PROJECT ID: 6020-00-70
WITH: N/A

COUNTY: COLUMBIA

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6020-00-70		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DEFOREST-PORTAGE

STH 22/STH 60 INTERSECTION

USH 51

COLUMBIA COUNTY

APPROVED FOR DESIGN OF UTILITY ADJUSTMENTS MARCH 27, 2020

STATE PROJECT NUMBER
6020-00-70

ORDER OF SHEETS

TOTAL SHEETS =

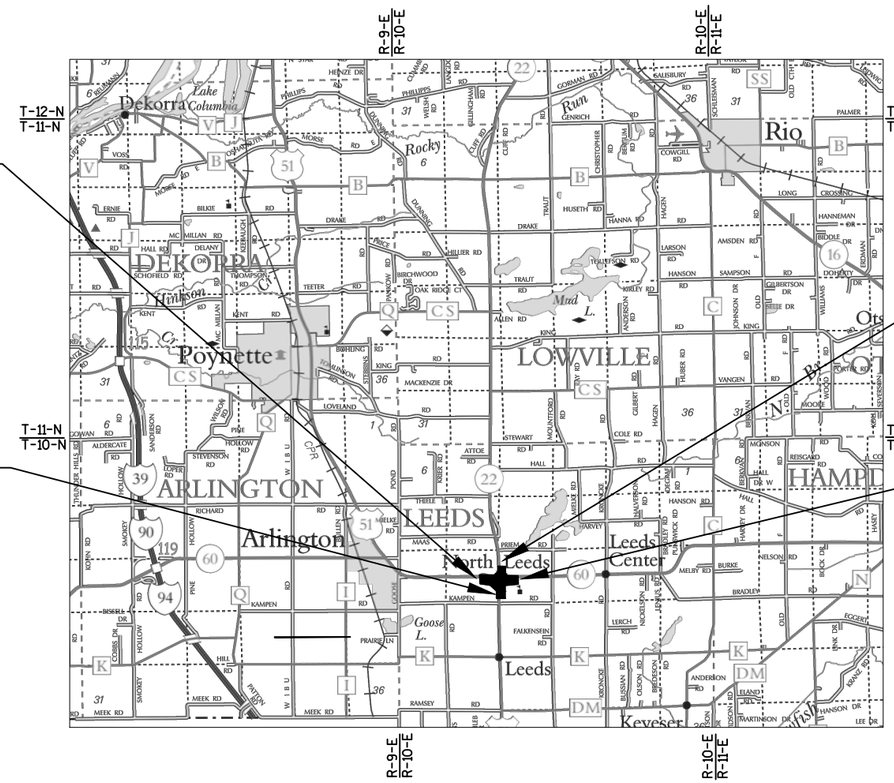
N

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	10,000
A.A.D.T.	(2042)	=	12,000
D.H.V.	(9.6%)	=	8.4
D.D.		=	60/40
T.		=	10%
DESIGN SPEED		=	60 MPH
ESALS		=	2,500,000

BEGIN PROJECT
STA. 102+00.00 "EB"
Y = 318527.10
X = 571252.43

BEGIN CONSTRUCTION
STA. 205+00.00 "NB"



END CONSTRUCTION
STA. 229+00.00 "NB"

END PROJECT
STA. 134+50.00 "EB"

CONVENTIONAL SYMBOLS

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

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

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

LAYOUT
SCALE 0 1.5 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.616 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUE ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCE MAY BE USED AS GROUND DISTANCES.

ELEVATION SHOWN ON THIS PLAN ARE REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD (2012).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JSD PROFESSIONAL SERVICES, INC
Designer	GREGORY PAYNE, P.E.
Project Manager	LALITHA BALACHANDRAN. P.E.
Regional Examiner	SW REGION
Regional Supervisor	WILLIAM STROBEL, P.E.

APPROVED FOR THE DEPARTMENT

DATE:_____ _____
(Signature)

E

2

SECTION 2 ORDER OF SHEETS

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

PLACE 6" HMA PAVEMENT IN THREE LAYERS, 2" UPPER LAYER AND TWO 2" LOWER LAYERS. PLACE THE 4" TEMPORARY ASPHALTIC SURFACE IN A SINGLE LAYER.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTION AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING OR TURNING LANE.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL ITEMS IN THE MISCELLANEOUS QUANTITIES, TYPICAL SECTIONS, AND EROSION CONTROL PLANS ARE SUGGESTED. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. MAINTAIN EROSION CONTROL ITEMS UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

CURB AND GUTTER GRADES ARE MEASURED AT THE FLANGE LINE.

CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE LINE.

THE LOCATION OF STORM SEWER STRUCTURES REFERS TO THE CENTER OF THE STRUCTURE.

STANDARD ABBREVIATIONS

AGG	AGGREGATE	RL	REFERENCE LINE
AADT	ANNUAL AVERAGE DAILY TRAFFIC	R/W	RIGHT OF WAY
CL OR C/L	CENTER LINE	RD	ROAD
CTH	COUNTY TRUNK HIGHWAY	RDWY	ROADWAY
CY	CUBIC YARD	SHLDR	SHOULDER
DHV	DESIGN HOUR VOLUME	S	SOUTH
EB	EASTBOUND	SB	SOUTHBOUND
FE	FIELD ENTRANCE	SPECS	SPECIFICATIONS
FT	FOOT	SF	SQUARE FOOT
IN DIA	INCH DIAMETER	SY	SQUARE YARD
LIN FT OR LF	LINEAR FOOT	SDD	STANDARD DETAIL DRAWING
NB	NORTHBOUND	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
OH	OVERHEAD	TEL	TELEPHONE
PAVT	PAVEMENT	UG	UNDERGROUND
LB	POUND	W	WEST
PSI	POUNDS PER SQUARE INCH	WB	WESTBOUND
PROJ	PROJECT		

WISDOT REGION CONTACTS

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PROJECT MANAGER
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LALITHA.BALACHANDRAN@DOT.WI.GOV

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PROJECT LEADER
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(608) 242-8058
GREGORY.PAYNE@DOT.WI.GOV

DNR LIASON

ERIC HEGGELUND
DNR SOUTH CENTRAL REGION HQ
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FITCHBURG, WI 53711
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ERIC.HEGGELUND@WISCONSIN.GOV

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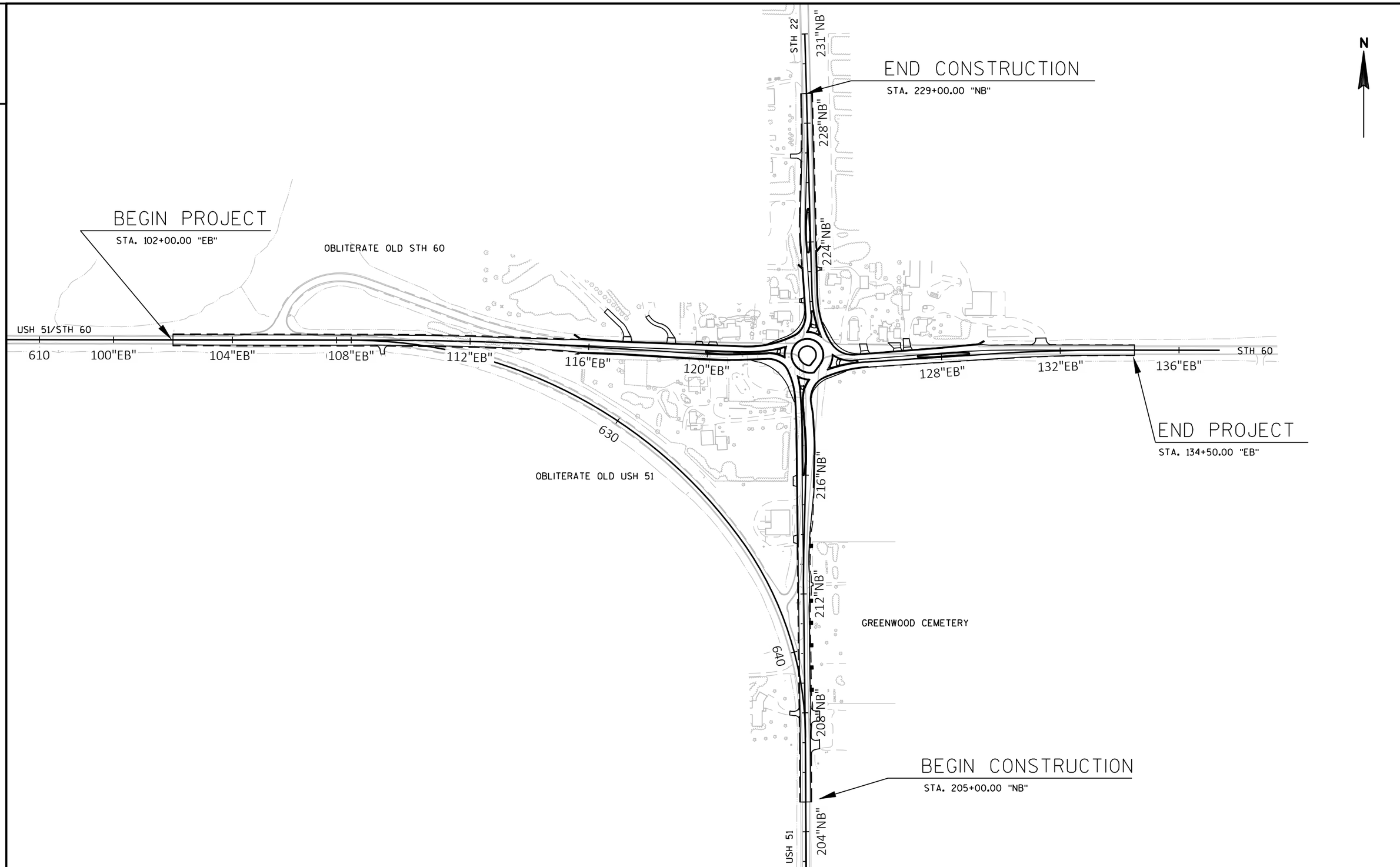
ALLIANT ENERGY - ELECTRICITY
4902 NORTH BILTMORE LANE
MADISON, WI 53713
(608) 458-4871
MICHAELBROLIN@ALLIANTENERGY.COM

KEVIN ZICKERT
CENTURYLINK - COMMUNICATION LINE
224 INDUSTRIAL DR.
NORTH PRAIRIE, WI 53153
(262) 392-5200
KEVIN.ZICKERT@CENTURYLINK.COM

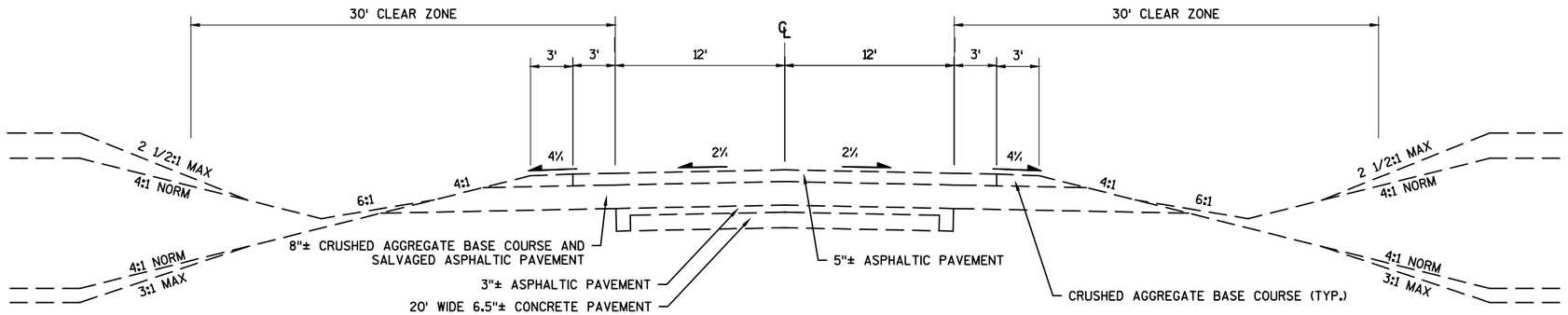
JANE ROSSING
MG&E - GAS/PETROLEUM
P.O. BOX 1231
MADISON, WI 53701-1231
(608) 252-7099
GROSSING@MGE.COM

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

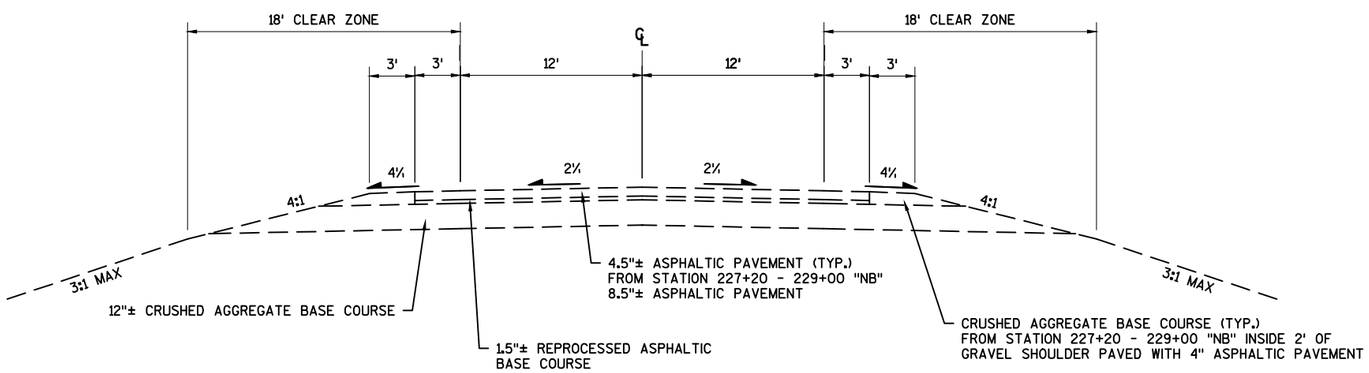


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET	E

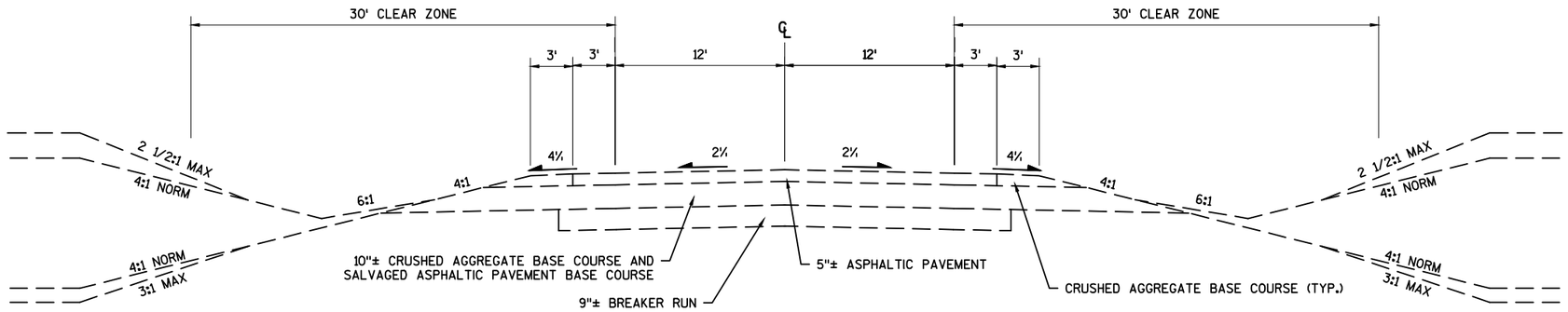
FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - Plan 1 IN 200 FT
PLOT DATE : 7/19/2019 8:52 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN: 300 FT
WISDOT/CADDS SHEET 42



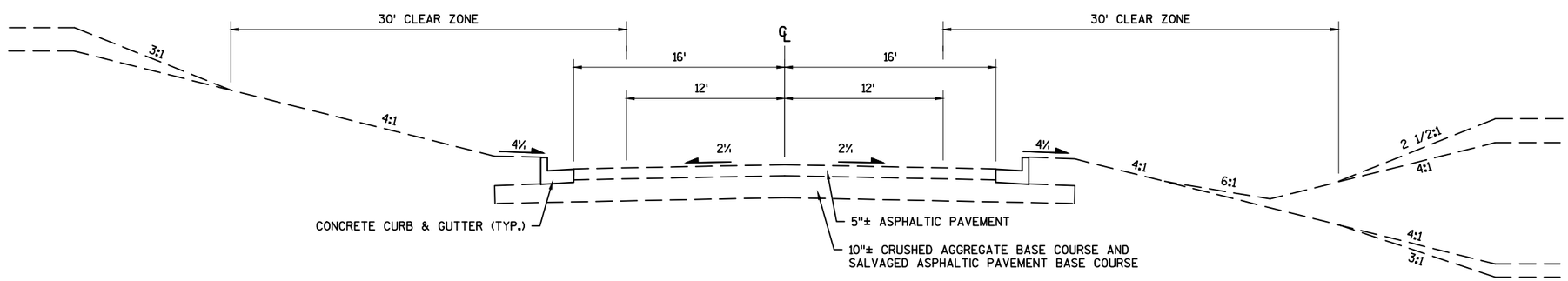
EXISTING TYPICAL SECTION USH 51
STA. 610+00 - STA. 650+00



EXISTING TYPICAL SECTION STH 22
STA 210+00 "NB" - 229+00 "NB"

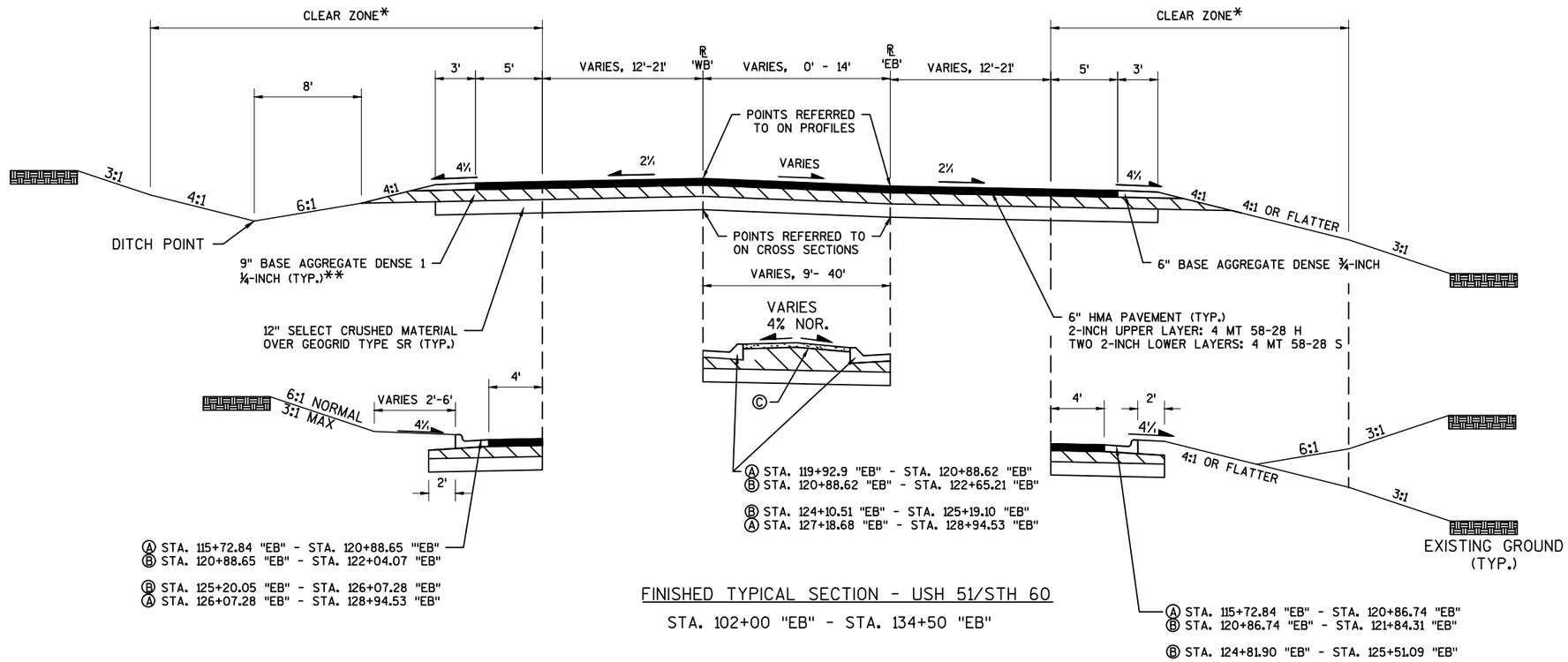


EXISTING TYPICAL SECTION STH 60
STA. 114 "EB" - 117+00 "EB"
STA. 123+00 "EB" - 134+50 "EB"



EXISTING TYPICAL SECTION STH 60
STA 117+00 "EB" - 123+00 "EB"

PROJECT NO:6020-00-70	HWY:USH 51	COUNTY:COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET	E



FINISHED TYPICAL SECTION - USH 51/STH 60

STA. 102+00 "EB" - STA. 134+50 "EB"

LEGEND

Ⓐ CONCRETE CURB & GUTTER 36-INCH, 4-INCH SLOPED, TYPE-D (TYP.)

Ⓑ CONCRETE CURB & GUTTER 30-INCH, TYPE-D (TYP.)

Ⓒ CONCRETE SIDEWALK 4-INCH (TYP.) OVER BASE AGGREGATE DENSE 1 ¼ INCH

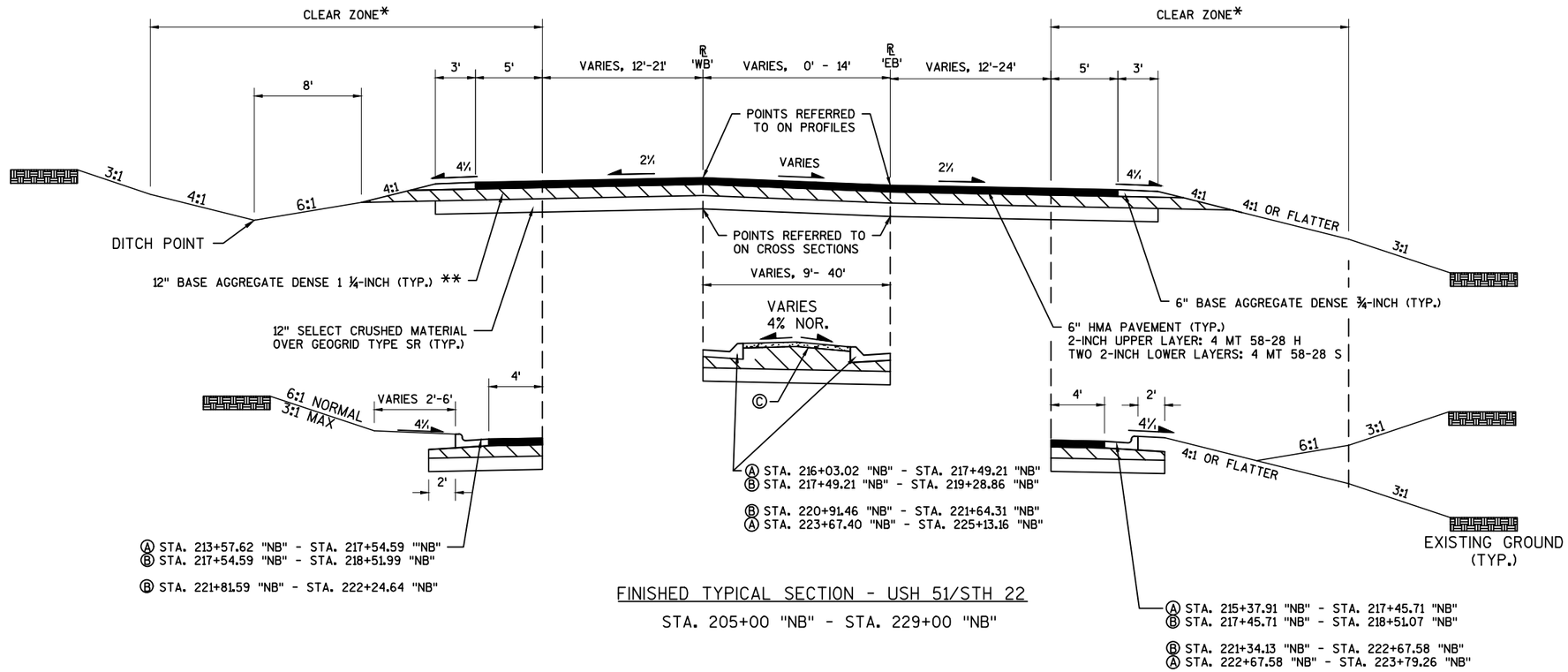
** STA. 120+00 "EB" - 127+20 "EB" 12-INCH BASE AGGREGATE DENSE 1 1/4-INCH

SEE CONSTRUCTION DETAILS, MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLAN FOR FINISHING ITEM DETAILS

SEE CONSTRUCTION DETAILS, MISCELLANEOUS QUANTITIES AND STORM SEWER DETAILS FOR UNDERDRAIN LOCATIONS

CLEARZONE WIDTH

* 102+00 - 119+25 "EB"	-	36'
119+25 - 120+75 "EB"	-	24'
120+75 - 125+75 "EB"	-	16'
125+75 - 128+00 "EB"	-	24'
128+00 - 134+50 "EB"	-	36'



FINISHED TYPICAL SECTION - USH 51/STH 22

STA. 205+00 "NB" - STA. 229+00 "NB"

LEGEND

Ⓐ CONCRETE CURB & GUTTER 36-INCH, 4-INCH SLOPED, TYPE-D (TYP.)

Ⓑ CONCRETE CURB & GUTTER 30-INCH, TYPE-D (TYP.)

Ⓒ CONCRETE SIDEWALK 4-INCH (TYP.) OVER BASE AGGREGATE DENSE 1 ¼ INCH

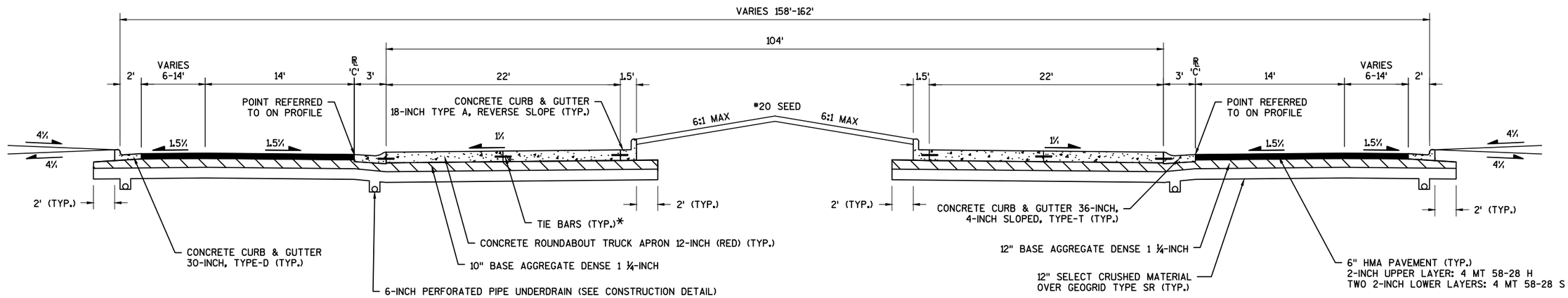
** STA. 223+60 "NB" - 229+00 "NB" 9-INCH BASE AGGREGATE DENSE 1 1/4-INCH

CLEARZONE WIDTH

*205+00 - 216+00 "NB" - 36'
216+00 - 217+50 "NB" - 24'
217+50 - 222+50 "NB" - 16'
222+50 - 225+00 "NB"- 24'
225+00 - 229+00 "NB"- 36'

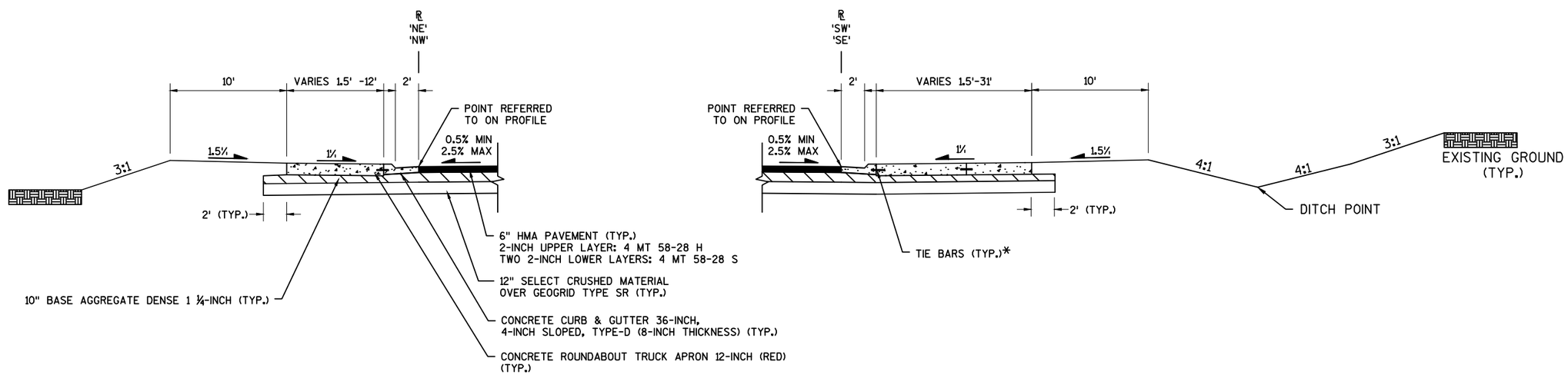
SEE CONSTRUCTION DETAILS, MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLAN FOR FINISHING ITEM DETAILS

SEE CONSTRUCTION DETAILS, MISCELLANEOUS QUANTITIES AND STORM SEWER DETAILS FOR UNDERDRAIN LOCATIONS



FINISHED TYPICAL SECTION - ROUNDABOUT
STA. 20+00 'C' - STA. 23+54.61 'C'

*NO.4, 2' TIE BARS SPACED 3' C-C
INCIDENTAL TO CONCRETE ROUNDABOUT TRUCK APRON



FINISHED TYPICAL SECTION - TRUCK APRON

STA. 31+25 "NW" - STA. 32+50 "NW"
STA. 41+00 "NE" - STA. 42+25 "NE"
STA. 50+00 "SW" - STA. 51+81.82 "SW"
STA. 66+25 "SE" - STA. 67+85 "SE"

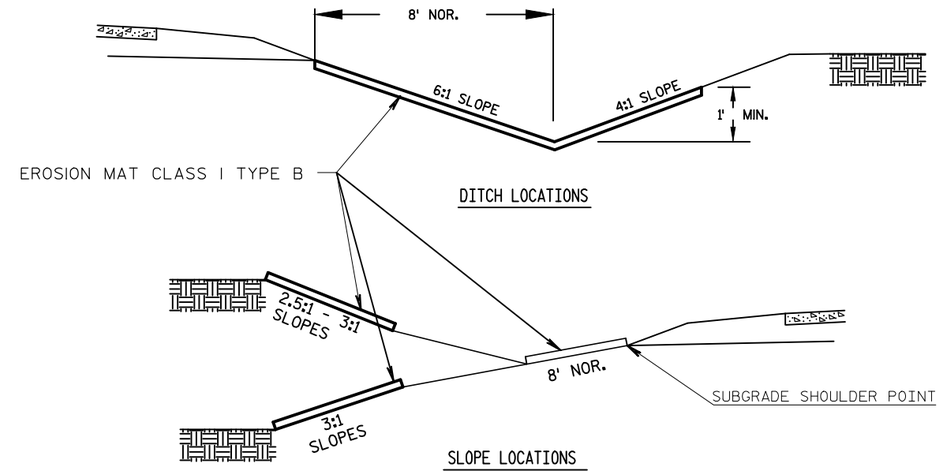
SEE CONSTRUCTION DETAILS, MISCELLANEOUS QUANTITIES AND EROSION CONTROL PLAN FOR FINISHING ITEM DETAILS

SEE CONSTRUCTION DETAILS, MISCELLANEOUS QUANTITIES AND STORM SEWER DETAILS FOR UNDERDRAIN LOCATIONS

RUNOFF COEFFICIENT TABLE

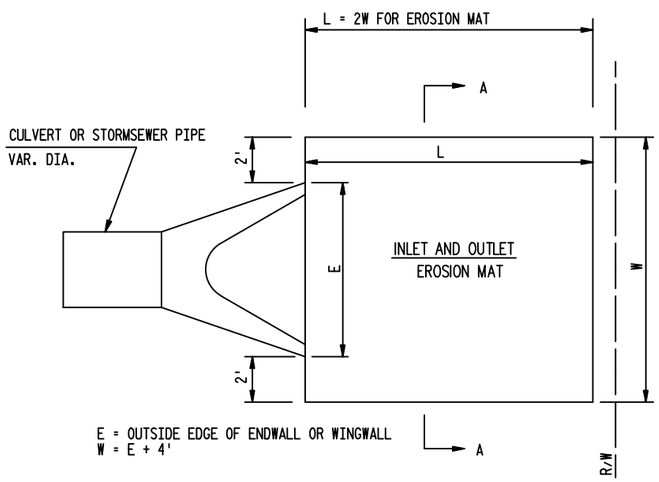
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .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 =23 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES =17.5 ACRES



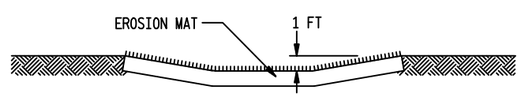
DETAIL FOR EROSION MAT PLACEMENT

LOCATIONS SHOWN ON EROSION CONTROL PLAN



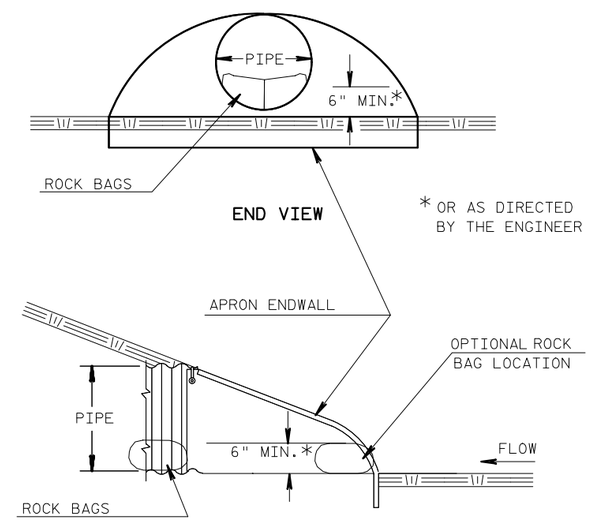
DETAIL FOR EROSION CONTROL AT CULVERT OR STORMSEWER PIPE ENDS

SEE EROSION CONTROL PLAN SHEETS FOR LOCATIONS



INLET AND OUTLET SECTION A-A

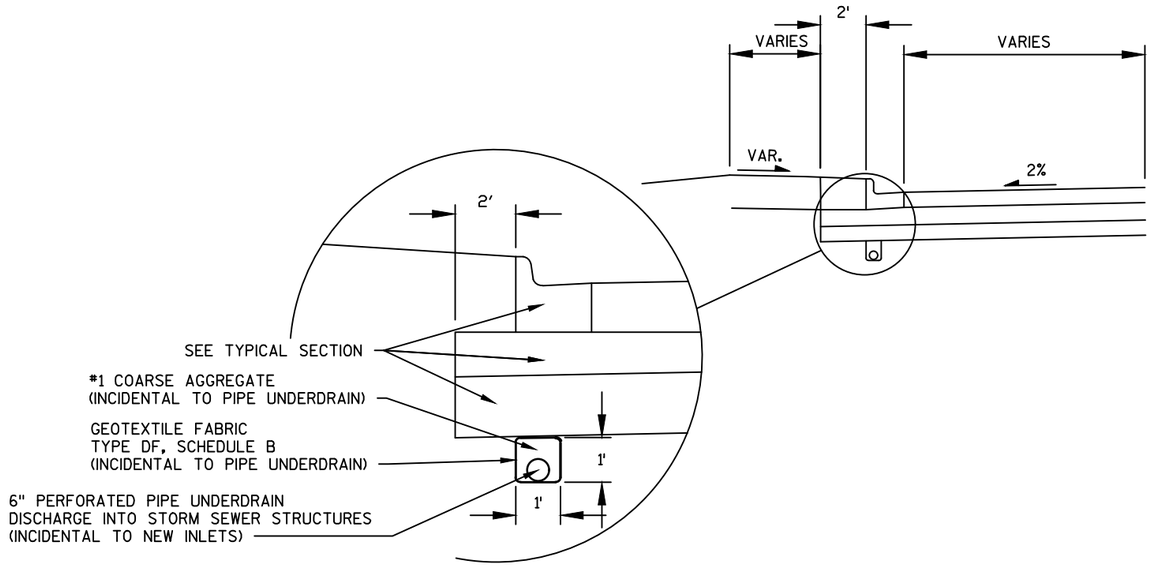
EROSION MAT



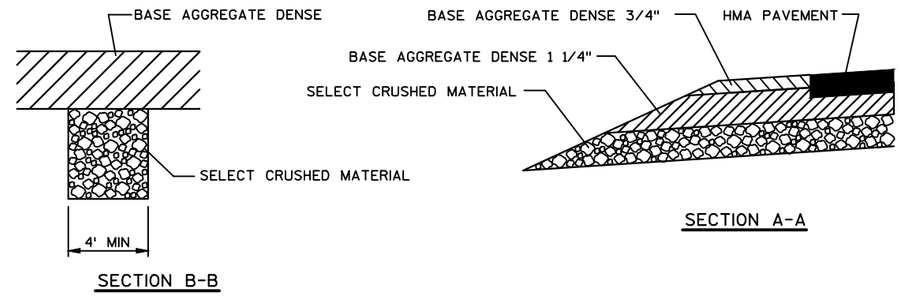
ESTIMATED BAG SIZE = 18" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
12"	1
15"	2
18"	2
21"	3
14" X 23"	3
24"	3
27"	4
30"	5
19" X 30"	5
36"	7
24" X 38"	8
42"	8
29" X 45"	10
48"	10
34" X 53"	10
38" X 60"	13
60"	13
66"	15
53" X 83"	19

DETAIL FOR CULVERT PIPE CHECKS

(INSTALL ON INLET END ONLY)

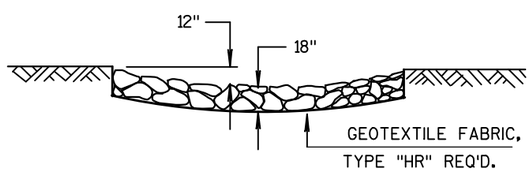


DETAIL FOR 6" PERFORATED PIPE UNDERDRAIN



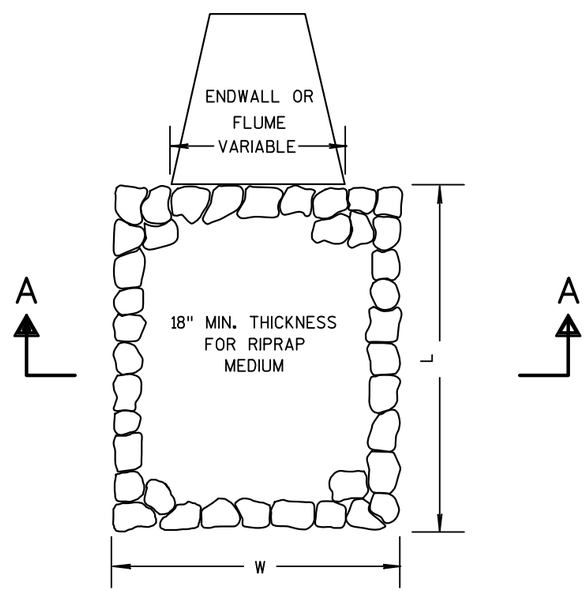
DETAIL FOR FRENCH DRAINS

DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250'
AND AT EACH SAG VERTICLE CURVE IN THE PROFILE
OR AS DIRECTED BY THE ENGINEER.

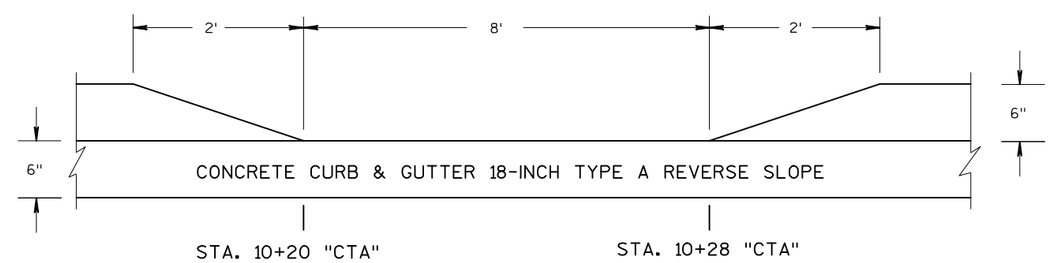


SECTION A-A

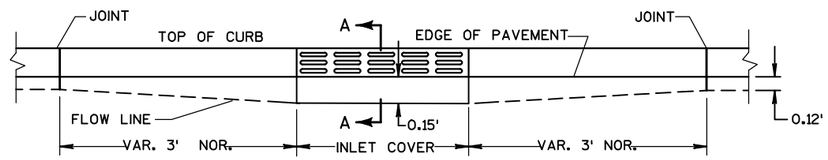
LENGTH	WIDTH	LOCATION
25'	10'	115+30 "EB", 25' RT
25'	8'	115+50 "EB", 40' LT
5'	10'	121+50 "EB", 50' LT
25'	8'	129+50 "EB", 45' LT
25'	10'	223+25 "NB", 40' LT
25'	10'	223+90 "NB", 30' RT



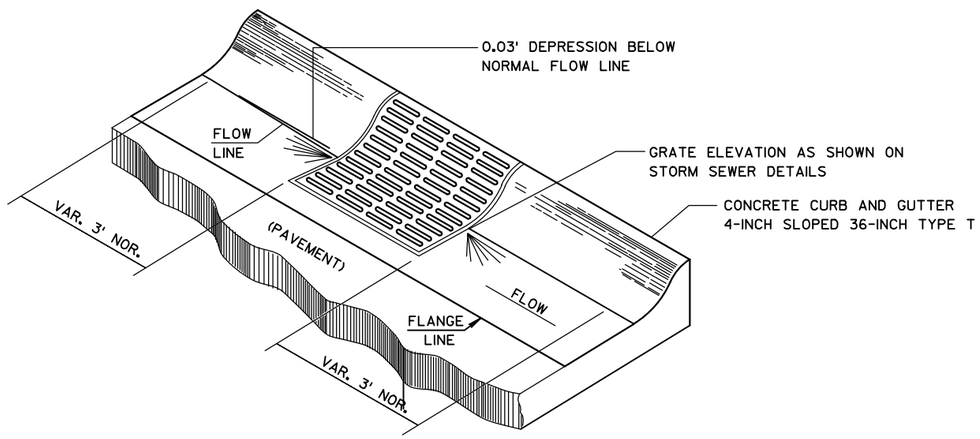
DETAIL FOR RIPRAP MEDIUM TREATMENT AT ENDWALLS/FLUMES



DETAIL FOR CURB HEAD DEPRESSION
FOR ROUNDABOUT ISLAND MAINTENANCE

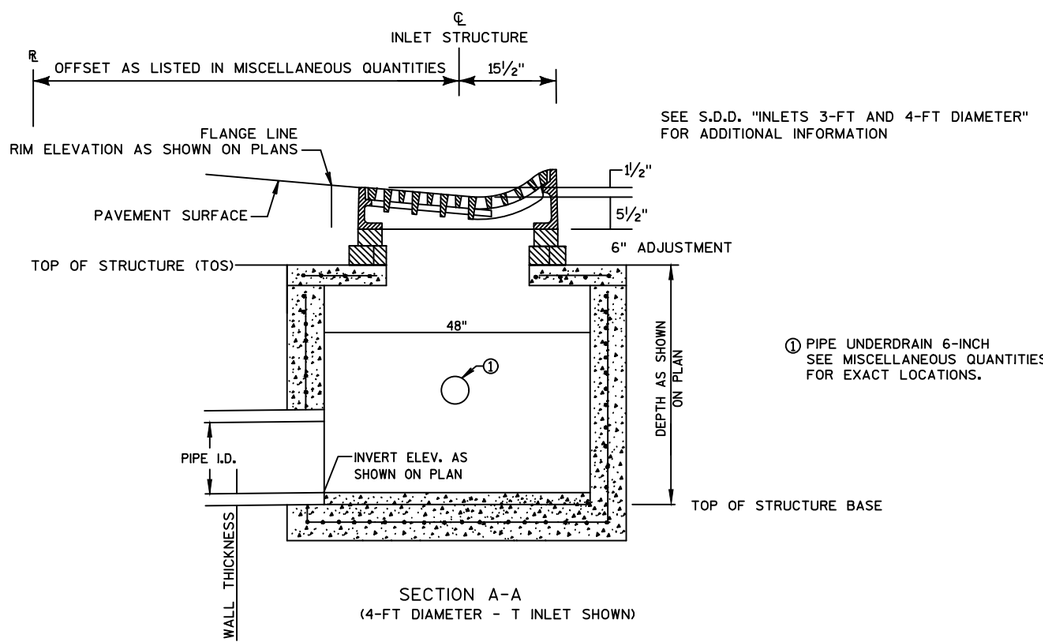


ELEVATION

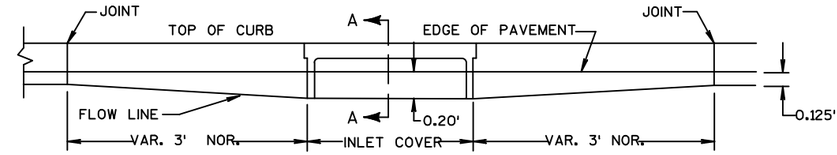


DETAIL FOR CURB AND GUTTER AT INLETS

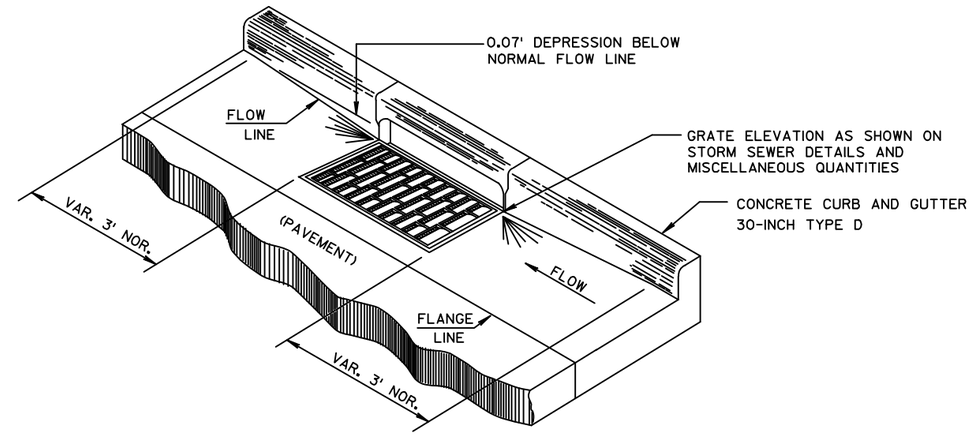
(2x3-FT - T INLET SHOWN)



DETAIL FOR CONCRETE CURB AND GUTTER 36-INCH TYPE T AT INLETS

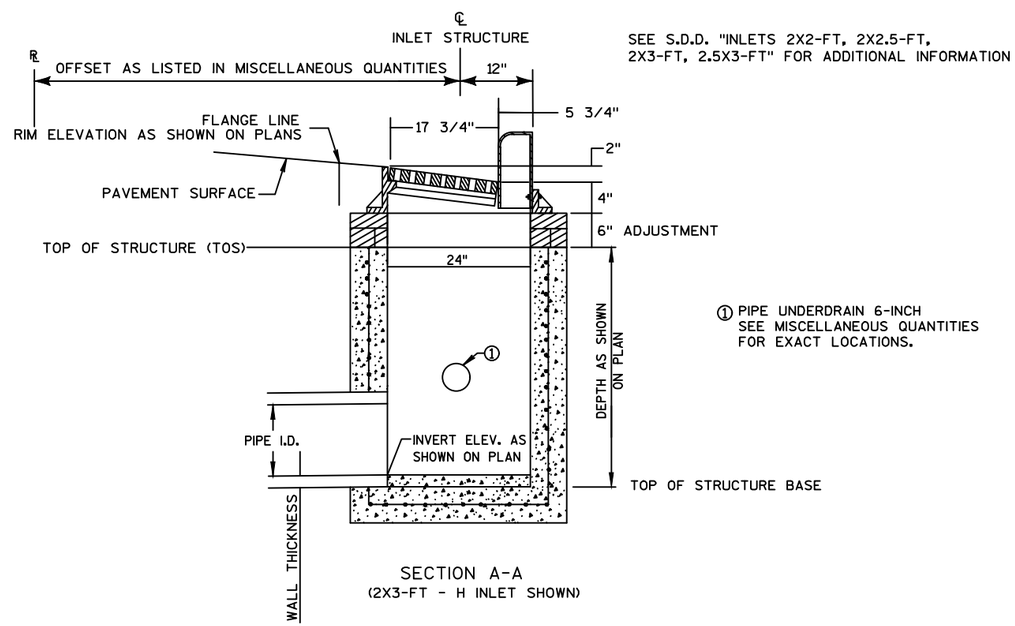


ELEVATION

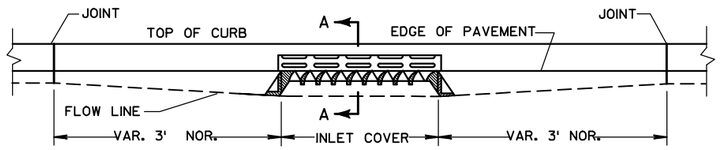


DETAIL FOR CURB AND GUTTER AT INLETS

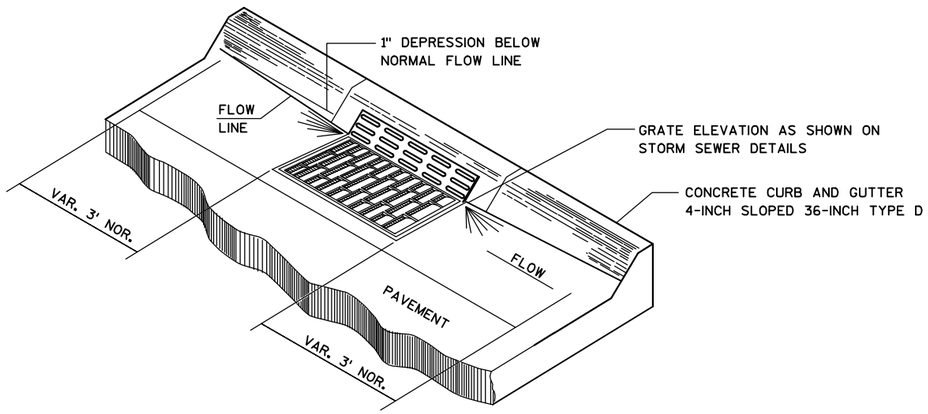
(2x3-FT - H INLET SHOWN)



DETAIL FOR CONCRETE CURB AND GUTTER 30-INCH TYPE D AT INLETS

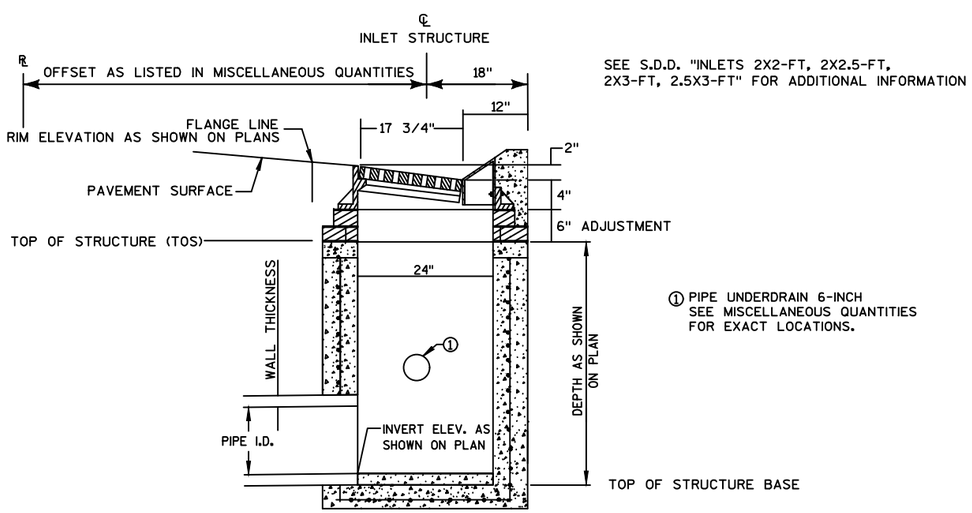


ELEVATION



DETAIL FOR CURB AND GUTTER AT INLETS

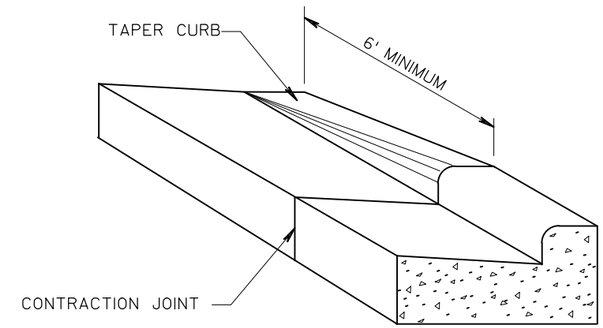
(2x3-FT - HM INLET SHOWN)



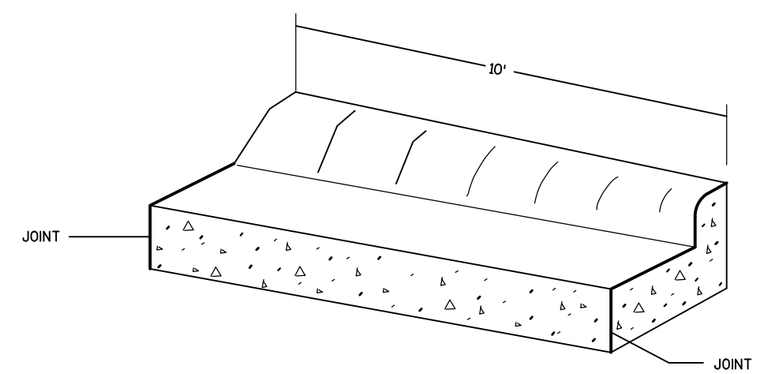
SECTION A-A

(2X3-FT - HM INLET SHOWN)

DETAIL FOR CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D AT INLETS

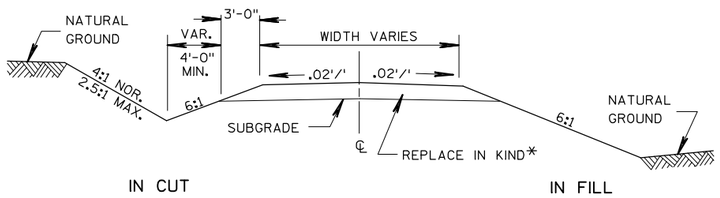


DETAIL FOR CURB & GUTTER TERMINI

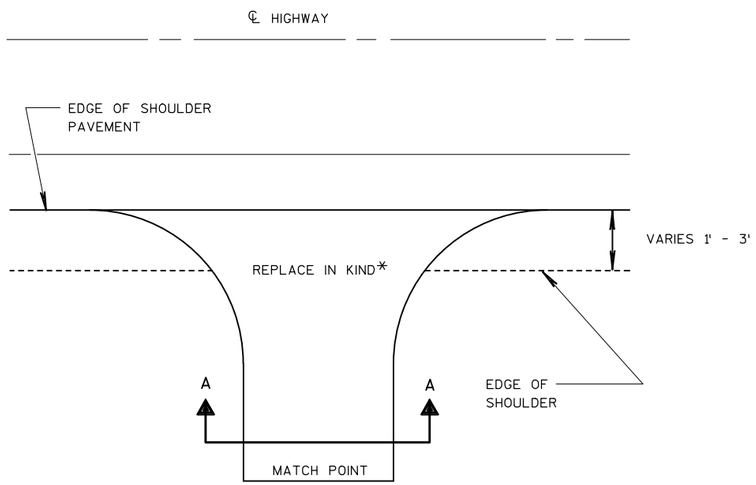


DETAIL FOR TYPE D TRANSITION

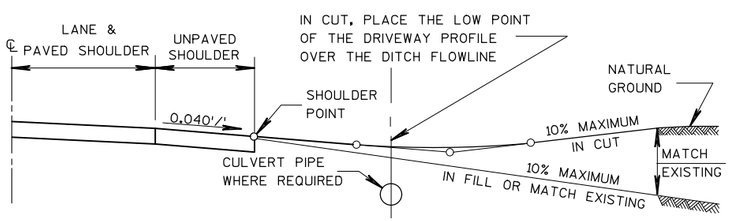
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D TO
CONCRETE CURB & GUTTER 30-INCH TYPE D (TO BE MEASURED AND PAID
FOR AS CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D)



SECTION A-A



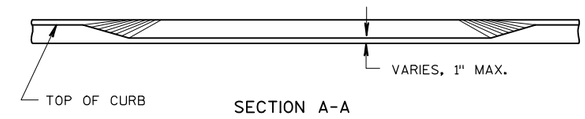
PLAN



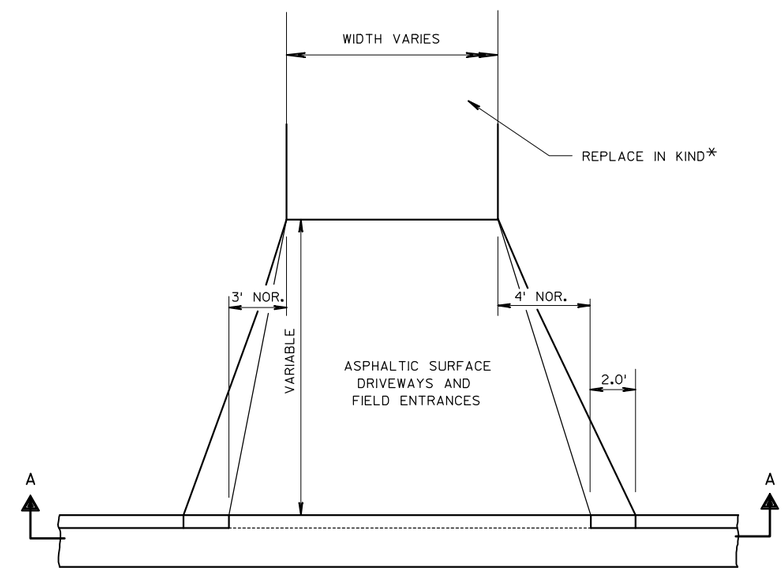
PROFILE

*6" BASE AGGREGATE DENSE 3/4-INCH MATERIAL OR
3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
OVER 6-INCHES 1 1/4-INCH BASE AGGREGATE DENSE MATERIAL

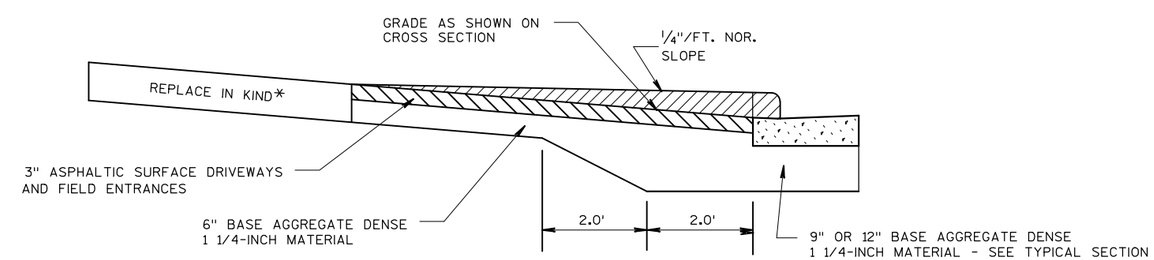
DETAIL FOR RURAL DRIVEWAY



SECTION A-A



PLAN

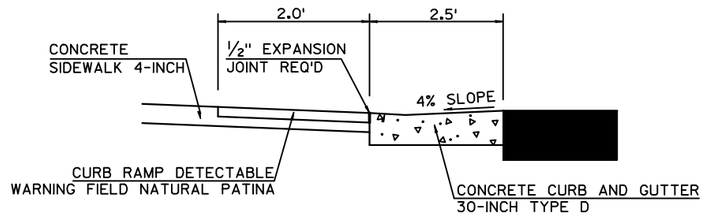


*6" BASE AGGREGATE DENSE 3/4-INCH MATERIAL OR
3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
OVER 6-INCHES 1 1/4-INCH BASE AGGREGATE DENSE MATERIAL

PROFILE

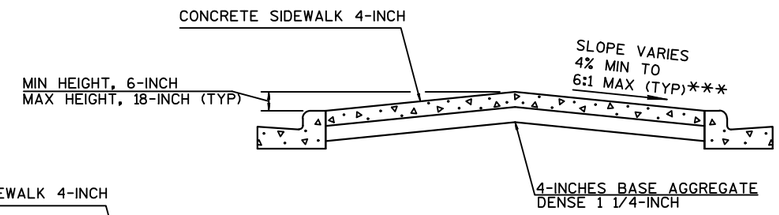
DETAIL FOR URBAN DRIVEWAY

PROJECT NO:6020-00-70	HWY:USH 51	COUNTY:COLUMBIA	CONSTRUCTION DETAILS	SHEET _____	E

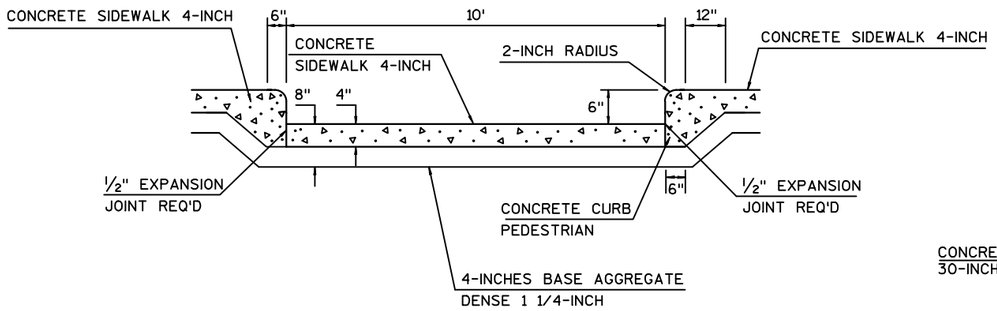


SECTION A-A

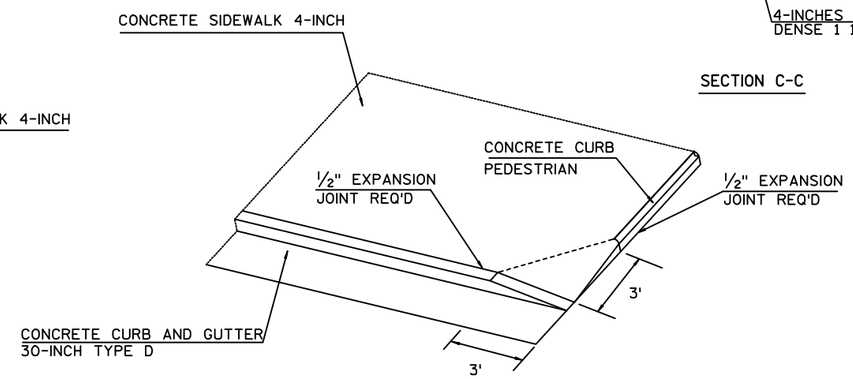
*** SEE CROSS SECTIONS



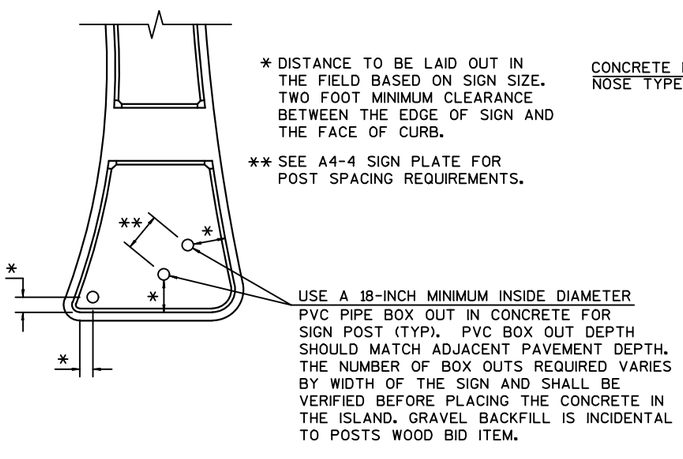
SECTION C-C



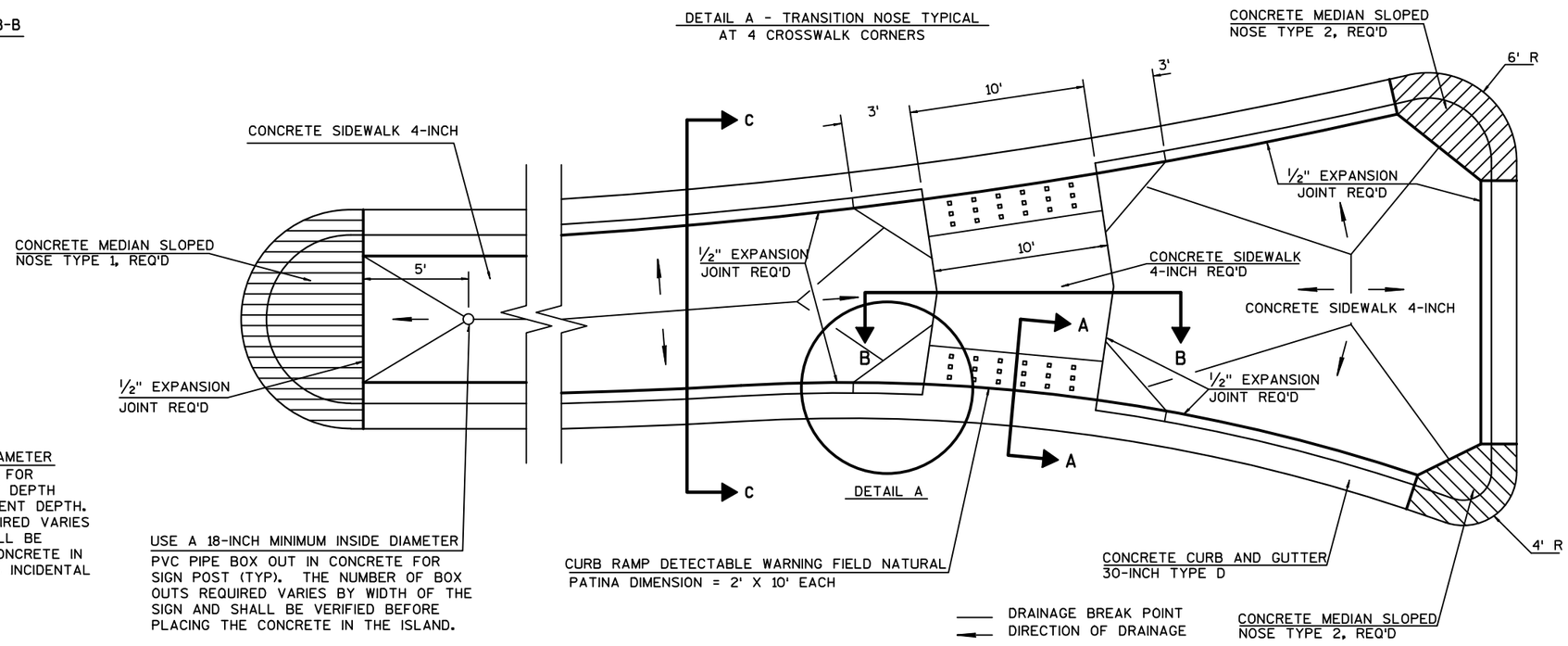
SECTION B-B



DETAIL A - TRANSITION NOSE TYPICAL
AT 4 CROSSWALK CORNERS



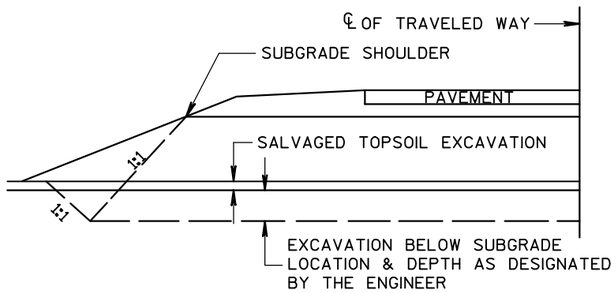
CENTER AND SPLITTER ISLAND SIGN LOCATION DETAIL (TYP)



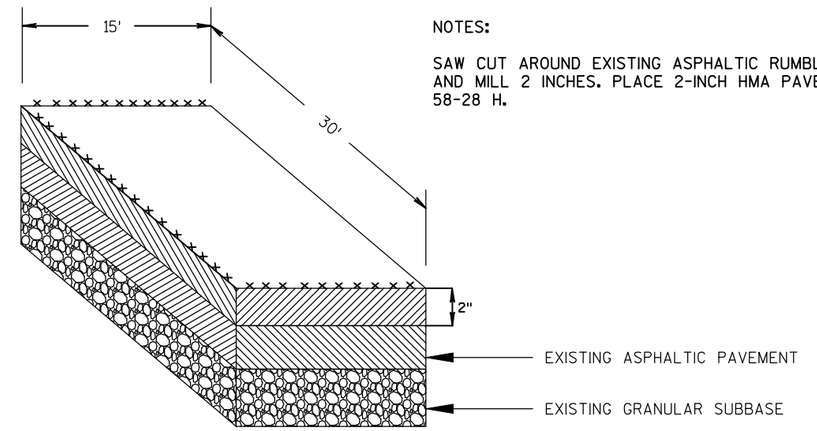
SPLITTER ISLAND DETAIL

SEE CURB RAMP DETAILS FOR ADDITIONAL LAYOUT INFORMATION

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



DETAIL FOR EXCAVATION BELOW SUBGRADE



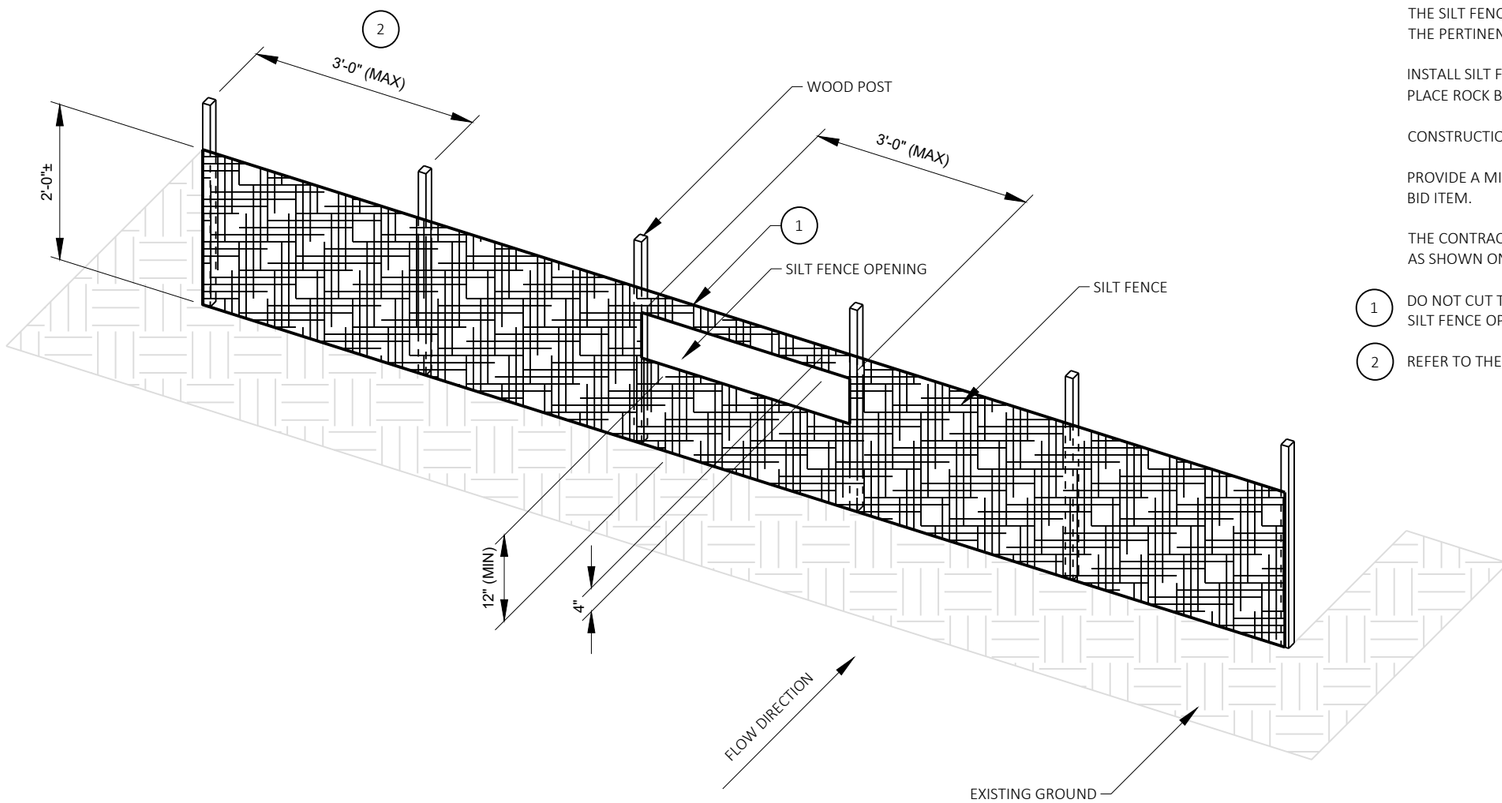
NOTES:

SAW CUT AROUND EXISTING ASPHALTIC RUMBLE STRIPS AND MILL 2 INCHES. PLACE 2-INCH HMA PAVEMENT 4 MT 58-28 H.

DETAIL FOR ASPHALTIC PAVEMENT RUMBLE STRIP REPLACEMENT

LOCATIONS:

STH 60 WB LANE
APPROXIMATELY STA. 136+50



GENERAL NOTES

THE SILT FENCE RELIEF DETAIL IS A SUPPLEMENTAL DETAIL TO THE SILT FENCE STANDARD DETAILS AND SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

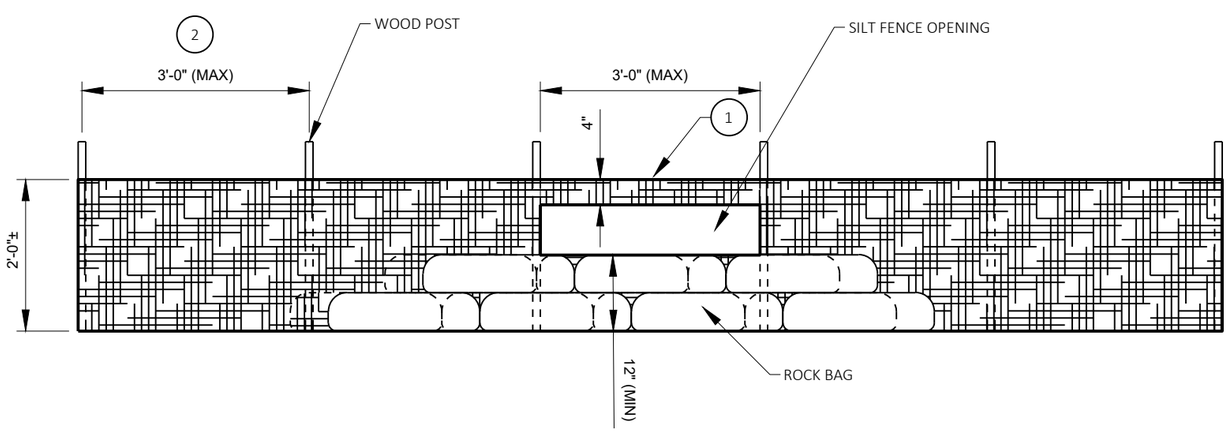
INSTALL SILT FENCE PRIOR TO CONSTRUCTING THE SILT FENCE OPENING. PRIOR TO CONSTRUCTING THE SILT FENCE OPENING, PLACE ROCK BAGS AT THE SILT FENCE OPENING AS SHOWN IN THIS DETAIL.

CONSTRUCTION OF THE SILT FENCE OPENING SHALL BE INCIDENTAL TO THE COST OF THE SILT FENCE BID ITEM.

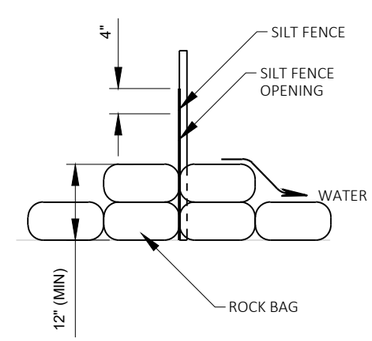
PROVIDE A MINIMUM OF 22 ROCK BAGS MINIMUM PER 3 FOOT OPENING. ROCK BAGS SHALL BE PAID UNDER THE ROCK BAGS BID ITEM.

THE CONTRACTOR SHALL ADJUST THE SILT FENCE RELIEF OPENINGS WITHIN THE SILT FENCE AS NECESSARY TO PROVIDE RELIEF: AS SHOWN ON THE PLANS, TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE FIELD ENGINEER.

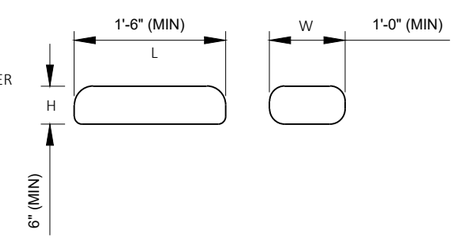
1. DO NOT CUT THE SUPPORT CORD OR TENSION TAPE WHEN CONSTRUCTING THE SILT FENCE OPENING. KEEP THE TOP OF THE SILT FENCE OPENING 1"± BELOW THE 3" FOLD AT THE SUPPORT CORD OR TENSION TAPE.
2. REFER TO THE SILT FENCE STANDARD DETAILS FOR ALLOWABLE ADJUSTMENTS TO POST SPACING.



SECTION VIEW

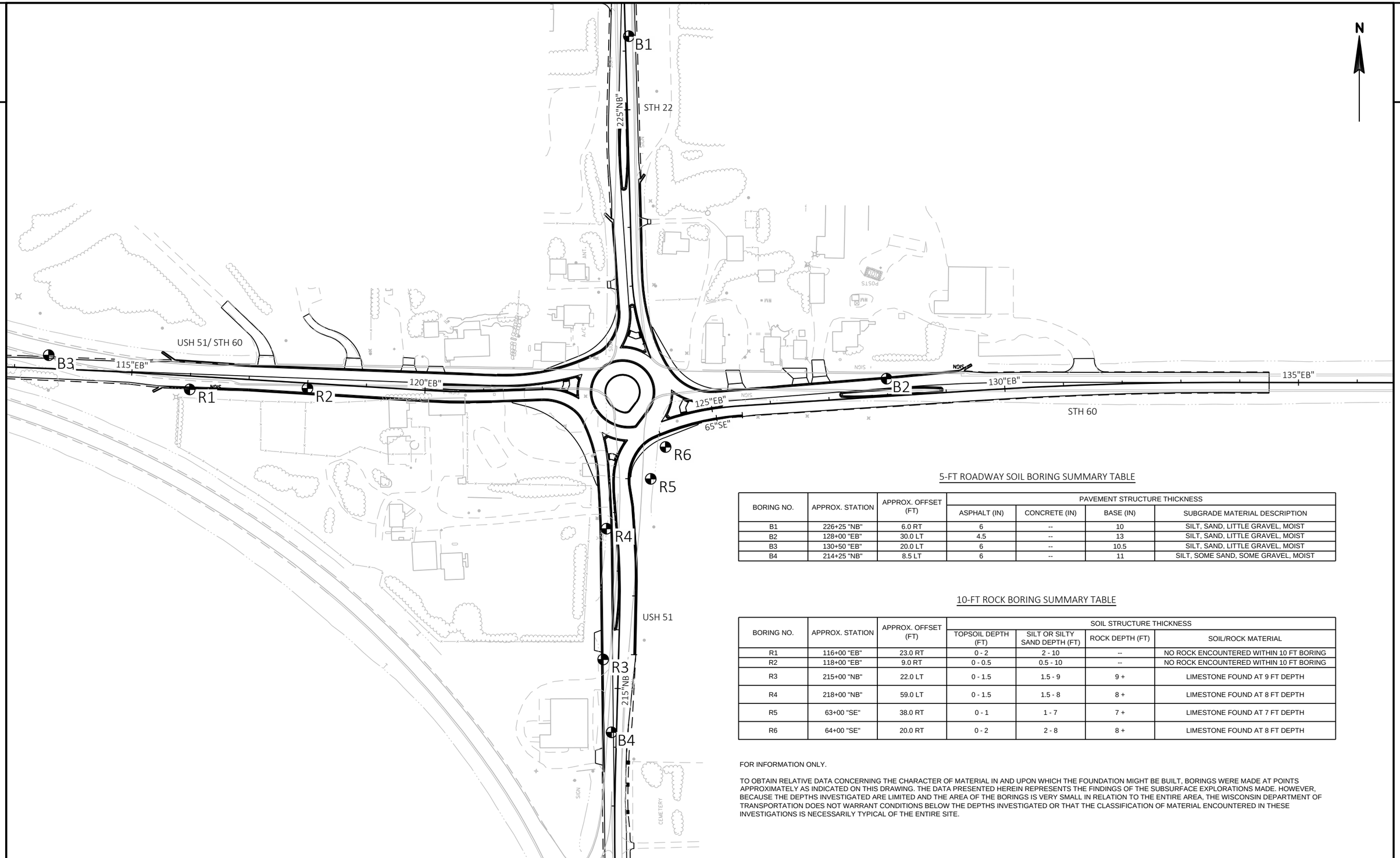


ROCK BAG DETAIL



SILT FENCE RELIEF DETAIL

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CONSTRUCTION DETAILS	SHEET	E



5-FT ROADWAY SOIL BORING SUMMARY TABLE

BORING NO.	APPROX. STATION	APPROX. OFFSET (FT)	PAVEMENT STRUCTURE THICKNESS			
			ASPHALT (IN)	CONCRETE (IN)	BASE (IN)	SUBGRADE MATERIAL DESCRIPTION
B1	226+25 "NB"	6.0 RT	6	--	10	SILT, SAND, LITTLE GRAVEL, MOIST
B2	128+00 "EB"	30.0 LT	4.5	--	13	SILT, SAND, LITTLE GRAVEL, MOIST
B3	130+50 "EB"	20.0 LT	6	--	10.5	SILT, SAND, LITTLE GRAVEL, MOIST
B4	214+25 "NB"	8.5 LT	6	--	11	SILT, SOME SAND, SOME GRAVEL, MOIST

10-FT ROCK BORING SUMMARY TABLE

BORING NO.	APPROX. STATION	APPROX. OFFSET (FT)	SOIL STRUCTURE THICKNESS			
			TOPSOIL DEPTH (FT)	SILT OR SILTY SAND DEPTH (FT)	ROCK DEPTH (FT)	SOIL/ROCK MATERIAL
R1	116+00 "EB"	23.0 RT	0 - 2	2 - 10	--	NO ROCK ENCOUNTERED WITHIN 10 FT BORING
R2	118+00 "EB"	9.0 RT	0 - 0.5	0.5 - 10	--	NO ROCK ENCOUNTERED WITHIN 10 FT BORING
R3	215+00 "NB"	22.0 LT	0 - 1.5	1.5 - 9	9 +	LIMESTONE FOUND AT 9 FT DEPTH
R4	218+00 "NB"	59.0 LT	0 - 1.5	1.5 - 8	8 +	LIMESTONE FOUND AT 8 FT DEPTH
R5	63+00 "SE"	38.0 RT	0 - 1	1 - 7	7 +	LIMESTONE FOUND AT 7 FT DEPTH
R6	64+00 "SE"	20.0 RT	0 - 2	2 - 8	8 +	LIMESTONE FOUND AT 8 FT DEPTH

FOR INFORMATION ONLY.

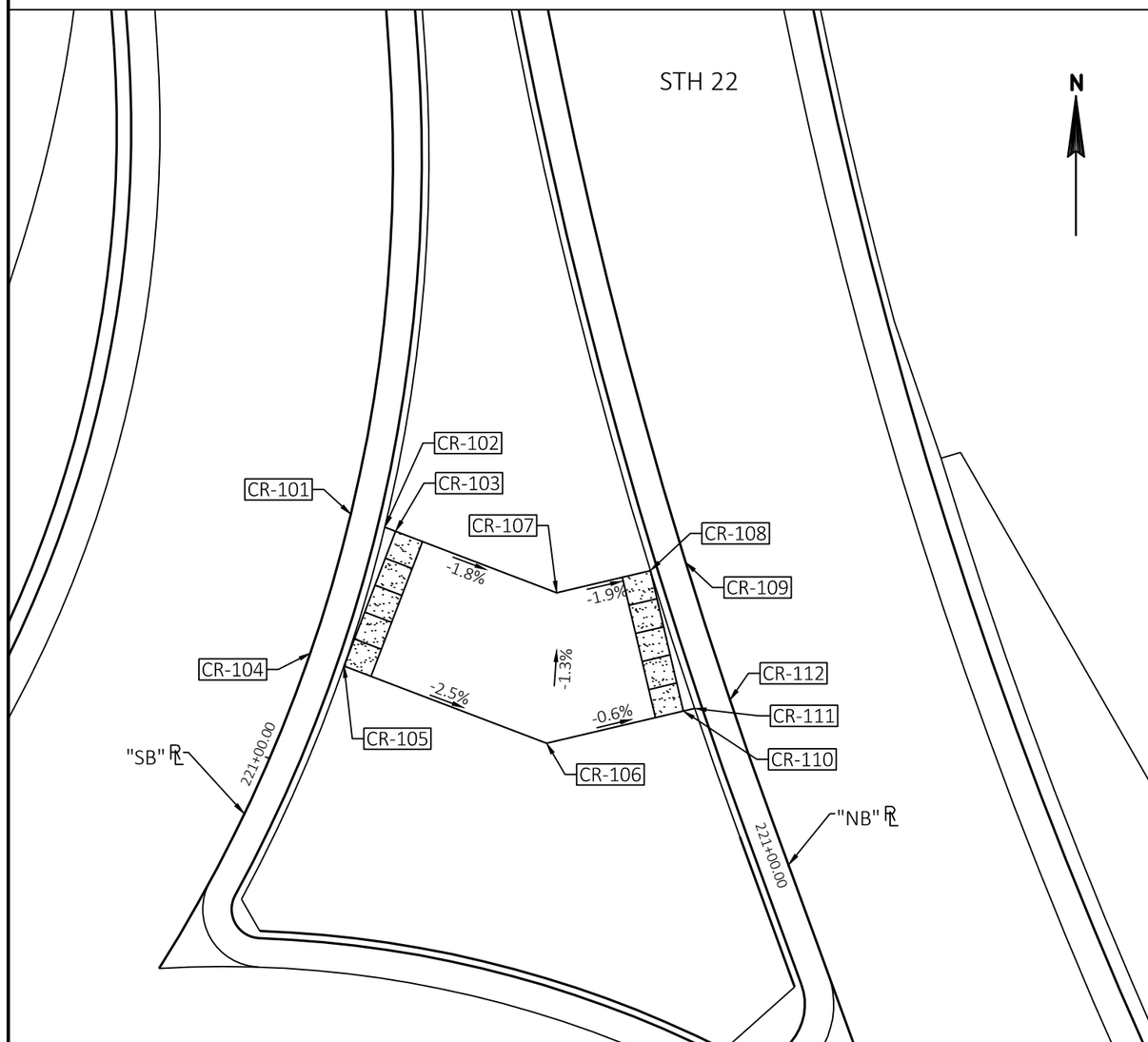
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

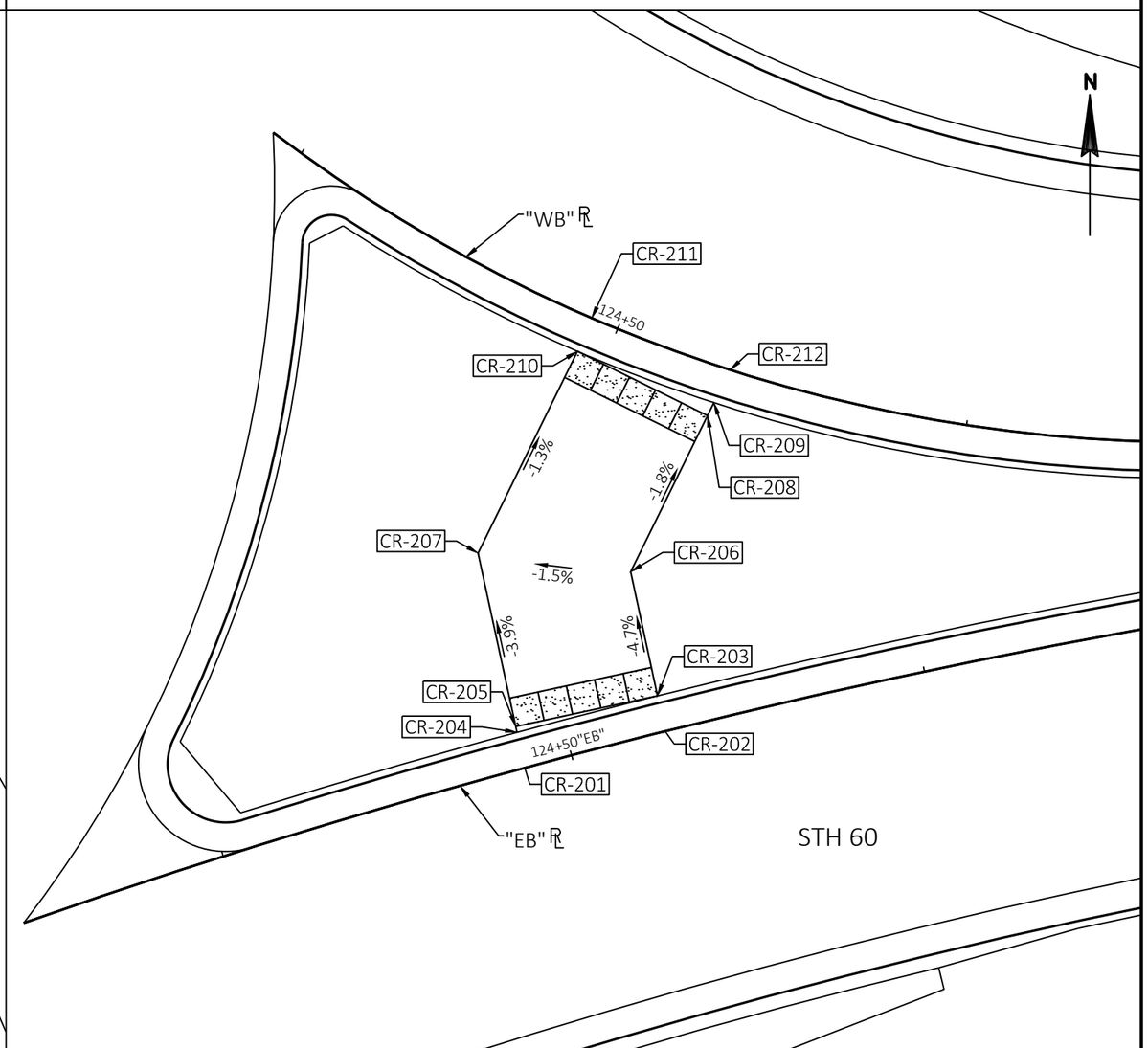
CR-101 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
101	221+17.88 "SB"	0.00'	1074.18	318582.67	573396.37
102	221+17.57 "SB"	2.50' RT	1074.23	318581.77	573398.73
103	221+17.47 "SB"	3.28' RT	1074.22	318581.49	573399.46
104	221+07.84 "SB"	0.00'	1074.49	318573.04	573393.56
105	221+07.76 "SB"	2.50' RT	1074.53	318572.14	573395.90
106	221+12.29 "NB"	13.00' LT	1074.15	318566.79	573409.94

CR-101 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
107	221+21.74 "NB"	9.16' LT	1074.01	318577.22	573410.64
108	221+21.31 "NB"	2.50' LT	1073.88	318578.75	573417.13
109	221+21.14 "NB"	0.00'	1073.94	318579.33	573419.57
110	221+11.42 "NB"	3.30' LT	1074.09	318569.02	573419.43
111	221+11.34 "NB"	2.50' LT	1074.09	318569.20	573420.20
112	221+11.11 "NB"	0.00'	1074.17	318569.78	573422.65

CR-201 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
201	124+46.66 "EB"	0.00'	1075.91	318436.31	573487.72
202	124+56.67 "EB"	0.00'	1075.98	318438.83	573497.40
203	124+56.75 "EB"	2.50' LT	1076.02	318441.27	573496.87
204	124+46.79 "EB"	2.50' LT	1075.95	318438.76	573487.18
205	124+46.81 "EB"	2.90' LT	1075.94	318439.15	573487.10
206	124+57.00 "EB"	11.25' LT	1075.61	318449.82	573495.01

CR-201 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
207	124+47.40 "EB"	15.13' LT	1075.45	318451.11	573484.50
208	124+57.75 "WB"	3.47' RT	1075.40	318460.59	573500.32
209	124+57.88 "WB"	2.50' RT	1075.38	318461.47	573500.75
210	124+48.07 "WB"	2.50' RT	1075.25	318465.01	573491.35
211	124+48.07 "WB"	0.00'	1075.33	318467.31	573492.33
212	124+58.25 "WB"	0.00'	1075.46	318463.74	573501.87





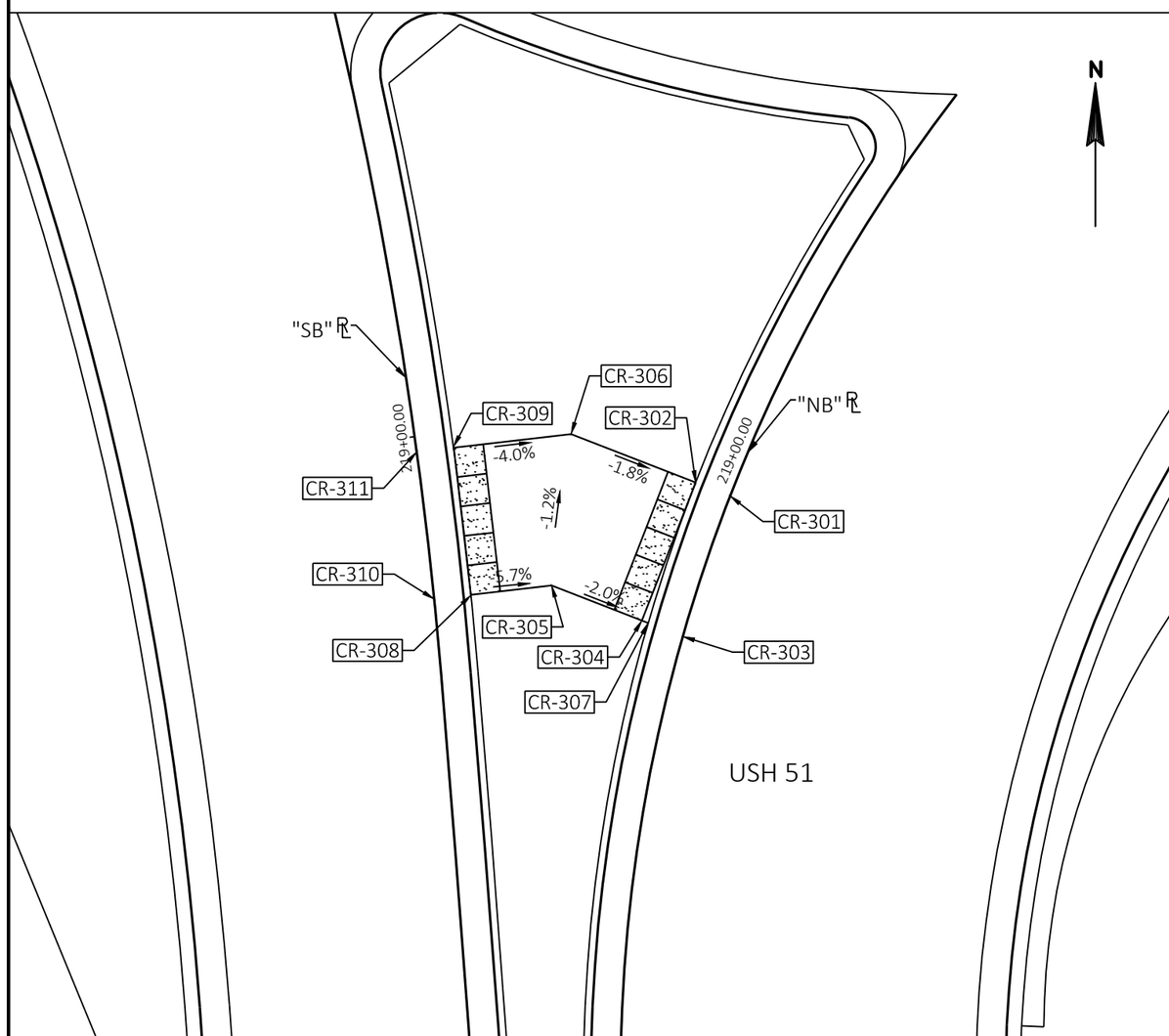
PROJECT NO: 6020-02-70	HWY: USH 51	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - CURB RAMP DETAILS	SHEET	E

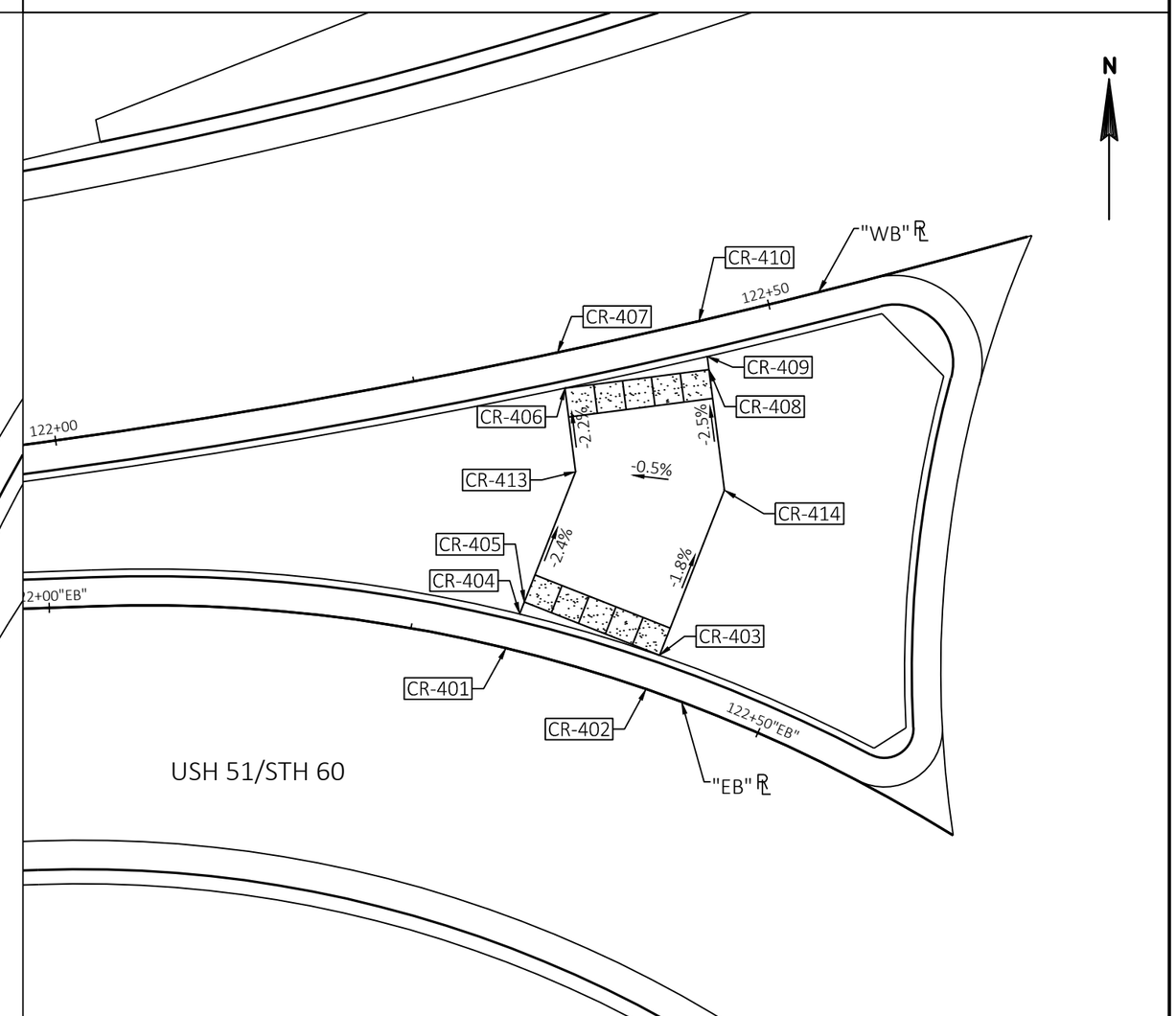
CR-301 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
301	218+97.06 "NB"	0.00'	1077.12	318367.64	573380.91
302	218+97.06 "NB"	2.50' LT	1077.04	318368.54	573378.58
303	218+87.04 "NB"	0.00'	1077.27	318358.15	573377.72
304	218+87.31 "NB"	2.95' LT	1077.19	318359.22	573374.96
305	218+87.85 "NB"	9.46' LT	1077.32	318361.59	573368.86
306	218+97.06 "NB"	11.52' LT	1077.20	318371.81	573370.18

CR-301 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
307	218+87.27 "NB"	2.50' LT	1077.19	318359.06	573375.38
308	218+88.96 "SB"	2.50' RT	1077.64	318360.92	573363.42
309	218+98.96 "SB"	2.50' RT	1077.52	318370.94	573362.24
310	218+88.96 "SB"	0.00'	1077.60	318360.67	573360.93
311	218+98.96 "SB"	0.00'	1077.47	318370.60	573359.76

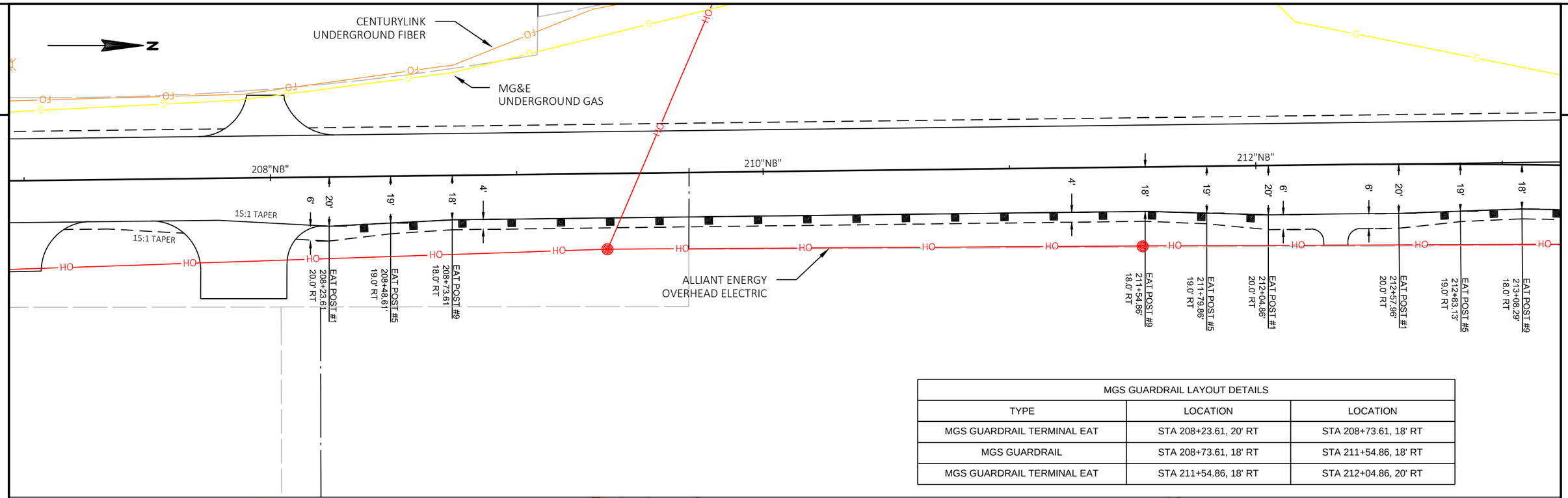
CR-401 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
401	122+31.69 "EB"	0.00'	1076.69	318477.90	573282.55
402	122+41.74 "EB"	0.00'	1076.71	318475.08	573292.19
403	122+41.84 "EB"	2.50' LT	1076.75	318477.40	573293.11
404	122+32.03 "EB"	2.50' LT	1076.73	318480.25	573283.48
405	122+32.15 "EB"	3.38' LT	1076.71	318481.07	573283.80
406	122+35.09 "WB"	2.50' RT	1076.35	318495.79	573286.60

CR-401 POINTS					
POINT	STATION	OFFSET	ELEVATION	NORTHING	EASTING
407	122+35.09 "WB"	0.00'	1076.43	318498.24	573286.08
408	122+44.99 "WB"	3.41' RT	1076.32	318497.07	573296.52
409	122+45.08 "WB"	2.50' RT	1076.30	318497.97	573296.40
410	122+45.08 "WB"	0.00'	1076.38	318500.40	573295.83
413	122+33.29 "EB"	12.94' LT	1076.48	318490.04	573287.34
414	122+42.29 "EB"	14.71' LT	1076.53	318488.77	573297.58

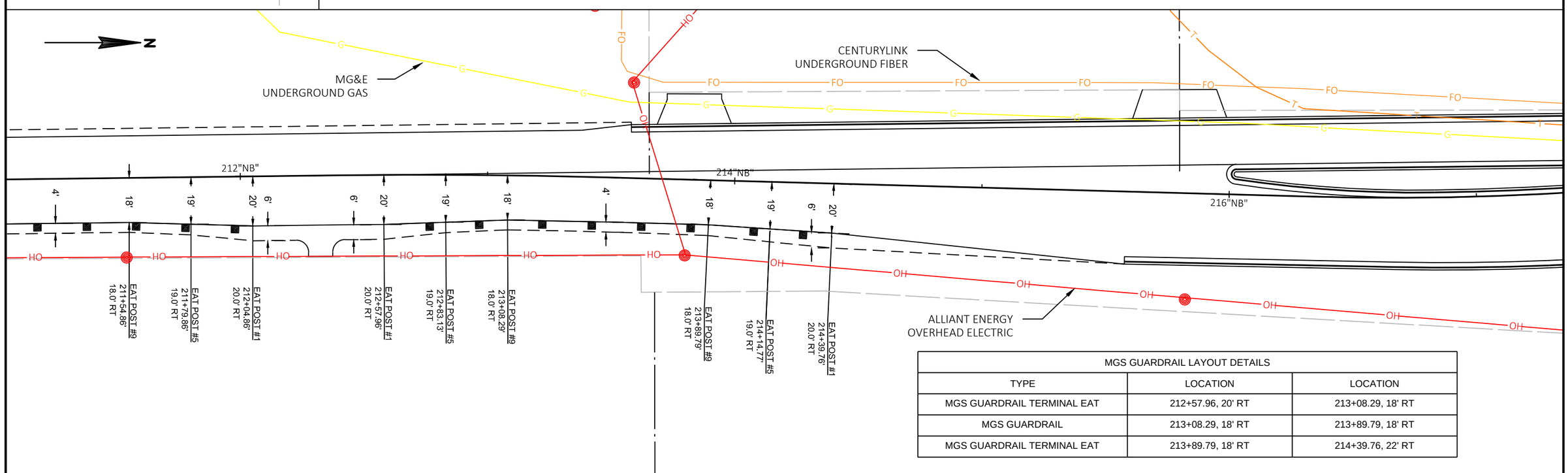




PROJECT NO: 6020-02-70	HWY: USH 51	COUNTY: COLUMBIA	CONSTRUCTION DETAILS- CURB RAMP DETAILS	SHEET	E

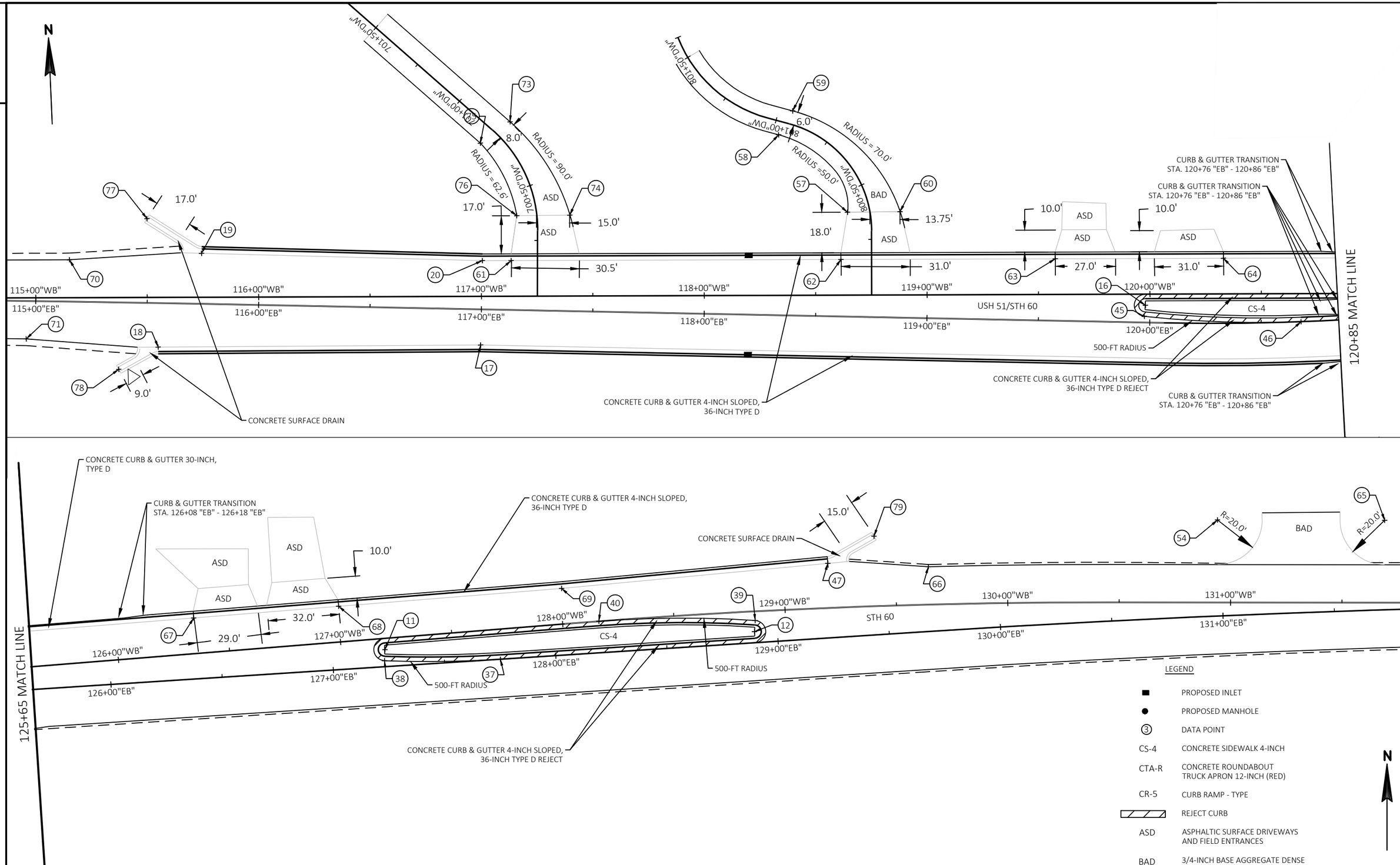


MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	STA 208+23.61, 20' RT	STA 208+73.61, 18' RT
MGS GUARDRAIL	STA 208+73.61, 18' RT	STA 211+54.86, 18' RT
MGS GUARDRAIL TERMINAL EAT	STA 211+54.86, 18' RT	STA 212+04.86, 20' RT



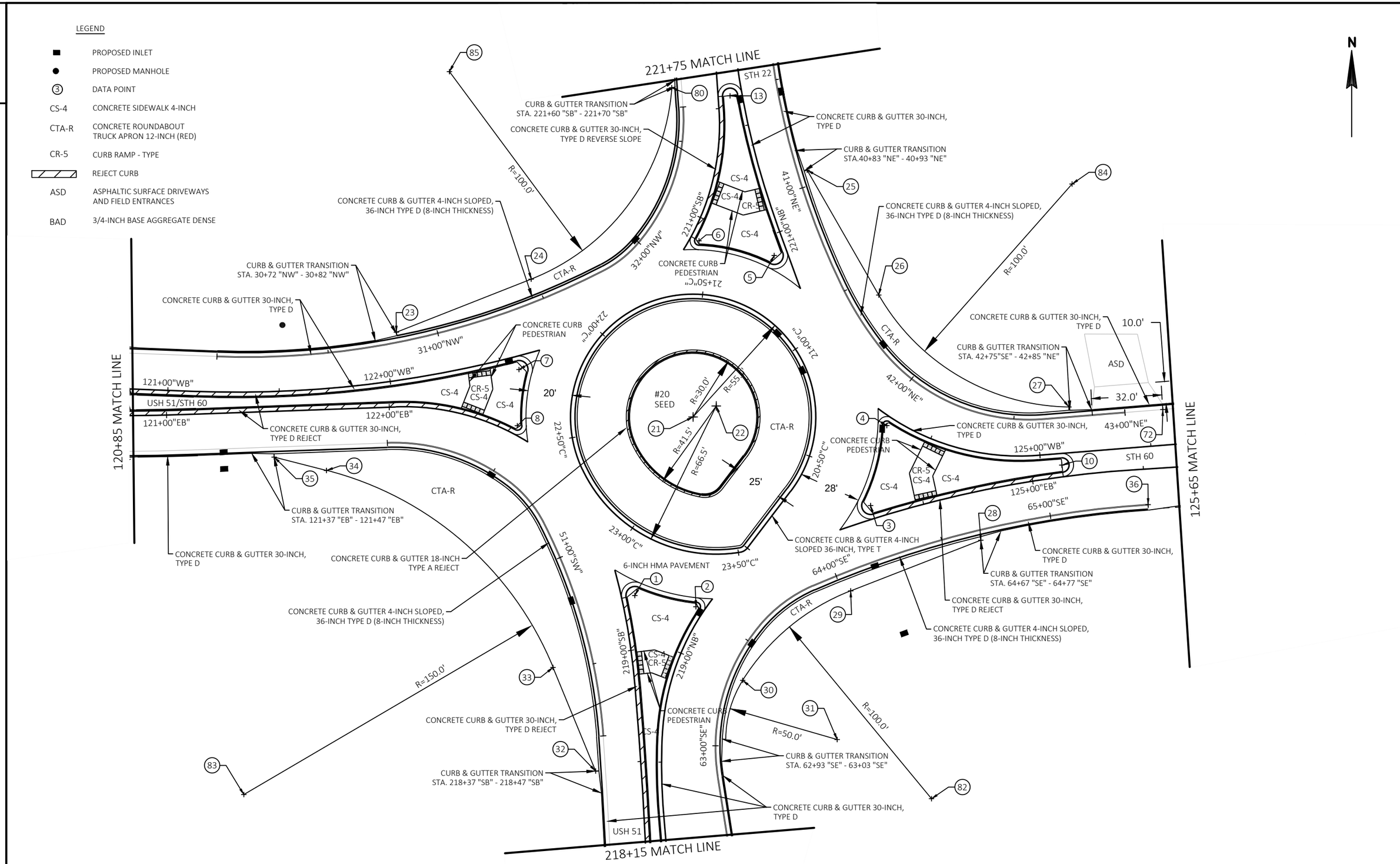
MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	212+57.96, 20' RT	213+08.29, 18' RT
MGS GUARDRAIL	213+08.29, 18' RT	213+89.79, 18' RT
MGS GUARDRAIL TERMINAL EAT	213+89.79, 18' RT	214+39.76, 22' RT

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	GUARDRAIL DETAILS	SHEET	E



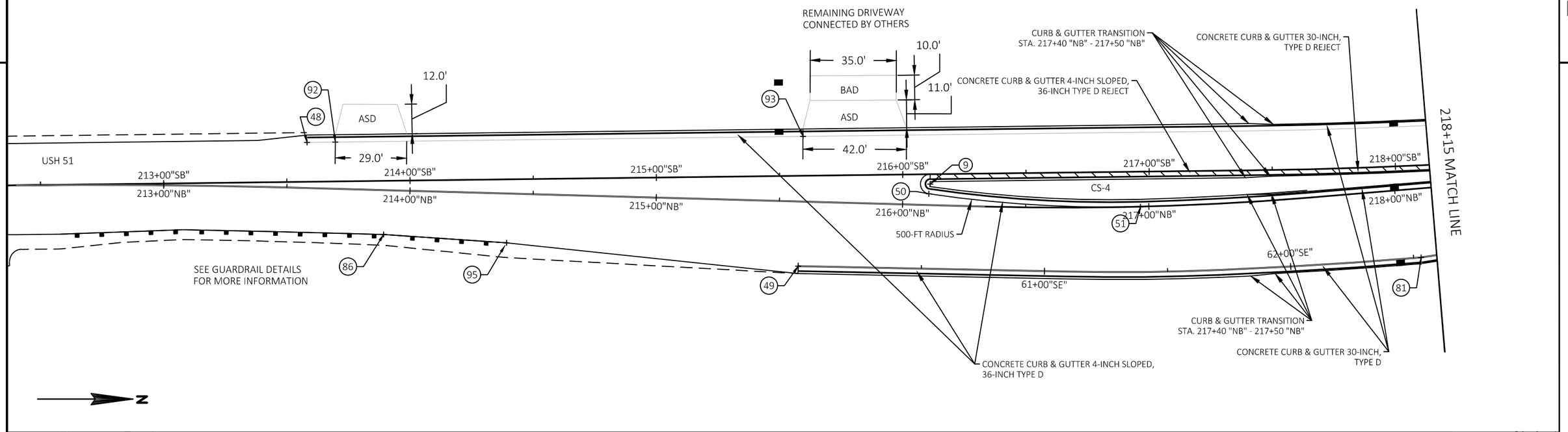
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET	E

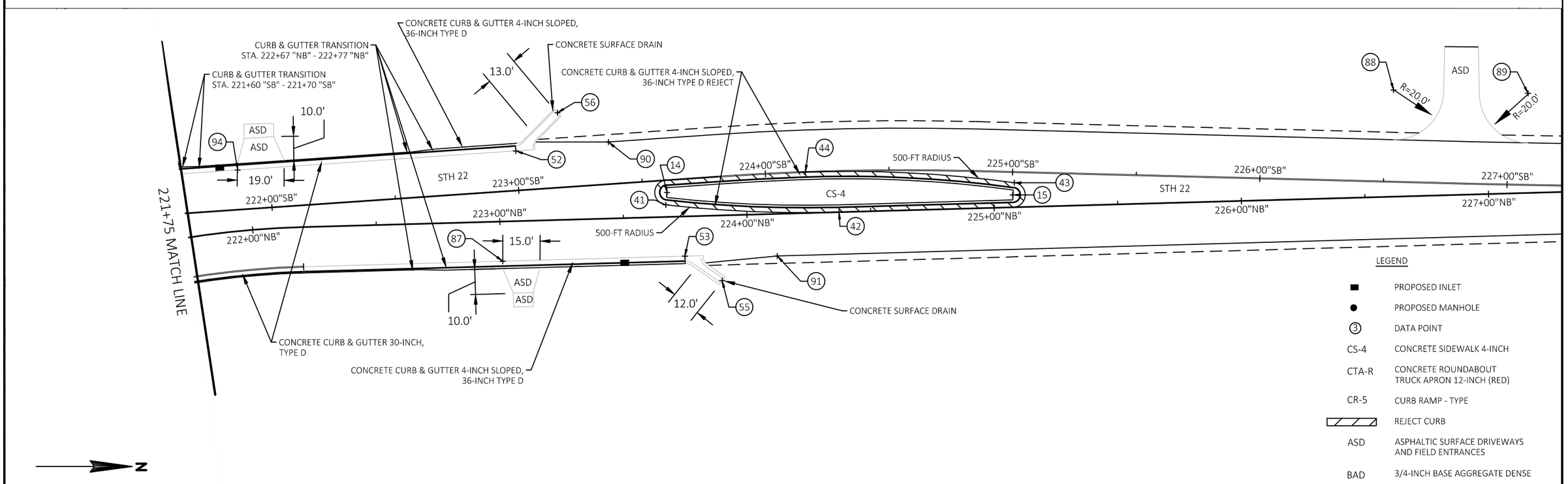
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\021201_ID.DWG
LAYOUT NAME - 021202_id
PLOT DATE : 2/4/2020 12:29 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : ######



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\021201_ID.DWG
LAYOUT NAME - 021201_id
PLOT DATE : 2/4/2020 12:29 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

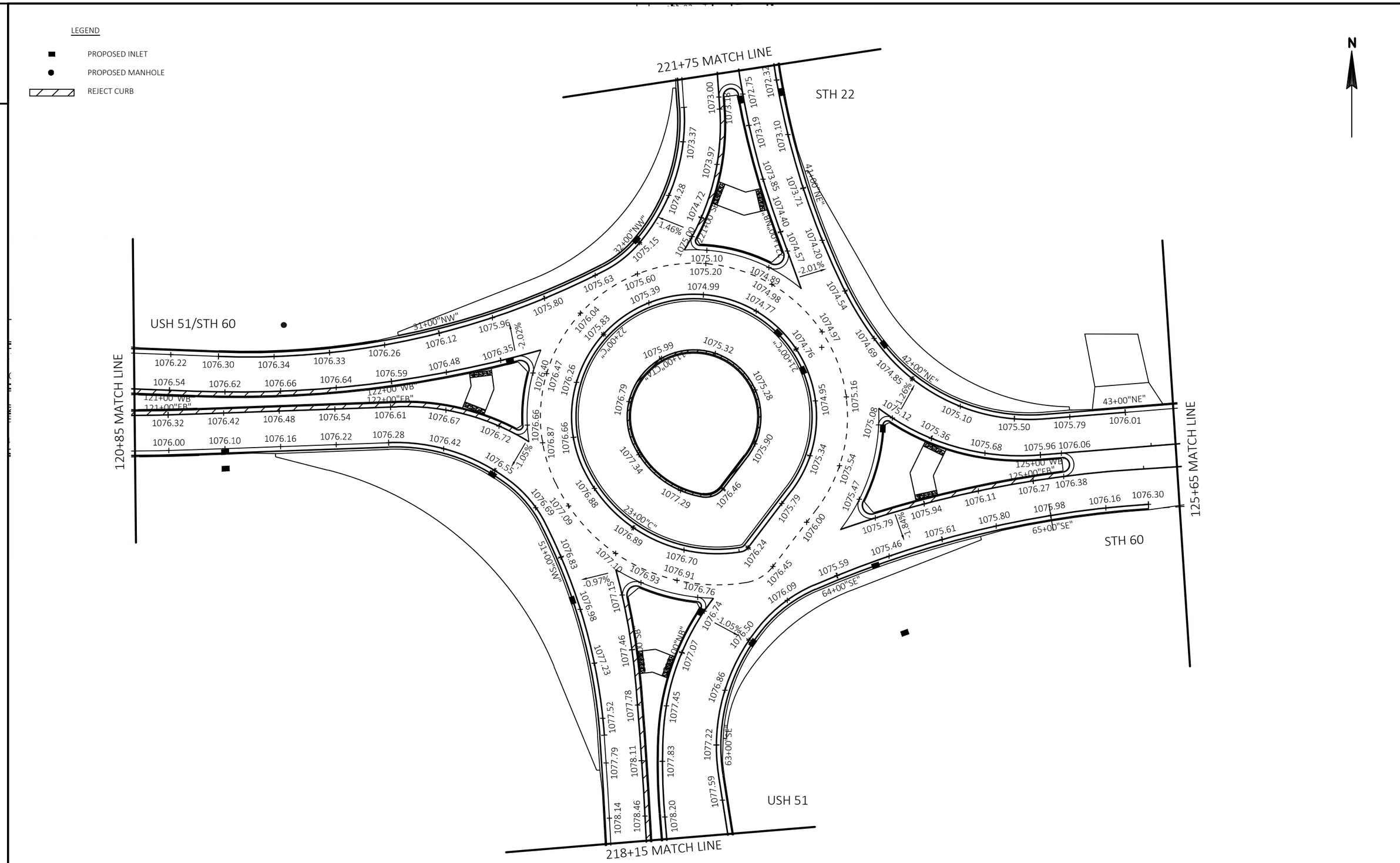




LEGEND

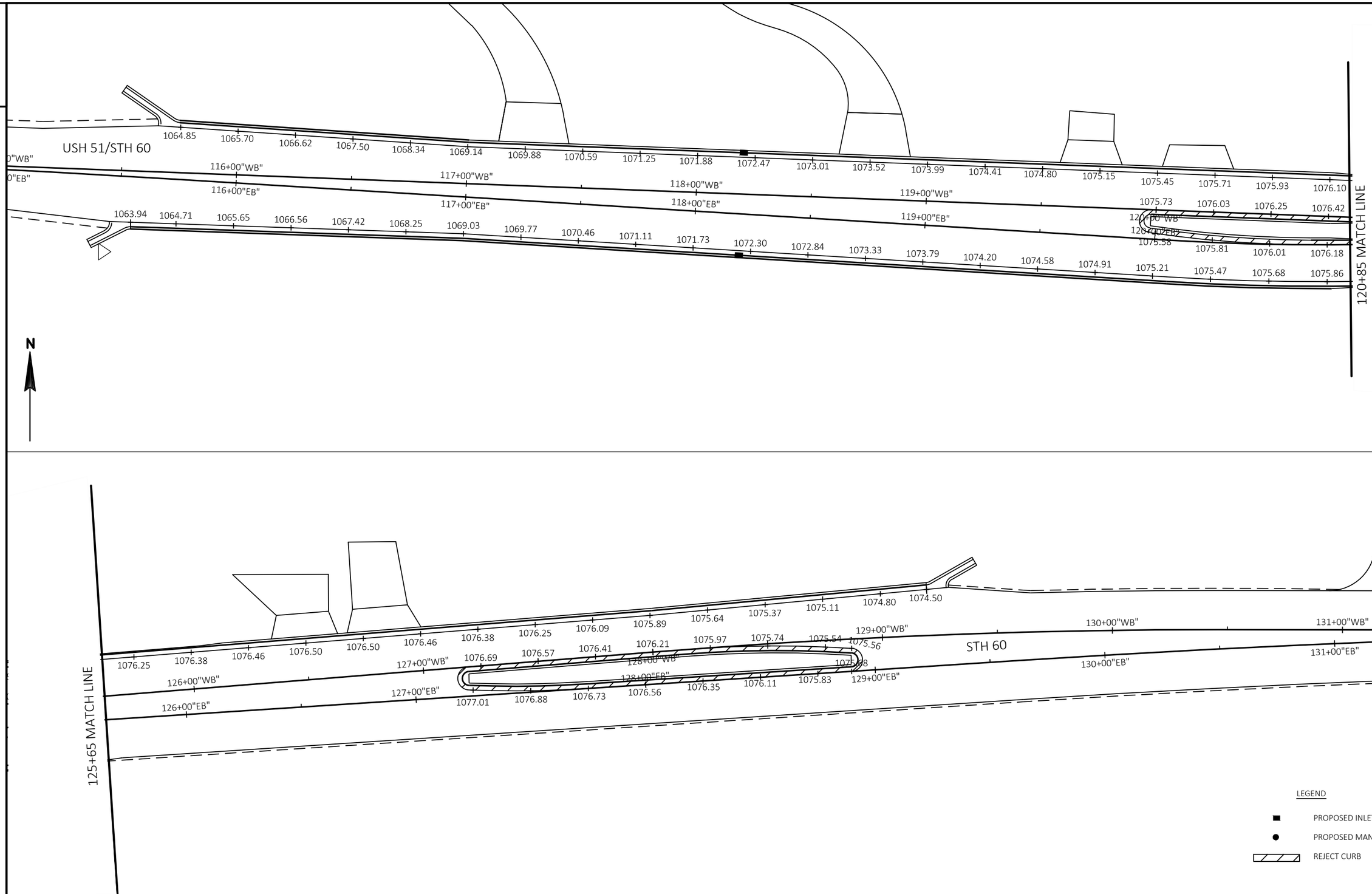
■	PROPOSED INLET
●	PROPOSED MANHOLE
③	DATA POINT
CS-4	CONCRETE SIDEWALK 4-INCH
CTA-R	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH (RED)
CR-5	CURB RAMP - TYPE
▨	REJECT CURB
ASD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
BAD	3/4-INCH BASE AGGREGATE DENSE

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	INTERSECTION DETAILS	SHEET	E



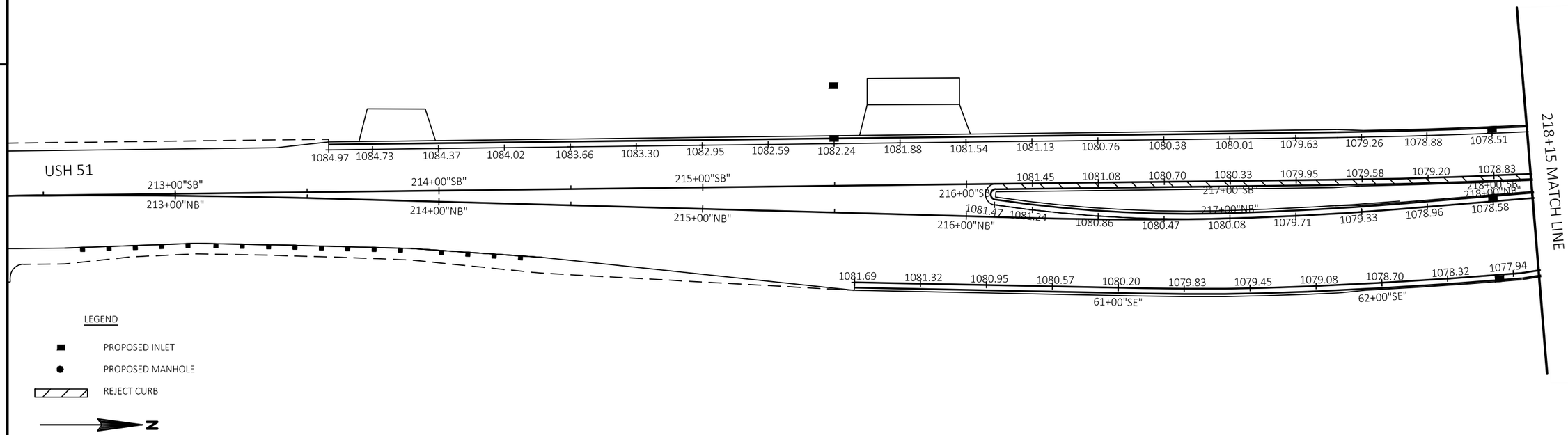
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVING DETAILS	SHEET	E

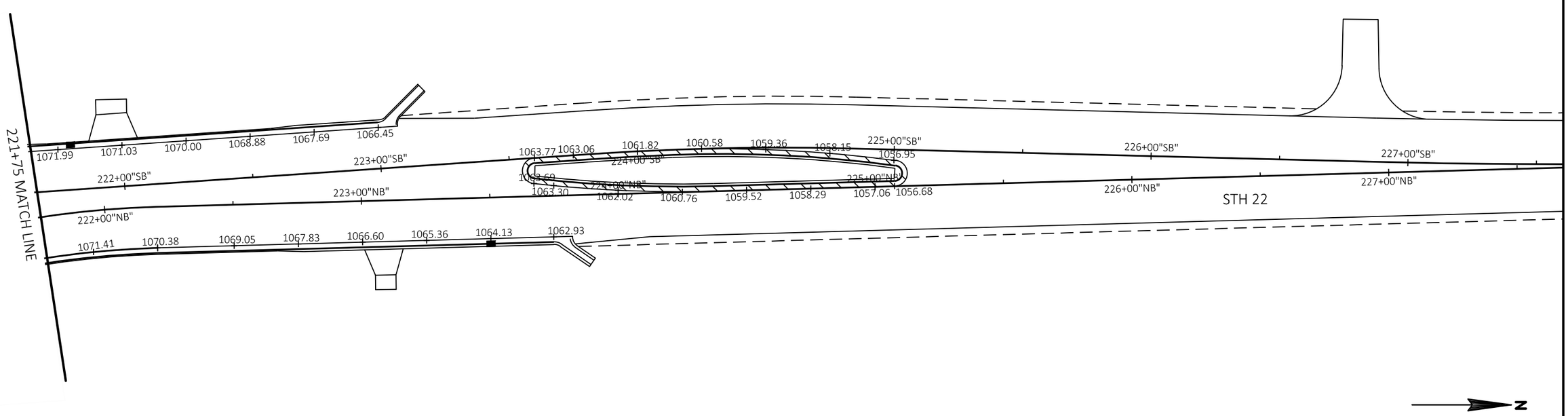
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201_pd
PLOT DATE : 2/4/2020 12:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:40 FT



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVING DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202_pd
PLOT DATE : 2/4/2020 12:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:40 FT





PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVING DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203_pd
PLOT DATE : 2/4/2020 12:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

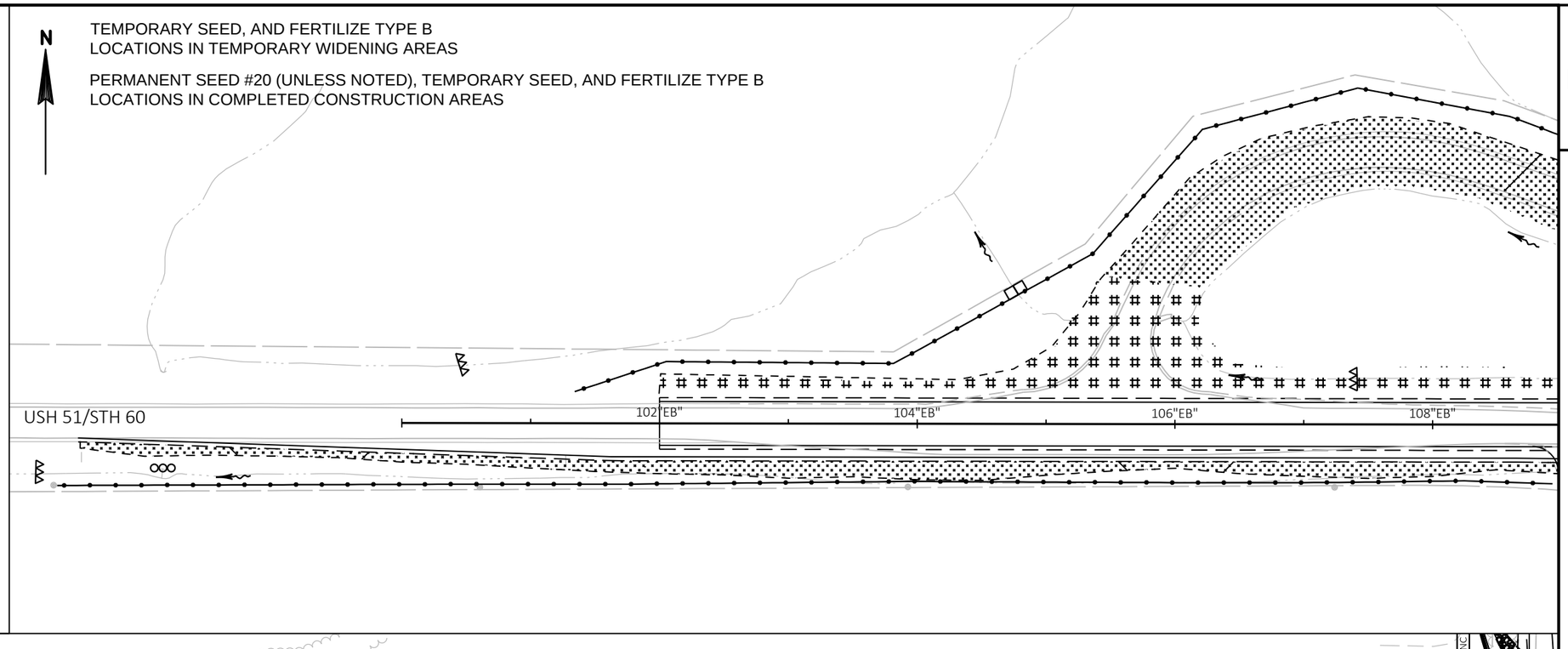
LEGEND

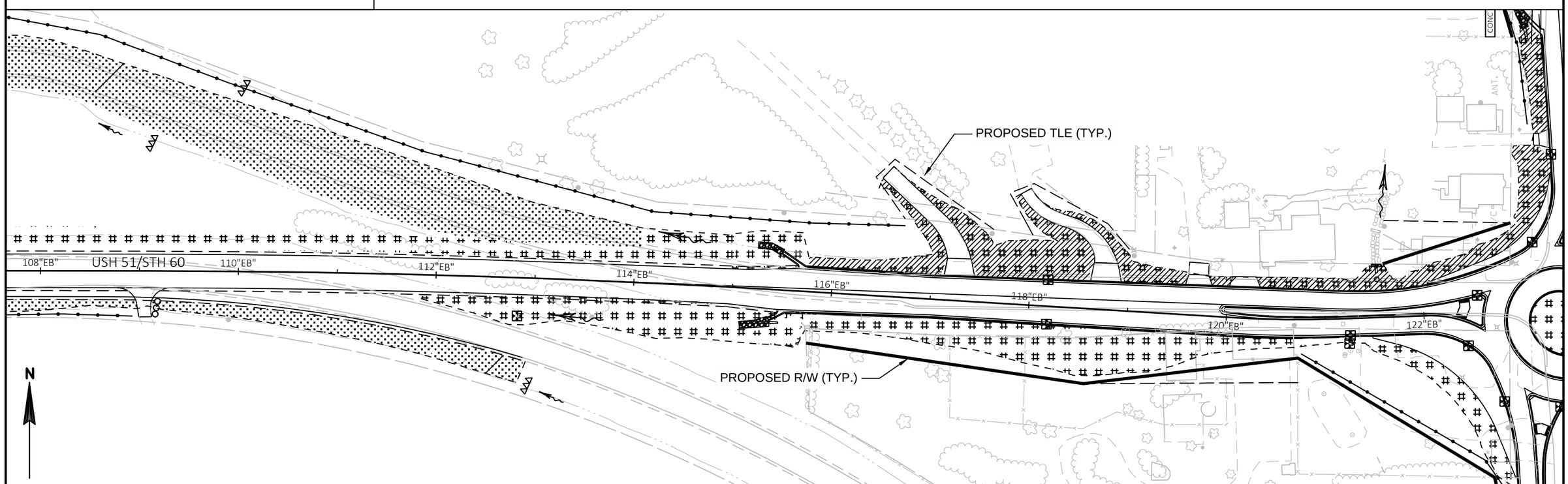
- EROSION MAT CLASS I, TYPE B
- MULCH
- SILT FENCE
- SILT FENCE RELIEF
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- CONC — CONCRETE SURFACE DRAIN
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- #40 SEED

N

TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN TEMPORARY WIDENING AREAS

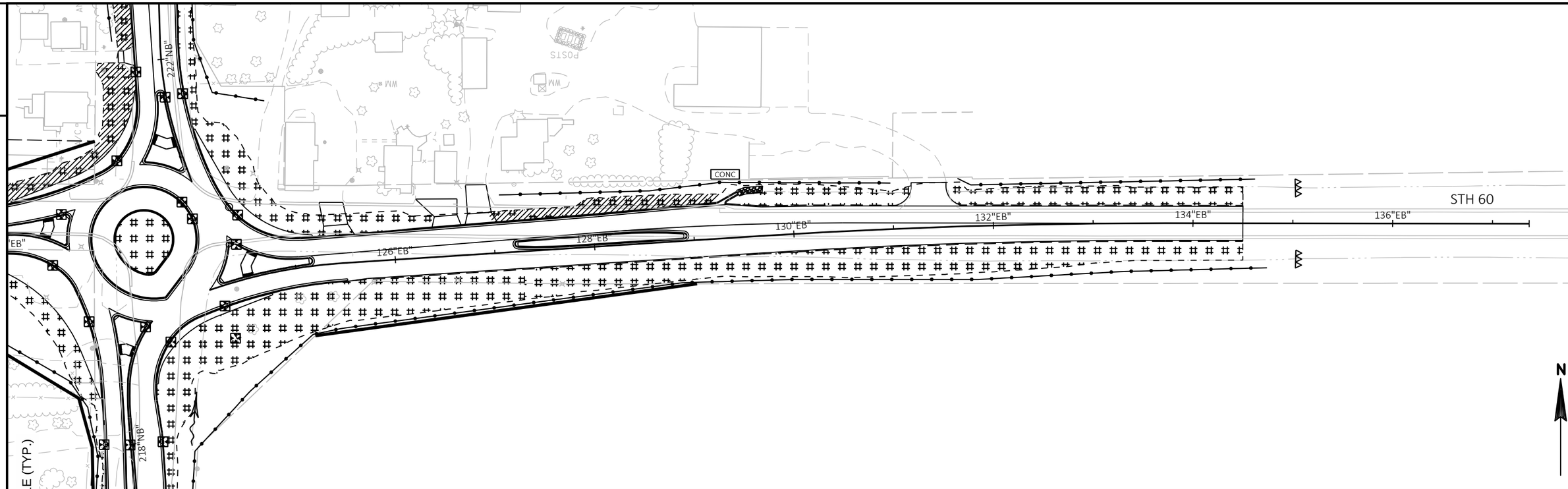
PERMANENT SEED #20 (UNLESS NOTED), TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN COMPLETED CONSTRUCTION AREAS





PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EROSION CONTROL - STAGE 1-3	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - STAGE 1 -1
PLOT DATE : 1/17/2020 9:42 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

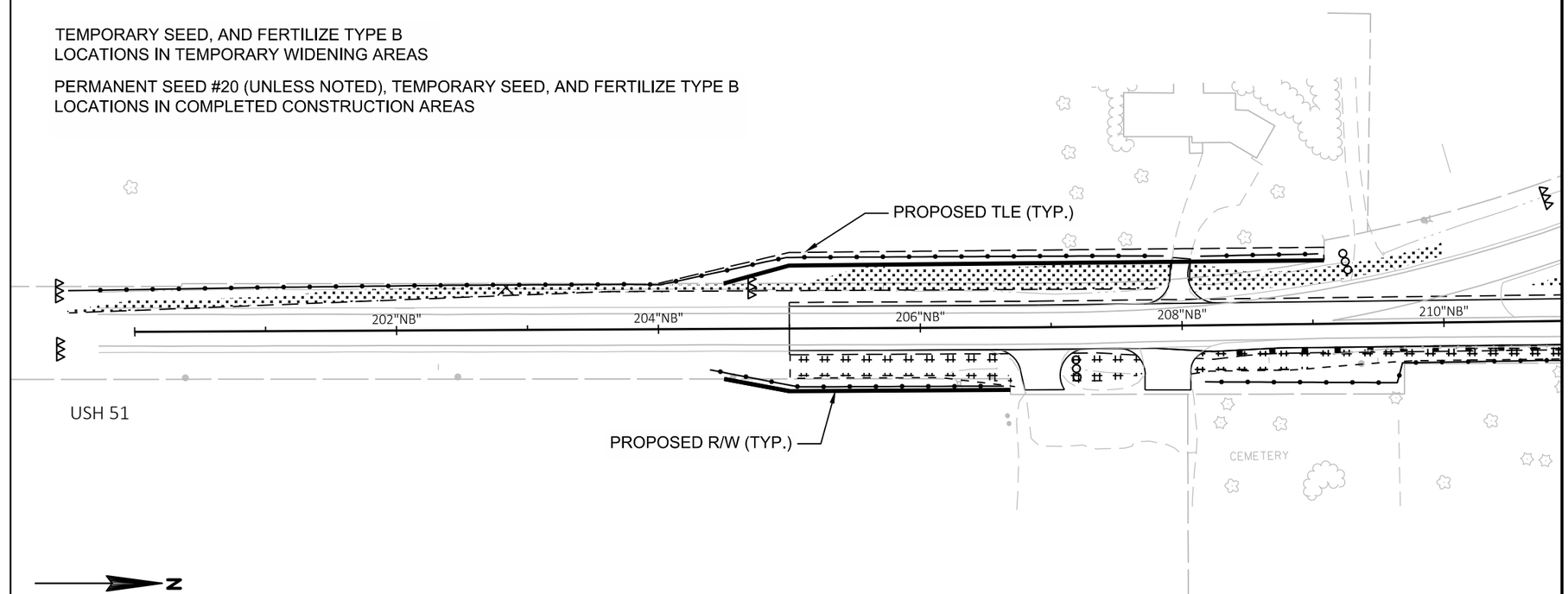


LEGEND

- EROSION MAT CLASS I, TYPE B
- MULCH
- SILT FENCE
- SILT FENCE RELIEF
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- CONC — CONCRETE SURFACE DRAIN
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- #40 SEED

TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN TEMPORARY WIDENING AREAS

PERMANENT SEED #20 (UNLESS NOTED), TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN COMPLETED CONSTRUCTION AREAS

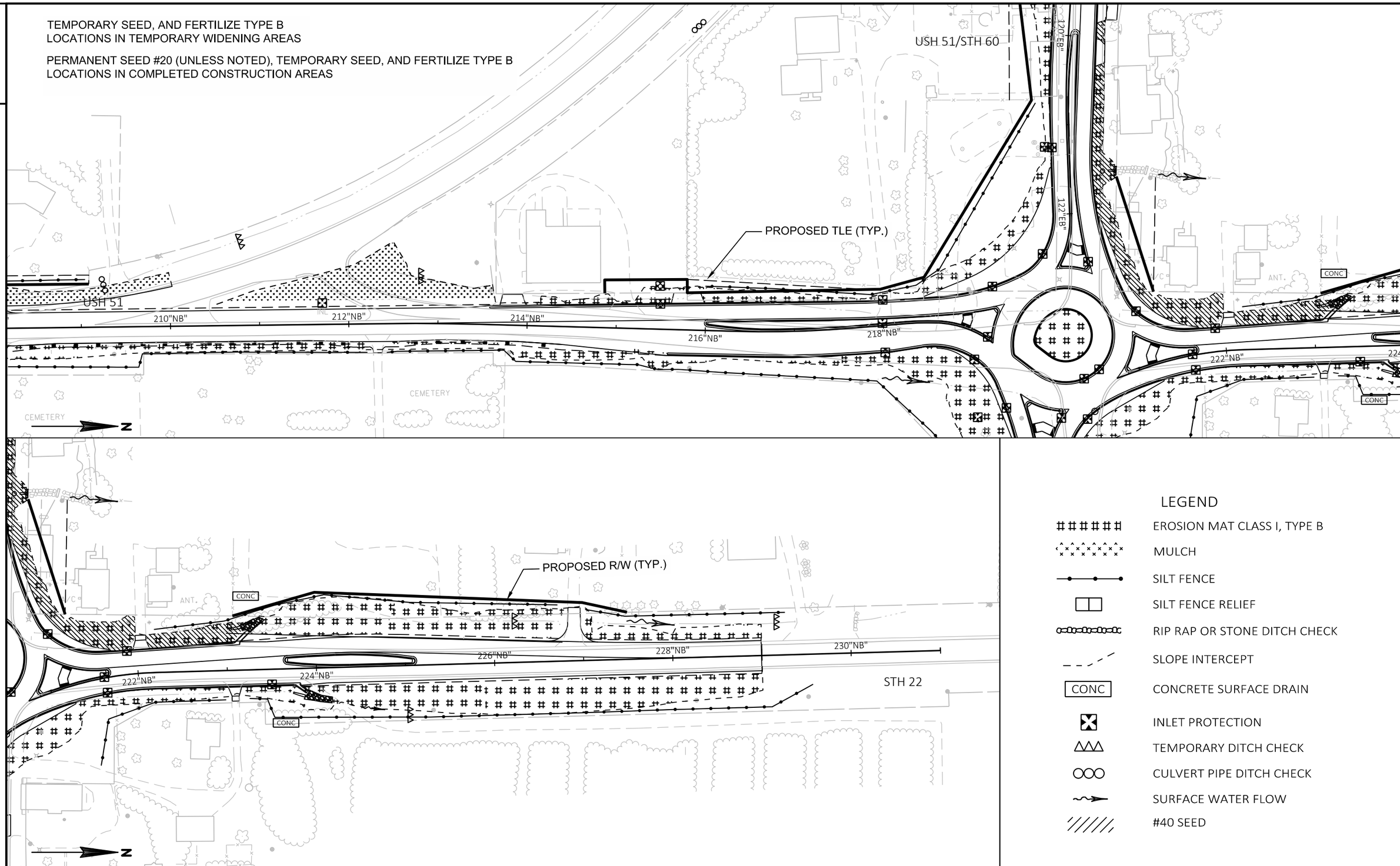


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EROSION CONTROL - STAGE 1-3	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - STAGE 1 -2
PLOT DATE : 1/17/2020 9:42 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:100 FT

TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN TEMPORARY WIDENING AREAS

PERMANENT SEED #20 (UNLESS NOTED), TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN COMPLETED CONSTRUCTION AREAS

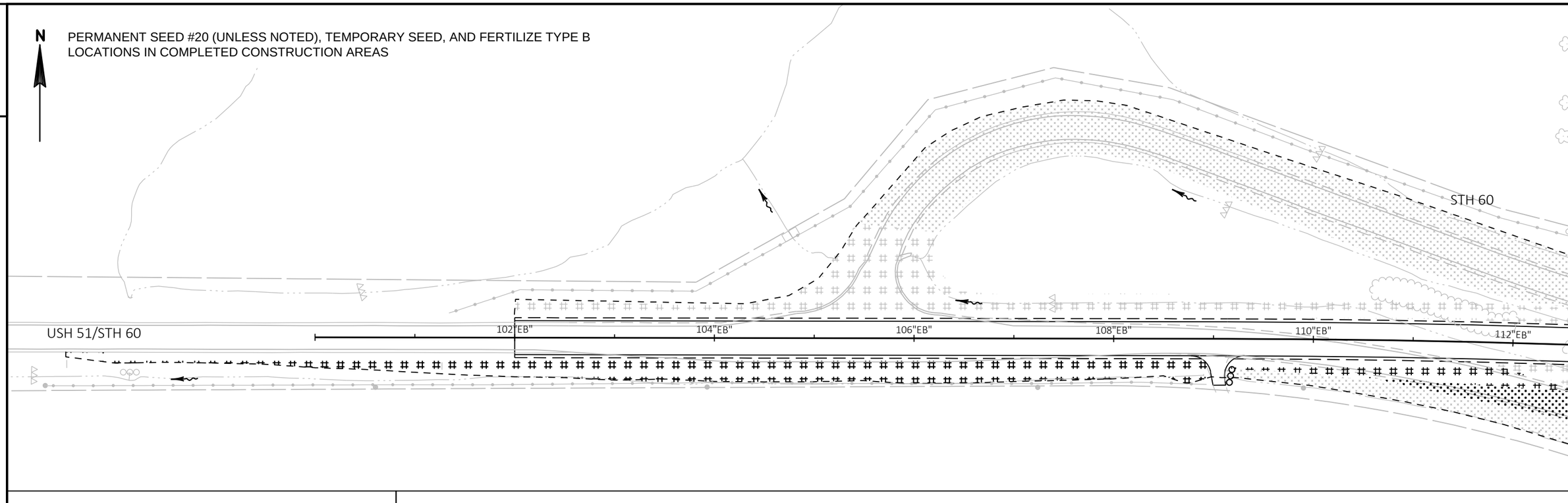


LEGEND

- EROSION MAT CLASS I, TYPE B
- MULCH
- SILT FENCE
- SILT FENCE RELIEF
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- CONC — CONCRETE SURFACE DRAIN
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- #40 SEED

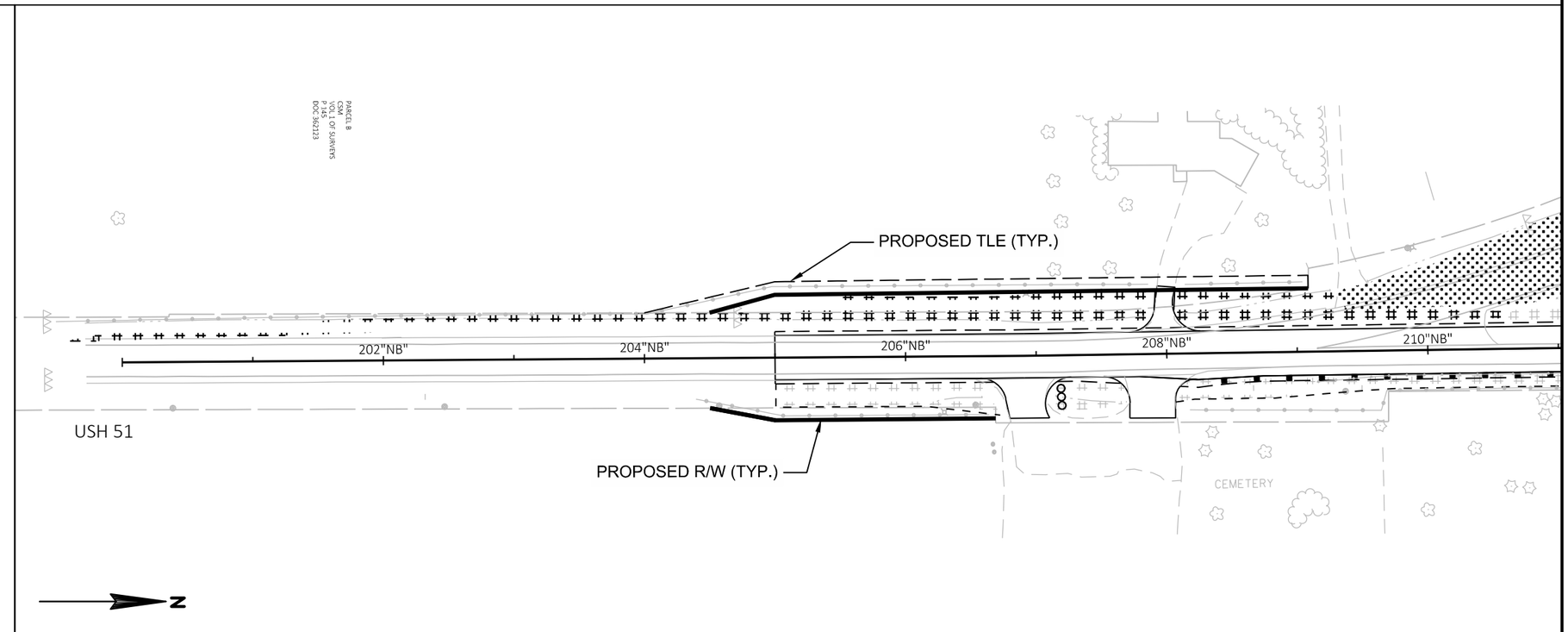
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EROSION CONTROL - STAGE 1-3	SHEET	E

PERMANENT SEED #20 (UNLESS NOTED), TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN COMPLETED CONSTRUCTION AREAS



LEGEND

- EROSION MAT CLASS I, TYPE B
- MULCH
- SILT FENCE
- SILT FENCE RELIEF
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- CONC — CONCRETE SURFACE DRAIN
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- #40 SEED



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EROSION CONTROL - STAGE 4	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\022001_EC STAGE 4.DWG
LAYOUT NAME - STAGE 4 -1
PLOT DATE : 1/17/2020 9:50 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

USH 51/STH 60

110"EB"

112"EB"

114"EB"

116"EB"

118"EB"

120"EB"

122"EB"

PROPOSED R/W (TYP.)

PROPOSED TLE (TYP.)

218"NB"

216"NB"

214"NB"

212"NB"

CEMETERY

USH 51

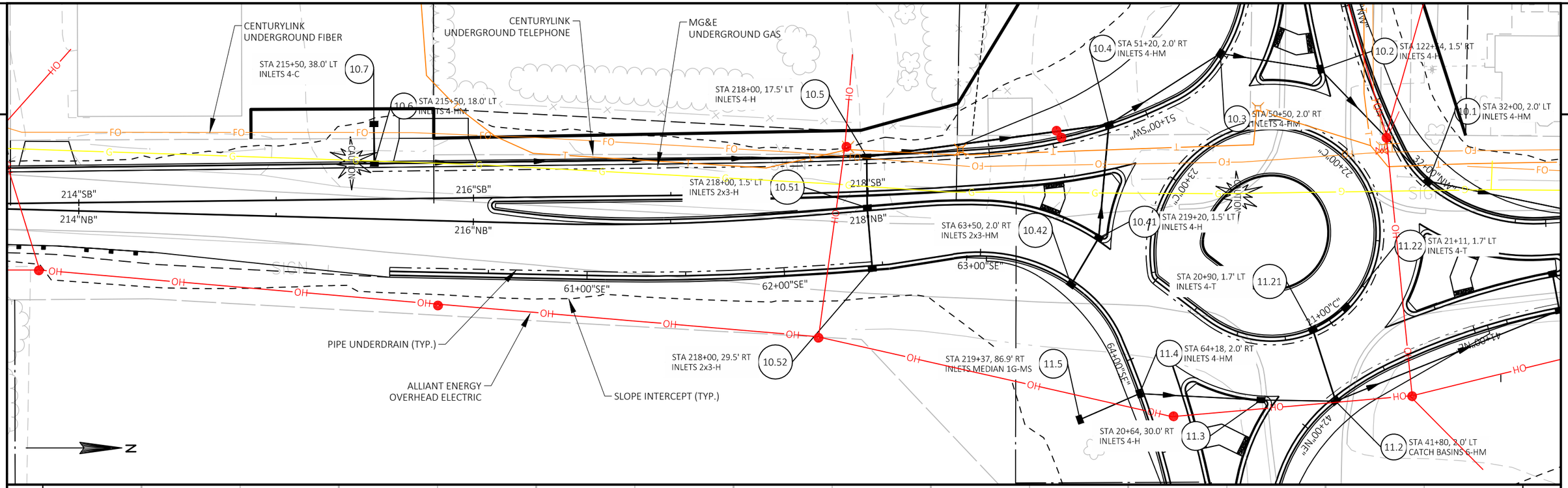
N

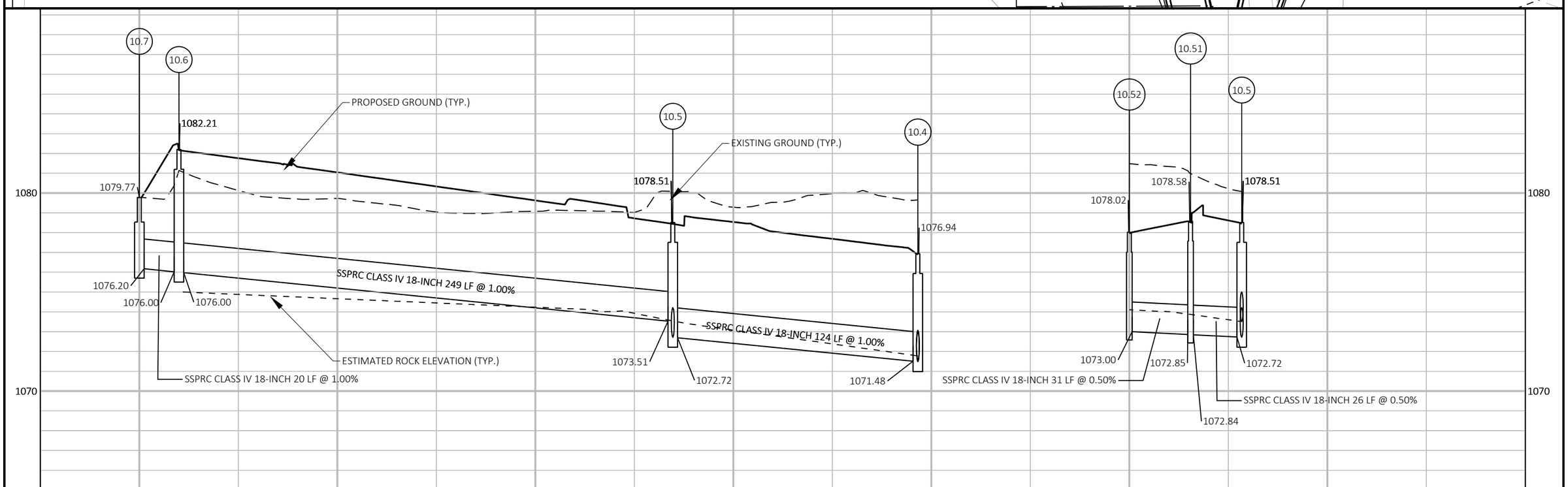
PERMANENT SEED #20 (UNLESS NOTED), TEMPORARY SEED, AND FERTILIZE TYPE B
LOCATIONS IN COMPLETED CONSTRUCTION AREAS

LEGEND

- EROSION MAT CLASS I, TYPE B
- MULCH
- SILT FENCE
- SILT FENCE RELIEF
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- CONC — CONCRETE SURFACE DRAIN
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- #40 SEED

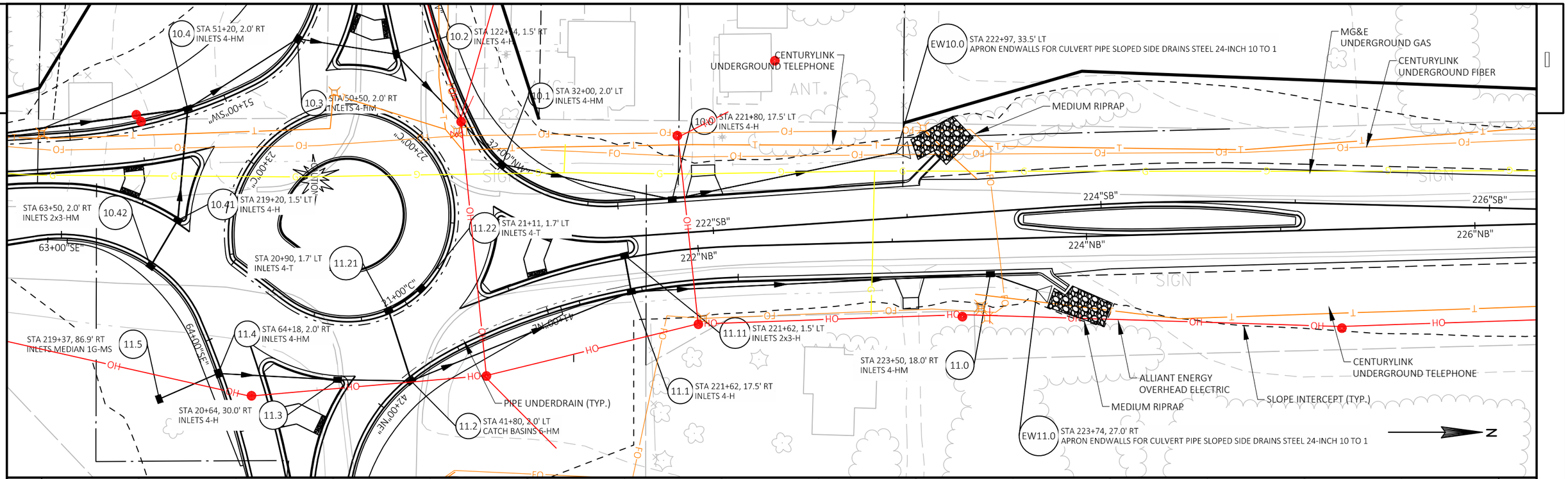
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EROSION CONTROL - STAGE 4	SHEET	E

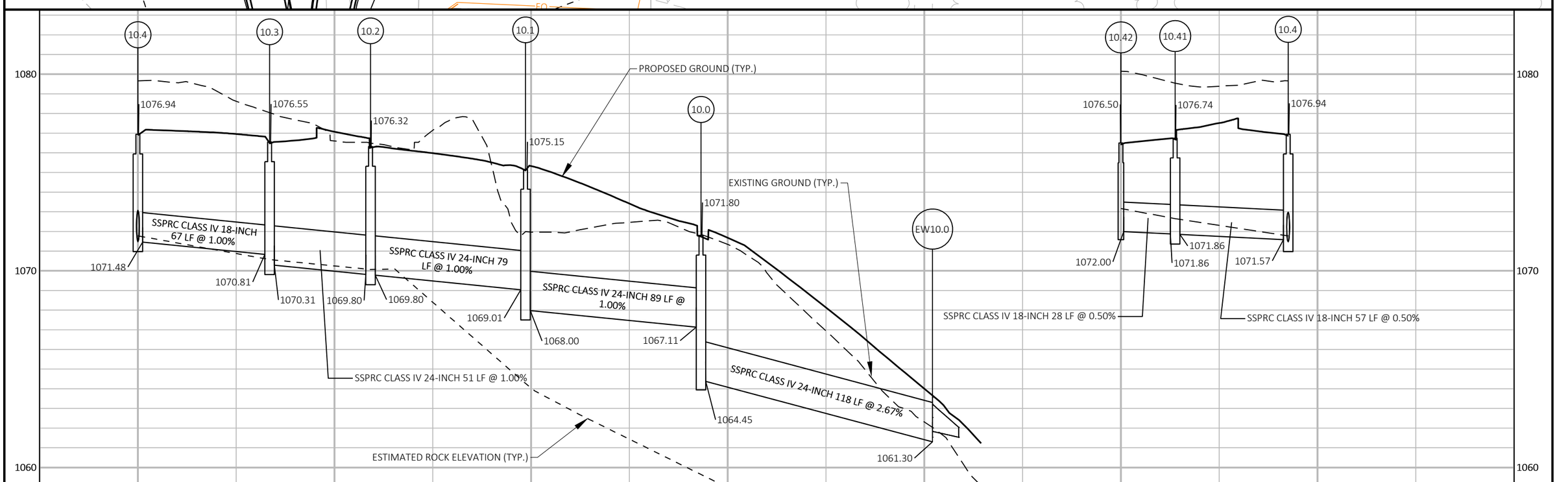




PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STORM SEWER	SHEET	E

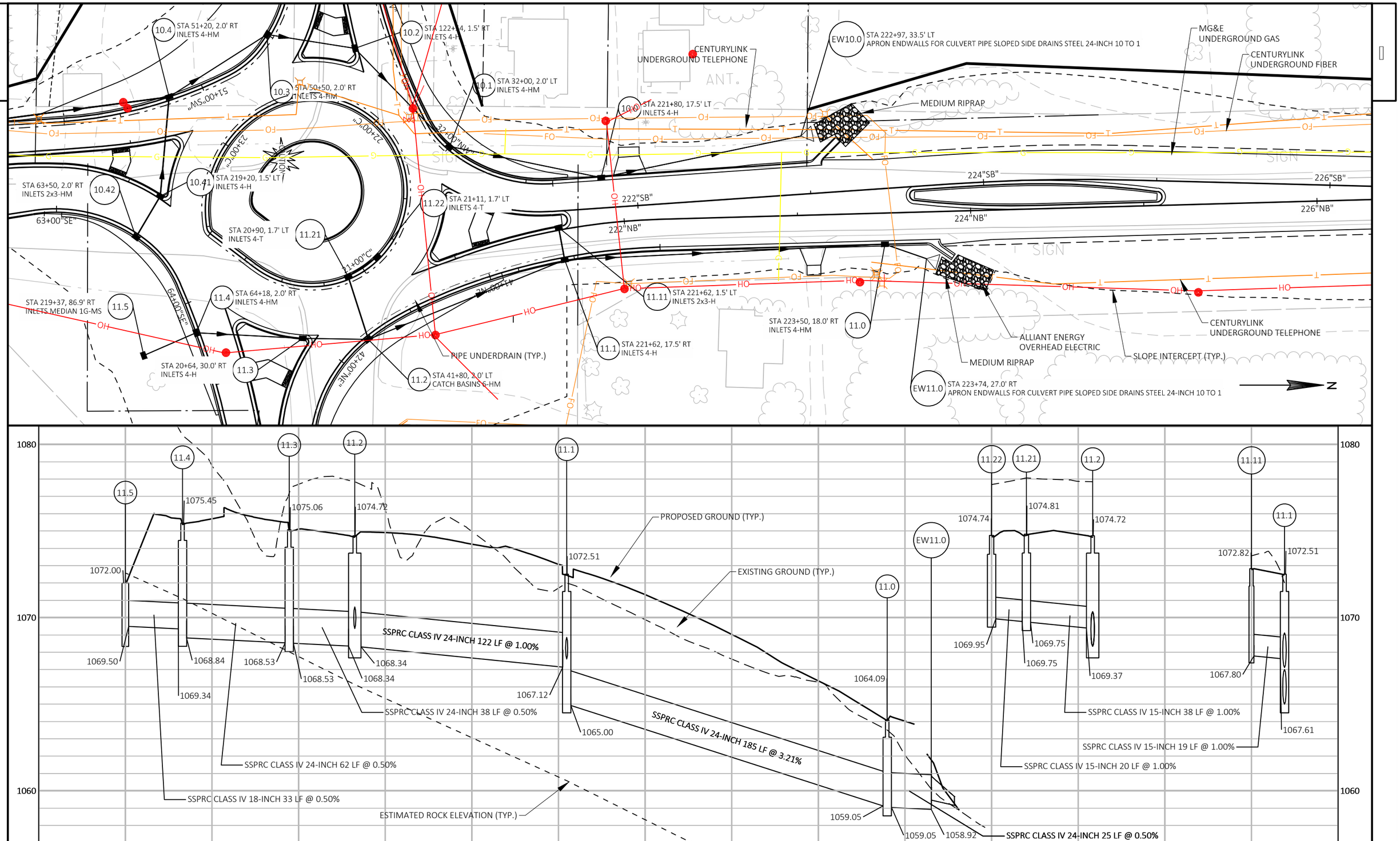
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 10.0 Series
PLOT DATE : 2/4/2020 12:47 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44





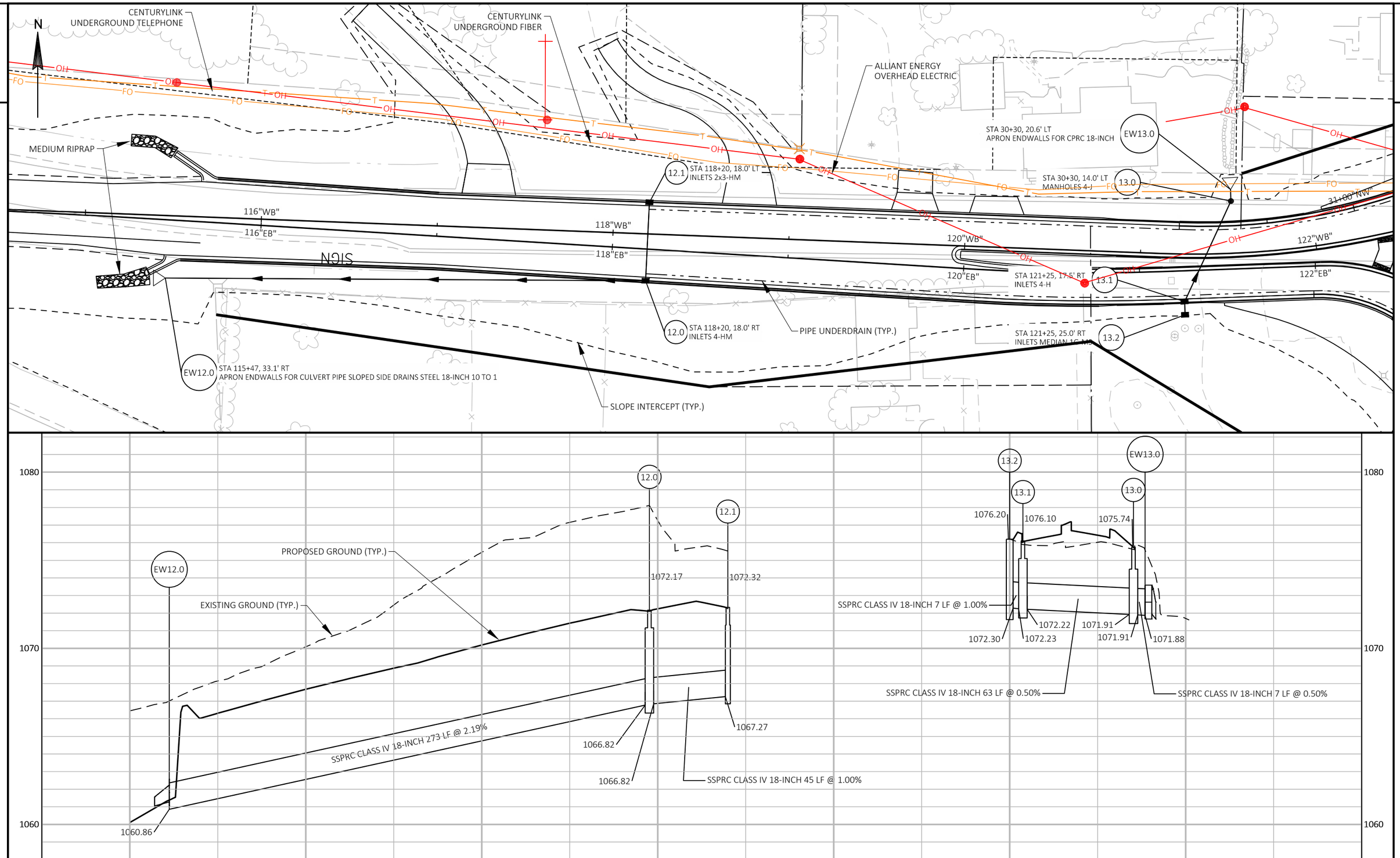
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STORM SEWER	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 10.42 Series
PLOT DATE : 2/4/2020 12:47 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



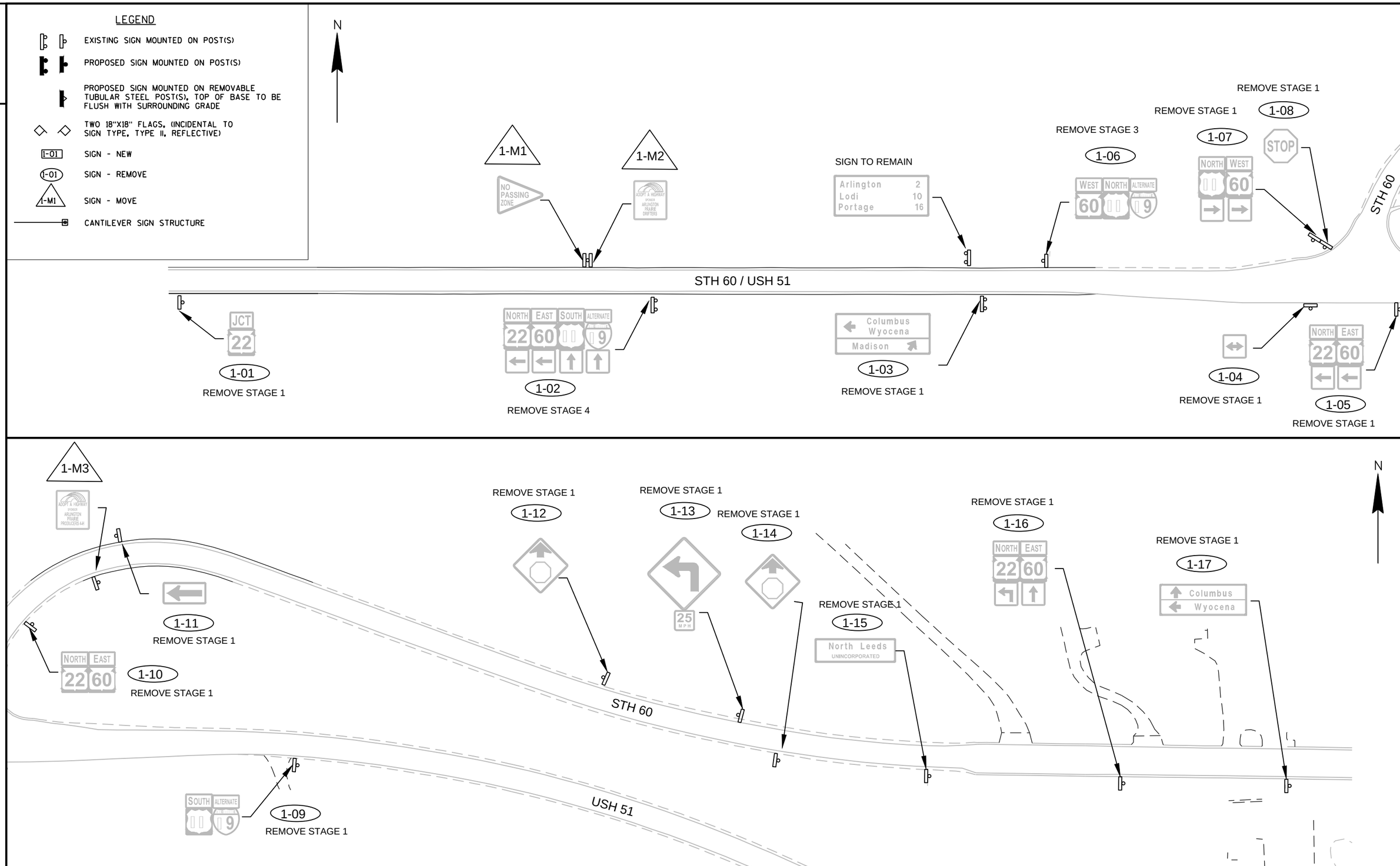
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STORM SEWER	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 11.0 Series
PLOT DATE : 2/4/2020 12:47 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:50 FT



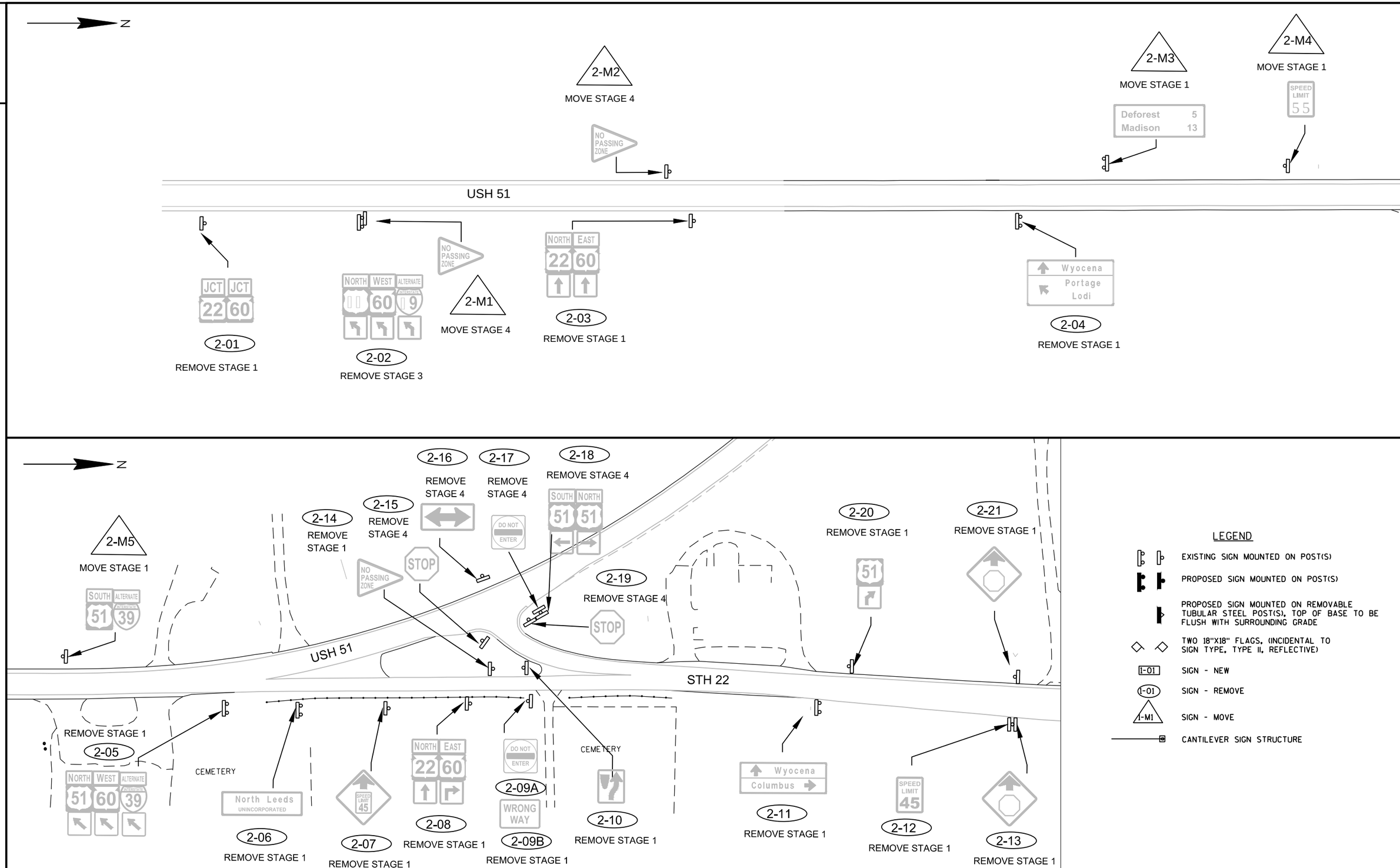
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STORM SEWER	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 12 & 13 Series
PLOT DATE : 2/4/2020 12:47 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:50 FT



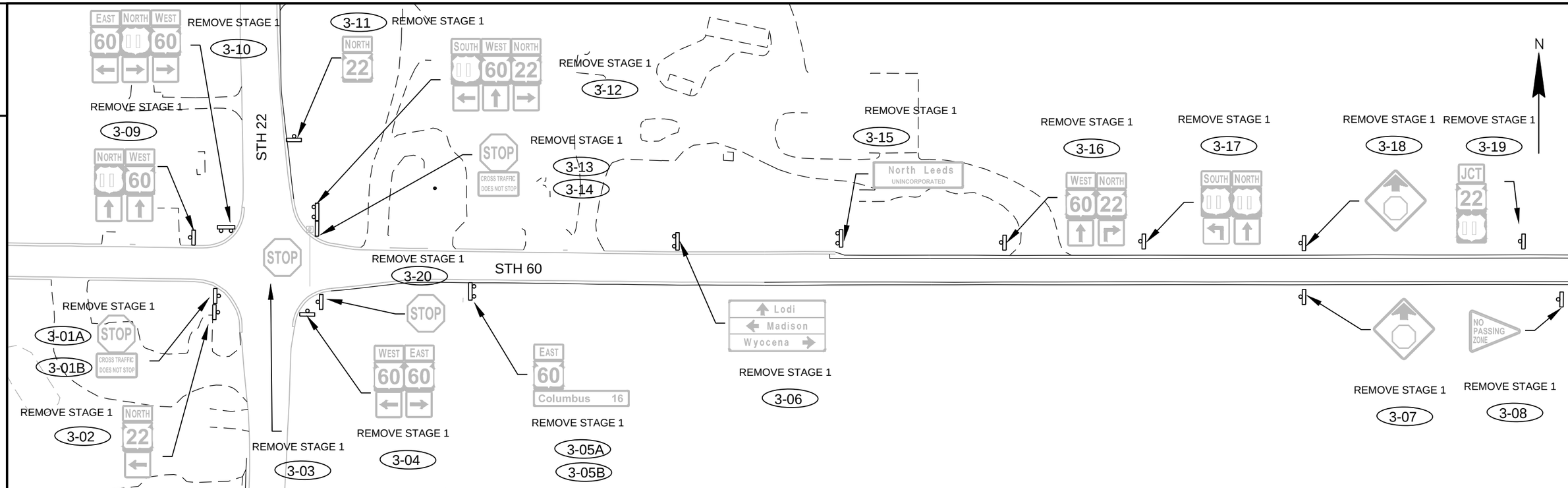
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	SIGN REMOVAL	SHEET	E

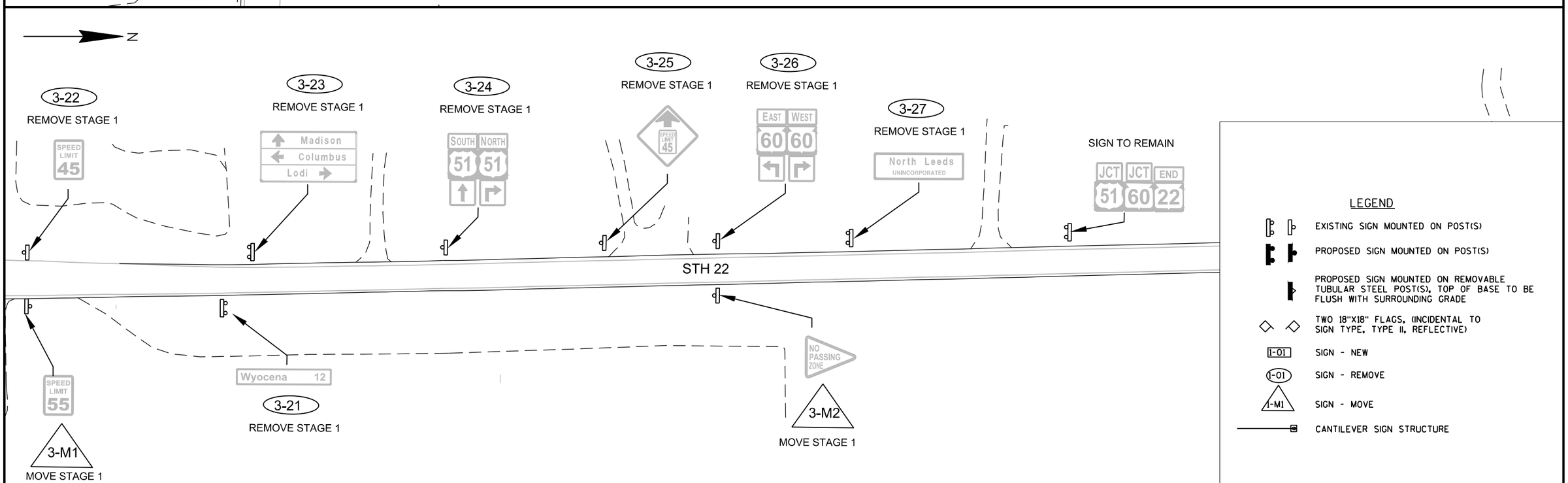
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\023201_PS EMILY 3.DWG
LAYOUT NAME - 023201_ES1
PLOT DATE : 8/14/2019 7:46 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	SIGN REMOVAL	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\023201_PS EMILY 3.DWG
LAYOUT NAME - 023201_ES2
PLOT DATE : 8/14/2019 7:46 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

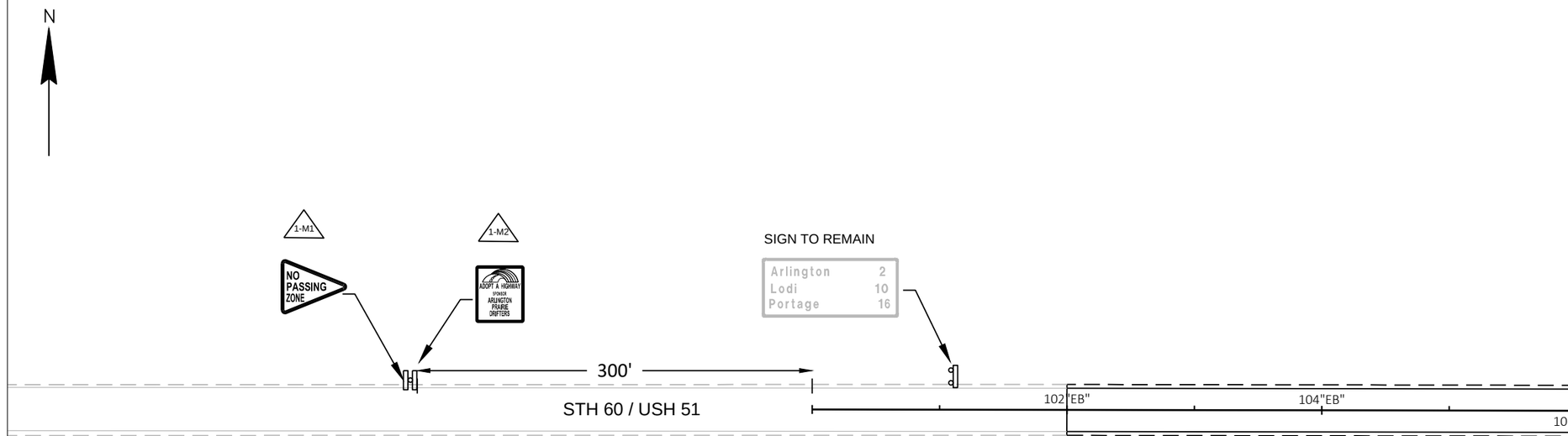


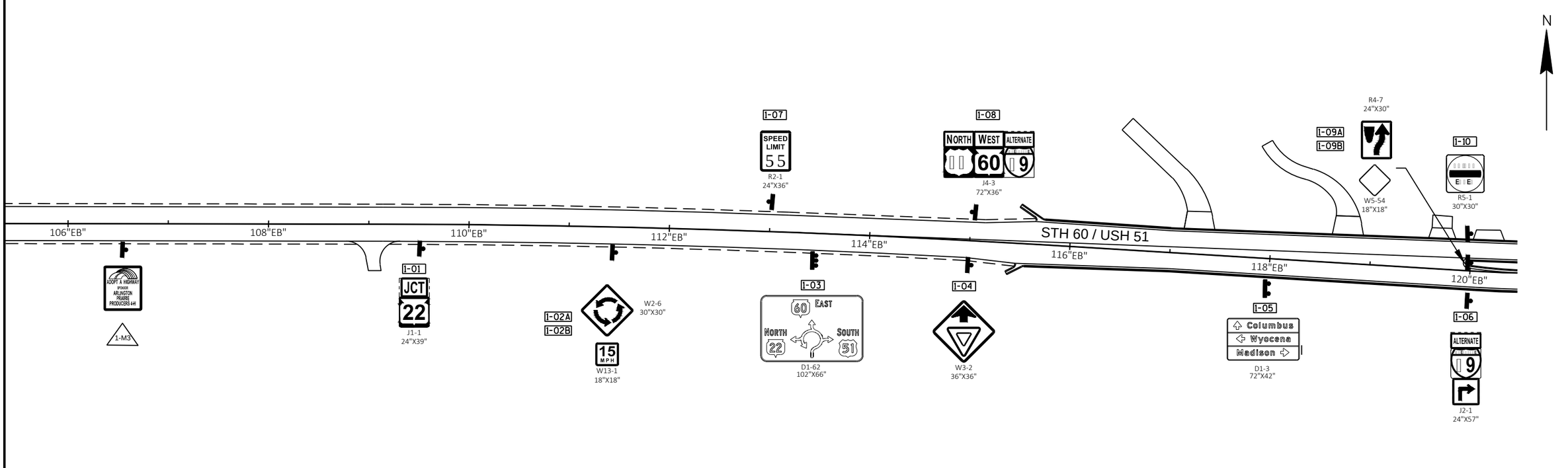


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	SIGN REMOVAL	SHEET	E

LEGEND

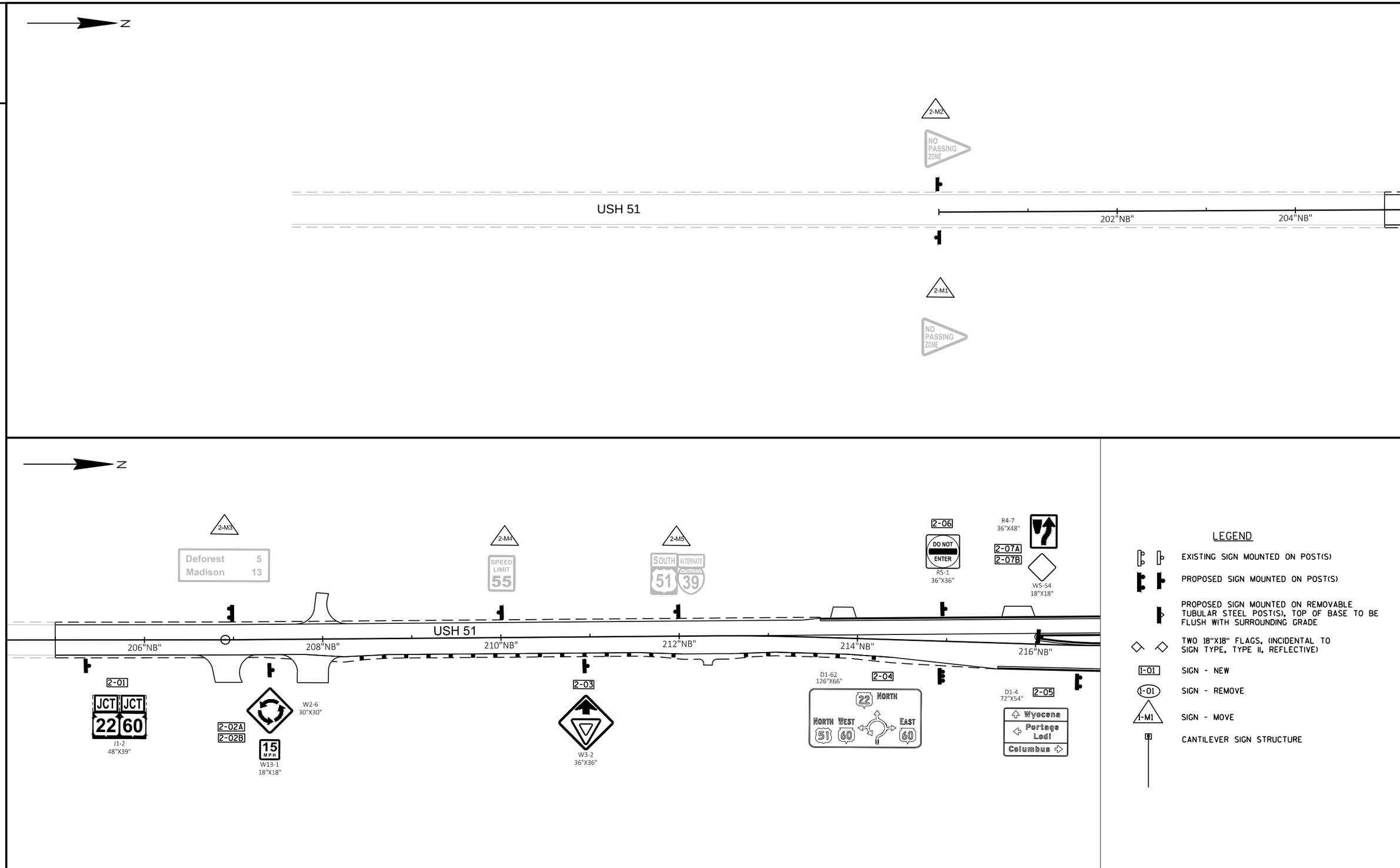
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON REMOVABLE TUBULAR STEEL POST(S), TOP OF BASE TO BE FLUSH WITH SURROUNDING GRADE
- TWO 18"X18" FLAGS, (INCIDENTAL TO SIGN TYPE, TYPE II, REFLECTIVE)
- I-01 SIGN - NEW
- I-01 SIGN - REMOVE
- 1-M1 SIGN - MOVE
- CANTILEVER SIGN STRUCTURE





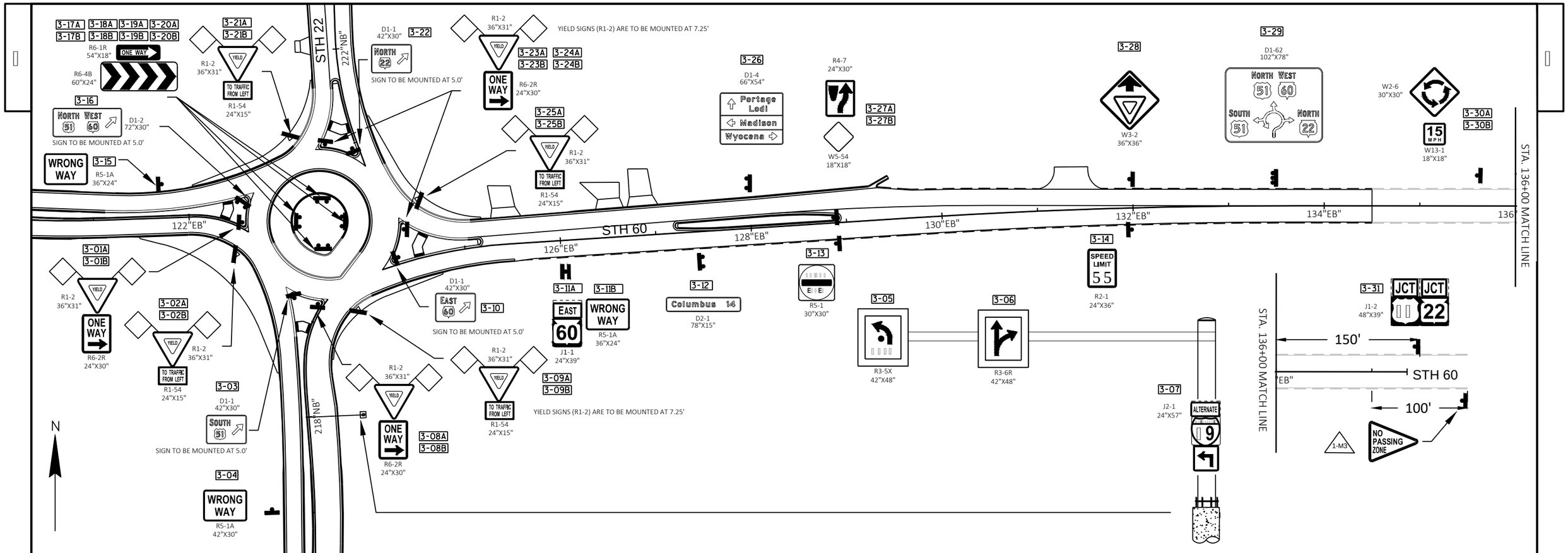
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

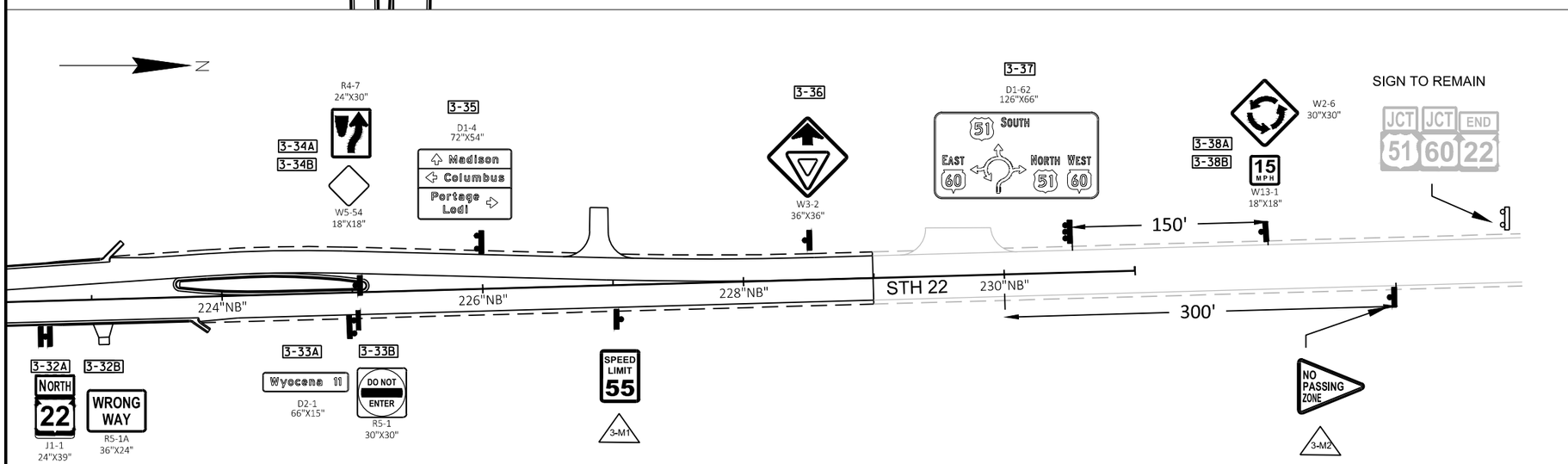
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\023201_PS GREG 2.DWG
LAYOUT NAME - 023201_PS1
PLOT DATE : 8/14/2019 9:39 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\023201_PS GREG 2.DWG
LAYOUT NAME - 023201_PS2
PLOT DATE : 8/14/2019 9:39 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



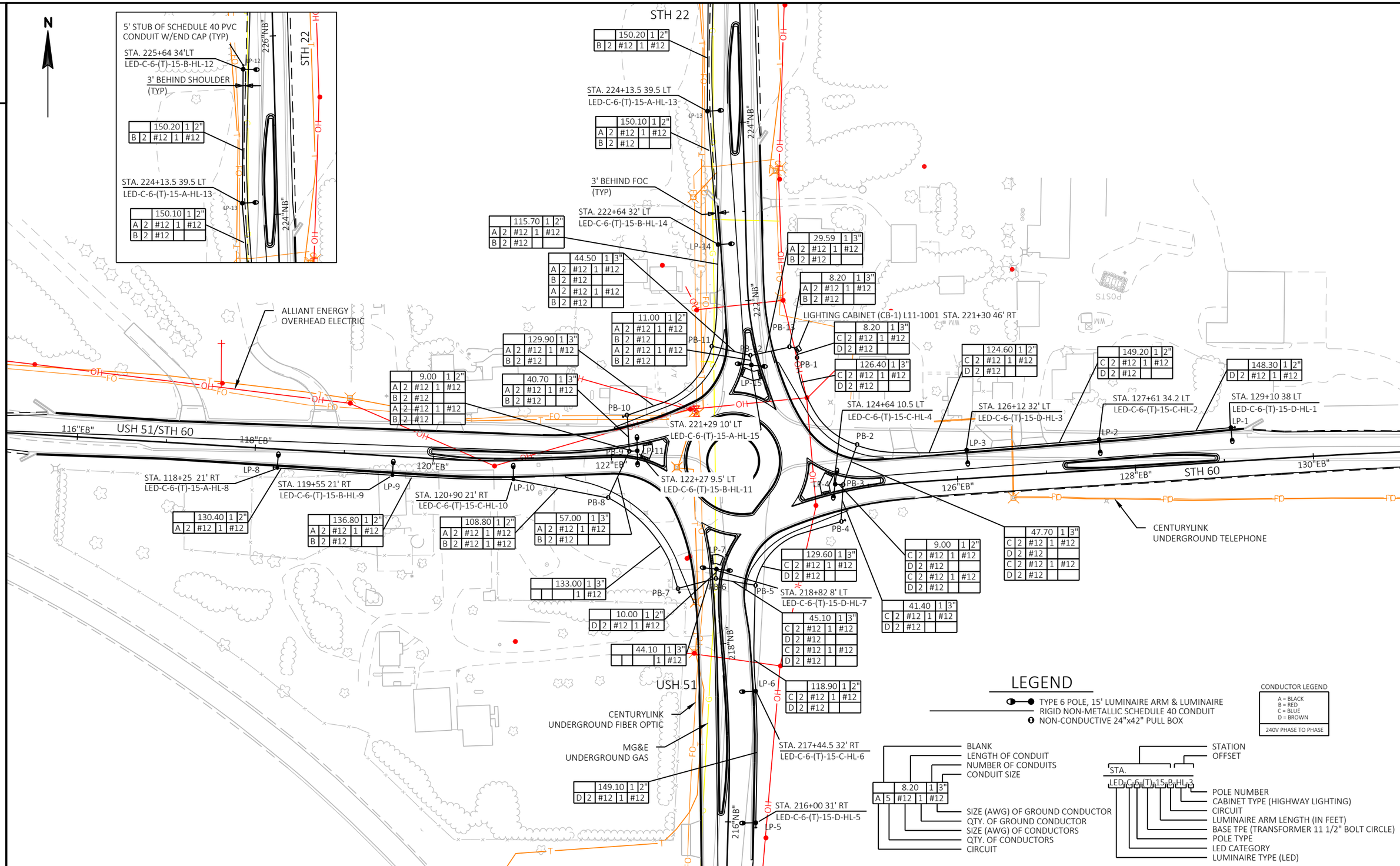


LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON REMOVABLE TUBULAR STEEL POST(S), TOP OF BASE TO BE FLUSH WITH SURROUNDING GRADE
- TWO 18"X18" FLAGS, (INCIDENTAL TO SIGN TYPE, TYPE II, REFLECTIVE)
- I-01 SIGN - NEW
- (I-01) SIGN - REMOVE
- I-M1 SIGN - MOVE
- CANTILEVER SIGN STRUCTURE

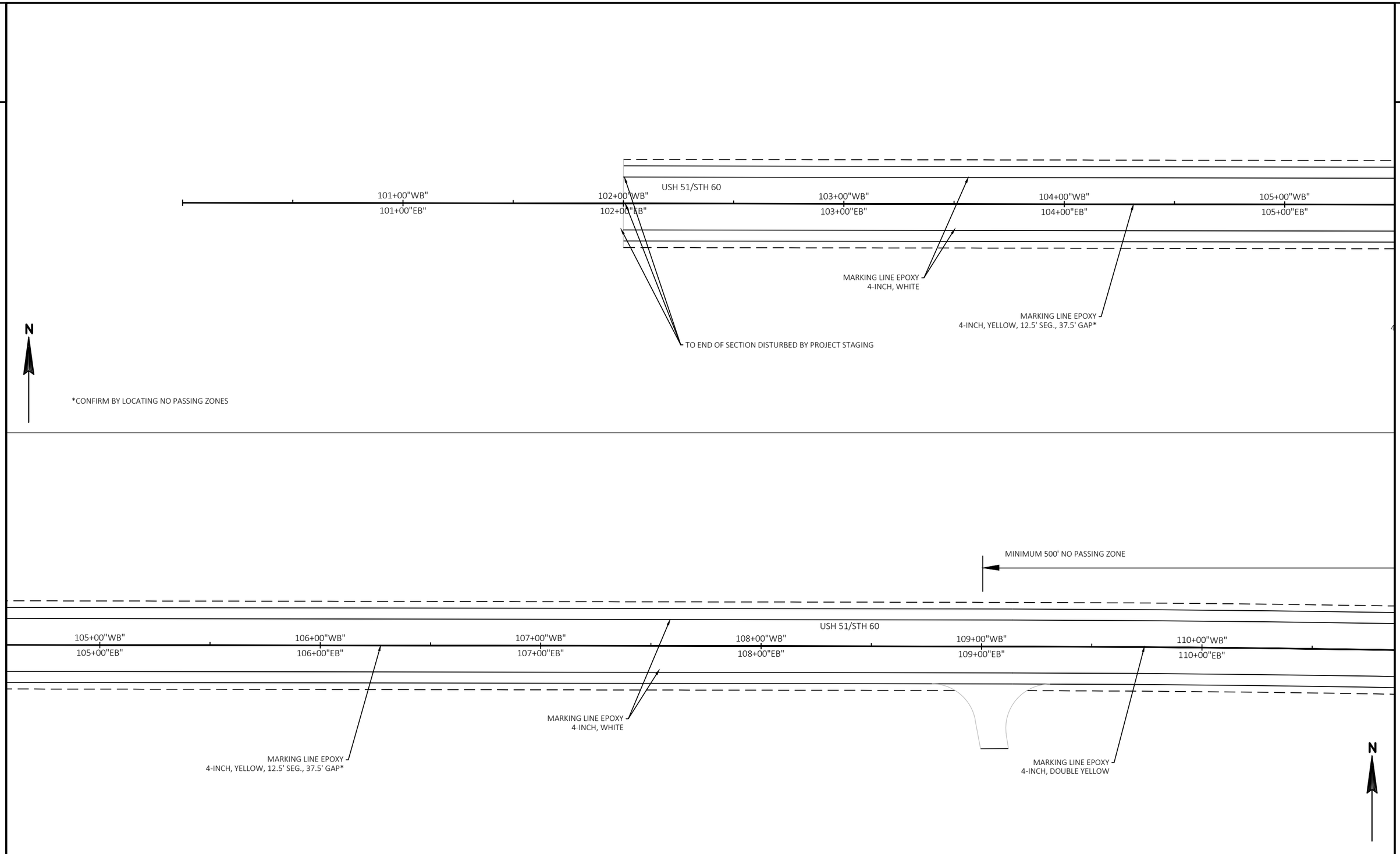
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\023201_PS GREG 2.DWG
LAYOUT NAME - 023201_PS3
PLOT DATE : 8/14/2019 9:39 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

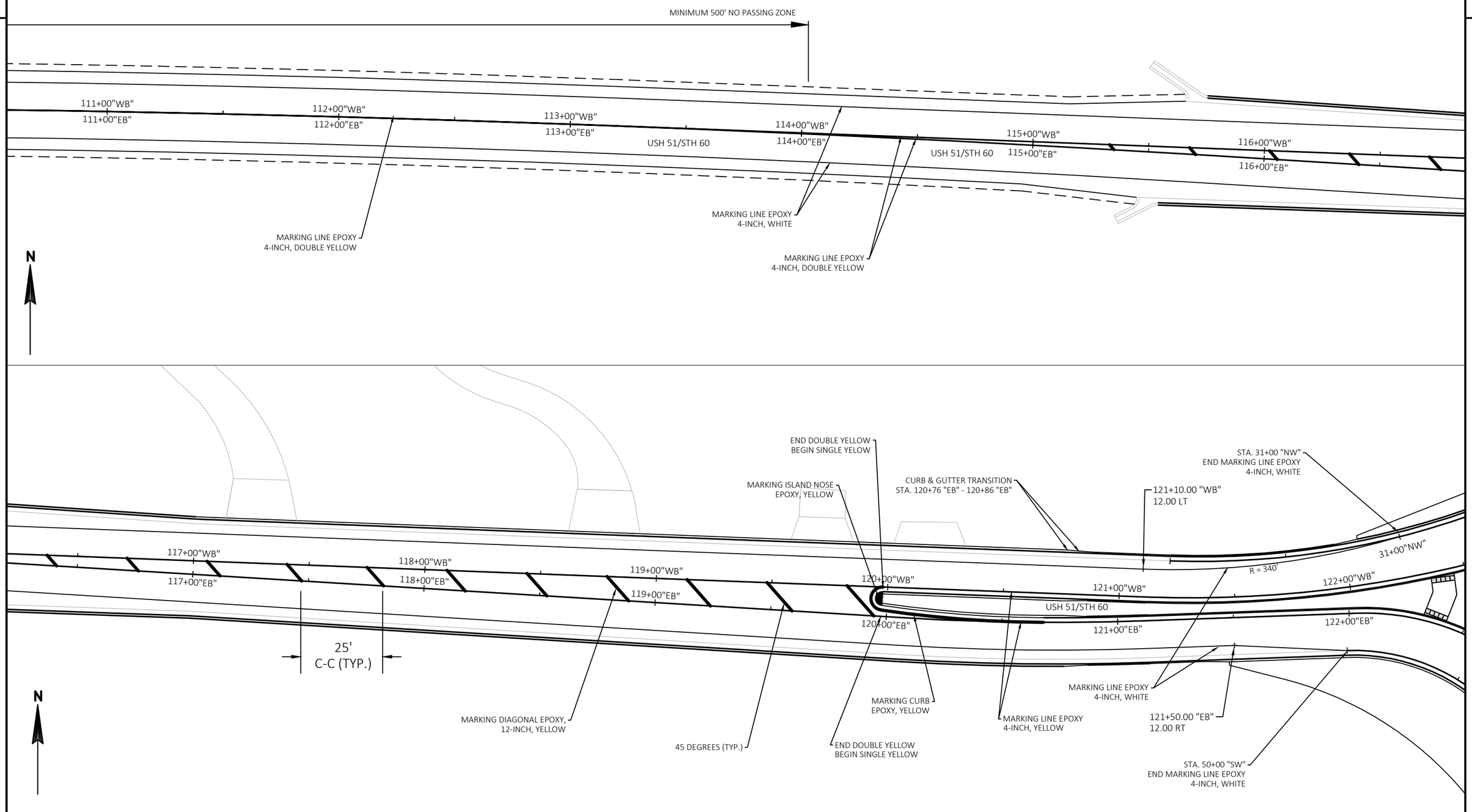


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	LIGHTING PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\023501_LP.DWG
LAYOUT NAME - LIGHTING PLAN
PLOT DATE : 2/4/2020 2:14 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

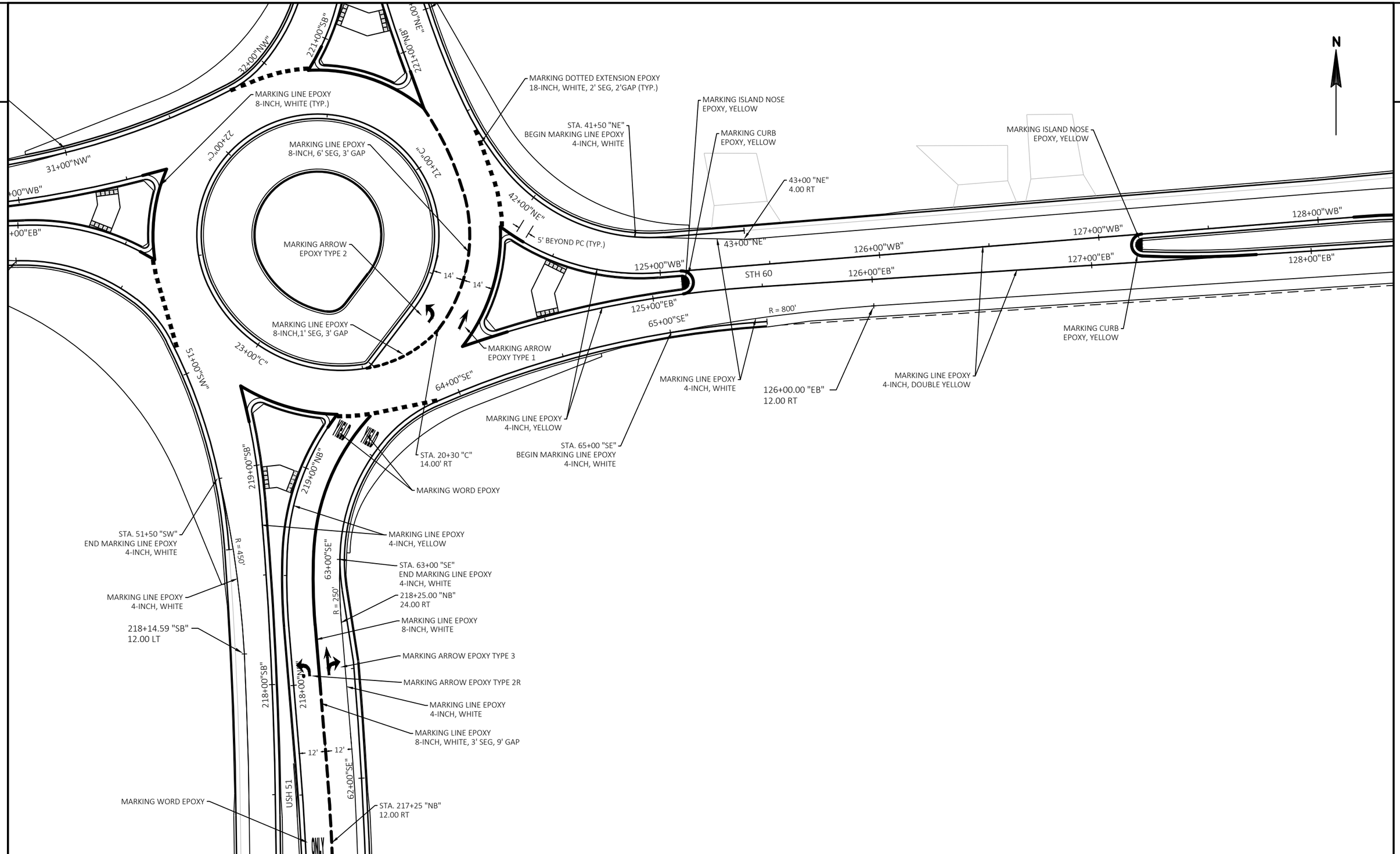


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET	E

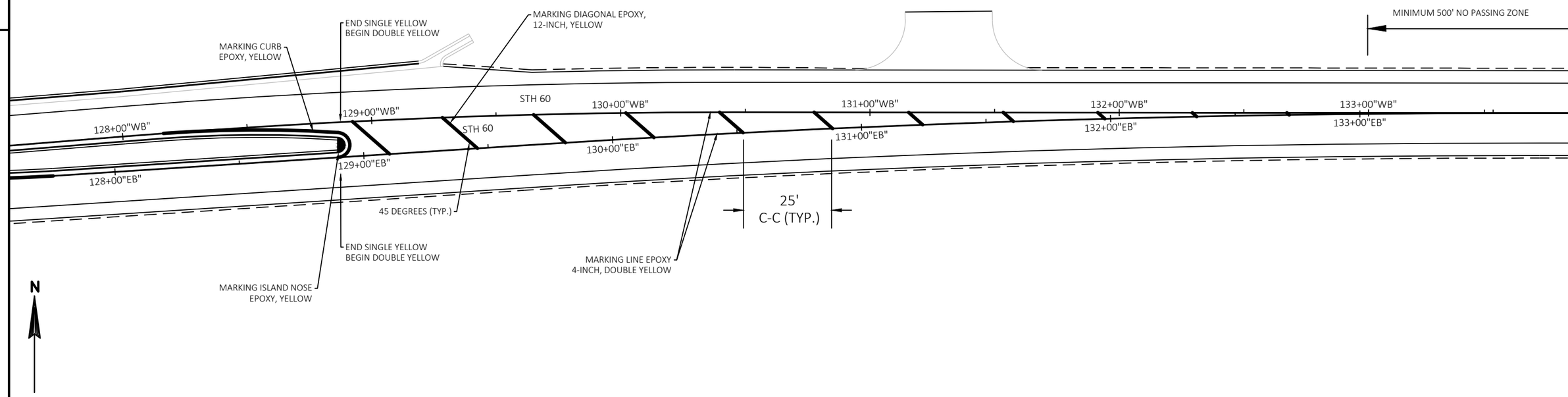


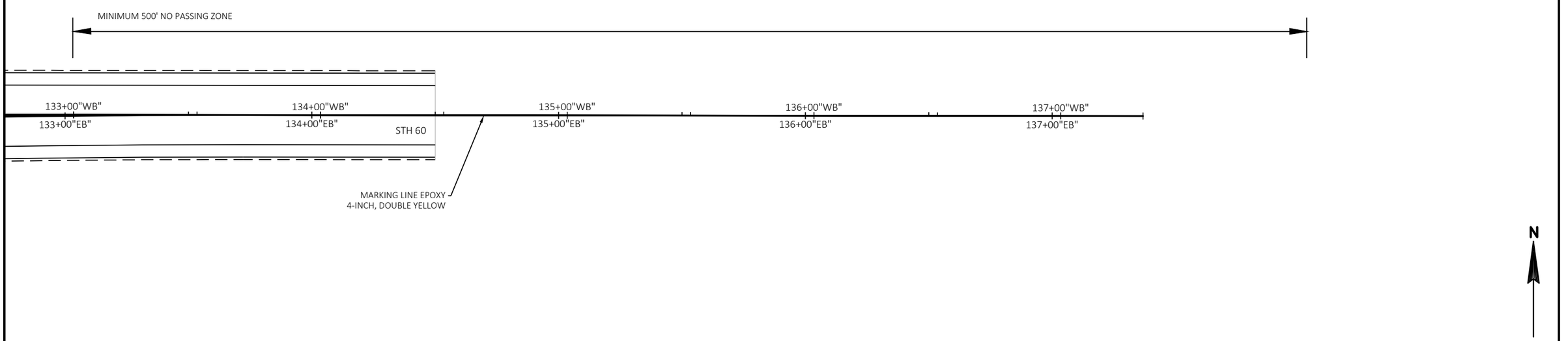
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024502_pm
PLOT DATE : 2/4/2020 12:58 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

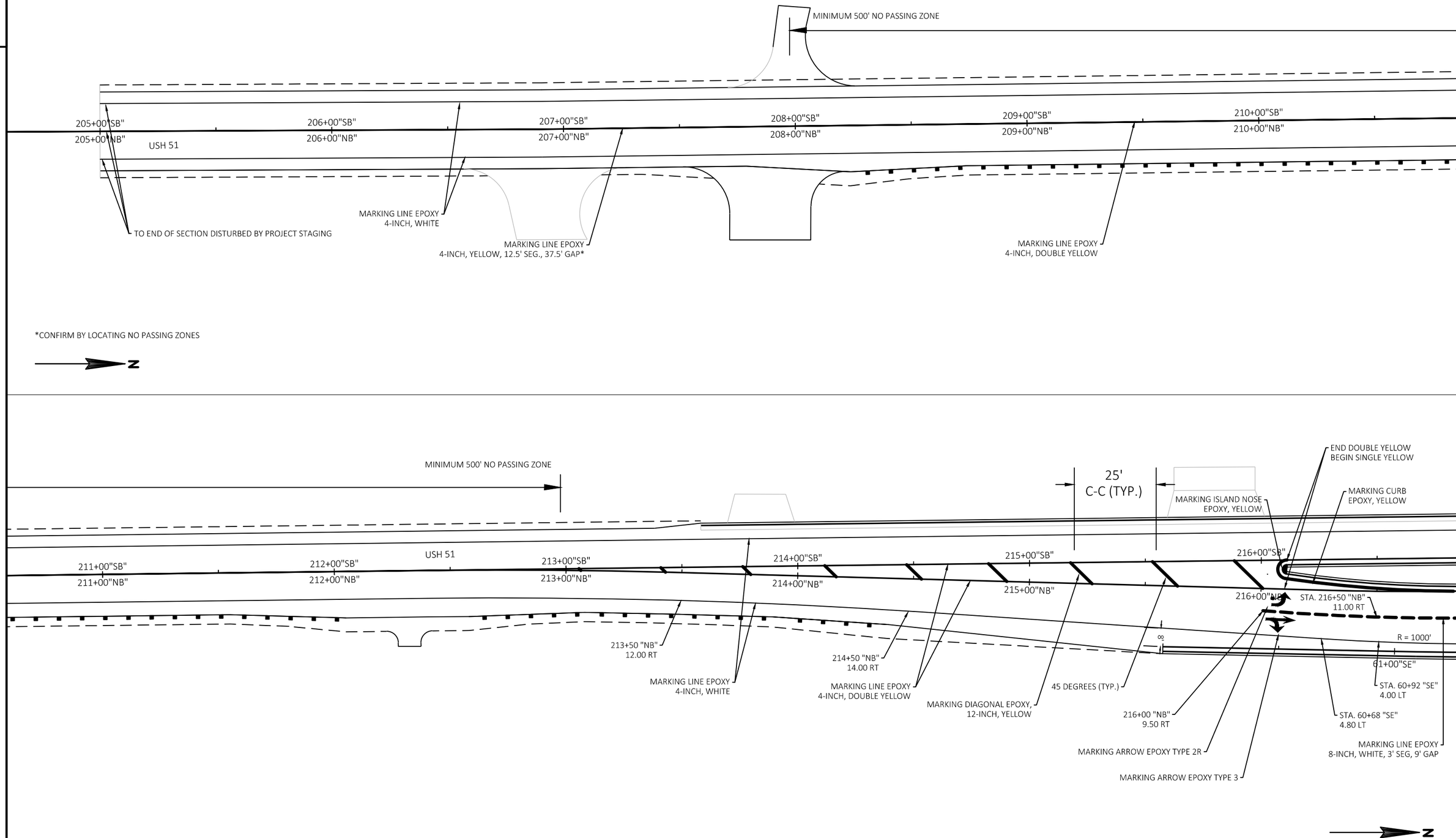


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET	E



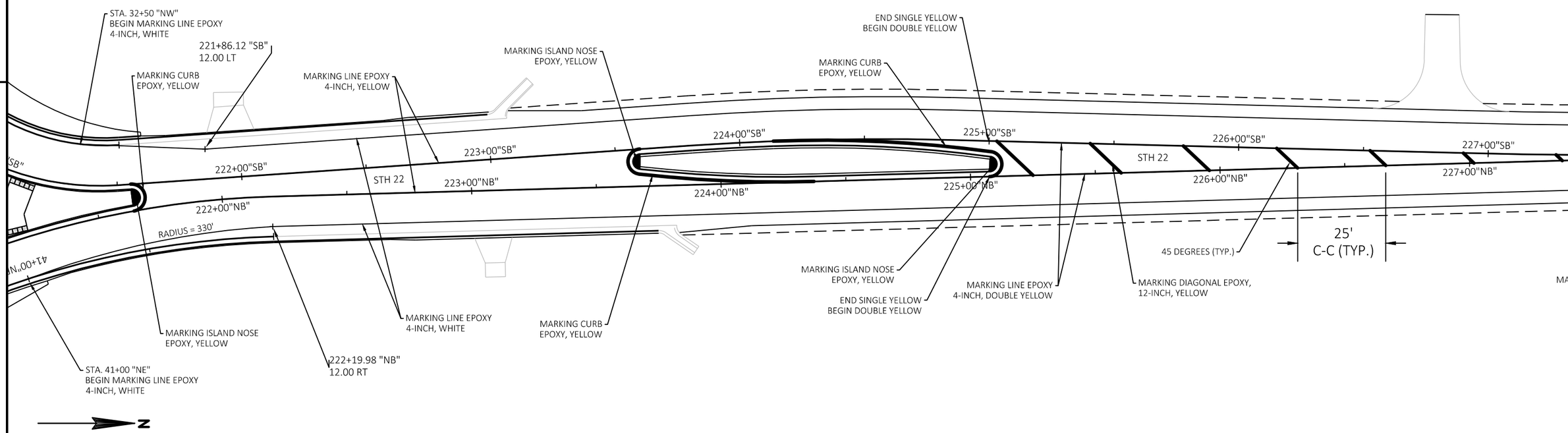


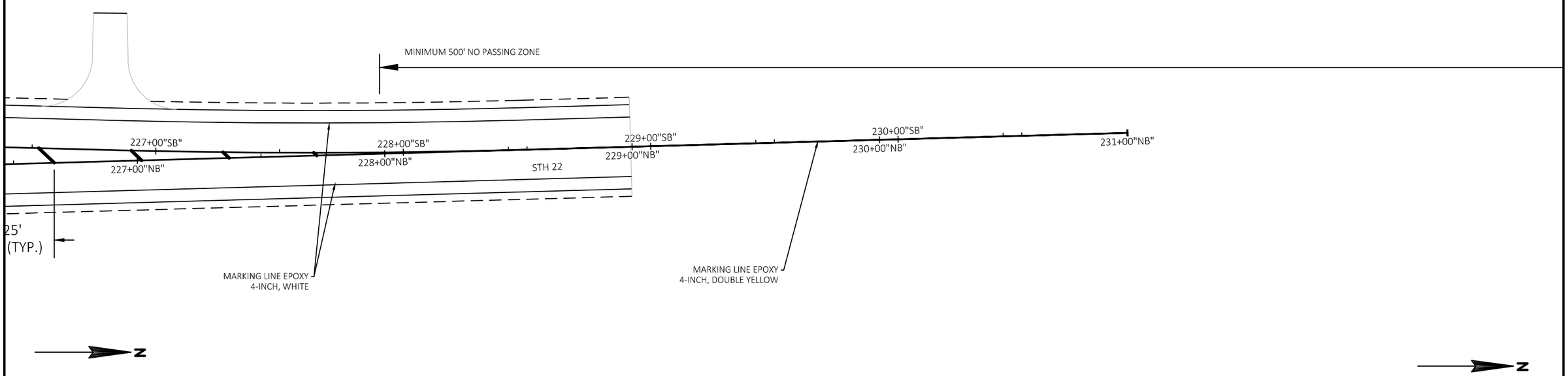
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET	E



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024505_pm
PLOT DATE : 2/4/2020 12:58 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:40 FT





PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PAVEMENT MARKING	SHEET	E

2

GENERAL NOTES FOR TRAFFIC CONTROL

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

2) CONFLICTING TRAFFIC SIGNS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

3) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER.

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

5) FOR NIGHTTIME OPERATION, ALL DRUMS IN TAPERS SHALL HAVE A TYPE "C" WARNING LIGHT.

6) ALL TYPE III BARRICADES WITH SIGNS SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

7) ALL TEMPORARY PAVEMENT SHALL CONSIST OF 4 INCHES OF ASPHALTIC SURFACE TEMPORARY, OVER 6 INCHES OF BASE AGGREGATE DENSE OVER 12 INCHES OF SELECT CRUSH UNLESS APPROVED BY ENGINEER.

8) ALL TEMPORARY PAVEMENT MARKINGS ON PERMANENT PAVEMENT SHALL BE REMOVABLE TAPE.

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

10) BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.

11) ALL TRAFFIC CONTROL DRUMS ARE SPACED AT 50-FEET UNLESS OTHERWISE NOTED.

12) BEGIN EACH STAGE BY COMPLETING PAVEMENT MARKING AND SIGNAGE FIRST.

13) FOR SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS, USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE ADJACENT PAVEMENT.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- A — TYPE A WARNING LIGHT (FLASHING)
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- REMOVE PAVEMENT MARKING
- SAW CUT

WORK ZONE PAVEMENT MARKINGS

- DY — CONTINUOUS DOUBLE YELLOW, 4-INCH
- Y — CONTINUOUS YELLOW, 4-INCH
- W — CONTINUOUS WHITE, 4-INCH

TPM TEMPORARY MARKING LINE PAINT

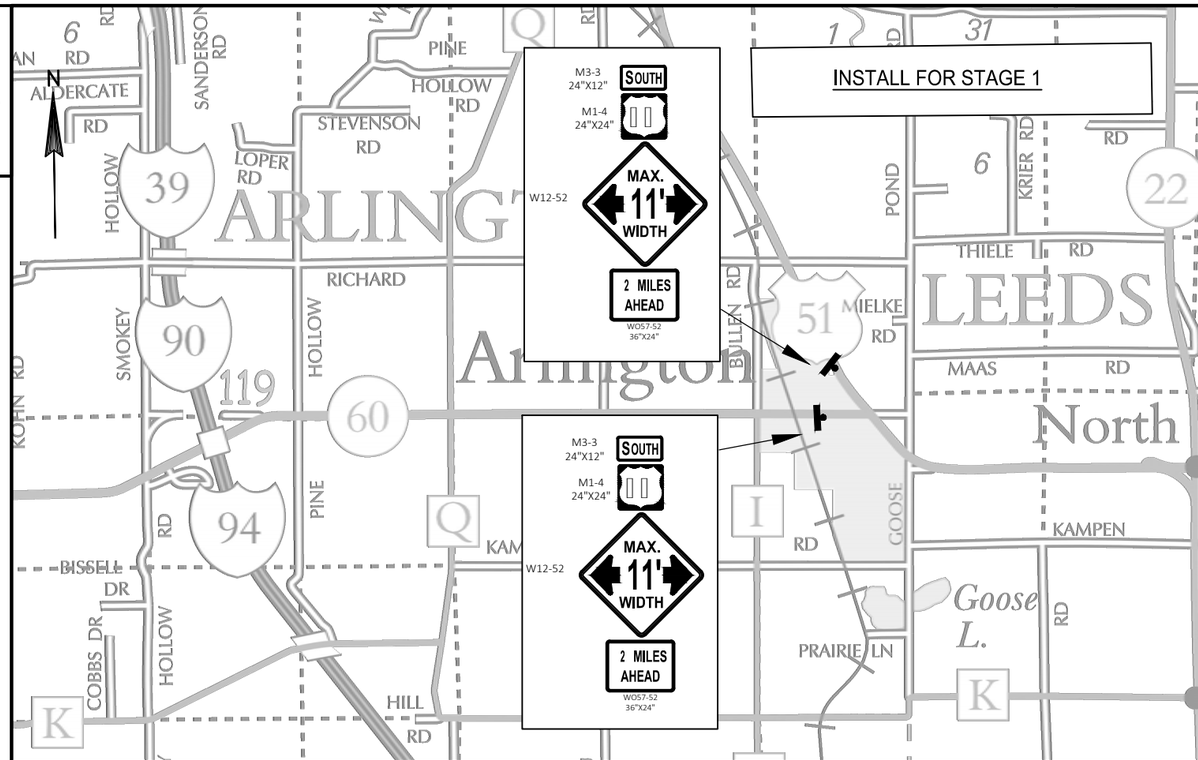
TPMRT TEMPORARY MARKING LINE REMOVABLE TAPE

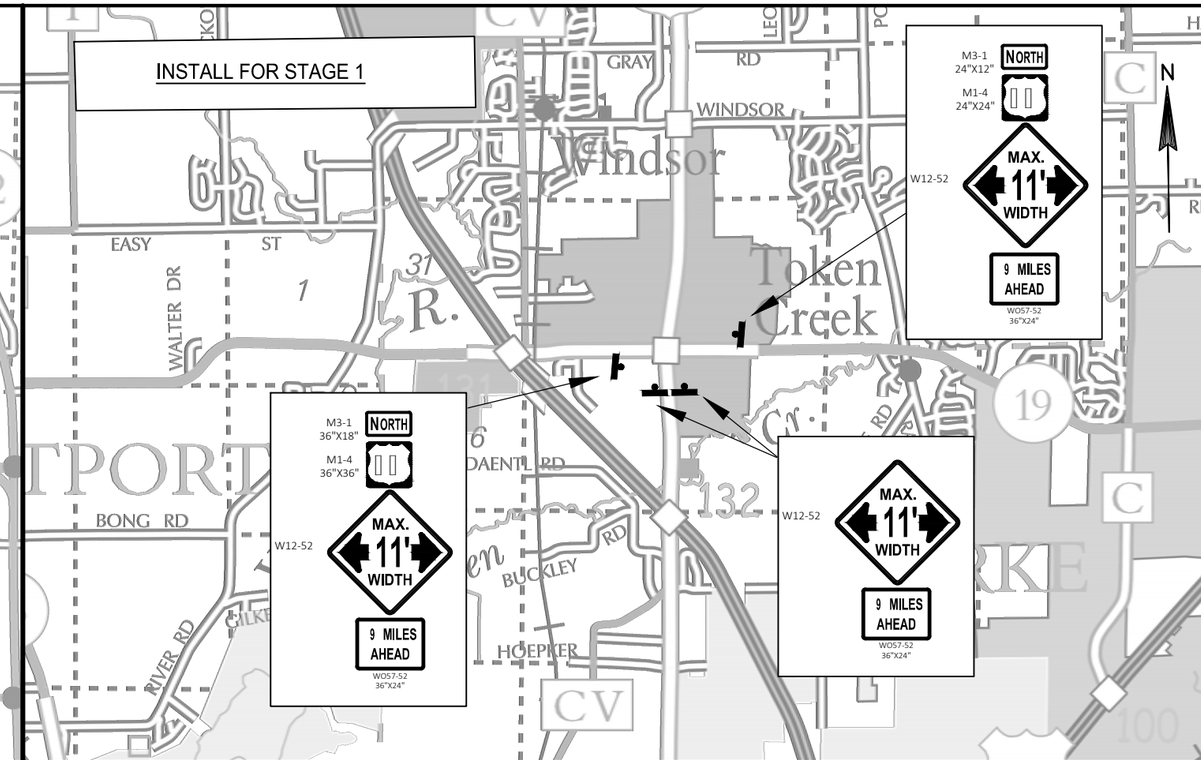
SEE DETOUR AND TRAFFIC CONTROL SHEETS FOR PCMS LOCATION

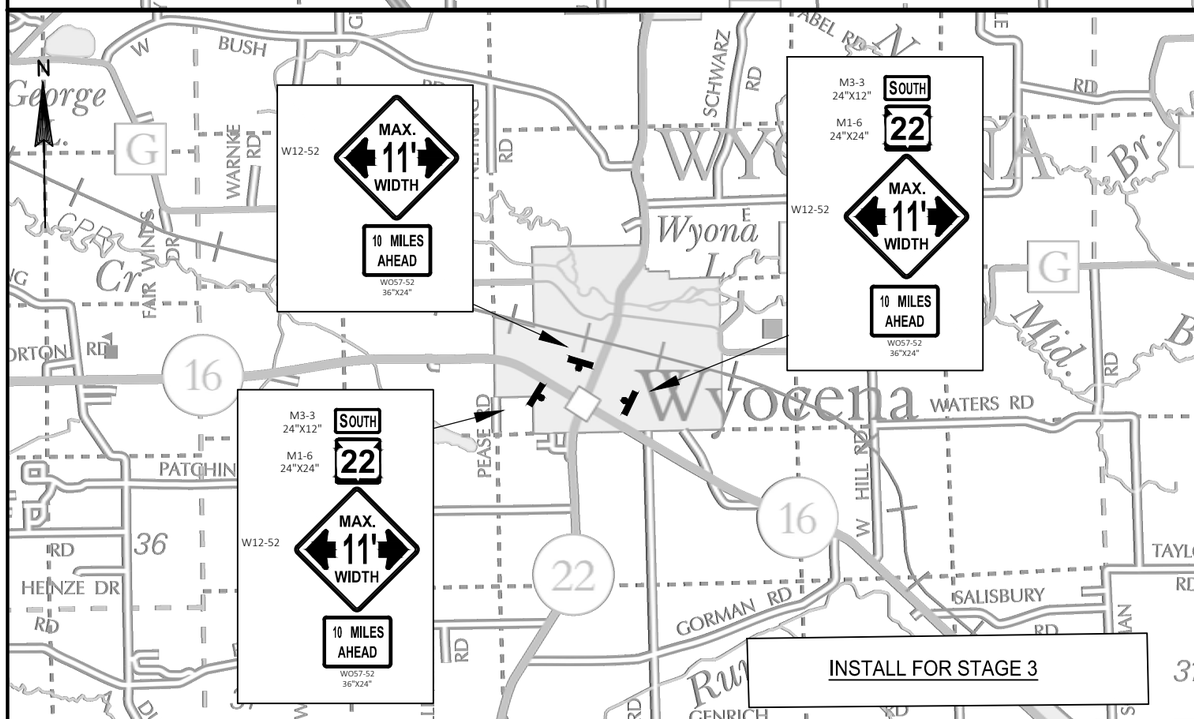
PCMS MESSAGES

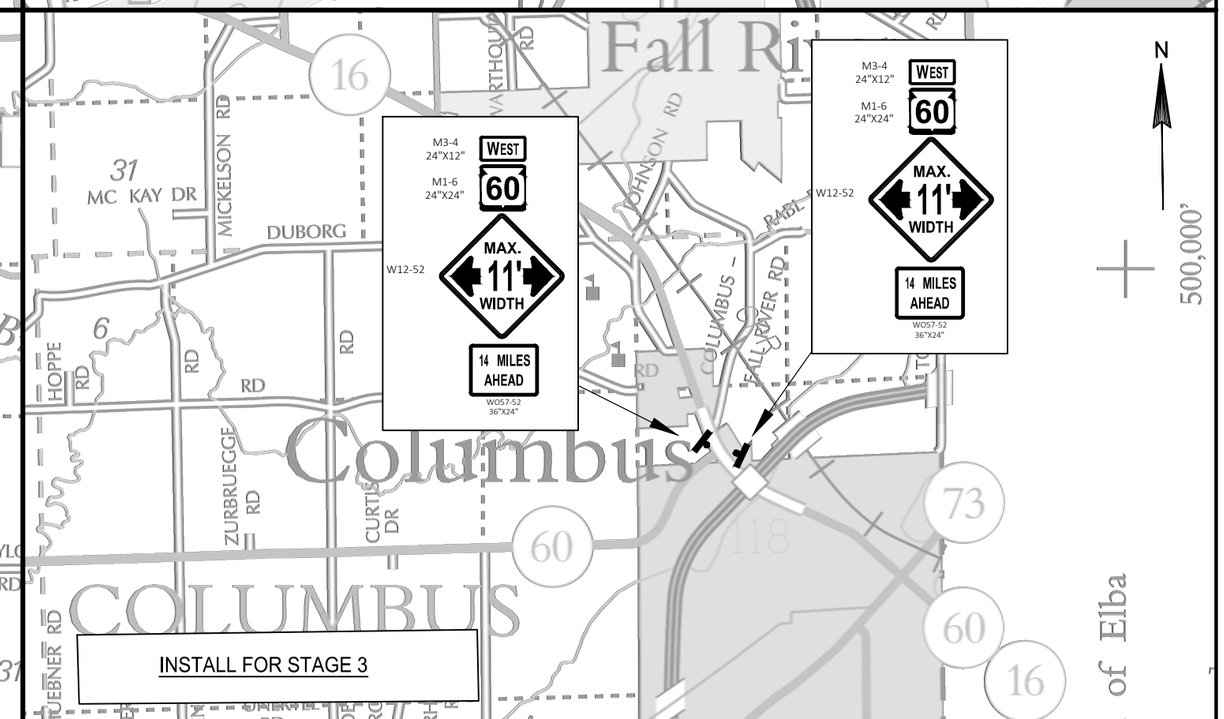
	USH 51/STH 60 EB		USH 51 NB		STH 60 WB		STH 22 SB	
STAGE	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
7 DAYS PRIOR TO STAGE 1	ROAD WORK BEGINS	DAY: XXX DATE: XX/XX	ROAD WORK BEGINS	DAY: XXX DATE: XX/XX	ROAD WORK BEGINS	DAY: XXX DATE: XX/XX	ROAD WORK BEGINS	DAY: XXX DATE: XX/XX
FIRST 7 DAYS DURING STAGE 1	ROAD CLOSED AHEAD	FOLLOW DETOUR	ROAD CLOSED AHEAD	FOLLOW DETOUR	ROAD CLOSED AHEAD	FOLLOW DETOUR	ROAD CLOSED AHEAD	FOLLOW DETOUR
FIRST 7 DAYS DURING STAGE 3	--	--	NEW TRAFFIC PATTERN	ROUND-ABOUT AHEAD	NEW TRAFFIC PATTERN	ROUND-ABOUT AHEAD	NEW TRAFFIC PATTERN	ROUND-ABOUT AHEAD
FIRST 7 DAYS DURING STAGE 4	NEW TRAFFIC PATTERN	ROUND-ABOUT AHEAD	--	--	--	--	--	--

2



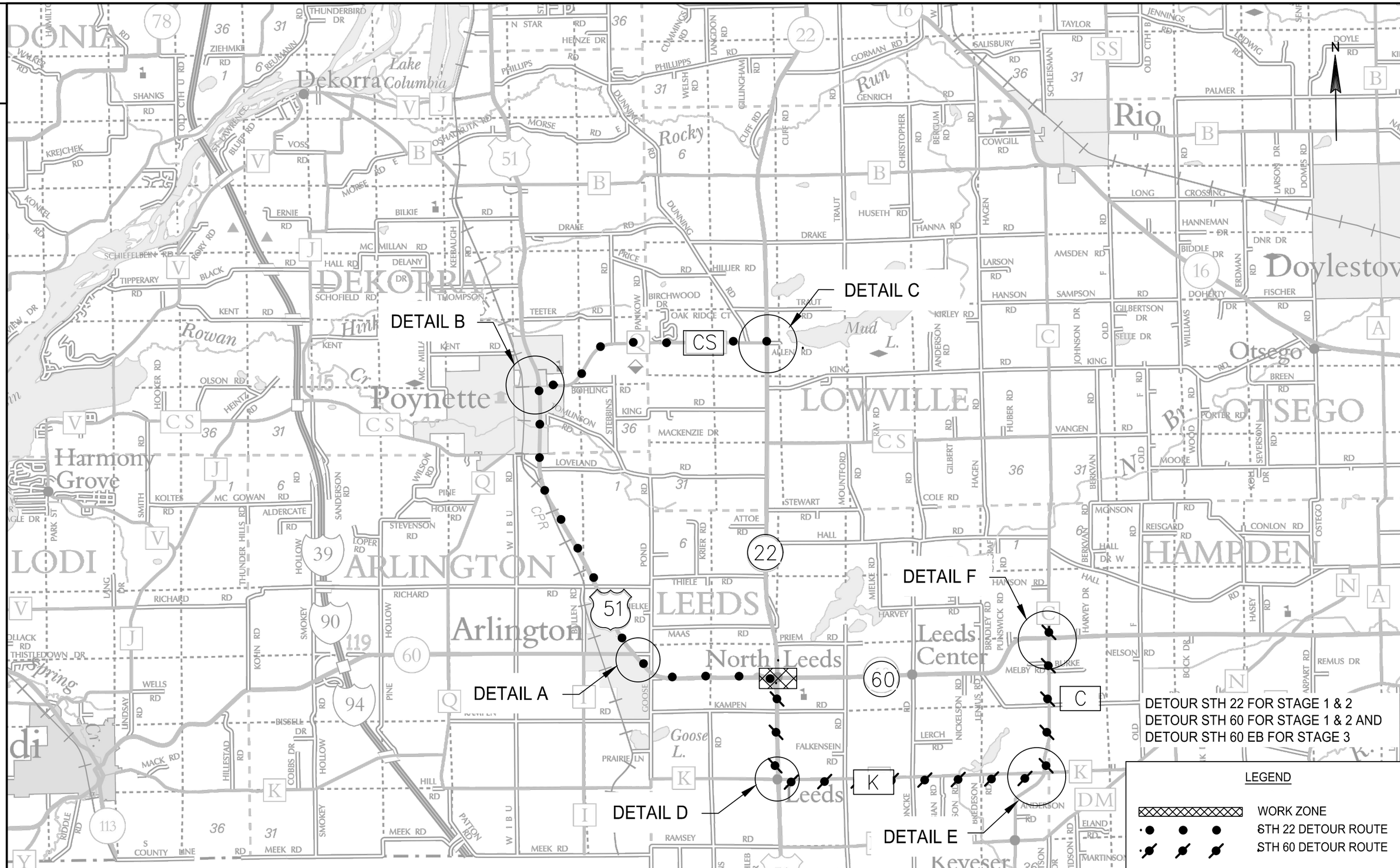






PROJECT NO:6020-00-70	HWY:USH 51	COUNTY:COLUMBIA	TRAFFIC CONTROL - ADVANCE SIGNING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\023301_AW.DWG
LAYOUT NAME - ####
PLOT DATE : 8/21/2019 9:20 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE :



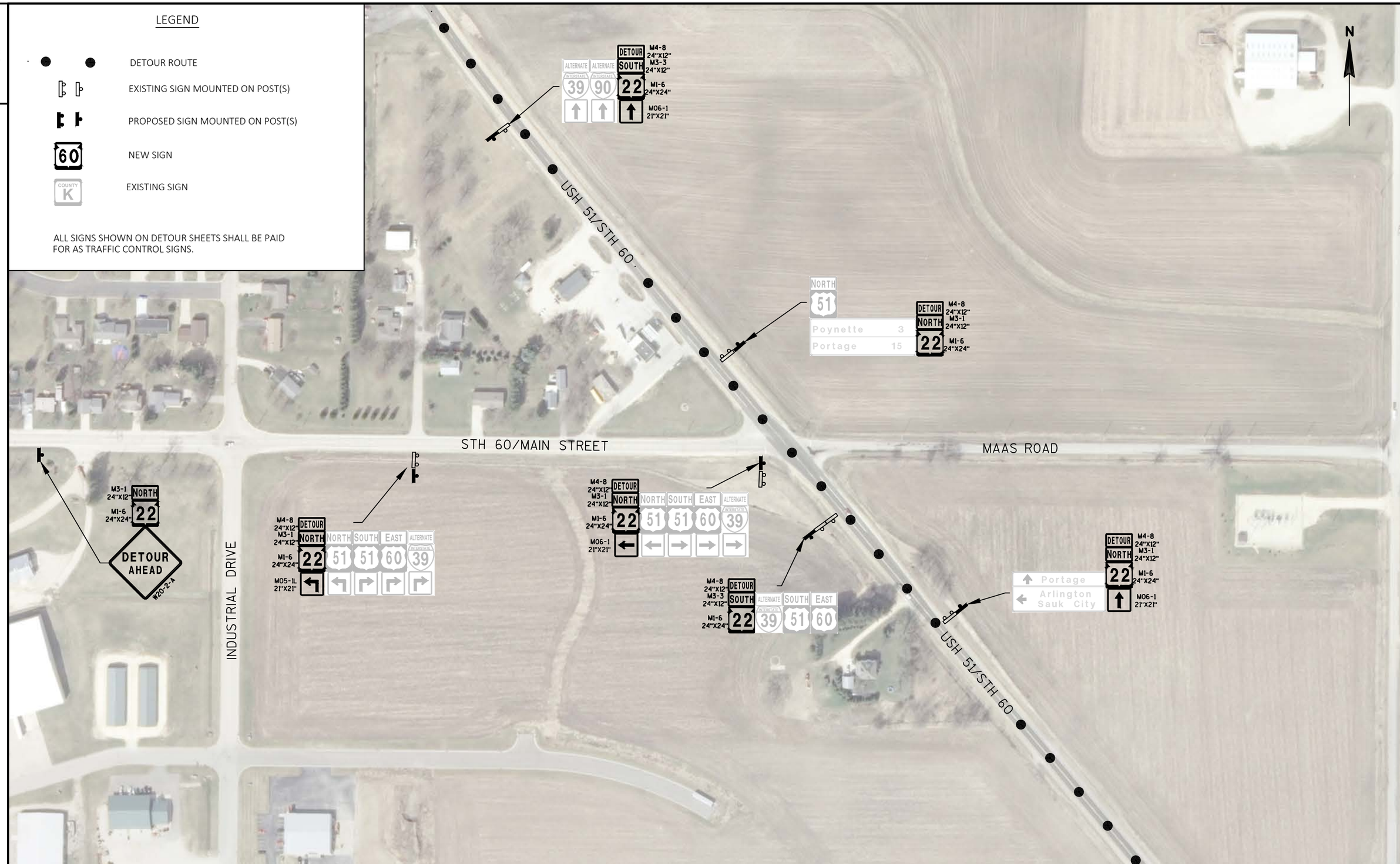
PROJECT NO:6020-00-70	HWY:USH 51	COUNTY:COLUMBIA	DETOUR PLAN OVERVIEW SHEET	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - ####
PLOT DATE : 8/21/2019 9:36 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE :

LEGEND

- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- NEW SIGN
- EXISTING SIGN

ALL SIGNS SHOWN ON DETOUR SHEETS SHALL BE PAID FOR AS TRAFFIC CONTROL SIGNS.



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 22 DETOUR - DETAIL A (STAGE 1 & 2)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\DETOUR PLAN STH 22 AND STH 60.DWG
LAYOUT NAME - Detail A STH 22
PLOT DATE : 8/28/2019 9:21 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

LEGEND

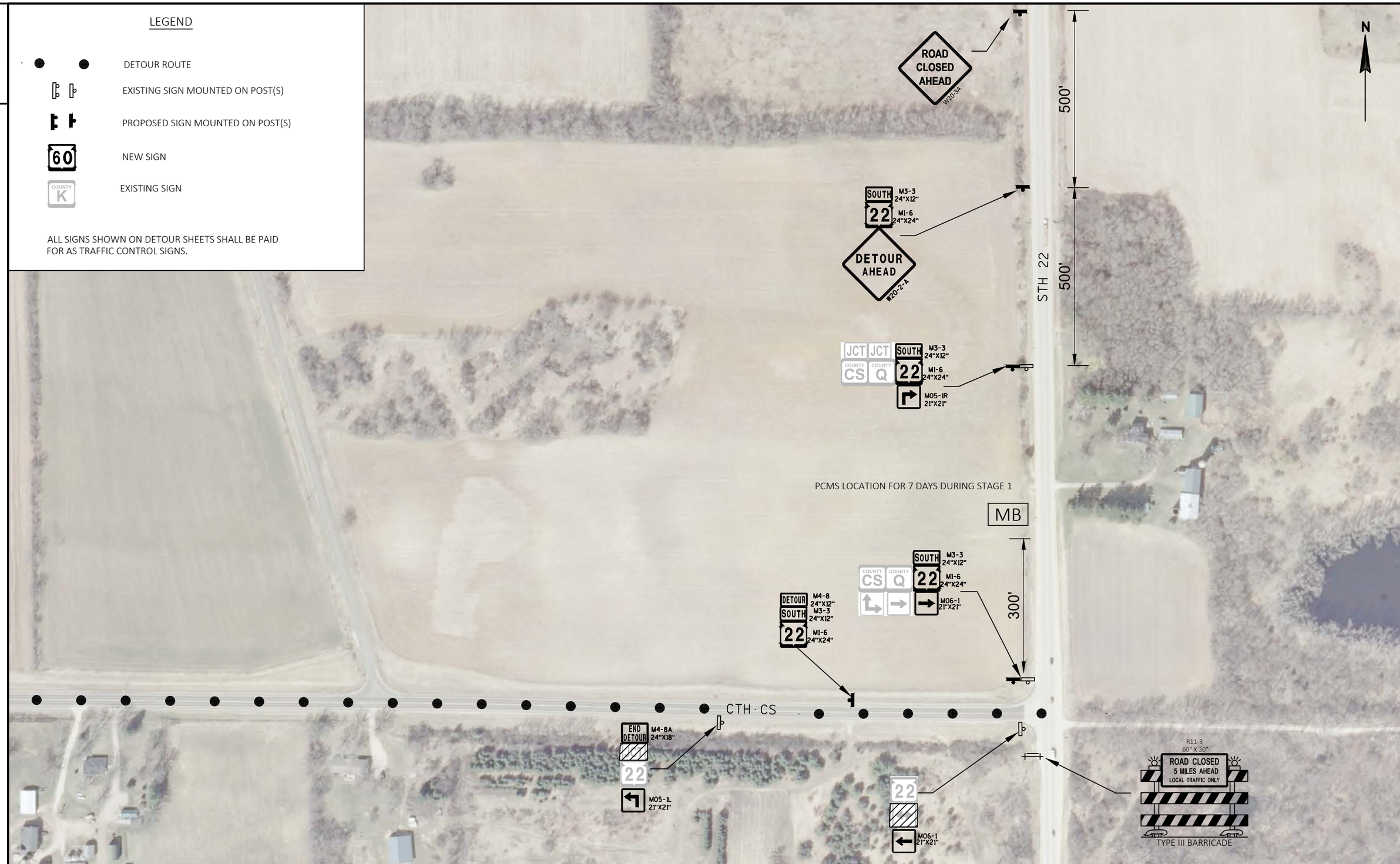
- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- NEW SIGN
- EXISTING SIGN

ALL SIGNS SHOWN ON DETOUR SHEETS SHALL BE PAID FOR AS TRAFFIC CONTROL SIGNS.

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 22 DETOUR - DETAIL B (STAGE 1 & 2)	SHEET	E

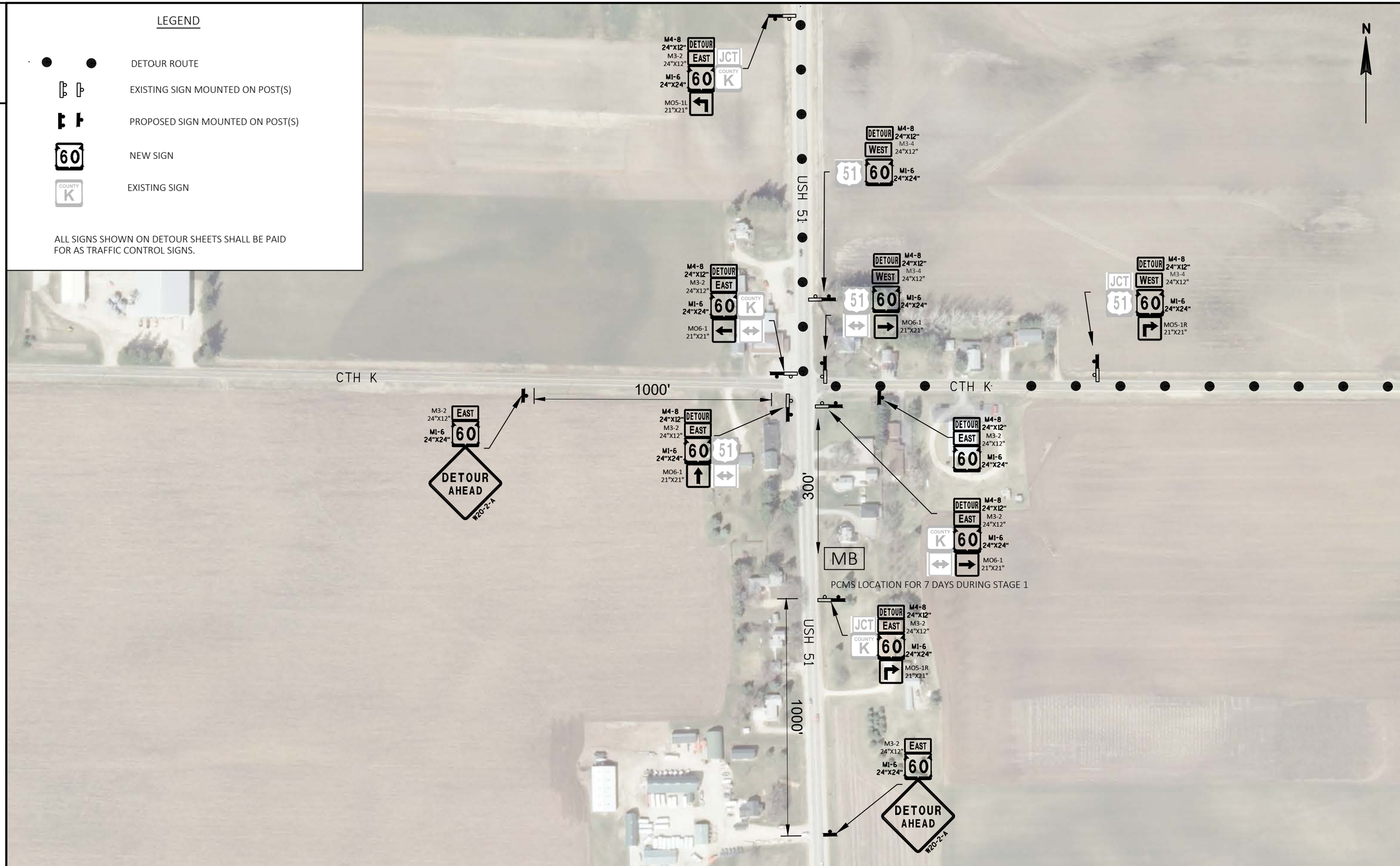
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\DETOUR PLAN STH 22 AND STH 60.DWG
LAYOUT NAME - Detail B STH 22
PLOT DATE : 8/28/2019 9:21 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 22 DETOUR - DETAIL C (STAGE 1 & 2)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\DETOUR PLAN STH 22 AND STH 60.DWG
LAYOUT NAME - Detail C STH 22
PLOT DATE : 8/28/2019 9:21 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:200 FT



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 60 DETOUR - DETAIL D (STAGE 1 & 2)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\DETOUR PLAN STH 22 AND STH 60.DWG
LAYOUT NAME - Detail D STH 60
PLOT DATE : 8/28/2019 9:21 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:200 FT

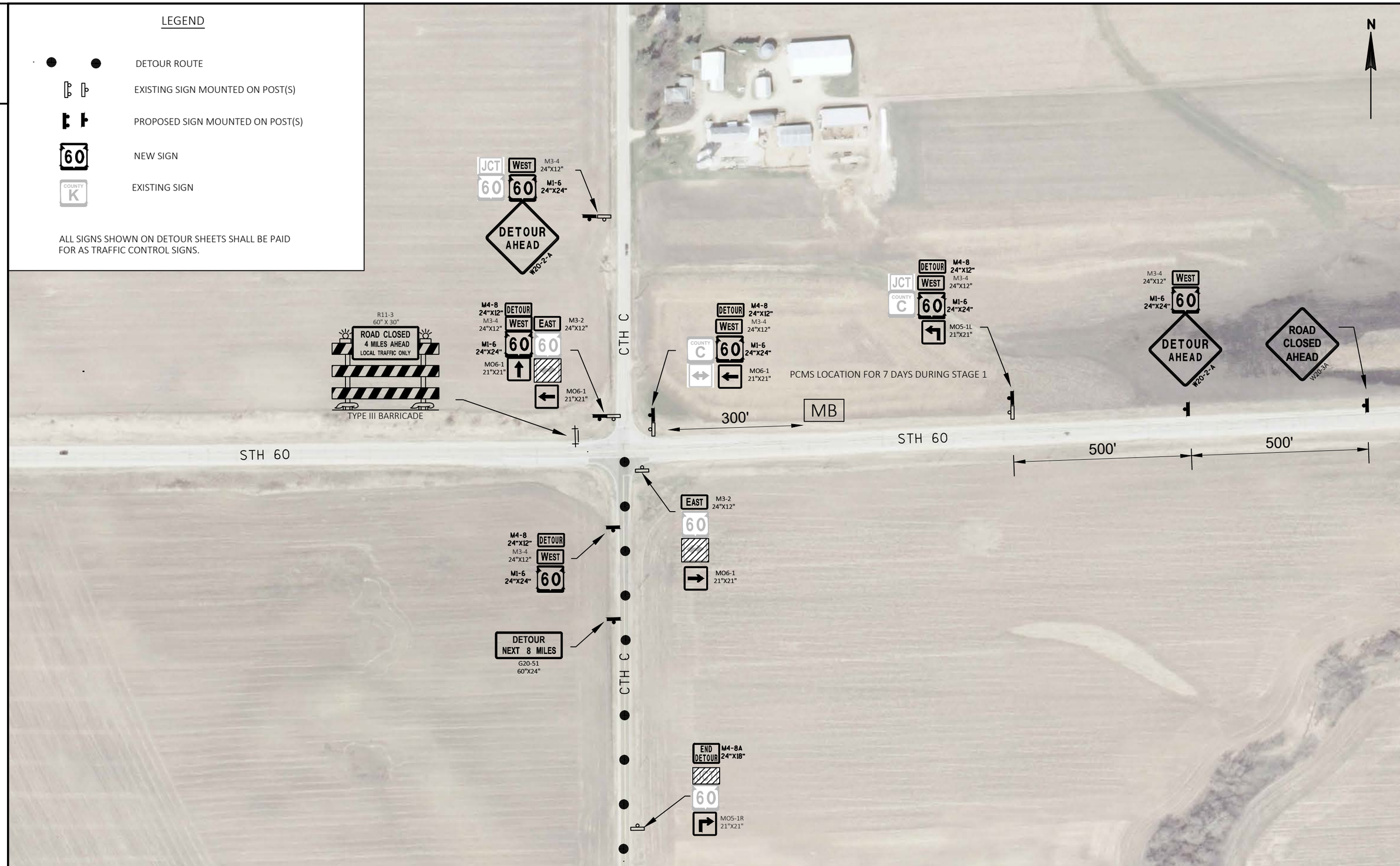
WISDOT/CADDS SHEET 42

LEGEND

- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- NEW SIGN
- EXISTING SIGN

ALL SIGNS SHOWN ON DETOUR SHEETS SHALL BE PAID FOR AS TRAFFIC CONTROL SIGNS.

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 60 DETOUR - DETAIL E (STAGE 1 & 2)	SHEET	E



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 60 DETOUR - DETAIL F (STAGE 1 & 2)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\DETOUR PLAN STH 22 AND STH 60.DWG
LAYOUT NAME - Detail F STH 60
PLOT DATE : 8/28/2019 9:21 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- NEW SIGN
- EXISTING SIGN

ALL SIGNS SHOWN ON DETOUR SHEETS SHALL BE PAID FOR AS TRAFFIC CONTROL SIGNS.

2

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 60 DETOUR - DETAIL D (STAGE 3)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\DETOUR PLAN STH 22 AND STH 60 STAGE 3.DWG
LAYOUT NAME - Detail D STH 60
PLOT DATE : 8/28/2019 9:28 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

ALL SIGNS SHOWN ON DETOUR SHEETS SHALL BE PAID FOR AS TRAFFIC CONTROL SIGNS.

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 60 DETOUR - DETAIL E (STAGE 3)	SHEET	E

LEGEND

DETOUR ROUTE

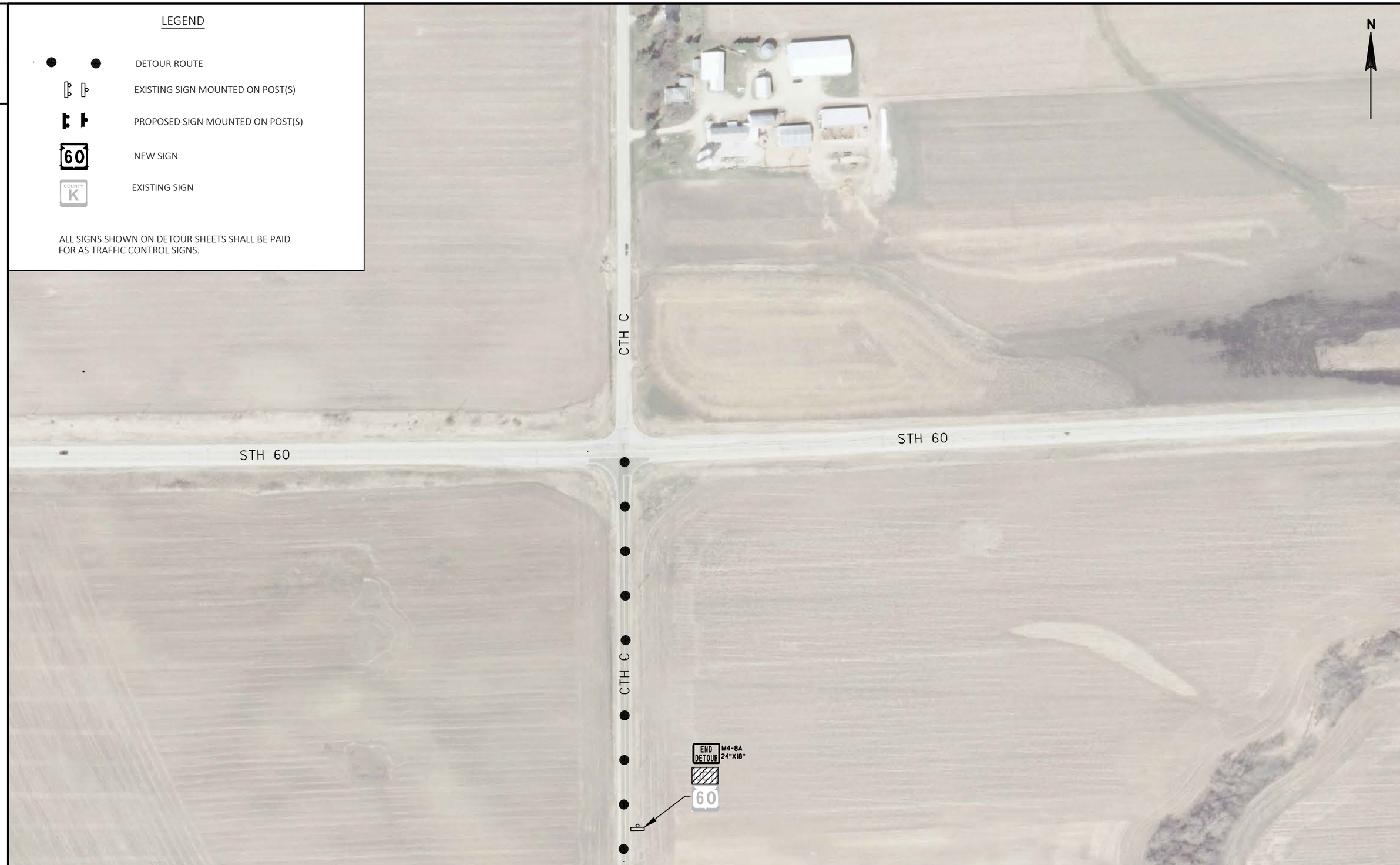
EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

NEW SIGN

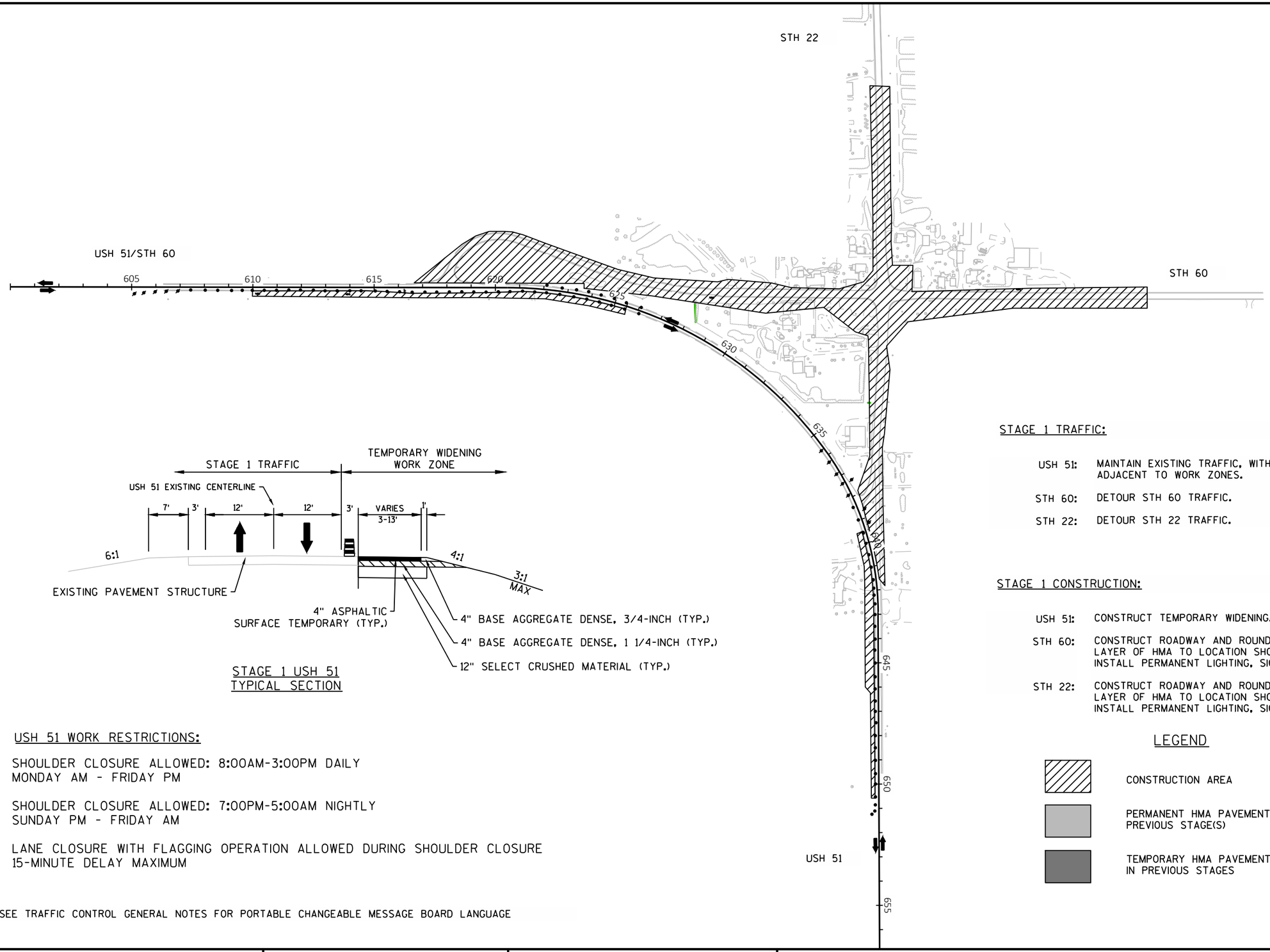
EXISTING SIGN

ALL SIGNS SHOWN ON DETOUR SHEETS SHALL BE PAID FOR AS TRAFFIC CONTROL SIGNS.



2

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	STH 60 DETOUR - DETAIL F (STAGE 3)	SHEET	E



STAGE 1 USH 51
TYPICAL SECTION

USH 51 WORK RESTRICTIONS:

SHOULDER CLOSURE ALLOWED: 8:00AM-3:00PM DAILY
MONDAY AM - FRIDAY PM

SHOULDER CLOSURE ALLOWED: 7:00PM-5:00AM NIGHTLY
SUNDAY PM - FRIDAY AM

LANE CLOSURE WITH FLAGGING OPERATION ALLOWED DURING SHOULDER CLOSURE
15-MINUTE DELAY MAXIMUM

SEE TRAFFIC CONTROL GENERAL NOTES FOR PORTABLE CHANGEABLE MESSAGE BOARD LANGUAGE

STAGE 1 TRAFFIC:

USH 51: MAINTAIN EXISTING TRAFFIC, WITH CLOSED RIGHT SHOULDER ADJACENT TO WORK ZONES.

STH 60: DETOUR STH 60 TRAFFIC.

STH 22: DETOUR STH 22 TRAFFIC.

STAGE 1 CONSTRUCTION:

USH 51: CONSTRUCT TEMPORARY WIDENING.

STH 60: CONSTRUCT ROADWAY AND ROUNDABOUT. CONSTRUCT UPPER LAYER OF HMA TO LOCATION SHOWN IN STAGING PLAN. INSTALL PERMANENT LIGHTING, SIGNAGE AND MARKING.

STH 22: CONSTRUCT ROADWAY AND ROUNDABOUT. CONSTRUCT UPPER LAYER OF HMA TO LOCATION SHOWN IN STAGING PLAN. INSTALL PERMANENT LIGHTING, SIGNAGE AND MARKING.

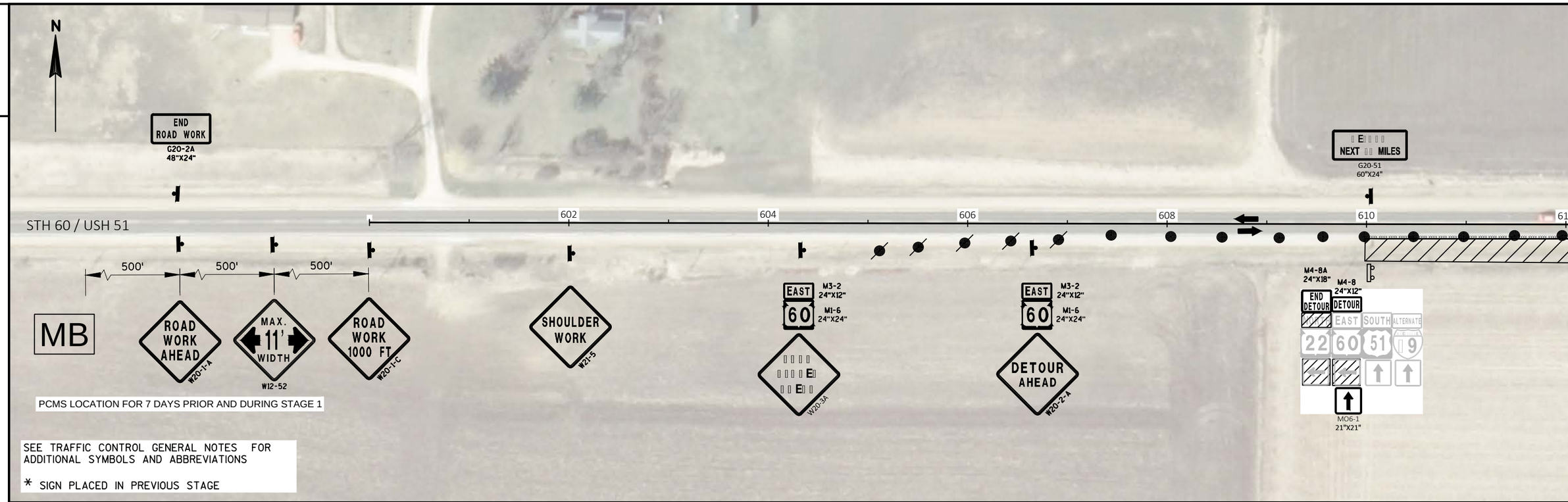
LEGEND

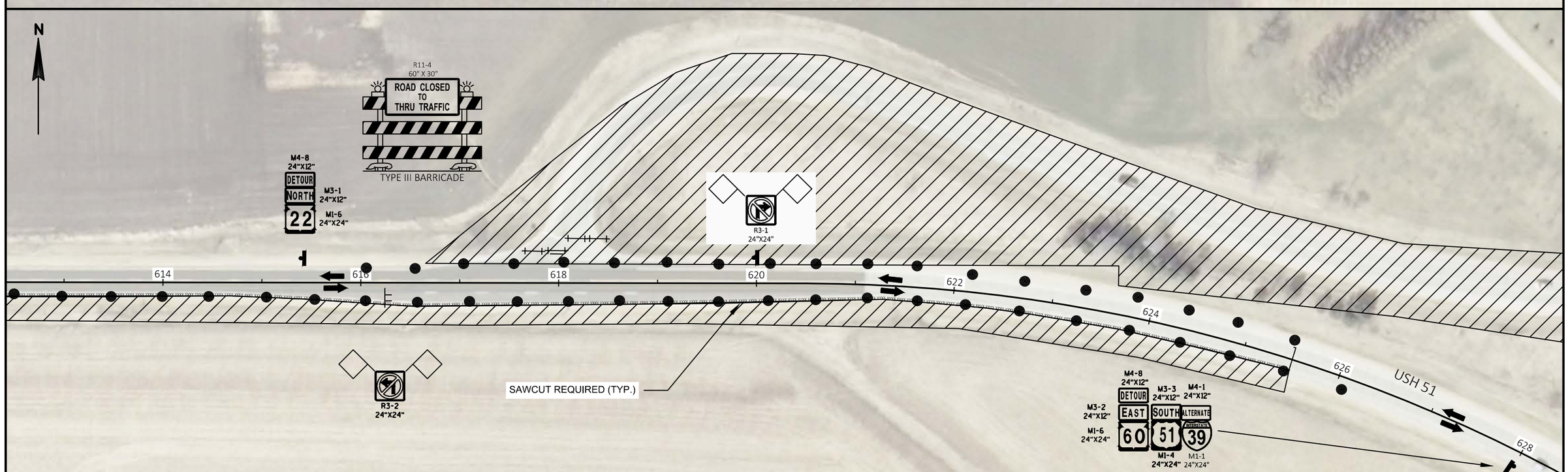
CONSTRUCTION AREA

PERMANENT HMA PAVEMENT PLACED IN PREVIOUS STAGE(S)

TEMPORARY HMA PAVEMENT PLACED IN IN PREVIOUS STAGES

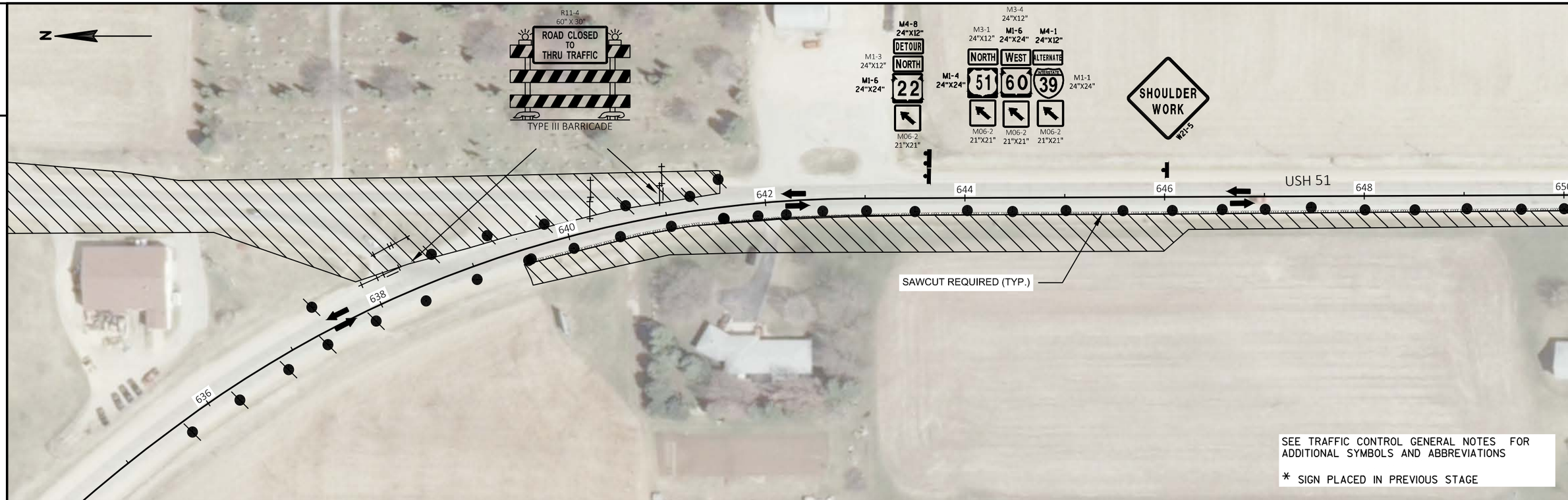
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 OVERVIEW	SHEET	E





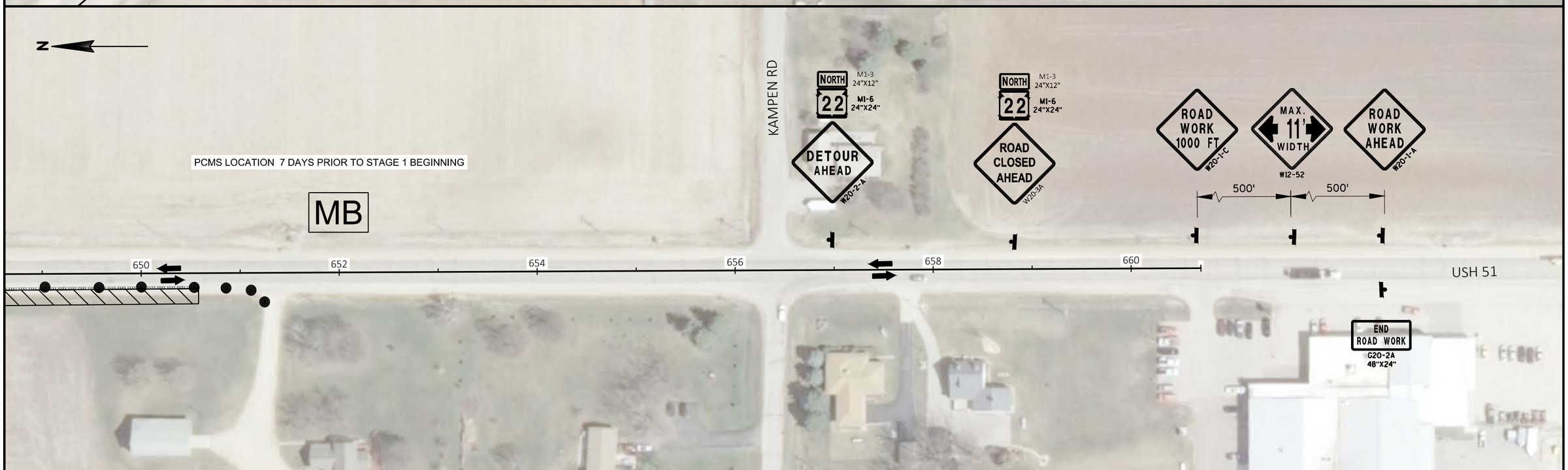
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025001_TC STAGE 1.DWG
LAYOUT NAME - 025001_tc Stage 1 A
PLOT DATE : 1/21/2020 2:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



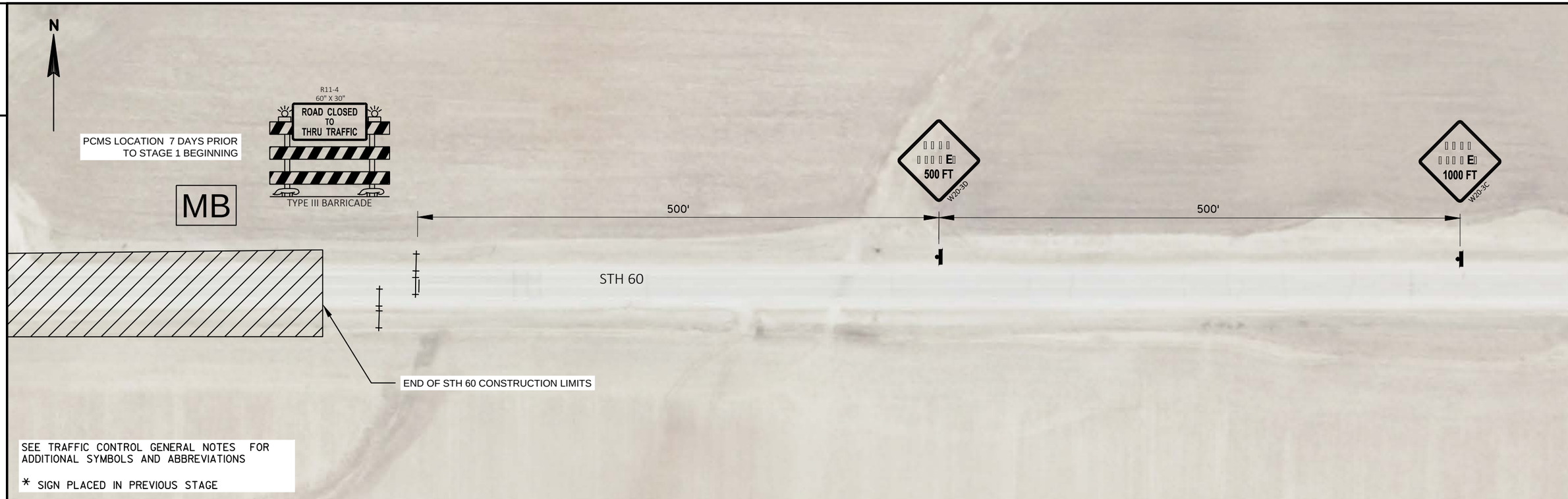
SEE TRAFFIC CONTROL GENERAL NOTES FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS

* SIGN PLACED IN PREVIOUS STAGE



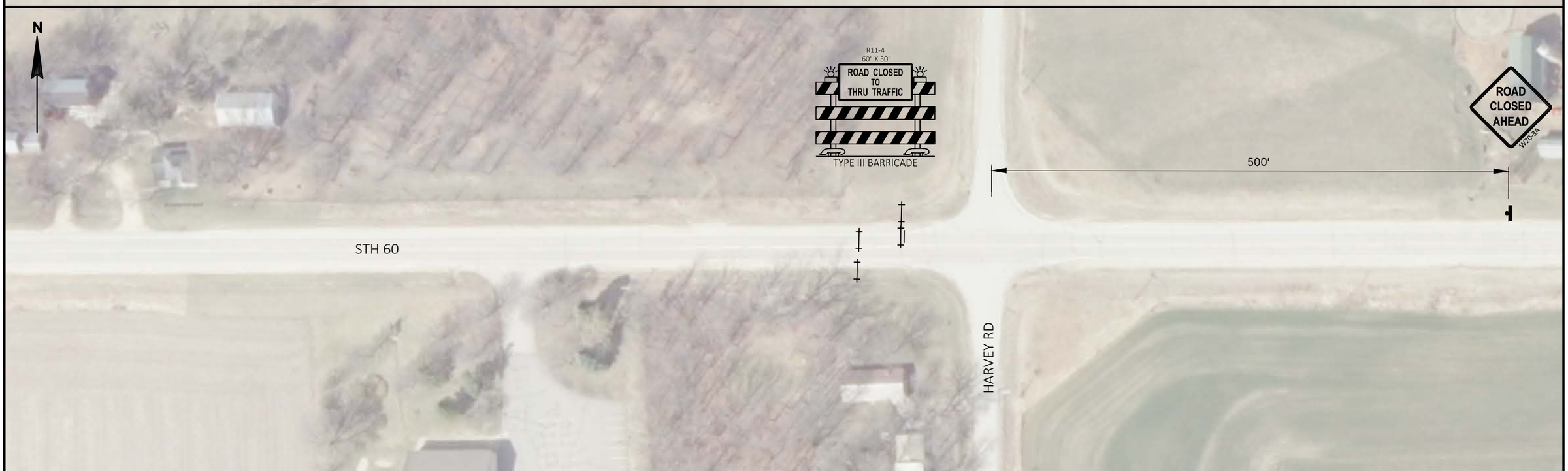
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025001_TC STAGE 1.DWG
LAYOUT NAME - 025001_tc Stage 1 B
PLOT DATE : 1/21/2020 2:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

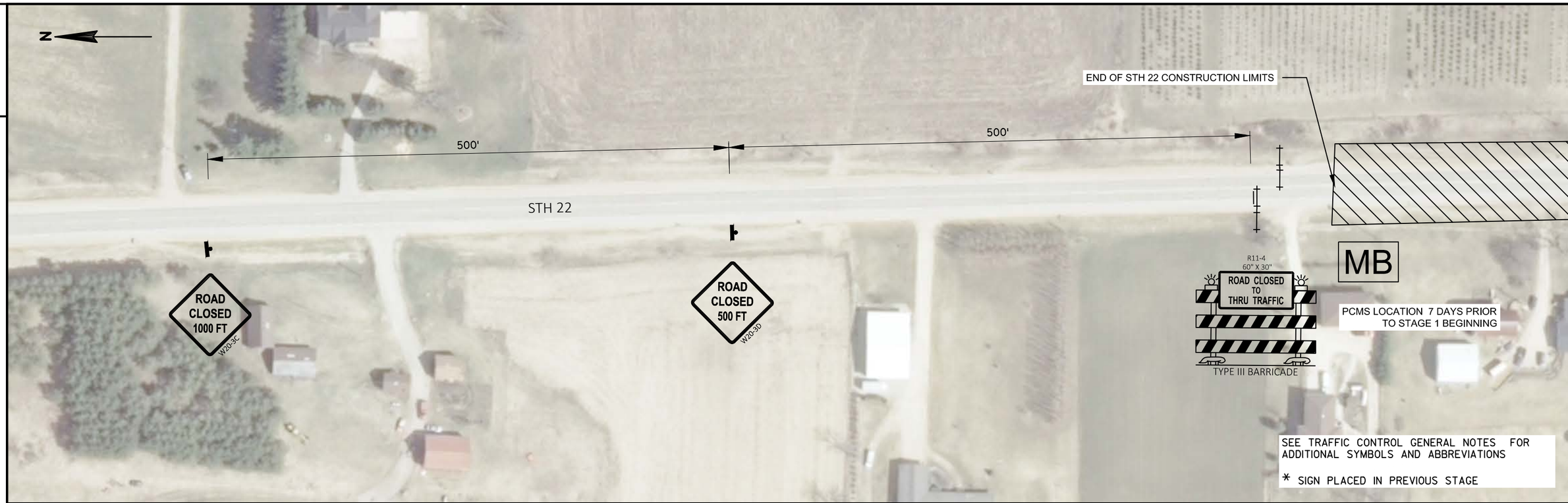


SEE TRAFFIC CONTROL GENERAL NOTES FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS

* SIGN PLACED IN PREVIOUS STAGE

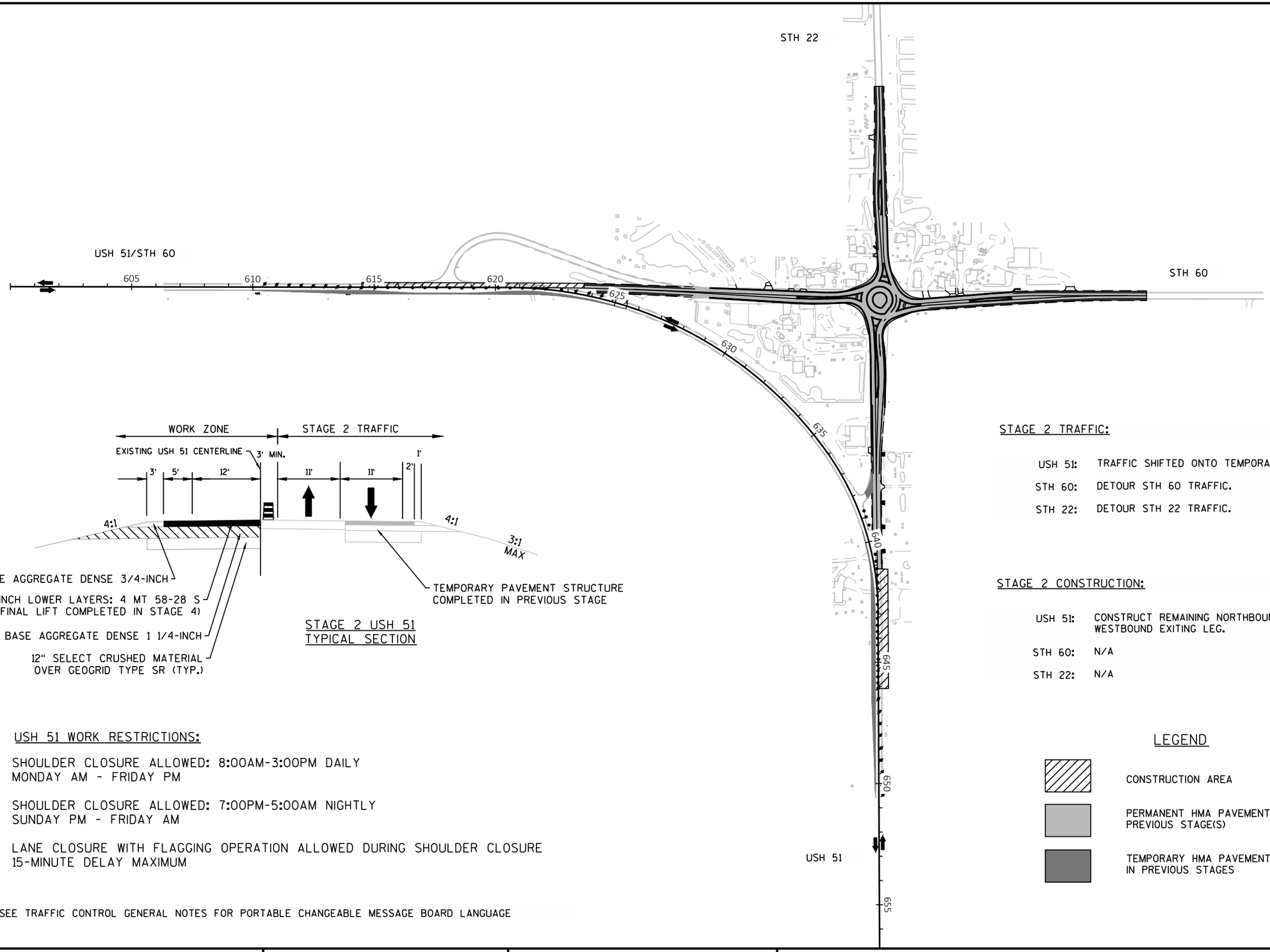


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (STH 60)	SHEET	E



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 1 (STH 22)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025001_TC STAGE 1.DWG
LAYOUT NAME - 025001_tc Stage 1 D
PLOT DATE : 1/21/2020 2:40 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:100 FT



STAGE 2 USH 51
TYPICAL SECTION

STAGE 2 TRAFFIC:

USH 51: TRAFFIC SHIFTED ONTO TEMPORARY PAVEMENT.

STH 60: DETOUR STH 60 TRAFFIC.

STH 22: DETOUR STH 22 TRAFFIC.

STAGE 2 CONSTRUCTION:

USH 51: CONSTRUCT REMAINING NORTHBOUND APPROACH LEG AND WESTBOUND EXITING LEG.

STH 60: N/A

STH 22: N/A

USH 51 WORK RESTRICTIONS:

SHOULDER CLOSURE ALLOWED: 8:00AM-3:00PM DAILY
MONDAY AM - FRIDAY PM

SHOULDER CLOSURE ALLOWED: 7:00PM-5:00AM NIGHTLY
SUNDAY PM - FRIDAY AM

LANE CLOSURE WITH FLAGGING OPERATION ALLOWED DURING SHOULDER CLOSURE
15-MINUTE DELAY MAXIMUM

SEE TRAFFIC CONTROL GENERAL NOTES FOR PORTABLE CHANGEABLE MESSAGE BOARD LANGUAGE

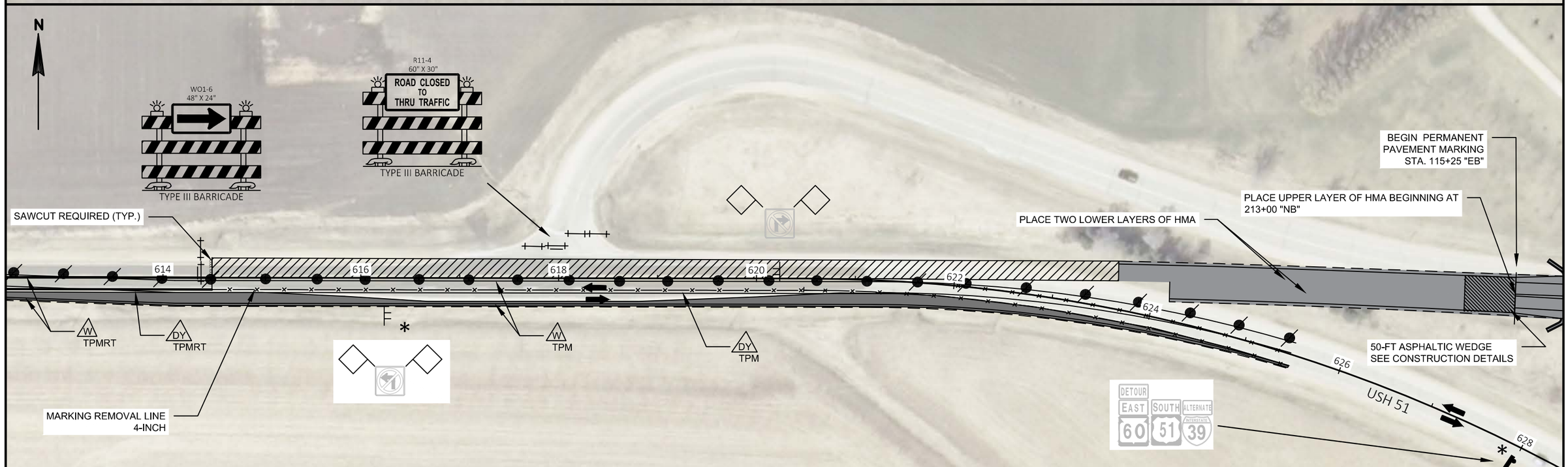
LEGEND

CONSTRUCTION AREA

PERMANENT HMA PAVEMENT PLACED IN PREVIOUS STAGE(S)

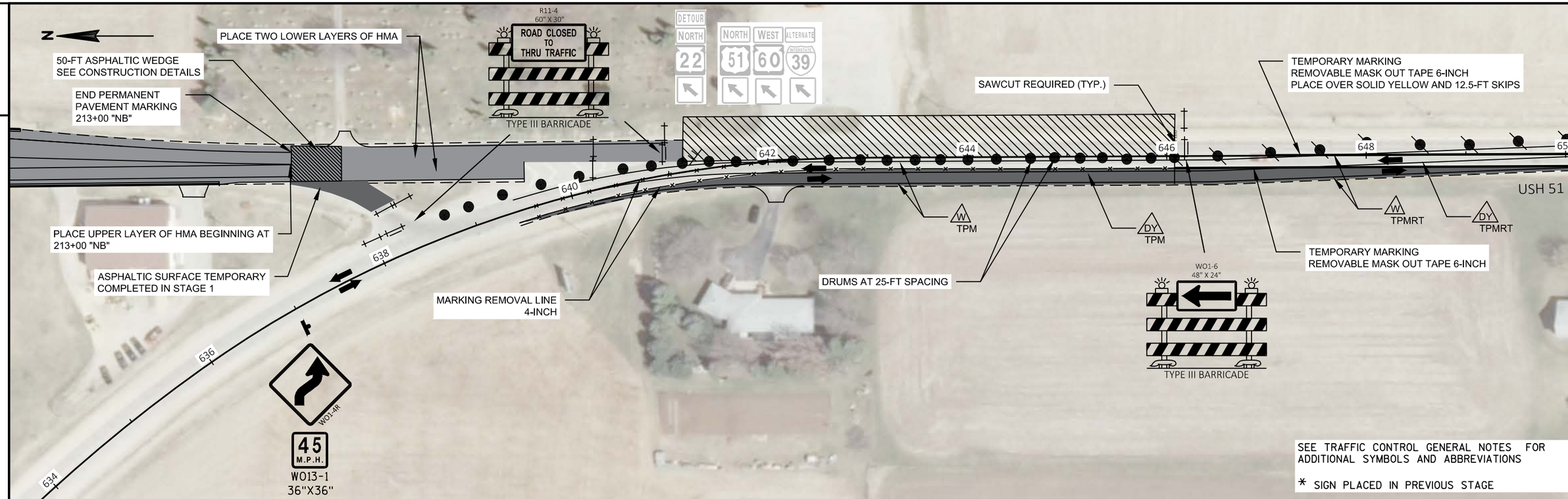
TEMPORARY HMA PAVEMENT PLACED IN IN PREVIOUS STAGES

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET	E



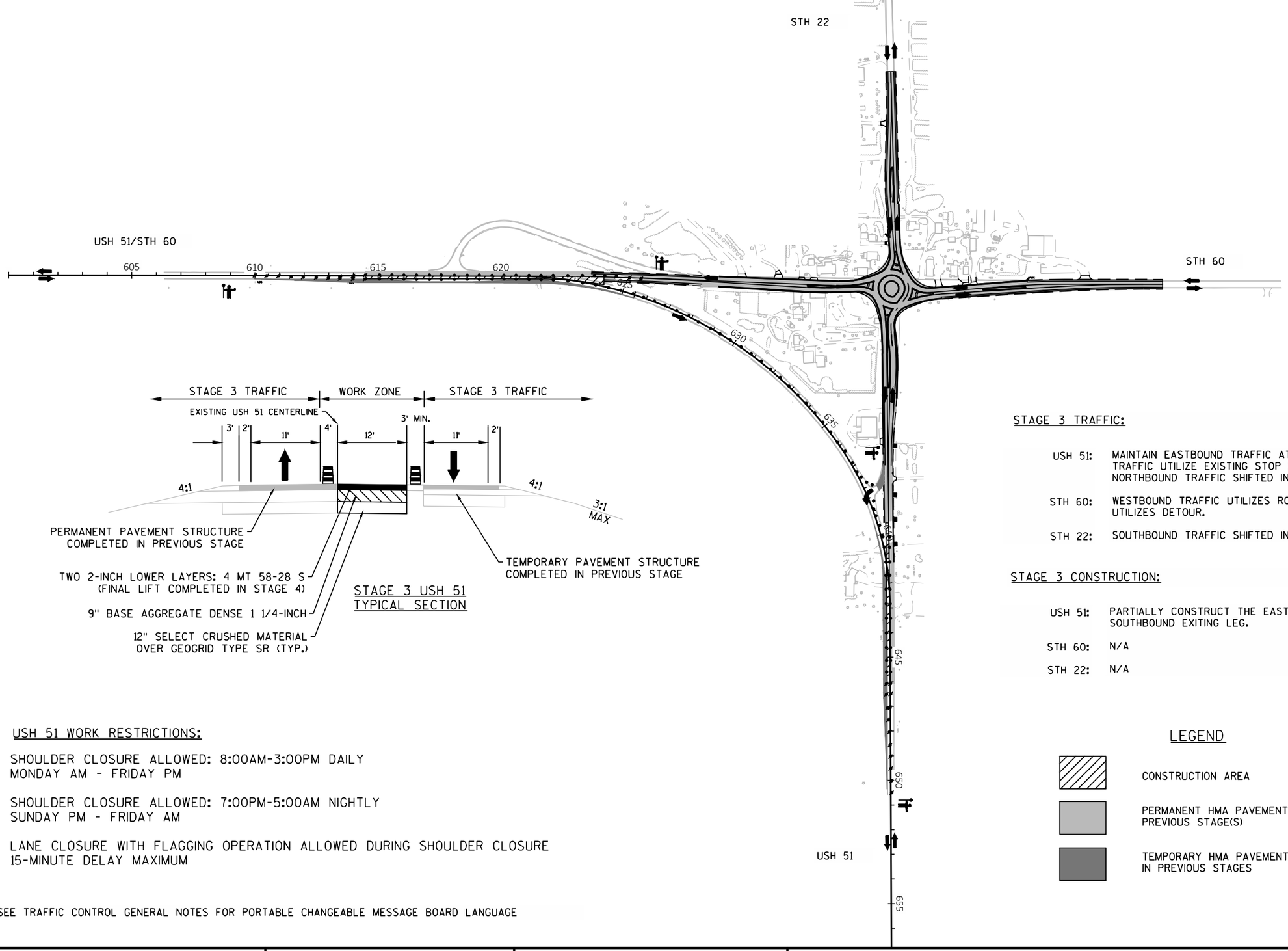
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025002_TC STAGE 2.DWG
LAYOUT NAME - 025002_tc Stage 2 A
PLOT DATE : 1/21/2020 2:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 2 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025002_TC STAGE 2.DWG
LAYOUT NAME - 025002_tc Stage 2 B
PLOT DATE : 1/21/2020 2:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



STAGE 3 USH 51
TYPICAL SECTION

STAGE 3 TRAFFIC:

USH 51: MAINTAIN EASTBOUND TRAFFIC AT EXISTING LOCATION. SOUTHBOUND TRAFFIC UTILIZE EXISTING STOP SIGN AT USH 51 INTERSECTION. NORTHBOUND TRAFFIC SHIFTED INTO ROUNDABOUT.

STH 60: WESTBOUND TRAFFIC UTILIZES ROUNDABOUT. EASTBOUND TRAFFIC UTILIZES DETOUR.

STH 22: SOUTHBOUND TRAFFIC SHIFTED INTO ROUNDABOUT.

STAGE 3 CONSTRUCTION:

USH 51: PARTIALLY CONSTRUCT THE EASTBOUND APPROACH LEG AND SOUTHBOUND EXITING LEG.

STH 60: N/A

STH 22: N/A

USH 51 WORK RESTRICTIONS:

SHOULDER CLOSURE ALLOWED: 8:00AM-3:00PM DAILY
MONDAY AM - FRIDAY PM

SHOULDER CLOSURE ALLOWED: 7:00PM-5:00AM NIGHTLY
SUNDAY PM - FRIDAY AM

LANE CLOSURE WITH FLAGGING OPERATION ALLOWED DURING SHOULDER CLOSURE
15-MINUTE DELAY MAXIMUM

SEE TRAFFIC CONTROL GENERAL NOTES FOR PORTABLE CHANGEABLE MESSAGE BOARD LANGUAGE

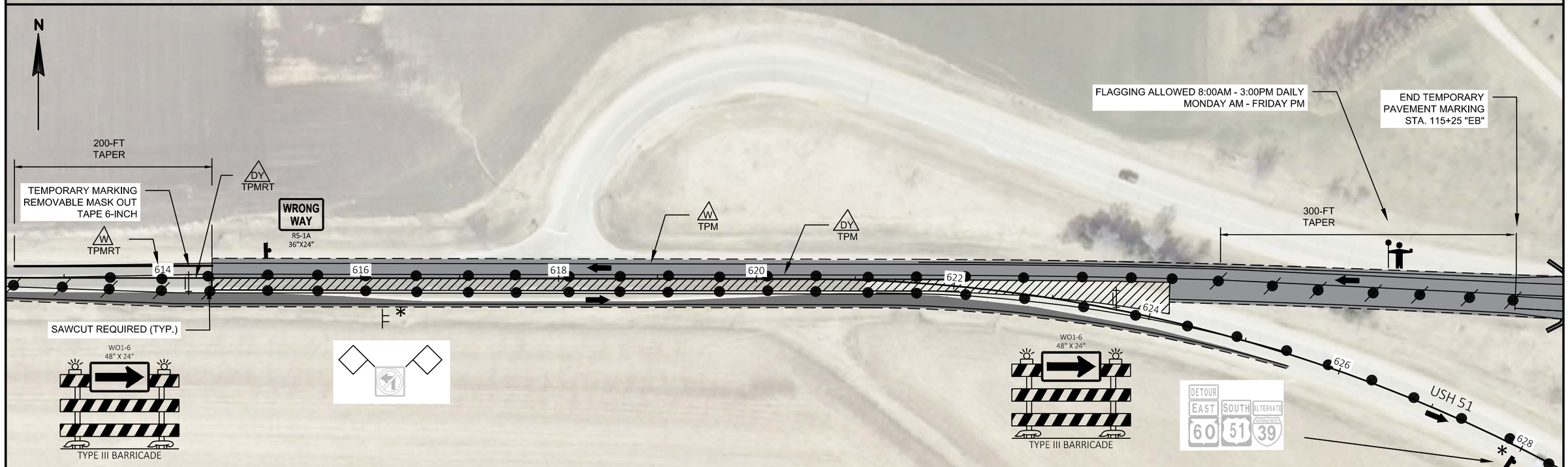
LEGEND

CONSTRUCTION AREA

PERMANENT HMA PAVEMENT PLACED IN PREVIOUS STAGE(S)

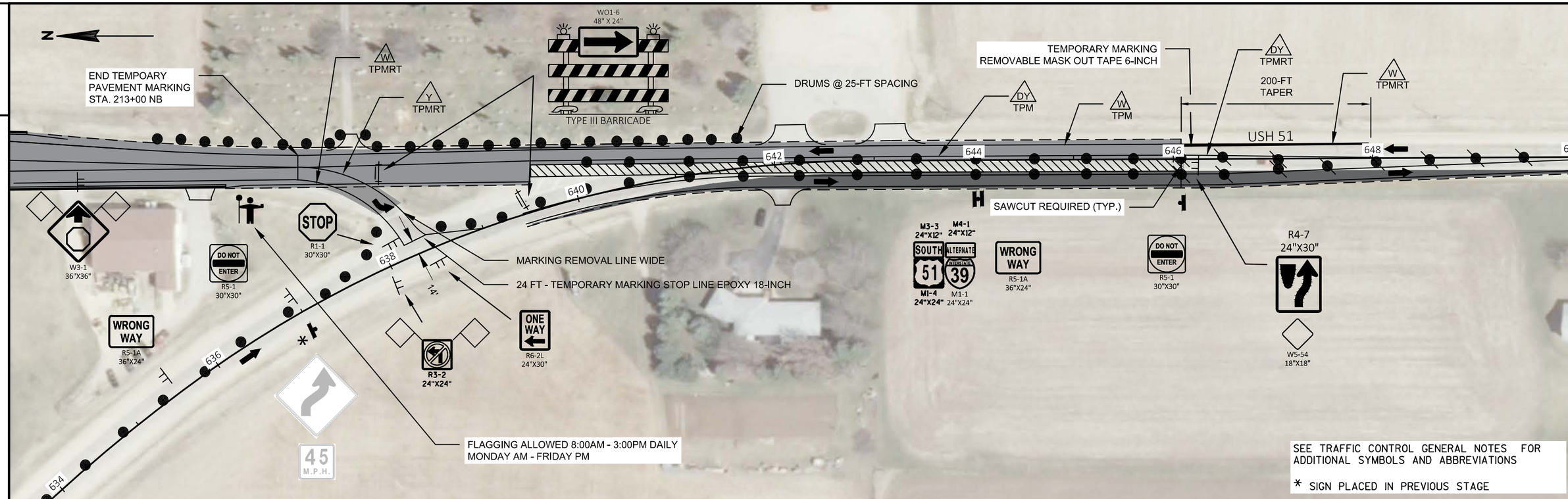
TEMPORARY HMA PAVEMENT PLACED IN IN PREVIOUS STAGES

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 OVERVIEW	SHEET	E



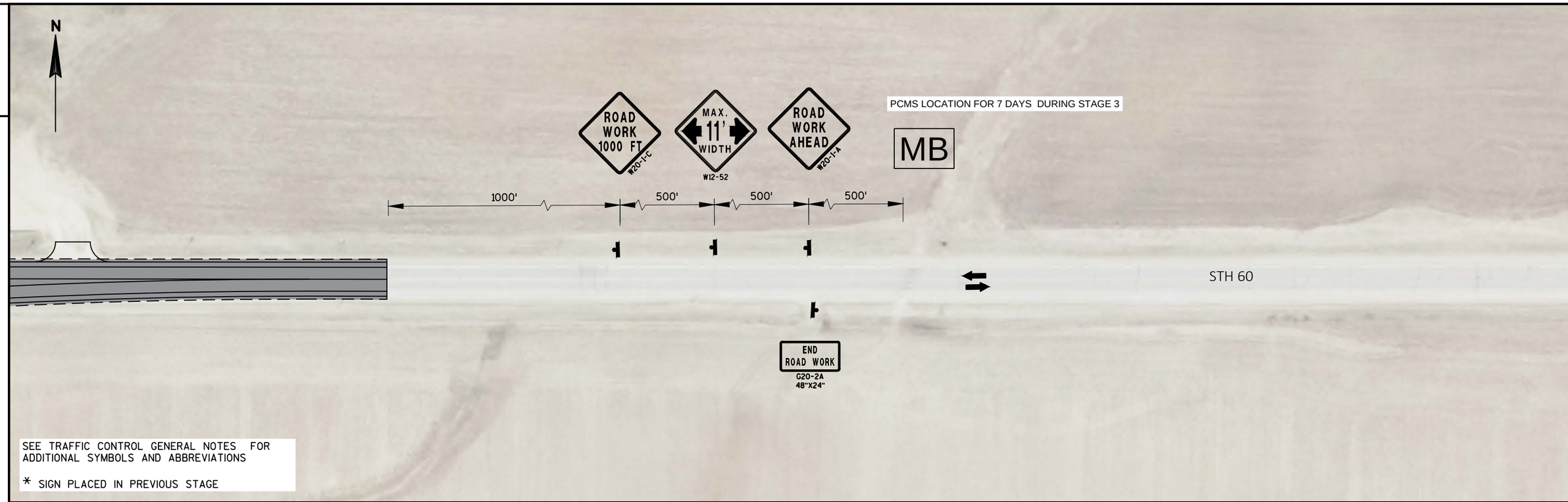
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025003_TC STAGE 3.DWG
LAYOUT NAME - 025003_tc Stage 3 A
PLOT DATE : 1/21/2020 2:40 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



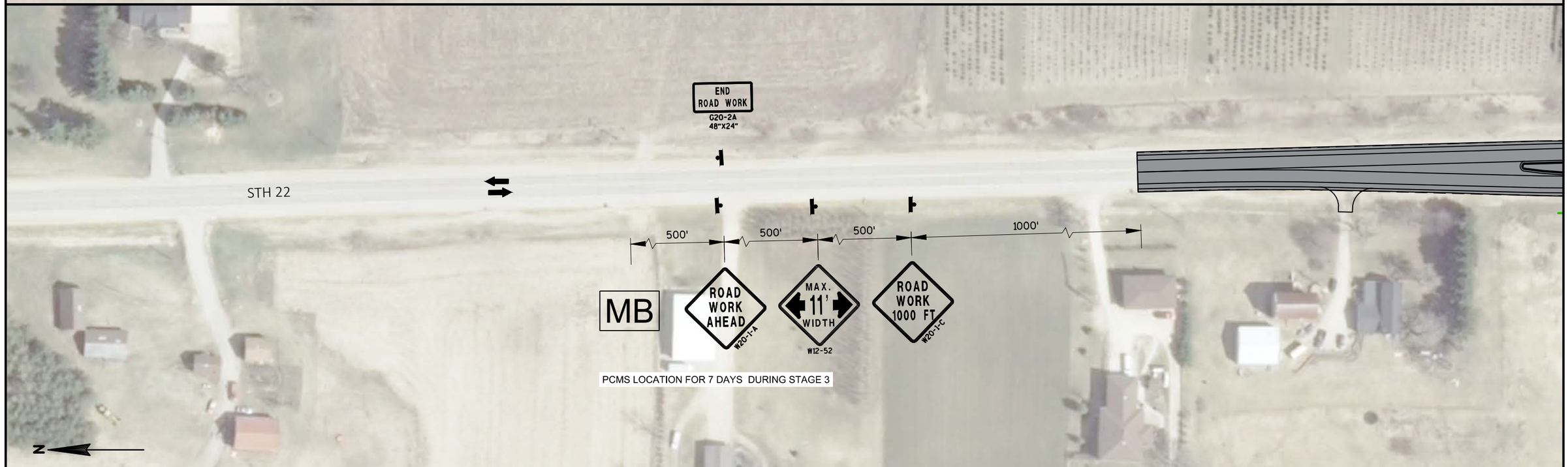
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025003_TC STAGE 3.DWG
LAYOUT NAME - 025003_tc Stage 3 B
PLOT DATE : 1/21/2020 2:41 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



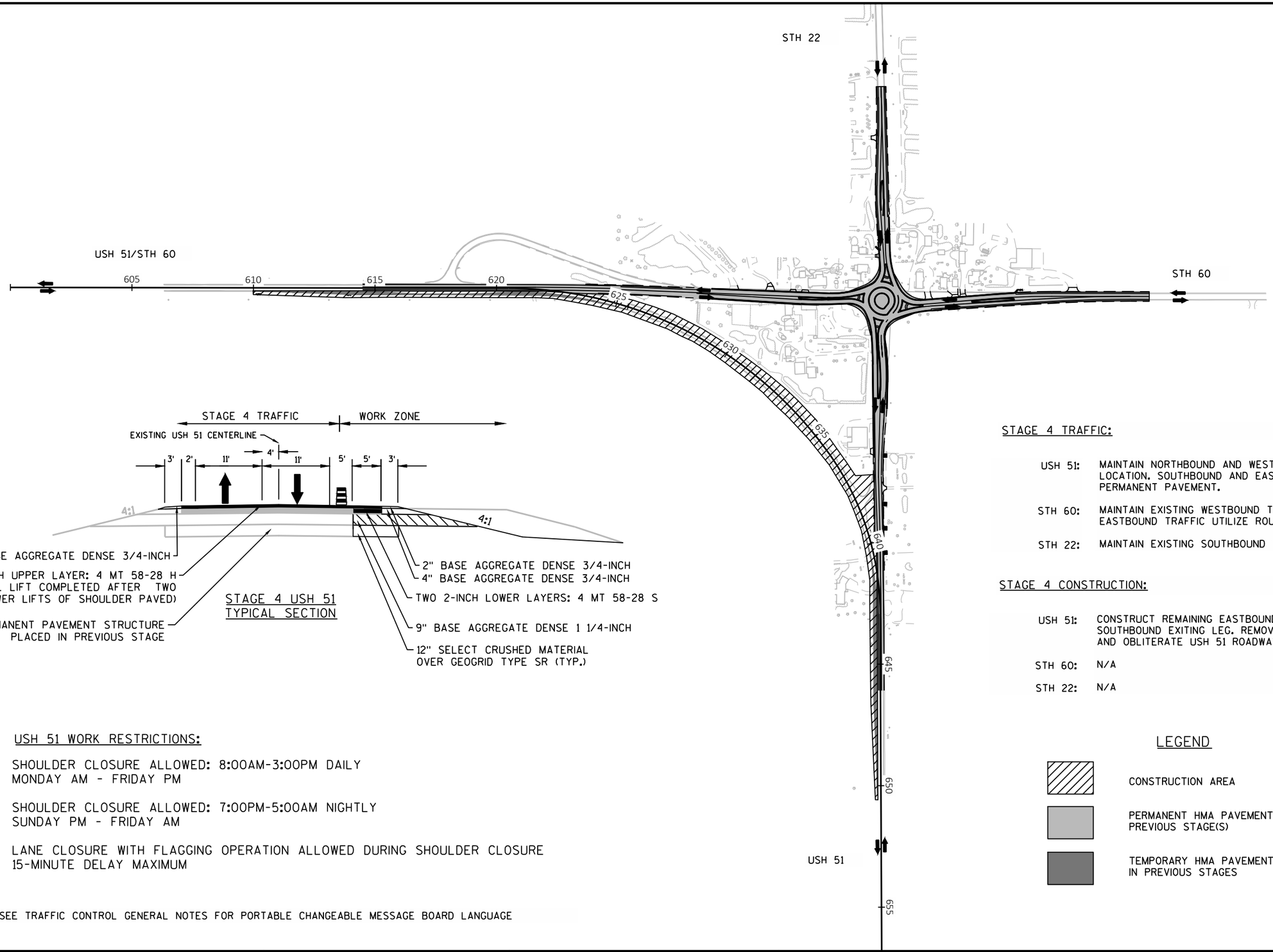
SEE TRAFFIC CONTROL GENERAL NOTES FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS

* SIGN PLACED IN PREVIOUS STAGE



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 3 (STH 60 AND STH 22)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025003_TC STAGE 3.DWG
LAYOUT NAME - 025003_tc Stage 3 C
PLOT DATE : 1/21/2020 2:41 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:100 FT



STAGE 4 USH 51
TYPICAL SECTION

STAGE 4 TRAFFIC:

USH 51: MAINTAIN NORTHBOUND AND WESTBOUND TRAFFIC AT EXISTING LOCATION. SOUTHBOUND AND EASTBOUND TRAFFIC SWITCHED TO PERMANENT PAVEMENT.

STH 60: MAINTAIN EXISTING WESTBOUND TRAFFIC AT EXISTING LOCATION. EASTBOUND TRAFFIC UTILIZE ROUNDABOUT.

STH 22: MAINTAIN EXISTING SOUTHBOUND TRAFFIC AT EXISTING LOCATION.

STAGE 4 CONSTRUCTION:

USH 51: CONSTRUCT REMAINING EASTBOUND APPROACH LEG AND SOUTHBOUND EXITING LEG. REMOVE TEMPORARY WIDENING AND OBLITERATE USH 51 ROADWAY.

STH 60: N/A

STH 22: N/A

USH 51 WORK RESTRICTIONS:

SHOULDER CLOSURE ALLOWED: 8:00AM-3:00PM DAILY
MONDAY AM - FRIDAY PM

SHOULDER CLOSURE ALLOWED: 7:00PM-5:00AM NIGHTLY
SUNDAY PM - FRIDAY AM

LANE CLOSURE WITH FLAGGING OPERATION ALLOWED DURING SHOULDER CLOSURE
15-MINUTE DELAY MAXIMUM

SEE TRAFFIC CONTROL GENERAL NOTES FOR PORTABLE CHANGEABLE MESSAGE BOARD LANGUAGE

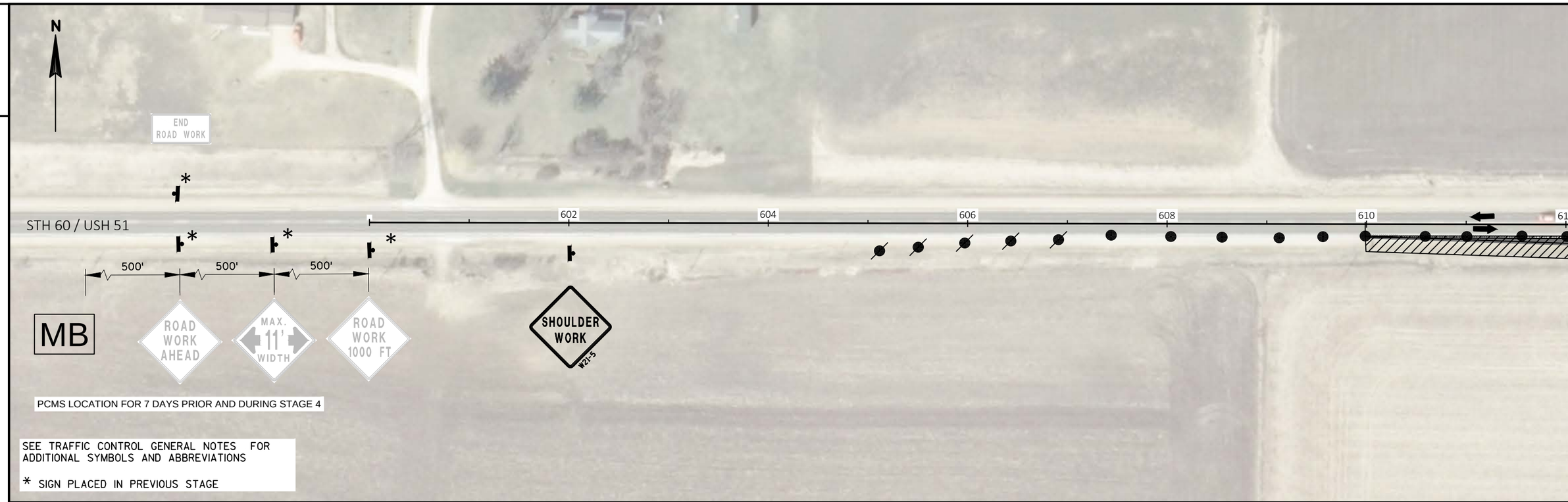
LEGEND

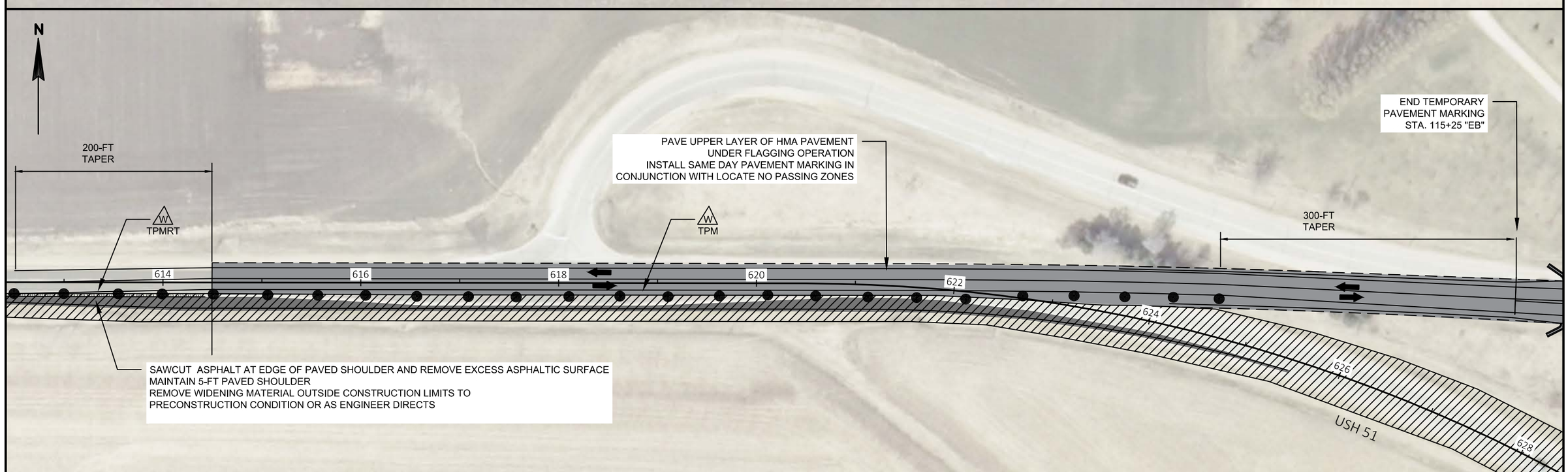
CONSTRUCTION AREA

PERMANENT HMA PAVEMENT PLACED IN PREVIOUS STAGE(S)

TEMPORARY HMA PAVEMENT PLACED IN IN PREVIOUS STAGES

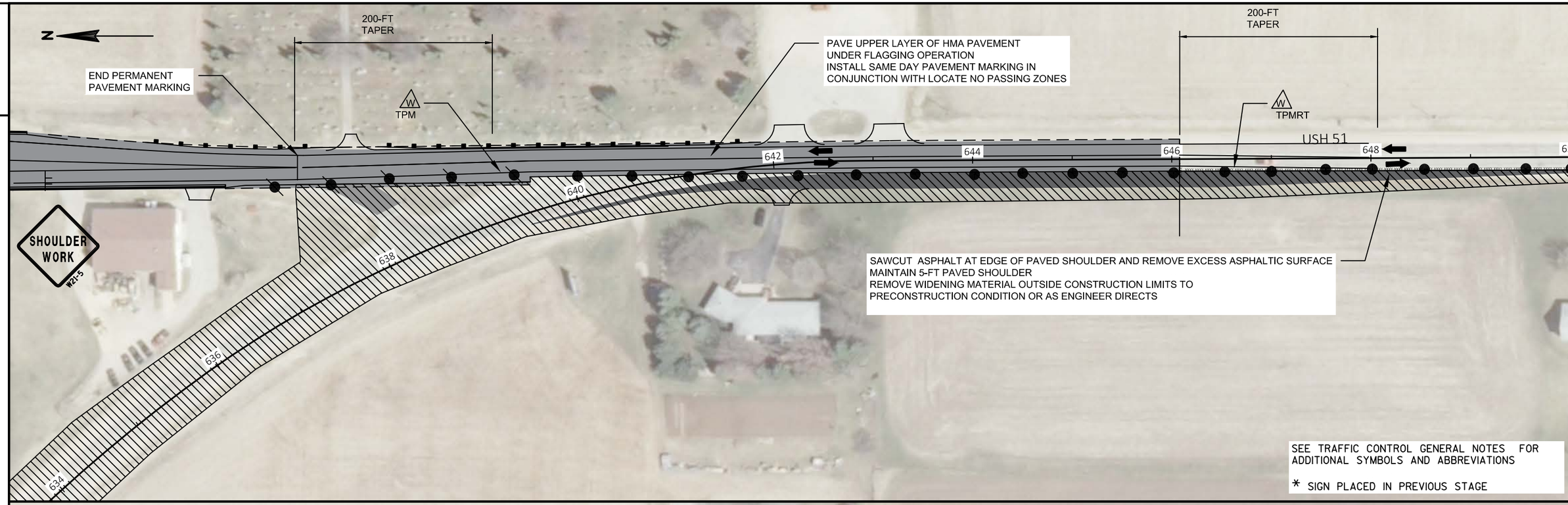
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 OVERVIEW	SHEET	E





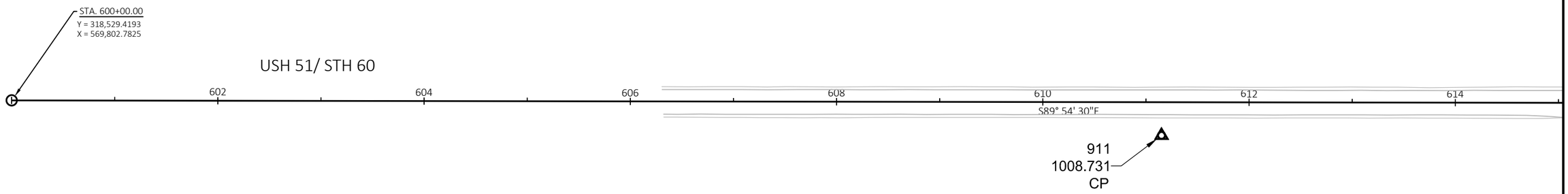
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (USH 51)	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025004_TC STAGE 4.DWG
LAYOUT NAME - 025004_tc Stage 4 A
PLOT DATE : 1/21/2020 2:41 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	TRAFFIC CONTROL - STAGE 4 (USH 51)	SHEET	E

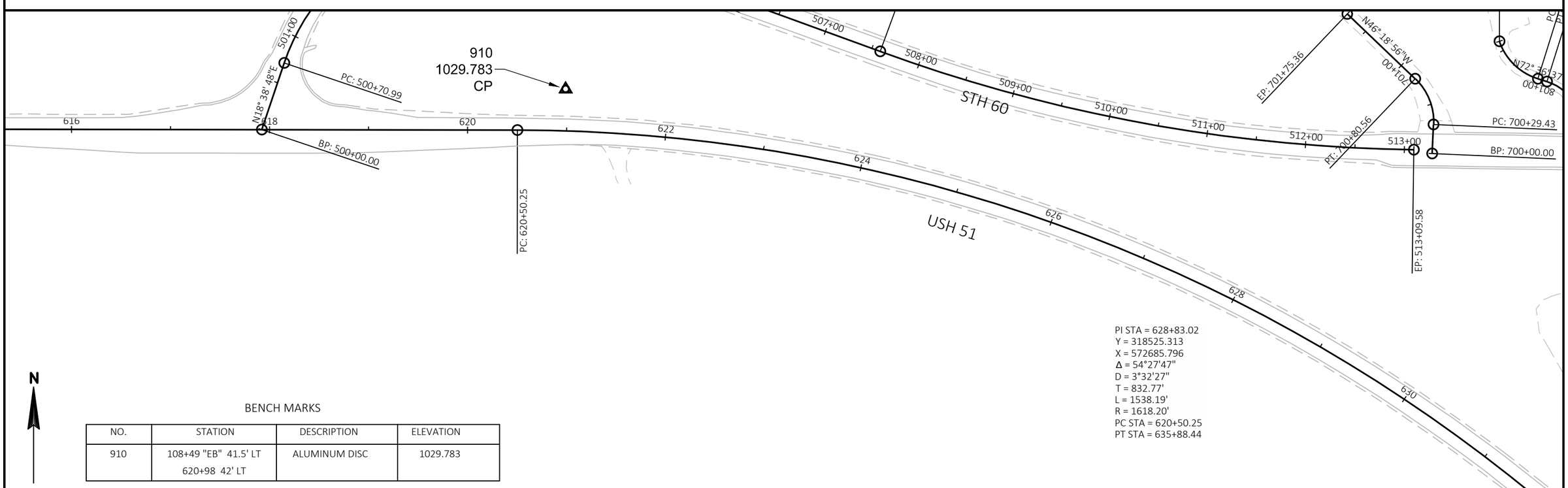
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\025004_TC STAGE 4.DWG
LAYOUT NAME - 025004_tc Stage 4 B
PLOT DATE : 1/21/2020 2:41 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



N

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
911	611+15 32' RT	ALUMINUM DISC	1008.731

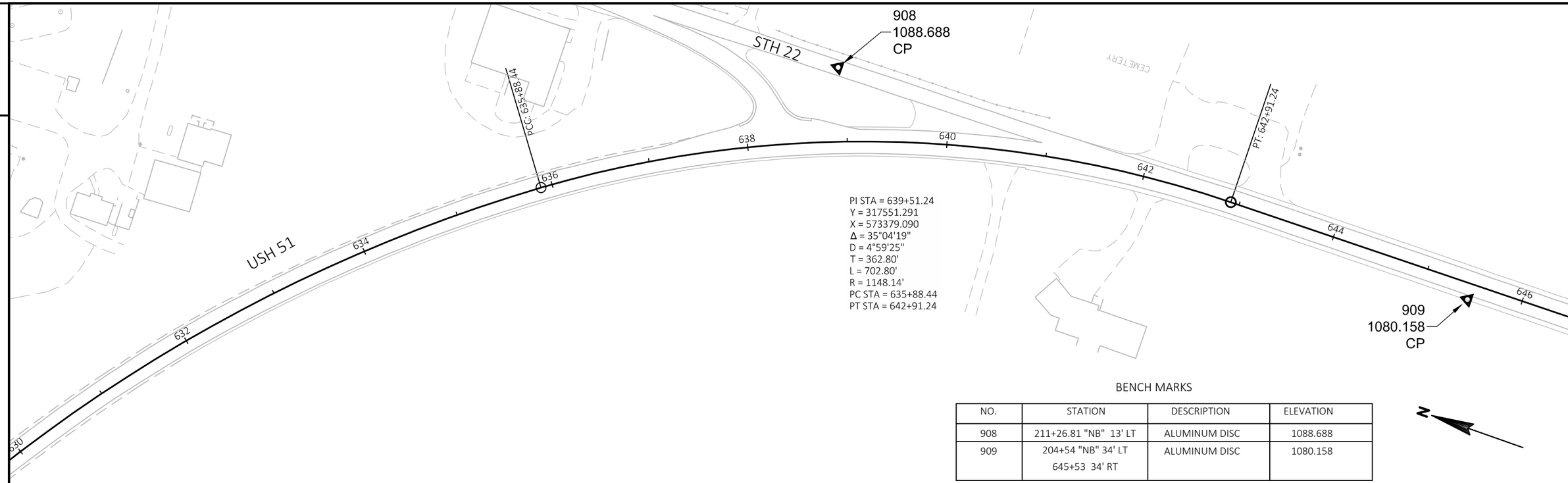


N

BENCH MARKS

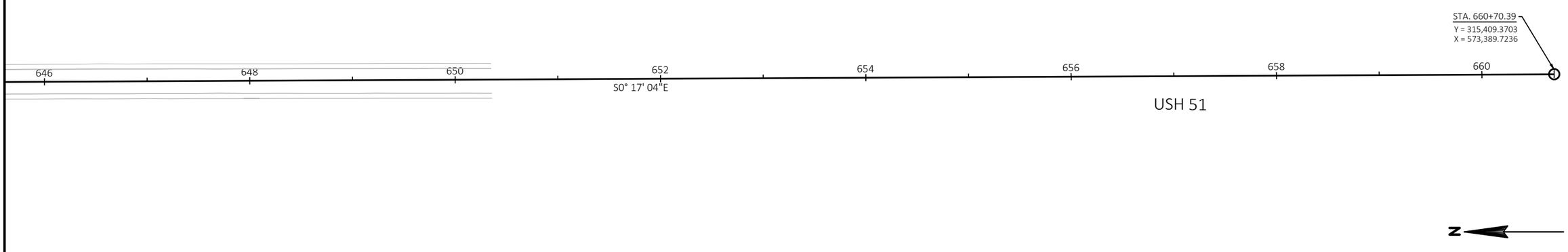
NO.	STATION	DESCRIPTION	ELEVATION
910	108+49 "EB" 41.5' LT 620+98 42' LT	ALUMINUM DISC	1029.783

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
908	211+26.81 "NB" 13' LT	ALUMINUM DISC	1088.688
909	204+54 "NB" 34' LT 645+53 34' RT	ALUMINUM DISC	1080.158



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E

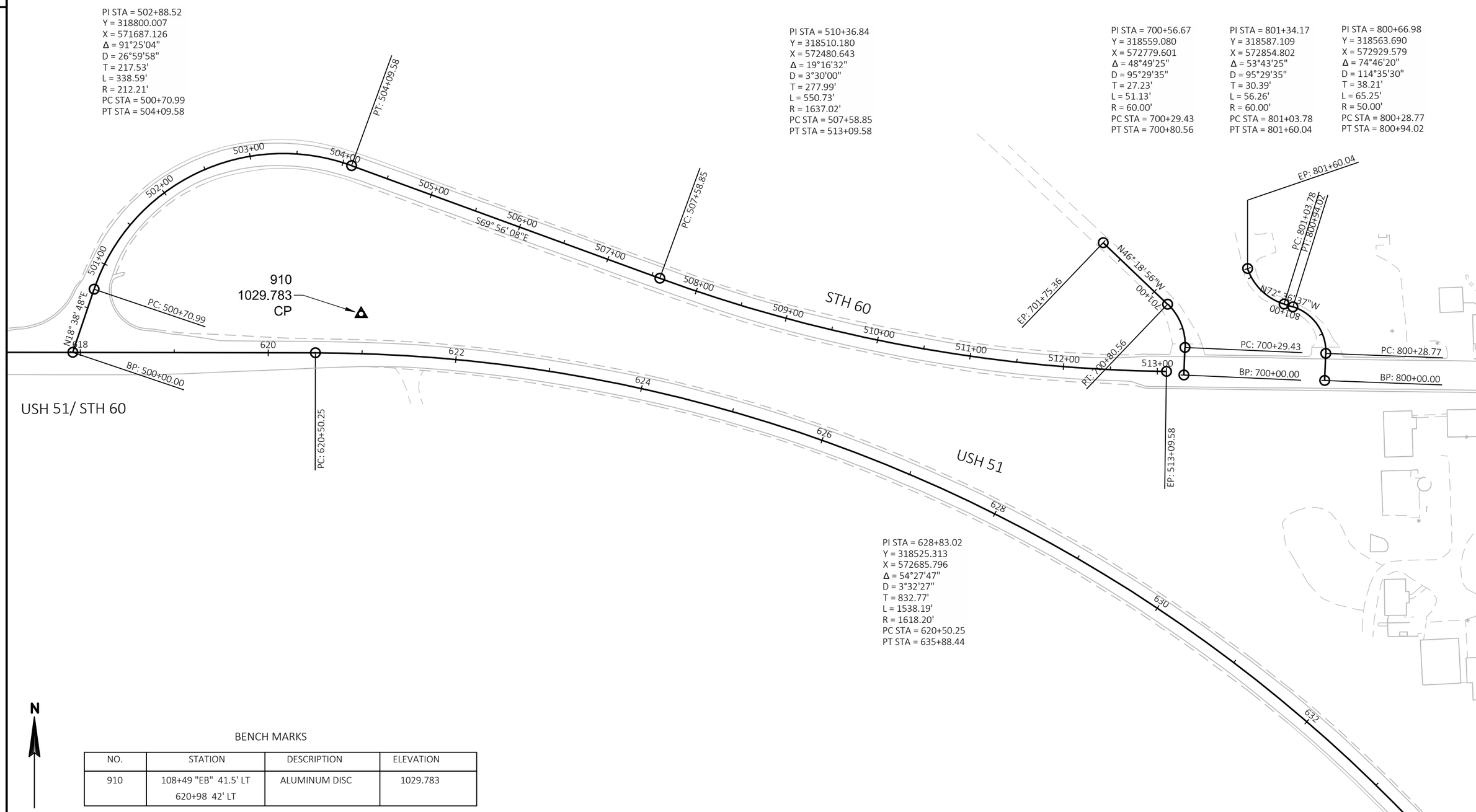
PI STA = 502+88.52
Y = 318800.007
X = 571687.126
Δ = 91°25'04"
D = 26°59'58"
T = 217.53'
L = 338.59'
R = 212.21'
PC STA = 500+70.99
PT STA = 504+09.58

PI STA = 510+36.84
Y = 318510.180
X = 572480.643
Δ = 19°16'32"
D = 3°30'00"
T = 277.99'
L = 550.73'
R = 1637.02'
PC STA = 507+58.85
PT STA = 513+09.58

PI STA = 700+56.67
Y = 318559.080
X = 572779.601
Δ = 48°49'25"
D = 95°29'35"
T = 27.23'
L = 51.13'
R = 60.00'
PC STA = 700+29.43
PT STA = 700+80.56

PI STA = 801+34.17
Y = 318587.109
X = 572854.802
Δ = 53°43'25"
D = 95°29'35"
T = 30.39'
L = 56.26'
R = 60.00'
PC STA = 801+03.78
PT STA = 801+60.04

PI STA = 800+66.98
Y = 318563.690
X = 572929.579
Δ = 74°46'20"
D = 114°35'30"
T = 38.21'
L = 65.25'
R = 50.00'
PC STA = 800+28.77
PT STA = 800+94.02

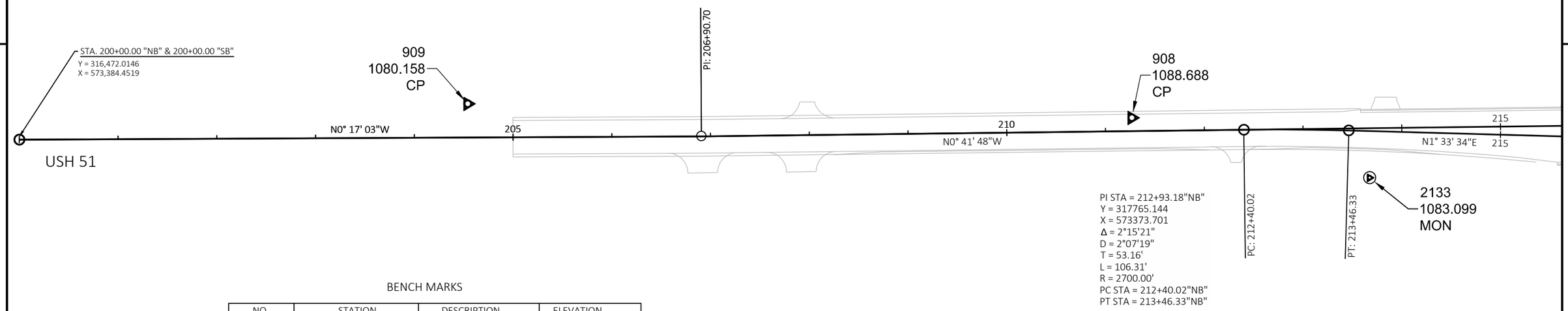


PI STA = 628+83.02
Y = 318525.313
X = 572685.796
Δ = 54°27'47"
D = 3°32'27"
T = 832.77'
L = 1538.19'
R = 1618.20'
PC STA = 620+50.25
PT STA = 635+88.44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
910	108+49 "EB" 41.5' LT 620+98 42' LT	ALUMINUM DISC	1029.783

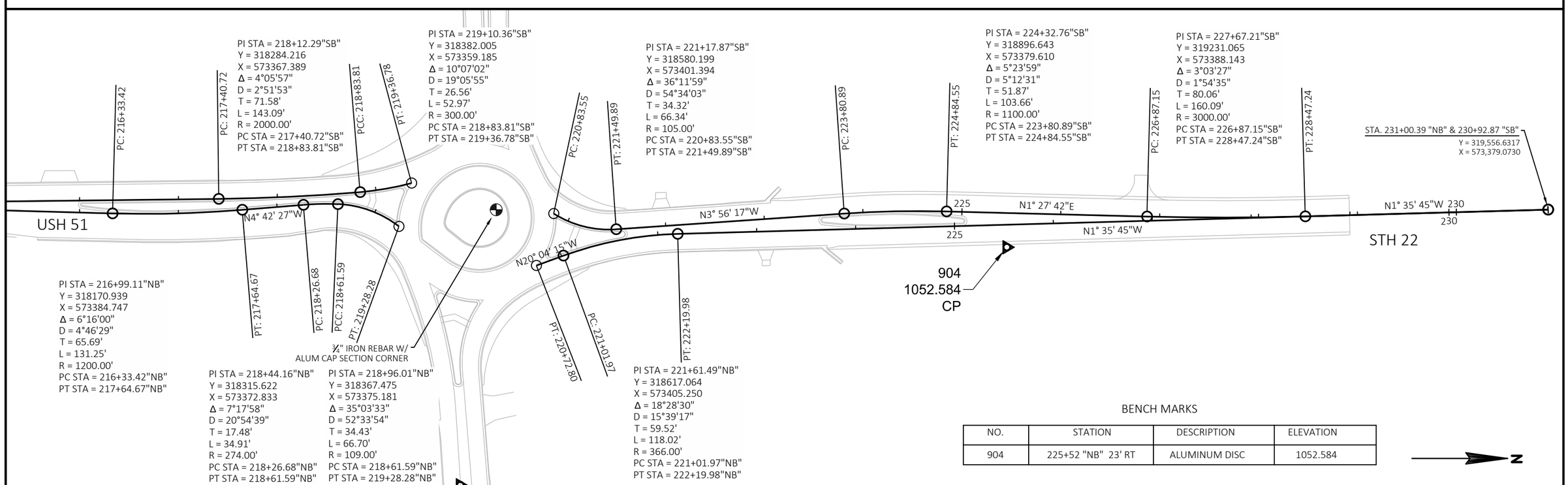
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
908	211+27 "NB" 13' LT	ALUMINUM DISC	1088.688
909	204+54 "NB" 34' LT	ALUMINUM DISC	1080.158
2113	213+69 "NB" 47' RT	MONUMENT	1083.099

N

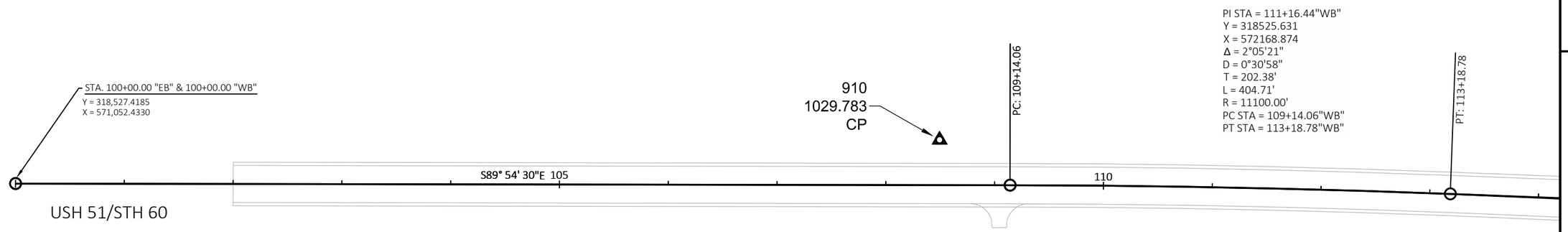


BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
904	225+52 "NB" 23' RT	ALUMINUM DISC	1052.584

N

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E



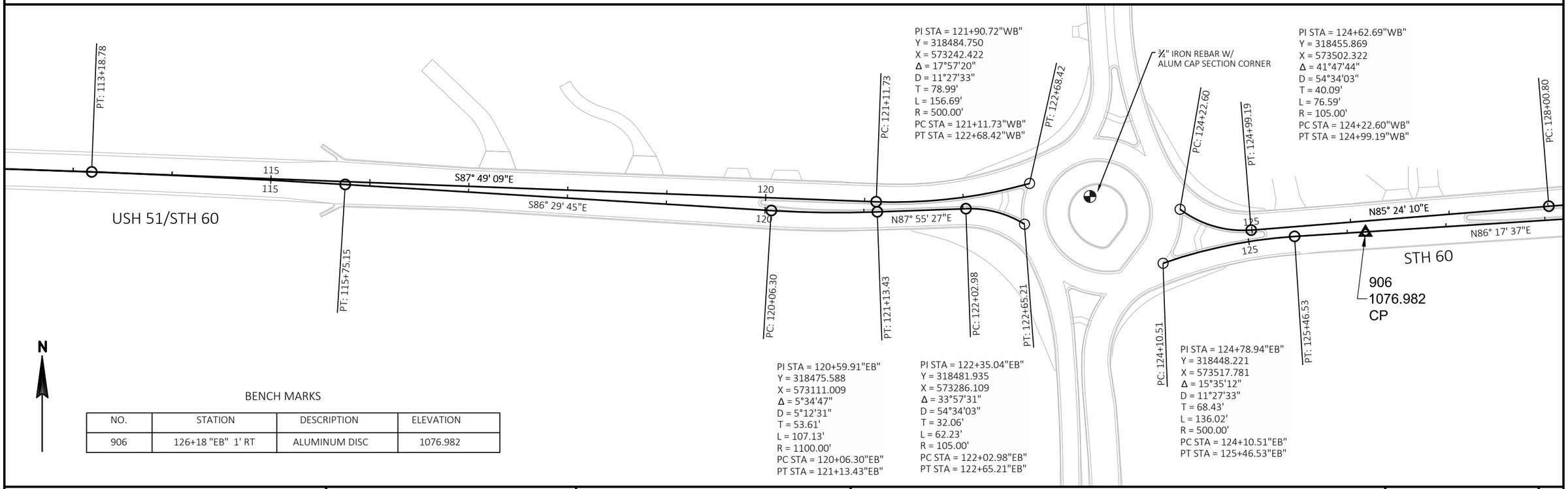
PI STA = 111+16.44"WB"
Y = 318525.631
X = 572168.874
Δ = 2°05'21"
D = 0°30'58"
T = 202.38'
L = 404.71'
R = 11100.00'
PC STA = 109+14.06"WB"
PT STA = 113+18.78"WB"

PI STA = 112+44.70"EB"
Y = 318525.426
X = 572297.136
Δ = 3°24'45"
D = 0°30'58"
T = 330.64'
L = 661.09'
R = 11100.00'
PC STA = 109+14.06"EB"
PT STA = 115+75.15"EB"

N

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
910	108+49 "EB" 41.5' LT	ALUMINUM DISC	1029.783



PI STA = 121+90.72"WB"
Y = 318484.750
X = 573242.422
Δ = 17°57'20"
D = 11°27'33"
T = 78.99'
L = 156.69'
R = 500.00'
PC STA = 121+11.73"WB"
PT STA = 122+68.42"WB"

PI STA = 124+62.69"WB"
Y = 318455.869
X = 573502.322
Δ = 41°47'44"
D = 54°34'03"
T = 40.09'
L = 76.59'
R = 105.00'
PC STA = 124+22.60"WB"
PT STA = 124+99.19"WB"

PI STA = 120+59.91"EB"
Y = 318475.588
X = 573111.009
Δ = 5°34'47"
D = 5°12'31"
T = 53.61'
L = 107.13'
R = 1100.00'
PC STA = 120+06.30"EB"
PT STA = 121+13.43"EB"

PI STA = 122+35.04"EB"
Y = 318481.935
X = 573286.109
Δ = 33°57'31"
D = 54°34'03"
T = 32.06'
L = 62.23'
R = 105.00'
PC STA = 122+02.98"EB"
PT STA = 122+65.21"EB"

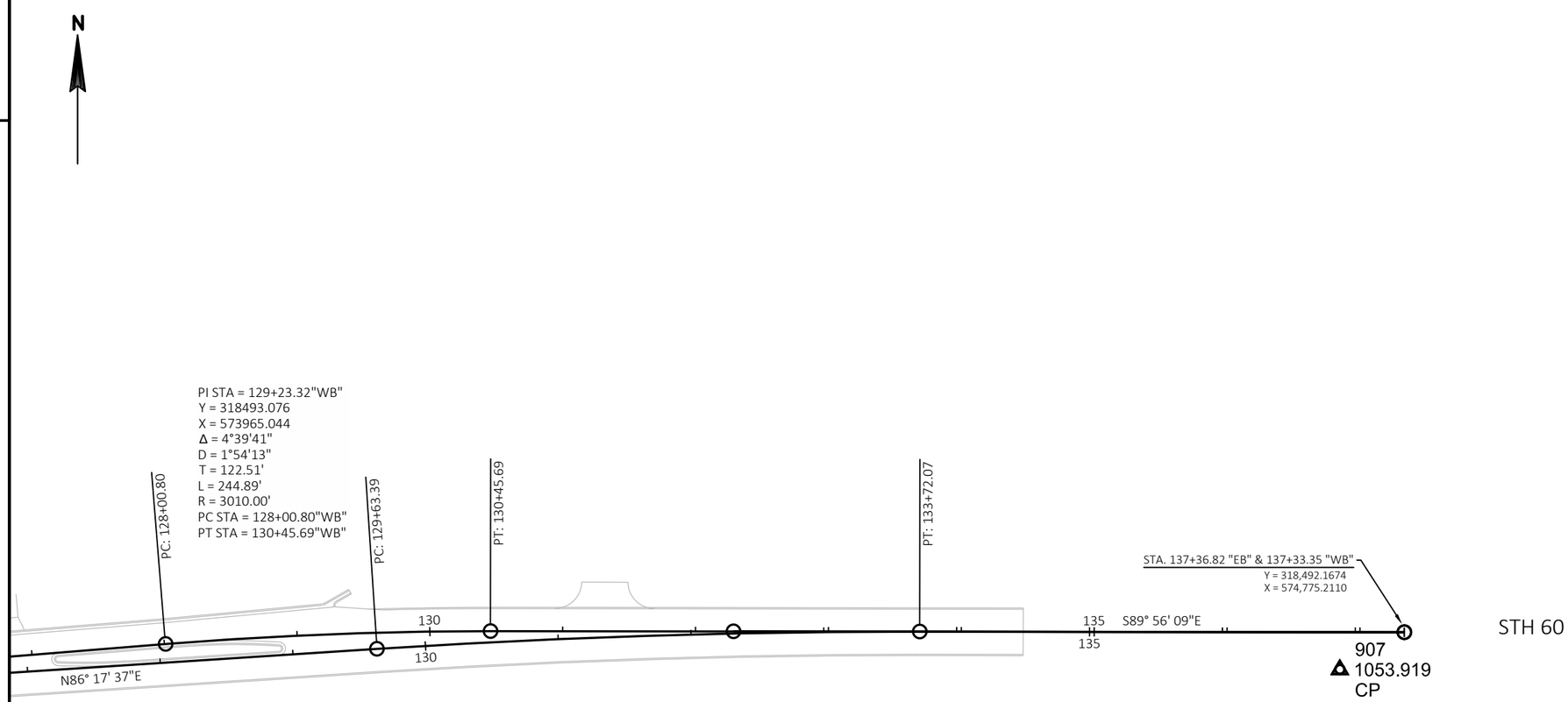
PI STA = 124+78.94"EB"
Y = 318448.221
X = 573517.781
Δ = 15°35'12"
D = 11°27'33"
T = 68.43'
L = 136.02'
R = 500.00'
PC STA = 124+10.51"EB"
PT STA = 125+46.53"EB"

N

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
906	126+18 "EB" 1' RT	ALUMINUM DISC	1076.982

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E

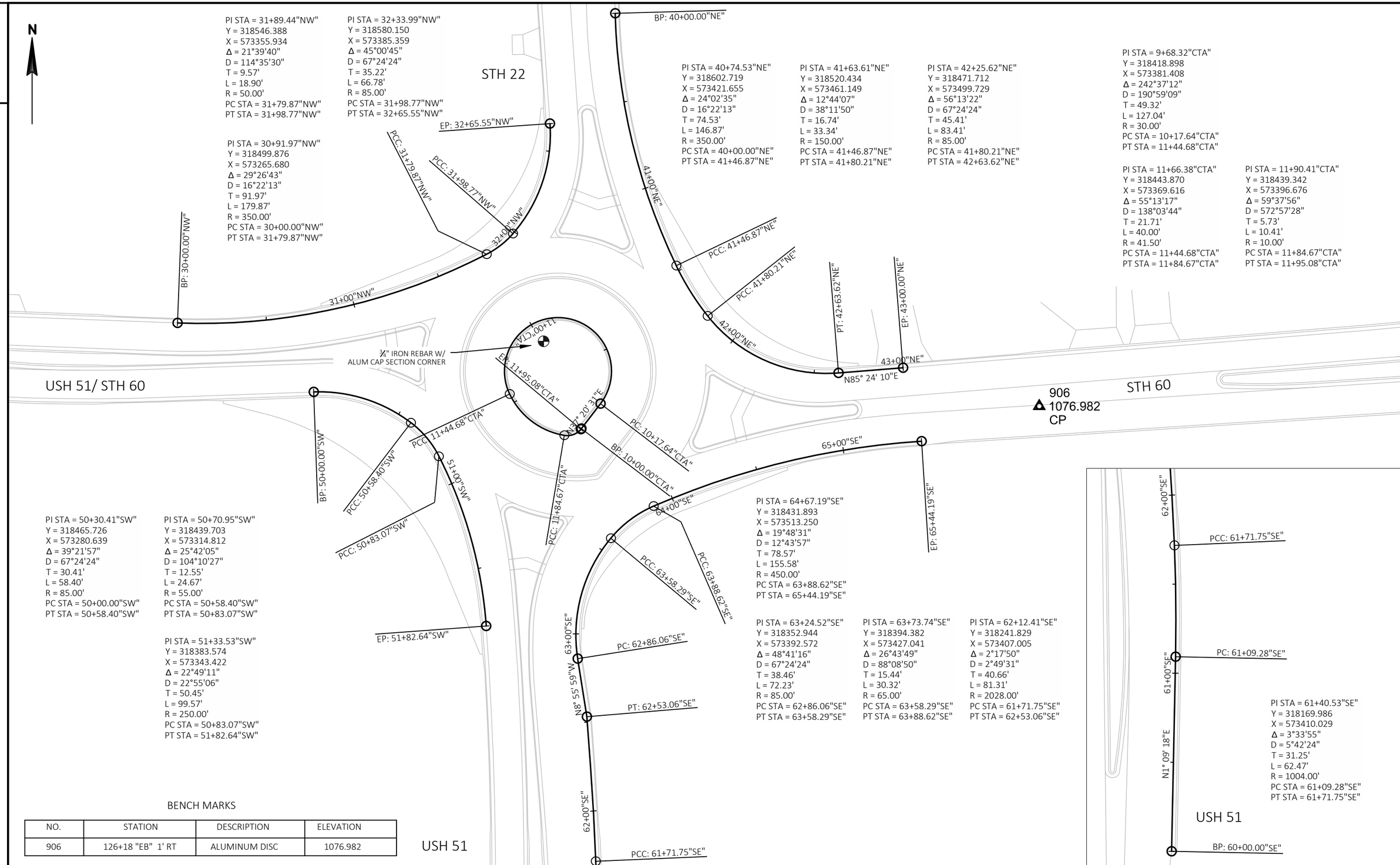


PI STA = 131+67.81"EB"
Y = 318492.806
X = 574206.047
Δ = 3°46'14"
D = 0°55'21"
T = 204.42'
L = 408.68'
R = 6210.00'
PC STA = 129+63.39"EB"
PT STA = 133+72.07"EB"

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
907	136+88 "EB" 28' RT	ALUMINUM DISC	1053.919

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E



PI STA = 31+89.44"NW"
Y = 318546.388
X = 573355.934
Δ = 21°39'40"
D = 114°35'30"
T = 9.57'
L = 18.90'
R = 50.00'
PC STA = 31+79.87"NW"
PT STA = 31+98.77"NW"

PI STA = 32+33.99"NW"
Y = 318580.150
X = 573385.359
Δ = 45°00'45"
D = 67°24'24"
T = 35.22'
L = 66.78'
R = 85.00'
PC STA = 31+98.77"NW"
PT STA = 32+65.55"NW"

PI STA = 30+91.97"NW"
Y = 318499.876
X = 573265.680
Δ = 29°26'43"
D = 16°22'13"
T = 91.97'
L = 179.87'
R = 350.00'
PC STA = 30+00.00"NW"
PT STA = 31+79.87"NW"

PI STA = 40+74.53"NE"
Y = 318602.719
X = 573421.655
Δ = 24°02'35"
D = 16°22'13"
T = 74.53'
L = 146.87'
R = 350.00'
PC STA = 40+00.00"NE"
PT STA = 41+46.87"NE"

PI STA = 41+63.61"NE"
Y = 318520.434
X = 573461.149
Δ = 12°44'07"
D = 38°11'50"
T = 16.74'
L = 33.34'
R = 150.00'
PC STA = 41+46.87"NE"
PT STA = 41+80.21"NE"

PI STA = 42+25.62"NE"
Y = 318471.712
X = 573499.729
Δ = 56°13'22"
D = 67°24'24"
T = 45.41'
L = 83.41'
R = 85.00'
PC STA = 41+80.21"NE"
PT STA = 42+63.62"NE"

PI STA = 9+68.32"CTA"
Y = 318418.898
X = 573381.408
Δ = 242°37'12"
D = 190°59'09"
T = 49.32'
L = 127.04'
R = 30.00'
PC STA = 10+17.64"CTA"
PT STA = 11+44.68"CTA"

PI STA = 11+66.38"CTA"
Y = 318443.870
X = 573369.616
Δ = 55°13'17"
D = 138°03'44"
T = 21.71'
L = 40.00'
R = 41.50'
PC STA = 11+44.68"CTA"
PT STA = 11+84.67"CTA"

PI STA = 11+90.41"CTA"
Y = 318439.342
X = 573396.676
Δ = 59°37'56"
D = 572°57'28"
T = 5.73'
L = 10.41'
R = 10.00'
PC STA = 11+84.67"CTA"
PT STA = 11+95.08"CTA"

PI STA = 50+30.41"SW"
Y = 318465.726
X = 573280.639
Δ = 39°21'57"
D = 67°24'24"
T = 30.41'
L = 58.40'
R = 85.00'
PC STA = 50+00.00"SW"
PT STA = 50+58.40"SW"

PI STA = 50+70.95"SW"
Y = 318439.703
X = 573314.812
Δ = 25°42'05"
D = 104°10'27"
T = 12.55'
L = 24.67'
R = 55.00'
PC STA = 50+58.40"SW"
PT STA = 50+83.07"SW"

PI STA = 51+33.53"SW"
Y = 318383.574
X = 573343.422
Δ = 22°49'11"
D = 22°55'06"
T = 50.45'
L = 99.57'
R = 250.00'
PC STA = 50+83.07"SW"
PT STA = 51+82.64"SW"

PI STA = 64+67.19"SE"
Y = 318431.893
X = 573513.250
Δ = 19°48'31"
D = 12°43'57"
T = 78.57'
L = 155.58'
R = 450.00'
PC STA = 63+88.62"SE"
PT STA = 65+44.19"SE"

PI STA = 63+24.52"SE"
Y = 318352.944
X = 573392.572
Δ = 48°41'16"
D = 67°24'24"
T = 38.46'
L = 72.23'
R = 85.00'
PC STA = 62+86.06"SE"
PT STA = 63+58.29"SE"

PI STA = 63+73.74"SE"
Y = 318394.382
X = 573427.041
Δ = 26°43'49"
D = 88°08'50"
T = 15.44'
L = 30.32'
R = 65.00'
PC STA = 63+58.29"SE"
PT STA = 63+88.62"SE"

PI STA = 62+12.41"SE"
Y = 318241.829
X = 573407.005
Δ = 2°17'50"
D = 2°49'31"
T = 40.66'
L = 81.31'
R = 2028.00'
PC STA = 61+71.75"SE"
PT STA = 62+53.06"SE"

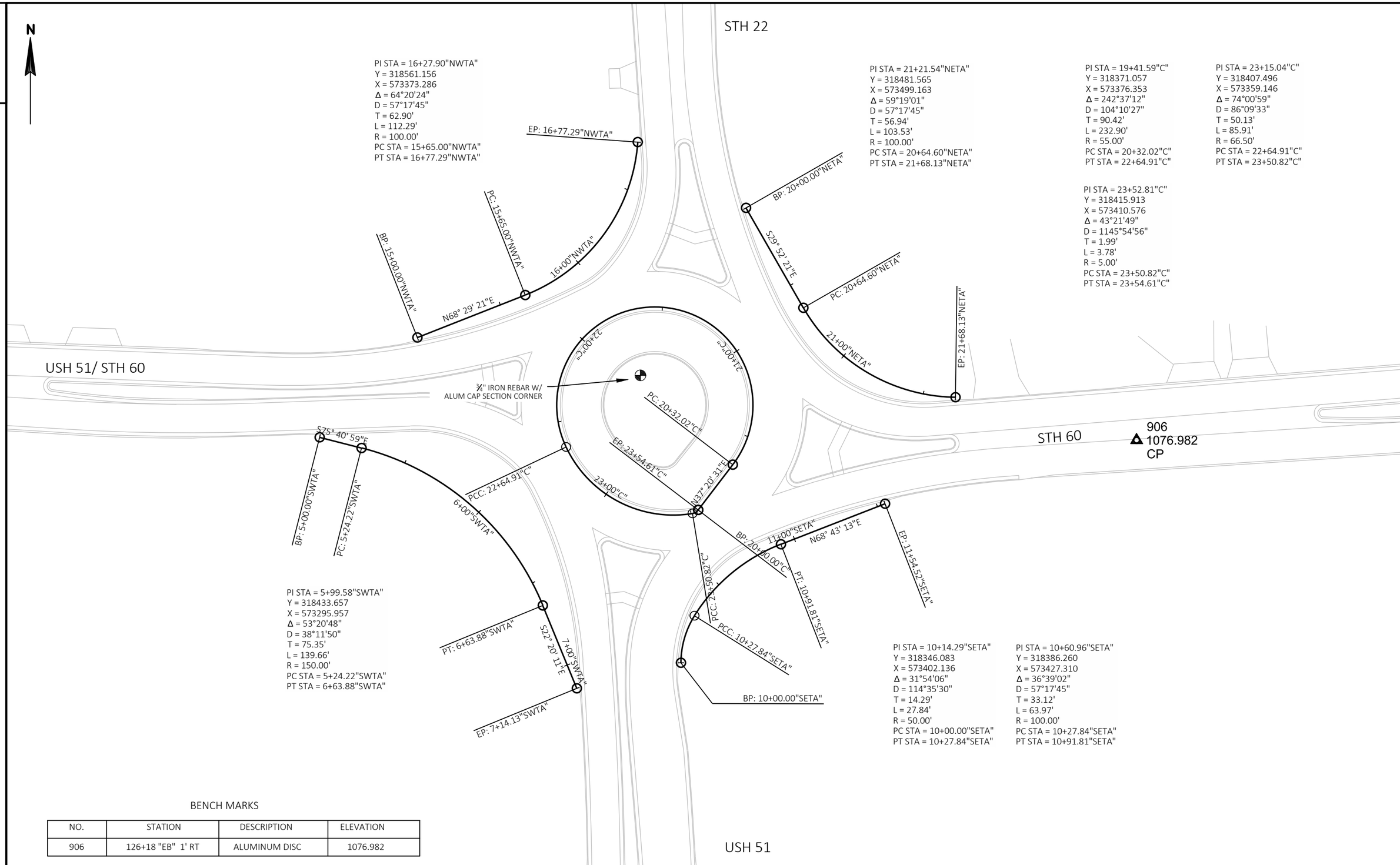
PI STA = 61+40.53"SE"
Y = 318169.986
X = 573410.029
Δ = 3°33'55"
D = 5°42'24"
T = 31.25'
L = 62.47'
R = 1004.00'
PC STA = 61+09.28"SE"
PT STA = 61+71.75"SE"

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
906	126+18 "EB" 1' RT	ALUMINUM DISC	1076.982

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\027201_AD 3.DWG
LAYOUT NAME - Circle
PLOT DATE : 1/24/2020 11:15 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:50 FT



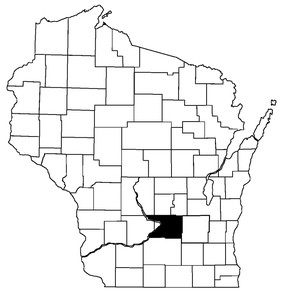
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEVATION
906	126+18 "EB" 1' RT	ALUMINUM DISC	1076.982

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	ALIGNMENT DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\027201_AD 4.DWG
LAYOUT NAME - Circle
PLOT DATE : 1/24/2020 11:15 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
6020-00-20
DEFOREST - PORTAGE
STH 22/ STH 60 INTERSECTION
USH 51
COLUMBIA COUNTY



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
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

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (3/4-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

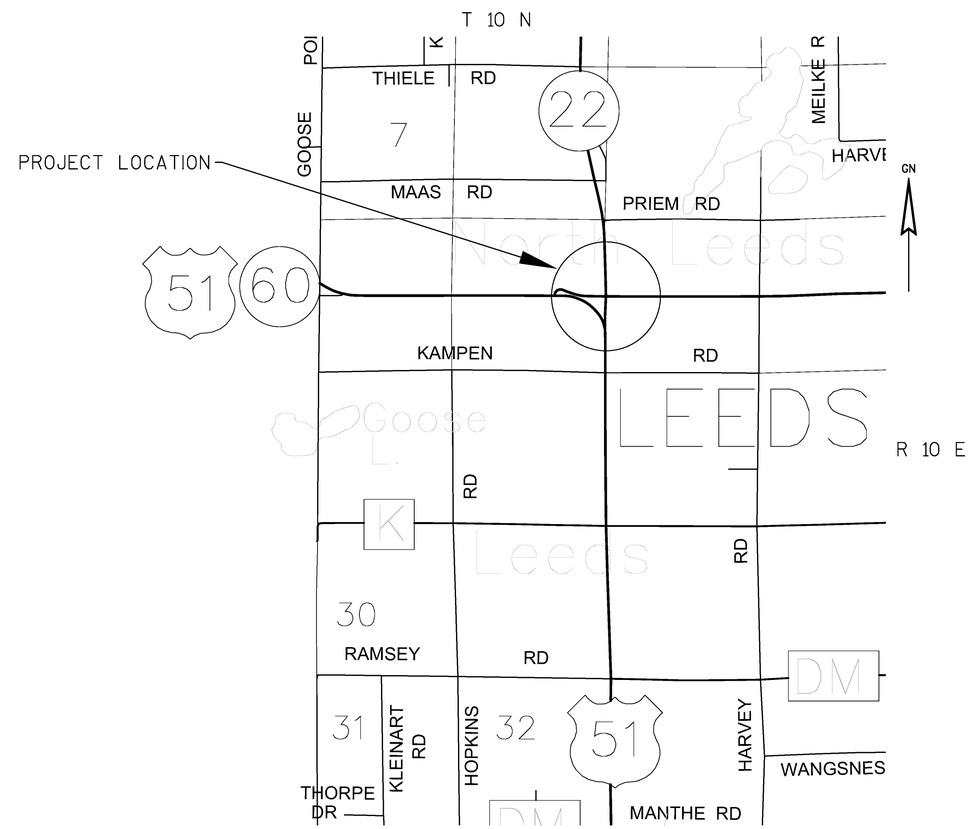
ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
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		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

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	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS



LAYOUT
SCALE 0 .5 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 6020-00-20.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), COLUMBIA COUNTY, NAD83(2011), 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 ¾" 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.

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.

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.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

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

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

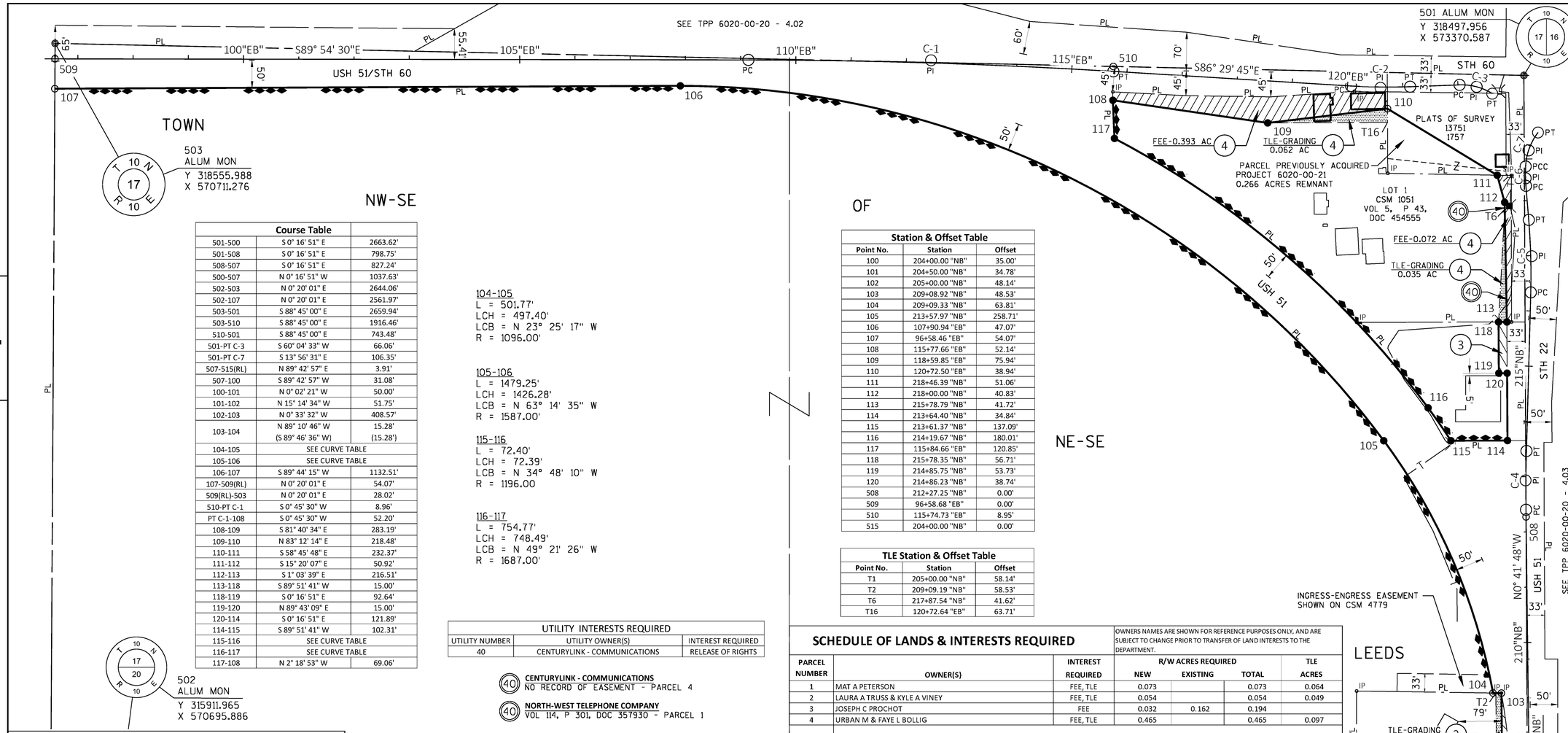
EXISTING ACCESS CONTROL ALONG USH 51 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT CA 05-2(1).

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT OF WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECTS 460B, 460F & 460G, CSM 1051, CSM 2068, CSM 4779, CSM VOL. 1 OF SURVEYS, PAGE 145, DOC 362123 AND PLAT OF SURVEY 8958.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 22 ESTABLISHED FROM PREVIOUS PROJECT S0294(6), CSM 1051, CSM 3088, CSM 3852, CSM 2068, PLAT OF SURVEY 13429, PLAT OF SURVEY 13751, PLAT OF SURVEY 1757 AND PLAT OF SURVEY 11198.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 60 ESTABLISHED FROM PREVIOUS PROJECTS 6010-00-21, 6010-03-21, S0294(6), CSM 4460, CSM 3085, PLAT OF SURVEY 8958 AND PLAT OF SURVEY 6117.

PROJECT NUMBER 6020-00-20- 4.01
SHEET 2 OF 2



DOC # 919184
REGISTER OF DEEDS
COLUMBIA COUNTY

RECORDED ON:
10/22/2019 08:5022
PAGES: 2

KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: $25.00

Exempt #:
VOLUME: TPP-E PAGE: 34
ELECTRONICALLY RETURNED TO SENDER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-00-20 - 4.01
SHEET 1 OF 2
AMENDMENT NO:___

Course Table		
501-500	S 0° 16' 51" E	2663.62'
501-508	S 0° 16' 51" E	798.75'
508-507	S 0° 16' 51" E	827.24'
500-507	N 0° 16' 51" W	1037.63'
502-503	N 0° 20' 01" E	2644.06'
502-107	N 0° 20' 01" E	2561.97'
503-501	S 88° 45' 00" E	2659.94'
503-510	S 88° 45' 00" E	1916.46'
510-501	S 88° 45' 00" E	743.48'
501-PT C-3	S 60° 04' 33" W	66.06'
501-PT C-7	S 13° 56' 31" E	106.35'
507-515(RL)	N 89° 42' 57" E	3.91'
507-100	S 89° 42' 57" W	31.08'
100-101	N 0° 02' 21" W	50.00'
101-102	N 15° 14' 34" W	51.75'
102-103	N 0° 33' 32" W	408.57'
103-104	N 89° 10' 46" W (S 89° 46' 36" W)	15.28' (15.28')
104-105	SEE CURVE TABLE	
105-106	SEE CURVE TABLE	
106-107	S 89° 44' 15" W	1132.51'
107-509(RL)	N 0° 20' 01" E	54.07'
509(RL)-503	N 0° 20' 01" E	28.02'
510-PT C-1	S 0° 45' 30" W	8.96'
PT C-1-108	S 0° 45' 30" W	52.20'
108-109	S 81° 40' 34" E	283.19'
109-110	N 83° 12' 14" E	218.48'
110-111	S 58° 45' 48" E	232.37'
111-112	S 15° 20' 07" E	50.92'
112-113	S 1° 03' 39" E	216.51'
113-118	S 89° 51' 41" W	15.00'
118-119	S 0° 16' 51" E	92.64'
119-120	N 89° 43' 09" E	15.00'
120-114	S 0° 16' 51" E	121.89'
114-115	S 89° 51' 41" W	102.31'
115-116	SEE CURVE TABLE	
116-117	SEE CURVE TABLE	
117-108	N 2° 18' 53" W	69.06'

104-105
L = 501.77'
LCH = 497.40'
LCB = N 23° 25' 17" W
R = 1096.00'

105-106
L = 1479.25'
LCH = 1426.28'
LCB = N 63° 14' 35" W
R = 1587.00'

115-116
L = 72.40'
LCH = 72.39'
LCB = N 34° 48' 10" W
R = 1196.00

116-117
L = 754.77'
LCH = 748.49'
LCB = N 49° 21' 26" W
R = 1687.00'

Station & Offset Table		
Point No.	Station	Offset
100	204+00.00 "NB"	35.00'
101	204+50.00 "NB"	34.78'
102	205+00.00 "NB"	48.14'
103	209+08.92 "NB"	48.53'
104	209+09.33 "NB"	63.81'
105	213+57.97 "NB"	258.71'
106	107+90.94 "EB"	47.07'
107	96+58.46 "EB"	54.07'
108	115+77.66 "EB"	52.14'
109	118+59.85 "EB"	75.94'
110	120+72.50 "EB"	38.94'
111	218+46.39 "NB"	51.06'
112	218+00.00 "NB"	40.83'
113	215+78.79 "NB"	41.72'
114	213+64.40 "NB"	34.84'
115	213+61.37 "NB"	137.09'
116	214+19.67 "NB"	180.01'
117	115+84.66 "EB"	120.85'
118	215+78.35 "NB"	56.71'
119	214+85.75 "NB"	53.73'
120	214+86.23 "NB"	38.74'
508	212+27.25 "NB"	0.00'
509	96+58.68 "EB"	0.00'
510	115+74.73 "EB"	8.95'
515	204+00.00 "NB"	0.00'

TLE Station & Offset Table		
Point No.	Station	Offset
T1	205+00.00 "NB"	58.14'
T2	209+09.19 "NB"	58.53'
T6	217+87.54 "NB"	41.62'
T16	120+72.64 "EB"	63.71'

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
40	CENTURYLINK - COMMUNICATIONS	RELEASE OF RIGHTS

(40) **CENTURYLINK - COMMUNICATIONS**
NO RECORD OF EASEMENT - PARCEL 4

(40) **NORTH-WEST TELEPHONE COMPANY**
VOL 114, P 301, DOC 357930 - PARCEL 1

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
1	MAT A PETERSON	FEE, TLE	0.073		0.073	0.064
2	LAURA A TRUSS & KYLE A VINEY	FEE, TLE	0.054		0.054	0.049
3	JOSEPH C PROCHOT	FEE	0.032	0.162	0.194	
4	URBAN M & FAYE L BOLLIG	FEE, TLE	0.465		0.465	0.097
	ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED.					

PI STA = 206+90.70"NB"
Y = 317162.708
X = 573381.026
DELTA = 0°24'45" LT

ALIGNMENT CURVE: C-4
PI STA = 212+93.18"NB"
Y = 317765.144
X = 573373.701
DELTA = 2°15'21" RT
D = 2°07'19"
T = 53.16'
L = 106.31'
R = 2700.00'
PC STA = 212+40.02"NB"
PT STA = 213+46.33"NB"
AH = N 01°33'34" E

ALIGNMENT CURVE: C-5
PI STA = 216+99.11"NB"
Y = 318170.939
X = 573384.747
DELTA = 6°16'00" LT
D = 4°46'29"
T = 65.69'
L = 131.25'
R = 1200.00'
PC STA = 216+33.42"NB"
PT STA = 217+64.67"NB"
BK = N 01°33'34" E
AH = N 04°42'27" W

ALIGNMENT CURVE: C-6
PI STA = 218+44.16"NB"
Y = 318315.622
X = 573372.833
DELTA = 7°17'58" RT
D = 20°54'39"
T = 17.48'
L = 34.91'
R = 274.00'
PC STA = 218+26.68"NB"
PCC STA = 218+61.59"NB"
BK = N 04°42'27" W
AH = N 02°35'31" E

ALIGNMENT CURVE: C-7
PI STA = 218+96.01"NB"
Y = 318367.475
X = 573375.181
DELTA = 35°03'33" RT
D = 52°33'54"
T = 34.43'
L = 66.70'
R = 109.00'
PCC STA = 218+61.59"NB"
PT STA = 219+28.28"NB"
BK = N 01°33'34" E
AH = N 37°39'04" E

ALIGNMENT CURVE: C-1
PI STA = 112+44.71'EB"
Y = 318525.426
X = 572297.136
DELTA = 3°24'45" RT
D = 0°30'58"
T = 330.64'
L = 661.09'
R = 11100.00'
PC STA = 109+14.07"EB"
PT STA = 115+75.16"EB"

ALIGNMENT CURVE: C-2
PI STA = 120+59.91"EB"
Y = 318475.588
X = 573111.009
DELTA = 5°34'47" LT
D = 5°12'31"
T = 53.61'
L = 107.13'
R = 1100.00'
PC STA = 120+06.31"EB"
PT STA = 121+13.43"EB"
AH = N 87°55'27" E

ALIGNMENT CURVE: C-3
PI STA = 122+35.04"EB"
Y = 318481.935
X = 573286.109
DELTA = 33°57'31" RT
D = 54°34'03"
T = 32.06'
L = 62.23'
R = 105.00'
PC STA = 122+02.98"EB"
PT STA = 122+65.21"EB"
BK = N 87°55'27" E
AH = S 58°07'02" E

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT OF WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECTS 460B, 460F & 460G, CSM 1051, CSM 2068, CSM 4779, CSM VOL. 1 OF SURVEYS, PAGE 145, DOC 362123 AND PLAT OF SURVEY 8958.

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.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 22 ESTABLISHED FROM PREVIOUS PROJECT S0294 (6), CSM 1051, CSM 2068, PLAT OF SURVEY 13751 AND PLAT OF SURVEY 1757.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 60 ESTABLISHED FROM PREVIOUS PROJECTS 6010-00-21, 6010-03-21.

EXISTING ACCESS CONTROL ALONG USH 51 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT CA 05-2 (1).

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

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

FOUND IRON PINS ARE 3/4", UNLESS OTHERWISE NOTED.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

WISCONSIN Keif S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

SIGNATURE: DATE: 9/25/2019
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SW REGION - MADISON OFFICE
SIGNATURE: DATE: 10/21/2019
PRINT NAME: CORY SCHLAGEL

TRANSPORTATION PROJECT PLAT NO: 6020-00-20 - 4.01

THAT PART OF PARCEL B OF CSM VOLUME 1 OF SURVEYS, PAGE 145, DOCUMENT NUMBER 362123 LOCATED IN THE SE ¼ OF THE SE ¼. ALSO, THAT PART OF LOT 1 OF CSM 4779 VOLUME 33, PAGE 114, DOCUMENT NUMBER 770756 AND LOT 1 OF CSM 1051 VOLUME 5, PAGE 43, DOCUMENT NUMBER 454555 ALL LOCATED IN THE NE ¼ OF THE SE ¼. ALSO, THAT PART OF THE NE ¼ OF THE SE ¼. ALL LOCATED IN SECTION 17, T 10 N, R 10 E, TOWN OF LEEDS, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 DEFOREST - PORTAGE (STH 22/ STH 60 INTERSECTION), COLUMBIA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, 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 LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

504
ALUM MON
Y 321235.370
X 570726.690

ALIGNMENT CURVE: C-1
PI STA = 112+44.71"EB"
Y = 318525.426
X = 572297.136
DELTA = 3°24'45" RT
D = 0°30'58"
T = 330.64'
L = 661.09'
R = 11100.00'
PC STA = 109+14.07"EB"
PT STA = 115+75.16"EB"

ALIGNMENT CURVE: C-2
PI STA = 120+59.91"EB"
Y = 318475.588
X = 573111.009
DELTA = 5°34'47" LT
D = 5°12'31"
T = 53.61'
L = 107.13'
R = 1100.00'
PC STA = 120+06.31"EB"
PT STA = 121+13.43"EB"
AH = N 87°55'27" E

ALIGNMENT CURVE: C-3
PI STA = 122+35.04"EB"
Y = 318481.935
X = 573286.109
DELTA = 33°57'31" RT
D = 54°34'03"
T = 32.06'
L = 62.23'
R = 105.00'
PC STA = 122+02.98"EB"
PT STA = 122+65.21"EB"
BK = N 87°55'27" E
AH = S 58°07'02" E

ALIGNMENT CURVE: C-8
PI STA = 221+61.49"NB"
Y = 318617.064
X = 573405.250
DELTA = 18°28'30" RT
D = 15°39'17"
T = 59.52'
L = 118.02'
R = 366.00'
PC STA = 221+01.97"NB"
PT STA = 222+19.98"NB"
BK = N 20°04'15" W

TOWN

Course Table		
504-503	S 0° 19' 47" W	2679.43'
504-200	S 0° 19' 47" W	2646.52'
505-501	S 0° 34' 06" W	2666.71'
505-511	S 0° 34' 06" W	1958.64'
511-501	S 0° 34' 06" W	708.07'
501-503	N 88° 45' 00" W	2659.94'
503-200	N 0° 19' 47" E	32.91'
501-PT C-3	S 60° 04' 33" W	66.06'
501-516	N 61° 11' 26" E	74.30'
502-503	N 0° 20' 01" E	2644.06'
502-509(RL)	N 0° 20' 01" E	2616.04'
509(RL)-503	N 0° 20' 01" E	28.02'
511-513(RL)	N 88° 29' 49" E	11.23'
200-201	S 89° 30' 09" E (S 89° 56' 15" E)	722.74' (722.71')
201-202	N 60° 39' 20" E (N 60° 12' 58" E)	170.48' (170.47)'
202-203	N 40° 08' 09" E (N 39° 42' 46" E)	129.67' (129.79')
203-204	N 75° 42' 43" E (N 75° 18' 22" E)	129.87' (129.79')
204-205	S 80° 09' 33" E (S 80° 32' 44" E)	117.26' (117.43')
205-206	S 69° 58' 24" E (S 70° 21' 47" E)	350.80' (350.99')
206-207	S 75° 34' 32" E (S 75° 59' 59" E)	246.77' (246.76')
207-208	S 86° 05' 25" E	284.37'
208-209	S 81° 38' 59" E	281.10'
209-210	S 89° 12' 52" E	171.13'
210-215	N 72° 09' 38" E	135.57'
215-211	N 0° 34' 06" E	187.56'
211-212	N 16° 08' 13" W	95.69'
212-213	N 2° 13' 06" E	300.67'
213-214	N 12° 08' 10" E	51.47'
214-511	N 88° 29' 49" E	41.55'

TLE Station & Offset Table		
Point No.	Station	Offset
T7	116+70.00 "EB"	79.33'
T8	116+38.00 "EB"	120.00'
T9	116+56.00 "EB"	139.00'
T10	117+60.11 "EB"	74.29'
T11	118+00.00 "EB"	70.91'
T12	117+74.00 "EB"	112.00'
T13	117+98.00 "EB"	123.00'
T14	118+75.00 "EB"	87.00'
T15	118+98.00 "EB"	62.60'
T17	121+62.53 "EB"	97.79'

Station & Offset Table		
Point No.	Station	Offset
200	96+58.94 "EB"	60.93'
201	103+81.67 "EB"	55.81'
202	105+30.14 "EB"	139.59'
203	106+13.57 "EB"	238.87'
204	107+39.37 "EB"	271.12'
205	108+54.94 "EB"	251.26'
206	111+81.50 "EB"	134.92'
207	114+20.25 "EB"	82.19'
208	117+03.47 "EB"	79.09'
209	119+83.56 "EB"	55.34'
210	121+60.13 "EB"	53.96'
211	223+07.38 "NB"	60.98'
212	224+00.00 "NB"	85.00'
213	227+00.00 "NB"	65.00'
214	227+50.00 "NB"	52.78'
215	221+37.09 "NB"	79.44'
509	96+58.68 "EB"	0.00'
513	227+49.91 "NB"	0.00'
516	220+72.80 "NB"	0.00'

SW-NE

PARCEL A
PLAT OF SURVEY
8958

OF

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
40	CENTURYLINK - COMMUNICATIONS	RELEASE OF RIGHTS

(40) **NORTH-WEST TELEPHONE COMPANY**
VOL 285, P 184-185
DOC 442618 - PARCEL 8

505 ALUM MON
Y 321164.534
X 573397.034

PARCEL D
PLAT OF SURVEY
8958

PARCEL C
PLAT OF SURVEY
8958

PARCEL B
PLAT OF SURVEY
8958

LOT 3
CSM 3088
VOL 20, P 85,
DOC 589891

LOT 2
CSM 3088
VOL 20, P 85,
DOC 589891

LOT 1
CSM 3088
VOL 20, P 85,
DOC 589891

LOT 1
CSM 828
VOL 4 OF SURVEYS
P 48,
DOC 435239
PLAT OF SURVEY
8579

SE-NE

LOT 1
CSM 5973
VOL 43, P 14,
DOC 899933

LEEDS

REMNANT
0.597 AC
PLAT OF
SURVEY
11198

MAP OF SURVEY
11150

LOT 1
CSM 3860
VOL 26, P 97,
DOC 668575

LOT 2
CSM 3860
VOL 26,
P 97,
DOC
668575

LOT 2, CSM 828
VOL 4 OF SURVEYS
P 48, DOC 435239

TLE-DRIVEWAY
0.022 AC

TLE-DRIVEWAY
0.085 AC

TLE-GRADING

PLAT OF
SURVEY 6774

STH 22

STH 60

USH 51/STH 60

SEE TPP 6020-00-20 - 4.01

SEE TPP 6020-00-20 - 4.03

30' INGRESS-EGRESS
EASEMENT SHOWN ON
PLAT OF SURVEY 1977

ACCESS EASEMENT
SHOWN ON CSM 3860

ROAD EASEMENT
VOL 122 OF RECORDS
SHOWN ON CSM 828

15' ACCESS EASEMENT SHOWN
ON PLAT OF SURVEY 11198

S89° 54' 30"E
S86° 29' 45"E
N1° 35' 45"W 225"NB"
100"EB"
105"EB"
110"EB"
115"EB"
120"EB"

DOC # 919207
REGISTER OF DEEDS
COLUMBIA COUNTY

RECORDED ON:
10/22/2019 11:0908
PAGES: 1

KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: $25.00

Exempt #:
VOLUME: TPP-E PAGE: 35
ELECTRONICALLY RETURNED TO SENDER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-00-20 - 4.02
AMENDMENT NO:___

GN

503
ALUM MON
Y 318555.988
X 570711.276

502
ALUM MON
Y 315911.965
X 570695.886

501
ALUM MON
Y 318497.956
X 573370.587

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
6	WILFRED J & CORINNE R WIEDENBECK LIVING TRUST	TLE				0.053
7	ROBERT L & AMBER M GINGRICH	TLE				0.107
8	CASEY J BORMANN	FEE, TLE, AR	0.064	0.207	0.271	0.065
9	JAMIE M PAULI & ROBYN M PAVEL	FEE	0.185	0.014	0.199	
	ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED.					

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), COLUMBIA COUNTY, NAD83 (2011), 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 REGISTER OF DEEDS, IN COLUMBIA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 919184.

SCALE, FEET
0 100 200

TRANSPORTATION PROJECT PLAT NO: 6020-00-20 - 4.02

THAT PART OF LOT 1 OF CSM 5973 VOLUME 43, PAGE 14, DOCUMENT NUMBER 899933. ALSO, THAT PART OF LOTS 1 AND 2 OF CSM 3860 VOLUME 26, PAGE 97, DOCUMENT NUMBER 668575 AND LOT 1 OF CSM 828 VOLUME 4 OF SURVEYS, PAGE 48, DOCUMENT NUMBER 435239 ALL LOCATED IN THE SE ¼ OF THE NE ¼. ALSO, THAT PART OF THE SE ¼ OF THE NE ¼. ALL LOCATED IN SECTION 17, T 10 N, R 10 E, TOWN OF LEEDS, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 DEFOREST - PORTAGE (STH 22/ STH 60 INTERSECTION), COLUMBIA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, 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 LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT OF WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECTS 460F & 460G, CSM 1051 AND PLAT OF SURVEY 8958.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 22 ESTABLISHED FROM PREVIOUS PROJECT S0294 (6), CSM 3088, CSM 3852, PLAT OF SURVEY 13429 AND PLAT OF SURVEY 11198.

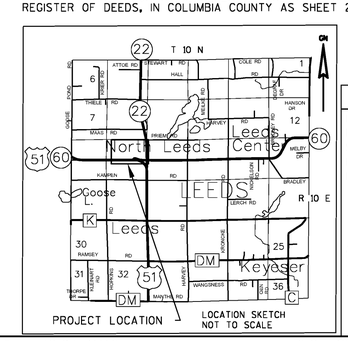
EXISTING HIGHWAY RIGHT OF WAY FOR STH 60 ESTABLISHED FROM PREVIOUS PROJECTS 6010-00-21 AND 6010-03-21.

EXISTING ACCESS CONTROL ALONG USH 51 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT CA 05-2 (1)

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

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.

FOUND IRON PINS ARE 3/4", UNLESS OTHERWISE NOTED.



LOCATION SKETCH
NOT TO SCALE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

WISCONSIN Keif S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

SIGNATURE: DATE: 9/25/2019
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SW REGION - MADISON OFFICE
SIGNATURE: Cory Schlagel DATE: 10/22/2019
PRINT NAME: CORY SCHLAGEL

TRANSPORTATION PROJECT PLAT NO: 6020-00-20 - 4.03

THAT PART OF OF LOT 1 OF CSM 2068 VOLUME 12, PAGE 55, DOCUMENT NUMBER 522345 LOCATED IN THE SW ¼ OF THE SW ¼. ALSO, THAT PART OF THE SW ¼ OF THE SW ¼. ALSO, THAT PART OF THE NW ¼ OF THE SW ¼. ALL LOCATED IN SECTION 16, T 10 N, R 10 E, TOWN OF LEEDS, COLUMBIA COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 DEFOREST - PORTAGE (STH 22/ STH 60 INTERSECTION), COLUMBIA COUNTY

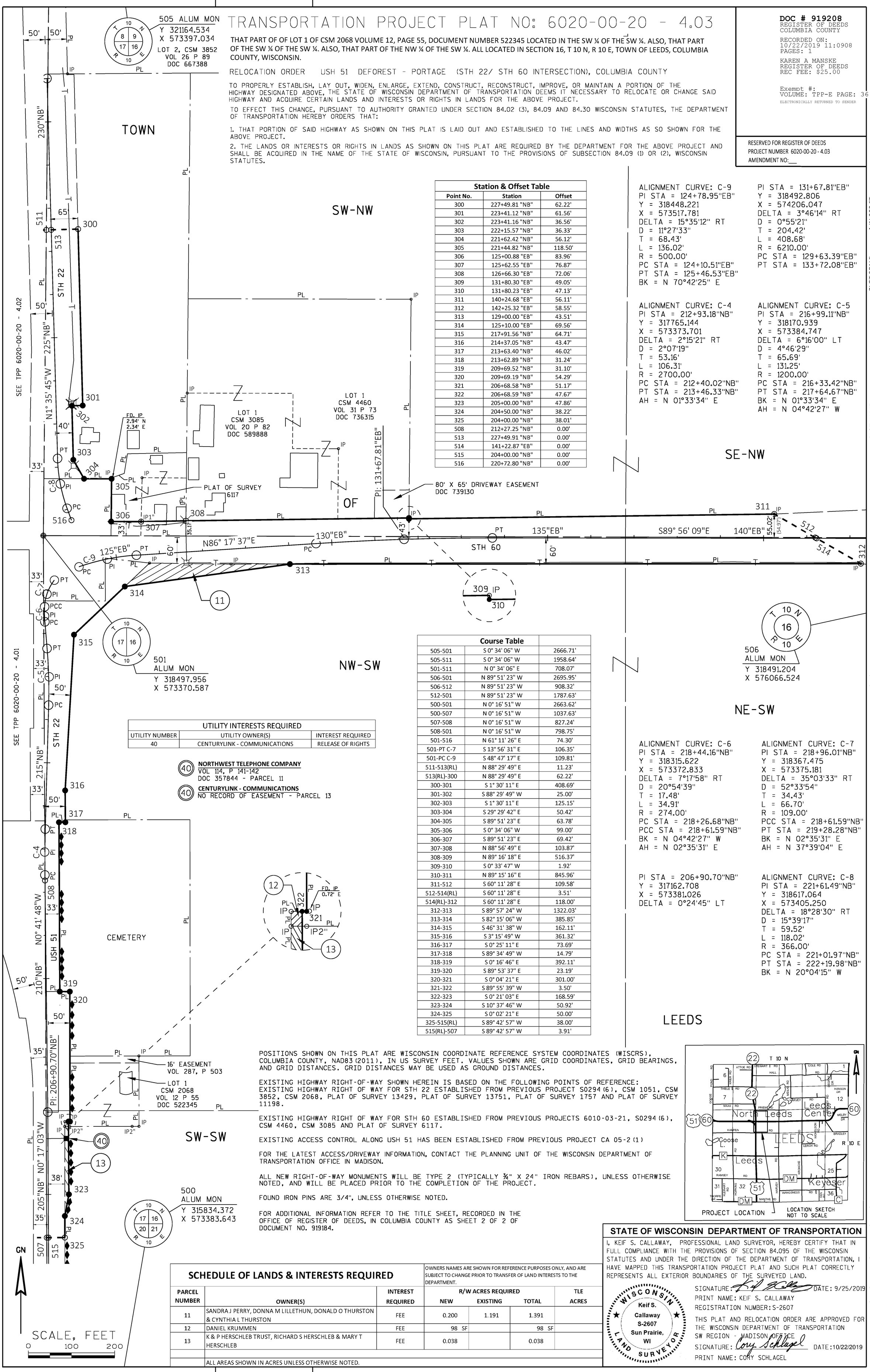
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN 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 LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOC # 919208
REGISTER OF DEEDS
COLUMBIA COUNTY
RECORDED ON:
10/22/2019 11:0908
PAGES: 1
KAREN A MANSKE
REGISTER OF DEEDS
REC FEE: $25.00
Exempt #:
VOLUME: TPP-E PAGE: 36
ELECTRONICALLY RETURNED TO SENDER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-00-20 - 4.03
AMENDMENT NO:___



Station & Offset Table		
Point No.	Station	Offset
300	227+49.81 "NB"	62.22'
301	223+41.12 "NB"	61.56'
302	223+41.16 "NB"	36.56'
303	222+15.57 "NB"	36.33'
304	221+62.42 "NB"	56.12'
305	221+44.82 "NB"	118.50'
306	125+00.88 "EB"	83.96'
307	125+62.55 "EB"	76.87'
308	126+66.30 "EB"	72.06'
309	131+80.30 "EB"	49.05'
310	131+80.23 "EB"	47.13'
311	140+24.68 "EB"	56.11'
312	142+25.32 "EB"	58.55'
313	129+00.00 "EB"	43.51'
314	125+10.00 "EB"	69.56'
315	217+91.56 "NB"	64.71'
316	214+37.05 "NB"	43.47'
317	213+63.40 "NB"	46.02'
318	213+62.89 "NB"	31.24'
319	209+69.52 "NB"	31.10'
320	209+69.19 "NB"	54.29'
321	206+68.58 "NB"	51.17'
322	206+68.59 "NB"	47.67'
323	205+00.00 "NB"	47.86'
324	204+50.00 "NB"	38.22'
325	204+00.00 "NB"	38.01'
508	212+27.25 "NB"	0.00'
513	227+49.91 "NB"	0.00'
514	141+22.87 "EB"	0.00'
515	204+00.00 "NB"	0.00'
516	220+72.80 "NB"	0.00'

Course Table		
505-501	S 0° 34' 06" W	2666.71'
505-511	S 0° 34' 06" W	1958.64'
501-511	N 0° 34' 06" E	708.07'
506-501	N 89° 51' 23" W	2695.95'
506-512	N 89° 51' 23" W	908.32'
512-501	N 89° 51' 23" W	1787.63'
500-501	N 0° 16' 51" W	2663.62'
500-507	N 0° 16' 51" W	1037.63'
507-508	N 0° 16' 51" W	827.24'
508-501	N 0° 16' 51" W	798.75'
501-516	N 61° 11' 26" E	74.30'
501-PT C-7	S 13° 56' 31" E	106.35'
501-PC C-9	S 48° 47' 17" E	109.81'
511-513(RL)	N 88° 29' 49" E	11.23'
513(RL)-300	N 88° 29' 49" E	62.22'
300-301	S 1° 30' 11" E	408.69'
301-302	S 88° 29' 49" W	25.00'
302-303	S 1° 30' 11" E	125.15'
303-304	S 29° 29' 42" E	50.42'
304-305	S 89° 51' 23" E	63.78'
305-306	S 0° 34' 06" W	99.00'
306-307	S 89° 51' 23" E	69.42'
307-308	N 88° 56' 49" E	103.87'
308-309	N 89° 16' 18" E	516.37'
309-310	S 0° 33' 47" W	1.92'
310-311	N 89° 15' 16" E	845.96'
311-512	S 60° 11' 28" E	109.58'
512-514(RL)	S 60° 11' 28" E	3.51'
514(RL)-312	S 60° 11' 28" E	118.00'
312-313	S 89° 57' 24" W	1322.03'
313-314	S 82° 15' 06" W	385.85'
314-315	S 46° 31' 38" W	162.11'
315-316	S 3° 15' 49" W	361.32'
316-317	S 0° 25' 11" E	73.69'
317-318	S 89° 34' 49" W	14.79'
318-319	S 0° 16' 46" E	392.11'
319-320	S 89° 53' 37" E	23.19'
320-321	S 0° 04' 21" E	301.00'
321-322	S 89° 55' 39" W	3.50'
322-323	S 0° 21' 03" E	168.59'
323-324	S 10° 37' 46" W	50.92'
324-325	S 0° 02' 21" E	50.00'
325-515(RL)	S 89° 42' 57" W	38.00'
515(RL)-507	S 89° 42' 57" W	3.91'

ALIGNMENT CURVE: C-9
PI STA = 124+78.95"EB"
Y = 318448.221
X = 573517.781
DELTA = 15°35'12" RT
D = 11°27'33"
T = 68.43'
L = 136.02'
R = 500.00'
PC STA = 124+10.51"EB"
PT STA = 125+46.53"EB"
BK = N 70°42'25" E

PI STA = 131+67.81"EB"
Y = 318492.806
X = 574206.047
DELTA = 3°46'14" RT
D = 0°55'21"
T = 204.42'
L = 408.68'
R = 6210.00'
PC STA = 129+63.39"EB"
PT STA = 133+72.08"EB"

ALIGNMENT CURVE: C-4
PI STA = 212+93.18"NB"
Y = 317765.144
X = 573373.701
DELTA = 2°15'21" RT
D = 2°07'19"
T = 53.16'
L = 106.31'
R = 2700.00'
PC STA = 212+40.02"NB"
PT STA = 213+46.33"NB"
AH = N 01°33'34" E

ALIGNMENT CURVE: C-5
PI STA = 216+99.11"NB"
Y = 318170.939
X = 573384.747
DELTA = 6°16'00" LT
D = 4°46'29"
T = 65.69'
L = 131.25'
R = 1200.00'
PC STA = 216+33.42"NB"
PT STA = 217+64.67"NB"
BK = N 01°33'34" E
AH = N 04°42'27" W

ALIGNMENT CURVE: C-6
PI STA = 218+44.16"NB"
Y = 318315.622
X = 573372.833
DELTA = 7°17'58" RT
D = 20°54'39"
T = 17.48'
L = 34.91'
R = 274.00'
PC STA = 218+26.68"NB"
PCC STA = 218+61.59"NB"
BK = N 04°42'27" W
AH = N 02°35'31" E

ALIGNMENT CURVE: C-7
PI STA = 218+96.01"NB"
Y = 318367.475
X = 573375.181
DELTA = 35°03'33" RT
D = 52°33'54"
T = 34.43'
L = 66.70'
R = 109.00'
PCC STA = 218+61.59"NB"
PT STA = 219+28.28"NB"
BK = N 02°35'31" E
AH = N 37°39'04" E

PI STA = 206+90.70"NB"
Y = 317162.708
X = 573381.026
DELTA = 0°24'45" LT

ALIGNMENT CURVE: C-8
PI STA = 221+61.49"NB"
Y = 318617.064
X = 573405.250
DELTA = 18°28'30" RT
D = 15°39'17"
T = 59.52'
L = 118.02'
R = 366.00'
PC STA = 221+01.97"NB"
PT STA = 222+19.98"NB"
BK = N 20°04'15" W

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
40	CENTURYLINK - COMMUNICATIONS	RELEASE OF RIGHTS

(40) **NORTHWEST TELEPHONE COMPANY**
VOL 114, P 141-142
DOC 357844 - PARCEL 11

(40) **CENTURYLINK - COMMUNICATIONS**
NO RECORD OF EASEMENT - PARCEL 13

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT OF WAY FOR STH 22 ESTABLISHED FROM PREVIOUS PROJECT S0294(6), CSM 1051, CSM 3852, CSM 2068, PLAT OF SURVEY 13429, PLAT OF SURVEY 13751, PLAT OF SURVEY 1757 AND PLAT OF SURVEY 11198.

EXISTING HIGHWAY RIGHT OF WAY FOR STH 60 ESTABLISHED FROM PREVIOUS PROJECTS 6010-03-21, S0294(6), CSM 4460, CSM 3085 AND PLAT OF SURVEY 6117.

EXISTING ACCESS CONTROL ALONG USH 51 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT CA 05-2(1)

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

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.

FOUND IRON PINS ARE 3/4", UNLESS OTHERWISE NOTED.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN COLUMBIA COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 919184.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
11	SANDRA J PERRY, DONNA M LILLETHUN, DONALD O THURSTON & CYNTHIA L THURSTON	FEE	0.200	1.191	1.391	
12	DANIEL KRUMMEN	FEE	98 SF		98 SF	
13	K & P HERSCHLEB TRUST, RICHARD S HERSCHLEB & MARY T HERSCHLEB	FEE	0.038		0.038	
	ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED.					

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

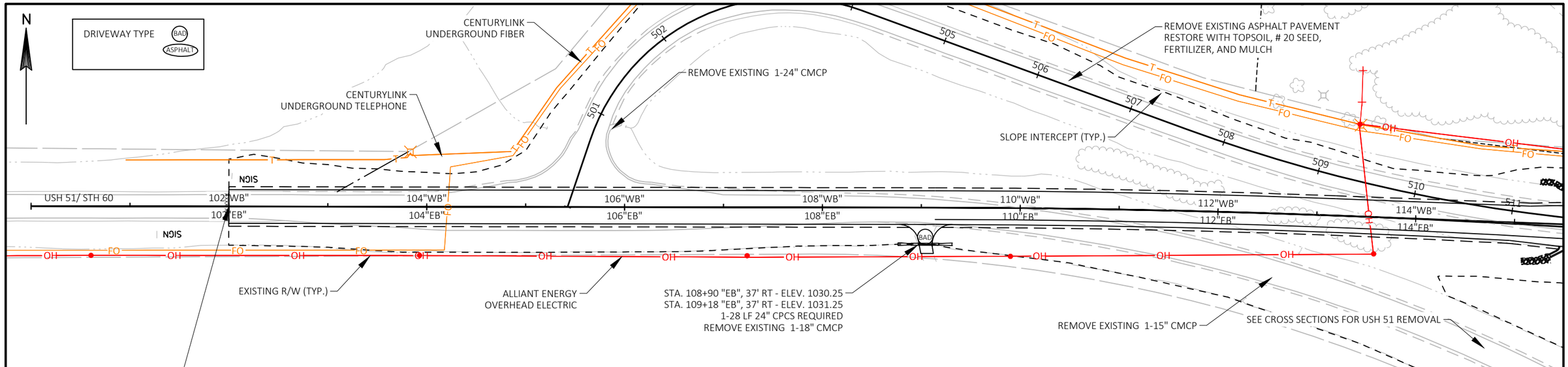
I, KEIF S. CALLAWAY, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR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

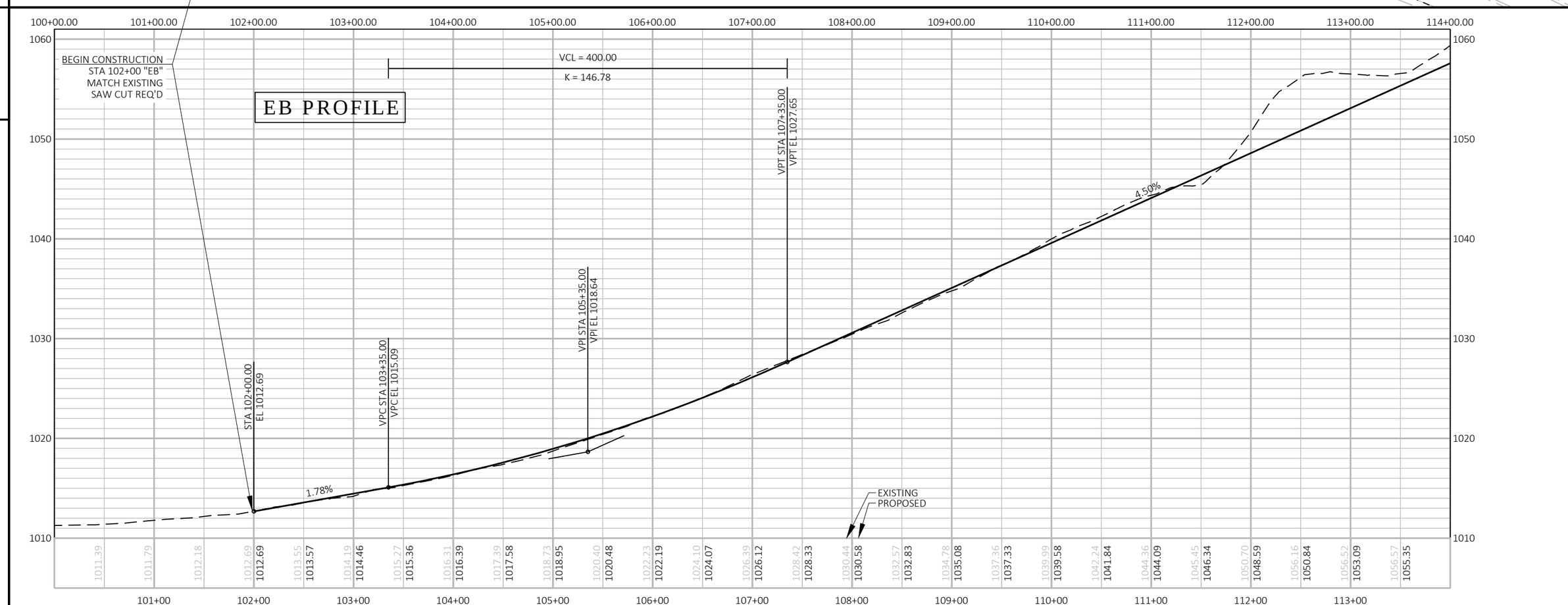
WISCONSIN Keif S. Callaway S-2607 Sun Prairie, WI LAND SURVEYOR

SIGNATURE: Keif S. Callaway DATE: 9/25/2019
PRINT NAME: KEIF S. CALLAWAY
REGISTRATION NUMBER: S-2607

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SW REGION - MADISON OFFICE
SIGNATURE: Cory Schlagel DATE: 10/22/2019
PRINT NAME: CORY SCHLAGEL

6020-00-20 4.03
1 IN:200 FT
PLOT SCALE :
PLOT NAME :
CALLAWAY, KEIF S
PLOT BY :
10/22/2019 9:29 AM
PLOT DATE :
PLOT DATE :
FILE NAME : N:\PDS\RW-PLAT\6020000\DWG\040403.DWG
APPRAISAL PLAT DATE : 9/25/2019





PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EB PLAN & PROFILE	SHEET	E

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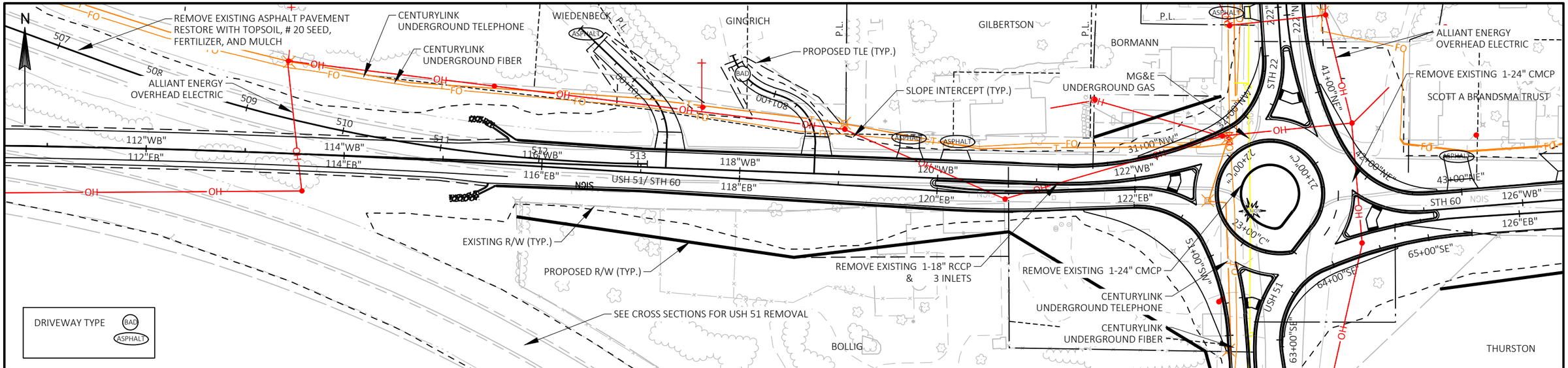
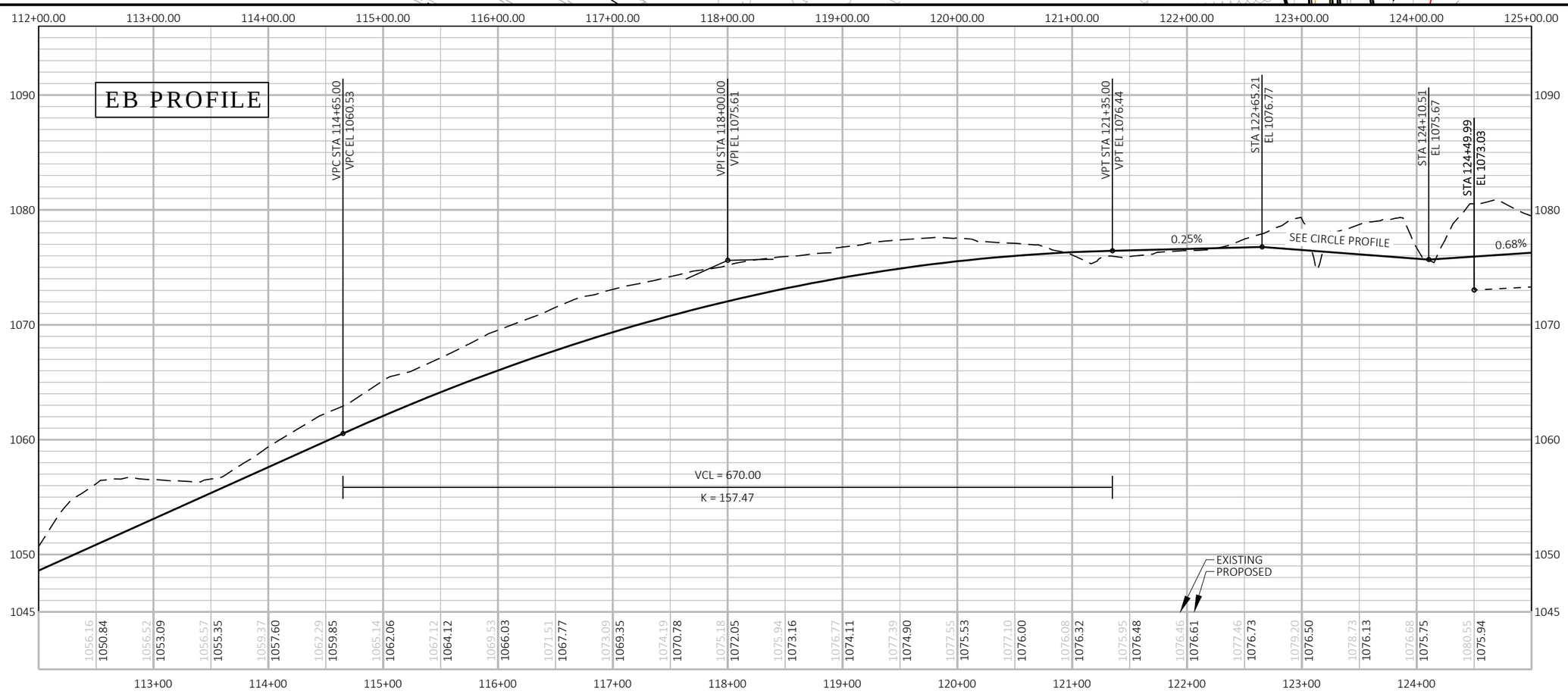
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT





PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EB PLAN & PROFILE	SHEET	E

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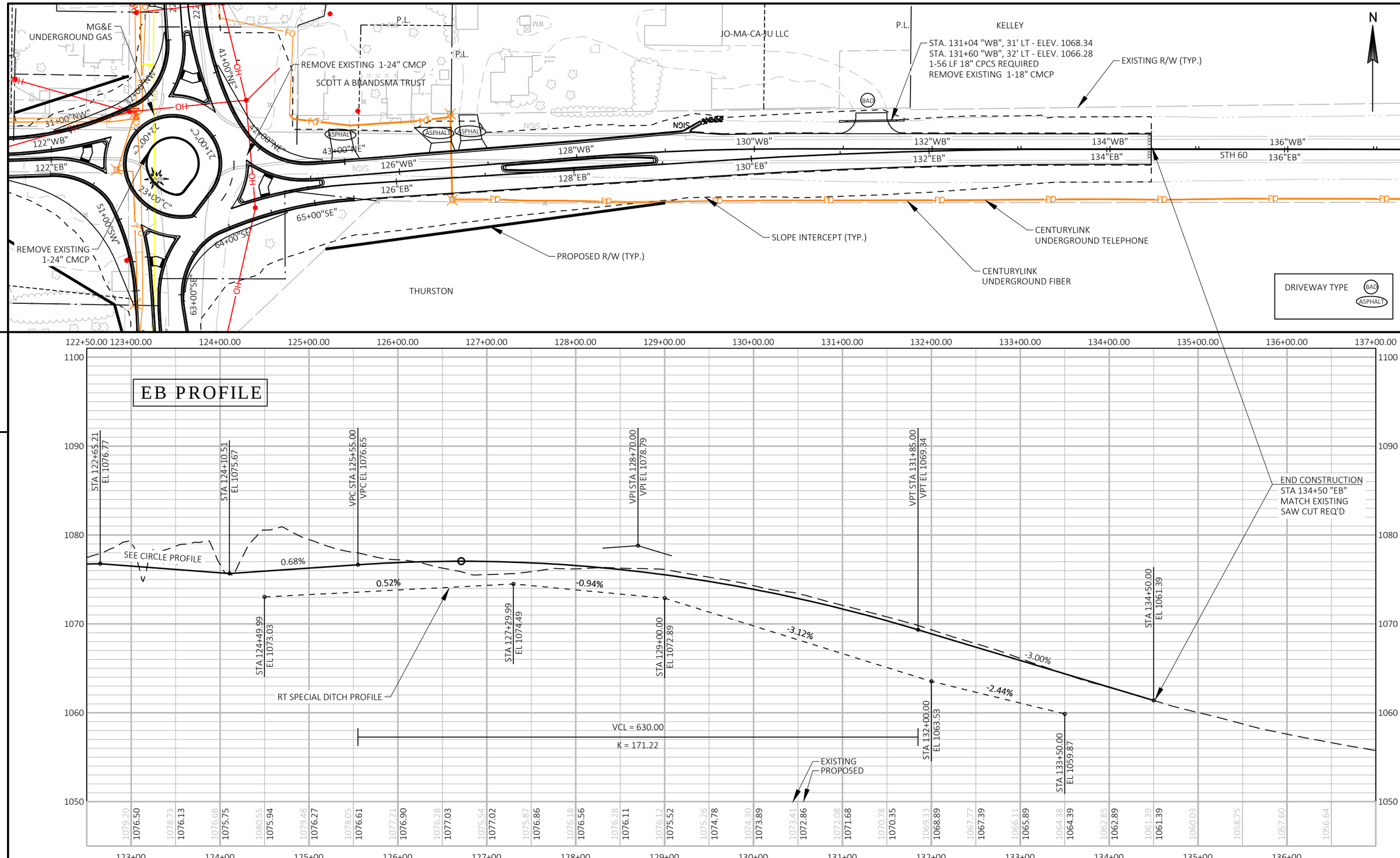

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	EB PLAN & PROFILE	SHEET	E

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PLOT DATE : 2/19/2020 6:49 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
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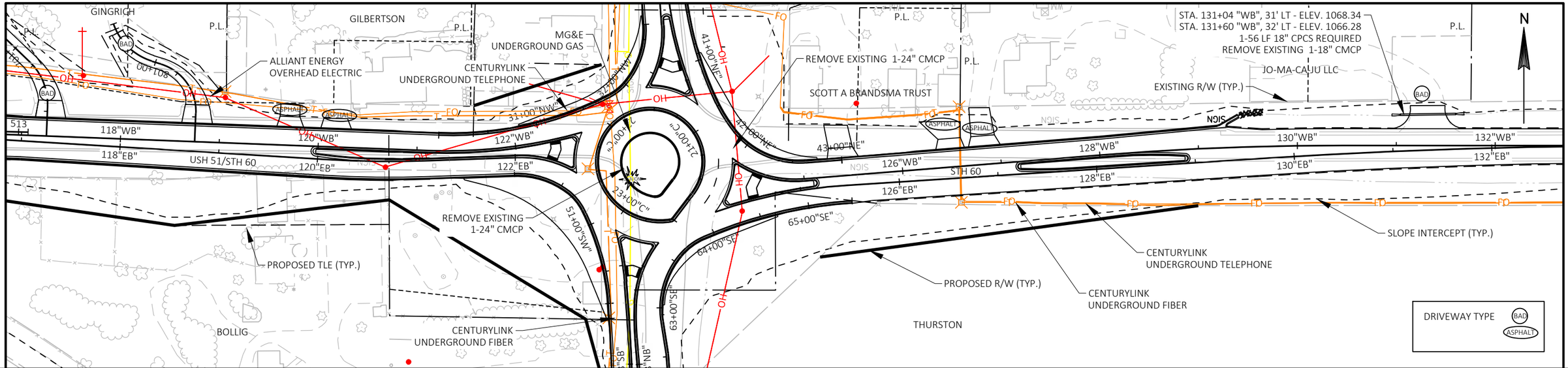

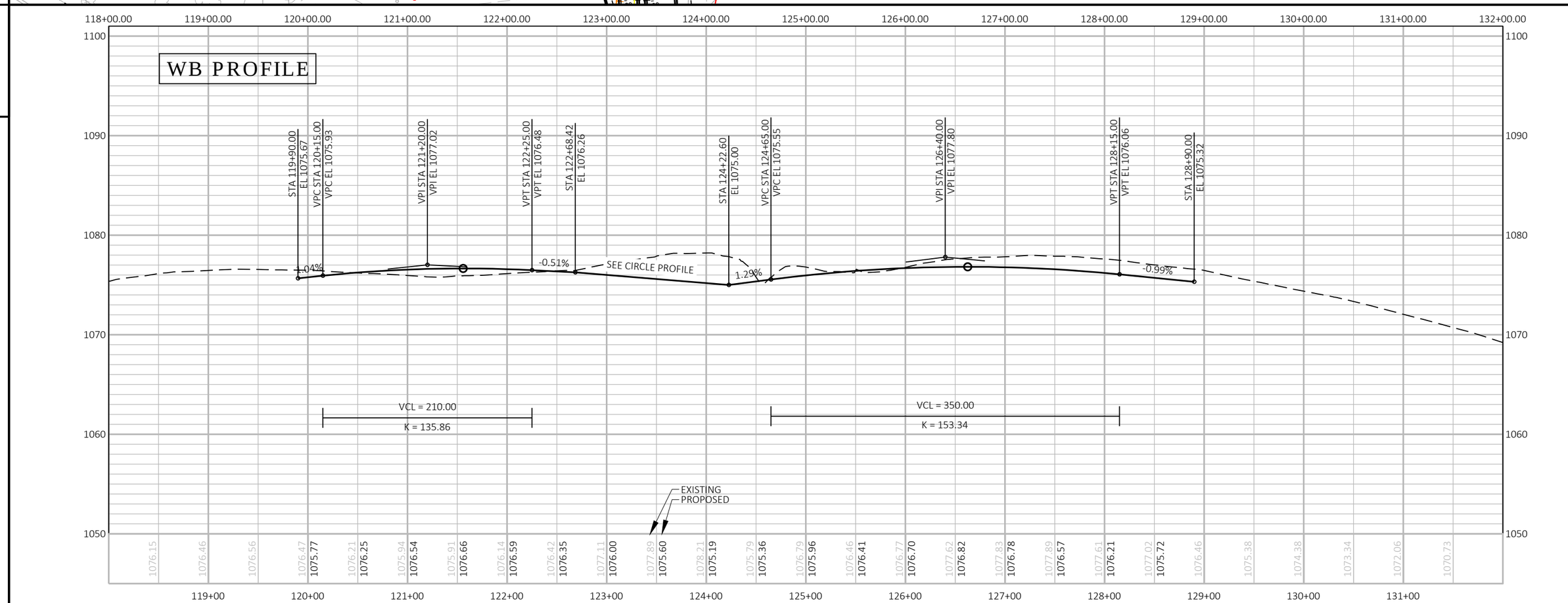

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PLOT NAME :
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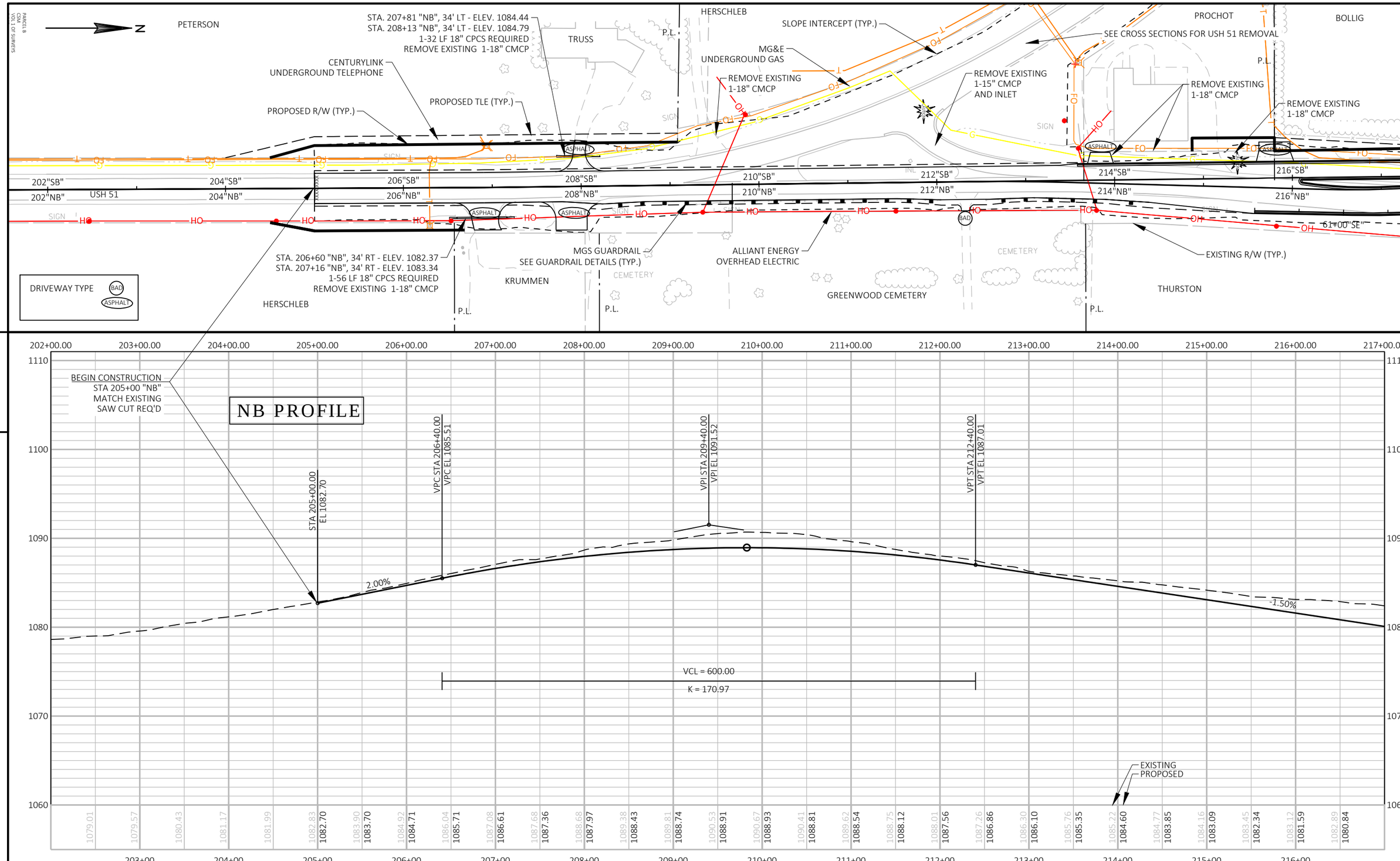

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PLOT NAME :
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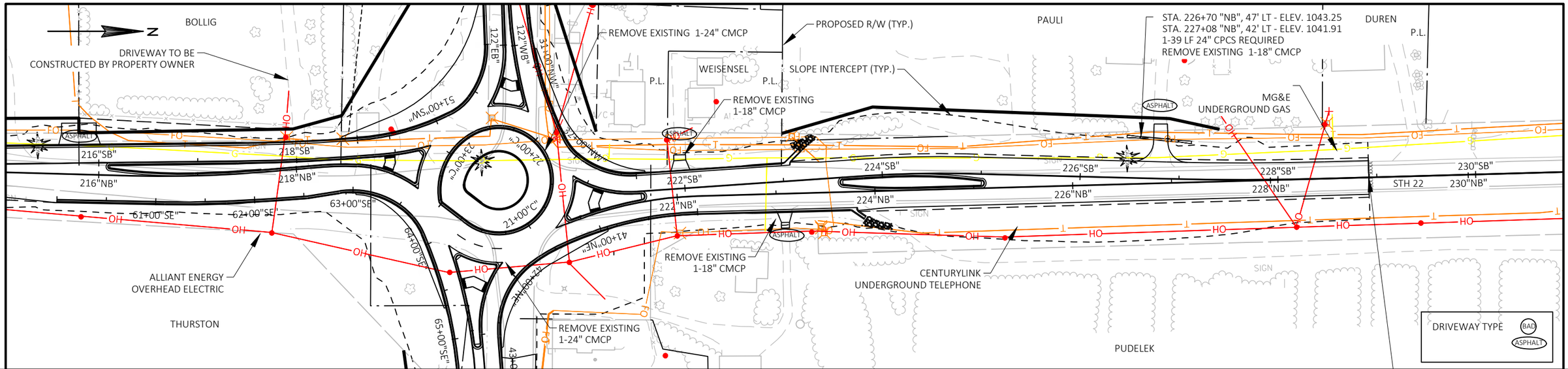

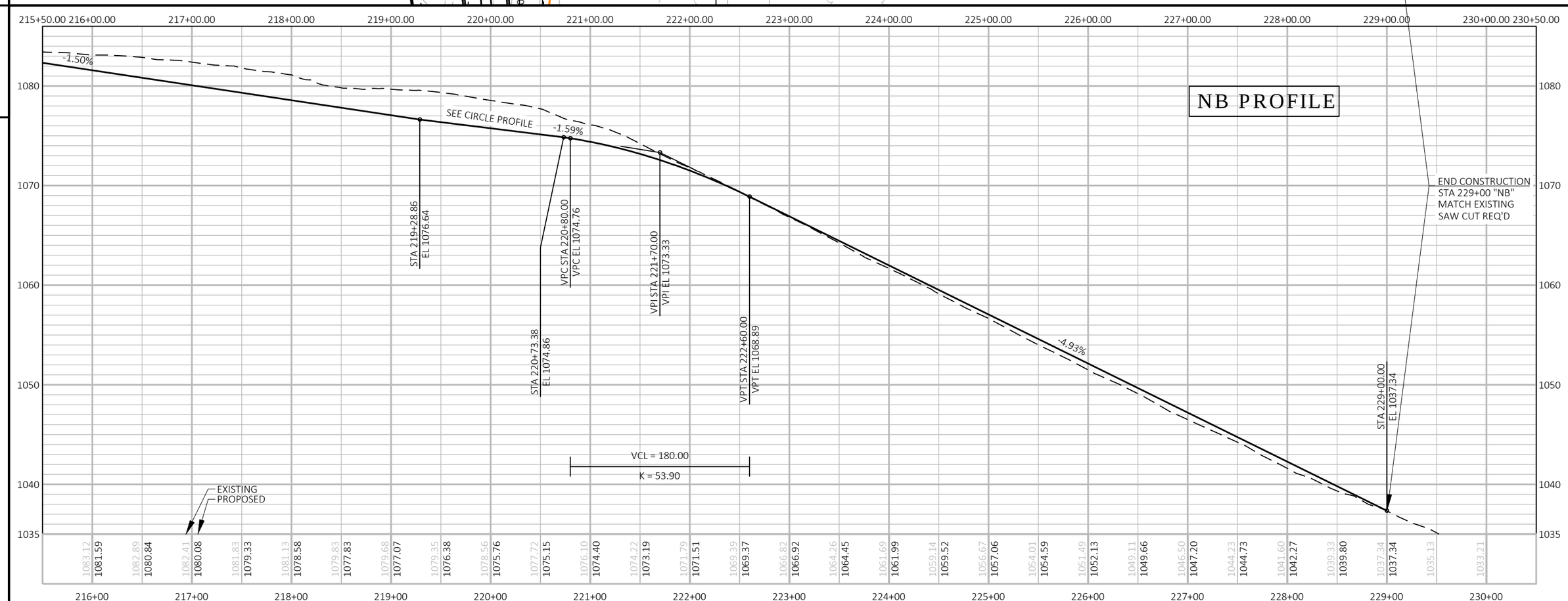

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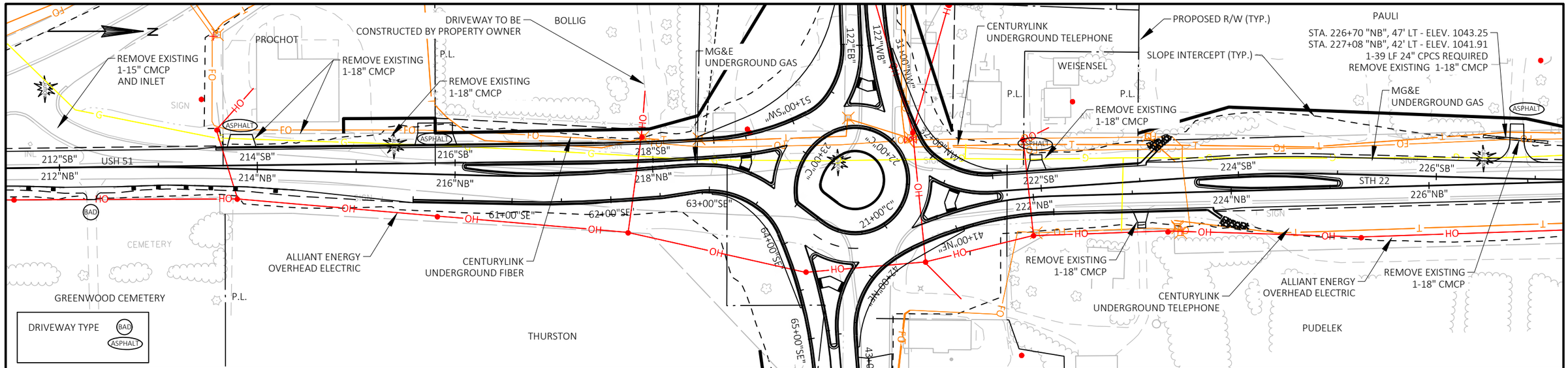

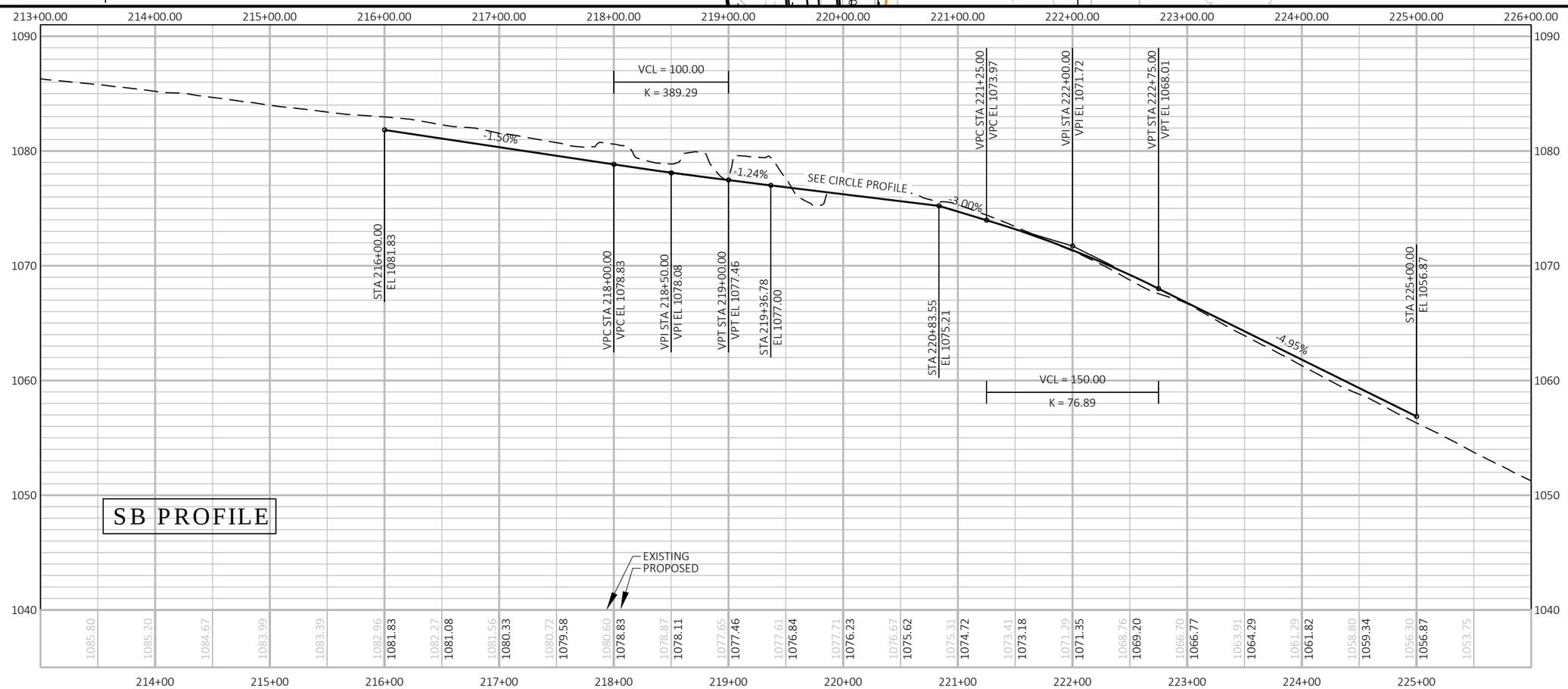

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	SB PLAN & PROFILE	SHEET	E

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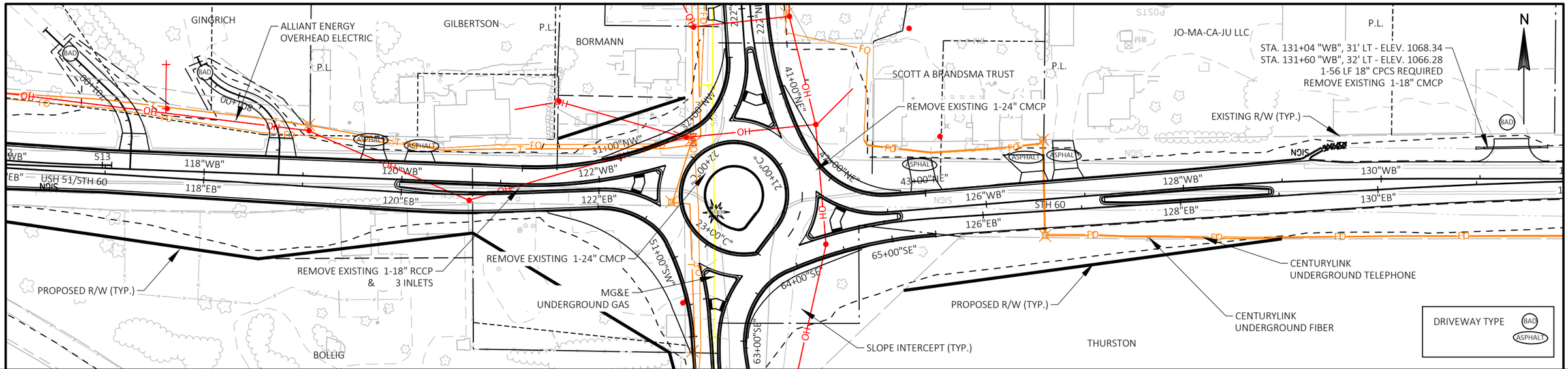

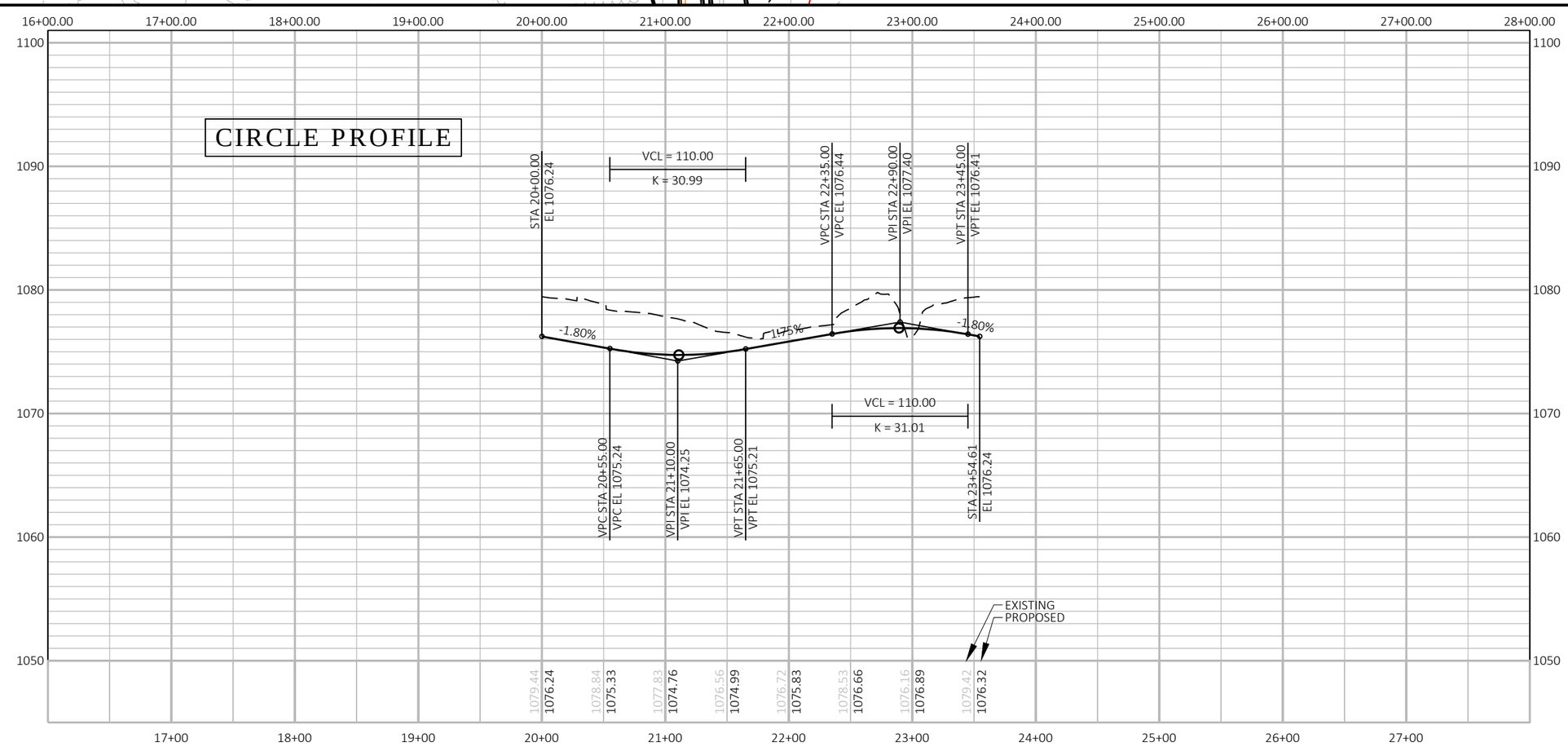

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LAYOUT NAME - PLAN & PROFILE CIRCLE
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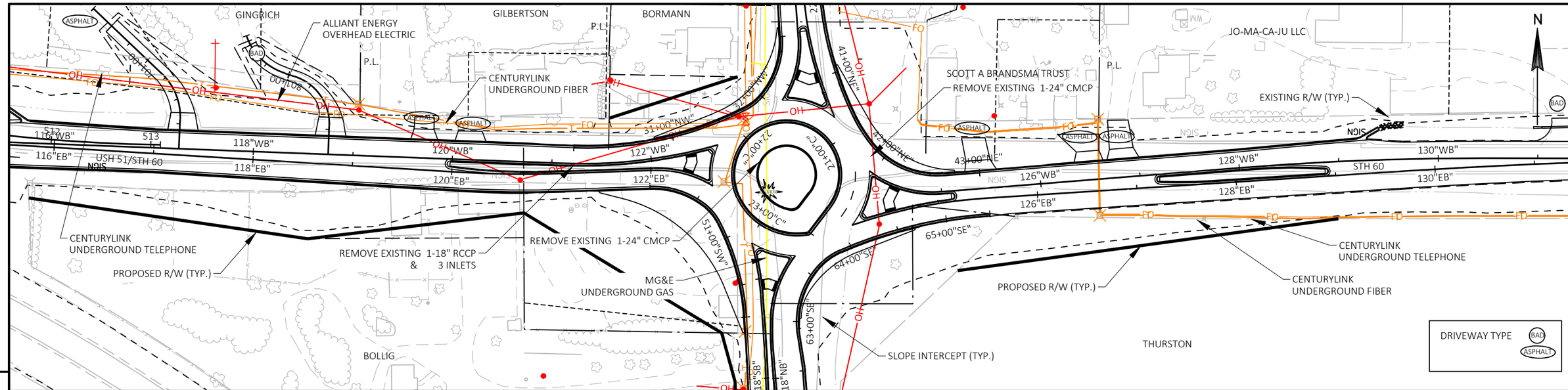

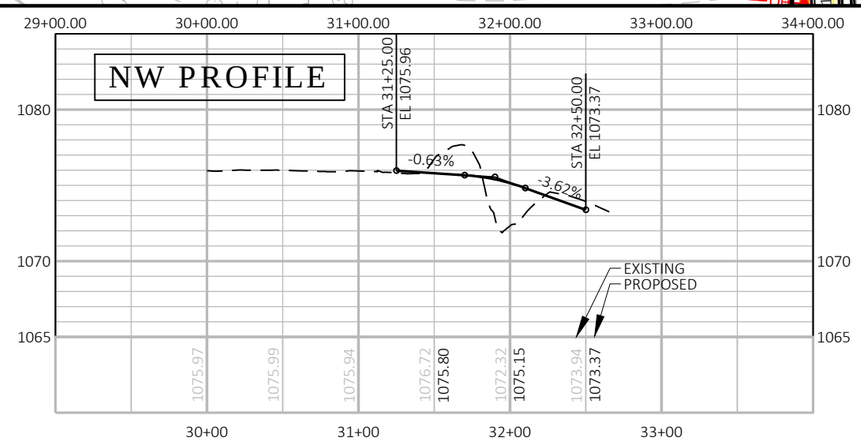

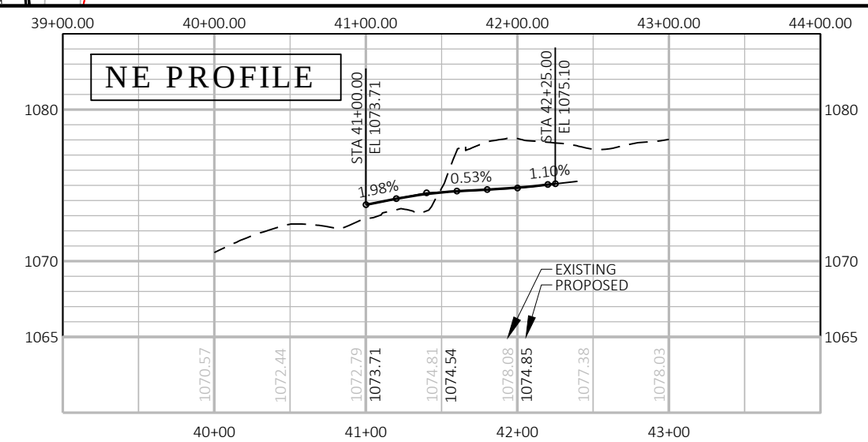

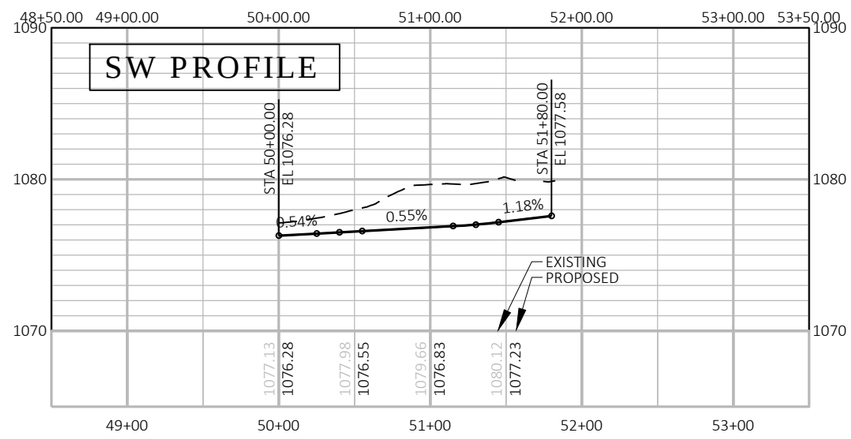

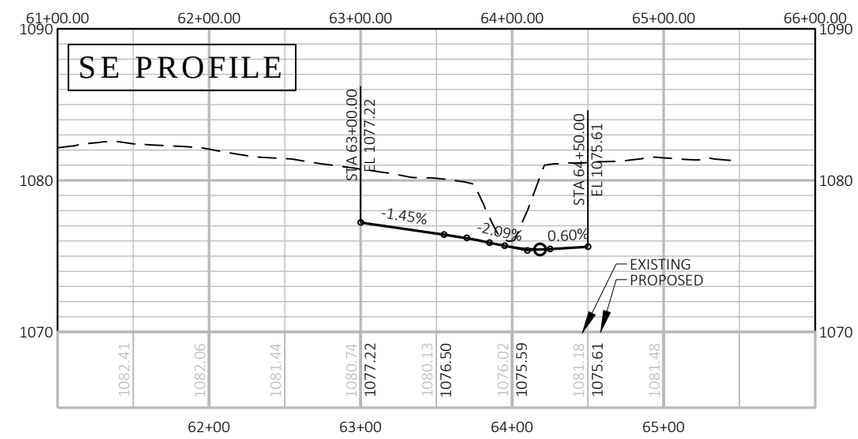

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CURB PLAN & PROFILE	SHEET	E

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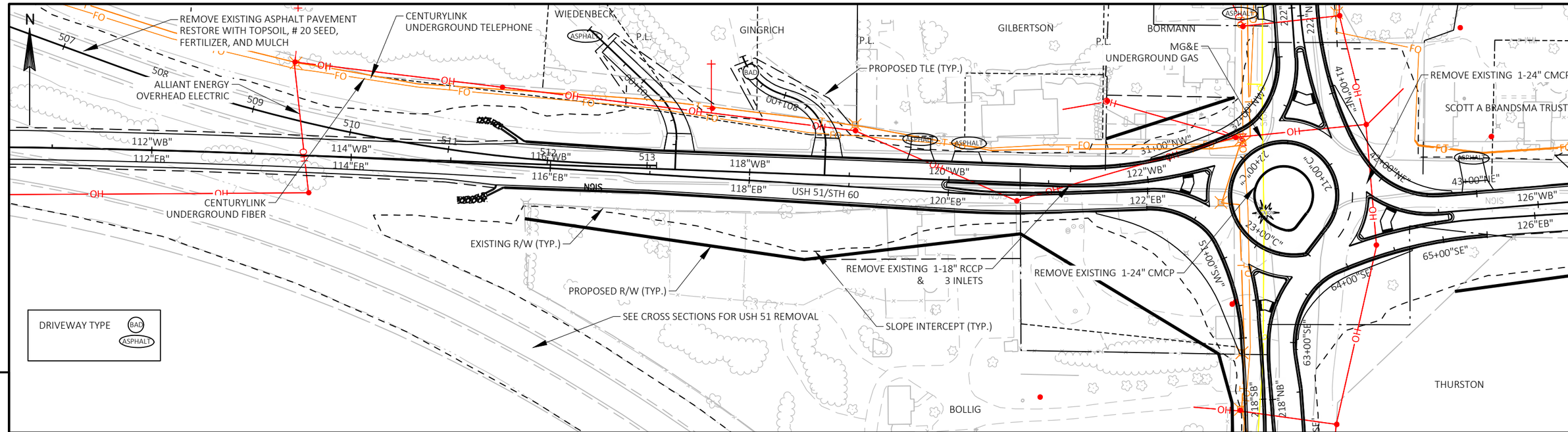
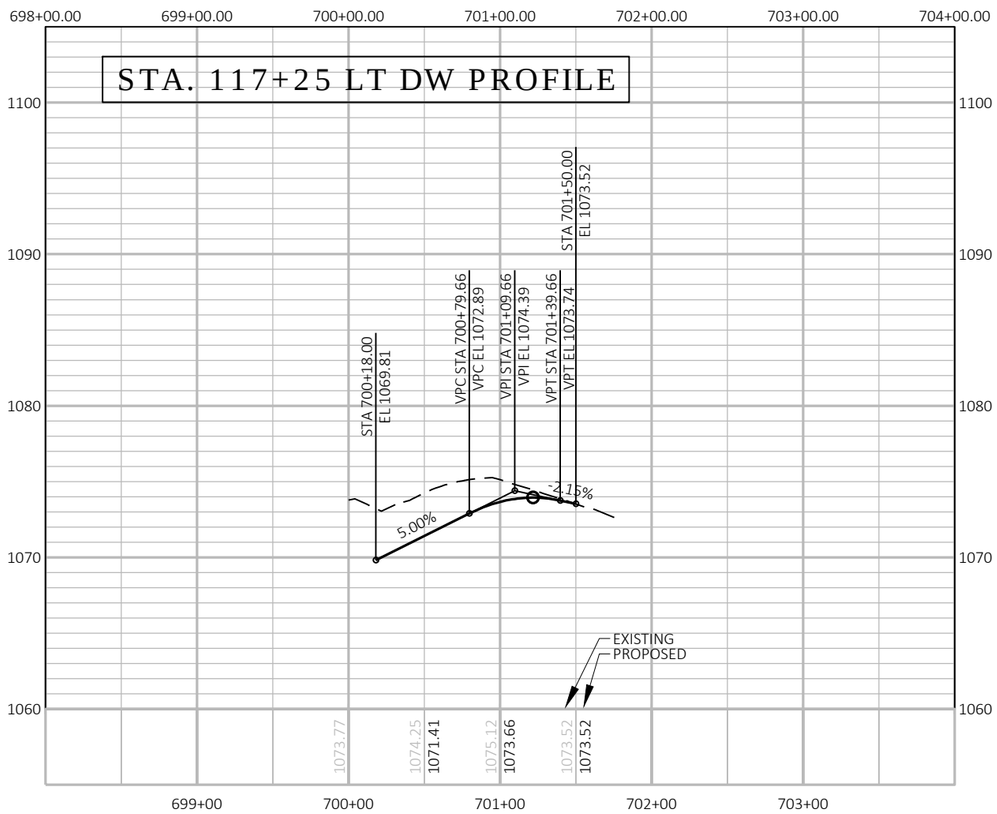
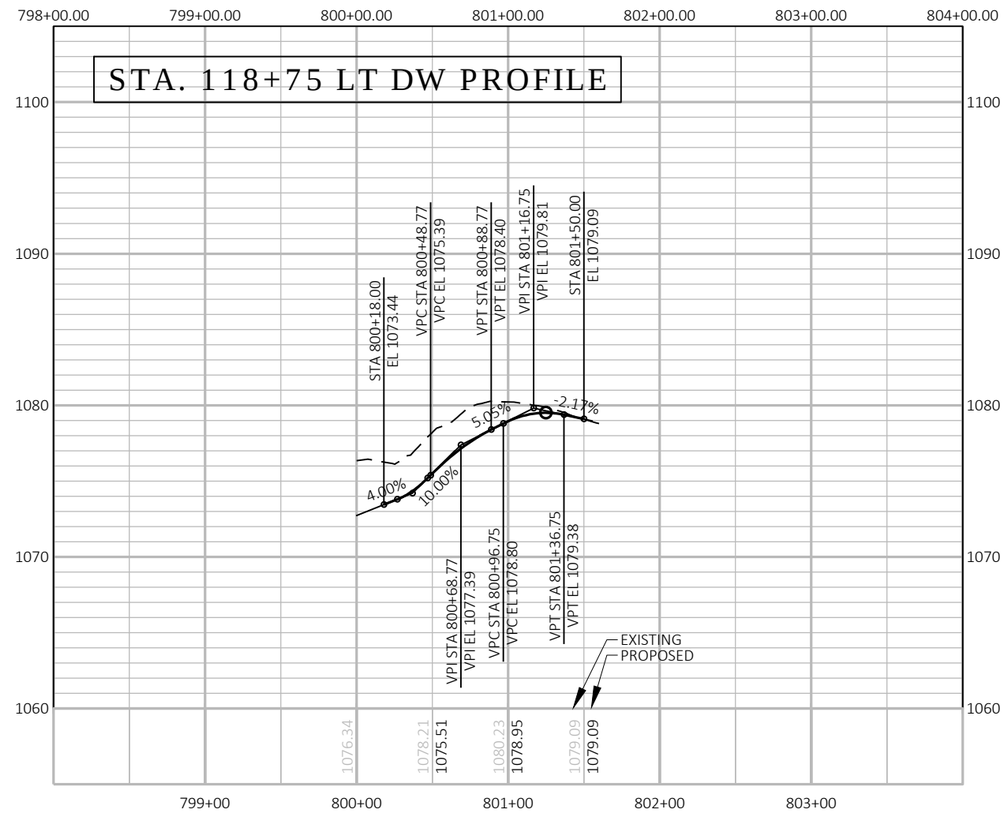
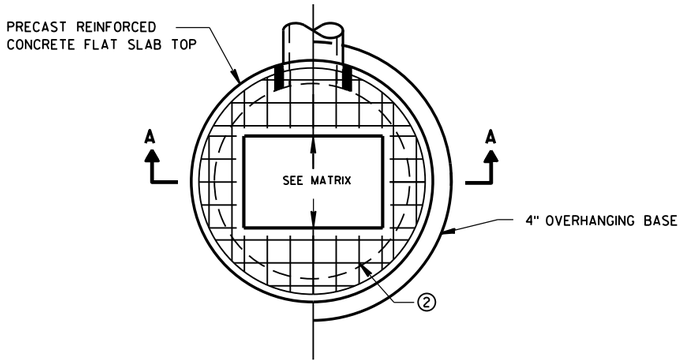




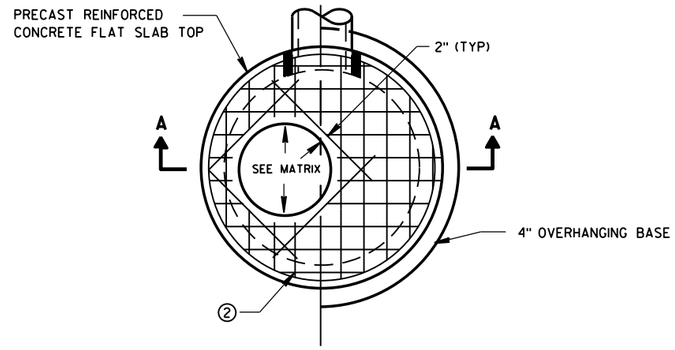


PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	DRIVEWAY PLAN & PROFILE	SHEET	E

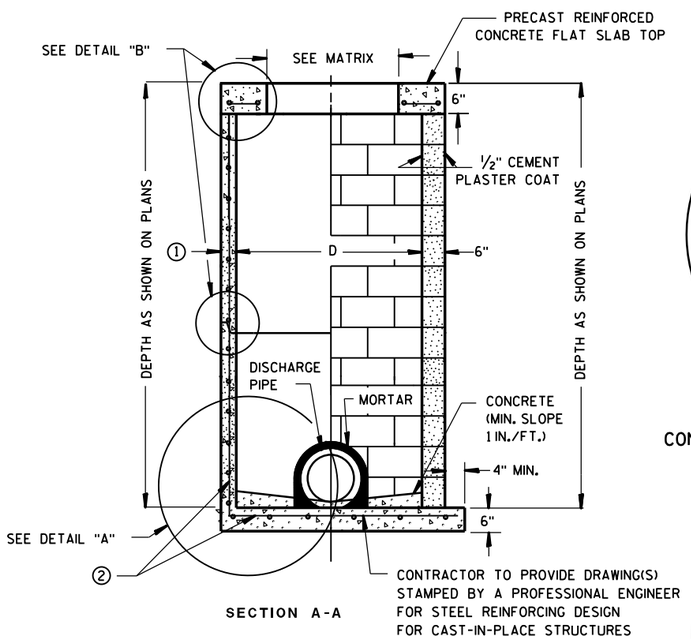
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - PLAN & PROFILE DRIVEWAYS
PLOT DATE : 2/19/2020 6:51 AM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

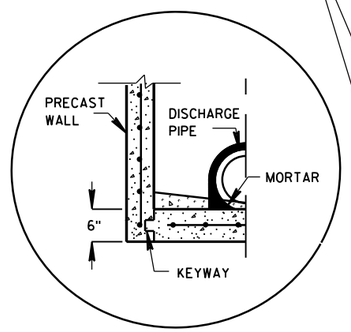


SECTION A-A

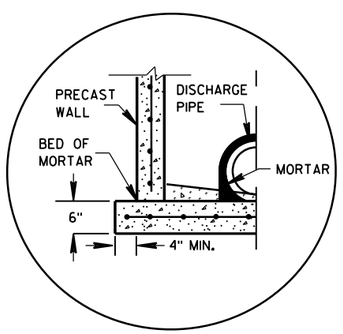
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

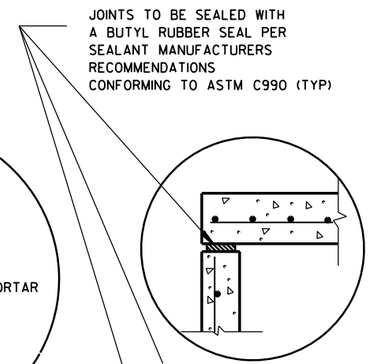


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

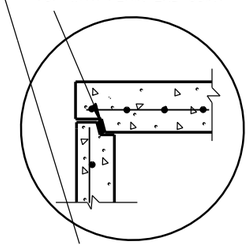


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

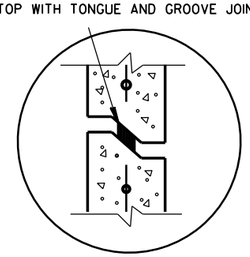
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

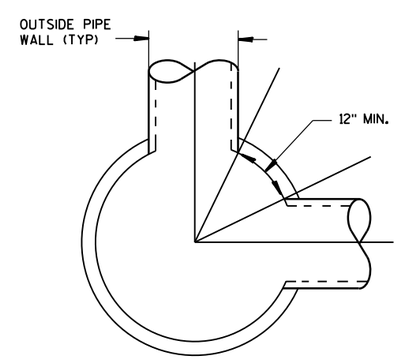
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

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

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

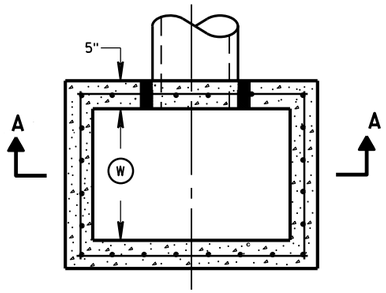
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

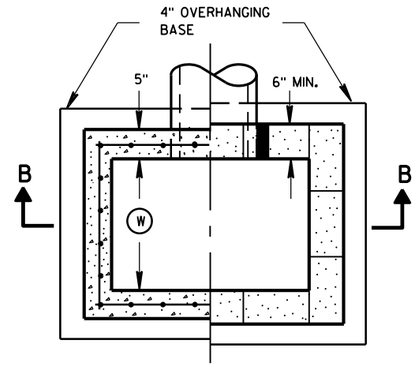
INLETS 3-FT
AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

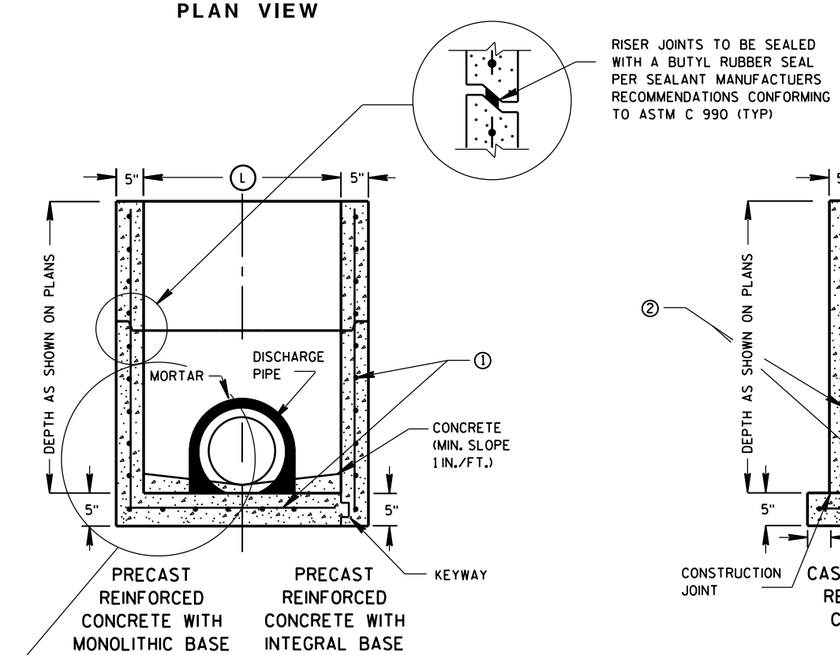
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



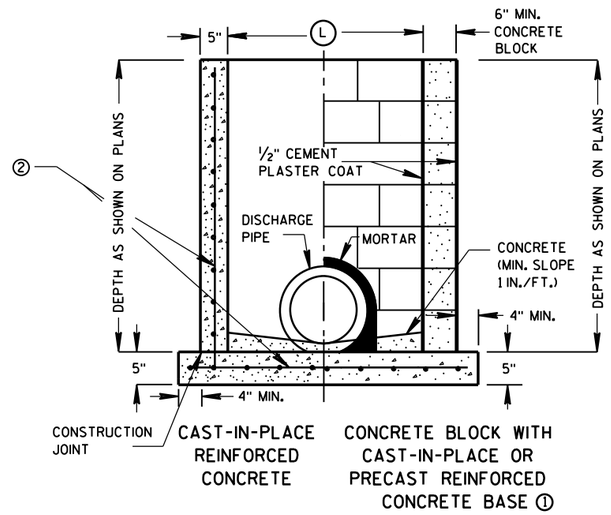
PLAN VIEW



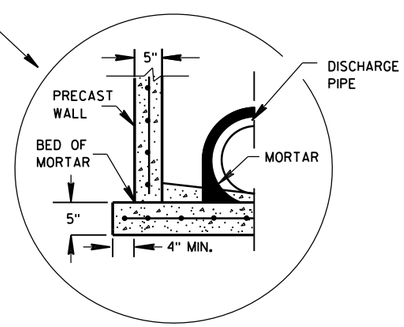
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

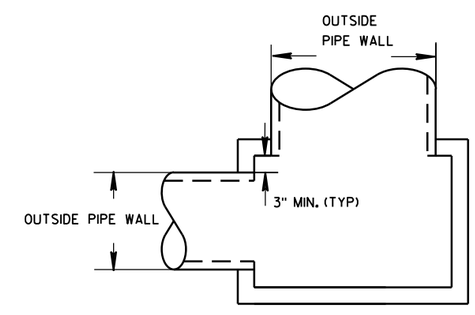
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



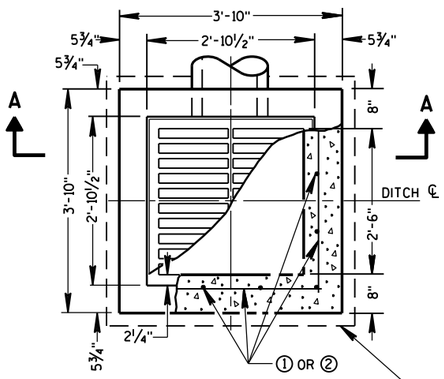
DETAIL "A"

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

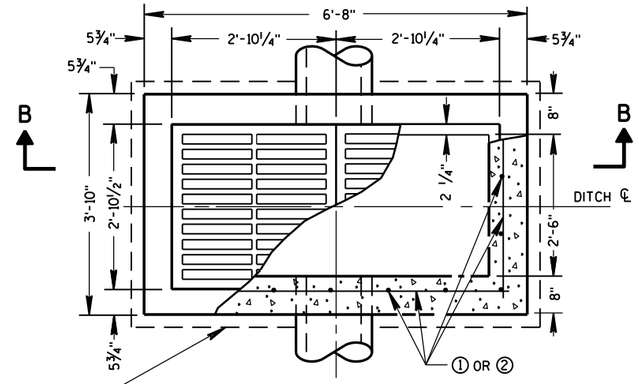
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

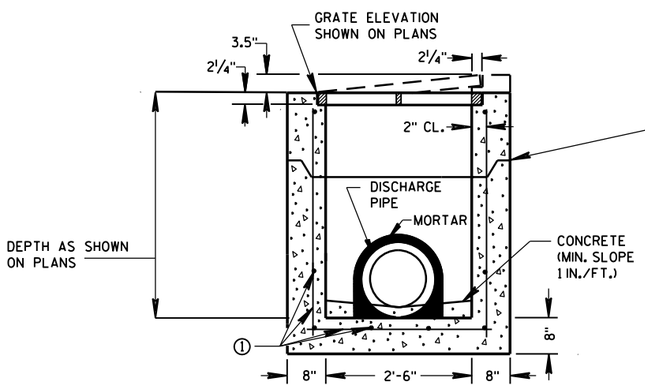


PLAN VIEW

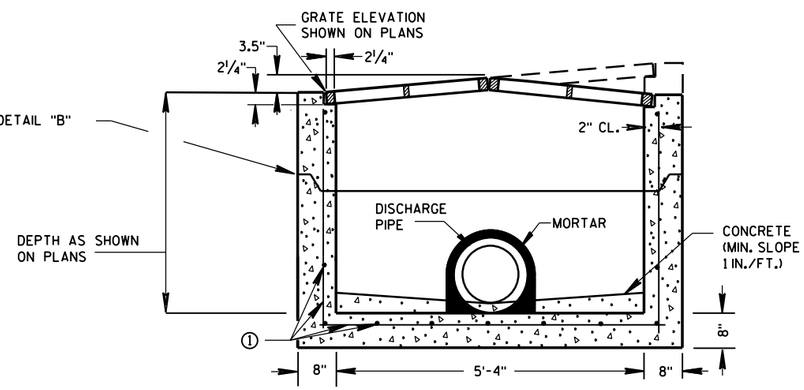


PLAN VIEW

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



PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B

GENERAL NOTES

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

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

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

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

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

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

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

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

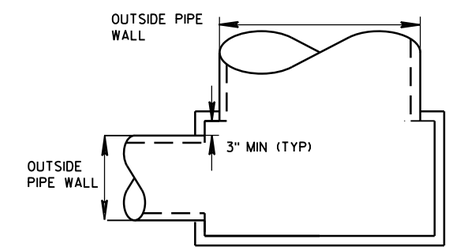
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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

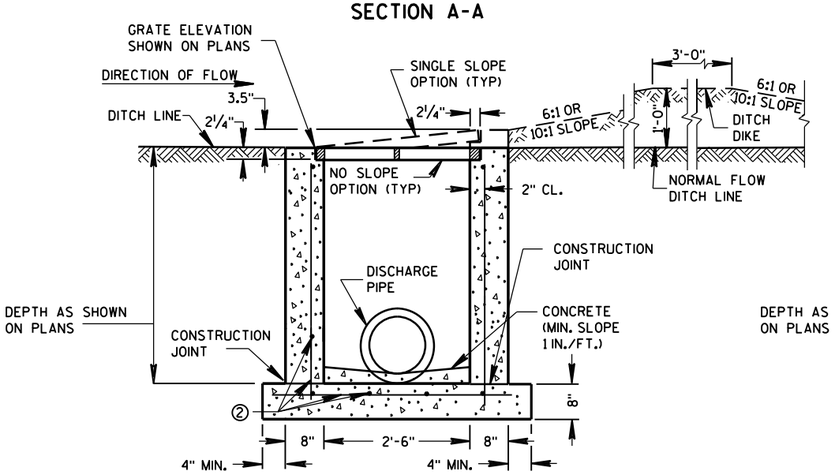
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

PIPE MATRIX

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

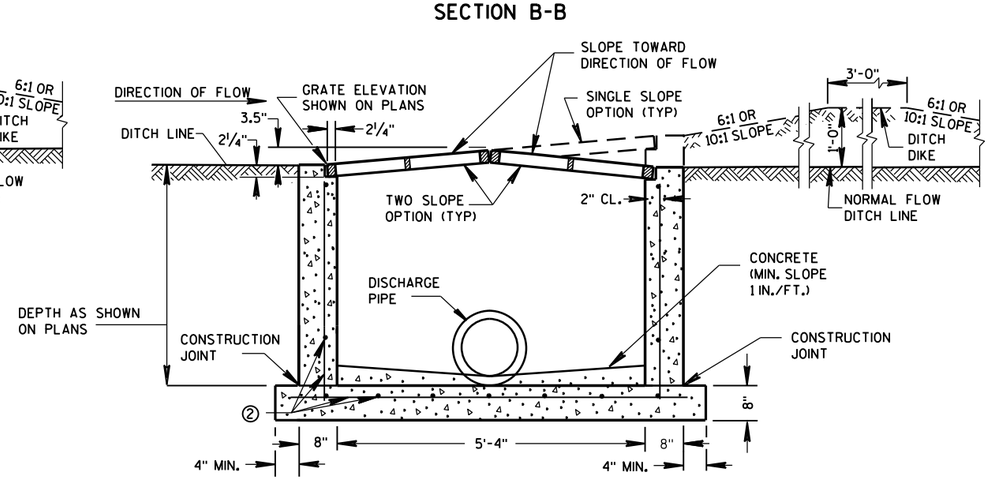


DETAIL "A"



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A

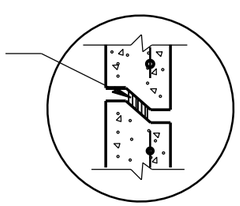
INLETS MEDIAN 1 GRATE



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 2 GRATE

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



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

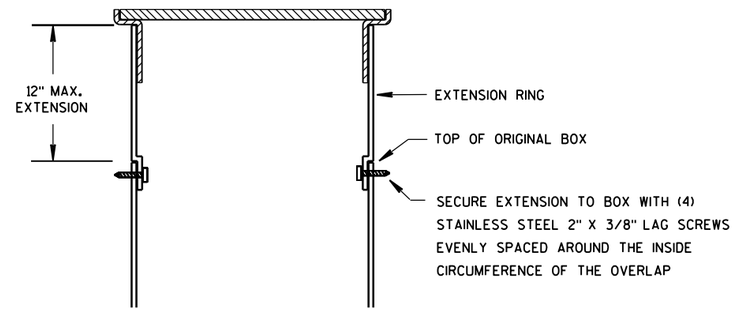
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

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

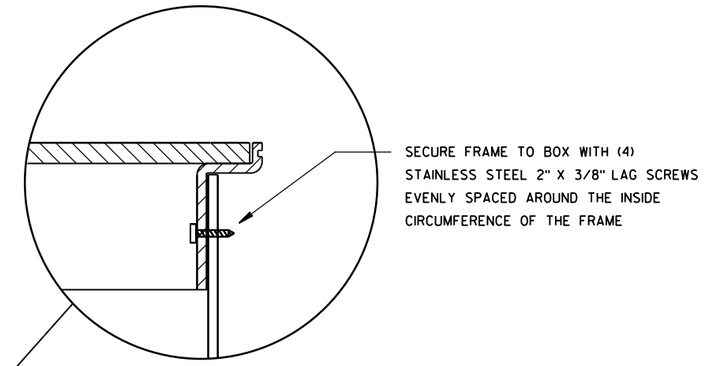
* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

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

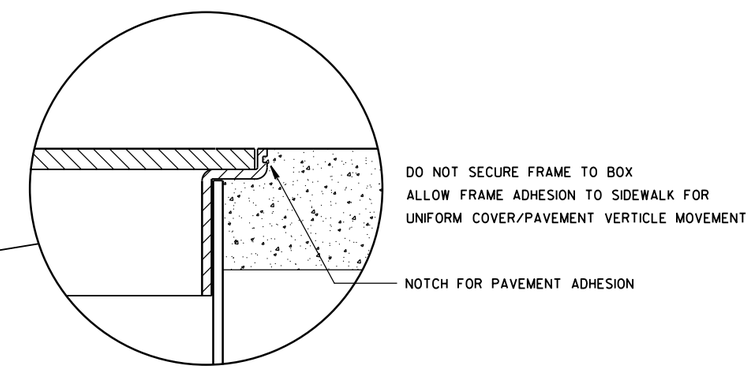


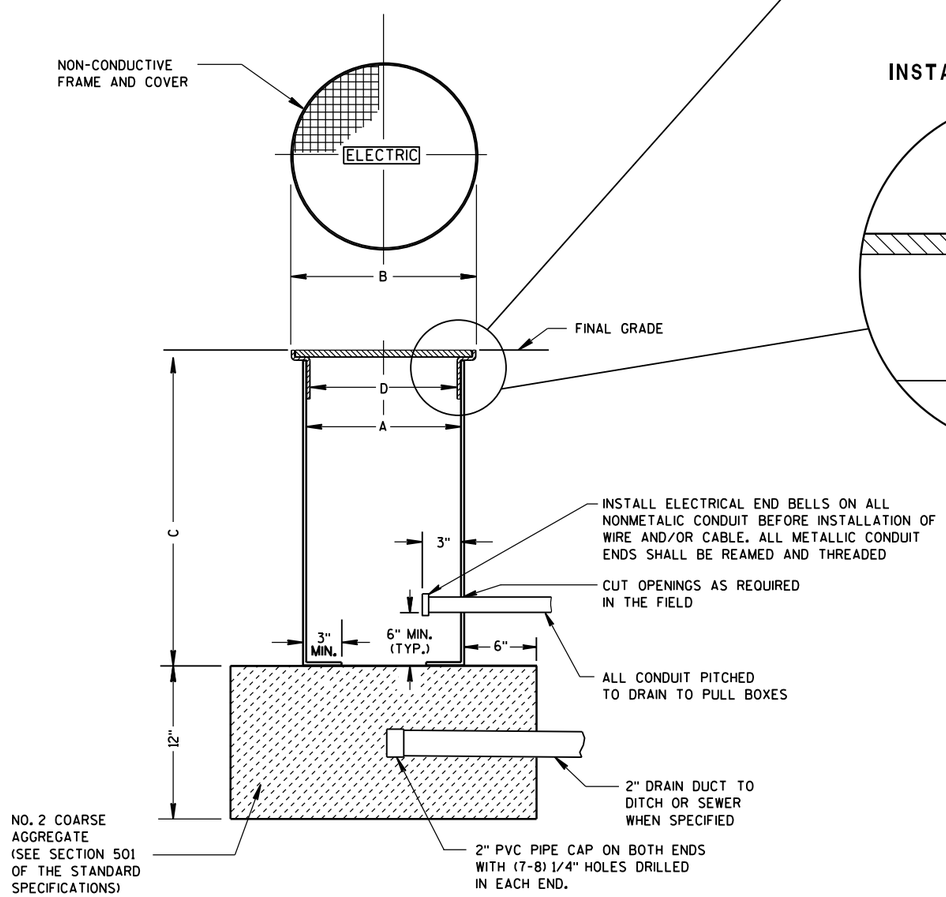
BOX EXTENSION

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK





NON-CONDUCTIVE PULL BOX

GENERAL NOTES

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

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

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

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

COVER SHALL BE MAGNETICALLY LOCATABLE.

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

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

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

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

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

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

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

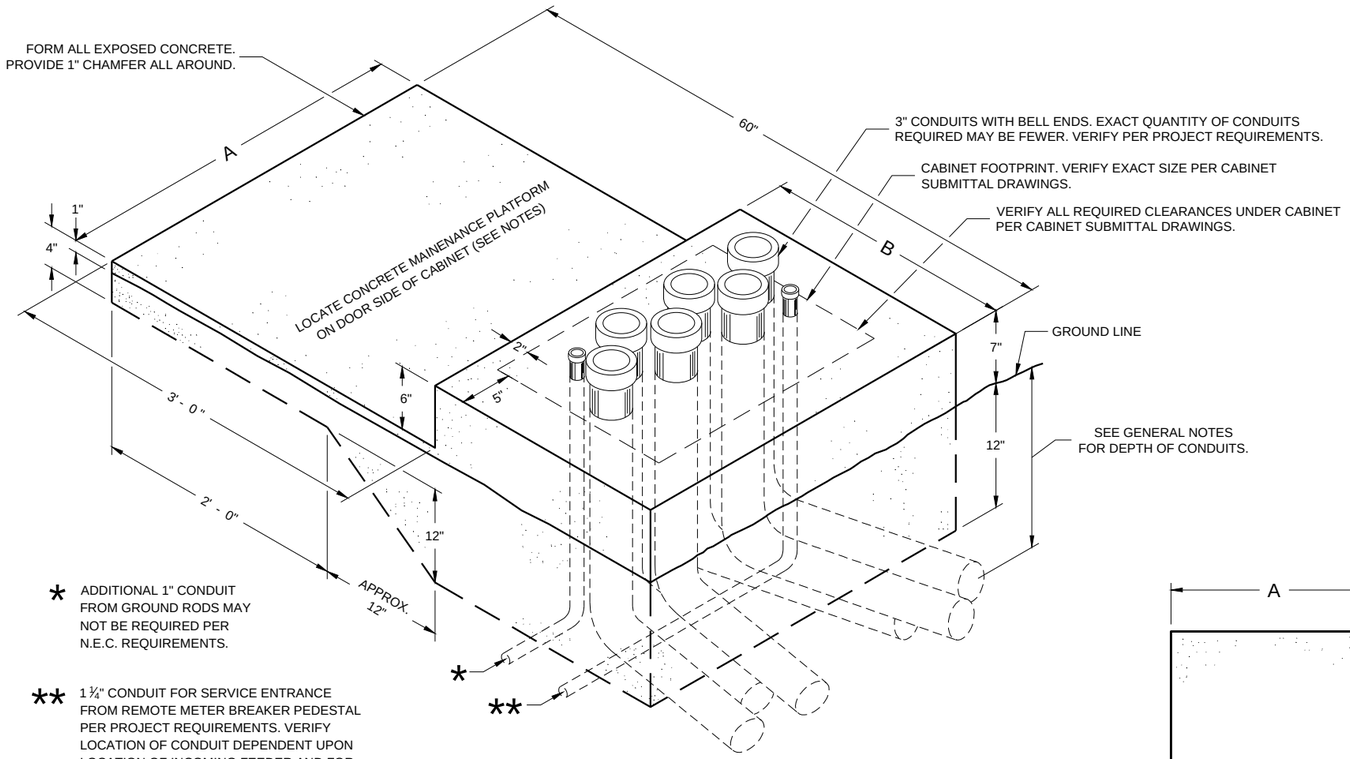
PULL BOX
NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 9 B 16-1

SDD 09C14 Concrete Control Base, Type-L



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

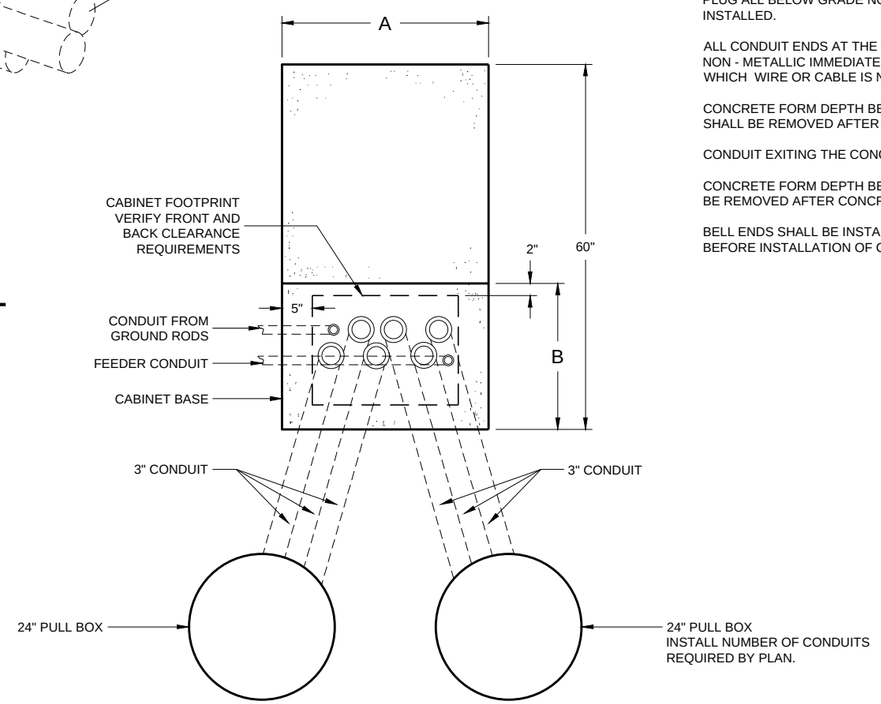
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

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

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

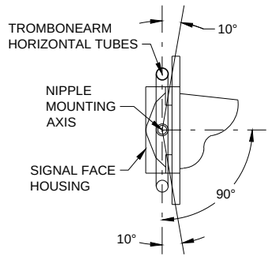
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

6

SDD 09C14 - 03

SDD 09E01-a Pole Mountings for Traffic Signals, Type 2

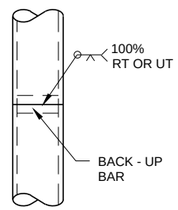


SECTION A-A

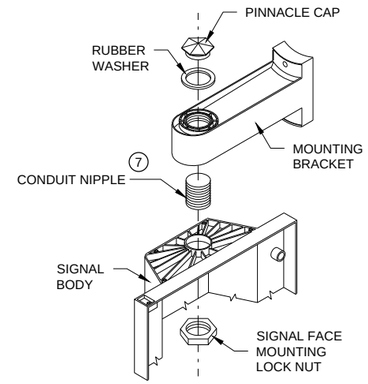
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

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

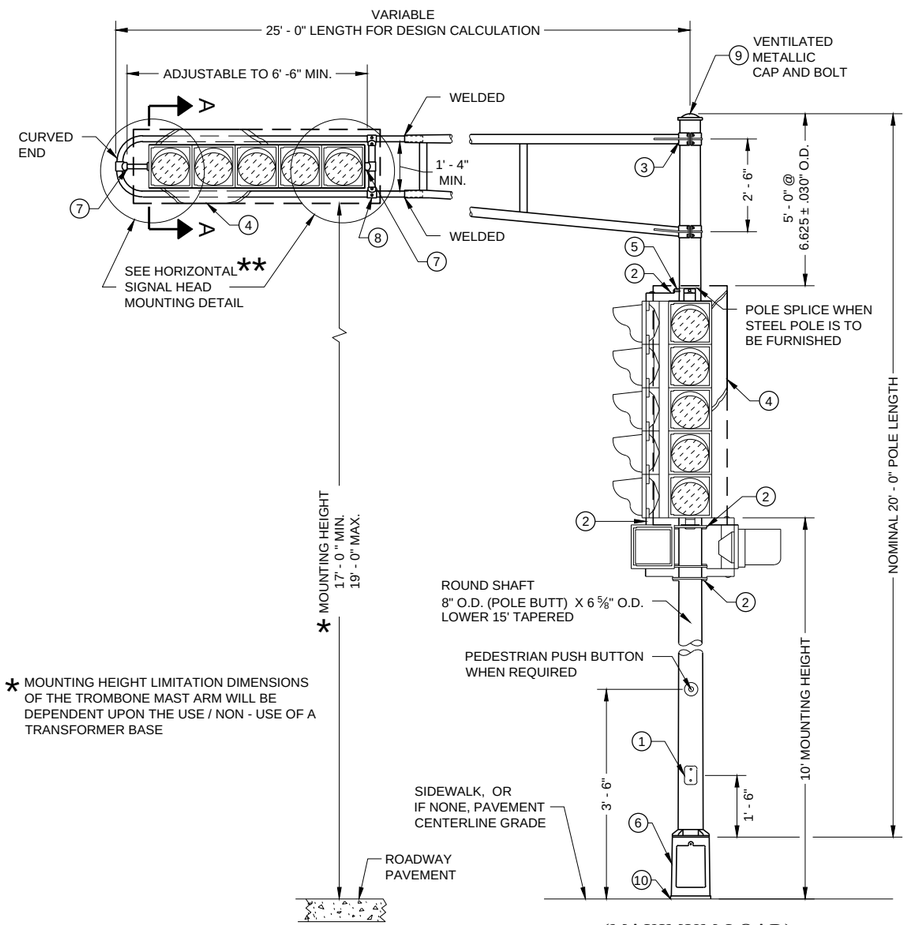
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

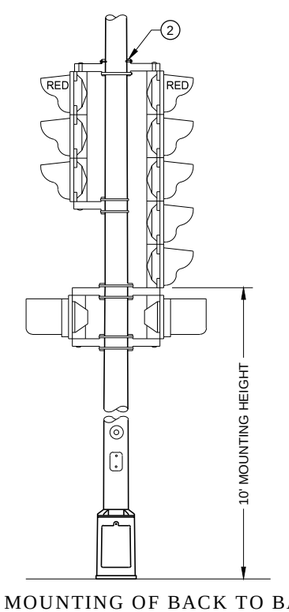
WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
3. GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING,PER MANUFACTURER'S RECOMMENDATIONS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. USE 1½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1½" OPENING IN SIGNAL FACES AND BRACKET ENDS.
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUTS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.
11. USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

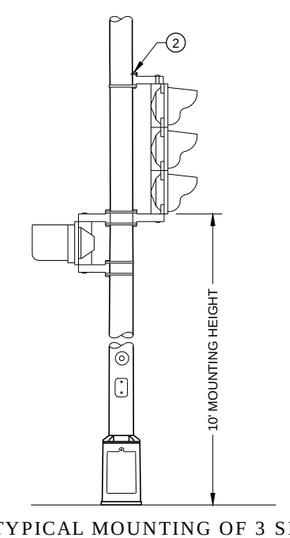


* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

(MAXIMUM LOAD)

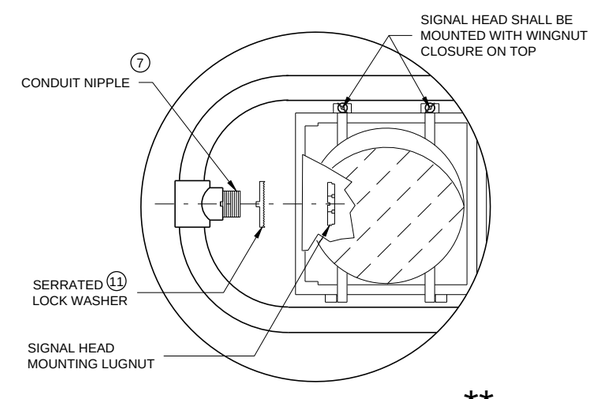


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 2 POLE MOUNTING CONFIGURATION



HORIZONTAL SIGNAL HEAD **
MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

POLE MOUNTINGS FOR TRAFFIC SIGNALS
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

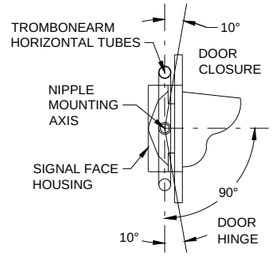
6

6

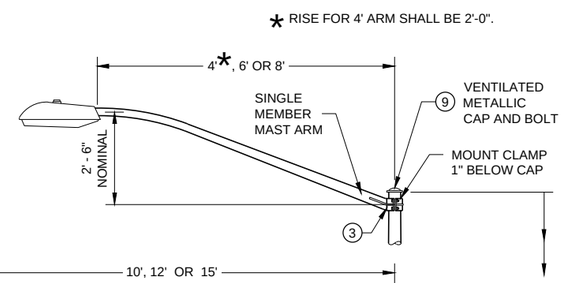
SDD 09E01 - 15a

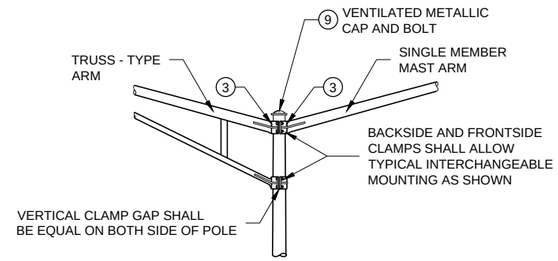
SDD 09E01 - 15a

SDD 09E01-b Pole Mountings for Traffic Signals and Lighting Units, Type 3 (Heavy Duty)

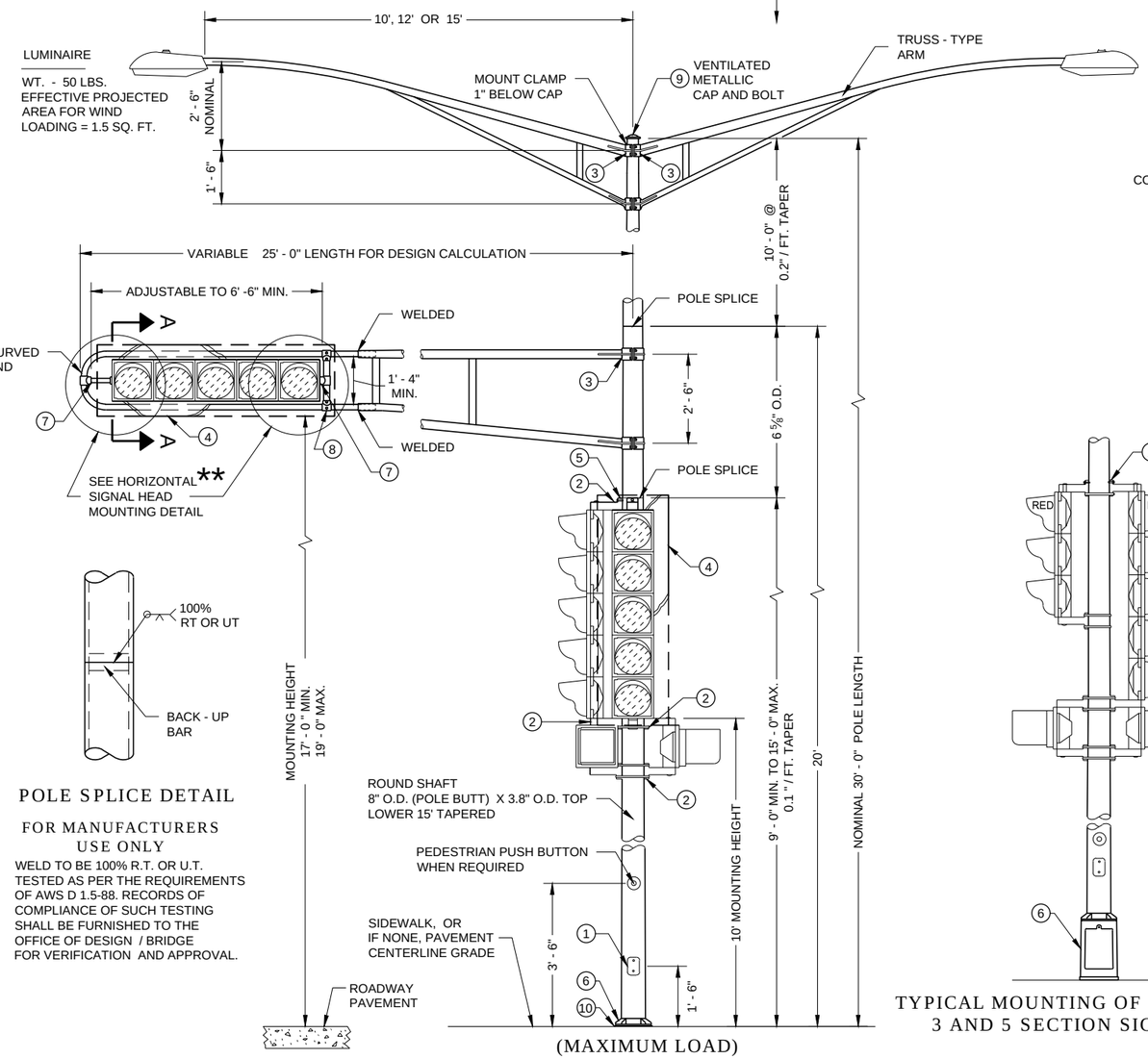


SECTION A-A



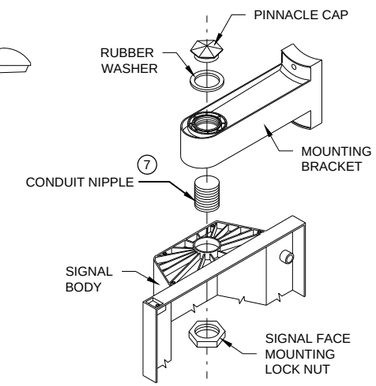


INTERCHANGEABLE MOUNTING DETAIL



(MAXIMUM LOAD)

TYPE 3 POLE MOUNTING CONFIGURATION



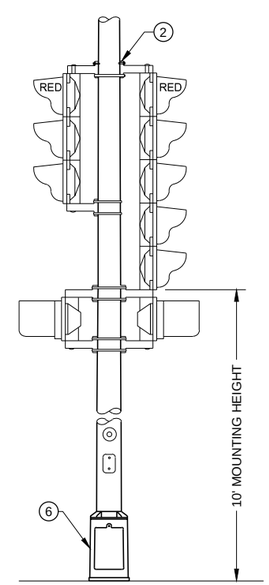
SIGNAL FACE MOUNTING DETAIL

(BANDED)

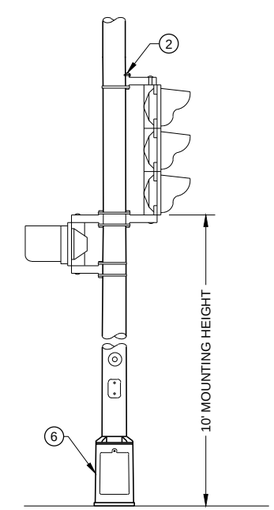
POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

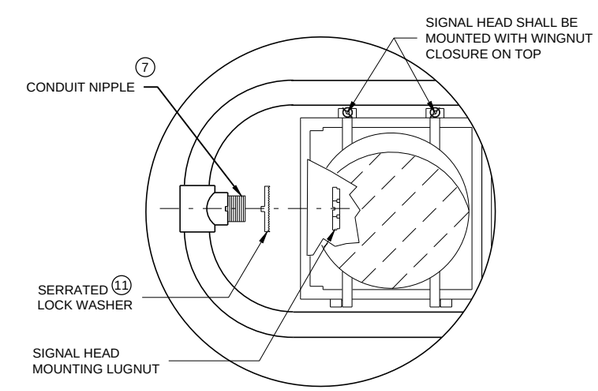
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

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

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

1. 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
3. GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.
7. USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
11. USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD**
MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS
TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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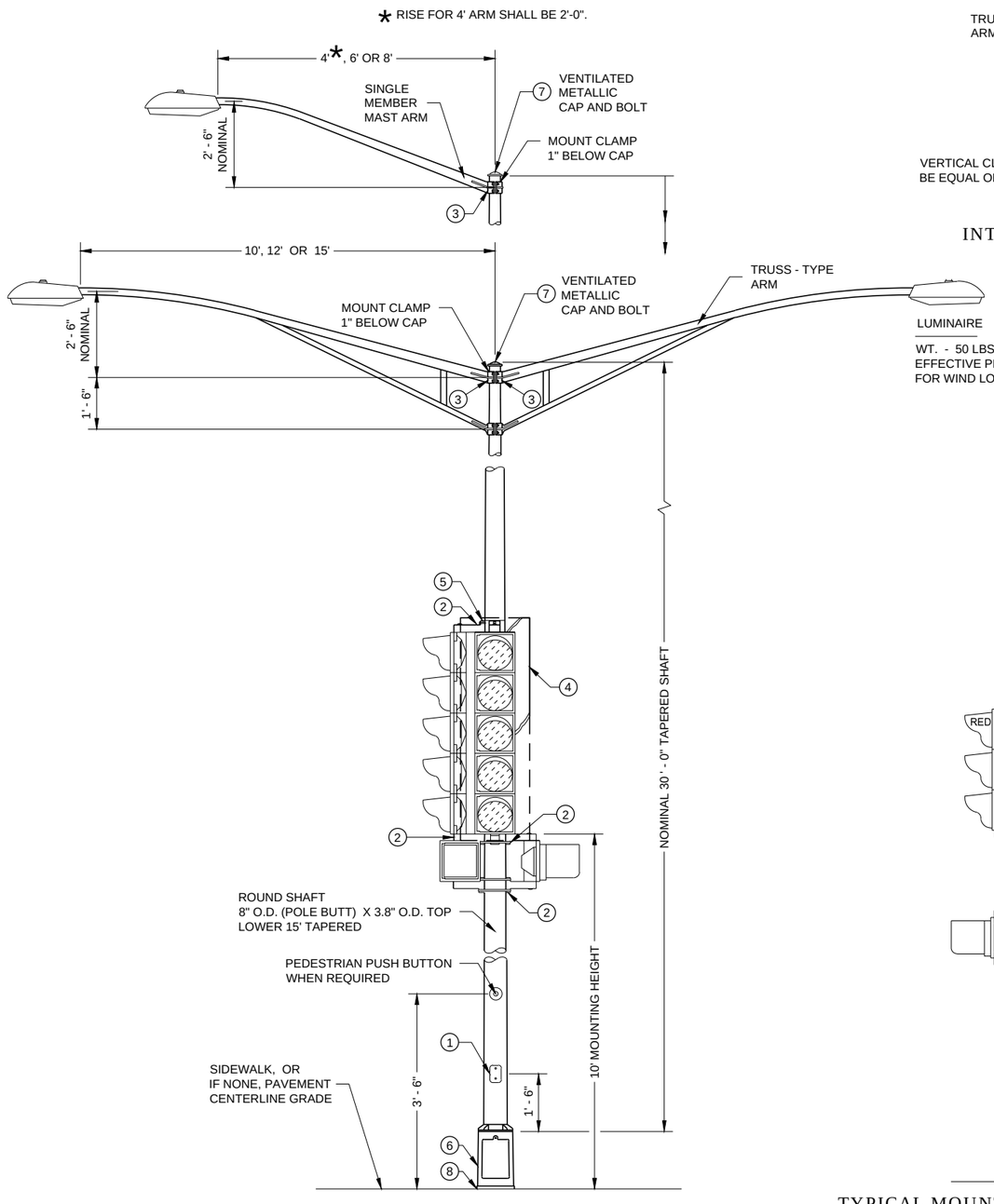
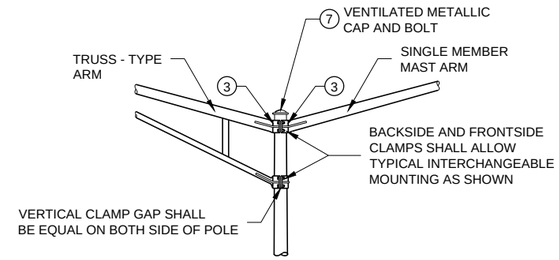
SDD 09E01-c Pole Mountings for Traffic Signals and Lighting Units, Type 4



(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

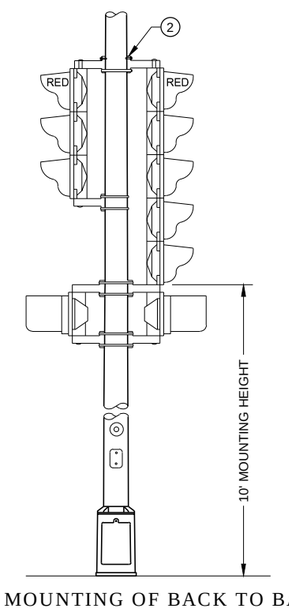
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

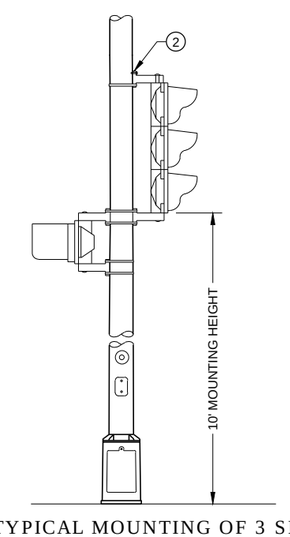
THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

1. 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
3. GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
8. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
9. USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

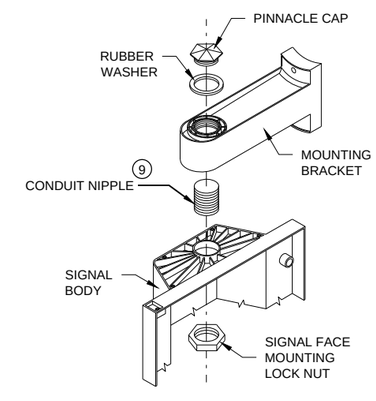


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 4

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DEPARTMENT OF TRANSPORTATION

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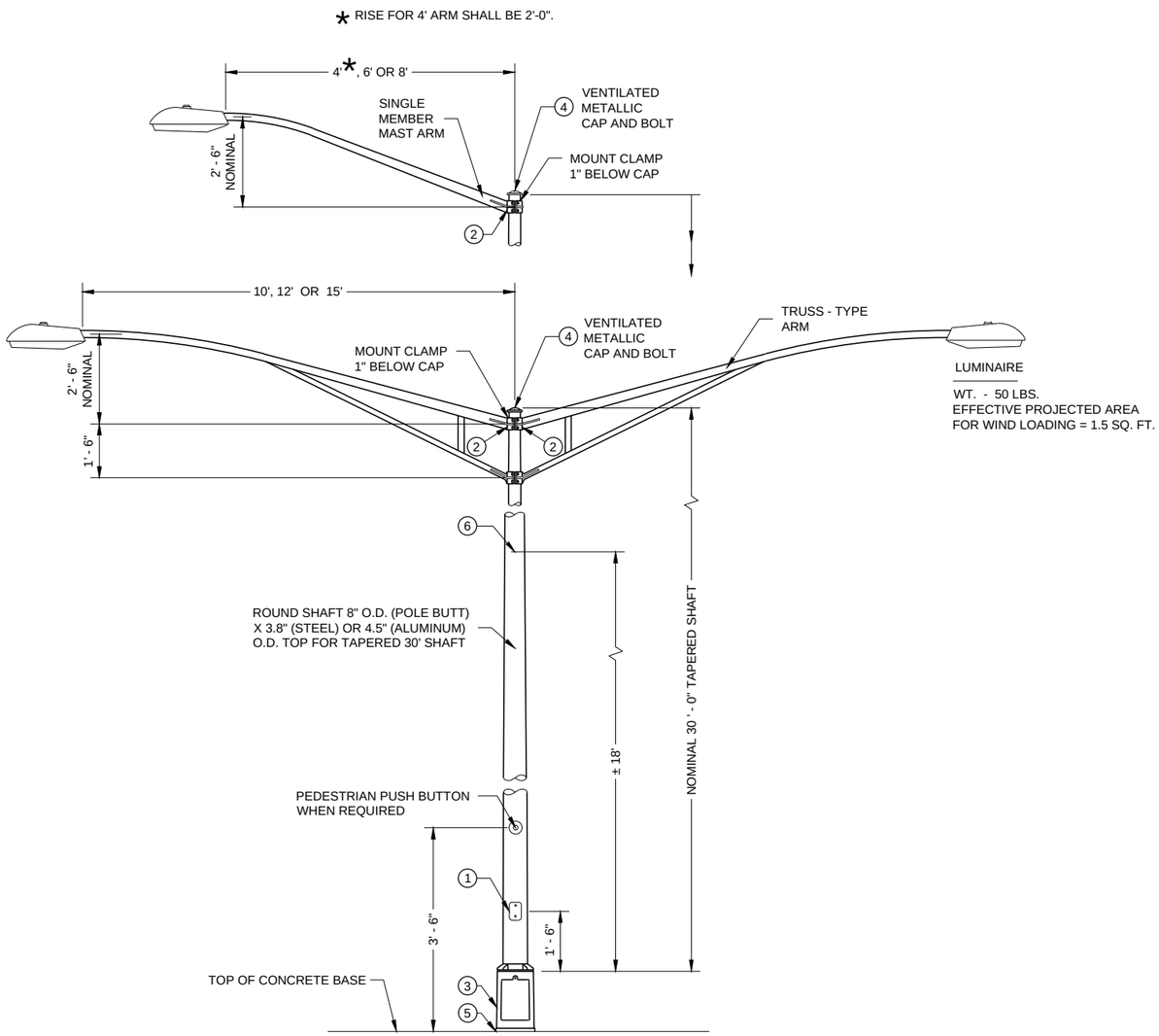
SDD 09E01-d Pole Mountings for Lighting Units, Type 5



TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

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

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

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

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

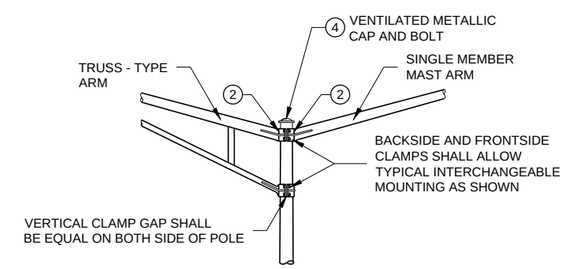
TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

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

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

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

1. 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
2. GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
4. FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
6. INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



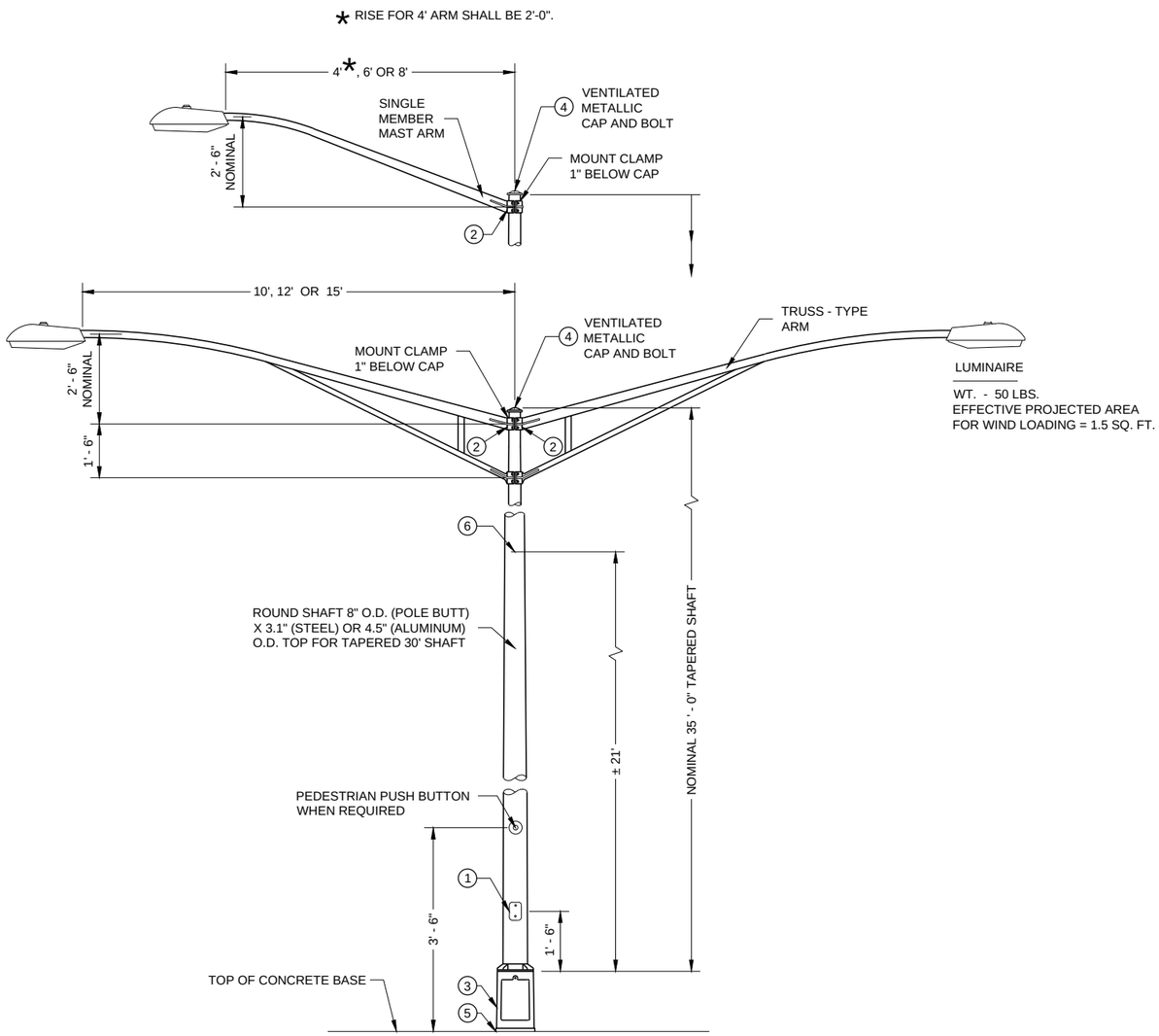
INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5

(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 09E01-e Pole Mountings for Lighting Units, Type 6 (35 feet)



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

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

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

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

TYPE 6 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

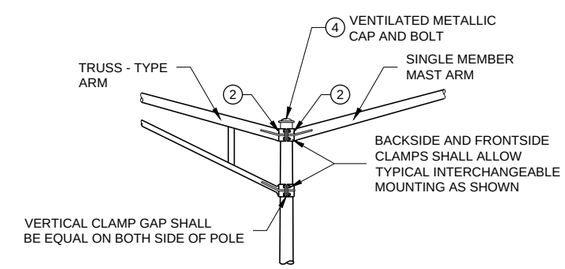
TYPE 6 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

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

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

1. 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
2. GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
4. FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
6. INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6

(35 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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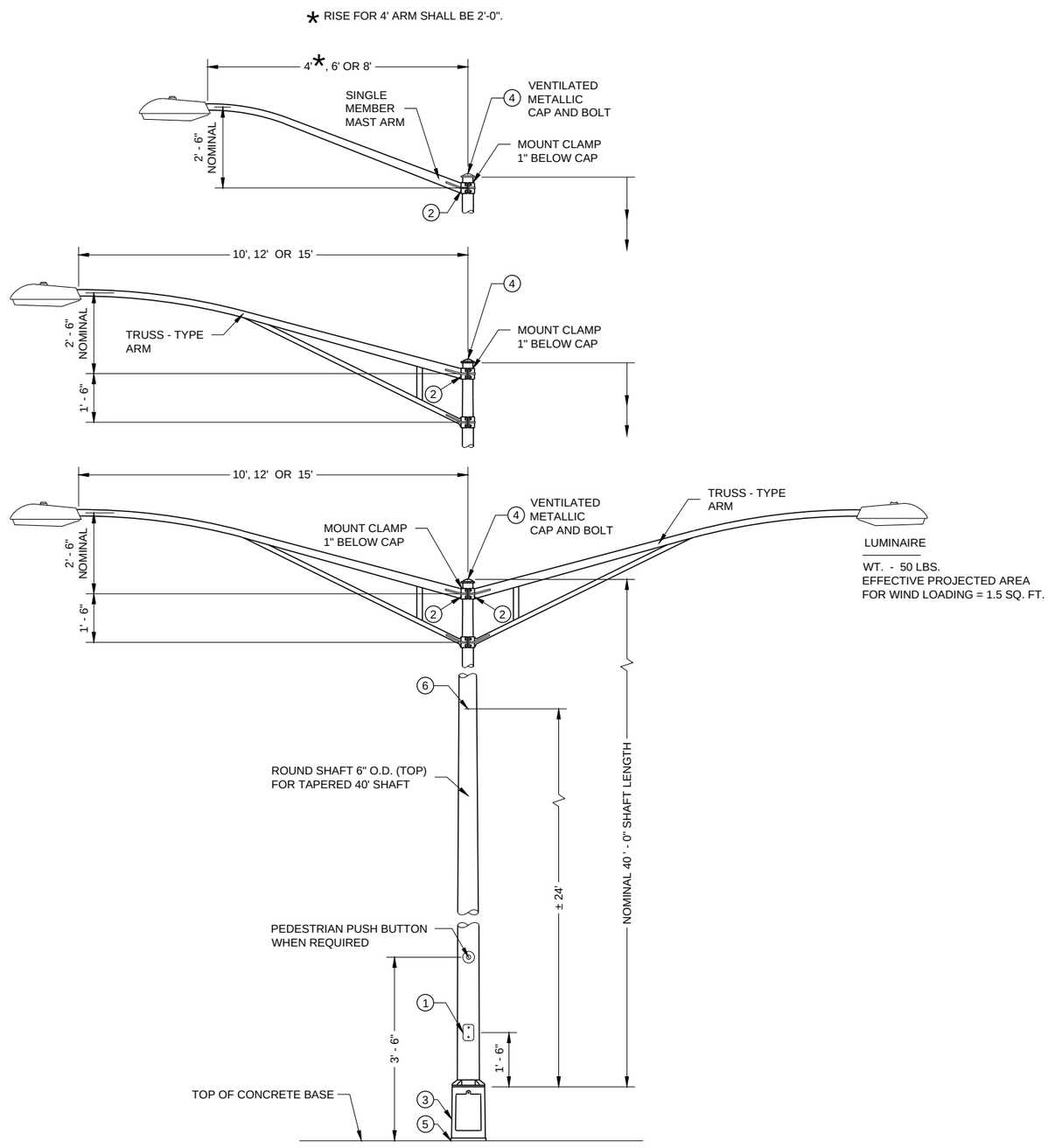
SDD 09E01 - 15e

SDD 09E01 - 15e

SDD 09E01-f Pole Moutings for Lighting Units, Type 17 (40 feet)



TYPE 17 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

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

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

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

TYPE 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

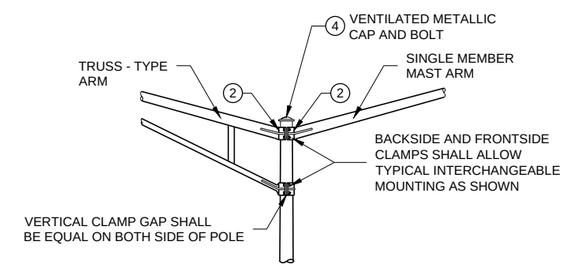
TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

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

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

1. 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
2. GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.
4. FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
6. INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17
(40 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 09E01 - 15f

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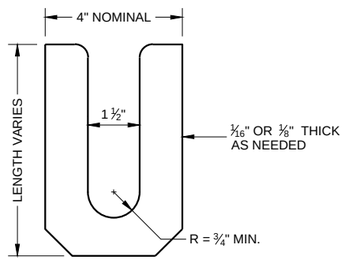
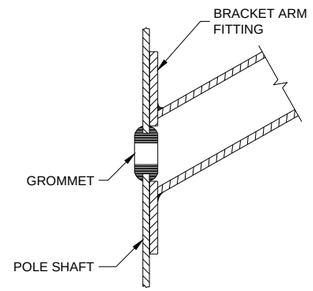
SDD 09E01 - 15f

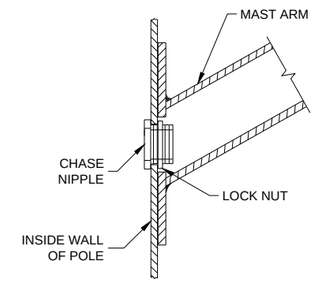
SDD 09E01-g Hardware Details for Pole Mounting



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

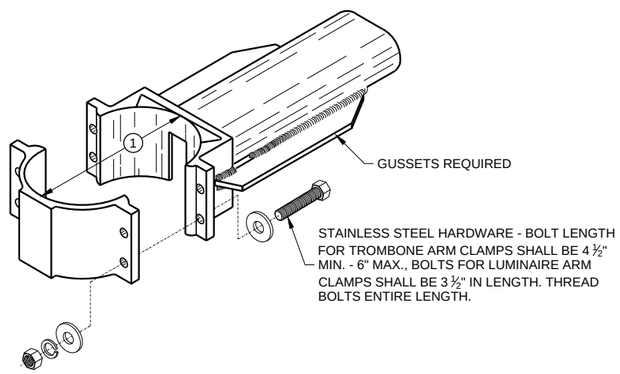
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

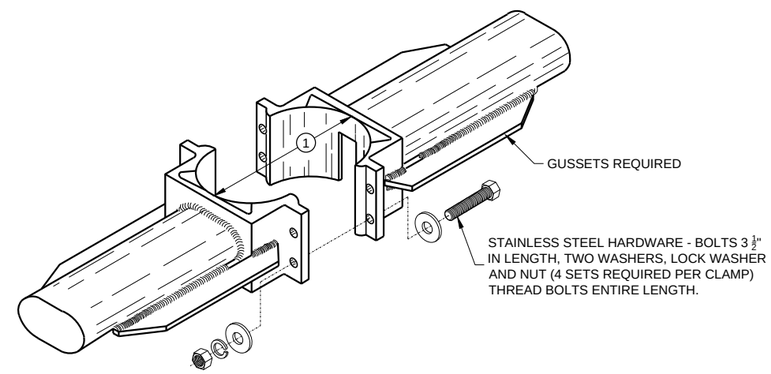
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

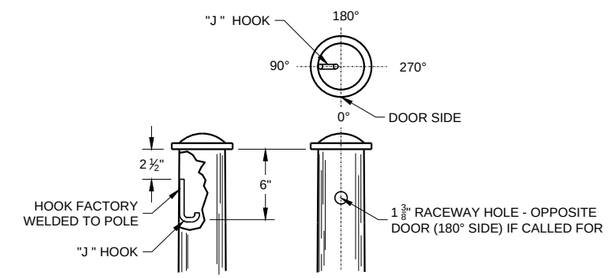
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



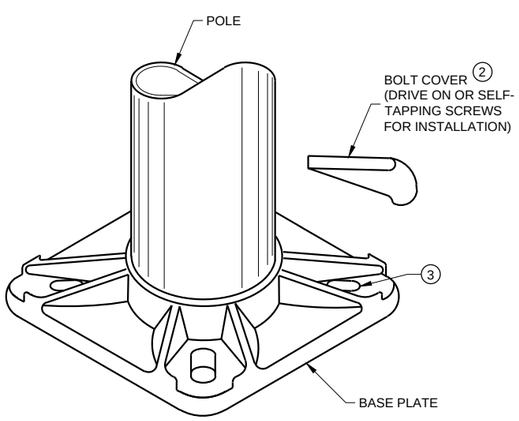
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



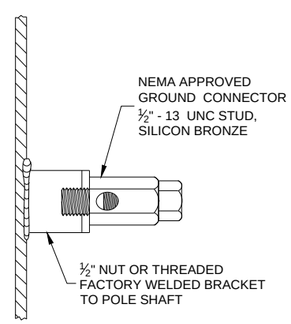
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

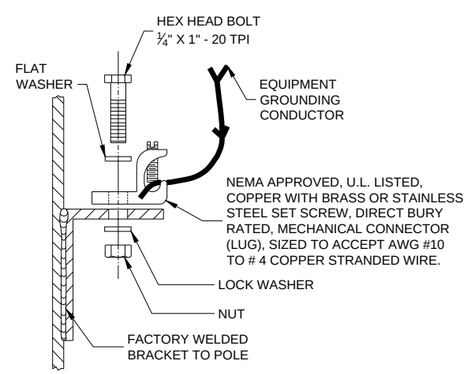


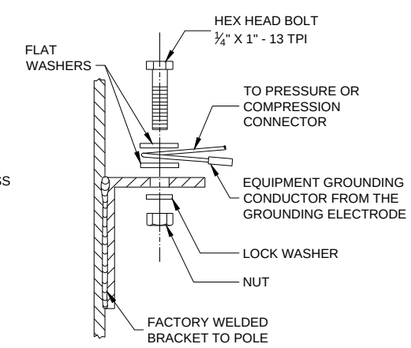
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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SDD 09A01 - 15g

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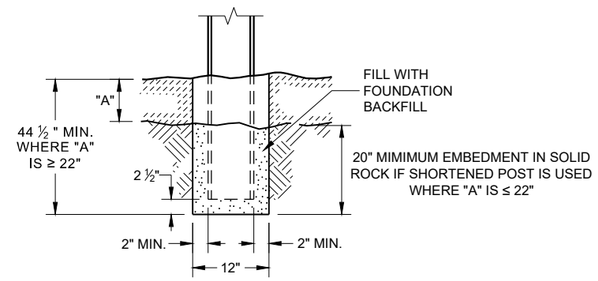
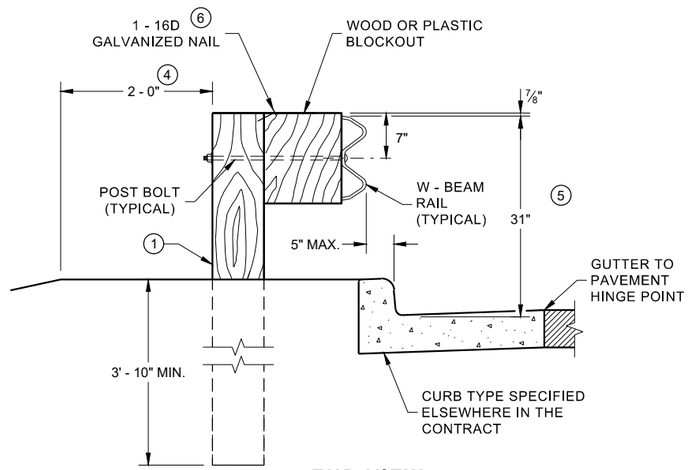
SDD 09A01 - 15g

SDD 14B42-a Midwest Guardrail System (MGS) Guardrail

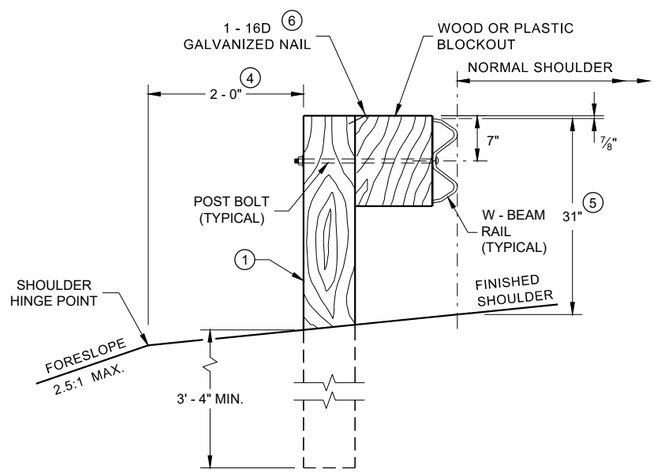
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".
6. WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
7. TOTAL POST LENGTH FOR TYPE K IS 7' - 0". TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



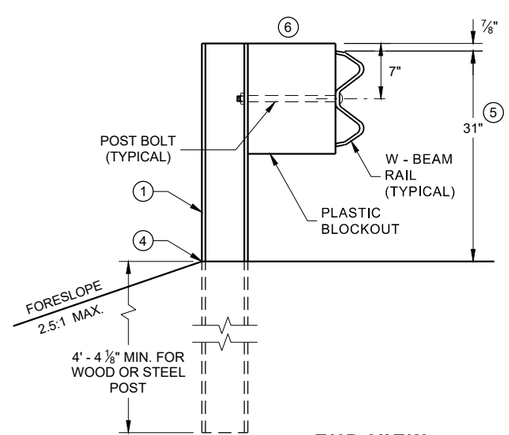
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



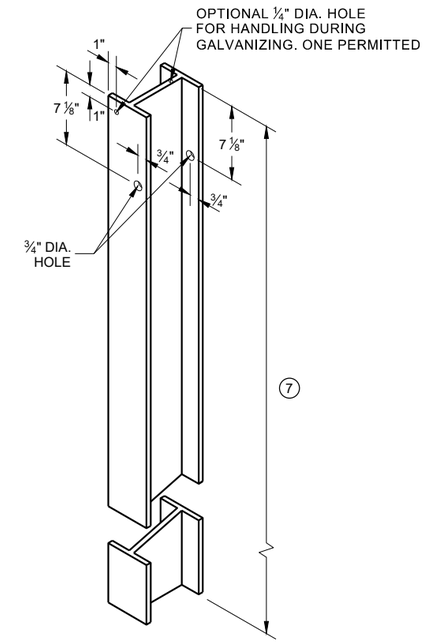
END VIEW
LOCATED ALONG A CURBED ROADWAY



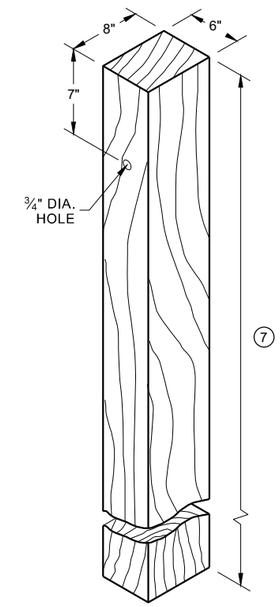
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



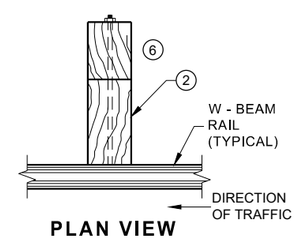
END VIEW
MGS LONGER POST AT HALFPOST
SPACING W BEAM (K)



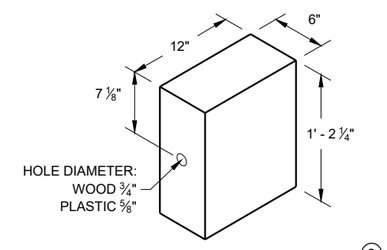
STEEL POST & HOLE
PUNCHING DETAIL
(W 6 X 9) (1)



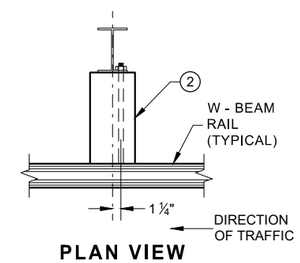
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR PLASTIC (2)
BLOCKOUT



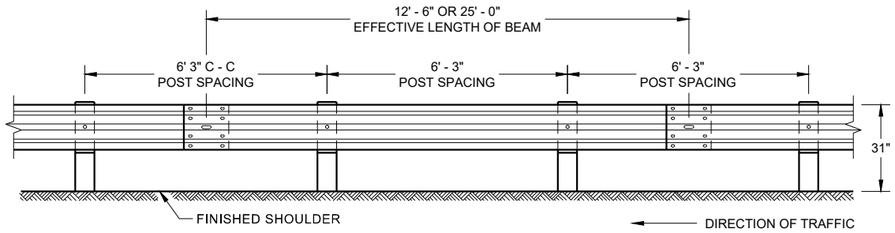
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

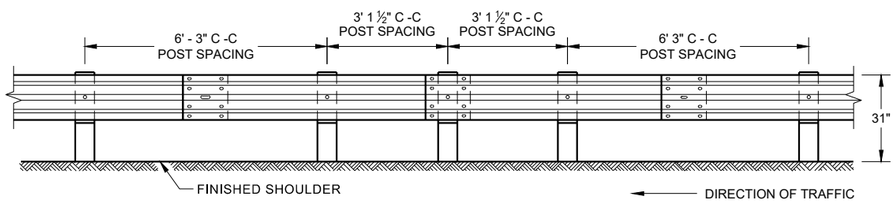
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B42 - 06a

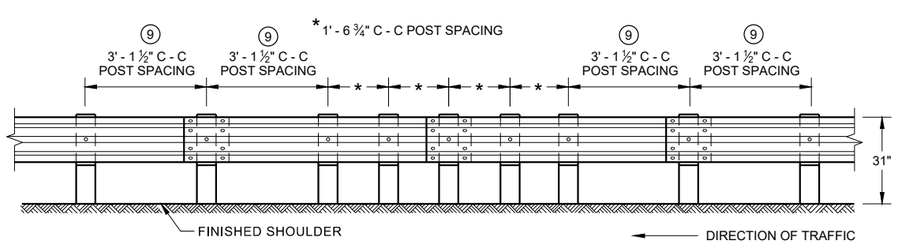
SDD 14B42-b Midwest Guardrail System (MGS) Guardrail



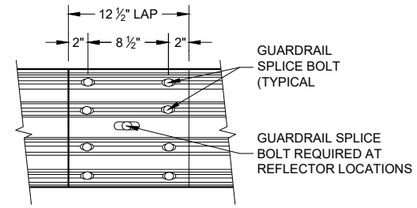
FRONT VIEW
POST SPACING STANDARD INSTALLATION



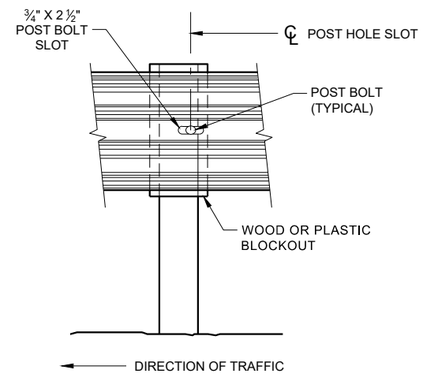
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



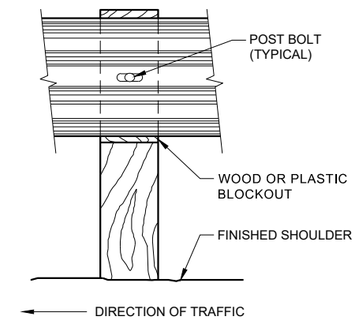
FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST

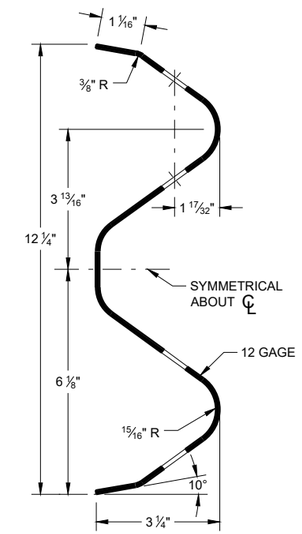
GENERAL NOTES

8. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

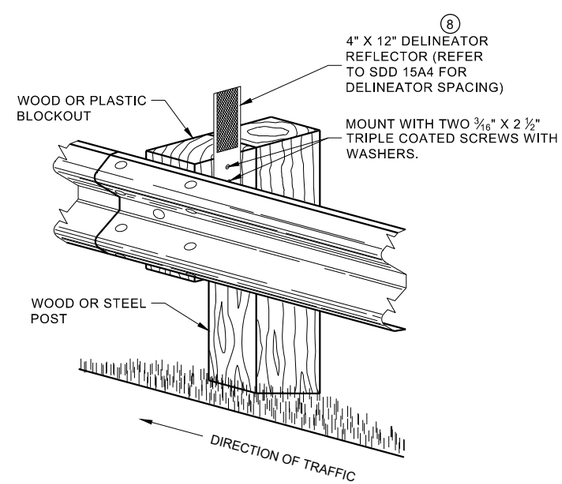
9. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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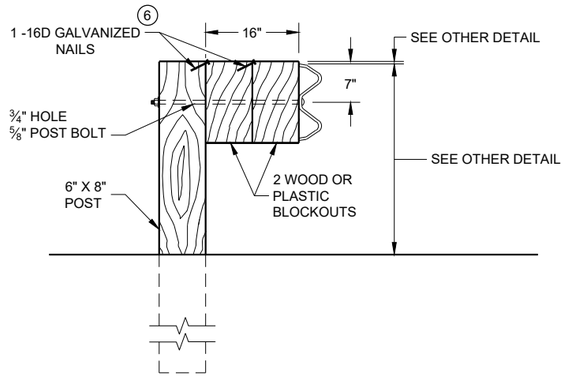
SDD 14B42 - 06b

SDD 14B42 - 06b

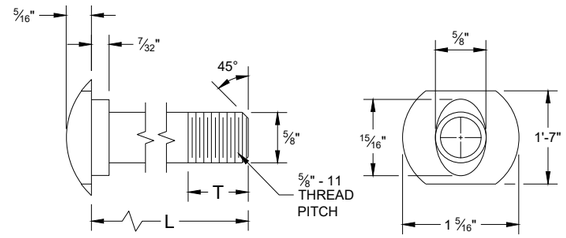


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

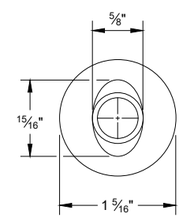
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

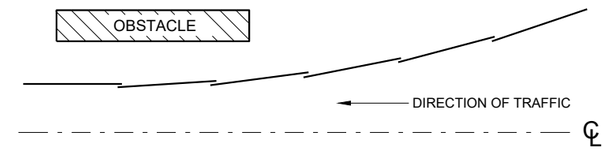


POST BOLT TABLE

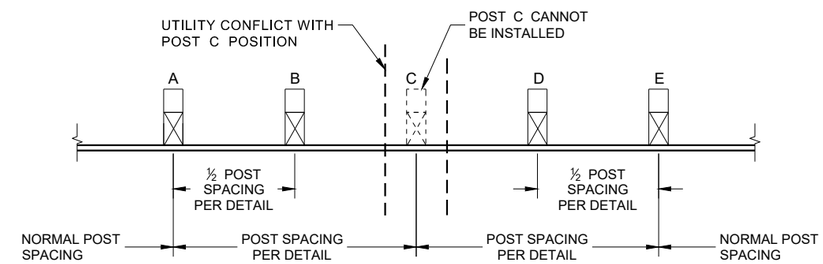
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



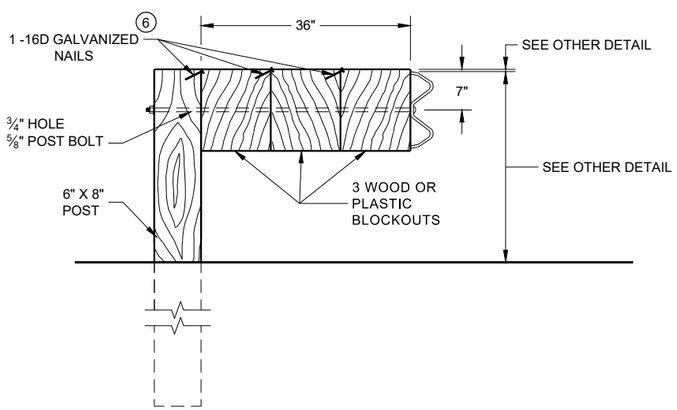
ALTERNATE BOLT HEAD



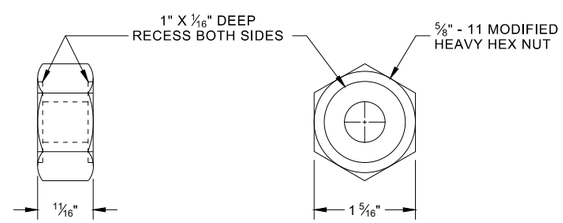
PLAN VIEW
BEAM LAPPING DETAIL



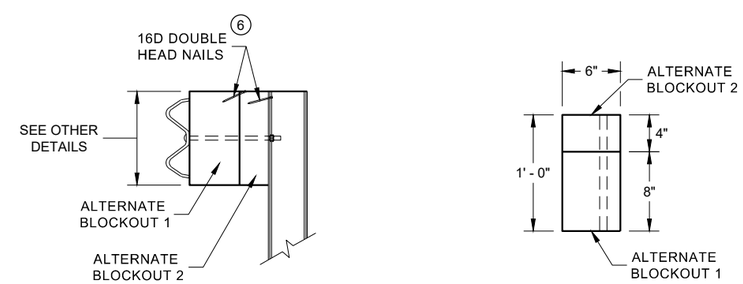
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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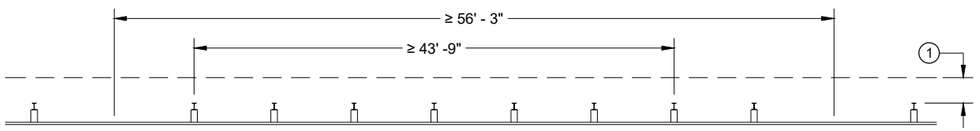
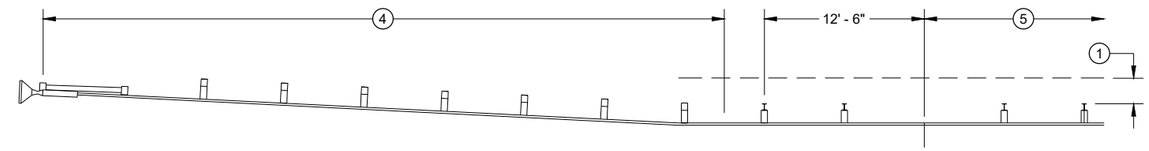
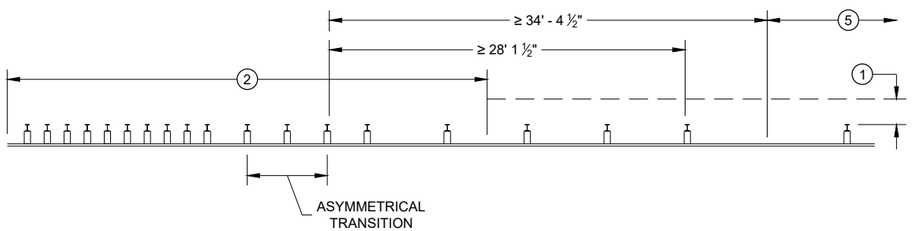
SDD 14B42 - 06c



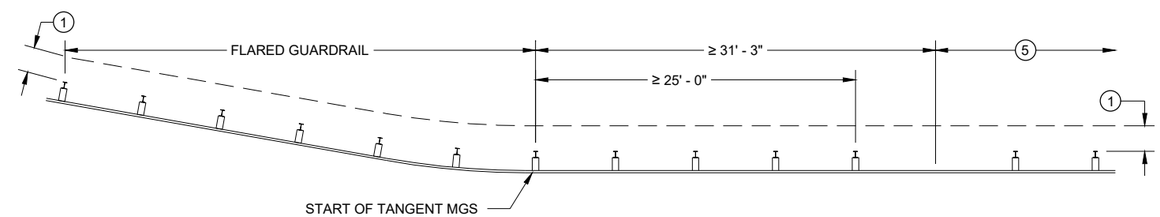
MISSING POST IN NORMAL BEAM GUARD RUN



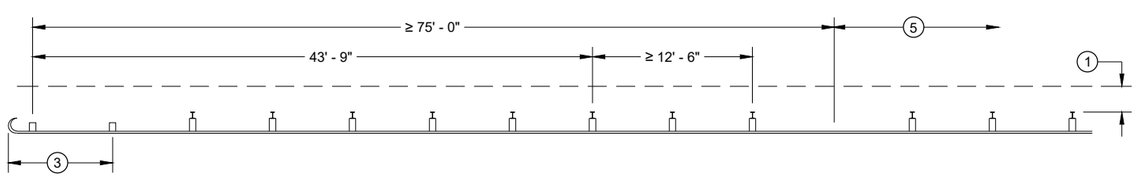
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



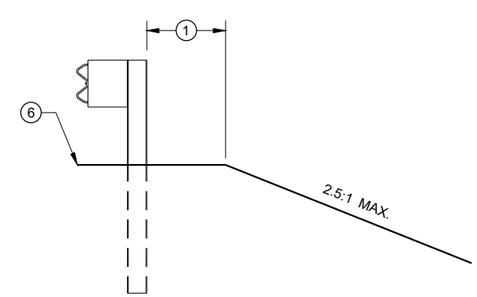
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

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SDD 14B42 - 06d

SDD 14B44-a Midwest Guardrail System (MGS) Energy Absorbing Terminal

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

(F) DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

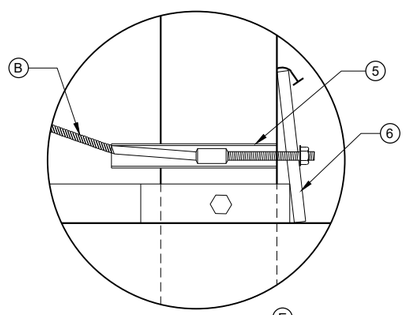
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

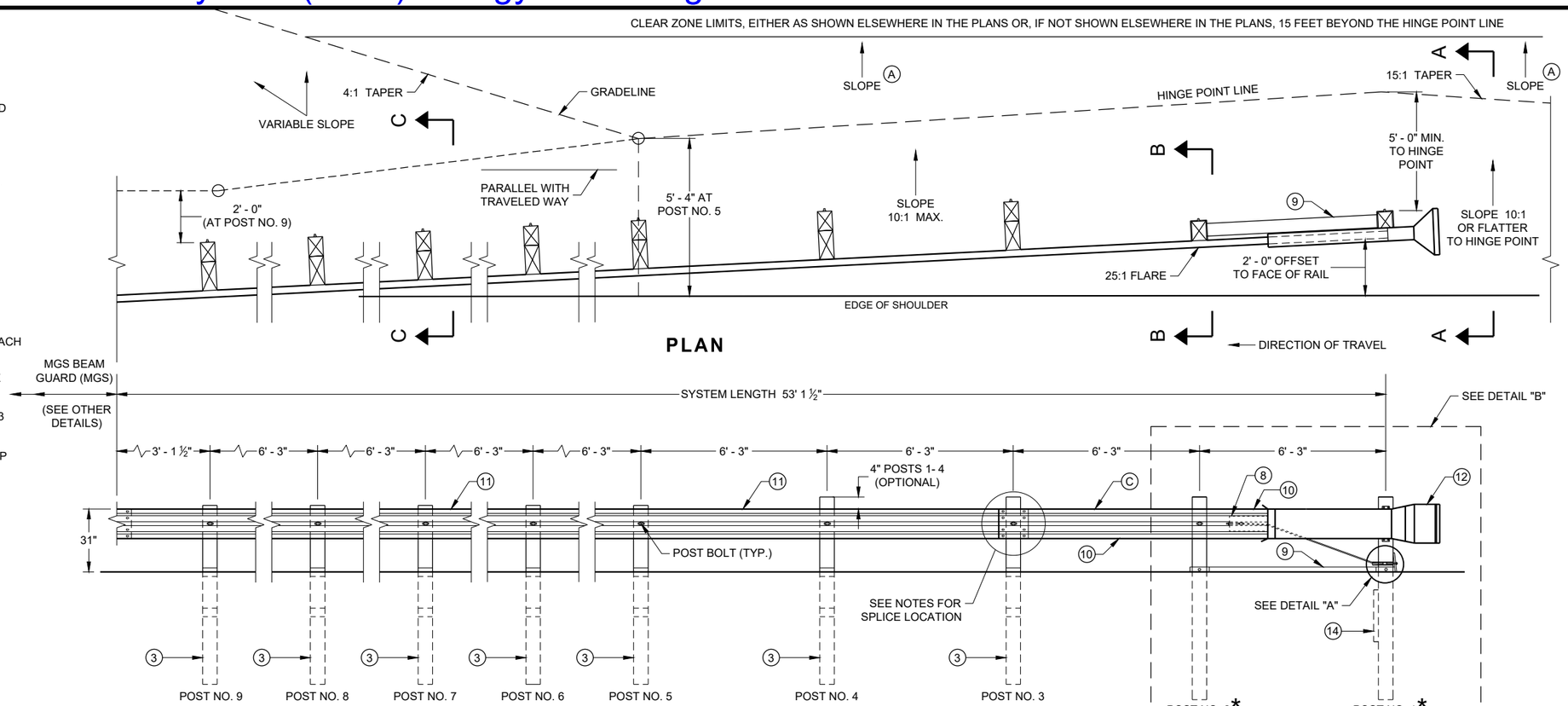
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

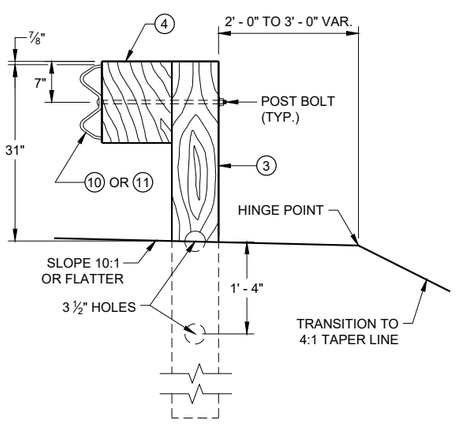
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

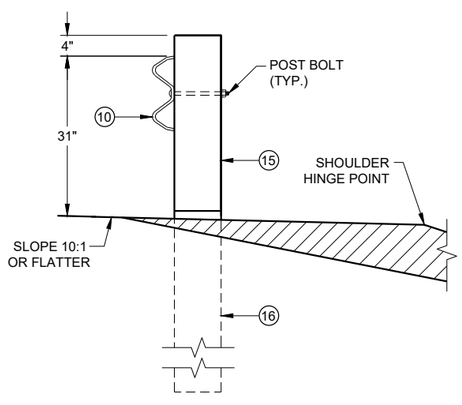


DETAIL "A" (E)

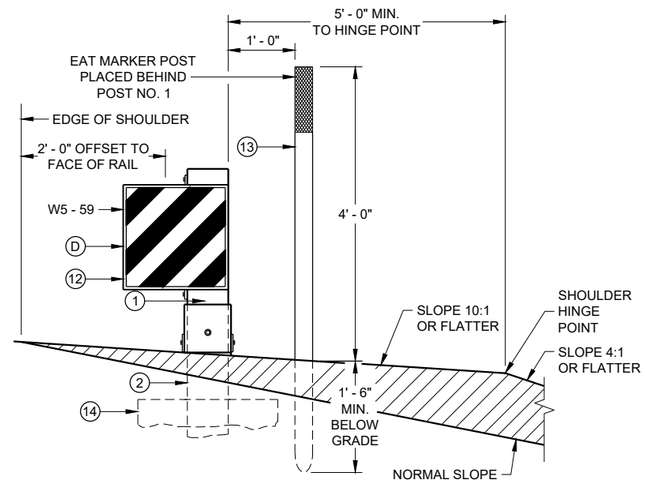




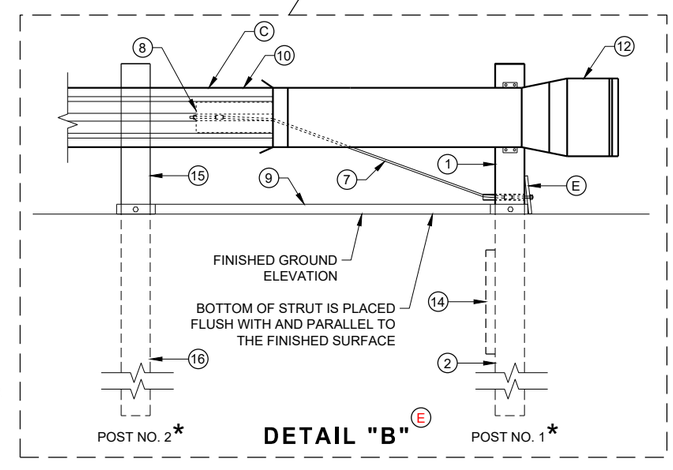
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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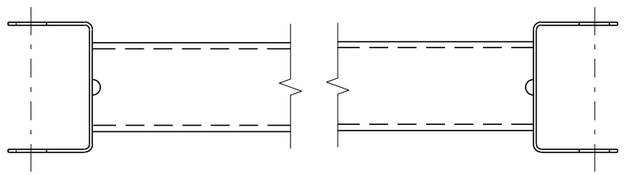
SDD 14B44 - 04a

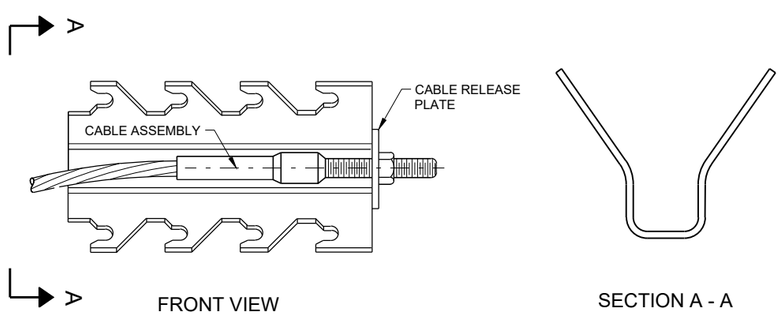
SDD 14B44 - 04a



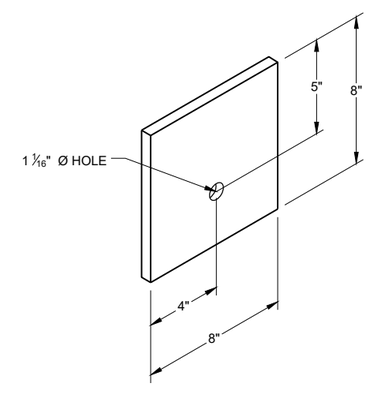
GENERIC GROUND STRUT (9)(E)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
11	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
12	IMPACT HEAD
13	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
14	SOIL PLATE
15	UPPER POST NO. 2
16	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX (9)(E)

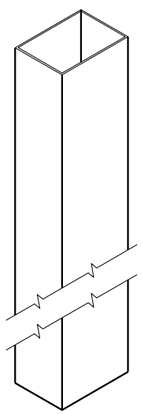


BEARING PLATE (6)(E)

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B44 - 04b



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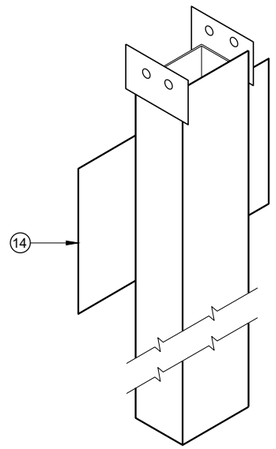

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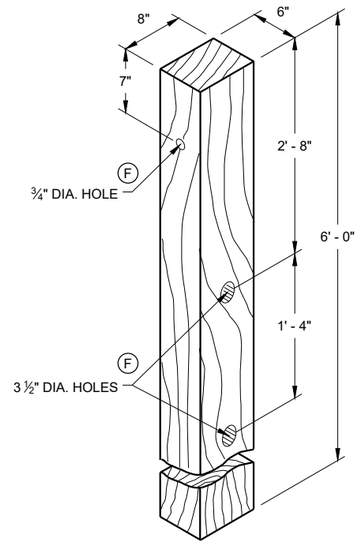
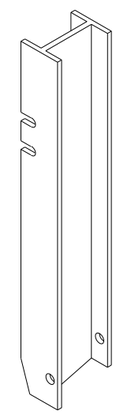


WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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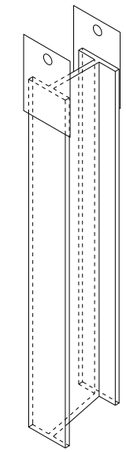

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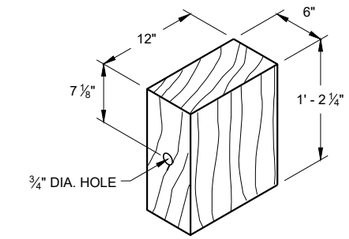
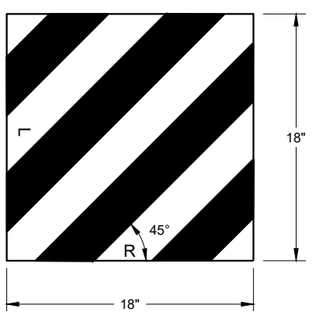
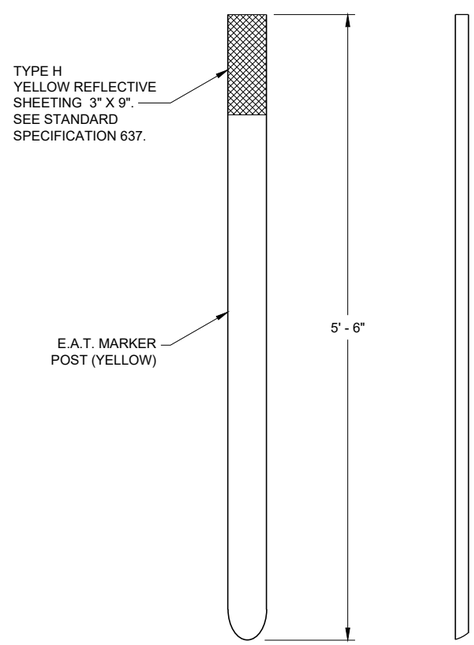


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



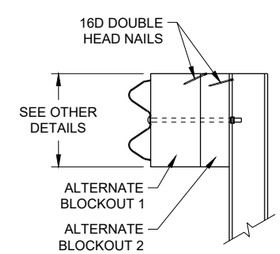
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

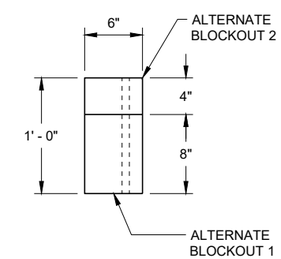


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

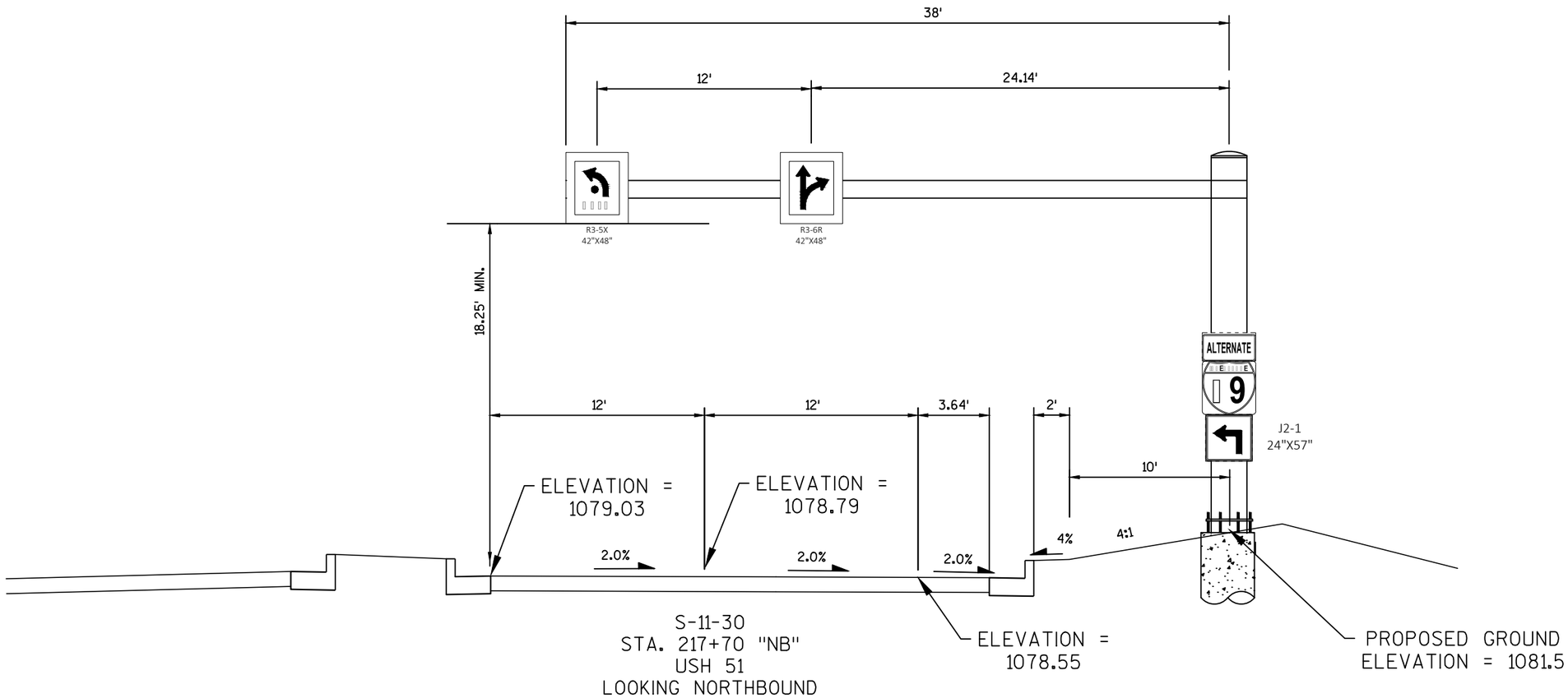
ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

6
SDD 14B44 - 04c



GENERAL NOTES

1) DRAWINGS NOT TO SCALE

2) DESIGN NEW OVERHEAD SIGN SUPPORTS ACCORDING TO THE LATEST EDITION OF, AND SUPPLEMENTAL TO THE STATE OF WISCONSIN "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" AND AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS."

3) PROVIDE AN IDENTIFICATION PLAQUE FOR ALL OVERHEAD SIGN SUPPORTS, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT".

4) SIZE THE ANCHOR BOLT/TEMPLATE ASSEMBLY TO FIT WITHIN THE BAR CAGE OF THE FOOTING BASE SHOWN IN THE CONTRACT PLANS IN ADDITION TO MEETING ALL APPLICABLE DESIGN REQUIREMENTS FOR THE DESIGN OF THE UPRIGHT BASE CONNECTION.

5) PROVIDE DESIGN CALCULATIONS.

6) DESIGN WIND VELOCITIES SHALL BE PER WISDOT SPECS.

7) SIGNS OR BLANKS SHALL BE INSTALLED ON THE OVERHEAD SIGN SUPPORT AT THE TIME OF ERECTION. BLANKS, IF USED, SHALL BE OF THE SAME SIZE AND LOCATION AS PERMANENT SIGNS.

8) MINIMUM OF SIX(6) ANCHOR RODS SHALL BE USED PER STANDARD DETAIL DRAWING.

8

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	PERMANENT SIGNING STRUCTURE DETAILS	SHEET	E

STATE PROJECT NUMBER

STANDARD

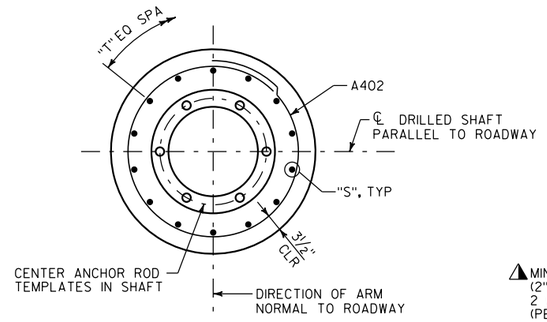
FOUNDATION SELECTION TABLE

STRUCTURE TYPE ☆	STANDARD FOUNDATION TYPE
CANTILEVER MONOTUBE TYPE 1	C3
CANTILEVER MONOTUBE TYPE 2	C3
CANTILEVER MONOTUBE TYPE 3	C6
CANTILEVER MONOTUBE TYPE 4	C7
FULL SPAN MONOTUBE TYPE 1	C1
FULL SPAN MONOTUBE TYPE 2	C2
CANTILEVER 2-CHORD TYPE 1	C4
CANTILEVER 2-CHORD TYPE 2	C6
CANTILEVER 2-CHORD TYPE 3	C8
CANTILEVER 2-CHORD TYPE 4	C9
CANTILEVER 2-CHORD DMS	C4
FULL SPAN 2-CHORD TYPE 1	C3
FULL SPAN 2-CHORD TYPE 2	C5
FULL SPAN 2-CHORD TYPE 3	C6
FULL SPAN 2-CHORD TYPE 4	C7
FULL SPAN 2-CHORD DMS	C3

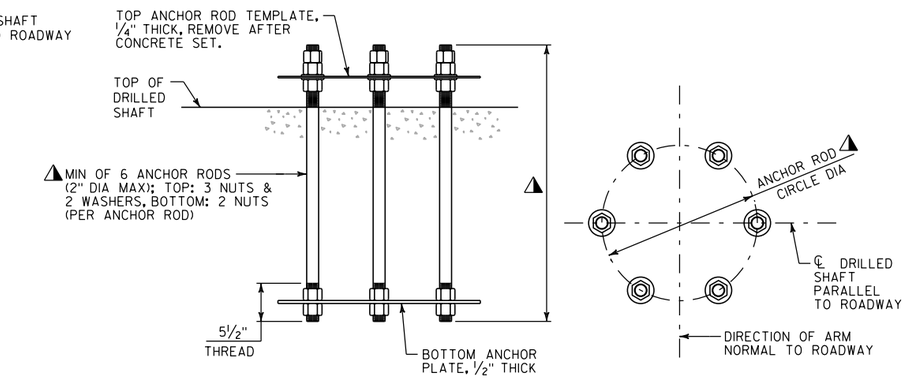
☆ STRUCTURE TYPE SELECTED PER WISDOT FACILITIES DEVELOPMENT MANUAL SECTION 11-55-20

FOUNDATION & REINFORCING DATA

STANDARD FOUNDATION TYPE	SHAFT VARIABLES					
	"D"	"L"	"R"	"S"	"T"	"BC" MAX
C1	2'-0"	12'-0"	12	A801	6	12"
C2	2'-6"	13'-0"	13	A801	10	17"
C3	2'-6"	17'-0"	17	A801	10	17"
C4	3'-0"	18'-0"	18	A801	14	22"
C5	3'-0"	20'-0"	20	A801	14	22"
C6	3'-6"	18'-0"	18	A901	14	28"
C7	3'-6"	23'-0"	23	A901	14	28"
C8	4'-0"	23'-0"	23	A1001	14	34"
C9	4'-0"	28'-0"	28	A1001	14	34"



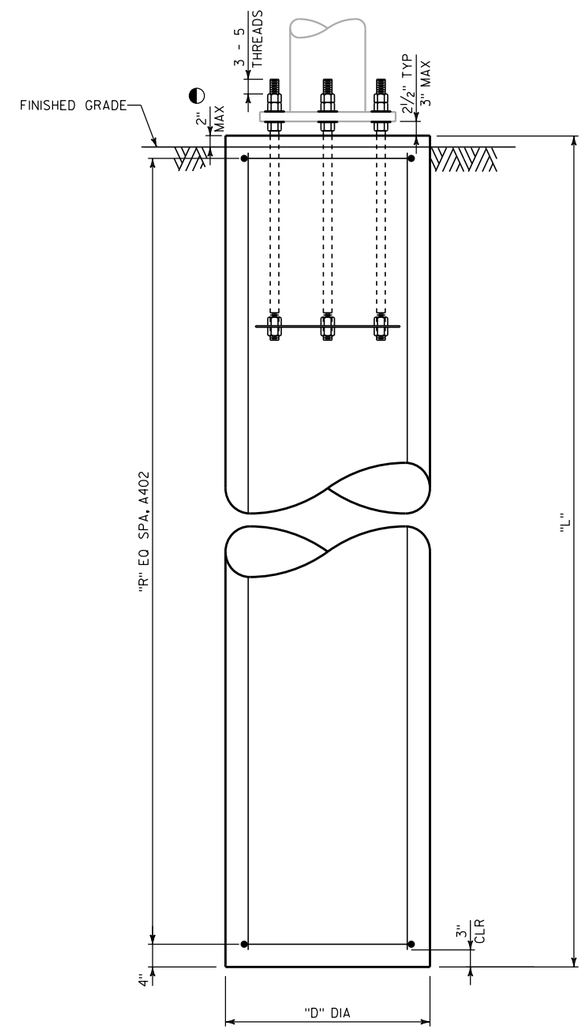
PLAN



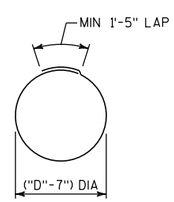
ELEVATION PLAN

ANCHOR ROD ASSEMBLY DETAILS

EXACT NUMBER, DIAMETER, LENGTH & ORIENTATION AS SHOWN ON FABRICATION DRAWING.



ELEVATION



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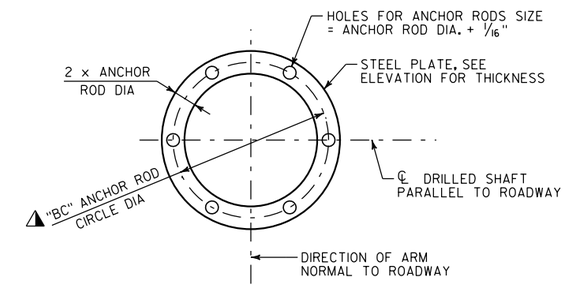

ANCHOR PLATE/TOP TEMPLATE

PLAN

NOTE:
THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS - FOUNDATIONS

BAR MARK	COAT	NO REQ'D	LENGTH	BENT	LOCATION
STD FOUNDATION TYPE C1					
A801		6	11'-7"		DRILLED SHAFT - VERTICAL
A402		13	5'-10"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C2					
A801		10	12'-7"		DRILLED SHAFT - VERTICAL
A402		14	7'-5"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C3					
A801		10	16'-7"		DRILLED SHAFT - VERTICAL
A402		18	7'-5"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C4					
A801		14	17'-7"		DRILLED SHAFT - VERTICAL
A402		19	9'-0"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C5					
A801		14	19'-7"		DRILLED SHAFT - VERTICAL
A402		21	9'-0"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C6					
A901		14	17'-7"		DRILLED SHAFT - VERTICAL
A402		19	10'-6"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C7					
A901		14	22'-7"		DRILLED SHAFT - VERTICAL
A402		24	10'-6"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C8					
A1001		14	22'-7"		DRILLED SHAFT - VERTICAL
A402		24	12'-2"	X	DRILLED SHAFT - HORIZONTAL
STD FOUNDATION TYPE C9					
A1001		14	27'-7"		DRILLED SHAFT - VERTICAL
A402		29	12'-2"	X	DRILLED SHAFT - HORIZONTAL

ESTIMATED QUANTITIES - FOUNDATIONS

STANDARD FOUNDATION TYPE	ANCILLARY STRUCTURES CONCRETE MASONRY (CY)	ANCILLARY STRUCTURES STEEL REINFORCEMENT HS (LBS)	FOUNDATION DRILLING (LF)
C1	2	240	12
C2	3	410	13
C3	4	530	17
C4	5	770	18
C5	6	860	20
C6	7	970	18
C7	9	1,240	23
C8	11	1,560	23
C9	13	1,900	28

NOTES

CENTER ANCHOR ROD ASSEMBLY ON DRILLED SHAFT AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.

◐ FOR OVERHEAD SIGN STRUCTURES THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE SHAFT SHALL BE POURED FLUSH WITH THE FINISHED GRADE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STANDARD

JAN 2020

OSS MONOTUBE & 2-CHORD TRUSS STANDARD FOUNDATIONS

SHEET 1 OF 1

SCALE: 3.333333:1

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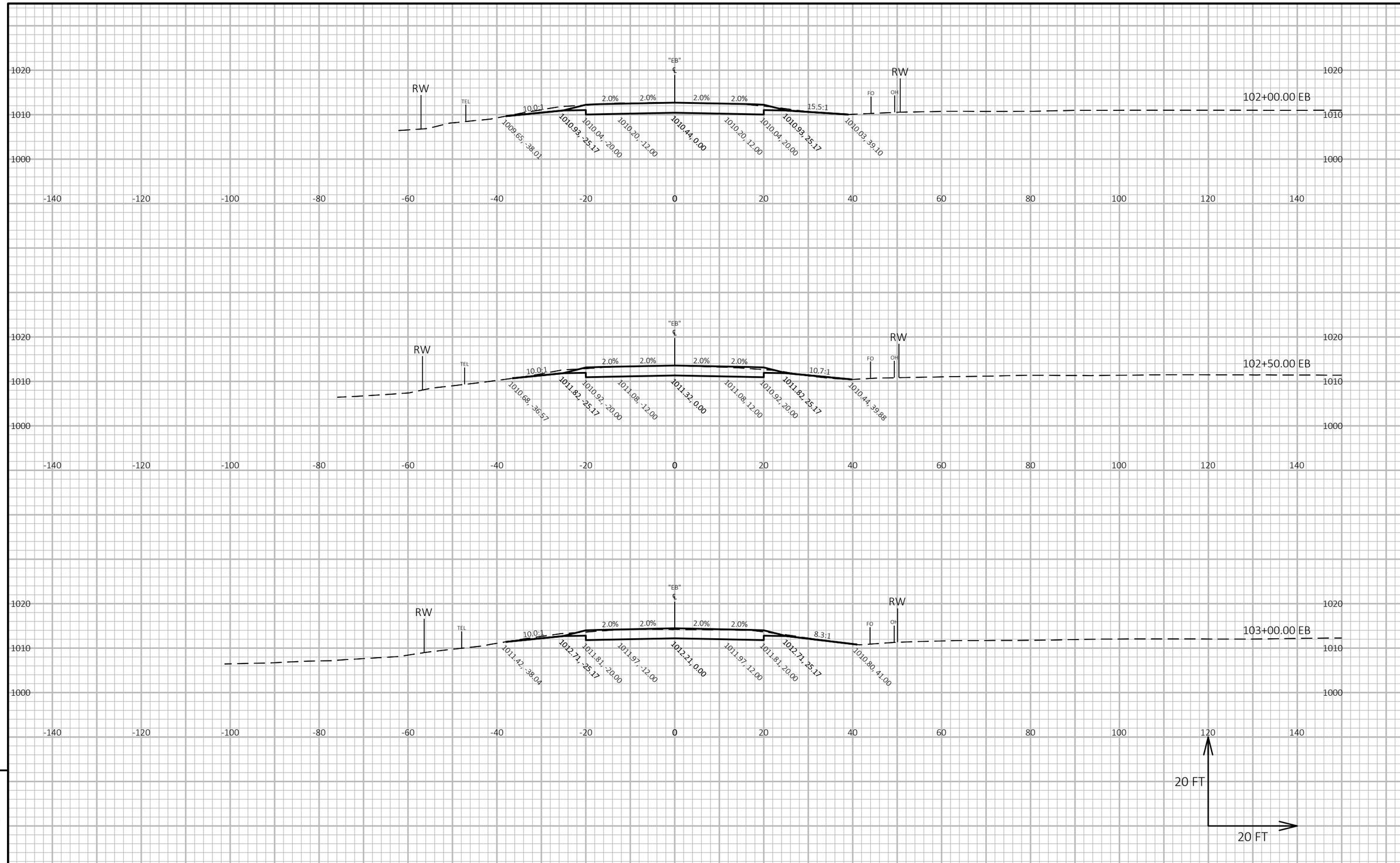

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9

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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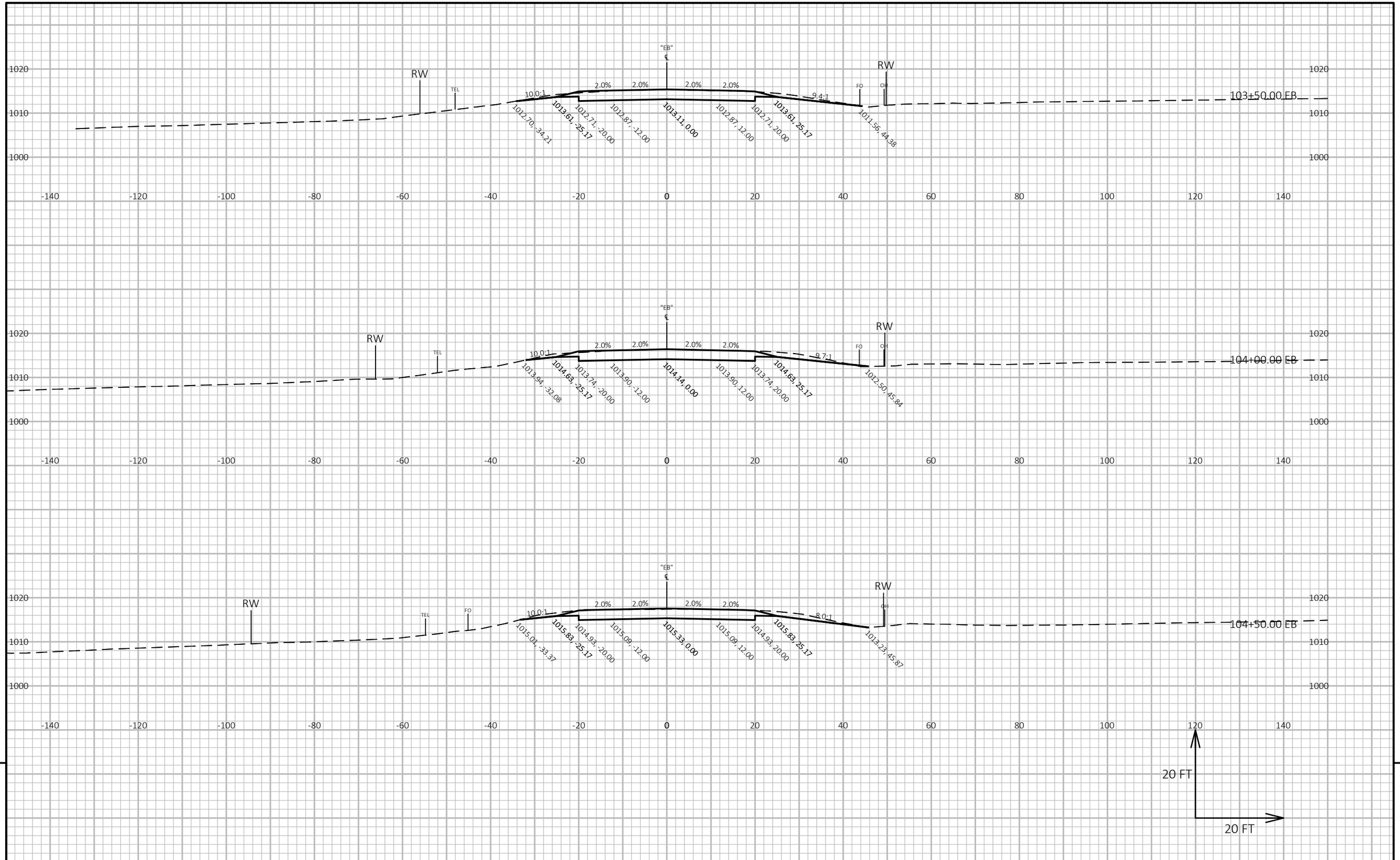
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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PLOT NAME :
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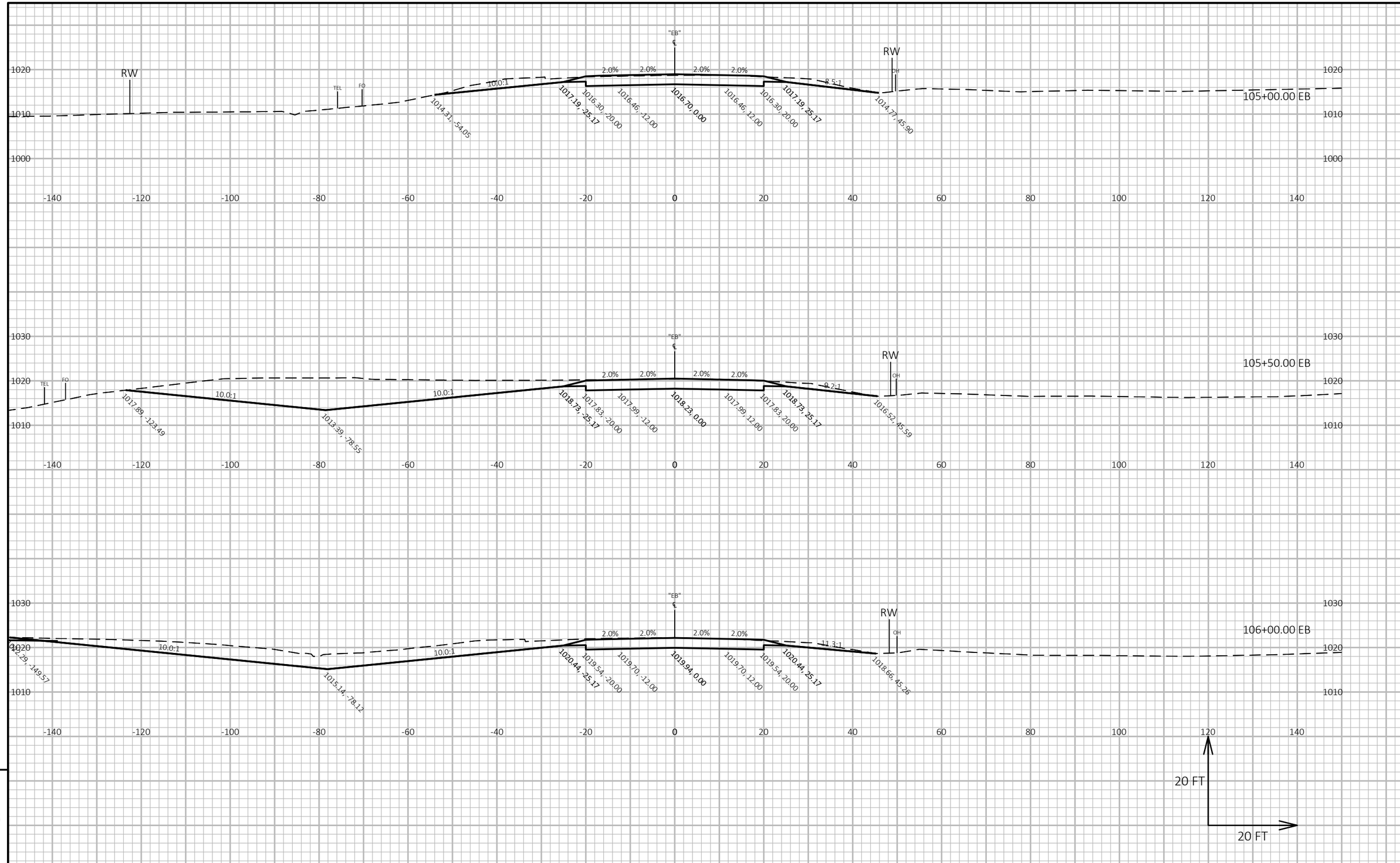

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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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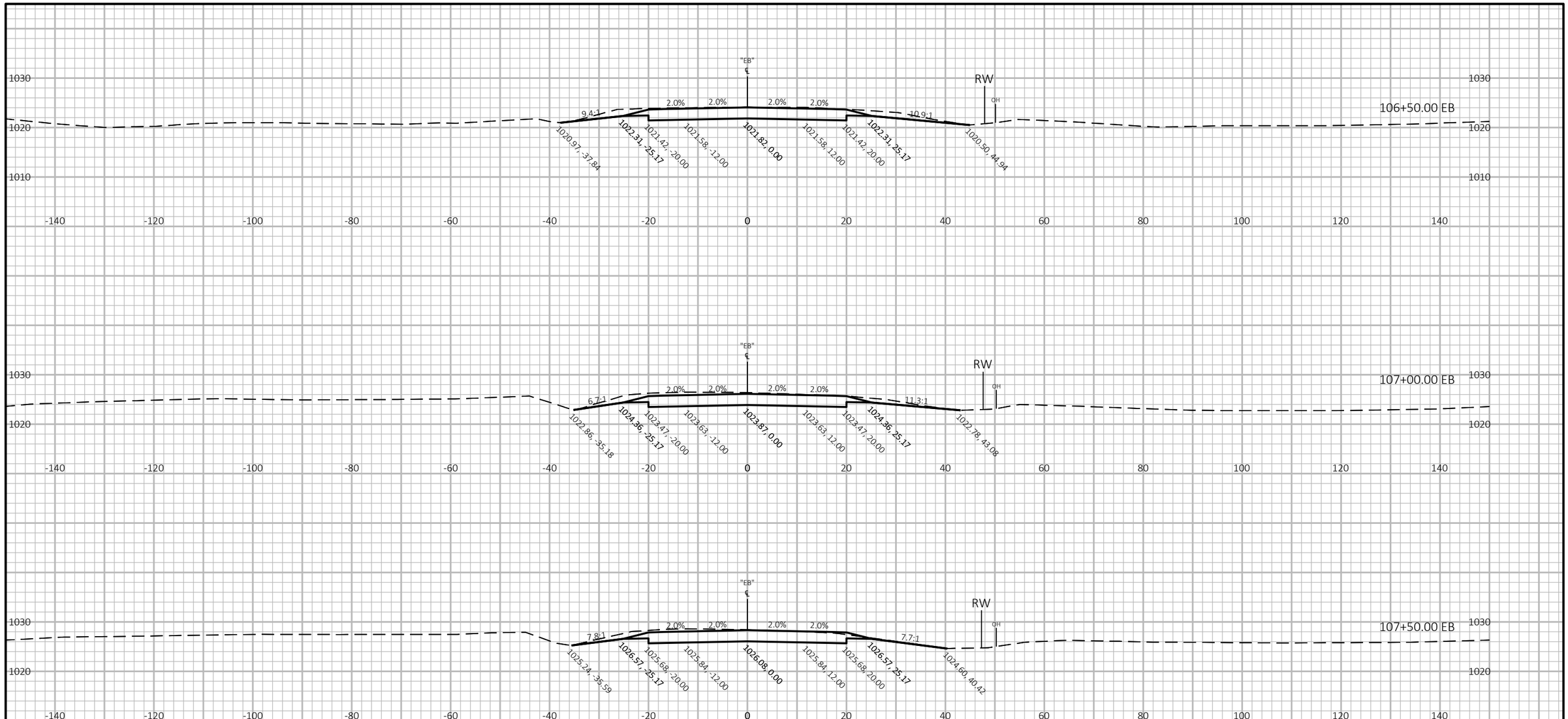
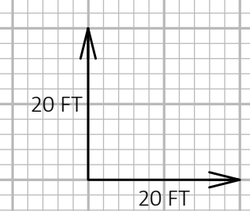
WISDOT/CADDS SHEET 49





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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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PLOT NAME :
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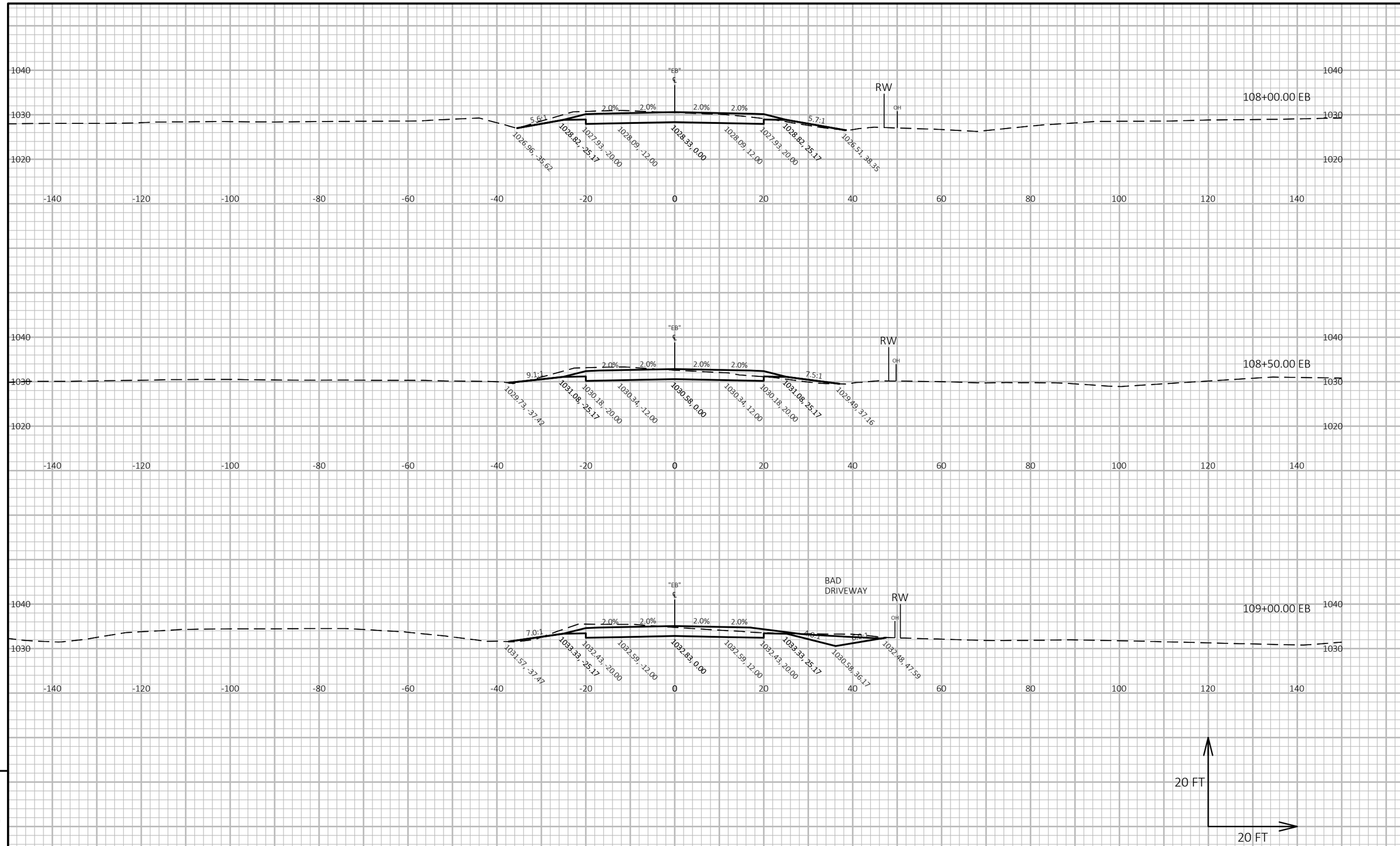

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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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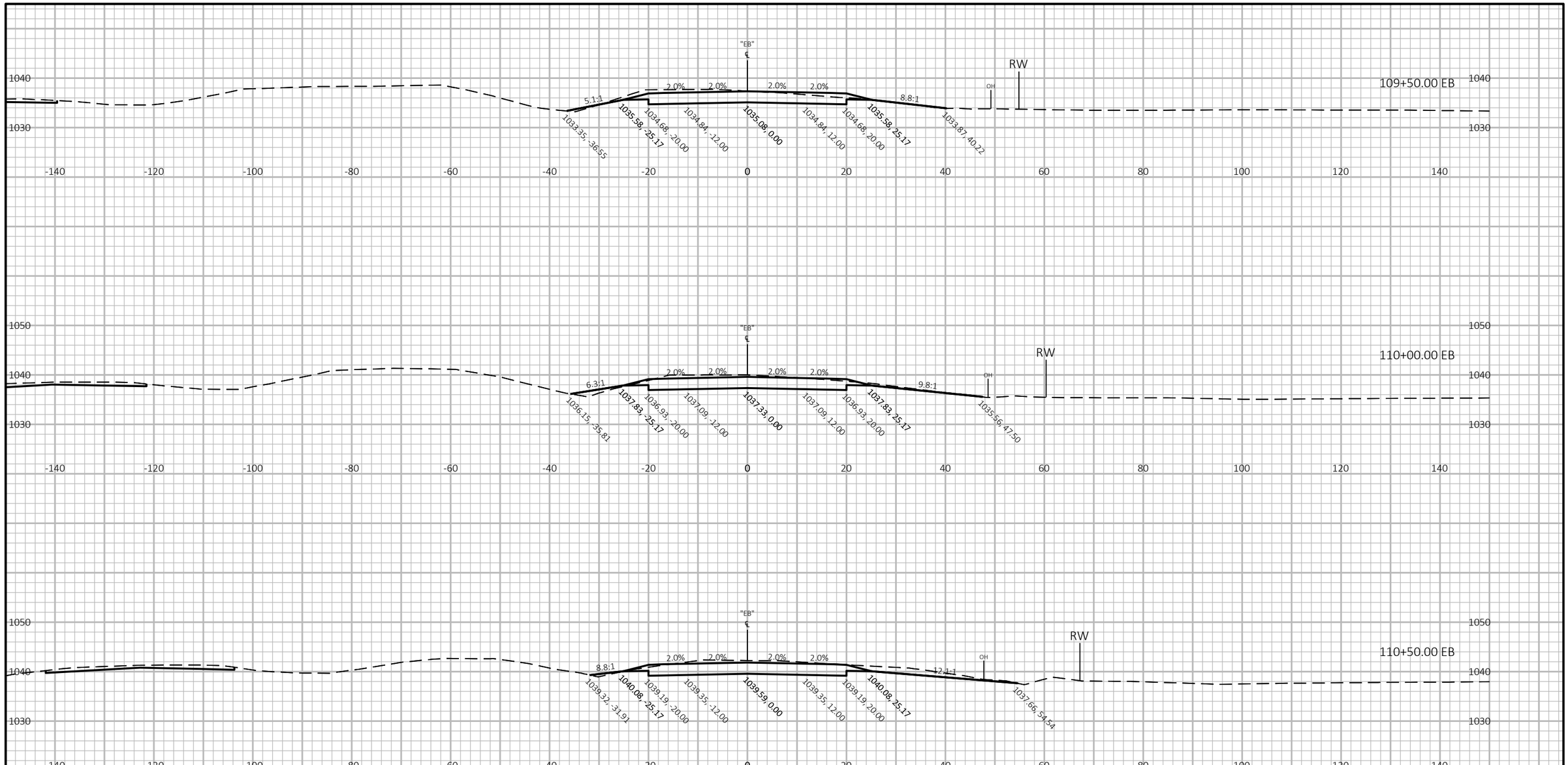
WISDOT/CADDS SHEET 49



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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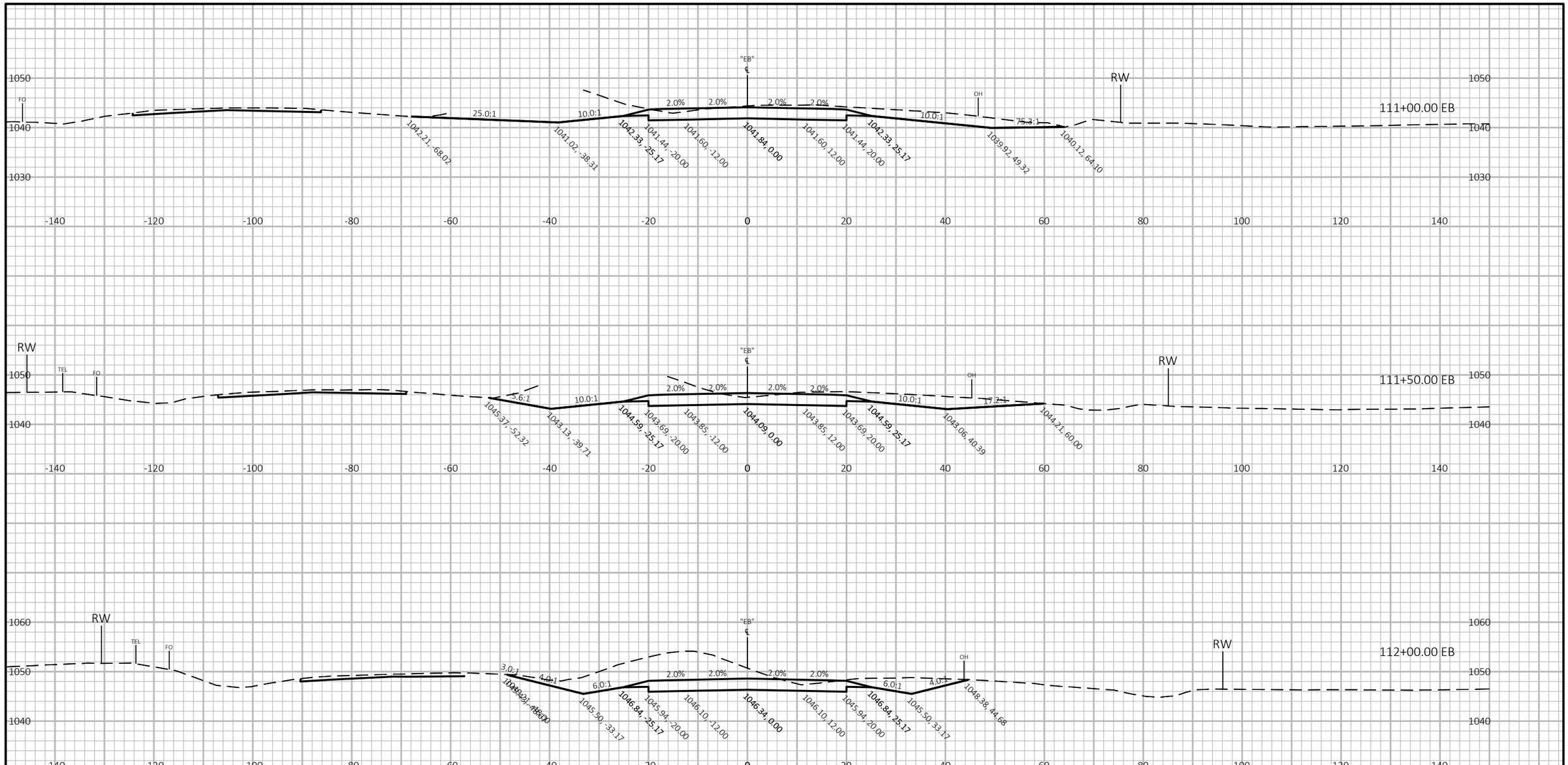

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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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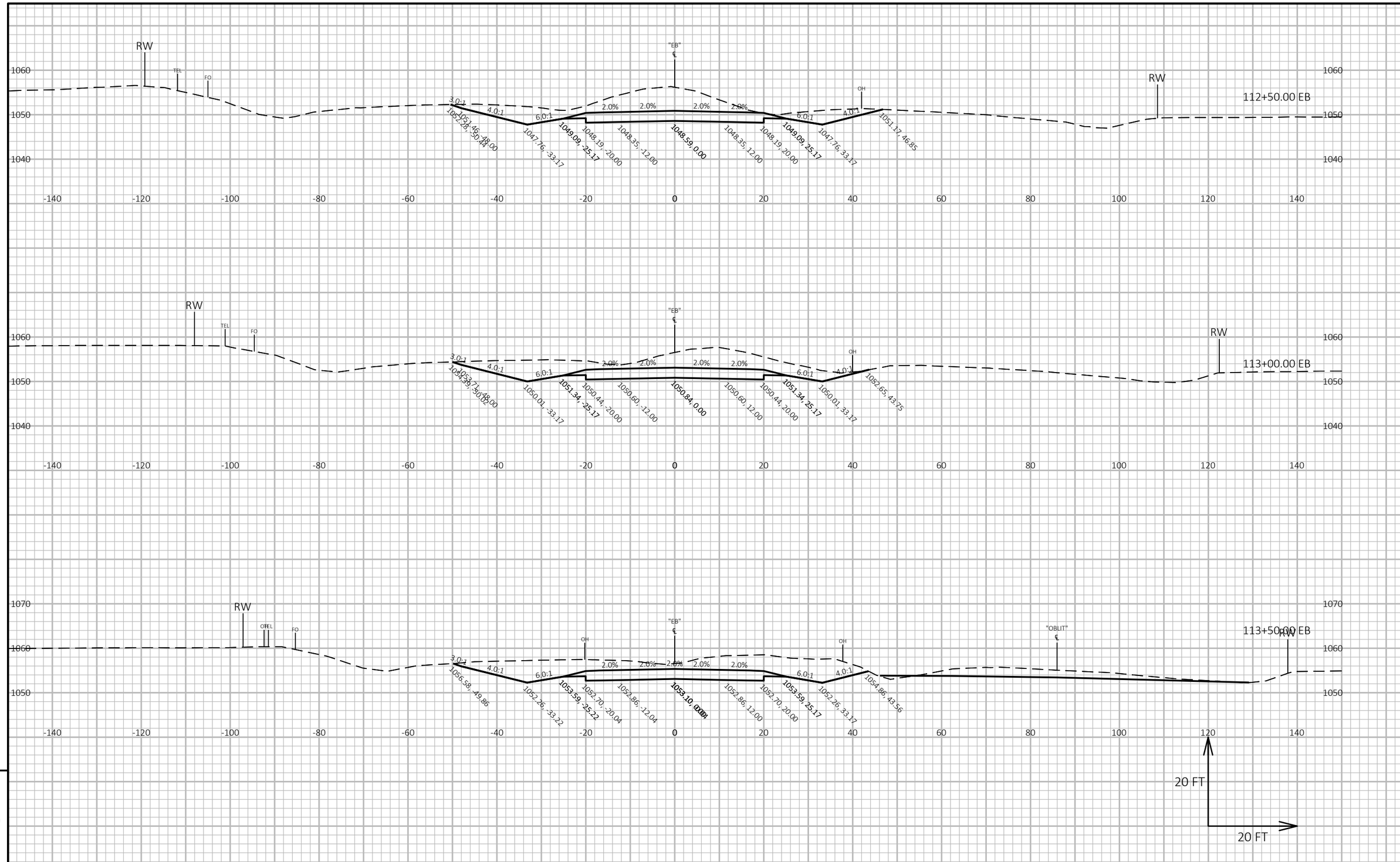
WISDOT/CADDS SHEET 49



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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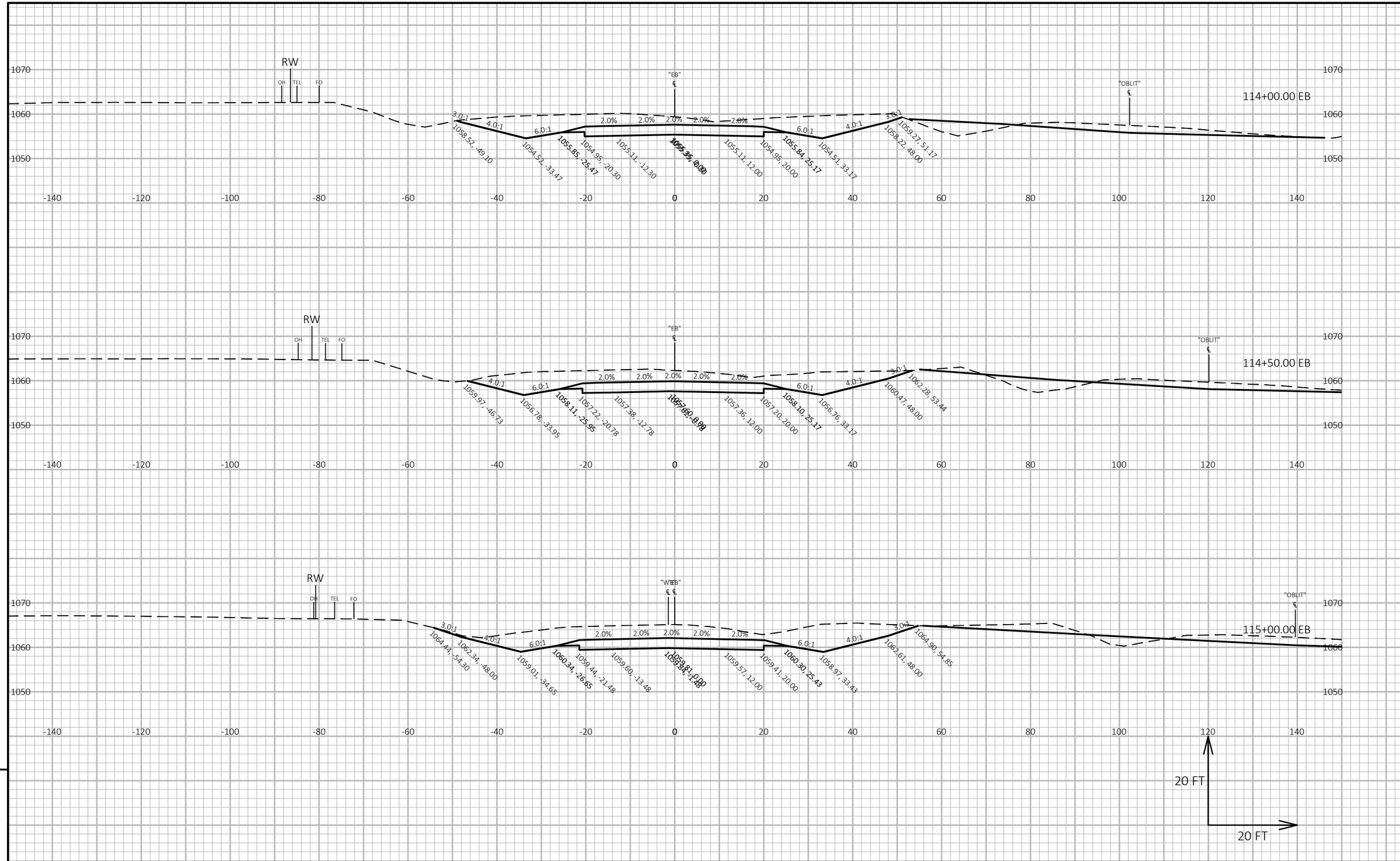
WISDOT/CADDS SHEET 49



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
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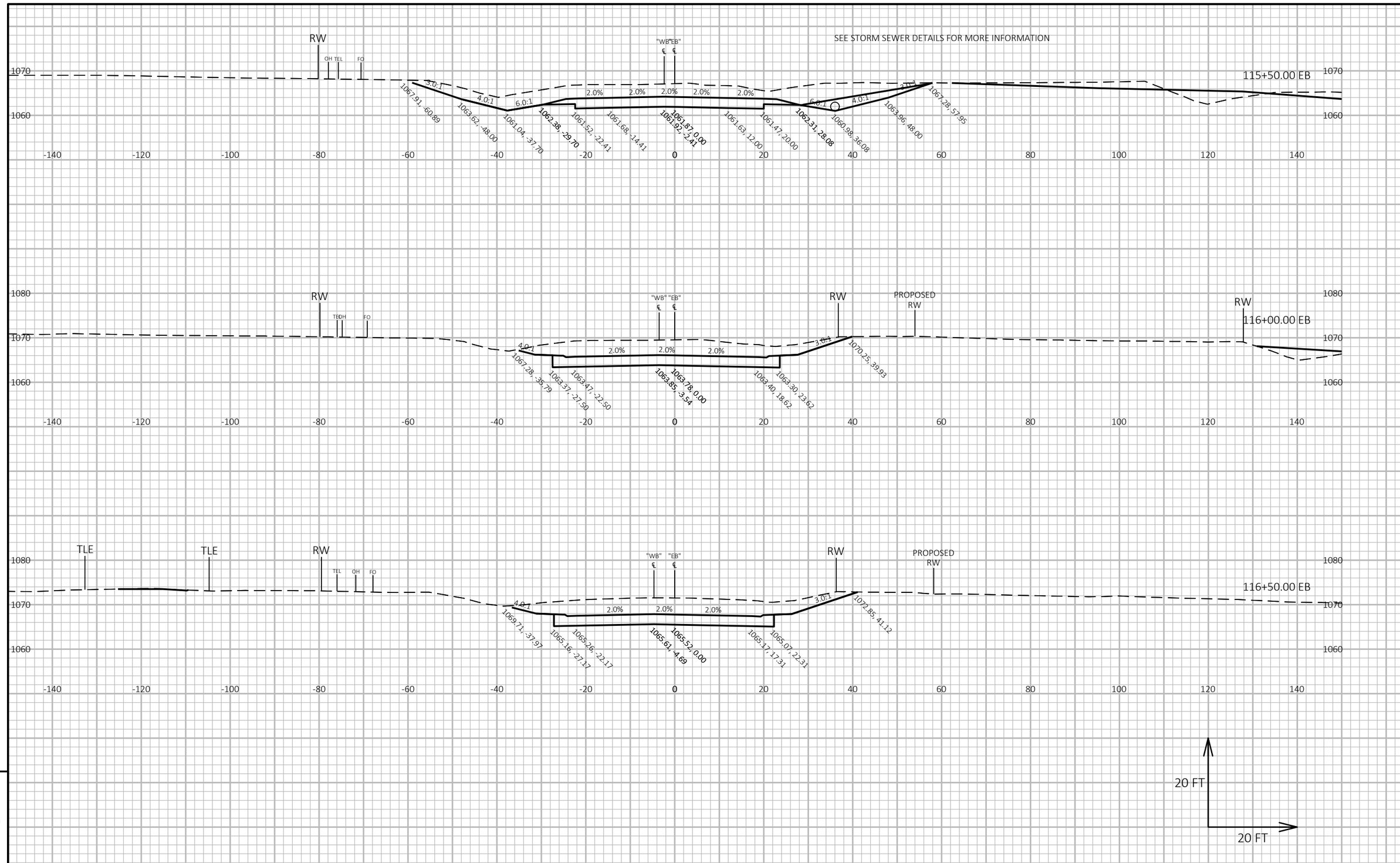
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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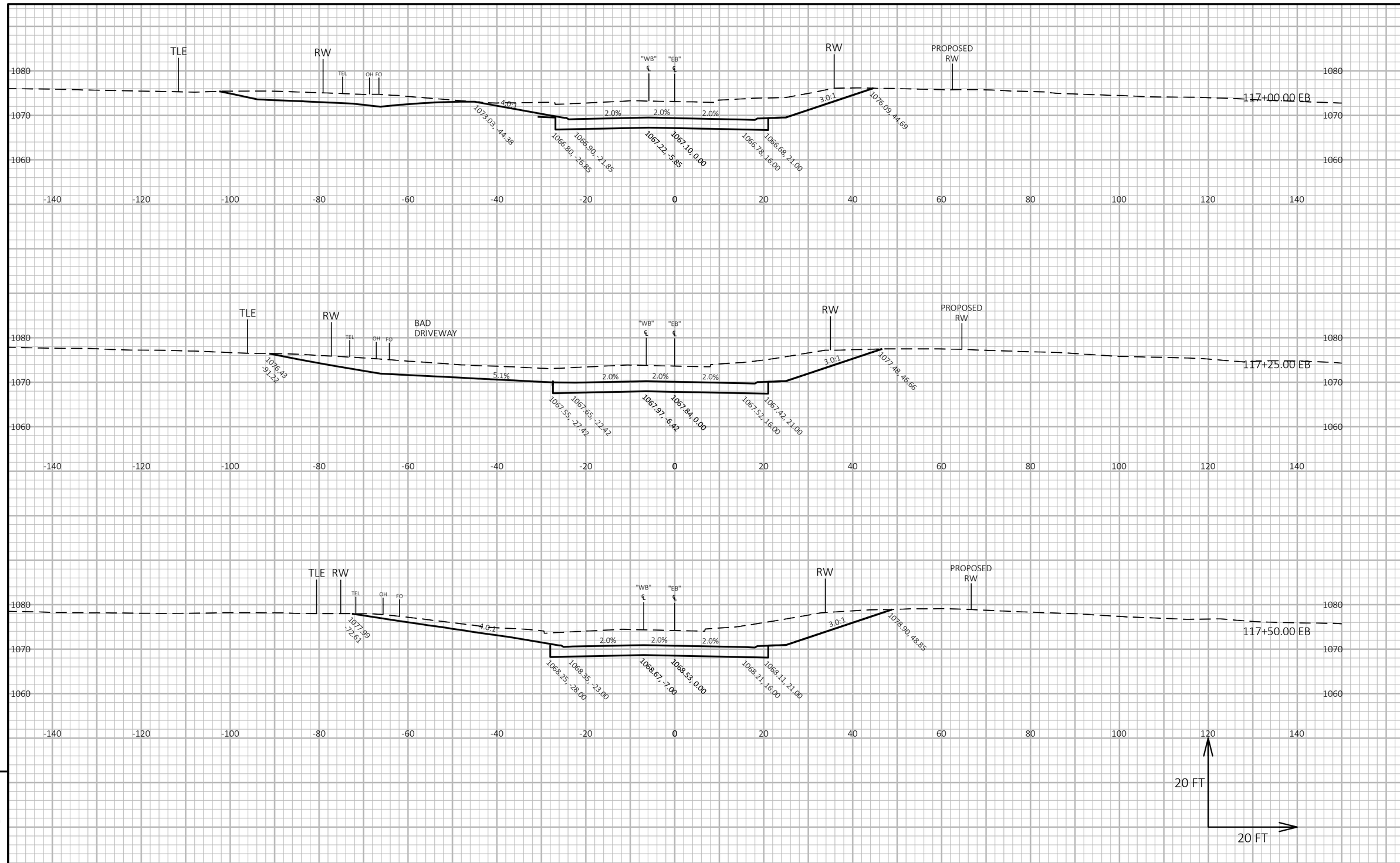

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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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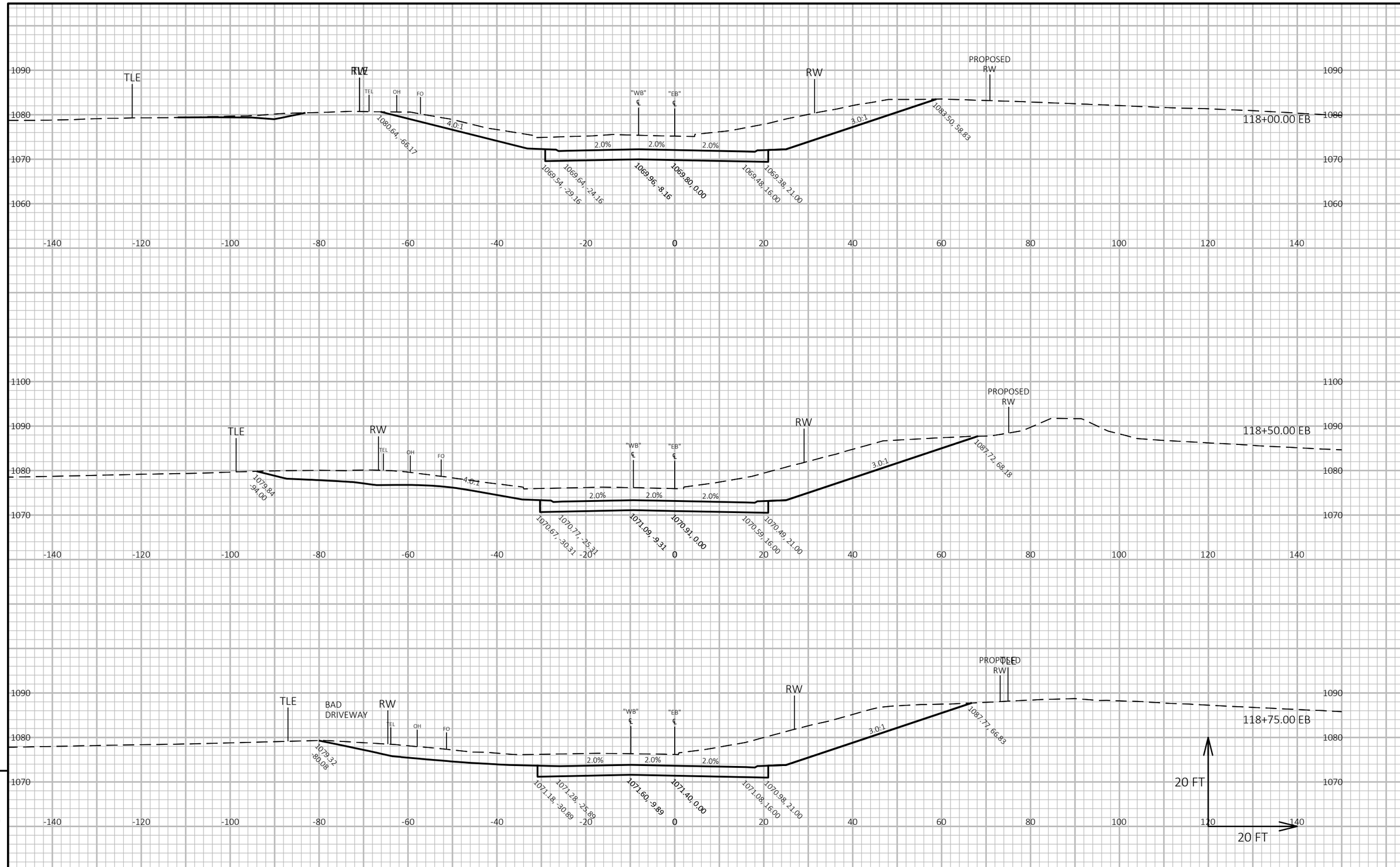
WISDOT/CADDS SHEET 49



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

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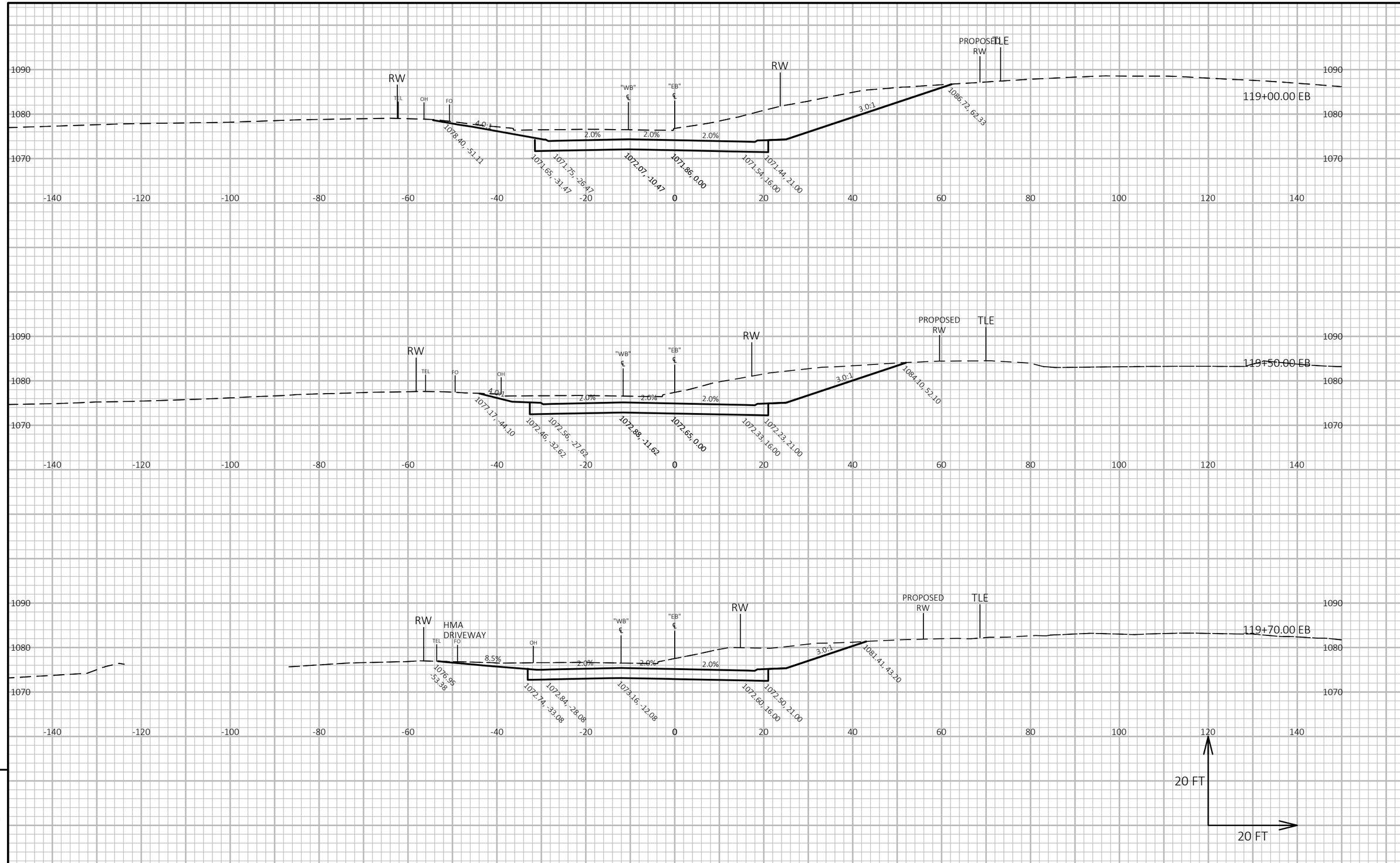
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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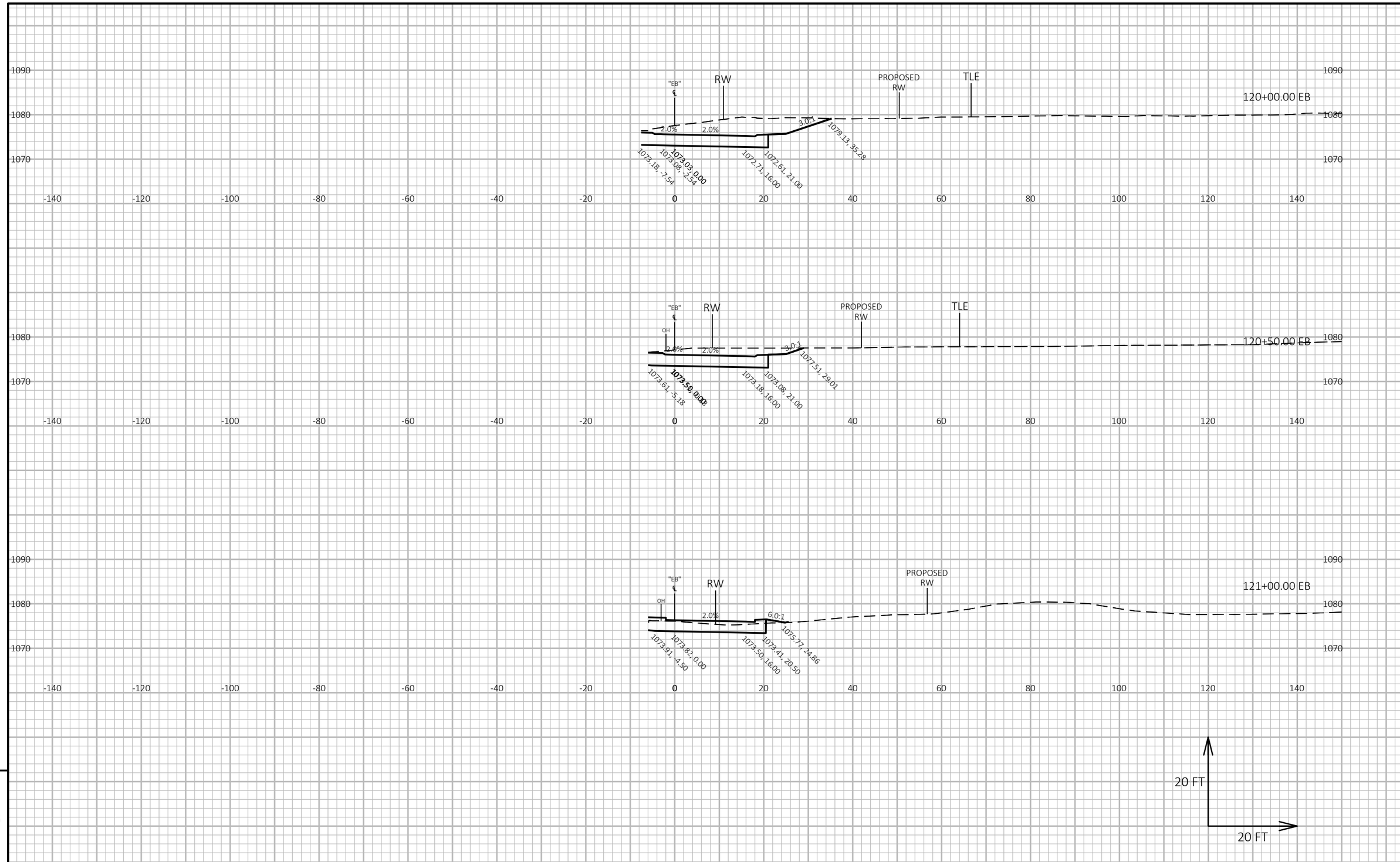
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (13)

PLOT DATE : 3/3/2020 3:53 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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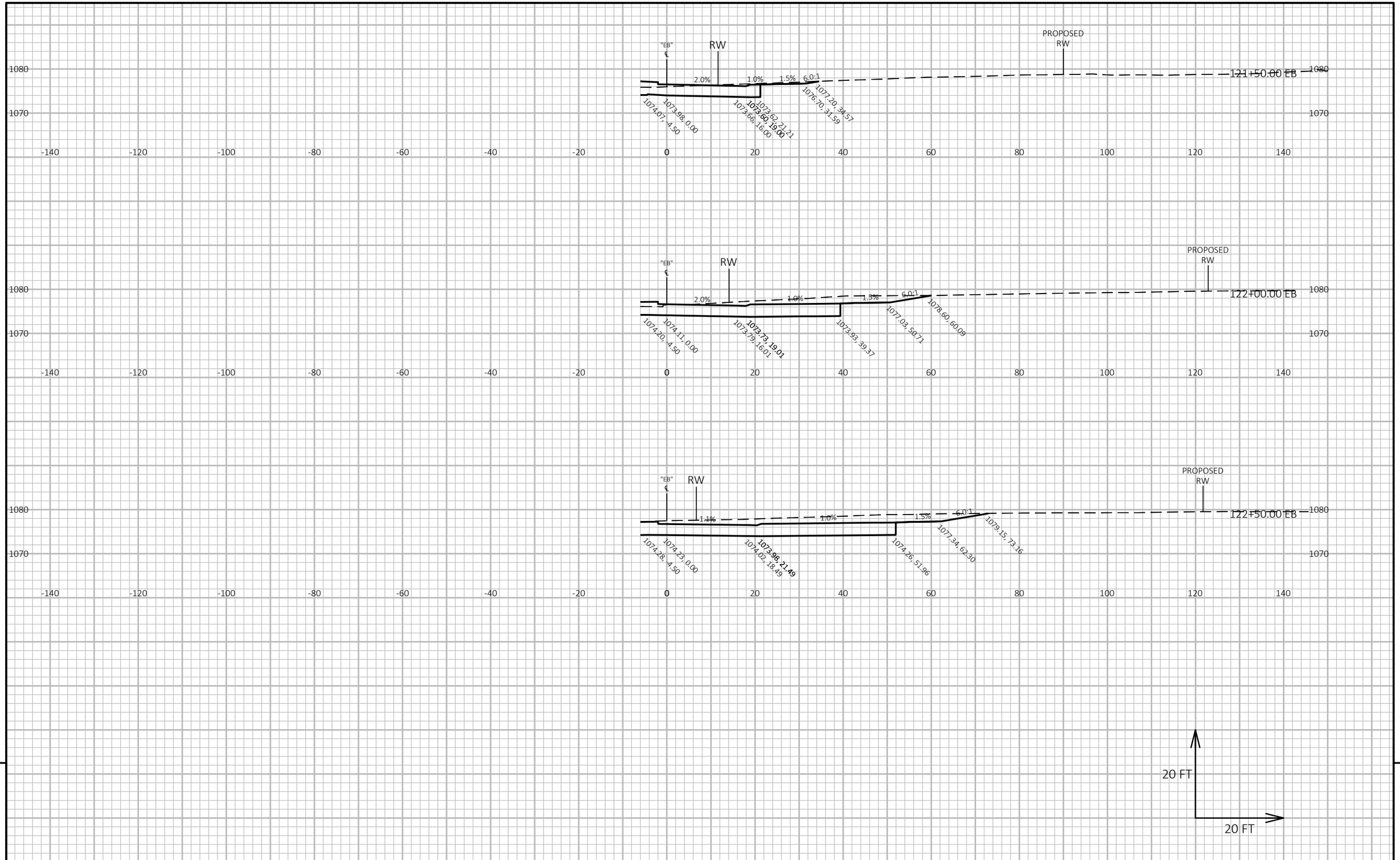
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (14)
PLOT DATE : 3/3/2020 3:53 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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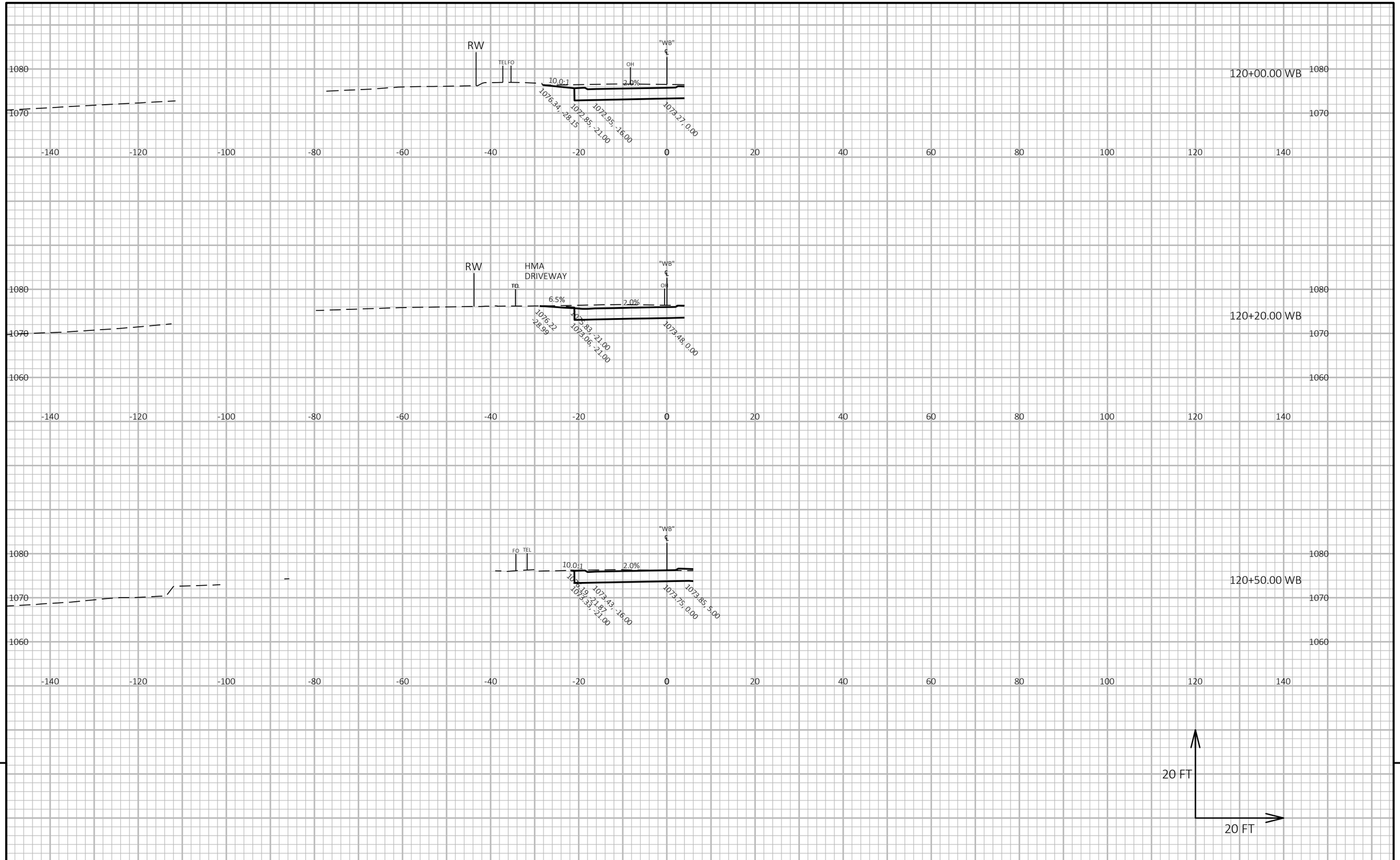
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (15)

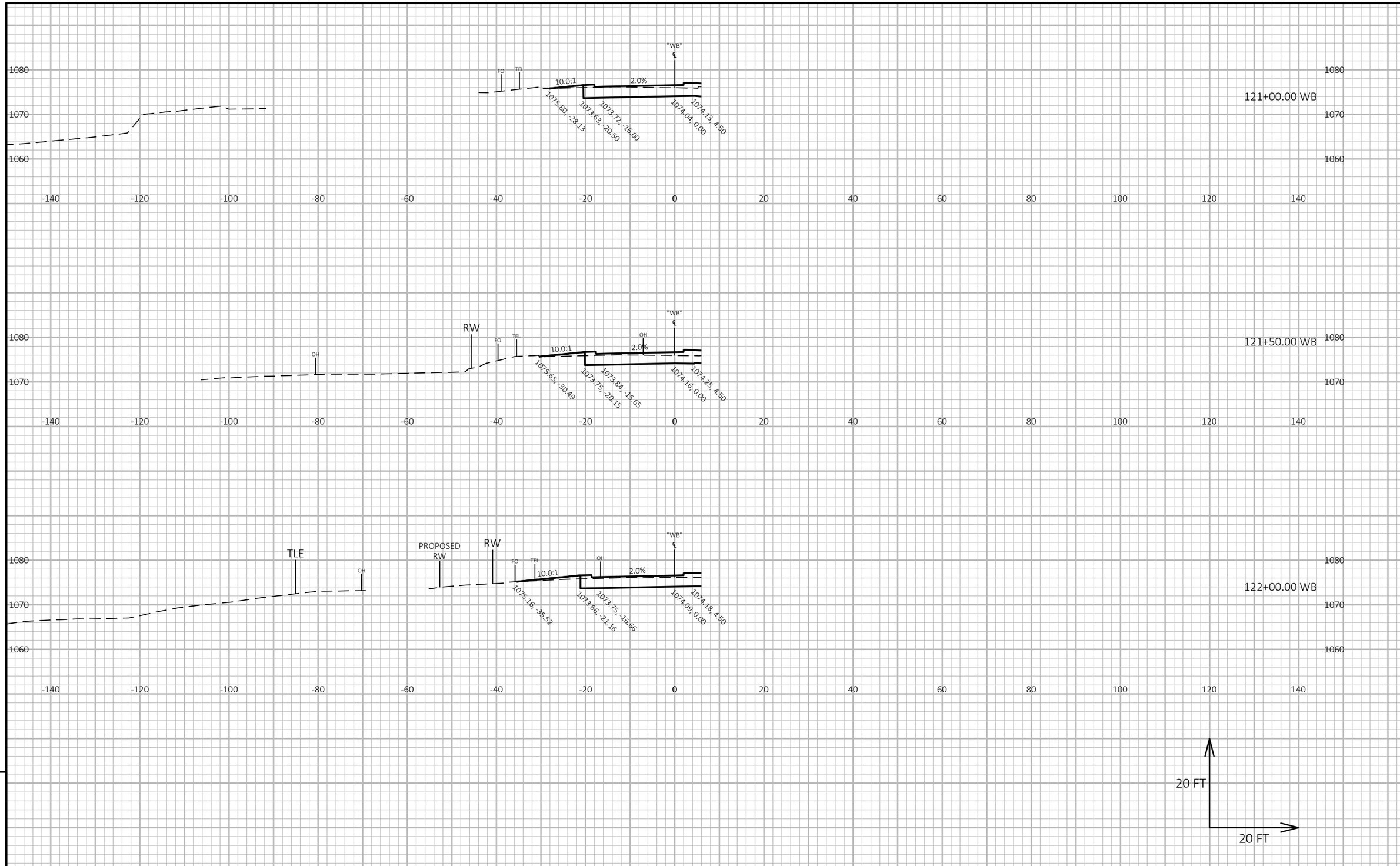
PLOT DATE : 3/3/2020 3:53 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (1)
PLOT DATE : 3/3/2020 3:54 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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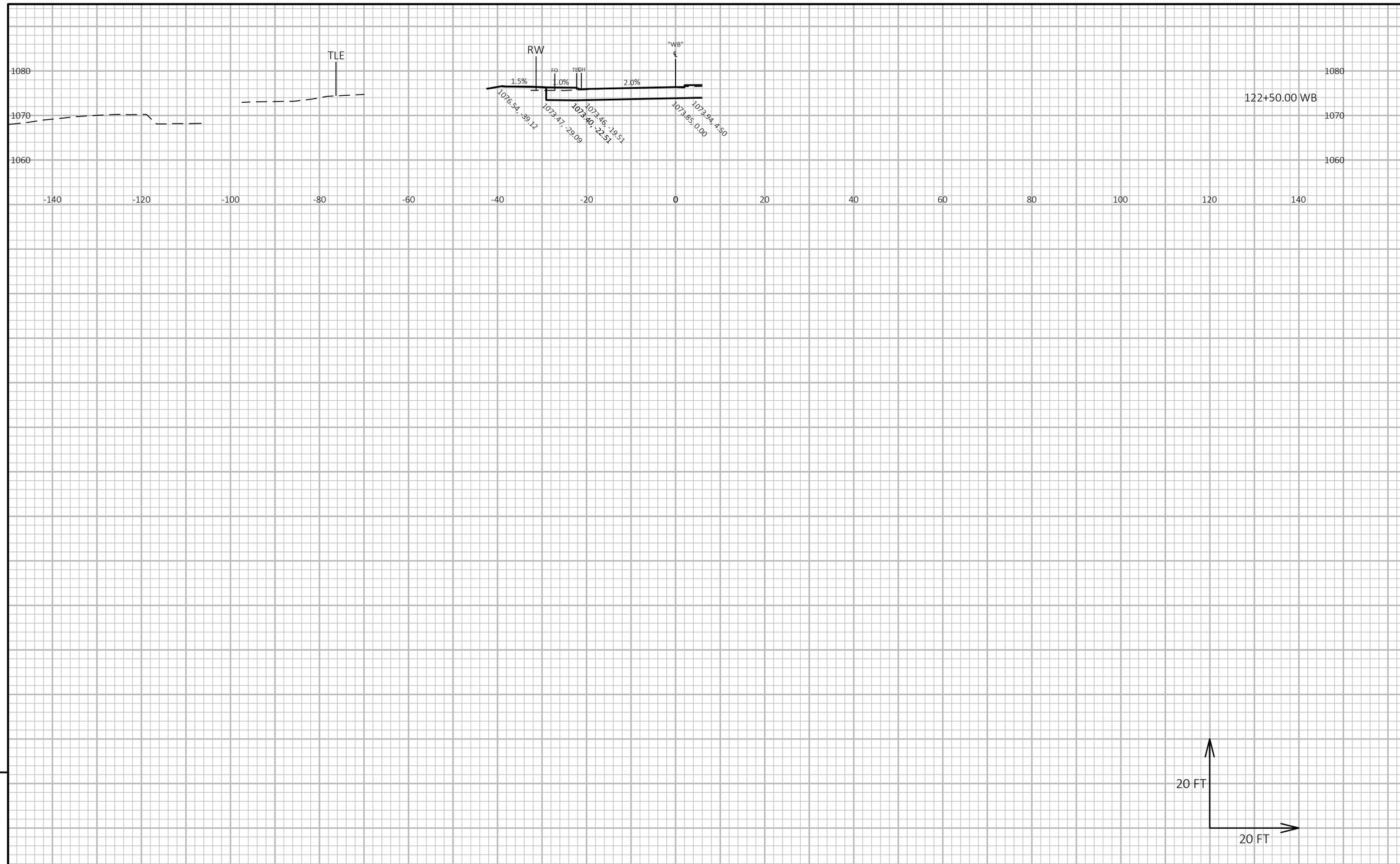
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (2)
PLOT DATE : 3/3/2020 3:54 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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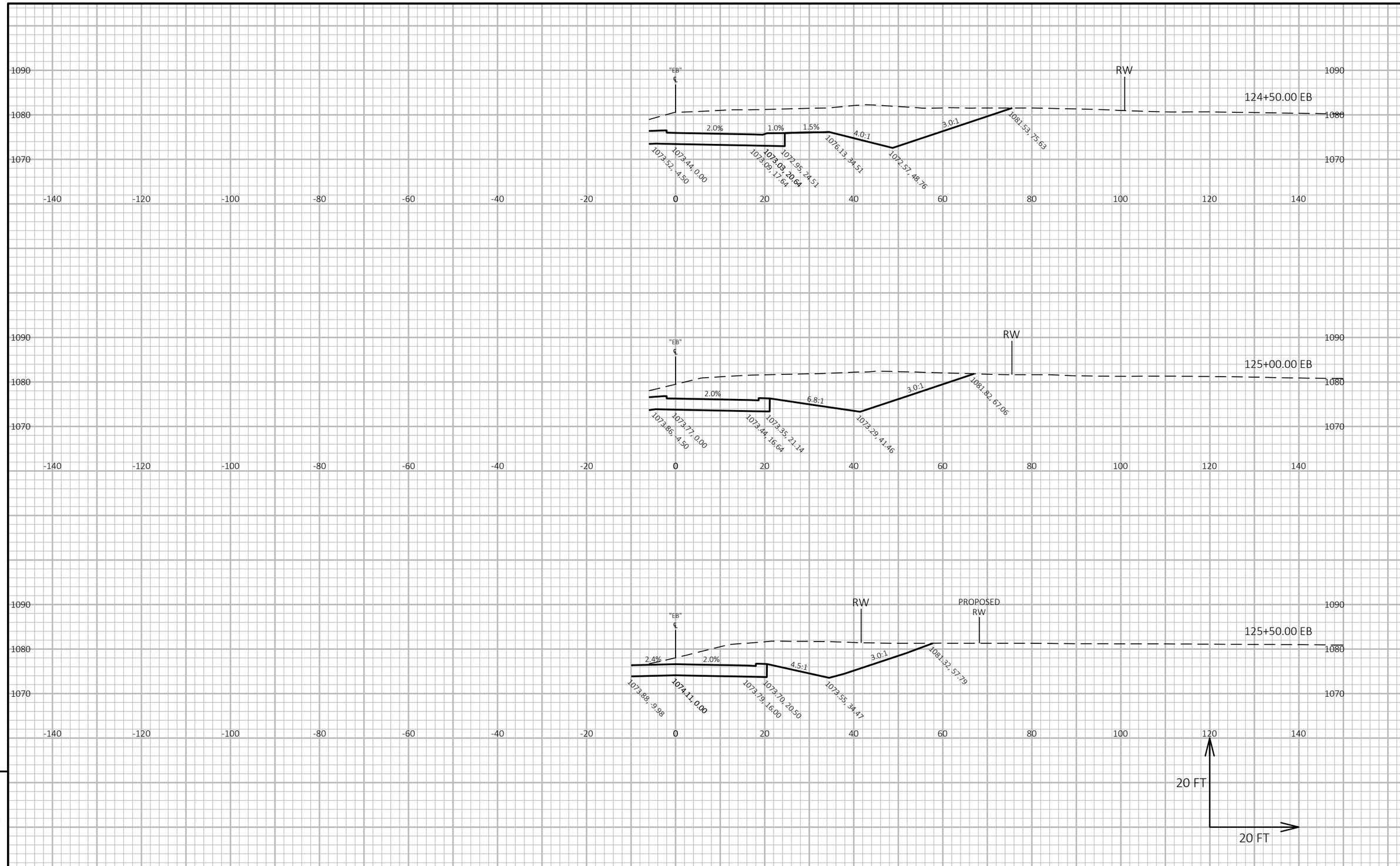
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB USH 51 WEST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (3)

PLOT DATE : 3/3/2020 3:54 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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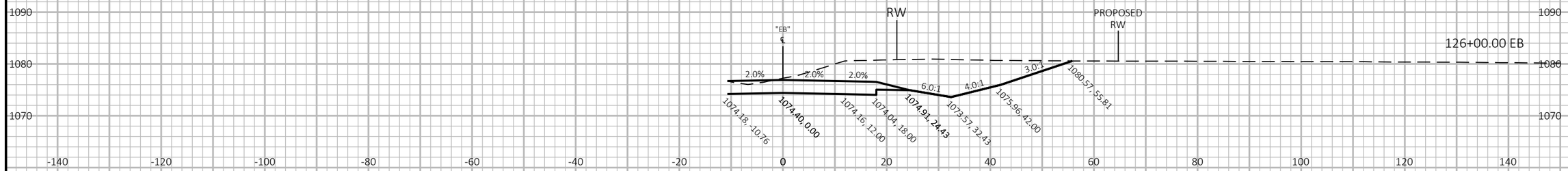
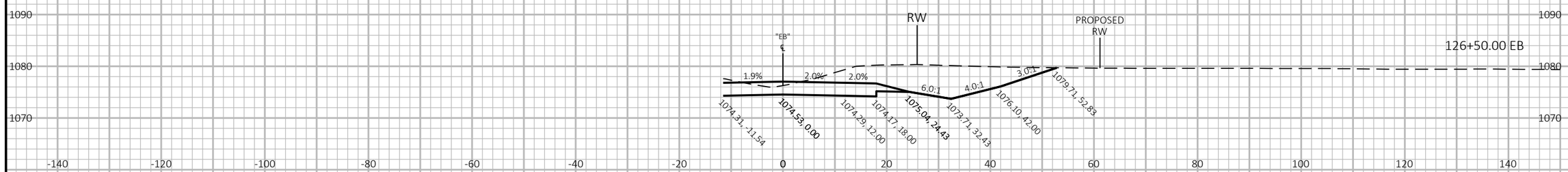
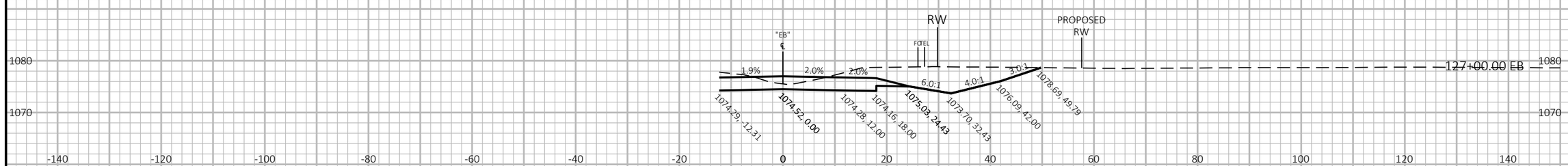
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (16)
PLOT DATE : 3/3/2020 3:54 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49







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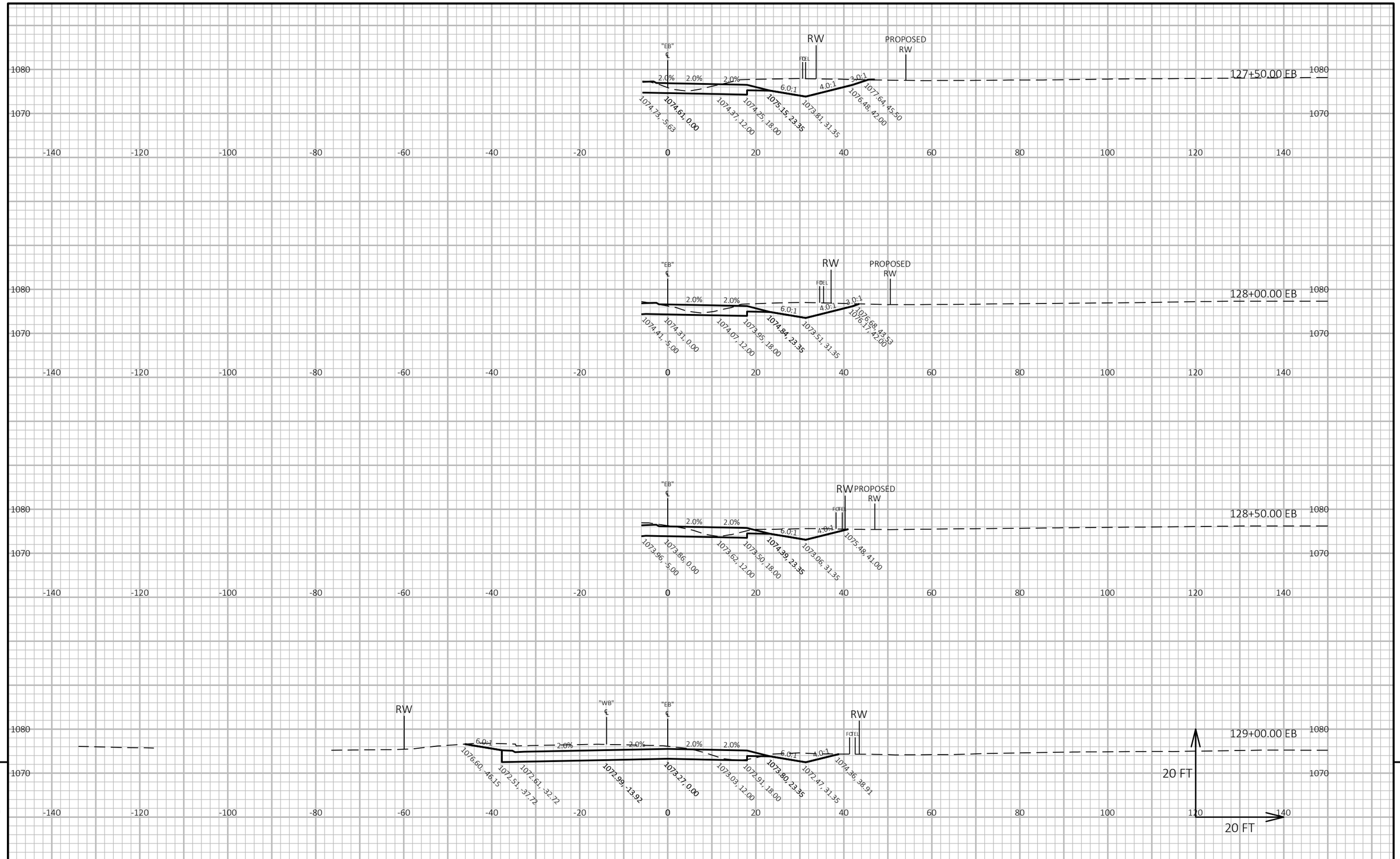
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (17)
PLOT DATE : 3/3/2020 3:55 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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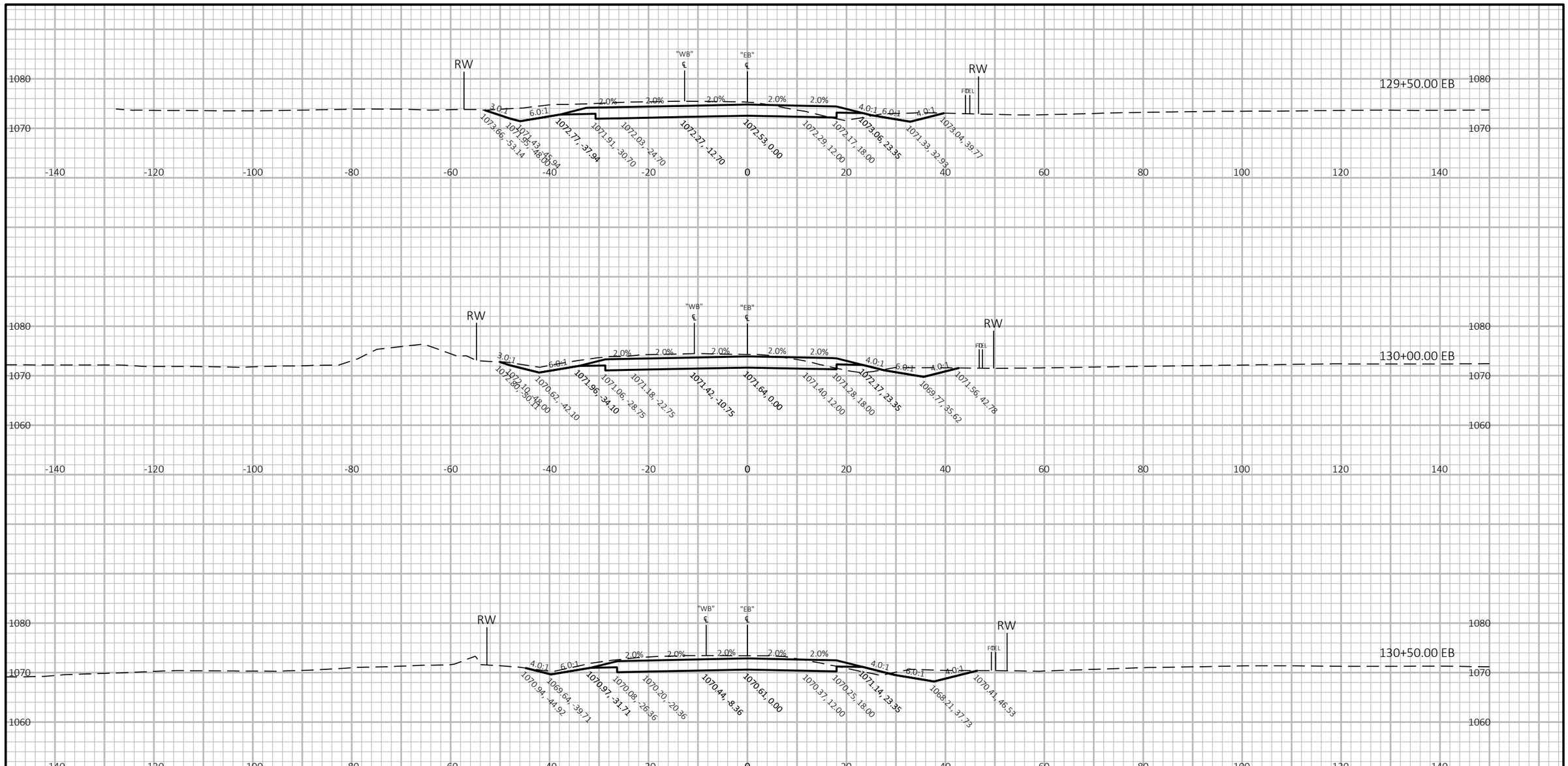
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (18)
PLOT DATE : 3/3/2020 3:55 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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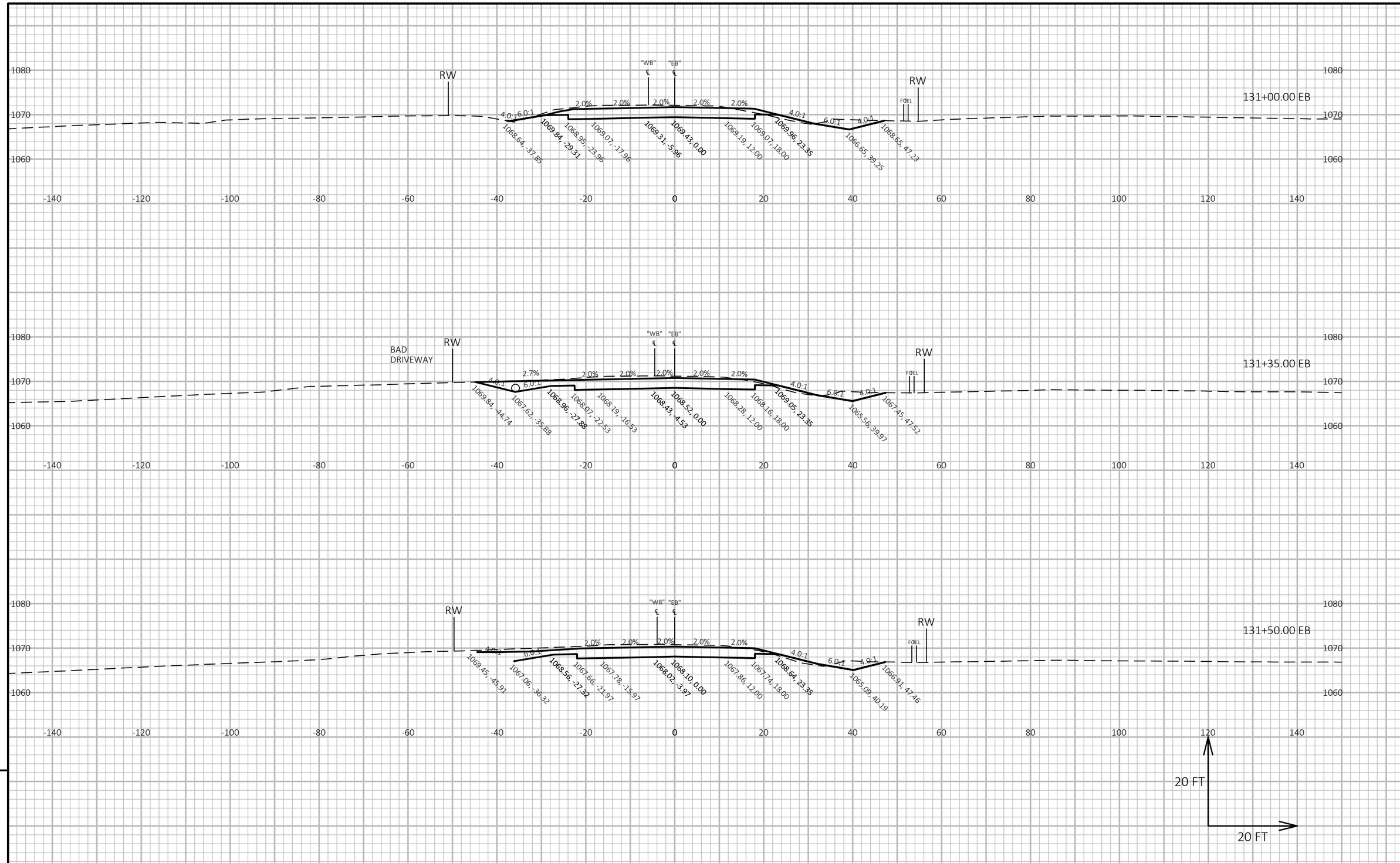
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (19)
PLOT DATE : 3/3/2020 3:55 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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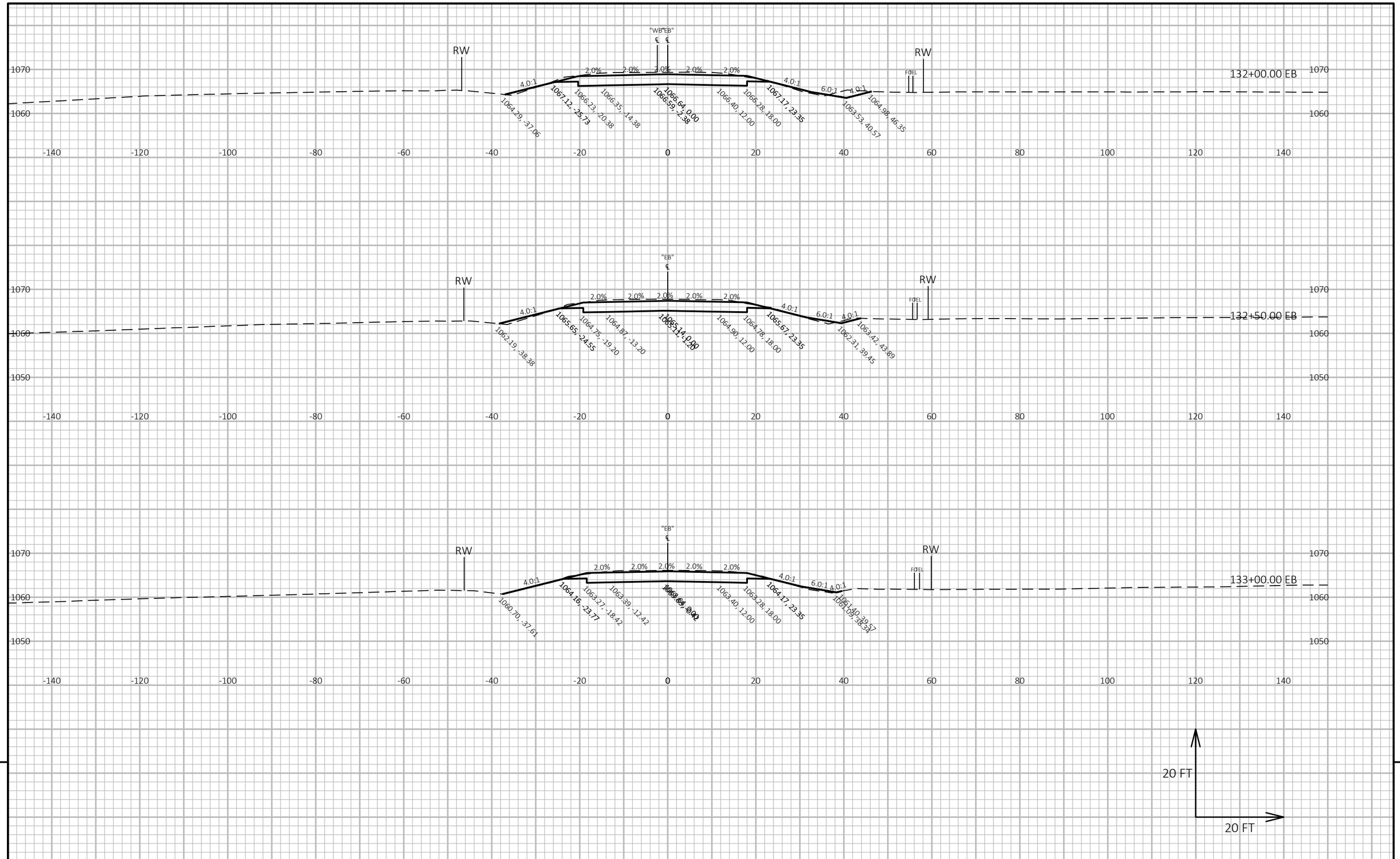
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (20)
PLOT DATE : 3/3/2020 3:55 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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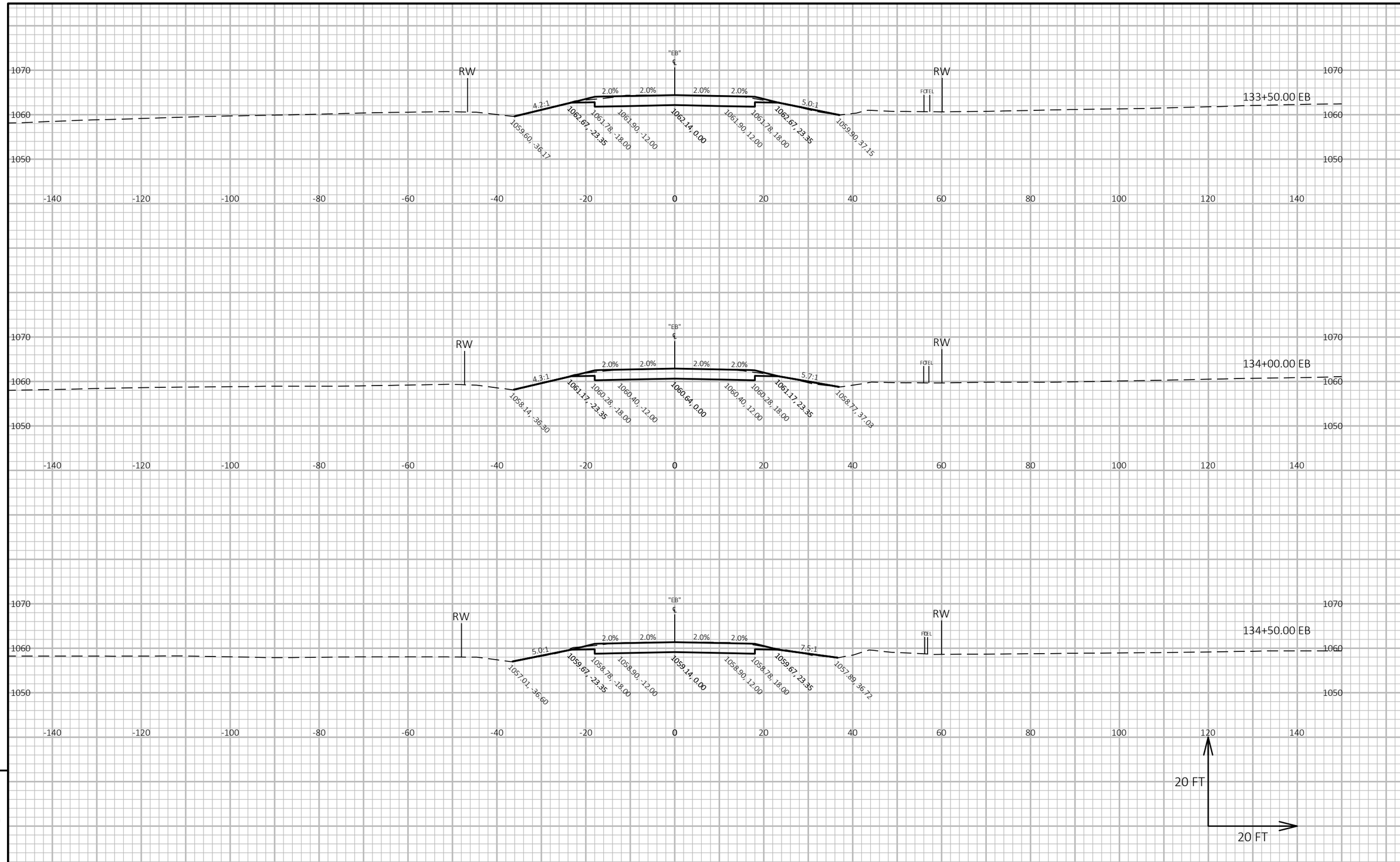
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (21)
PLOT DATE : 3/3/2020 3:55 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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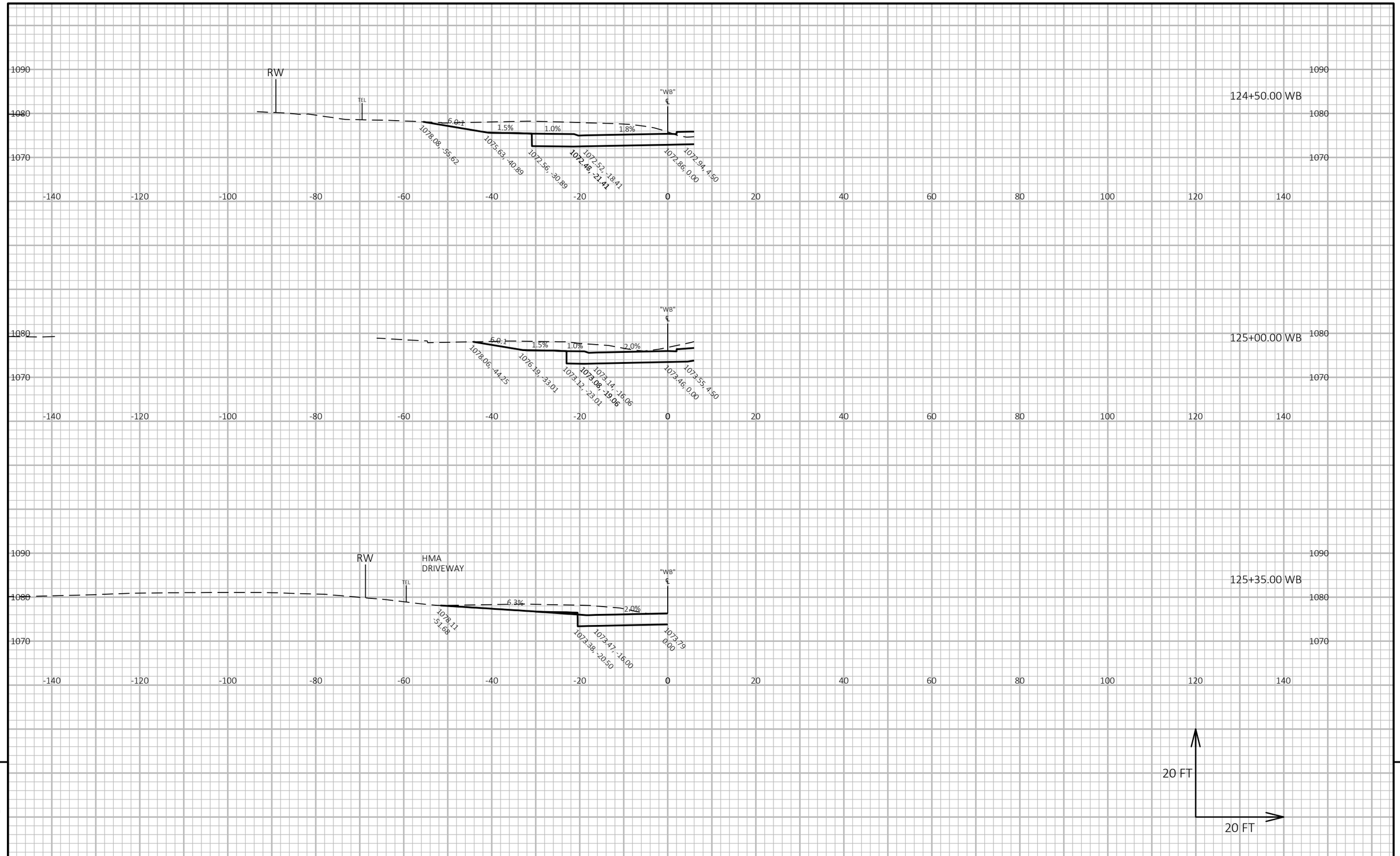
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: EB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 EB AlignmentSection Sheet - (22)
PLOT DATE : 3/3/2020 3:55 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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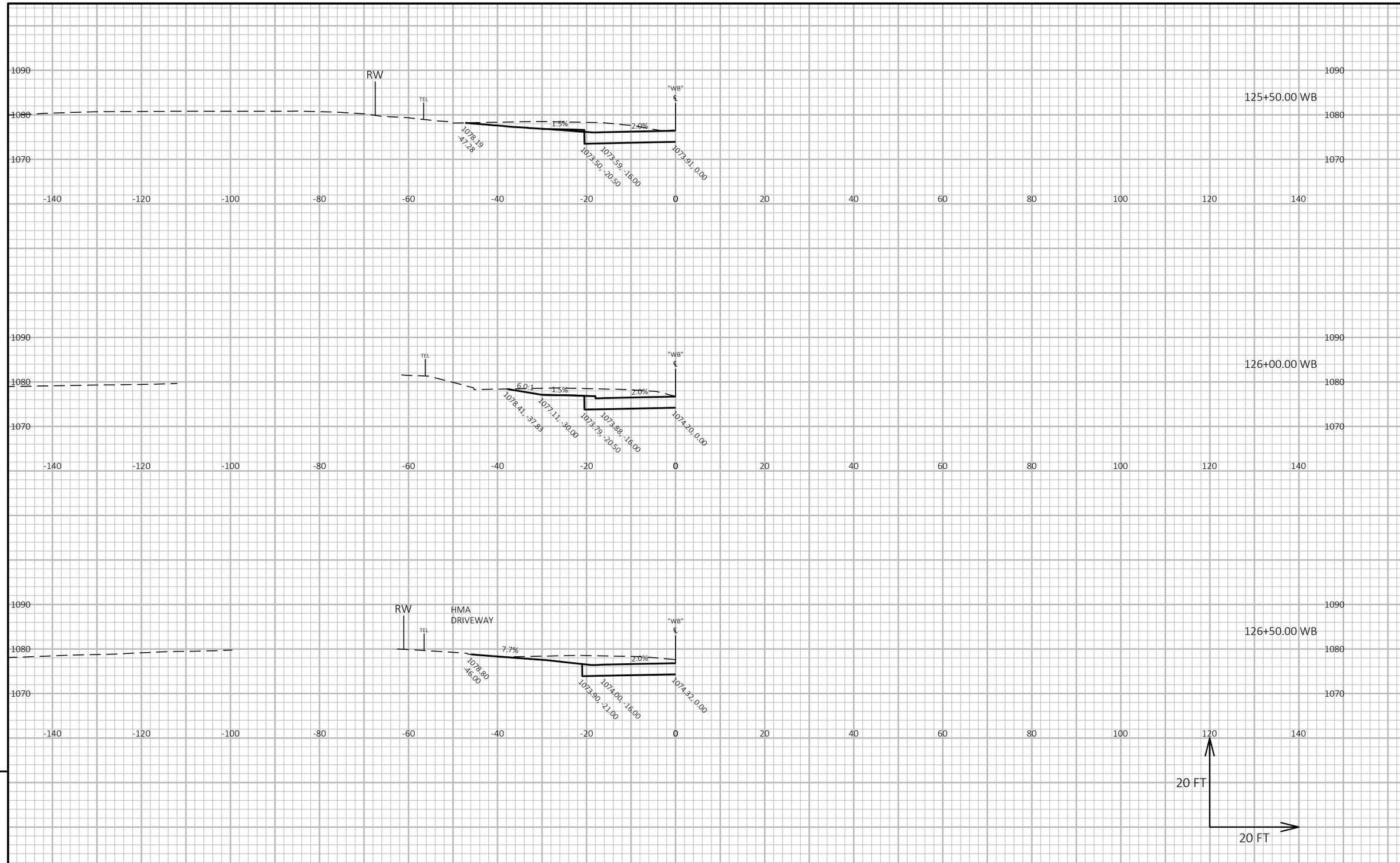
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (10)
PLOT DATE : 3/3/2020 3:55 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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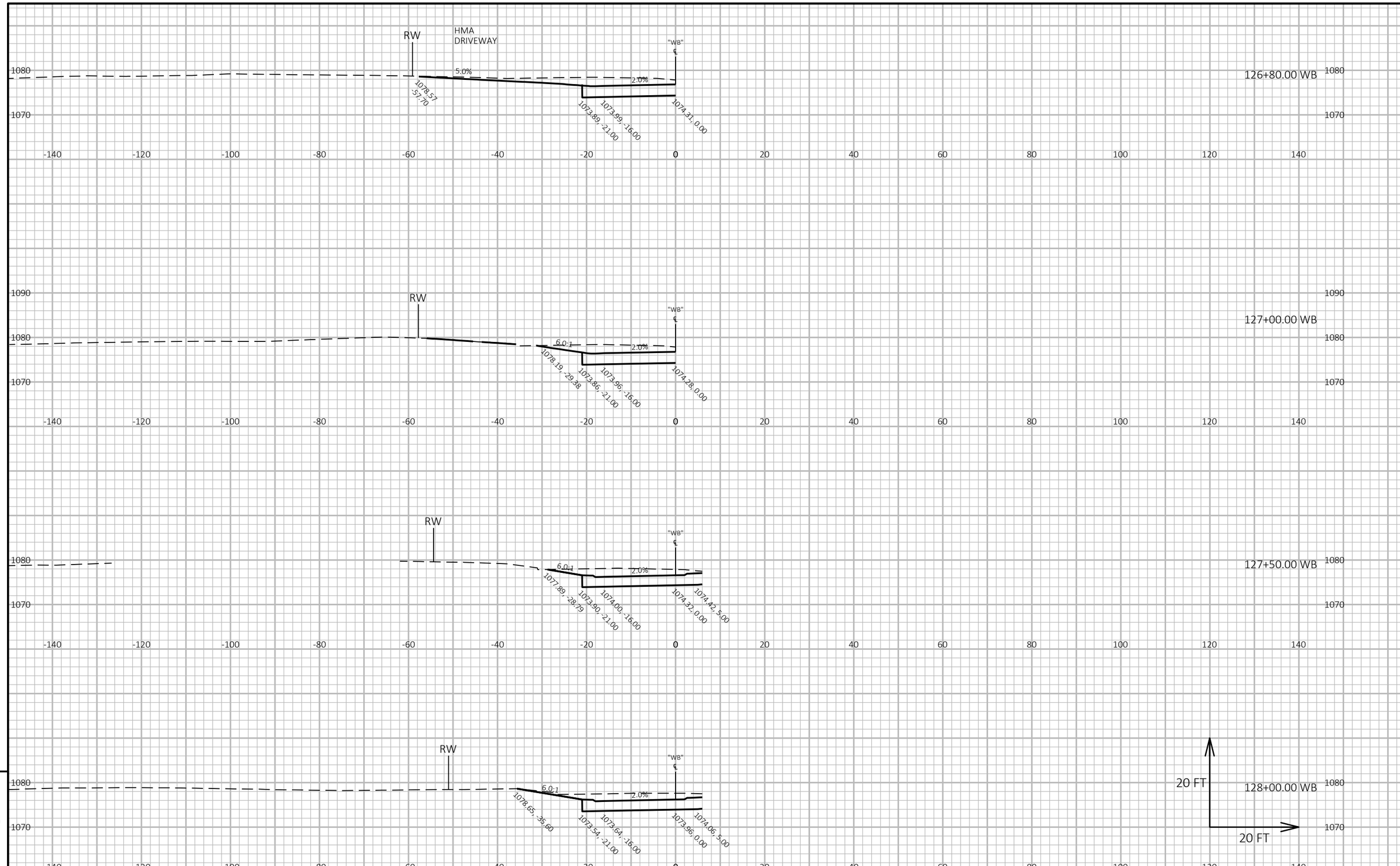
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (11)

PLOT DATE : 3/3/2020 3:55 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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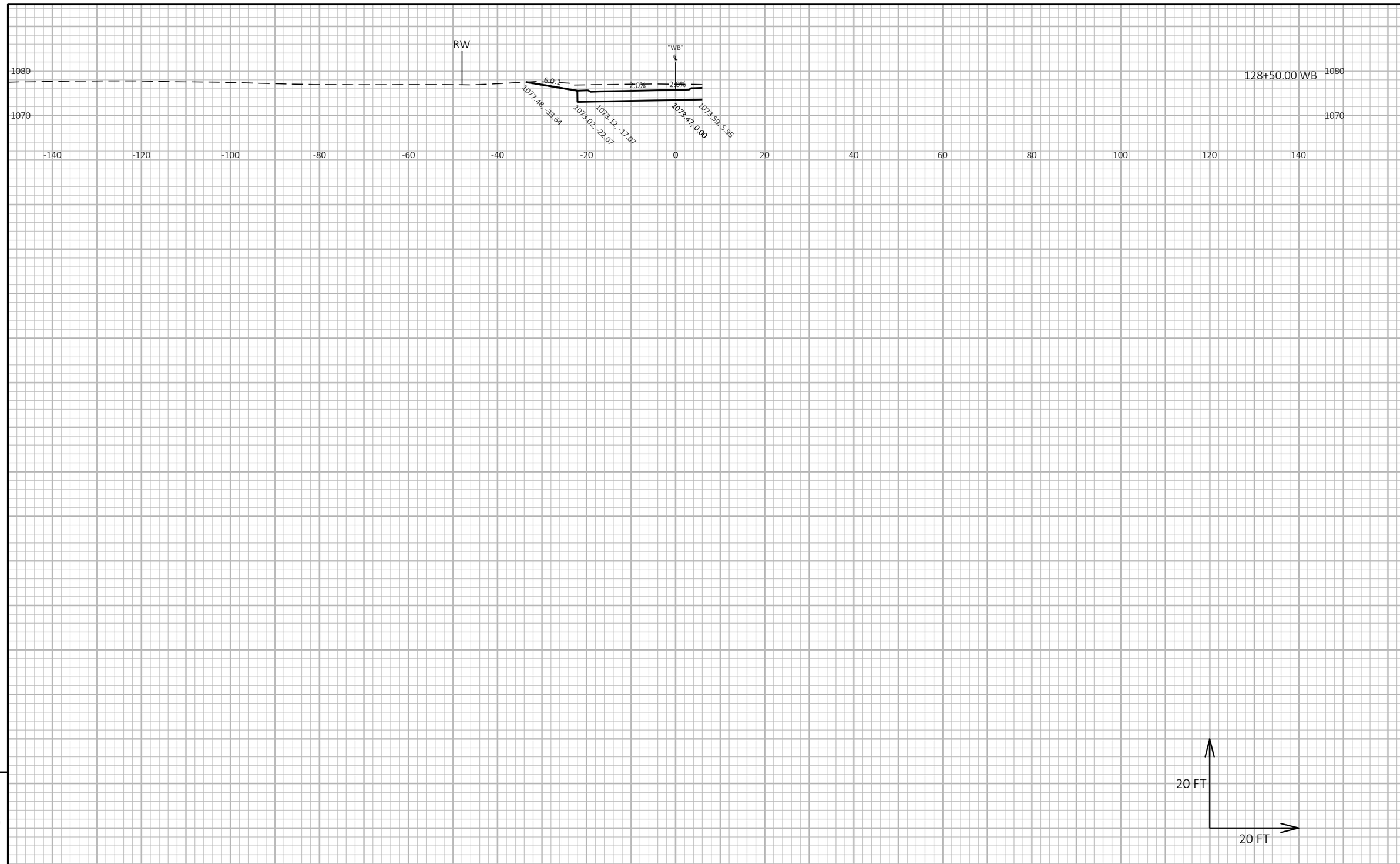
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (12)

PLOT DATE : 3/3/2020 3:56 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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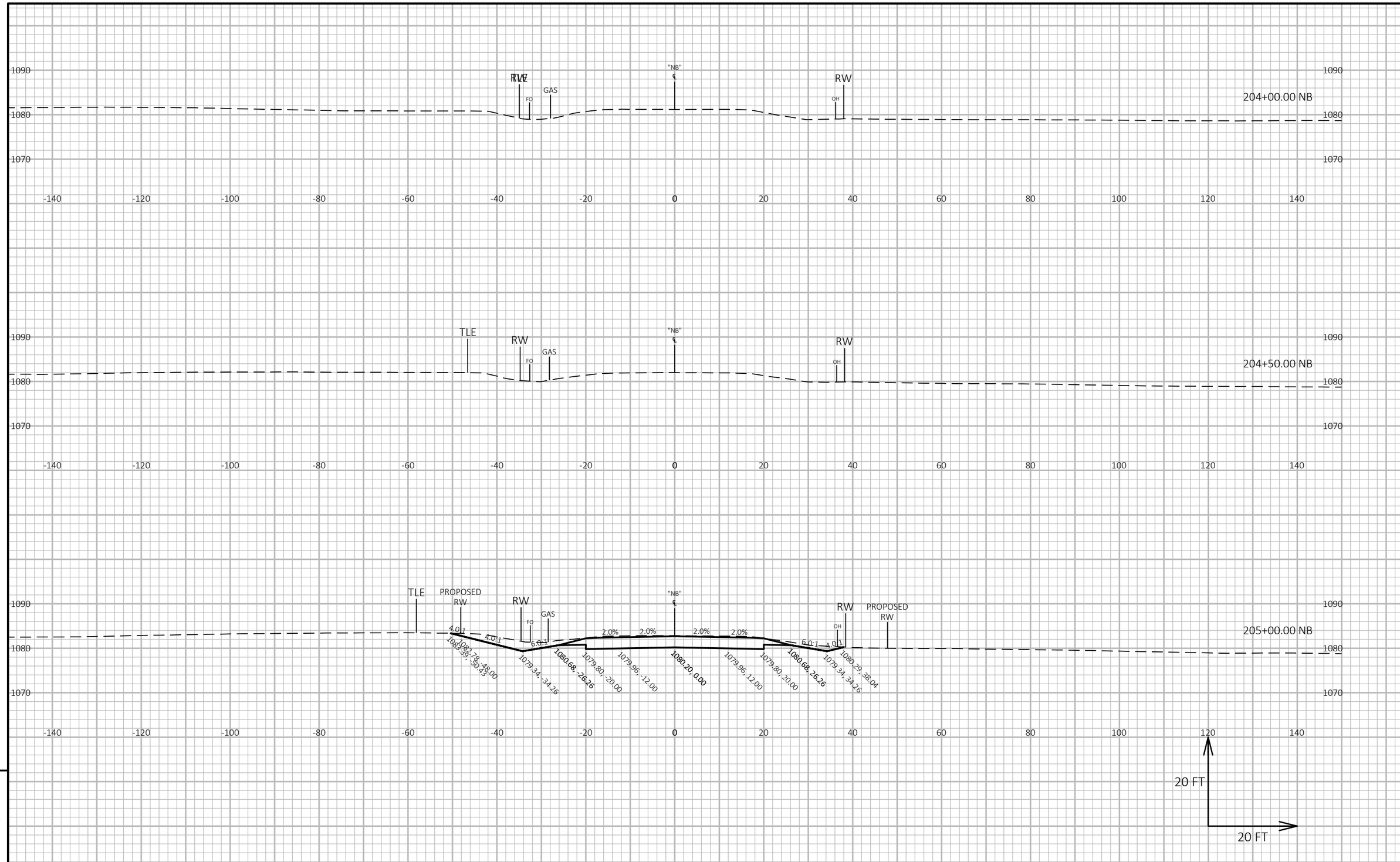
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: WB STH 60 EAST LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 60 WB AlignmentSection Sheet - (13)

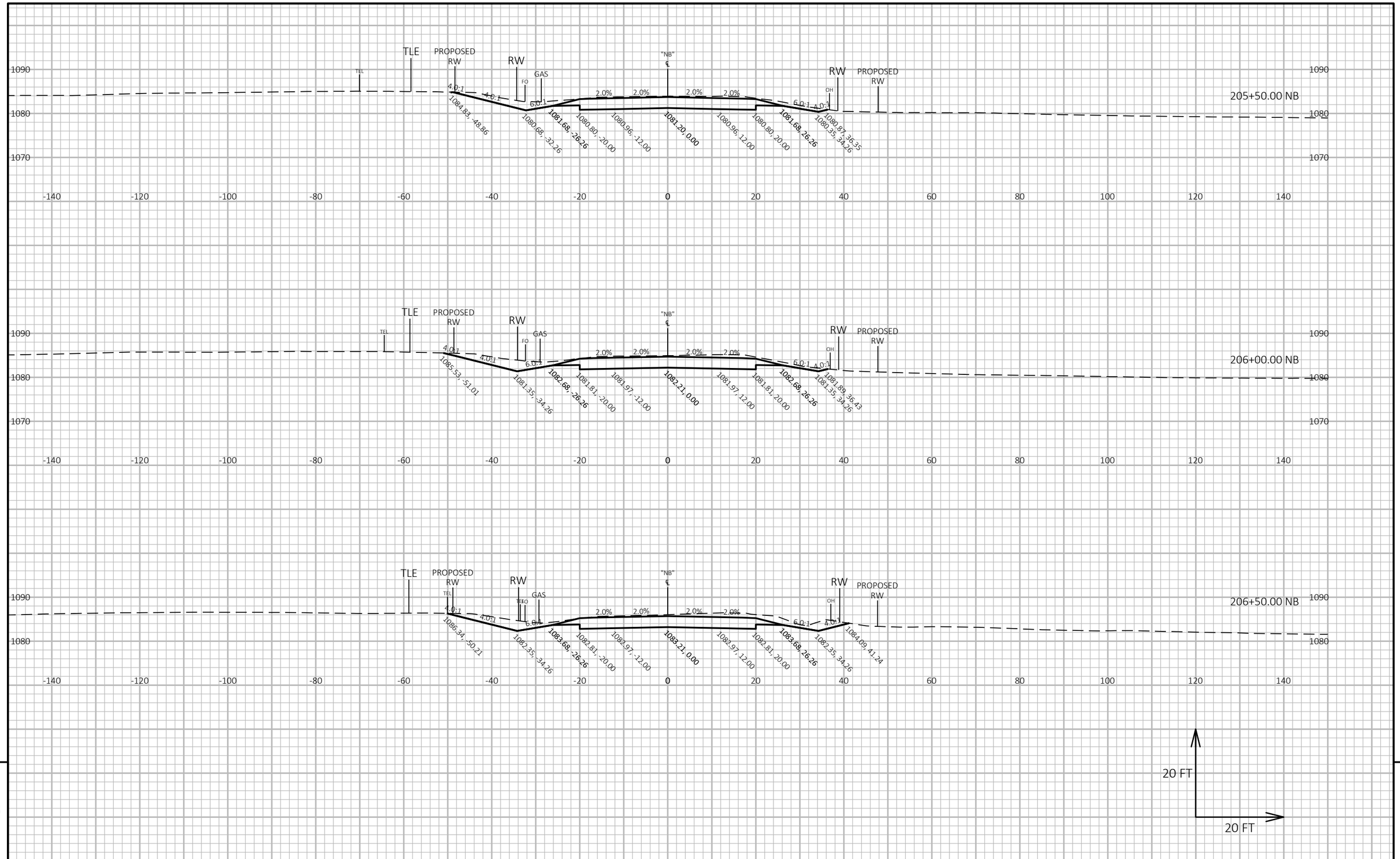
PLOT DATE : 3/3/2020 3:56 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (1)
PLOT DATE : 3/3/2020 3:56 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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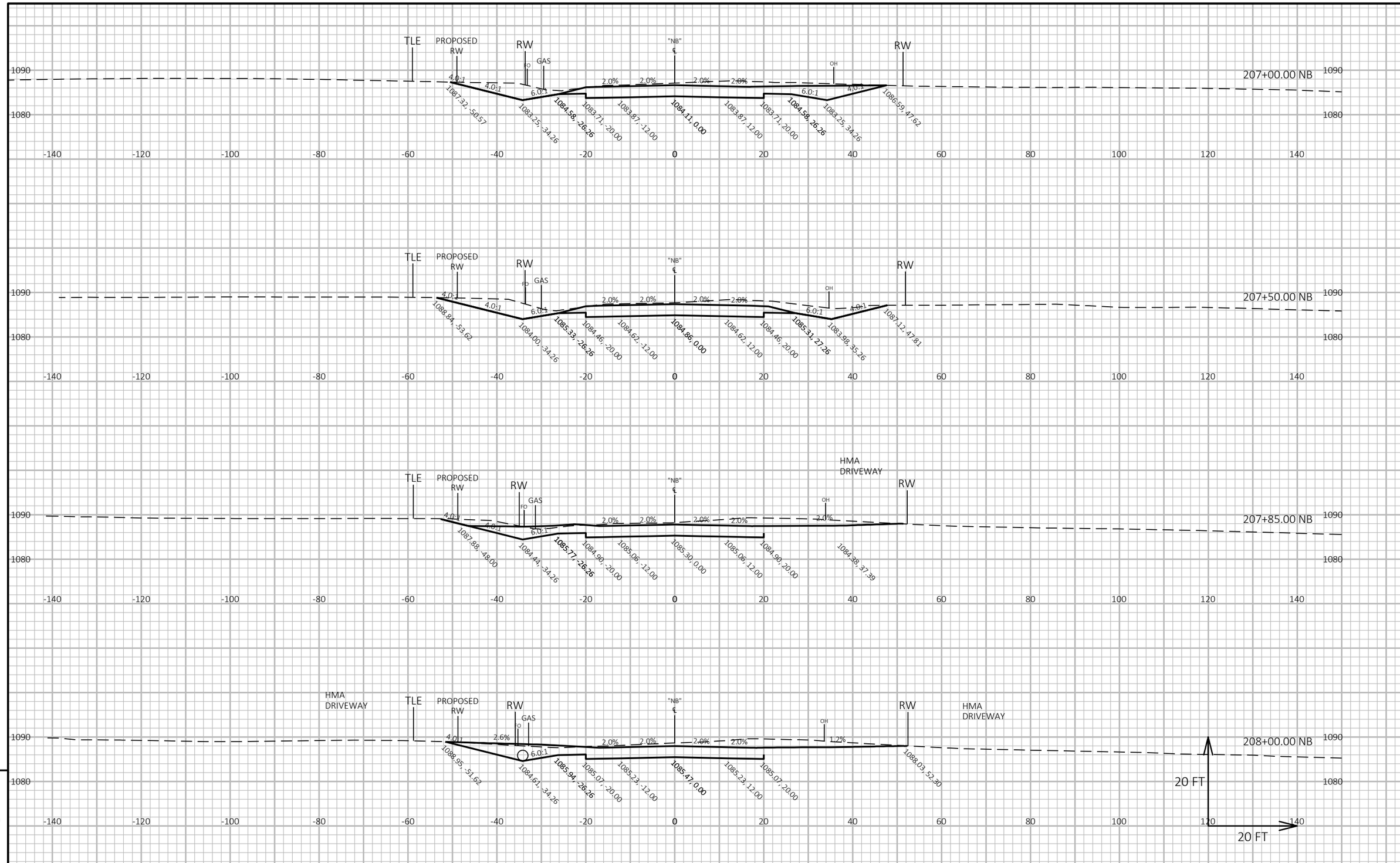
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (2)
PLOT DATE : 3/3/2020 3:56 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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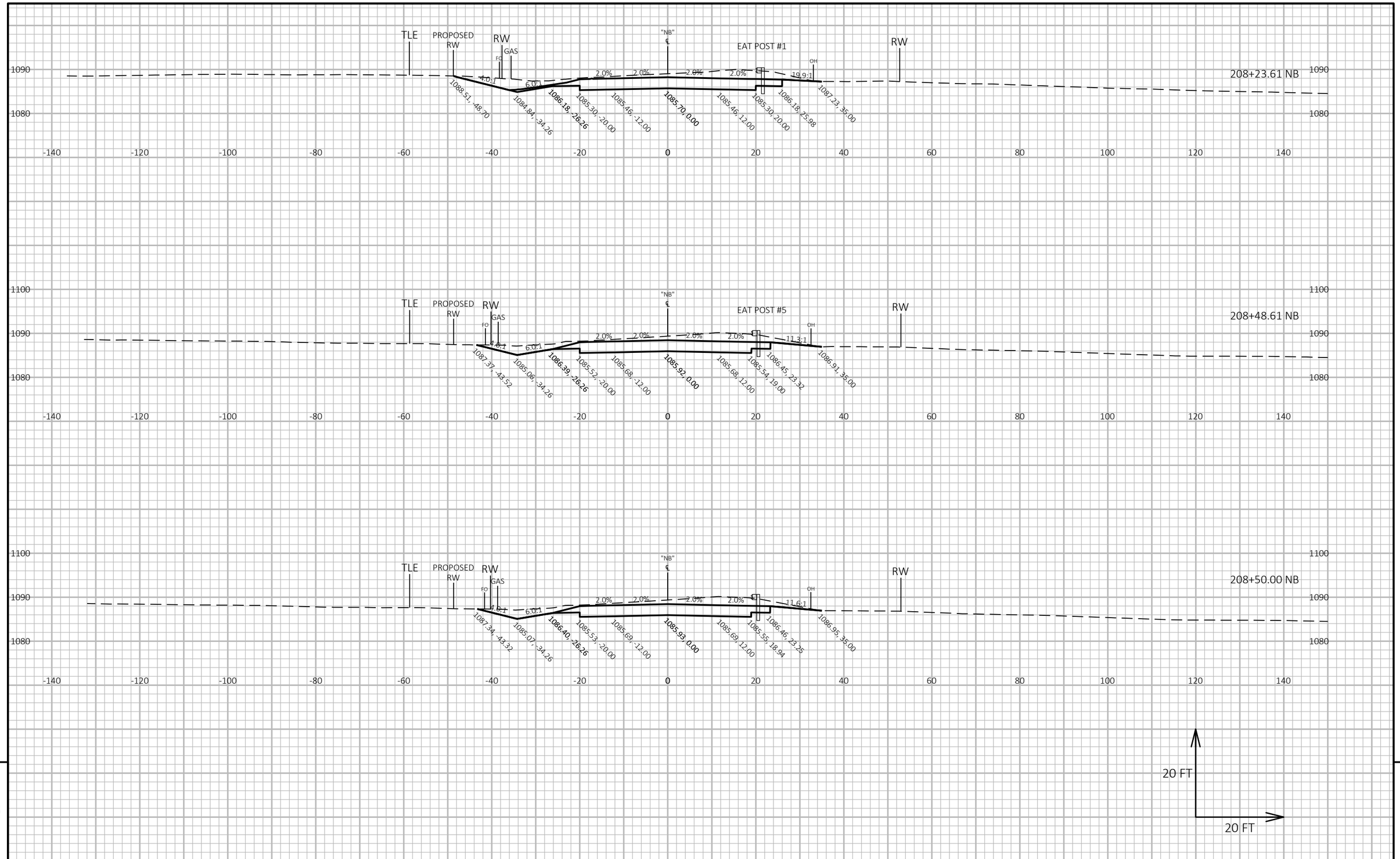
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (3)
PLOT DATE : 3/3/2020 3:56 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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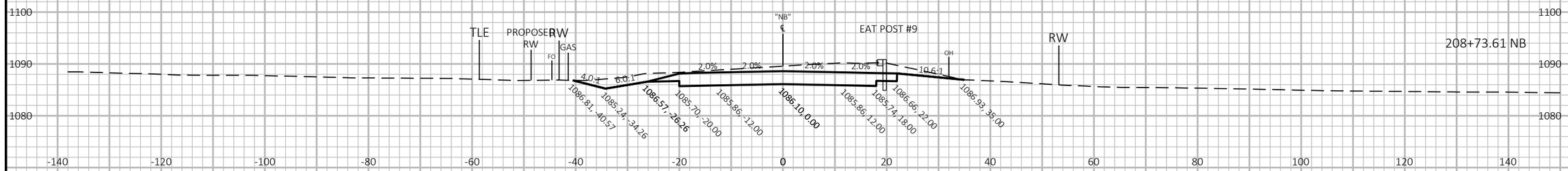
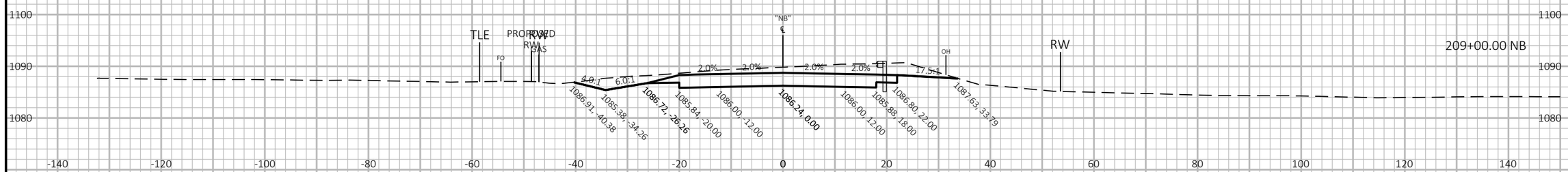
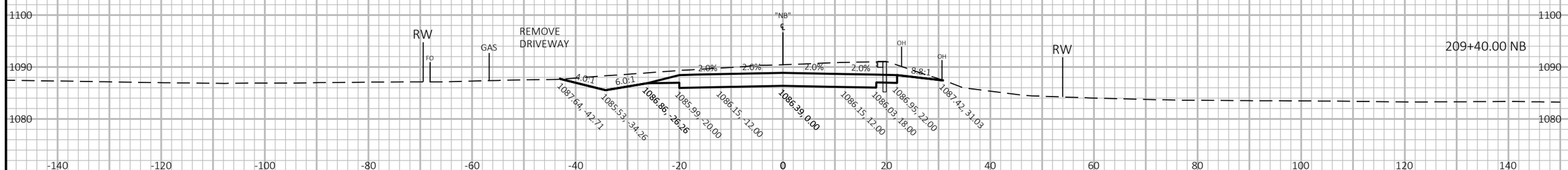
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (4)
PLOT DATE : 3/3/2020 3:57 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.







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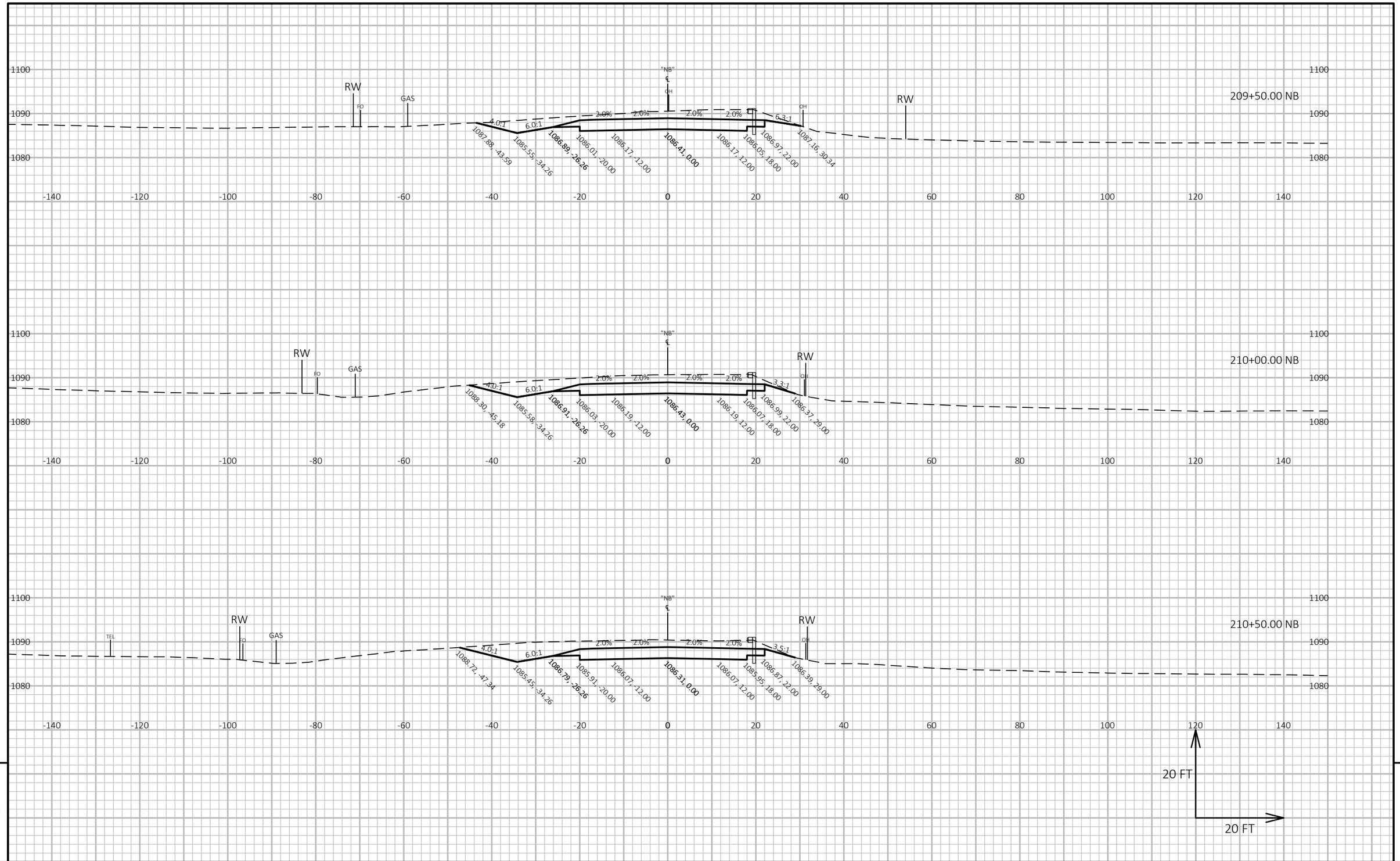
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (5)
PLOT DATE : 3/3/2020 3:57 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (6)
PLOT DATE : 3/3/2020 3:57 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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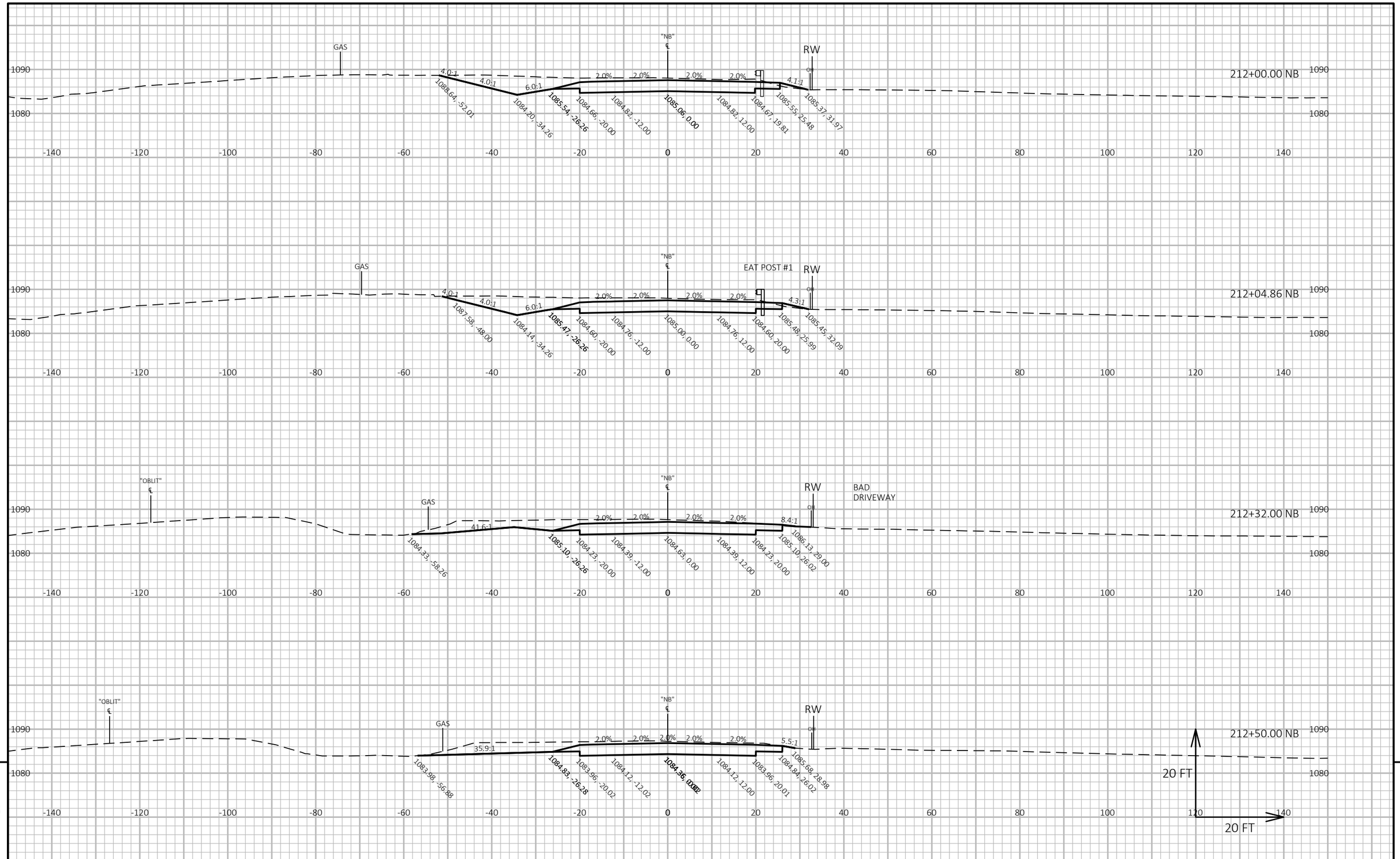
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (7)
PLOT DATE : 3/3/2020 3:57 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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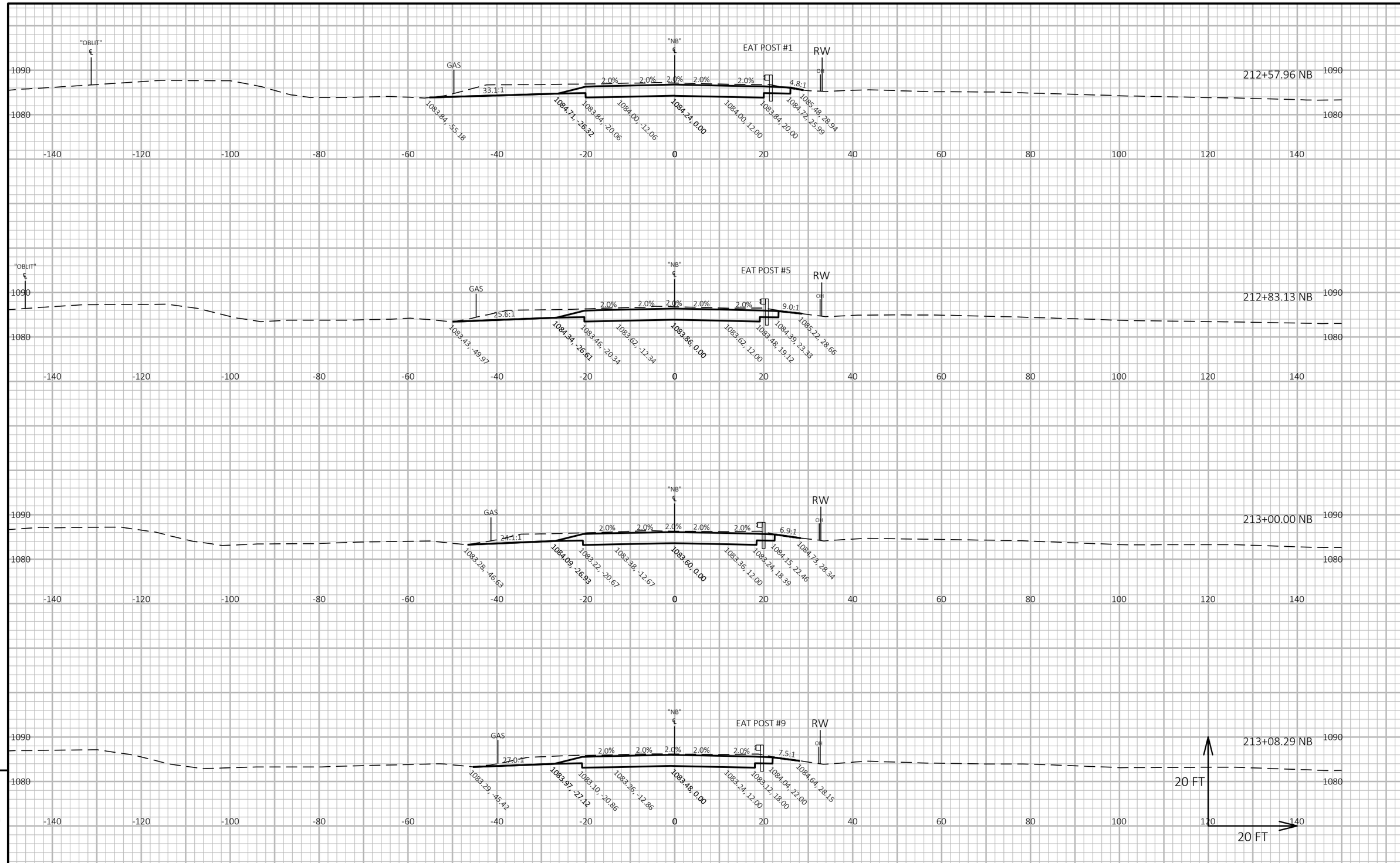
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (8)
PLOT DATE : 3/3/2020 3:57 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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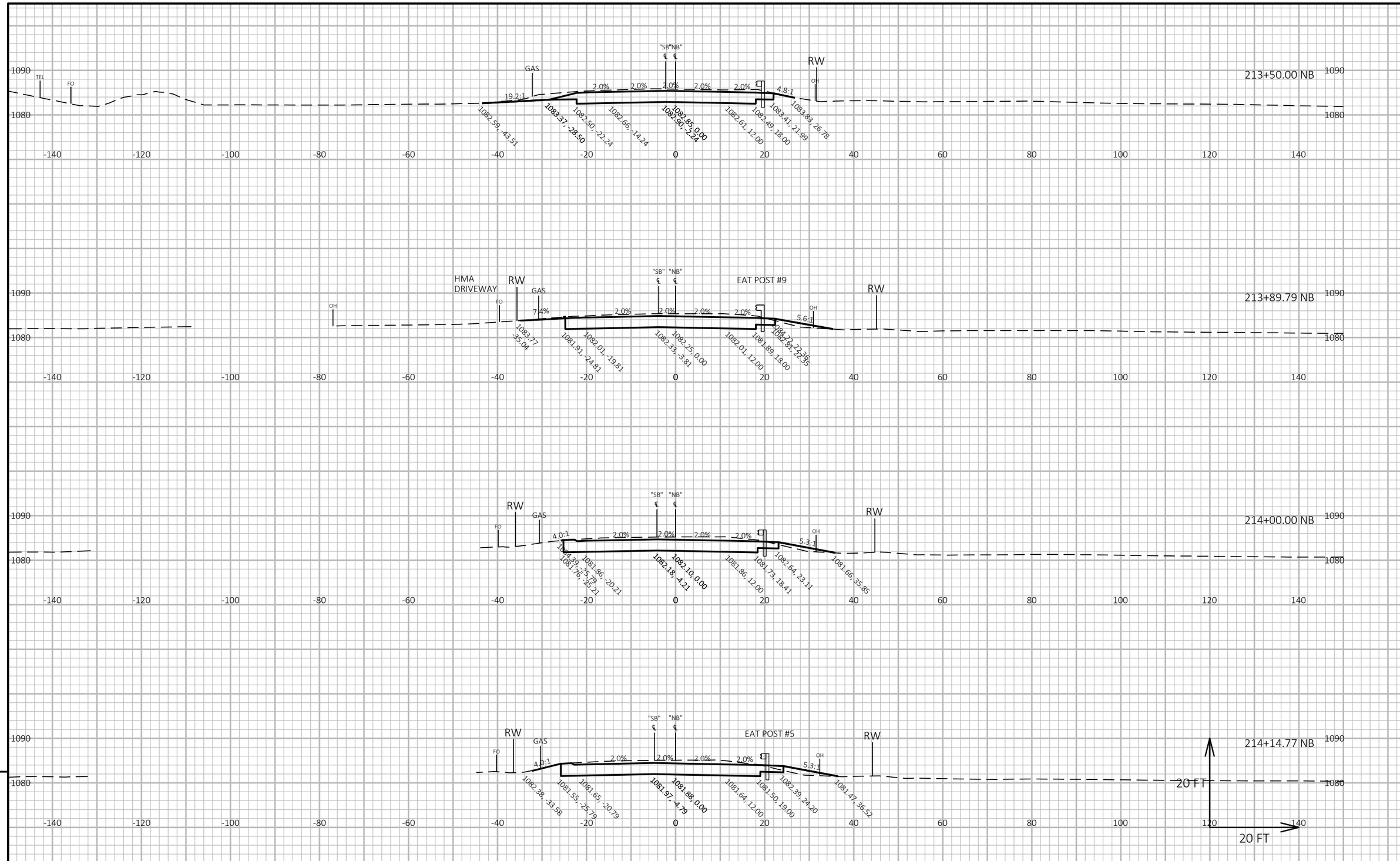
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (9)

PLOT DATE : 3/3/2020 3:57 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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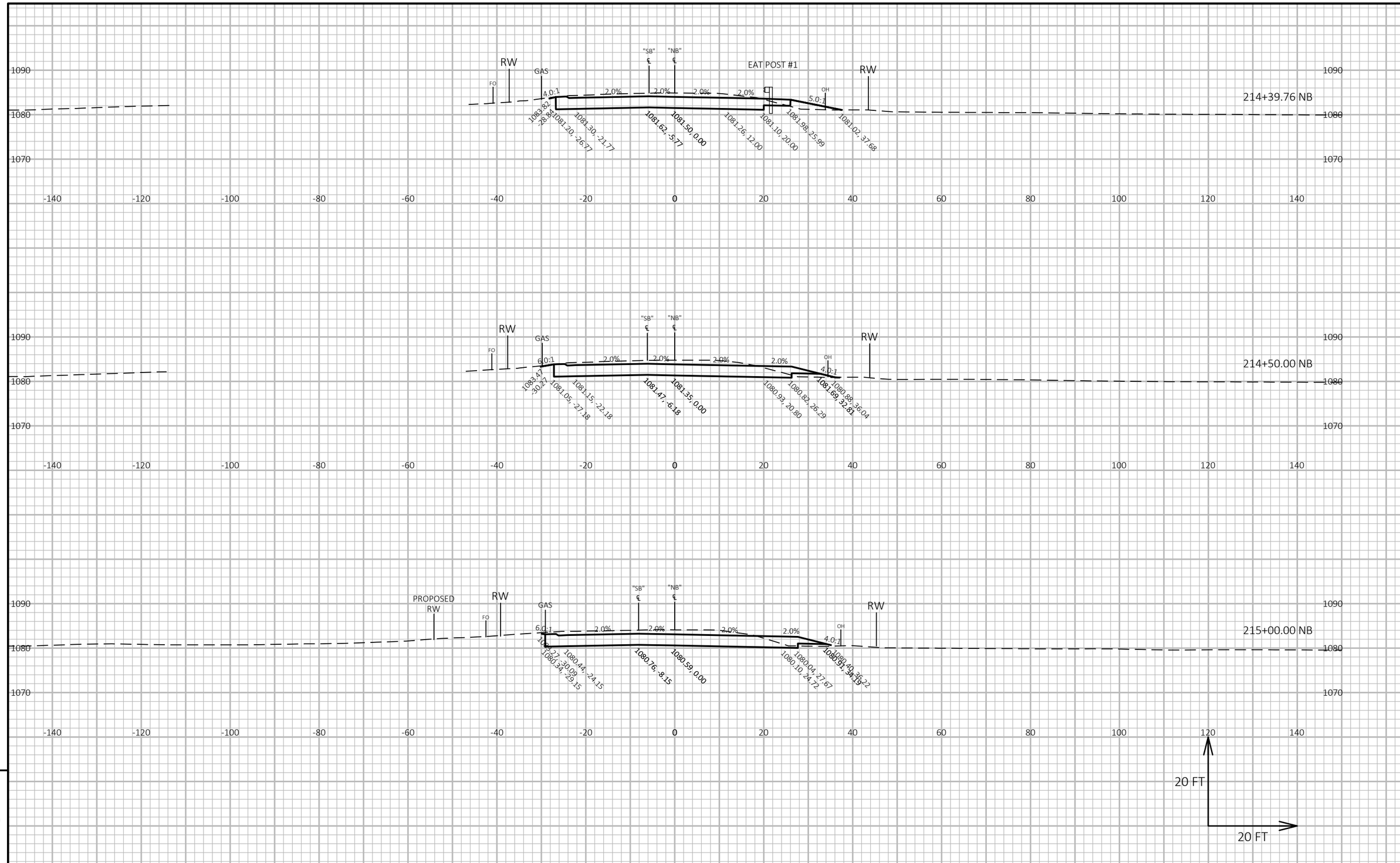
9

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (10)
PLOT DATE : 3/3/2020 3:58 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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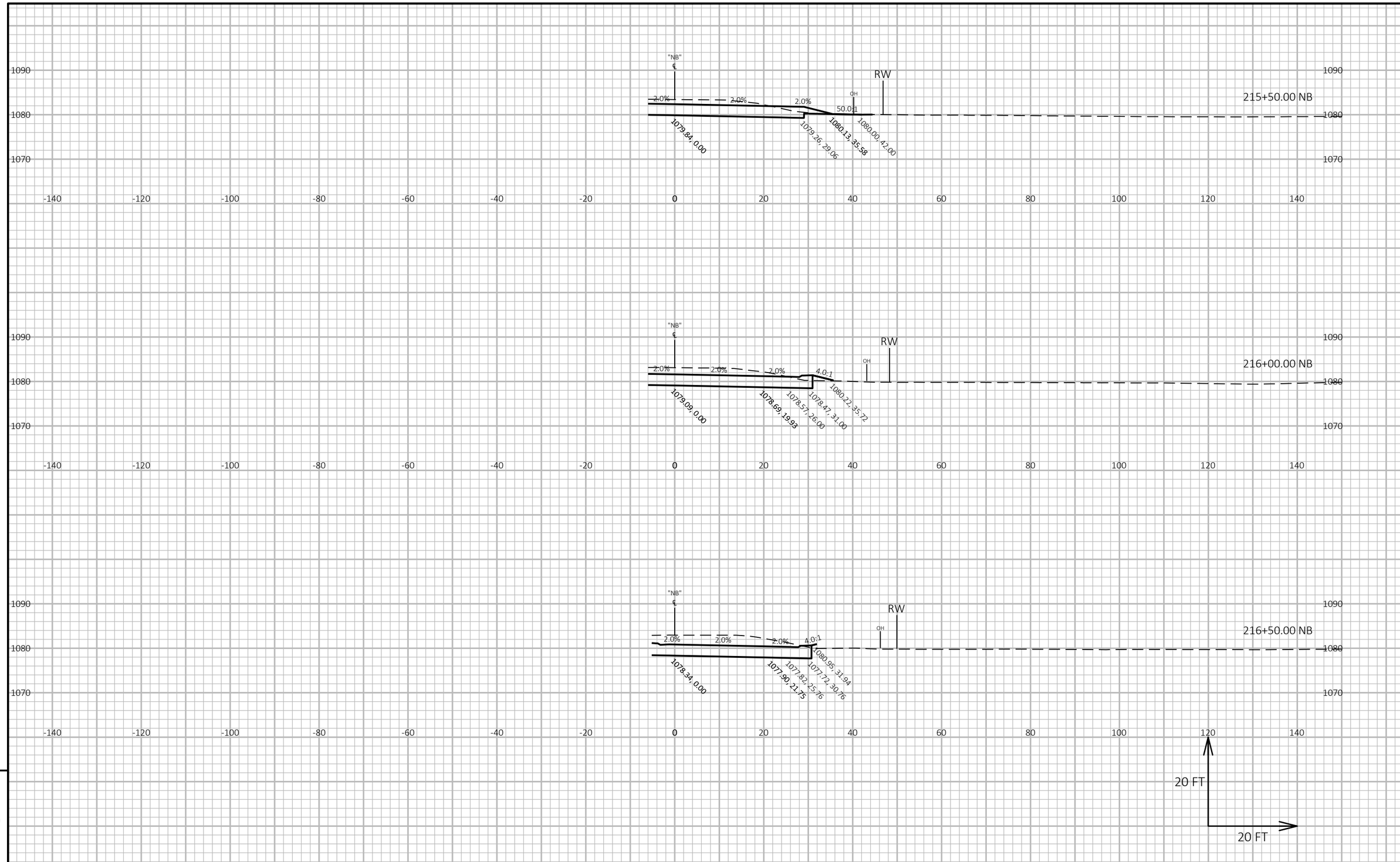
9

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (11)
PLOT DATE : 3/3/2020 3:58 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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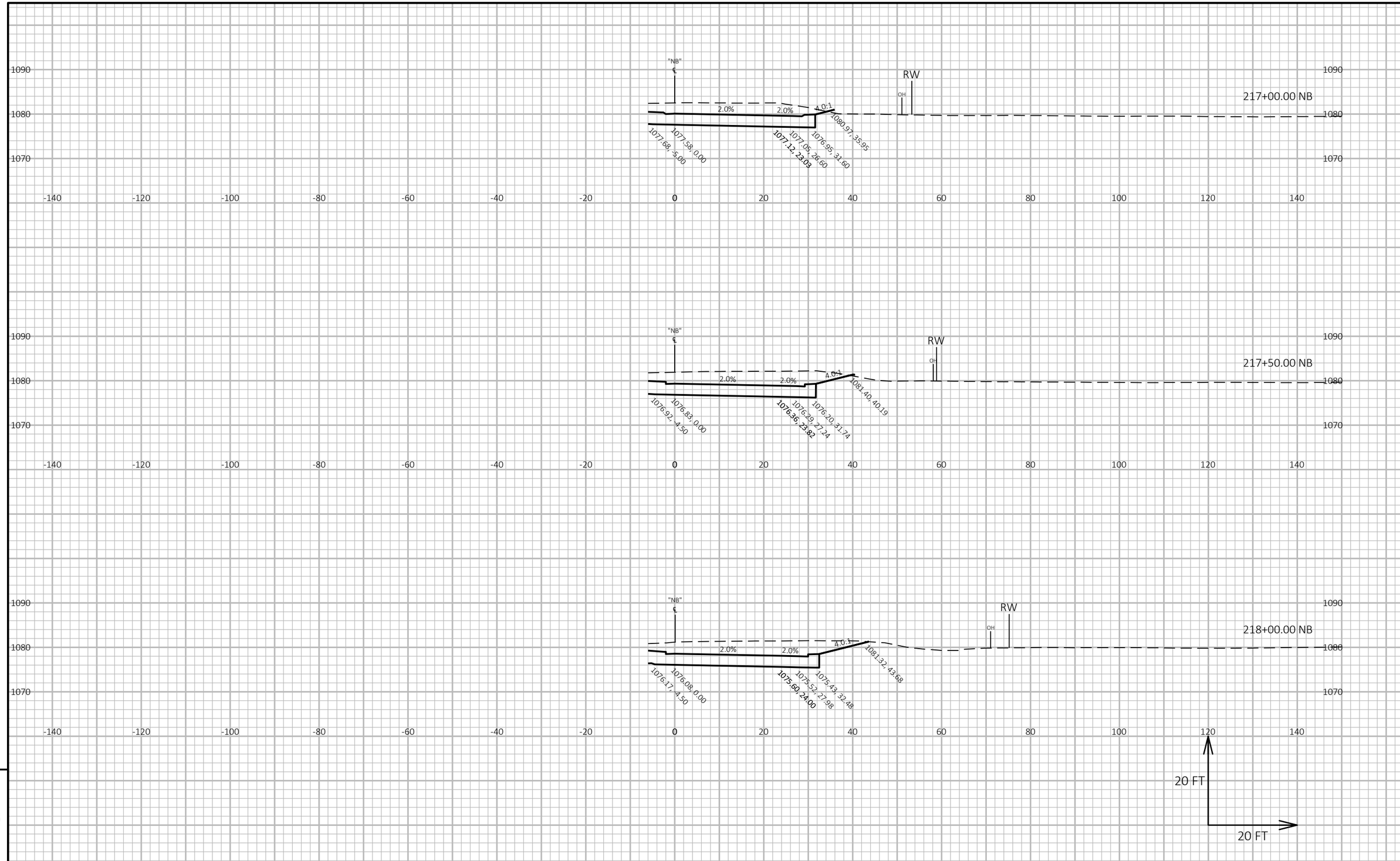
9

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (12)

PLOT DATE : 3/3/2020 3:58 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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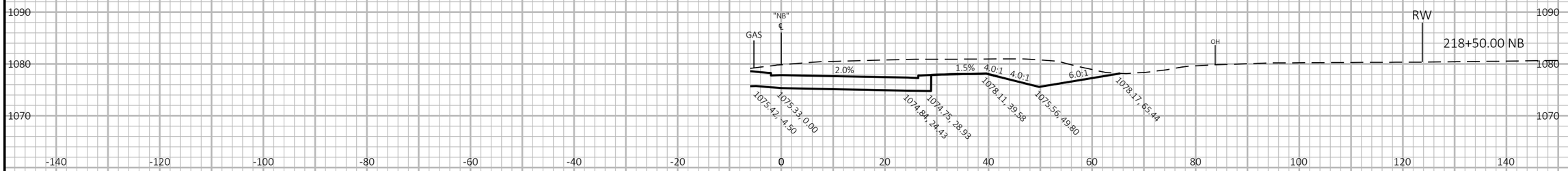
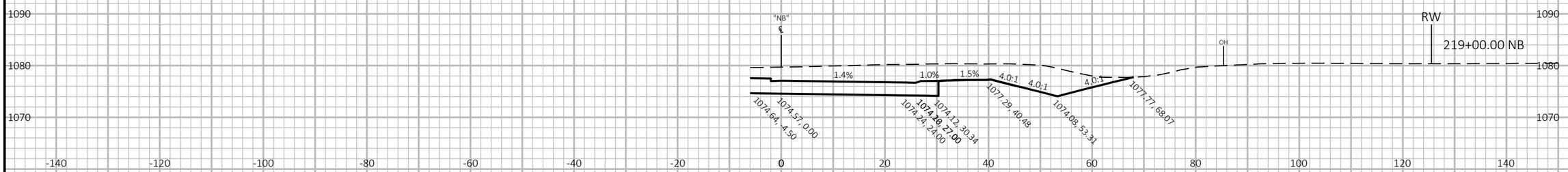
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

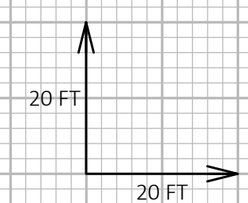
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (13)

PLOT DATE : 3/3/2020 3:58 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







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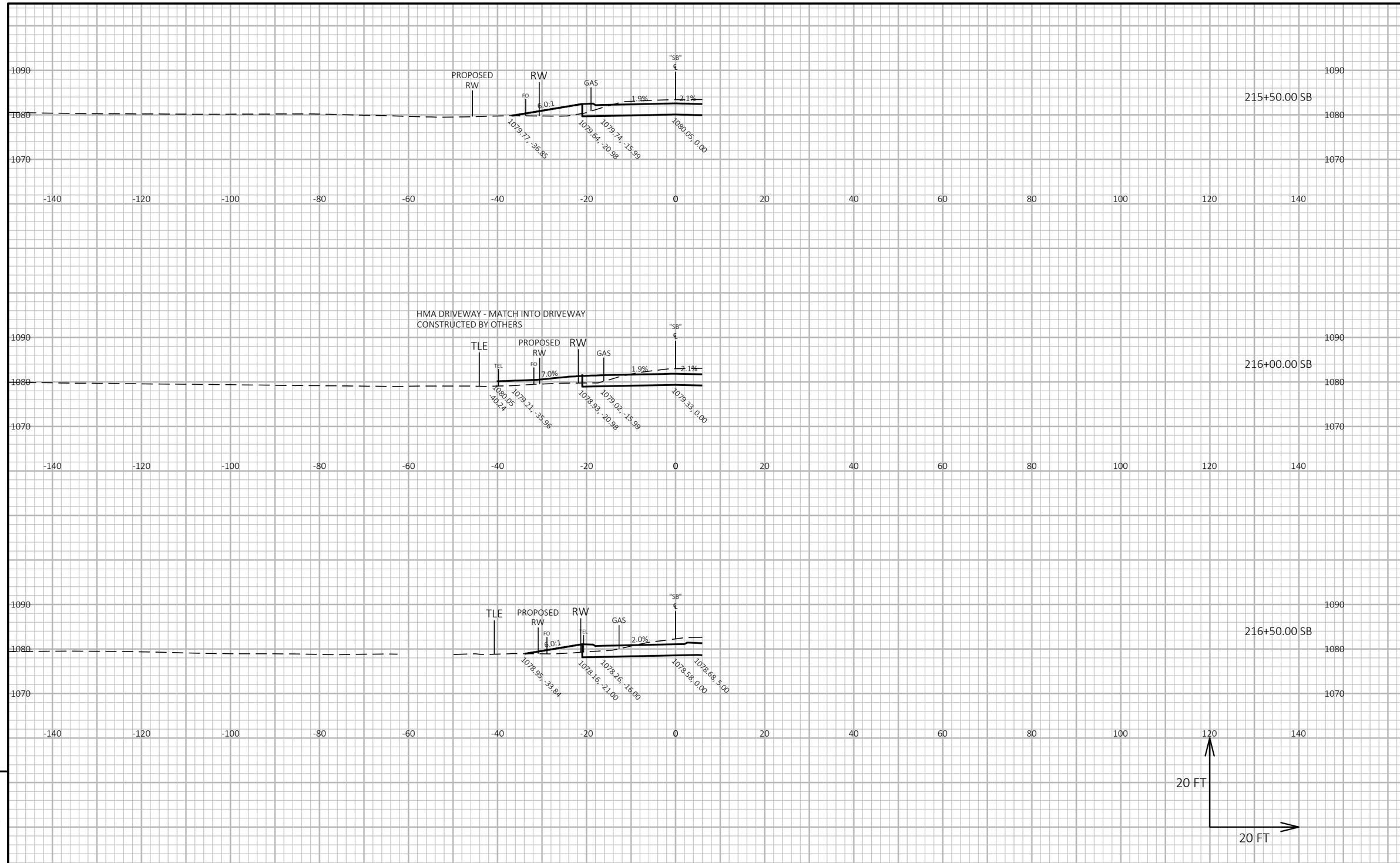
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (14)

PLOT DATE : 3/3/2020 3:58 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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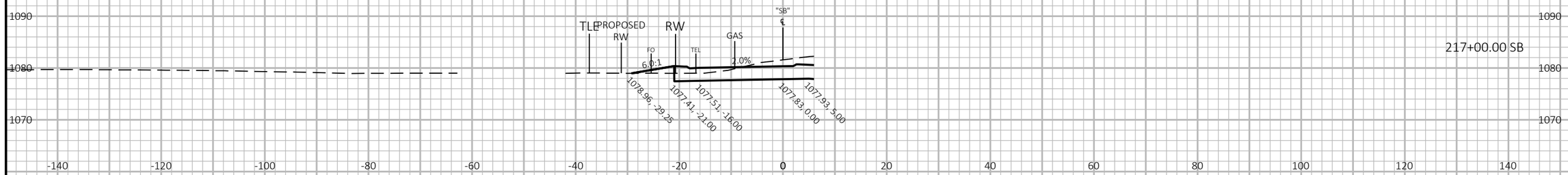
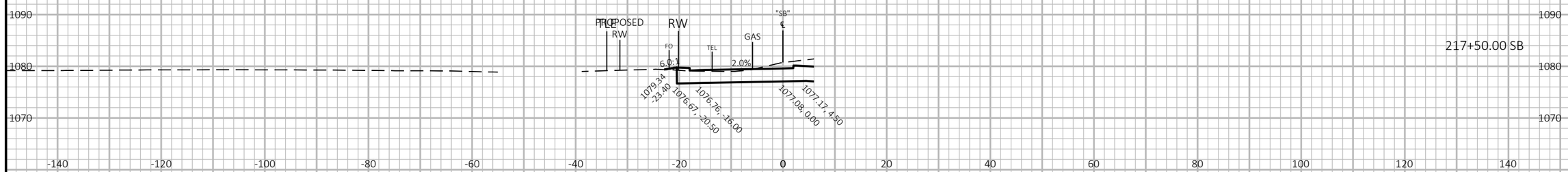
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: SB USH 51 SOUTH LEG	SHEET	E

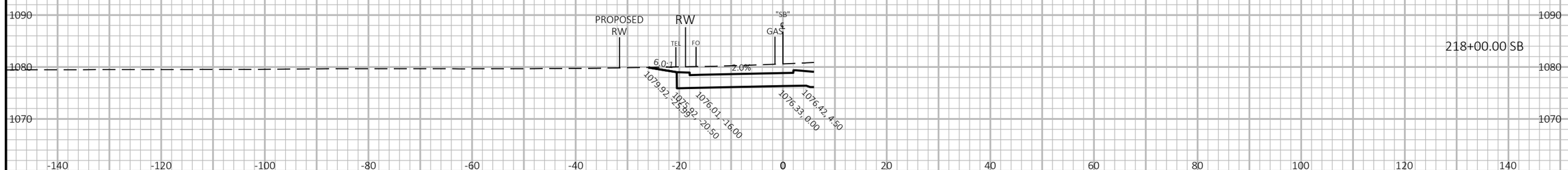
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 SB AlignmentSection Sheet - (1)

PLOT DATE : 3/3/2020 3:58 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







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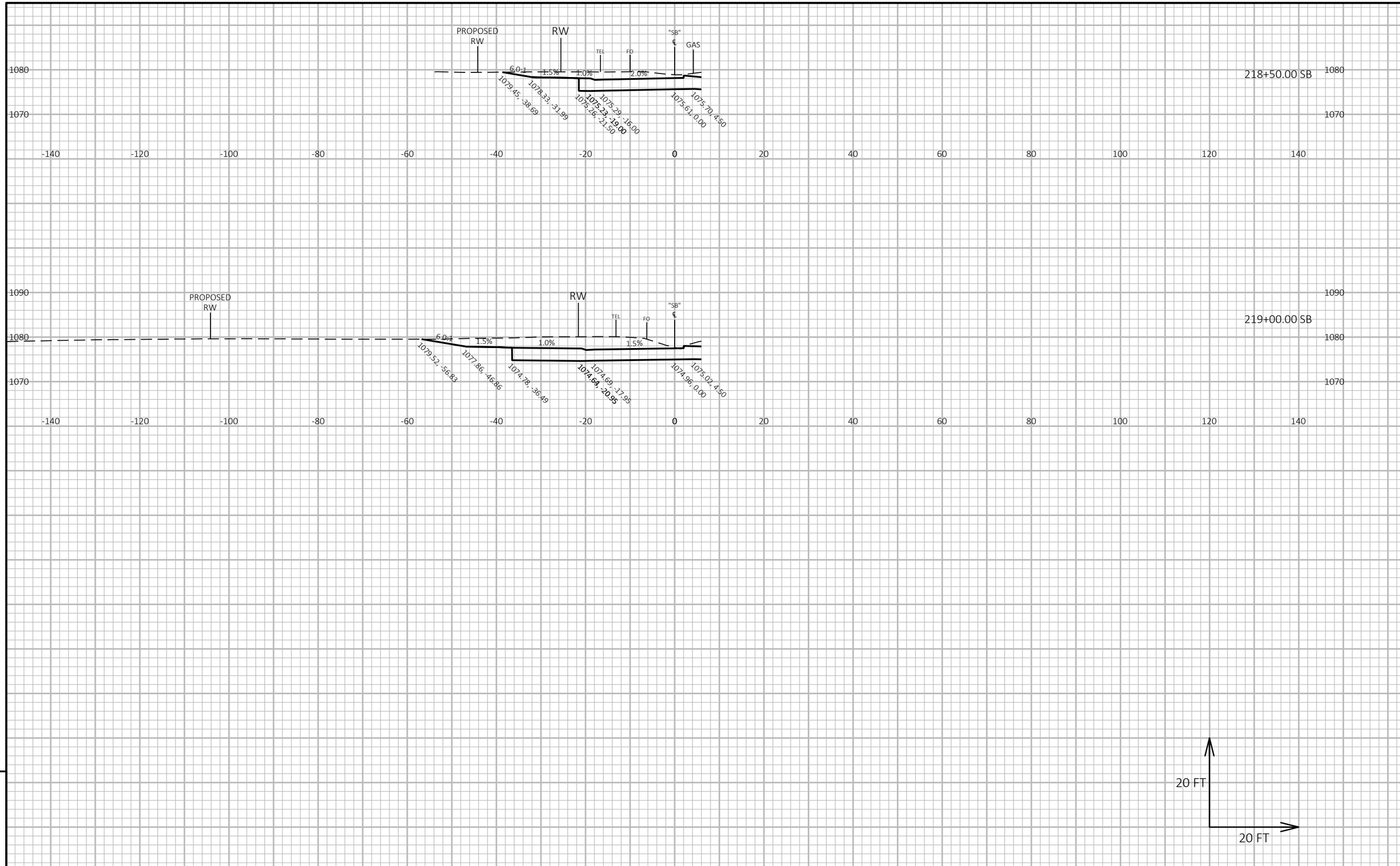
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: SB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 SB AlignmentSection Sheet - (2)
PLOT DATE : 3/3/2020 3:59 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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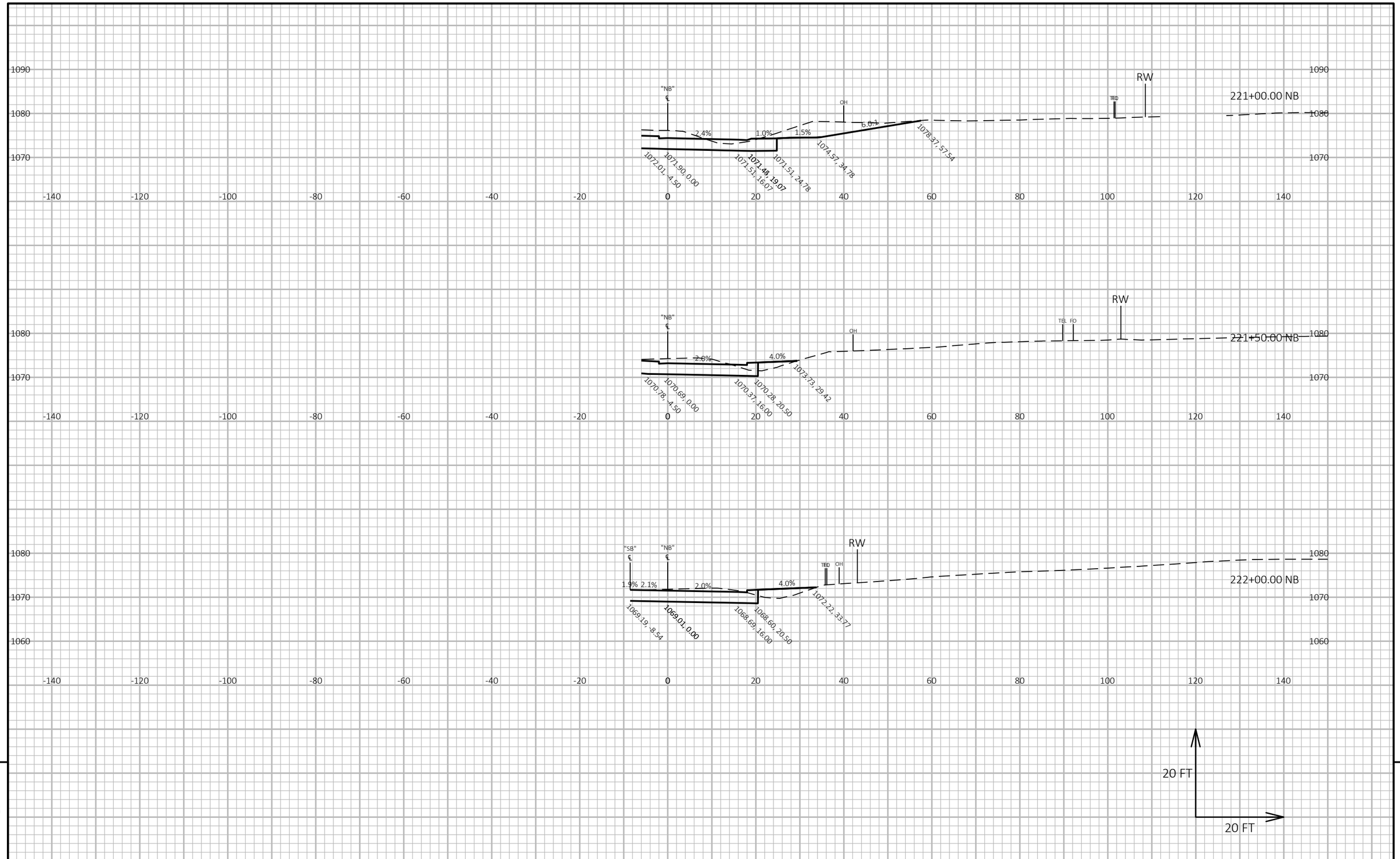
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: SB USH 51 SOUTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 SB AlignmentSection Sheet - (3)

PLOT DATE : 3/3/2020 3:59 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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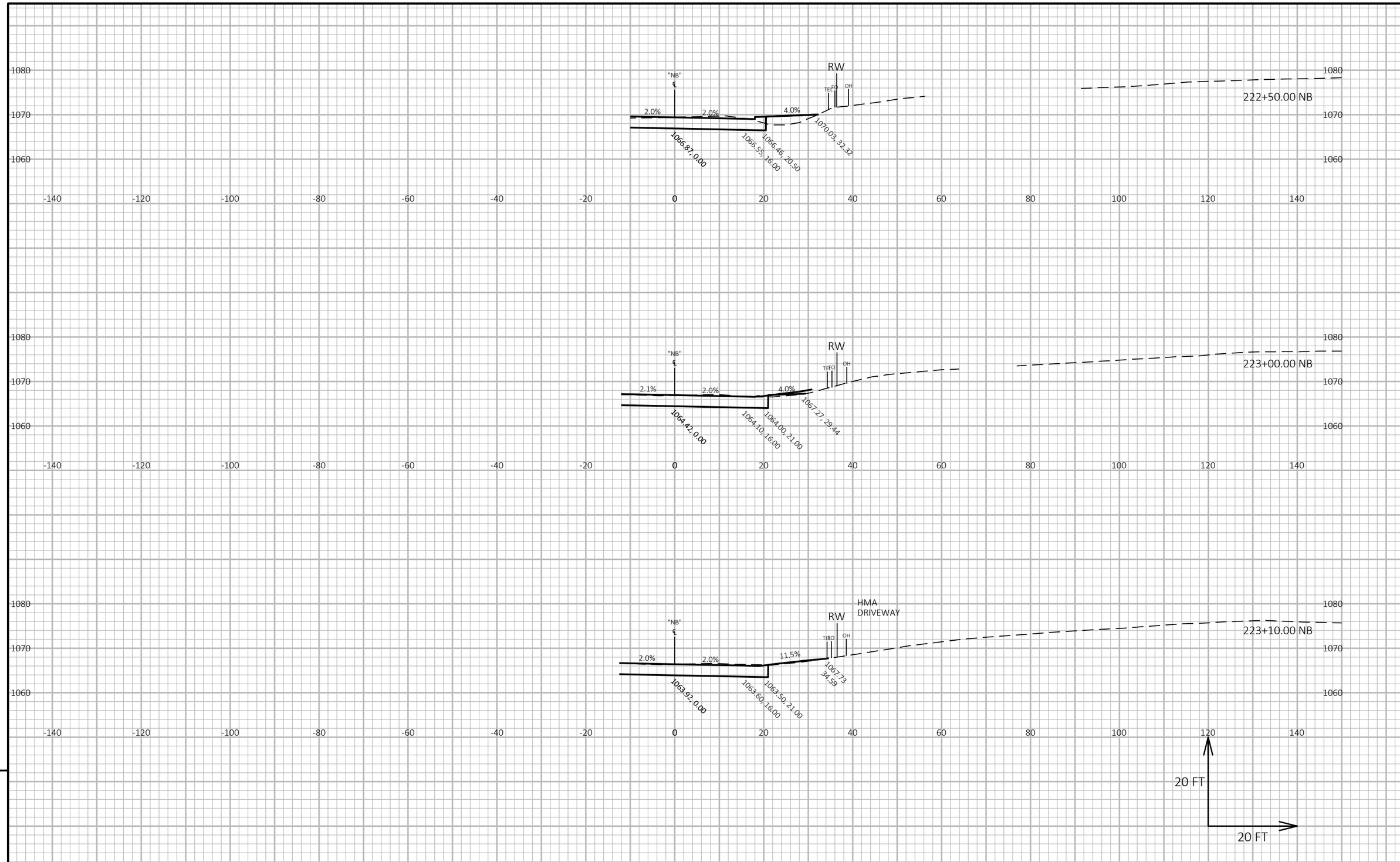
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (20)

PLOT DATE : 3/3/2020 3:59 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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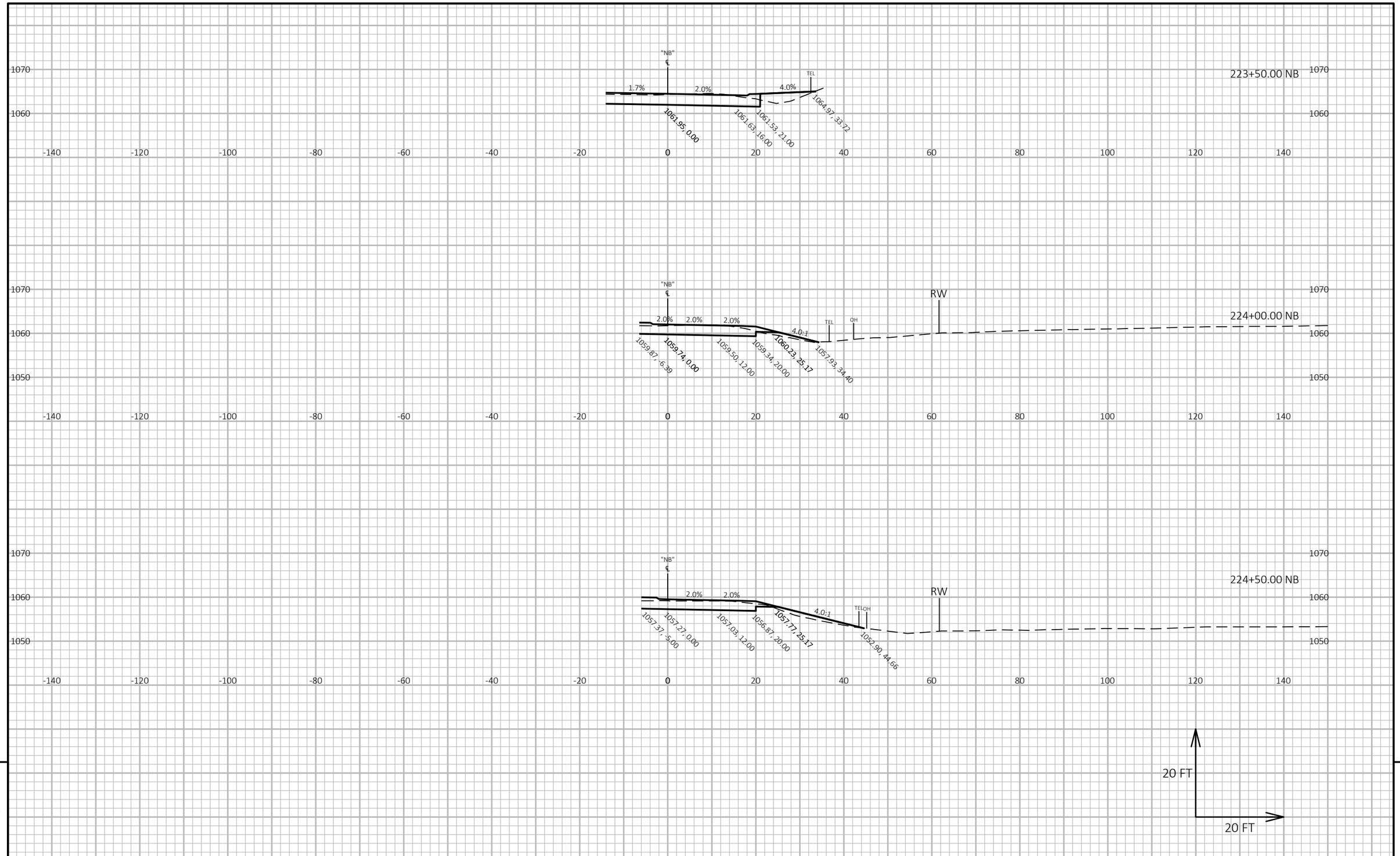
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (21)

PLOT DATE : 3/3/2020 3:59 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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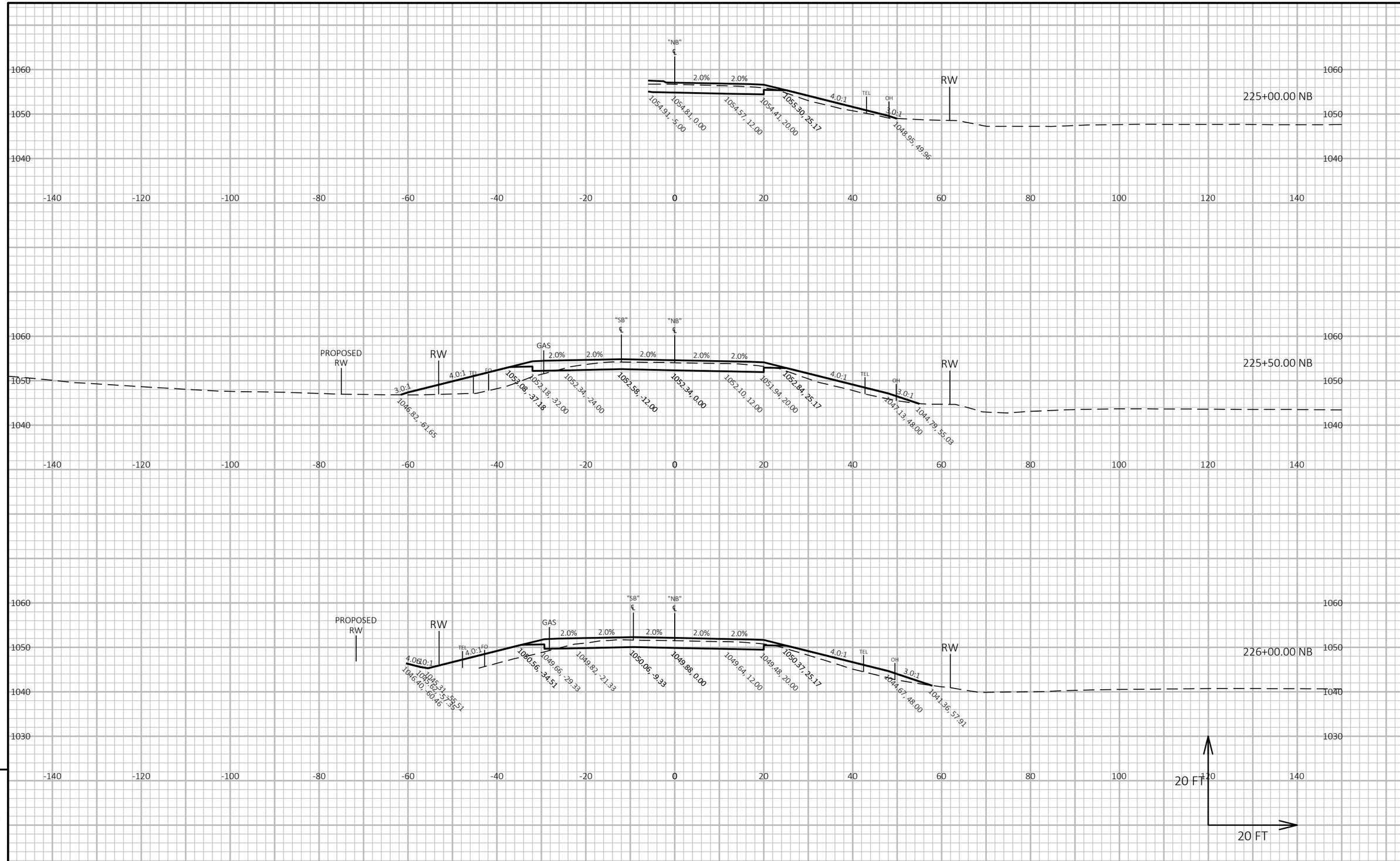
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (22)

PLOT DATE : 3/3/2020 3:59 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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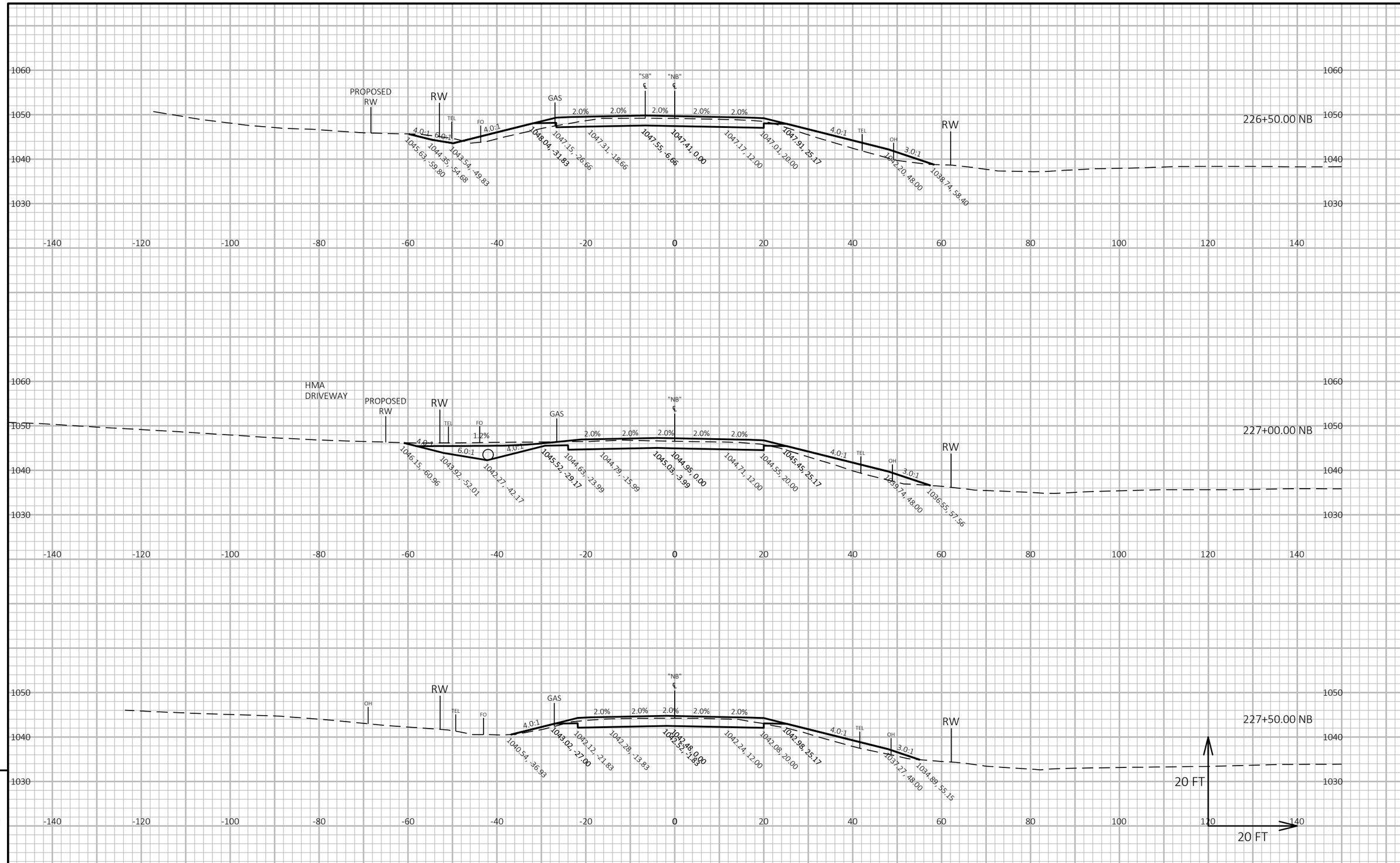
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (23)
PLOT DATE : 3/3/2020 3:59 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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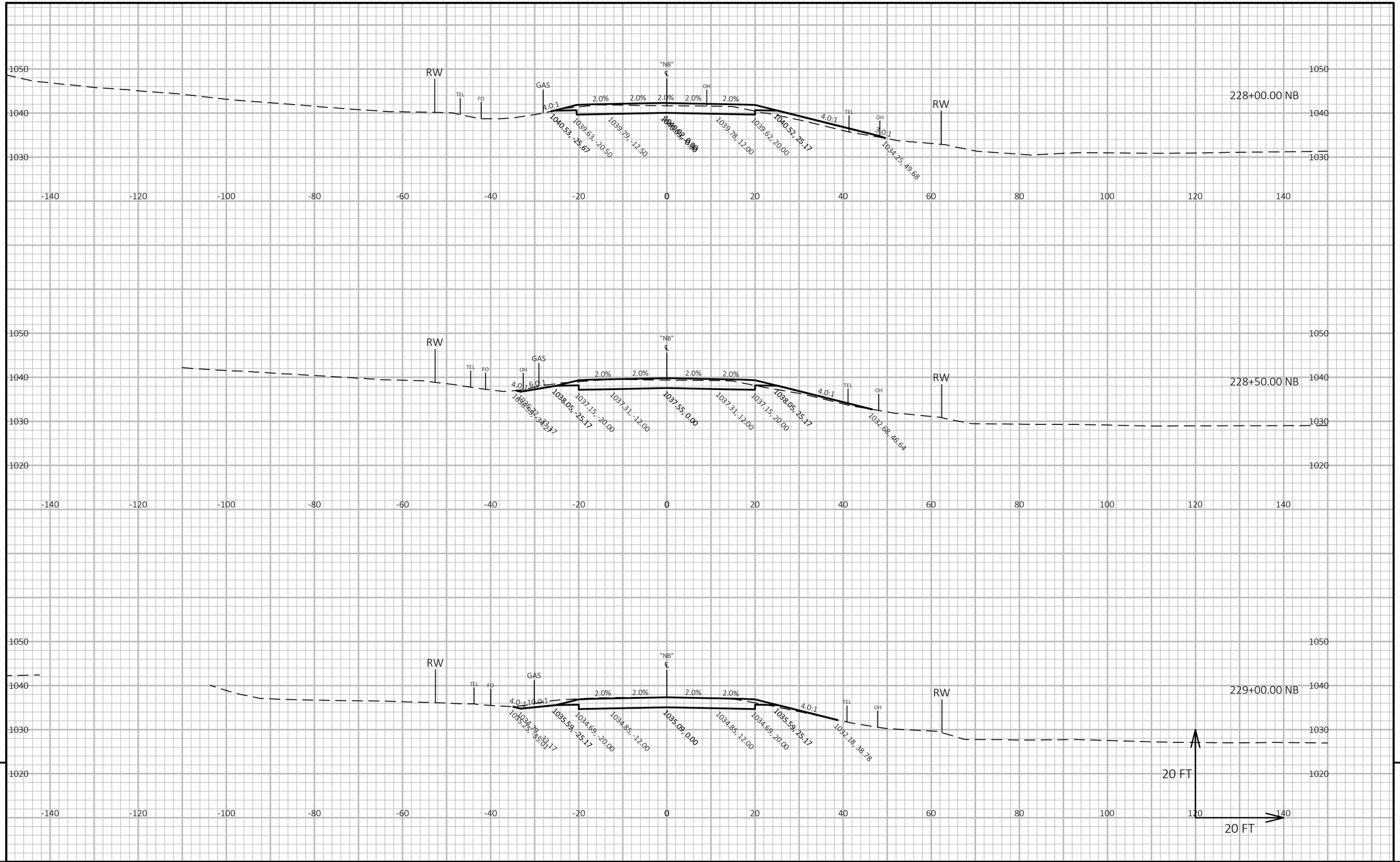
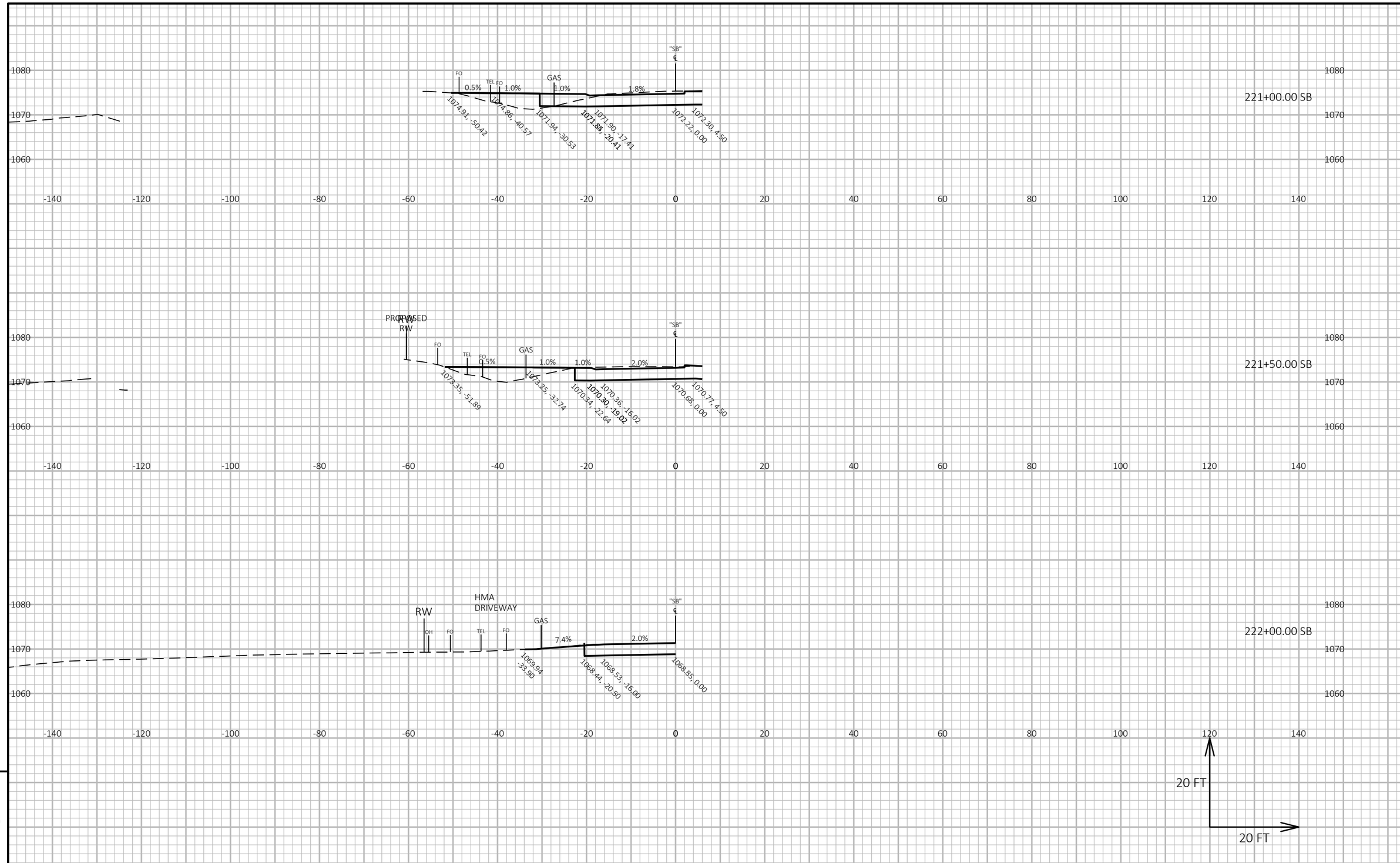
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (24)
PLOT DATE : 3/3/2020 3:59 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: NB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 NB AlignmentSection Sheet - (25)
PLOT DATE : 3/3/2020 4:00 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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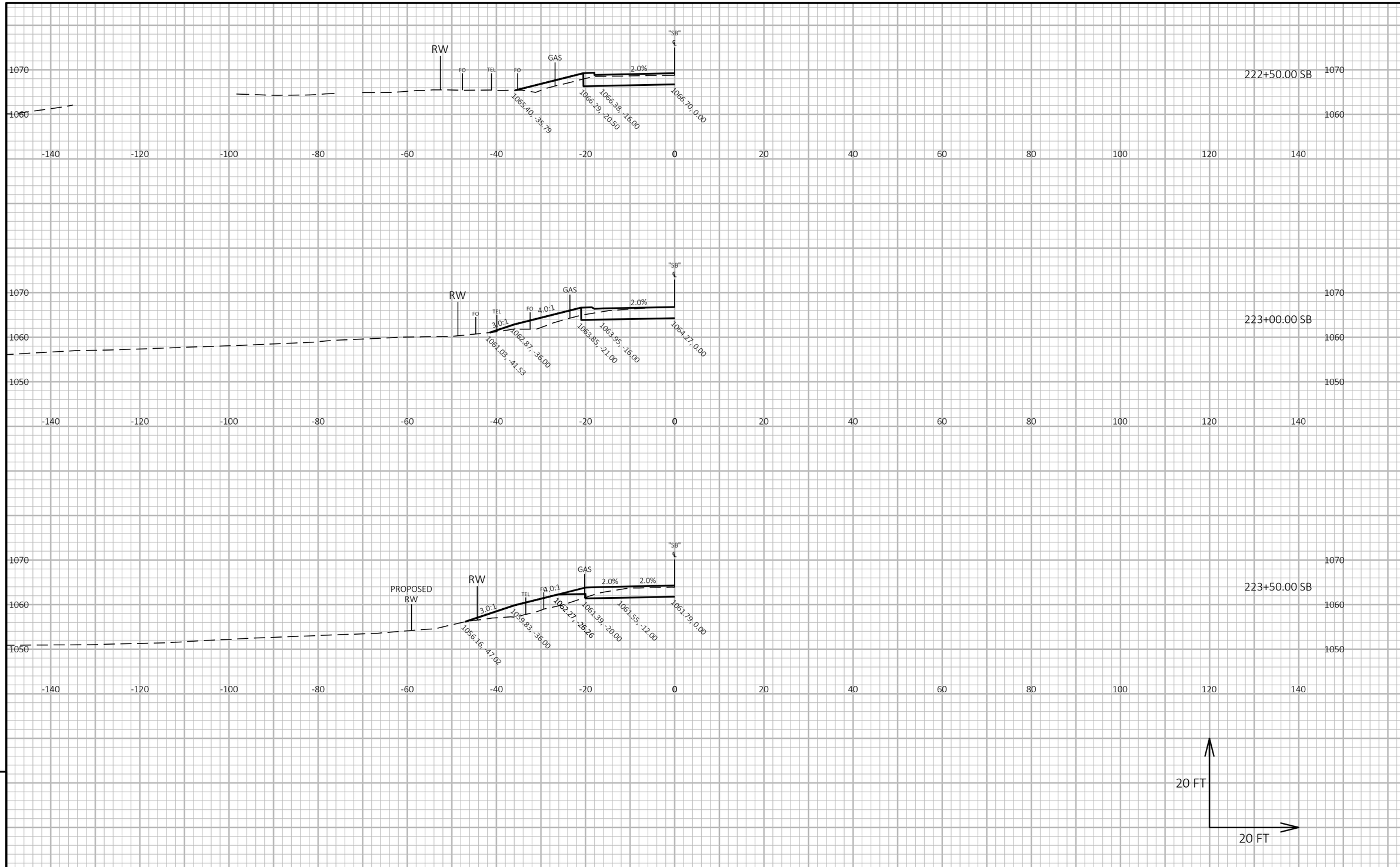
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: SB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 SB AlignmentSection Sheet - (10)

PLOT DATE : 3/3/2020 4:00 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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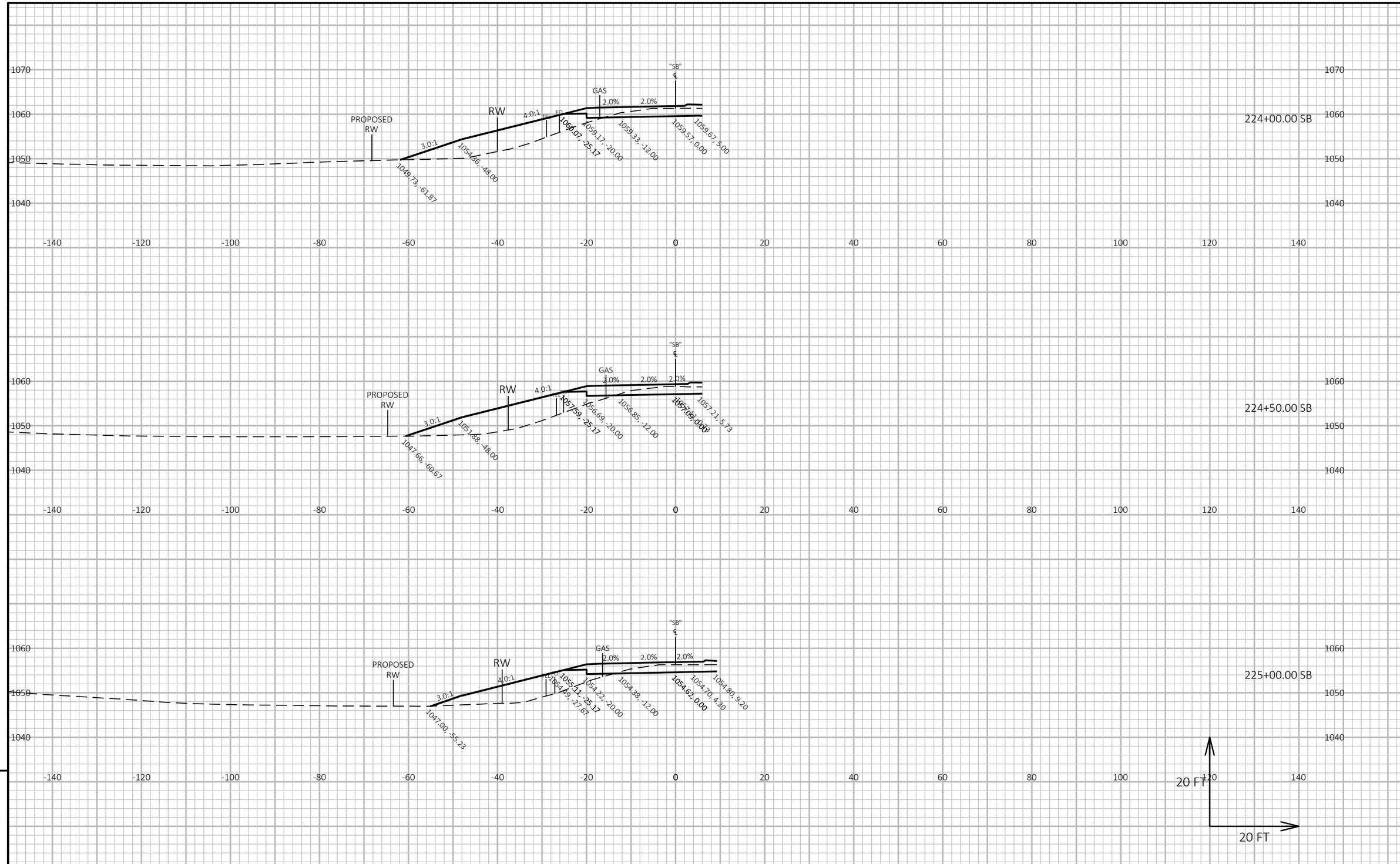
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: SB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 SB AlignmentSection Sheet - (11)
PLOT DATE : 3/3/2020 4:00 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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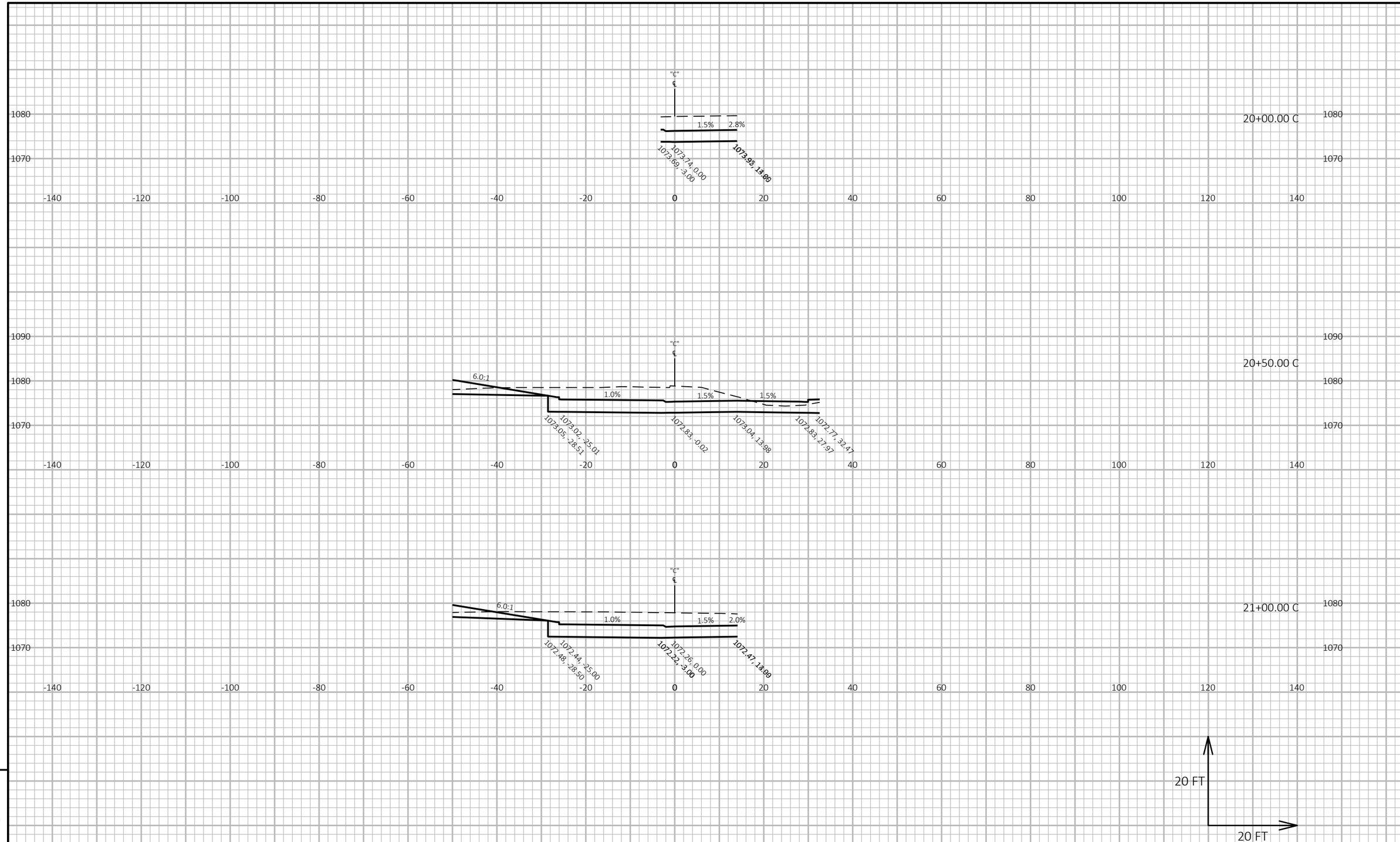
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: SB STH 22 NORTH LEG	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 22 SB AlignmentSection Sheet - (12)

PLOT DATE : 3/3/2020 4:00 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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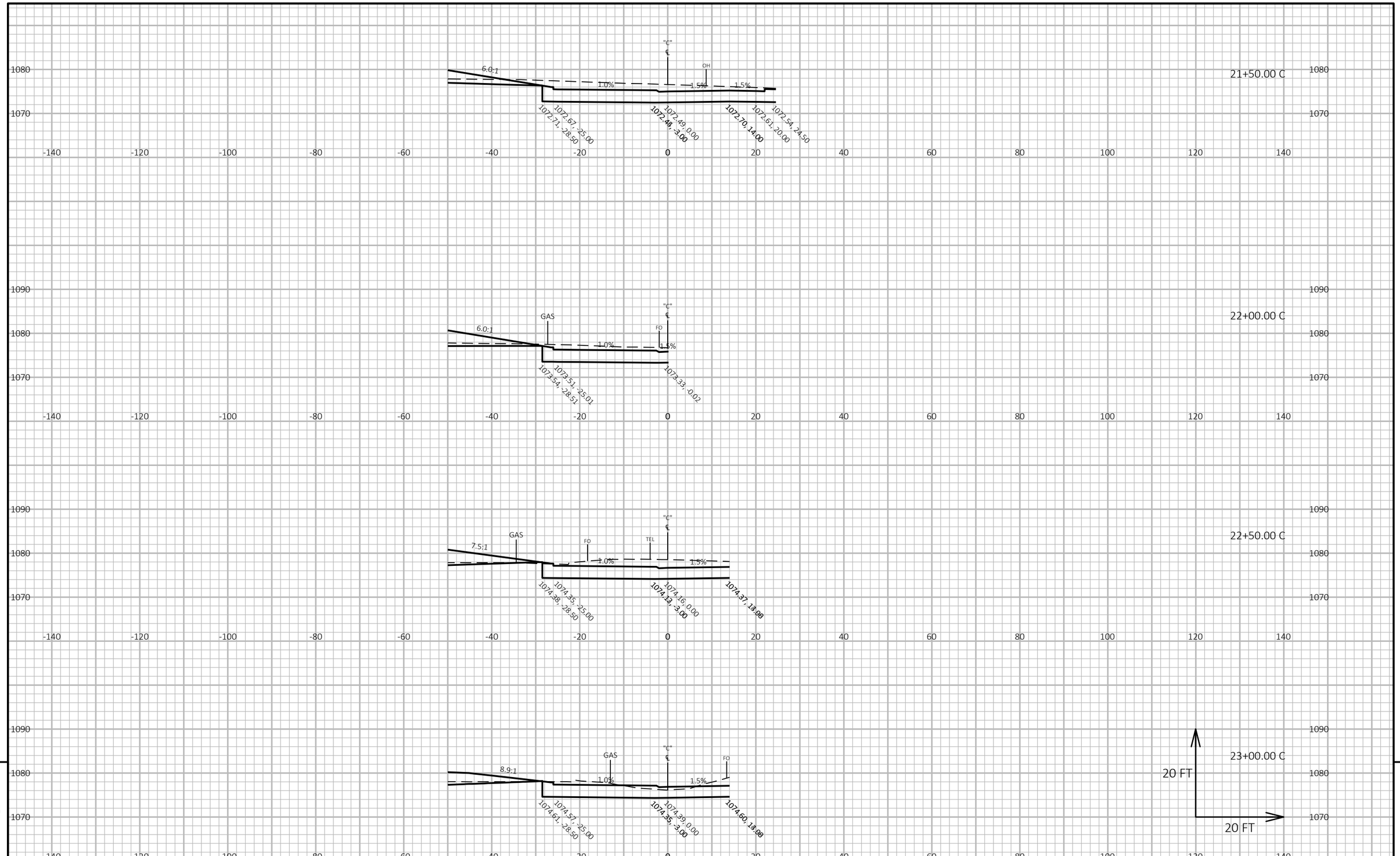
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: CIRCLE	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Circle AlignmentSection Sheet - (1)

PLOT DATE : 3/3/2020 4:00 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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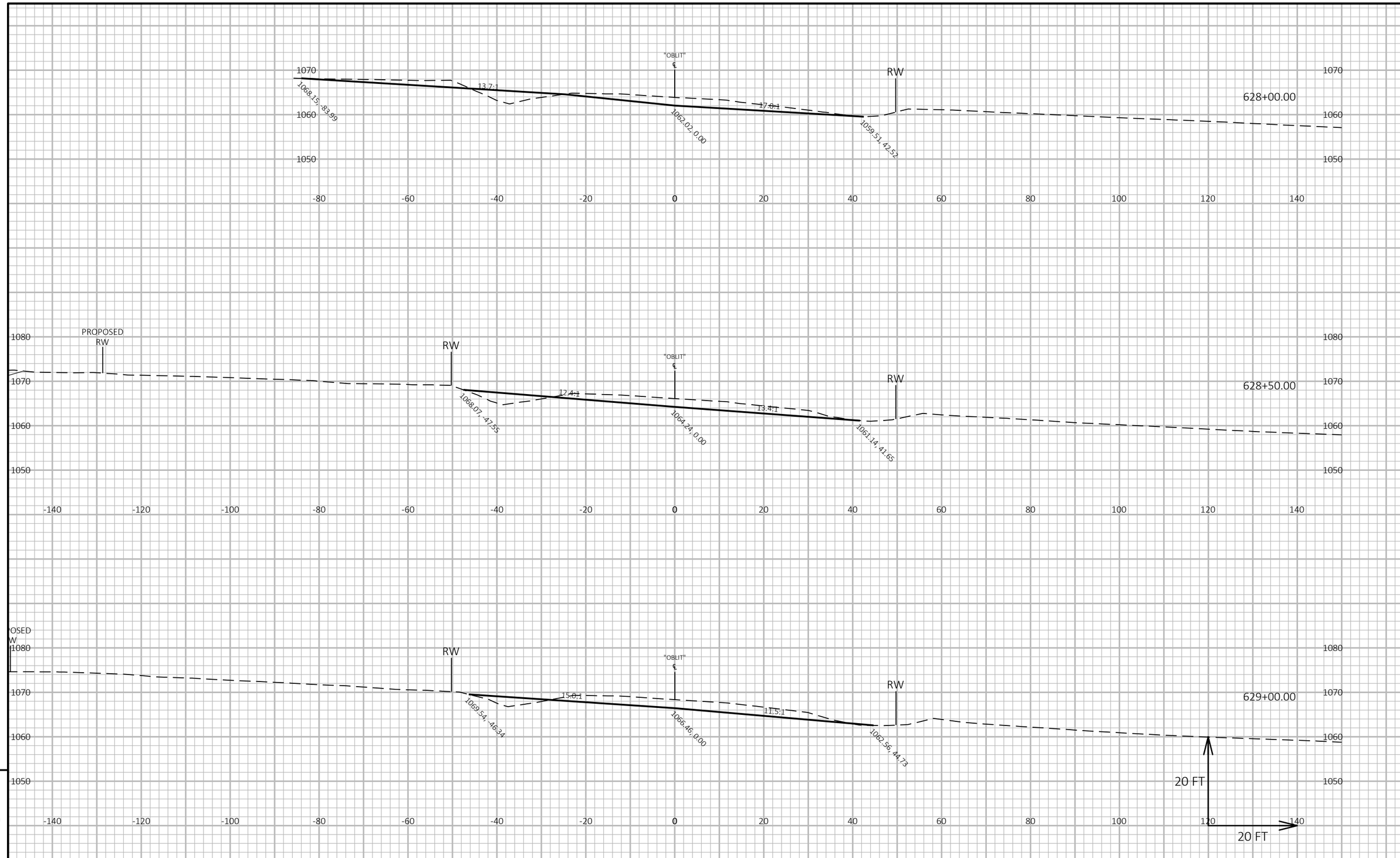
9

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: CIRCLE	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Circle AlignmentSection Sheet - (2)
PLOT DATE : 3/3/2020 4:00 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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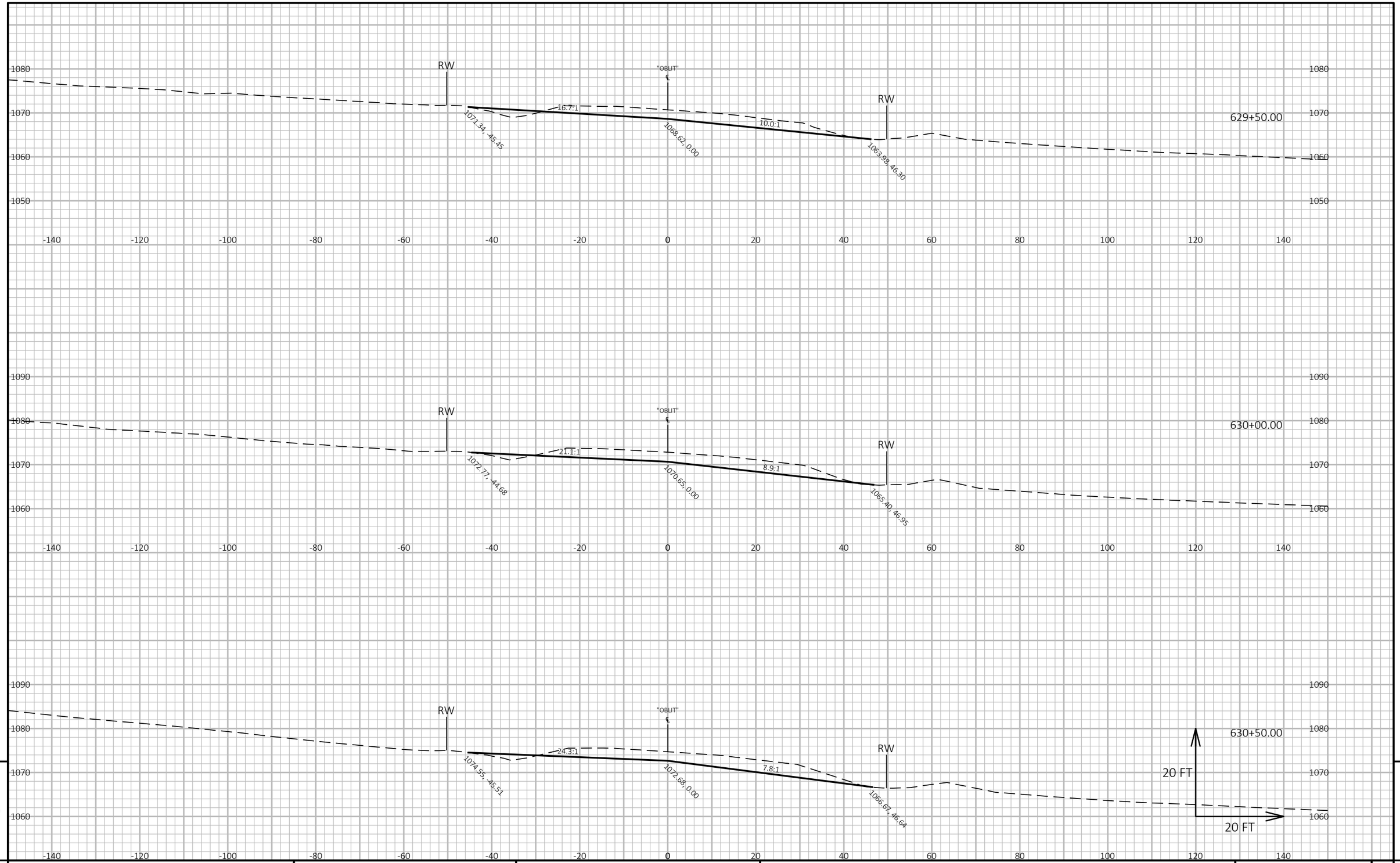
9

PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: USH 51 OBLITERATION	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet - (1)
PLOT DATE : 3/3/2020 4:01 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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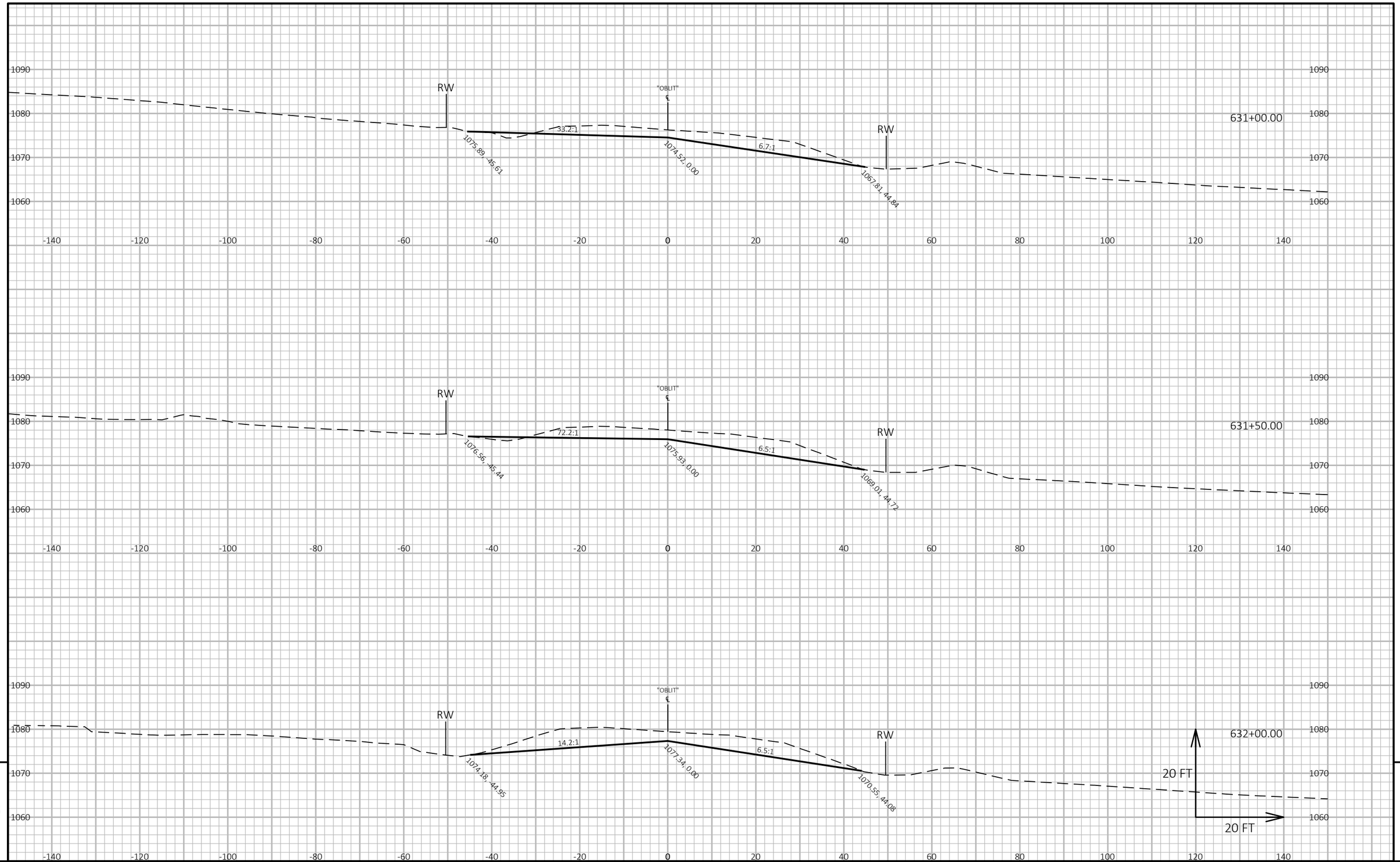
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: USH 51 OBLITERATION	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet - (2)

PLOT DATE : 3/3/2020 4:01 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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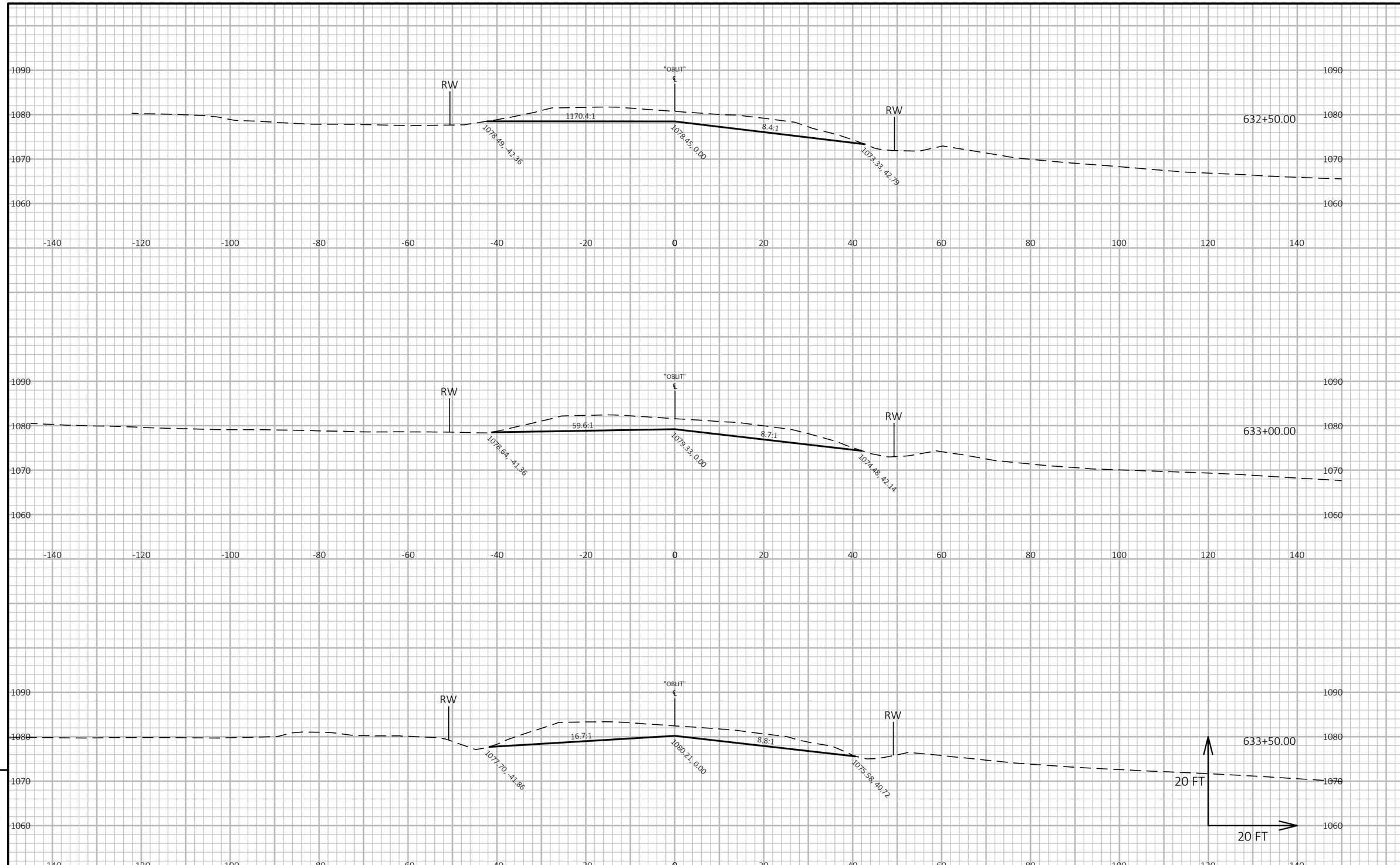
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: USH 51 OBLITERATION	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet - (3)

PLOT DATE : 3/3/2020 4:01 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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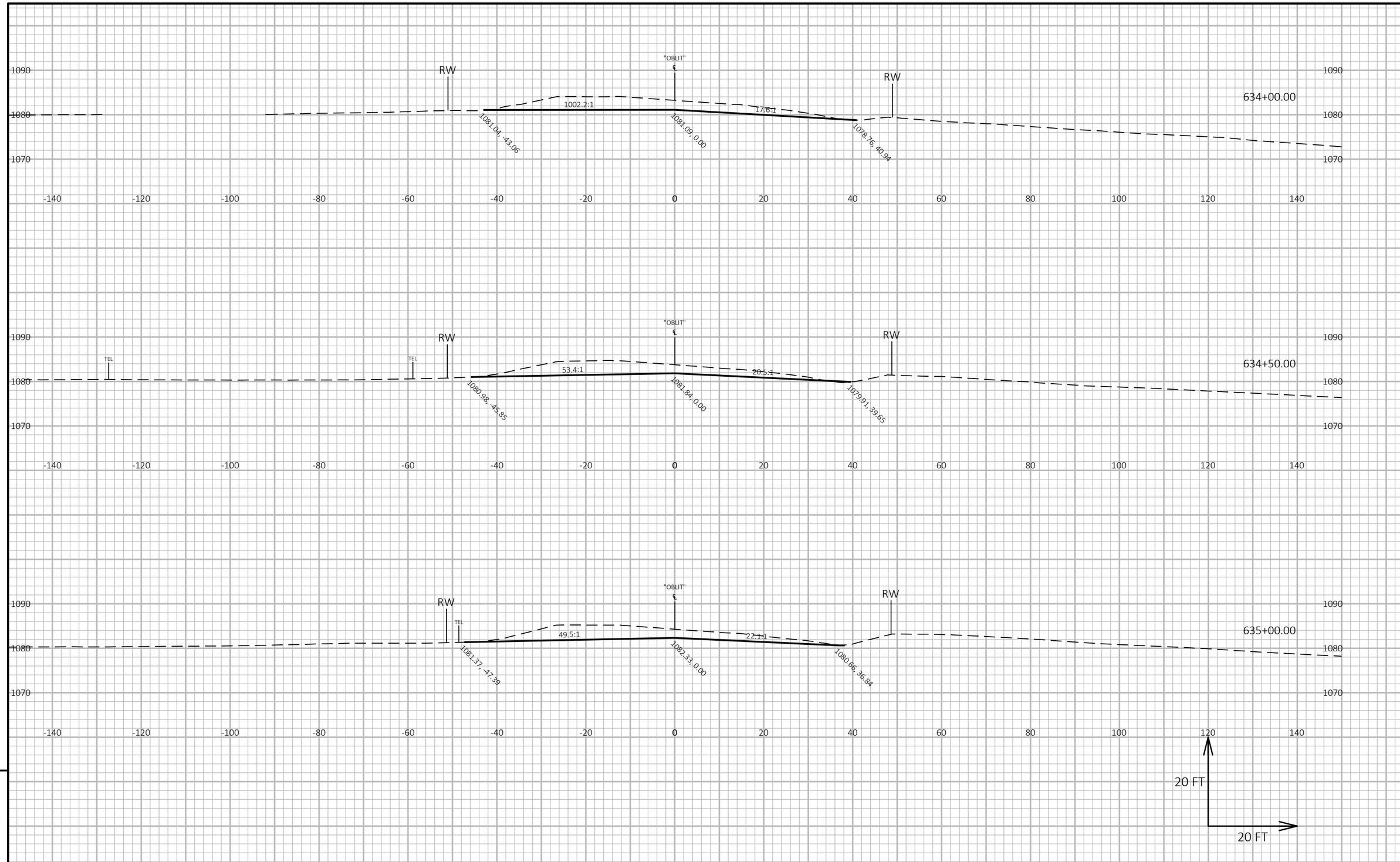
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: USH 51 OBLITERATION	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet - (4)
PLOT DATE : 3/3/2020 4:01 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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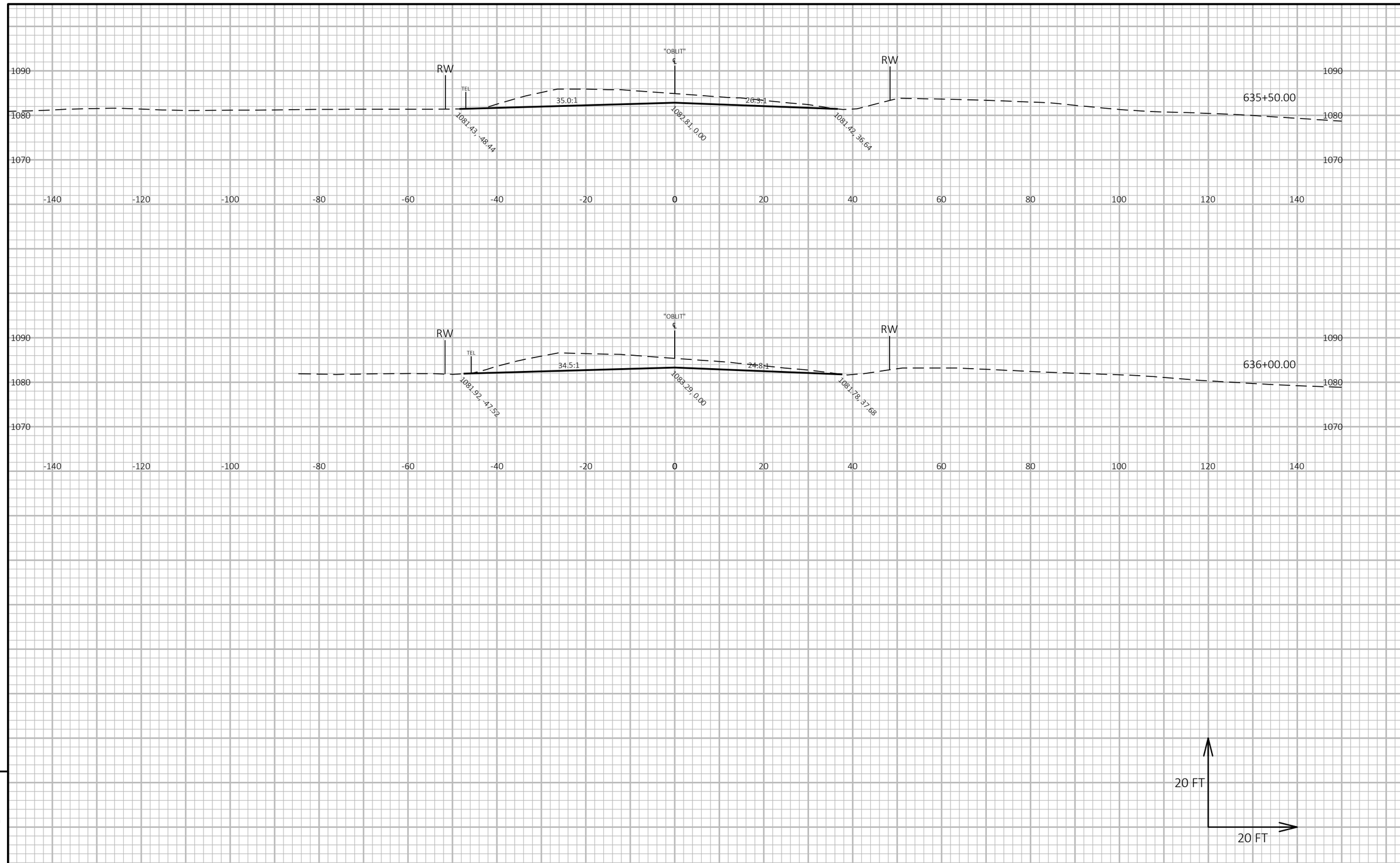
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: USH 51 OBLITERATION	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet - (5)

PLOT DATE : 3/3/2020 4:02 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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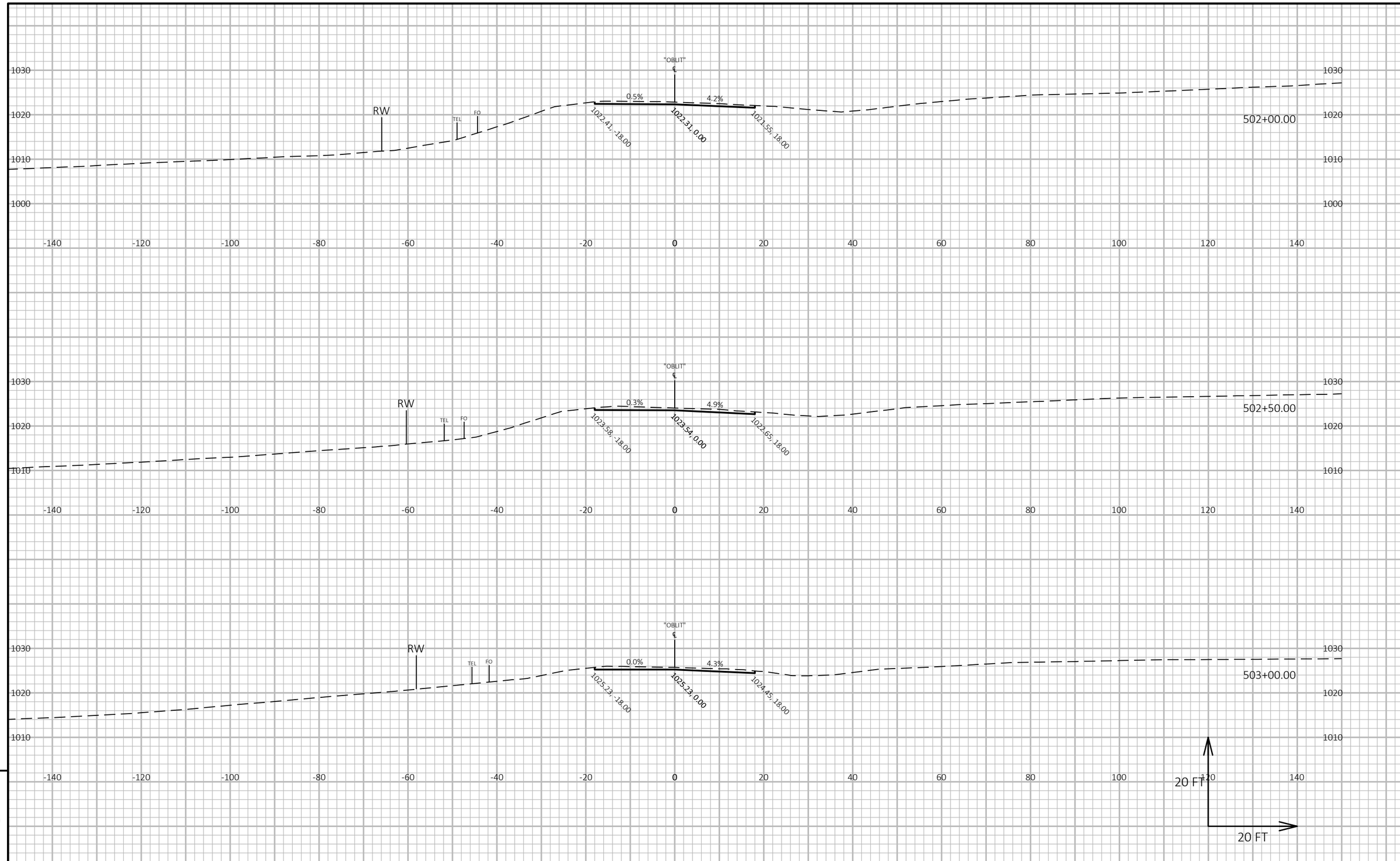
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: USH 51 OBLITERATION	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet - (6)

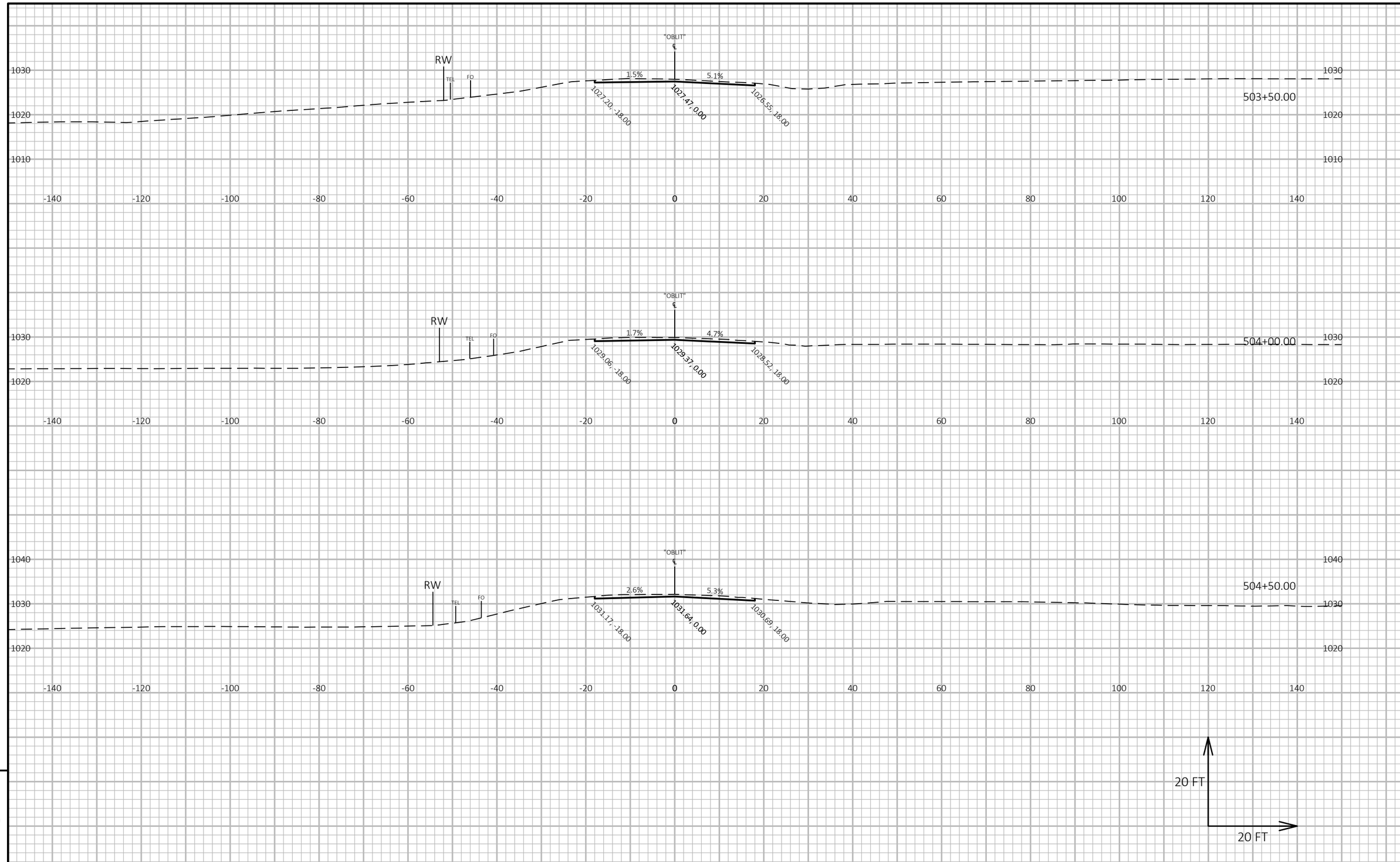
PLOT DATE : 3/3/2020 4:02 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60 OBLITERATION	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet 1 STH 60
PLOT DATE : 3/3/2020 4:02 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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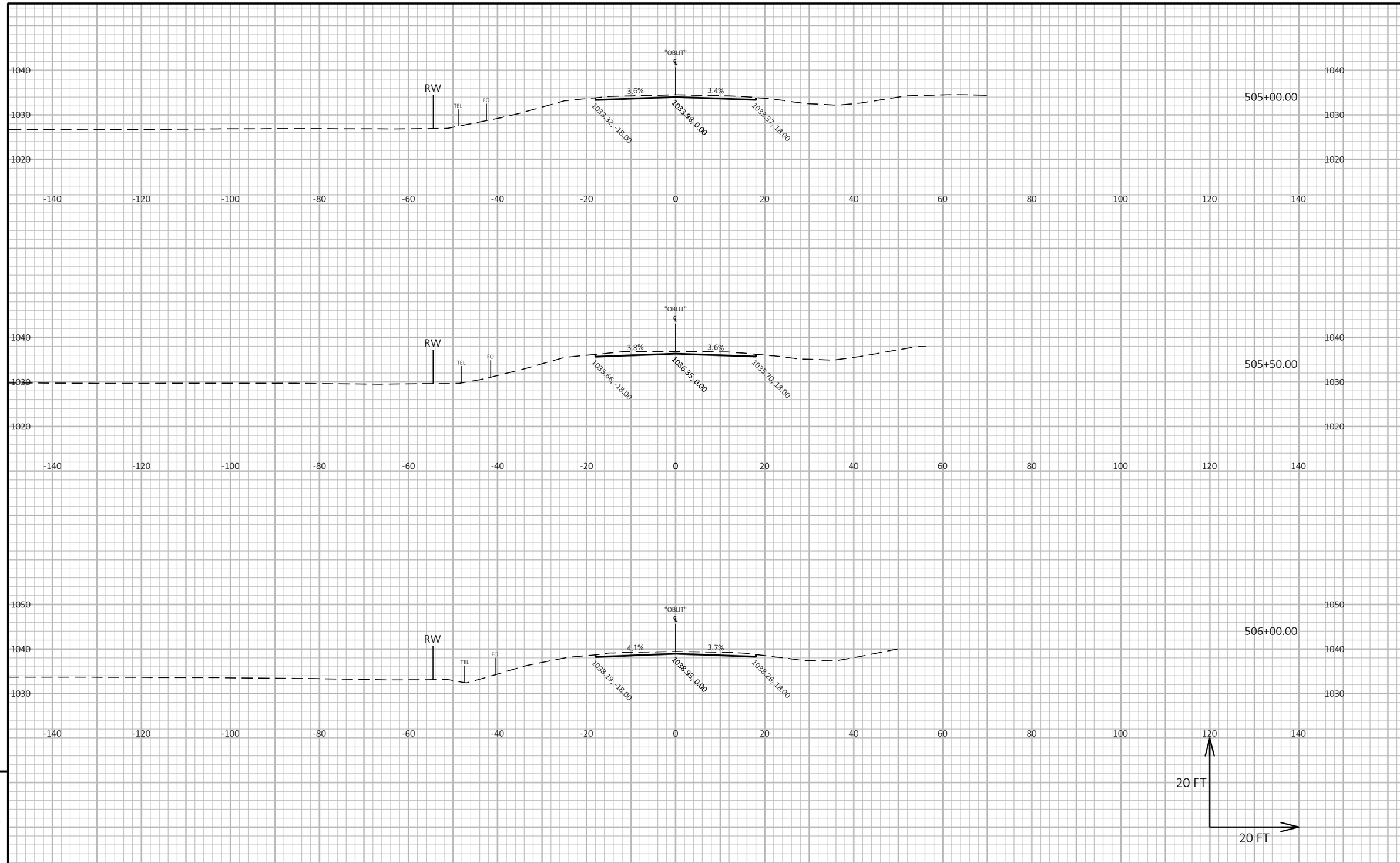
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60 OBLITERATION	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet STH 60 - (2)
PLOT DATE : 3/3/2020 4:02 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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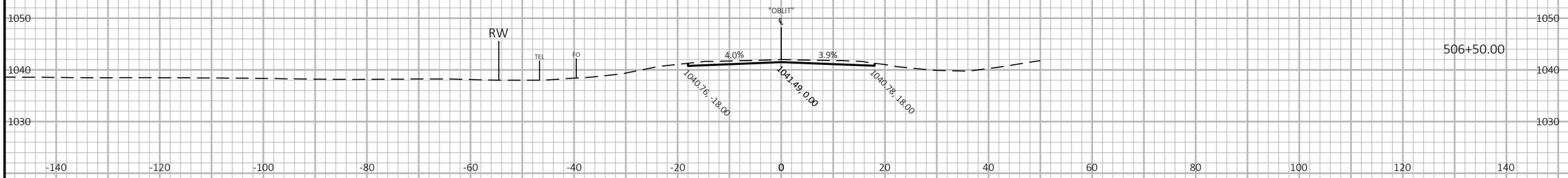
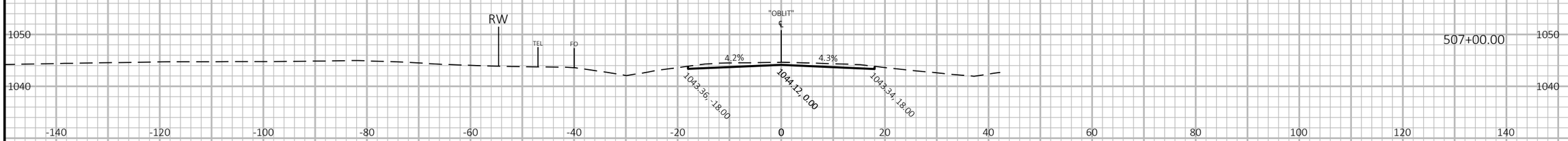
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60 OBLITERATION	SHEET	E

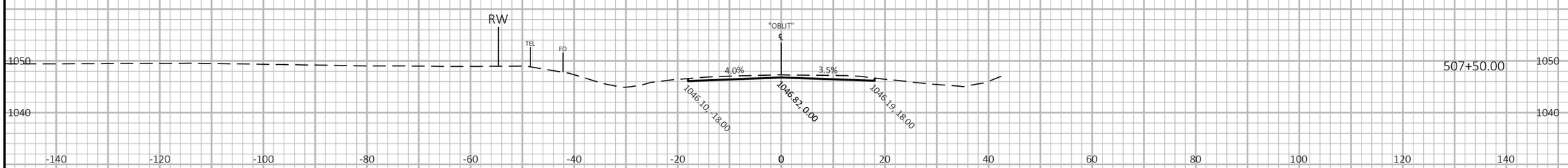
FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration Section Sheet STH 60 - (3)

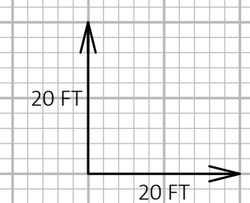
PLOT DATE : 3/3/2020 4:02 PM PLOT BY : PAYNE, GREGORY A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49









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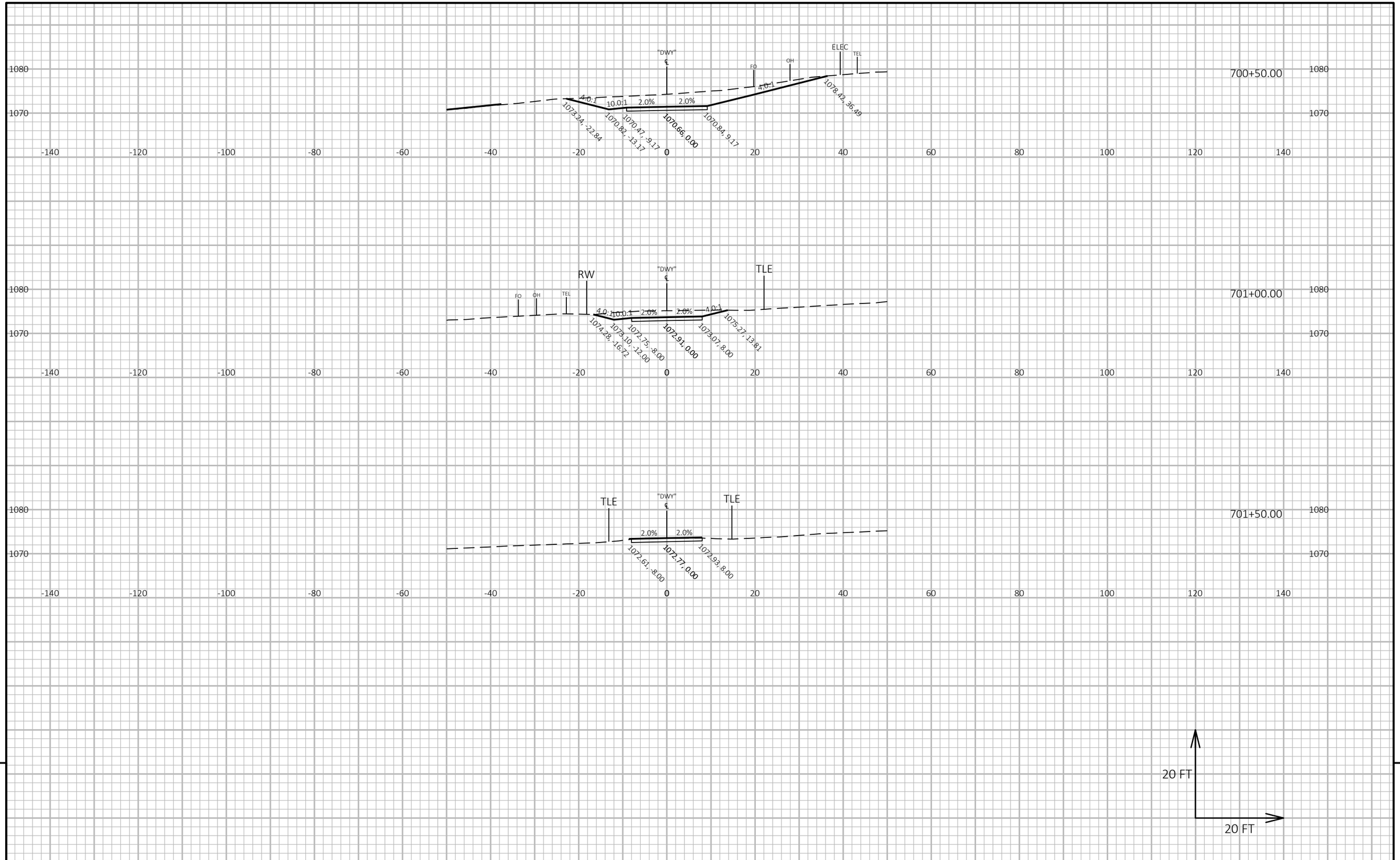
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: STH 60 OBLITERATION	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Obliteration STH 60 Section Sheet - (4)
PLOT DATE : 3/3/2020 4:02 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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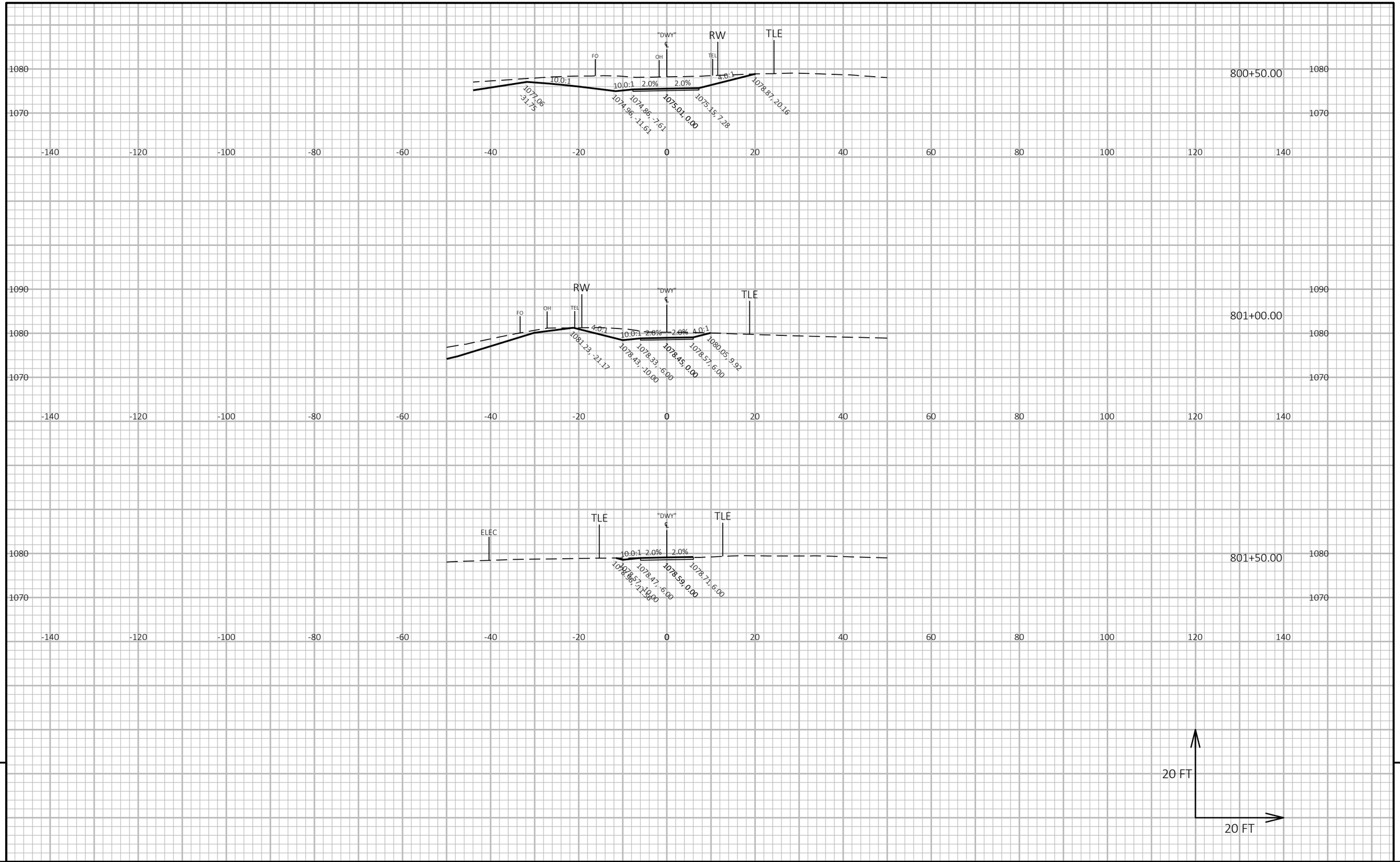
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: STA. 117+25 DRIVEWAY	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 117 DWY Section Sheet - (1)
PLOT DATE : 3/3/2020 4:03 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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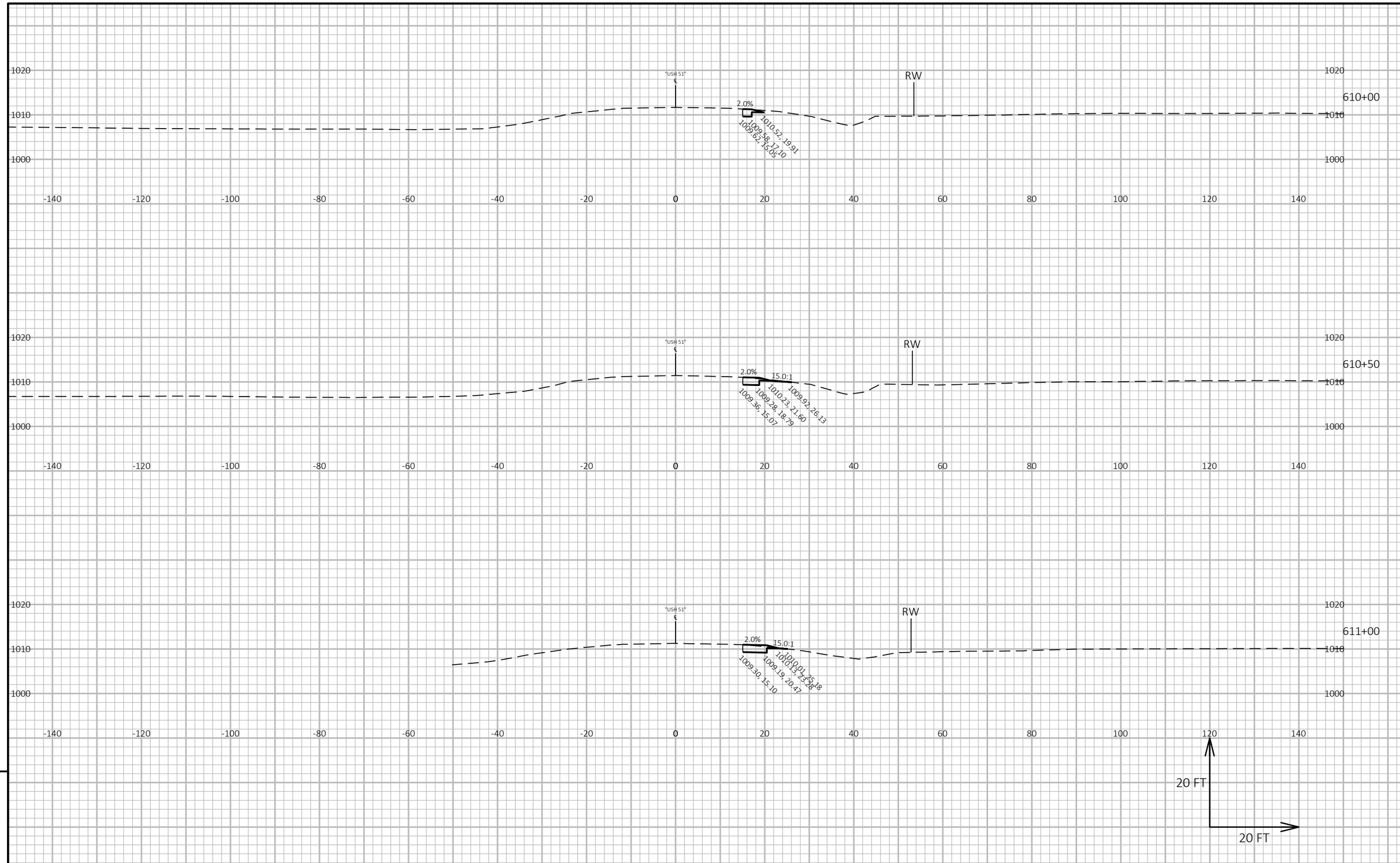
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: STA. 118+75 DRIVEWAY	SHEET	E

FILE NAME : N:\PDS\C3D\60200000\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 118 DWY Section Sheet - (1)
PLOT DATE : 3/3/2020 4:03 PM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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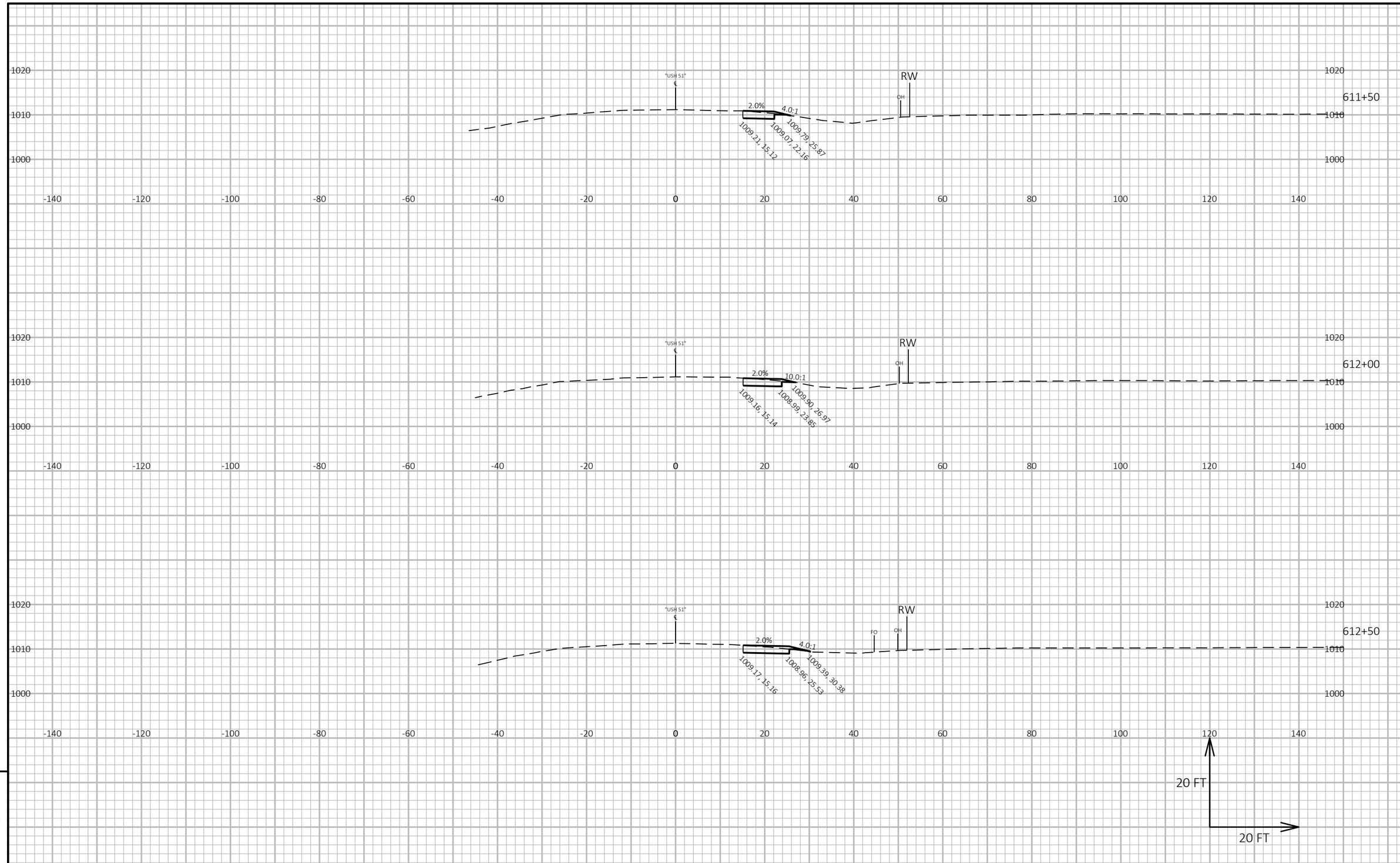
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (1)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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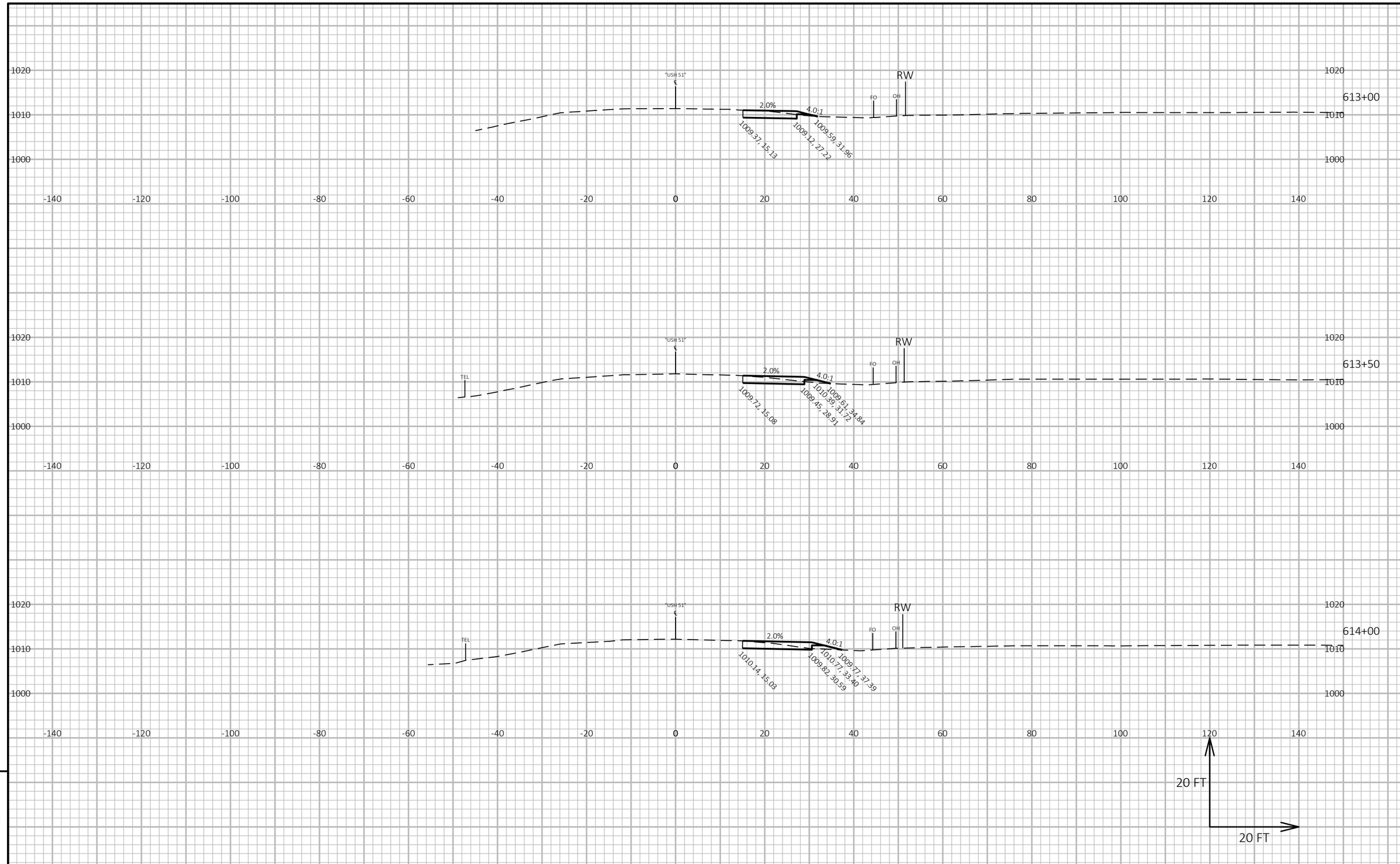
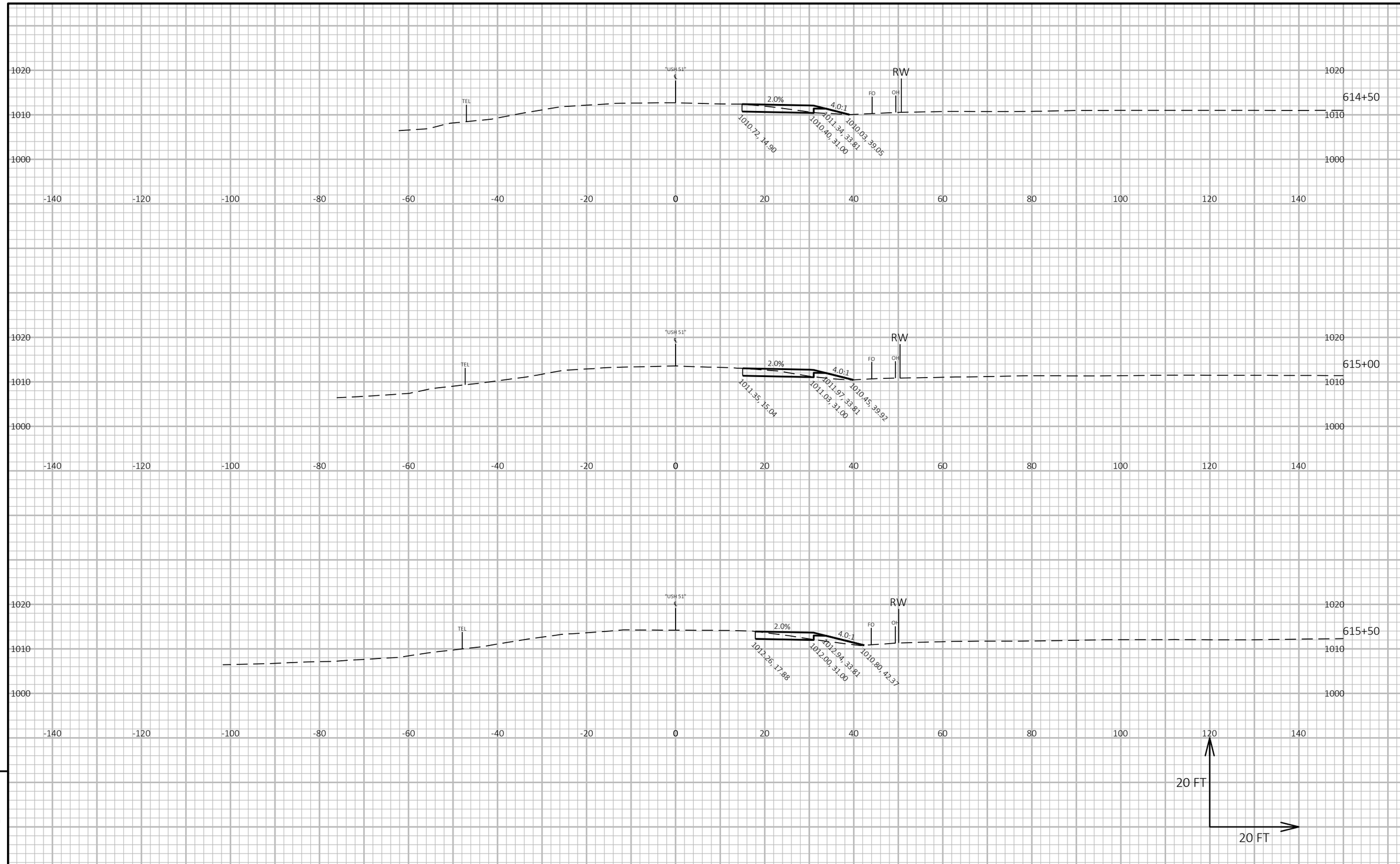
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (2)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (3)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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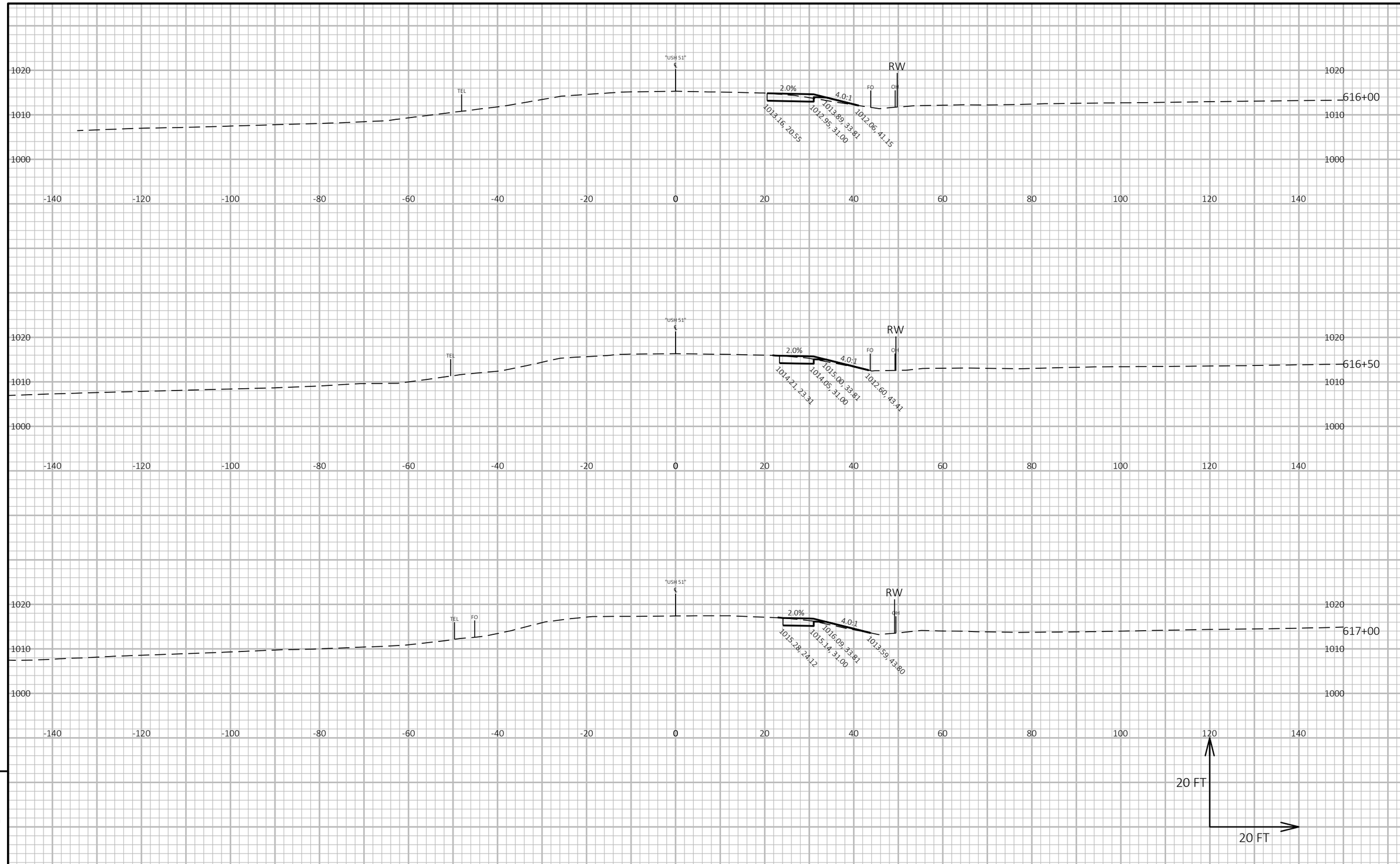
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (4)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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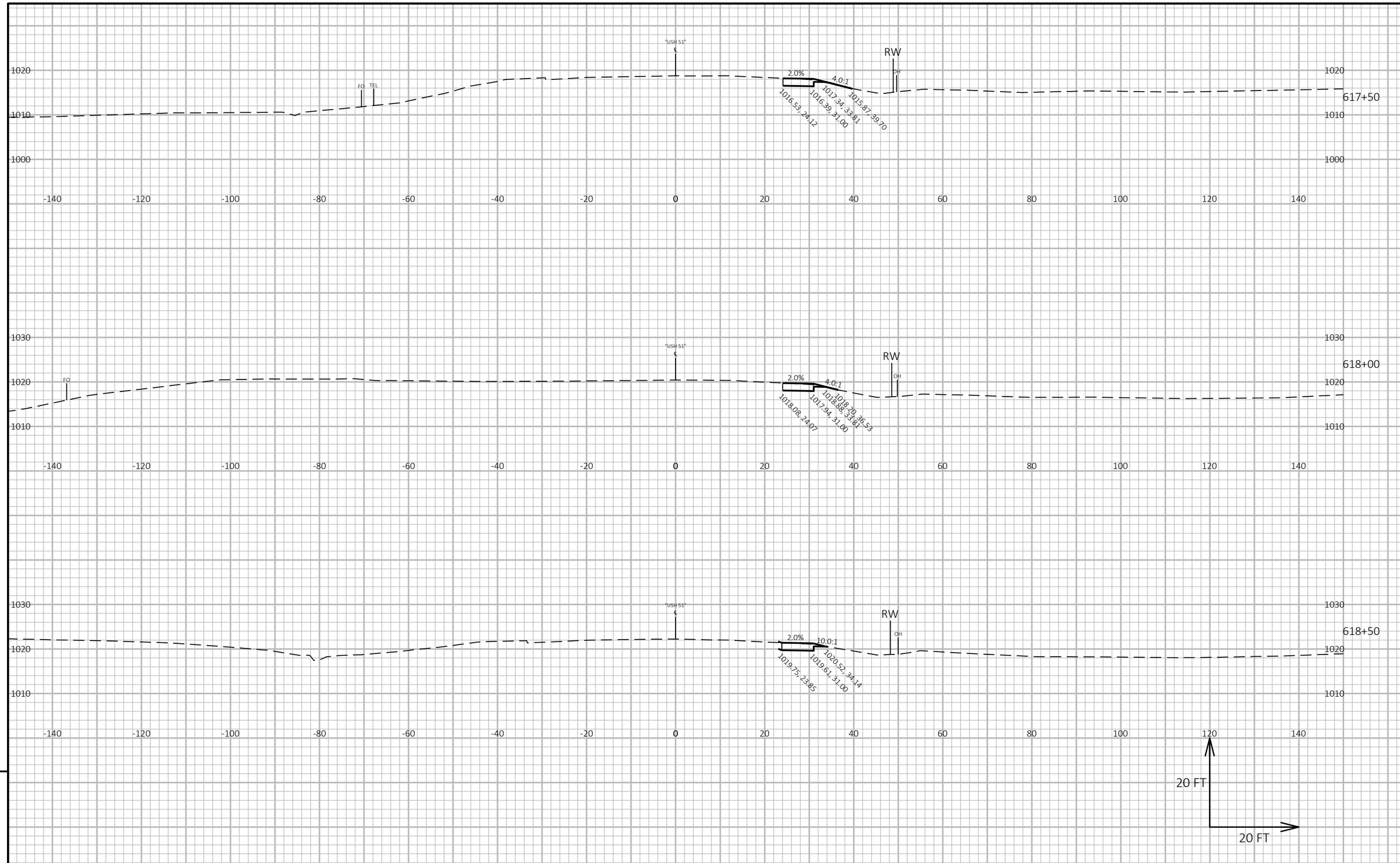
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (5)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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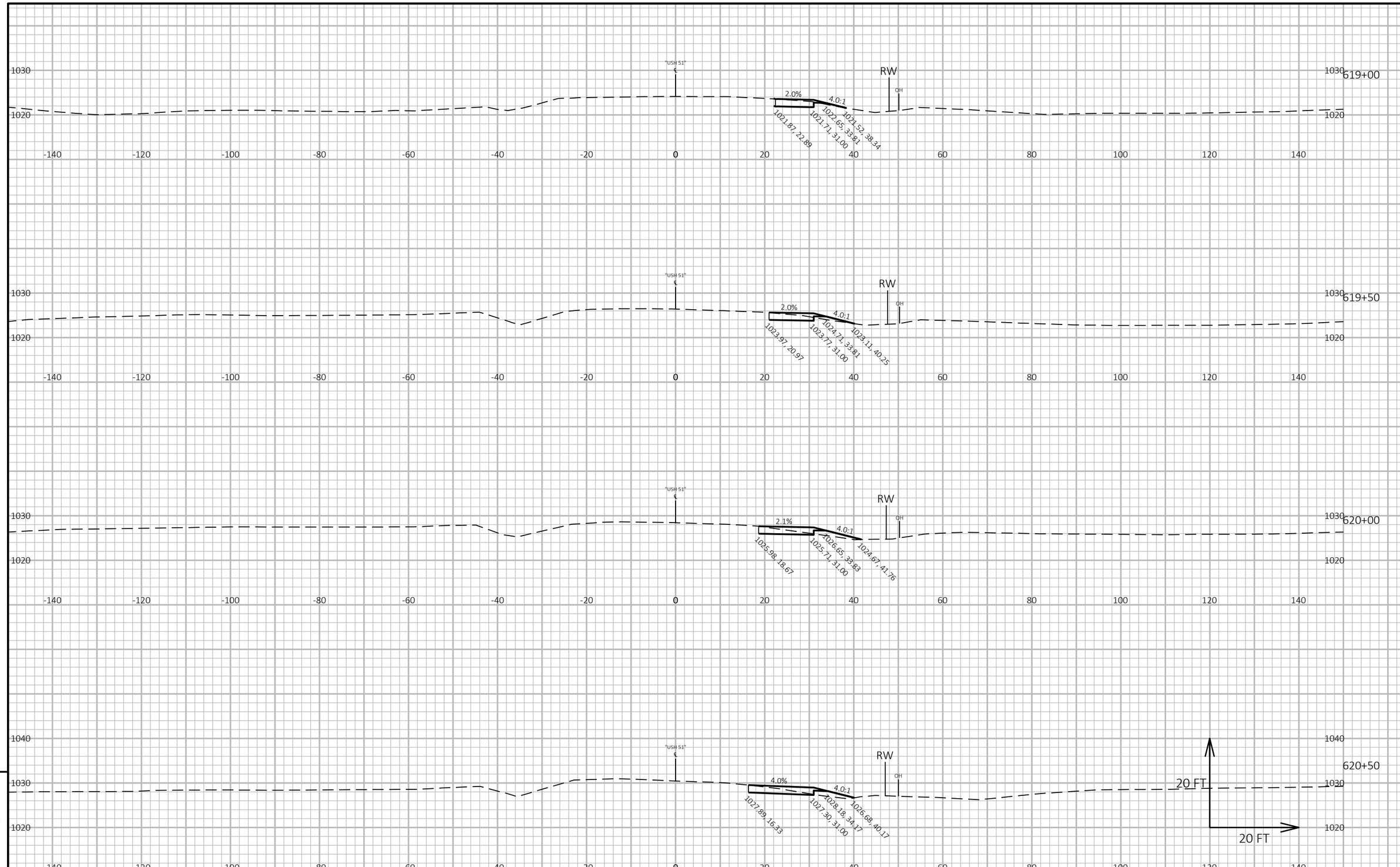
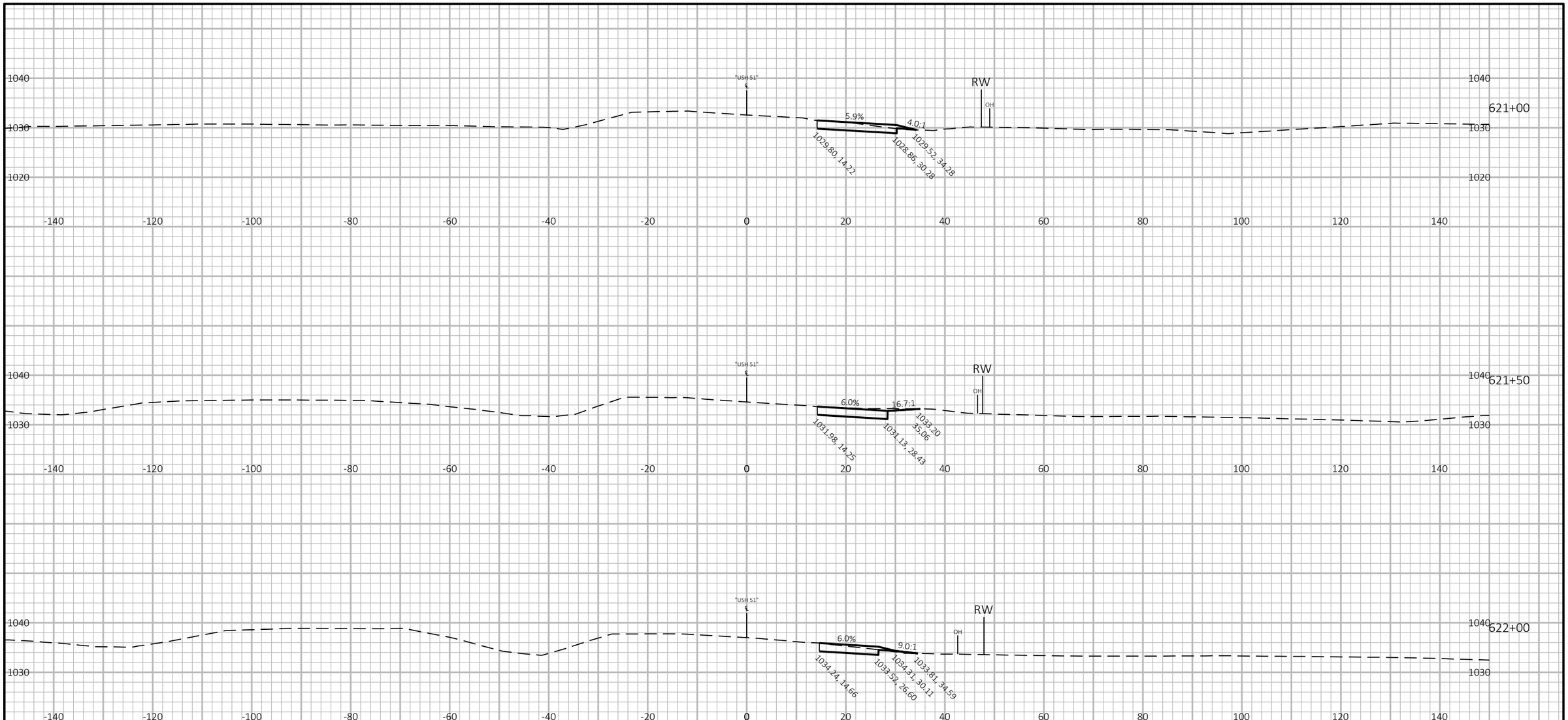
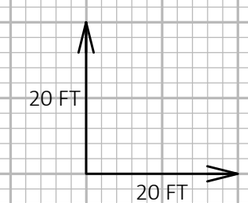
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (6)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E





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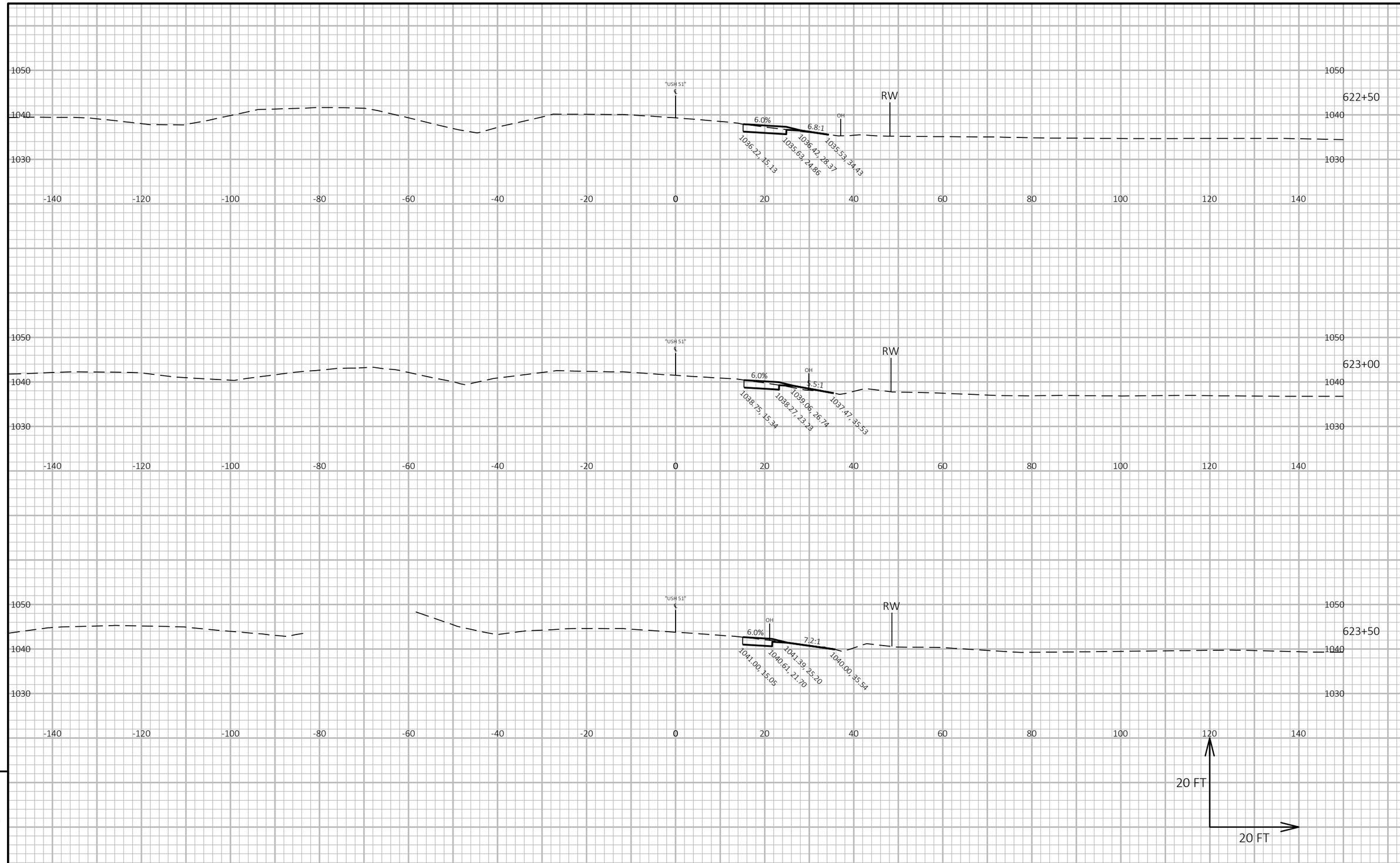
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (8)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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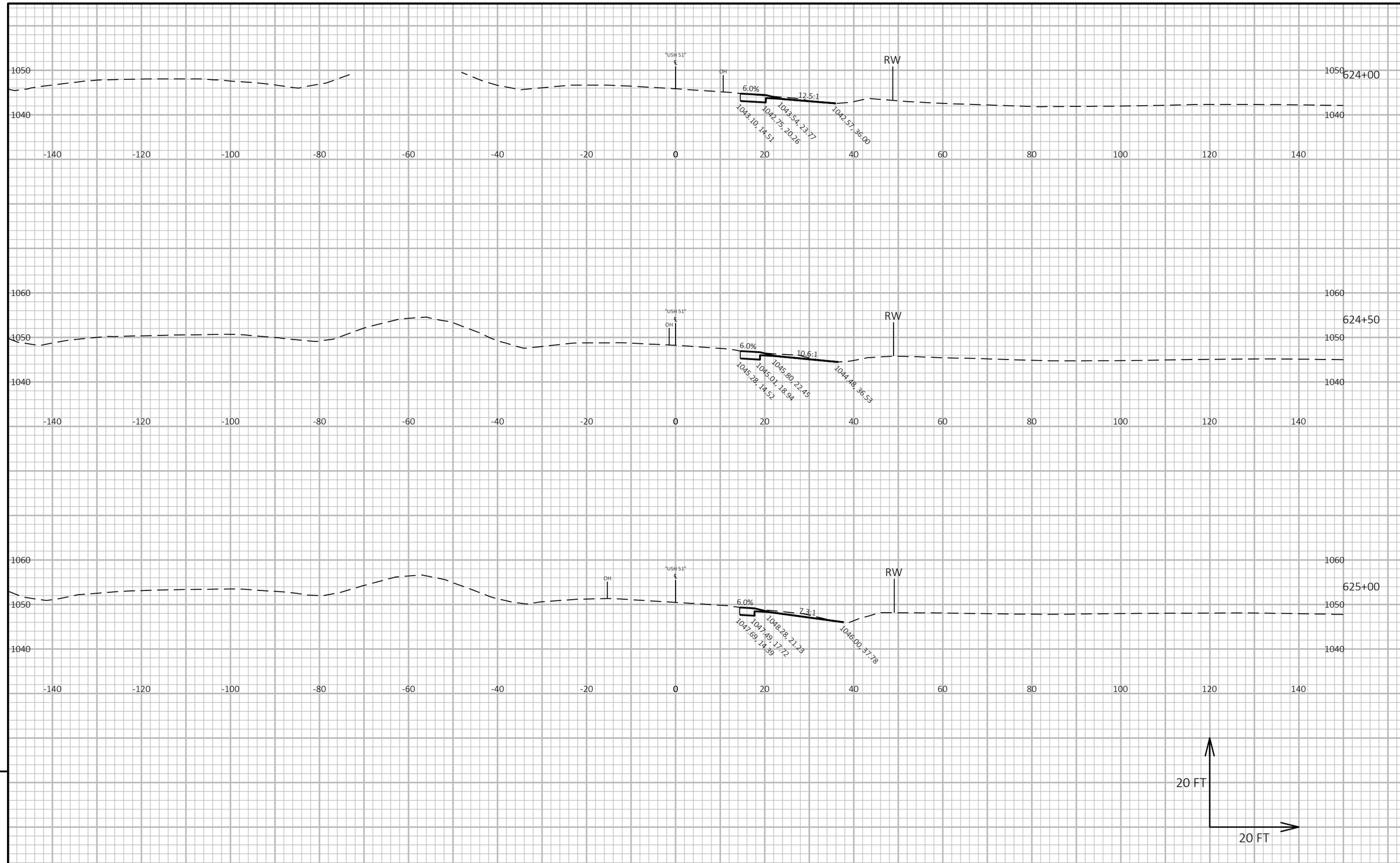
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (9)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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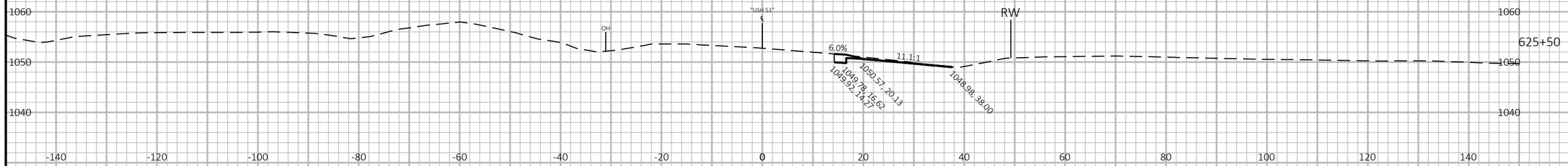
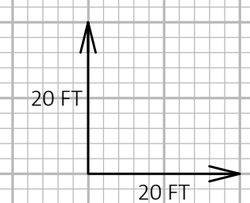
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (10)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.





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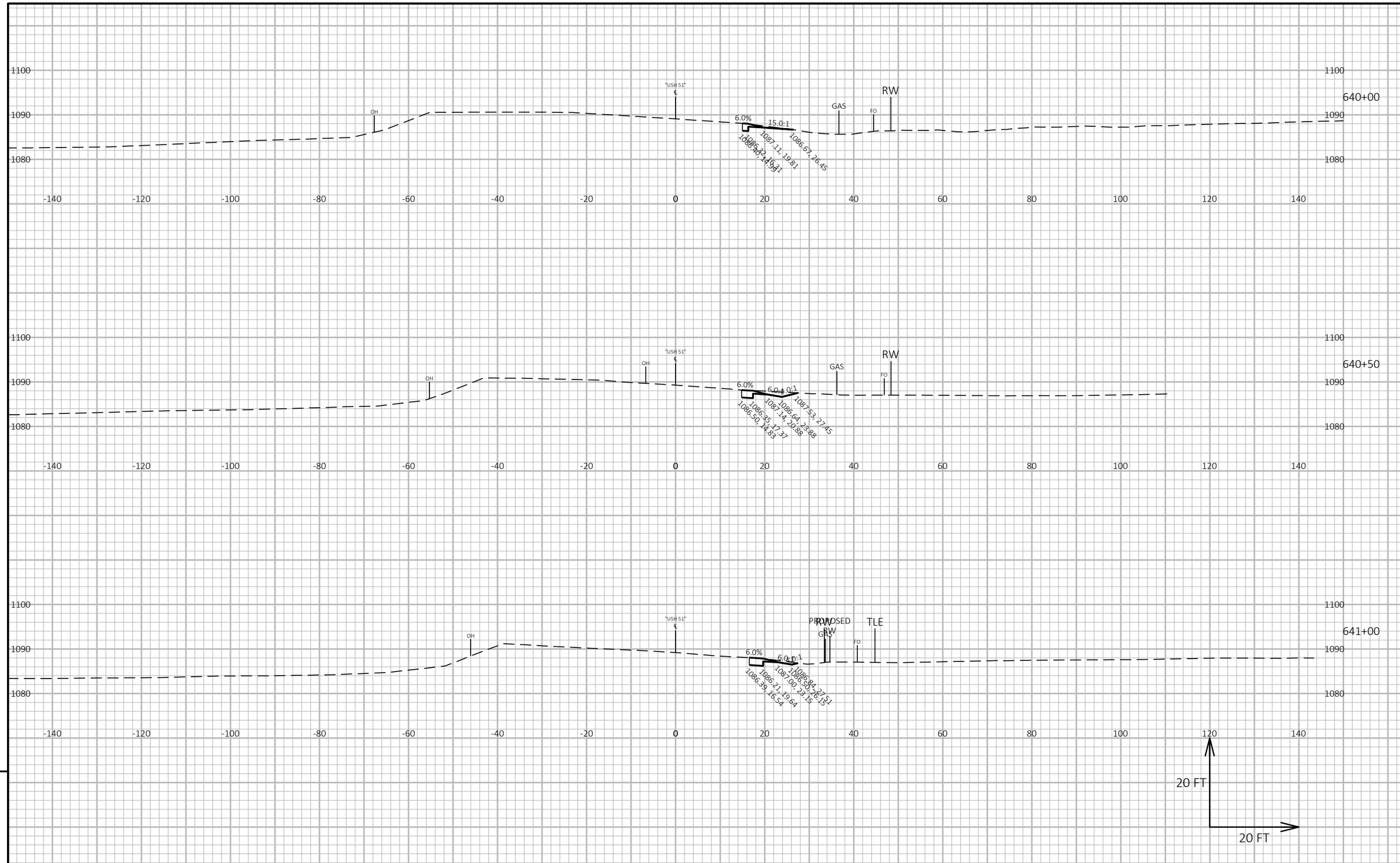
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (11)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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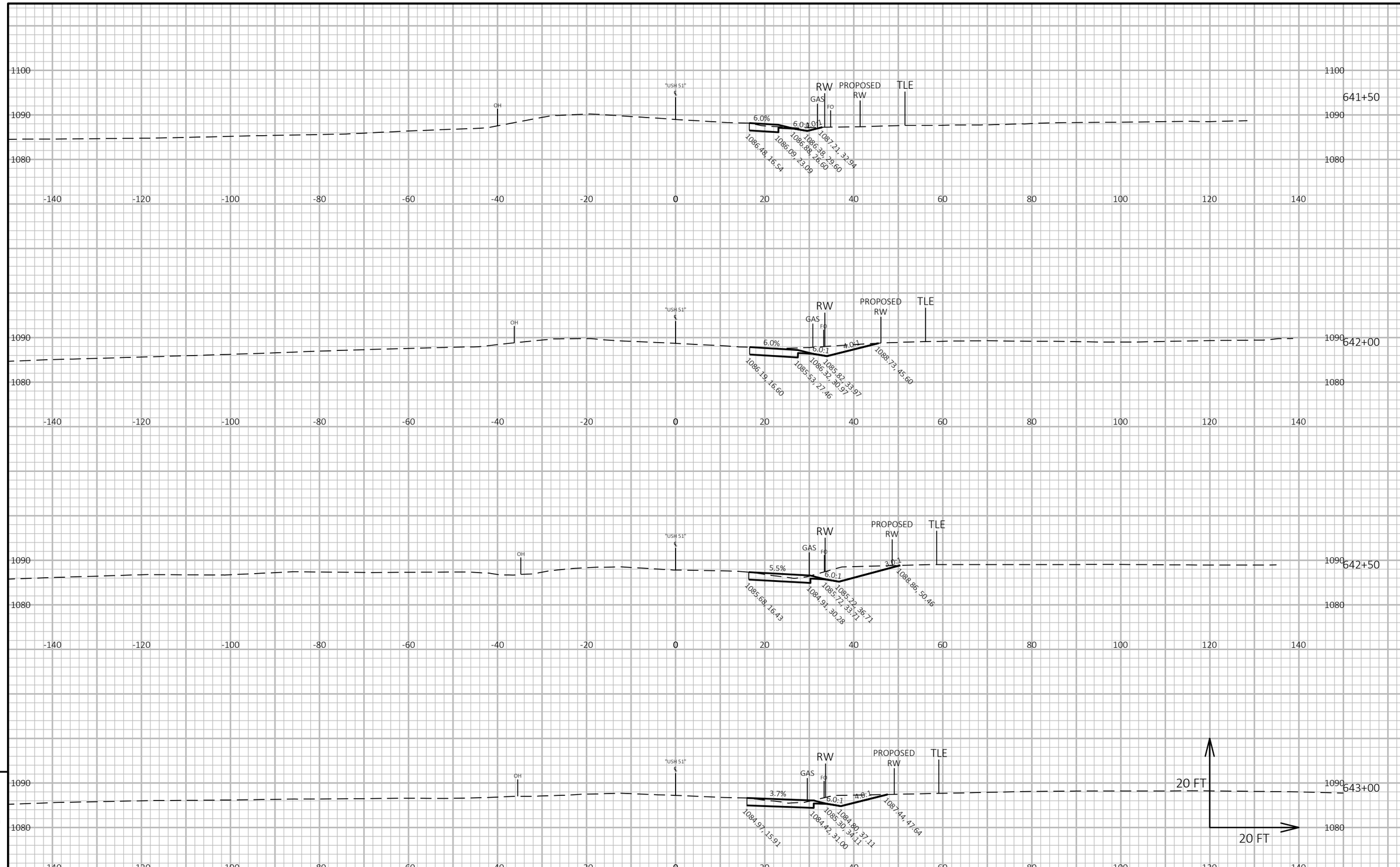
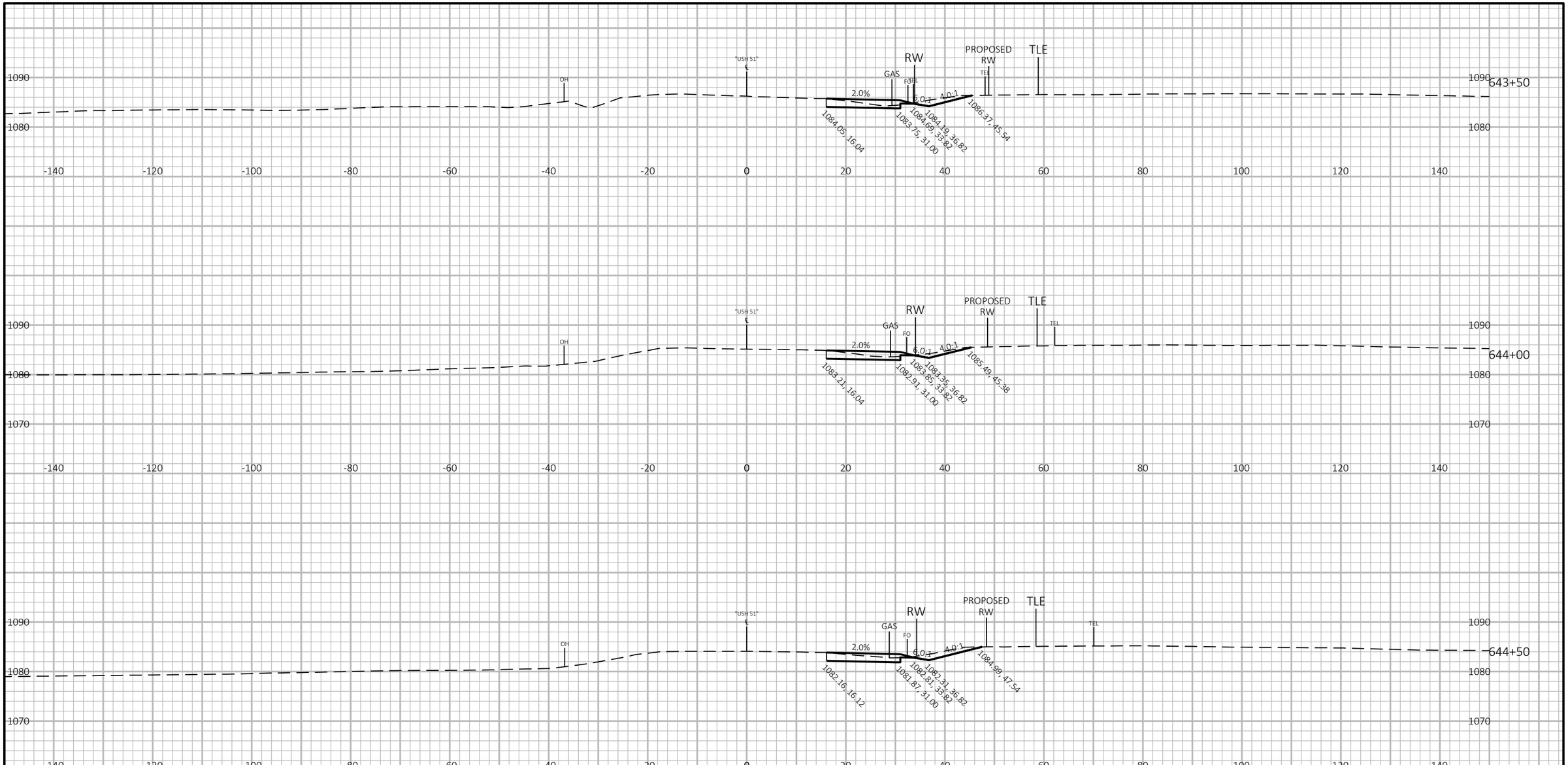
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (12)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (13)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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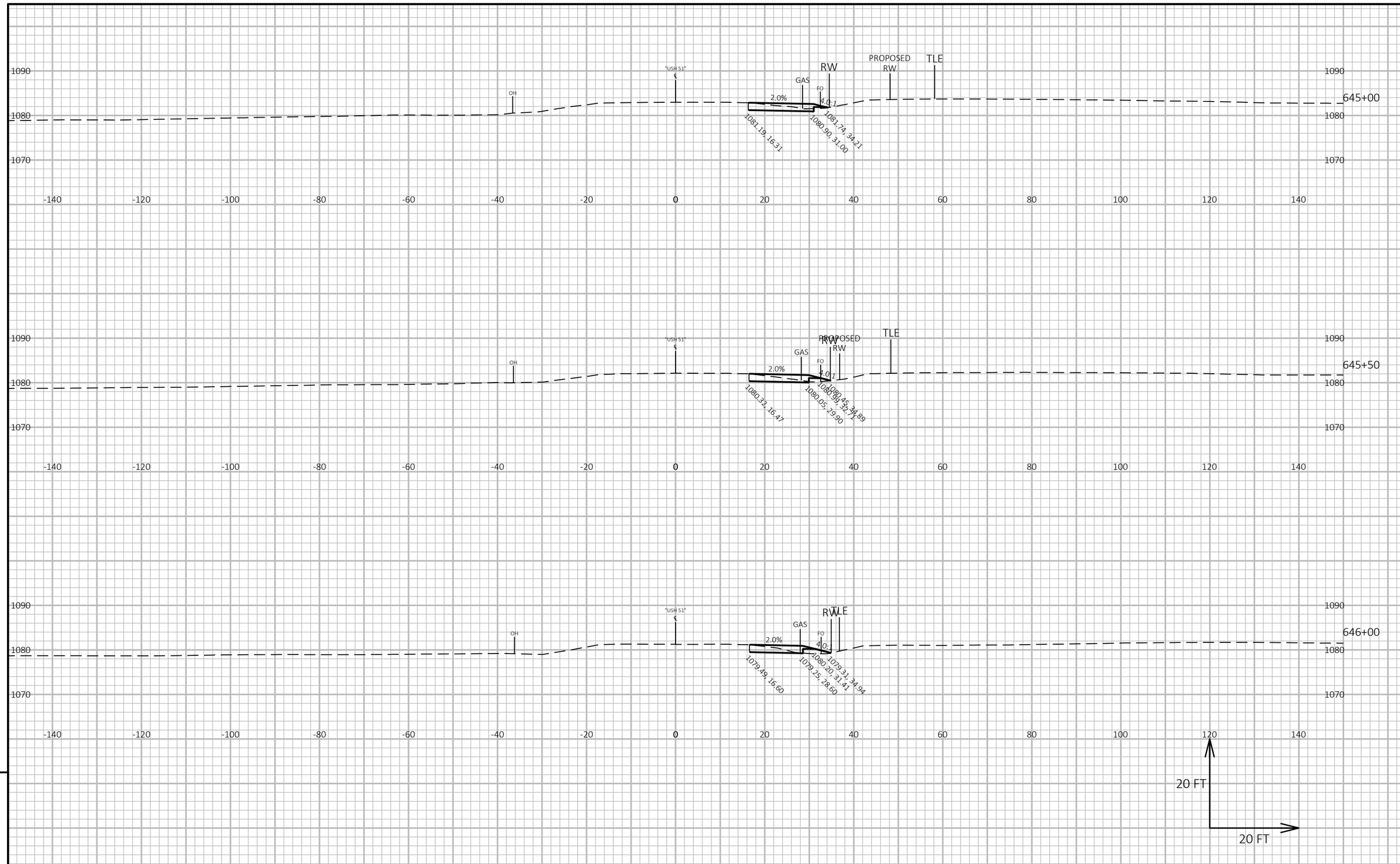
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (14)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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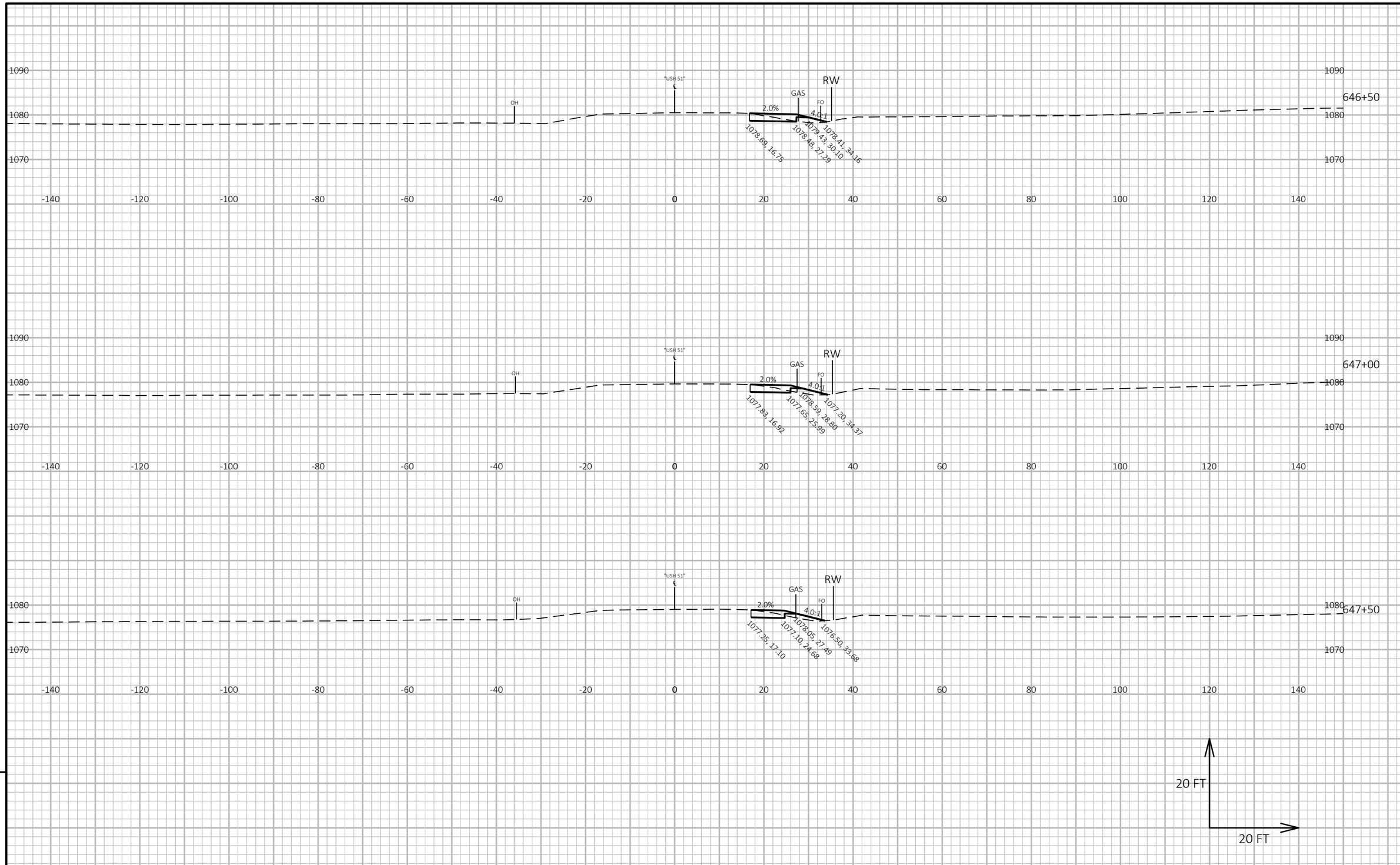
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (15)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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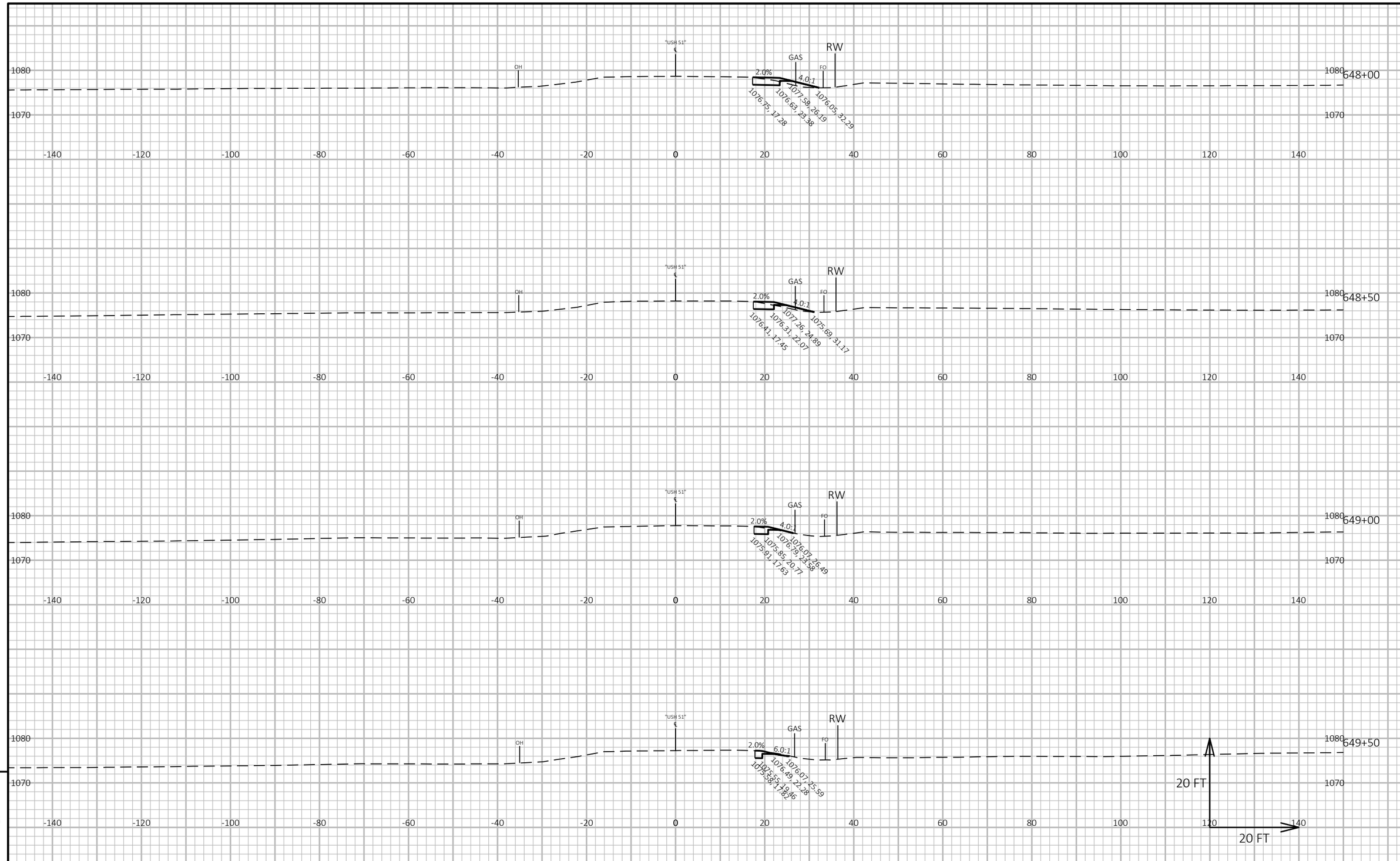
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (16)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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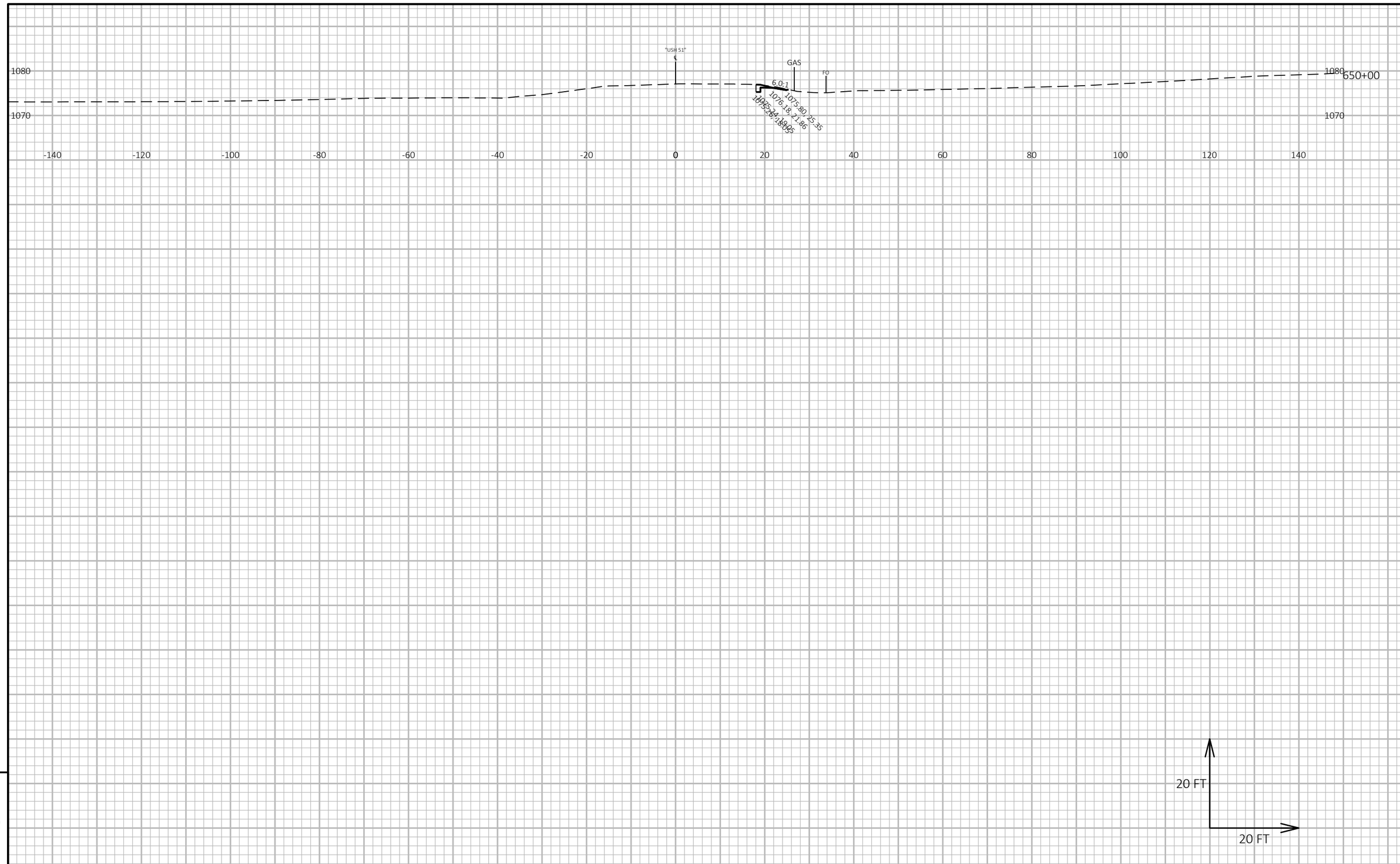
PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (17)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 6020-00-70	HWY: USH 51	COUNTY: COLUMBIA	CROSS SECTIONS: TEMPORARY WIDENING	SHEET	E

FILE NAME : \\FIWMAD7P3158\N3PUBLIC\PDS\C3D\60200000\SHEETSPLAN\090201_XS TEMP.DWG
LAYOUT NAME - Section Sheet - (18)
PLOT DATE : 3/13/2020 10:09 AM
PLOT BY : PAYNE, GREGORY A
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49