

GRE

JUNE 2024

PROJECT ID:

1130-68-81

WITH: N/A

COUNTY:

BROWN

ORDER OF SHEETS

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

TOTAL SHEETS = 460

07

DESIGN DESIGNATION

A.A.D.T.	=	WEST OF I 41 11,900
A.A.D.T.	=	EAST OF I 41 18,500
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	40 MPH
ESALS	=	N/A

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS

PROPERTY LINE

LOT LINE

LIMITED HIGHWAY EASEMENT

EXISTING RIGHT OF WAY

PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT

PROPOSED CULVERT (Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA

PROFILE

GRADE LINE

ORIGINAL GROUND

MARSH OR ROCK PROFILE (To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

TELEPHONE

WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE

ROCK

LABEL

95.36

E

FO

G

SAN

SS

T

W

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

APPLETON - DE PERE

SBC EARLY FILL AND FRONTAGE ROADS

LOCAL STREET

BROWN COUNTY

STATE PROJECT NUMBER

1130-68-81

EE

EB

F

EE

D

U

F

S

NOAH RD

R-19-E

R-20-E

BIRCHWOOD RD

LITTLE RAPIDS

Ashwaubenon Cr.

HICKORY RD

MIDWAY

MAR - EL DR

MILITARY

BOE JA

HI

T-23-N

T-22-N

T-22-N

T-22-N

BEGIN PROJECT

STA 102'GVWB'+25.00

Y= 533,605.628

X= 68,652.451

END PROJECT

STA 138'GVWB'+00

Y= 531,710.735

X= 71,576.715

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.677 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor

Designer

Project Manager

Regional Examiner

Regional Supervisor

NER

NER

K. Trembl

REGIONAL EXAMINER

E. Gwidt

APPROVED FOR THE DEPARTMENT

DATE: 4/17/24

(Signature)

E

FILE NAME :

C:\USERS\DOT\B\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSP\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\01 TITLE\010101-TI.DWG

PLOT DATE :

2/29/2024 6:44 AM

PLOT BY :

BRATTLUND, ERIK JOHN

PLOT NAME :

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- REMOVAL PLANS
- PLAN DETAILS
- PAVING GRADES
- CURB RAMP DETAILS
- EROSION CONTROL
- STORM SEWER
- PERMANENT SIGNING
- LIGHTING PLAN
- PAVEMENT MARKING
- TRAFFIC CONTROL
- DETOUR PLAN
- ALIGNMENT LAYOUT
- FENCING PLAN

DNR LIAISON

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COMMUNICATION

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UTILITY CONTACTS

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COMMUNICATION

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SEWER

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WATER

TOWN OF LAWRENCE
KURT MINTEN
2400 SHADY COURT
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COMMUNICATION

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ELECTRICITY

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GAS/PETROLEUM

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EMAIL: adam.vandenhouten@wisconsinpublicservice.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	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP- TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE- TURF			.25			.27			.28			.30
			.32			.34			.36			.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 = 85.60 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 52.11 ACRES

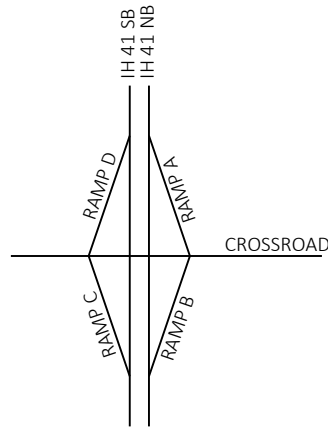
DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

ALIGNMENT NAMING ABBREVIATIONS

'GVEB'	SOUTHBRIDGE RD EB
'GVWB'	SOUTHBRIDGE RD WB
'GVNC'	SOUTHBRIDGE RD / IH 41 NB RAMP RAB
'GVSC'	SOUTHBRIDGE RD / IH 41 SB RAMP RAB
'GVA'	SOUTHBRIDGE RD RAMP A
'GVB'	SOUTHBRIDGE RD RAMP B
'GVC'	SOUTHBRIDGE RD RAMP C
'GVD'	SOUTHBRIDGE RD RAMP D
'GVAB'	SOUTHBRIDGE RD RAMP A BYPASS LANE
'GVBB'	SOUTHBRIDGE RD RAMP B BYPASS LANE
'GVCB'	SOUTHBRIDGE RD RAMP C BYPASS LANE
'GVDB'	SOUTHBRIDGE RD RAMP D BYPASS LANE
'GMVC'	SOUTHBRIDGE RD - MID VALLEY DR RAB
'GMVN'	SOUTHBRIDGE RD - MID VALLEY DR NB
'GMVS'	SOUTHBRIDGE RD - MID VALLEY DR SB
'GFVC'	SOUTHBRIDGE RD - FRENCH RD RAB
'GVFN'	SOUTHBRIDGE RD - FRENCH RD NB
'GVFS'	SOUTHBRIDGE RD - FRENCH RD SBFRENCH
'GVFT'	RD TEMPORARY ROAD
'GVPT'	PRESERVE TRAIL
'SB'	IH 41 SOUTHBOUND
'NB'	IH 41 NORTHBOUND



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

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

WHEN THE QUANTITY OF HMA PAVEMENT OR BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE QUANTITY OF TOPSOIL IS COMPUTED FROM MEASUREMENTS BETWEEN THE SUBGRADE SHOULDER POINTS AND THE SLOPE INTERCEPTS AS SHOWN ON THE CROSS SECTIONS.

THE PRESENCE OR REMOVAL OR ANY REINFORCEMENT, REBAR, OR WIRE MESH FOUND IN ANY EXISTING CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE REMOVAL PAVEMENT ITEM.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS. STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCH.

A SAWED JOINT IS REQUIRED WHERE HMA PAVEMENT MEETS EXISTING ASPHALTIC CONCRETE SURFACE. SAWING ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCHLINE AS SHOWN ON THE PAVING DETAILS OR AS DIRECTED BY THE ENGINEER.

IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED.

FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

SALVAGED TOPSOIL, FERTILIZER, MULCH AND SEED SHALL BE PLACED AS DIRECTED BY THE ENGINEER. IN DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS.

EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL

BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT IT IS NO LONGER REQUIRED.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS SHOWN ON THE EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

MAINTAIN DRAINAGE OF THE EXISTING STORM SEWER SYSTEM UNTIL THE PROPOSED STORM SEWER SYSTEM IS FUNCTIONAL.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.07 GALLON PER SQUARE YARD AND SHALL BE APPLIED BETWEEN ALL LAYERS OF ASPHALTIC PAVEMENT.

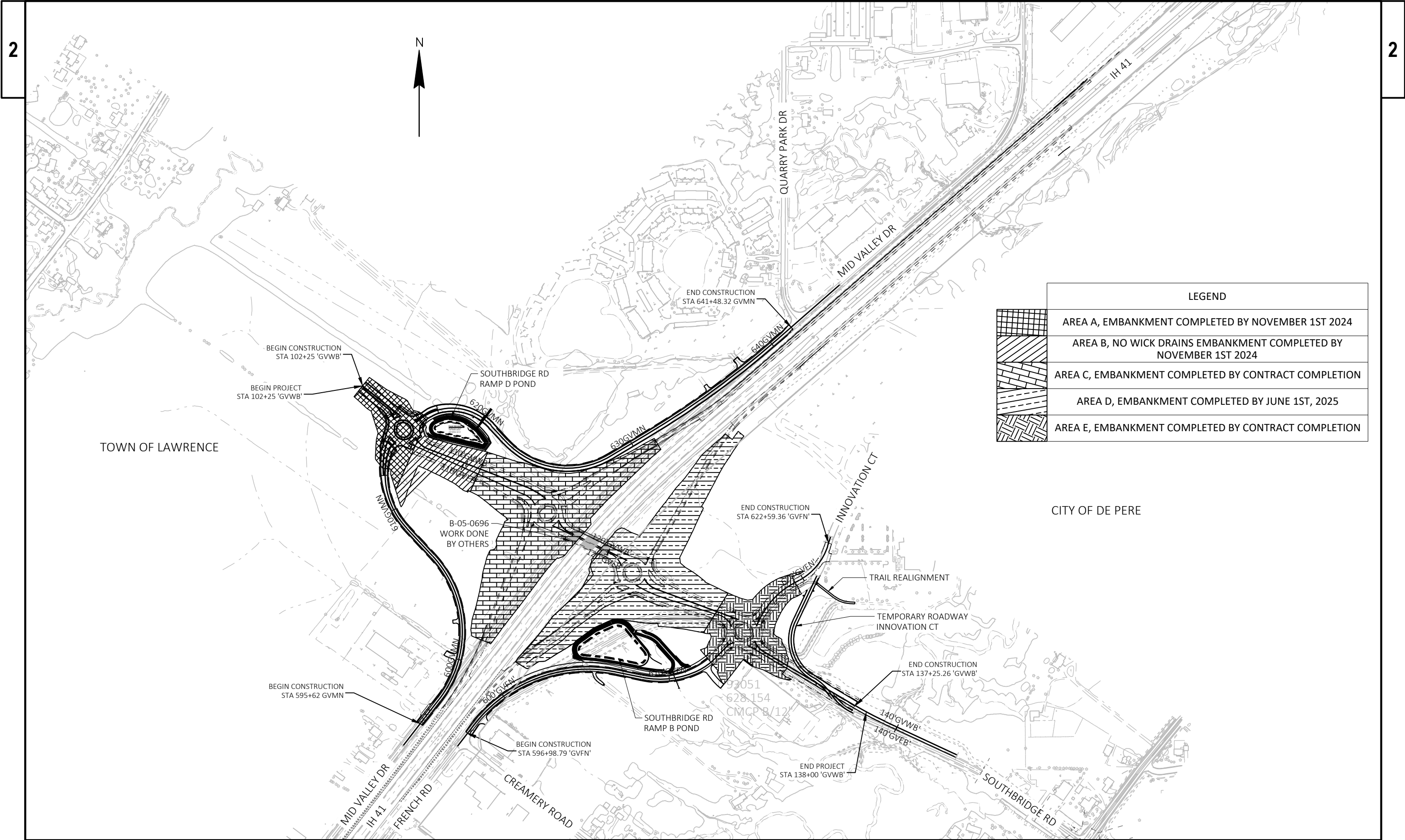
CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE. CURB AND GUTTER RADII DIMENSIONS ARE MEASURED TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

CONCRETE MEDIAN SLOPED NOSE SHALL BE CONSTRUCTED FOR ALL MEDIAN OPENINGS AT INTERSECTIONS WITH CURB & GUTTER.

CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER AT LEAST TWO (2) WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

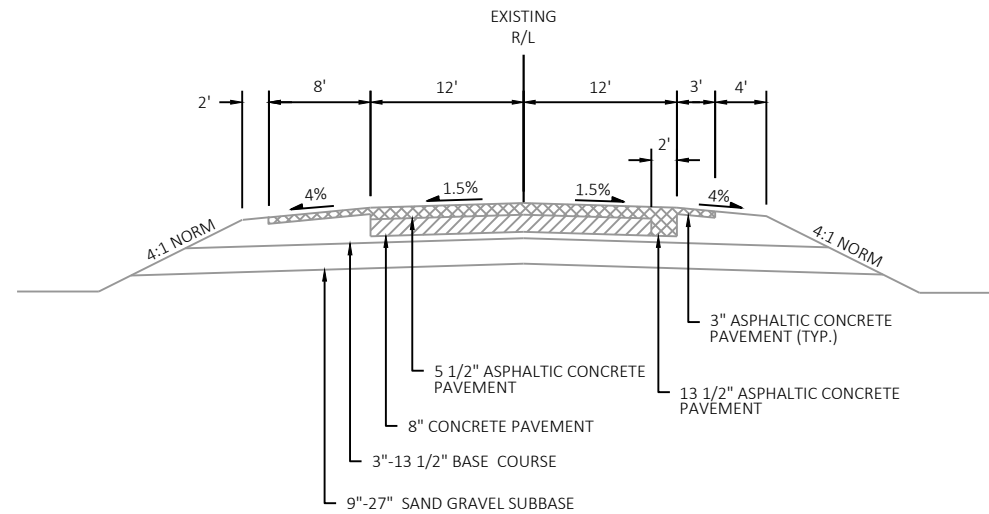
FOR SECTION CORNER REPLACEMENT CONTACT MIKE ANDRASCHKO TWO (2) WEEKS BEFORE STARTING CONSTRUCTION OPERATIONS.

EXISTING UTILITIES WILL BE ABANDONED WITHIN THE PROJECT LIMITS. IF ENCOUNTERED, REMOVE TO A DEPTH OF AT LEAST 2 FEET BELOW THE SUBGRADE. REMOVAL IS INCIDENTAL TO EXCAVATION COMMON. SEAL ENDS IF VOID IS 6 INCHES OR GREATER.

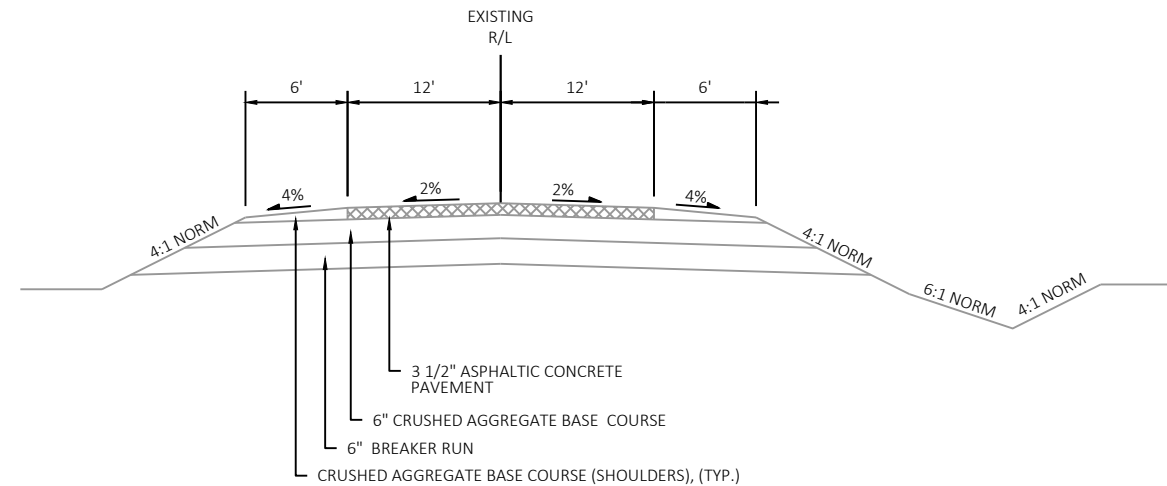


LEGEND	
	AREA A, EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
	AREA B, NO WICK DRAINS EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
	AREA C, EMBANKMENT COMPLETED BY CONTRACT COMPLETION
	AREA D, EMBANKMENT COMPLETED BY JUNE 1ST, 2025
	AREA E, EMBANKMENT COMPLETED BY CONTRACT COMPLETION

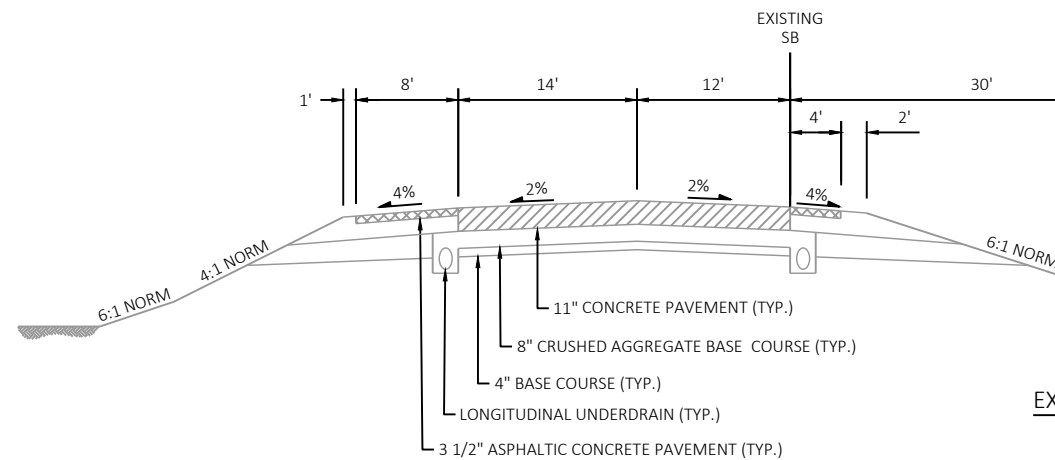
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PROJECT OVERVIEW	SHEET	E
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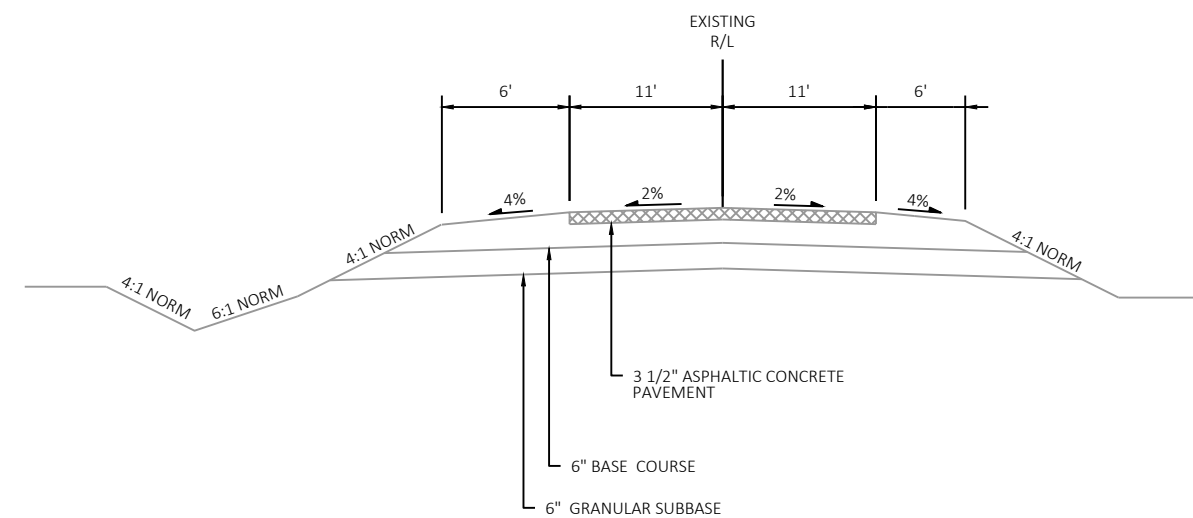
EXISTING TYPICAL SECTION
MID VALLEY DR
STA 595'GVMN'+75 TO STA 637'GVMN'+67.67



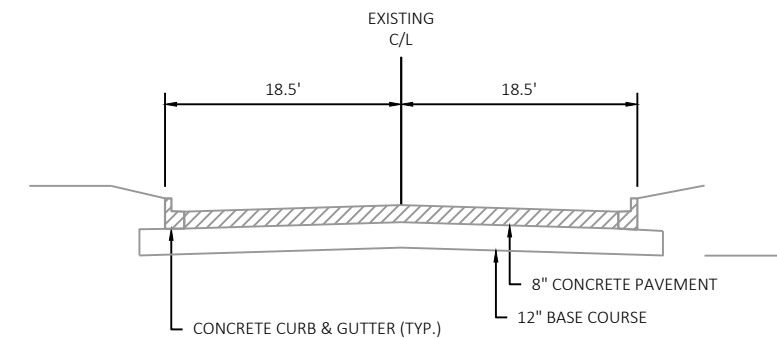
EXISTING TYPICAL SECTION
MID VALLEY DR
STA 637'GVMN'+67.67 TO STA 640'GVMN'+48.32



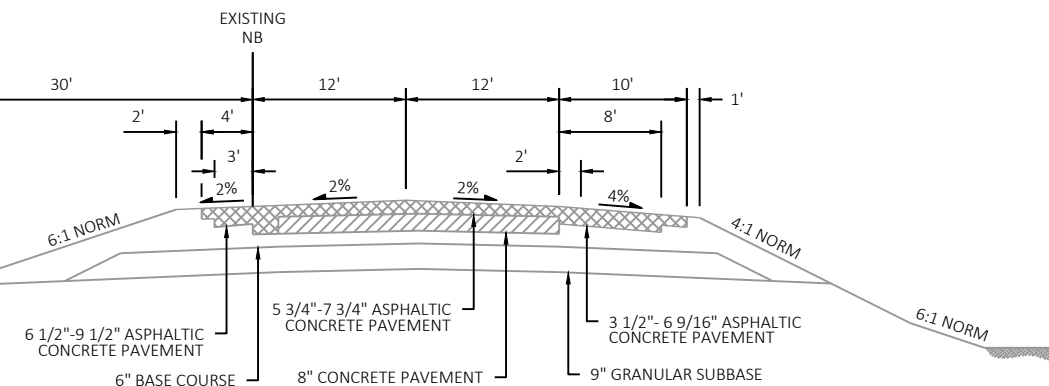
EXISTING TYPICAL SECTION
IH 41
STA 607'SB'+97 TO STA 618'SB'+28
STA 600'NB'+41 TO STA 612'NB'+66



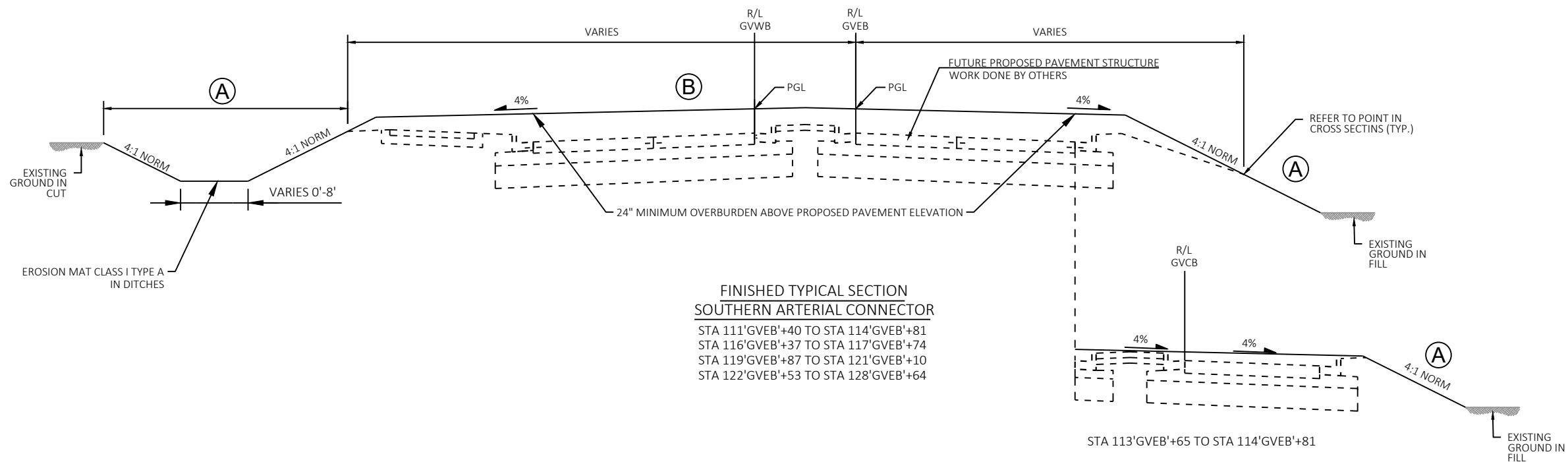
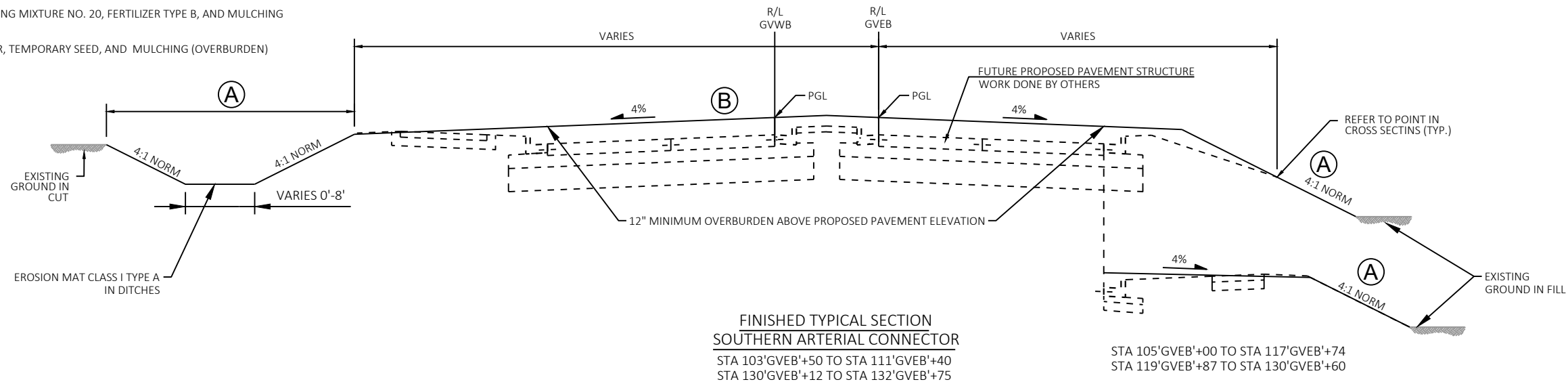
EXISTING TYPICAL SECTION
FRENCH RD
STA 598'GVFN'+98.79 TO STA 614'GVFN'+39



EXISTING TYPICAL SECTION
INNOVATION CT
STA 616'GVFN'+05 TO STA 622'GVFN'+59.36



- (A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING
 (B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)



STRUCTURE LOCATION
 B-05-0696
 STA 117'GVEB'+74 TO STA 122'GVEB'+53

NOTES:
 PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
 INITIAL EARLY FILL TRANSITIONS DOWN TO GROUND SURFACE FROM:
 STA 103'GVEB'+00 TO STA 104'GVEB'+45
 STA 103'GVWB'+00 TO STA 104'GVWB'+50
 STA 131'GVEB'+75 TO STA 132'GVEB'+75
 STA 132'GVWB'+15 TO STA 132'GVWB'+73.63

PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

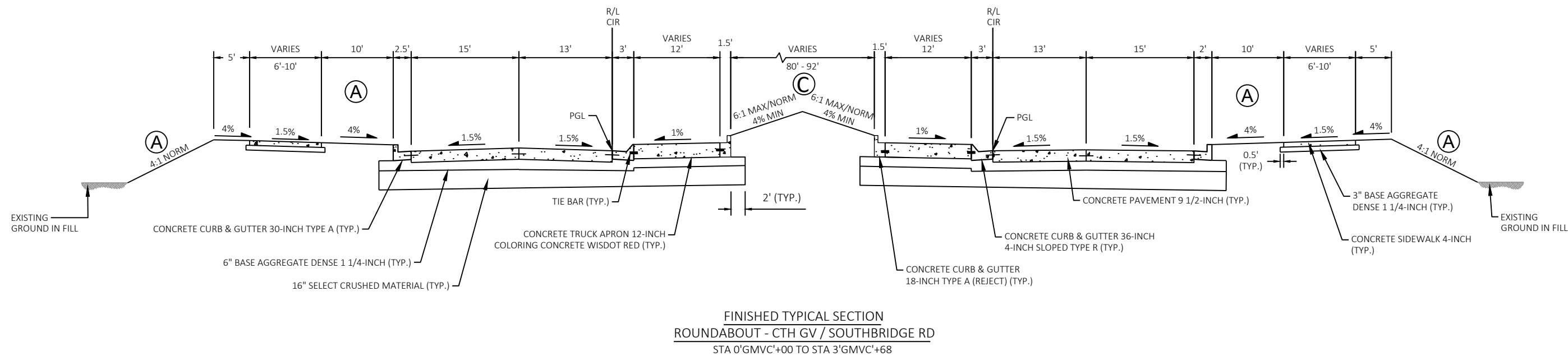
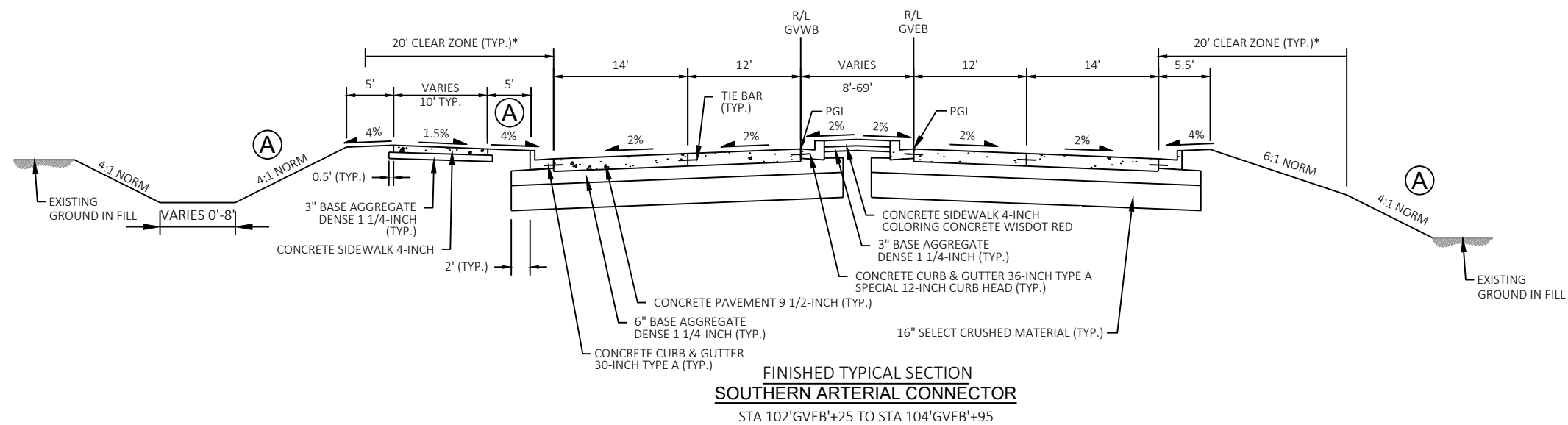
COUNTY: BROWN

TYPICAL SECTIONS - PROPOSED MAINLINE

SHEET

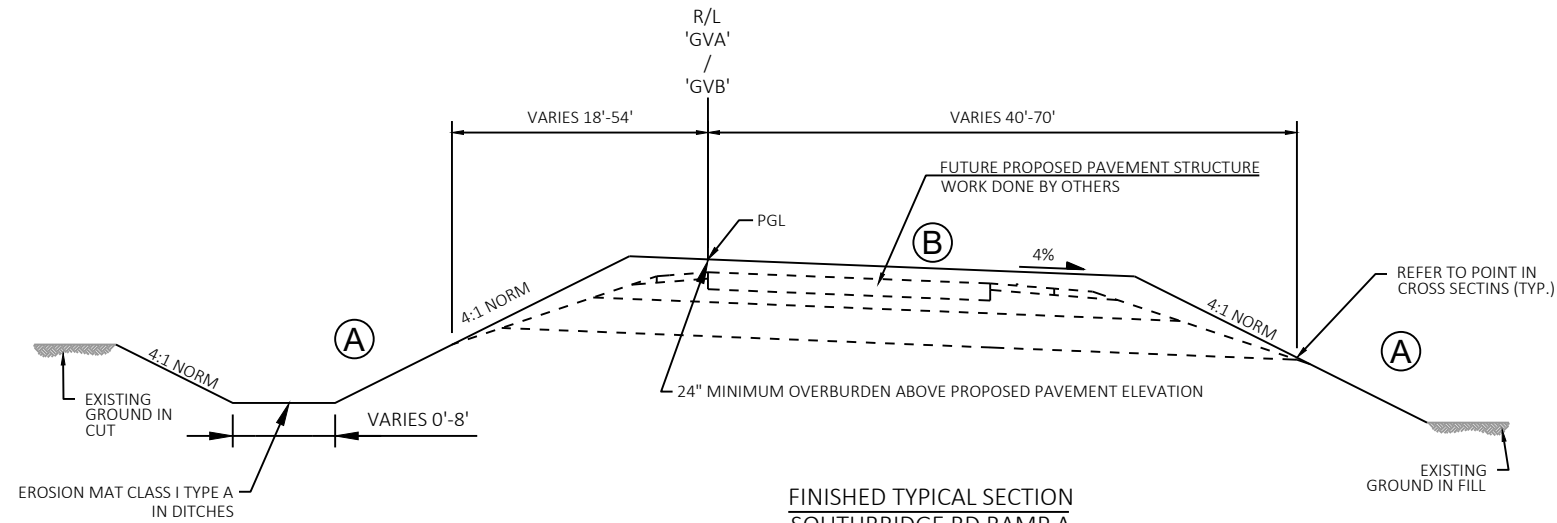
E

- Ⓐ TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING
- Ⓒ SEE SHEET PLANTING - ROUNDABOUT CIRCLE FOR ADDITIONAL ROUNDABOUT LANDSCAPING AND STAMPED COLORED CONCRETE DETAIL



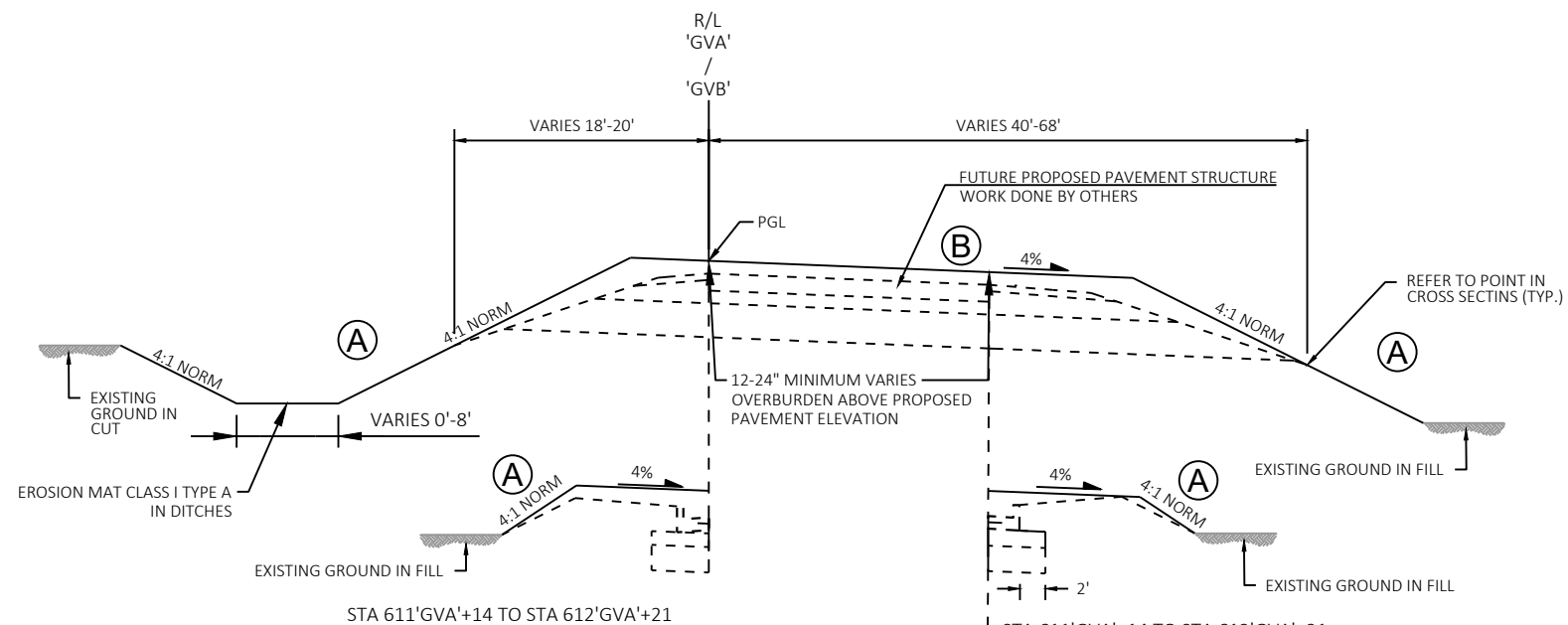
(A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING

(B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)



FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP A
STA 612'GVA'+21 TO STA 620'GVA'+10

FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP B
STA 605'GVA'+94 TO STA 607'GVA'+35



STA 611'GVA'+14 TO STA 612'GVA'+21

12"-24" OVERBURDEN ABOVE PROPOSED PAVEMENT ELEVATION

FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP A
STA 611'GVA'+14 TO STA 612'GVA'+21

FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP B
STA 602'GVB'+00 TO STA 605'GVB'+94
STA 607'GVA'+35 TO STA 607'GVA'+84

STA 611'GVA'+14 TO STA 612'GVA'+21
STA 607'GVB'+35 TO STA 607'GVB'+84

STA 603'GVB'+50 TO STA 605'GVB'+94

NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

EARLY FILL TRANSITIONS DOWN TO GROUND SURFACE FROM:
STA 617'GVA'+60 TO STA 620'GVA'+10
STA 602'GVB'+00 TO STA 603'GVB'+20

PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

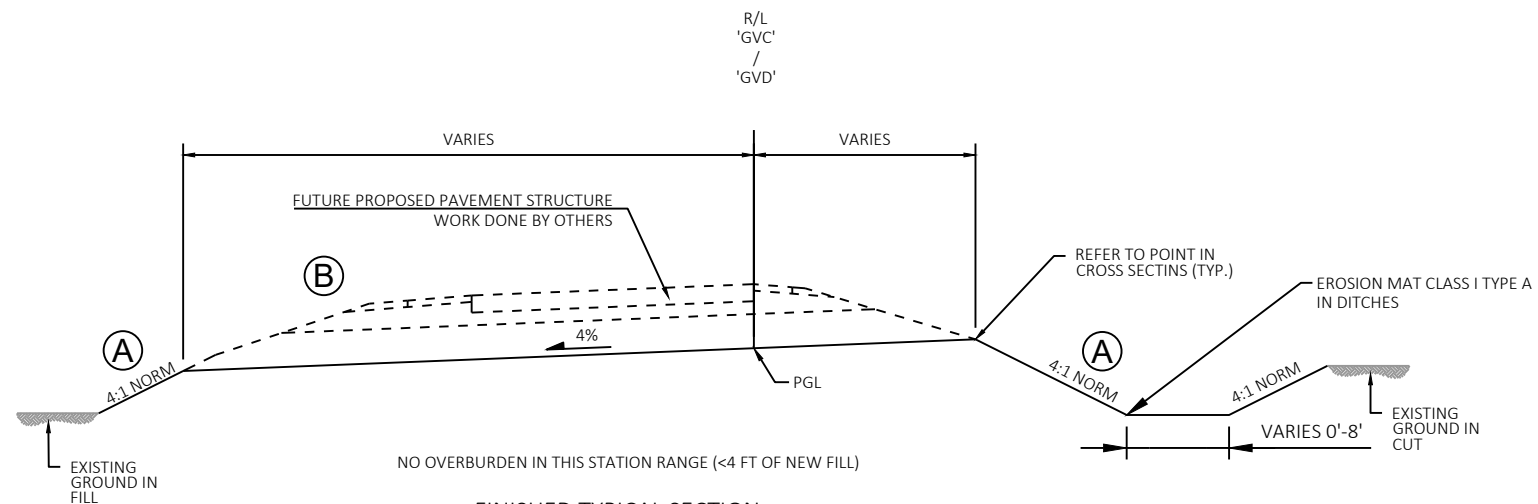
COUNTY: BROWN

TYPICAL SECTIONS - PROPOSED RAMPS A & B

SHEET

E

- (A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING
(B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)

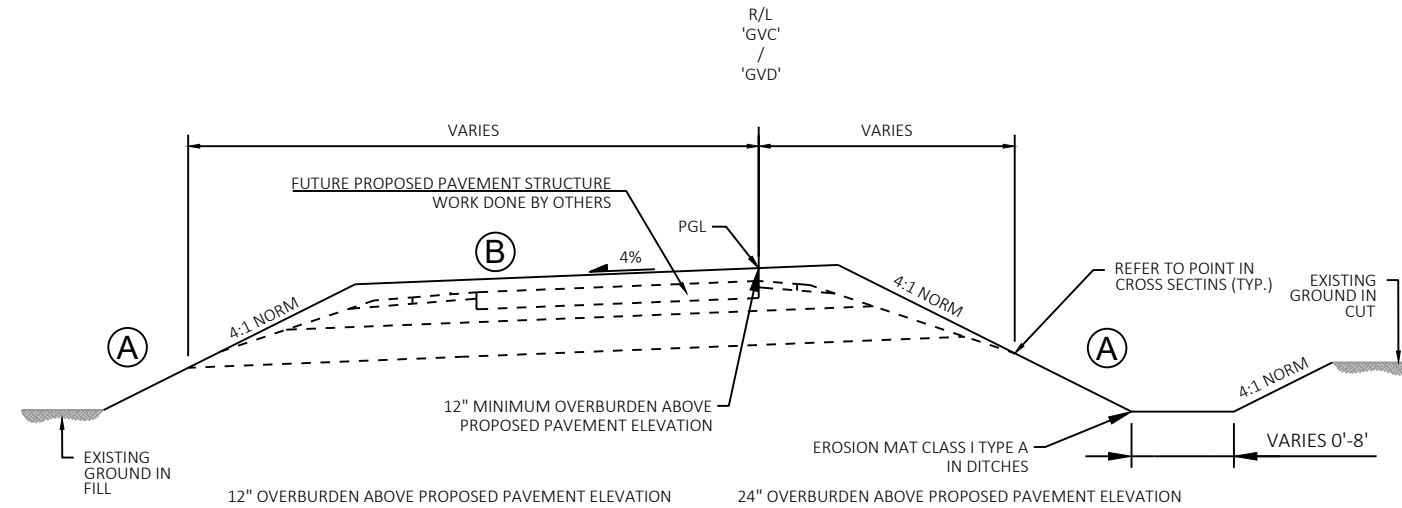


**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP C**

STA 595'GVC'+71 TO STA 601'GVC'+15

**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP D**

STA 615'GVD'+00 TO STA 616'GVD'+00



**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP C**

STA 601'GVC'+15 TO STA 602'GVC'+00

**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP D**

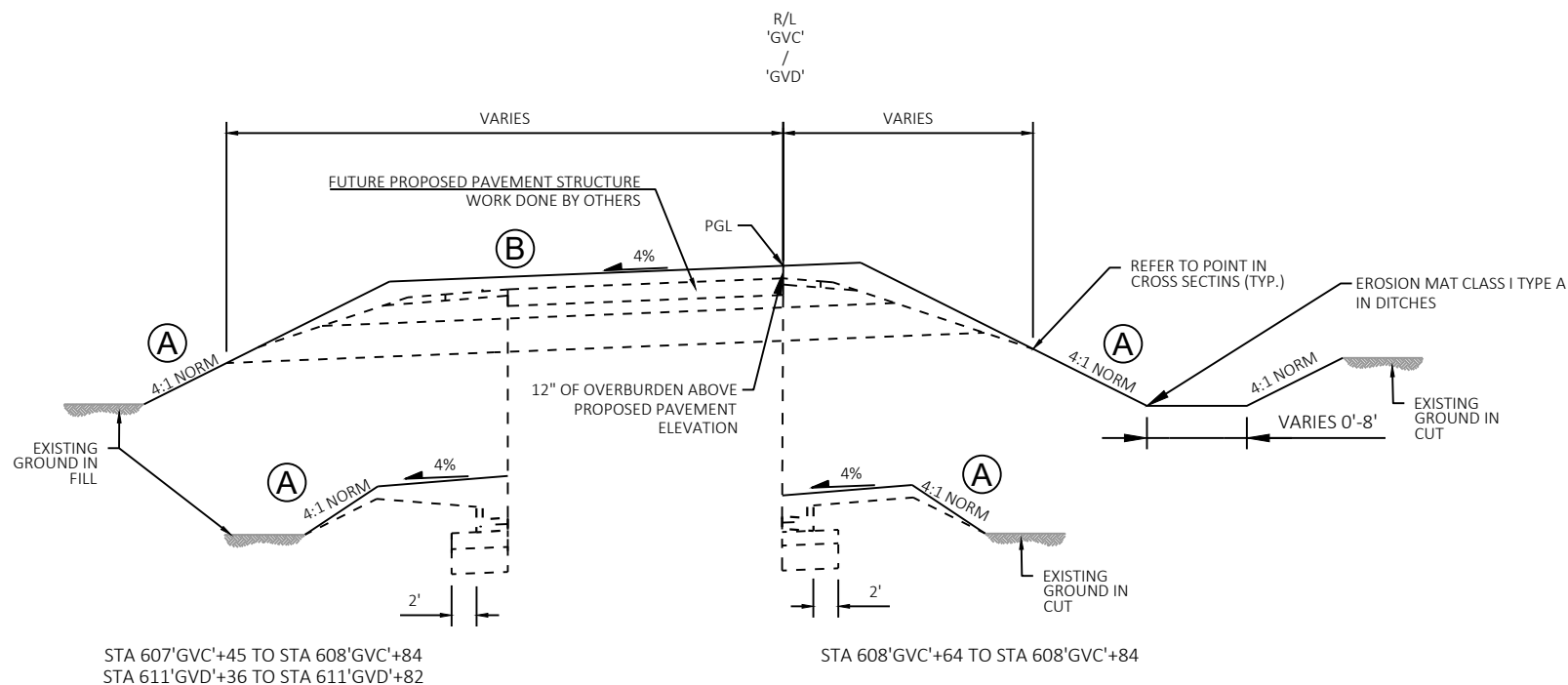
STA 614'GVD'+50 TO STA 615'GVD'+00

**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP C**

STA 602'GVC'+00 TO STA 607'GVC'+45

**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP D**

STA 611'GVD'+82 TO STA 615'GVD'+00



**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP C**

STA 607'GVC'+45 TO STA 608'GVC'+84

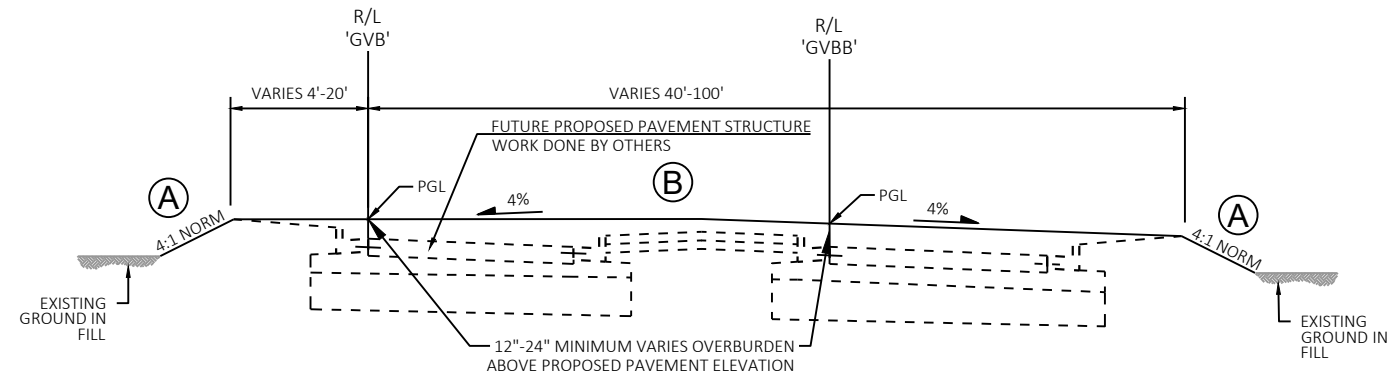
**FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP D**

STA 611'GVD'+36 TO STA 611'GVD'+82

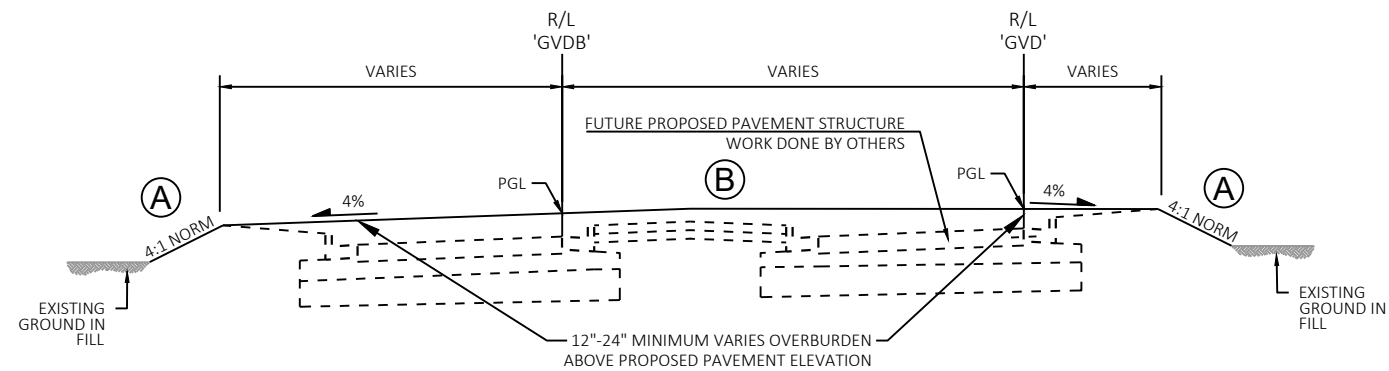
NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION
EARLY FILL TRANSITIONS DOWN TO GROUND SURFACE FROM:
STA 601'GVC'+15 TO STA 603'GVC'+00
STA 614'GVD'+00 TO STA 616'GVD'+00

(A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING

(B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)



FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP B
STA 607'GVB'+84 TO STA 609'GVB'+74



FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP C
STA 608'GVC'+84 TO STA 609'GVC'+39

FINISHED TYPICAL SECTION
SOUTHBRIDGE RD RAMP D
STA 609'GVD'+25 TO STA 611'GVD'+36

NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

TYPICAL SECTIONS - PROPOSED RAMPS

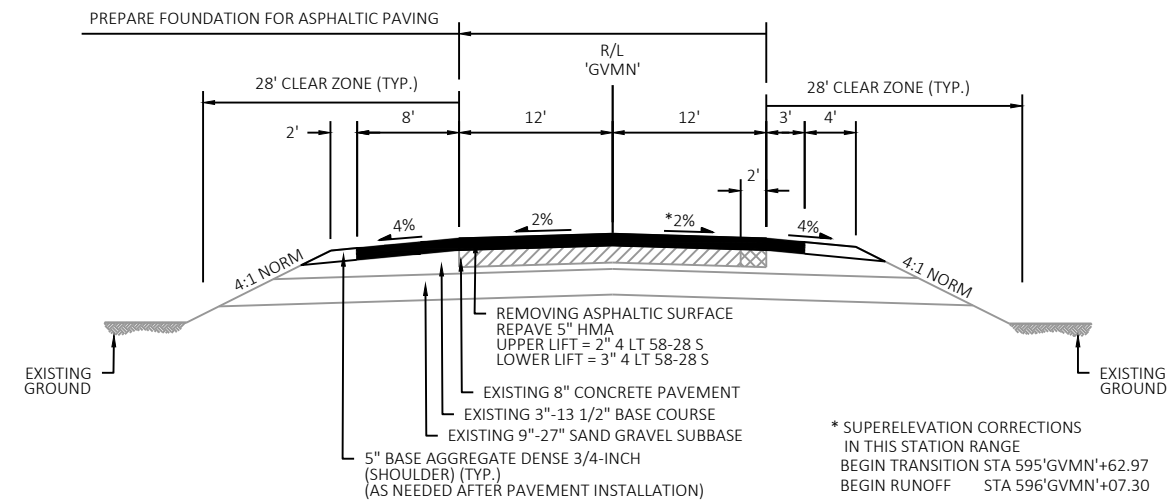
SHEET

E

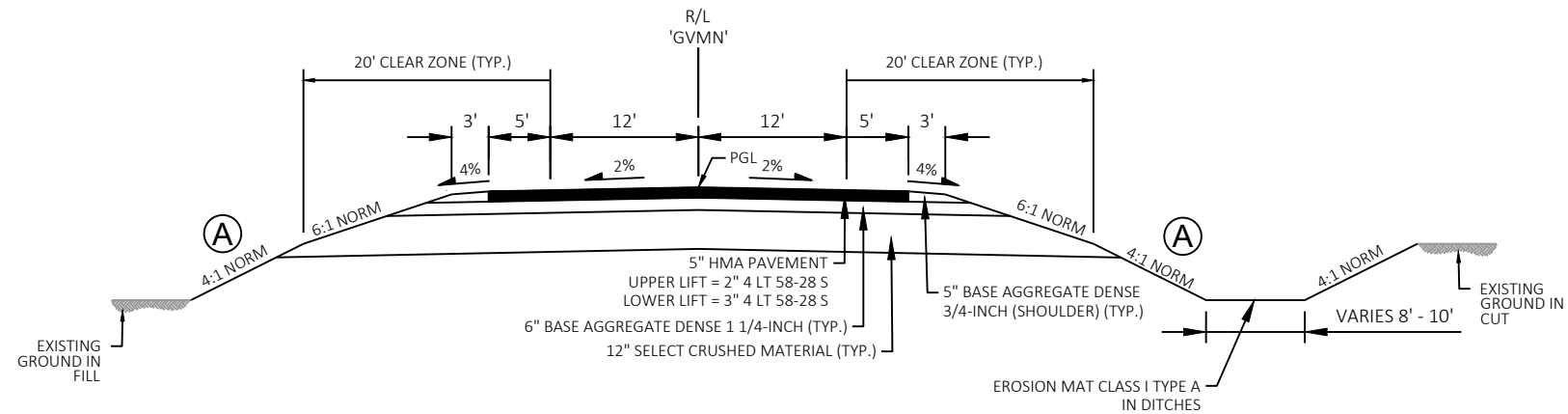
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A TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING

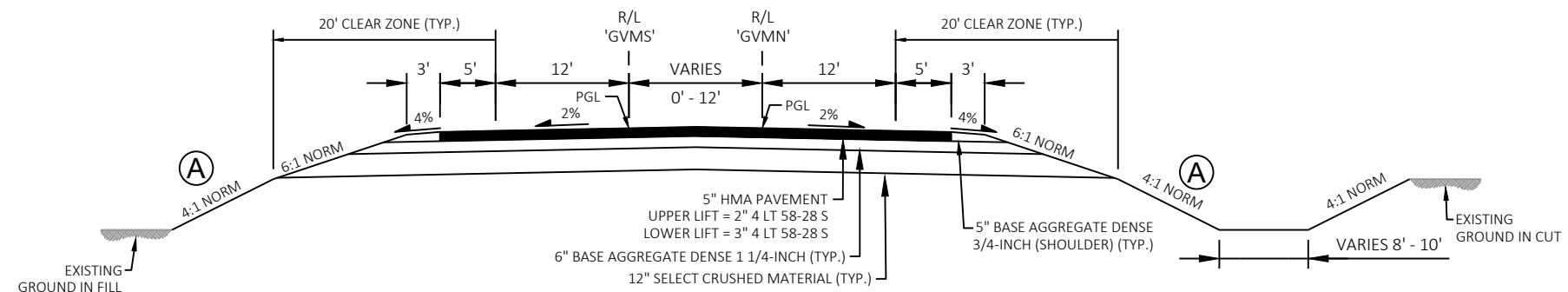
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FINISHED TYPICAL SECTION
MID VALLEY DR
STA 595'GVMN'+62 TO STA 597'GVMN'+00



FINISHED TYPICAL SECTION
MID VALLEY DR
STA 597'GVMN'+00 TO STA 609'GVMN'+36



FINISHED TYPICAL SECTION
MID VALLEY DR
STA 609'GVMN'+36 TO STA 612'GVMN'+07

NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

TYPICAL SECTIONS - PROPOSED MID VALLEY DR

SHEET

E

FILE NAME : C:\USERS\DOTK9D\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSPLAN\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\020301-TS.DWG PLOT DATE : 3/1/2024 11:42 AM

PLOT BY : DENEYS, KRISTOPHER M PLOT NAME : PLOT SCALE : 1IN:15 FT

WISDOT/CADDs SHEET 42

(A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING

(B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)

NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

EARLY FILL TRANSITIONS DOWN TO GROUND SURFACE FROM:
STA 612'GVMN'+50 TO STA 614'GVMN'+40
STA 616'GVMN'+05 TO STA 617'GVMN'+50

PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

TYPICAL SECTIONS - PROPOSED MID VALLEY DR

SHEET

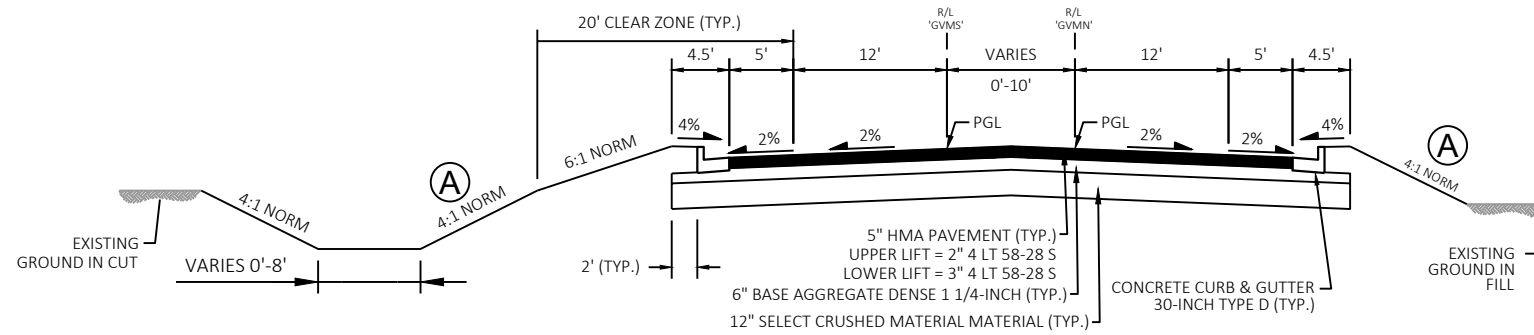
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FILE NAME : C:\USERS\DOTK9D\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSPLAN\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\020301-TS.DWG PLOT DATE : 3/1/2024 11:42 AM
LAYOUT NAME - 020308-ts

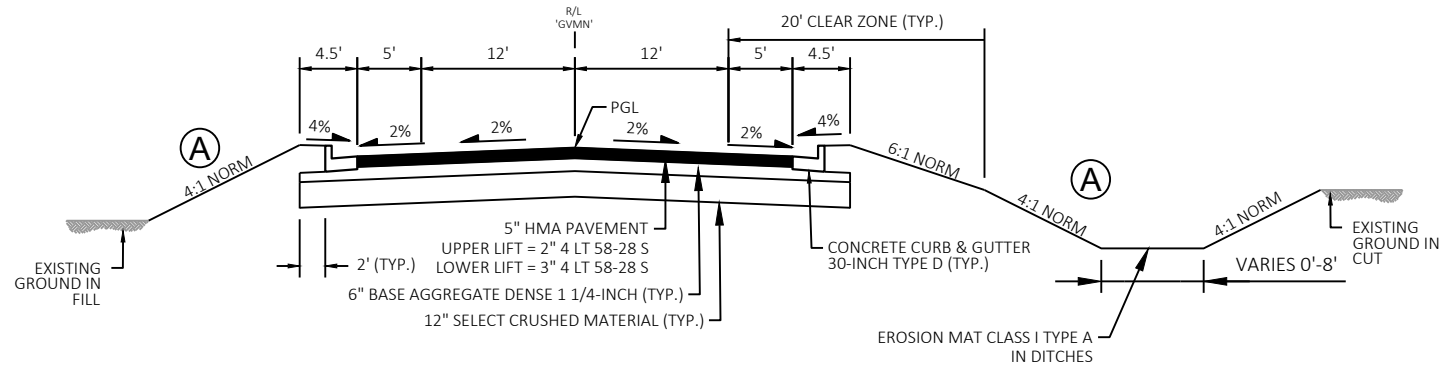
PLOT BY : DENEYS, KRISTOPHER M PLOT NAME : PLOT SCALE : 1IN:15 FT

WISDOT/CADDS SHEET 42

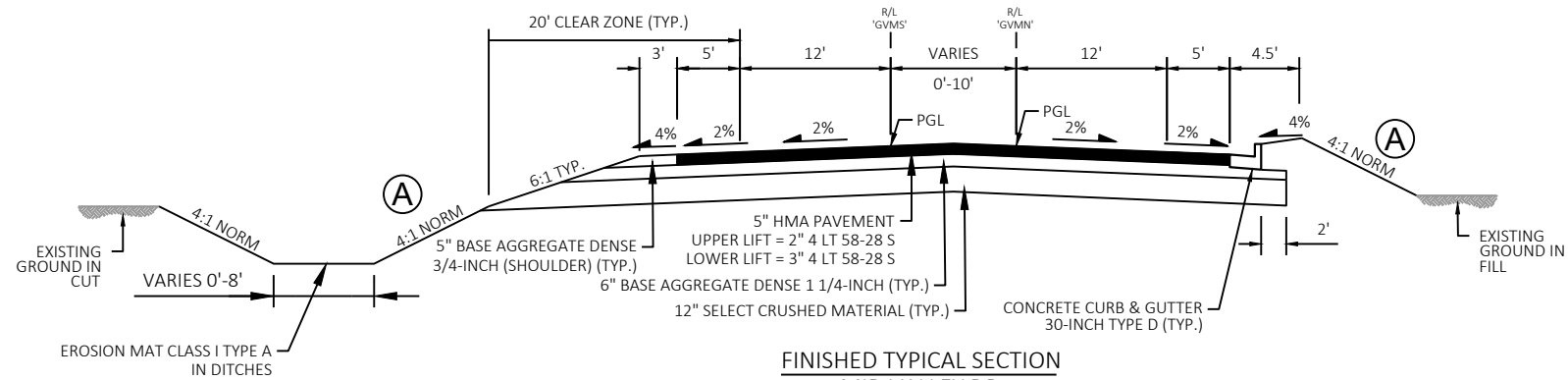




FINISHED TYPICAL SECTION
MID VALLEY DR
STA 617'GVMN'+27 TO STA 619'GVMN'+69



FINISHED TYPICAL SECTION
MID VALLEY DR
STA 619'GVMN'+69 TO STA 621'GVMN'+00

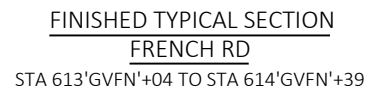
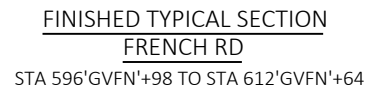


FINISHED TYPICAL SECTION
MID VALLEY DR
STA 621'GVMN'+00 TO STA 640'GVMN'+81

NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

(A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING

(B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)



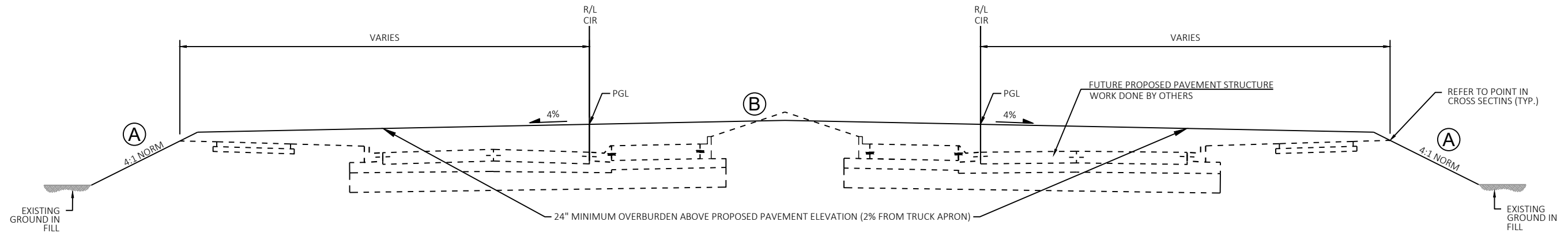
NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

EARLY FILL TRANSITIONS DOWN TO GROUND SURFACE FROM:
STA 619'GVFN'+00 TO STA 619'GVFN'+50

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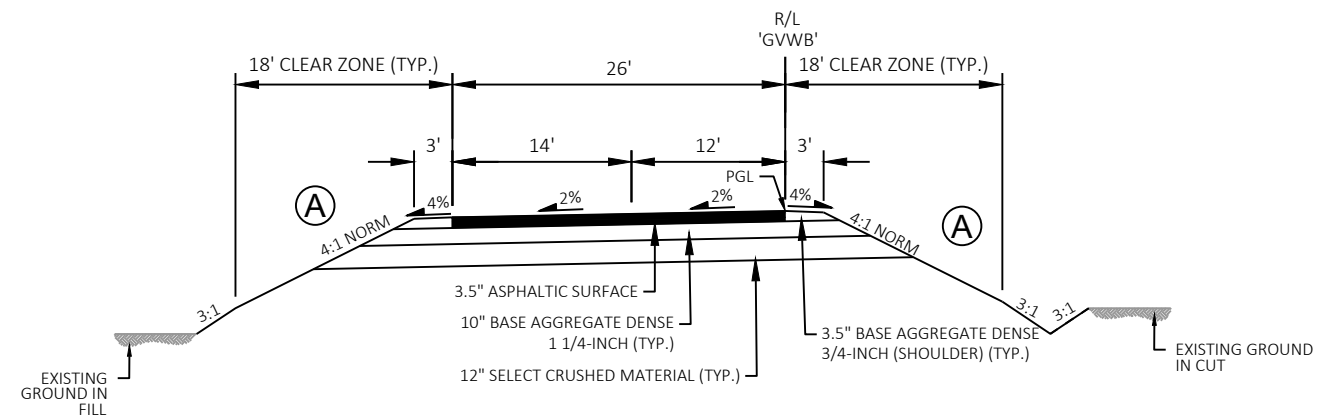
WISDOT/CADDS SHEET 42

- (A) TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, AND MULCHING
(B) SOIL STABILIZER, TEMPORARY SEED, AND MULCHING (OVERBURDEN)

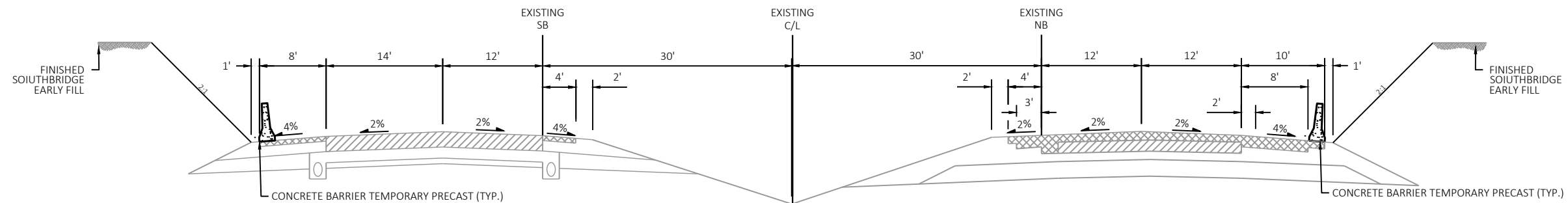


FINISHED TYPICAL SECTION
ROUNDABOUT - CTH GV / SOUTHBRIDGE RD

STA 0'GMVC'+00 TO STA 3'GMVC'+68
STA 20'GVSC'+00 TO STA 23'GVSC'+68
STA 30'GVNC'+00 TO STA 3X'GVNC'+XX
STA 40'GVFC'+00 TO STA 43'GVFC'+XX



FINISHED TYPICAL SECTION
SOUTHERN ARTERIAL TEMPORARY CONNECTOR
STA 135'GVWB'+72.05 TO STA 137'GVWB'+25.26



FINISHED TYPICAL SECTION
IH 41

STA 607'SB'+97 TO STA 618'SB'+28
STA 600'NB'+41 TO STA 612'NB'+66

NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION

PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

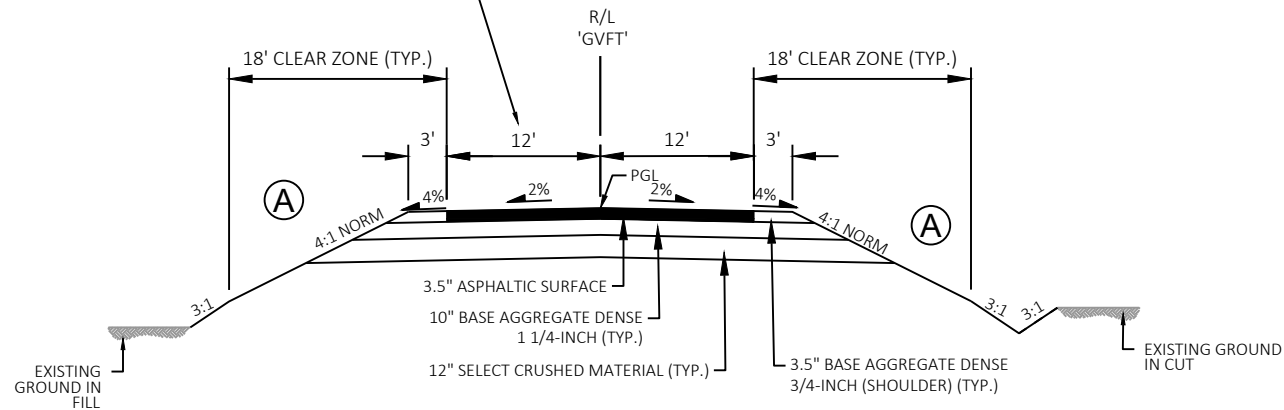
COUNTY: BROWN

TYPICAL SECTIONS - PROPOSED

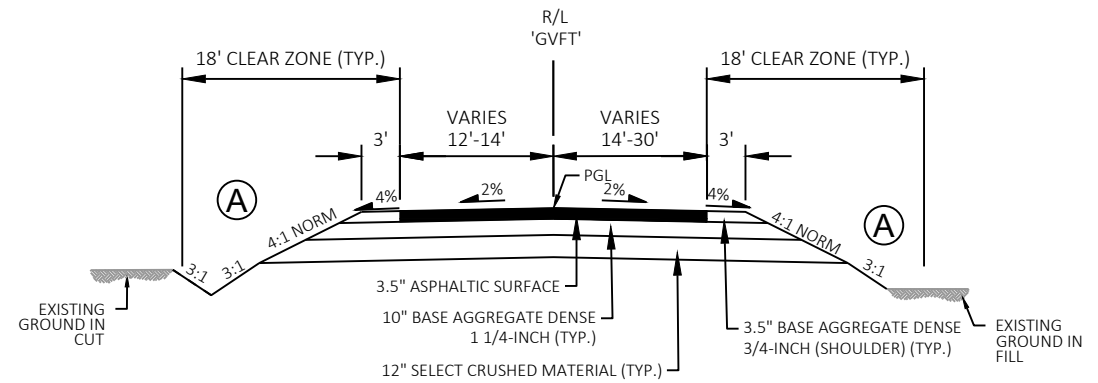
SHEET

E

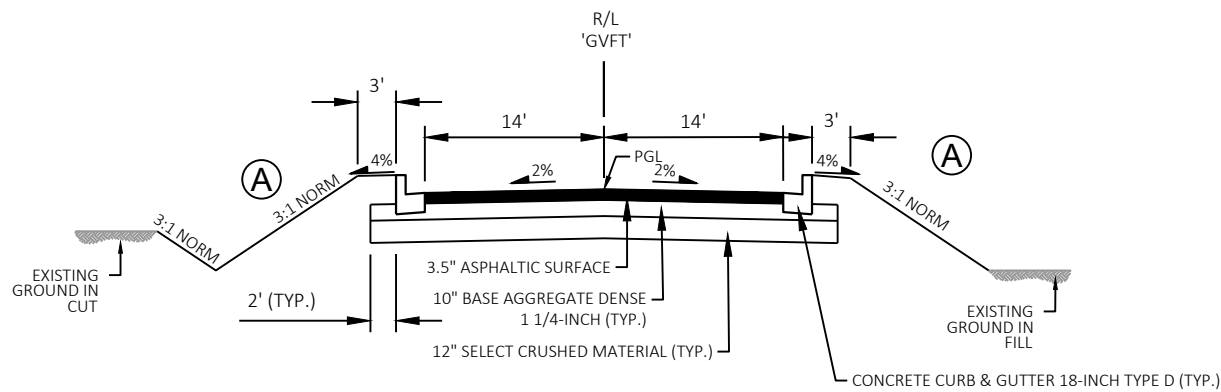
STA 0'GVFT'+15 TO STA 1'GVFT'+11
EXISTING SOUTHBRIDGE RD, PAVEMENT REPLACEMENT NOT REQUIRED



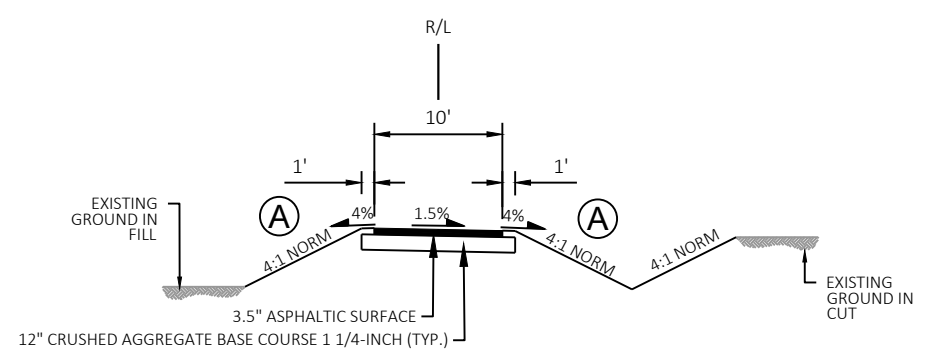
FINISHED TYPICAL SECTION
FRENCH RD/INNOVATION RD TEMP
STA 0'GVFT'+15 TO STA 1'GVFT'+81



FINISHED TYPICAL SECTION
FRENCH RD/INNOVATION RD TEMP
STA 1'GVFT'+81 TO STA 2'GVFT'+75

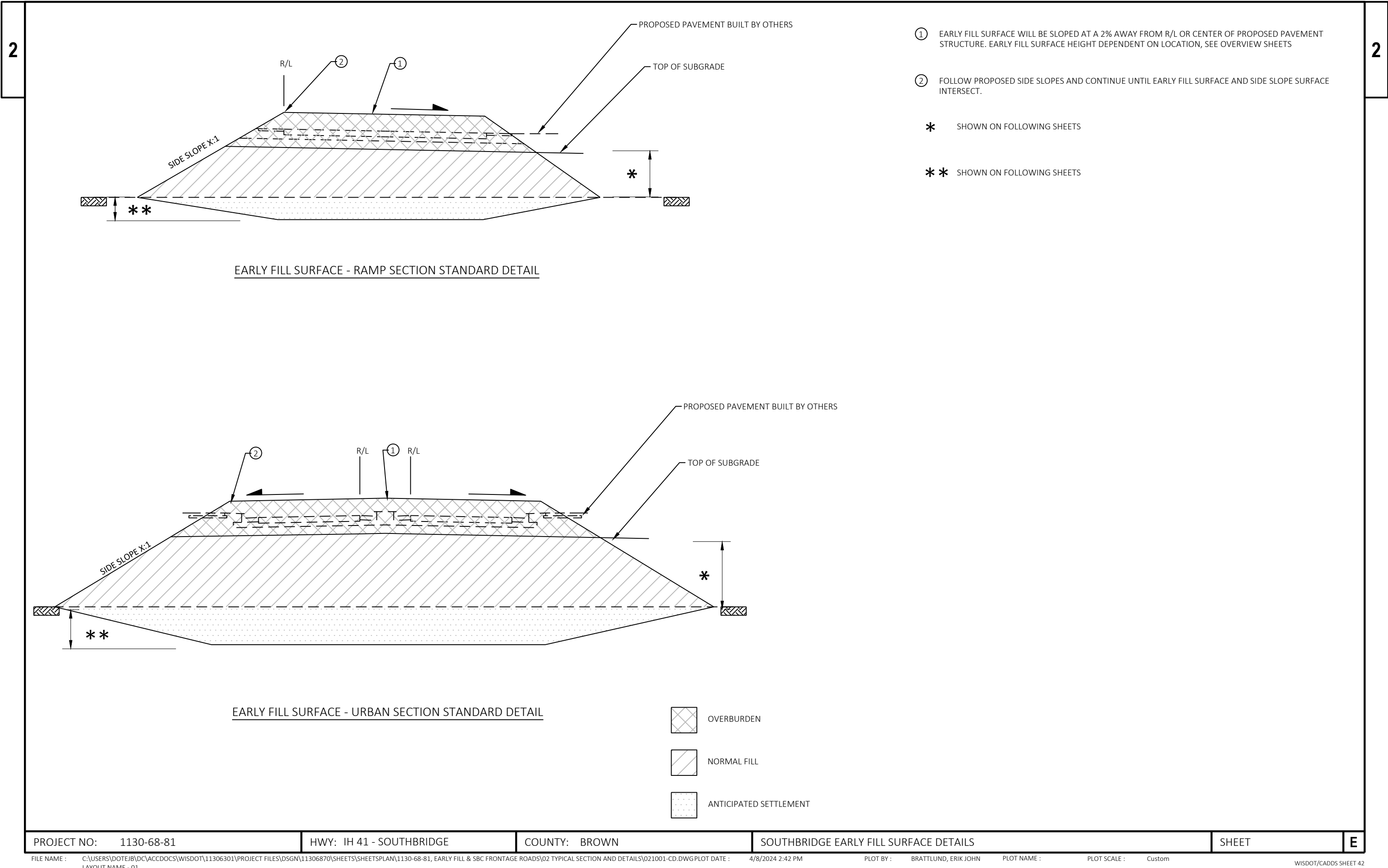


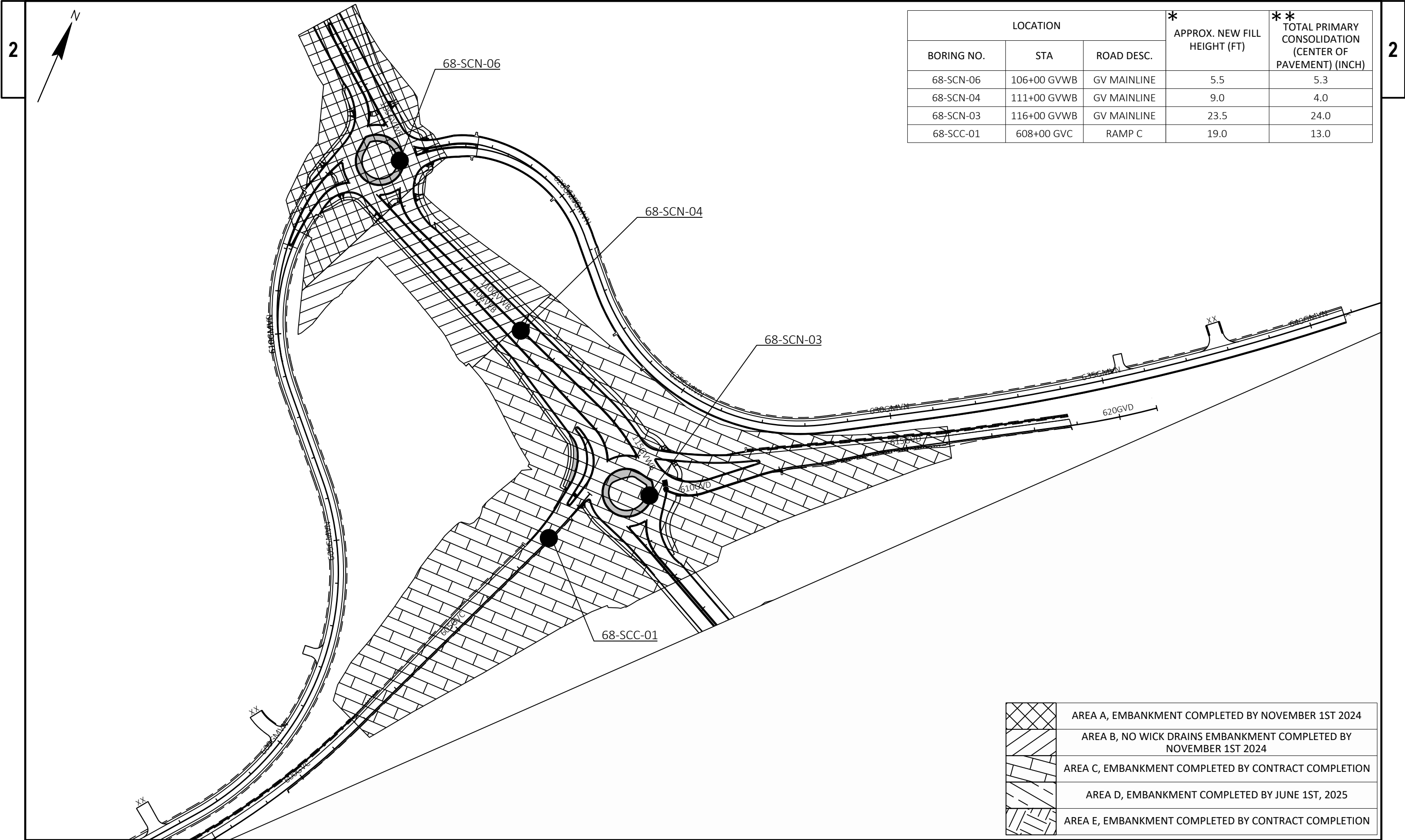
FINISHED TYPICAL SECTION
FRENCH RD/INNOVATION RD TEMP
STA 2'GVFT'+75 TO STA 9'GVFT'+25



FINISHED TYPICAL SECTION
PRESERVE TRAIL
STA 0+00 TO STA 2+59.21

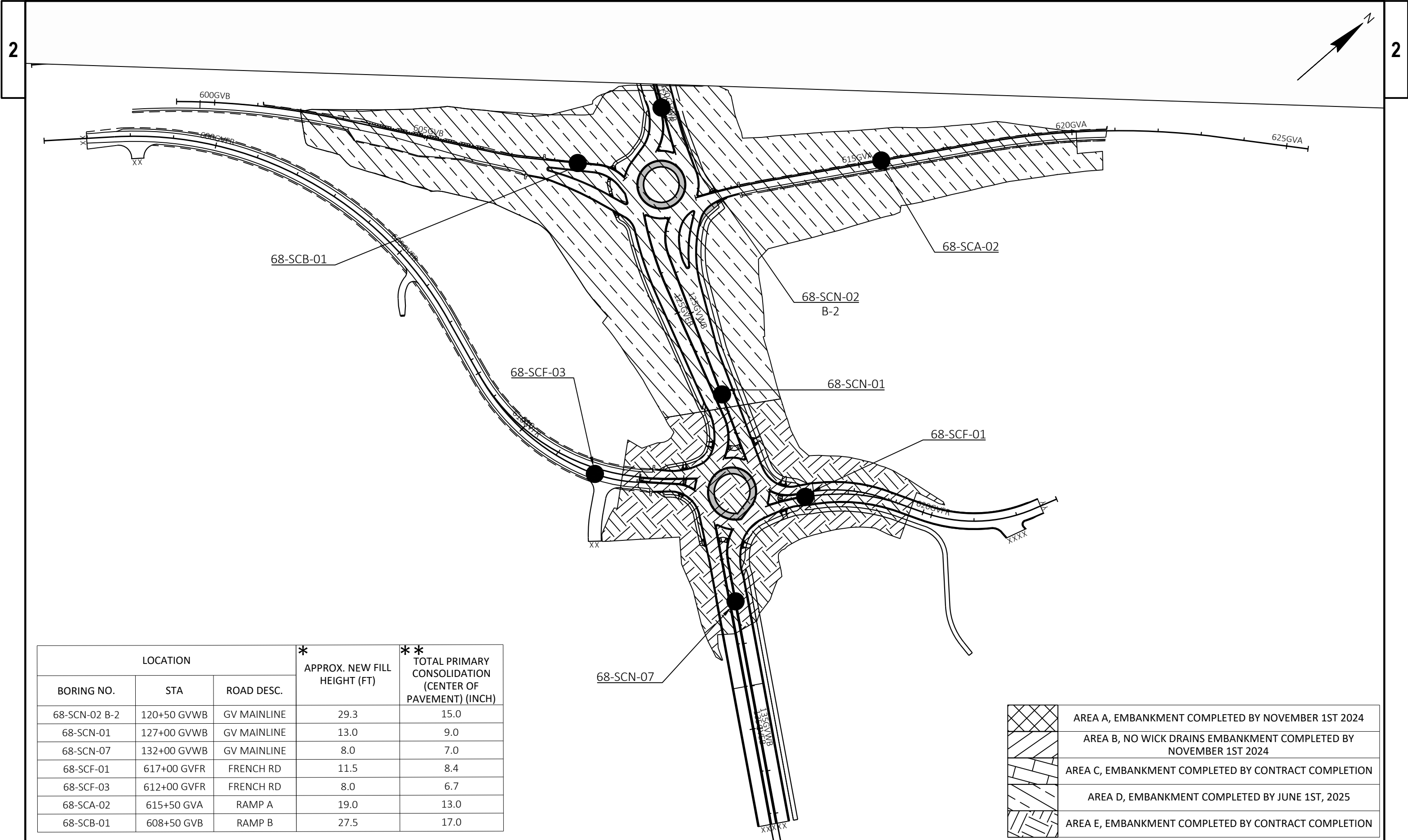
NOTES:
PGL = POINT REFERRED TO ON PROFILE AND PIVOT POINT FOR SUPERELEVATION





LOCATION			* APPROX. NEW FILL HEIGHT (FT)	** TOTAL PRIMARY CONSOLIDATION (CENTER OF PAVEMENT) (INCH)
BORING NO.	STA	ROAD DESC.		
68-SCN-06	106+00 GVWB	GV MAINLINE	5.5	5.3
68-SCN-04	111+00 GVWB	GV MAINLINE	9.0	4.0
68-SCN-03	116+00 GVWB	GV MAINLINE	23.5	24.0
68-SCC-01	608+00 GVC	RAMP C	19.0	13.0

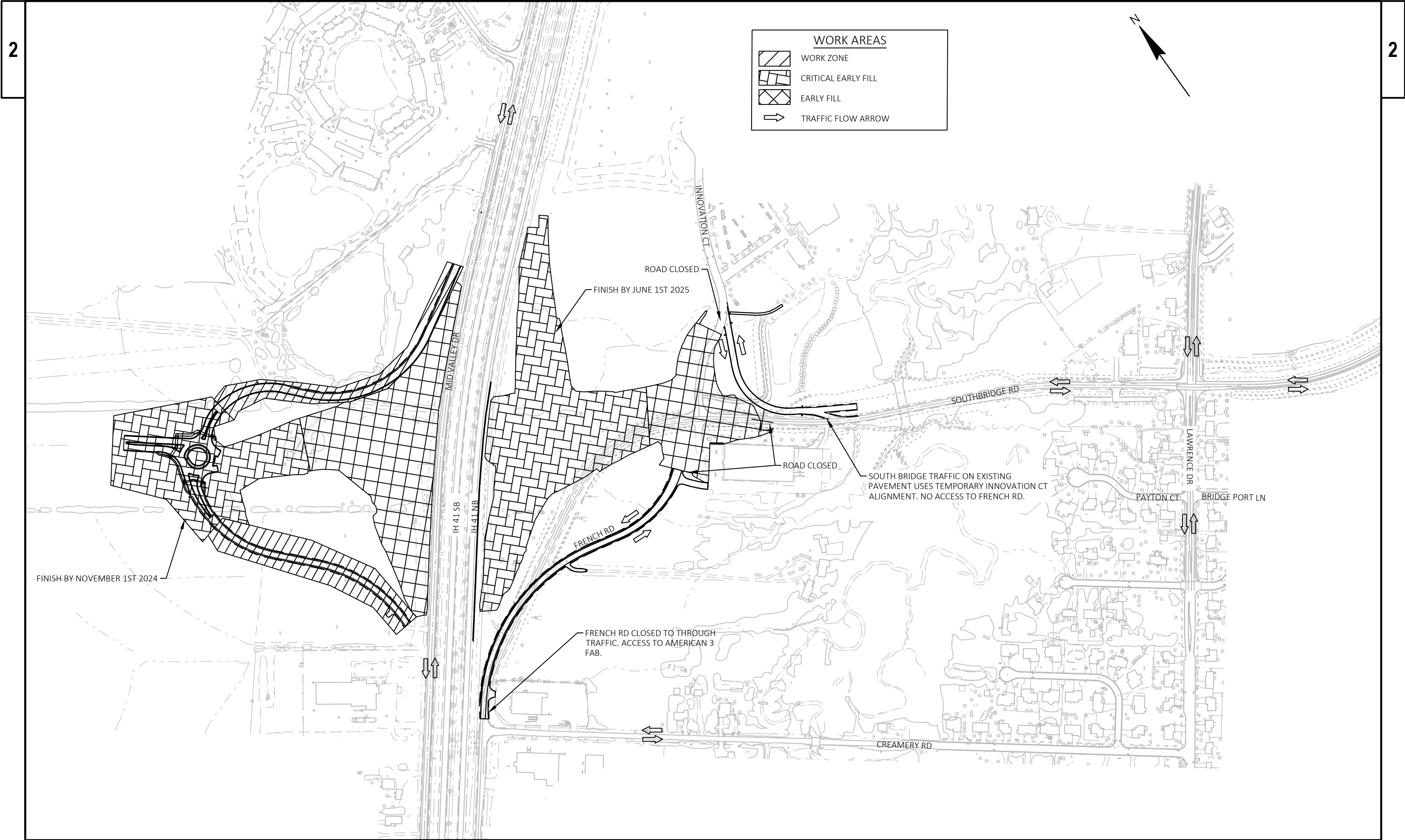
	AREA A, EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
	AREA B, NO WICK DRAINS EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
	AREA C, EMBANKMENT COMPLETED BY CONTRACT COMPLETION
	AREA D, EMBANKMENT COMPLETED BY JUNE 1ST, 2025
	AREA E, EMBANKMENT COMPLETED BY CONTRACT COMPLETION

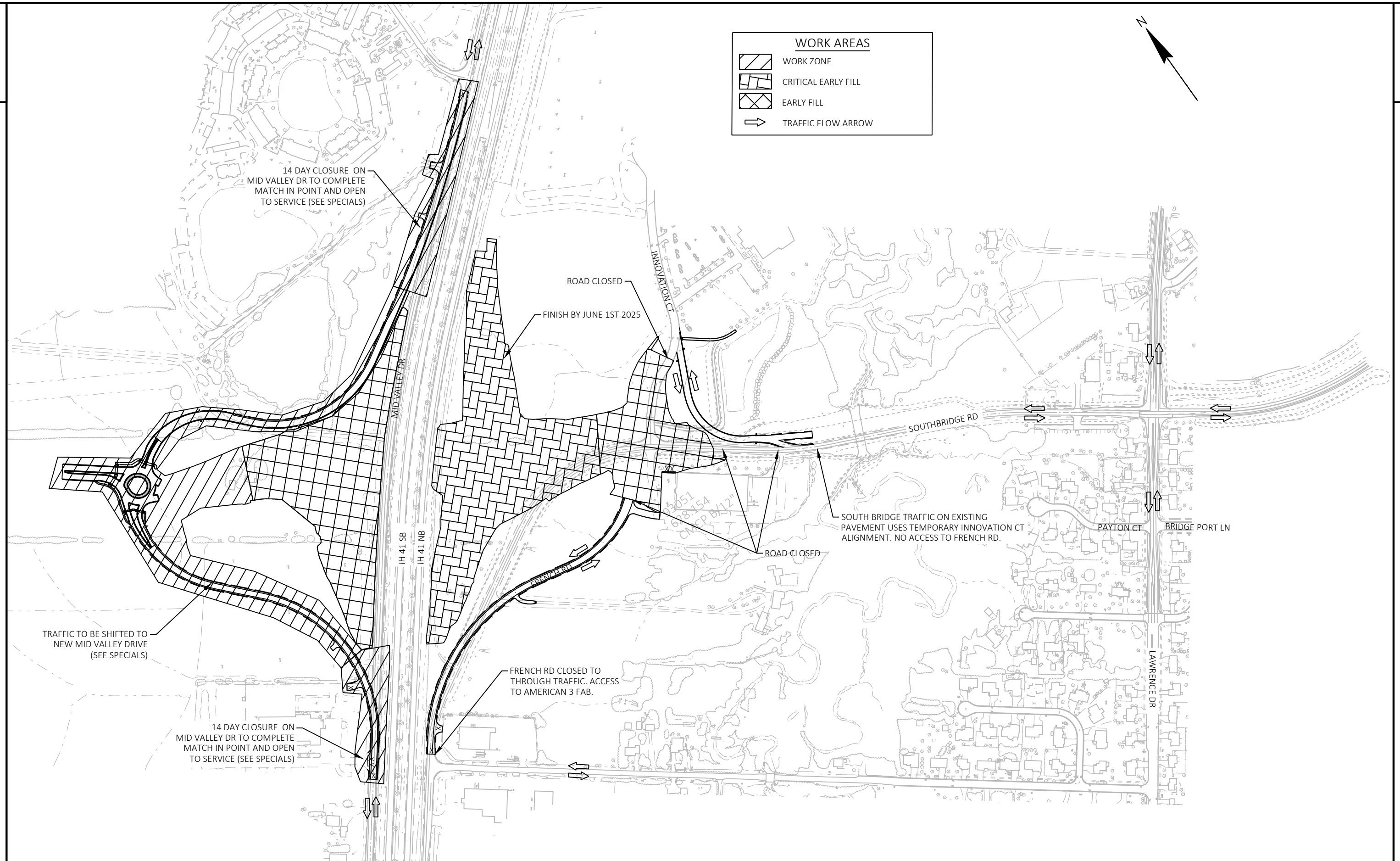


LOCATION			* APPROX. NEW FILL HEIGHT (FT)	** TOTAL PRIMARY CONSOLIDATION (CENTER OF PAVEMENT) (INCH)
BORING NO.	STA	ROAD DESC.		
68-SCN-02 B-2	120+50 GVWB	GV MAINLINE	29.3	15.0
68-SCN-01	127+00 GVWB	GV MAINLINE	13.0	9.0
68-SCN-07	132+00 GVWB	GV MAINLINE	8.0	7.0
68-SCF-01	617+00 GVFR	FRENCH RD	11.5	8.4
68-SCF-03	612+00 GVFR	FRENCH RD	8.0	6.7
68-SCA-02	615+50 GVA	RAMP A	19.0	13.0
68-SCB-01	608+50 GVB	RAMP B	27.5	17.0

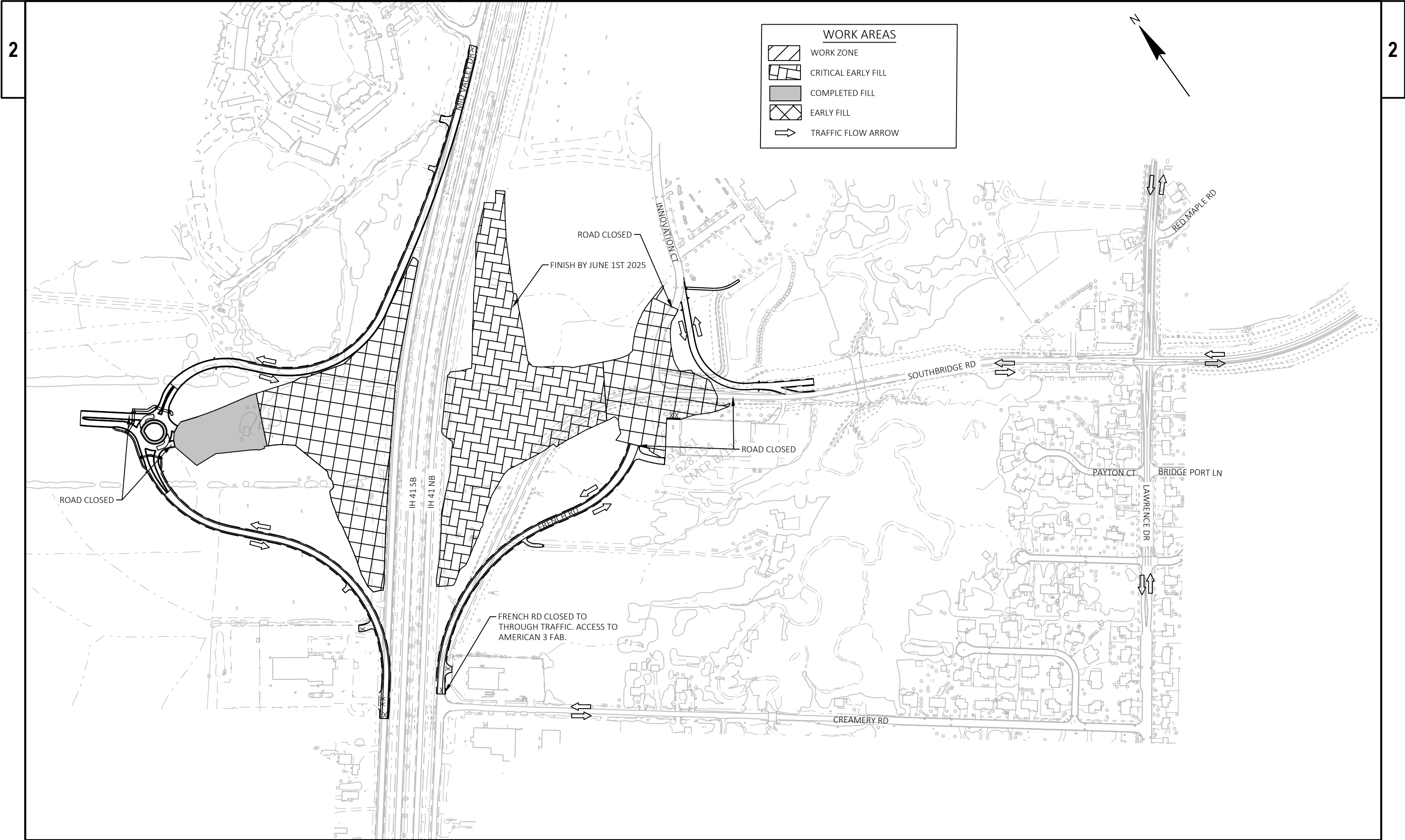
	AREA A, EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
	AREA B, NO WICK DRAINS EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
	AREA C, EMBANKMENT COMPLETED BY CONTRACT COMPLETION
	AREA D, EMBANKMENT COMPLETED BY JUNE 1ST, 2025
	AREA E, EMBANKMENT COMPLETED BY CONTRACT COMPLETION

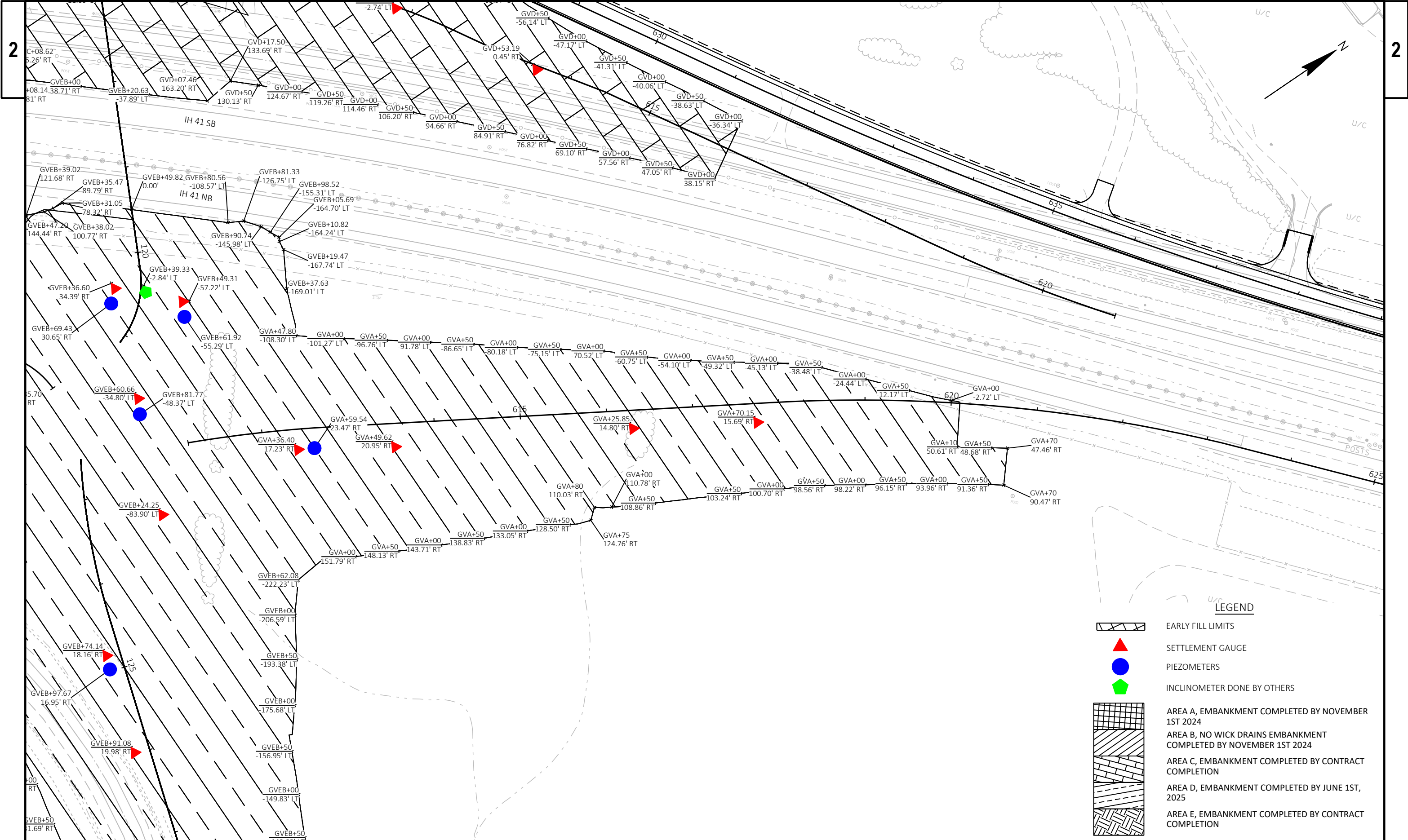




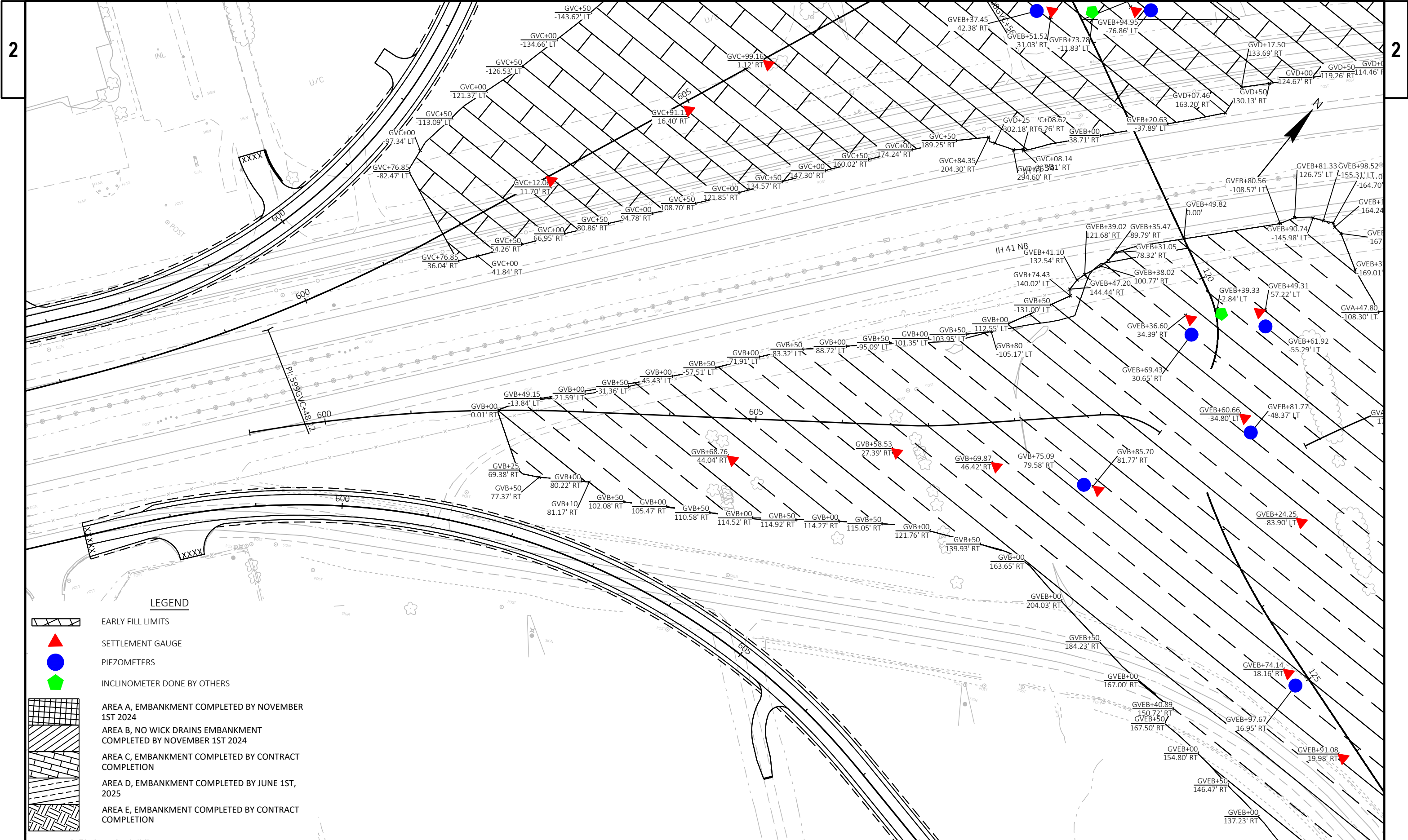


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CONSTRUCTION STAGING FOR SETTLEMENT AREAS - STAGE 3	SHEET	E
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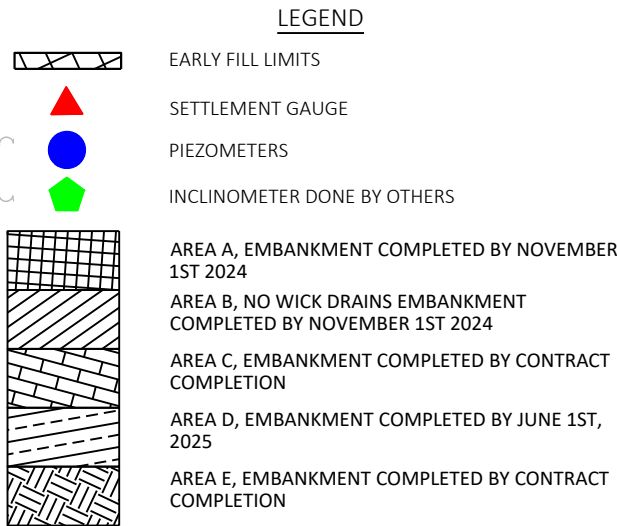


PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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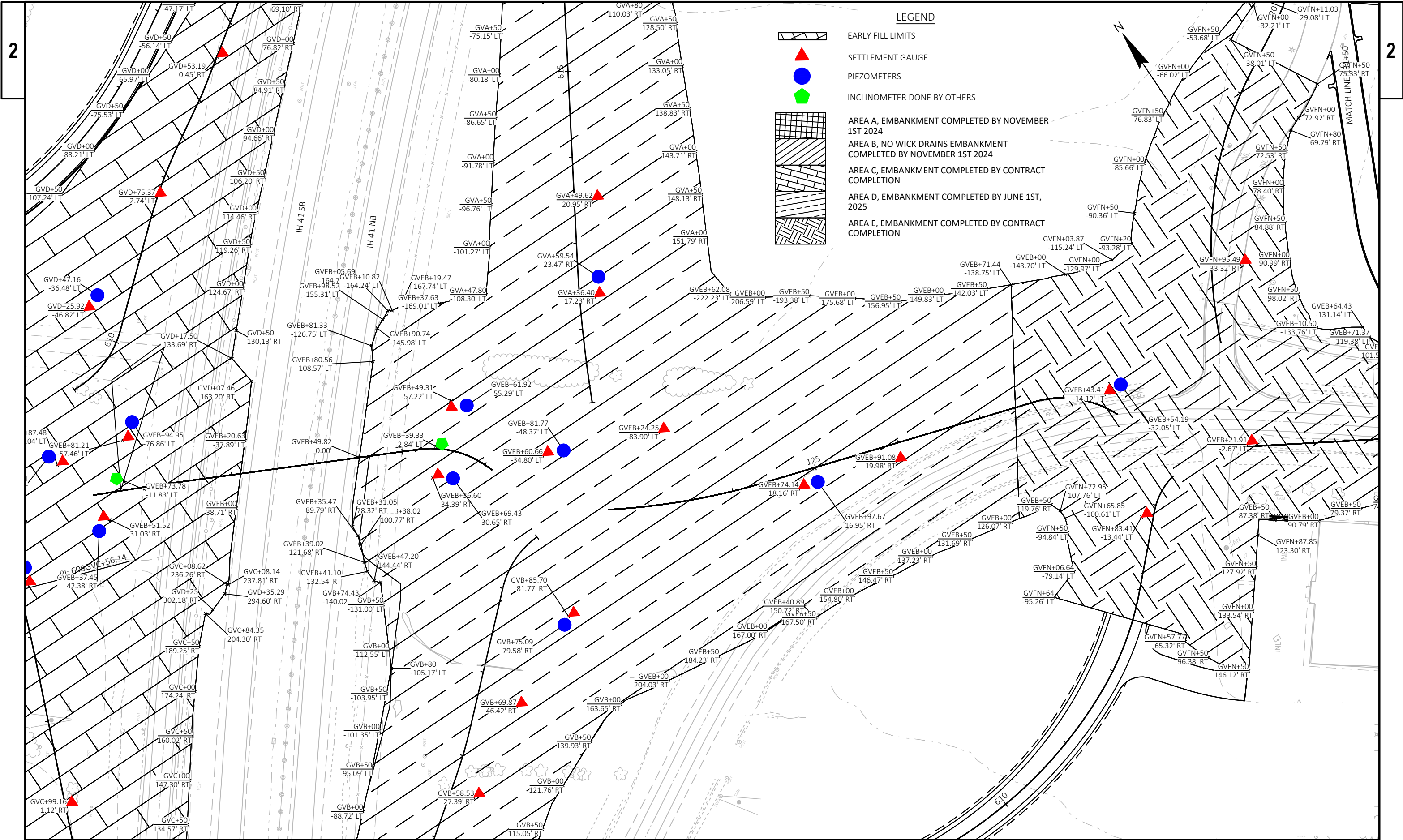


- LEGEND**
- EARLY FILL LIMITS
 - SETTLEMENT GAUGE
 - PIEZOMETERS
 - INCLINOMETER DONE BY OTHERS
 - AREA A, EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
 - AREA B, NO WICK DRAINS EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
 - AREA C, EMBANKMENT COMPLETED BY CONTRACT COMPLETION
 - AREA D, EMBANKMENT COMPLETED BY JUNE 1ST, 2025
 - AREA E, EMBANKMENT COMPLETED BY CONTRACT COMPLETION

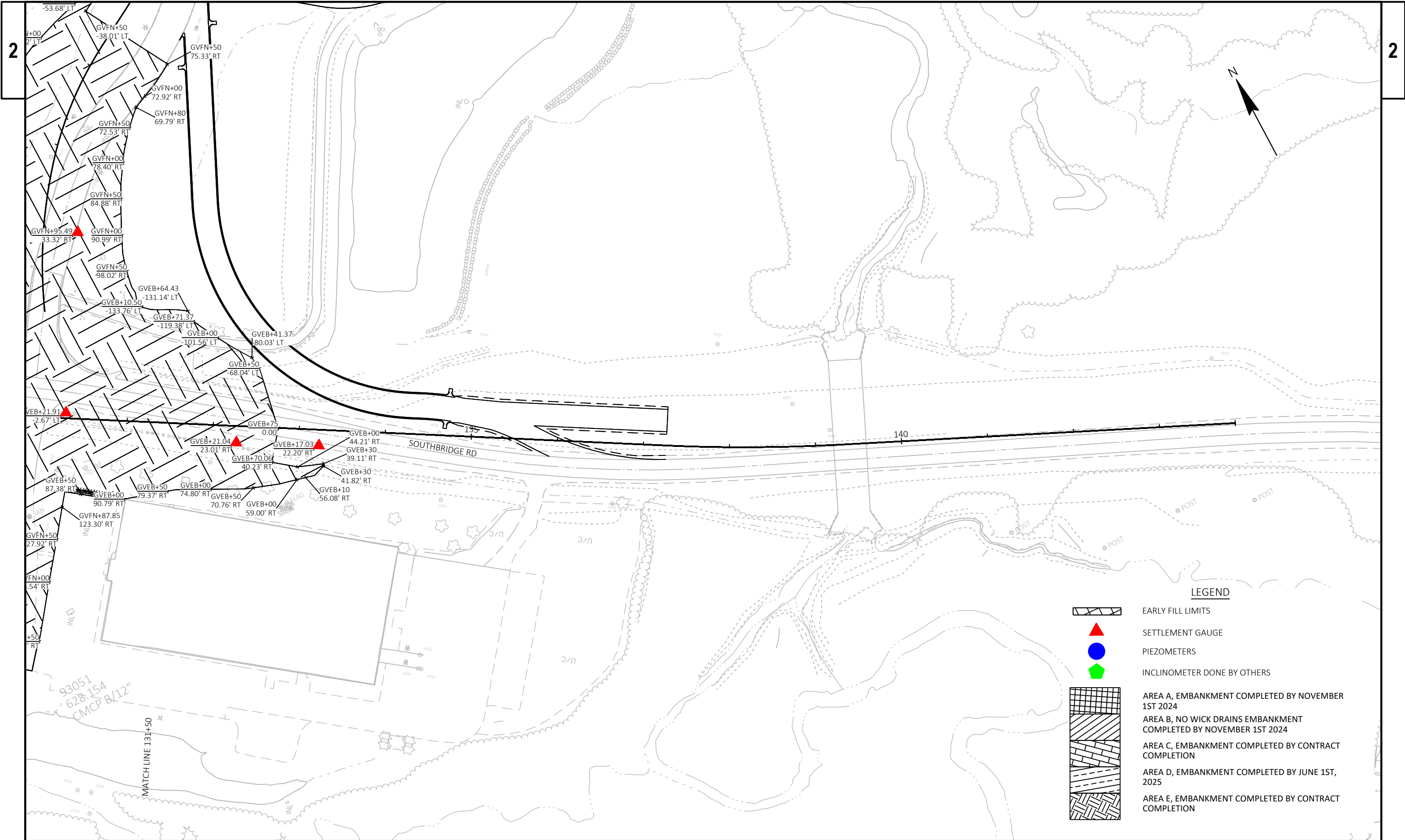
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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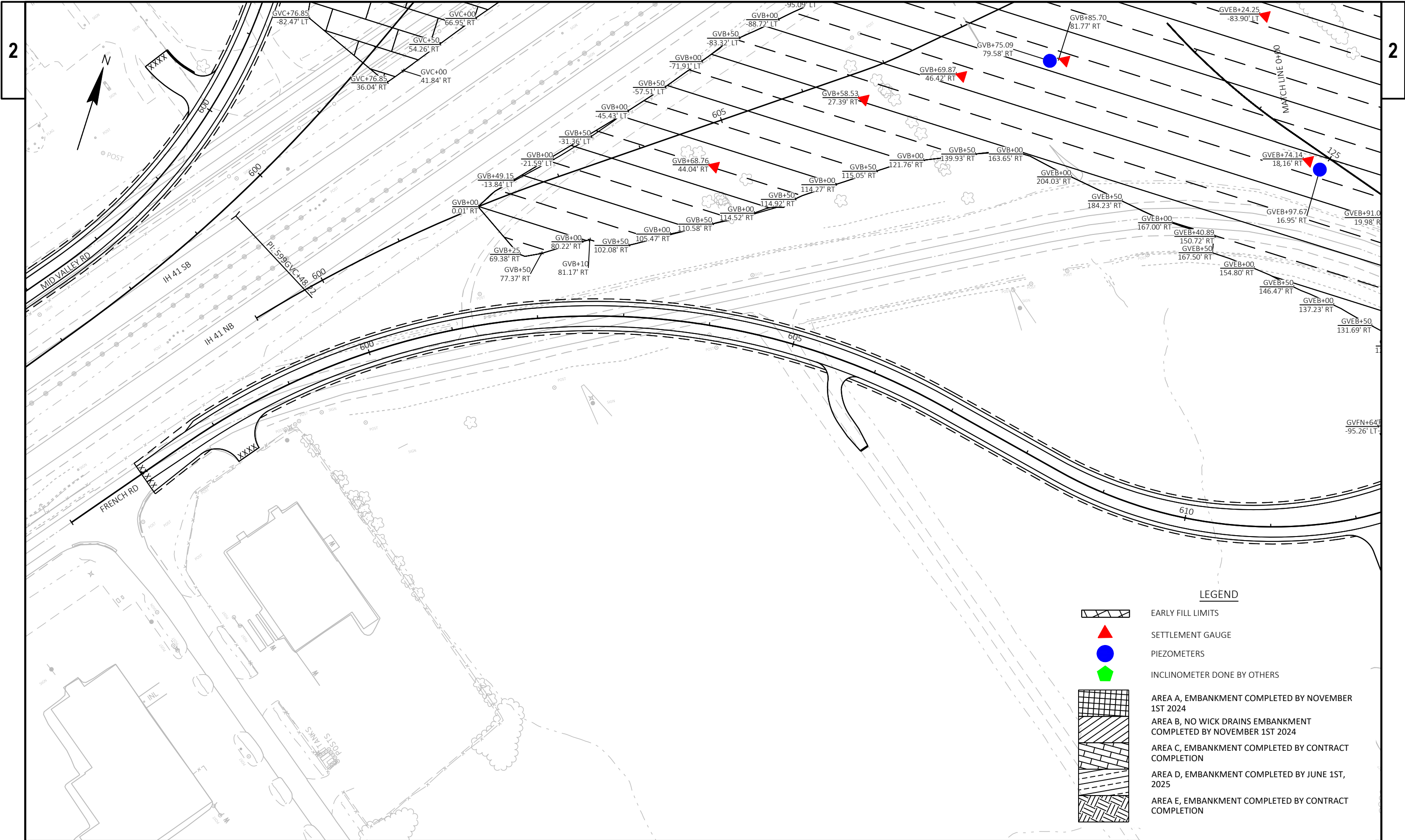
FILE NAME :	C:\USERS\DOT\B\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSP\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\021007-CD.DWG	PLOT DATE :	4/8/2024 2:50 PM	PLOT BY :	BRATTLUND, ERIK JOHN	PLOT NAME :		PLOT SCALE :	1 IN=100 FT		WISDOT/CADD SHEET 42
LAYOUT NAME :	30										



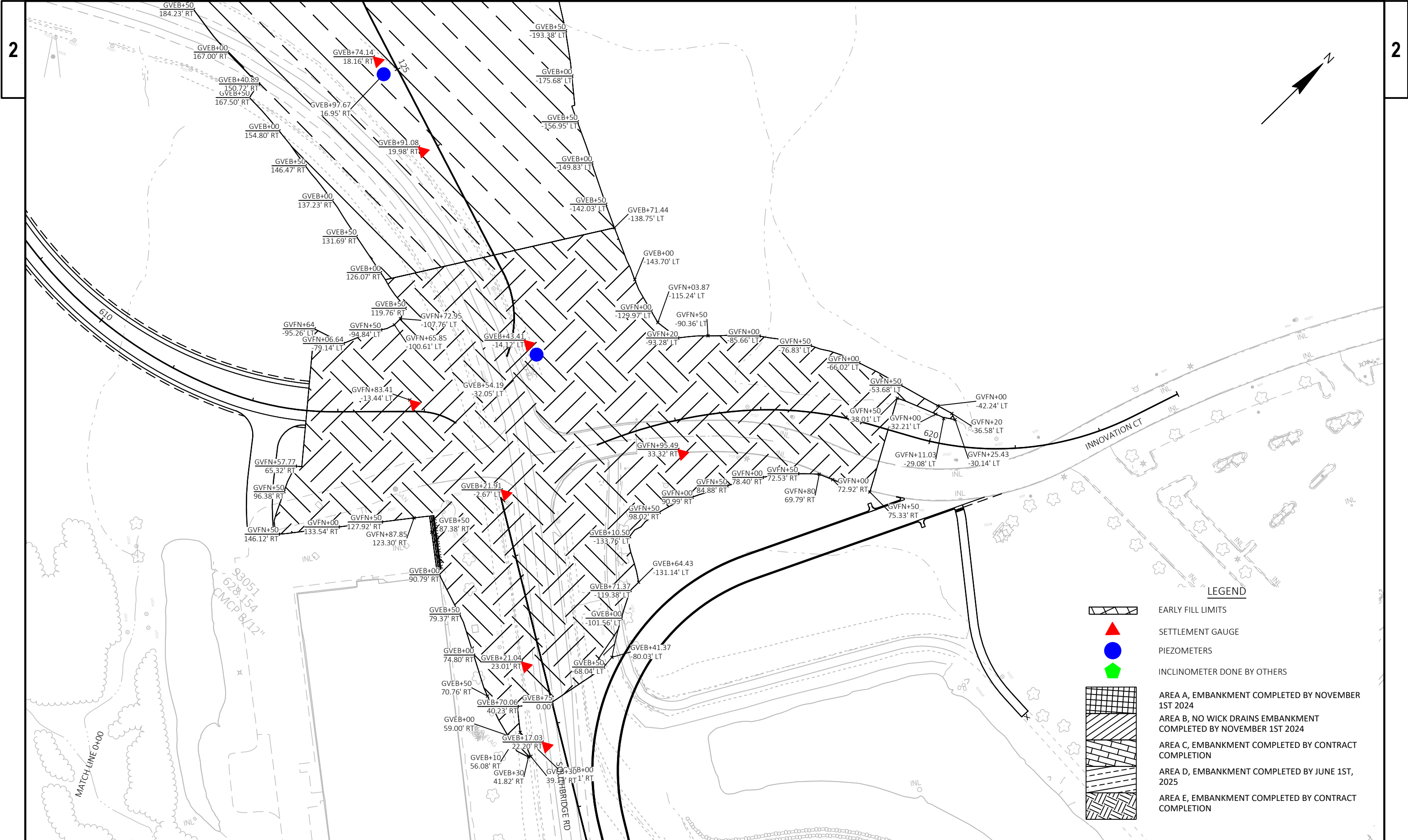
PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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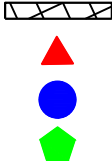


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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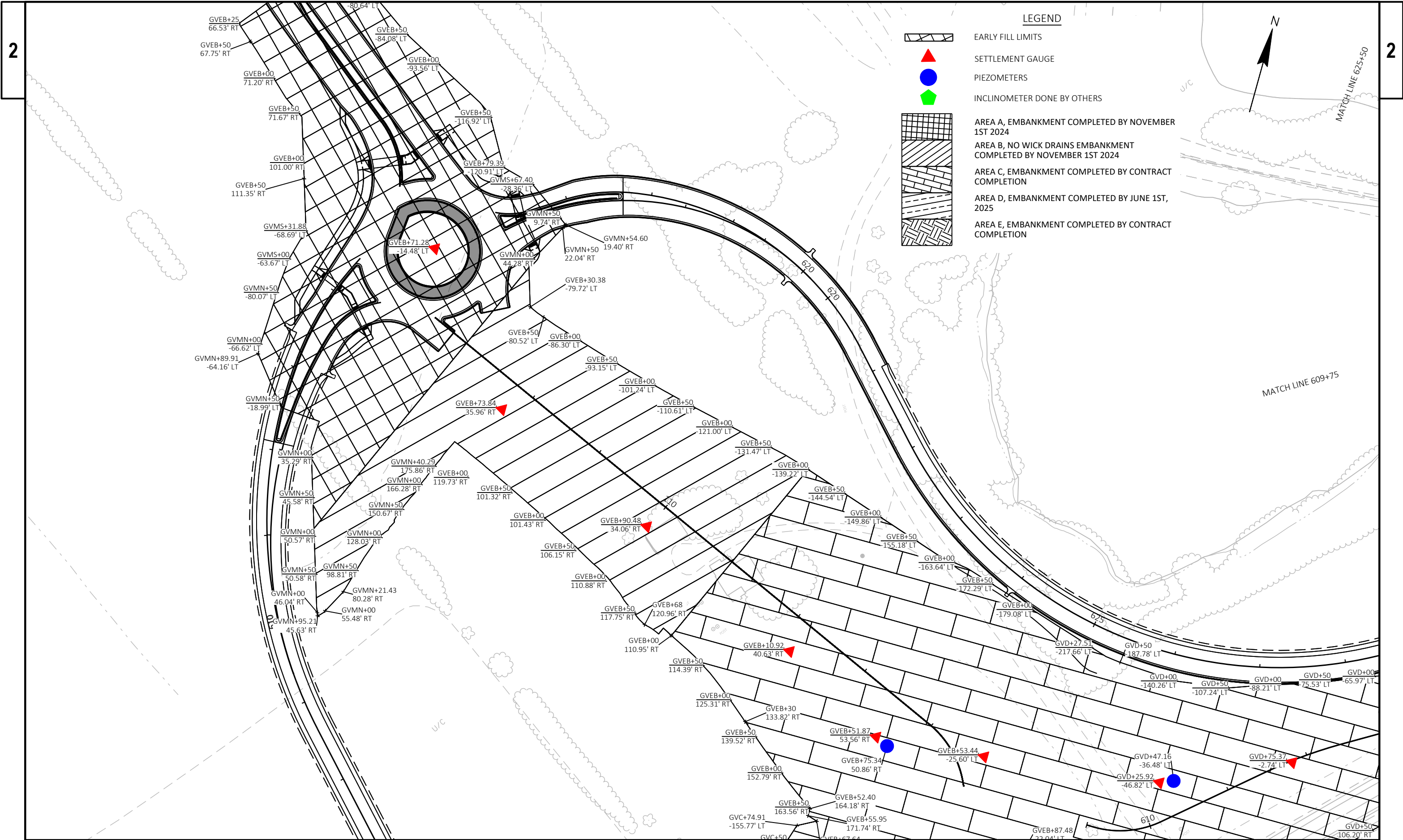
PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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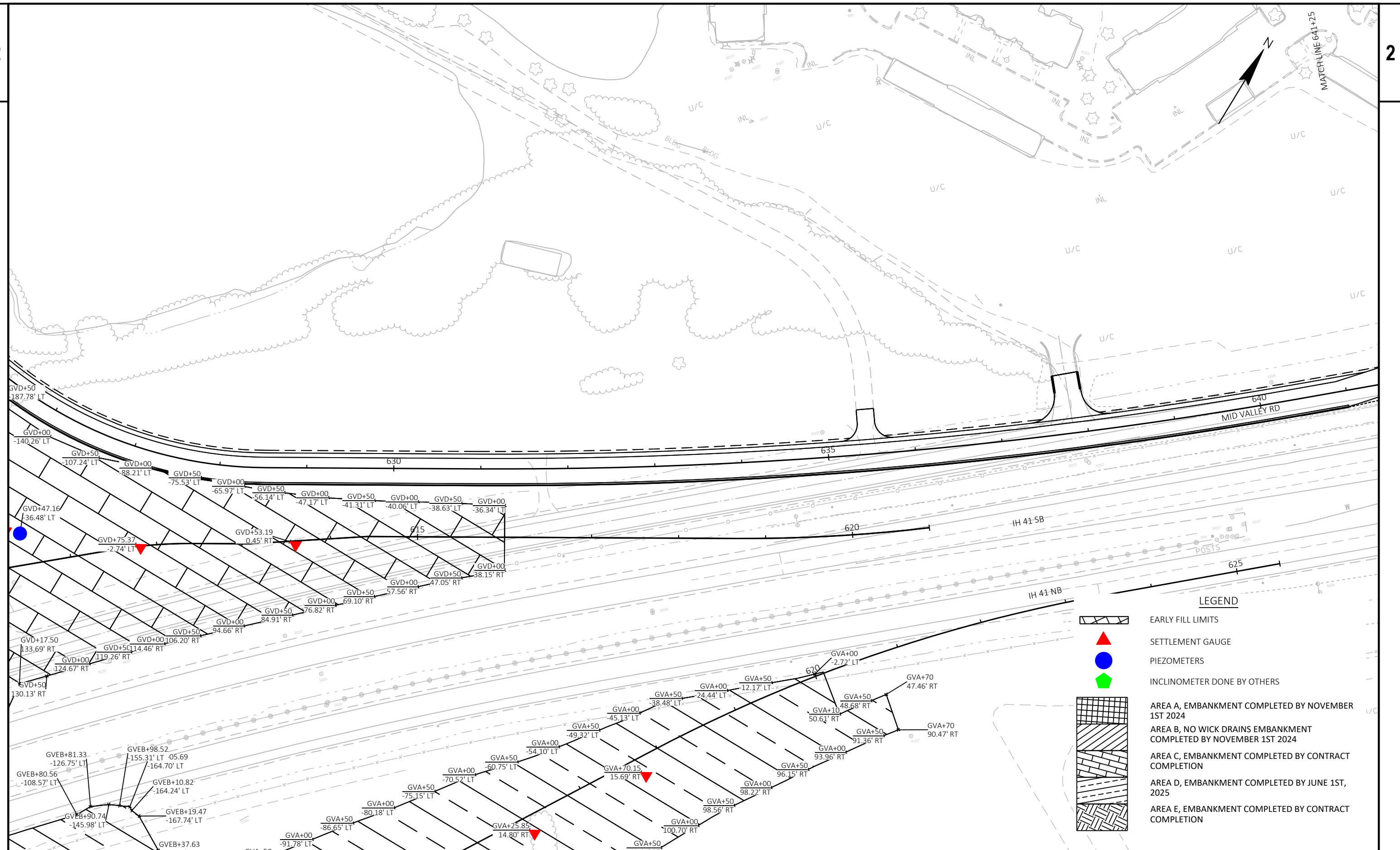
LEGEND



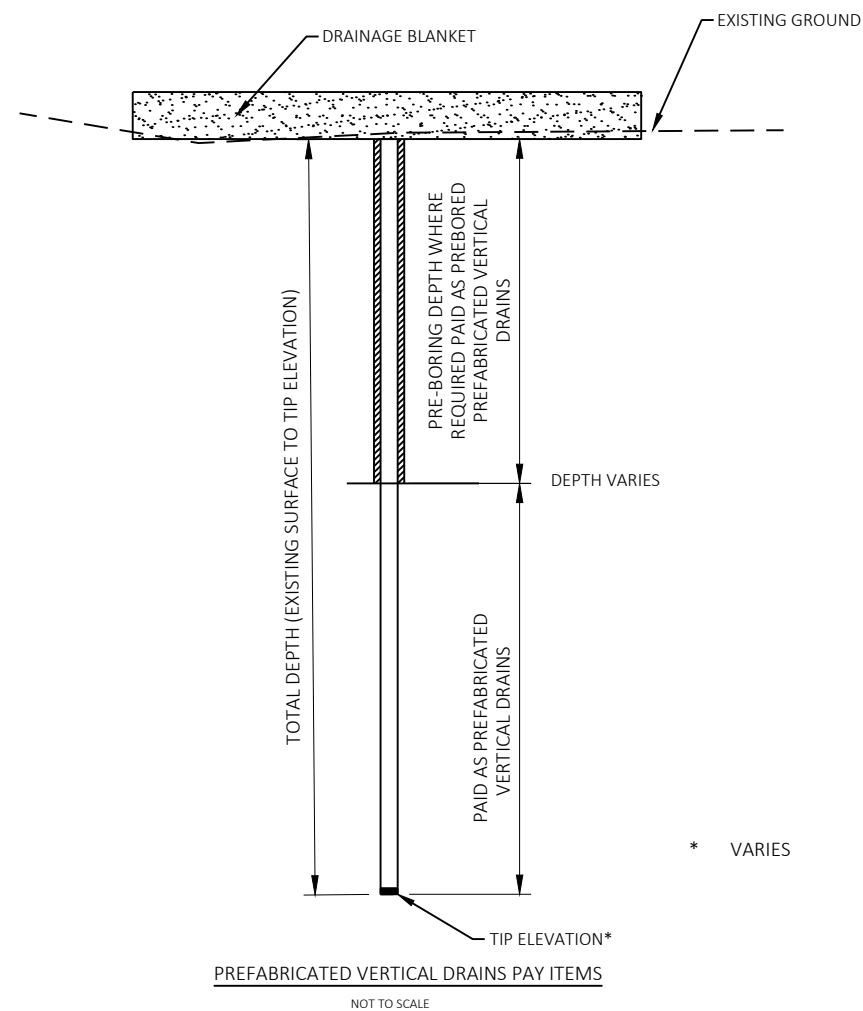
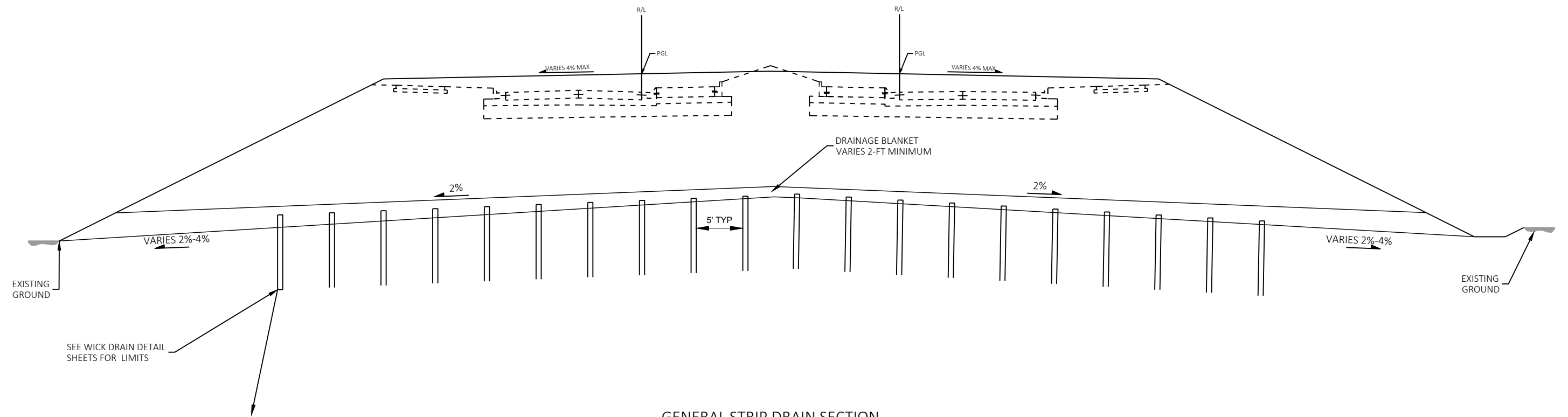
- EARLY FILL LIMITS
- SETTLEMENT GAUGE
- PIEZOMETERS
- INCLINOMETER DONE BY OTHERS
- AREA A, EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
- AREA B, NO WICK DRAINS EMBANKMENT COMPLETED BY NOVEMBER 1ST 2024
- AREA C, EMBANKMENT COMPLETED BY CONTRACT COMPLETION
- AREA D, EMBANKMENT COMPLETED BY JUNE 1ST, 2025
- AREA E, EMBANKMENT COMPLETED BY CONTRACT COMPLETION







PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARLY FILL LIMITS	SHEET	E
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PROJECT NO: 1130-68-81

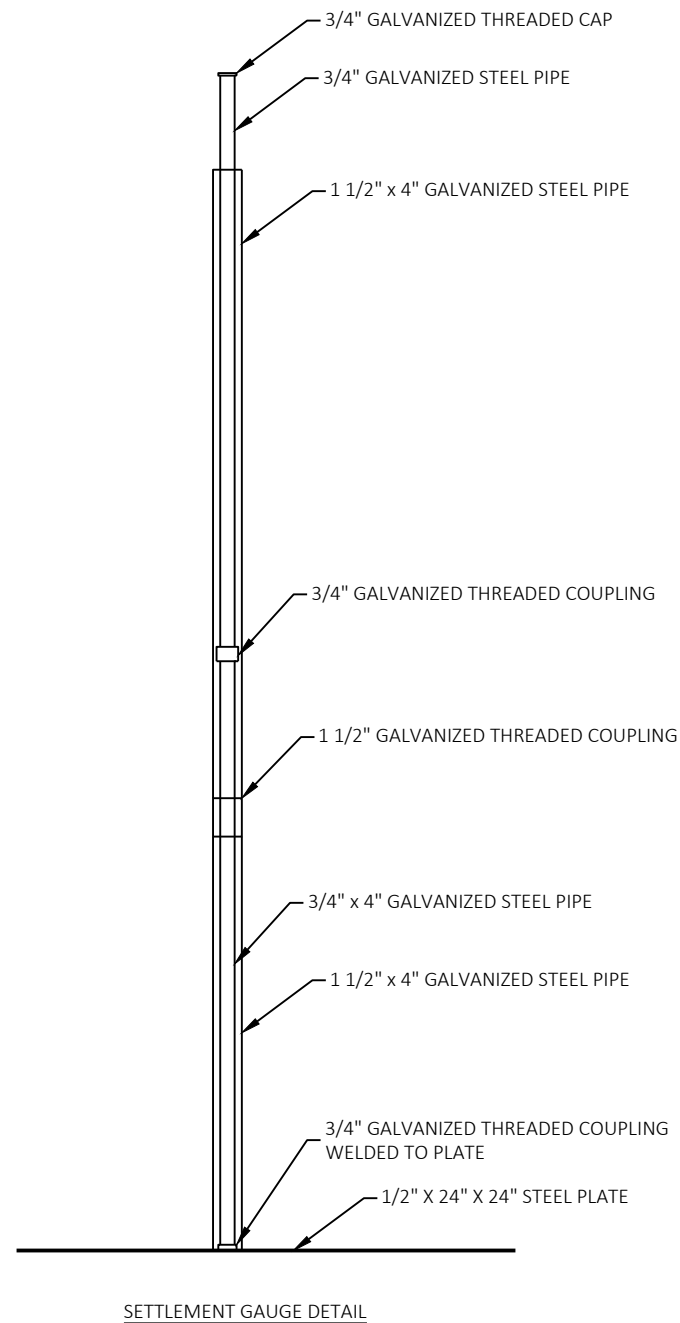
HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

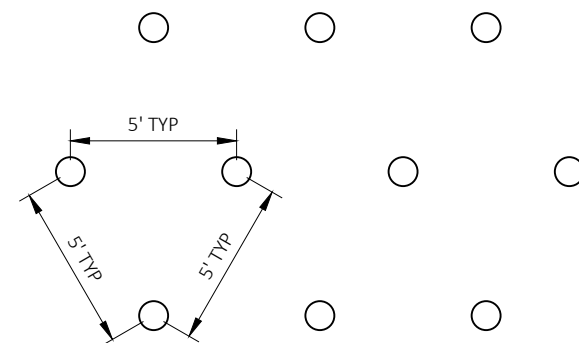
WICK DRAINS

SHEET

E

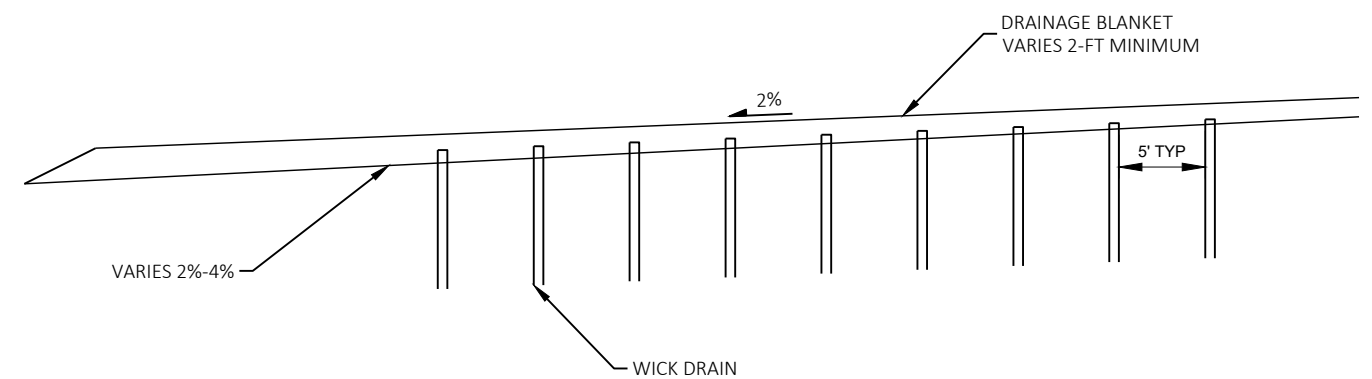


NOT TO SCALE



PREFABRICATE VERTICAL DRAINS PLACEMENT DETAIL -
5-FOOT EQUILATERAL TRIANGULAR SPACING

NOT TO SCALE



DRAINAGE BLANKET DETAIL - 5-FOOT EQUILATERAL TRIANGULAR SPACING

NOT TO SCALE

PROJECT NO: 1130-68-81

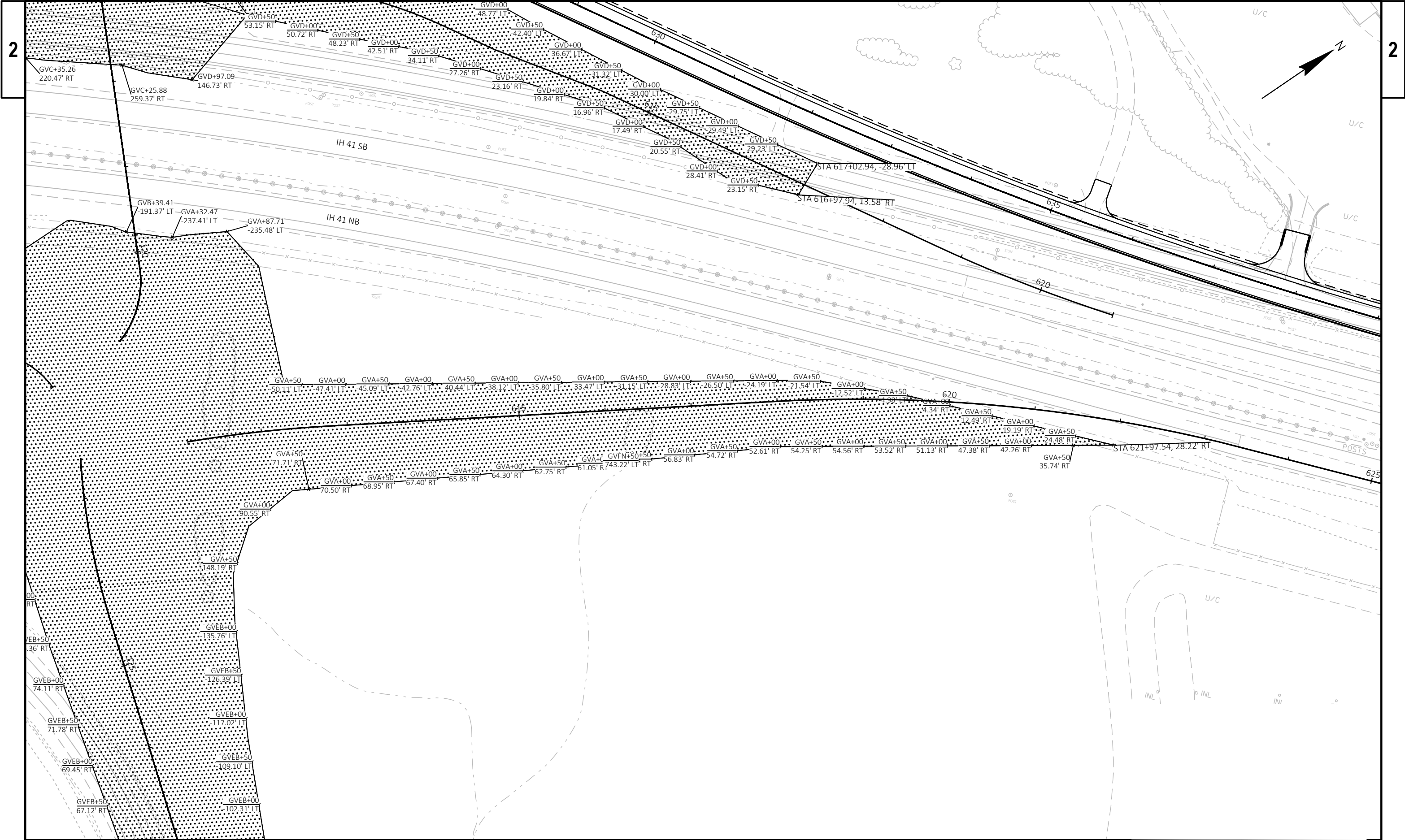
HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

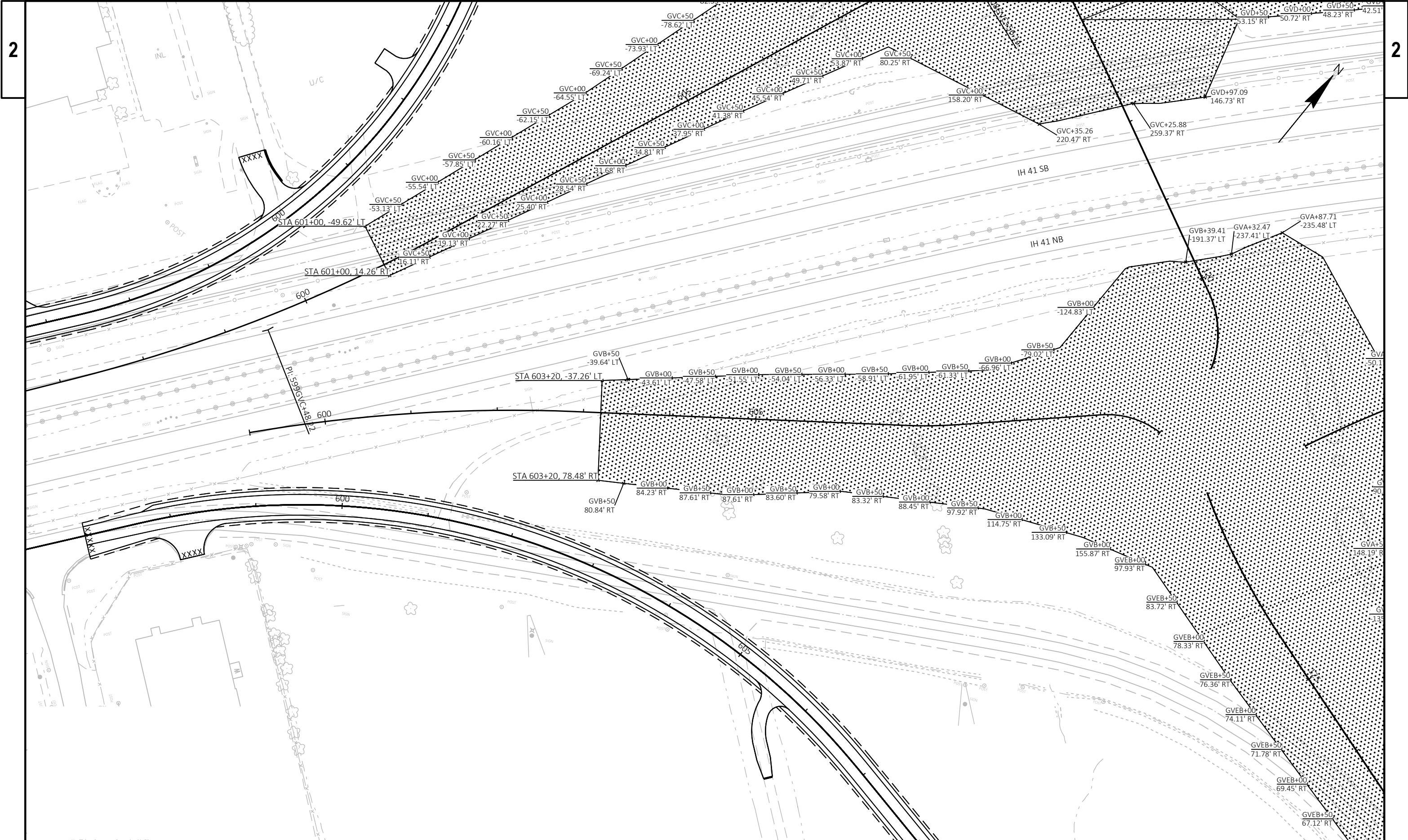
WICK DRAINS

SHEET

E



PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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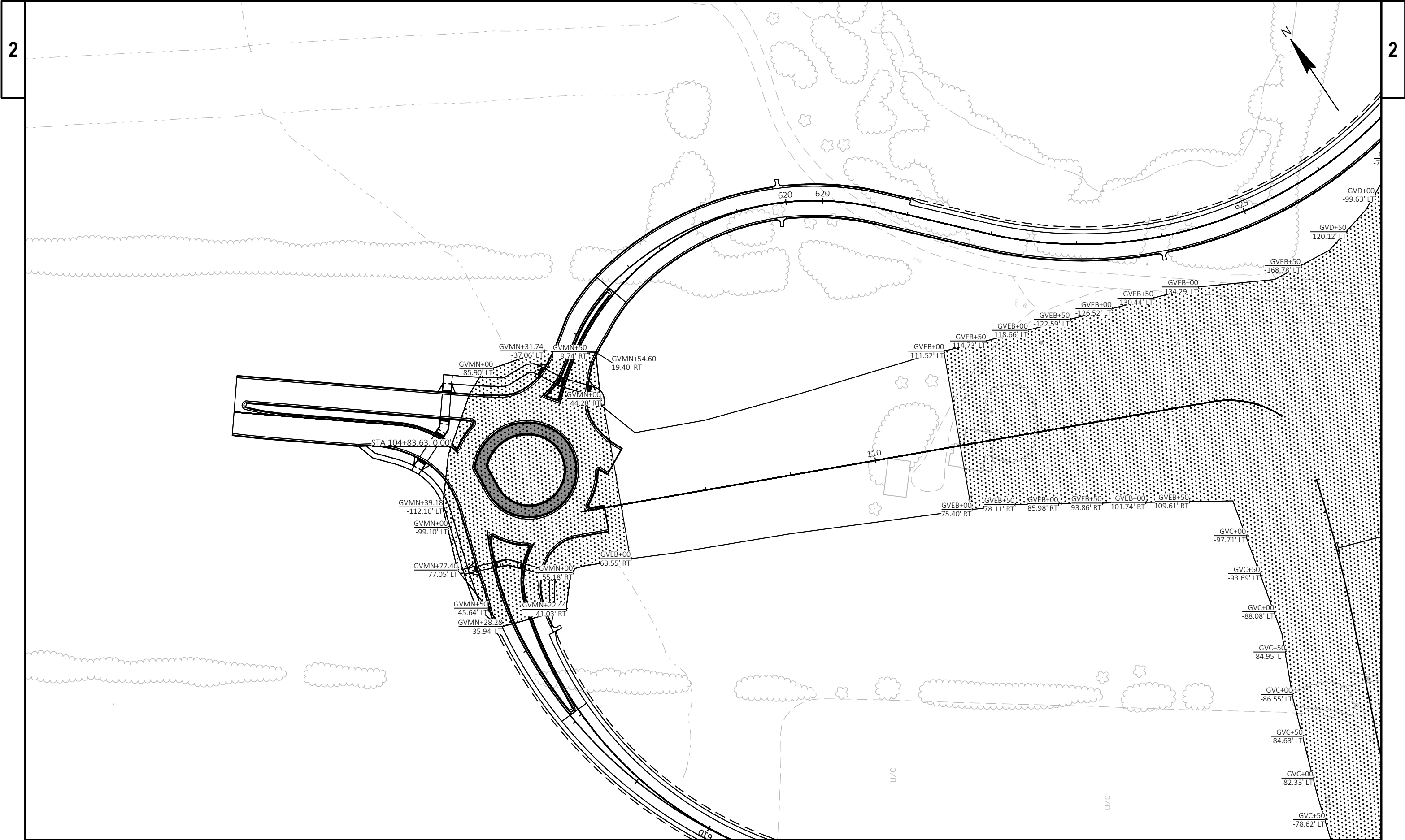
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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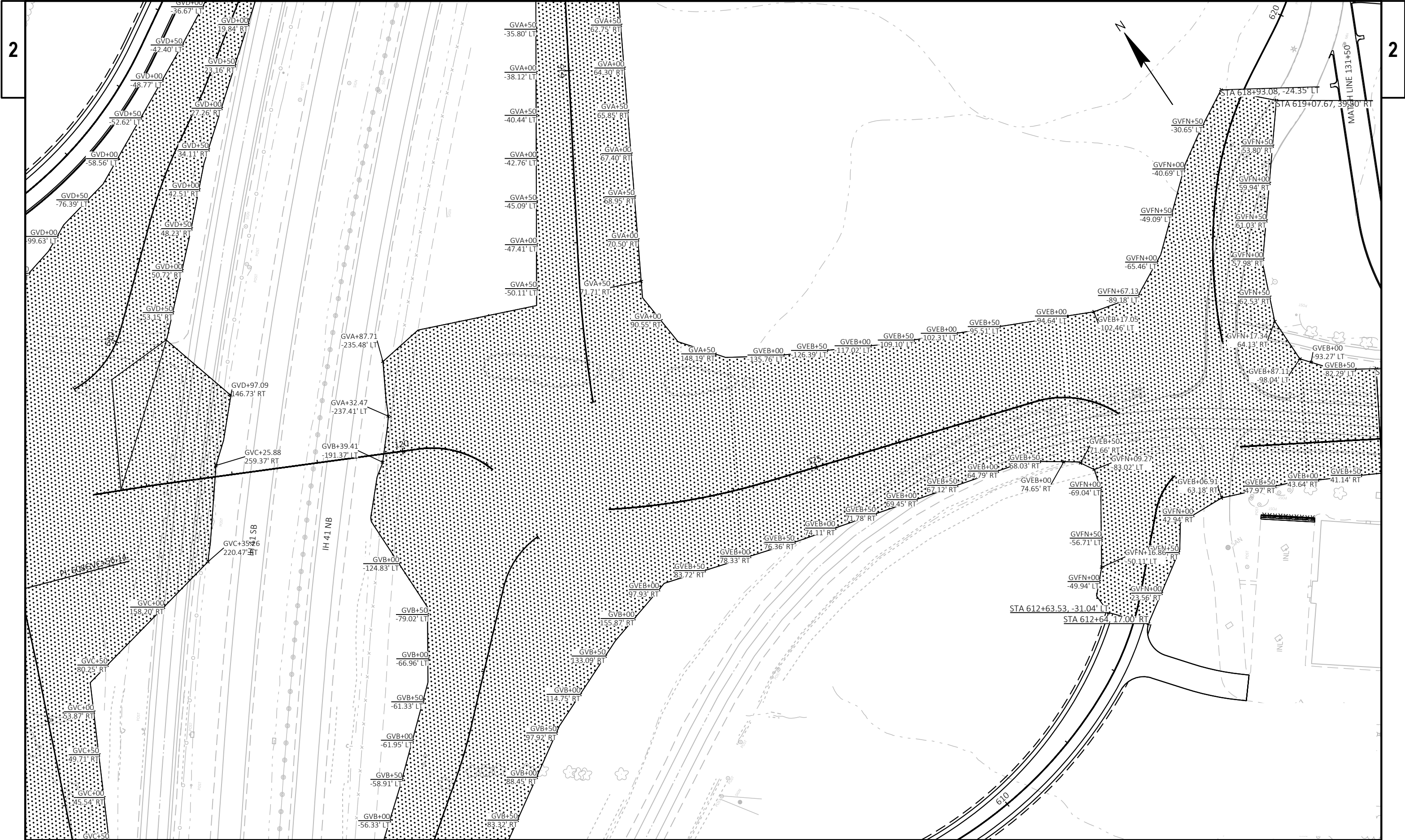
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

WICK DRAIN LAYOUT

SHEET

E

FILE NAME : C:\USERS\DOT\B\DC\ACCD\DCS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSPLAN\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\021009-CD.DWG PLOT DATE : 2/29/2024 9:04 AM
LAYOUT NAME - 33

PLOT BY : BRATTLUND, ERIK JOHN

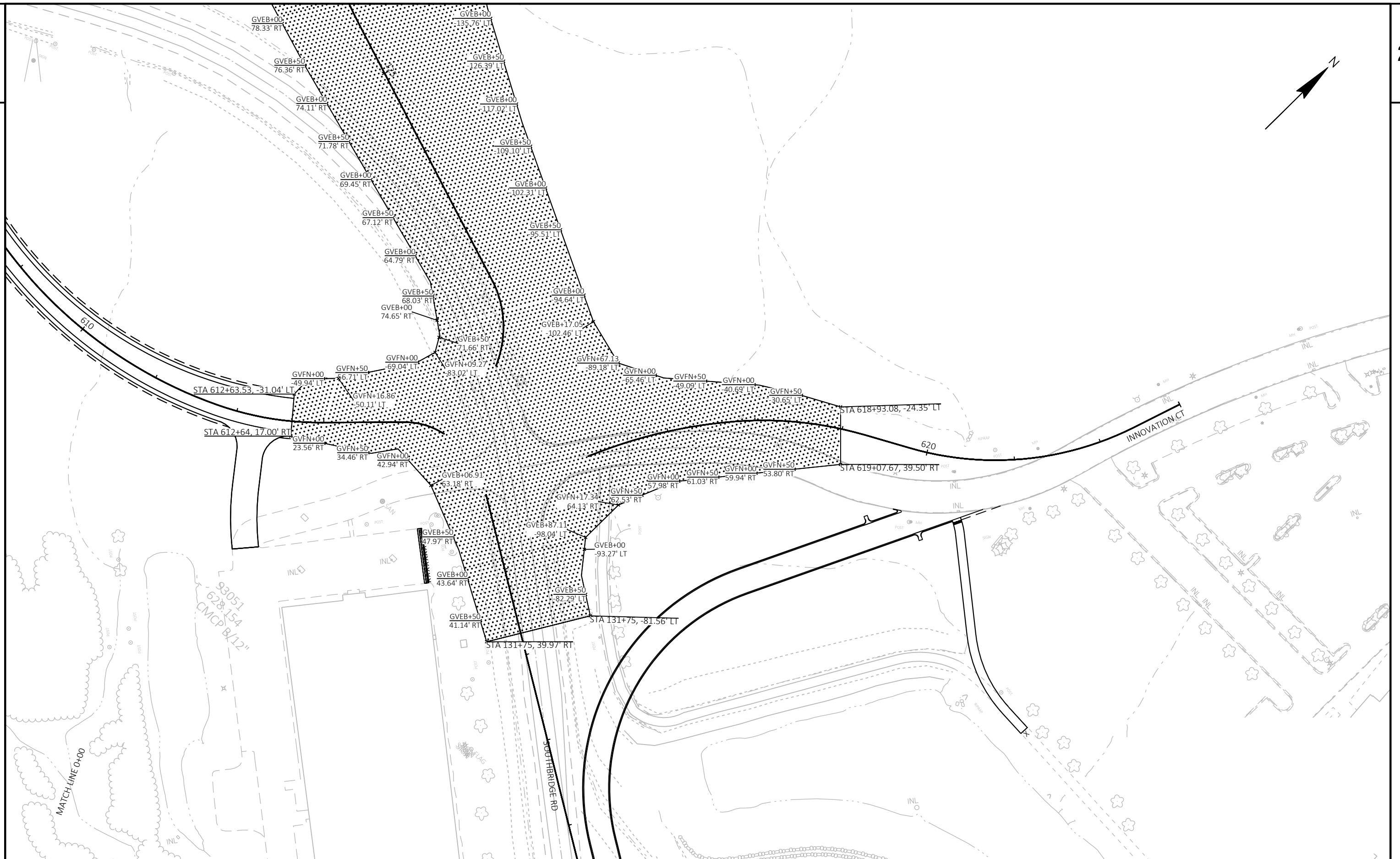
PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

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2 |



PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

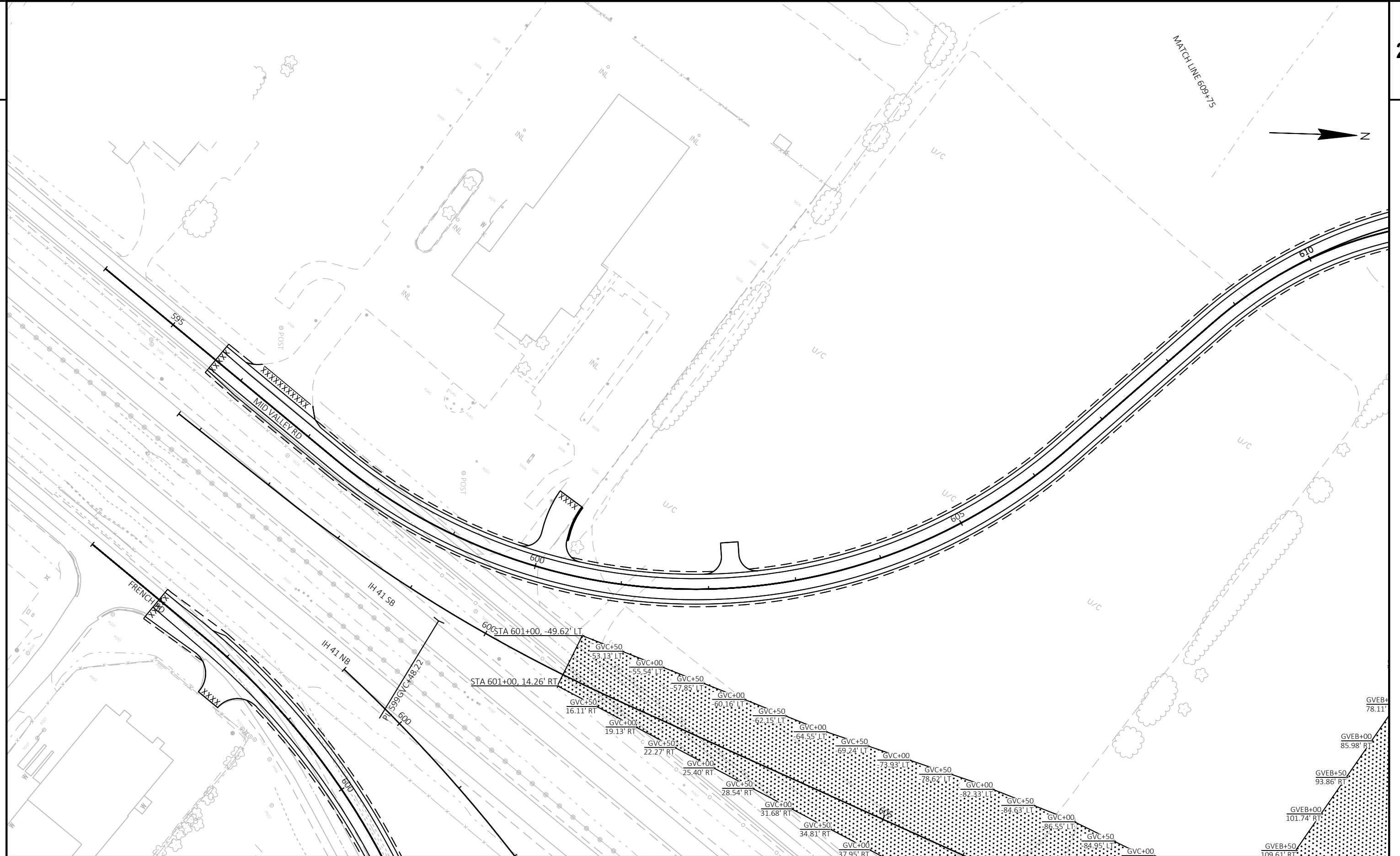
WICK DRAIN LAYOUT

SHEET

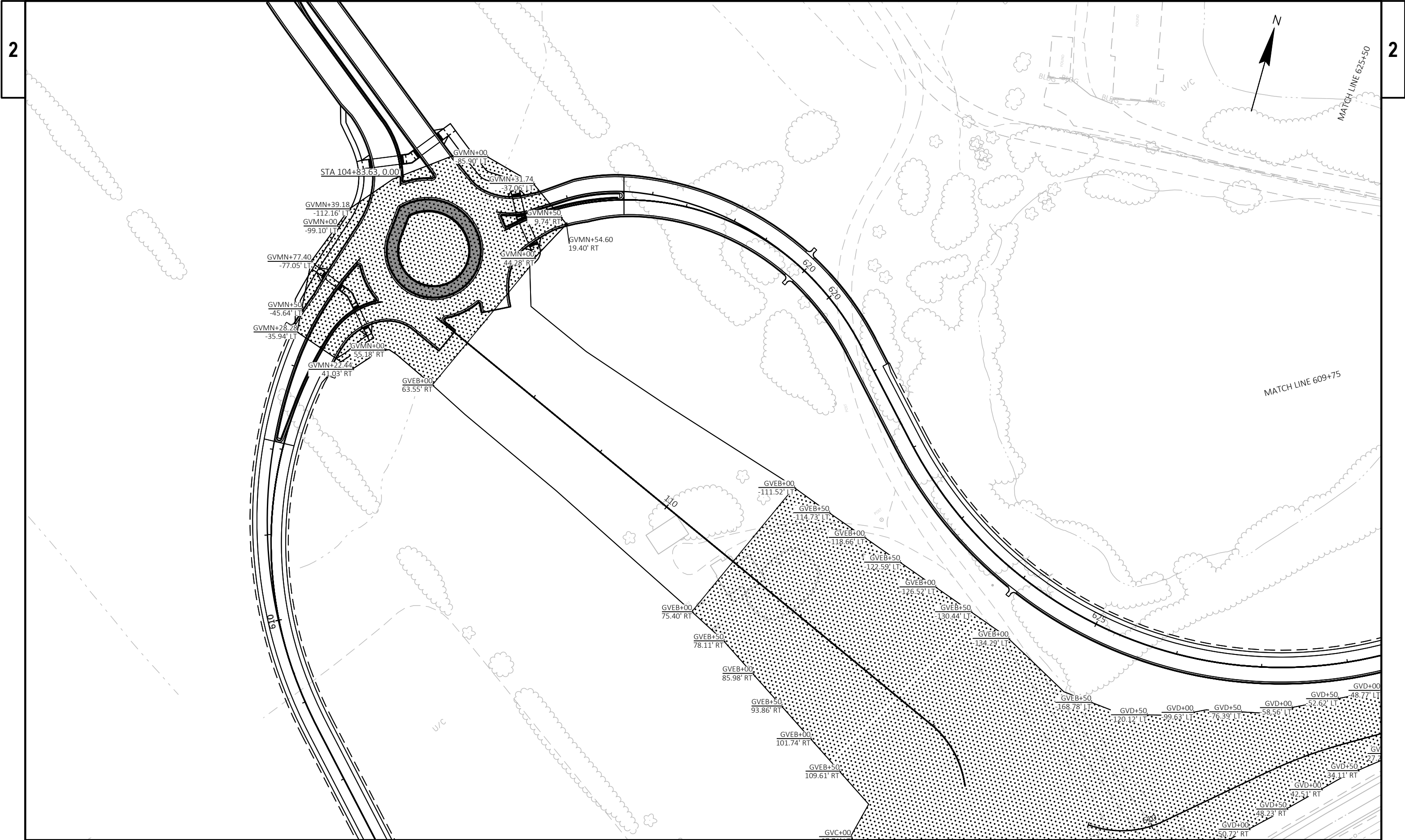
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FILE NAME : C:\USERS\DOTEJB\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSPLAN\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\021009-CD.DWG PLOT DATE : 2/29/2024 9:05 AM PLOT BY : BRATTLUND, ERIK JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT LAYOUT NAME - 34 WISDOT/CADD SHEET 42

WISDOT/CADDS SHEET 42



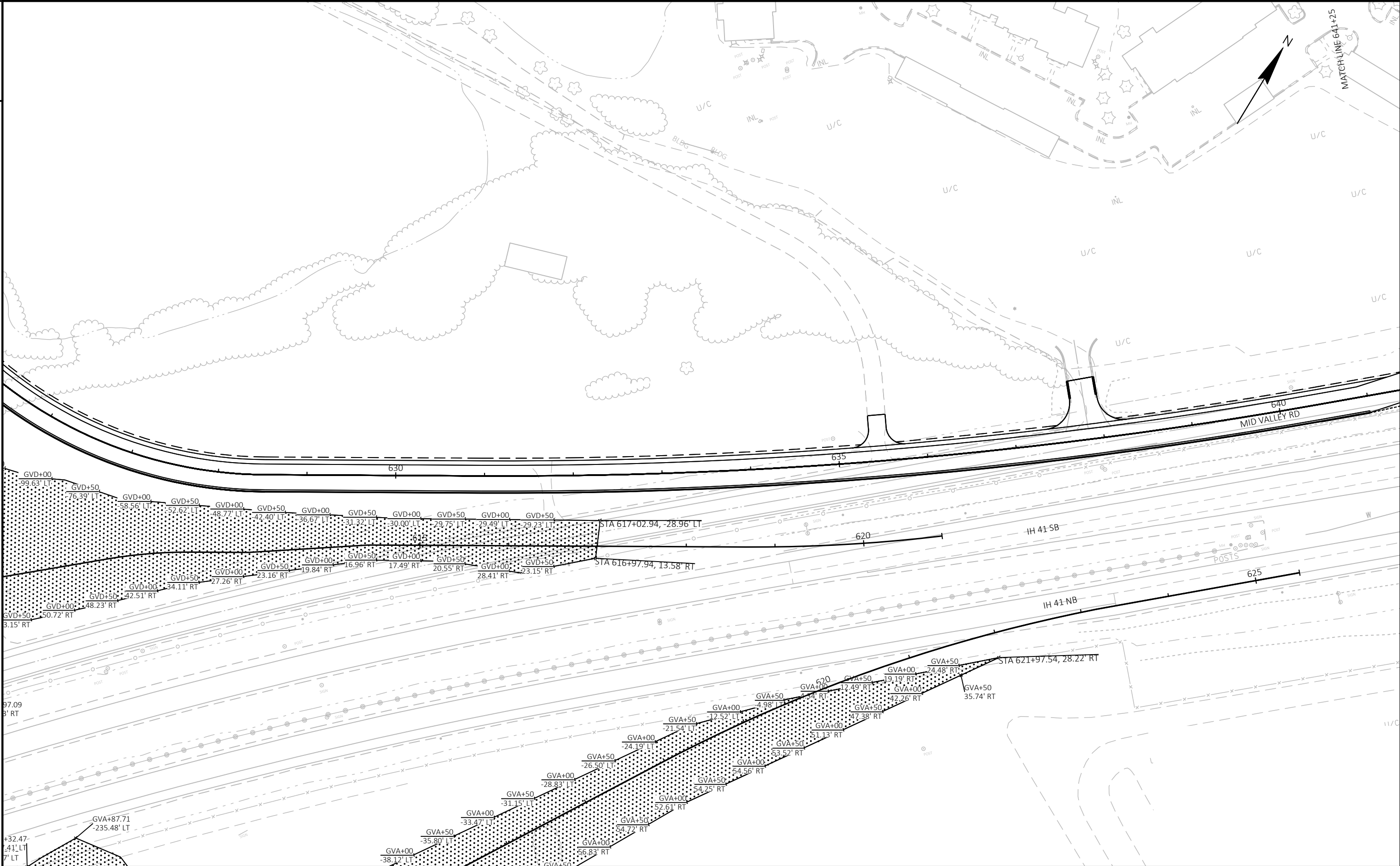
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	WICK DRAIN LAYOUT	SHEET	E
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PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

WICK DRAIN LAYOUT

SHEET

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FILE NAME : C:\USERS\DOTJ\B\ACCD\DOCS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSP\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\021009-CD.DWG PLOT DATE : 2/29/2024 9:06 AM
LAYOUT NAME - 37

PLOT BY : BRATTLUND, ERIK JOHN

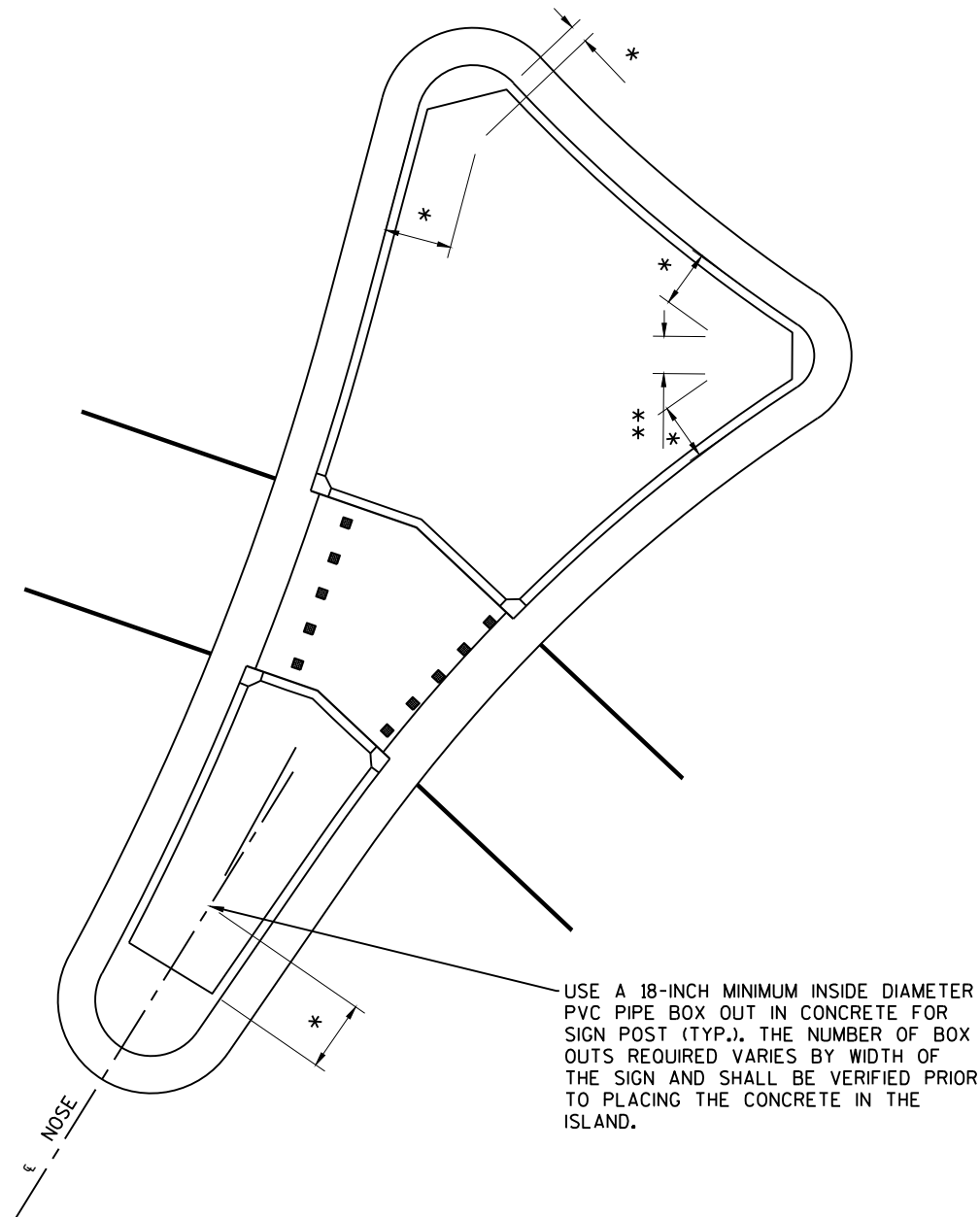
PLOT NAME :

PLOT SCALE : 1 IN:100 FT

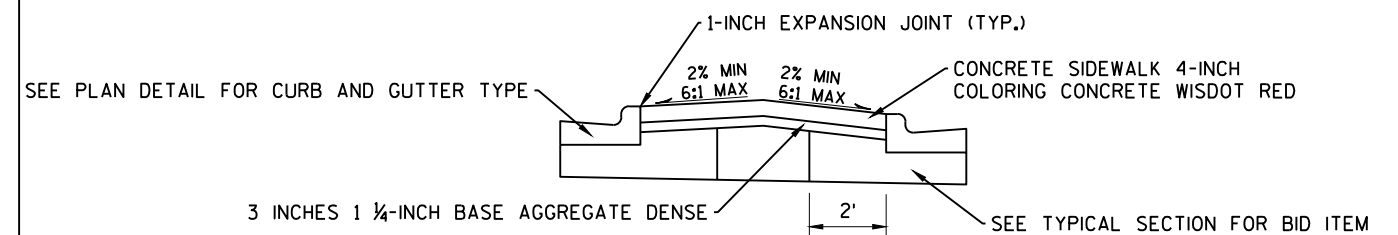
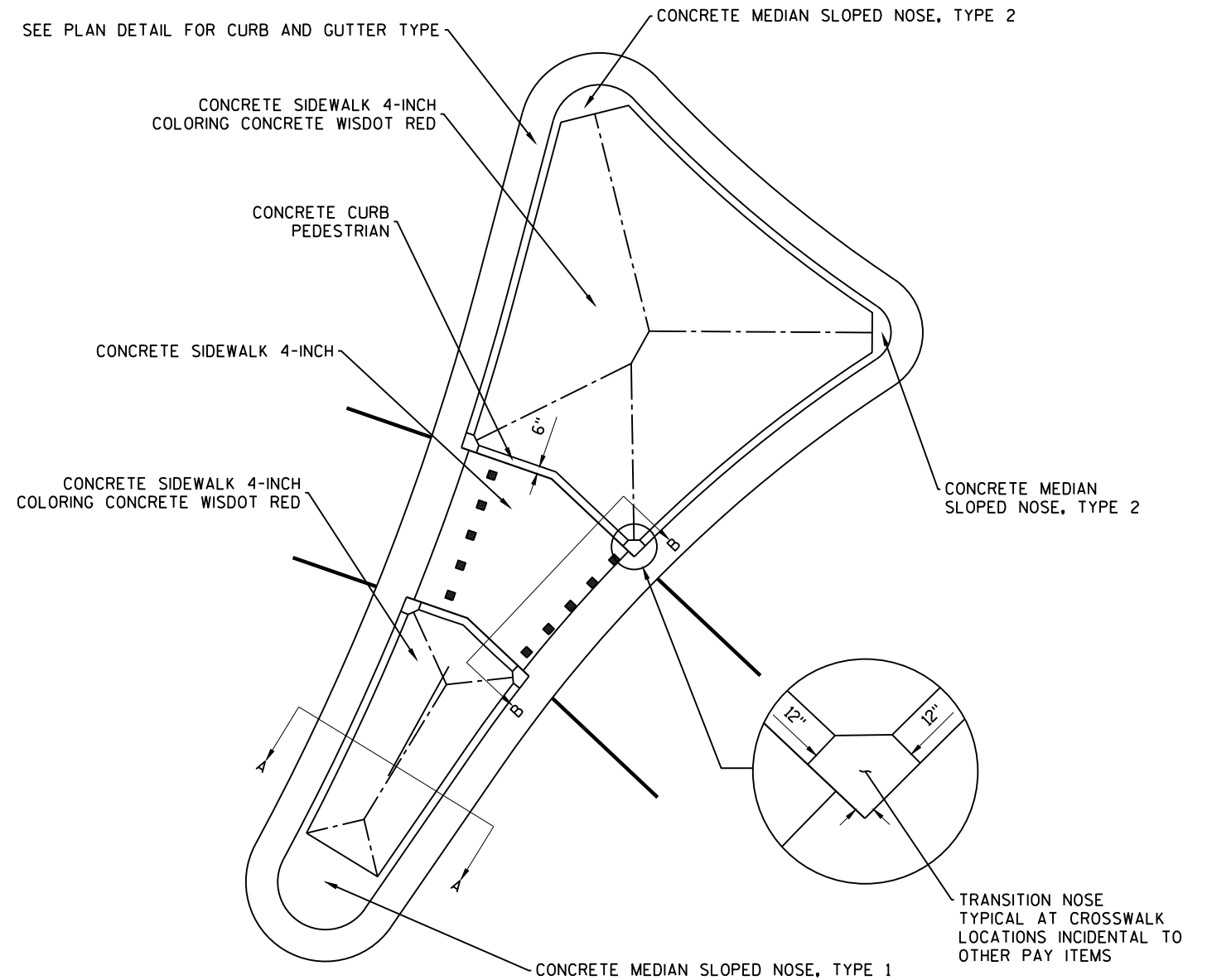
WISDOT/CADDS SHEET 42

* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

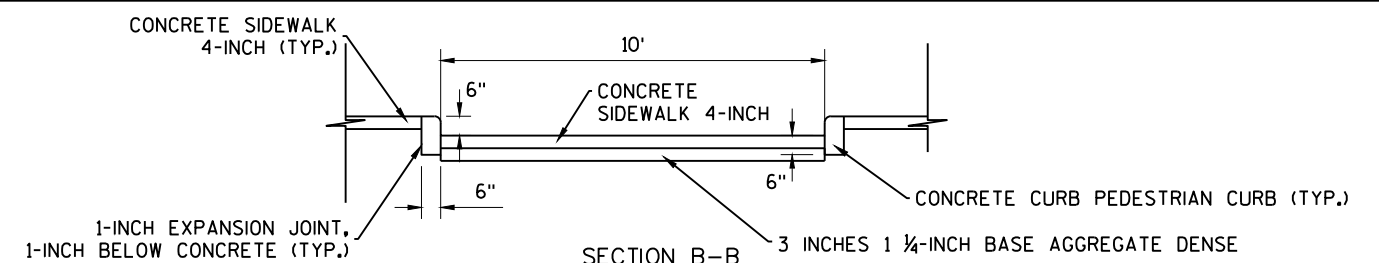
**SEE SIGN DETAILS FOR POST SPACING.



ISLAND SIGN LOCATION DETAIL (TYP.)

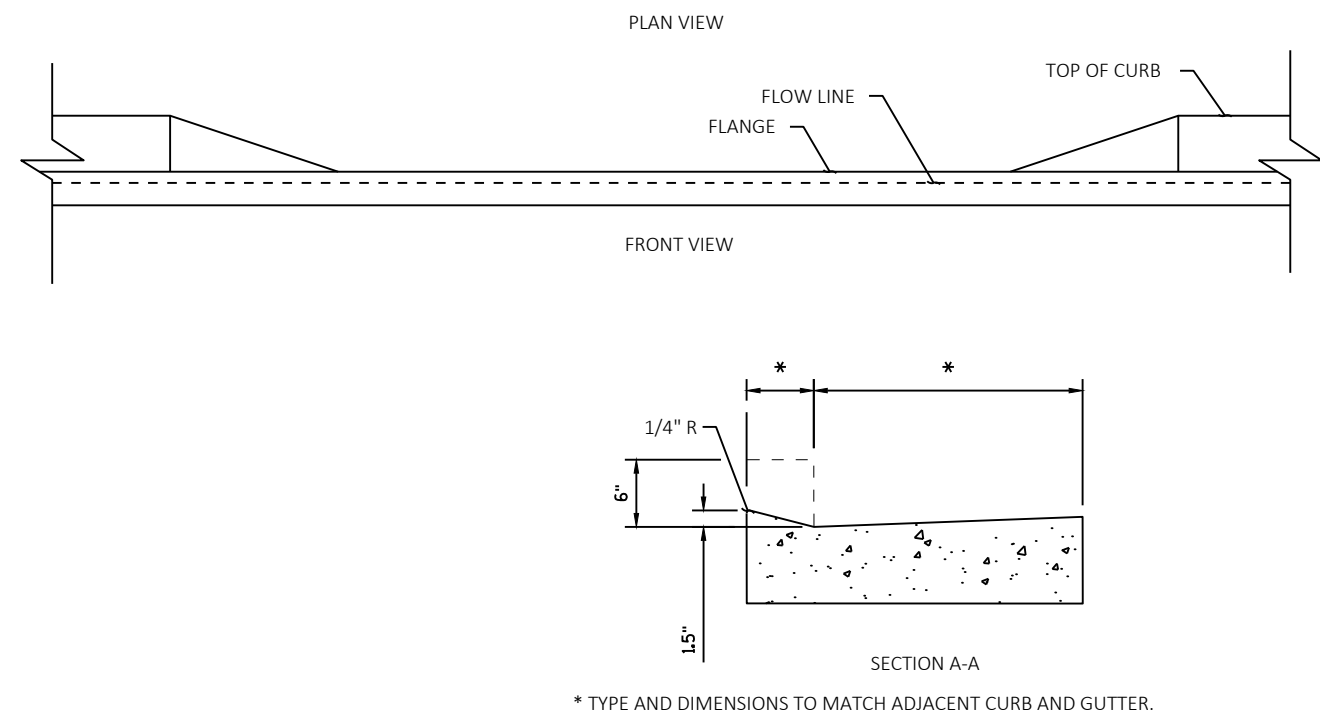
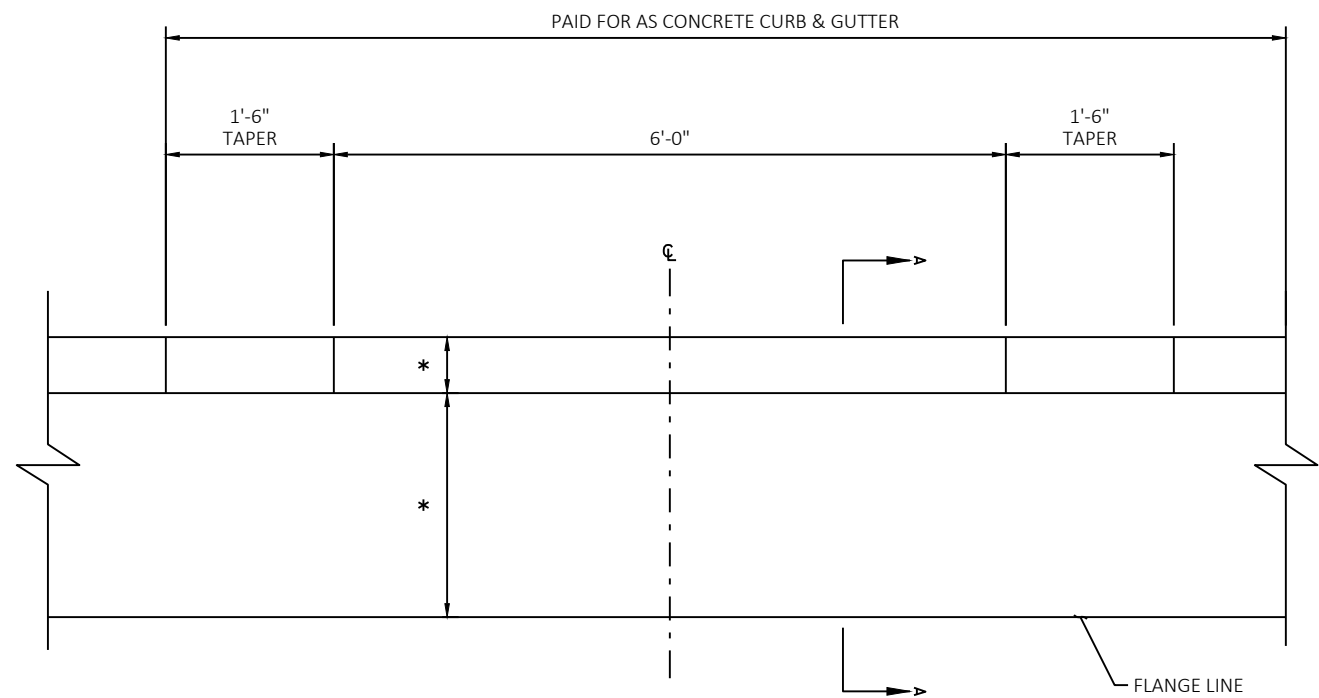
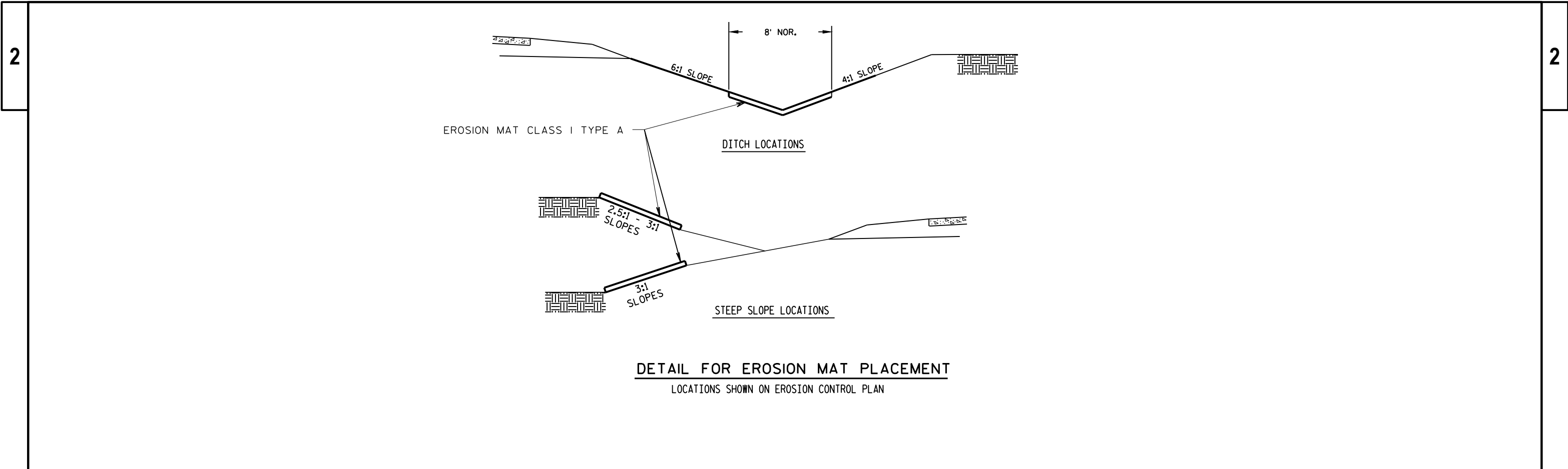


SECTION A-A



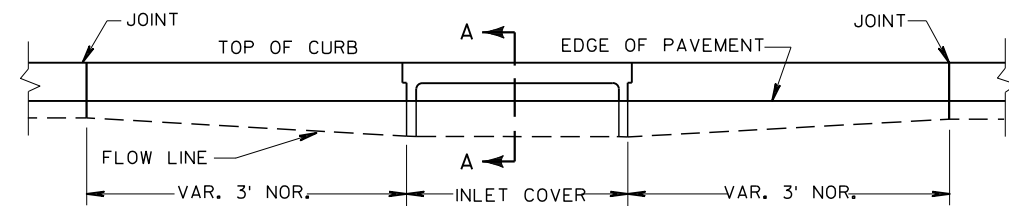
SECTION B-B

SPLITTER ISLAND DETAIL (TYP.)

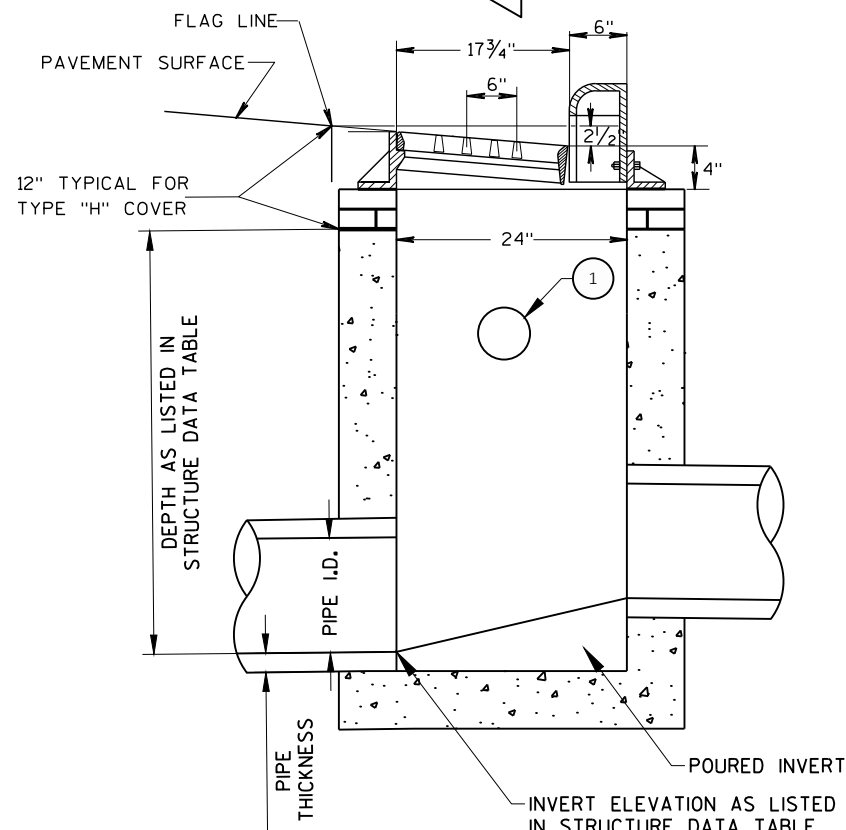
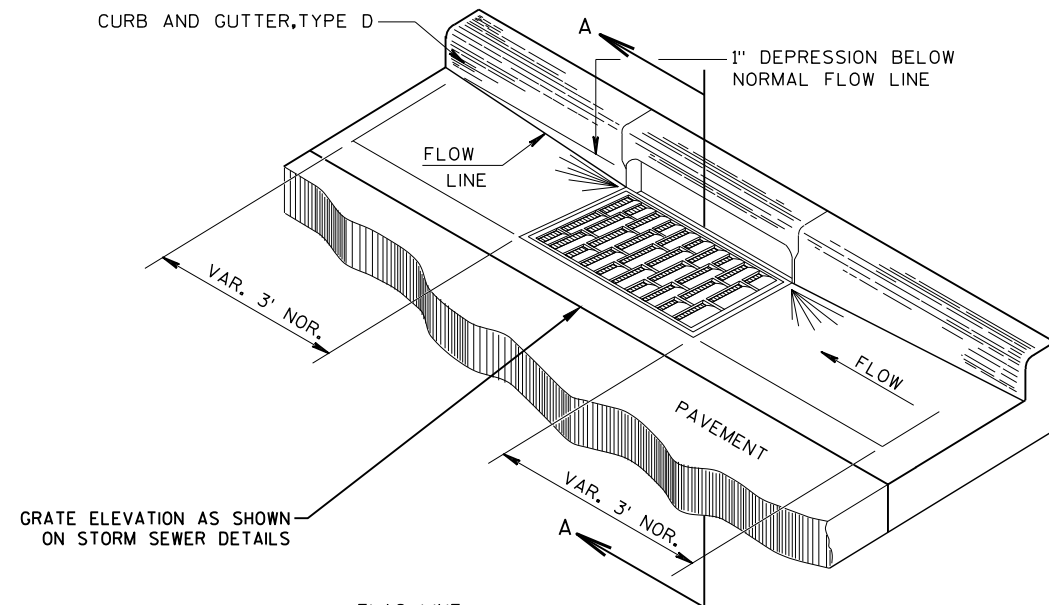


MAINTENANCE OPENING

LOCATIONS SHOWN ON PLAN DETAILS



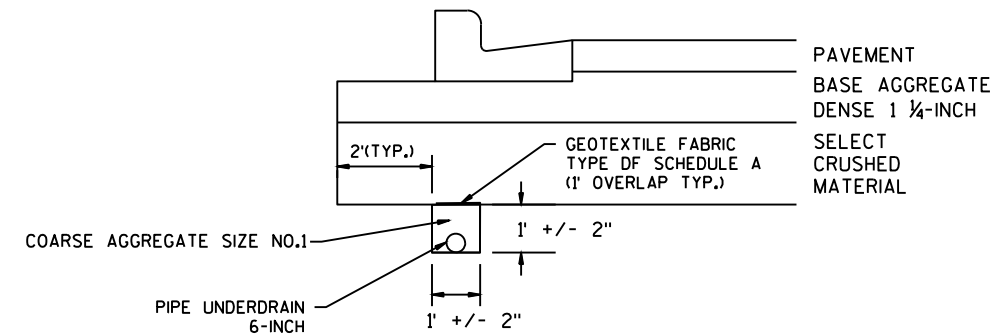
ELEVATION



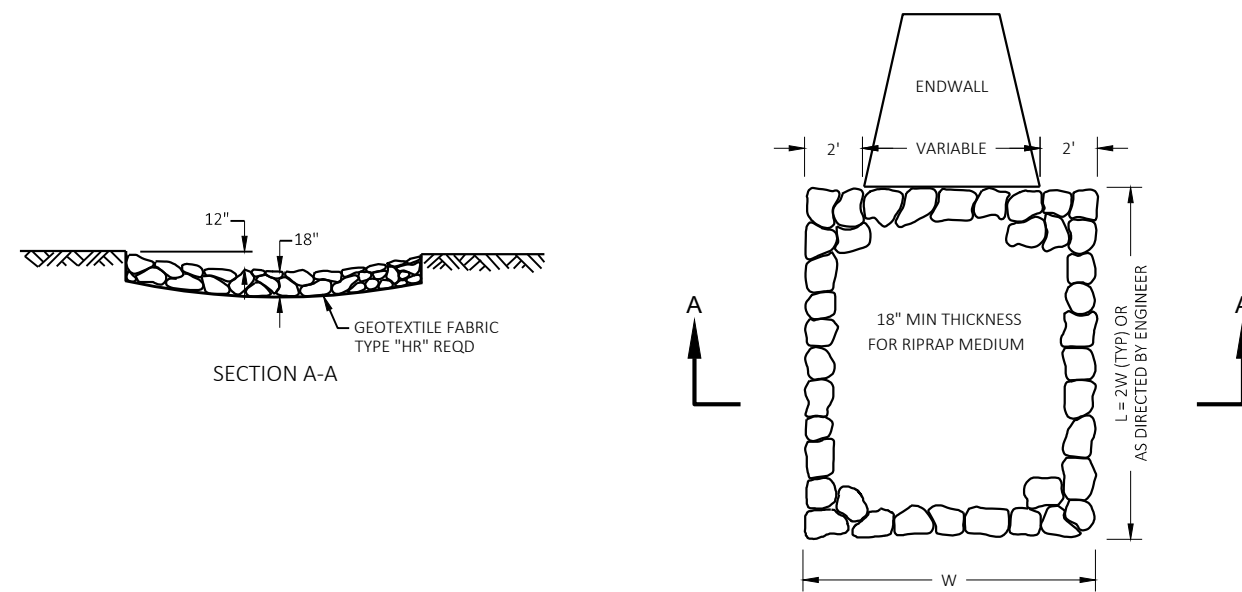
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS AT SAG LOCATIONS

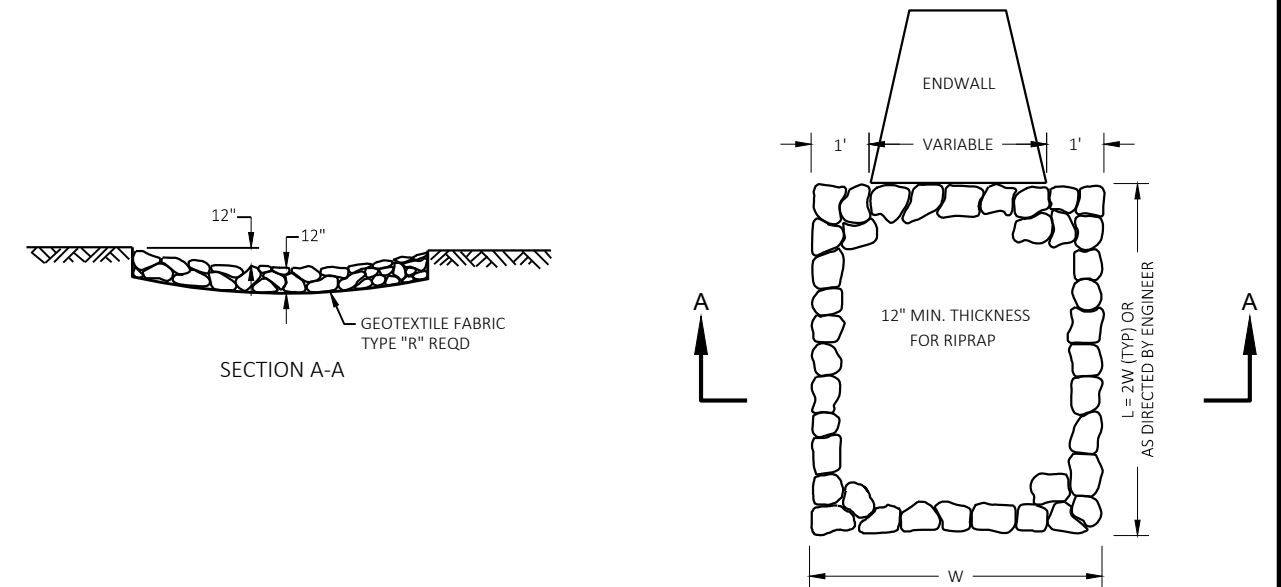
(INLET TYPE 2X3-H SHOWN)

PIPE UNDERDRAIN WRAPPED 6-INCH DETAIL

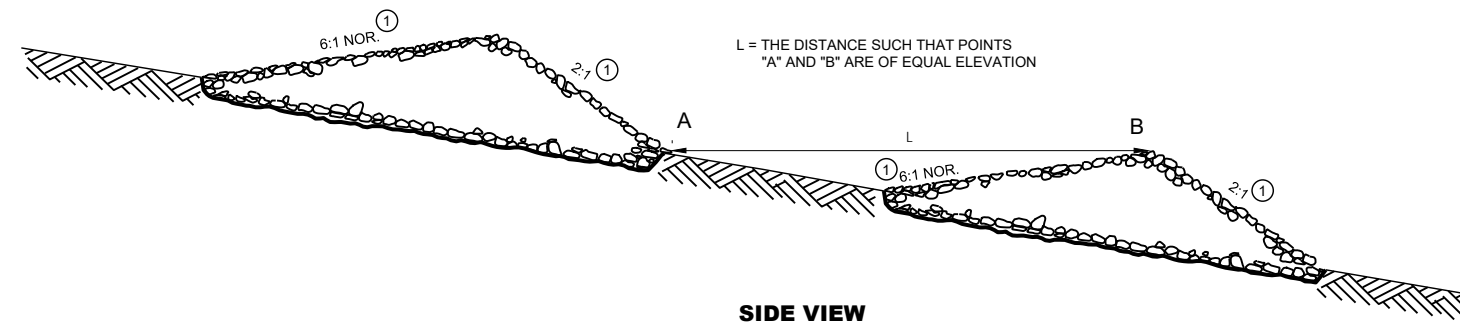
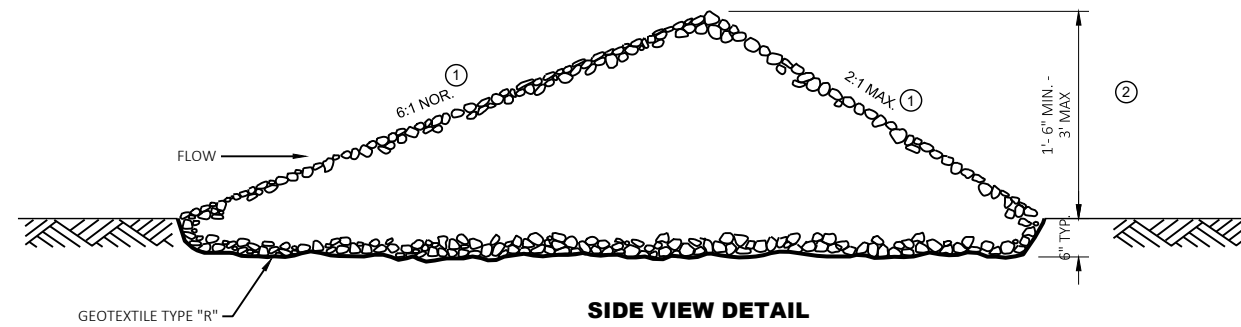
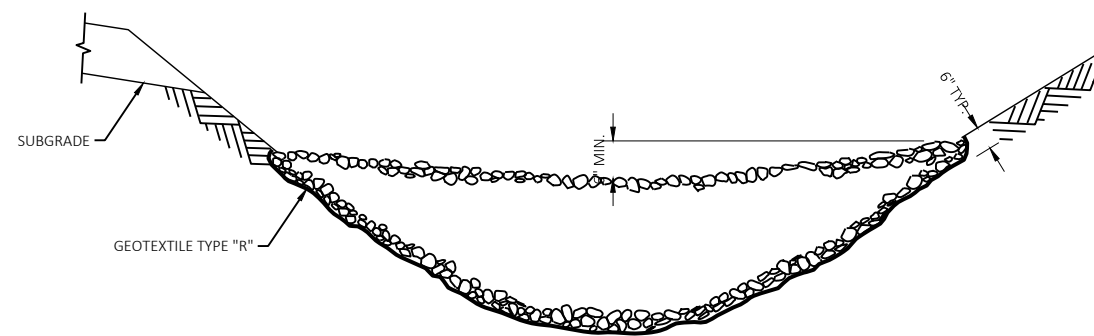
- ① PIPE UNDERDRAIN 6-INCH WITH GEOTEXTILE FABRIC TYPE DF SCHEDULE A AND BACKFILL COARSE AGGREGATE SIZE NO. 1. SEE "PIPE UNDERDRAIN 6-INCH DETAIL" AND MISCELLANEOUS QUANTITIES FOR LOCATIONS AND ADDITIONAL INFORMATION.



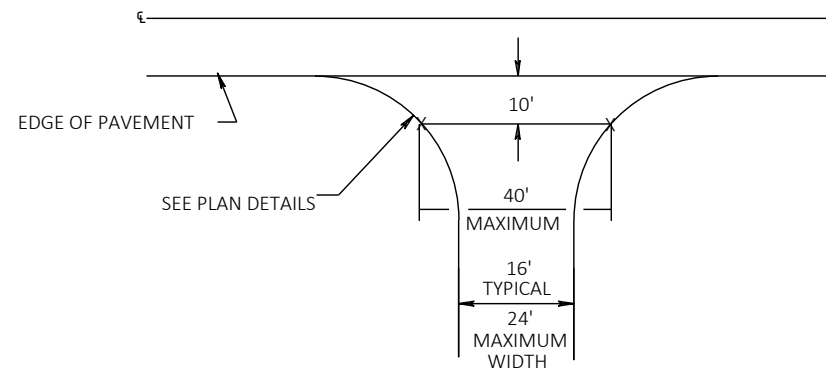
RIPRAP MEDIUM TREATMENT AT CULVERTS



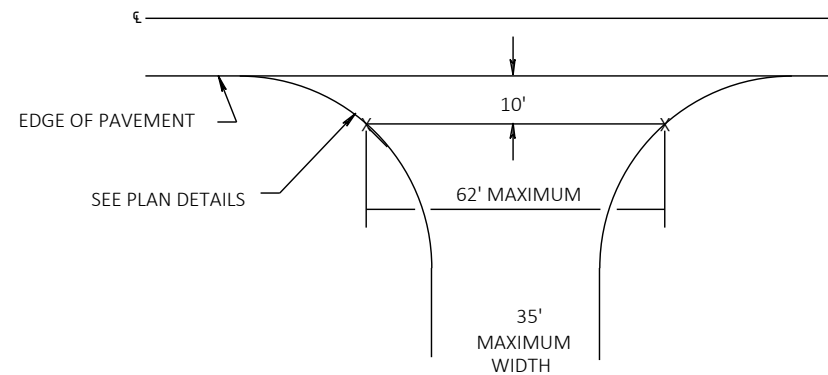
LIGHT RIPRAP TREATMENT AT CULVERTS

**SIDE VIEW****SIDE VIEW DETAIL****SECTION VIEW****STONE DITCH CHECK**

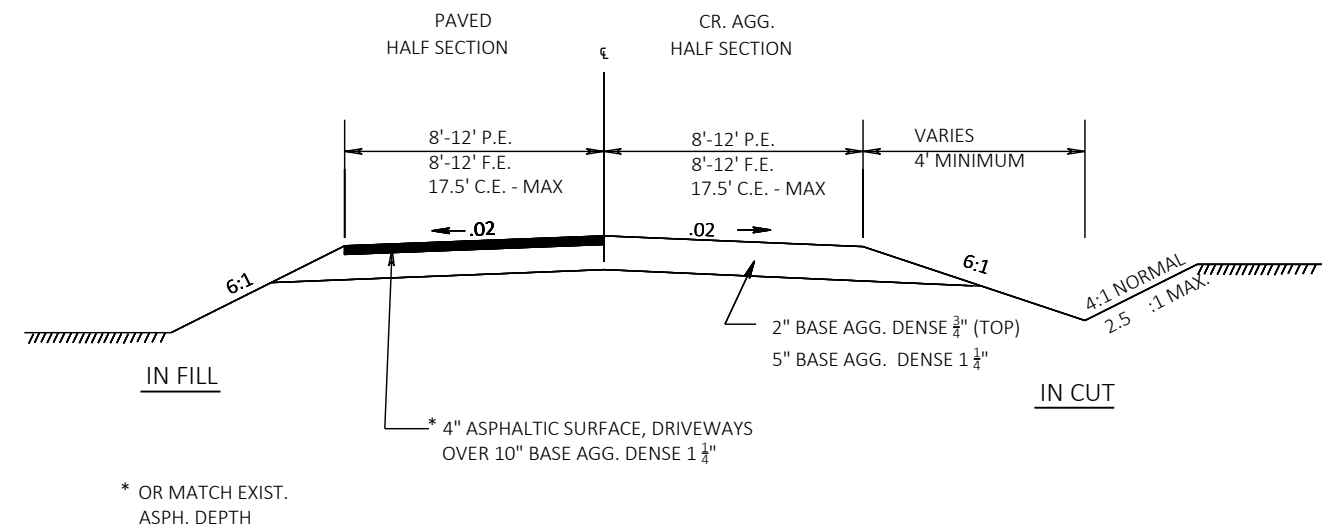
- ① WHEN PLACED WITHIN THE CLEAR ZONE, SLOPED AT 6:1 OR FLATTER.
② MEASURED AT THE CENTER OF THE DITCH CHECK.



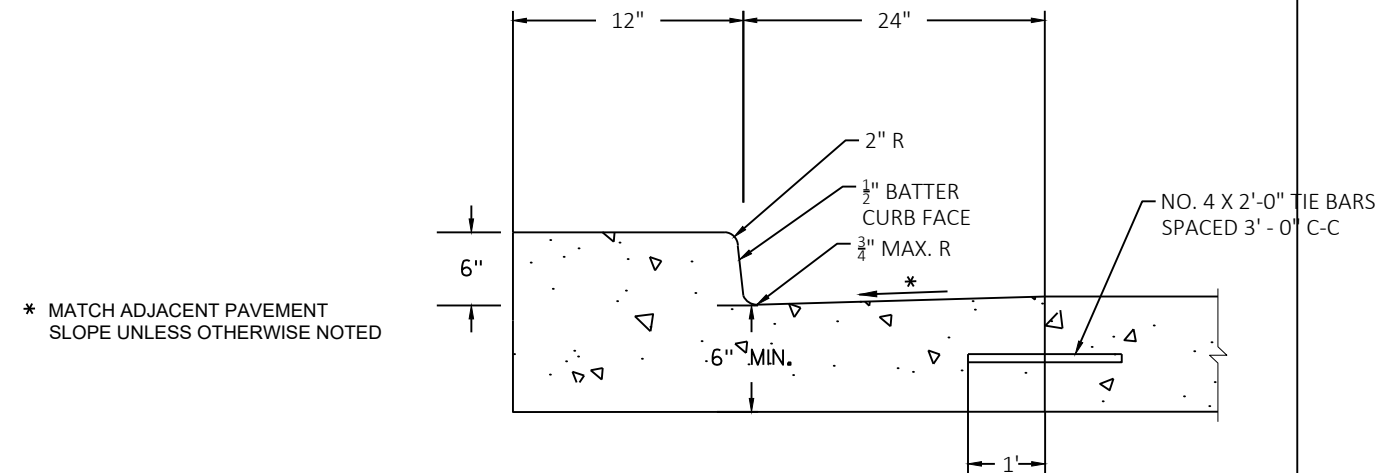
TYPICAL DRIVEWAY DETAIL
(NON-COMMERCIAL RURAL)



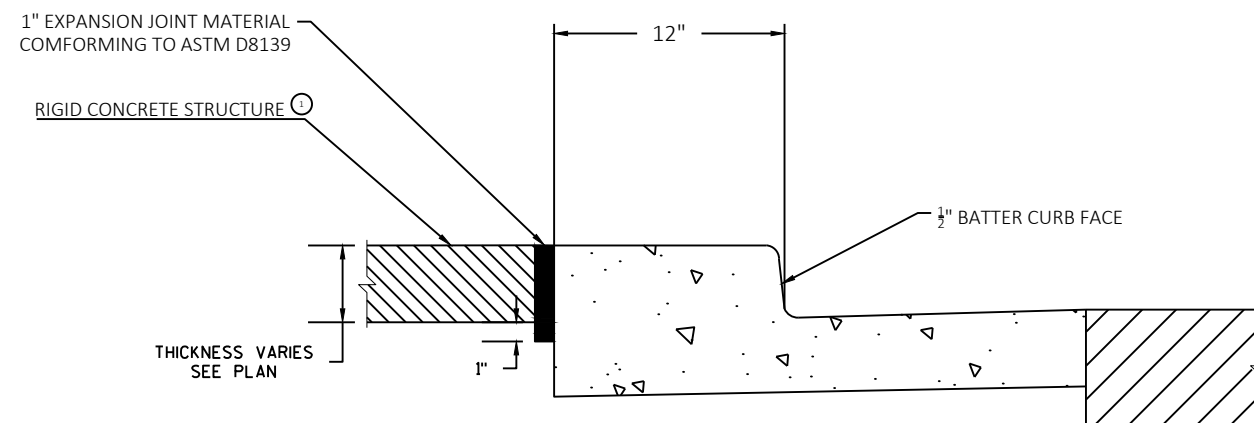
TYPICAL DRIVEWAY DETAIL
(COMMERCIAL RURAL)



TYPICAL CROSS SECTIONS FOR DRIVEWAYS



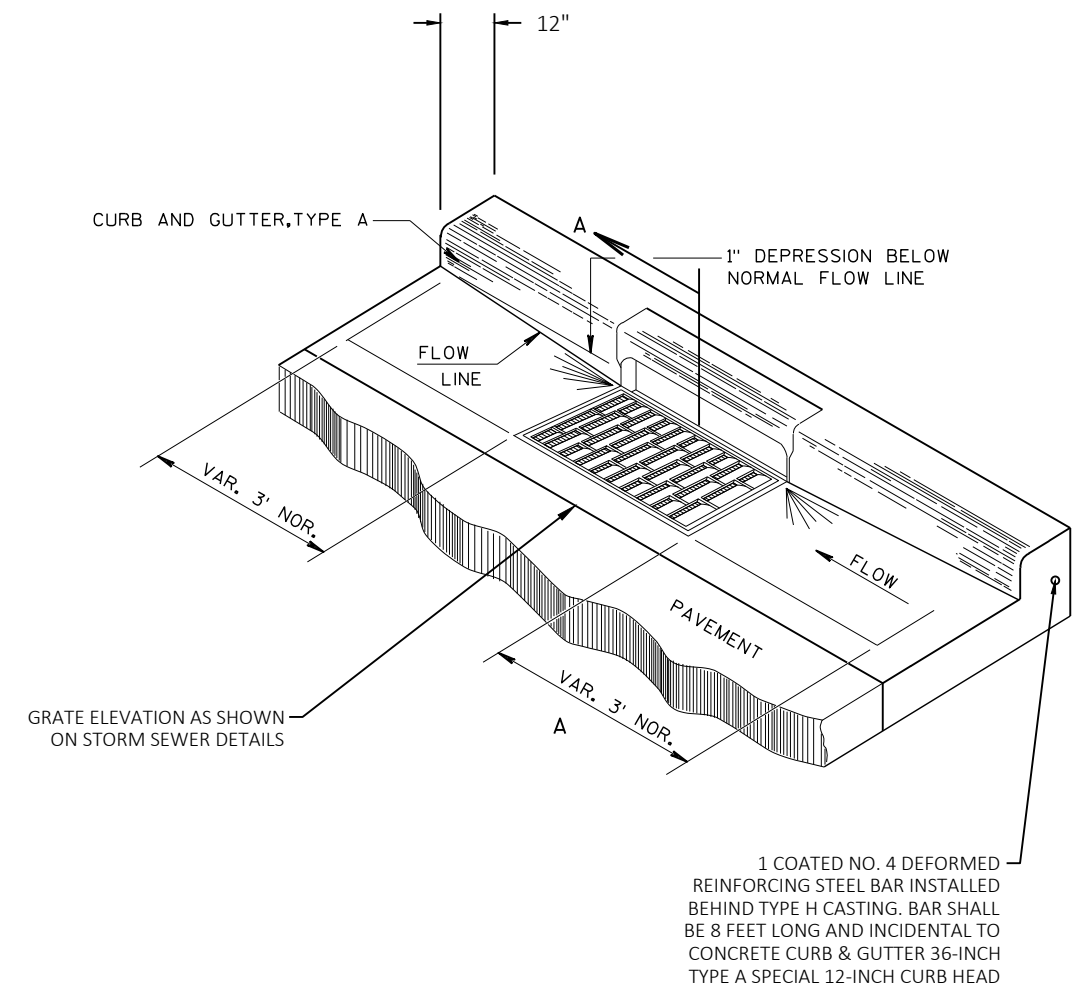
CONCRETE CURB & GUTTER 36-INCH TYPE
A SPECIAL 12-INCH CURB HEAD



EXPANSION JOINT DETAIL FOR VERTICAL
CURB ABUTTING A RIGID STRUCTURE

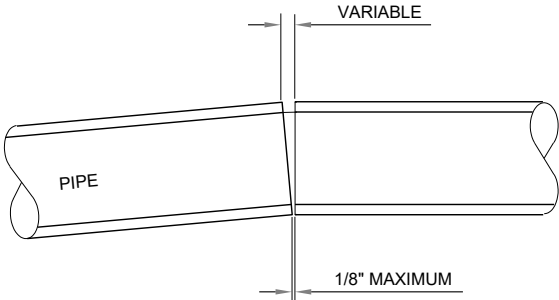
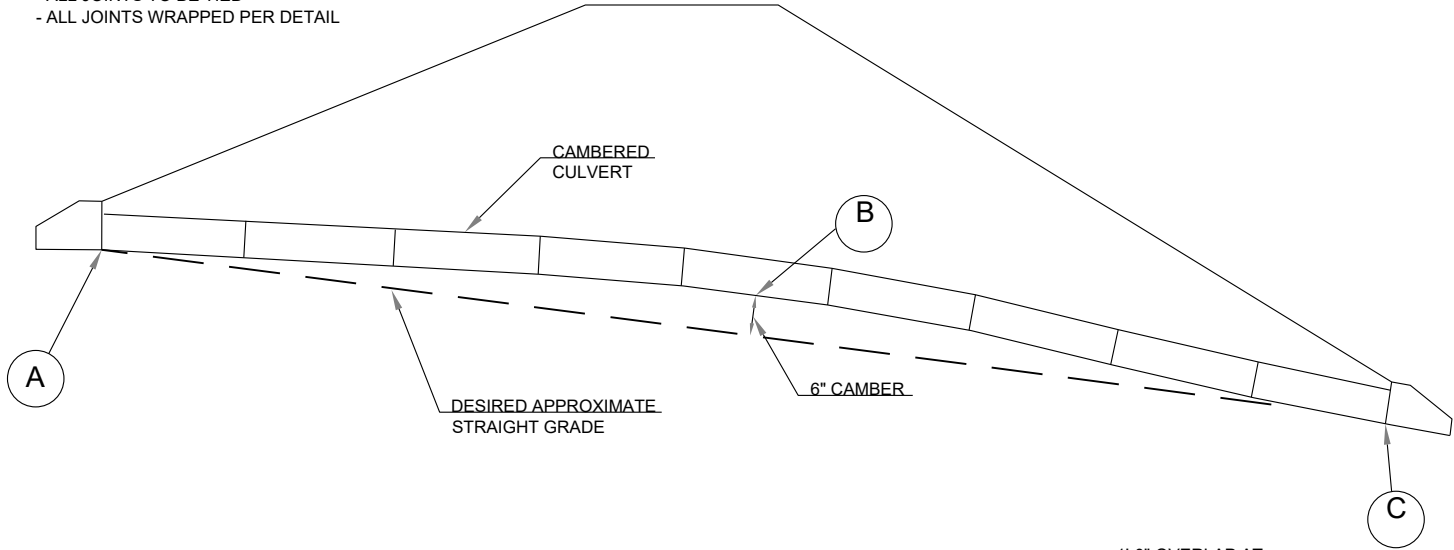
① PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. DO NOT USE TWO 1/2" EXPANSION JOINT MATERIAL. MUST BE ONE PIECE.

RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

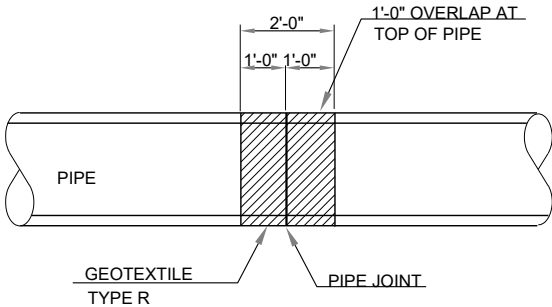


START STATION	END STATION	A	B	C	CAMBER
606'GVB'+82.98 LT	606'GVB'+60.44 RT	639.32'	639.23'	638.15'	6"
606'GVB'+30 LT	606'GVB'+35 RT	643.84'	642.42'	641.01'	6"

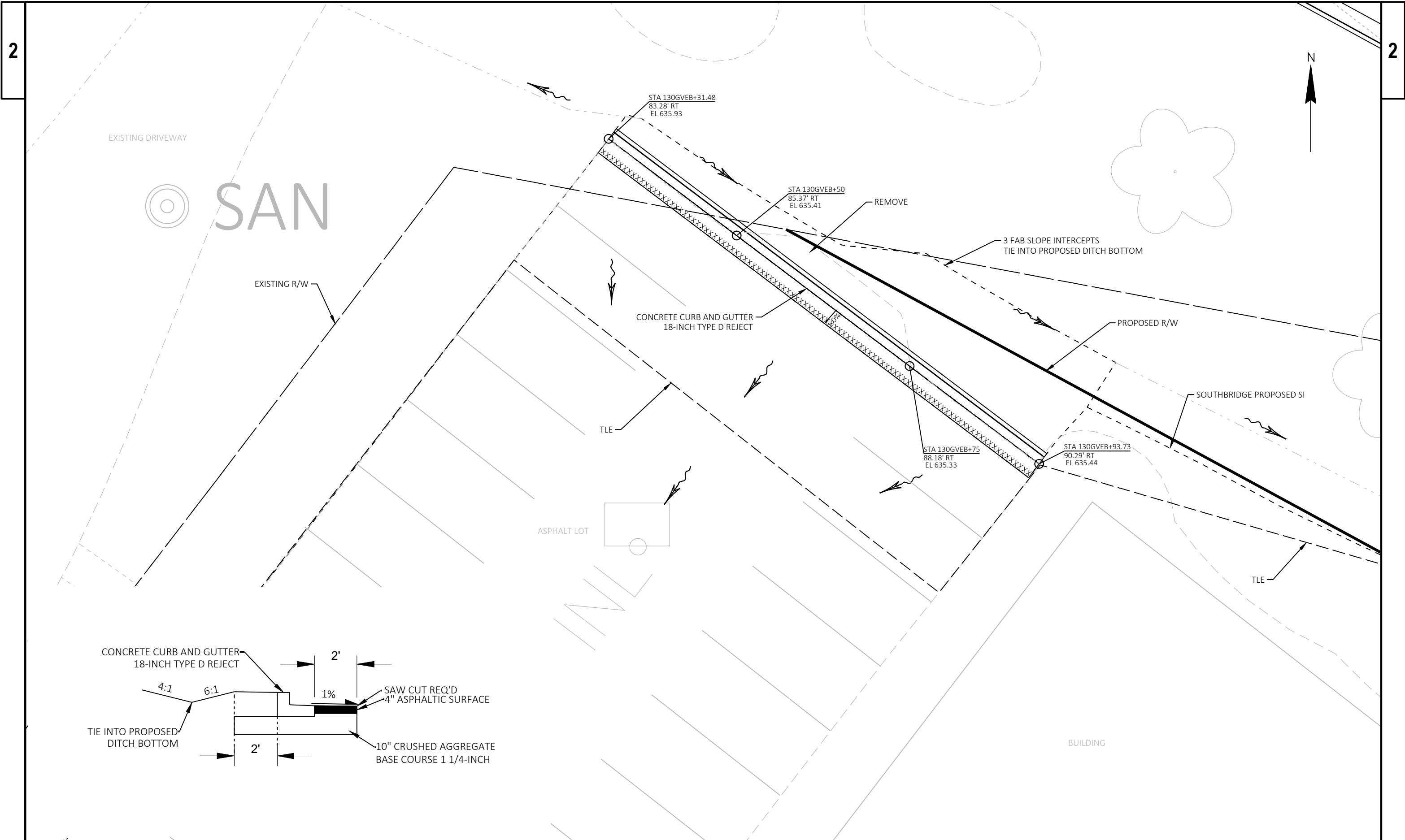
NOTE:
- ALL JOINTS TO BE TIED
- ALL JOINTS WRAPPED PER DETAIL



TYPICAL JOINT IN CAMBERED PIPE

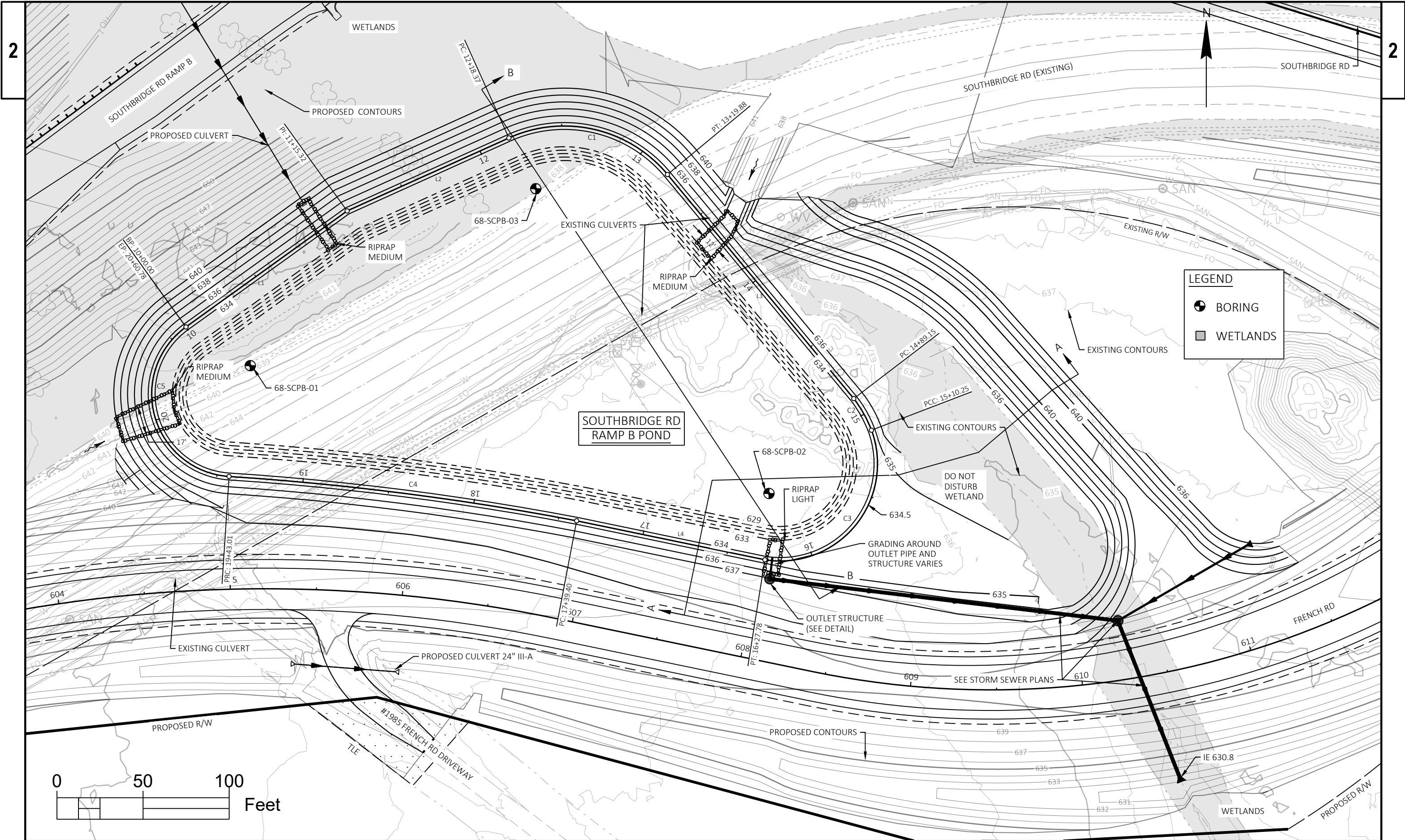


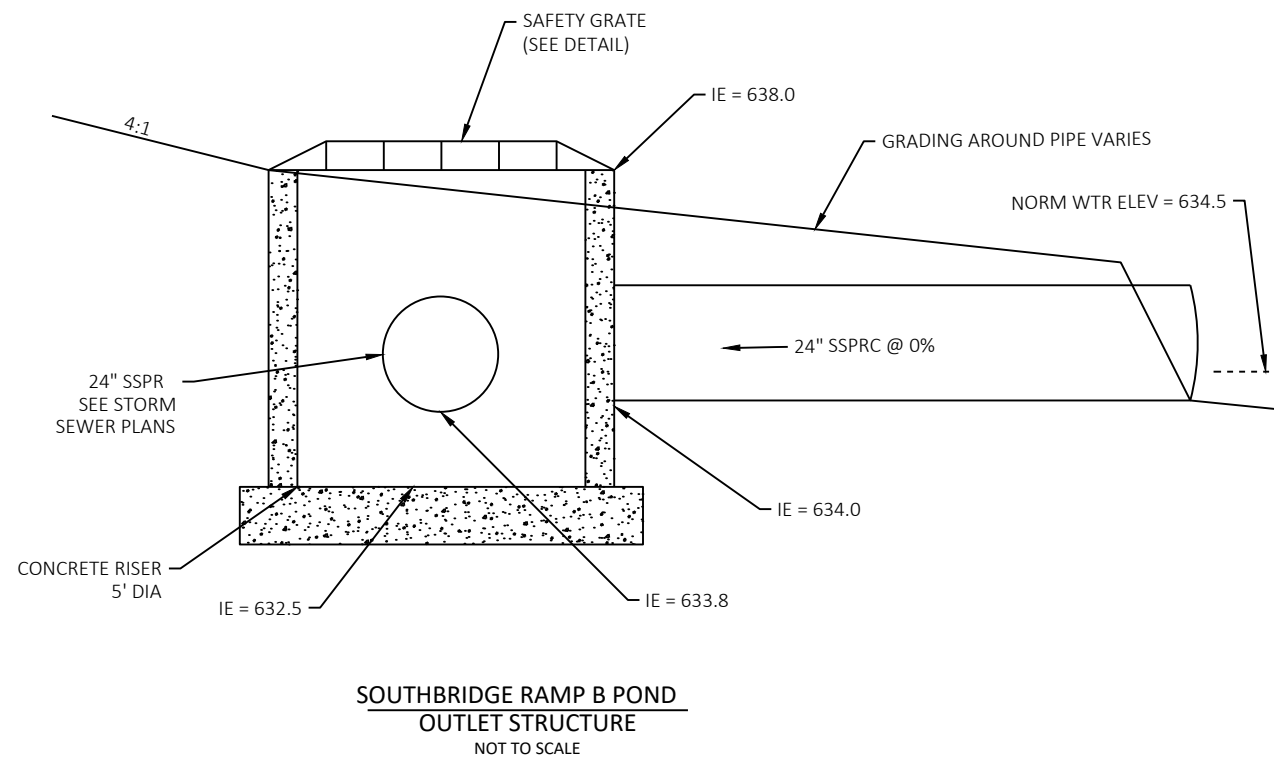
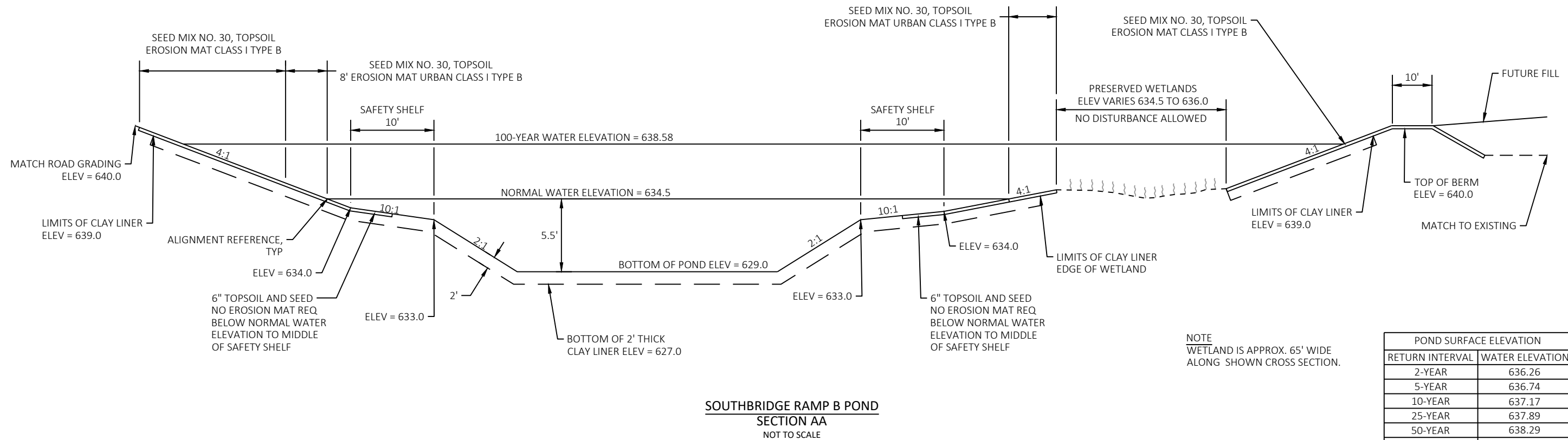
PIPE JOINT WRAPPING



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	AMERICAN 3 FAB PARKING LOT	SHEET	E
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NOTE
DETAILS FOR CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WET BASIN SHALL HAVE A TYPE 'A' CLAY LINER IN ACCORDANCE WITH THE PLAN DETAILS AND SPECIAL PROVISIONS.

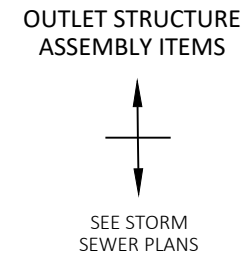
SUPPLY OR FABRICATE SAFETY GRATE AND ATTACH TO TOP OF RISER PER PLAN DETAILS. FABRICATE AND ATTACH OVERSIZED TRASH GRATE TO THE ORIFICE USING NO. 4 REBAR OVER THE ORIFICE. OFFSET THE GRATE AWAY FROM THE ORIFICE OPENING. GRATE OPENINGS NO LARGER THAN 4". TOTAL OPEN AREA AT LEAST 56 SQ-IN SO PARTICLE CLOGGING DOES NOT INTERRUPT FLOW.

TREAT PORTION OF SAFETY SHELF IN FRONT OF POND OUTLET WITH GEOTEXTILE FABRIC TYPE R AND LIGHT RIPRAP TO DETER PLANT GROWTH IN FRONT OF OUTLET STRUCTURE. KEY RIPRAP 6" - 12" THICK INTO SAFETY SHELF TO MATCH FINISH GRADING ELEVATIONS.

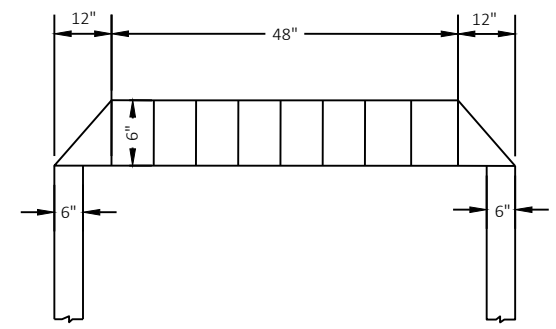
POINT DISCHARGES ENTERING POND FROM ABOVE THE WATER SURFACE SHALL HAVE AN ARMORED RIPRAP FLUME RUNNING DOWN THE SLOPE TO PREVENT EROSION. RIPRAP FLUMES SHALL BE PARABOLIC SHAPED AND INCLUDE GEOTEXTILE FABRIC UNDER THE STONE. ALL RIPRAP SHALL INCLUDE GEOTEXTILE TYPE HR. RIPRAP TO EXTEND BELOW THE NORMAL WATER LINE AND THROUGH THE WIDTH OF THE SAFETY SHELF TO PREVENT SCOUR OF THE SHELF. RIPRAP AT APRON ENDWALLS SHALL EXTEND 2 FEET BEYOND THE SIDES OF THE ENDWALL AND EXTEND 2 FEET ABOVE THE TOP OF THE ENDWALL. RIPRAP SHALL EXTEND THROUGH LIMITS OF THE SAFETY SHELF. ENSURE AREAS TREATED WITH RIPRAP MAINTAIN THE MINIMUM 2-FOOT THICK CLAY LINER BENEATH THE RIPRAP AREA.

ALL DISTURBED AREAS OF THE POND ABOVE THE SAFETY SHELF SHALL BE RESTORED WITH TOPSOIL, SEED, AND EROSION MAT IN ACCORDANCE TO THE LANDSCAPING ITEMS.

ALIGNMENT - SOUTHBRIDGE RAMP B POND										
SEGMENT NUMBER	START STATION	START NORTHING	START EASTING	END STATION	END NORTHING	END EASTING	LENGTH	RADIUS	LINE/CHORD BEARING	DELTA ANGLE
L1	10+00.00	532112.013	69912.128	11+15.32	532179.415	70005.695	115.32		N54° 13' 57"E	
L2	11+15.32	532179.415	70005.695	12+18.37	532221.816	70099.625	103.06		N65° 42' 18"E	
C1	PC 12+18.37	PC 532221.816	PC 70099.625	PT 13+19.88	PT 532200.578	PT 70191.705	101.51	78.00	S77° 00' 43"E	74° 33' 58"
L3	13+19.88	532200.578	70191.705	14+89.15	532070.399	70299.892	169.27		S39° 43' 43"E	
C2	PC 14+89.15	PC 532070.399	PC 70299.892	PT 15+10.25	PT 532052.048	PT 70310.155	21.10	73.44	S29° 12' 57"E	16° 27' 39"
C3	PC 15+10.25	PC 532052.048	PC 70310.155	PT 16+27.78	PT 531976.788	PT 70248.281	117.53	56.46	S39° 25' 29"W	119° 15' 51"
L4	16+27.78	531976.788	70248.281	17+39.40	531999.423	70138.974	111.63		N78° 18' 02"W	
C4	PC 17+39.40	PC 531999.423	PC 70138.974	PT 19+43.01	PT 532025.163	PT 69937.134	203.60	1653.91	N82° 43' 57"W	7° 03' 12"
C5	PC 19+43.01	PC 532025.163	PC 69937.134	PT 20+60.78	PT 532112.013	PT 69912.128	117.78	48.00	N16° 03' 43"W	140° 35' 21"



**SOUTHBRIDGE RAMP B POND
OUTLET STRUCTURE BAFFLE WALL**
NOT TO SCALE



SECTION B-B
NOT TO SCALE

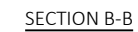
DEBRIS & SAFETY GRATE
NOT TO SCALE



DETENTION POND ANTI-SEEP COLLAR DETAIL
NOT TO SCALE



SECTION C-C



RIPRAP CONSTRUCTION NOTES:

1. GEOTEXTILE FABRIC TO EXTEND BENEATH THE ENTIRE LENGTH OF THE APRON ENDWALL SECTION AND BENEATH ALL RIPRAP PLACED.
2. COMPLETE GEOTEXTILE FABRIC AND RIPRAP INSTALLATION PRIOR TO STORM WATER FLOW.
3. PLACE LIGHT RIPRAP TO A MINIMUM OF 12" THICK AND PLACE MEDIUM RIPRAP TO A MINIMUM OF 18" THICK.

RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

SEE POND OVERVIEW SHEET FOR LOCATIONS

USE SECTIONS B-B & C-C FOR DITCH/SWALE INFLOWS TO POND
SEE POND OVERVIEW SHEET FOR LOCATIONS

MATERIAL SYMBOLS

 SAND
  CLAY

 TOPSOIL
  SILT

LEGEND OF BORING

BORING #/EL. STA./OFFSET

TOPSOIL

CLAY

SILT

SAND WITH SILT

SILT WITH SAND

SAND

S.T. (17)

0.25⁽³⁾

(1) UNCONFINED STRENGTH, TESTED IN ACCORDANCE WITH ASTM D2166

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

 AT TIME OF DRILLING
 END OF DRILLING
 AFTER DRILLING

NOTE

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING ID	DATE COMPLETED	NORTHING	EASTING
68-SCPB-01	2/28/2023	532089.5	69949.45
68-SCPB-02	6/7/2023	532015.3	70250.66
68-SCPB-03	2/28/2023	532192.3	70115.22

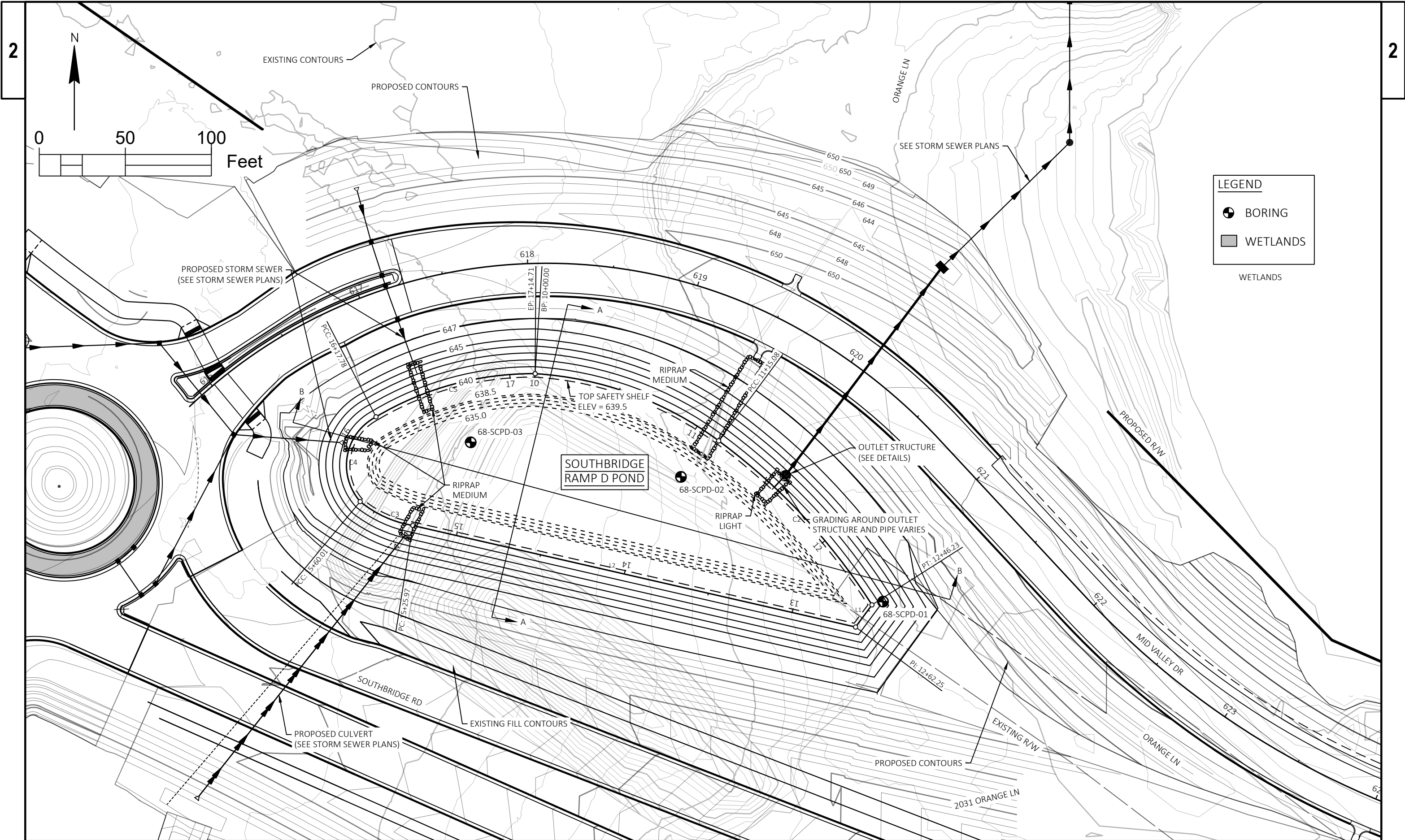
BORINGS COMPLETED BY GESTRA ENGINEERING, INC.
ALL COORDINATES REFERENCED TO WCCS - BROWN COUNTY (NAD83) AND ELEVATIONS ARE NAVD88.

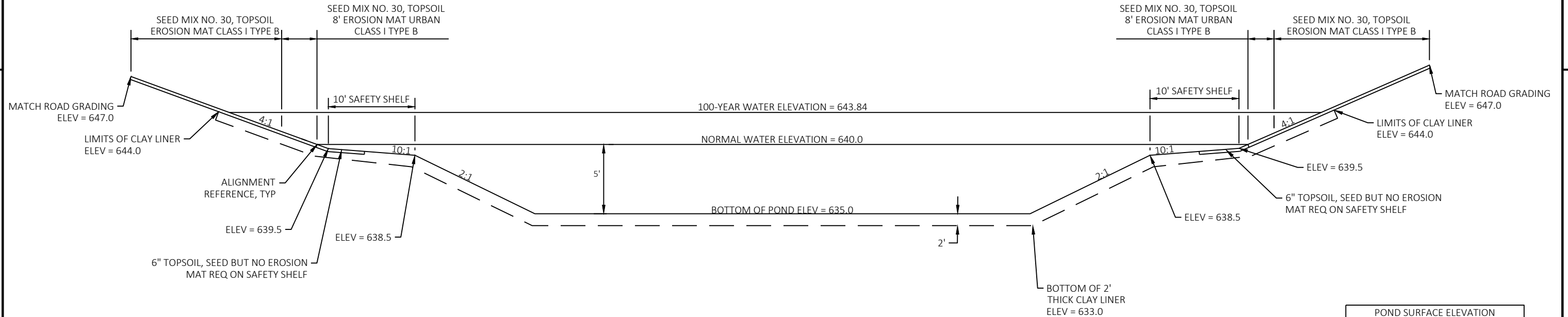
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NOTE

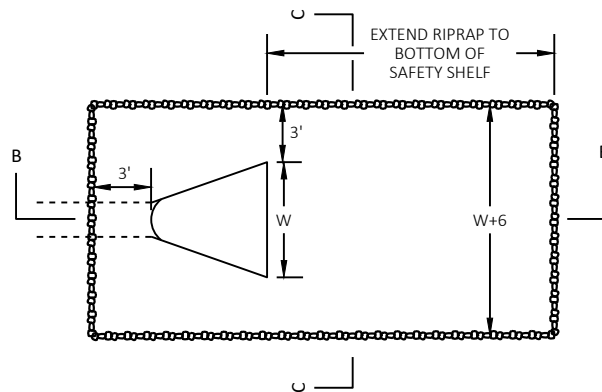
GROUNDWATER LEVEL FLUCTUATIONS MAY OCCUR WITH TIME AND SEASONAL CHANGES DUE TO VARIATIONS IN PRECIPITATION, EVAPORATION, SURFACE WATER RUNOFF, AND LOCAL DEWATERING. PERCHED WATER POCKETS AND A HIGHER WATER TABLE MAY ALSO BE ENCOUNTERED DURING WET WEATHER PERIODS.



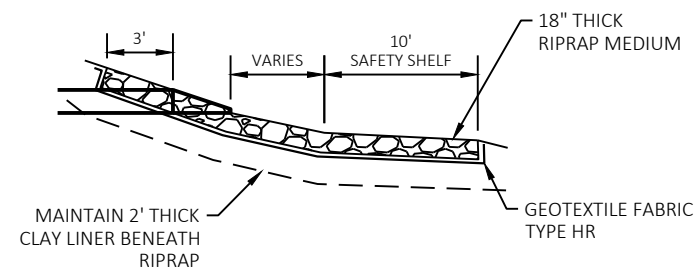


SOUTHBIDGE RAMP D POND
SECTION AA
NOT TO SCALE

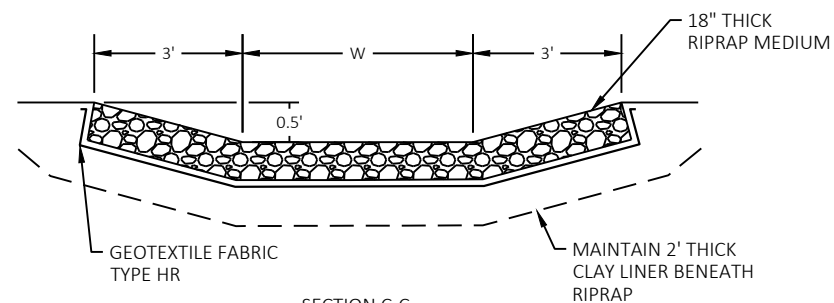
POND SURFACE ELEVATION	
RETURN INTERVAL	WATER ELEVATION
2-YEAR	642.10
5-YEAR	642.47
10-YEAR	642.81
25-YEAR	643.26
50-YEAR	643.56
100-YEAR	643.84



PLAN VIEW



SECTION B-B



SECTION C-C

RIPRAP AND GEOTEXTILE FABRIC DETAIL
AT APRON ENDWALLS
SEE POND OVERVIEW SHEET FOR LOCATIONS

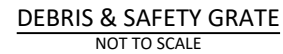
ALIGNMENT - SOUTHBIDGE RAMP D POND

SEGMENT NUMBER	START STATION	START NORTHING	START EASTING	END STATION	END NORTHING	END EASTING	LENGTH	RADIUS	LINE/CHORD BEARING	DELTA ANGLE
C1	PC 10+00.00	PC 533411.188	PC 69164.448	PT 11+15.08	PT 533372.178	PT 69271.043	115.08	200.55	S69° 53' 56"E	32° 52' 38"
C2	PC 11+15.08	PC 533372.178	PC 69271.043	PT 12+46.23	PT 533276.866	PT 69360.049	131.15	355.72	S43° 02' 26"E	21° 07' 27"
L1	12+46.23	533276.866	69360.049	12+62.25	533263.982	69350.535	16.02		S36° 26' 40"W	
L2	12+62.25	533263.982	69350.535	15+25.97	533322.971	69093.492	263.72		N77° 04' 30"W	
C3	PC 15+25.97	PC 533322.971	PC 69093.492	PT 15+60.01	PT 533336.854	PT 69062.850	34.04	63.95	N65° 37' 31"W	30° 29' 50"
C4	PC 15+60.01	PC 533336.854	PC 69062.850	PT 16+17.78	PT 533386.106	PT 69072.059	57.77	31.70	N10° 35' 25"E	104° 24' 21"
C5	PC 16+17.78	PC 533386.106	PC 69072.059	PT 17+14.71	PT 533411.188	PT 69164.448	96.93	177.89	N74° 48' 41"E	31° 13' 07"

RIPRAP CONSTRUCTION NOTES:

- GEOTEXTILE FABRIC TO EXTEND BENEATH THE ENTIRE LENGTH OF THE APRON ENDWALL SECTION AND BENEATH ALL RIPRAP PLACED.
- COMPLETE GEOTEXTILE FABRIC AND RIPRAP INSTALLATION PRIOR TO STORM WATER FLOW.
- PLACE LIGHT RIPRAP TO A MINIMUM OF 12" THICK AND PLACE MEDIUM RIPRAP TO A MINIMUM OF 18" THICK.

2



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

HIGH GROUNDWATER WAS ENCOUNTERED DURING SUBSURFACE EXPLORATION FOR THE POND. REVIEW THE GEOTECHNICAL REPORT, ASSOCIATED BORING LOGS, AND SPECIAL PROVISIONS FOR APPROPRIATE CONSTRUCTION MEANS AND METHODS TO COMPLETE POND WORK.

WET BASIN SHALL HAVE A TYPE 'A' CLAY LINER IN ACCORDANCE WITH THE PLAN DETAILS AND SPECIAL PROVISIONS. MAINTAIN CLAY LINER THICKNESS BELOW TOPSOIL AND RIPRAP.

SUPPLY OR FABRICATE SAFETY GRATE AND ATTACH TO TOP OF RISER PER PLAN DETAILS. FABRICATE AND ATTACH OVERSIZED TRASH GRATE TO THE ORIFICE USING NO. 4 REBAR OVER THE ORIFICE. OFFSET THE GRATE AWAY FROM THE ORIFICE OPENING. GRATE OPENINGS NO LARGER THAN 4". TOTAL OPEN AREA AT LEAST 56 SQ-IN SO PARTICLE CLOGGING DOES NOT INTERRUPT FLOW.

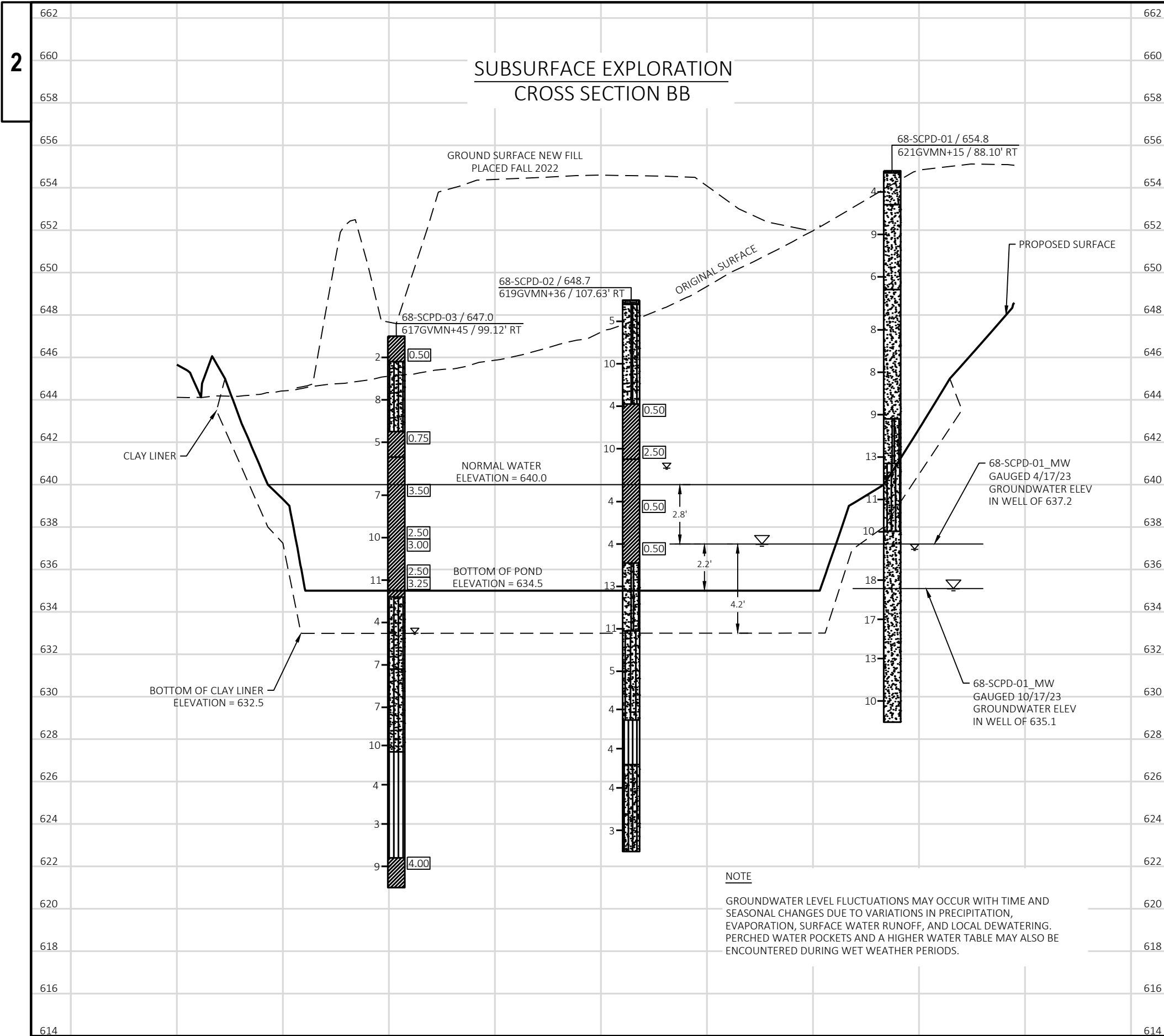
TREAT PORTION OF SAFETY SHELF IN FRONT OF POND OUTLET WITH GEOTEXTILE FABRIC TYPE R AND LIGHT RIPRAP TO DETER PLANT GROWTH IN FRONT OF OUTLET STRUCTURE. KEY RIPRAP 6" - 12" THICK INTO SAFETY SHELF TO MATCH FINISH GRADING ELEVATIONS.

POINT DISCHARGES ENTERING POND FROM ABOVE THE WATER SURFACE SHALL HAVE AN ARMORED RIPRAP FLUME RUNNING DOWN THE SLOPE TO PREVENT EROSION. RIPRAP FLUMES SHALL BE PARABOLIC SHAPED AND INCLUDE GEOTEXTILE FABRIC UNDER THE STONE. ALL RIPRAP SHALL INCLUDE GEOTEXTILE TYPE HR. RIPRAP TO EXTEND BELOW THE NORMAL WATER LINE AND THROUGH THE WIDTH OF THE SAFETY SHELF TO PREVENT SCOUR OF THE SHELF. RIPRAP AT APRON ENDWALLS SHALL EXTEND 2 FEET BEYOND THE SIDES OF THE ENDWALL AND EXTEND 2 FEET ABOVE THE TOP OF ENDWALL. RIPRAP SHALL EXTEND THROUGH LIMITS OF THE SAFETY SHELF. ENSURE AREAS TREATED WITH RIPRAP MAINTAIN THE MINIMUM 2-FOOT THICK CLAY LINER BENEATH THE RIPRAP AREA.

ALL DISTURBED AREAS OF THE POND ABOVE THE SAFETY SHELF SHALL BE RESTORED WITH TOPSOIL, SEED, AND EROSION MAT IN ACCORDANCE TO THE LANDSCAPING ITEMS.



WISDOT/CADDS SHEET 42



2

MATERIAL SYMBOLS

SAND

CLAY

TOPSOIL

SILT

LEGEND OF BORING

BORING #/EL.
STA./OFFSET

TOPSOIL

CLAY

SILT

SAND WITH SILT

SILT WITH SAND

SAND

S.T.

(1) 0.25

(2) 17

(1) UNCONFINED STRENGTH, TESTED IN ACCORDANCE WITH ASTM D2166

(2) UNLESS OTHERWISE SPECIFIED, THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING

END OF DRILLING

AFTER DRILLING

NOTE

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING ID	DATE COMPLETED	NORTHING	EASTING
68-SCPD-01	2/28/2023	533278.6	69366.53
68-SCPD-02	3/3/2023	533351.2	69249.11
68-SCPD-03	3/3/2023	533371.3	69127.05

BORINGS COMPLETED BY GESTRA ENGINEERING, INC.
ALL COORDINATES REFERENCED TO WCCS - BROWN COUNTY (NAD83) AND ELEVATIONS ARE NAVD88.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

POND DETAILS - SOUTHBRIDGE RD RAMP D POND

SHEET

E

FILE NAME : C:\USERS\DOT\B\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306471\DSGM\SCRATCH\FURLANO\POND_681610LT.DWG

LAYOUT NAME - Sheet-04

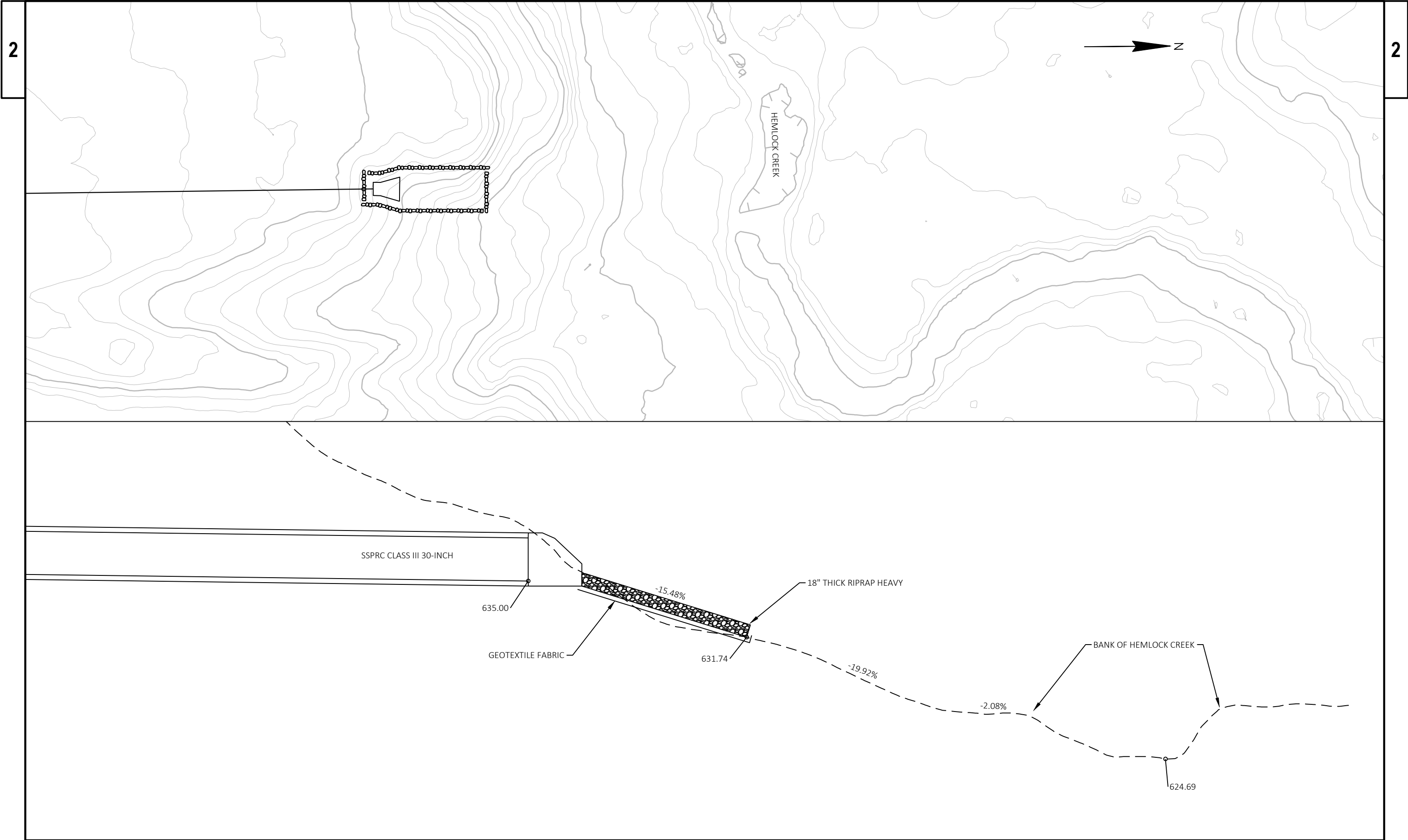
PLOT DATE : 2/15/2024 8:40 AM

PLOT BY : BRATTLUND, ERIK JOHN

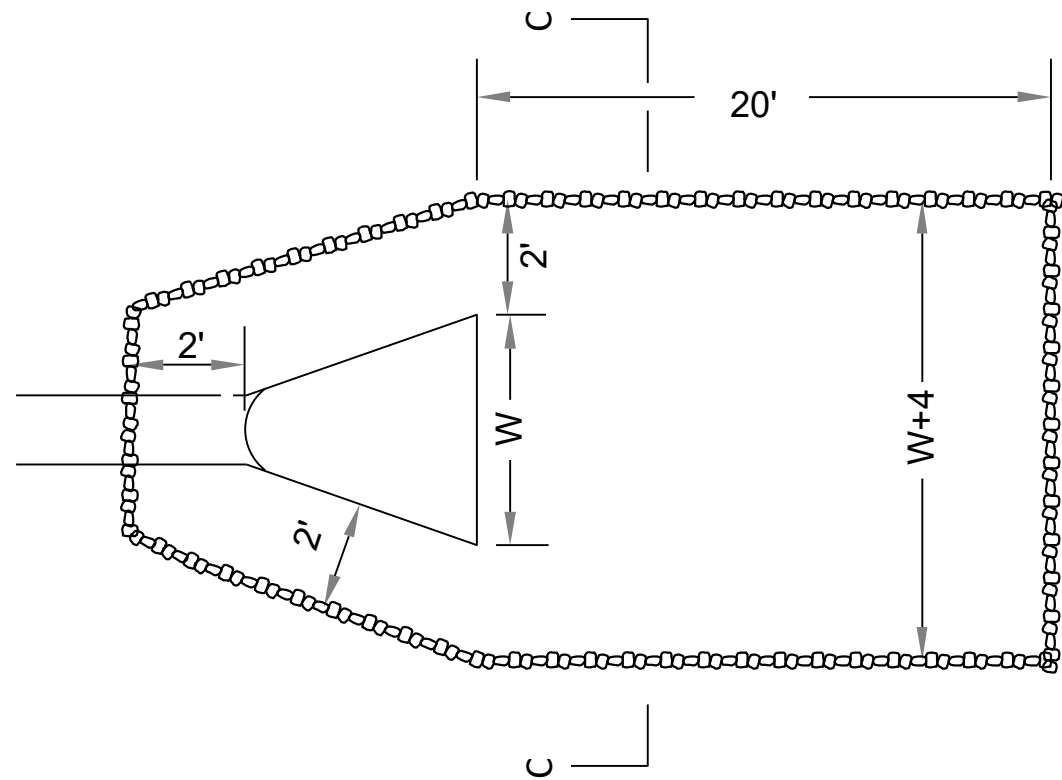
PLOT NAME :

PLOT SCALE : 1 IN:50 FT

WISDOT/CADD5 SHEET 42



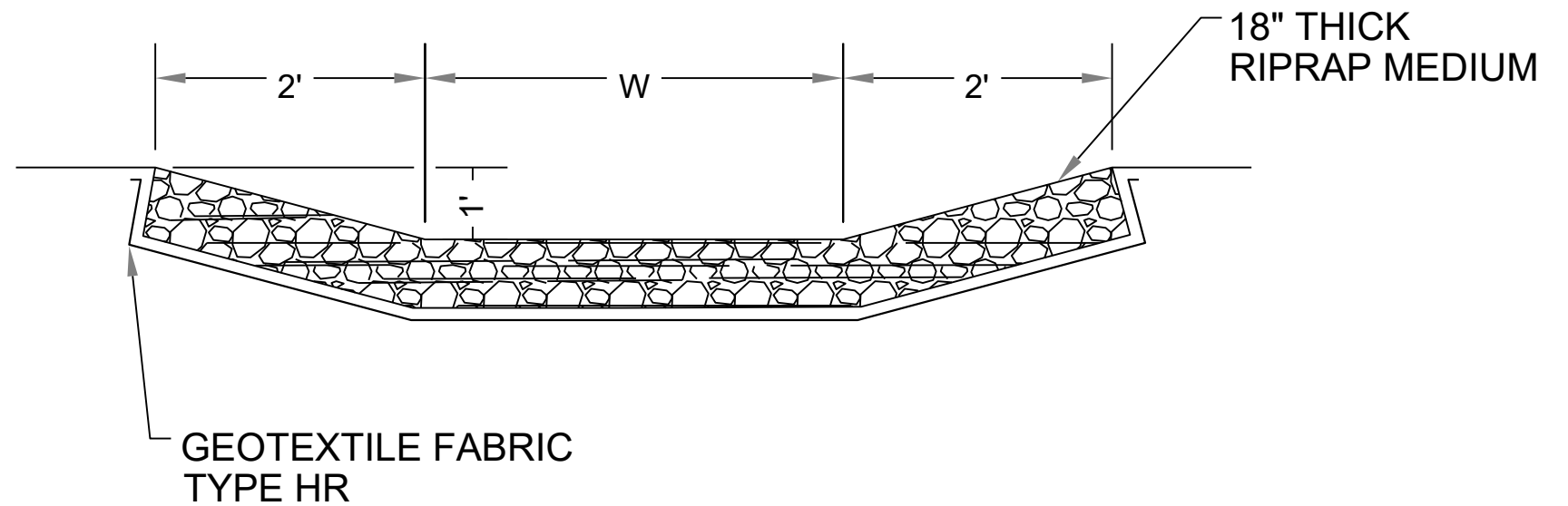
PROJECT NO: 1130-68-81	HWY: I-41	COUNTY: BROWN	OUTFALL DETAILS	SHEET	E
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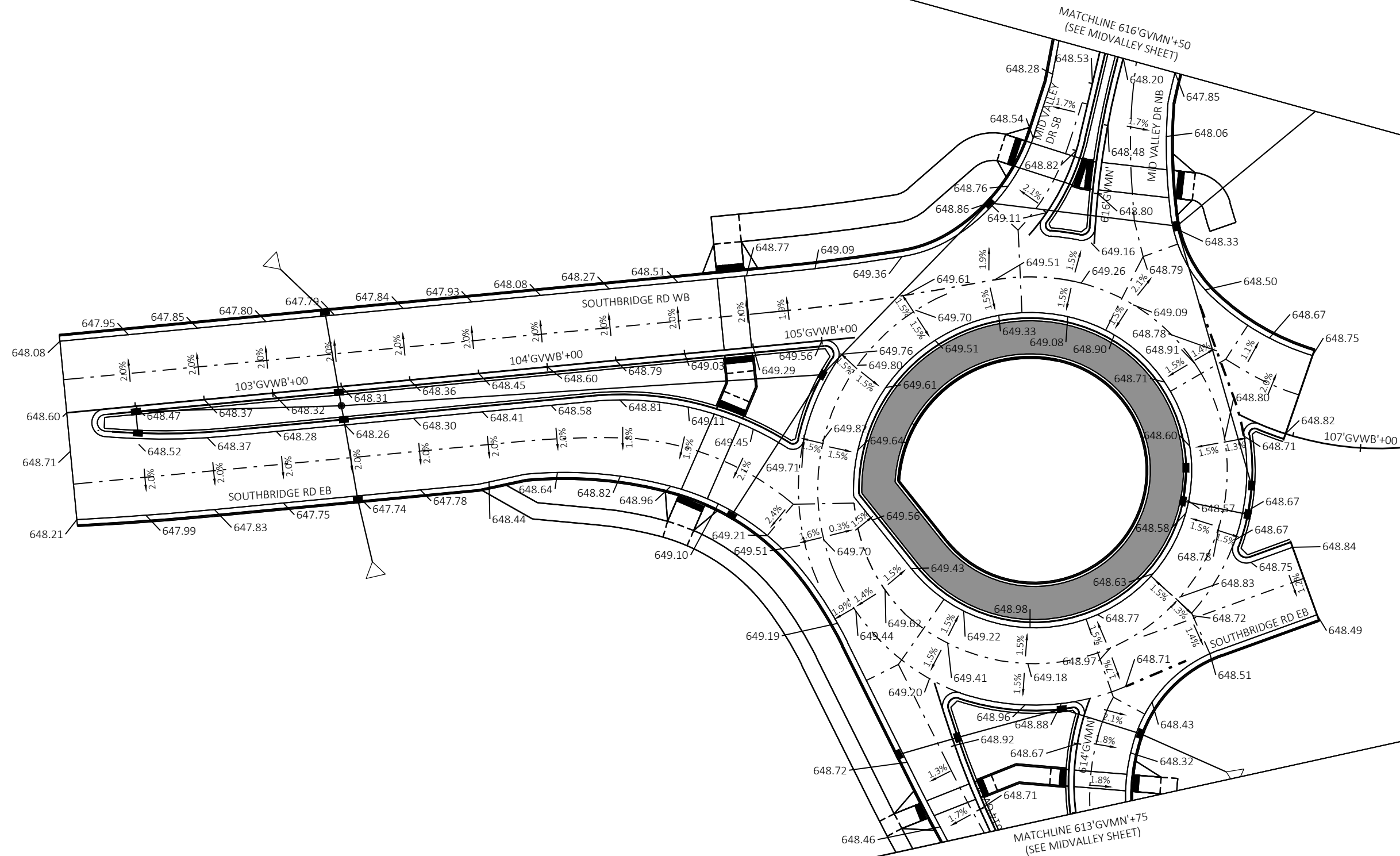
PLAN VIEW

RIPRAP AND GEOTEXTILE FABRIC DETAIL
AT APRON ENDWALL

USE PROFILE AND SECTION C-C FOR DITCH/SWALE INFLOWS TO CREEK



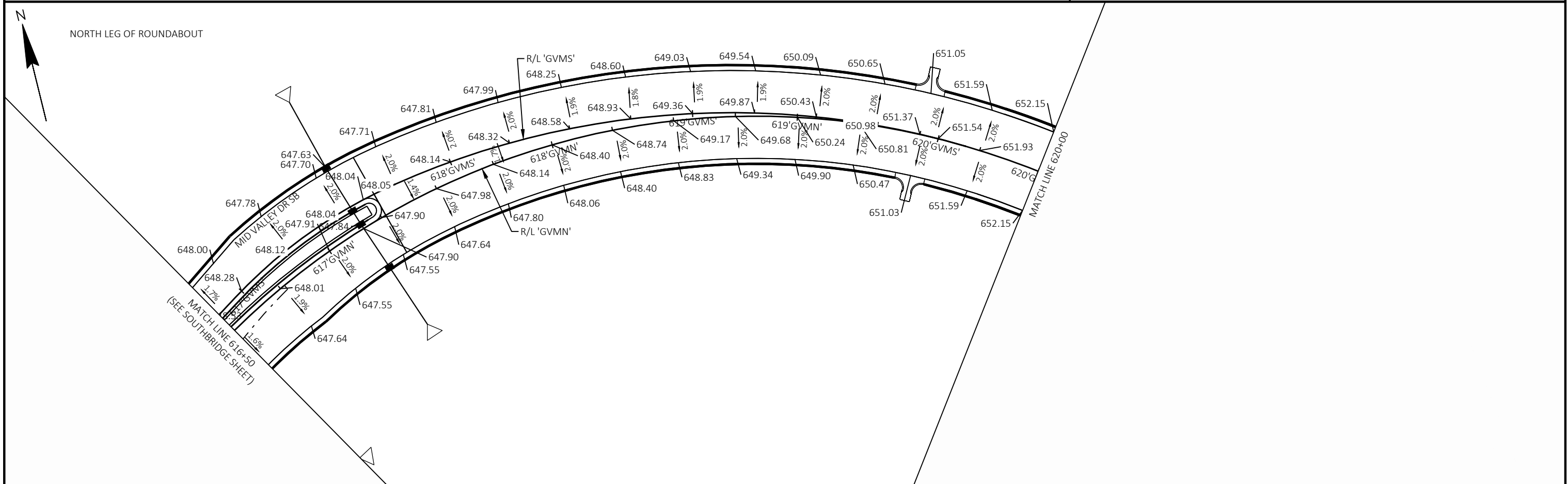
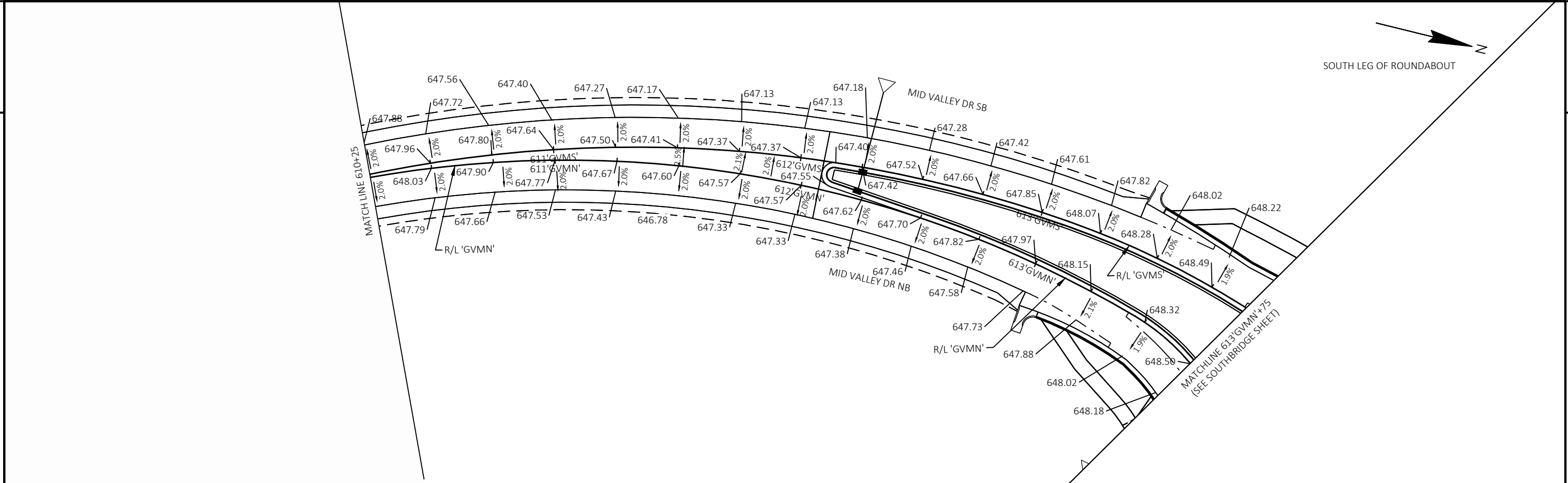
SECTION C-C



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	INTERSECTION DETAILS - SOUTHBRIDGE RD	SHEET	E
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2

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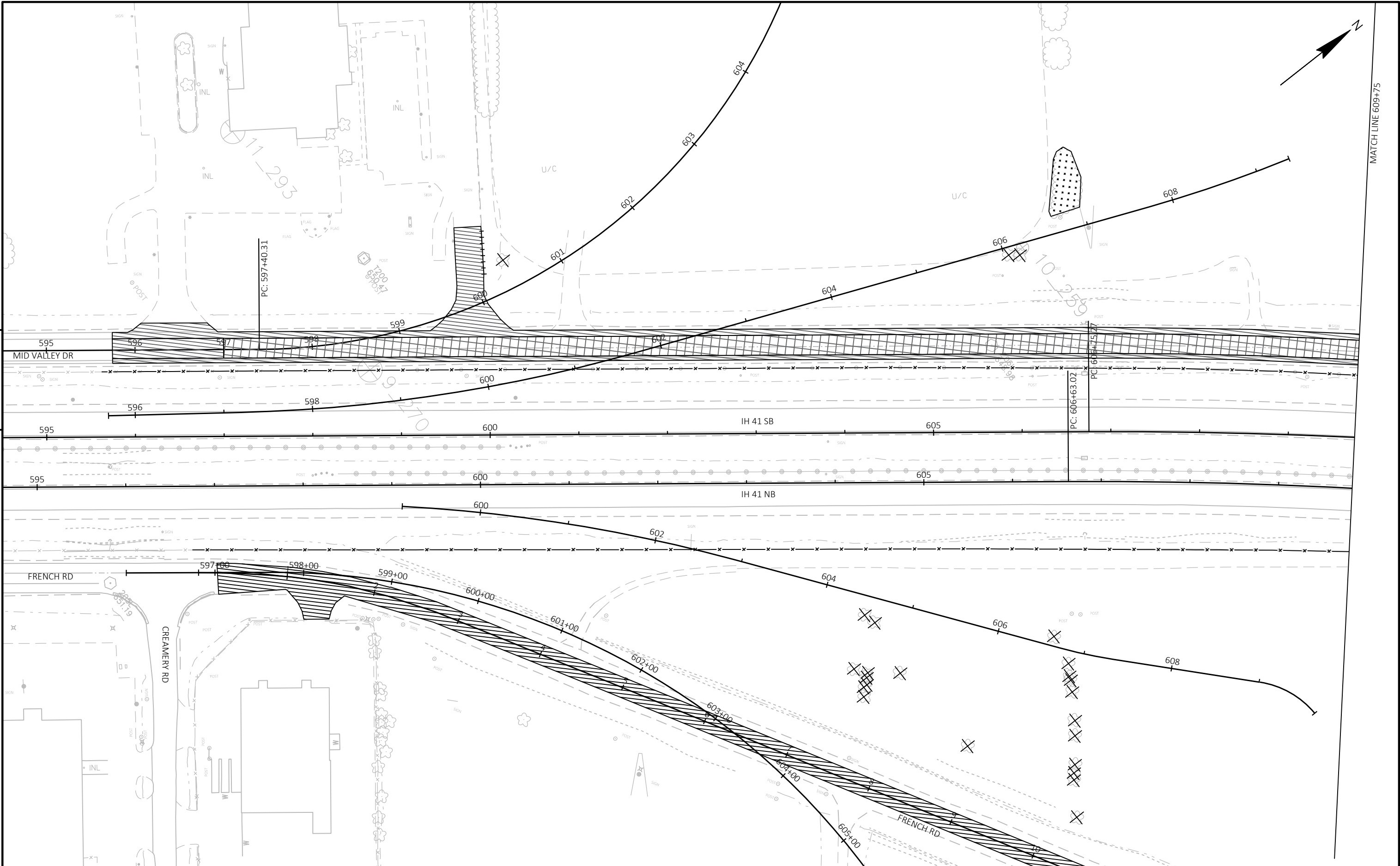
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	INTERSECTION DETAILS - SOUTHBRIDGE RD	SHEET	E
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REMOVALS LEGEND

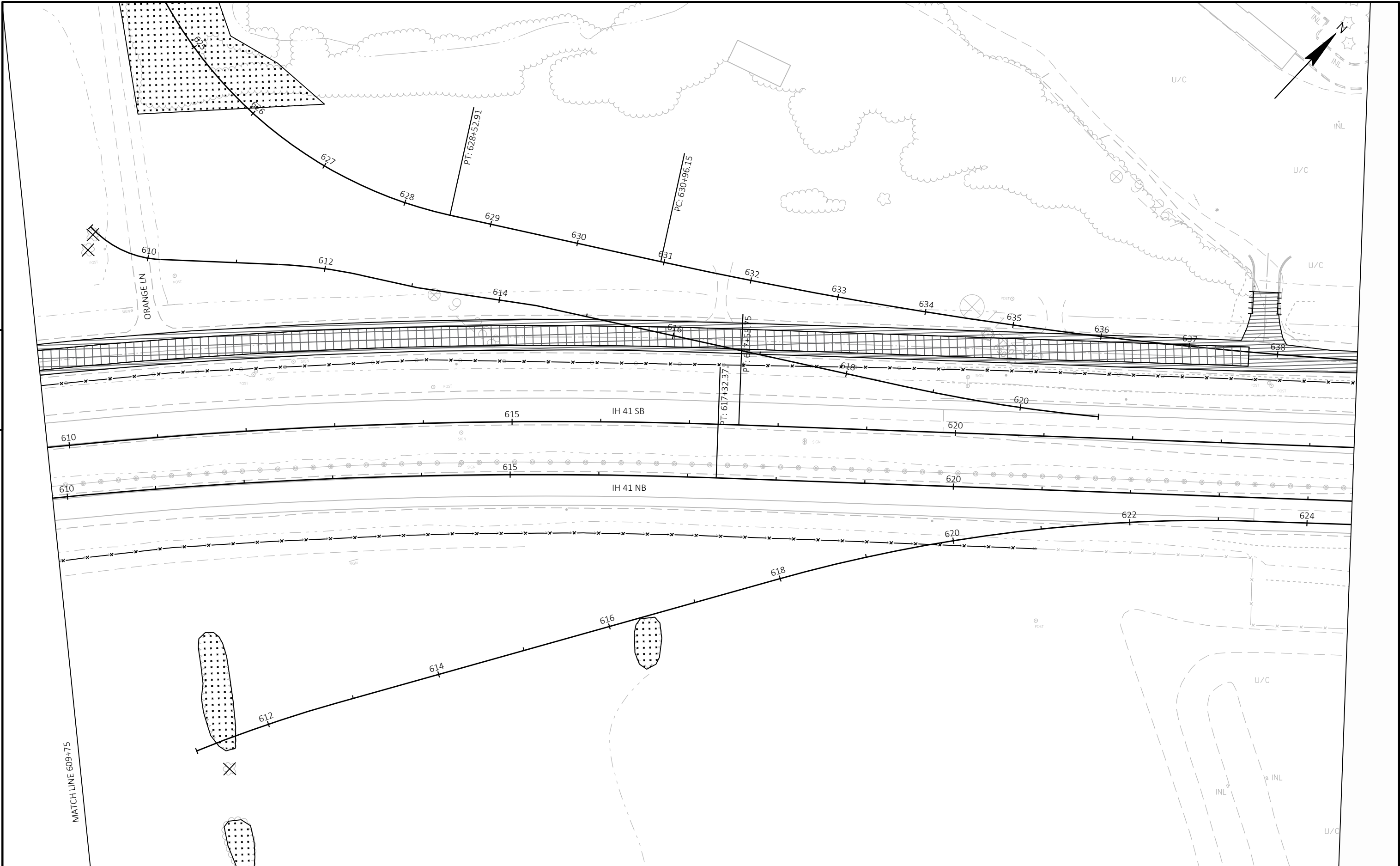
	REMOVING STRUCTURE
	CLEARING & GRUBBING
	GRUBBING
	GRUBBING
	REMOVING ASPHALTIC SURFACE
	REMOVING CONCRETE PAVEMENT
	REMOVING CONCRETE SIDEWALK
	SAWING ASPHALT
	SAWING CONCRETE
	REMOVING FENCE
	REMOVING CURB AND GUTTER
	REMOVING INLETS
	REMOVING MANHOLES
	REMOVING SMALL PIPE CULVERTS

NOTE:
GRUBBING OUTSIDE OF THE SLOPE INTERCEPT IS ASSOCIATED WITH FENCE
REMOVAL AND REPLACEMENT. WHERE POSSIBLE, LIMIT IMPACTS TO EXISTING
VEGETATION.

SEE DRAINAGE, SIGNING, FTMS, AND SIGNAL PLANS FOR OTHER REMOVAL ITEMS.



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	REMOVALS PLAN	SHEET	E
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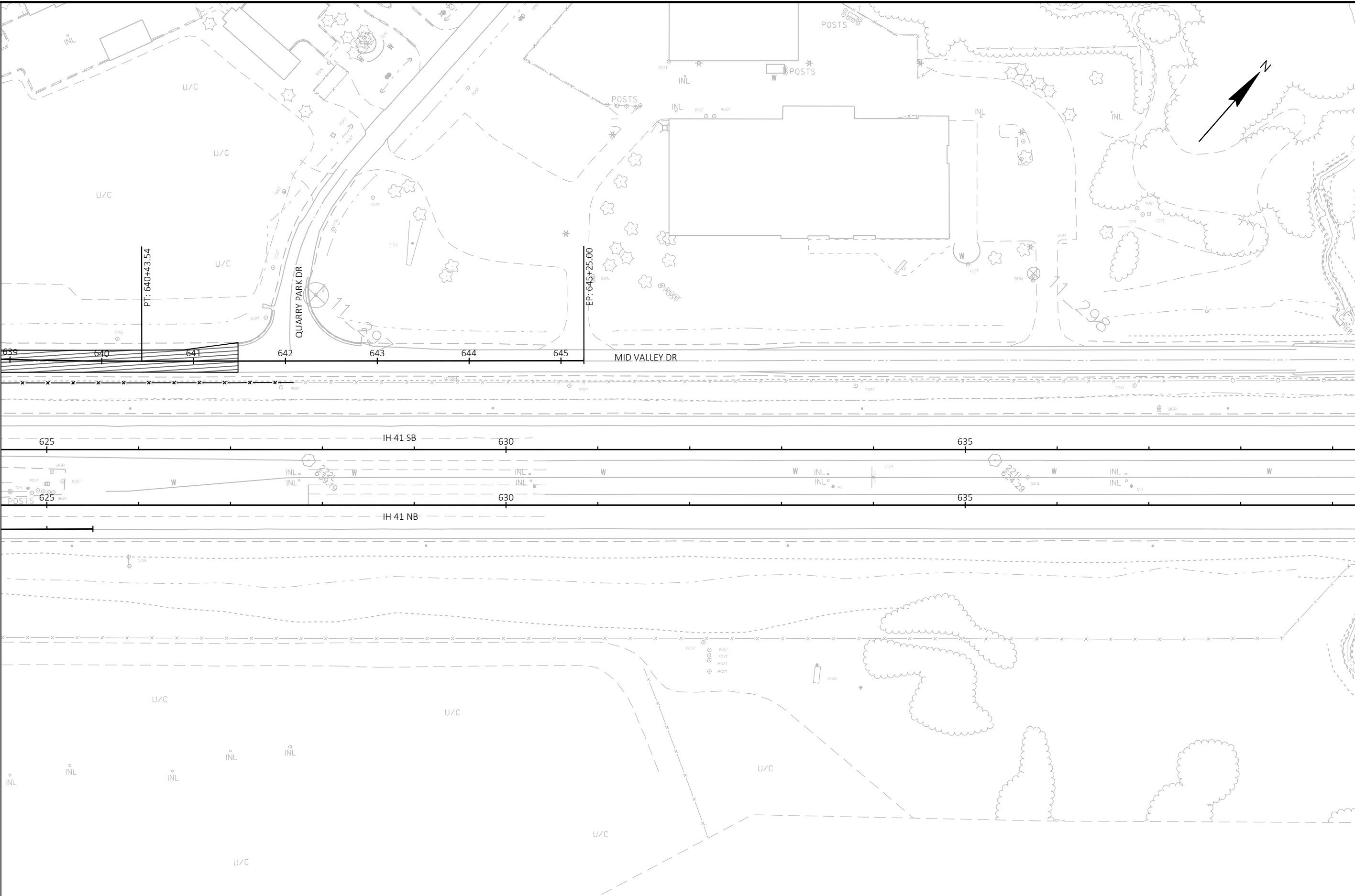


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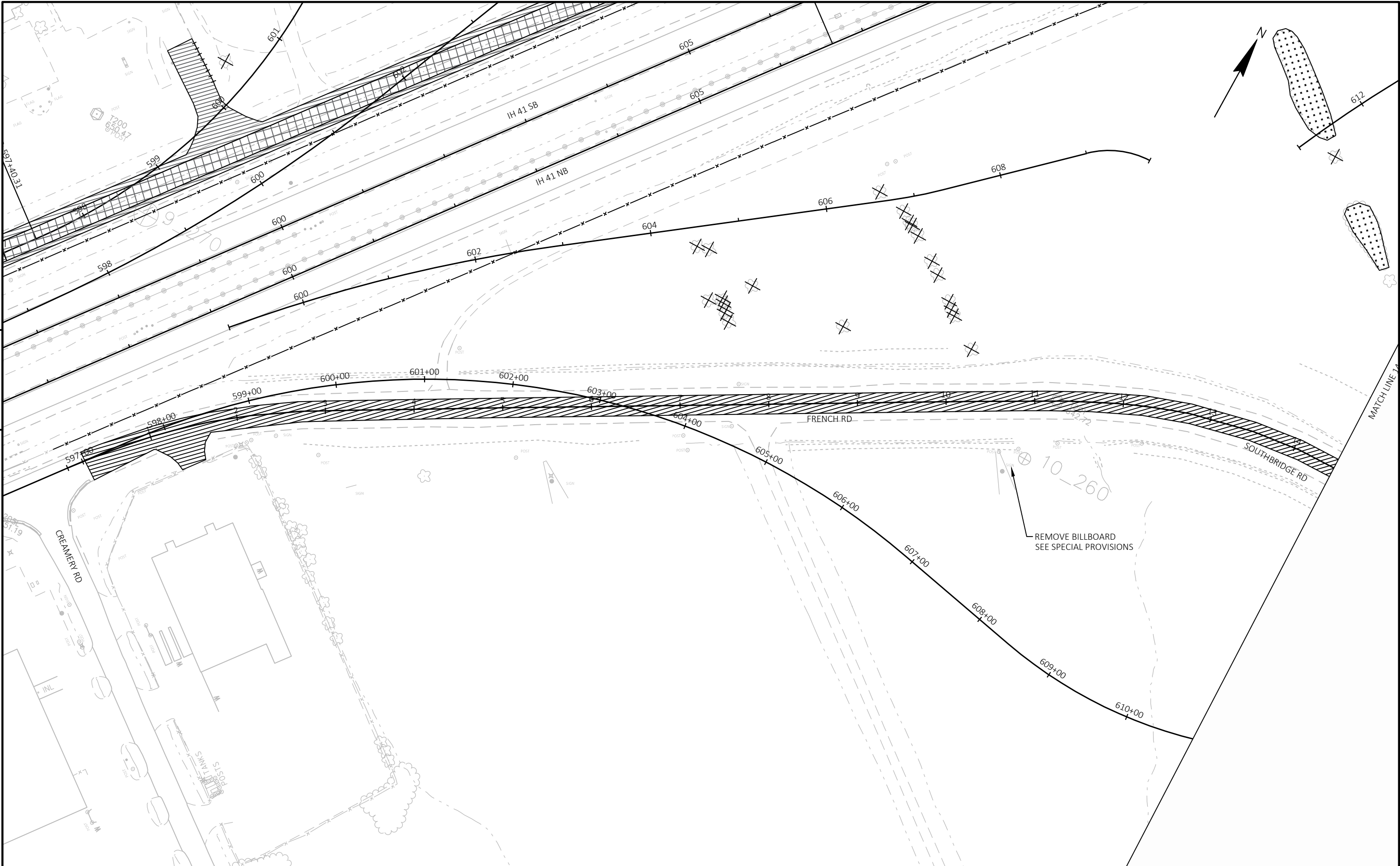
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	REMOVALS PLAN	SHEET	E
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5



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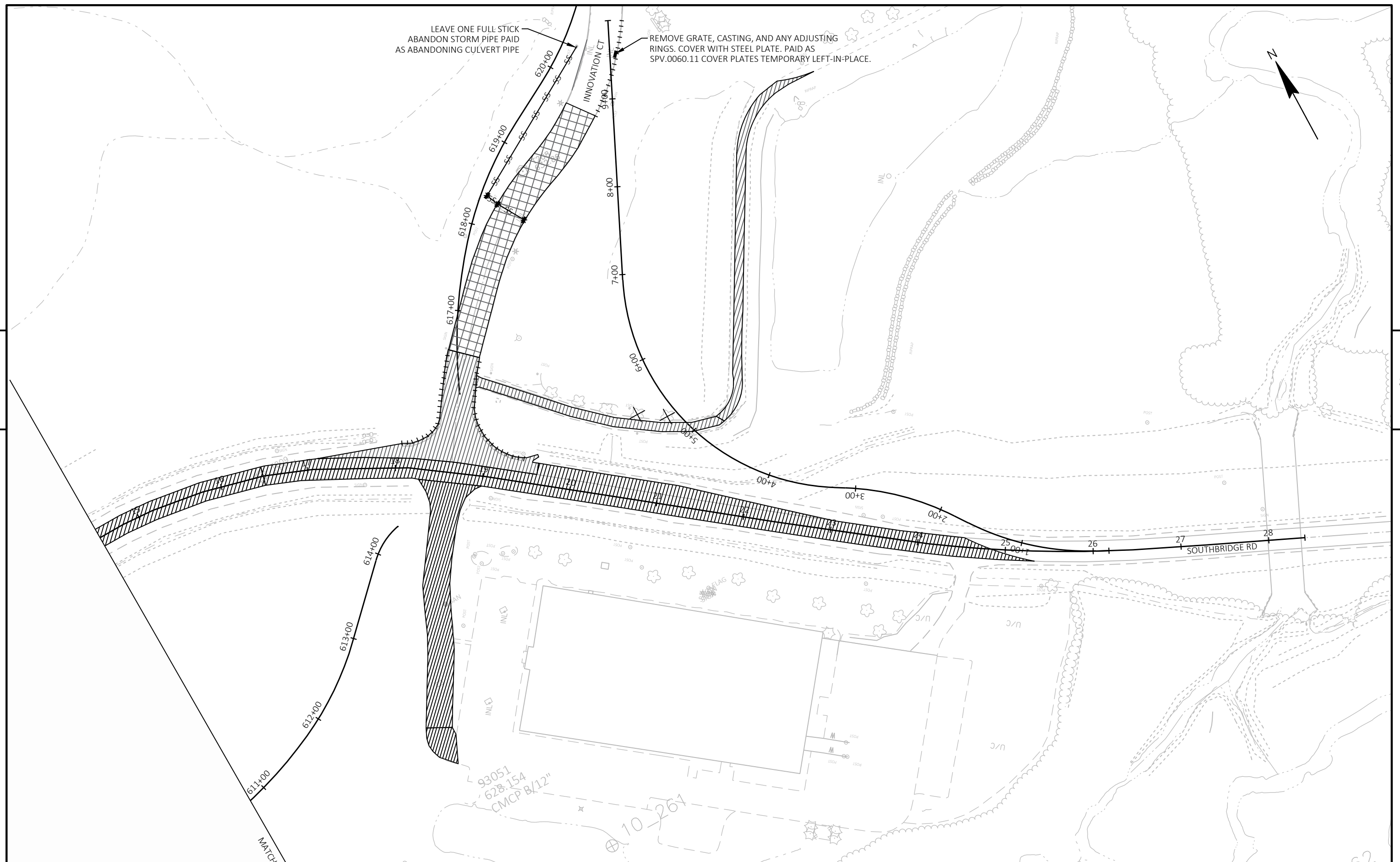
PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	REMOVALS PLAN	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	REMOVALS PLAN	SHEET	E
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5

5



PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

REMOVALS PLAN

SHEET

E

FILE NAME : C:\USERS\MIKEL\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSP\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\021101-RM.DWG
LAYOUT NAME - 05

PLOT DATE : 4/15/2024 2:48 PM

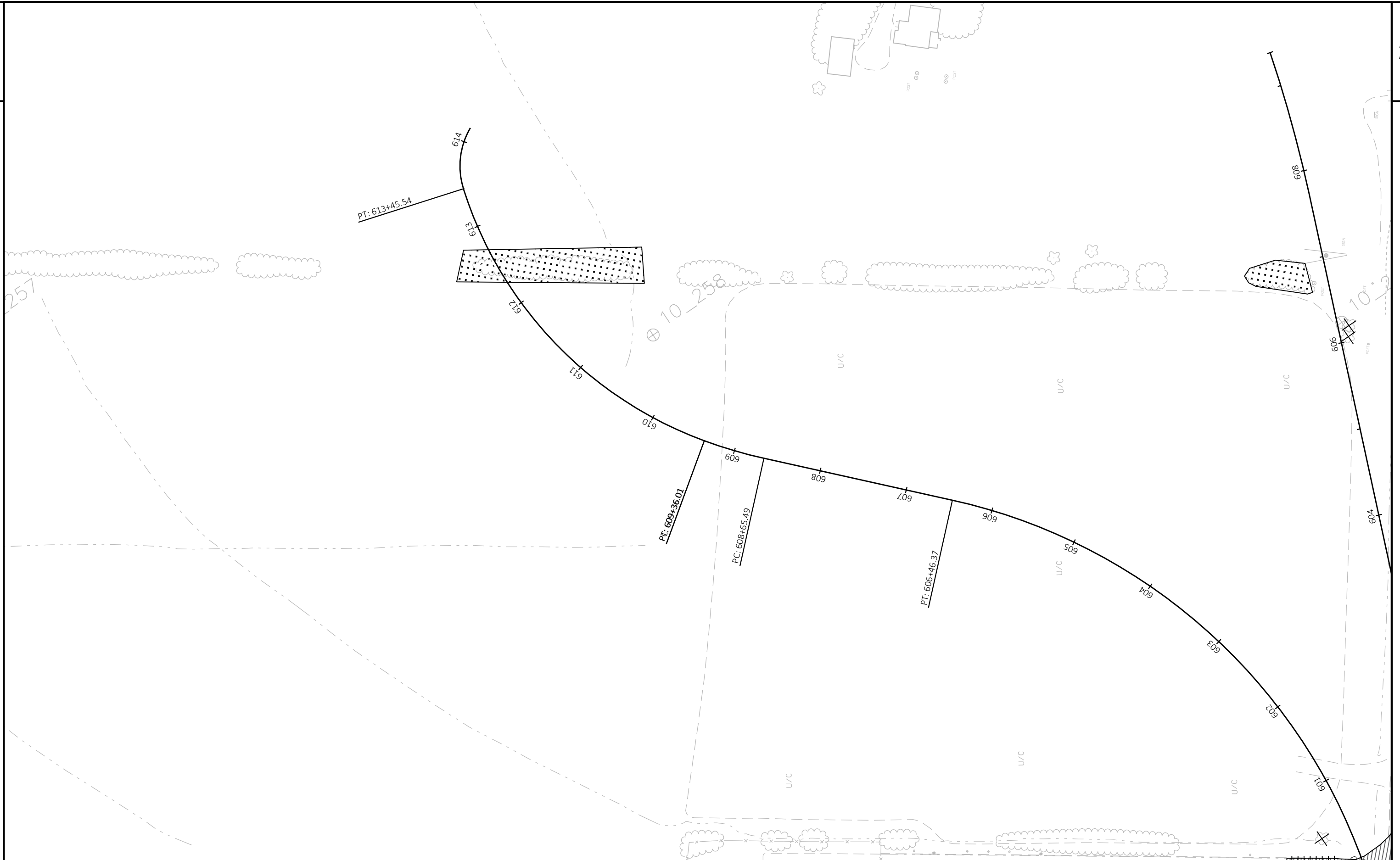
PLOT BY : MICHAEL LISKA

PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	REMOVALS PLAN	SHEET	E
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FILE NAME : C:\USERS\MIKEL\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSPLAN\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\02 DATE RM.DWG
LAYOUT NAME - 06

PLOT BY : MICHAEL LISKA

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	REMOVALS PLAN	SHEET	E
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FILE NAME :	C:\USERS\MIKE\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSP\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\02 DATE RM.DWG	DATE : 6/15/2024 2:50 PM	PLOT BY :	MICHAEL LISKA	PLOT NAME :		PLOT SCALE :	1 IN:100 FT	WISDOT/CADD SHEET 42
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PLAN DETAIL LEGEND

- AG01

BASE AGGREGATE DENSE 3/4-INCH
- AG02

BASE AGGREGATE DENSE 1 1/4-INCH
- AP3.5

HMA PAVEMENT 3 1/2-INCH
- AP05

HMA PAVEMENT 5-INCH
- CG12

CONCRETE CURB & GUTTER 18-INCH TYPE A
- CG13

CONCRETE CURB & GUTTER 18-INCH TYPE D
- CG14

CONCRETE CURB & GUTTER 30-INCH TYPE A
- CG15

CONCRETE CURB & GUTTER 30-INCH TYPE D
- CG16

CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL 12- INCH CURB HEAD
- CG33

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
- CG43

CURB RAMP DETECTABLE WARNING FIELD YELLOW
- CG46

CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW
- CM04

CONCRETE SIDEWALK 4-INCH

CM11

CONCRETE MEDIAN BLUNT NOSE

CM12

CONCRETE MEDIAN SLOPED NOSE

CP01

COLORING CONCRETE WISDOT RED

CP9.5

CONCRETE PAVEMENT 9 1/2-INCH

DR20

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

PV05

ASPHALTIC FLUME

PV06

CONCRETE SURFACE DRAIN

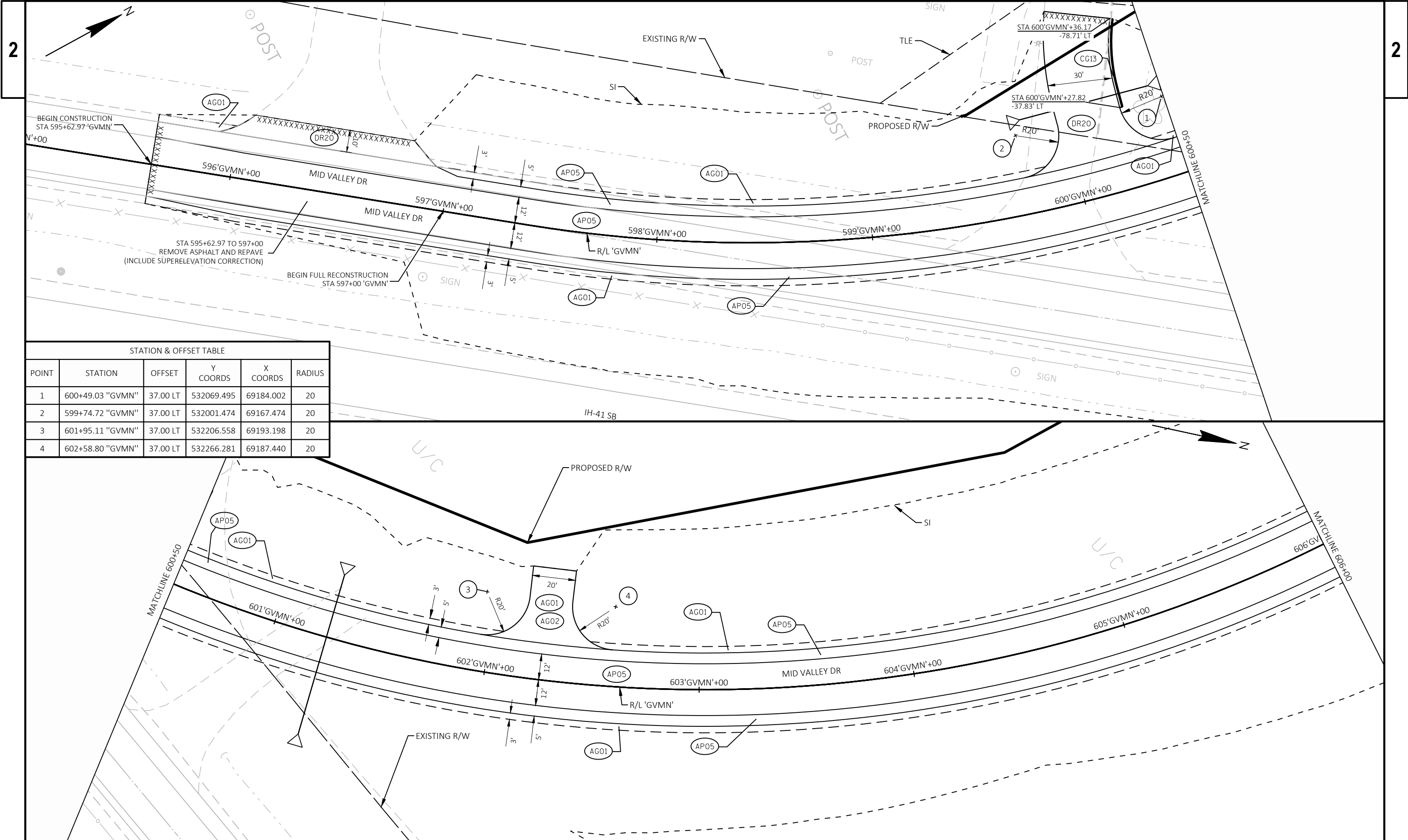
TA12

CONCRETE TRUCK APRON 12-INCH

XXXX

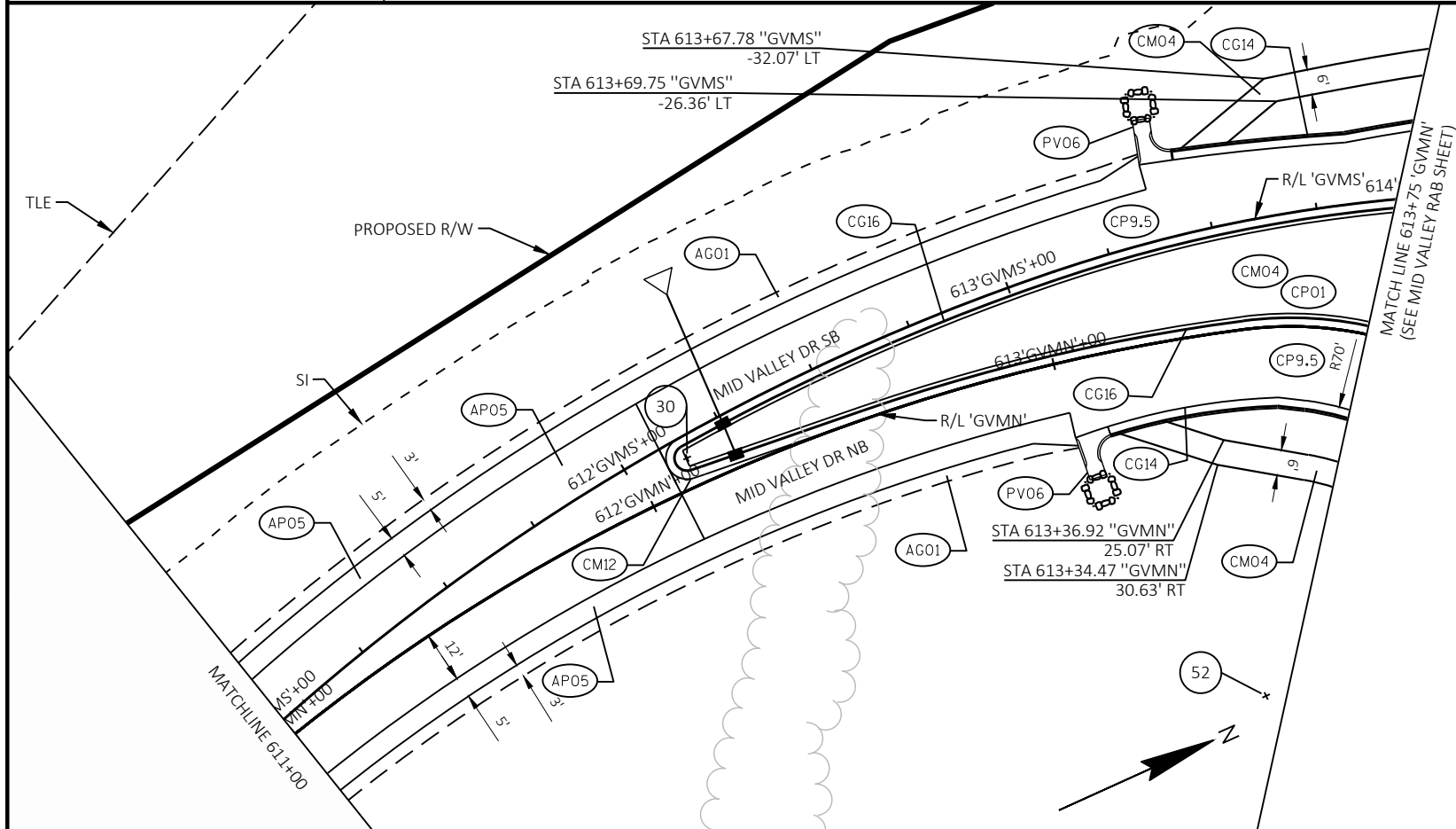
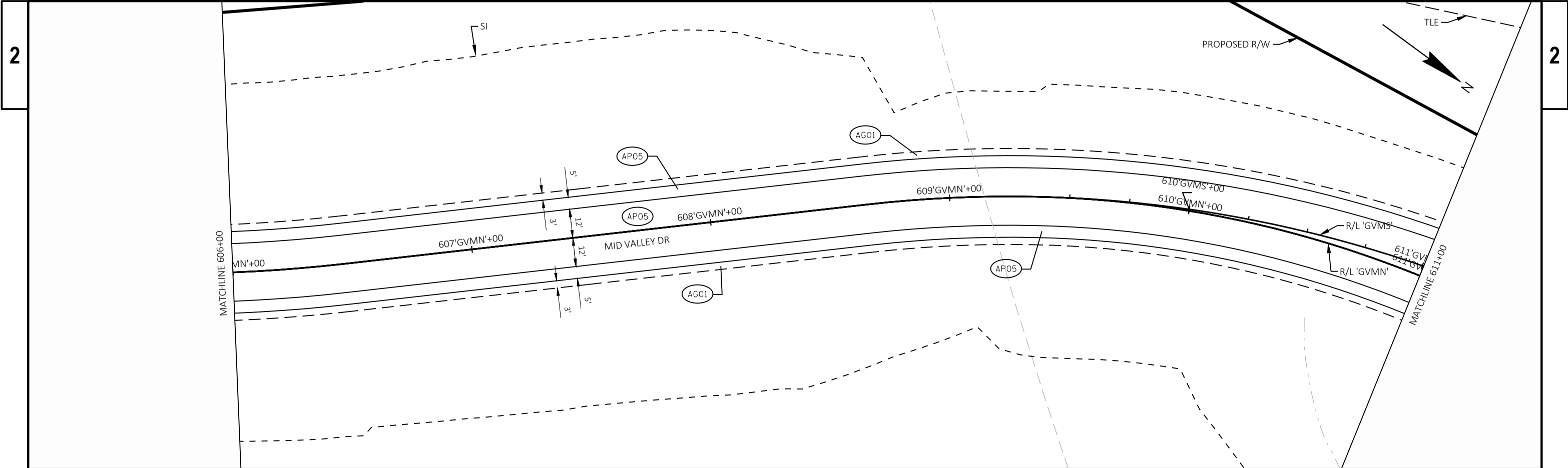
SAWING ASPHALT

NOTE:
SEE CURB RAMP DETAILS FOR
ADDITIONAL INFORMATION ON CURB
RAMP LAYOUTS AND ELEVATIONS.

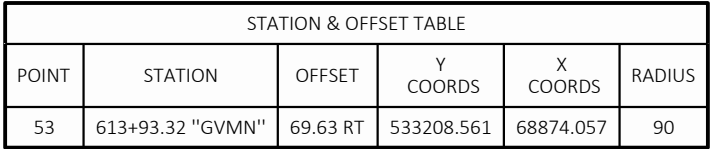


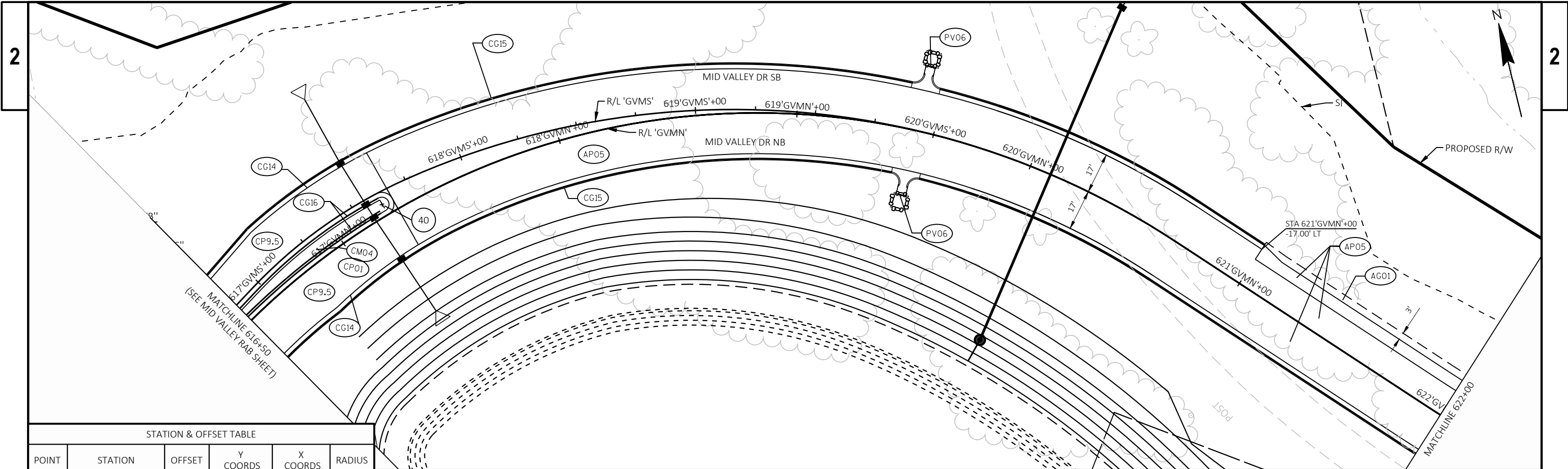
STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1	600+49.03 "GVMN"	37.00 LT	532069.495	69184.002	20
2	599+74.72 "GVMN"	37.00 LT	532001.474	69167.474	20
3	601+95.11 "GVMN"	37.00 LT	532206.558	69193.198	20
4	602+58.80 "GVMN"	37.00 LT	532266.281	69187.440	20

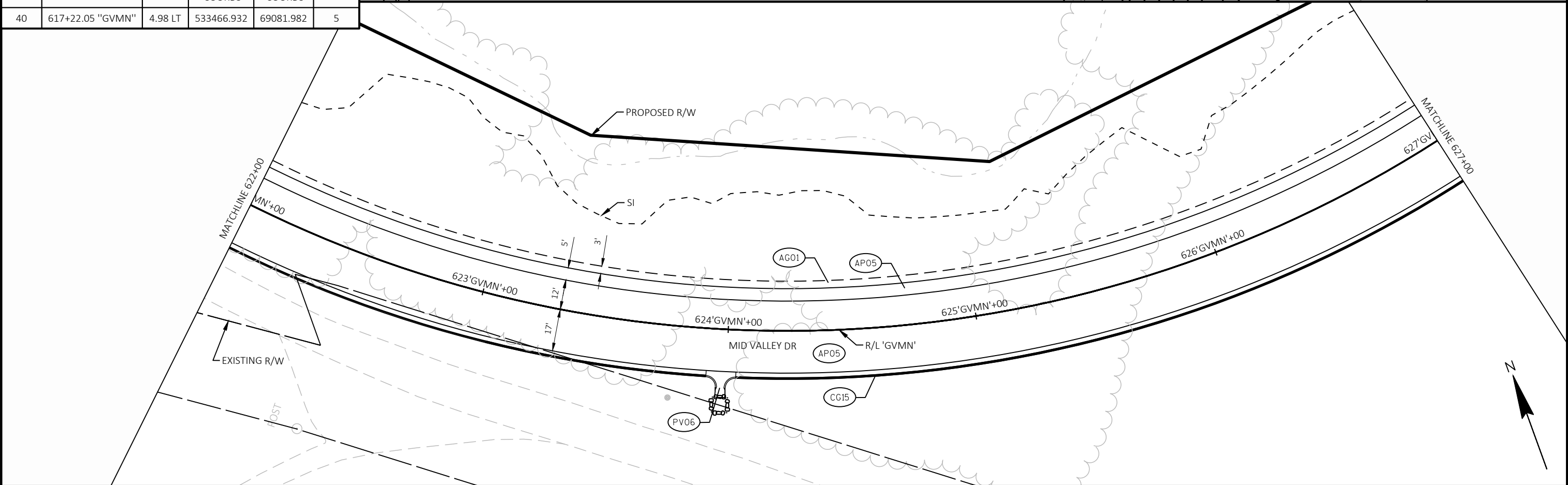


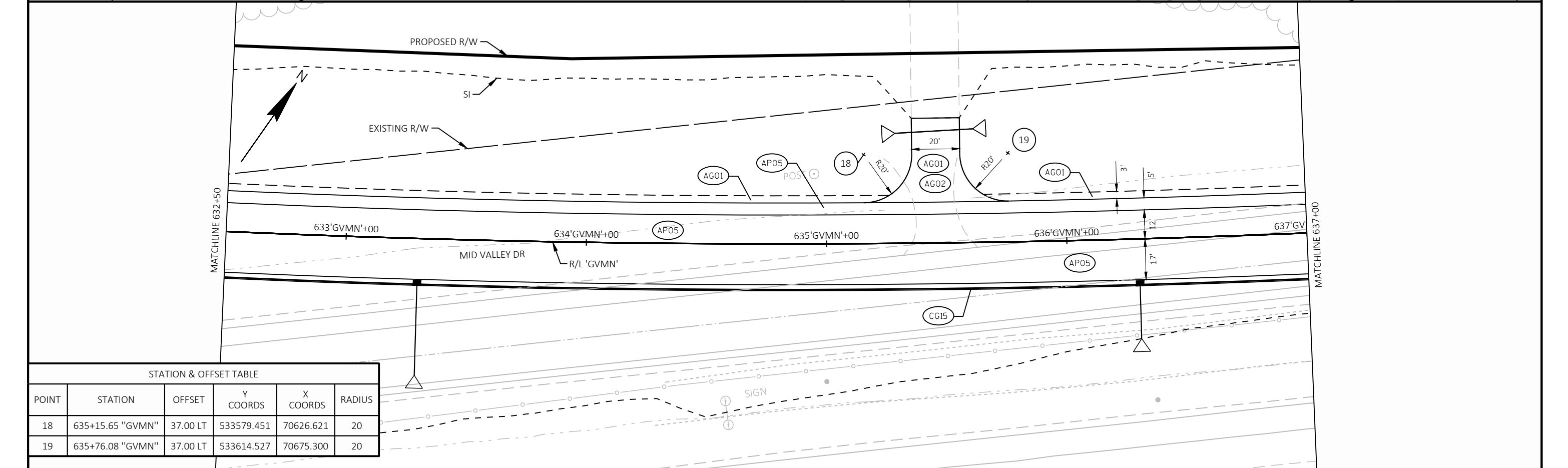
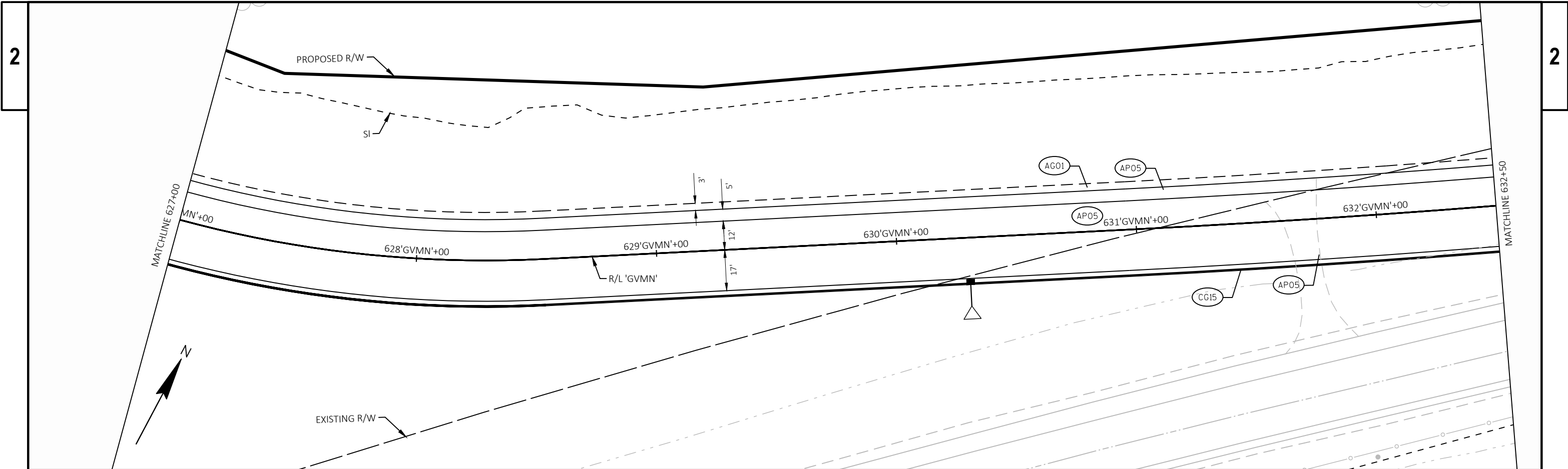
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
30	612+11.86 "GVMN"	6.99 LT	533089.951	68776.268	5
52	106+58.70 "GVEB"	88.41 RT	533190.852	68883.351	70



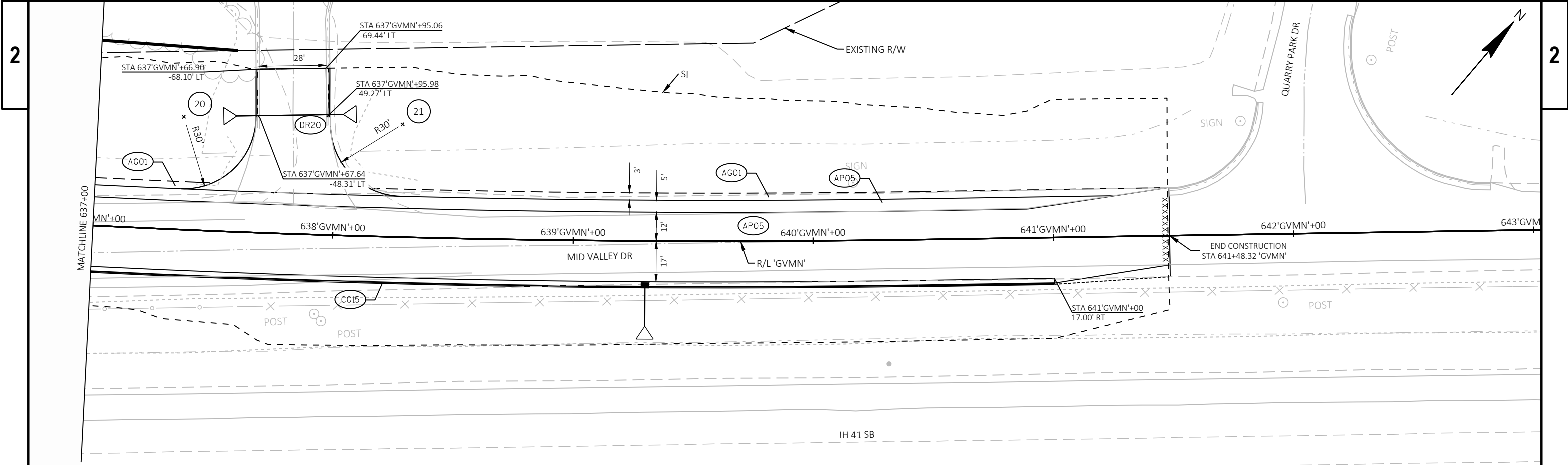


STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
40	617+22.05 "GVMN"	4.98 LT	533466.932	69081.982	5

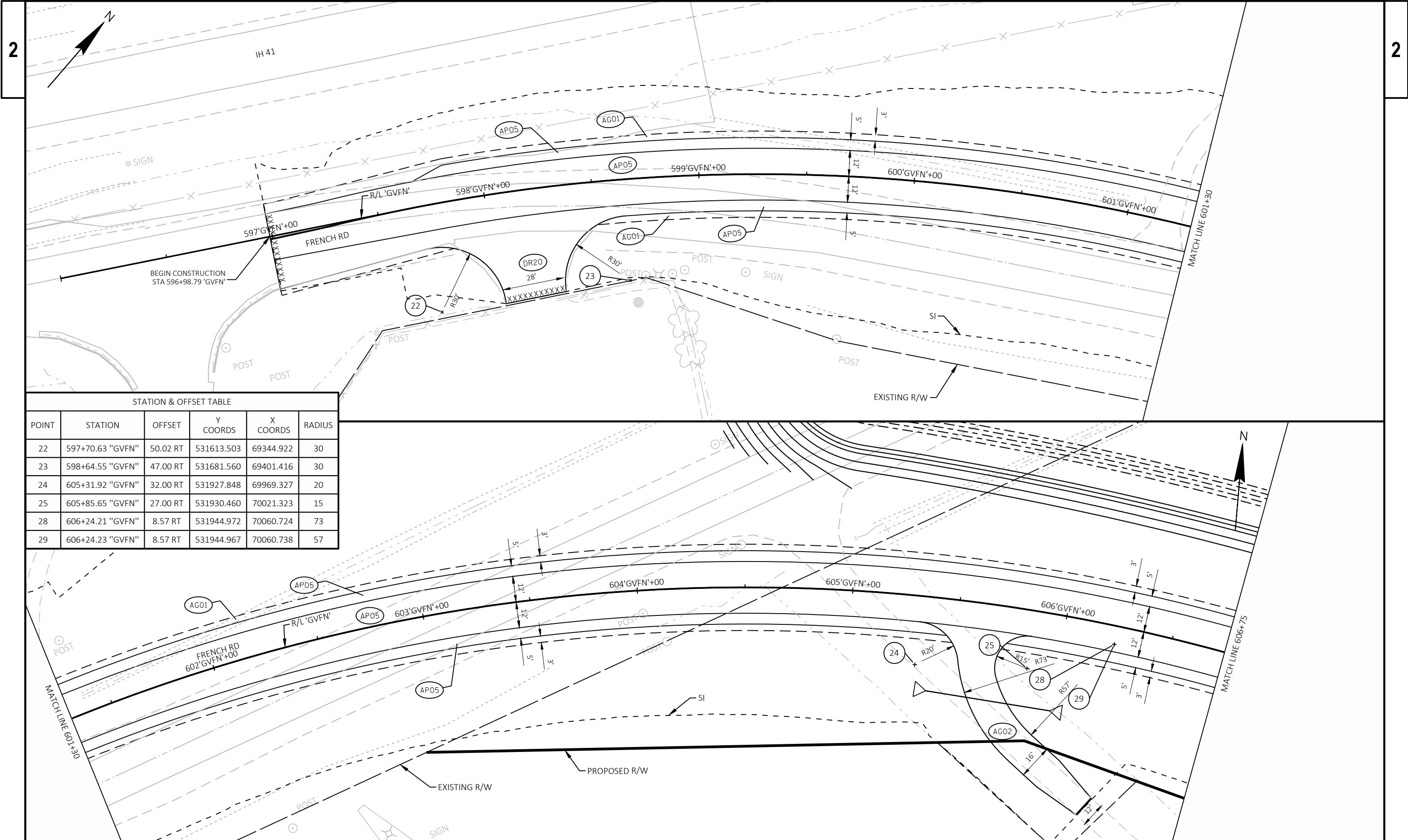




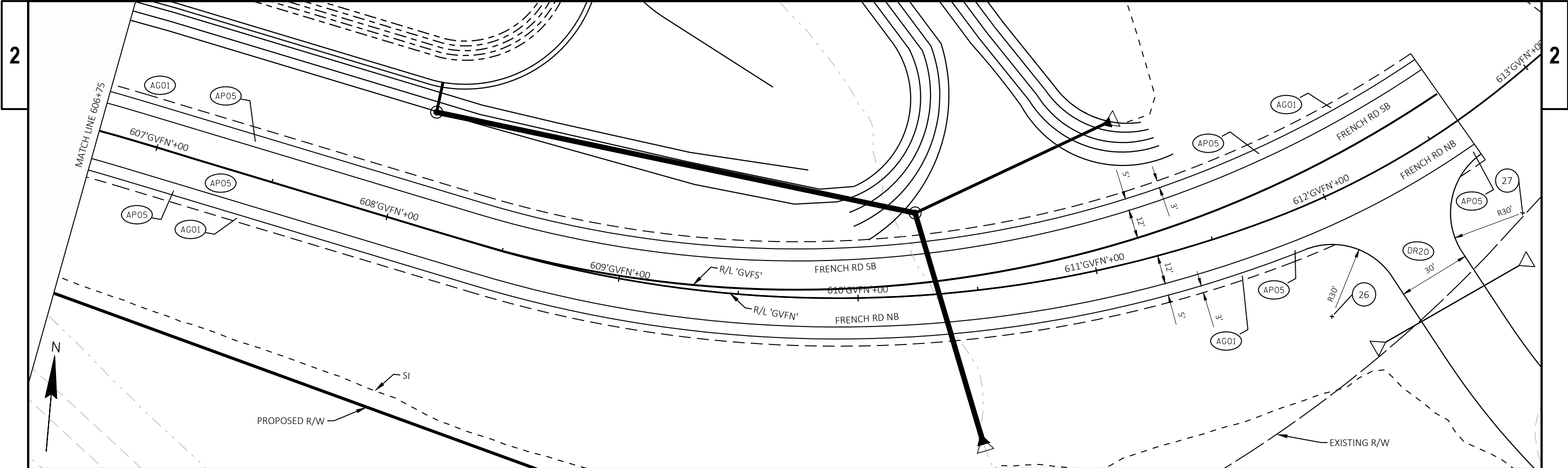
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
18	635+15.65 "GVMN"	37.00 LT	533579.451	70626.621	20
19	635+76.08 "GVMN"	37.00 LT	533614.527	70675.300	20



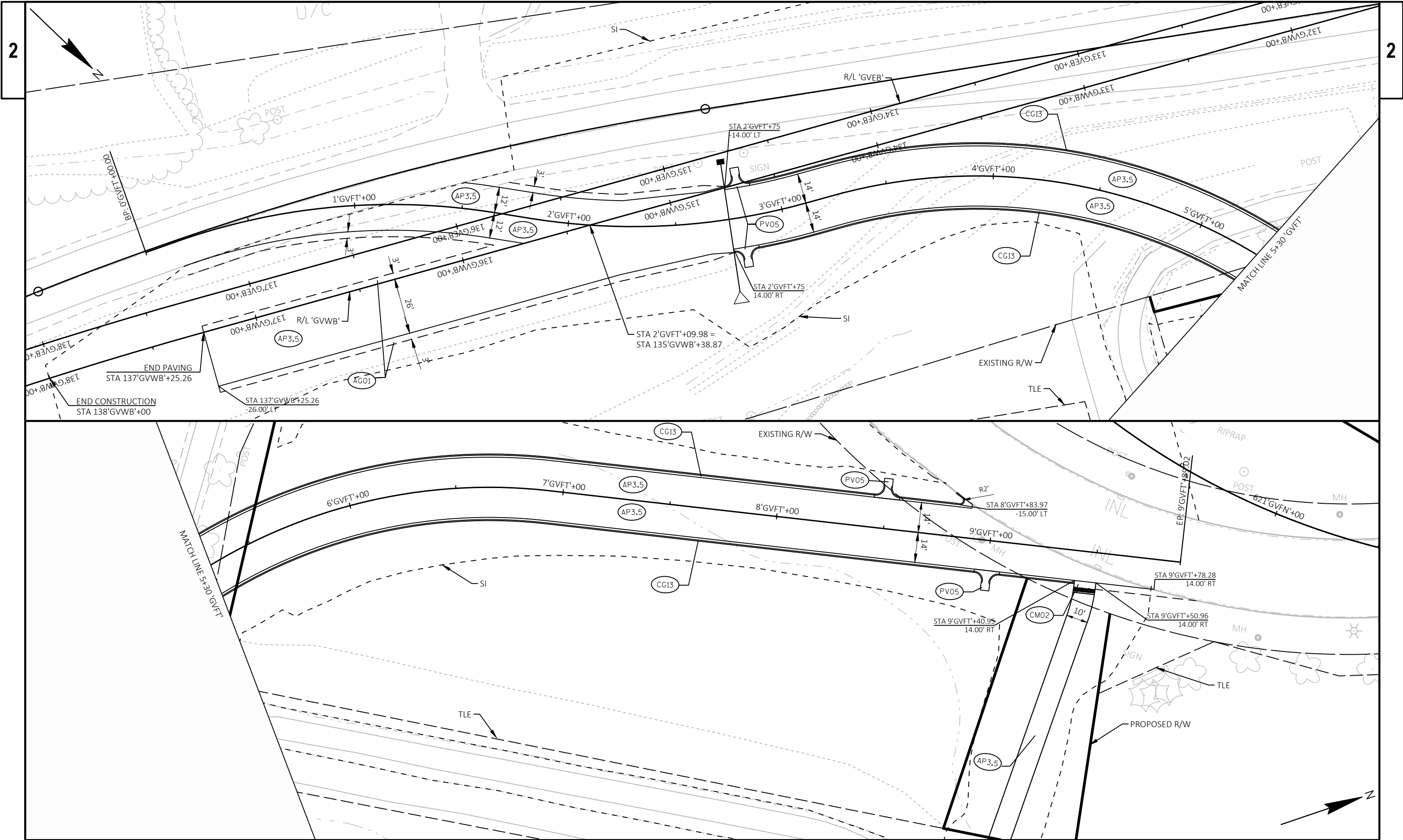
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
20	637+35.88 "GVMN"	47.00 LT	533717.869	70795.910	30
21	638+27.90 "GVMN"	47.00 LT	533774.464	70867.416	30



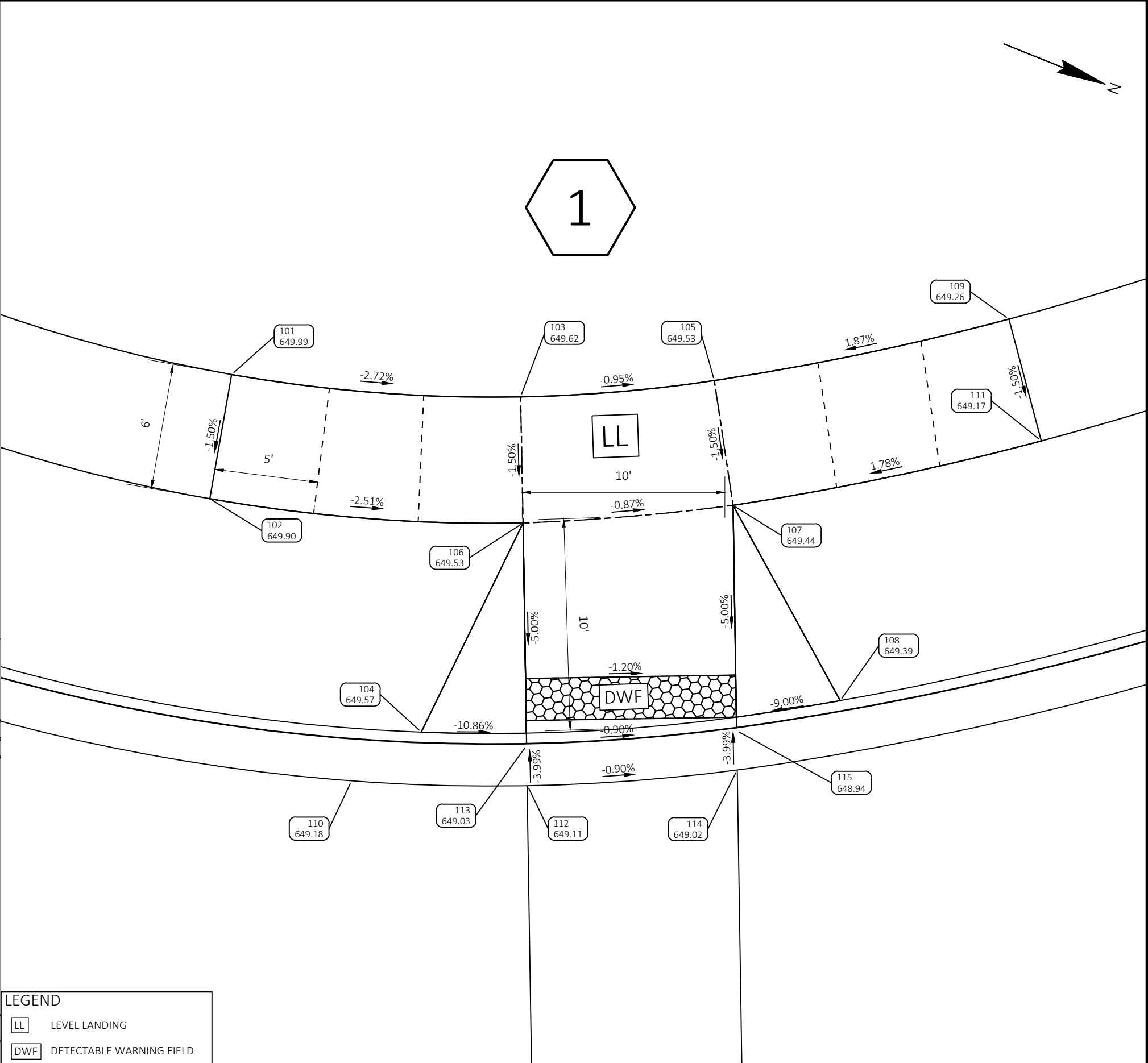
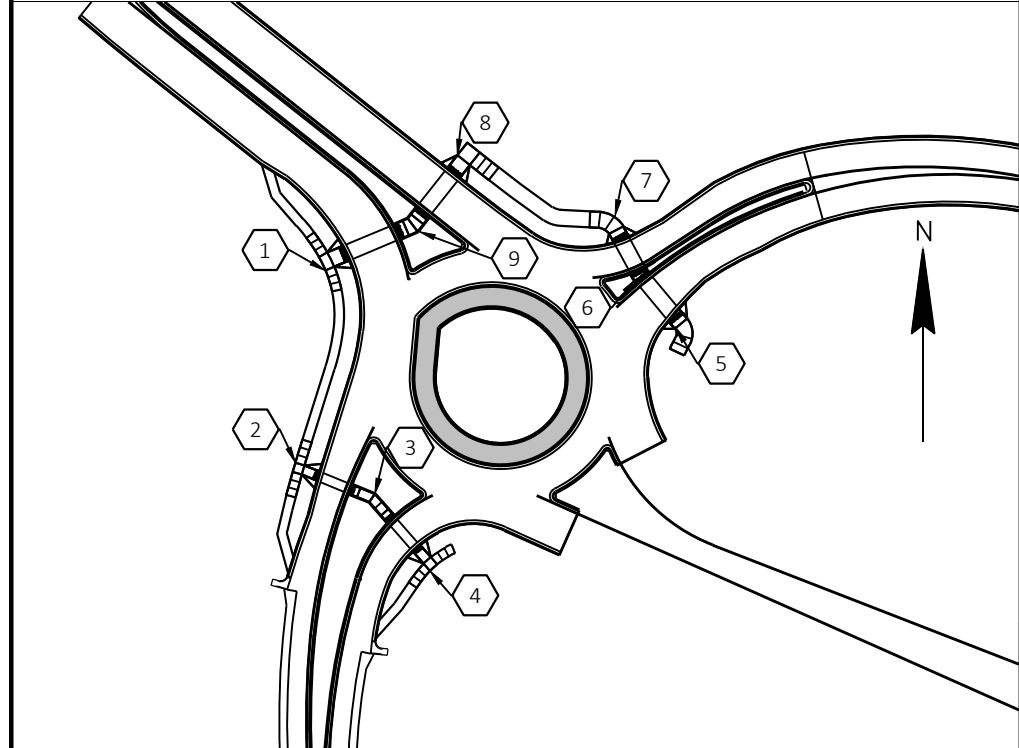
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
22	597+70.63 "GVFN"	50.02 RT	531613.503	69344.922	30
23	598+64.55 "GVFN"	47.00 RT	531681.560	69401.416	30
24	605+31.92 "GVFN"	32.00 RT	531927.848	69969.327	20
25	605+85.65 "GVFN"	27.00 RT	531930.460	70021.323	15
28	606+24.21 "GVFN"	8.57 RT	531944.972	70060.724	73
29	606+24.23 "GVFN"	8.57 RT	531944.967	70060.738	57



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
26	611+84.19 "GVFN"	47.03 RT	531913.657	70629.877	30
27	612+63.99 "GVFN"	47.00 RT	531963.665	70705.087	30



NW Leg W Ramp					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
101	GV EB 104+92.65	48.50' RT	649.99	533401.97	68785.41
102	GV EB 104+92.68	42.50' RT	649.90	533403.20	68791.28
103	GV EB 104+68.33	48.28' RT	649.62	533415.14	68781.31
104	GV EB 104+76.02	32.38' RT	649.57	533416.65	68797.87
105	GV EB 104+52.11	47.96' RT	649.53	533423.41	68777.17
106	GV EB 104+68.59	42.28' RT	649.53	533417.47	68786.84
107	GV EB 104+52.52	41.96' RT	649.44	533426.43	68782.36
108	GV EB 104+47.95	31.81' RT	649.39	533434.61	68789.10
109	GV EB 104+27.41	46.57' RT	649.26	533435.34	68769.27
110	GV EB 104+80.48	29.93' RT	649.18	533414.43	68801.25
111	GV EB 104+28.83	40.64' RT	649.17	533438.92	68774.08
112	GV EB 104+69.07	29.79' RT	649.11	533422.29	68798.37
113	GV EB 104+69.01	31.70' RT	649.03	533421.55	68796.60
114	GV EB 104+55.45	29.52' RT	649.02	533431.28	68793.98
115	GV EB 104+55.08	31.39' RT	648.94	533430.55	68792.24



LEGEND

LL

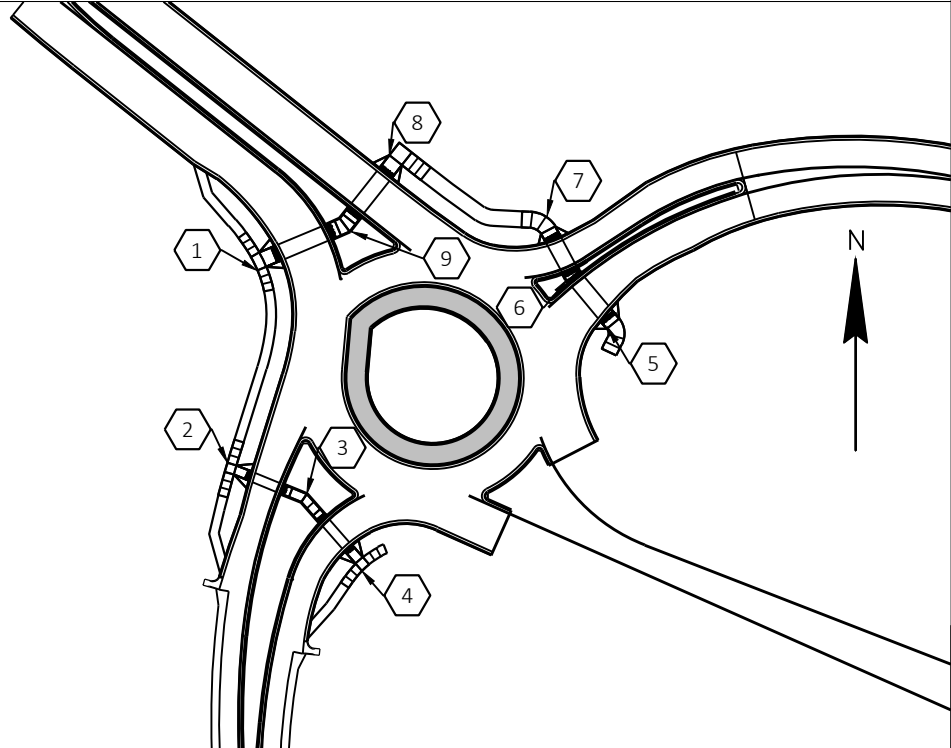
LEVEL LANDING

DWF

DETECTABLE WARNING FIELD

SW Leg W Ramp					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
201	GV EB 105+47.67	108.39' RT	649.64	533309.18	68766.96
202	GV EB 105+52.13	104.37' RT	649.55	533307.39	68772.68
203	GV EB 105+57.77	119.55' RT	649.37	533294.81	68762.50
204	GV EB 105+61.92	124.02' RT	649.29	533288.96	68760.77
205	GV EB 105+72.36	134.81' RT	649.28	533274.48	68756.80
206	GV EB 105+62.18	115.49' RT	649.28	533293.08	68768.24
207	GV EB 105+66.81	105.73' RT	649.21	533294.07	68779.00
208	GV EB 105+66.29	119.91' RT	649.20	533287.29	68766.53
209	GV EB 105+76.61	130.59' RT	649.20	533272.97	68762.60
210	GV EB 105+77.75	117.45' RT	649.01	533278.69	68774.49
211	GV EB 105+72.19	107.90' RT	648.75	533288.34	68779.87
212	GV EB 105+73.23	109.03' RT	648.73	533286.87	68779.43
213	GV EB 105+70.66	109.05' RT	648.68	533289.07	68778.10
214	GV EB 105+76.31	112.31' RT	648.67	533282.55	68778.18
215	GV EB 105+74.76	113.47' RT	648.60	533283.29	68776.39

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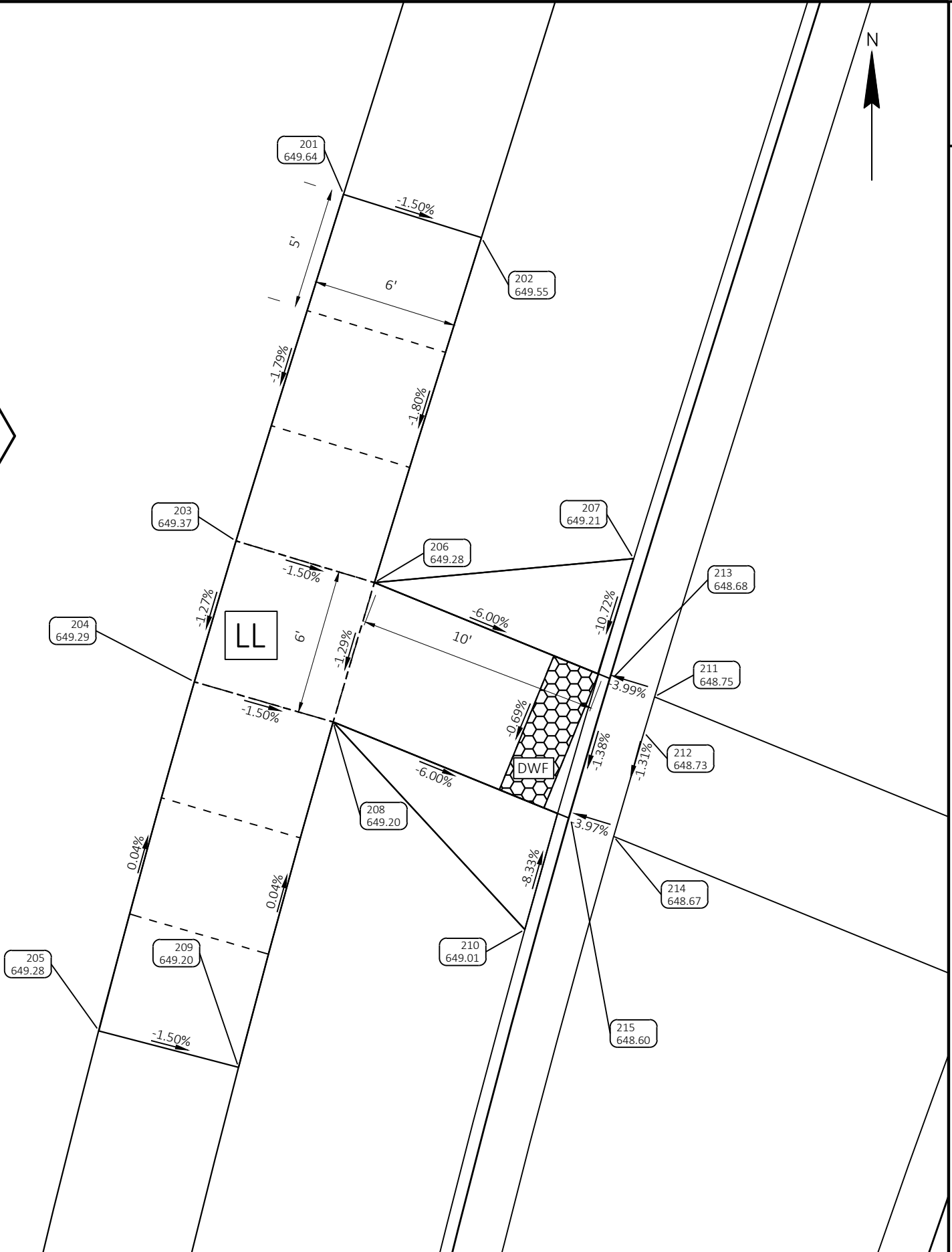
LEGEND

LL

LEVEL LANDING

DWF

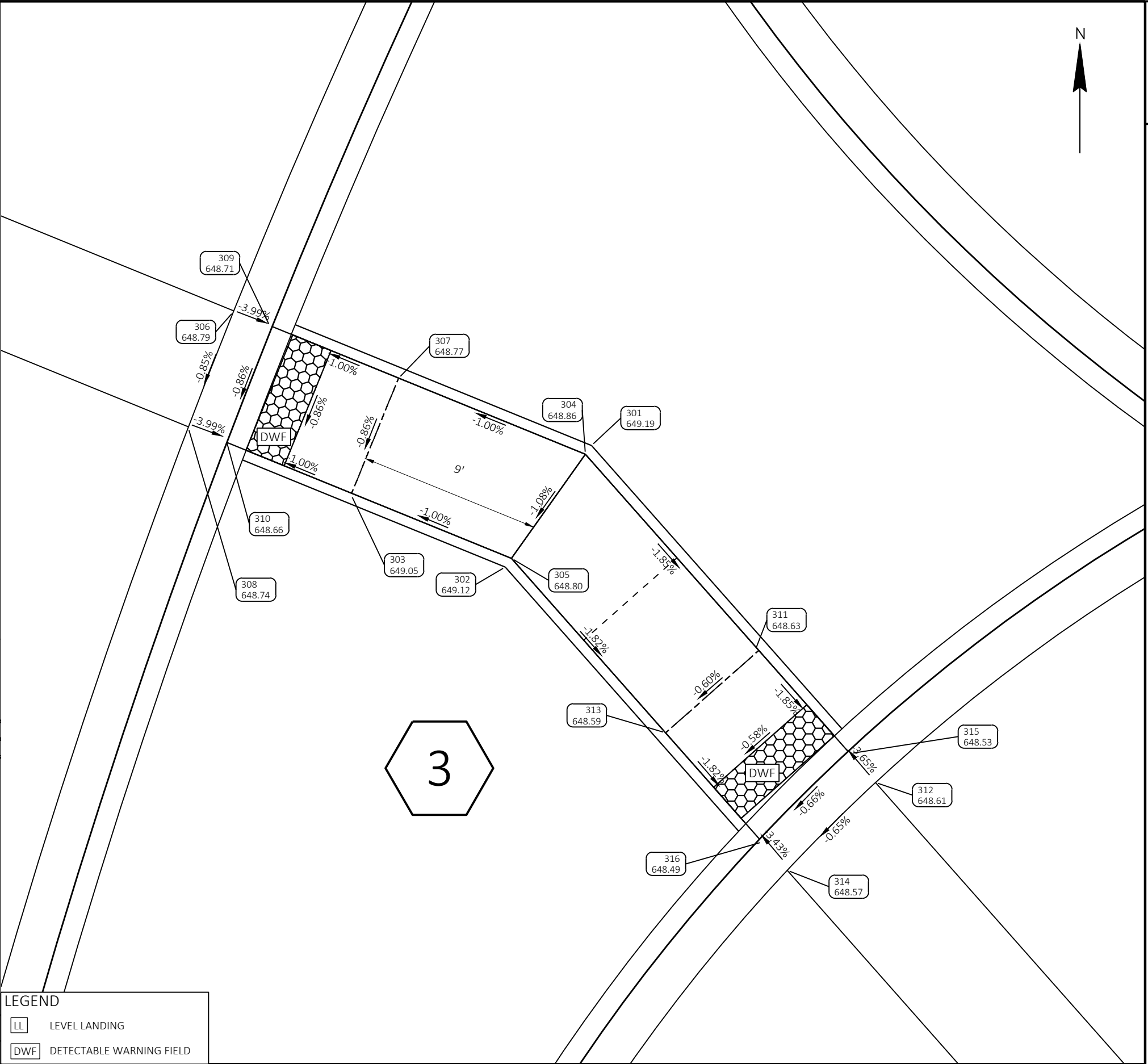
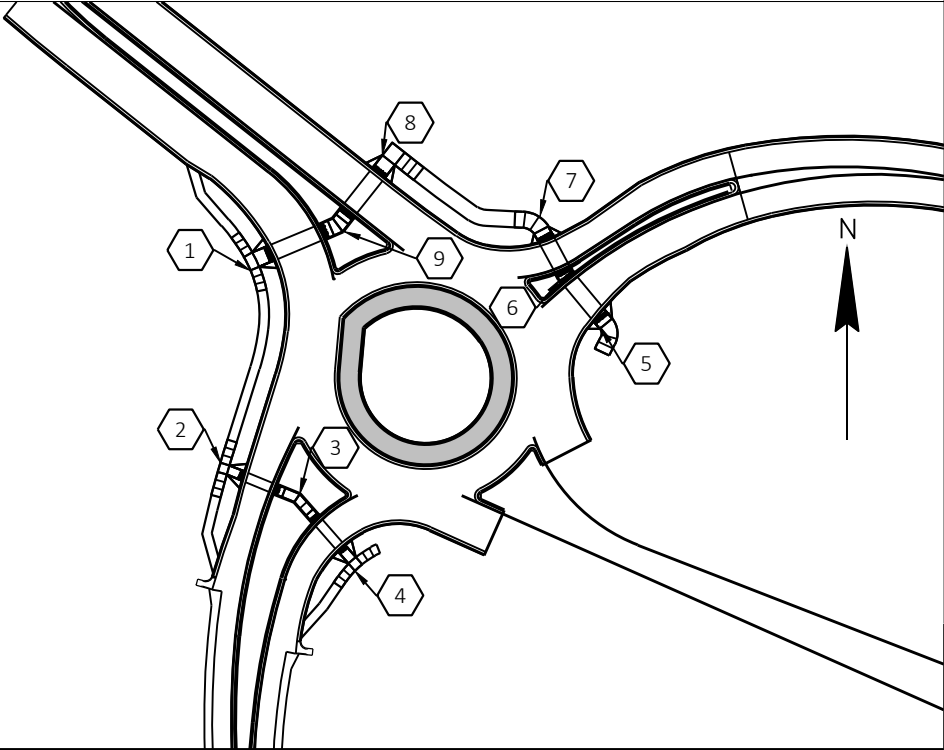
DETECTABLE WARNING FIELD



2

SW Leg Median					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
301	GV EB 105+99.90	86.25' RT	649.19	533275.53	68812.62
302	GV EB 106+02.83	92.82' RT	649.12	533269.67	68808.46
303	GV EB 105+96.05	97.44' RT	649.05	533273.14	68801.03
304	GV EB 106+00.11	86.72' RT	648.86	533275.11	68812.32
305	GV EB 106+02.62	92.35' RT	648.80	533270.09	68808.76
306	GV EB 105+85.55	97.83' RT	648.79	533281.98	68795.35
307	GV EB 105+92.36	92.60' RT	648.77	533278.78	68803.31
308	GV EB 105+89.24	102.56' RT	648.74	533276.39	68793.16
309	GV EB 105+87.03	96.67' RT	648.71	533281.29	68797.10
310	GV EB 105+90.71	101.29' RT	648.66	533275.78	68795.00
311	GV EB 106+12.41	84.47' RT	648.63	533265.68	68820.53
312	GV EB 106+20.87	82.75' RT	648.61	533259.28	68826.32
313	GV EB 106+13.65	90.24' RT	648.59	533261.67	68816.20
314	GV EB 106+22.35	88.58' RT	648.57	533255.04	68822.06
315	GV EB 106+19.05	83.09' RT	648.53	533260.67	68825.10
316	GV EB 613+94.27	32.88' RT	648.49	533256.40	68820.86

2



LEGEND

	LEVEL LANDING
	DETECTABLE WARNING FIELD

PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

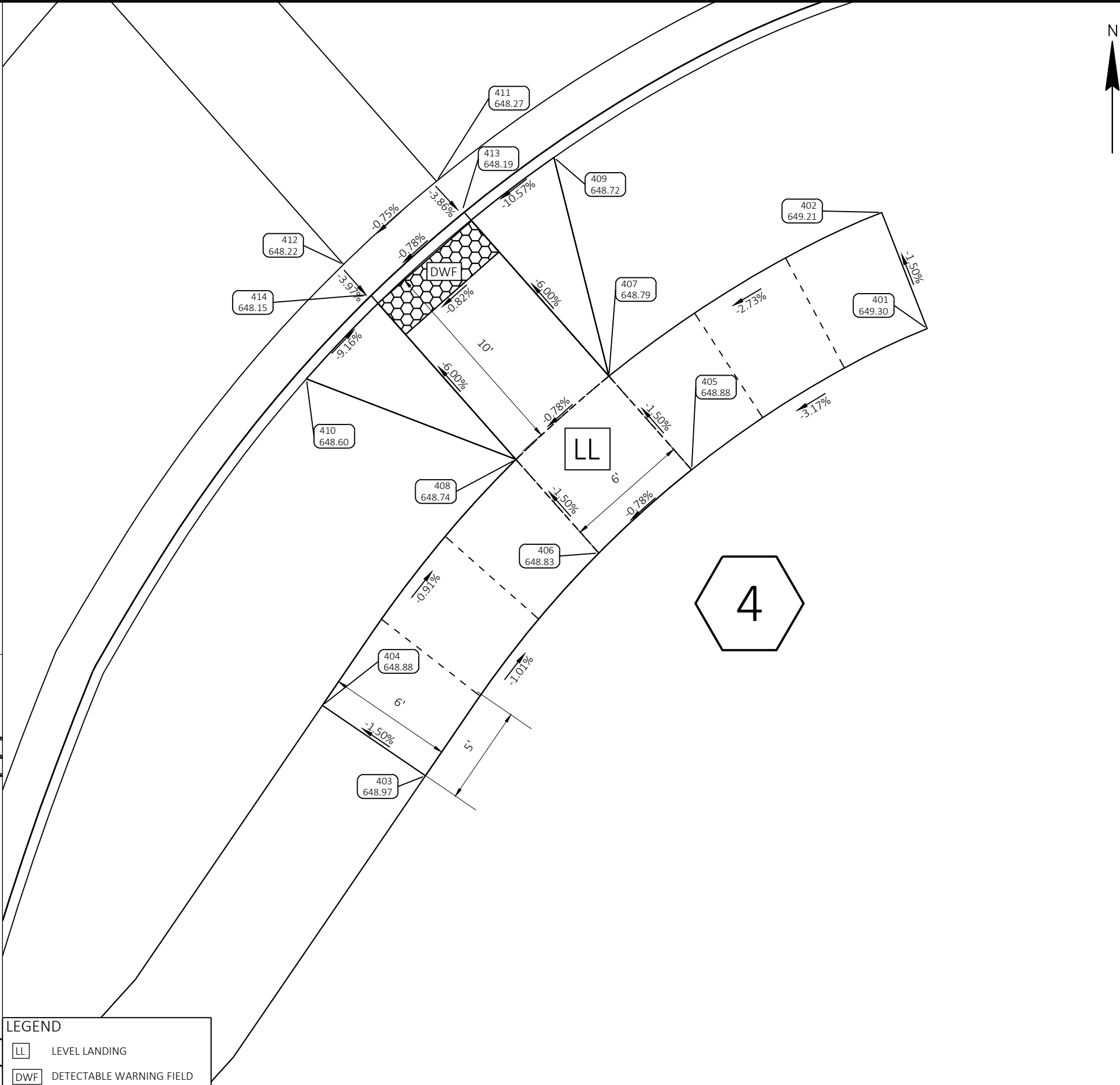
CURB RAMP DETAILS

SHEET

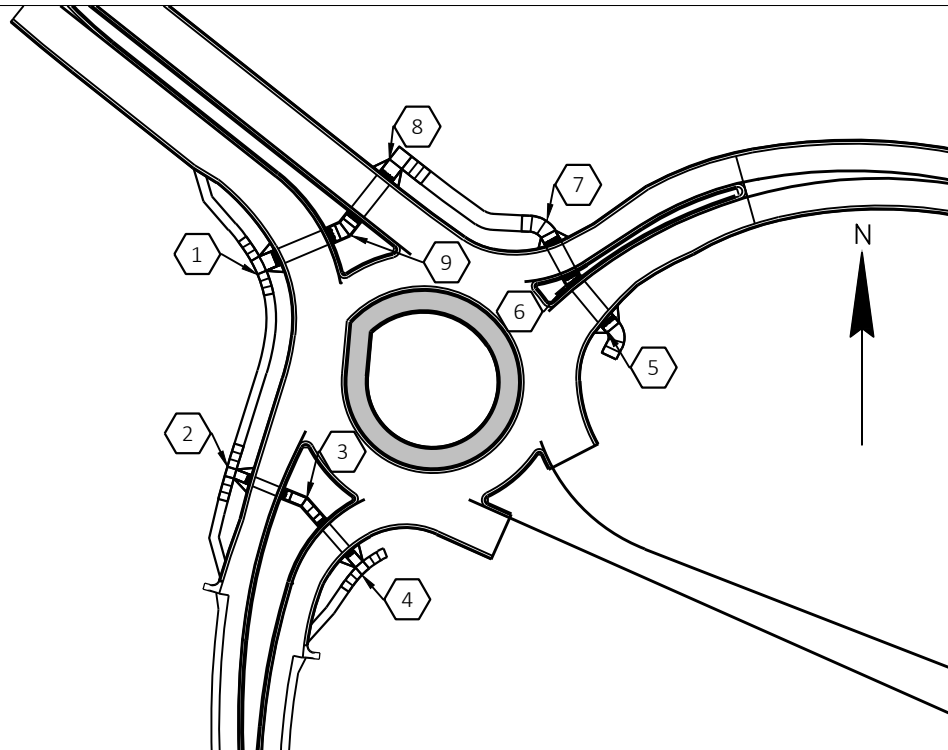
E

2

SW Leg E Ramp					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
401	GV EB 106+52.67	62.68' RT	649.30	533237.89	68862.56
402	GV EB 106+51.82	61.51' RT	649.21	533243.47	68860.37
403	GV EB 106+52.67	94.86' RT	648.97	533216.40	68838.43
404	GV EB 106+52.67	96.90' RT	648.88	533219.78	68833.48
405	GV EB 106+52.67	75.86' RT	648.88	533231.11	68851.23
406	GV EB 106+52.67	81.81' RT	648.83	533227.10	68846.77
407	GV EB 106+51.90	76.81' RT	648.79	533235.61	68847.25
408	GV EB 106+52.67	82.70' RT	648.74	533231.60	68842.78
409	GV EB 106+41.51	73.72' RT	648.72	533246.12	68844.61
410	GV EB 106+44.60	89.39' RT	648.60	533235.48	68832.71
411	GV EB 106+39.62	79.16' RT	648.27	533244.98	68838.96
412	GV EB 106+40.78	85.05' RT	648.22	533240.98	68834.49
413	GV EB 106+41.46	78.82' RT	648.19	533243.56	68840.20
414	GV EB 106+42.64	84.77' RT	648.15	533239.52	68835.68



2

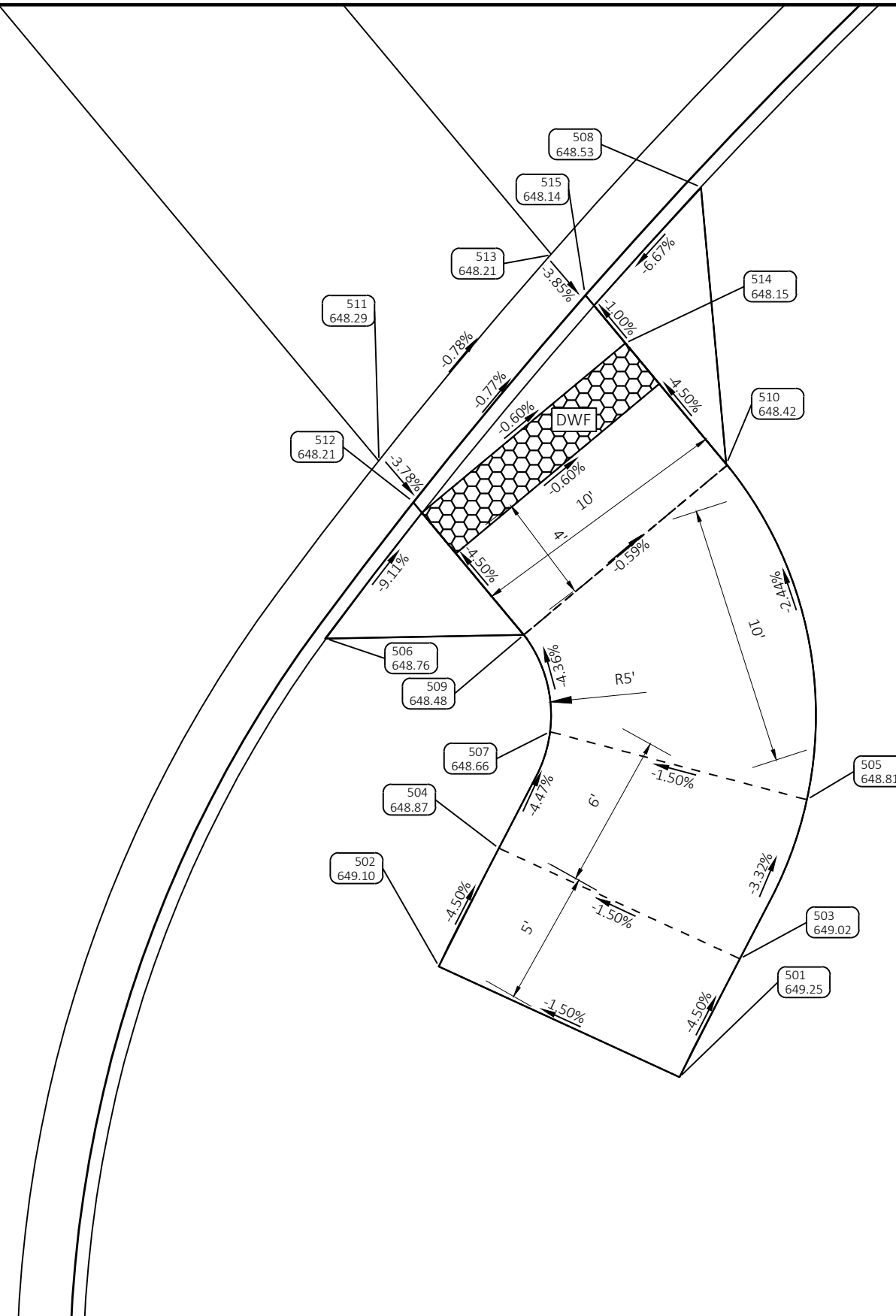
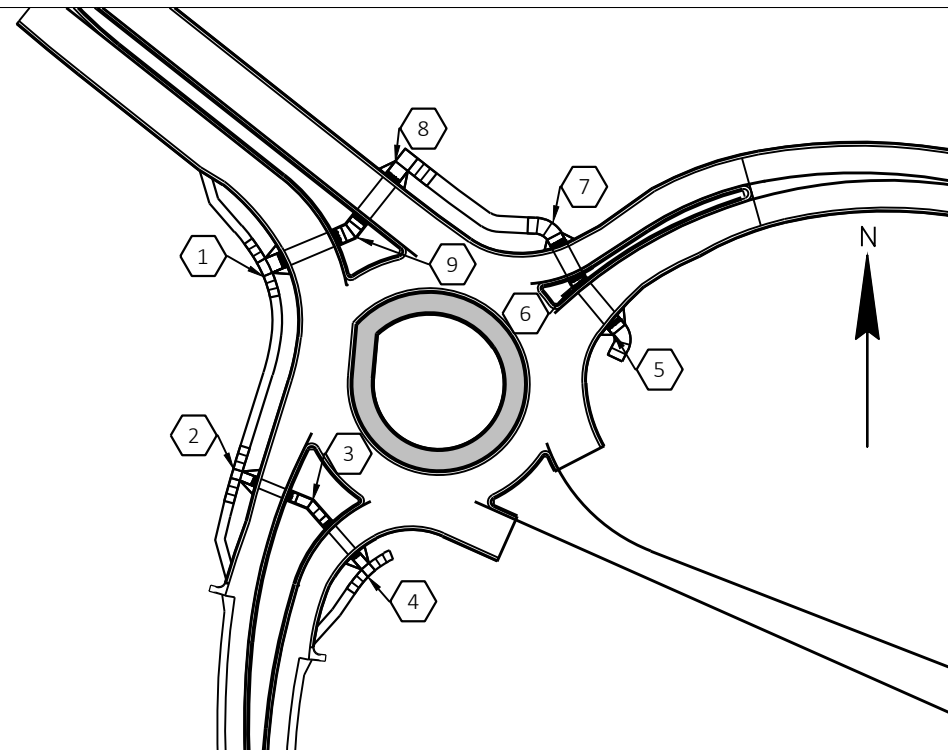


LEGEND

LL	LEVEL LANDING
DWF	DETECTABLE WARNING FIELD

2

NE Leg S					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
501	GV EB 107+01.34	117.70' LT	649.25	533361.92	69005.98
502	GV EB 106+91.34	117.84' LT	649.10	533366.10	68996.90
503	GV EB 107+01.61	122.72' LT	649.02	533366.39	69008.26
504	GV EB 106+13.23	122.67' LT	648.87	533370.56	68999.16
505	GV EB 107+01.48	129.23' LT	648.81	533372.40	69010.79
506	GV EB 106+03.09	121.10' LT	648.76	533378.48	68992.64
507	GV EB 106+10.42	126.58' LT	648.66	533374.97	69001.09
508	GV EB 105+95.64	141.96' LT	648.53	533395.53	69006.79
509	GV EB 106+06.78	127.59' LT	648.48	533378.62	69000.10
510	GV EB 106+05.13	137.46' LT	648.42	533385.07	69007.75
511	GV EB 105+98.34	126.23' LT	648.29	533385.18	68994.64
512	GV EB 106+00.30	126.55' LT	648.21	533383.66	68995.90
513	GV EB 105+94.96	135.82' LT	648.21	533392.98	69001.16
514	GV EB 105+99.26	136.51' LT	648.15	533389.63	69003.94
515	GV EB 105+96.86	136.15' LT	648.14	533391.52	69002.41



2 |

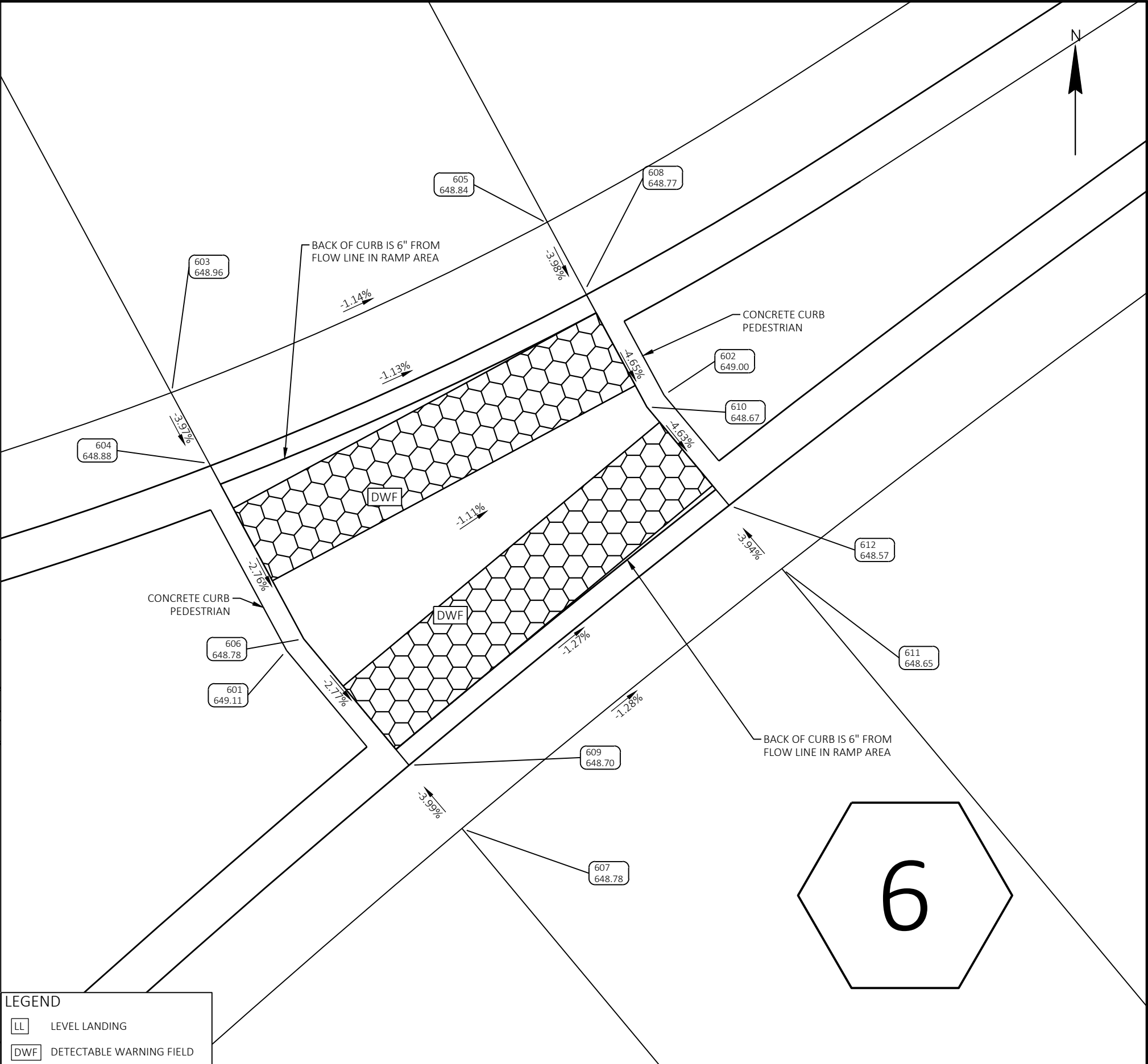
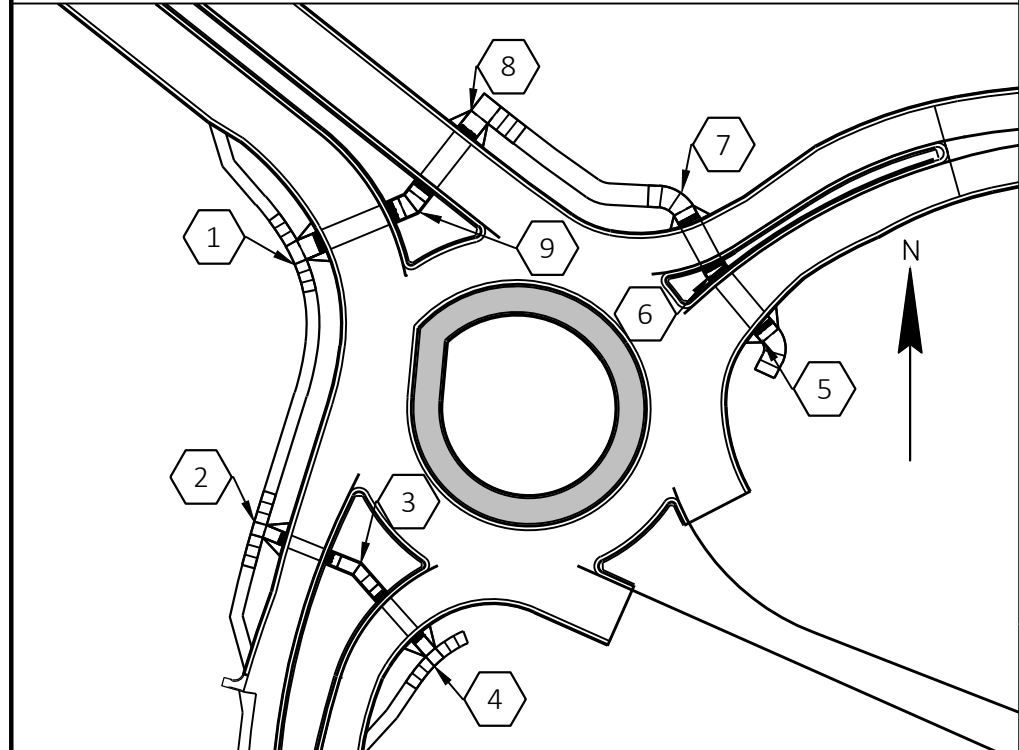


LEGEND

LL LEVEL LANDING

DWF DETECTABLE WARNING FIELD

NE Leg Median					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
601	GV EB 105+67.06	120.67' LT	649.11	533409.26	68973.90
602	GV EB 105+66.40	131.71' LT	649.00	533415.46	68983.06
603	GV EB 616+37.72	0.02' RT	648.96	533415.50	68971.11
604	GV EB 616+37.97	1.94' RT	648.88	533413.80	68972.04
605	GV EB 616+47.74	0.05' RT	648.84	533419.62	68980.25
606	GV EB 616+38.53	6.73' RT	648.78	533409.54	68974.32
607	GV EB 616+40.17	12.44' RT	648.78	533404.94	68978.16
608	GV EB 616+47.75	1.91' RT	648.77	533417.97	68981.13
609	GV EB 616+39.65	10.53' RT	648.70	533406.48	68976.88
610	GV EB 616+47.77	5.09' RT	648.67	533415.17	68982.64
611	GV EB 616+48.70	10.10' RT	648.65	533411.25	68985.92
612	GV EB 616+48.35	8.14' RT	648.57	533412.78	68984.64



LEGEND

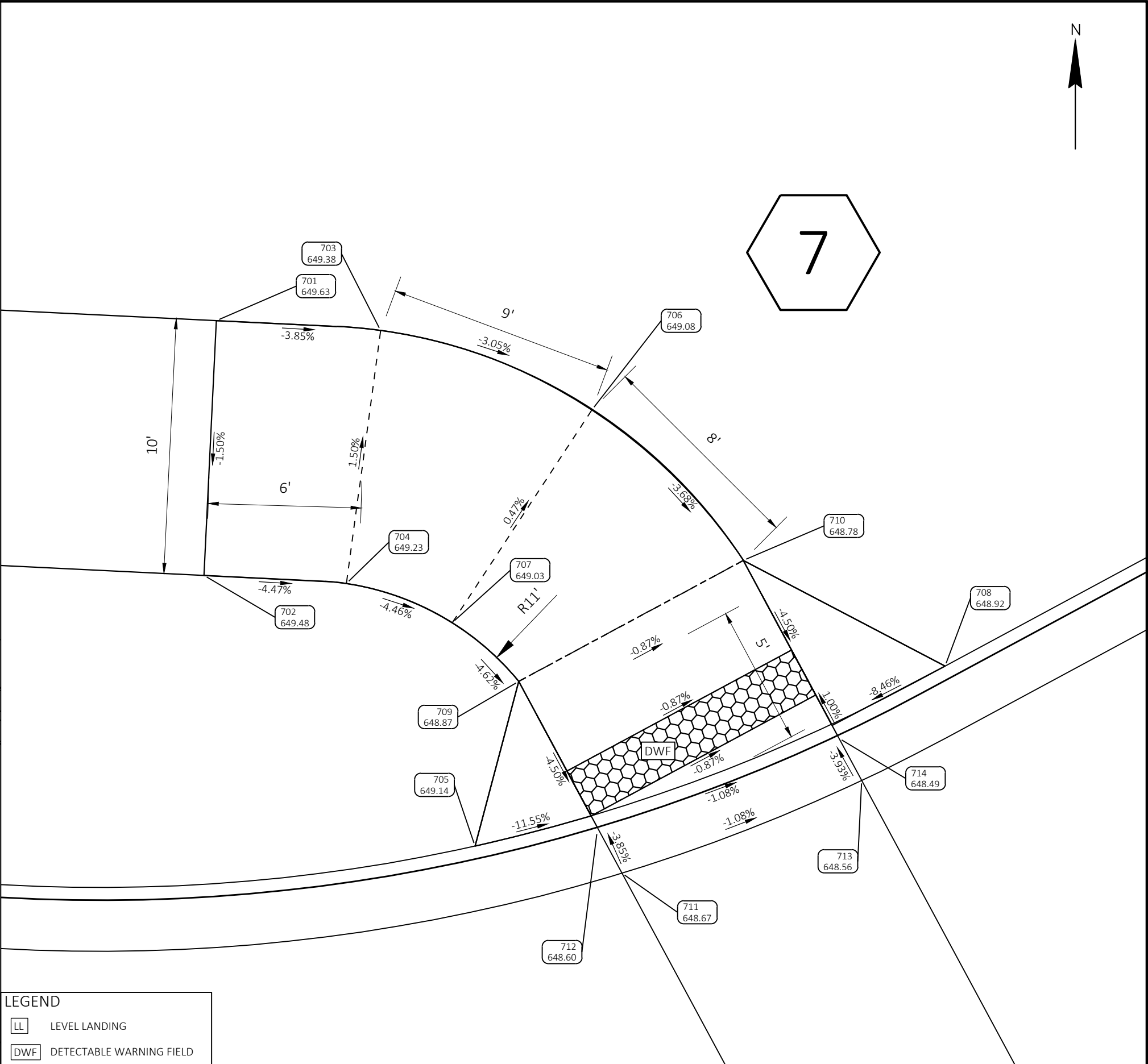
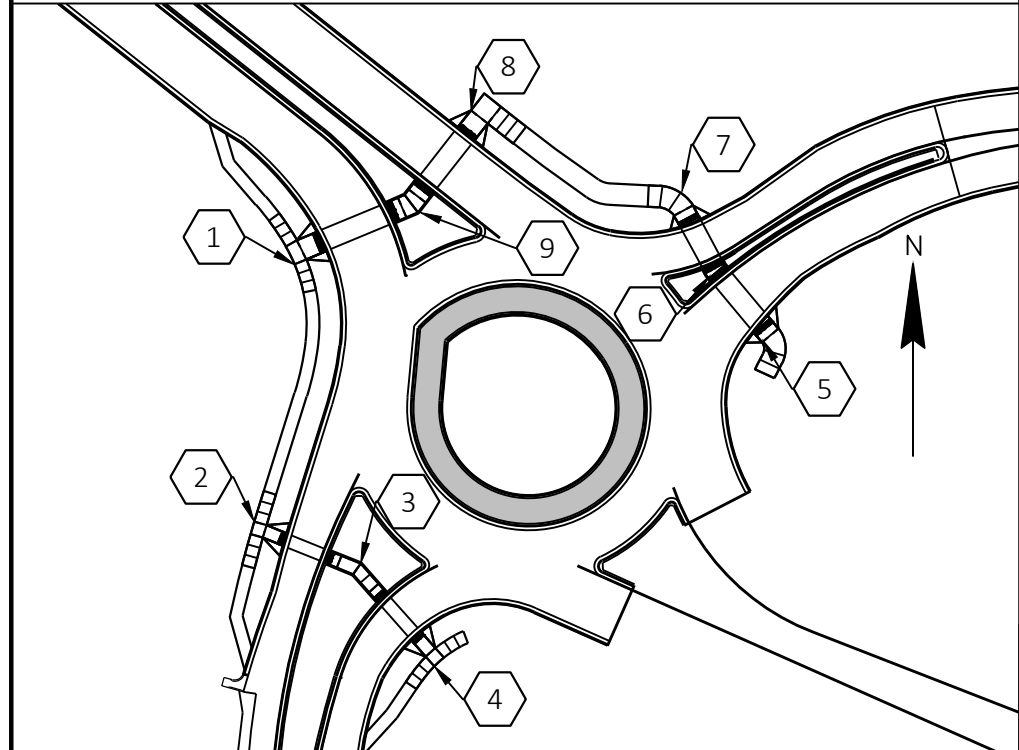
LL

LEVEL LANDING

DWF

DETECTABLE WARNING FIELD

NE Leg N Ramp					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
701	GV EB 105+16.57	119.50' LT	649.63	533452.11	68947.16
702	GV EB 105+24.91	113.99' LT	649.48	533442.12	68946.67
703	GV EB 105+20.18	124.85' LT	649.38	533451.72	68953.60
704	GV EB 105+28.02	118.64' LT	649.23	533441.81	68952.26
705	GV EB 105+39.46	117.73' LT	649.14	533431.51	68957.30
706	GV EB 105+27.07	130.40' LT	649.08	533448.62	68961.89
707	GV EB 105+31.47	121.42' LT	649.03	533440.26	68956.41
708	GV EB 105+42.78	137.17' LT	648.92	533438.56	68975.73
709	GV EB 105+34.78	122.49' LT	648.87	533437.96	68959.01
710	GV EB 105+35.18	132.48' LT	648.78	533442.71	68967.82
711	GV EB 105+43.31	122.14' LT	648.67	533430.45	68963.06
712	GV EB 105+41.39	122.15' LT	648.60	533432.10	68962.09
713	GV EB 105+44.96	132.08' LT	648.56	533434.09	68972.46
714	GV EB 105+43.09	132.16' LT	648.49	533435.74	68971.57



LEGEND

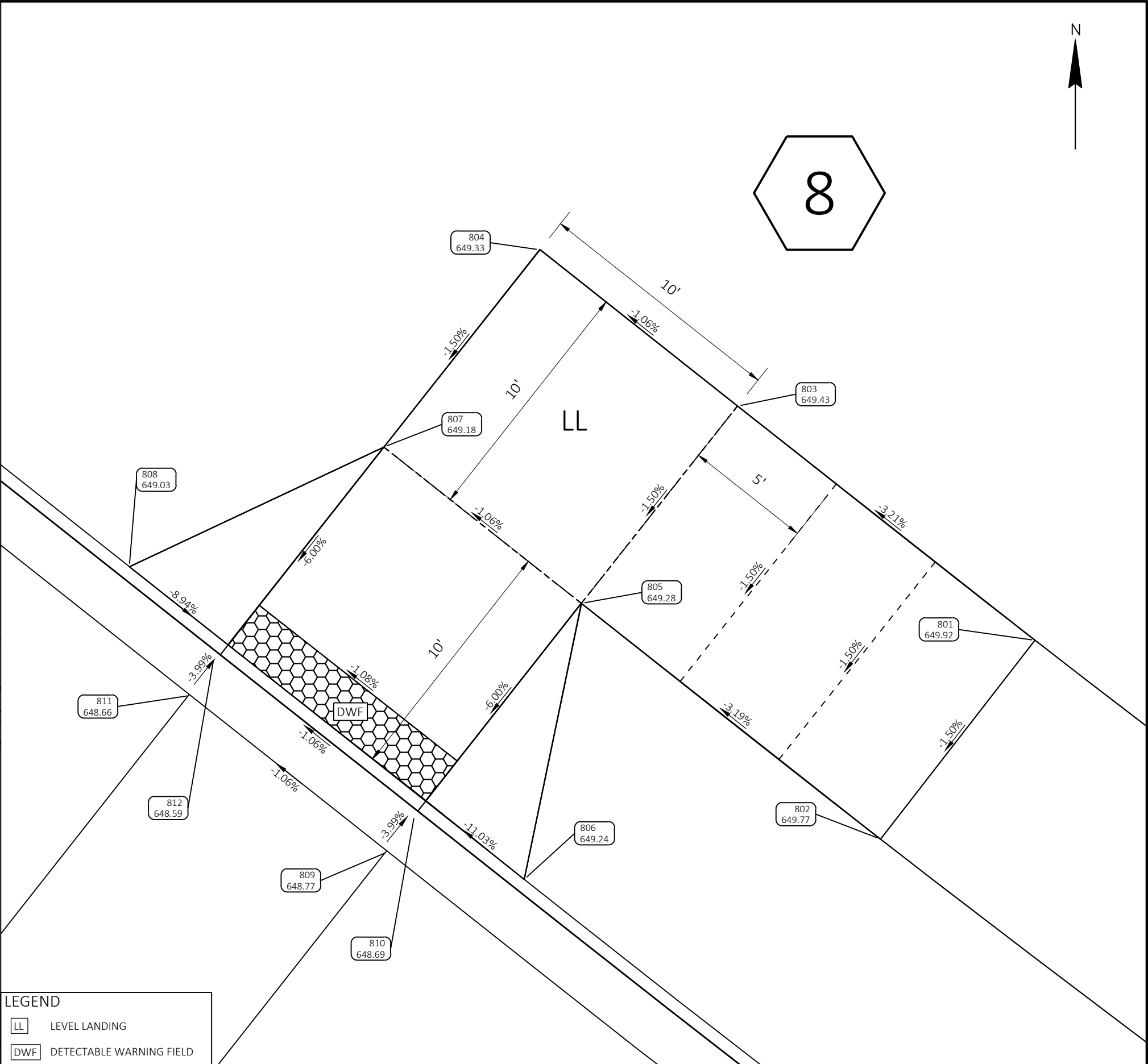
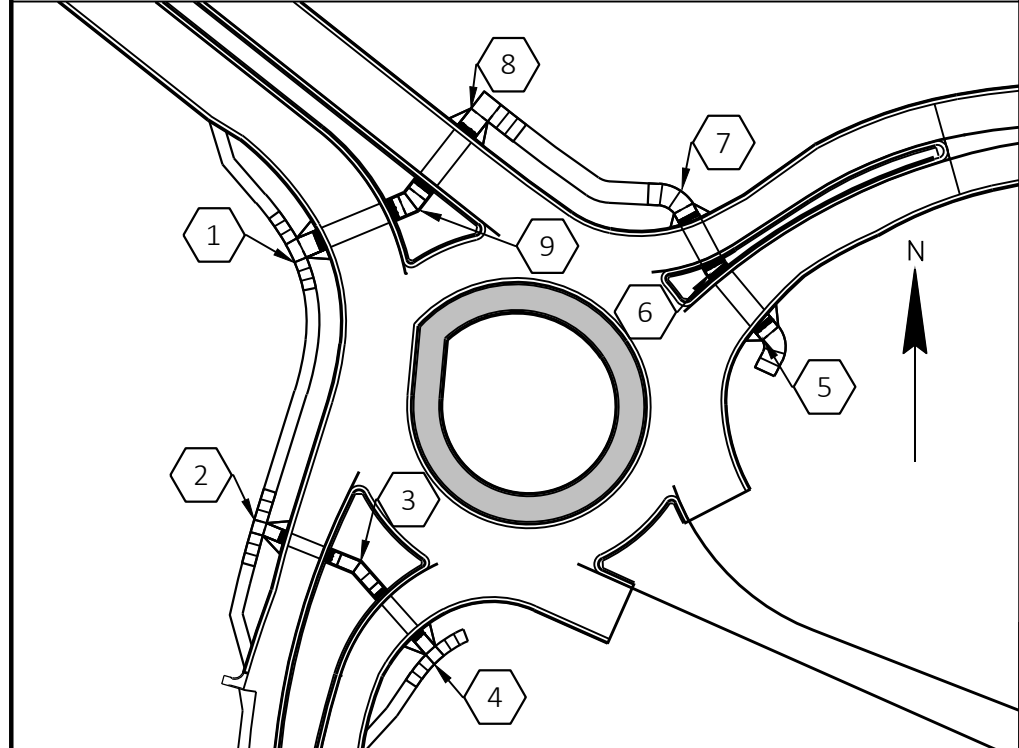
LL

LEVEL LANDING

DWF

DETECTABLE WARNING FIELD

NW Leg E Ramp					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
801	GV EB 104+60.16	77.64' LT	649.92	533479.56	68889.80
802	GV EB 104+62.64	68.52' LT	649.77	533471.67	68883.66
803	GV EB 104+51.75	72.25' LT	649.43	533488.87	68877.99
804	GV EB 104+45.90	69.28' LT	649.33	533495.07	68870.15
805	GV EB 104+53.81	62.81' LT	649.28	533481.03	68871.79
806	GV EB 104+59.25	55.30' LT	649.24	533470.07	68869.52
807	GV EB 104+47.67	59.69' LT	649.18	533487.24	68863.95
808	GV EB 104+46.35	48.69' LT	649.03	533482.48	68853.84
809	GV EB 104+56.78	51.14' LT	648.77	533471.16	68864.11
810	GV EB 104+74.33	27.80' LT	648.69	533472.63	68865.17
811	GV EB 104+50.25	47.78' LT	648.66	533477.37	68856.27
812	GV EB 104+49.73	49.40' LT	648.59	533478.89	68857.20



LEGEND

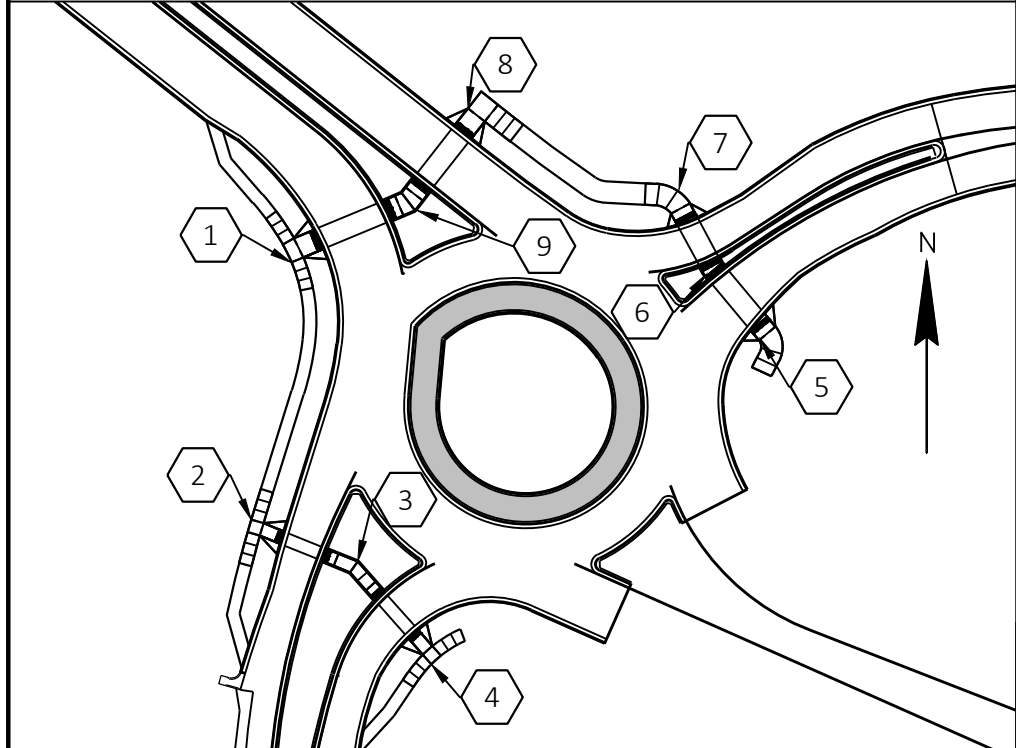
LL

LEVEL LANDING

DWF

DETECTABLE WARNING FIELD

NW Leg Median					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
901	GV EB 104+70.35	14.57' LT	649.79	533439.03	68839.46
902	GV EB 104+60.42	12.29' LT	649.63	533448.04	68832.56
903	GV EB 104+74.53	14.37' RT	649.46	533439.44	68839.15
904	GV EB 104+67.70	27.09' RT	649.38	533433.71	68825.89
905	GV EB 104+64.51	11.82' RT	649.31	533447.66	68832.87
906	GV EB 104+68.55	25.43' RT	649.30	533434.48	68827.58
907	GV EB 104+74.41	0.00'	649.29	533450.78	68847.97
908	GV EB 104+58.64	22.79' RT	649.24	533442.71	68821.46
909	GV EB 104+74.40	1.85' RT	649.21	533449.34	68846.81
910	GV EB 104+64.41	0.00'	649.18	533456.99	68840.13
911	GV EB 104+59.55	21.08' RT	649.17	533443.48	68823.23
912	GV EB 104+64.43	1.87' RT	649.11	533455.51	68838.99



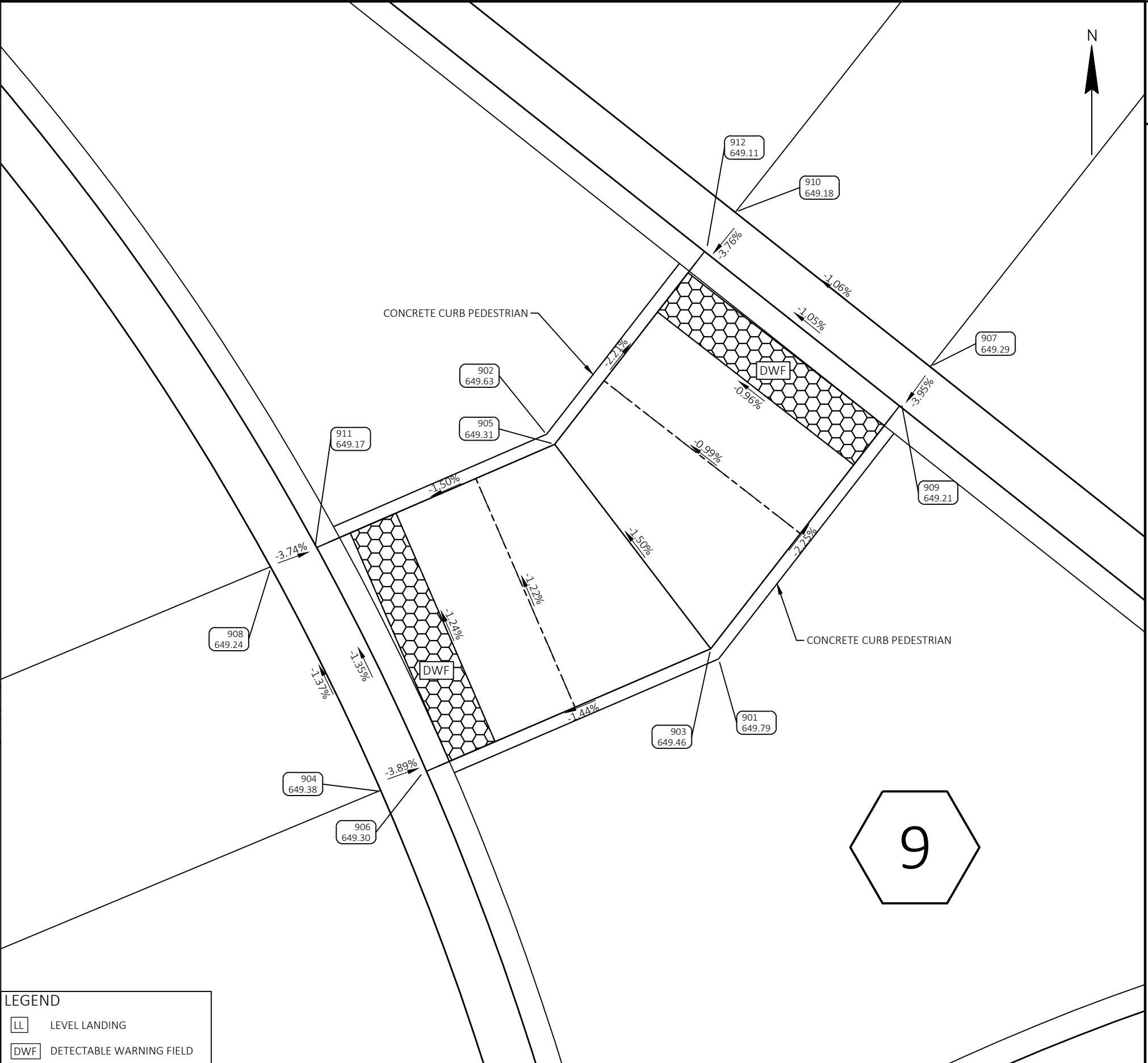
LEGEND

LL

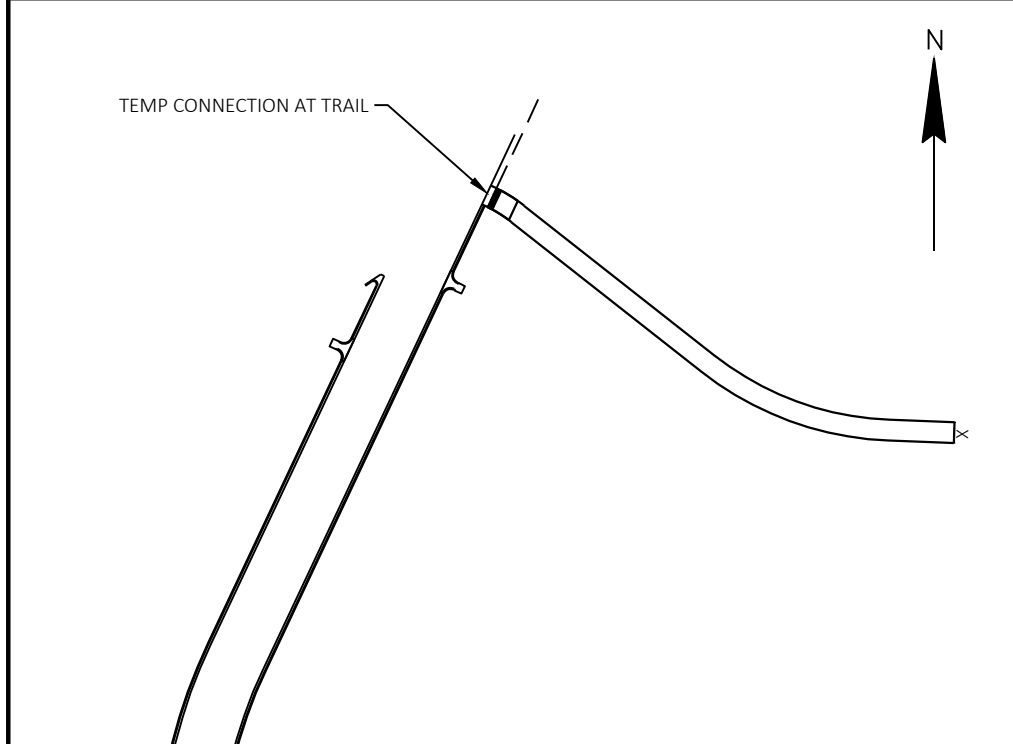
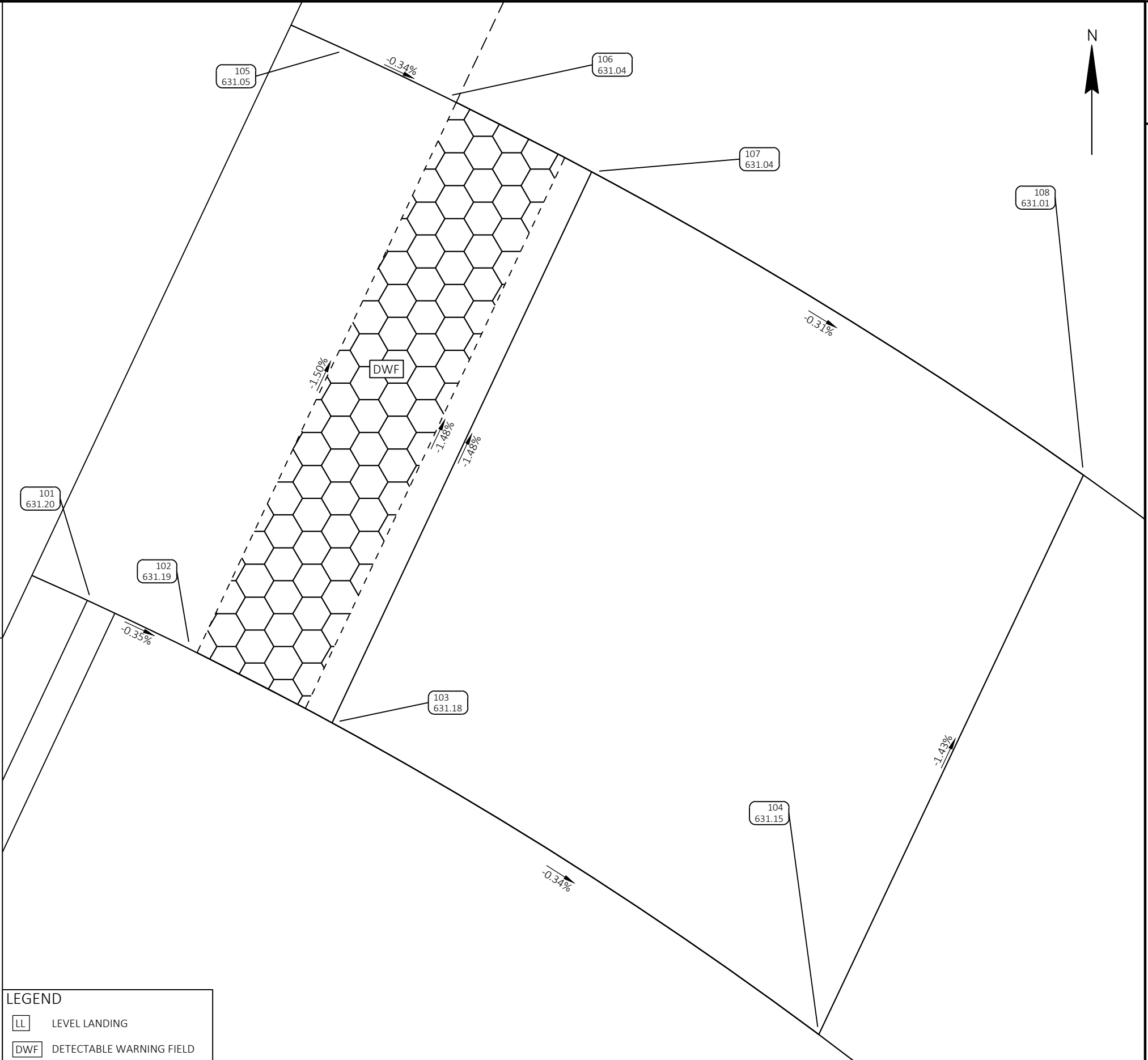
LEVEL LANDING

DWF

DETECTABLE WARNING FIELD



Innovation Path					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
101	GV EB 9+40.97	15.08' RT	631.20	532453.58	71283.25
102	GV EB 9+40.96	16.87' RT	631.19	532452.80	71284.87
103	GV EB 9+40.86	19.50' RT	631.18	532451.59	71287.21
104	GV EB 9+39.64	28.92' RT	631.15	532446.47	71295.21
105	GV EB 9+50.97	15.00' RT	631.05	532462.65	71287.45
106	GV EB 9+50.97	16.79' RT	631.04	532461.89	71289.06
107	GV EB 9+50.88	19.50' RT	631.04	532460.65	71291.48
108	GV EB 9+49.81	28.94' RT	631.01	532455.67	71299.56



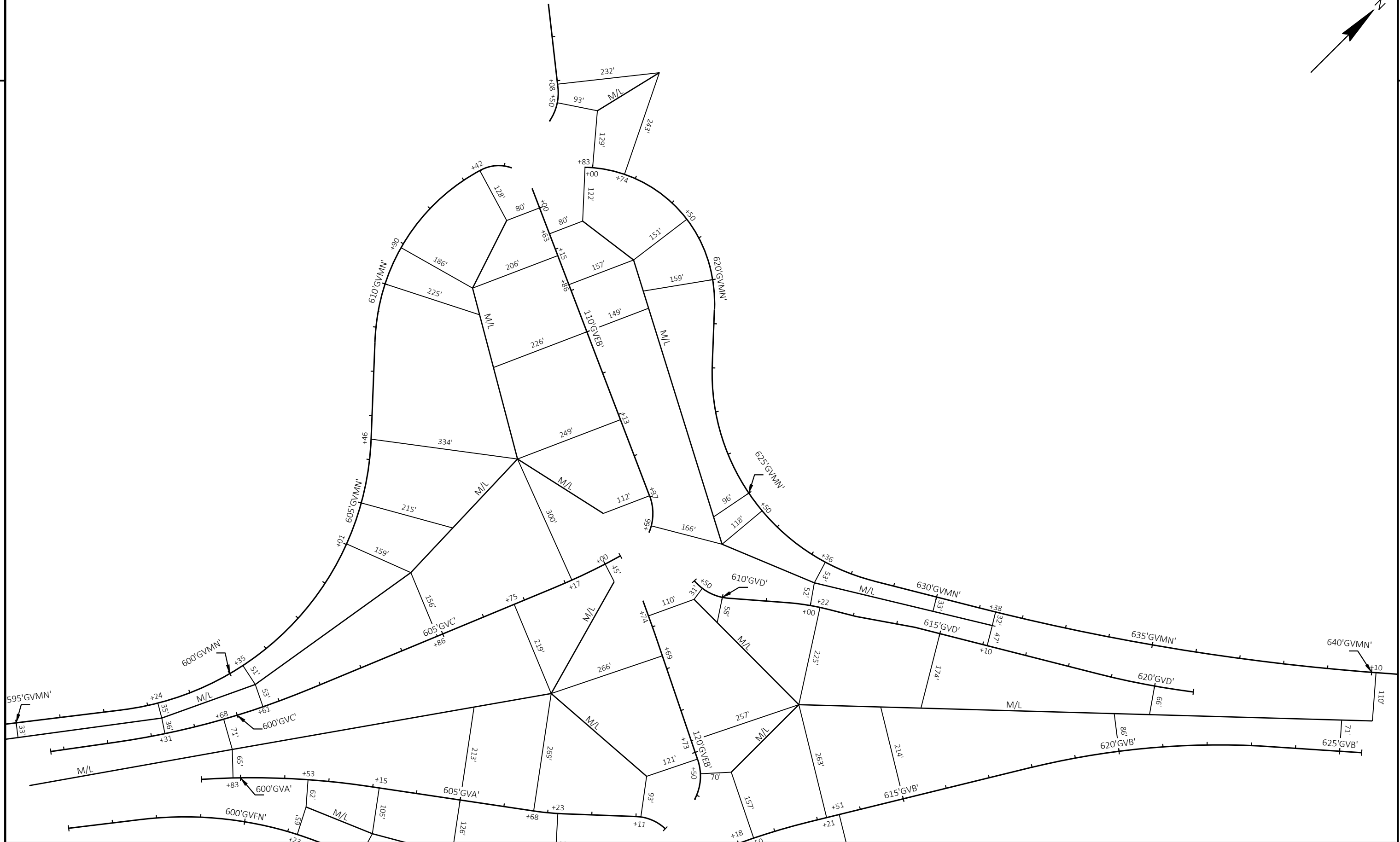
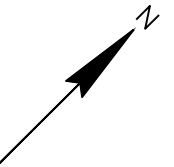
LEGEND

LL

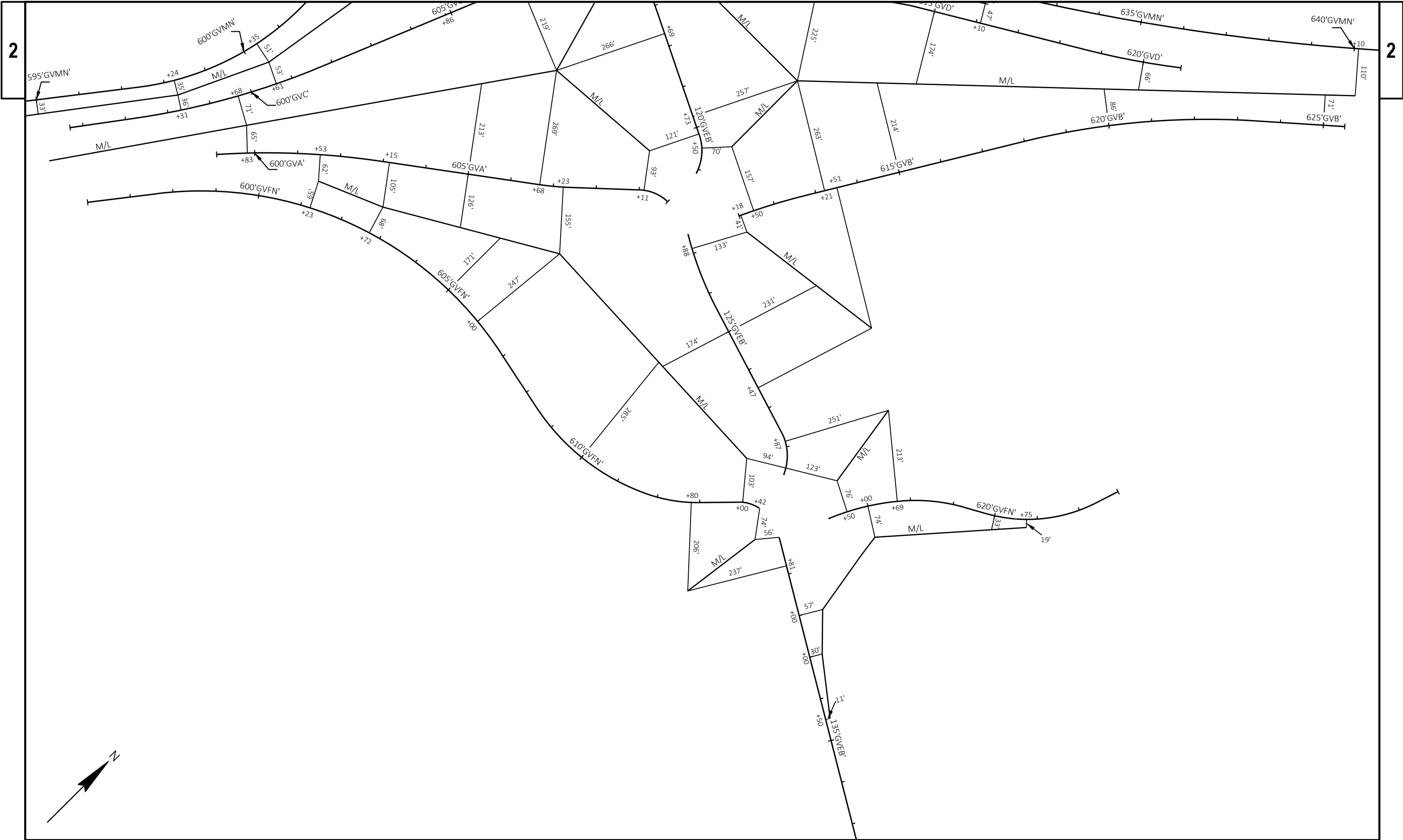
LEVEL LANDING

DWF

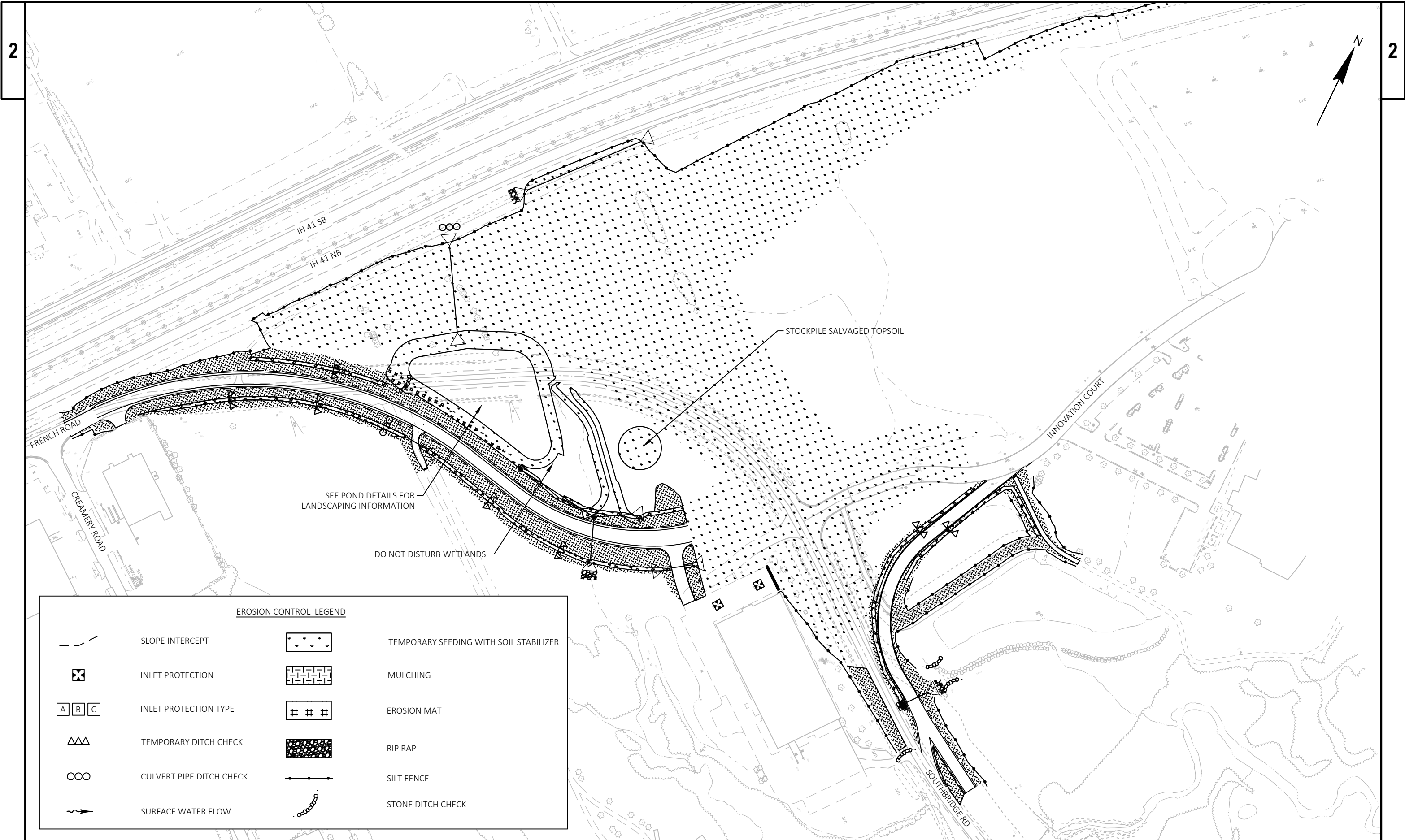
DETECTABLE WARNING FIELD

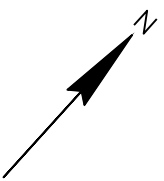


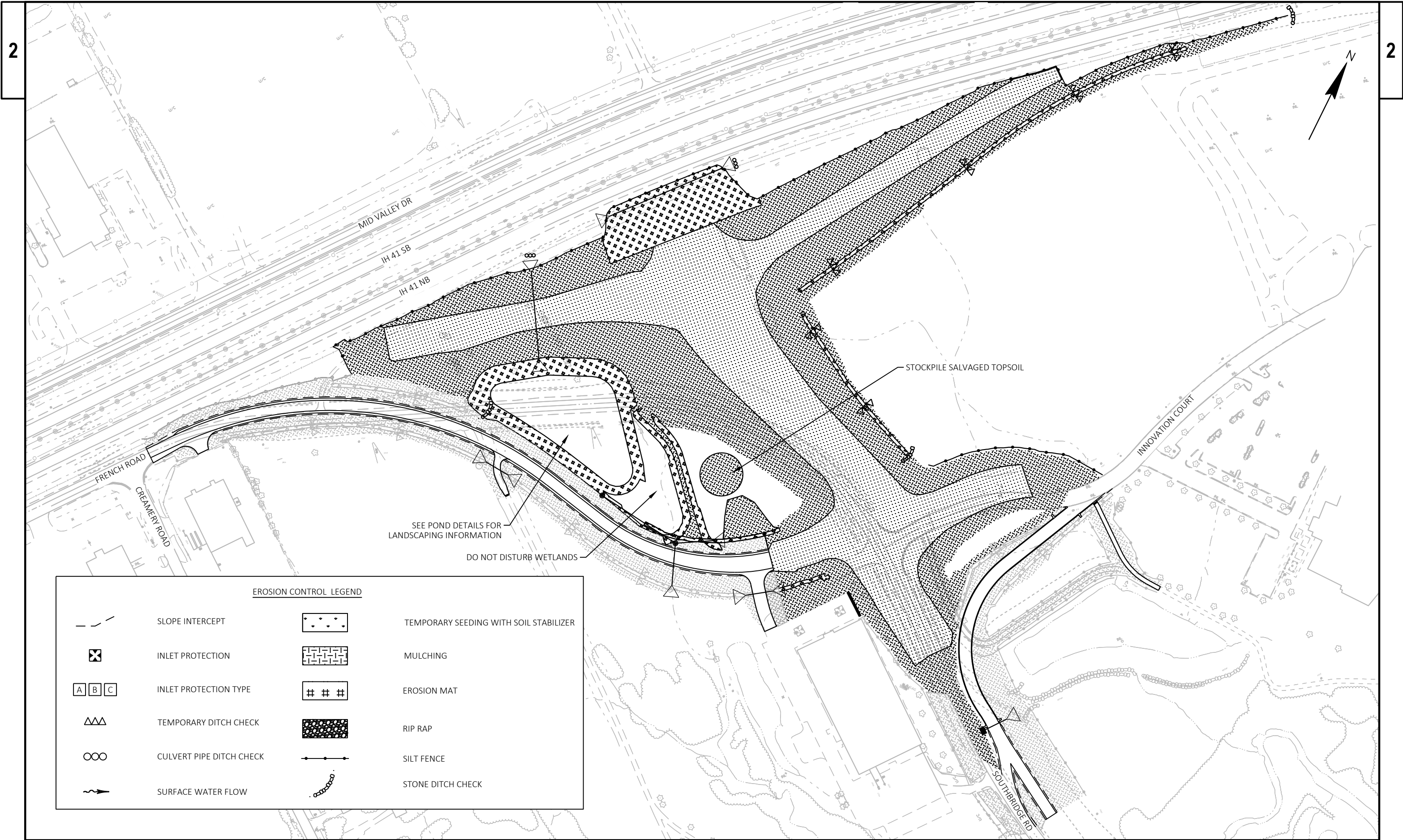
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	EARTHWORK MATCHLINES - SOUTHBRIDGE RD	SHEET	E
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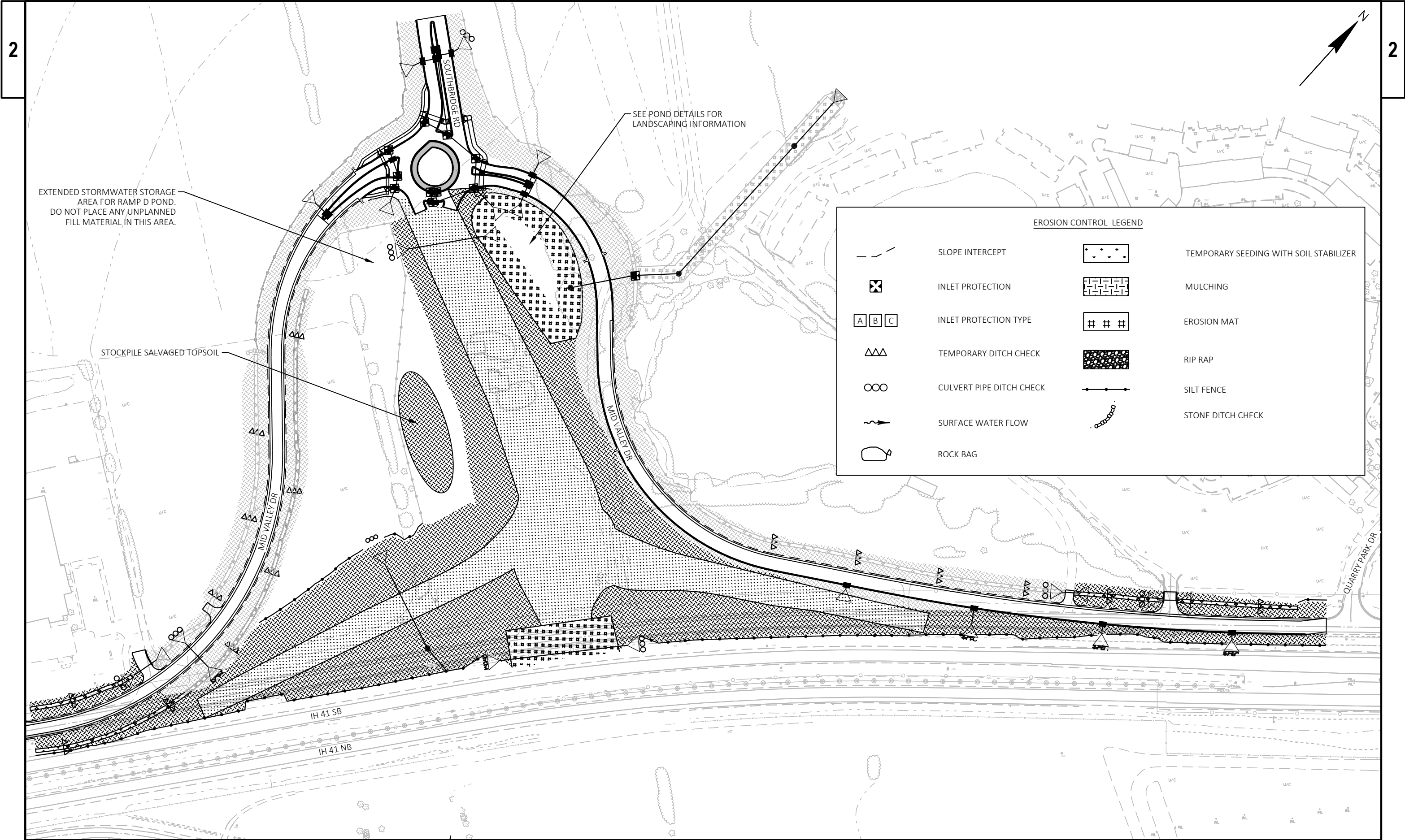


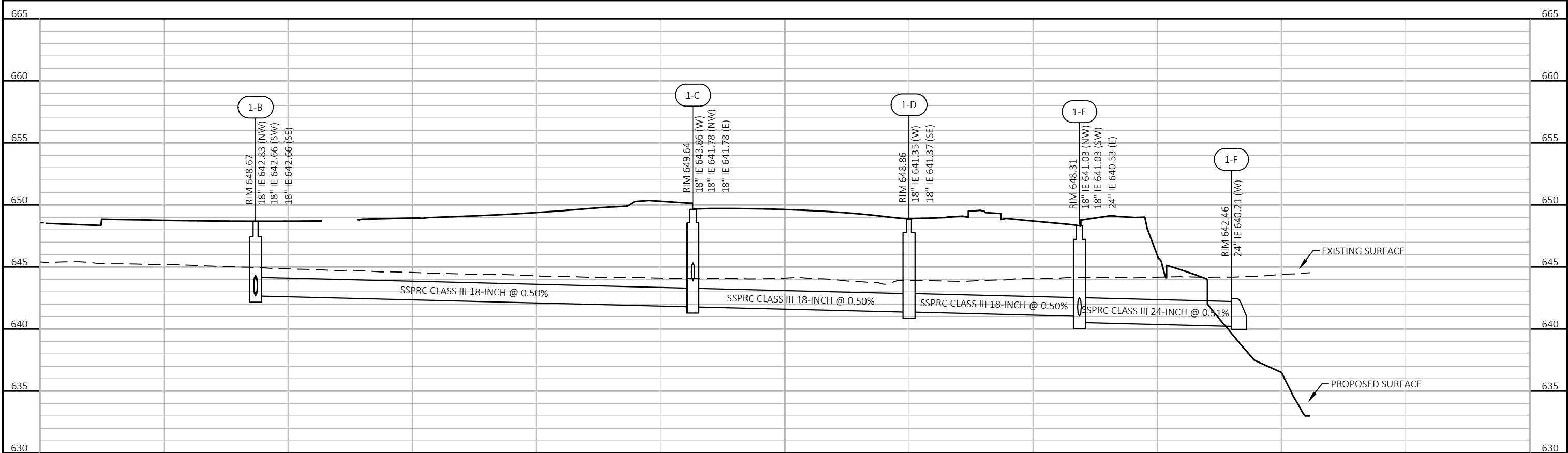
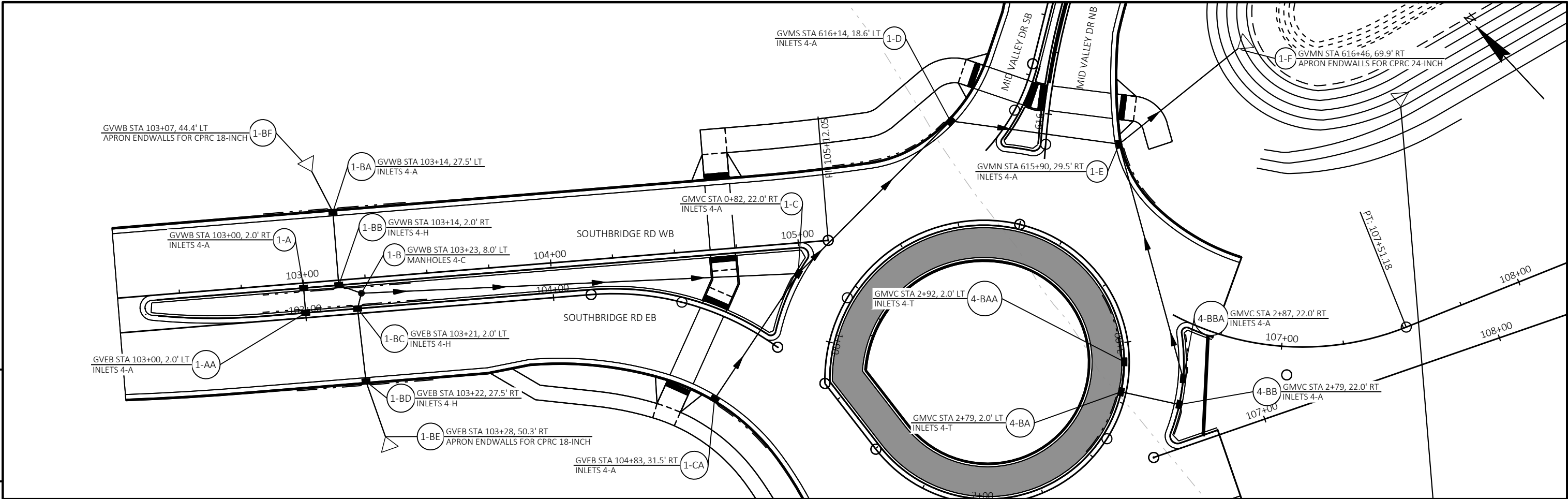
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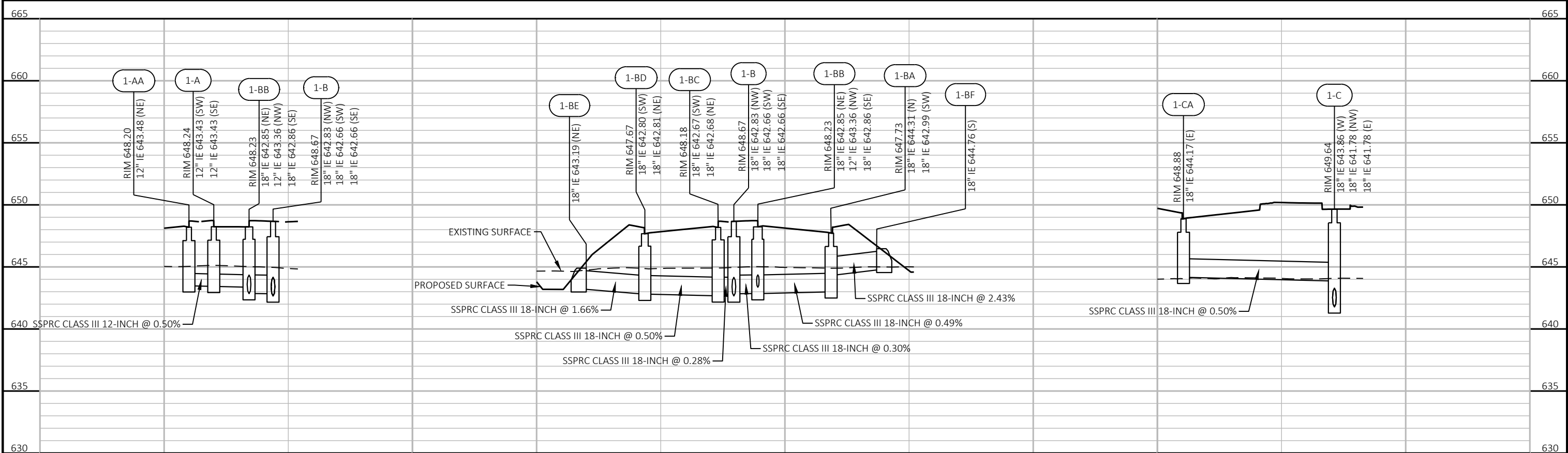
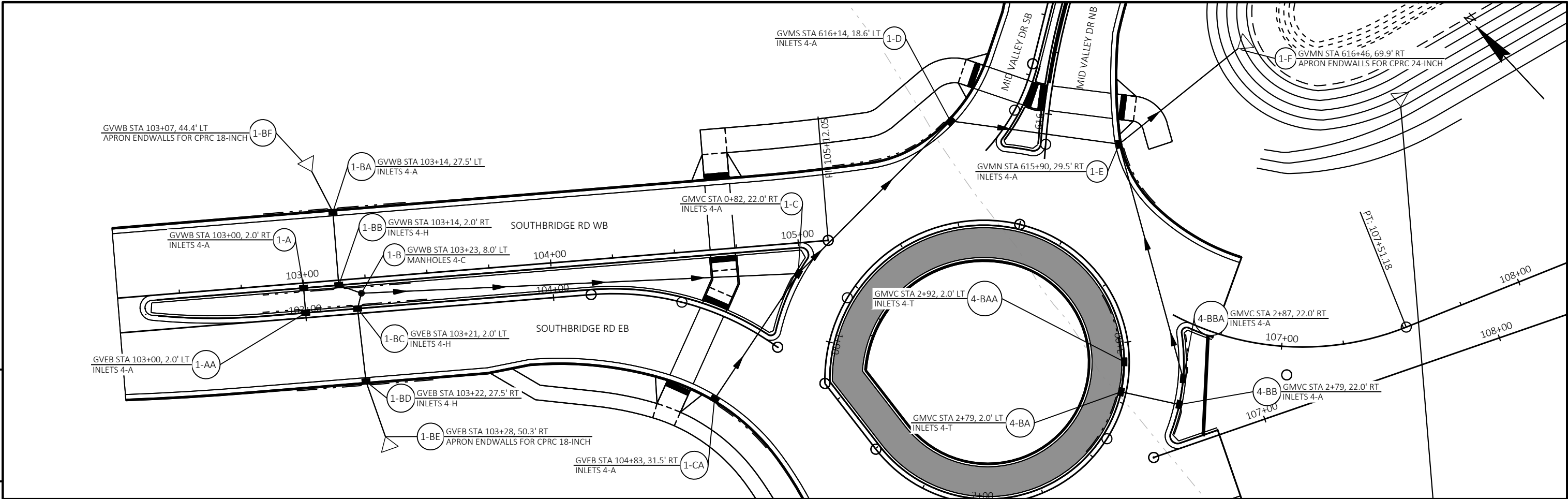




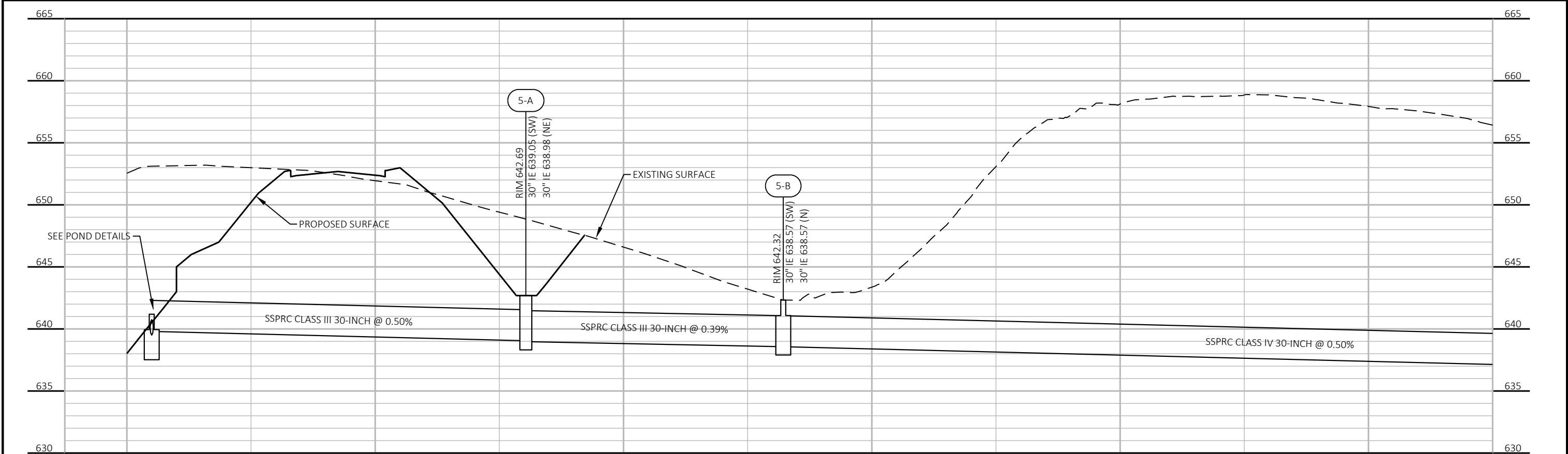
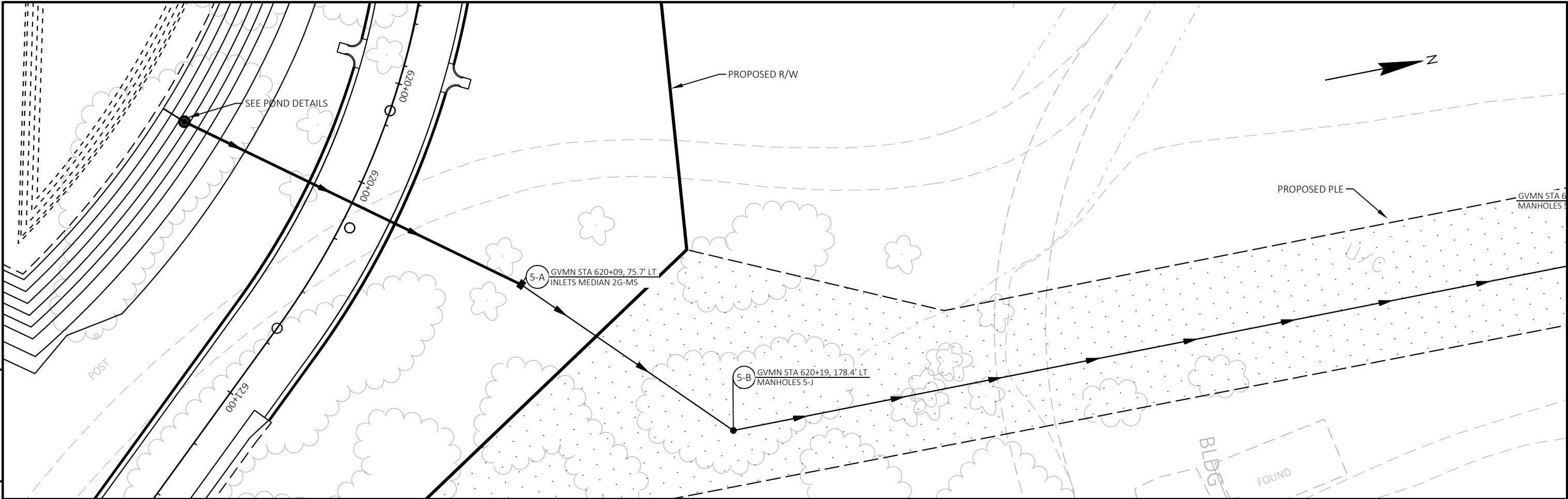


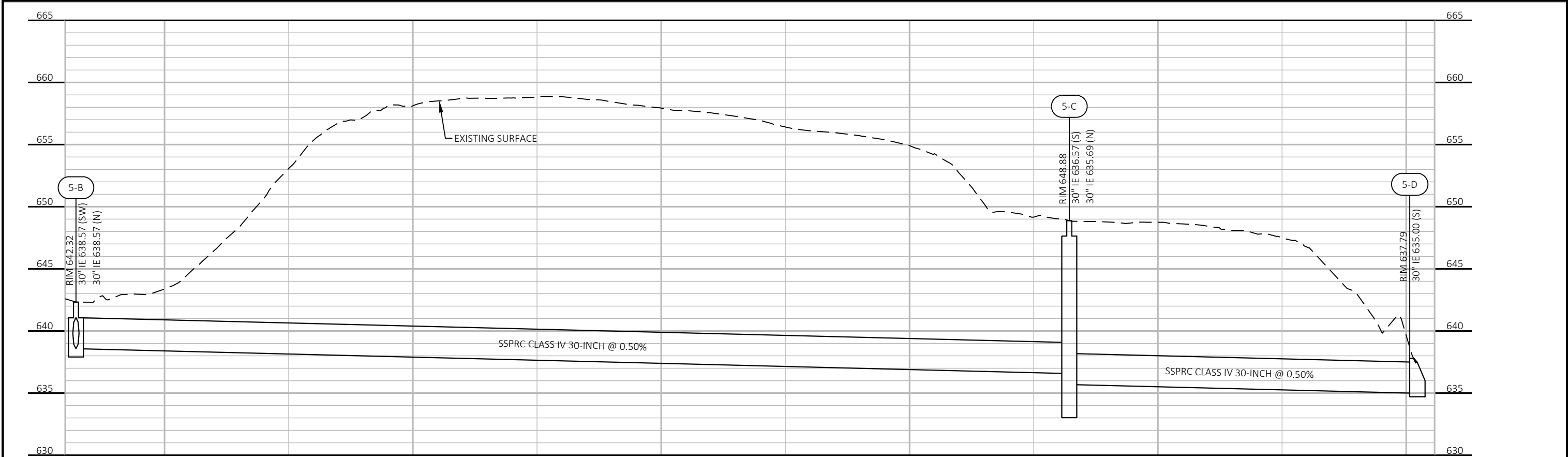
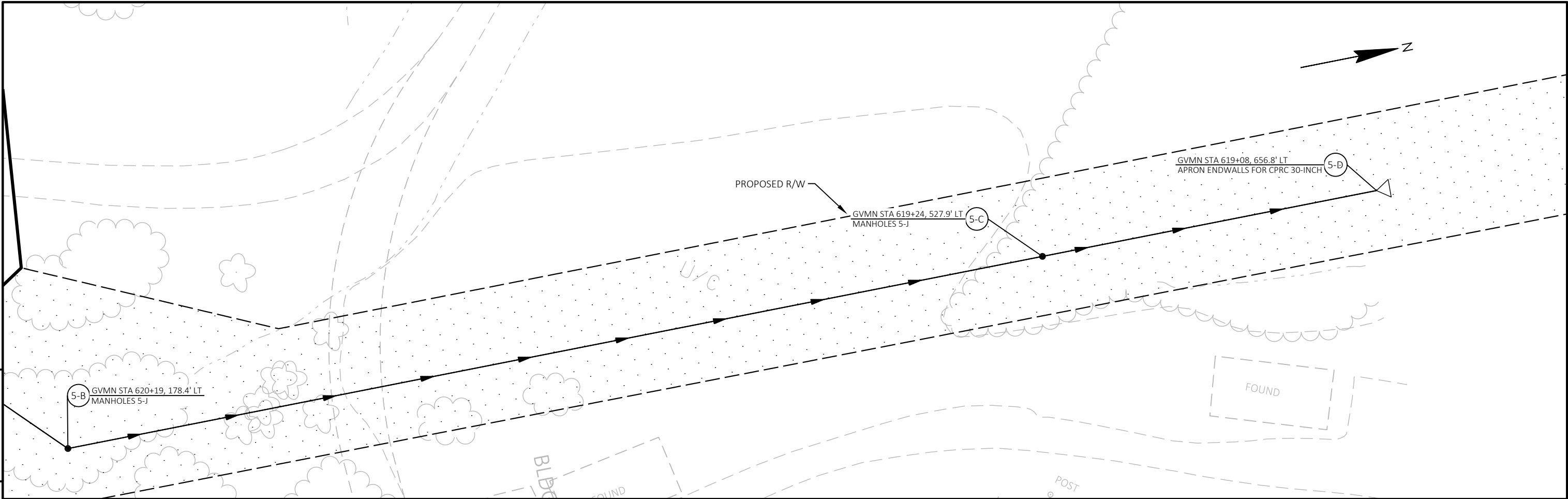


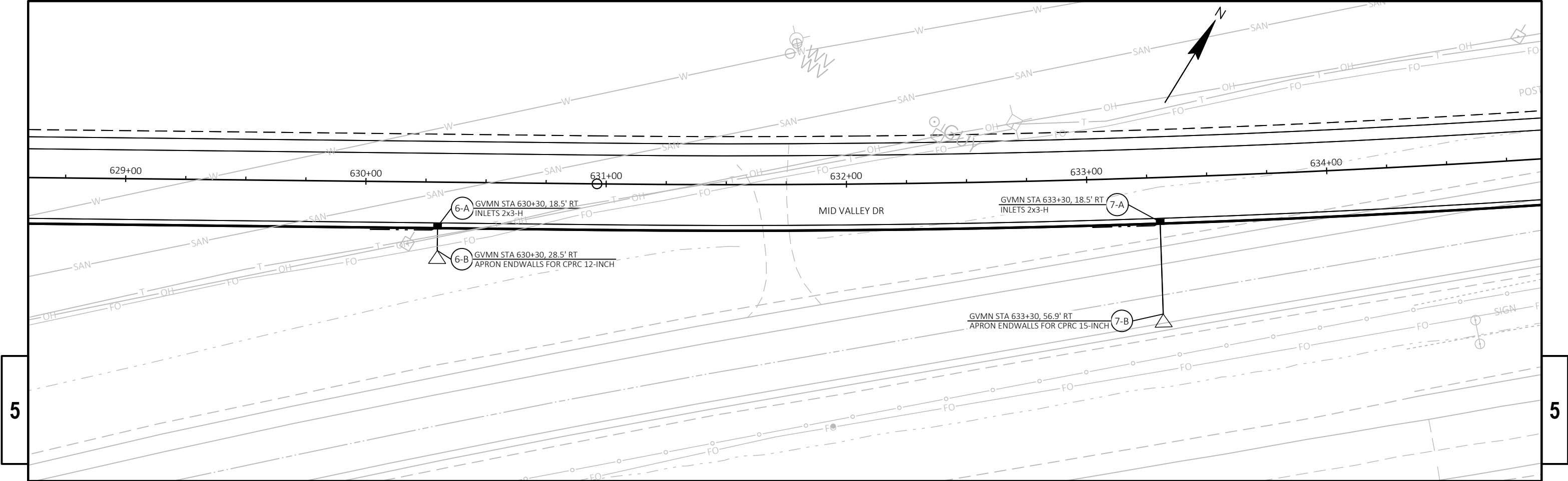
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PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE:	STORM SEWER	SHEET	E
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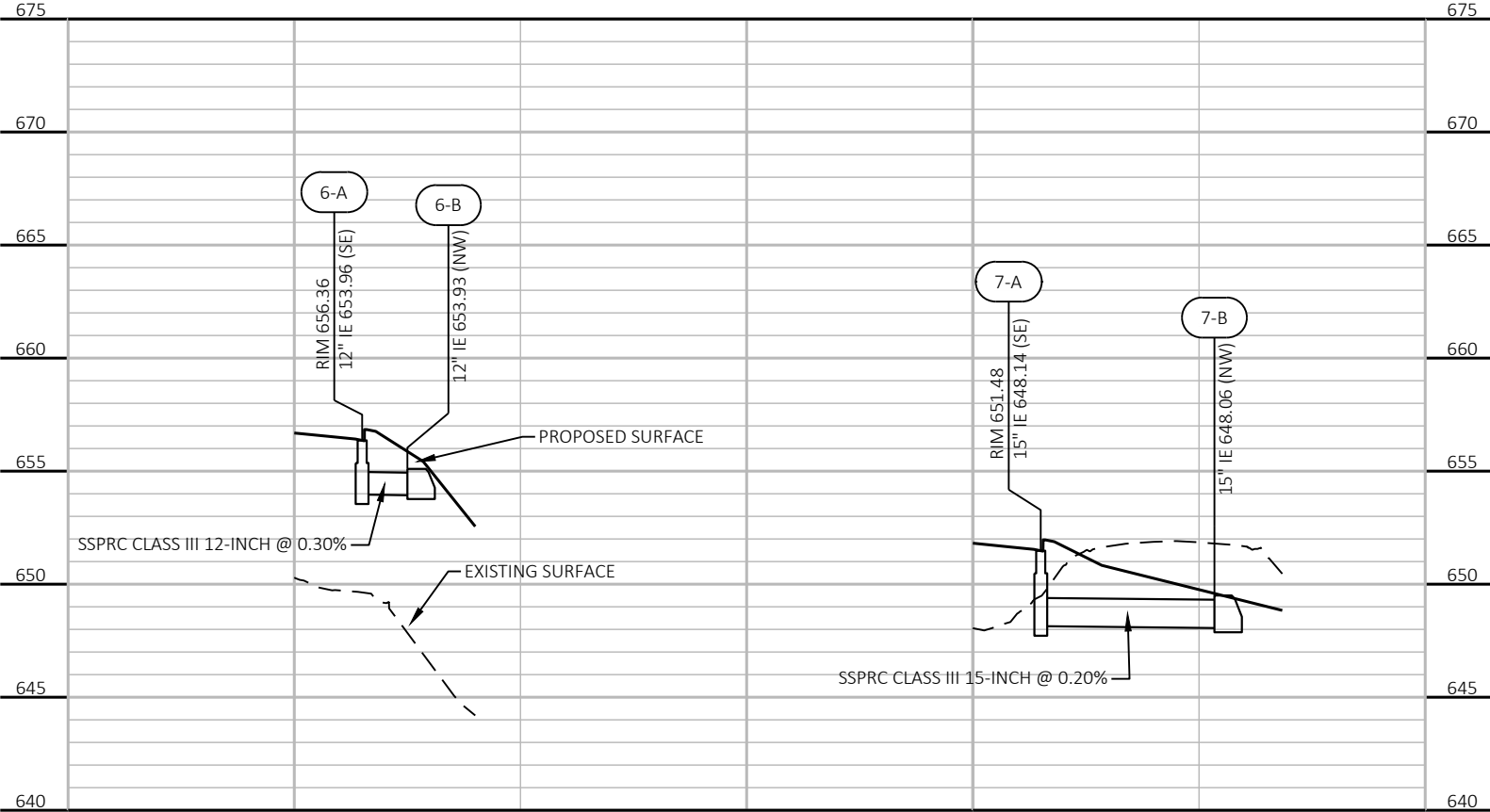


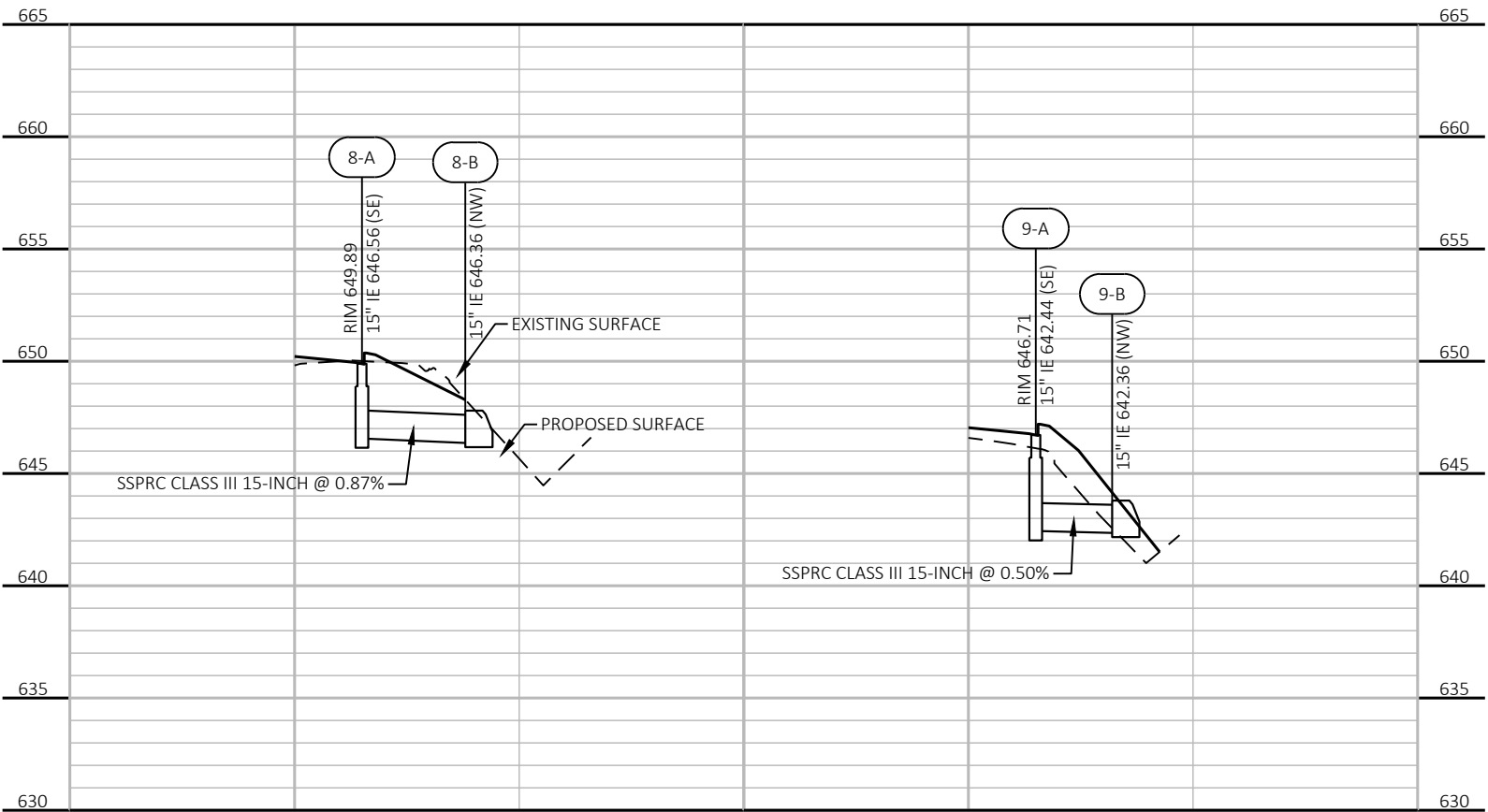
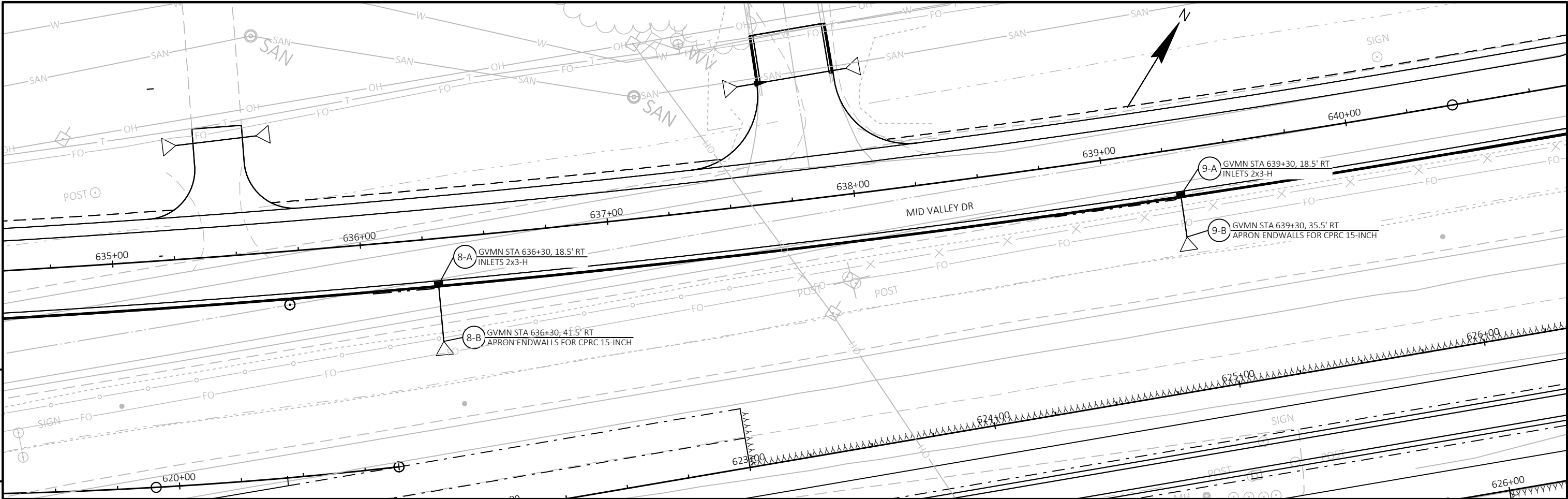


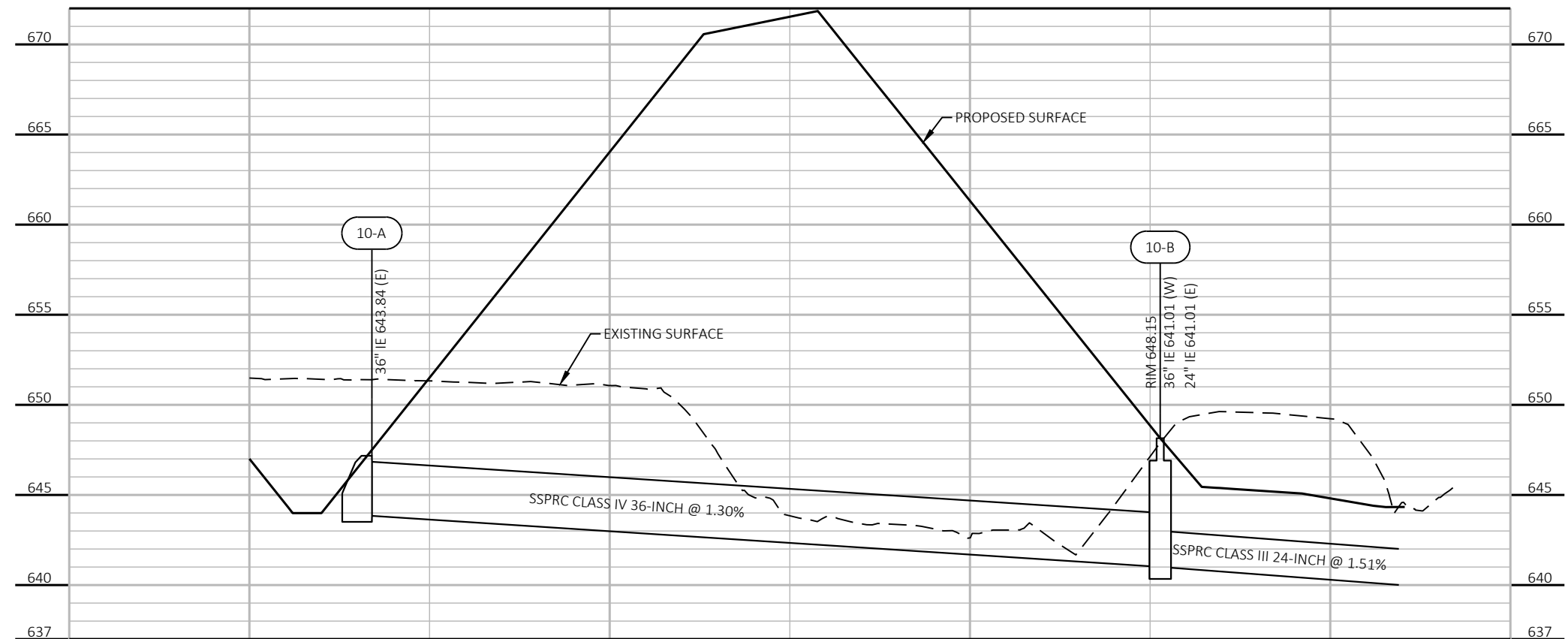
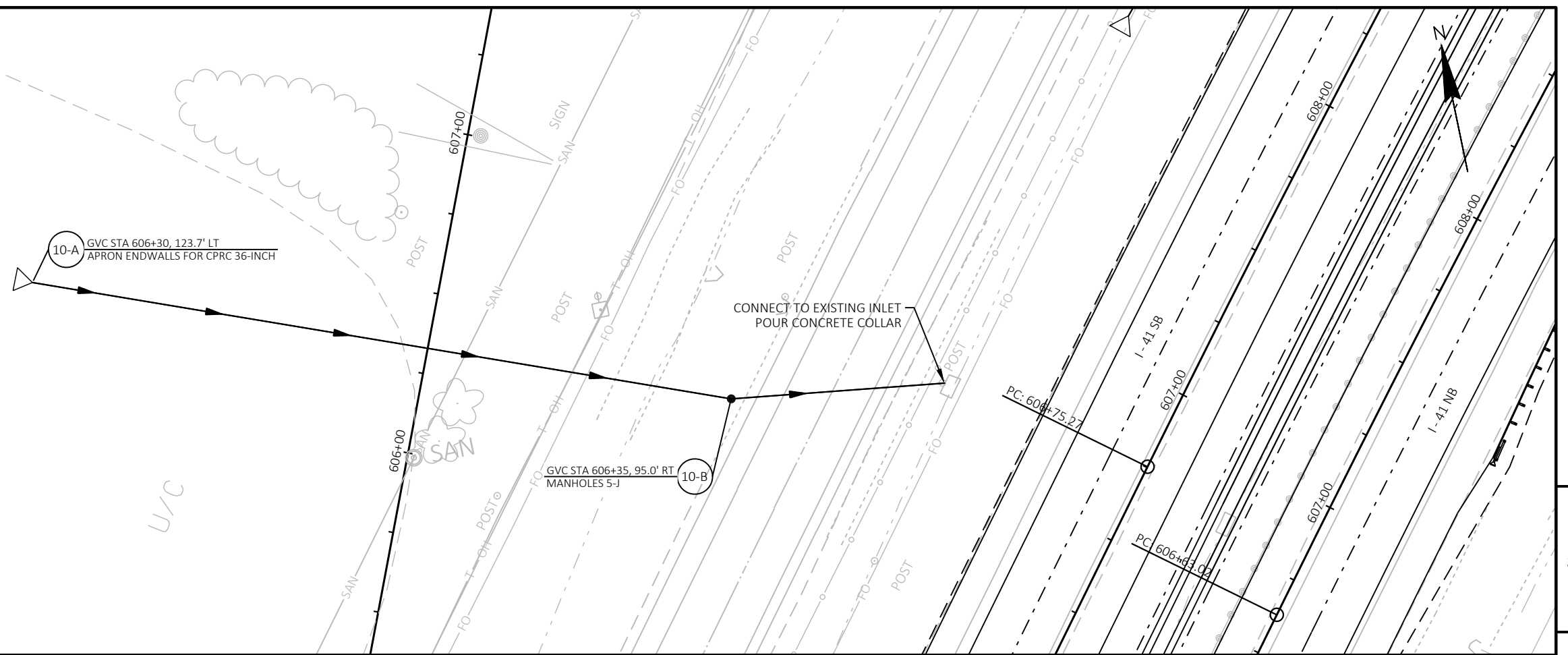


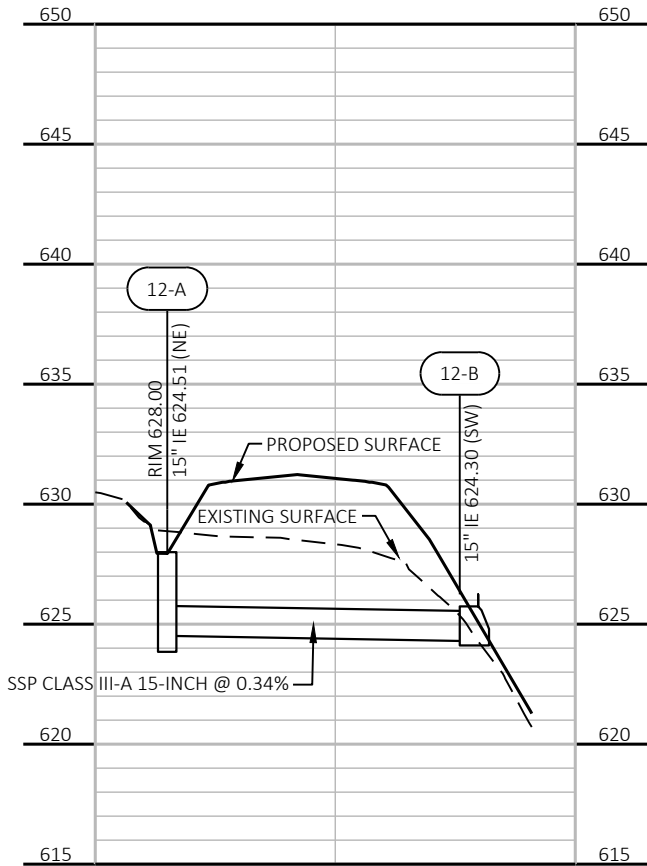
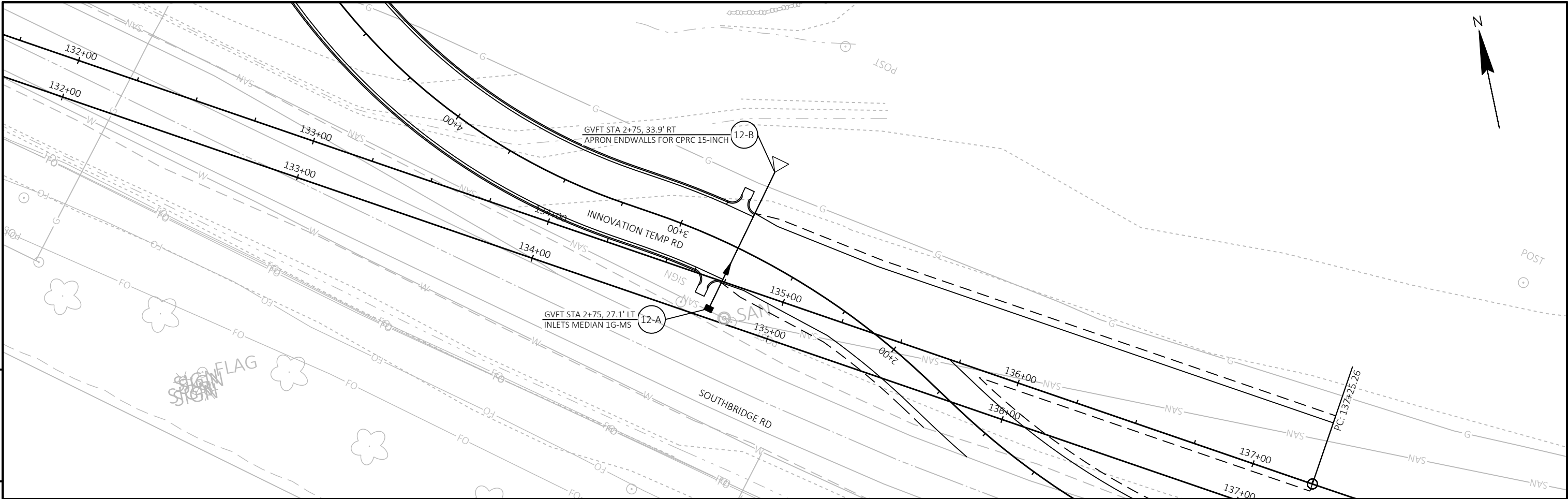
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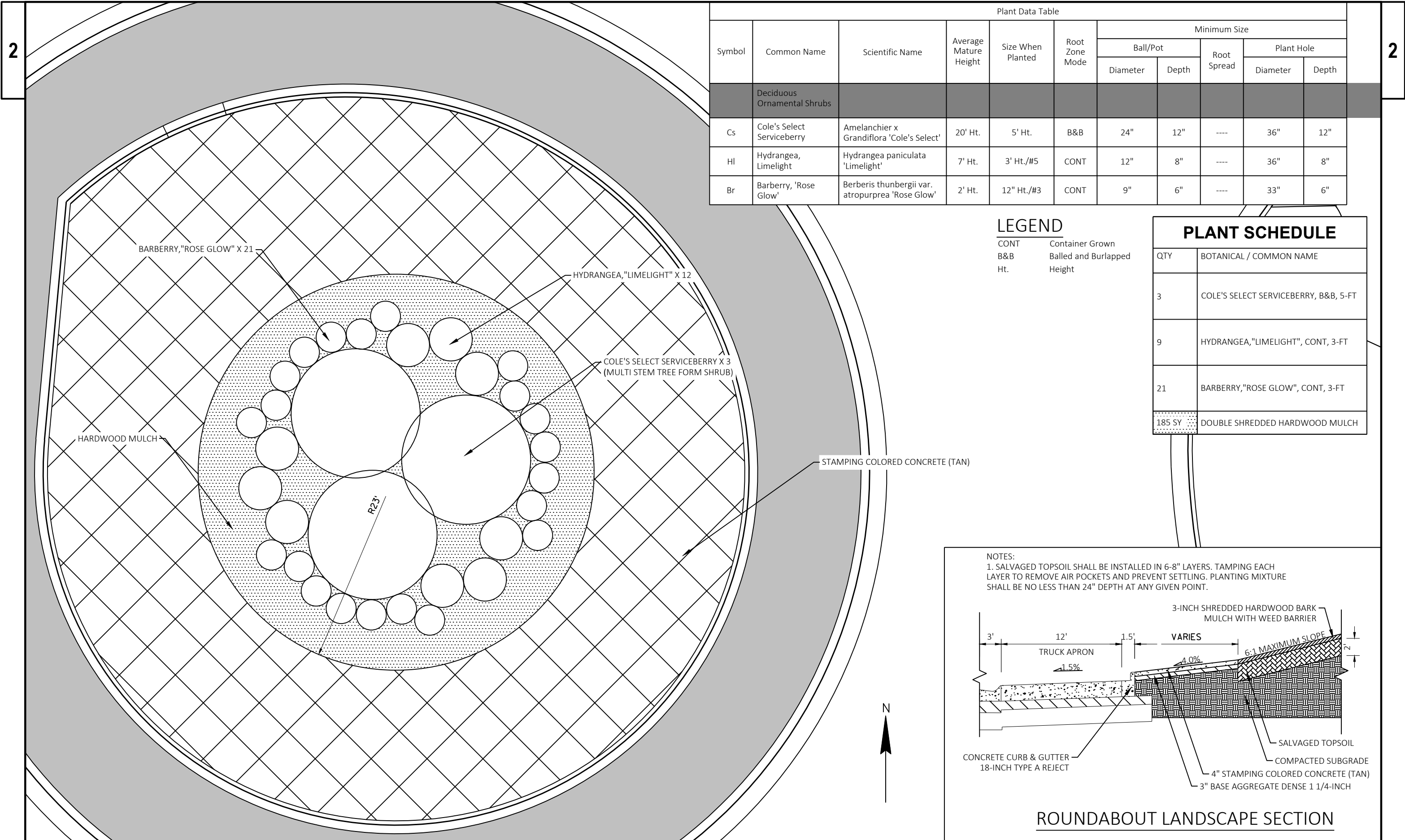
5











Plant Data Table										
Symbol	Common Name	Scientific Name	Average Mature Height	Size When Planted	Root Zone Mode	Minimum Size				
						Ball/Pot		Root Spread	Plant Hole	
						Diameter	Depth		Diameter	Depth
	Deciduous Ornamental Shrubs									
Cs	Cole's Select Serviceberry	Amelanchier x Grandiflora 'Cole's Select'	20' Ht.	5' Ht.	B&B	24"	12"	----	36"	12"
HI	Hydrangea, Limelight	Hydrangea paniculata 'Limelight'	7' Ht.	3' Ht./#5	CONT	12"	8"	----	36"	8"
Br	Barberry, 'Rose Glow'	Berberis thunbergii var. atropurpurea 'Rose Glow'	2' Ht.	12" Ht./#3	CONT	9"	6"	----	33"	6"

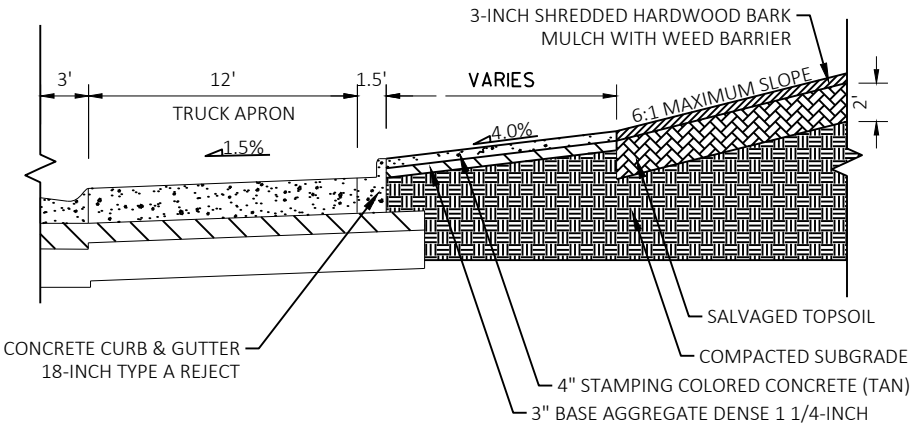
LEGEND

CONT Container Grown
B&B Balled and Burlapped
Ht. Height

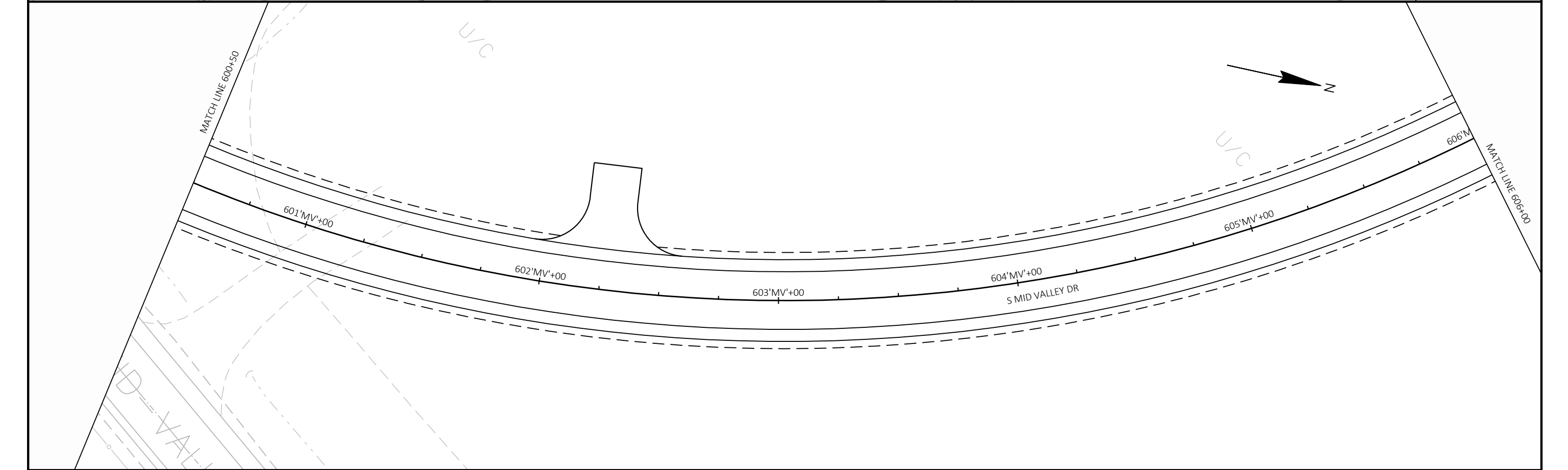
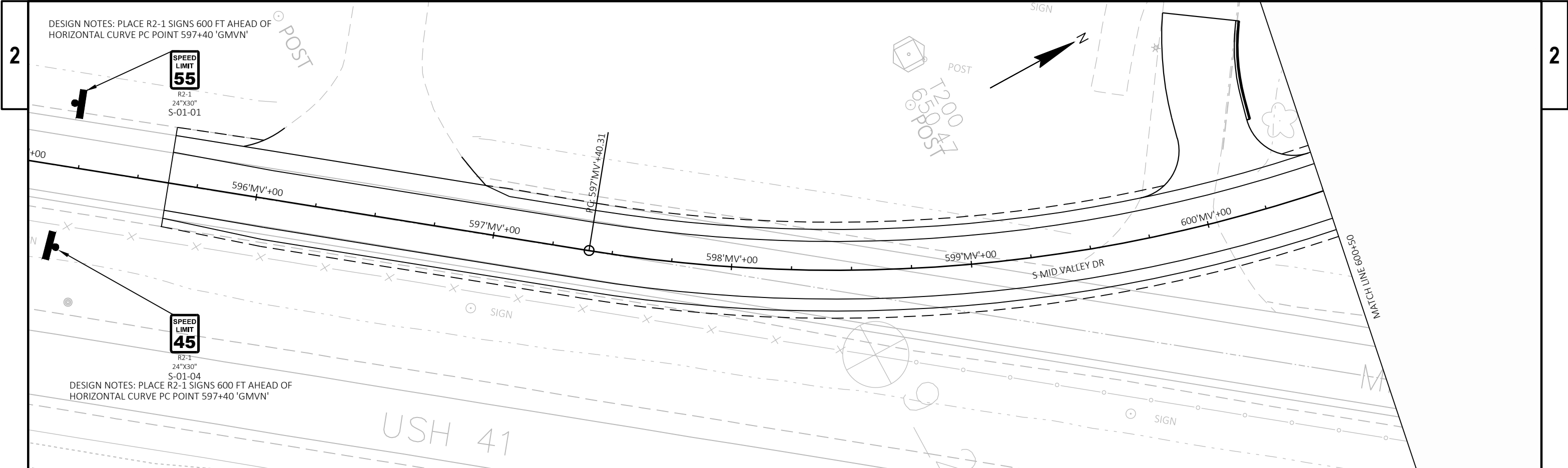
PLANT SCHEDULE

QTY	BOTANICAL / COMMON NAME
3	COLE'S SELECT SERVICEBERRY, B&B, 5-FT
9	HYDRANGEA, "LIMELIGHT", CONT, 3-FT
21	BARBERRY, "ROSE GLOW", CONT, 3-FT
185 SY	DOUBLE SHREDDED HARDWOOD MULCH

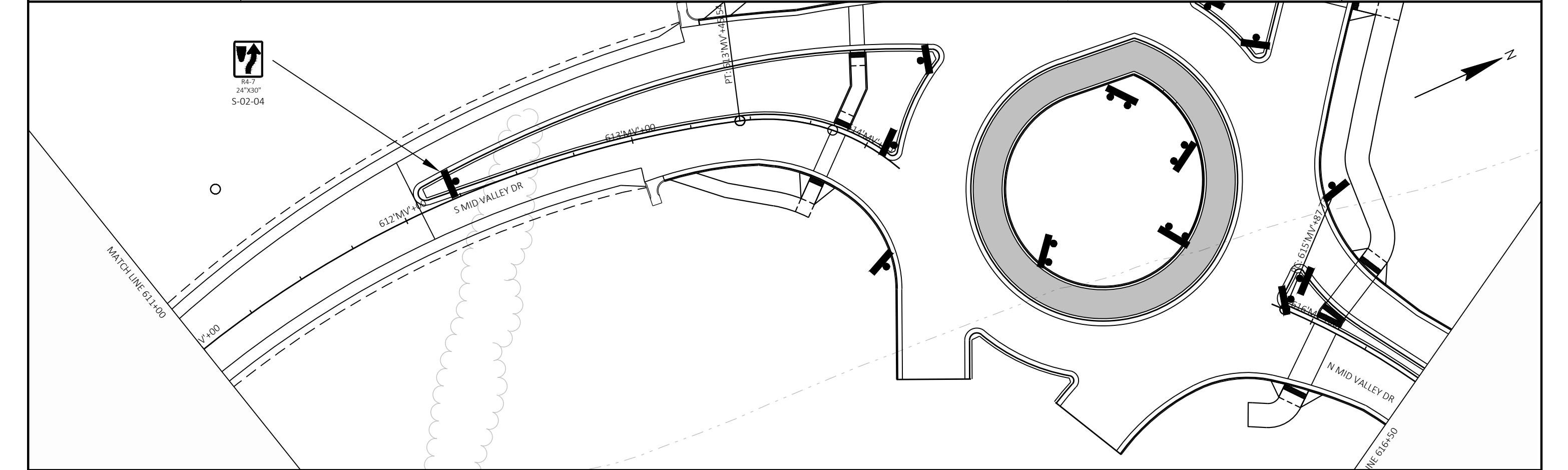
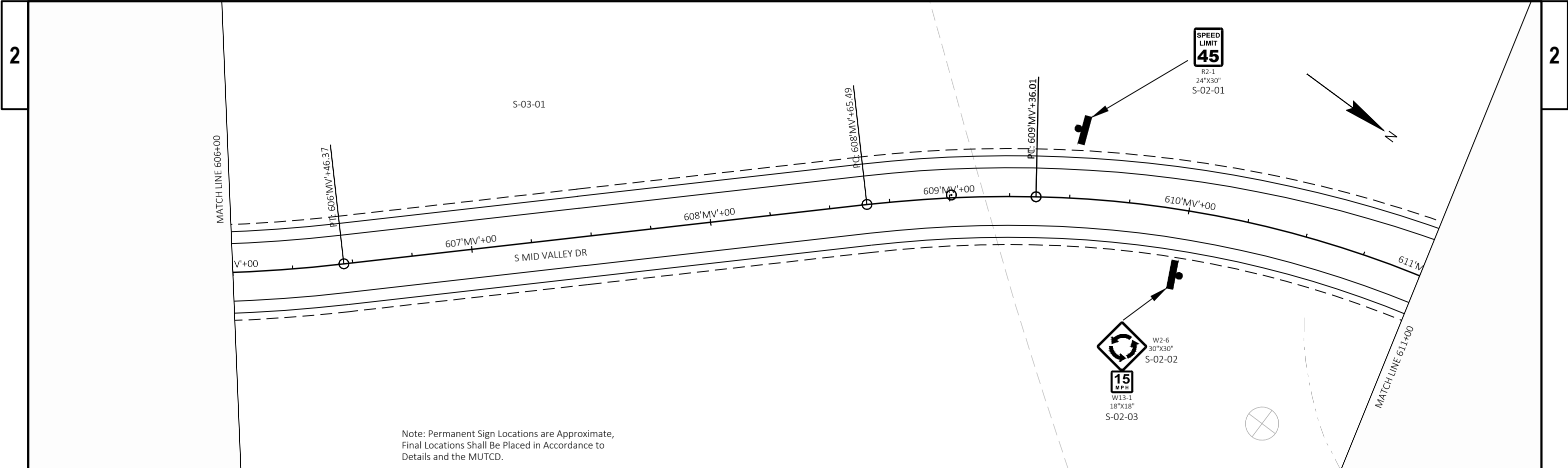
NOTES:
1. SALVAGED TOPSOIL SHALL BE INSTALLED IN 6-8" LAYERS. TAMPING EACH LAYER TO REMOVE AIR POCKETS AND PREVENT SETTLING. PLANTING MIXTURE SHALL BE NO LESS THAN 24" DEPTH AT ANY GIVEN POINT.



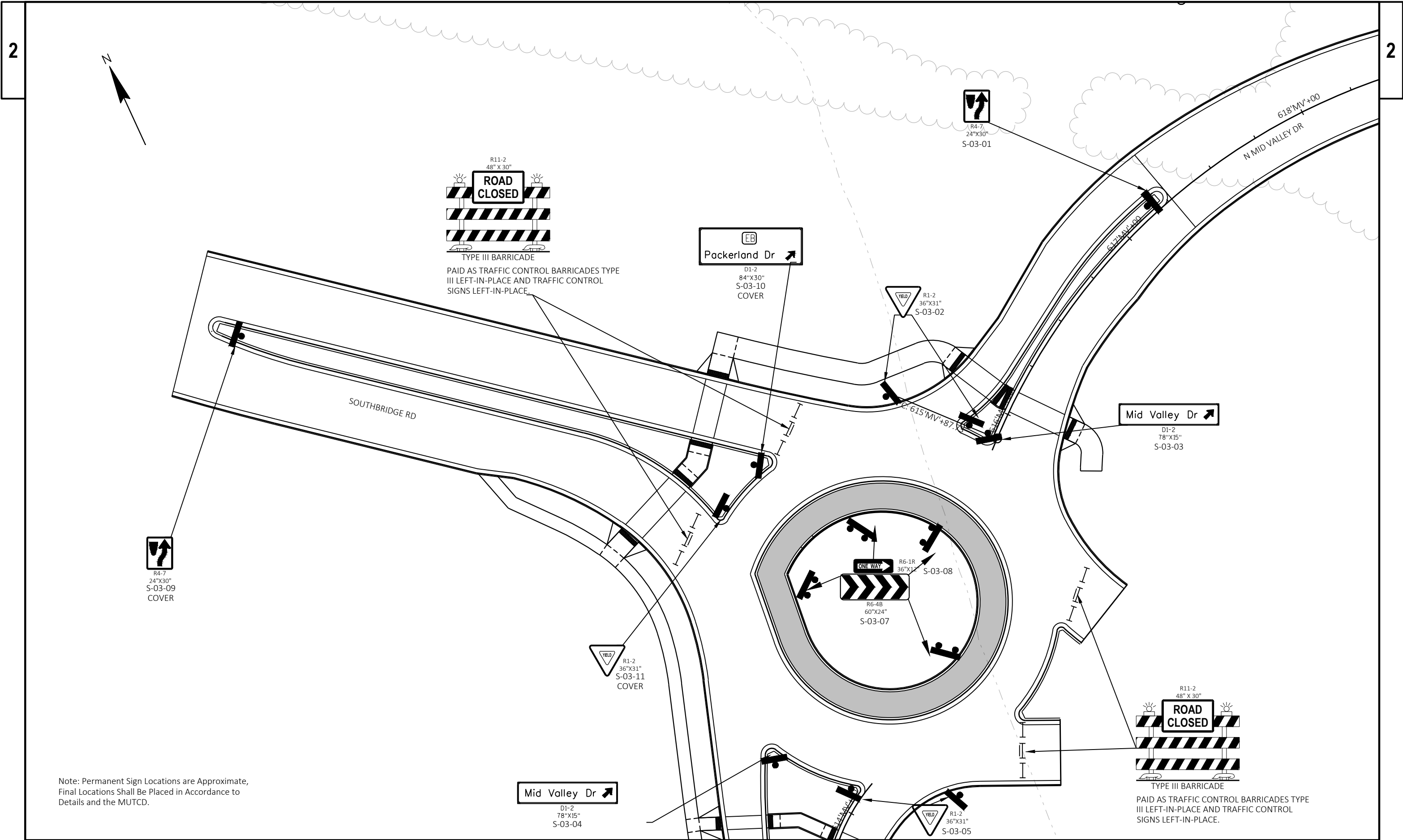
ROUNABOUT LANDSCAPE SECTION



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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Note: Permanent Sign Locations are Approximate,
Final Locations Shall Be Placed in Accordance to
Details and the MUTCD.

PROJECT NO: 1130-68-81

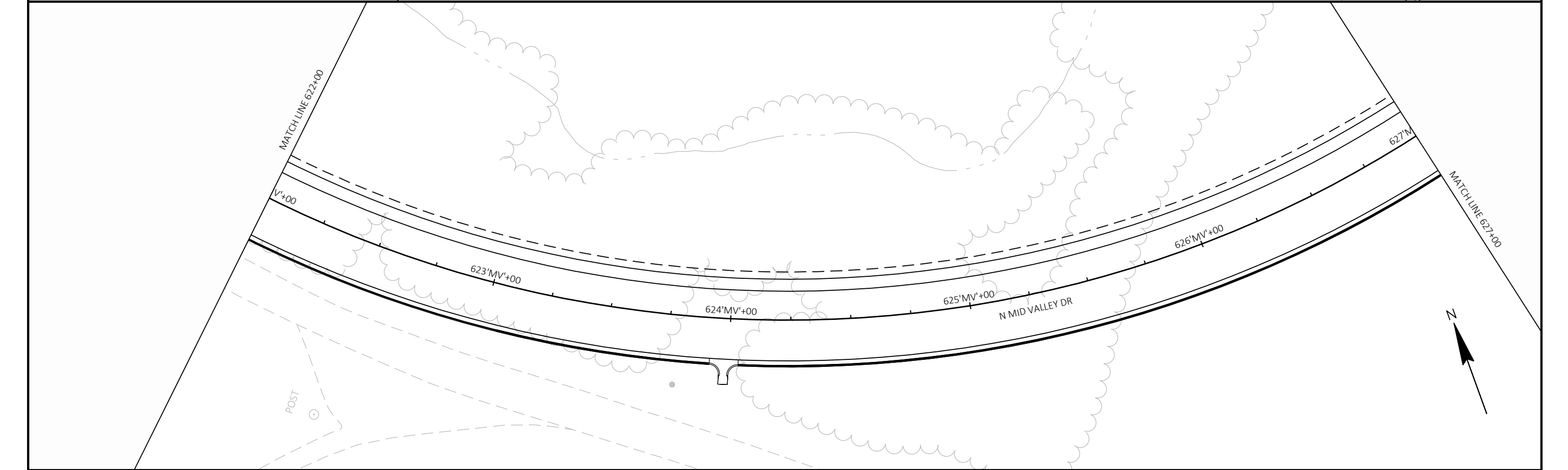
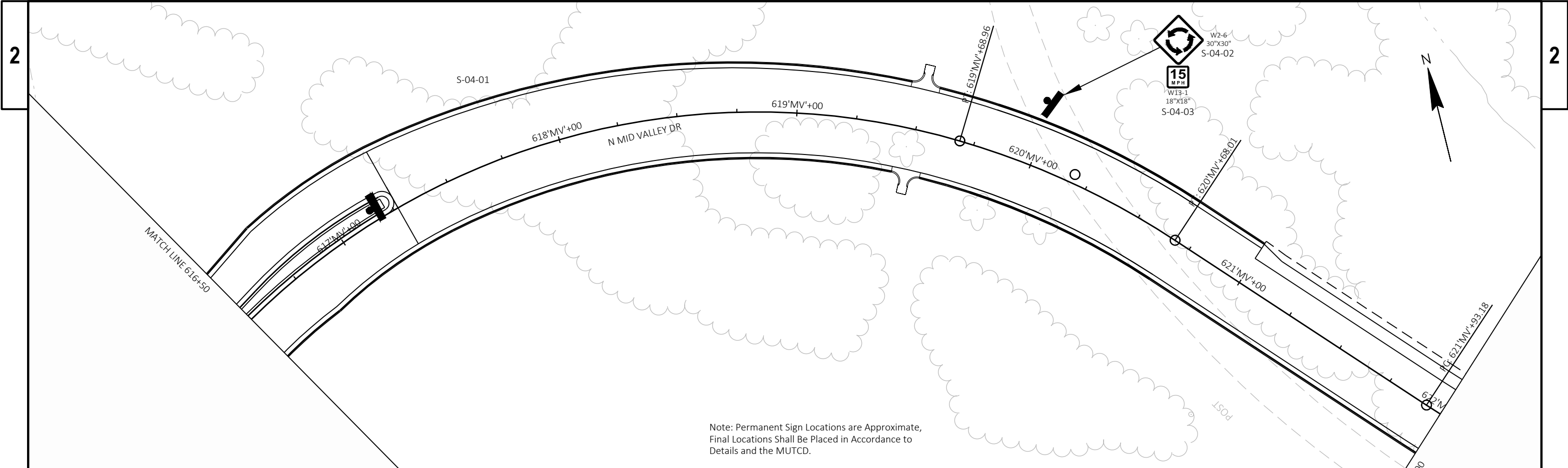
HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

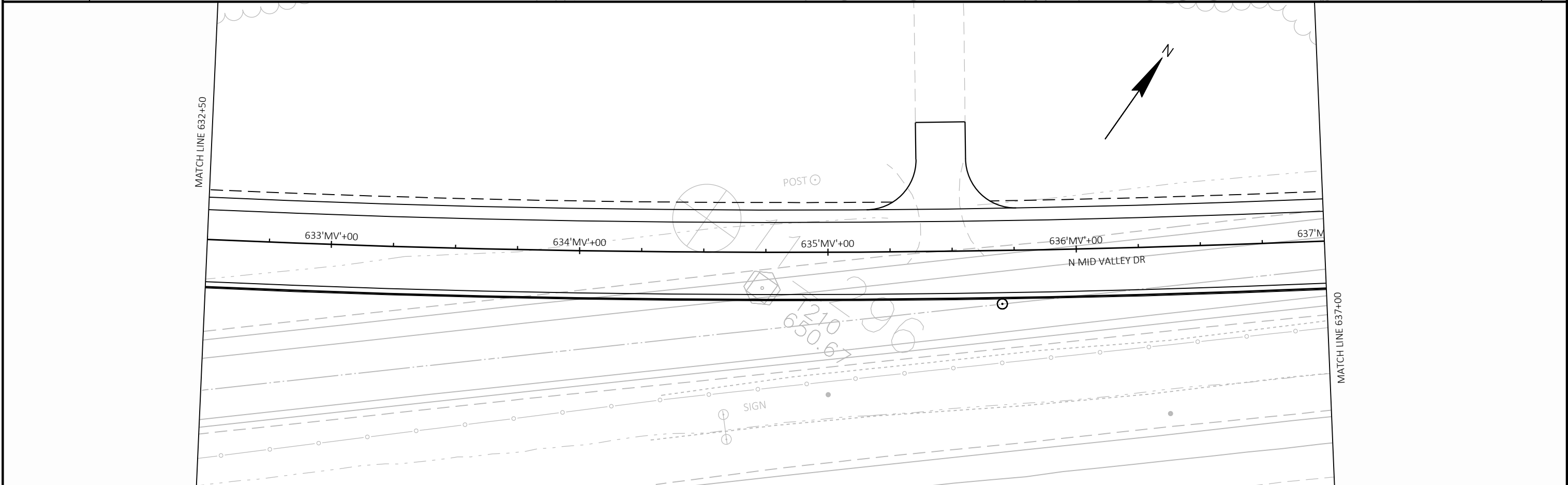
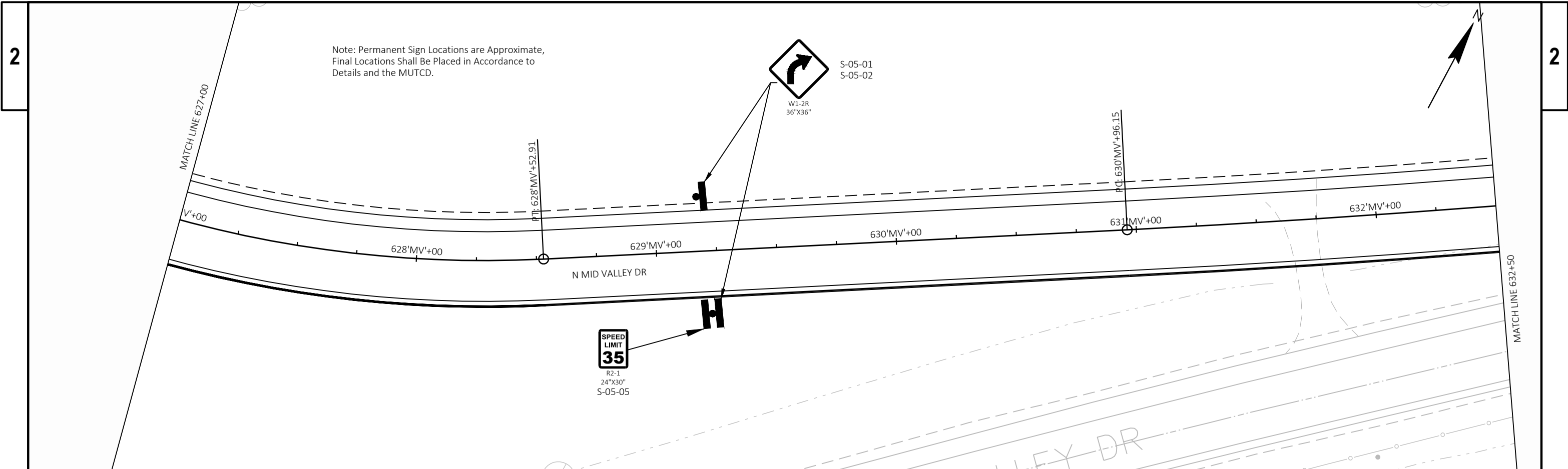
PERMANENT SIGNING PLAN

SHEET

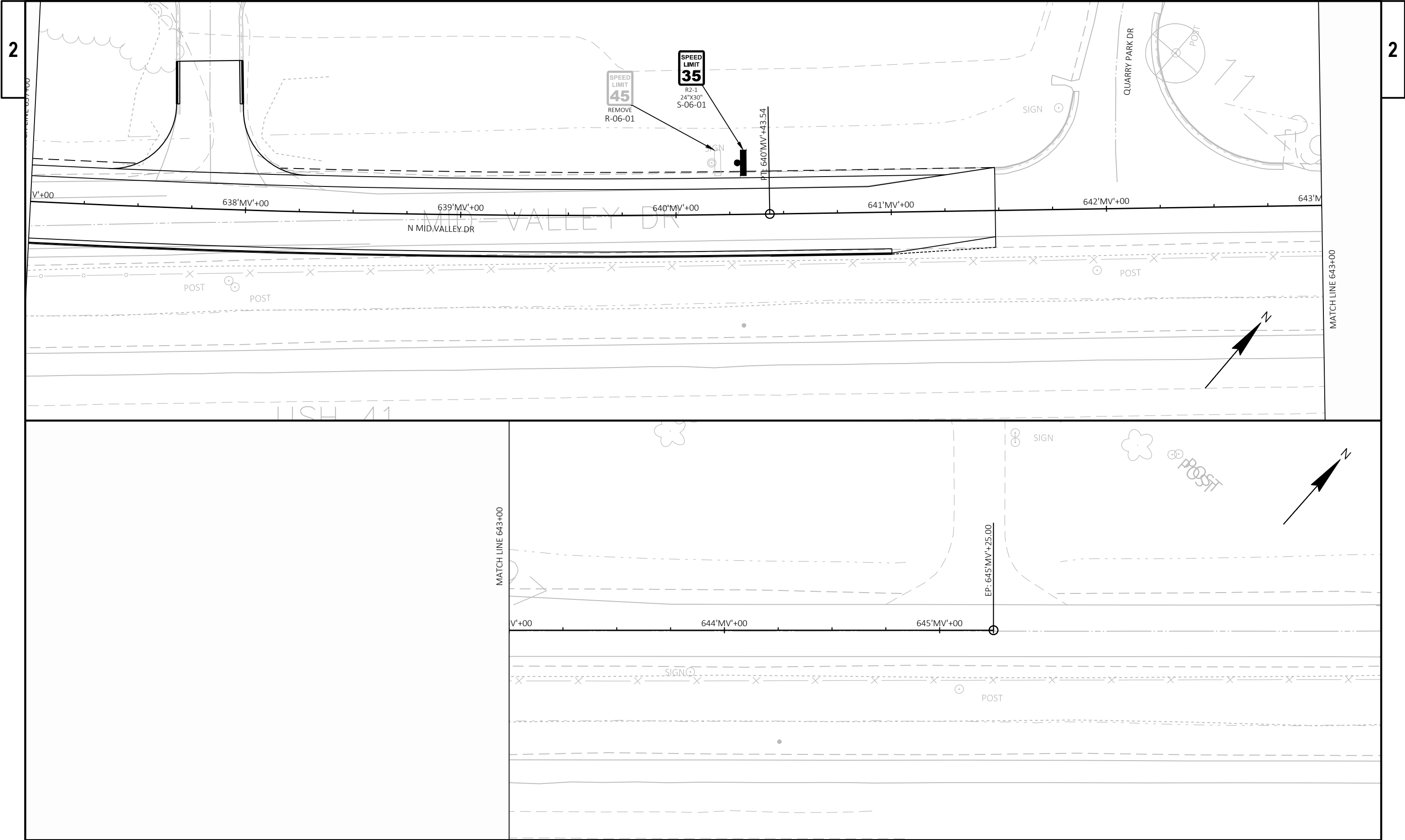
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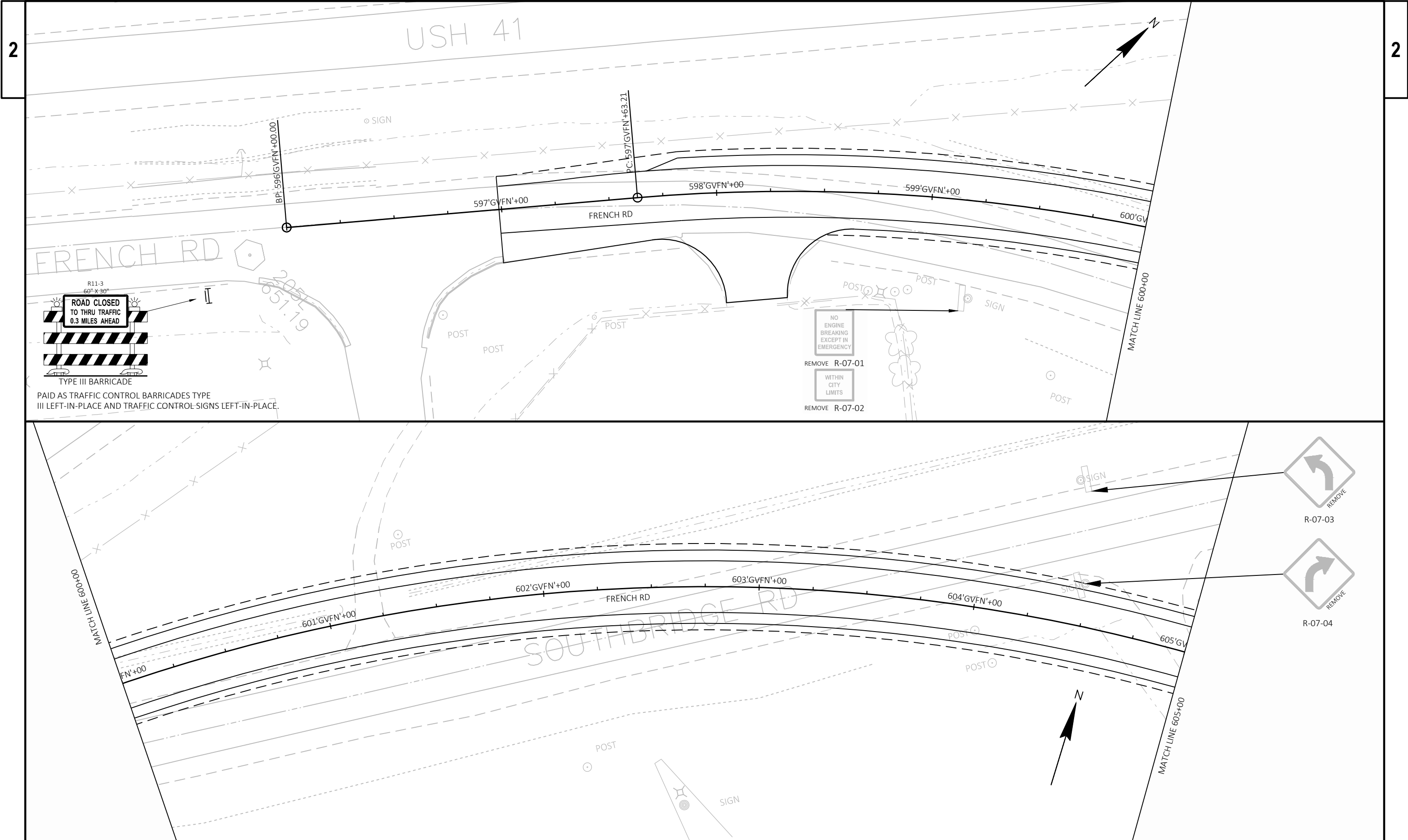
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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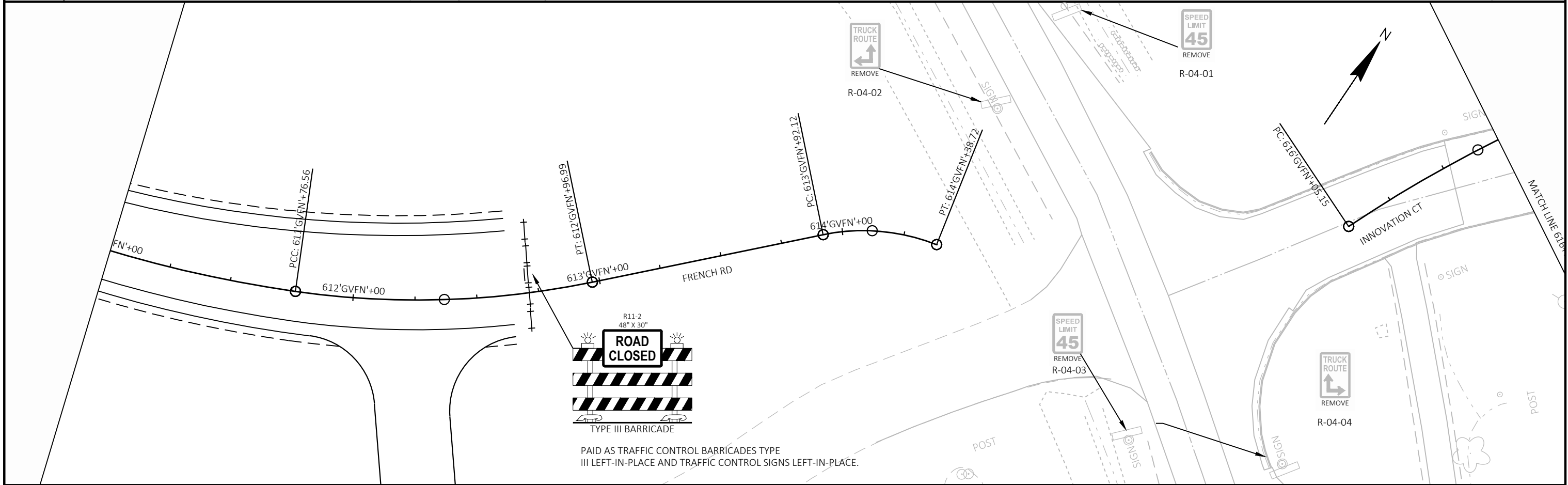
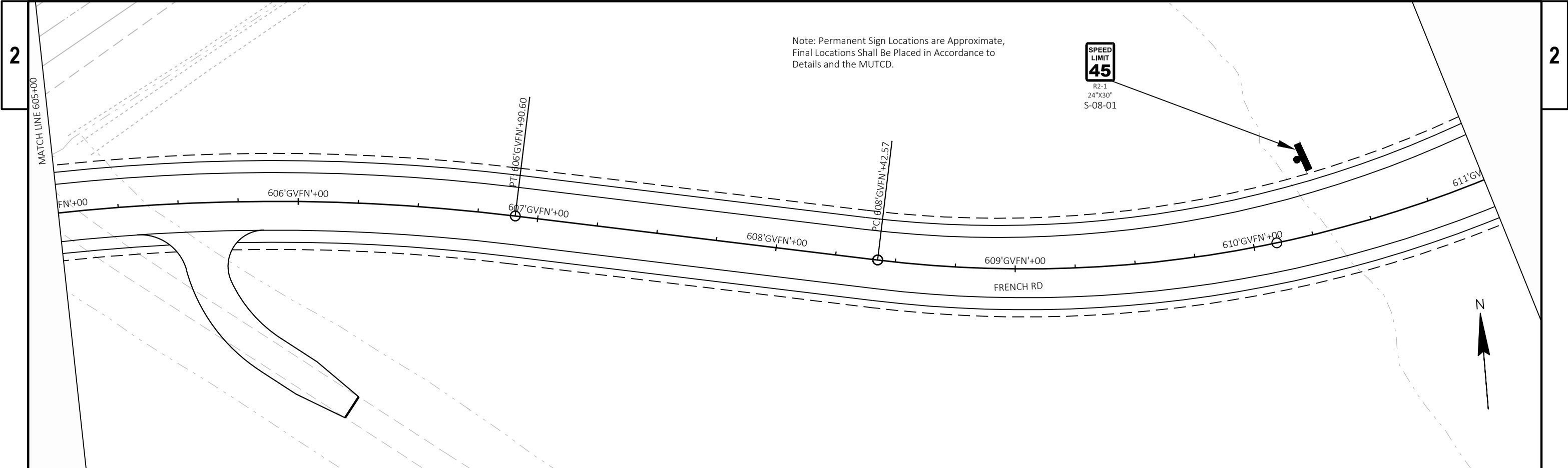


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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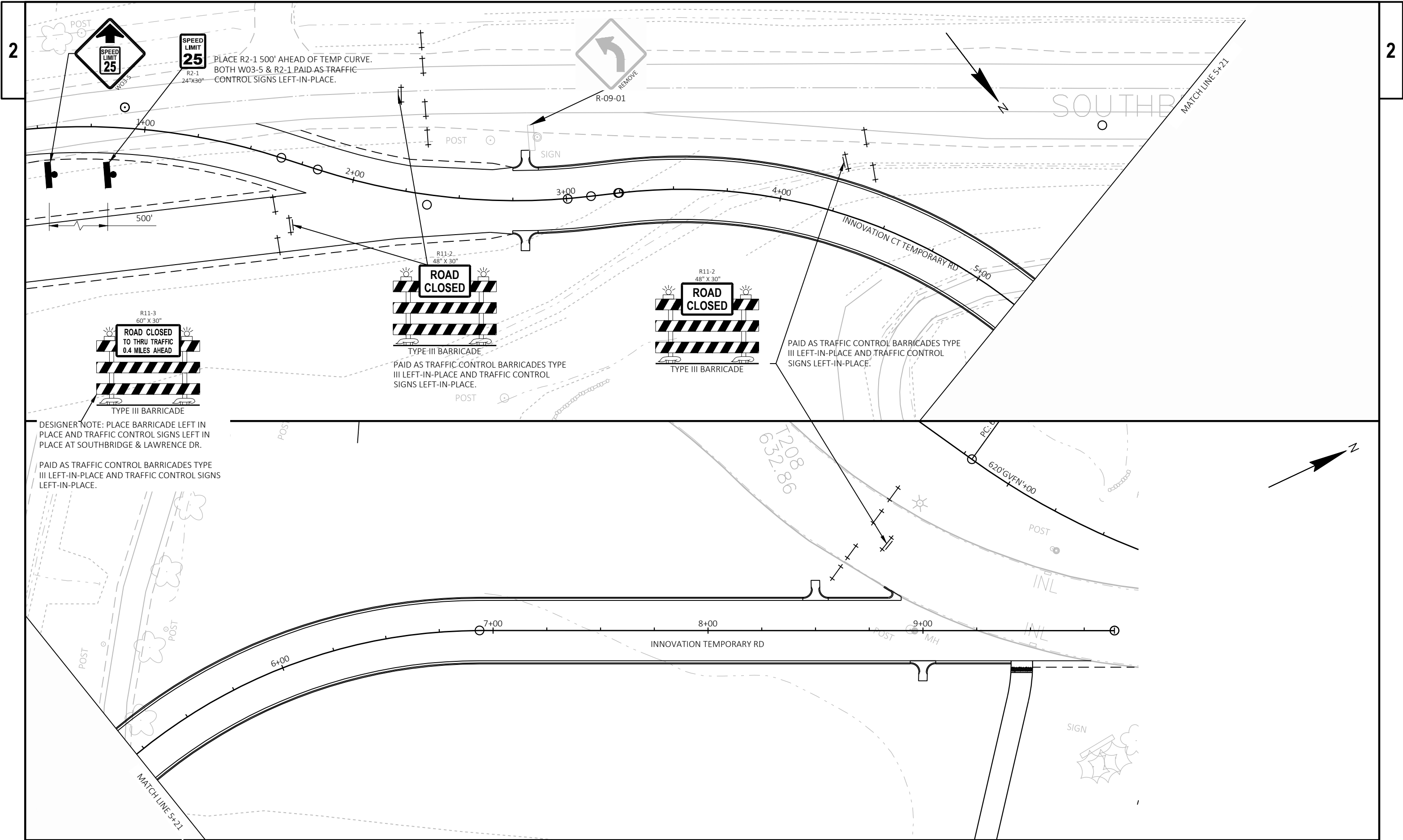


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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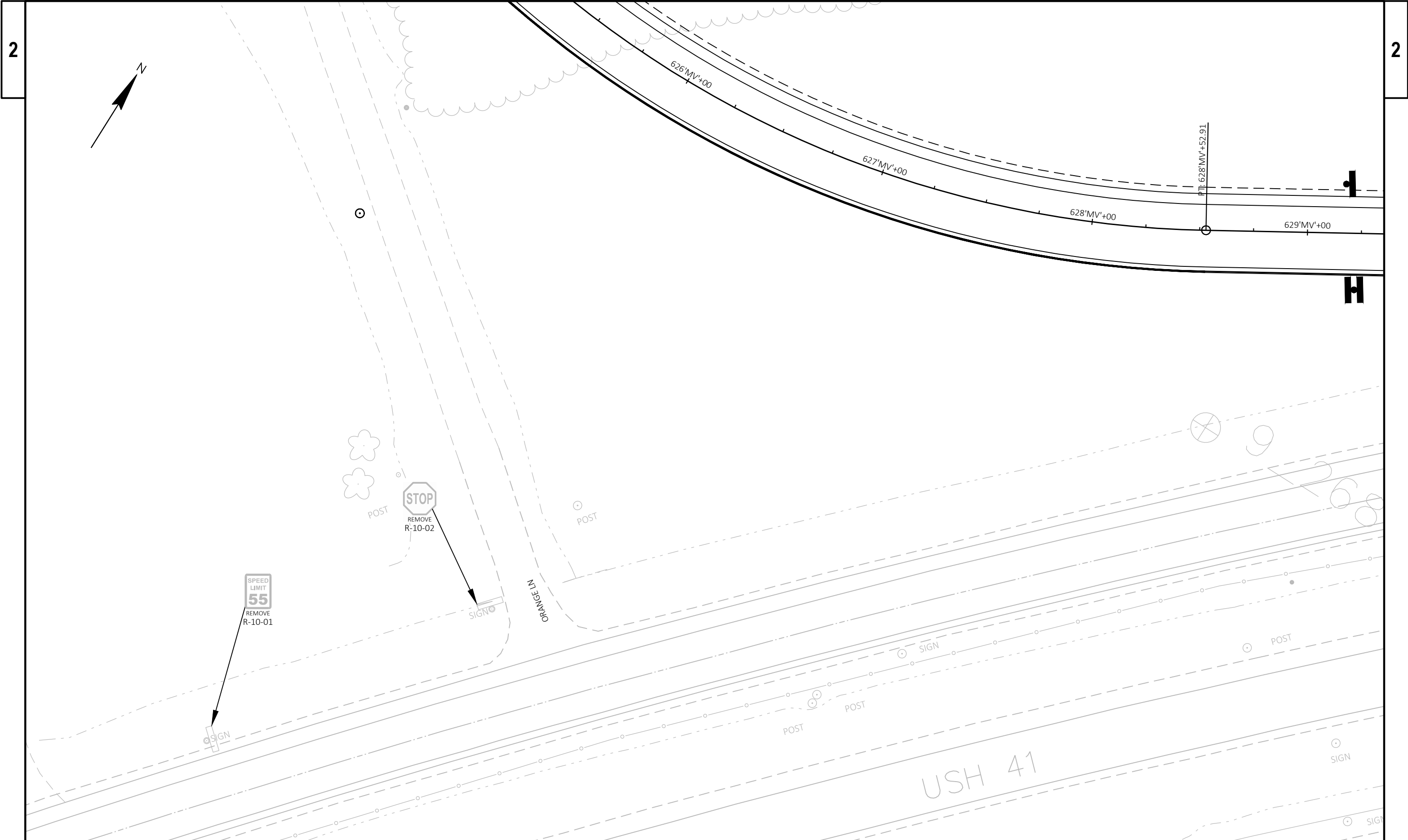




PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PERMANENT SIGNING PLAN	SHEET	E
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(DATE)

(SIGNATURE)

- 1) WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO INSTALLATION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5654 OR (920) 492-5628.
- 2) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 3) EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACTOR'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.
- 4) ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.
- 5) MAINTAIN LIGHTING AT ALL TIMES DURING CONSTRUCTION USING REMAINING EXISTING LIGHTING AND TEMPORARY LIGHTING.
- 6) DO NOT REMOVE EXISTING LIGHTING UNTIL THE TEMPORARY LIGHTING IS OPERATIONAL.
- 7) PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN.
- 8) PROPOSED STORM SEWER AND PAVEMENT MARKING PLANS ARE SHOWN IN GRAYSHADE FOR PLAN CLARITY.

	TEMPORARY METER BREAKER PEDESTAL (TMBP)
	METER BREAKER PEDESTAL (MBP) TO BE SALVAGED
	PULL BOX (24"X42") TO BE REMOVED
	LIGHTING CONDUIT TO BE ABANDONED
	SINGLE ARM LUMINAIRE TO BE REMOVED

 TEMPORARY METER BREAKER PEDESTAL (TMBP)
 PULL BOX NON-CONDUCTIVE (24"x42")
 — — — — LIGHTING CONDUIT (2" SCHEDULE 40 PVC UNLESS SPECIFIED OTHERWISE)
 EXISTING SINGLE ARM LUMINAIRE

	PROPOSED CONCRETE CONTROL CABINET BASE/ELEC. SERVICE
	PROPOSED PULL BOX NON-CONDUCTIVE (24"x42")
	PROPOSED LIGHTING CONDUIT (2" SCHEDULE 40 PVC UNLESS SPECIFIED OTHERWISE)
	PROPOSED LIGHTING CONDUIT (3" SCHEDULE 80 PVC UNLESS SPECIFIED OTHERWISE)
	PROPOSED SINGLE ARM LUMINAIRE

The diagram illustrates the structure of a 12-character alphanumeric code used for luminaire identification. The code is divided into two main sections: a 6-character section and a 6-character section.

Top Section (6 characters):

- Character 1: **STATION**
- Character 2: **OFFSET**
- Character 3: **LED X**
- Character 4: **F6XXX**
- Character 5: **LIGHTING UNIT NUMBER**
- Character 6: **LUMINAIRE UTILITY LED CATEGORY**

Bottom Section (6 characters):

- Character 1: **STATION**
- Character 2: **OFFSET**
- Character 3: **LED X**
- Character 4: **X**
- Character 5: **X**
- Character 6: **SLXXX**

The diagram shows the following breakdown of the 12-character code:

- STATION** (Character 1)
- OFFSET** (Character 2)
- LED X** (Character 3)
- F6XXX** (Character 4)
- LIGHTING UNIT NUMBER** (Character 5)
- LUMINAIRE UTILITY LED CATEGORY** (Character 6)

Diagram illustrating the components and data for a Service Cabinet:

- SERVICE CABINET
- NO. OF CONDUITS
- CONDUIT SIZE

CB100	1	2"
A1	*2	1 #2

- SIZE (AWG) OF GROUNDING CONDUCTOR
- QTY. OF GROUNDING CONDUCTOR
- SIZE (AWG) OF CONDUCTORS
- QTY. OF CONDUCTORS
- CIRCUIT

PWO = PULL WIRE ONLY

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



1

A - BLACK
B - RED

240V PHASE TO PHASE

- IH 41 CORRIDOR - SOUTHBRIDGE RD INTERCHANGE / TOWN OF LAWRENCE / BROWN COUNTY
- CB200 / SOUTHEAST QUADRANT SOUTHBRIDGE RD & MID VALLEY DR
- 120/240 VOLT SINGLE PHASE / 200 AMP SERVICE
- METER BREAKER PEDESTAL
- CIRCUIT DESCRIPTIONS
- CKT A - ROUNDABOUT
- CKT B - ROUNDABOUT

2

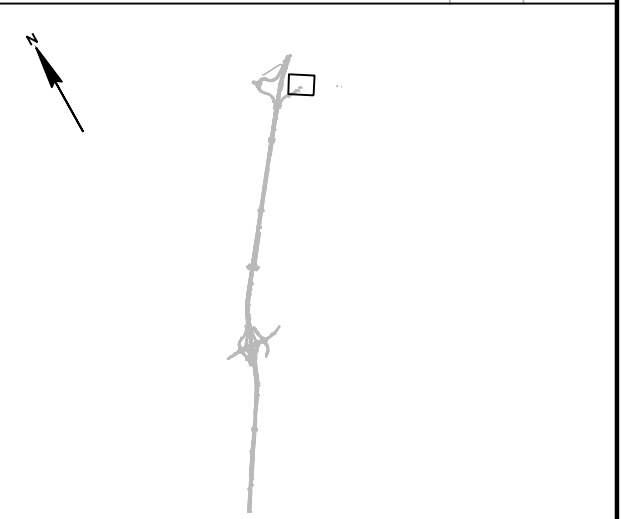
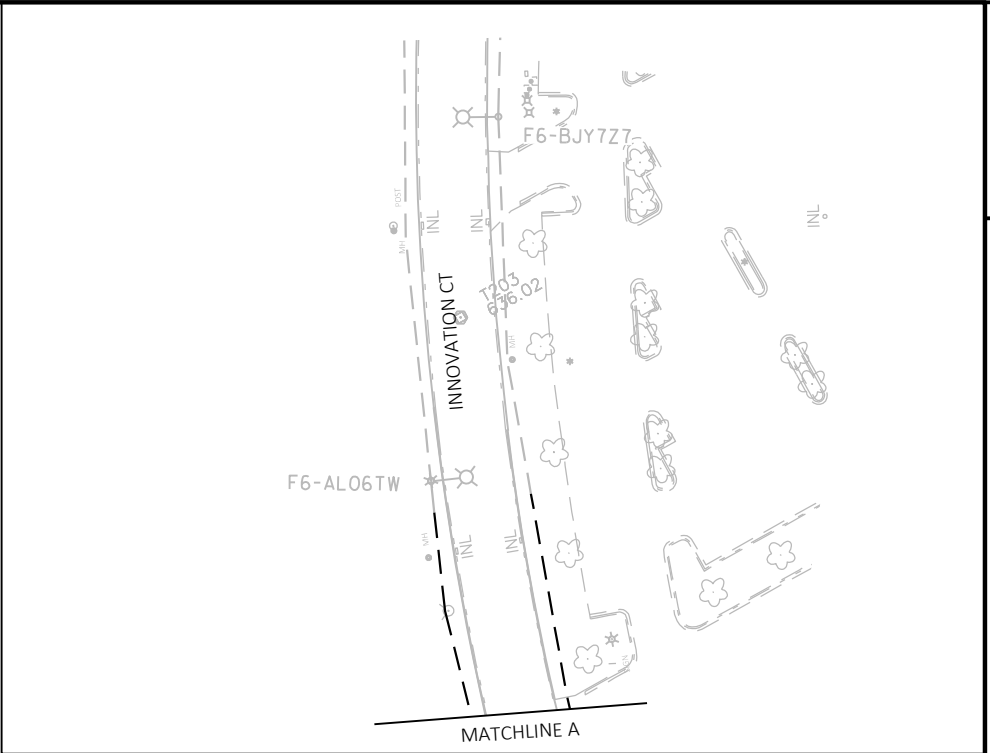
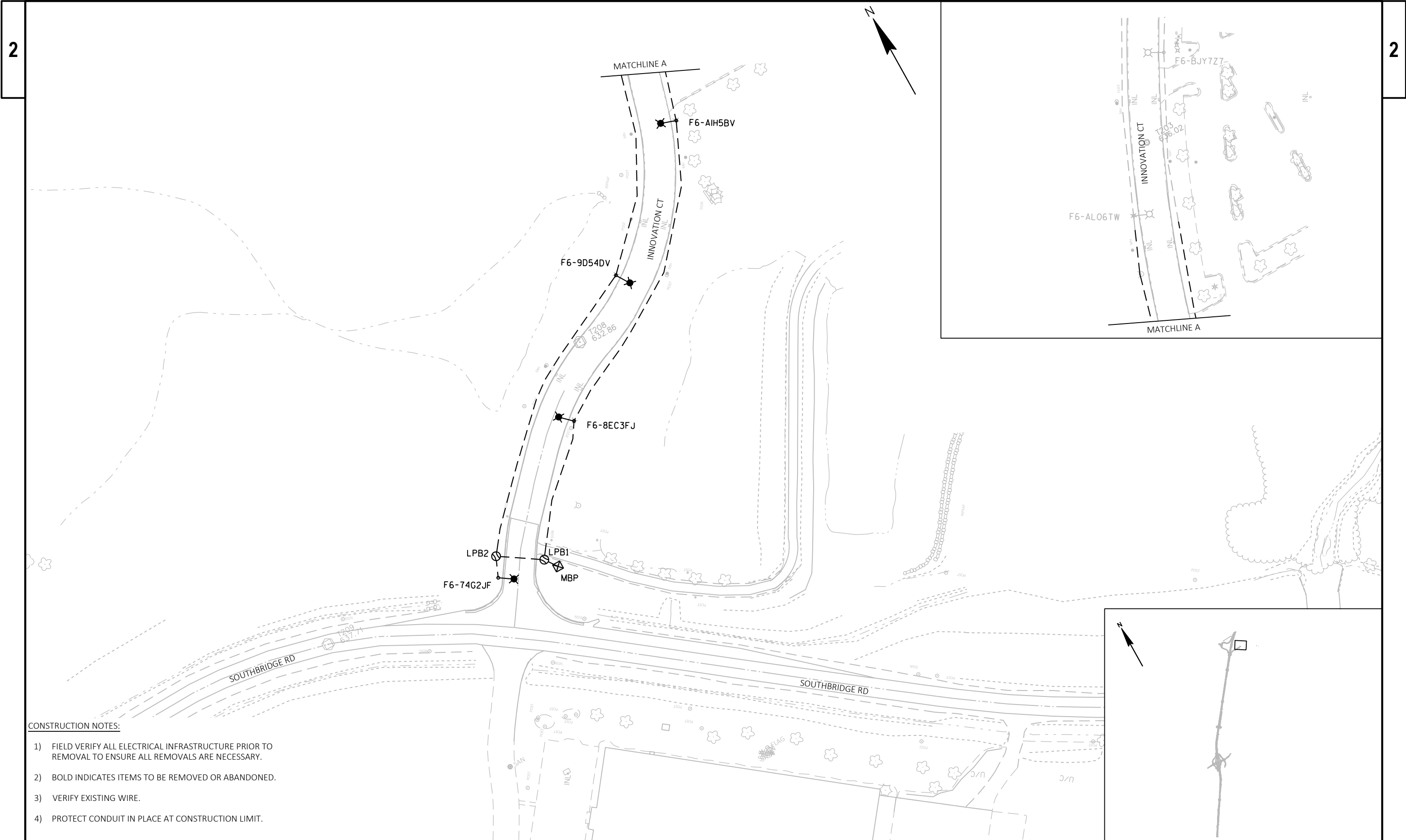
A - BLACK
B - RED

240V PHASE TO PHASE

- IH 41 CORRIDOR - SOUTHBRIDGE RD INTERCHANGE / CITY OF DE PERE / BROWN COUNTY
- TMBP400 / EAST SIDE OF INNOVATION CT
- CB200 / SOUTHEAST QUADRANT SOUTHBRIDGE RD & MID VALLEY DR
- 120/240 VOLT SINGLE PHASE / 100 AMP SERVICE
- METER BREAKER PEDESTAL
- CIRCUIT DESCRIPTIONS
- CKT A - EAST SIDE OF INNOVATION
- CKT B - WEST SIDE OF INNOVATION

NON-WISDOT SYSTEMS

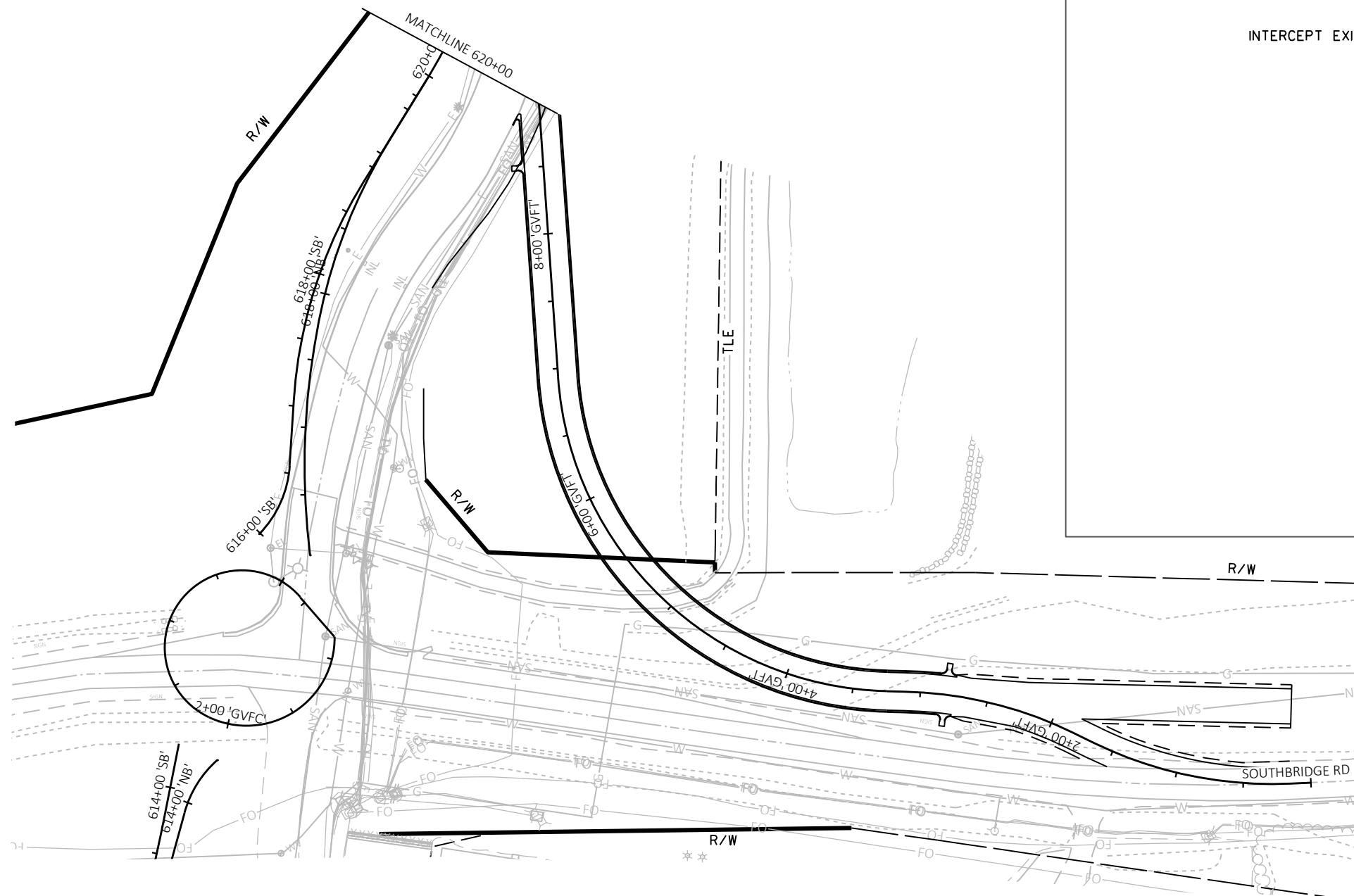
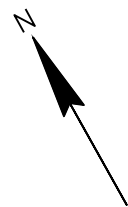




CONSTRUCTION NOTES:

- 1) FIELD VERIFY ALL ELECTRICAL INFRASTRUCTURE PRIOR TO REMOVAL TO ENSURE ALL REMOVALS ARE NECESSARY.
- 2) BOLD INDICATES ITEMS TO BE REMOVED OR ABANDONED.
- 3) VERIFY EXISTING WIRE.
- 4) PROTECT CONDUIT IN PLACE AT CONSTRUCTION LIMIT.

PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	LIGHTING REMOVAL PLANS	SHEET	E
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SPLICE INTO EXISTING CIRCUITING IN POLE HANDHOLE
TO RE-ESTABLISH EXISTING SERVICE,
CONTINUE UTILIZING EXISTING UNDERGROUND
CONDUCTORS NORTH OF THIS POINT

EXIST
LED B - F6-AL06TW
EXT2
INTERCEPT EXISTING CONDUIT

TMBP400	1	2"
B	2	#6 1 #6

STA 623+00.0 'NB' - 23.1' LT
TPB2

TMBP400	1	3"
B	2	#6 1 #6

EXIST
LED B - F6-BJY727

SPLICE INTO EXISTING CIRCUITING IN POLE HANDHOLE
TO RE-ESTABLISH EXISTING SERVICE,
CONTINUE UTILIZING EXISTING UNDERGROUND
CONDUCTORS NORTH OF THIS POINT

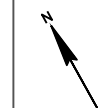
EXT1
INTERCEPT EXISTING CONDUIT

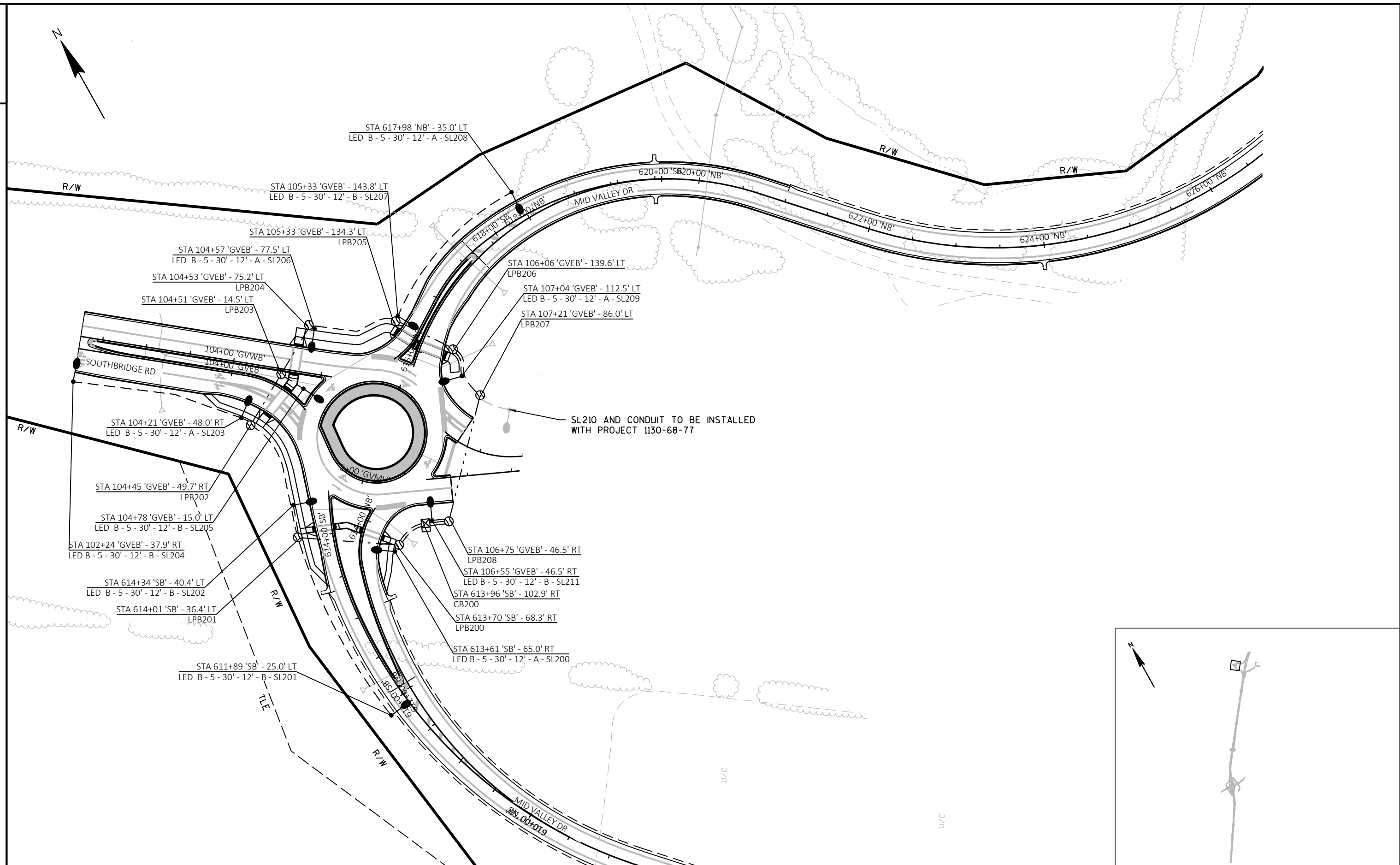
TMBP400	1	2"
A	2	#6 1 #6

STA 623+00 'NB' - 25.3' RT
TPB1

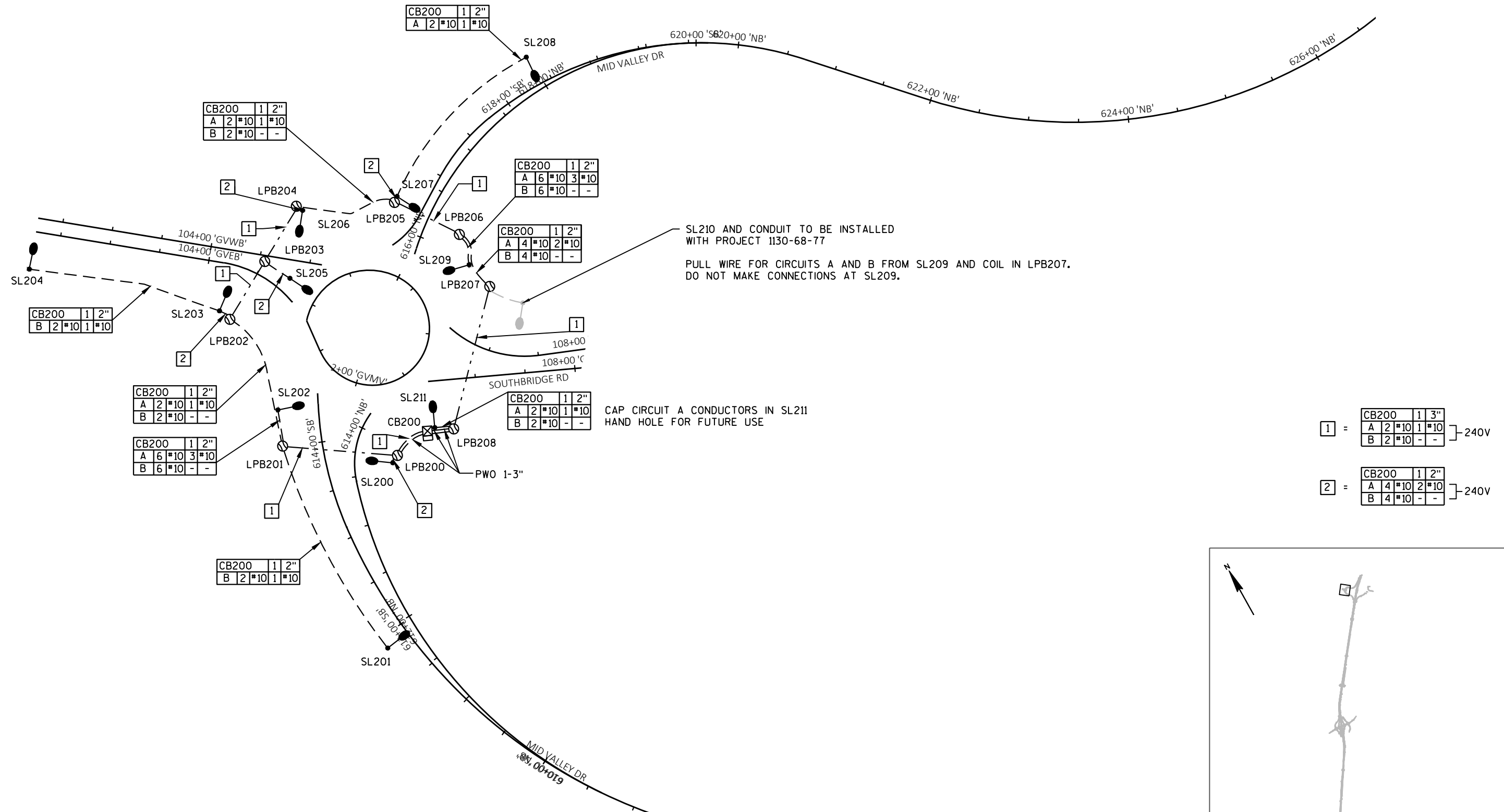
TMBP400	1	2"
A	2	#6 2 #6
B	2	#6 - -

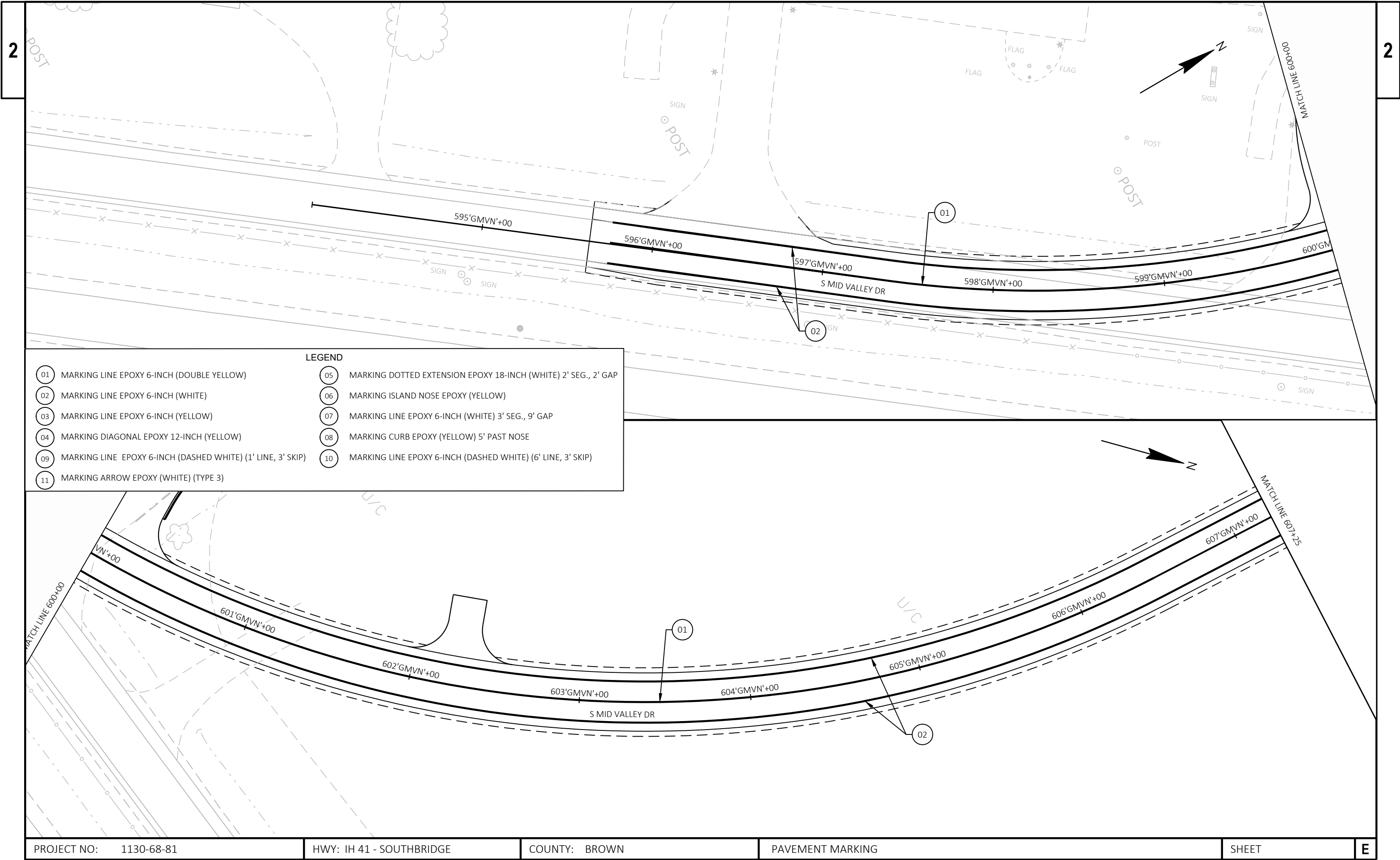
FIELD LOCATE
TMBP400



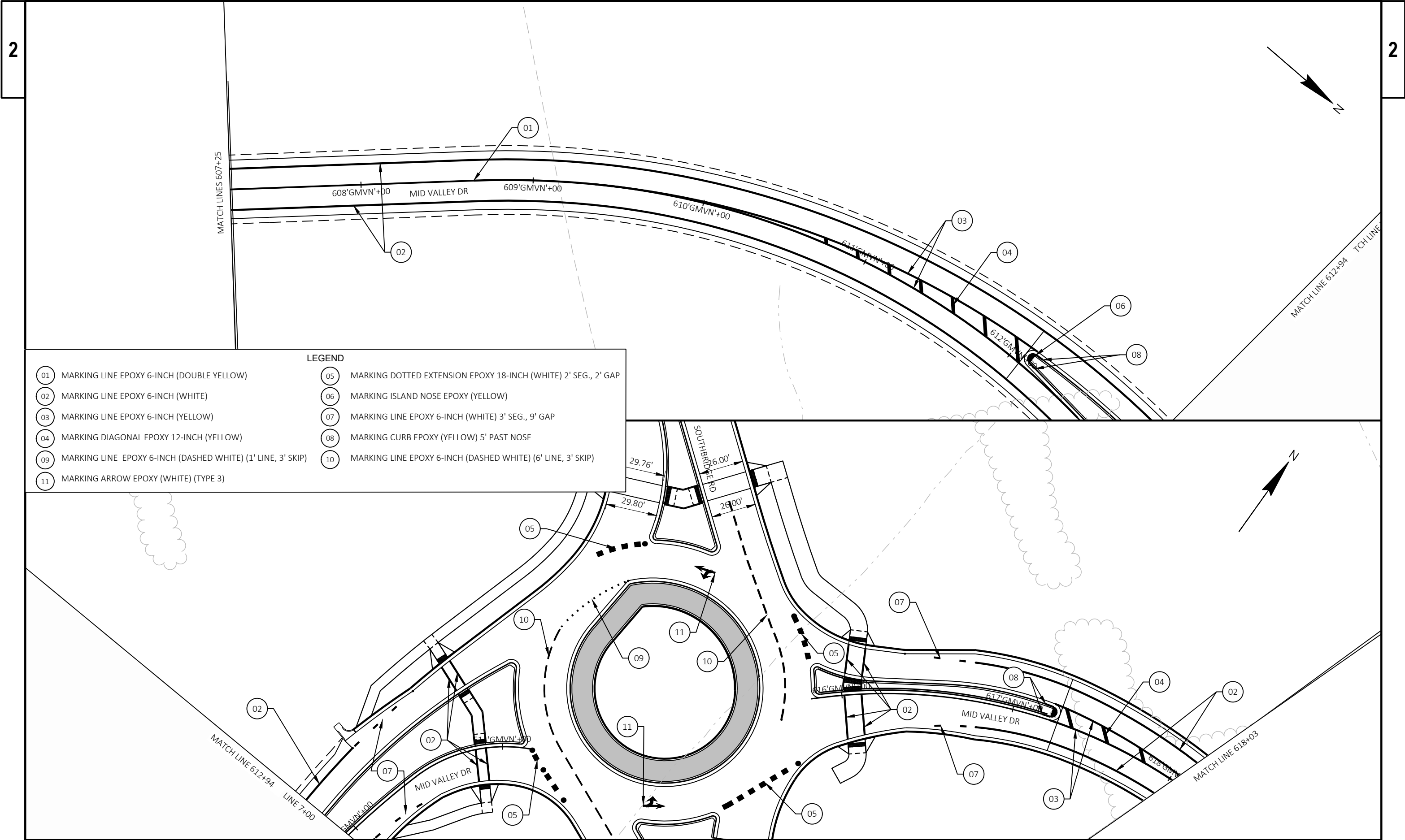


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	LIGHTING PLANS	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PAVEMENT MARKING	SHEET	E
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- LEGEND
- 01

MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)

02

MARKING LINE EPOXY 6-INCH (WHITE)

03

MARKING LINE EPOXY 6-INCH (YELLOW)

04

MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

09

MARKING LINE EPOXY 6-INCH (DASHED WHITE) (1' LINE, 3' SKIP)

11

MARKING ARROW EPOXY (WHITE) (TYPE 3)

05

MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) 2' SEG., 2' GAP

06

MARKING ISLAND NOSE EPOXY (YELLOW)

07

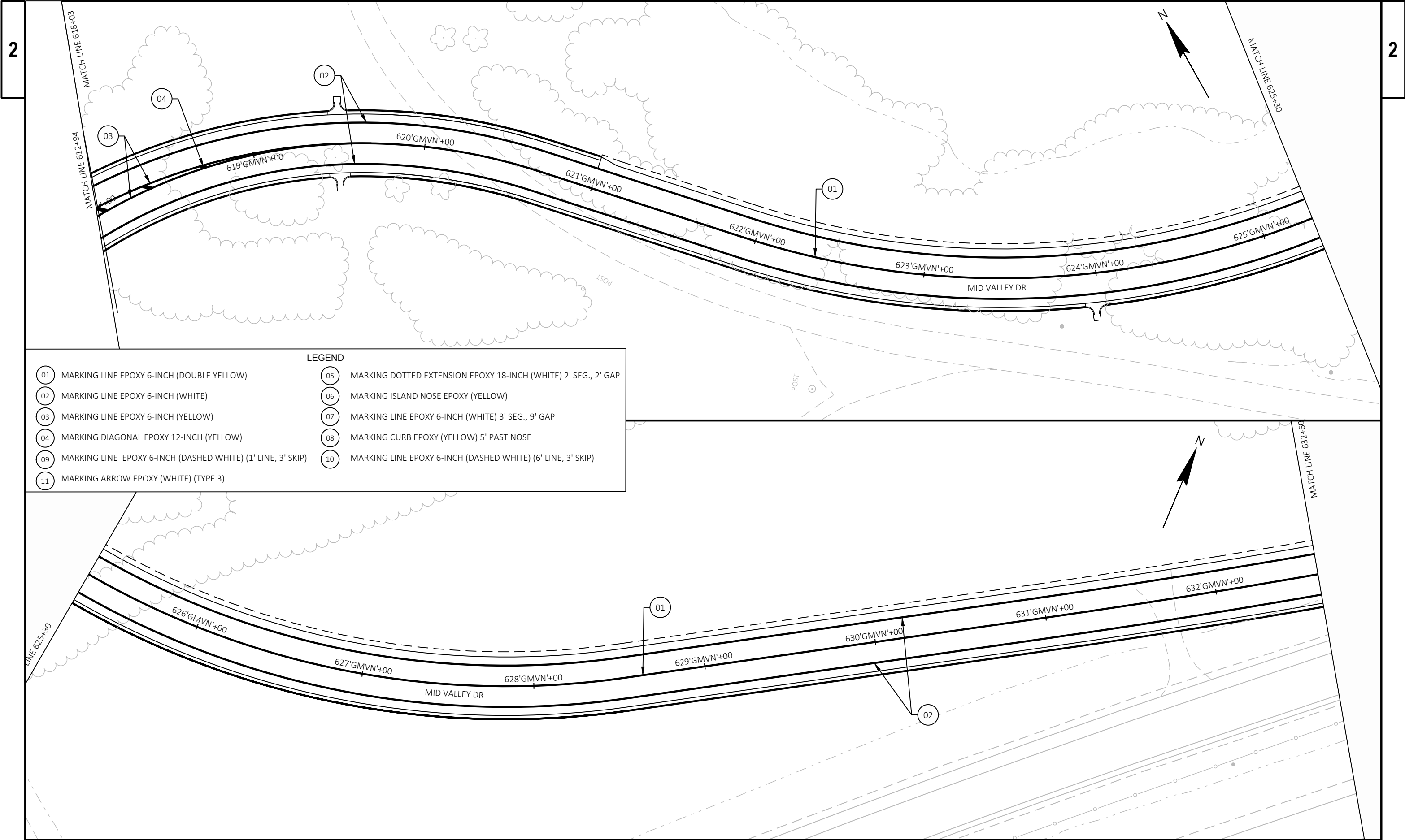
MARKING LINE EPOXY 6-INCH (WHITE) 3' SEG., 9' GAP

08

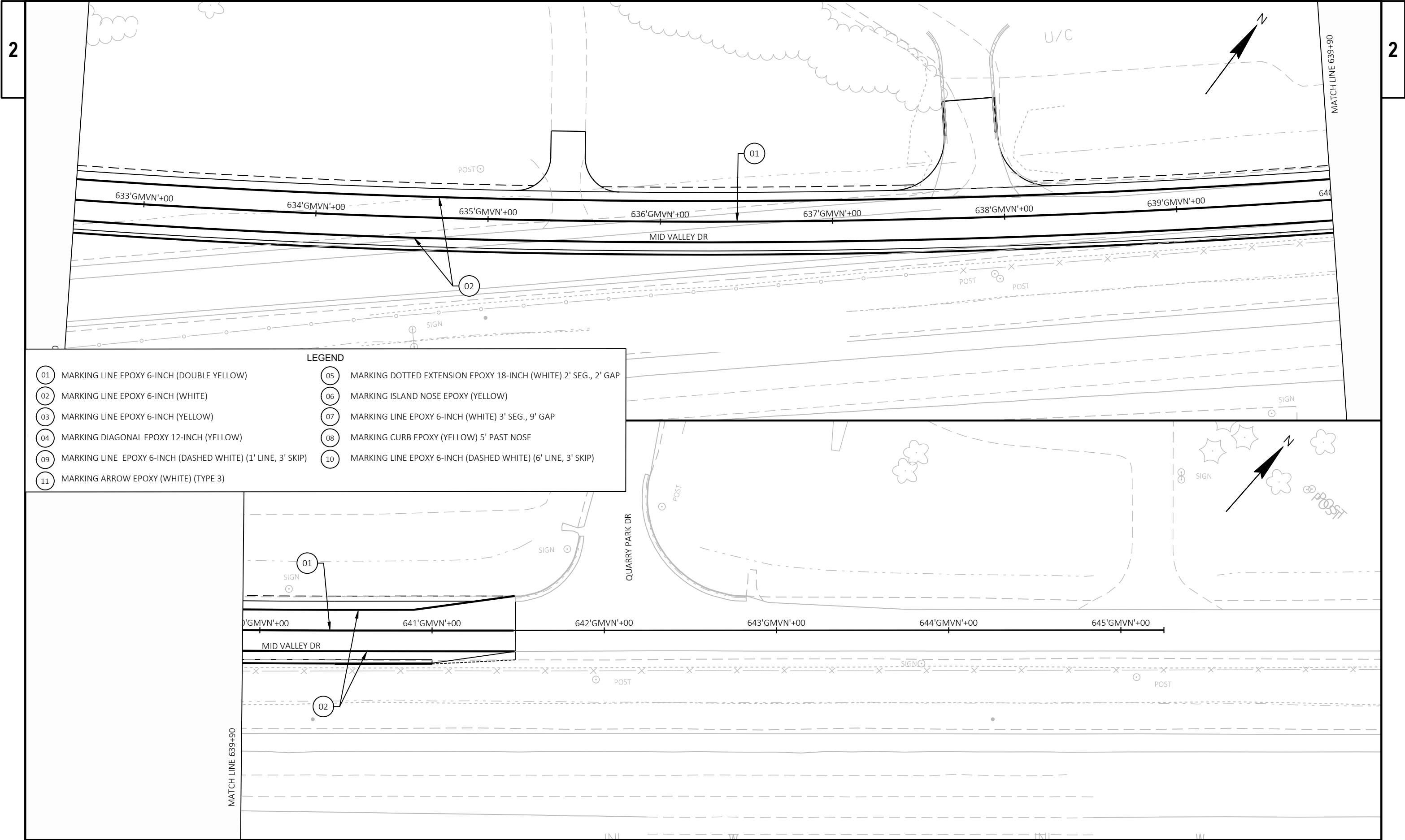
MARKING CURB EPOXY (YELLOW) 5' PAST NOSE

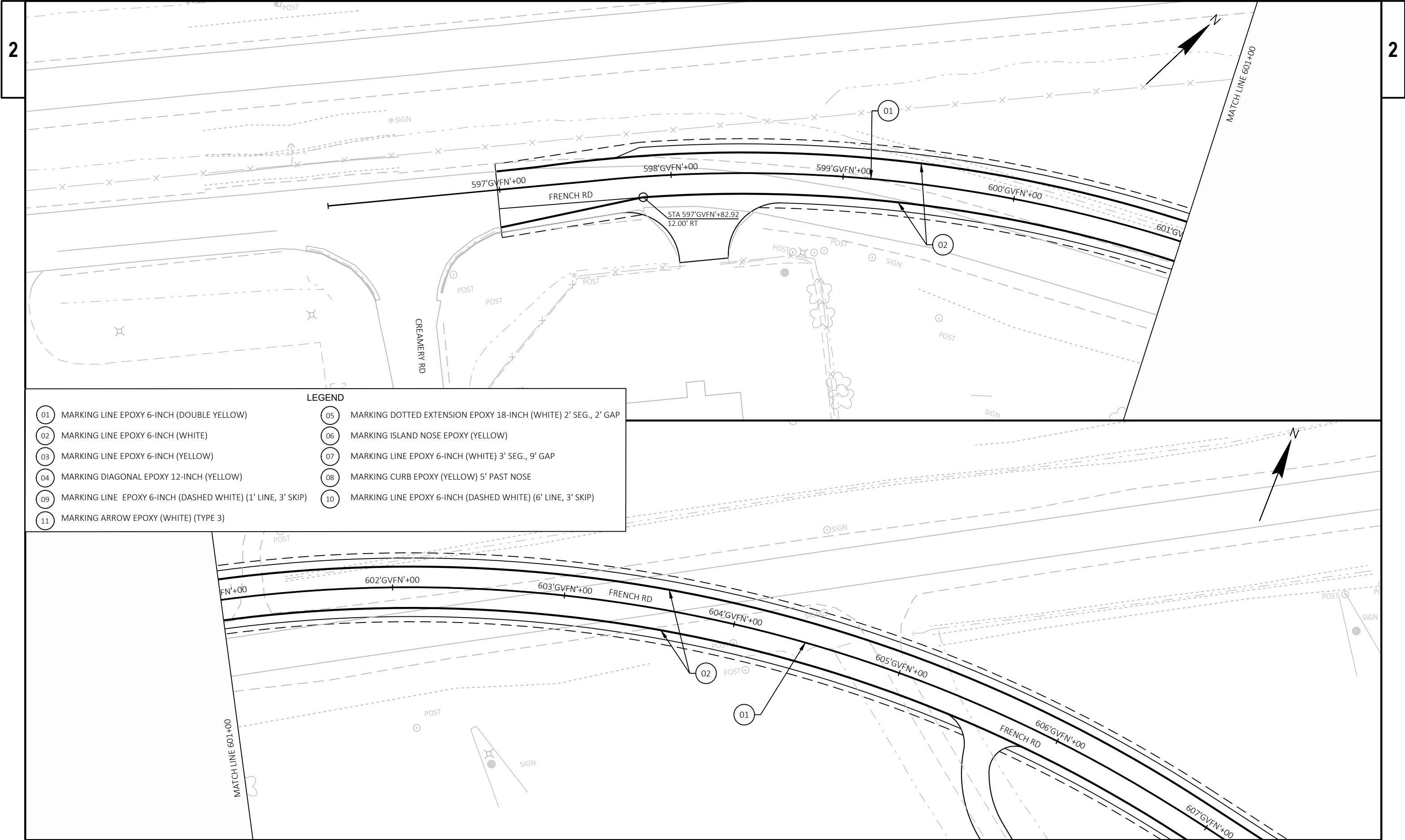
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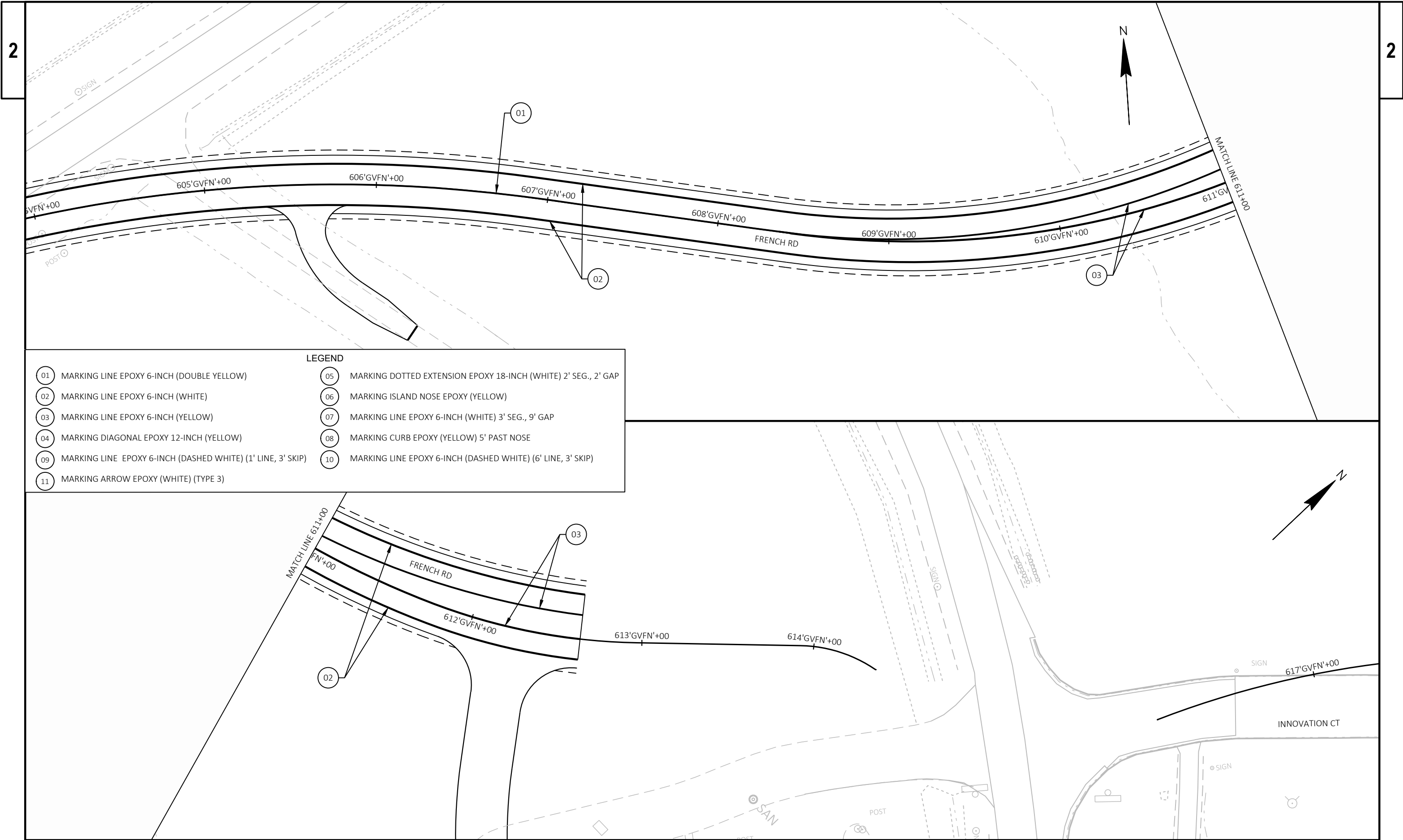
MARKING LINE EPOXY 6-INCH (DASHED WHITE) (6' LINE, 3' SKIP)



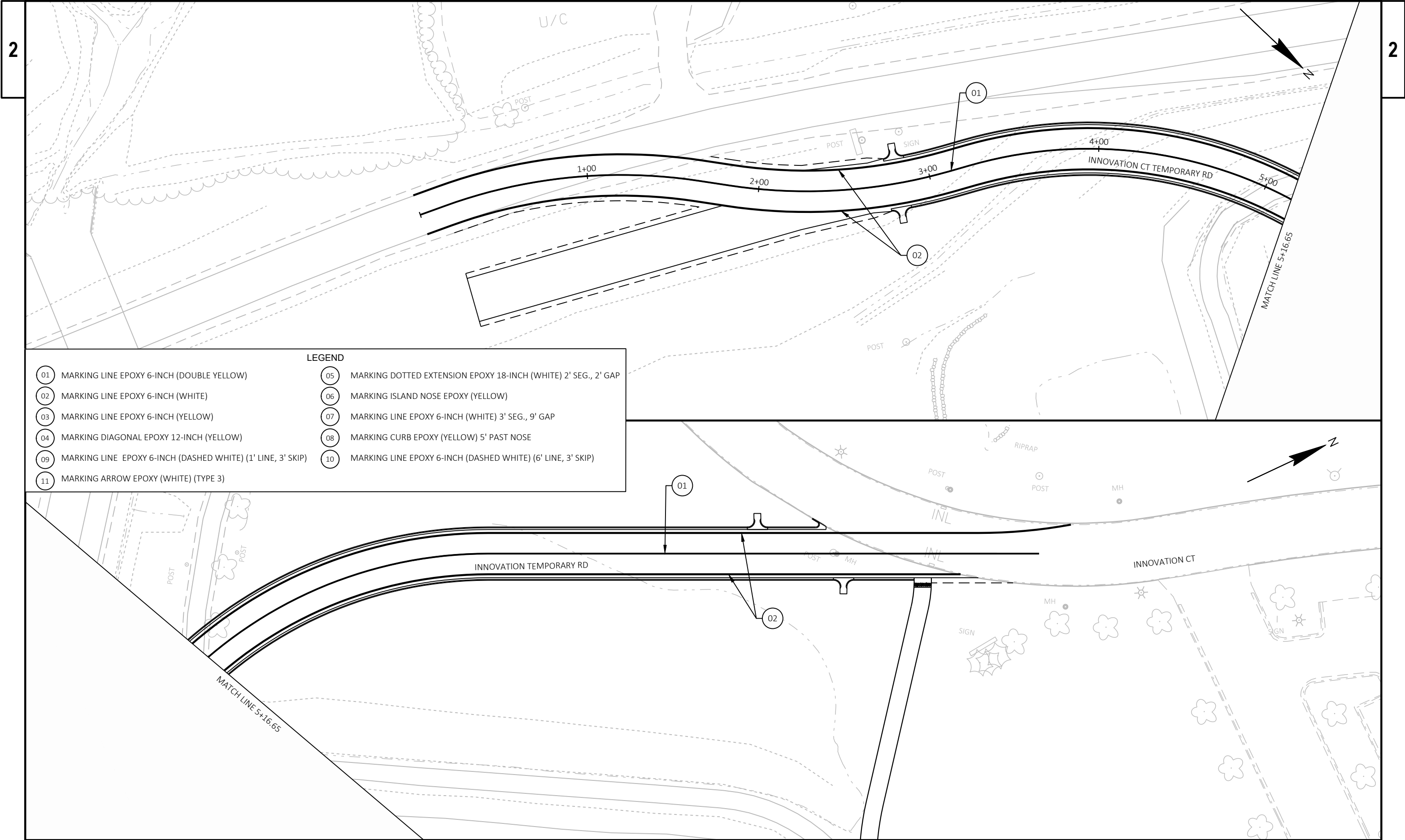
LEGEND	
01	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
02	MARKING LINE EPOXY 6-INCH (WHITE)
03	MARKING LINE EPOXY 6-INCH (YELLOW)
04	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
09	MARKING LINE EPOXY 6-INCH (DASHED WHITE) (1' LINE, 3' SKIP)
11	MARKING ARROW EPOXY (WHITE) (TYPE 3)
05	MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) 2' SEG., 2' GAP
06	MARKING ISLAND NOSE EPOXY (YELLOW)
07	MARKING LINE EPOXY 6-INCH (WHITE) 3' SEG., 9' GAP
08	MARKING CURB EPOXY (YELLOW) 5' PAST NOSE
10	MARKING LINE EPOXY 6-INCH (DASHED WHITE) (6' LINE, 3' SKIP)

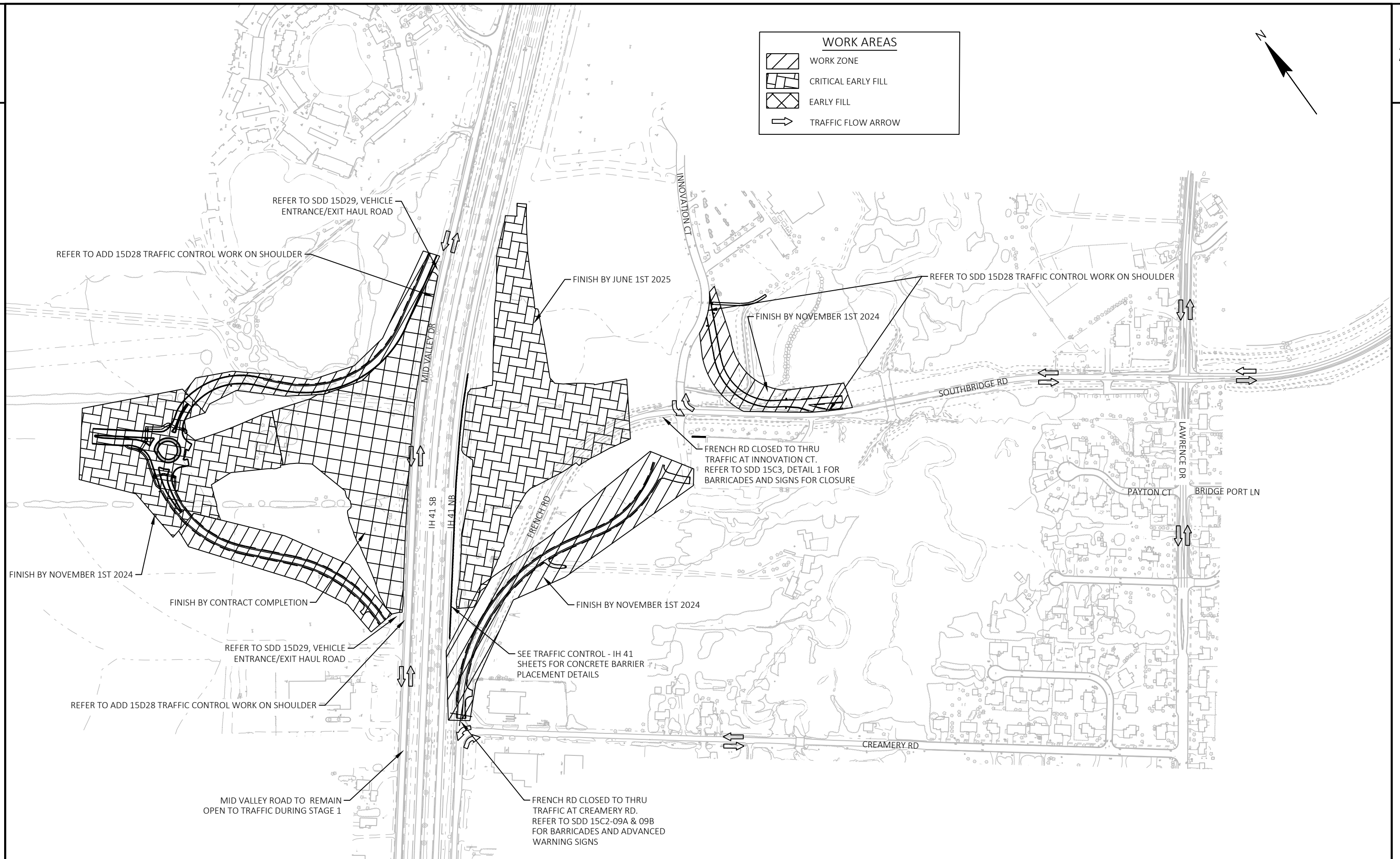






LEGEND	
01	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
02	MARKING LINE EPOXY 6-INCH (WHITE)
03	MARKING LINE EPOXY 6-INCH (YELLOW)
04	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
05	MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE) 2' SEG., 2' GAP
06	MARKING ISLAND NOSE EPOXY (YELLOW)
07	MARKING LINE EPOXY 6-INCH (WHITE) 3' SEG., 9' GAP
08	MARKING CURB EPOXY (YELLOW) 5' PAST NOSE
09	MARKING LINE EPOXY 6-INCH (DASHED WHITE) (1' LINE, 3' SKIP)
10	MARKING LINE EPOXY 6-INCH (DASHED WHITE) (6' LINE, 3' SKIP)
11	MARKING ARROW EPOXY (WHITE) (TYPE 3)





PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

TRAFFIC CONTROL STAGE 1

SHEET

E

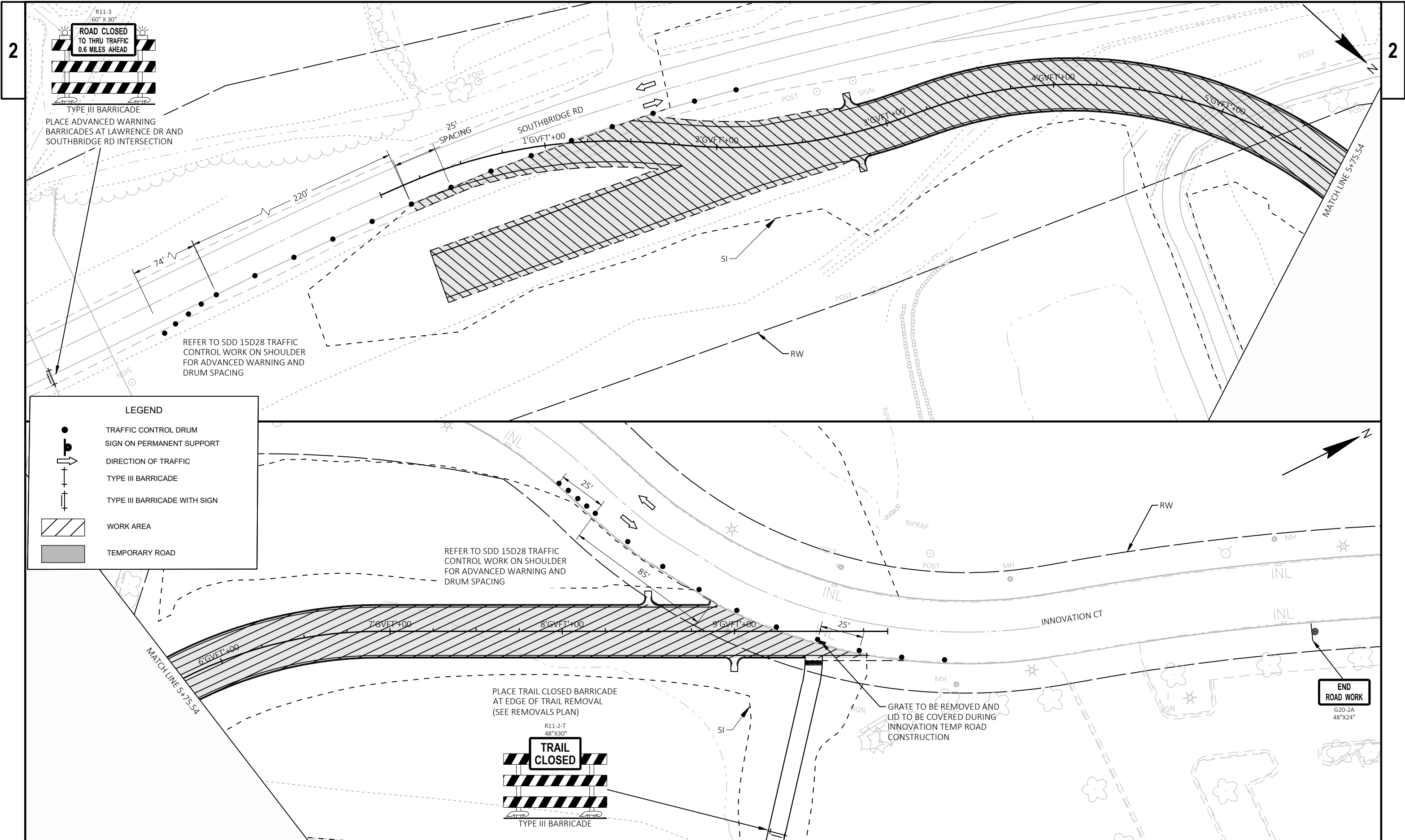
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LAYOUT NAME - 2024 - S1

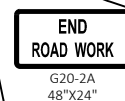
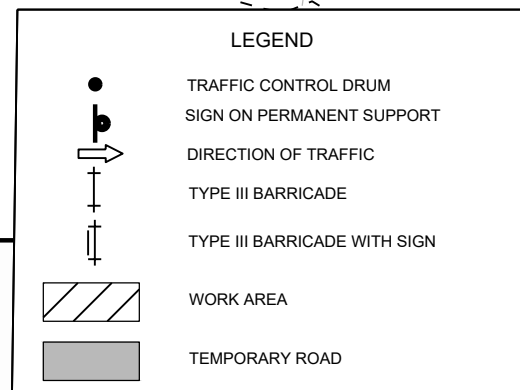
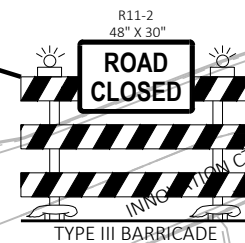
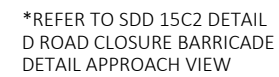
PLOT BY : BRATTLUND, ERIK JOHN

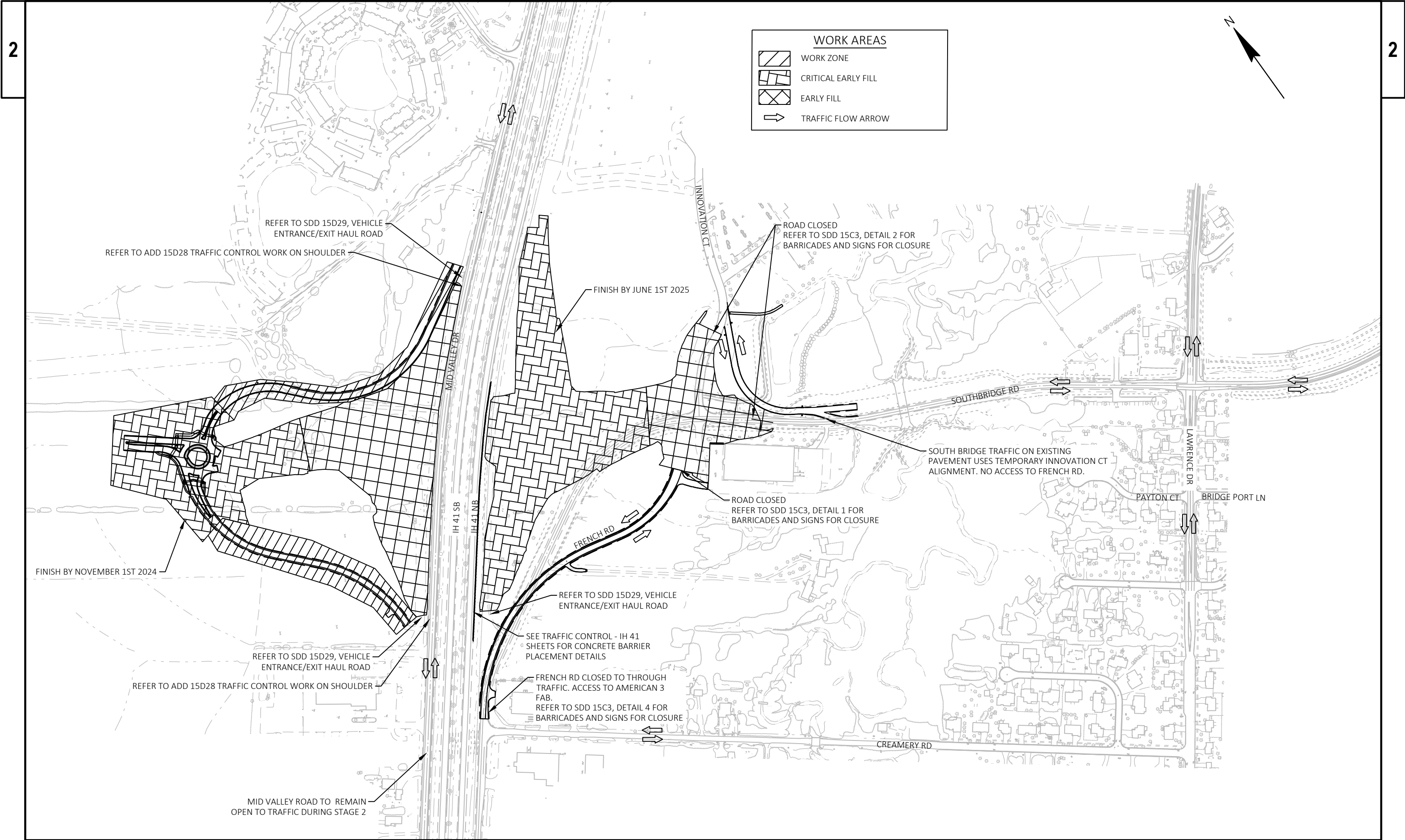
PLOT NAME :

PLOT SCALE : 1 IN=400 FT

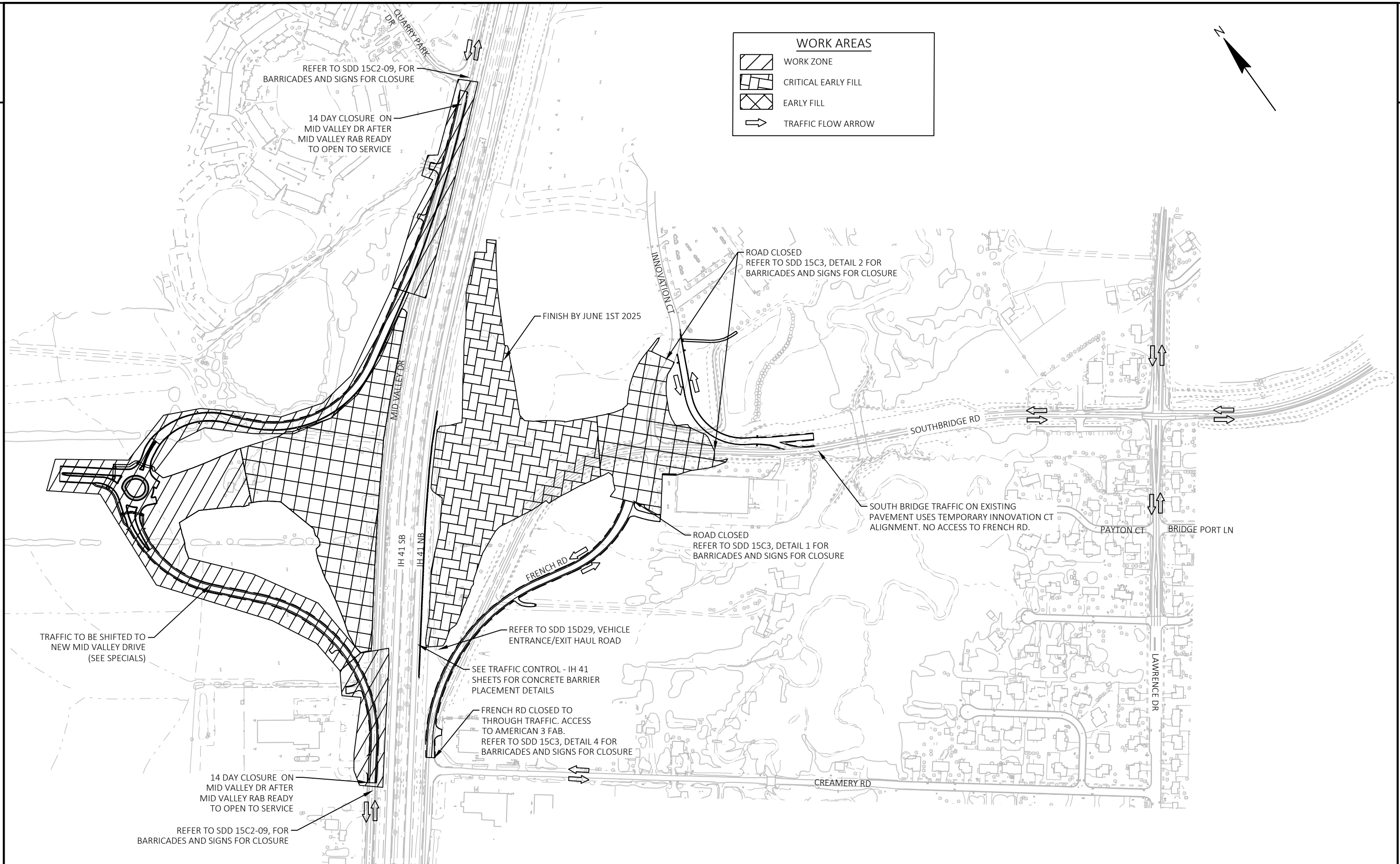
WISDOT/CADDs SHEET 42



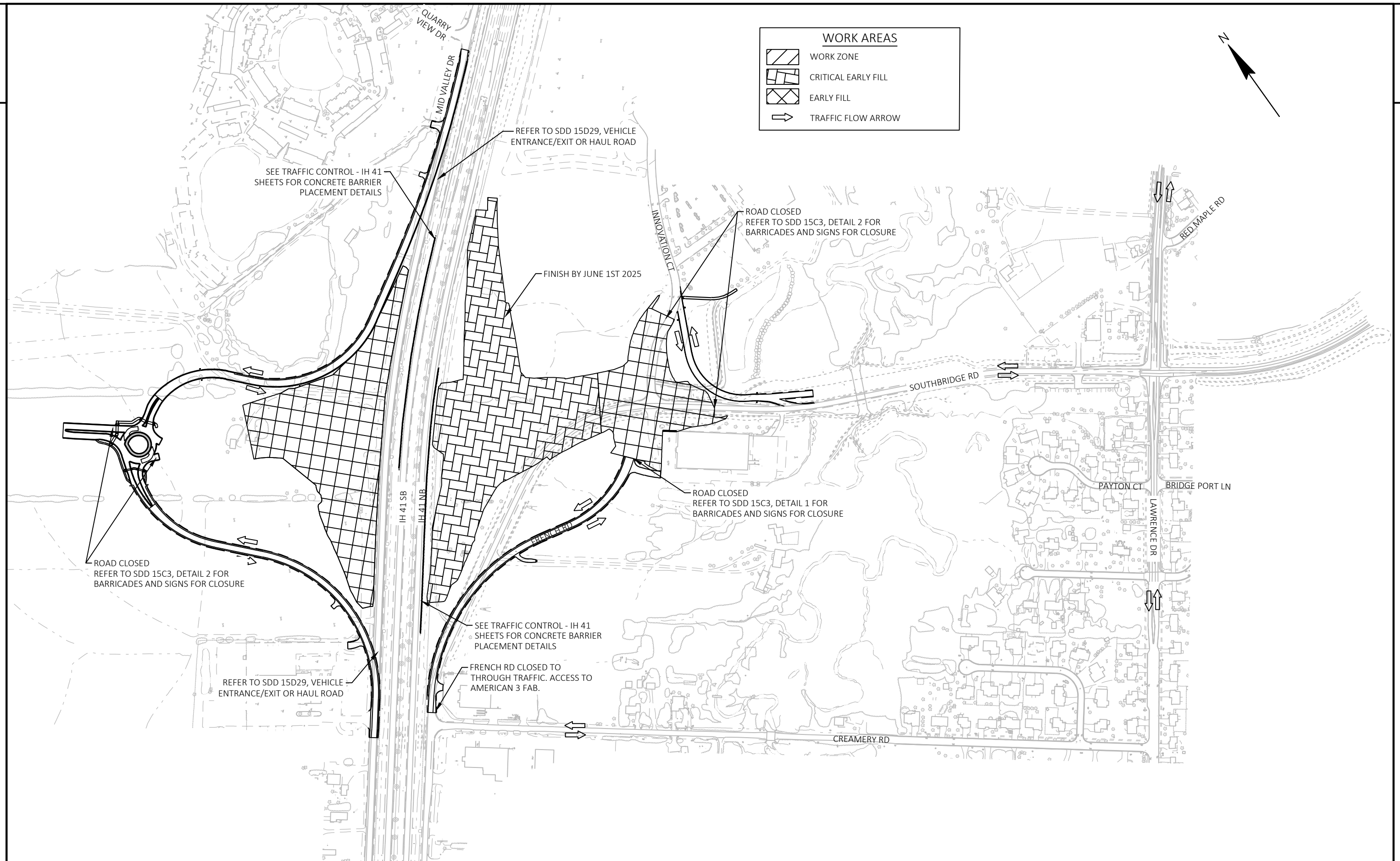




PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	TRAFFIC CONTROL STAGE 2	SHEET	E
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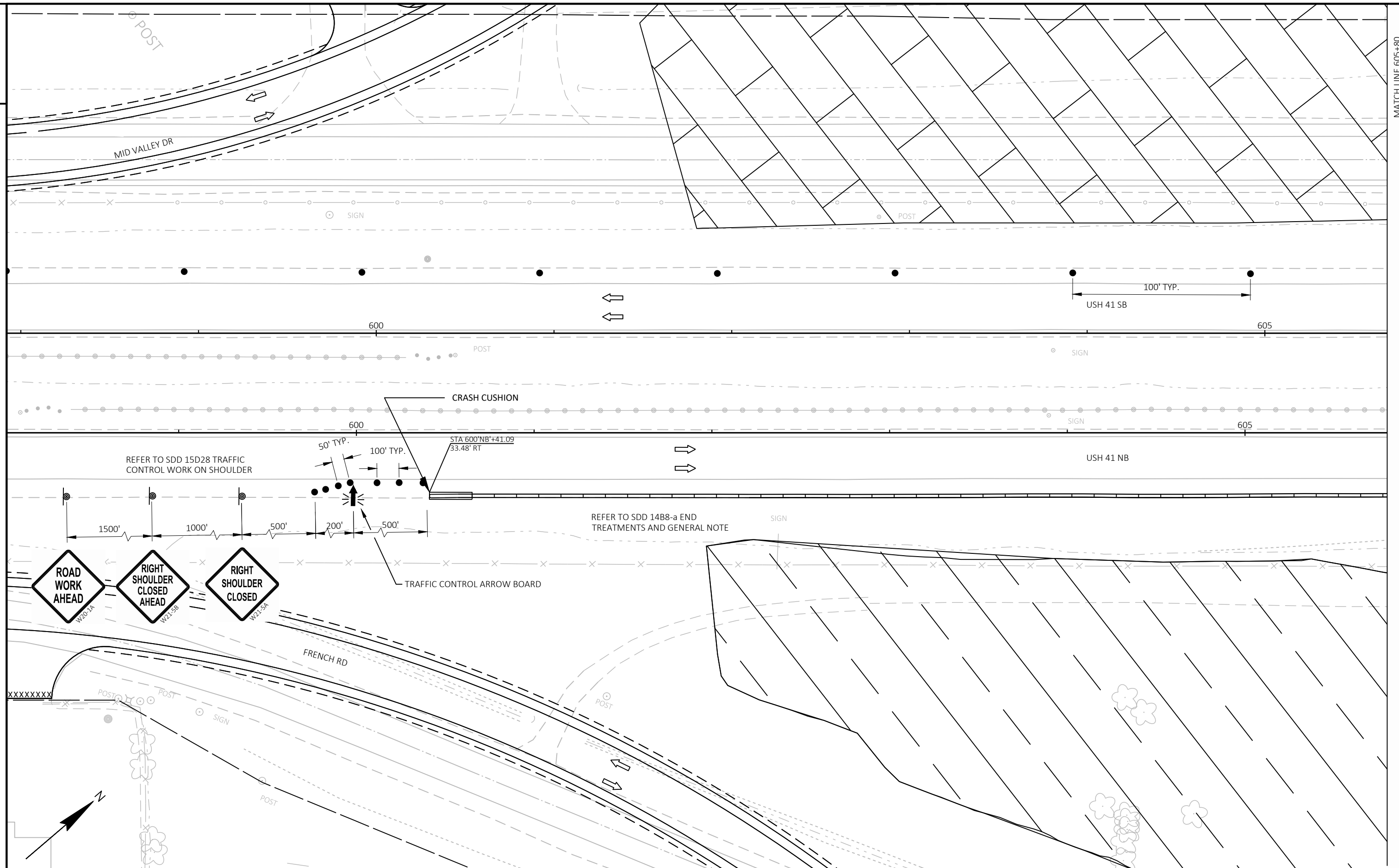
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	TRAFFIC CONTROL STAGE 4	SHEET	E
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2

2



PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

TRAFFIC CONTROL - IH 41

SHEET

I

FILE NAME : C:\USERS\DOT\B\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSP\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\02 TYPICAL SECTION AND DETAILS\025106-TC-141.DWG
LAYOUT NAME - 72

PLOT DATE : 2/29/2024 11:45 AM

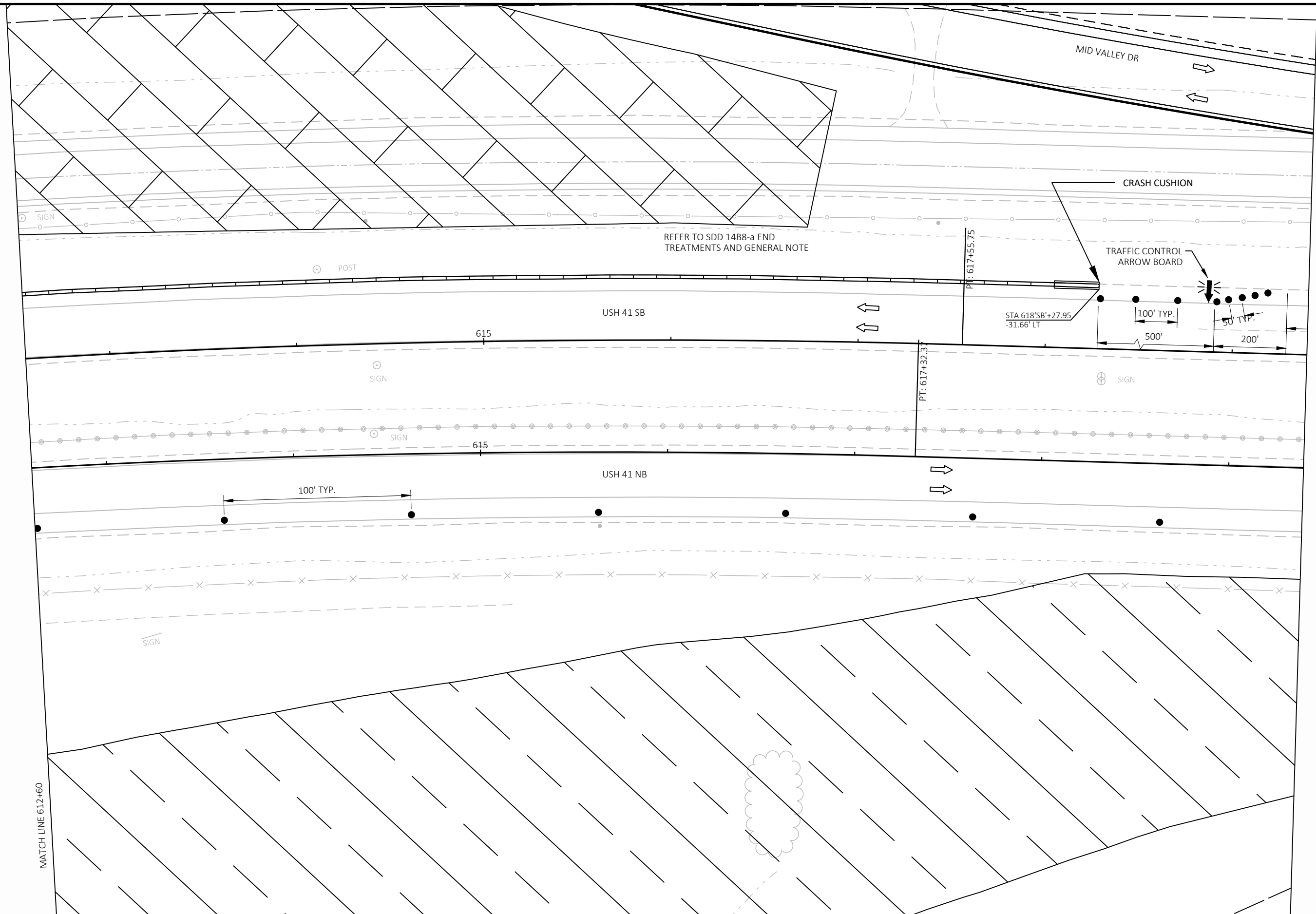
PLOT BY : BRATTLUND, ERIK JOHN

PLOT NAME: PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2 |



PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

TRAFFIC CONTROL - IH 41

SHEET

11

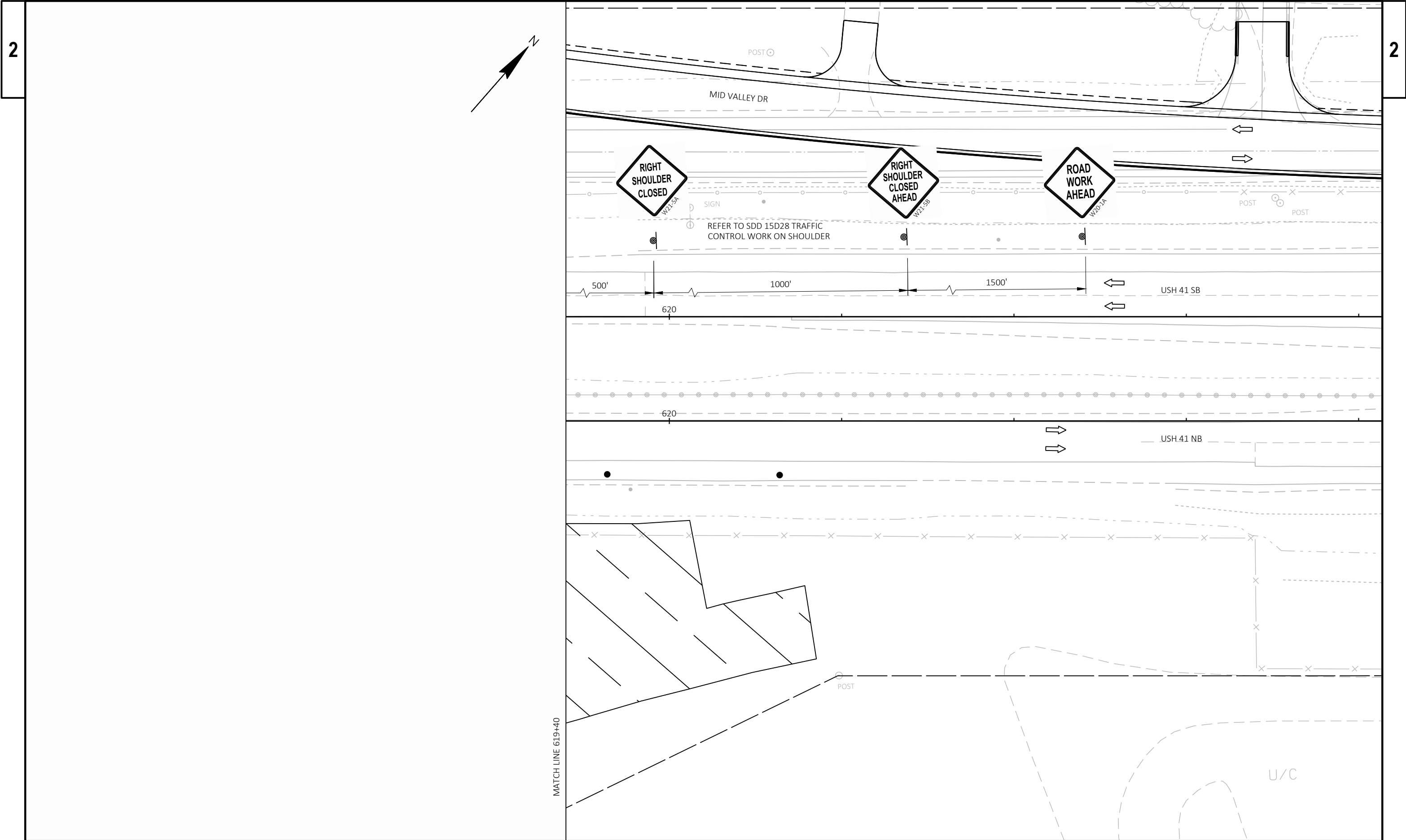
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LAYOUT NAME - 74

PLOT DATE : 2/29/2024 11:46 AM

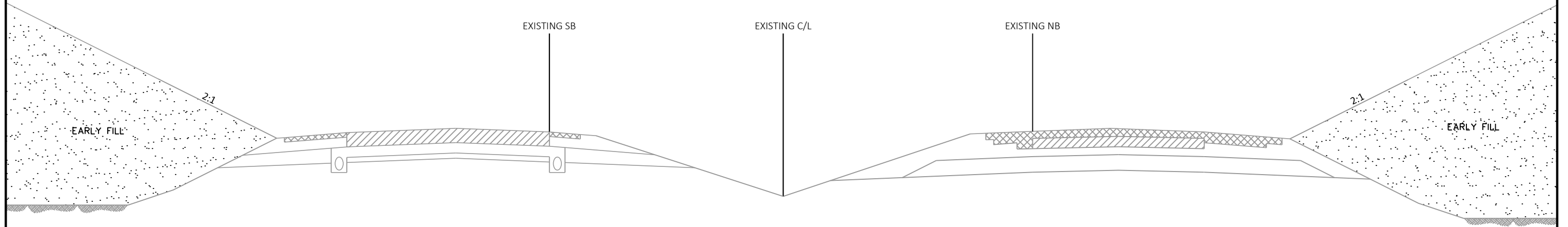
PLOT BY : BRATTLUND, ERIK JOHN

PLOT NAME: PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	TRAFFIC CONTROL - IH 41	SHEET E
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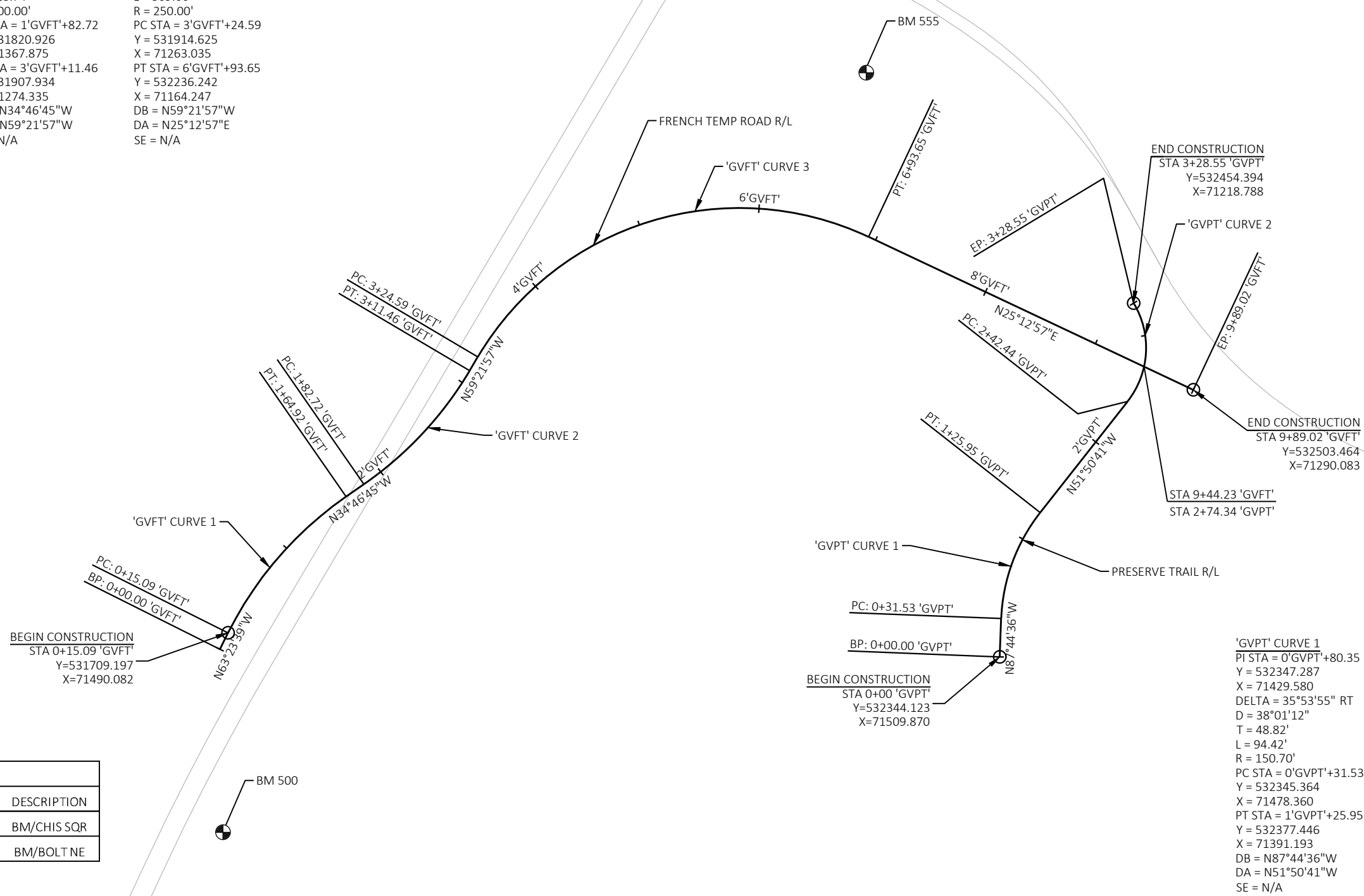
IH 41 TYPICAL SECTION



'GVFT' CURVE 1
PI STA = 0'GVFT'+91.61
Y = 531743.462
X = 71421.672
DELTA = 28°36'55" RT
D = 19°05'55"
T = 76.51'
L = 149.83'
R = 300.00'
PC STA = 0'GVFT'+15.09
Y = 531709.197
X = 71490.082
PT STA = 1'GVFT'+64.92
Y = 531806.305
X = 71378.029
DB = N63°23'39"W
DA = N34°46'45"W
SE = N/A

'GVFT' CURVE 2
PI STA = 2'GVFT'+48.10
Y = 531874.622
X = 71330.585
DELTA = 24°35'12" LT
D = 19°05'55"
T = 65.37'
L = 128.74'
R = 300.00'
PC STA = 1'GVFT'+82.72
Y = 531820.926
X = 71367.875
PT STA = 3'GVFT'+11.46
Y = 531907.934
X = 71274.335
DB = N34°46'45"W
DA = N59°21'57"W
SE = N/A

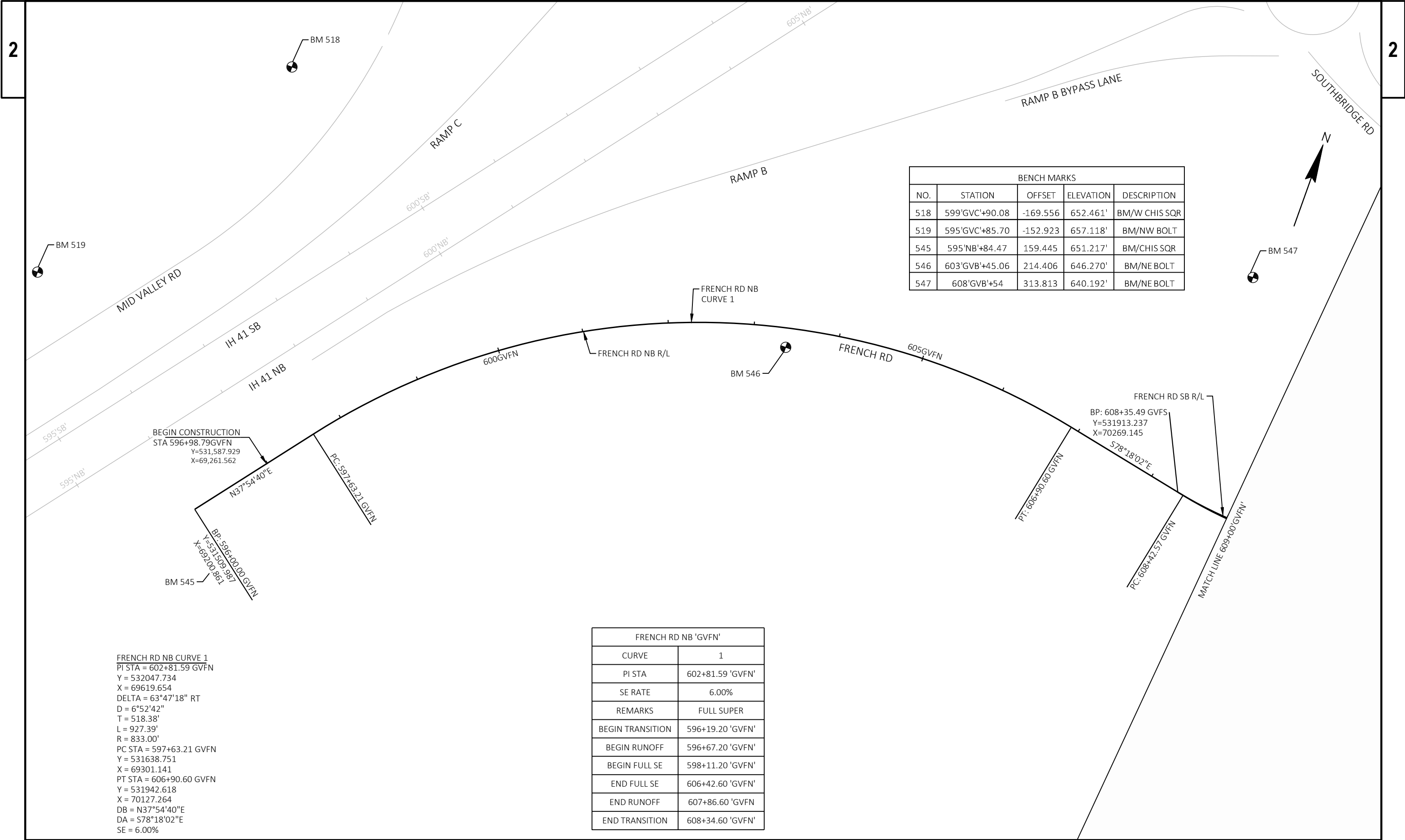
'GVFT' CURVE 3
PI STA = 5'GVFT'+52.00
Y = 532030.503
X = 71067.364
DELTA = 84°34'54" RT
D = 22°55'06"
T = 227.41'
L = 369.06'
R = 250.00'
PC STA = 3'GVFT'+24.59
Y = 531914.625
X = 71263.035
PT STA = 6'GVFT'+93.65
Y = 532236.242
X = 71164.247
DB = N59°21'57"W
DA = N25°12'57"E
SE = N/A



BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
500	138'GVWB'+72.05	-30.616	628.534'	BM/CHIS SQR
555	616'GVFN'+69.13	70.66	637.335'	BM/BOLT NE

'GVPT' CURVE 1
PI STA = 0'GVPT'+80.35
Y = 532347.287
X = 71429.580
DELTA = 35°53'55" RT
D = 38°01'12"
T = 48.82'
L = 94.42'
R = 150.70'
PC STA = 0'GVPT'+31.53
Y = 532345.364
X = 71478.360
PT STA = 1'GVPT'+25.95
Y = 532377.446
X = 71391.193
DB = N87°44'36"W
DA = N51°50'41"W
SE = N/A

'GVPT' CURVE 2
PI STA = 2'GVPT'+91.64
Y = 532479.802
X = 71260.911
DELTA = 69°15'11" LT
D = 80°25'40"
T = 49.19'
L = 86.11'
R = 71.24'
PC STA = 2'GVPT'+42.44
Y = 532449.411
X = 71299.594
PT STA = 3'GVPT'+28.55
Y = 532454.394
X = 71218.788
DB = N51°50'41"W
DA = S58°54'08"W
SE = N/A



BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
518	599'GVC'+90.08	-169.556	652.461'	BM/W CHIS SQR
519	595'GVC'+85.70	-152.923	657.118'	BM/NW BOLT
545	595'NB'+84.47	159.445	651.217'	BM/CHIS SQR
546	603'GVB'+45.06	214.406	646.270'	BM/NE BOLT
547	608'GVB'+54	313.813	640.192'	BM/NE BOLT

FRENCH RD NB CURVE 1
PI STA = 602+81.59 'GVFN'
Y = 532047.734
X = 69619.654
DELTA = 63°47'18" RT
D = 6°52'42"
T = 518.38'
L = 927.39'
R = 833.00'
PC STA = 597+63.21 'GVFN'
Y = 531638.751
X = 69301.141
PT STA = 606+90.60 'GVFN'
Y = 531942.618
X = 70127.264
DB = N37°54'40"E
DA = S78°18'02"E
SE = 6.00%

FRENCH RD NB 'GVFN'	
CURVE	1
PI STA	602+81.59 'GVFN'
SE RATE	6.00%
REMARKS	FULL SUPER
BEGIN TRANSITION	596+19.20 'GVFN'
BEGIN RUNOFF	596+67.20 'GVFN'
BEGIN FULL SE	598+11.20 'GVFN'
END FULL SE	606+42.60 'GVFN'
END RUNOFF	607+86.60 'GVFN'
END TRANSITION	608+34.60 'GVFN'

CONTROL POINTS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
18	125'EB'+36.13	173.622	637.774	CP-18

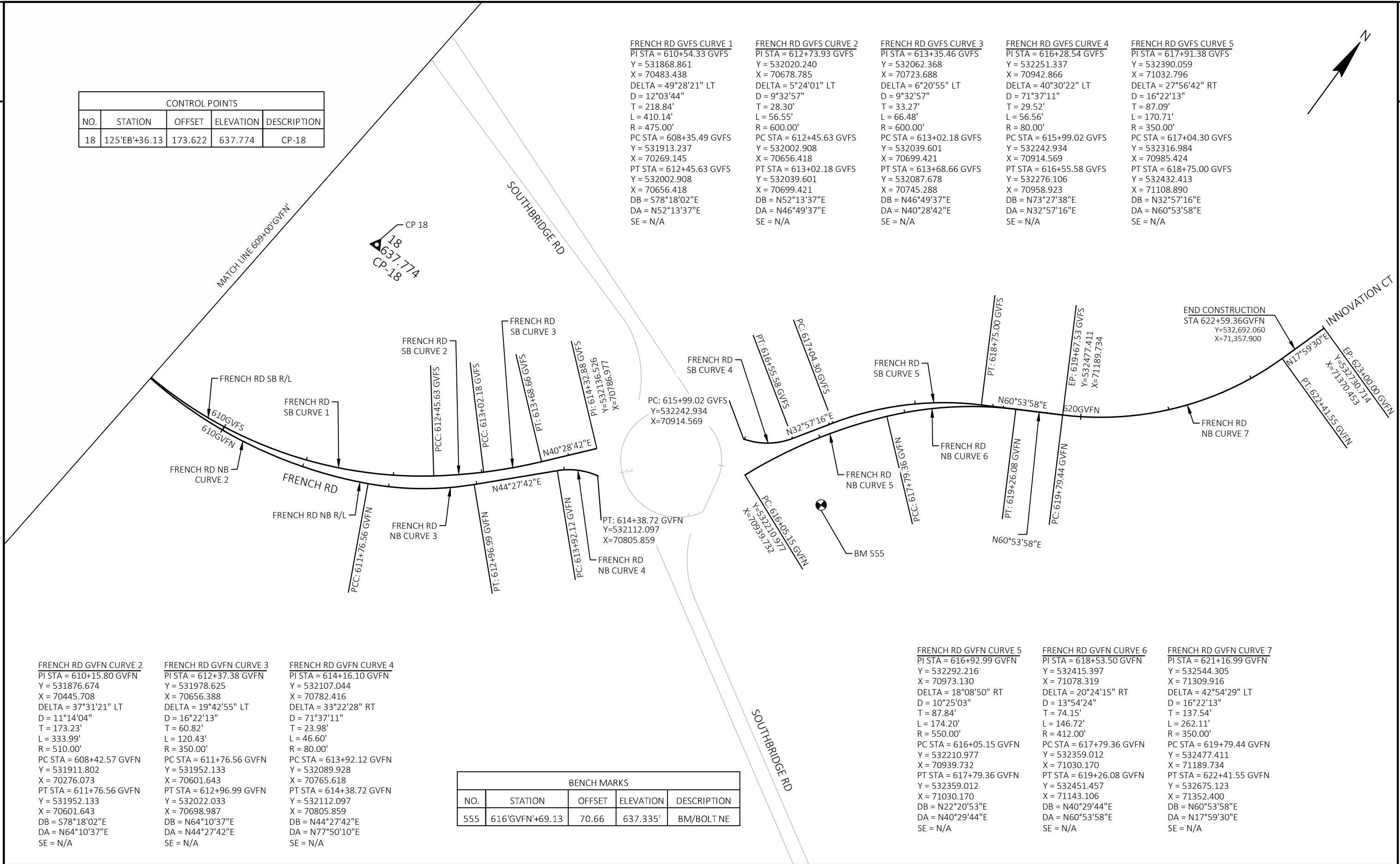
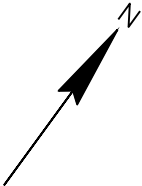
FRENCH RD GVFS CURVE 1
PI STA = 610+54.33 GVFS
Y = 531868.861
X = 70483.438
DELTA = 49°28'21" LT
D = 12°03'44"
T = 218.84'
L = 410.14'
R = 475.00'
PC STA = 608+35.49 GVFS
Y = 531913.237
X = 70269.145
PT STA = 612+45.63 GVFS
Y = 532002.908
X = 70656.418
DB = S78°18'02"E
DA = N52°13'37"E
SE = N/A

FRENCH RD GVFS CURVE 2
PI STA = 612+73.93 GVFS
Y = 532020.240
X = 70678.785
DELTA = 5°24'01" LT
D = 9°32'57"
T = 28.30'
L = 56.55'
R = 600.00'
PC STA = 612+45.63 GVFS
Y = 532002.908
X = 70656.418
PT STA = 613+02.18 GVFS
Y = 532039.601
X = 70699.421
DB = N52°13'37"E
DA = N46°49'37"E
SE = N/A

FRENCH RD GVFS CURVE 3
PI STA = 613+35.46 GVFS
Y = 532062.368
X = 70723.688
DELTA = 6°20'55" LT
D = 9°32'57"
T = 33.27'
L = 66.48'
R = 600.00'
PC STA = 613+02.18 GVFS
Y = 532039.601
X = 70699.421
PT STA = 613+68.66 GVFS
Y = 532087.678
X = 70745.288
DB = N46°49'37"E
DA = N40°28'42"E
SE = N/A

FRENCH RD GVFS CURVE 4
PI STA = 616+28.54 GVFS
Y = 532251.337
X = 70942.866
DELTA = 40°30'22" LT
D = 71°37'11"
T = 29.52'
L = 56.56'
R = 80.00'
PC STA = 615+99.02 GVFS
Y = 532242.934
X = 70914.569
PT STA = 616+55.58 GVFS
Y = 532276.106
X = 70958.923
DB = N73°27'38"E
DA = N32°57'16"E
SE = N/A

FRENCH RD GVFS CURVE 5
PI STA = 617+91.38 GVFS
Y = 532390.059
X = 71032.796
DELTA = 27°56'42" RT
D = 16°22'13"
T = 87.09'
L = 170.71'
R = 350.00'
PC STA = 617+04.30 GVFS
Y = 532316.984
X = 70985.424
PT STA = 618+75.00 GVFS
Y = 532432.413
X = 71108.890
DB = N32°57'16"E
DA = N60°53'58"E
SE = N/A



FRENCH RD GVFN CURVE 2
PI STA = 610+15.80 GVFN
Y = 531876.674
X = 70445.708
DELTA = 37°31'21" LT
D = 11°14'04"
T = 173.23'
L = 333.99'
R = 510.00'
PC STA = 608+42.57 GVFN
Y = 531911.802
X = 70276.073
PT STA = 611+76.56 GVFN
Y = 531952.133
X = 70601.643
DB = S78°18'02"E
DA = N64°10'37"E
SE = N/A

FRENCH RD GVFN CURVE 3
PI STA = 612+37.38 GVFN
Y = 531978.625
X = 70656.388
DELTA = 19°42'55" LT
D = 16°22'13"
T = 60.82'
L = 120.43'
R = 350.00'
PC STA = 611+76.56 GVFN
Y = 531952.133
X = 70601.643
PT STA = 612+96.99 GVFN
Y = 532022.033
X = 70698.987
DB = N64°10'37"E
DA = N44°27'42"E
SE = N/A

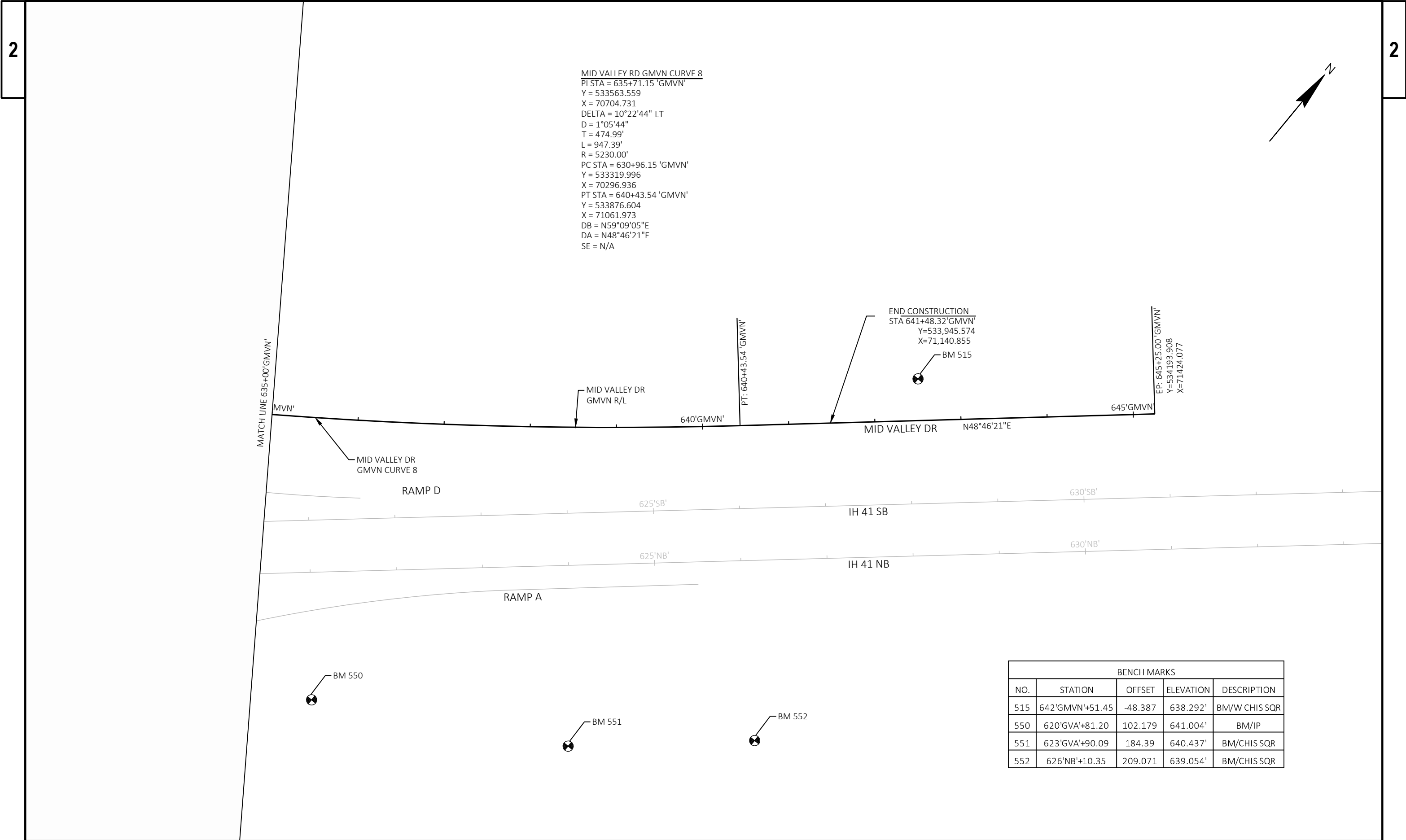
FRENCH RD GVFN CURVE 4
PI STA = 614+16.10 GVFN
Y = 532107.044
X = 70782.416
DELTA = 33°22'28" RT
D = 71°37'11"
T = 23.98'
L = 46.60'
R = 80.00'
PC STA = 613+92.12 GVFN
Y = 532089.928
X = 70765.618
PT STA = 614+38.72 GVFN
Y = 532112.097
X = 70805.859
DB = N44°27'42"E
DA = N77°50'10"E
SE = N/A

BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
555	616'GVFN'+69.13	70.66	637.335'	BM/BOLT NE

FRENCH RD GVFN CURVE 5
PI STA = 616+92.99 GVFN
Y = 532292.216
X = 70973.130
DELTA = 18°08'50" RT
D = 10°25'03"
T = 87.84'
L = 174.20'
R = 550.00'
PC STA = 616+05.15 GVFN
Y = 532210.977
X = 70939.732
PT STA = 617+79.36 GVFN
Y = 532359.012
X = 71030.170
DB = N22°20'53"E
DA = N40°29'44"E
SE = N/A

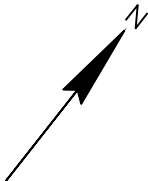
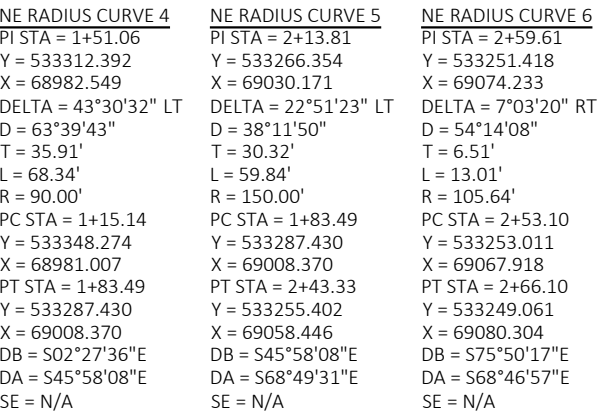
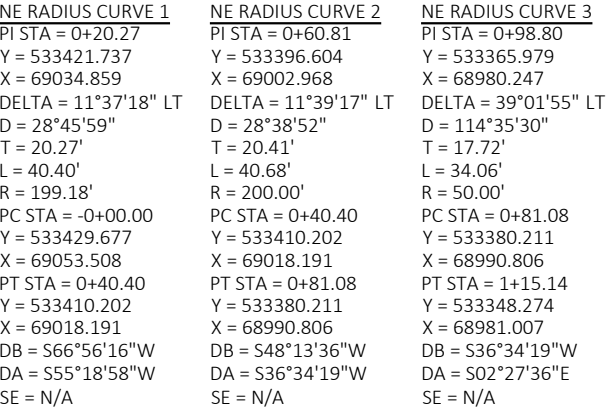
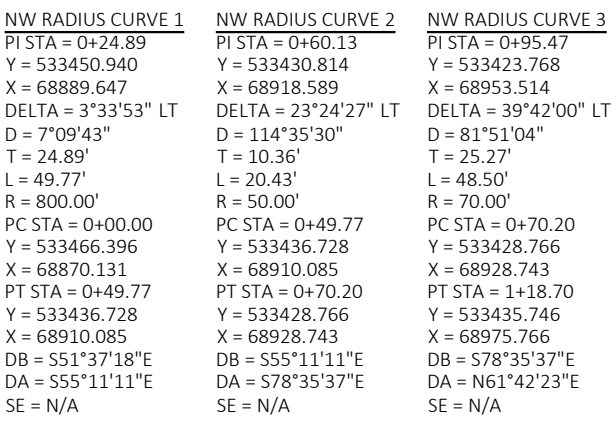
FRENCH RD GVFN CURVE 6
PI STA = 618+53.50 GVFN
Y = 532415.397
X = 71078.319
DELTA = 20°24'15" RT
D = 13°54'24"
T = 74.15'
L = 146.72'
R = 412.00'
PC STA = 617+79.36 GVFN
Y = 532359.012
X = 71030.170
PT STA = 619+26.08 GVFN
Y = 532451.457
X = 71143.106
DB = N40°29'44"E
DA = N60°53'58"E
SE = N/A

FRENCH RD GVFN CURVE 7
PI STA = 621+16.99 GVFN
Y = 532544.305
X = 71309.916
DELTA = 42°54'29" LT
D = 16°22'13"
T = 137.54'
L = 262.11'
R = 350.00'
PC STA = 619+79.44 GVFN
Y = 532477.411
X = 71189.734
PT STA = 622+41.55 GVFN
Y = 532675.123
X = 71352.400
DB = N60°53'58"E
DA = N17°59'30"E
SE = N/A



BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
515	642'GMVN'+51.45	-48.387	638.292'	BM/W CHIS SQR
550	620'GVA'+81.20	102.179	641.004'	BM/IP
551	623'GVA'+90.09	184.39	640.437'	BM/CHIS SQR
552	626'NB'+10.35	209.071	639.054'	BM/CHIS SQR

SE RADIUS CURVE 1	SE RADIUS CURVE 2	SE RADIUS CURVE 3
PI STA = 0+81.17	PI STA = 1+20.93	PI STA = 1+70.14
Y = 533264.076	Y = 533244.056	Y = 533199.657
X = 68872.242	X = 68834.096	X = 68811.274
DELTA = 51°38'20" LT	DELTA = 30°12'06" LT	DELTA = 18°38'25" LT
D = 114°35'30"	D = 81°51'04"	D = 38°11'50"
T = 24.19'	T = 18.89'	T = 24.62'
L = 45.06'	L = 36.90'	L = 48.80'
R = 50.00'	R = 70.00'	R = 150.00'
PC STA = 0+56.98	PC STA = 1+02.04	PC STA = 1+45.52
Y = 533254.257	Y = 533252.834	Y = 533222.406
X = 68894.352	X = 68850.821	X = 68820.682
PT STA = 1+02.04	PT STA = 1+38.94	PT STA = 1+94.32
Y = 533252.834	Y = 533228.056	Y = 533175.094
X = 68850.821	X = 68824.057	X = 68809.631
DB = N66°03'09"W	DB = S62°18'30"W	DB = S22°28'03"W
DA = S62°18'30"W	DA = S32°06'24"W	DA = S03°49'38"W
SE = N/A	SE = N/A	SE = N/A



SOUTHBRIDGE RD WB CURVE 1
PI STA = 107+05.92 'GVWB'
Y = 533261.835
X = 68975.560
DELTA = 49°40'23" LT
D = 51°09'25"
T = 51.84'
L = 97.10'
R = 112.00'
PC STA = 106+54.08 'GVWB'
Y = 533310.816
X = 68958.590
PT STA = 107+51.18 'GVWB'
Y = 533243.074
X = 69023.884
DB = S19°06'34"E
DA = S68°46'57"E
SE = N/A

SOUTHBRIDGE RD EB CURVE 1
PI STA = 104+56.78 'GVEB'
Y = 533450.749
X = 68825.461
DELTA = 40°46'54" RT
D = 51°09'25"
T = 41.63'
L = 79.72'
R = 112.00'
PC STA = 104+15.15 'GVEB'
Y = 533476.596
X = 68792.824
PT STA = 104+94.87 'GVEB'
Y = 533409.860
X = 68833.290
DB = S51°37'18"E
DA = S10°50'23"E
SE = N/A

BEGIN CONSTRUCTION
STA 102+25.00'GVWB'
Y=533,605.628
X=68,652.451

BEGIN CONSTRUCTION
STA 102+25.00'GVEB'
Y=533,594.653
X=68,643.759

SOUTHBRIDGE RD EB CURVE 1
PC: 104+15.15 'GVEB'
PT: 104+94.87 'GVEB'
Y=533409.860
X=68833.290

SOUTHBRIDGE-MID VALLEY CIR GMVC CURVE 1
PT: 1+16.80 'GMVC'
SOUTHBRIDGE-MID VALLEY CIR GMVC R/L

PC: 1+50.29 'GMVC'
SOUTHBRIDGE-MID VALLEY CIR GMVC CURVE 2

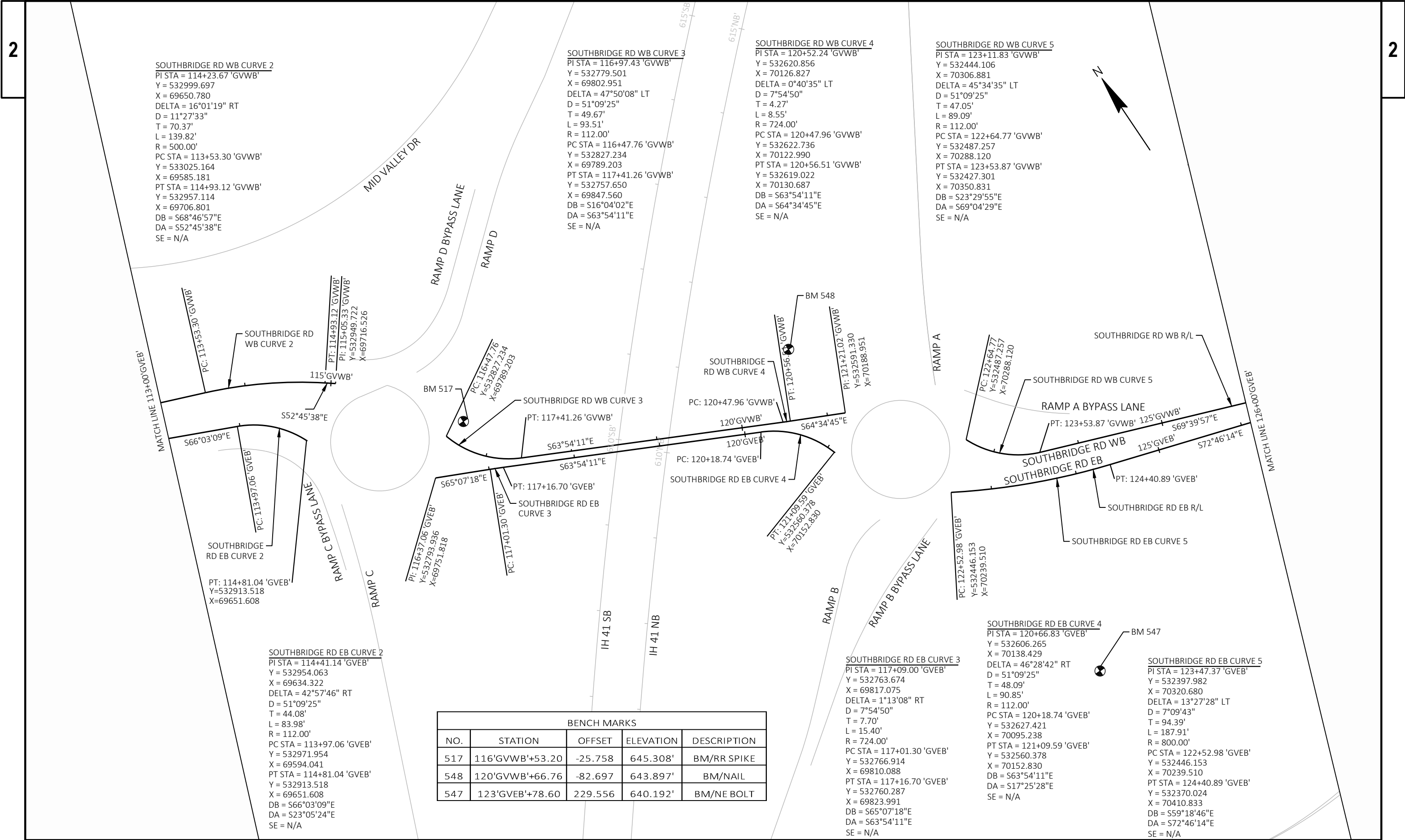
PI: 105+12.05 'GVWB'
Y=533427.410
X=68877.480

EP: 3+68.27 'GMVC'
PC: 106+54.08
Y=533310.816
X=68958.590

PI: 106+52.67 'GVEB'
Y=533274.102
X=68913.724

SOUTHBRIDGE-MID VALLEY CIR GMVC CURVE 1
PI STA = 4+51.03 'GMVC'
Y = 533448.144
X = 68892.145
DELTA = 104°33'53" LT
D = 89°31'29"
T = 82.75'
L = 116.80'
R = 64.00'
PC STA = 0+00.00 'GMVC'
Y = 533379.453
X = 68938.294
PT STA = 1+16.80 'GMVC'
Y = 533386.204
X = 68837.267
DB = N33°53'40"W
DA = S41°32'27"W
SE = N/A

SOUTHBRIDGE-MID VALLEY CIR GMVC CURVE 2
PI STA = -0+10.14 'GMVC'
Y = 533512.620
X = 68848.828
DELTA = 219°07'12" LT
D = 100°31'08"
T = 160.43'
L = 217.99'
R = 57.00'
PC STA = 1+50.29 'GMVC'
Y = 533352.857
X = 68834.217
PT STA = 3+68.27 'GMVC'
Y = 533379.453
X = 68938.294
DB = S05°13'31"W
DA = N33°53'40"W
SE = N/A



SOUTHBRIDGE RD EB CURVE 6
PI STA = 127+83.77 'GVEB'
Y = 532268.463
X = 70738.331
DELTA = 18°35'00" RT
D = 51°09'25"
T = 18.32'
L = 36.33'
R = 112.00'
PC STA = 127+65.45 'GVEB'
Y = 532273.890
X = 70720.829
PT STA = 128+01.78 'GVEB'
Y = 532257.741
X = 70753.190
DB = S72°46'14"E
DA = S54°11'14"E
SE = N/A

SOUTHBRIDGE RD EB CURVE 7
PI STA = 128+34.32 'GVEB'
Y = 532238.695
X = 70779.585
DELTA = 30°21'06" RT
D = 47°44'47"
T = 32.55'
L = 63.57'
R = 120.00'
PC STA = 128+01.78 'GVEB'
Y = 532257.741
X = 70753.190
PT STA = 128+65.34 'GVEB'
Y = 532208.922
X = 70792.739
DB = S54°11'14"E
DA = S23°50'09"E
SE = N/A

SOUTHBRIDGE RD EB CURVE 8
PI STA = 138+27.01 'GVEB'
Y = 531682.683
X = 71589.931
DELTA = 5°43'27" LT
D = 2°51'12"
T = 100.39'
L = 200.61'
R = 2008.00'
PC STA = 137+26.62 'GVEB'
Y = 531733.837
X = 71503.552
PT STA = 139+27.24 'GVEB'
Y = 531640.399
X = 71680.982
DB = S59°21'57"E
DA = S65°05'24"E
SE = 3.2%

SOUTHBRIDGE RD WB CURVE 6
PI STA = 130+67.71 'GVWB'
Y = 532084.193
X = 70943.340
DELTA = 38°40'49" LT
D = 51°09'25"
T = 39.31'
L = 75.61'
R = 112.00'
PC STA = 130+28.40 'GVWB'
Y = 532120.969
X = 70929.455
PT STA = 131+04.02 'GVWB'
Y = 532064.162
X = 70977.164
DB = S20°41'07"E
DA = S59°21'57"E
SE = N/A

SOUTHBRIDGE RD WB CURVE 7
PI STA = 138+24.85 'GVWB'
Y = 531696.858
X = 71597.395
DELTA = 5°43'27" LT
D = 2°52'35"
T = 99.59'
L = 199.01'
R = 1992.00'
PC STA = 137+25.26 'GVWB'
Y = 531747.604
X = 71511.705
PT STA = 139+24.27 'GVWB'
Y = 531654.912
X = 71687.719
DB = S59°21'57"E
DA = S65°05'24"E
SE = 3.2%

SOUTHBRIDGE RD WB 'GVWB'	
CURVE	7
PI STA	138+24.85 'GVWB'
SE RATE	3.20%
REMARKS	FULL SUPER
BEGIN TRANSITION	135+76.71 'GVWB'
BEGIN RUNOFF	136+48.59 'GVWB'
BEGIN FULL SE	137+63.59 'GVWB'
END FULL SE	138+85.94 'GVWB'
END RUNOFF	-
END TRANSITION	140+72.82 'GVWB'

SOUTHBRIDGE RD WB CURVE 7
END PROJECT
STA 138+00.00'GVWB'
Y=531,710.732
X=71,576.715

END CONSTRUCTION
STA 137+25.26'GVWB'
Y=531,747.603
X=71,511.704

BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
555	616'GVFN'+69.13	70.66	637.335'	BM/BOLT NE
500	138'GVWB'+72.05	-30.616	628.534'	BM/CHIS SQR

SOUTHBRIDGE-FRENCH CIR CURVE 1
PI STA = -11+00.81
Y = 531246.291
X = 71454.634
DELTA = 185°55'42" LT
D = 100°31'08"
T = 1100.81'
L = 184.97'
R = 57.00'
PC STA = 0+00.00
Y = 532204.002
X = 70911.898
PT STA = 1+84.97
Y = 532142.824
X = 70815.885
DB = N29°32'25"W
DA = S35°28'07"E
SE = N/A

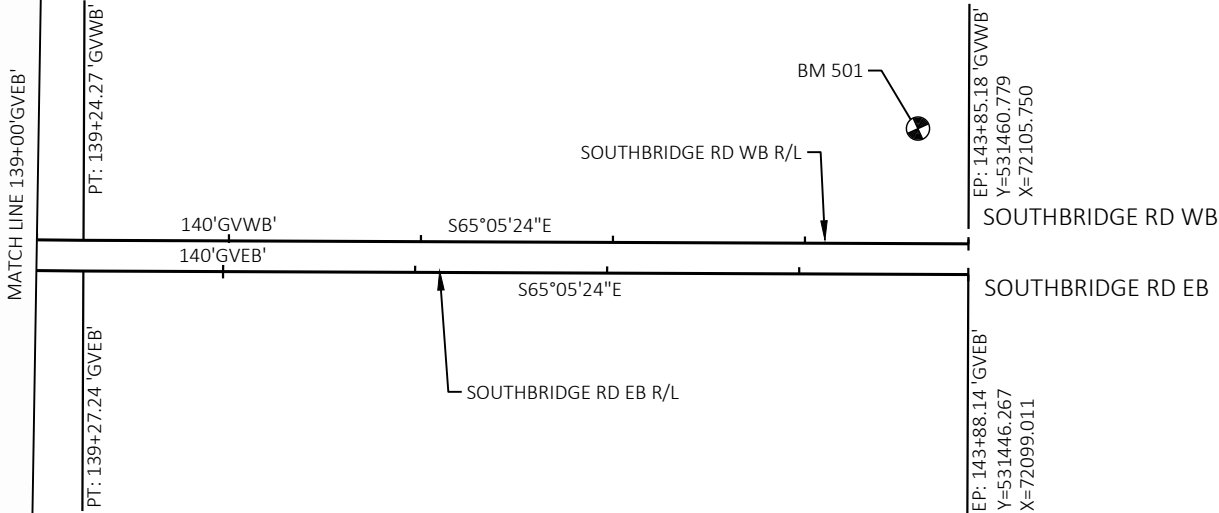
SOUTHBRIDGE-FRENCH CIR CURVE 2
PI STA = 2+88.92
Y = 532058.162
X = 70876.204
DELTA = 115°57'56" LT
D = 88°08'50"
T = 103.95'
L = 131.56'
R = 65.00'
PC STA = 1+84.97
Y = 532142.824
X = 70815.885
PT STA = 3+16.53
Y = 532149.460
X = 70925.911
DB = S35°28'07"E
DA = N28°33'57"E
SE = N/A

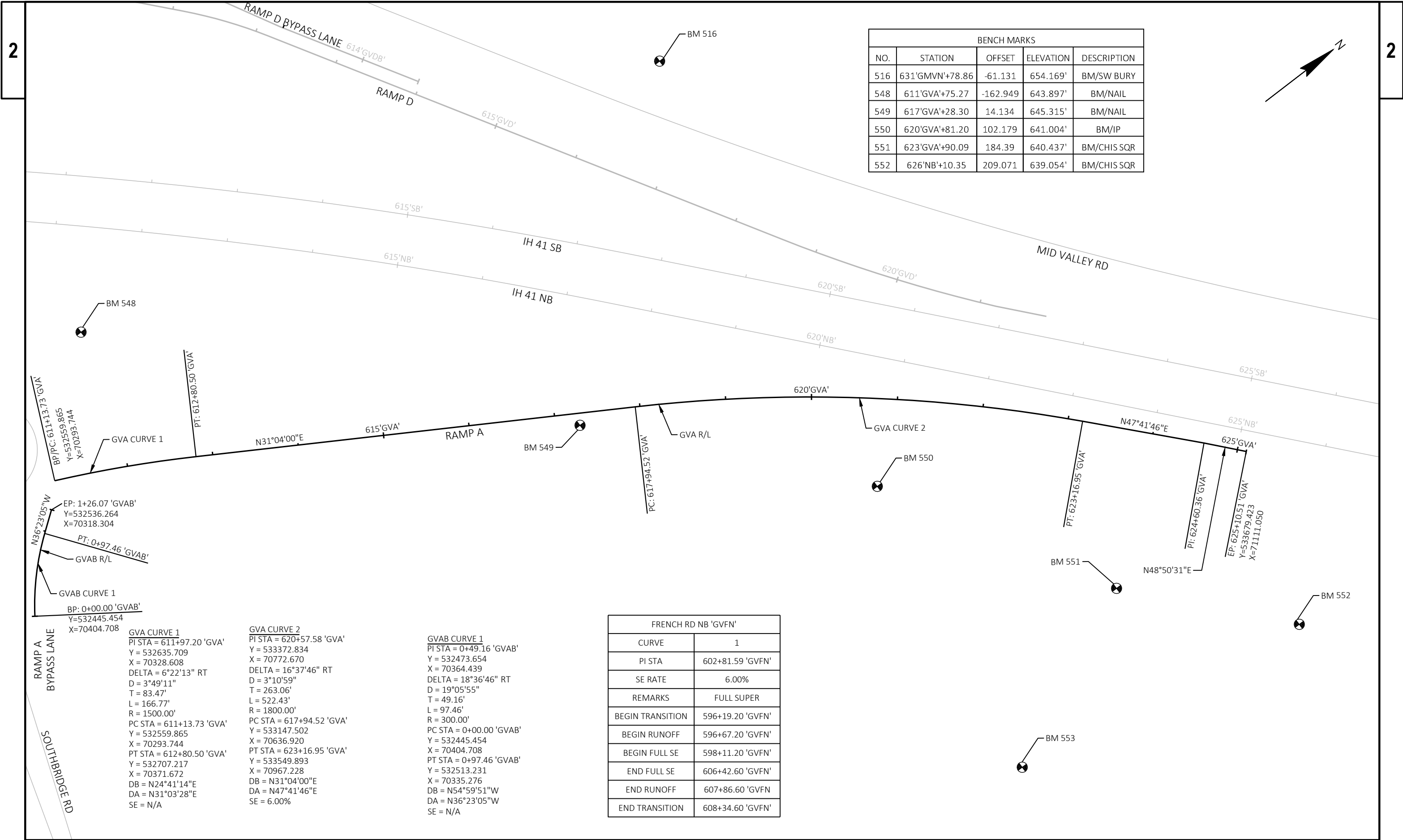
SOUTHBRIDGE-FRENCH CIR CURVE 3
PI STA = 3+64.20
Y = 532196.166
X = 70916.339
DELTA = 17°57'32" LT
D = 100°31'08"
T = 9.01'
L = 17.87'
R = 57.00'
PC STA = 3+55.20
Y = 532187.342
X = 70918.147
PT STA = 3+73.06
Y = 532204.002
X = 70911.898
DB = N11°34'53"W
DA = N29°32'25"W
SE = N/A

SOUTHBRIDGE RD EB 'GVEB'	
CURVE	8
PI STA	138+27.01 'GVEB'
SE RATE	3.20%
REMARKS	FULL SUPER
BEGIN TRANSITION	135+78.08 'GVEB'
BEGIN RUNOFF	136+49.95 'GVEB'
BEGIN FULL SE	137+64.95 'GVEB'
END FULL SE	138+88.91 'GVEB'
END RUNOFF	140+03.91 'GVEB'
END TRANSITION	140+75.78 'GVEB'



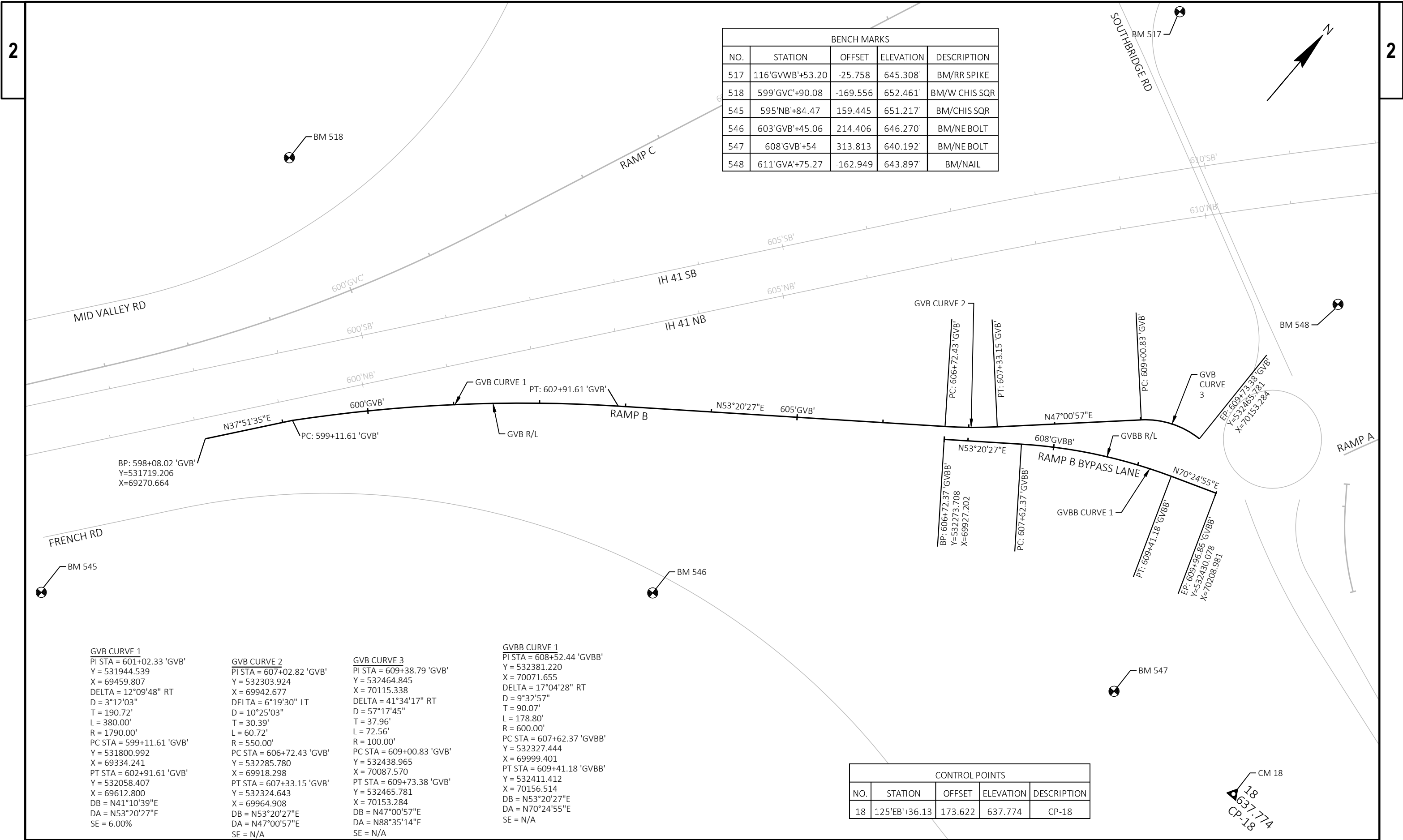
BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
501	143'GVWB'+58.63	-59.899	633.775'	BM/CHIS SQR





BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
516	631'GMVN'+78.86	-61.131	654.169'	BM/SW BURY
548	611'GVA'+75.27	-162.949	643.897'	BM/NAIL
549	617'GVA'+28.30	14.134	645.315'	BM/NAIL
550	620'GVA'+81.20	102.179	641.004'	BM/IP
551	623'GVA'+90.09	184.39	640.437'	BM/CHIS SQR
552	626'NB'+10.35	209.071	639.054'	BM/CHIS SQR

FRENCH RD NB 'GVFN'	
CURVE	1
PI STA	602+81.59 'GVFN'
SE RATE	6.00%
REMARKS	FULL SUPER
BEGIN TRANSITION	596+19.20 'GVFN'
BEGIN RUNOFF	596+67.20 'GVFN'
BEGIN FULL SE	598+11.20 'GVFN'
END FULL SE	606+42.60 'GVFN'
END RUNOFF	607+86.60 'GVFN'
END TRANSITION	608+34.60 'GVFN'



BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
517	116'GVWB'+53.20	-25.758	645.308'	BM/RR SPIKE
518	599'GVC'+90.08	-169.556	652.461'	BM/W CHIS SQR
545	595'NB'+84.47	159.445	651.217'	BM/CHIS SQR
546	603'GVB'+45.06	214.406	646.270'	BM/NE BOLT
547	608'GVB'+54	313.813	640.192'	BM/NE BOLT
548	611'GVA'+75.27	-162.949	643.897'	BM/NAIL

CONTROL POINTS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
18	125'EB'+36.13	173.622	637.774	CP-18

GVB CURVE 1
PI STA = 601+02.33 'GVB'
Y = 531944.539
X = 69459.807
DELTA = 12°09'48" RT
D = 3°12'03"
T = 190.72'
L = 380.00'
R = 1790.00'
PC STA = 599+11.61 'GVB'
Y = 531800.992
X = 69334.241
PT STA = 602+91.61 'GVB'
Y = 532058.407
X = 69612.800
DB = N41°10'39"E
DA = N53°20'27"E
SE = 6.00%

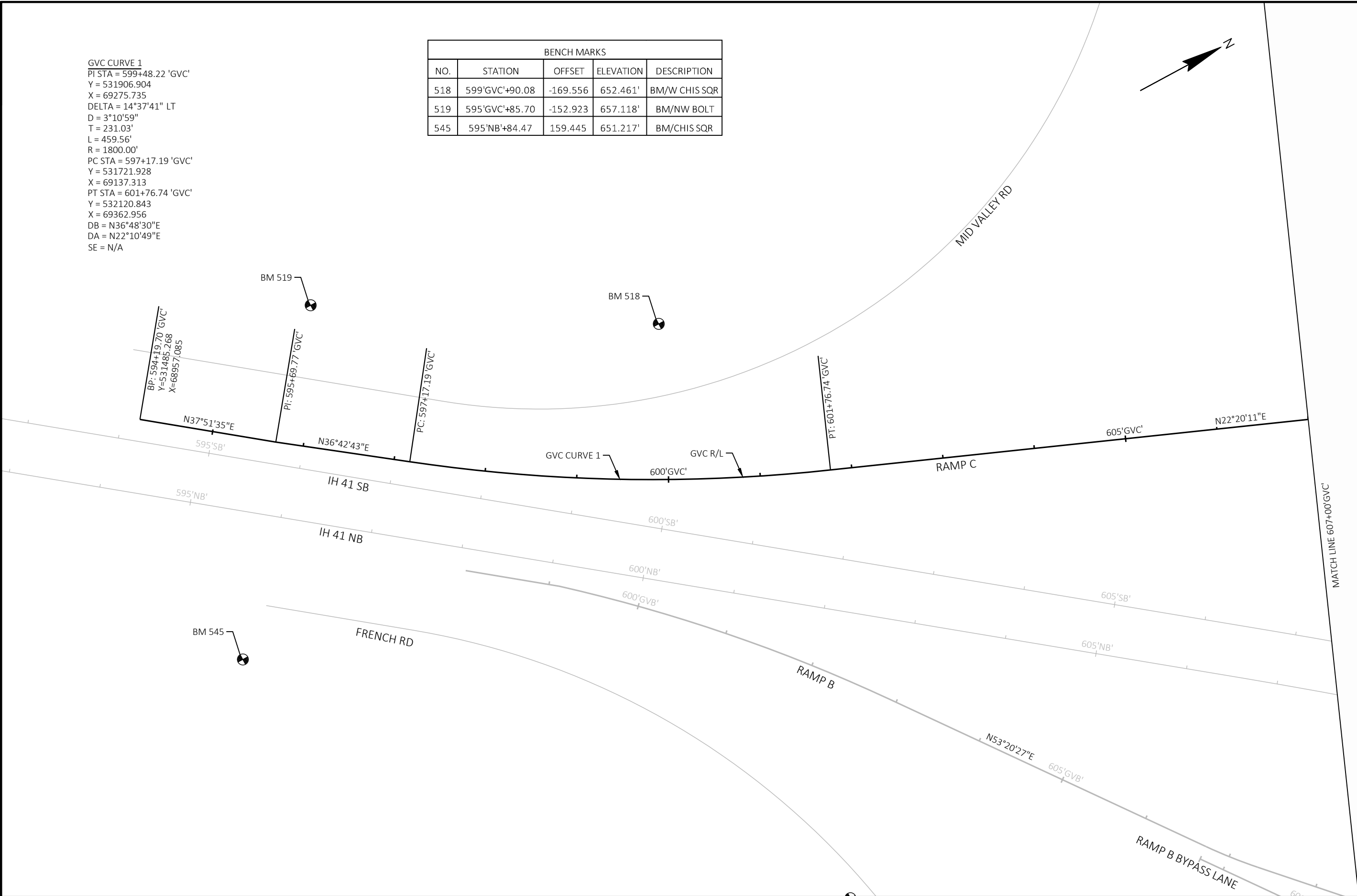
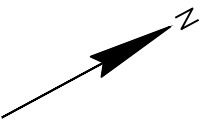
GVB CURVE 2
PI STA = 607+02.82 'GVB'
Y = 532303.924
X = 69942.677
DELTA = 6°19'30" LT
D = 10°25'03"
T = 30.39'
L = 60.72'
R = 550.00'
PC STA = 606+72.43 'GVB'
Y = 532285.780
X = 69918.298
PT STA = 607+33.15 'GVB'
Y = 532324.643
X = 69964.908
DB = N53°20'27"E
DA = N47°00'57"E
SE = N/A

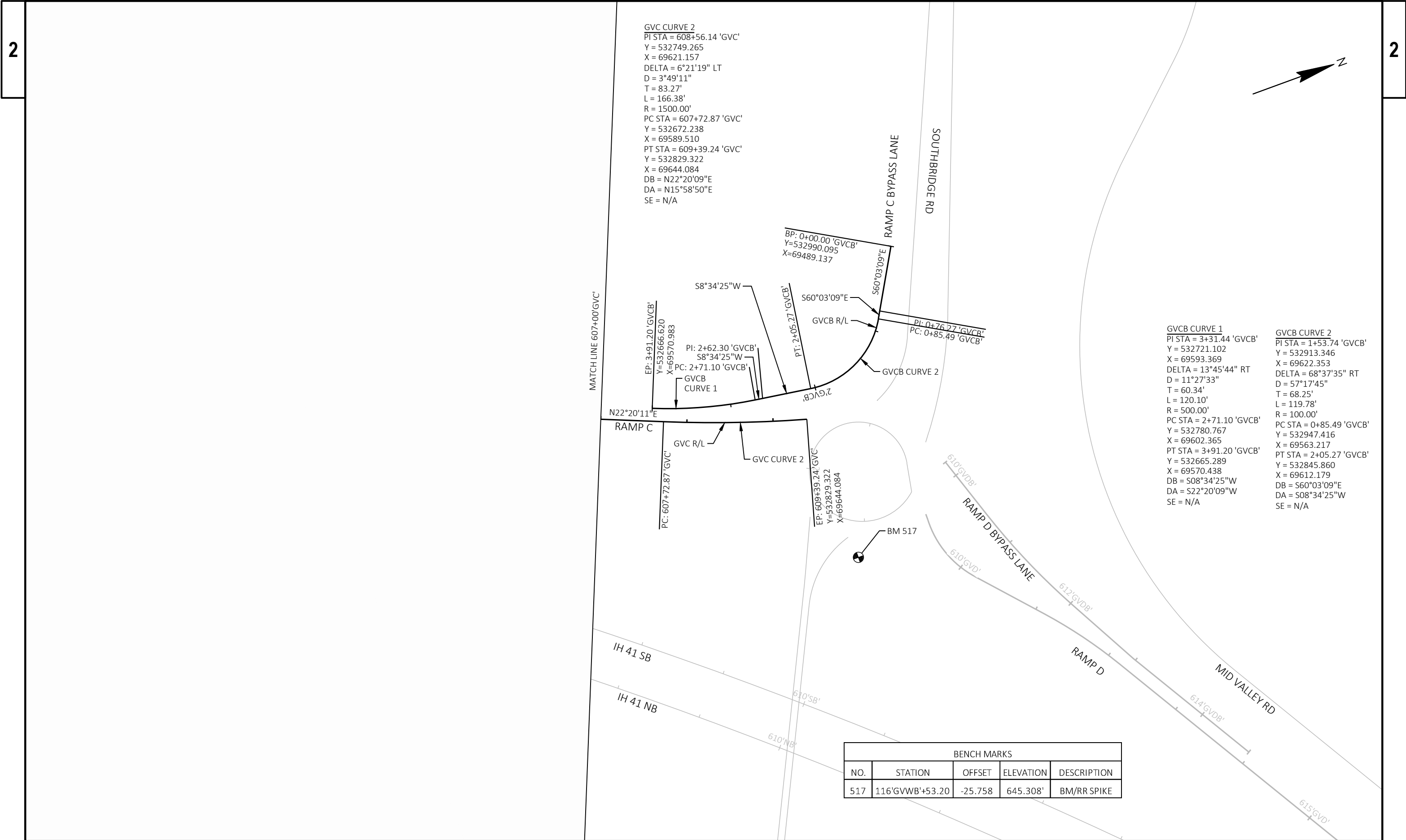
GVB CURVE 3
PI STA = 609+38.79 'GVB'
Y = 532464.845
X = 70115.338
DELTA = 41°34'17" RT
D = 57°17'45"
T = 37.96'
L = 72.56'
R = 100.00'
PC STA = 609+00.83 'GVB'
Y = 532438.965
X = 70087.570
PT STA = 609+73.38 'GVB'
Y = 532465.781
X = 70153.284
DB = N47°00'57"E
DA = N88°35'14"E
SE = N/A

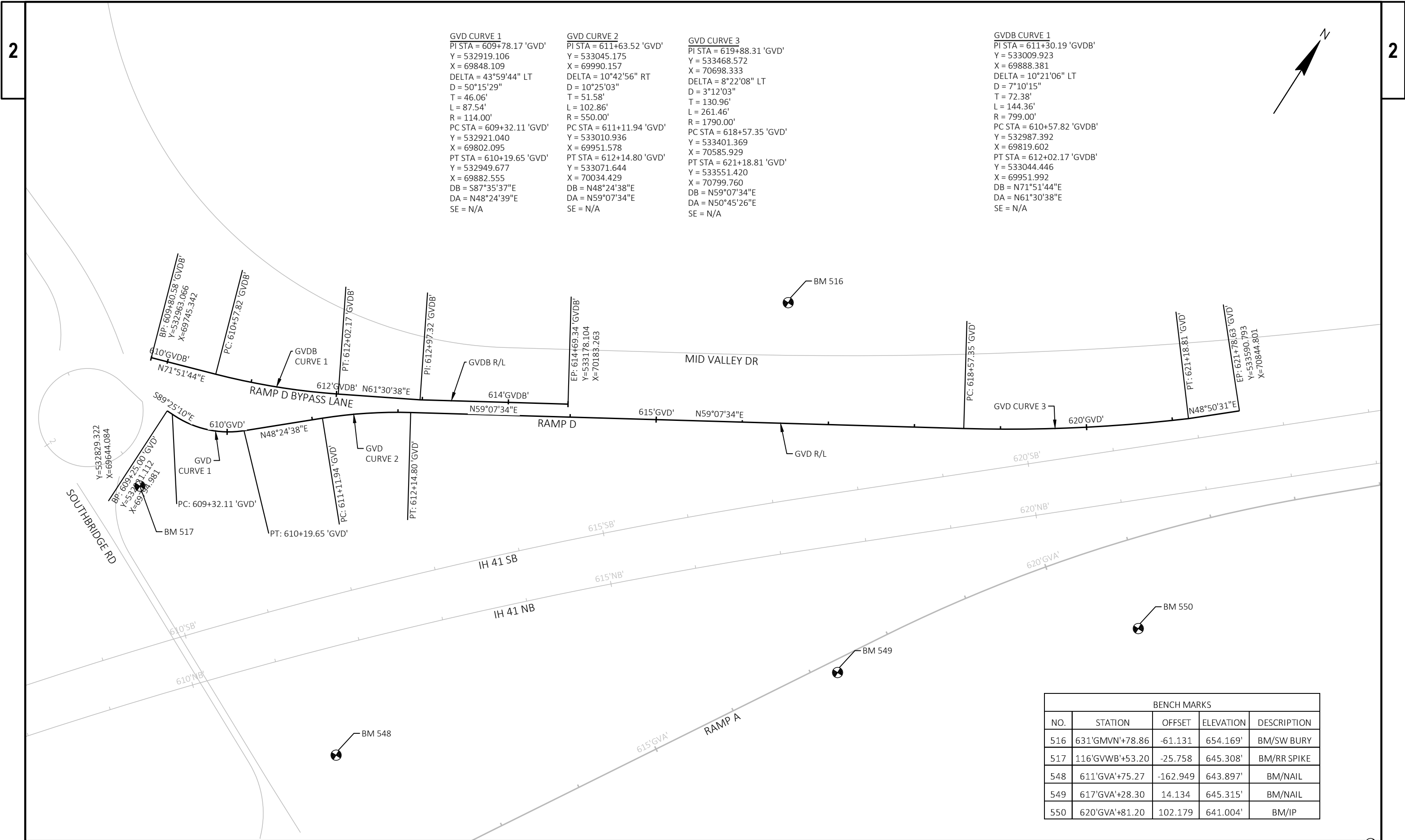
GVBB CURVE 1
PI STA = 608+52.44 'GVBB'
Y = 532381.220
X = 70071.655
DELTA = 17°04'28" RT
D = 9°32'57"
T = 90.07'
L = 178.80'
R = 600.00'
PC STA = 607+62.37 'GVBB'
Y = 532327.444
X = 69999.401
PT STA = 609+41.18 'GVBB'
Y = 532411.412
X = 70156.514
DB = N53°20'27"E
DA = N70°24'55"E
SE = N/A

GVC CURVE 1
PI STA = 599+48.22 'GVC'
Y = 531906.904
X = 69275.735
DELTA = 14°37'41" LT
D = 3°10'59"
T = 231.03'
L = 459.56'
R = 1800.00'
PC STA = 597+17.19 'GVC'
Y = 531721.928
X = 69137.313
PT STA = 601+76.74 'GVC'
Y = 532120.843
X = 69362.956
DB = N36°48'30"E
DA = N22°10'49"E
SE = N/A

BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
518	599'GVC'+90.08	-169.556	652.461'	BM/W CHIS SQR
519	595'GVC'+85.70	-152.923	657.118'	BM/NW BOLT
545	595'NB'+84.47	159.445	651.217'	BM/CHIS SQR







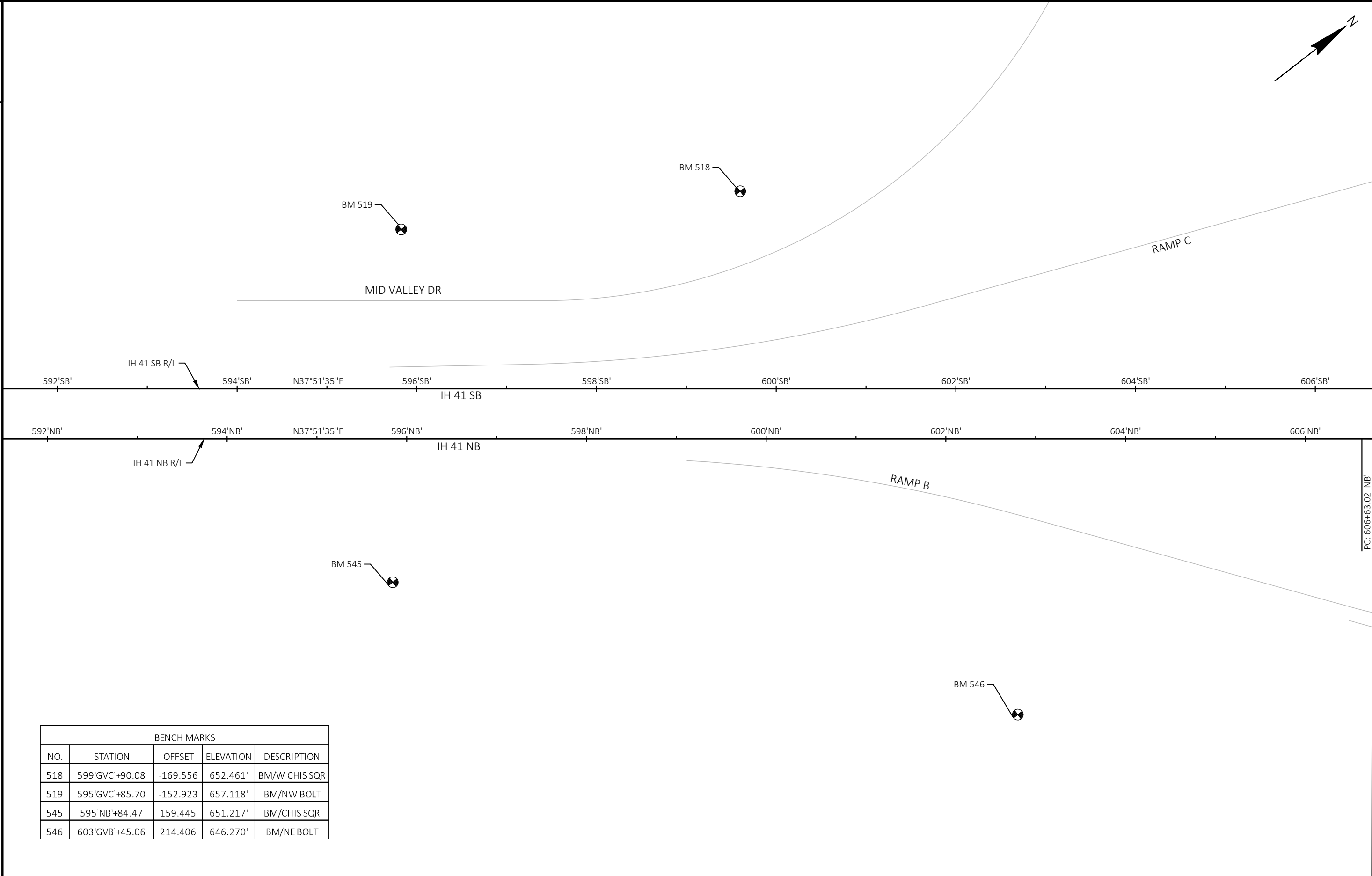
GVD CURVE 1
PI STA = 609+78.17 'GVD'
Y = 532919.106
X = 69848.109
DELTA = 43°59'44" LT
D = 50°15'29"
T = 46.06'
L = 87.54'
R = 114.00'
PC STA = 609+32.11 'GVD'
Y = 532921.040
X = 69802.095
PT STA = 610+19.65 'GVD'
Y = 532949.677
X = 69882.555
DB = S87°35'37"E
DA = N48°24'39"E
SE = N/A

GVD CURVE 2
PI STA = 611+63.52 'GVD'
Y = 533045.175
X = 69990.157
DELTA = 10°42'56" RT
D = 10°25'03"
T = 51.58'
L = 102.86'
R = 550.00'
PC STA = 611+11.94 'GVD'
Y = 533010.936
X = 69951.578
PT STA = 612+14.80 'GVD'
Y = 533071.644
X = 70034.429
DB = N48°24'38"E
DA = N59°07'34"E
SE = N/A

GVD CURVE 3
PI STA = 619+88.31 'GVD'
Y = 533468.572
X = 70698.333
DELTA = 8°22'08" LT
D = 3°12'03"
T = 130.96'
L = 261.46'
R = 1790.00'
PC STA = 618+57.35 'GVD'
Y = 533401.369
X = 70585.929
PT STA = 621+18.81 'GVD'
Y = 533551.420
X = 70799.760
DB = N59°07'34"E
DA = N50°45'26"E
SE = N/A

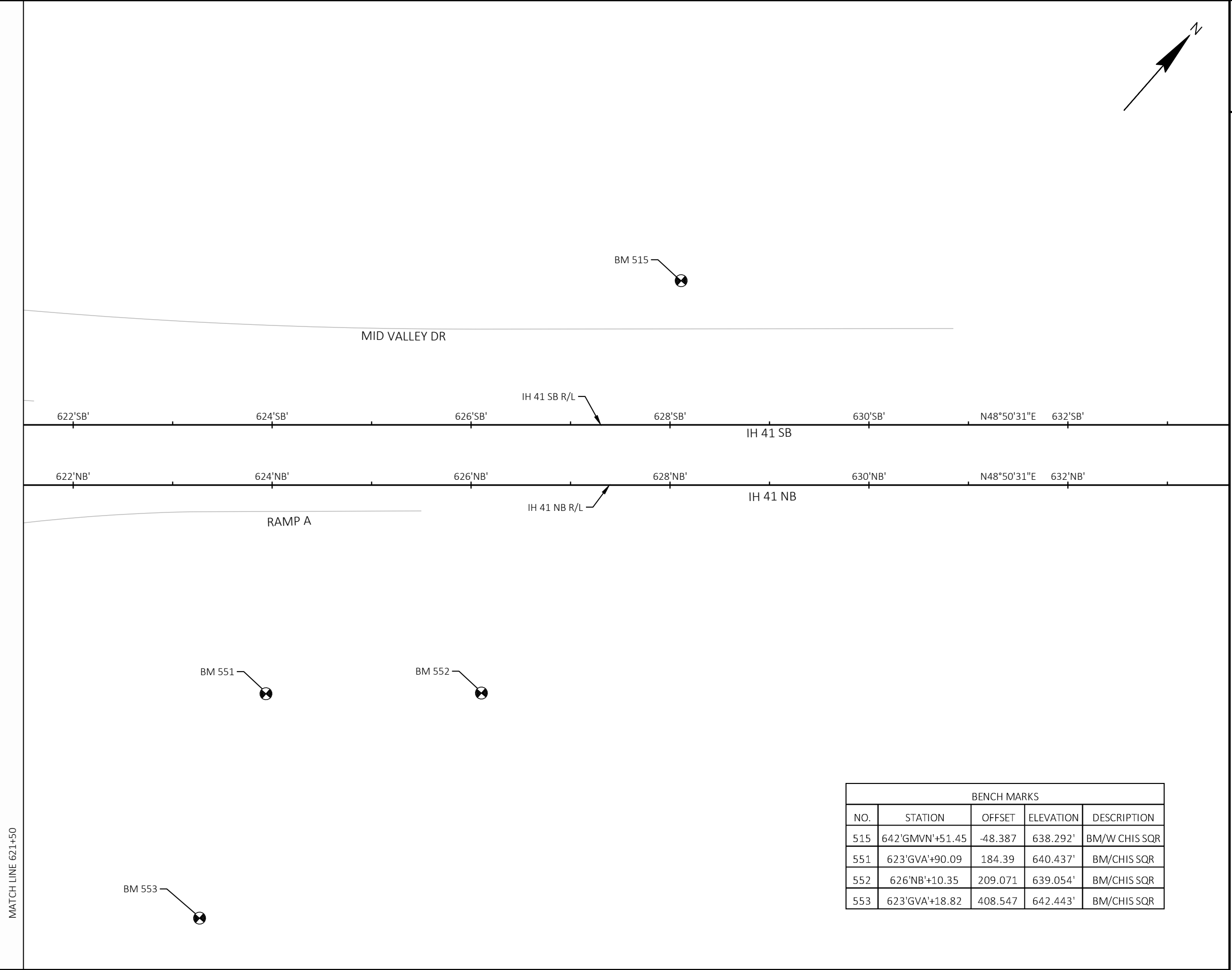
GVDB CURVE 1
PI STA = 611+30.19 'GVDB'
Y = 533009.923
X = 69888.381
DELTA = 10°21'06" LT
D = 7°10'15"
T = 72.38'
L = 144.36'
R = 799.00'
PC STA = 610+57.82 'GVDB'
Y = 532987.392
X = 69819.602
PT STA = 612+02.17 'GVDB'
Y = 533044.446
X = 69951.992
DB = N71°51'44"E
DA = N61°30'38"E
SE = N/A

BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
516	631'GMVN'+78.86	-61.131	654.169'	BM/SW BURY
517	116'GVWB'+53.20	-25.758	645.308'	BM/RR SPIKE
548	611'GVA'+75.27	-162.949	643.897'	BM/NAIL
549	617'GVA'+28.30	14.134	645.315'	BM/NAIL
550	620'GVA'+81.20	102.179	641.004'	BM/IP



BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
518	599'GVC'+90.08	-169.556	652.461'	BM/W CHIS SQR
519	595'GVC'+85.70	-152.923	657.118'	BM/NW BOLT
545	595'NB'+84.47	159.445	651.217'	BM/CHIS SQR
546	603'GVB'+45.06	214.406	646.270'	BM/NE BOLT





BENCH MARKS				
NO.	STATION	OFFSET	ELEVATION	DESCRIPTION
515	642'GMVN'+51.45	-48.387	638.292'	BM/W CHIS SQR
551	623'GVA'+90.09	184.39	640.437'	BM/CHIS SQR
552	626'NB'+10.35	209.071	639.054'	BM/CHIS SQR
553	623'GVA'+18.82	408.547	642.443'	BM/CHIS SQR

Estimate Of Quantities

1130-68-81					
Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	3.000	3.000
0004	201.0205	Grubbing	STA	44.000	44.000
0006	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0008	204.0100	Removing Concrete Pavement	SY	7,820.000	7,820.000
0010	204.0110	Removing Asphaltic Surface	SY	368.000	368.000
0012	204.0150	Removing Curb & Gutter	LF	506.000	506.000
0014	204.0170	Removing Fence	LF	5,630.000	5,630.000
0016	204.0195	Removing Concrete Bases	EACH	5.000	5.000
0018	204.0220	Removing Inlets	EACH	3.000	3.000
0020	204.0270	Abandoning Culvert Pipes	EACH	1.000	1.000
0022	204.0280	Sealing Pipes	EACH	8.000	8.000
0024	204.9060.S	Removing (item description) 01. Billboard Sign STA 607+00'GVFN'	EACH	1.000	1.000
0026	205.0100	Excavation Common	CY	132,997.000	132,997.000
0028	208.1100	Select Borrow	CY	7,270.000	7,270.000
0030	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1130-68-81	EACH	1.000	1.000
0032	213.0100	Finishing Roadway (project) 01. 1130-68-81	EACH	1.000	1.000
0034	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,460.000	1,460.000
0036	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	17,083.000	17,083.000
0038	310.0115	Base Aggregate Open-Graded	CY	14.700	14.700
0040	312.0110	Select Crushed Material	TON	36,540.000	36,540.000
0042	405.0100	Coloring Concrete WisDOT Red	CY	259.000	259.000
0044	405.1000	Stamping Colored Concrete	CY	36.000	36.000
0046	415.0095	Concrete Pavement 9 1/2-Inch	SY	4,650.000	4,650.000
0048	415.2010	Concrete Truck Apron 12-inch	SY	416.000	416.000
0050	450.4000	HMA Cold Weather Paving	TON	229.000	229.000
0052	455.0605	Tack Coat	GAL	2,800.000	2,800.000
0054	460.2000	Incentive Density HMA Pavement	DOL	4,560.000	4,560.000
0056	460.5224	HMA Pavement 4 LT 58-28 S	TON	6,170.000	6,170.000
0058	465.0105	Asphaltic Surface	TON	655.000	655.000
0060	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	241.000	241.000
0062	465.0315	Asphaltic Flumes	SY	38.000	38.000
0064	520.1021	Apron Endwalls for Culvert Pipe 21-Inch	EACH	10.000	10.000
0066	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	8.000	8.000
0068	520.3321	Culvert Pipe Class III-A 21-Inch	LF	397.000	397.000
0070	520.3324	Culvert Pipe Class III-A 24-Inch	LF	690.000	690.000
0072	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0074	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	204.000	204.000
0076	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000
0078	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	4.000	4.000
0080	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	6.000	6.000
0082	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0084	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0086	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	3.000	3.000
0088	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	268.000	268.000
0090	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	1,393.000	1,393.000
0092	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,558.000	1,558.000
0094	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	2,790.000	2,790.000
0096	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	356.000	356.000
0098	601.0600	Concrete Curb Pedestrian	LF	124.000	124.000
0100	602.0405	Concrete Sidewalk 4-Inch	SF	14,663.000	14,663.000

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty
0102	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	228.000	228.000
0104	602.3010	Concrete Surface Drains	CY	5.100	5.100
0106	603.8000	Concrete Barrier Temporary Precast Delivered	LF	2,063.000	2,063.000
0108	603.8125	Concrete Barrier Temporary Precast Installed	LF	2,063.000	2,063.000
0110	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	725.000	725.000
0112	606.0100	Riprap Light	CY	14.000	14.000
0114	606.0200	Riprap Medium	CY	326.500	326.500
0116	606.0300	Riprap Heavy	CY	14.300	14.300
0118	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	129.000	129.000
0120	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	78.000	78.000
0122	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	916.000	916.000
0124	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	331.000	331.000
0126	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	352.000	352.000
0128	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	537.000	537.000
0130	608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	LF	219.000	219.000
0132	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	55.000	55.000
0134	611.0530	Manhole Covers Type J	EACH	4.000	4.000
0136	611.0600	Inlet Covers Type A	EACH	19.000	19.000
0138	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0140	611.0624	Inlet Covers Type H	EACH	7.000	7.000
0142	611.0642	Inlet Covers Type MS	EACH	3.000	3.000
0144	611.0652	Inlet Covers Type T	EACH	2.000	2.000
0146	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0148	611.2005	Manholes 5-FT Diameter	EACH	4.000	4.000
0150	611.3004	Inlets 4-FT Diameter	EACH	24.000	24.000
0152	611.3230	Inlets 2x3-FT	EACH	4.000	4.000
0154	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0156	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0158	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0160	612.0106	Pipe Underdrain 6-Inch	LF	735.000	735.000
0162	614.0905	Crash Cushions Temporary	EACH	2.000	2.000
0164	616.0700.S	Fence Safety	LF	1,000.000	1,000.000
0166	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1130-68-81	EACH	1.000	1.000
0168	619.1000	Mobilization	EACH	1.000	1.000
0170	620.0300	Concrete Median Sloped Nose	SF	709.000	709.000
0172	624.0100	Water	MGAL	273.000	273.000
0174	625.0100	Topsoil	SY	12,810.000	12,810.000
0176	625.0500	Salvaged Topsoil	SY	169,800.000	169,800.000
0178	627.0200	Mulching	SY	250,543.000	250,543.000
0180	628.1504	Silt Fence	LF	13,257.000	13,257.000
0182	628.1520	Silt Fence Maintenance	LF	13,257.000	13,257.000
0184	628.1905	Mobilizations Erosion Control	EACH	11.000	11.000
0186	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0188	628.2002	Erosion Mat Class I Type A	SY	34,058.000	34,058.000
0190	628.2004	Erosion Mat Class I Type B	SY	9,250.000	9,250.000
0192	628.2008	Erosion Mat Urban Class I Type B	SY	1,950.000	1,950.000
0194	628.6505	Soil Stabilizer Type A	ACRE	48.700	48.700
0196	628.7005	Inlet Protection Type A	EACH	4.000	4.000
0198	628.7010	Inlet Protection Type B	EACH	5.000	5.000
0200	628.7015	Inlet Protection Type C	EACH	20.000	20.000

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty
0202	628.7504	Temporary Ditch Checks	LF	375.000	375.000
0204	628.7515.S	Stone Ditch Checks	CY	60.100	60.100
0206	628.7555	Culvert Pipe Checks	EACH	70.000	70.000
0208	628.7560	Tracking Pads	EACH	8.000	8.000
0210	629.0210	Fertilizer Type B	CWT	179.500	179.500
0212	630.0120	Seeding Mixture No. 20	LB	12,809.000	12,809.000
0214	630.0130	Seeding Mixture No. 30	LB	575.000	575.000
0216	630.0200	Seeding Temporary	LB	6,368.000	6,368.000
0218	630.0500	Seed Water	MGAL	11,981.000	11,981.000
0220	632.0101	Trees (species, root, size) 01. Cole's Select Serviceberry, B&B, 5-FT	EACH	3.000	3.000
0222	632.0201	Shrubs (species, root, size) 01. Hydrangea Limelight, Cont, 3-FT	EACH	9.000	9.000
0224	632.0201	Shrubs (species, root, size) 02. Barberry Rose Glow, Cont, 1-FT	EACH	21.000	21.000
0226	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	24.000	24.000
0228	633.5200	Markers Culvert End	EACH	20.000	20.000
0230	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	11.000	11.000
0232	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	14.000	14.000
0234	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	3.000	3.000
0236	637.2210	Signs Type II Reflective H	SF	170.750	170.750
0238	637.2230	Signs Type II Reflective F	SF	24.750	24.750
0240	638.2602	Removing Signs Type II	EACH	12.000	12.000
0242	638.3000	Removing Small Sign Supports	EACH	12.000	12.000
0244	640.1303.S	Pond Liner Clay	CY	11,700.000	11,700.000
0246	642.5001	Field Office Type B	EACH	1.000	1.000
0248	643.0300	Traffic Control Drums	DAY	25,185.000	25,185.000
0250	643.0420	Traffic Control Barricades Type III	DAY	2,891.000	2,891.000
0252	643.0705	Traffic Control Warning Lights Type A	DAY	2,742.000	2,742.000
0254	643.0800	Traffic Control Arrow Boards	DAY	760.000	760.000
0256	643.0900	Traffic Control Signs	DAY	12,758.000	12,758.000
0258	643.0920	Traffic Control Covering Signs Type II	EACH	5.000	5.000
0260	643.1050	Traffic Control Signs PCMS	DAY	168.000	168.000
0262	643.5000	Traffic Control	EACH	1.000	1.000
0264	645.0111	Geotextile Type DF Schedule A	SY	353.000	353.000
0266	645.0120	Geotextile Type HR	SY	951.000	951.000
0268	645.0130	Geotextile Type R	SY	381.700	381.700
0270	646.2020	Marking Line Epoxy 6-Inch	LF	26,969.000	26,969.000
0272	646.5020	Marking Arrow Epoxy	EACH	2.000	2.000
0274	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	39.000	39.000
0276	646.7120	Marking Diagonal Epoxy 12-Inch	LF	107.000	107.000
0278	646.8120	Marking Curb Epoxy	LF	20.000	20.000
0280	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0282	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,168.000	1,168.000
0284	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	140.000	140.000
0286	652.0335	Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	447.000	447.000
0288	652.0615	Conduit Special 3-Inch	LF	48.000	48.000
0290	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	11.000	11.000
0292	653.0905	Removing Pull Boxes	EACH	2.000	2.000
0294	654.0105	Concrete Bases Type 5	EACH	11.000	11.000
0296	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0298	655.0610	Electrical Wire Lighting 12 AWG	LF	1,650.000	1,650.000
0300	655.0615	Electrical Wire Lighting 10 AWG	LF	10,131.000	10,131.000

Estimate Of Quantities

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Line	Item	Item Description	Unit	Total	Qty
0302	655.0625	Electrical Wire Lighting 6 AWG	LF	1,515.000	1,515.000
0304	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. CB200	EACH	1.000	1.000
0306	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	11.000	11.000
0308	657.0322	Poles Type 5-Aluminum	EACH	11.000	11.000
0310	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	11.000	11.000
0312	659.1120	Luminaires Utility LED B	EACH	11.000	11.000
0314	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0316	674.0300	Remove Cable	LF	5,523.000	5,523.000
0318	690.0150	Sawing Asphalt	LF	389.000	389.000
0320	690.0250	Sawing Concrete	LF	125.000	125.000
0322	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,395.000	1,395.000
0324	740.0440	Incentive IRI Ride	DOL	5,010.000	5,010.000
0326	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,100.000	2,100.000
0328	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	5,760.000	5,760.000
0330	SPV.0035	Special 01. Roadway Embankment	CY	561,376.000	561,376.000
0332	SPV.0035	Special 02. Drainage Blanket	CY	101,570.000	101,570.000
0334	SPV.0060	Special 01. Remove and Salvage Meter Breaker Pedestal	EACH	1.000	1.000
0336	SPV.0060	Special 02. Removing Municipal Lighting Units	EACH	4.000	4.000
0338	SPV.0060	Special 03. Temporary Street Lighting System	EACH	1.000	1.000
0340	SPV.0060	Special 04. Crash Cushions Temporary Left in Place	EACH	2.000	2.000
0342	SPV.0060	Special 05. Vibrating Wire Piezometer Instrumentation System	EACH	12.000	12.000
0344	SPV.0060	Special 06. Settlement Gauges	EACH	34.000	34.000
0346	SPV.0060	Special 07. Baseline CPM Progress Schedule	EACH	1.000	1.000
0348	SPV.0060	Special 08. CPM Progress Schedule and Accepted Revisions	EACH	12.000	12.000
0350	SPV.0060	Special 09. Construction Staking Survey Project 1130-68-81	EACH	1.000	1.000
0352	SPV.0060	Special 10. Geotechnical Instrumentation	EACH	2.000	2.000
0354	SPV.0060	Special 11. Cover Plates Temporary Left-in-Place	EACH	1.000	1.000
0356	SPV.0060	Special 12. Traffic Control Barricades Type III Left-in-Place	EACH	35.000	35.000
0358	SPV.0060	Special 13. Traffic Control Signs Left-in-Place	EACH	11.000	11.000
0360	SPV.0060	Special 14. Outlet Structure Pond Southbridge Rd Ramp B	EACH	1.000	1.000
0362	SPV.0060	Special 15. Outlet Structure Pond Southbridge Rd Ramp D	EACH	1.000	1.000
0364	SPV.0060	Special 16. Traffic Control Warning Lights Type A Left in Place	EACH	70.000	70.000
0366	SPV.0060	Special 17. Adjusting Sanitary Manhole Covers	EACH	21.000	21.000
0368	SPV.0060	Special 18. Adjusting Water Valve Boxes	EACH	31.000	31.000
0370	SPV.0075	Special 01. Street Sweeping	HRS	122.000	122.000
0372	SPV.0090	Special 01. Concrete Barrier Temporary Precast Left in Place	LF	2,063.000	2,063.000
0374	SPV.0090	Special 02. Prefabricated Vertical Drains	LF	1,136,516.000	1,136,516.000
0376	SPV.0090	Special 03. Prebored Prefabricated Vertical Drains	LF	807,230.000	807,230.000
0378	SPV.0090	Special 04. Concrete Curb & Gutter 36-Inch Type A Special 12-Inch Curb Head	LF	1,073.000	1,073.000
0380	SPV.0180	Special 01. Double Shredded Hardwood Mulch	SY	185.000	185.000

3

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

CLEARING AND GRUBBING ITEMS

		201.0105		201.0205	
		CLEARING		GRUBBING	
STATION	-	STATION	LOCATION	STA	STA
0+00	-	5+50	INNOVATION CT TEMP		2
604+00	-	608+00	NORTHBOUND OFF RAMP		4
611+00	-	617+00	NORTHBOUND ON RAMP		2
606+00	-	608+00	SOUTHBOUND ON RAMP		2
609+00		610+00	SOUTHBOUND OFF RAMP		1
600+00	-	626+00	MID VALLEY DR	3	33
TOTAL				3	44

REMOVING SMALL CULVERT PIPES

		203.0100		204.0270	
		REMOVING SMALL PIPE CULVERTS		ABANDONING CULVERT PIPES	
STATION	OFFSET	LOCATION	SIZE MATERIAL LENGTH	EACH	EACH
618+27	38.8' RT	INNOVATION CT	12" PVC 35	1	--
618+33	14.3' RT	INNOVATION CT	12" PVC 15	1	--
619+37	14.2' RT	INNOVATION CT	21" CONCRETE 198	1	1
TOTAL				3	1

3

PAVEMENT REMOVAL ITEMS

				204.0100	204.0110	
				REMOVING CONCRETE PAVEMENT	REMOVING ASPHALTIC SURFACE	
STATION	-	STATION	LOCATION	SY	SY	REMARKS
616+79	-	622+59	Innovation Ct	1,260	--	
597+00	-	623+27	Mid valley	6,560	--	
595+62	-	597+00	Mid valley		368	
Total				7,820	368	

REMOVING CURB AND GUTTER

204.0150					
REMOVING CURB & GUTTER					
STATION	-	STATION	LOCATION	LF	REMARKS
615+27	-	616+56	Innovation	280	
619+80	-	620+77	Innovation	121	
600+03	-	600+36	Mid valley	55	DRIVEWAY
637+66	-	637+99	Mid valley	50	DRIVEWAY
TOTAL				506	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

REMOVING FENCE

204.0170

REMOVING FENCE

STATION	-	STATION	LOCATION	LF	REMARKS
598+60	-	619+92	Mid Valley Rd	3,220	
599+38	-	621+51	French Rd	2,410	
TOTAL				5,630	

REMOVE STORM SEWER STRUCTURES

204.0220

REMOVING
INLETS

STATION	OFFSET	EACH	REMARKS
648+36	7.1' RT	1	GVFN Alignment
618+31	20.8' RT	1	GVFN Alignment
618+23	54.9' RT	1	GVFN Alignment
TOTAL		3	

PREPARE FOUNDATION FOR ASPHALTIC PAVING

211.0101.01

PREPARE FOUNDATION FOR
ASPHALTIC PAVING (1130-68-81)

STATION	STATION	EACH	REMARKS
595' GVMN'+62	- 597+00	1	
TOTAL		1	

COVER EXISTING INLET

611.8110

SPV.0060.11

ADJUSTING COVER PLATES TEMPORARY
MANHOLE COVERS LEFT-IN-PLACE

STATION	ALI	OFFSET	EACH	EACH	REMARKS
620+41	'GVFN'	60' RT	1	1	Innovation Ct.
TOTAL			1	1	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

3

REMOVING BILLBOARD

204.9060.S.01

REMOVING (01. BILLBOARD
SIGN STA 607+00'GVFN")

LOCATION	EACH	REMARKS
607'GVFN'+00 RT	1	
TOTAL	1	

3

Seal Pipe

204.0280

SEALING PIPES

LOCATION	EACH	REMARKS
West Side of Interstate	4	
East Side of Interstate	4	
TOTAL	8	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

EARTHWORK SUMMARY - MID VALLEY											
DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5)	MASS ORDINATE +/- (6)	WASTE (7)	COMMENT
			CUT (2)	EBS EXCAVATION				FACTOR 1.00			
DIVISION 1											
SOUTHBRIDGE-EB	102+25.00/111+00.00	SOUTHBRIDGE RD - EB	12,574	0	0	12,574	537	537	12,037	12,037	
MIDVALLEY-S	612+00.00/613+50.00	MIDDDVALEY RD - S	421	0	0	421	191	191	230	230	
MIDVALLEY-N	616+00.00/617+50.00	MIDVALLEY RD - N	1,109	0	0	1,109	107	107	1,002	1,002	
UNDISTRIBUTED EBS	N/A	N/A	1,411								
DIVISION 1 SUBTOTAL			15,515	0	0	14,104	835	835	13,269	13,269	
GRAND TOTAL			15,515	0	0	14,104	835	835	13,269	13,269	
TOTAL COMMON EXC			15,515								

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.
(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(5) EXPANDED FILL FACTOR = 1.00
EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR
(6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

EARTHWORK SUMMARY - EARLY FILL

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	SPV.0035.02 DRAINAGE BLANKET	AVAILABLE MATERIAL (5)	208.1100 EXPANDED EBS BACKFILL (7)	UNEXPANDED FILL	EXPANDED FILL (8)	MASS ORDINATE +/- (9)	WASTE	SPV.0035.01 ROADWAY EMBANKMENT	COMMENT	
			CUT (2)	EBS EXCAVATION (3)				FACTOR 1.00		FACTOR 1.00					
DIVISION 1															
SOUTHBRIDGE-EB-W LEG	102+25.00 - 118+37.40	SOUTHBRIDGE RD - EB - W	3,557	0	351	25,093	3,206	0	148,821	148,821	-145,615	0	148,821	EXCESS TOPSOIL EBS	
SOUTHBRIDGE-EB-E LEG	119+30.37 - 137+26.62	SOUTHBRIDGE RD - EB - E	1,492	0	504	31,397	988	0	165,937	165,937	-164,949	0	165,937		
MIDVALLEY - N	616+00.00 - 641+48.27	MIDVALLEY RD - NORTH	35,968	0	765	1,966	35,203	0	12,349	12,349	22,884	22,884	12,349		
MIDVALLEY - S	595+62.97 - 613+50.00	MIDVALLEY RD - SOUTH	14,966	0	676	0	14,290	0	6,430	6,430	7,860	7,860	6,430		
RAMP C	601+76.85 - 609+00.00	41 SB ENTRANCE RAMP	5,626	0	0	9,245	5,626	0	63,593	63,593	-57,967	0	63,593		
RAMP D	609+50.00 - 615+50.00	41 SB EXIT RAMP	886	0	473	5,330	413	0	33,480	33,480	0	0	33,480		
RAMP B	602+00.00 - 609+00.00	41 NB EXIT RAMP	1,810	0	0	11,274	1,810	0	51,348	51,348	-49,538	0	51,348		
RAMP A	611+50.00 - 618+00.00	41 NB ENTRANCE RAMP	2,401	0	0	12,228	2,401	0	51,666	51,666	-49,265	0	51,666		
FRENCH - S	596+98.79 - 614+00.00	FRENCH RD - NORTH	40,391	0	283	1,845	40,108	0	11,056	11,056	29,052	29,052	11,056		
FRENCH - N	616+50.00 - 620+50.00	FRENCH RD - SOUTH	512	0	278	3,192	234	0	7,383	7,383	-7,149	0	7,383		
INNOVATION - TEMP	3+01.39 - 9+76.82	INNOVATION TEMP ROAD	1,803	0	0	0	1,803	0	1,243	1,243	560	560	1,243		
UNDISTRIBUTED EBS	N/A	N/A	0	8,070	0	0	0	7,270	0	0	-8,070	0	8,070		
DIVISION 1 SUBTOTAL			109,412	8,070	3,331	101,570	106,081	7,270	553,306	553,306	-422,198	60,355	561,376		
GRAND TOTAL			109,412	8,070	3,331	101,570	106,081	7,270	553,306	553,306	-422,198	60,355	561,376		
TOTAL COMMON EXC			117,482												

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.
- (3) EBS EXCAVATION TO BE BACKFILLED WITH WITH SELECT BORROW OR SELECT CRUSHED TO BE DETERMINED BY THE PROJECT ENGINEER
- (4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
- 5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
- (6) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = 1.00
- (7) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. EBS BACKFILL FACTOR = 1.00. ITEM NUMBER 208.1100
- (8) EXPANDED FILL FACTOR = 1.00
- EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
- (9) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

AGGREGATE ITEMS

				305.0110	305.0120	312.0110		
				BASE AGGREGATE DENSE 3/4- INCH	BASE AGGREGATE DENSE 1 1/4- INCH*	SELECT CRUSHED MATERIAL		
STATION	-	STATION	LOCATION	TON	TON	TON	REMARKS	
597+00	-	612+07	Mid valley Dr	420	2,710	6,120		
612+07	-	614+17	Mid valley Dr	40	510	1,070		
615+81	-	617+27	Mid valley Dr	--	420	840		
617+27	-	641+48	Mid valley Dr	280	4,200	8,870		
102+25	-	106+81	Southbridge West & East Leg	--	860	1,720	Mid valley RAB	
0+00	-	3+68	Mid valley Dr RAB	--	650	3,110		
0	-	8+04	Innovation Rd Temp	210	2,910	5,010		
596+98	-	612+64	French Rd	440	2,860	6,440		
			BIKE PATHS	--	240	--		
			DRIVEWAYS	--	600	--		
EBS				--	--	1,700		
UNDISTRIBUTED				70	760	1,660		
TOTAL				1,460	16,720	36,540		

ASPHALT PAVEMENT

				450.4000	455.0605	460.5224	465.0105	465.0120				
				AREA	LOWER LAYER DEPTH	UPPER LAYER DEPTH	HMA COLD WEATHER PAVING	TACK COAT	HMA PAVEMENT 4 LT 58-28 S	ASPHALTIC SURFACE	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	
STATION	TO	STATION	LOCATION	SY	IN	IN	TON	GAL	TON	TON	TON	REMARKS
595+75	-	597+00	Mid valley Dr	558	3	2		70	160	--	--	
597+00	-	612+07	Mid valley Dr	5789	3	2		690	1,630	--	64	
615+82	-	641+48	Mid valley Dr	9249	3	2		1,110	2,590	--	37	
612+07	-	615+82	Mid valley RAB	126	3	2		20	40	--	--	
0+00	-	8+04	Innovation Ct & Temp	3052	--	--	38	150	--	599	--	3.5" HMA Thickness
			Bike Path	283	--	--	3	10	--	56	--	3.5" HMA Thickness
596+98	-	612+64	French Rd	6215	3	2	188	750	1,750	--	140	
TOTALS							229	2,800	6,170	655	241	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

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3

CONCRETE PAVEMENT							
		415.0095	415.2010	405.0100	620.0300		
		CONCRETE PAVEMENT 9 1/2-INCH	CONCRETE TRUCK APRON 12-INCH	COLORING CONCRETE WISDOT RED*	CONCRETE MEDIAN SLOPED NOSE		
STATION	TO STATION	OFFSET	SY	SY	CY	SF	REMARKS
612+07	-	614+17	810	--	7	181	Mid Valley South Leg
615+82	-	617+27	830	--	13	184	Mid Valley North Leg
102+25	-	106+81	1,810	--	17	304	Southbridge East & West Leg (GVEB)
			1,200	416	139	--	Mid Valley RAB
	8+84	17' LT	--	--	--	40	Innovation Temp (GVFT)
Total			4,650	416	176	709	
* ADDITIONAL QUANTITIES LISTED ELSEWHERE							

SURFACE DRAINS					
		602.3010	606.0200	645.0120	
		CONCRETE SURFACE DRAINS	RIPRAP MEDIUM*	GEOTEXTILE TYPE HR*	
STATION	OFFSET	CY	CY	SY	REMARKS
613+04	RT	0.90	1.1	7.0	Mid valley Dr
613+40	RT	0.90	1.1	7.0	Mid valley DR (GVMS)
619+50	RT	1.10	23.8	87.0	Mid valley Dr
619+50	LT	1.10	1.1	7.0	Mid valley Dr
623+98	RT	1.10	1.1	7.0	Mid Valley Dr
TOTAL		5.1	28.2	115.0	
*ADDITIONAL QUANTITIES LISTED ELSEWHERE					

ASPHALTIC FLUMES			
		465.0315	
		ASPHALTIC FLUMES	
STATION	OFFSET	SY	REMARKS
2+81	LT	7	Innovation Temp
2+81	RT	12	Innovation Temp
8+50	LT	7	Innovation Temp
9+00	RT	12	Innovation Temp
TOTAL		38	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

DRIVEWAY AND CMCP CULVERTS

520.1021 520.1024 522.1036 520.3321 520.3324 522.0436 633.5200

						APRON ENDWALLS FOR CULVERT PIPE 21- INCH	APRON ENDWALLS FOR CULVERT PIPE 24- INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36- INCH*	CULVERT PIPE CLASS III-A 21- INCH	CULVERT PIPE CLASS III- A 24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH	MARKERS CULVERT END			STEEL THICKNESS (INCHES)
INLET	OUTLET					LOCATION	EACH	EACH	EACH	LF	LF	LF	EACH	REMARKS	
STATION	OFFSET	ELEVATION	STATION	OFFSET	ELEVATION										
611+98.23	65.6' RT	633.10	612+52.33	64.4' RT	634.02	LCL-FRENCH-GV-NB-BCO-68	--	2	--	--	64	--	2	20-A TO 20-B @ 1.43%	0.064
107+47.41	76.4' RT	641.70	107+92.87	101.01' LT	640.70	CTY-GV-EB-BCO-68	2	--	--	183	--	--	2	21-A TO 21-B @ 0.55%	0.064
601+25.24	29.9' LT	647.00	601+24.66	46.8' RT	646.50	LCL-MIDVALLEY-GV-NB-BCO-68	2	--	--	77	--	--	2	22-A TO 22-B @ 0.65%	0.064
637+58.13	48.3' LT	643.57	638+02.87	50.4' LT	643.13	LCL-MIDVALLEY-GV-NB-BCO-68	2	--	--	44	--	--	2	23-A TO 23-B @ 1.00%	0.064
635+28.79	45.8' LT	645.87	635+61.51	47.3' LT	645.54	LCL-MIDVALLEY-GV-NB-BCO-68	2	--	--	32	--	--	2	24-A TO 24-B @ 1.02%	0.064
605+38.51	43.6' RT	637.11	606+00.00	44.6' RT	635.80	LCL-FRENCH-GV-NB-BCO-68	--	2	--	--	58	--	2	25-A TO 25-B @ 2.25%	0.064
606+81.99	84.90' LT	639.32	606+61.49	117.80' RT	635.00	41NB-ExtRmp-GV-BCo-68	--	--	2	--	--	204	2	26-A TO 26-B @ 2.12%	
599+78.25	43.8' LT	647.49	600+44.24	43.7' LT	647.04	LCL-MIDVALLEY-GV-NB-BCO-68	2	--	--	61	--	--	2	27-A TO 27-B @ 0.73%	0.064
120+20.40	152.2' LT	642.61	119+46.42	115.3' RT	640.16	CTY-GV-EB-BCO-68	--	2	--	--	285	--	2	28-A TO 28-B @ 0.86%	0.064**
118+17.33	111.9' LT	646.19	117+42.31	153.2' RT	645.12	CTY-GV-EB-BCO-68	--	2	--	--	283	--	2	29-A TO 29-B @ 0.36%	0.064**
TOTAL							10	8	2	397	690	204	20		

**MUST BE CPCS OR RCP

CONCRETE COLLARS

520.8000

CONCRETE COLLARS
FOR PIPE

STATION	OFFSET	ALI	EACH	REMARKS
606+52	158' RT	GVC	1	CONNECTION TO EXISTING INLET
TOTAL			1	

3

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

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CONCRETE CURB AND GUTTER											
				601.0405	601.0407	601.0409	601.0411	601.0580	SPV.0090.04		
				CONCRETE CURB & GUTTER 18-INCH TYPE A	CONCRETE CURB & GUTTER 18-INCH TYPE D	CONCRETE CURB & GUTTER 30-INCH TYPE A	CONCRETE CURB & GUTTER 30-INCH TYPE D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CONCRETE CURB & GUTTER 36-INCH TYPE A SPECIAL 12-INCH CURB HEAD		
STATION	TO	STATION	OFFSET	LF	LF	LF	LF	LF	LF	REMARKS	
612+07	-	614+17	RT & LT	--	--	260	--	--	446	Mid valley Dr	
615+82	-	617+27	RT & LT	--	--	640	--	--	--	Mid valley Dr	
617+27	-	641+48	RT & LT	--	--	--	2790	--	--	Mid valley Dr	
0+00		3+68	RT & LT	268	--	--	--	356	--	Mid Valley RAB (GMVC)	
			LT	--	83	--	--	--	--	Mid Valley Driveways	
1+00	-	15+50	RT & LT	--	--	658	--	--	627	Southbridge East & West (GVEB)	
1+34	-	2+05	LT	--	1247	--	--	--	--	Innovation Temp	
				--	63	--	--	--	--	3 FAB Lot	
Total				268	1,393	1,558	2,790	356	1,073		

SIDEWALK												
				305.0120	601.0600	602.0405	602.0405	405.0100	602.0505			
				BASE AGGREGATE DENSE 1 1/4-INCH*	CONCRETE CURB PEDESTRIAN	CONCRETE SIDEWALK 4-INCH*	CONCRETE SIDEWALK 4-INCH* **	COLORING WISDOT RED*	CONCRETE RED*	CURB RAMP WARNING	DETECTABLE FIELD YELLOW	
STATION	TO	STATION	OFFSET	TON	LF	SF	SF		CY		SF	REMARKS
612+07	-	614+17	LT	74	67	200	3,580		45		24	South Mid valley Splitter
615+82	-	617+27	LT	12	13	60	540		7		40	North Mid valley Splitter
102+25	-	104+94	RT & LT	53	44	220	2,480		31		40	west Southbridge Splitter
			RT	35	--	1,760	--		--		32	Mid valley SW Quad
			RT	8	--	400	--		--		12	Mid valley SE Quad
			RT	25	--	1,280	--		--		40	Mid valley NW Quad
			RT	6	--	280	--		--		20	Mid valley NE Quad
0+00	-	3+68	LT	75	--	--	3,808		--		--	Mid valley RAB CIR (STAMPED)
				75	--	55	--		--		20	Innovation Path
Total				363	124	14,663			83		228	
* ADDITIONAL QUANTITIES LISTED ELSEWHERE												
**SPLITTER ISLAND QUANTITY												

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

RIPRAP						
606.0200 606.0300 645.0120						
RIPRAP RIPRAP GEOTEXTILE						
MEDIUM* HEAVY TYPE HR*						
STRUCTURE	LOCATION	OFFSET	CY	CY	SY	REMARKS
1-F	GVMN 646+50	72' RT	9.5	--	27.9	See Ramp D Pond Details
0-C	GVMS 612+26	2' RT	6.2	--	17.2	
	GVMN 601+25	46.8' RT	7.2	--	19.6	Mid valley Culvert Pipe
3-E	GVMN 613+98	55' RT	6.2	--	17.2	
2-F	GVMN 617+18	46' RT	14.1	--	41.4	See Ramp D Pond Details
5-D	GVMN 619+08	657' LT	10.3	--	26.8	
6-B	GVMN 630+30	28.5' RT	4.5	--	13.2	
7-B	GVMN 633+30	56.9' RT	5.3	--	15.1	
8-B	GVMN 636+30	41.5' RT	5.3	--	15.1	
9-B	GVMN 639+30	35.5' RT	5.3	--	15.1	
11-B	GVFN 610+45	62' RT	10.3	--	26.8	
12-B	GVFT 2+75	34' RT	5.3	--	15.1	
16	GVWB 107+85	110' LT	10.2	--	30.2	Pond D
26-B			16.9	--	46.0	Temp Pipe Ramp B
Pond B #1			35.0	--	88.9	37 x 17
Pond B #2			16.7	--	46.7	25 x 12
Creek outfall			--	14.3	28.7	
TOTAL			168.3	14.3	491.0	

RIPRAP AND GEOTEXTILE FABRIC ITEMS - PONDS				
606.0100 606.0200 645.0120 645.0130				
RIPRAP RIPRAP GEOTEXTILE GEOTEXTILE				
LIGHT MEDIUM* TYPE HR* TYPE R*				
LOCATION	CY	CY	SY	SY
POND 'B'				
WEST SWALE	--	33.0	83.0	0.0
NW CULVERT OUTFALL	--	36.0	80.0	0.0
NORTH SWALE	--	17.0	46.0	0.0
OUTLET STRUCTURE	6.0	0.0	0.0	23.0
UNDISTRIBUTED	1.0	19.0	52.0	5.0
POND 'B' SUBTOTALS	7.0	105.0	261.0	28.0
POND 'D'				
SOUTH CULVERT OUTFALL	--	6.0	20.0	0.0
WEST SS OUTFALL	--	5.0	17.0	0.0
NORTH SS OUTFALL	--	9.0	30.0	0.0
OUTLET STRUCTURE	6.0	0.0	0.0	23.0
UNDISTRIBUTED	1.0	5.0	17.0	5.0
POND 'D' SUBTOTALS	7.0	25.0	84.0	28.0
TOTALS	14.0	130.0	345.0	56.0
*ADDITIONAL QUANTITIES LISTED ELSEWHERE				

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

PIPE UNDERDRAINS									
						612.0106	310.0115	645.0111	
						PIPE UNDERDRAIN 6-INCH	BASE AGGREGATE OPEN- GRADED	GEOTEXTILE TYPE DF SCHEDULE A	
ALI	STATION		STATION	OFFSET	INLET STRUCTURE	LF	CY	SY	REMARKS
Cty-GV-EB-BCo-68	102+89	-	103+14	41.5 LT	1-BA	25	0.5	12	
	103+14	-	103+39	41.5 LT	1-BA	25	0.5	12	
	102+85	-	103+00	12.0 LT	1-A	15	0.3	7	
	102+85	-	103+00	2.0 LT	1-AA	15	0.3	7	
	103+04	-	103+14	12.0 LT	1-BB	10	0.2	5	
	103+14	-	103+39	12.0 LT	1-BB	25	0.5	12	
	103+06	-	103+21	1.5 LT	1-BC	15	0.3	7	
	103+21	-	103+46	1.5 LT	1-BC	25	0.5	12	
	102+97	-	103+22	27.5 RT	1-BD	25	0.5	12	
	103+22	-	103+47	27.5 RT	1-BD	25	0.5	12	
	104+83	-	105+08	31.5 RT	1-CA	25	0.5	12	
Rdbt-GV-MidValley-CIR-CG-BCo-68	0+82	-	0+92	22.0 RT	1-C	10	0.2	5	
	2+54	-	2+79	1.7 LT	4-BA	25	0.5	12	
	2+92	-	3+17	1.7 LT	4-BAA	25	0.5	12	
	2+69	-	2+79	22.0 RT	4-BB	10	0.2	5	
	2+87	-	2+97	22.0 RT	4-BBA	10	0.2	5	
	1+83	-	2+08	30.0 RT	3-C	25	0.5	12	
Lc1-MidValley-GV-NB-BCo-68	615+68	-	615+93	39.0 LT	1-D	25	0.5	12	
	615+65	-	615+90	29.5 RT	1-E	25	0.5	12	
	616+91	-	617+16	28.7 LT	2-B	25	0.5	12	
	617+16	-	617+41	28.7 LT	2-B	25	0.5	12	
	616+91	-	617+16	8.8 LT	2-C	25	0.5	12	
	616+91	-	617+16	1.5 LT	2-D	25	0.5	12	
	616+92	-	617+17	19.0 RT	2-E	25	0.5	12	
	617+17	-	617+42	19.0 RT	2-E	25	0.5	12	
	630+05	-	630+30	18.5 RT	6-A	25	0.5	12	
	633+05	-	633+30	18.5 RT	7-A	25	0.5	12	
	636+05	-	636+30	18.5 RT	8-A	25	0.5	12	
	639+05	-	639+30	18.5 RT	9-A	25	0.5	12	
	614+10	-	614+35	21.5 RT	3-D	25	0.5	12	
	612+23	-	612+48	2.6 LT	0-B	25	0.5	12	
Lc1-MidValley-GV-SB-BCo-68	614+28	-	614+53	20.3 RT	3-A	25	0.5	12	
	612+26	-	612+51	1.5 RT	0-A	25	0.5	12	
	TOTAL					735	14.7	353	

FENCE SAFETY			
616.0700.S			
FENCE SAFETY			
STATION TO STATION	LOCATION	LF	REMARKS
-	UNDISTRIBUTED	1,000	
TOTALS		1,000	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

STORM SEWER APRON ENDWALLS										
				522.1012	522.1015	522.1018	522.1024	522.1030	522.1036	
				APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH*	INVERT (3) ELEVATION
STRUCTURE	STATION	OFFSET (1)	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	
0-C	612+28.04	31.0' LT	LCL-MIDVALLEY-GV-SB-BCO-68	--	--	1	--	--	--	643.14
1-BE	103+30.19	50.3' RT	CTY-GV-EB-BCO-68	--	--	1	--	--	--	643.19
1-BF	103+07.08	44.4' LT	CTY-GV-WB-BCO-68	--	--	1	--	--	--	644.76
1-F	616+45.65	69.95' RT	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	1	--	--	640.21
2-A	617+55.32	48.7' LT	LCL-MIDVALLEY-GV-SB-BCO-68	--	--	1	--	--	--	641.65
2-F	617+18.11	44.47' RT	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	1	--	--	--	641.17
3-E	613+97.57	54.9' RT	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	1	--	--	--	643.48
5-D	619+07.99	656.8' LT	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	--	1	--	635.00
6-B	118+83.02	639.7' LT	CTY-GV-EB-BCO-68	1	--	--	--	--	--	653.93
7-B	120+24.22	881.8' LT	CTY-GV-EB-BCO-68	--	1	--	--	--	--	648.06
8-B	120+34.67	1166.2' LT	CTY-GV-EB-BCO-68	--	1	--	--	--	--	646.36
9-B	120+40.71	1458.6' LT	CTY-GV-EB-BCO-68	--	1	--	--	--	--	642.36
10-A	606+30.29	123.8' LT	41SB-ENTRMP-GV-BCO-68	--	--	--	--	--	1	643.84
11-AB	611+18.32	58.7' LT	LCL-FRENCH-GV-NB-BCO-68	1	--	--	--	--	--	635.00
11-B	610+45.20	61.6' RT	LCL-FRENCH-GV-NB-BCO-68	--	--	--	--	1	--	630.80
12-B	2+75.00	33.9' RT	SOUTHBRIDGE-FRENCH-TEMPROAD	--	1	--	--	--	--	624.30
TOTALS				2	4	6	1	2	1	

REMARKS:
(1) STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
(2) 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
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

STORM SEWER STRUCTURES
611.0530 611.0600 611.0612 611.0624 611.0642 611.0652 611.2004 611.2005 611.3004 611.3230 611.3901 611.3902

STRUCTURE	STATION	OFFSET (1)	LOCATION	MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE A EACH	INLET COVERS TYPE C EACH	INLET COVERS TYPE H EACH	INLET COVERS TYPE MS EACH	INLET COVERS TYPE T EACH	MANHOLES 4-FT DIAMETER EACH	MANHOLES 5-FT DIAMETER EACH	INLETS 4- FT DIAMETER EACH	INLETS 2X3-FT EACH	INLETS MEDIAN 1 GRATE EACH	INLETS MEDIAN 2 GRATE EACH	RIM (2) ELEVATION	INVERT (3) ELEVATION	DEPTH (4) FT
0-A	612+25.58	2.0' RT	LCL-MIDVALLEY-GV-SB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.34	642.54	3.72
0-B	612+22.56	3.1' LT	LCL-MIDVALLEY-GV-NB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.53	643.12	3.32
1-A	102+50.00	2.0' RT	CTY-GV-WB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.39	644.25	3.22
1-AA	102+50.00	4.2' LT	CTY-GV-EB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.52	644.43	3.01
1-B	103+24.35	7.0' LT	CTY-GV-EB-BCO-68	--	--	1	--	--	--	1	--	--	--	--	--	649.03	642.66	5.34
1-BA	103+21.62	27.5' LT	CTY-GV-WB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.73	642.99	3.86
1-BB	103+23.92	2.0' RT	CTY-GV-WB-BCO-68	--	--	--	1	--	--	--	--	1	--	--	--	648.23	642.85	4.59
1-BC	103+24.77	2.0' LT	CTY-GV-EB-BCO-68	--	--	--	1	--	--	--	--	1	--	--	--	648.18	642.67	4.72
1-BD	103+27.09	27.5' RT	CTY-GV-EB-BCO-68	--	--	--	1	--	--	--	--	1	--	--	--	647.68	642.8	4.08
1-C	0+81.99	22.0' RT	RDBT-GV-MIDVALLEY-CIR-CG-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	649.64	641.78	6.98
1-CA	104+83.47	31.5' RT	CTY-GV-EB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.88	644.17	3.84
1-D	616+14.46	18.6' LT	LCL-MIDVALLEY-GV-SB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.86	641.35	6.64
1-E	615+90.33	29.5' RT	LCL-MIDVALLEY-GV-NB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.31	640.53	6.95
2-B	617+54.96	18.5' LT	LCL-MIDVALLEY-GV-SB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.64	641.21	5.35
2-C	617+55.64	2.0' RT	LCL-MIDVALLEY-GV-SB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.96	641.4	5.68
2-D	617+16.45	2.0' LT	LCL-MIDVALLEY-GV-NB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.85	641.36	5.62
2-E	617+17.19	19.0' RT	LCL-MIDVALLEY-GV-NB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	647.48	641.26	5.35
3-A	614+28.47	20.3' LT	LCL-MIDVALLEY-GV-SB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.72	644.08	3.76
3-B	614+27.34	2.0' RT	LCL-MIDVALLEY-GV-SB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.86	643.97	4.01
3-C	2+08.00	30.0' RT	RDBT-GV-MIDVALLEY-CIR-CG-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.8	643.78	4.15
3-D	614+09.97	21.5' RT	LCL-MIDVALLEY-GV-NB-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.31	643.64	3.79
4-BA	2+79.41	2.0' LT	RDBT-GV-MIDVALLEY-CIR-CG-BCO-68	--	--	--	--	--	1	--	--	1	--	--	--	648.53	643.95	3.5
4-BAA	2+92.00	2.0' LT	RDBT-GV-MIDVALLEY-CIR-CG-BCO-68	--	--	--	--	--	1	--	--	1	--	--	--	648.54	644.01	3.45
4-BB	2+79.41	22.0' RT	RDBT-GV-MIDVALLEY-CIR-CG-BCO-68	--	1	--	---	--	--	--	--	1	--	--	--	648.59	644.13	3.59
4-BBA	2+87.00	22.0' RT	RDBT-GV-MIDVALLEY-CIR-CG-BCO-68	--	1	--	--	--	--	--	--	1	--	--	--	648.59	644.09	3.63
5-A	620+09.00	75.7' LT	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	--	2	--	--	--	--	--	--	1	642.69	638.98	4
5-B	620+19.16	178.4' LT	LCL-MIDVALLEY-GV-NB-BCO-68	1	--	--	--	--	--	--	1	--	--	--	--	642.32	638.57	2.81
5-C	619+23.76	527.9' LT	LCL-MIDVALLEY-GV-NB-BCO-68	1	--	--	--	--	--	--	1	--	--	--	--	648.88	633.69	13.95
6-A	118+74.64	645.2' LT	CTY-GV-EB-BCO-68	--	--	--	1	--	--	--	--	--	1	--	--	656.36	653.96	1.56
7-A	120+20.46	900.2' LT	CTY-GV-EB-BCO-68	--	--	--	1	--	--	--	--	--	1	--	--	651.48	648.14	2.53
8-A	120+32.78	1173.8' LT	CTY-GV-EB-BCO-68	--	--	--	1	--	--	--	--	--	1	--	--	649.89	646.56	2.51
9-A	120+39.53	1462.4' LT	CTY-GV-EB-BCO-68	--	--	--	1	--	--	--	--	--	1	--	--	646.71	642.44	3.46
10-B	606+34.84	95.0' RT	41SB-ENTRMP-GV-BCO-68	1	--	--	--	--	--	--	1	--	--	--	--	648.15	641.01	6.23
11-A	610+26.10	34.4' LT	LCL-FRENCH-GV-NB-BCO-68	1	--	--	--	--	--	--	1	--	--	--	--	638.59	631.8	5.84
12-A	2+75	21.25' LT	SOUTHBRIDGE-FRENCH-TEMPROAD	--	--	--	--	1	--	--	--	--	--	1	--	628.54	624.51	4.21
TOTALS				4	19	1	7	3	2	1	4	24	4	1	1			

REMARKS:
(1) STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
(2) RIM ELEV IS AT THE INLET COVER FLANGE LOCATION
(3) 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
(4) DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

STORM SEWER PIPE SUMMARY														
			608.0312	608.0315	608.0318	608.0324	608.0330	608.0430	608.0436	608.3015				
			STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 36-INCH	STORM SEWER PIPE CLASS III-A 15-INCH	INLET** ELEVATION	OUTLET** ELEVATION	SLOPE FT/FT	
STRUCTURE	-	STRUCTURE	LOCATION	LF	LF	LF	LF	LF	LF	LF				
0-A	-	0-C	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	33	--	--	--	--	643.32	643.14	0.0055	
0-B	-	0-A	LCL-MIDVALLEY-GV-NB-BCO-68	8	--	--	--	--	--	--	643.86	643.82	0.0056	
1-A	-	1-BB	CTY-GV-EB-BCO-68	14	--	--	--	--	--	--	644.25	643.88	0.0050	
1-AA	-	1-A	CTY-GV-EB-BCO-68	10	--	--	--	--	--	--	644.81	644.75	0.0067	
1-B	-	1-C	CTY-GV-EB-BCO-68	--	--	176	--	--	--	--	642.66	641.78	0.0050	
1-BA	-	1-BB	CTY-GV-EB-BCO-68	--	--	30	--	--	--	--	642.99	642.85	0.0049	
1-BB	-	1-B	CTY-GV-EB-BCO-68	--	--	10	--	--	--	--	642.86	642.83	0.0059	
1-BC	-	1-B	CTY-GV-EB-BCO-68	--	--	6	--	--	--	--	642.68	642.66	0.0035	
1-BD	-	1-BC	CTY-GV-EB-BCO-68	--	--	30	--	--	--	--	642.81	642.67	0.0050	
1-BE	-	1-BD	CTY-GV-EB-BCO-68	--	--	24	--	--	--	--	643.19	642.80	0.0166	
1-BF	-	1-BA	CTY-GV-EB-BCO-68	--	--	18	--	--	--	--	644.76	644.31	0.0200	
1-C	-	1-D	CTY-GV-EB-BCO-68	--	--	87	--	--	--	--	641.78	641.35	0.0050	
1-CA	-	1-C	CTY-GV-EB-BCO-68	--	--	61	--	--	--	--	644.17	643.86	0.0050	
1-D	-	1-E	CTY-GV-EB-BCO-68	--	--	69	--	--	--	--	641.37	641.03	0.0050	
1-E	-	1-F	CTY-GV-EB-BCO-68	--	--	--	61	--	--	--	640.53	640.21	0.0051	
2-A	-	2-B	CTY-GV-EB-BCO-68	--	--	30	--	--	--	--	641.65	641.50	0.0050	
2-B	-	2-C	CTY-GV-EB-BCO-68	--	--	20	--	--	--	--	641.50	641.40	0.0049	
2-C	-	2-D	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	6	--	--	--	--	641.40	641.36	0.0058	
2-D	-	2-E	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	21	--	--	--	--	641.36	641.26	0.0049	
2-E	-	2-F	CTY-GV-EB-BCO-68	--	--	25	--	--	--	--	641.26	640.50	0.0050	
3-A	-	3-B	CTY-GV-EB-BCO-68	--	--	22	--	--	--	--	644.08	643.97	0.0049	
3-B	-	3-C	CTY-GV-EB-BCO-68	--	--	39	--	--	--	--	643.98	643.78	0.0051	
3-C	-	3-D	CTY-GV-EB-BCO-68	--	--	30	--	--	--	--	643.79	643.64	0.0050	
3-D	-	3-E	CTY-GV-EB-BCO-68	--	--	34	--	--	--	--	643.65	643.48	0.0050	
4-BA	-	4-BB	CTY-GV-EB-BCO-68	--	--	24	--	--	--	--	644.25	644.13	0.0051	
4-BAA	-	4-BA	CTY-GV-EB-BCO-68	--	--	12	--	--	--	--	644.30	644.24	0.0050	
4-BB	-	4-BBA	CTY-GV-EB-BCO-68	--	--	11	--	--	--	--	644.13	644.09	0.0034	
4-BBA	-	1-E	CTY-GV-EB-BCO-68	--	--	98	--	--	--	--	644.09	641.03	0.0313	
5-A	-	5-B	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	--	104	--	--	638.98	638.57	0.0039	
5-B	-	5-C	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	--	--	400	--	638.57	636.57	0.0050	
5-C	-	5-D	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	--	--	137	--	635.69	635.00	0.0050	
6-A	-	6-B	CTY-GV-EB-BCO-68	10	--	--	--	--	--	--	653.96	653.93	0.0030	
7-A	-	7-B	CTY-GV-EB-BCO-68	--	38	--	--	--	--	--	648.14	648.06	0.0020	
8-A	-	8-B	CTY-GV-EB-BCO-68	--	23	--	--	--	--	--	646.56	646.36	0.0087	
9-A	-	9-B	CTY-GV-EB-BCO-68	--	17	--	--	--	--	--	642.44	642.36	0.0050	
10-A	-	10-B	41SB-ENTRMP-GV-BCO-68	--	--	--	--	--	--	219	643.84	641.01	0.0130	
10-B	-			--	--	--	66	--	--	--	641.01	640.01	0.0151	
11-A	-	11-B	CTY-GV-EB-BCO-68	--	--	--	--	98	--	--	631.80	630.80	0.0102	
11-AB	-	11-A	CTY-GV-EB-BCO-68	87	--	--	--	--	--	--	635.00	634.10	0.0103	
12-A	-	12-B	SOUTHBRIDGE-FRENCH-TEMPROAD	--	--	--	--	--	--	55	624.51	624.30	0.0038	
POND B OUTLET	-	11-A	CTY-GV-EB-BCO-68	--	--	--	204	--	--	--	633.80	631.80	0.0098	
POND D OUTLET	-	5-A	LCL-MIDVALLEY-GV-NB-BCO-68	--	--	--	--	150	--	--	638.98	638.57	0.0039	
TOTALS				129	78	916	331	352	537	219	55			

*NON-BID ITEM: FOR INFORMATION ONLY
**PIPE INVERT AT END OF PIPE FOR INFORMATION ONLY. FIELD VERIFY

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

WATER SUMMARY		
	624.0100	
	WATER	
LOCATION	MGAL	REMARKS
UNDISTRIBUTED	273	
TOTAL	273	

SALVAGED TOPSOIL		
	625.0500	
	SALVAGED TOPSOIL	
LOCATION	SY	REMARKS
Project (Early Fill Limits)	88,400	
Mid Valley	42,200	
French	31,200	
Innovation	8,000	
TOTAL	169,800	

TRACKING PAD		
	628.7560	
	TRACKING PADS	
LOCATION	EACH	REMARKS
UNDISTRIBUTED	8	
TOTAL	8	

STREET SWEEPING		
	SPV.0075.01	
	STREET SWEEPING	
LOCATION	HRS	REMARKS
UNDISTRIBUTED	122	
TOTAL	122	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

PERMANENT SIGNS												

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

3

3

REMOVING SIGNS

638.2602

638.3000

REMOVING
SIGNS TYPE II

REMOVING
SMALL SIGN
SUPPORTS

SHEET NO.	SIGN NO.	CODE	LOCATION	OFFSET	SIGN WORDING & PICTORIALS	EACH	EACH	REMARKS
PS-06	R-06-01	R2-1	Mid Valley	LT	SPEED LIMIT 45	1	1	
PS-10	R-10-01	R1-1	Orange Ln	RT	STOP	1	1	
PS-10	R-10-02	R2-1	Orange Ln	RT	SPEED LIMIT 55	1	1	APROX 135'SOUTH OF STOP SIGN
PS-07	R-07-01		French Rd	RT	NO ENGINE BREAKING	1	1	
PS-07	R-07-02		French Rd	RT	WITHIN CITY LIMITS	1	1	
PS-07	R-07-03	W1-2L	French Rd	LT	LEFT CURVE	1	1	
PS-07	R-07-04	W1-2R	French Rd	LT	RIGHT CURVE	1	1	
PS-08	R-04-02	R14-1	Southbridge Rd	RT	TRUCK ROUTE	1	1	WEST OF INNOVATION CT
PS-08	R-04-01	R2-1	Southbridge Rd	LT	SPEED LIMIT 45	1	1	WEST OF INNOVATION CT
PS-08	R-04-04	R14-1	Southbridge Rd	LT	TRUCK ROUTE	1	1	EAST OF INNOVATION CT
PS-08	R-04-03	R2-1	Southbridge Rd	RT	SPEED LIMIT 45	1	1	EAST OF INNOVATION CT
PS-09	R-09-01	W1-2L	Southbridge Rd	RT	LEFT CURVE	1	1	
Total						12	12	

PAVEMENT MARKING ITEMS

646.2020

646.6320

646.5020

646.7120

646.8120

646.8220

STATION TO STATION		LOCATION	MARKING LINE EPOXY		MARKING DOTTED	MARKING	MARKING	MARKING	MARKING	REMARKS
			6-INCH		EXTENSION EPOXY	ARROW	DIAGONAL EPOXY	CURB	ISLAND	
			WHITE	YELLOW	18-INCH	EPOXY	12-INCH	EPOXY	NOSE EPOXY	
			LF	LF	LF	EACH	LF	LF	EACH	
595+75	- 614+00	Mid Valley Dr	3,512	3,319	--	--	59	10	--	
616+00	- 641+00	Mid Valley Dr	4,831	4,710	--	--	48	10	--	
		Mid Valley RAB	311	--	39	2	--		2	Type 3 Arrows
0+00	- 8+04	Innovation Ct	2,001	2,028	--	--	--	--	--	
596+98	- 612+64	French Rd	3,124	3,133	--	--	--	--	--	
TOTAL			26,969		39	2	107	20	2	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

3

SAWING PAVEMENT ITEMS						
				690.0150	690.0250	
				SAWING ASPHALT	SAWING CONCRETE	
STATION	TO	STATION	LOCATION	LF	LF	REMARKS
BEGIN PROJECT LIMIT						
595+00	-	610+00	Mid valley Rd	141	--	
620+00	-	641+00	Mid valley Rd	58	--	
			Mid valley Temp	0	--	
619+80	-	620+64	GVFN Innovation Ct	34	125	
			3 FAB Lot	63		
597+00		614+00	French Rd	93	--	
TOTAL				389	125	

3

CONSTRUCTION STAKING					
		SPV.0060.09			
		CONSTRUCTION STAKING		SURVEY PROJECT 1130-68-81	
STATION	TO	STATION	LOCATION	EACH	REMARKS
	-		Project (Undistributed)	1	
TOTAL				1	

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

TRAFFIC CONTROL																																											
643.0420				SPV.0060.12		SPV.0060.13		SPV.0060.16		643.0300		643.0705		643.0900		643.0800		643.0920		643.1050																							
TRAFFIC CONTROL BARRICADES TYPE III				TRAFFIC CONTROL BARRICADES TYPE III LEFT-IN-PLACE		TRAFFIC CONTROL SIGNS LEFT-IN-PLACE		TRAFFIC CONTROL WARNING LIGHTS TYPE A LEFT IN PLACE		TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL ARROW BOARDS		CONTROL COVERING SIGNS TYPE II*		TRAFFIC CONTROL SIGNS PCMS																							
APPROXIMATE SERVICE DAYS		NO. IN SERVICE		DAY		EACH		EACH		EACH		NO. IN SERVICE		DAY		NO. IN SERVICE		DAY		NO. IN SERVICE		DAY																					
PRE-WARNING																																											
STAGE 1		7		--		--		--		--		--		--		--		--		6		42																					
STAGE 2		7		--		--		--		--		--		--		--		--		6		42																					
PRE-WARNING SUBTOTAL																	12		84																								
EARLY FILL																																											
INTERSTATE		380		4		1520		--		--		--		40		15,200		24		9,120		2		760																			
EARLY FILL SUBTOTAL				1,520								15,200				9120				760																							
STAGE 1																																											
MID VALLEY		200		0		0		--		--		--		34		6,800		0		0		9		1800		--		--		1		--		--									
FRENCH RD		85		12		1020		--		--		--		--		--		24		2040		8		680		--		--		--		--		--									
INNOVATION CT		85		1		85		--		2		--		35		2,975		2		170		10		850		--		--															
STAGE 1 SUBTOTAL				1105				0				2				9775				2210				3330				0				1				0							
STAGE 2																																											
MID VALLEY		14		12		168		12		4		24		--		--		24		336		8		112		--		--		1		--		--									
FRENCH RD		14		2		28		6		2		12		--		--		4		56		9		126		--		--		--		--		--									
INNOVATION CT		14		5		70		17		3		34		15		210		10		140		5		70		--		--		--		--		--									
UNDISTRIBUTED																	6		84																								
STAGE 2 SUBTOTAL				266				35				9				70				210				532				308				0				1				84			
TOTAL				2,891				35				11				70				25,185				2,742				12,758				760				2				168			
* ADDITIONAL QUANTITIES LISTED ELSEWHERE / 1 CYCLE EACH STAGE																																											

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

TEMPORARY BARRIER WALL					
	603.8000	603.8125	SPV.0090.01	603.8500	
	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	CONCRETE BARRIER TEMPORARY PRECAST LEFT IN PLACE	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	
LOCATION	LF	LF	LF	LF	REMARKS
IH 41 NB	1,038	1,038	1,038	400	
IH 41 SB	1,025	1,025	1,025	325	
TOTAL	2,063	2,063	2,063	725	

TEMPORARY CRASH CUSHIONS									
		614.0905	SPV.0060.04						
		CRASH CUSHIONS TEMPORARY	CRASH CUSHIONS TEMPORARY LEFT IN PLACE	BACK WIDTH	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRA SH CUSHION SHIELDS
LOCATION	REMARKS	EACH	EACH	FT					
IH 41 NB	600+41 33.5' RT	1	1	2	OM-3R	TL-3	Unidirectional	R	Concrete barrier precast in ramp gore
IH 41 SB	618+28 31.7' LT	1	1	2	OM-3R	TL-3	Unidirectional	R	Concrete barrier precast in ramp gore
TOTAL		2	2						

3

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

EROSION CONTROL ITEMS

				628.1504	628.1520	628.1905	628.1910	627.0200	628.2002	628.7005	628.7010	628.7015	628.7504	628.7515.S	645.0130	628.7555	REMARKS
				SILT FENCE		MOBILIZATIONS	MOBILIZATIONS	EROSION MAT		INLET	INLET	INLET	TEMPORARY	STONE	DITCH	GEOTEXTILE	CULVERT
STATION	TO	STATION	LOCATION	LF	LF	EROSION	EROSION	MULCHING	CLASS I	PROTECTION	PROTECTION	PROTECTION	DITCH	CHECKS	CY	TYPE R*	PIPE
						CONTROL	CONTROL	SY	TYPE A	TYPE A	TYPE B	TYPE C	CHECKS			SY	CHECKS
						EACH	EACH		SY	EACH	EACH	EACH	LF				EACH
Stage 1 East																	
597+00	-	622+00	French Rd	645	645	--	--	12,039	2,843	--	2	--	60	7.8	42.3	4	
0+00	-	9+92	Innovation	2,353	2,353	--	--	4,268	572	1	--	--	20	15.6	84.6	--	
	-		Early Fill	2,560	2,560	--	--	0	0	--	--	--	0	--	--	4	
Stage 1 West																	
595+75	-	641+48	Mid valley	1,900	1,900	--	--	26,093	5,617	--	--	--	110	7.8	42.3	8	
597+00	-	622+00	Early Fill	--	--	--	--	0	0	--	--	--	0	--	--	--	
Stage 2 East																	
597+00	-	622+00	French Rd	--	--	--	--	0	0	--	--	--	0	--	--	--	
0+00	-	9+92	Innovation	--	--	--	--	0	0	1	--	--	0	--	--	--	
	-		Early Fill	872	872	--	--	86,005	11,369	--	--	--	60	15.6	84.6	8	
Stage 2 West																	
595+75	-	641+48	Mid valley	859	859	--	--	0	0	2	3	20	50	--	--	24	
597+00	-	622+00	Early Fill	1,416	1,416	--	--	72,029	6,845	--	--	--	0	7.8	42.3	8	
			Undistributed	2,652	2,652	11	6	50,109	6,812	--	--	--	75	5.5	29.6	14	
TOTAL				13,257	13,257	11	6	250,543	34,058	4	5	20	375	60.1	325.7	70	
*Additional Quantities Elsewhere																	

3

RESTORATION ITEMS - PONDS

LOCATION	625.0100	628.2004	628.2008	630.0130	630.0500
	TOPSOIL	EROSION MAT	EROSION MAT	SEED	SEED
	SY	CLASS I TYPE B SY	URBAN CLASS I TYPE B SY	MIX NO. 30 LB	WATER* MGAL
POND 'B'					
POND BORDER TO 2' ABOVE NORMAL WATER	4,868	4,868	0	219	109
2' ABOVE NORMAL WATER TO NORMAL WATER	925	0	925	42	21
NORMAL WATER TO 1' BELOW NORMAL WATER	773	0	0	35	17
UNDISTRIBUTED	1,641	1,218	231	72	37
POND 'B' SUBTOTALS	8,207	6,086	1,156	368	184
POND 'D'					
POND BORDER TO 2' ABOVE NORMAL WATER	2,531	2,531	0	114	57
2' ABOVE NORMAL WATER TO NORMAL WATER	636	0	636	29	14
NORMAL WATER TO 1' BELOW NORMAL WATER	516	0	0	23	12
UNDISTRIBUTED	920	633	158	41	21
POND 'D' SUBTOTALS	4,603	3,164	794	207	104
TOTALS	12,810	9,250	1,950	575	288
* ADDITIONAL QUANTITIES LISTED ELSEWHERE					

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

				FINISHING ITEMS				
				628.6505	629.0210	630.0120	630.0200	630.0500
				SOIL		SEEDING		
				STABILIZER	FERTILIZER	MIXTURE	SEEDING	SEED
				TYPE A	TYPE B	NO. 20	TEMPORARY	WATER*
STATION	TO	STATION	LOCATION	ACRE	CWT	LB	LB	MGAL
Stage 1 East								
597+00	-	622+00	French Rd	--	9.4	670	0	335
0+00	-	9+92	Innovation	--	3.1	218	0	109
	-		Early Fill	18.0	0.0	0	2356	1960
Stage 1 West				--			0	0
595+75	-	641+48	Mid Valley	4.5	20.0	1427	585	1199
597+00	-	622+00	Early Fill	12.6	0.0	0	1646	1370
Stage 2 East				--			0	0
597+00	-	622+00	French Rd	--	0.0	0	0	0
0+00	-	9+92	Innovation	--	0.0	0	0	0
	-		Early Fill	7.5	61.4	4382	983	3005
Stage 2 West				--			0	0
595+75	-	641+48	Mid Valley	--	0.0	0	0	0
597+00	-	622+00	Early Fill	6.1	49.7	3550	798	2436
			undistributed	--	35.9	2562	0	1279
TOTAL				48.7	179.5	12,809	6,368	11,693

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

					DRAINS	
					SPV.0090.02	SPV.0090.03
					PREFABRICATED	PREBORED
					VERTICAL	PREFABRICATED
					DRAINS	VERTICAL
					DRAINS	DRAINS
STATION	TO	STATION	LF	LF	REMARKS	
104GVWB+83	-	107GVWB+00	34,950	0	Area A Assumed 15' depth of PVC	
111GVWB+00	-	117GVWB+98	432,854	373,150	Area C assumed 25' prebore and 29' PVC depth	
119GVWB+62	-	124GVWB+05	486,968	335,840	Area D assumed 20' prebore and 29' PVC depth	
119GVWB+62	-	124GVWB+05	181,744	98,240	Area E assumed 20' prebore and 37' PVC depth	
			1,136,516	807,230		

PLANTING ITEMS							
	SPV.0180.01	632.0101.01	632.0201.01	632.0201.02	632.9101		
	DOUBLE SHREDDED HARDWOOD MULCH	TREES (COLE'S SELECT SERVICEBERRY, B&B, 5-FT)	SHRUBS (HYDRANGAEA LIMELIGHT, CONT, 3-FT)	SHRUBS (BARBERRY ROSE GLOW, CONT, 1-FT)	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES		REMARKS
LOCATION	CAT	SY	EACH	EACH	EACH	EACH	
Mid valley Dr RAB	1000	185.0	3	9	21	24	
TOTAL		185.0	3	9	21	24	

PLANTING ITEMS - CONCRETE				
	405.1000			
	STAMPING COLORED CONCRETE			REMARKS
LOCATION	CAT	CY		
Mid valley Dr RAB	1600	36.0		Stamped Concrete (Tan)
TOTAL		36.0		

LIGHTING CONDUIT AND WIRE							
		652.0225*	652.0235	652.0335	655.0615		
		CONDUIT	CONDUIT	CONDUIT	ELECTRICAL WIRE		
		RIGID NONMETALLIC	RIGID NONMETALLIC	RIGID NONMETALLIC	LIGHTING		
		SCHEDULE 40	SCHEDULE 40	SCHEDULE 80	10 AWG		
		2-INCH	3-INCH	3-INCH			
CATEGORY	FROM	TO	LF	LF	LF	LF	REMARKS
1100	CB200	LPB200	--	40	--	313	--
	CB200	LPB200	--	40	--	--	PULL WIRE ONLY
	LPB200	SL200	8	--	--	205	--
	LPB200	LPB201	--	--	109	620	--
	LPB201	SL201	227	--	--	719	--
	LPB201	SL202	38	--	--	758	--
	LPB201	LPB202	144	--	--	795	--
	LPB202	SL203	13	--	--	255	--
	SL203	SL204	195	--	--	615	--
	LPB202	LPB203	--	--	64	395	--
	LPB203	SL205	30	--	--	425	--
	LPB203	LPB204	--	--	61	380	--
	LPB204	SL206	7	--	--	195	--
	LPB204	LPB205	101	--	--	580	--
	LPB205	SL207	8	--	--	205	--
	SL207	SL208	194	--	--	612	--
	LPB205	LPB206	--	--	73	440	--
	LPB206	SL209	32	--	--	668	--
	LPB206	LPB207	62	--	--	1013	INCLUDES 243 FEET OF CABLE COILED IN LPB207 FOR SL210
	LPB207	LPB208	--	--	140	775	--
	LPB208	SL211	20	--	--	163	--
	LPB208	CB200	--	30	--	--	PULL WIRE ONLY
	LPB208	CB200	--	30	--	--	PULL WIRE ONLY
PROJECT TOTAL			1079	140	447	10131	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVALS

204.0195
REMOVING
CONCRETE
BASES

653.0905
REMOVING
PULL BOXES

SPV.0060.01
REMOVE
AND
SALVAGE
METER BREAKER
PEDESTAL

SPV.0060.02
REMOVING
MUNICIPAL
LIGHTING
UNITS

CATEGORY	FROM	TO	EACH	EACH	EACH	EACH
1100	MBP	-	1	-	1	-
	LPB1	-	-	1	-	-
	LPB2	-	-	1	-	-
	F6-74G2JF	-	1	-	-	1
	F6-8EC3FJ	-	1	-	-	1
	F6-9D54DV	-	1	-	-	1
	F6-AIH5BV	-	1	-	-	1
PROJECT TOTAL			5	2	1	4

674.0300
REMOVE
CABLE
LF

CATEGORY	FROM	TO	LF
1100	MBP	LPB1	123
	LPB1	LPB2	216
	LPB1	F6-8EC3FJ	537
	LPB2	F6-74G2JF	114
	LPB2	F6-9D54DV	1110
	F6-8EC3FJ	F6-AIH5BV	1170
	F6-9D54DV	F6-ALO6TW	1116
	F6-AIH5BV	F6-BJ1727	1137
PROJECT TOTAL			5523

LIGHTING PULLBOXES

653.0164*
PULL BOXES
NON-CONDUCTIVE
24X42-INCH

CATEGORY	PULLBOX NUMBER	STATION	OFFSET	R/L	EACH
1100	LPB200	STA 613+70 'SB'	68.3'	RT	1
	LPB201	STA 614+01 'SB'	36.4'	LT	1
	LPB202	STA 104+45 'GVEB'	49.7'	RT	1
	LPB203	STA 104+51 'GVEB'	14.5'	LT	1
	LPB204	STA 104+53 'GVEB'	75.2'	LT	1
	LPB205	STA 105+33 'GVEB'	134.3'	LT	1
	LPB206	STA 106+06 'GVEB'	139.6'	LT	1
	LPB207	STA 107+21 'GVEB'	86.0'	LT	1
	LPB208	STA 106+75 'GVEB'	46.5'	RT	1

PROJECT TOTAL 9

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

STREET LIGHTS

654.0105
CONCRETE
BASES
TYPE 5

657.0255
TRANSFORMER BASES
BREAKAWAY 11 1/2-INCH
BOLT CIRCLE

657.0322
POLES
TYPE 5
ALUMINUM

657.0710
LUMINAIRE ARMS TRUSS
TYPE 4 1/2-INCH CLAMP
12-FT

659.1120
LUMINAIRES
UTILITY
LED B

655.0610
ELECTRICAL
WIRE LIGHTING
12 AWG

CATEGORY	LIGHT NUMBER	CATEGORY	STATION	OFFSET	R/L	EACH	EACH	EACH	EACH	EACH	LF
1100	SL200	1100	STA 613+61 'SB'	65.0'	RT	1	1	1	1	1	150
	SL201	1100	STA 611+89 'SB'	25.0'	LT	1	1	1	1	1	150
	SL202	1100	STA 614+34 'SB'	40.4'	LT	1	1	1	1	1	150
	SL203	1100	STA 104+21 'GVEB'	48.0'	RT	1	1	1	1	1	150
	SL204	1100	STA 102+24 'GVEB'	37.9'	RT	1	1	1	1	1	150
	SL205	1100	STA 104+78 'GVEB'	15.0'	LT	1	1	1	1	1	150
	SL206	1100	STA 104+57 'GVEB'	77.5'	LT	1	1	1	1	1	150
	SL207	1100	STA 105+33 'GVEB'	143.8'	LT	1	1	1	1	1	150
	SL208	1100	STA 617+98 'NB'	35.0'	LT	1	1	1	1	1	150
	SL209	1100	STA 107+04 'GVEB'	112.5'	LT	1	1	1	1	1	150
	SL211	1100	STA 106+55 'GVEB'	46.5'	RT	1	1	1	1	1	150
SUBTOTAL						11	11	11	11	11	1650

LIGHTING CONTROL

654.0230
CONCRETE CONTROL
CABINET BASES
TYPE L30

656.0201.01
ELECTRICAL SERVICE
METER BREAKER
PEDESTAL (CB200)

659.2130
LIGHTING CONTROL
CABINETS 120/240
30-INCH

CABINET NUMBER	CATEGORY	STATION	OFFSET	R/L	EACH	EACH	EACH
CB200	1100	STA 613+96 'SB'	102.9'	RT	1	1	1
PROJECT TOTALS					1	1	1

TEMPORARY

LIGHTING PULLBOXES

						653.0164
						PULL BOXES
						NON-CONDUCTIVE
						24x42-INCH
CATEGORY	PULLBOX NUMBER	STATION	OFFSET	R/L	EACH	
1100	TPB1	STA 623+00 'NB'	25.3'	RT	1	
	TPB2	STA 623+00 'NB'	25.1'	LT	1	
SUBTOTAL						2

LIGHTING CONDUIT AND WIRE

			652.0225*	652.0615	655.0625
			CONDUIT		
			RIGID NONMETALLIC	CONDUIT	ELECTRICAL WIRE
			SCHEDULE 40	SPECIAL	LIGHTING
			2-INCH	3-INCH	6 AWG
CATEGORY	FROM	TO	LF	LF	LF
1100	TMBP400	TPB1	67	---	540
	TPB1	EXT1	11	---	57
	EXT1	F6-BJY7Z7	---	---	606
	TPB1	TPB2	---	48	192
	TPB2	EXT2	11	---	57
	EXT2	F6-AL06TW	---	---	63
SUBTOTAL			89	48	1515

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY

						SPV.0060.03
						TEMPORARY
						STREET
						LIGHTING
						SYSTEM
CATEGORY	LOCATION	STATION	OFFSET	R/L	EACH	
1100	TMBP400	-	-	-	1	
PROJECT TOTAL						1

ALL BID ITEMS LISTED ARE CATEGORY 1000 UNLESS NOTED OTHERWISE

CLAY LINER POND				
640.1303.S		SPV.0060.14		SPV.0060.15
POND LINER CLAY		OUTLET STRUCTURE POND SOUTHBRIDGE RD RAMP B		OUTLET STRUCTURE POND SOUTHBRIDGE RD RAMP D
LOCATION	CY	EACH	EACH	REMARKS
Southbridge Ramp B (SE) Pond Liner	8,600	1	--	
Southbridge Ramp D (NW) Pond Liner	3,100	--	1	
Total	11,700	1	1	

CRITICAL PATH METHOD (CPM) SCHEDULING		
SPV.0060.07		SPV.0060.08
BASELINE CPM PROGRESS SCHEDULE		CPM PROGRESS SCHEDULE AND ACCEPTED REVISIONS
LOCATION	EACH	EACH
UNDISTRIBUTED	1	12
TOTAL	1	12

Utility Adjustments				
SPV.0060.17		SPV.0060.18		
ADJUSTING SANITARY MANHOLE COVERS		ADJUSTING WATER VALVE BOXES		
LOCATION	CAT	EACH	EACH	REMARKS
Project - Miscellaneous	1700	13	17	TOWN OF LAWRENCE
Project - Miscellaneous	1710	8	14	CITY OF DE PERE
TOTAL		21	31	

GEOTECHNICAL INSTRUMENTATION			
SPV.0060.05		SPV.0060.06	SPV.0060.10
VIBRATING WIRE PIEZOMETER INSTRUMENTATION SYSTEM		SETTLEMENT GAUGES	GEOTECHNICAL INSTRUMENTATION
LOCATION	EACH	EACH	EACH
WEST SIDE OF INTERSTATE	6	18	1
EAST SIDE OF INTERSTATE	6	16	1
TOTAL	12	34	2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
1130-63-21
APPLETON - DE PERE

STH 96 - CTH F

IH-41
OUTAGAMIE & BROWN COUNTIES



CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	•
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		OFF-PREMISE SIGN	
NEW R/W LINE	---	SIGN		COMPENSABLE	
EXISTING R/W OR HE LINE	---	NON-COMPENSABLE		ELECTRIC POLE	
PROPERTY LINE	---	TELEPHONE POLE		PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	
LOT, TIE & OTHER MINOR LINES	---	COMMUNICATION VAULT		ACCESS RESTRICTED BY ACQUISITION	
SLOPE INTERCEPT	---	NO ACCESS (BY STATUTORY AUTHORITY)		NO ACCESS (BY PREVIOUS PROJECT OR CONTROL)	
CORPORATE LIMITS	---	NO ACCESS (NEW HIGHWAY)		PARCEL NUMBER	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---	UTILITY NUMBER		PARALLEL OFFSETS	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---				
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING		TO BE REMOVED			
BRIDGE		CULVERT			

CONVENTIONAL ABBREVIATIONS

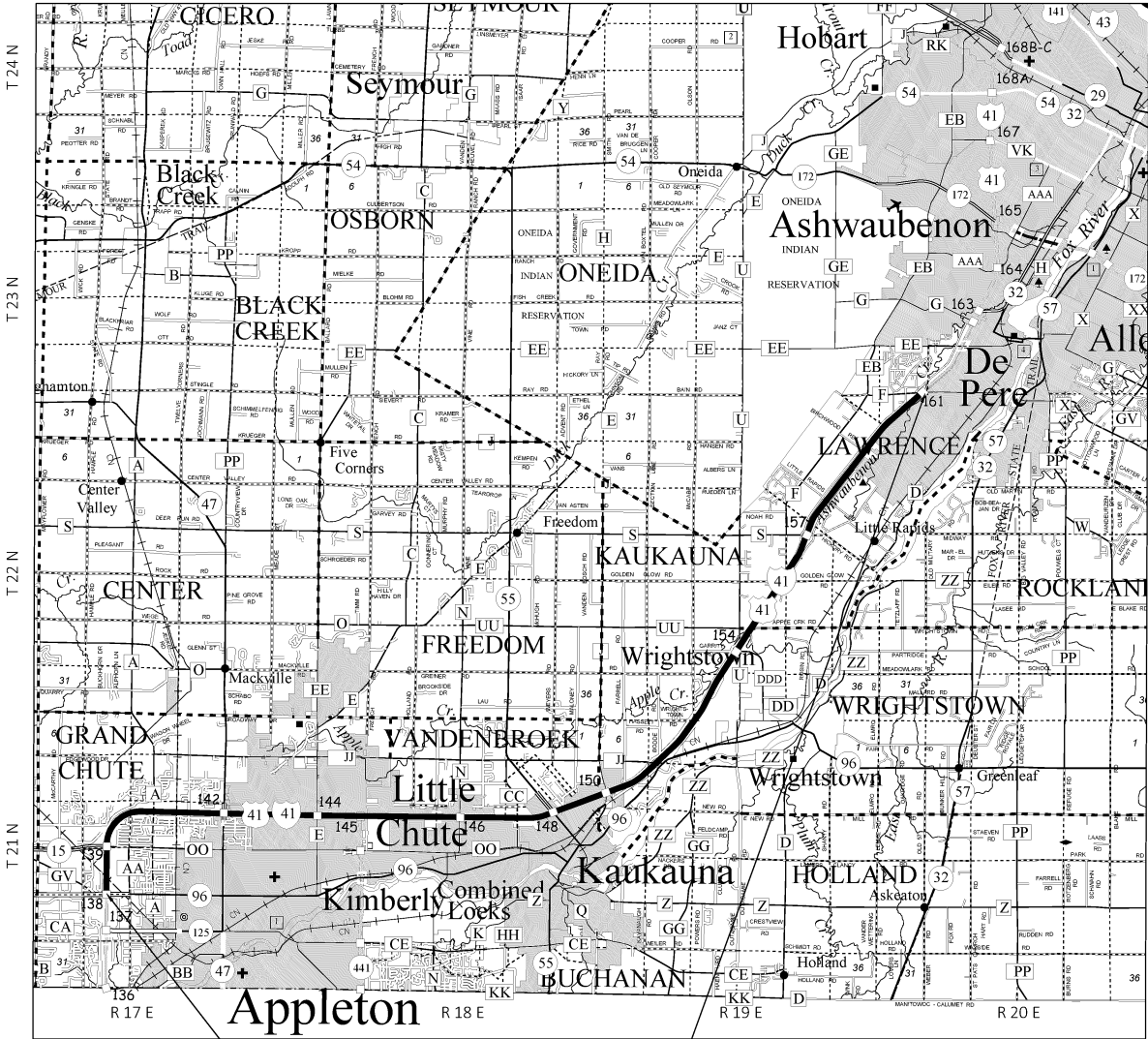
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS (100')	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT	
CONCRETE	CONC	RIGHT	RT
COUNTY	CO	RIGHT OF WAY	R/W
COUNTY TRUNK HIGHWAY	CTH	SECTION	SEC
DISTANCE	DIST	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED	TLE
GRID NORTH	GN	EASEMENT	
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	---
GAS	---
TELEPHONE	---
OVERHEAD TRANSMISSION LINES	---
ELECTRIC	---
CABLE TELEVISION	---
FIBER OPTIC	---
SANITARY SEWER	---
STORM SEWER	---
ELECTRIC TOWER	---



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1130-63-21

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

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

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

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

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

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 1130-63-21 -4. 47
SHEET 2 OF 2
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 1130-63-21 - 4.48

THAT PART OF LOT 2 OF CERTIFIED SURVEY MAP NUMBER 8579 IN VOLUME 60 CSM, PAGE 313 AS DOCUMENT NUMBER 2715908, BEING IN LOT 54, WILLIAMS GRANT, AND INCLUDING THAT PART OF LOT 52 AND LOT 53, WILLIAMS GRANT, TOWN OF LAWRENCE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER IH-41 APPLETON-DE PERE 5TH 96' CTH F OUTGAMIE & BROWN COUNTIES

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY, MAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

FOUND IRON PINS ARE 1" PIPE WITH PLASTIC CAP, UNLESS OTHERWISE NOTED.

EXISTING ACCESS CONTROL FOR IH-41 ESTABLISHED FROM PREVIOUS PROJECTS B-11 #10, DOC 440181, SECTION 84.29S, AND PROJECT CA.03-213).

EXISTING RIGHT-OF-WAY FOR IH-41 ESTABLISHED FROM PREVIOUS PROJECTS 1130-42-00, 1130-63-22, TO3-2134), CSM 8579, DOC 1551146, AND DOC 2644987

EXISTING RIGHT-OF-WAY FOR ORANGE LN ESTABLISHED FROM PREVIOUS PROJECTS 1130-63-22, CSM 8579, AND DOC 1551146.

EXISTING RIGHT-OF-WAY FOR MID VALLEY DR ESTABLISHED FROM PREVIOUS PROJECTS 1130-42-00 AND TO3-2134).

EXISTING RIGHT-OF-WAY FOR FRENCH RD ESTABLISHED FROM PREVIOUS PROJECTS 1130-42-00 AND TO3-2134), CSM 8641, CSM 7003, AND DOC 1788748.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

US# 41 IN OUTGAMIE/BROWN COUNTIES WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.29S OF WISCONSIN STATUTES BY THE HIGHWAY COMMISSION ON 6/8/1972.

3035621
CHERYL BERKEN
REGISTERED PROFESSIONAL
REGISTER OF DEEDS
GREEN BAY, WI
RECORDED ON
09/15/2023 08:50 AM
PAGES: 1
*The above recording information
verifies that this document has
been electronically recorded and
returned to the submitter**

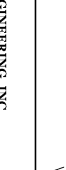
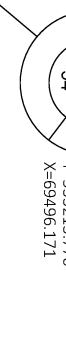
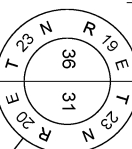
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1130-63-21 - 4.48
AMENDMENT NO. _____

FOR ADDITIONAL INFORMATION
REFER TO THE TITLE SHEET.
RECORDED IN THE OFFICE OF THE
REGISTER OF DEEDS IN BROWN
COUNTY AS SHEET 7 OF 2 OF
DOCUMENT #3034470.

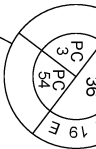
UTILITY INTERESTS REQUIRED	
UTILITY NUMBER	OWNERS)
530	TOWN OF LAWRENCE-SANITARY
530	LAWRENCE-SANITARY
531	TOWN OF LAWRENCE-WATER
531	RELEASE OF RIGHTS

SW-NW

GOVT LOT 1



SCALE, FEET
0 100 200



SEC. COR. TO PNT 4810
S55°17'59"E, 1175.64'



EXISTING ACCESS CONTROL FOR IH-41 ESTABLISHED FROM PREVIOUS PROJECTS B-11 #10, DOC 440181, SECTION 84.29S, AND PROJECT CA.03-213).

EXISTING RIGHT-OF-WAY FOR IH-41 ESTABLISHED FROM PREVIOUS PROJECTS 1130-42-00, 1130-63-22, TO3-2134), CSM 8579, DOC 1551146, AND DOC 2644987

EXISTING RIGHT-OF-WAY FOR ORANGE LN ESTABLISHED FROM PREVIOUS PROJECTS 1130-63-22, CSM 8579, AND DOC 1551146.

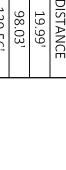
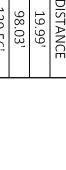
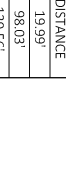
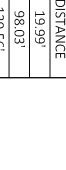
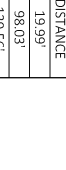
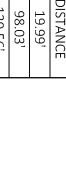
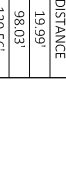
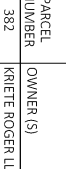
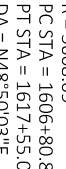
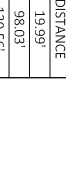
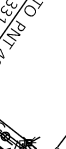
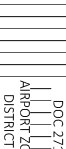
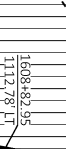
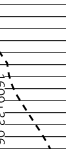
EXISTING RIGHT-OF-WAY FOR MID VALLEY DR ESTABLISHED FROM PREVIOUS PROJECTS 1130-42-00 AND TO3-2134).

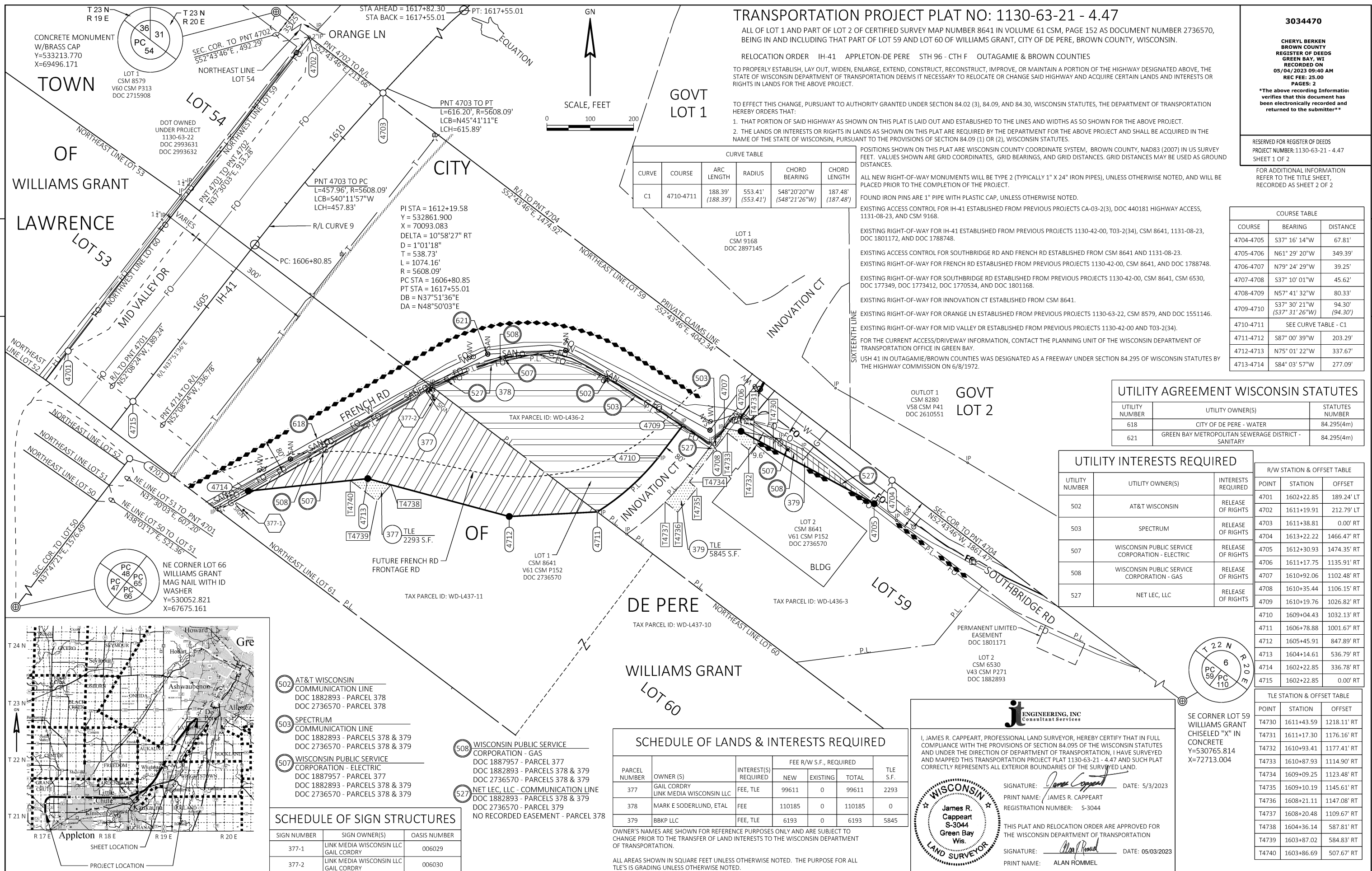
EXISTING RIGHT-OF-WAY FOR FRENCH RD ESTABLISHED FROM PREVIOUS PROJECTS 1130-42-00 AND TO3-2134), CSM 8641, CSM 7003, AND DOC 1788748.

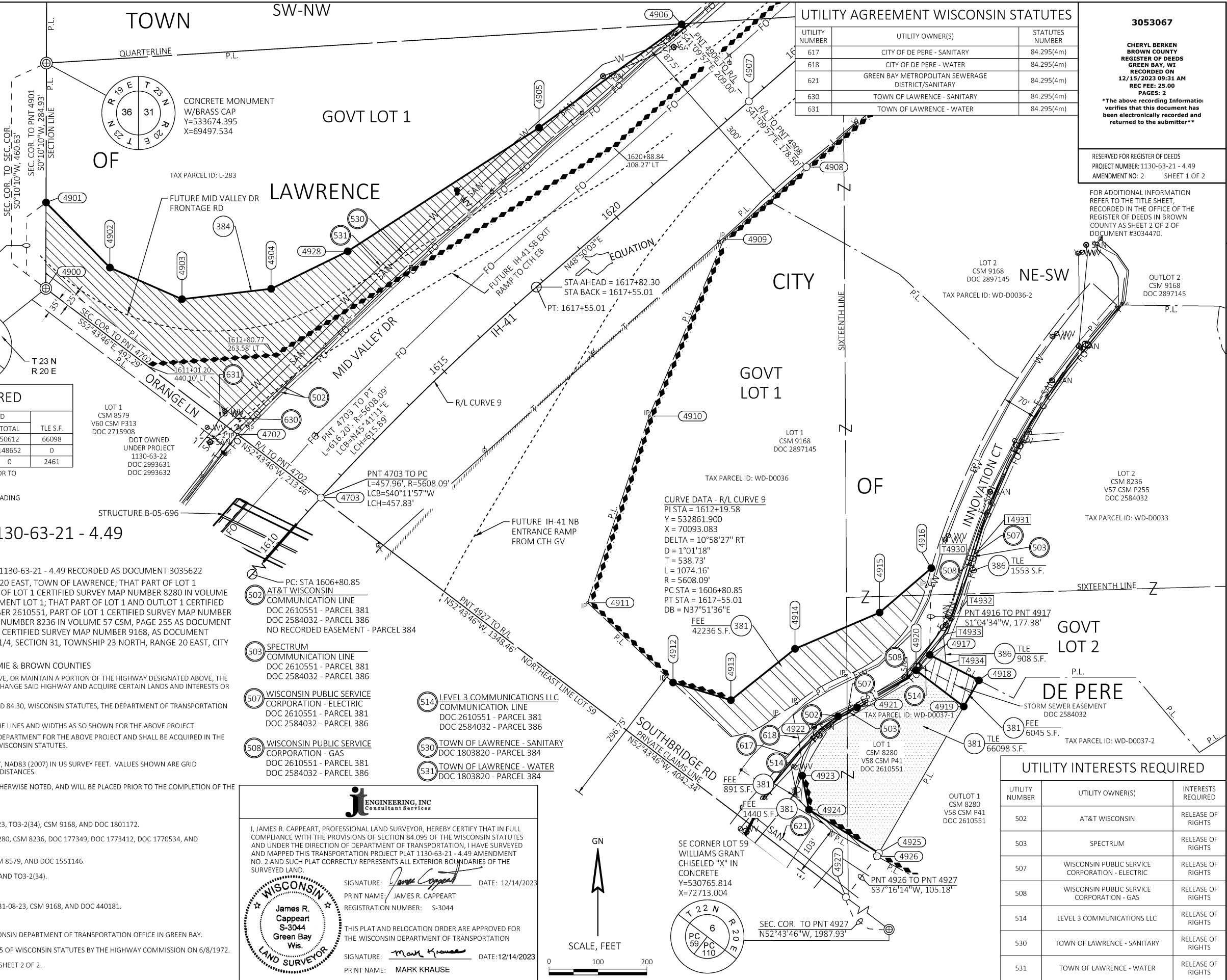
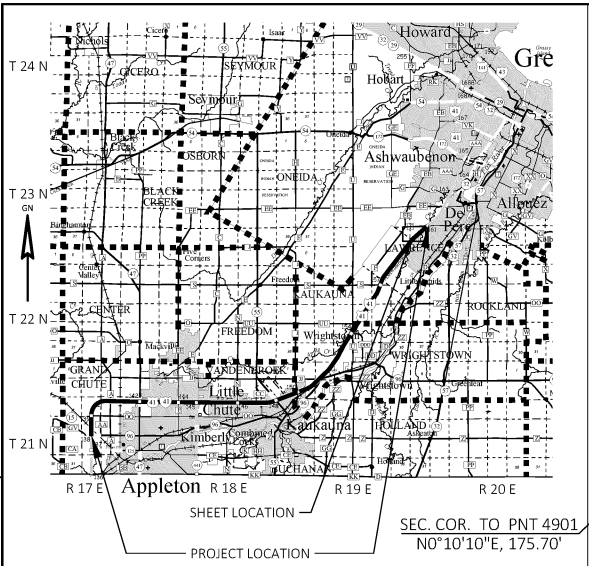
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

US# 41 IN OUTGAMIE/BROWN COUNTIES WAS DESIGNATED AS A FREEWAY UNDER SECTION 84.29S OF WISCONSIN STATUTES BY THE HIGHWAY COMMISSION ON 6/8/1972.

GOVT LOT 1







TRANSPORTATION PROJECT PLAT NO: 1130-63-21 - 4.49 EXTENSION SHEET
AMENDMENT NO. 2

RELOCATION ORDER IH-41 APPLETON-DE PERE STH 96 - CTH F OUTAGAMIE & BROWN COUNTIES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM,
BROWN COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID
COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE
USED AS GROUND DISTANCES.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE
OFFICE OF THE REGISTER OF DEEDS IN BROWN COUNTY AS SHEET 2 OF 2 OF
DOCUMENT #3034470.

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
4702	1611+19.91	212.79' LT
4703	1611+38.81	0.00' RT
4900	1610+81.22	703.30' LT
4901	1611+95.50	821.70' LT
4902	1611+88.30	635.58' LT
4903	1612+37.49	484.13' LT
4904	1613+69.66	368.25' LT
4905	1620+00.83	241.57' LT
4906	1623+59.14	209.00' LT
4907	1623+59.14	0.00' RT
4908	1623+59.14	178.50' RT
4909	1621+35.13	178.50' RT
4910	1617+82.34	350.05' RT
4911	1613+71.83	542.70' RT
4912	1613+80.74	781.47' RT
4913	1614+49.87	890.20' RT

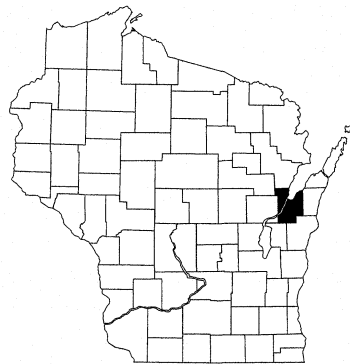
R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
4914	1616+48.97	903.51' RT
4915	1618+72.34	962.41' RT
4916	1620+11.64	963.57' RT
4917	1618+92.39	1094.88' RT
4918	1619+33.98	1200.31' RT
4919	1618+75.40	1220.20' RT
4920	1618+50.80	1100.06' RT
4921	1616+65.33	1077.73' RT
4922	1616+14.99	1064.81' RT
4923	1614+45.60	1102.30' RT
4924	1613+96.90	1161.54' RT
4925	1614+47.89	1324.97' RT
4926	1614+38.35	1327.00' RT
4927	1613+01.55	1340.96' RT
4928	1615+25.74	313.77' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T4930	1621+01.74	990.64' RT
T4931	1621+07.02	999.13' RT
T4932	1619+99.17	1066.54' RT
T4933	1619+40.79	1081.93' RT
T4934	1619+06.23	1129.98' RT

COURSE TABLE		
COURSE	BEARING	DISTANCE
4901-4902	S44° 24' 59"E	186.30'
4902-4903	S66° 21' 47"E	160.82'
4903-4904	N83° 23' 42"E	183.44'
4904-4928	N63° 54' 24"E	174.30'
4928-4905	N57° 08' 31"E	465.44'
4905-4906	N54° 01' 43"E	359.79'
4908-4909	S48° 50' 03"W	224.02'
4909-4910	S22° 54' 07"W (S22° 54' 21"W)	392.28' (392.77')
4910-4911	S18° 14' 37"W (S18° 14' 51"W)	401.79' (401.79')
4911-4912	S46° 55' 11"E	238.90'
4912-4913	S73° 03' 07"E	123.63'
4913-4914	N51° 16' 59"E	167.78'
4914-4915	N66° 48' 12"E	188.17'
4915-4916	N49° 18' 41"E	139.30'
4917-4918	S62° 41' 37"E	113.34'
4918-4919	S30° 05' 00"W	61.86'
4919-4920	N52° 44' 20"W	122.63'
4920-4921	SEE CURVE TABLE - C2	
4921-4922	SEE CURVE TABLE - C3	
4922-4923	SEE CURVE TABLE - C4	
4923-4924	S11° 18' 26"E	70.86'
4924-4925	S58° 12' 51"E	168.18'
4925-4926	S30° 05' 00"W	7.56'

CURVE TABLE					
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C2	4920-4921	143.70'	335.00'	S57° 36' 27"W	142.61'
C3	4921-4922	42.78'	265.00'	S65° 16' 18"W	42.73'
C4	4922-4923	141.97'	667.35'	S31° 11' 56"W	141.71'

PROJECT NUMBER 1130-63-21 - 4.49
SHEET 2 OF 2
AMENDMENT NO: 2



STATE OF WISCONSIN

BROWN COUNTY HIGHWAY DEPARTMENT

TRANSPORTATION PROJECT PLAT TITLE SHEET

EB-39 ROADWAY AMENDMENT 02

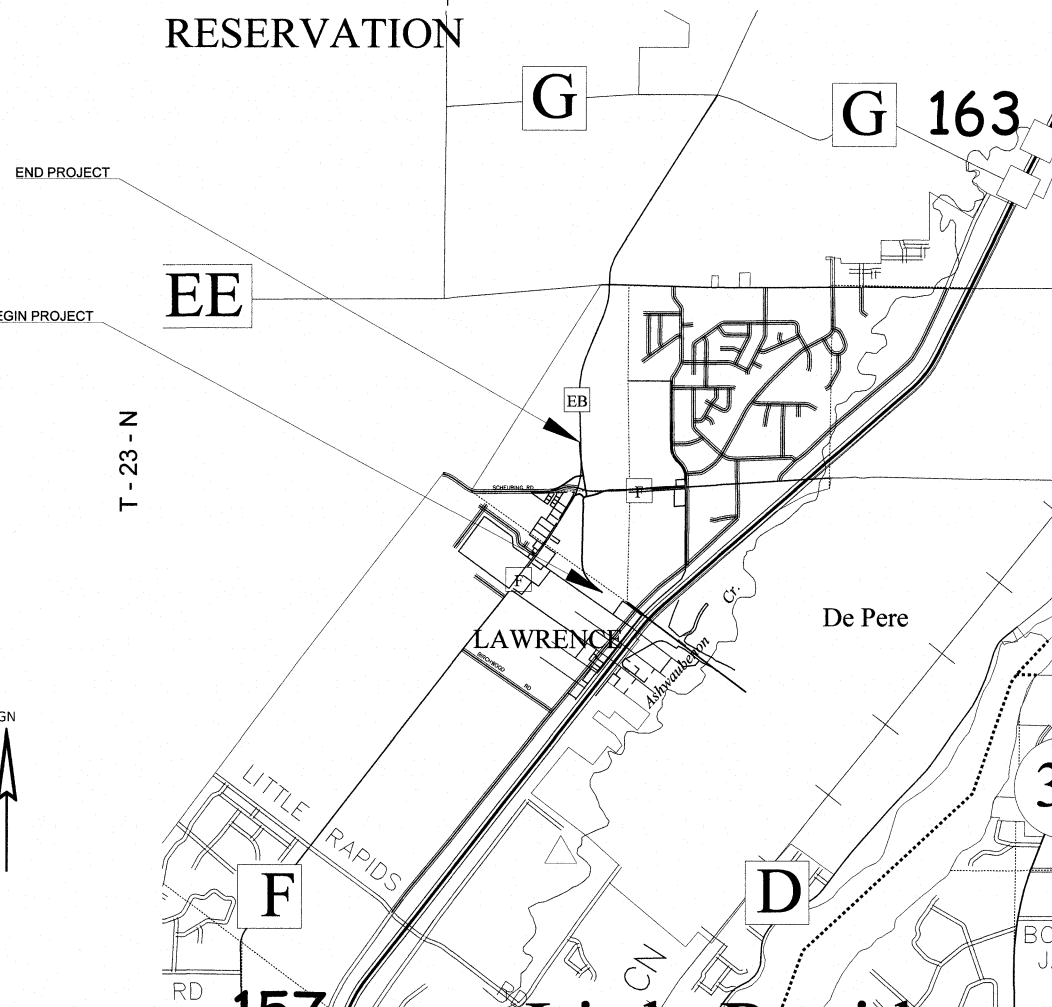
CTH EB - SOUTH BRIDGE CONNECTOR

CTH F TO MID VALLEY DRIVE

CTH EB
BROWN COUNTY

R - 19 - E | R - 20 - E

RESERVATION



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT EB-39 ROADWAY

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE BROWN COUNTY HIGHWAY DEPARTMENT.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

CONVENTIONAL SYMBOLS

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	•
QUARTER LINE	---	SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
NEW REFERENCE LINE	---	SIXTEENTH CORNER MONUMENT		OFF-PREMISE SIGN	
NEW R/W LINE	---	SIGN		COMPENSABLE	
EXISTING R/W OR HE LINE	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		NON-COMPENSABLE	
PROPERTY LINE	---	ACCESS RESTRICTED BY ACQUISITION			
LOT, TIE & OTHER MINOR LINES	---	NO ACCESS (BY STATUTORY AUTHORITY)			
SLOPE INTERCEPT	---	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
CORPORATE LIMITS	---	NO ACCESS (NEW HIGHWAY)			
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---	PARCEL NUMBER (25)		UTILITY NUMBER (40)	
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	PARALLEL OFFSETS			
TEMPORARY LIMITED EASEMENT AREA	---				
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---				
TRANSMISSION STRUCTURES	---				
BUILDING					
TO BE REMOVED					
BRIDGE					
CULVERT					

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT	
CONCRETE	CONC	RIGHT	RT
COUNTY	CO	RIGHT OF WAY	R/W
COUNTY TRUNK HIGHWAY	CTH	SECTION	SEC
DISTANCE	DIST	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED	TLE
GRID NORTH	GN	EASEMENT	
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	---
GAS	---
TELEPHONE	---
OVERHEAD TRANSMISSION LINES	---
ELECTRIC	---
CABLE TELEVISION	---
FIBER OPTIC	---
SANITARY SEWER	---
STORM SEWER	---
ELECTRIC TOWER	

LAYOUT
SCALE 0 1/2 MI.

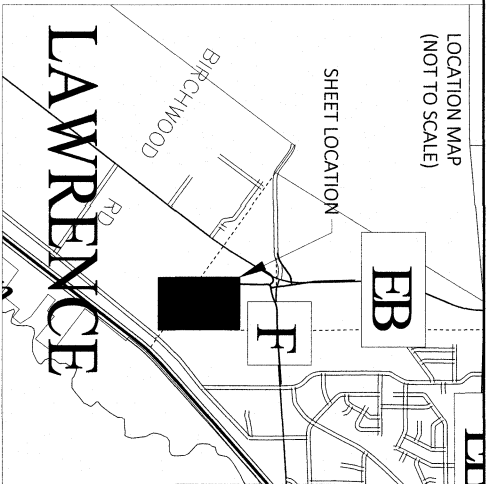
PAGE 2 OF 3

PROJECT NUMBER EB-39 -4. 01
SHEET 2 OF 3
AMENDMENT NO: 02

TRANSPORTATION PROJECT PLAT NO: EB-39 ROADWAY - 4.01

AMENDMENT NO: 02

AMENDS PARCEL 1 OF TRANSPORTATION PROJECT PLAT NO: EB-39 ROADWAY 4.01 AMENDMENT NO: 01
RECORDED AS DOCUMENT NUMBER 3046498 PAGES 1, and 3
THAT PART OF GOV'T LOT 1 AND THAT PART OF THE NE ¼ - NE ¼ AND GOV'T LOT 2 OF SECTION 36 ALL LOCATED
IN TOWNSHIP 23 NORTH, RANGE 19 EAST, TOWN OF LAWRENCE, BROWN COUNTY, WISCONSIN
RELOCATION ORDER EB-39 CTH EB - SOUTH BRIDGE CONNECTOR (CTH F TO MID-VALLEY DRIVE) BROWN COUNTY
TO PROPERLY ESTABLISH LAYOUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE,
BROWN COUNTY DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE
PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 83.07, AND 83.08, WISCONSIN STATUTES, BROWN COUNTY HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTH AS SO SHOWN FOR THE ABOVE PROJECT;
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS SO SHOWN ON THIS PLAT ARE RELOCATED TO BROWN COUNTY IN THE ABOVE PROJECT AND SHALL BE ACQUIRED
IN THE NAME OF BROWN COUNTY, PURSUANT TO THE PROVISIONS OF SECTION 83.07 AND/OR 83.08, WISCONSIN STATUTES.



3049347

CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
RECORDED ON
10/26/2023 03:52 PM
REC FEE: 25.00
PAGES: 3

PAGE 1 OF 3
FOR ADDITIONAL INFORMATION
REFER TO THE TITLE SHEET,
RECORDED AS SHEET 2 OF 3

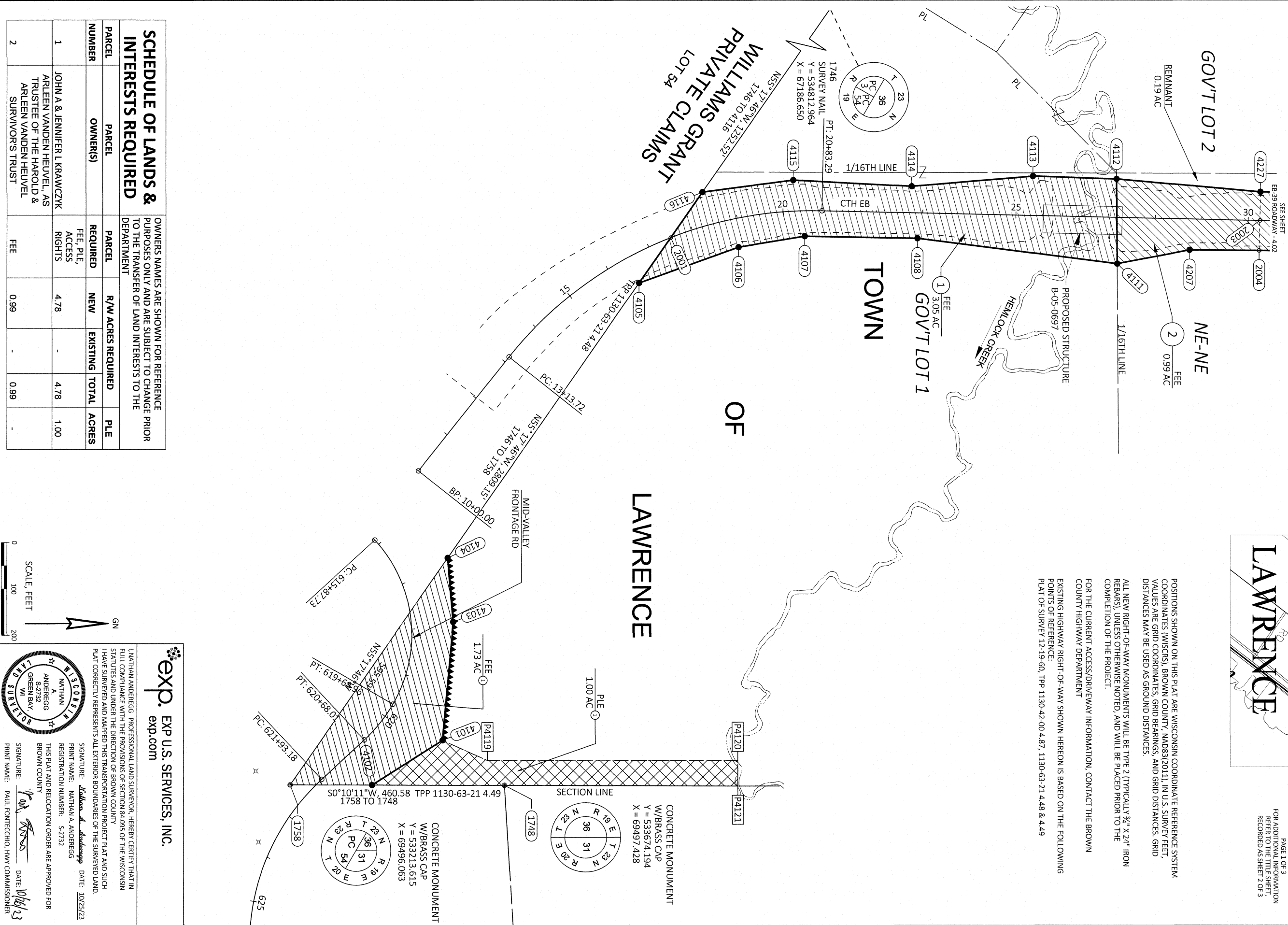
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: EB-39 ROADWAY
AMENDMENT NO. 02

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM
COORDINATES (WISCRS), BROWN COUNTY, NAD83(2011), IN U.S. SURVEY FEET.
VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID
DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON
REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE
COMPLETION OF THE PROJECT.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE BROWN
COUNTY HIGHWAY DEPARTMENT

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREON IS BASED ON THE FOLLOWING
POINTS OF REFERENCE:
PLAT OF SURVEY 12-19-60, TTP 1130-42-00 4.87, 1130-63-21 4.48 & 4.49



TRANSPORTATION PROJECT PLAT NO: EB-39 ROADWAY - 4.01 EXTENSION SHEET

RELOCATION ORDER EB-39 CTH EB - SOUTH BRIDGE CONNECTOR (CTH F TO MID-VALLEY DRIVE) BROWN COUNTY

CTH EB NB ALIGNMENT

Begin CTH EB NB
N 533.489,4889 E 68,818.4230 10+00.00
Line (1)
N51°37'17.66"W 313.723'
N 533.684,2649 E 68,572.4868 13+13.72
Curve (2)
BC N 533.684,2649 E 68,572.4868 13+13.72
CTR N 534.337,2763 E 69,089.6570
PI N 533.941,7368 E 68,247.3867
Direction Back N51°37'17.66"W
Radius 833.000'
Delta 52°55'57"(RT)
Length 769.566'
Tangent 414.707'
Chord Direction N25°09'18.97"W Distance 742.489'
Direction Ahead N1°18'39.72"E
EC N 534.356,3352 E 68,256,8751 20+83.29
Line (3)
N1°18'39.72"E 1,368.384'
N 535.724,3607 E 68,288.1835 34+51.67
Curve (4)
BC N 535.724,3607 E 68,288.1835 34+51.67
CTR N 535.699,1929 E 69,387.8955
PI N 535.742,2485 E 68,288.5997
Direction Back N1°18'39.72"E
Radius 1,100.000'
Delta 1°53'42"(RT)
Length 36.382'
Tangent 18.193'
Chord Direction N2°15'30.76"E Distance 36.380'
Direction Ahead N3°12'21.80"E
EC N 535.760,7127 E 68,289,6172 34+88.05
Line (5)
N3°12'21.80"E 107.840'
N 535.888,5842 E 68,293.6484 35+95.89
Curve (6)
BC N 535.888,5842 E 68,293.6484 35+95.89
CTR N 535.925,6544 E 69,295.6484
PI N 535.965,9070 E 67,796.4466
Direction Back N3°12'21.80"E
Radius 1,100.000'
Delta 1°53'42"(RT)
Length 36.382'
Tangent 18.193'
Chord Direction N2°14'29.67"W Distance 96.835'
Direction Ahead N7°41'21.14"W
EC N 535.965,1448 E 68,291.8609 36+92.88
Line (7)
N7°41'21.14"W 59.326'
N 536.023,9376 E 68,283.9231 37+52.20
Non-Tangent Radial Bearing 583°50'17.54"W
Curve (8)
BC N 536.023,9376 E 68,283.9231 37+52.20
CTR N 536.034,6712 E 68,383.3453
PI N 536.095,8740 E 68,276.1568
Direction Back N6°09'42.46"W
Radius 100.000'
Delta 71°46'29"(RT)
Length 125.271'
Tangent 72.354'
Chord Direction N29°43'32.18"E Distance 117.239'
Direction Ahead N65°36'46.81"E
EC N 536.125,7490 E 68,342.0556
Reversing Curve
Curve (9)
BC N 536.125,7490 E 68,342.0556 38+77.47
CTR N 536.182,2172 E 68,316.4539
PI N 536.188,6199 E 68,392.5047
Direction Back N65°36'46.81"E
Radius 62.000'
Delta 83°33'20"(LT)
Length 50.416'
Tangent 55.391'
Chord Direction N23°50'06.62"E Distance 82.614'
Direction Ahead N1°7'36'33.57"W
EC N 536.304,8917 E 68,356.4697 40+73.49
Reversing Curve
Curve (10)
BC N 536.304,8917 E 68,356.4697 40+73.49
CTR N 536.321,2970 E 66,860.2786
PI N 536.392,7314 E 68,352.1490
Direction Back N2°48'57.60"W
Radius 1,498.000'
Delta 6°43'11"(LT)
Length 175.690'
Tangent 87.946'
Chord Direction N6°10'33.29"W Distance 175.589'
Direction Ahead N9°32'08.97"W
EC N 536.479,4621 E 68,337.5795 42+49.18
Line (12)
N9°32'08.97"W 172.980'
N 536.650,0523 E 68,308.9229 44+22.16
Curve (13)
BC N 536.650,0523 E 68,308.9229 44+22.16
CTR N 537.719,5809 E 74,675.7152
PI N 536.696,2718 E 68,301.1587
Direction Back N9°32'08.97"W
Radius 6,456.000'
Delta 0°49'55"(RT)
Length 93.733'
Tangent 46.867'
Chord Direction N8°07'11.63"W Distance 93.732'
Direction Ahead N6°42'14.28"W
EC N 536.742,5992 E 68,294.0663 45+15.90
Line (14)
N6°42'14.28"W 302.425'
N 537.041,5423 E 68,246.3004 48+18.32
Curve (15)
BC N 537.041,5423 E 68,248.3004 48+18.32
CTR N 537.749,7632 E 72,874.4077
PI N 537.335,6450 E 68,203.2755
Direction Back N8°42'14.28"W
Radius 4,680.000'
Delta 7°16'31"(RT)
Length 594.259'
Tangent 297.529'
Chord Direction N5°03'58.70"W Distance 593.860'
Direction Ahead N1°25'43.12"W
Line (16)
N1°25'43.12"W 813.315'
N 538.446,1437 E 68,175.5800 62+25.89
End CTH EB NB

Alignment Length: 5,225.895'

MID-VALLEY FRONTAGE ROAD ALIGNMENT

Begin Mid-Valley Frontage Road
N 531.515,0444 E 68,886.6979 594+00.00
Line (1)
N37°51'22.53"E 340.307'
N 531.783,7345 E 69,095.5382 597+40.31
Curve (2)
BC N 531.783,7345 E 69,095.5382 597+40.31
CTR N 532.178,3324 E 68,587.8557
PI N 532.215,3219 E 69,430.9909
Direction Back N37°51'22.53"E
Radius 643.000'
Delta 80°44'12"(LT)
Length 906.064'
Tangent 546.622'
Chord Direction N2°30'43.30"W Distance 832.940'
Direction Ahead N42°52'49.13"W
EC N 532.615,8741 E 69,059.0312 606+46.37
Line (3)
N42°52'49.13"W 219.122'
N 532.776,4414 E 68,909.9256 608+65.49
Curve (4)
BC N 532.776,4414 E 68,909.9256 608+65.49
CTR N 533.134,8682 E 69,295.3661
PI N 532.802,3181 E 68,885.8960
Direction Back N42°52'49.13"W
Radius 526.000'
Delta 7°40'54"(RT)
Length 70.511'
Tangent 35.313'
Chord Direction N39°02'22.22"W Distance 70.468'
Direction Ahead N53°11'55.31"W
EC N 532.851,746 E 68,865.5410 609+36.01
Line (6)
N53°11'55.31"W 54.069'
N 532.851,746 E 68,865.5410 609+36.01
Non-Tangent Radial Bearing 554°48'04.69"W
Curve (7)
BC N 532.851,746 E 68,865.5410 609+36.01
CTR N 533.090,5608 E 69,233.2621
PI N 533.011,0931 E 68,728.6286
Direction Back N35°11'55.31"W
Radius 450.000'
Delta 52°08'35"(RT)
Length 409.531'
Tangent 220.127'
Chord Direction N9°07'37.66"W Distance 395.544'
Direction Ahead N16°56'40.00"E
EC N 533.221,7107 E 68,802.7976 613+45.54
Line (8)
N9°07'37.66"W 107.840'
N 533.221,7107 E 68,802.7976 613+45.54
Non-Tangent Radial Bearing N73°03'20.00"W
Curve (8)
BC N 533.221,7107 E 68,802.7976 613+45.54
CTR N 533.196,9379 E 68,884.1076
PI N 533.258,1115 E 68,813.8879
Direction Back N16°56'40.00"E
Radius 85.000'
Delta 48°14'03"(RT)
Length 71.557'
Tangent 38.053'
Chord Direction N41°03'41.44"E Distance 69.462'
Direction Ahead N65°10'42.88"E
EC N 533.274,0857 E 68,848.4253 614+17.10
Line (9)
N41°03'41.44"E 164.743'
N 533.391,9154 E 68,963.5616 615+81.84
Line (10)
N47°20'18.45"E 5.885'
N 533.395,9031 E 68,967.8890 615+87.73
Curve (11)
BC N 533.395,9031 E 68,967.8890 615+87.73
CTR N 533.127,52923 E 69,171.1888
PI N 533.346,8174 E 69,130.5865
Direction Back N47°20'18.45"E
Radius 1,300.000'
Delta 27°49'38"(RT)
Length 38.235'
Tangent 22.121'
Chord Direction N83°44'37.31"E Distance 356.095'
Direction Ahead S59°51'03.83"E
EC N 533.434,7091 E 69,321.8637 619+68.96
Line (12)
N59°51'03.83"E 0.000'
N 533.434,7091 E 69,321.8637 619+68.96
Non-Tangent Radial Bearing N30°08'56.17"E
Curve (13)
BC N 533.434,7091 E 69,321.8637 619+68.96
CTR N 533.145,0270 E 69,153.6101
PI N 533.409,6524 E 69,365.0037
Direction Back S59°51'03.83"E
Radius 335.000'
Delta 16°56'27"(RT)
Length 99.050'
Tangent 49.889'
Chord Direction S51°22'50.54"E Distance 98.689'
Direction Ahead S42°54'37.25"E
EC N 533.373,1128 E 69,398.9708 620+68.01
Line (14)
S42°54'37.25"E 125.165'
N 533.281,4937 E 69,464.1895 621+93.18
Curve (15)
BC N 533.281,4937 E 69,464.1895 621+93.18
CTR N 533.611,6535 E 69,839.4132
PI N 532.994,1020 E 69,751.2969
Direction Back S42°54'37.25"E
Radius 485.000'
Delta 77°56'18"(LT)
Length 659.735'
Tangent 392.313'
Chord Direction S81°52'46.11"E Distance 610.034'
Direction Ahead N59°09'05.04"E
EC N 533.195,2687 E 70,088.1072 628+52.91
Line (16)
N59°09'05.04"E 243.242'
N 533.319,9962 E 70,296.9365 630+96.15
Curve (17)
BC N 533.319,9962 E 70,296.9365 630+96.15
CTR N 533.127,52923 E 69,171.1888
PI N 533.583,5593 E 70,727.2406
Direction Back N59°09'05.04"E
Radius 5,230.000'
Delta 10°22'44"(LT)
Length 947.388'
Tangent 474.994'
Chord Direction N53°57'43.12"E Distance 946.093'
Direction Ahead N48°46'21.20"E
EC N 533.876,6038 E 71,061.9730 640+43.54
Line (18)
N48°46'21.20"E 481.457'
N 534.193,9080 E 71,424.0766 645+25.00
End Mid-Valley Frontage Road

Alignment Length: 5,125.000'

STATION OFFSET TABLE				
PNT	ALIGNMENT	STATION	OFFSET	
1748	MID-VALLEY FRONTAGE RD	619+85.71	296.05'	LT
1758	MID-VALLEY FRONTAGE RD	622+46.58	40.67'	RT
4101	MID-VALLEY FRONTAGE RD	619+79.01	131.39'	LT
4102	MID-VALLEY FRONTAGE RD	621+22.36	82.76'	LT
4103	MID-VALLEY FRONTAGE RD	617+90.64	90.15'	LT
4104	MID-VALLEY FRONTAGE RD	616+87.62	111.81'	LT
4105	CTH EB NB	16+44.12	60.00'	RT
4106	CTH EB NB	18+90.00	62.00'	RT
4107	CTH EB NB	20+45.00	55.00'	RT
4108	CTH EB NB	22+90.00	55.00'	RT
4111	CTH EB NB	27+20.37	100.00'	RT
4112	CTH EB NB	27+14.81	83.00'	LT
4113	CTH EB NB	25+35.00	85.00'	LT
4114	CTH EB NB	22+75.00	57.00'	LT
4115	CTH EB NB	20+25.00	67.00'	LT
4116	CTH EB NB	18+43.11	72.00'	LT
P4119	MID-VALLEY FRONTAGE RD	619+70.96	237.15'	LT
P4120	MID-VALLEY FRONTAGE RD	618+90.95	736.83'	LT
P4121	MID-VALLEY FRONTAGE RD	619+06.10	752.65'	LT
2001	CTH EB NB	17+51.39	0.00'	RT
2003	CTH EB NB	30+25.00	0.00'	RT
2004	CTH EB NB	30+25.00	64.59'	RT

COURSE TABLE

PNT TO PNT	BEARING	DISTANCE
1758 - 4104	N55°17'46"W	595.59'
4104 - 4103	N85°06'21"E	138.68'
4103 - 4101	S84°45'31"E	256.31'
4101 - 4102	S32°34'04"E	179.73'
4102 - 1758	S0°10'11"W	176.04'
4101 P4119	N24°26'59"E	106.48'
P4119 P4120	N0°00'00"E	537.55'
P4120 P4121	N90°00'00"E	55.00'
1758 - 4105	N55°17'46"W	1317.55'
4105 - 4116	N55°17'46"W	239.07'
4116 - 4115	N7°30'22"W	196.74'
4115 - 4114	N3°03'54"E	254.76'
4114 - 4113	N4°50'08"W	261.50'
4113 - 4112	N1°56'54"E	179.82'
4112 - 4227	N5°11'03"E	310.90'
4227 - 2003	S88°41'20"E	62.00'
2003 - 2004	S88°41'20"E	64.58'
2004 - 4207	N0°23'19"E	150.02'
4207 - 4111	N10°44'08"W	158.12'
4111 - 4108	N7°16'49"E	432.71'
4108 - 4107	N1°07'01"E	242.46'
4107 - 4106	N9°25'34"W	144.08'
4106 - 4105	N19°56'27"W	227.06'
4105 - 1758	S55°17'46"E	1317.55'

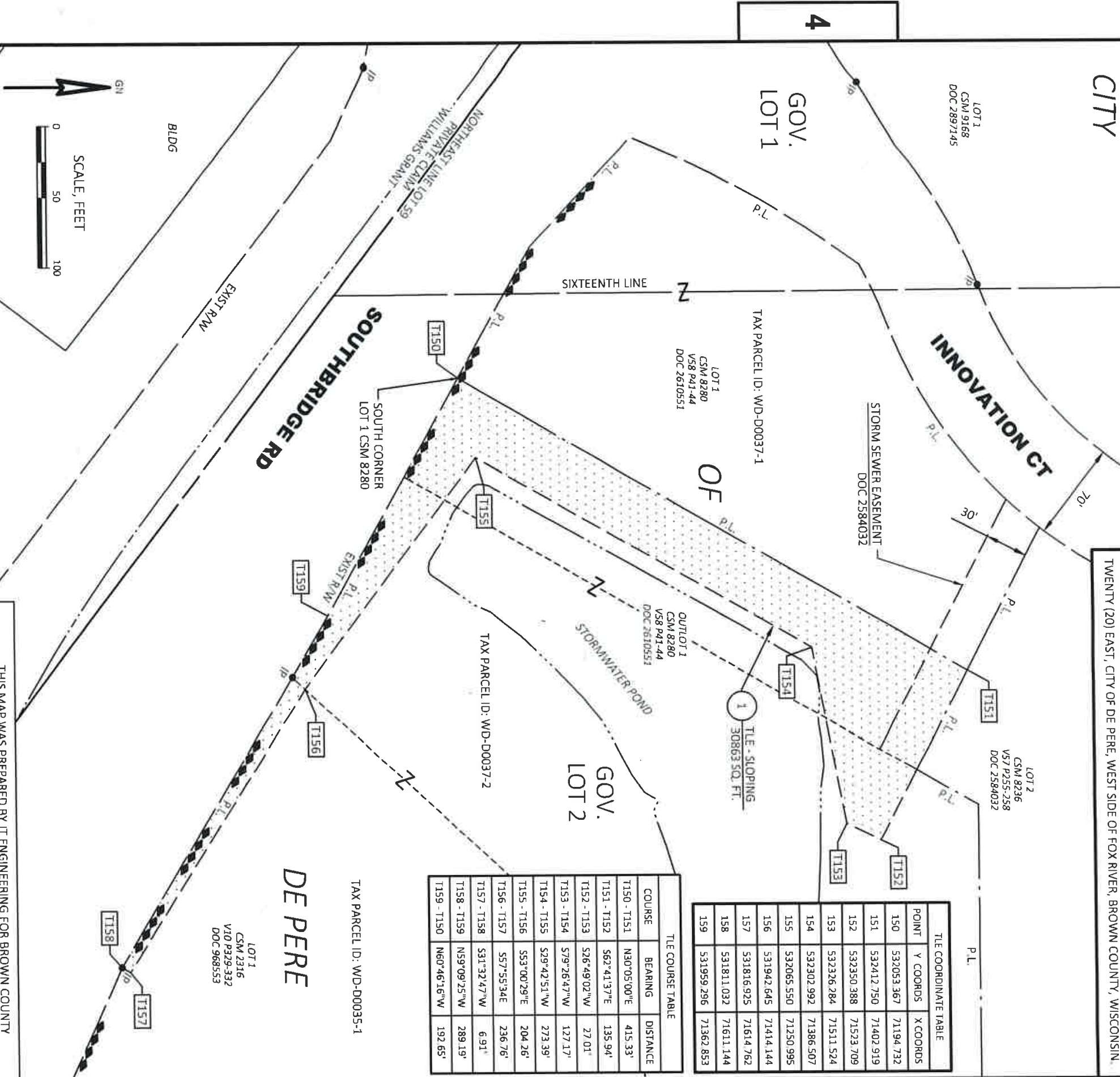
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

R/W PROJECT NUMBER: GV-14

SHEET NUMBER: 1

TLE ACQUISITION EXHIBIT
FRENCH ROAD TO LAWRENCE DRIVE
CITY OF DE PERE
BROWN COUNTY
CTH GV

THAT PART OF OUTLOT 1 OF CERTIFIED SURVEY MAP 8280, BEING IN GOVERNMENT LOT TWO (2), SECTION THIRTY-ONE (31), TOWNSHIP TWENTY-THREE (23) NORTH, RANGE TWENTY (20) EAST, CITY OF DE PERE, WEST SIDE OF FOX RIVER, BROWN COUNTY, WISCONSIN.



TLE COORDINATE TABLE		
POINT	Y COORDS	X COORDS
150	532053.367	71194.732
151	532412.750	71402.919
152	532350.388	71523.709
153	532326.284	71511.524
154	532302.992	71386.507
155	532065.550	71250.995
156	531942.645	71414.144
157	531816.925	71614.762
158	531811.032	71611.144
159	531959.296	71362.853

TLE COURSE TABLE		
COURSE	BEARING	DISTANCE
T150 - T151	N30°05'00"E	415.33'
T151 - T152	S62°41'37"E	135.94'
T152 - T153	S26°49'02"W	27.01'
T153 - T154	S79°26'47"W	127.17'
T154 - T155	S29°42'51"W	273.39'
T155 - T156	S53°00'29"E	204.26'
T156 - T157	S57°55'34"E	236.76'
T157 - T158	S31°32'47"W	6.91'
T158 - T159	N59°09'25"W	289.19'
T159 - T150	N60°46'16"W	192.65'

SCHEDULE OF LANDS
& INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	CITY OF DE PERE	TLE	30863

THIS MAP IS APPROVED FOR THE BROWN COUNTY.

SIGNATURE: *Paul Fanteschis* DATE: *11/28/25*
PRINT NAME: *Paul Fanteschis*

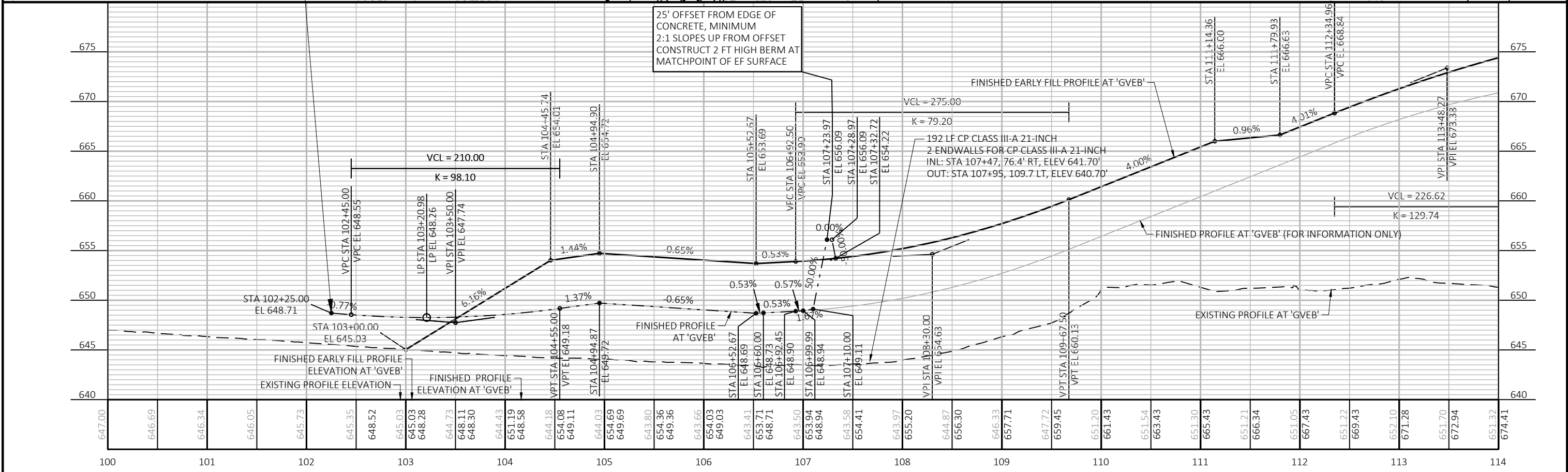
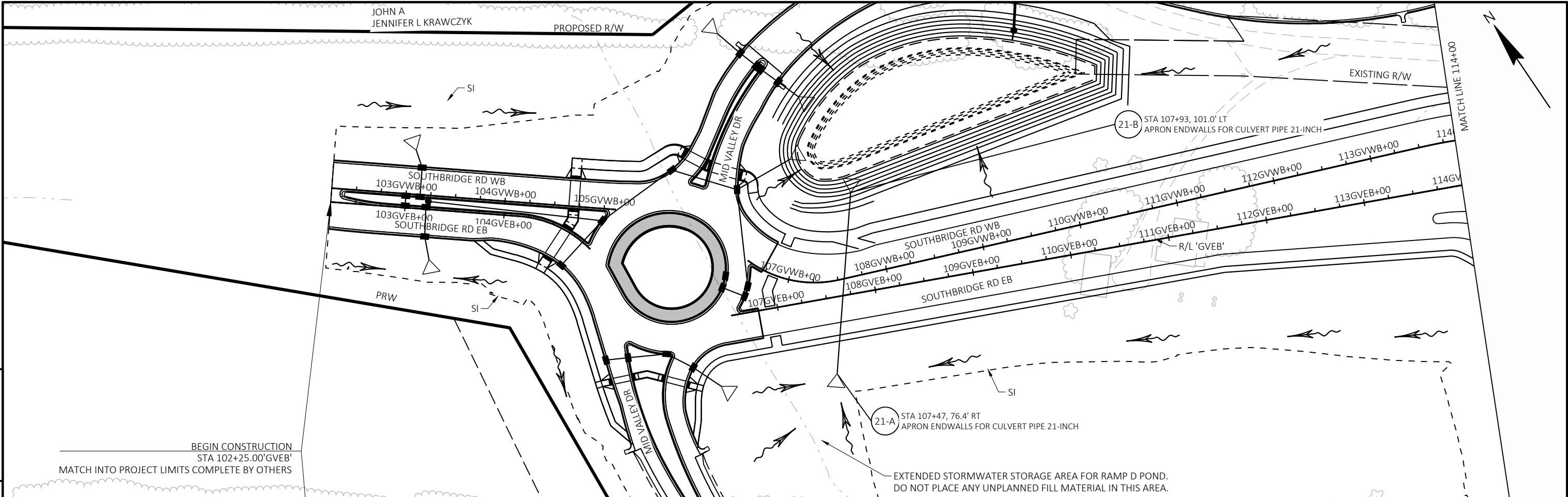
THIS MAP WAS PREPARED BY JT ENGINEERING FOR BROWN COUNTY

FILE NAME : 0401 TLE EXHIBIT.DWG

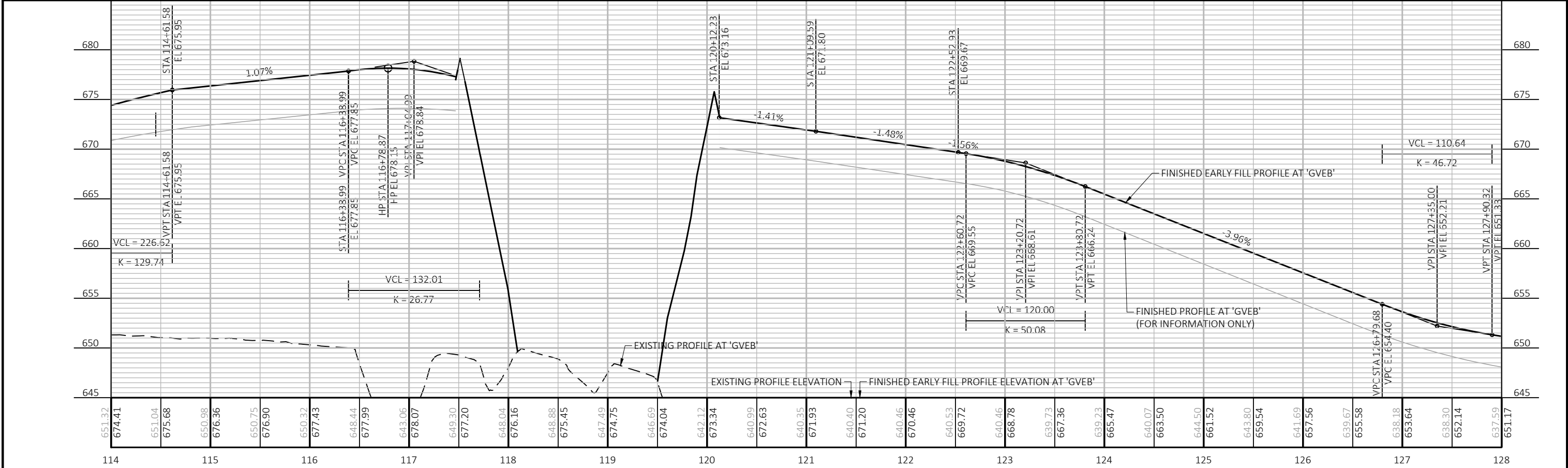
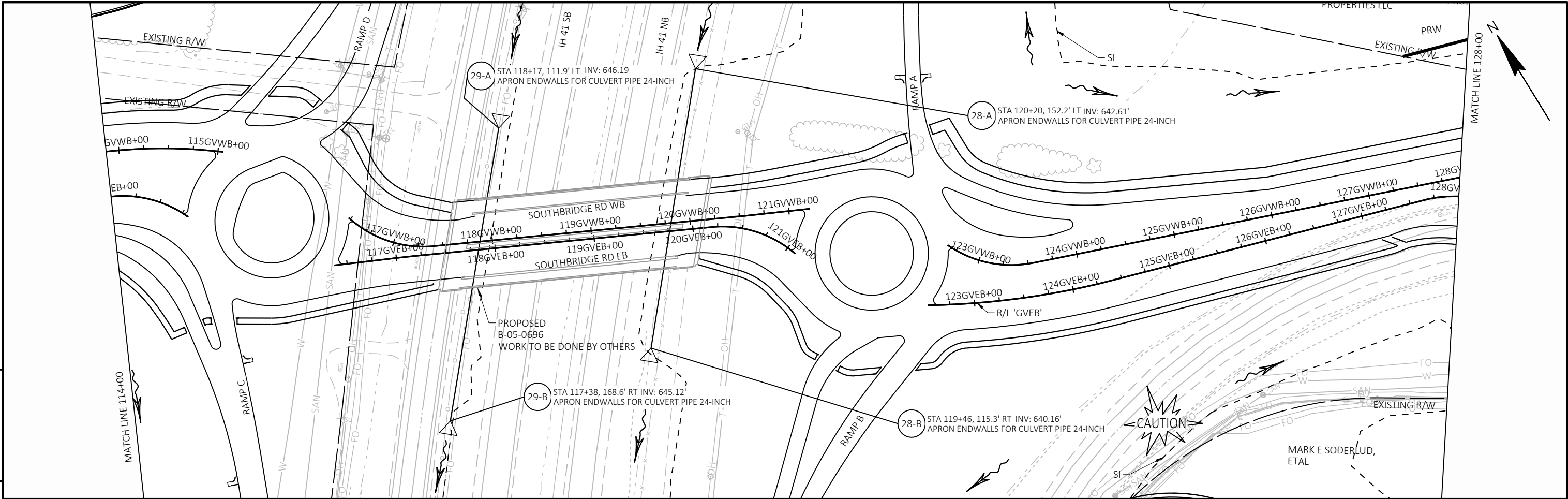
PLOT DATE :

11/14/2023 8:37 AM

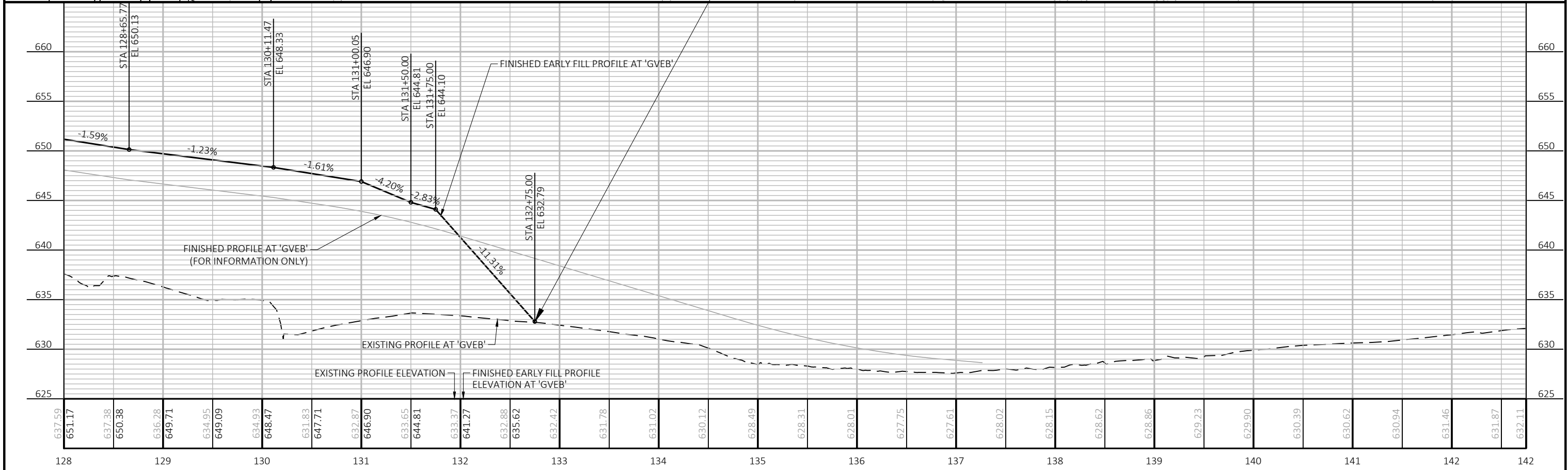
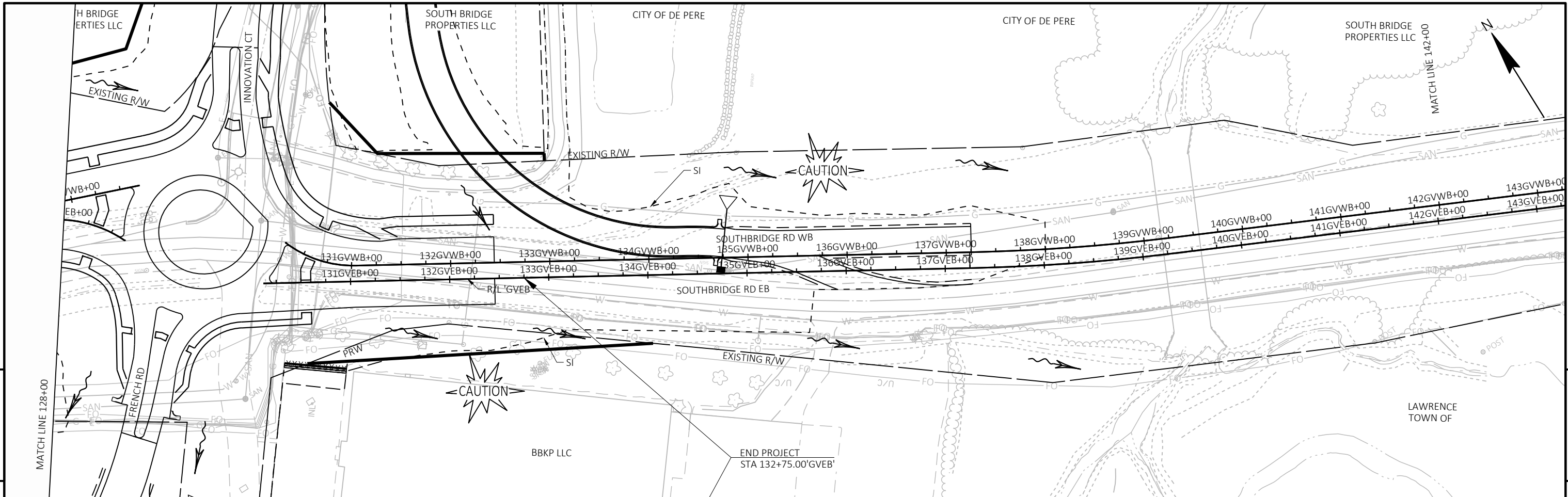
R/W PROJECT: R/W PROJ NO



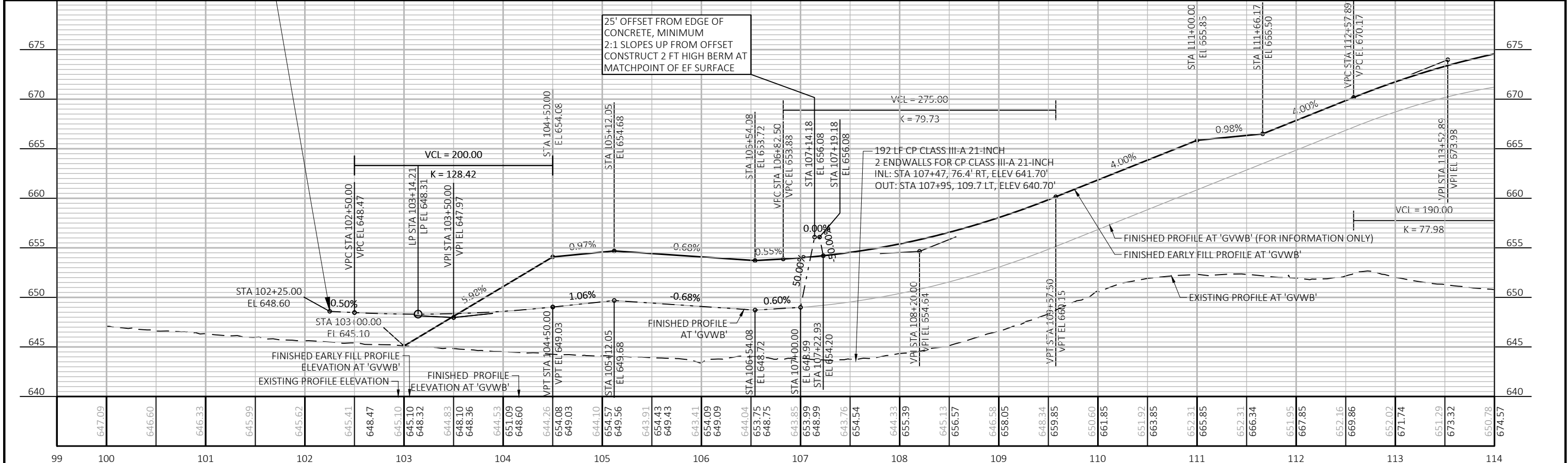
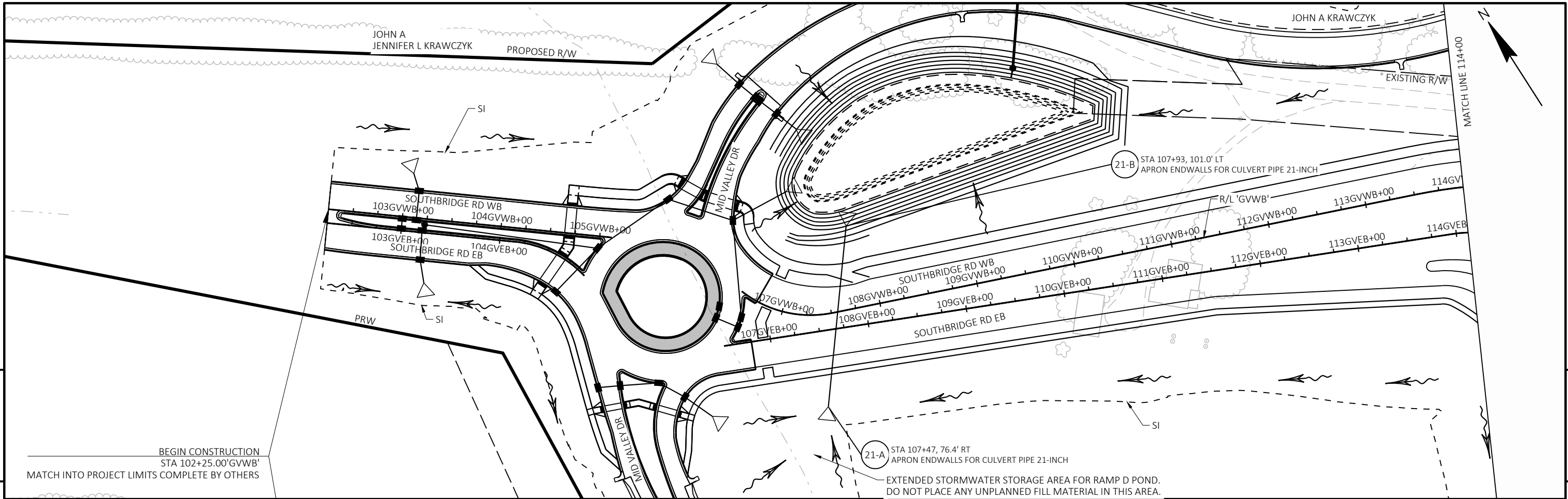
PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE:	SOUTHBRIDGE RD EB	SHEET	E
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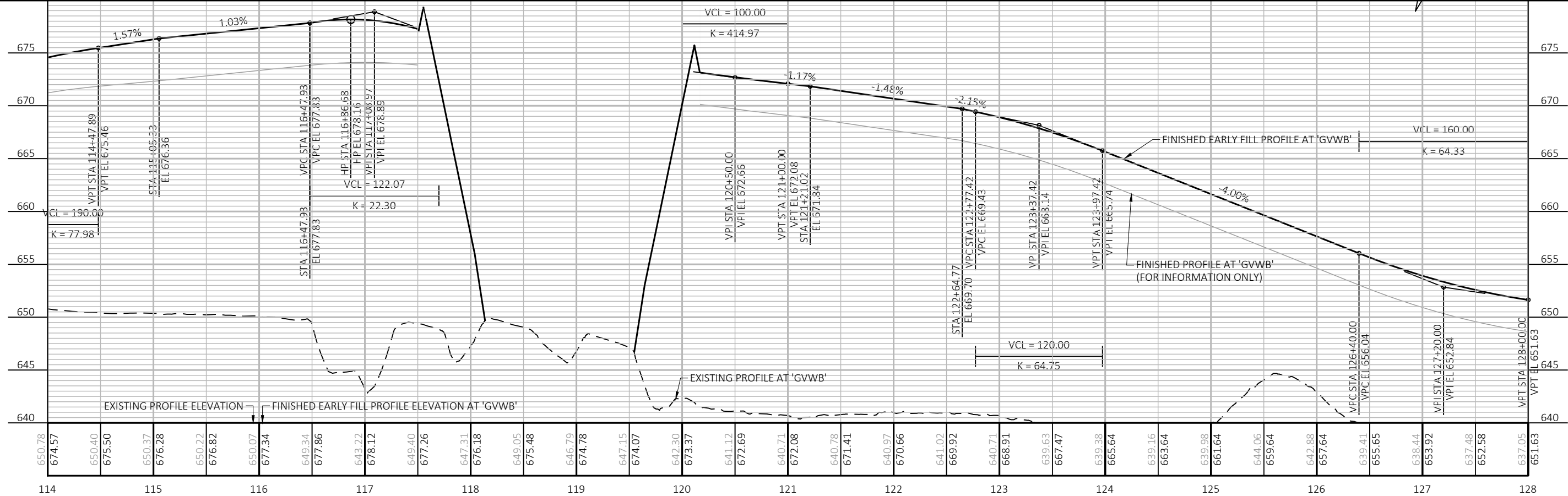
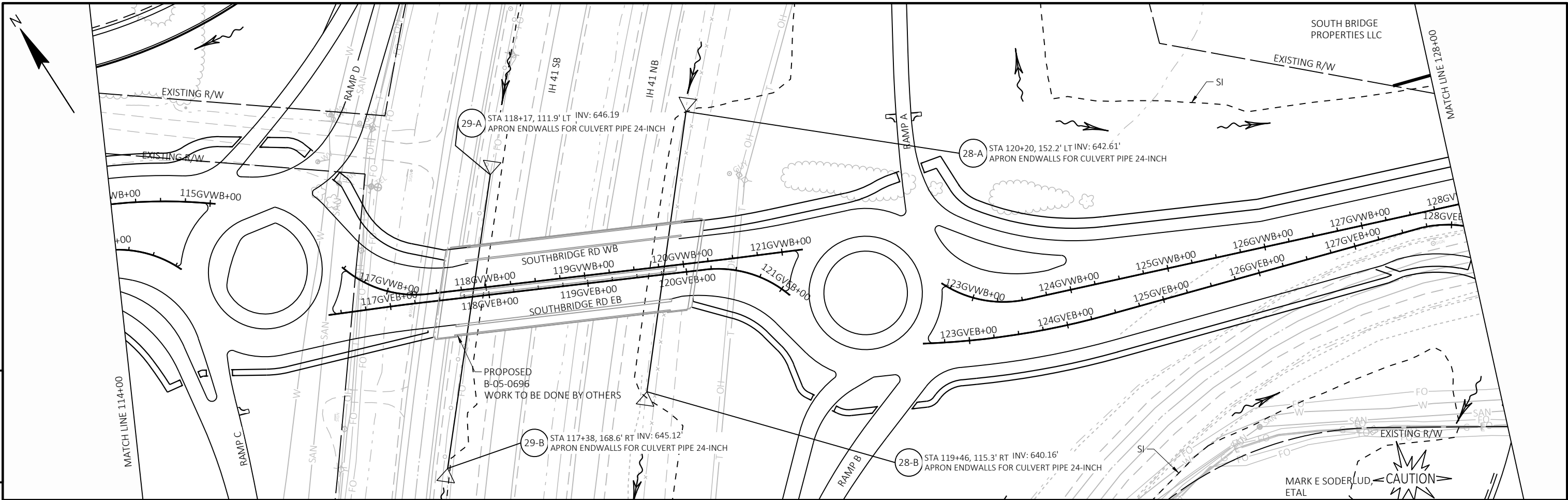
PROJECT NO:	1130-68-81	HWY:	IH 41 - SOUTHBRIDGE	COUNTY:	BROWN	PLAN AND PROFILE:	SOUTHBRIDGE RD EB	SHEET	E
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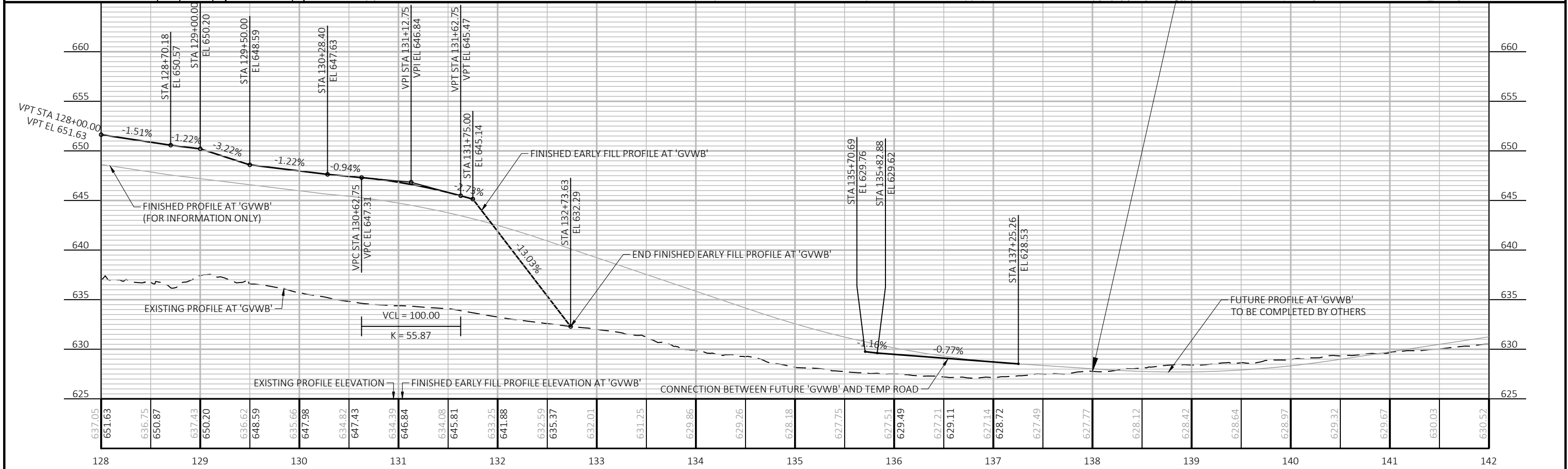
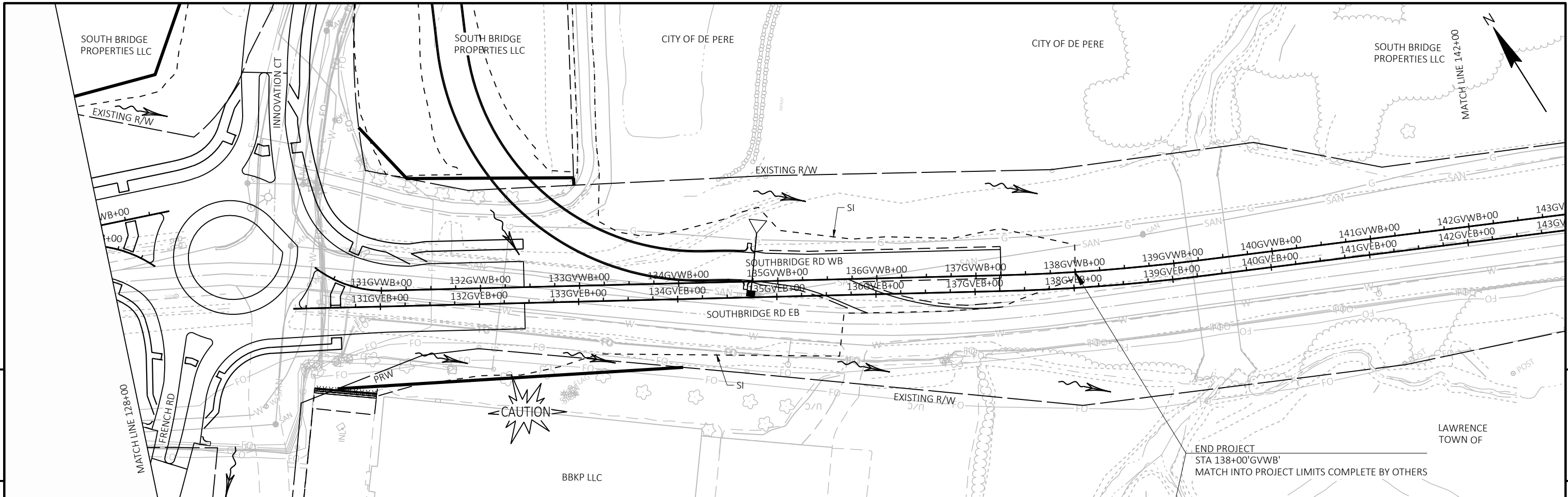
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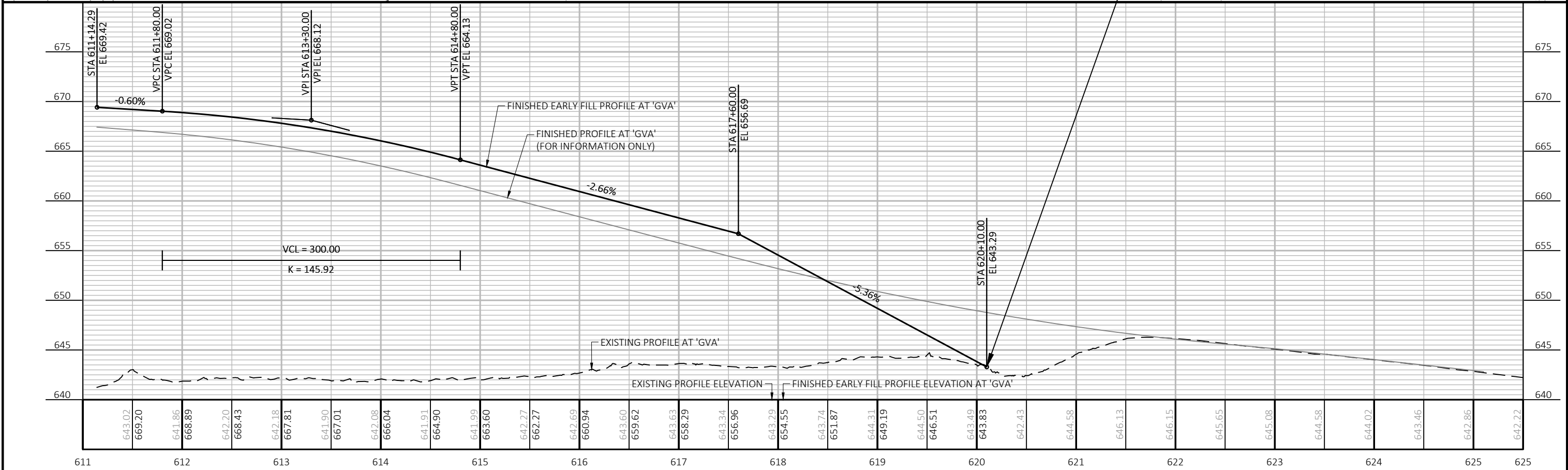
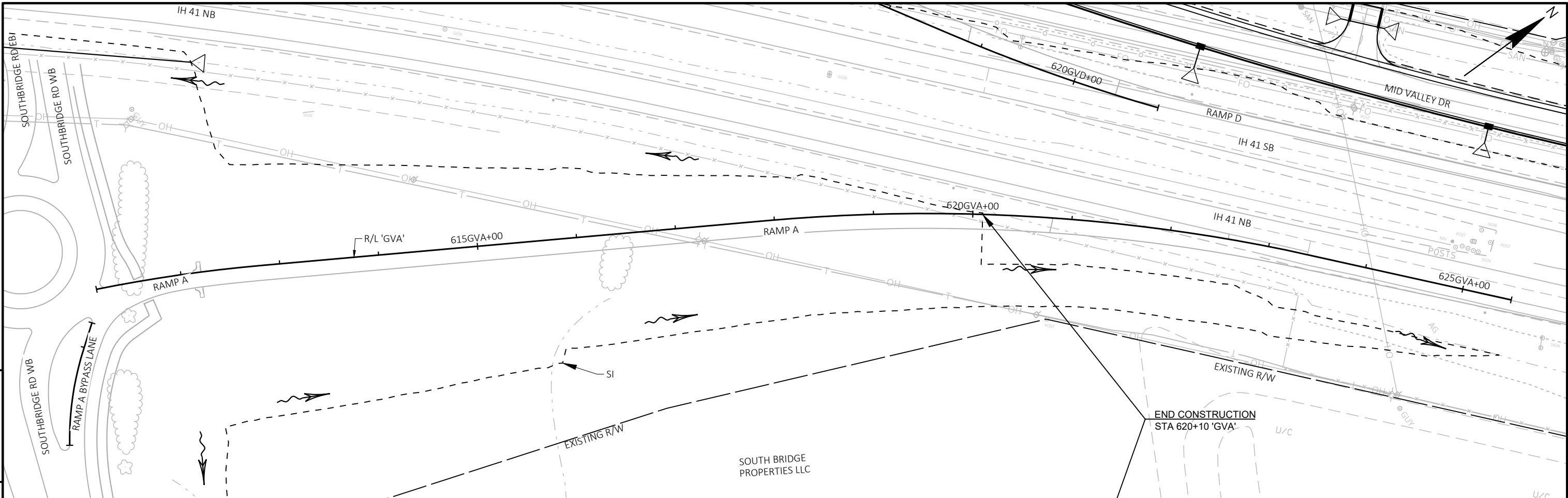
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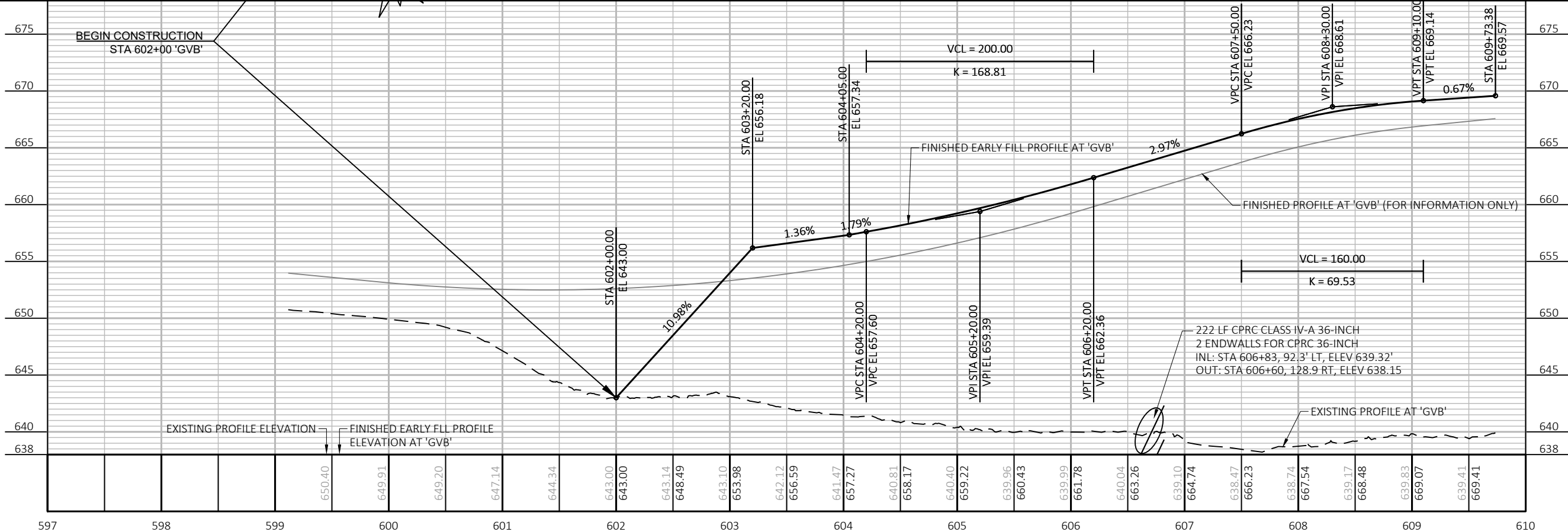
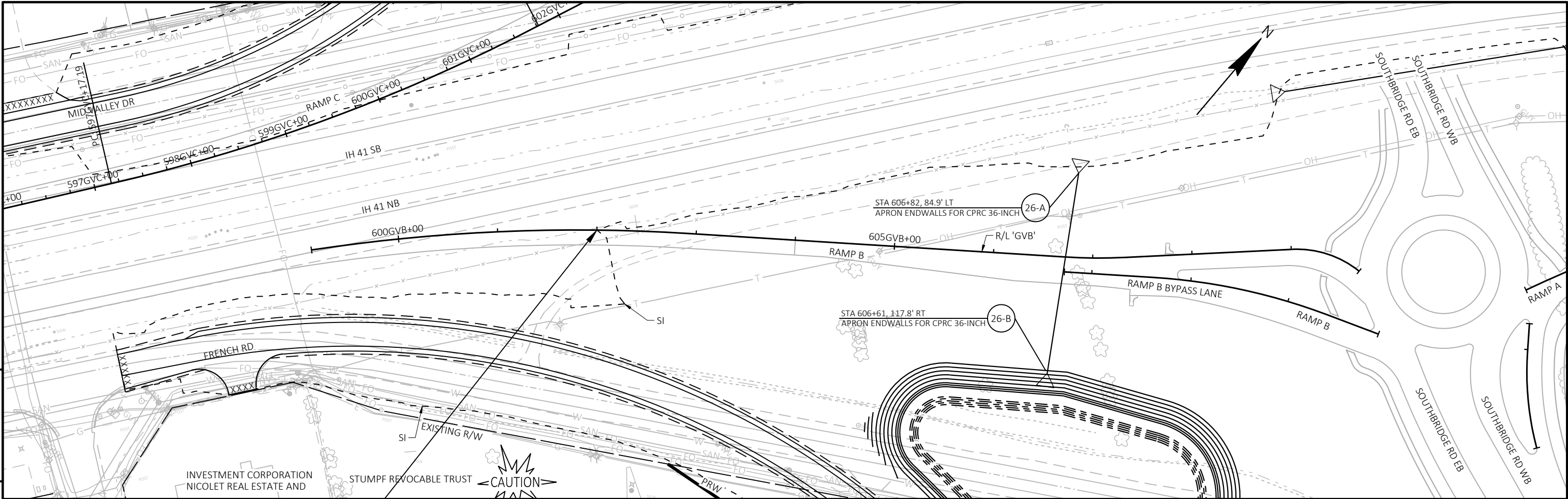
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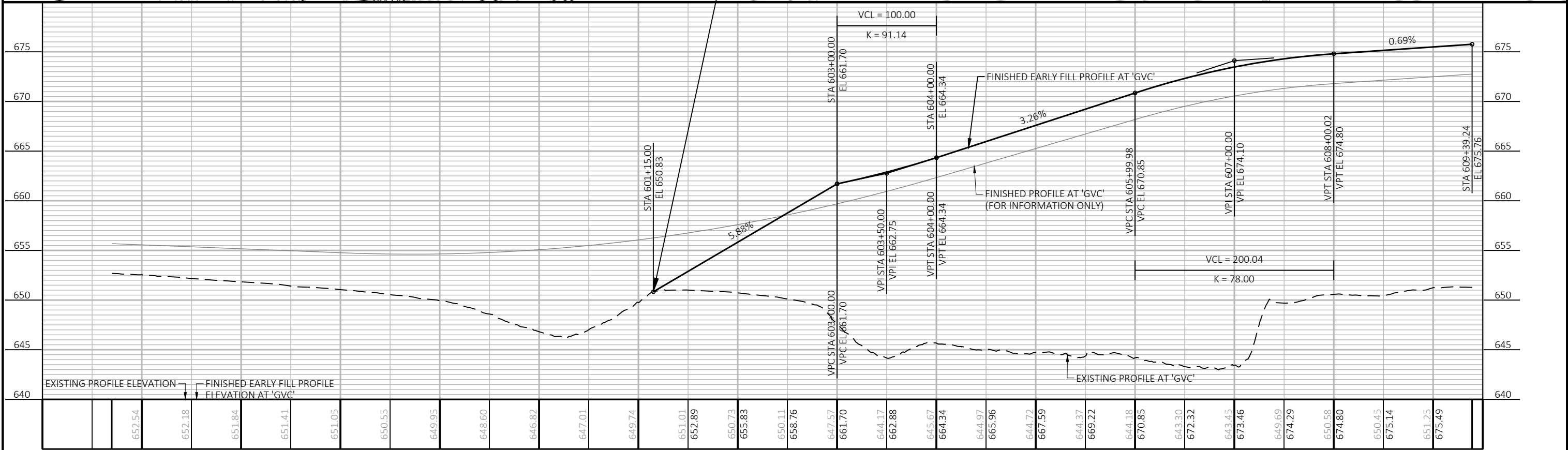
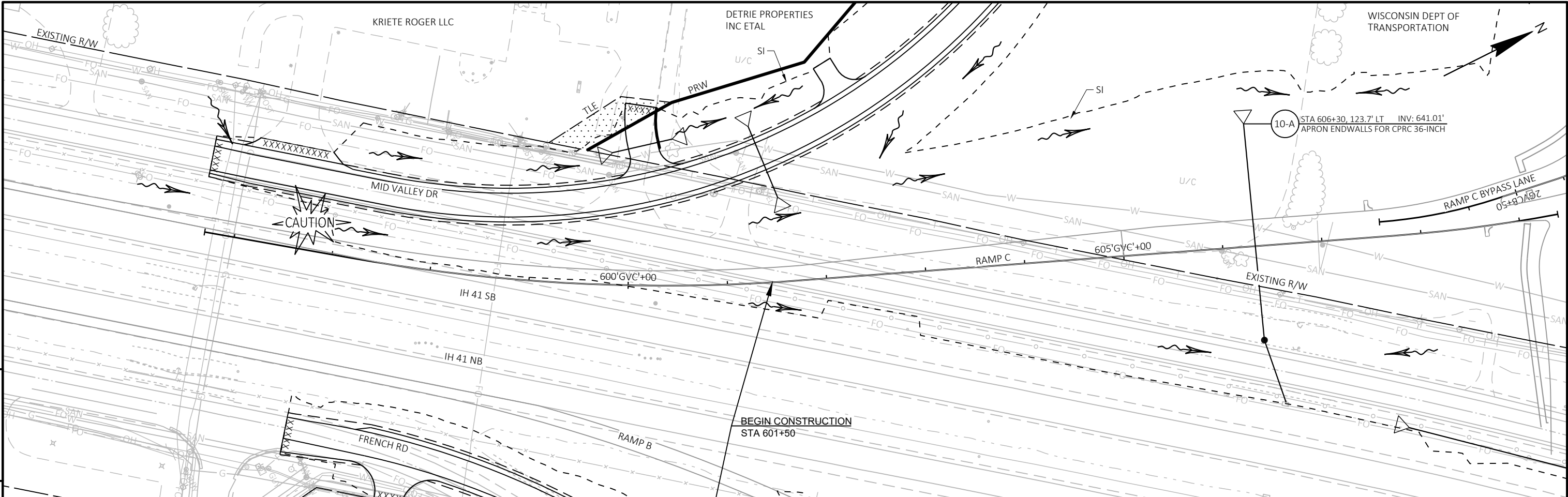
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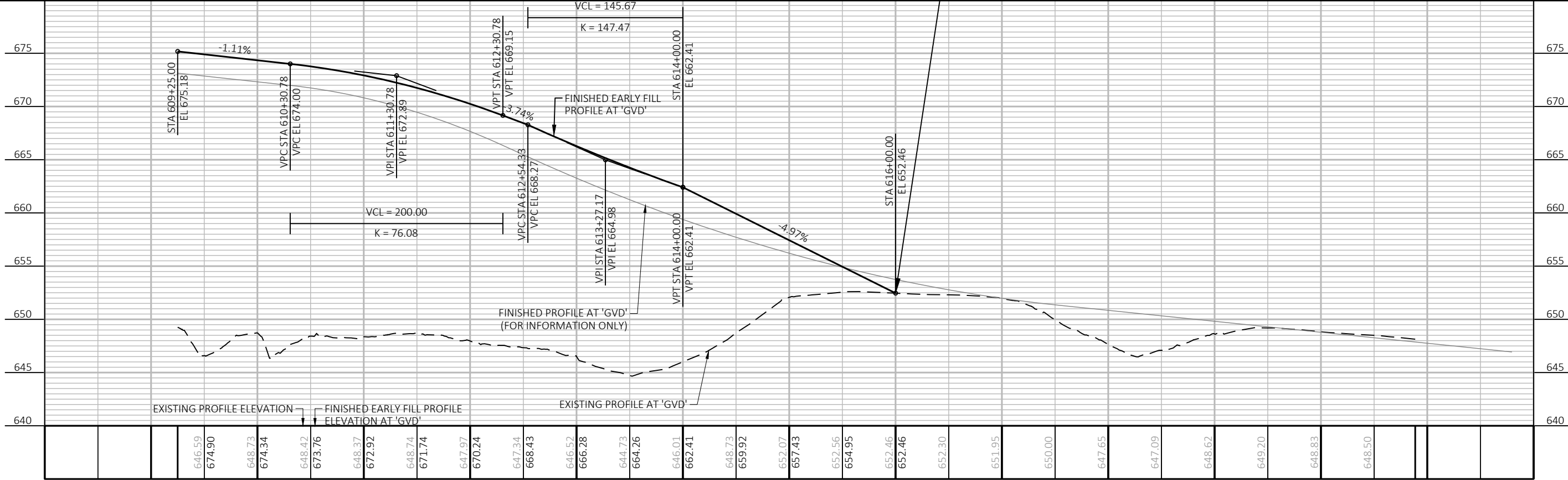
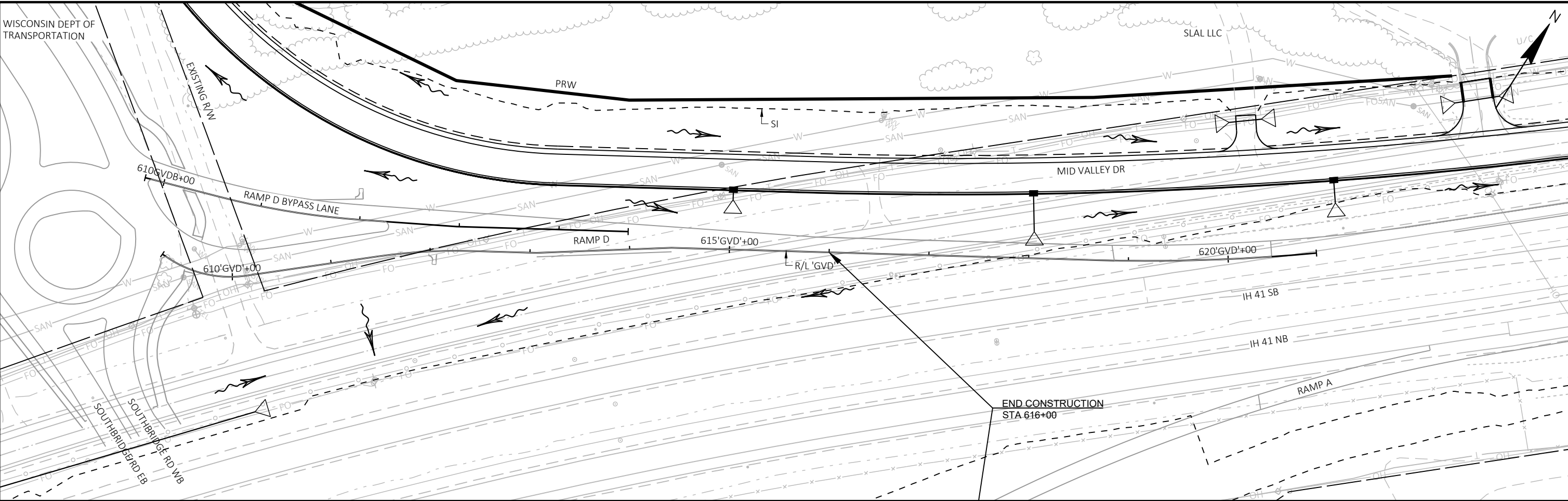


PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE:	SOUTHBRIDGE RD - RAMP A	SHEET	5
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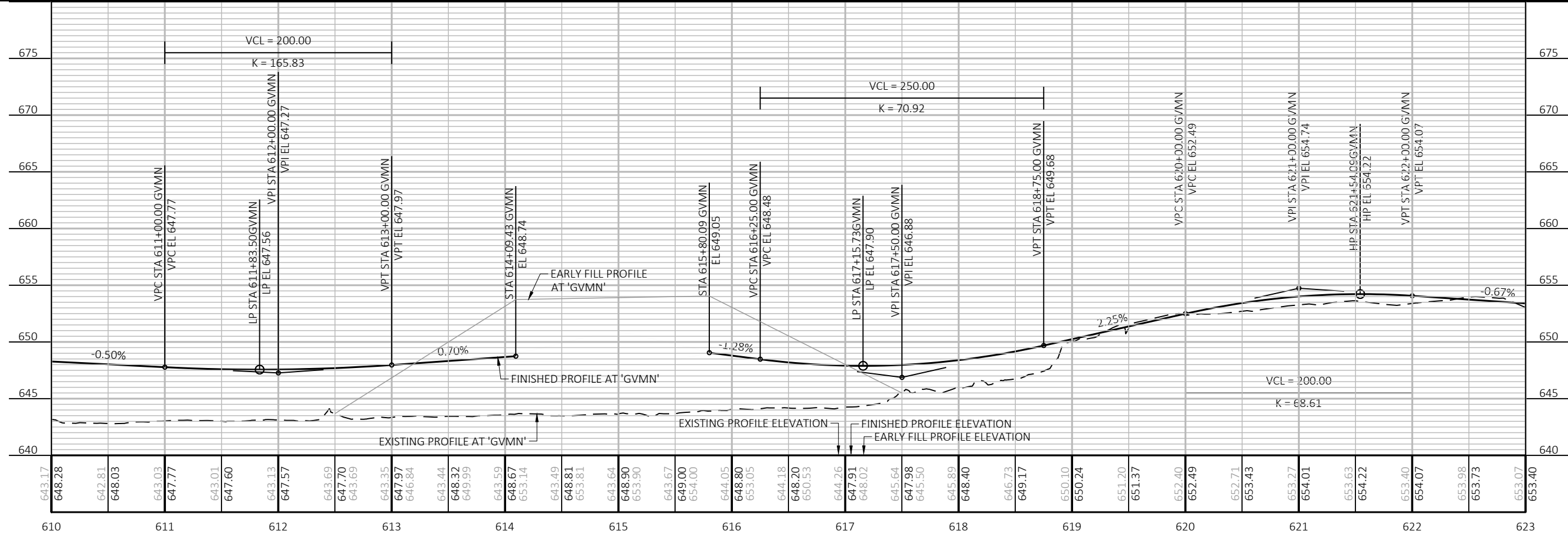
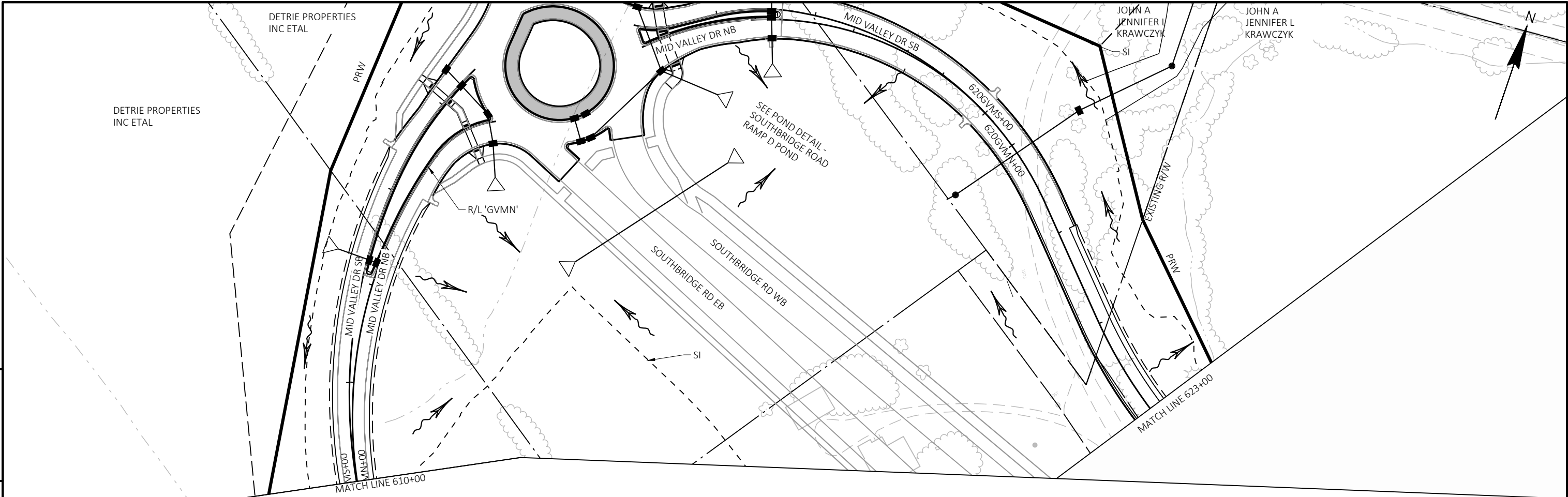


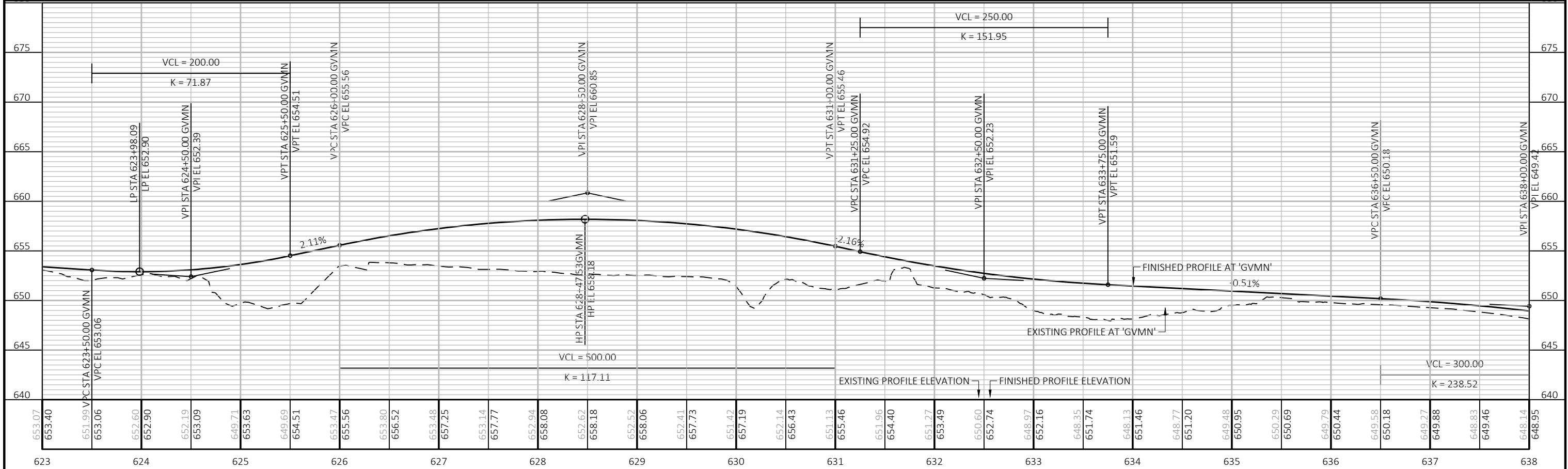
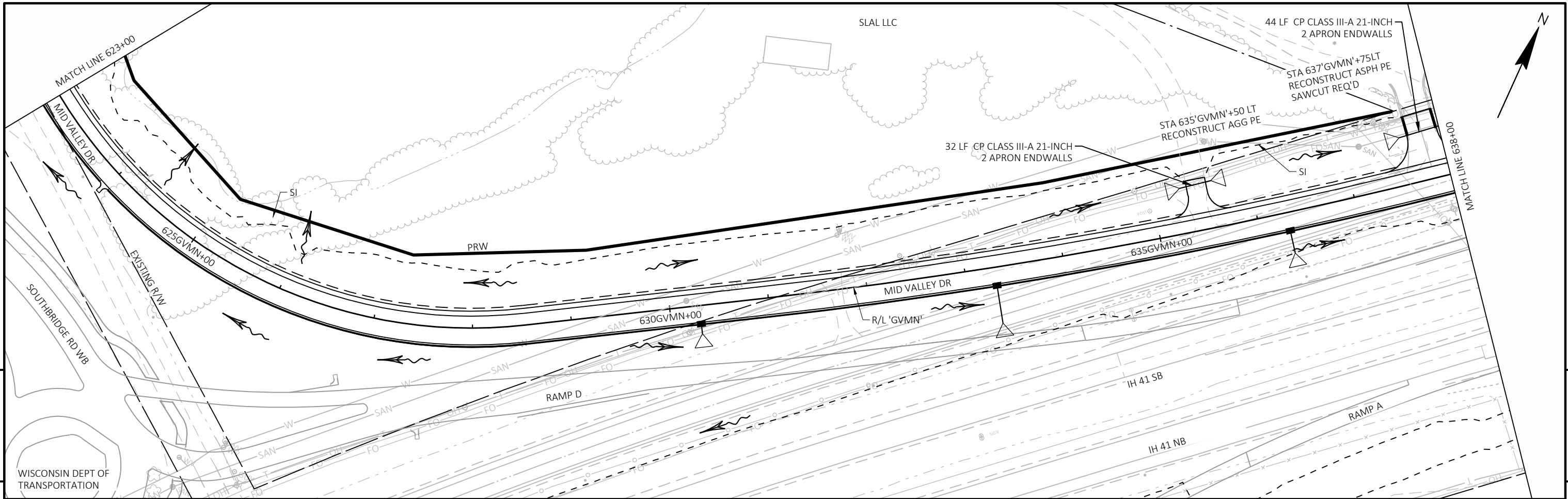
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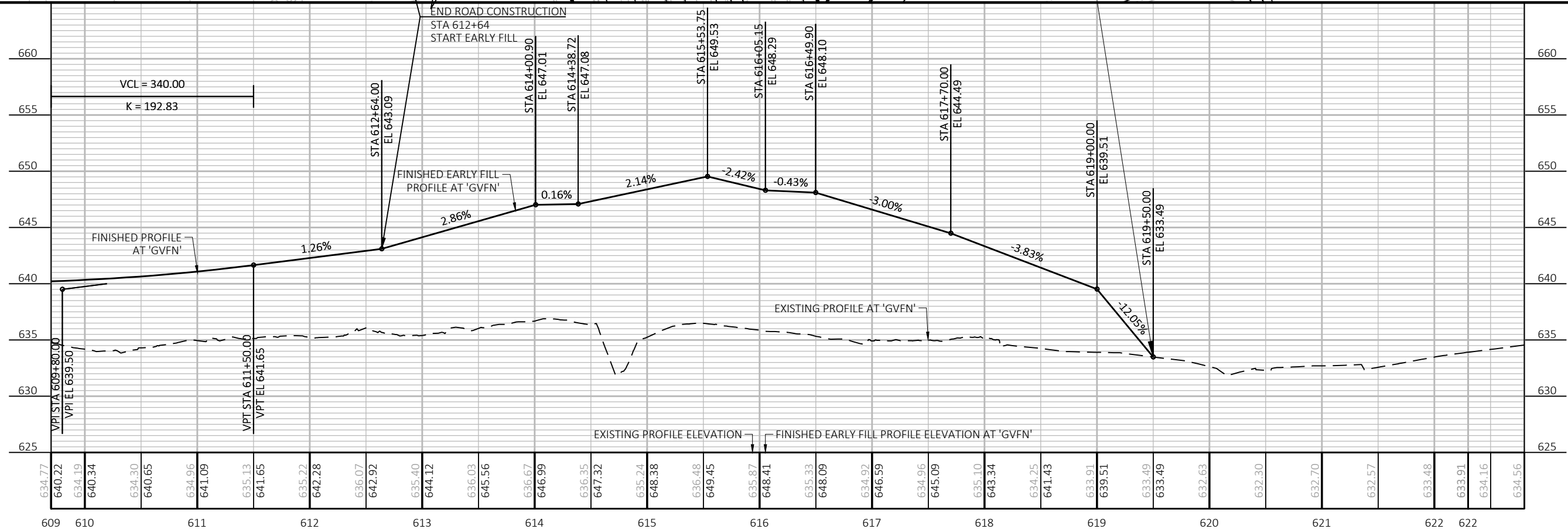
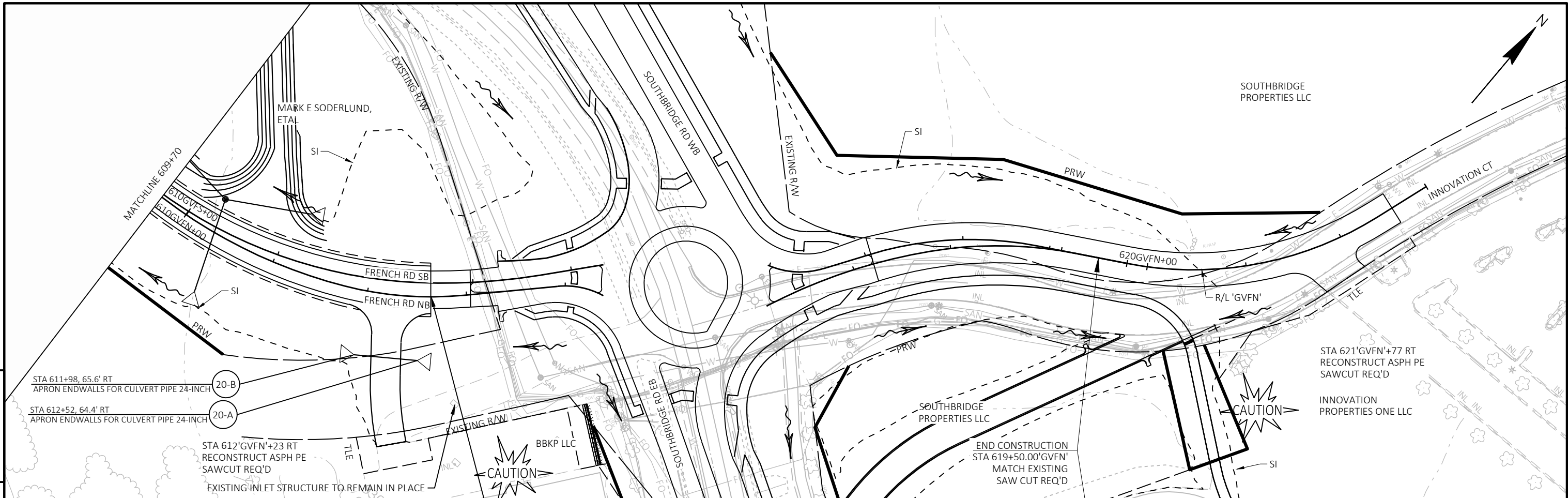


PROJECT NO:	1130-68-81	HWY:	IH 41 - SOUTHBRIDGE	COUNTY:	BROWN	PLAN AND PROFILE:	SOUTHBRIDGE RD - RAMP D	SHEET	5
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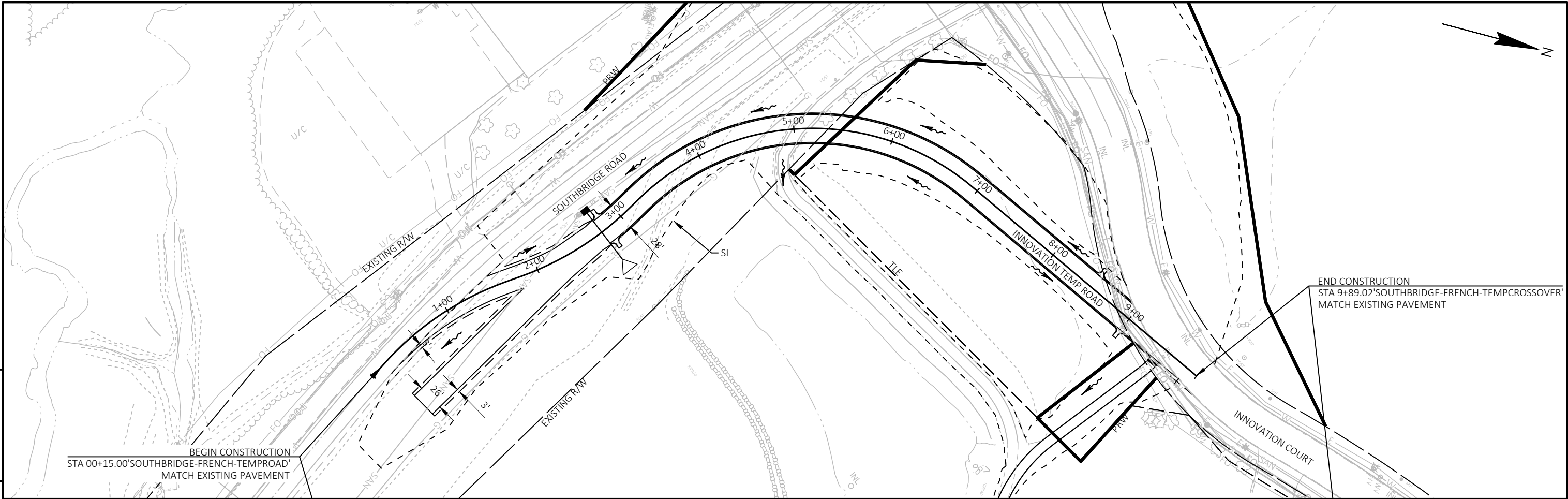


PROJECT NO:	1130-68-81	HWY:	IH 41 - SOUTHBRIDGE	COUNTY:	BROWN	PLAN AND PROFILE:	SOUTHBRIDGE RD - MID VALLEY DR NB	SHEET	5
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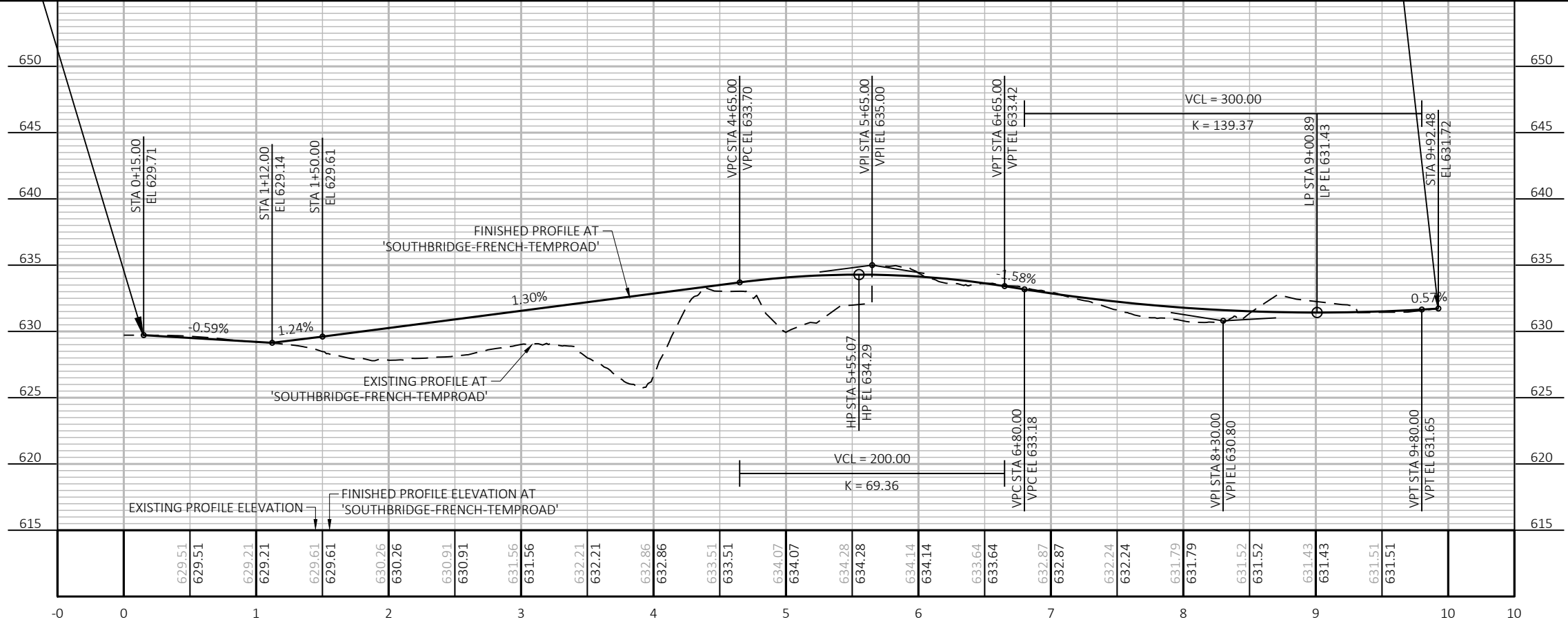


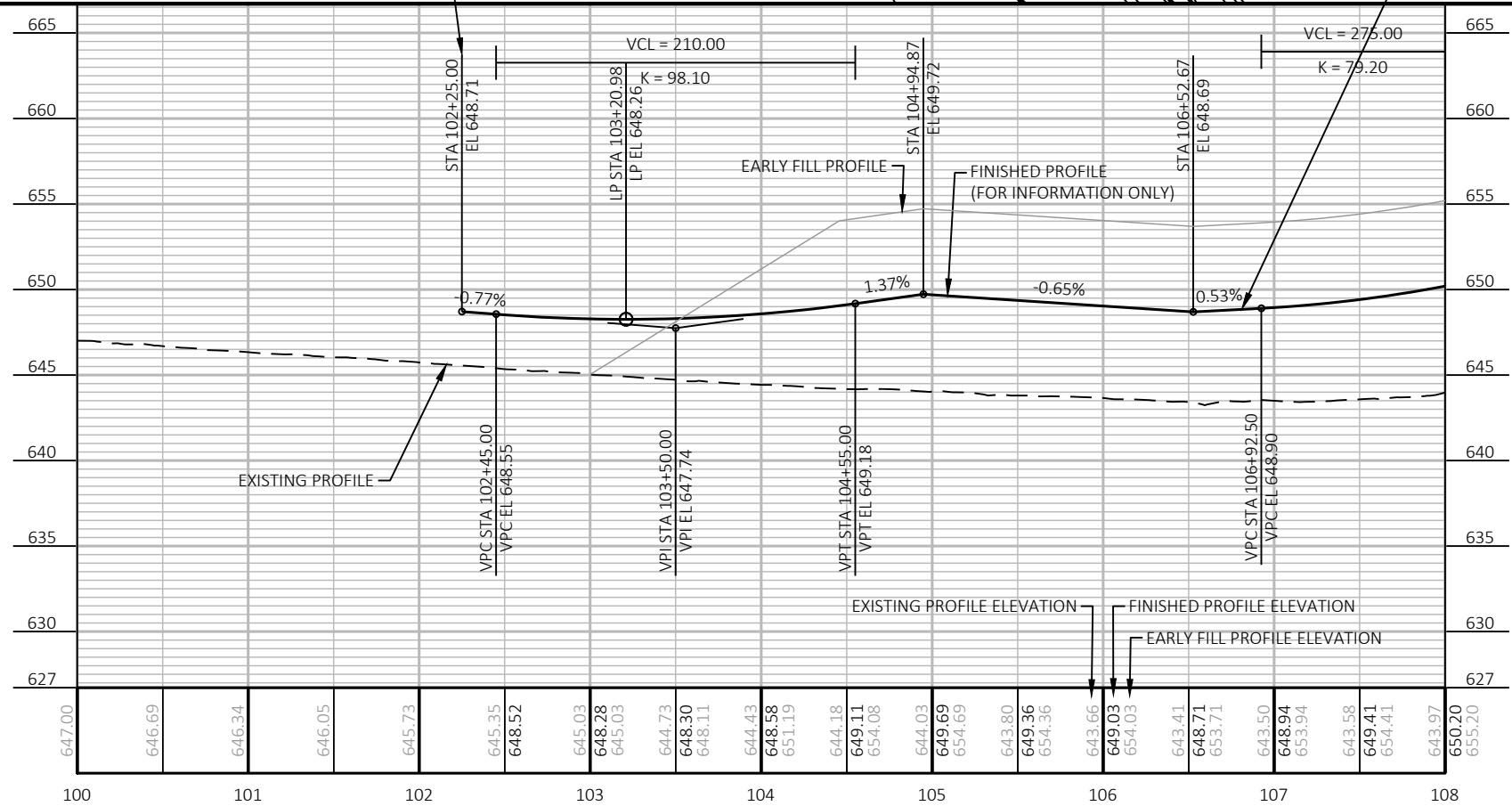
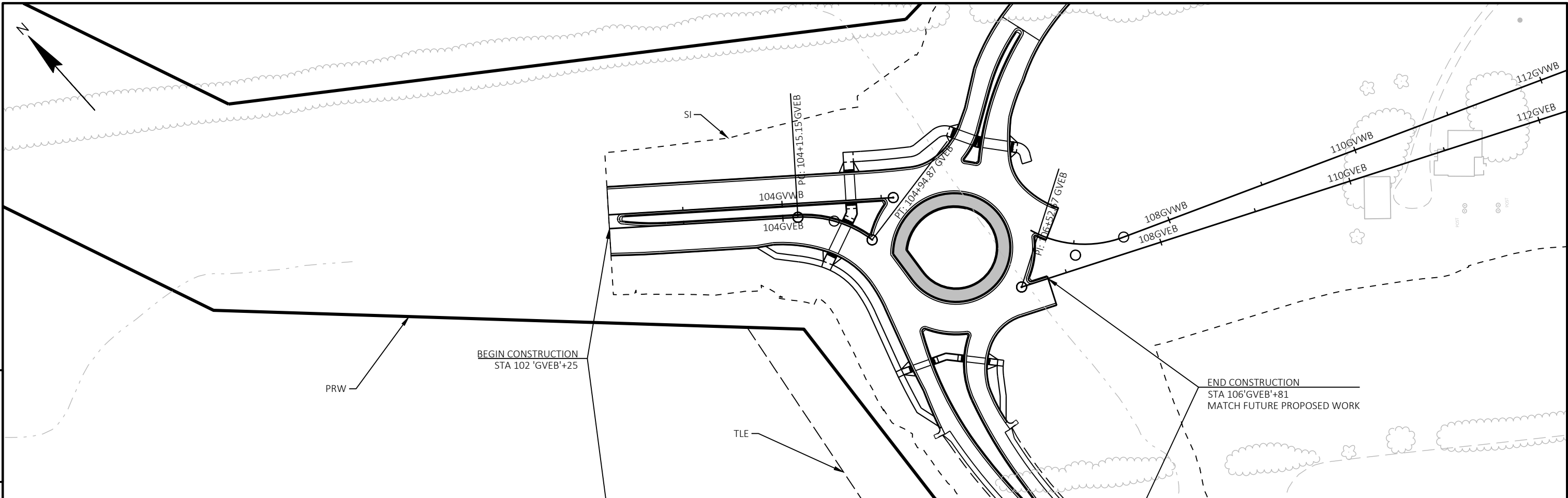
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE: FRENCH RD NB	SHEET E
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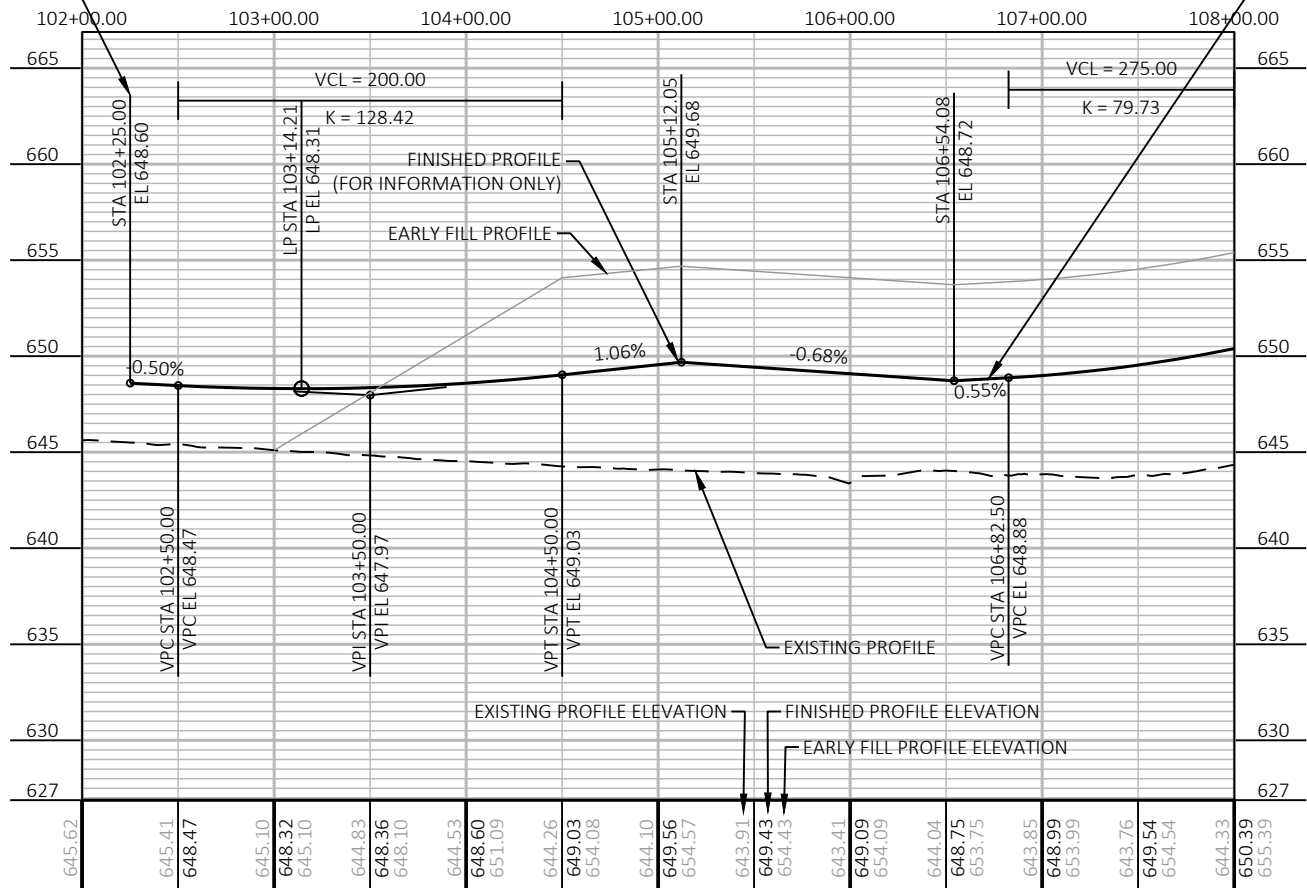
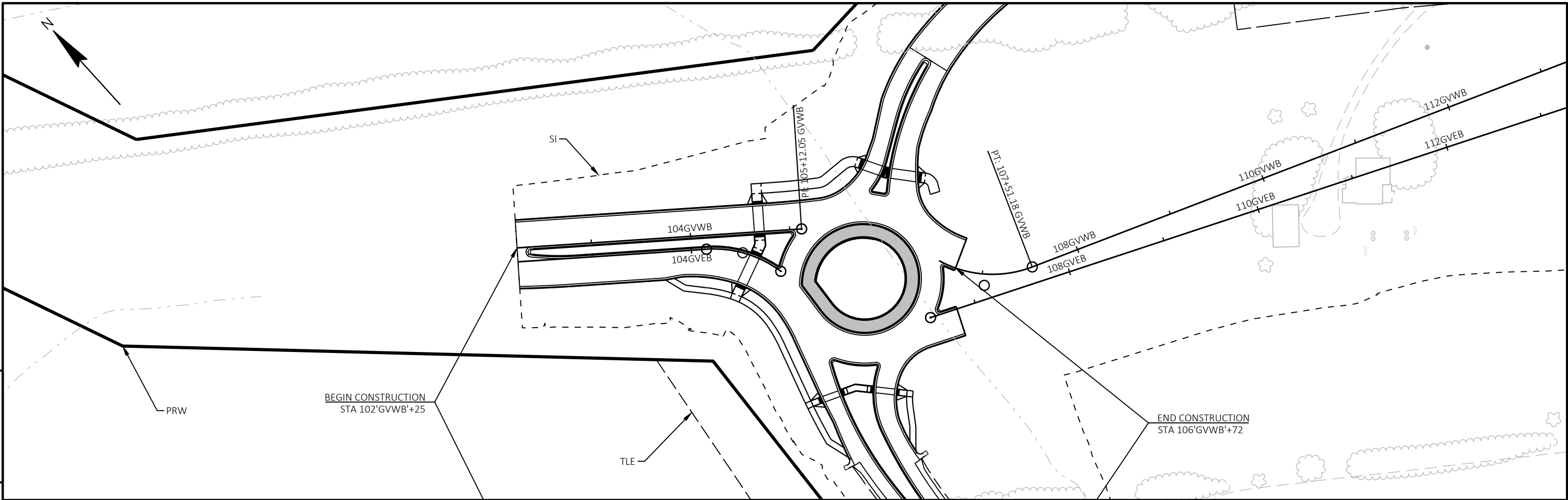
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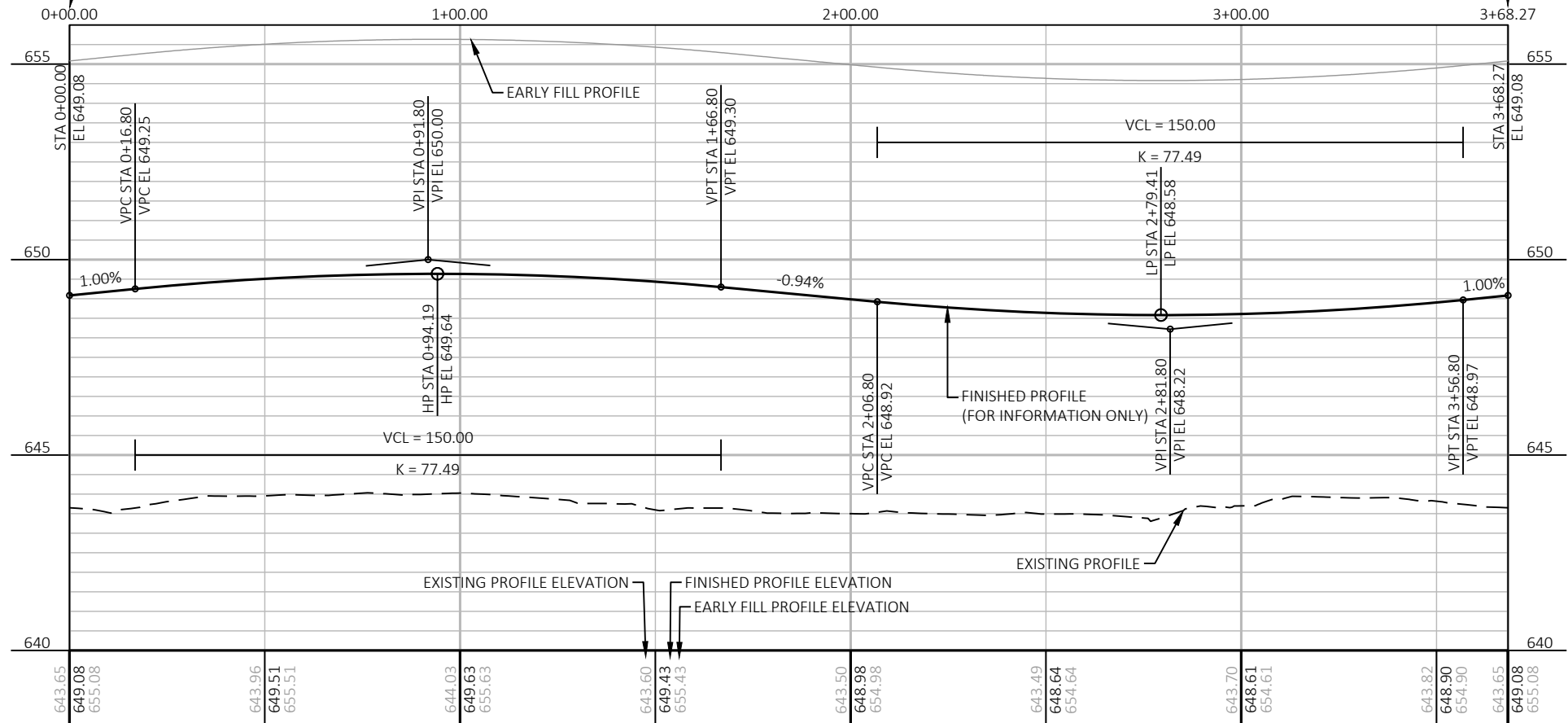
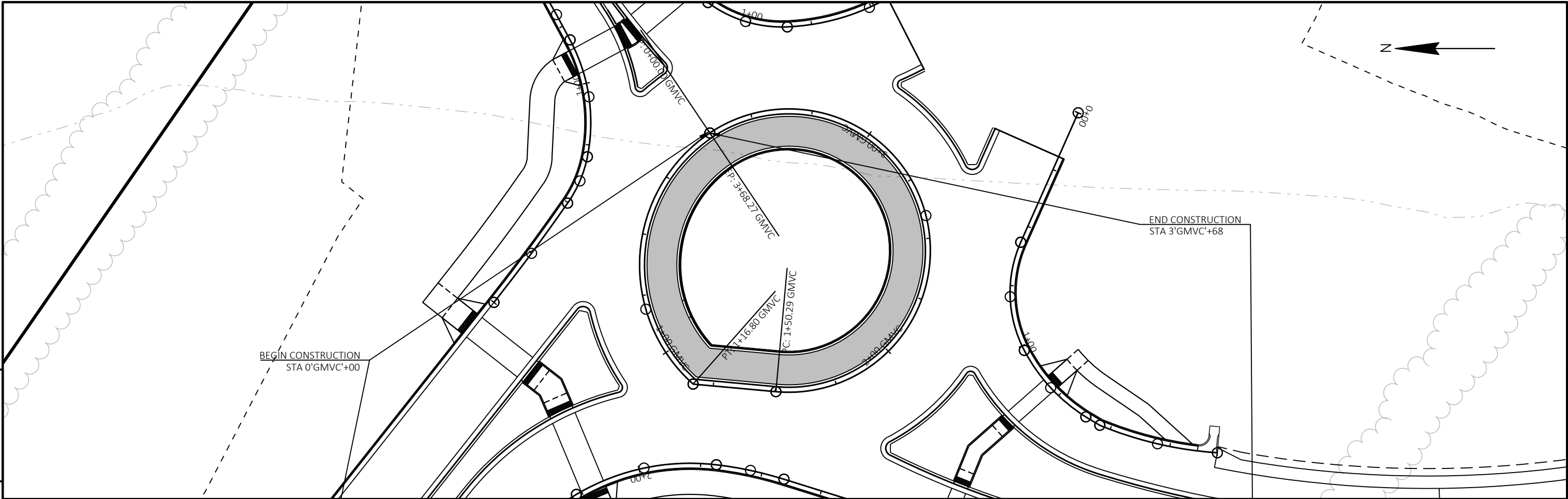
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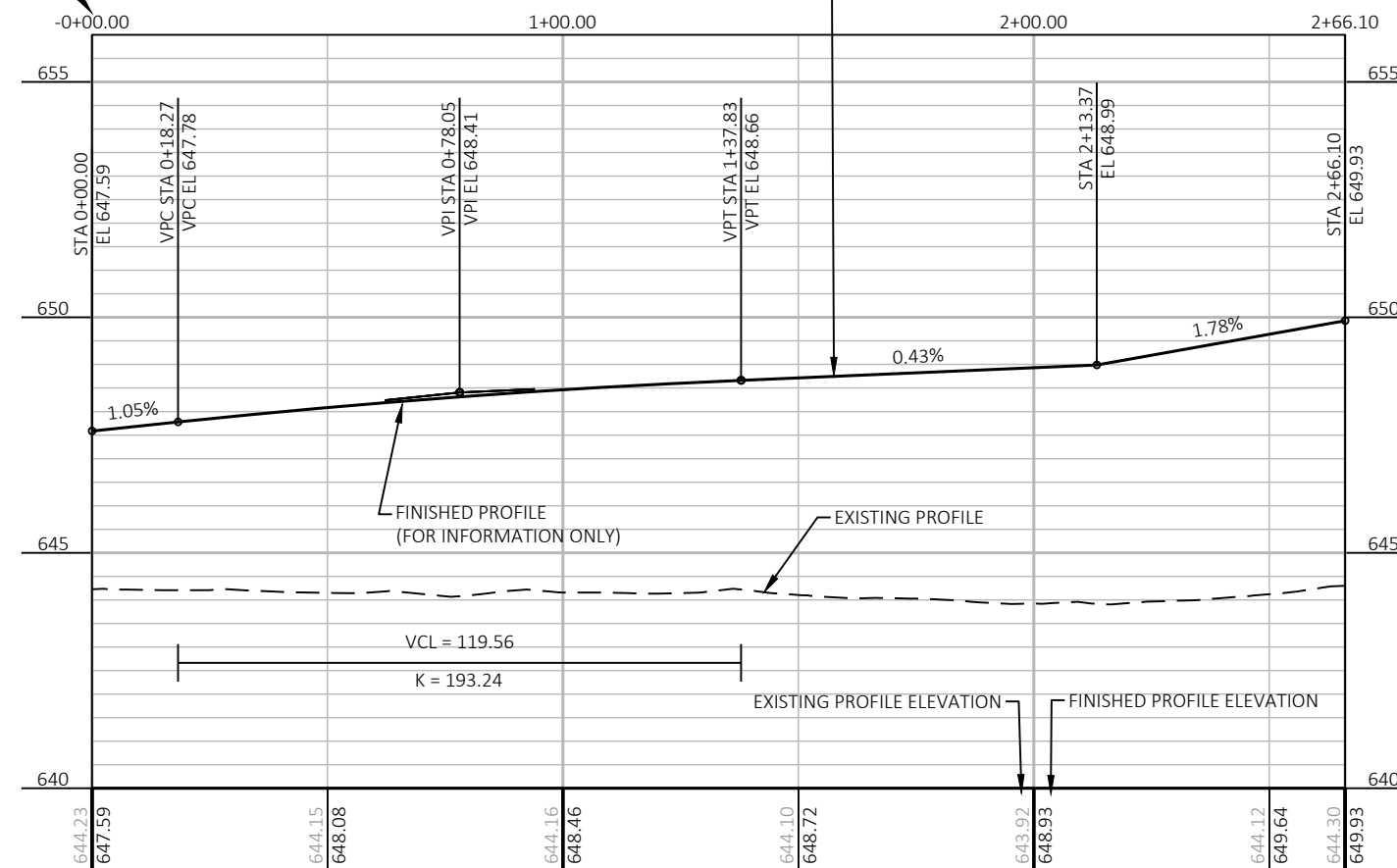
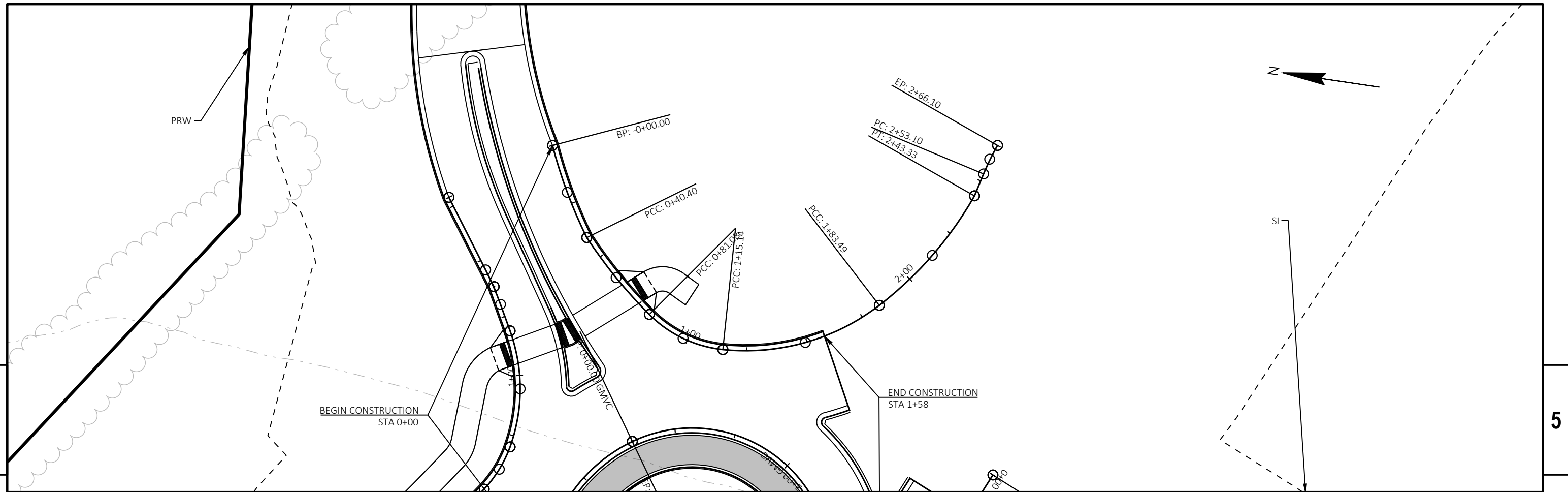




PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE: SOUTHBRIDGE WB RD - FINISHED	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE: SOUTHBRIDGE MID VALLEY RAB - CIR	SHEET	E
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PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

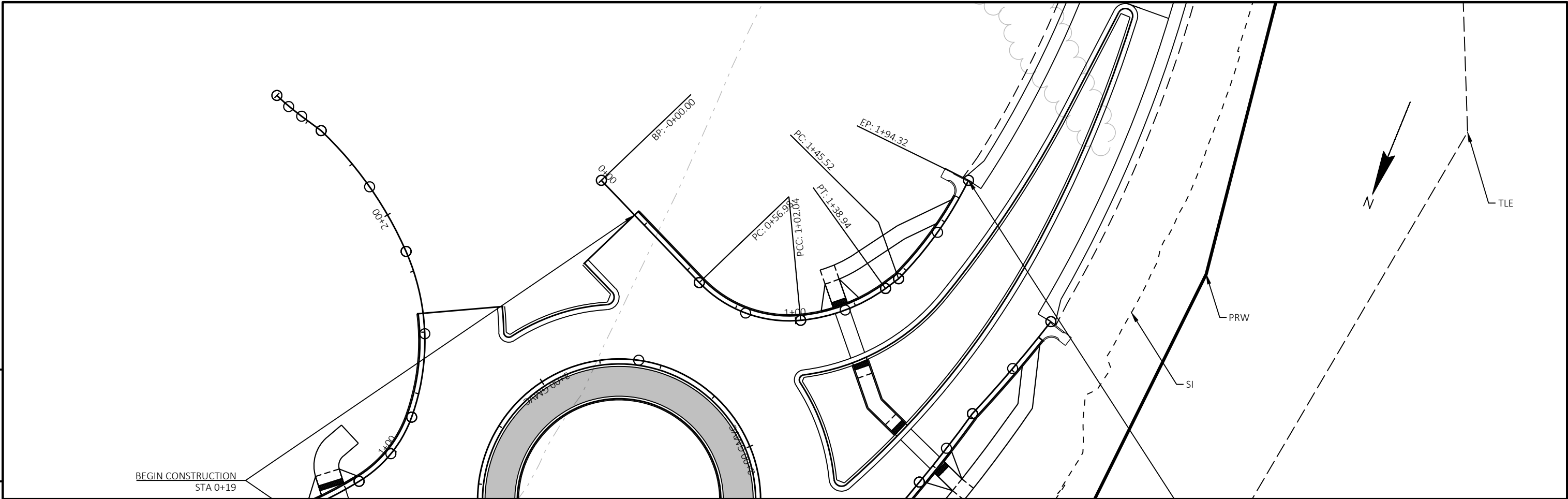
COUNTY: BROWN

PLAN AND PROFILE:	MID VALLEY RAB - NE CURB RETURN
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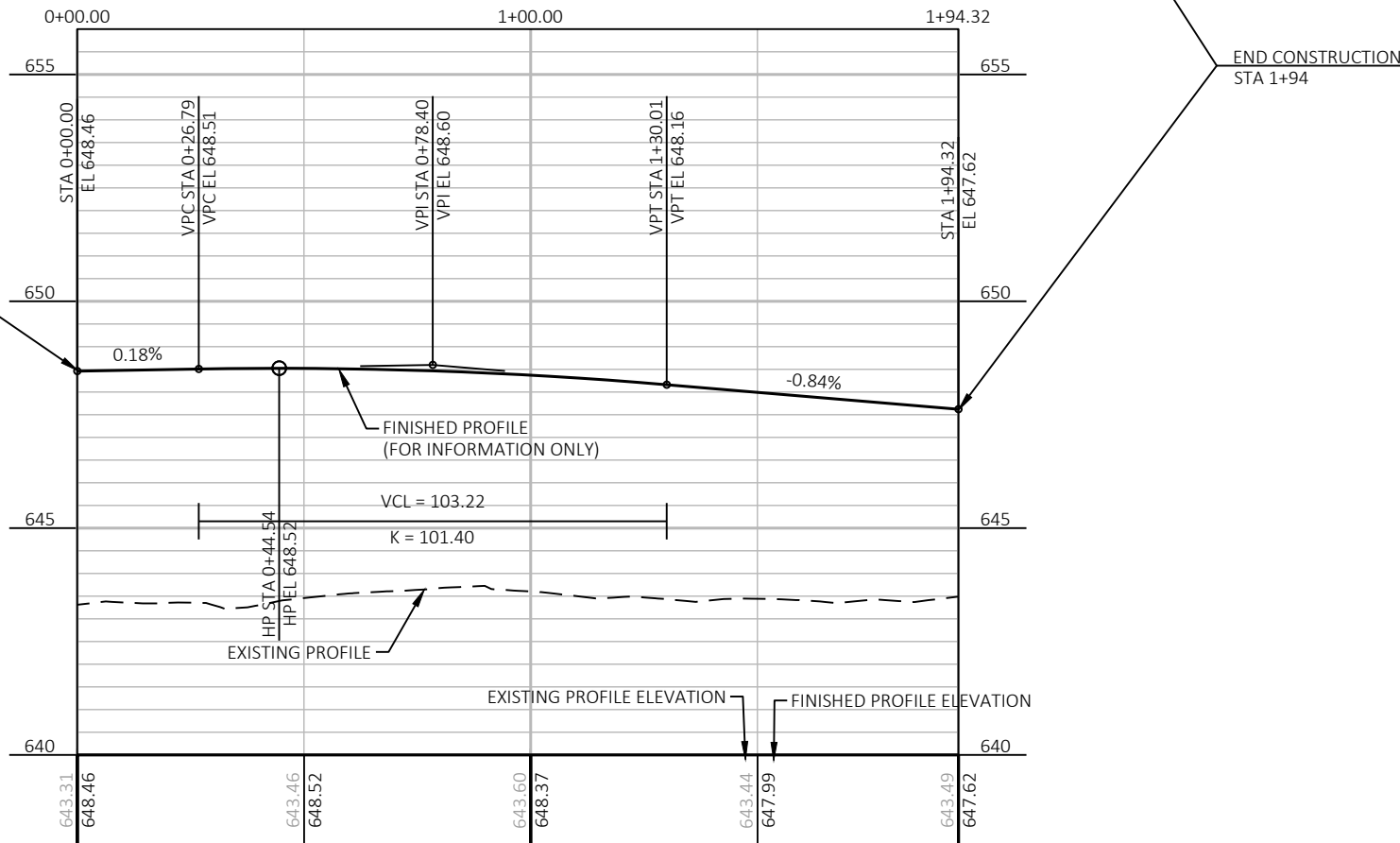
SHEET

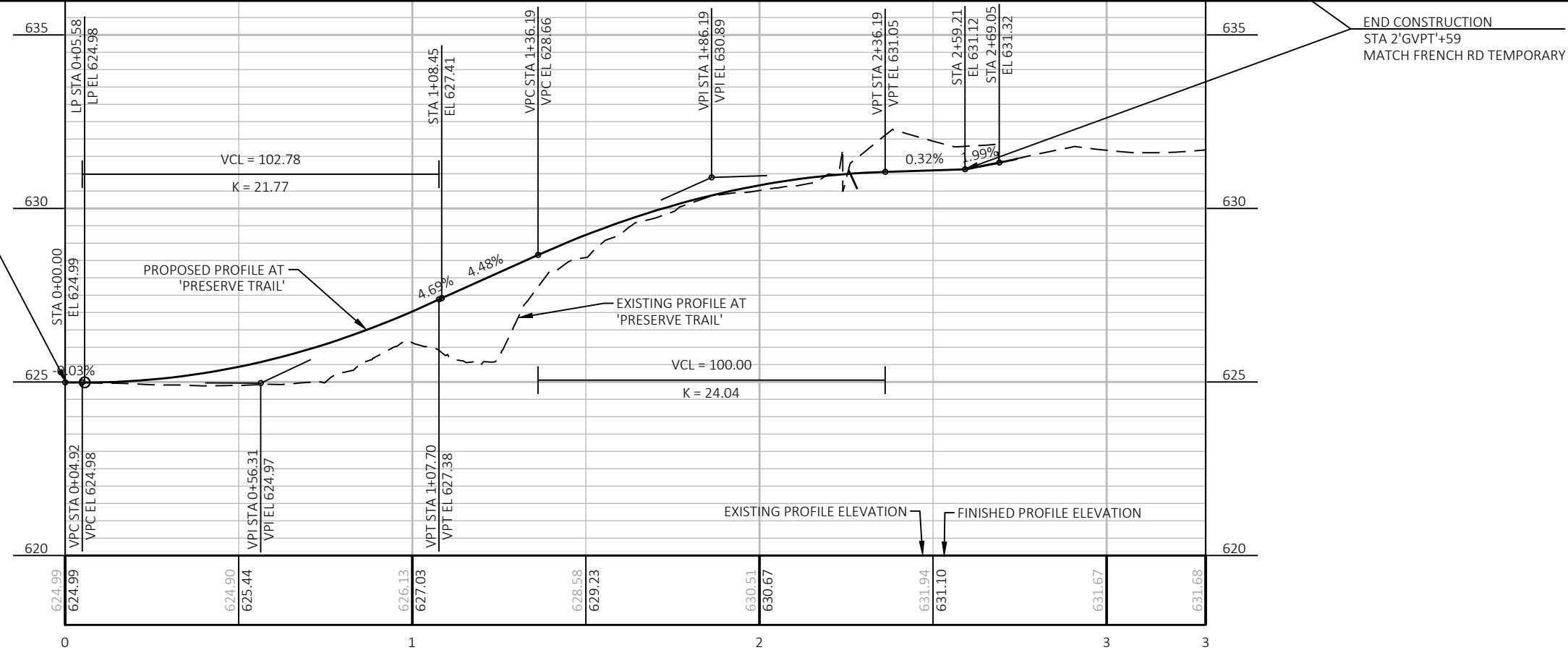
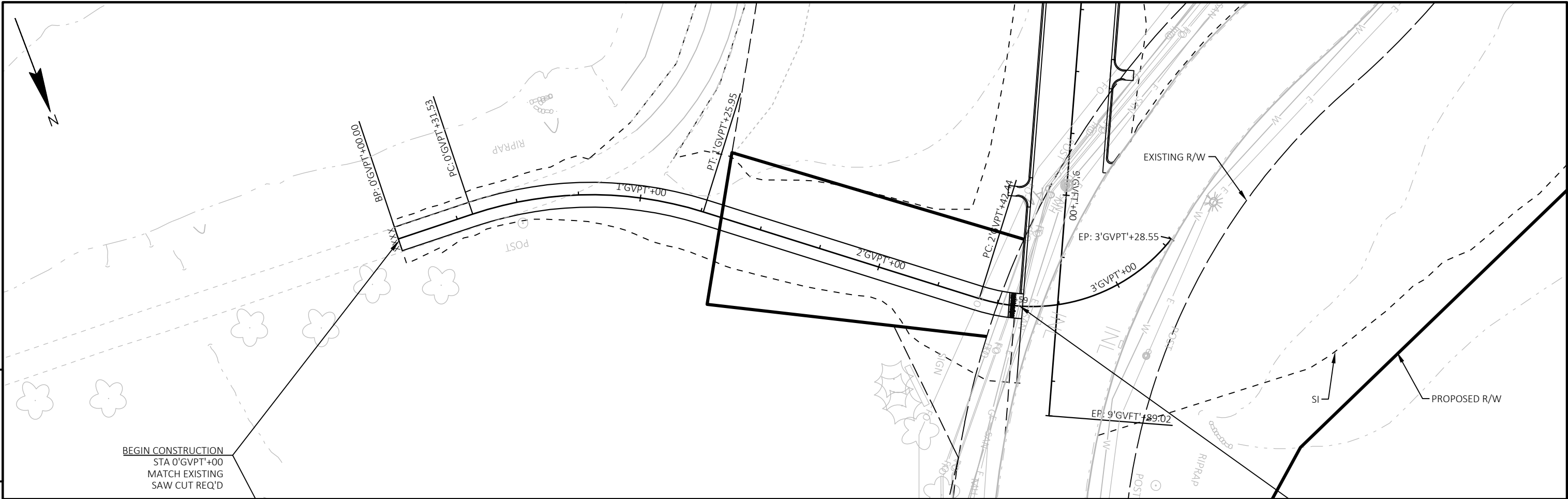
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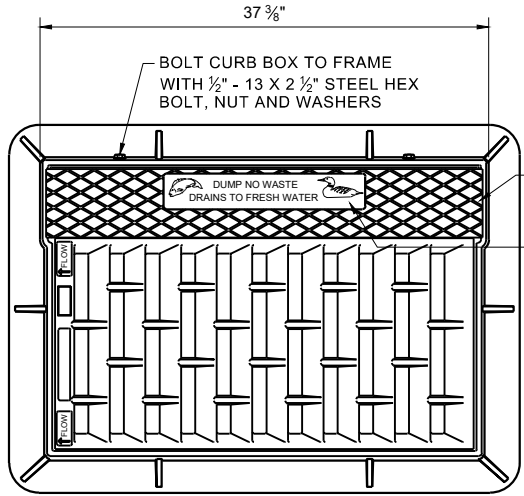
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	PLAN AND PROFILE: PRESERVE TRAIL	SHEET	E
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Standard Detail Drawing List

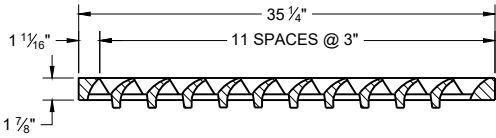
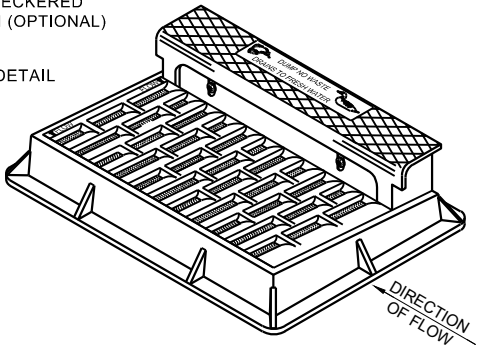
08A05-20A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-20B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-20C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-20D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT 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
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
10A18-05A	LUMINAIRE ARMS, SINGLE MEMBER 6-INCH CLAMP
11B02-02	CONCRETE MEDIAN NOSE
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C19-03	HMA LONGITUDINAL JOINTS
14A02-01	TREE PLANTING DETAIL
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-15D	ROUNDABOUT ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

Standard Detail Drawing List

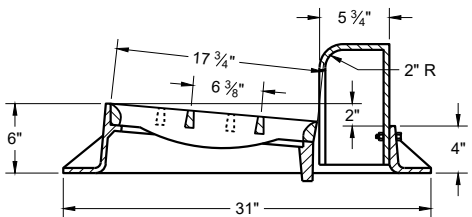
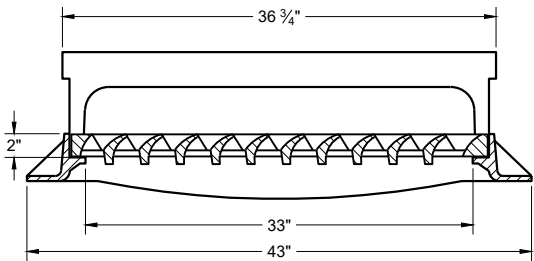
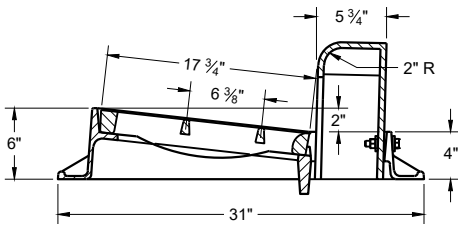
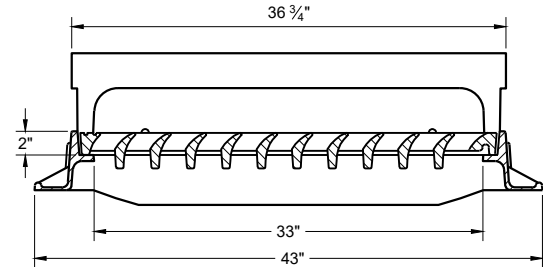
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D29-06	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD



NOTE: EITHER CASTING IS ACCEPTABLE

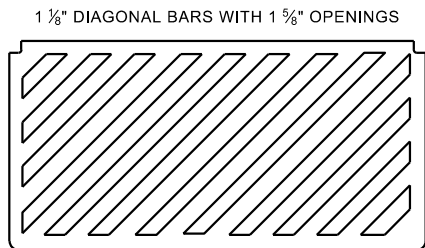


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"



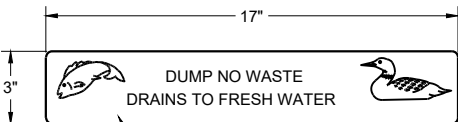
TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

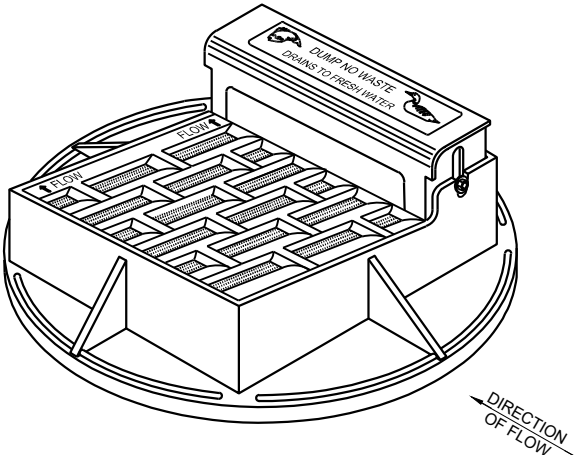


SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

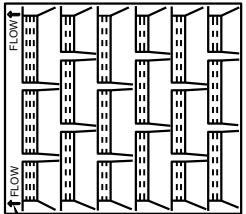


LOGO DETAIL

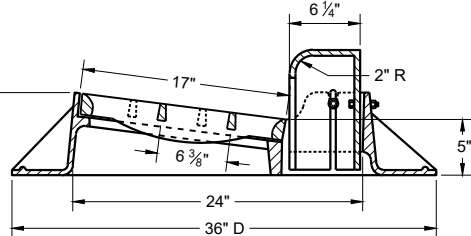
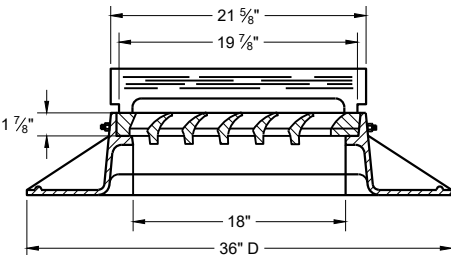
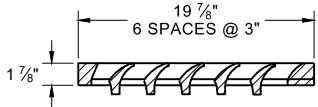


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

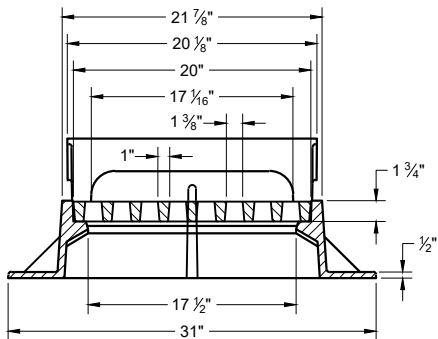
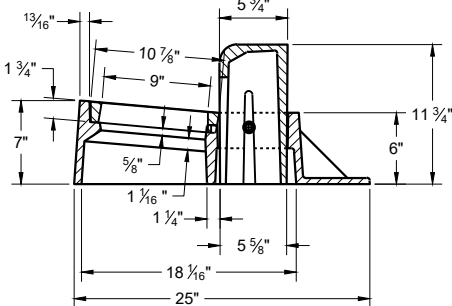
NOTE: EITHER CASTING IS ACCEPTABLE



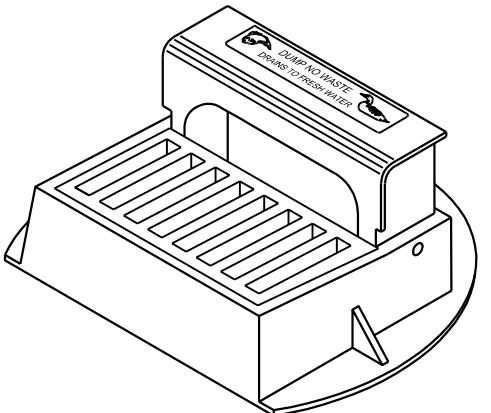
DIRECTION OF FLOW ARROWS



TYPE "A"



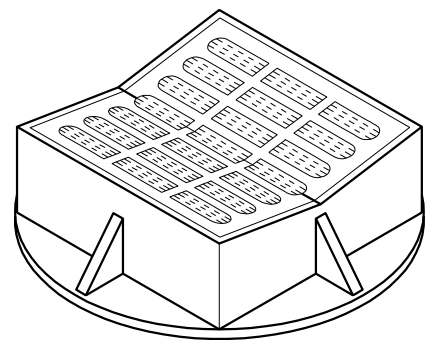
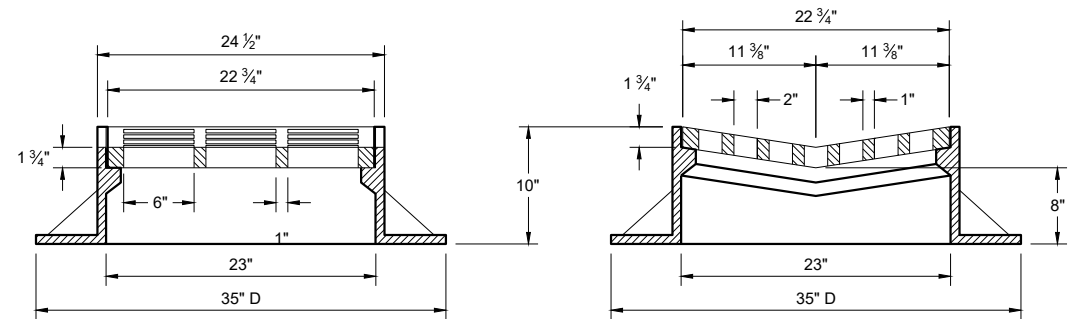
TYPE "Z"



**INLET COVERS
TYPES A, H, A-S, H-S AND Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

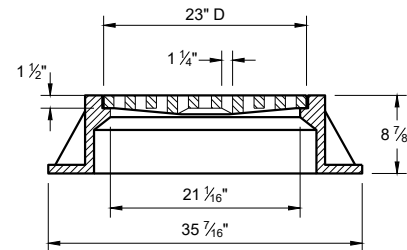
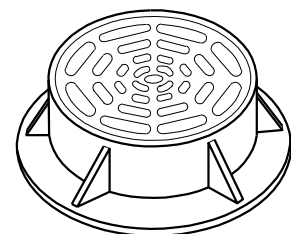
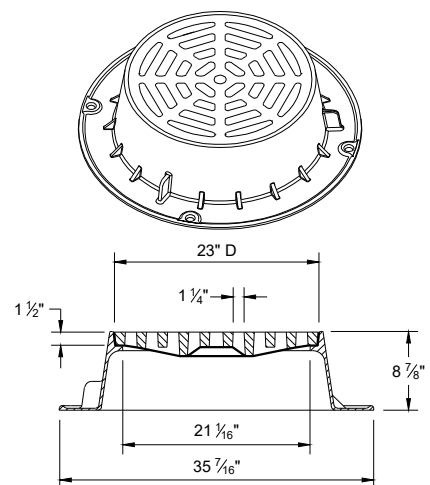
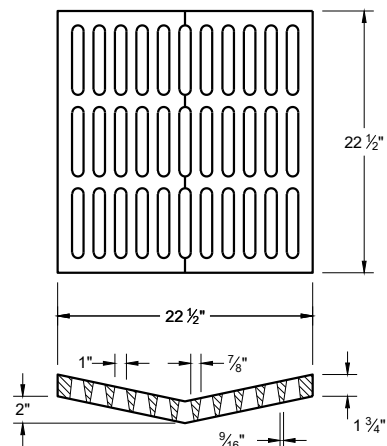
APPROVED
July 2023 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
FHWA



TYPE "B"

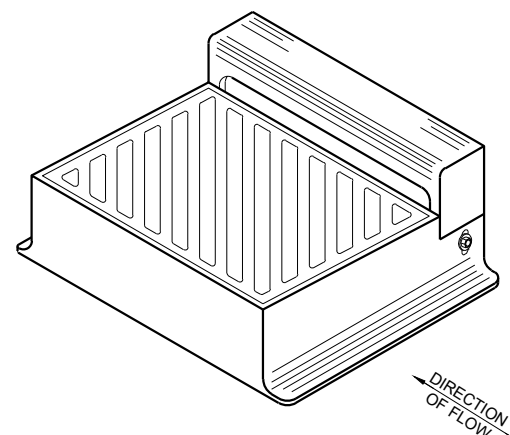
**ALTERNATIVE GRATE FOR
TYPE "B" COVER**

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

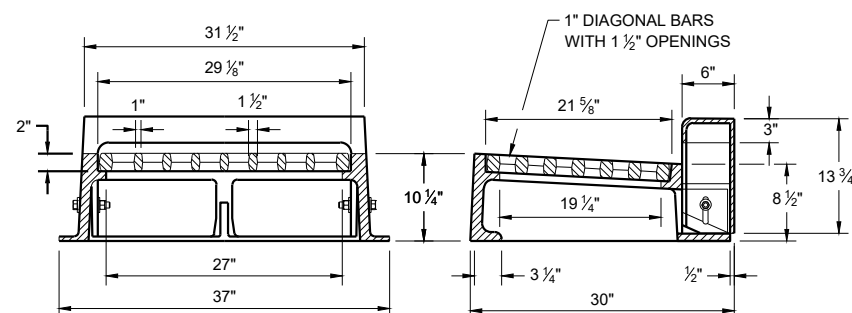


TYPE "C"

NOTE: EITHER CASTING IS ACCEPTABLE



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



TYPE "WM"

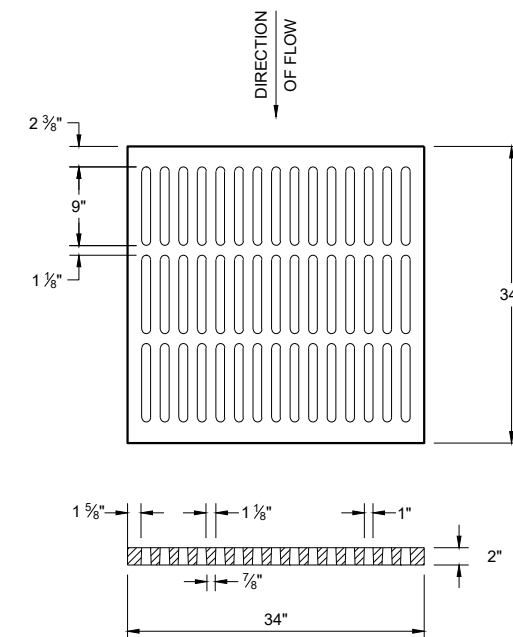
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

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.

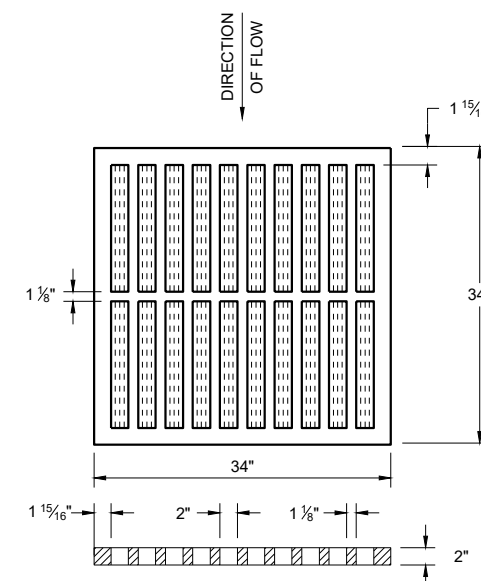
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF 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 THE DRAINAGE TABLE

**INLET COVERS
TYPES B, B-A, C,
MS, MS-A AND WM**

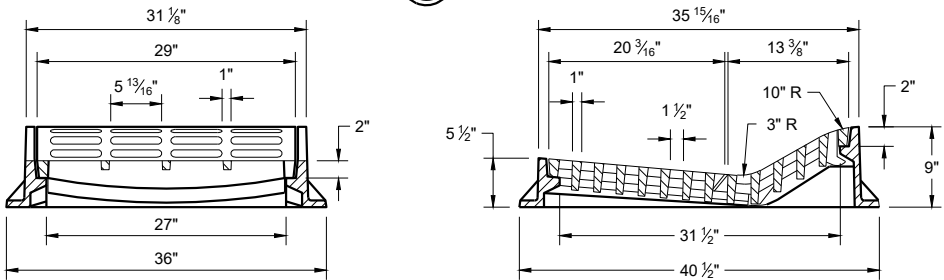
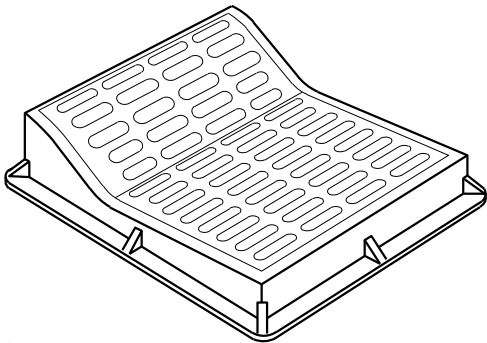
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

GENERAL NOTES

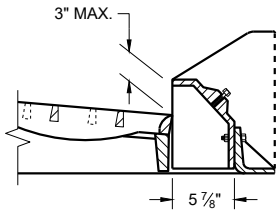
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

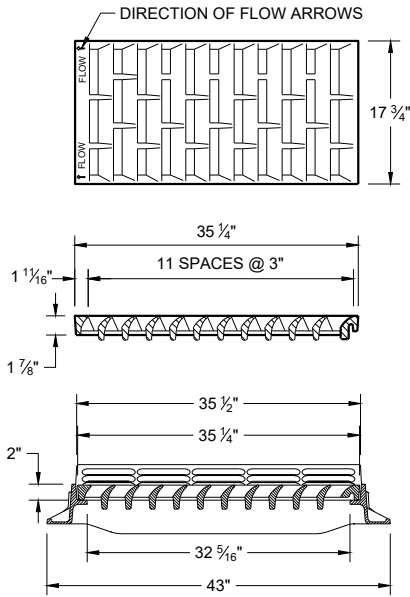


ALTERNATIVE CURB BOX
FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

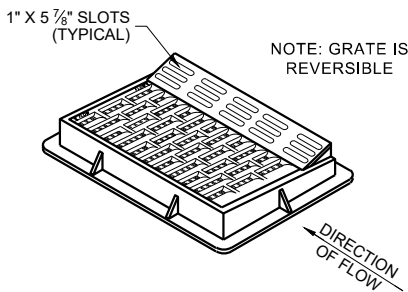
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.

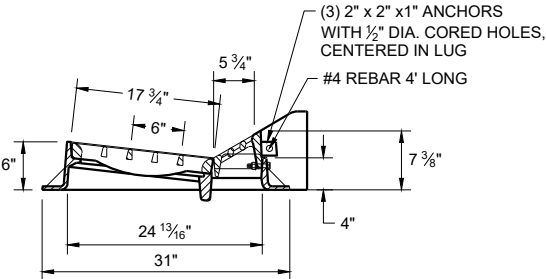


TYPE "HM"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

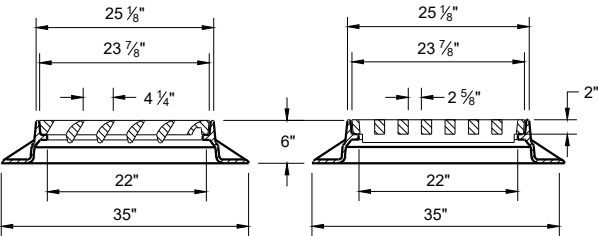
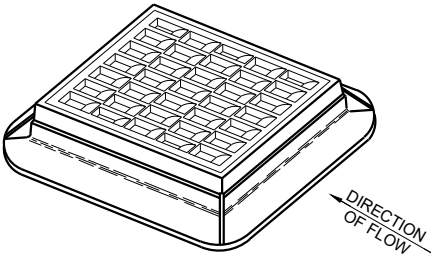


NOTE: GRATE IS REVERSIBLE

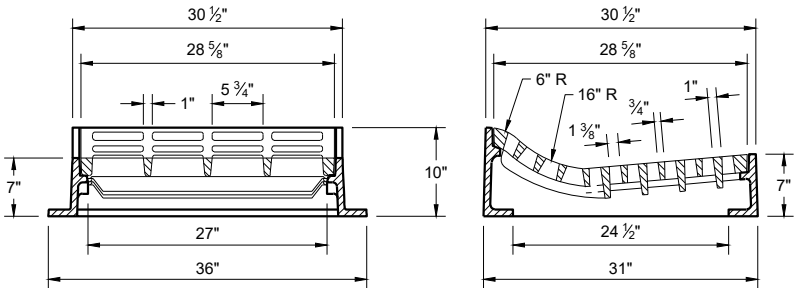
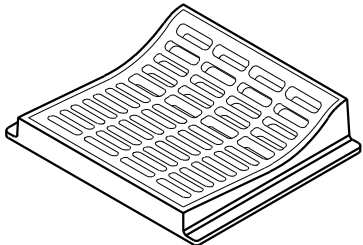


NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.

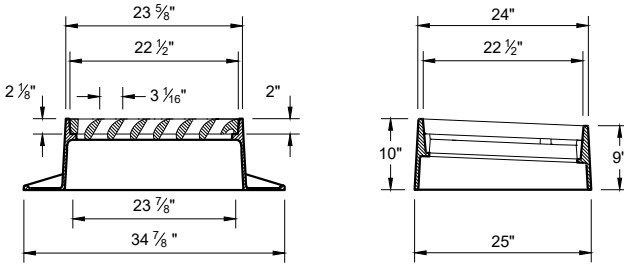
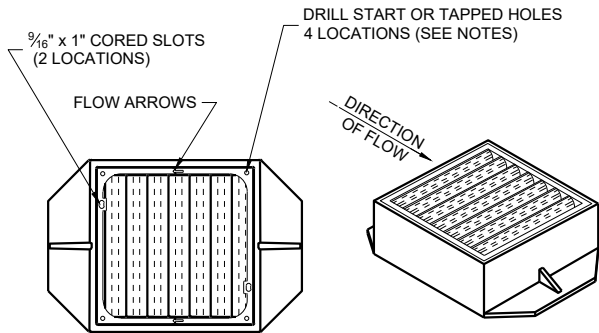


TYPE "S"



TYPE "T"

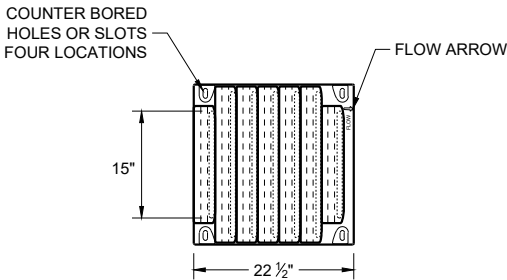
USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
3/8" DIA. X 1/8" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR
TYPE "V" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER NOTED AS TYPE "V-B" ON DRAINAGE TABLE

TAP 1/2" -13 HOLES IN FOUR LOCATIONS IN FRAME TO BOLT GRATE FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - 1/2" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

INLET COVERS
TYPES F, HM, HM-S, S, T, V,
HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

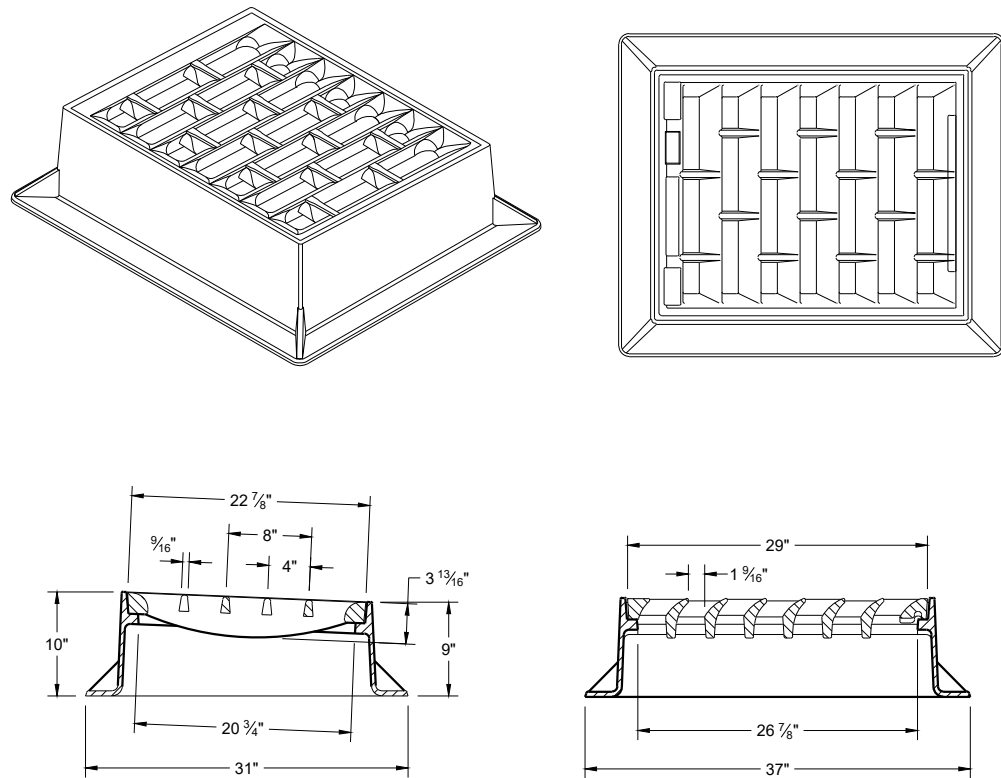
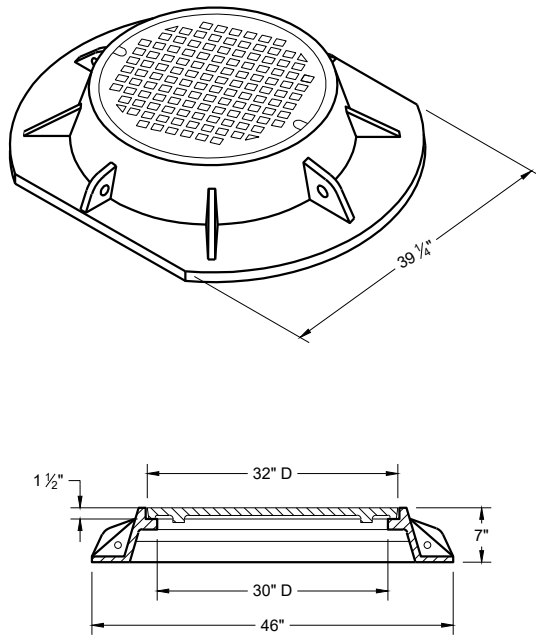
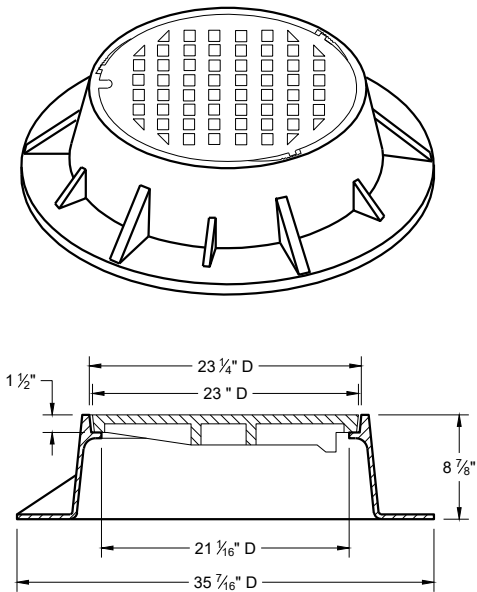
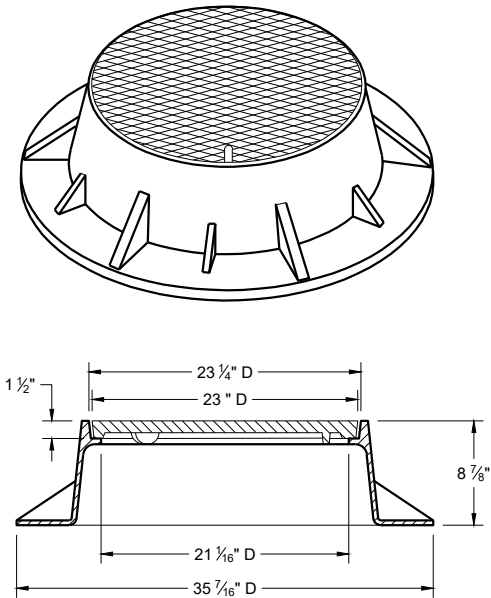
APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

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.

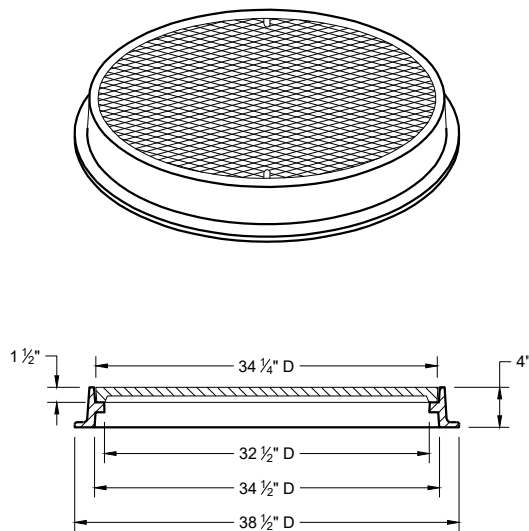
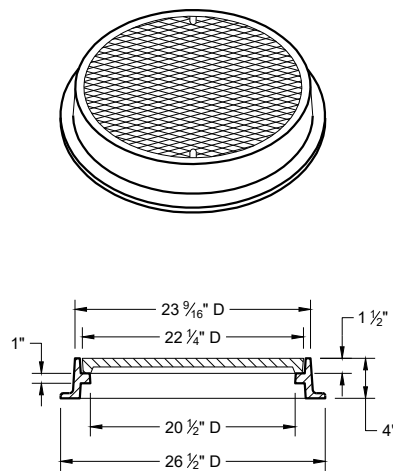
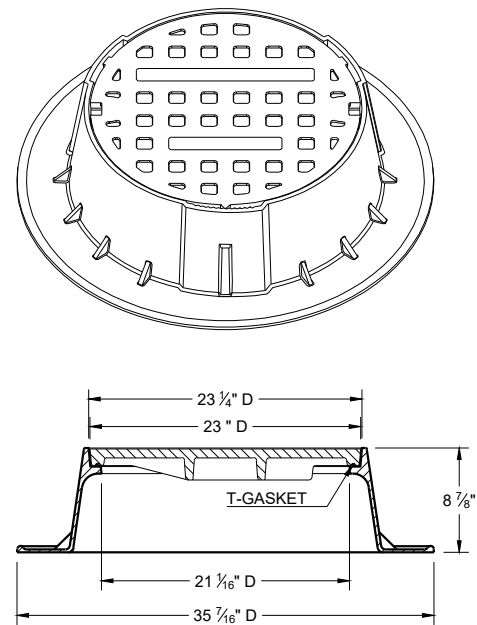
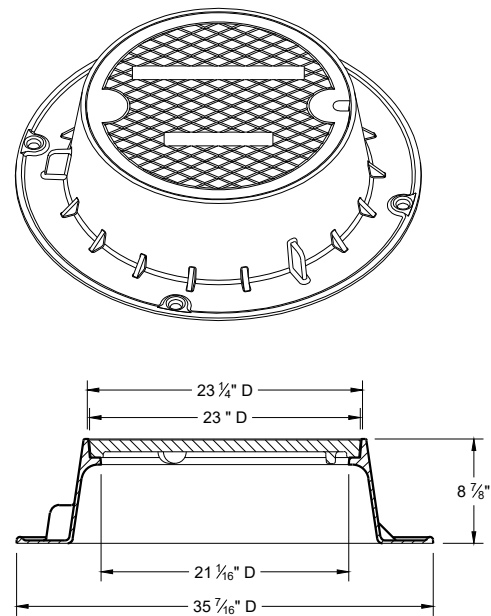
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



TYPE "K"

INLET COVER TYPE "BW"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

NOTE: EITHER CASTING IS ACCEPTABLE

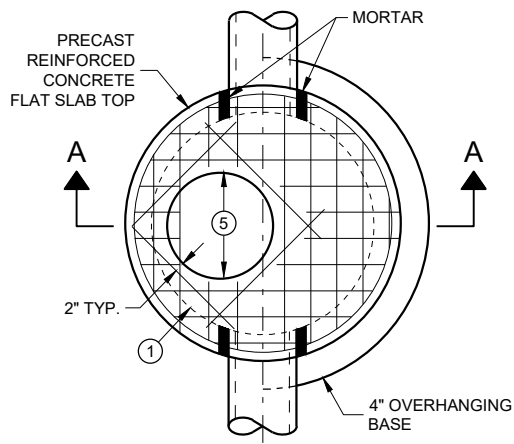
TYPE "L"

TYPE "M"

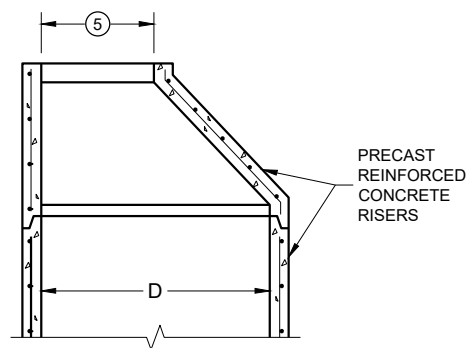
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K,
J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

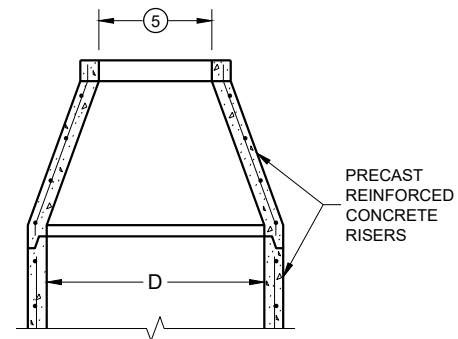
APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST
REINFORCED CONCRETE
ECCENTRIC TOP



OPTIONAL PRECAST
REINFORCED CONCRETE
CONCENTRIC TOP

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

* A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

GENERAL NOTES

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

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

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

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

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

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

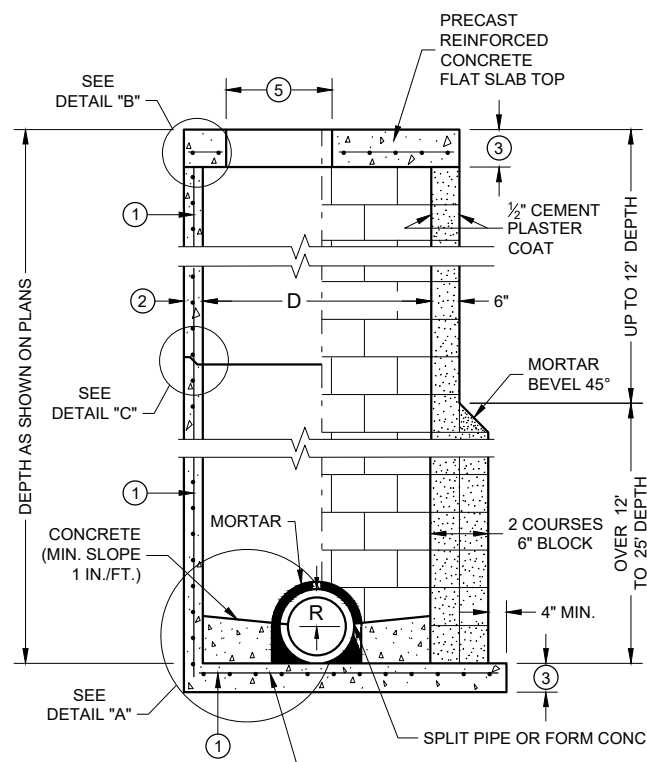
PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED 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 "D".

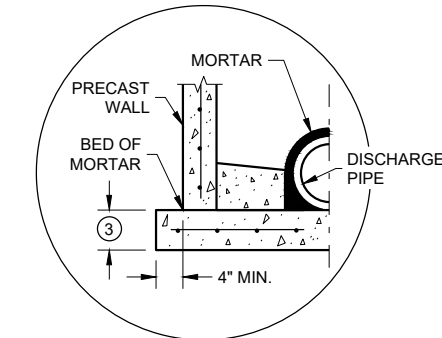
- 1 FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- 2 SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES
- 3 SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.
- 4 JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).
- 5 SEE MANHOLE COVER OPENING MATRIX.



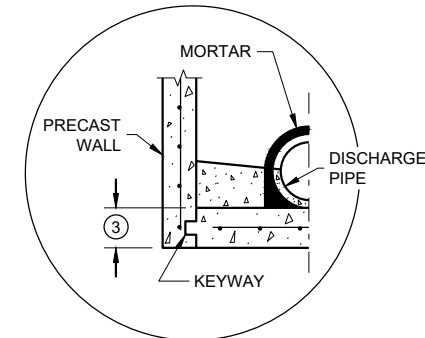
SECTION A - A

PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE

CONCRETE BLOCK WITH
CAST IN PLACE OR
PRECAST REINFORCED
CONCRETE BASE 1

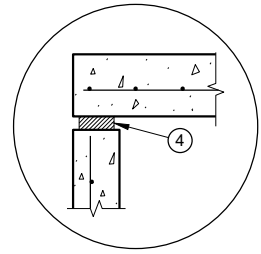


SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

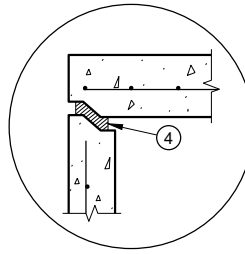


PRECAST REINFORCED CONCRETE
WITH INTEGRAL BASE OPTION

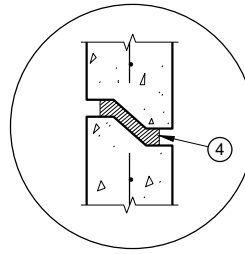
DETAIL "A"



TOP WITH PLAIN
END JOINT



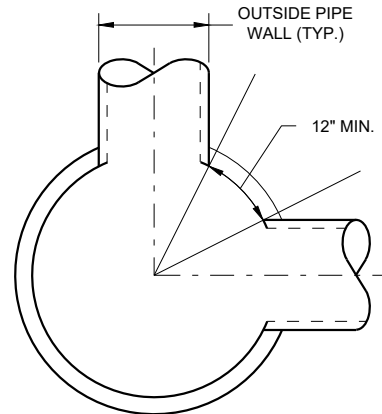
TOP WITH TONGUE
AND GROOVE JOINT



RISER WITH TONGUE
AND GROOVE JOINT

DETAIL "B"

DETAIL "C"



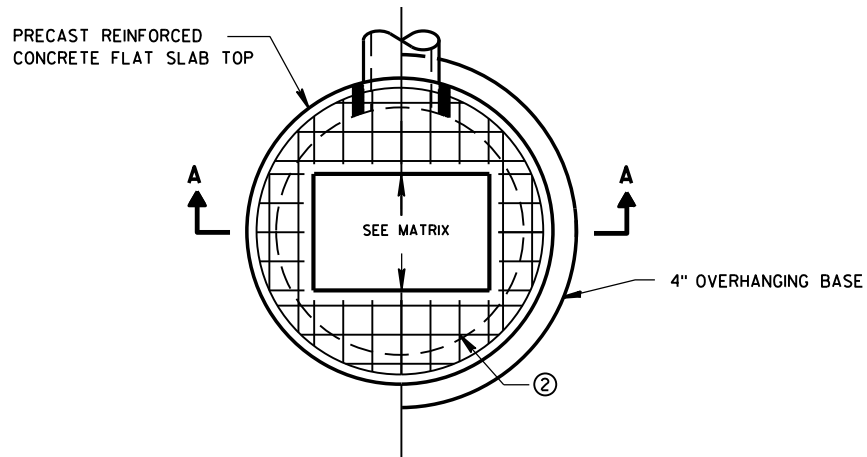
MINIMUM HORIZONTAL
PIPE SEPARATION

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

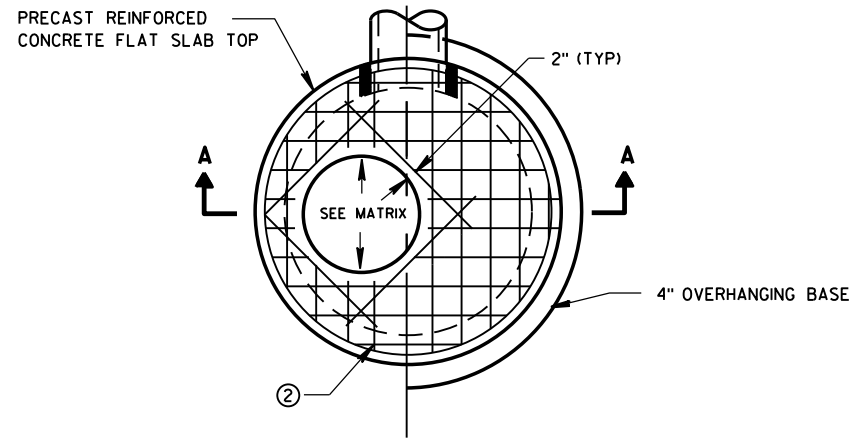
MANHOLES, 3-FT, 4-FT
5-FT, 6-FT, 7-FT, 8-FT, 9-FT
AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

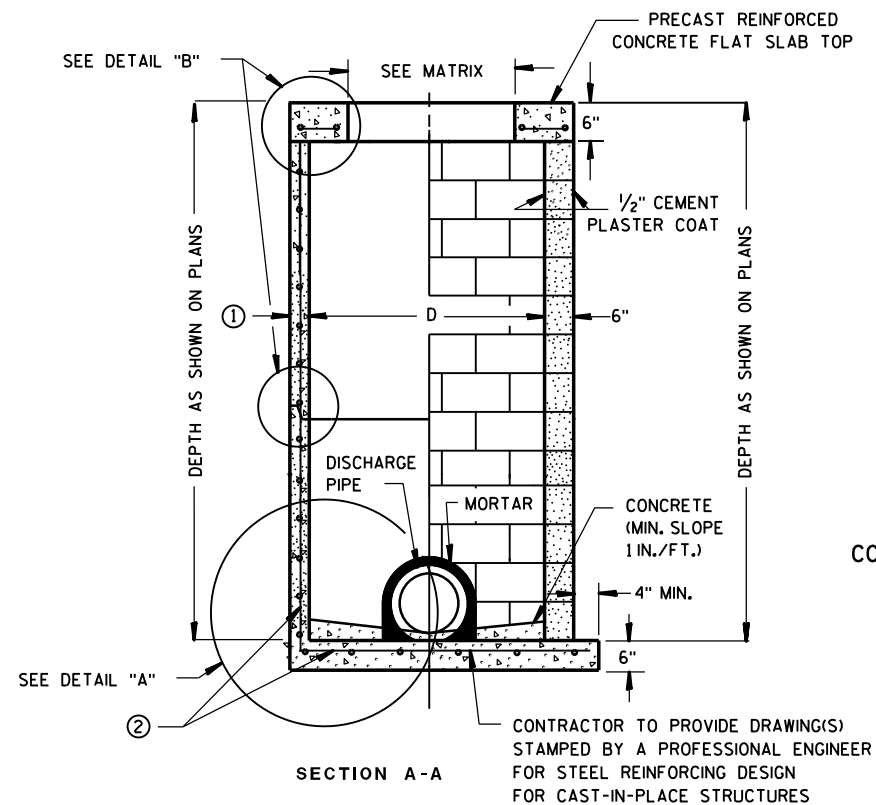
APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



PLAN VIEW RECTANGULAR OPENING

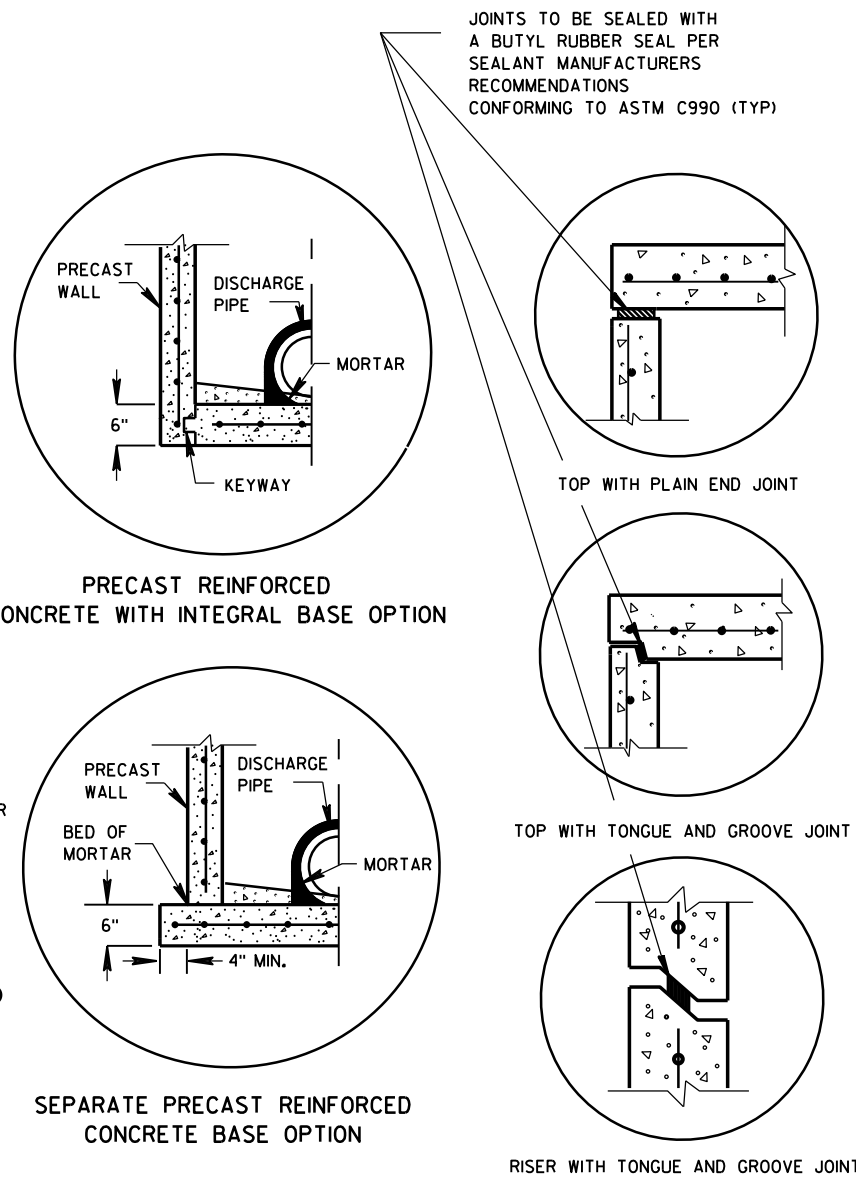


PLAN VIEW CIRCULAR OPENING



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

CIRCULAR INLETS W/ FLAT TOP



DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

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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.

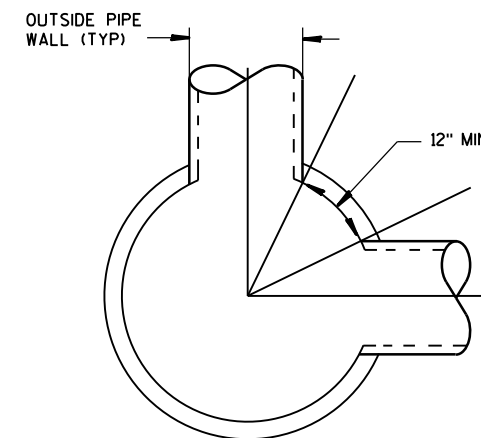
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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"

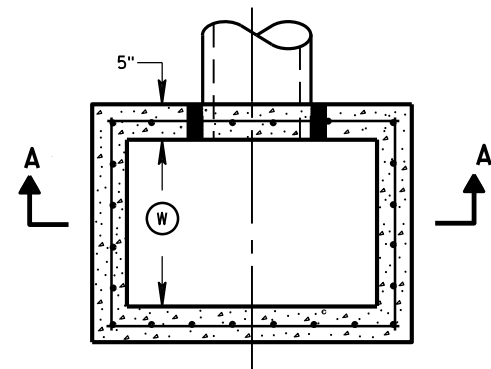
PIPE MATRIX

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

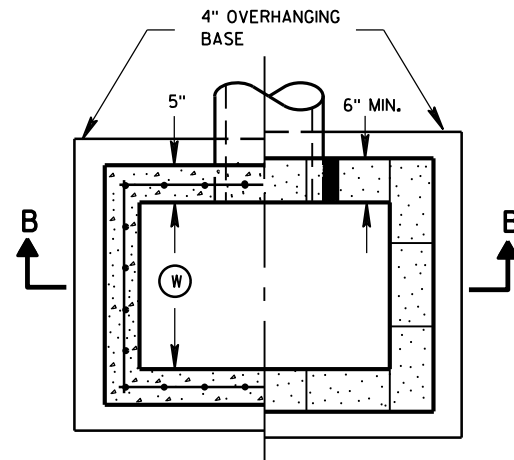
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

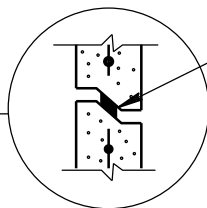
APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



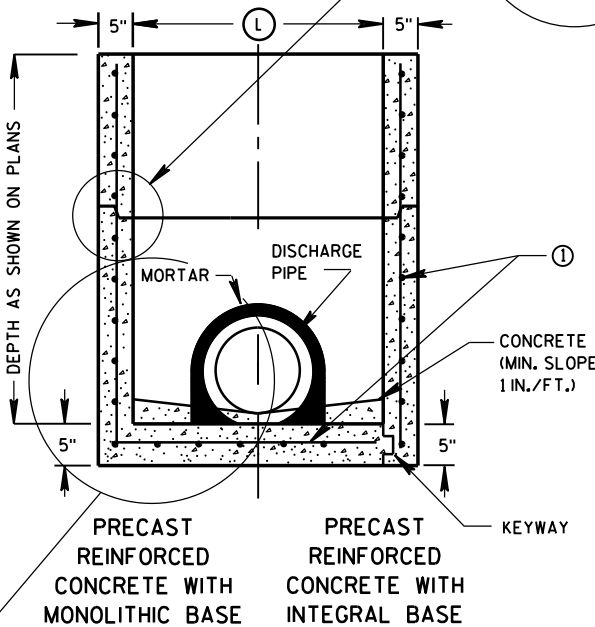
PLAN VIEW



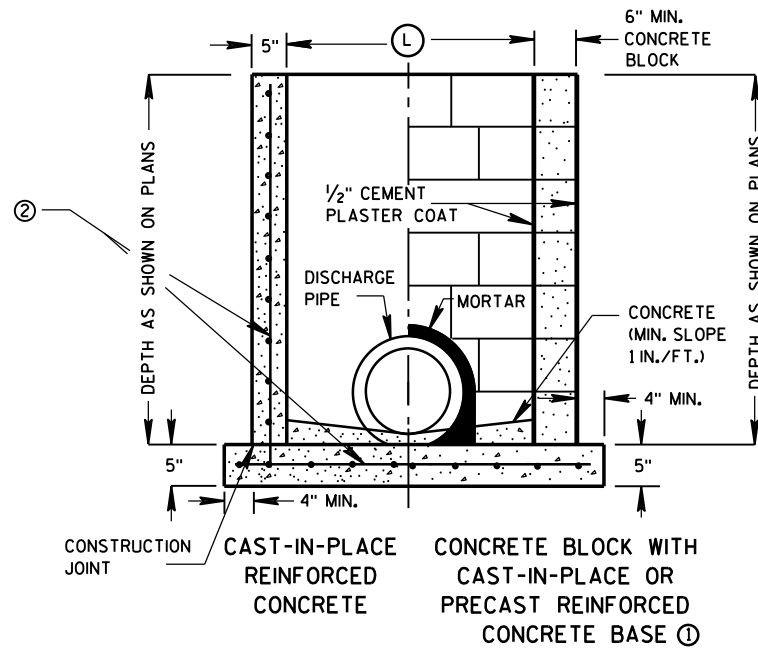
PLAN VIEW



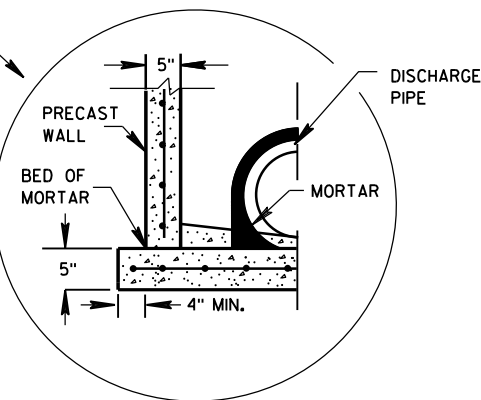
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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

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.

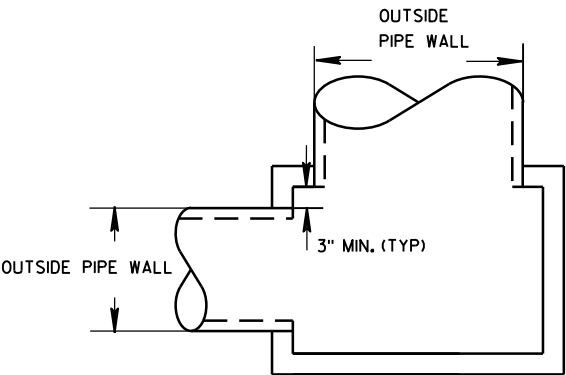
- ① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH ① (FT)	LENGTH ② (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

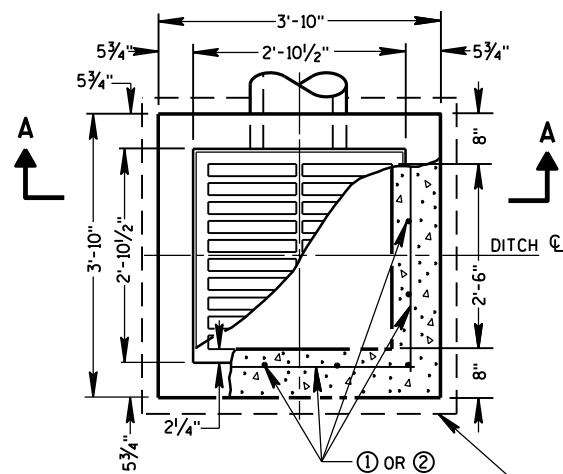


DETAIL "A"

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

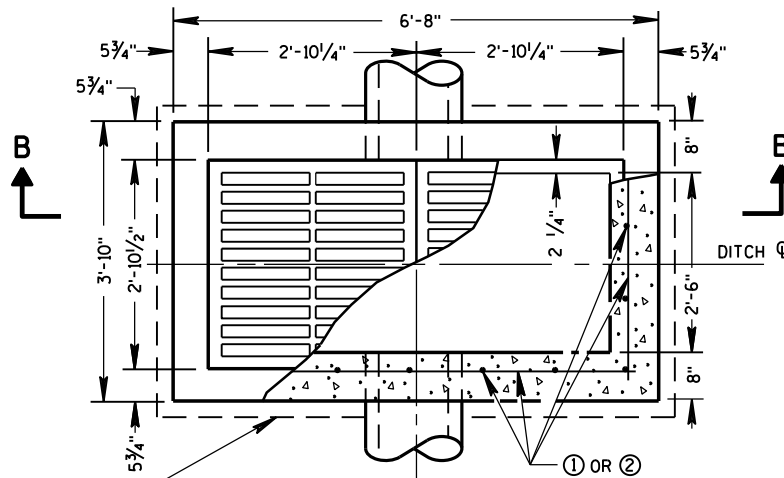
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

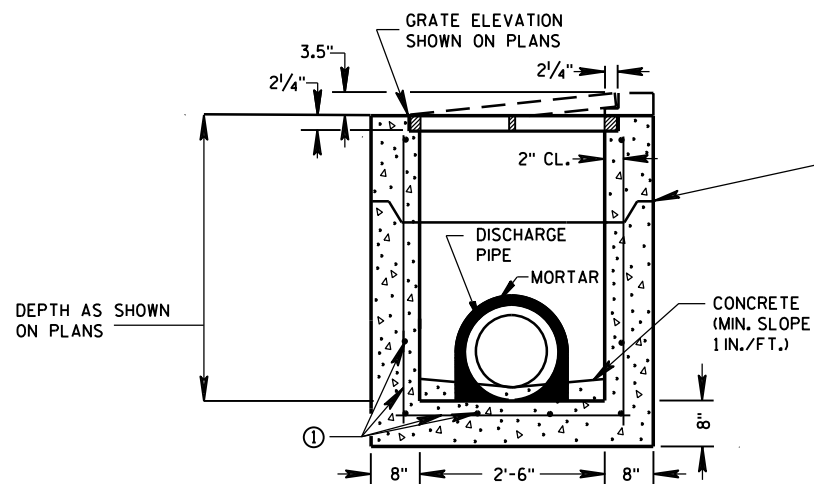


PLAN VIEW

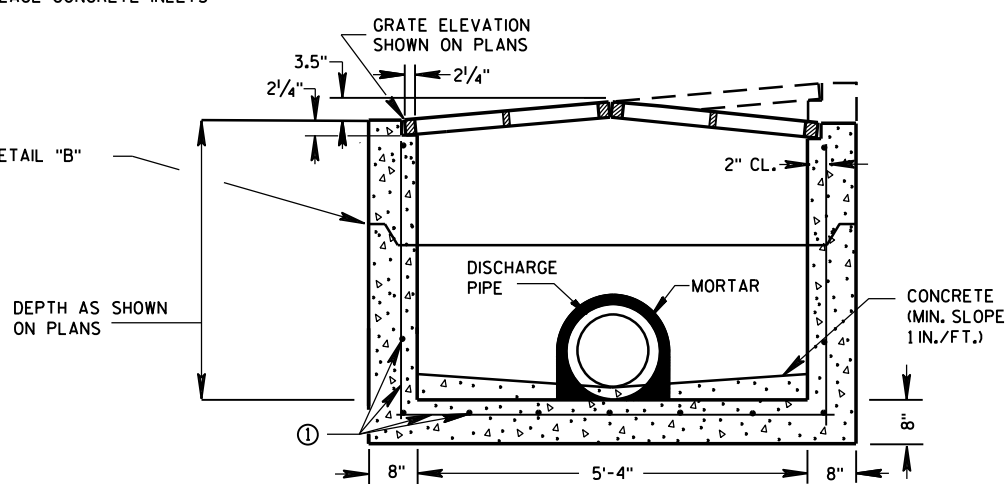
4" OVERHANGING BASE ON REINFORCED
CAST-IN-PLACE CONCRETE INLETS



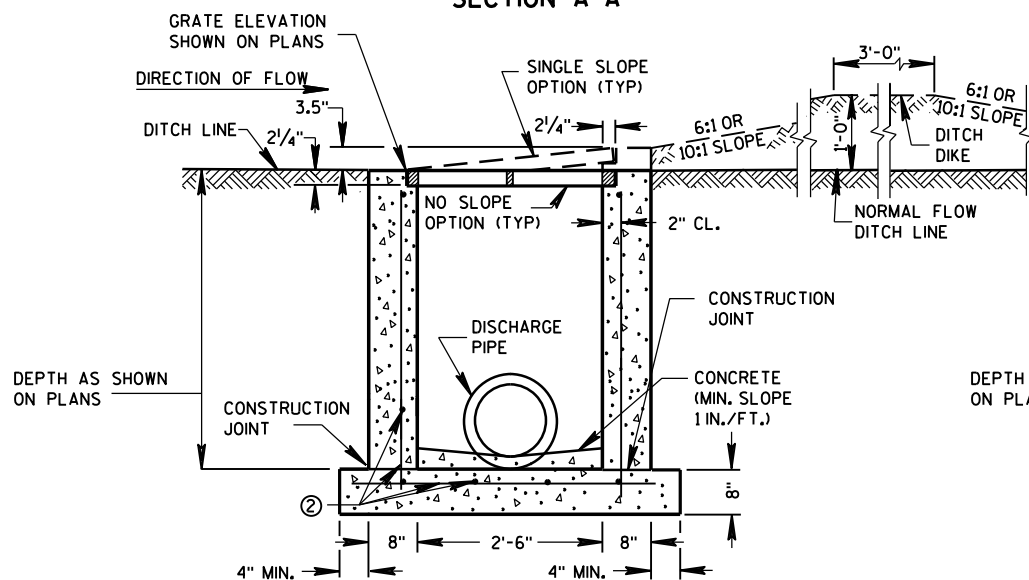
PLAN VIEW



PRECAST REINFORCED CONCRETE
SECTION A-A

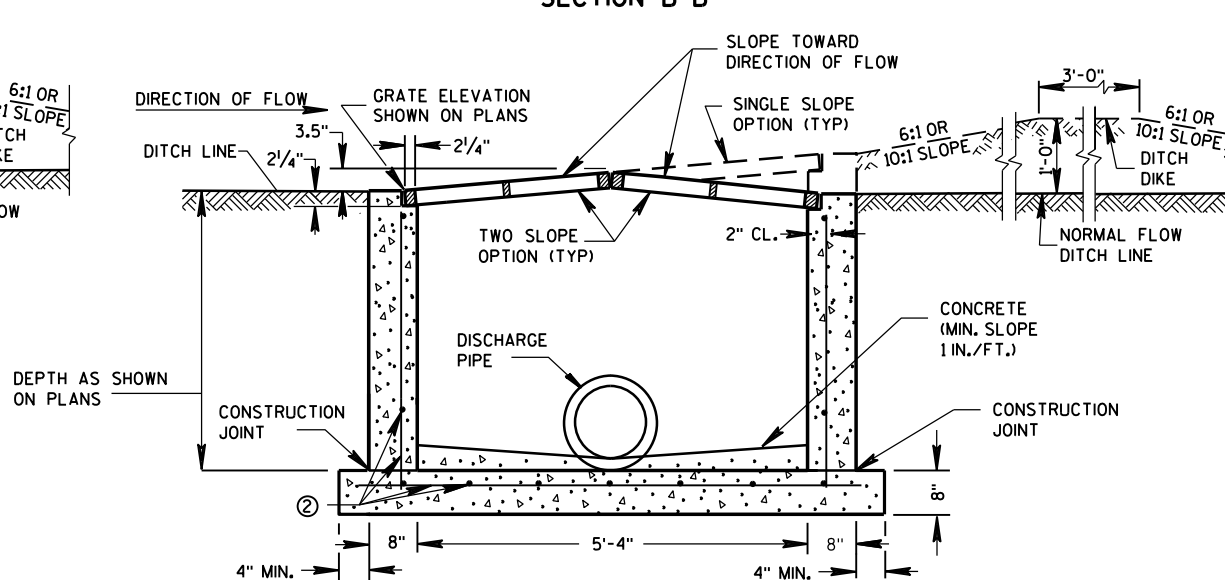


PRECAST REINFORCED CONCRETE
SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE
SECTION A-A

INLETS MEDIAN 1 GRATE



REINFORCED CAST-IN-PLACE CONCRETE
SECTION B-B

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, IG-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.

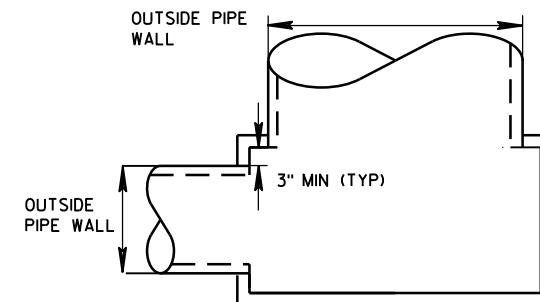
ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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.

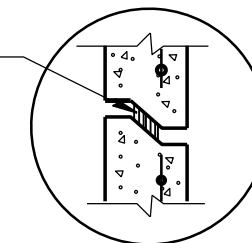
PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	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)



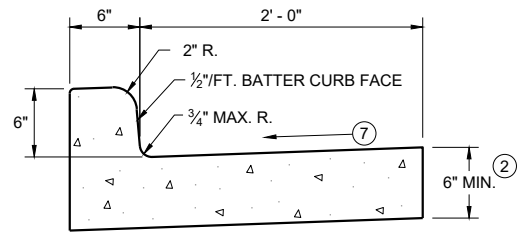
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

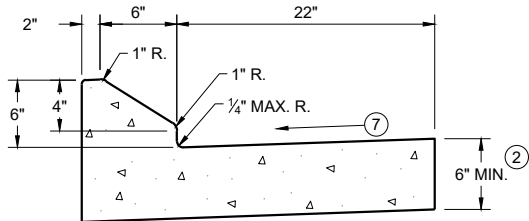
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
FHWA

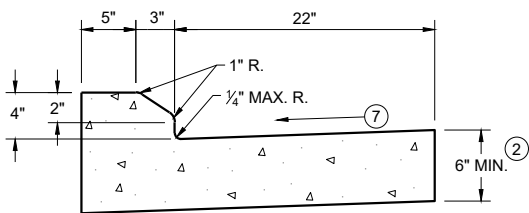
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR



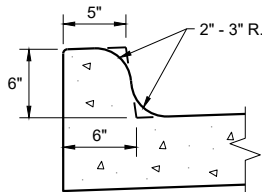
TYPES A^① & D



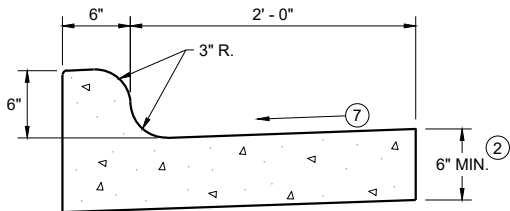
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

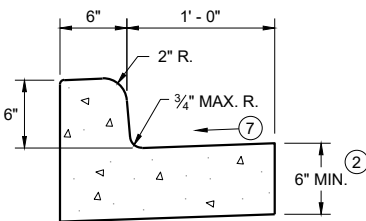


TYPES K^① & L
(OPTIONAL CURB SHAPE)



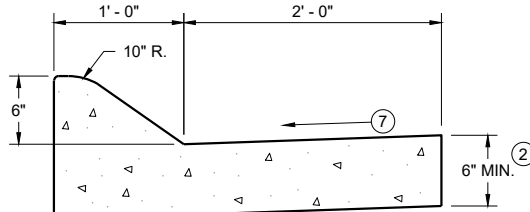
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

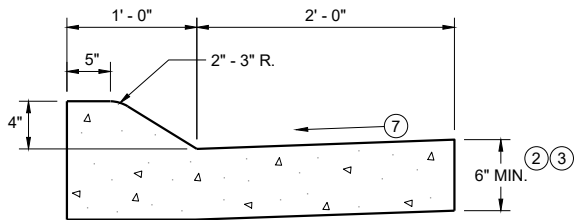


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

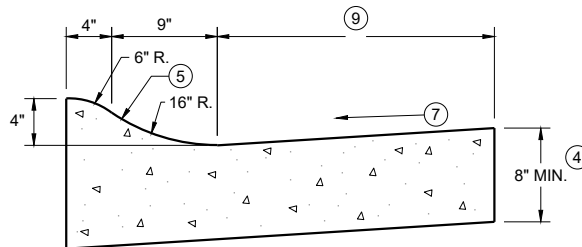


6" SLOPED CURB TYPES A^① & D



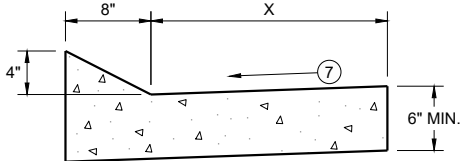
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

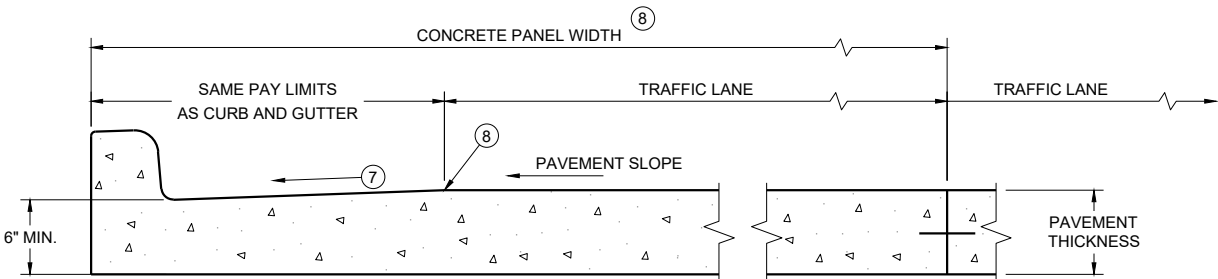


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

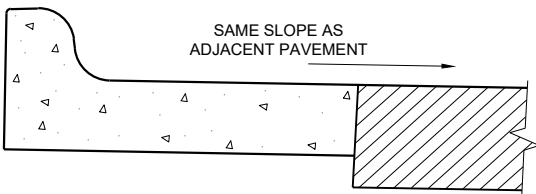
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

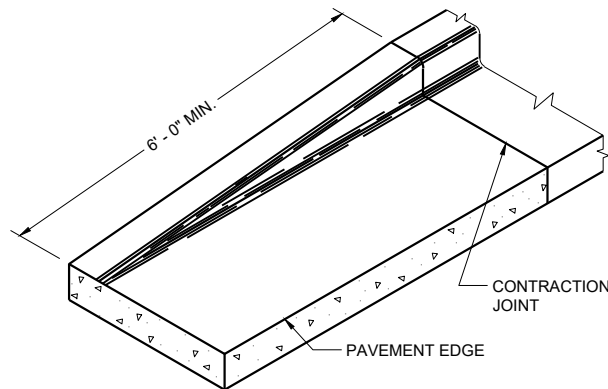
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

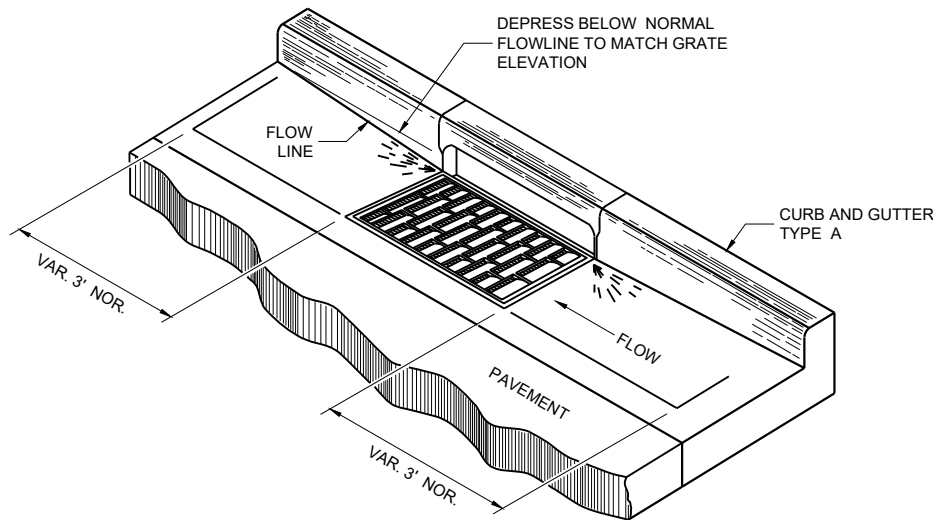
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

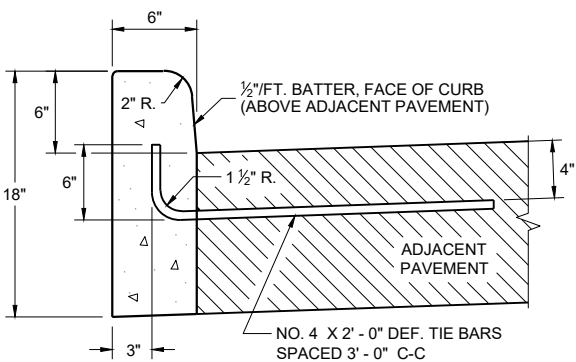


END SECTION CURB AND GUTTER

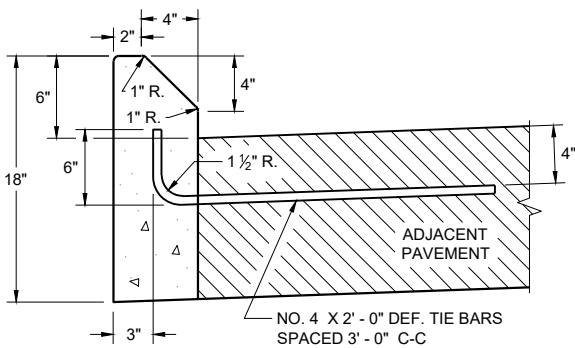


DETAIL OF CURB AND GUTTER AT INLETS

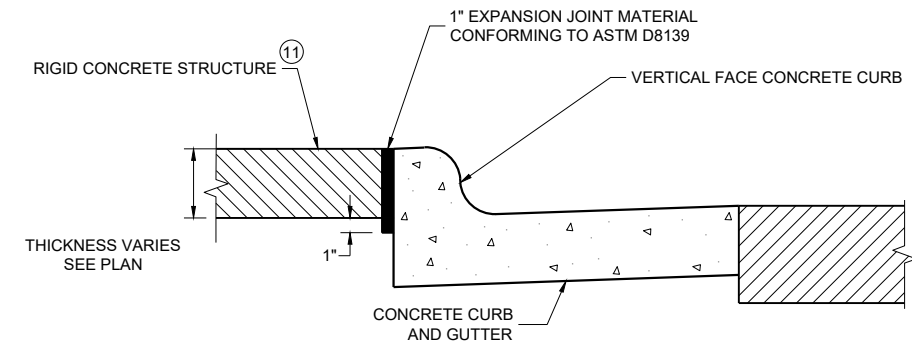
(TYPICAL H INLET COVER SHOWN)



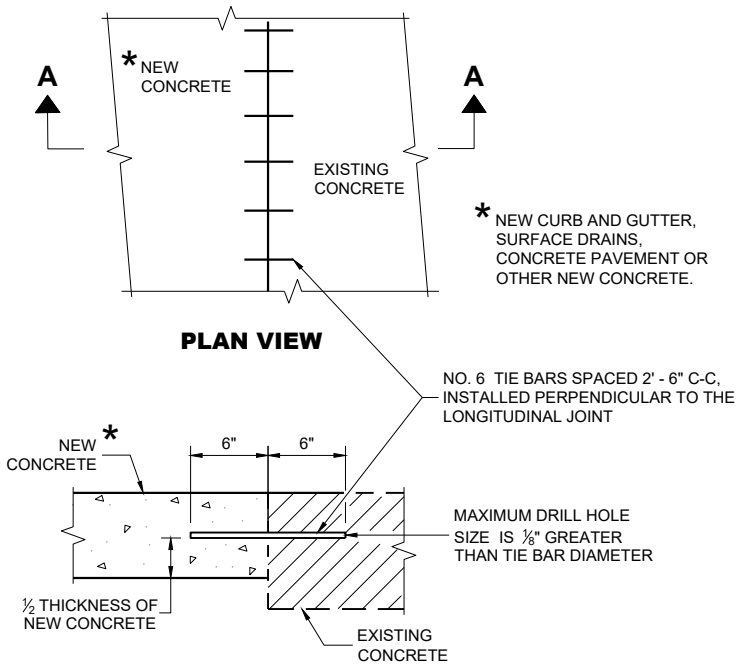
TYPES A^① & D



TYPES G^① & J
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT

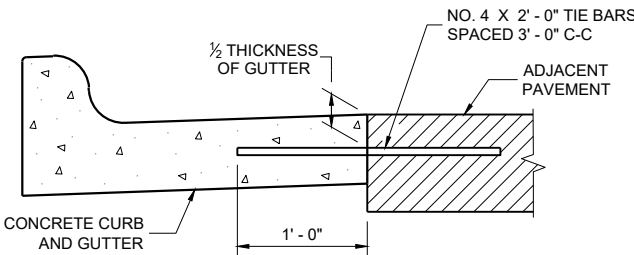
GENERAL NOTES

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

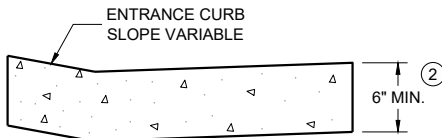
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



TYPICAL TIE BAR LOCATION^①



DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)

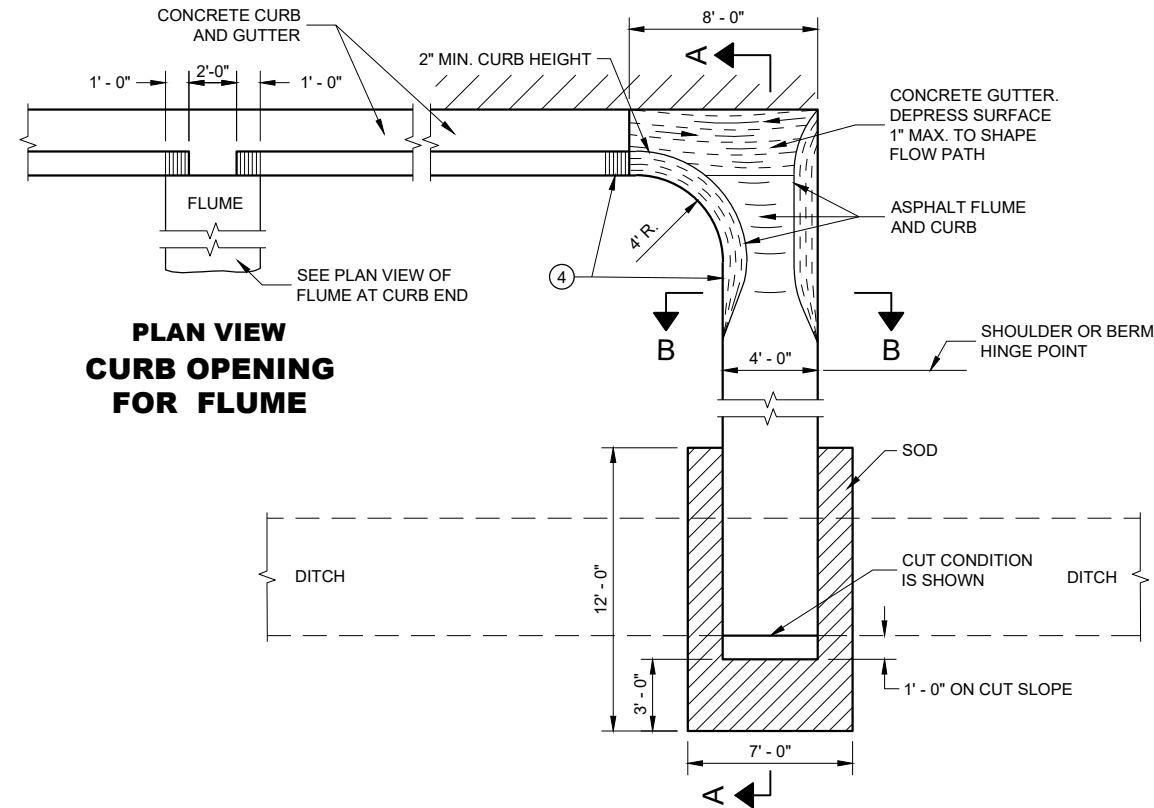
CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

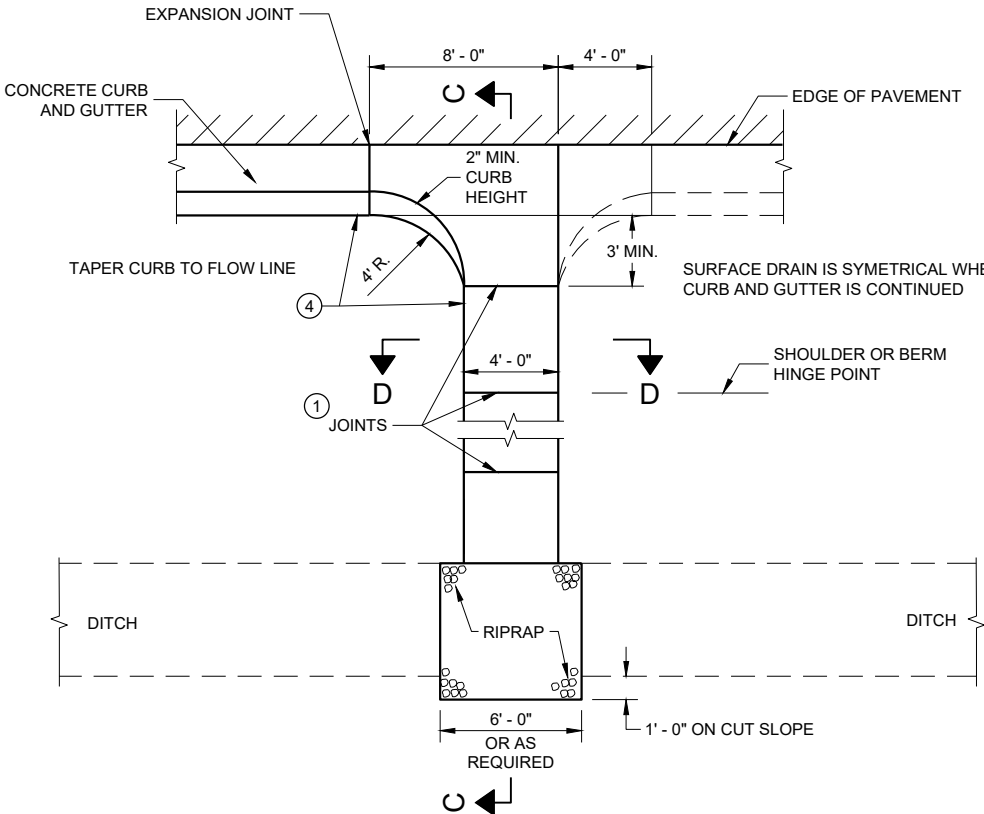
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING
FOR FLUME

PLAN VIEW
FLUME AT CURB END



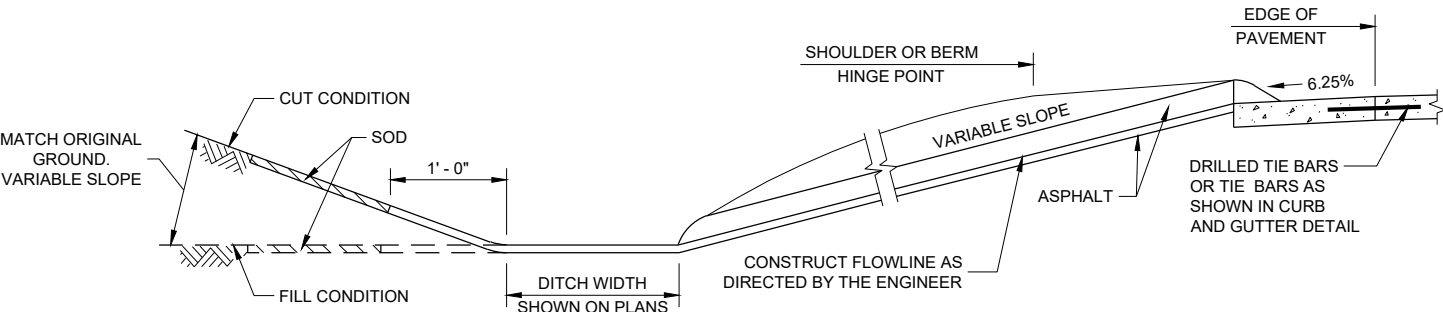
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

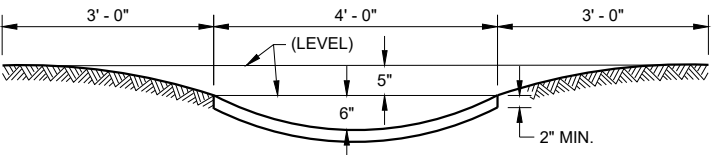
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

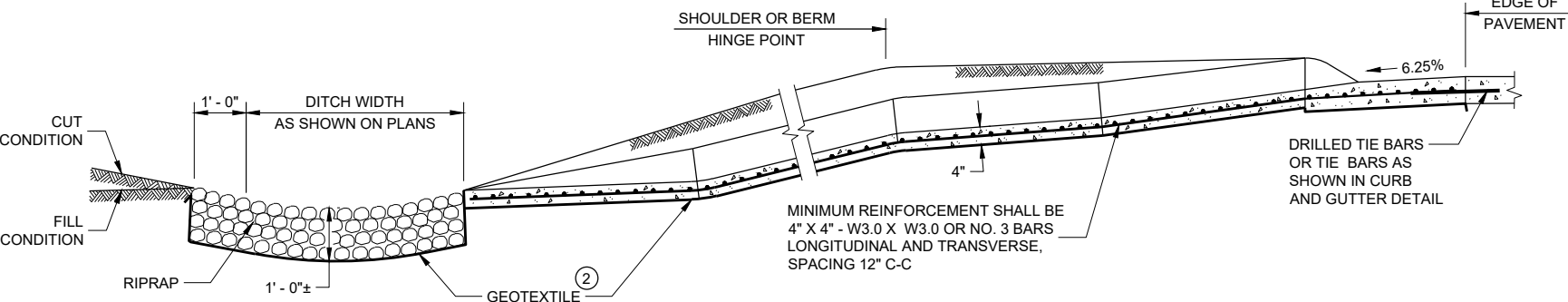
- JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



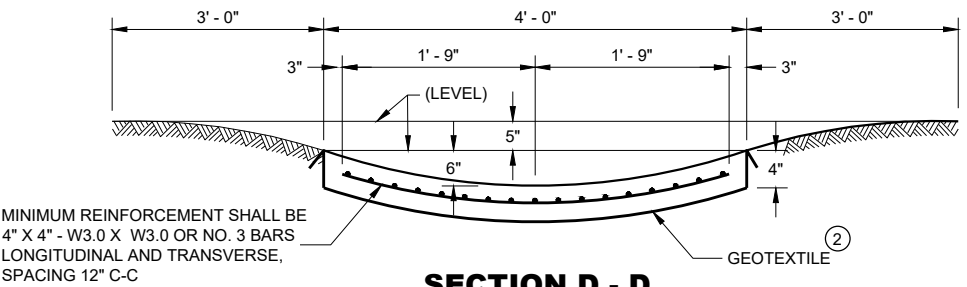
SECTION A - A



SECTION B - B



SECTION C - C

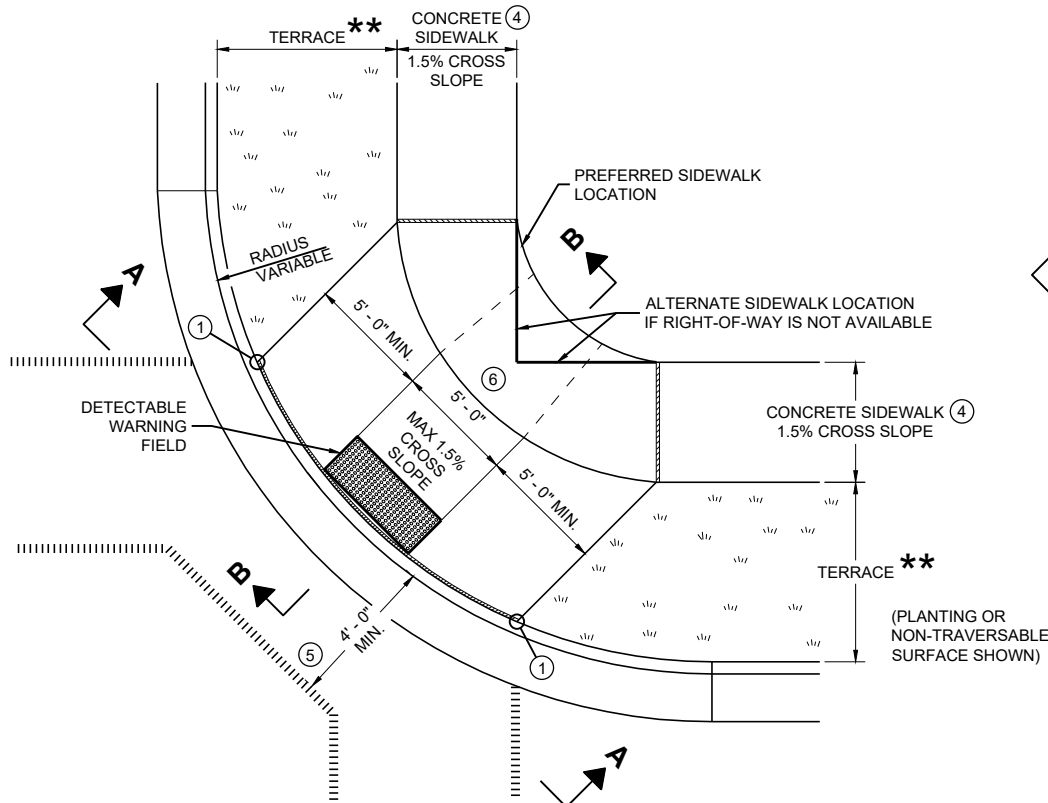


SECTION D - D

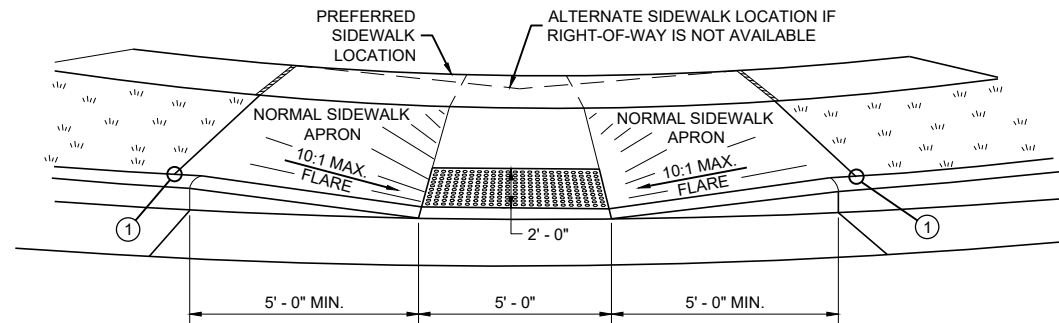
CONCRETE SURFACE
DRAINS AND
ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

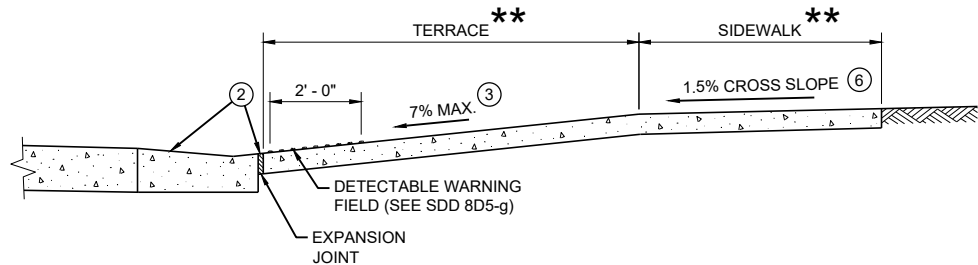


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

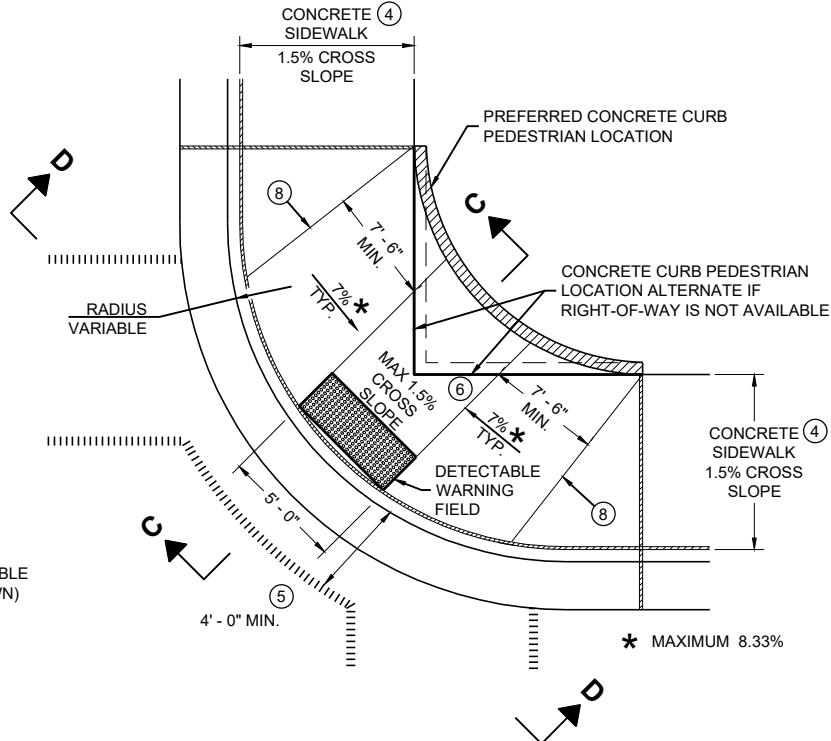


VIEW A - A FOR TYPE 1

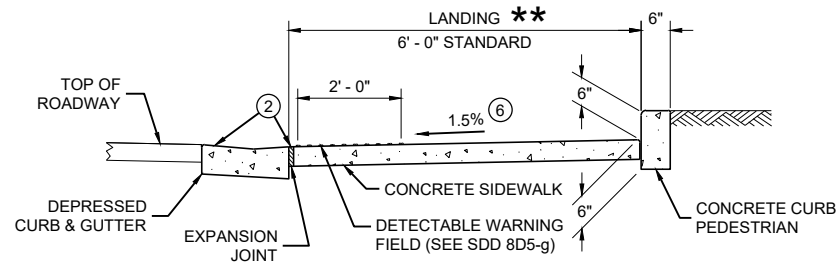
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



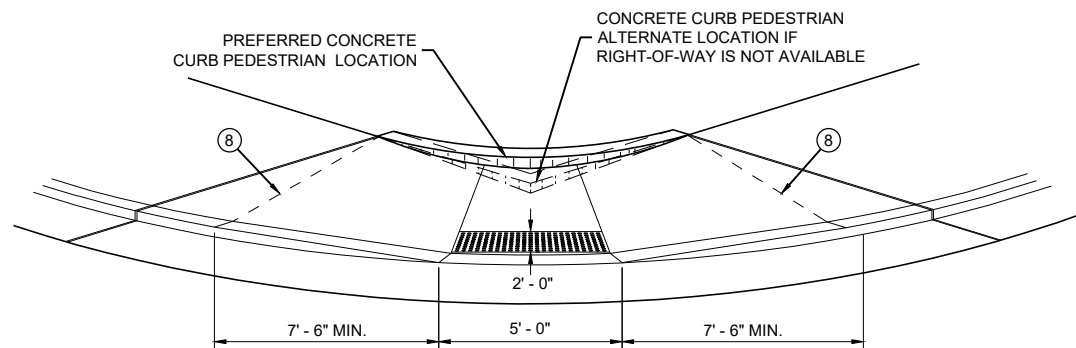
SECTION B - B FOR TYPE 1



PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

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 CURB 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 LINEAR 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.

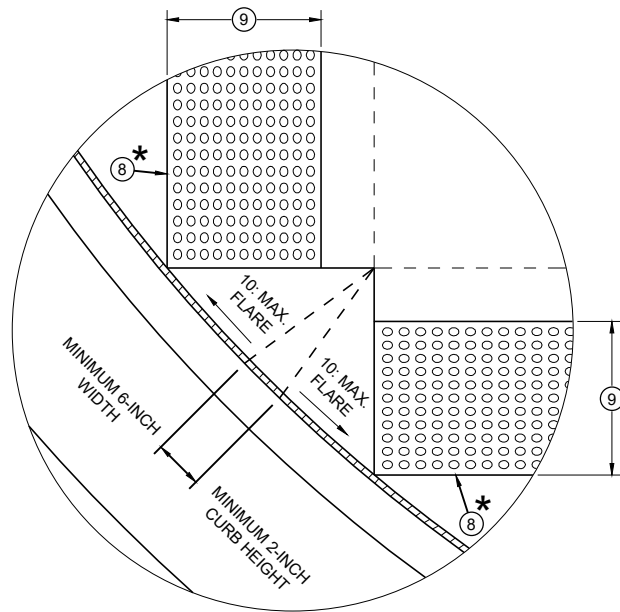
- 1 THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. 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 MAXIMUM 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. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

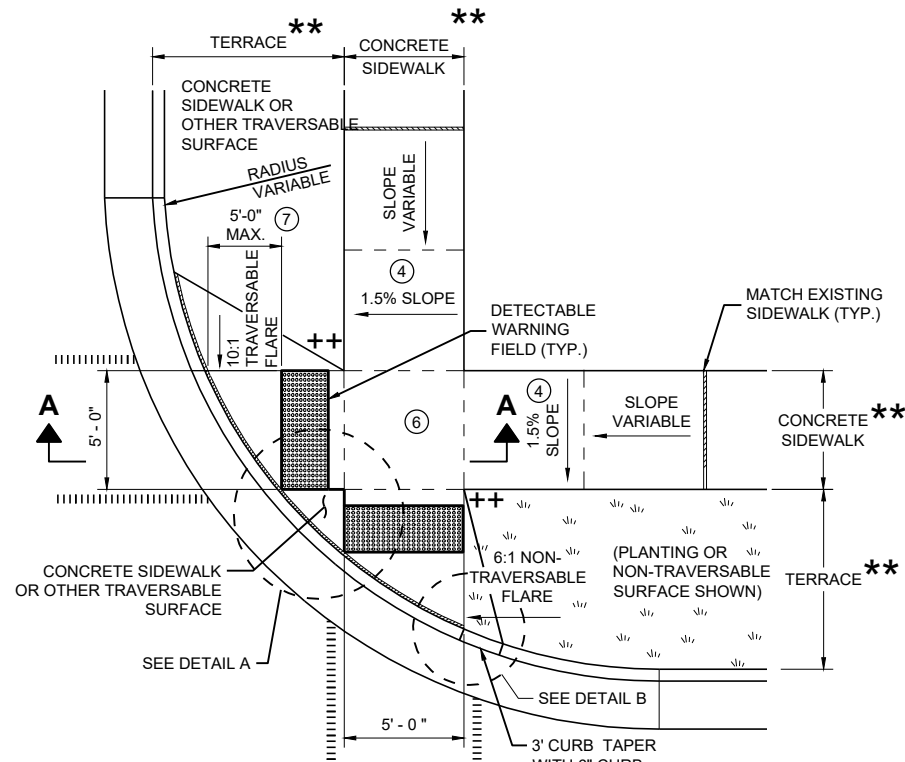
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

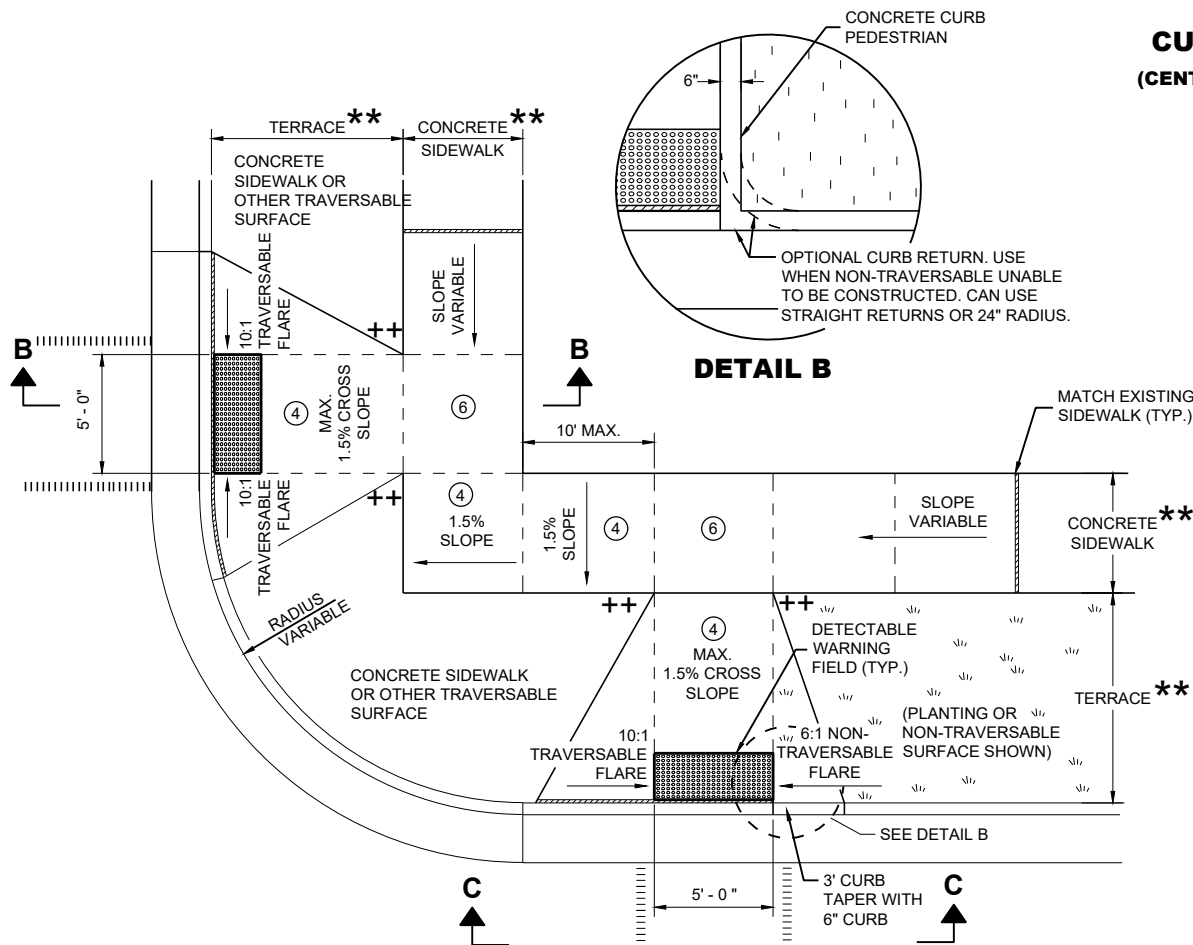
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



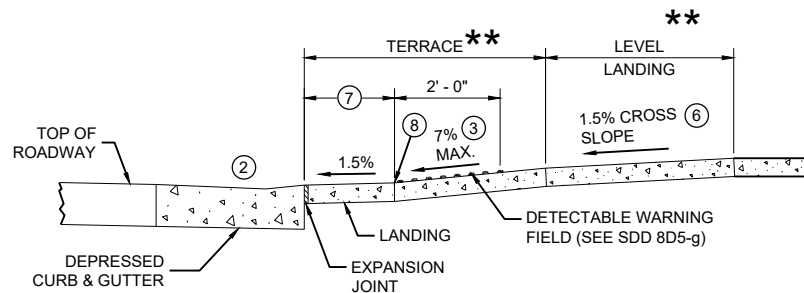
DETAIL A



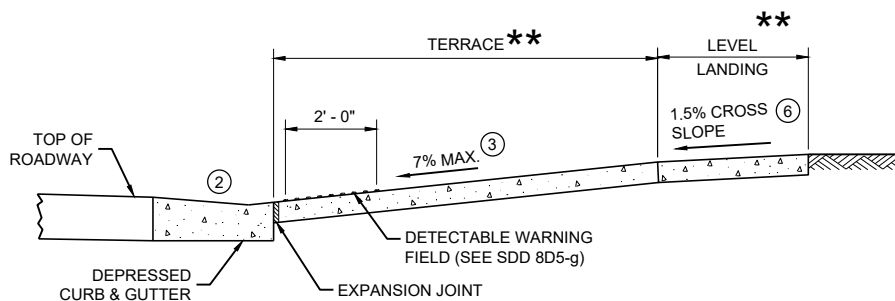
PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



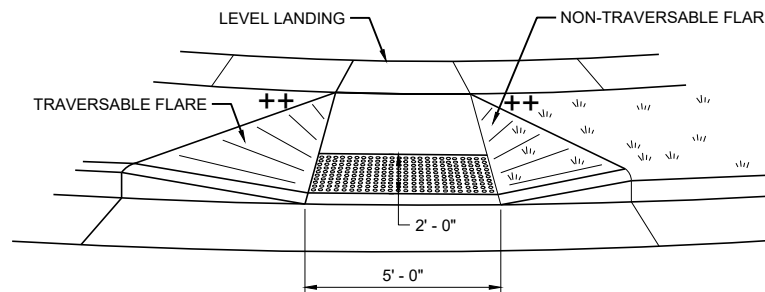
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION A - A FOR TYPE 2



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

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.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- 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.
 - AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
 - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
 - WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - WHEN 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.

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

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

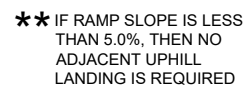
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 2 AND 3

STATE OF WISCONSIN
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SECTION B - B FOR TYPE 4A AND TYPE 4A1

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

INTERMEDIATE RADII CAN BE INTERPOLATED



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.

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 $\frac{1}{4}$ - 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 AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ 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 LEVEL LANDING SIZE IS 5 FEET BY 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.

LEGEND

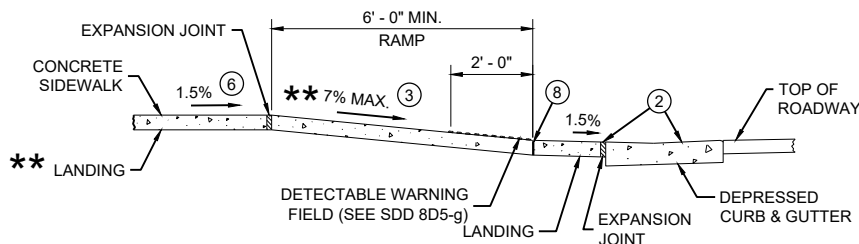
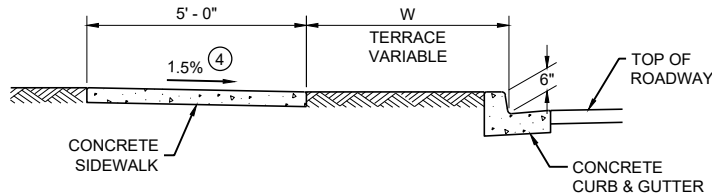
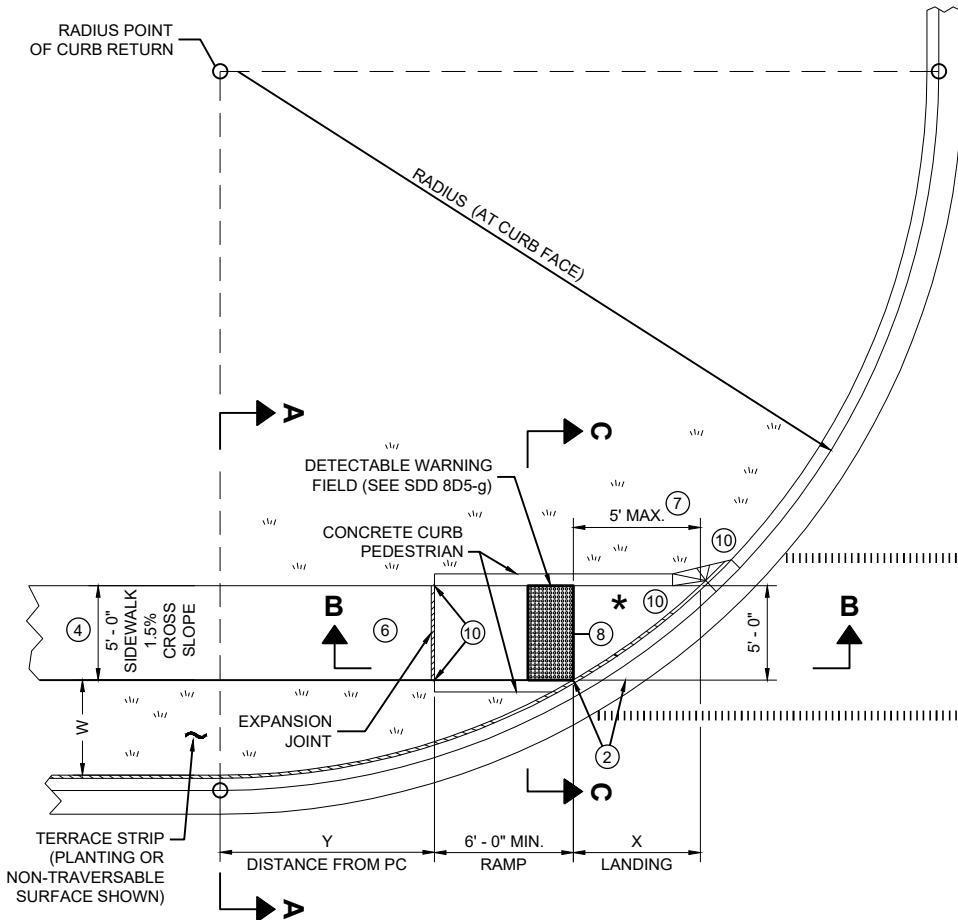
- | | |
|---|------------------------------------|
|  | 1/2" EXPANSION JOINT SIDEWALK |
|  | CONTRACTION JOINT SIDEWALK |
|  | PAVEMENT MARKING CROSSWALK (WHITE) |



++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

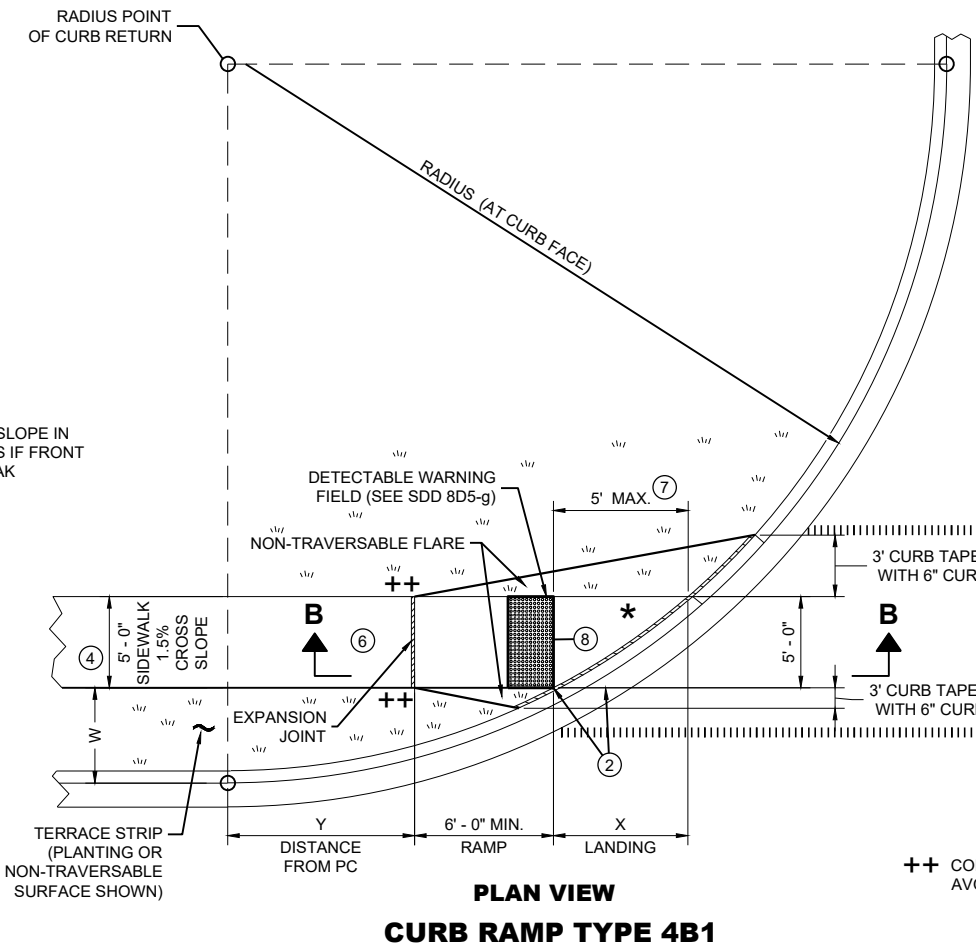
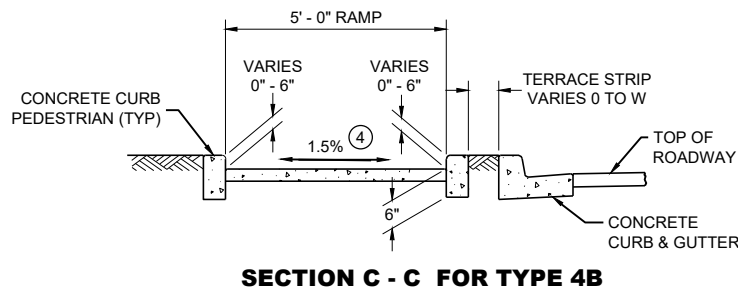


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

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' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

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



++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

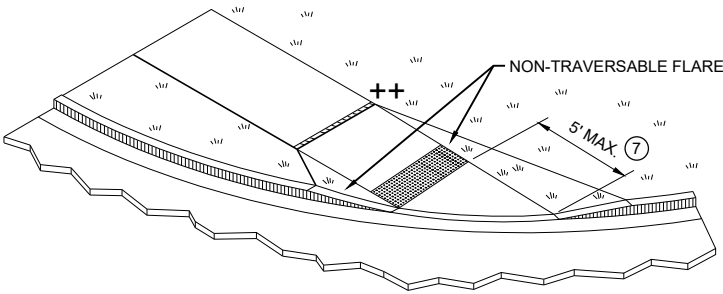
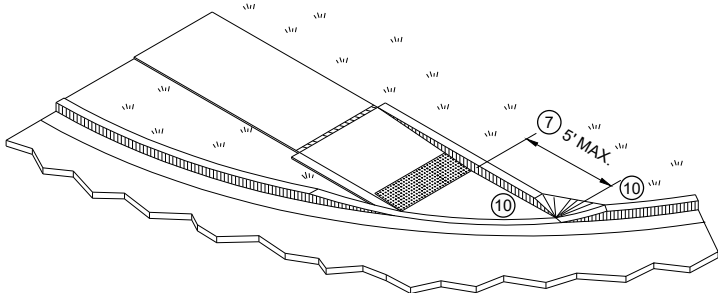
GENERAL NOTES

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.

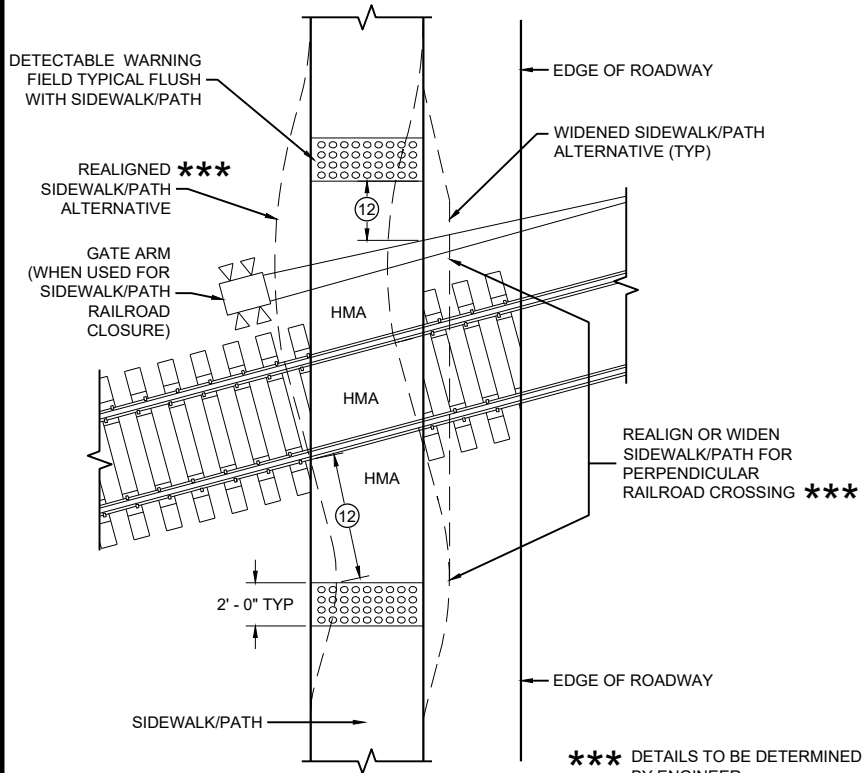
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- 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.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

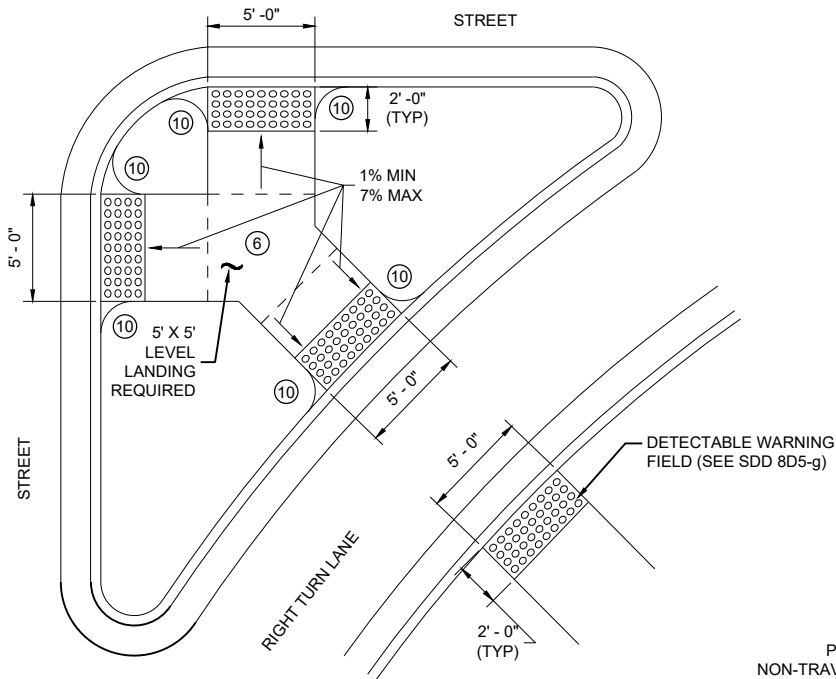


CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

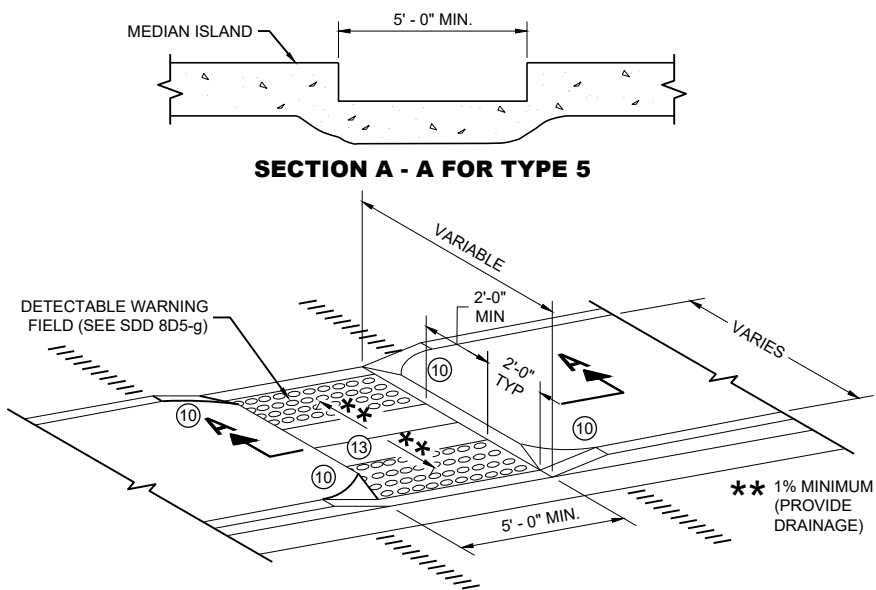


CURB RAMP TYPE 8
DETECTABLE WARNINGS
FOR SIDEWALKS OR SHARED USE PATHS
AT RAILROAD CROSSINGS

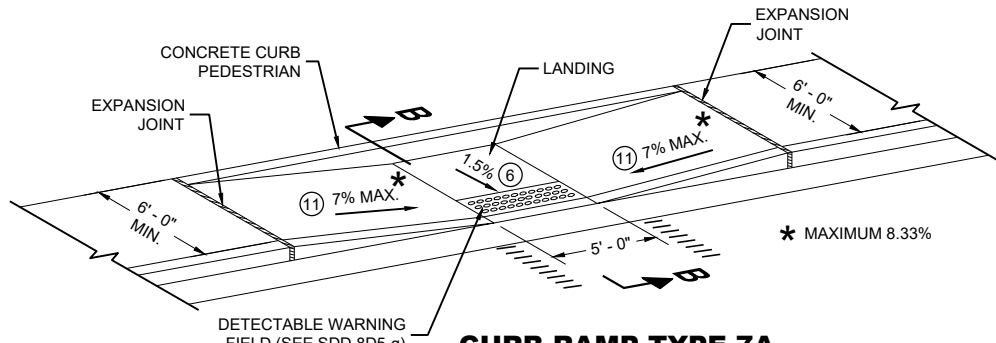


CURB RAMP TYPE 6
DETECTABLE WARNING AT ISLANDS

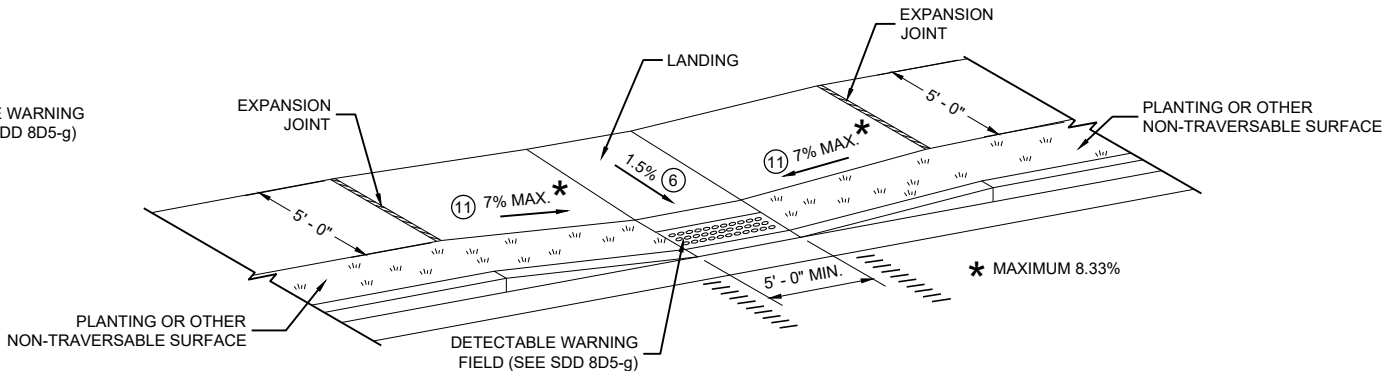
REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 5
MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS



CURB RAMP TYPE 7B
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS

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.

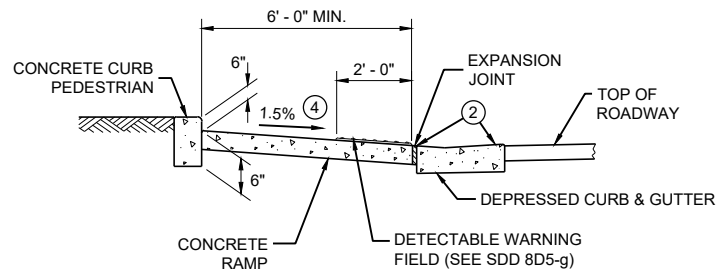
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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 1/8 - 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 AN 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 LEVEL LANDING SIZE IS 5 FEET BY 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/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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

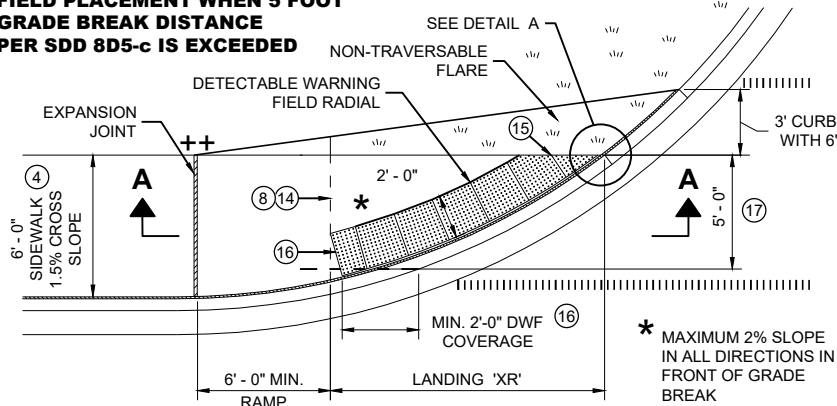


SECTION B - B FOR TYPE 7A

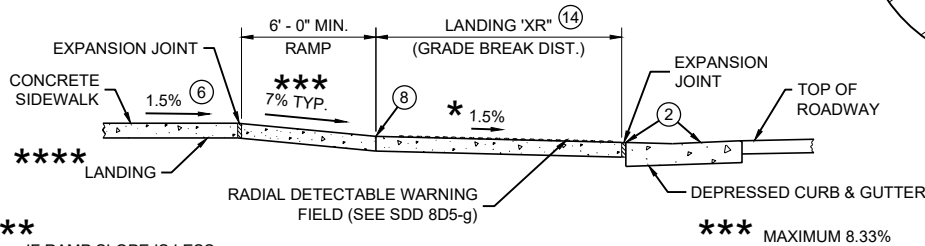
CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-c IS EXCEEDED**

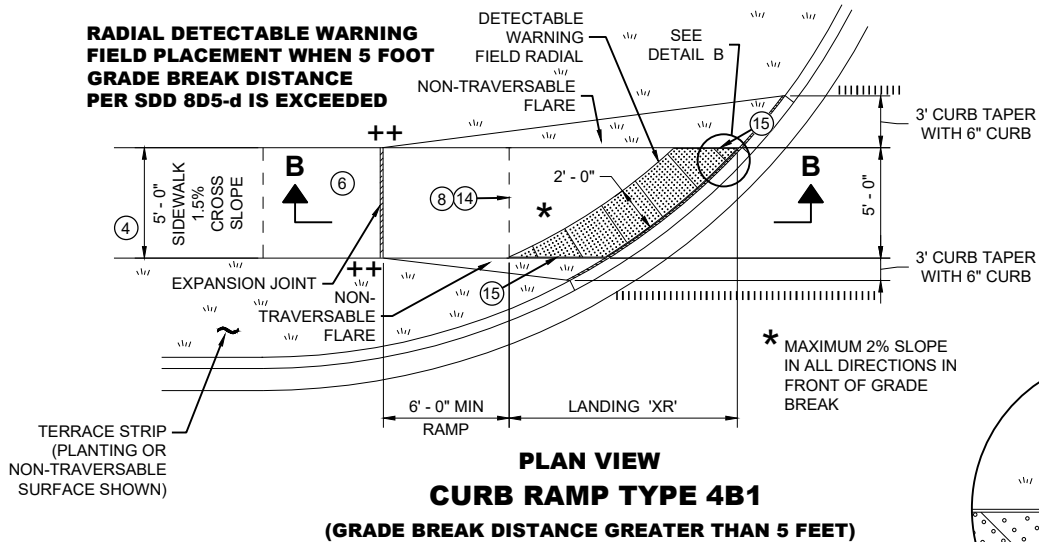


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

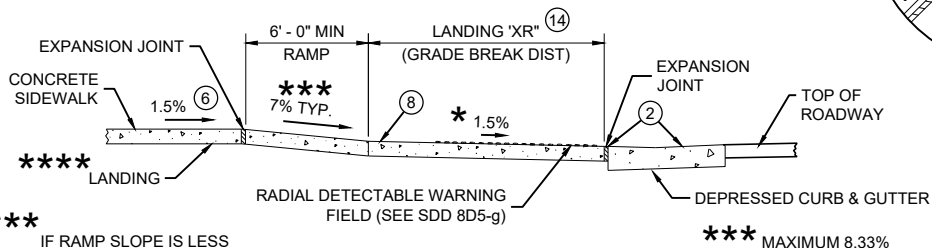


SECTION A - A FOR TYPE 4A1

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-d IS EXCEEDED**



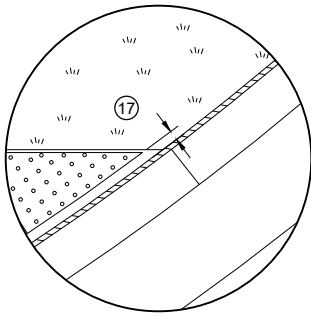
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



SECTION B - B FOR TYPE 4B1

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



DETAIL A

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.

DETECTABLE WARNING FIELDS 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.

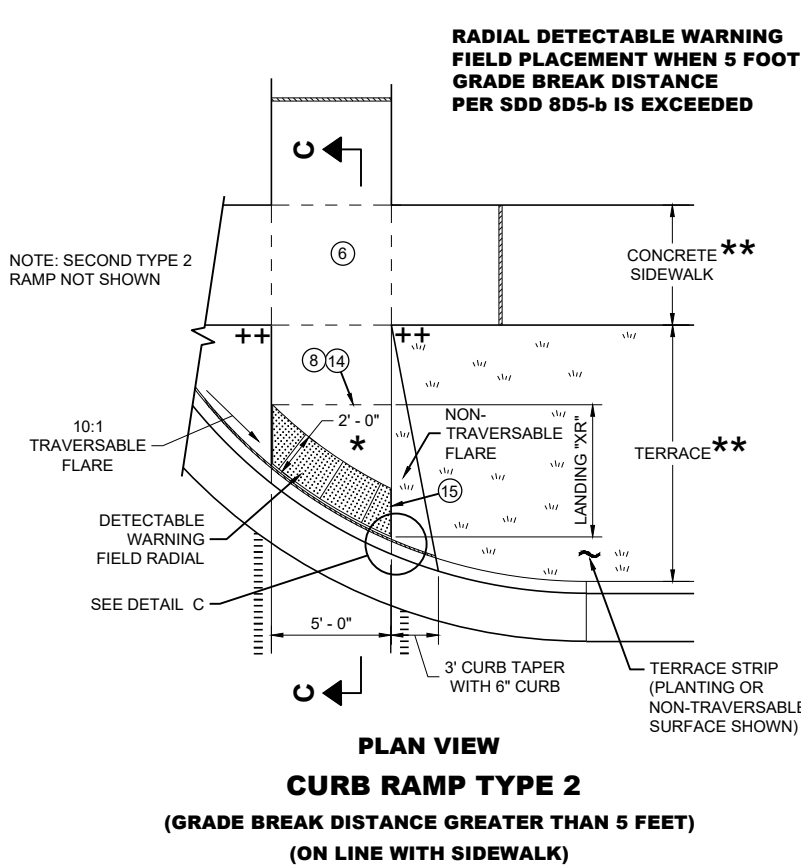
REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

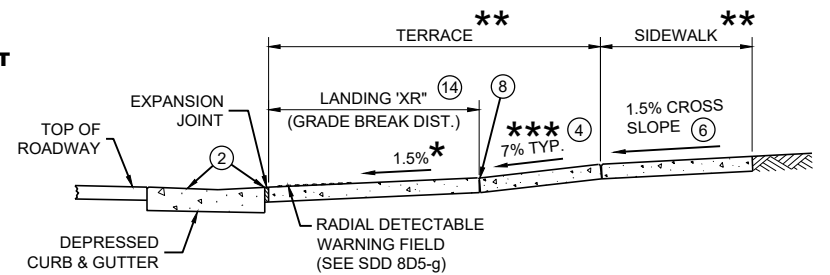
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

- 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.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- 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 1/2" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- 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.
- 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.

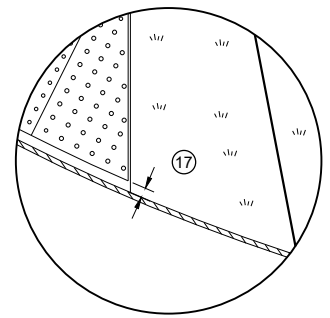
**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED**



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



SECTION C - C FOR TYPE 2



DETAIL C

*** MAXIMUM 2% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE
BREAK

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

*** MAXIMUM 8.33%

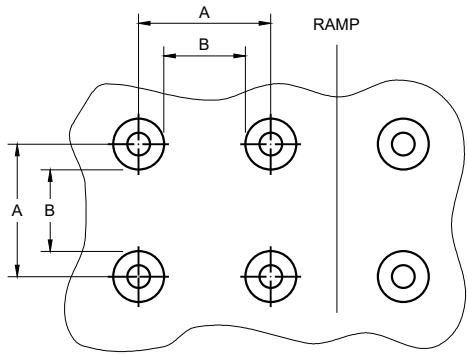
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

**CURB RAMPS
RADIAL DETECTABLE WARNING**

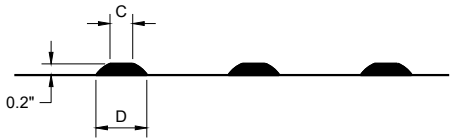
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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.

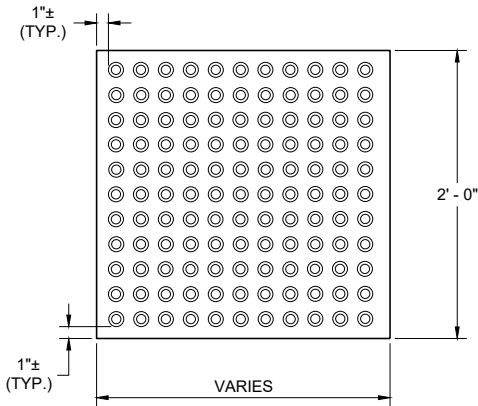


PLAN VIEW

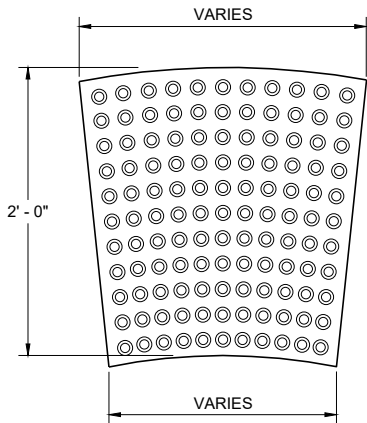


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

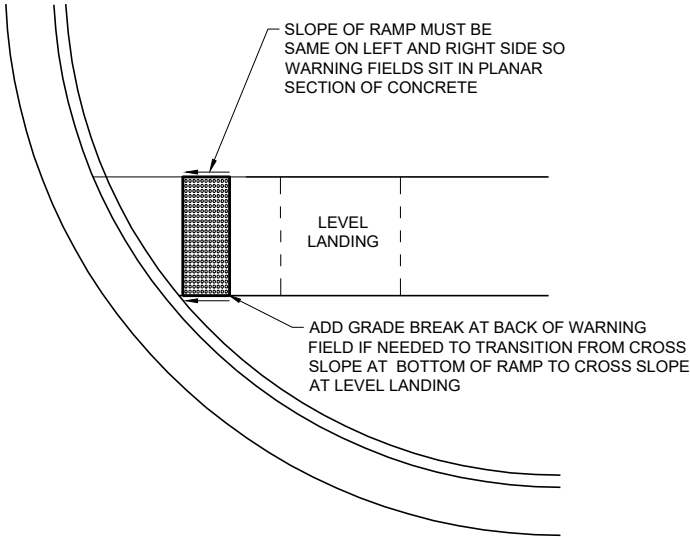


RECTANGULAR
PLATES

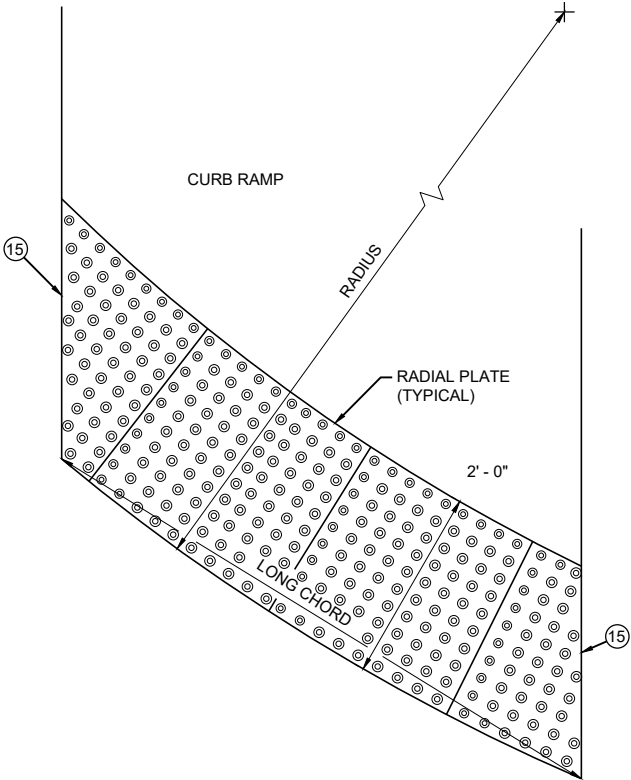


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP 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 FILED ARE PROHIBITED.

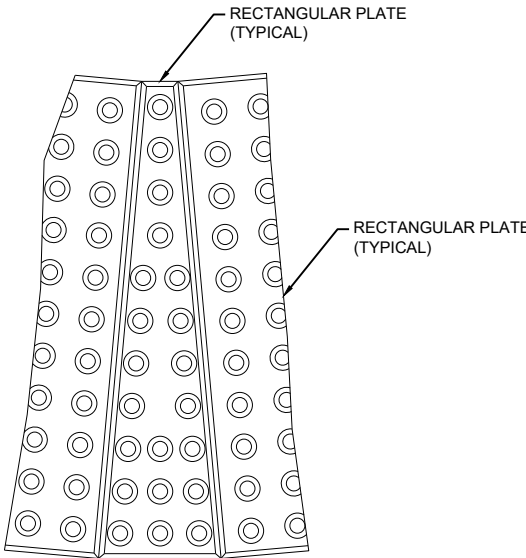
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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 WEDGE PLATES IN COMBINATION WITH SQUARE PLATES 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.

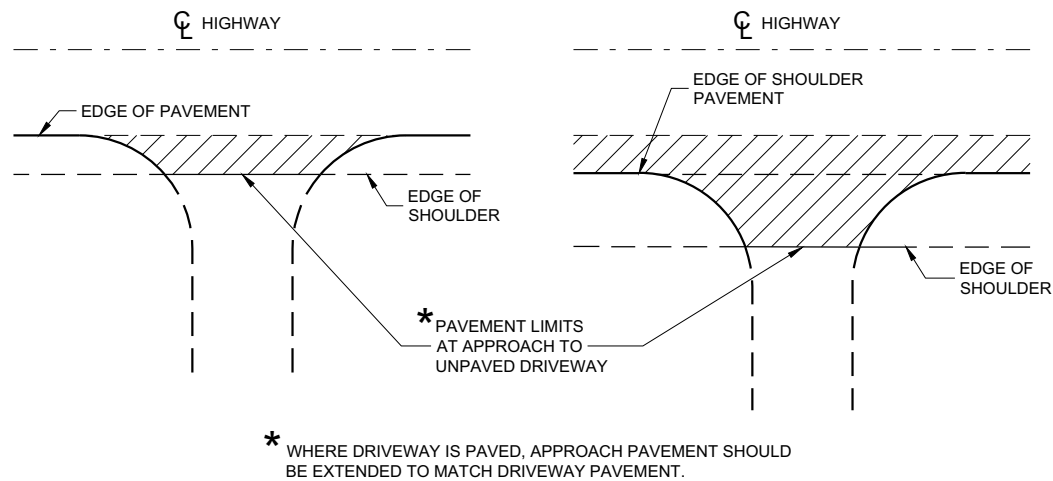


PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

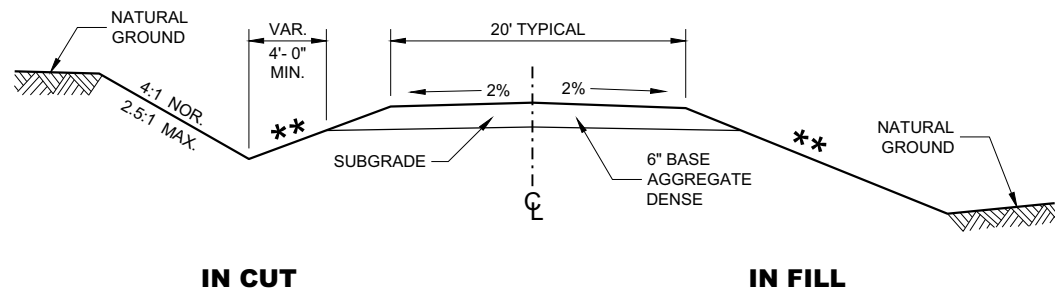
APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

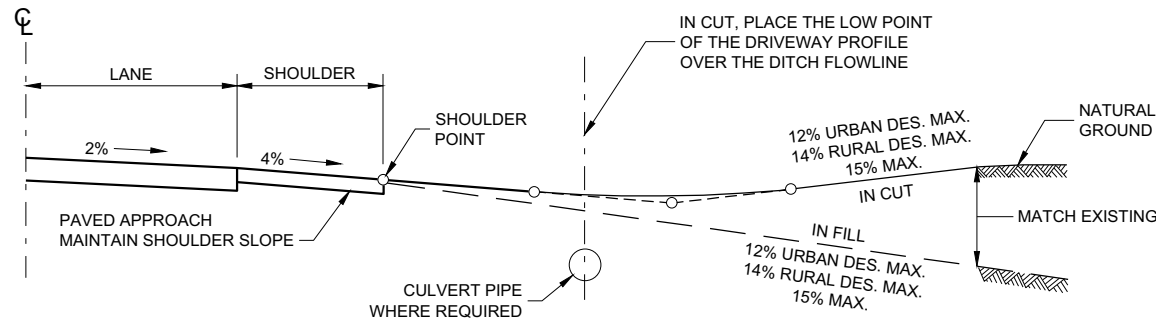
**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**



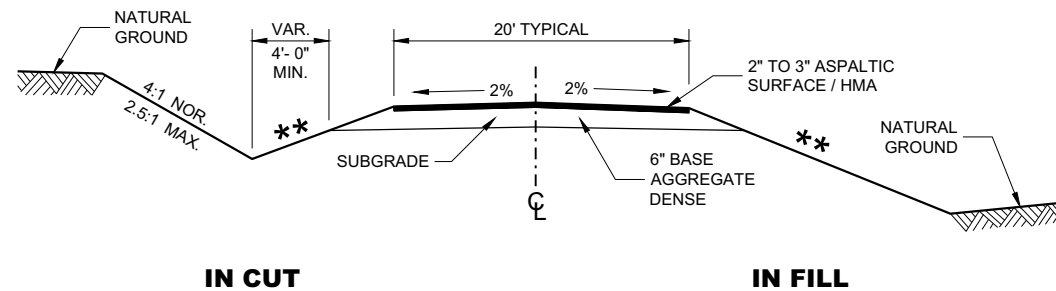
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

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

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



TYPICAL DRIVEWAY PROFILES

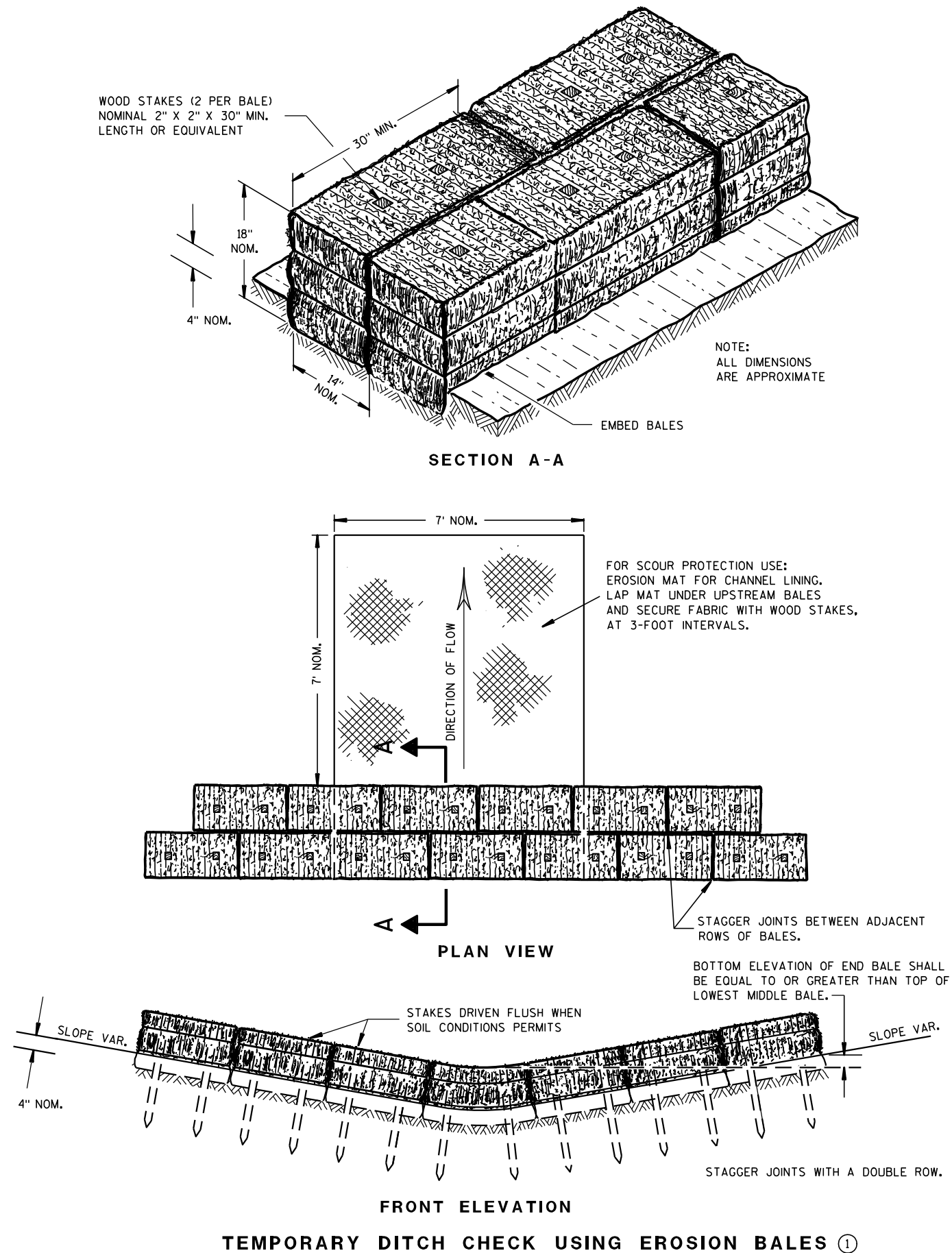


**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

**DRIVEWAYS WITHOUT
CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

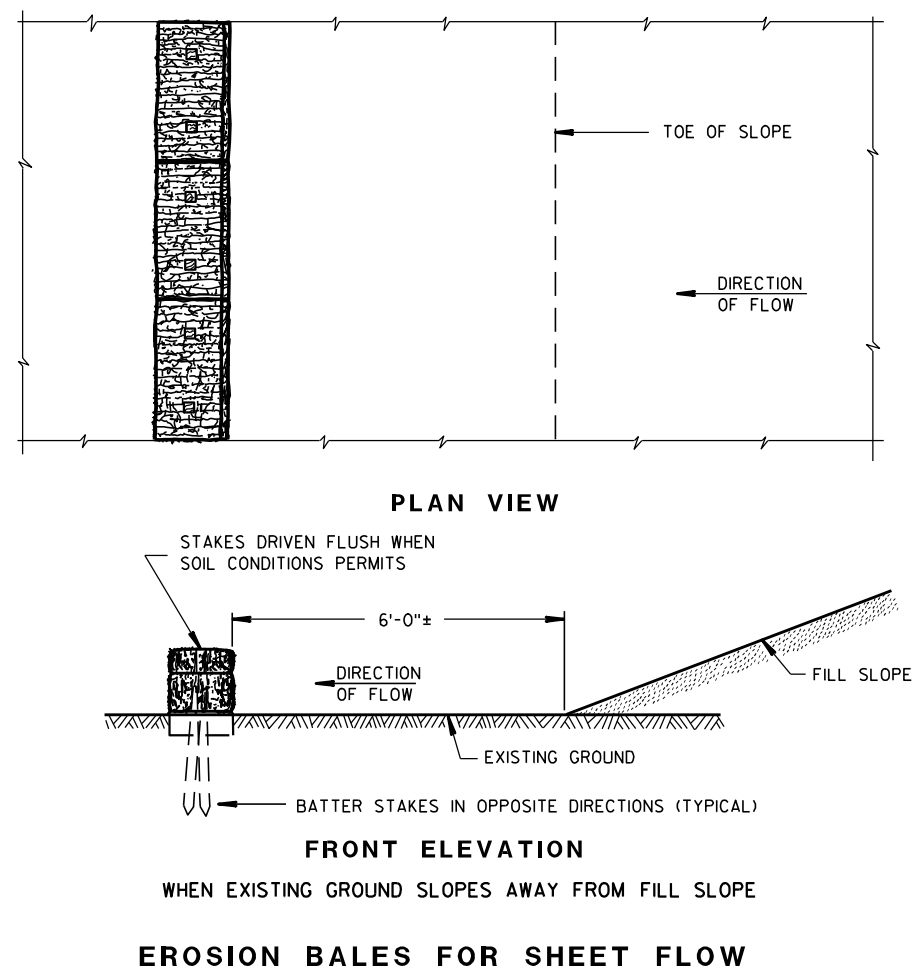
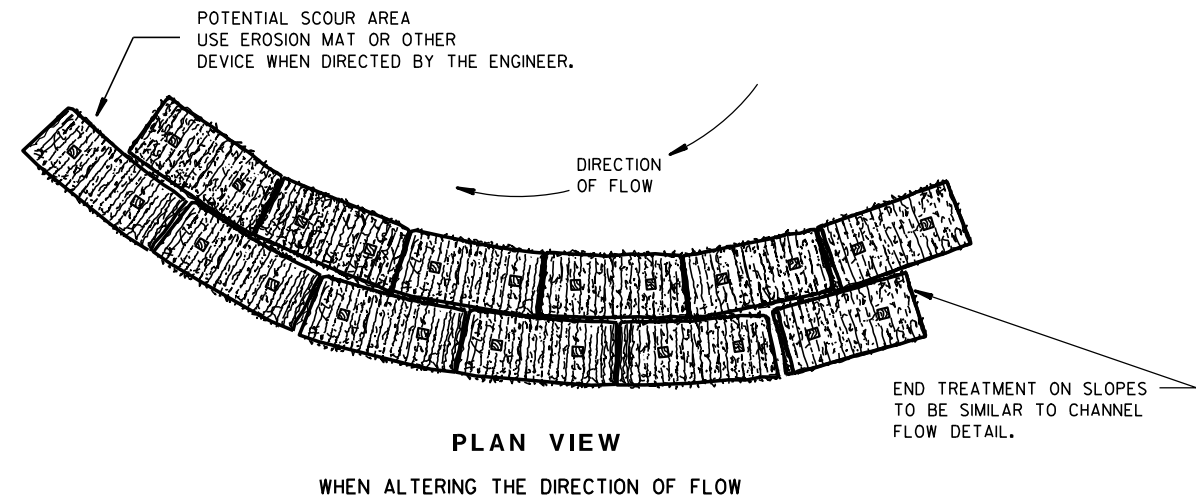
APPROVED
December 2017
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
FHWA



GENERAL NOTES

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

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



TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

FHWA

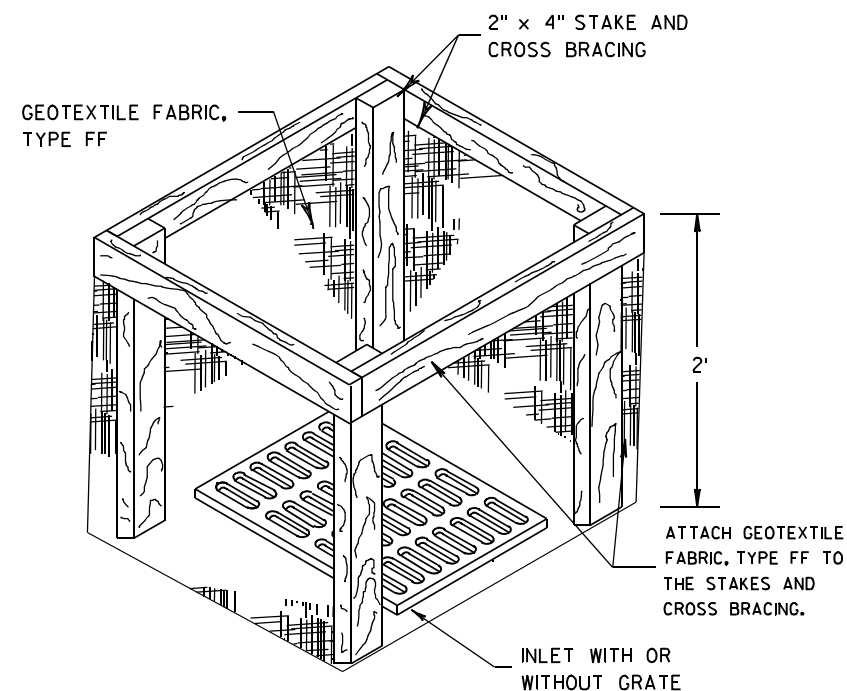
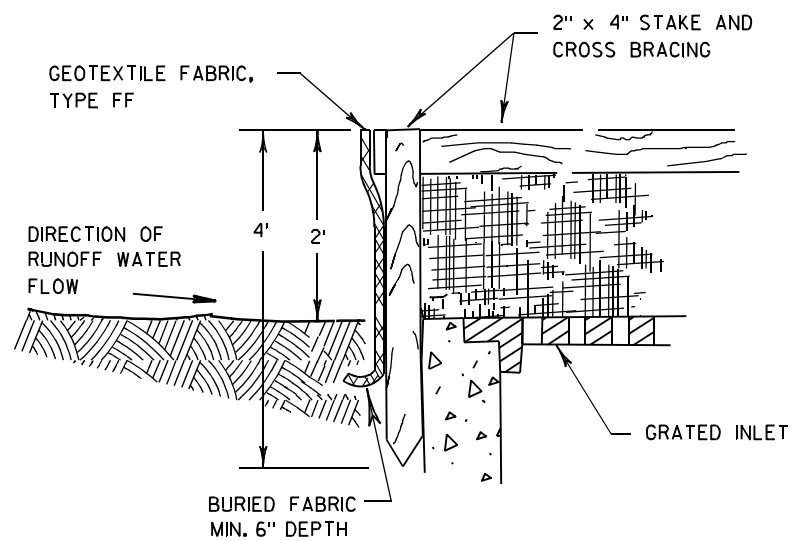
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



- 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 1½" X 1½" 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.



S.D.D. 8 E 9-6



INLET PROTECTION, TYPE A

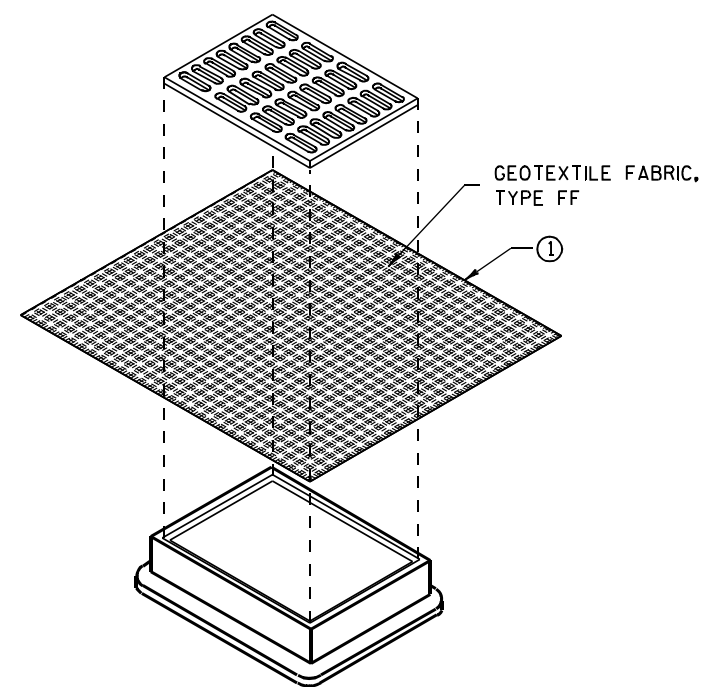
GENERAL NOTES

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.

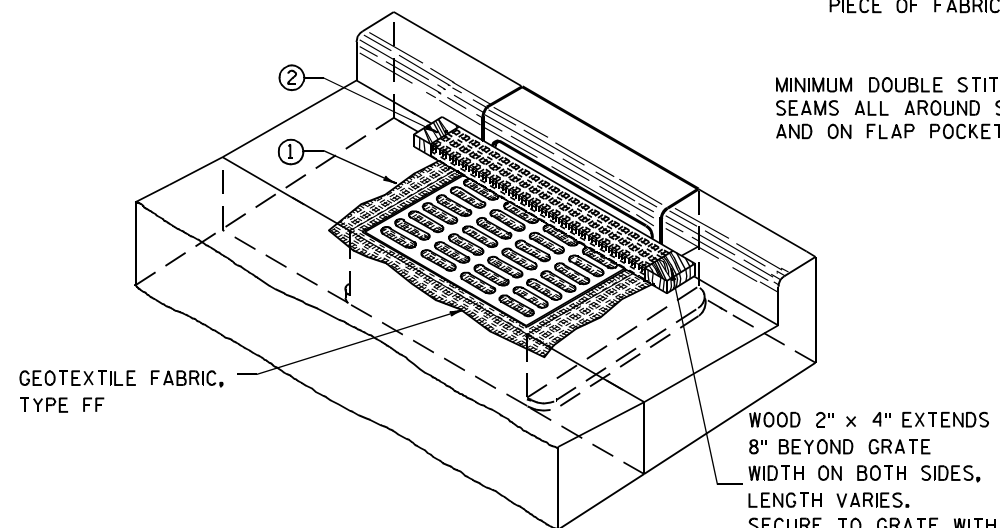
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

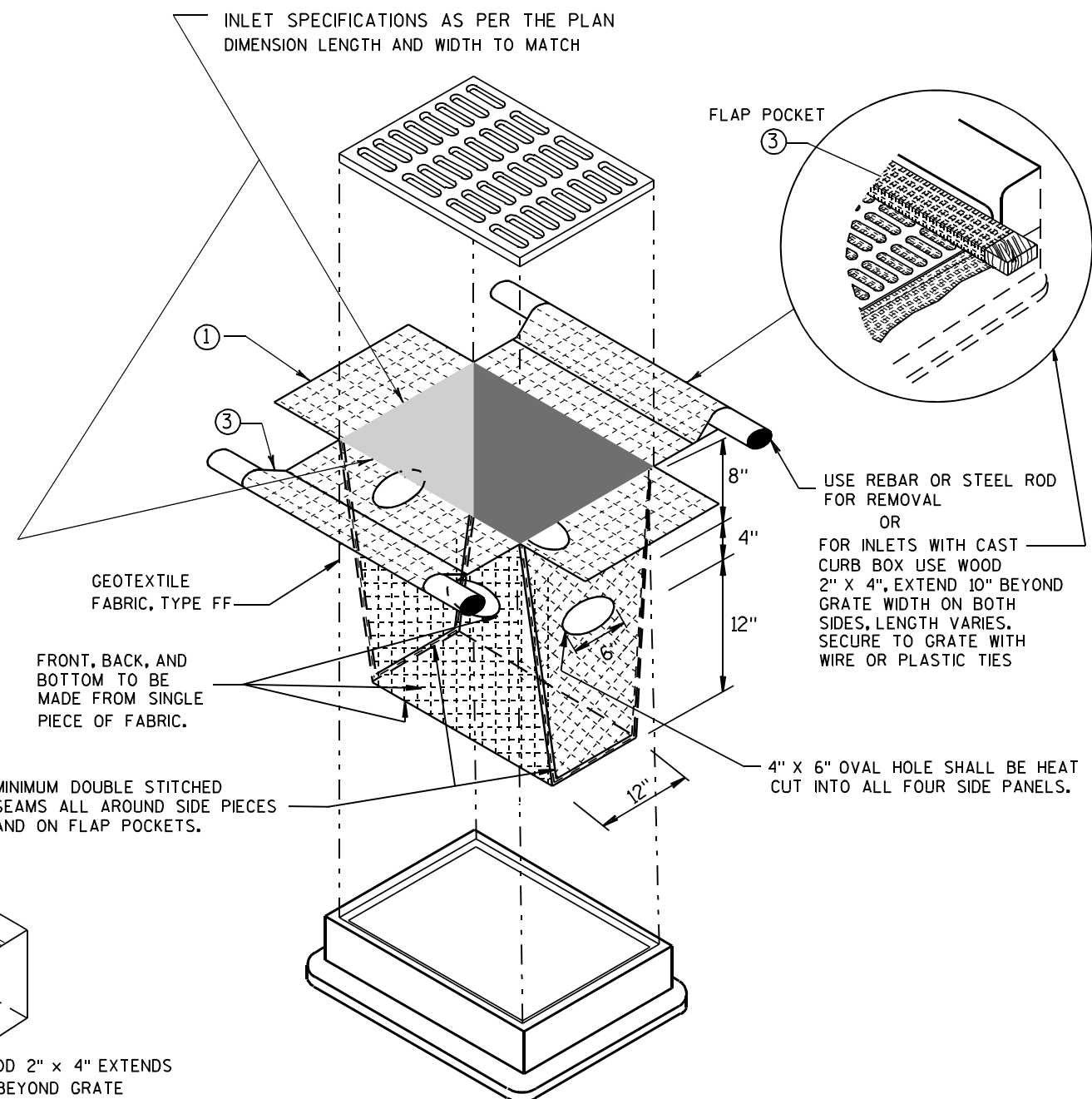
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.

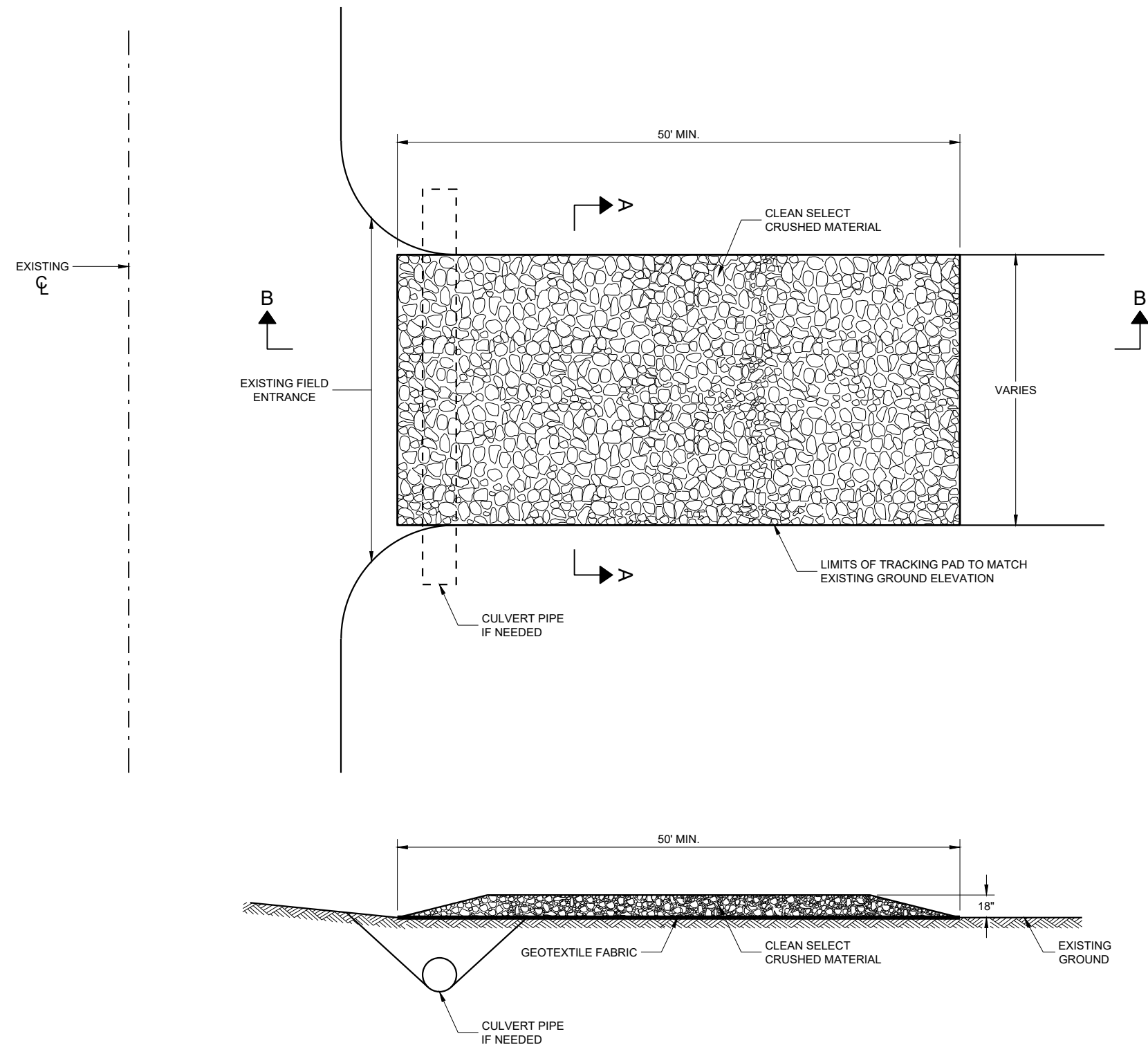
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



INLET PROTECTION, TYPE D

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

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	



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.

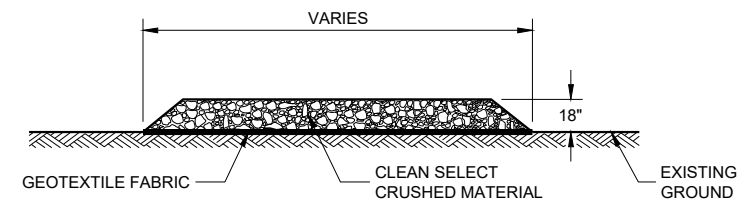
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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.



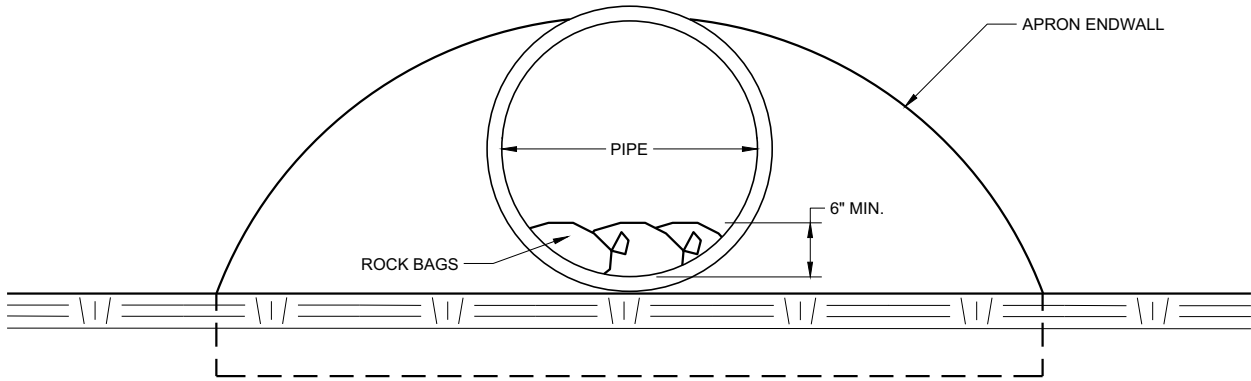
SECTION A - A

TRACKING PAD

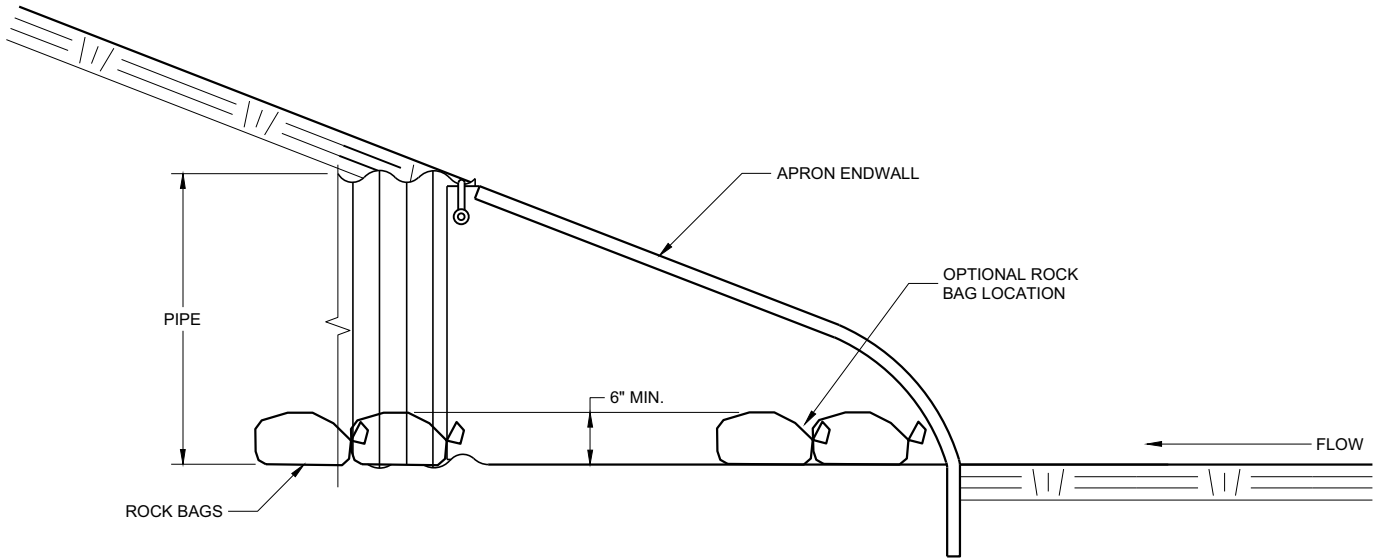
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



END VIEW



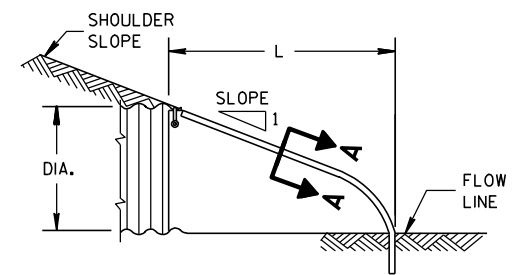
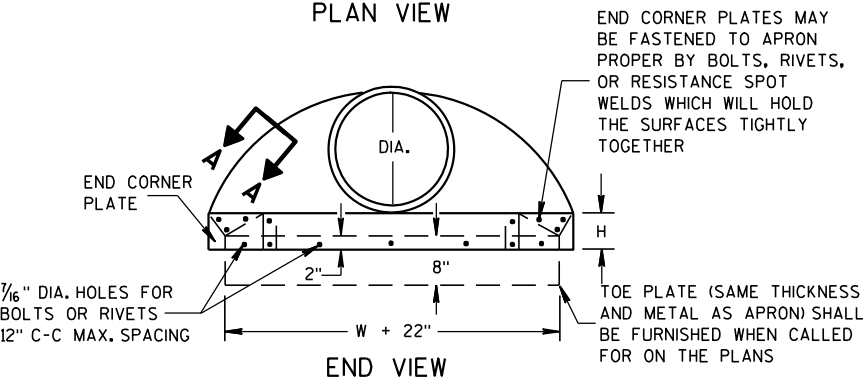
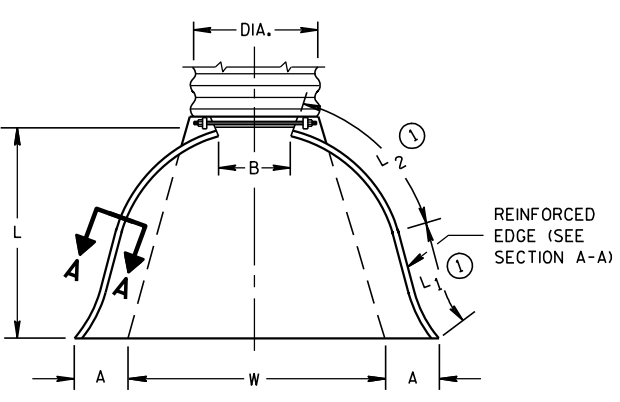
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

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

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1		3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1		3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1		3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1		3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1		3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1		3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1		3 Pc.

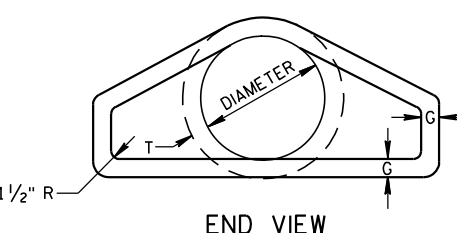
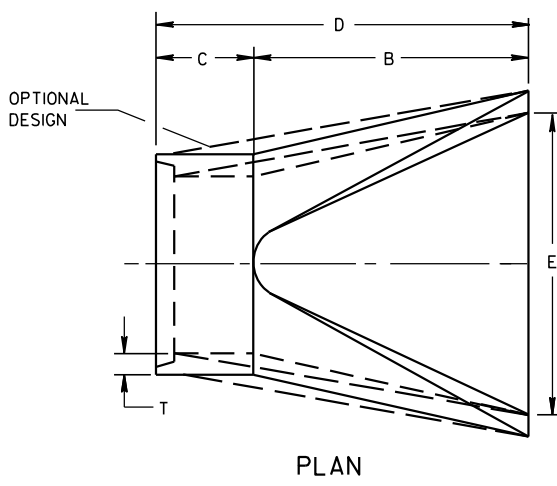
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



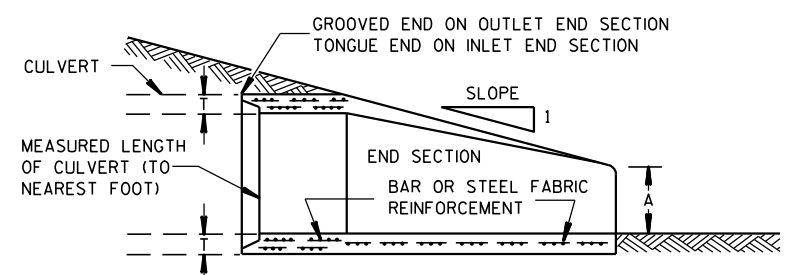
SIDE ELEVATION
METAL ENDWALLS

REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 1/8	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 1/2 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				

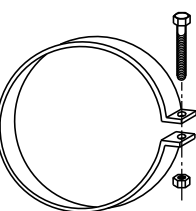
* MINIMUM
** MAXIMUM



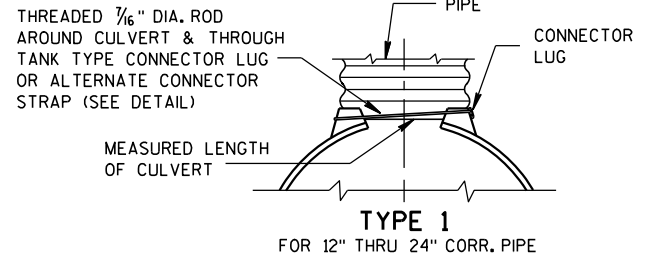
LONGITUDINAL SECTION
CONCRETE ENDWALLS



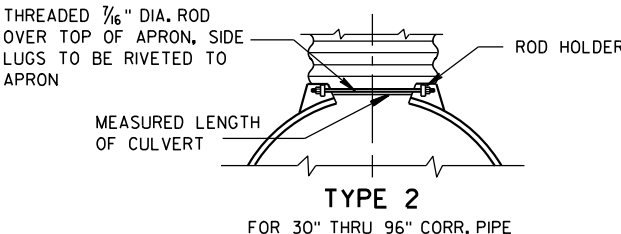
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



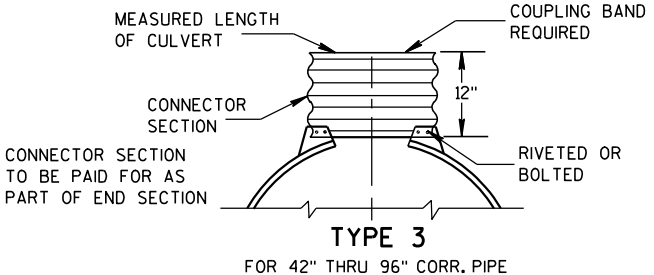
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



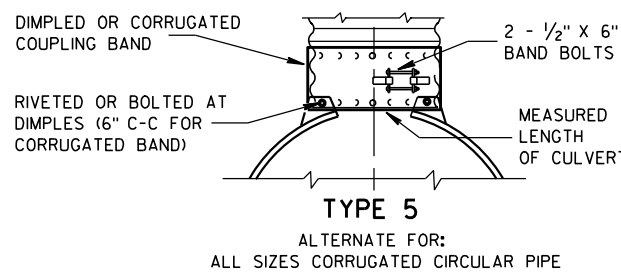
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

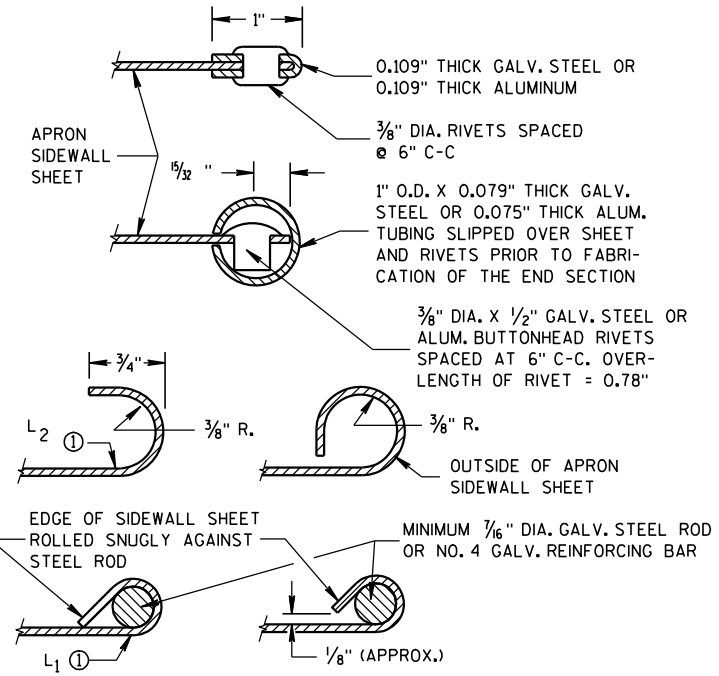
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

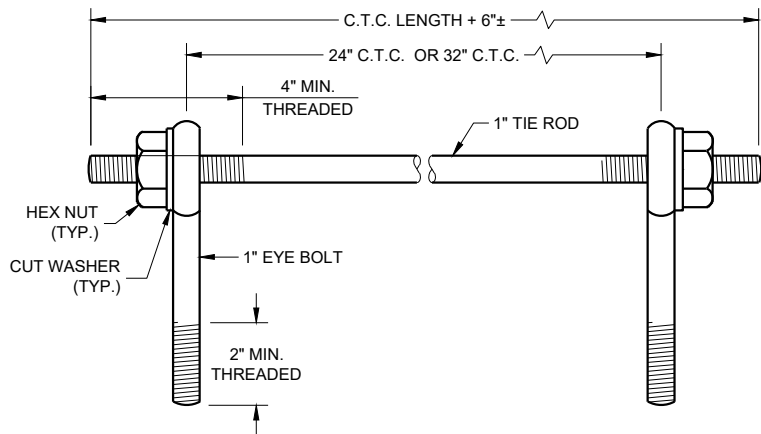
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

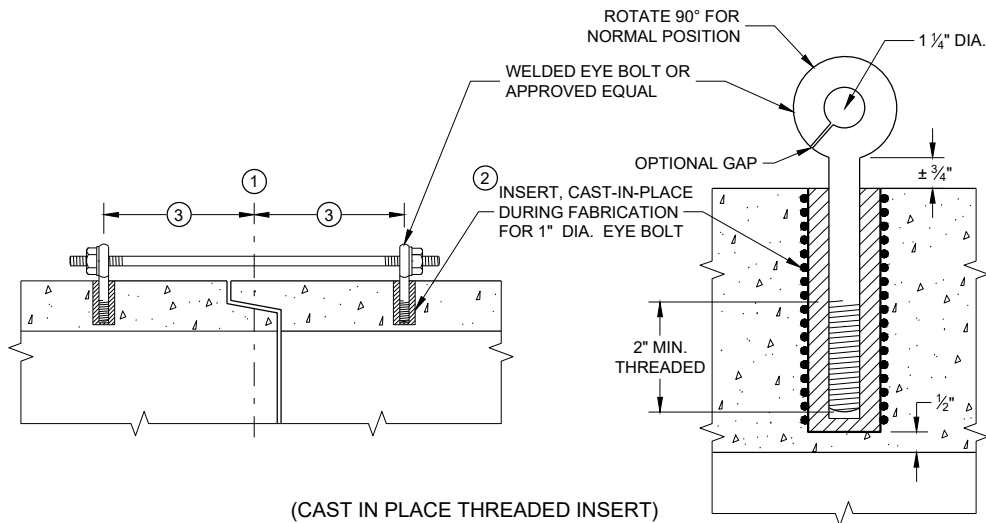
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



EYE BOLTS AND TIE ROD

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



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

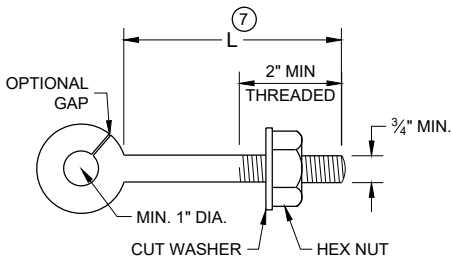
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

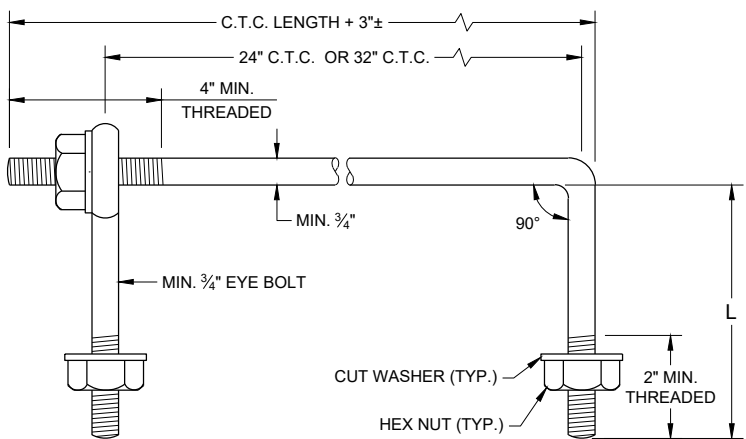
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE 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 PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 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.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

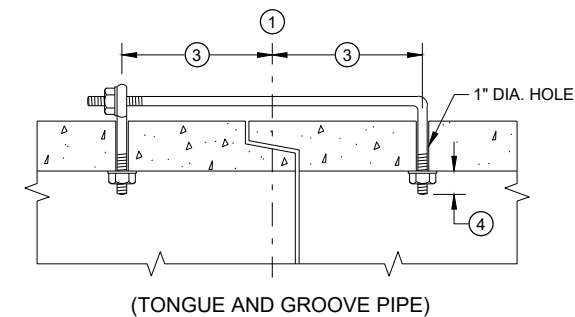


EYE BOLT 7

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

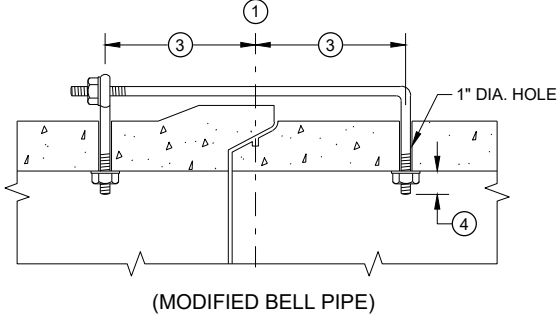


(TONGUE AND GROOVE PIPE)

LONGITUDINAL SECTION

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

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

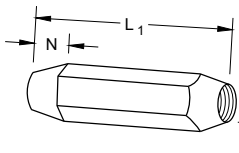


(MODIFIED BELL PIPE)

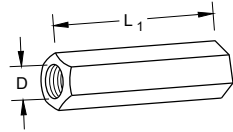
ADJUSTABLE TIE ROD TABLE

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 - 144	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES

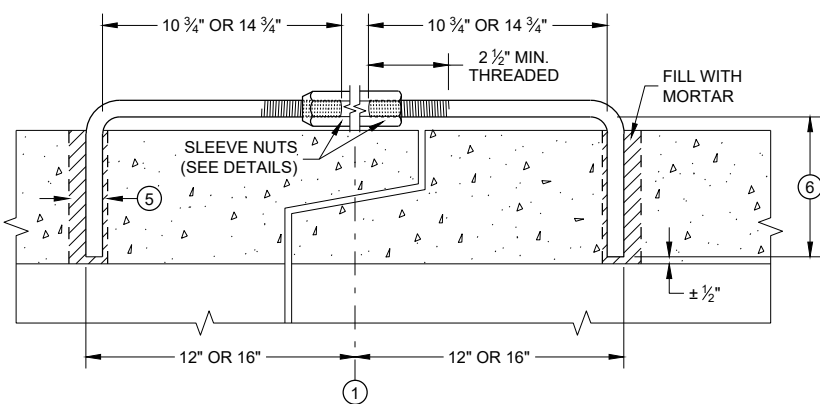


TAPERED



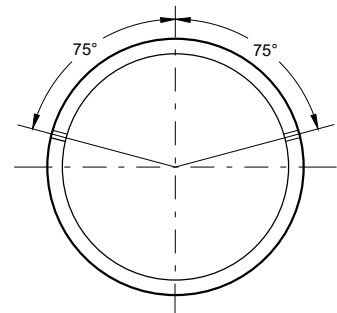
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



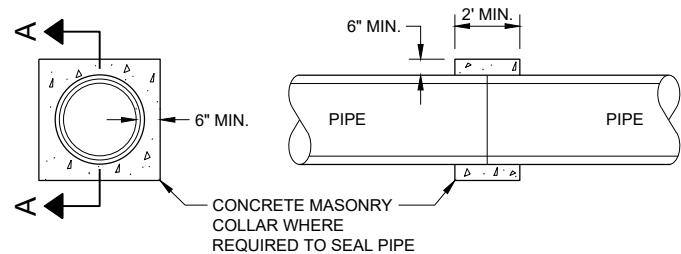
LONGITUDINAL SECTION

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



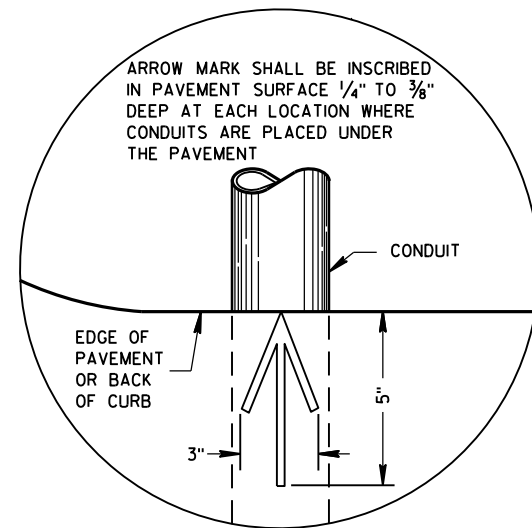
SECTION A - A

CONCRETE COLLAR DETAIL

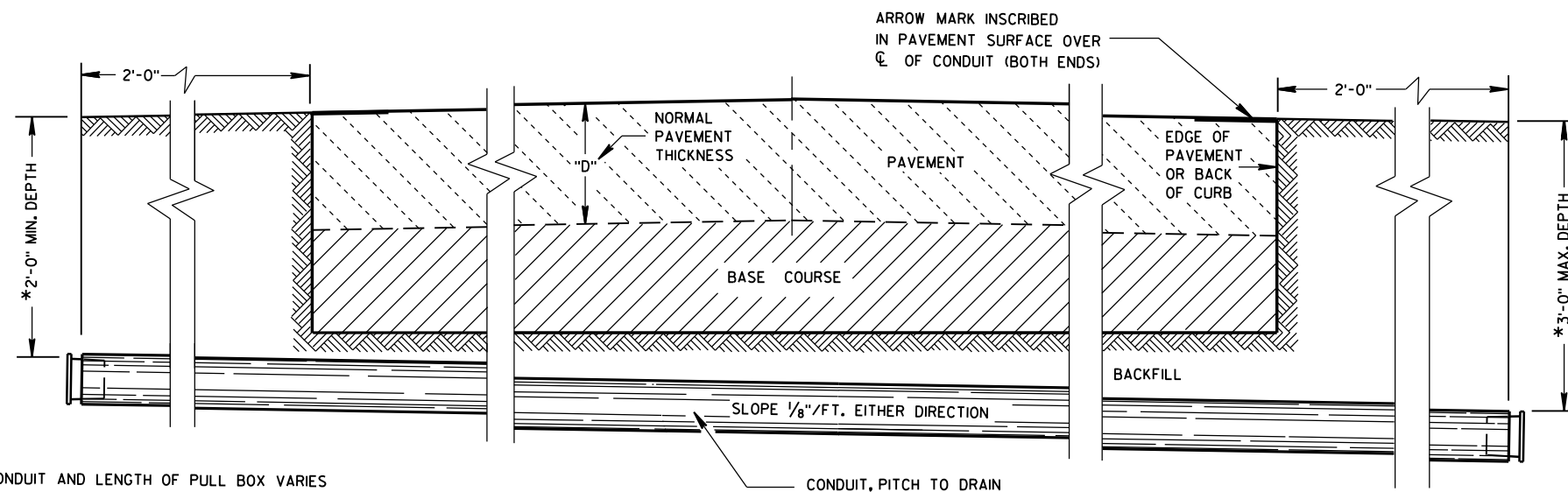
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



PLAN VIEW
ARROW MARK



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

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

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

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



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

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

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

COVER SHALL BE MAGNETICALLY LOCATABLE.

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

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

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

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

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

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

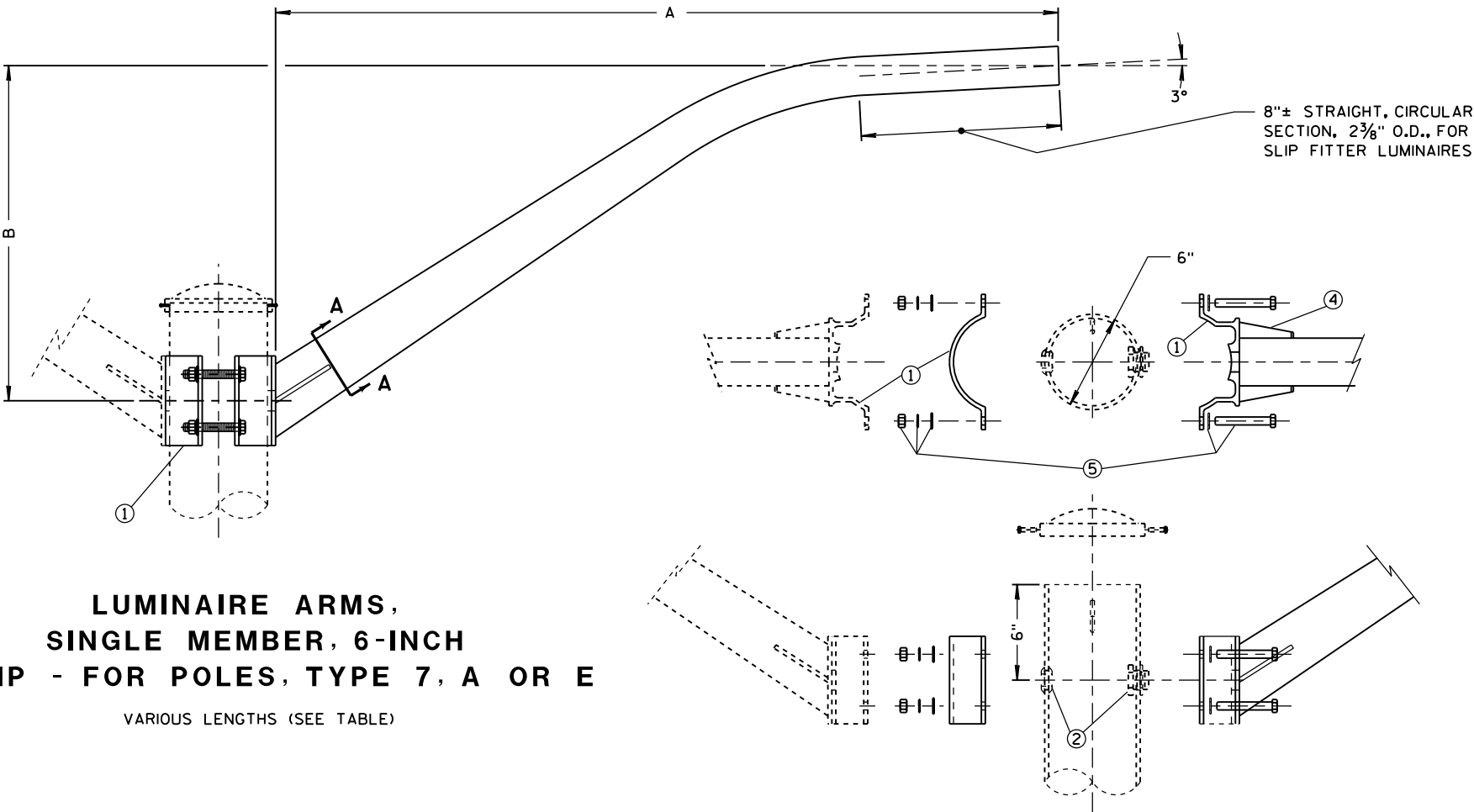
LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS,
"WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

FHWA

LUMINAIRE ARMS,
SINGLE MEMBER, 6-INCH
CLAMP - FOR POLES, TYPE 7, A OR E
VARIOUS LENGTHS (SEE TABLE)



CLAMP ASSEMBLY
SINGLE MEMBER CLAMP SHOWN

TYPE	DIM. A	DIM. B
	NOMINAL ARM LENGTH (FT)	APPROX. RISE (FT)
SINGLE MEMBER	4.0	2.0
SINGLE MEMBER	8.0	3.0
SINGLE MEMBER	10.0	3.0
SINGLE MEMBER	15.0	3.0

GENERAL NOTES

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

ARMS AND CLAMP EXTRUSIONS SHALL BE CONSTRUCTED OF NATURAL FINISH 6063-T6 ALUMINUM.

HEAT TREATMENT OF WELDS IN STRUCTURAL AREAS IS REQUIRED.

ALL THREADED FASTENER COMPONENTS SHALL BE STAINLESS STEEL. NUTS SHALL BE HEX NUTS. BOLTS SHALL BE HEX HEAD. ALL THREADED SURFACES SHALL BE COATED WITH ANTI-SEIZE COMPOUND PRIOR TO INSTALLATION.

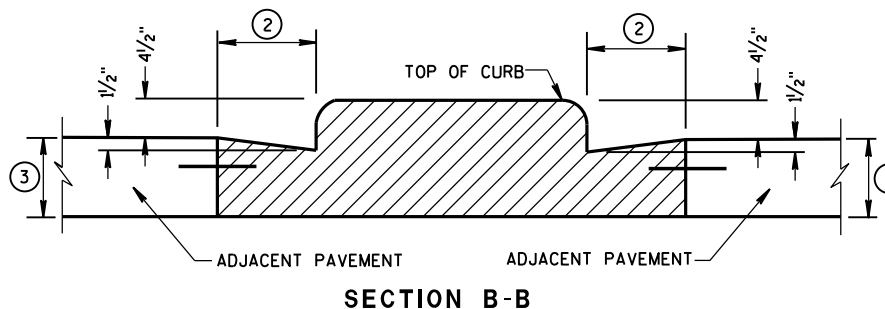
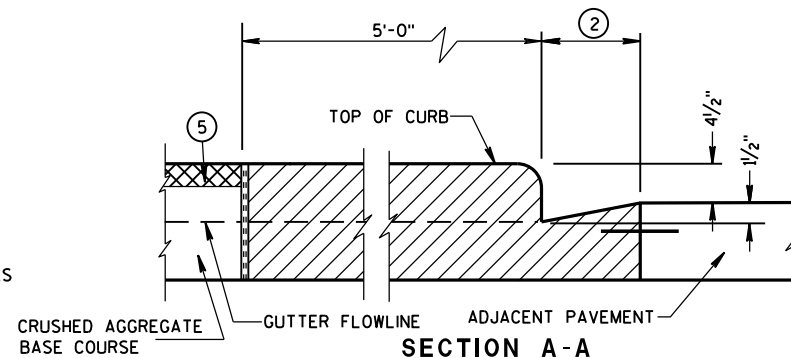
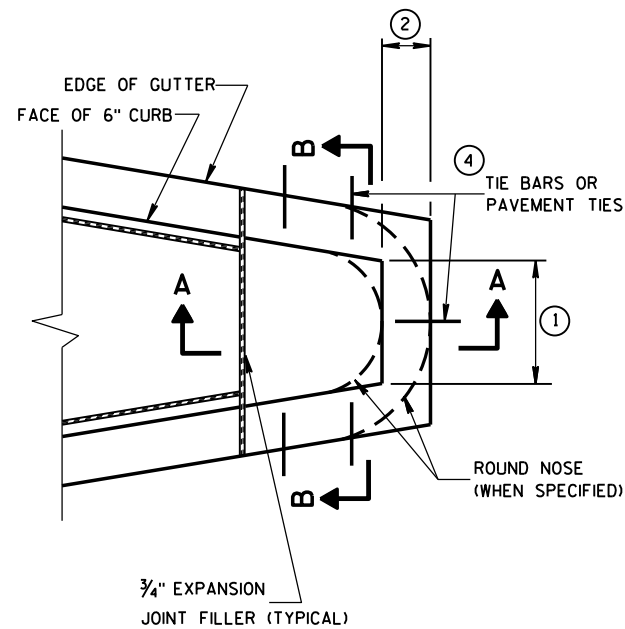
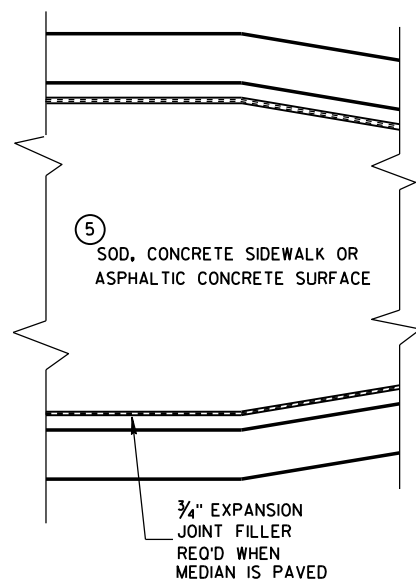
LUMINAIRE LOADING FOR DESIGN CALCULATION SHALL BE 50 LBS. IN WEIGHT AND 1.5 SQ. FT. FOR E.P.A..

- ① CLAMPS SHALL BE EXTRUDED ALUMINUM.
- ② RACE WAY: 1 3/8" FIELD DRILLED HOLE WITH 1" CHASE NIPPLE AND NUT (OR NEOPRENE GROMMET) PER EACH REQUIRED LUMINAIRE ARM. PROVIDE 1 1/2" HOLE IN CLAMP EXTRUSION TO CONTINUE RACEWAY.
- ③ STIFFENER
- ④ GUSSETS REQUIRED.
- ⑤ CLAMP BOLT ASSEMBLY (BOLT - 1/2"-13 UNC, 2 EACH - FLAT WASHER, LOCK WASHER, NUT) - 4 EACH PER CLAMP.

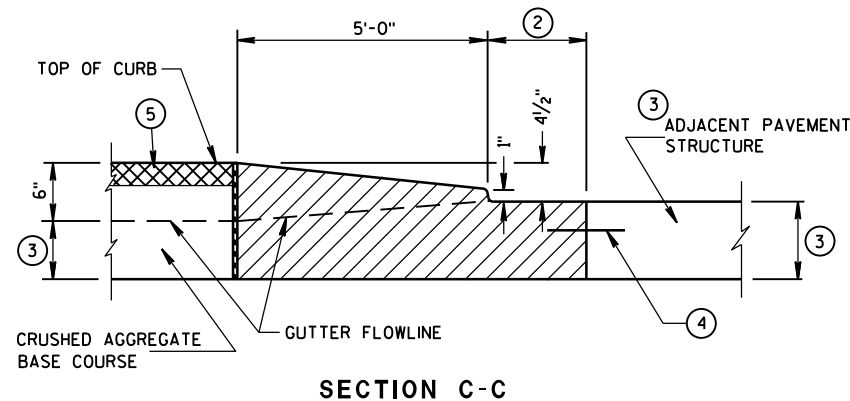
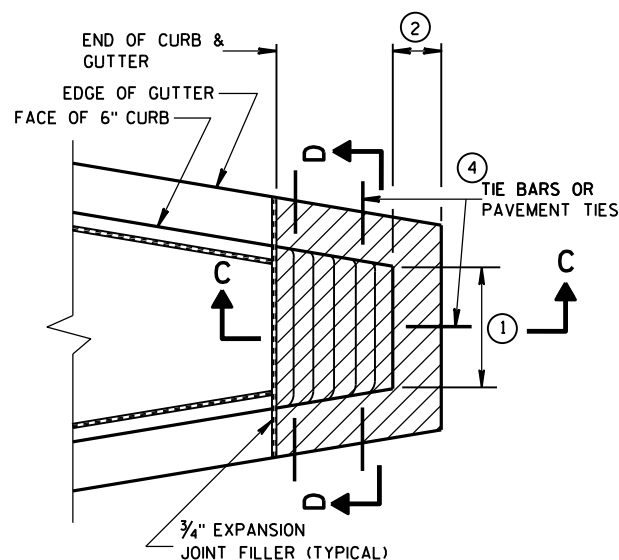
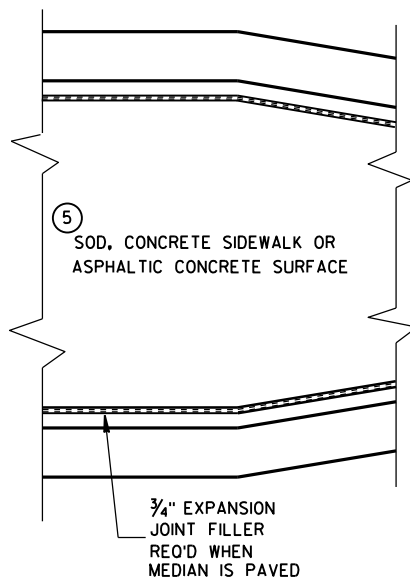
LUMINAIRE ARMS, SINGLE MEMBER
6-INCH CLAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

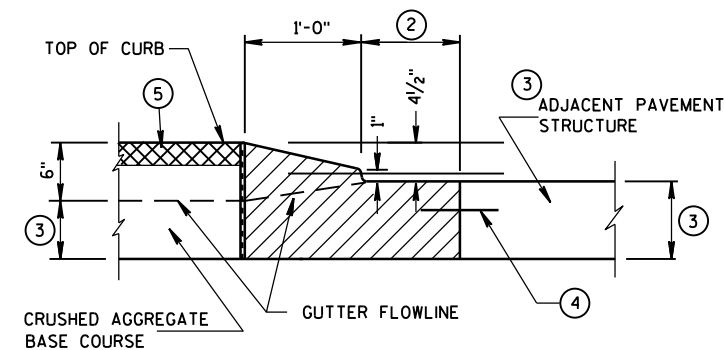
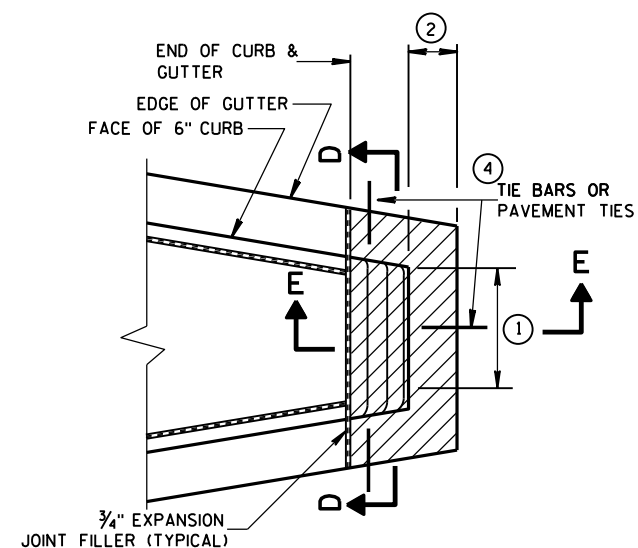
APPROVED
DATE: Sept. 2014 /S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER
FHWA



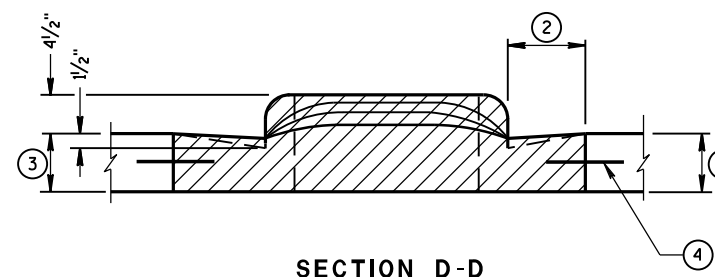
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



GENERAL NOTES

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

- 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 NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

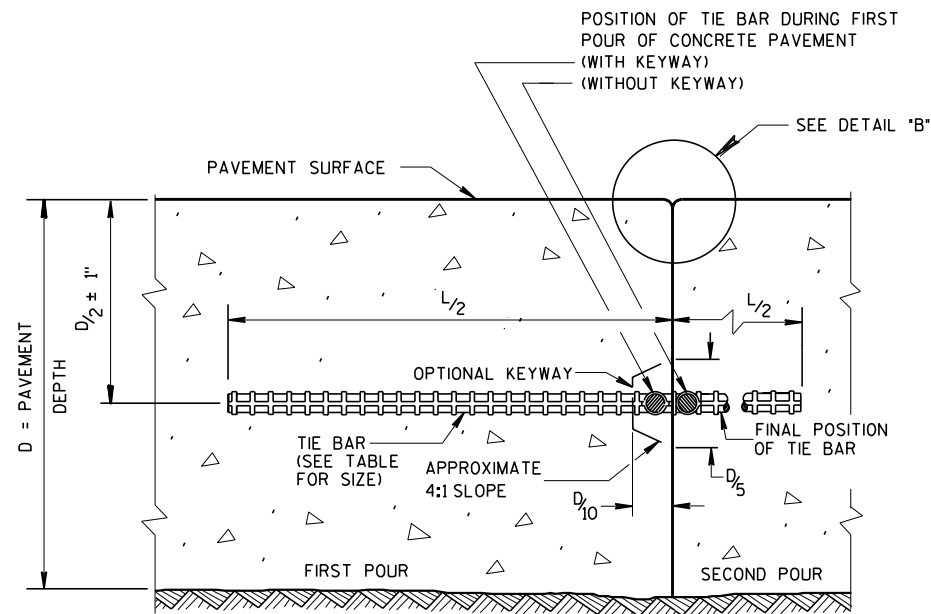
APPROVED

6/8/2006

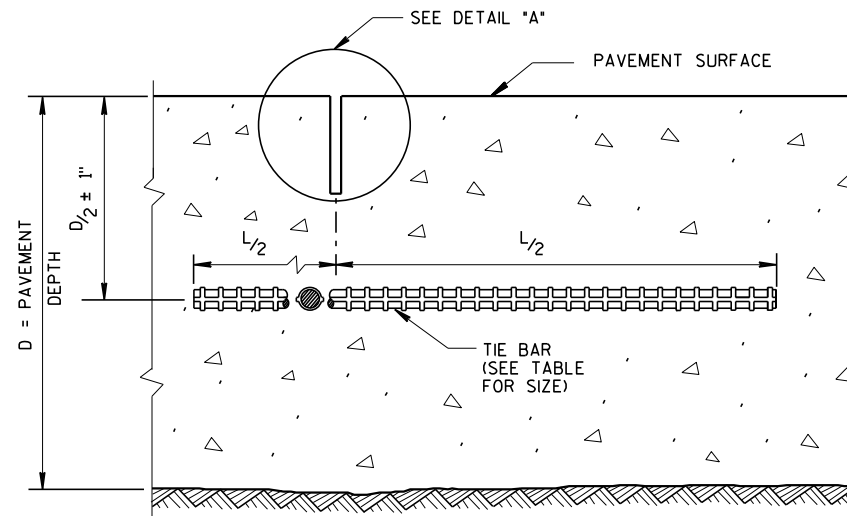
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



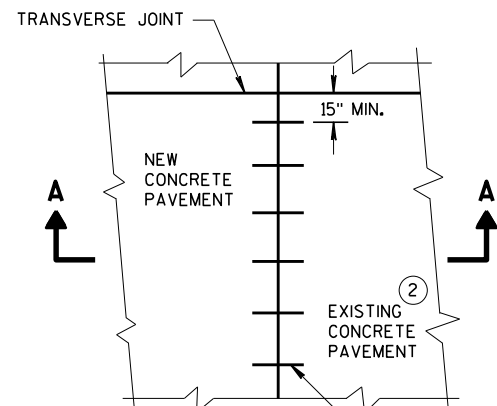
CONSTRUCTION JOINT



SAWED JOINT

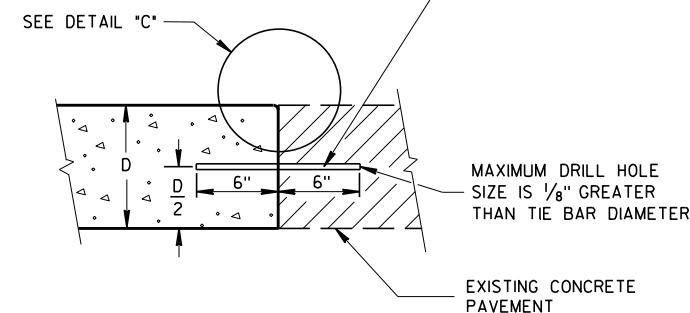
GENERAL NOTES

- 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.

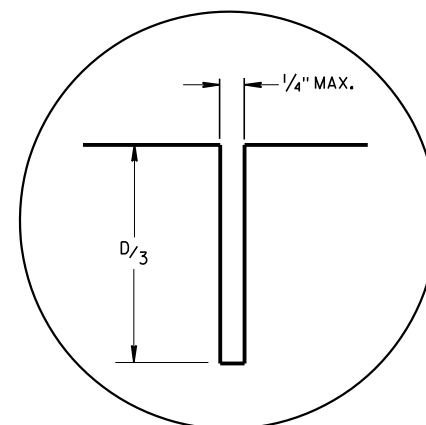


PLAN VIEW

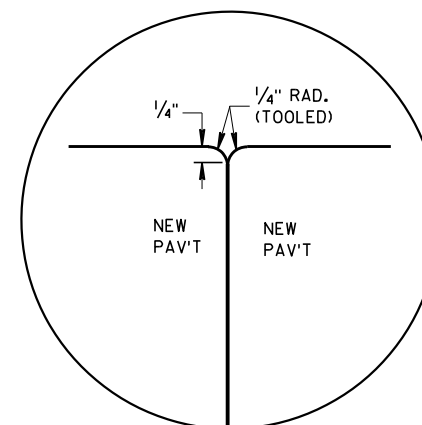
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



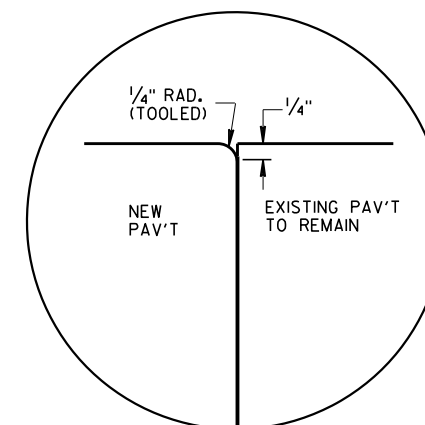
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



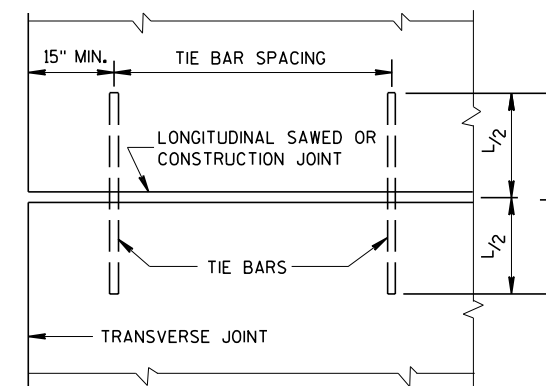
DETAIL "C"

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" **

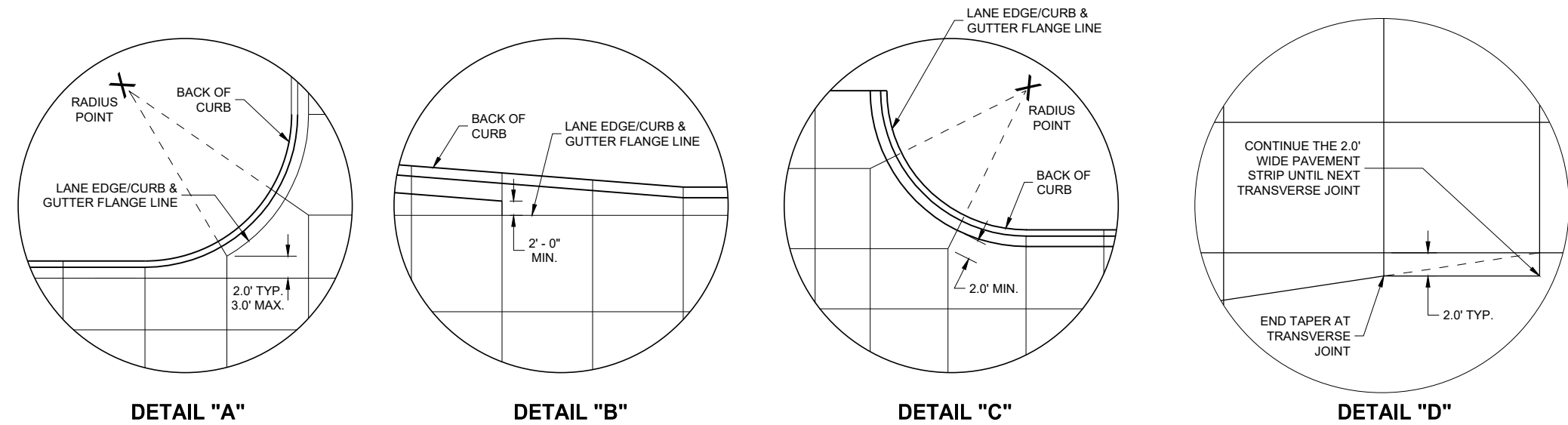
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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

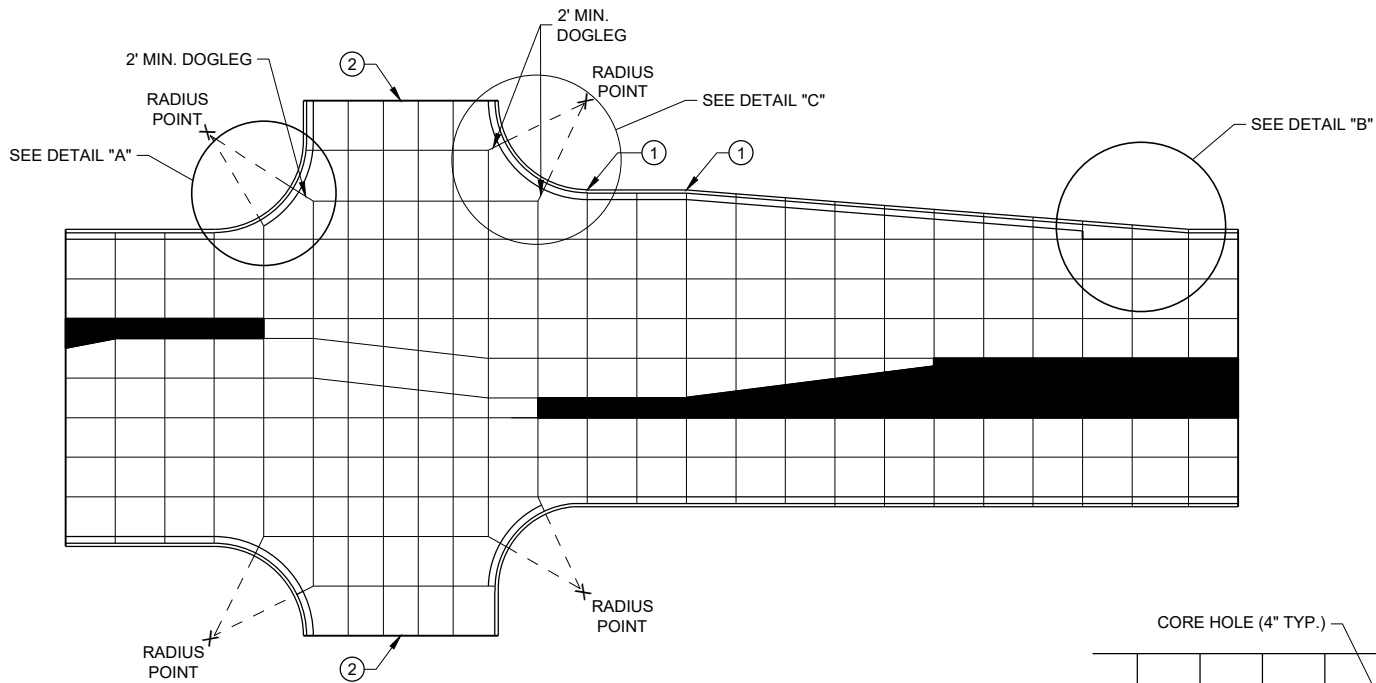


PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2018 DATE	/S/ Peter Kemp, P.E. PAVEMENT SUPERVISOR
FHWA	



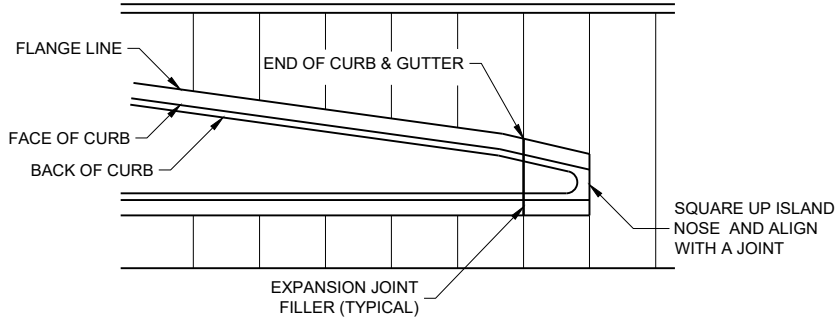
- GENERAL NOTES**
- THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.
- ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.
- CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.
- ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.
- AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.
- SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.
- AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.
- 1 PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
 - 2 CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
 - 3 THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



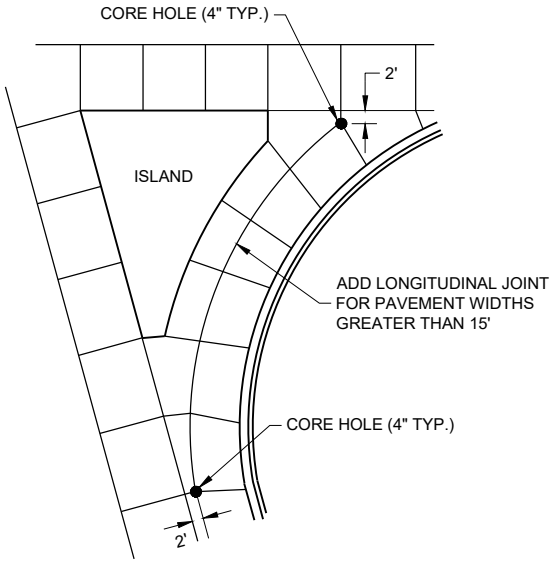
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

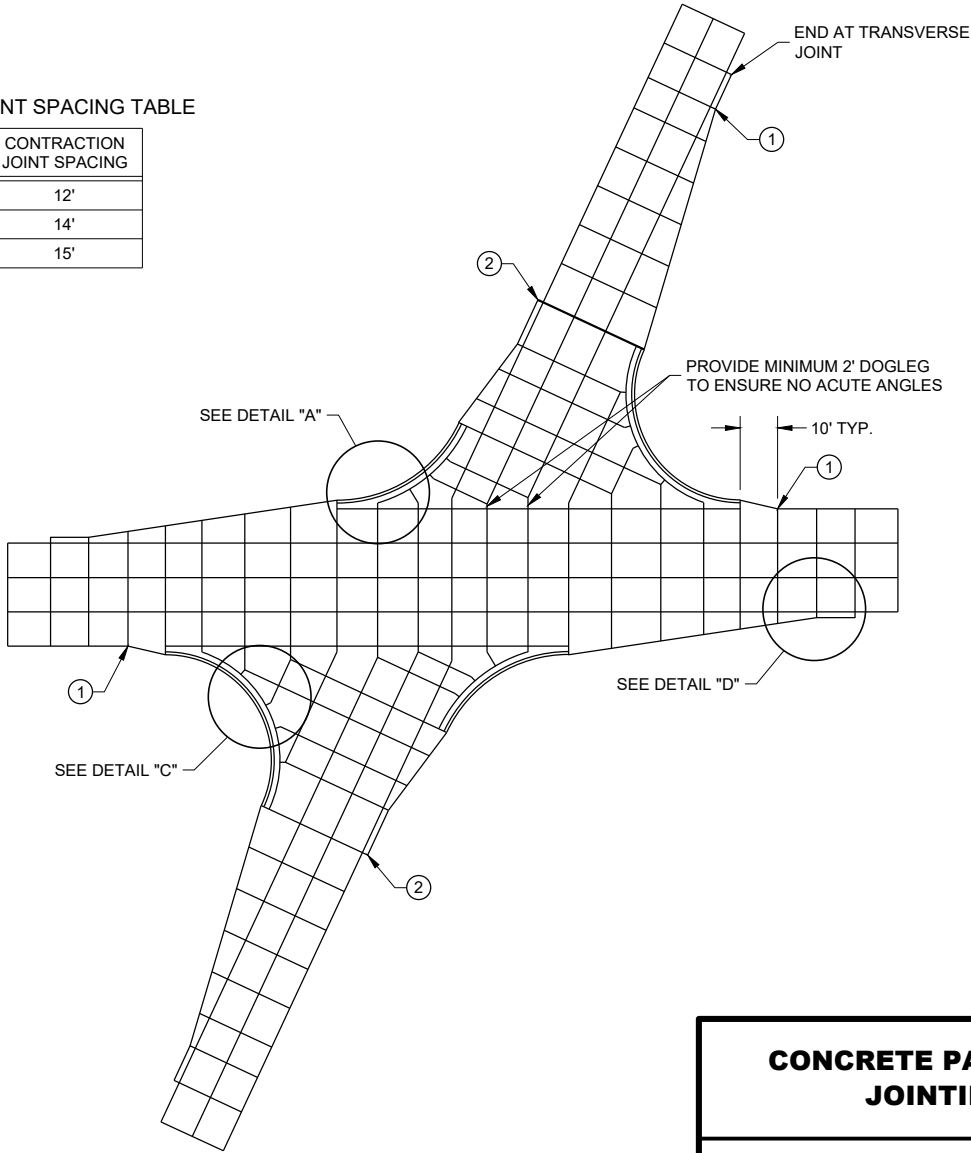
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



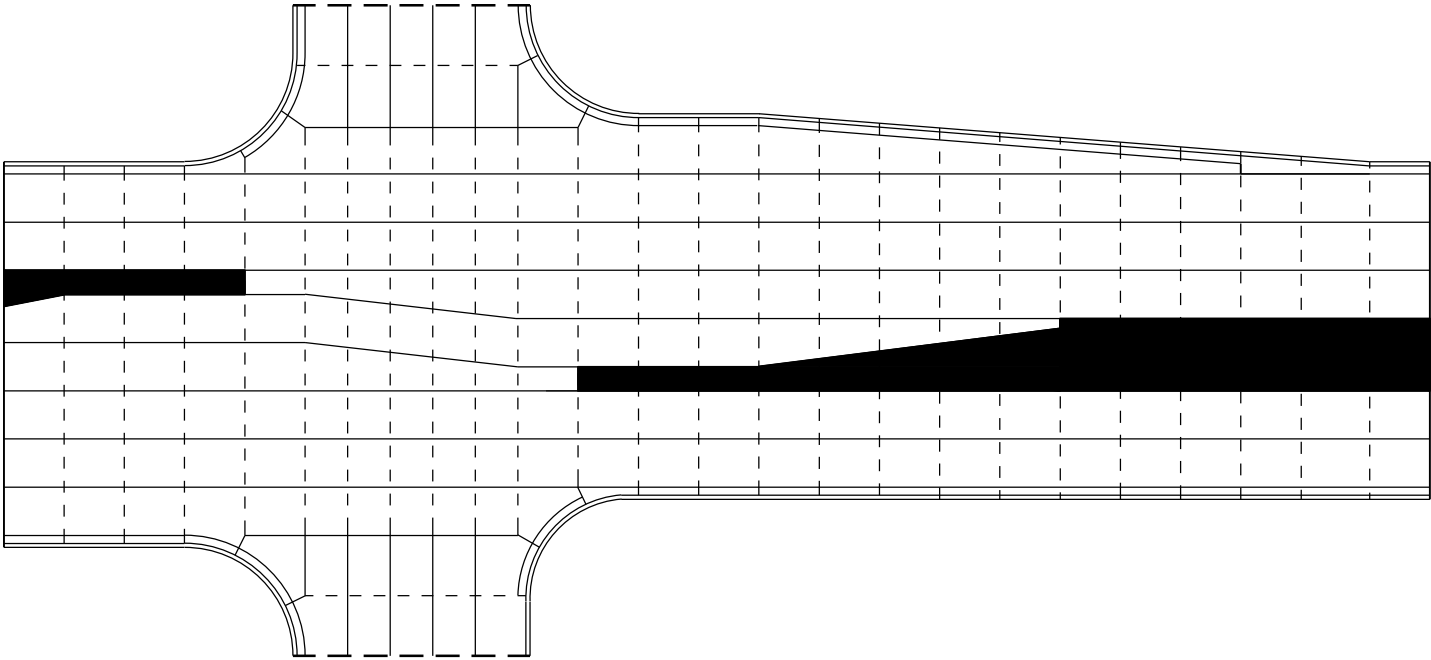
SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

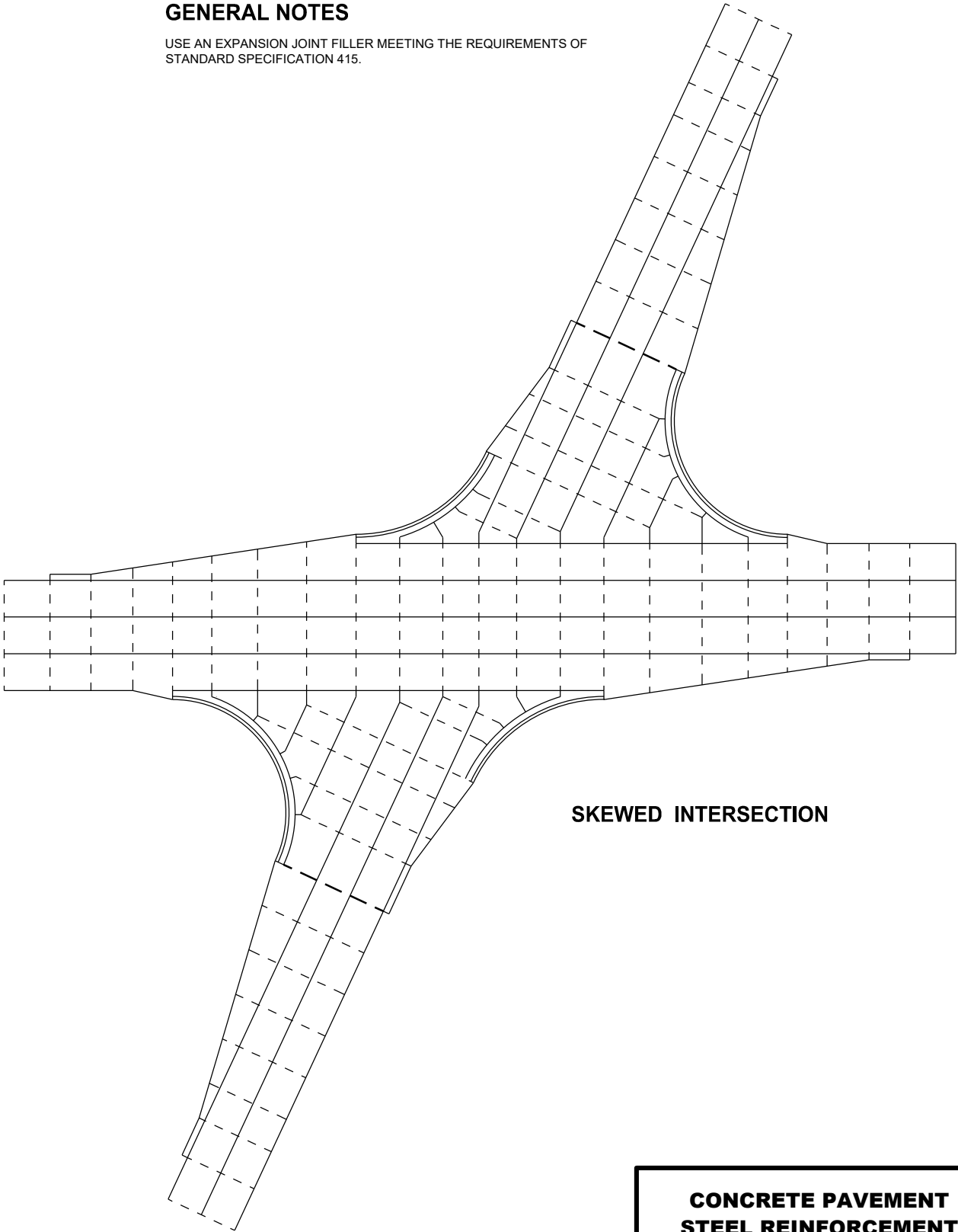
- POTENTIAL DOWELED EXPANSION JOINT
- DOWELED JOINT
- TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

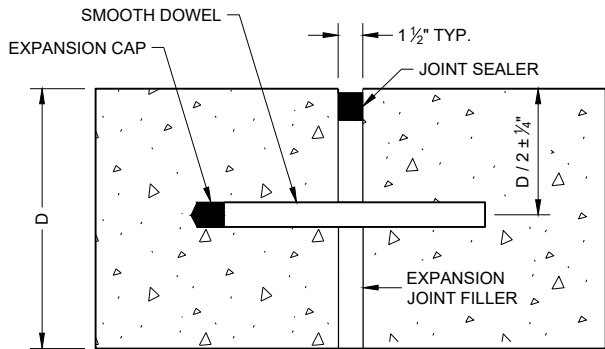
USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



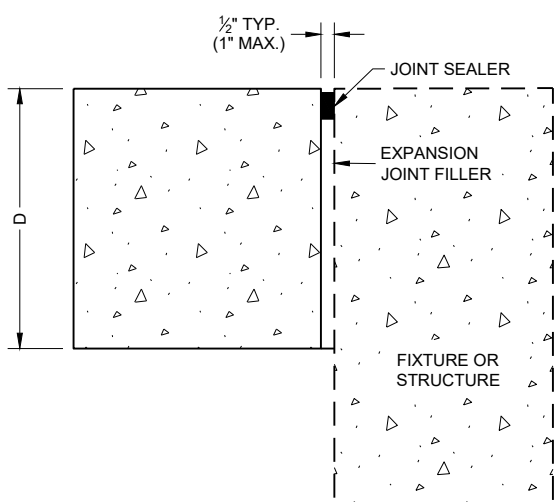
SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

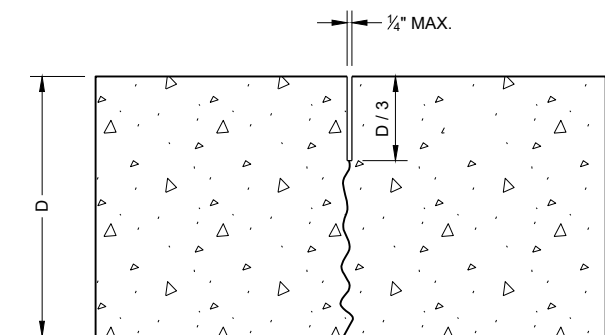


DOWELED TRANSVERSE ①

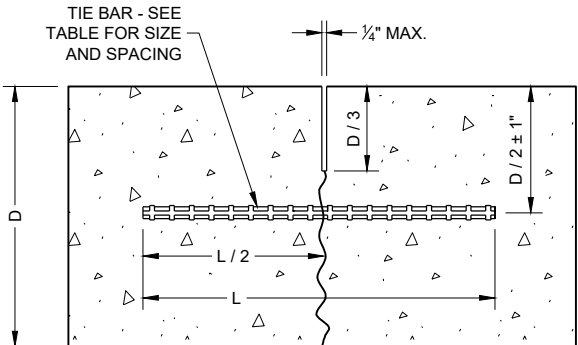


UNTIED - LONGITUDINAL

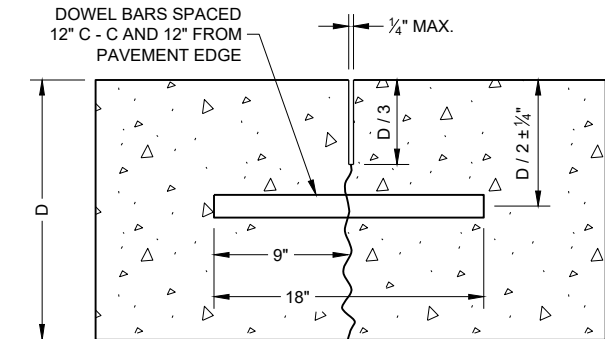
EXPANSION JOINTS



UNDOWELED TRANSVERSE



TIED LONGITUDINAL



DOWELED TRANSVERSE

CONTRACTION JOINTS ②

TIE BAR TABLE

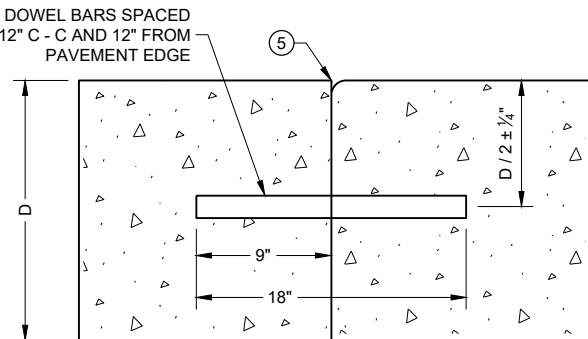
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

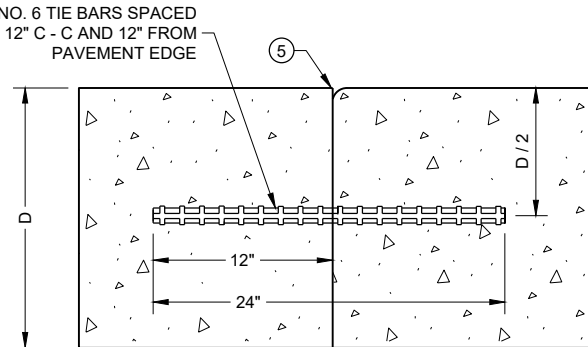
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

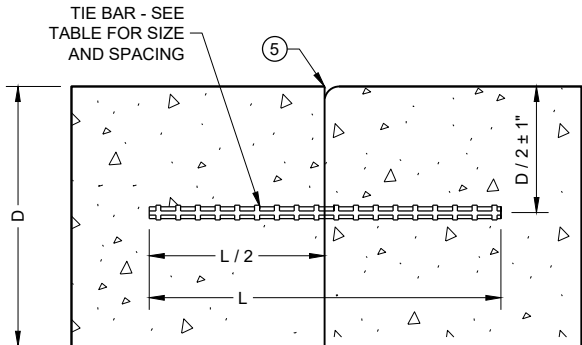
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM 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 1/4" RADIUS.
- ⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



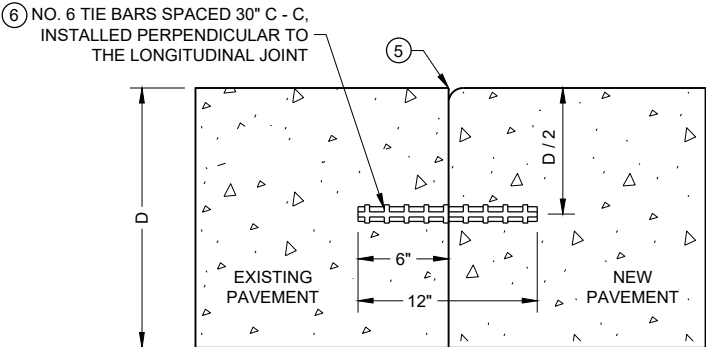
DOWELED TRANSVERSE ③



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



TIED LONGITUDINAL

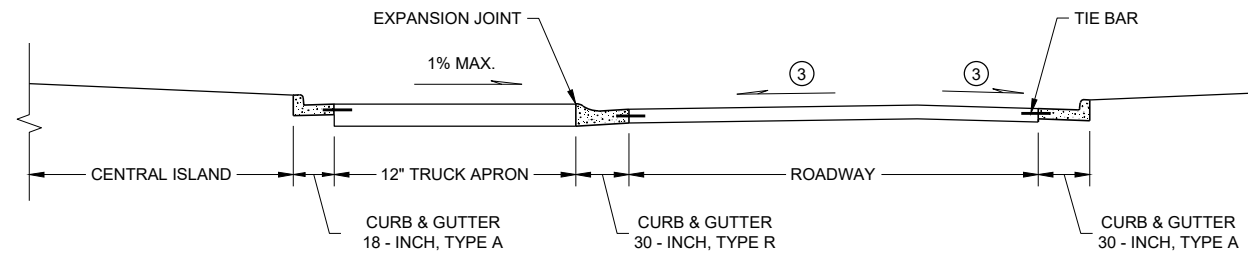


TIED LONGITUDINAL TO EXISTING

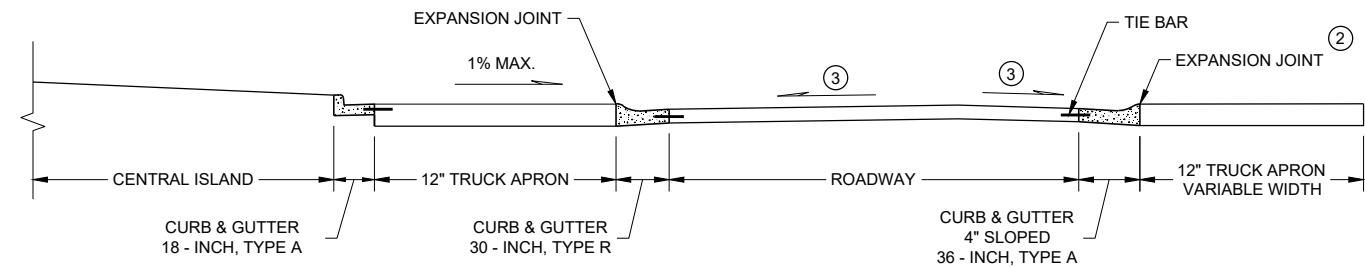
CONSTRUCTION JOINTS ④

CONCRETE PAVEMENT
JOINT TYPES

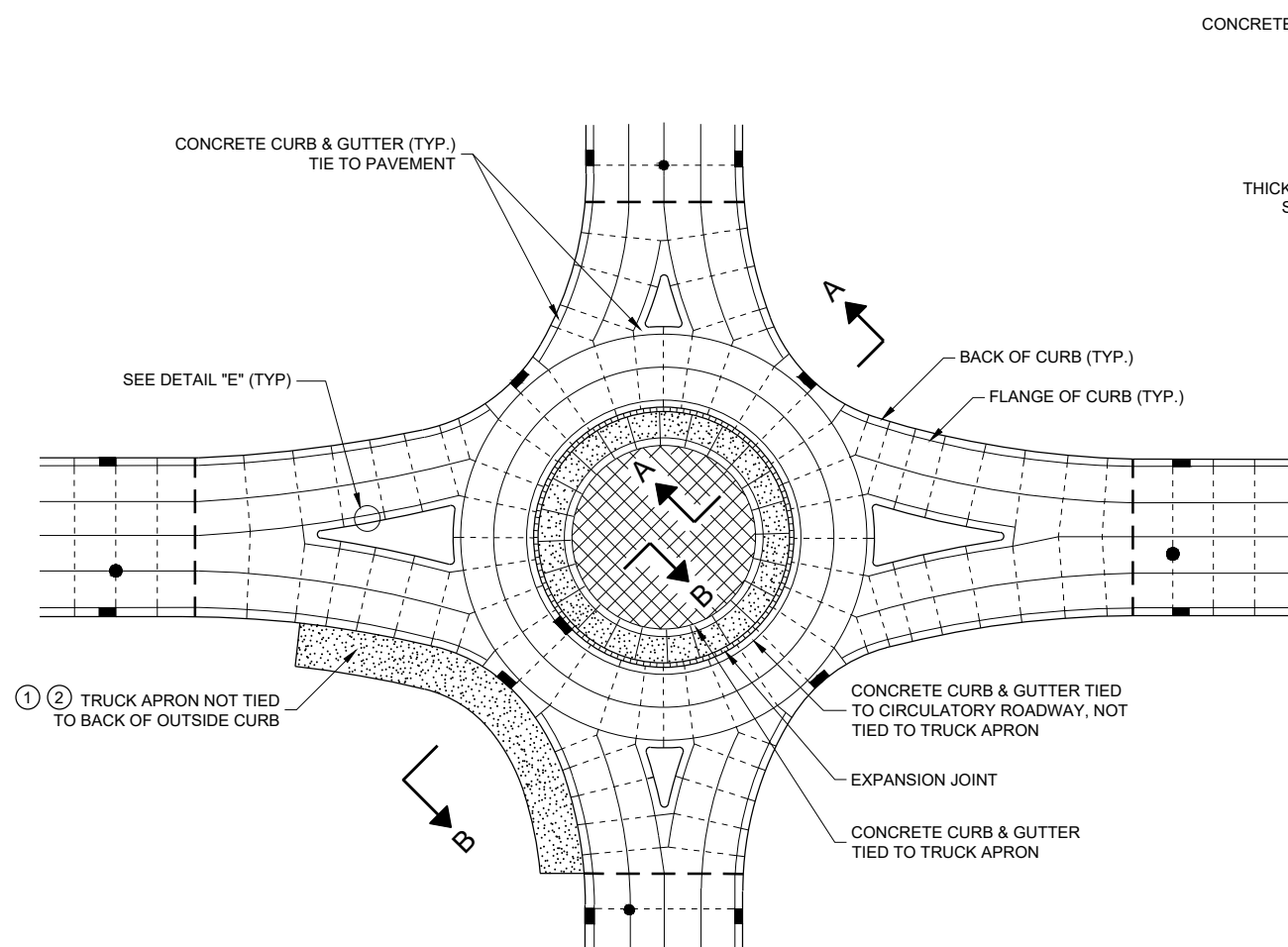
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SECTION A - A



SECTION B - B

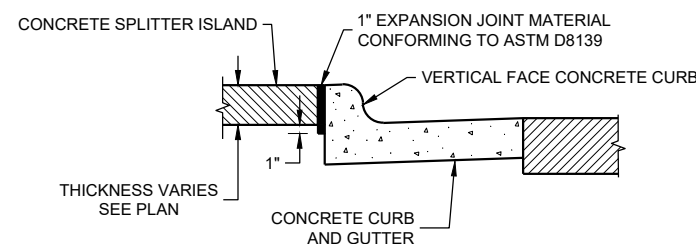


ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

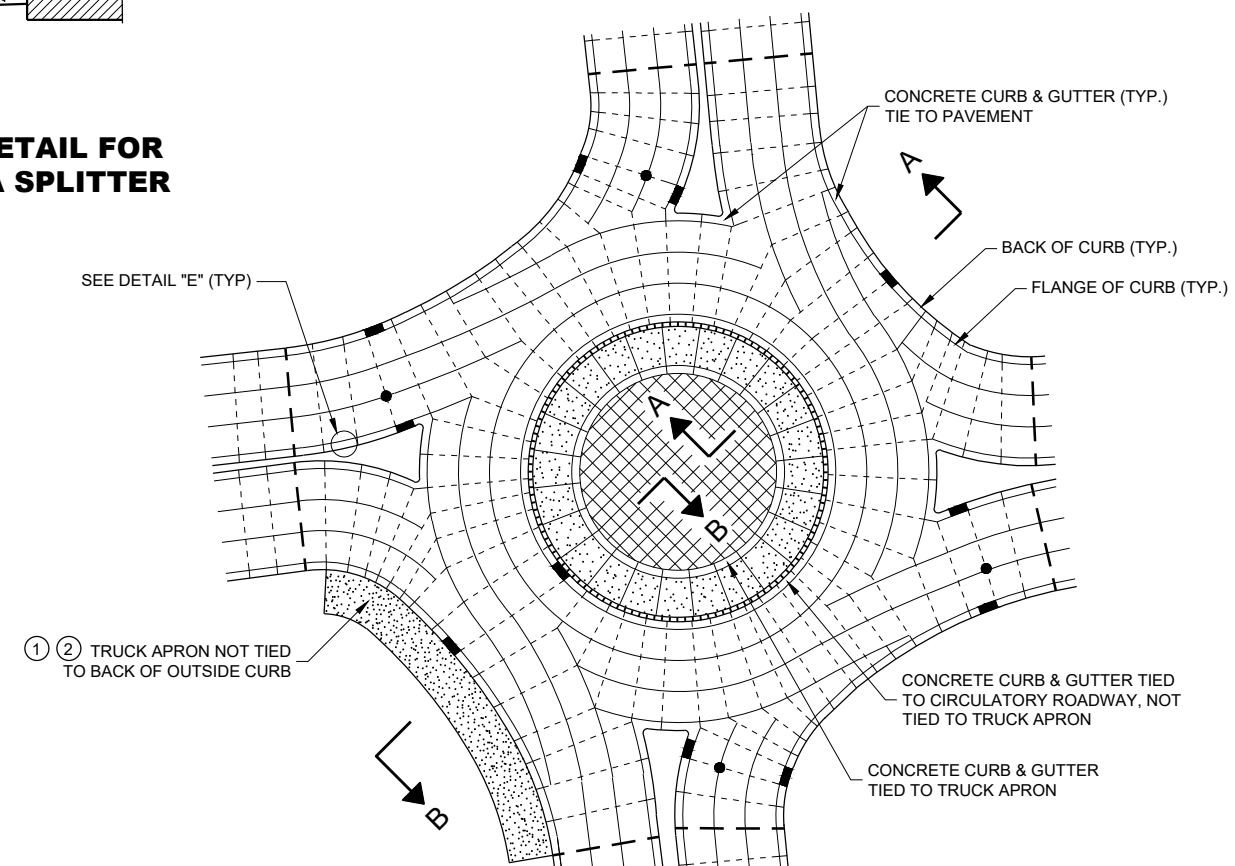
GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"
 USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.
 DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

- ① DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.
- ② TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.
- ③ CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.



**DETAIL 'E'
EXPANSION JOINT DETAIL FOR
VERTICAL CURB AT A SPLITTER
ISLAND**



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

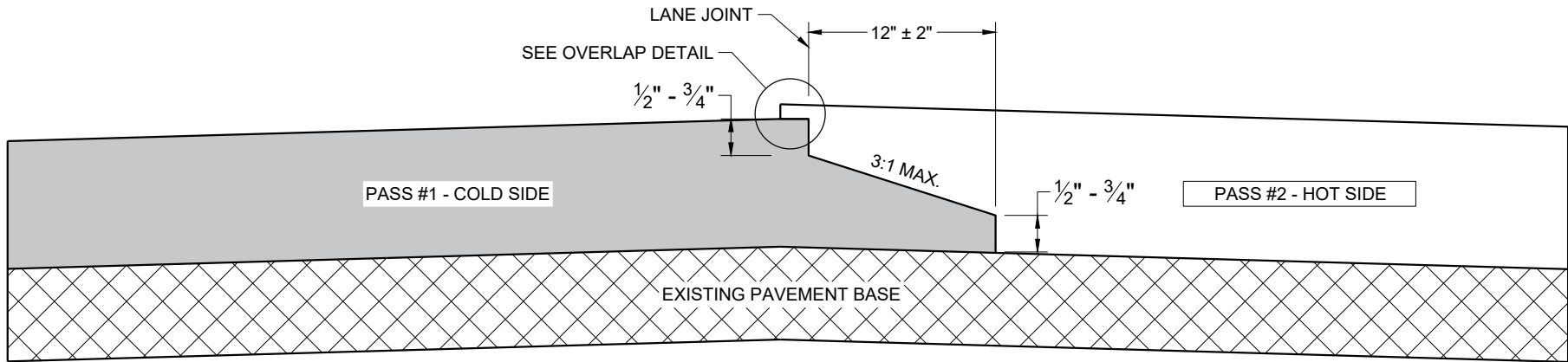
LEGEND

- DOWELED JOINT
- TIED JOINT
- ===== EXPANSION JOINT
- — — — — POTENTIAL DOWELED EXPANSION JOINT
- [Pattern] TRUCK APRON
- [Pattern] CENTRAL ISLAND
- ● UTILITY STRUCTURES

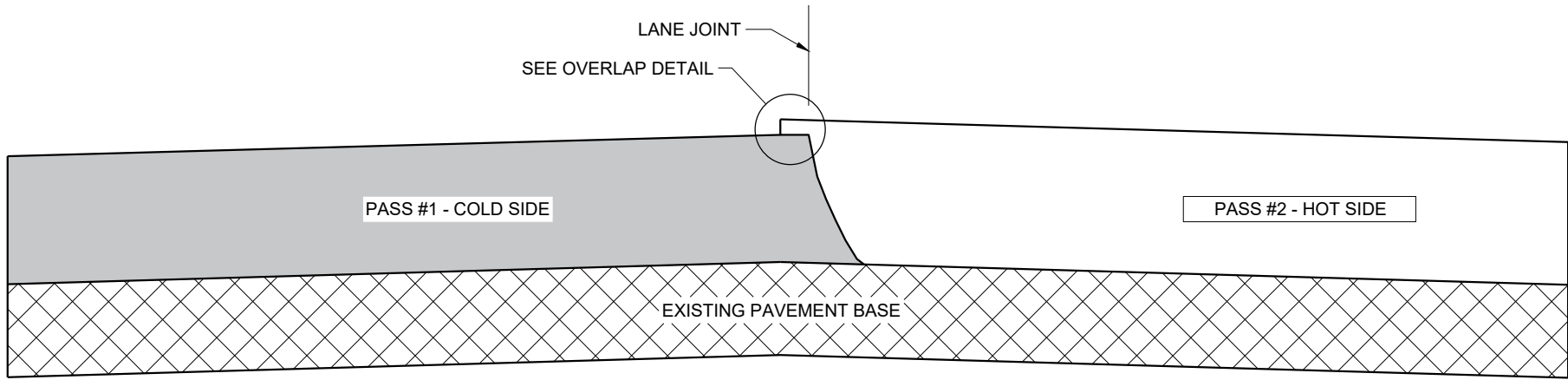
**CONCRETE PAVEMENT JOINTING
AND STEEL REINFORCEMENT
IN ROUNDABOUTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

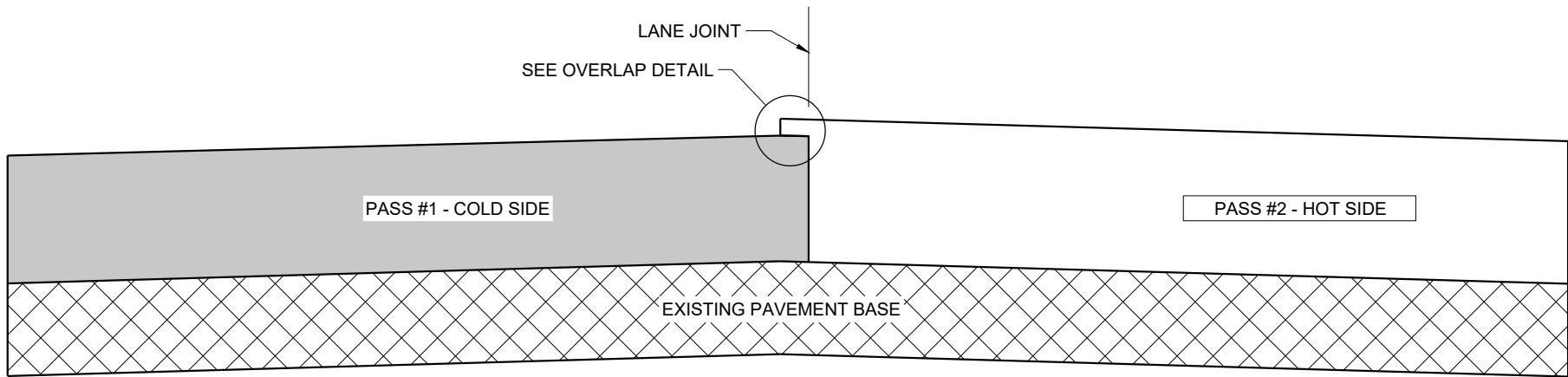
APPROVED
May 2023 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

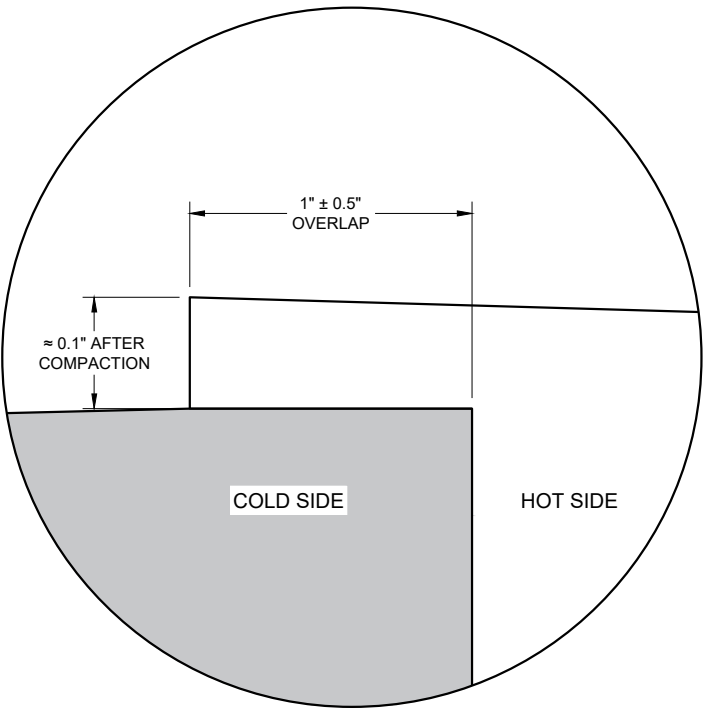
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY $0.1"$ AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO $2"$ FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.

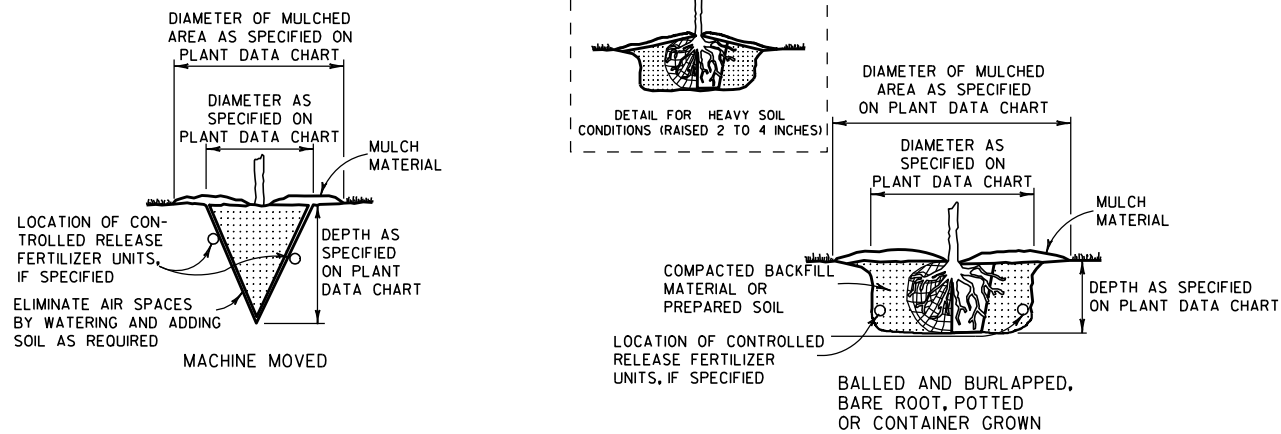


OVERLAP DETAIL (TYPICAL)

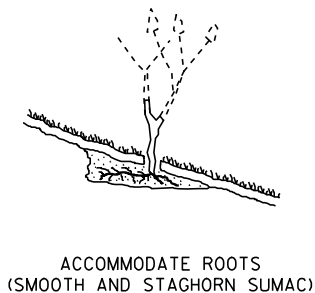
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

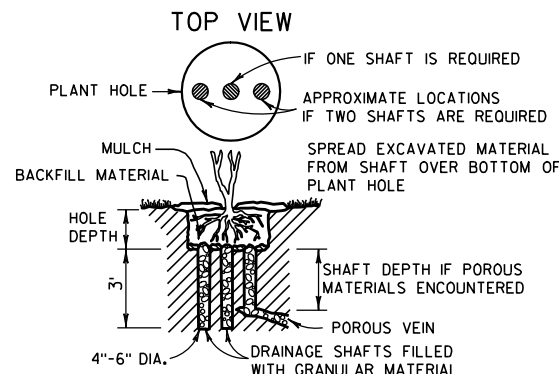
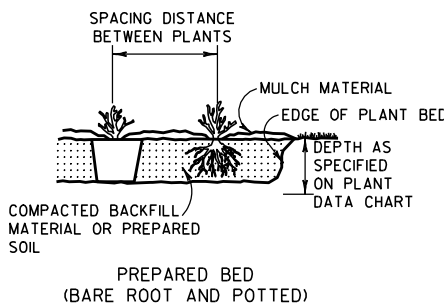
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



PLANTING

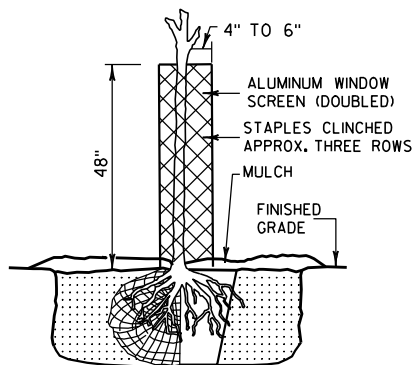
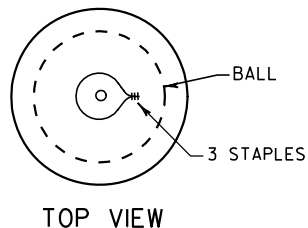
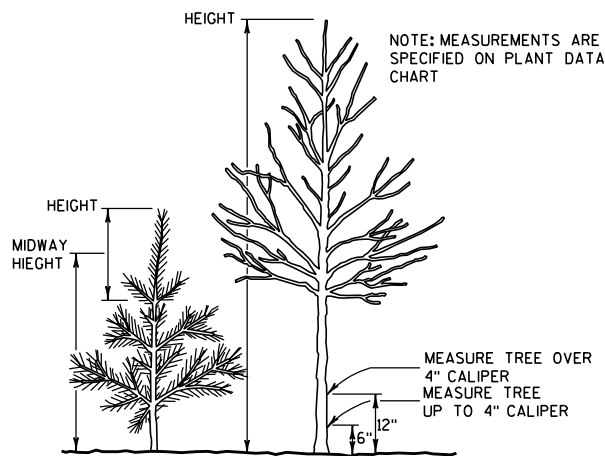


- NOTE:
- 1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
 - 2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING

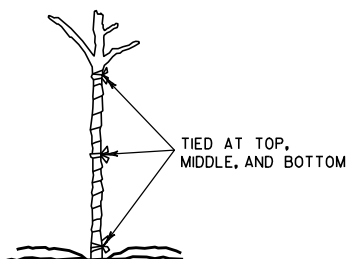


NOTE: DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

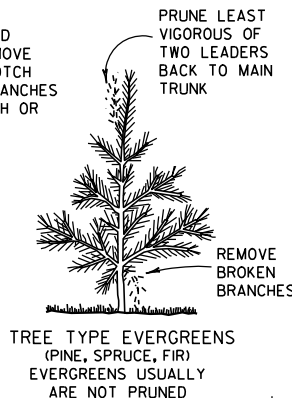
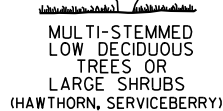
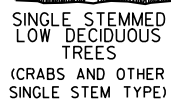
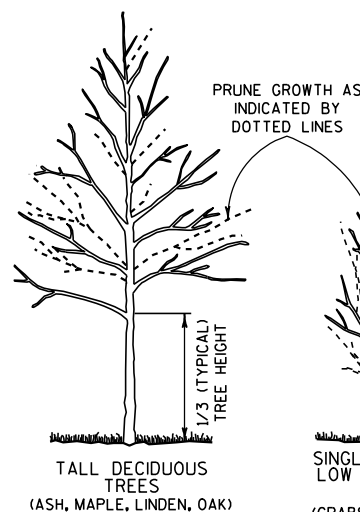
DRAINING



RODENT PROTECTION

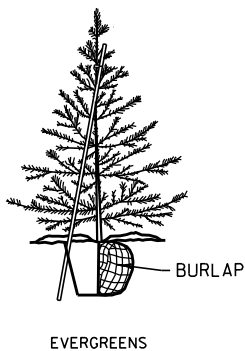
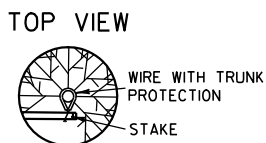
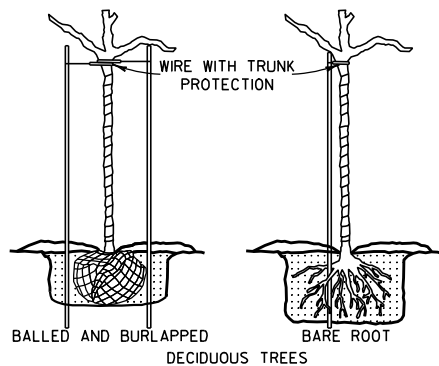
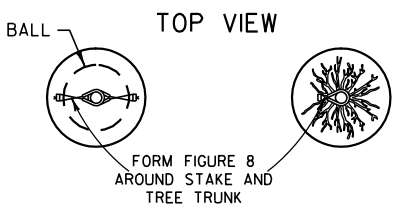


WRAPPING



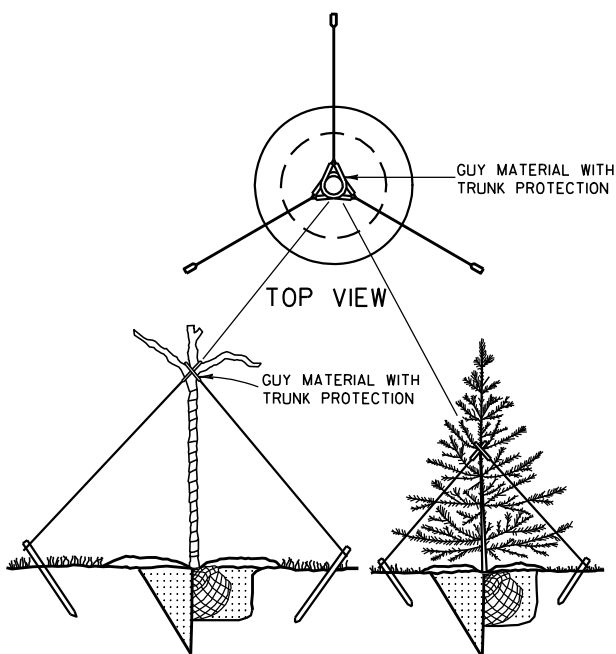
- NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
- 1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
 - 2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

PRUNING



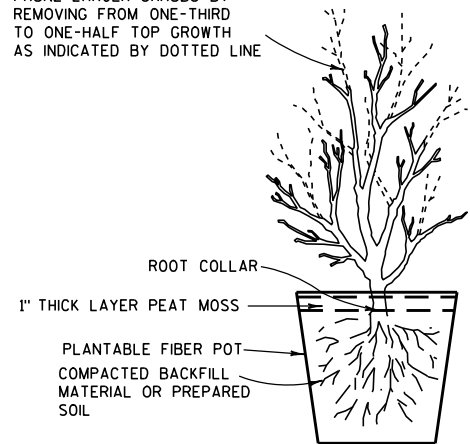
- NOTE: BRACING STAKE
- 1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
 - 2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
 - 3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
 - 4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

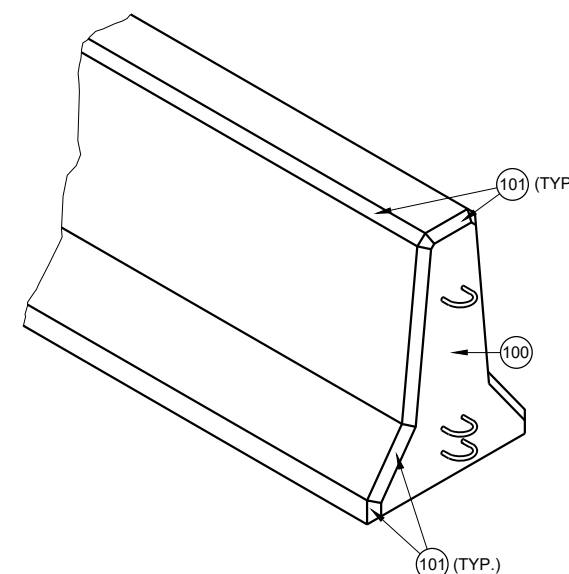
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/11/94
DATE

/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER

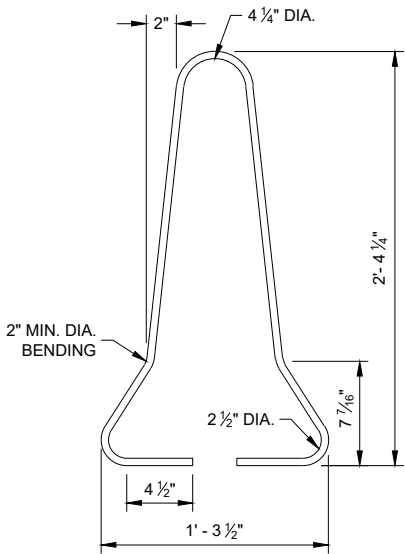
FHWA



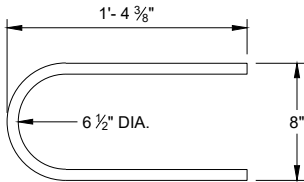
PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

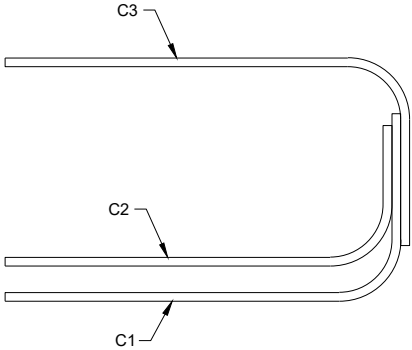
100. PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
 - A. TYPE OF BARRIER: WI-CBTP
 - B. MANUFACTURER
 - C. DATE OF MANUFACTURE (MONTH AND YEAR)
101. 1" OPTIONAL CHAMFER
102. SEE LIFTING SLOT DETAIL
103. SEE ANCHOR BLOCK DETAIL
104. 1 3/4" MIN. CLEAR COVER
105. 2" MIN. CLEAR COVER
106. 1" MIN. CLEAR COVER
107. ± 5/8" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)
108. USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TO MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.



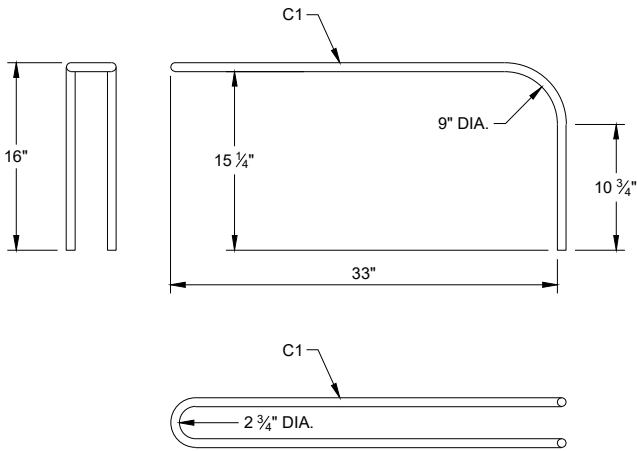
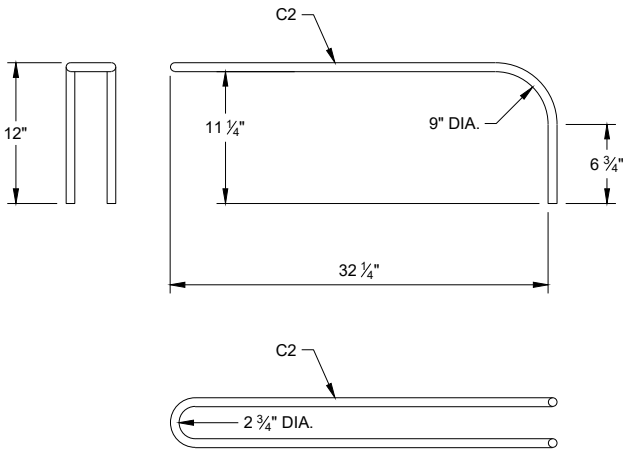
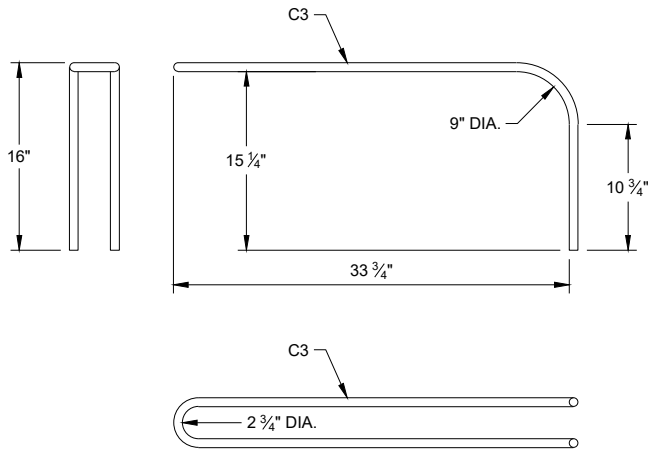
B4 BAR DETAIL



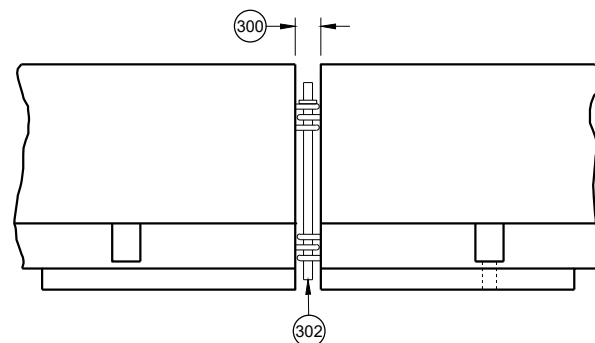
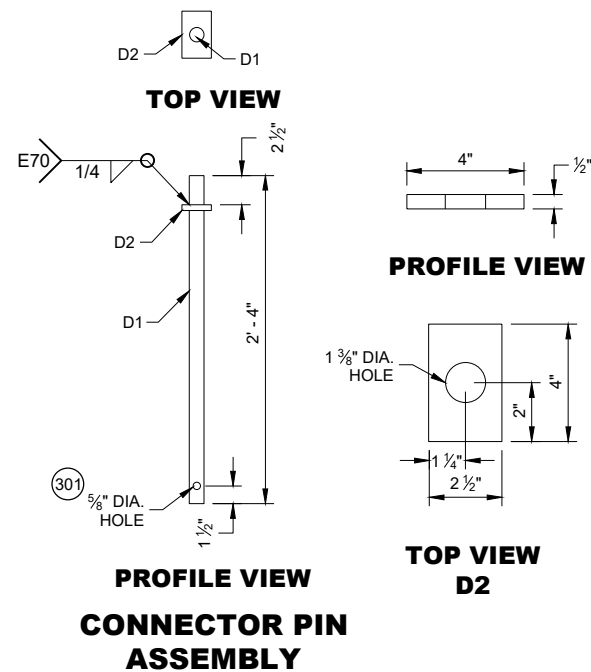
B5 BAR DETAIL



PROFILE VIEW
LOOP BAR ASSEMBLY



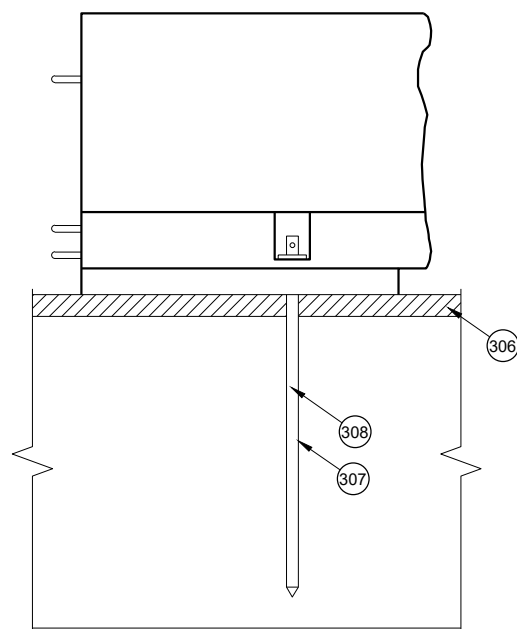
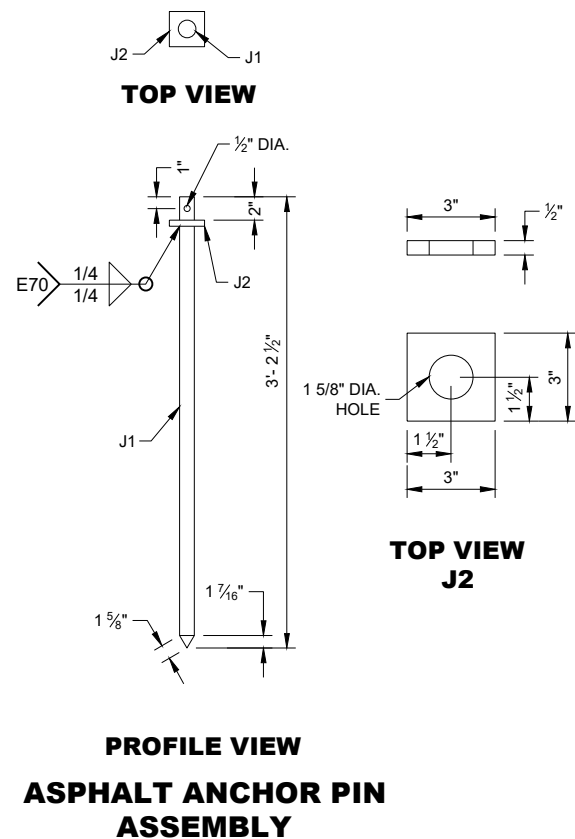
C BAR DETAILS



**CONNECTING TEMPORARY
BARRIER SECTIONS**

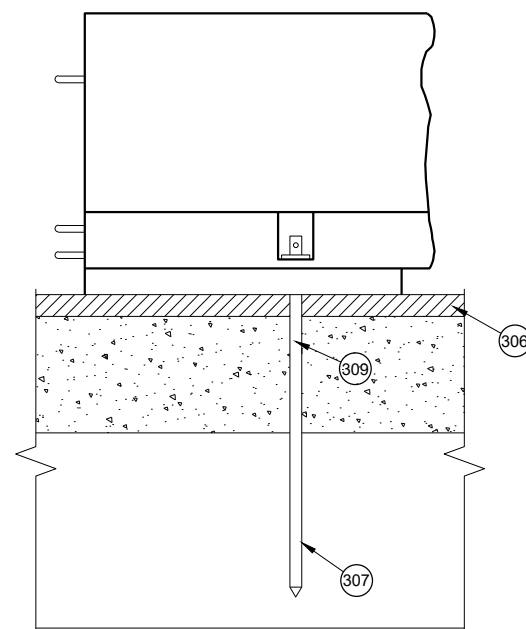
GENERAL NOTES

- (300) SET WITH 3 5/8" WOOD BLOCK.
- (301) HOLE IS OPTIONAL.
- (302) CONNECTOR PIN ASSEMBLY.
- (303) CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.
- (304) CONCRETE DECK.
- (305) DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.
- (306) MINIMUM OF 2" OF ASPHALT.
- (307) ASPHALT ANCHOR PIN ASSEMBLY
- (308) IF DRILLING A PILOT HOLE, THE MAX. DIA. OF THE HOLE IS 3/4"
- (309) WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



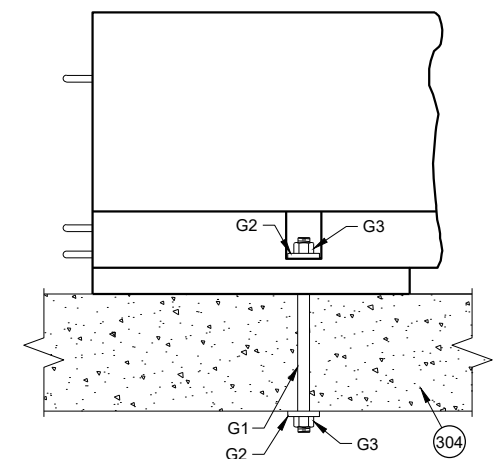
SIDE VIEW

**ASPHALT ANCHOR
INSTALLATION
THROUGH
ASPHALT PAVEMENT**



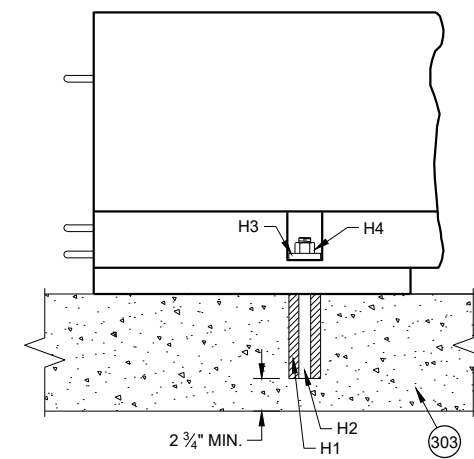
SIDE VIEW

**ASPHALT ANCHOR
INSTALLATION
THROUGH
ASPHALT OVERLAY
ON TOP OF
CONCRETE PAVEMENT**



SIDE VIEW

**THROUGH BOLT ANCHOR
INSTALLATION**

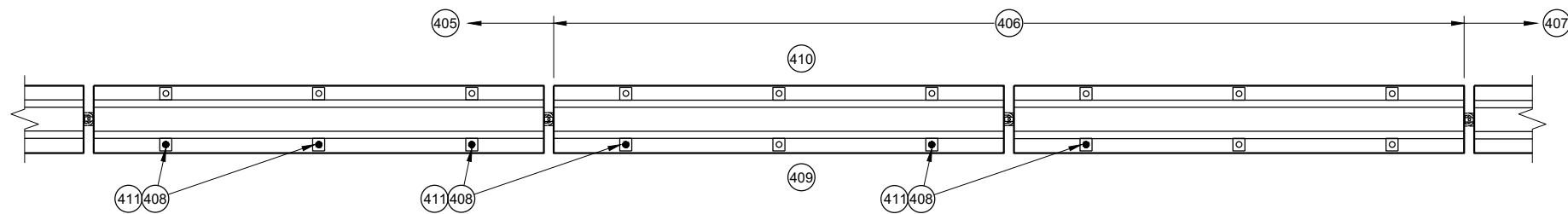


SIDE VIEW

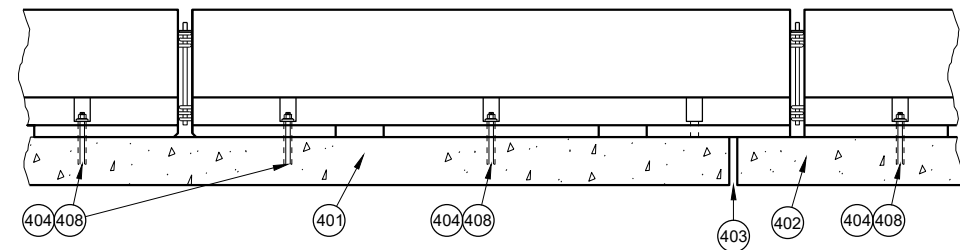
**ADHESIVE ANCHOR
INSTALLATION**

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

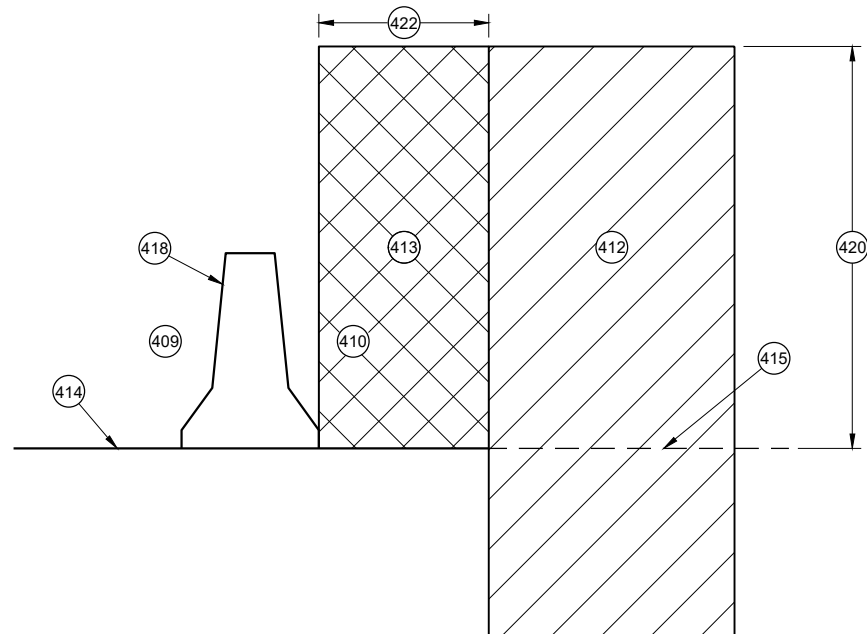
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



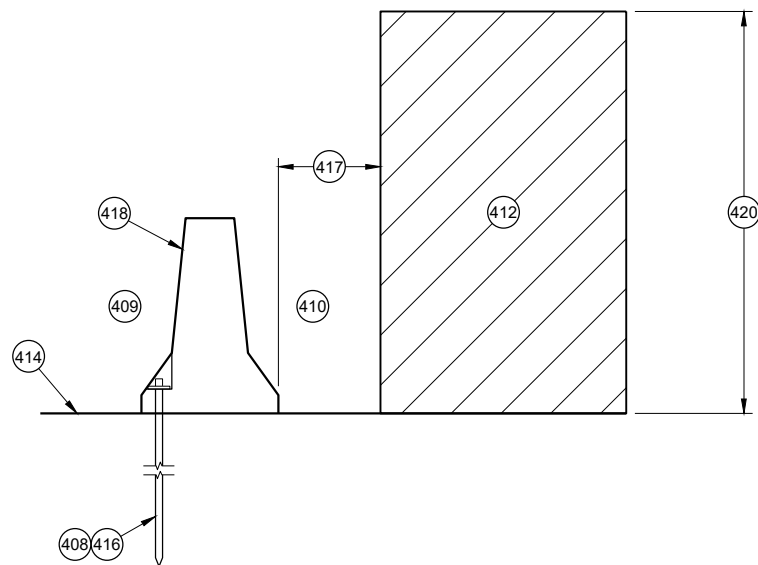
PLAN VIEW
TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



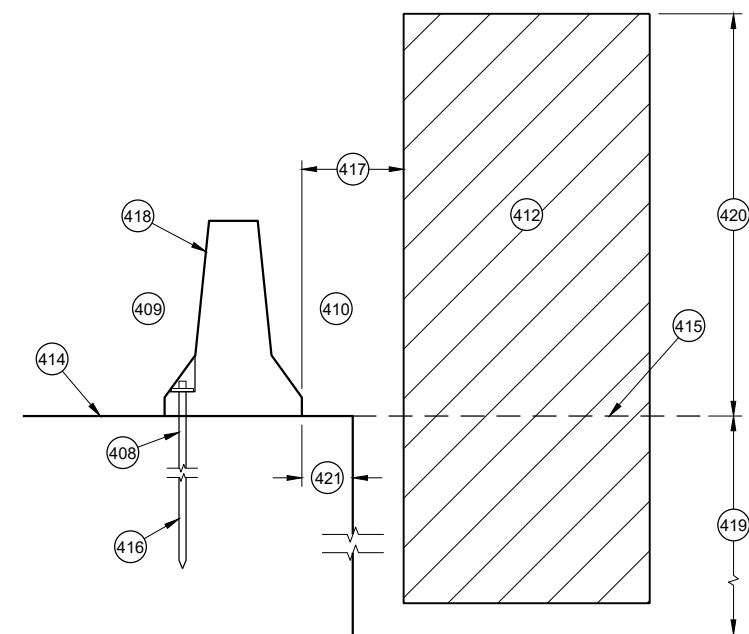
PROFILE VIEW
ANCHORED BARRIER NEAR EXPANSION JOINT



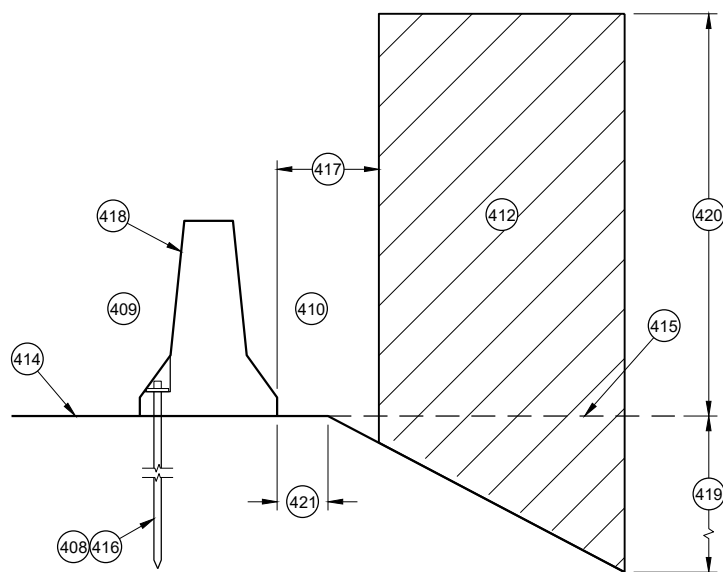
CROSS SECTION
FREE STANDING BARRIER



CROSS SECTION
**ANCHORED BARRIER FOR OBJECTS ABOVE
THE GRADE LINE AND NEAR THE BARRIER**



CROSS SECTION
ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION
ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

- (400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.
- (401) CONCRETE DECK
- (402) CONCRETE DECK OR APPROACH SLAB.
- (403) EXPANSION JOINT
- (404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.
- (405) ANCHORED TEMPORARY BARRIER
- (406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING
- (407) FREE STANDING BARRIER
- (408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.
- (409) TRAFFIC SIDE
- (410) NON-TRAFFIC SIDE
- (411) ANCHOR LOCATION. SEE ANCHORING DETAILS.
- (412) WORK AREA
- (413) AREA FREE OF OBJECTS AND WORKERS
- (414) GRADE LINE
- (415) EXTENDED GRADE LINE
- (416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.
- (417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.
- (418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.
- (419) DEPTHS OF 3 FEET OR MORE.
- (420) Y = 6.5'
- (421) OFFSET FROM BACK OF BARRIER EDGE:
- | | |
|-------------------|------|
| CONCRETE PAVEMENT | 0.5' |
| ASPHALT | 0.5' |
- (422) POSTED SPEED (MPH):
- | | |
|---------------|------|
| 45 OR GREATER | 4.0' |
| 40 OR LOWER | 2.0' |

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- 500 EXISTING RIGID BARRIERS (VARIES)

501 TEMPORARY BARRIER

502 SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

503 ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

504 NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

505 TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.
- 506 TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

507 VERTICAL BARRIER

508 SAFETY SHAPE BARRIER

509 SINGLE SLOPE BARRIER

510 CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

511 BENT THRIE BEAM TO FIT.

512 THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
- 513 TWO (2) P1, P2 AND P3 ARE REQUIRED

514 FIVE (5) N1, N2 AND N3 ARE REQUIRED

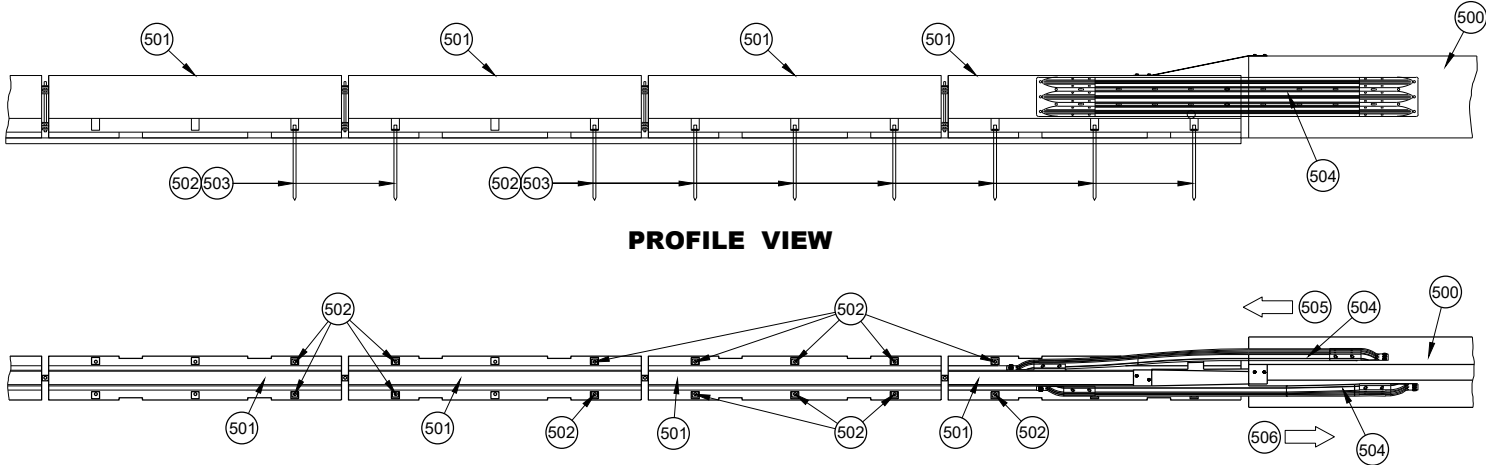
515 TWO (2) R1, R2 AND R3 ARE REQUIRED

516 CUT WOOD BLOCK TO FIT.

517 SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

518 CAP ASSEMBLY

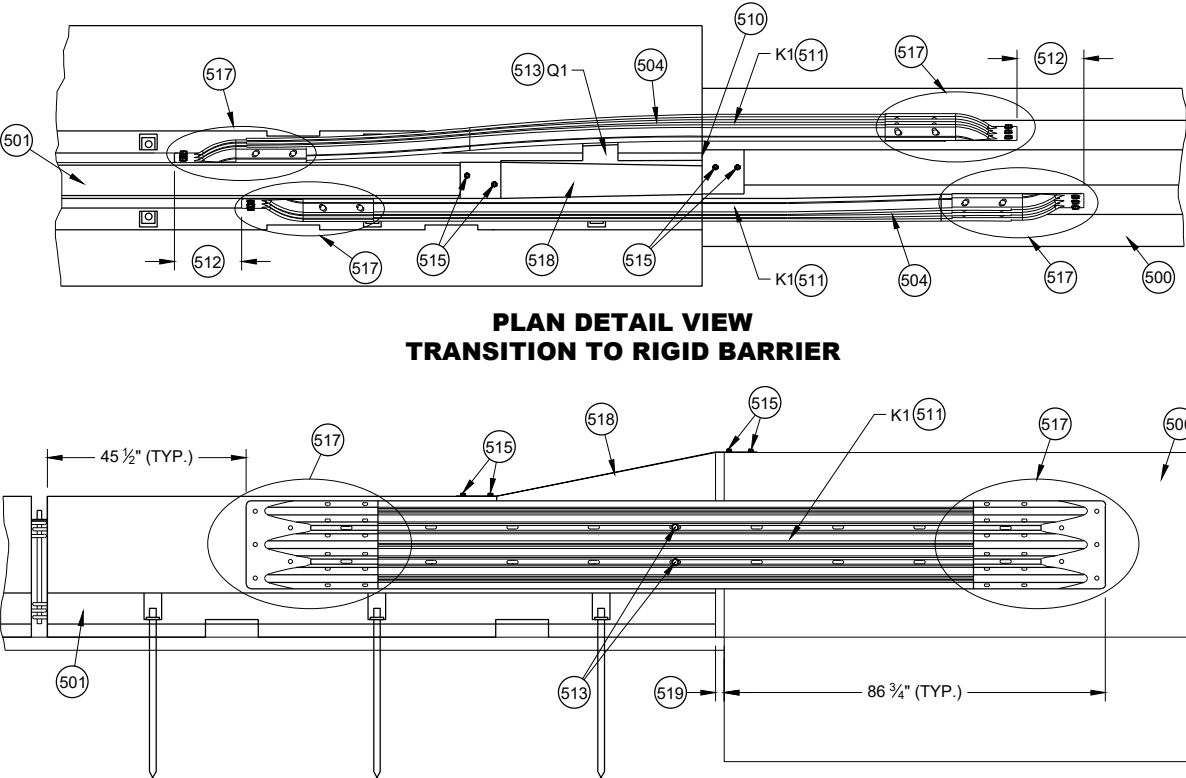
519 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.
- 520 ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



PROFILE VIEW

PLAN VIEW

TRANSITION TO RIGID BARRIER

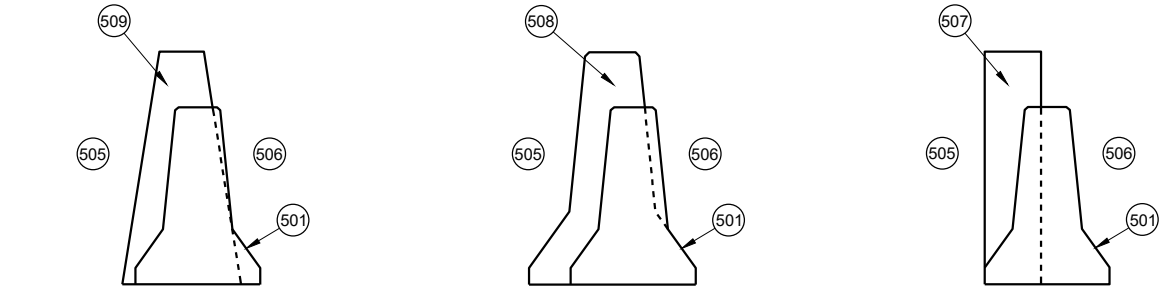


PLAN DETAIL VIEW

TRANSITION TO RIGID BARRIER

FRONT DETAIL VIEW

TRANSITION TO RIGID BARRIER



CROSS SECTION

TEMPORARY BARRIER

PLACEMENT SINGLE SLOPE

CROSS SECTION

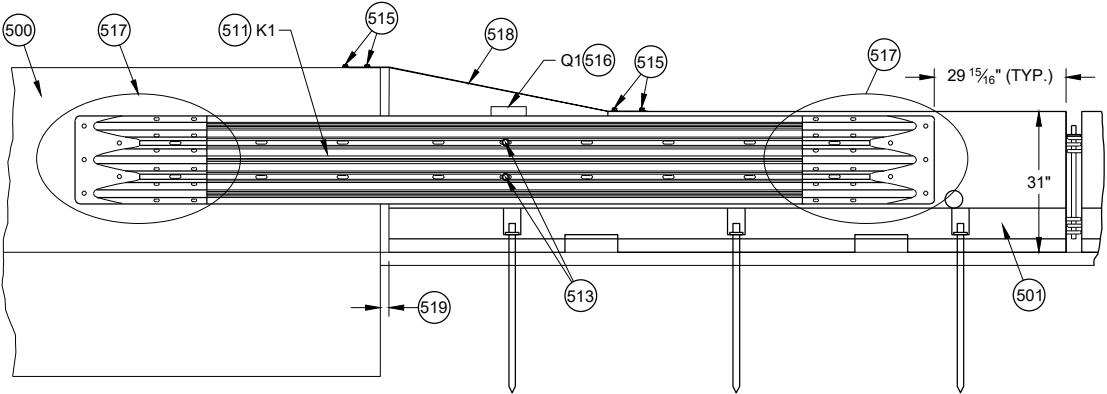
TEMPORARY BARRIER

PLACEMENT SAFETY SHAPE

CROSS SECTION

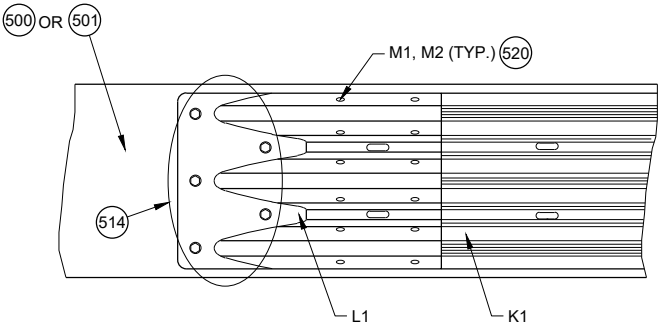
TEMPORARY BARRIER

PLACEMENT VERTICAL



BACK DETAIL VIEW

TRANSITION TO RIGID BARRIER



517 DETAIL PLAN VIEW

THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

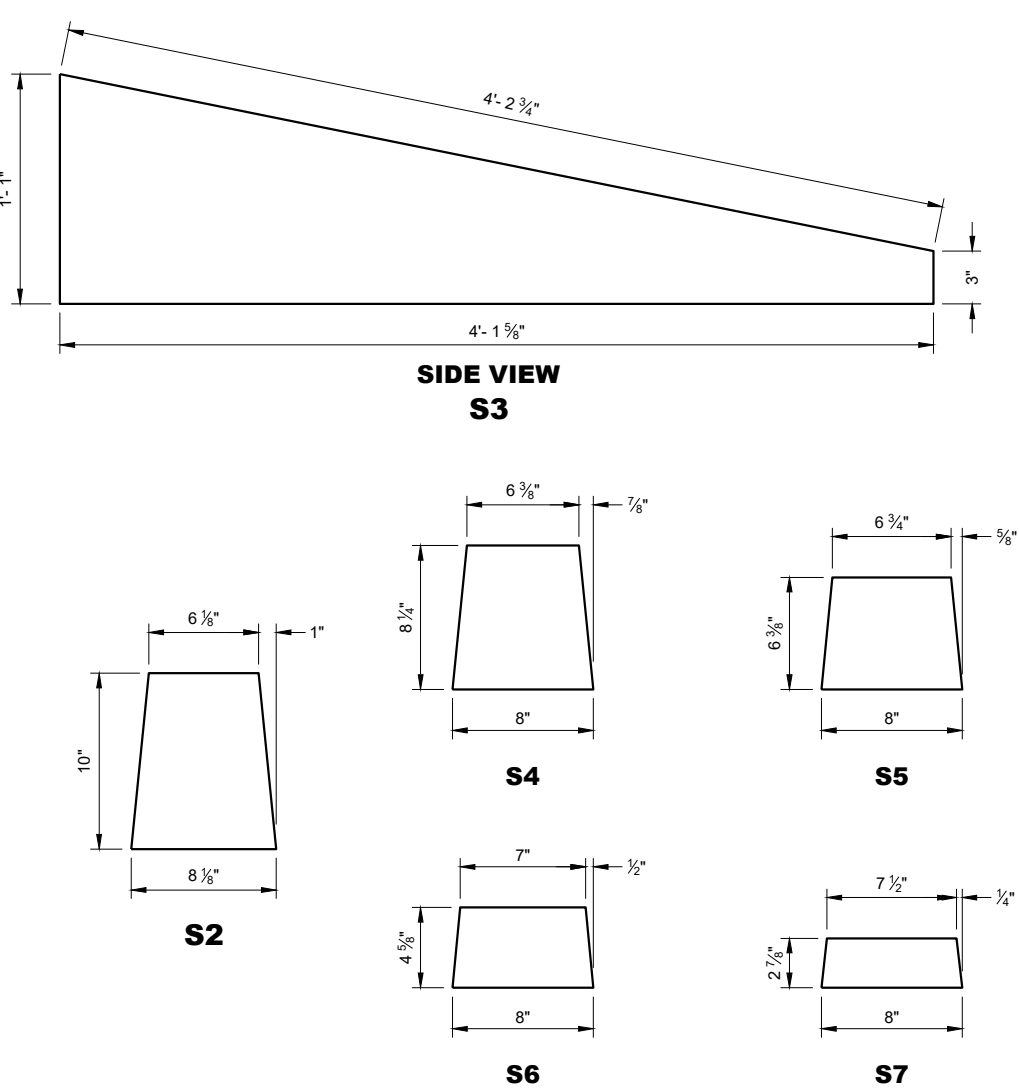
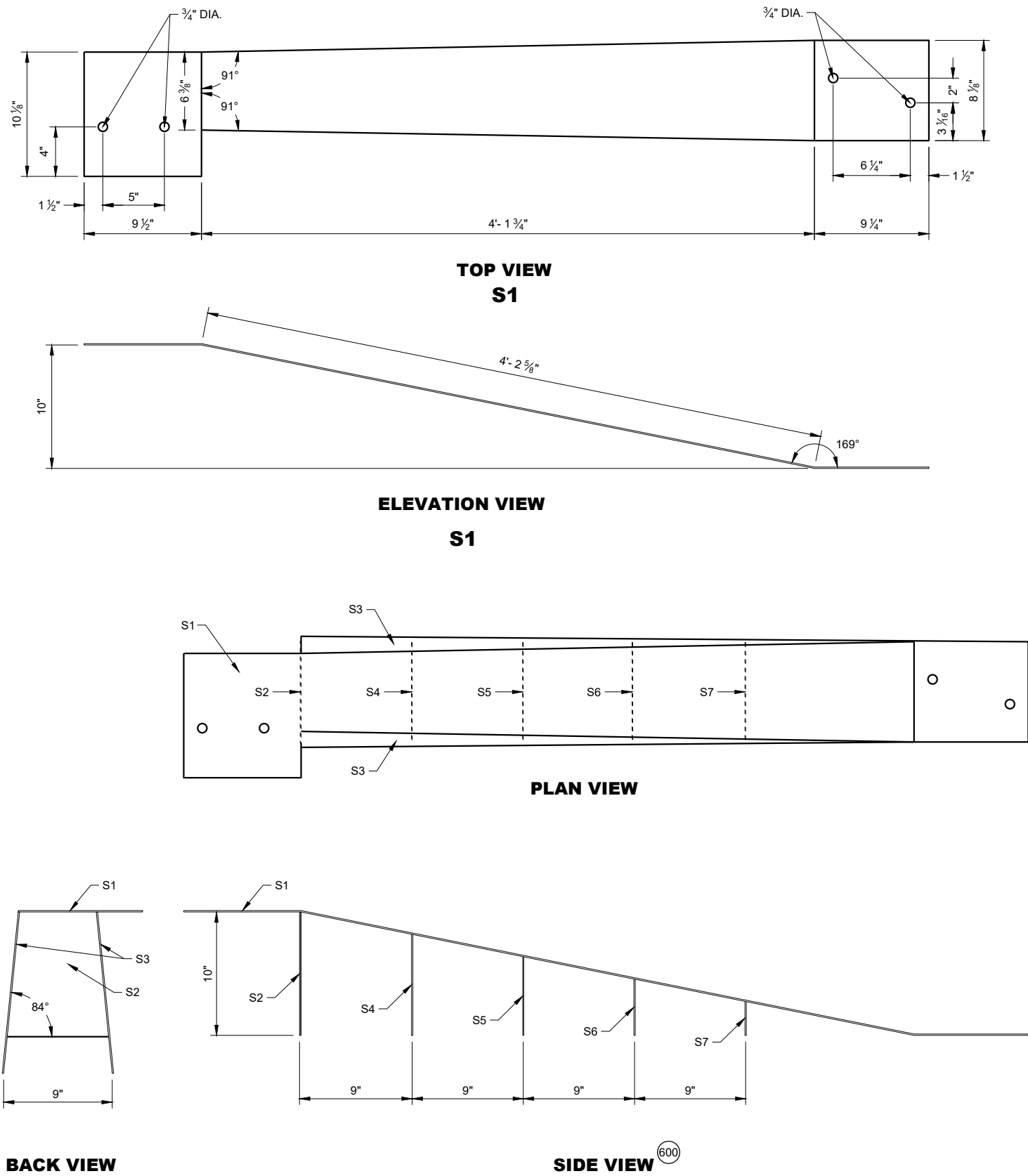
CONCRETE BARRIER

TEMPORARY PRECAST,

12' - 6"

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

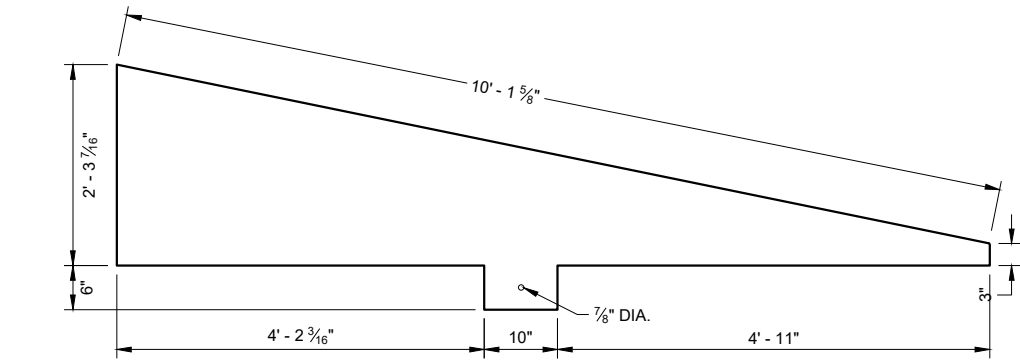
STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

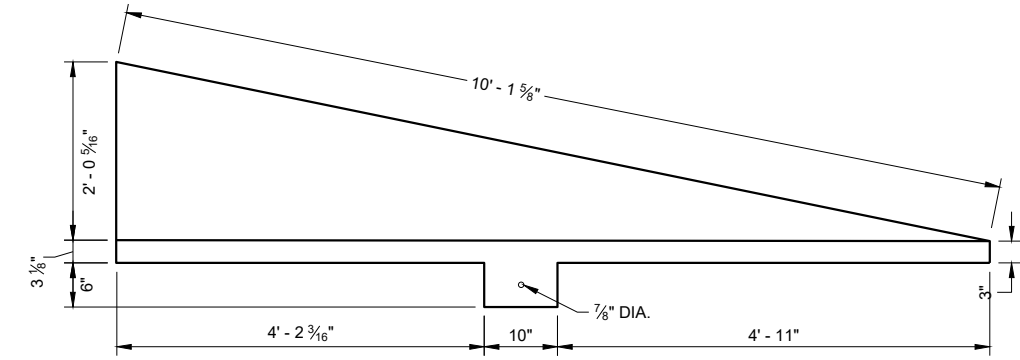
600 SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

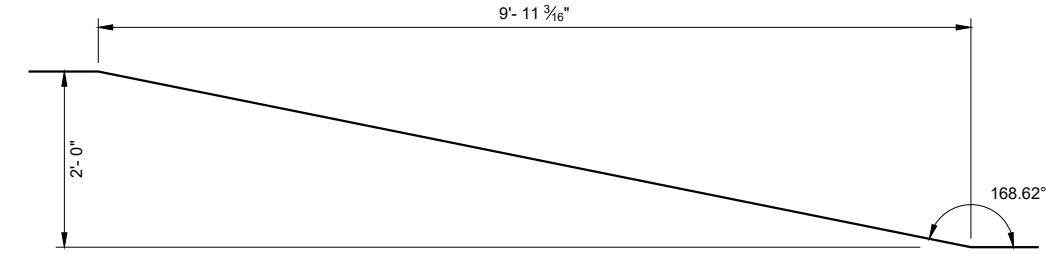
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



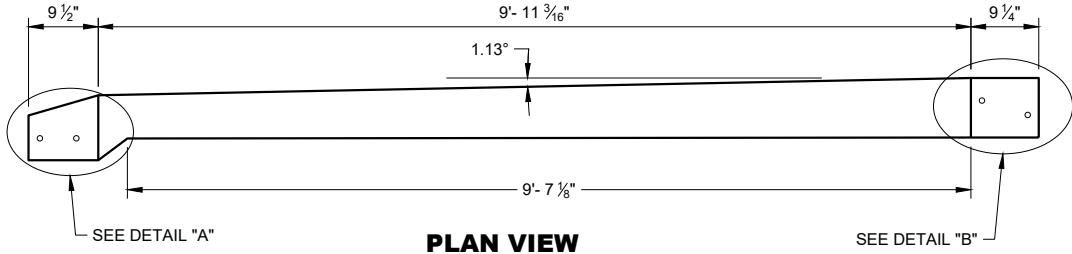
SIDE VIEW
T4



SIDE VIEW
T3



SIDE VIEW
TOP PLATE T1



PLAN VIEW
TOP PLATE T1

END
VIEW

END
VIEW

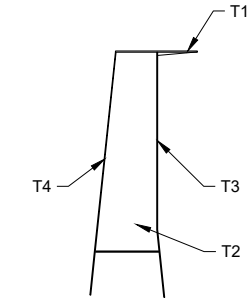
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

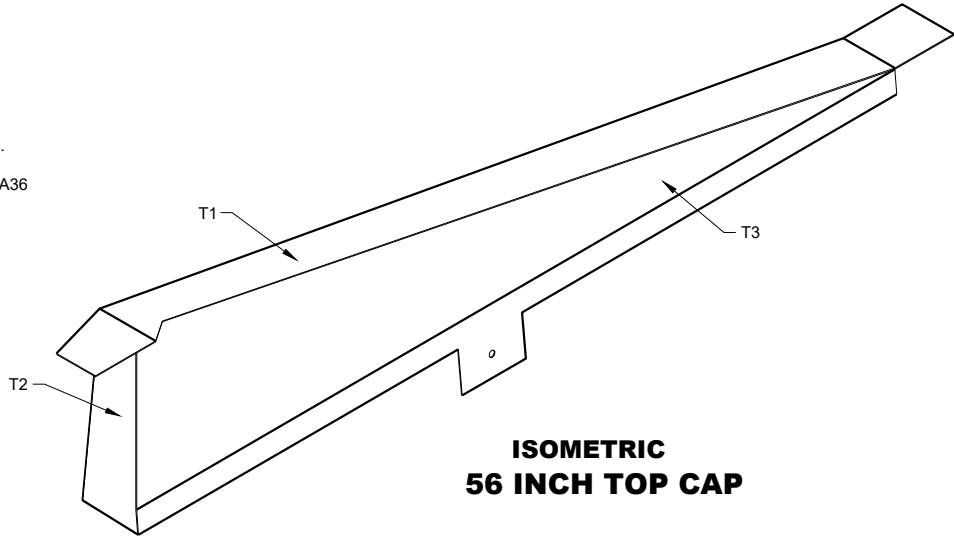
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

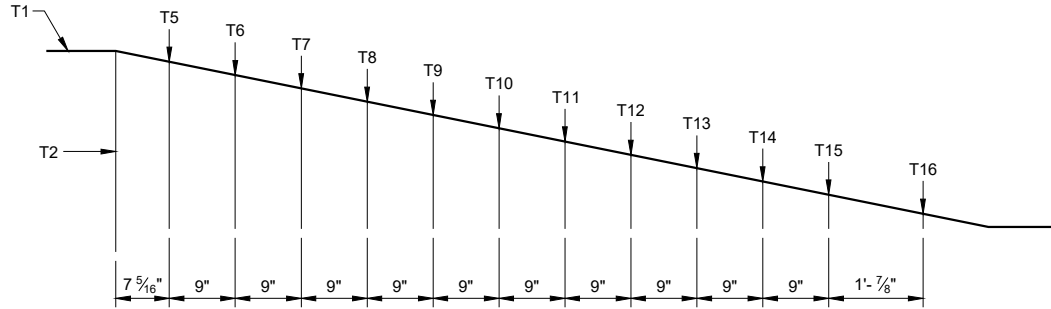
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



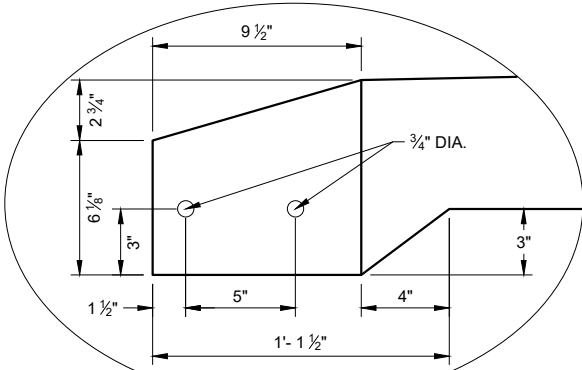
END VIEW
56 INCH TOP CAP



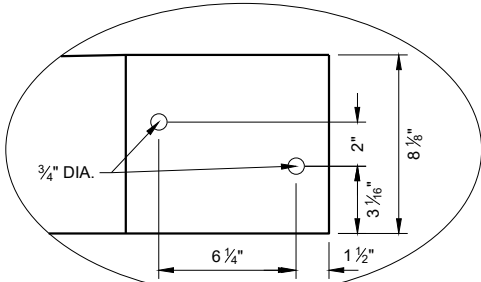
ISOMETRIC
56 INCH TOP CAP



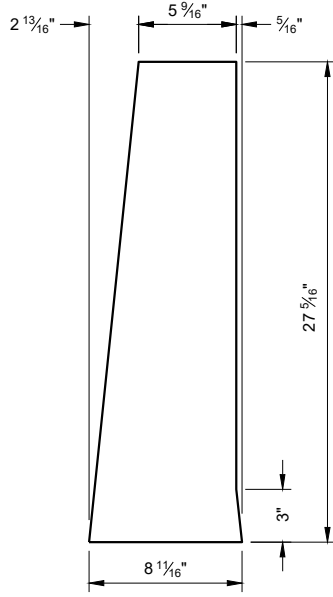
SIDE VIEW
56 INCH TOP CAP (700)



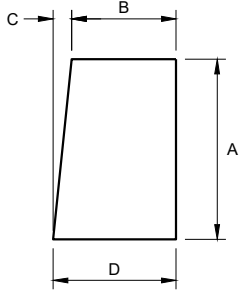
DETAIL "A"



DETAIL "B"



END PLATE T2

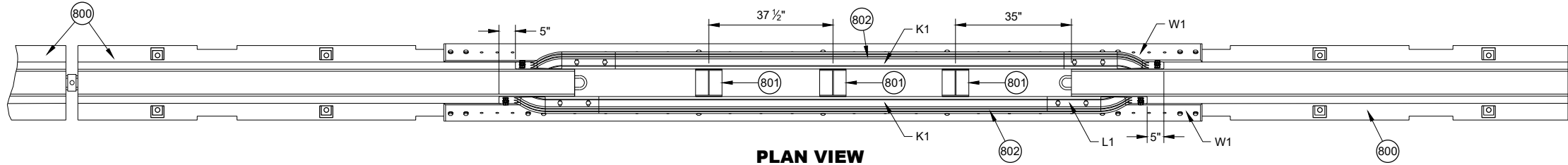
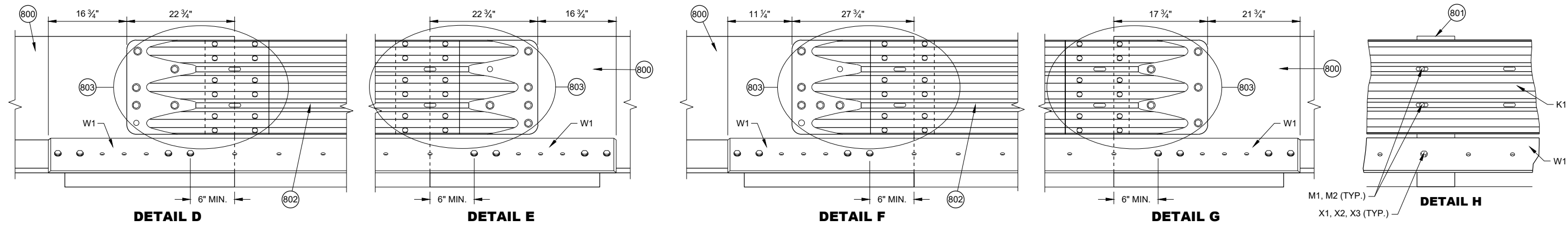


GUSSET PLATES
T5 - T16

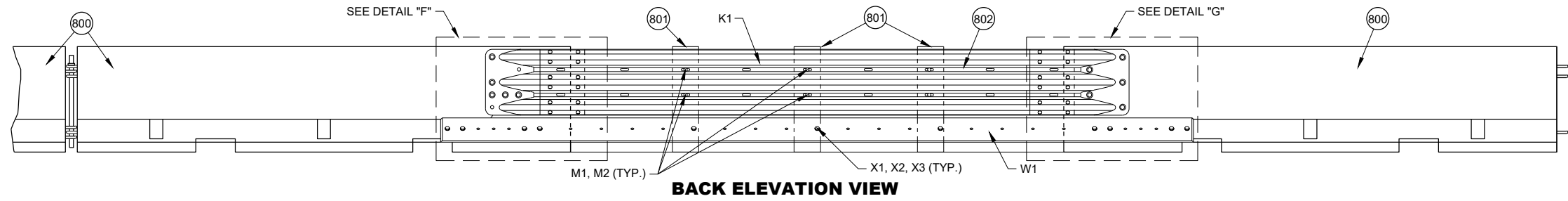
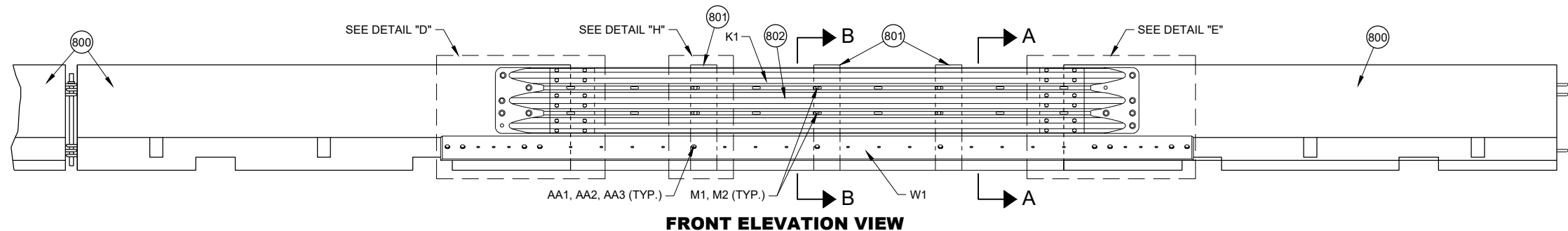
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 9/16"	6 5/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 1/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

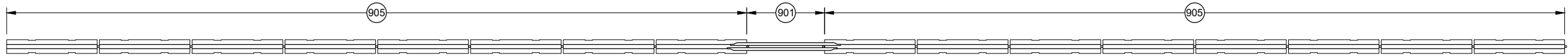


- GENERAL NOTES**
- 800 FREE STANDING TEMPORARY BARRIER
 - 801 GAP STIFFENER ASSEMBLY
 - 802 THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.
 - 803 SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL

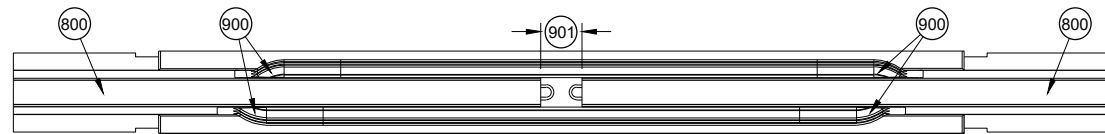


PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

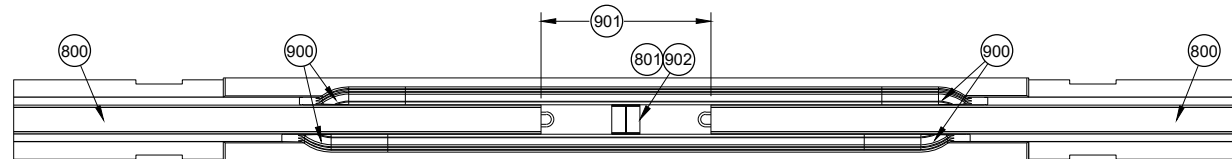
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



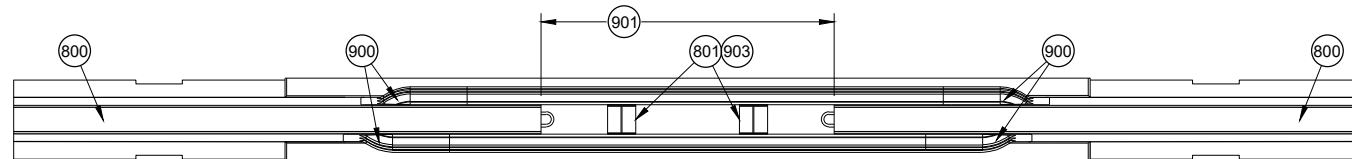
PLAN VIEW
GAP WITHIN SPACING



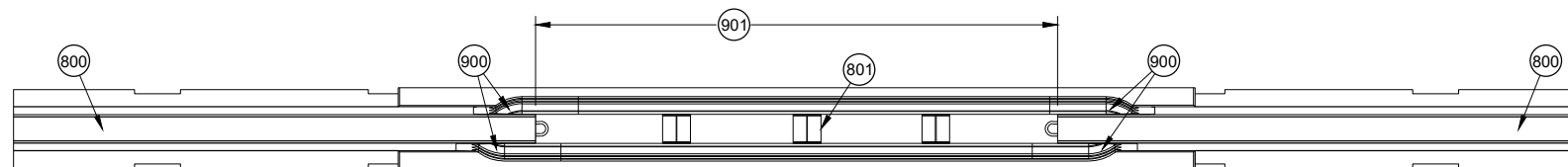
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. 904



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. 904



PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. 904



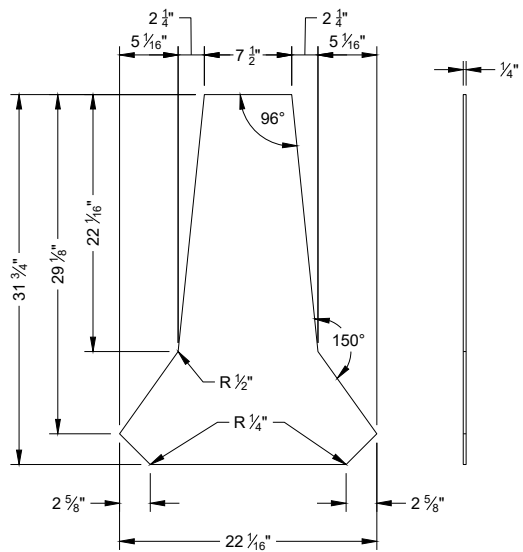
PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. 904

GENERAL NOTES

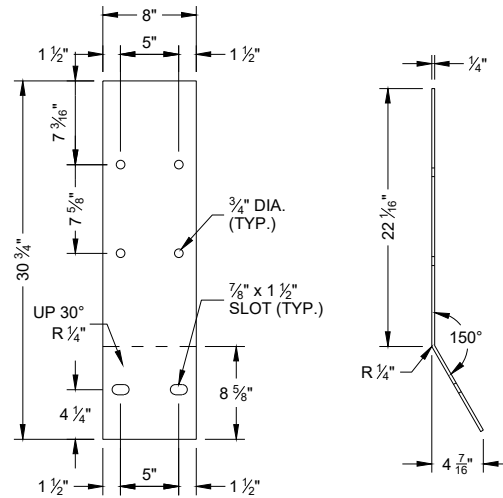
- 900 SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
- 901 TEMPORARY BARRIER GAP
- 902 GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
- 903 GAP STIFFENER ASSEMBLY IS OFFSET 18 3/4" FROM CENTER
- 904 MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
- 905 MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

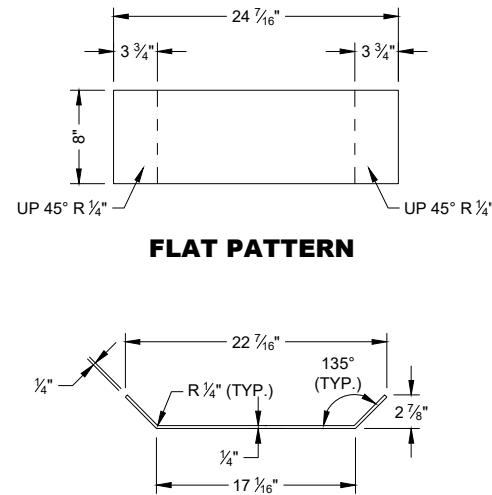
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



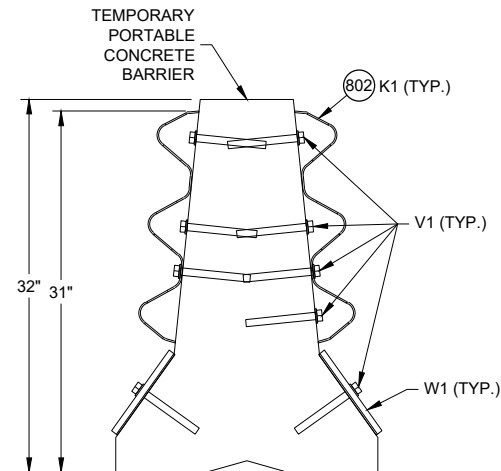
PROFILE VIEW
STIFFENER ASSEMBLY
CENTER PANEL U1



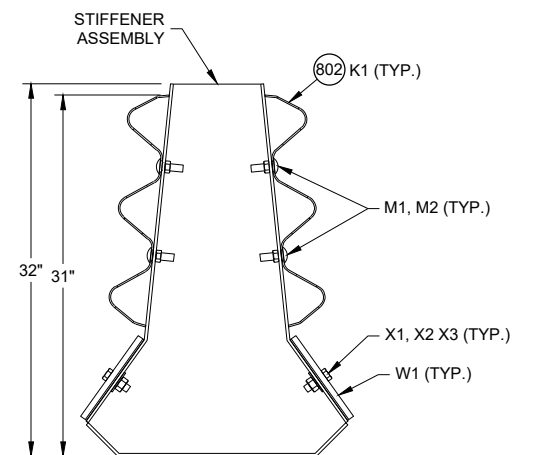
FLAT PATTERN
STIFFENER ASSEMBLY
SIDE PANEL U2



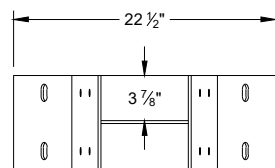
FLAT PATTERN
STIFFENER ASSEMBLY
BOTTOM PANEL U3



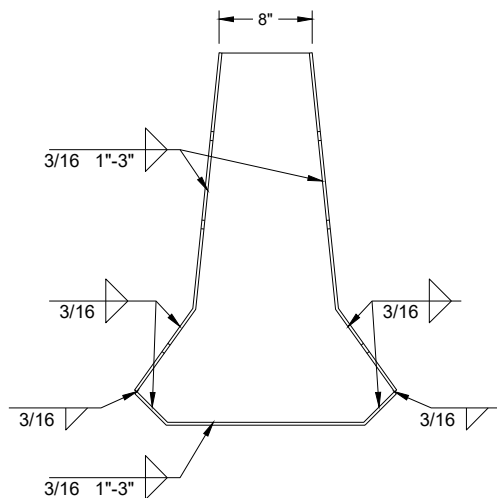
SECTION A - A



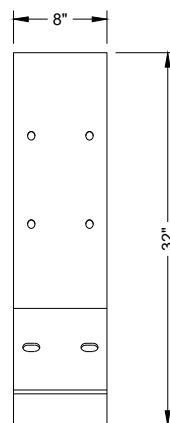
SECTION B - B



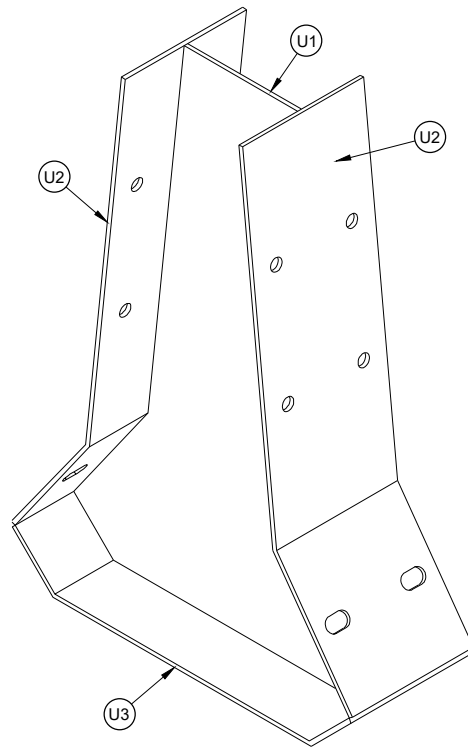
PLAN VIEW



PROFILE VIEW



SIDE VIEW

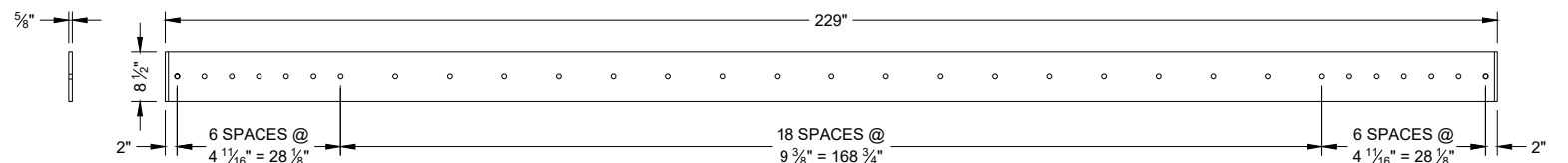


ISOMETRIC

GAP STIFFENER ASSEMBLY

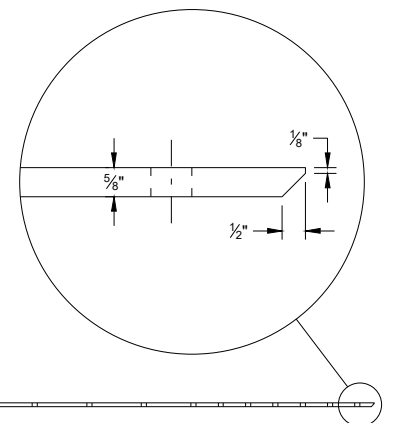


PLAN VIEW



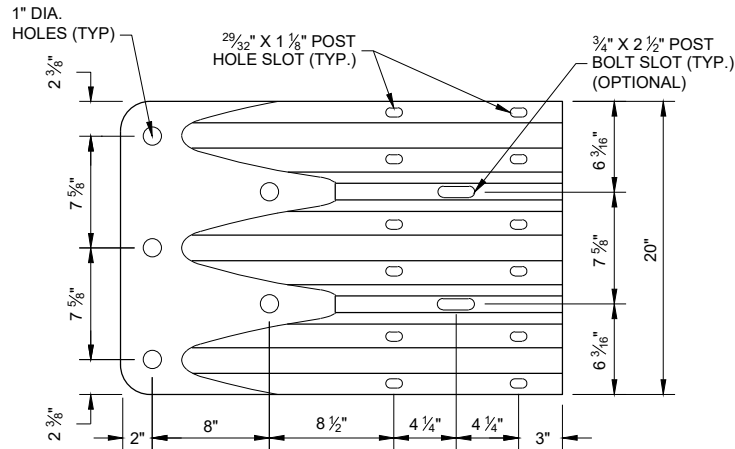
SIDE VIEW

ELEVATION VIEW
W1 TOE PLATE



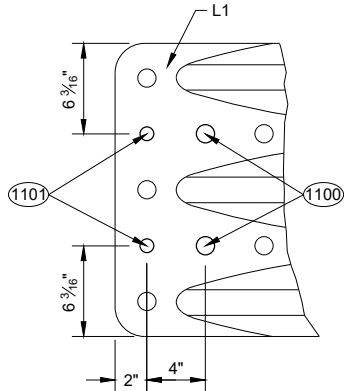
CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



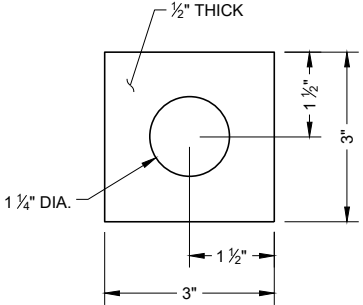
ELEVATION VIEW

**THRIE BEAM
TERMINAL CONNECTOR**



ELEVATION VIEW

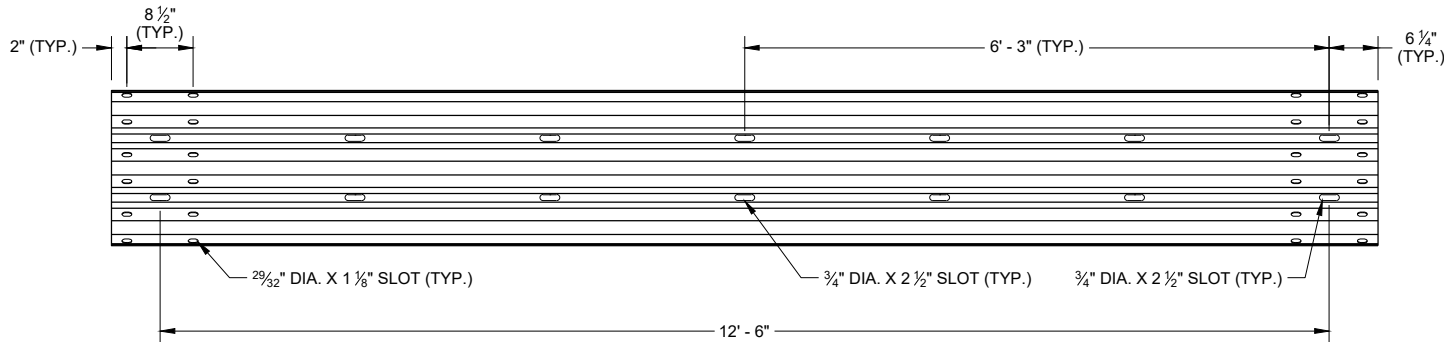
**ADDITIONAL THRIE BEAM
TERMINAL CONNECTOR HOLE DETAIL**



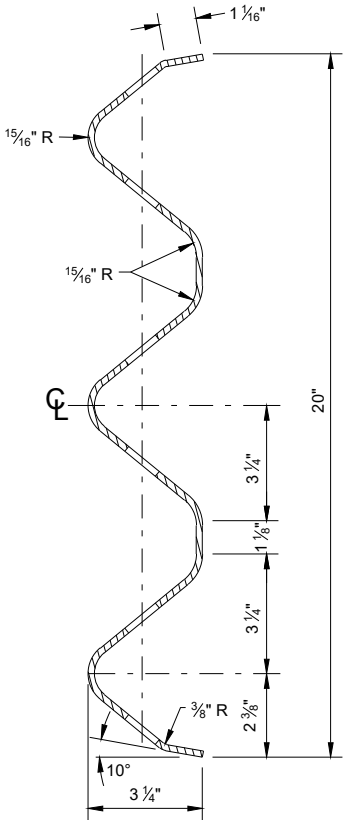
**PLATE WASHER DETAIL
G2, H3**

GENERAL NOTES

- (1100) 1" DIA. HOLE
- (1101) $\frac{3}{4}"$ DIA. HOLE
- (1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



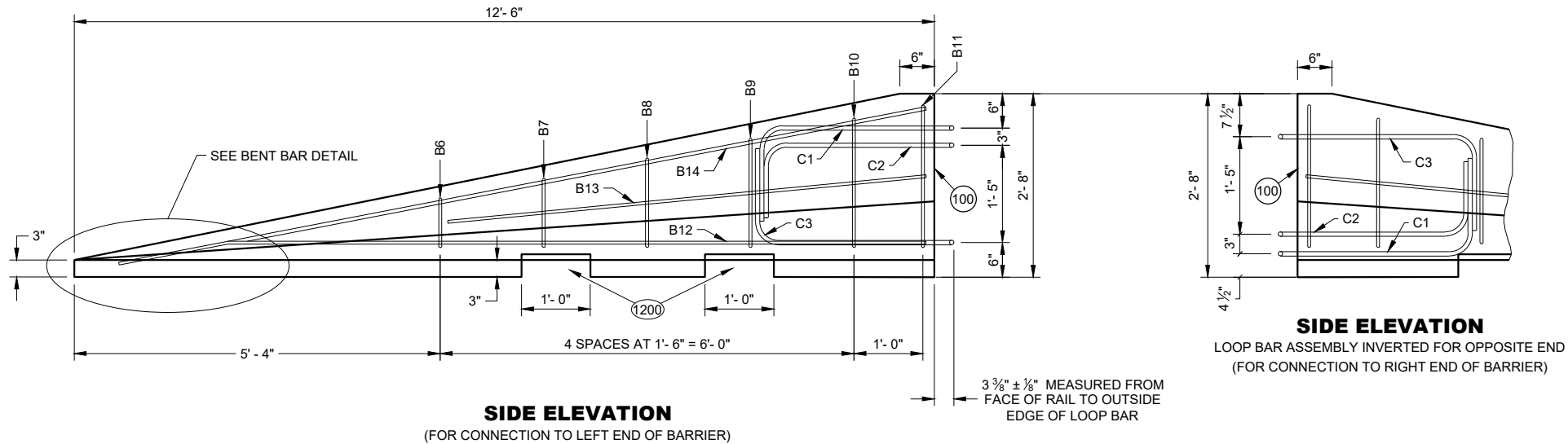
SLOTTED THRIE BEAM RAIL K1



**SECTION THROUGH
BEAM K1**

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

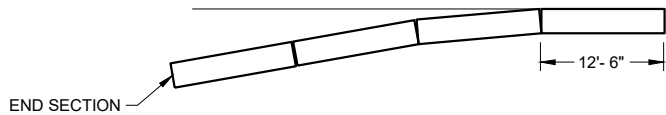


SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)

SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

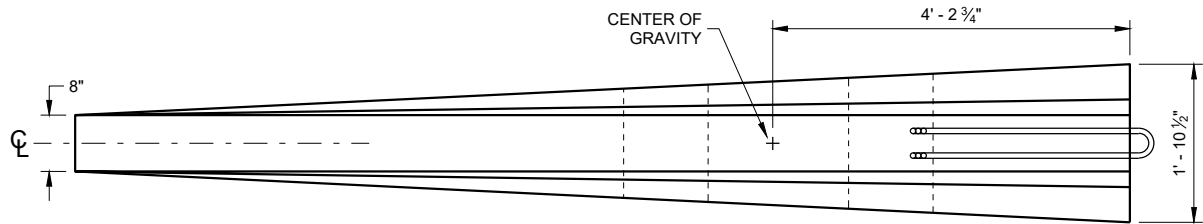
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

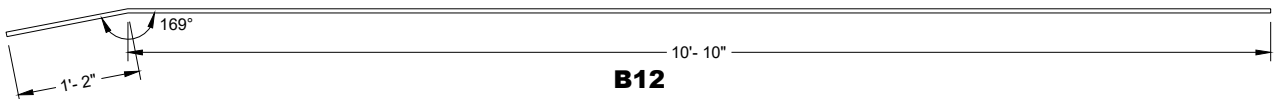


FLARE AT BARRIER END

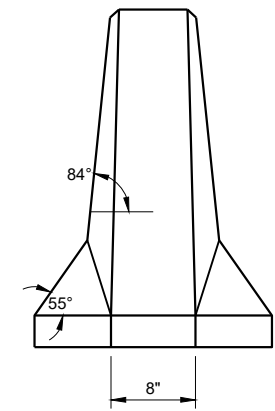
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



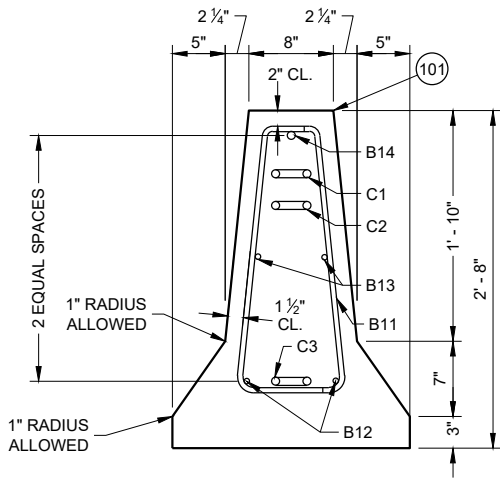
PLAN VIEW



BENT BAR DETAIL

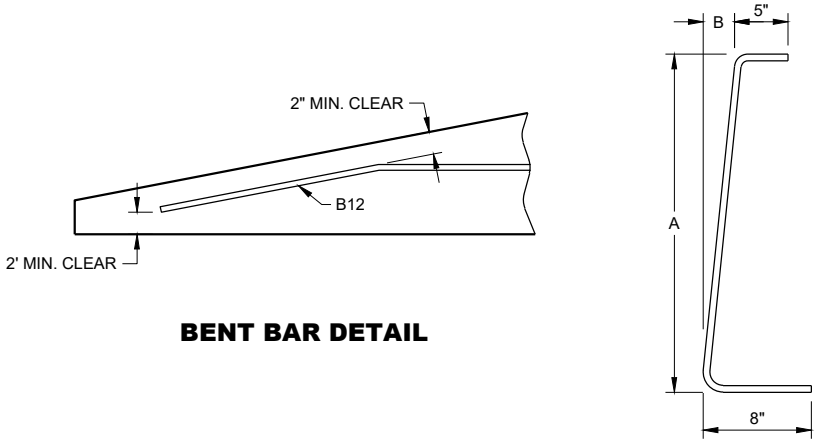


FRONT ELEVATION



END SECTION

DETAILS OF BARRIER TAPER SECTION



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 1/4"
B8	1'- 5"	1 5/8"
B9	1'- 8"	1 7/8"
B10	2'- 0 1/2"	2 3/8"
B11	2'- 3"	2 3/4"

B BARS

2 OF EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

**CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅝" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅝" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE

6

SDD 14B07-16m

CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

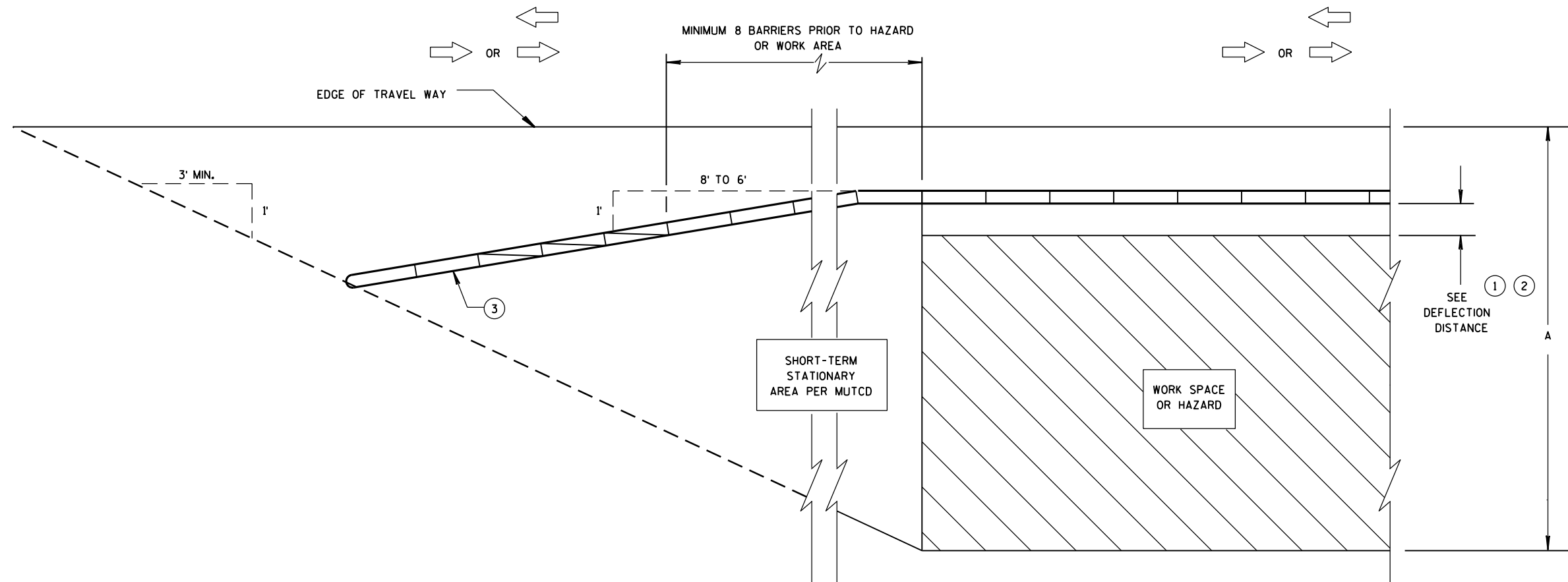
PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

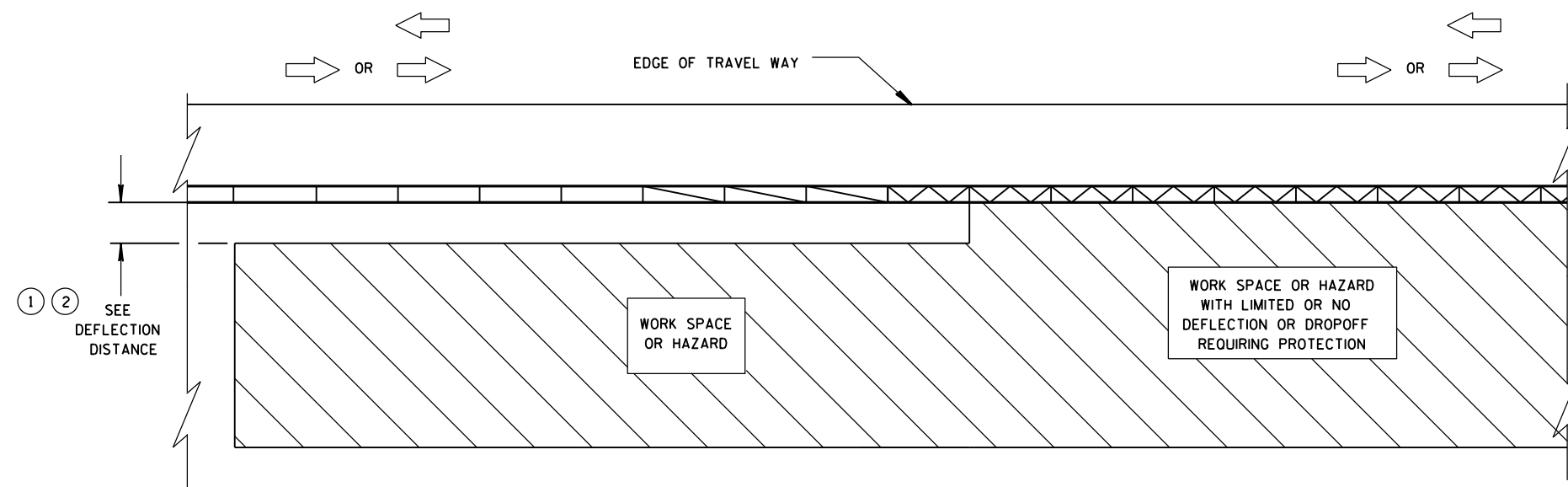
CONCRETE BARRIER
TEMPORARY PRECAST,
12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION**



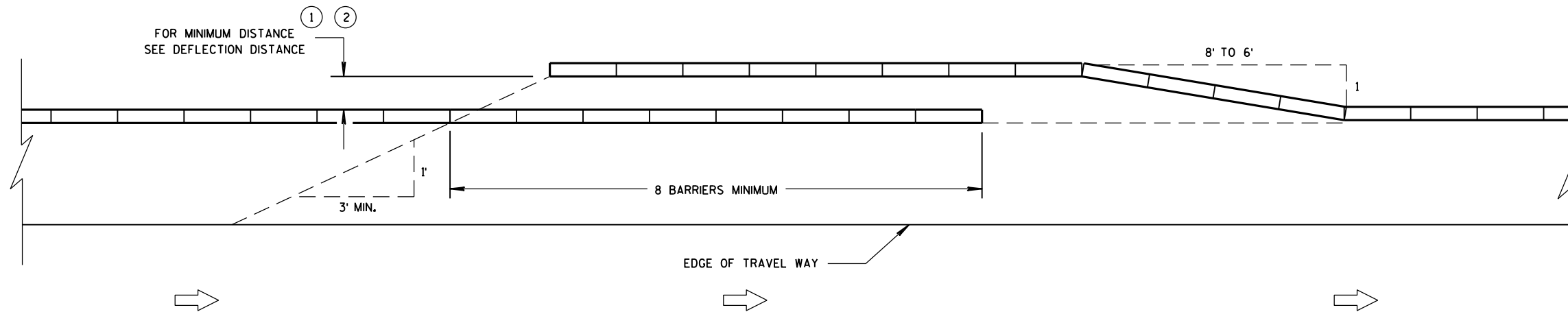
**TRANSITION FROM FREE STANDING TEMPORARY BARRIER
TO ANCHORED BARRIER**

LEGEND

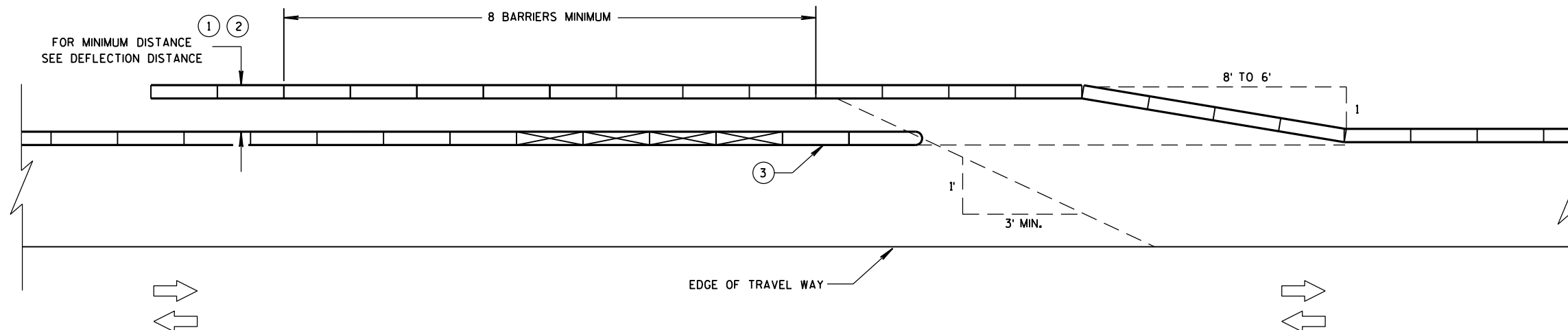
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

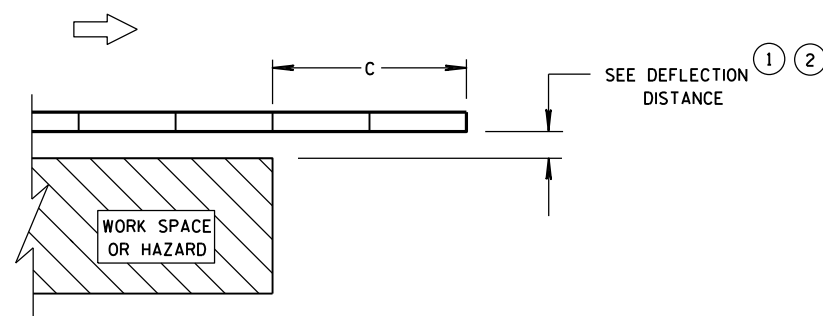
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



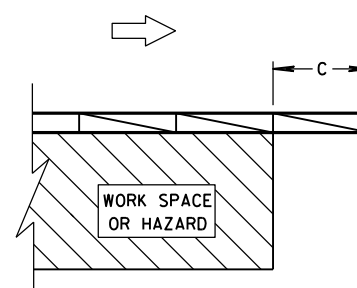
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



**ENDING TEMPORARY BARRIER
DOWNSTREAM - UNANCHORED**



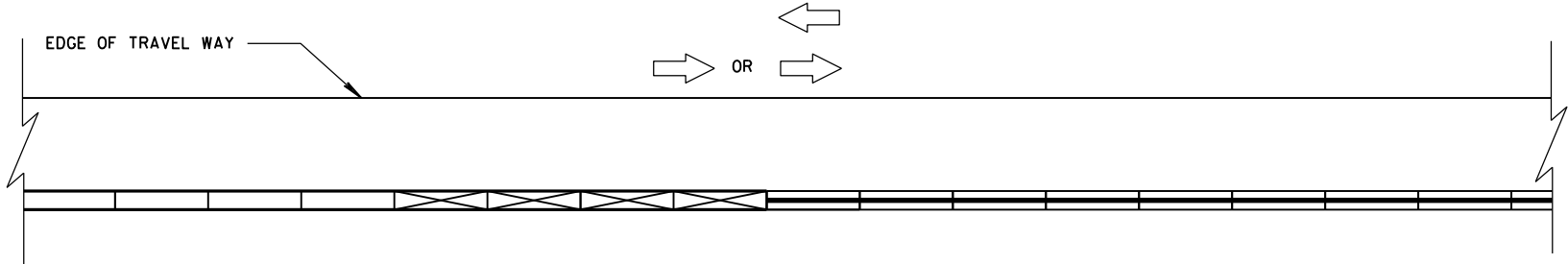
**ENDING TEMPORARY BARRIER
DOWNSTREAM - ANCHORED**

LEGEND

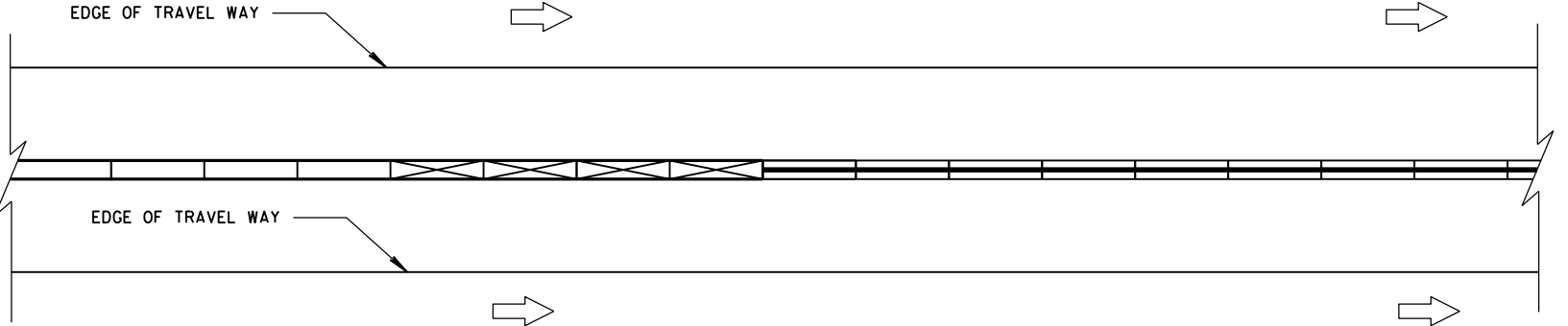
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



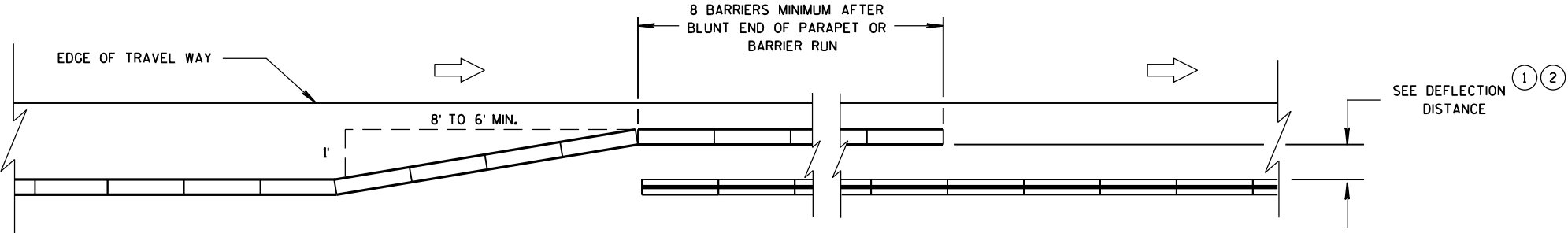
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



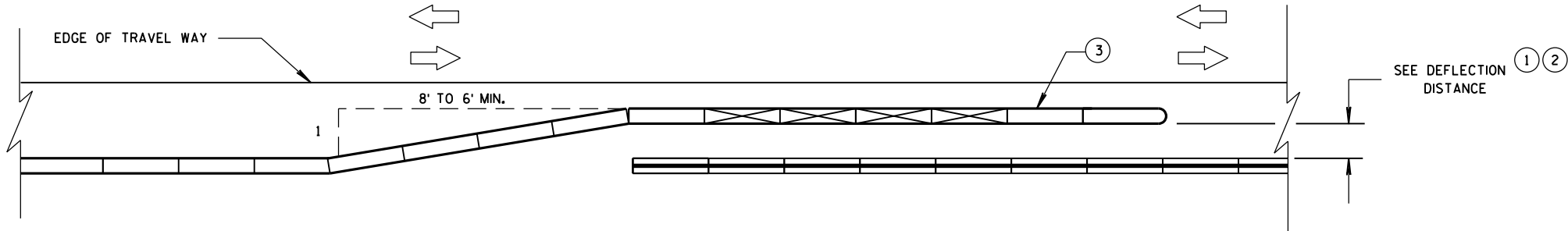
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

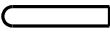
CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

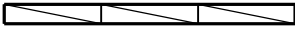
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- DIRECTION OF TRAVEL

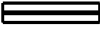

- CRASH CUSHION OR SAND BARREL ARRAY

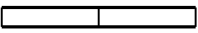

- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS


- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS


- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER


- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET


- FREE STANDING TEMPORARY BARRIER



DIMENSION C TABLE

2

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100

6

6

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

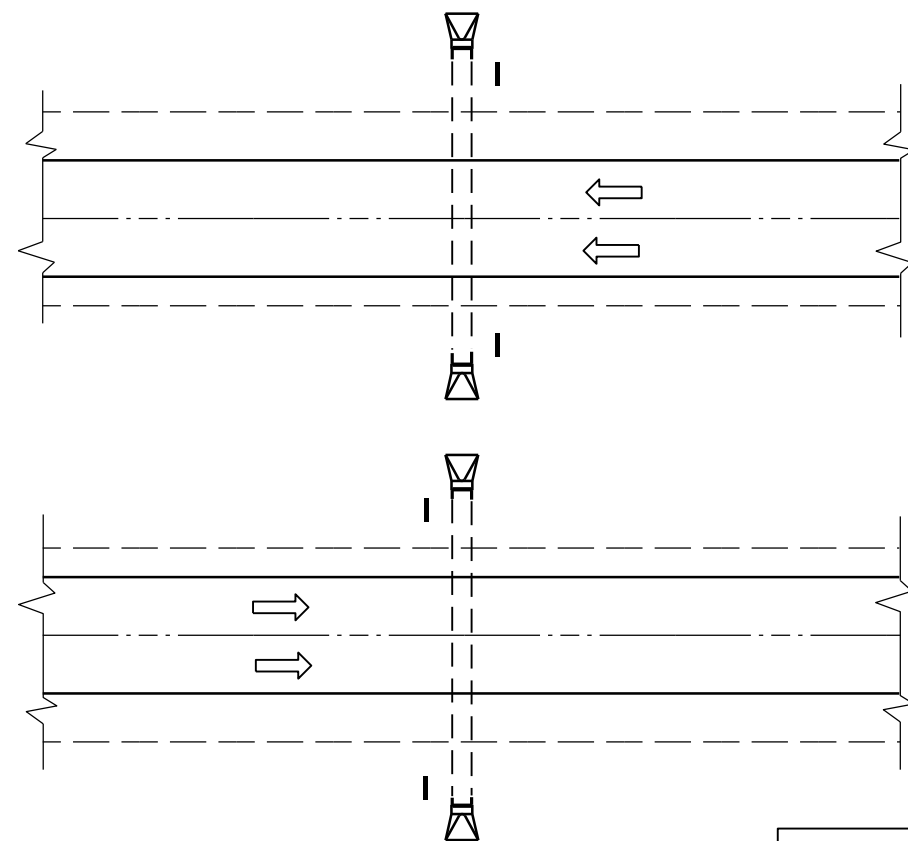
June, 2015

DATE

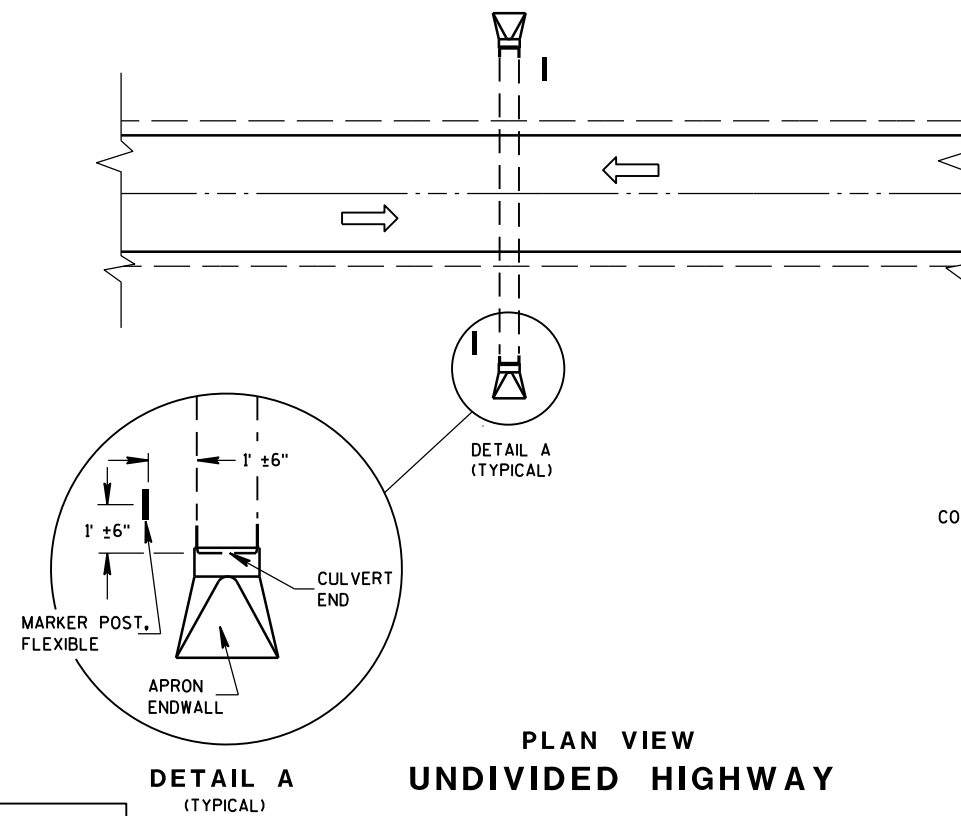
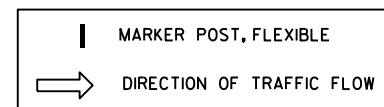
FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT
ENGINEER



PLAN VIEW
DIVIDED HIGHWAY

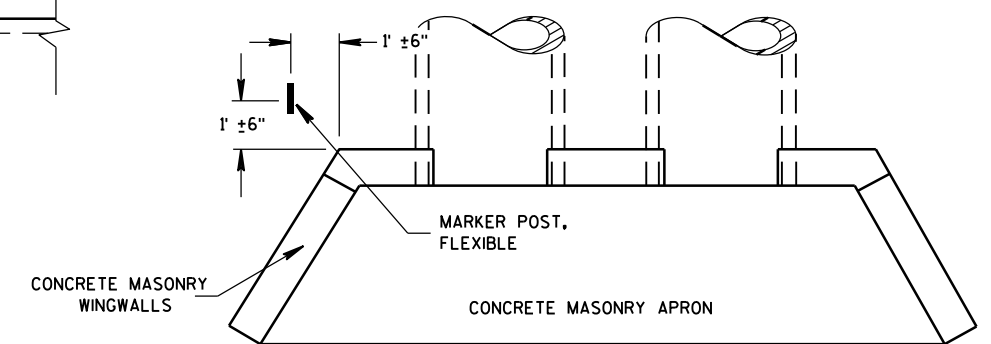


PLAN VIEW
UNDIVIDED HIGHWAY

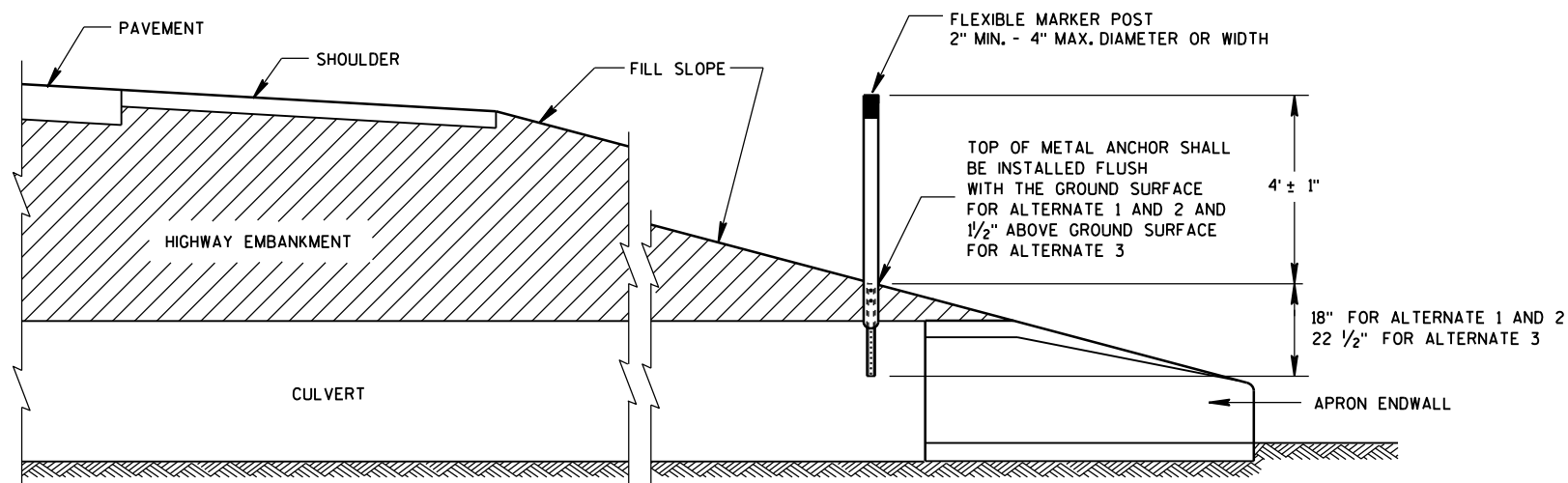
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



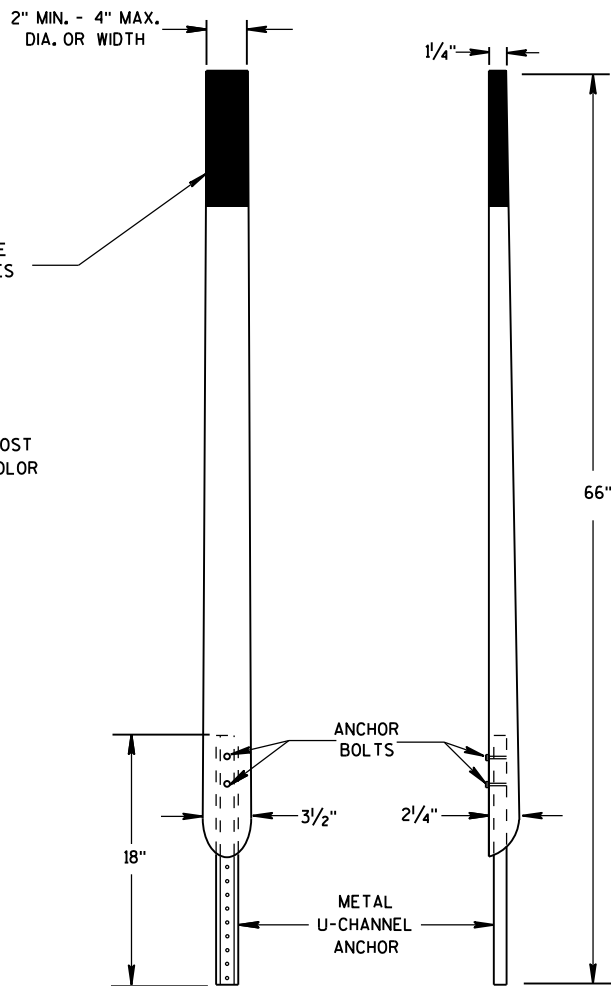
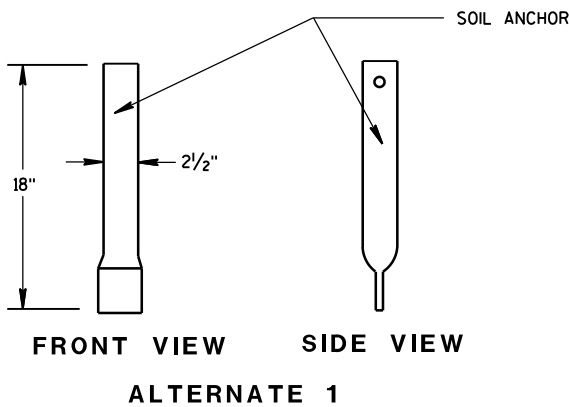
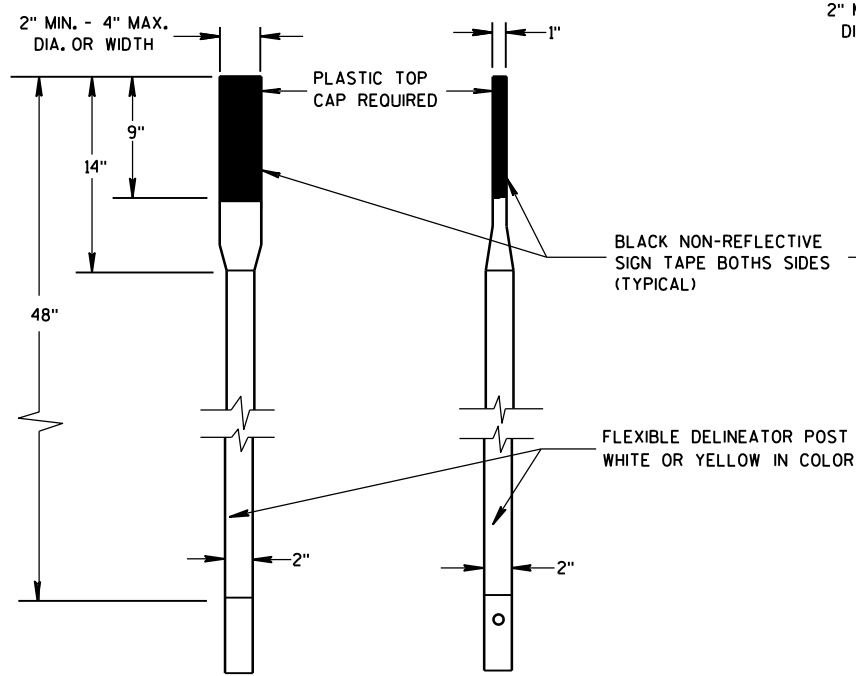
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

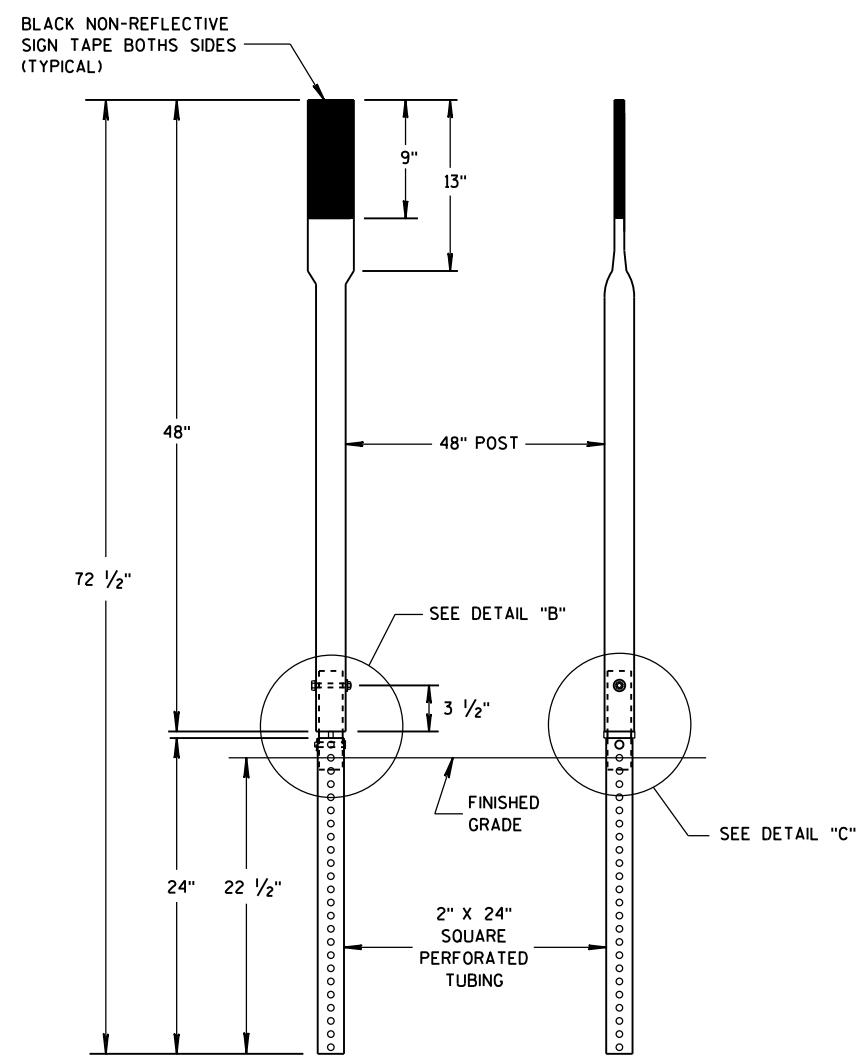
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

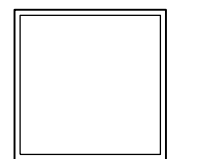


FRONT VIEW SIDE VIEW
ALTERNATE 2

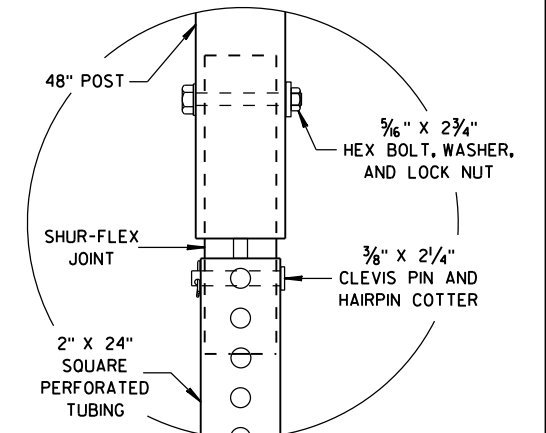
FLEXIBLE MARKER POSTS



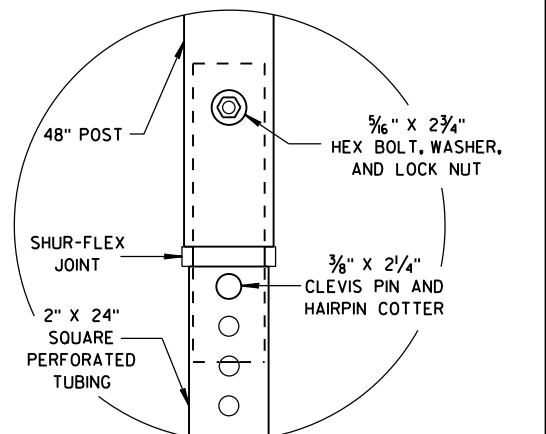
FRONT VIEW SIDE VIEW
ALTERNATE 3



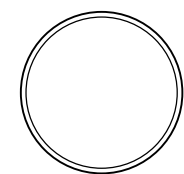
SECTION C-C



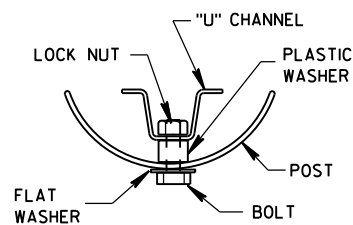
DETAIL B



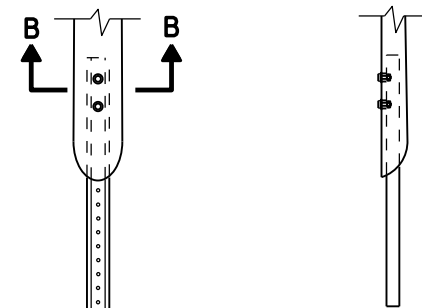
DETAIL C



SECTION A-A



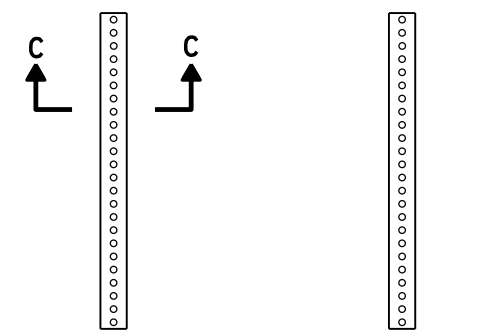
SECTION B-B



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST
FOR CULVERT END

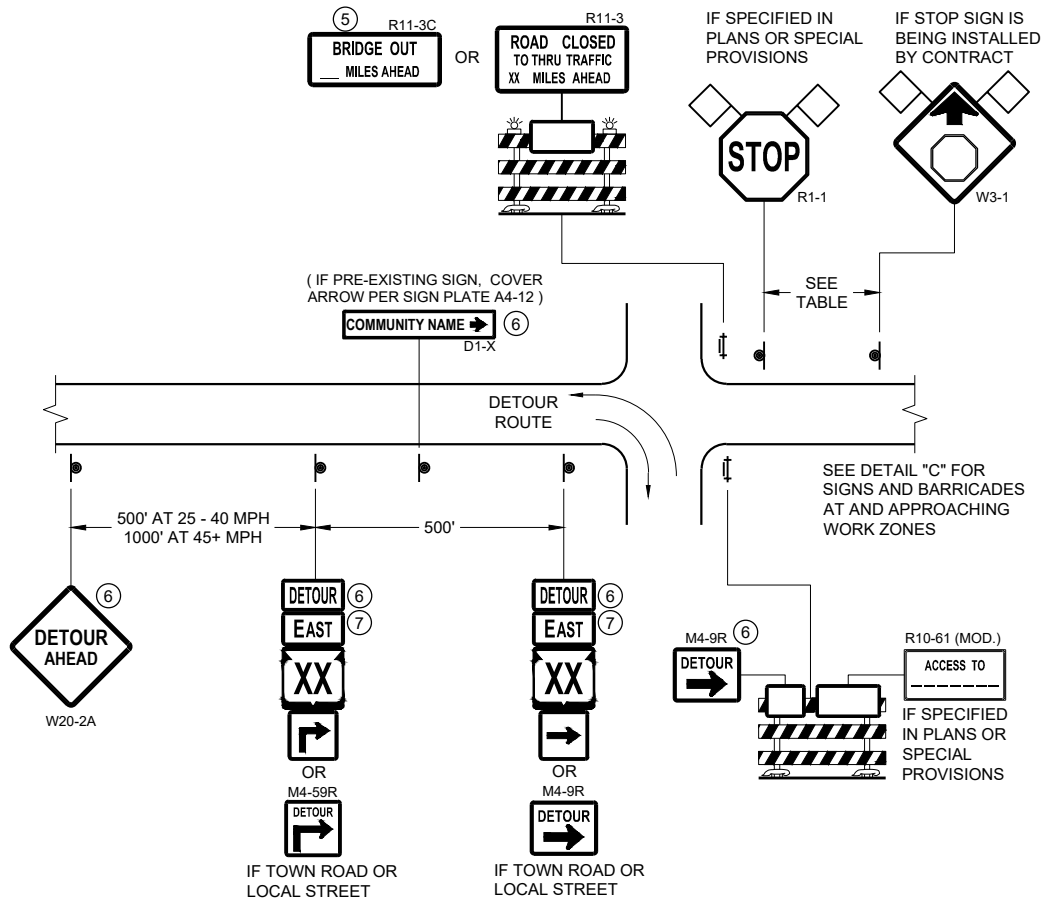
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012

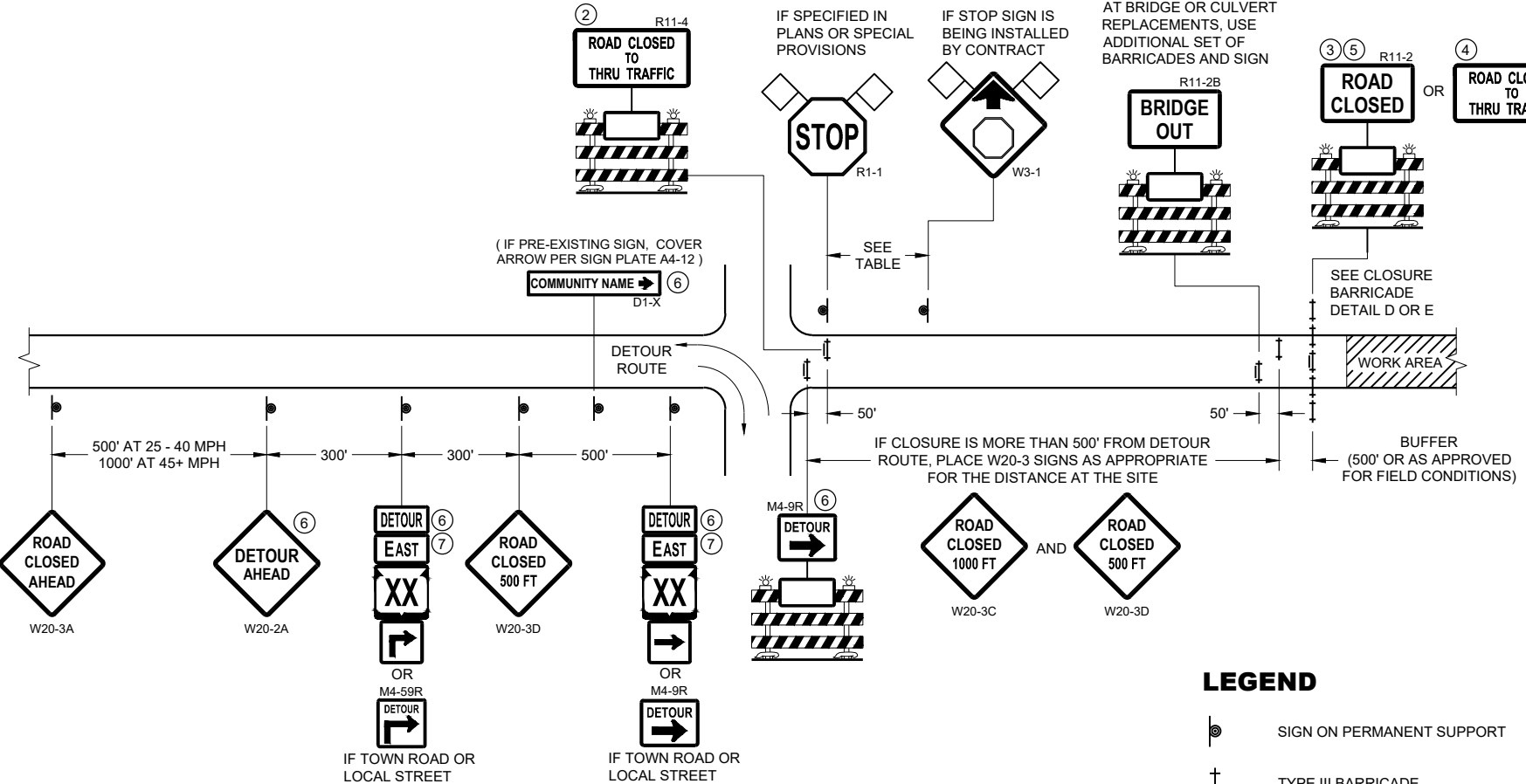
DATE

FHWA

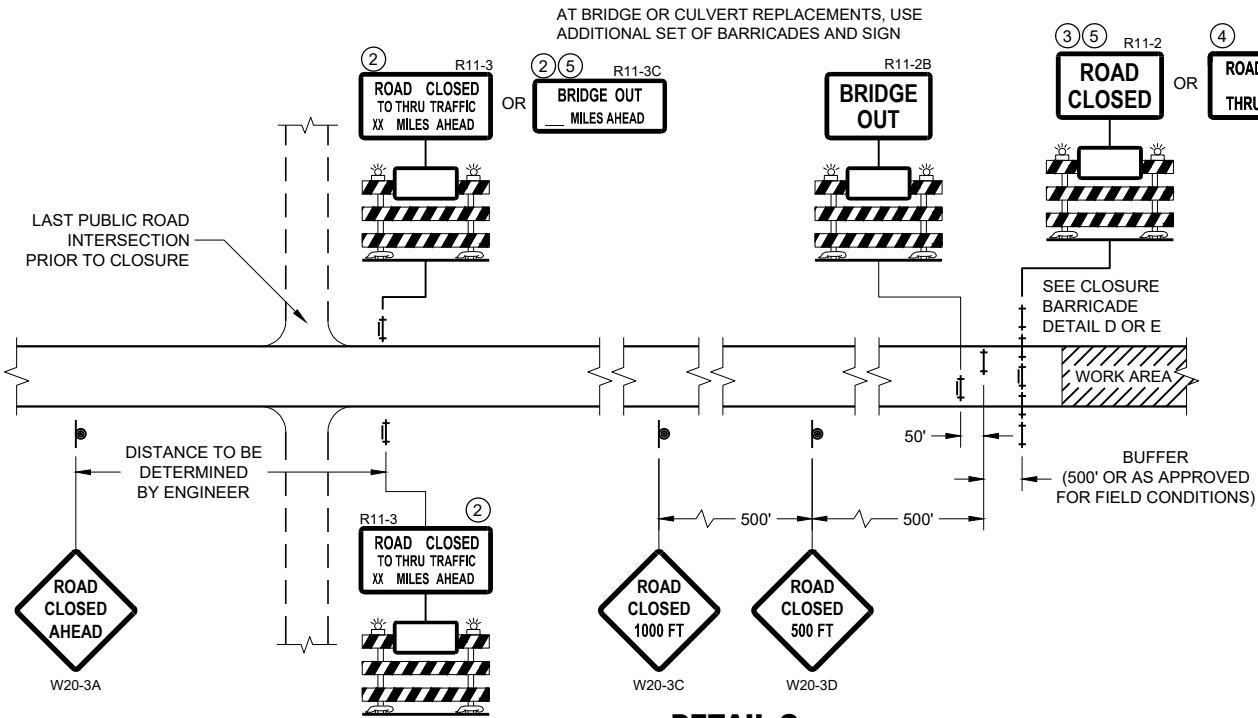
/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN



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

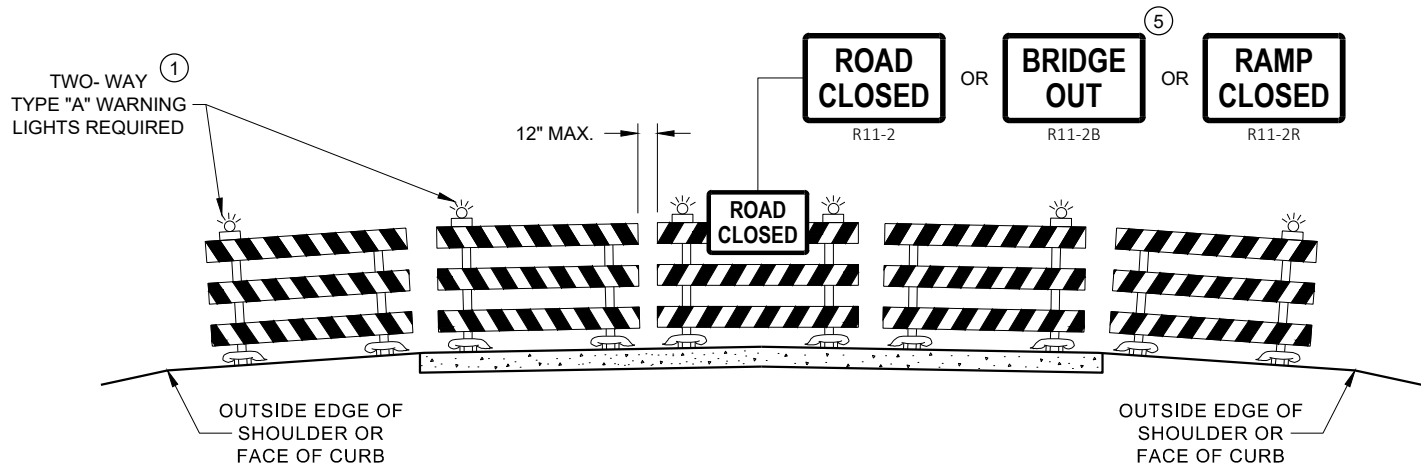
LEGEND

- 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 M1 - 5A
- OR M05 - 1 OR M06 - 1

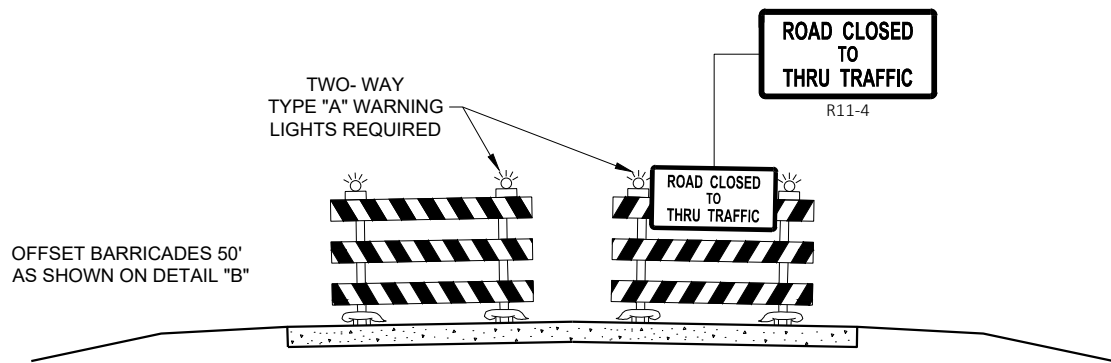
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



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"

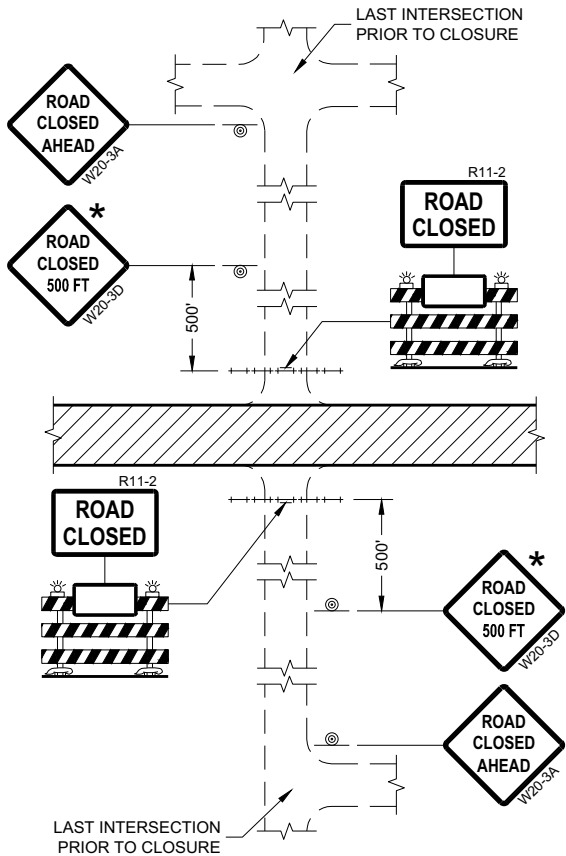
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS 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

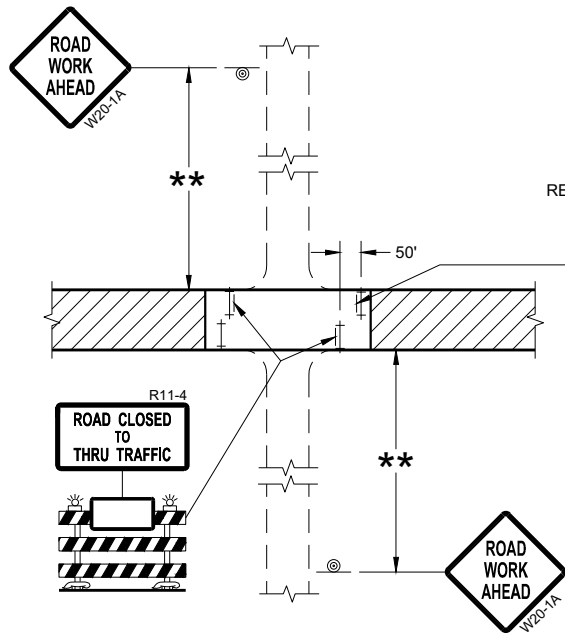
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

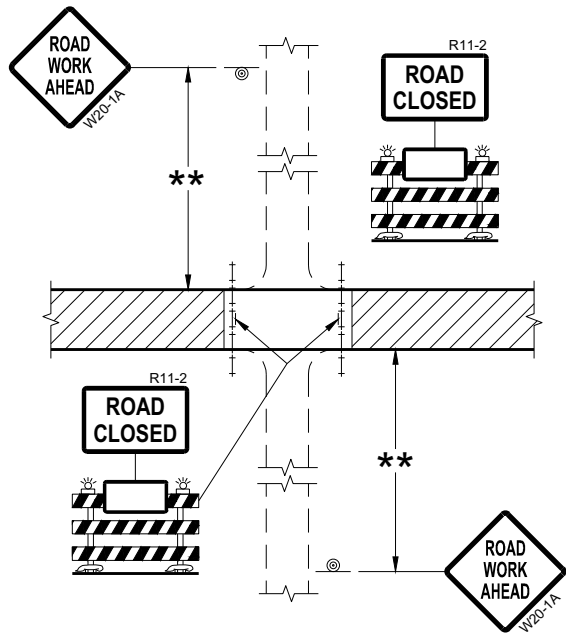
FHWA



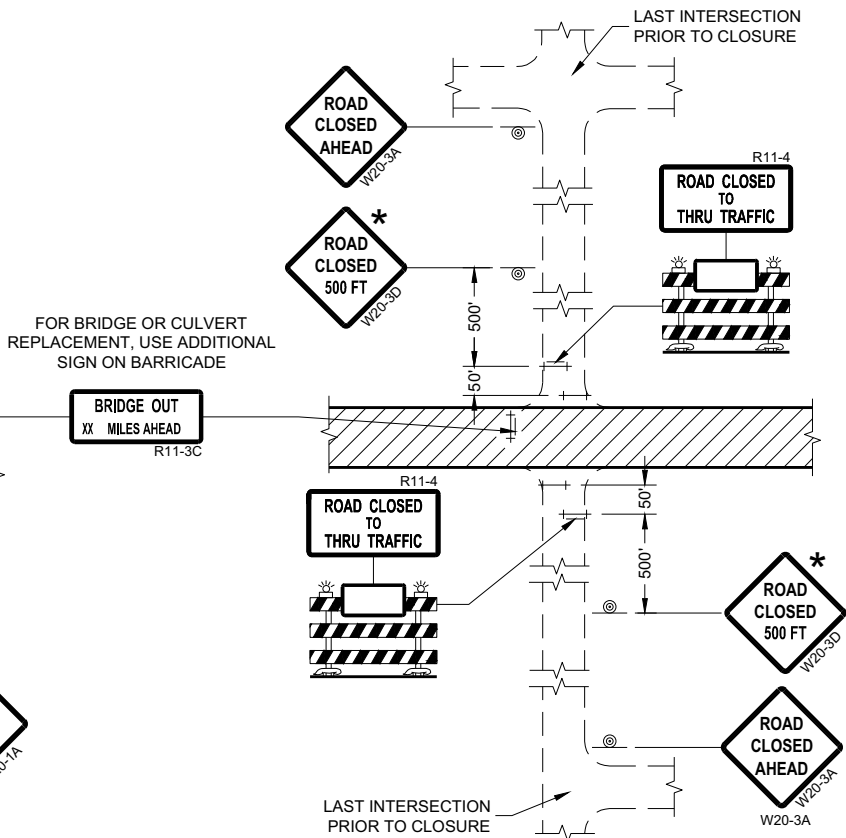
DETAIL 1
(NO ACCESS TO PROJECT)



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



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

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

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

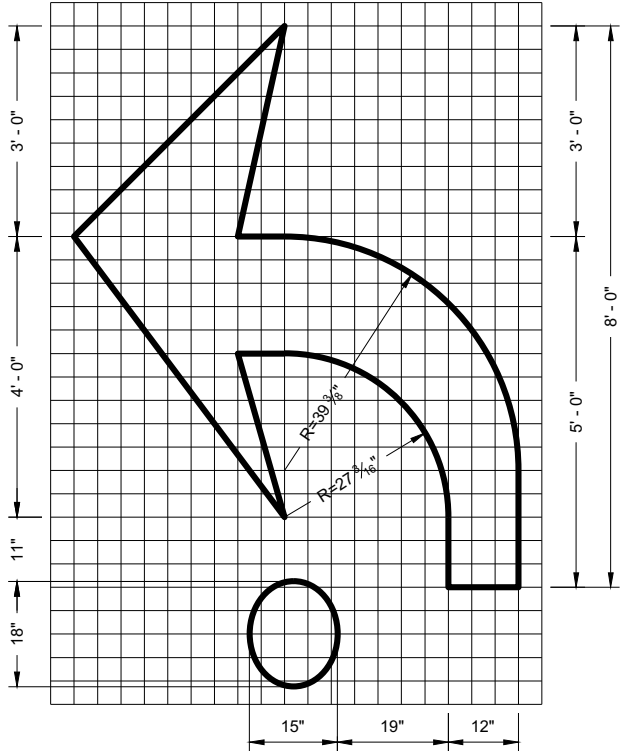
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

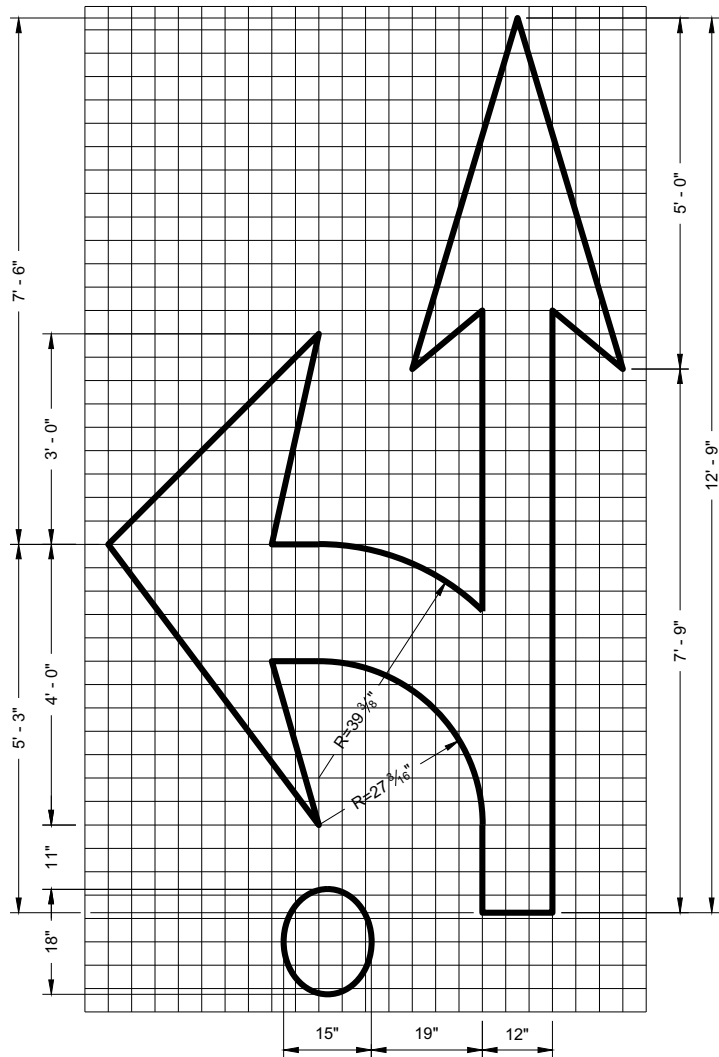
FHWA

GENERAL NOTES

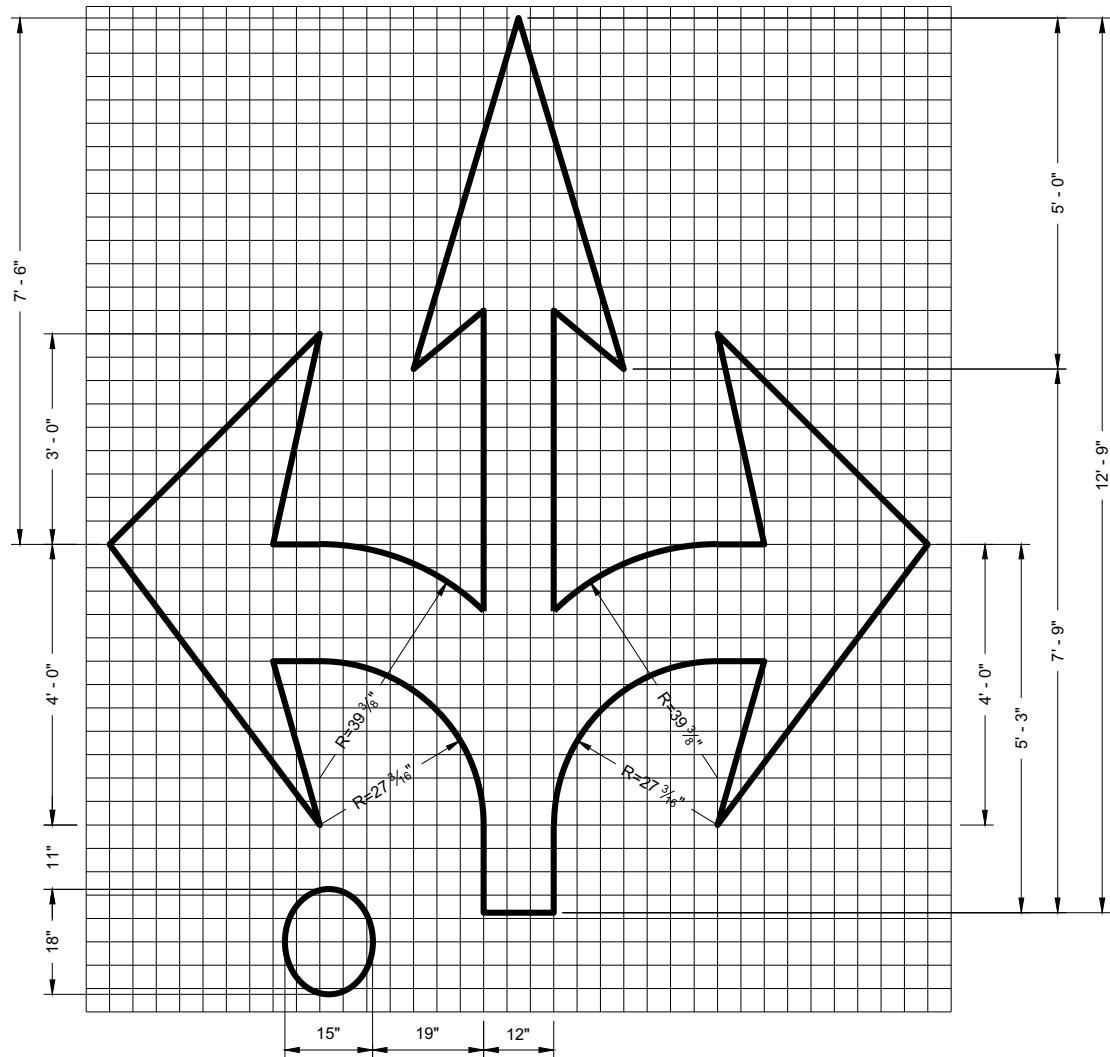
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



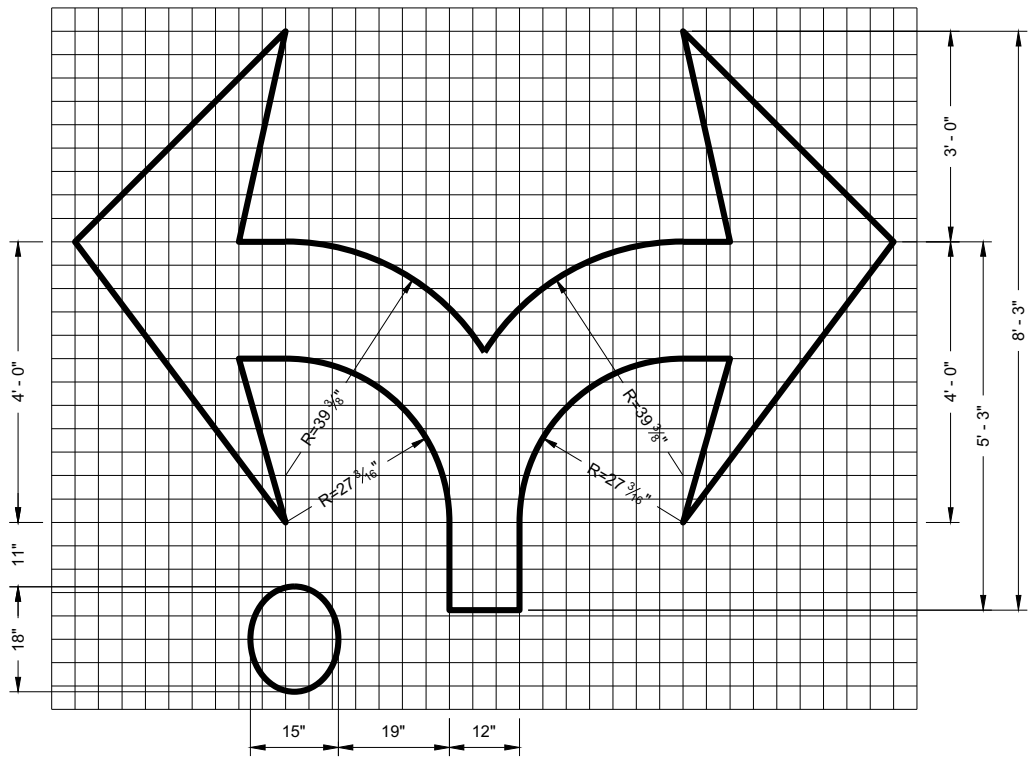
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDAABOUT
MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE /S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA



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
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

-  "T" MARKING
 SIGN ON PERMANENT SUPPORT
 DIRECTION OF TRAFFIC

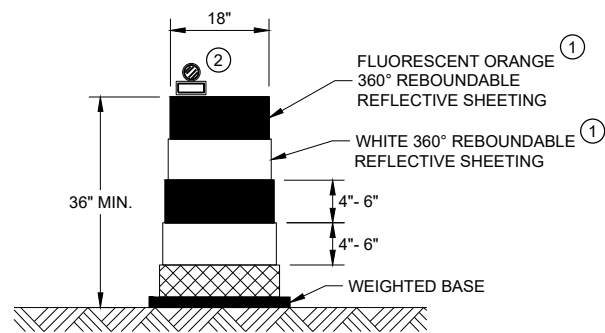
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

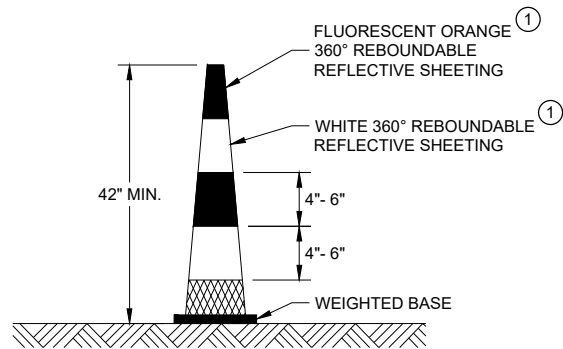
/S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING
ENGINEER

FWHA



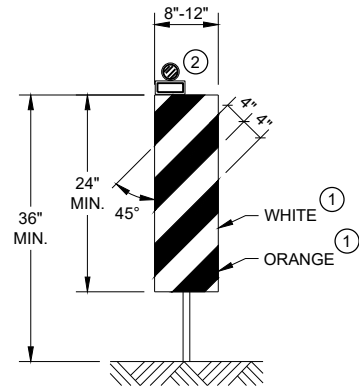
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



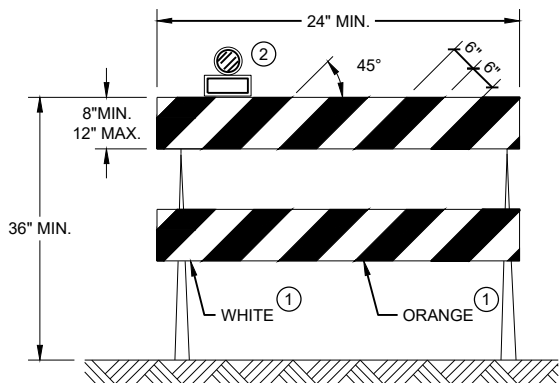
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



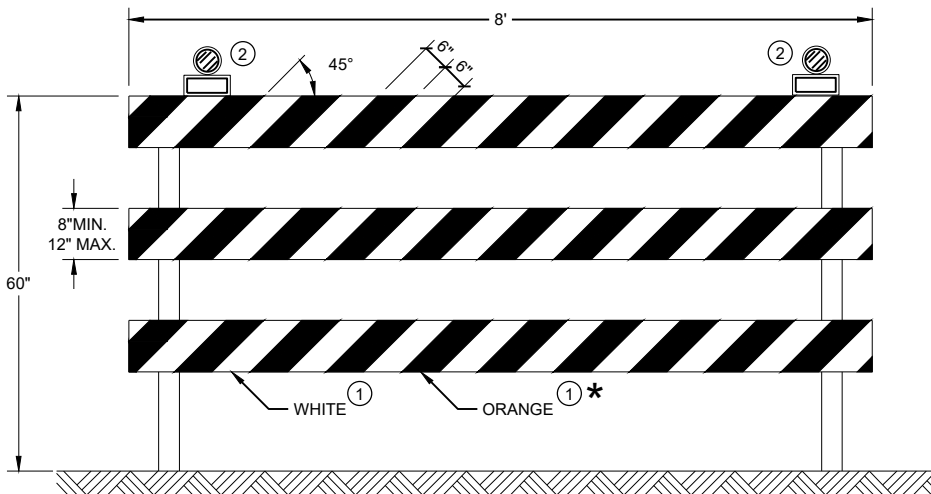
VERTICAL PANEL

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.

GENERAL NOTES

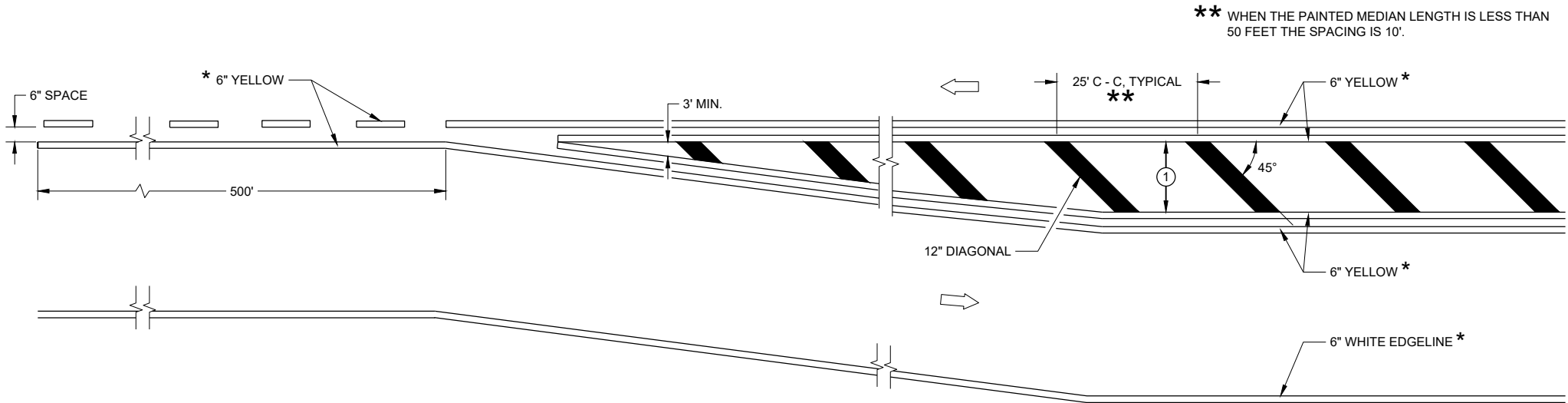
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



MEDIAN ISLAND DETAIL

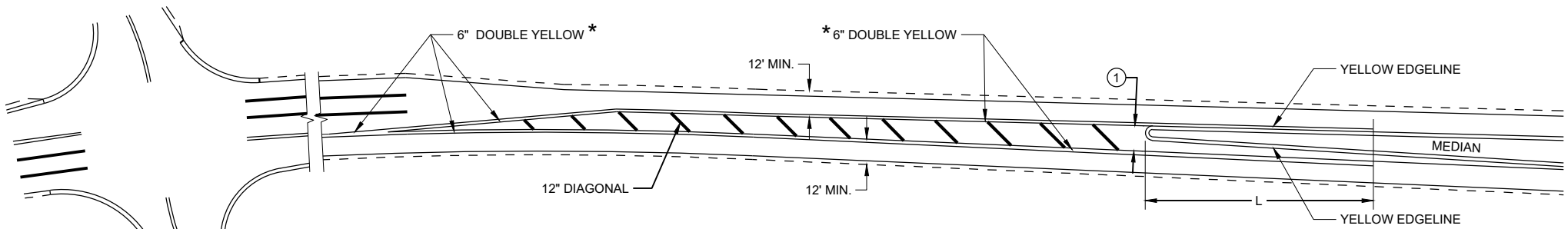
GENERAL NOTES

- ① DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

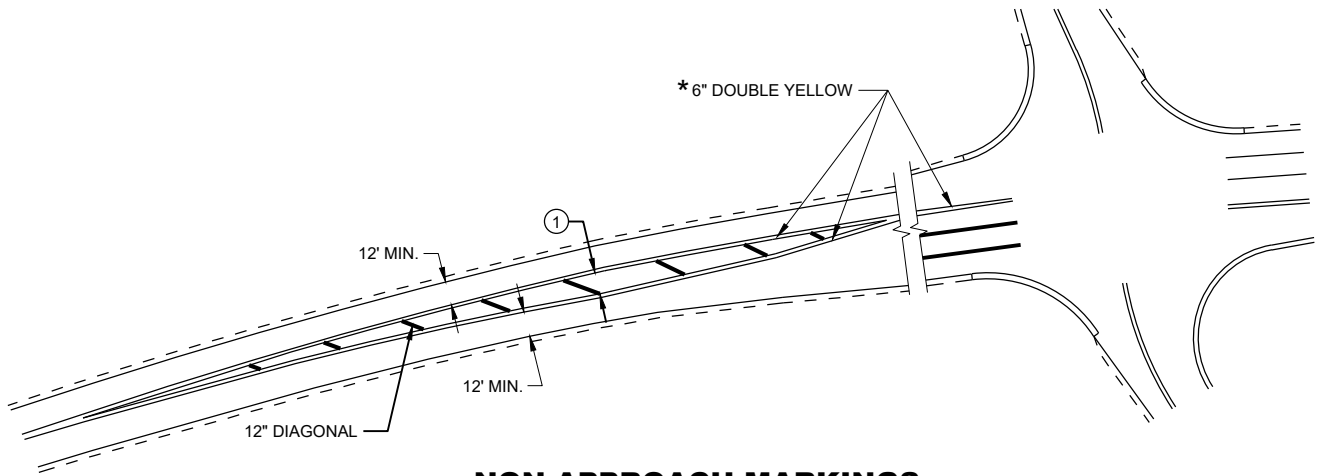
➡ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



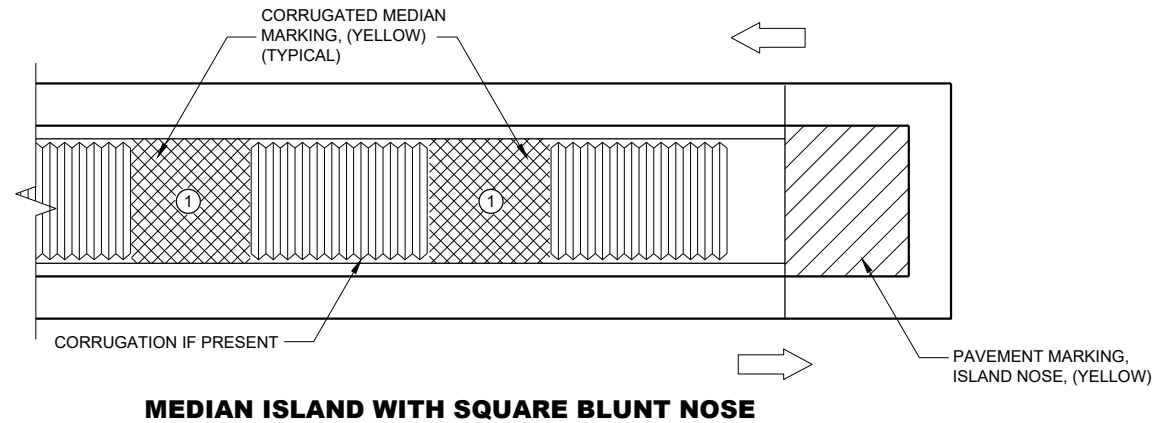
NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

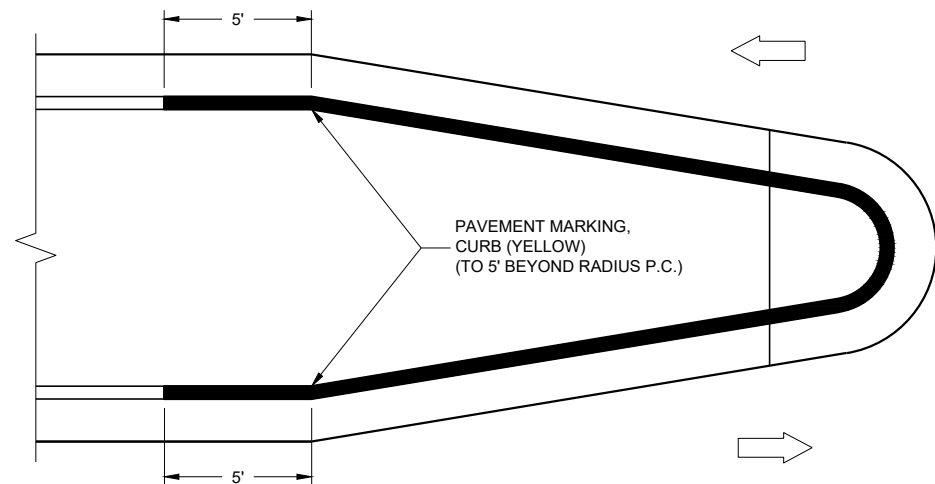
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
STATE SIGNING AND MARKING
ENGINEER

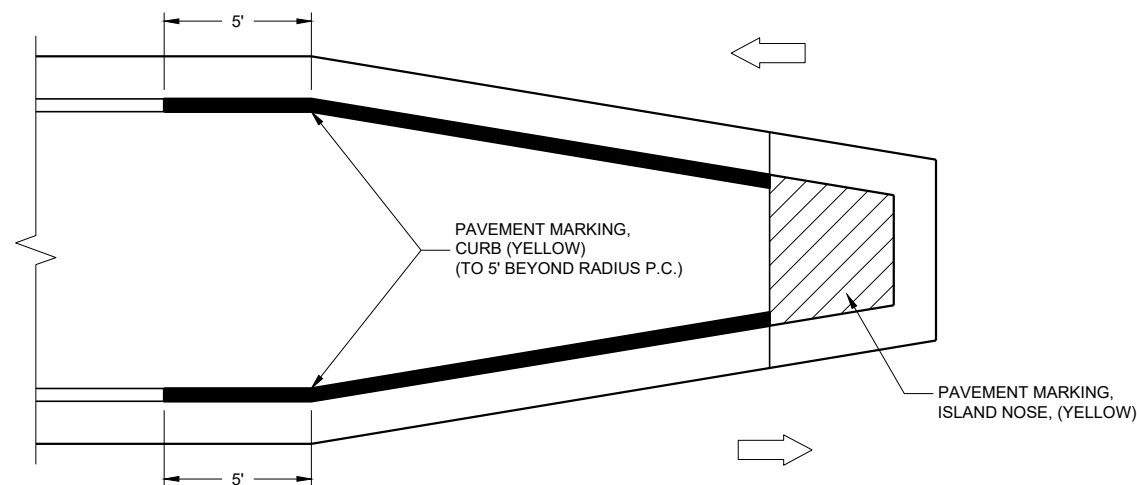
FHWA



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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

① APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver STATE SIGNING AND MARKING ENGINEER
FHWA	

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

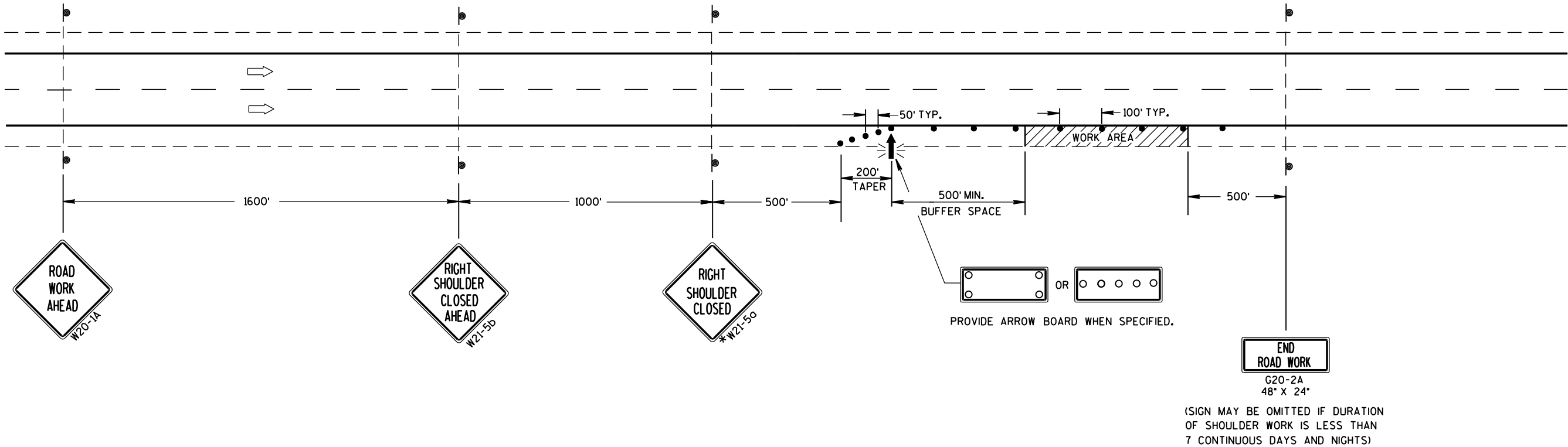
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

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" SIGN IS THE SAME AS "W" SIGN 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.

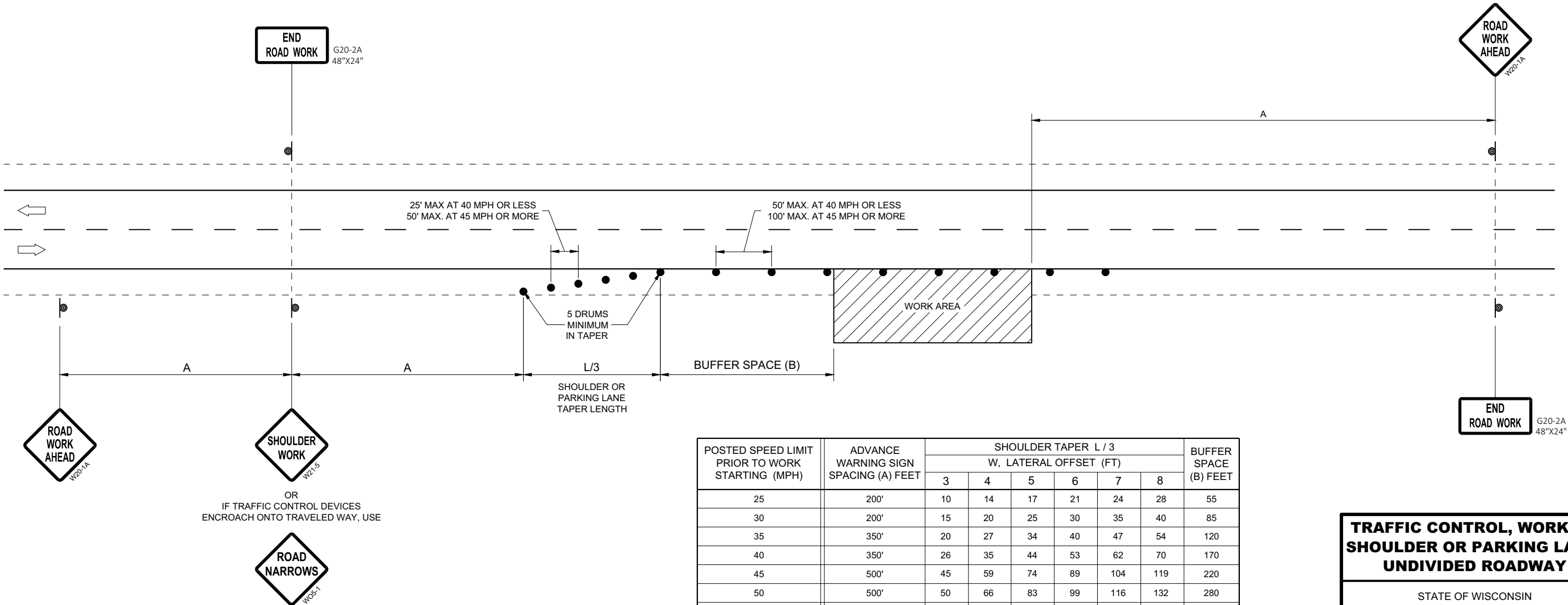
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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 WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

SDD 15D28 - 04



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

FHWA

6

SDD 15D28 - 04

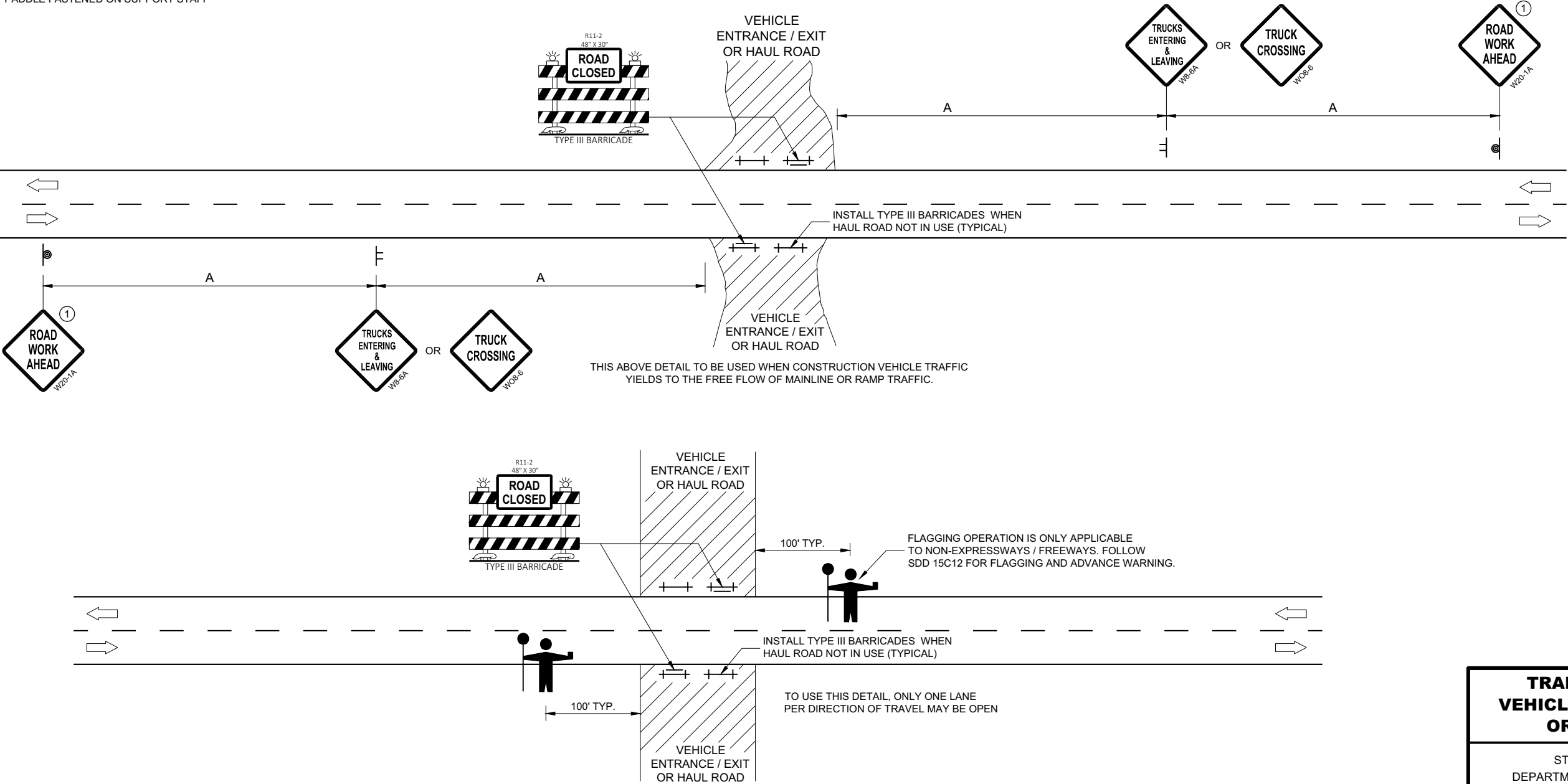
LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  DIRECTION OF TRAFFIC
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET
0-30	200'
35-40	350'
45-55	500'

GENERAL NOTES

- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- "WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.
- WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.
- PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.
- ① THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE / EXIT CONDITIONS ARE SEPARATED BY MORE THAN TWO MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL,
VEHICLE ENTRANCE/EXIT
OR HAUL ROAD

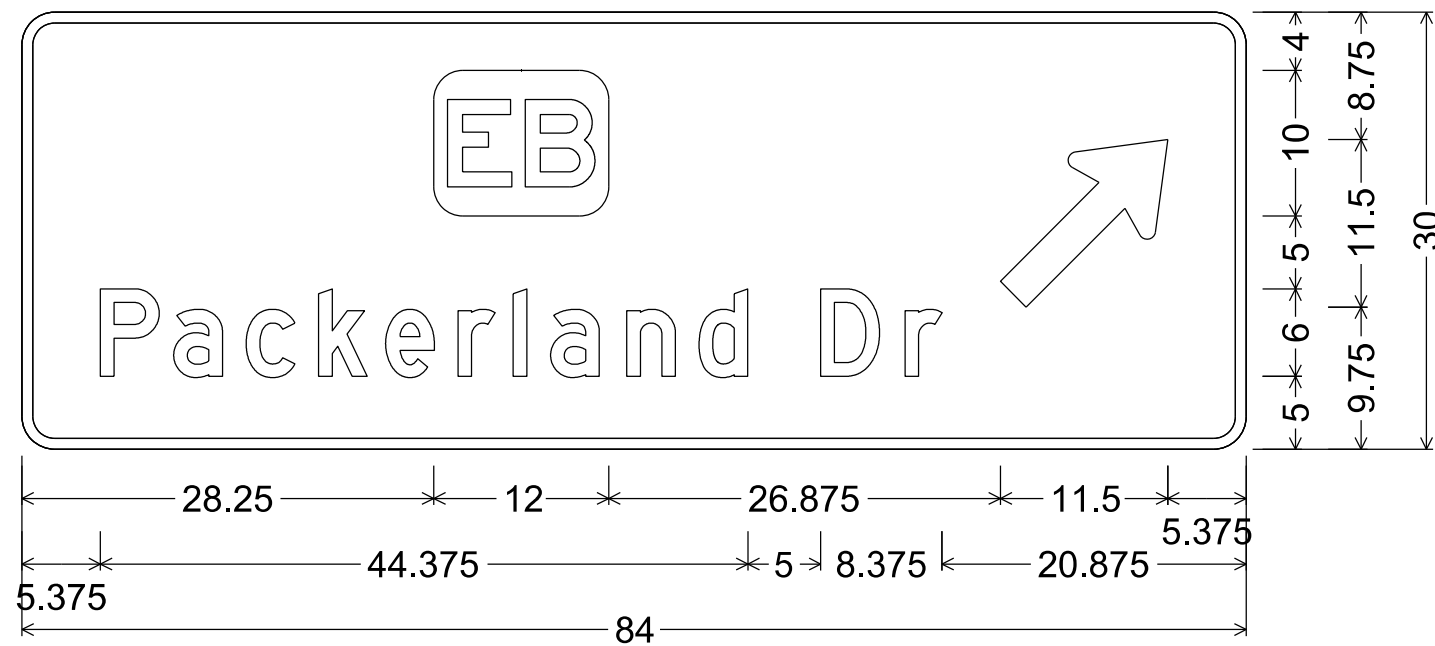
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

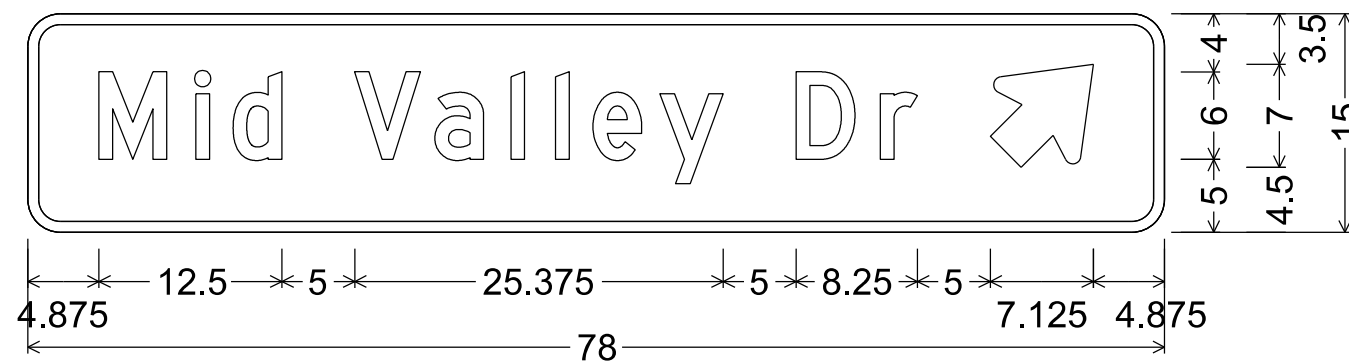
FHWA

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
 - Background - Green
 - Message - White
3. Message Series - D

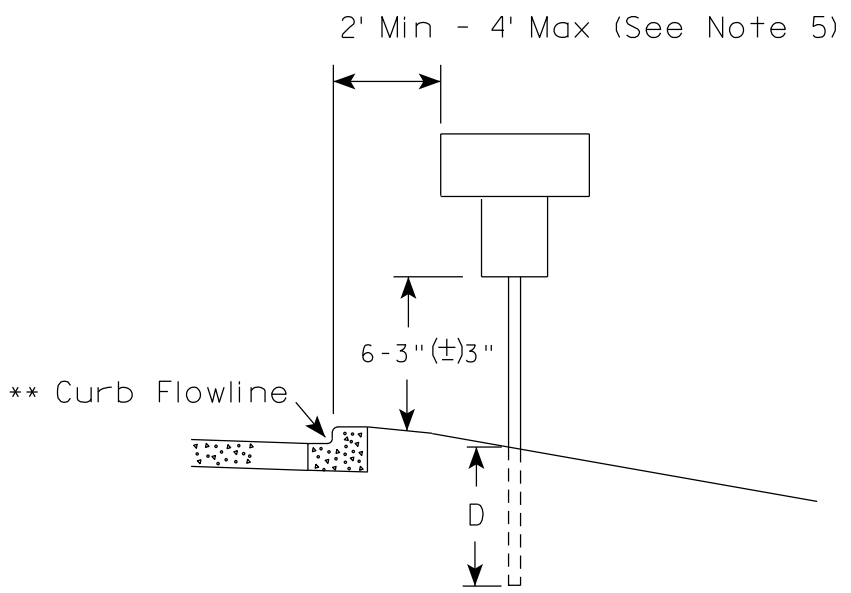
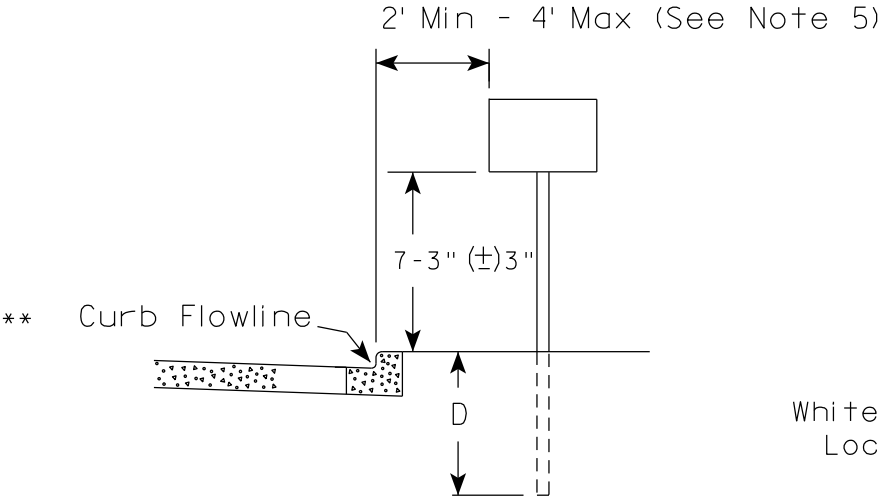


D1-2; 2.250" Radius, 0.750" Border

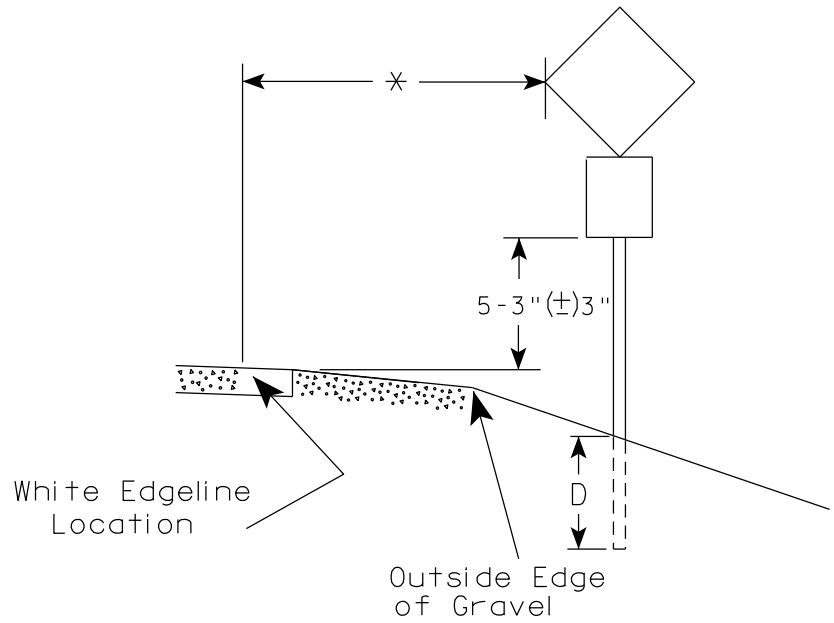
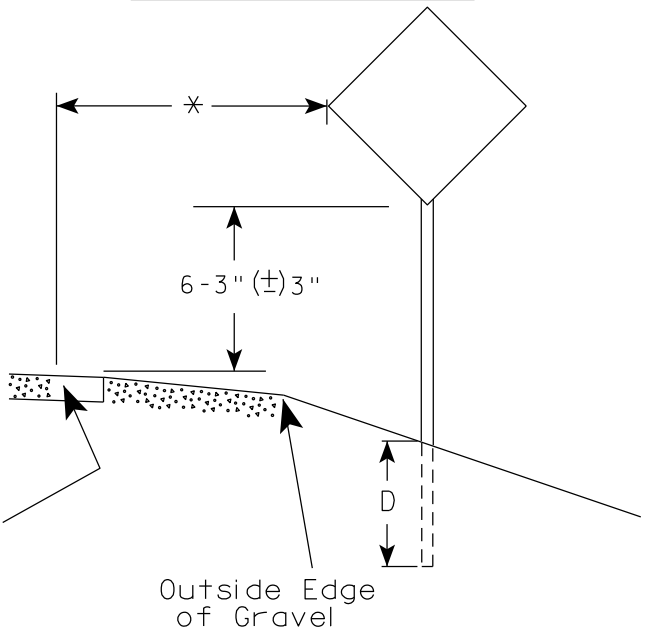


D1-1; 2.250" Radius, 0.750" Border

URBAN AREA



RURAL AREA (See Note 2)



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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the 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.

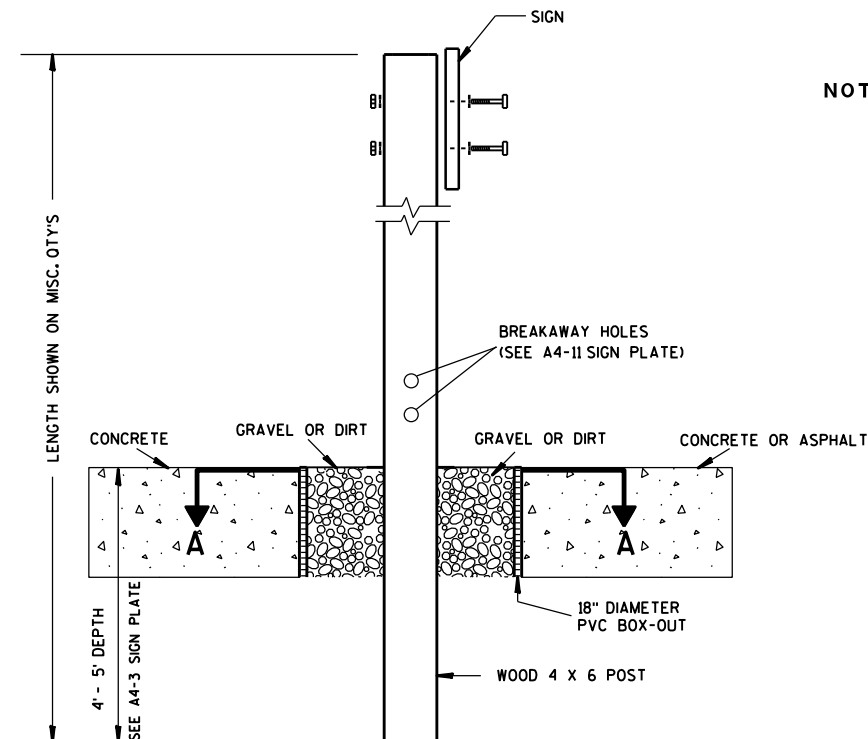
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

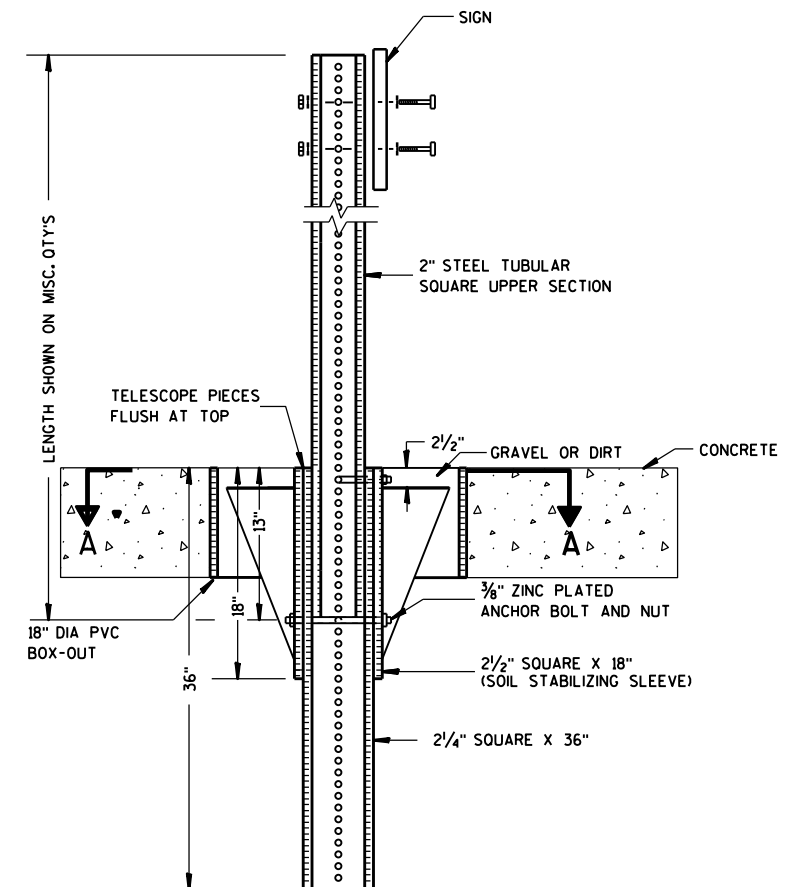
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

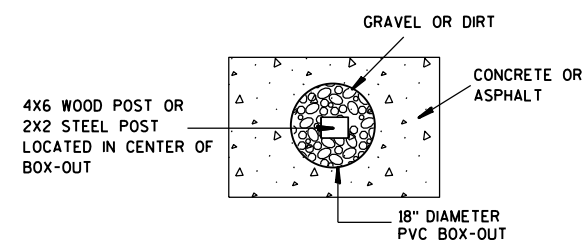
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

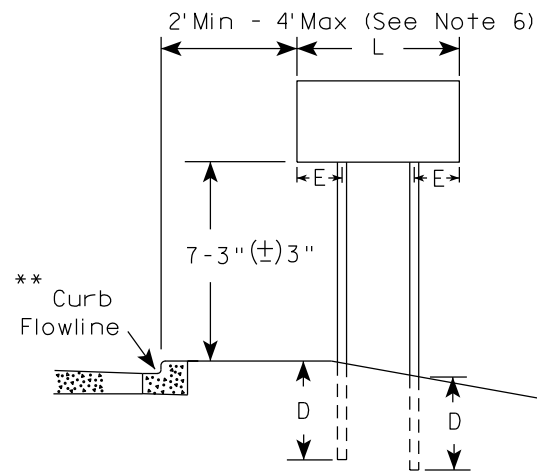
SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

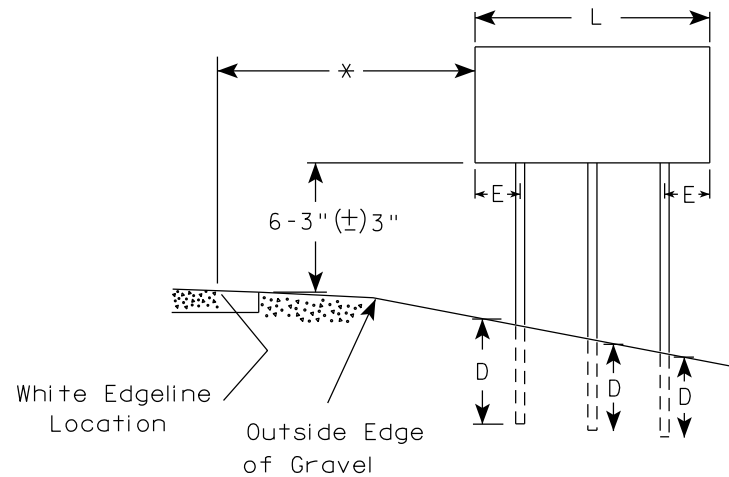
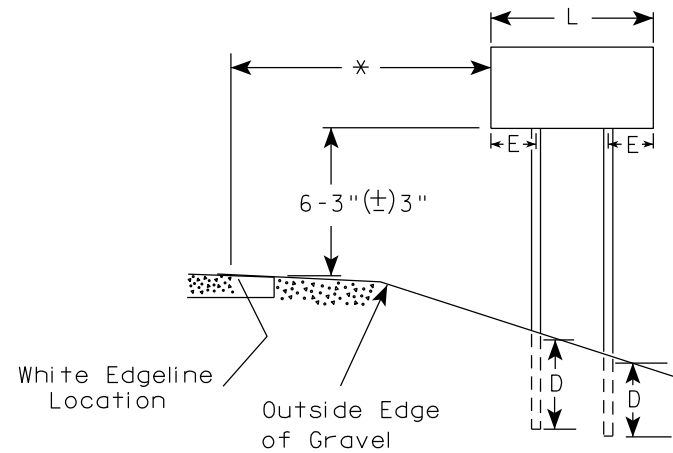
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

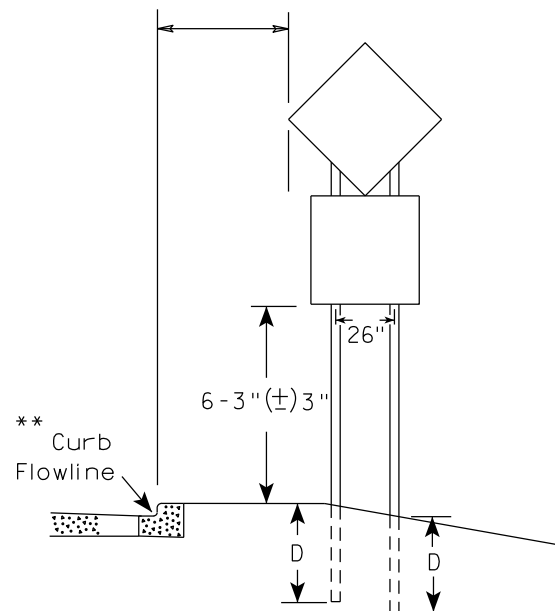
URBAN AREA



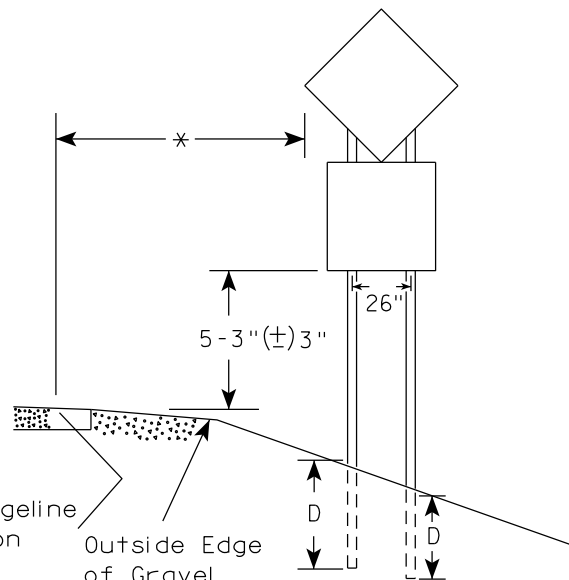
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



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"

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 12/6/23 PLATE NO. A4-4.16

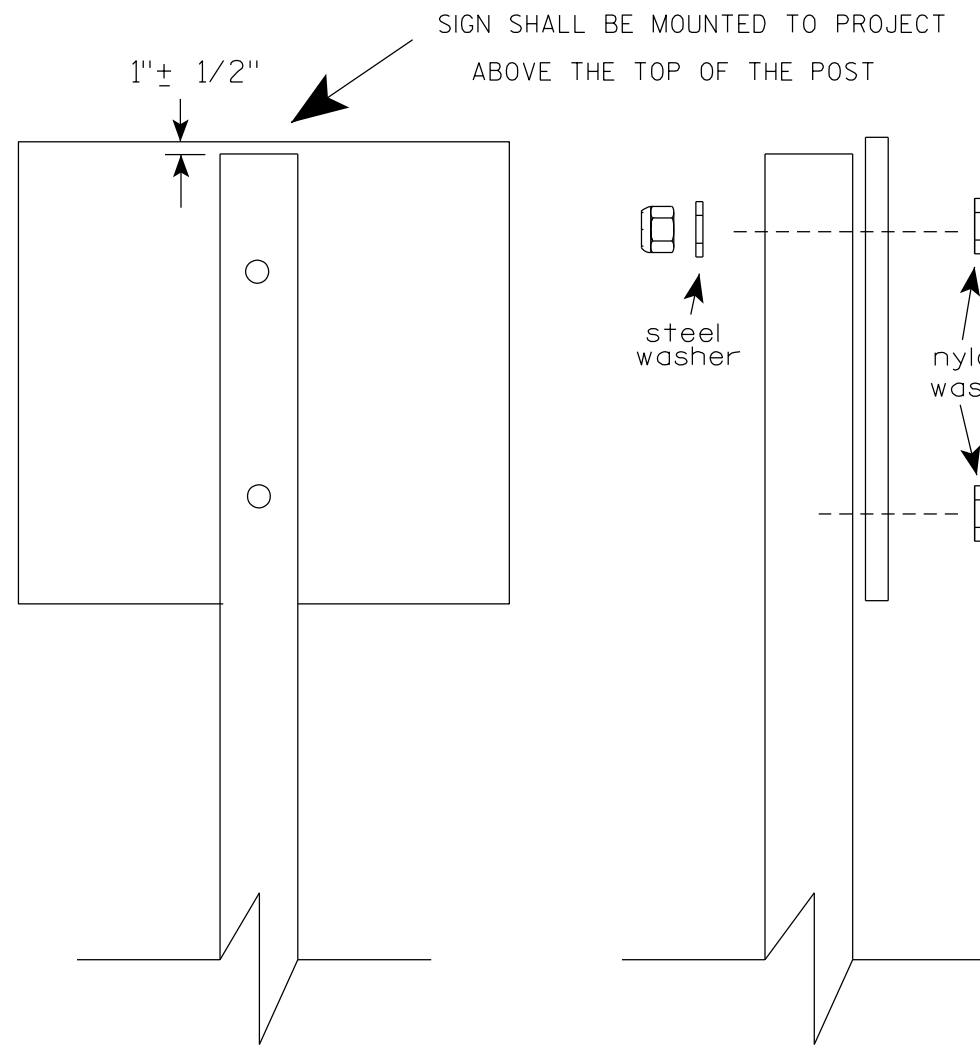
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

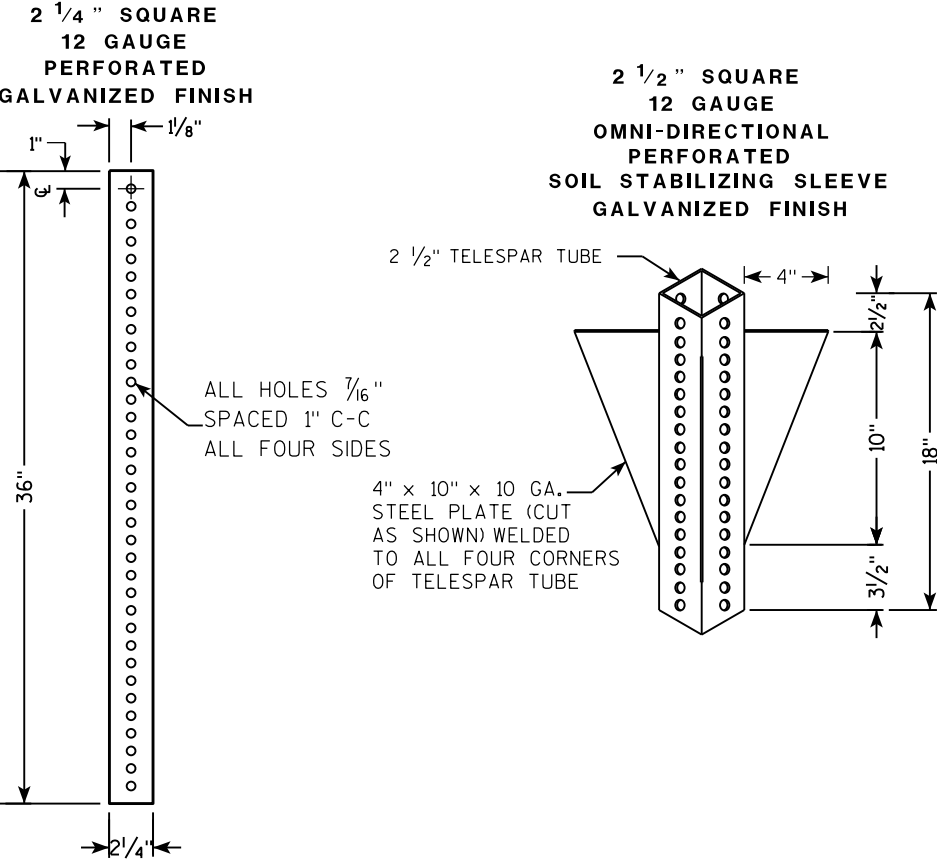
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

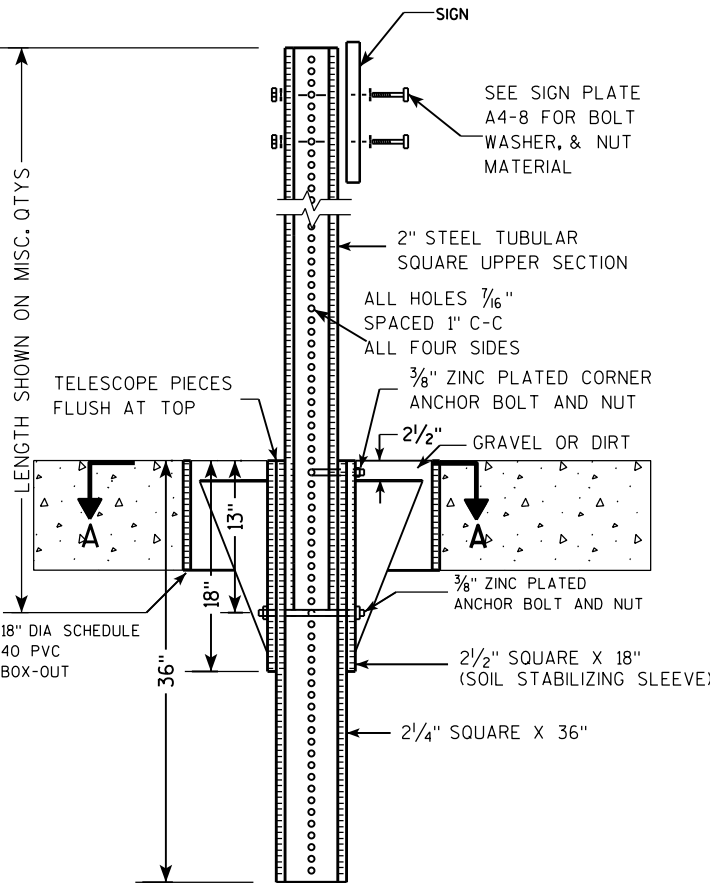
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

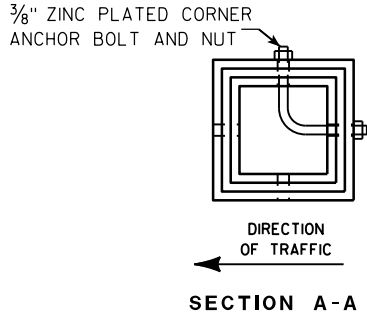
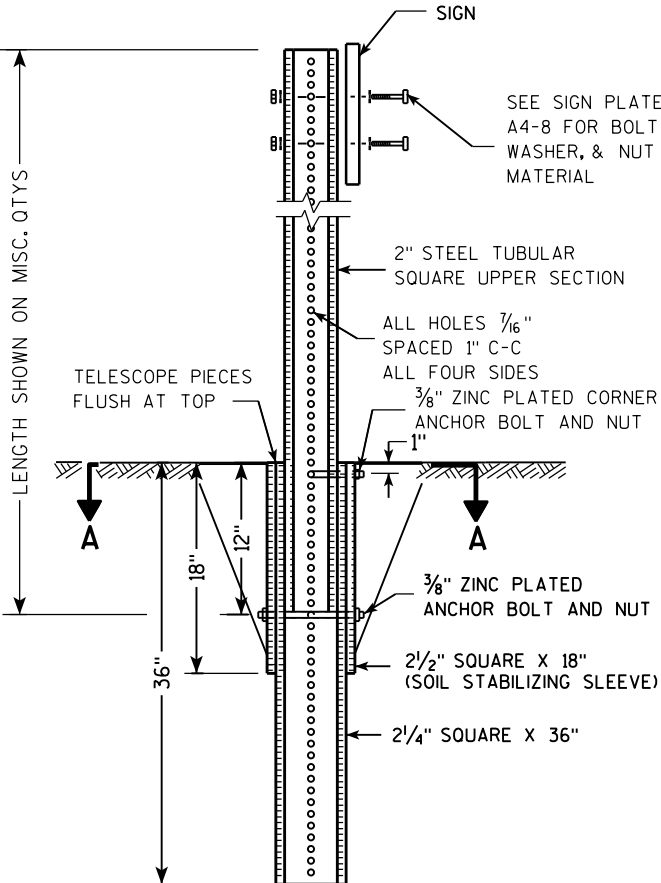
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

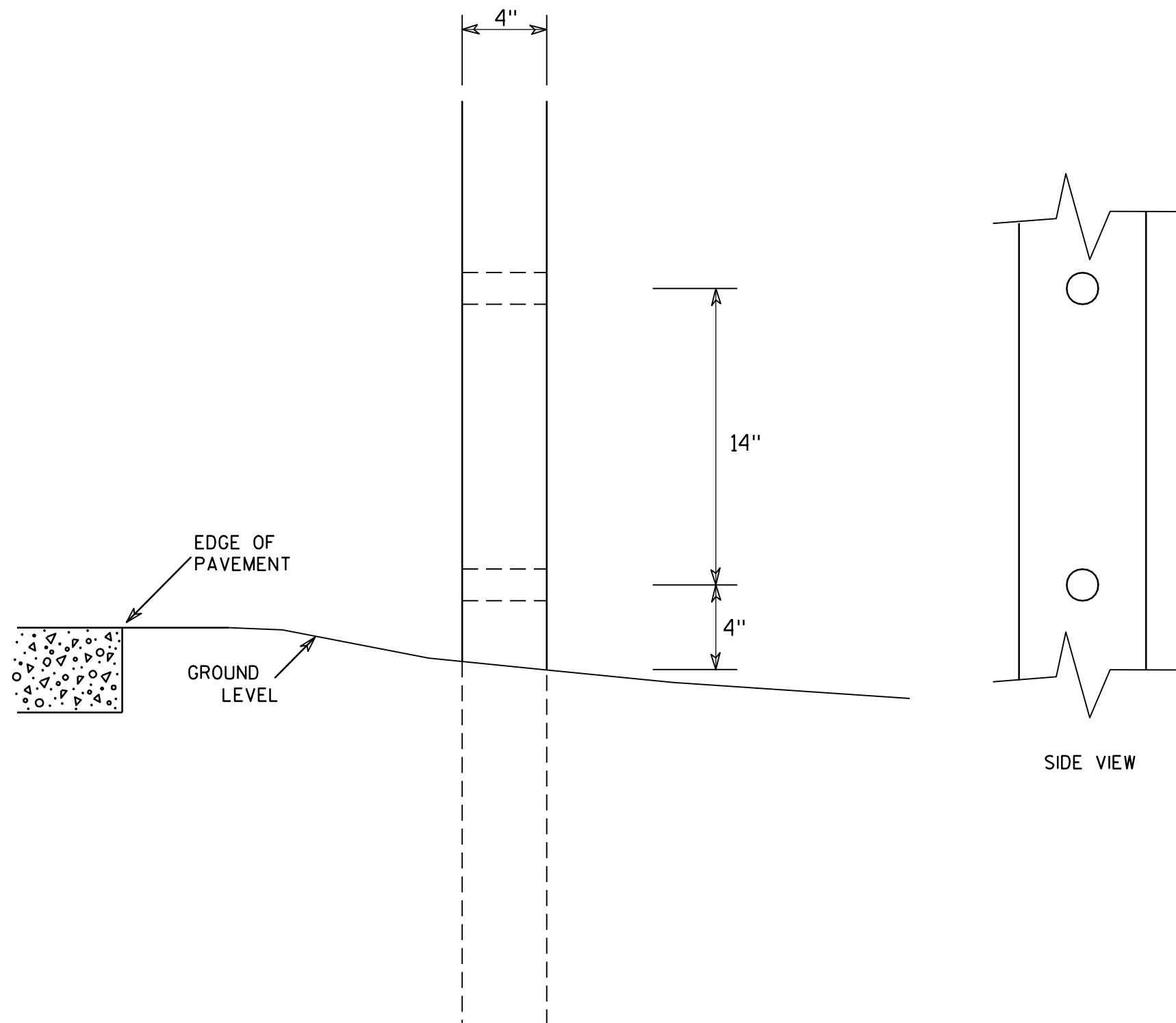
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

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

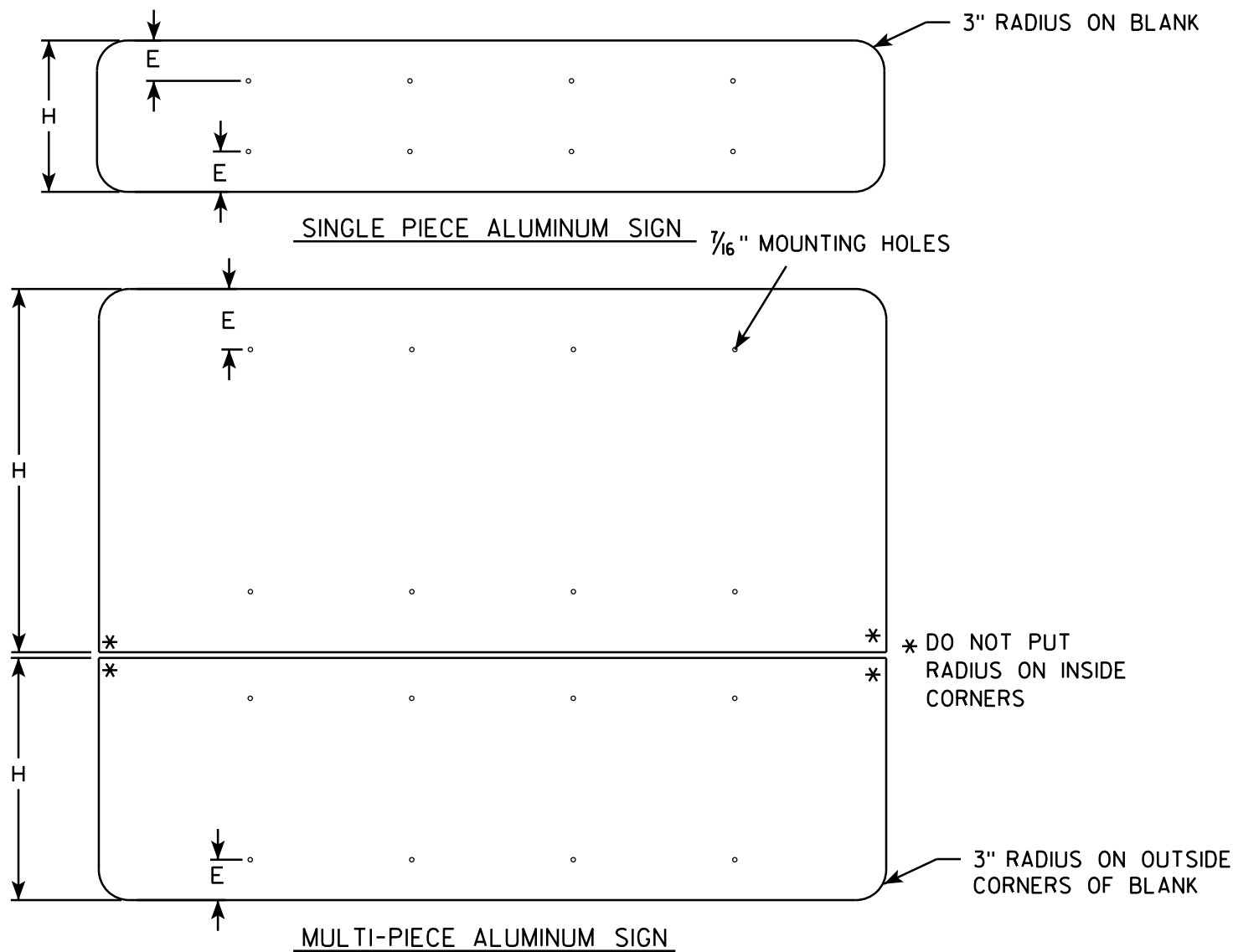
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

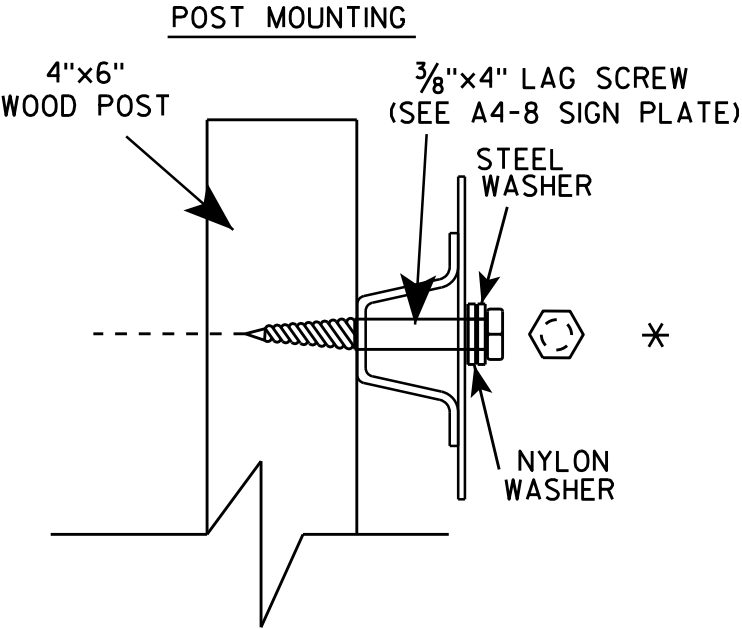
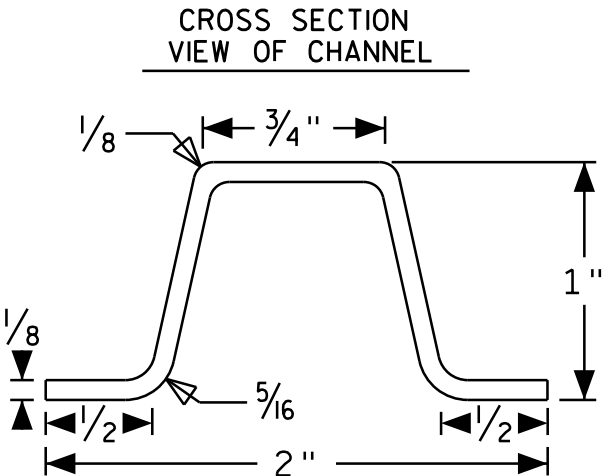
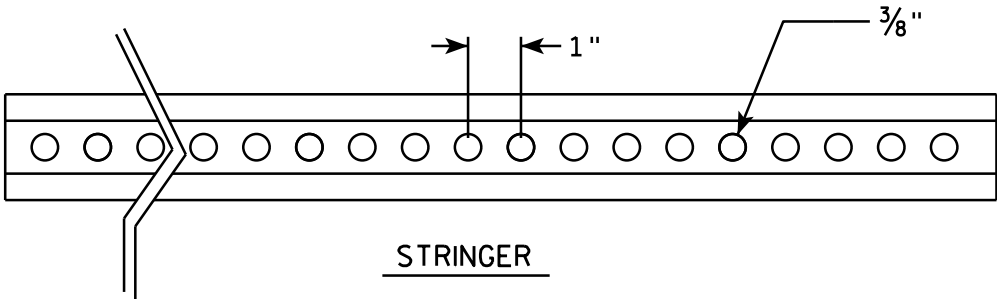
E



GENERAL NOTES

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

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES			
78"	72"	2	16"	15"	31"	47"	63"
84"	72"	2	17"	16 1/2"	33 1/2"	50 1/2"	67 1/2"
90"	72"	2	18"	18"	36"	54"	72"
96"	90"	2	19"	19 1/2"	38 1/2"	57 1/2"	76 1/2"
102"	90"	2	20"	21"	41"	61"	81"
108"	90"	2	21"	22 1/2"	43 1/2"	64 1/2"	85 1/2"
114"	108"	3	15"	12"	27"	42"	57" 72" 87" 102"
120"	108"	3	16"	12"	28"	44"	60" 76" 92" 108"
126"	108"	3	17"	12"	29"	46"	63" 80" 97" 114"
132"	126"	3	18"	12"	30"	48"	66" 84" 102" 120"
138"	126"	3	19"	12"	31"	50"	69" 88" 107" 126"
144"	126"	3	20"	12"	32"	52"	72" 92" 112" 132"



SIGN STRINGER
MOUNTING REQUIREMENTS

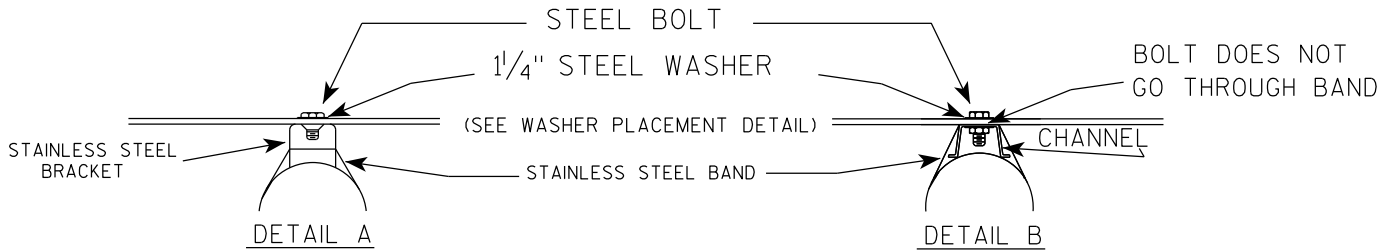
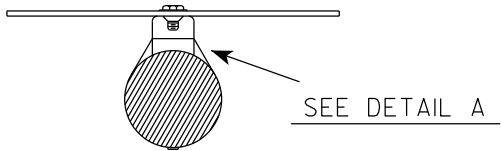
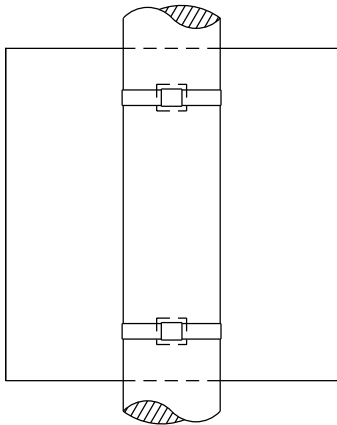
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/26/16 PLATE NO. A4-18.1

BANDING

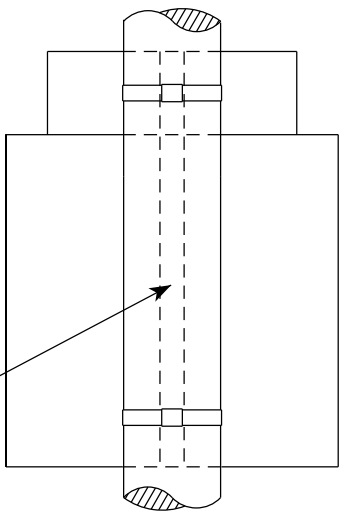
SINGLE SIGN



GENERAL NOTES

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

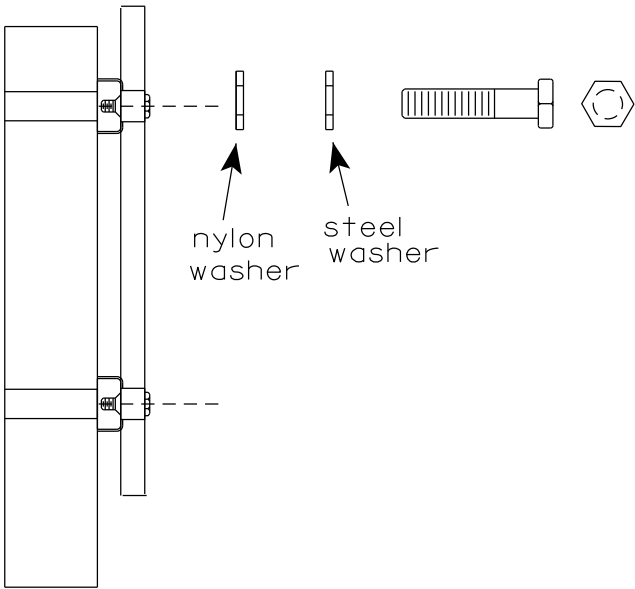
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

WASHER PLACEMENT

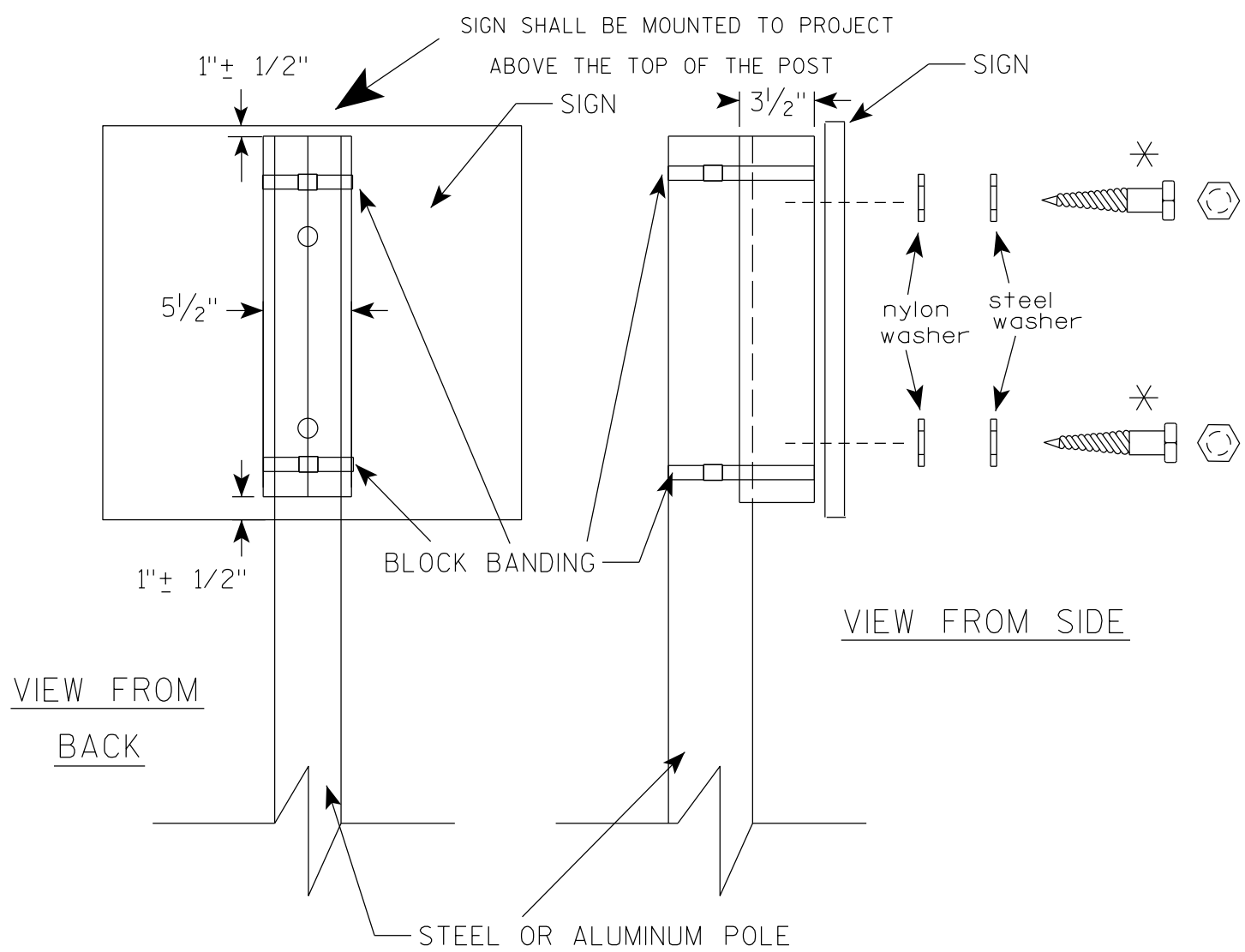


WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

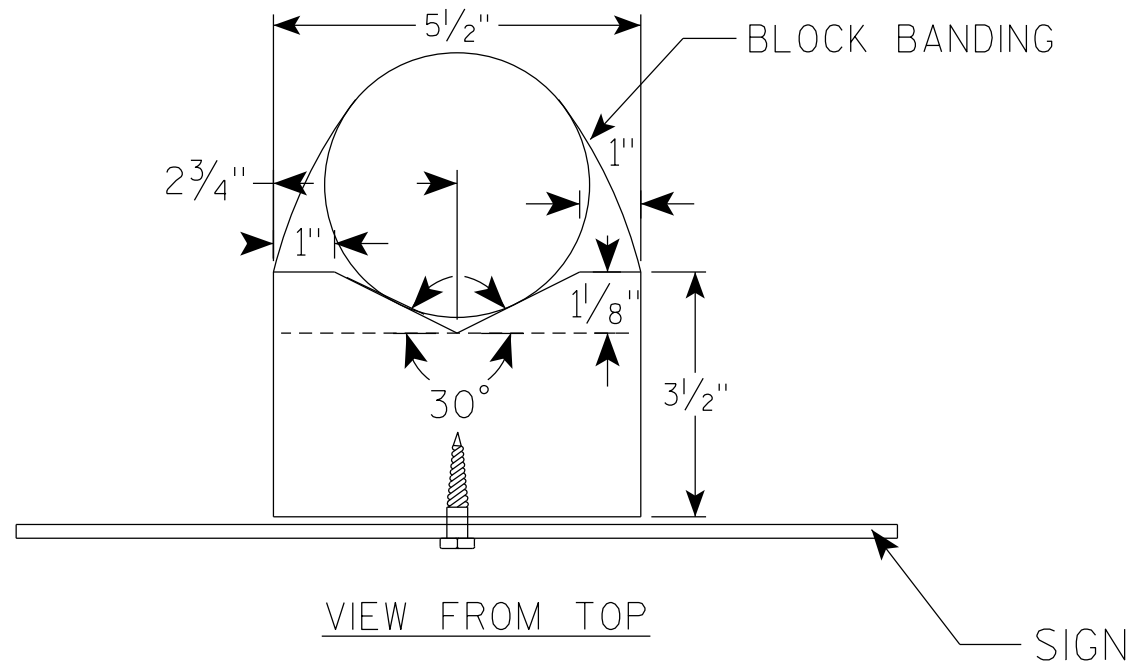
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

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

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO:

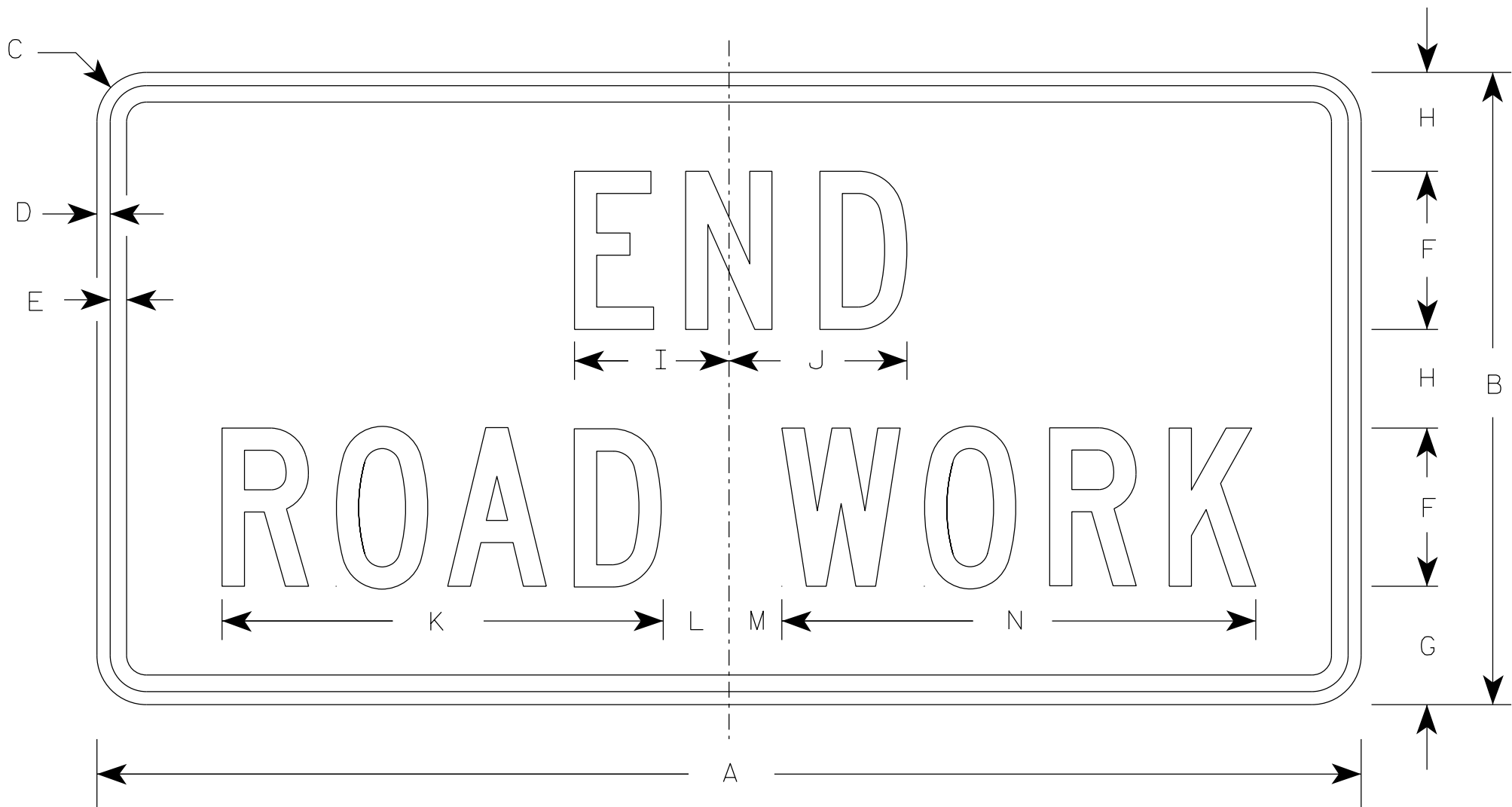
E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:

Background - Orange

Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



G20-2A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

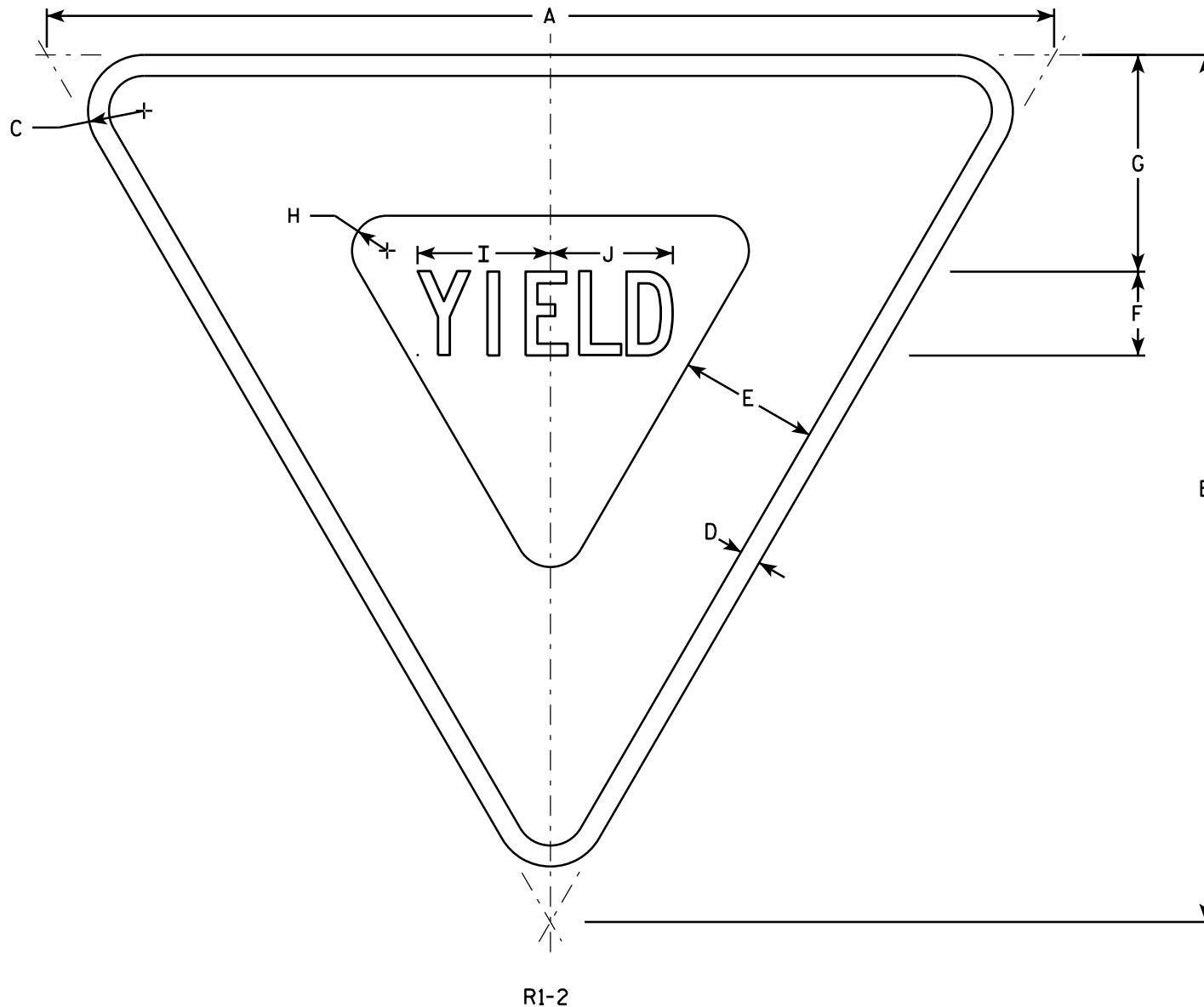
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - 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

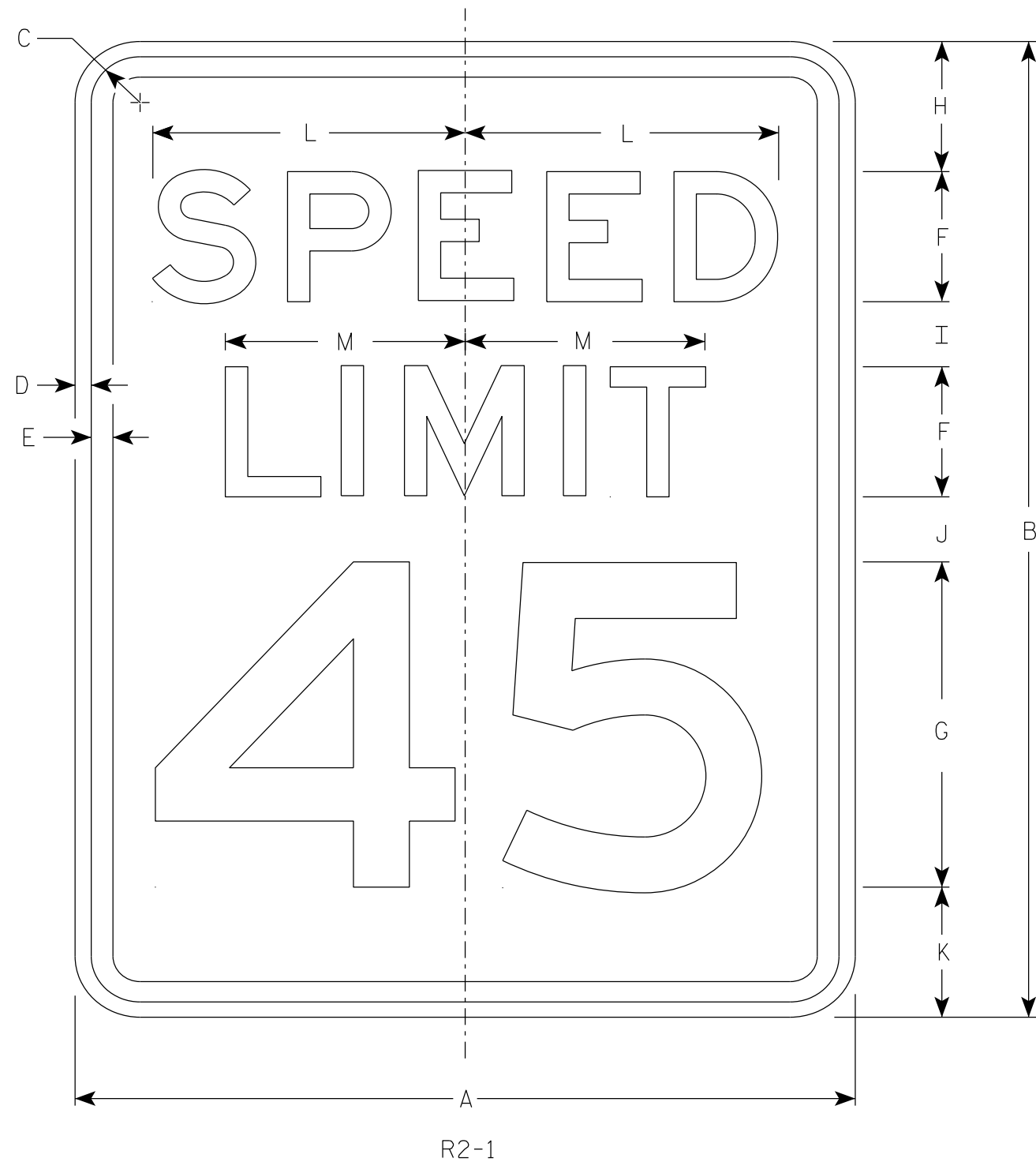
STANDARD SIGN

R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/13/14 PLATE NO. R1-2.12



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - E
4. 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 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	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 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	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 2/1/23 PLATE NO. R2-1.14

PROJECT NO:

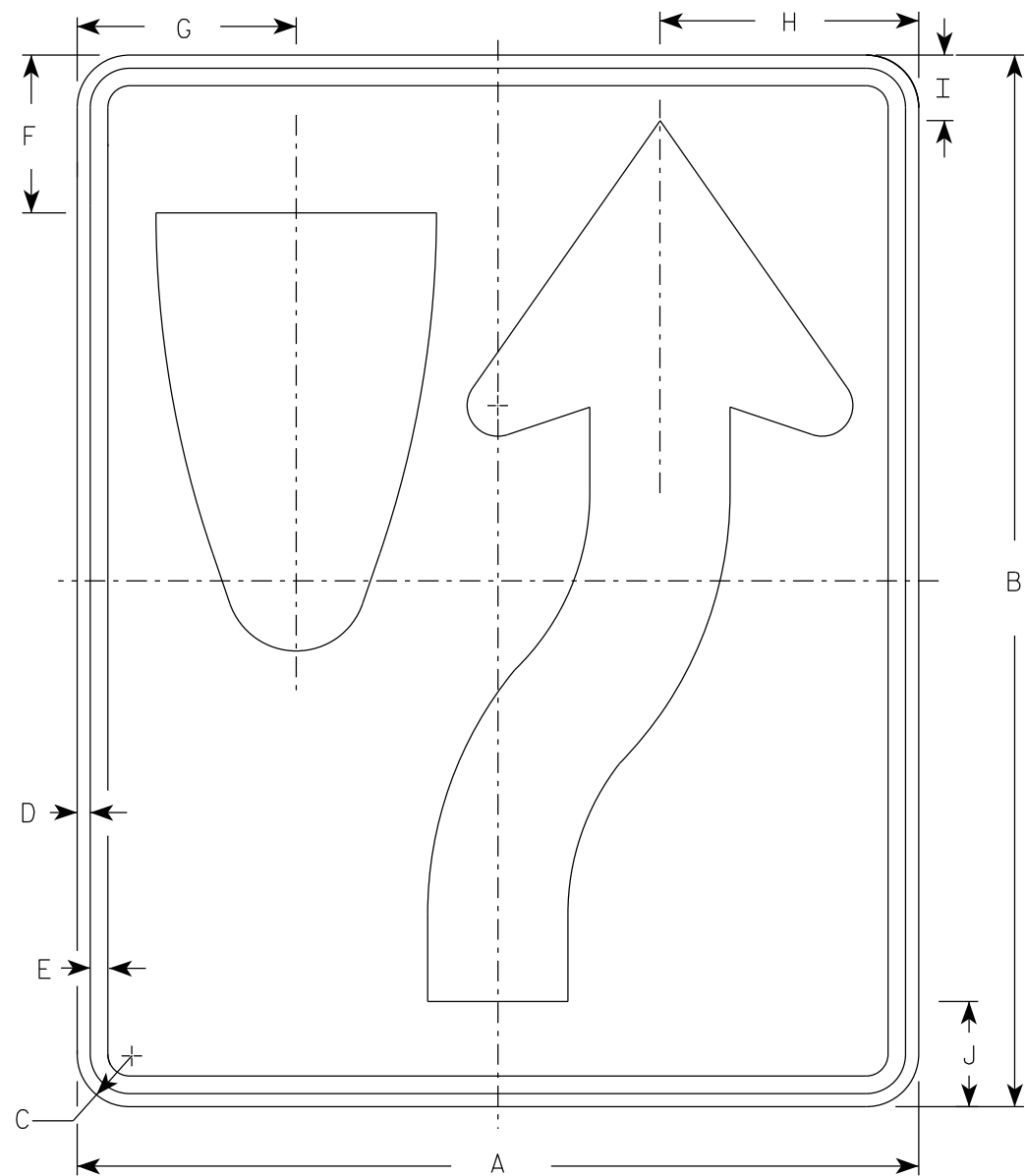
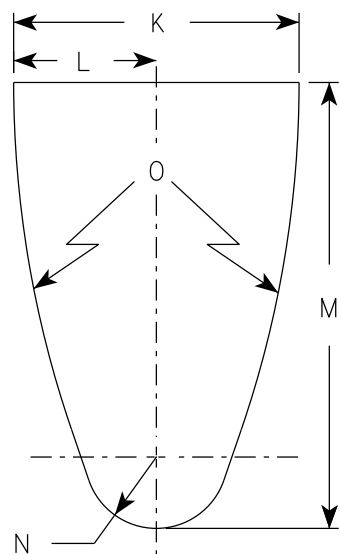
HWY:

COUNTY:

SHEET NO:

E

DIVIDER DETAIL

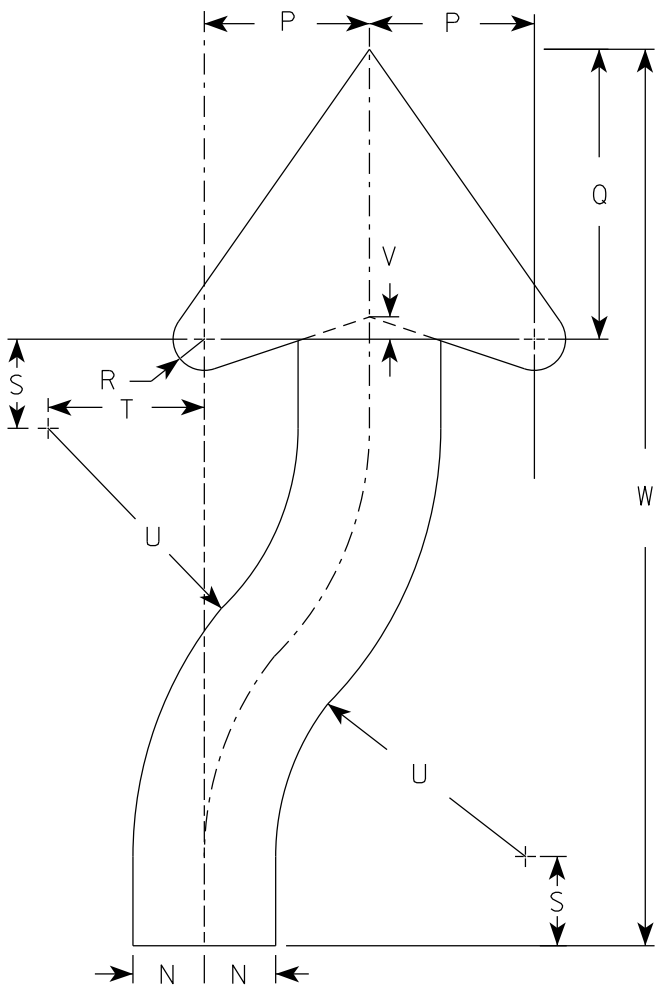


R4-7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. R4-8 is the same as R4-7 except Legend is reversed.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	3	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

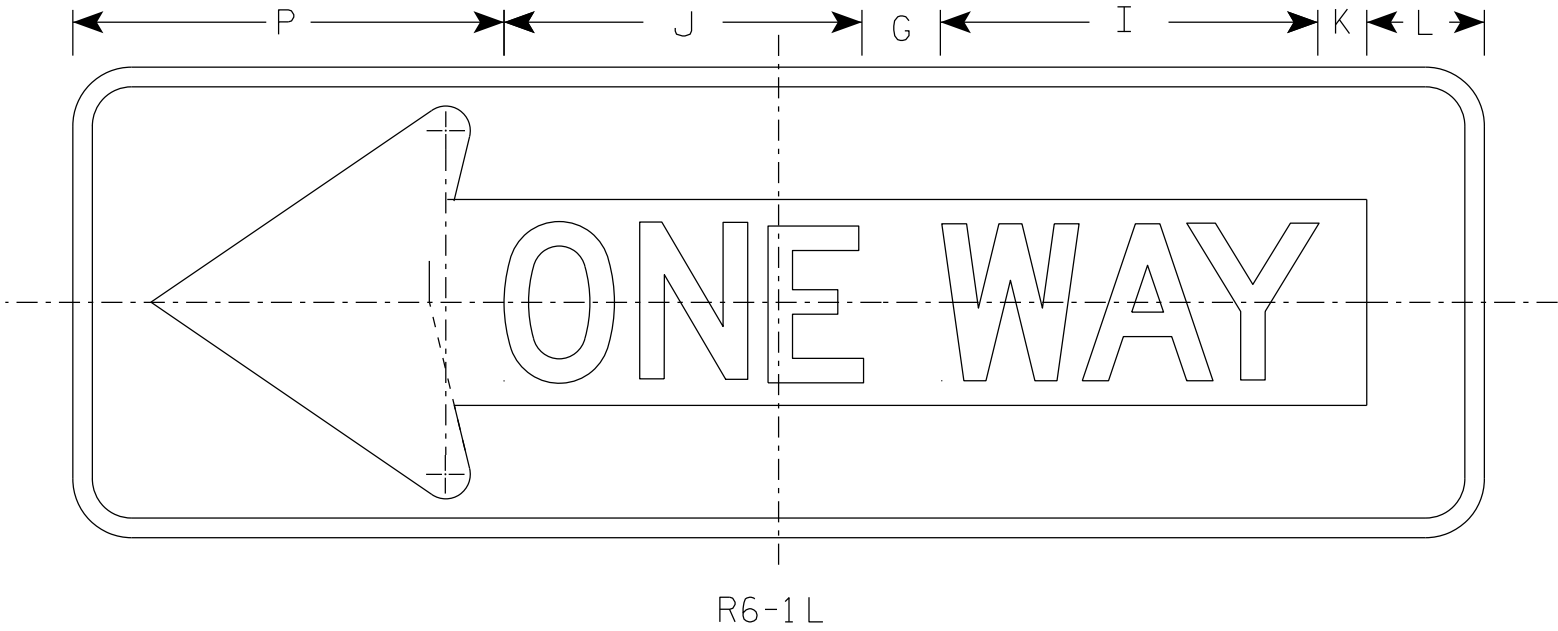
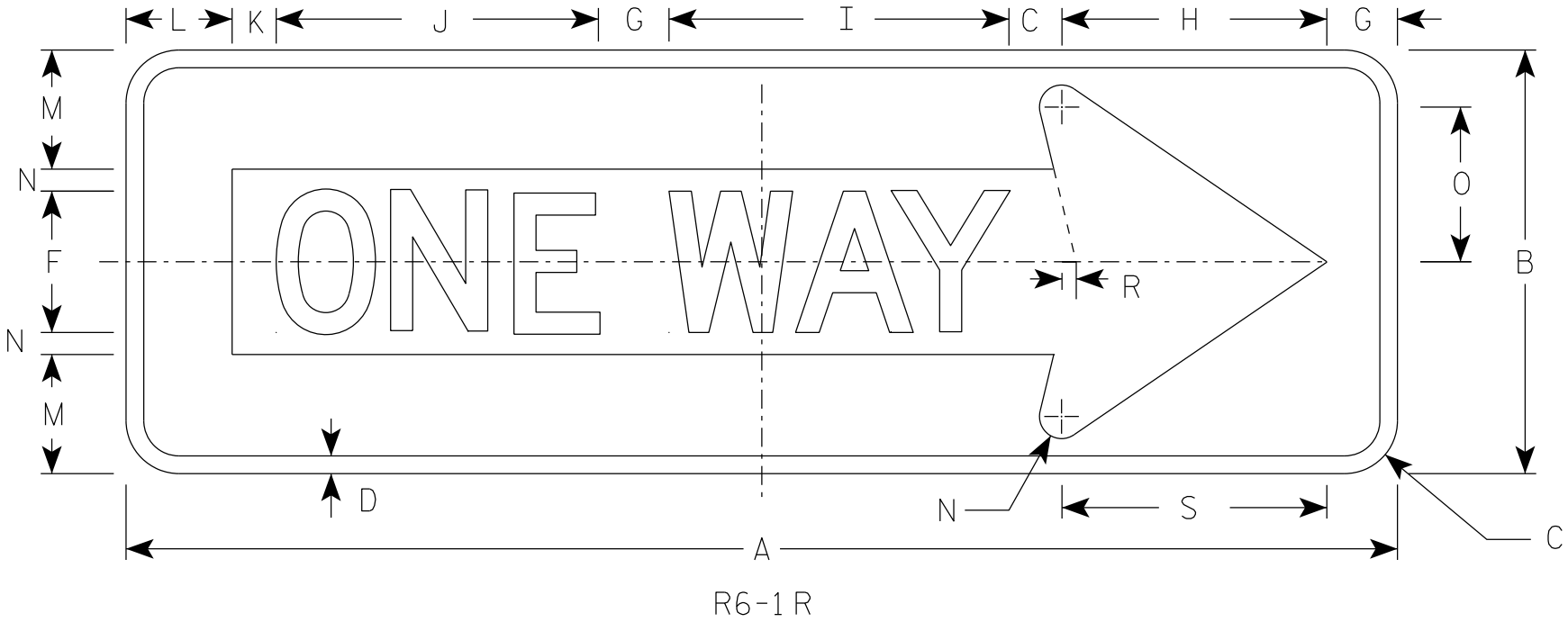
E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - Black

Message - Black Legend & White Arrow & Border
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	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	1 1/2	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	1 1/2	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	1 1/2	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

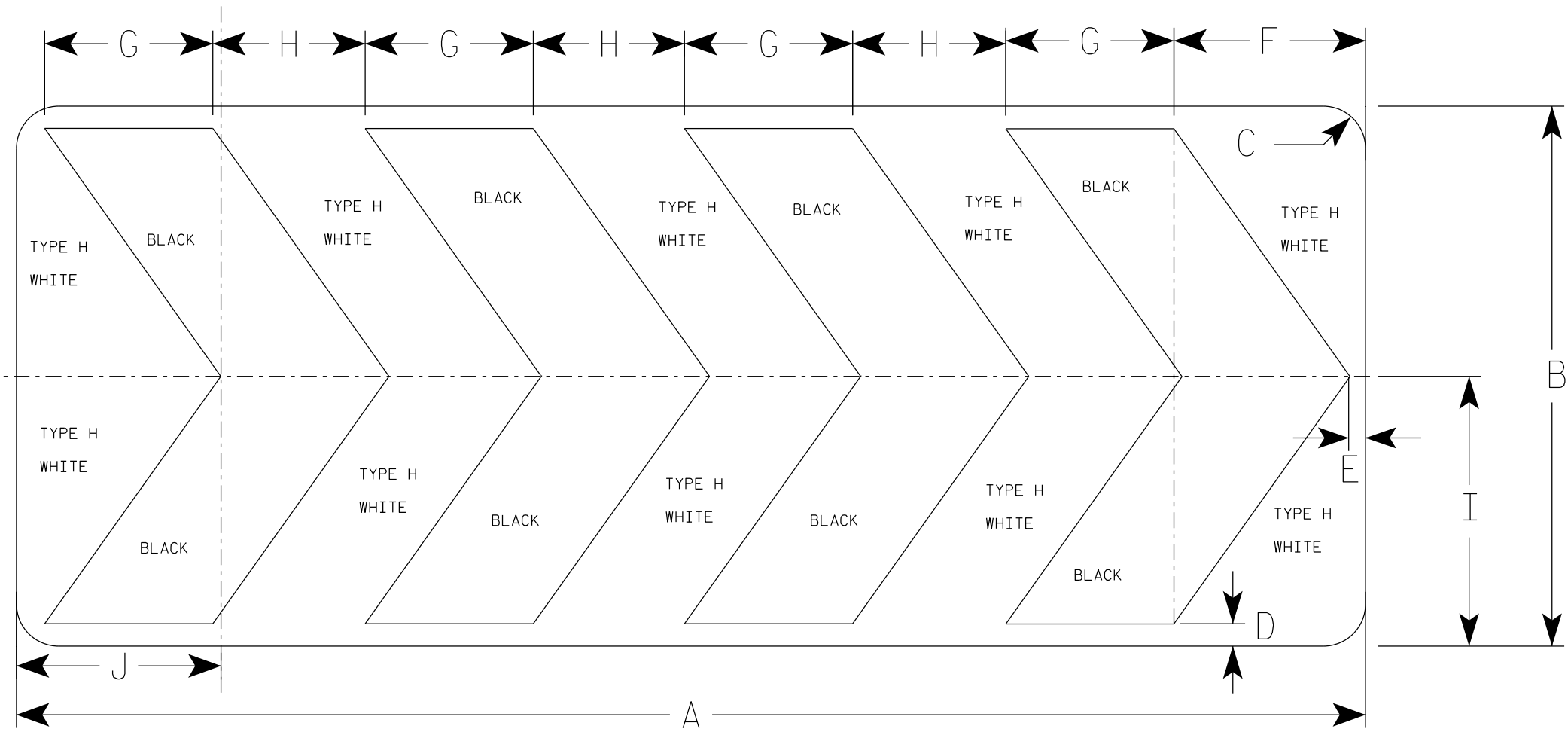
DATE 8/30/23 PLATE NO. R6-1.4

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - WHITE

Message - BLACK



R6-4B

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	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN

R6 - 4B

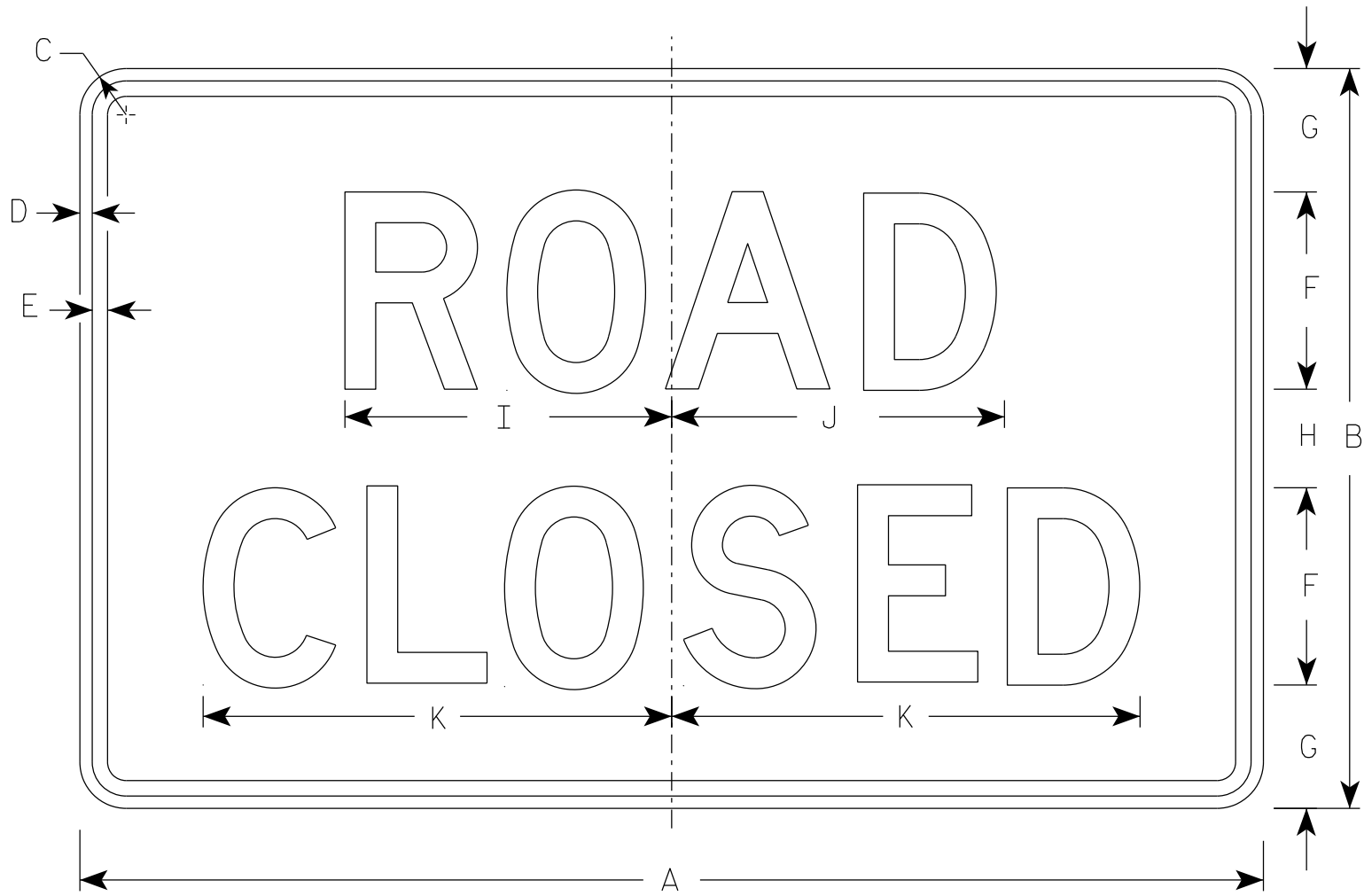
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch

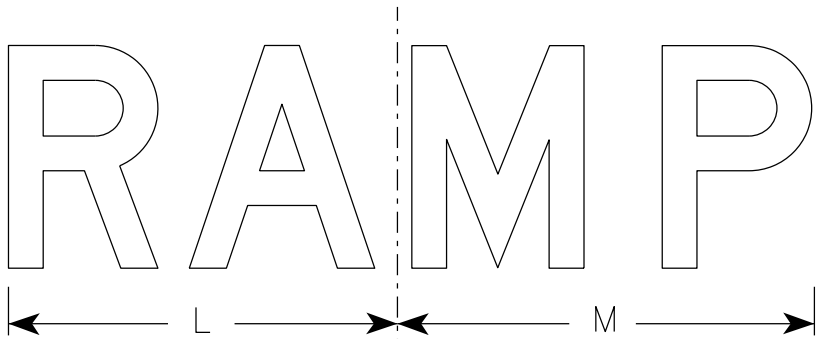
for State Traffic Engineer

DATE 10/26/23PLATE NO. R6-4.4

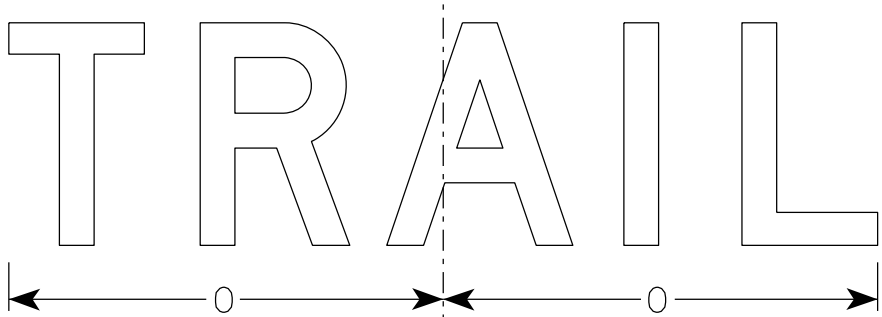


R11-2

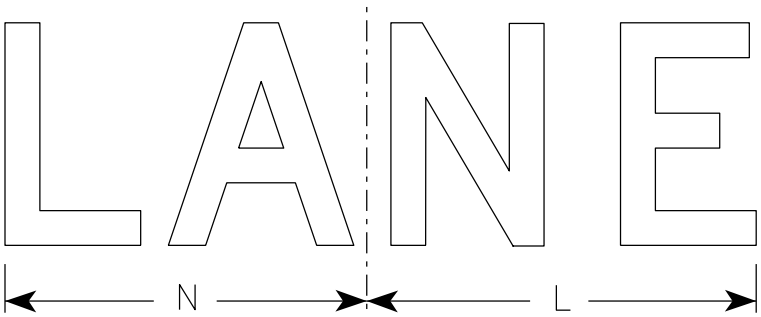
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify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



R11-2R



R11-2T



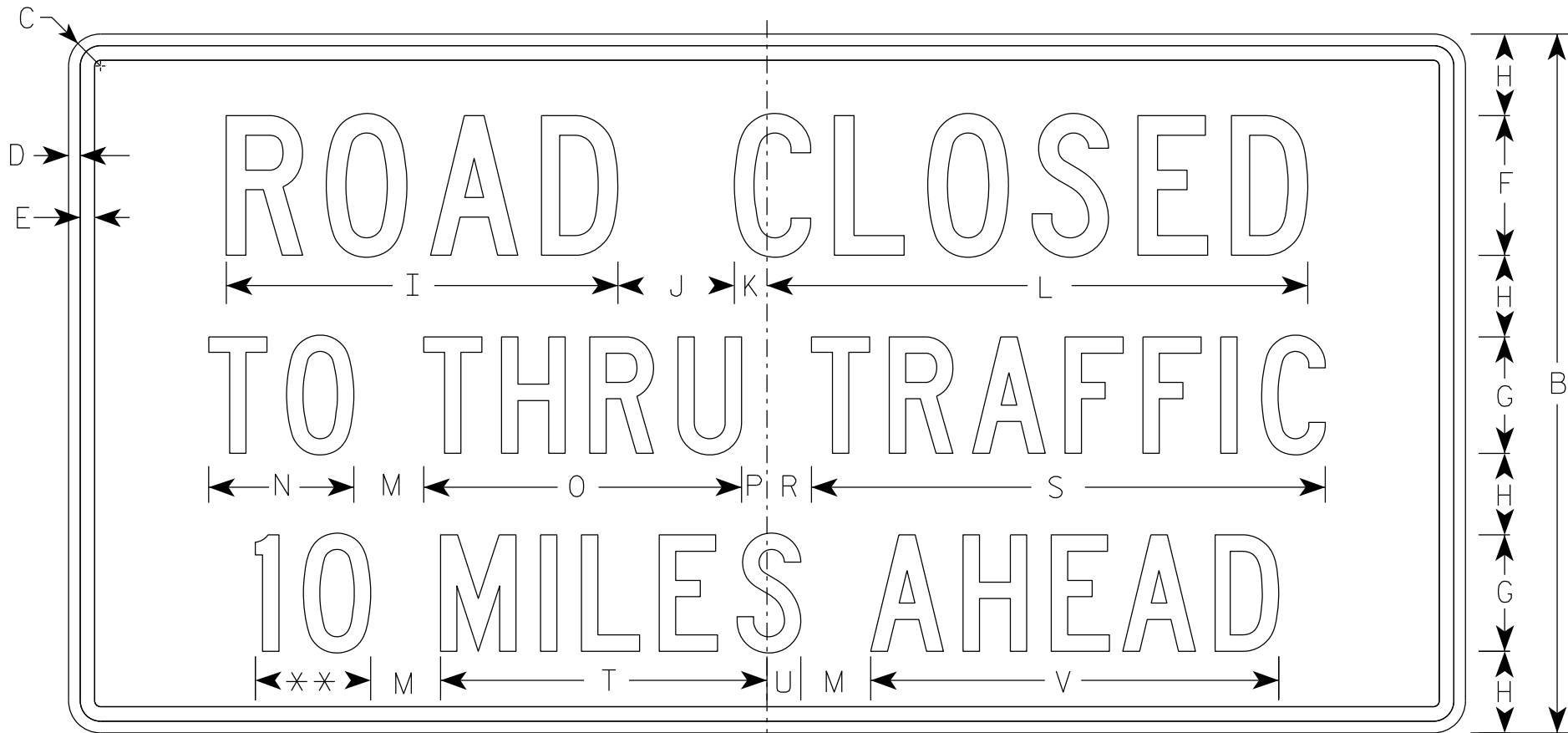
R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 2/5/24	PLATE NO. R11-2.12

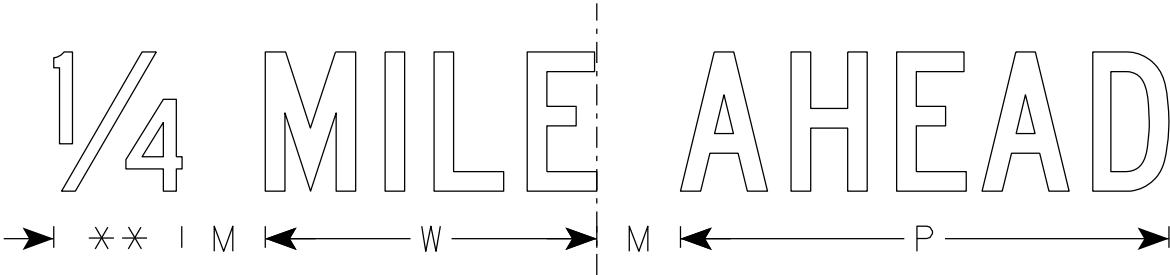
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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7



R11-3

** See Note 5



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. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.

7

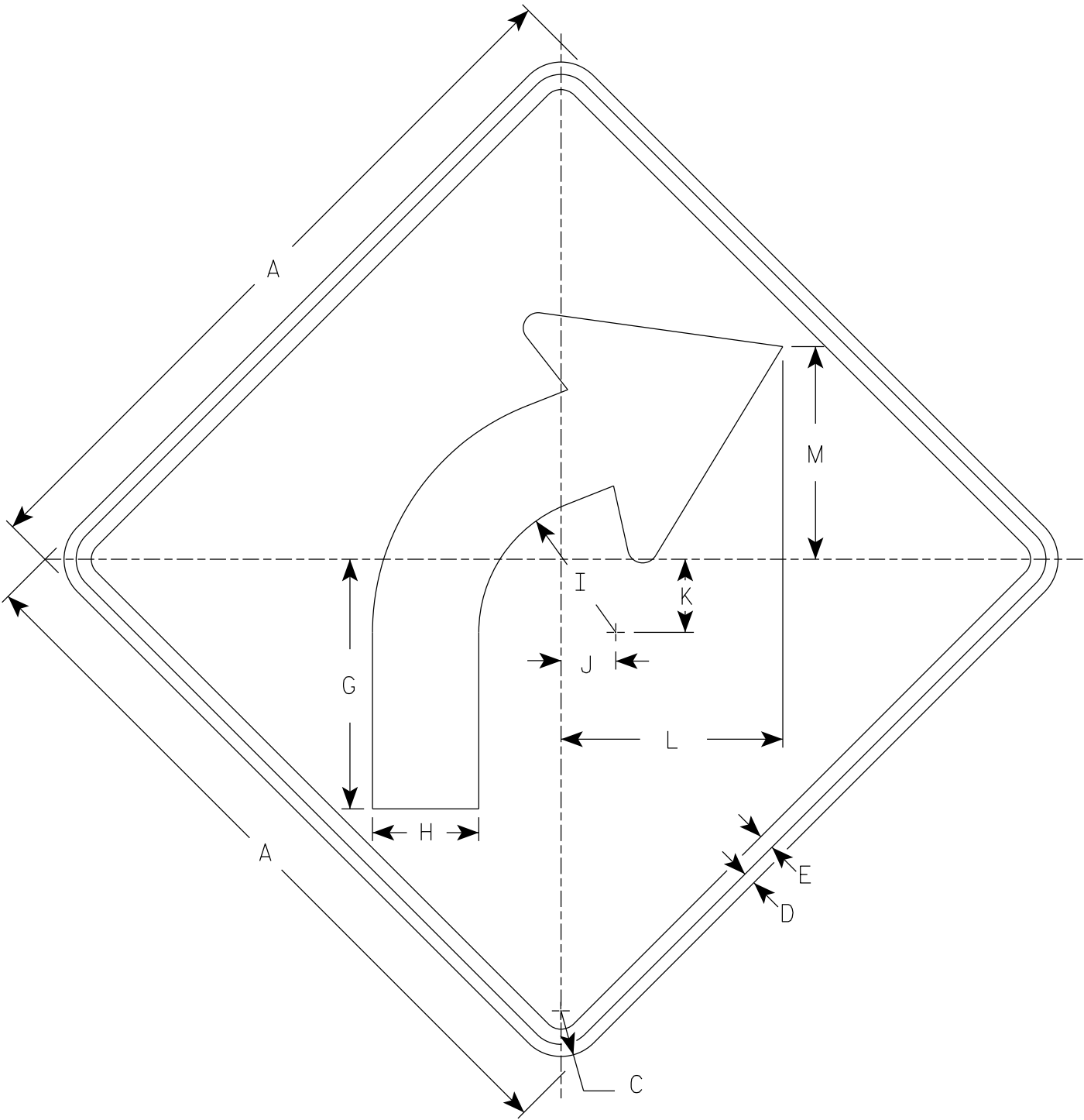
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

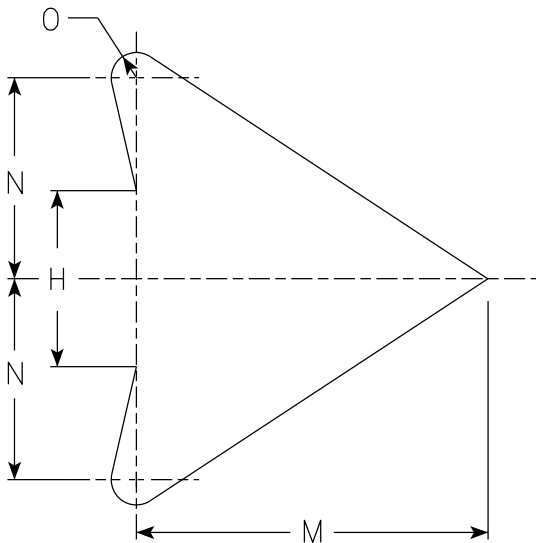
DATE 2/5/24 PLATE NO. R11-3.10



W1-2R

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

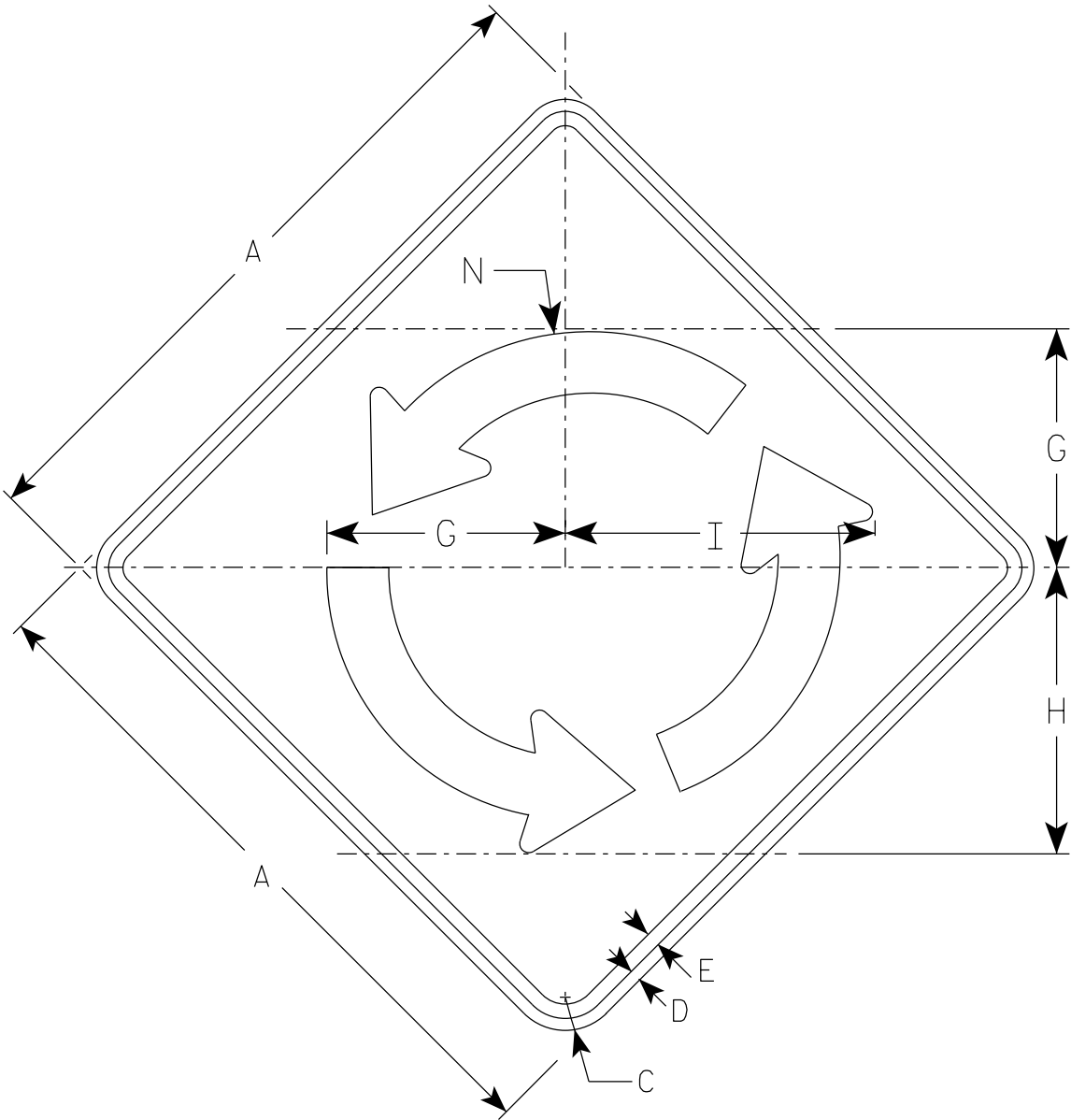
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 7/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-2.11

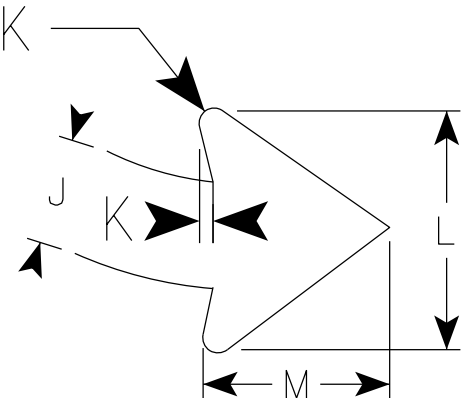


W2-6

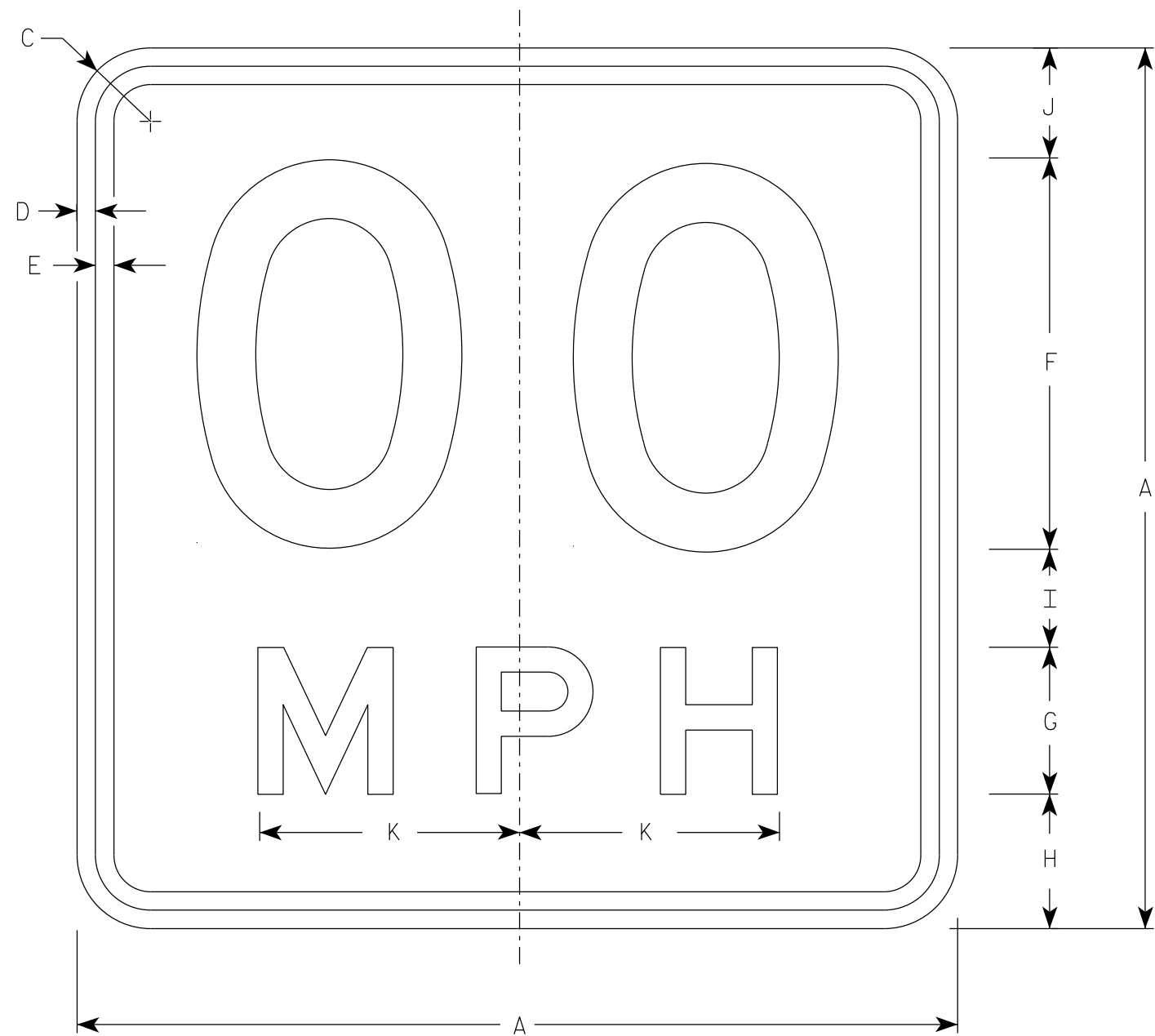
NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black

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	Area sq. ft.
1																									
2S	30		1 7/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
2M	30		1 7/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
3	36		2 1/4	5/8	3/4		12 1/2	15	16 1/4	3 1/4	1/2	7 3/8	5 3/4	13 3/8											9.00
4	48		3	3/4	1		16 5/8	20	16 1/4	4 3/8	5/8	9 3/4	7 5/8	17 7/8											16.0
5																									



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 5
4. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
5. Line 1 is Series D
Line 2 is Series E

W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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.
✱ 2S	1	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8															2.25
	2	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8															2.25
✱ 2M	3	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8															2.25
	4	24		1 1/2	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8															4.00
	5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8															9.00
	6	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8															9.00

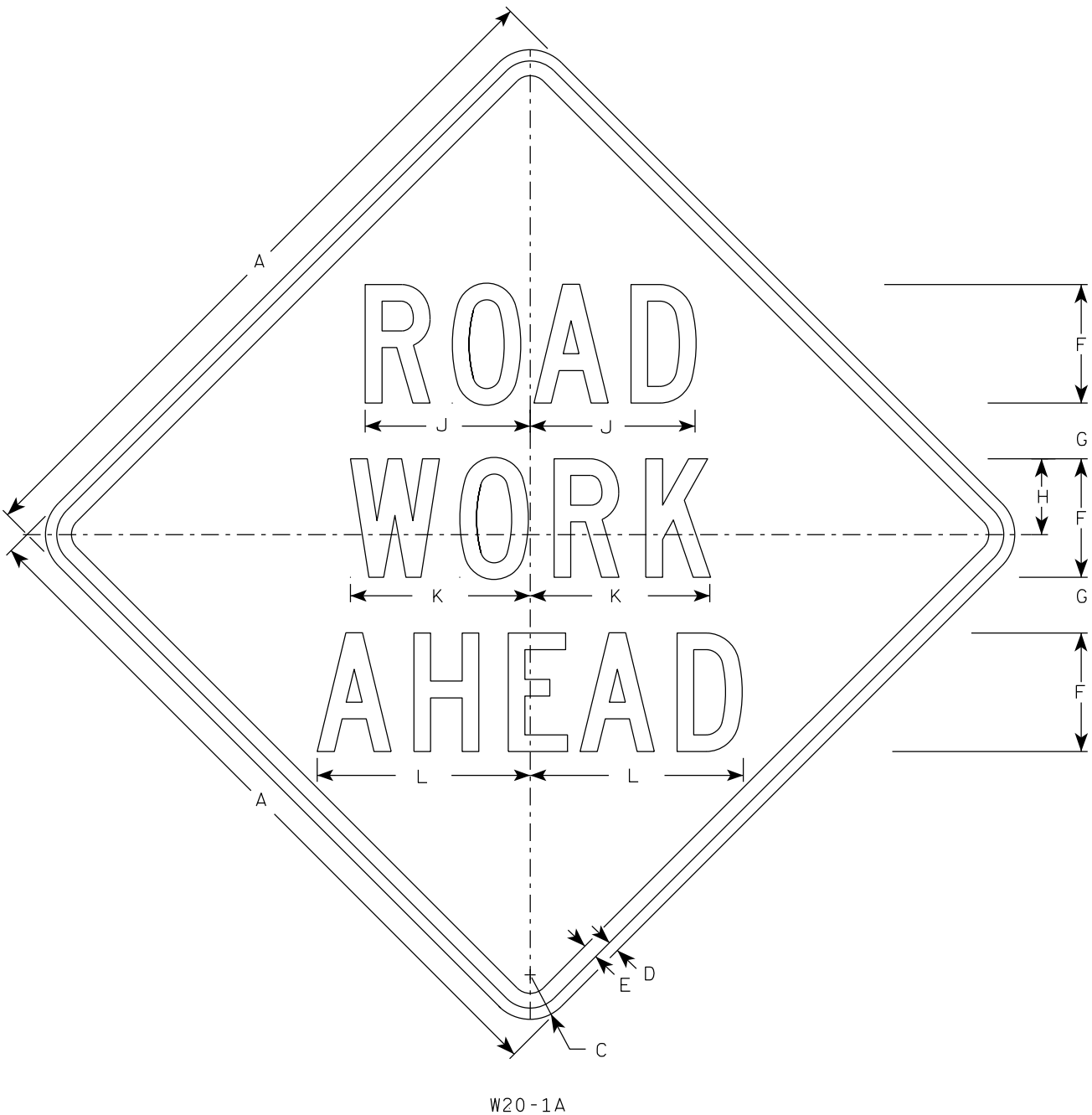
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

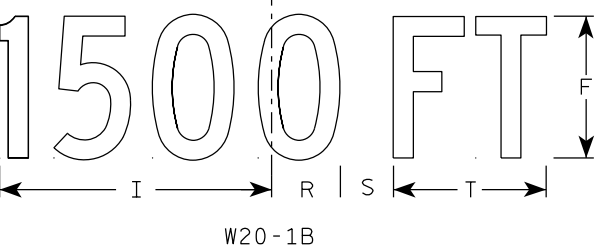
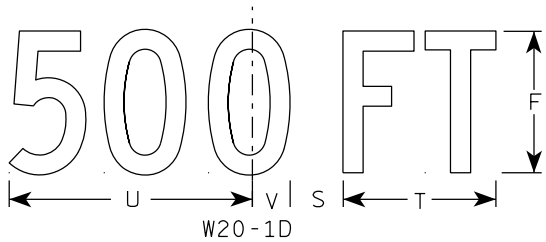
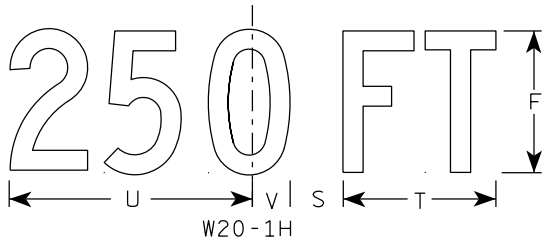
APPROVED Matthew R. Rauch
For State Traffic Engineer

DATE 1/8/2024 PLATE NO. W13-1.17

PROJECT NO: HWY: COUNTY: SHEET NO: E

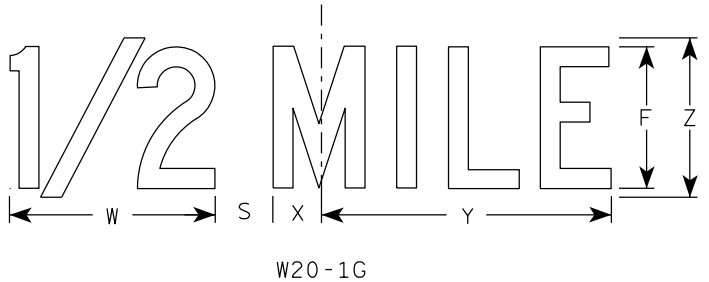


W20-1A

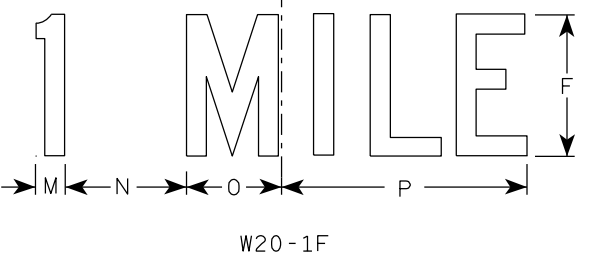


W20-1B

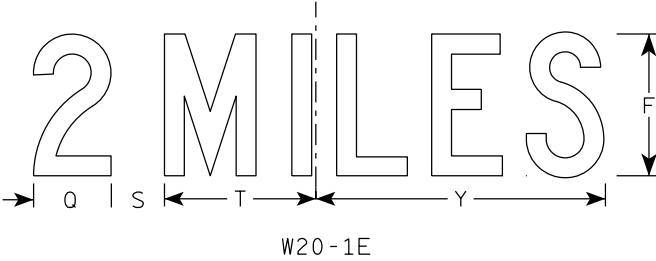
- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



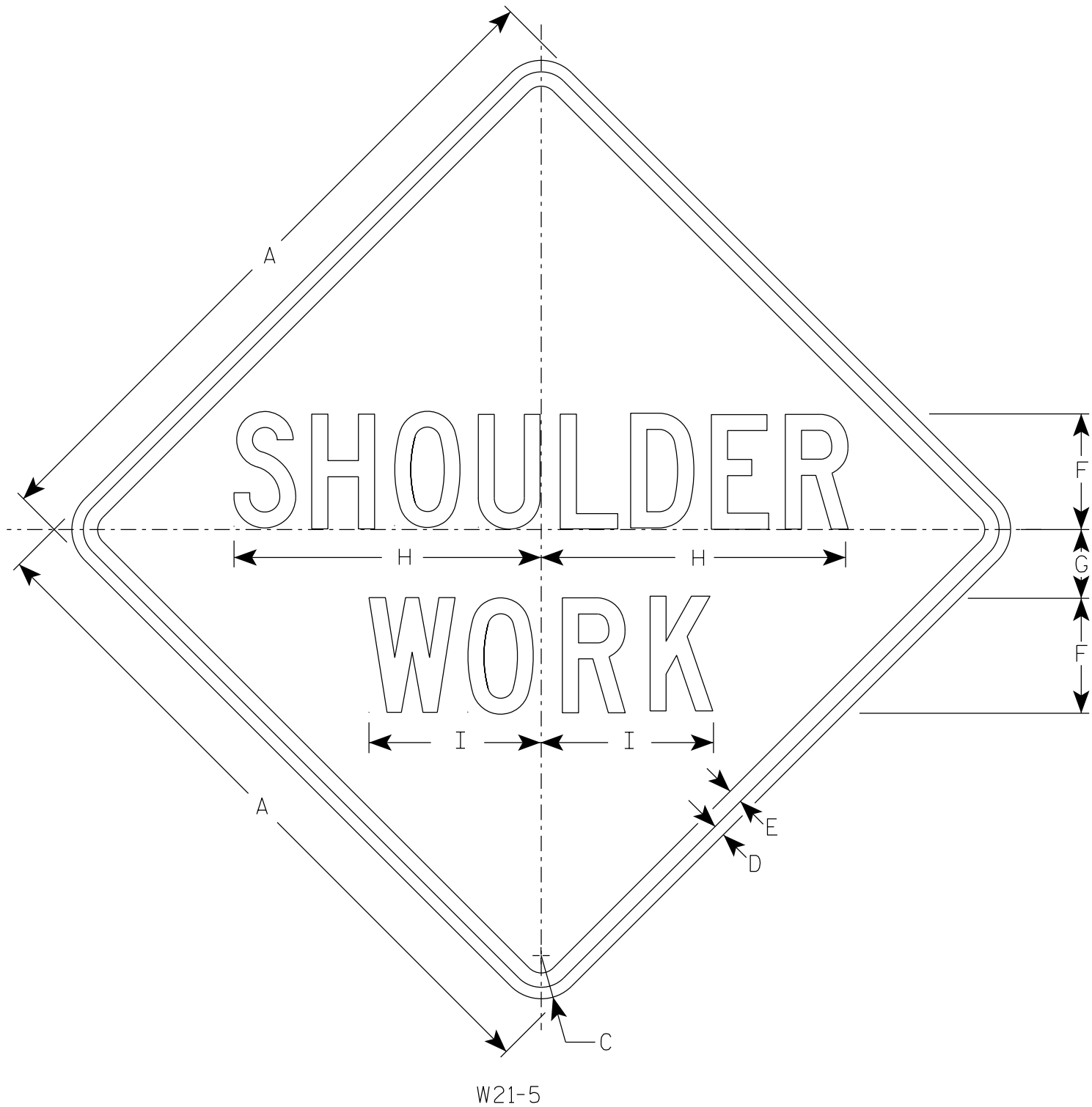
W20-1F



W20-1E

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		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C

7

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		2 1/4	5/8	3/4	6	3 1/2	16	9																		9.0
2S	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
2M	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
3	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
4	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0

STANDARD SIGN

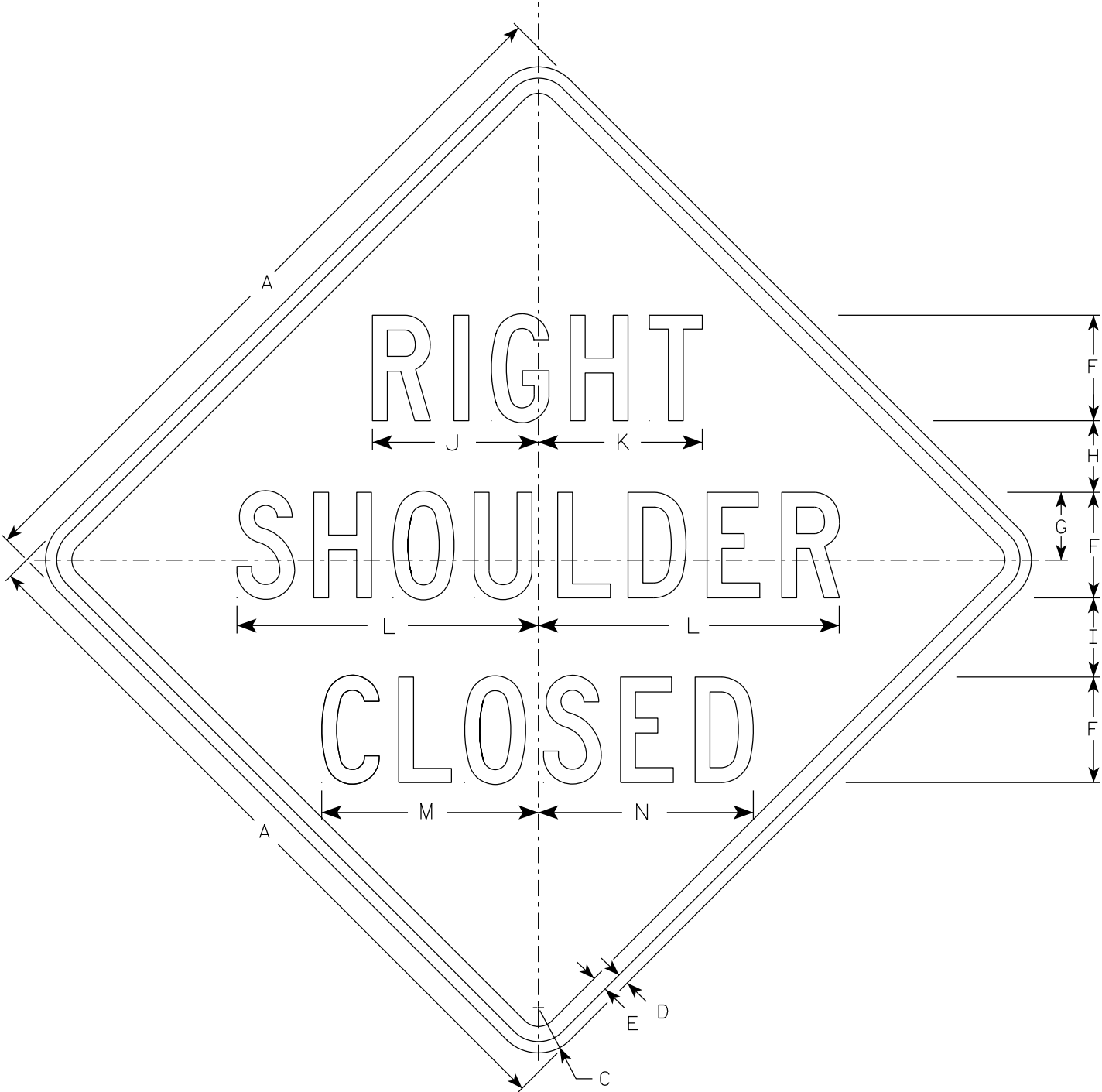
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5.7

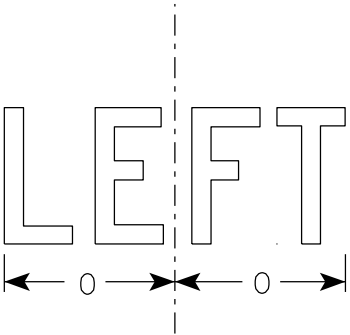
7



W21-5A

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - D



W21-5AL

7

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		2 1/4	5/8	3/4	5	3 3/8	3 1/2	4	7 7/8	7 3/4	14 1/4	10 1/4	10 1/8	6 1/4												9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	5 1/4	11	10 7/8	20	14 3/8	14 1/4	8 3/4												16.0

PROJECT NO:

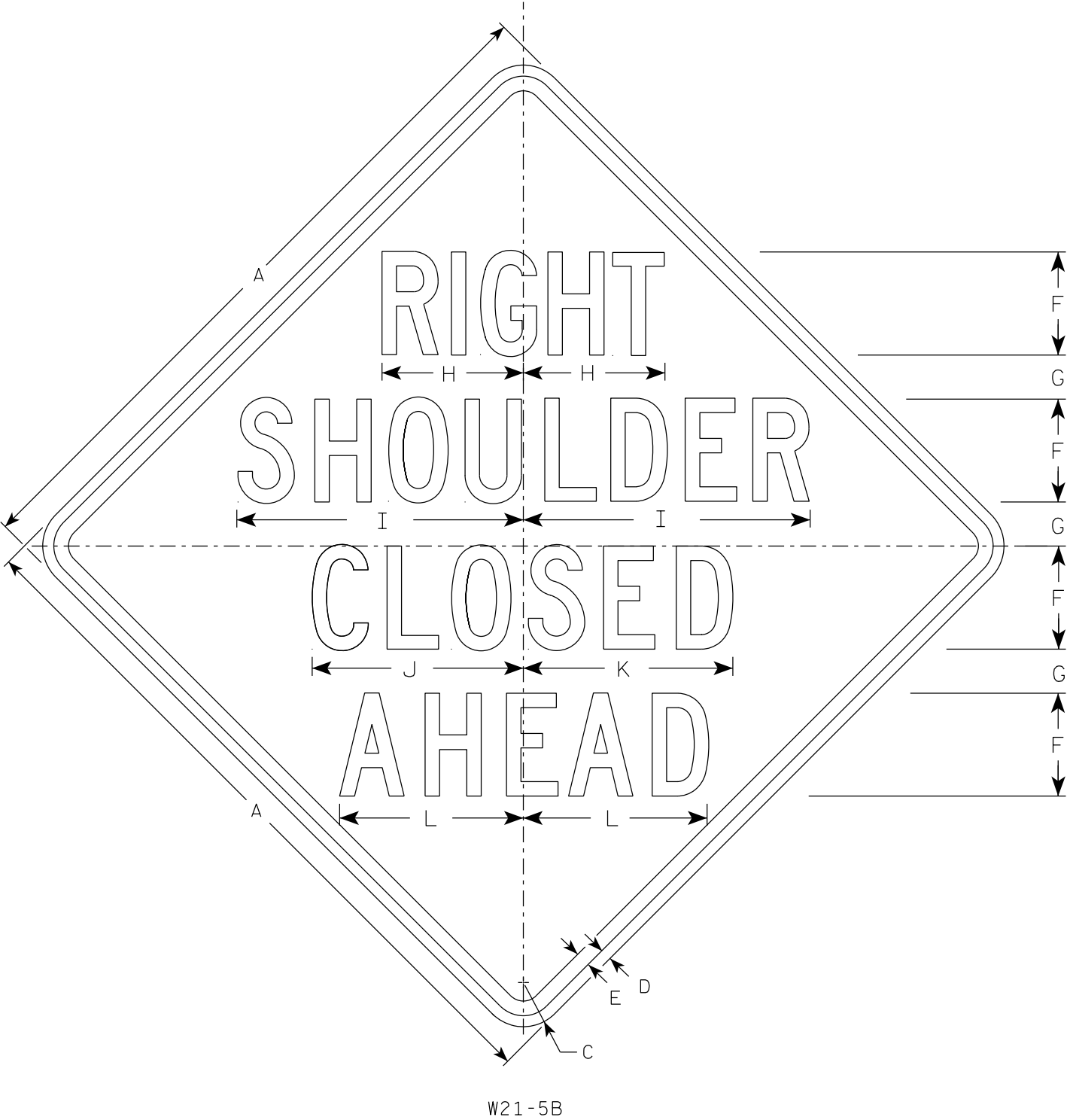
HWY:

COUNTY:

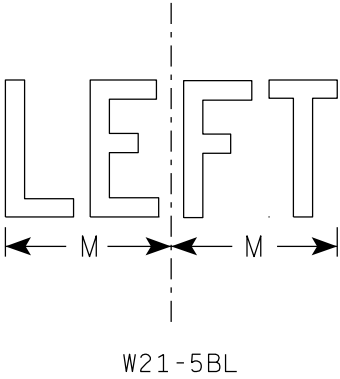
SHEET NO:

E

7



- NOTES
- 1. Sign is Type II - Type F Reflective
 - 2. Color:
 - Background - Orange
 - Message - Black
 - 3. Message Series - C



7

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		2 1/4	5/8	3/4	5	2 1/4	7 3/8	14 1/4	10 1/4	10 1/8	8 7/8	6 1/4														9.0
2S	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
2M	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
3	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
4	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
5	48		3	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0

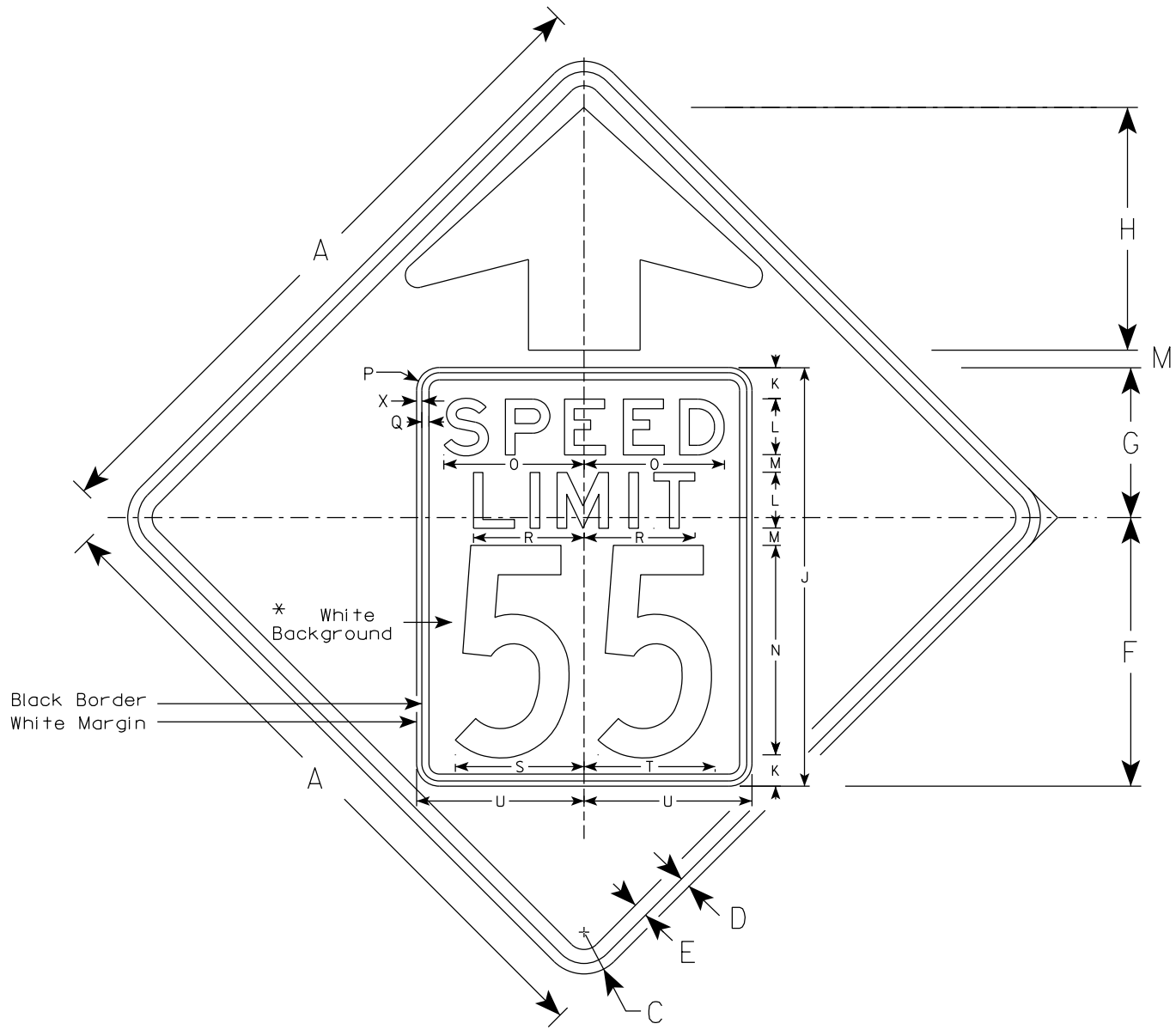
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

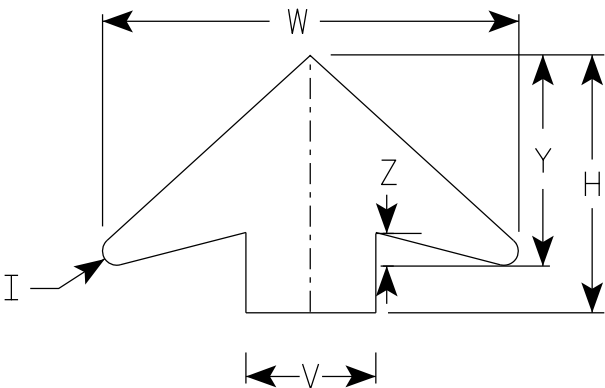


W03-5

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color: *
Background - ORANGE*
Message - BLACK
- 3. Message Series - C for numbers Series E for wording
- 4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-5.2

SOUTHBRIDGE RD WEST EARTHWORK SUMMARY - EARLY FILL																								
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE
																	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
																	NOTE 1	NOTE 1	NOTE 4	NOTE 5	NOTE 5	NOTE 6	NOTE 7	NOTE 8
102+25.00	10225.00	0.00	11.67	0.00	0.00	298.74	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102+50.00	10250.00	25.00	15.62	0.00	0.00	302.10	0.00	0.00	0.00	13	0	0	278	0	0	0	13	278	0	0	0	0	0	-265
103+00.00	10300.00	50.00	68.79	0.00	0.00	0.24	0.00	0.00	0.00	78	0	0	280	0	0	0	91	558	0	0	0	0	0	-467
103+50.00	10350.00	50.00	25.46	0.00	0.00	253.46	0.00	0.00	0.00	87	0	0	235	0	0	0	178	793	0	0	0	0	0	-615
104+00.00	10400.00	50.00	17.29	0.00	0.00	688.27	0.00	0.00	0.00	40	0	0	872	0	0	0	218	1,665	0	0	0	0	0	-1,447
104+50.00	10450.00	50.00	1.31	0.00	318.54	967.86	0.00	0.00	0.00	17	0	295	1,533	0	0	0	235	3,198	0	0	0	0	0	-2,963
105+00.00	10500.00	50.00	0.00	0.00	463.48	1319.03	0.00	0.00	0.00	1	0	724	2,117	0	0	0	236	5,315	0	0	0	0	0	-5,079
105+50.00	10550.00	50.00	0.00	0.00	623.04	1963.58	0.00	0.00	0.00	0	0	1,006	3,039	0	0	0	236	8,354	0	0	0	0	0	-8,118
106+00.00	10600.00	50.00	0.00	0.00	602.99	1997.02	0.00	0.00	0.00	0	0	1,135	3,667	0	0	0	236	12,021	0	0	0	0	0	-11,785
106+50.00	10650.00	50.00	0.00	0.00	400.83	1345.48	0.00	0.00	0.00	0	0	929	3,095	0	0	0	236	15,116	0	0	0	0	0	-14,880
107+00.00	10700.00	50.00	3.62	0.00	325.85	1247.55	0.00	0.00	0.00	3	0	673	2,401	0	0	0	239	17,517	0	0	0	0	0	-17,278
107+50.00	10750.00	50.00	95.12	0.00	0.00	1343.04	0.00	0.00	0.00	91	0	302	2,399	0	0	0	330	19,916	0	0	0	0	0	-19,586
108+00.00	10800.00	50.00	44.23	0.00	0.00	1363.00	0.00	0.00	0.00	129	0	0	2,506	0	0	0	459	22,422	0	0	0	0	0	-21,963
108+50.00	10850.00	50.00	193.03	0.00	0.00	1450.26	0.00	0.00	0.00	220	0	0	2,605	0	0	0	679	25,027	0	0	0	0	0	-24,348
109+00.00	10900.00	50.00	365.51	0.00	0.00	1499.64	0.00	0.00	0.00	517	0	0	2,731	0	0	0	1,196	27,758	0	0	0	0	0	-26,562
109+50.00	10950.00	50.00	292.12	0.00	0.00	1584.31	0.00	0.00	0.00	609	0	0	2,856	0	0	0	1,805	30,614	0	0	0	0	0	-28,809
110+00.00	11000.00	50.00	237.80	0.00	0.00	1551.61	0.00	0.00	0.00	491	0	0	2,904	0	0	0	2,296	33,518	0	0	0	0	0	-31,222
110+50.00	11050.00	50.00	240.02	0.00	0.00	1713.86	0.00	0.00	0.00	442	0	0	3,024	0	0	0	2,738	36,542	0	0	0	0	0	-33,804
111+00.00	11100.00	50.00	131.78	0.00	672.09	1357.80	0.00	0.00	0.00	344	0	622	2,844	0	0	0	3,082	39,386	0	0	0	0	0	-36,304
111+50.00	11150.00	50.00	32.82	0.00	715.43	1644.54	0.00	0.00	0.00	152	0	1,285	2,780	0	0	0	3,234	42,166	0	0	0	0	0	-38,932
112+00.00	11200.00	50.00	9.34	0.00	778.86	2040.80	0.00	0.00	0.00	39	0	1,384	3,412	0	0	0	3,273	45,578	0	0	0	0	0	-42,305
112+50.00	11250.00	50.00	11.07	0.00	825.32	2522.28	0.00	0.00	0.00	19	0	1,485	4,225	0	0	0	3,292	49,803	0	0	0	0	0	-46,511
113+00.00	11300.00	50.00	23.78	0.00	860.40	2980.81	0.00	0.00	0.00	32	0	1,561	5,095	0	0	0	3,324	54,898	0	0	0	0	0	-51,574
113+50.00	11350.00	50.00	3.91	0.00	903.02	3491.75	0.00	0.00	0.00	26	0	1,633	5,993	0	0	0	3,350	60,891	0	0	0	0	0	-57,541
114+00.00	11400.00	50.00	0.00	0.00	806.48	4141.59	0.00	0.00	0.00	4	0	1,583	7,068	0	0	0	3,354	67,959	0	0	0	0	0	-64,605
114+50.00	11450.00	50.00	0.00	0.00	721.10	5116.07	0.00	0.00	0.00	0	0	1,414	8,572	0	0	0	3,354	76,531	0	0	0	0	0	-73,177
115+00.00	11500.00	50.00	0.00	0.00	854.94	6943.28	0.00	0.00	0.00	0	0	1,459	11,166	0	0	0	3,354	87,697	0	0	0	0	0	-84,343
115+50.00	11550.00	50.00	0.00	0.00	576.62	6392.99	0.00	0.00	0.00	0	0	1,326	12,348	0	0	0	3,354	100,045	0	0	0	0	0	-96,691
116+00.00	11600.00	50.00	0.00	0.00	356.01	4520.33	0.00	0.00	0.00	0	0	864	10,105	0	0	0	3,354	110,150	0	0	0	0	0	-106,796
116+50.00	11650.00	50.00	0.00	0.00	668.96	6467.69	0.00	0.00	0.00	0	0	949	10,174	0	0	0	3,354	120,324	0	0	0	0	0	-116,970
117+00.00	11700.00	50.00	106.60	3.49	779.39	5940.82	0.00	0.00	0.00	99	174	1,341	11,489	0	0	0	3,453	131,813	0	0	0	0	0	-128,534
117+50.00	11750.00	50.00	3.49	3.49	840.14	4609.44	0.00	0.00	0.00	102	174	1,500	9,769	0	0	0	3,555	141,582	0	0	0	0	0	-138,376
117+75.00	11775.00	25.00	0.00	0.00	762.17	3154.23	0.00	0.00	0.00	2	2	742	3,594	0	0	0	3,557	145,176	0	0	0	0	0	-141,970
118+37.40	11837.40	62.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	881	3,645	0	0	0	3,557	148,821	0	0	0	0	0	-145,615

SOUTHBRIDGE RD EAST EARTHWORK SUMMARY - EARLY FILL																								
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
																	1.00	1.00	1.00	1.00	1.00	1.00		
																	NOTE 1	NOTE 2	NOTE 3	NOTE 4	NOTE 5	NOTE 6	NOTE 7	
119+30.37	11930.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119+83.92	11983.92	53.55	0.58	0.00	477.15	3275.28	0.00	0.00	0.00	1	0	473	3,248	0	0	0	1	3,248	0	0	0	0	0	-3,247
120+00.00	12000.00	16.08	0.00	0.00	734.31	4690.47	0.00	0.00	0.00	0	0	361	2,372	0	0	0	1	5,620	0	0	0	0	0	-5,619
120+19.95	12019.95	19.95	0.00	0.00	782.77	5134.63	0.00	0.00	0.00	0	0	560	3,630	0	0	0	1	9,250	0	0	0	0	0	-9,249
120+50.00	12050.00	30.05	0.00	0.00	557.98	4427.27	0.00	0.00	0.00	0	0	746	5,321	0	0	0	1	14,571	0	0	0	0	0	-14,570
121+00.00	12100.00	50.00	0.00	0.00	760.50	5629.54	0.00	0.00	0.00	0	0	1,221	9,312	0	0	0	1	23,883	0	0	0	0	0	-23,882
121+50.00	12150.00	50.00	0.00	0.00	562.94	6559.10	0.00	0.00	0.00	0	0	1,225	11,286	0	0	0	1	35,169	0	0	0	0	0	-35,168
122+00.00	12200.00	50.00	0.00	0.00	666.08	7198.02	0.00	0.00	0.00	0	0	1,138	12,738	0	0	0	1	47,907	0	0	0	0	0	-47,906
122+50.00	12250.00	50.00	0.00	0.00	673.75	5794.70	0.00	0.00	0.00	0	0	1,241	12,030	0	0	0	1	59,937	0	0	0	0	0	-59,936
123+00.00	12300.00	50.00	266.35	0.00	997.68	6143.31	0.00	0.00	0.00	247	0	1,548	11,054	0	0	0	248	70,991	0	0	0	0	0	-70,743
123+50.00	12350.00	50.00	171.13	0.35	967.45	6072.88	0.00	0.00	0.00	405	18	1,820	11,311	0	0	0	653	82,302	0	0	0	0	0	-81,667
124+00.00	12400.00	50.00	71.84	0.35	1091.01	5454.30	0.00	0.00	0.00	225	18	1,906	10,673	0	0	0	878	92,975	0	0	0	0	0	-92,132
124+50.00	12450.00	50.00	14.41	0.35	878.76	4695.99	0.00	0.00	0.00	80	18	1,824	9,398	0	0	0	958	102,373	0	0	0	0	0	-101,468
125+00.00	12500.00	50.00	0.01	0.35	897.64	3799.48	0.00	0.00	0.00	13	18	1,645	7,866	0	0	0	971	110,239	0	0	0	0	0	-109,339
125+50.00	12550.00	50.00	0.08	0.35	841.73	3062.66	0.00	0.00	0.00	0	18	1,611	6,354	0	0	0	971	116,593	0	0	0	0	0	-115,710
126+00.00	12600.00	50.00	4.01	0.35	780.65	2514.70	0.00	0.00	0.00	4	18	1,502	5,164	0	0	0	975	121,757	0	0	0	0	0	-120,888
126+50.00	12650.00	50.00	23.12	0.35	718.05	2218.88	0.00	0.00	0.00	25	18	1,388	4,383	0	0	0	1,000	126,140	0	0	0	0	0	-125,264
127+00.00	12700.00	50.00	26.69	0.35	648.08	2049.24	0.00	0.00	0.00	46	18	1,265	3,952	0	0	0	1,046	130,092	0	0	0	0	0	-129,187
127+50.00	12750.00	50.00	15.85	0.35	577.55	1892.92	0.00	0.00	0.00	39	18	1,135	3,650	0	0	0	1,085	133,742	0	0	0	0	0	-132,816
128+00.00	12800.00	50.00	7.18	0.35	575.32	1920.18	0.00	0.00	0.00	21	18	1,067	3,531	0	0	0	1,106	137,273	0	0	0	0	0	-136,344
128+50.00	12850.00	50.00	0.00	0.35	570.00	2012.02	0.00	0.00	0.00	7	18	1,060	3,641	0	0	0	1,113	140,914	0	0	0	0	0	-139,995
129+00.00	12900.00	50.00	0.00	0.35	515.19	2319.81	0.00	0.00	0.00	0	18	1,005	4,011	0	0	0	1,113	144,925	0	0	0	0	0	-144,024
129+50.00	12950.00	50.00	0.00	0.35	496.98	2558.92	0.00	0.00	0.00	0	18	937	4,517	0	0	0	1,113	149,442	0	0	0	0	0	-148,559
130+00.00	13000.00	50.00	0.00	0.35	617.26	1948.31	0.00	0.00	0.00	0	18	1,032	4,173	0	0	0	1,113	153,615	0	0	0	0	0	-152,750
130+50.00	13050.00	50.00	0.02	0.35	673.63	2049.58	0.00	0.00	0.00	0	18	1,195	3,702	0	0	0	1,113	157,317	0	0	0	0	0	-156,469
131+00.00	13100.00	50.00	7.56	0.35	504.60	1311.55	0.00	0.00	0.00	7	18	1,091	3,112	0	0	0	1,120	160,429	0	0	0	0	0	-159,592
131+50.00	13150.00	50.00	7.22	0.35	504.36	1112.94	0.00	0.00	0.00	14	18	934	2,245	0	0	0	1,134	162,674	0	0	0	0	0	-161,841
132+00.00	13200.00	50.00	4.42	0.35	0.00	862.31	0.00	0.00	0.00	11	18	467	1,829	0	0	0	1,145	164,503	0	0	0	0	0	-163,676
132+50.00	13250.00	50.00	11.52	0.35	0.00	253.38	0.00	0.00	0.00	15	18	0	1,033	0	0	0	1,160	165,536	0	0	0	0	0	-164,712
133+00.00	13300.00	50.00	14.22	0.35	0.00	0.39	0.00	0.00	0.00	24	18	0	235	0	0	0	1,184	165,771	0	0	0	0	0	-164,941
133+50.00	13350.00	50.00	5.94	0.35	0.00	5.10	0.00	0.00	0.00	19	18	0	5	0	0	0	1,203	165,776	0	0	0	0	0	-164,944
134+00.00	13400.00	50.00	7.39	0.35	0.00	8.21	0.00	0.00	0.00	12	18	0	12	0	0	0	1,215	165,788	0	0	0	0	0	-164,962
134+50.00	13450.00	50.00	1.43	0.35	0.00	1.97	0.00	0.00	0.00	8	18	0	9	0	0	0	1,223	165,797	0	0	0	0	0	-164,981
135+00.00	13500.00	50.00	1.10	0.35	0.00	37.89	0.00	0.00	0.00	2	18	0	37	0	0	0	1,225	165,834	0	0	0	0	0	-165,033
135+50.00	13550.00	50.00	17.47	0.35	0.00	15.85	0.00	0.00	0.00	17	18	0	50	0	0	0	1,242	165,884	0	0	0	0	0	-165,084
136+00.00	13600.00	50.00	33.85	0.35	0.00	1.77	0.00	0.00	0.00	48	18	0	16	0	0	0	1,290	165,900	0	0	0	0	0	-165,070
136+50.00	13650.00	50.00	42.98	0.35	0.00	11.19	0.00	0.00	0.00	71	18	0	12	0	0	0	1,361	165,912	0	0	0	0	0	-165,028
137+00.00	13700.00	50.00	46.25	0.35	0.00	8.67	0.00	0.00	0.00	83	18	0	18	0	0	0	1,444	165,930	0	0	0	0	0	-164,981
137+26.62	13726.62	26.62	52.05	0.35	0.00	4.84	0.00	0.00	0.00	48	9	0	7	0	0	0	1,492	165,937	0	0	0	0	0	-164,949

MIDVALLEY DR - SOUTH EARTHWORK SUMMARY - EARLY FILL																								
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE
																	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
										NOTE 1	NOTE 2		NOTE 3					NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8	
595+62.97	59562.97	0.00	18.64	0.84	0.00	19.22	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
596+00.00	59600.00	37.03	18.78	0.84	0.00	9.80	0.00	0.00	0.00	26	31	0.00	20	0	0	0	26	20	0	0	0	0	0	-25
596+50.00	59650.00	50.00	16.16	0.84	0.00	17.39	0.00	0.00	0.00	32	42	0.00	25	0	0	0	58	45	0	0	0	0	0	-60
597+00.00	59700.00	50.00	113.48	0.84	0.00	40.70	0.00	0.00	0.00	120	42	0.00	54	0	0	0	178	99	0	0	0	0	0	-36
597+50.00	59750.00	50.00	104.82	0.84	0.00	74.01	0.00	0.00	0.00	202	42	0.00	106	0	0	0	380	205	0	0	0	0	0	18
598+00.00	59800.00	50.00	95.01	0.84	0.00	83.74	0.00	0.00	0.00	185	42	0.00	146	0	0	0	565	351	0	0	0	0	0	16
598+50.00	59850.00	50.00	76.49	0.84	0.00	68.82	0.00	0.00	0.00	159	42	0.00	141	0	0	0	724	492	0	0	0	0	0	-8
599+00.00	59900.00	50.00	57.85	0.84	0.00	68.44	0.00	0.00	0.00	124	42	0.00	127	0	0	0	848	619	0	0	0	0	0	-53
599+50.00	59950.00	50.00	90.76	0.84	0.00	45.95	0.00	0.00	0.00	138	42	0.00	106	0	0	0	986	725	0	0	0	0	0	-63
600+00.00	60000.00	50.00	159.97	0.84	0.00	35.00	0.00	0.00	0.00	232	42	0.00	75	0	0	0	1,218	800	0	0	0	0	0	52
600+50.00	60050.00	50.00	87.31	1.55	0.00	244.71	0.00	0.00	0.00	229	78	0.00	259	0	0	0	1,447	1,059	0	0	0	0	0	-55
601+00.00	60100.00	50.00	68.52	1.55	0.00	198.72	0.00	0.00	0.00	144	78	0.00	411	0	0	0	1,591	1,470	0	0	0	0	0	-400
601+50.00	60150.00	50.00	56.12	1.55	0.00	92.28	0.00	0.00	0.00	115	78	0.00	269	0	0	0	1,706	1,739	0	0	0	0	0	-631
602+00.00	60200.00	50.00	220.21	1.55	0.00	5.38	0.00	0.00	0.00	256	78	0.00	90	0	0	0	1,962	1,829	0	0	0	0	0	-543
602+50.00	60250.00	50.00	339.38	0.00	0.00	1.01	0.00	0.00	0.00	518	0	0.00	6	0	0	0	2,480	1,835	0	0	0	0	0	-31
603+00.00	60300.00	50.00	350.56	0.00	0.00	0.05	0.00	0.00	0.00	639	0	0.00	1	0	0	0	3,119	1,836	0	0	0	0	0	607
603+50.00	60350.00	50.00	430.91	0.00	0.00	0.07	0.00	0.00	0.00	724	0	0.00	0	0	0	0	3,843	1,836	0	0	0	0	0	1,331
604+00.00	60400.00	50.00	501.55	0.00	0.00	0.00	0.00	0.00	0.00	863	0	0.00	0	0	0	0	4,706	1,836	0	0	0	0	0	2,194
604+50.00	60450.00	50.00	541.41	0.00	0.00	0.09	0.00	0.00	0.00	966	0	0.00	0	0	0	0	5,672	1,836	0	0	0	0	0	3,160
605+00.00	60500.00	50.00	583.00	0.00	0.00	0.00	0.00	0.00	0.00	1,041	0	0.00	0	0	0	0	6,713	1,836	0	0	0	0	0	4,201
605+50.00	60550.00	50.00	581.96	0.00	0.00	0.59	0.00	0.00	0.00	1,079	0	0.00	1	0	0	0	7,792	1,837	0	0	0	0	0	5,279
606+00.00	60600.00	50.00	583.76	0.00	0.00	0.61	0.00	0.00	0.00	1,079	0	0.00	1	0	0	0	8,871	1,838	0	0	0	0	0	6,357
606+50.00	60650.00	50.00	605.29	0.00	0.00	1.63	0.00	0.00	0.00	1,101	0	0.00	2	0	0	0	9,972	1,840	0	0	0	0	0	7,456
607+00.00	60700.00	50.00	622.44	0.00	0.00	0.05	0.00	0.00	0.00	1,137	0	0.00	2	0	0	0	11,109	1,842	0	0	0	0	0	8,591
607+50.00	60750.00	50.00	645.01	0.00	0.00	0.00	0.00	0.00	0.00	1,174	0	0.00	0	0	0	0	12,283	1,842	0	0	0	0	0	9,765
608+00.00	60800.00	50.00	667.57	0.00	0.00	0.00	0.00	0.00	0.00	1,215	0	0.00	0	0	0	0	13,498	1,842	0	0	0	0	0	10,980
608+50.00	60850.00	50.00	330.91	0.00	0.00	1.20	0.00	0.00	0.00	925	0	0.00	1	0	0	0	14,423	1,843	0	0	0	0	0	11,904
609+00.00	60900.00	50.00	22.12	0.00	0.00	194.83	0.00	0.00	0.00	327	0	0.00	182	0	0	0	14,750	2,025	0	0	0	0	0	12,049
609+50.00	60950.00	50.00	0.00	0.00	0.00	248.89	0.00	0.00	0.00	20	0	0.00	411	0	0	0	14,770	2,436	0	0	0	0	0	11,658
610+00.00	61000.00	50.00	2.21	0.00	0.00	235.65	0.00	0.00	0.00	2	0	0.00	449	0	0	0	14,772	2,885	0	0	0	0	0	11,211
610+50.00	61050.00	50.00	7.86	0.00	0.00	230.44	0.00	0.00	0.00	9	0	0.00	432	0	0	0	14,781	3,317	0	0	0	0	0	10,788
611+00.00	61100.00	50.00	8.43	0.00	0.00	197.86	0.00	0.00	0.00	15	0	0.00	397	0	0	0	14,796	3,714	0	0	0	0	0	10,406
611+50.00	61150.00	50.00	31.14	0.00	0.00	180.58	0.00	0.00	0.00	37	0	0.00	350	0	0	0	14,833	4,064	0	0	0	0	0	10,093
612+00.00	61200.00	50.00	32.02	0.00	0.00	218.91	0.00	0.00	0.00	58	0	0.00	370	0	0	0	14,891	4,434	0	0	0	0	0	9,781
612+50.00	61250.00	50.00	14.21	0.00	0.00	247.68	0.00	0.00	0.00	43	0	0.00	432	0	0	0	14,934	4,866	0	0	0	0	0	9,392
613+00.00	61300.00	50.00	0.48	0.00	0.00	379.28	0.00	0.00	0.00	14	0	0.00	581	0	0	0	14,948	5,447	0	0	0	0	0	8,825
613+50.00	61350.00	50.00	19.45	0.00	0.00	681.93	0.00	0.00	0.00	18	0	0.00	983	0	0	0	14,966	6,430	0	0	0	0	0	7,860

MIDVALLEY DR - NORTH EARTHWORK SUMMARY - EARLY FILL																									
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)								
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE	
																									1.00
																	NOTE 1	NOTE 2		NOTE 3					NOTE 1
616+00.00	61600.00	0.00	0.00	0.00	344.04	949.56	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
616+50.00	61650.00	50.00	470.79	0.00	58.89	366.63	0.00	0.00	0.00	436	0	373	1,219	0	0	0	436	1,219	0	0	0	0	0	-783	
617+00.00	61700.00	50.00	1070.91	0.00	0.00	241.74	0.00	0.00	0.00	1,428	0	55	563	0	0	0	1,864	1,782	0	0	0	0	0	82	
617+50.00	61750.00	50.00	1190.08	0.00	0.00	87.54	0.00	0.00	0.00	2,094	0	0	305	0	0	0	3,958	2,087	0	0	0	0	0	1,871	
618+00.00	61800.00	50.00	1249.71	0.00	0.00	81.46	0.00	0.00	0.00	2,259	0	0	156	0	0	0	6,217	2,243	0	0	0	0	0	3,974	
618+50.00	61850.00	50.00	1268.65	0.00	0.00	99.18	0.00	0.00	0.00	2,332	0	0	167	0	0	0	8,549	2,410	0	0	0	0	0	6,139	
619+00.00	61900.00	50.00	1697.62	0.00	0.00	7.29	0.00	0.00	0.00	2,747	0	0	99	0	0	0	11,296	2,509	0	0	0	0	0	8,787	
619+50.00	61950.00	50.00	1903.49	0.00	0.00	1.74	0.00	0.00	0.00	3,334	0	0	8	0	0	0	14,630	2,517	0	0	0	0	0	12,113	
620+00.00	62000.00	50.00	1936.16	0.00	0.00	7.80	0.00	0.00	0.00	3,555	0	0	9	0	0	0	18,185	2,526	0	0	0	0	0	15,659	
620+50.00	62050.00	50.00	1640.34	0.00	0.00	48.99	0.00	0.00	0.00	3,312	0	0	53	0	0	0	21,497	2,579	0	0	0	0	0	18,918	
621+00.00	62100.00	50.00	1341.29	0.00	0.00	6.67	0.00	0.00	0.00	2,761	0	0	52	0	0	0	24,258	2,631	0	0	0	0	0	21,627	
621+50.00	62150.00	50.00	639.43	0.00	0.00	10.35	0.00	0.00	0.00	1,834	0	0	16	0	0	0	26,092	2,647	0	0	0	0	0	23,445	
622+00.00	62200.00	50.00	437.97	0.00	0.00	8.12	0.00	0.00	0.00	998	0	0	17	0	0	0	27,090	2,664	0	0	0	0	0	24,426	
622+50.00	62250.00	50.00	322.22	0.00	0.00	8.79	0.00	0.00	0.00	704	0	8	65	0	0	0	27,794	2,729	0	0	0	0	0	25,065	
623+00.00	62300.00	50.00	204.75	0.00	0.00	21.76	0.00	0.00	0.00	488	0	47	78	0	0	0	28,282	2,807	0	0	0	0	0	25,475	
623+50.00	62350.00	50.00	91.86	0.00	0.00	30.73	0.00	0.00	0.00	275	0	114	49	0	0	0	28,557	2,856	0	0	0	0	0	25,701	
624+00.00	62400.00	50.00	121.65	0.00	0.00	116.98	0.00	0.00	0.00	198	0	183	107	0	0	0	28,755	2,963	0	0	0	0	0	25,792	
624+50.00	62450.00	50.00	66.38	0.00	0.00	131.07	0.00	0.00	0.00	174	0	230	211	0	0	0	28,929	3,174	0	0	0	0	0	25,755	
625+00.00	62500.00	50.00	12.52	0.00	0.00	143.36	0.00	0.00	0.00	73	0	254	497	0	0	0	29,002	3,671	0	0	0	0	0	25,331	
625+50.00	62550.00	50.00	1.40	0.00	0.00	149.40	0.00	0.00	0.00	13	0	271	1,153	0	0	0	29,015	4,824	0	0	0	0	0	24,191	
626+00.00	62600.00	50.00	16.41	0.00	0.00	105.01	0.00	0.00	0.00	16	0	236	1,080	0	0	0	29,031	5,904	0	0	0	0	0	23,127	
626+50.00	62650.00	50.00	46.77	0.00	0.00	53.19	0.00	0.00	0.00	58	0	146	478	0	0	0	29,089	6,382	0	0	0	0	0	22,707	
627+00.00	62700.00	50.00	46.58	0.00	0.00	210.38	0.00	0.00	0.00	86	0	49	382	0	0	0	29,175	6,764	0	0	0	0	0	22,411	
627+50.00	62750.00	50.00	38.52	0.00	0.00	230.33	0.00	0.00	0.00	79	0	0	408	0	0	0	29,254	7,172	0	0	0	0	0	22,082	
628+00.00	62800.00	50.00	20.74	0.00	0.00	253.27	0.00	0.00	0.00	55	0	0	448	0	0	0	29,309	7,620	0	0	0	0	0	21,689	
628+50.00	62850.00	50.00	7.08	0.00	0.00	273.75	0.00	0.00	0.00	26	0	0	488	0	0	0	29,335	8,108	0	0	0	0	0	21,227	
629+00.00	62900.00	50.00	10.91	0.00	0.00	278.63	0.00	0.00	0.00	17	0	0	511	0	0	0	29,352	8,619	0	0	0	0	0	20,733	
629+50.00	62950.00	50.00	20.03	0.00	0.00	268.79	0.00	0.00	0.00	29	0	0	507	0	0	0	29,381	9,126	0	0	0	0	0	20,255	
630+00.00	63000.00	50.00	29.91	0.00	0.00	278.11	0.00	0.00	0.00	46	0	0	506	0	0	0	29,427	9,632	0	0	0	0	0	19,795	
630+50.00	63050.00	50.00	37.23	0.00	0.00	238.82	0.00	0.00	0.00	62	0	0	479	0	0	0	29,489	10,111	0	0	0	0	0	19,378	
631+00.00	63100.00	50.00	51.71	1.70	0.00	236.54	0.00	0.00	0.00	82	85	0	440	0	0	0	29,571	10,551	0	0	0	0	0	18,935	
631+50.00	63150.00	50.00	182.86	1.70	0.00	217.68	0.00	0.00	0.00	217	85	0	421	0	0	0	29,788	10,972	0	0	0	0	0	18,646	
632+00.00	63200.00	50.00	214.33	1.70	0.00	136.14	0.00	0.00	0.00	368	85	0	328	0	0	0	30,156	11,300	0	0	0	0	0	18,601	
632+50.00	63250.00	50.00	226.74	0.60	0.00	86.35	0.00	0.00	0.00	408	30	0	206	0	0	0	30,564	11,506	0	0	0	0	0	18,773	
633+00.00	63300.00	50.00	241.76	0.60	0.00	52.83	0.00	0.00	0.00	434	30	0	129	0	0	0	30,998	11,635	0	0	0	0	0	19,048	
633+50.00	63350.00	50.00	195.81	0.60	0.00	29.67	0.00	0.00	0.00	405	30	0	76	0	0	0	31,403	11,711	0	0	0	0	0	19,348	
634+00.00	63400.00	50.00	185.99	0.60	0.00	20.32	0.00	0.00	0.00	354	30	0	46	0	0	0	31,757	11,757	0	0	0	0	0	19,626	
634+50.00	63450.00	50.00	197.53	0.60	0.00	14.78	0.00	0.00	0.00	355	30	0	32	0	0	0	32,112	11,789	0	0	0	0	0	19,919	
635+00.00	63500.00	50.00	201.82	0.60	0.00	9.96	0.00	0.00	0.00	370	30	0	23	0	0	0	32,482	11,812	0	0	0	0	0	20,236	
635+50.00	63550.00	50.00	252.72	0.60	0.00	0.84	0.00	0.00	0.00	421	30	0	10	0	0	0	32,903	11,822	0	0	0	0	0	20,617	
636+00.00	63600.00	50.00	169.63	0.60	0.00	15.26	0.00	0.00	0.00	391	30	0	15	0	0	0	33,294	11,837	0	0	0	0	0	20,963	
636+50.00	63650.00	50.00	148.55	0.60	0.00	15.11	0.00	0.00	0.00	295	30	0	28	0	0	0	33,589	11,865	0	0	0	0	0	21,200	
637+00.00	63700.00	50.00	125.83	0.60	0.00	16.73	0.00	0.00	0.00	254	30	0	29	0	0										

RAMP C EARTHWORK SUMMARY - EARLY FILL																								
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE
																	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
																	NOTE 1	NOTE 1	NOTE 4	NOTE 4	NOTE 5	NOTE 6	NOTE 7	NOTE 8
601+76.85	60176.85	0.00	2.90	0.00	0.00	275.33	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
602+00.00	60200.00	23.15	0.27	0.00	0.00	445.44	0.00	0.00	0.00	1	0	0.00	309	0	0	0	1	309	0	0	0	0	0	-308
602+50.00	60250.00	50.00	41.56	0.00	0.00	803.63	0.00	0.00	0.00	39	0	0.00	1,157	0	0	0	40	1,466	0	0	0	0	0	-1,426
603+00.00	60300.00	50.00	131.46	0.00	271.88	1144.81	0.00	0.00	0.00	160	0	252.00	1,804	0	0	0	200	3,270	0	0	0	0	0	-3,070
603+50.00	60350.00	50.00	189.60	0.00	297.32	1334.83	0.00	0.00	0.00	297	0	527.00	2,296	0	0	0	497	5,566	0	0	0	0	0	-5,069
604+00.00	60400.00	50.00	237.09	0.00	322.24	1535.33	0.00	0.00	0.00	395	0	574.00	2,658	0	0	0	892	8,224	0	0	0	0	0	-7,332
604+50.00	60450.00	50.00	274.31	0.00	352.50	1786.12	0.00	0.00	0.00	474	0	625.00	3,075	0	0	0	1,366	11,299	0	0	0	0	0	-9,933
605+00.00	60500.00	50.00	311.78	0.00	382.76	2082.36	0.00	0.00	0.00	543	0	681.00	3,582	0	0	0	1,909	14,881	0	0	0	0	0	-12,972
605+50.00	60550.00	50.00	384.42	0.00	407.19	2426.83	0.00	0.00	0.00	645	0	731.00	4,175	0	0	0	2,554	19,056	0	0	0	0	0	-16,502
606+00.00	60600.00	50.00	436.28	0.00	429.68	2829.82	0.00	0.00	0.00	760	0	775.00	4,867	0	0	0	3,314	23,923	0	0	0	0	0	-20,609
606+50.00	60650.00	50.00	474.03	0.00	451.75	3426.86	0.00	0.00	0.00	843	0	816.00	5,793	0	0	0	4,157	29,716	0	0	0	0	0	-25,559
607+00.00	60700.00	50.00	213.17	0.00	468.60	4271.29	0.00	0.00	0.00	636	0	852.00	7,128	0	0	0	4,793	36,844	0	0	0	0	0	-32,051
607+50.00	60750.00	50.00	219.53	0.00	470.92	3355.85	0.00	0.00	0.00	401	0	870.00	7,062	0	0	0	5,194	43,906	0	0	0	0	0	-38,712
608+00.00	60800.00	50.00	68.29	0.00	441.77	3946.34	0.00	0.00	0.00	266	0	845.00	6,761	0	0	0	5,460	50,667	0	0	0	0	0	-45,207
608+50.00	60850.00	50.00	53.32	0.00	398.56	3401.52	0.00	0.00	0.00	113	0	778.00	6,804	0	0	0	5,573	57,471	0	0	0	0	0	-51,898
609+00.00	60900.00	50.00	4.22	0.00	593.88	3210.06	0.00	0.00	0.00	53	0	919.00	6,122	0	0	0	5,626	63,593	0	0	0	0	0	-57,967

RAMP D EARTHWORK SUMMARY - EARLY FILL																								
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE
																	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
																	NOTE 1	NOTE 1	NOTE 4	NOTE 4	NOTE 5	NOTE 6	NOTE 7	NOTE 8
609+50.00	60950.00	0.00	0.00	0.00	290.86	3445.92	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
610+00.00	61000.00	50.00	0.00	0.00	435.56	3566.51	0.00	0.00	0.00	0	0	673.00	6,493	0	0	0	0	6,493	0	0	0	0	0	-6,493
610+50.00	61050.00	50.00	8.84	0.86	384.59	3248.43	0.00	0.00	0.00	8	43	759.00	6,310	0	0	0	8	12,803	0	0	0	0	0	-12,838
611+00.00	61100.00	50.00	44.16	0.86	347.90	2680.32	0.00	0.00	0.00	49	43	678.00	5,490	0	0	0	57	18,293	0	0	0	0	0	-18,322
611+50.00	61150.00	50.00	39.40	0.86	245.51	2225.34	0.00	0.00	0.00	77	43	549.00	4,542	0	0	0	134	22,835	0	0	0	0	0	-22,830
612+00.00	61200.00	50.00	41.92	0.86	214.10	1765.69	0.00	0.00	0.00	75	43	426.00	3,695	0	0	0	209	26,530	0	0	0	0	0	-26,493
612+50.00	61250.00	50.00	55.48	0.86	214.56	968.59	0.00	0.00	0.00	90	43	397.00	2,532	0	0	0	299	29,062	0	0	0	0	0	-28,978
613+00.00	61300.00	50.00	44.07	0.86	192.04	633.70	0.00	0.00	0.00	92	43	376.00	1,484	0	0	0	391	30,546	0	0	0	0	0	-30,413
613+50.00	61350.00	50.00	40.02	0.86	171.08	410.00	0.00	0.00	0.00	78	43	336.00	966	0	0	0	469	31,512	0	0	0	0	0	-31,344
614+00.00	61400.00	50.00	40.00	0.86	152.12	317.54	0.00	0.00	0.00	74	43	299.00	674	0	0	0	543	32,186	0	0	0	0	0	-31,987
614+50.00	61450.00	50.00	49.45	0.86	133.28	232.59	0.00	0.00	0.00	83	43	264.00	509	0	0	0	626	32,695	0	0	0	0	0	-32,456
615+00.00	61500.00	50.00	41.75	0.86	120.45	185.12	0.00	0.00	0.00	84	43	235.00	387	0	0	0	710	33,082	0	0	0	0	0	-32,802
615+50.00	61550.00	50.00	33.36	0.86	122.26	80.66	0.00	0.00	0.00	70	43	225.00	246	0	0	0	780	33,328	0	0	0	0	0	-33,021
616+00.00	61600.00	50.00	81.14	0.00	0.00	83.65	0.00	0.00	0.00	106	0	113.00	152	0	0	0	886	33,480	0	0	0	0	0	-33,067

STATION	REAL STATION	DISTANCE	RAMP B EARTHWORK SUMMARY - EARLY FILL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
			AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
																	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
NOTE 1	NOTE 2		NOTE 3													NOTE 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

RAMP A EARTHWORK SUMMARY - EARLY FILL																								
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
NOTE 1	NOTE 2		NOTE 3					1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	NOTE 8	
611+50.00	61150.00	0.00	0.00	0.00	701.94	5635.85	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
612+00.00	61200.00	50.00	0.00	0.00	1115.69	3994.29	0.00	0.00	0.00	0	0	1683.00	8,917	0	0	0	0	8,917	0	0	0	0	0	-8,917
612+50.00	61250.00	50.00	0.00	0.00	579.93	2889.58	0.00	0.00	0.00	0	0	1570.00	6,374	0	0	0	0	15,291	0	0	0	0	0	-15,291
613+00.00	61300.00	50.00	0.00	0.00	592.14	2582.29	0.00	0.00	0.00	0	0	1085.00	5,067	0	0	0	0	20,358	0	0	0	0	0	-20,358
613+50.00	61350.00	50.00	0.01	0.00	574.95	2431.16	0.00	0.00	0.00	0	0	1081.00	4,642	0	0	0	0	25,000	0	0	0	0	0	-25,000
614+00.00	61400.00	50.00	0.03	0.00	538.96	2266.37	0.00	0.00	0.00	0	0	1031.00	4,350	0	0	0	0	29,350	0	0	0	0	0	-29,350
614+50.00	61450.00	50.00	0.01	0.00	498.33	2049.22	0.00	0.00	0.00	0	0	960.00	3,996	0	0	0	0	33,346	0	0	0	0	0	-33,346
615+00.00	61500.00	50.00	0.20	0.00	454.23	1792.87	0.00	0.00	0.00	0	0	882.00	3,557	0	0	0	0	36,903	0	0	0	0	0	-36,903
615+50.00	61550.00	50.00	0.49	0.00	415.54	1565.30	0.00	0.00	0.00	1	0	805.00	3,109	0	0	0	1	40,012	0	0	0	0	0	-40,011
616+00.00	61600.00	50.00	9.13	0.00	380.42	1325.23	0.00	0.00	0.00	9	0	737.00	2,676	0	0	0	10	42,688	0	0	0	0	0	-42,678
616+50.00	61650.00	50.00	21.48	0.00	331.86	1016.85	0.00	0.00	0.00	28	0	660.00	2,169	0	0	0	38	44,857	0	0	0	0	0	-44,819
617+00.00	61700.00	50.00	26.75	0.00	286.77	870.24	0.00	0.00	0.00	45	0	573.00	1,747	0	0	0	83	46,604	0	0	0	0	0	-46,521
617+50.00	61750.00	50.00	40.89	0.00	255.41	726.69	0.00	0.00	0.00	63	0	502.00	1,479	0	0	0	146	48,083	0	0	0	0	0	-47,937
618+00.00	61800.00	50.00	53.14	0.00	228.31	564.18	0.00	0.00	0.00	87	0	448.00	1,195	0	0	0	233	49,278	0	0	0	0	0	-49,045
618+50.00	61850.00	50.00	64.96	0.00	0.00	589.20	0.00	0.00	0.00	109	0	211.00	1,068	0	0	0	342	50,346	0	0	0	0	0	-50,004
619+00.00	61900.00	50.00	94.96	0.00	0.00	303.73	0.00	0.00	0.00	148	0	0.00	827	0	0	0	490	51,173	0	0	0	0	0	-50,683
619+50.00	61950.00	50.00	103.15	0.00	0.00	112.78	0.00	0.00	0.00	183	0	0.00	386	0	0	0	673	51,559	0	0	0	0	0	-50,886
620+00.00	62000.00	50.00	120.14	0.00	0.00	1.38	0.00	0.00	0.00	207	0	0.00	106	0	0	0	880	51,665	0	0	0	0	0	-50,785
620+50.00	62050.00	50.00	108.88	0.00	0.00	0.08	0.00	0.00	0.00	212	0	0.00	1	0	0	0	1,092	51,666	0	0	0	0	0	-50,574
621+00.00	62100.00	50.00	104.75	0.00	0.00	0.09	0.00	0.00	0.00	198	0	0.00	0	0	0	0	1,290	51,666	0	0	0	0	0	-50,376
621+50.00	62150.00	50.00	113.46	0.00	0.00	0.06	0.00	0.00	0.00	202	0	0.00	0	0	0	0	1,492	51,666	0	0	0	0	0	-50,174
622+00.00	62200.00	50.00	122.36	0.00	0.00	0.01	0.00	0.00	0.00	218	0	0.00	0	0	0	0	1,710	51,666	0	0	0	0	0	-49,956
622+50.00	62250.00	50.00	111.52	0.00	0.00	0.21	0.00	0.00	0.00	217	0	0.00	0	0	0	0	1,927	51,666	0	0	0	0	0	-49,739
623+00.00	62300.00	50.00	73.57	0.00	0.00	0.24	0.00	0.00	0.00	171	0	0.00	0	0	0	0	2,098	51,666	0	0	0	0	0	-49,568
623+50.00	62350.00	50.00	54.61	0.00	0.00	0.00	0.00	0.00	0.00	119	0	0.00	0	0	0	0	2,217	51,666	0	0	0	0	0	-49,449
624+00.00	62400.00	50.00	41.85	0.00	0.00	0.04	0.00	0.00	0.00	89	0	0.00	0	0	0	0	2,306	51,666	0	0	0	0	0	-49,360
624+50.00	62450.00	50.00	24.08	0.00	0.00	0.00	0.00	0.00	0.00	61	0	0.00	0	0	0	0	2,367	51,666	0	0	0	0	0	-49,299
625+00.00	62500.00	50.00	6.57	0.00	0.00	0.02	0.00	0.00	0.00	28	0	0.00	0	0	0	0	2,395	51,666	0	0	0	0	0	-49,271
625+50.00	62550.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6	0	0.00	0	0	0	0	2,401	51,666	0	0	0	0	0	-49,265

FRENCH RD - SOUTH EARTHWORK SUMMARY - EARLY FILL																									
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)								
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE	
																									NOTE 1
596+98.79	59698.79	0.00	107.87	0.28	0.00	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	
597+00.00	59700.00	1.21	107.01	0.28	0.00	0.00	0.00	0.00	5	0	0.00	0	0	0	0	5	0	0	0	0	0	0	0	5	
597+50.00	59750.00	50.00	97.71	0.28	0.00	3.48	0.00	0.00	0.00	190	14	0.00	3	0	190	0	195	3	0	0	0	0	0	178	
598+00.00	59800.00	50.00	101.01	0.28	0.00	24.61	0.00	0.00	0.00	184	14	0.00	26	0	0	0	379	29	0	0	0	0	0	321	
598+50.00	59850.00	50.00	116.70	0.28	0.00	46.78	0.00	0.00	0.00	202	14	0.00	66	0	0	0	581	95	0	0	0	0	0	443	
599+00.00	59900.00	50.00	141.79	0.28	0.00	62.65	0.00	0.00	0.00	239	14	0.00	101	0	0	0	820	196	0	0	0	0	0	567	
599+50.00	59950.00	50.00	216.67	0.28	0.00	51.78	0.00	0.00	0.00	332	14	0.00	106	0	0	0	1,152	302	0	0	0	0	0	779	
600+00.00	60000.00	50.00	266.13	0.28	0.00	45.42	0.00	0.00	0.00	447	14	0.00	90	0	0	0	1,599	392	0	0	0	0	0	1,122	
600+50.00	60050.00	50.00	286.06	0.28	0.00	31.58	0.00	0.00	0.00	511	14	0.00	71	0	0	0	2,110	463	0	0	0	0	0	1,548	
601+00.00	60100.00	50.00	287.94	0.28	0.00	30.10	0.00	0.00	0.00	531	14	0.00	57	0	0	0	2,641	520	0	0	0	0	0	2,007	
601+50.00	60150.00	50.00	319.33	0.28	0.00	19.46	0.00	0.00	0.00	562	14	0.00	46	0	0	0	3,203	566	0	0	0	0	0	2,509	
602+00.00	60200.00	50.00	316.75	0.28	0.00	35.44	0.00	0.00	0.00	589	14	0.00	51	0	0	0	3,792	617	0	0	0	0	0	3,033	
602+50.00	60250.00	50.00	325.55	0.28	0.00	34.14	0.00	0.00	0.00	595	14	0.00	64	0	0	0	4,387	681	0	0	0	0	0	3,550	
603+00.00	60300.00	50.00	345.55	0.28	0.00	14.93	0.00	0.00	0.00	621	14	0.00	45	0	0	0	5,008	726	0	0	0	0	0	4,112	
603+50.00	60350.00	50.00	345.07	0.28	0.00	6.50	0.00	0.00	0.00	639	14	0.00	20	0	0	0	5,647	746	0	0	0	0	0	4,717	
604+00.00	60400.00	50.00	312.72	0.28	0.00	3.02	0.00	0.00	0.00	609	14	0.00	9	0	0	0	6,256	755	0	0	0	0	0	5,303	
604+50.00	60450.00	50.00	506.74	0.28	0.00	4.42	0.00	0.00	0.00	759	14	0.00	7	0	0	0	7,015	762	0	0	0	0	0	6,040	
605+00.00	60500.00	50.00	1687.25	0.28	0.00	14.98	0.00	0.00	0.00	2,031	14	0.00	18	0	0	0	9,046	780	0	0	0	0	0	8,039	
605+50.00	60550.00	50.00	2115.85	0.28	0.00	52.27	0.00	0.00	0.00	3,521	14	0.00	62	0	0	0	12,567	842	0	0	0	0	0	11,484	
606+00.00	60600.00	50.00	2609.14	0.28	0.00	68.13	0.00	0.00	0.00	4,375	14	0.00	111	0	0	0	16,942	953	0	0	0	0	0	15,734	
606+50.00	60650.00	50.00	2668.28	0.28	0.00	78.65	0.00	0.00	0.00	4,887	14	0.00	136	0	0	0	21,829	1,089	0	0	0	0	0	20,471	
607+00.00	60700.00	50.00	2578.13	0.28	0.00	87.55	0.00	0.00	0.00	4,858	14	0.00	154	0	0	0	26,687	1,243	0	0	0	0	0	25,161	
607+50.00	60750.00	50.00	2112.28	0.00	0.00	97.81	0.00	0.00	0.00	4,343	0	0.00	172	0	0	0	31,030	1,415	0	0	0	0	0	29,332	
608+00.00	60800.00	50.00	1324.60	0.00	0.00	161.33	0.00	0.00	0.00	3,182	0	0.00	240	0	0	0	34,212	1,655	0	0	0	0	0	32,274	
608+50.00	60850.00	50.00	590.86	0.00	0.00	182.12	0.00	0.00	0.00	1,774	0	0.00	318	0	0	0	35,986	1,973	0	0	0	0	0	33,730	
609+00.00	60900.00	50.00	172.48	0.00	0.00	242.99	0.00	0.00	0.00	707	0	0.00	394	0	0	0	36,693	2,367	0	0	0	0	0	34,043	
609+50.00	60950.00	50.00	117.06	0.00	0.00	367.44	0.00	0.00	0.00	268	0	0.00	565	0	0	0	36,961	2,932	0	0	0	0	0	33,746	
610+00.00	61000.00	50.00	79.76	0.00	0.00	553.07	0.00	0.00	0.00	182	0	0.00	852	0	0	0	37,143	3,784	0	0	0	0	0	33,076	
610+50.00	61050.00	50.00	16.50	0.00	0.00	602.45	0.00	0.00	0.00	89	0	0.00	1,070	0	0	0	37,232	4,854	0	0	0	0	0	32,095	
611+00.00	61100.00	50.00	41.87	0.00	0.00	423.24	0.00	0.00	0.00	54	0	0.00	950	0	0	0	37,286	5,804	0	0	0	0	0	31,199	
611+50.00	61150.00	50.00	37.24	0.00	0.00	411.55	0.00	0.00	0.00	73	0	0.00	773	0	0	0	37,359	6,577	0	0	0	0	0	30,499	
612+00.00	61200.00	50.00	1042.16	0.00	0.00	539.14	0.00	0.00	0.00	999	0	0.00	880	0	0	0	38,358	7,457	0	0	0	0	0	30,618	
612+64.02	61264.02	64.02	299.26	0.00	0.00	280.46	128.81	0.00	0.00	1,590	0	0.00	792	0	0	0	39,948	8,249	0	0	0	0	0	31,416	
613+00.00	61300.00	35.98	78.92	0.00	0.00	284.86	430.61	0.00	0.00	252	0	0.00	373	0	0	0	40,200	8,622	0	0	0	0	0	31,295	
613+50.00	61350.00	50.00	39.65	0.00	0.00	254.67	705.78	0.00	0.00	110	0	0.00	1,052	0	0	0	40,310	9,674	0	0	0	0	0	30,353	
614+00.00	61400.00	50.00	48.15	0.00	0.00	432.07	786.54	0.00	0.00	81	0	0.00	636.00	1,382	0	0	0	40,391	11,056	0	0	0	0	0	29,052

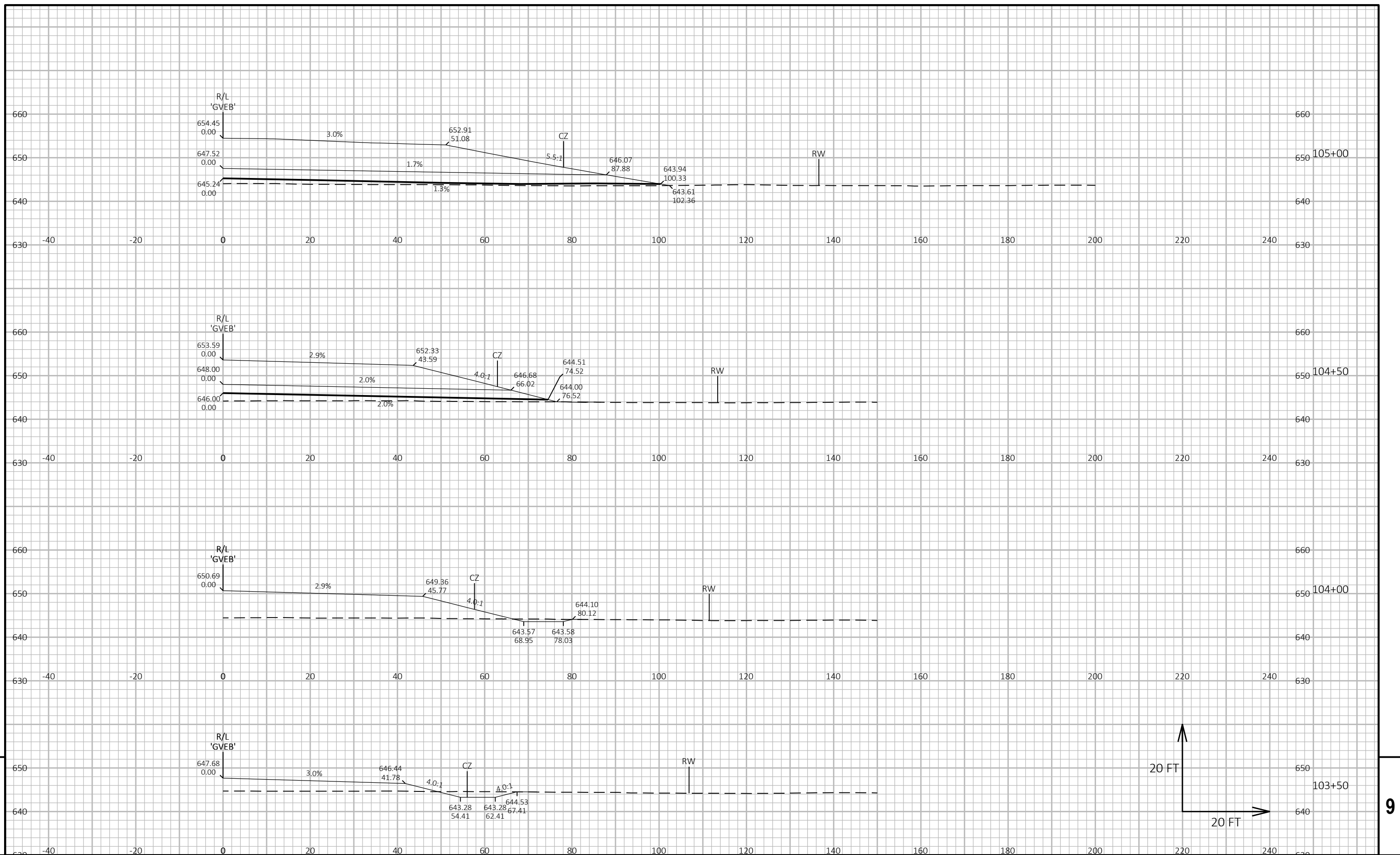
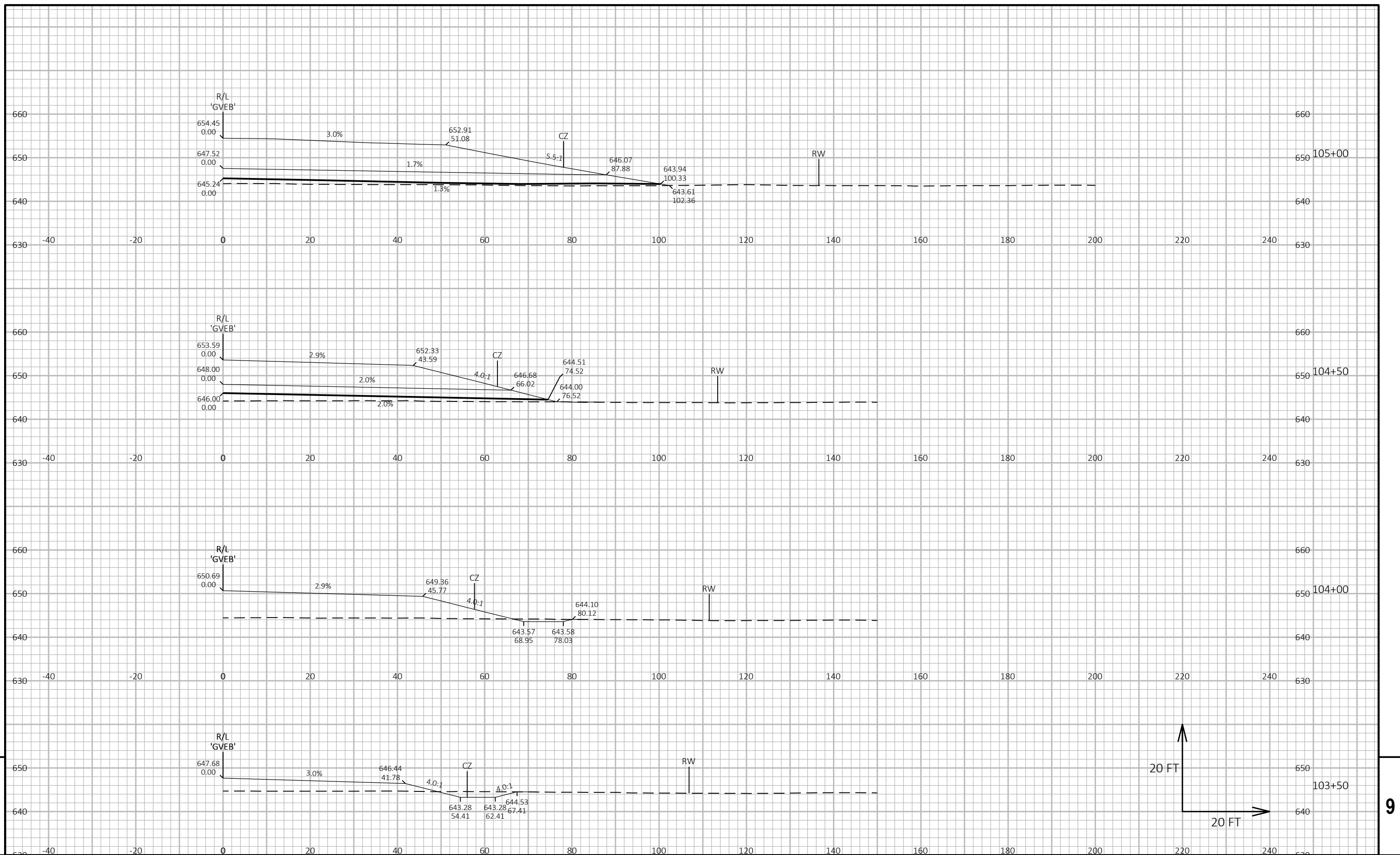
STATION	REAL STATION	DISTANCE	FRENCH RD - NORTH EARTHWORK SUMMARY - EARLY FILL																					
			AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
																	1.00	1.00	1.00	1.00	1.00	1.00	NOTE 1	
616+50.00	61650.00	0.00	1.43	0.80	429.60	1351.81	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	
617+00.00	61700.00	50.00	24.23	0.80	419.00	1037.23	0.00	0.00	0.00	64	40	786.00	2,212	0	0	0	64	2,212	0	0	0	0	-2,188	
617+50.00	61750.00	50.00	13.09	0.80	371.35	809.21	0.00	0.00	0.00	75	40	732.00	1,710	0	0	0	139	3,922	0	0	0	0	-3,863	
618+00.00	61800.00	50.00	21.45	0.80	333.56	613.39	0.00	0.00	0.00	72	40	653.00	1,317	0	0	0	210	5,239	0	0	0	0	-5,148	
618+50.00	61850.00	50.00	24.24	0.80	292.63	424.04	0.00	0.00	0.00	82	40	580.00	961	0	0	0	292	6,200	0	0	0	0	-6,067	
619+00.00	61900.00	50.00	23.66	0.80	92.33	405.56	0.00	0.00	0.00	84	40	356.00	768	0	0	0	376	6,968	0	0	0	0	-6,791	
619+50.00	61950.00	50.00	13.53	0.80	0.00	21.15	0.00	0.00	0.00	74	40	85.00	395	0	0	0	450	7,363	0	0	0	0	-7,152	
620+00.00	62000.00	50.00	5.64	0.80	0.00	0.09	0.00	0.00	0.00	58	40	0.00	20	0	0	0	507	7,383	0	0	0	0	-7,154	
620+50.00	62050.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5	0	0.00	0	0	0	0	512	7,383	0	0	0	0	-7,149	

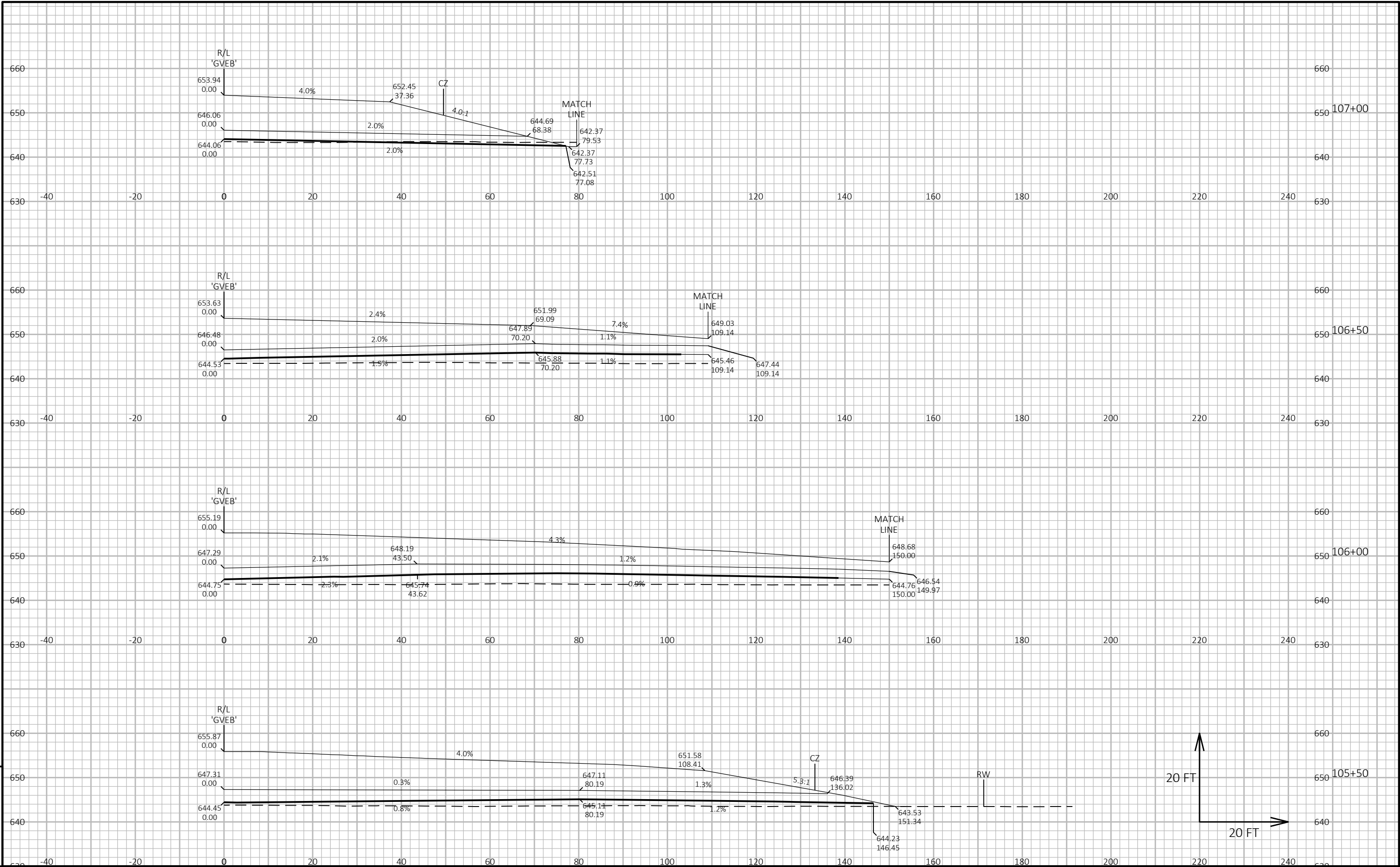
INNOVATION CT TEMP ROAD EARTHWORK SUMMARY - EARLY FILL																									
STATION	REAL STATION	DISTANCE	AREA (SF)							INCREMENTAL VOL (CY) (UNADJUSTED)							CUMULATIVE VOL (CY)								
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	DRAINAGE BLANKET	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE	
																	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
																	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 4	NOTE 5	NOTE 6		NOTE 7
3+01.39	301.39	0.00	0.37	0.00	0.00	126.32	0.00	0.00	0.00	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	
3+50.00	350.00	48.61	0.03	0.00	0.00	184.28	0.00	0.00	0.00	0	0	0.00	280	0	0	0	0	280	0	0	0	0	0	-280	
4+00.00	400.00	50.00	7.32	0.00	0.00	84.80	0.00	0.00	0.00	7	0	0.00	249	0	0	0	7	529	0	0	0	0	0	-522	
4+50.00	450.00	50.00	59.15	0.00	0.00	14.22	0.00	0.00	0.00	62	0	0.00	92	0	0	0	69	621	0	0	0	0	0	-552	
5+00.00	500.00	50.00	21.11	0.00	0.00	141.13	0.00	0.00	0.00	74	0	0.00	144	0	0	0	143	765	0	0	0	0	0	-622	
5+50.00	550.00	50.00	42.15	0.00	0.00	150.91	0.00	0.00	0.00	59	0	0.00	270	0	0	0	202	1,035	0	0	0	0	0	-833	
6+00.00	600.00	50.00	173.09	0.00	0.00	0.49	0.00	0.00	0.00	199	0	0.00	140	0	0	0	401	1,175	0	0	0	0	0	-774	
6+50.00	650.00	50.00	127.73	0.00	0.00	0.07	0.00	0.00	0.00	279	0	0.00	1	0	0	0	680	1,176	0	0	0	0	0	-496	
7+00.00	700.00	50.00	108.18	0.00	0.00	3.15	0.00	0.00	0.00	218	0	0.00	3	0	0	0	898	1,179	0	0	0	0	0	-281	
7+50.00	750.00	50.00	69.88	0.00	0.00	0.75	0.00	0.00	0.00	165	0	0.00	4	0	0	0	1,063	1,183	0	0	0	0	0	-120	
8+00.00	800.00	50.00	53.94	0.00	0.00	5.72	0.00	0.00	0.00	115	0	0.00	6	0	0	0	1,178	1,189	0	0	0	0	0	-11	
8+50.00	850.00	50.00	92.13	0.00	0.00	21.14	0.00	0.00	0.00	135	0	0.00	25	0	0	0	1,313	1,214	0	0	0	0	0	99	
9+00.00	900.00	50.00	140.72	0.00	0.00	5.09	0.00	0.00	0.00	216	0	0.00	24	0	0	0	1,529	1,238	0	0	0	0	0	291	
9+50.00	950.00	50.00	87.77	0.00	0.00	0.00	0.00	0.00	0.00	212	0	0.00	5	0	0	0	1,741	1,243	0	0	0	0	0	498	
9+76.82	976.82	26.82	37.02	0.00	0.00	0.00	0.00	0.00	0.00	62	0	0.00	0	0	0	0	1,803	1,243	0	0	0	0	0	560	

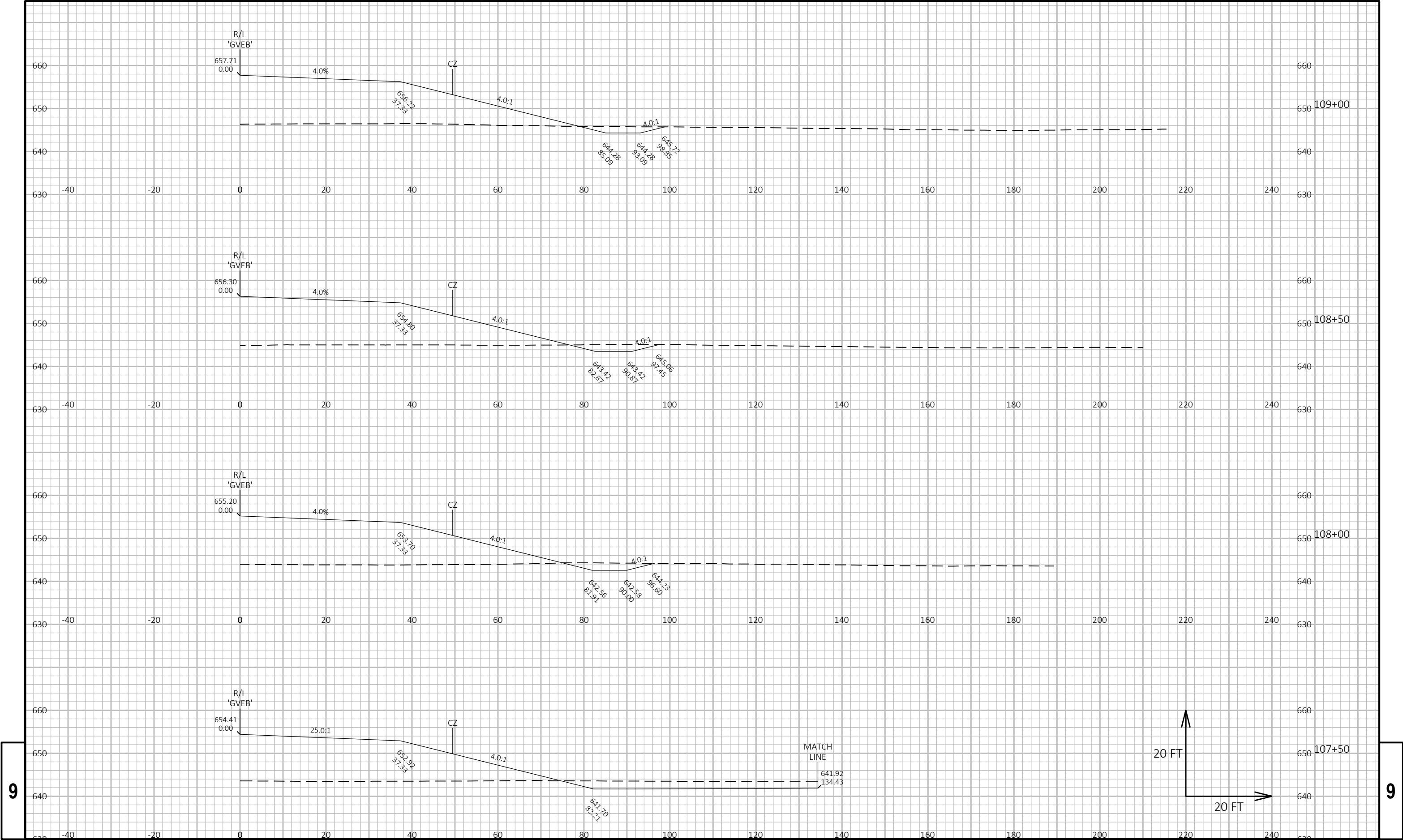
SOUTHBRIDGE RD EARTHWORK SUMMARY - FINISHED																							
STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)								
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE	
															1.00	1.00	1.00	1.00	1.00	1.00			
															NOTE 1	NOTE 1	NOTE 4	NOTE 4	NOTE 5	NOTE 6	NOTE 7		NOTE 8
102+25.00	10225.00	0.00	193.48	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
102+50.00	10250.00	25.00	186.54	0.00	0.00	0.00	0.00	176	0	0	0	0	0	176	0	0	0	0	0	0	176		
103+00.00	10300.00	50.00	0.00	0.00	178.19	0.00	0.00	173	0	165	0	0	0	349	165	0	0	0	0	0	184		
103+50.00	10350.00	50.00	136.06	0.00	61.05	0.00	0.00	126	0	222	0	0	0	475	387	0	0	0	0	0	88		
104+00.00	10400.00	50.00	402.85	0.00	16.27	0.00	0.00	499	0	72	0	0	0	974	459	0	0	0	0	0	515		
104+50.00	10450.00	50.00	785.48	0.00	31.79	0.00	0.00	1,100	0	45	0	0	0	2,074	504	0	0	0	0	0	1,570		
105+00.00	10500.00	50.00	962.95	0.00	0.63	0.00	0.00	1,619	0	30	0	0	0	3,693	534	0	0	0	0	0	3,159		
105+50.00	10550.00	50.00	1447.15	0.00	1.05	0.00	0.00	2,232	0	2	0	0	0	5,925	536	0	0	0	0	0	5,389		
106+00.00	10600.00	50.00	1511.97	0.00	0.00	0.00	0.00	2,740	0	1	0	0	0	8,665	537	0	0	0	0	0	8,128		
106+50.00	10650.00	50.00	1067.25	0.00	0.00	0.00	0.00	2,388	0	0	0	0	0	11,053	537	0	0	0	0	0	10,516		
107+00.00	10700.00	50.00	287.63	0.00	0.00	0.00	0.00	1,255	0	0	0	0	0	12,308	537	0	0	0	0	0	11,771		
107+50.00	10750.00	50.00	0.00	0.00	0.00	0.00	0.00	266	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
108+00.00	10800.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
108+50.00	10850.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
109+00.00	10900.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
109+50.00	10950.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
110+00.00	11000.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
110+50.00	11050.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		
111+00.00	11100.00	50.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	12,574	537	0	0	0	0	0	12,037		

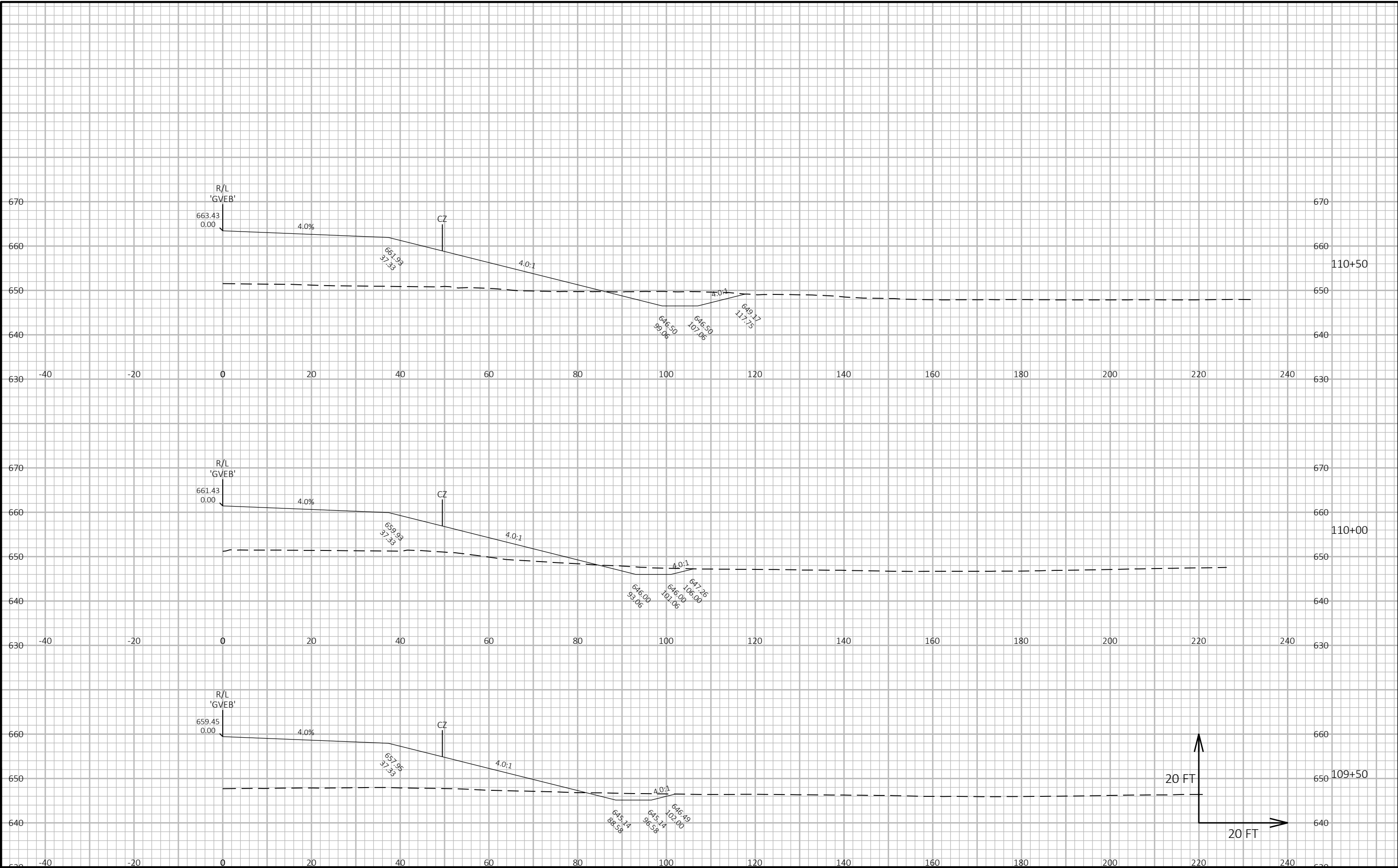
MIDVALLEY DR - SOUTH EARTHWORK SUMMARY - FINISHED																							
STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)								
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE	
															1.00	1.00	1.00	1.00	1.00	1.00			
															NOTE 1	NOTE 2	NOTE 3	NOTE 4	NOTE 5	NOTE 6	NOTE 7		NOTE 8
612+00.00	61200.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
612+50.00	61250.00	50.00	47.20	0.00	78.86	0.00	0.00	0.00	44	0	73	0	0	0	44	73	0	0	0	0	-29		
613+00.00	61300.00	50.00	63.13	0.00	12.00	0.00	0.00	0.00	102	0	84	0	0	0	146	157	0	0	0	0	-11		
613+50.00	61350.00	50.00	233.76	0.00	24.89	0.00	0.00	0.00	275	0	34	0	0	0	421	191	0	0	0	0	230		

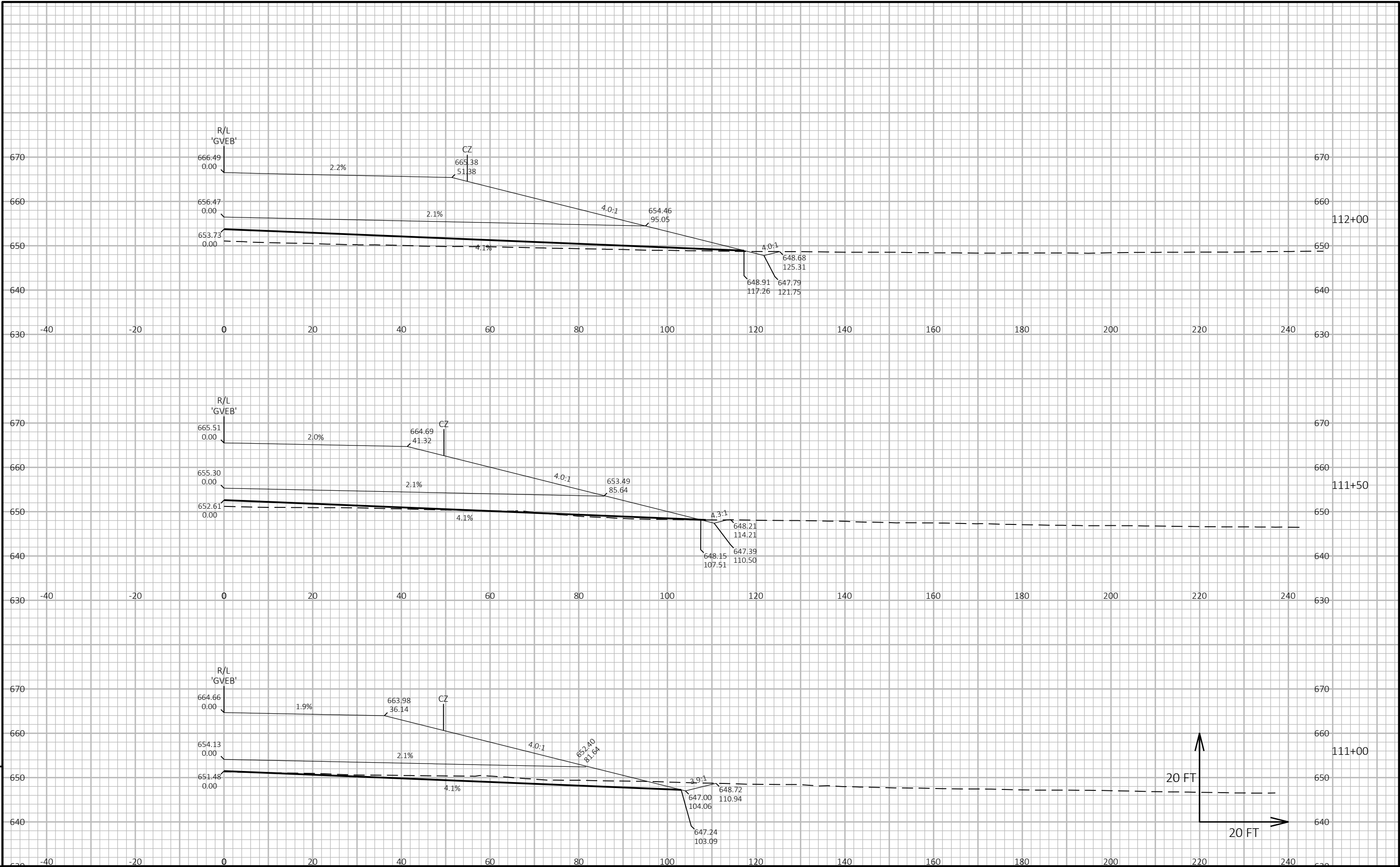
MIDVALLEY - NORTH EARTHWORK SUMMARY - FINISHED																						
STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDNATE
															1.00	1.00	1.00	1.00	1.00	1.00		
															NOTE 1	NOTE 2	NOTE 3	NOTE 4	NOTE 5	NOTE 6	NOTE 7	
616+00.00	61600.00	0.00	461.48	0.00	25.40	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	
616+50.00	61650.00	50.00	248.82	0.00	19.37	0.00	0.00	0.00	658	0	41	0	0	0	658	41	0	0	0	0	617	
617+00.00	61700.00	50.00	118.94	0.00	25.85	0.00	0.00	0.00	341	0	42	0	0	0	999	83	0	0	0	0	916	
617+50.00	61750.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	110	0	24	0	0	0	1,109	107	0	0	0	0	1,002	

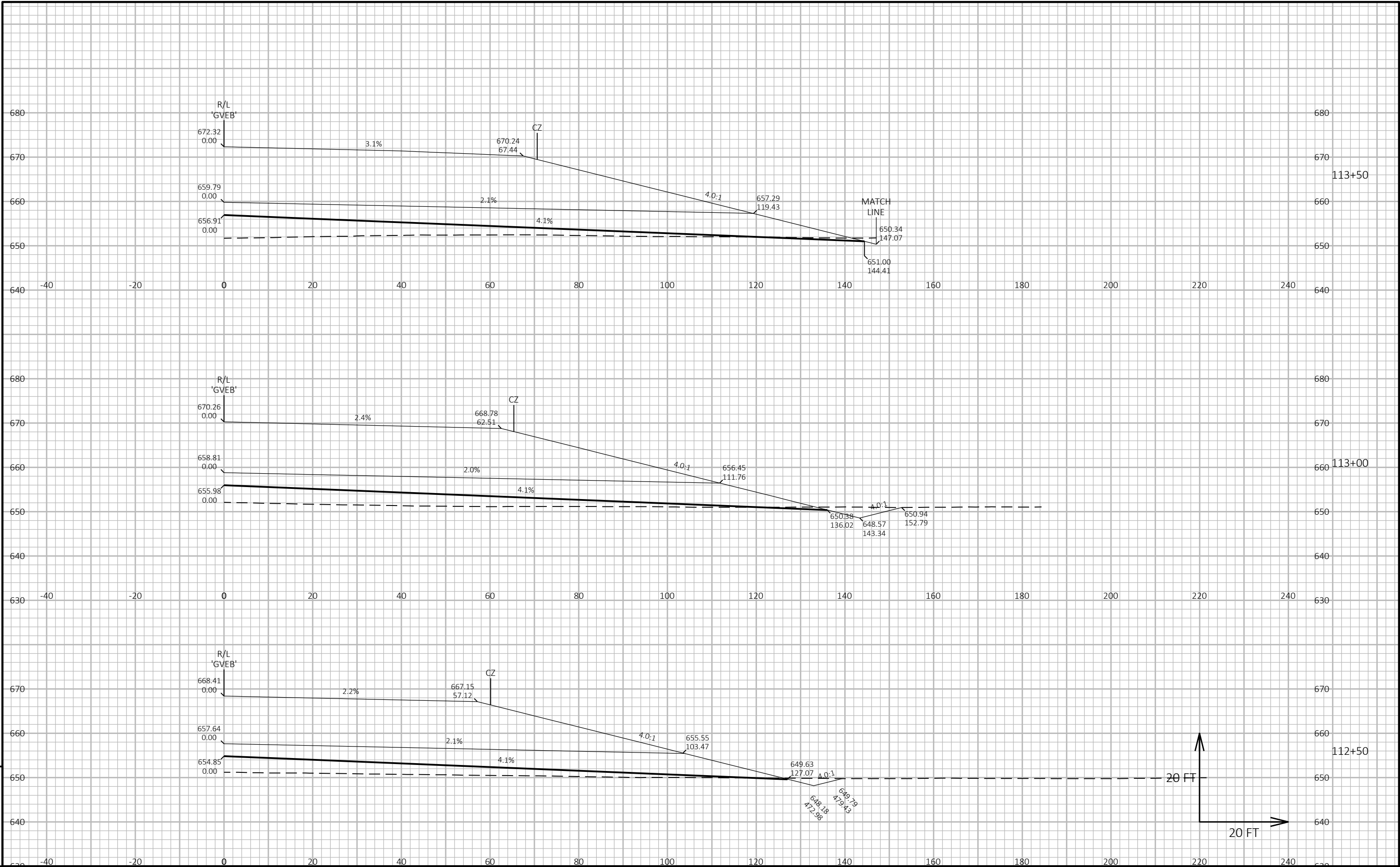


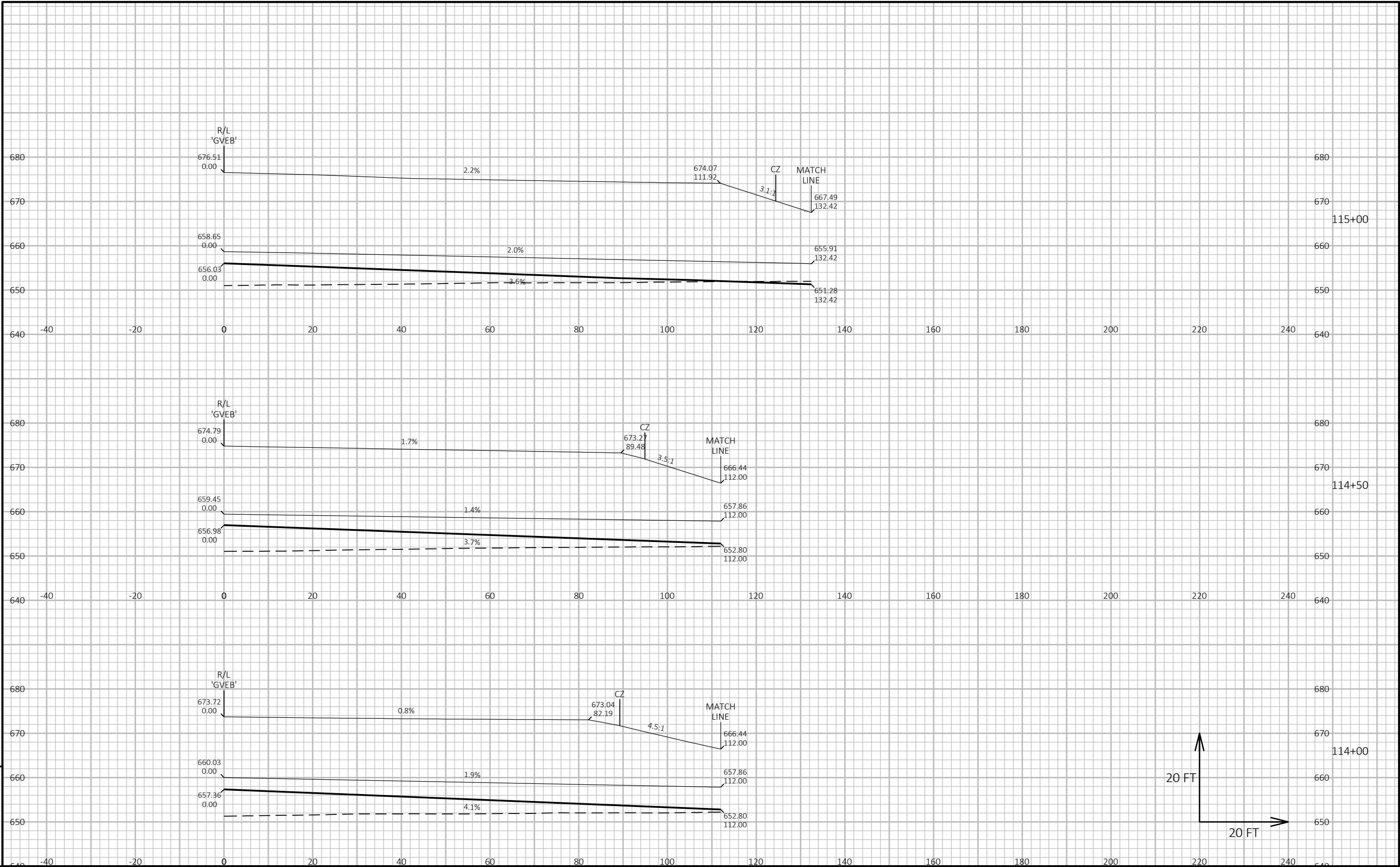


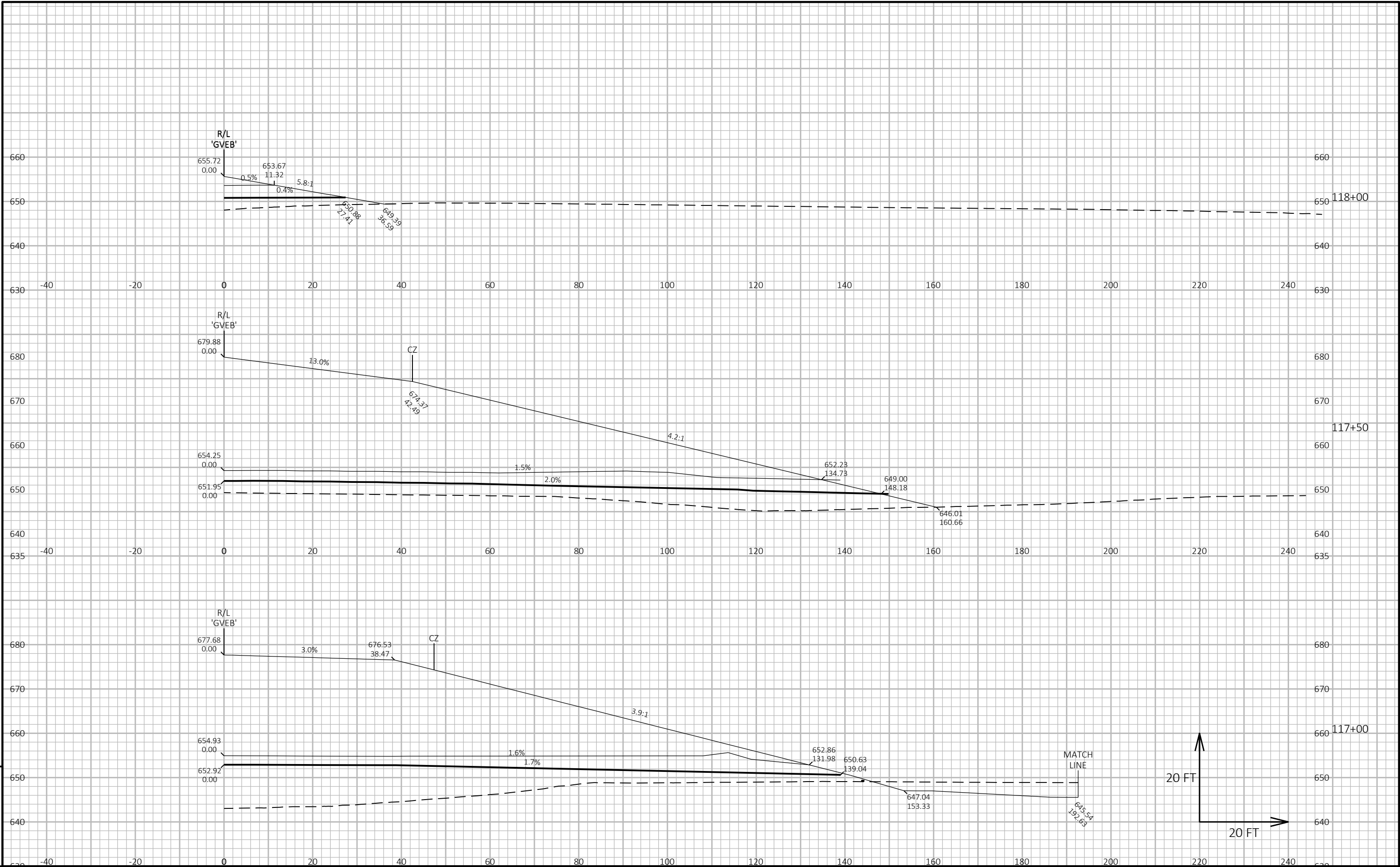


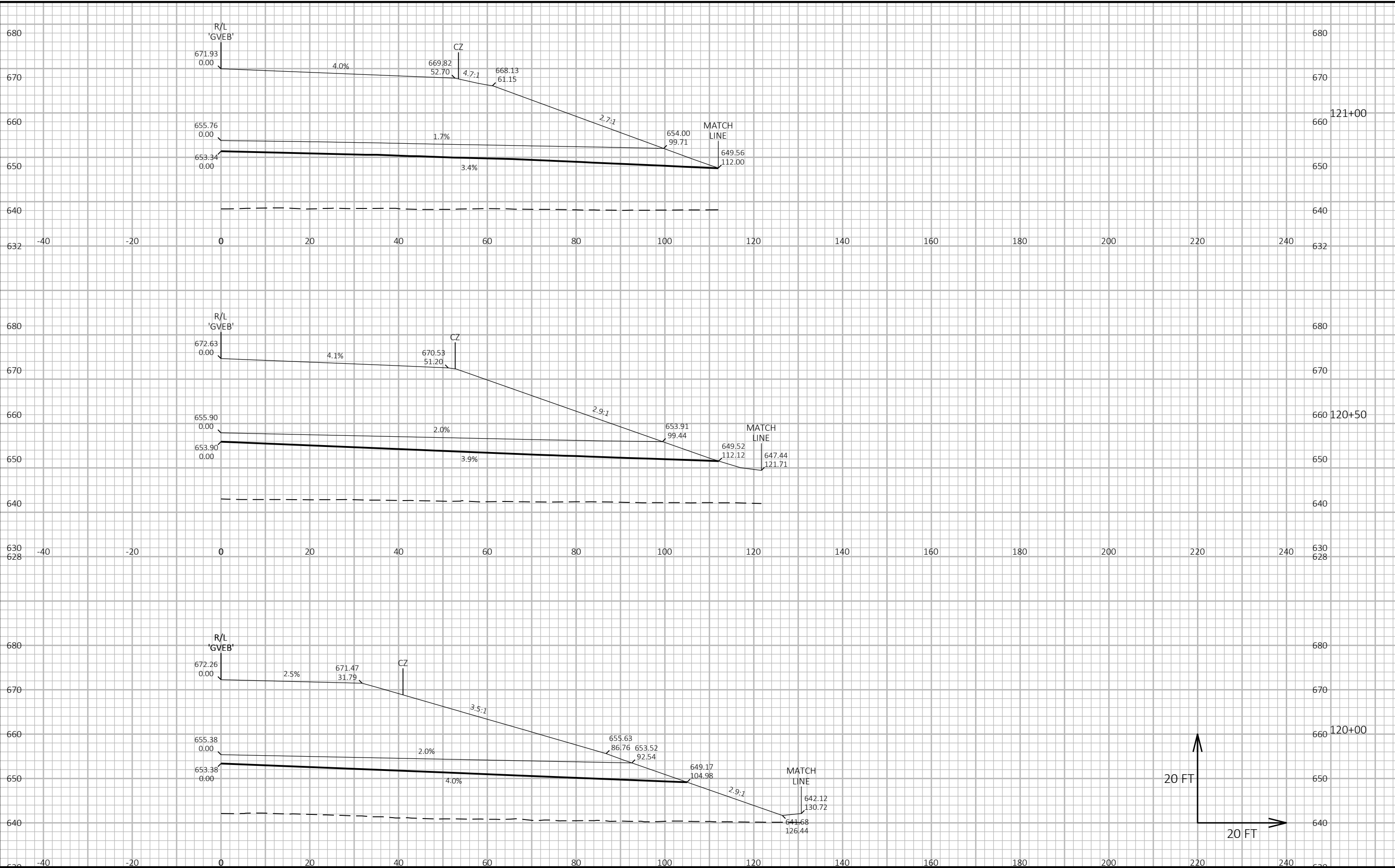


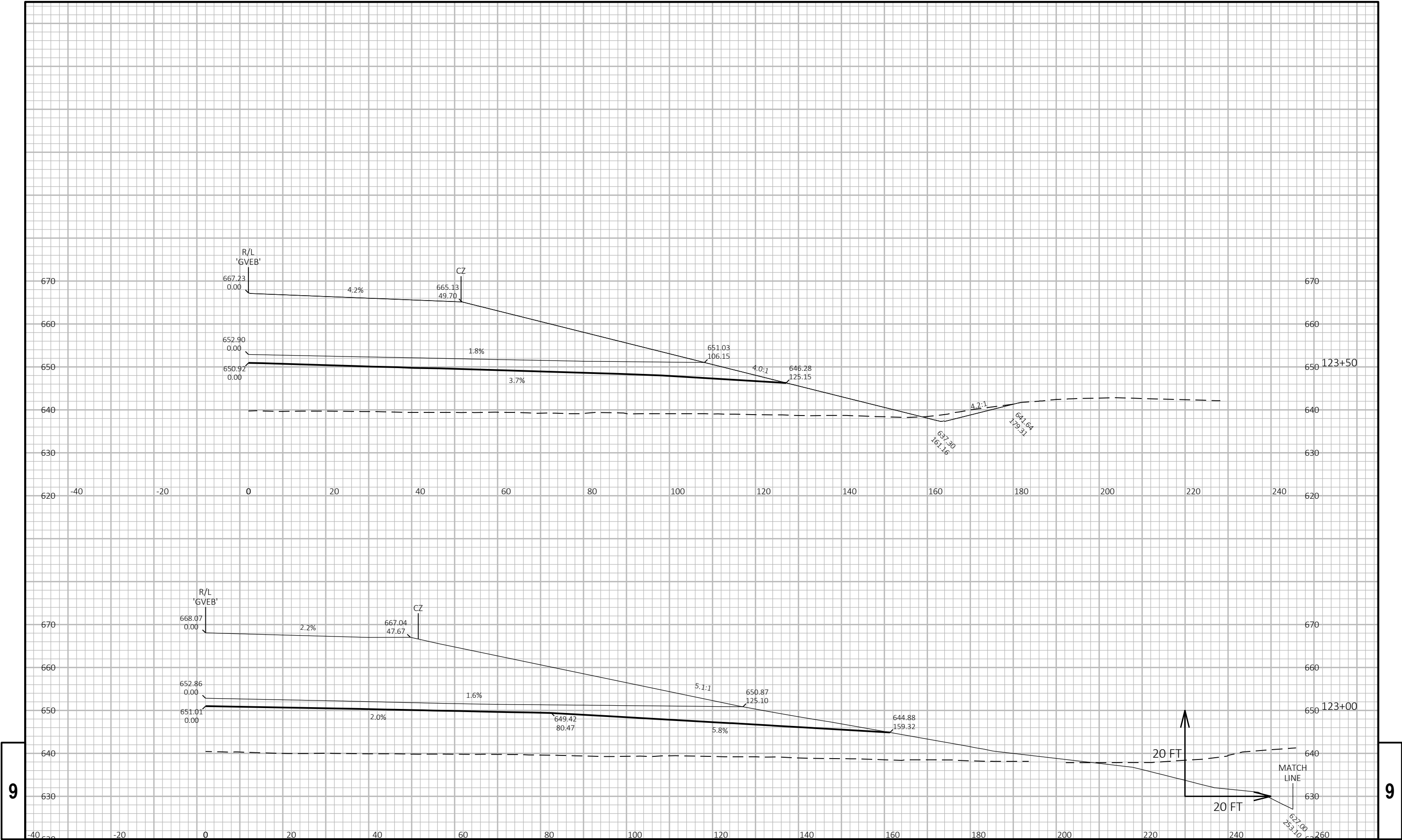








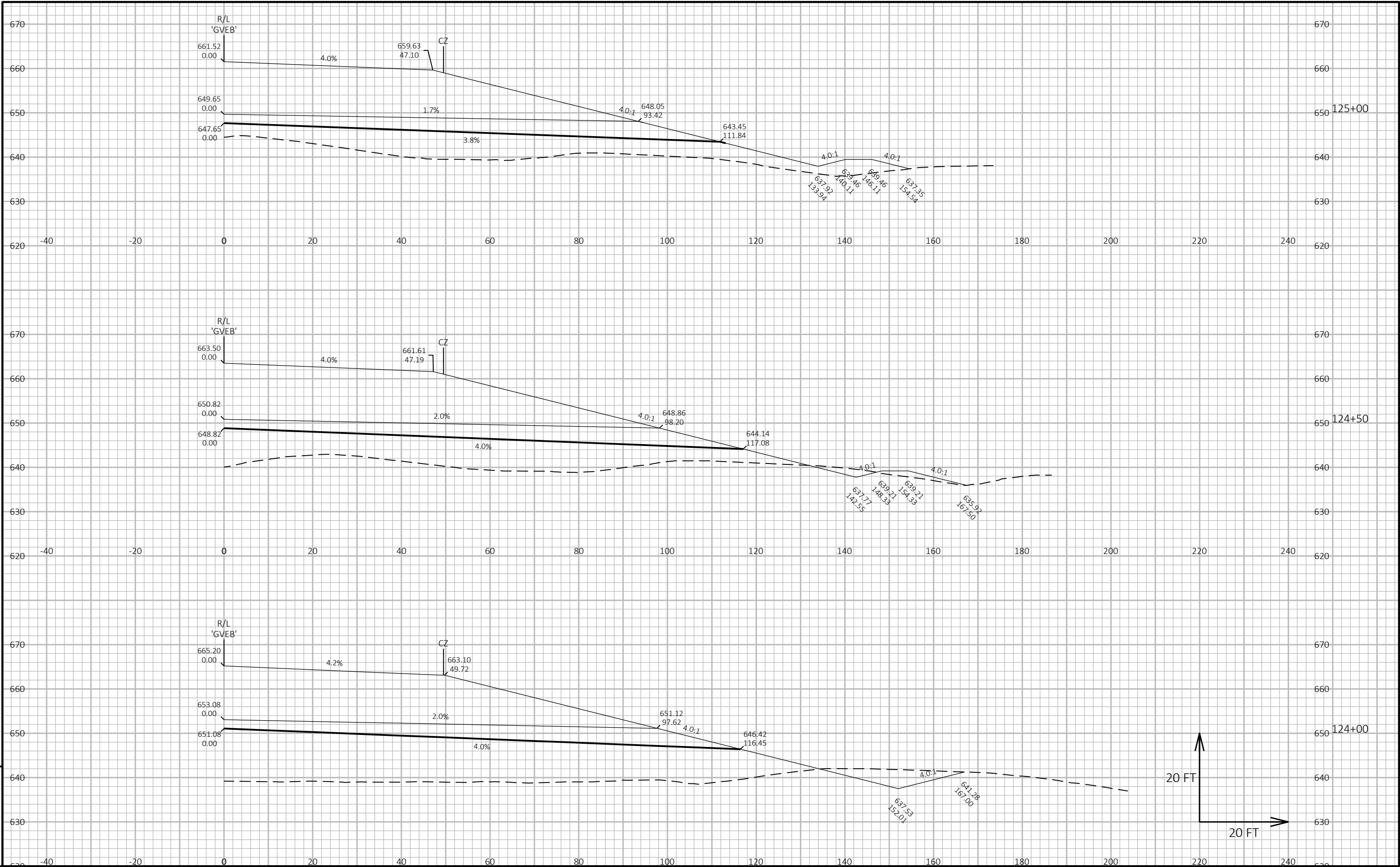


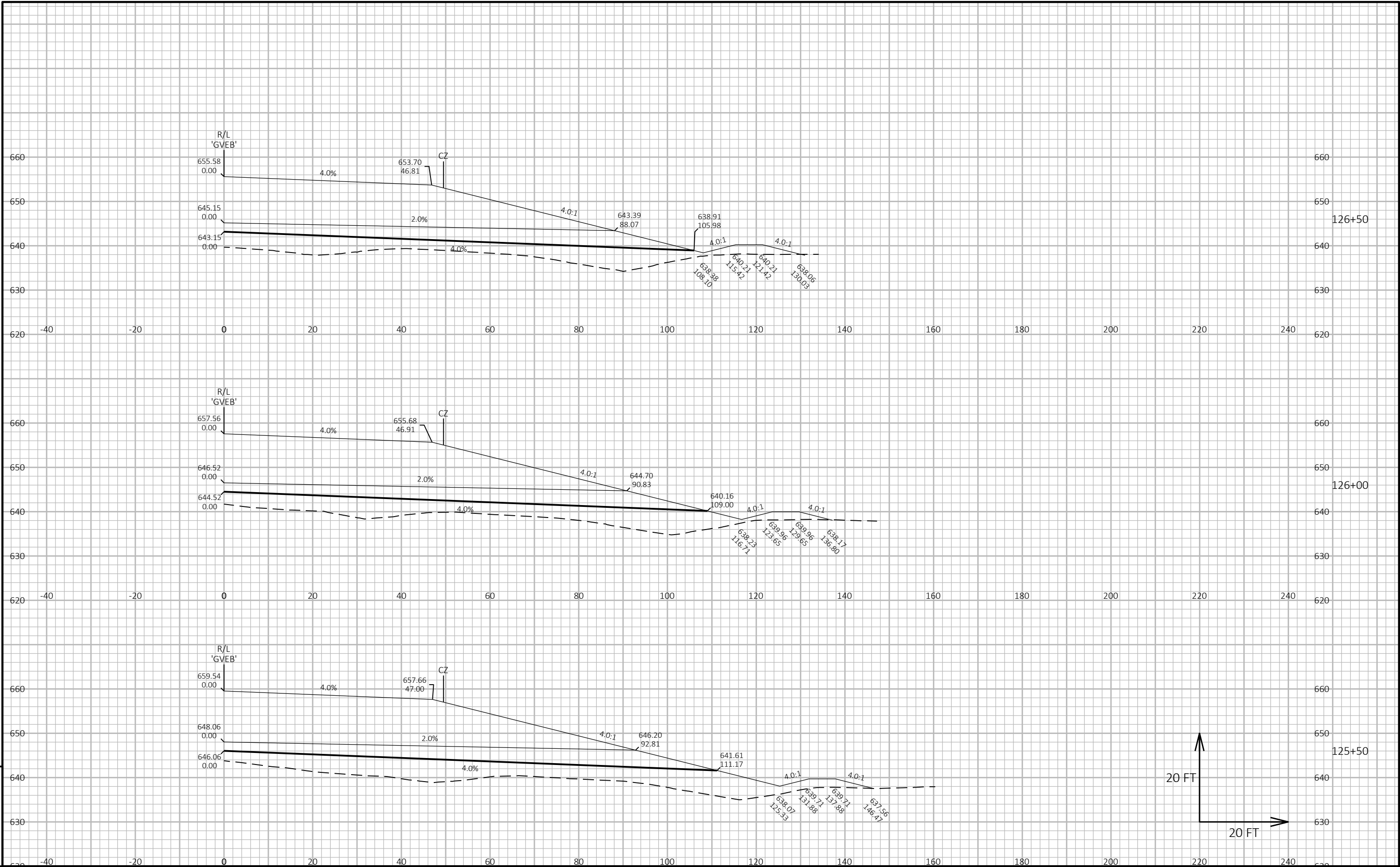


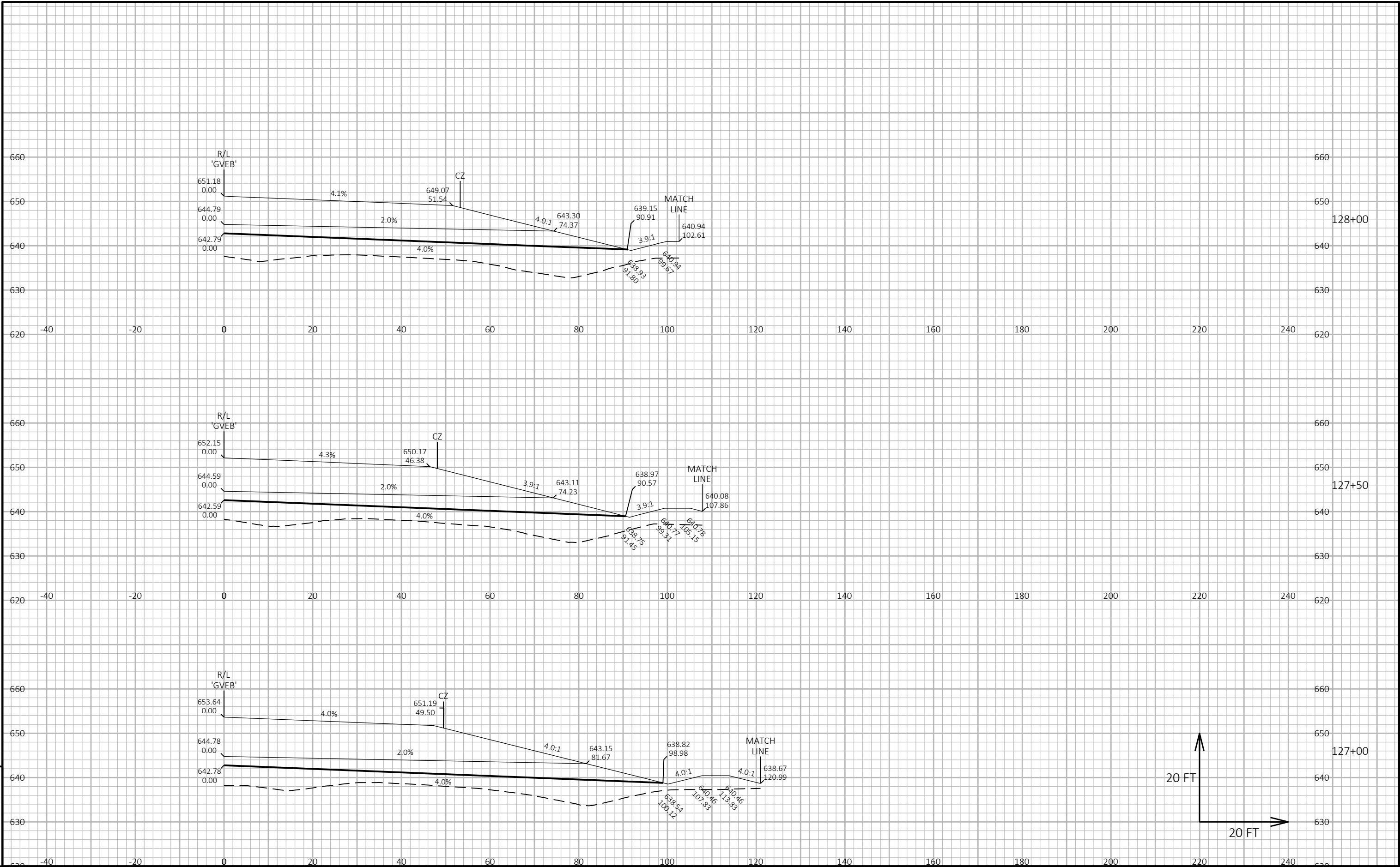
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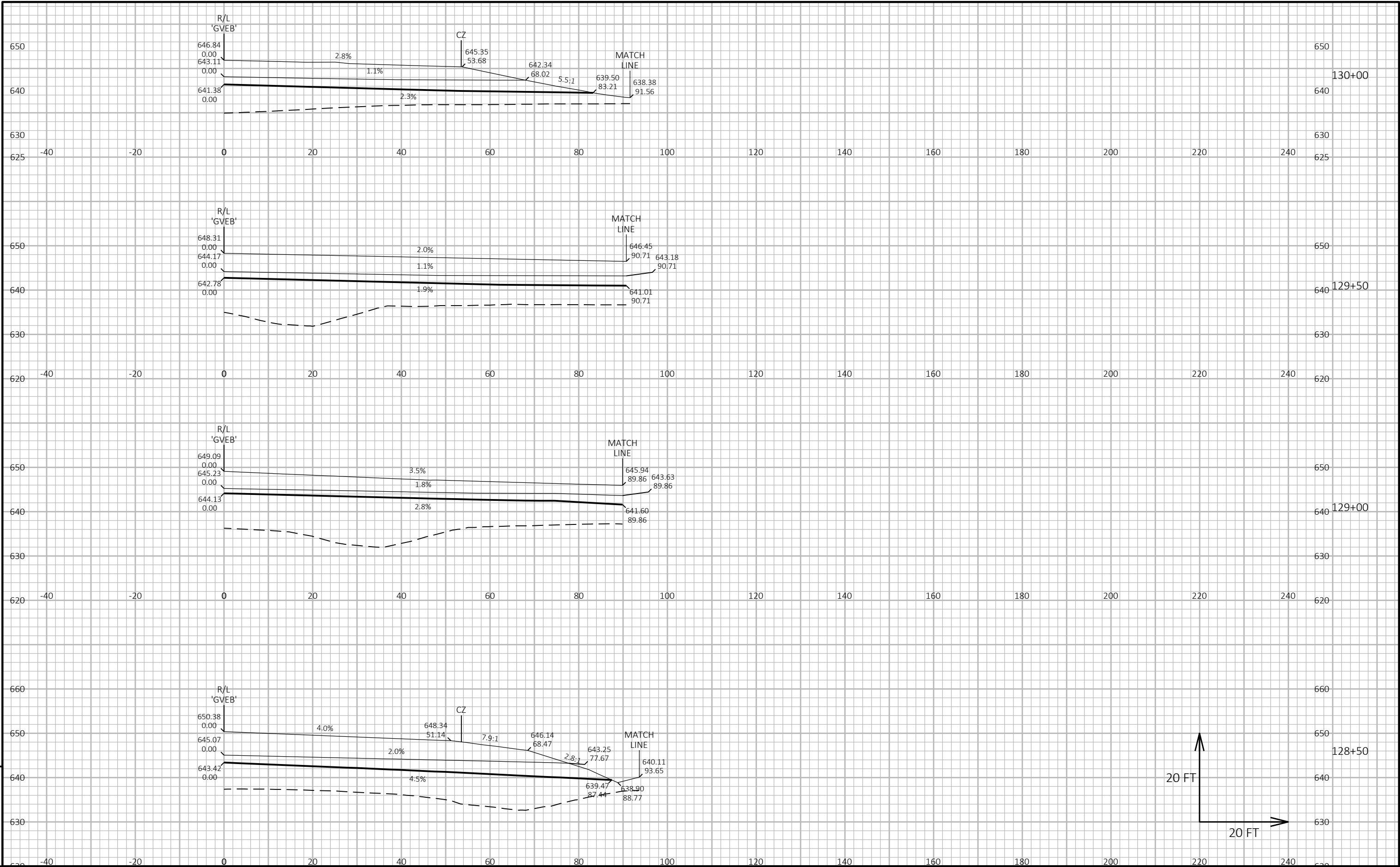
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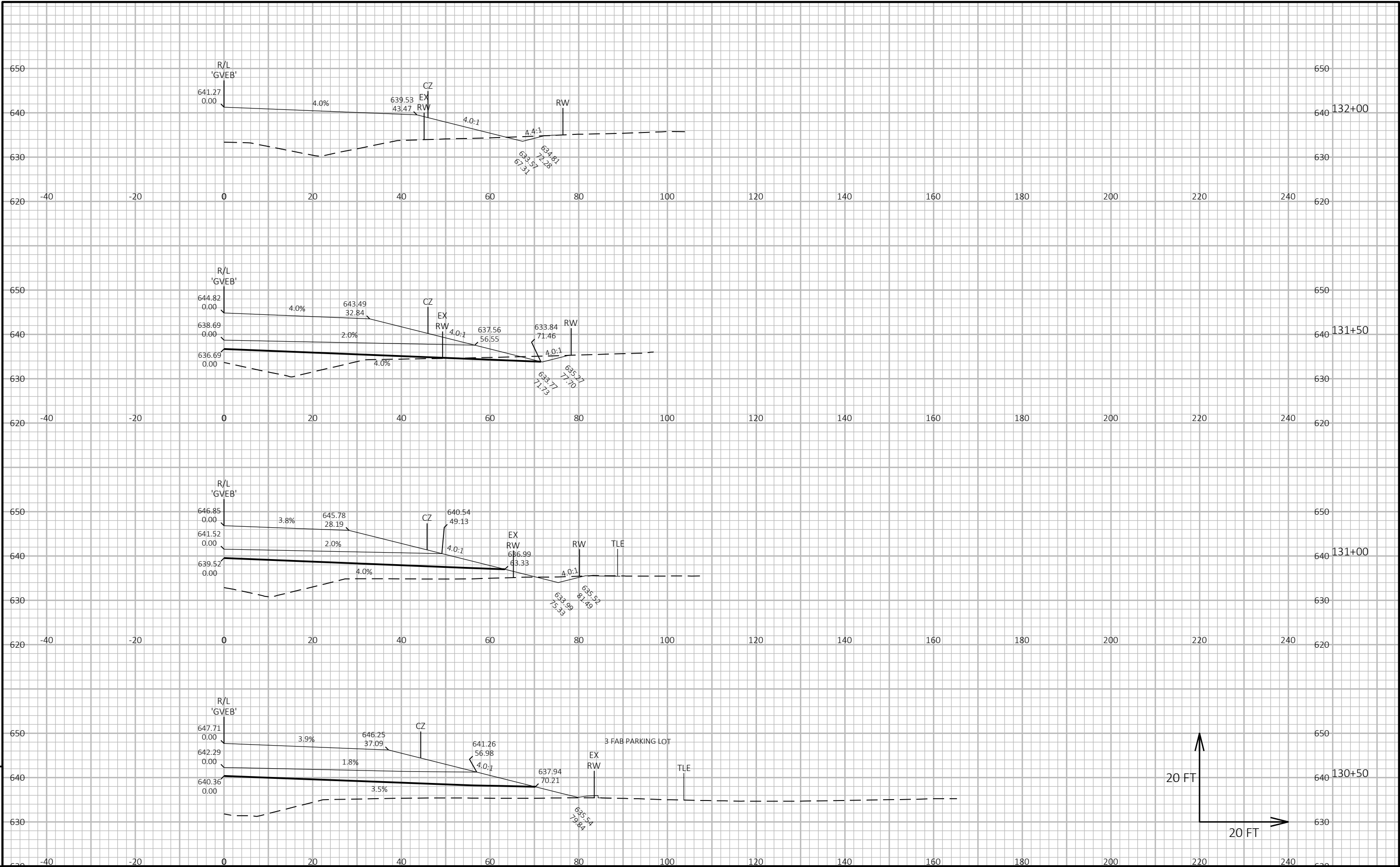
PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS:	SOUTHBRIDGE - EB RT	SHEET	E
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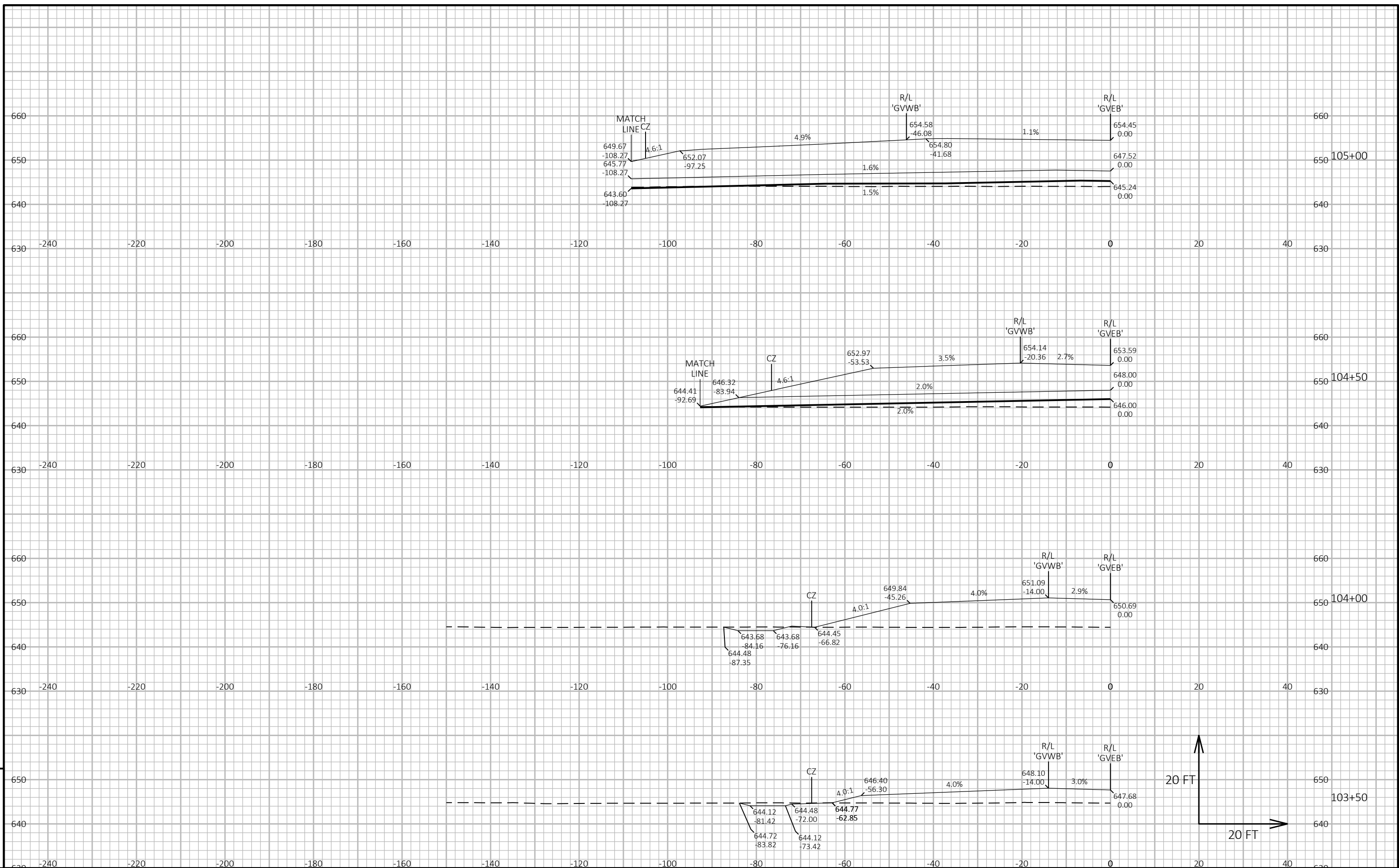


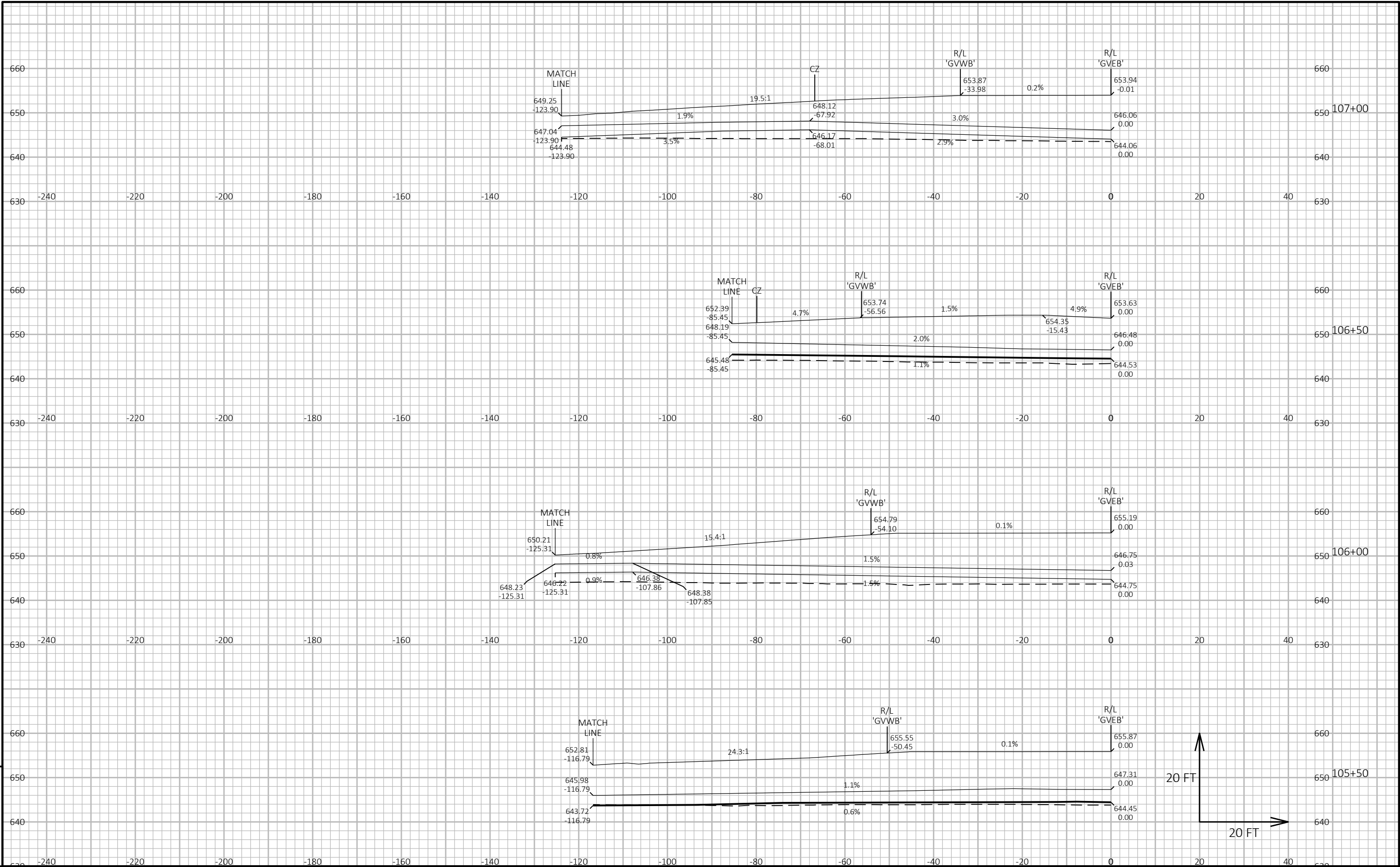


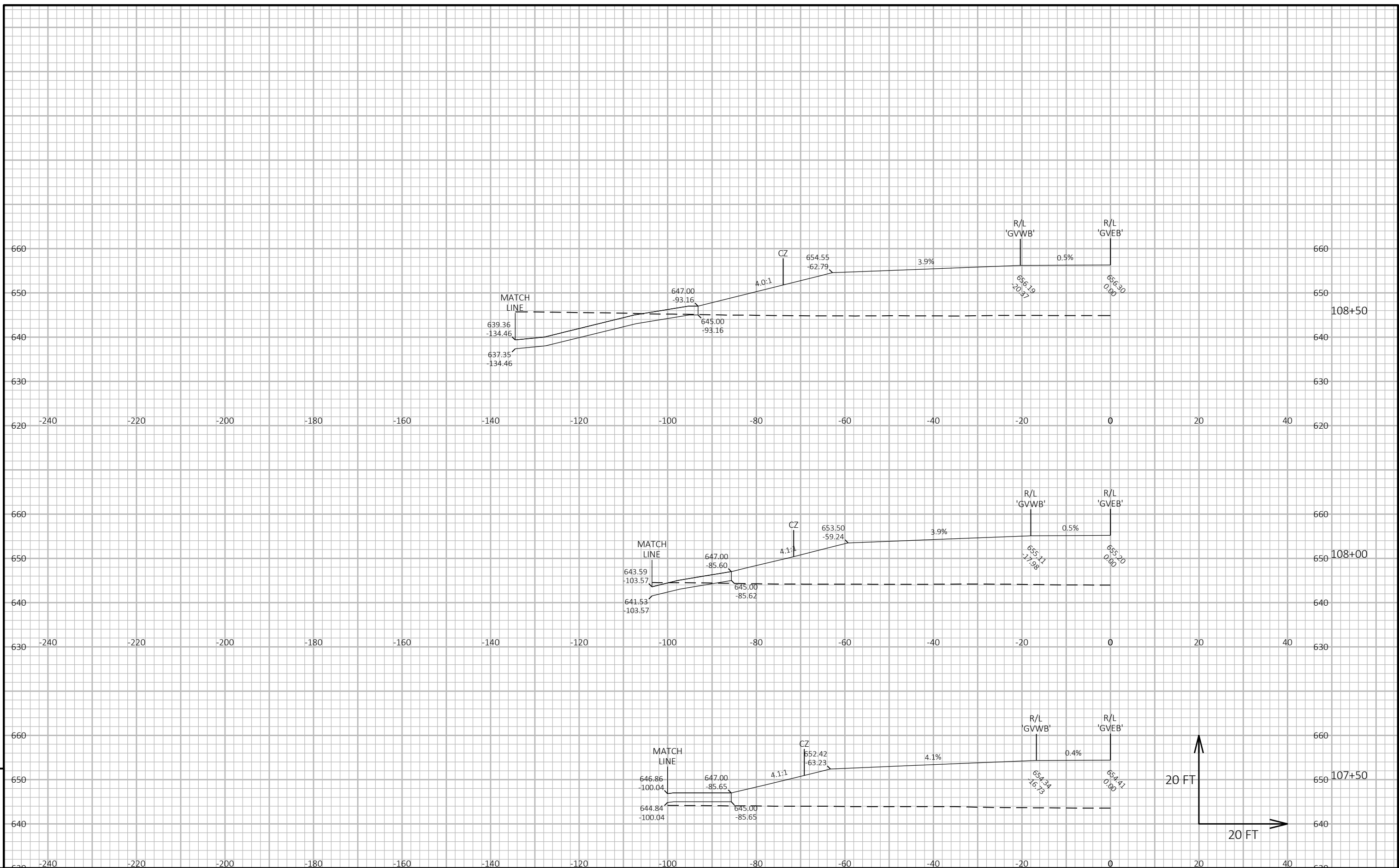


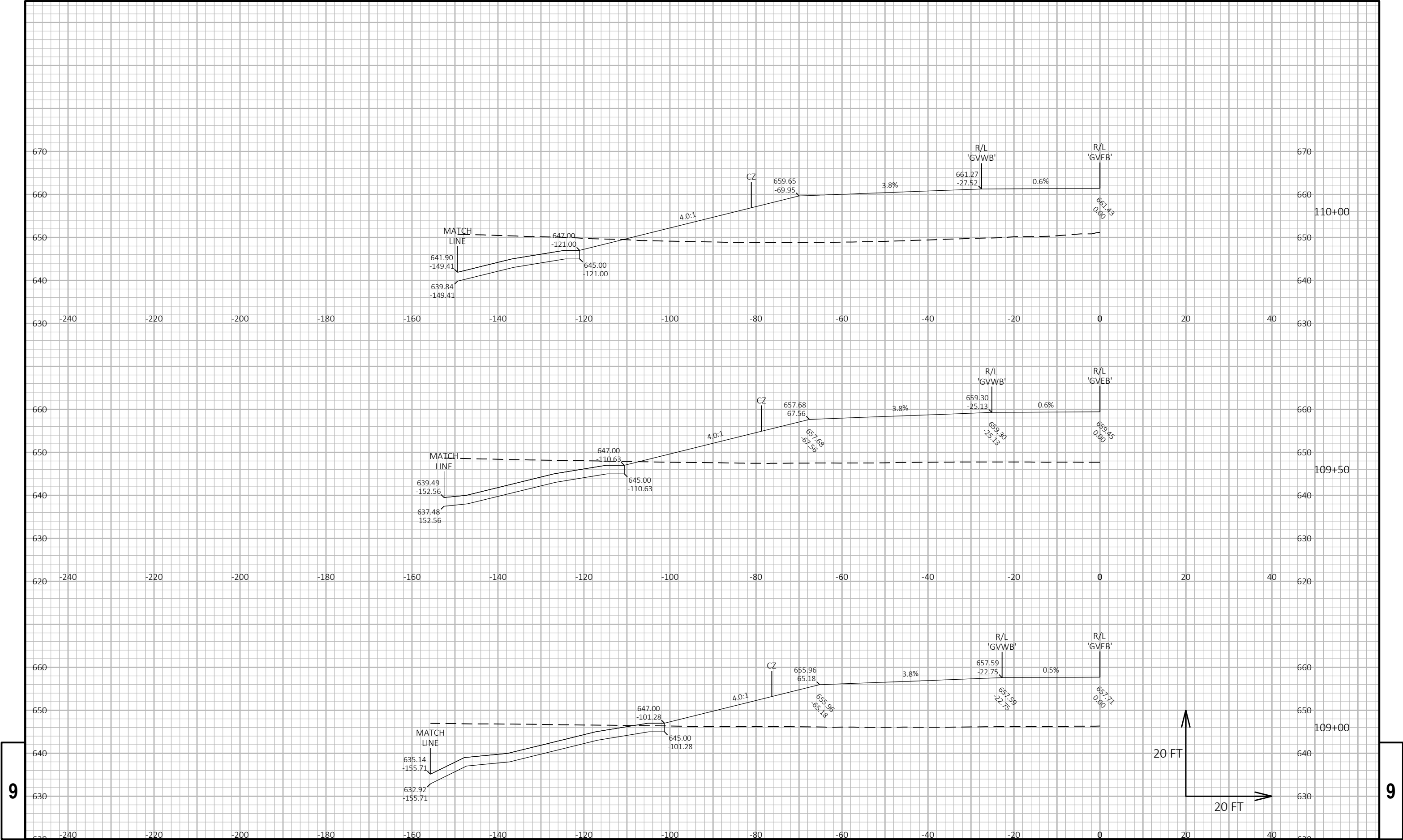








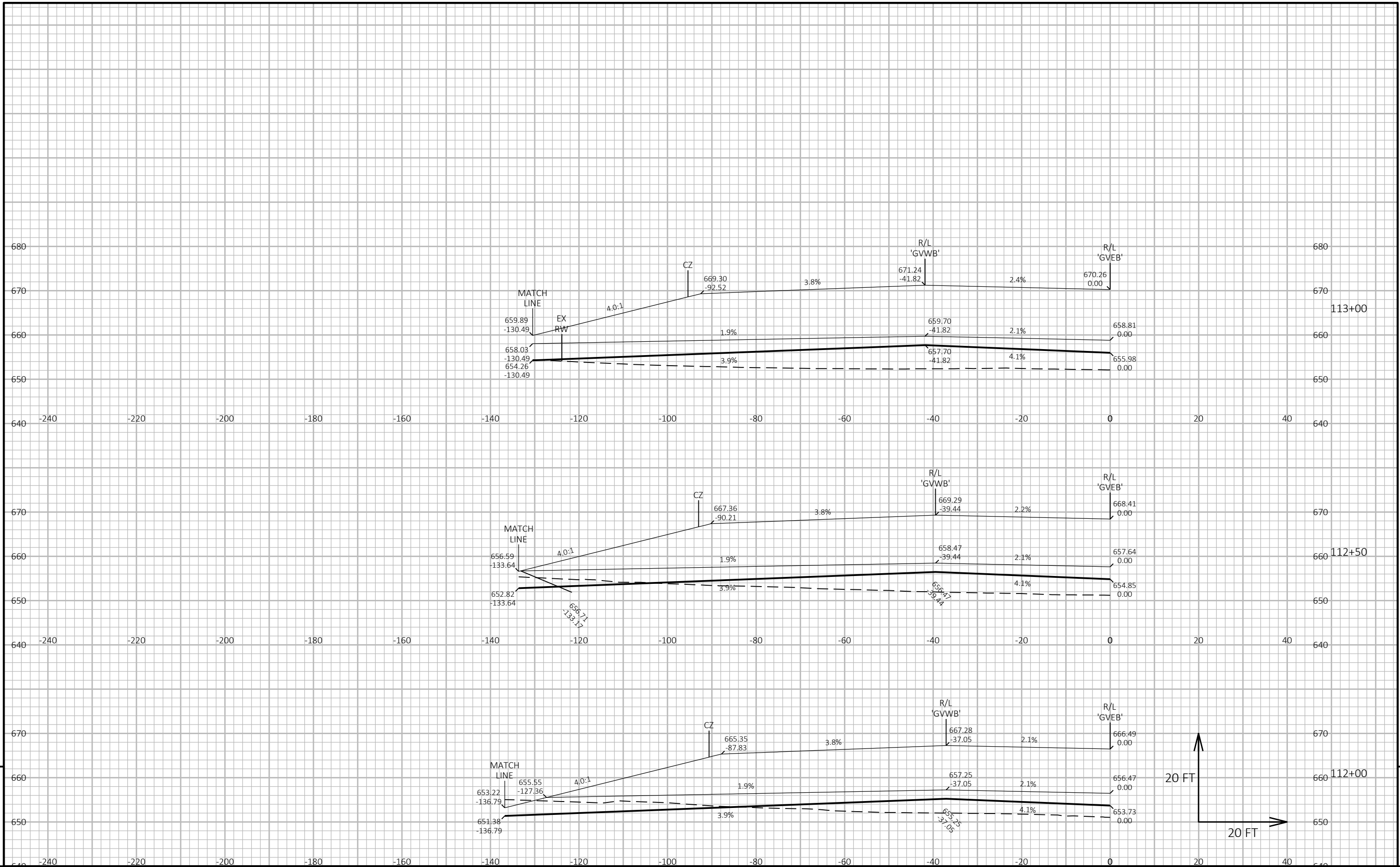


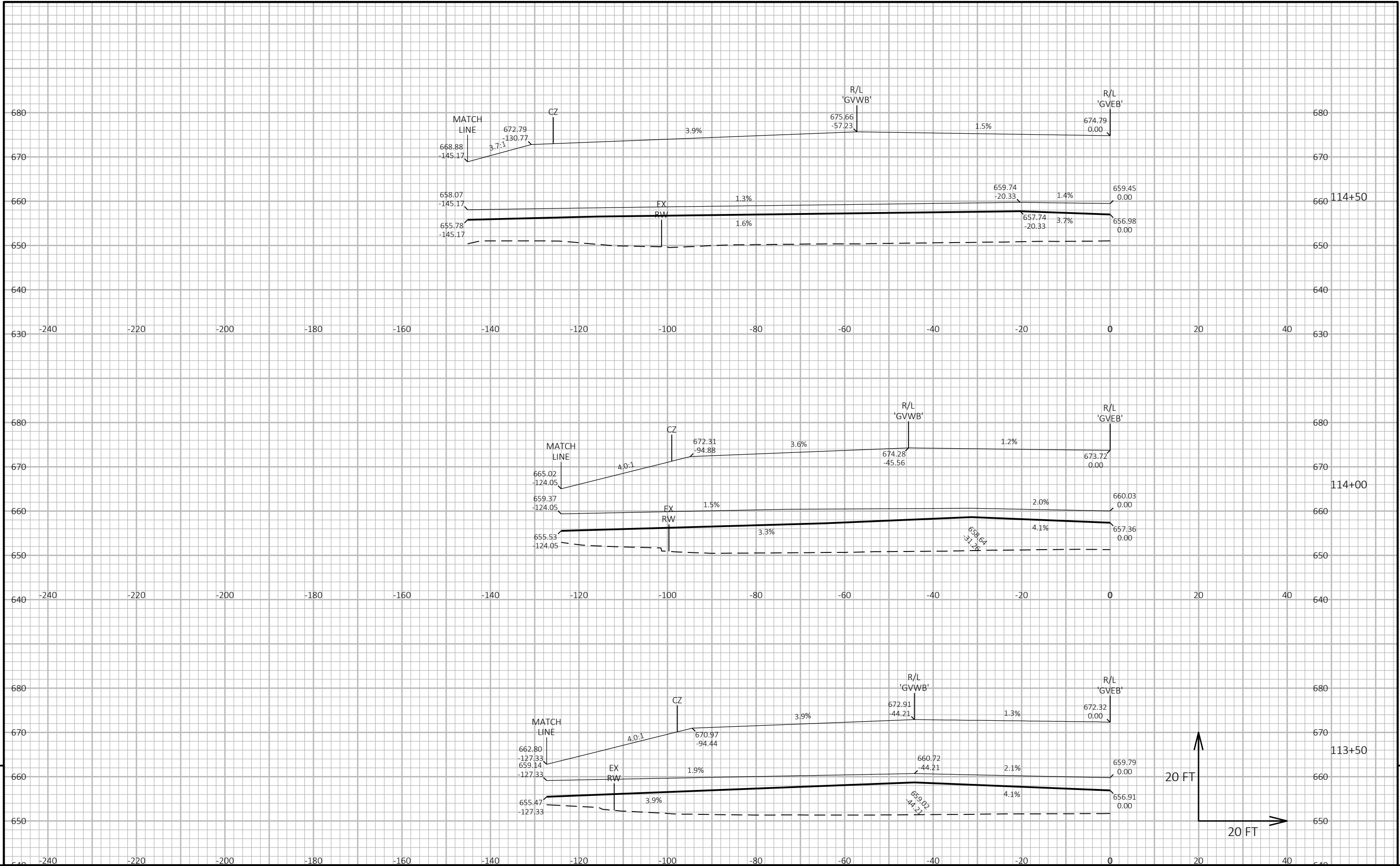


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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - EB LT	SHEET E
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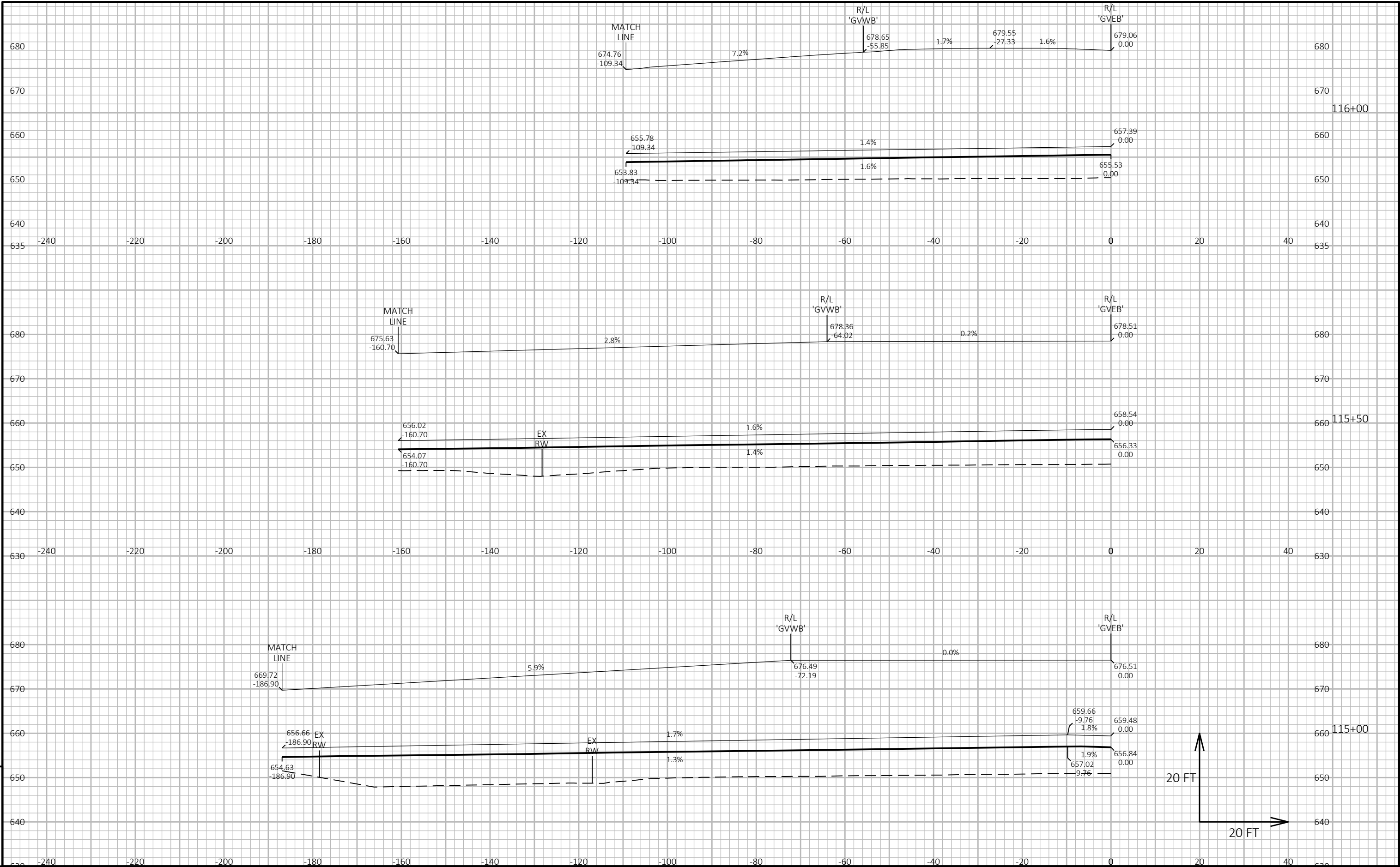


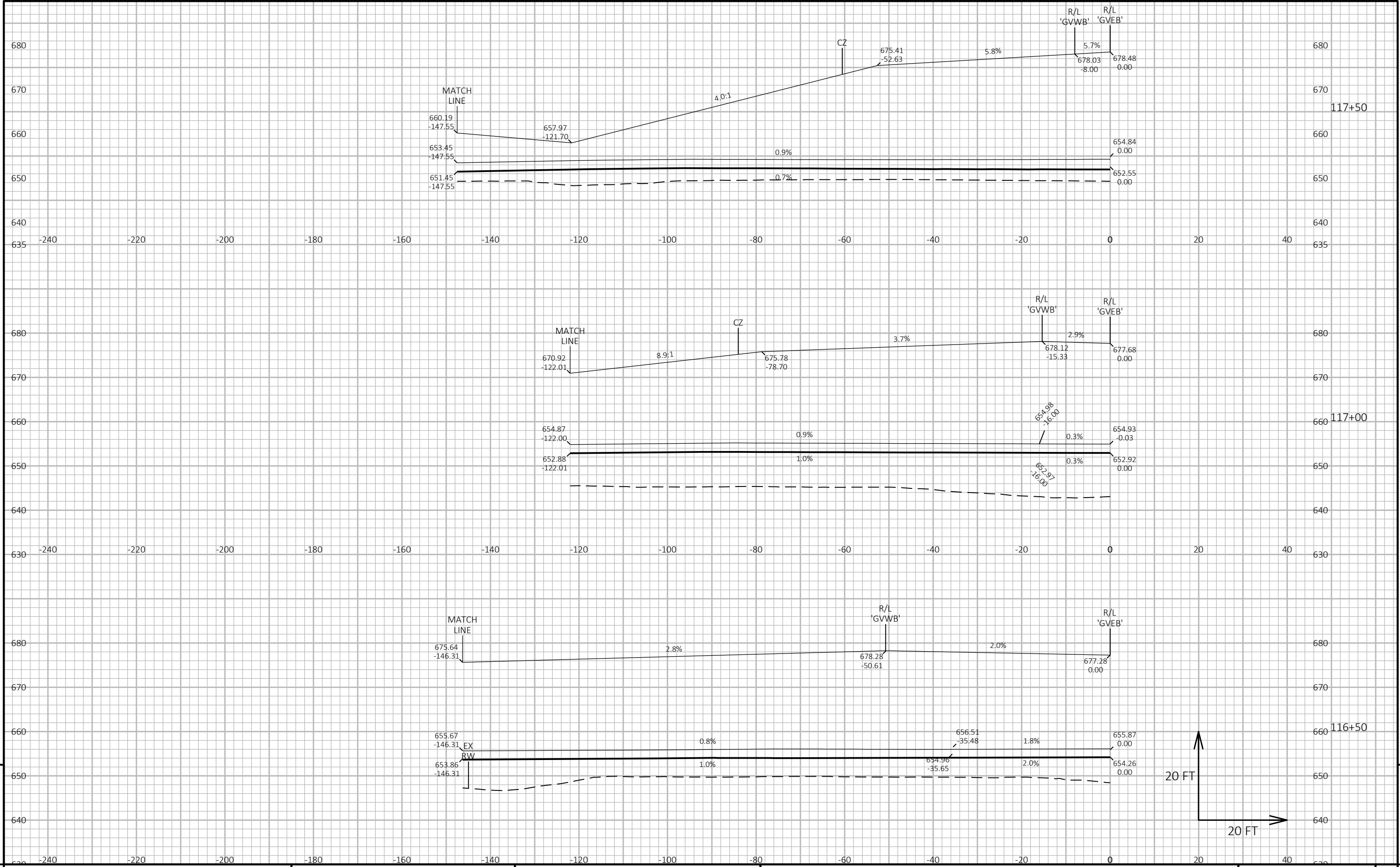


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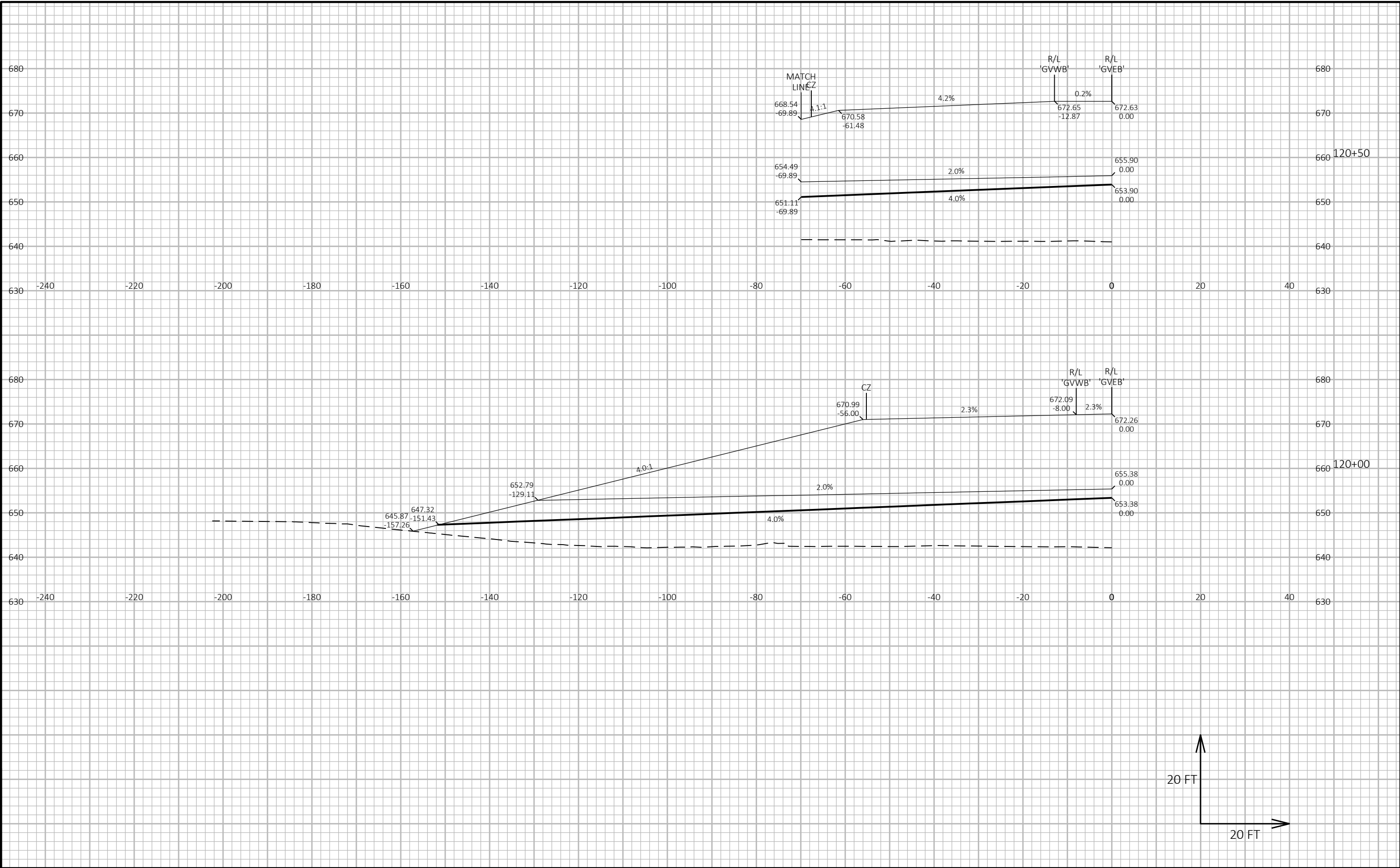
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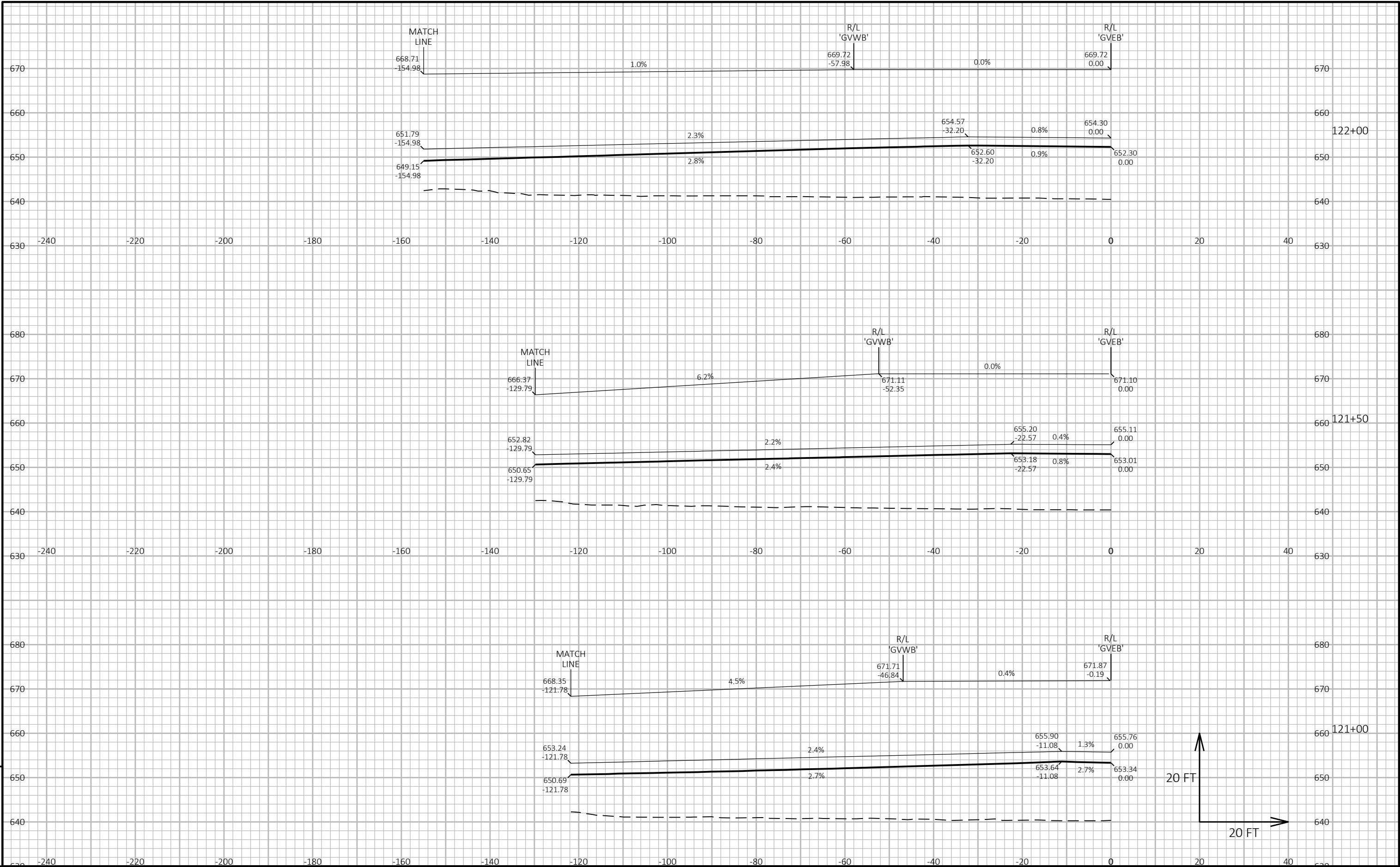
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - EB LT	SHEET E
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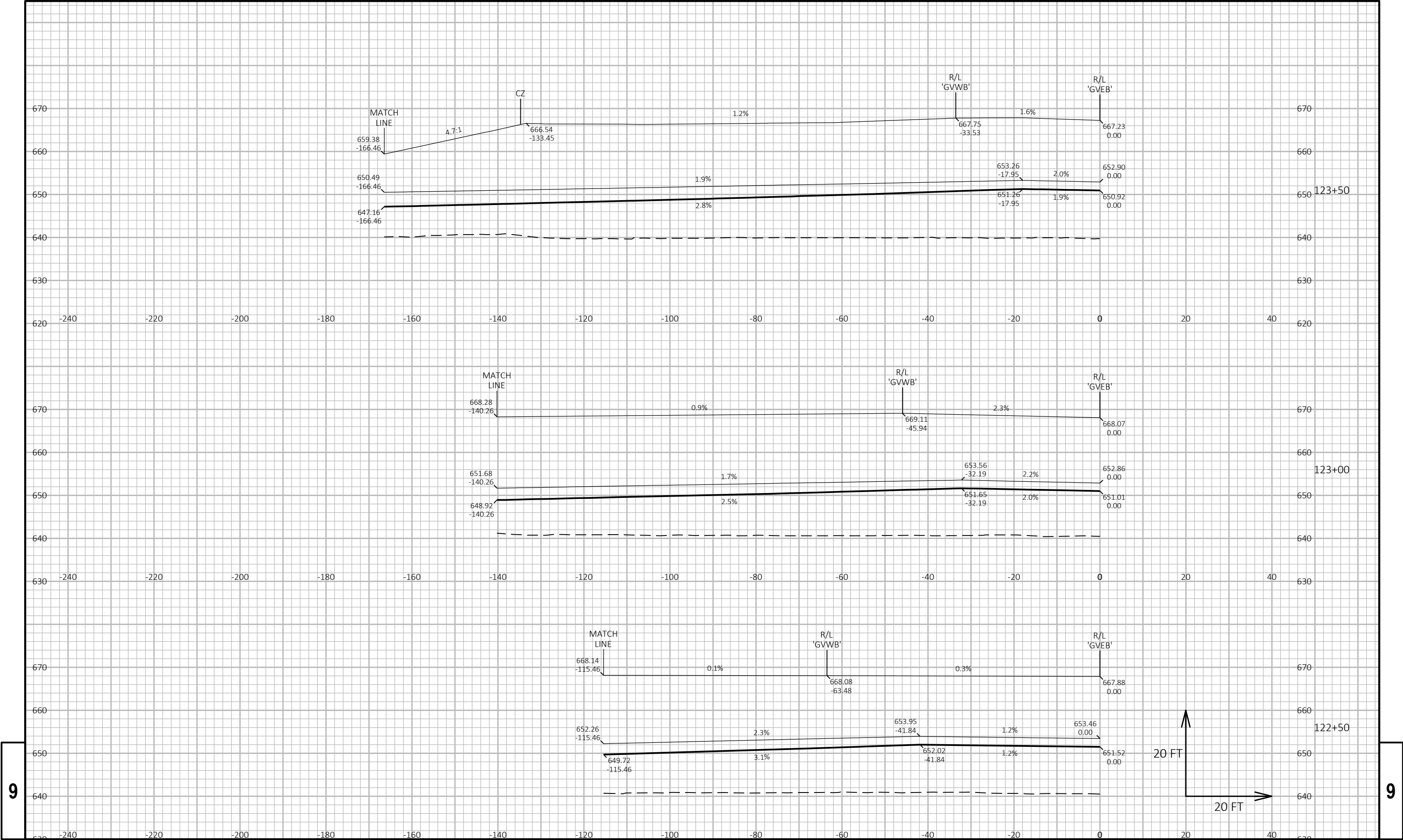




PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - EB LT	SHEET E
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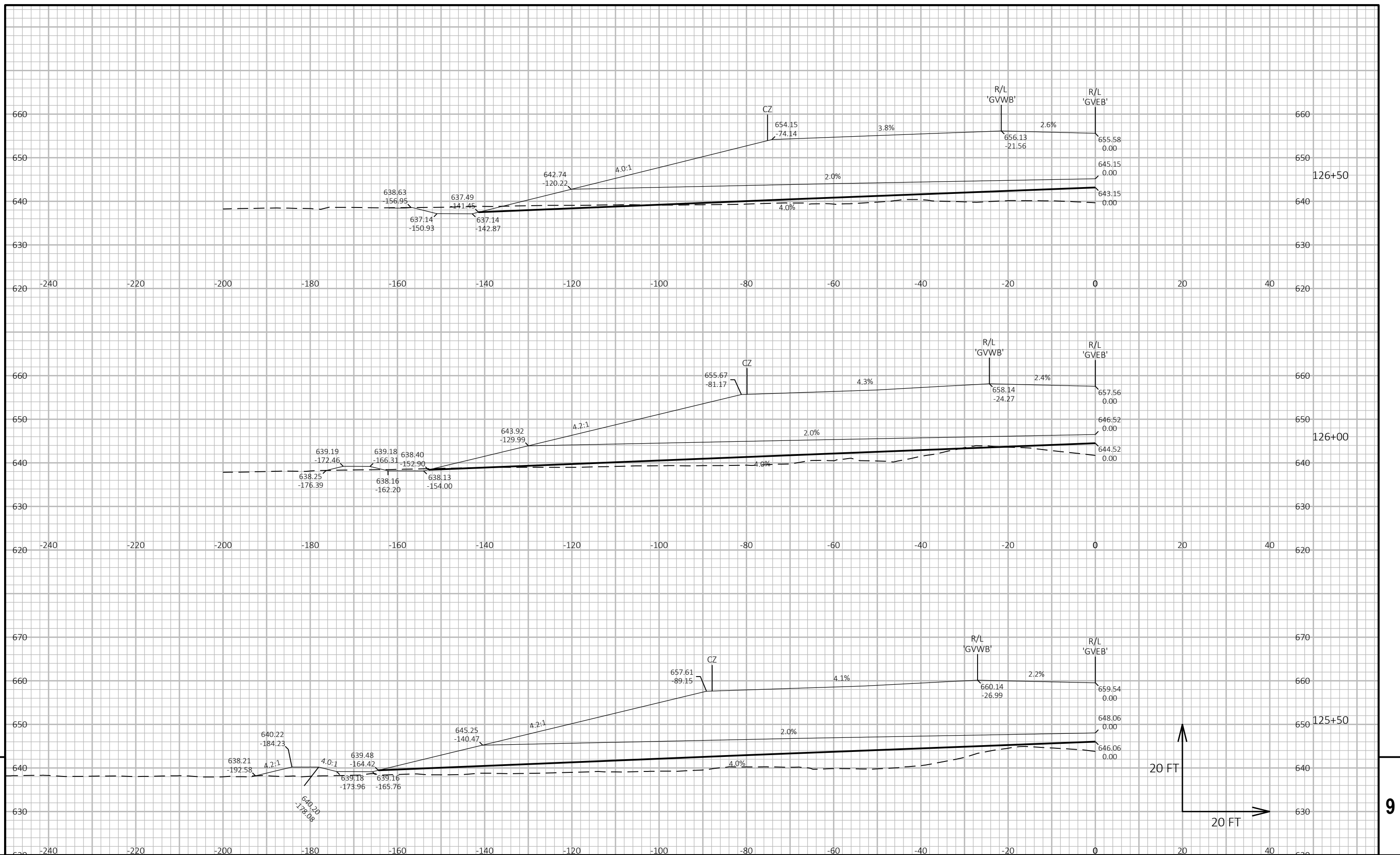




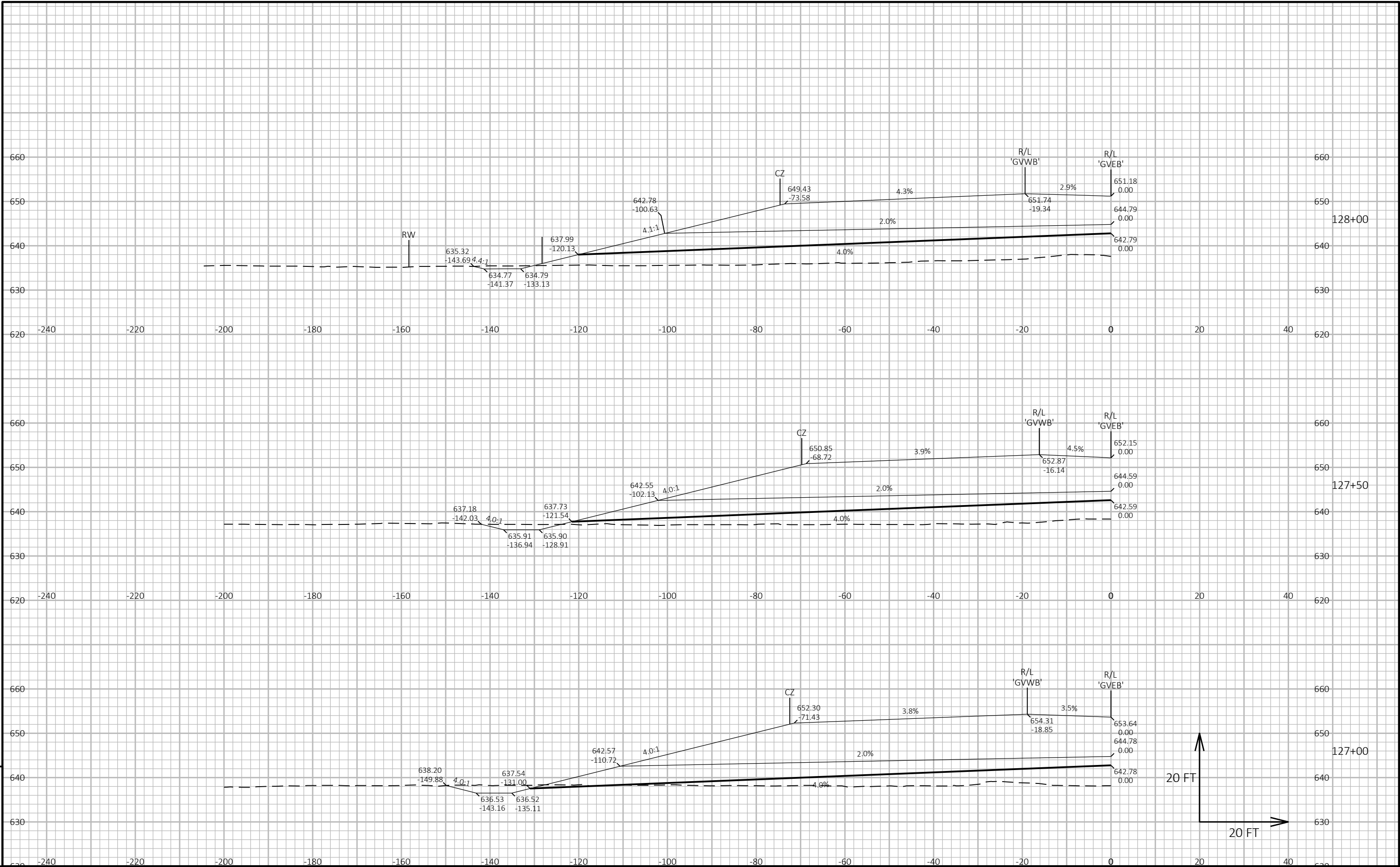
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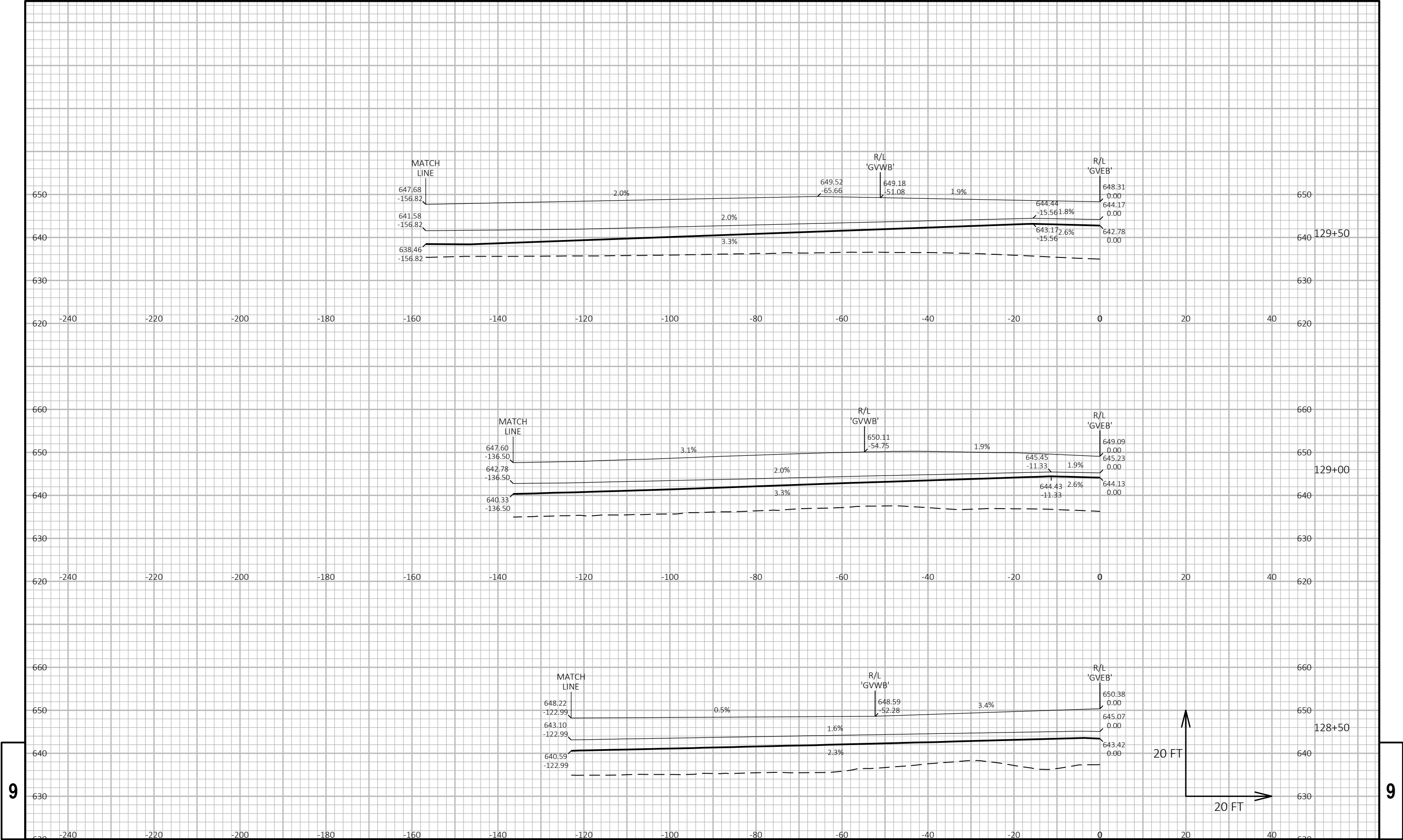
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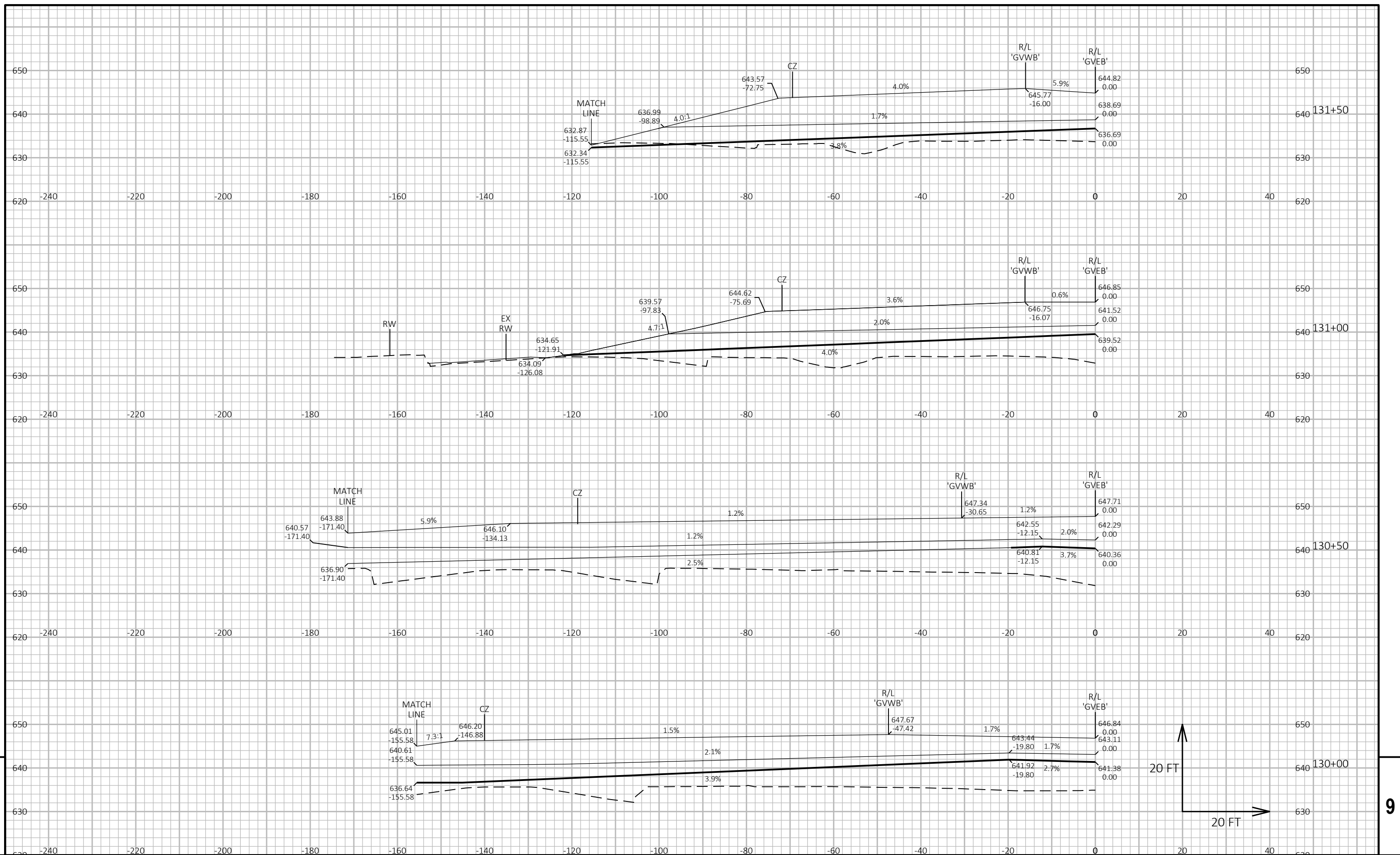
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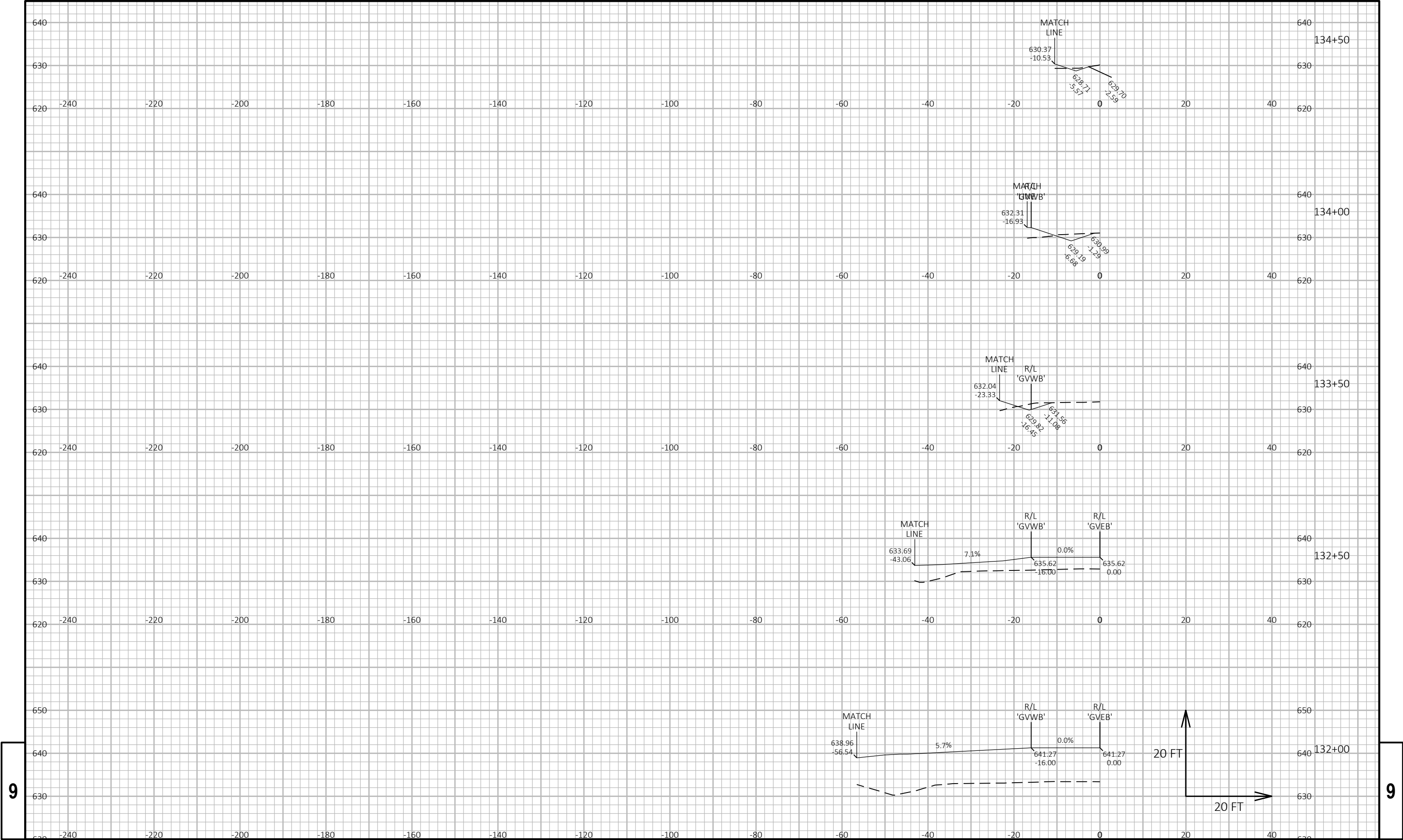


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - EB LT	SHEET	E
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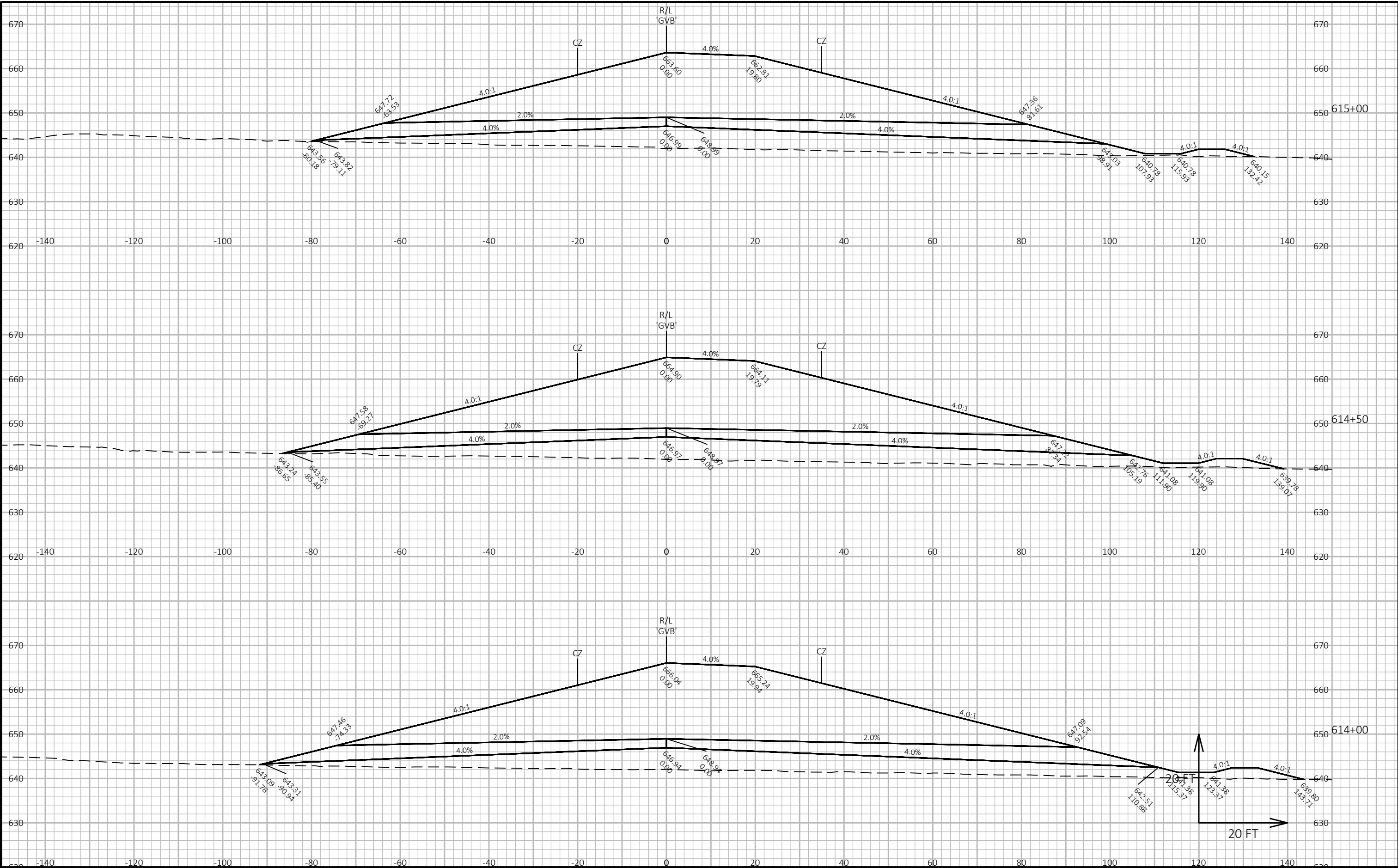


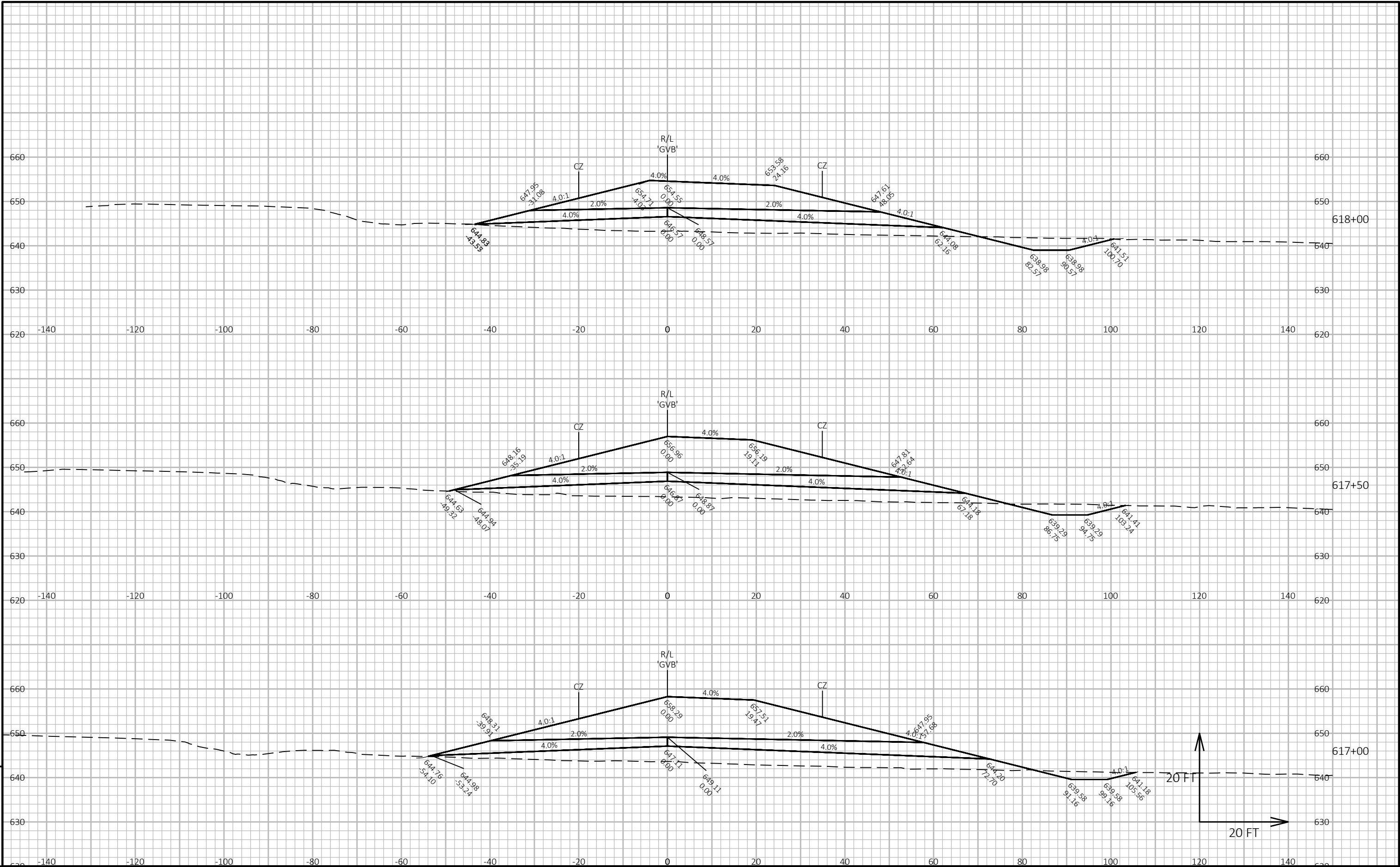


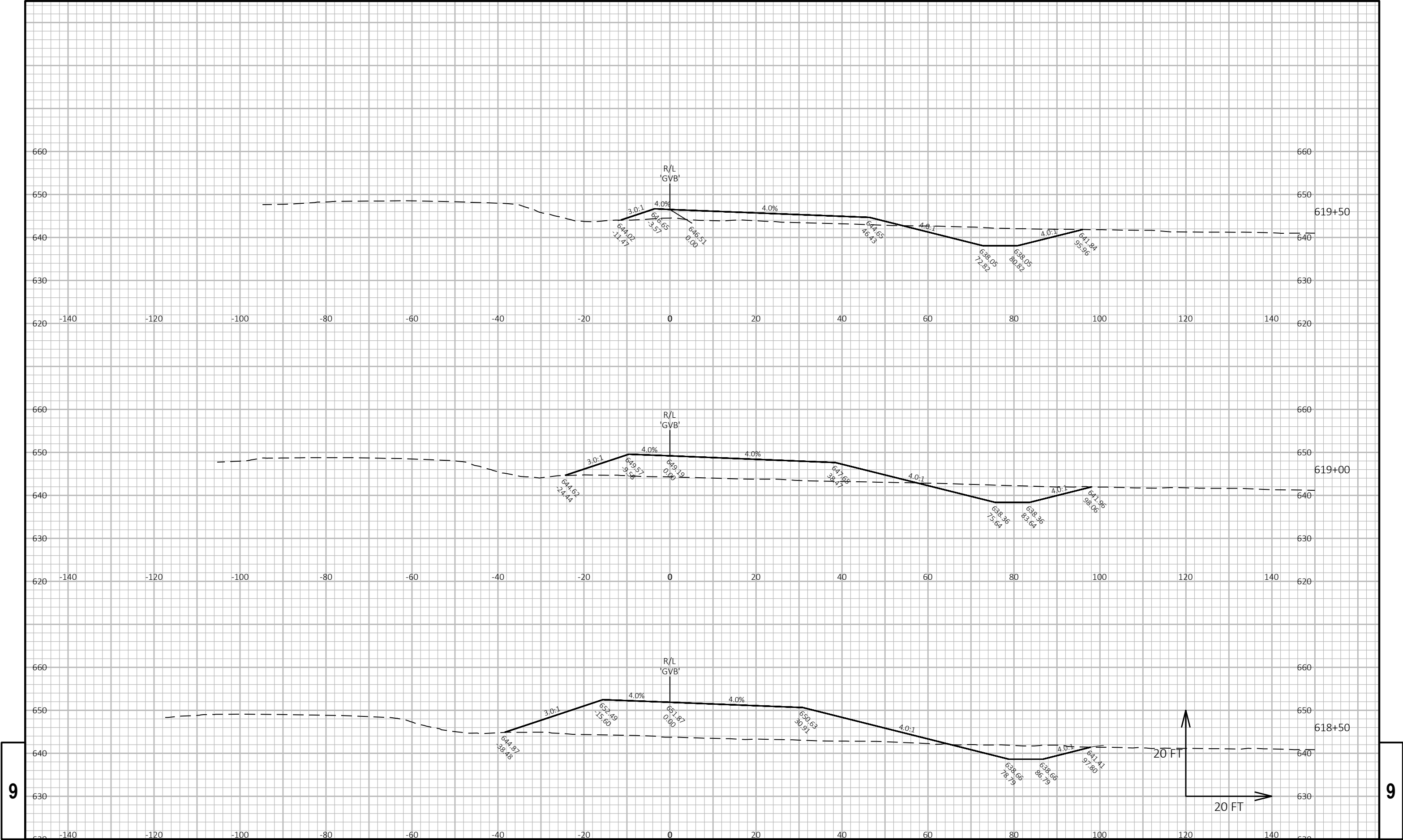
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - EB LT	SHEET E
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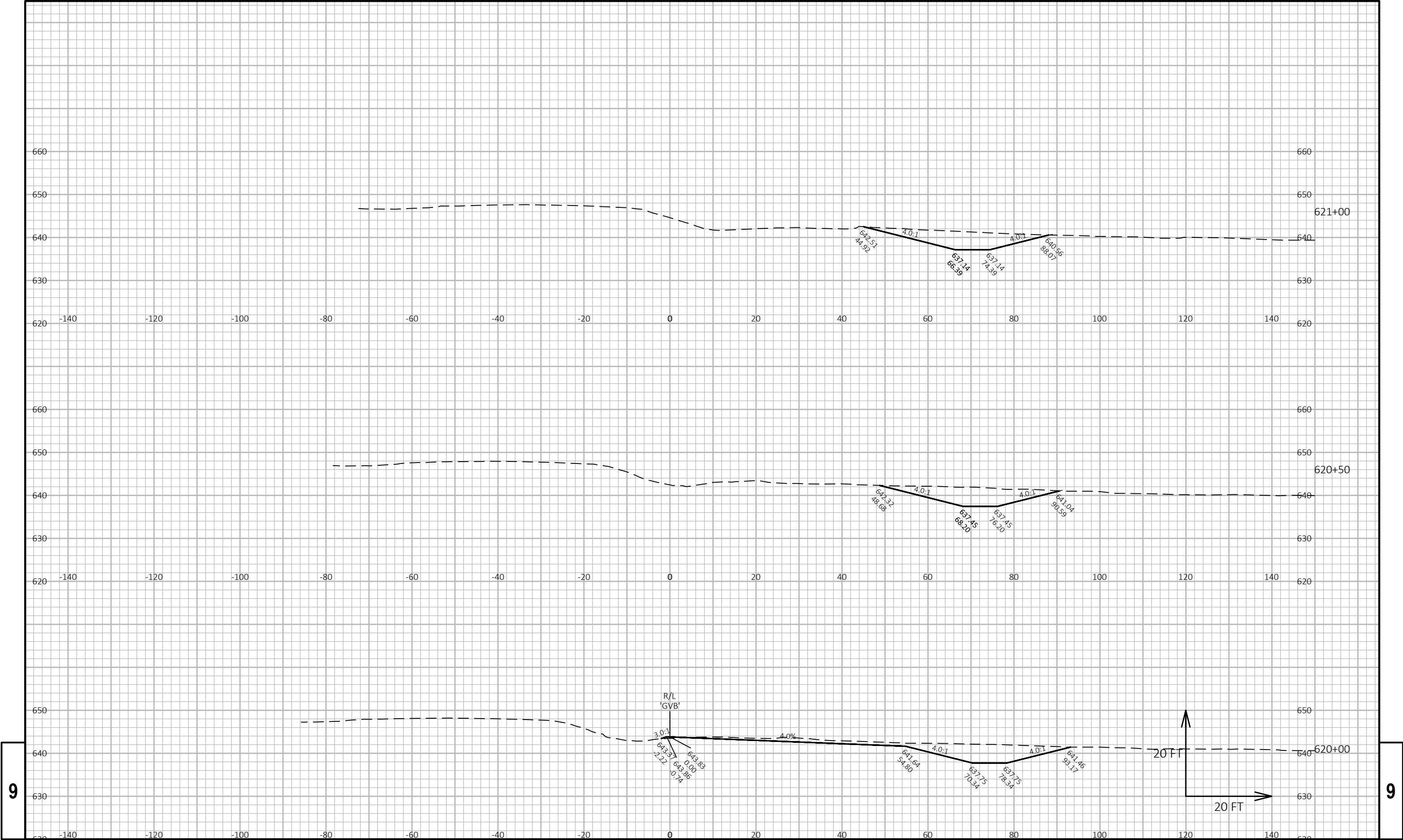


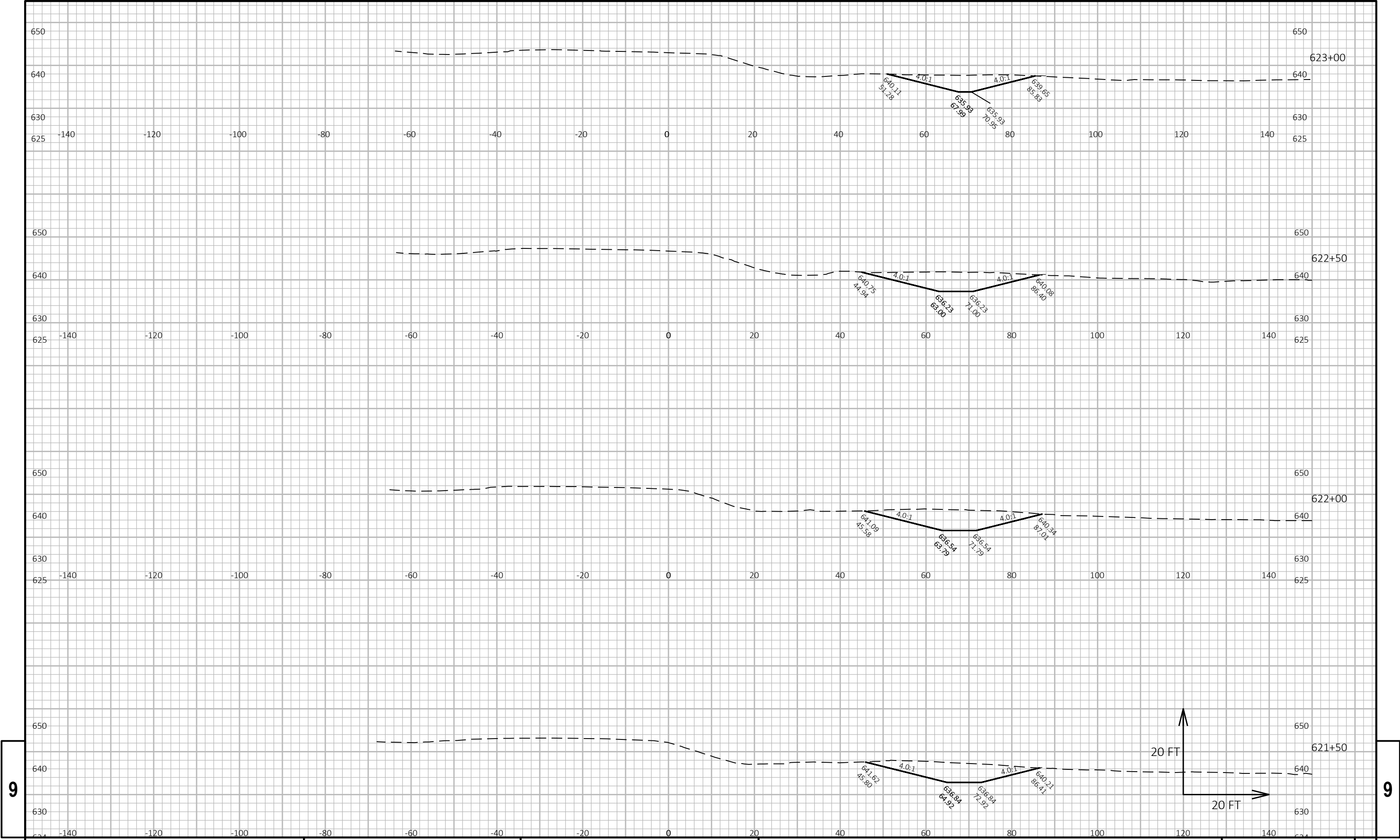


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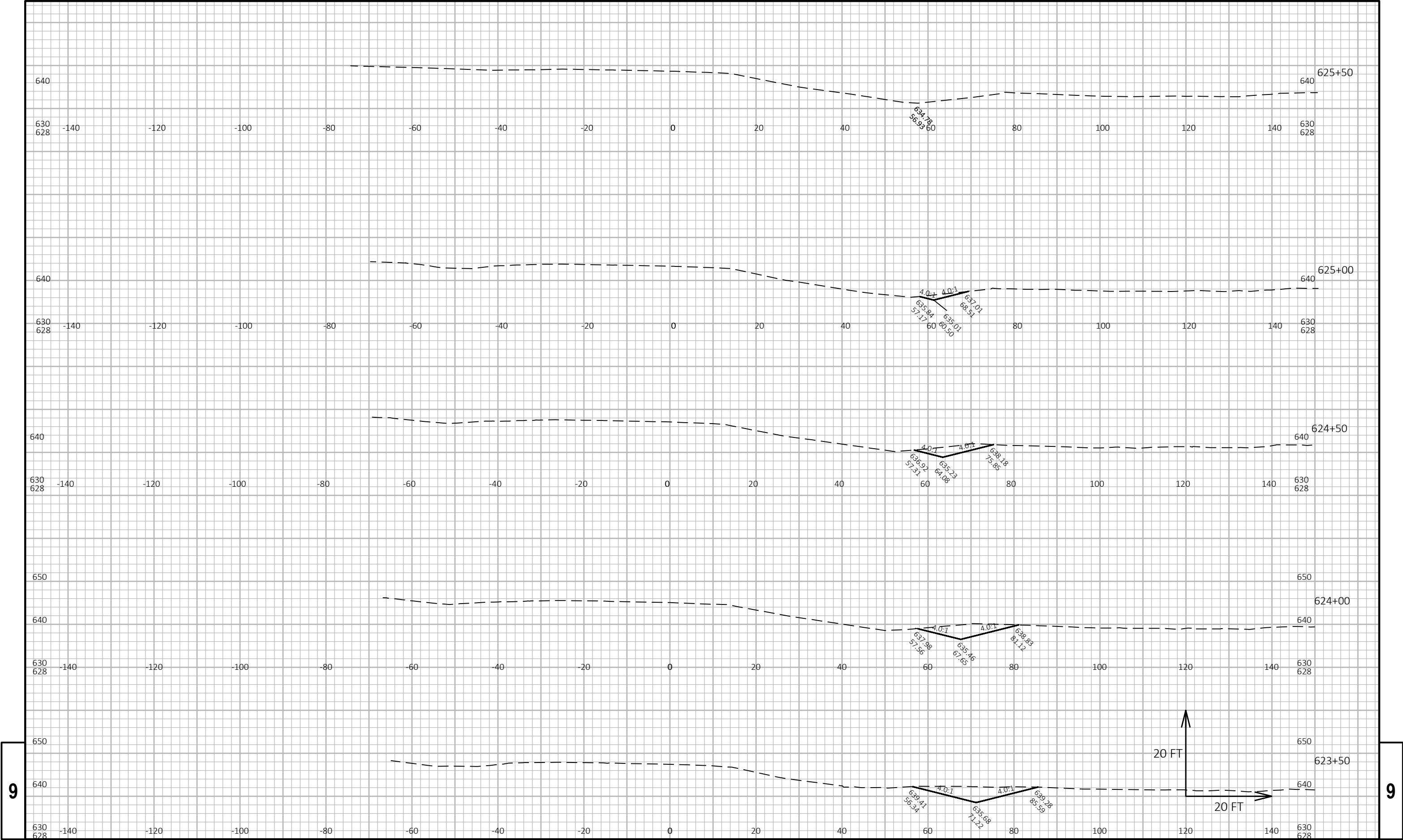
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - RAMP A	SHEET E
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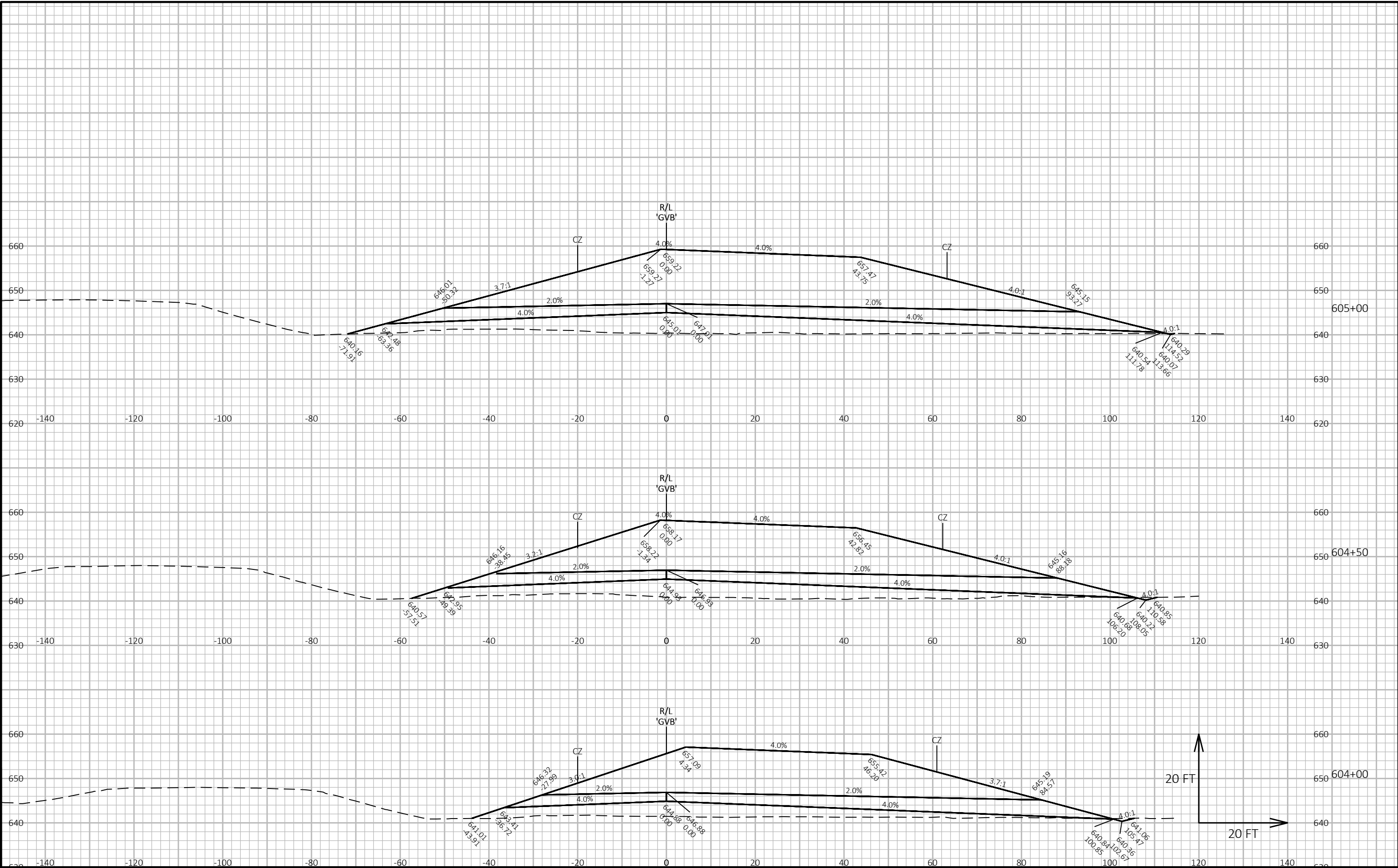
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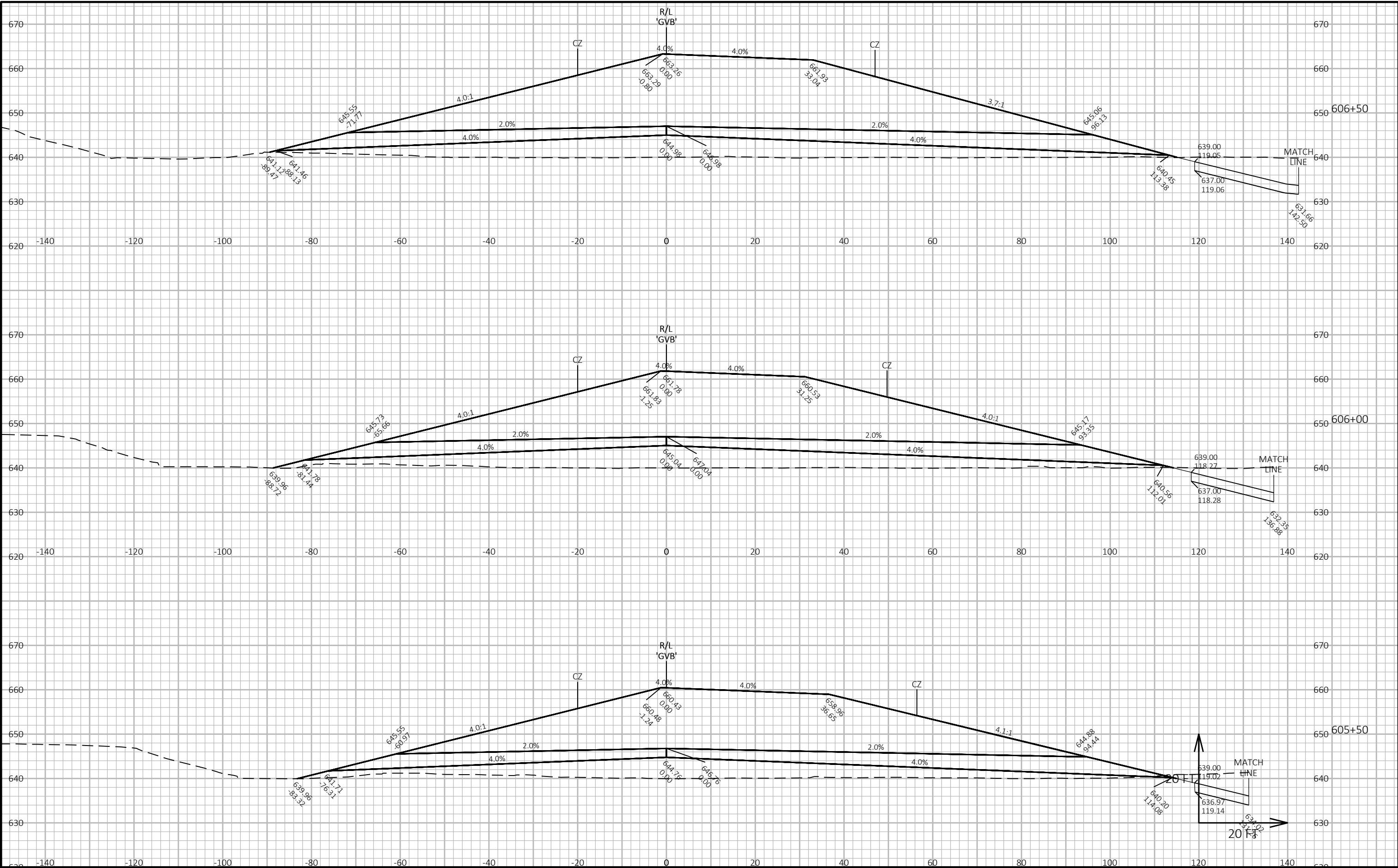
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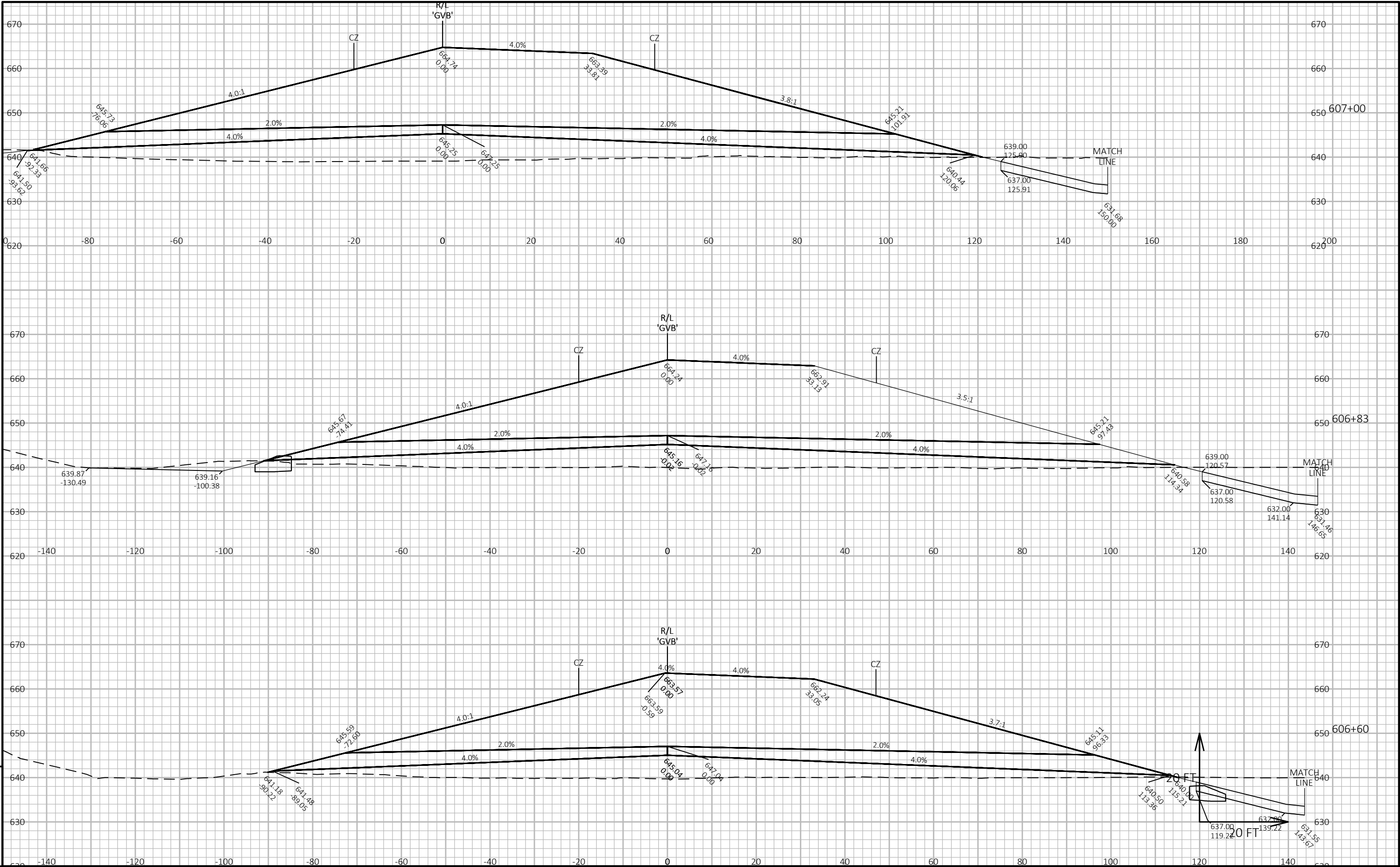


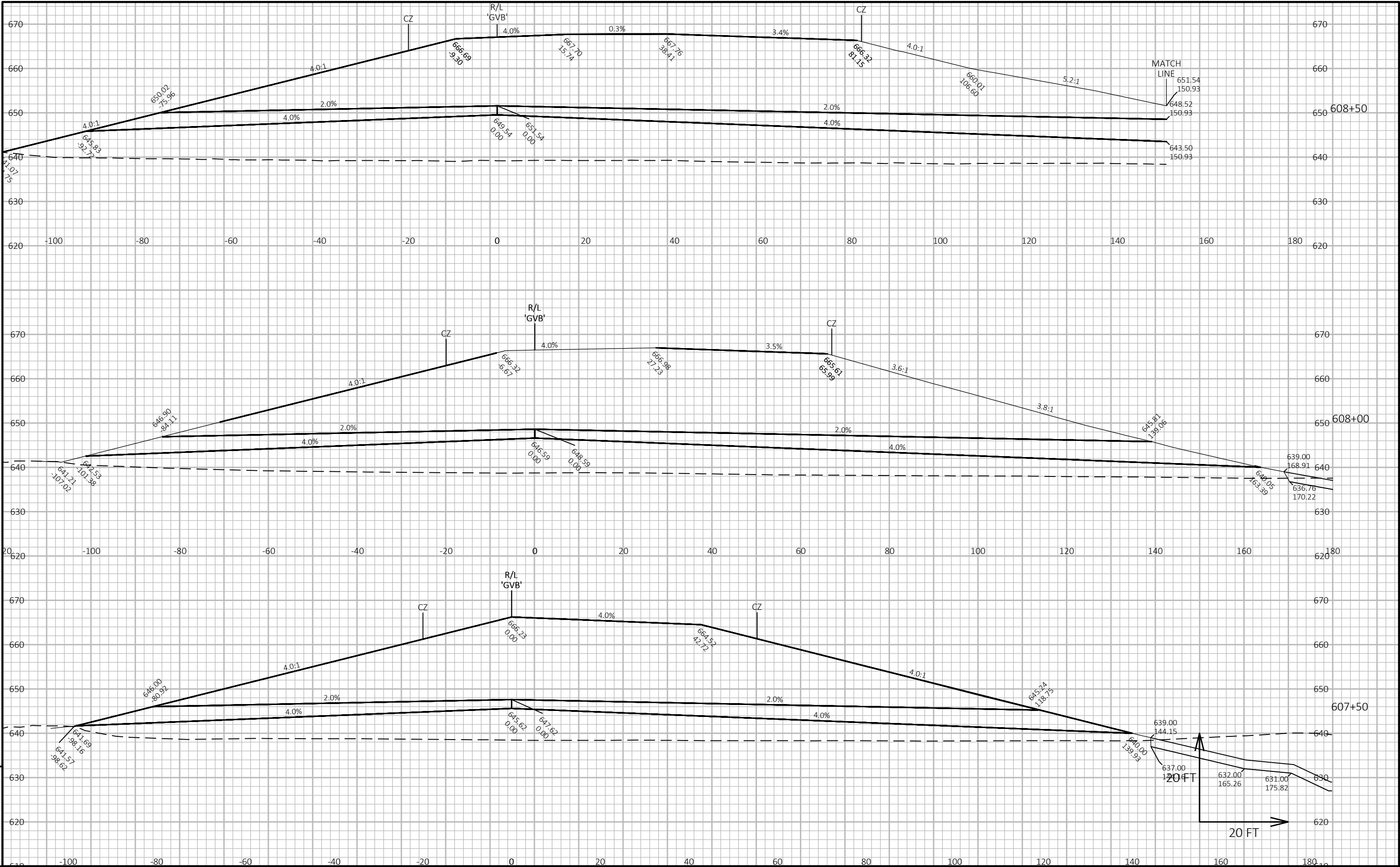
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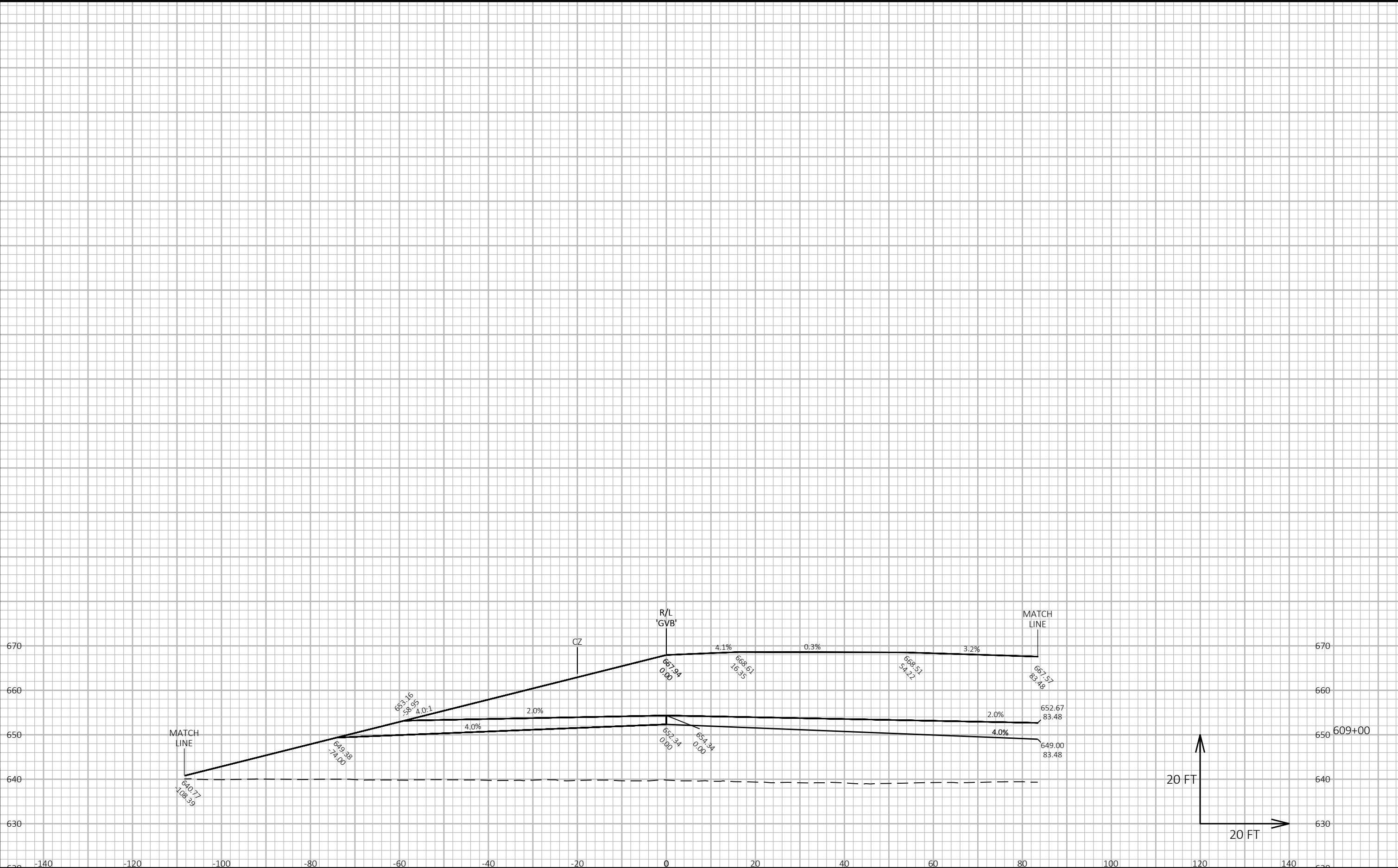






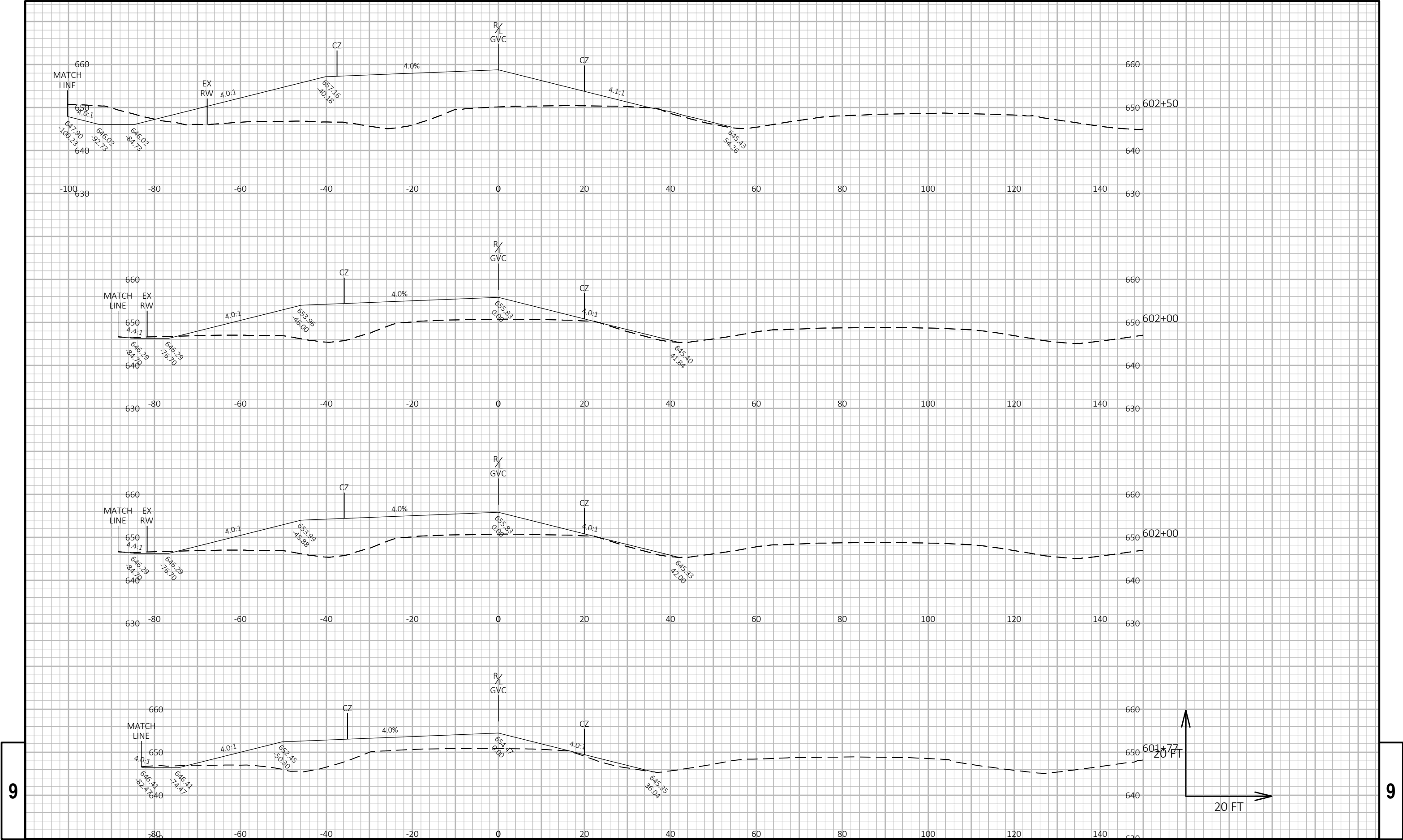
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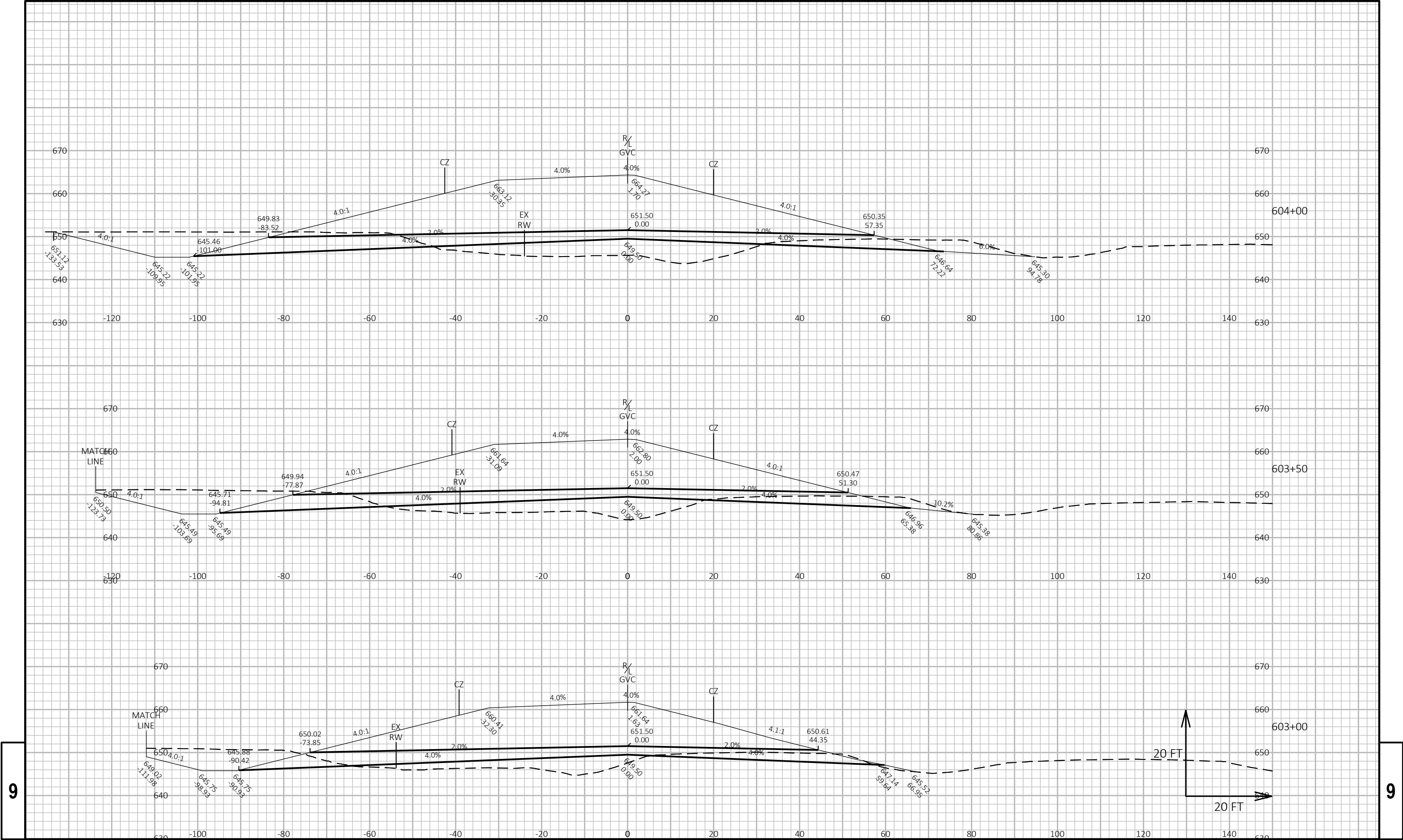
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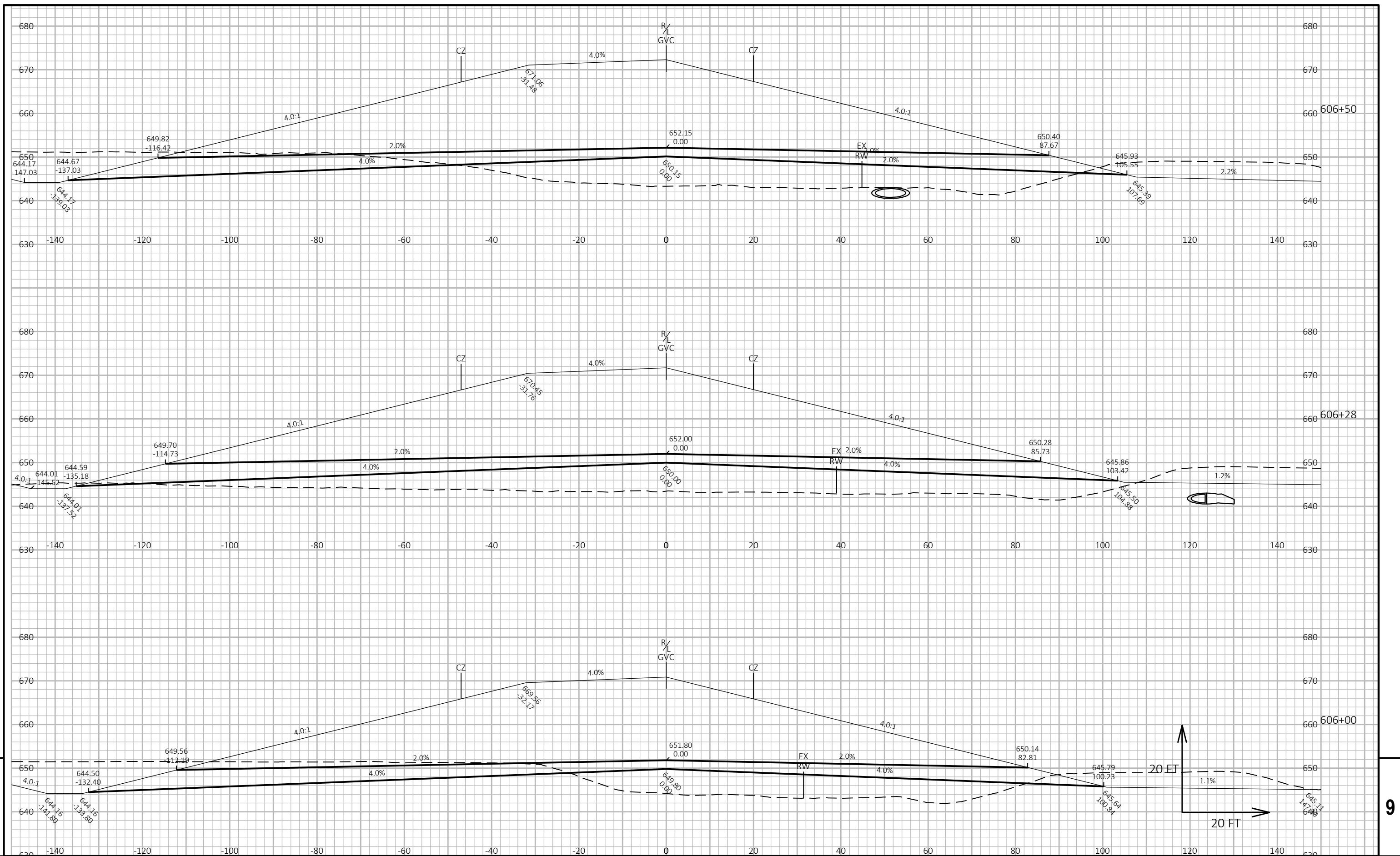
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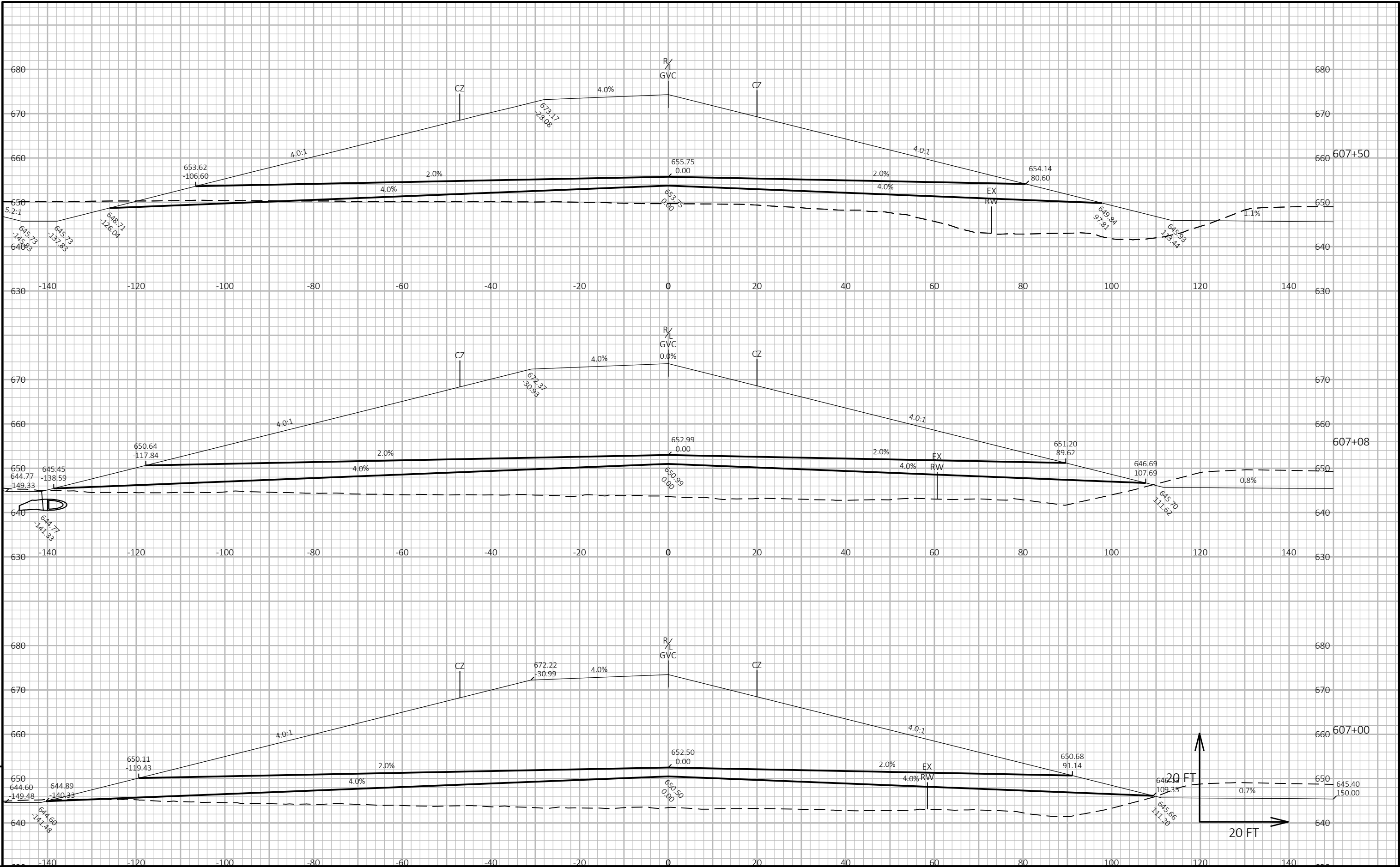
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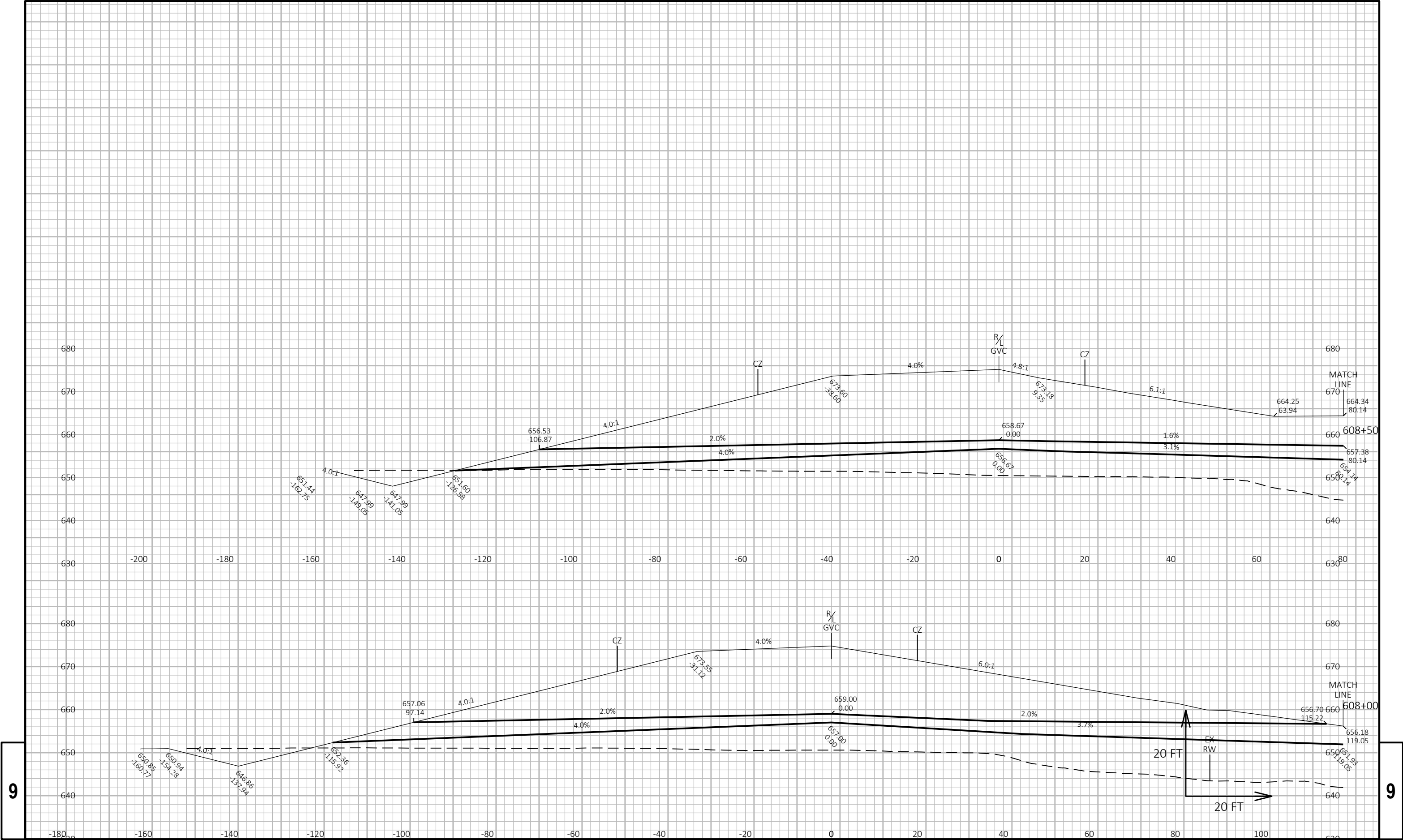
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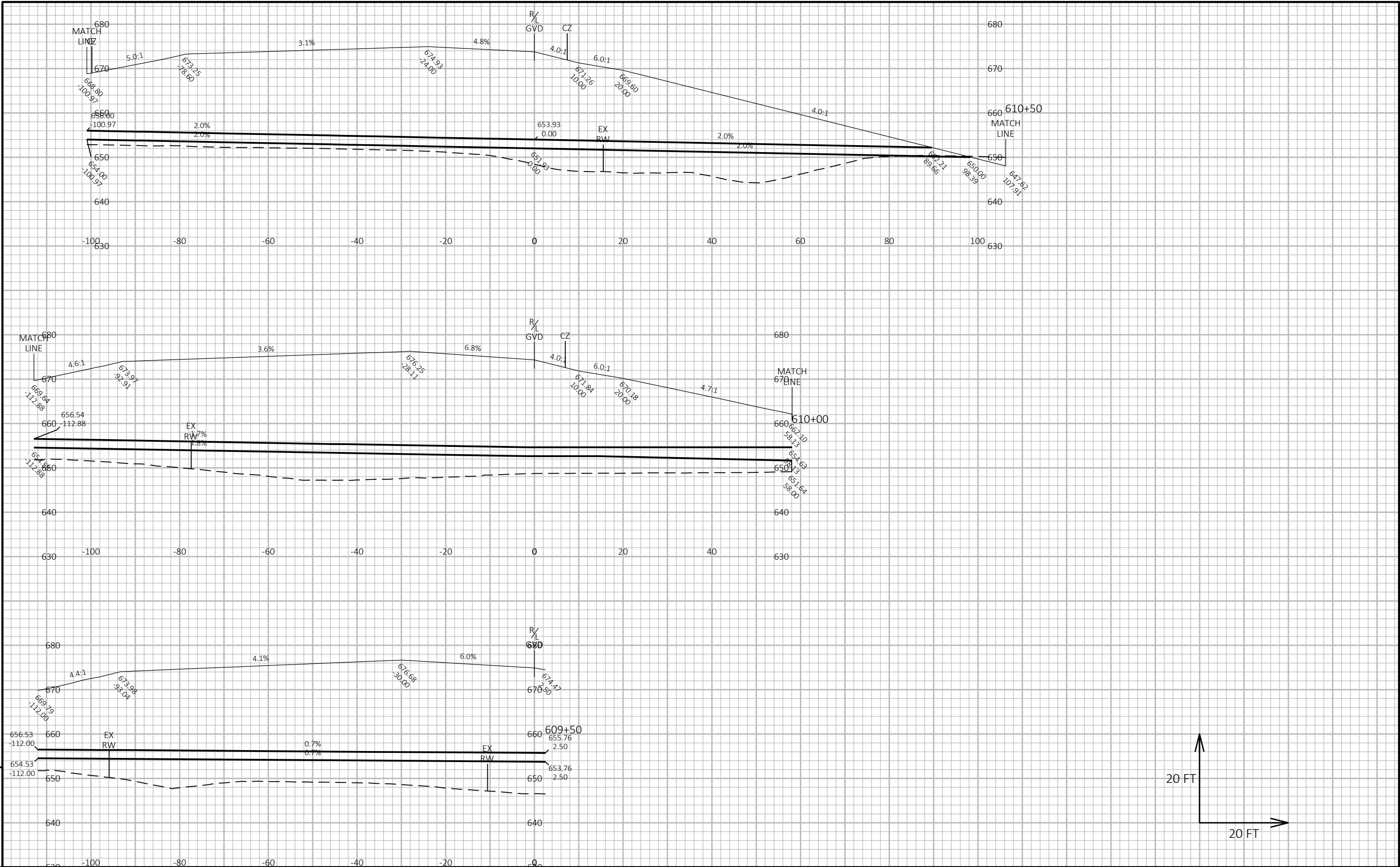


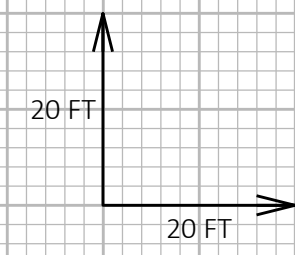
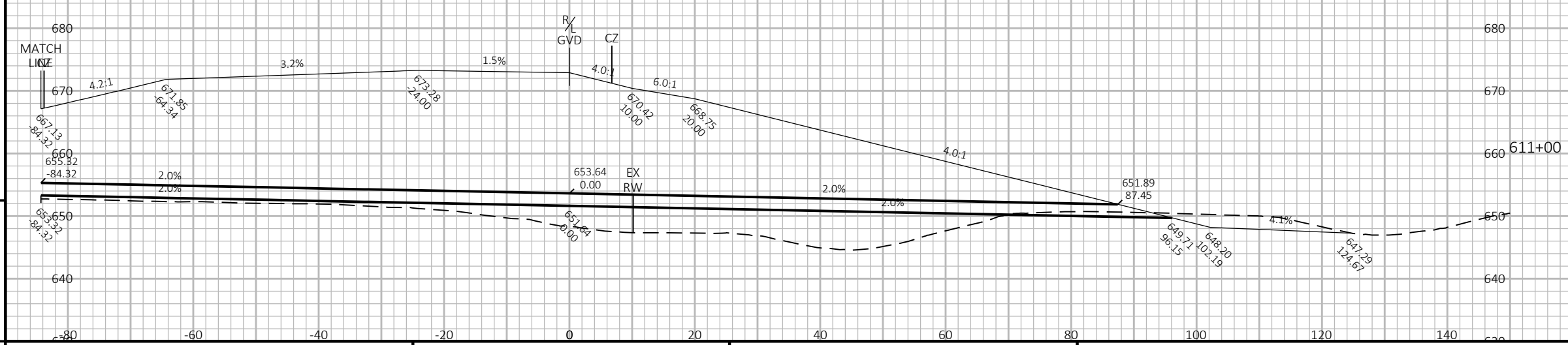
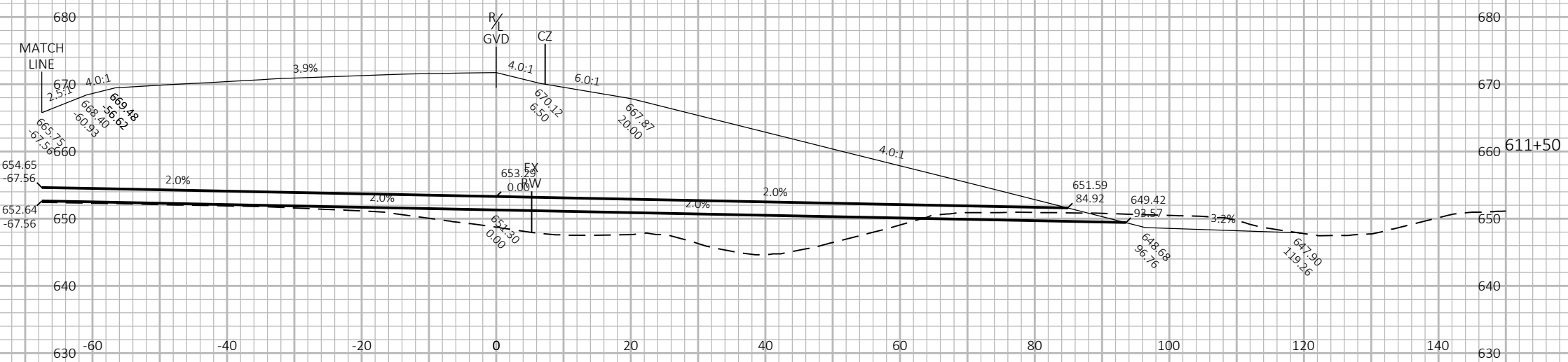
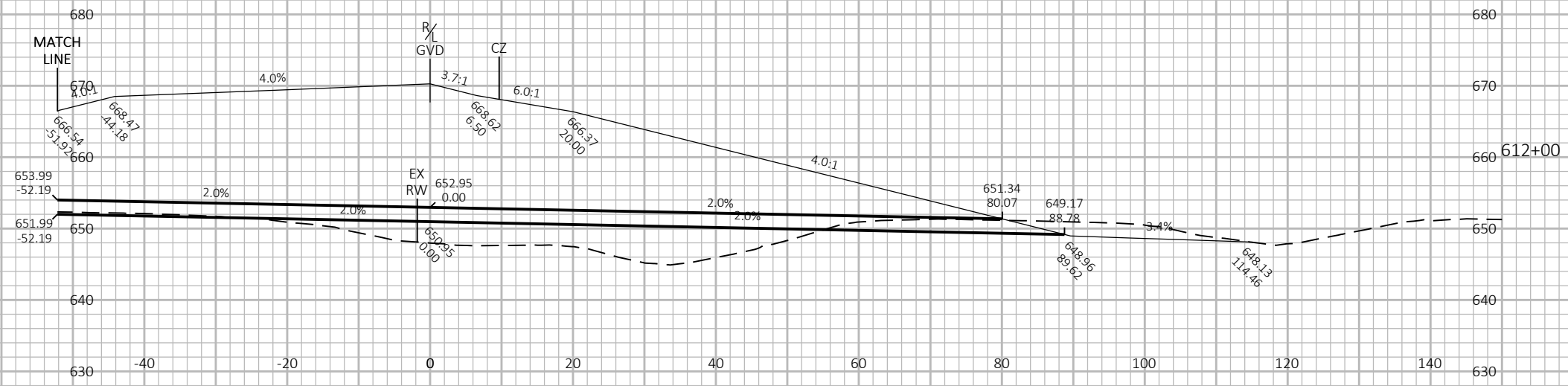
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FILE NAME : C:\USERS\DOTK9D\DC\ACCDOS\WISDOT\11306301\PROJECT FILES\DSGN\11306870\SHEETS\SHEETSPLAN\1130-68-81, EARLY FILL & SBC FRONTAGE ROADS\09 CROSS SECTIONS\090213-XFLOW.DWG PLOT DATE : 1/31/2024 10:06 AM PLOT BY : DENEYS, KRISTOPHER M PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT. WISDOT/CADD SHEET 49
LAYOUT NAME - RAMP C4

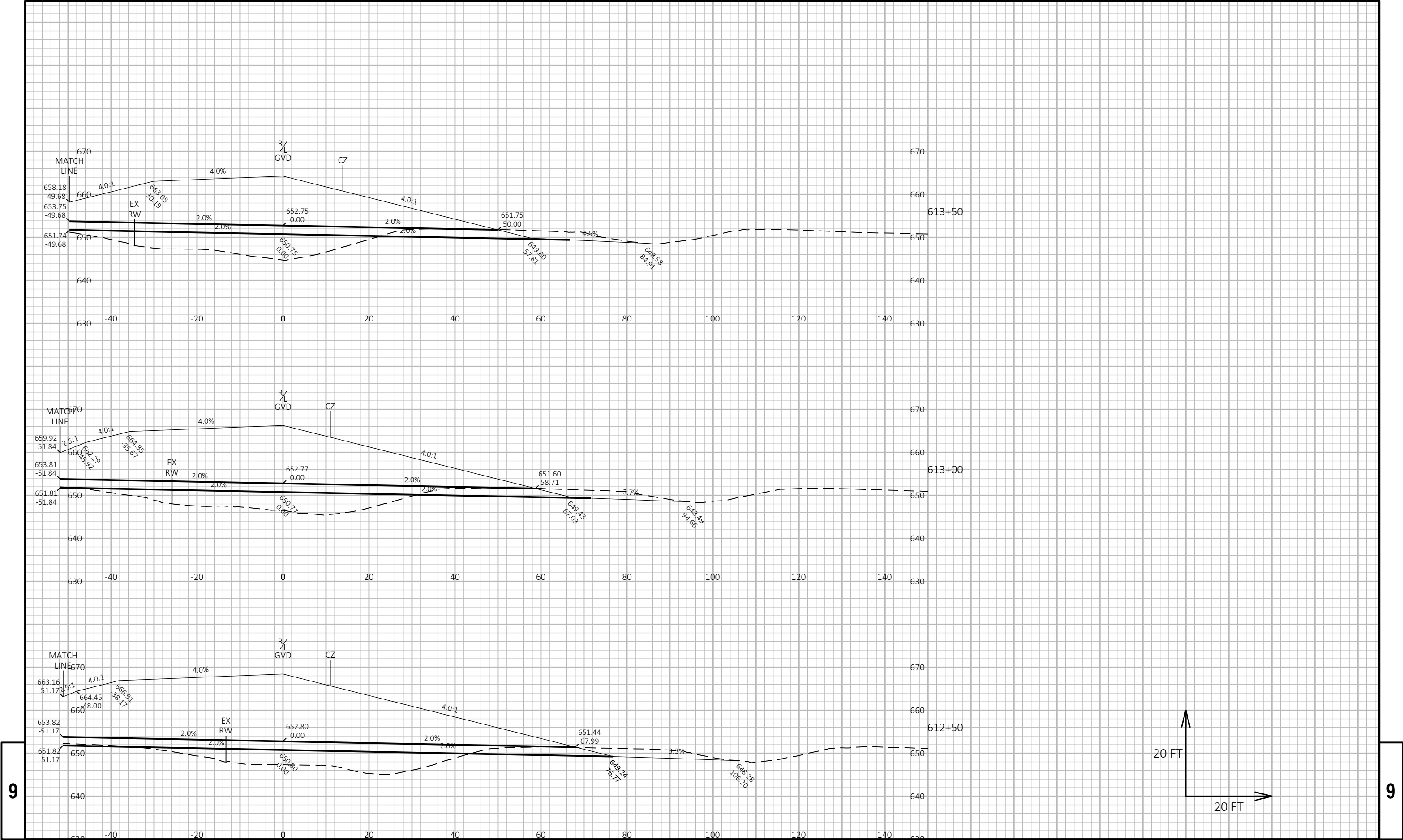


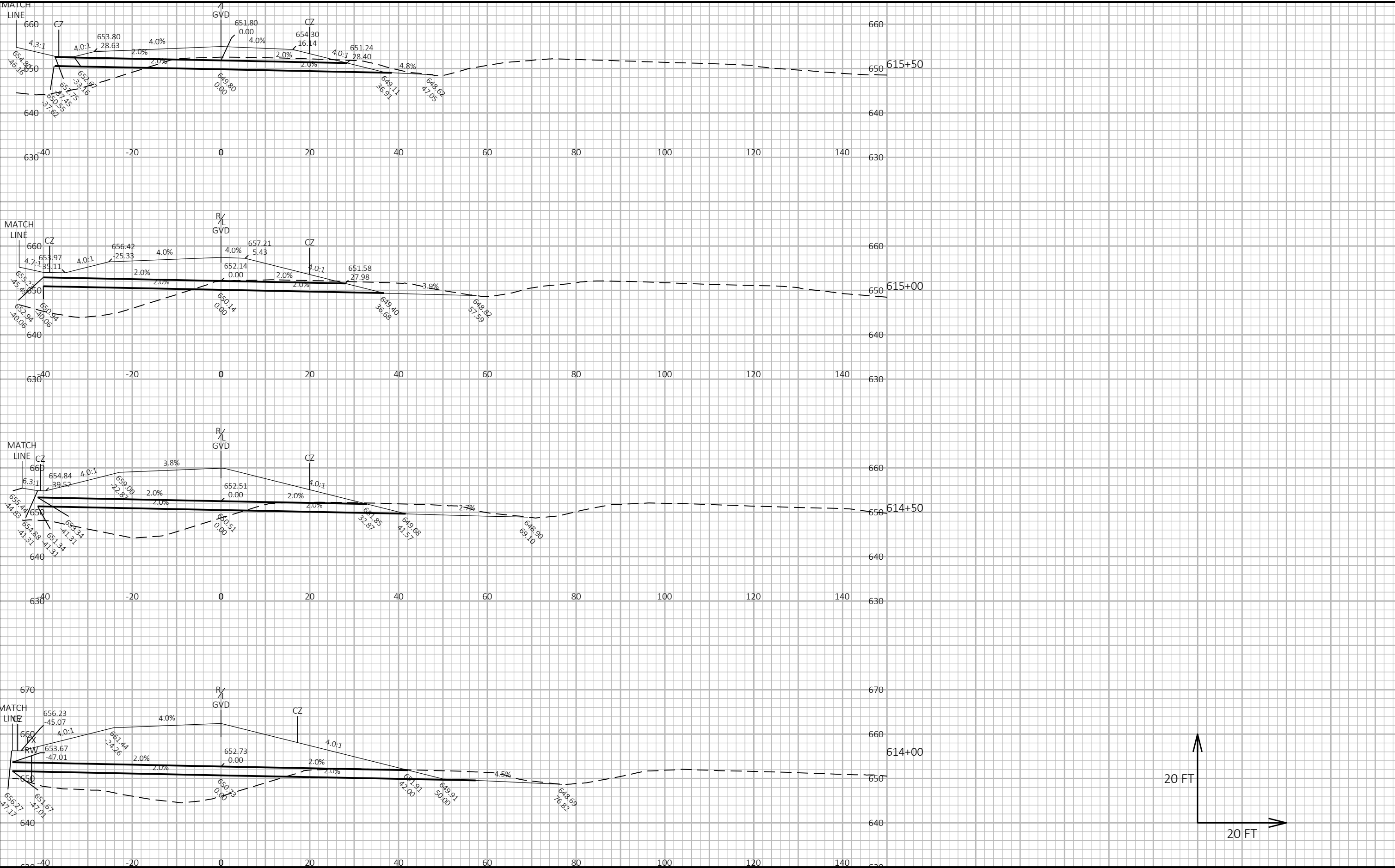


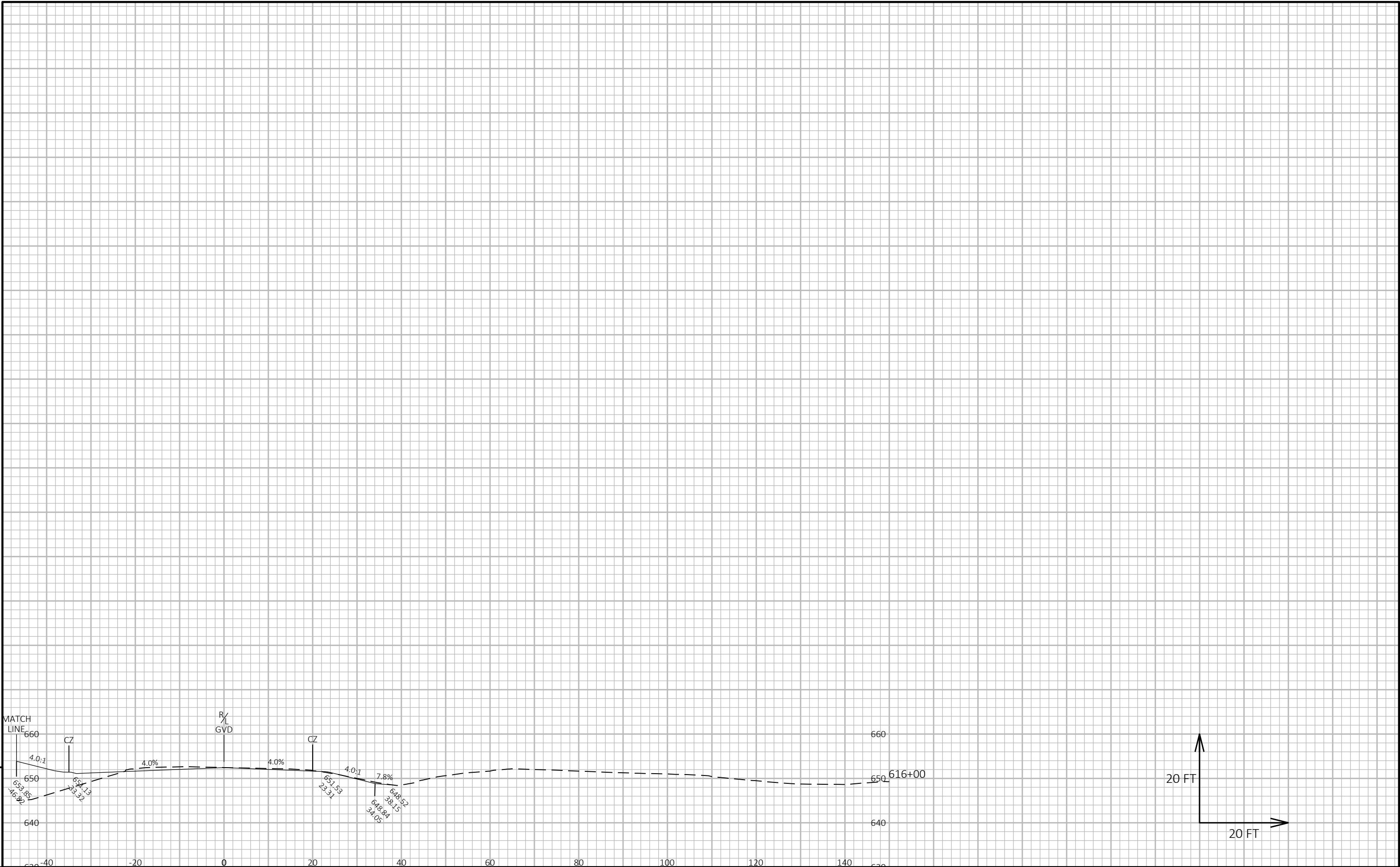


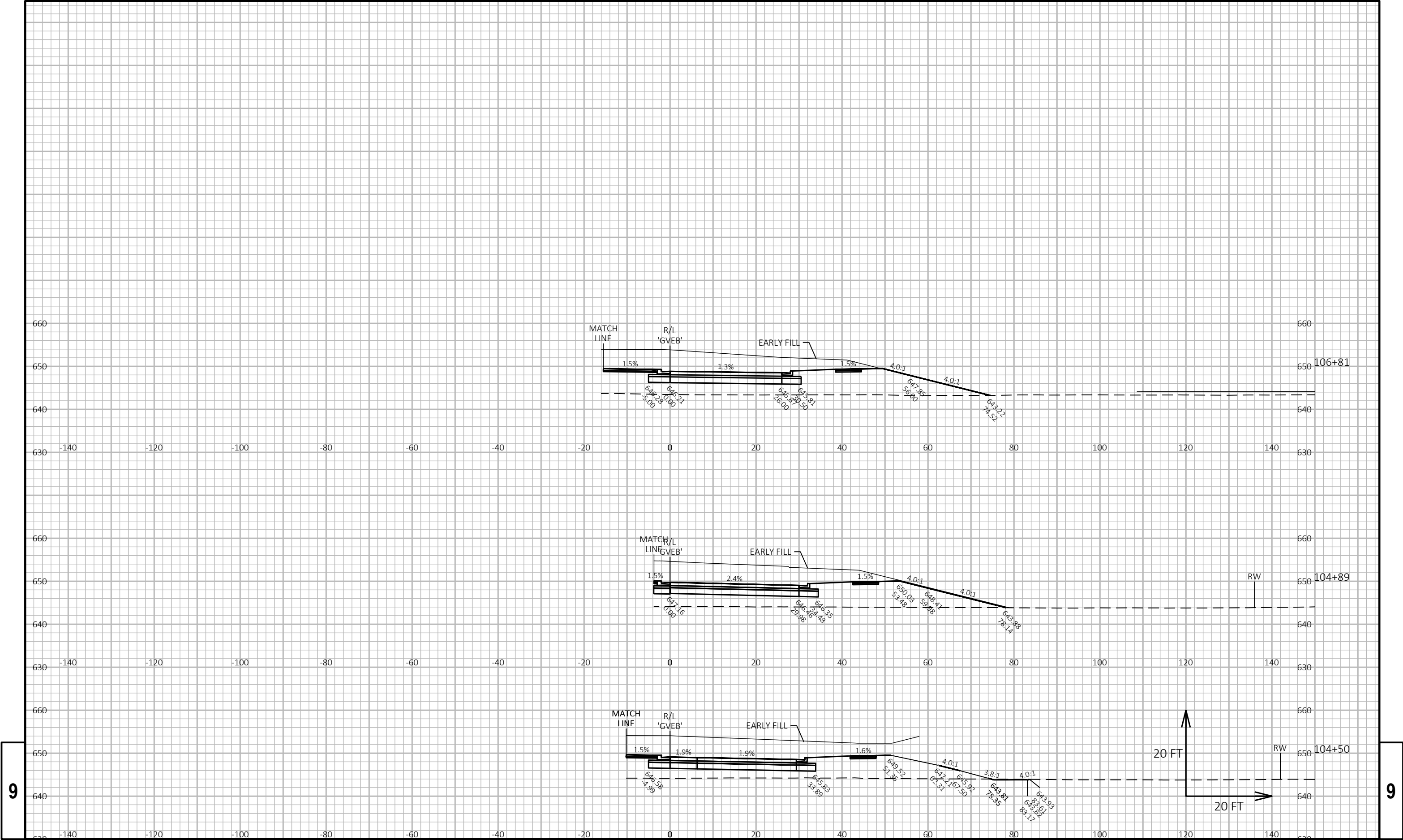


PROJECT NO:	1130-68-81	HWY:	IH 41 - SOUTHBRIDGE	COUNTY:	BROWN	CROSS SECTIONS:	SOUTHBRIDGE - RAMP D	SHEET	E
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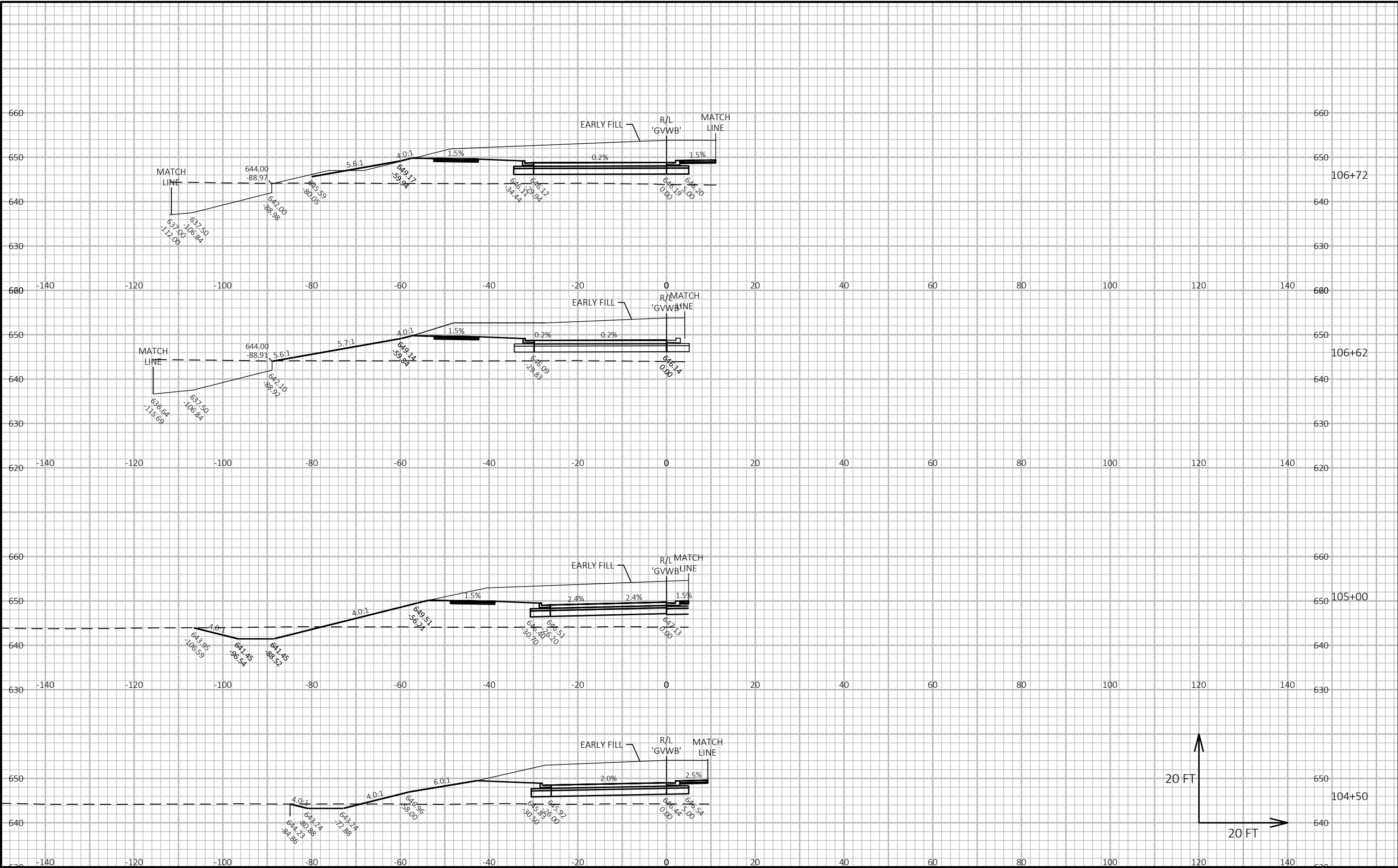


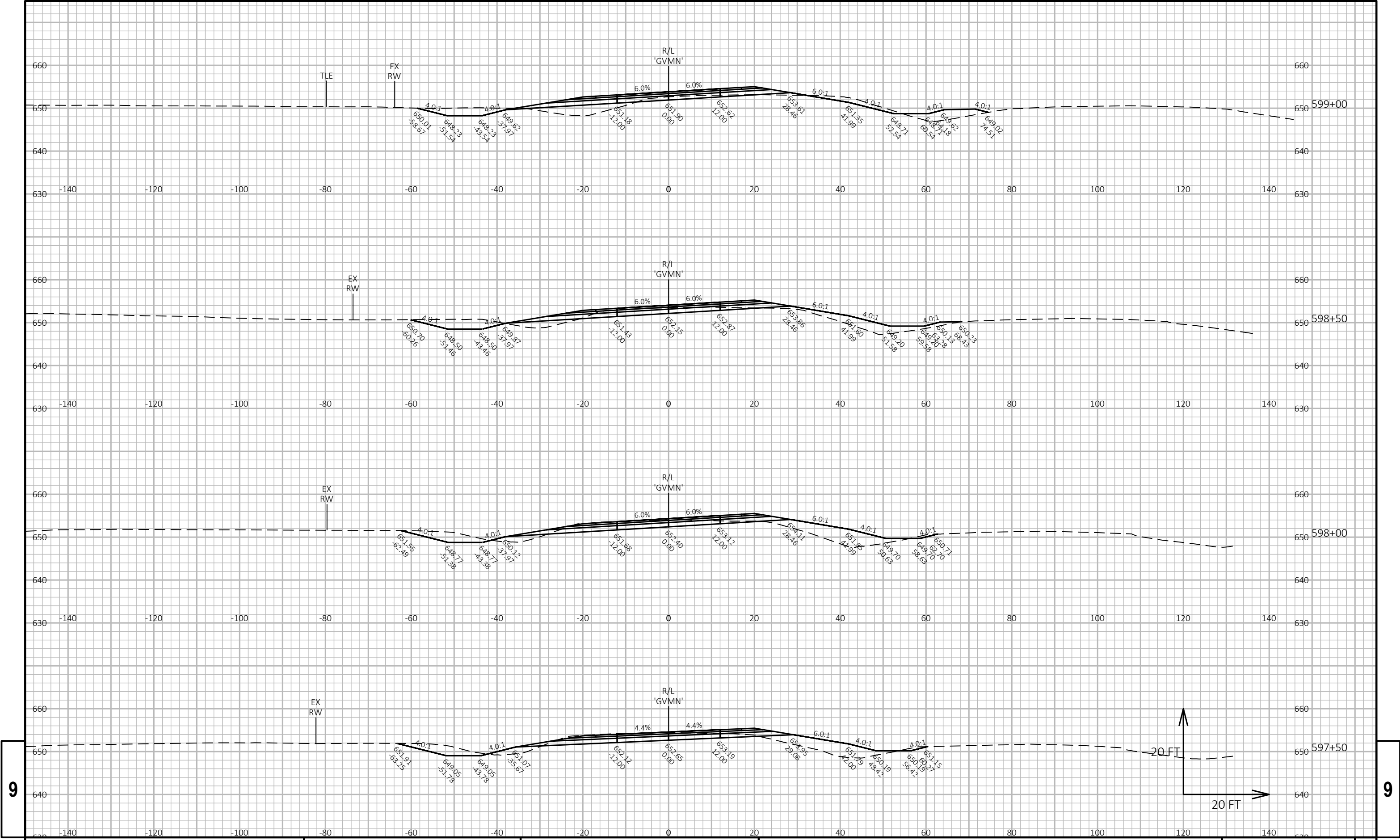


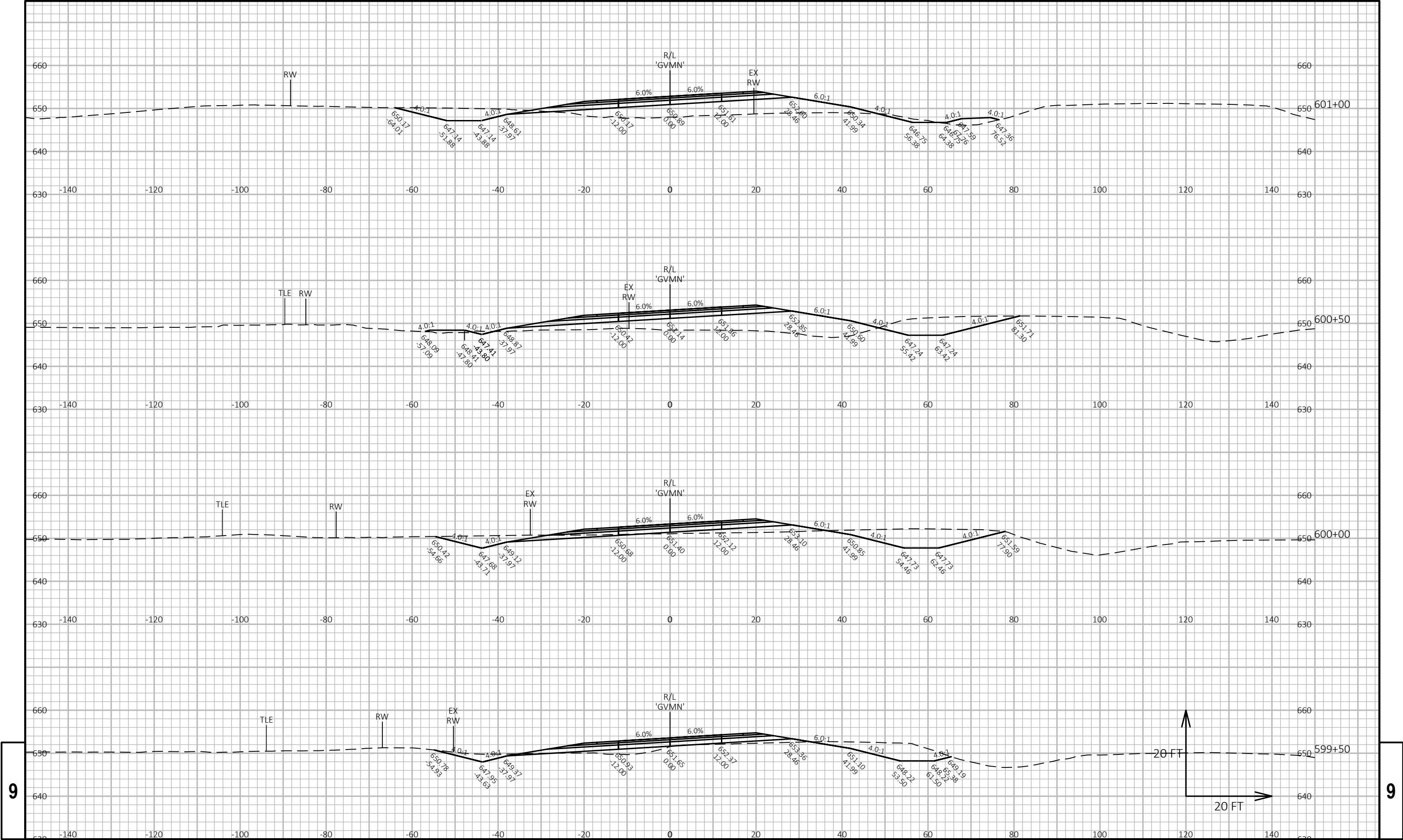
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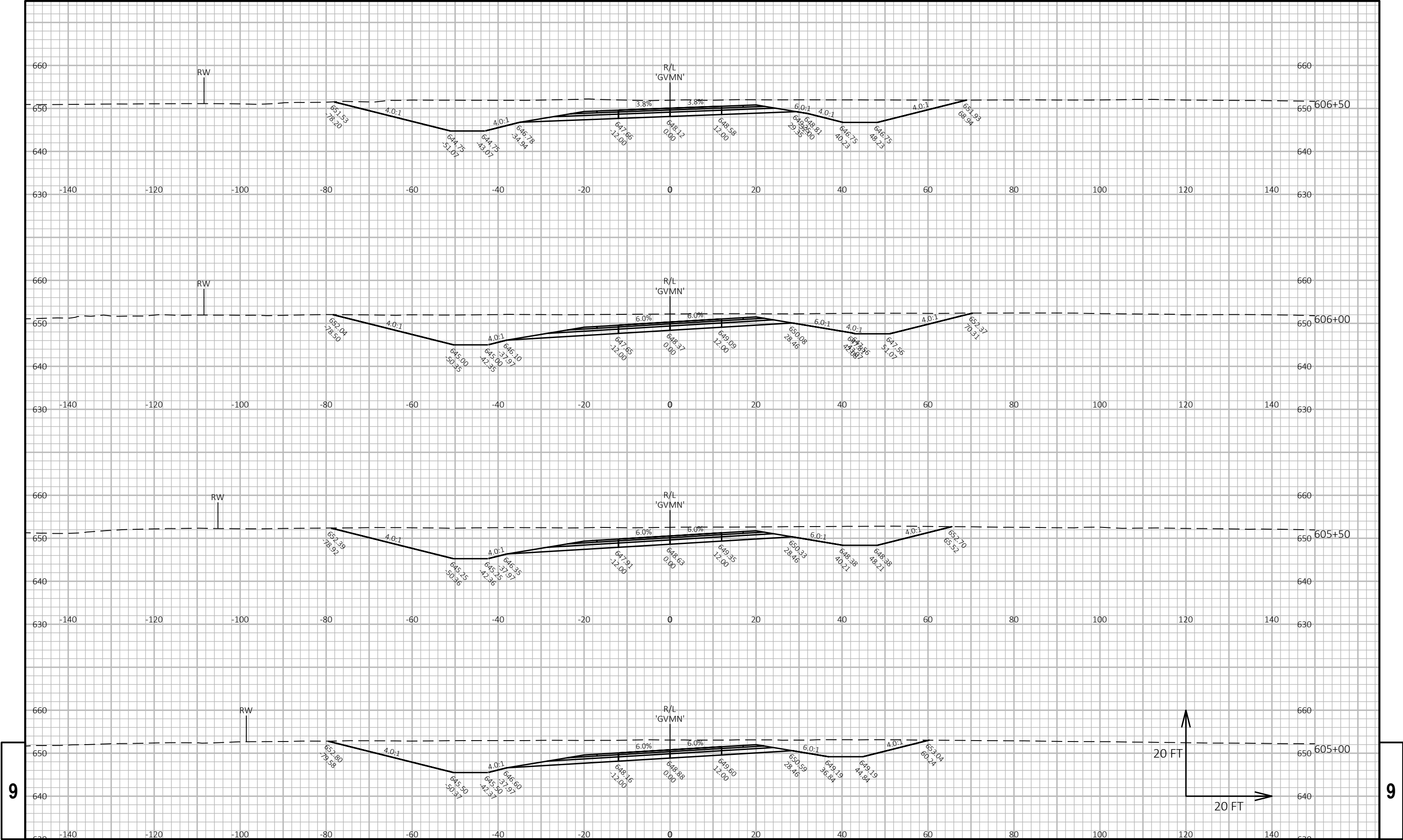
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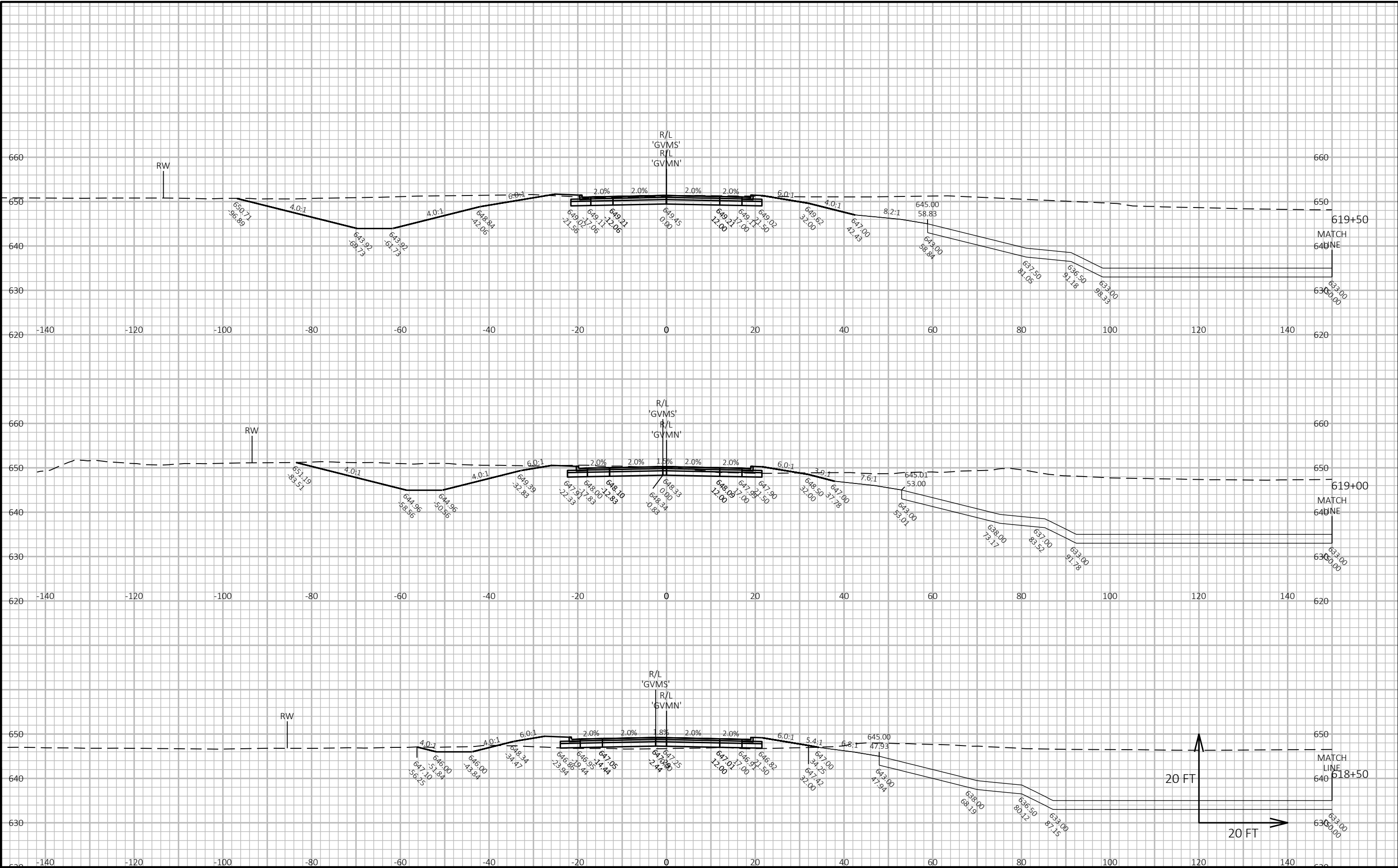


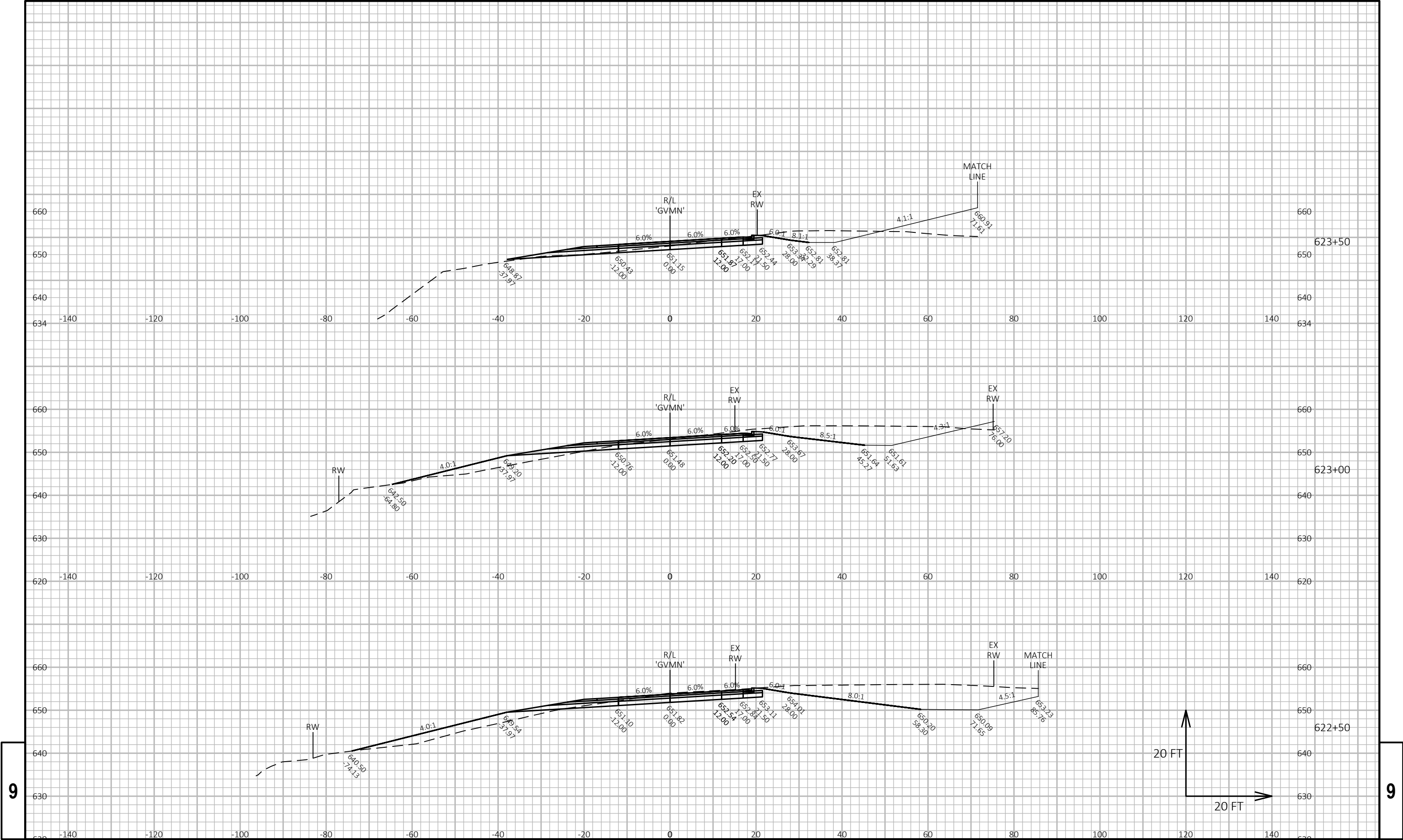




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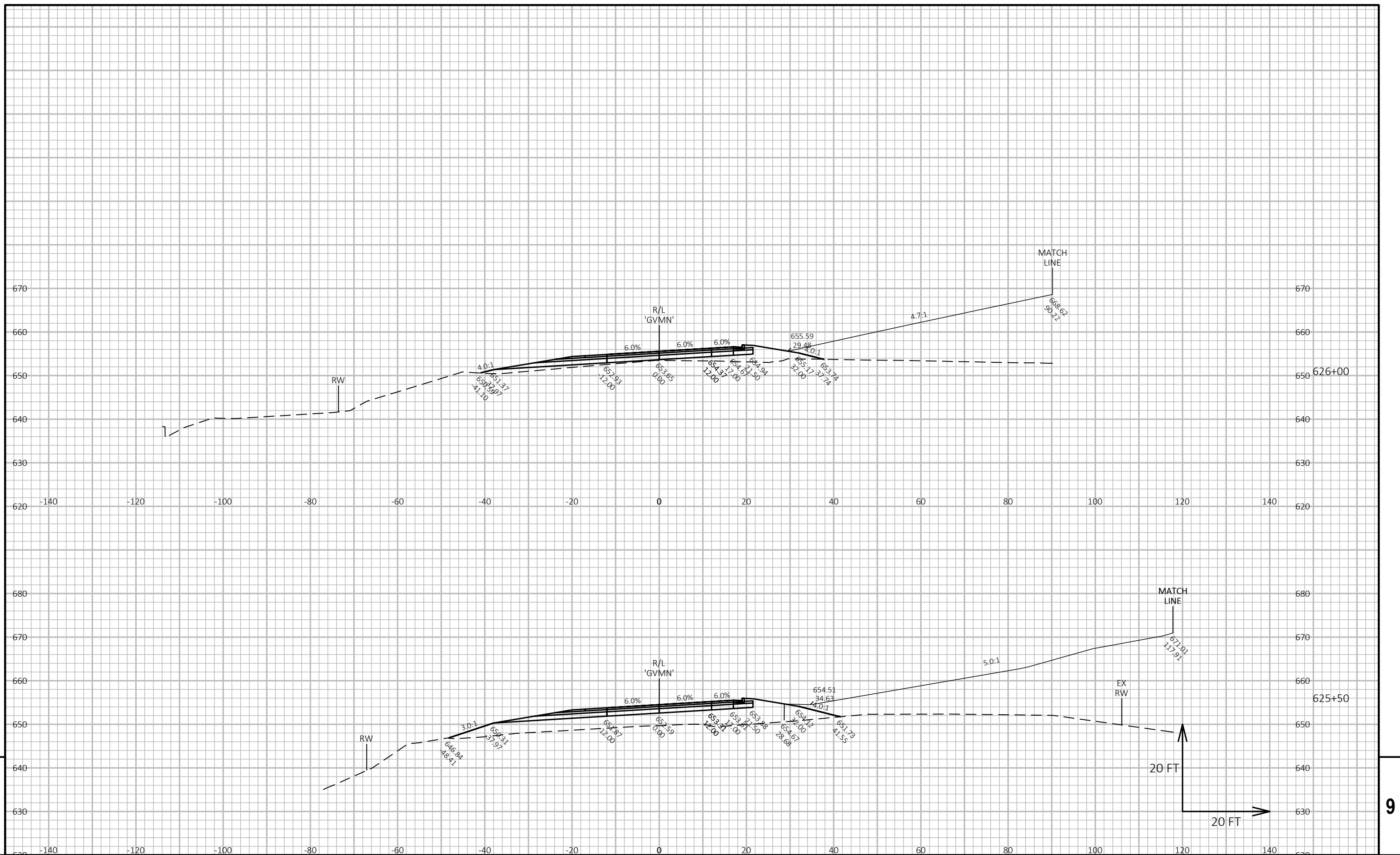




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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: MID VALLEY NB - FINISHED	SHEET E
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PROJECT NO:	1130-68-81
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HWY: IH 41 - SOUTHBRIDGE

COUNTY: BROWN

CROSS SECTIONS: MID VALLEY NB - FINISHED

SHEET

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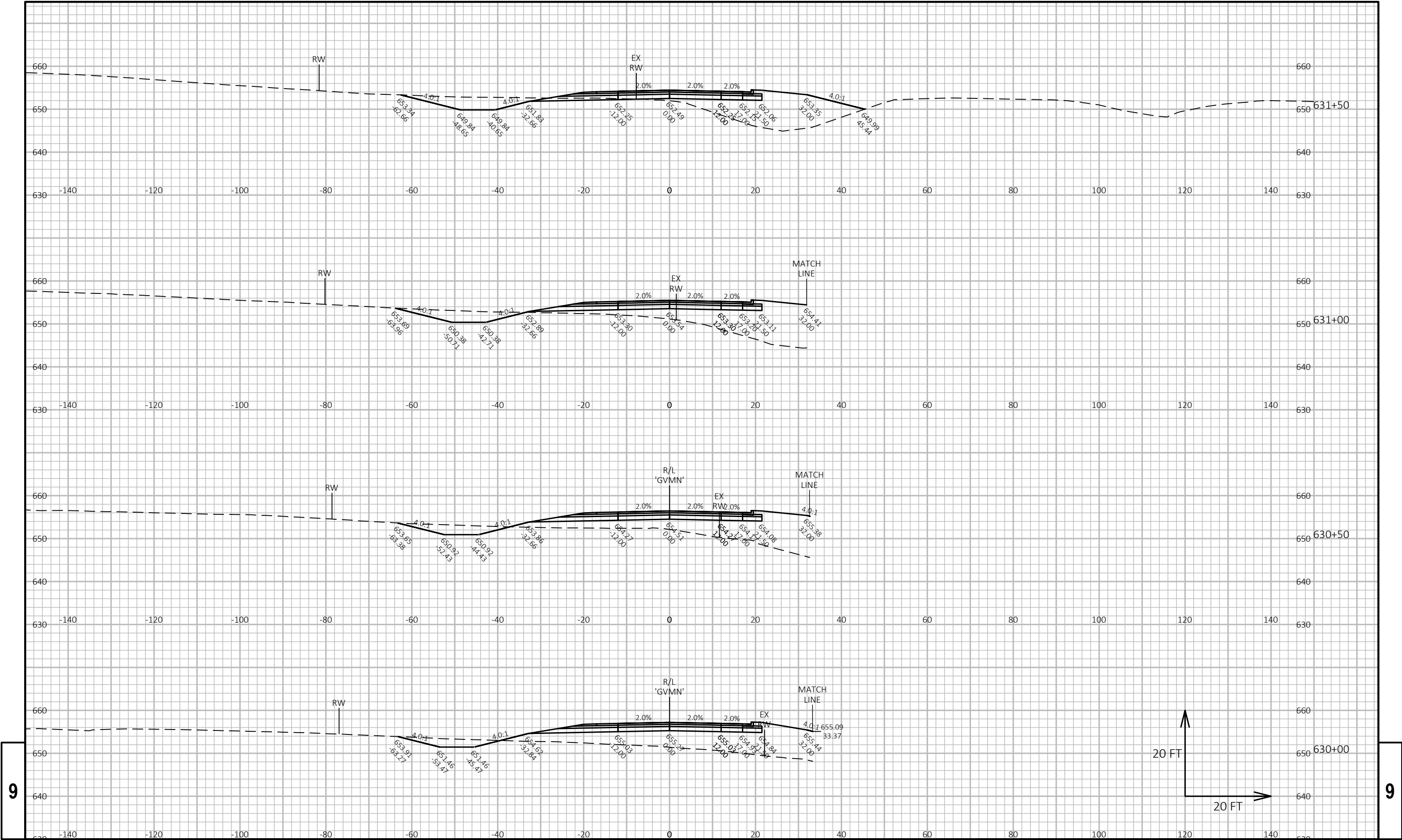
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LAYOUT NAME - MID VALLEY NB-17

PLOT BY : BRATTLUND, ERIK JOHN

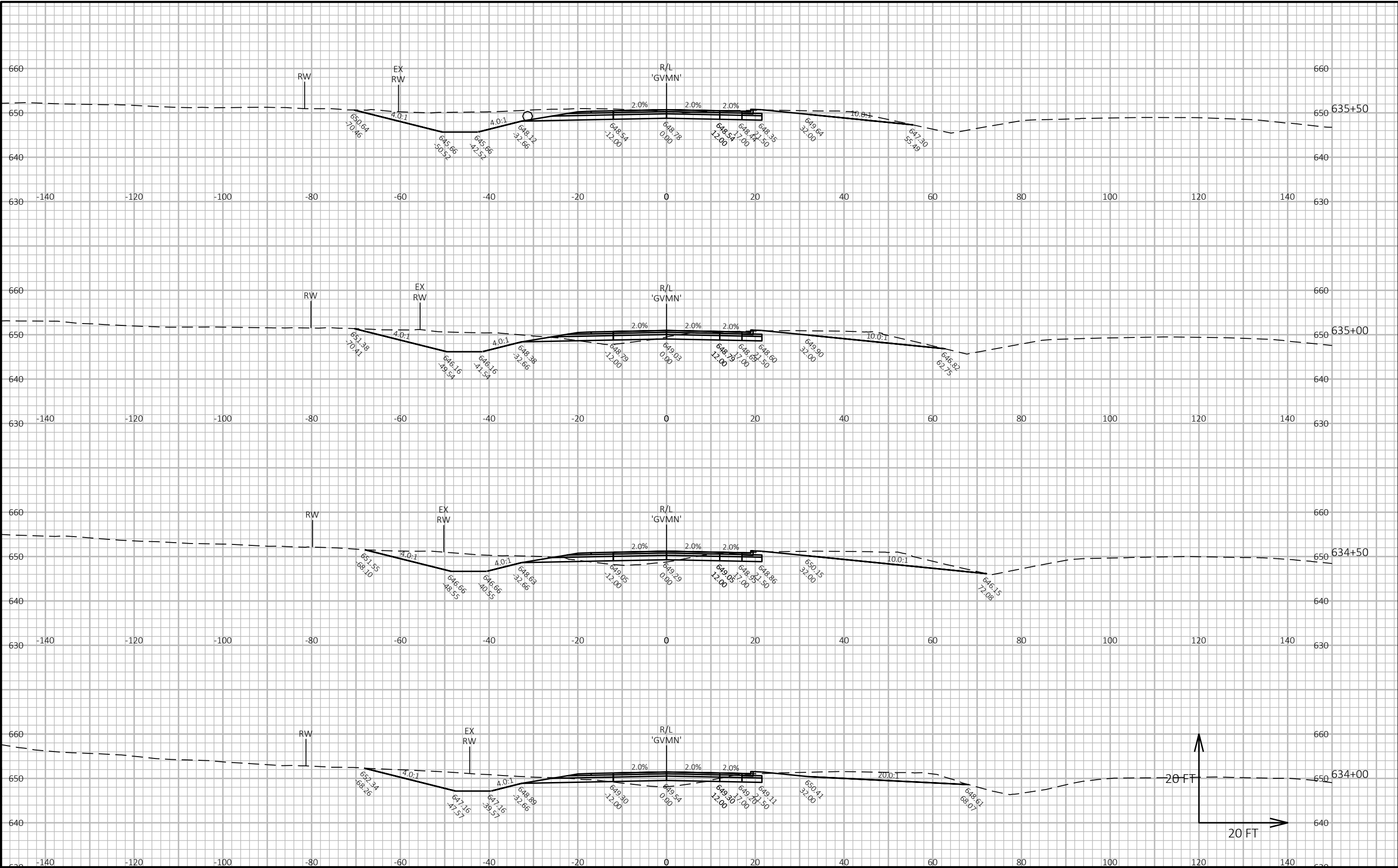
PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



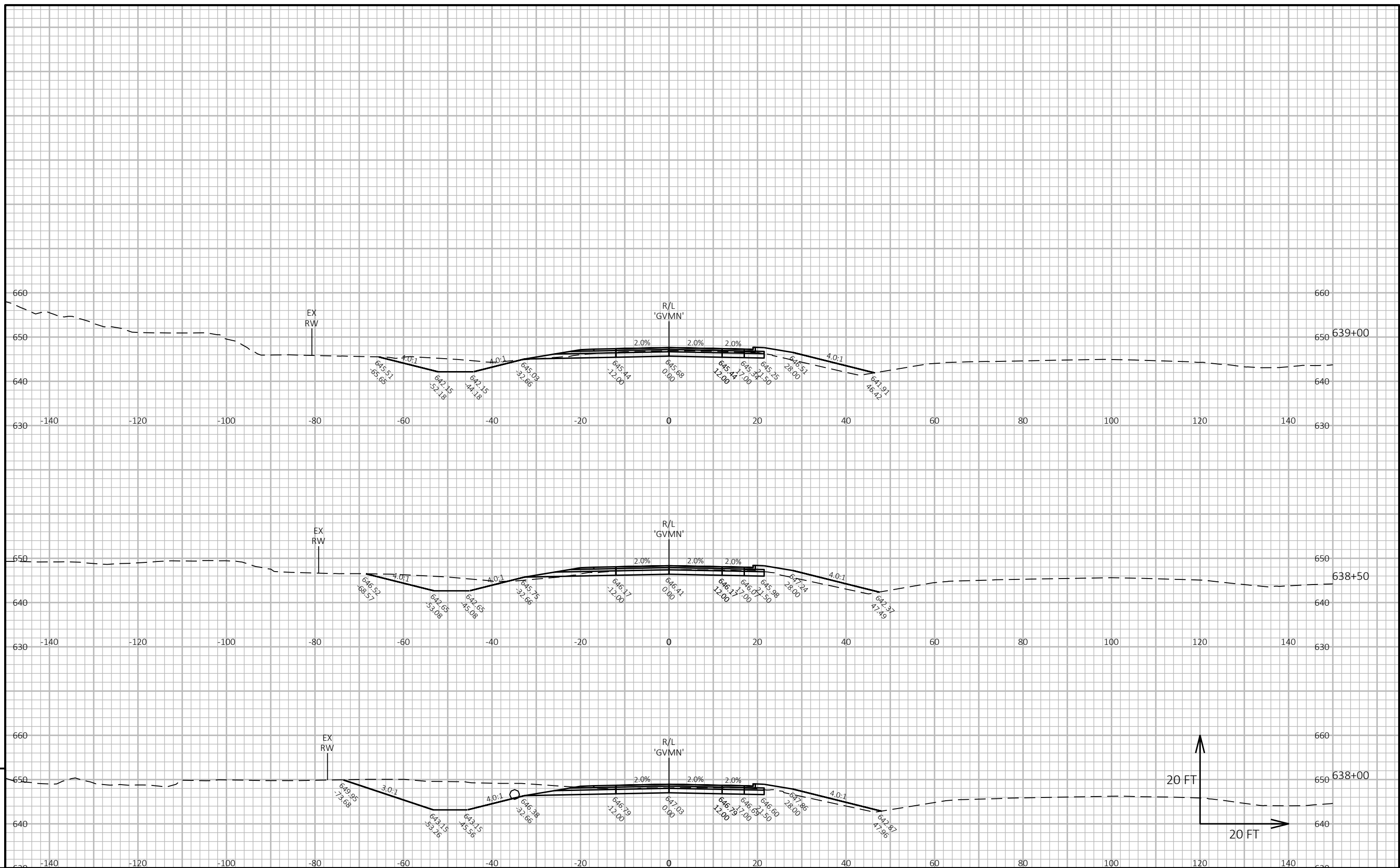
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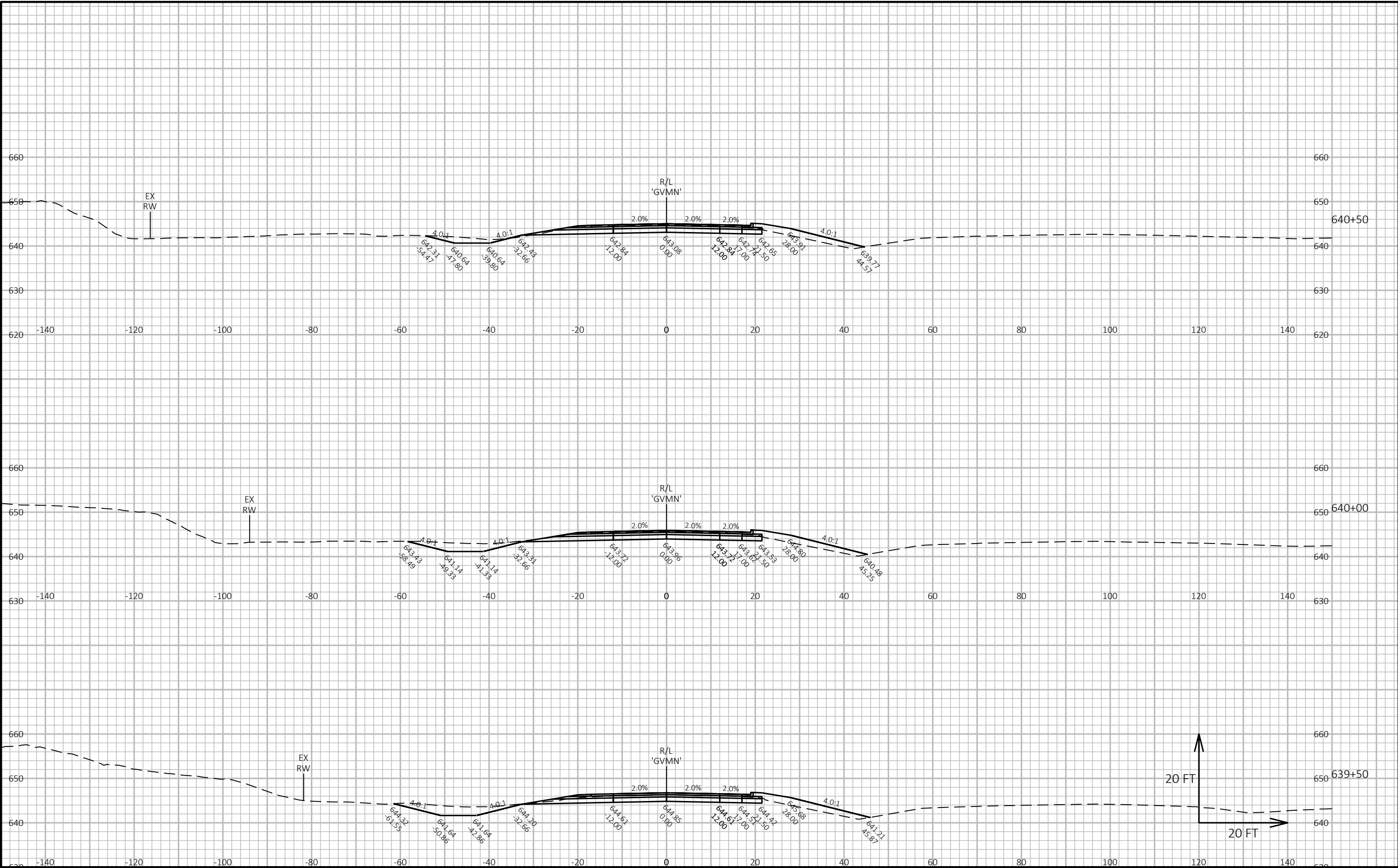
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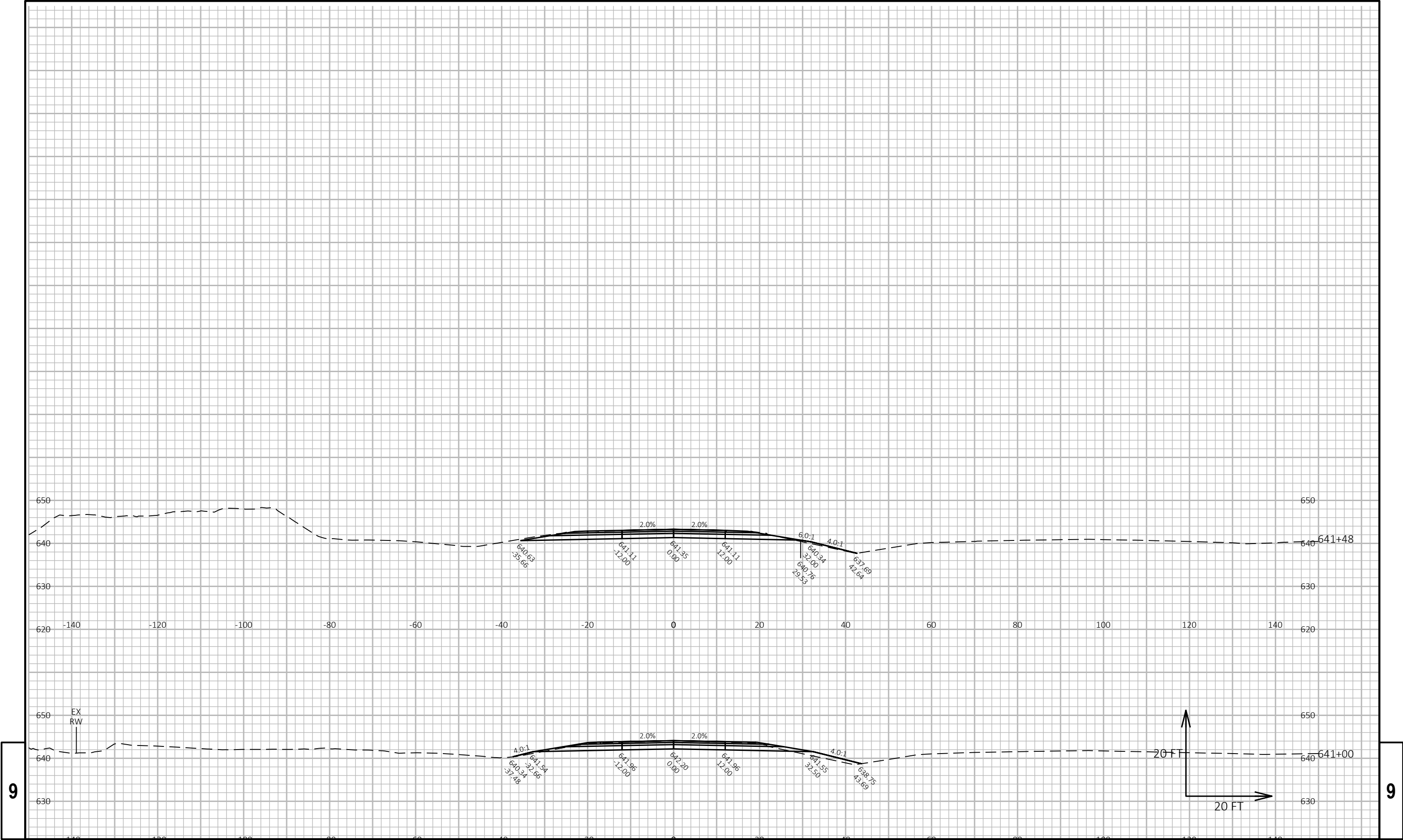
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: MID VALLEY NB - FINISHED	SHEET	E
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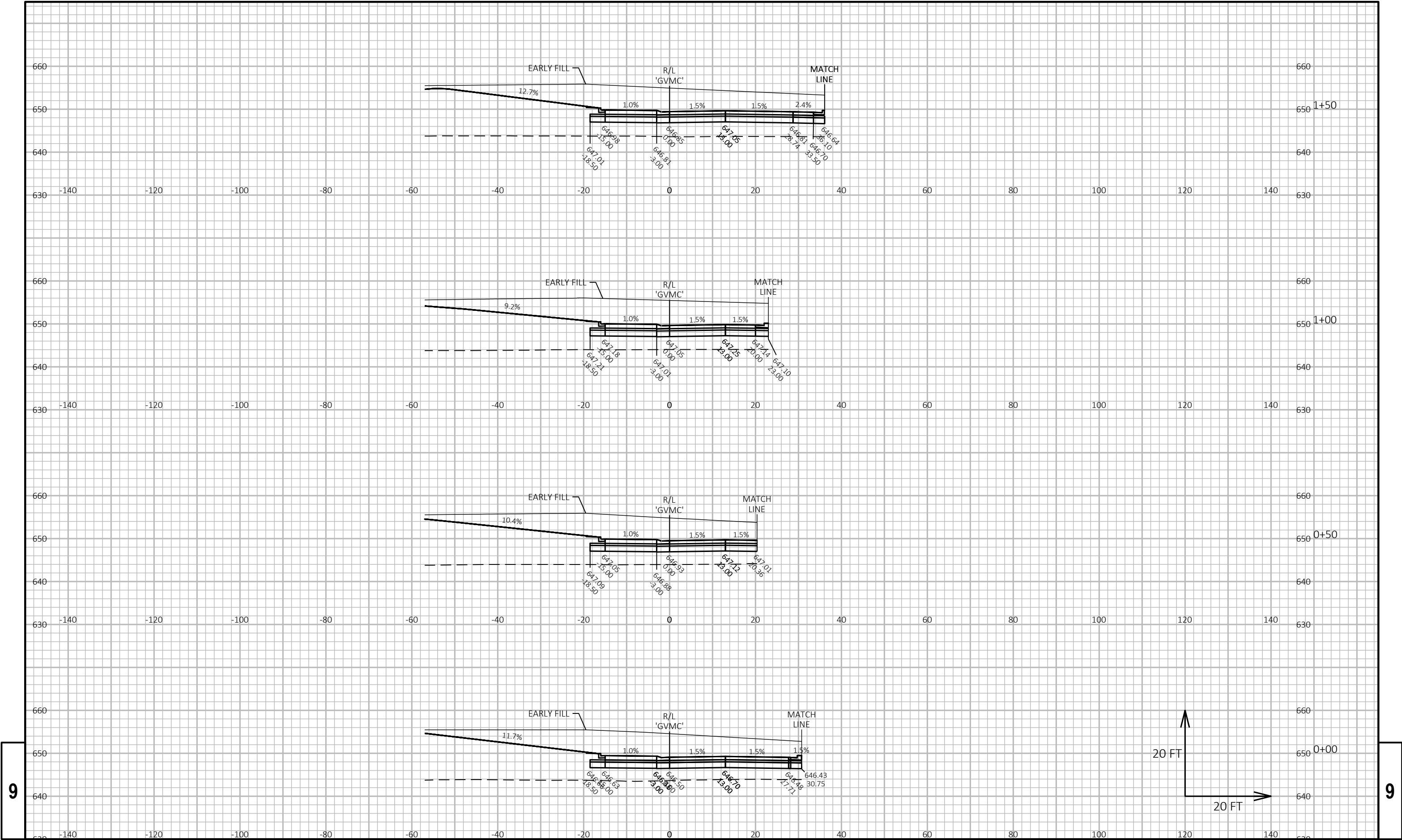
PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS:	MID VALLEY NB - FINISHED	SHEET	E
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PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: MID VALLEY NB - FINISHED	SHEET	E
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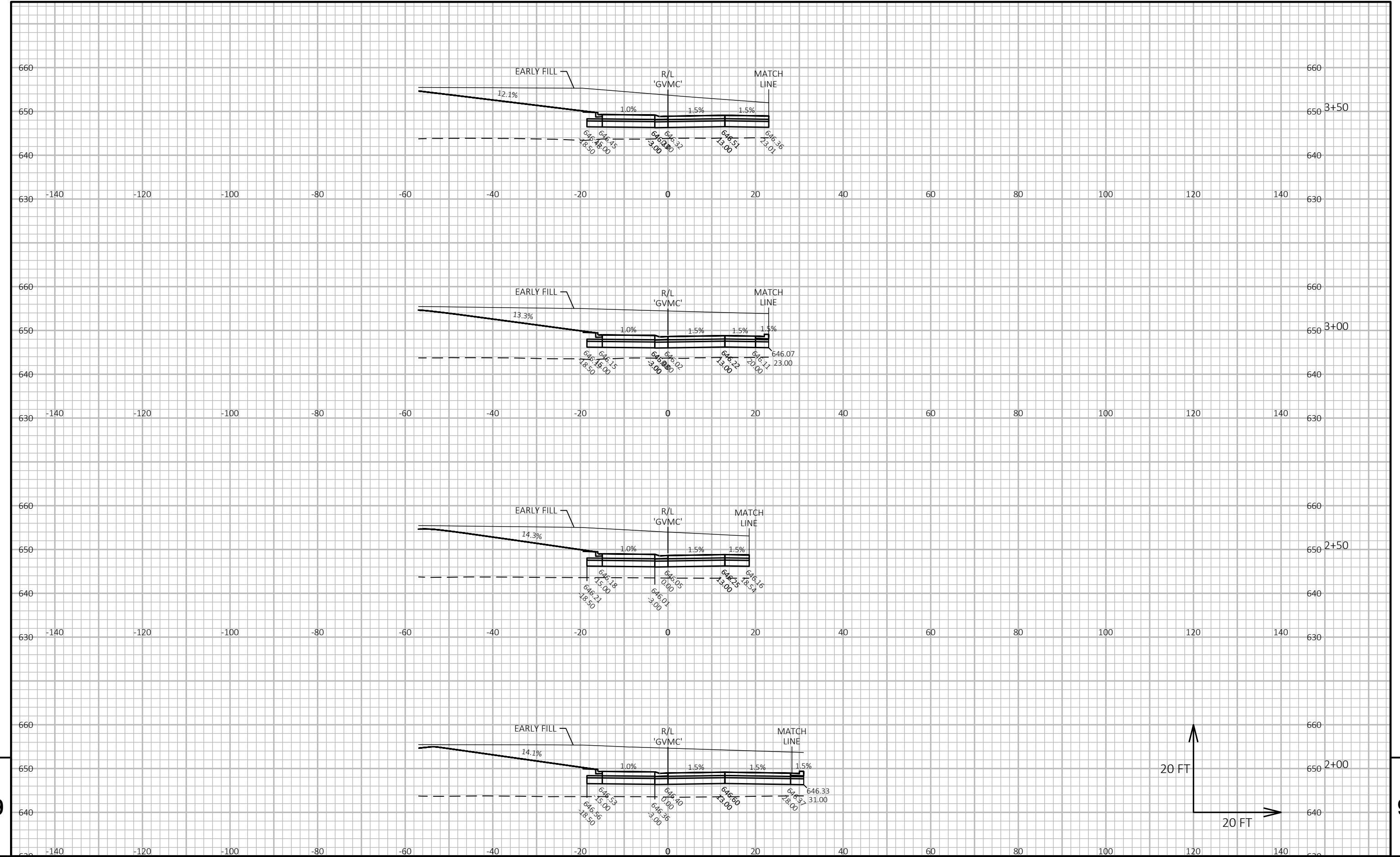
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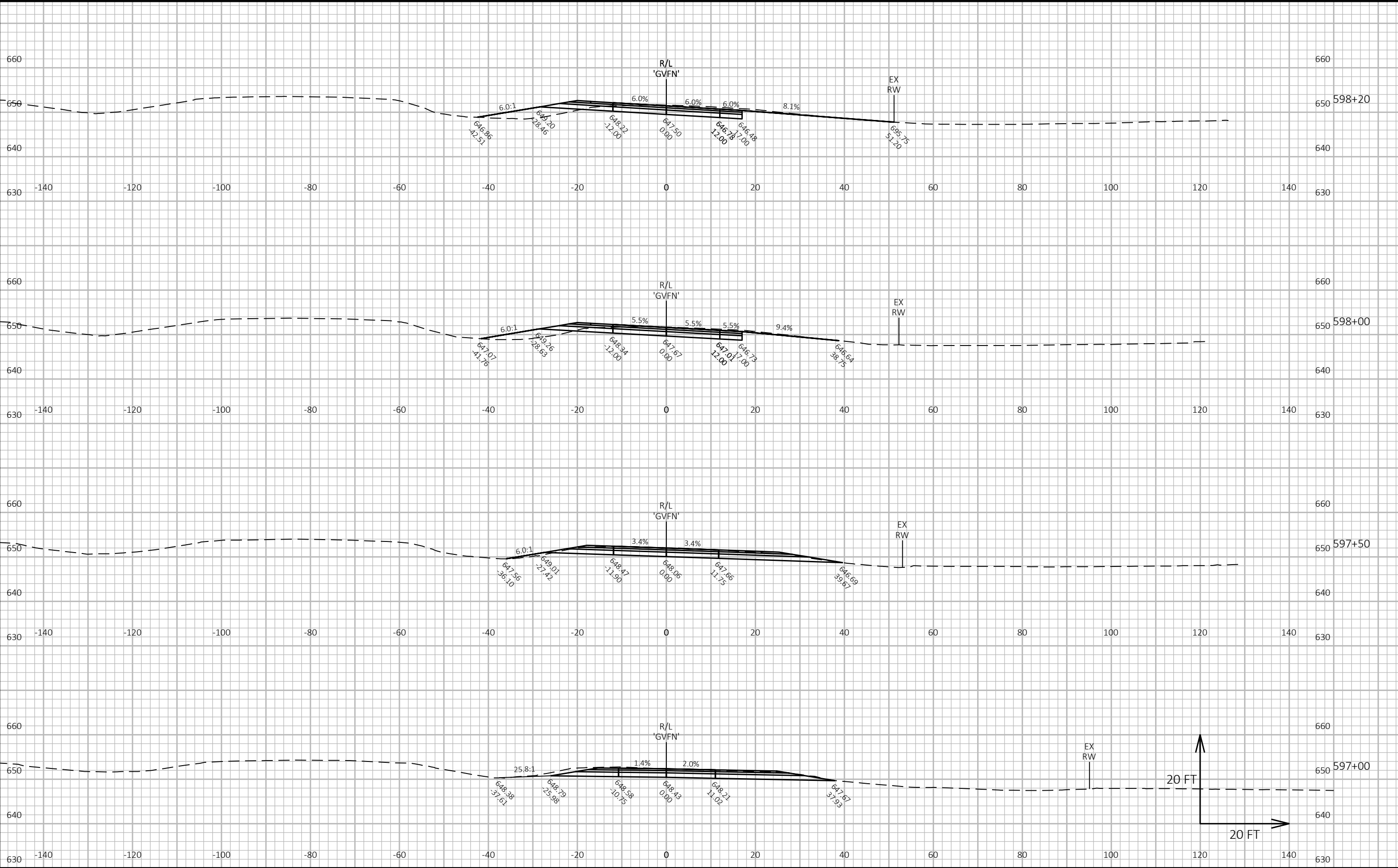
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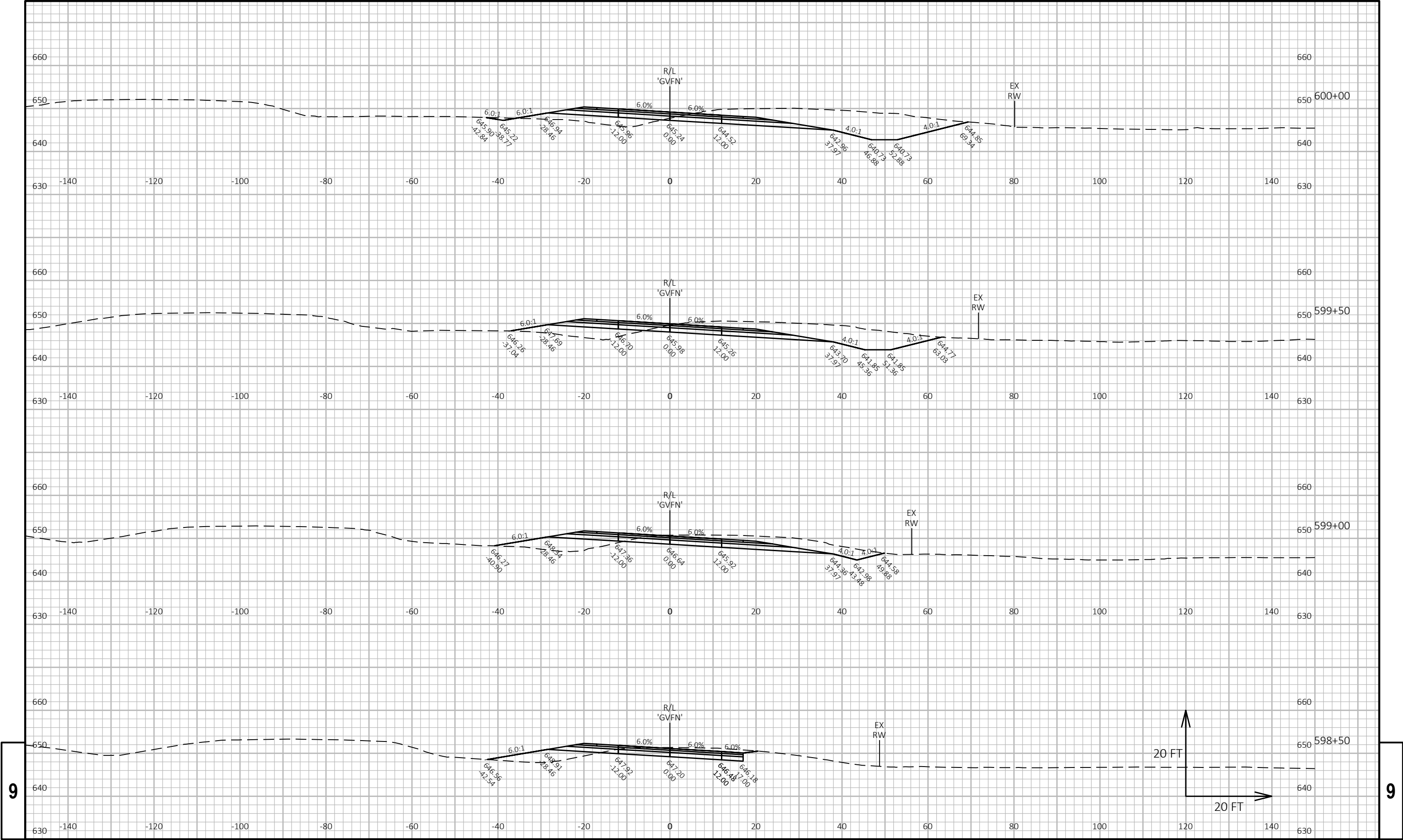
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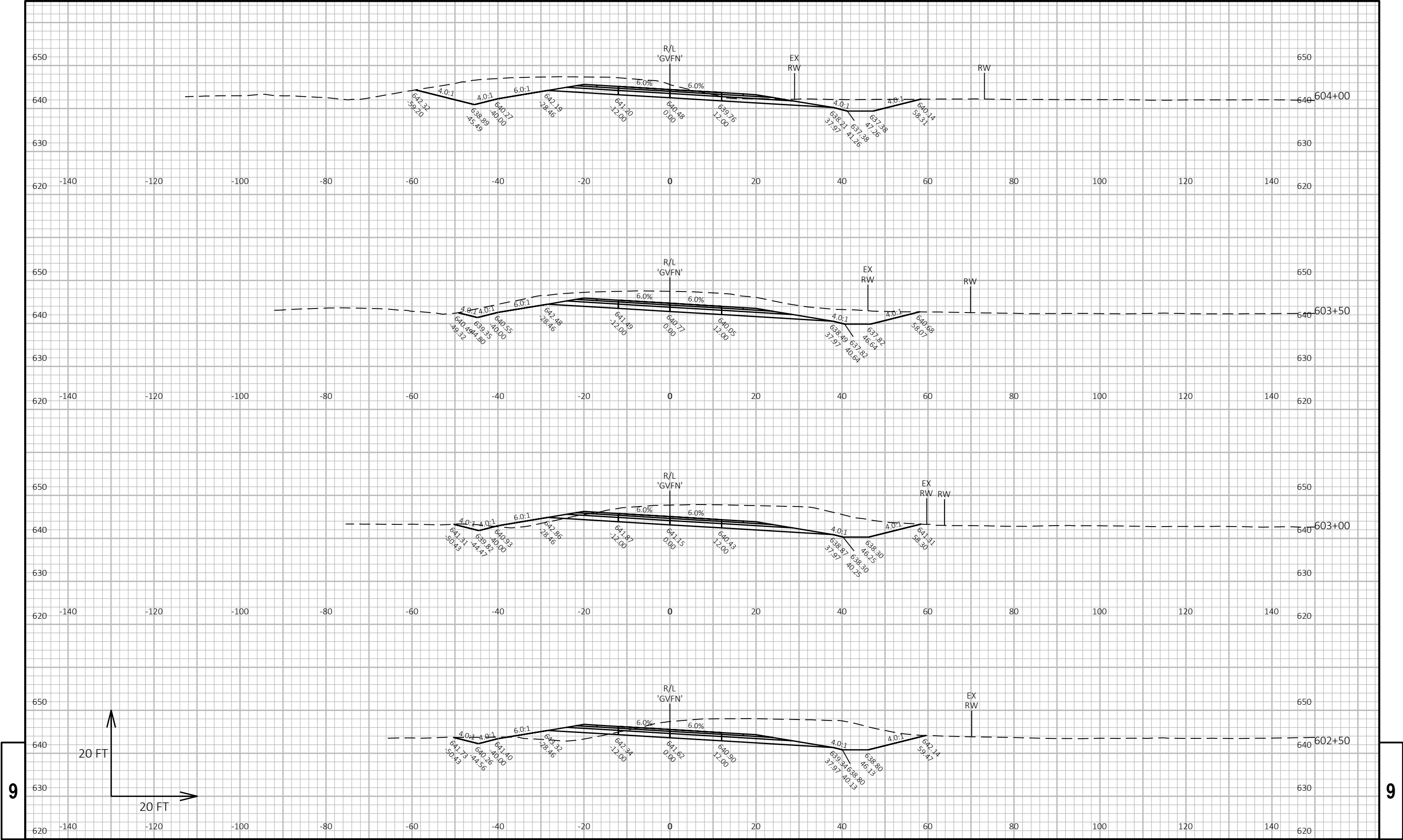


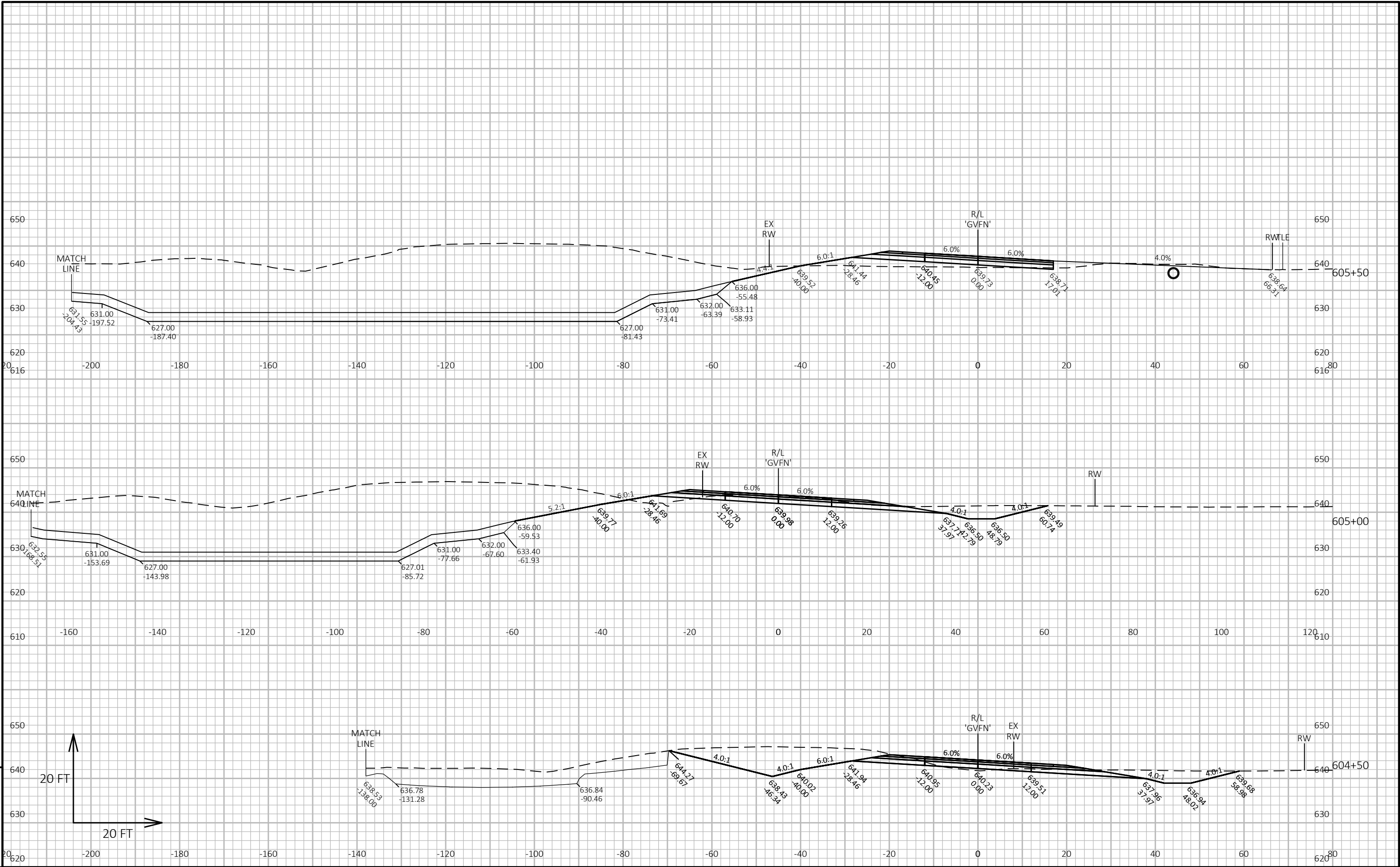
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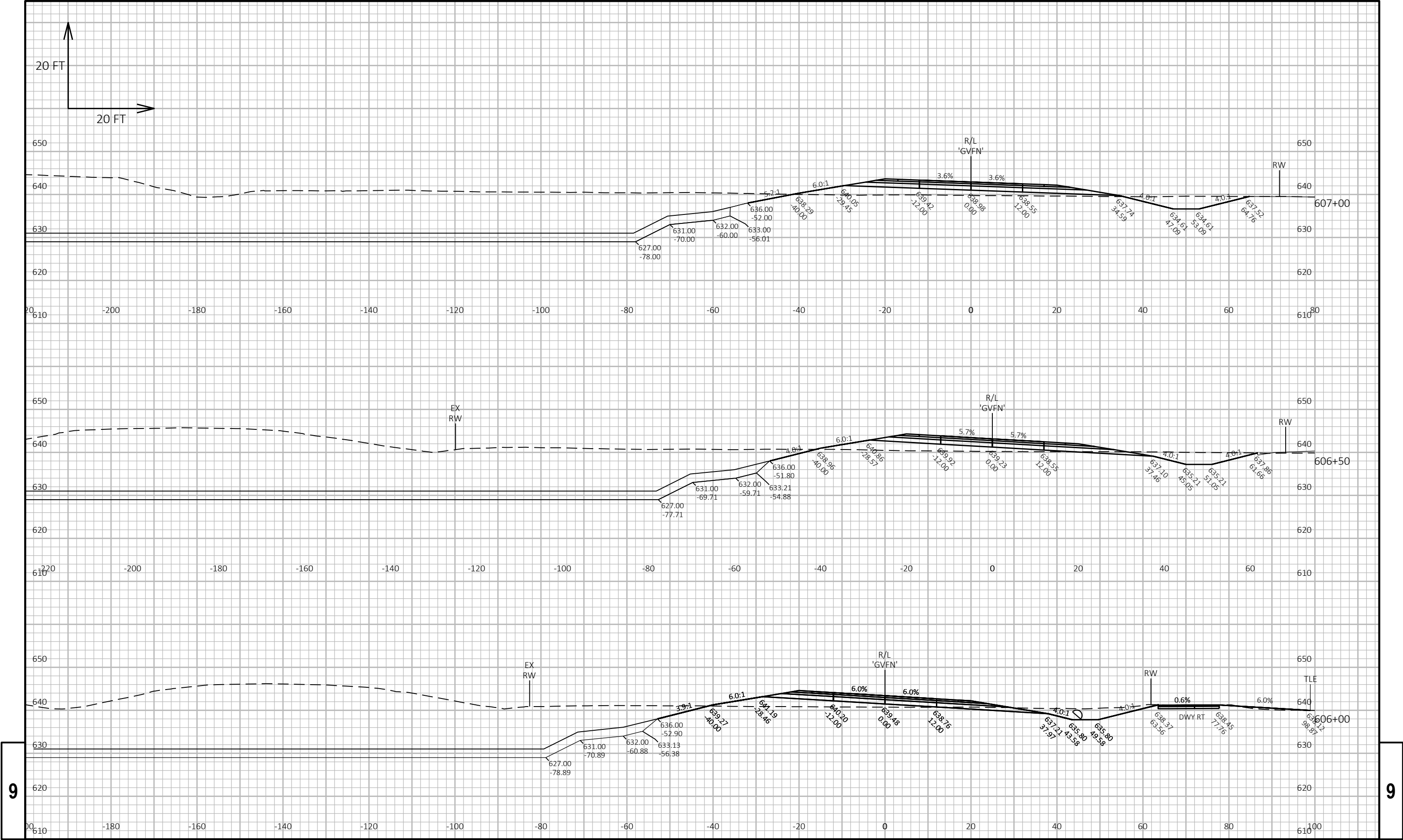
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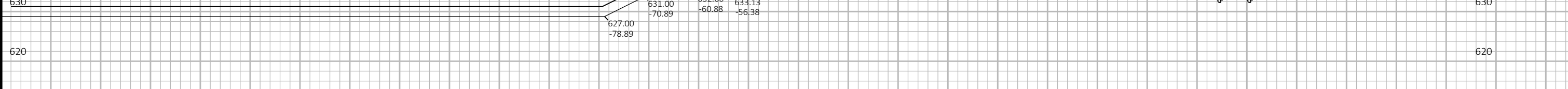


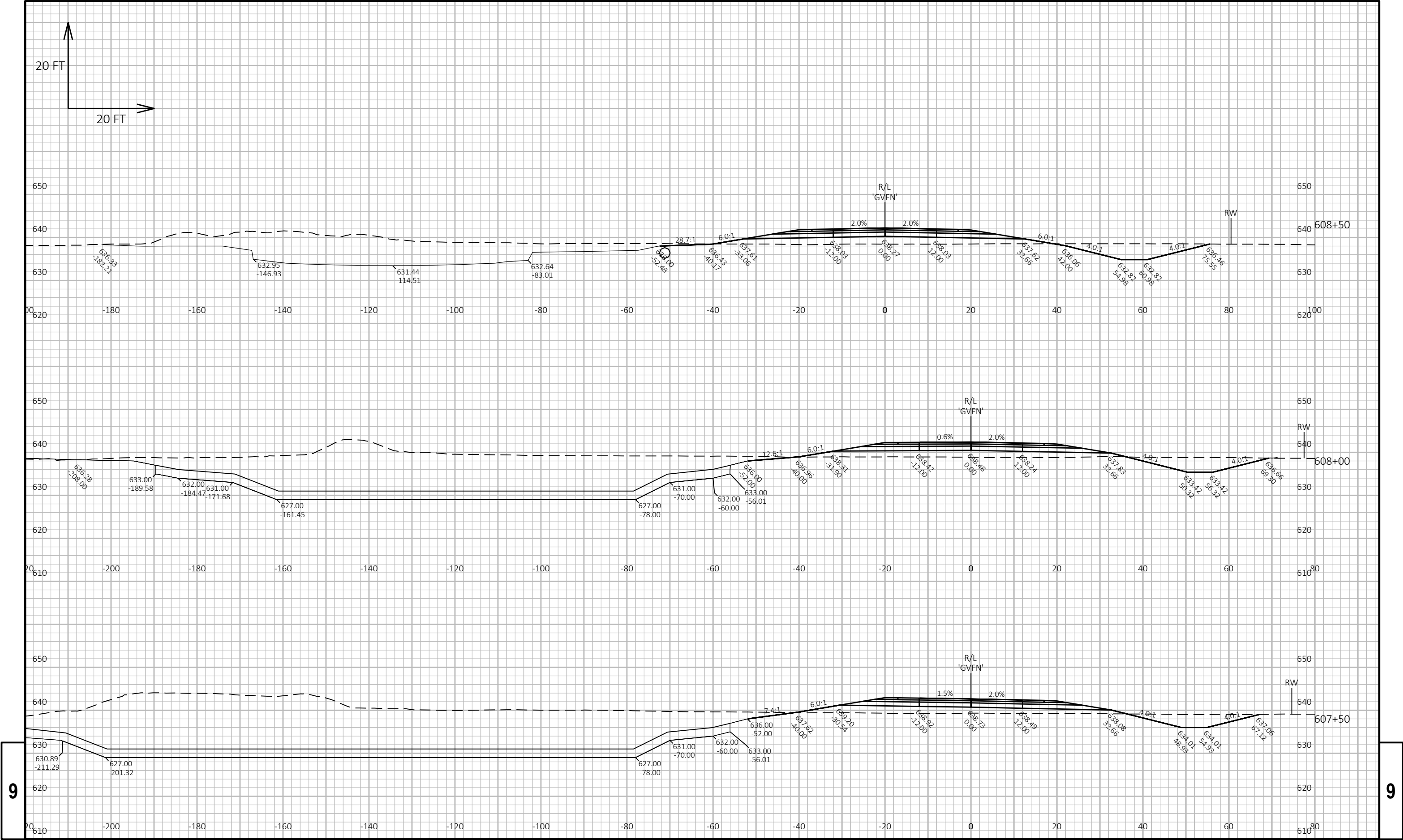








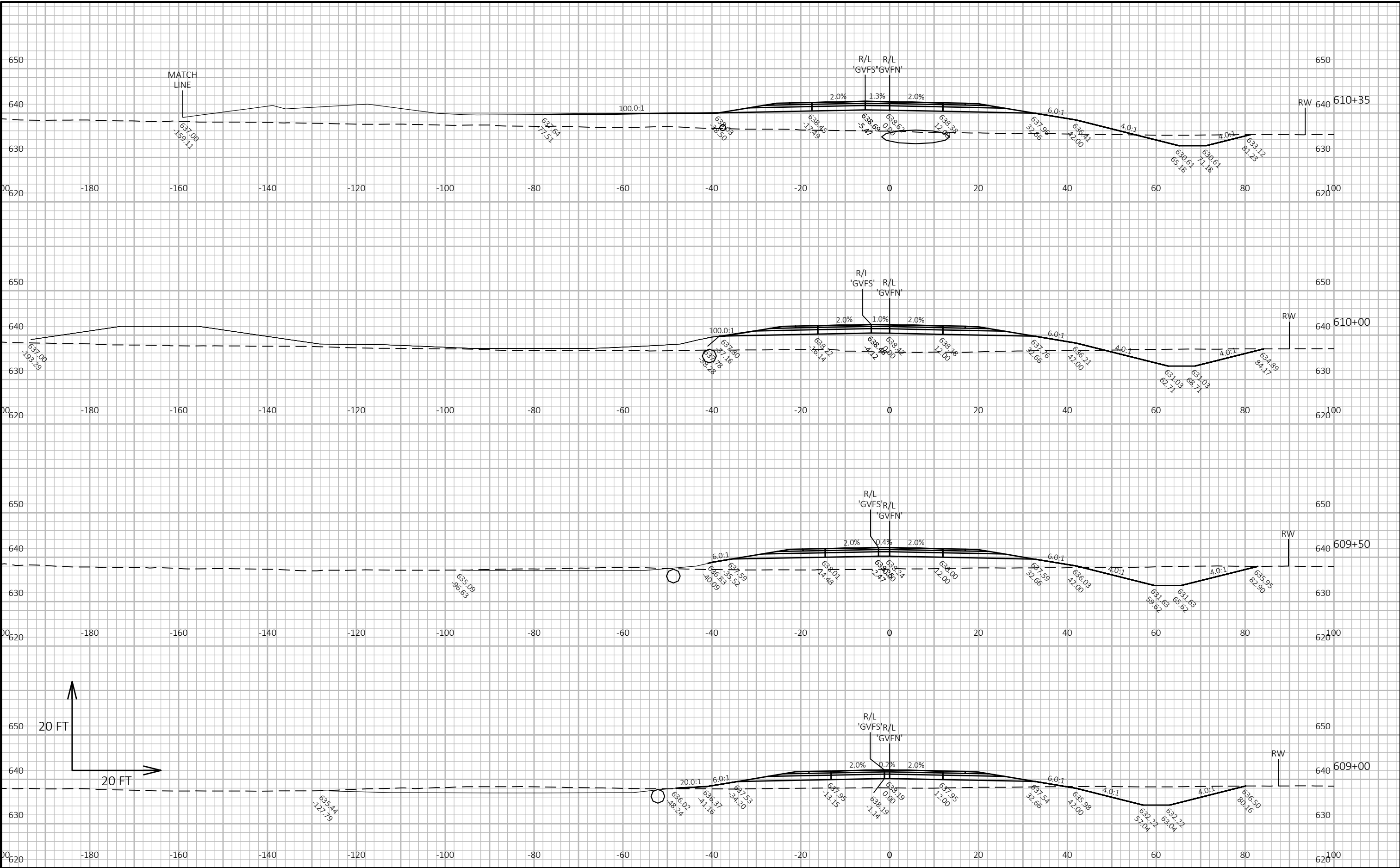
9	 The diagram shows a cross-section of a road with a centerline at station 0. Elevation points are marked at various stations: 630.00 at station -180, 627.00 at station -80, 631.00 at station -70.89, 632.00 at station -60.88, and 633.13 at station -56.38. The road width is 100 feet, and the elevation at the edges is 610.00. The diagram is divided into two sections by a vertical line at station 0.																9
	PROJECT NO: 1130-68-81		HWY: IH 41 - SOUTHBRIDGE		COUNTY: BROWN		CROSS SECTIONS: SOUTHBRIDGE - FRENCH RD				SHEET		E				

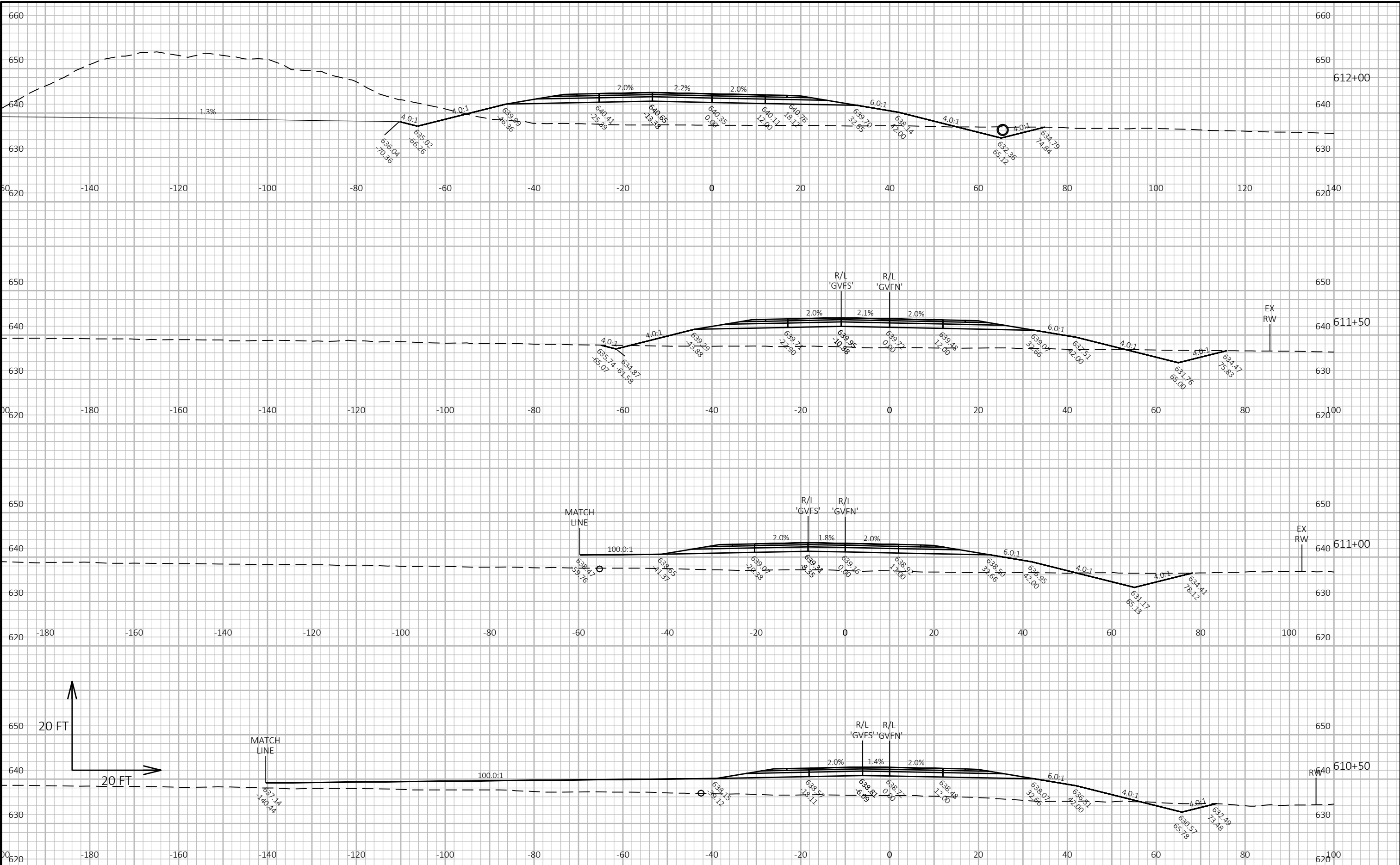


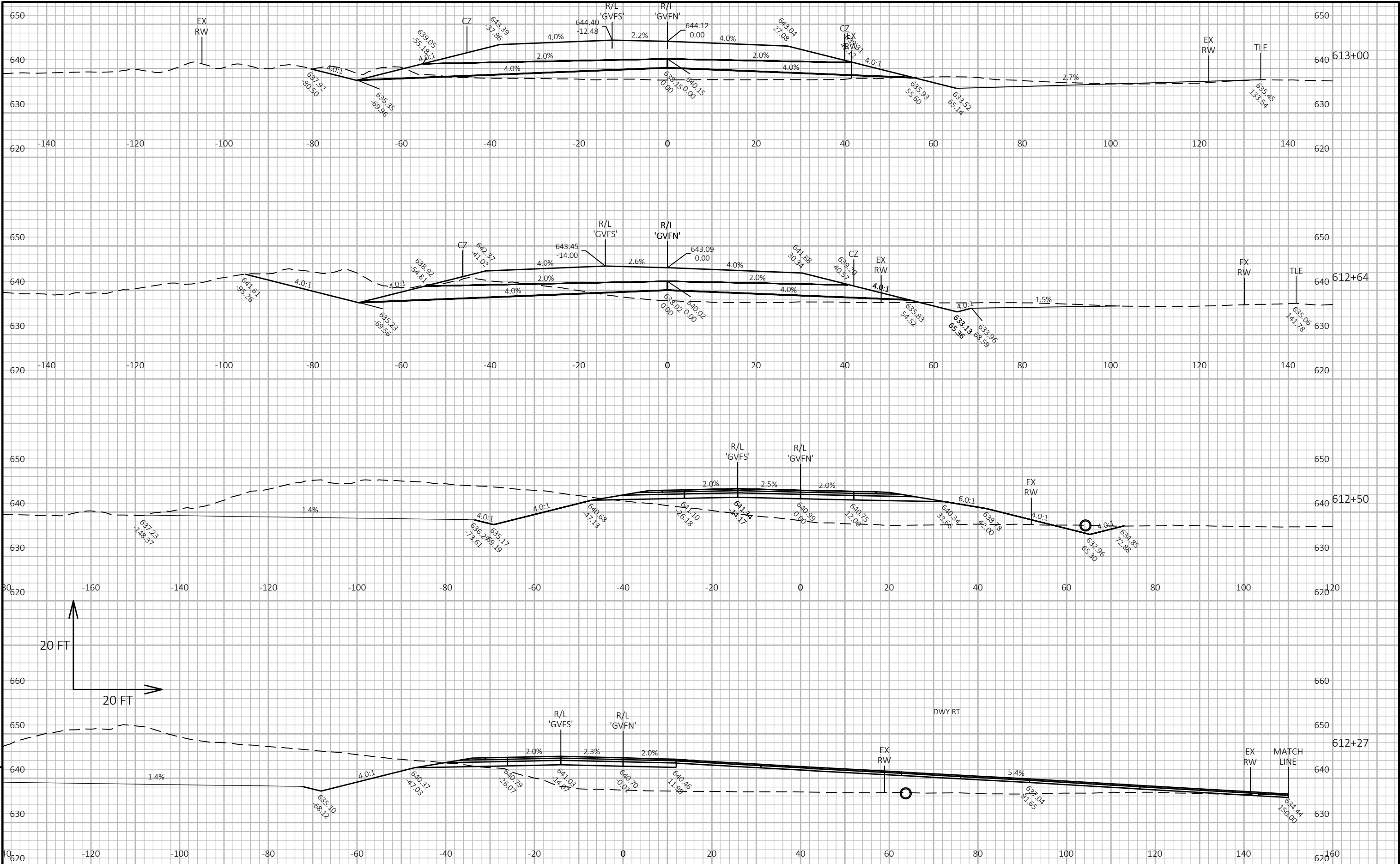
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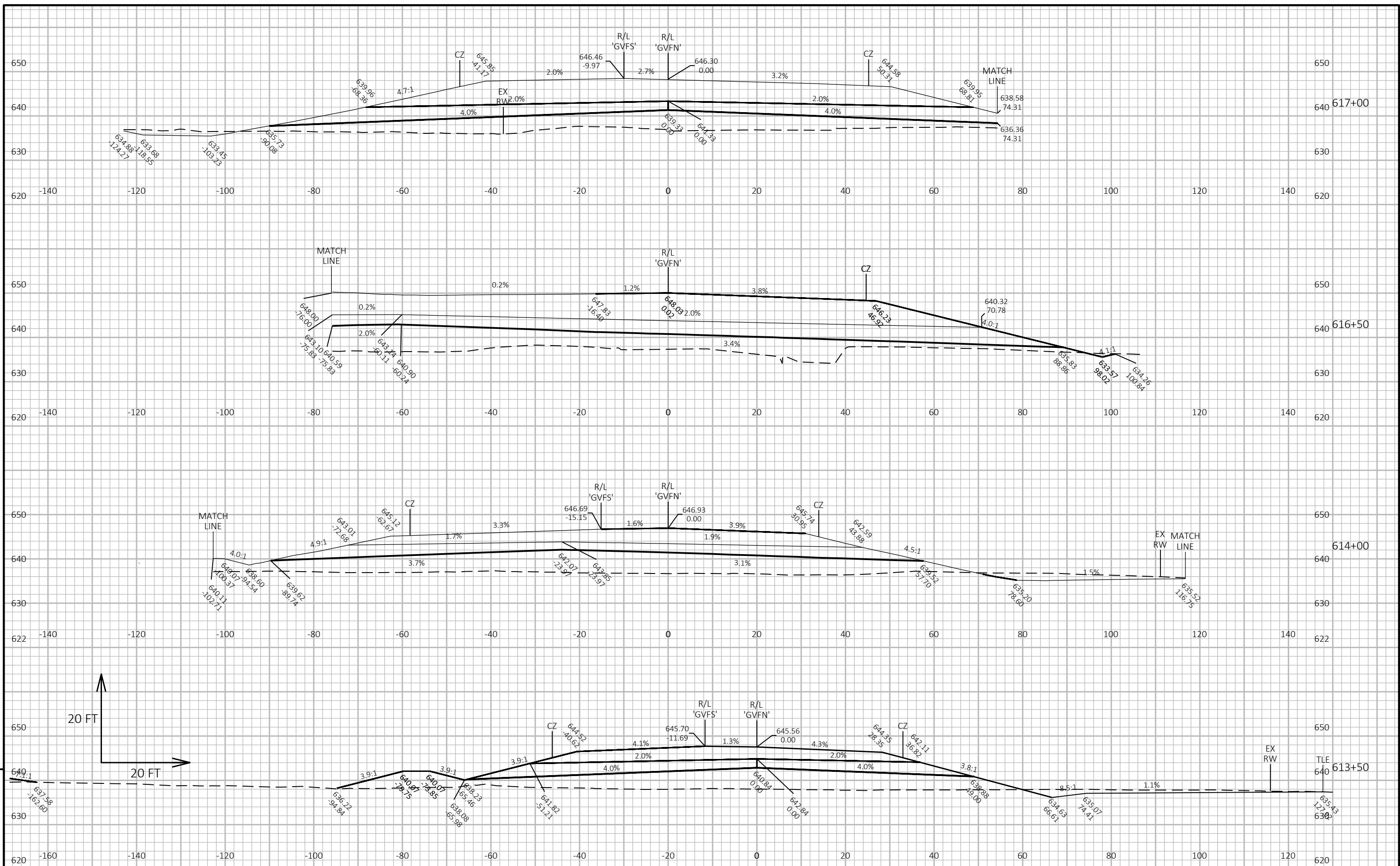
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - FRENCH RD	SHEET	E
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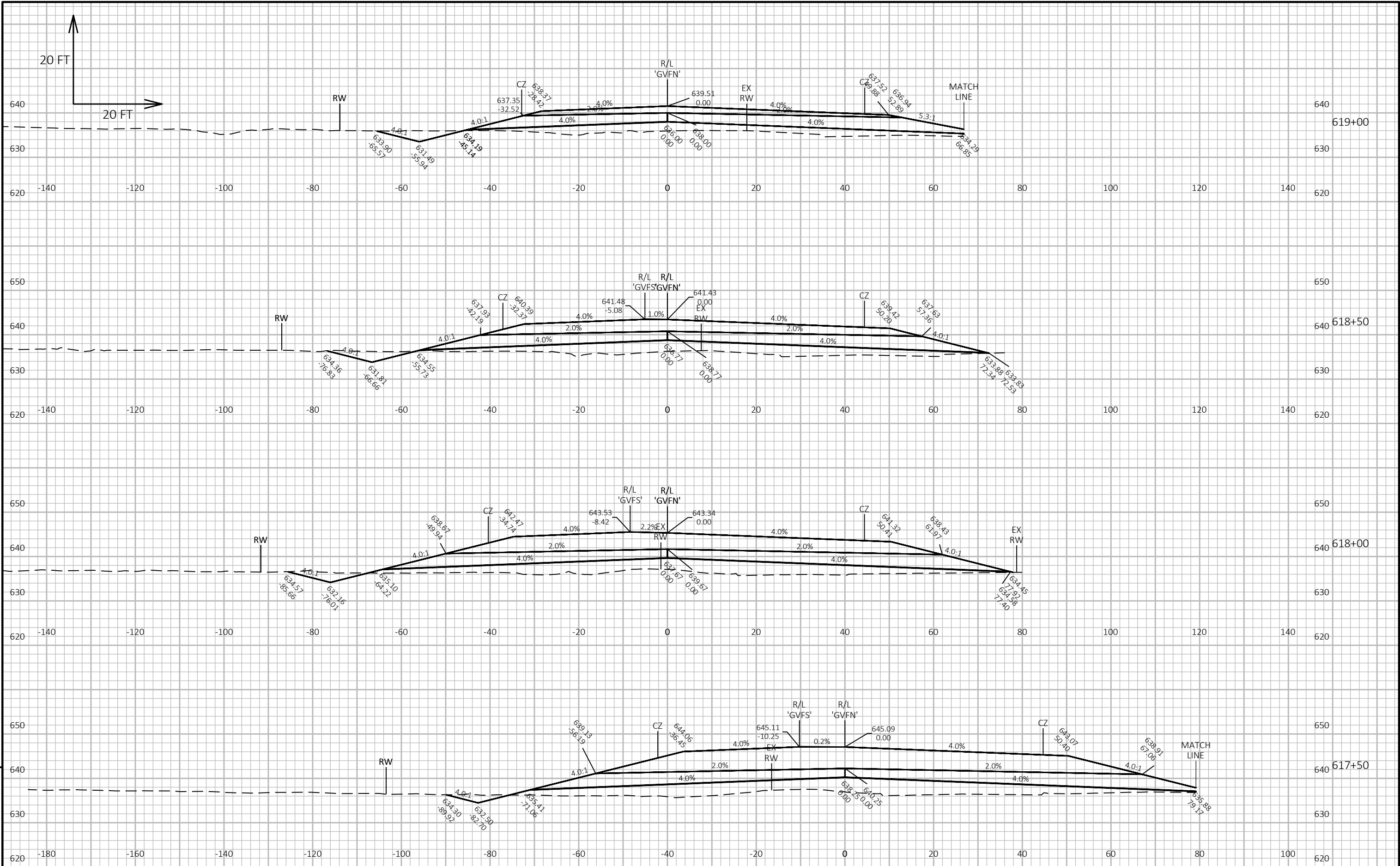


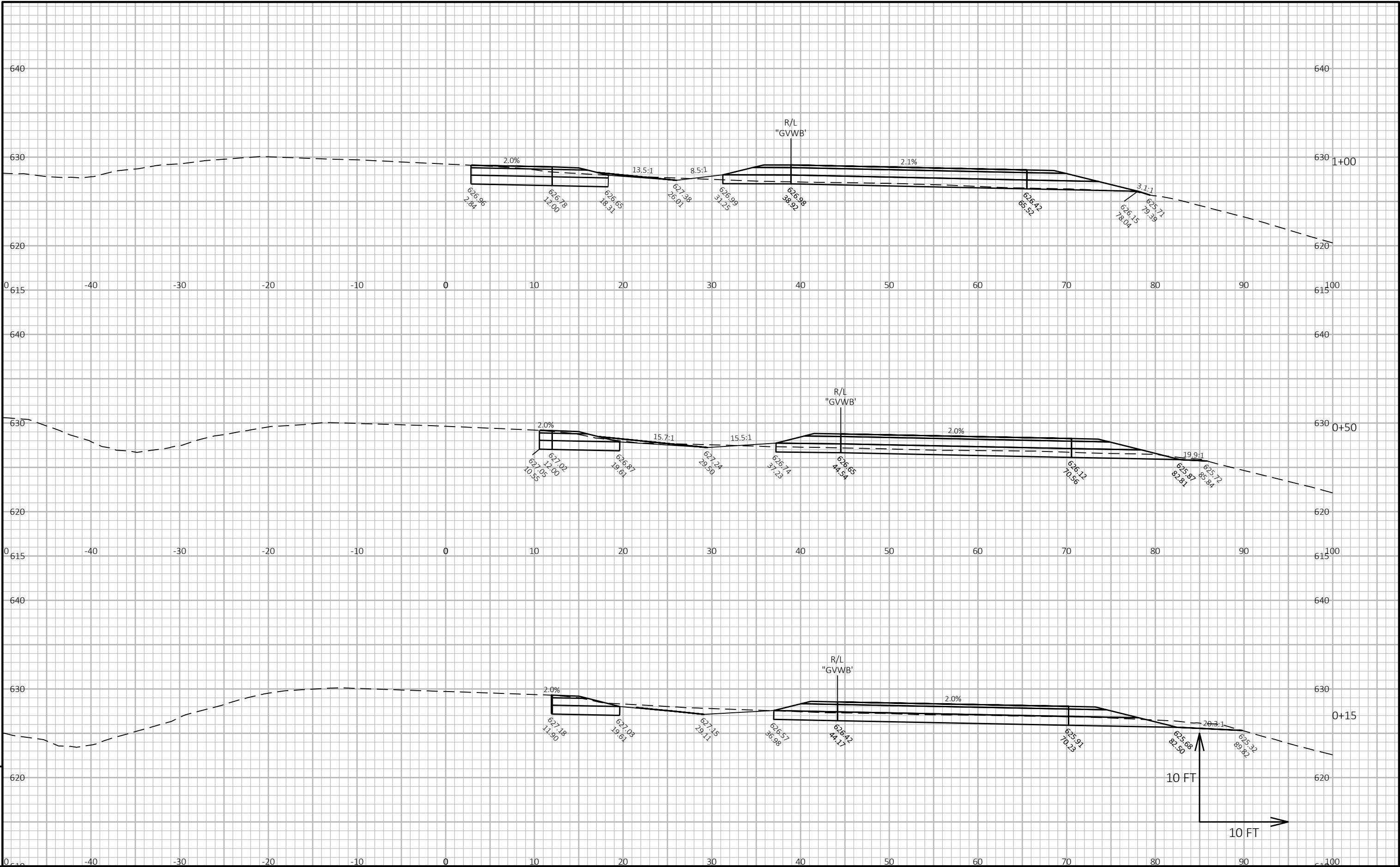


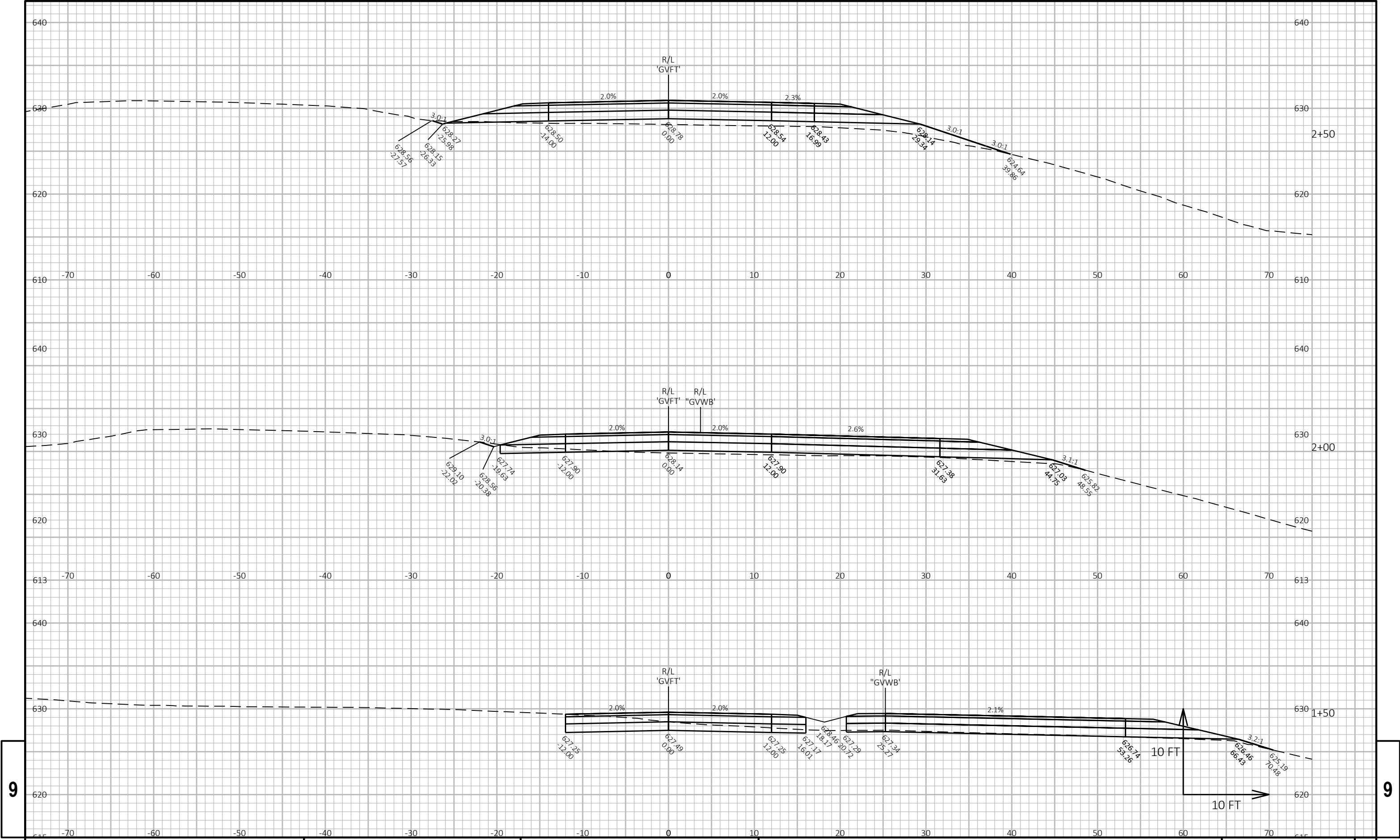


PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: SOUTHBRIDGE - FRENCH RD	SHEET	E
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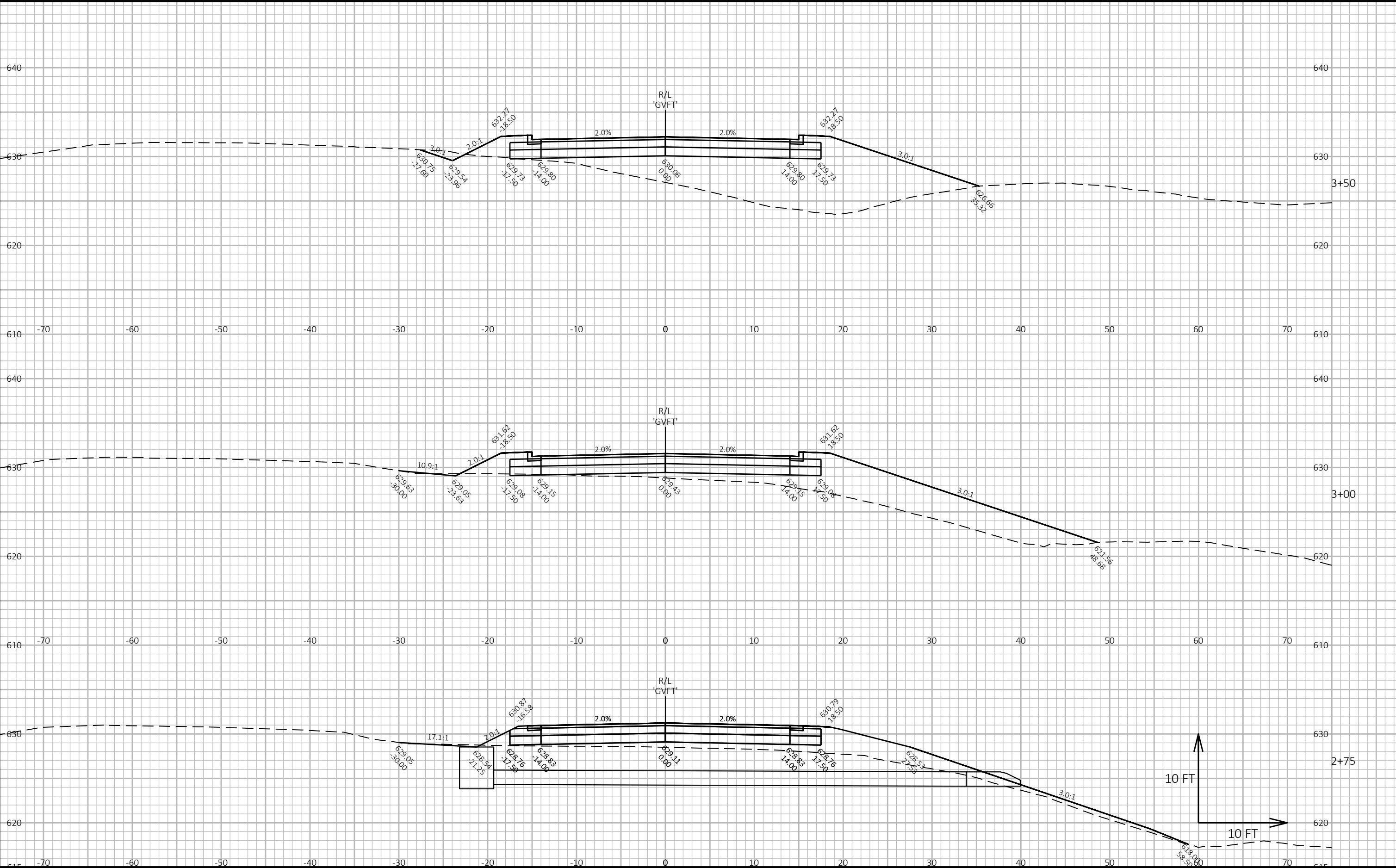


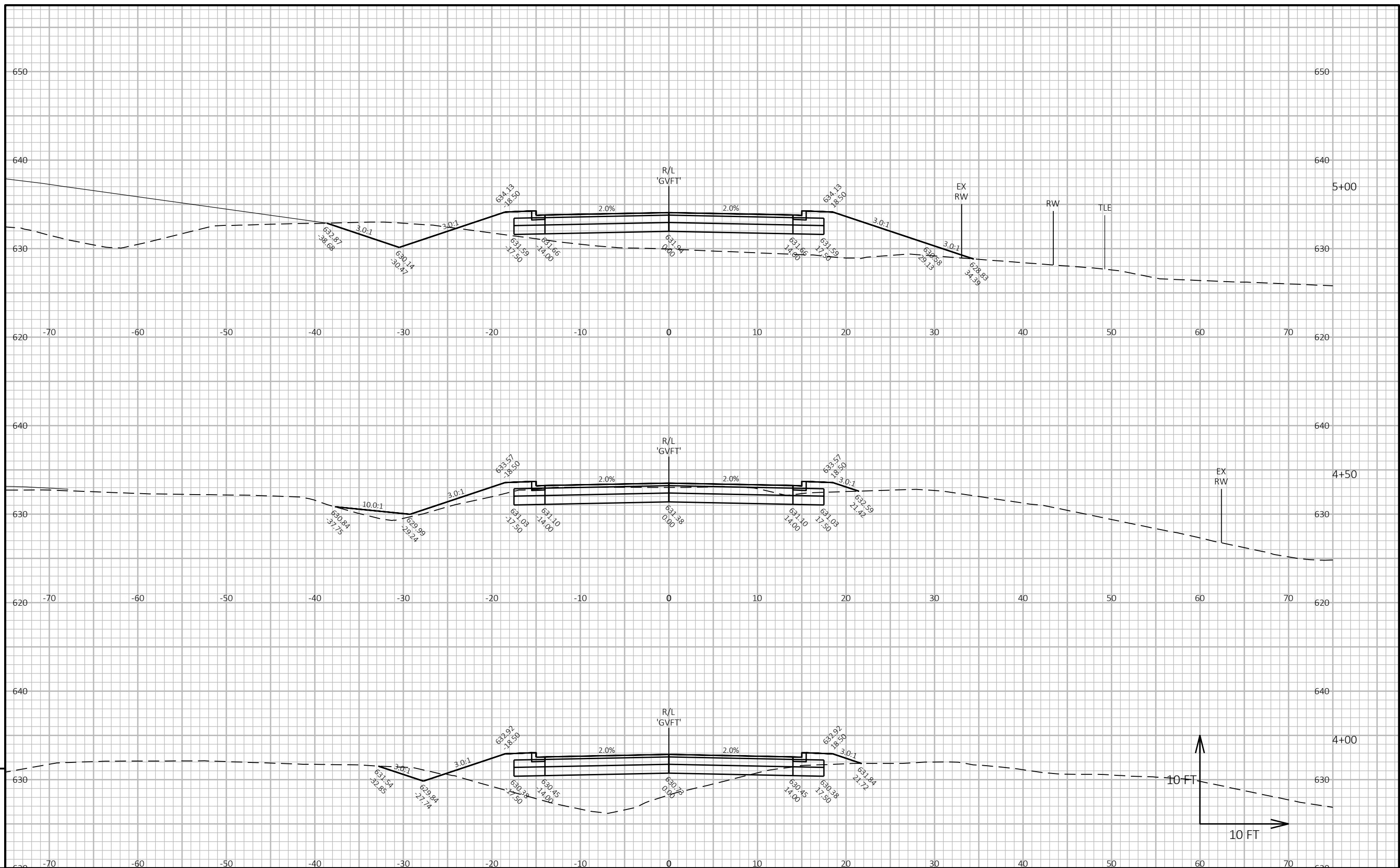


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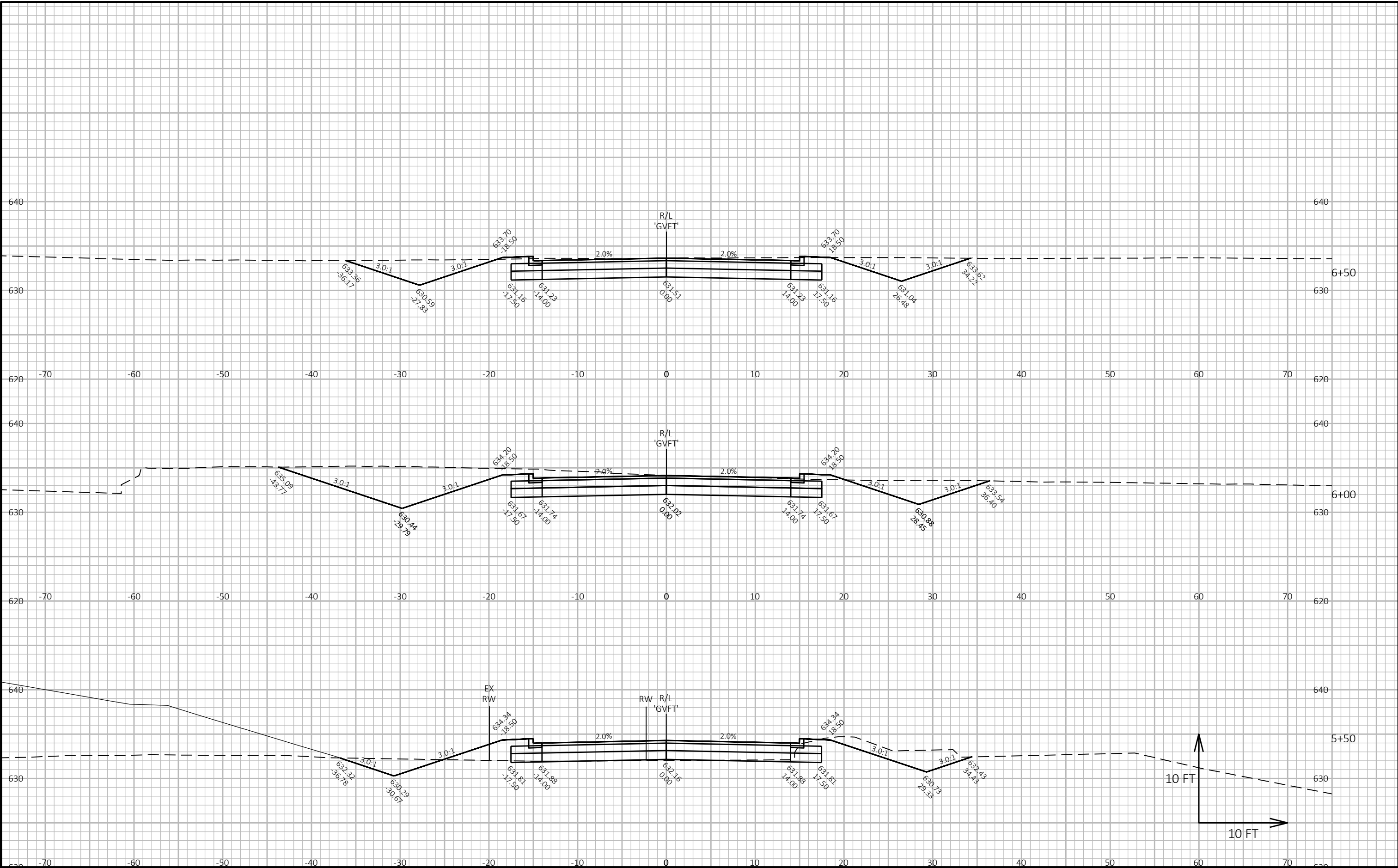
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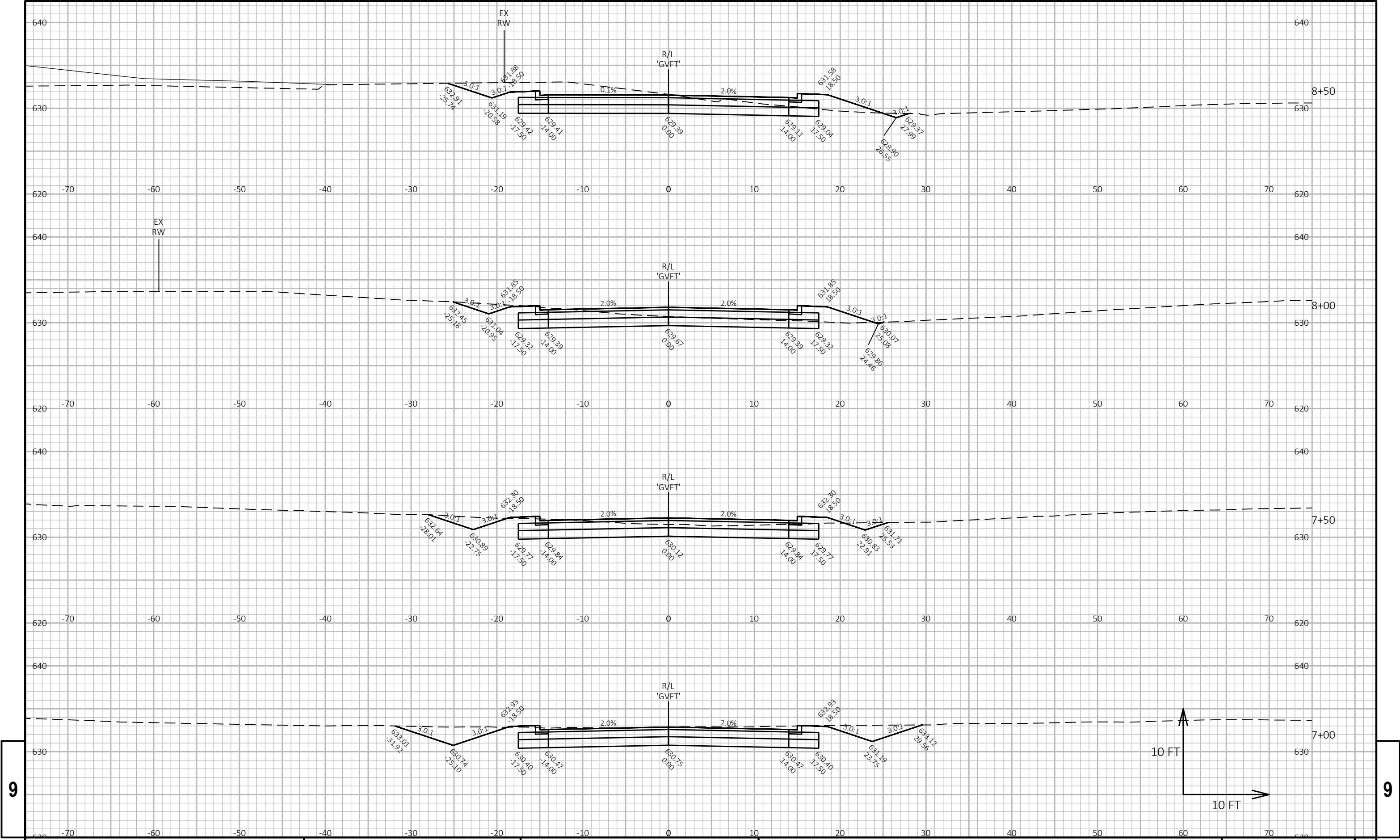
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: INNOVATION TEMP ROAD	SHEET E
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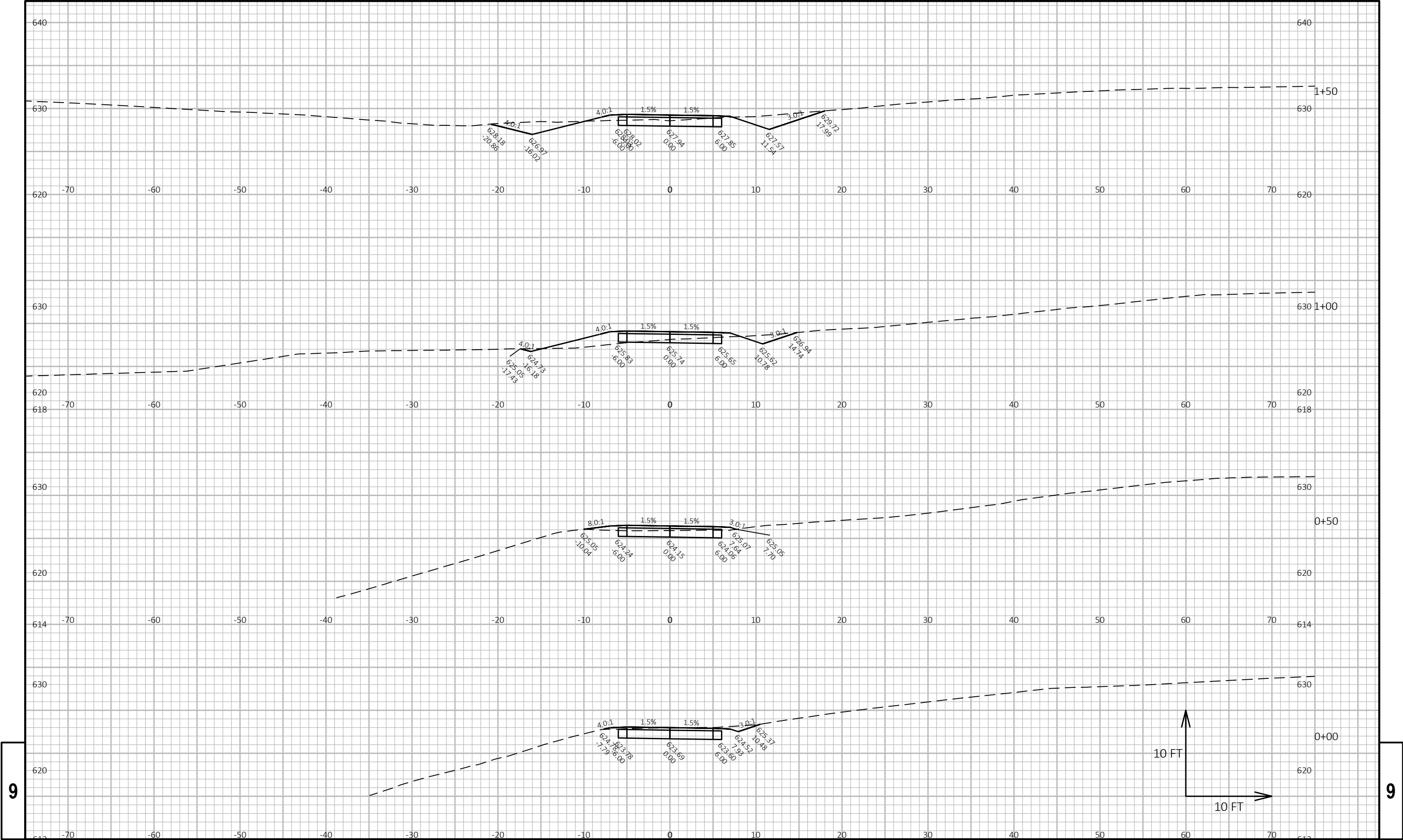




PROJECT NO:	1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS:	INNOVATION TEMP ROAD	SHEET	E
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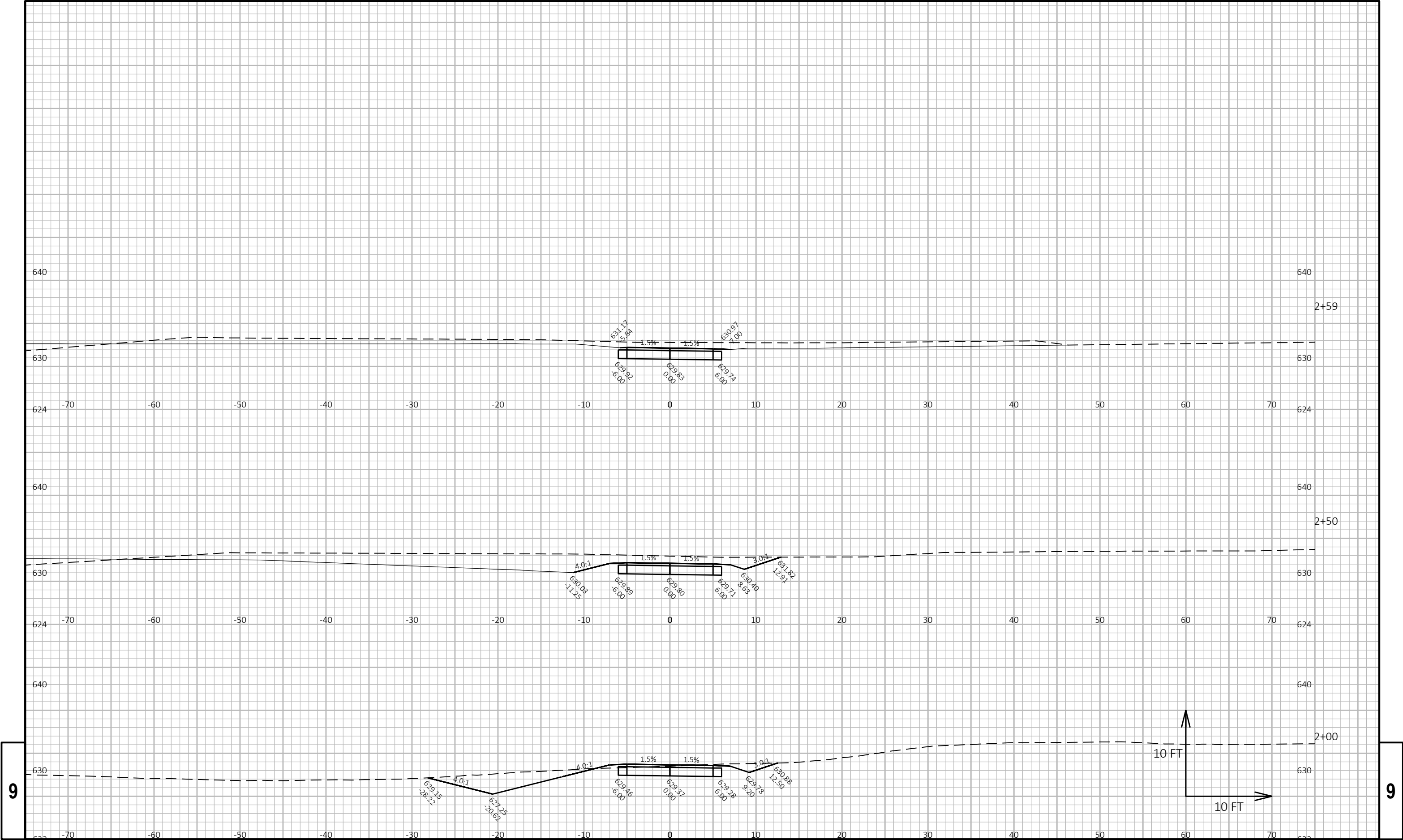




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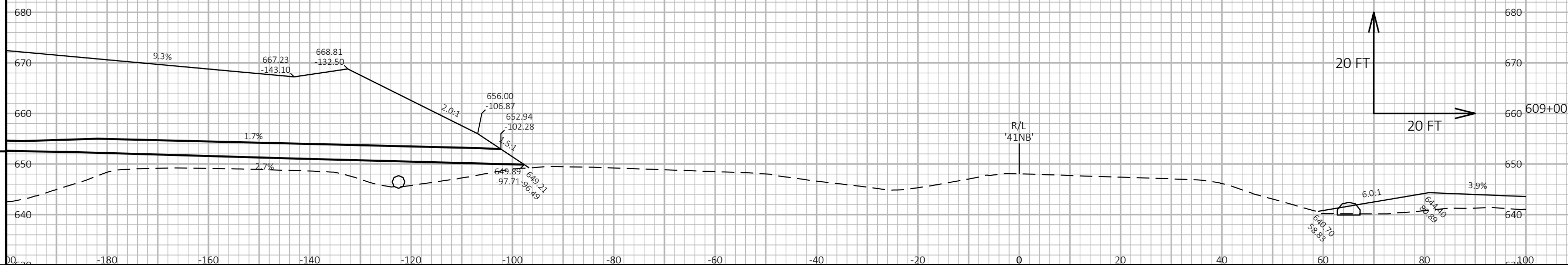
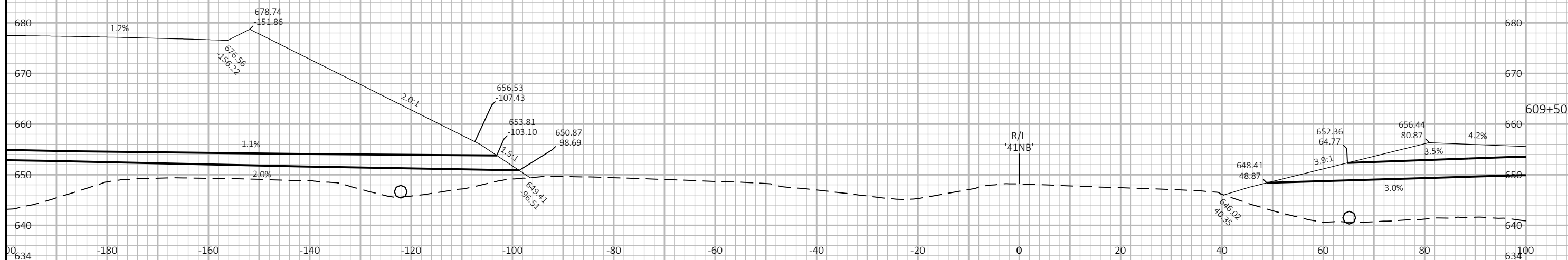
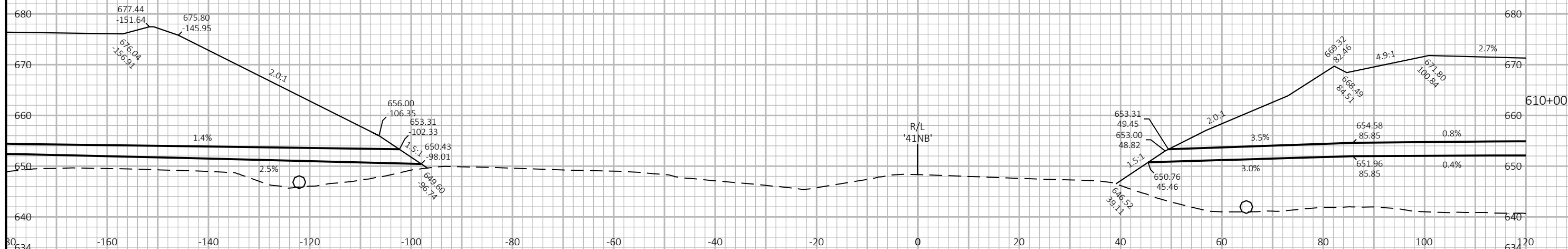
PROJECT NO: 1130-68-81	HWY: IH 41 - SOUTHBRIDGE	COUNTY: BROWN	CROSS SECTIONS: PRESERVE TRIAL	SHEET E
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AVOID FUTURE PILE LOCATIONS WITH VERTICAL
DRAIN PLACEMENT. CONTACT KYLE TREML,
920-360-7029 FOR PILE LOCATIONS



PROJECT NO: 1130-68-81

HWY: IH 41 - SOUTHBRIDGE

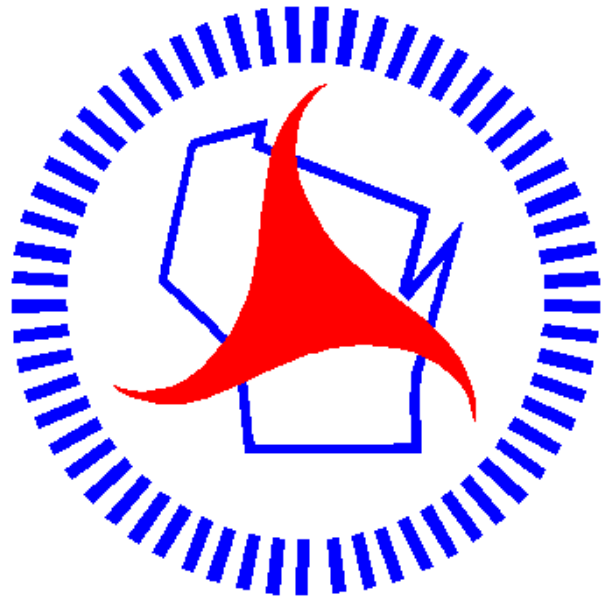
COUNTY: BROWN

CROSS SECTIONS: IH 41 GRADING

SHEET

E

Notes



Wisconsin Department of Transportation

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