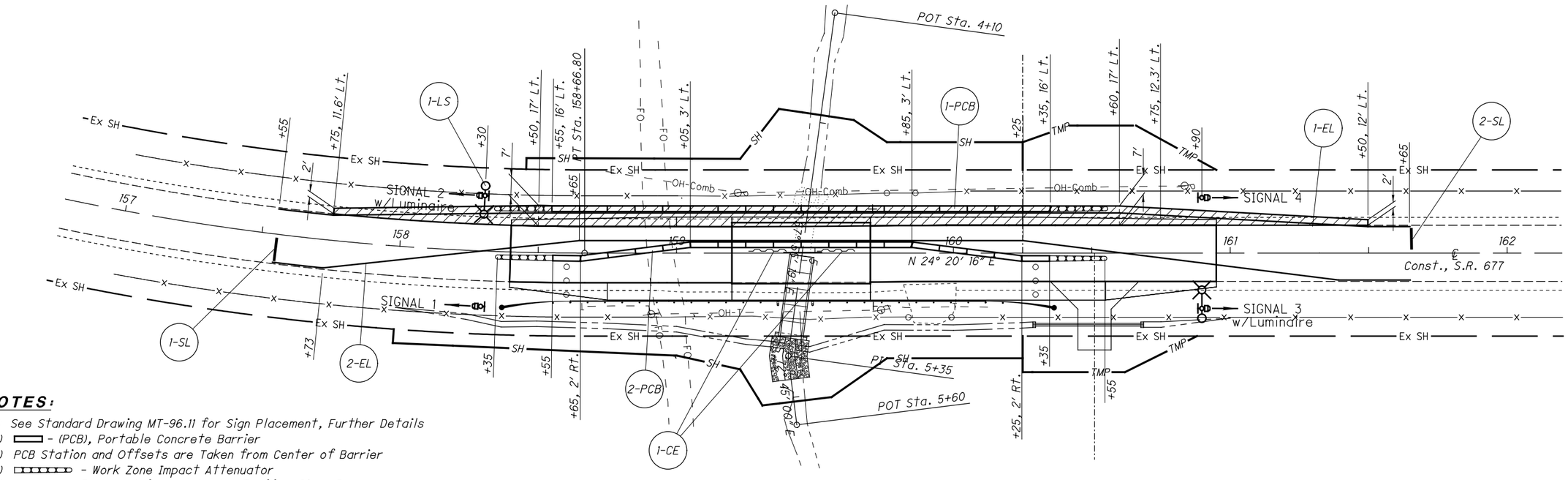
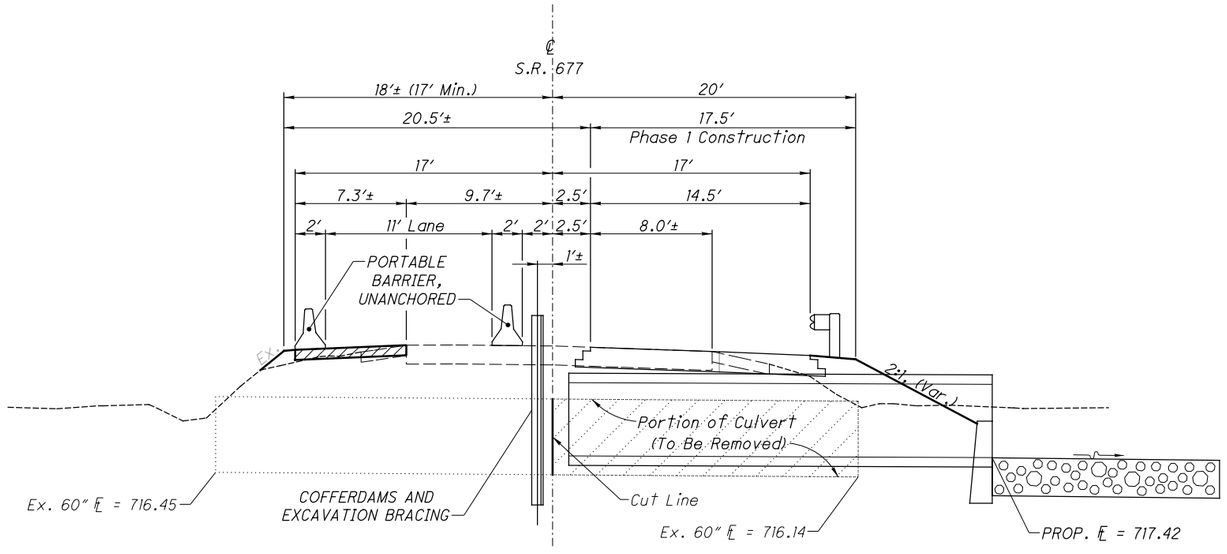


NOTES:

1.) See Standard Drawing MT-96.11 for Sign Placement, Further Details
2.) ▭ - (PCB), Portable Concrete Barrier
3.) PCB Station and Offsets are Taken from Center of Barrier
4.) ▭▭▭▭▭ - Work Zone Impact Attenuator
5.) ▨ - Pavement for Maintaining Traffic, Class B
6.) ——— - Cut Line
7.) ○ ○ ○ - Drums



TRANSVERSE SECTION

Phase - 1

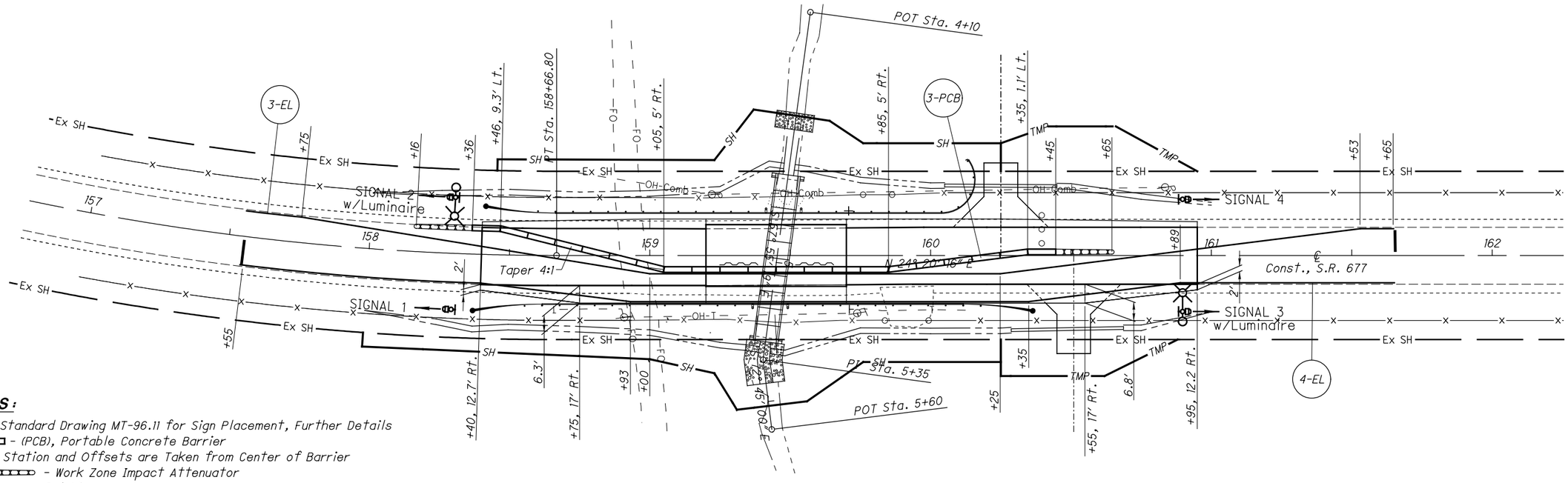
MOT PHASE 1 QUANTITIES

REF. No.	STATION to STATION	SIDE	503 COFFERDAMS AND EXCAVATION BRACING	614 WZ IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE I, BIDIRECTIONAL	614 OBJECT MARKER, TWO WAY	614 WZ EDGE LINE, CLASS I	614 WZ STOP LINE, CLASS I	614 WZ LIGHTING SYSTEM	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	615 ROADS FOR MAINTAINING TRAFFIC	622 PORTABLE BARRIER, UNANCHORED
			Lump	Each	Each	Each	Mile	Foot	Each	Sq.Yd.	Lump	Foot
1-MT	157+75 to 161+50	L								256	Lump	
1-SL	157+55	R						10				
2-SL	161+65	L						10				
1-EL	157+55 to 161+65	L					0.08					
2-EL	157+55 to 161+65	R/L/R					0.08					
1-PCB	157+84 to 161+05	L		2	13	13						180
2-PCB	158+35 to 160+55	℄/L/℄		2	9	9						180
1-LS	158+30 & 160+90	R							1			
1-CE	159+45	℄	Lump						1			
Totals to General Summary			Lump	4	22	22	0.16	20	1	256	Lump	360

HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED CAK
CHECKED JPH

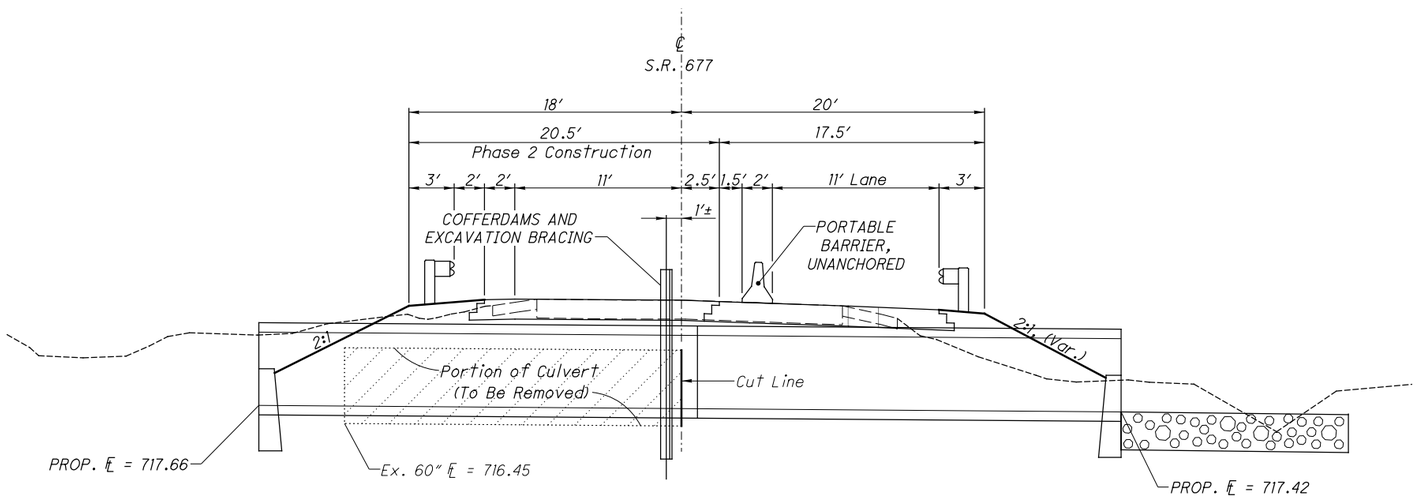
MOT PLAN - PHASE 1
VIN-677-3.02

VIN-677-3.02/3.19



NOTES:

1.) See Standard Drawing MT-96.11 for Sign Placement, Further Details
2.) ▭ - (PCB), Portable Concrete Barrier
3.) PCB Station and Offsets are Taken from Center of Barrier
4.) ▭▭▭▭▭ - Work Zone Impact Attenuator
5.) ——— - Cut Line
6.) ○ ○ ○ - Drums



TRANSVERSE SECTION
Phase - 2

MOT PHASE 2 QUANTITIES

REF. No.	STATION to STATION	SIDE	614 WZ IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL) Each	614 BARRIER REFLECTOR, TYPE I, BIDIRECTIONAL Each	614 OBJECT MARKER, TWO WAY Each	614 WZ EDGE LINE, CLASS I, 4" Mile	622 PORTABLE BARRIER, UNANCHORED Foot
3-EL	157+55 to 161+65	L/R/L				0.08	
4-EL	157+55 to 161+65	R				0.08	
3-PCB	158+16 to 160+65	L/R/L	2	10	10		210
Totals to General Summary			2	10	10	0.16	210

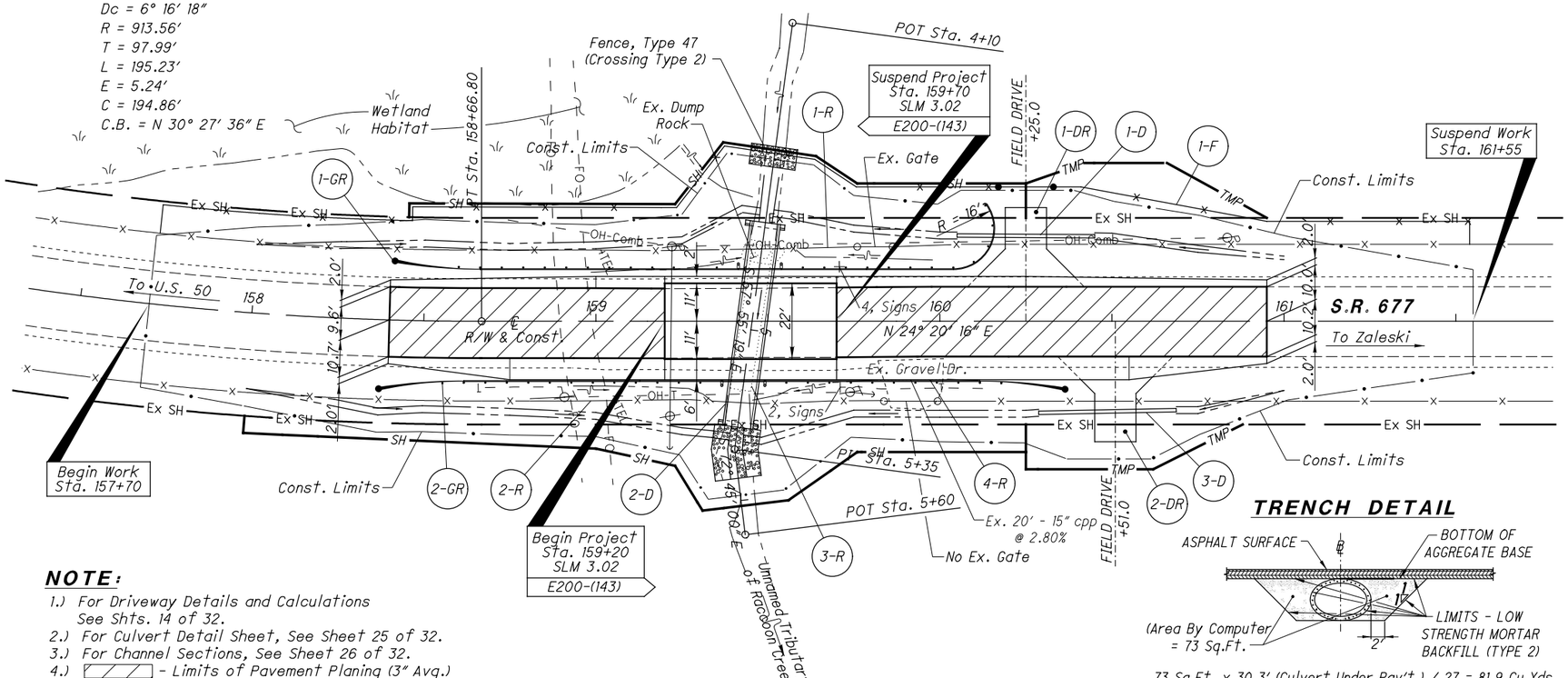
HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED CAK CHECKED JPH

MOT PLAN - PHASE 2
VIN-677-3.02

VIN-677-3.02/3.19

Curve Data:

P.I. Sta. 157+70.09
Δ = 12° 14′ 39″ (LT)
Dc = 6° 16′ 18″
R = 913.56′
T = 97.99′
L = 195.23′
E = 5.24′
C = 194.86′
C.B. = N 30° 27′ 36″ E

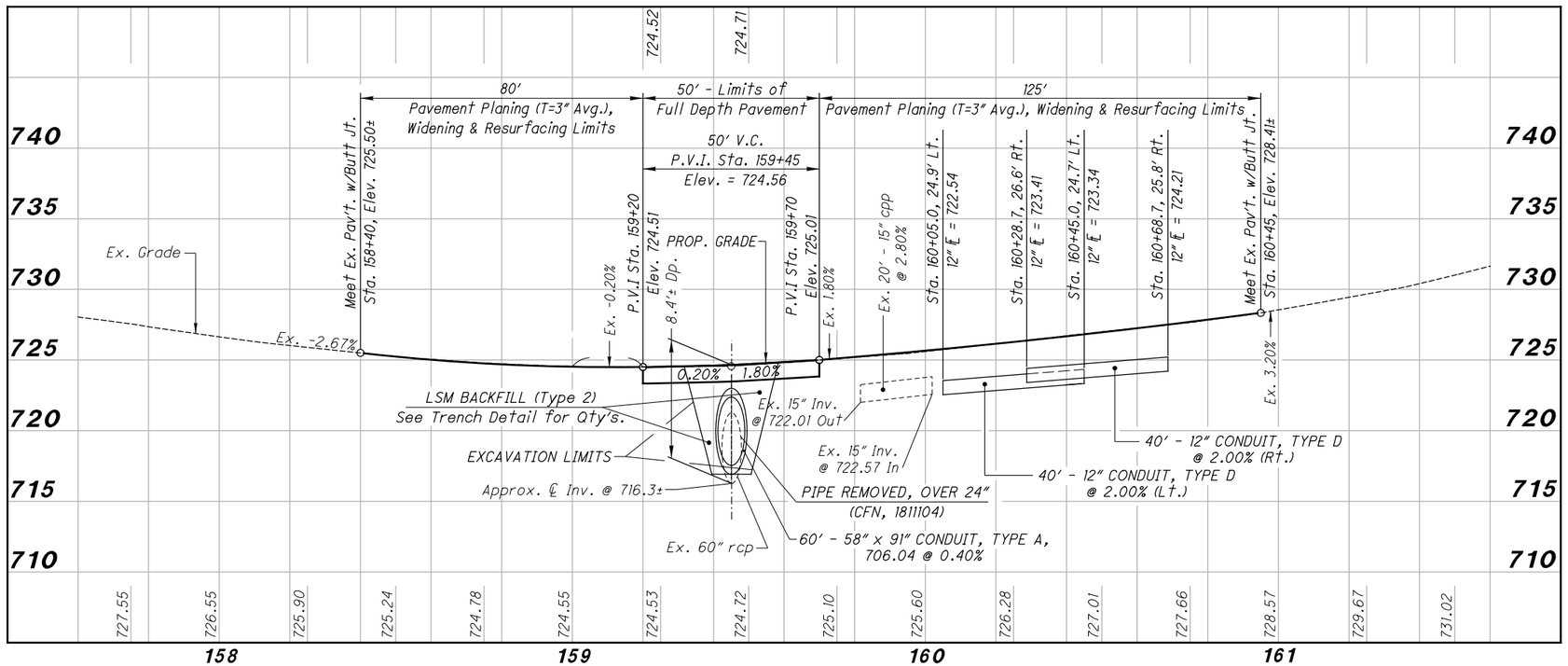


NOTE:

1.) For Driveway Details and Calculations See Shts. 14 of 32.
2.) For Culvert Detail Sheet, See Sheet 25 of 32.
3.) For Channel Sections, See Sheet 26 of 32.
4.) ▨ - Limits of Pavement Planing (3″ Avg.)
5.) One (1) Guardrail Post Shall Be Omitted Over Culvert (Each Side of Roadway).

TRENCH DETAIL

73 Sq.Ft. x 30.3′ (Culvert Under Pav't.) / 27 = 81.9 Cu.Yds.
82 Cu.Yds. CARRIED TO GENERAL SUMMARY Sht. 11 of 32.



REF NO.	STATION FROM	STATION TO	SIDE	202 Pipe Removed, 24″ and Under (Each)	202 Pipe Removed, Over 24″ (Foot)	202 Fence Removed (Foot)	202 Gate Removed For Reuse (Each)	304 Aggregate Base (Cu.Yd.)	606 Guardrail, Type MGS (Foot)	606 Anchor Assembly, MGS Type A (Each)	606 Anchor Assembly, MGS Type T (Each)	607 Fence, Type 47 (Foot)	601 Rock Channel Protection, Type B With Filter (Cu.Yd.)	602 Concrete Masonry (Cu.Yd.)	611 12″ Conduit, Type D (Foot)	611 58″ x 91″ Conduit, Type A, 706.04 (Foot)
1-R	157+71	161+54	Lt.			364	1									
2-R	157+71	161+54	Rt.			377										
3-R	159+45.41		℄		43											
4-R	159+81.7	160+01.9	Rt.	20												
1-D	160+05	160+45	Lt.					6	150	1					40	60
2-D	159+45.41		℄					5	150	2					40	60
3-D	160+28.7	160+68.7	Rt.								1	384	23	4	80	60
1-GR	158+41.1	160+15.9	Lt.													
2-GR	158+37.5	160+36.4	Rt.													
1-DR	160+25		Lt.													
2-DR	160+51		Rt.													
1-F	157+71	161+54	Lt.													
TOTALS CARRIED TO GENERAL SUMMARY				20	43	741	1	11	300	3	1	384	23	4	80	60

HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED CAK
CHECKED JPH

PLAN AND PROFILE
Sta. 159+20 to Sta. 159+70

VIN-677-3.02/3.19

16
32

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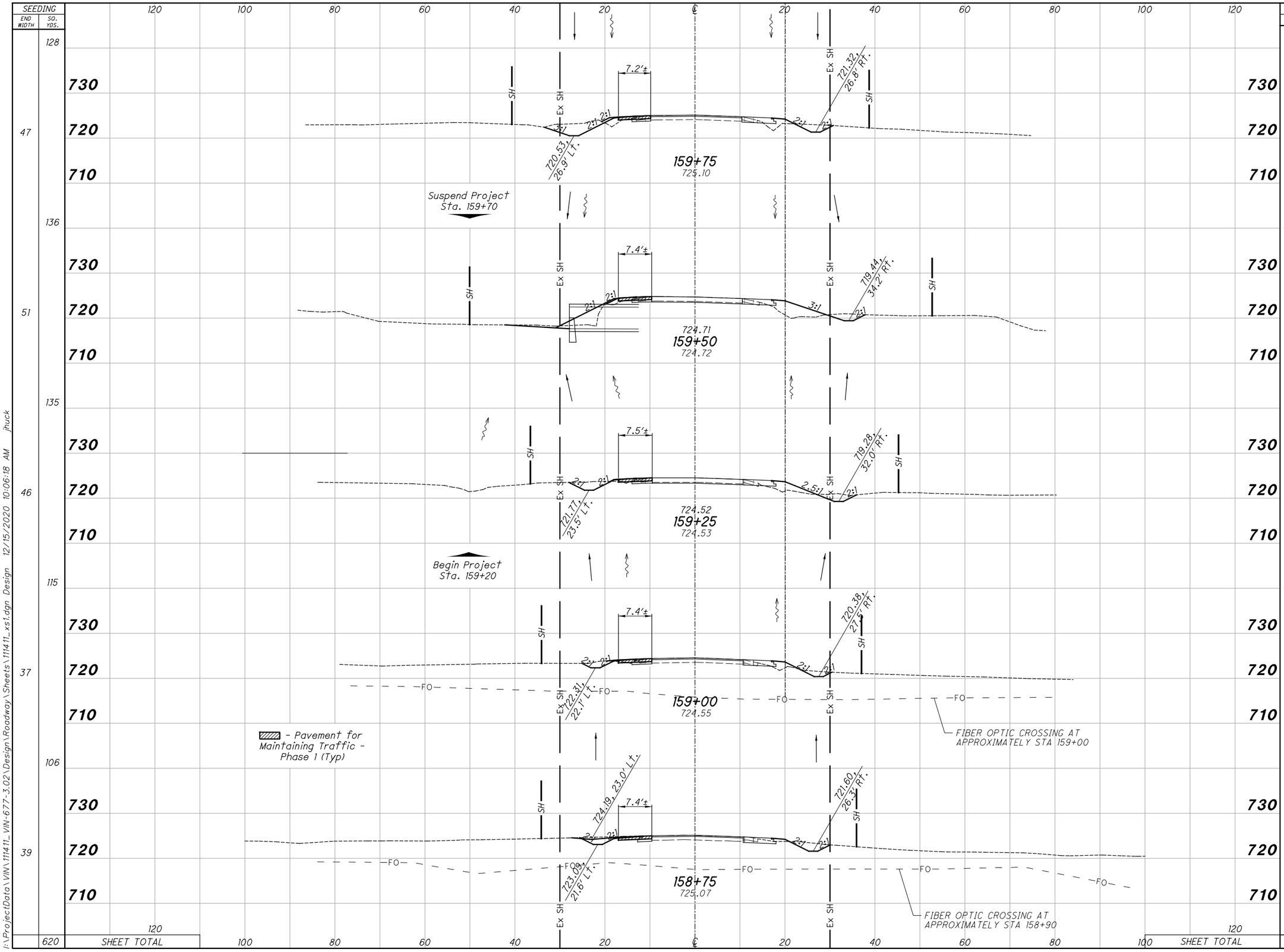
SEEDING END WIDTH	SEEDING SQ. YDS.
	128
47	
	136
51	
	135
46	
	115
37	
	106
39	
	620



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		36	7
42	7		
		8	1
42	7		
38	43		
		28	32
38	43		
		40	25
49	12		
		9	2
49	12		
20	6		
		15	4
20	6		
		22	3
27	2		
		158	74

SHEET TOTAL

CALCULATED CAK
CHECKED JPH

CROSS SECTIONS - VIN-677-3.02
Sta. 158+75 to Sta. 159+75

VIN-677-3.02/3.19

19
32

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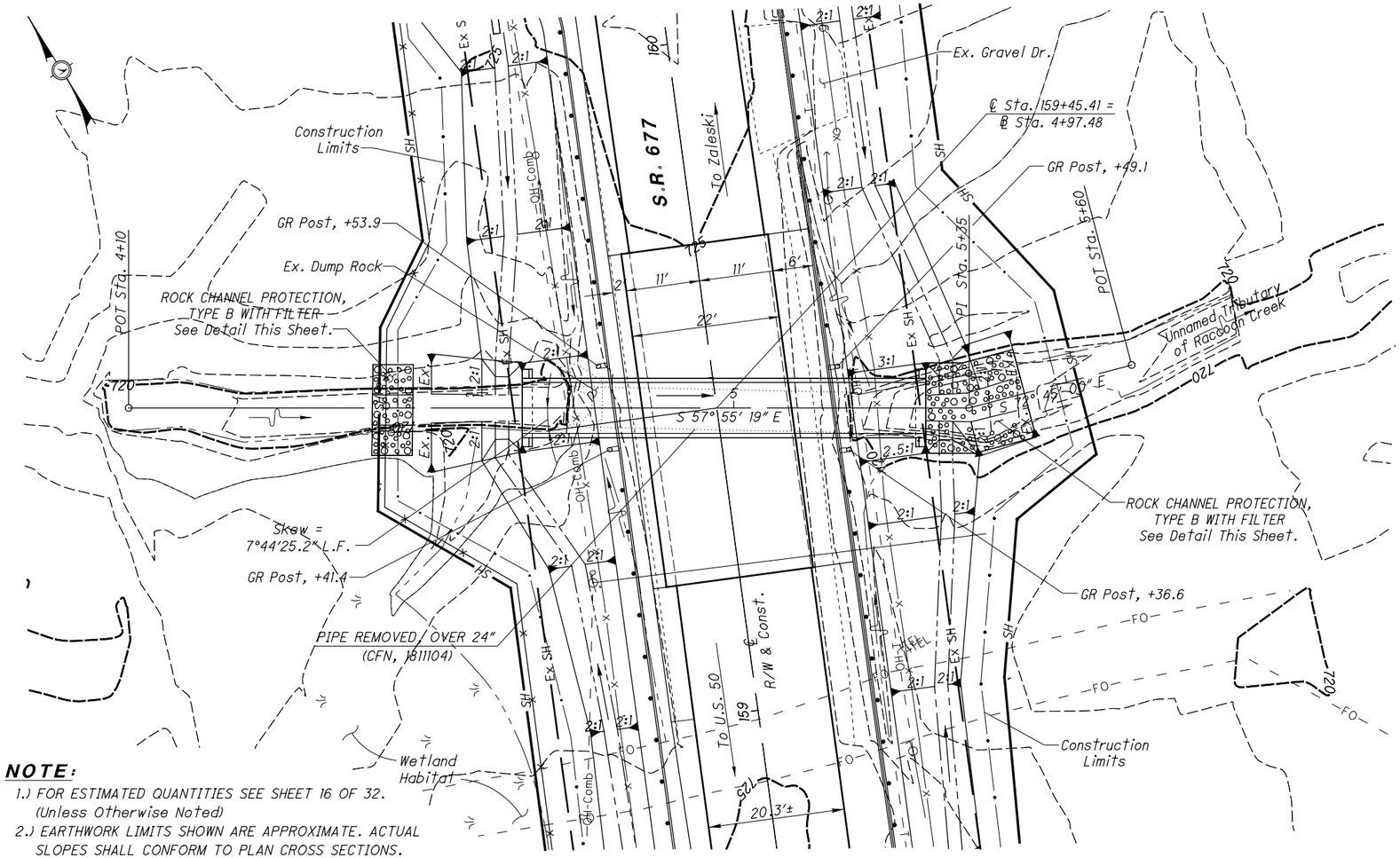
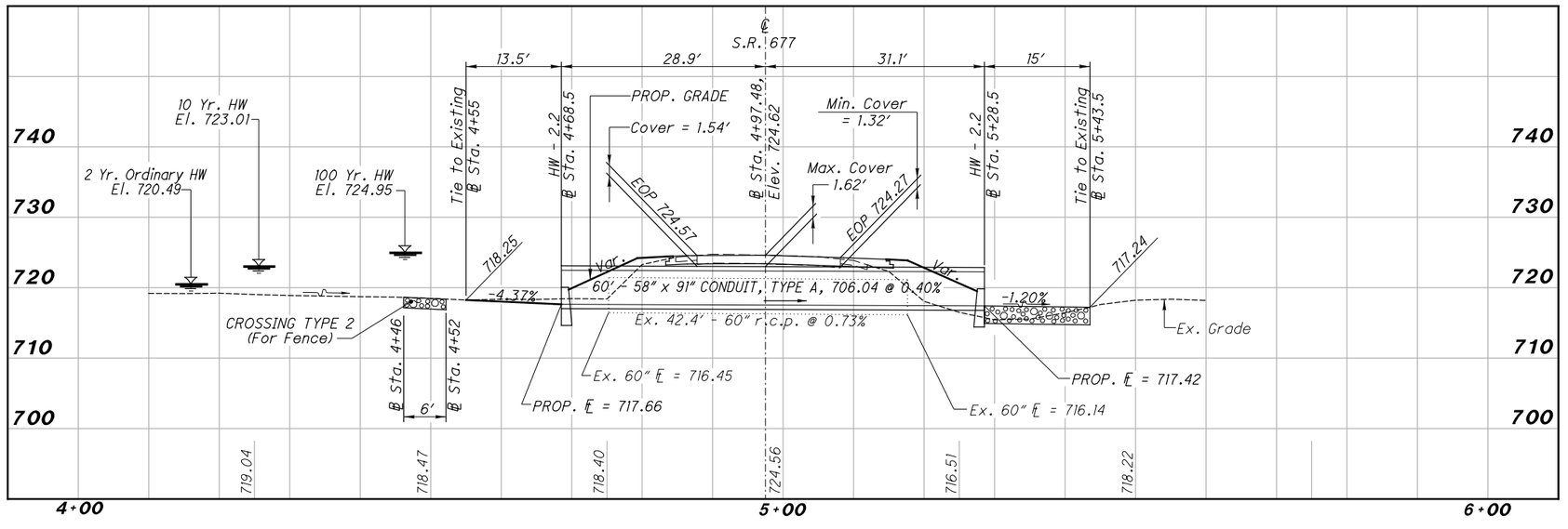


NOTE:

1.) FOR ESTIMATED QUANTITIES SEE SHEET 16 OF 32. (Unless Otherwise Noted)

2.) EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.



BENCHMARK DATA

SV10 (BM), STA. 160+07.96, ELEV. = 724.970, OFFSET = 12.298' Rt.
SV11 (BM), STA. 158+87.90, ELEV. = 723.873, OFFSET = 17.756' Lt.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 15 OF 32.

DESIGN TRAFFIC

2021 ADT = 960 2021 ADTT = 96
2041 ADT = 980 2041 ADTT = 98
DIRECTIONAL DISTRIBUTION = 0.6

HYDRAULIC DATA

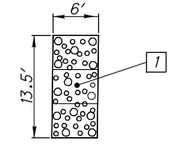
DRAINAGE AREA = 0.56 Sq. Miles

Q_2 = 84 CFS V_2 = 7.9 Ft./Sec.
Q_{10} = 217 CFS V_{10} = 10.5 Ft./Sec.
Q_{100} = 414 CFS V_{100} = 11.7 Ft./Sec.

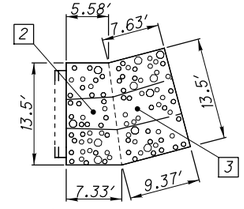
NOTE: CULVERT CLEARS THE (10 Yr. Design HW) BY 0.10 FEET.

ROCK CHANNEL PROTECTION, TYPE B WITH FILTER

[1] 6 x 13.5 x 1.5' Dp. / 27 = 4.5 Cu.Yds.



[2] ((5.58 + 7.33) / 2) x 13.5 x 2.5' Dp. / 27 = 8.1 Cu.Yds.
[3] ((7.63 + 9.37) / 2) x 13.5 x 2.5' Dp. / 27 = 10.6 Cu.Yds.



A TOTAL OF 23 Cu. Yds. CARRIED TO PLAN & PROFILE Sht. 16 of 32.

EXISTING CULVERT

TYPE: 60" Reinforced Concrete Pipe
LENGTH: 42.4' Long
ROADWAY: 20.3'
SKEW: 7°44'25.2" L.F.
ALIGNMENT: Tangent
Ex. CULVERT FILE NUMBER: 1811104

PROPOSED CULVERT

TYPE: 58" X 91" CONDUIT, TYPE A, 706.04
LENGTH: 60' Long
LOADING: HL-93
ROADWAY: 32' F/F GUARDRAIL
SKEW: 7°44'25.2" L.F.
CULVERT FILE NUMBER: 1985775
COORDINATES: LATITUDE 39°16'25" LONGITUDE 82°25'18"

HORIZONTAL SCALE IN FEET
0 5 10 20

DESIGNED CAK CHECKED JPH

CULVERT PLAN
Culvert No. VIN-677-3.02
Unnamed Tributary of Raccoon Creek

VIN-677-3.02/3.19
PID No. 111411

25
32

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