

TYPICAL SECTIONS

**LEGEND:**

- ① ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22  
(2 LIFTS, 1 1/2" EACH)
- ② ITEM 301 - 7" ASPHALT CONCRETE BASE, PG64-22
- ③ ITEM 304 - 6" AGGREGATE BASE
- ④ ITEM 407 - TACK COAT @ 0.08 GAL / SQ. YD.
- ⑤ ITEM 204 - SUBGRADE COMPACTION
- ⑥ ITEM 659 - SEEDING AND MULCHING
- ⑦ ITEM 202 - PAVEMENT REMOVED, ASPHALT
- ⑧ ITEM 605 - AGGREGATE DRAIN
- ⑨ ITEM 441 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
- ⑩ ITEM 254 - 1 1/2" PAVEMENT PLANING, ASPHALT CONCRETE
- Ⓐ EXISTING PAVEMENT 24"

DESIGN AGENCY

DESIGNER  
MPG

REVIEWER  
XXX MM-DD-YY

PROJECT ID  
102911

SHEET TOTAL  
P.2 | 20

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

SOUTH CENTRAL POWER COMPANY  
 MR. ZACHERY REED  
 P.O. BOX 250  
 LANCASTER, OHIO 43130  
 (740) 689-6150

HORIZON CHILLICOTHE TELEPHONE  
 MR. JIM MITCHELL  
 P. O. BOX 480  
 CHILLICOTHE, OHIO 45601  
 (740) 772-8264

ROSS COUNTY WATER COMPANY  
 MR. WILLIAM NEAL  
 GENERAL MANAGER  
 P.O. BOX 1690  
 CHILLICOTHE, OHIO 45601  
 (740) 774-4117

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**CLEARING AND GRUBBING**

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	0	16	16
30"	0	2	2

IN ADDITION TO ALL THE REQUIREMENTS OF ITEM 201, ALL TREES WITHIN THE CONSTRUCTION LIMITS HAVE BEEN CUT AND REMOVED AT APPROXIMATELY 4 FOOT ABOVE THE EXISTING GROUND, UNDER A SEPARATE CONTRACT. REMOVE ALL REMAINING STUMPS WITHIN THE RIGHT-OF-WAY THAT WERE NOT REMOVED BY THE SEPARATE CONTRACT. INCLUDE THE COSTS FOR THE WORK IN LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING.

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SEEDING AND MULCHING	1,344 SQ. YD.
659, REPAIR SEEDING AND MULCHING	67 SQ. YD.
659, COMMERCIAL FERTILIZER	0.18 TON
659, LIME	0.28 ACRES
659, WATER	7 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

**SURVEYING PARAMETERS**

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE BELOW FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

**PROJECT CONTROL**

POSITIONING METHOD: Odot VRS  
 MONUMENT TYPE: Type B, 5/8" Rebar & Odot cap

**VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD88  
 GEOID: Geoid18

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAD83/2011 Epoch 2010  
 ELLIPSOID: GRS80  
 MAP PROJECTION: Lambert Conformal Conic  
 COORDINATE SYSTEM: Ohio State Plane, South Zone 3402  
 COMBINED SCALE FACTOR: 0.99990609  
 PROJECT ADJUSTMENT FACTOR (MULTIPLIER): 1.00009392  
 ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

**ENDANGERED BAT HABITAT**

ENSURE IMPACTS TO THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT AND THE STATE LISTED AND PROTECTED LITTLE BROWN BAT AND TRICOLORED BAT ARE AVOIDED AND MINIMIZED. DO NOT REMOVE TREES FROM APRIL 1 THROUGH SEPTEMBER 30. PERFORM ALL NECESSARY TREE REMOVAL FROM OCTOBER 1 THROUGH MARCH 31. DEMARCATÉ CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

**BENCHING OF FOUNDATION SLOPES**

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

**REMOVAL; MISC. SHEET PILING**

REMOVE THE EXISTING SHEET PILING WITHIN THE PROJECT LIMITS TO AN ELEVATION OF 740.

ROS-207-09.32 PID:102911						
PROJECT COORDINATES ARE RELATIVE TO STATE PLANE GRID COORDINATES BY A PROJECT ADJUSTMENT FACTOR (P.A.F.) MULTIPLIER OF 1.000093919						
To obtain State Plane Grid Coordinates divide each Northing and Easting by the P.A.F.						
POINT NUMBER	GROUND COORDINATES		C/L Construction S.R. 207		ORTHOMETRIC	DESCRIPTION
	U.S. SURVEY FEET		STATION	OFFSET	HEIGHT	
	NORTHING	EASTING	(FEET)	(FEET)	ELEVATION (FT)	
SV1	533656.195	1801178.7790	488+95.97	-30.10	763.09	Conc. Monument (fnd)
SV2	533854.301	1800929.1900	492+11.19	19.04	753.57	5/8" rebar & Odot cap (set)
SV3	534067.548	1800563.2440	496+34.79	21.39	755.10	5/8" rebar & Odot cap (set)



**ITEM 614, MAINTAINING TRAFFIC**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 21 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.5.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

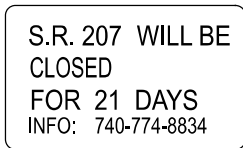
NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 CALENDAR DAYS PRIOR TO CLOSURE
START OF CONST. & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO CLOSURE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

**ITEM 614, MAINTAINING TRAFFIC (CONT.)**

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.



W20-H13-60

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSURES	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

- S.R. 207 - STA. 490+70
- S.R. 207 - STA. 494+30

THE ROAD MAY NOT BE CLOSED UNTIL AFTER THE 2022 MEMORIAL DAY HOLIDAY, ALL WORK ON THIS PROJECT SHALL BE COMPLETED NO LATER THAN AUGUST 1st, 2022.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONT.)**

SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE   8   HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER   5   M. GAL.

**ITEM 614, MAINTAINING TRAFFIC (ESTIMATED QUANTITIES)**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 253, PAVEMENT REPAIR 50 CU. YD.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22 100 CU. YD.

ITEM 407, TACK COAT 200 GAL.

DESIGN AGENCY



DESIGNER

MPG

REVIEWER

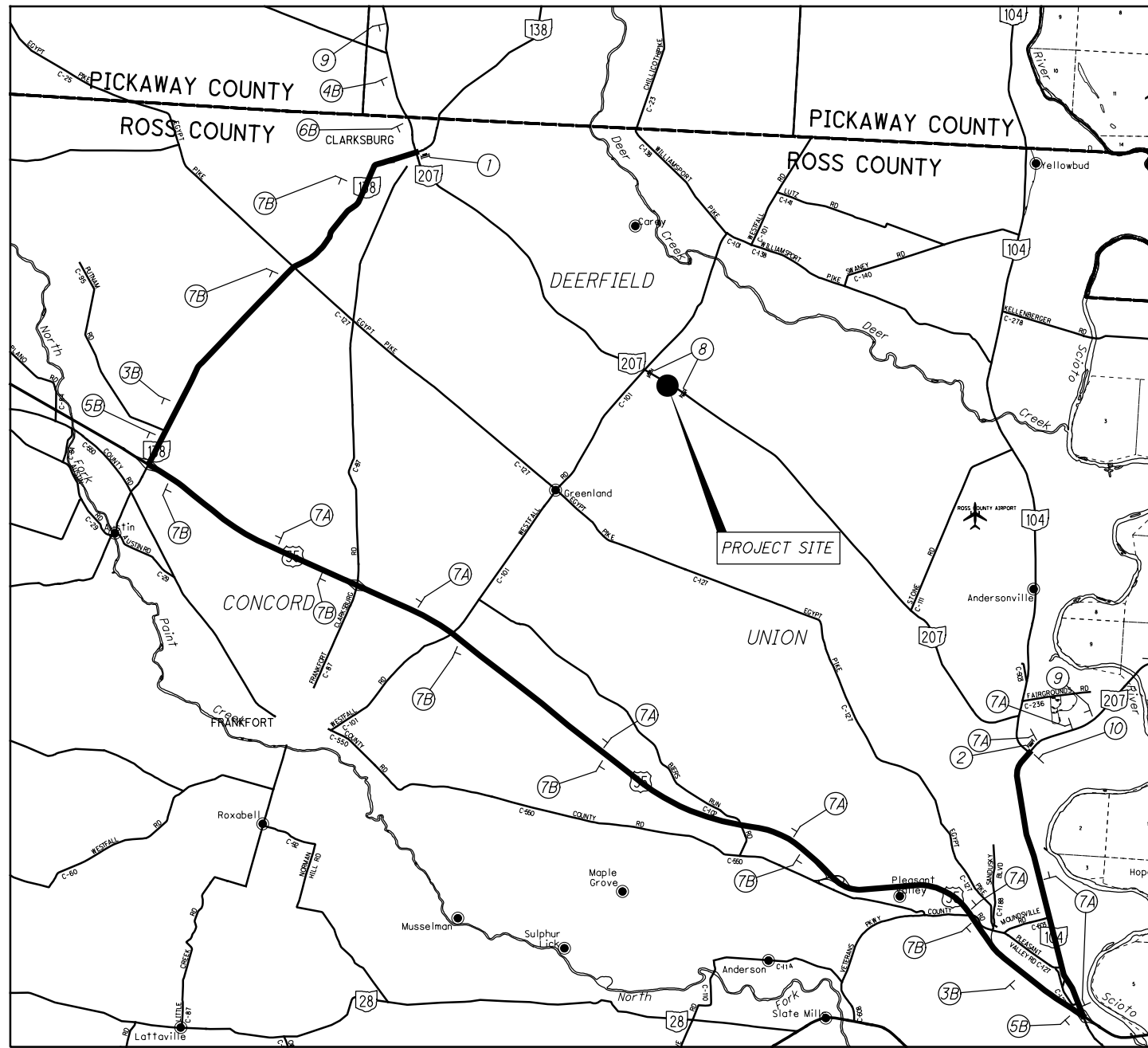
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PROJECT ID

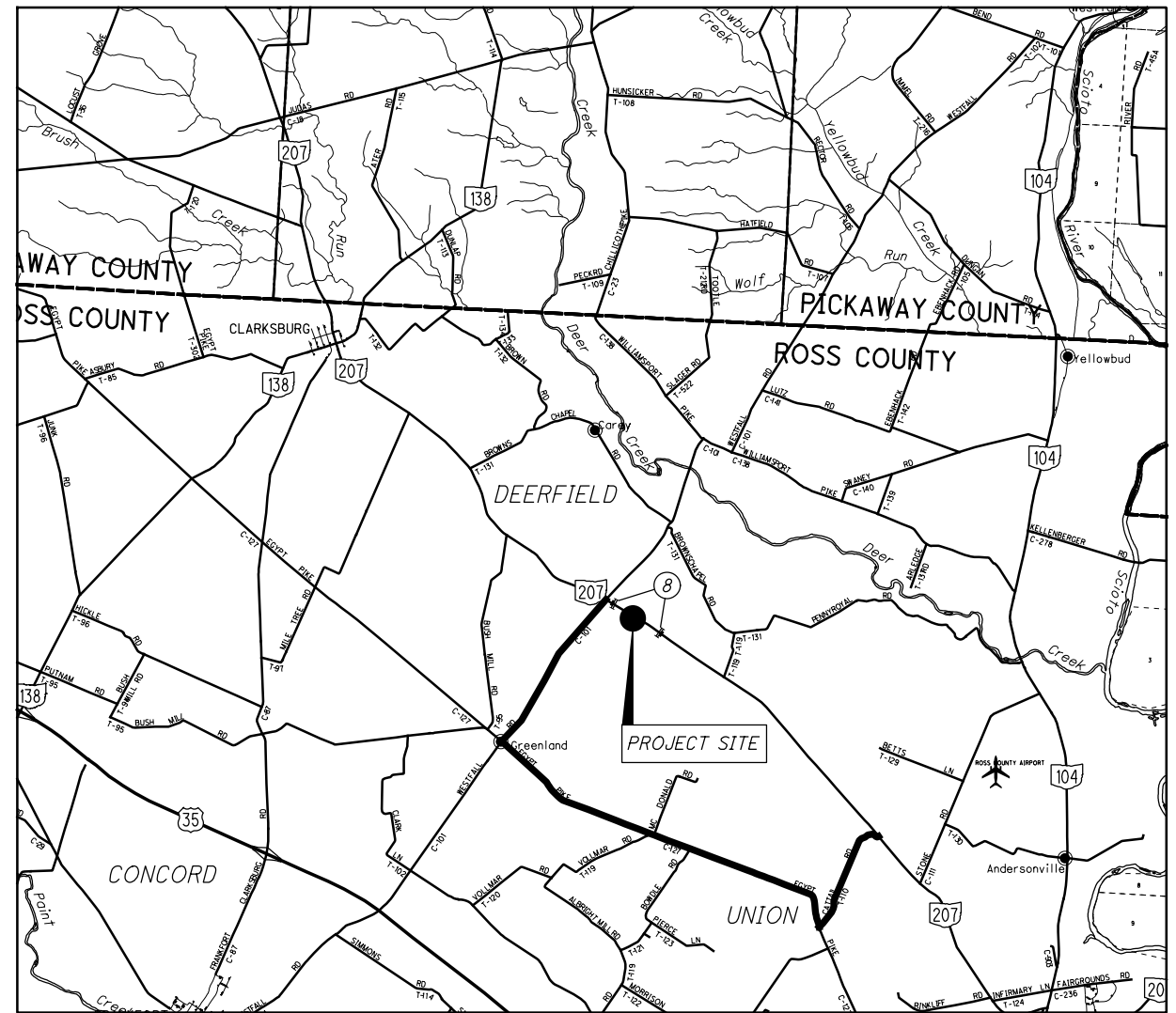
102911

SHEET TOTAL

P.4 20



STATE DETOUR



LOCAL DETOUR

DETOUR MAP

①	②	③	④	⑤	⑥	⑦	⑧	⑩	A
ROAD CLOSED 4.3 MILES AHEAD LOCAL TRAFFIC ONLY <i>R11-3a-60</i> ON TYPE III BARRICADES	ROAD CLOSED 6.7 MILES AHEAD LOCAL TRAFFIC ONLY <i>R11-3a-60</i> ON TYPE III BARRICADES	DETOUR <i>M4-8-24</i>	DETOUR <i>M4-8-24</i>	DETOUR <i>M4-8-24</i>	DETOUR <i>M4-8-24</i>	DETOUR <i>M4-8-24</i>	ROAD CLOSED <i>R11-2-48</i> ON TYPE III BARRICADES	END DETOUR <i>M4-8a-24</i>	NORTH <i>M3-1-24</i>
									SOUTH <i>M3-3-24</i>
<i>M4-10R-48</i>	<i>M4-10L-48</i>	<i>M1-5-30-2</i> 	<i>M1-5-30-2</i> 	<i>M1-5-30-2</i> 	<i>M1-5-30-2</i> 	<i>M1-5-30-2</i> 	<i>W20-2-36</i>		

ROS-207-9.32

MODEL: Sheet PAPER: 17x11 (in.) DATE: 2/10/2022 TIME: 4:02:52 PM USER: mperges  
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DESIGN AGENCY




DESIGNER  
MPG  
REVIEWER  
XXX MM-DD-YY  
PROJECT ID  
102911  
SHEET TOTAL  
P.5 | 20

SHEET NUM.										PART.			ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	7	8	15						01/STR/CV			EXT	TOTAL				
																	<b>ROADWAY</b>	
			445							LS			201	11000	LS		CLEARING AND GRUBBING	
		500								445			202	23000	445	SY	PAVEMENT REMOVED	
										500			202	38000	500	FT	GUARDRAIL REMOVED	
		LS											202	98000	LS		REMOVAL MISC.:EXISTING SHEET PILING	3
				380						LS			203	10000	380	CY	EXCAVATION	
				736						736			203	20000	736	CY	EMBANKMENT	
			512							512			204	10000	512	SY	SUBGRADE COMPACTION	
																	<b>EROSION CONTROL</b>	
		35								35			601	32010	35	CY	ROCK CHANNEL PROTECTION, TYPE A WITH AGGREGATE FILTER	
1,344										1,344			659	10000	1,344	SY	SEEDING AND MULCHING	
67										67			659	14000	67	SY	REPAIR SEEDING AND MULCHING	
0.18										0.18			659	20000	0.18	TON	COMMERCIAL FERTILIZER	
0.28										0.28			659	31000	0.28	ACRE	LIME	
7										7			659	35000	7	MGAL	WATER	
										7,000			832	30000	7,000	EACH	EROSION CONTROL	
																	<b>DRAINAGE</b>	
		LS								LS			202	11000	LS		STRUCTURE REMOVED (84"x55" CONC. BOX)	
		2								2			202	20010	2	EACH	HEADWALL REMOVED	
										LS			503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
										8.1			602	20000	8.1	CY	CONCRETE MASONRY	
										130			605	31100	130	FT	AGGREGATE DRAINS	
										84			611	28000	84	FT	84" CONDUIT, TYPE A (SEE SHEET P.16 FOR ALLOWABLE MATERIAL TYPES)	
																	<b>PAVEMENT</b>	
			223							223			254	01000	223	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1 1/2")	
			90							90			301	46000	90	CY	ASPHALT CONCRETE BASE, PG64-22	
			81							81			304	20000	81	CY	AGGREGATE BASE	
			92							92			407	10000	92	GAL	TACK COAT	
			48							48			441	50000	48	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
																	<b>MAINTENANCE OF TRAFFIC</b>	
	50									50			253	02000	50	CY	PAVEMENT REPAIR	
	200									200			407	10000	200	GAL	TACK COAT	
	100									100			441	50000	100	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
										8			614	11110	8	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
										LS			614	12420	LS		DETOUR SIGNING	
										5			616	10000	5	MGAL	WATER	
																	<b>TRAFFIC CONTROL</b>	
										5			621	00100	5	EACH	RPM	
										5			621	54000	5	EACH	RAISED PAVEMENT MARKER REMOVED	
										0.06			642	00104	0.06	MILE	EDGE LINE, 6", TYPE 1	
										0.03			642	00300	0.03	MILE	CENTER LINE, TYPE 1	
																	<b>INCIDENTALS</b>	
										LS			614	11000	LS		MAINTAINING TRAFFIC	
										1			619	16000	1	MNTH	FIELD OFFICE, TYPE A	
										LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS			624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER  
MPG

REVIEWER  
XXX MM-DD-YY


PROJECT ID  
0

SHEET TOTAL  
P.6 | 20

REF NO.	SHEET NO.	STATION TO STATION				202	202	202	202	601		602			611	621	621		642	642	
						HEADWALL REMOVED	GUARDRAIL REMOVED	REMOVAL MISC.:EXISTING SHEET PILING	STRUCTURE REMOVED (84"x55" CONC. BOX)	ROCK CHANNEL PROTECTION, TYPE A WITH AGGREGATE FILTER	CONCRETE MASONRY	84" CONDUIT, TYPE A	RPM	RAISED PAVEMENT MARKER REMOVED	EDGE LINE, 6", TYPE 1	CENTER LINE, TYPE 1					
					EACH	FT	LS	LS	CY		CY			FT	EACH	EACH		MILE	MILE		
CL CONSTRUCTION S.R.207																					
R-1	9	491+00.00	LT	TO	494+00.00	LT															
R-2	9	491+60.00	RT	TO	493+60.00	RT															
R-3	9	492+55.00	LT	TO	492+65.00	RT	2		LS												
R-4	9	492+10.00	LT&RT	TO	493+00.00	LT&RT			LS												
D-1	9	492+42.00	LT	TO	492+65.00	RT				35		8.1		84							
EL-1	9	491+50.00	LT	TO	493+50.00	LT													0.030		
EL-2	9	491+50.00	RT	TO	493+50.00	RT													0.030		
CL-1	9	491+50.00	CL	TO	493+50.00	CL									5	5				0.030	
SUBTOTALS					2	500			35		8.1			84	5	5			0.060	0.030	
TOTALS CARRIED TO GENERAL SUMMARY					2	500	LS	LS	35		8.1			84	5	5			0.06	0.03	

SUBSUMMARY

DESIGN AGENCY

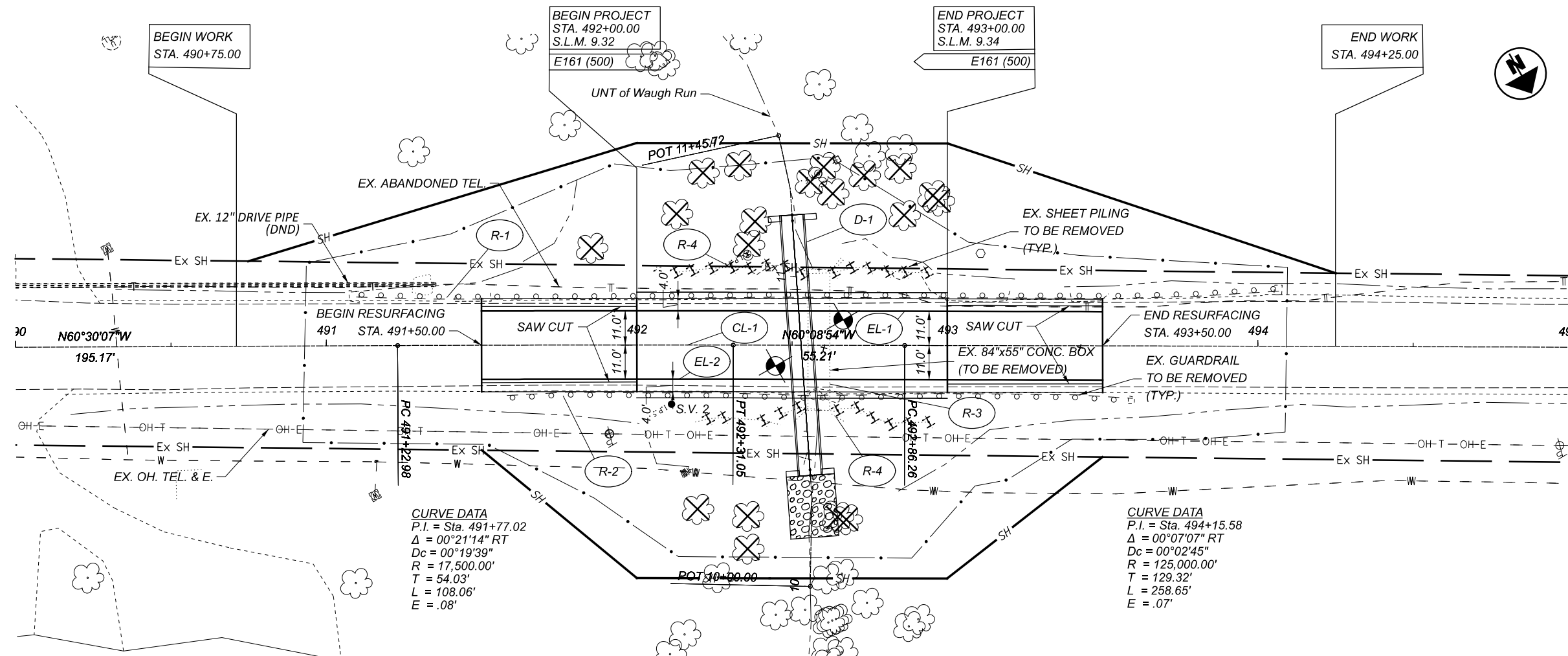


DESIGNER  
MPG

REVIEWER  
XXX MM-DD-YY

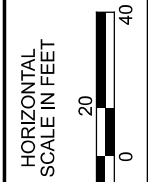
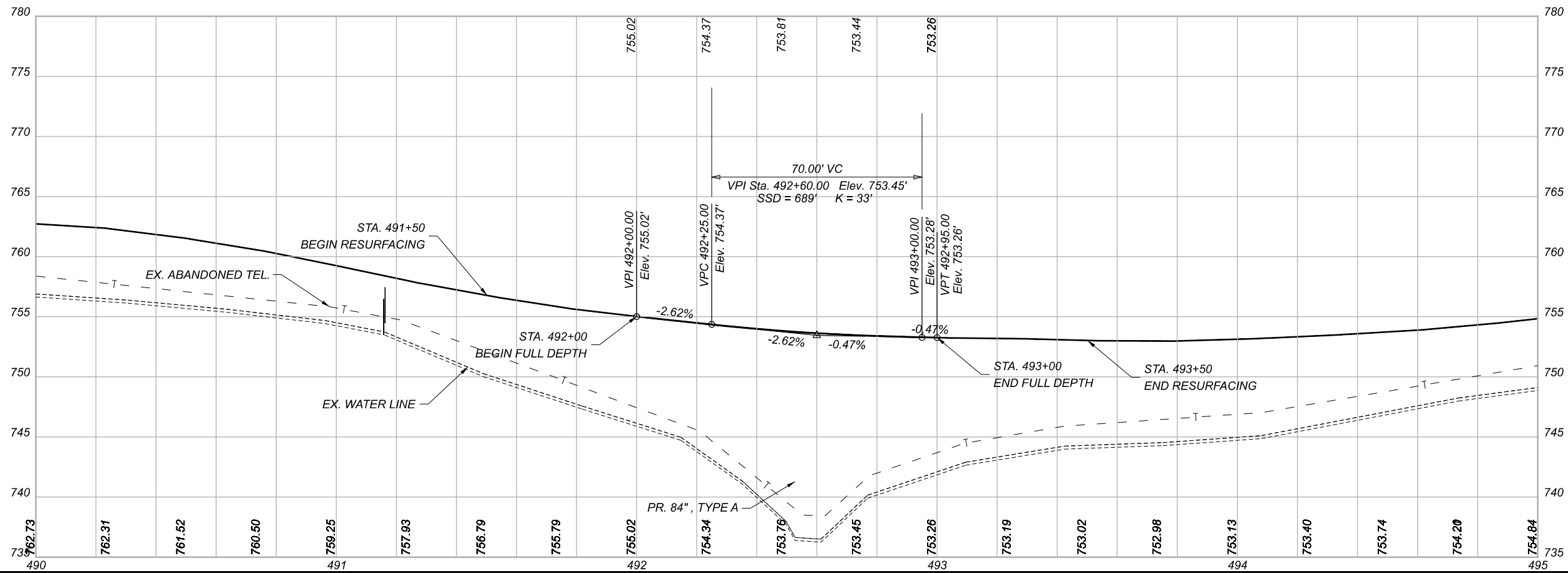
PROJECT ID  
102911

SHEET TOTAL  
P.7 20



**CURVE DATA**  
 P.I. = Sta. 491+77.02  
 $\Delta = 00^{\circ}21'14''$  RT  
 $D_c = 00^{\circ}19'39''$   
 $R = 17,500.00'$   
 $T = 54.03'$   
 $L = 108.06'$   
 $E = .08'$

**CURVE DATA**  
 P.I. = Sta. 494+15.58  
 $\Delta = 00^{\circ}07'07''$  RT  
 $D_c = 00^{\circ}02'45''$   
 $R = 125,000.00'$   
 $T = 129.32'$   
 $L = 258.65'$   
 $E = .07'$

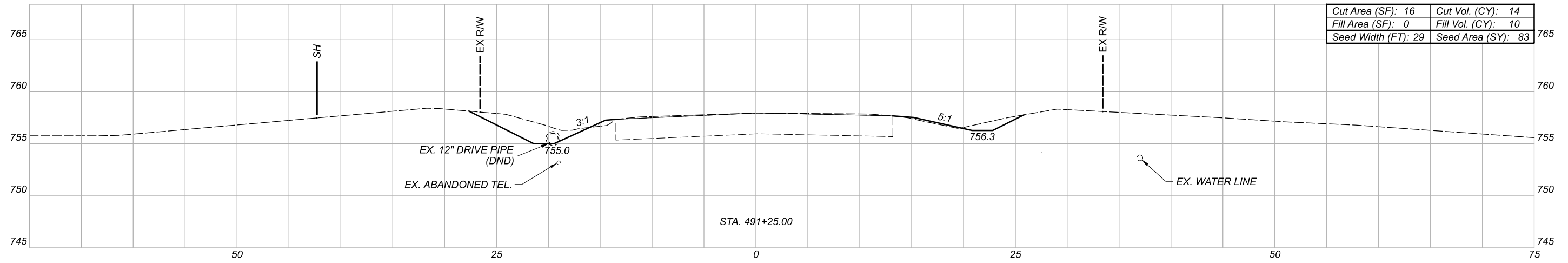


PLAN AND PROFILE  
 S.R. 207 - STA. 490+00.00 TO STA. 495+00.00

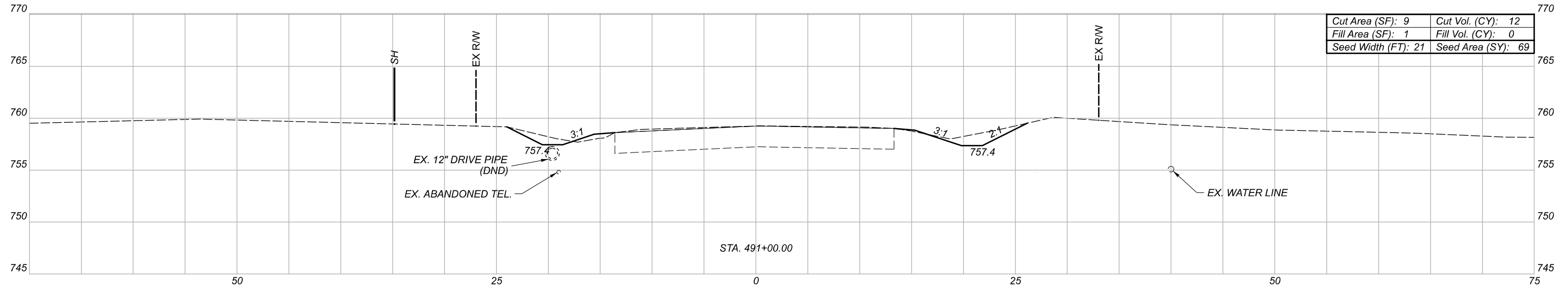
DESIGN AGENCY



DESIGNER	MPG
REVIEWER	XXX MM-DD-YY
PROJECT ID	102911
SHEET	TOTAL
P.9	20



Cut Area (SF): 16	Cut Vol. (CY): 14
Fill Area (SF): 0	Fill Vol. (CY): 10
Seed Width (FT): 29	Seed Area (SY): 83



Cut Area (SF): 9	Cut Vol. (CY): 12
Fill Area (SF): 1	Fill Vol. (CY): 0
Seed Width (FT): 21	Seed Area (SY): 69

CROSS SECTIONS S.R. - 207  
 STA. 491+00 TO STA. 491+25

DESIGN AGENCY



DESIGNER

MPG

REVIEWER

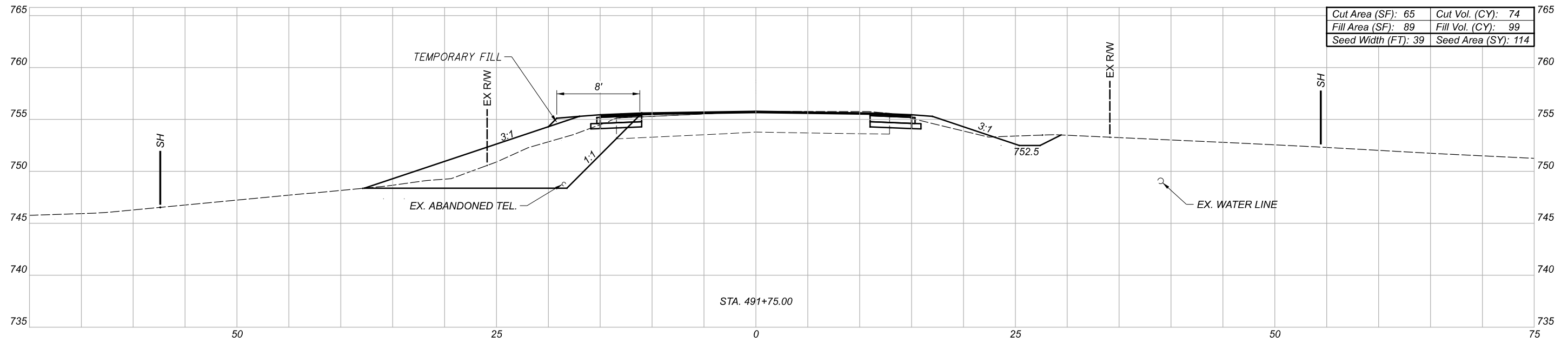
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PROJECT ID

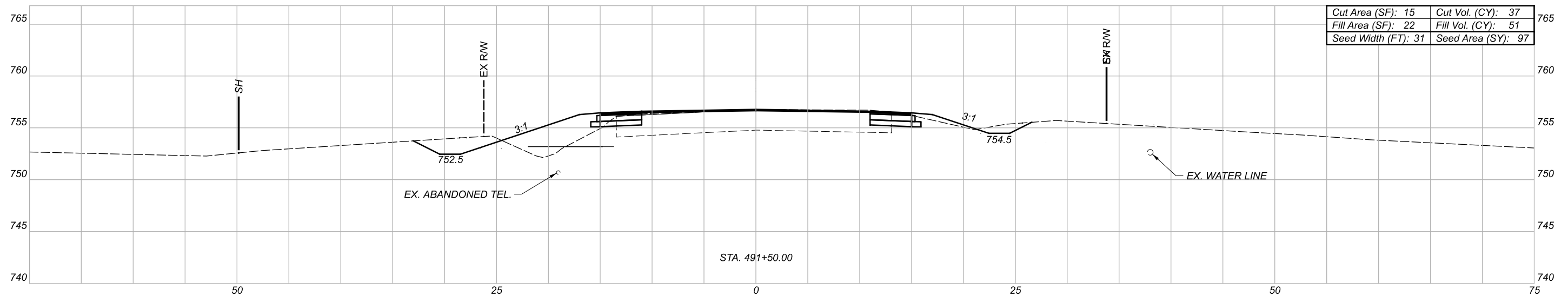
102911

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill		
152	26	10	P.10	20





Cut Area (SF): 65	Cut Vol. (CY): 74
Fill Area (SF): 89	Fill Vol. (CY): 99
Seed Width (FT): 39	Seed Area (SY): 114



Cut Area (SF): 15	Cut Vol. (CY): 37
Fill Area (SF): 22	Fill Vol. (CY): 51
Seed Width (FT): 31	Seed Area (SY): 97

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill		
241	111	150	P.11	20

CROSS SECTIONS - S.R. 207  
 STA. 491+00 TO STA. 491+75

DESIGN AGENCY



DESIGNER

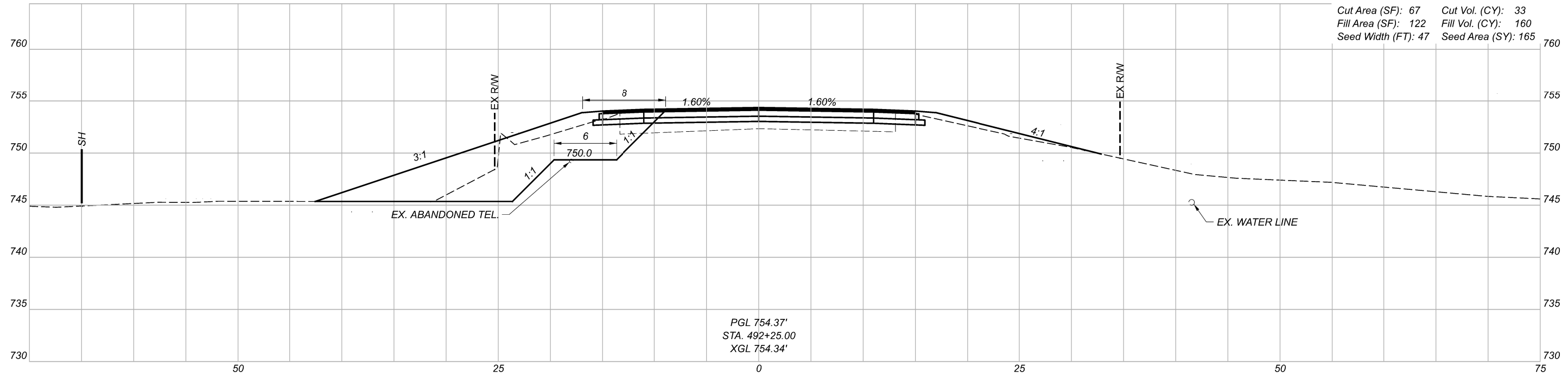
MPG

REVIEWER

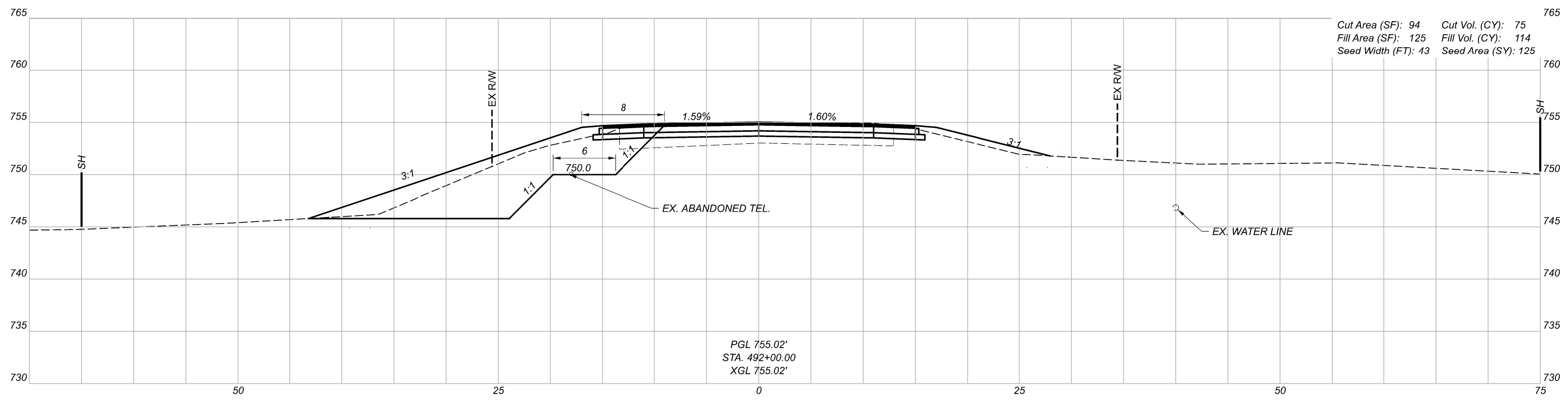
XXX MM-DD-YY

PROJECT ID

102911



Cut Area (SF): 67    Cut Vol. (CY): 33  
 Fill Area (SF): 122    Fill Vol. (CY): 160  
 Seed Width (FT): 47    Seed Area (SY): 165



Cut Area (SF): 94    Cut Vol. (CY): 75  
 Fill Area (SF): 125    Fill Vol. (CY): 114  
 Seed Width (FT): 43    Seed Area (SY): 125

CROSS SECTIONS - S.R. 207  
 STA. 492+00 TO 492+25

DESIGN AGENCY



DESIGNER

MPG

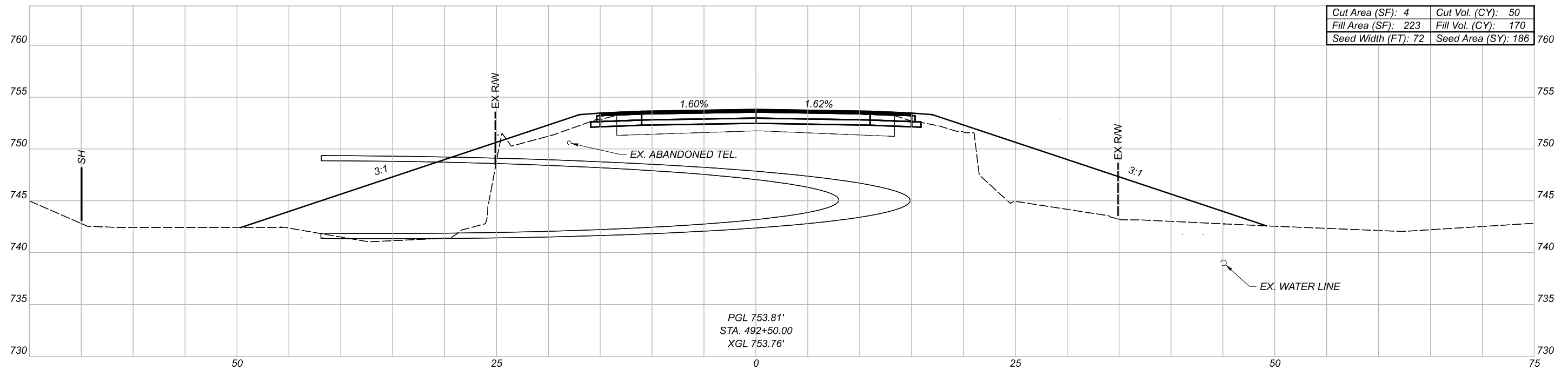
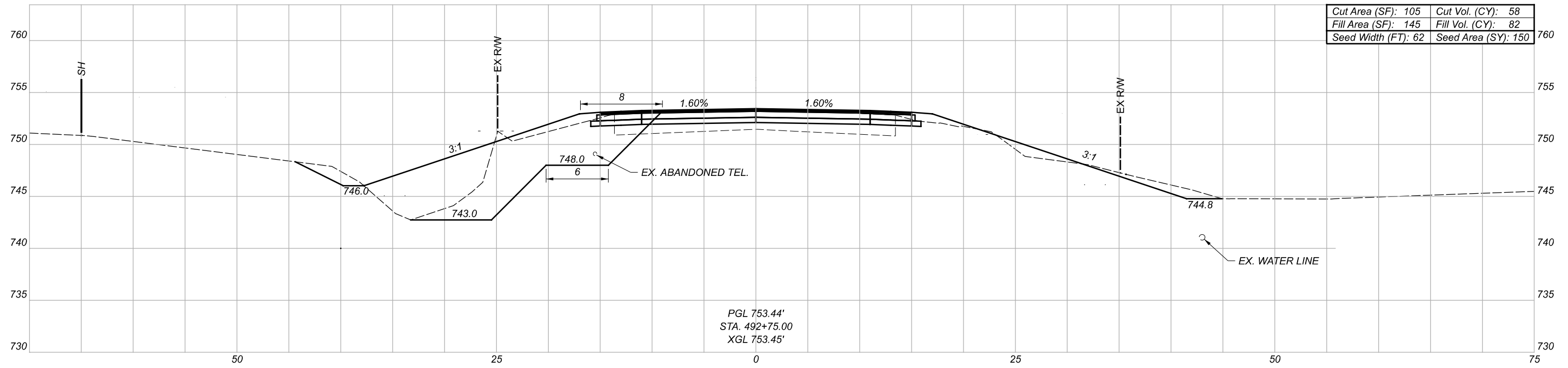
REVIEWER

XXX MM-DD-YY

PROJECT ID


102911

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill		
290	108	274	P.12	20



Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill		
336	108	252	P.13	20

DESIGN AGENCY

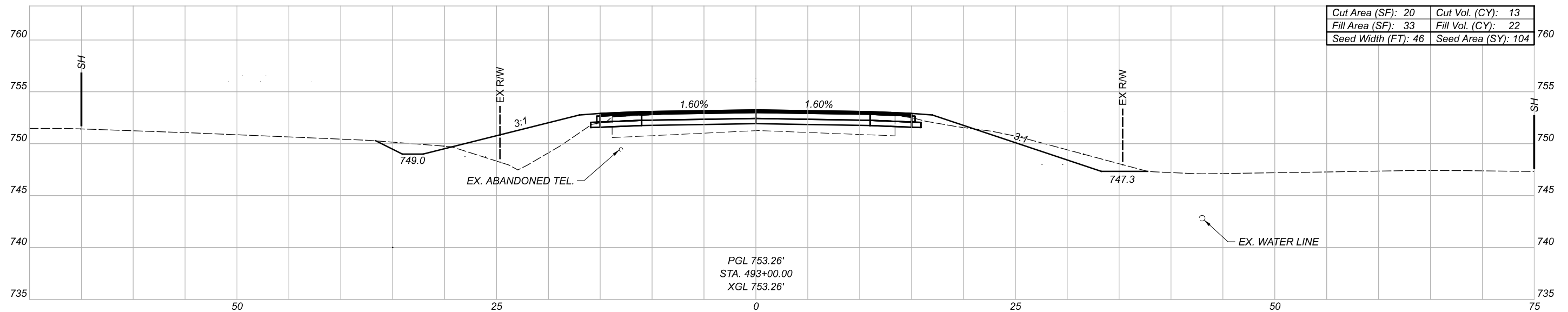
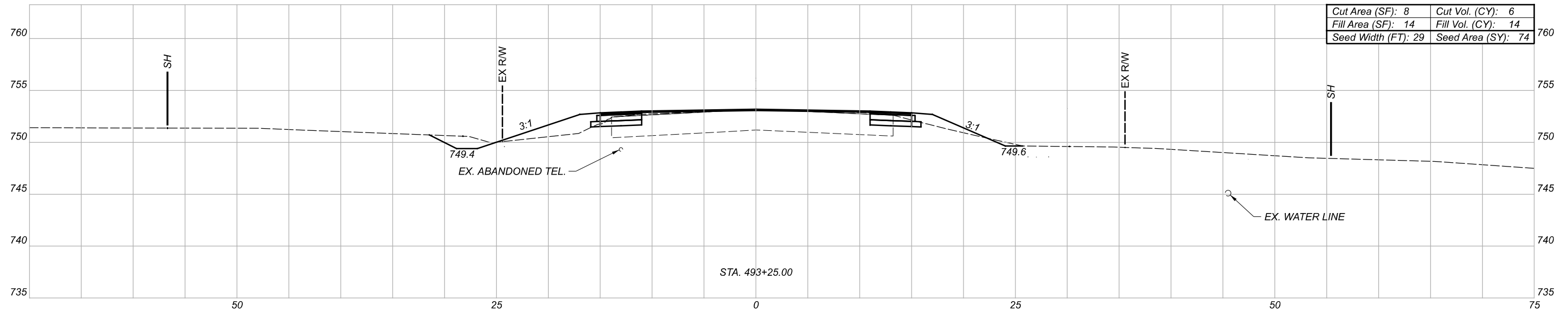
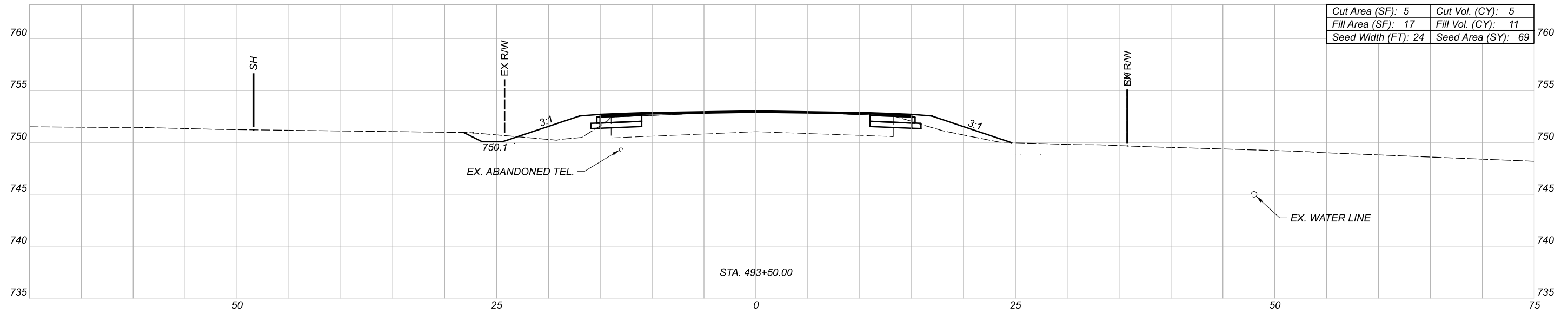


DESIGNER  
MPG

REVIEWER  
XXX MM-DD-YY

PROJECT ID  
102911

CROSS SECTIONS - S.R. 207  
 STA. 492+50 TO STA. 492+75



Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.14	TOTAL
247	24	47		20

DESIGN AGENCY

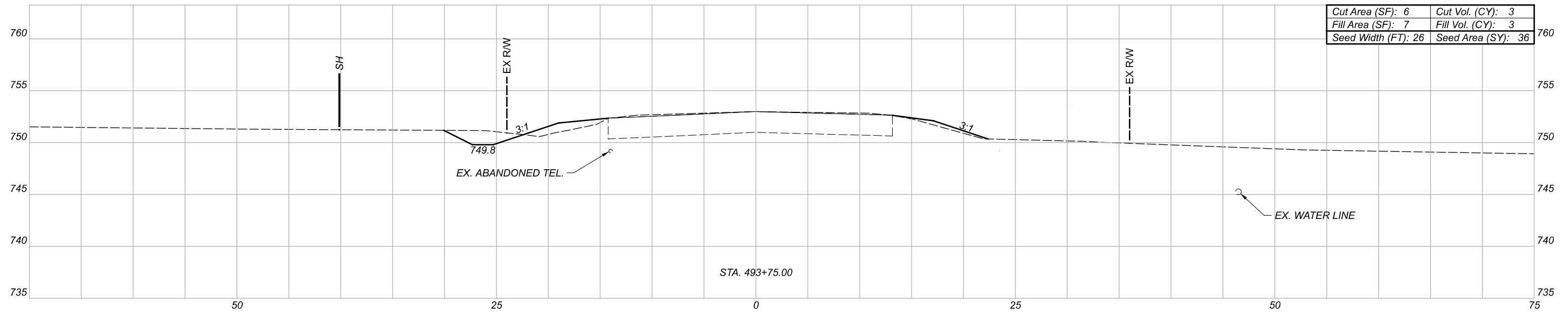
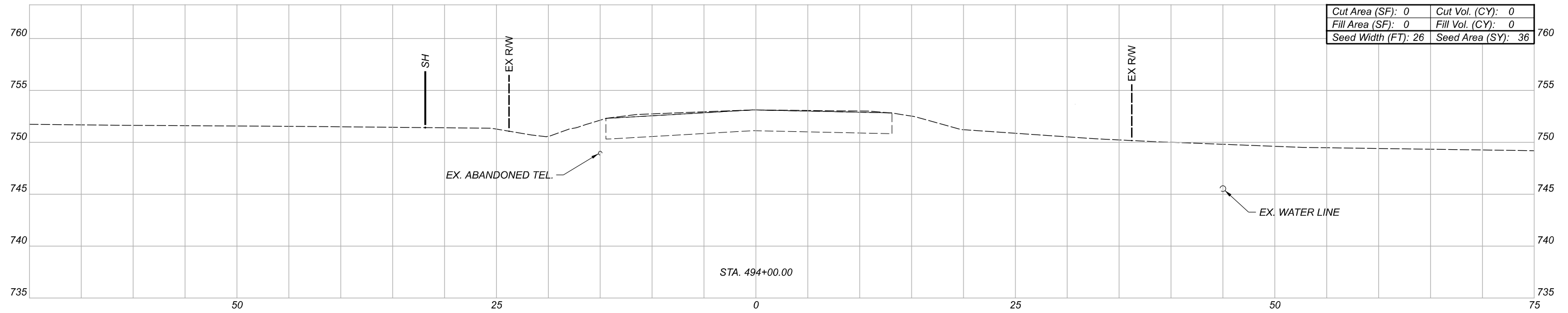
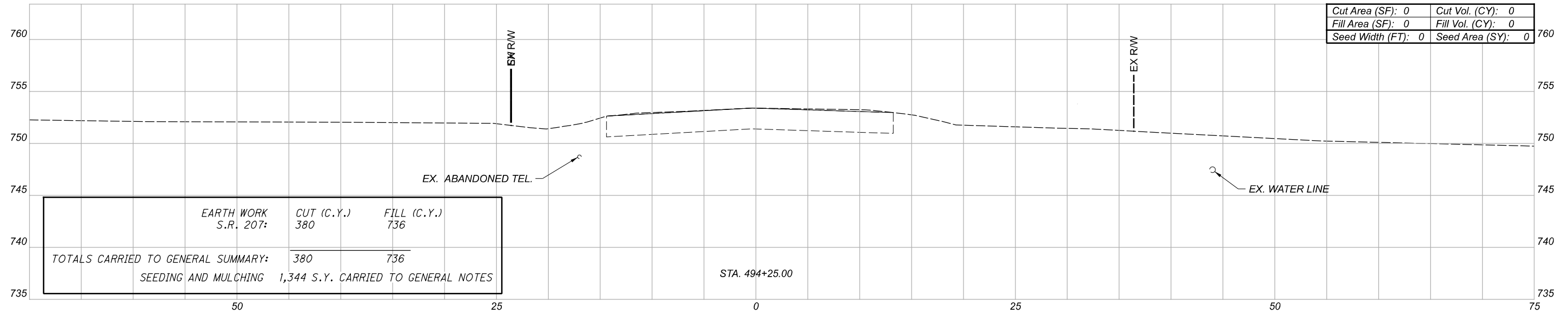


DESIGNER  
MPG

REVIEWER  
XXX MM-DD-YY

PROJECT ID  
102911

CROSS SECTIONS - S.R. 207  
 STA. 493+00 TO STA. 493+50



CROSS SECTIONS - S.R. 207  
 STA. 493+75 TO STA. 494+25

DESIGN AGENCY

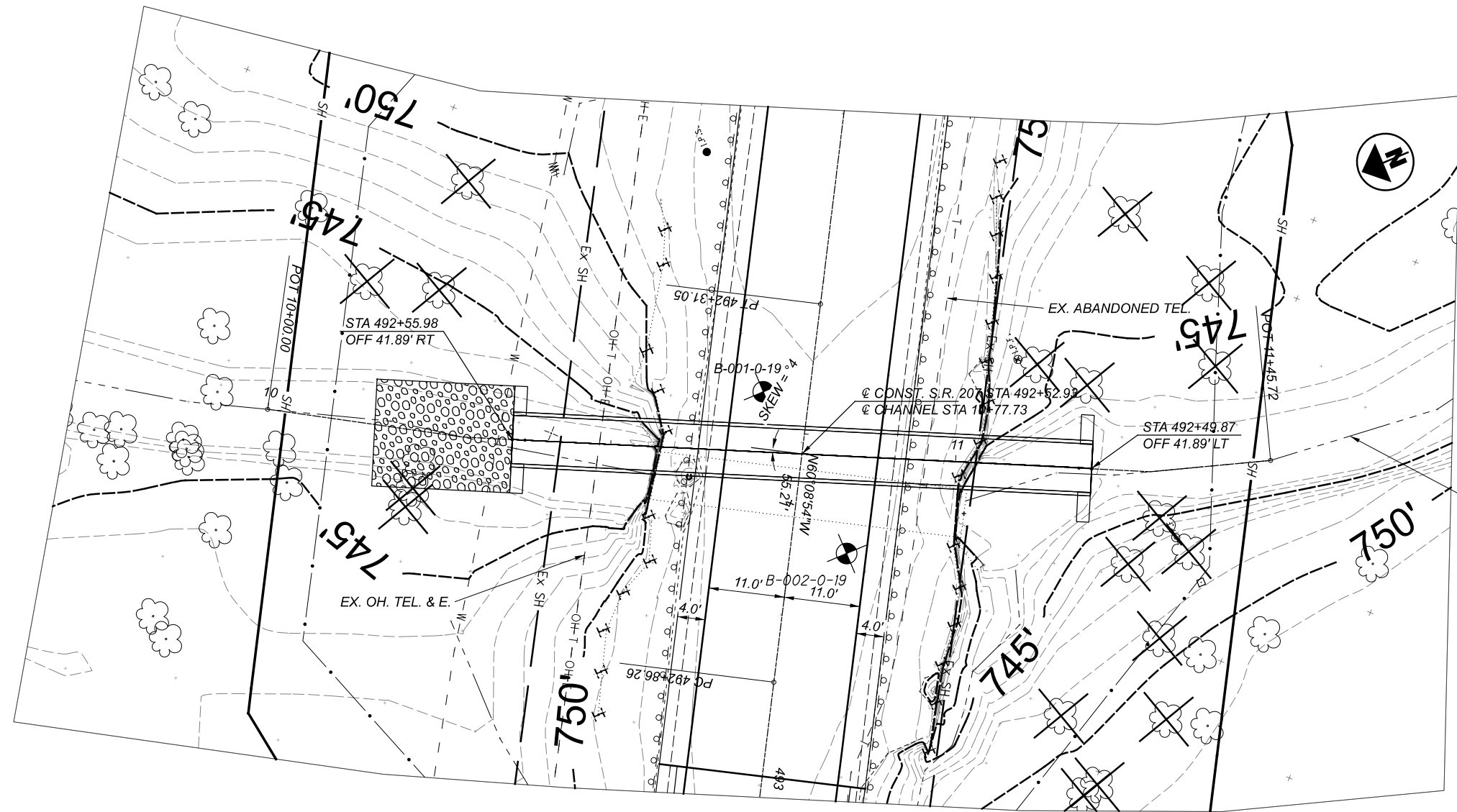


DESIGNER  
 XXX

REVIEWER  
 XXX MM-DD-YY

PROJECT ID  
 102911

Sheet Totals			SHEET	TOTAL
Seeding	Cut	Fill	P.15	20
108	3	3		



ALLOWABLE MATERIAL TYPES

- METAL OPTIONS: 84" - 707.01, 707.02 or 707.03, GALVANIZED W/ CFP\* (MIN. GAUGE = 7)
- 84" - 707.01 OR 707.02, ALUMINIZED W/CFP\*
- 84" - 707.04 W/ CFP\*
- 84" - 707.21, 707.22 OR 707.23 W/ CFP\*
- 84" - 748.06 CASING

CONC. OPTIONS: 84" - 706.02, 706.03

PLASTIC OPTIONS: 84" - 707.35 OR 707.75 OR SS938

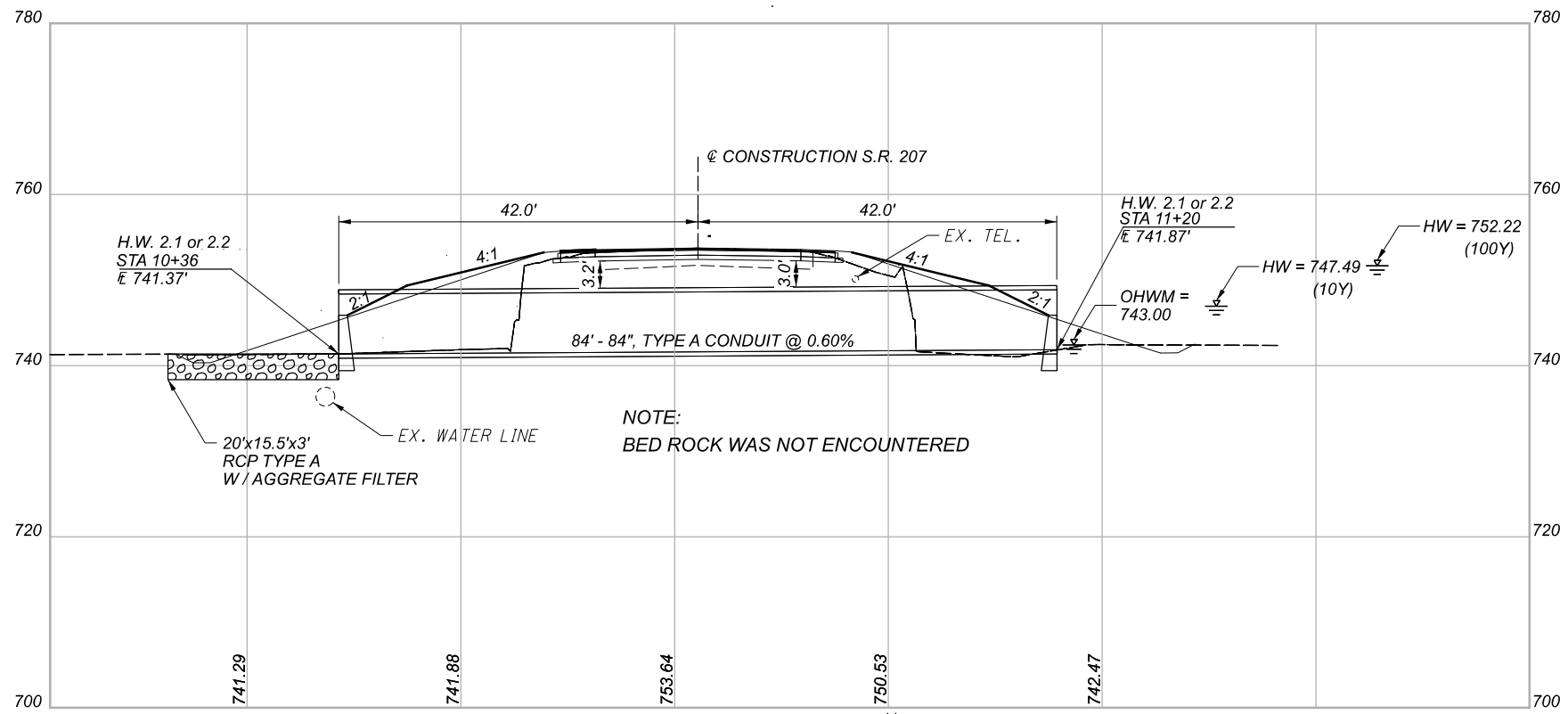
CFP\* = CONCRETE FIELD PAVING, BFI\*\* = BITUMINOUS FIELD INVERT

UNT of Waugh Run

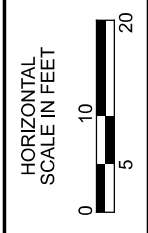
HYDRAULIC DESIGN DATA
DRAINAGE AREA: 362 ACRES
Q(10): 209 CFS
HW(10): 747.49
V(10): 11 FPS
Q(100): 461 CFS
HW(100): 752.22
V(100): 15 FPS
ORDINARY HIGH WATER MARK: 743.00
DESIGN SERVICE LIFE: 75 YEARS
pH: 7.1
ABRASION LEVEL: 4

PROPOSED STRUCTURE
TYPE: 84", TYPE A CONDUIT WITH HALF HEIGHT HEADWALLS
SKEW: 4° L.F.
CFN: 1982839
COORDINATES: LAT. 39° 27'50"
LON. 83° 05'39"

EXISTING STRUCTURE
TYPE: 84"x55" CONC. BOX
SKEW: 0° L.F.
CFN: 1844558
DISPOSITION: REMOVE EX. STRUCTURE



NOTE: BED ROCK WAS NOT ENCOUNTERED



CULVERT DETAILS

DESIGN AGENCY	
DESIGNER	MPG
CHECKER	XXX
REVIEWER	XXX MM-DD-YY
PROJECT ID	102911
SHEET	P.16
TOTAL	20

**PROJECT DESCRIPTION**  
 REPLACE EXISTING DEFICIENT 84"x55" BOX CULVERT WITH NEW 84" CONDUIT AND REMOVING THE EXISTING GUARDRAIL BY PROVIDING Milder SLOPES.

# RIGHT OF WAY LEGEND SHEET ROS-207-9.32

VIRGINIA MILITARY SURVEY No. 4189  
 UNION TOWNSHIP  
 ROSS COUNTY, OHIO

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ROSS COUNTY WATER CO.  
 P.O. BOX 1690  
 CHILLICOTHE, OHIO 45601  
 740-774-4117

SOUTH CENTRAL POWER CO.  
 P.O. BOX 250  
 LANCASTER, OHIO 43130  
 740-689-6150

HORIZON CHILLICOTHE TELEPHONE  
 P.O. BOX 480  
 CHILLICOTHE, OHIO 45601  
 740-772-8264

**PLANS PREPARED BY:**


FIRM NAME : ODOT DISTRICT 9  
 R/W DESIGNER: MJW  
 R/W REVIEWER: MJW  
 FIELD REVIEWER: JK  
 PRELIMINARY FIELD REVIEW DATE: 11/20/19  
 TRACINGS FIELD REVIEW DATE: 5/4/21  
 OWNERSHIP UPDATED BY: MJW  
 DATE COMPLETED: 5/4/21  
 PLAN COMPLETION DATE: 5/5/21

**INDEX OF SHEETS:**

LEGEND SHEET	1
PROPERTY MAP	2
SUMMARY OF ADD'L R/W	3
R/W PLAN SHEET	4
























NOTES: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

**STRUCTURE KEY**

-  RESIDENTIAL
-  COMMERCIAL
-  OUT-BUILDING

- TYPES OF TITLE LEGEND:  
 WL = FEE SIMPLE WITH LIMITATION OF ACCESS  
 WD = WARRANTY DEED  
 PRW = PROPERTY RIGHT FEE SIMPLE  
 SH = STANDARD HIGHWAY EASEMENT  
 LA = LIMITED ACCESS EASEMENT  
 T = TEMPORARY EASEMENT  
 CH = CHANNEL EASEMENT  
 A = AERIAL EASEMENT  
 SL = SLOPE EASEMENT  
 PRE = PROPERTY RIGHT EASEMENT

**CONVENTIONAL SYMBOLS**

County Line	-----	Edge of Shoulder (Ex)	-----
Township Line	-----	Edge of Shoulder ( Pr)	-----
Section Line	-----	Ditch / Creek (Ex)	-----
Corporation Line	----- or -----	Ditch / Creek (Pr)	-----
Fence Line (Ex)	----- x----- x----- (Pr) ----- x----- x-----	Tree Line (Ex)	-----
Center Line	-----	Ownership Hook Symbol	<i>Z</i> , Example -----
Right of Way (Ex)	----- Ex R/W -----	Property Line Symbol	<i>P</i> , Example -----
Right of Way (Pr)	----- R/W -----	Break Line Symbol	<i>Λ</i> , Example -----
Standard Highway Ease.(Ex)	----- Ex SH -----	Tree (Pr)  , Tree (Ex)  , Shrub (Ex) 	
Standard Highway Ease.(Pr)	----- SH -----	Tree (Remove)  , Shrub (Remove) 	
Temporary Right of Way	----- TMP -----	Evergreen (Ex)  , Stump 	
Channel Ease. (Pr)	----- CH -----	Evergreen (Remove)  , Stump (Remove) 	
Utility Ease. (Ex)	----- Ex U -----	Wetland (Pr)  , Grass (Pr)  , Aerial Target 	
Railroad	----- or -----	Post (Ex)  , Mailbox (Ex)  , Mailbox (Pr) 	
Guardrail (Ex)	----- (Pr) -----	Light (Ex)  , Telephone Marker (Ex) 	
Construction Limits	-----	Fire Hydrant (Ex)  , Water Meter (Ex) 	
Edge of Pavement (Ex)	-----	Water Valve (Ex)  , Utility Valve Unknown (Ex.) 	
Edge of Pavement (Pr)	-----	Telephone Pole (Ex)  , Power Pole (Ex) 	
		Light Pole (Ex)	

I, Michael James Ware, P.S., have conducted a survey of the existing conditions for the Ohio Department of Transportation in November 2019. The results of that survey are contained herein. As a part of this project I have reestablished the locations of the existing property lines and centline of existing Right-of-Way for property takes contained herein. All of my work contained herein was conducted in accordance with Ohio Administrative Code 4733-37, commonly known as "Minimum Standards for Boundary Surveys in the State of Ohio" unless noted. The words I and my as used herein are to mean either myself or someone working under my direct supervision.

Michael James Ware, Professional Land Surveyor No. 8054

Date: 05/05/21



ROS-207-9.32

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 2/10/2022 TIME: 4:04:10 PM USER: mgerges  
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RAW LEGEND SHEET

DESIGN AGENCY



DESIGNER  
 MJW

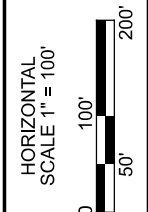
REVIEWER  
 MJW 5/4/21

PROJECT ID  
 102911

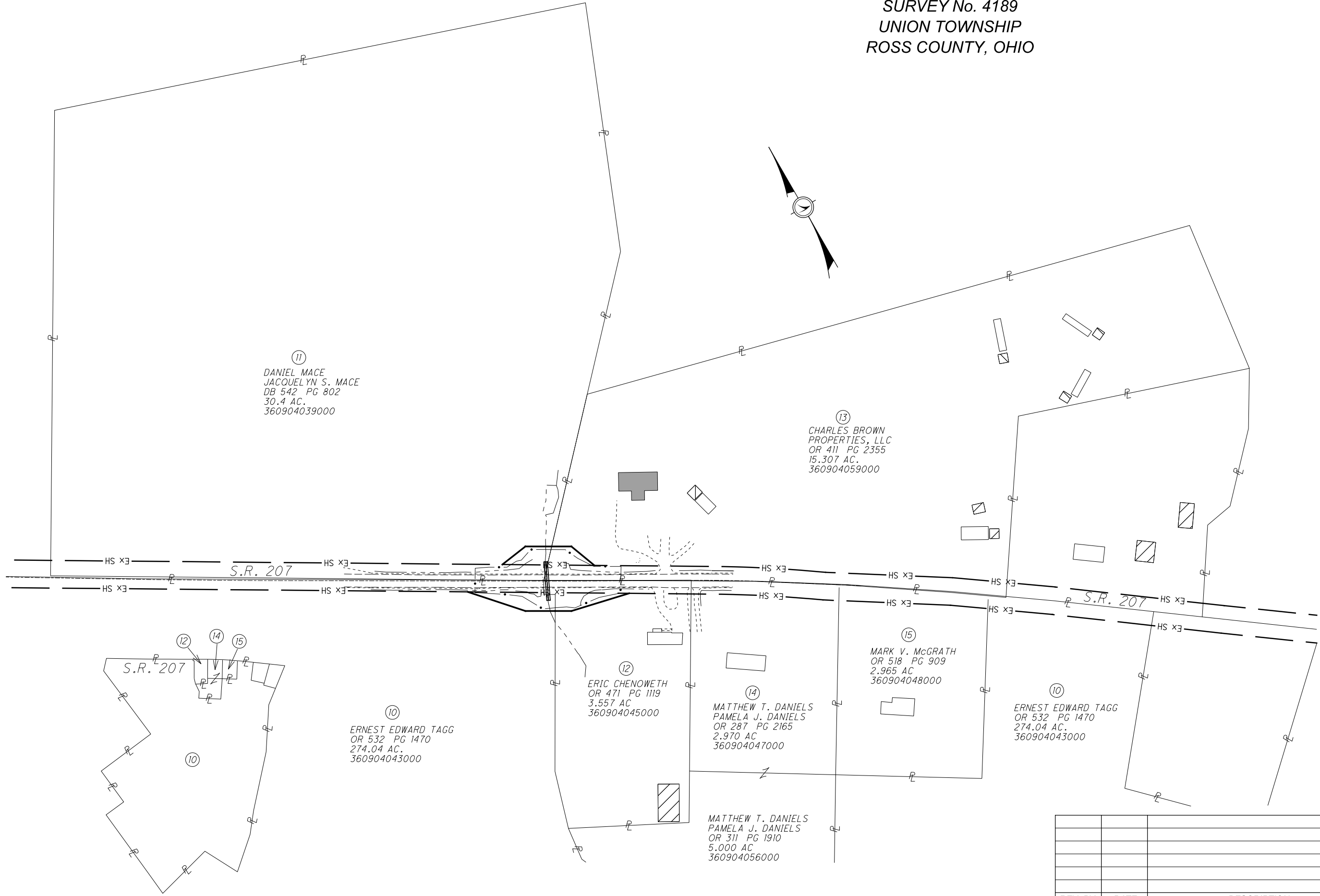
SUBSET	TOTAL
1	4

SHEET	TOTAL
P.17	20

VIRGINIA MILITARY  
SURVEY No. 4189  
UNION TOWNSHIP  
ROSS COUNTY, OHIO



PROPERTY MAP



ROS-207-9.32

MODEL: Sheet PAPER: 17x11 (in.) DATE: 2/10/2022 TIME: 4:04:23 PM USER: mgerges p:\v\hobbs-pw\hobbs-pw-102\Documents\101 Active Projects\Disinfect 09\Ross\102911\100-Engineering\RW\Sheets\102911\_RM001.dgn

REV. BY	DATE	DESCRIPTION
DATE COMPLETED : 5/5/21		

DESIGN AGENCY	
DESIGNER	MJW
REVIEWER	MJW 5/4/21
PROJECT ID	102911
SUBSET	TOTAL
2	4
SHEET	TOTAL
P.18	20



TOTAL NUMBER OF :

4 OWNERSHIPS            0 TOTAL TAKES  
 4 PARCELS                0 OWNERSHIPS W/ STRUCTURES INVOLVED

GRANTEE:

ALL RIGHT OF WAY ACQUIRED IN THE NAME OF  
 THE STATE OF OHIO  
 UNLESS OTHERWISE SHOWN.

PARCEL NO.	OWNER	SHEET NO.	OWNER'S RECORD	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		REMARKS	AS ACQUIRED	
											LEFT	RIGHT		BOOK	PAGE
1-9	NOT USED												ALL RECORD AREAS PER AUDITOR UNLESS NOTED OTHERWISE		
10-SH	ERNEST EDWARD TAGG	4	OR 532 PG 1470	360904043000	274.040	1.727	0.115	0.000	0.115			272.198			
11-SH	DANIEL MACE JACQUELYN S. MACE	4	DB 542 PG 802	360904039000	30.400	0.740	0.071	0.000	0.071			29.589			
12-SH	ERIC CHENOWETH	4	OR 471 PG 1119	360904045000	3.557	0.220	0.091	0.000	0.091			3.246			
13-SH	CHARLES BROWN PROPERTIES, LLC	4	OR 411 PG 2355	360904059000	15.307	0.692	0.067	0.000	0.067			14.548			
14	MATTHEW T. DANIELS PAMELA J. DANIELS	4	OR 287 PG 2165	360904047000	2.970	0.223	0.000	0.000	0.000			2.747	NO ADDITIONAL R/W REQUIRED		
				360904056000	9.231	0.000	0.000	0.000	0.000			9.231			
15	MARK V. McGRATH	4	OR 518 PG 909	360904048000	2.965	0.223	0.000	0.000	0.000			2.742	NO ADDITIONAL R/W REQUIRED		

SUMMARY OF ADDITIONAL RW

DESIGN AGENCY

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

NOTE: ALL TEMPORARY PARCELS TO BE OF 12 MONTH DURATION.

\* DENOTES RIGHT OF WAY ENCROACHMENT  
 + DENOTES REMOVAL ITEMS  
 SEE CORRESPONDING RIGHT OF WAY PLAN SHEET FOR DESCRIPTION

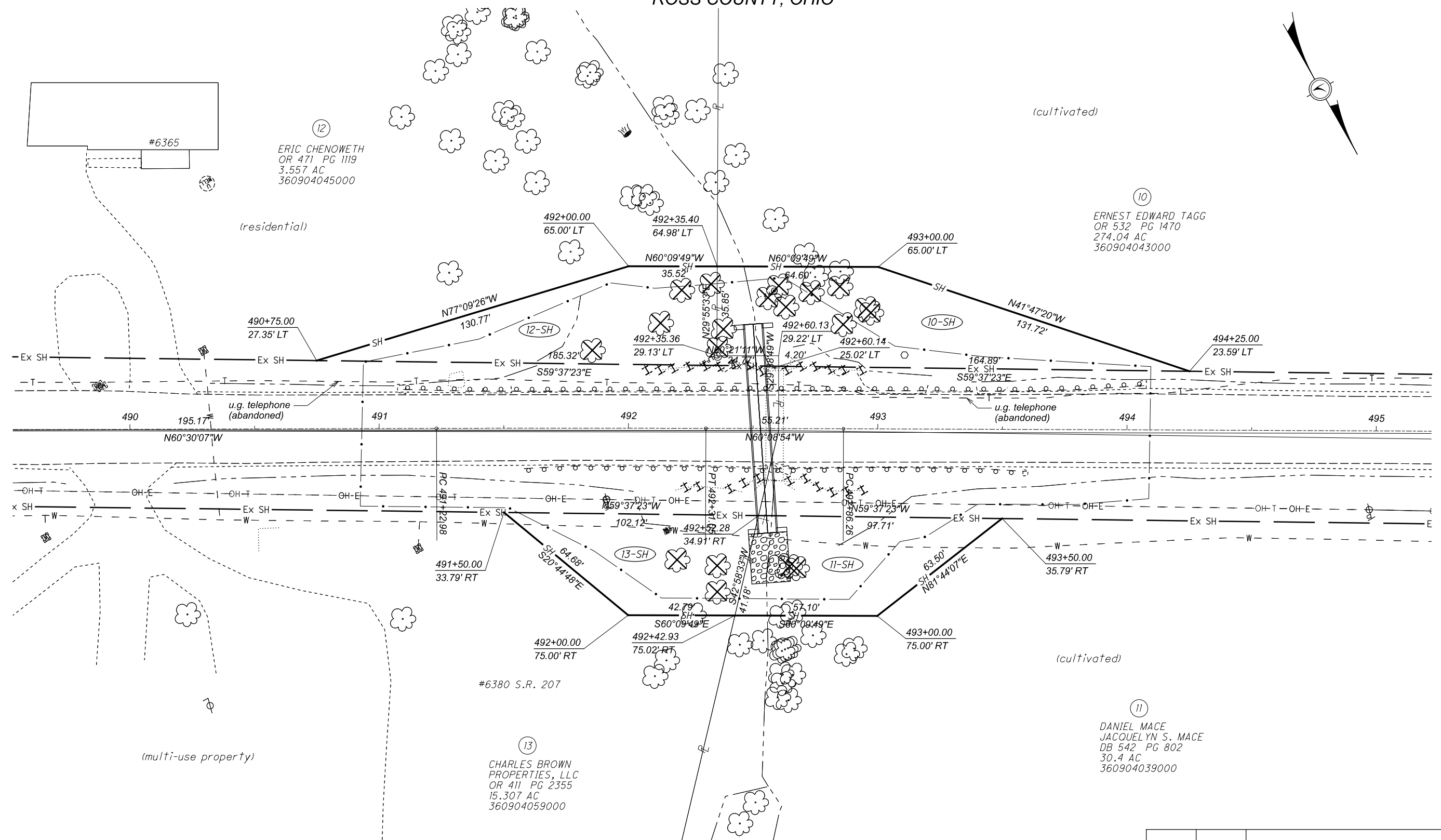
DESIGNER	MJW	
REVIEWER	MJW 5/4/21	
PROJECT ID	102911	
REV. BY	DATE	DESCRIPTION
FIELD REVIEW BY: JK	DATE: 5/4/21	
OWNERSHIP VERIFIED BY: MJW	DATE: 5/4/21	
DATE COMPLETED: 5/5/21		
SUBSET	TOTAL	
3	4	
SHEET	TOTAL	
P.19	20	



ROS-207-9.32

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ROS-207-9.32  
 VIRGINIA MILITARY SURVEY No. 4189  
 UNION TOWNSHIP  
 ROSS COUNTY, OHIO



RW DETAIL SHEET

ROS-207-9.32

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 2/10/2022 TIME: 4:04:42 PM USER: mperges p:\v\h\olc\pw\benley.com\sh\olc\pw-02\Documents\01 Active Projects\Distct 09\Ross\102911\400-Engineering\RW\Sheets\102911\_RD001.dgn

REV. BY	DATE	DESCRIPTION

DATE COMPLETED: 5/5/21

DESIGN AGENCY	
DESIGNER	MJW
REVIEWER	MJW 5/4/21
PROJECT ID	102911
SUBSET	TOTAL
4	4
SHEET	TOTAL
P.20	20