

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT STPS-HSIP 203-1(16)4 GRADE, GRAVEL, PLANT MIX, DRAINAGE NORTH OF STEVENSVILLE - NORTH (A LIMITED ACCESS FACILITY) RAVALLI COUNTY

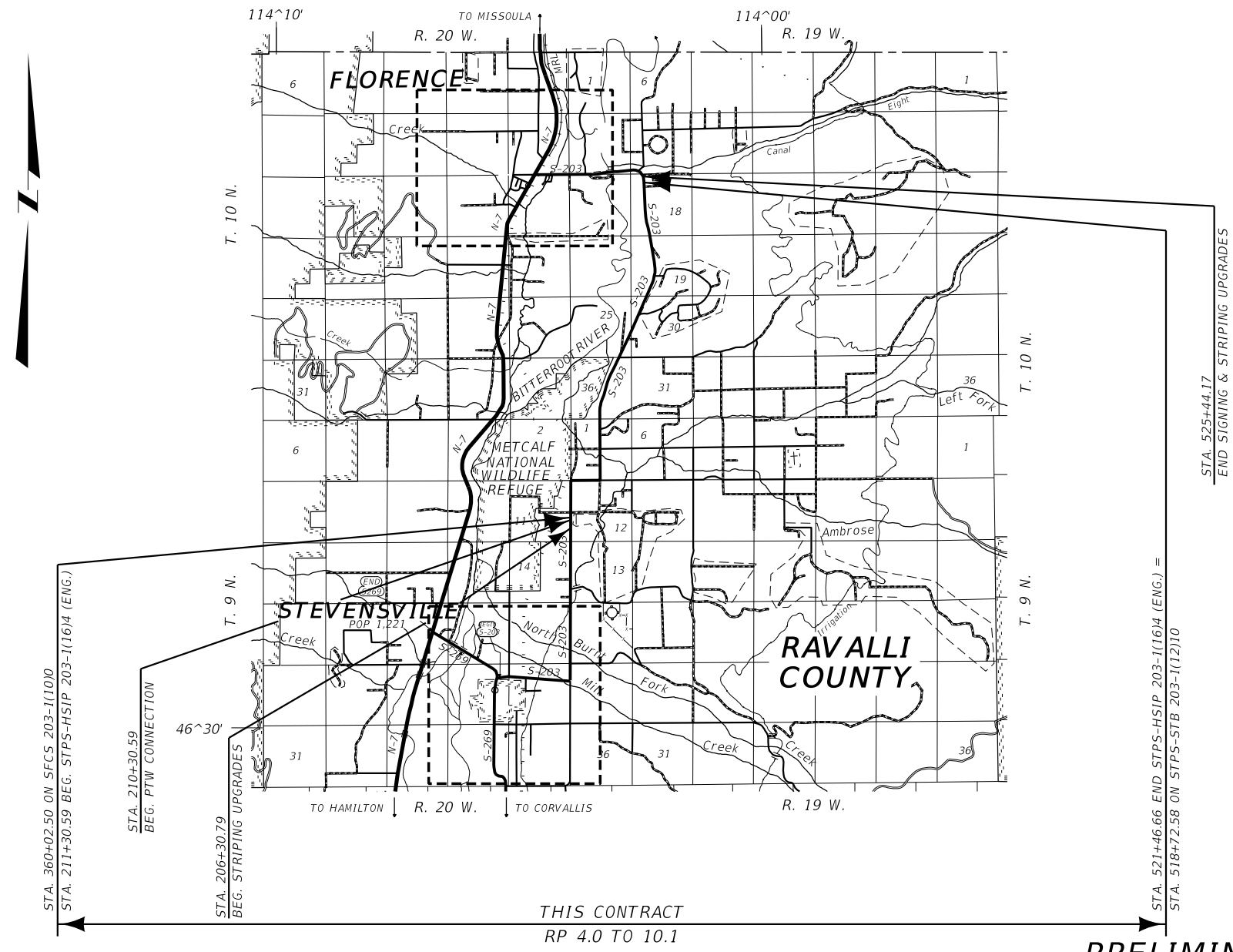
LENGTH 5.9 MILES

SURFACING SOURCES -
CONTRACTOR FURNISHED

PROJECT DESIGN DATA

PRESENT	2014	A.D.T. = 3,500
LETTING	2017	A.D.T. = 3,850
DESIGN	2037	A.D.T. = 7,320
		D.H.V. = 780
		TRUCKS = 4.3 %
		V. = 60 Mph
		18 KIP ESAL'S = 116 DAILY
		GROWTH RATE = 3.3 % ANNUALLY

LETTING DATE - _____
CSF = 0.99926617 (RP 4.0 TO 10.1)



THIS CONTRACT
RP 4.0 TO 10.1

PRELIMINARY

ASSOCIATED PROJECT AGREEMENT NUMBERS	
R / W	STPS 203-1(26)4
I.C.	
P. E.	STPS 203-1(15)4

MONTANA
DEPARTMENT OF TRANSPORTATION

MALCOLM "MACK" LONG
DIRECTOR OF TRANSPORTATION

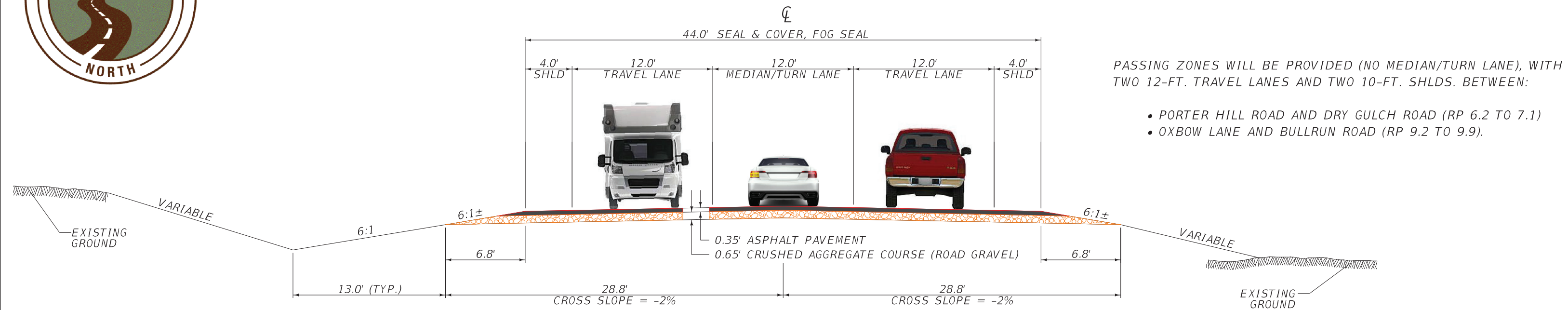
APPROVED BY:

HIGHWAYS
ENGINEER

DATE



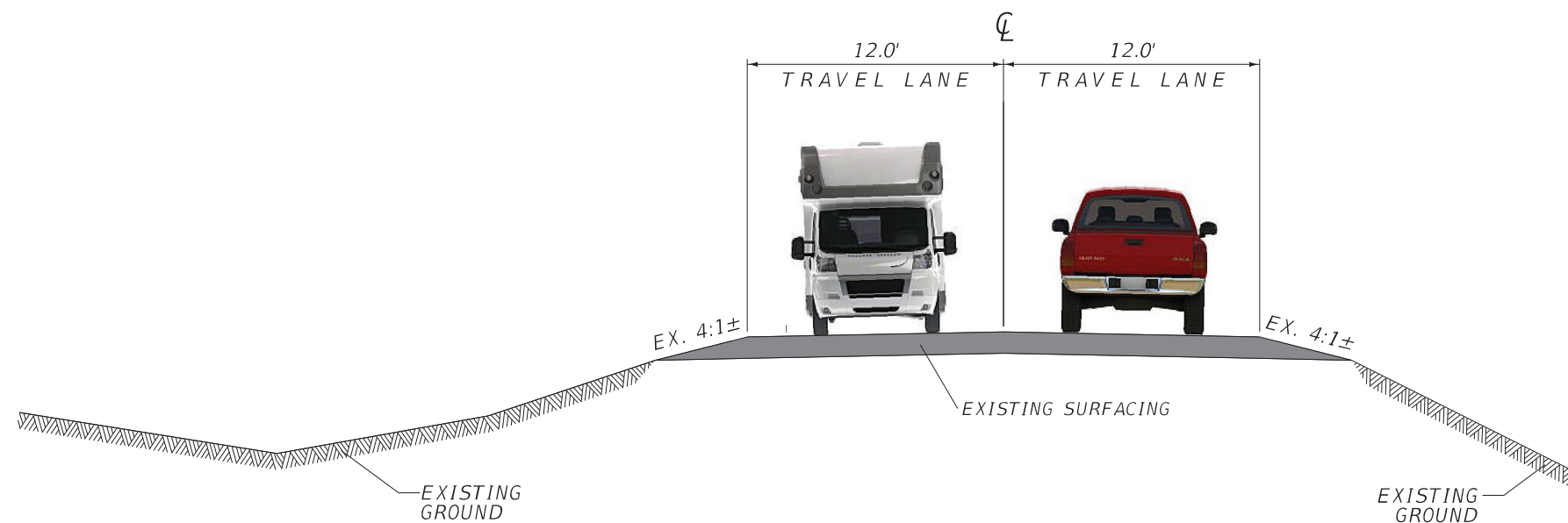
PROPOSED ROAD WIDTH



SHOULDER (SHLD) WIDTHS WILL DIFFER FROM ABOVE TYPICAL AT THESE LOCATIONS:

- 8' SHLD. LEFT ON THE OUTSIDE OF THE CURVE NEXT TO RATHBUN LN.
- 10' SHLD. IN MULTIPLE LOCATIONS AT NEW MAILBOX TURNOUTS.

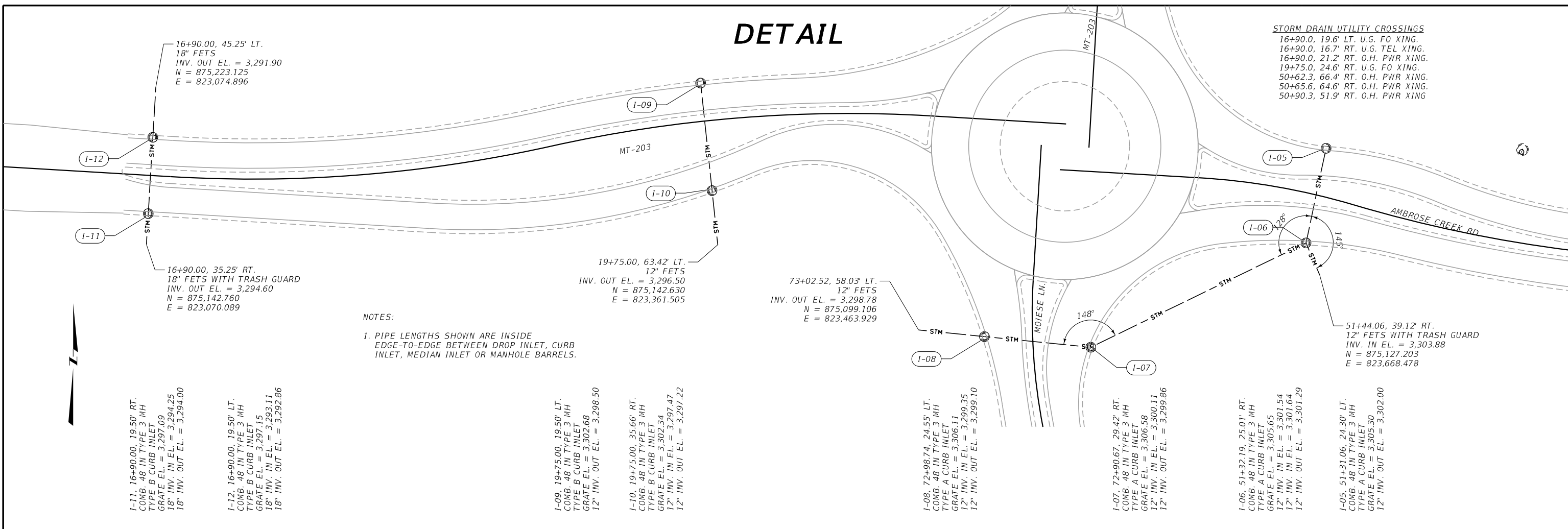
EXISTING ROAD WIDTH



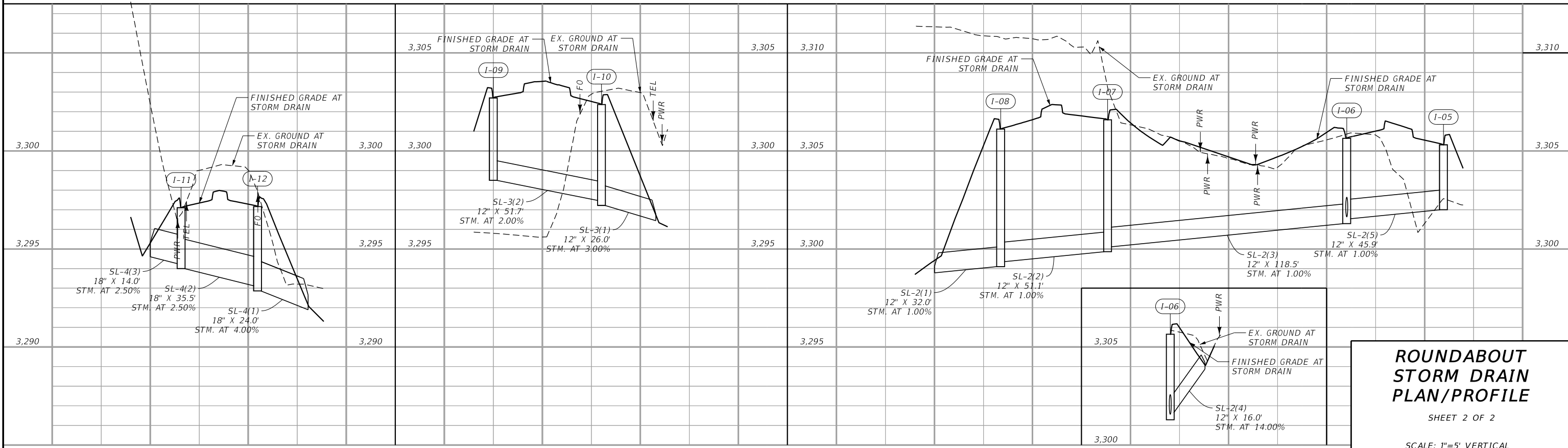
DETAIL

STORM DRAIN UTILITY CROSSINGS

16+90.0, 19.6' LT. U.G. FO XING.
 16+90.0, 16.7' RT. U.G. TEL XING.
 16+90.0, 21.2' RT. O.H. PWR XING.
 19+75.0, 24.6' RT. U.G. FO XING.
 50+62.3, 66.4' RT. O.H. PWR XING.
 50+65.6, 64.6' RT. O.H. PWR XING.
 50+90.3, 51.9' RT. O.H. PWR XING



NOTES:
 1. PIPE LENGTHS SHOWN ARE INSIDE
 EDGE-TO-EDGE BETWEEN DROP INLET, CURB
 INLET, MEDIAN INLET OR MANHOLE BARRELS.



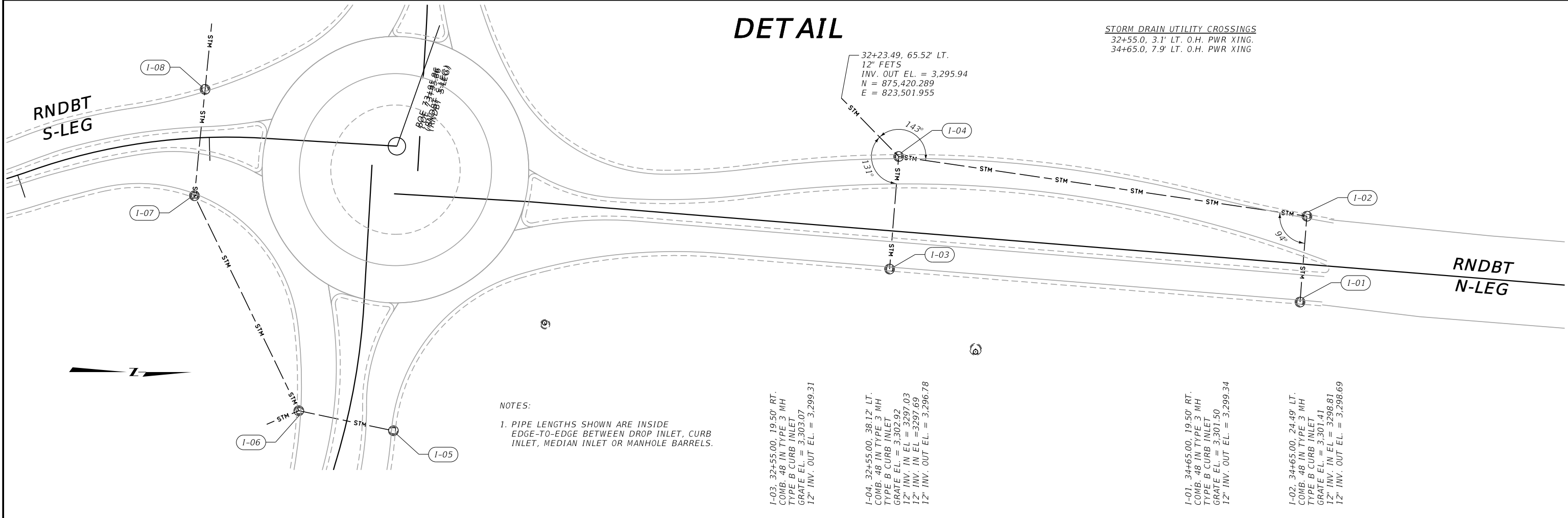
**ROUNDABOUT
 STORM DRAIN
 PLAN/PROFILE**

SHEET 2 OF 2

SCALE: 1"=5' VERTICAL
 1"=50' HORIZONTAL

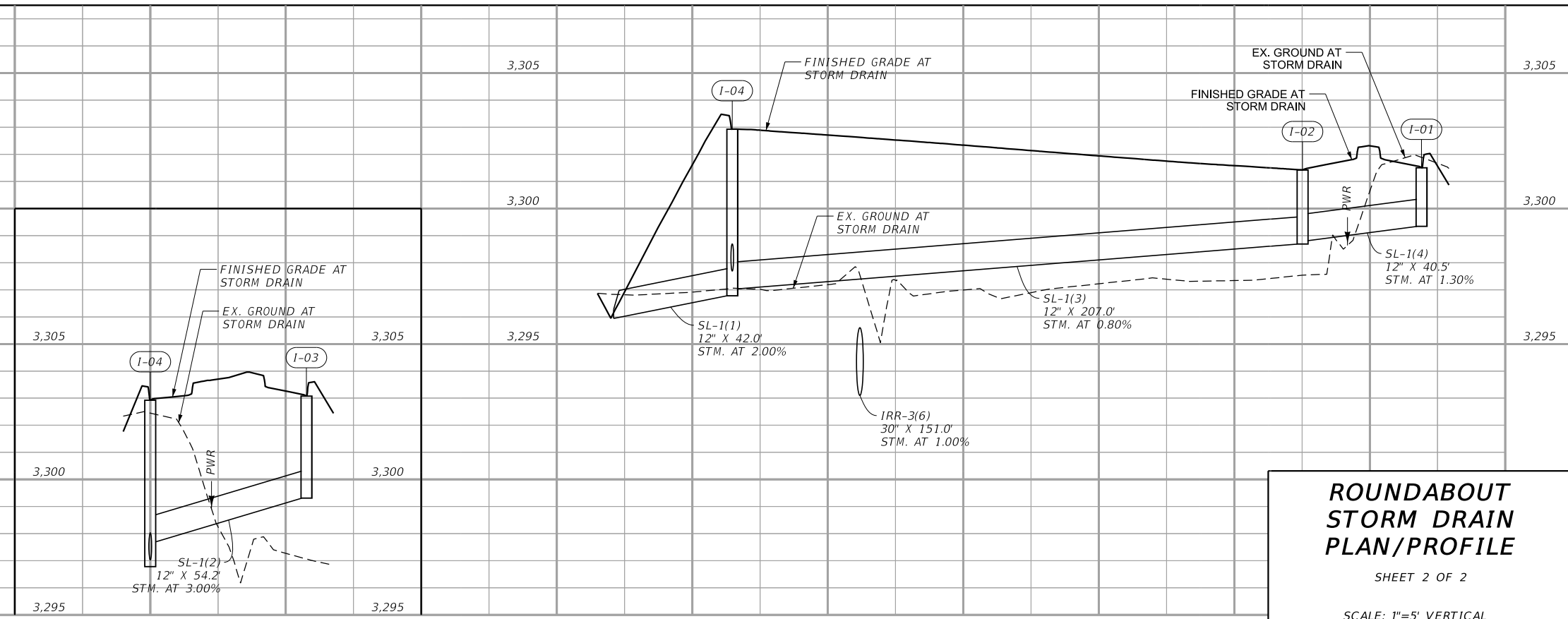
DETAIL

STORM DRAIN UTILITY CROSSINGS
 32+55.0, 3.1' LT. O.H. PWR XING.
 34+65.0, 7.9' LT. O.H. PWR XING

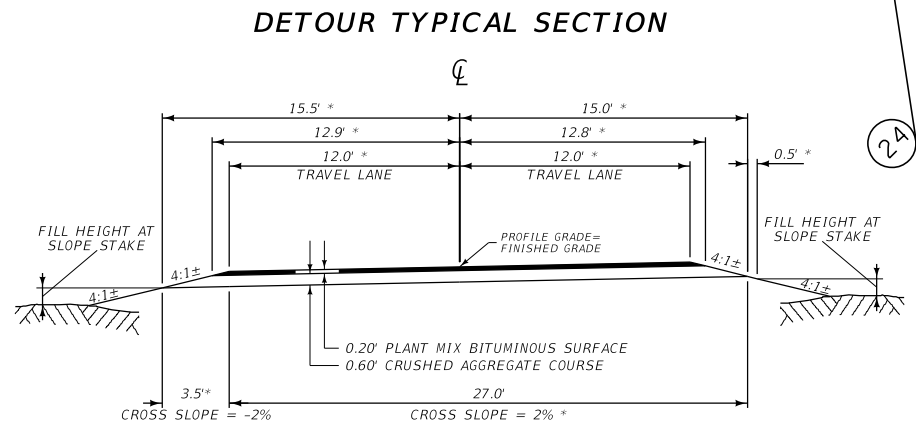
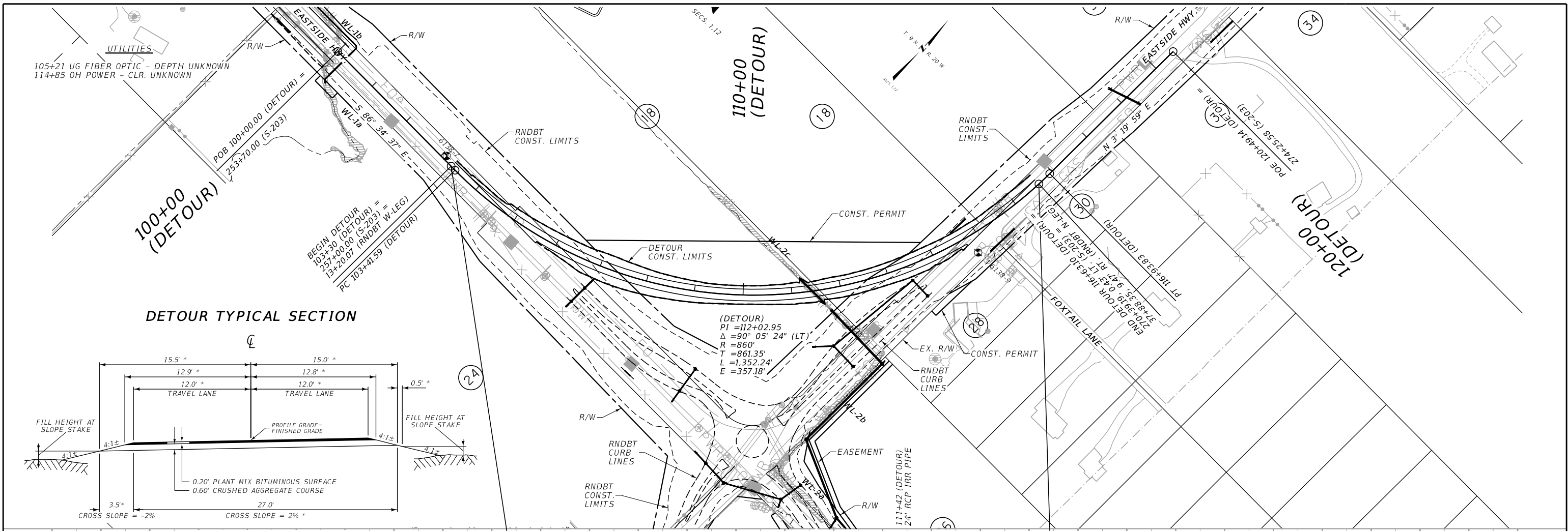


NOTES:
 1. PIPE LENGTHS SHOWN ARE INSIDE EDGE-TO-EDGE BETWEEN DROP INLET, CURB INLET, MEDIAN INLET OR MANHOLE BARRELS.

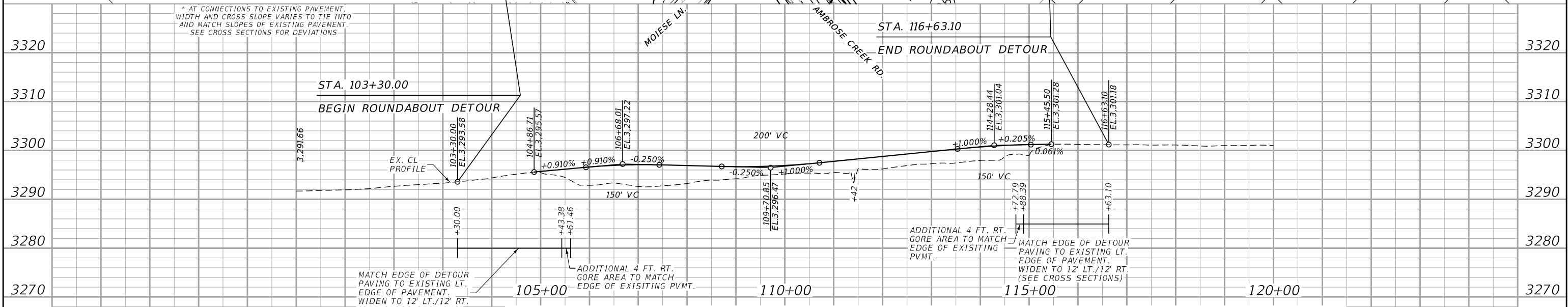
- I-03, 32+55.00, 19.50' RT. COMB. 48 IN TYPE 3 MH. TYPE B CURB INLET. GRATE EL. = 3.303.07. 12" INV. OUT EL. = 3.299.31
- I-04, 32+55.00, 38.12' LT. COMB. 48 IN TYPE 3 MH. TYPE B CURB INLET. GRATE EL. = 3.302.92. 12" INV. IN EL. = 3.297.03. 12" INV. IN EL. = 3.297.69. 12" INV. OUT EL. = 3.296.78
- I-01, 34+65.00, 19.50' RT. COMB. 48 IN TYPE 3 MH. TYPE B CURB INLET. GRATE EL. = 3.301.50. 12" INV. OUT EL. = 3.299.34
- I-02, 34+65.00, 24.49' LT. COMB. 48 IN TYPE 3 MH. TYPE B CURB INLET. GRATE EL. = 3.301.41. 12" INV. IN EL. = 3.298.81. 12" INV. OUT EL. = 3.298.69



ROUNDABOUT STORM DRAIN PLAN/PROFILE
 SHEET 2 OF 2
 SCALE: 1"=5' VERTICAL
 1"=50' HORIZONTAL



* AT CONNECTIONS TO EXISTING PAVEMENT, WIDTH AND CROSS SLOPE VARIES TO TIE INTO AND MATCH SLOPES OF EXISTING PAVEMENT. SEE CROSS SECTIONS FOR DEVIATIONS.

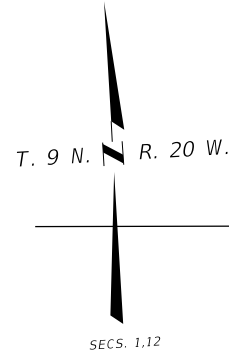


STATION		tons	cu. yds.	tons	sq. yds.	gallons	cubic yards		linear feet	sq. yds.	acres	REMARKS
FROM	TO	PLANT MIX BIT. SURF. GR. S-1/2" #	CRUSHED AGG. COURSE #	ASPHALT CEMENT PG 64-28 #	AGG. TREAT. #	EMULSIFIED ASPHALT TACK COAT #	UNCL. EXC. #	EMB. #	RCP-IRR 24 IN #	TEMPORARY STRIPING #	SEPARATION GEOTEXTILE - MOD ##	
257+00.00	270+39.39	383	676	22	3,088	3,088	34	3,430	68	5,332	155	1.1
TOTAL		~	~	~	~	~	~	~	~	~	~	~

FOR INFORMATION ONLY, INCLUDE IN COST OF DETOUR - CONSTRUCT, MAINTAIN, REMOVE.
GEOTEXTILE FOR SEPARATION ON DETOUR AREA TEMPORARY DISTURBING WETLAND/IRRIGATION CANAL.

ROUNDABOUT DETOUR DETAIL
DESIGN SPEED = 45 MPH
NO SCALE

ROUNDBABOUT - WEST AND EAST LEGS



250+00 (MAINLINE)

UTILITIES (W-LEG RNDBT)
18+67 UG FIBER - DEPTH UNKNOWN

10+00 (W-LEG)



18

(RNDBT W-LEG)
PI =19+93.59
Δ =15° 58' 43" (RT)
R =700'
T =98.25'
L =195.22'
E =6.86'

(RNDBT W-LEG)
PI =17+98.38
Δ =15° 58' 43" (LT)
R =700'
T =98.25'
L =195.22'
E =6.86'

POE 21+59.63 (RNDBT W-LEG)
S 86° 34' 37" E (RNDBT W-LEG)

20+00 (W-LEG)

50+00 (E-LEG)

UTILITIES (E-LEG RNDBT)
50+50 OH POWER - CLR. UNKNOWN
50+65 UG TELEPHONE - DEPTH UNKNOWN
50+69 UG FIBER - DEPTH UNKNOWN

26

POB 50+00.00 (RNDBT E-LEG)
S 86° 40' 01" E (RNDBT E-LEG)

POT 55+36.86 (RNDBT E-LEG)
END CONNECTION TO AMBROSE CREEK RD

POE 57+39.23 (RNDBT E-LEG)
END HZ ALIGNMENT

AMBROSE CREEK ROAD

S 86° 44' 36" E (RNDBT E-LEG)

24

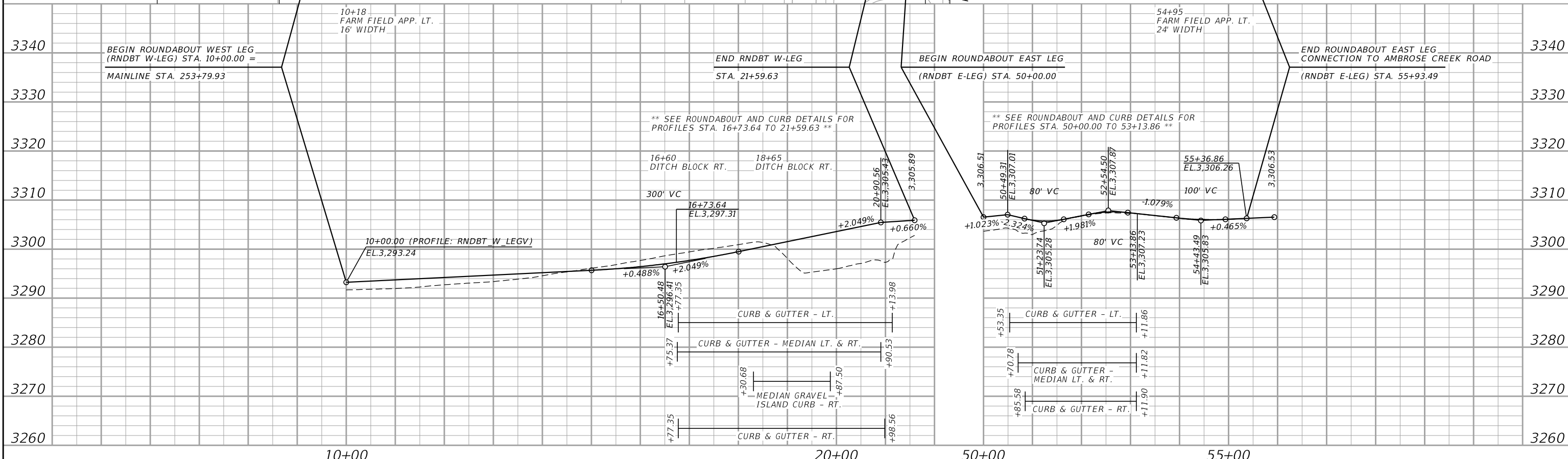
70+00 (S-LEG)

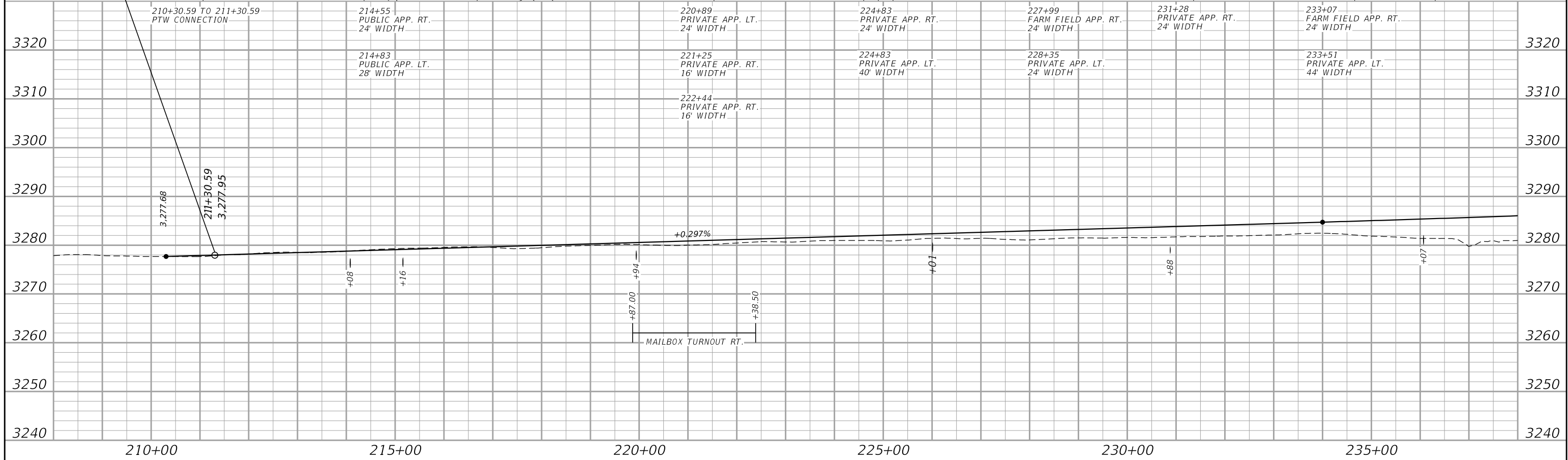
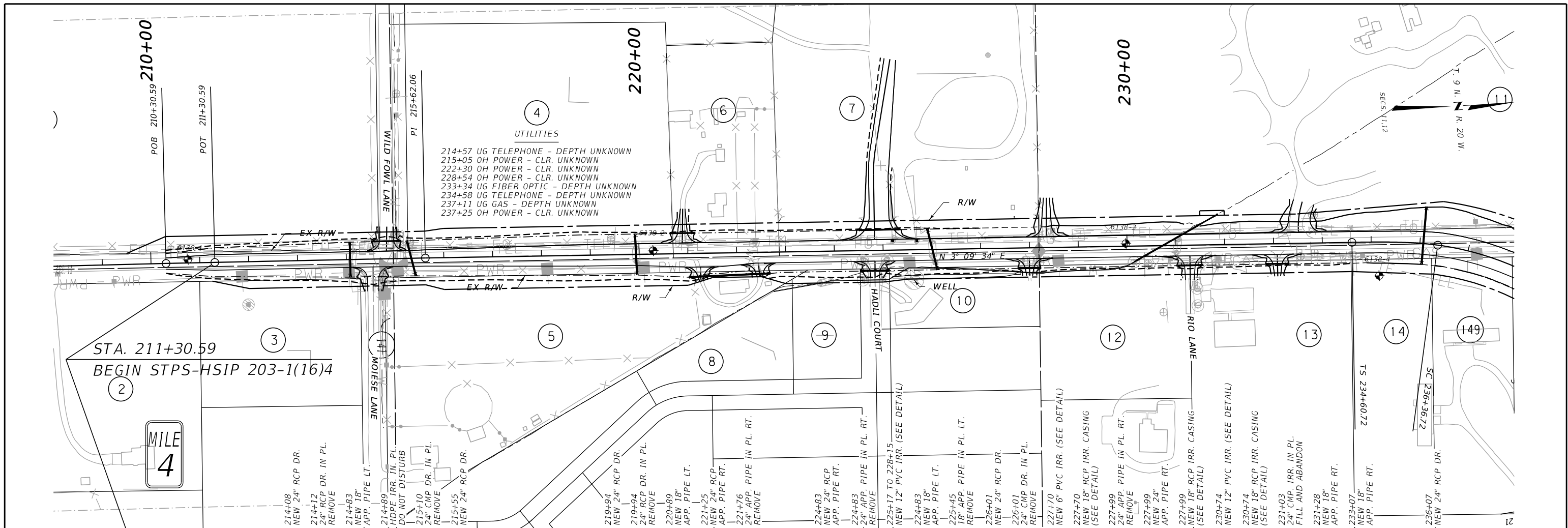
25

(RNDBT E-LEG)
PI =51+11.11
Δ =13° 08' 46" (RT)
R =350'
T =40.33'
L =80.31'
E =2.32'

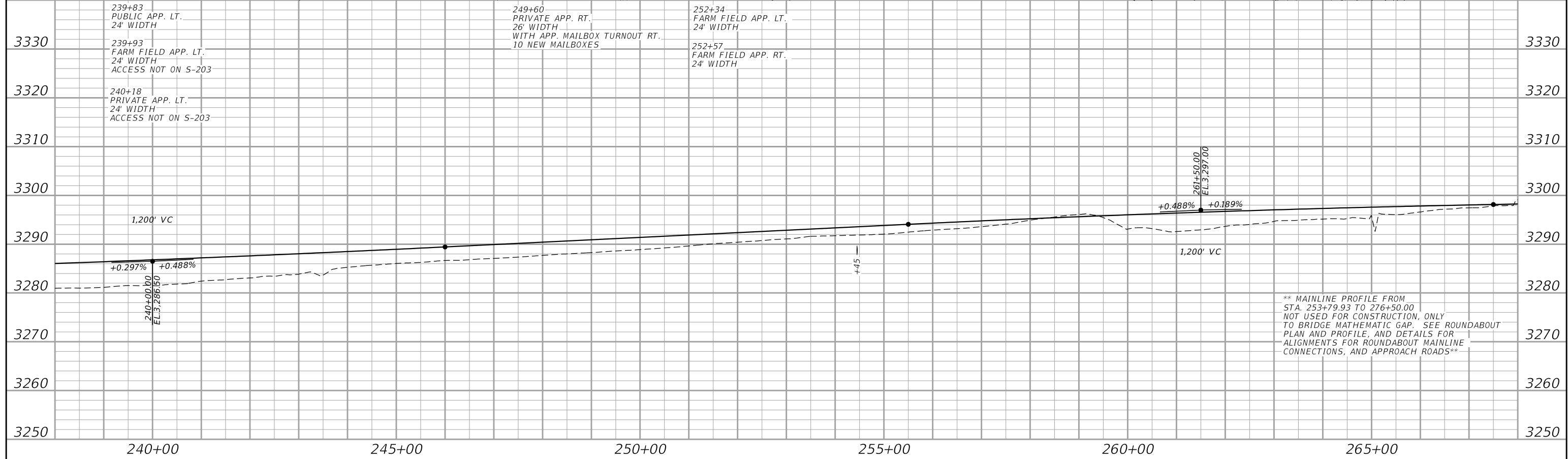
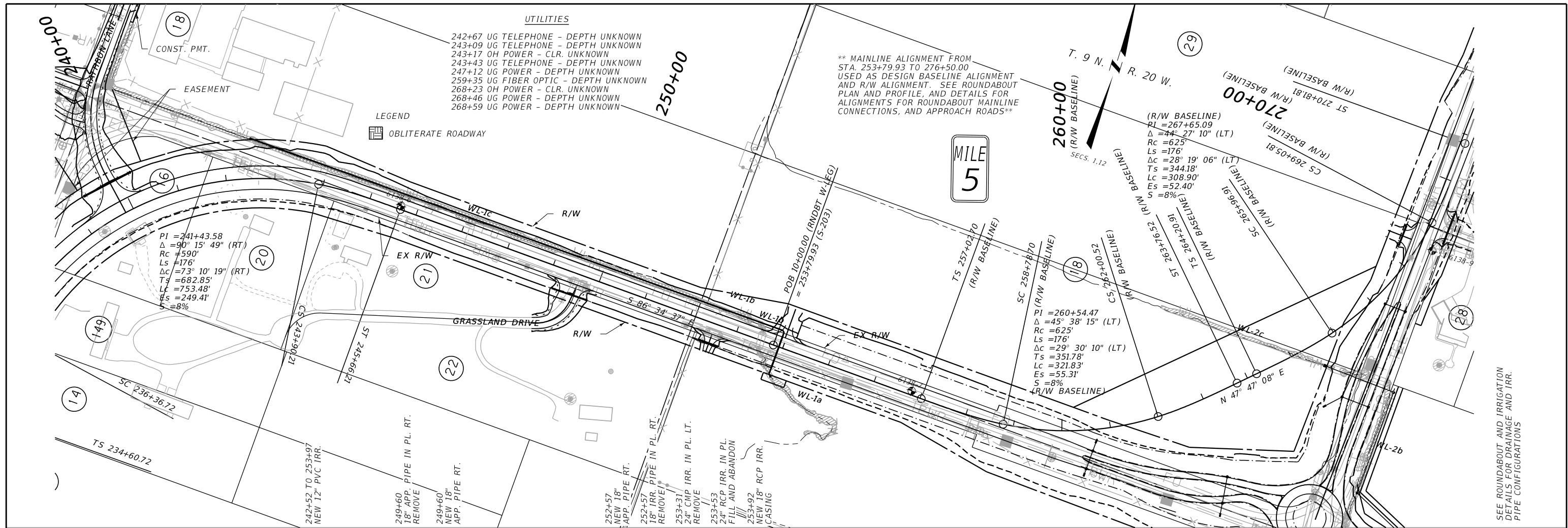
(RNDBT E-LEG)
PI =52+32.21
Δ =13° 13' 21" (LT)
R =700'
T =81.13'
L =161.54'
E =4.69'

55+18 LT. (E-LEG) TO 33+07 RT. (N-LEG)
NEW 12', 18', 24", & 30" RCP IRR
(SEE DETAIL)





3		C:\DGN\6138000\rdplp001.dgn	DESIGNED BY J. JENKS	11/16/2020	ROAD PLANS RAVALLI COUNTY	PRELIMINARY	NORTH OF STEVENSVILLE - NORTH UPN 6138000	STPS-HSIP 203-1(16)4 87
2		3/25/2024	REVIEWED BY					



UTILITIES
 242+67 UG TELEPHONE - DEPTH UNKNOWN
 243+09 UG TELEPHONE - DEPTH UNKNOWN
 243+17 OH POWER - CLR. UNKNOWN
 243+43 UG TELEPHONE - DEPTH UNKNOWN
 247+12 UG POWER - DEPTH UNKNOWN
 259+35 UG FIBER OPTIC - DEPTH UNKNOWN
 268+23 OH POWER - CLR. UNKNOWN
 268+46 UG POWER - DEPTH UNKNOWN
 268+59 UG POWER - DEPTH UNKNOWN

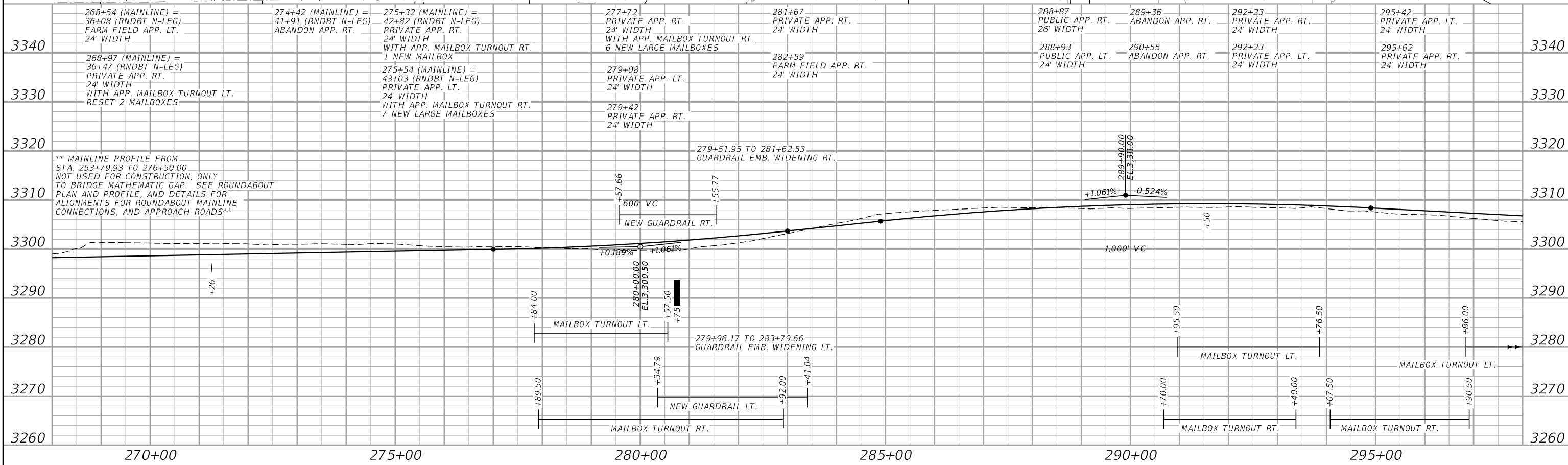
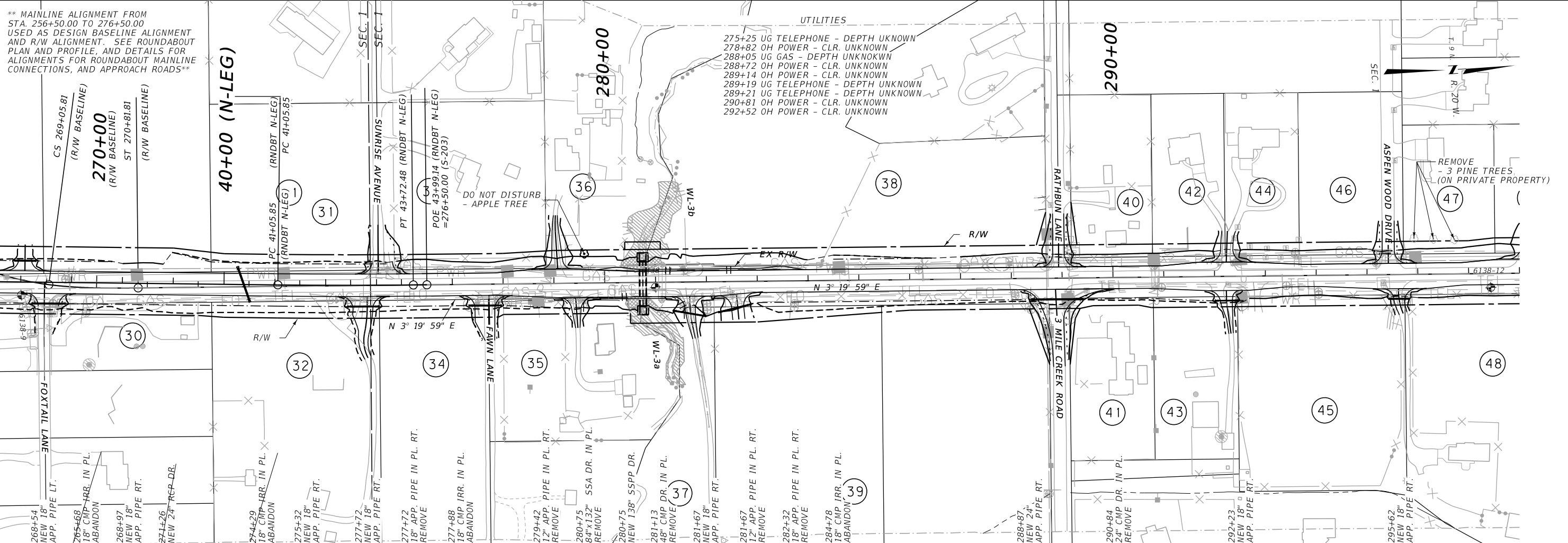
LEGEND
 [Symbol] OBLITERATE ROADWAY

** MAINLINE ALIGNMENT FROM STA. 253+79.93 TO 276+50.00 USED AS DESIGN BASELINE ALIGNMENT AND R/W ALIGNMENT. SEE ROUNDABOUT PLAN AND PROFILE, AND DETAILS FOR ALIGNMENTS FOR ROUNDABOUT MAINLINE CONNECTIONS, AND APPROACH ROADS**

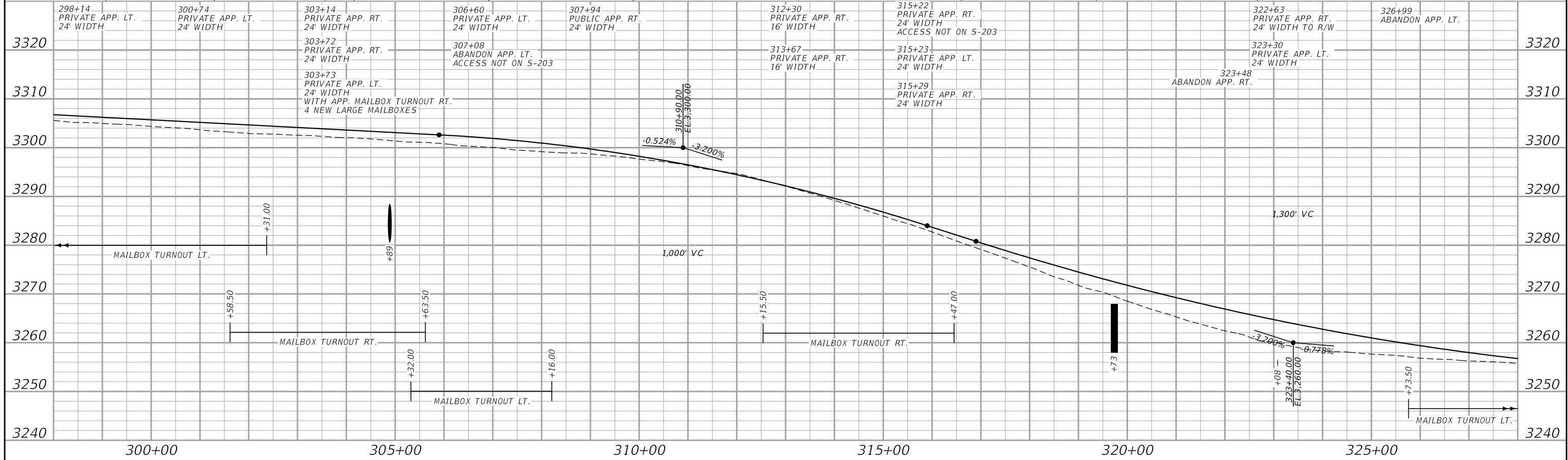
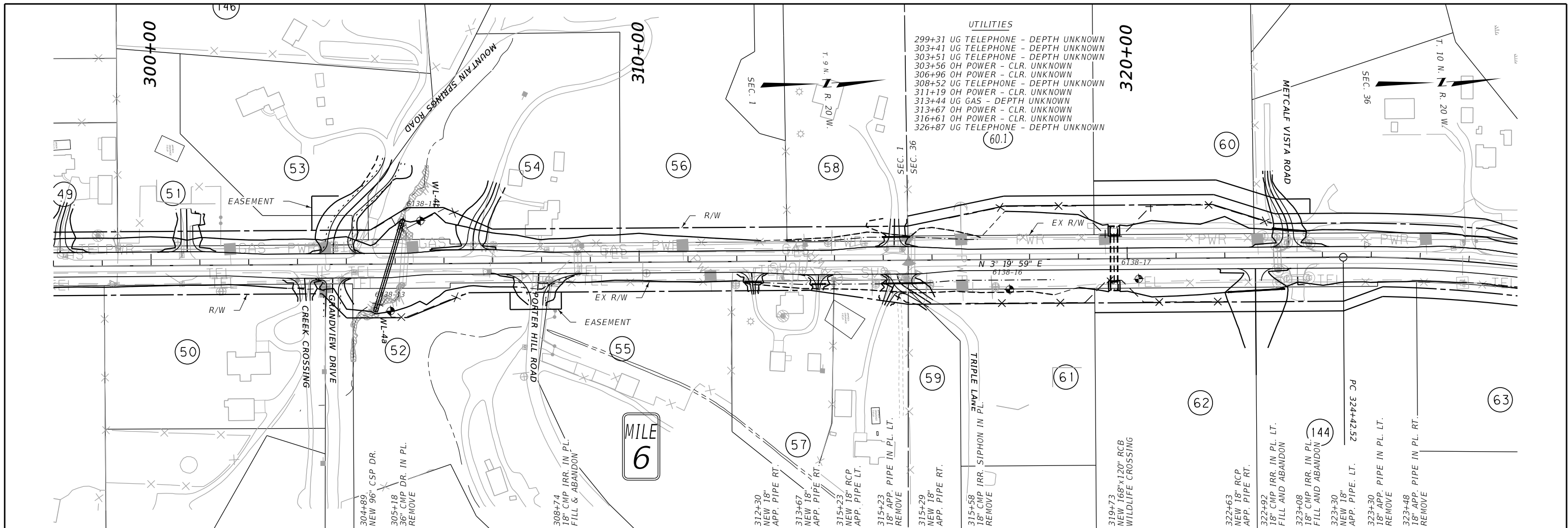
SEE ROUNDABOUT AND IRRIGATION DETAILS FOR DRAINAGE AND IRR. PIPE CONFIGURATIONS

** MAINLINE ALIGNMENT FROM STA. 256+50.00 TO 276+50.00 USED AS DESIGN BASELINE ALIGNMENT AND R/W ALIGNMENT. SEE ROUNDABOUT PLAN AND PROFILE, AND DETAILS FOR ALIGNMENTS FOR ROUNDABOUT MAINLINE CONNECTIONS, AND APPROACH ROADS**

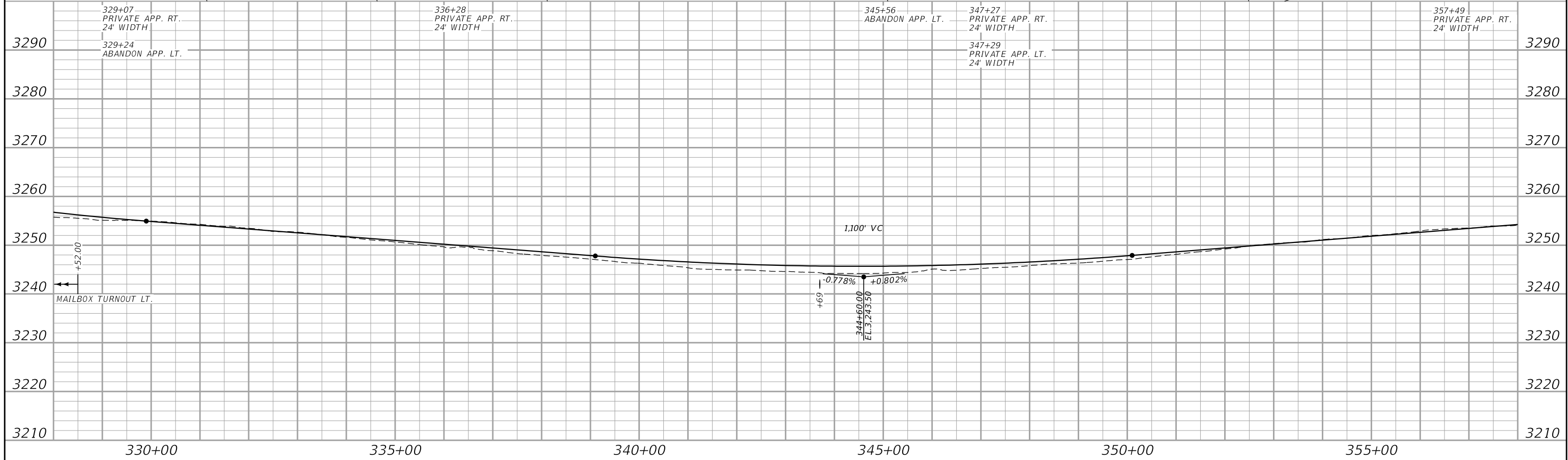
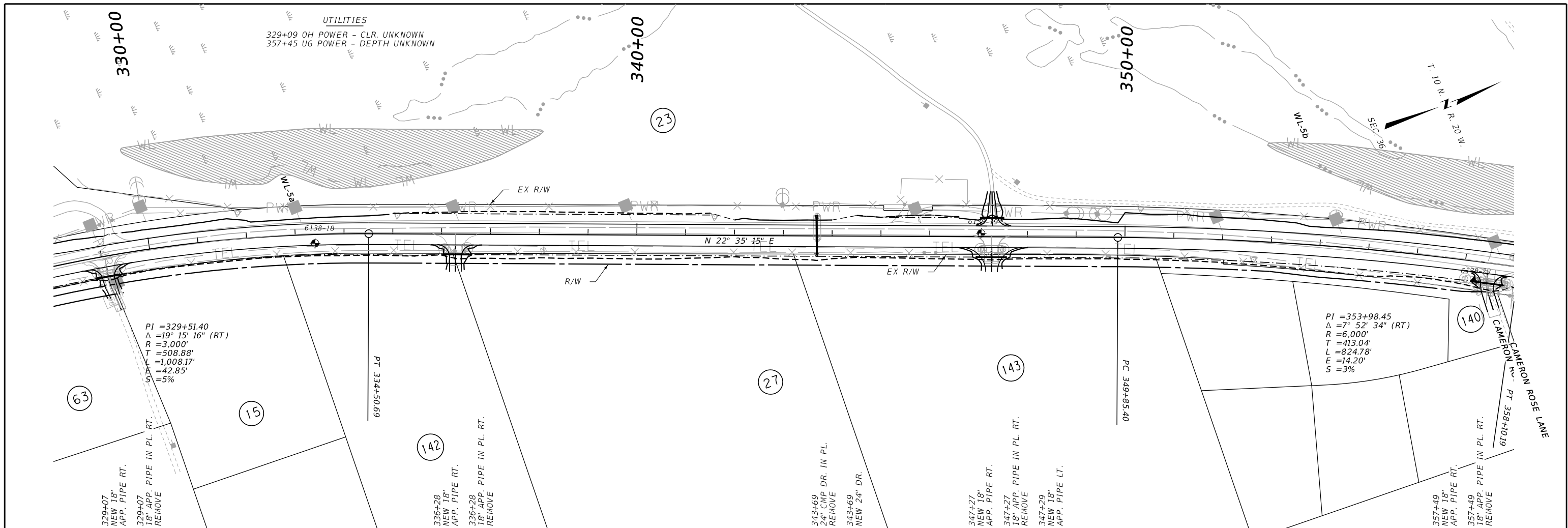
UTILITIES
 275+25 UG TELEPHONE - DEPTH UNKNOWN
 278+82 OH POWER - CLR. UNKNOWN
 288+05 UG GAS - DEPTH UNKNOWN
 288+72 OH POWER - CLR. UNKNOWN
 289+14 OH POWER - CLR. UNKNOWN
 289+19 UG TELEPHONE - DEPTH UNKNOWN
 289+21 UG TELEPHONE - DEPTH UNKNOWN
 290+81 OH POWER - CLR. UNKNOWN
 292+52 OH POWER - CLR. UNKNOWN

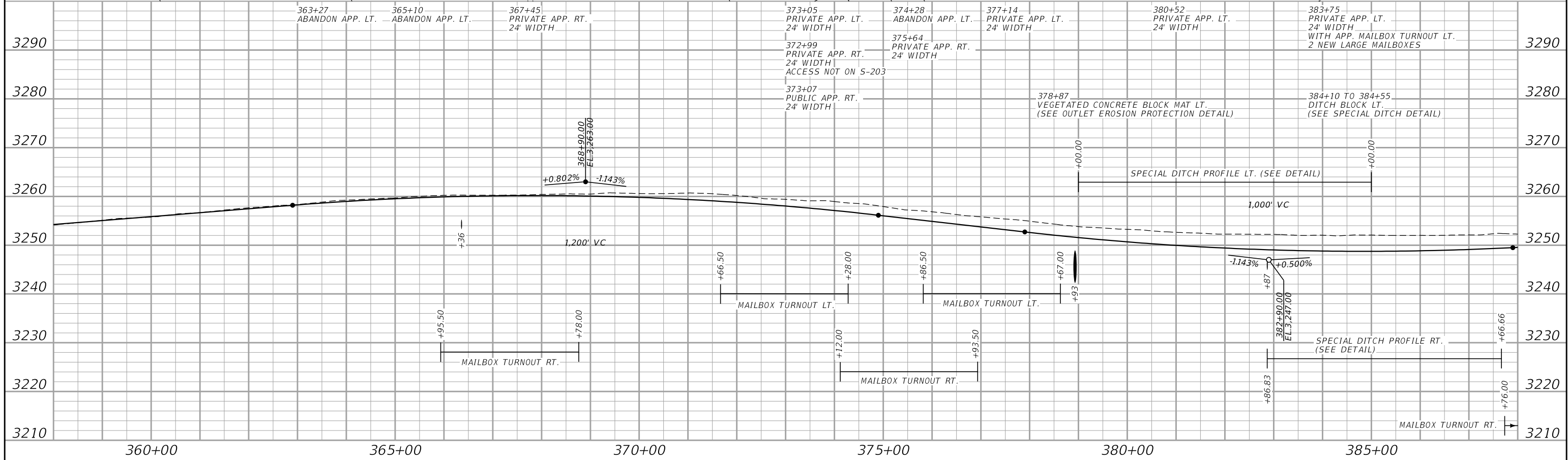
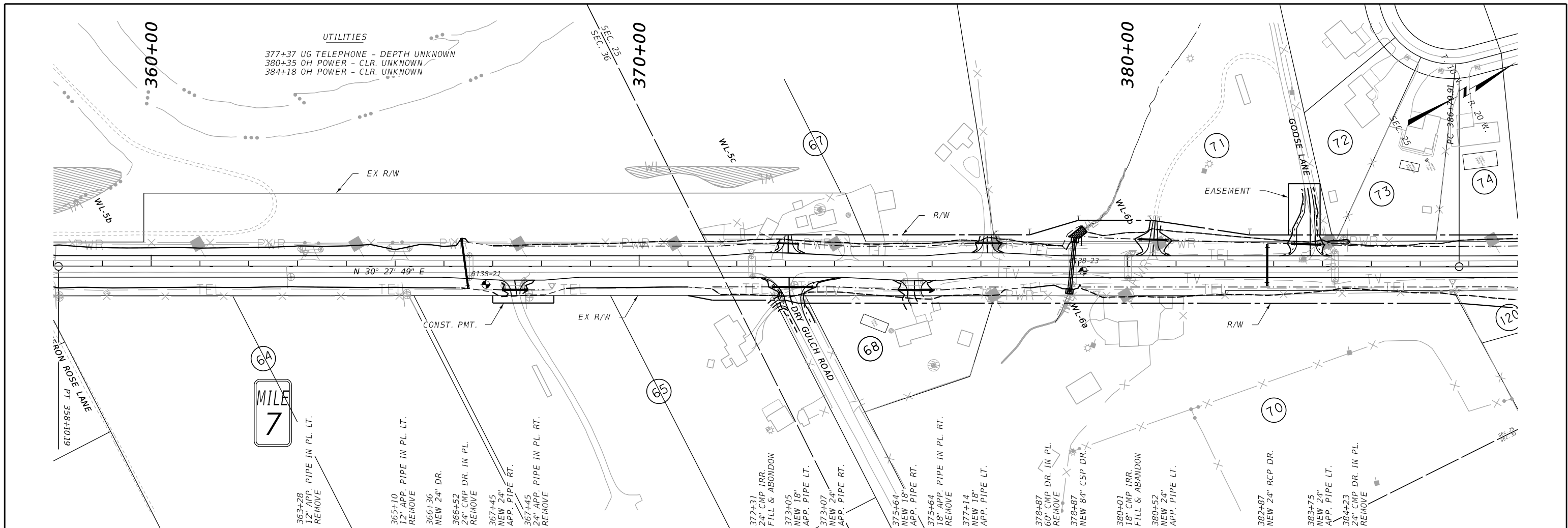


270+00	275+00	280+00	285+00	290+00	295+00
--------	--------	--------	--------	--------	--------

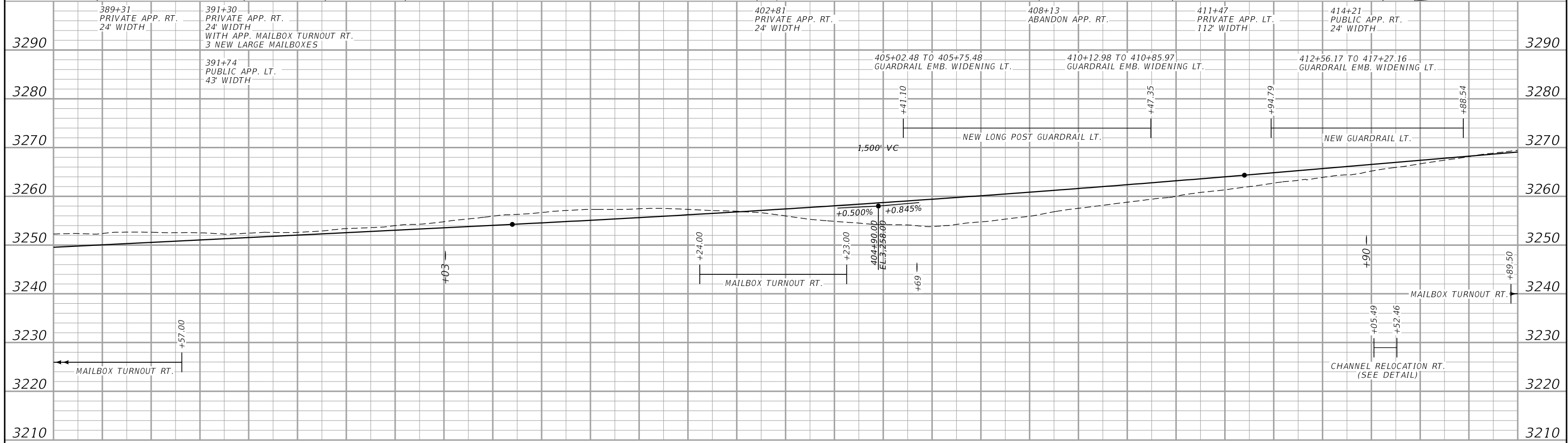
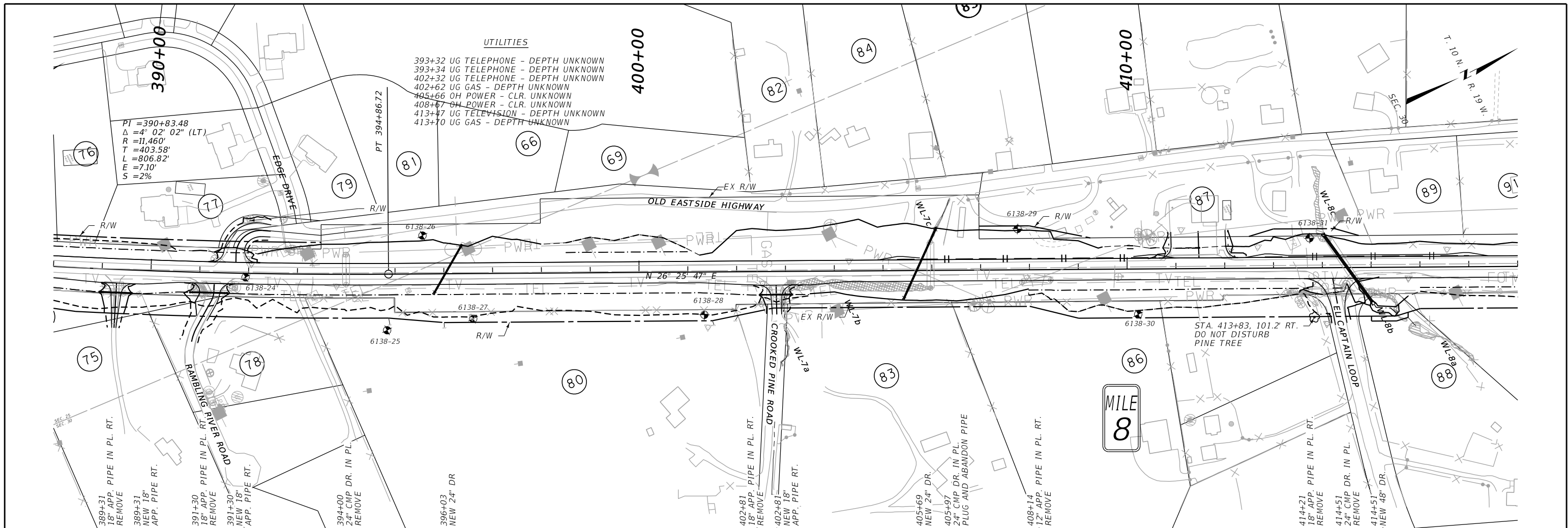


3 2		C:\DGN\6138000\rdplp002.dgn	DESIGNED BY J. JENKS	11/16/2020	ROAD PLANS	NORTH OF STEVENSVILLE - NORTH	STPS-HSIP 203-1(16)4
		3/25/2024	REVIEWED BY		RAVALLI COUNTY	UPN 6138000	90
		8:14:22 AM	CPS - U419				

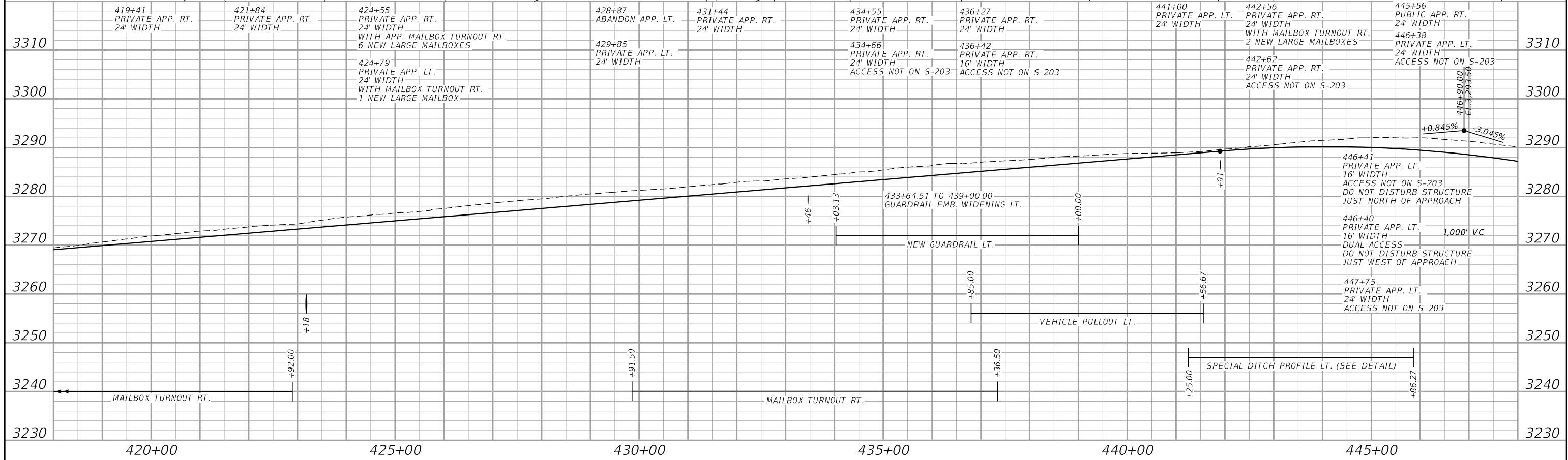
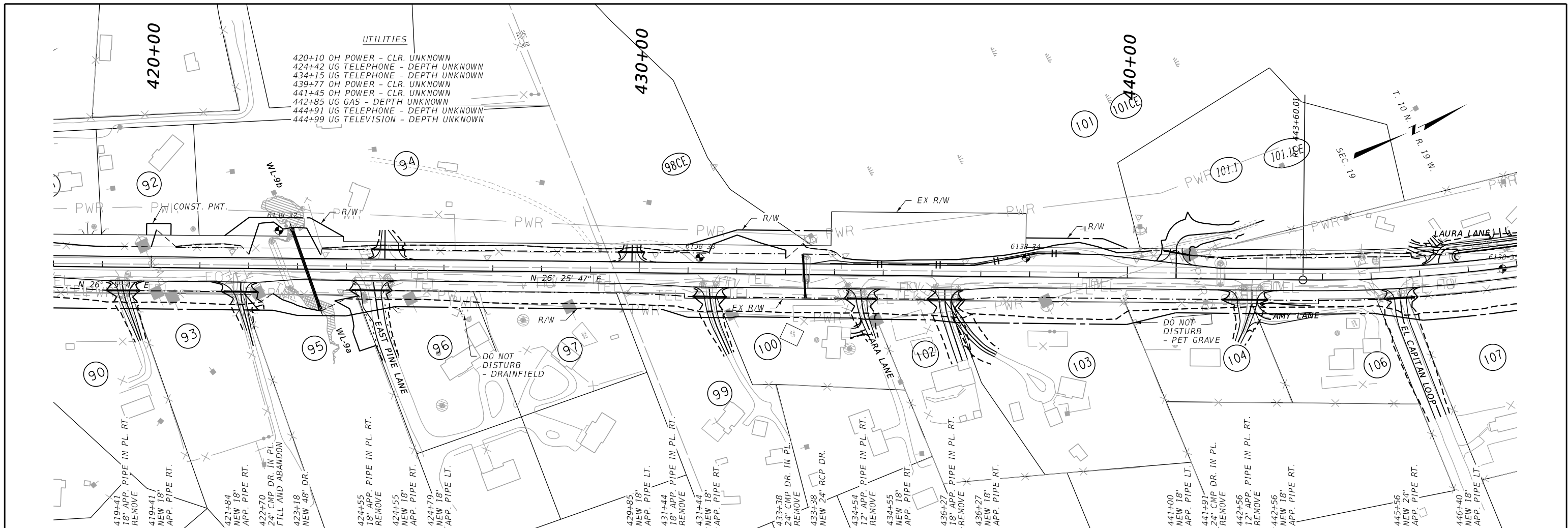




2		C:\DGN\6138000\rdplp002.dgn	DESIGNED BY J. JENKS	11/16/2020	ROAD PLANS RAVALLI COUNTY	PRELIMINARY	NORTH OF STEVENSVILLE - NORTH UPN 6138000	STPS-HSIP 203-1(16)4 92
1		3/25/2024	REVIEWED BY					

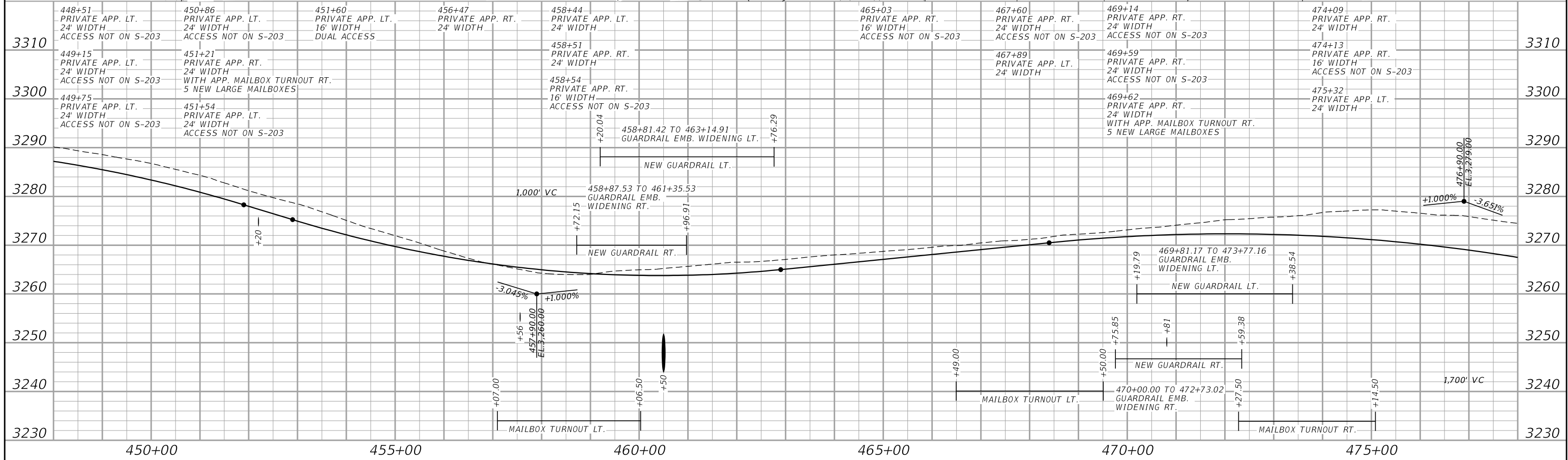
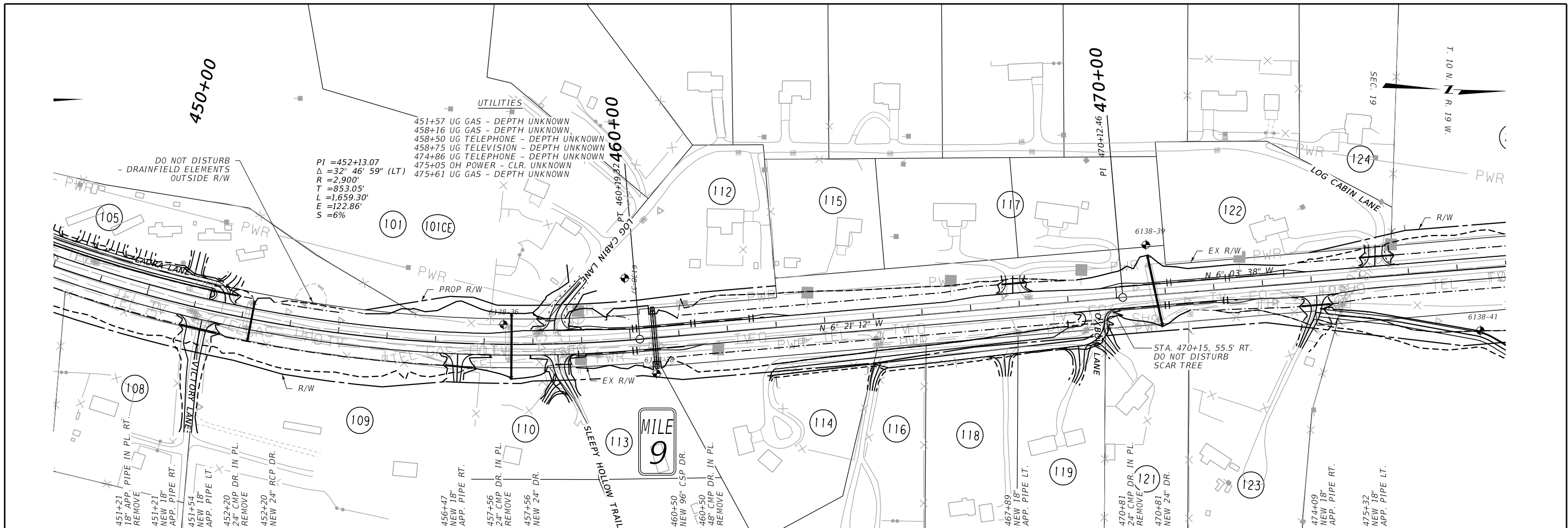


3	MONTANA Department of Transportation	C:\DGN\6138000\rdplp003.dgn	DESIGNED BY J. JENKS	11/16/2020	ROAD PLANS RAVALLI COUNTY	PRELIMINARY	NORTH OF STEVENSVILLE - NORTH UPN 6138000	STPS-HSIP 203-1(16)4 93
2		3/25/2024	REVIEWED BY					

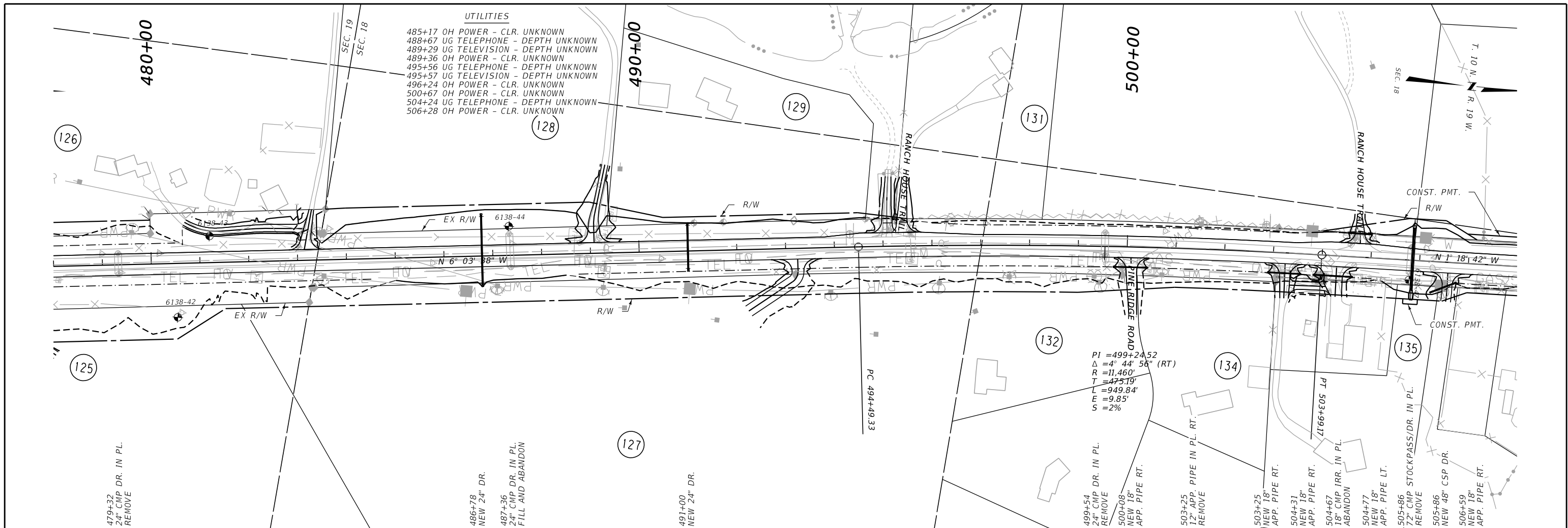


3		C:\DGN\6138000\rdplp003.dgn	DESIGNED BY J. JENKS	11/16/2020	ROAD PLANS	NORTH OF STEVENSVILLE - NORTH	STPS-HSIP 203-1(16)4
		3/25/2024	REVIEWED BY				
		8:14:55 AM	CPS - U419				
1					RAVALLI COUNTY	UPN 6138000	94

PRELIMINARY

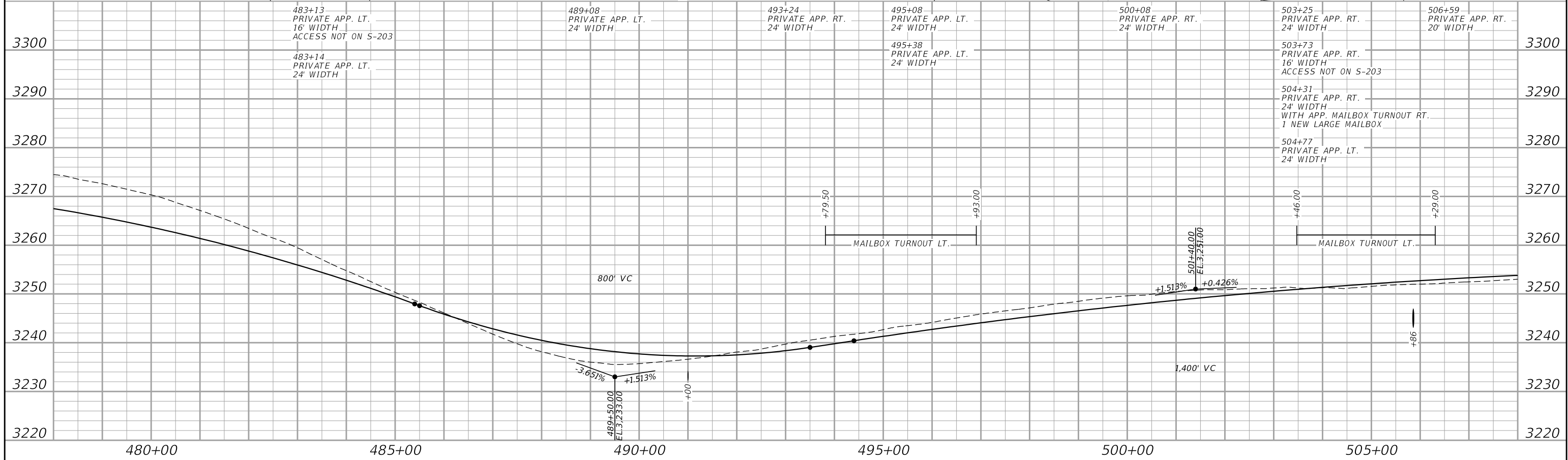


448+51 PRIVATE APP. LT. 24' WIDTH ACCESS NOT ON S-203	450+86 PRIVATE APP. LT. 24' WIDTH ACCESS NOT ON S-203	451+60 PRIVATE APP. LT. 16' WIDTH DUAL ACCESS	456+47 PRIVATE APP. RT. 24' WIDTH	458+44 PRIVATE APP. LT. 24' WIDTH	465+03 PRIVATE APP. RT. 16' WIDTH ACCESS NOT ON S-203	467+60 PRIVATE APP. RT. 24' WIDTH ACCESS NOT ON S-203	469+14 PRIVATE APP. RT. 24' WIDTH ACCESS NOT ON S-203	474+09 PRIVATE APP. RT. 24' WIDTH
449+15 PRIVATE APP. LT. 24' WIDTH ACCESS NOT ON S-203	451+21 PRIVATE APP. RT. 24' WIDTH WITH APP. MAILBOX TURNOUT RT. 5 NEW LARGE MAILBOXES		458+51 PRIVATE APP. RT. 24' WIDTH	458+54 PRIVATE APP. RT. 16' WIDTH ACCESS NOT ON S-203		467+89 PRIVATE APP. LT. 24' WIDTH	469+59 PRIVATE APP. RT. 24' WIDTH ACCESS NOT ON S-203	474+13 PRIVATE APP. RT. 16' WIDTH ACCESS NOT ON S-203
449+75 PRIVATE APP. LT. 24' WIDTH ACCESS NOT ON S-203	451+54 PRIVATE APP. LT. 24' WIDTH ACCESS NOT ON S-203						469+62 PRIVATE APP. RT. 24' WIDTH WITH APP. MAILBOX TURNOUT RT. 5 NEW LARGE MAILBOXES	475+32 PRIVATE APP. LT. 24' WIDTH

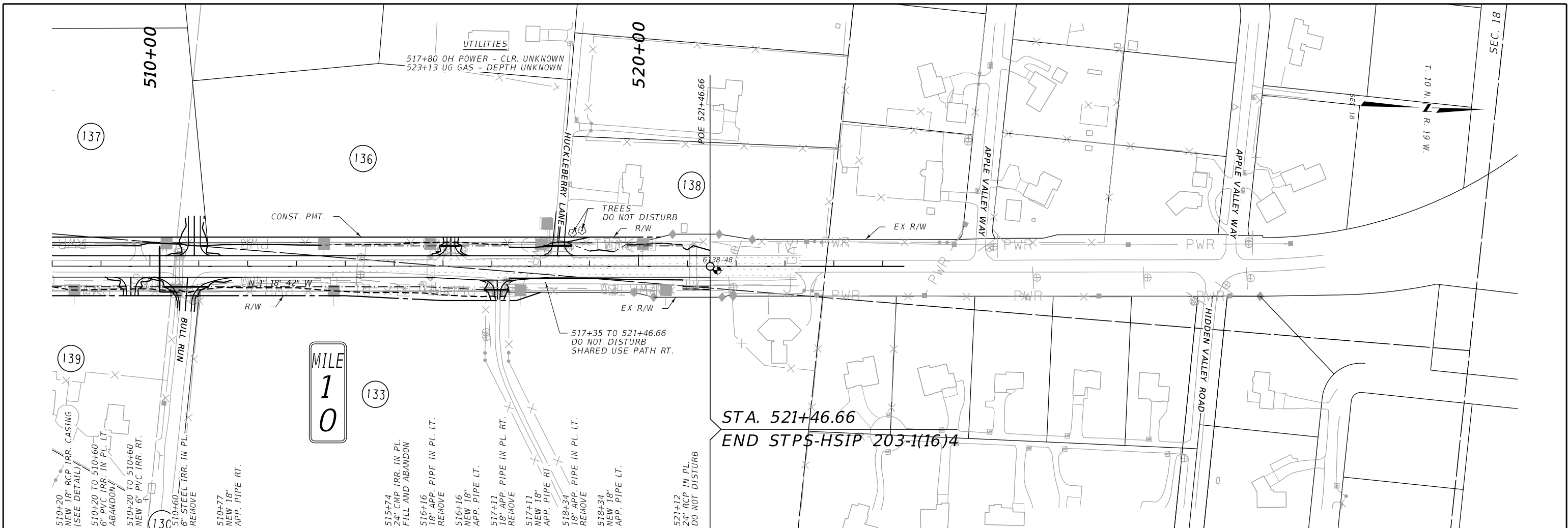


UTILITIES
 485+17 OH POWER - CLR. UNKNOWN
 488+67 UG TELEPHONE - DEPTH UNKNOWN
 489+29 UG TELEVISION - DEPTH UNKNOWN
 489+36 OH POWER - CLR. UNKNOWN
 495+56 UG TELEPHONE - DEPTH UNKNOWN
 495+57 UG TELEVISION - DEPTH UNKNOWN
 496+24 OH POWER - CLR. UNKNOWN
 500+67 OH POWER - CLR. UNKNOWN
 504+24 UG TELEPHONE - DEPTH UNKNOWN
 506+28 OH POWER - CLR. UNKNOWN

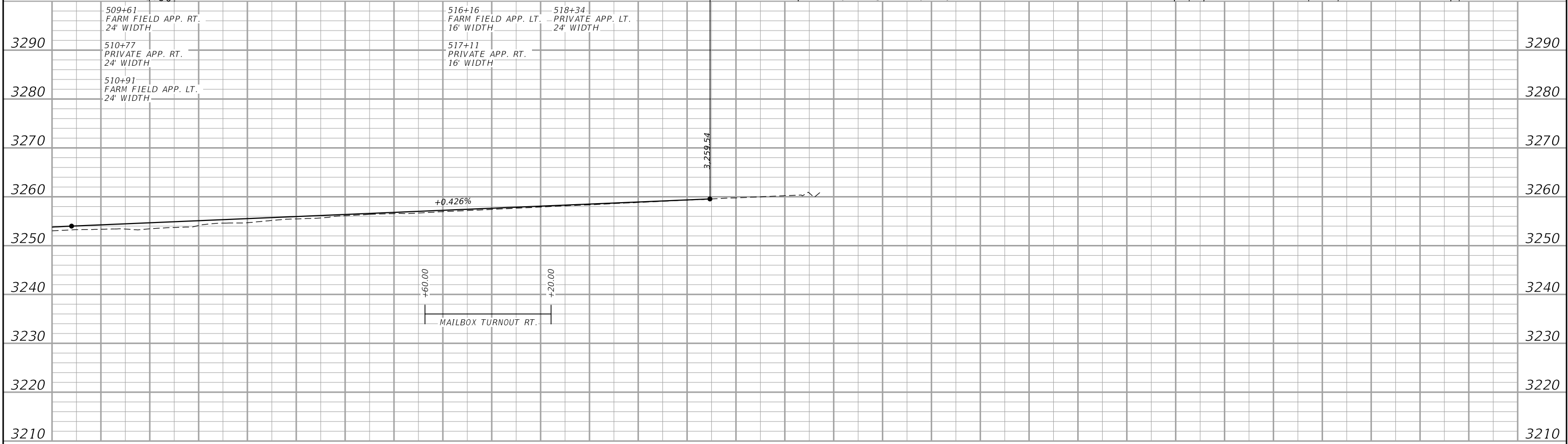
PI = 499+24.52
 $\Delta = 4^\circ 44' 56''$ (RT)
 R = 11,460'
 T = 475.19'
 L = 949.84'
 E = 9.85'
 S = 2%



3		C:\DGN\6138000\rdplp004.dgn	DESIGNED BY J. JENKS	11/16/2020	ROAD PLANS RAVALLI COUNTY	PRELIMINARY	NORTH OF STEVENSVILLE - NORTH UPN 6138000	STPS-HSIP 203-1(16)4 96
2		3/25/2024	REVIEWED BY					



STA. 521+46.66
 END STPS-HSIP 203-1(16)4



510+00 515+00 520+00 525+00