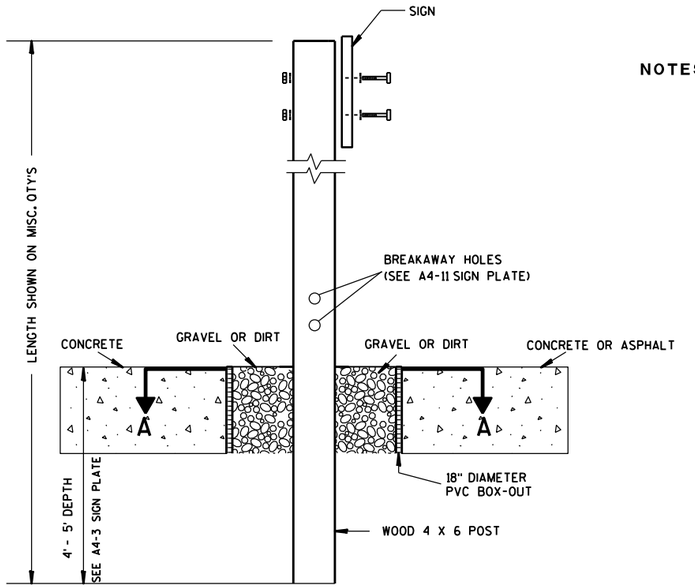
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

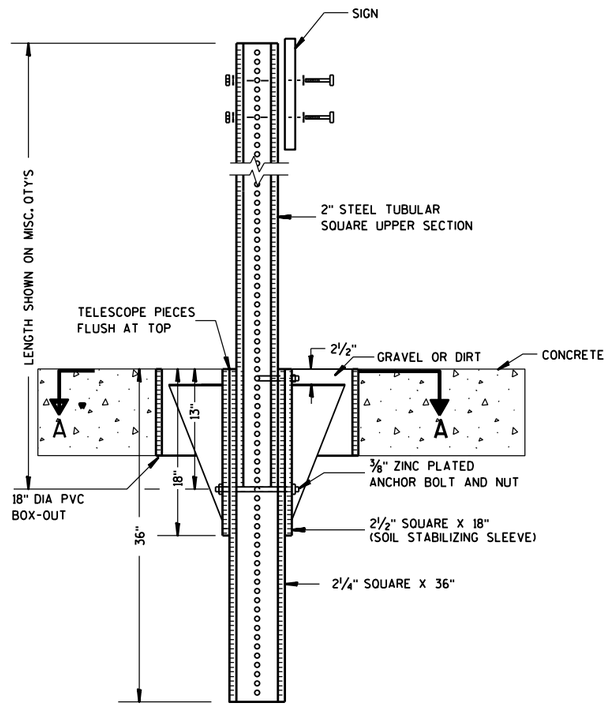
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	E



ELEVATION VIEW

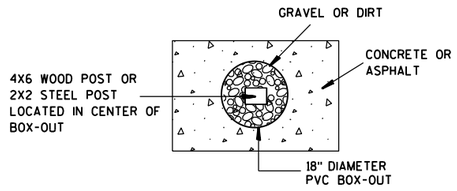
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

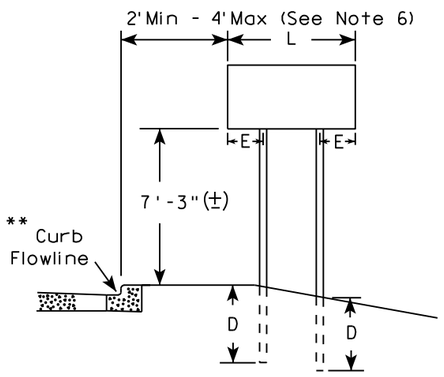
APPROVED Matthew R Rauch
for State Traffic Engineer

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

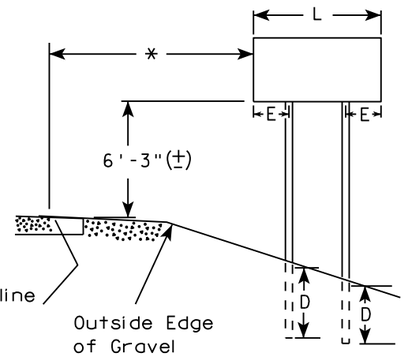
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

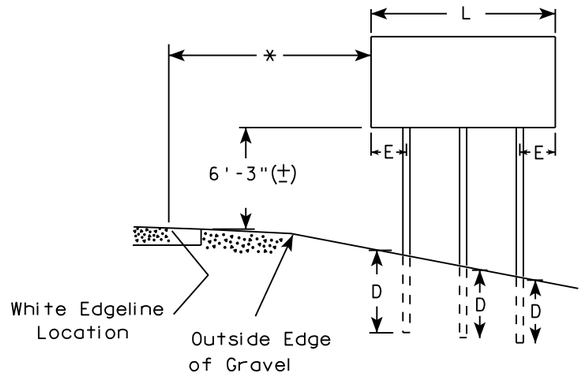
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

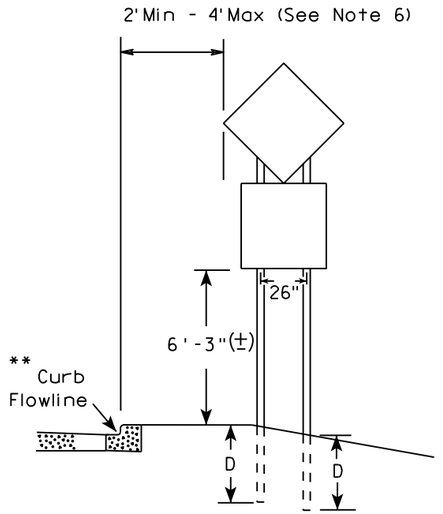
URBAN AREA



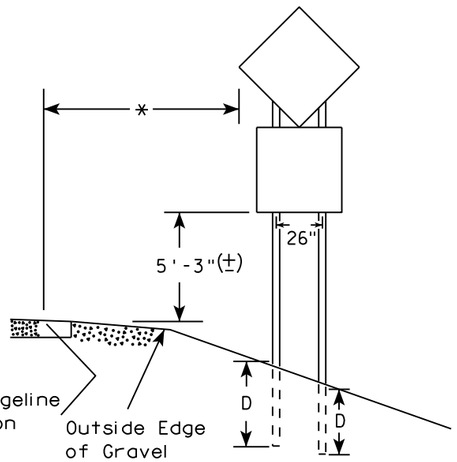
RURAL AREA (See Note 3)







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'

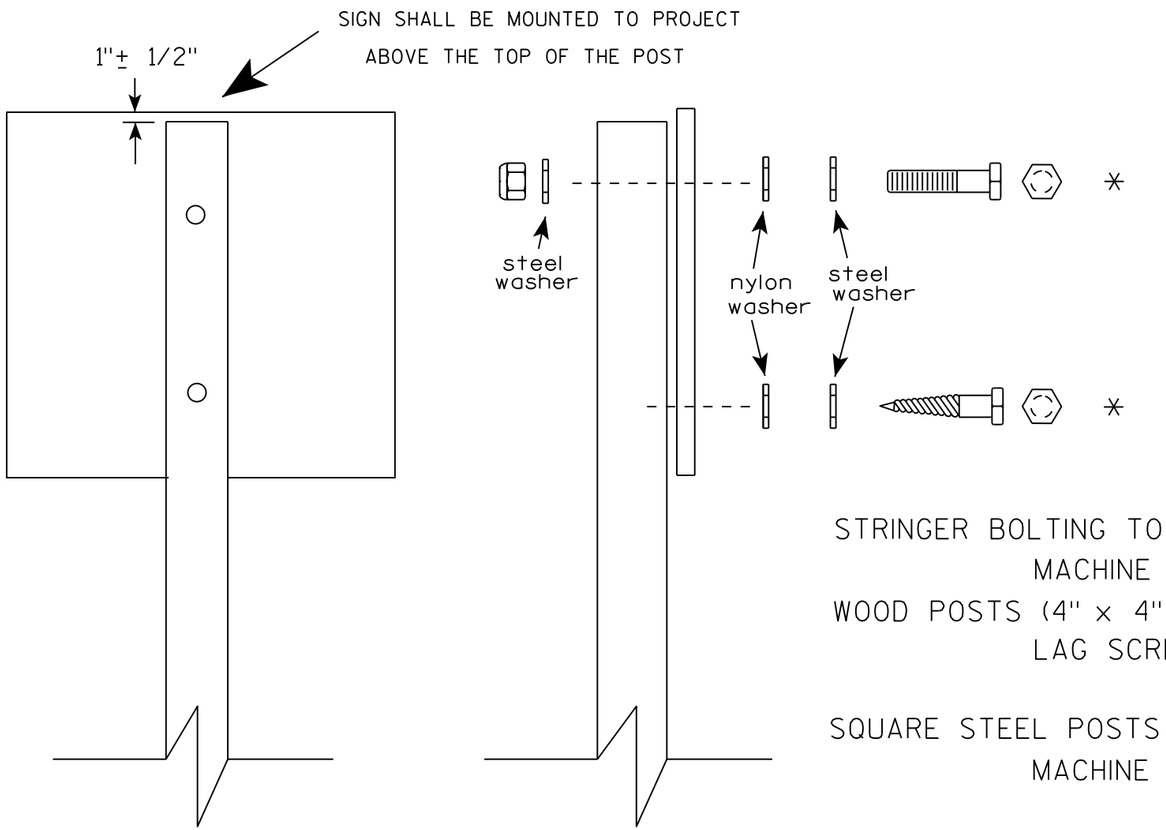
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 171	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 4" or 4" x 6")

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

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

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

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

WASHERS (ALL POSTS) -

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

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

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

ATTACHMENT OF SIGNS TO POSTS

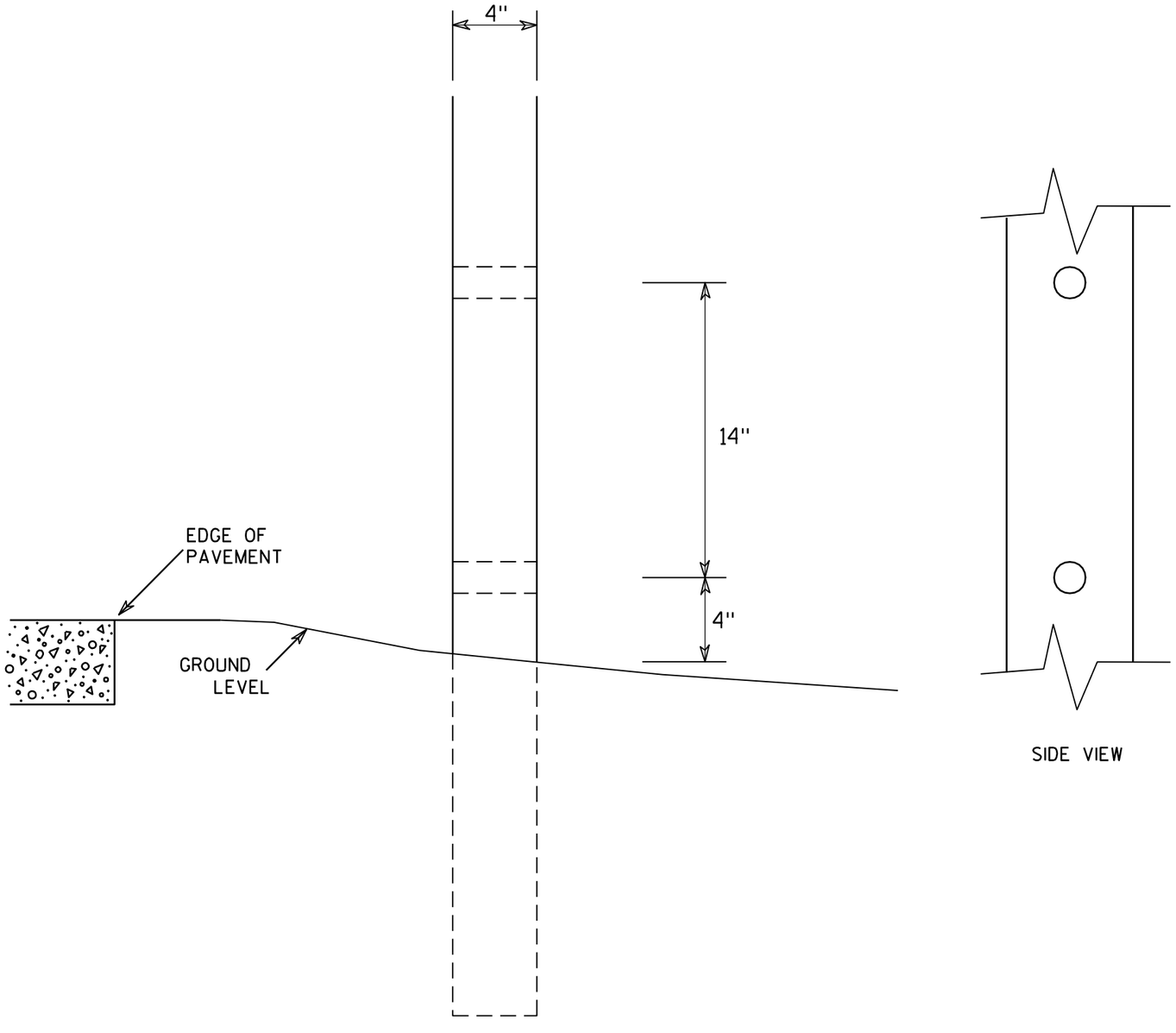
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$



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

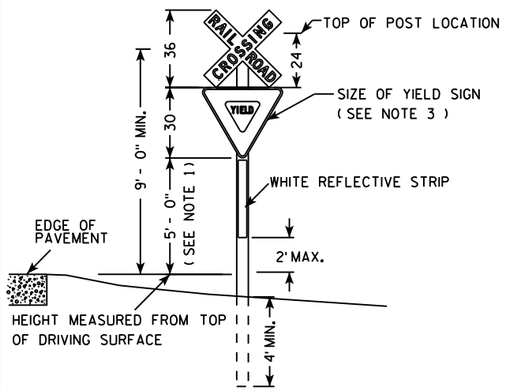
APPROVED Chester J Spang for State Traffic Engineer

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

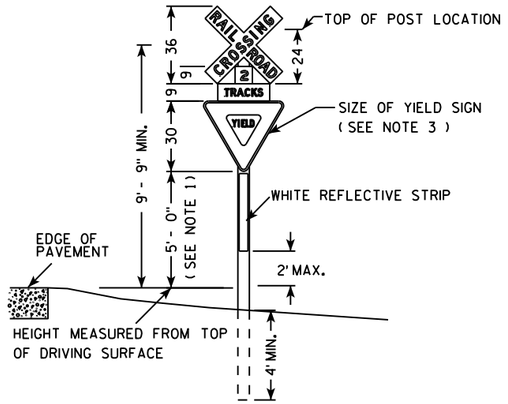
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E

YIELD SIGN INSTALLATIONS
AT CROSSBUCK LOCATIONS

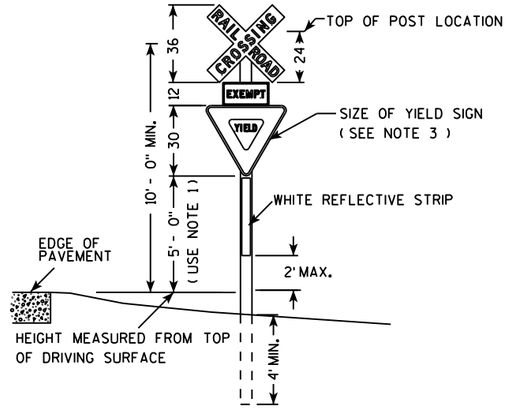
36" X 36" X 36" YIELD SIGN



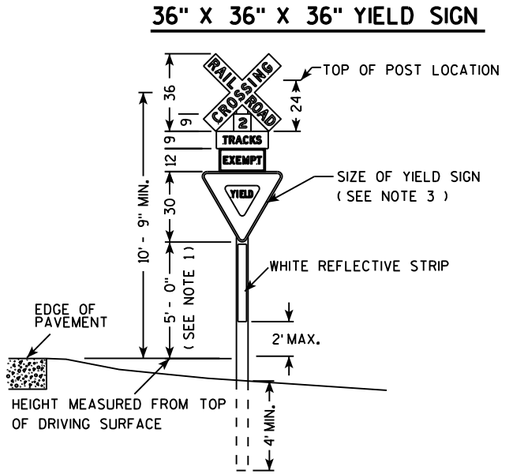
36" X 36" X 36" YIELD SIGN



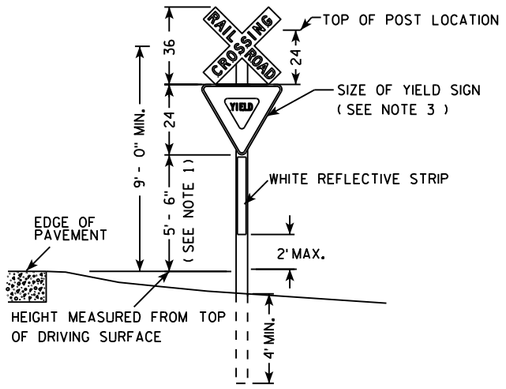
36" X 36" X 36" YIELD SIGN



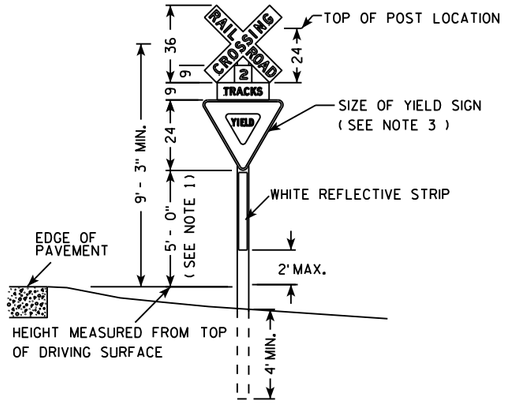
36" X 36" X 36" YIELD SIGN



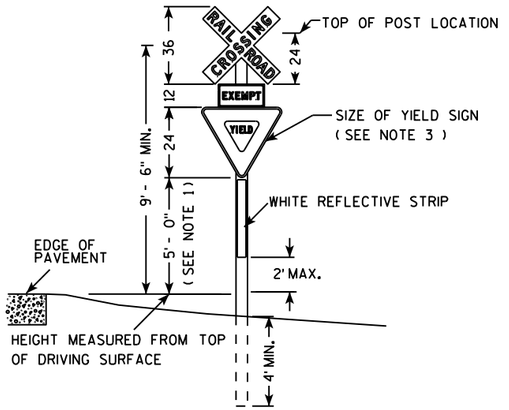
30" X 30" X 30" YIELD SIGN



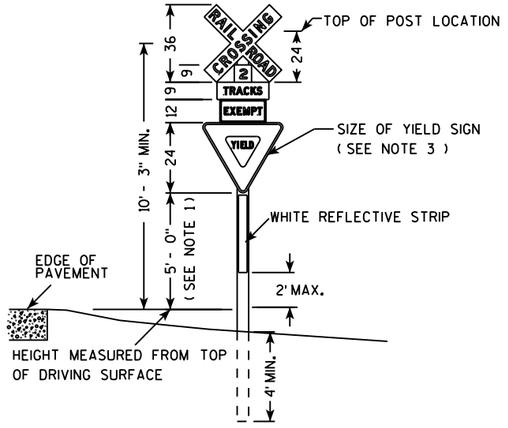
30" X 30" X 30" YIELD SIGN



30" X 30" X 30" YIELD SIGN



30" X 30" X 30" YIELD SIGN



NOTES:
1.) 5' - 0" MIN. MOUNTING HEIGHT FOR NEW INSTALLATIONS, EXCEPT AS NOTED
7' - 0" MIN. MOUNTING HEIGHT IN AREAS WITH PEDESTRIAN OR PARKING CONFLICTS

2.) YIELD SIGNS SHALL HAVE A MINIMUM OF HIGH INTENSITY REFLECTIVE SHEETING (EITHER ENCAPSULATED BEAD OR PRISMATIC.)

3.) THE 36" X 36" X 36" YIELD SIGN IS THE STANDARD SIZE USED FOR MOST LOCATIONS. HOWEVER A 30" X 30" X 30" YIELD SIGN CAN BE USED ON ROADWAYS THAT HAVE A SPEED LIMIT OF 30 MPH OR LESS, AND ARE NOT STATE HIGHWAYS OR CONNECTING STATE HIGHWAYS AND HAVE NO MORE THAN ONE LANE OF TRAFFIC IN EACH DIRECTION.

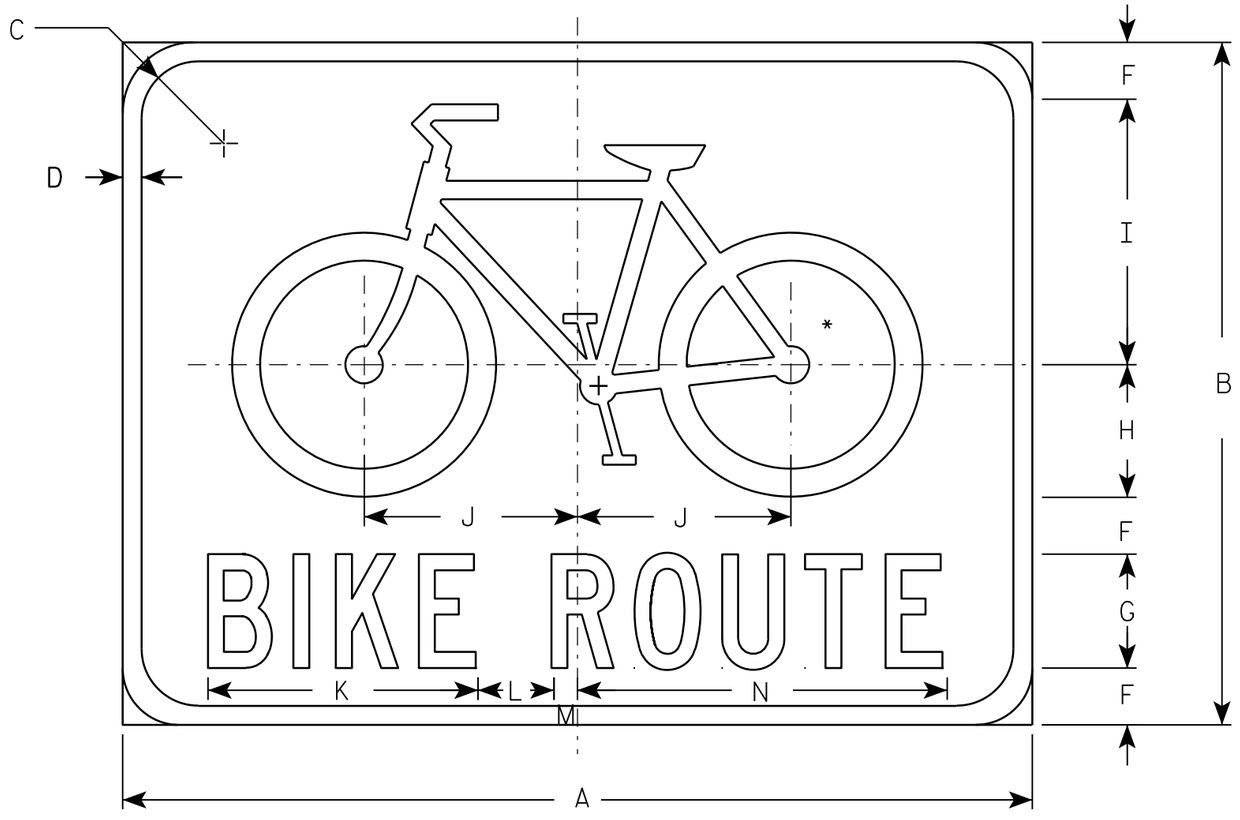
TYPICAL INSTALL OF YIELD SIGN AT RR

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/14/17 PLATE NO. A4-17.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 174	E



D11-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

* See W11-1 for symbol design

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 450 mm
3	750 mm X 600 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	18	1 1/2	1/2		1 1/2	3	3 1/2	7	5 5/8	7 1/8	2	5/8	9 3/4													3.0	0.27
3	30	24	1 1/4	5/8		2	4	4 3/4	9 1/4	7 1/2	9 1/2	2 5/8	7/8	13													5.0	0.45
4																												
5																												

STANDARD SIGN
D11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/04 PLATE NO. D11-1.1

PROJECT NO:

SHEET NO: 175 E

FILE NAME : C:\Users\Projects\tr_stdplate\D111.DGN PLOT DATE : 17-MAR-2005 10:38 PLOT BY : DOTDZK

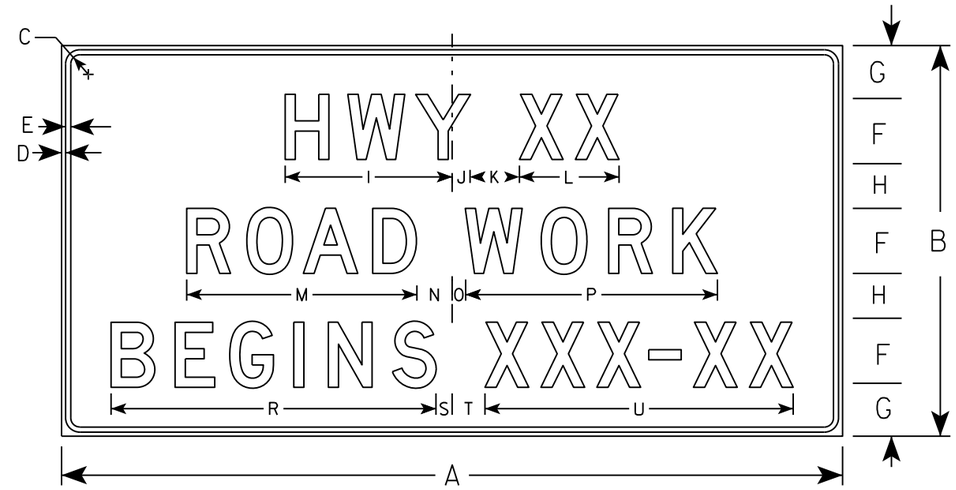
WISDOT/CADDS SHEET 42

7

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

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																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	28 3/8		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

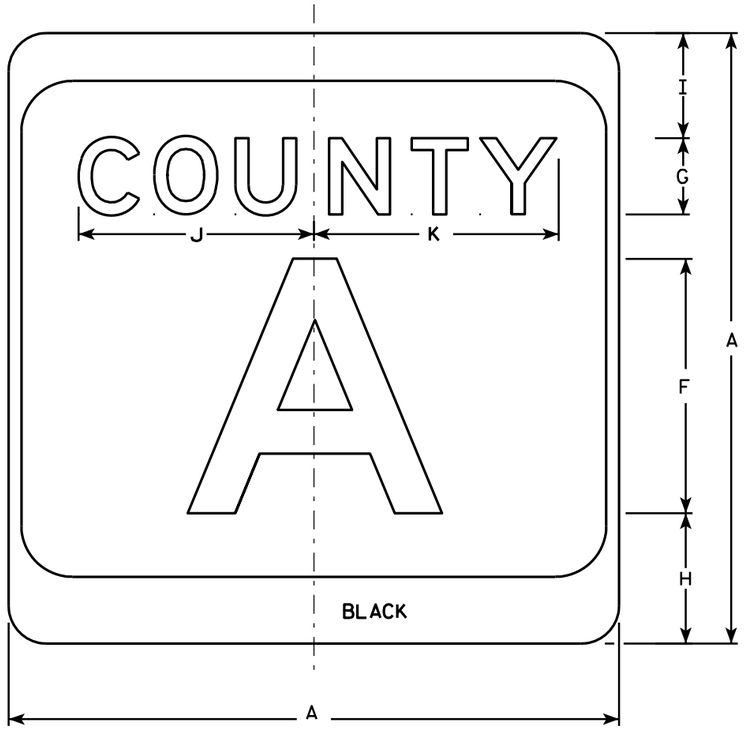
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

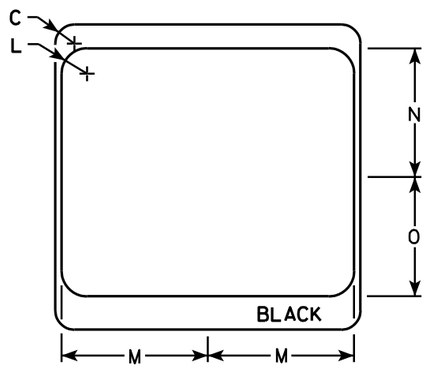
APPROVED Matthew R Rauch
For State Traffic Engineer

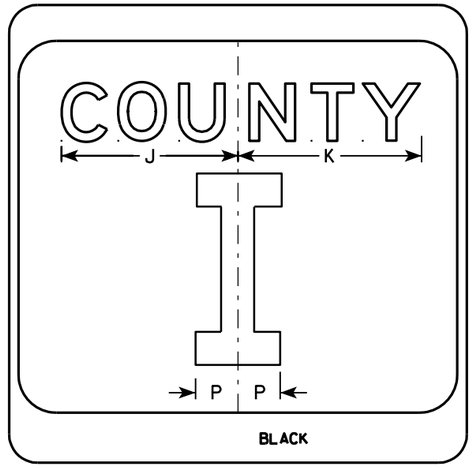
DATE 3/1/17 PLATE NO. G20-57.3

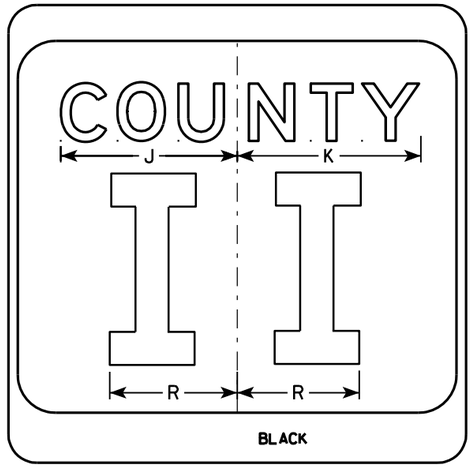
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 176	E



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

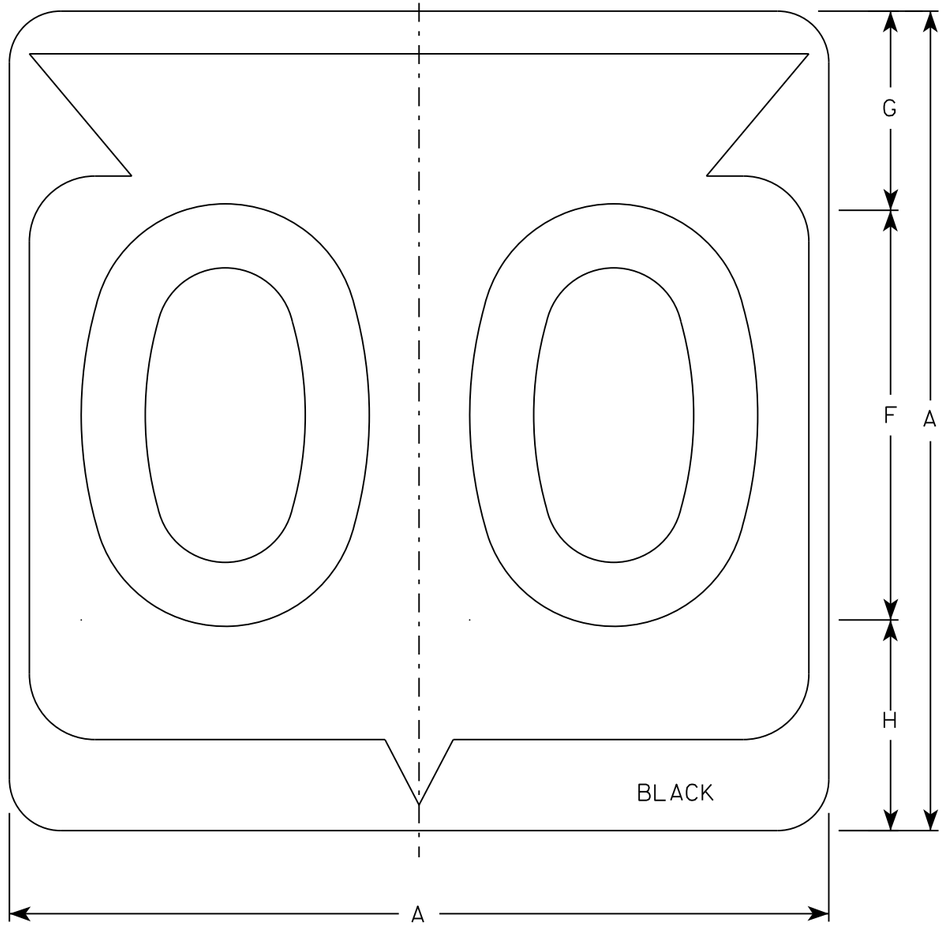
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 | E

7

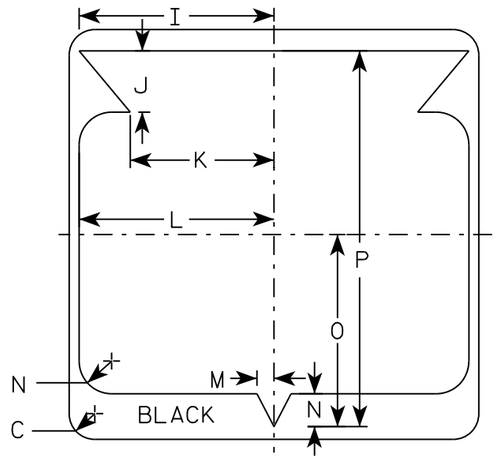
FILE NAME : C:\Users\PROJECTS\tr_stdplate\M15A.DGN PLOT DATE : 29-SEP-2011 11:25 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000
WISDOT/CADDS SHEET 42



M1-6

NOTES

1. Sign is Type II - 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

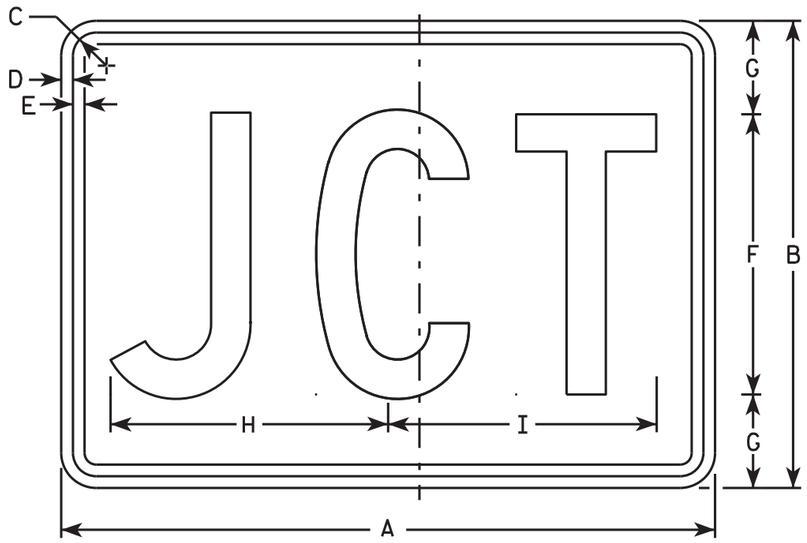
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

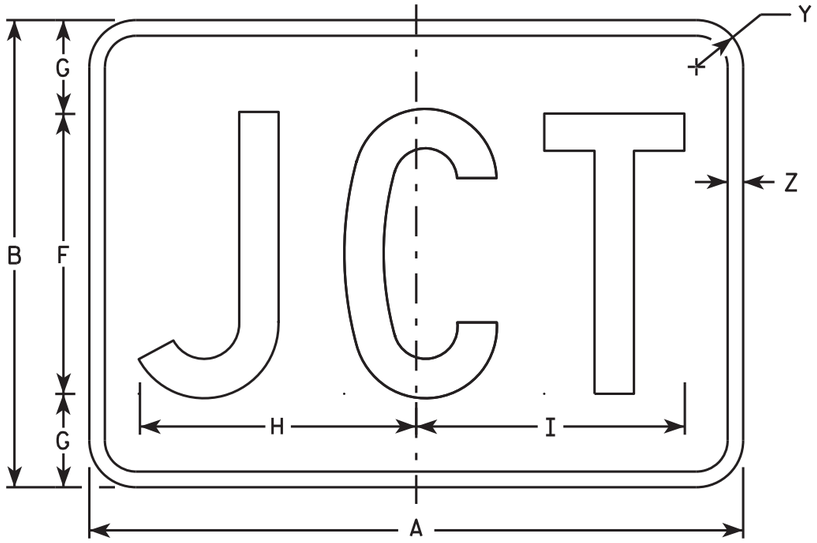
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 178	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

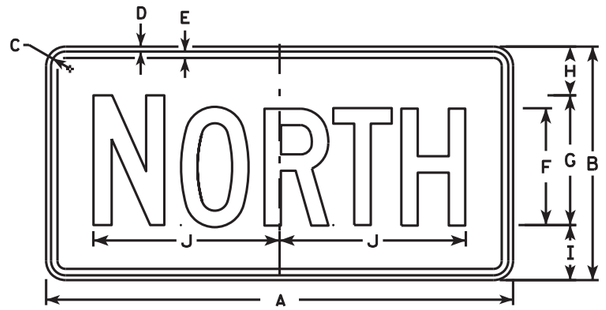
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M2-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO. 179 | E



M3-1
MM3-1
MP3-1



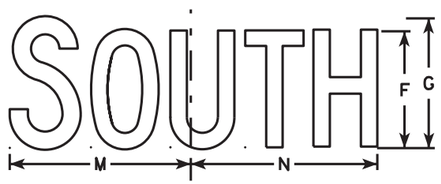
MB3-1
MK3-1
MN3-1



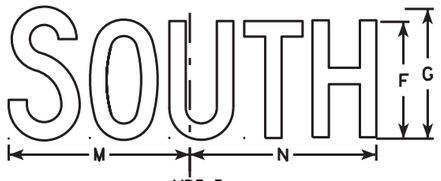
M3-2
MM3-2
MP3-2



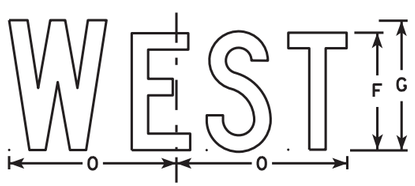
MB3-2
MK3-2
MN3-2



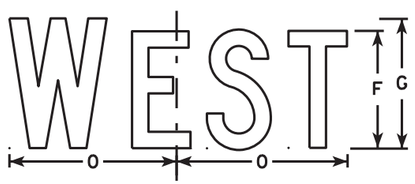
M3-3
MM3-3
MP3-3



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

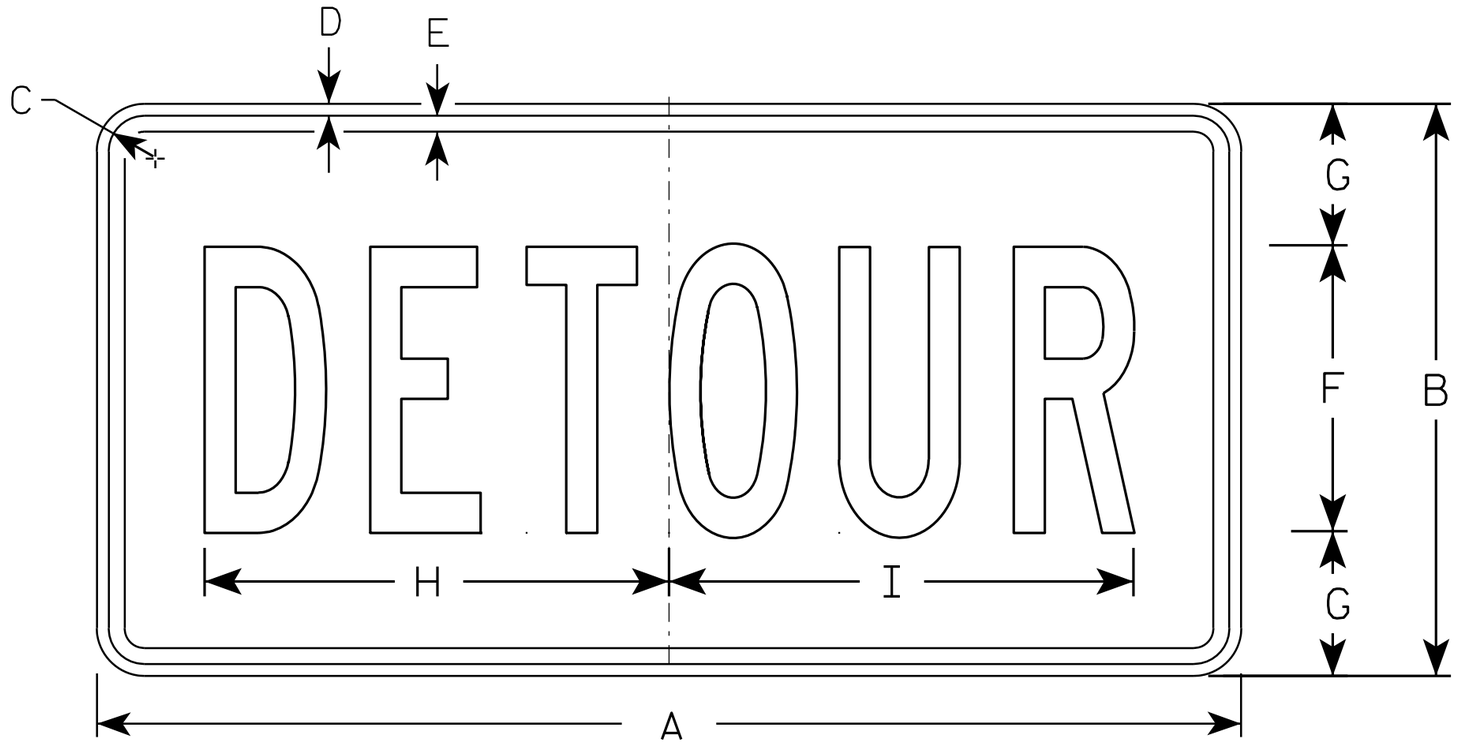
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO. 180 | E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 15-OCT-2015 12:16 PLOT BY : ss...plotuser...ss PLOT NAME : PLOT SCALE : 18.607113:1.000000
WISDOT/CADDS SHEET 42



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

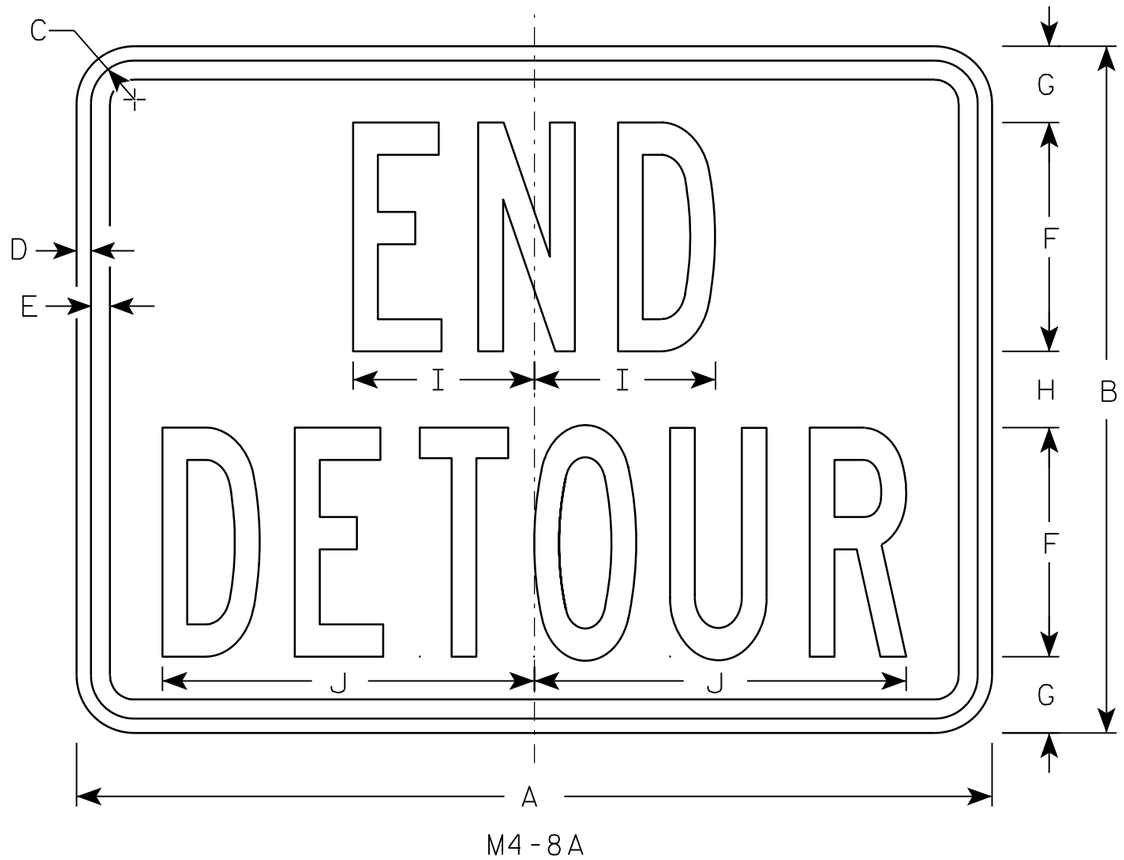
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 181	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M48.DGN PLOT DATE : 10-NOV-2010 13:18 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.767233:1.000000

WISDOT/CADDS SHEET 42

7

7



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

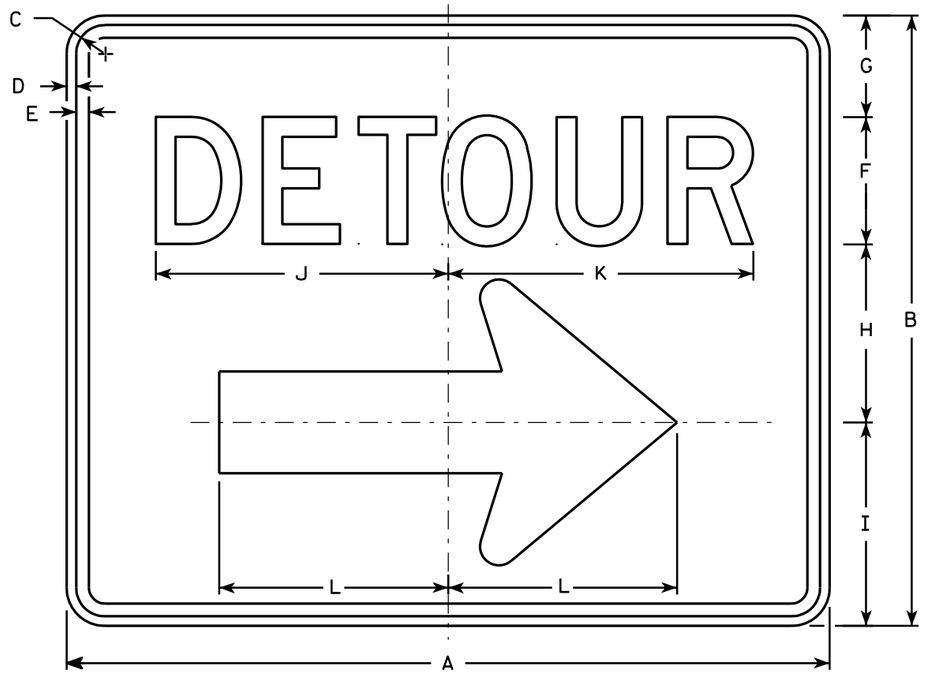
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

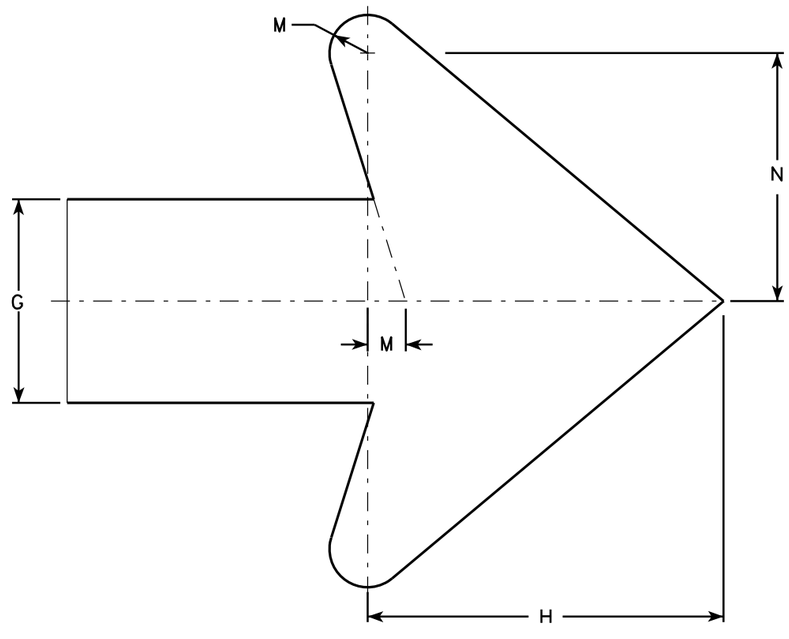
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 182	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow 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																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

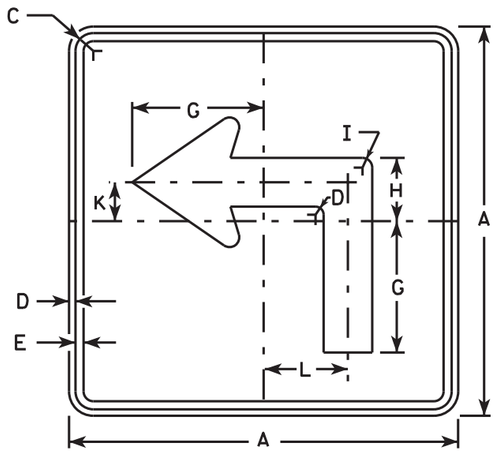
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

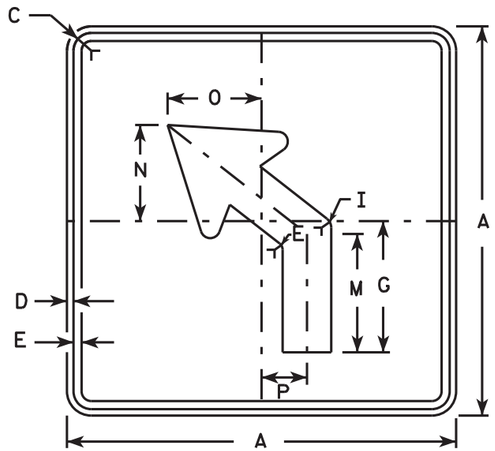
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

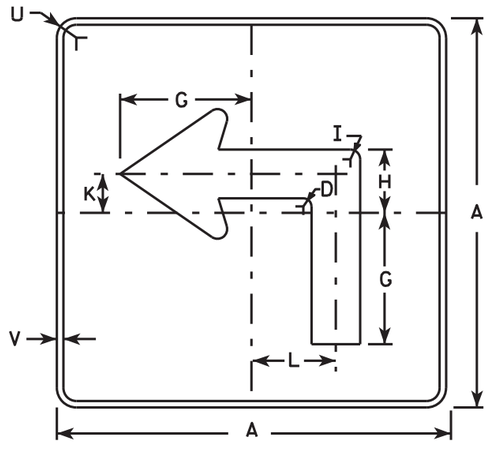
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 183 | E



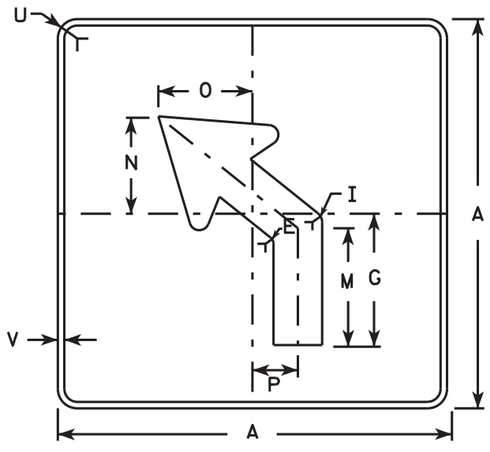
M5-1L
MM5-1L
MO5-1L
MP5-1L



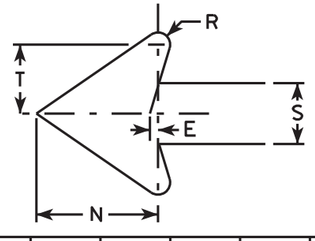
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

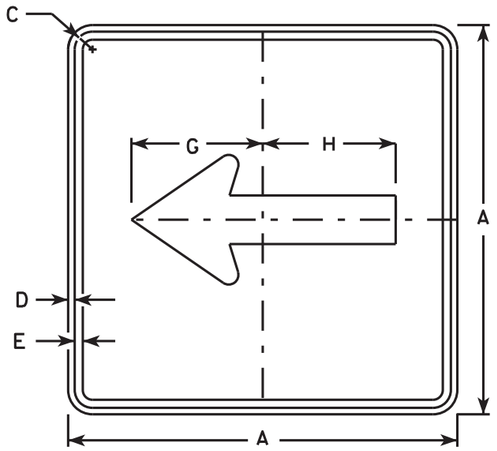
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

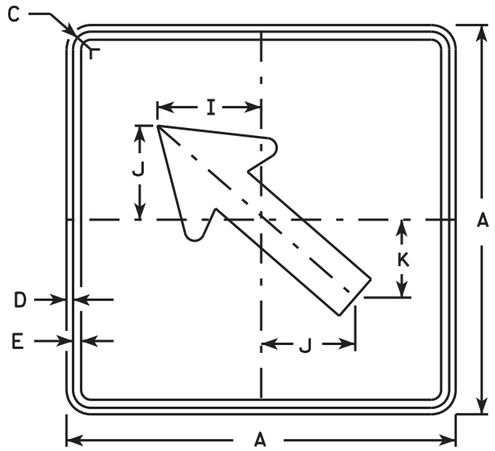
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO. 184 | E



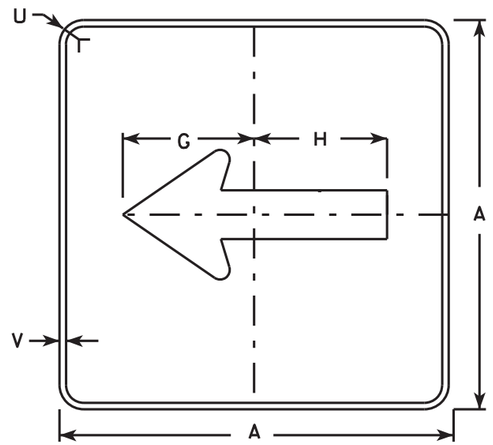
M6-1
MM6-1
MO6-1
MP6-1



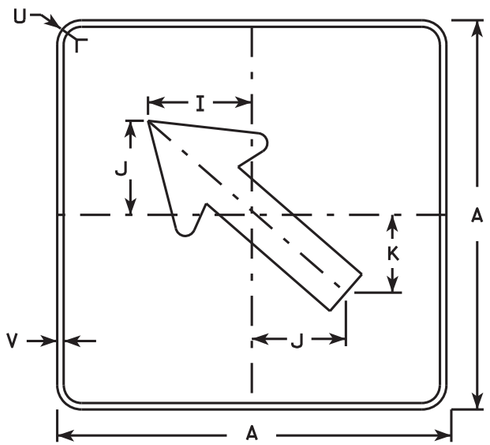
M6-2
MM6-2
MO6-2
MP6-2

NOTES

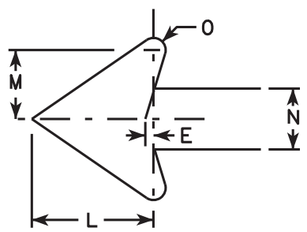
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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

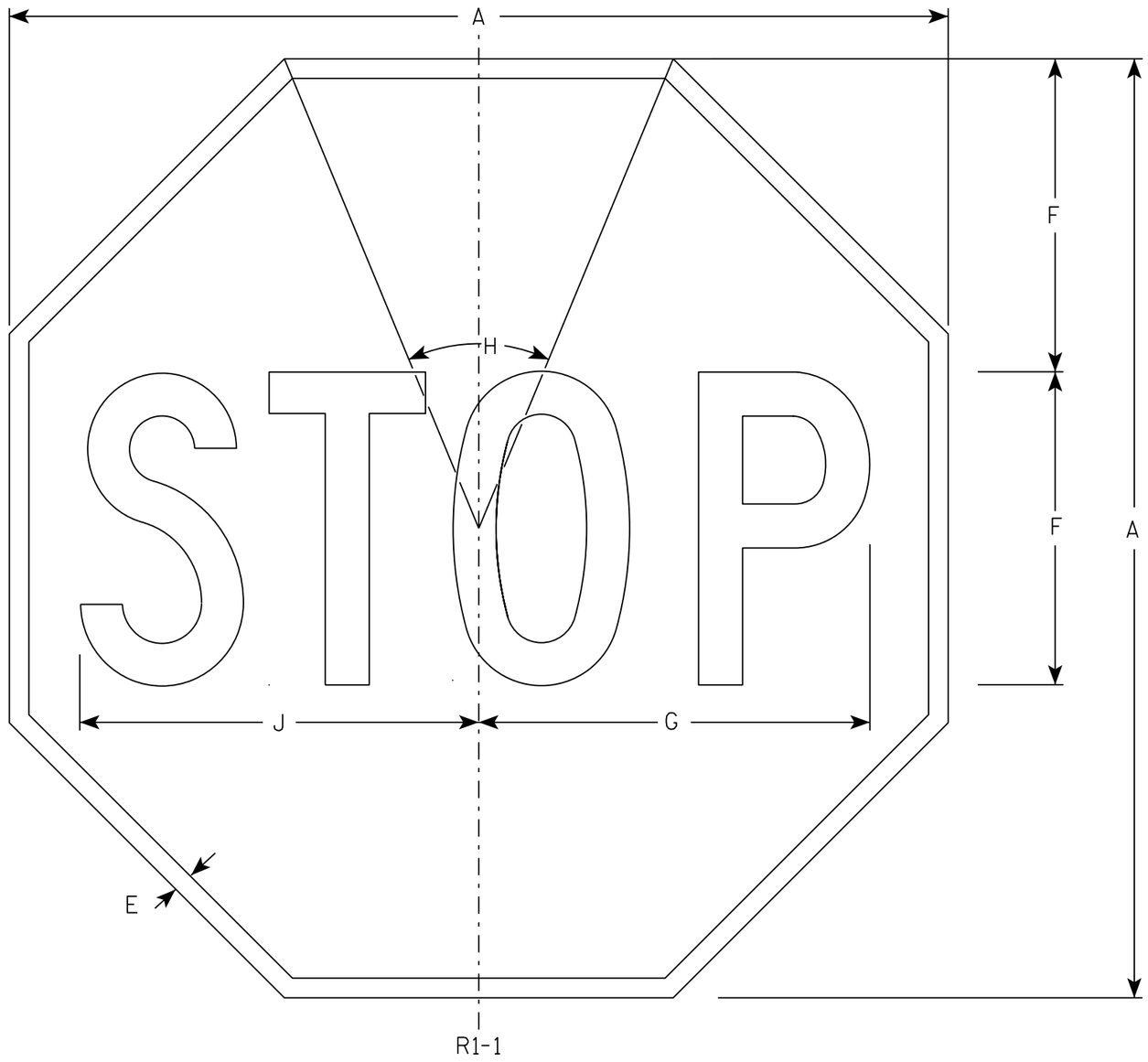
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO. 185 | E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 15-OCT-2015 13:17 PLOT BY : ss...plotuser...ss PLOT NAME : PLOT SCALE : 18.607113:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1-1

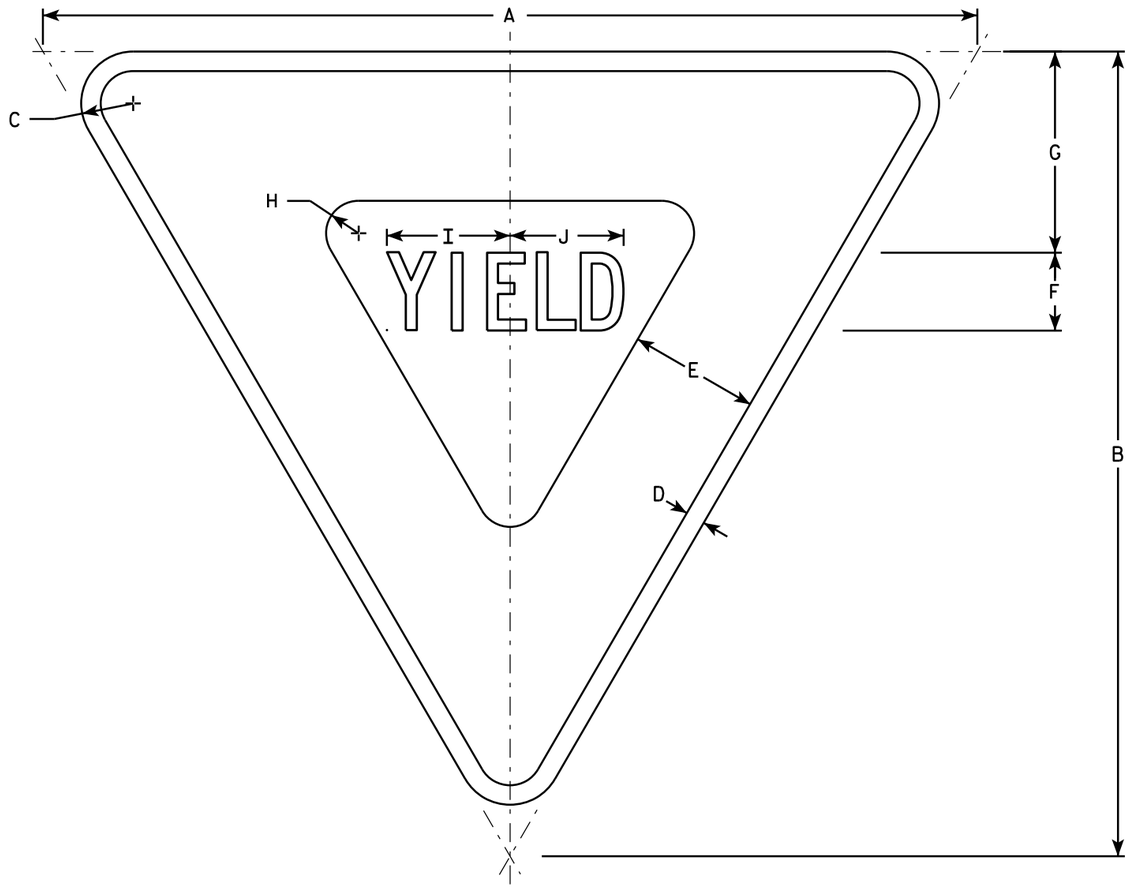
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 186	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

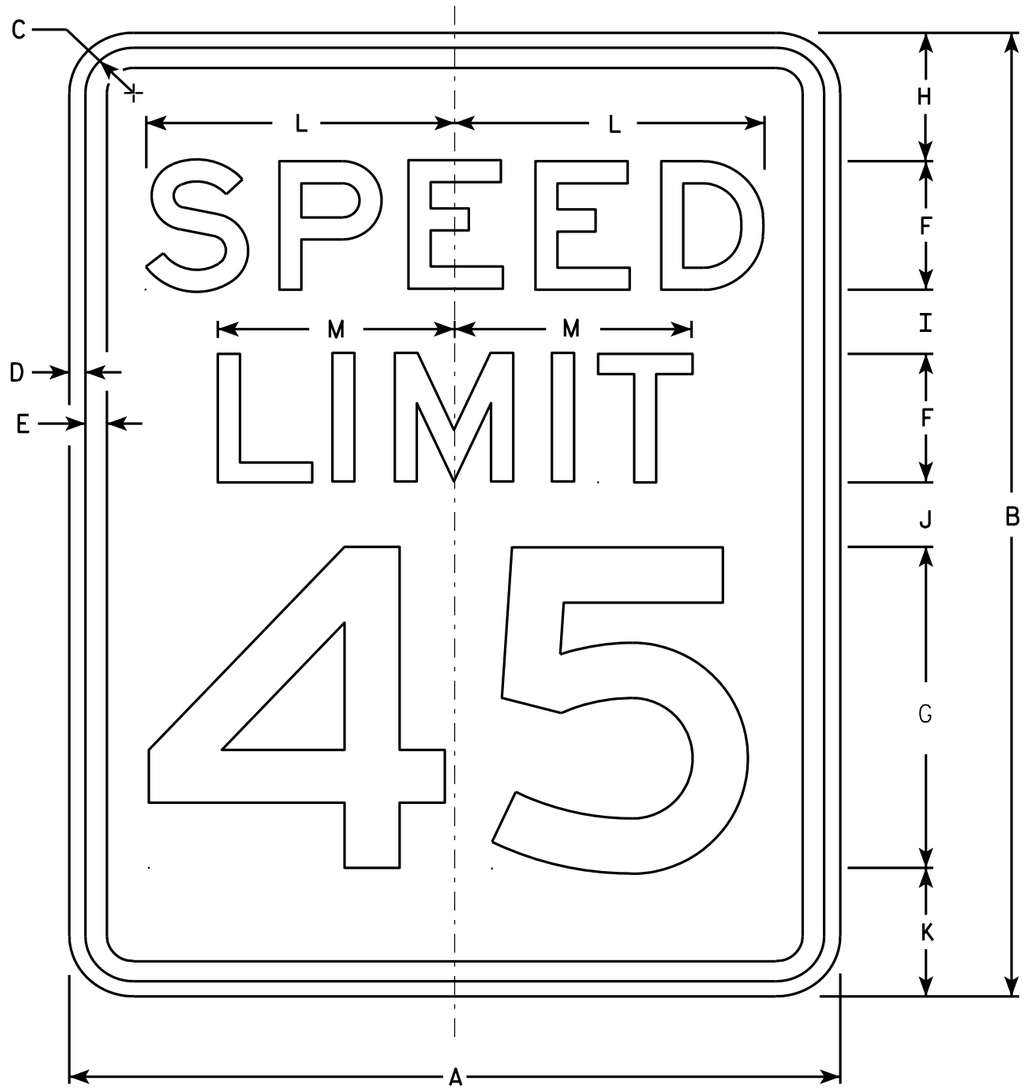
APPROVED Matthew R Rauch
for State Traffic Engineer

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

WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

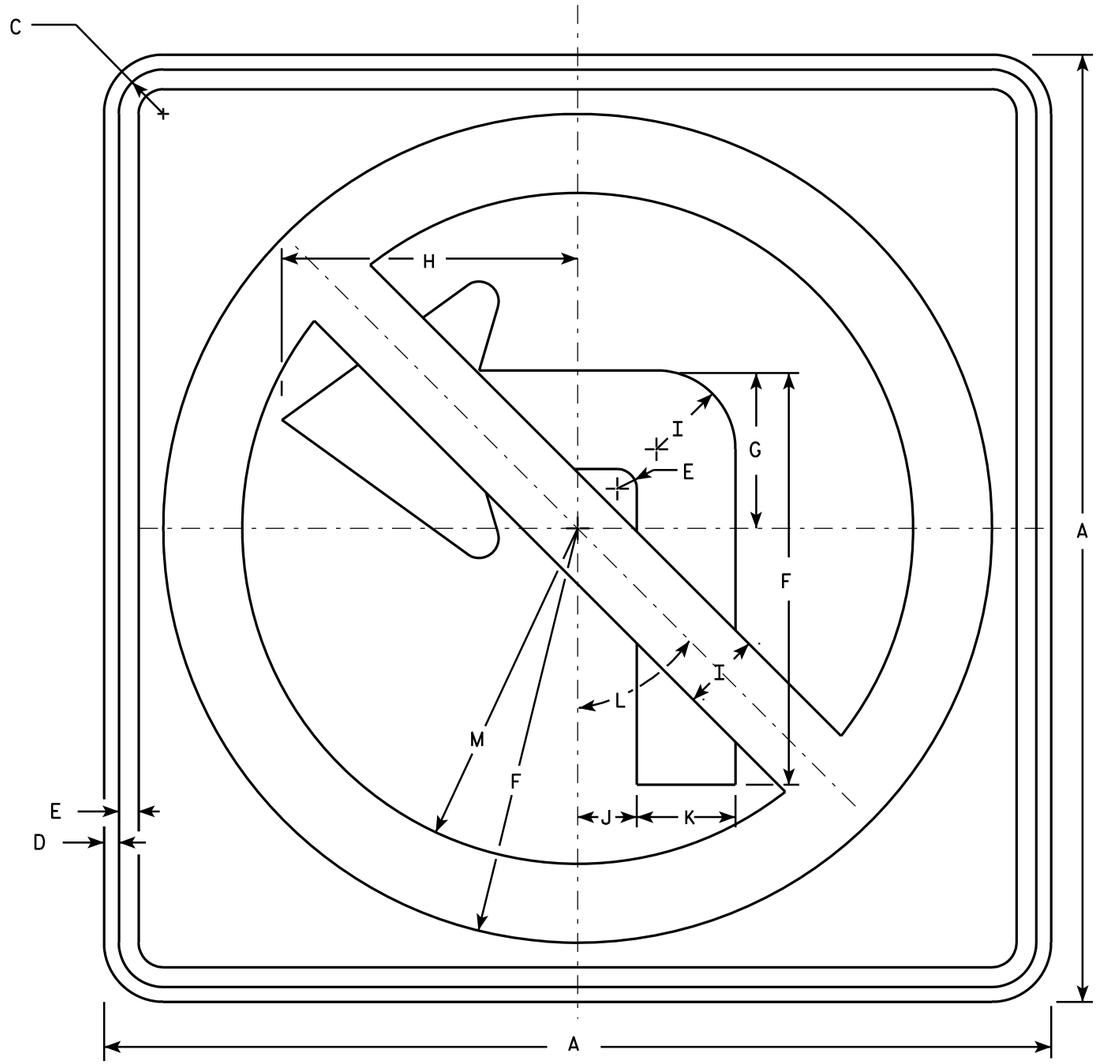
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

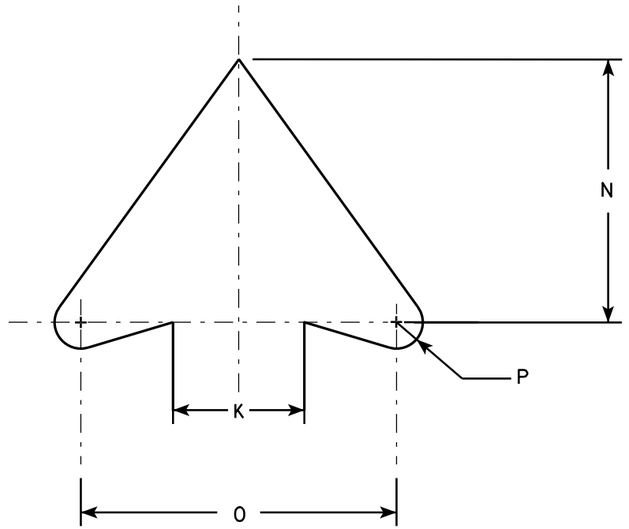
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | E



R3-2

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

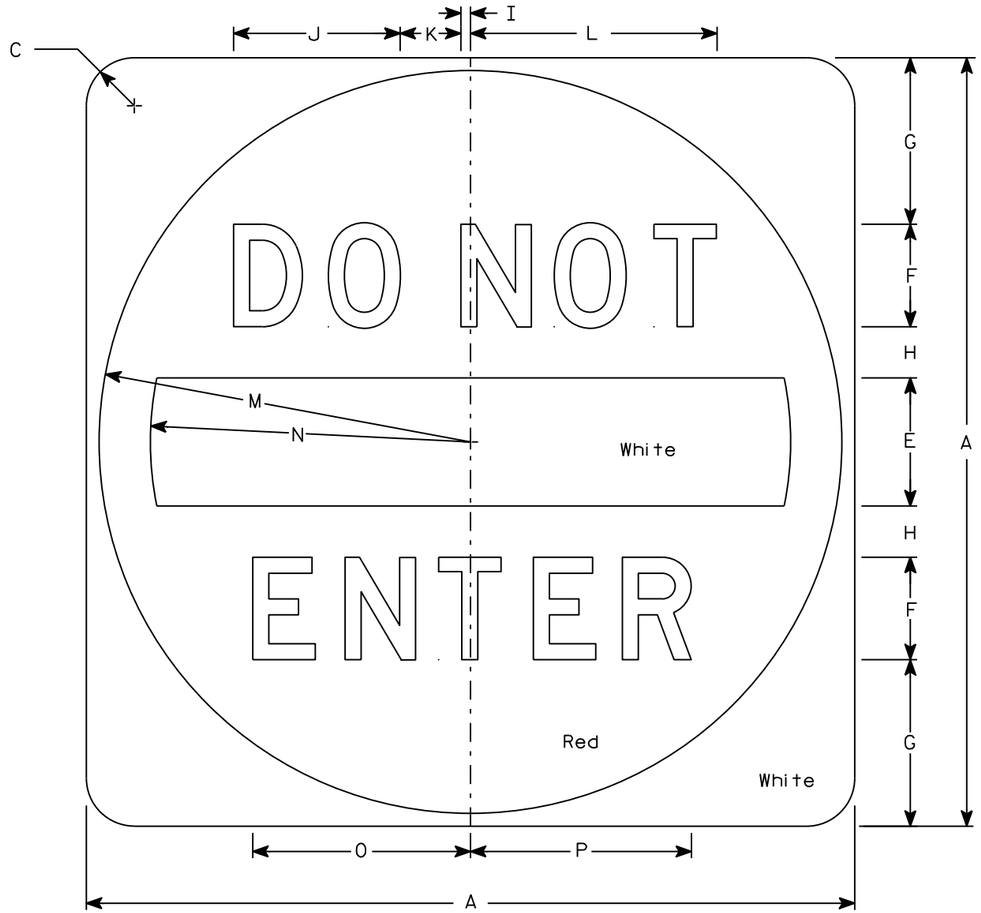
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 189	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

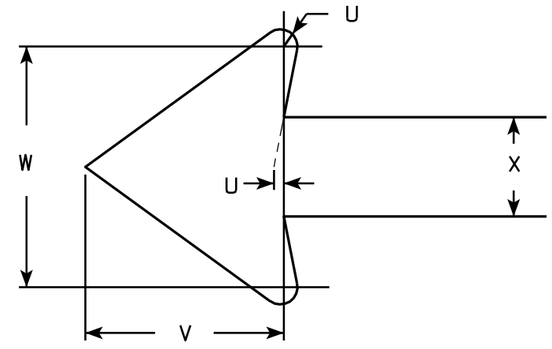
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E



R7-52

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-52D (double arrow)
   R7-52L (left arrow)
   R7-52R (right arrow)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	1 1/2	7/8	7/8	2	2 1/2	2	2	4 7/8	4 7/8	5 1/8	5	3 1/8	3 7/8	1/8	1 1/2	1 3/4	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	6 3/8	6 1/4	3 7/8	5 7/8	1/4	2 1/4	2 5/8	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 5/8	7 5/8	4 3/4	7 3/4	1/4	3	3 1/2	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 5/8	7 5/8	4 3/4	7 3/4	1/4	3	3 1/2	1 1/2			5.0
4																											
5																											

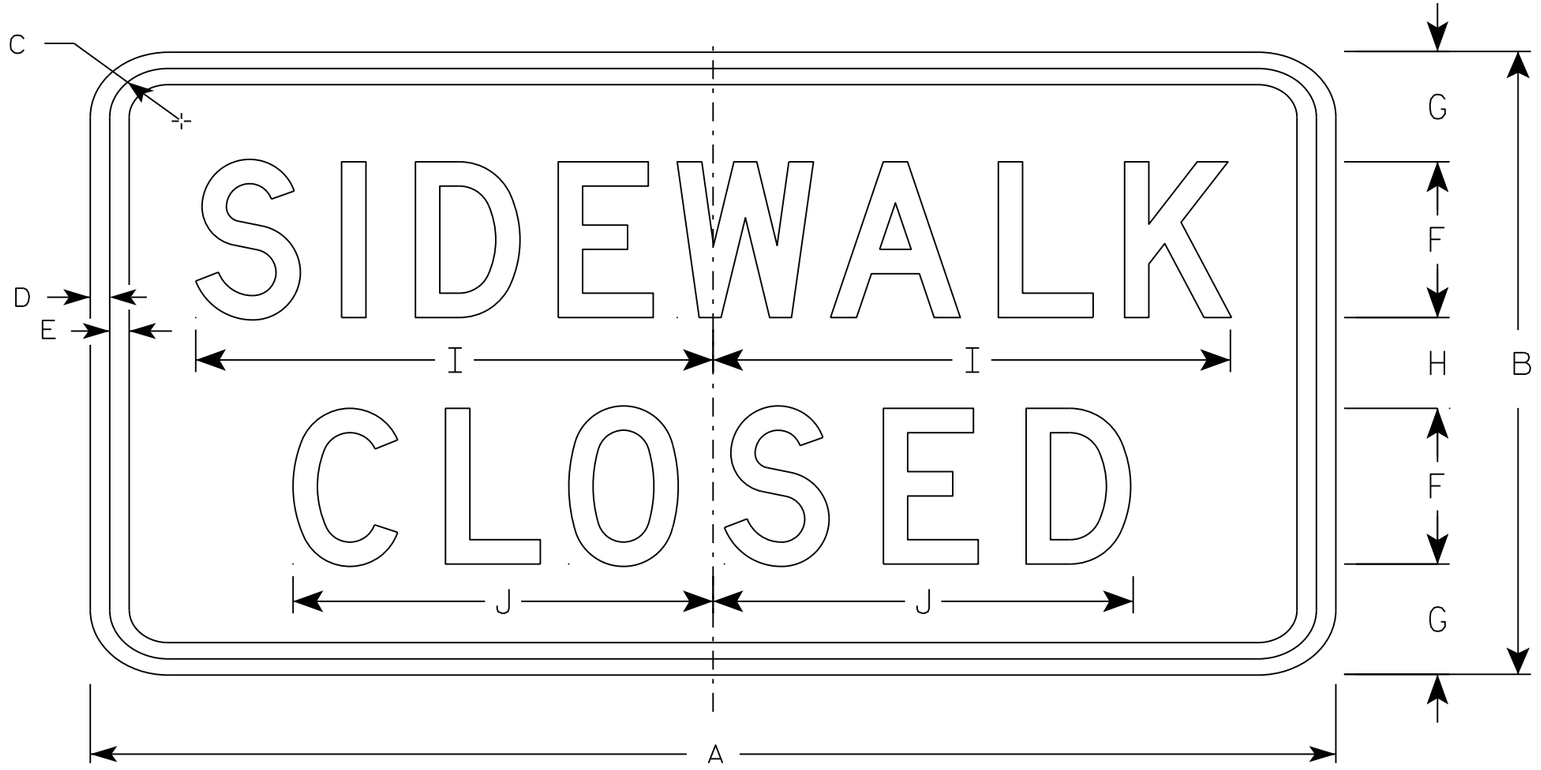
STANDARD SIGN
R7-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-52.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 191	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

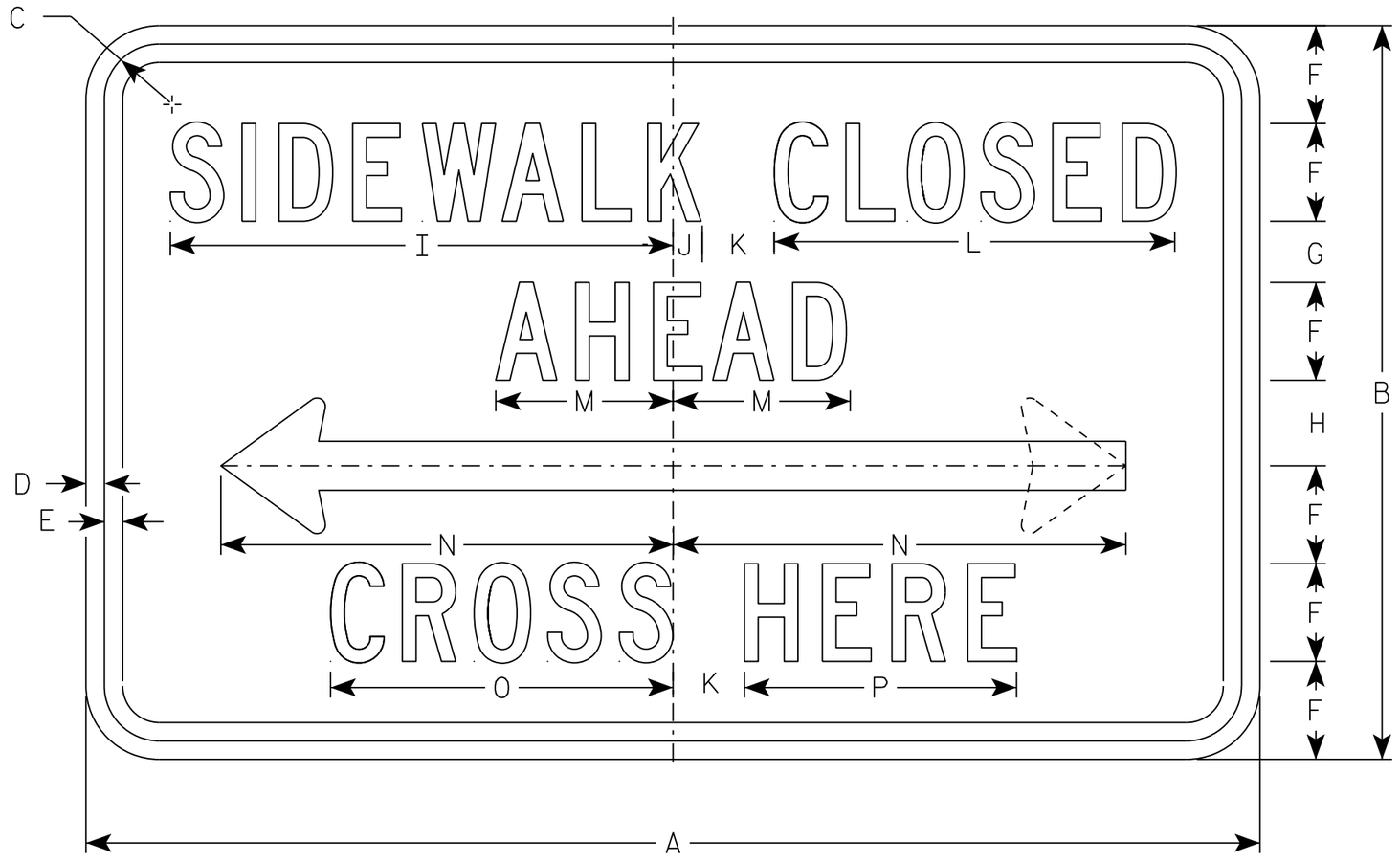
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

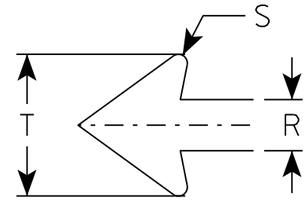
DATE 8/11/16 PLATE 192 R9-9.6

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

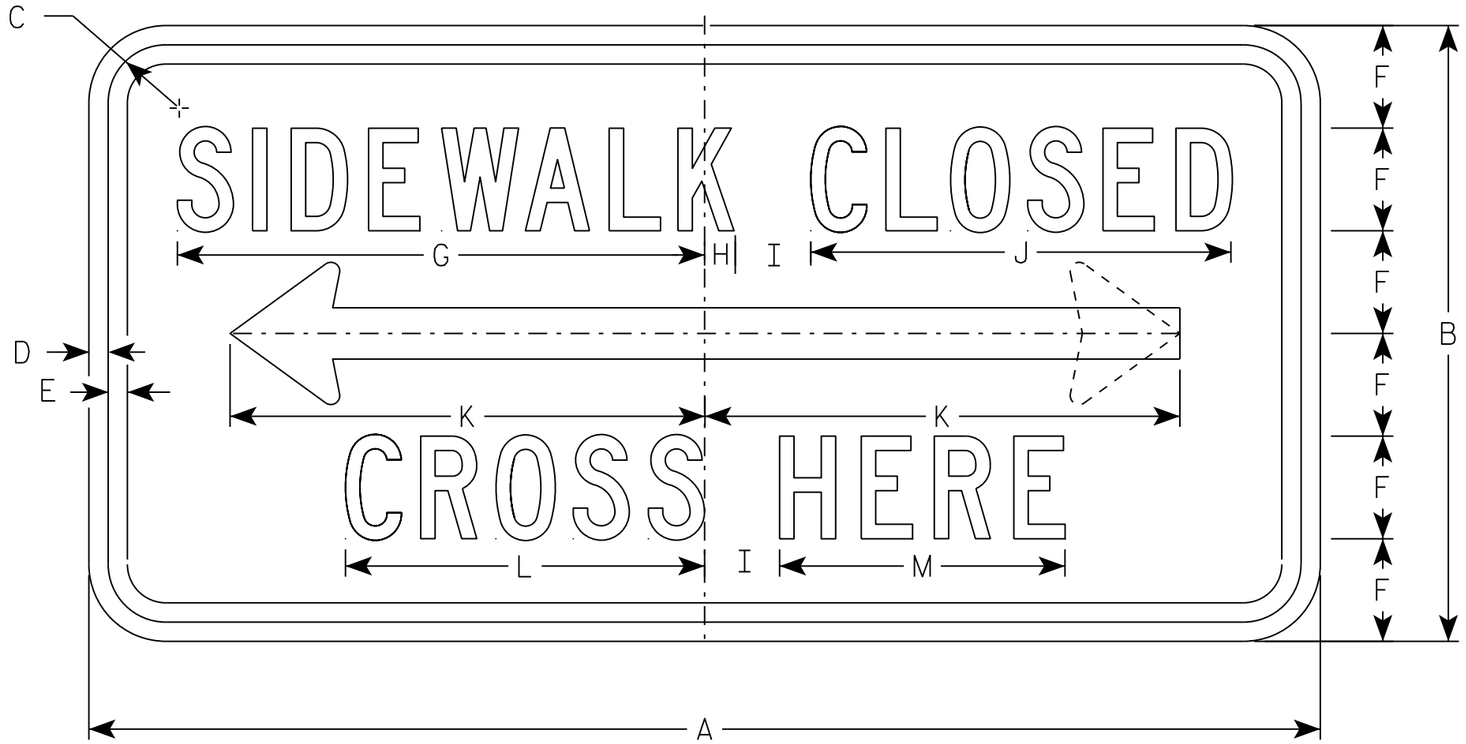
APPROVED Matthew R Rauch
for State Traffic Engineer

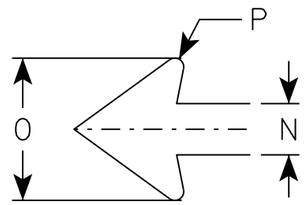
DATE 11/29/16 PLATE NO. R9-11.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 193	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for paths and Trails.





R9-11A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
3	30	15	1 1/8	3/8	1/2	2	13	3/4	2	10 1/4	12 3/8	8 7/8	6 7/8	1 1/4	3 5/8	1/4											3.125
4																											
5																											

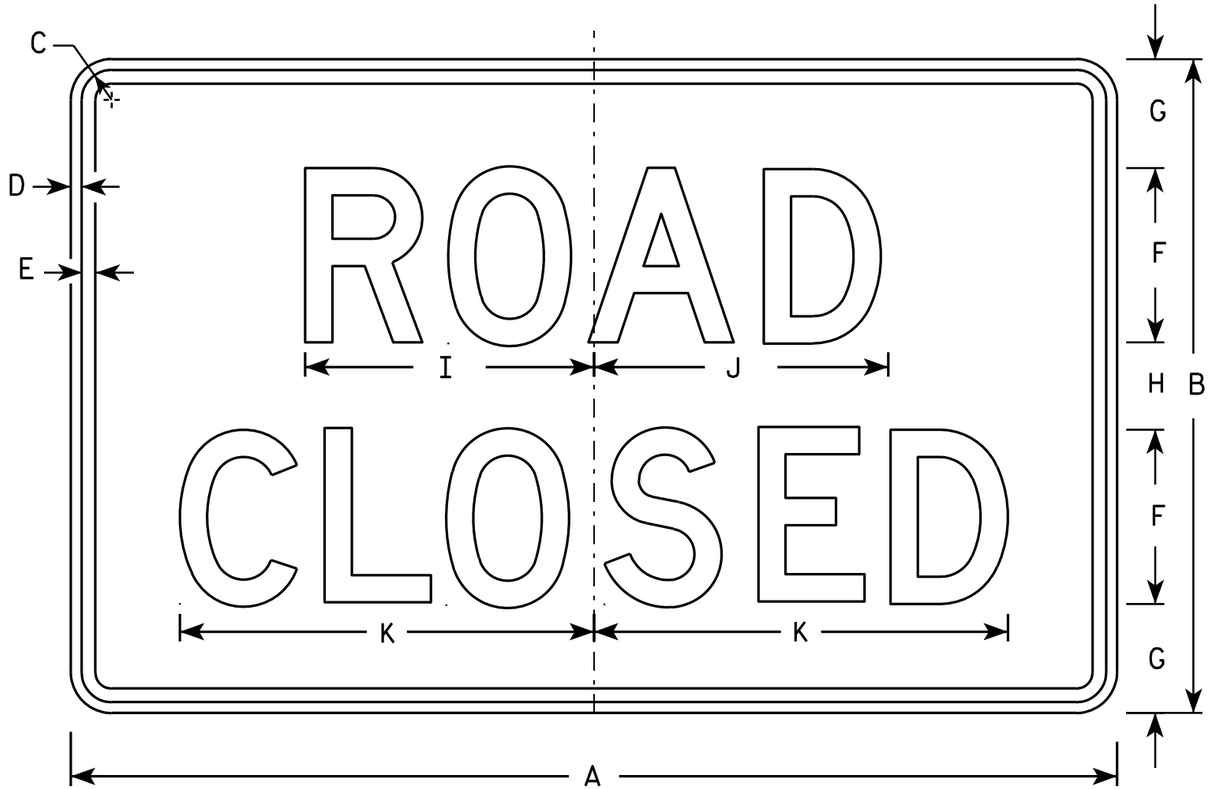
STANDARD SIGN
R9-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11A.3

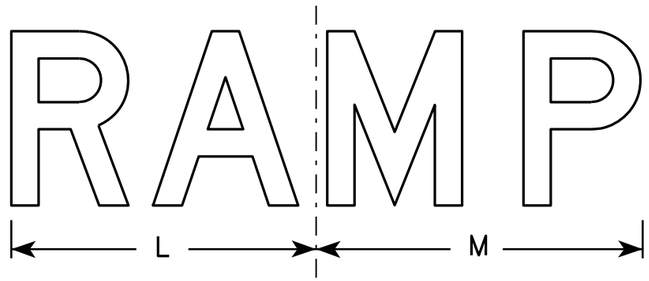
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 194 E



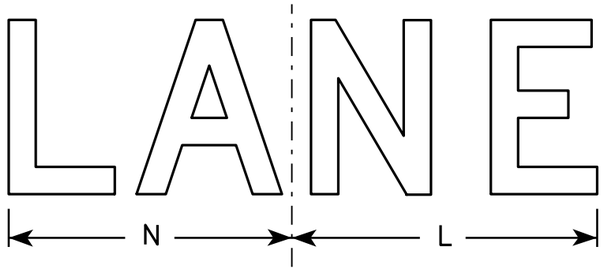
R11-2

NOTES

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



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

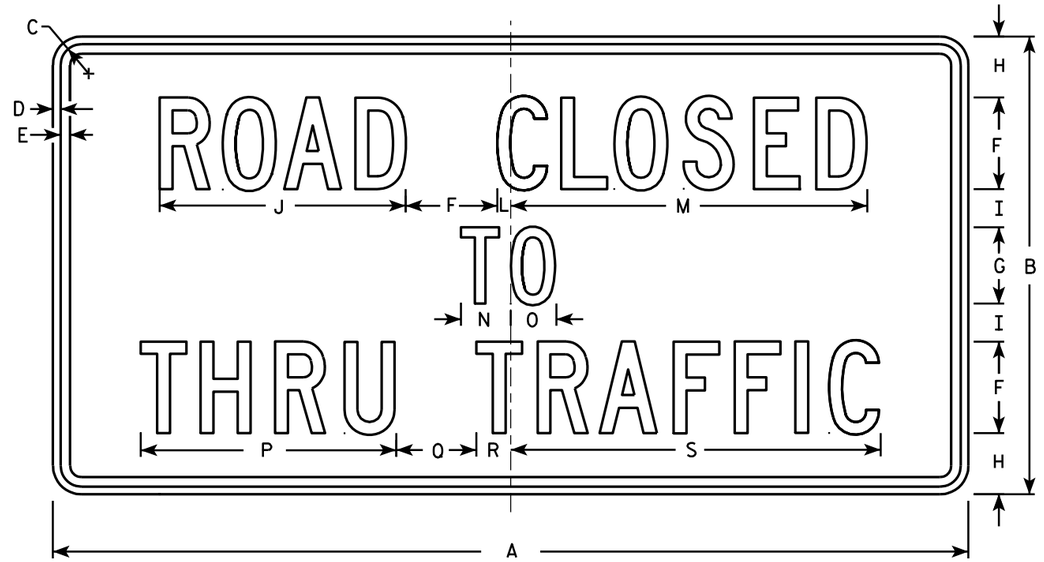
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 195	E



R11-4

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

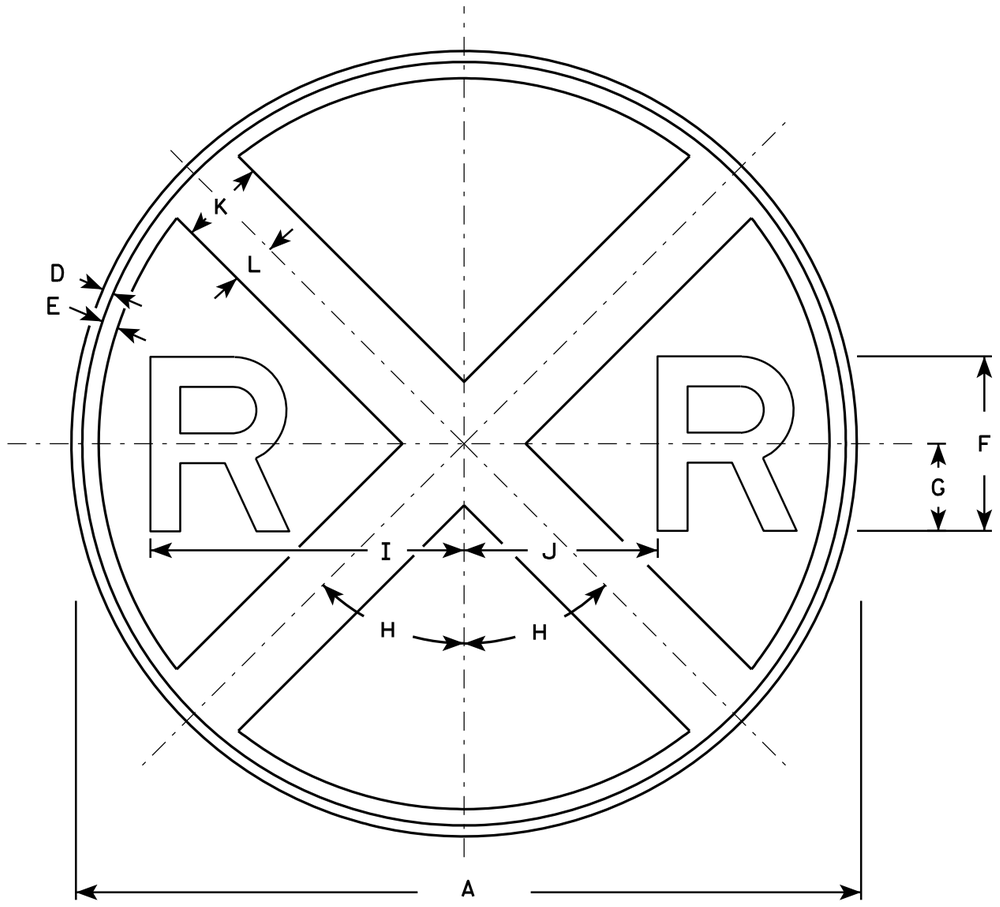
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 196 | E



W10-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E

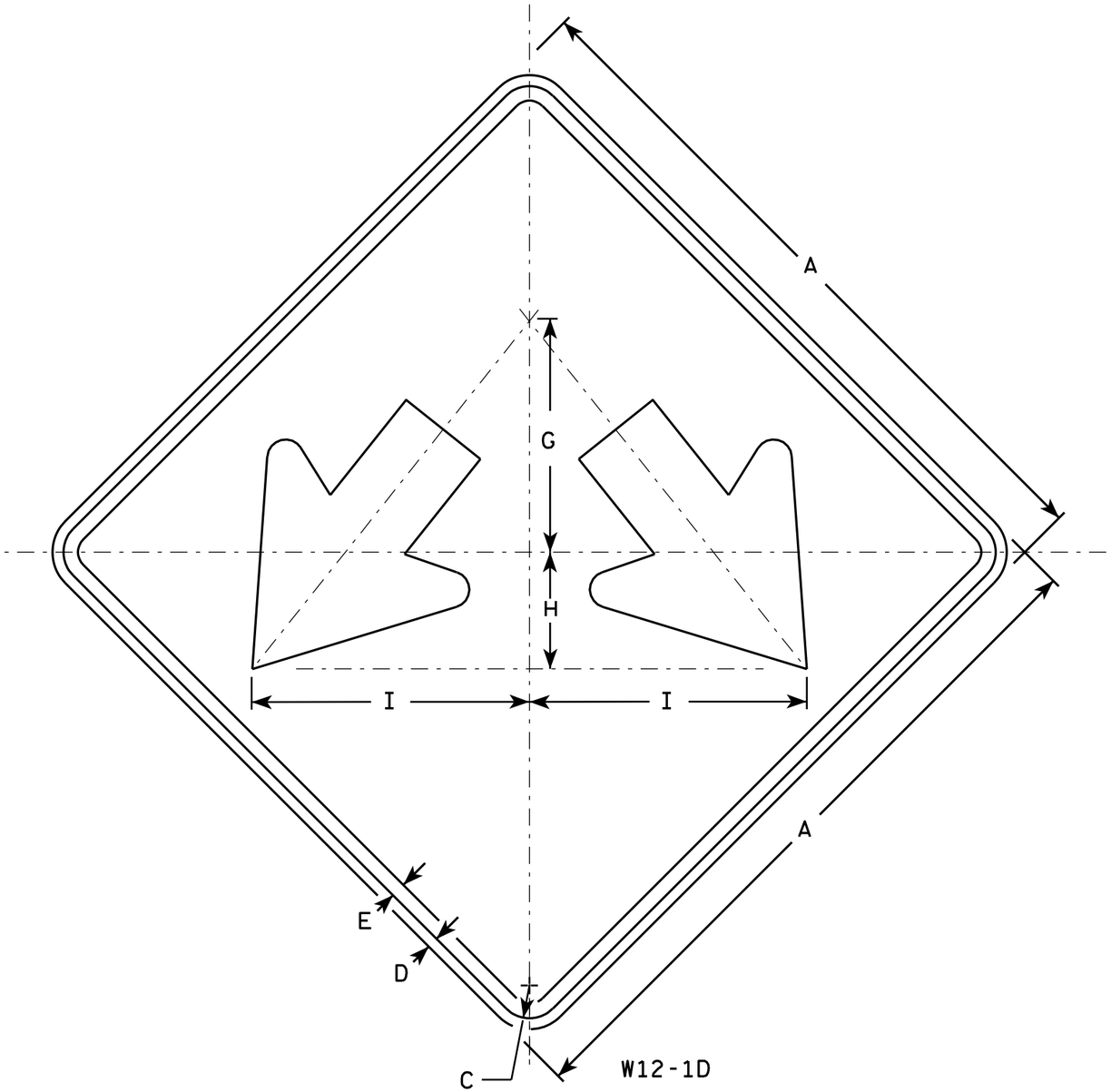
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

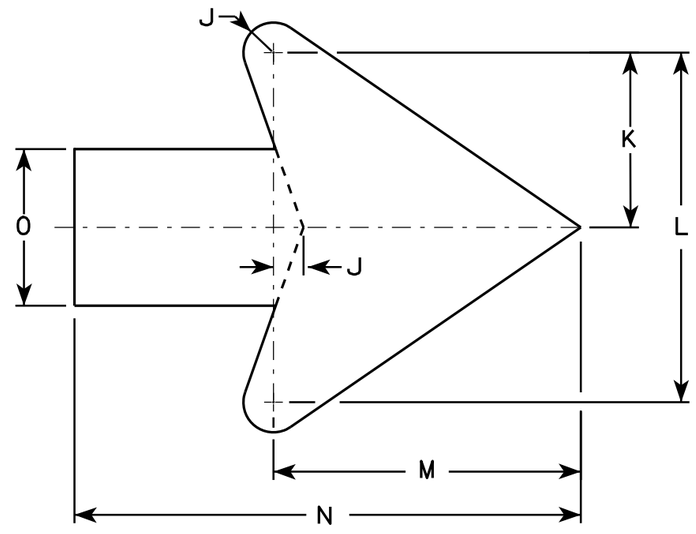
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 197	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

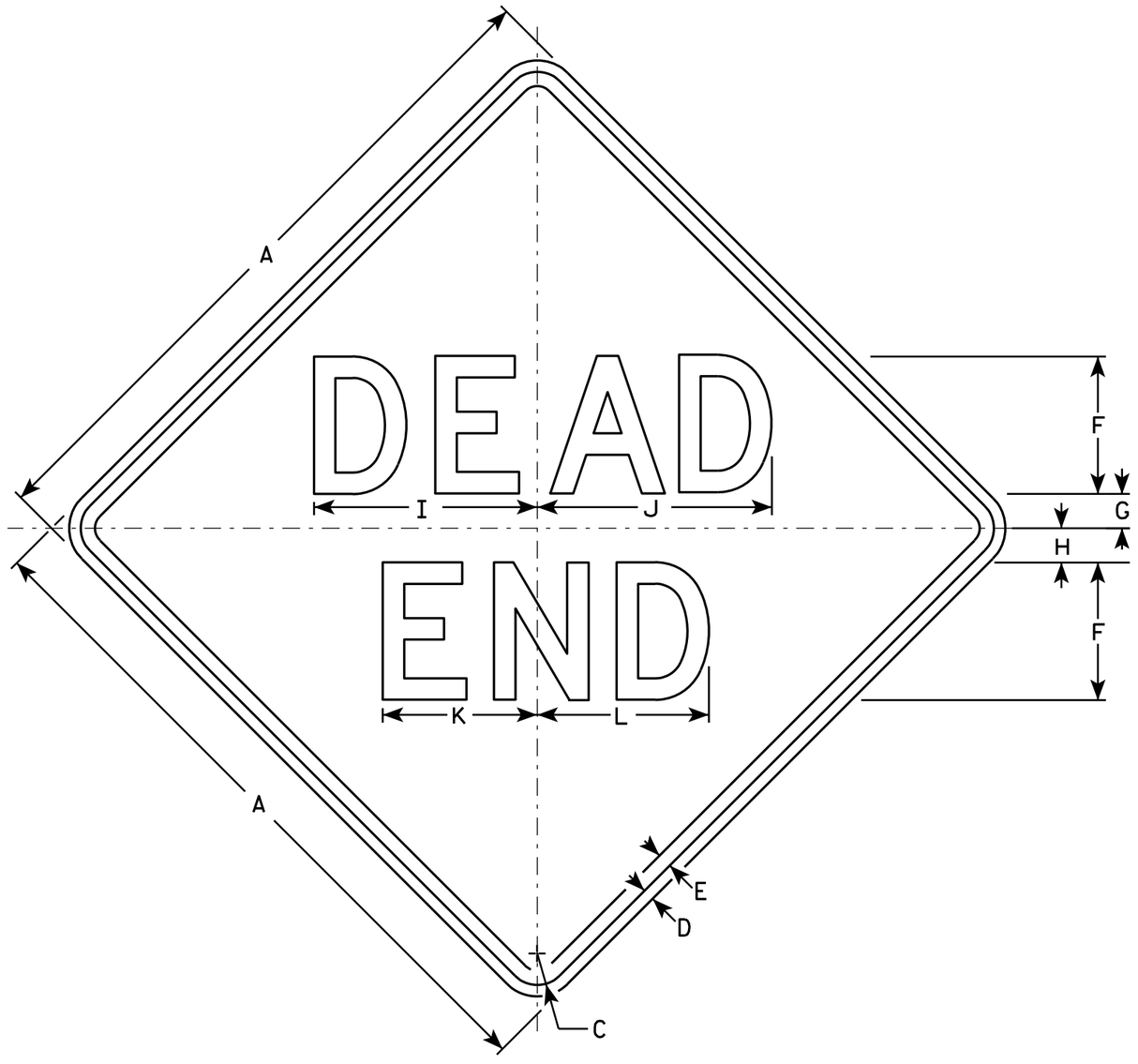
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 198 | E



W14-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

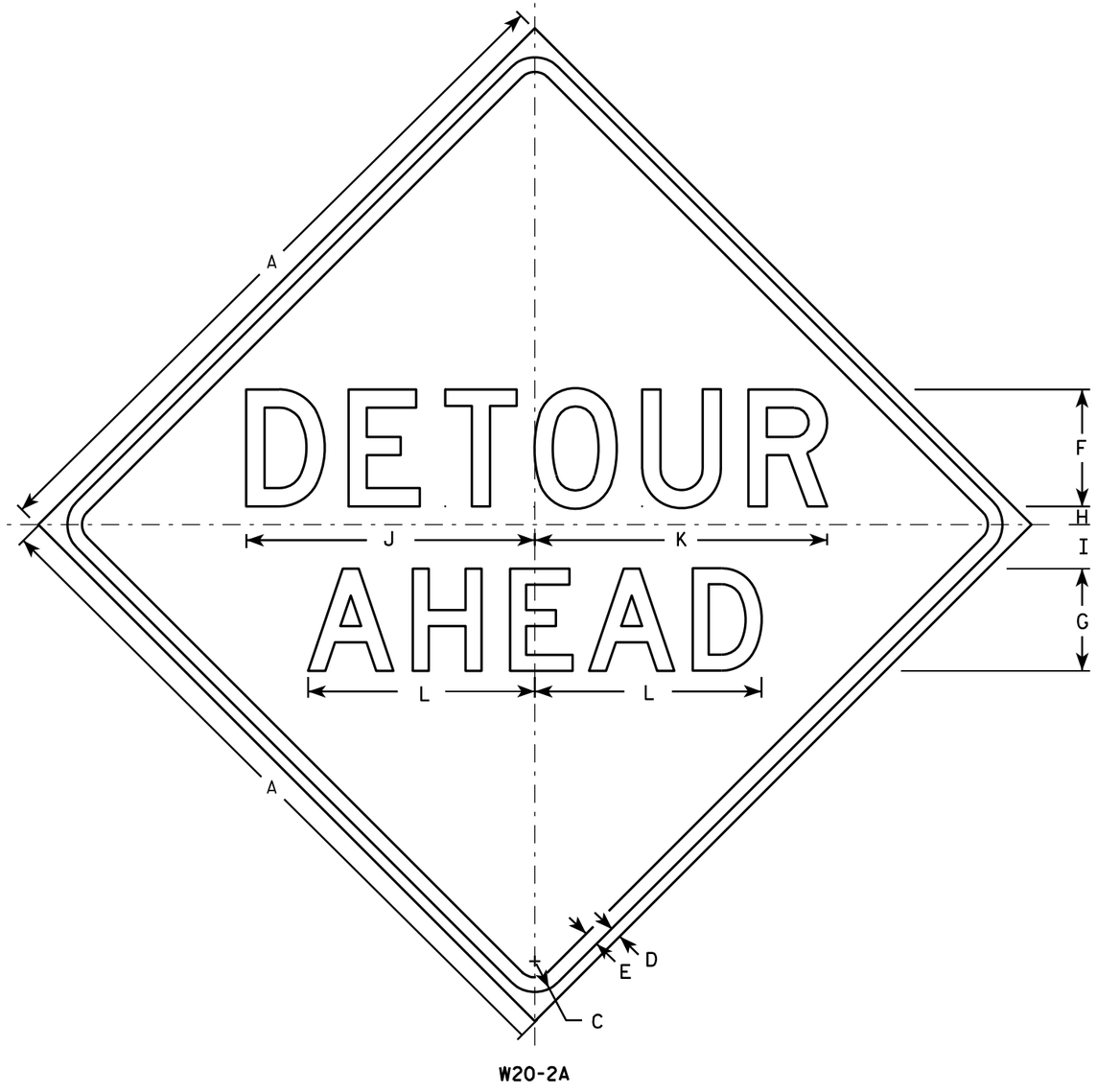
STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

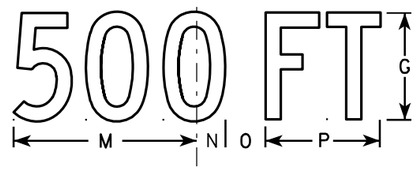
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-1.7

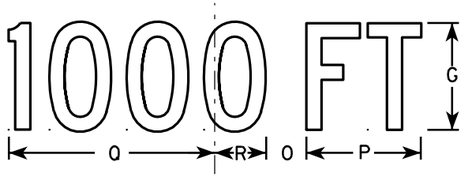
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E



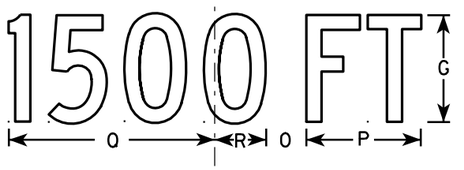
W20-2A



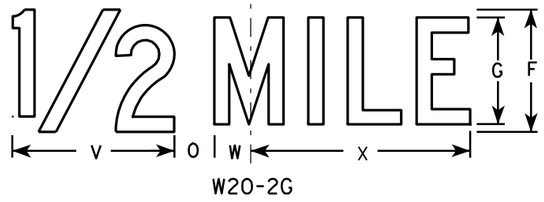
W20-2D



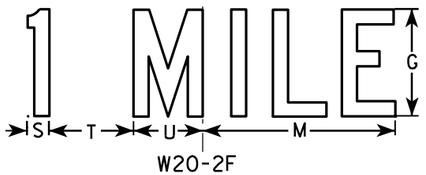
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

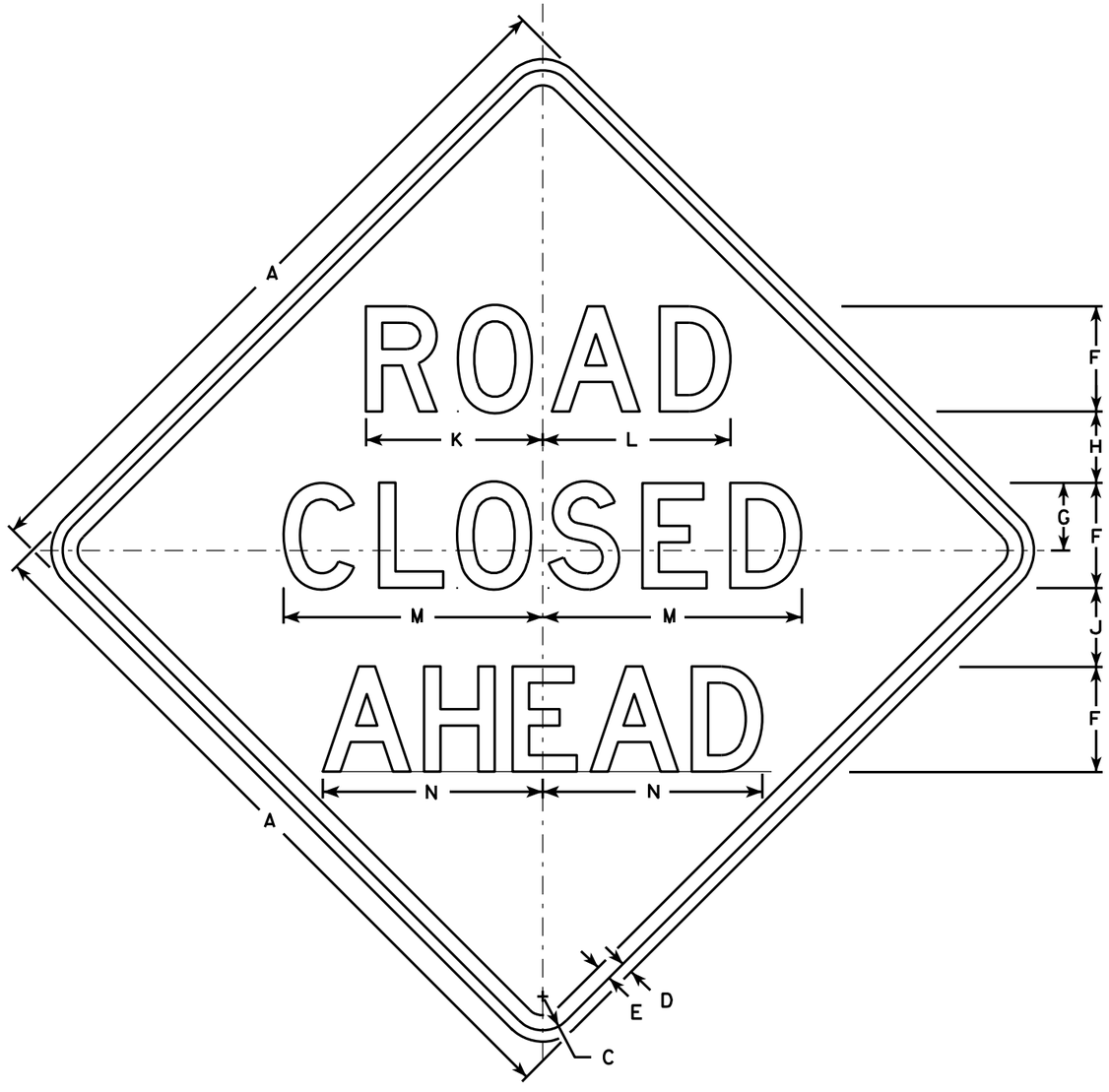
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

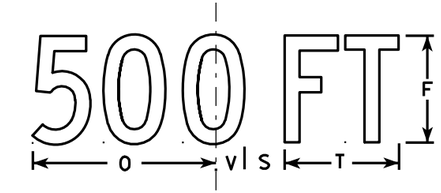
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

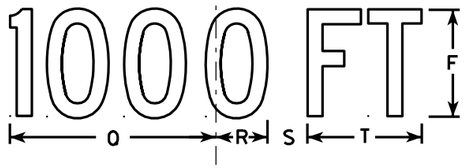
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 200	E



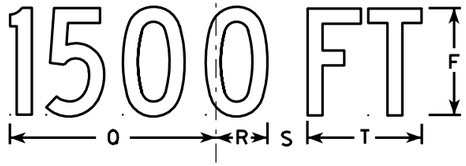
W20-3A



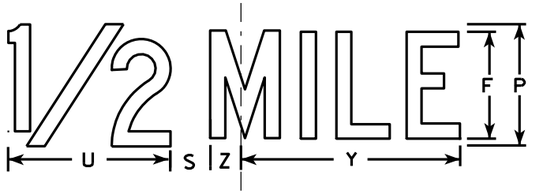
W20-3D



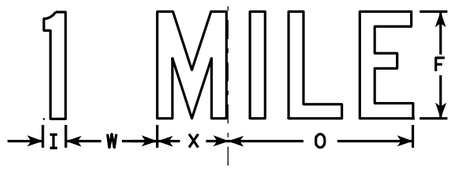
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 201 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

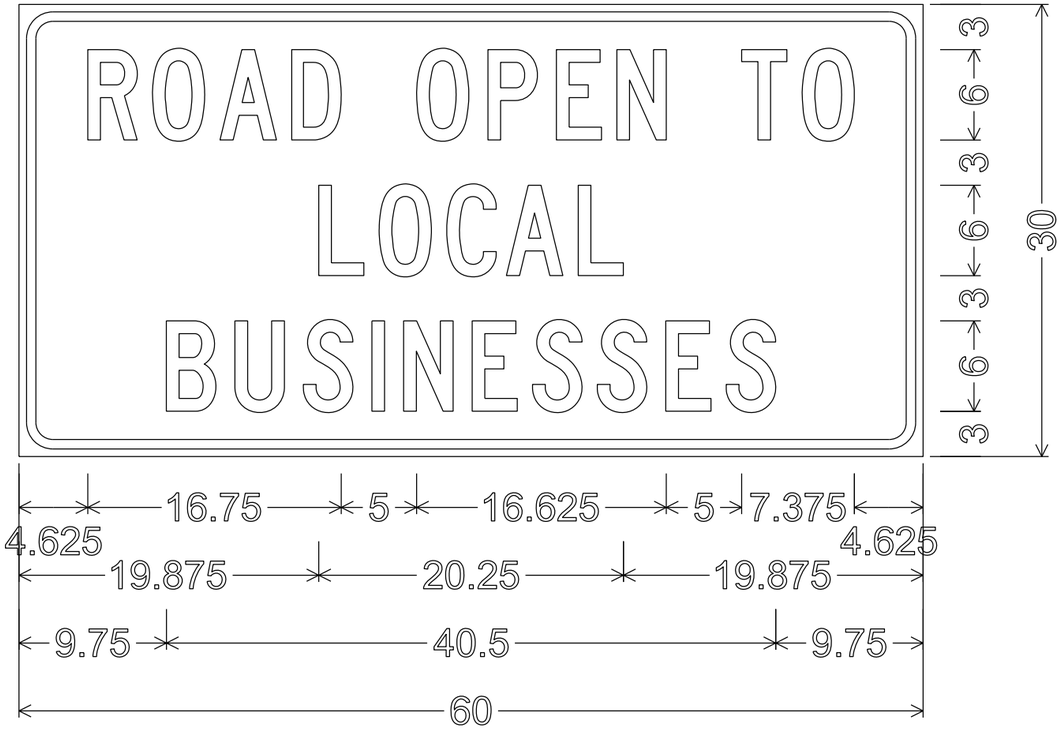
WISDOT/CADDS SHEET 42

7

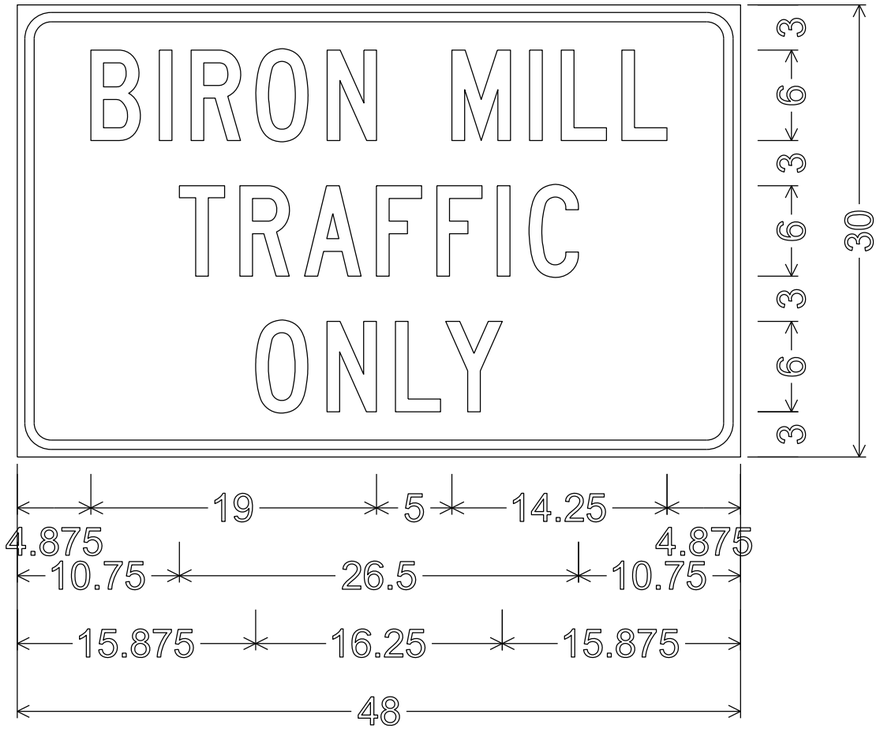
7

NOTES

1. Fixed Message Type II Signs - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C



2.250" Radius, 0.625" Border, 0.500" Indent



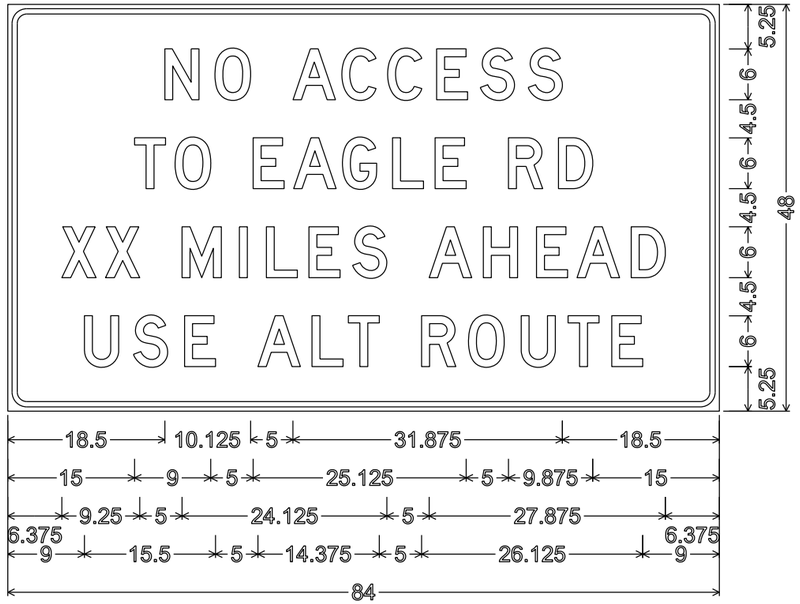
2.250" Radius, 0.625" Border, 0.500" Indent

7

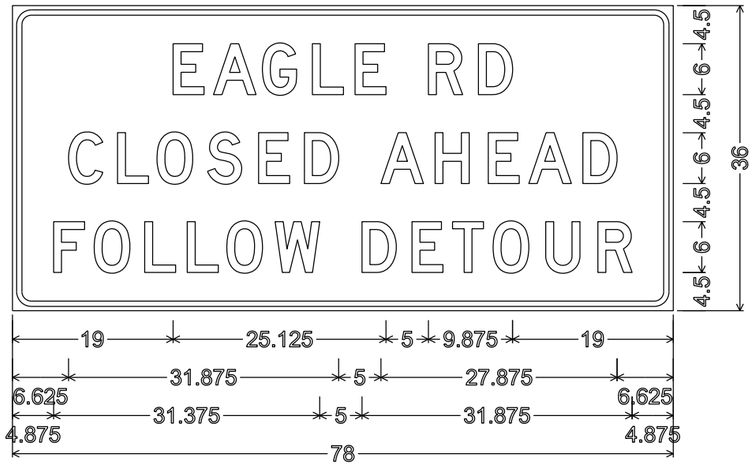
7

NOTES

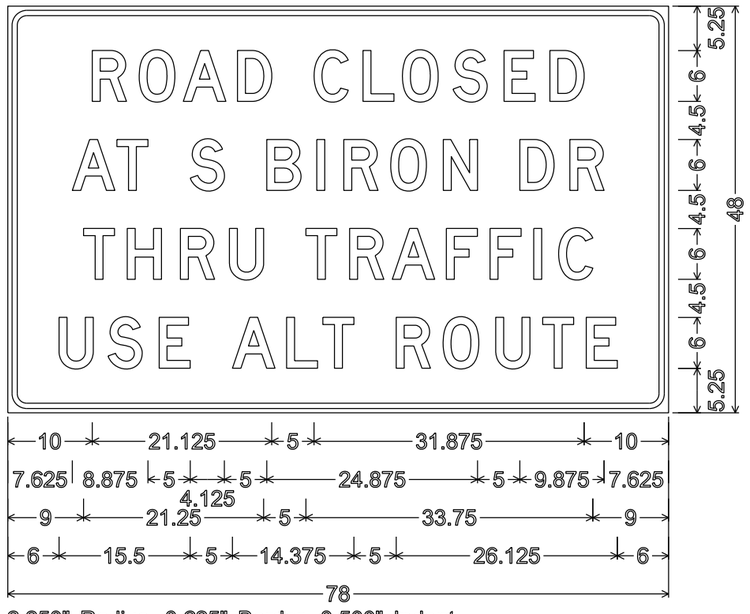
1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



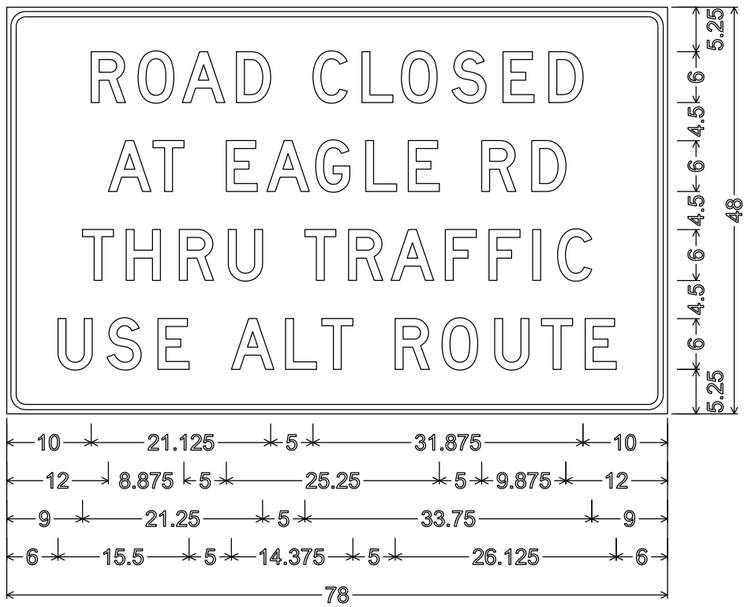
2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent

EARTHWORK - STAGE 1 - Mill Temp Access

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
00+12.13	149.69	0.00	0.00	0.00	0	0	0	0	0	0	0	0
00+50	72.03	0.00	0.00	0.00	143	0	0	0	143	0	0	143
01+00	168.99	0.00	0.00	0.00	223	0	0	0	366	0	0	366
01+50	76.14	0.00	0.00	0.00	227	0	0	0	593	0	0	593
02+00	41.25	0.00	0.00	0.00	109	0	0	0	702	0	0	702
02+50	19.07	0.00	0.58	0.00	56	0	1	0	757	1	0	757
02+80	21.34	0.00	0.00	0.00	22	0	0	0	780	1	0	779

EARTHWORK - STAGE 2 - CTH U

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
147+15	42.80	8.00	0.00	0.00	0	0	0	0	0	0	0	0
147+50	42.65	8.00	0.00	0.00	55	10	0	0	55	0	0	45
148+00	17.61	8.00	4.49	0.00	56	15	4	0	111	5	0	81
148+50	19.19	8.00	12.82	0.00	34	15	16	0	145	25	0	80
149+00	19.89	8.00	41.26	8.30	36	15	50	8	181	88	9	39
149+50	22.13	8.00	34.34	14.60	39	15	70	21	220	175	35	-25
150+00	31.97	8.00	31.10	8.90	50	15	61	22	270	251	61	-65
150+40	38.58	8.00	24.80	8.70	52	12	41	13	323	303	76	-76
150+50	0.00	8.00	0.00	0.00	7	3	5	2	330	309	78	-78

EARTHWORK - STAGE 2- Biron Dr.

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
31+75	0.00	8.00	0.00	0.00	0	0	0	0	0	0	0	0
32+00	36.96	8.00	25.04	0.00	17	7	12	0	17	14	0	-5
32+50	55.51	8.00	21.60	0.00	86	15	43	0	103	68	0	12
33+00	49.96	8.00	29.62	0.00	98	15	47	0	200	128	0	36
33+50	49.18	8.00	20.54	0.00	92	15	46	0	292	186	0	55
33+75	48.55	8.00	0.00	0.00	45	7	10	0	337	198	0	80
34+00	43.48	8.00	2.59	0.00	43	7	1	0	380	199	0	114
34+50	64.63	8.00	5.54	0.00	100	15	8	0	480	209	0	190

EARTHWORK - STAGE 2 - Biron Dr. RT Turn Lane

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
01+00	24.63	7.33	13.94	0.00	0	0	0	0	0	0	0	0
01+50	22.54	7.33	25.81	0.00	44	14	37	0	44	46	0	-16
02+00	10.99	7.33	21.97	0.00	31	14	44	0	75	101	0	-54
02+25	3.31	7.33	24.26	0.00	7	7	21	0	81	128	0	-81

EARTHWORK - STAGE 3 - CTH U

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
108+00	172.94	15.00	0.00	0.00	0	0	0	0	0	0	0	0
108+50	180.76	15.00	0.00	0.00	328	28	0	0	328	0	0	300
108+95.52	179.93	15.00	0.00	0.00	304	25	0	0	632	0	0	578
109+00	178.27	15.00	0.00	0.00	30	2	0	0	661	0	0	606
109+11.05	180.00	15.00	0.00	0.00	73	6	0	0	735	0	0	673
109+50	141.42	15.00	0.00	0.00	232	22	0	0	966	0	0	883
109+58.45	150.78	15.00	0.00	0.00	46	5	0	0	1,012	0	0	924
110+00	128.60	15.00	0.00	0.00	215	23	0	0	1,227	0	0	1,116
110+20.3	142.03	15.00	0.00	0.00	102	11	0	0	1,329	0	0	1,206
110+50	122.14	15.00	0.00	0.00	145	16	0	0	1,474	0	0	1,335
111+00	111.73	15.00	0.02	0.00	217	28	0	0	1,691	0	0	1,524
111+33.48	128.01	15.00	0.15	0.00	149	19	0	0	1,839	0	0	1,654
111+50	107.12	15.00	1.34	0.00	72	9	0	0	1,911	1	0	1,716
111+90.39	117.69	15.00	0.63	0.00	168	22	1	0	2,079	3	0	1,860
112+00	110.24	15.00	1.01	0.00	41	5	0	0	2,120	3	0	1,895
112+41.3	138.96	15.00	0.00	0.00	191	23	1	0	2,311	4	0	2,061
112+50	142.57	15.00	0.00	0.00	45	5	0	0	2,356	4	0	2,102
113+00	149.46	15.00	0.00	0.00	270	28	0	0	2,626	4	0	2,345
113+18.37	179.34	15.00	0.00	0.00	112	10	0	0	2,738	4	0	2,446
113+50	192.27	15.00	0.00	0.00	218	18	0	0	2,956	4	0	2,646
114+00	163.27	15.00	0.00	0.00	329	28	0	0	3,285	4	0	2,948
114+25	228.67	15.00	0.00	0.00	181	14	0	0	3,467	4	0	3,115
114+50	175.38	15.00	0.00	0.00	187	14	0	0	3,654	4	0	3,289
115+00	205.22	15.00	0.00	0.00	352	28	0	0	4,006	4	0	3,613
115+06.67	207.48	15.00	0.00	0.00	51	4	0	0	4,057	4	0	3,660
115+50	196.26	15.00	0.00	0.00	324	24	0	0	4,381	4	0	3,960
115+75	185.86	15.00	0.00	0.00	177	14	0	0	4,558	4	0	4,123
116+00	155.47	15.00	0.00	0.00	158	14	0	0	4,716	4	0	4,267
116+50	112.82	15.00	0.20	0.00	248	28	0	0	4,964	4	0	4,488
117+00	110.84	15.00	0.00	0.00	207	28	0	0	5,171	4	0	4,667
117+12	131.01	15.00	0.00	0.00	54	7	0	0	5,225	4	0	4,714
117+50	107.78	15.00	0.01	0.00	168	21	0	0	5,393	4	0	4,861
117+77.57	116.89	15.00	0.00	0.00	115	15	0	0	5,508	4	0	4,960
118+00	130.63	15.00	0.00	0.00	103	12	0	0	5,611	4	0	5,051
118+50	131.53	15.00	0.00	``	243	28	0	0	5,853	4	0	5,266
118+85.09	161.20	15.00	0.00	0.00	190	19	0	0	6,044	4	0	5,436
119+00	143.93	15.00	0.00	0.00	84	8	0	0	6,128	4	0	5,512
119+50	121.76	15.00	0.00	0.00	246	28	0	0	6,374	4	0	5,731
119+70.82	122.70	15.00	0.00	0.00	94	12	0	0	6,468	4	0	5,813
120+00	107.69	15.00	0.74	0.00	125	16	0	0	6,593	5	0	5,921
120+50	151.16	15.00	0.00	0.00	240	28	1	0	6,832	6	0	6,132
121+00	153.77	15.00	0.00	0.00	282	28	0	0	7,115	6	0	6,387
121+25	190.82	15.00	0.00	0.00	160	14	0	0	7,274	6	0	6,532
121+50	179.09	15.00	0.00	0.00	171	14	0	0	7,445	6	0	6,690
121+83.37	213.33	15.00	0.00	0.00	243	19	0	0	7,688	6	0	6,914
122+00	181.58	15.00	0.00	0.00	122	9	0	0	7,810	6	0	7,026

EARTHWORK - STAGE 3 - CTH U

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
122+50	159.10	15.00	0.00	0.00	315	28	0	0	8,125	6	0	7,314
123+00	142.59	15.00	0.00	0.00	279	28	0	0	8,404	6	0	7,565
123+27.35	162.80	15.00	0.00	0.00	155	15	0	0	8,559	6	0	7,705
123+50	124.97	15.00	0.00	0.00	121	13	0	0	8,680	6	0	7,813
124+00	113.18	15.00	0.00	0.00	221	28	0	0	8,900	6	0	8,006
124+50	135.74	15.00	0.00	0.00	230	28	0	0	9,131	6	0	8,208
125+00	97.03	15.00	0.00	0.00	216	28	0	0	9,346	6	0	8,396
125+14.16	127.72	15.00	0.00	0.00	59	8	0	0	9,405	6	0	8,447
125+50	85.98	15.00	1.71	0.00	142	20	1	0	9,547	7	0	8,568
126+00	75.55	15.00	4.90	0.00	150	28	6	0	9,697	15	0	8,682
126+25	86.15	15.00	6.76	0.00	75	14	5	0	9,771	22	0	8,736
126+50	84.46	15.00	5.21	0.00	79	14	6	0	9,850	28	0	8,794
127+00	79.75	15.00	10.00	0.00	152	28	14	0	10,002	46	0	8,901
127+39.28	90.32	15.00	10.80	0.00	124	22	15	0	10,126	65	0	8,984
127+50	82.13	15.00	24.28	0.00	34	6	7	0	10,160	74	0	9,003
128+00	84.80	15.00	23.01	0.00	155	28	44	0	10,315	128	0	9,075
128+40.47	96.45	15.00	8.18	0.00	136	22	23	0	10,451	158	0	9,160
128+50	85.48	15.00	18.58	0.00	32	5	5	0	10,483	164	0	9,180
129+00	82.31	15.00	22.14	0.00	155	28	38	0	10,638	211	0	9,261
129+50	107.04	15.00	1.55	0.00	175	28	22	0	10,814	238	0	9,381
130+00	73.72	15.00	9.41	0.00	167	28	10	0	10,981	251	0	9,508
130+50	71.57	15.00	11.46	0.00	135	28	19	0	11,116	275	0	9,591
130+75	91.40	15.00	5.17	0.00	75	14	8	0	11,191	285	0	9,642
131+00	71.65	15.00	14.88	0.00	75	14	9	0	11,266	296	0	9,692
131+50	69.14	15.00	9.24	0.00	130	28	22	0	11,397	324	0	9,767
132+00	66.45	15.00	9.57	0.00	126	28	17	0	11,522	346	0	9,843
132+50	59.23	15.00	10.97	0.00	116	28	19	0	11,639	370	0	9,908
132+85.59	68.32	15.00	7.78	0.00	84	20	12	0	11,723	385	0	9,957
133+00	54.51	15.00	8.83	0.00	33	8	4	0	11,756	391	0	9,976
133+50	51.34	15.00	32.05	0.00	98	28	38	0	11,854	438	0	9,999
134+00	56.88	15.00	31.79	0.00	100	28	59	0	11,954	512	0	9,998
134+28	62.89	15.00	167.18	27.00	62	16	103	14	12,016	641	17	9,915
134+37.8	65.49	15.00	147.70	16.20	23	5	57	8	12,039	712	26	9,862
134+50	72.85	15.00	38.15	0.00	31	7	42	4	12,070	765	31	9,834
135+00	86.62	15.00	35.22	0.00	148	28	68	0	12,218	850	31	9,868
135+50	96.00	15.00	33.03	0.00	169	28	63	0	12,387	929	31	9,931
136+00	140.76	15.00	8.30	0.00	219	28	38	0	12,606	976	31	10,074
136+50	134.67	15.00	13.80	0.00	255	28	20	0	12,861	1,002	31	10,276
137+00	174.63	15.00	0.00	0.00	286	28	13	0	13,148	1,018	31	10,519
137+50	150.95	15.00	5.20	0.00	301	28	5	0	13,449	1,024	31	10,786
138+00	152.33	15.00	5.15	0.00	281	28	10	0	13,730	1,036	31	11,027
138+50	141.52	15.00	6.09	0.00	272	28	10	0	14,002	1,049	31	11,259
139+00	253.08	15.00	0.00	0.00	365	28	6	0	14,368	1,056	31	11,589
139+50	140.20	15.00	6.51	0.00	364	28	6	0	14,732	1,064	31	11,918
139+81.43	194.76	15.00	0.00	0.00	195	17	4	0	14,927	1,068	31	12,091

EARTHWORK - STAGE 3 - CTH U

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
140+00	138.91	15.00	3.38	0.00	115	10	1	0	15,041	1,070	31	12,194
140+50	127.15	15.00	4.03	0.00	246	28	7	0	15,288	1,078	31	12,404
141+00	105.44	15.00	6.75	0.00	215	28	10	0	15,503	1,091	31	12,579
141+50	89.26	15.00	14.00	0.00	180	28	19	0	15,683	1,115	31	12,707
142+00	80.10	15.00	14.90	0.00	157	28	27	0	15,840	1,148	31	12,803
142+50	79.15	15.00	14.89	0.00	147	28	28	0	15,988	1,183	31	12,888
143+00	75.96	15.00	11.06	0.00	144	28	24	0	16,131	1,213	31	12,974
143+50	75.50	15.00	7.61	0.00	140	28	17	0	16,272	1,234	31	13,065
143+67.75	82.20	15.00	1.65	0.00	52	10	3	0	16,323	1,238	31	13,103
144+00	81.65	15.00	13.81	0.00	98	18	9	0	16,421	1,250	31	13,172
144+50	58.06	15.00	17.65	0.00	129	28	29	0	16,551	1,286	31	13,237
145+00	48.04	15.00	33.34	0.00	98	28	47	0	16,649	1,345	31	13,248
145+50	48.56	15.00	14.03	0.00	89	28	44	0	16,738	1,400	31	13,255
146+00	62.44	15.00	0.80	0.00	103	28	14	0	16,841	1,417	31	13,313
146+50	38.28	15.00	10.66	0.00	93	28	11	0	16,934	1,430	31	13,365
147+00	44.75	15.00	1.50	0.00	77	28	11	0	17,011	1,444	31	13,400
147+15	42.80	15.00	1.21	0.00	24	8	1	0	17,036	1,445	31	13,415

EARTHWORK - STAGE 3 - Deer St.

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
10+68	25.03	9.17	0.00	0.00	0	0	0	0	0	0	0	0
10+75	34.44	9.17	0.00	0.00	8	2	0	0	8	0	0	5
11+00	85.83	9.17	12.92	0.00	56	8	6	0	63	7	0	45
11+19	161.25	9.17	0.00	0.00	87	6	5	0	150	13	0	120

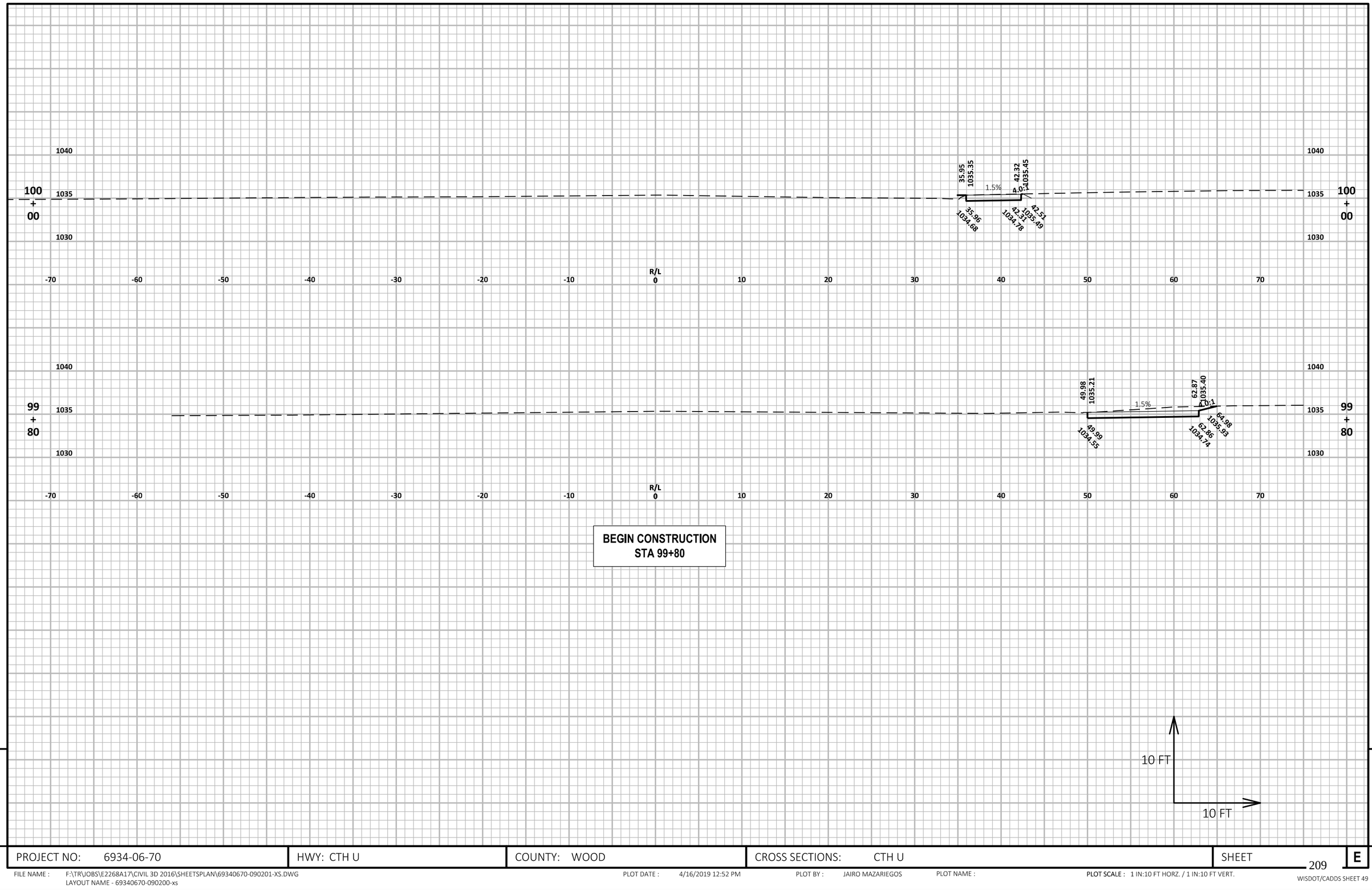
EARTHWORK- STAGE 3 - Buffalo St.

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
20+75	21.75	9.17	0.00	0.00	0	0	0	0	0	0	0	0
21+00	52.86	9.17	15.53	0.00	35	8	7	0	35	9	0	17
21+25	83.64	9.17	10.06	0.00	63	8	12	0	98	24	0	57
21+45	270.80	9.17	0.00	0.00	131	7	4	0	229	28	0	177

EARTHWORK - STAGE 4 - CTH U

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut Note 1	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Marsh Exc	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Marsh Backfill 1.20 Note 4	Mass Ordinate Note 8
99+80	12.64	0.00	0.00	0.00	0	0	0	0	0	0	0	0
100+00	7.73	0.00	0.00	0.00	8	0	0	0	8	0	0	8
100+50	5.26	0.00	1.42	0.00	12	0	1	0	20	2	0	18
101+00	54.26	15.00	4.87	0.00	41	14	6	0	61	9	0	38
101+25	53.82	15.00	6.57	0.00	36	14	5	0	97	16	0	54
101+50	58.20	15.00	21.96	0.00	38	14	13	0	135	32	0	61
102+00	66.54	15.00	0.07	0.00	88	28	20	0	223	58	0	96
102+50	86.02	15.00	0.00	0.00	113	28	0	0	336	58	0	181
103+00	85.40	15.00	0.00	0.00	131	28	0	0	467	58	0	284
103+50	115.53	15.00	0.00	0.00	158	28	0	0	625	58	0	415
103+77.56	109.74	15.00	0.00	0.00	100	15	0	0	725	58	0	499
104+00	114.48	15.00	0.00	0.00	81	12	0	0	806	58	0	568
104+50	116.88	15.00	0.00	0.00	186	28	0	0	992	58	0	726
105+00	116.18	15.00	0.00	0.00	188	28	0	0	1,180	58	0	886
105+50	128.12	15.00	0.00	0.00	198	28	0	0	1,379	58	0	1,057
106+00	134.91	15.00	0.00	0.00	216	28	0	0	1,594	58	0	1,245
106+50	137.36	15.00	0.00	0.00	224	28	0	0	1,819	58	0	1,442
107+00	206.51	15.00	0.00	0.00	291	28	0	0	2,109	58	0	1,704
107+50	151.27	15.00	0.00	0.00	303	28	0	0	2,413	58	0	1,980
107+64.34	182.52	15.00	0.00	0.00	81	8	0	0	2,493	58	0	2,053
107+89.41	195.26	15.00	0.00	0.00	161	14	0	0	2,655	58	0	2,200
108+00	177.16	15.00	0.00	0.00	67	6	0	0	2,722	58	0	2,262

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
4 - Expanded Marsh Backfill	Will be backfilled with Granular Backfill (or Cut, or Borrow). Marsh Excavation assumed to be wasted.
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [Cut - Salvaged Pavt - Expanded Fill]. Does not include Marsh Excavation



9

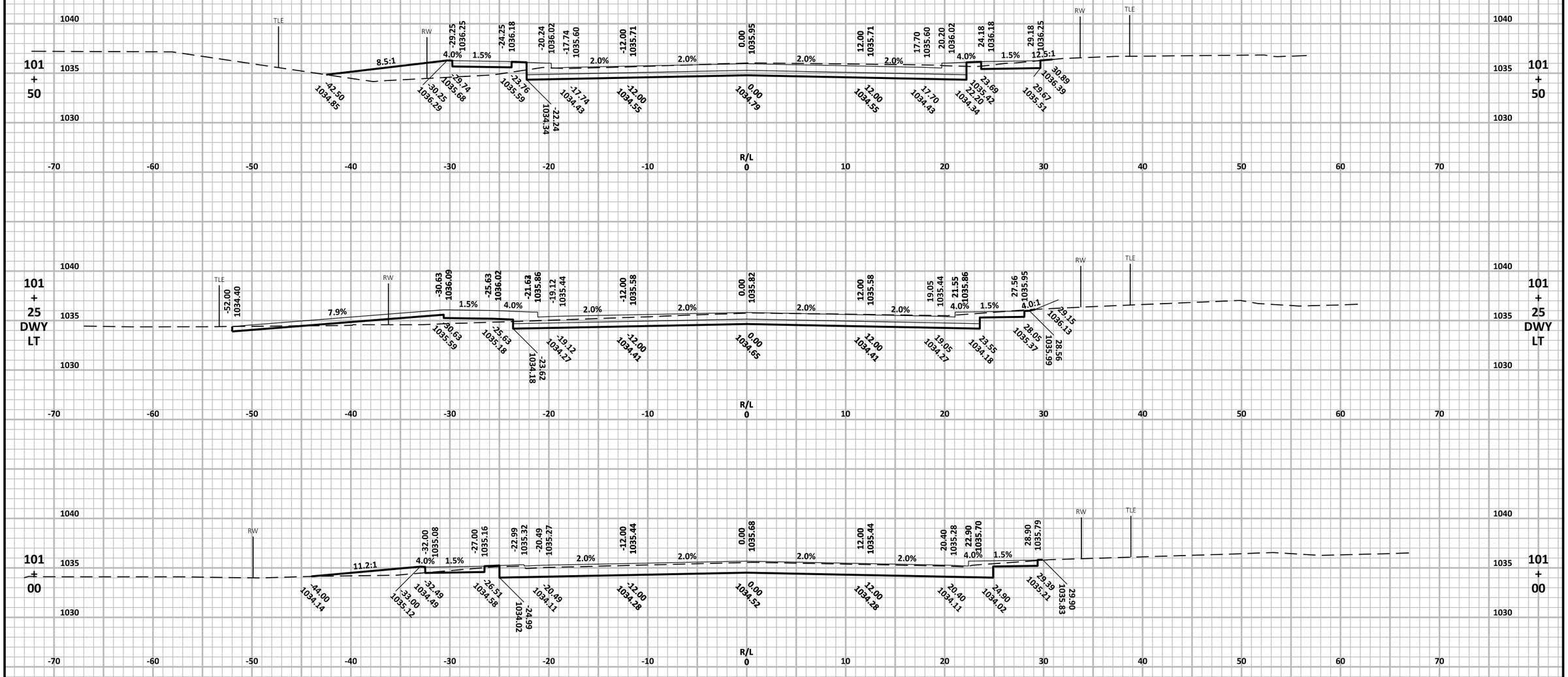
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 209	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090200-xs

PLOT DATE : 4/16/2019 12:52 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



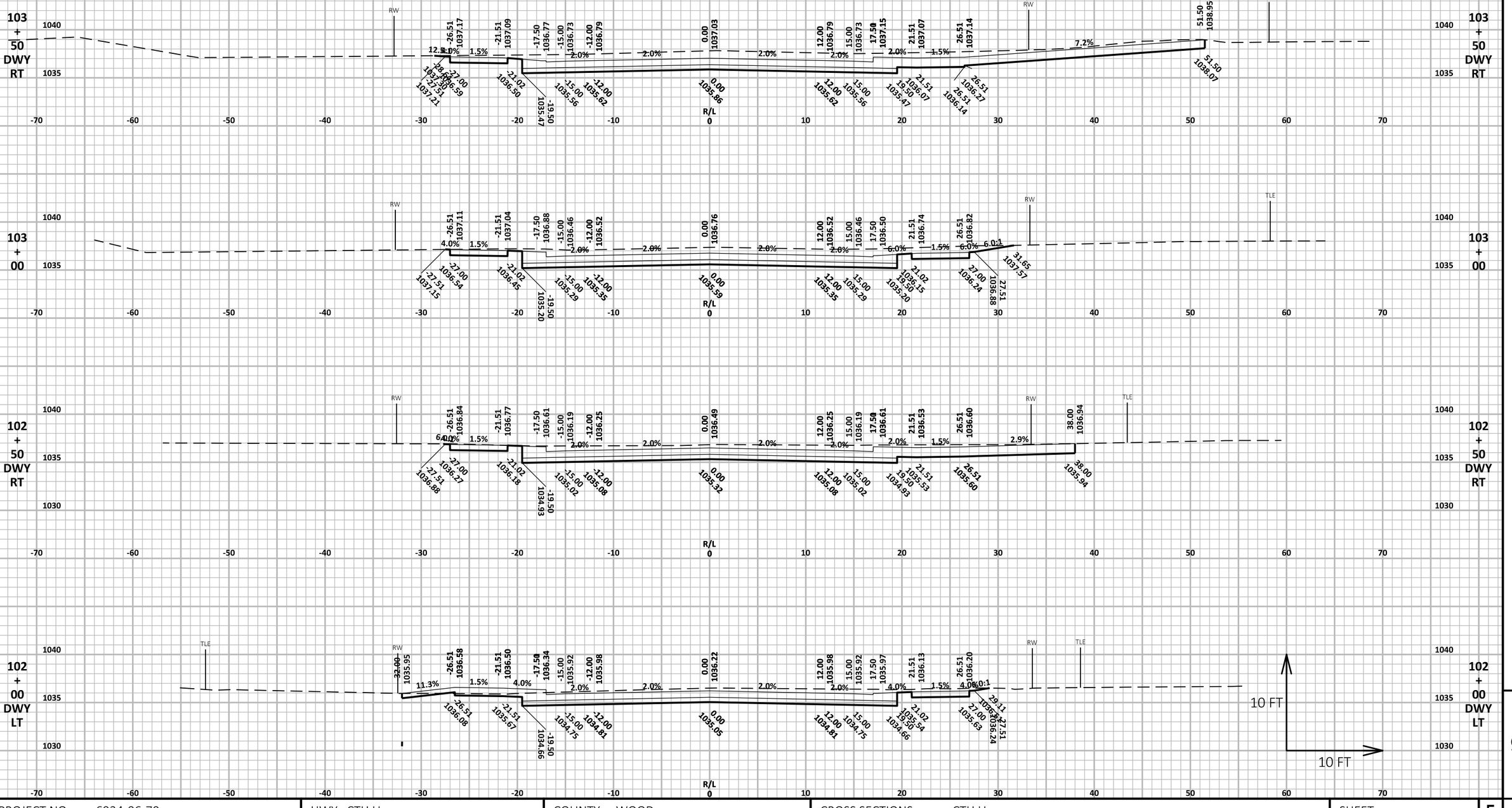
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 210	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090201-xs

PLOT DATE : 4/17/2019 8:37 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

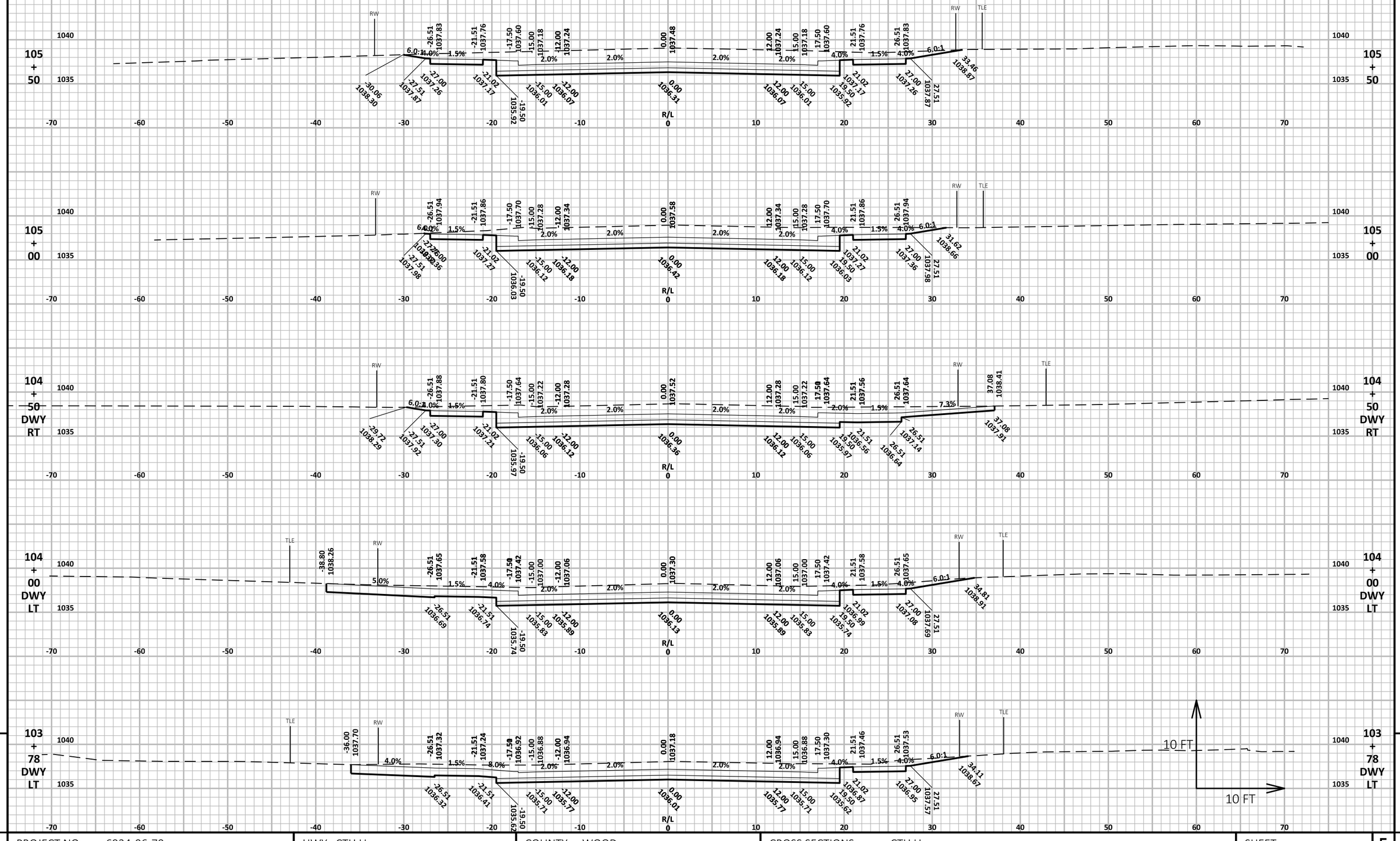
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 211	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090202-xs

PLOT DATE : 4/16/2019 12:52 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

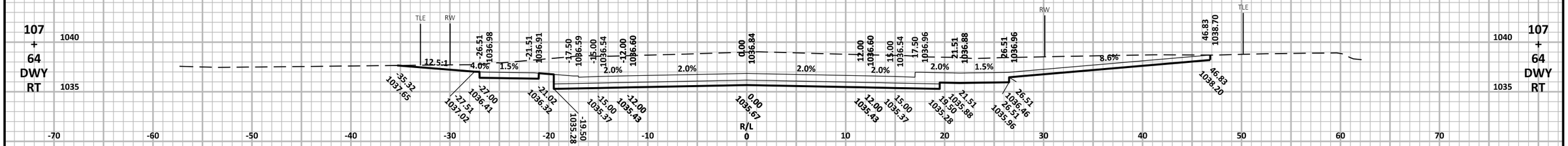
WISDOT/CADDS SHEET 49

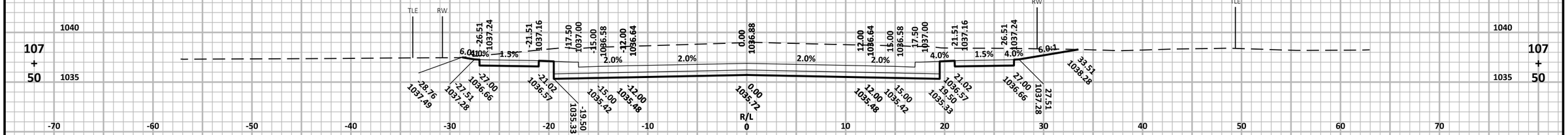


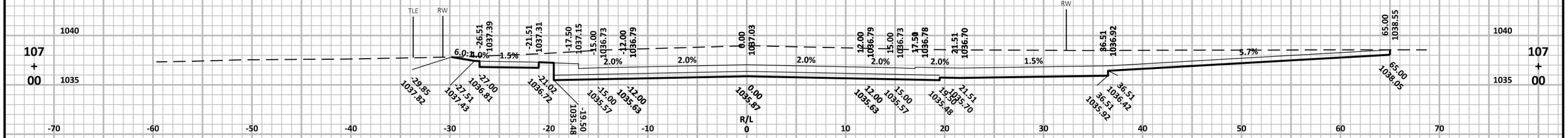
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 212	E

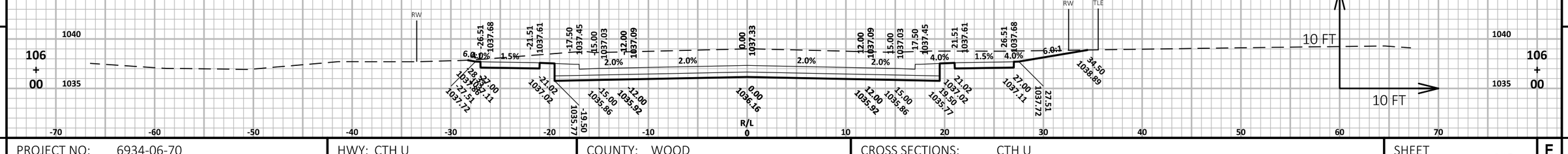
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090203-xs
PLOT DATE : 4/16/2019 12:52 PM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49









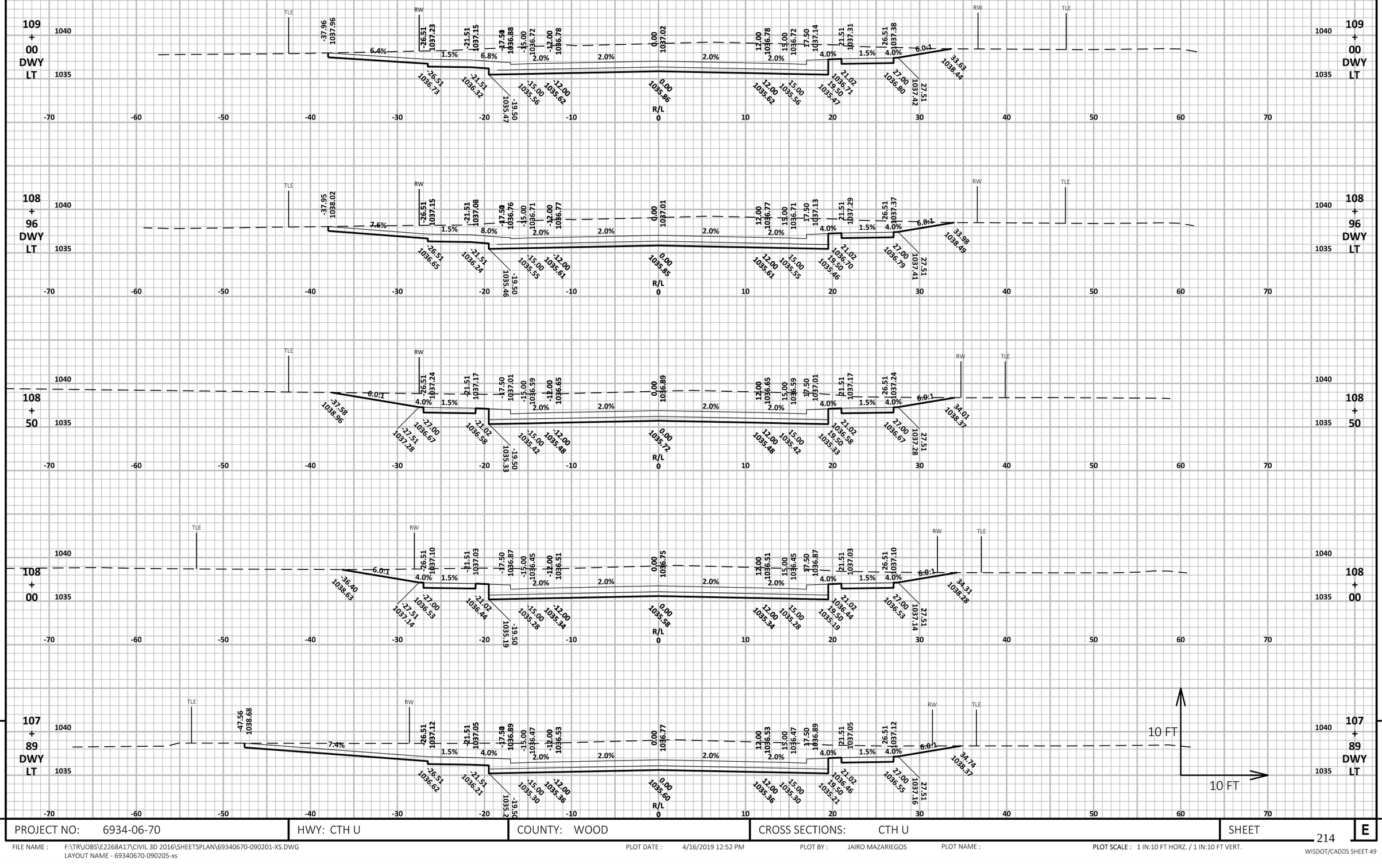


9

9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 213	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090204-xs
PLOT DATE : 4/16/2019 12:52 PM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



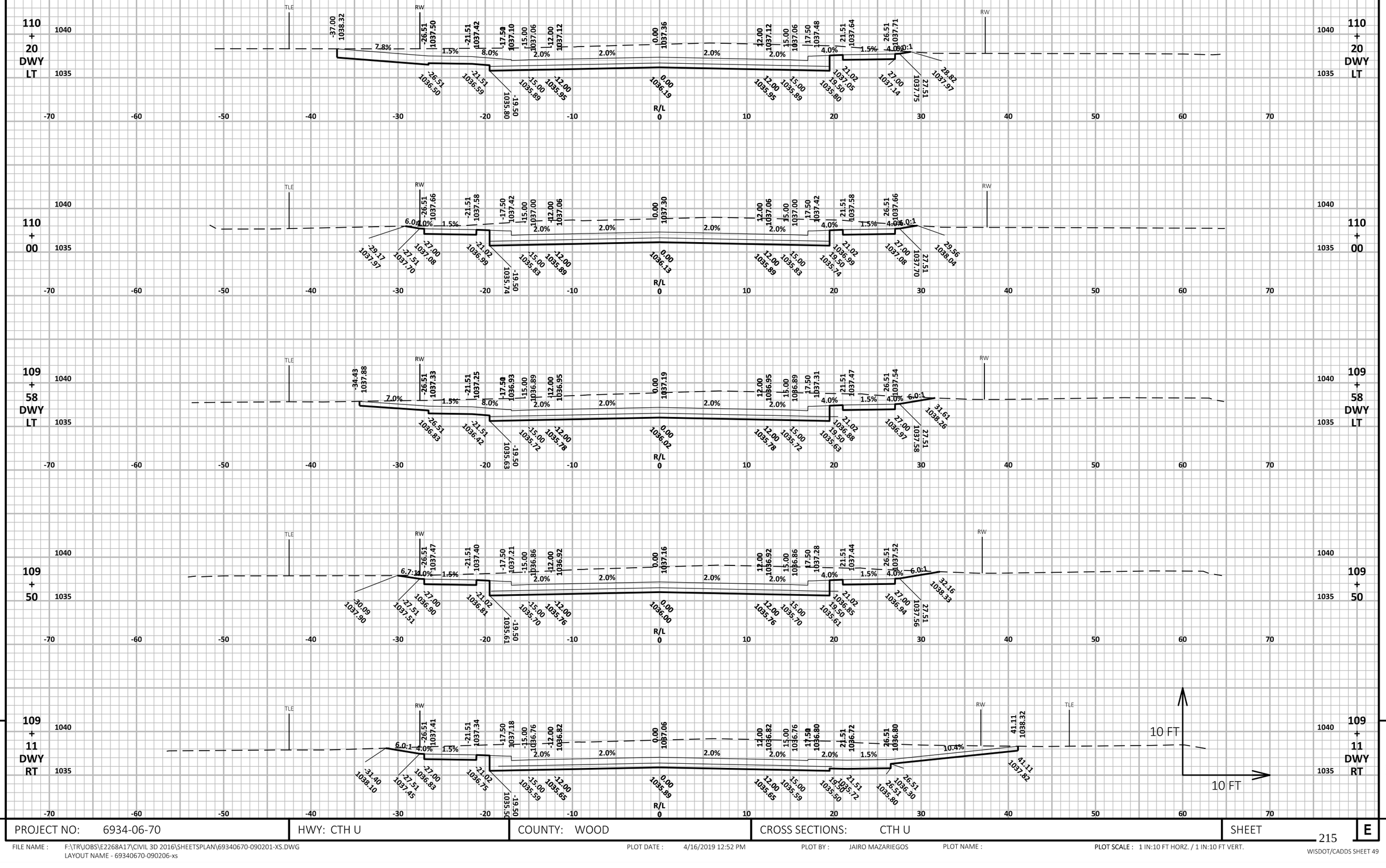
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 214	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090205-xs

PLOT DATE : 4/16/2019 12:52 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



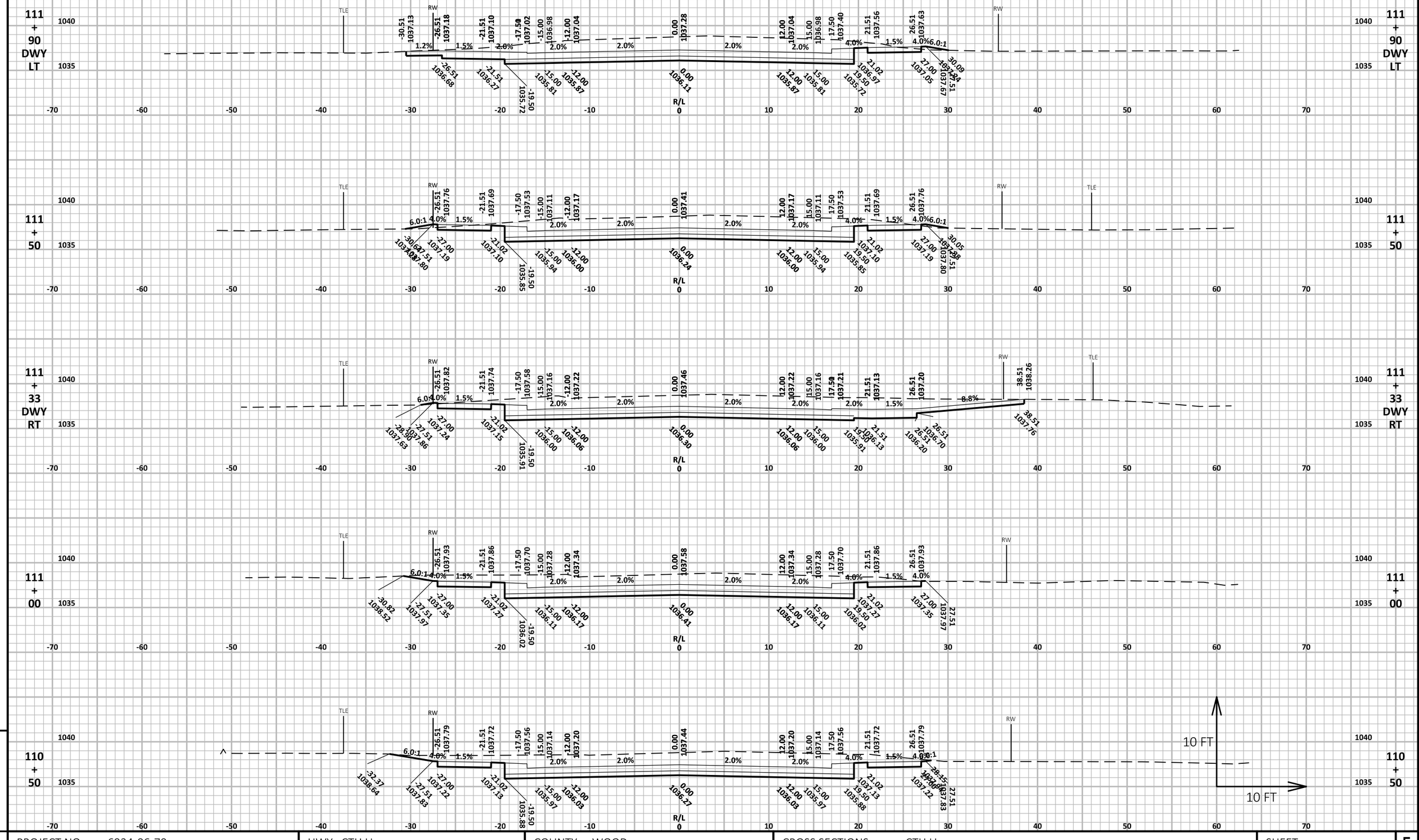
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 215	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090206-xs

PLOT DATE : 4/16/2019 12:52 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



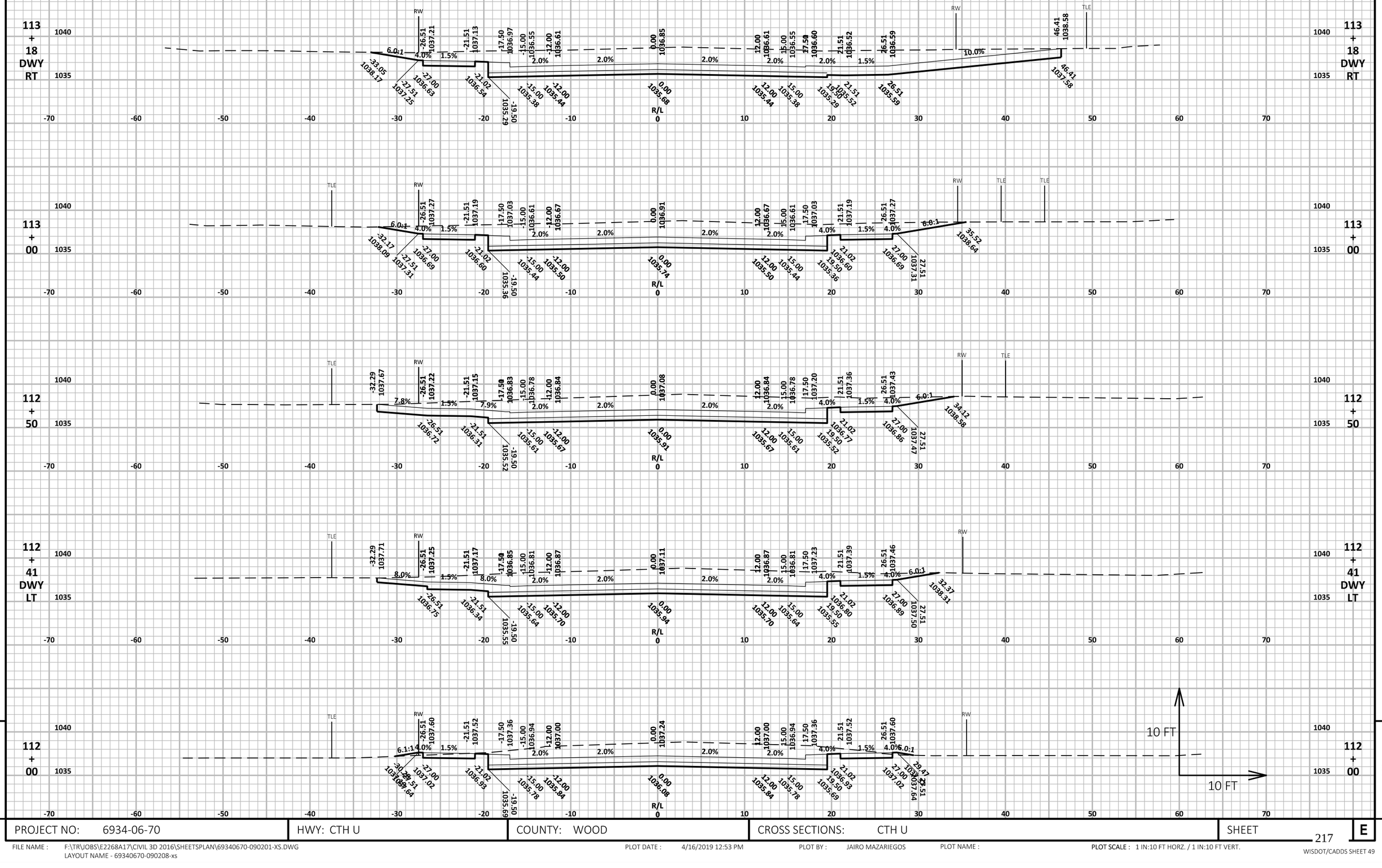
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 216	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090207-xs

PLOT DATE : 4/16/2019 12:53 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



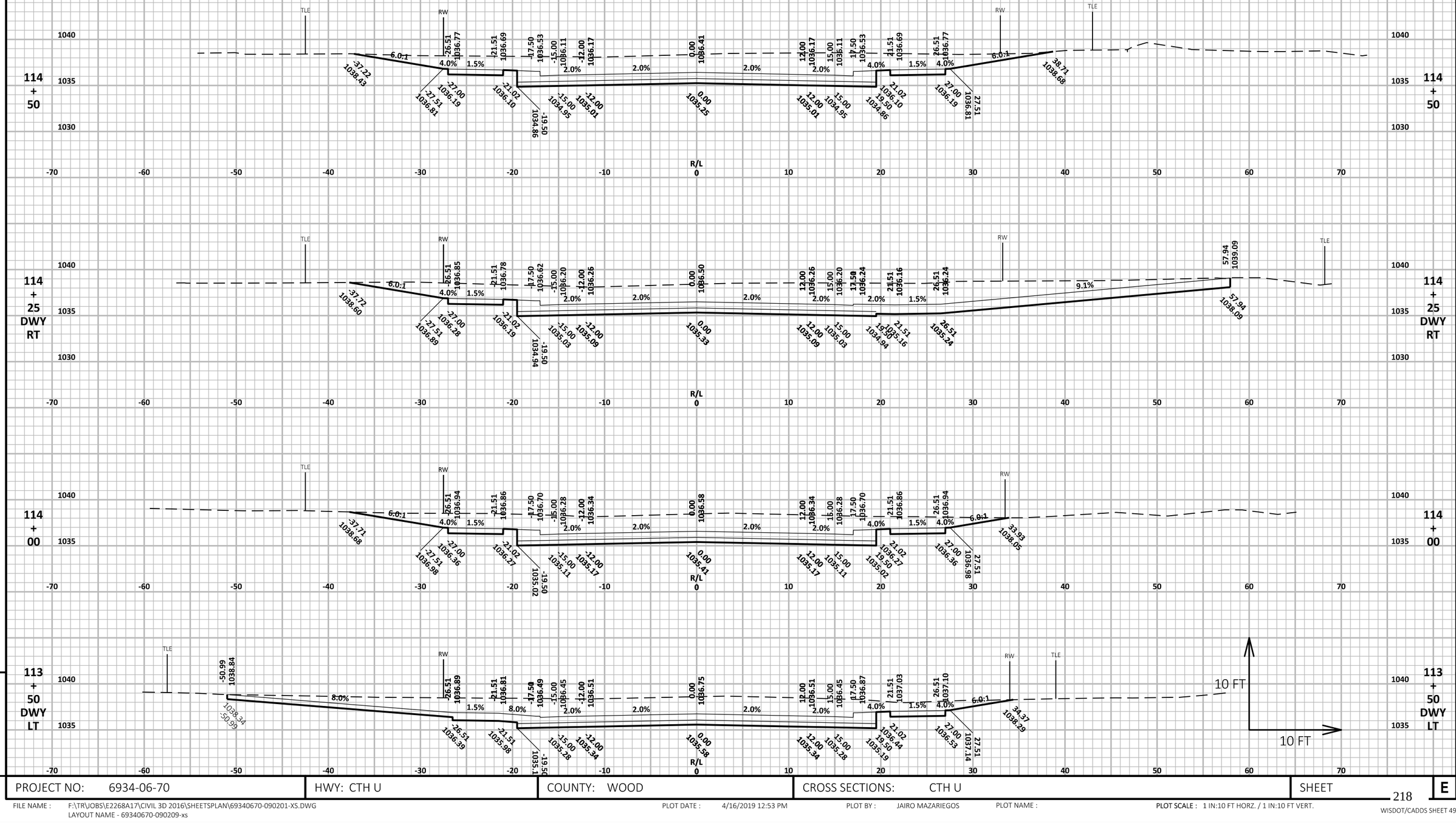
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 217	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090208-xs

PLOT DATE : 4/16/2019 12:53 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

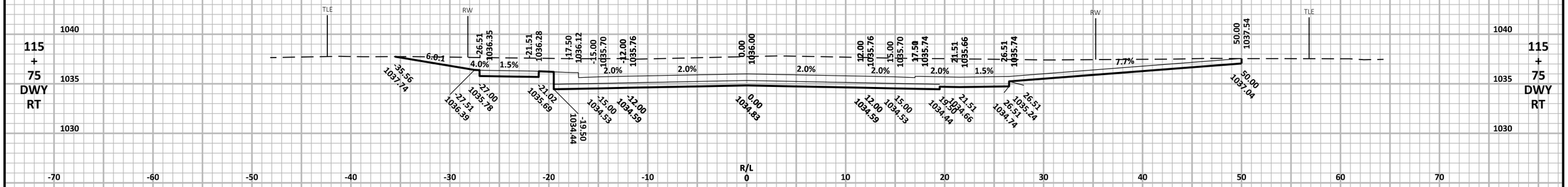
WISDOT/CADDS SHEET 49

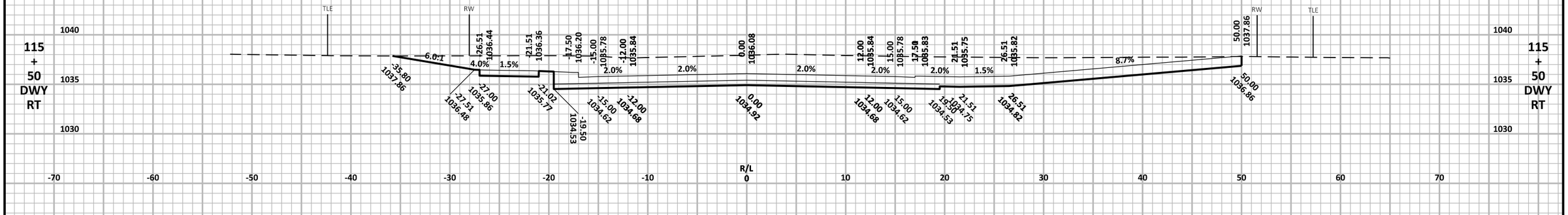


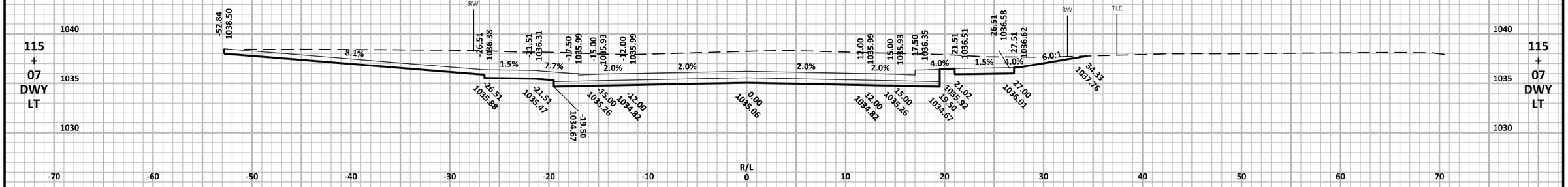
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 218	E

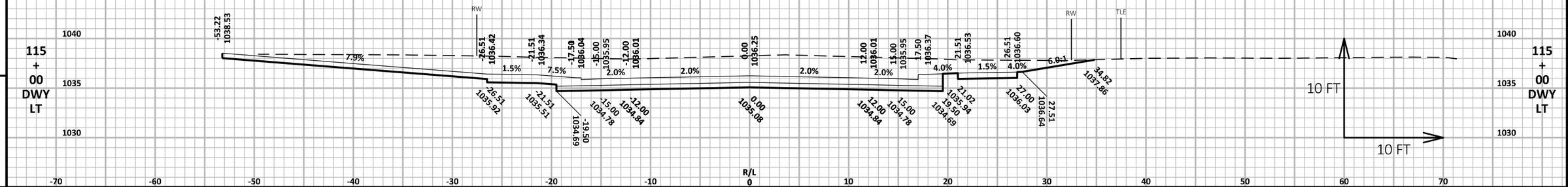
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090209-xs

PLOT DATE : 4/16/2019 12:53 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.









9

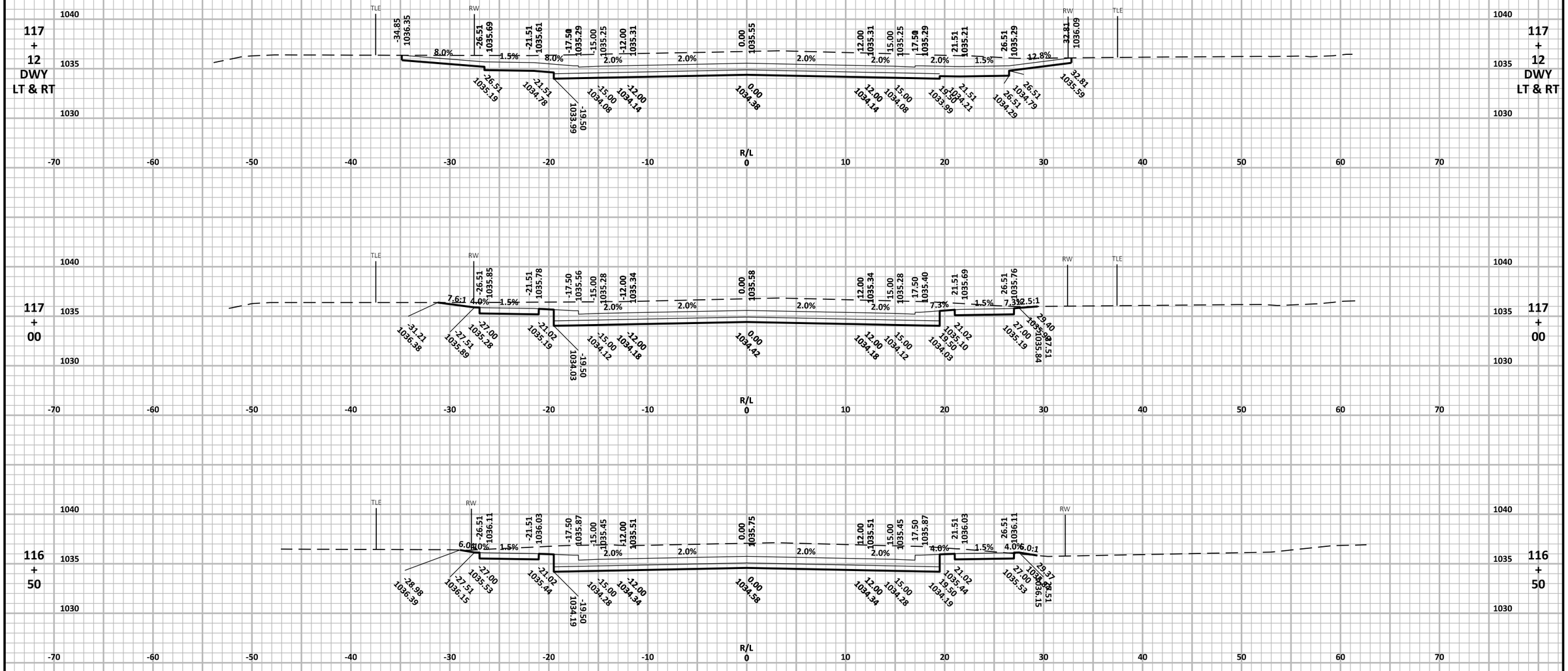
9

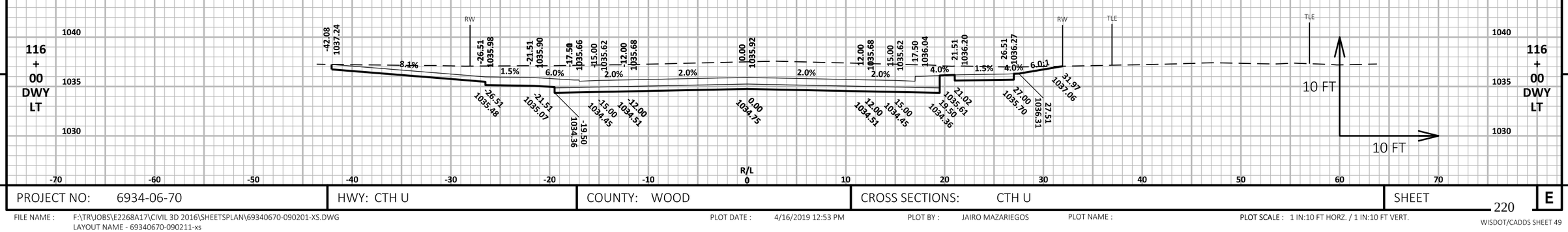
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 219	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090210-xs

PLOT DATE : 4/16/2019 12:53 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

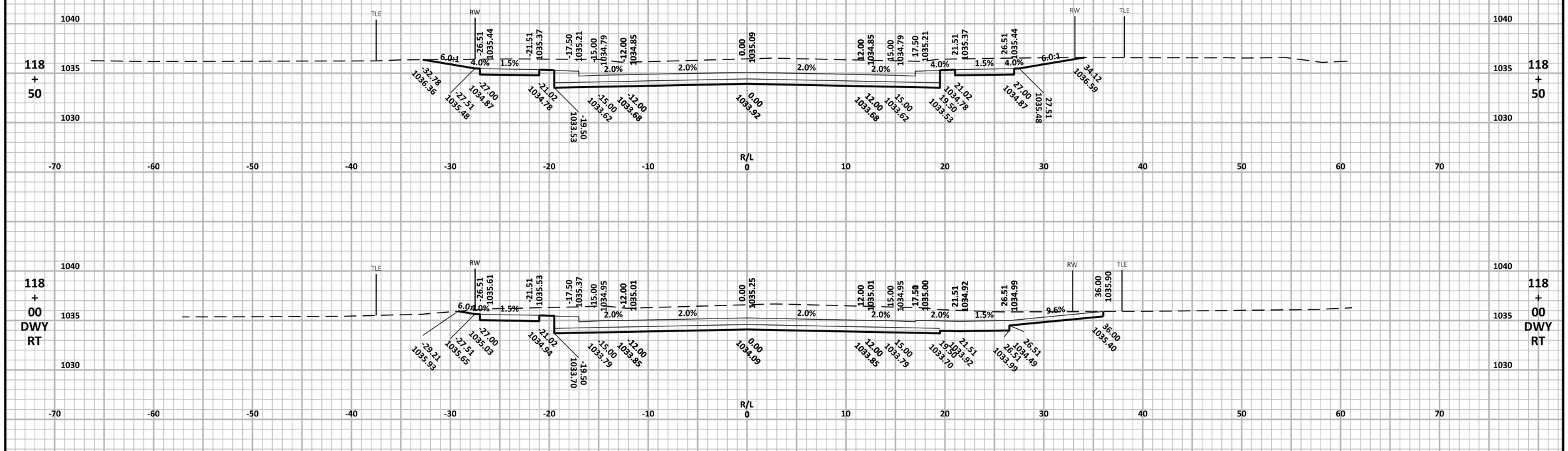
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 220	E

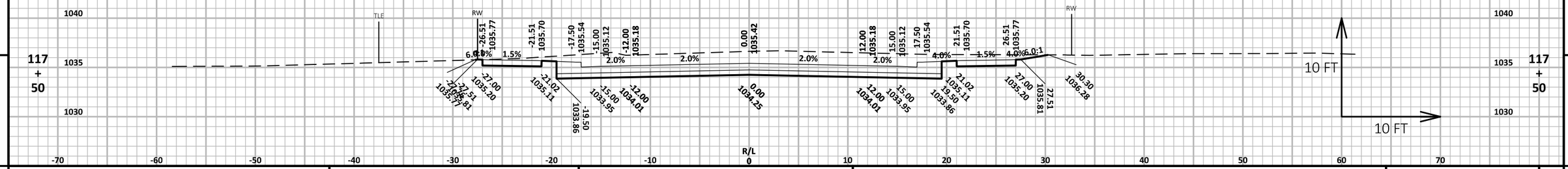
FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090211-xs

PLOT DATE : 4/16/2019 12:53 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

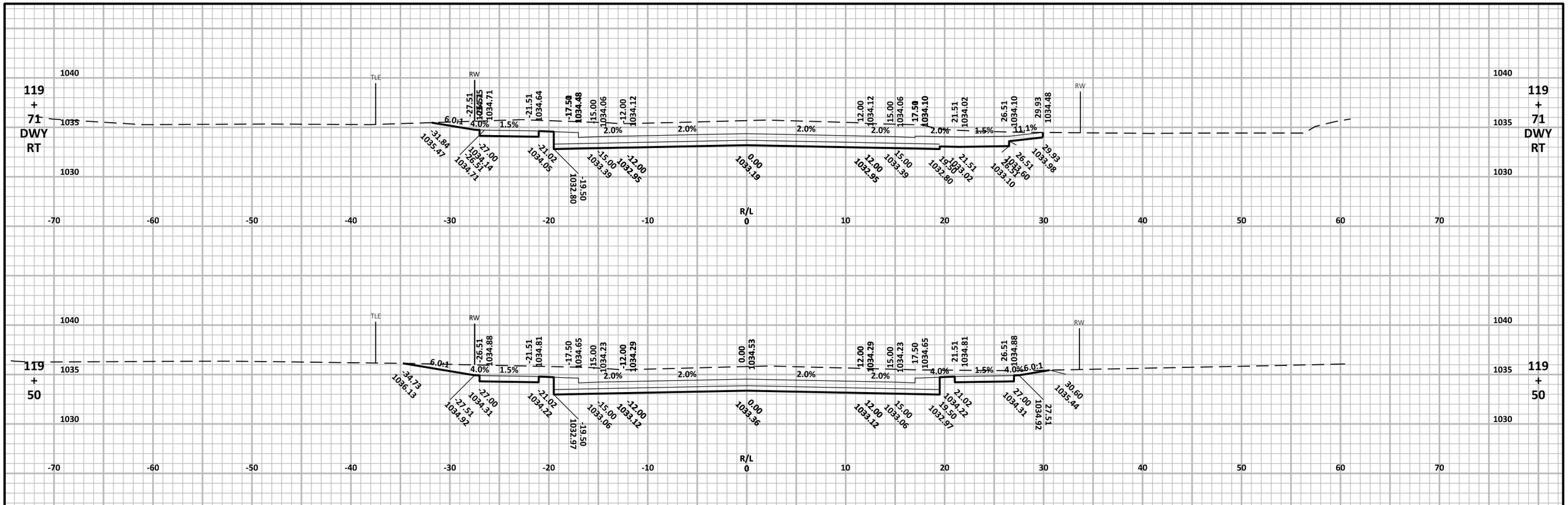
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 221	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090212-xs

PLOT DATE : 4/16/2019 12:53 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

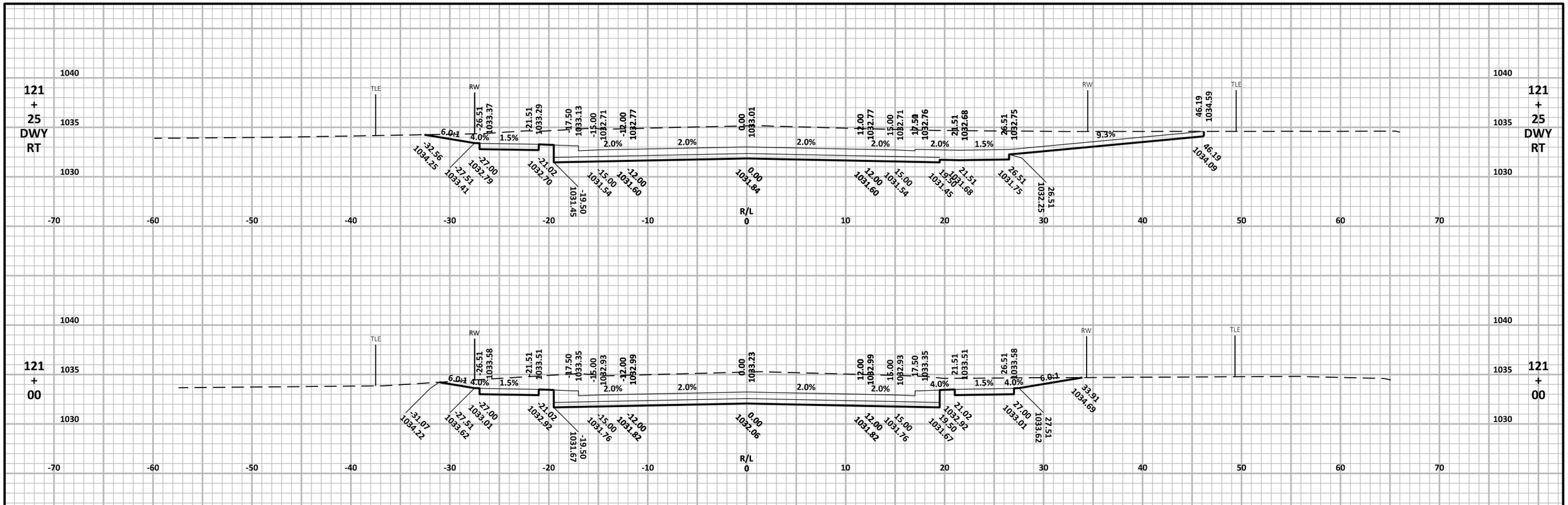
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 222	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090213-xs

PLOT DATE : 4/16/2019 12:54 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



9

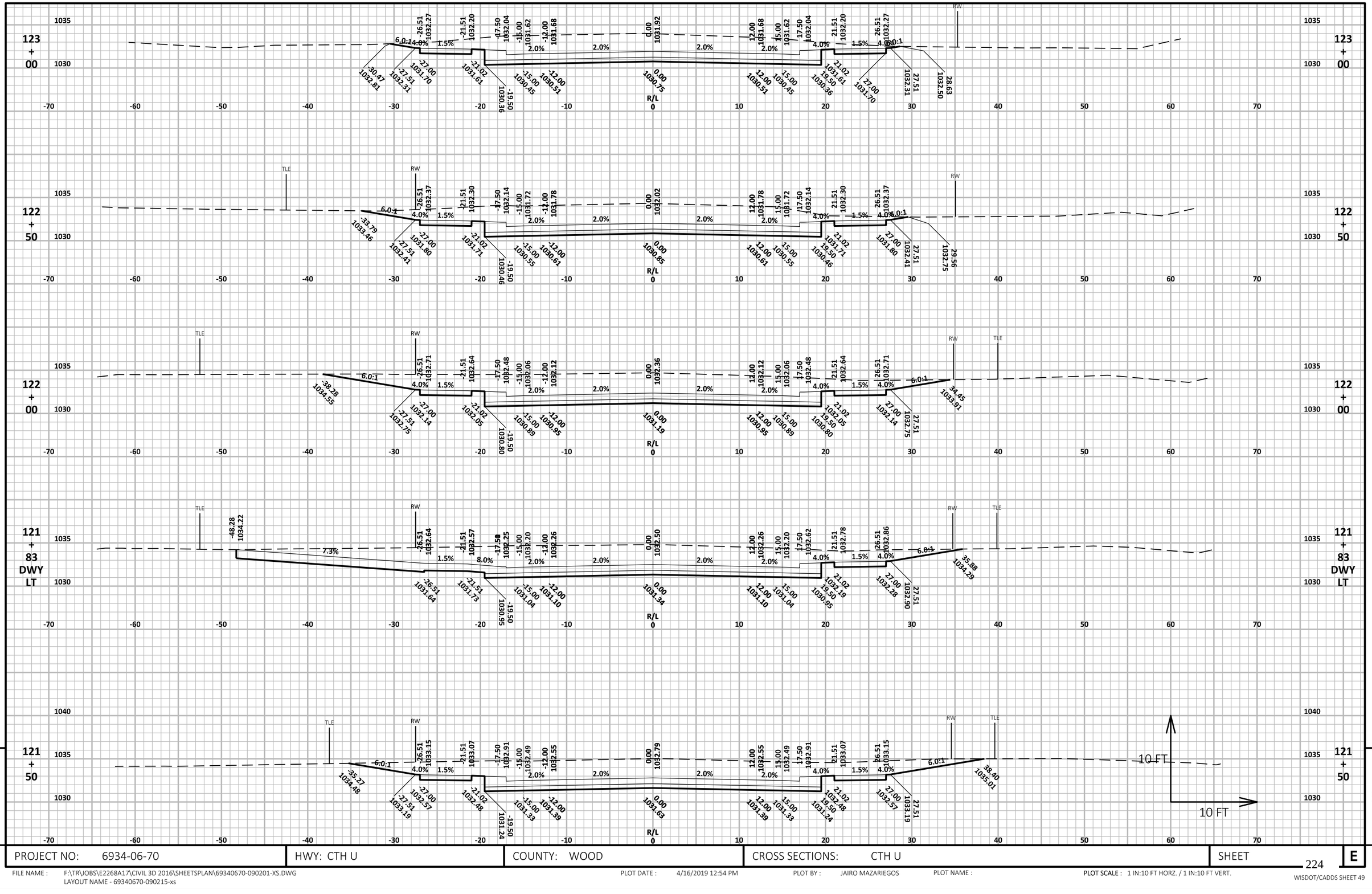
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 223	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090214-xs

PLOT DATE : 4/16/2019 12:54 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



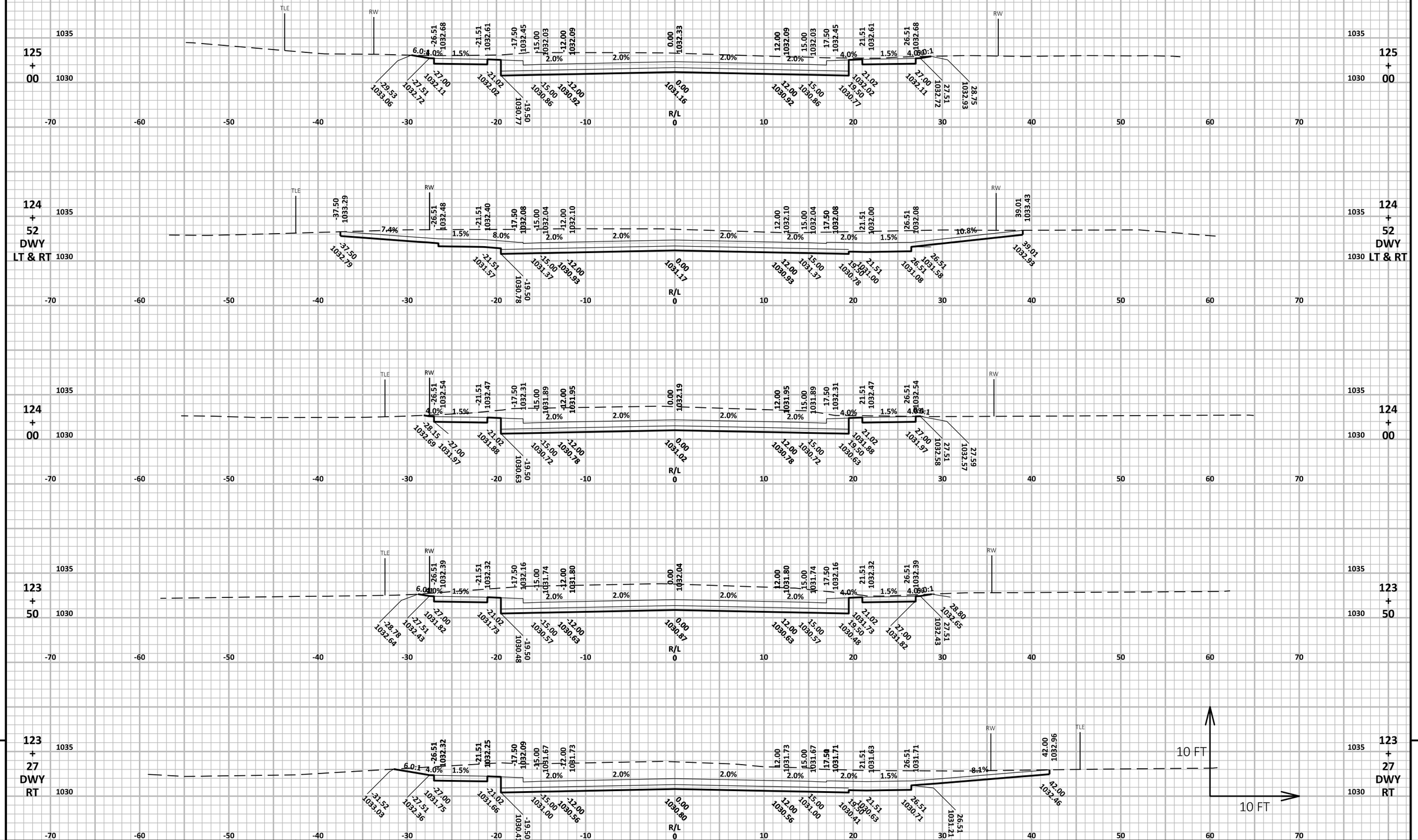
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 224 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090215-xs

PLOT DATE : 4/16/2019 12:54 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



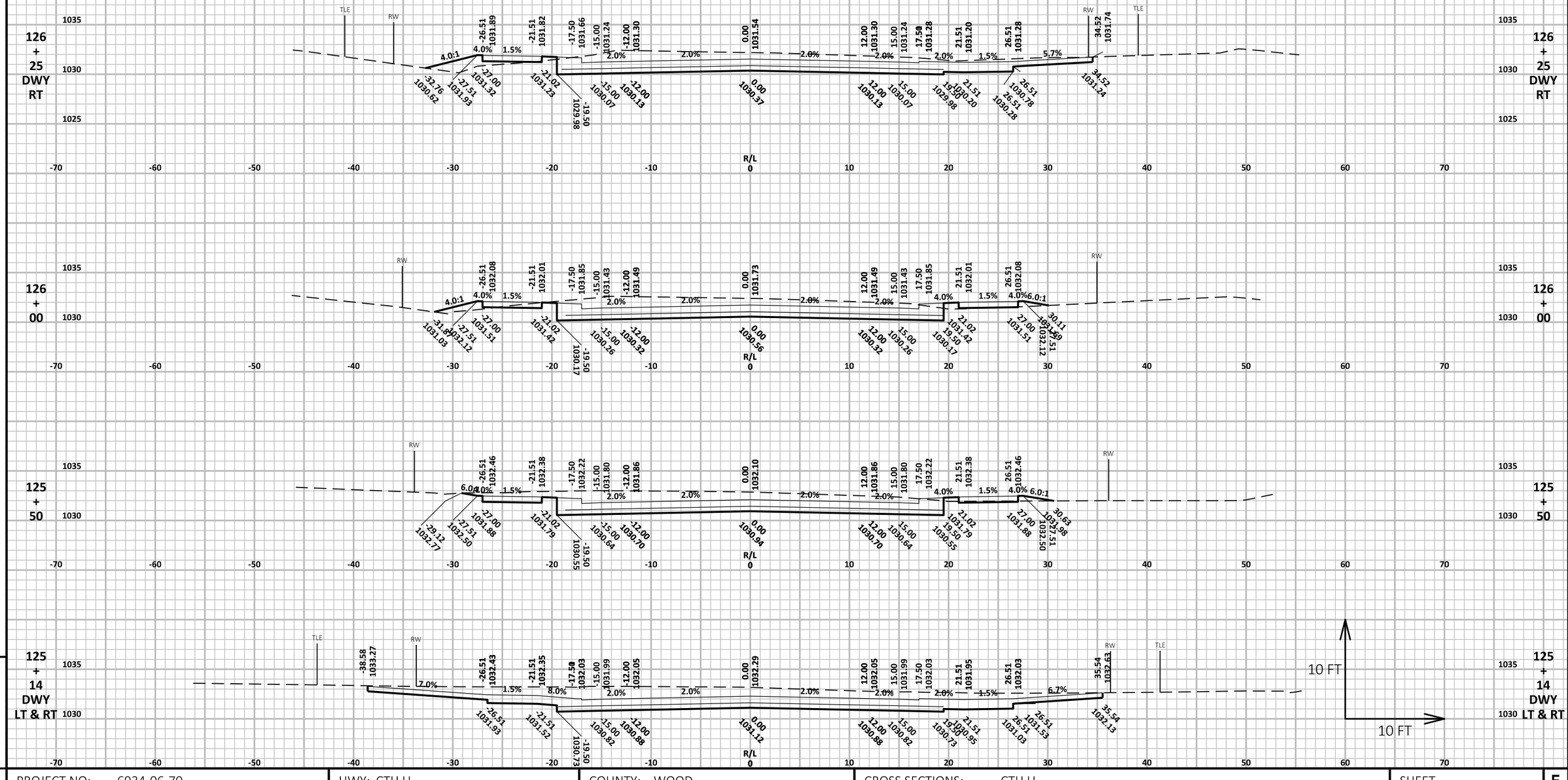
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 225	E

FILE NAME : F:\TR\OBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090216-xs

PLOT DATE : 4/17/2019 8:37 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

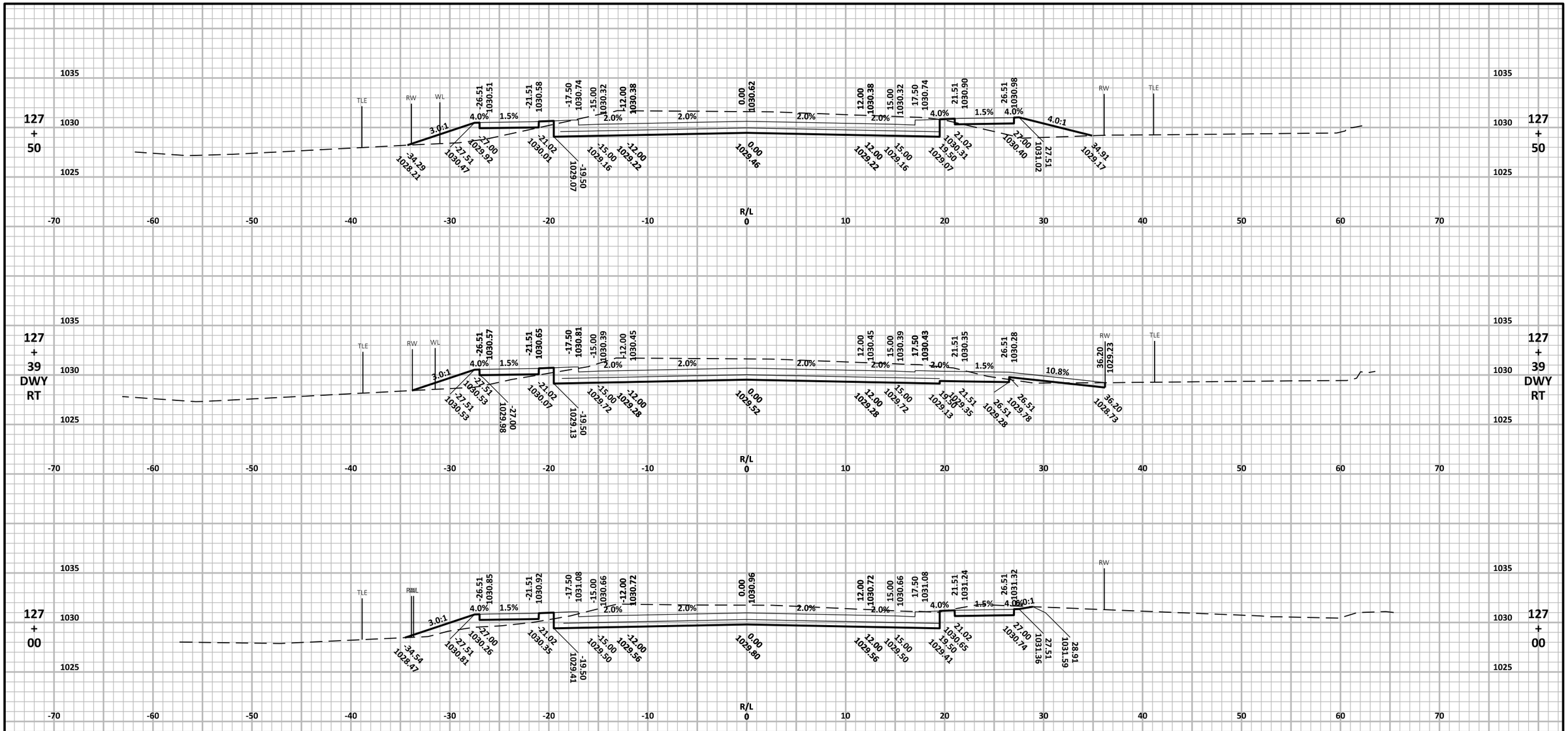
WISDOT/CADDS SHEET 49

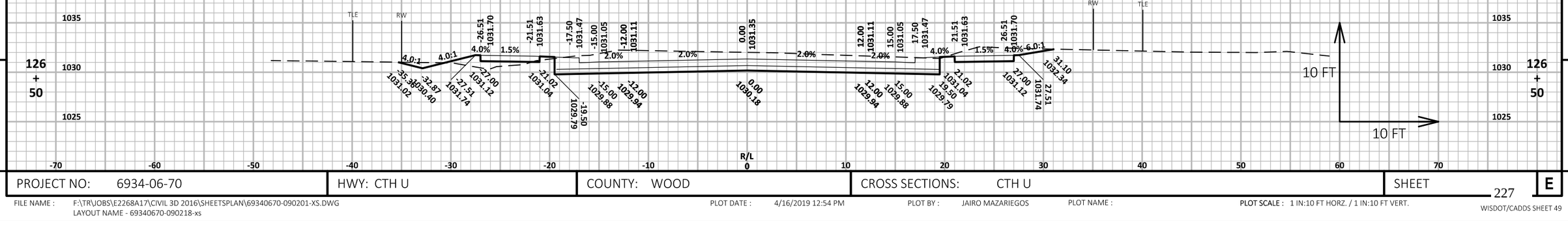


9	PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 226 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090217-xs

PLOT DATE : 4/16/2019 12:54 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.





9

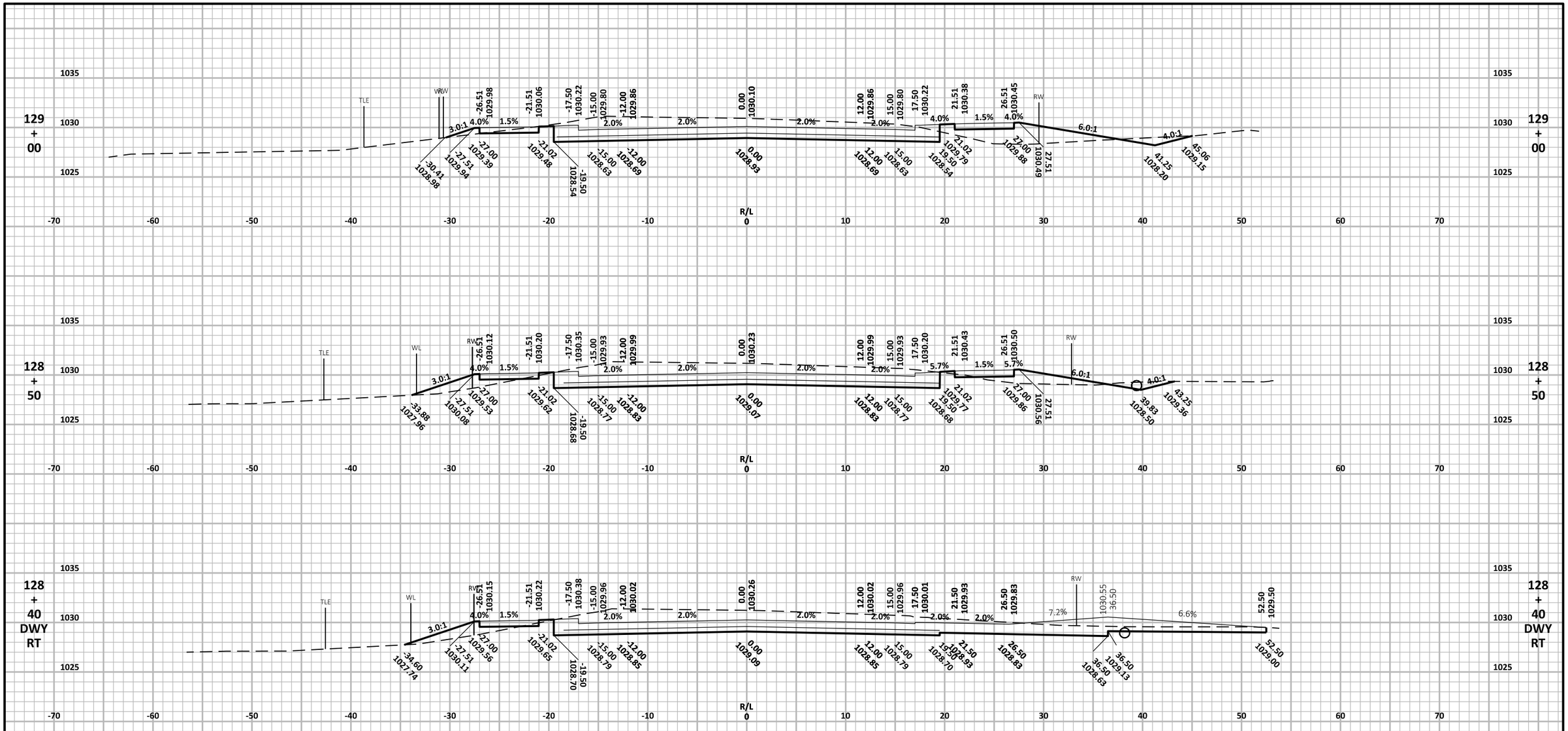
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 227	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090218-xs

PLOT DATE : 4/16/2019 12:54 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



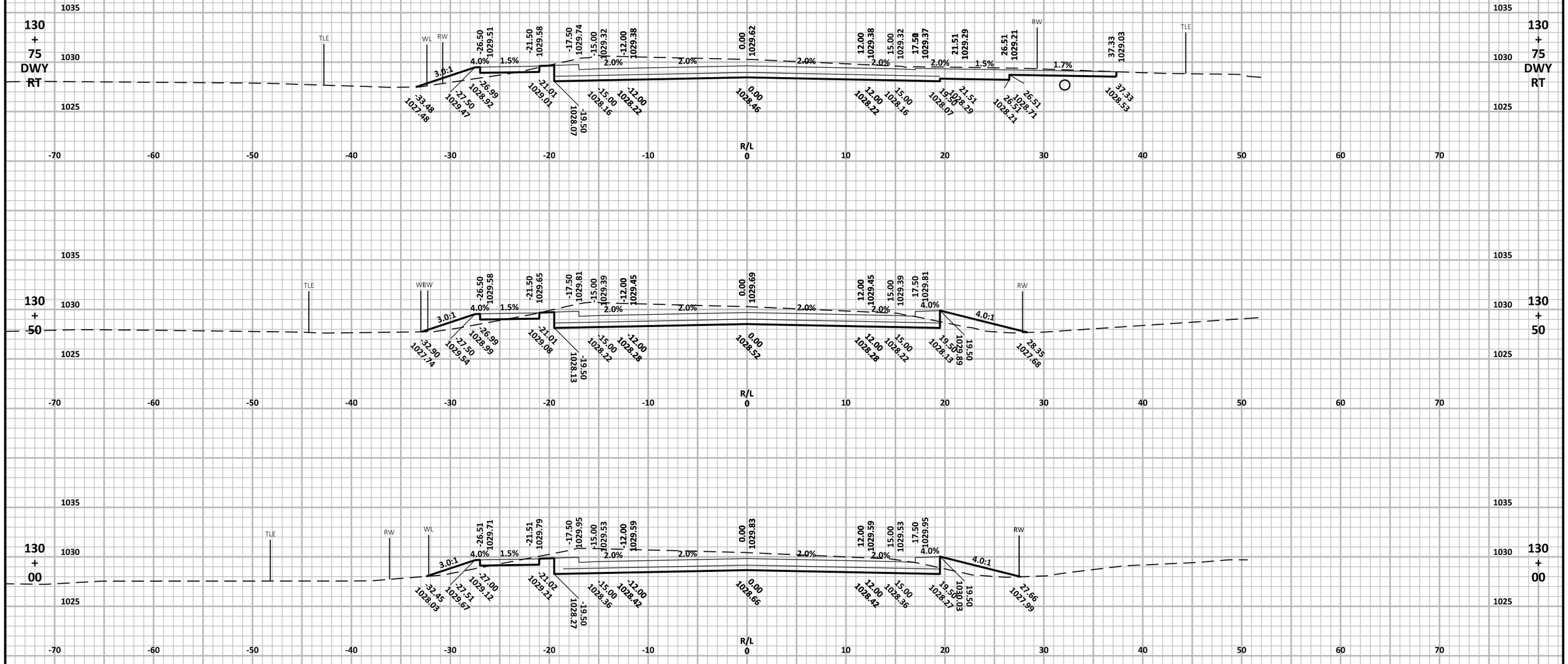
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 228 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090219-xs

PLOT DATE : 4/16/2019 12:54 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



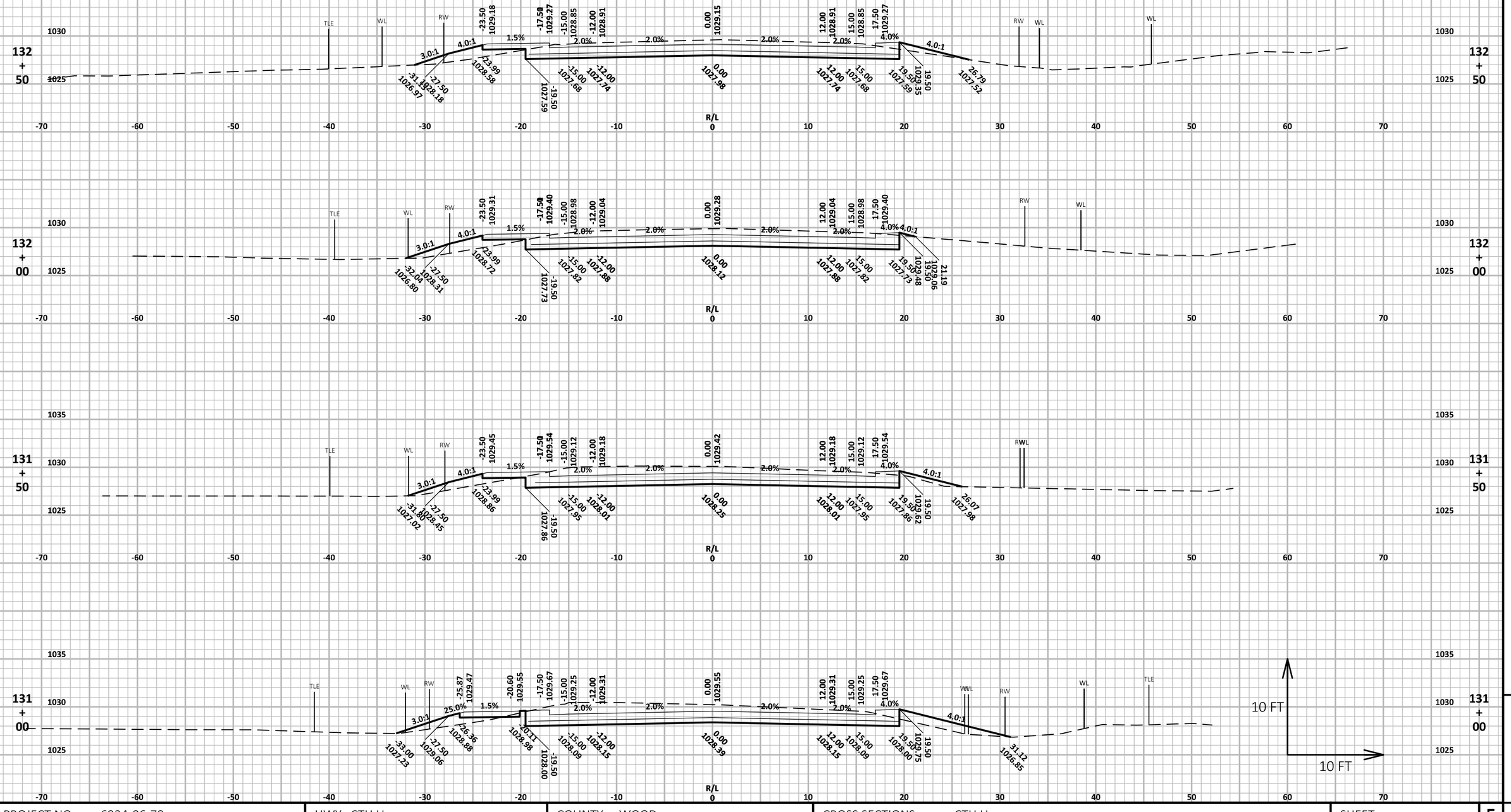
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 229	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090220-xs

PLOT DATE : 4/16/2019 12:55 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

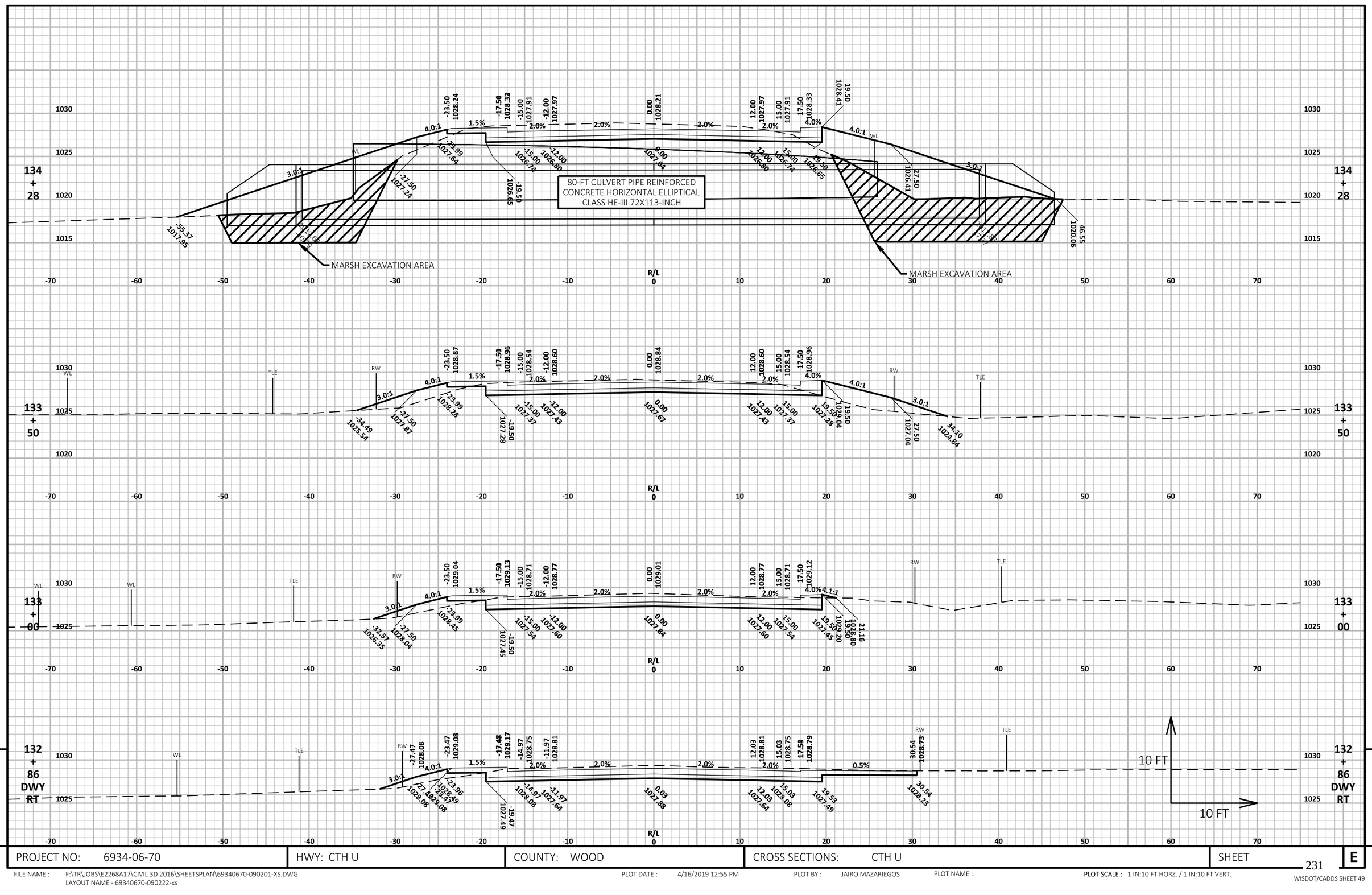


PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 230 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090221-xs

PLOT DATE : 4/16/2019 12:55 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



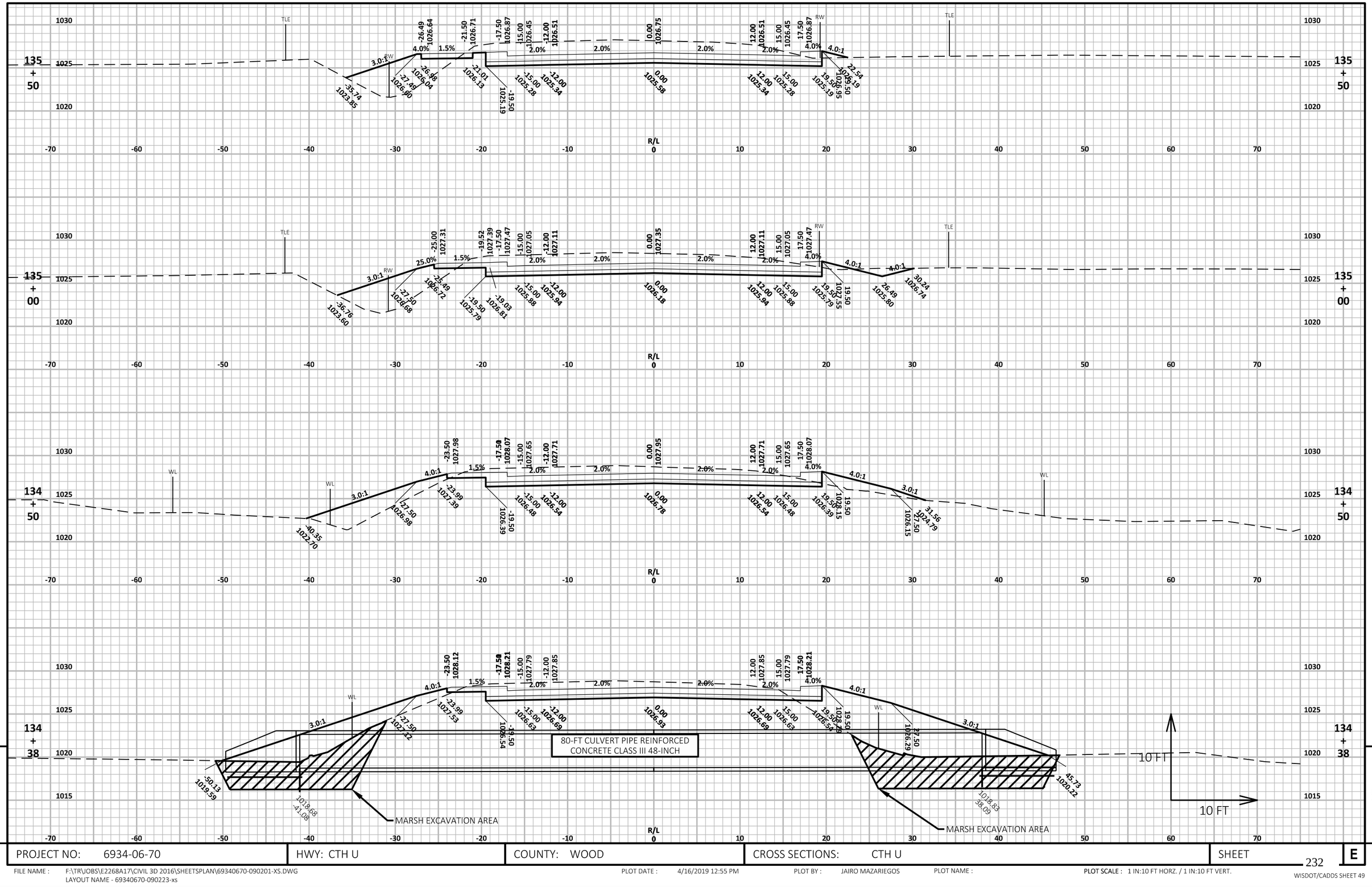
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 231	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090222-xs

PLOT DATE : 4/16/2019 12:55 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

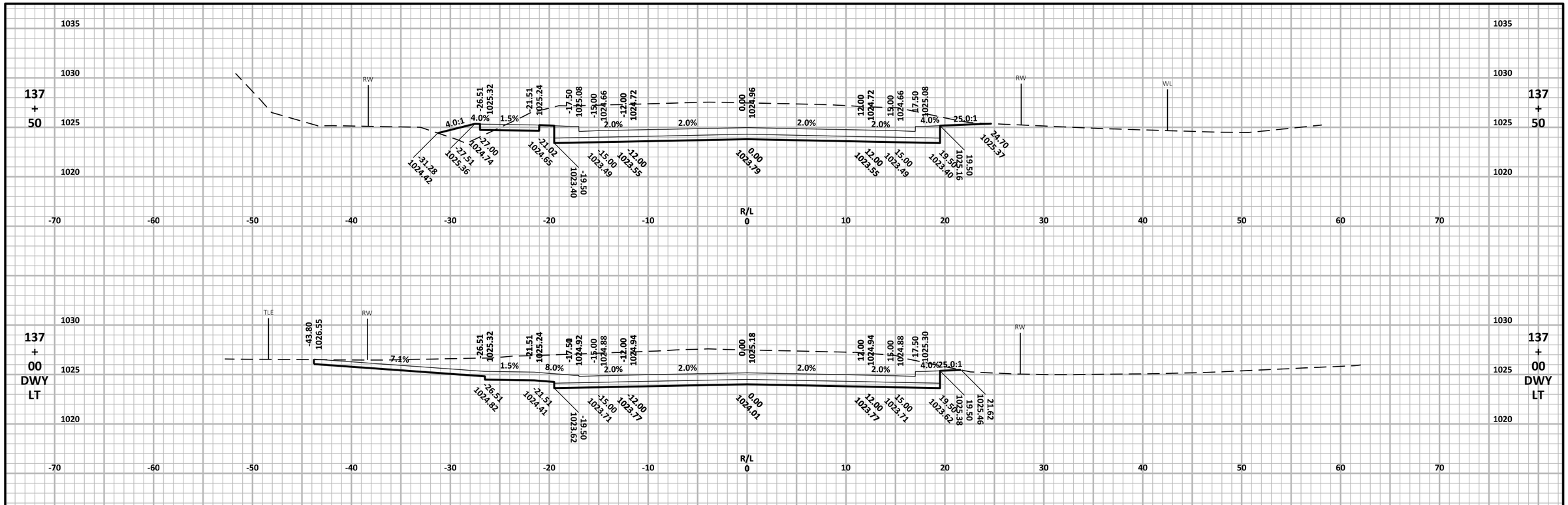


PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 232 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090223-xs

PLOT DATE : 4/16/2019 12:55 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

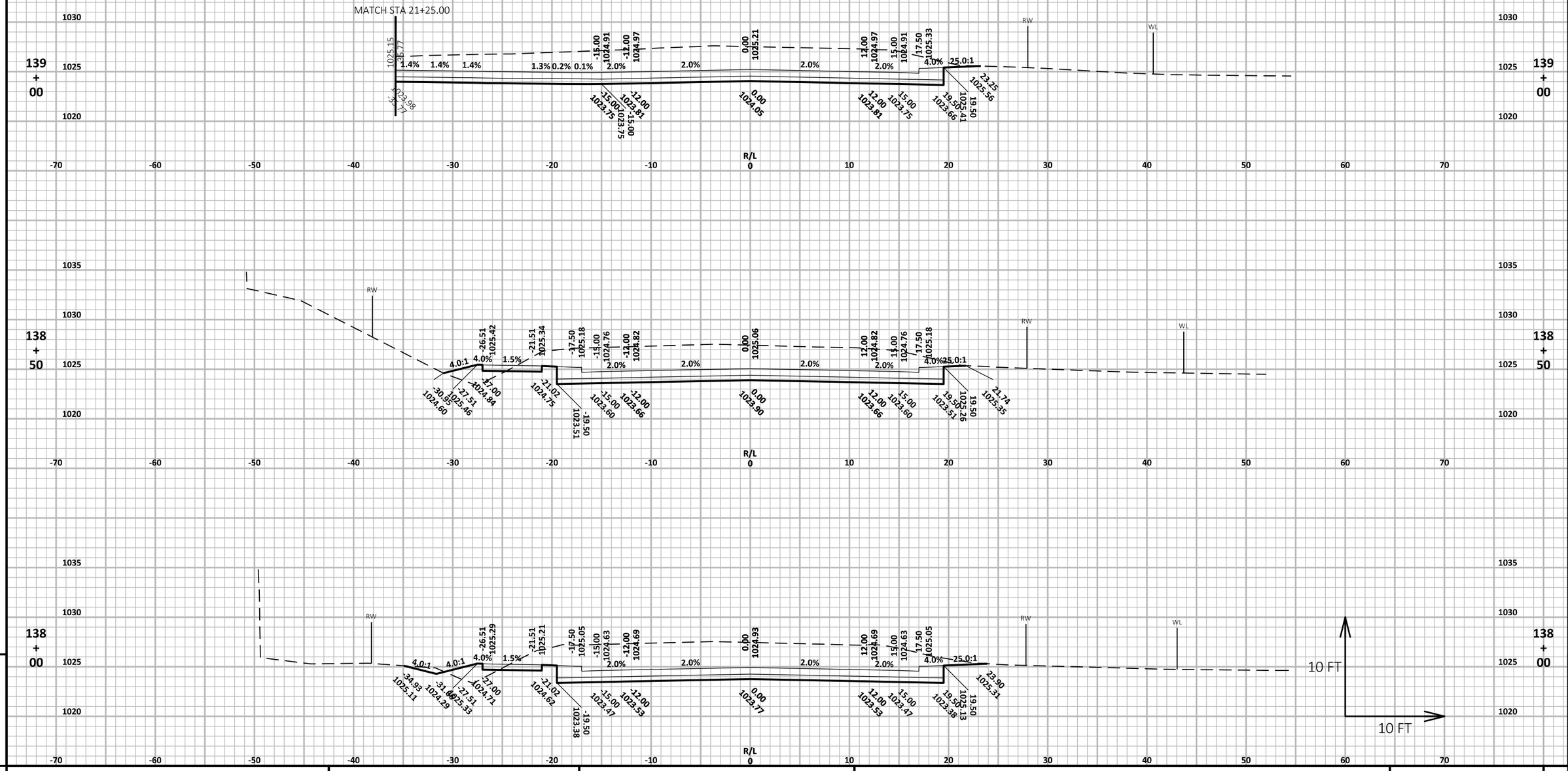
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 233	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090224-xs

PLOT DATE : 4/16/2019 12:55 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 234 E

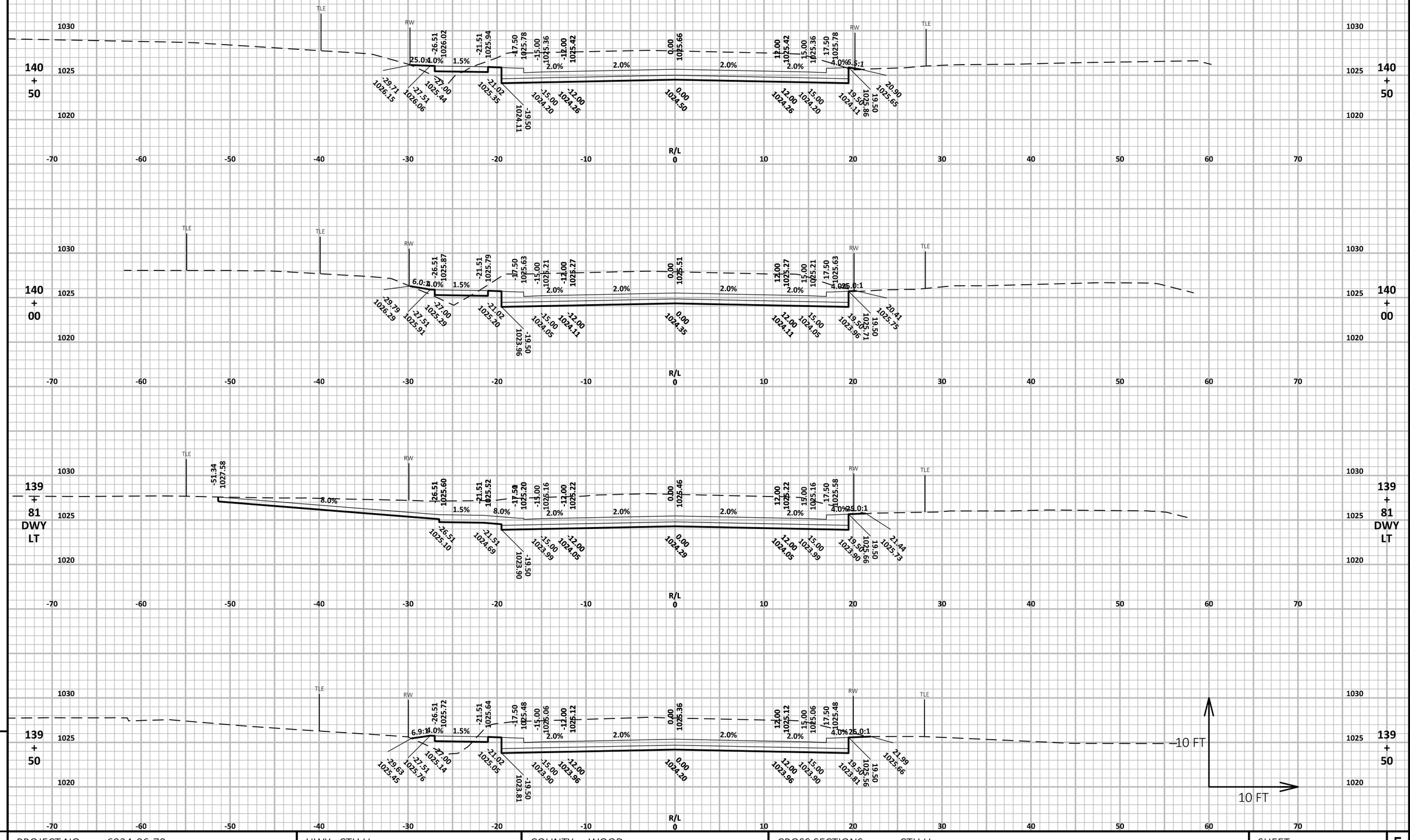
FILE NAME : F:\TR\OBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090225-xs

PLOT DATE : 4/16/2019 12:55 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

9



9

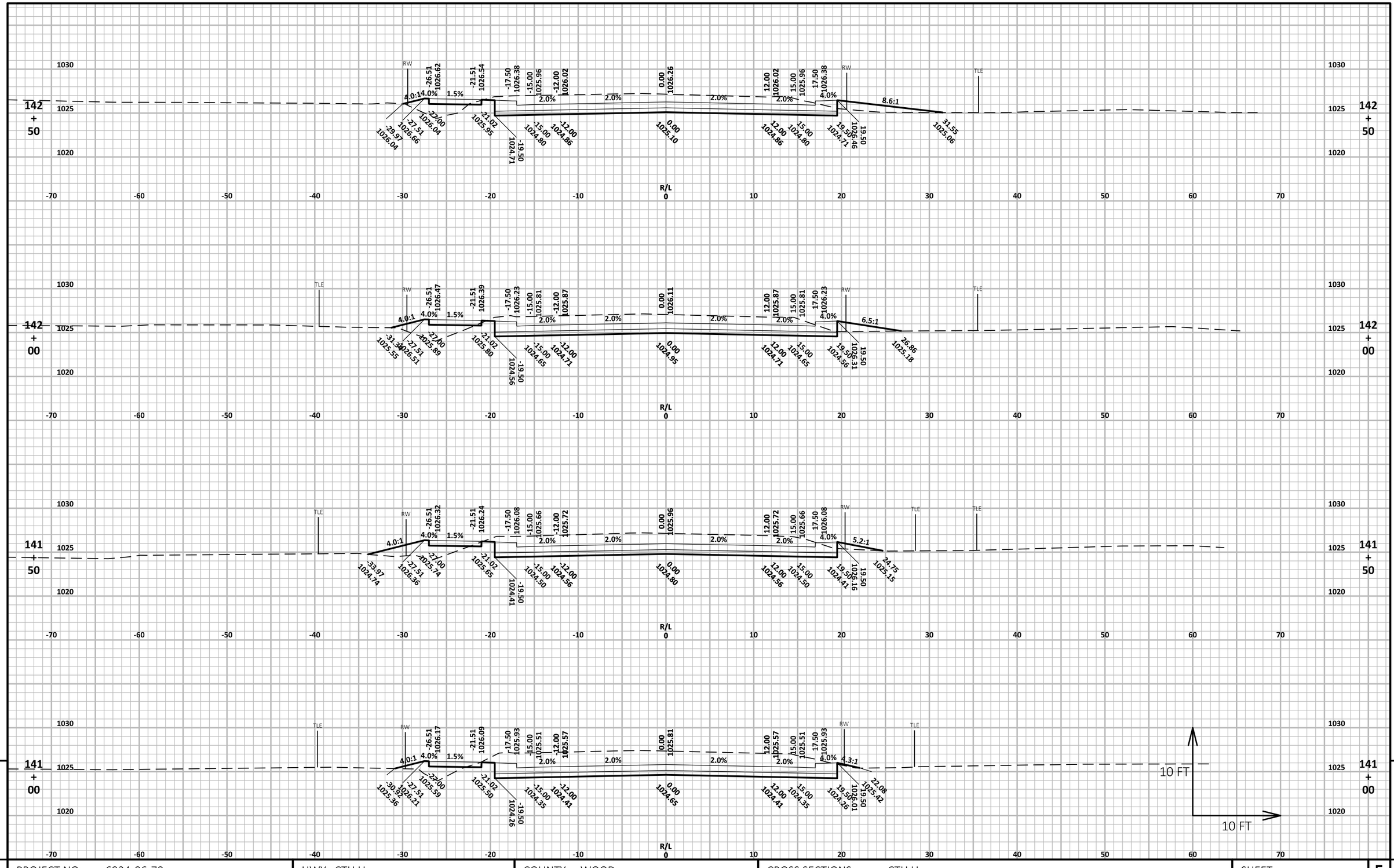
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 235	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090226-xs

PLOT DATE : 4/16/2019 12:56 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

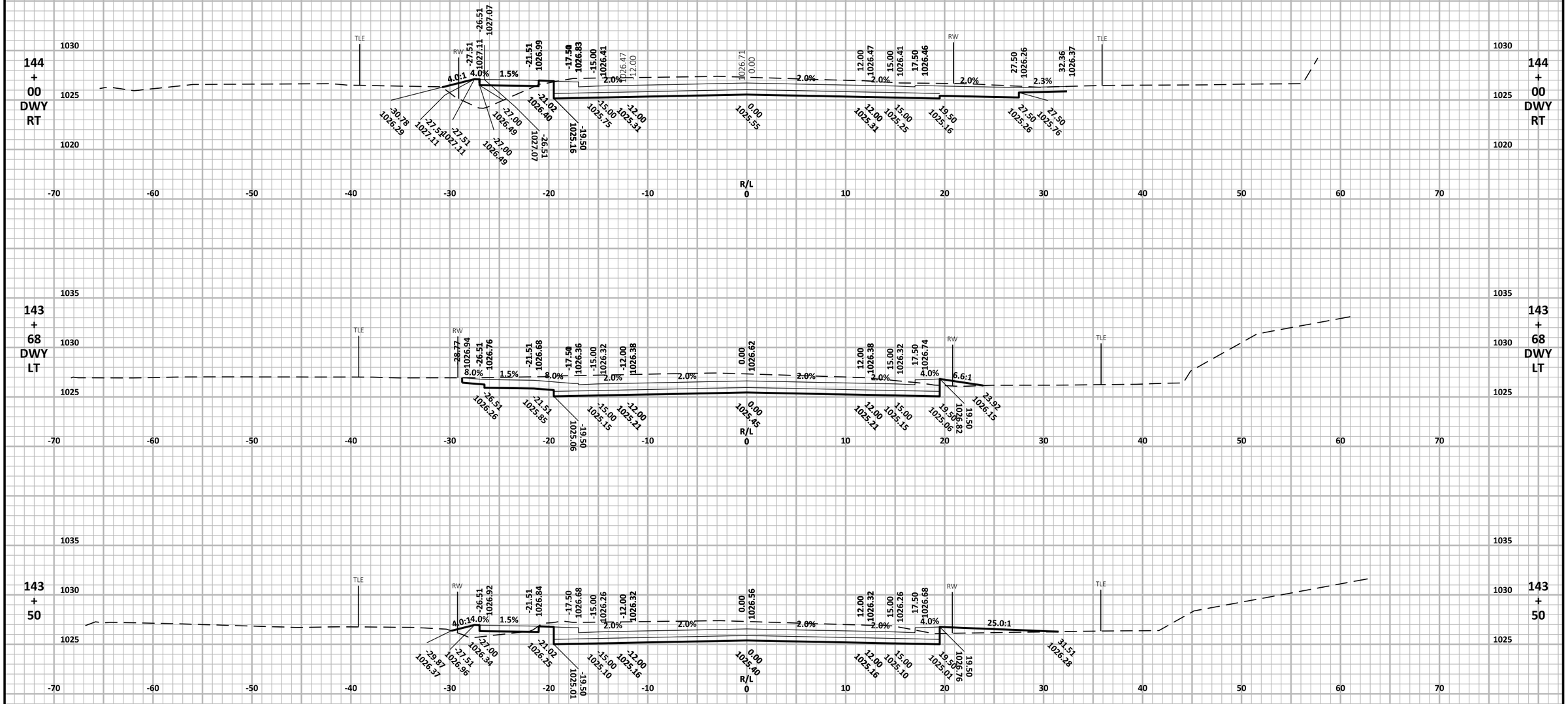
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 236	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090227-xs

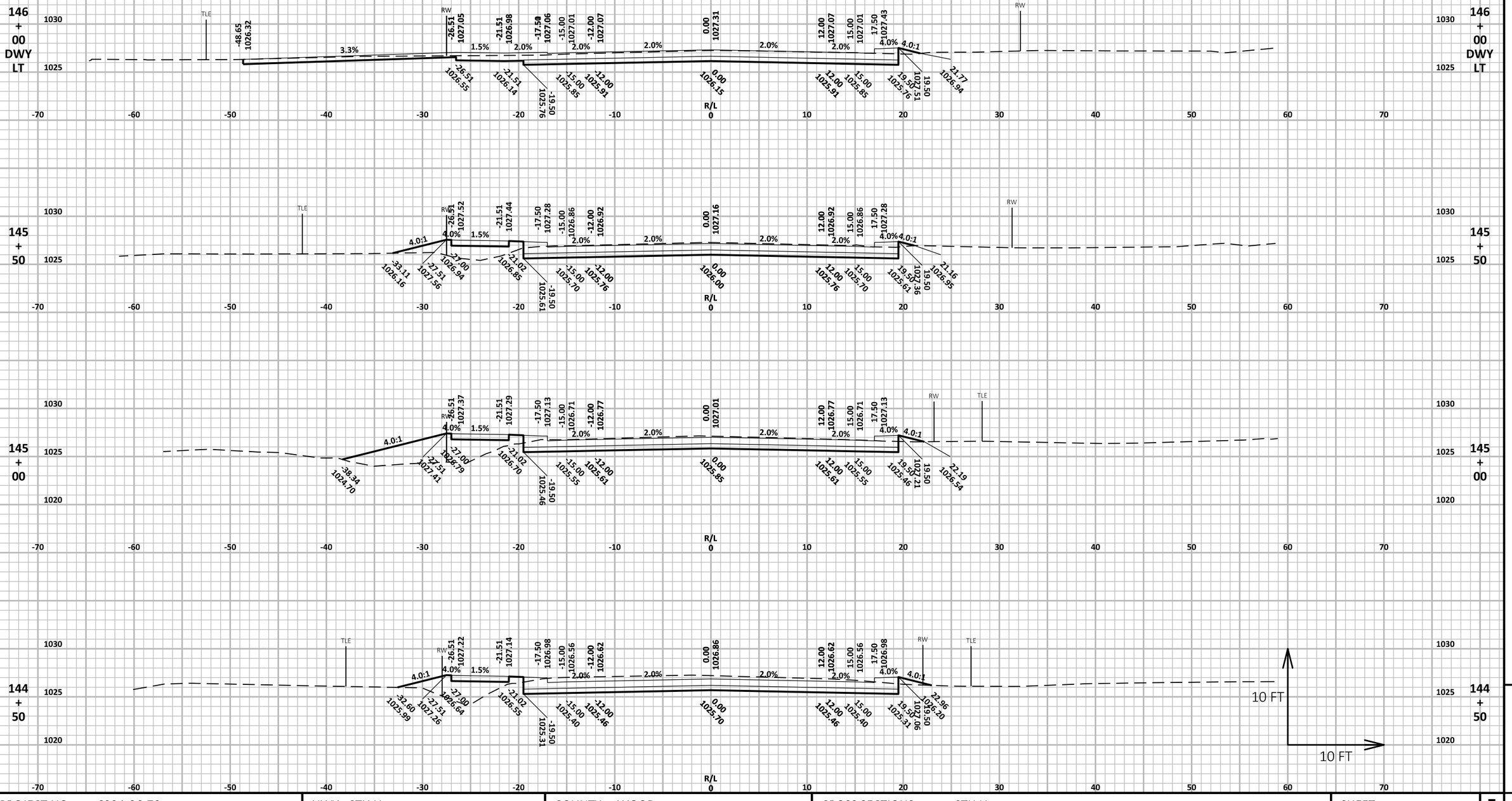
PLOT DATE : 4/16/2019 12:56 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 237	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090228-xs
PLOT DATE : 4/16/2019 12:56 PM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



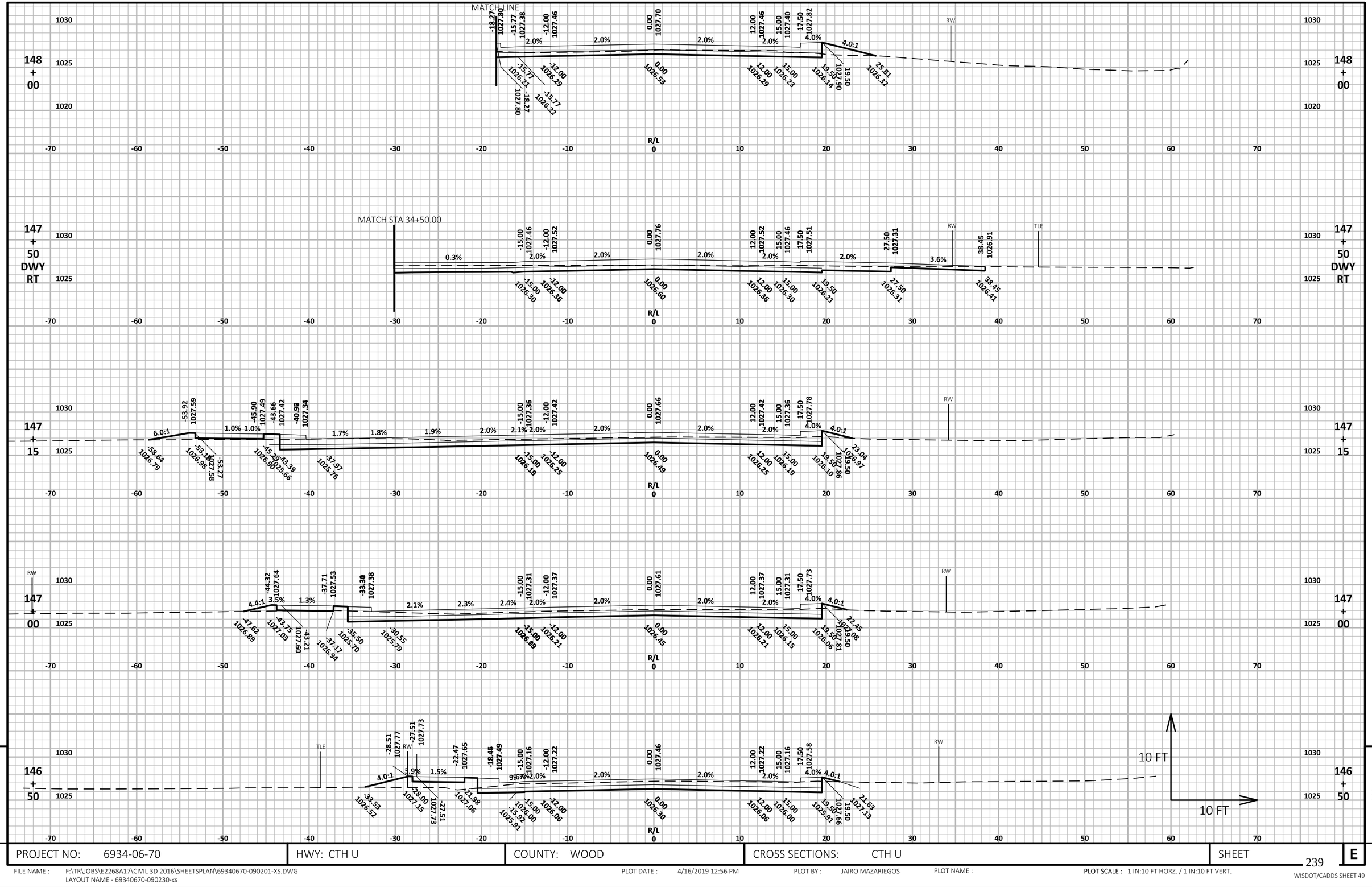
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 238 E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090229-xs

PLOT DATE : 4/16/2019 12:56 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

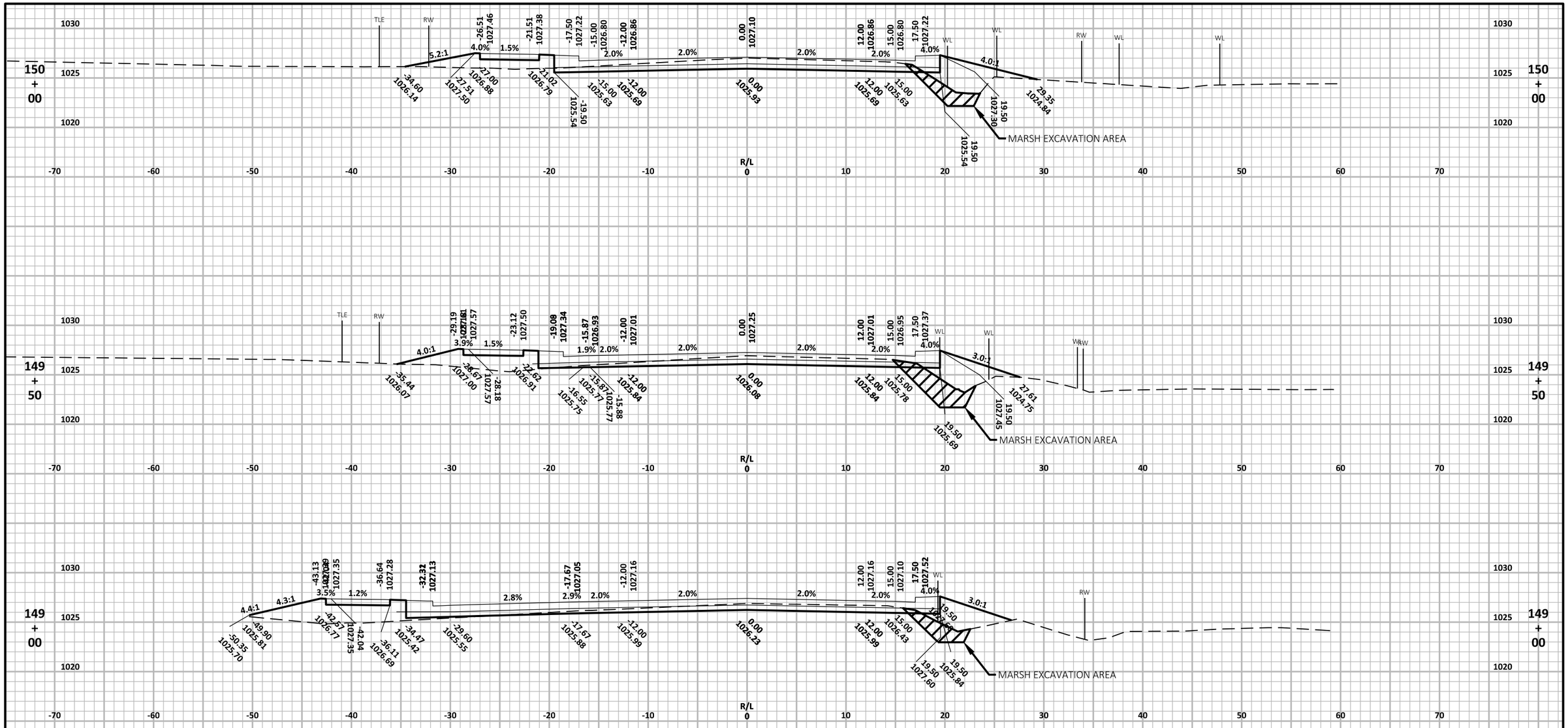
WISDOT/CADDS SHEET 49

9 9



PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 239	E

FILE NAME : F:\TR\OBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090230-xs
PLOT DATE : 4/16/2019 12:56 PM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

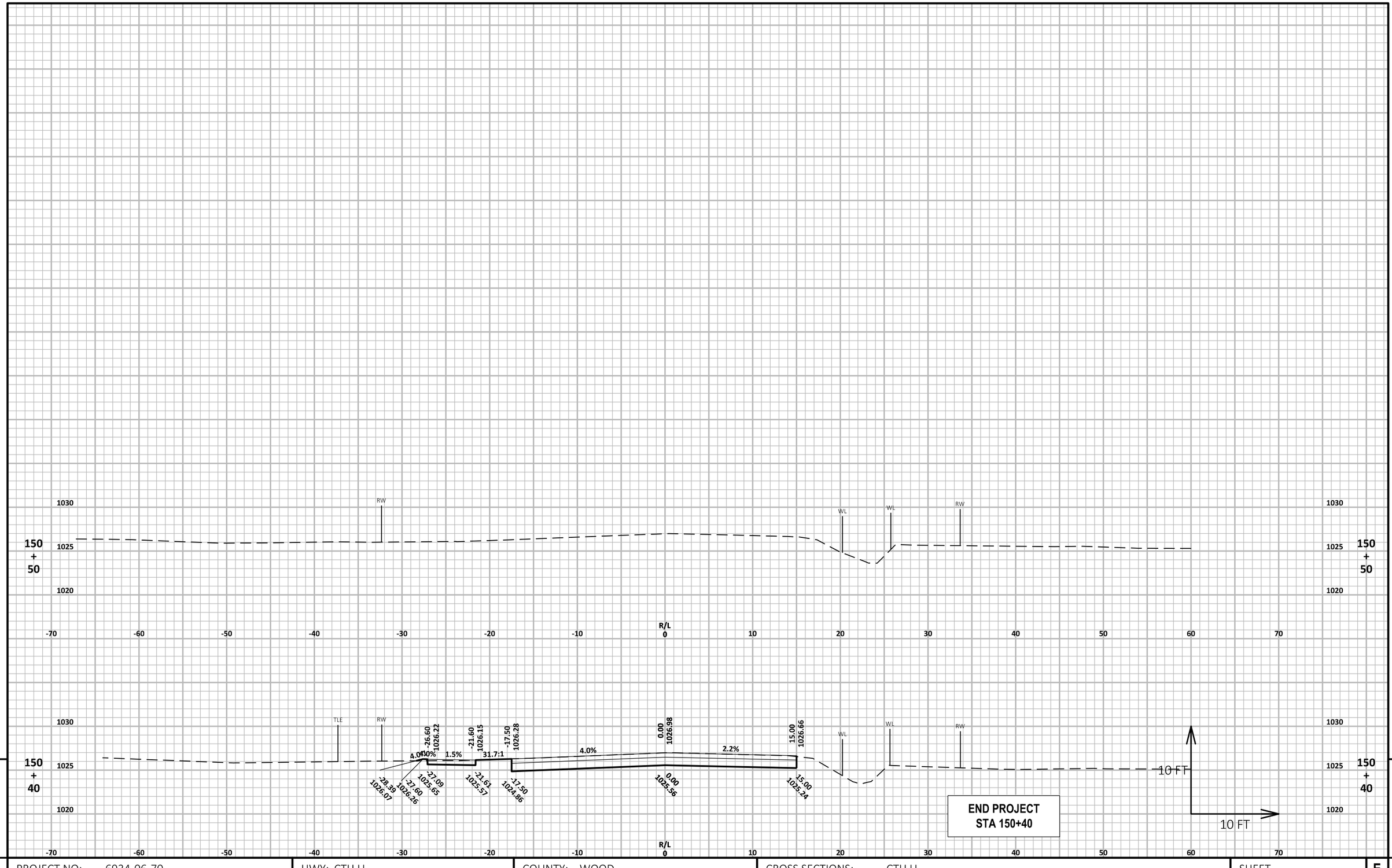
PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 240	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090231-xs

PLOT DATE : 4/16/2019 12:56 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

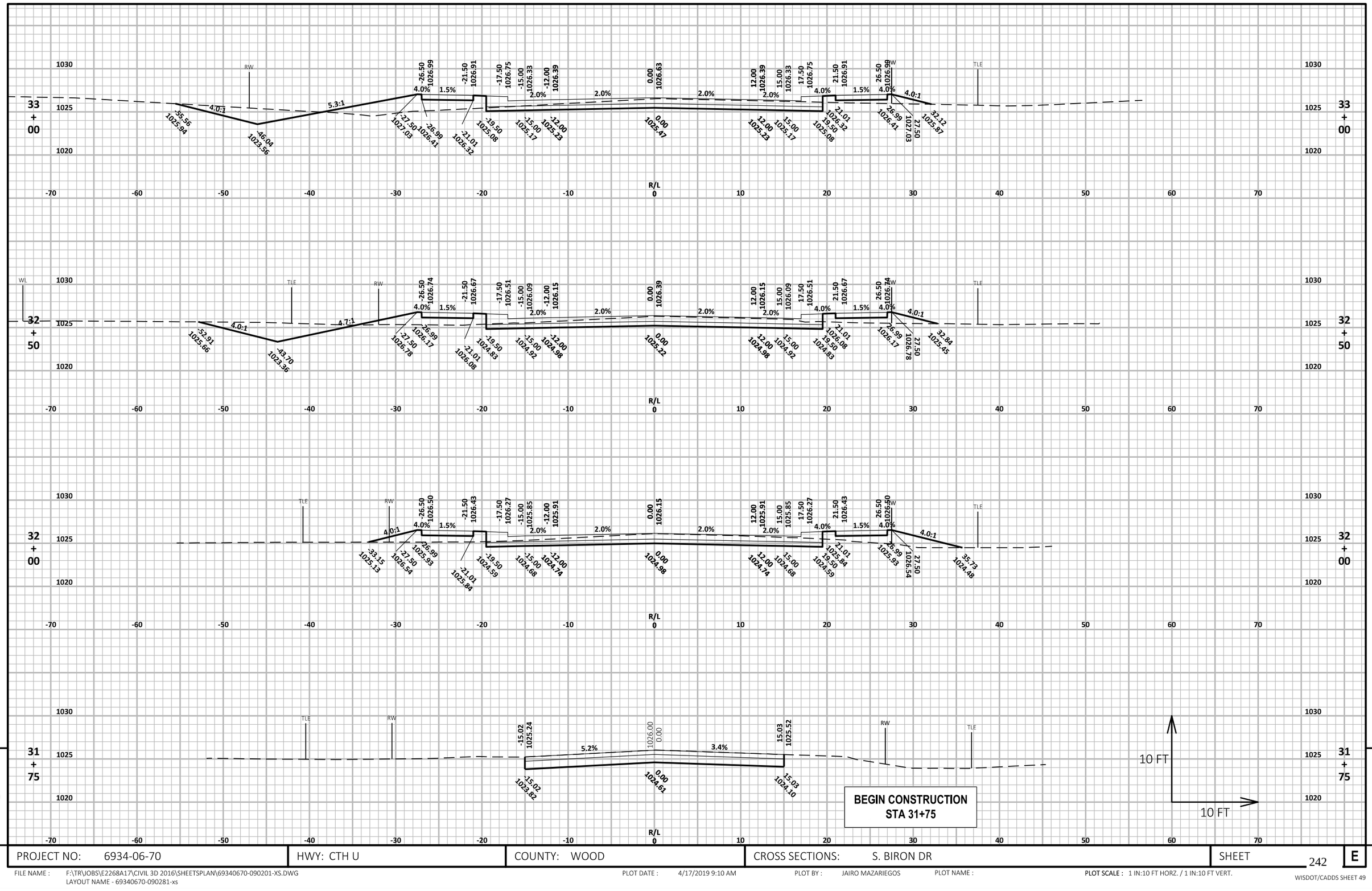


9 9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: CTH U	SHEET 241	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090232-xs

PLOT DATE : 4/16/2019 12:56 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



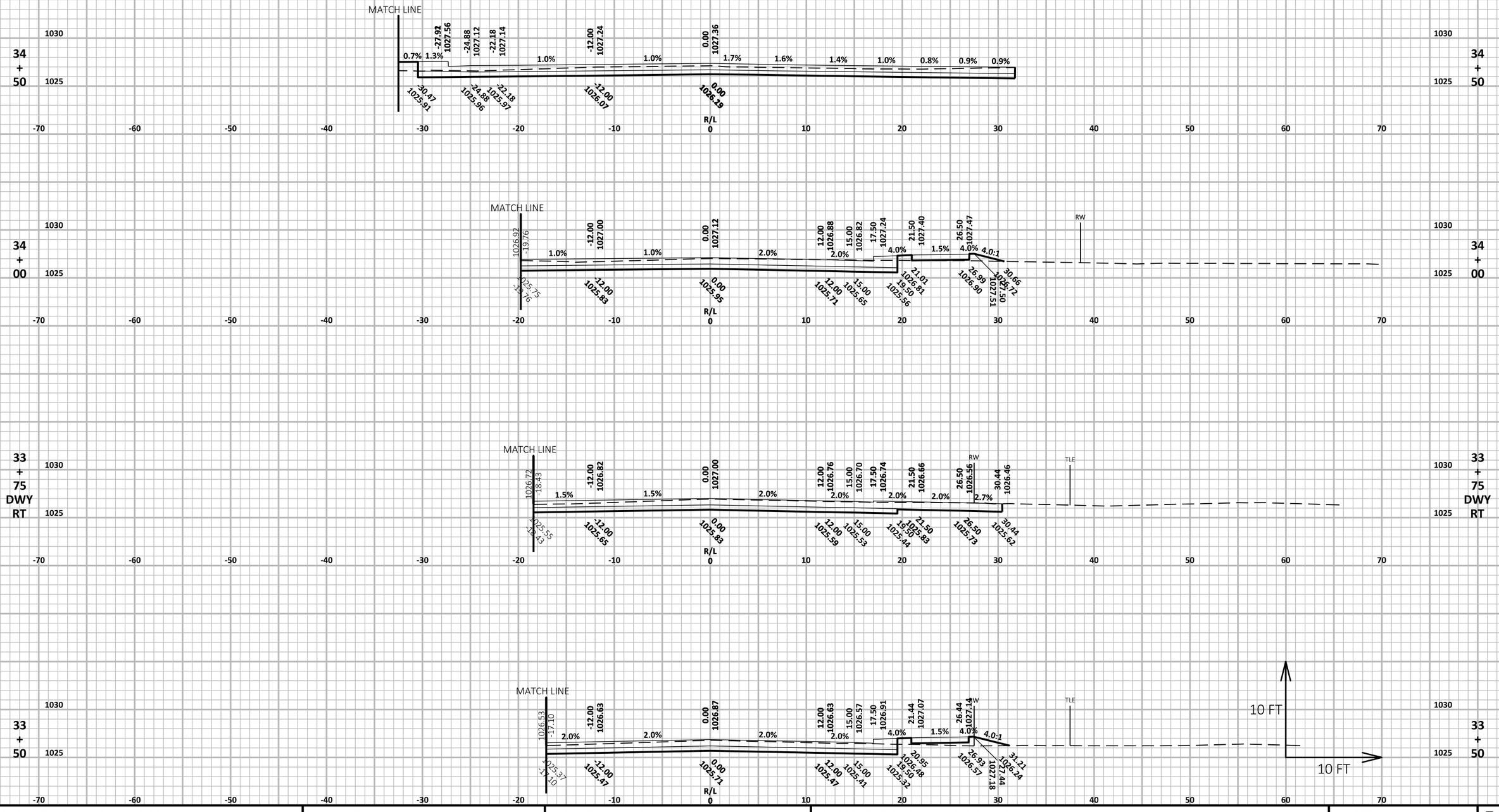
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: S. BIRON DR	SHEET 242	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090281-xs

PLOT DATE : 4/17/2019 9:10 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



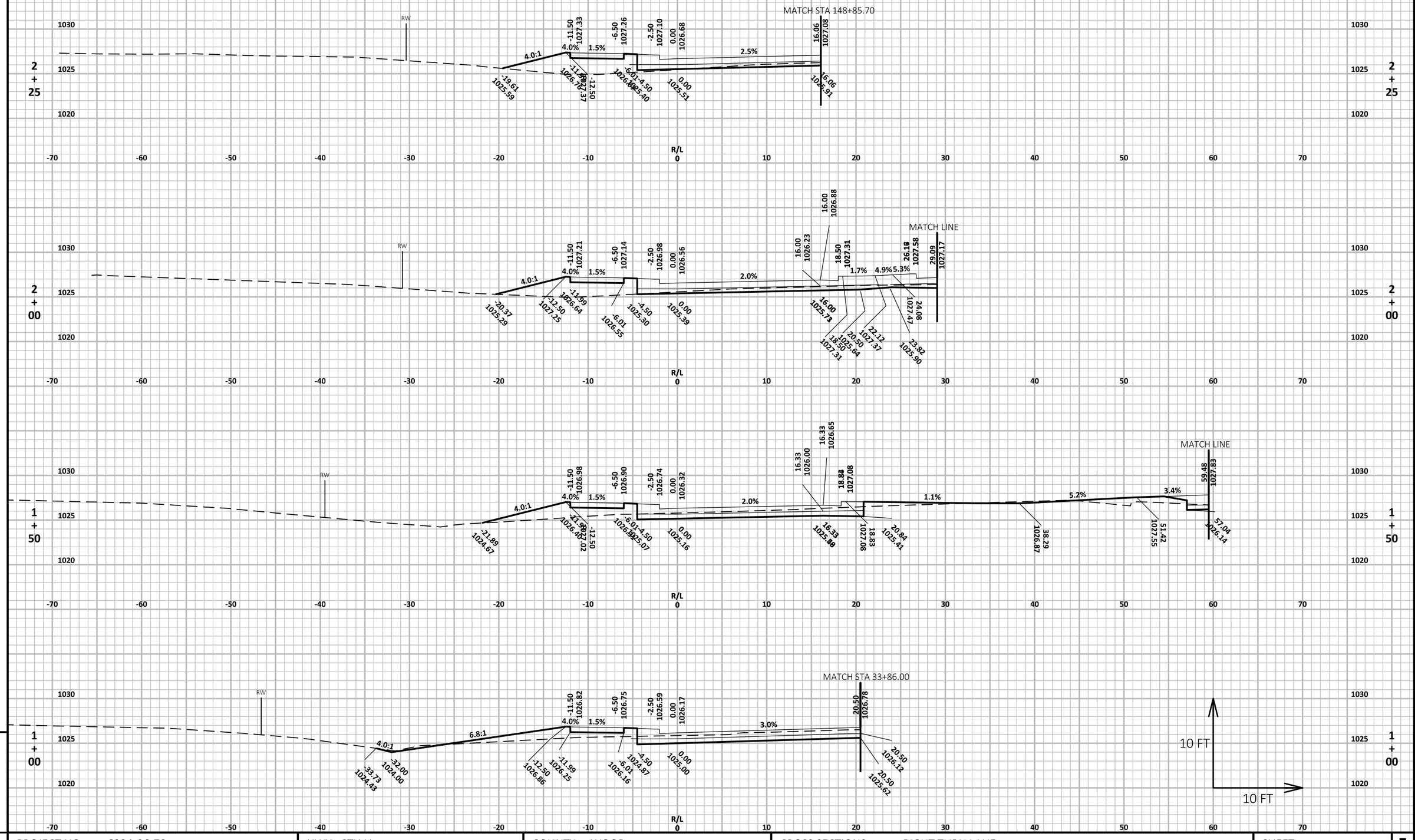
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: S. BIRON DR	SHEET 243	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090282-xs

PLOT DATE : 4/17/2019 9:10 AM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

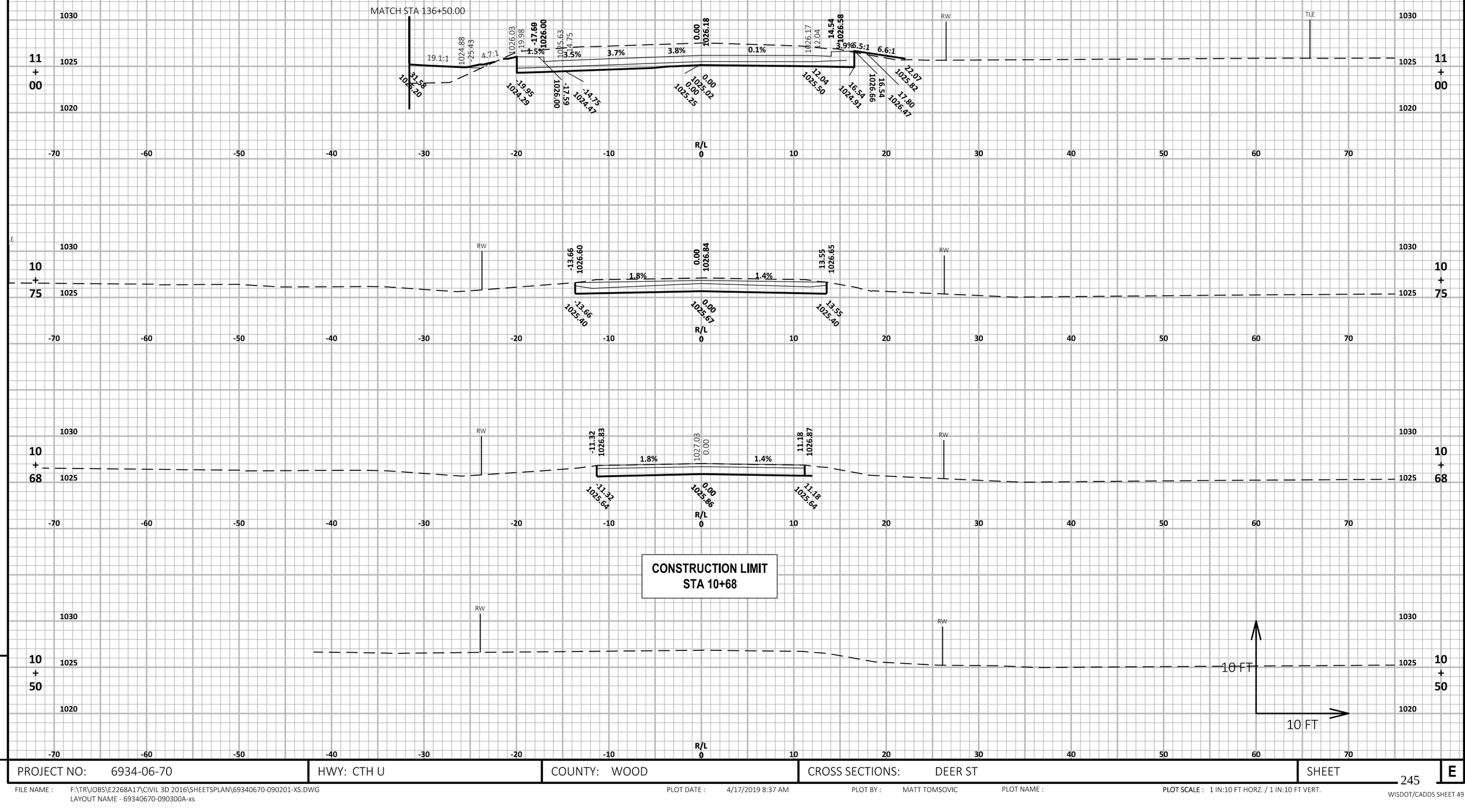
WISDOT/CADDS SHEET 49



9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: RIGHT TURN LANE	SHEET 244	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090291-xs
PLOT DATE : 4/16/2019 12:57 PM
PLOT BY : JAIRO MAZARIEGOS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

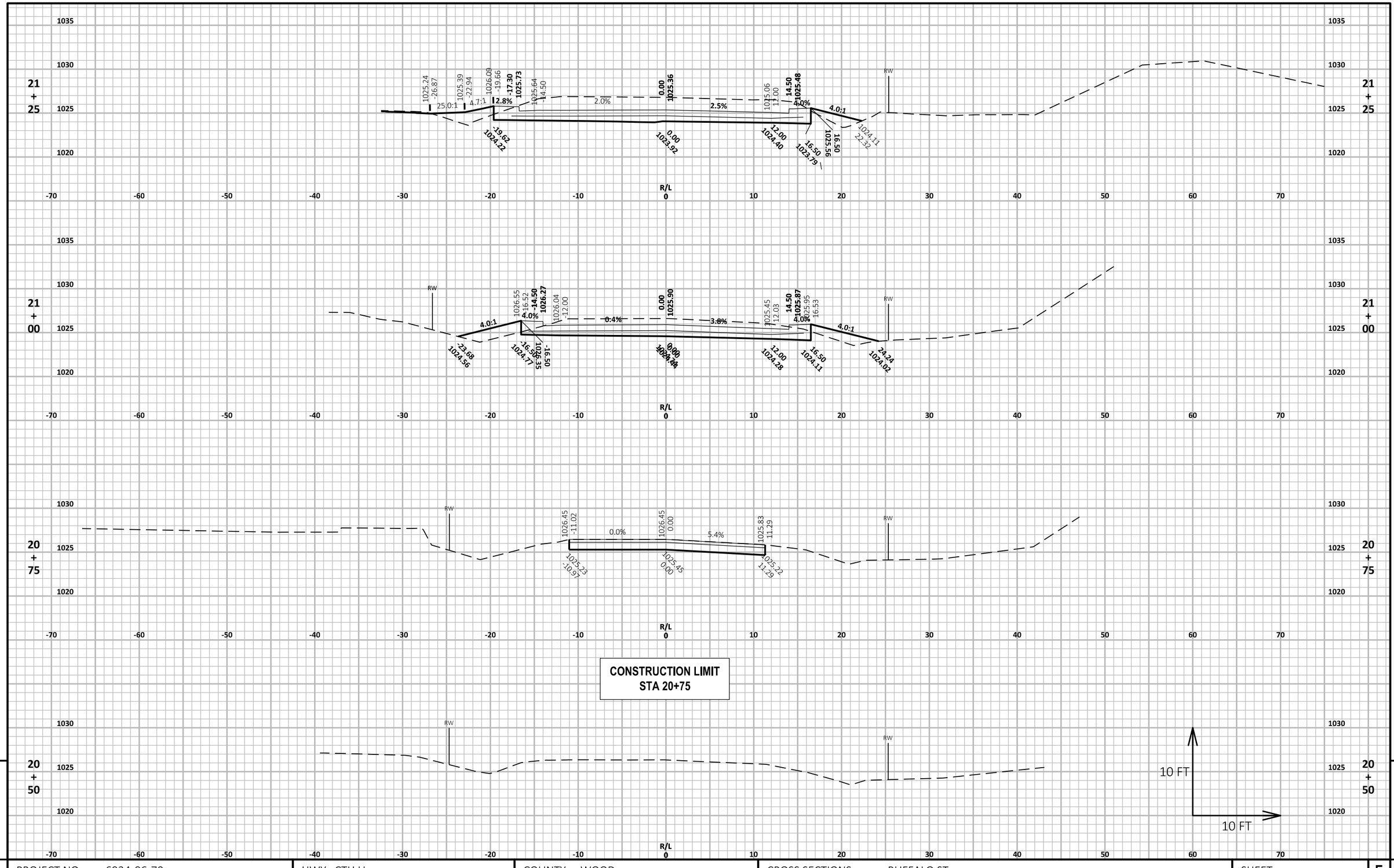


PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: DEER ST	SHEET 245	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090300A-xs

PLOT DATE : 4/17/2019 8:37 AM PLOT BY : MATT TOMSOVIC PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

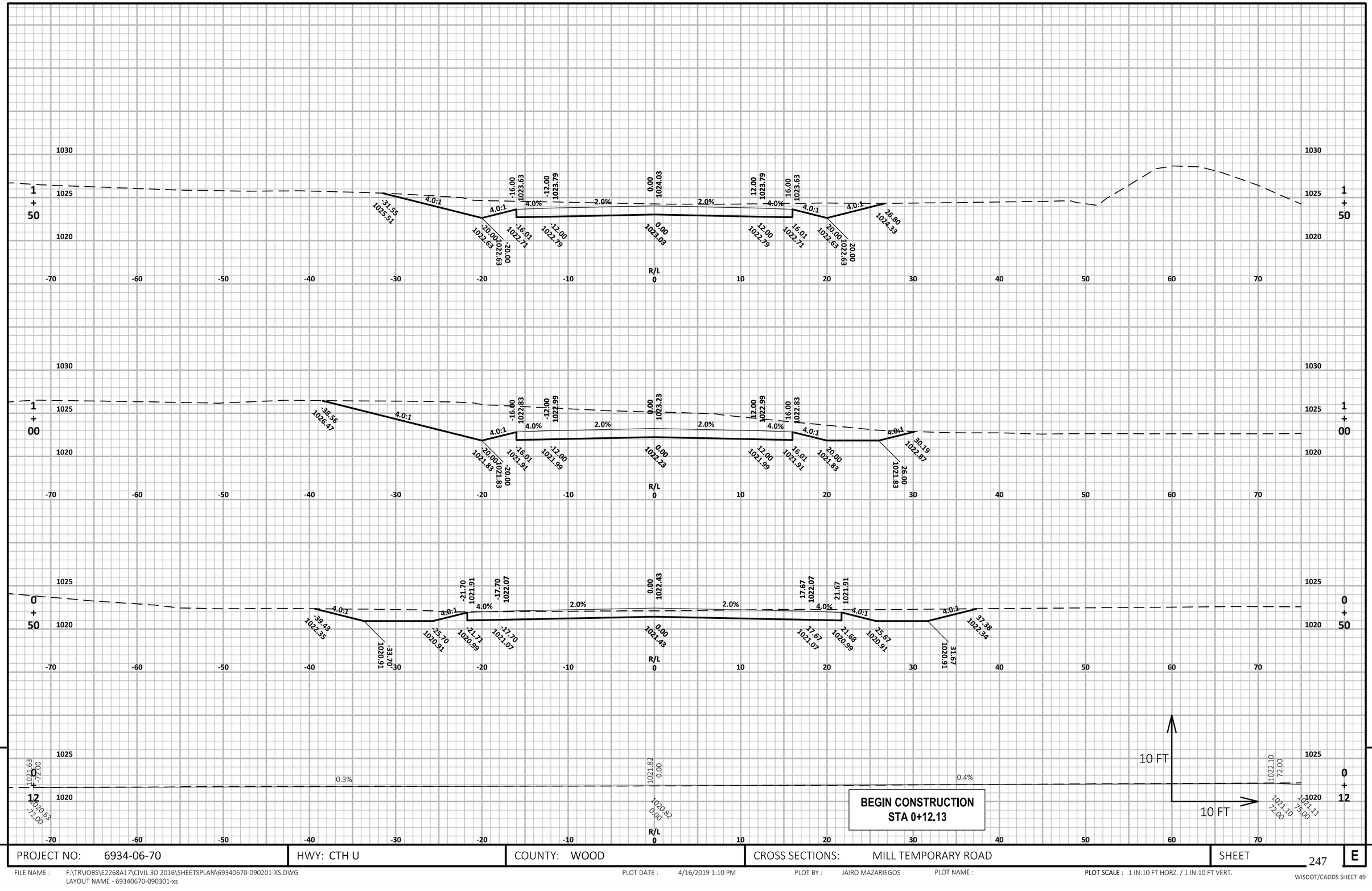


CONSTRUCTION LIMIT
STA 20+75

9

9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: BUFFALO ST	SHEET 246	E



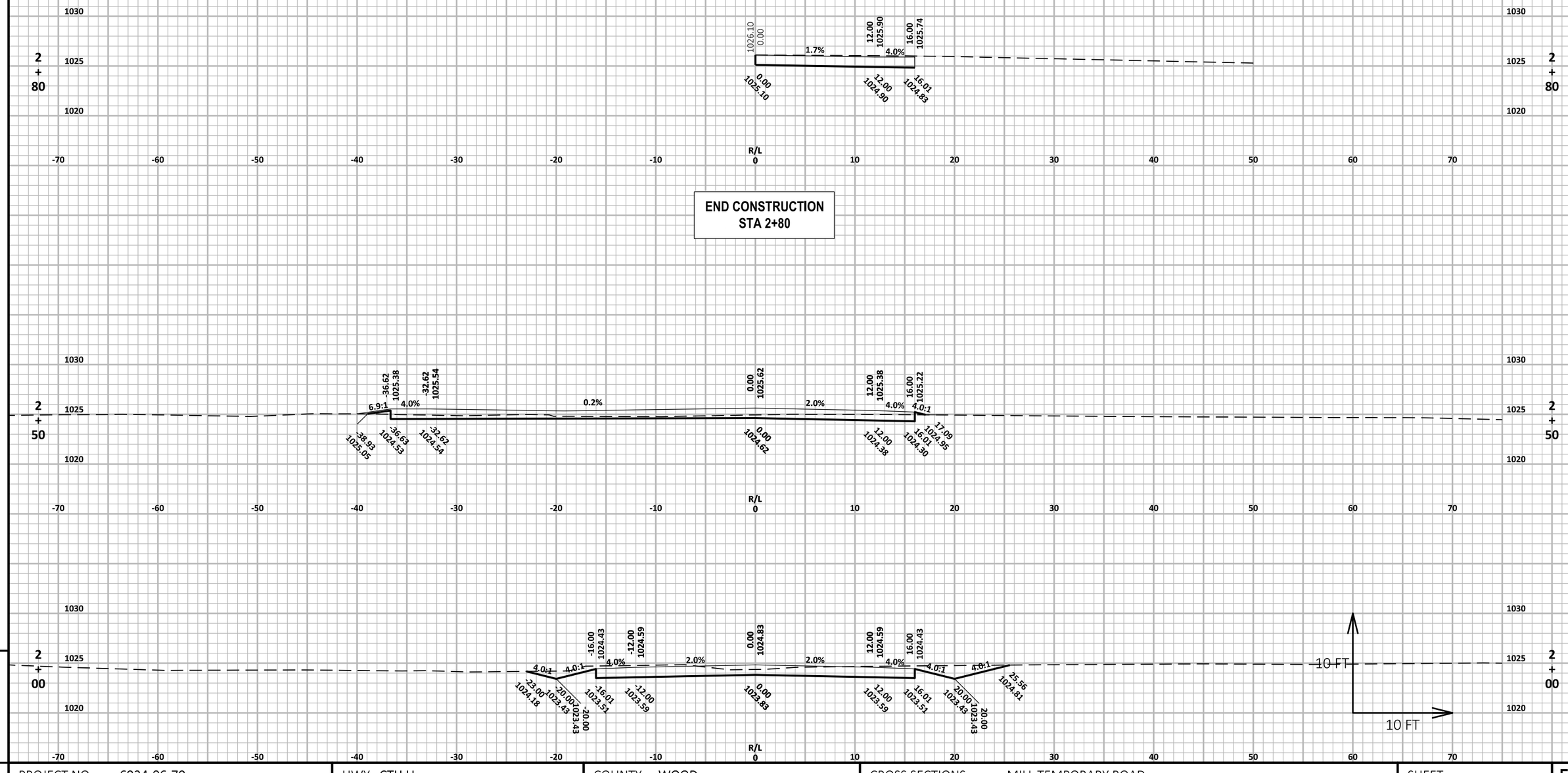
9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: MILL TEMPORARY ROAD	SHEET 247	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090301-xs

PLOT DATE : 4/16/2019 1:10 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 6934-06-70	HWY: CTH U	COUNTY: WOOD	CROSS SECTIONS: MILL TEMPORARY ROAD	SHEET 248	E

FILE NAME : F:\TR\JOBS\E2268A17\CIVIL 3D 2016\SHEETSPLAN\69340670-090201-XS.DWG
LAYOUT NAME - 69340670-090302-xs

PLOT DATE : 4/16/2019 12:57 PM PLOT BY : JAIRO MAZARIEGOS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov