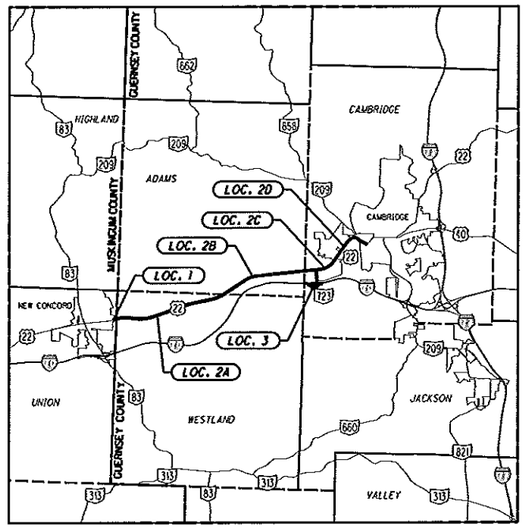


LOCATION MAP

LATITUDE: 39° 59′ 57″ LONGITUDE: 81° 41′ 34″

PORTION TO BE IMPROVED ----------

DESIGN DESIGNATION	*U.S. 22 1*	*U.S. 22 2A,2B*	*U.S. 22 2C,2D*	*S.R. 723 3*
FUNCTIONAL CLASSIFICATION	*RMC*	*RMC*	*UPA*	*UPA*
OPENING YEAR ADT (2019)	*7,200*	*6,800*	*9,400*	*6,800*
DESIGN YEAR ADT (2031)	*7,700*	*7,500*	*11,500*	*8,000*
DESIGN HOURLY VOLUME (2031)	*750*	*700*	*1,000*	*700*
DIRECTIONAL DISTRIBUTION	*58%*	*53%*	*59%*	*56%*
TRUCKS (24 HOUR B&C)	*9%*	*9%*	*11%*	*8%*
DESIGN SPEED (MPH)	*35*	*55*	*35/55*	*35*
LEGAL SPEED (MPH)	*35*	*55*	*35/55*	*35*

RMC = RURAL MAJOR COLLECTOR *UPA = URBAN PRINCIPAL ARTERIAL*

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

GUE-22/723-0.00 /0.70

VILLAGE OF NEW CONCORD
CITY OF CAMBRIDGE

ADAMS, CAMBRIDGE, UNION AND WESTLAND TOWNSHIPS

GUERNSEY AND MUSKINGUM COUNTIES

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PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING AND RELATED WORK ON U.S. 22 AND S.R. 723 INCLUDING REMOVAL OF EXISTING GRASS MEDIAN AND ADDITION OF SHOULDERS ON U.S. 22 FROM SLM 26.64-27.73 AND 0.00-3.46 IN MUSKINGUM AND GUERNSEY COUNTIES. UPGRADE TO TRAFFIC SIGNAL AT U.S. 22/S.R. 723.

PROJECT EARTH DISTURBED AREA = 12.5 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 1.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA = 13.5 ACRES

LOCATION	*PLAN SPLIT*	*COUNTY*	*ROUTE*	*BEGIN SLM*	*END SLM*	*LENGTH MILES*	*CITY/ VILLAGE*
1	*1*	*MUS*	*22*	*27.64*	*27.73*	*0.09*	*NEW CONCORD*
2A	*1*	*GUE*	*22*	*0.00*	*2.31*	*2.31*	
2B	*2*	*GUE*	*22*	*2.31*	*6.04*	*3.73*	
2C	*3*	*GUE*	*22*	*6.04*	*6.19*	*0.15*	*CAMBRIDGE*
				6.98	*7.36*	*0.38*	
2D	*2*	*GUE*	*22*	*6.19*	*6.98*	*0.79*	
3	*2*	*GUE*	*723*	*0.07*	*0.85*	*0.78*	
			I.R. 70/ S.R. 723 RAMPS				
	5	*GUE*	*U.S. 22/ S.R. 723 SIGNAL*				

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED Jeffrey Neil McLaughlin
DATE 2/25/19 *CITY ENGINEER CITY OF CAMBRIDGE*

APPROVED Jason L. Bumgarner
DATE 2/14/19 *DISTRICT DEPUTY DIRECTOR*

APPROVED [signature]
DATE 3/1/19 *DIRECTOR, DEPARTMENT OF TRANSPORTATION*

DESIGN EXCEPTIONS

U.S. 22
SUPERELEVATION, CURVE 1,2,4 - 2/20/2019

UNDERGROUND UTILITIES

OHIO811.org Before You Dig

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 5 PLANNING & ENGINEERING

ENGINEER'S SEAL

STATE OF OHIO ★ JASON SCOTT LUTZ E-77397 REGISTERED PROFESSIONAL ENGINEER ★

SIGNED: [signature]
DATE: 2/15/2019

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	7/18/14	MT-97.10	7/18/14	TC-65.11	7/21/17	
BP-3.2	1/18/19	MT-97.12	1/20/17	TC-71.10	1/19/18	
BP-4.1	7/19/13	MT-99.20	7/20/18	TC-81.21	1/18/19	
BP-7.1	7/20/18	MT-101.60	1/20/17	TC-83.10	1/19/18	
		MT-101.90	7/21/17	TC-83.20	7/21/17	
CB-1.1	7/20/18	MT-105.10	7/19/13	TC-85.20	7/20/18	
CB-2.3	1/15/16					
		TC-21.20	7/20/18			
DM-1.1	7/21/17	TC-41.20	10/18/13			
DM-4.3	1/15/16	TC-41.30	10/18/13			
DM-4.4	1/15/16	TC-42.10	10/18/13			
	-	TC-42.20	10/18/13			
MT-95.31	7/21/17	TC-52.10	10/18/13			
MT-95.32	7/21/17	TC-52.20	7/20/18			
MT-95.60	7/19/13	TC-65.10	1/17/14			

SUPPLEMENTAL SPECIFICATIONS

800	1/18/19
809	1/18/19
821	4/20/12
832	10/19/18
921	4/20/12

SPECIAL PROVISIONS

FEDERAL PROJECT NO. E150(654)
PID NO. 95457
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
GUE-22/723-0.00 /0.70
1 / 188

GUE - US 22/SR 723-00.00/00.70
190289 PID - 95457
Dist 5 5/16/2019

Conformed Set

Contract Proposal Available @ www.contracts.dot.state.oh.us/home

I:\ProjectData\GUE\95457\Design\

UTILITIES

*SEE **SHEET 48** FOR UTILITIES ASSOCIATED WITH THE MEDIAN AND TRAFFIC SIGNAL WORK. THE REST OF THE WORK ON THIS PROJECT WILL NOT AFFECT ANY KNOWN UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.*

CONTINGENCY QUANTITIES

*THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "**AS DIRECTED BY THE ENGINEER**" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.*

PAVEMENT MARKINGS

AUXILIARY MARKINGS (STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC.) SHOWN IN THE PLANS ARE TAKEN FROM EXISTING LOCATIONS. THE CONTRACTOR SHALL DOCUMENT ALL AUXILIARY MARKING LOCATIONS THAT WILL BE REMOVED/OBLITERATED DURING THIS PROJECT AND PLACE NEW AUXILIARY MARKINGS AT THE LOCATION OF THE EXISTING MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

*CENTER LINE MARKINGS SHALL BE PLACED PER THE PASSING/ NO PASSING LOGS FOUND ON THE WEBSITE BELOW. **ANY DISCREPANCIES BETWEEN THE EXISTING MARKINGS AND THE PASSING/NO PASSING LOGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PLACEMENT.***

HTTP://WWW.DOT.STATE.OH.US/DISTRICTS/D05/CAPITAL%20PROGRAMS/PRODUCTION/PAGES/CENTERLINEPASSINGANDNOPASSINGZONELOGS.ASPX

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER A MINIMUM OF 24 HOURS PRIOR TO APPLYING PAVEMENT MARKING MATERIALS ON ANY ROUTES SO THAT ODOT PERSONNEL MAY BE PRESENT DURING PAVEMENT MARKING OPERATIONS. AS PER CMS 641.04, THE CONTRACTOR SHALL PROVIDE ODOT PERSONNEL A COPY OF THE DLS SHORT REPORT AT THE END OF EVERY WORK DAY OR AS REQUESTED THROUGHOUT THE DAY. THE CONTRACTOR SHALL NOT RECEIVE PAYMENT FOR ANY WORK DONE WITHOUT NOTIFICATION AS STATED ABOVE OR IF DSL SHORT REPORTS ARE NOT PROVIDED DAILY.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE

*DEPTH OF PLANING SHALL BE AS SHOWN ON DATA TABLES. **THE PLANING DEPTH FROM SLM 0.33 (STA. 44+00) TO SLM 3.46 (STA. 208+00) SHALL BE VARIABLE TO ACHIEVE PAVEMENT CROSS SLOPES AS SHOWN IN THE SUPERELEVATION TABLES.***

THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

NATIONAL ROAD MARKERS

AVOID IMPACTS TO ALL NATIONAL ROAD MARKERS ALONG U.S. 22

ITEM 253, PAVEMENT REPAIR

*ALL REPAIRS SHALL TAKE PLACE PRIOR TO THE PLANING/PAVING OPERATIONS. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE **5"** OR TO THE **TOP OF CONCRETE BASE**. AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH ITEM 407 TACK COAT. REPLACEMENT MATERIAL WILL BE **5"** OF ITEM 301, ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED).*

*REPAIR QUANTITIES MAY BE USED ON THE MAINLINE PAVEMENT, RAMP PAVEMENT, AND PAVED SHOULDERS, **AS DIRECTED BY THE ENGINEER**.*

ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 253, PAVEMENT REPAIR.

ITEM 253, PAVEMENT REPAIR

LOCATION 2A:	***120 CU.YD.***	***LOCATION 2B:***	***75 CU.YD.***
LOCATION 2C:	***85 CU.YD.***	***LOCATION 2D:***	***85 CU.YD.***
LOCATION 3:	***10 CU.YD.***		

ITEM 407, NON-TRACKING TACK COAT

*THE RATE OF APPLICATION OF THE ITEM 407, NON-TRACKING TACK COAT SHALL BE PER **CMS TABLE 407.06-1** AND SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF **0.08 GAL/SY** FOR TACK COAT UNDER THE SURFACE COURSE, (FOR ESTIMATING PURPOSES ONLY).*

ITEM 408, PRIME COAT, AS PER PLAN

*THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER CMS 702) AT A RATE OF **0.40 GAL/SY** TO THE COMPLETED AGGREGATE SHOULDER. TO REDUCE AGGREGATE LOSS, **THE PRIME COAT SHALL BE APPLIED WITHIN SEVEN (7) DAYS AFTER PLACEMENT OF THE AGGREGATE SHOULDER OR LIQUATED DAMAGES PER CMS 108.07 WILL BE ASSESSED.** THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.*

ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

*THE CONTRACTOR SHALL PLACE A **1" X 2" DEEP** BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.*

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

AGGREGATE SHOULDERS SHALL EXTEND FROM TWO (2) FEET TO FOUR (4) FEET WHERE THE EXISTING BERM WIDTH PERMITS, AS DIRECTED BY THE ENGINEER. ADDITIONAL QUANTITY HAS BEEN INCLUDED IN THE PLANS.

SUSPEND AGGREGATE SHOULDERS AT ALL DRIVES AND MAILBOX TURNOUTS.

ALL AREAS SHALL BE LOOSENED AND FREE OF VEGETATION PER 617.04 PRIOR TO PLACEMENT OF COMPACTED AGGREGATE. AGGREGATE SHOULDERS SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE ROADWAY. AGGREGATE SHOULDERS MAY BE REDUCED TO ONE (1) FOOT WIDE WHERE NECESSARY AND MAY BE OMITTED ON SLOPES STEEPER THAN 4:1 AT THE APPROVAL OF THE ENGINEER.

SHOULDER PREPARATION SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 617, COMPACTED AGGREGATE, AS PER PLAN.

ITEM 621, RAISED PAVEMENT MARKER REMOVED

AN ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR DISPOSAL BY THE CONTRACTOR. RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ITEM 611, CATCH BASIN ADJUSTED TO GRADE
ITEM 611, MANHOLE ADJUSTED TO GRADE
ITEM 638, VALVE BOX ADJUSTED TO GRADE

THE FOLLOWING ITEMS HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIAND SHALL BE USED TO ADJUST CATCH BASINS, MANHOLES AND VALVE BOXES:

ITEM 611, CATCH BASIN ADJUSTED TO GRADE
LOCATION 2C: 1 EACH

ITEM 611, MANHOLE ADJUSTED TO GRADE
LOCATION 2C: 3 EACH

ITEM 638, VALVE BOX ADJUSTED TO GRADE
LOCATION 2C: 2 EACH

CALCULATED PTB CHECKED JSL

GENERAL NOTES

GUE-22/723-0.00
/ 0.70

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RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 441, ASPHALT CONCRETE, HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. **PAVING SHALL EXTEND FOUR (4) FEET INTO EACH DRIVE (MEASURED FROM THE EDGE OF PAVED SHOULDER) UNLESS SPECIFIED IN THE PLANS.** THE ENGINEER MAY EXTEND PAVING DISTANCE FOR ASPHALT DRIVEWAYS IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED.

IF NO EXISTING PAVEMENT IS PRESENT OUTSIDE THE PAVED SHOULDER THAN BOTH SURFACE AND INTERMEDIATE COURSES SHALL BE PLACED.

AN ESTIMATED QUANTITY OF ITEM 202, WEARING COURSE REMOVED HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO CREATE BUTT JOINTS FOR ALL EXISTING ASPHALT, CONCRETE, AND GRAVEL DRIVES/APRONS. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED.

IF AN EXISTING APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

BUTT JOINTS AT THE END OF ALL PAVED DRIVEWAYS SHALL BE **1.25"** IN DEPTH TO ACCOMMODATE THE SURFACE COURSE. BUTT JOINTS AT THE END OF GRAVEL DRIVEWAYS SHALL BE **2.25"** IN DEPTH TO ACCOMMODATE THE SURFACE AND INTERMEDIATE COURSES AND CREATE A SMOOTH TRANSITION FROM GRAVEL TO ASPHALT WITH NO BUMPS.

NO WORK SHALL BE PERFORMED ON DRIVEWAYS LOCATED IN CURB SECTIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE:

ITEM 202, WEARING COURSE REMOVED

LOCATION 2A:	**250 SQ.YD.**	**LOCATION 2B:**	**620 SQ.YD.**
LOCATION 2C:	**120 SQ.YD.**	**LOCATION 2D:**	**80 SQ.YD.**

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 70-22M

LOCATION 2A:	**9 CU.YD.**	**LOCATION 2B:**	**22 CU.YD.**
LOCATION 2C:	**5 CU.YD.**	**LOCATION 2D:**	**5 CU.YD.**

ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)

LOCATION 2A:	**5 CU.YD.**	**LOCATION 2B:**	**11 CU.YD.**
LOCATION 2C:	**3 CU.YD.**	**LOCATION 2D:**	**3 CU.YD.**

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN-OUTS. TURN-OUTS SHALL BE PAVED AS SHOWN IN STANDARD DRAWING **BP-4.1**. **PAVING SHALL EXTEND A MINIMUM OF FOUR (4) FEET OUTSIDE THE EDGE OF PAVED SHOULDER.**

IF NO EXISTING PAVEMENT IS PRESENT OUTSIDE THE PAVED SHOULDER THAN BOTH SURFACE AND INTERMEDIATE COURSES SHALL BE PLACED.

ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN-OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE:

ITEM 202, WEARING COURSE REMOVED

LOCATION 2A:	**70 SQ.YD.**	**LOCATION 2B:**	**210 SQ.YD.**
LOCATION 2C:	**30 SQ.YD.**	**LOCATION 2D:**	**10 SQ.YD.**

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 70-22M

LOCATION 2A:	**5 CU.YD.**	**LOCATION 2B:**	**8 CU.YD.**
LOCATION 2C:	**5 CU.YD.**	**LOCATION 2D:**	**5 CU.YD.**

ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)

LOCATION 2A:	**3 CU.YD.**	**LOCATION 2B:**	**4 CU.YD.**
LOCATION 2C:	**3 CU.YD.**	**LOCATION 2D:**	**3 CU.YD.**

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

BEFORE PLACEMENT OF THE SURFACE COURSE, WHILE PERFORMING LINEAR GRADING, THE CONTRACTOR SHALL EXCAVATE AN AREA **10 INCHES WIDE** OUTSIDE THE EXISTING PAVED SHOULDER TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE.

DURING LINEAR GRADING, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AFTER LINEAR GRADING IS COMPLETED THAT HAS NOT BEEN DISPOSED OF ON-SITE, SHALL BE REMOVED AND DISPOSED OFF-SITE BY THE CONTRACTOR PRIOR TO PLACEMENT OF THE SURFACE COURSE AND SAFETY EDGE.

GRADED SHOULDERS OF 12 INCHES OR LESS WHERE THE SAFETY EDGE CAN BE OMITTED, THE PREPARING SUBGRADE FOR SHOULDER PAVING CAN ALSO BE OMITTED. THE CONTRACTOR WILL ONLY BE PAID FOR AREAS WHERE THE ABOVE WORK IS BEING PREFORMED.

ALL EQUIPMENT, LABOR, AND INCIDENTALS REQUIRED TO PERFORM LINEAR GRADING AND EXCAVATION OF SHOULDER SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

SAFETY EDGE PLAN NOTE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CAMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANS TECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TransTech Systems, Inc.
1594 State Street
Schenectady, NY 12304
1-800-724-6306
www.transtechsys.com

Advant-Edge Paving Equipment, LLC.
P.O. Box 9163
Niskayuna, NY 12309-0163
518-280-6090
www.advantaedgepaving.com

Carlson Safety Edge End Gate
18425 50th Avenue East
Tacoma, WA 98446
253-875-8000

Troxler Electronics Laboratories, Inc.
3008 E. Cornwallis Rd.
Research Triangle Park, NC 27709
1-877-TROXLER
www.troxlerlabs.com

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 mm) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M

LOCATION 1:	**2 CU.YD.**	**LOCATION 2A:**	**36 CU.YD.**
LOCATION 2B:	**58 CU.YD.**	**LOCATION 2C:**	**8 CU.YD.**
LOCATION 2D:	**12 CU.YD.**		

CALCULATED PTB CHECKED JSL

GENERAL NOTES

GUE-22/723-0.00
/ 0.70

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ITEM 614, MAINTAINING TRAFFIC

*A MINIMUM OF 1-LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON **U.S. 22** BY THE USE OF THE EXISTING PAVEMENT AND STANDARD DRAWINGS LISTED ON THE TITLE SHEET.*

SEE SHEETS 52-60 FOR MOT DETAILS ON U.S. 22 MEDIAN REMOVAL.

TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON S.R. 723 AND I.R. 70/ S.R. 723 RAMPS.

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES INCLUDING REPAIRS.

AT NO TIME SHALL TRAFFIC BE MAINTAINED ON THE PLANED SURFACE, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC. THIS RULE DOES NOT APPLY TO PLANING AT BRIDGES OR ACROSS BRIDGES UNLESS THE BRIDGE IS BEING TREATED THE SAME AS THE ADJACENT ROADWAY.

***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.*

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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.

NOTIFICATION OF TRAFFIC RESTRICTIONS

*THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER A MINIMUM OF **TWENTY-ONE (21) DAYS** PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND/OR ROAD CLOSURES.*

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

THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT D05.PIO@DOT.OHIO.GOV

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT BRIAN.BOSCH@DOT.OHIO.GOV

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS. PAYMENT FOR GRINDING BUTT JOINTS SHALL BE INCLUDED WITH PAVEMENT PLANING.

*THE MINIMUM ASPHALT WEDGE LENGTH AT BUTT JOINTS SHALL BE **10'**. THE GRINDING FOR BUTT JOINTS SHALL BE INCLUDED WITH ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE.*

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD.
1	U.S. 22	BEGIN WORK	27.66	1.8
		LOCATION 1 TOTAL		**2.0**
2A	U.S. 22	GUE-22-0006	0.06	5.1
		LOCATION 2A TOTAL		**6.0**
2B	U.S. 22	GUE-22-0381	3.81	4.1
		GUE-22-0471	4.71	4.1
		LOCATION 2B TOTAL		**9.0**
2C	U.S. 22	GUE-22-0659	6.59	3.0
		LOCATION 2C TOTAL		**3.0**
2D	U.S. 22	END WORK: U.S. 22/ DEWEY AVE	7.38	1.5
		END WORK: DEWEY AVE	7.38	0.9
		END WORK: JEFERSON AVE	7.38	1.4
		LOCATION 2D TOTAL		**4.0**
3	S.R. 723	BEGIN WORK	0.07	0.8
		GUE-723-0040	0.40	3.1
		GUE-723-0059	0.59	2.0
		AT U.S. 22	0.76	1.6
		SW LOOP END		0.8
		NW RAMP END		0.8
		NE RAMP BEGIN		0.8
		LOCATION 3 TOTAL		**10.0**

DROP-OFFS IN WORK ZONES

*DROP-OFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE **LUMP SUM** BID FOR **ITEM 614, MAINTAINING TRAFFIC**.*

COOPERATION BETWEEN CONTRACTORS

*THE STATE OF OHIO HAS CONTRACTED PROJECT **D05-DS-FY2020 PID 102533** WHICH MAY BE CONSTRUCTED CONCURRENTLY WITH THIS PROJECT. IT IS IMPERATIVE THAT THE CONTRACTORS COOPERATE FULLY WITH EACH OTHER AS OUTLINED IN SECTION 105.08 OF THE CMS MANUAL. ALL MAINTENANCE OF TRAFFIC SHALL BE COORDINATED BETWEEN PROJECTS AND NOT CONFLICT WITH ONE ANOTHER.*

ITEM 614, WORK ZONE MARKING SIGN

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITIES OF WORK ZONE MARKING SIGN TO BE USED AS DIRECTED BY THE ENGINEER:

W8-H12A (NO EDGE LINES):
LOCATION 2A: 12 EACH
LOCATION 2B: 20 EACH
LOCATION 2D: 5 EACH

ALL "NO EDGE LINES" SIGN LOCATIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

ITEM 614, WORK ZONE MARKING SIGN
LOCATION 2A: 12 EACH
LOCATION 2B: 20 EACH
LOCATION 2D: 5 EACH

CALCULATED PTB CHECKED JSL

MAINTENANCE OF TRAFFIC NOTES

GUE-22/723-0.00 / 0.70

ITEM 614, WORK ZONE PAVEMENT MARKINGS

*THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS IN ACCORDANCE WITH **CMS 614.11** AND STANDARD DRAWING **MT-99.20** UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE QUANTITIES BELOW ARE FOR PLACEMENT OF TEMPORARY MARKINGS ON BOTH THE INTERMEDIATE AND SURFACE COURSES FOR THE CONCRETE AND ASPHALT SECTIONS OF ROADWAY.*

ITEM 614, WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT (INTERMEDIATE)

LOCATION 1:	**0.02 MILE**	**LOCATION 2C:**	**0.52 MILE**
LOCATION 2A:	**4.62 MILE**	**LOCATION 2D:**	**1.26 MILE**
LOCATION 2B:	**7.46 MILE**	**LOCATION 3:**	**0.56 MILE**

ITEM 614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT (INTERMEDIATE)

LOCATION 2B:	**2.46 MILE**	**LOCATION 2C:**	**0.53 MILE**
LOCATION 2D:	**1.11 MILE**		

ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (INTERMEDIATE)

LOCATION 1:	**0.40 MILE**	**LOCATION 2C:**	**1.06 MILE**
LOCATION 2A:	**9.24 MILE**	**LOCATION 2D:**	**1.58 MILE**
LOCATION 2B:	**10.14 MILE**	**LOCATION 3:**	**3.72 MILE**

ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT (INTERMEDIATE)

LOCATION 2B:	**482 FT**	**LOCATION 2D:**	**130 FT**
LOCATION 3:	**425 FT**		

ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT (INTERMEDIATE)

LOCATION 2B:	**48 FT**	**LOCATION 2C:**	**13 FT**
LOCATION 3:	**29 FT**		

ITEM 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT (SURFACE)

LOCATION 1:	**0.02 MILE**	**LOCATION 2C:**	**0.52 MILE**
LOCATION 2A:	**4.62 MILE**	**LOCATION 2D:**	**1.26 MILE**
LOCATION 2B:	**7.46 MILE**	**LOCATION 3:**	**0.56 MILE**

ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT (SURFACE)

LOCATION 2B:	**2.46 MILE**	**LOCATION 2C:**	**0.53 MILE**
LOCATION 2D:	**1.11 MILE**		

ITEM 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT (SURFACE)

LOCATION 1:	**0.40 MILE**	**LOCATION 2C:**	**1.06 MILE**
LOCATION 2A:	**9.24 MILE**	**LOCATION 2D:**	**1.58 MILE**
LOCATION 2B:	**10.14 MILE**	**LOCATION 3:**	**3.72 MILE**

ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT (SURFACE)

LOCATION 2B:	**482 FT**	**LOCATION 2D:**	**130 FT**
LOCATION 3:	**425 FT**		

ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT (SURFACE)

LOCATION 2B:	**48 FT**	**LOCATION 2C:**	**13 FT**
LOCATION 3:	**29 FT**		

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. *EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK ACCEPTED.*

2. *NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.*

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MIS-ALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT, THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION (CONT'D)

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. *TIME OF NOTIFICATION OF MALFUNCTION*

2. *TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION*

3. *ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED*

4. *A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE*

5. *TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.*

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

CALCULATED PTB CHECKED JSL

MAINTENANCE OF TRAFFIC NOTES

GUE-22/723-0.00 / 0.70

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ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (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) SHOULD BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS, ***AS DIRECTED BY THE ENGINEER****:*

- *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 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 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.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT 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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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.

LAW ENFORCEMENT OFFICERS (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 HOURS PAID SHALL INCLUDE 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.

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
LOCATION 3: 50 HOURS

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FEET AND 475 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (CONT'D.)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

A TOTAL OF ***3 PCMS*** *SHALL BE REQUIRED FOR THIS PROJECT.*
3 SIGNS X 6 MONTHS = 18 SNMT

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
LOCATION 2A: 6 SNMT
LOCATION 2B: 6 SNMT
LOCATION 3: 6 SNMT

CALCULATED PTB CHECKED JSL

MAINTENANCE OF TRAFFIC NOTES

GUE-22/723-0.00 / 0.70

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SEQUENCE OF OPERATIONS

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC. THE CONTRACTOR SHALL COMPLETE ALL WORK AS DESCRIBED IN THE SEQUENCE OF OPERATIONS, FOR EACH PHASE OF CONSTRUCTION, BEFORE STARTING WORK ON THE NEXT PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL NOT BE ALLOWED TO START WORK ON ANY PHASE OF CONSTRUCTION UNTIL APPROVAL HAS BEEN GRANTED BY THE PROJECT ENGINEER.

THE CONTRACTOR MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC SEQUENCING, PROVIDED NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL, IN WRITING, HAS BEEN GRANTED BY THE OFFICE OF PLANNING AND ENGINEERING. ALL WORK NOT SPECIFIED IN THIS SEQUENCE CAN BE COMPLETED ANYTIME DURING THE DURATION OF THE PROJECT AT THE APPROVAL OF THE ENGINEER.

INTERIM COMPLETION DATE
PHASE 1 SHALL BE COMPLETED BY OCTOBER 15TH, 2019.

PHASE 1: (CLOSE INSIDE LANES – SEE SHEET 52)
(1) EXCAVATE MEDIAN, PERFORM UNDERCUT (WHERE NECESSARY), SUBGRADE COMPACTION

(2) REMOVE EXISTING MEDIAN CURB AND GUTTER, ABANDON MEDIAN CATCH BASINS

(3) INSTALL PROPOSED DRAINAGE ITEMS IN BIFURCATED SECTION (23+71 TO STA. 45+00)

(4) PLACE 6" ITEM 304, AGGREGATE BASE, PLACE 9" AND VARIABLE ITEM 301, ASPHALT CONCRETE BASE, PLACE 1" ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 IN MEDIAN AND INSIDE LANES

PHASE 2: (WINTER SHUTDOWN, ALL LANES OPEN – SEE SHEET 53)

PHASE 3: (SHIFT TRAFFIC TO WB LANES – SEE SHEET 54)
(1) EXCAVATE EASTBOUND SHOULDER, SUBGRADE COMPACTION

(2) REMOVE EXISTING EASTBOUND SHOULDER CURB AND GUTTER, ABANDON SHOULDER CATCH BASINS

(3) PLACE 6" ITEM 304, AGGREGATE BASE, PLACE 6" ITEM 301, ASPHALT CONCRETE BASE IN EASTBOUND SHOULDER

(4) PERFORM VARIABLE PLANING AND PLACE ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 IN EASTBOUND LANES

PHASE 4: (SHIFT TRAFFIC TO EB LANES – SEE SHEET 55)
(1) EXCAVATE WESTBOUND SHOULDER, SUBGRADE COMPACTION

(2) REMOVE EXISTING WESTBOUND SHOULDER CURB AND GUTTER, ABANDON SHOULDER CATCH BASINS

(3) PLACE 6" ITEM 304, AGGREGATE BASE, PLACE 6" ITEM 301, ASPHALT CONCRETE BASE IN WESTBOUND SHOULDER

(4) PERFORM VARIABLE PLANING AND PLACE ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 IN WESTBOUND LANES

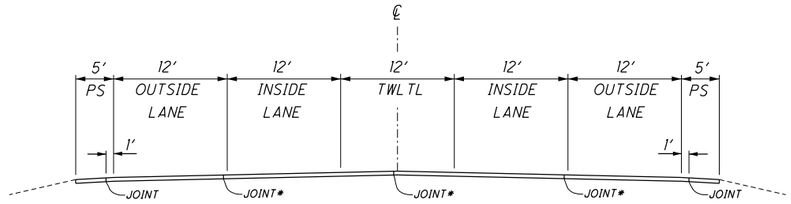
PHASE 5: (MAINTAIN ONE LANE IN EACH DIRECTION – SEE THIS SHEET)
(1) PERFORM VARIABLE PLANING AND PLACE ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 IN TAPERED SECTIONS (STA. 45+00 TO STA. 51+00, STA. 204+00 TO STA. 208+23)

(2) PLACE 1" ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 ON REST OF PROJECT

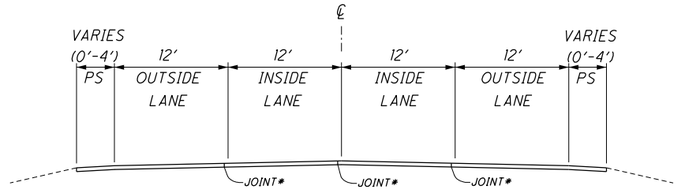
PHASE 6: (MAINTAIN ONE LANE IN EACH DIRECTION – SEE THIS SHEET)
(1) PLACE 1.25" ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1 ON ENTIRE PROJECT

(2) PLACE ITEM 617, COMPACTED AGGREGATE, AS PER PLAN ON ENITRE PROJECT

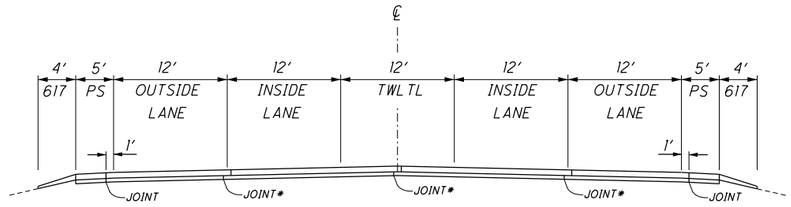
(3) PLACE FINAL PAVEMENT MARKINGS



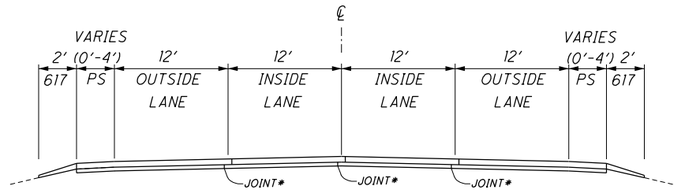
U.S. 22 EB/WB
PHASE 5 (5-LANE)



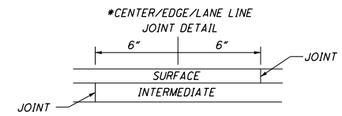
U.S. 22 EB/WB
PHASE 5 (4-LANE)



U.S. 22 EB/WB
PHASE 6 (5-LANE)



U.S. 22 EB/WB
PHASE 6 (4-LANE)



CALCULATED LME
CHECKED JSL

SEQUENCE OF OPERATIONS

GUE-22/723-0.00
/0.70

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PAVEMENT DATA

SEE SHEET 11A FOR TYPICALS

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH MILES	LENGTH LIN. FT.	TYPICAL	PAVEMENT WIDTH (FT.)	PAVEMENT AREA	254 PAVEMENT PLANING, ASPHALT CONCRETE, VARIABLE (0.00"-2.20")	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1.25"	254 PAVEMENT PLANING, ASPHALT CONCRETE, 2.25"	407 NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	407 NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	441 THICKNESS	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	441 THICKNESS	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M
									SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.
1	MUS	U.S. 22	27.64	27.73	0.09	475.2	1	58.0 AVG	3,062.4		3,062.40		245.0	153.2	1.00	85.1	1.25	106.3
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											**3,062.4**		**398.2**			**85.1**		**106.3**
2A	GUE	U.S. 22	0.00	0.33	0.33	1,742.4	1	60.0	11,616.0		11,616.00		929.3	580.8	1.00	322.7	1.25	403.3
			0.33	2.31	1.98	10,454.4	1	60.0	69,696.0	69,696.0			5,575.7	3,484.8	1.00	1,936.0	1.25	2,420.0
	BRIDGE DEDUCTIONS								(483.1)		(483.1)		(38.6)	(24.2)	1.00	(13.4)	1.25	(16.8)
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)										**69,696.0**	**11,132.9**		**10,507.8**			**2,245.3**		**2,806.5**
2B	GUE	U.S. 22	2.31	3.46	1.15	6,072.0	1	60.0	40,480.0	40,480.0			3,238.4	2,024.0	1.00	1,124.4	1.25	1,405.6
			3.46	3.49	0.03	158.4	1	60.0	1,056.0		1,056.00		84.5	52.8	1.00	29.3	1.25	36.7
			3.49	3.69	0.20	1,056.0	1	54.0 AVG	6,336.0		6,336.00		506.9	316.8	1.00	176.0	1.25	220.0
			3.69	6.04	2.35	12,408.0	1	48.0	66,176.0		66,176.0		5,294.1	3,308.8	1.00	1,838.2	1.25	2,297.8
	BRIDGE DEDUCTIONS								(963.7)		(963.7)		(77.1)	(48.2)	1.00	(26.8)	1.25	(33.5)
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)										**40,480.0**	**72,604.3**		**14,701.0**			**3,141.1**		**3,926.6**
2C	GUE	U.S. 22	6.04	6.19	0.15	792.0	1	48.0	4,224.0		4,224.0		338.0	211.2	1.00	117.3	1.25	146.7
			6.19	6.98	0.79	4,171.2	**SEE LOCATION 2D**											
			6.98	7.36	0.38	2,006.4	1	36.0	8,025.6			8,025.6	642.1	401.3	1.00	222.9	1.25	278.7
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)											**4,224.0**	**8,025.6**	**1,592.6**			**340.2**		**425.4**
2D	GUE	U.S. 22	6.19	6.34	0.15	792.0	1	48.0	4,224.0		4,224.0		338.0	211.2	1.00	117.3	1.25	146.7
			6.34	6.53	0.19	1,003.2	1	40.0 AVG	4,458.7		4,458.7		356.7	223.0	1.00	123.9	1.25	154.8
			6.53	6.98	0.45	2,376.0	1	24.0	6,336.0		6,336.0		506.9	316.8	1.00	176.0	1.25	220.0
	BRIDGE DEDUCTIONS								(396.5)		(396.5)		(31.7)	(19.8)	1.00	(11.0)	1.25	(13.8)
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)											**14,622.2**		**1,901.1**			**406.2**		**507.7**
3	GUE	S.R. 723	0.07	0.31	0.24	1,267.2	1	16.0	2,252.8			2,252.8	180.3	112.7	1.00	62.6	1.25	78.2
			0.31	0.55	0.24	1,267.2	3	16.0	2,252.8			2,252.8	180.3	112.7	1.00	62.6	1.25	78.2
			0.44	0.51	0.07	369.6	**BRIDGE GUE-723-0040**											
			0.51	0.55	0.04	211.2	3	24.0	563.2			563.2	45.1	28.2	1.00	15.6	1.25	19.6
			0.55	0.61	0.06	316.8	1	54.0	1,900.8			1,900.8	152.1	95.1	1.00	52.8	1.25	66.0
			0.61	0.67	0.06	316.8	**BRIDGE GUE-723-0059**											
			0.67	0.83	0.16	844.8	1	54.0	5,068.8			5,068.8	405.6	253.5	1.00	140.8	1.25	176.0
			0.83	0.85	0.02	105.6	**SEE SHEET 13 (EXTRA AREA - DETAIL 1)**											
			SW LOOP			1,860.0	1	16.0	3,306.7			3,306.7	264.6	165.4	1.00	91.9	1.25	114.8
			NW RAMP			740.0	1	16.0	1,315.6			1,315.6	105.3	65.8	1.00	36.5	1.25	45.7
			NE RAMP			1,180.0	1	16.0	2,097.8			2,097.8	167.9	104.9	1.00	58.3	1.25	72.8
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)												**18,758.5**	**2,439.5**			**521.1**		**651.3**

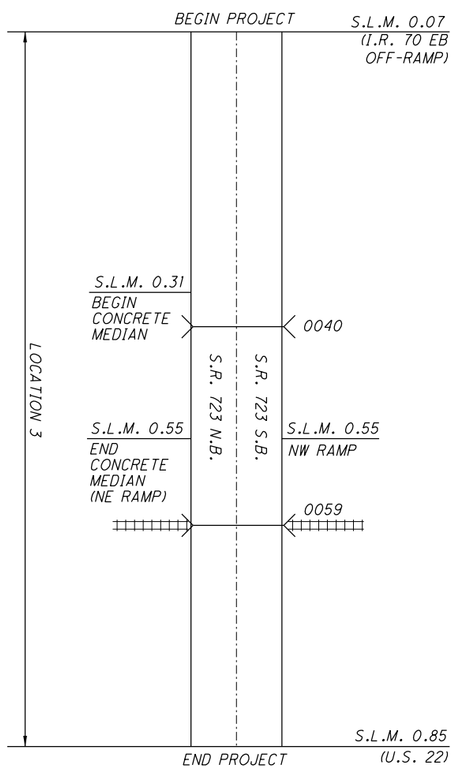
CALCULATED PTB CHECKED JSL

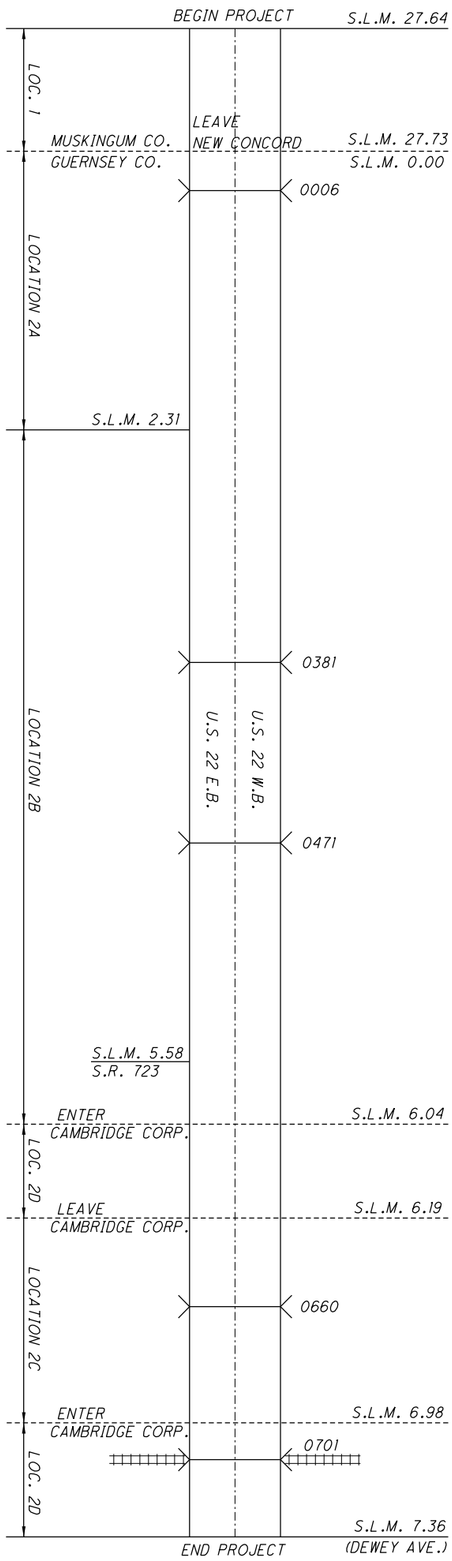
PAVEMENT DATA

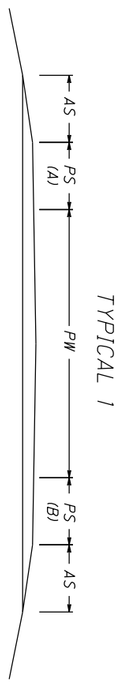
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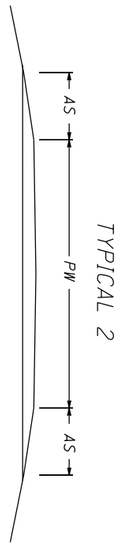
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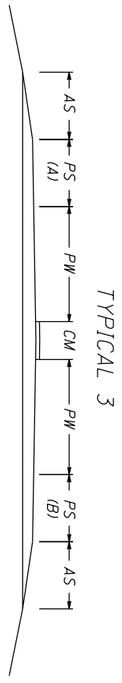








PW = PAVEMENT WIDTH
PS = PAVED SHOULDER
AS = AGGREGATE SHOULDER
CM = CONCRETE MEDIAN



SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH MILES	LENGTH LIN. FT.	TYPICAL	PAVED SHOULDER WIDTH (FT.) (WIDTHS ARE AVERAGE THROUGHOUT SECTION) A	PAVED SHOULDER WIDTH (FT.) (WIDTHS ARE AVERAGE THROUGHOUT SECTION) B	SHOULDER AREA	209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1.25"	254 PAVEMENT PLANING, ASPHALT CONCRETE, 2.25"	407 NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	407 NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	408 PRIME COAT, AS PER PLAN	441 THICKNESS	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	441 THICKNESS	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	617 THICKNESS	617 COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH)	617 COMPACTED AGGREGATE, AS PER PLAN (4' WIDTH)
										SQ. YD.	MILE	SQ. YD.	SQ. YD.	GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	CU. YD.
1	MUS	U.S. 22	27.64	27.73	0.09	475.2	1	5	5	528.0	0.18			42.2	26.4	169.0	1.00	14.7	1.25	18.3	3.00		35.2
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											**0.18**			**68.6**		**169.0**		**14.7**		**18.3**		**35.2**	
2A	GUE	U.S. 22	0.00	2.31	2.31	12,196.8	1	5	5	13,552.0	4.62	438.00		1084.2	677.6	4,336.6	1.00	376.4	1.25	470.6	3.00		903.5
		BRIDGE DEDUCTIONS								(114.6)	(0.01)			(9.2)	(5.7)	(1.3)	1.00	(3.2)	1.25	(4.0)	3.00		(2.5)
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)											**4.61**	**438.0**		**1,746.9**		**4,335.3**		**373.2**		**466.6**		**901.0**	
2B	GUE	U.S. 22	2.31	3.51	1.20	6,336.0	1	5	5	7,040.0	2.40			563.2	352.0	2,252.8	1.00	195.6	1.25	244.4	3.00		469.3
			3.51	6.04	2.53	13,358.4	1	2	2	5,937.1	5.06	5,937.1		475.0	296.9	2,374.8	1.00	164.9	1.25	206.1	2.00		659.7
		BRIDGE DEDUCTIONS								(80.3)	(0.03)	(80.3)		(6.4)	(4.0)	(1.4)	1.00	(2.2)	1.25	(2.8)	2.00		(3.5)
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)											**7.43**	**5,856.8**		**1,676.7**		**4,626.2**		**358.3**		**447.7**		**1,125.5**	
2C	GUE	U.S. 22	6.04	6.19	0.15	792.0	1	2	2	352.0	0.30	352.0		28.2	17.6	140.8	1.00	9.8	1.25	12.2	2.00		39.1
			6.19	6.98	0.79	4,171.2	**SEE LOCATION 2D**																
			6.98	7.36	0.38	2,006.4	1	1	1	445.9	0.76		445.9	35.7	22.3	356.7	1.00	12.4	1.25	15.5	2.00		99.1
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)											**1.06**	**352.0**	**445.9**	**103.8**		**497.5**		**22.2**		**27.7**		**138.2**	
2D	GUE	U.S. 22	6.19	6.34	0.15	792.0	1	2	2	352.0	0.30	352.0		28.2	17.6	140.8	1.00	9.8	1.25	12.2	2.00		39.1
			6.34	6.53	0.19	1,003.2	2				0.38					178.3	1.00		1.25		2.00		49.5
			6.53	6.98	0.45	2,376.0	1	6	6	3,168.0	0.90	3,168.0		253.4	158.4	422.4	1.00	88.0	1.25	110.0	2.00		117.3
		BRIDGE DEDUCTIONS								(132.2)	(0.03)	(132.2)		(10.6)	(6.6)	(2.3)	1.00	(3.7)	1.25	(4.6)	2.00		(5.9)
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)											**1.55**	**3,387.8**	**891.8**	**648.0**		**739.2**		**94.1**		**117.6**		**200.0**	
3	GUE	S.R. 723	0.07	0.31	0.24	1,267.2	1	3	6	1,267.2			1267.2	101.4	63.4	225.3	1.00	35.2	1.25	44.0	2.00	31.3	
			0.31	0.44	0.13	686.4	3	1.5	6	572.0			572.0	45.8	28.6	122.0	1.00	15.9	1.25	19.9	2.00	16.9	
			0.44	0.51	0.07	369.6	**BRIDGE GUE-723-0040**																
			0.51	0.55	0.04	211.2	3	8	8	375.5			375.5	30.0	18.8	37.5	1.00	10.4	1.25	13.0	2.00	5.2	
			0.55	0.61	0.06	316.8	1	8	8	563.2			563.2	45.1	28.2	56.3	1.00	15.6	1.25	19.6	2.00	7.8	
			0.61	0.67	0.06	316.8	**BRIDGE GUE-723-0059**																
			0.67	0.78	0.11	580.8	1	3	16	1,226.1			1226.1	98.1	61.3	103.3	1.00	34.1	1.25	42.6	2.00	14.3	
			0.78	0.83	0.05	264.0	1	10		293.3			293.3	23.5	14.7	46.9	1.00	8.1	1.25	10.2	2.00	6.5	
			0.83	0.85	0.02	105.6	**SEE SHEET 13 (EXTRA AREA - DETAIL 1)**																
			SW LOOP		0.13	700.0		1.5	6	583.3			583.3	46.7	29.2	124.4	1.00	16.2	1.25	20.3	2.00	17.3	
					0.22	1,160.0		3	6	1,160.0			1160.0	92.8	58.0	206.2	1.00	32.2	1.25	40.3	2.00	28.6	
			NW RAMP		0.14	740.0		3	6	740.0			740.0	59.2	37.0	131.6	1.00	20.6	1.25	25.7	2.00	18.3	
			NE RAMP		0.22	1,180.0		3	6	1,180.0			1180.0	94.4	59.0	209.8	1.00	32.8	1.25	41.0	2.00	29.1	
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)													**7,960.6**	**1,035.2**		**1,263.3**		**221.1**		**276.6**		**175.3**	

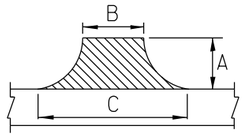
SEE SHEET IIA FOR TYPICALS

CALCULATED PTB CHECKED JSL

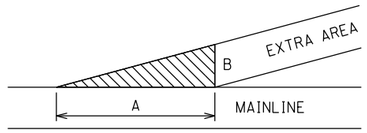
SHOULDER DATA

GUE-22/723-0.00 / 0.70

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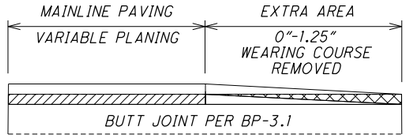


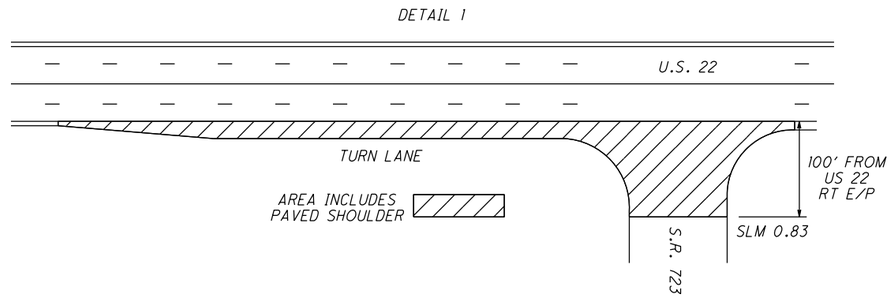
$$AREA = \left[\frac{A\ (B + C)}{2} \right] / 9$$



IF C=0 THEN:

$$AREA = \left[\frac{A}{2} \times B \right] / 9$$





EXTRA AREA DATA

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DIMENSIONS A	INTERSECTIONS DIMENSIONS B	INTERSECTIONS DIMENSIONS C	AREA	202 WEARING COURSE REMOVED	407 NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	407 NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	441 THICKNESS	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	441 THICKNESS	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448),PG 64-22	441 THICKNESS	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448),PG 70-22M
					FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.
1	MUS	U.S. 22	RT	EASTLAND DR	18	12	30	42.0	42.0	3.4				1.25	1.5		
			LT	TR 647 SNOOTS LN	37	101		207.7	207.7	16.7				1.25	7.3		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)									**249.7**	**20.1**					**8.8**		
2A	GUE	U.S. 22	RT	CR 14 - PATCH RD	24	25	75	133.4	133.4	10.7				1.25	4.7		
			LT	TR 4110 - FITZGERALD RD	16	18	60	69.4	69.4	5.6				1.25	2.5		
			LT	TR 4110 - FITZGERALD RD	15	16	40	46.7	46.7	3.8				1.25	1.7		
			LT	TR 11 - CABIN HILL RD	36	21	98	238.0	238.0	19.1				1.25	8.3		
			LT	TR 1410 - STILLMEADOW LANE	24	27	39	88.0	88.0	7.1				1.25	3.1		
			RT	CR 44 - MORGAN RD	36	21	96	234.0	234.0	18.8	11.7	2.00	13.0	1.25	8.2		
			LT	CR 141 - SAMSON RD	39	20	94	247.0	247.0	19.8				1.25	8.6		
			RT	TR 1432 - GREENBRIER DR	26	26	84	158.9	158.9	12.8				1.25	5.6		
			LT	TR 410 - BEST RD	26	20	68	127.2	127.2	10.2				1.25	4.5		
			RT	TR 1430 - MOORES LANE	34	20	93	213.5	213.5	17.1				1.25	7.5		
			LT	TR 410 - BEST RD	21	20	68	102.7	102.7	8.3				1.25	3.6		
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)									**1,658.8**	**145.0**			**13.0**		**58.3**		
2B	GUE	U.S. 22	LT	TR 413 - MEADOW RD	50	18	85	286.2	286.2	22.9				1.25	10.0		
			RT	TR 143 - SHAW RD	40	35	117	337.8	337.8	27.1				1.25	11.8		
			LT	TR 4111 - MAYFAIR LANE	22	16	41	69.7	69.7	5.6				1.25	2.5		
			LT	TR 4111 - MAYFAIR LANE	22	15	45	73.4	73.4	5.9				1.25	2.6		
			RT	TR 1450 - WESTLAND ST	40	22	60	182.3	182.3	14.6				1.25	6.4		
			LT	TR 1474 - SMALL LANE	25	15	40	76.4	76.4	6.2				1.25	2.7		
			RT	TR 1473 - BANTY LANE	31	41	89	223.9	223.9	18.0				1.25	7.8		
			LT	CR 416 - PETER'S CREEK	51	20	96	328.7	328.7	26.3				1.25	11.5		
			LT	TR 4175 - EIDENS LANE	22	18	37	67.3	67.3	5.4				1.25	2.4		
			RT	TR 19 - SAVAGE RD	44	16	100	283.6	283.6	22.7				1.25	9.9		
			LT	TR 19 - JACKSON RUN RD	44	18	95	276.3	276.3	22.2				1.25	9.6		
			LT	CR 430 - FAIRDALE RD	30	23	56	131.7	131.7	10.6				1.25	4.6		
			LT	CR 3401 - PROPHECY RD	36	21	95	232.0	232.0	18.6				1.25	8.1		
			CL	SR 723 - DETAIL 1	AREA BY COMPUTER			1,263.6	1,263.6	101.1	63.2	1.00	35.1			1.25	43.9
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)									**3,832.9**	**370.4**					**89.9**		**43.9**

CALCULATED PTB CHECKED JSL

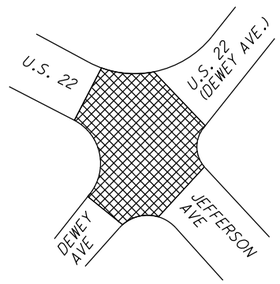
EXTRA AREA DATA

GUE-22/723-0.00 / 0.70

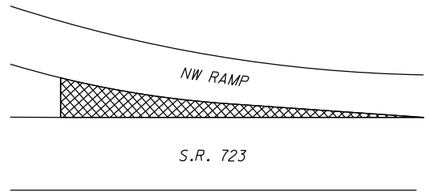
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DETAIL 2



DETAIL 3



EXTRA AREA DATA

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DIMENSIONS (SEE SHEET 13) A FT.	B FT.	C FT.	AREA SQ. YD.	202 WEARING COURSE REMOVED SQ. YD.	407 NON-TRACKING TACK COAT @ 0.08 GAL./S.Y. GAL.	407 NON-TRACKING TACK COAT @ 0.05 GAL./S.Y. GAL.	441 THICKNESS INCHES	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) CU. YD.	441 THICKNESS INCHES	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448),PG 64-22 CU. YD.	441 THICKNESS INCHES	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448),PG 70-22M CU. YD.
2C	GUE	U.S. 22	RT	CR 430 - FAIRDALE RD	26	33	105	199.4	199.4	16.0				1.25	7.0		
			LT	CR 430 - FAIRDALE RD	34	25	78	194.6	194.6	15.6				1.25	6.8		
			LT	COSHOCTON AVE	45	19	95	285.0	285.0	22.8				1.25	9.9		
			RT	COSHOCTON AVE	36	18	83	202.0	202.0	16.2				1.25	7.1		
			RT	RAINEY AVE	18	23	48	71.0	71.0	5.7				1.25	2.5		
			CL	DEWEY/ JEFFERSON AVE - DETAIL 2	AREA BY COMPUTER			657.0	657.0	52.6	32.9	1.00	18.3			1.25	22.9
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)									**1,609.0**	**161.8**			**18.3**		**33.3**		**22.9**
2D	GUE	U.S. 22	LT	COLUMBIA CT	23	27	64	116.3	116.3	9.4				1.25	4.1		
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)									**116.3**	**9.4**					**4.1**		
3	GUE	S.R. 723	CL	NW RAMP GORE - DETAIL 3	AREA BY COMPUTER			55.4	55.4	4.5	2.8	1.00	1.6			1.25	2.0
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)									**55.4**	**7.3**			**1.6**				**2.0**

CALCULATED PTB
CHECKED JSL

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BRIDGE TREATMENTS

GUE-22-0006	BUTT JOINT @ APPROACH SLABS
GUE-22-0025	CULVERT - PAVE SAME AS ROADWAY
GUE-22-0080	CULVERT - PAVE SAME AS ROADWAY
GUE-22-0381	BUTT JOINT @ APPROACH SLABS
GUE-22-0471	BUTT JOINT @ BRIDGE DECK
GUE-22-0578	CULVERT - PAVE SAME AS ROADWAY
GUE-22-0660	BUTT JOINT @ EXPANSION JOINTS, MILL/FILL SURFACE COURSE OVER BRIDGE DECK
GUE-22-0701	RAILROAD TUNNEL - PAVE SAME AS ROADWAY
GUE-723-0040	BUTT JOINT @ APPROACH SLABS
GUE-723-0059	BUTT JOINT @ APPROACH SLABS

BRIDGE TREATMENT DATA

LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	BRIDGE DECK DETAIL (SEE SHEETS 16-17)	MAINLINE DEDUCTIONS (CARRIED TO PAVEMENT DATA TABLE)	SHOULDER DEDUCTIONS (CARRIED TO SHOULDER DATA TABLE)	202	407		441				516
											WEARING COURSE REMOVED	NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	2" DEEP JOINT SEALER, AS PER PLAN
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.		SQ.YD.	SQ.YD.	SQ.YD.	GALLON	GALLON	INCHES	CU.YD.	INCHES	CU.YD.	FEET
2A	GUE-22-0006	33.7	82.0	307.1	20.0	82.0	364.4	1	483.1	114.6								164
	BRIDGE DEDUCTIONS								483.1	114.6								
	LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)																	**164**
2B	GUE-22-0381	42.7	66.0	313.2	25.0	66.0	366.7	1	494.4	41.2								132
	GUE-22-0471	28.0	66.5	206.9	30.0	66.5	443.3	2	469.3	39.1	443.3	35.5	22.2	1.00	12.3	1.25	15.4	133
	BRIDGE DEDUCTIONS								963.7	80.3								
	LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)										**443.3**	**57.7**			**12.3**		**15.4**	**265**
2D	GUE-22-0660	118.7	48.0	633.1	15.0	48.0	160.0	3	396.5	132.2	793.1	63.4	8.0	1.00	4.4	1.25	27.5	192
	BRIDGE DEDUCTIONS								396.5	132.2								
	LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)										**793.1**	**71.4**			**4.4**		**27.5**	**192**
3	GUE-723-0040	298.8	50.0	1,660.0	25.0	50.0	277.8	4	620.1	271.3								100
	GUE-723-0059	265.0	65.5	1,928.7	25.0	65.5	363.9	5	1,820.0	280.0								131
	BRIDGE DEDUCTIONS								2,440.1	551.3								
	LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)																	**231**

CALCULATED PTB
CHECKED JSL

BRIDGE TREATMENT DATA

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DETAIL 1



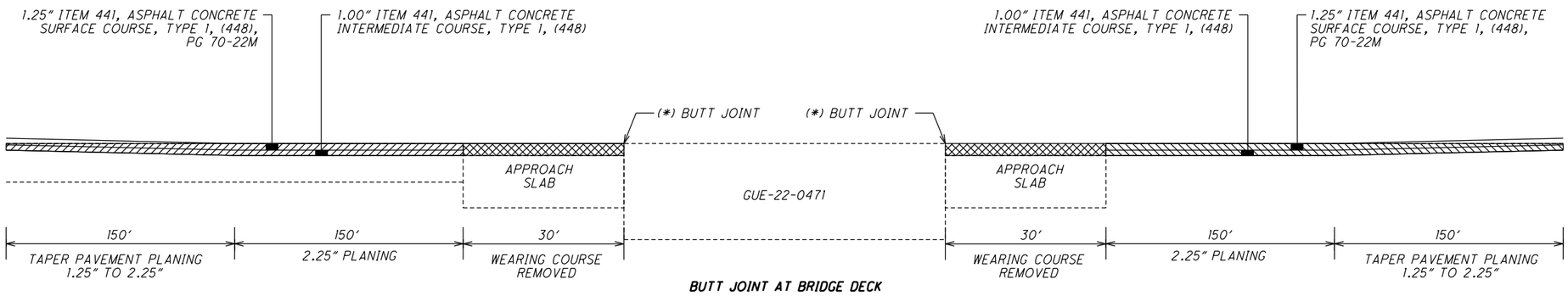
BUTT JOINT AT APPROACH SLABS

* ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

ITEM 202, WEARING COURSE REMOVED

ITEM 254, PAVEMENT PLANING

DETAIL 2



BUTT JOINT AT BRIDGE DECK

* ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

ITEM 202, WEARING COURSE REMOVED

ITEM 254, PAVEMENT PLANING

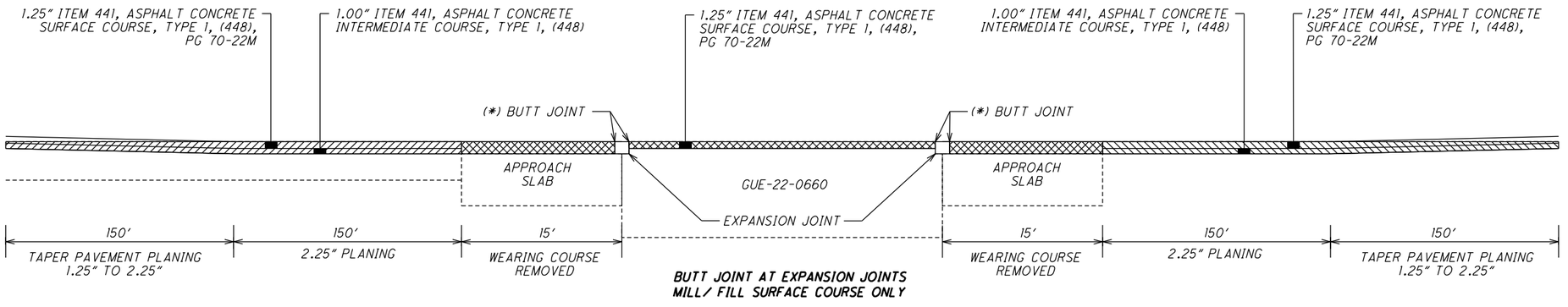
CALCULATED PTB
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BRIDGE TREATMENT DETAILS

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DETAIL 3



BUTT JOINT AT EXPANSION JOINTS
MILL / FILL SURFACE COURSE ONLY

* ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

ITEM 202, WEARING COURSE REMOVED

ITEM 254, PAVEMENT PLANING

DETAIL 4



BUTT JOINT AT APPROACH SLABS

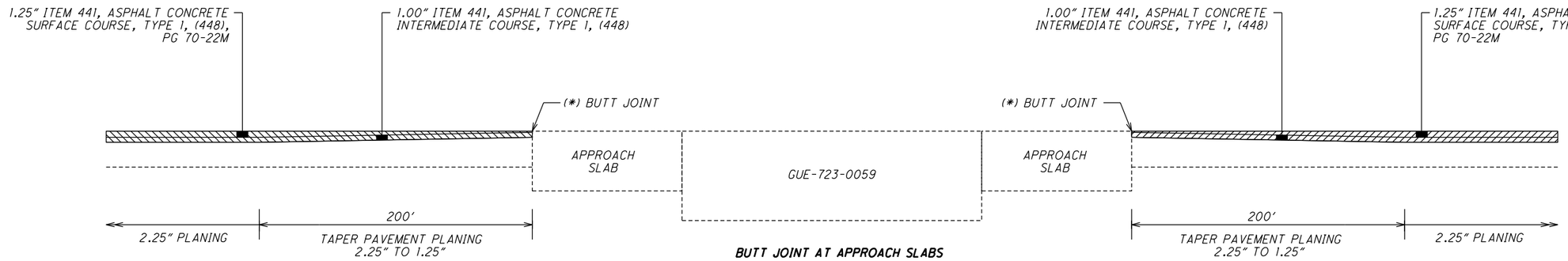
* ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

ITEM 202, WEARING COURSE REMOVED

ITEM 254, PAVEMENT PLANING

DETAIL 5

PROFILE ADJUSTMENT



PROFILE ADJUSTMENT

BUTT JOINT AT APPROACH SLABS

* ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

ITEM 202, WEARING COURSE REMOVED

ITEM 254, PAVEMENT PLANING

CALCULATED PTB
CHECKED JSL

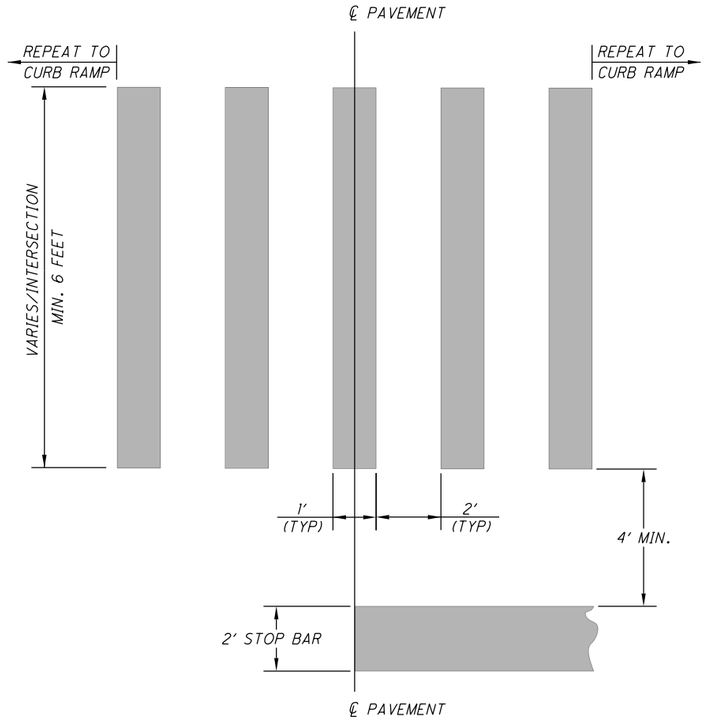
BRIDGE TREATMENT DATA

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CURB RAMP DATA

LOCATION	REF. NO.	DESCRIPTION	SIDE	202			608	609	FOR INFORMATION ONLY (SHADED AREA PER BP-7.1)				COMMENTS
				CURB AND GUTTER REMOVED	WALK REMOVED	CURB REMOVED	CURB RAMP TYPE D	CURB, TYPE 4C	CURB REMOVED	4" CONCRETE WALK	DETECTABLE WARNING	CURB, TYPE 4C	
				SQ. YD.	SQ. FT.	FT.	SQ. FT.	FT.	FT.	SQ. FT.	SQ. FT.	FT.	
2C	1-CR	US 22 AND DEWEY AVE	RT			44	68	44	13	68	8	13	
SUB-TOTALS									13	68	8	13	
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)						**44**	**68**	**44**					

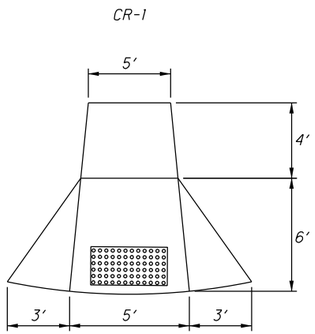


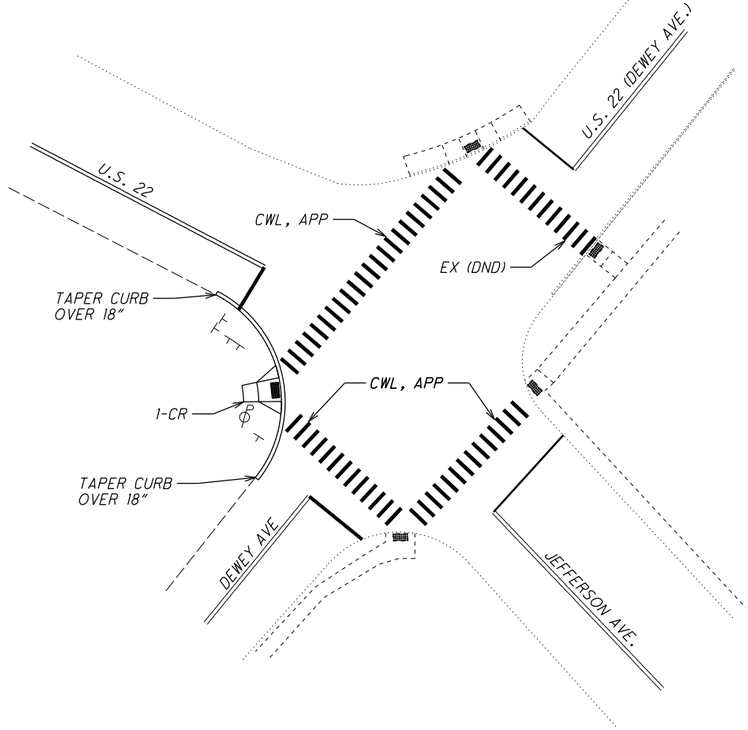
TYPICAL CROSSWALK

ITEM 644 CROSSWALK LINE, AS PER PLAN

CROSSWALK LINES LOCATED IN THE CITY OF CAMBRIDGE SHALL BE "PIANO KEY" STYLE AS DETAILED ON THIS SHEET. THE CROSSWALK LINES SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

ALL MATERIAL, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NEEDED TO PLACE THE CROSSWALK LINES SHALL BE INCLUDED IN THE UNIT PRICE BID. SEE SHEET 22 FOR QUANTITIES.





CWL, APP = CROSSWALK LINE, AS PER PLAN

CALCULATED PTB
CHECKED JSL

CURB RAMP DATA

GUE-22/723-0.00
/ 0.70

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EDGE LINE DATA

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	TOTAL LENGTH (MILES)	INFORMATION ONLY: WHITE EDGE LINE QUANTITIES TOTAL MILES	WHITE HIGHWAY MILES	WHITE RAMP MILES	INFORMATION ONLY: YELLOW EDGE LINE QUANTITIES TOTAL MILES	YELLOW HIGHWAY MILES	YELLOW RAMP MILES	644 TOTAL EDGE LINE (6") MILE	646 TOTAL EDGE LINE (6") MILE	REMARKS
1	MUS	U.S. 22	27.64	27.73	0.09	0.18	0.18					0.18		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)												**0.18**		
2A	GUE	U.S. 22	0.00	0.33	0.33	0.66	0.66		0.66	0.66		1.26	0.06	STRIPED MEDIAN, EPOXY ON BRIDGE GUE-22-0006
			0.33	2.31	1.98	3.96	3.96					3.96		
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)												**5.22**	**0.06**	
2B	GUE	U.S. 22	2.31	6.04	3.73	7.46	7.46					7.41	0.05	EPOXY ON BRIDGES GUE-22-0381, GUE-22-0471
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)												**7.41**	**0.05**	
2C	GUE	U.S. 22	6.04	6.19	0.15	0.30	0.30					0.30		
			6.19	6.98	0.79	**SEE LOCATION 2D**								
			6.98	7.36	0.38	0.76	0.76					0.76		
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)												**1.06**		
2D	GUE	U.S. 22	6.19	6.34	0.15	0.30	0.30					0.30		
			6.34	6.98	0.64	1.28	1.28					1.28		
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)												**1.58**		
3	GUE	S.R. 723	0.07	0.44	0.37	0.37	0.37		0.37	0.37		0.74		
			0.51	0.61	0.10	0.10	0.10		0.10	0.10		0.20		SKIP BRIDGE GUE-723-0059 (SEE PID 102533)
			0.67	0.85	0.18	0.36	0.36		0.36	0.36		0.72		SKIP BRIDGE GUE-723-0040 (SEE PID 102533)
		SW LOOP			0.46	0.46	0.46		0.46	0.46		0.92		
		NW RAMP			0.14	0.14	0.14		0.14	0.14		0.28		
		NE RAMP			0.19	0.19	0.19		0.19	0.19		0.38		
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)												**3.24**		

CALCULATED PTB
CHECKED JSL

EDGE LINE DATA

GUE-22/723-0.00
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LANE LINE DATA

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	TOTAL LENGTH (MILES)	644 TOTAL LANE LINE (6") MILES	646 TOTAL LANE LINE (6") MILES	REMARKS
1	MUS	U.S. 22	27.72	27.73	0.01	0.02		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)						**0.02**		
2A	GUE	U.S. 22	0.00	2.31	2.31	4.59	0.03	EPOXY ON BRIDGE GUE-22-0006
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)						**4.59**	**0.03**	
2B	GUE	U.S. 22	2.31	6.04	3.73	7.41	0.05	EPOXY ON BRIDGES GUE-22-0381, GUE-22-0471
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)						**7.41**	**0.05**	
2C	GUE	U.S. 22	6.04	6.19	0.15	0.30		
		U.S. 22 WB	7.14	7.36	0.22	0.22		
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)						**0.52**		
2D	GUE	U.S. 22 EB	6.19	6.22	0.03	0.03		
		U.S. 22 WB	6.19	6.38	0.19	0.19		
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)						**1.26**		
3	GUE	S.R. 723 NB	0.56	0.61	0.05	0.05		
			0.67	0.85	0.18	0.18		SKIP BRIDGE GUE-723-0040 (SEE PID 102533)
		S.R. 723 SB	0.58	0.61	0.03	0.03		
			0.67	0.85	0.18	0.18		SKIP BRIDGE GUE-723-0040 (SEE PID 102533)
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)						**0.44**		

CALCULATED PTB
CHECKED JSL

LANE LINE DATA

GUE-22/723-0.00
/0.70

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CENTER LINE DATA

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	TOTAL LENGTH (MILES)	INFORMATION ONLY: CENTER LINE QUANTITIES TOTAL MILES	INFORMATION ONLY: CENTER LINE QUANTITIES EQUIVALENT SOLID LINE	644 TOTAL CENTER LINE MILES	646 TOTAL CENTER LINE MILES	REMARKS
1	MUS	U.S. 22	27.66	27.73	0.07	0.14	0.560	0.14		2-LANE TO 4-LANE TRANSITION
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								**0.14**		
2A	GUE	U.S. 22	0.33	2.31	1.98	3.96	4.950	3.96		TWO WAY LEFT TURN LANE
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)								**3.96**		
2B	GUE	U.S. 22	2.31	3.72	1.41	2.82	3.525	2.82		TWO WAY LEFT TURN LANE
			3.72	6.04	2.32	2.32	4.640	2.29	0.03	EPOXY ON BRIDGES GUE-22-0381, GUE-22-0471
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)								**5.11**	**0.03**	
2C	GUE	U.S. 22	6.04	6.19	0.15	0.15	0.300	0.15		
			6.19	6.98	0.79	**SEE LOCATION 2D**				
			6.98	7.36	0.38	0.38	0.760	0.38		
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)								**0.53**		
2D	GUE	U.S. 22	6.19	6.23	0.04	0.04	0.080	0.04		
			6.23	6.55	0.32	0.32	1.280	0.64		TURN LANES, 4-LANE TO 2-LANE TRANSITION
			6.55	6.98	0.43	0.43	0.860	0.43		
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)								**1.11**		

CALCULATED PTB
CHECKED JSL

CENTER LINE DATA

GUE-22/723-0.00
/ 0.70

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AUXILARY MARKING DATA

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	644 TRANSEVERSE/ DIANGONAL LINES (24") WHITE FT.	644 TRANSEVERSE/ DIANGONAL LINES (24") YELLOW FT.	646 TRANSEVERSE/ DIANGONAL LINES (24") YELLOW FT.	644 STOP LINE (24") FT.	644 12" CROSSWALK LINE, AS PER PLAN FT.	644 WORD ON PAVEMENT ONLY 72" EACH	644 WORD ON PAVEMENT ONLY 96" EACH	644 LANE ARROW 96" TURN THRU EACH	644 LANE ARROW 96" TURN LT. EACH	644 LANE ARROW 96" TURN RT. EACH	644 8" CHANNELIZING LINE FT.	REMARKS (PLACE AS DIRECTED BY THE ENGINEER AND/OR DETAILS BELOW) (STOP BARS SHALL BE PLACED MINIMUM 4' FROM EDGE OF PAVED SHOULDER)
1	MUS	U.S. 22	EASTLAND DR	RT				11								
			TR 647 - SNOOTS LN	LT				14								
			CENTER MEDIAN (SLM 27.65-27.73)	CL		168										SEE SHEETS 171-177
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)					**168**			**25**								
2A	GUE	U.S. 22	CENTER MEDIAN (SLM 0.00-0.33)	CL		1187	40									SEE SHEETS 171-177, EPOXY ON BRIDGES
			TWLTL (SLM 0.33-2.31)	CL									20			SEE SHEETS 171-177
			CR 14 - PATCH RD	RT				18								
			TR 4110 - FITZGERALD RD	LT				11								
			TR 4110 - FITZGERALD RD	LT				15								
			TR 11 - CABIN HILL RD	LT				26								
			TR 1410 - STILLMEADOW LANE	LT				19								
			CR 44 - MORGAN RD	RT				20								
			CR 141 - SAMSON RD	LT				23								
			TR 1432 - GREENBRIER DR	RT				17								
			TR 410 - BEST RD	LT				19								
			TR 1430 - MOORES LANE	RT				20								
			TR 410 - BEST RD	LT				18								
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)					**1,187**		**40**	**206**				**20**				
2B	GUE	U.S. 22	TWLTL (SLM 2.31-3.65)	CL		221							16			SEE SHEETS 171-177
			TR 413 - MEADOW RD	LT				20								
			TR 143 - SHAW RD	RT				23								
			TR 4111 - MAYFAIR LANE	LT				14								
			TR 4111 - MAYFAIR LANE	LT				10								
			TR 1450 - WESTLAND ST	RT				16								
			TR 1474 - SMALL LANE	LT				11								
			TR 1473 - BANTY LANE	RT				24								
			CR 416 - PETER'S CREEK	LT				30								
			TR 4175 - EIDENS LANE	LT				13								
			TR 19 - SAVAGE RD	RT				28								
			TR 19 - JACKSON RUN RD	LT				24								
			CR 430 - FAIRDALE RD	LT				12								
			CR 3401 - PROPHECY RD	LT				28								
			US 22 EB AT SR 723	CL	162			24						2	390	SEE SHEET 24
			US 22 WB AT SR 723	CL				24								
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)					**383**			**301**				**18**			**390**	

CALCULATED PTB CHECKED JSL

AUXILARY MARKING DATA

GUE-22/723-0.00 / 0.70

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AUXILARY MARKING DATA

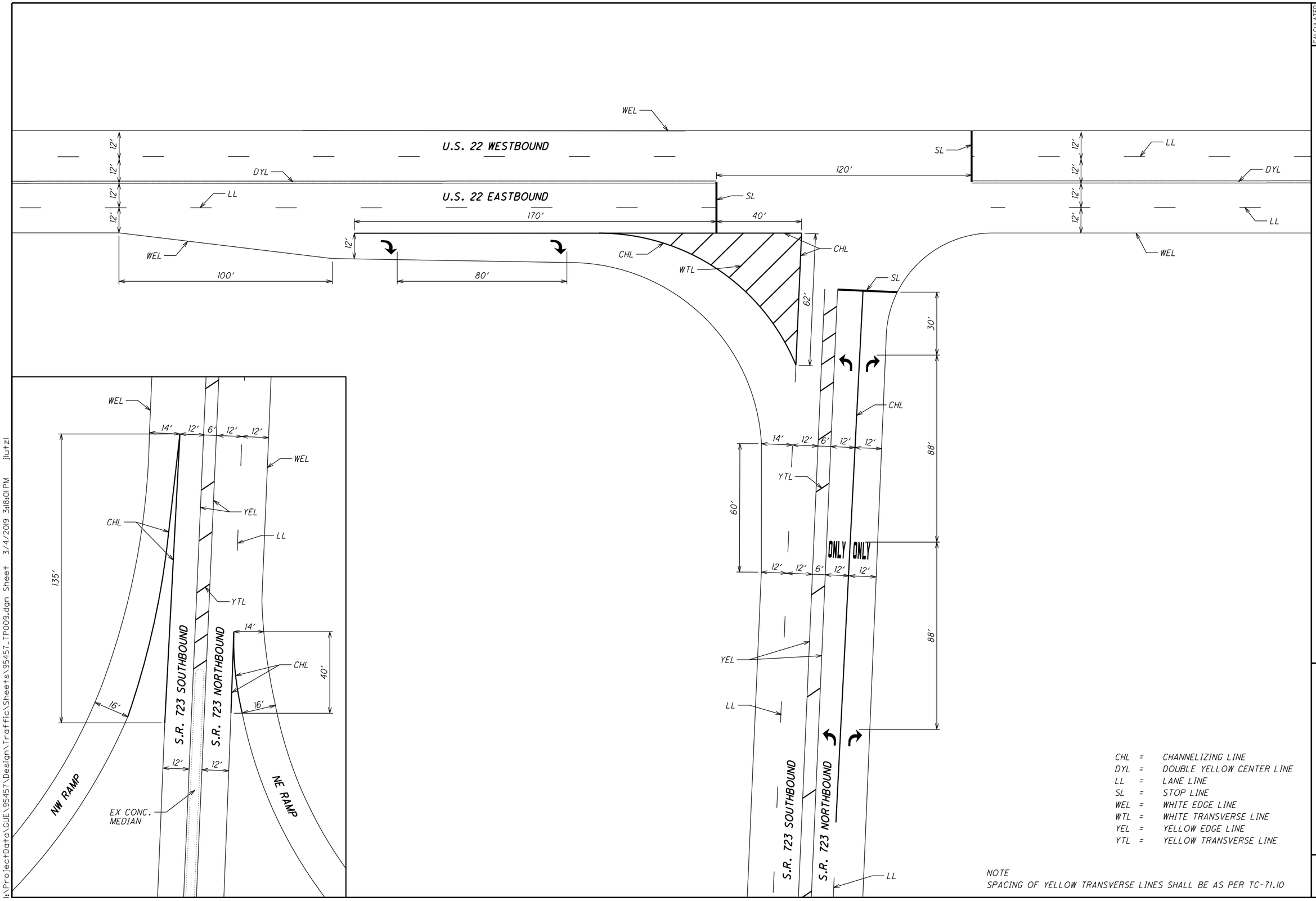
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	644 TRANSEVERSE/ DIANGONAL LINES (24") WHITE FT.	644 TRANSEVERSE/ DIANGONAL LINES (24") YELLOW FT.	646 YELLOW FT.	644 STOP LINE (24") FT.	644 12" CROSSWALK LINE, AS PER PLAN FT.	644 WORD ON PAVEMENT ONLY 72" EACH	644 WORD ON PAVEMENT ONLY 96" EACH	644 LANE ARROW 96" TURN THRU EACH	644 LANE ARROW 96" TURN LT. EACH	644 LANE ARROW 96" TURN RT. EACH	644 8" CHANNELIZING LINE FT.	REMARKS (PLACE AS DIRECTED BY THE ENGINEER AND/OR DETAILS BELOW) (STOP BARS SHALL BE PLACED MINIMUM 4' FROM EDGE OF PAVED SHOULDER)
2C	GUE	U.S. 22	CR 430 - FAIRDALE RD	RT												
			CR 430 - FAIRDALE RD	LT												
			COSHOCTON AVE	LT				15								
			COSHOCTON AVE	RT				15								
			DEWEY AVE	RT				17	84							SEE SHEET 18
			JEFFERSON AVE	RT					84							SEE SHEET 18
			AT DEWEY AVE/ JEFFERSON AVE	CL				13	138							SEE SHEET 18
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)								**60**	**306**							
2D	GUE	U.S. 22	COLUMBIA CT	LT				14								
			TURN LANE AT CIVIC CENTER	CL		90							2		70	SEE SHEET 25
			TURN LANE AT HIGHWAY PATROL	CL		340							2		60	SEE SHEET 25
			4-LANE TO 2-LANE TRANSITION	CL		240										SEE SHEET 25
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)					**670**			**14**				**4**			**130**	
3	GUE	S.R. 723	SR 723 AT U.S. 22	CL		240		28			2		2	2	250	SEE SHEET 24
			SR 723 AT NE/NW RAMPS	CL											350	
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)					**240**			**28**			**2**	**4**			**600**	

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AUXILARY MARKING DATA

GUE-22/723-0.00
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CHL = CHANNELIZING LINE
DYL = DOUBLE YELLOW CENTER LINE
LL = LANE LINE
SL = STOP LINE
WEL = WHITE EDGE LINE
WTL = WHITE TRANSVERSE LINE
YEL = YELLOW EDGE LINE
YTL = YELLOW TRANSVERSE LINE

NOTE
SPACING OF YELLOW TRANSVERSE LINES SHALL BE AS PER TC-71.10

CALCULATED PTB
CHECKED JSL

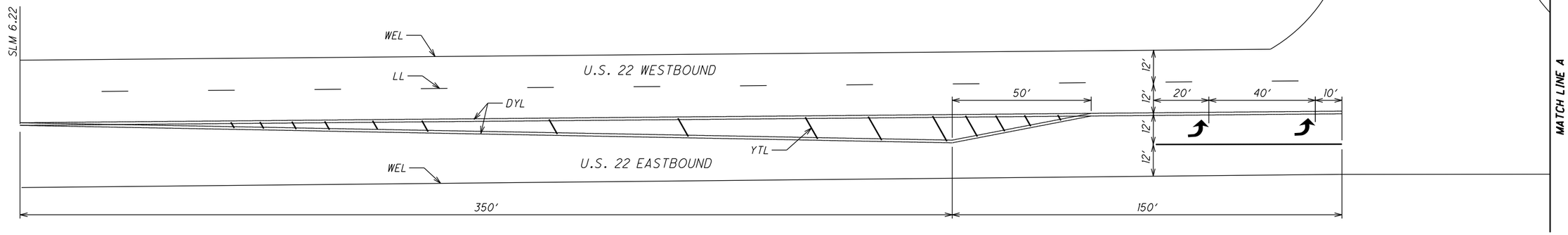
U.S. 22/ S.R. 723

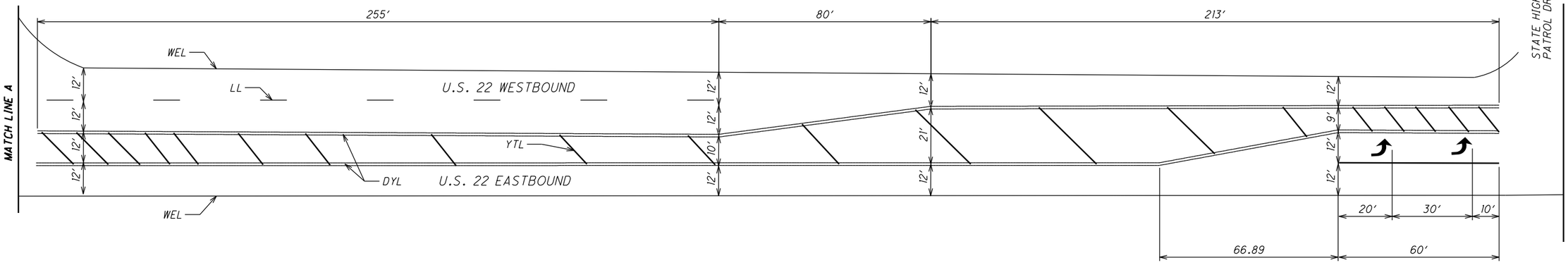
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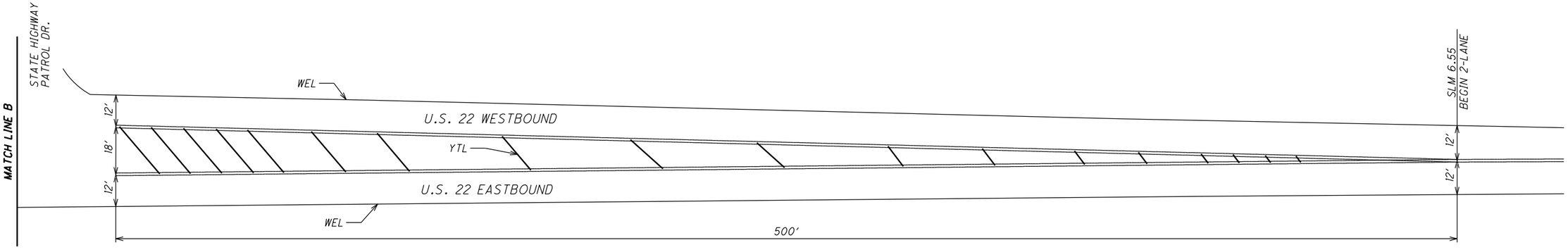
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CHL = CHANNELIZING LINE
DYL = DOUBLE YELLOW CENTER LINE
LL = LANE LINE
WEL = WHITE EDGE LINE
WTL = WHITE TRANSVERSE LINE
YEL = YELLOW EDGE LINE
YTL = YELLOW TRANSVERSE LINE

NOTE
SPACING OF YELLOW TRANSVERSE LINES SHALL BE AS PER TC-71.10







CALCULATED PTB
CHECKED JSL

U.S. 22/CIVIC CENTER/STATE HIGHWAY PATROL

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RAISED PAVEMENT MARKER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621		PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
								RAISED PAVEMENT MARKER REMOVED	RPM	INFORMATION ONLY					
										ONE-WAY		TWO-WAY			
					MILES	LIN.FT.		EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED	
1	MUS	U.S. 22	27.65	27.73	0.08	422	5	12	12			12			
SUBTOTALS												12			
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								**12**	**12**						
2A	GUE	U.S. 22	0.00	2.31	2.31	12,197	REM,9	612	612			306	306		80' SPACING ON LANE LINE, TWLTL
SUBTOTALS												306	306		
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)								**612**	**612**						
2B	GUE	U.S. 22	2.31	3.70	1.39	7,339	REM,9	368	368			184	184		80' SPACING ON LANE LINE, TWLTL
			3.70	5.58	1.88	9,926	GAP,REM,7	396	396	16		125	255		80' SPACING ON LANE LINE, STOP AT S.R. 723
			5.58	6.04	0.46	2,429	GAP,REM,7	109	109	16		31	62		80' SPACING ON LANE LINE, STOP AT S.R. 723
SUBTOTALS										32		340	501		
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)								**873**	**873**						
2C	GUE	U.S. 22	6.04	6.19	0.15	792	GAP,REM	30	30			10	20		80' SPACING ON LANE LINE
SUBTOTALS												10	20		
LOCATION 2C TOTALS (CARRIED TO SUB-SUMMARY)								**30**	**30**						
2D	GUE	U.S. 22	6.19	6.22	0.03	158	GAP,REM	6	6			2	4		80' SPACING ON LANE LINE
			6.22	6.32	0.10	528	GAP,10	24	24			14	10		LEFT TURN AT CIVIC CENTER
			6.32	6.45	0.13	686	GAP,10	24	24			18	6		LEFT TURN AT STATE HIGHWAY PATROL
			6.45	6.55	0.10	528	5	14	14			14			
			6.55	6.98	0.43	2,270	GAP	58	58			58			
SUBTOTALS												106	20		
LOCATION 2D TOTALS (CARRIED TO SUB-SUMMARY)								**126**	**126**						
3	GUE	S.R. 723	0.07	0.44	0.37	1,954	REM	25	25					25	80' SPACING ON YELLOW EDGE LINE
			0.44	0.51	0.07	370	**BRIDGE GUE-723-0040 (NO RPM'S)**								
			0.51	0.55	0.04	211	GAP,REM	21	21			6	9	6	NE/NW RAMP GORES
			0.55	0.61	0.06	317	REM	16	16			8	8		80' SPACING ON LANE LINE AND MEDIAN
			0.61	0.67	0.06		**BRIDGE GUE-723-0059 (NO RPM'S)**								
			0.67	0.85	0.18	950	REM,7	70	70	16		21	33		80' SPACING ON LANE LINE AND MEDIAN, STOP AT U.S. 22
			SW LOOP			1,860.0	REM	24	24					24	
			NW RAMP			740.0	REM	10	10					10	
			NE RAMP			1,180.0	REM	15	15					15	
SUBTOTALS										16		35	50	80	
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)								**181**	**181**						

DETAIL	SEE SCD TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/CONTROLLED ACCESS
4	4-LANE DIVIDED TO 2-LANE TRANSITION
5	4-LANE UNDIVIDED TO 2-LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH
9	TWO-WAY LEFT TURN LANE
10	APPROACH WITH LEFT TURN LANE
11	HORIZONTAL CURVE 40' SPACING
12	HORIZONTAL CURVE 20' SPACING
GAP	CENTER LINE AT 80' TYPICAL SPACING
REM	SEE REMARKS

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RAISED PAVEMENT MARKER DATA

GUE-22/723-0.00
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LOCATION 1 SHEET TOTALS											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
3	4	5	11	12	13	19	20	21	22	26					
															ROADWAY
					250						202	23500	250	SY	WEARING COURSE REMOVED
				0.18							209	72051	0.18	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
															PAVEMENT
			3,063								254	01000	3,063	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.25"
			399	69	21						407	20000	489	GAL	NON-TRACKING TACK COAT
				169							408	10000	169	GAL	PRIME COAT
					9						441	50000	9	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
2			107	19							441	50100	128	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
			86	15							441	50200	101	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
				36							617	10101	36	CY	COMPACTED AGGREGATE, AS PER PLAN
															TRAFFIC CONTROL
										12	621	00100	12	EACH	RPM
										12	621	54000	12	EACH	RAISED PAVEMENT MARKER REMOVED
						0.18					644	00104	0.18	MILE	EDGE LINE, 6"
							0.02				644	00204	0.02	MILE	LANE LINE, 6"
								0.14			644	00300	0.14	MILE	CENTER LINE
									25		644	00500	25	FT	STOP LINE
									168		644	00700	168	FT	TRANSVERSE/DIAGONAL LINE
															MAINTENANCE OF TRAFFIC
	1										614	12460	1	EACH	WORK ZONE MARKING SIGN
	2										614	13000	2	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
		0.02									614	20110	0.02	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
		0.02									614	20560	0.02	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
		0.40									614	22110	0.40	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
		0.40									614	22360	0.40	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT

CALCULATED PTB
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LOCATION 1 SUBSUMMARY

GUE-22/723-0.00
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LOCATION 1 (MEDIAN) SHEET TOTALS								ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
49	50	51	56	62	64	65	168					
												ROADWAY
937								202	32501	937	FT	CURB AND GUTTER REMOVED, AS PER PLAN
				122	117			203	10000	239	CY	EXCAVATION
				351	459			204	10000	810	SY	SUBGRADE COMPACTION
				1	1			204	45000	2	HOUR	PROOF ROLLING
												DRAINAGE
						3		202	58501	3	EACH	CATCH BASIN ABANDONED, AS PER PLAN
												PAVEMENT
				88	68			301	46000	156	CY	ASPHALT CONCRETE BASE, PG64-22
				59	77			304	20000	136	CY	AGGREGATE BASE
				18				407	20000	18	GAL	NON-TRACKING TACK COAT
												TRAFFIC CONTROL
							55.4	630	03100	55.4	FT	GROUND MOUNTED SUPPORT, NO. 3 POST
							30.7	630	80100	30.7	SF	SIGN, FLAT SHEET
							5	630	84900	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL
							4	630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
												MAINTENANCE OF TRAFFIC
			0.02					614	20110	0.02	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
			0.15					614	22110	0.15	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT

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LOCATION 1 SUBSUMMARY (MEDIAN)

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LOCATION 2A SHEET TOTALS														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	5	6	11	12	13	15	19	20	21	22	26					
																		ROADWAY
	320						1,659							202	23500	1,979	SY	WEARING COURSE REMOVED
						4.61								209	72051	4.61	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
																		PAVEMENT
120														253	02000	120	CY	PAVEMENT REPAIR
					69,696									254	01000	69,696	SY	PAVEMENT PLANING, ASPHALT CONCRETE , VARIABLE
					11,133									254	01000	11,133	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.25"
					10,508	1,747	145							407	20000	12,400	GAL	NON-TRACKING TACK COAT
						4,336								408	10000	4,336	GAL	PRIME COAT
							59							441	50000	59	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	50				2,807	467								441	50100	3,324	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
	8				2,246	374	13							441	50200	2,641	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
								164						516	31011	164	FT	2" DEEP JOINT SEALER, AS PER PLAN
						901								617	10101	901	CY	COMPACTED AGGREGATE, AS PER PLAN
																		TRAFFIC CONTROL
													612	621	00100	612	EACH	RPM
													612	621	54000	612	EACH	RAISED PAVEMENT MARKER REMOVED
									5.22					644	00104	5.22	MILE	EDGE LINE, 6"
										4.59				644	00204	4.59	MILE	LANE LINE, 6"
											3.96			644	00300	3.96	MILE	CENTER LINE
												206		644	00500	206	FT	STOP LINE
												1,187		644	00700	1,187	FT	TRANSVERSE/DIAGONAL LINE
												20		644	01300	20	EACH	LANE ARROW
									0.06					646	10010	0.06	MILE	EDGE LINE, 6"
										0.03				646	10110	0.03	MILE	LANE LINE, 6"
												40		646	10600	40	FT	TRANSVERSE/DIAGONAL LINE
																		MAINTENANCE OF TRAFFIC
		12												614	12460	12	EACH	WORK ZONE MARKING SIGN
		6												614	13000	6	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				6										614	18601	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
			4.62											614	20110	4.62	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
			4.62											614	20560	4.62	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
			9.24											614	22110	9.24	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
			9.24											614	22360	9.24	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT

CALCULATED PTB CHECKED JSL

LOCATION 2A SUBSUMMARY

GUE-22/723-0.00 / 0.70

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LOCATION 2A (MEDIAN) SHEET TOTALS								ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
49	50	51	61	62	64	64A	66					
												ROADWAY
LS								201	11000		LS	CLEARING AND GRUBBING
276								202	30600	276	SY	CONCRETE MEDIAN REMOVED
33,353								202	32501	33,353	FT	CURB AND GUTTER REMOVED, AS PER PLAN
329				5,131	3,341	99		203	10000	8,900	CY	EXCAVATION
280								203	20000	280	CY	EMBANKMENT
				17,235	11,611	543		204	10000	29,389	SY	SUBGRADE COMPACTION
			2,342					204	13000	2,342	CY	EXCAVATION OF SUBGRADE
			1,298					204	20000	1,298	CY	EMBANKMENT
			1,045					204	30010	1,045	CY	GRANULAR MATERIAL, TYPE B
				9	6			204	45000	15	HOUR	PROOF ROLLING
			5,188					204	50000	5,188	SY	GEOTEXTILE FABRIC
		2						SPECIAL	69050100	2	EACH	MAILBOX SUPPORT SYSTEM, SINGLE
		2						SPECIAL	69050200	2	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE
		2						SPECIAL	69050350	2	EACH	MAILBOX REMOVED AND RESET
												EROSION CONTROL
			12				12	601	21050	24	SY	TIED CONCRETE BLOCK MAT, TYPE 1
55								653	10000	55	CY	TOPSOIL FURNISHED AND PLACED
10,925								659	00510	10,925	SY	SEEDING AND MULCHING, CLASS 2
546								659	14000	546	SY	REPAIR SEEDING AND MULCHING
546								659	15000	546	SY	INTER-SEEDING
1.52								659	20000	1.52	TON	COMMERCIAL FERTILIZER
2.26								659	31000	2.26	ACRE	LIME
60								659	35000	60	MGAL	WATER
							450	670	00720	450	SY	DITCH EROSION PROTECTION MAT, TYPE B
								832	15000		LS	STORM WATER POLLUTION PREVENTION PLAN
								832	15002		LS	STORM WATER POLLUTION PREVENTION INSPECTIONS
								832	15010		LS	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE
								832	30000	100,000	EACH	EROSION CONTROL
												DRAINAGE
	250							202	35100	250	FT	PIPE REMOVED, 24" AND UNDER
	10							202	58100	10	EACH	CATCH BASIN REMOVED
							94	202	58501	94	EACH	CATCH BASIN ABANDONED, AS PER PLAN
	250							202	70000	250	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT
							1.62	602	20000	1.62	CY	CONCRETE MASONRY
	20							611	00100	20	FT	4" CONDUIT, TYPE B
	20							611	00900	20	FT	6" CONDUIT, TYPE B
			360					611	96600	360	FT	CONDUIT, BORED OR JACKED , 6" CONDUIT TYPE F, 707.33, 707.42, OR 707.45
							418	611	96600	418	FT	CONDUIT, BORED OR JACKED ,15" TYPE B
							5	611	98370	5	EACH	CATCH BASIN, NO. 6
							1	611	98470	1	EACH	CATCH BASIN, NO. 2-2B
							1	611	98635	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN
			6					611	99710	6	EACH	PRECAST REINFORCED CONCRETE OUTLET
	25							613	41200	25	CY	LOW STRENGTH MORTAR BACKFILL

CALCULATED PTB
CHECKED JSL

LOCATION 2A SUBSUMMARY (MEDIAN)

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LOCATION 2A (MEDIAN) SHEET TOTALS						ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
49	56	62	64	64A	169					
										PAVEMENT
2,226		4,310	1,721	5		301	46000	8,262	CY	ASPHALT CONCRETE BASE, PG64-22
		2,874	1,936	91		304	20000	4,901	CY	AGGREGATE BASE
		863				407	20000	863	GAL	NON-TRACKING TACK COAT
563						441	50200	563	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
										TRAFFIC CONTROL
					394.7	630	03100	394.7	FT	GROUND MOUNTED SUPPORT, NO. 3 POST
					233.7	630	80100	233.7	SF	SIGN, FLAT SHEET
					28	630	84900	28	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL
					7	630	85100	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION
					26	630	86002	26	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
										MAINTENANCE OF TRAFFIC
	4.62					614	20110	4.62	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
	3.70					614	21100	3.70	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT
	11.11					614	22110	11.11	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT

CALCULATED PTB
CHECKED JSL

LOCATION 2A SUBSUMMARY (MEDIAN)

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LOCATION 2B SHEET TOTALS														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	5	6	11	12	13	15	19	20	21	22	26					
																		ROADWAY
	830						3,833	444						202	23500	5,107	SY	WEARING COURSE REMOVED
						7.43								209	72051	7.43	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
																		PAVEMENT
75														253	02000	75	CY	PAVEMENT REPAIR
					40,480									254	01000	40,480	SY	PAVEMENT PLANING, ASPHALT CONCRETE , VARIABLE
					72,605	5,857								254	01000	78,462	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.25"
					14,701	1,677	371	58						407	20000	16,807	GAL	NON-TRACKING TACK COAT
						4,627								408	10000	4,627	GAL	PRIME COAT
							90							441	50000	90	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	88				3,927	448	44	16						441	50100	4,523	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
	15				3,142	359		13						441	50200	3,529	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
								265						516	31011	265	FT	2" DEEP JOINT SEALER, AS PER PLAN
						1,126								617	10101	1,126	CY	COMPACTED AGGREGATE, AS PER PLAN
																		TRAFFIC CONTROL
													873	621	00100	873	EACH	RPM
													873	621	54000	873	EACH	RAISED PAVEMENT MARKER REMOVED
									7.41					644	00104	7.41	MILE	EDGE LINE, 6"
										7.41				644	00204	7.41	MILE	LANE LINE, 6"
											5.11			644	00300	5.11	MILE	CENTER LINE
												390		644	00400	390	FT	CHANNELIZING LINE, 8"
												301		644	00500	301	FT	STOP LINE
												383		644	00700	383	FT	TRANSVERSE/DIAGONAL LINE
												18		644	01300	18	EACH	LANE ARROW
									0.05					646	10010	0.05	MILE	EDGE LINE, 6"
										0.05				646	10110	0.05	MILE	LANE LINE, 6"
											0.03			646	10200	0.03	MILE	CENTER LINE
																		MAINTENANCE OF TRAFFIC
		20												614	12460	20	EACH	WORK ZONE MARKING SIGN
		9												614	13000	9	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				16										614	18601	16	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
			7.46											614	20110	7.46	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
			7.46											614	20560	7.46	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
			2.46											614	21100	2.46	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT
			2.46											614	21550	2.46	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
			10.14											614	22110	10.14	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
			10.14											614	22360	10.14	MILE	WORK ZONE EDGE LINE, CLASS III. 6", 642 PAINT
			482											614	23200	482	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT
			482											614	23680	482	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT
			48											614	26200	48	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT
			48											614	26610	48	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT

CALCULATED XXX CHECKED XXX

LOCATION 2B SUBSUMMARY

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LOCATION 2B (MEDIAN) SHEET TOTALS								ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
49	50	51	61	63	64	64A	67					
												ROADWAY
LS								201	11000		LS	CLEARING AND GRUBBING
198								202	30600	198	SY	CONCRETE MEDIAN REMOVED
120								202	32000	120	FT	CURB REMOVED
13,190								202	32501	13,190	FT	CURB AND GUTTER REMOVED, AS PER PLAN
105				2,363	1,947	77		203	10000	4,492	CY	EXCAVATION
79								203	20000	79	CY	EMBANKMENT
				7,936	6,171	485		204	10000	14,592	SY	SUBGRADE COMPACTION
			1,283					204	13000	1,283	CY	EXCAVATION OF SUBGRADE
			361					204	20000	361	CY	EMBANKMENT
			922					204	30010	922	CY	GRANULAR MATERIAL, TYPE B
				5	4			204	45000	9	HOUR	PROOF ROLLING
			3,383					204	50000	3,383	SY	GEOTEXTILE FABRIC
		2						SPECIAL	69050100	2	EACH	MAILBOX SUPPORT SYSTEM, SINGLE
		2						SPECIAL	69050200	2	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE
		2						SPECIAL	69050350	2	EACH	MAILBOX REMOVED AND RESET
												EROSION CONTROL
			20					601	21050	20	SY	TIED CONCRETE BLOCK MAT, TYPE 1
3,925								659	00510	3,925	SY	SEEDING AND MULCHING, CLASS 2
196								659	14000	196	SY	REPAIR SEEDING AND MULCHING
196								659	15000	196	SY	INTER-SEEDING
0.55								659	20000	0.55	TON	COMMERCIAL FERTILIZER
0.81								659	31000	0.81	ACRE	LIME
22								659	35000	22	MGAL	WATER
								832	15000		LS	STORM WATER POLLUTION PREVENTION PLAN
								832	15002		LS	STORM WATER POLLUTION PREVENTION INSPECTIONS
								832	15010		LS	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE
								832	30000	100,000	EACH	EROSION CONTROL
												DRAINAGE
	250							202	35100	250	FT	PIPE REMOVED, 24" AND UNDER
	10							202	58100	10	EACH	CATCH BASIN REMOVED
							2	202	58400	2	EACH	INLET ABANDONED
							51	202	58501	51	EACH	CATCH BASIN ABANDONED, AS PER PLAN
	250							202	70000	250	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT
	20							611	00100	20	FT	4" CONDUIT, TYPE B
	20							611	00900	20	FT	6" CONDUIT, TYPE B
			600					611	96600	600	FT	CONDUIT, BORED OR JACKED : 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, 707.33, 707.42, OR 707.45
			10					611	99710	10	EACH	PRECAST REINFORCED CONCRETE OUTLET
	25							613	41200	25	CY	LOW STRENGTH MORTAR BACKFILL

CALCULATED PTB
CHECKED JSL

LOCATION 2B SUBSUMMARY (MEDIAN)

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LOCATION 2B (MEDIAN) SHEET TOTALS						ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
49	56	63	64	64A	168					
										PAVEMENT
1,323		1,985	915	3		301	46000	4,226	CY	ASPHALT CONCRETE BASE, PG64-22
		1,324	1,029	81		304	20000	2,434	CY	AGGREGATE BASE
		398				407	20000	398	GAL	NON-TRACKING TACK COAT
193						441	50200	193	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
										TRAFFIC CONTROL
					169.3	630	03100	169.3	FT	GROUND MOUNTED SUPPORT, NO. 3 POST
					131.9	630	80100	131.9	SF	SIGN, FLAT SHEET
					21	630	84900	21	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL
					15	630	86002	15	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
										MAINTENANCE OF TRAFFIC
	2.28					614	20110	2.28	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
	2.12					614	21100	2.12	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT
	6.19					614	22110	6.19	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
	427					614	24200	427	FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT

CALCULATED PTB
CHECKED JSL

LOCATION 2B SUBSUMMARY (MEDIAN)

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LOCATION 2C SHEET TOTALS													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	5	11	12	14	18	19	20	21	23	26					
																	ROADWAY
	150					1,609							202	23500	1,759	SY	WEARING COURSE REMOVED
							44						202	32000	44	FT	CURB REMOVED
					1.06								209	72051	1.06	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
							68						608	52000	68	SF	CURB RAMP
							44						609	24510	44	FT	CURB, TYPE 4-C
																	DRAINAGE
1													611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE
3													611	99654	3	EACH	MANHOLE ADJUSTED TO GRADE
2													638	10800	2	EACH	VALVE BOX ADJUSTED TO GRADE
																	PAVEMENT
85													253	02000	85	CY	PAVEMENT REPAIR
				4,224	352								254	01000	4,576	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.25"
				8,026	446								254	01000	8,472	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 2.25"
				1,593	104	162							407	20000	1,859	GAL	NON-TRACKING TACK COAT
					498								408	10000	498	GAL	PRIME COAT
						34							441	50000	34	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	18			426	28	23							441	50100	495	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
	6			341	23	19							441	50200	389	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
					139								617	10101	139	CY	COMPACTED AGGREGATE, AS PER PLAN
																	TRAFFIC CONTROL
												30	621	00100	30	EACH	RPM
												30	621	54000	30	EACH	RAISED PAVEMENT MARKER REMOVED
								1.06					644	00104	1.06	MILE	EDGE LINE, 6"
									0.52				644	00204	0.52	MILE	LANE LINE, 6"
										0.53			644	00300	0.53	MILE	CENTER LINE
											60		644	00500	60	FT	STOP LINE
											306		644	00600	306	FT	CROSSWALK LINE
																	MAINTENANCE OF TRAFFIC
		3											614	13000	3	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			0.52										614	20110	0.52	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
			0.52										614	20560	0.52	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
			0.53										614	21100	0.53	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT
			0.53										614	21550	0.53	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
			1.06										614	22110	1.06	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
			1.06										614	22360	1.06	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT
			13										614	26200	13	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT
			13										614	26610	13	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT

CALCULATED PTB CHECKED JSL

LOCATION 2C SUBSUMMARY

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LOCATION 2D SHEET TOTALS													ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	5	11	12	14	15	19	20	21	23	26					
																	ROADWAY
	90					117	794						202	23500	1,001	SY	WEARING COURSE REMOVED
					1.55								209	72051	1.55	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
																	PAVEMENT
85													253	02000	85	CY	PAVEMENT REPAIR
				14,623	3,388								254	01000	18,011	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.25"
				1,902	648	10	72						407	20000	2,632	GAL	NON-TRACKING TACK COAT
					740								408	10000	740	GAL	PRIME COAT
						5							441	50000	5	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448). PG64-22
	22			508	118		28						441	50100	676	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448). PG70-22M
	6			407	95		5						441	50200	513	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
							192						516	31011	192	FT	2" DEEP JOINT SEALER, AS PER PLAN
					200								617	10101	200	CY	COMPACTED AGGREGATE, AS PER PLAN
																	TRAFFIC CONTROL
												126	621	00100	126	EACH	RPM
												126	621	54000	126	EACH	RAISED PAVEMENT MARKER REMOVED
								1.58					644	00104	1.58	MILE	EDGE LINE, 6"
									1.26				644	00204	1.26	MILE	LANE LINE, 6"
										1.11			644	00300	1.11	MILE	CENTER LINE
											130		644	00400	130	FT	CHANNELIZING LINE, 8"
											14		644	00500	14	FT	STOP LINE
											670		644	00700	670	FT	TRANSVERSE/DIAGONAL LINE
											4		644	01300	4	EACH	LANE ARROW
																	MAINTENANCE OF TRAFFIC
		5											614	12460	5	EACH	WORK ZONE MARKING SIGN
		4											614	13000	4	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			1.26										614	20110	1.26	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
			1.26										614	20560	1.26	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
			1.11										614	21100	1.11	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT
			1.11										614	21550	1.11	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
			1.58										614	22110	1.58	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
			1.58										614	22360	1.58	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT
			130										614	23200	130	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT
			130										614	23680	130	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT

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LOCATION 2D SUBSUMMARY

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LOCATION 3 SHEET TOTALS												ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	4	5	6	11	12	14	15	19	20	23	26					
																ROADWAY
						56						202	23500	56	SY	WEARING COURSE REMOVED
																PAVEMENT
10												253	02000	10	CY	PAVEMENT REPAIR
				18,759	7,961							254	01000	26,720	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 2.25"
				2,440	1,036	8						407	20000	3,484	GAL	NON-TRACKING TACK COAT
					1,264							408	10000	1,264	GAL	PRIME COAT
				652	277	2						441	50100	931	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
				522	222	2						441	50200	746	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
							231					516	31011	231	FT	2" DEEP JOINT SEALER, AS PER PLAN
					176							617	10101	176	CY	COMPACTED AGGREGATE, AS PER PLAN
																TRAFFIC CONTROL
											181	621	00100	181	EACH	RPM
											181	621	54000	181	EACH	RAISED PAVEMENT MARKER REMOVED
								3.24				644	00104	3.24	MILE	EDGE LINE, 6"
									0.44			644	00204	0.44	MILE	LANE LINE, 6"
										600		644	00400	600	FT	CHANNELIZING LINE, 8"
										28		644	00500	28	FT	STOP LINE
										240		644	00700	240	FT	TRANSVERSE/DIAGONAL LINE
										4		644	01300	4	EACH	LANE ARROW
										2		644	01410	2	EACH	WORD ON PAVEMENT, 96"
																MAINTENANCE OF TRAFFIC
			50									614	11110	50	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
	10											614	13000	10	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			6									614	18601	6	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
		0.56										614	20110	0.56	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT
		0.56										614	20560	0.56	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT
		3.72										614	22110	3.72	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
		3.72										614	22360	3.72	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT
		425										614	23200	425	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT
		425										614	23680	425	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT
		29										614	26200	29	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT
		29										614	26610	29	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT

CALCULATED PTB
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LOCATION 3 SUBSUMMARY

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LOCATION 3 SHEET TOTALS					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
				184					
									TRAFFIC SIGNALS
				2	625	00450	2	EACH	CONNECTION, FUSED PULL APART
				2	625	00460	2	EACH	CONNECTION, UNFUSED PULL APART
				6	625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT
				2	625	18400	2	EACH	BRACKET ARM, 20'
				255	625	25402	255	FT	CONDUIT, 2", 725.05
				198	625	25602	198	FT	CONDUIT, 4", 725.05
				188	625	25902	188	FT	CONDUIT, JACKED OR DRILLED, 725.04 , 4"
				2	625	26253	2	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (150W, 120V, TYPE II)
				439	625	29002	439	FT	TRENCH, 24" DEEP
				8	625	30706	8	EACH	PULL BOX, 725.08, 24"
				8	625	31510	8	EACH	PULL BOX REMOVED
				4	625	32000	4	EACH	GROUND ROD
				6	632	05007	6	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN
				6	632	25000	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD
				774	632	40700	774	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
				3	632	64010	3	EACH	SIGNAL SUPPORT FOUNDATION
				631	632	67300	631	FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
				1	632	70001	1	EACH	POWER SERVICE, AS PER PLAN
				1	632	80302	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3
				2	632	80990	2	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3
				1	632	90101	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN
				1	633	67101	1	EACH	CABINET FOUNDATION, AS PER PLAN
				1	633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN
				1	633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN
				1	633	99000	1	EACH	CONTROLLER ITEM, MISC.: CONTROLLER UNIT, TYPE COBALT, WITH CABINET, TYPE 332
				3	809	69000	3	EACH	ADVANCE RADAR DETECTION
				1	809	69100	1	EACH	STOP LINE RADAR DETECTION

CALCULATED PTB
CHECKED JSL

LOCATION 3 SUBSUMMARY (SIGNAL)

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LOCATION TOTALS									PLAN SPLITS					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1	1 MEDIAN	2A	2A MEDIAN	2B	2B MEDIAN	2C	2D	3	01/STR/PV	02/S<2/PV	03/S<2/PV/ CAMB	04/S<2/OT/ CAMB	05/S<2/OT						
																		ROADWAY	
			LS		LS									201	11000		LS	CLEARING AND GRUBBING	
250		1,979		5,107		1,759	1,001	56	2,229	6,164	1,759			202	23500	10,152	SY	WEARING COURSE REMOVED	
			276		198				276	198				202	30500	474	FT	CONCRETE MEDIAN REMOVED	
					120	44				120		44		202	32000	164	FT	CURB REMOVED	
	937		33,353		13,190				34,290	13,190				202	32501	47,480	FT	CURB AND GUTTER REMOVED, AS PER PLAN	49
	239		8,931		4,550				9,170	4,550				203	10000	13,720	CY	EXCAVATION	
			280		79				280	79				203	20000	359	CY	EMBANKMENT	
	810		29,389		14,592				30,199	14,592				204	10000	44,791	SY	SUBGRADE COMPACTION	
			2,342		1,283				2,342	1,283				204	13000	3,625	CY	EXCAVATION OF SUBGRADE	
			1,298		361				1,298	361				204	20000	1,659	CY	EMBANKMENT	
			1,045		922				1,045	922				204	30010	1,967	CY	GRANULAR MATERIAL, TYPE B	
	2		15		9				17	9				204	45000	26	HOUR	PROOF ROLLING	
			5,188		3,383				5,188	3,383				204	50000	8,571	SY	GEOTEXTILE FABRIC	
0.18		4.61		7.43		1.06	1.55		4.79	8.98	1.06			209	72051	14.83	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	3
						68						68		608	52000	68	SF	CURB RAMP	
						44						44		609	24510	44	FT	CURB, TYPE 4-C	
			2		2				2	2				SPECIAL	69050100	4	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	51
			2		2				2	2				SPECIAL	69050200	4	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	51
			2		2				2	2				SPECIAL	69050350	4	EACH	MAILBOX REMOVED AND RESET	51
																		EROSION CONTROL	
			24		20				24	20				601	21050	44	SY	TIED CONCRETE BLOCK MAT, TYPE 1	
			55						55					653	10000	55	CY	TOPSOIL FURNISHED AND PLACED	
			10,925		3,925				10,925	3,925				659	00510	14,850	SY	SEEDING AND MULCHING, CLASS 2	
			546		196				546	196				659	14000	742	SY	REPAIR SEEDING AND MULCHING	
			546		196				546	196				659	15000	742	SY	INTER-SEEDING	
			1.52		0.55				1.52	0.55				659	20000	2.07	TON	COMMERCIAL FERTILIZER	
			2.26		0.81				2.26	0.81				659	31000	3.07	ACRE	LIME	
			60		22				60	22				659	35000	82	MGAL	WATER	
			450						450					670	00720	450	SY	DITCH EROSION PROTECTION MAT, TYPE B	
			LS		LS									832	15000		LS	STORM WATER POLLUTION PREVENTION PLAN	
			LS		LS									832	15002		LS	STORM WATER POLLUTION PREVENTION INSPECTIONS	
			LS		LS									832	15010		LS	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
			100,000		100,000				100,000	100,000				832	30000	200,000	EACH	EROSION CONTROL	

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GENERAL SUMMARY

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LOCATION TOTALS									PLAN SPLITS					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1	1 MEDIAN	2A	2A MEDIAN	2B	2B MEDIAN	2C	2D	3	01/STR/PV	02/S<2/PV	03/S<2/PV/ CAMB	04/S<2/OT/ CAMB	05/S<2/OT						
																		DRAINAGE	
			250		250				250	250				202	35100	500	FT	PIPE REMOVED, 24" AND UNDER	
			10		10				10	10				202	58100	20	EACH	CATCH BASIN REMOVED	
					2					2				202	58400	2	EACH	INLET ABANDONED	
	3		94		51				97	51				202	58501	148	EACH	CATCH BASIN ABANDONED, AS PER PLAN	50
			250		250				250	250				202	70000	500	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT	50
			1.62						1.62					602	20000	1.62	CY	CONCRETE MASONRY	
			20		20				20	20				611	00100	40	FT	4" CONDUIT, TYPE B	
			20		20				20	20				611	00900	40	FT	6" CONDUIT, TYPE B	
			360		600				360	600				611	96600	960	FT	CONDUIT, BORED OR JACKED : 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, 707.33, 707.42, OR 707.45	
			418						418					611	96600	418	FT	CONDUIT, BORED OR JACKED : 15" TYPE B	
			5						5					611	98370	5	EACH	CATCH BASIN, NO. 6	
			1						1					611	98470	1	EACH	CATCH BASIN, NO. 2-2B	
						1					1			611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
			1						1					611	98635	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	50
						3					3			611	99654	3	EACH	MANHOLE ADJUSTED TO GRADE	
			6		10				6	10				611	99710	16	EACH	PRECAST REINFORCED CONCRETE OUTLET	
			25		25				25	25				613	41200	50	CY	LOW STRENGTH MORTAR BACKFILL	
						2					2			638	10800	2	EACH	VALVE BOX ADJUSTED TO GRADE	
																		PAVEMENT	
		120		75		85	85	10	120	170	85			253	02000	375	CY	PAVEMENT REPAIR	
		69,696		40,480					69,696	40,480				254	01000	110,176	SY	PAVEMENT PLANING, ASPHALT CONCRETE , VARIABLE	
3,063		11,133		78,462		4,576	18,011		14,196	96,473	4,576			254	01000	115,245	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.25"	
						8,472		26,720		26,720	8,472			254	01000	35,192	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 2.25"	
	156		8,262		4,226				8,418	4,226				301	46000	12,644	CY	ASPHALT CONCRETE BASE, PG64-22	
	136		4,901		2,434				5,037	2,434				304	20000	7,471	CY	AGGREGATE BASE	
489	18	12,400	863	16,807	398	1,859	2,632	3,484	13,770	23,321	1,859			407	20000	38,950	GAL	NON-TRACKING TACK COAT	
169		4,336		4,627		498	740	1,264	4,505	6,631	498			408	10000	11,634	GAL	PRIME COAT	
9		59		90		34	5		68	95	34			441	50000	197	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
128		3,324		4,523		495	676	931	3,452	6,130	495			441	50100	10,077	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
101		2,641	563	3,529	193	389	513	746	3,305	4,981	389			441	50200	8,675	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
		164		265			192	231	164	688				516	31011	852	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
36		901		1,126		139	200	176	937	1,502	139			617	10101	2,578	CY	COMPACTED AGGREGATE, AS PER PLAN	2

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GENERAL SUMMARY

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LOCATION TOTALS									PLAN SPLITS					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1	1 MEDIAN	2A	2A MEDIAN	2B	2B MEDIAN	2C	2D	3	01/STR/PV	02/S<2/PV	03/S<2/PV/ CAMB	04/S<2/OT/ CAMB	05/S<2/OT						
																		TRAFFIC CONTROL	
12		612		873		30	126	181	624	1,180	30			621	00100	1,834	EACH	RPM	
12		612		873		30	126	181	624	1,180	30			621	54000	1,834	EACH	RAISED PAVEMENT MARKER REMOVED	
	55.4		394.7		169.3				450.1	169.3				630	03100	619.4	EACH	GROUND MOUNTED SUPPORT, NO. 3 POST	
	30.7		233.7		131.9				264.4	131.9				630	80100	396.3	SF	SIGN, FLAT SHEET	
	5		28		21				33	21				630	84900	54	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
			7						7					630	85100	7	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
	4		26		15				30	15				630	86002	45	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
0.18		5.22		7.41		1.06	1.58	3.24	5.40	12.23	1.06			644	00104	18.69	MILE	EDGE LINE, 6"	
0.02		4.59		7.41		0.52	1.26	0.44	4.61	9.11	0.52			644	00204	14.24	MILE	LANE LINE, 6"	
0.14		3.96		5.11		0.53	1.11		4.10	6.22	0.53			644	00300	10.85	MILE	CENTER LINE	
				390			130	600		1,120				644	00400	1,120	FT	CHANNELIZING LINE, 8"	
25		206		301		60	14	28	231	343	60			644	00500	634	FT	STOP LINE	
						306					306			644	00601	306	FT	CROSSWALK LINE, AS PER PLAN	18
168		1,187		383			670	240	1,355	1,293				644	00700	2,648	FT	TRANSVERSE/DIAGONAL LINE	
		20		18			4	4	20	26				644	01300	46	EACH	LANE ARROW	
								2		2				644	01410	2	EACH	WORD ON PAVEMENT, 96"	
		0.06		0.05					0.06	0.05				646	10010	0.11	MILE	EDGE LINE, 6"	
		0.03		0.05					0.03	0.05				646	10110	0.08	MILE	LANE LINE, 6"	
				0.03						0.03				646	10200	0.03	MILE	CENTER LINE	
		40							40					646	10600	40	FT	TRANSVERSE/DIAGONAL LINE	
																		TRAFFIC SIGNALS	
								2					2	625	00450	2	EACH	CONNECTION, FUSED PULL APART	
								2					2	625	00460	2	EACH	CONNECTION, UNFUSED PULL APART	
								6					6	625	00480	6	EACH	CONNECTION, UNFUSED PERMANENT	
								2					2	625	18400	2	EACH	BRACKET ARM, 20'	
								2					2	625	25402	2	FT	CONDUIT, 2", 725.05	
								255					255	625	25602	255	FT	CONDUIT, 4", 725.05	
								198					198	625	25902	198	FT	CONDUIT, JACKED OR DRILLED, 725.04 , 4"	
														625	26253		EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (150W, 120V, TYPE II)	178
								2					2	625	29002	2	FT	TRENCH, 24" DEEP	
								439					439	625	30706	439	EACH	PULL BOX, 725.08, 24"	
								8					8	625	31510	8	EACH	PULL BOX REMOVED	
								8					8	625	32000	8	EACH	GROUND ROD	
														632	05007		EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN	179
								6					6	632	25000	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
								6					6	632	40700	6	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
								774					774	632	64010	774	EACH	SIGNAL SUPPORT FOUNDATION	
								3					3	632	67300	3	FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG	
														632	70001		EACH	POWER SERVICE, AS PER PLAN	178
								1					1	632	80302	1	EACH	SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3	
								1					1	632	80990	1	EACH	COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3	
								2					2	632	90101	2	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	178
														633	67101		EACH	CABINET FOUNDATION, AS PER PLAN	179
								1					1	633	67201	1	EACH	CONTROLLER WORK PAD, AS PER PLAN	179
								1					1	633	75001	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	179
								1					1	633	99000	1	EACH	CONTROLLER ITEM, MISC.: CONTROLLER UNIT, TYPE COBALT, WITH CABINET, TYPE 332	179
														809	69000		EACH	ADVANCE RADAR DETECTION	180
								3					3	809	69100	3	EACH	STOP LINE RADAR DETECTION	180

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GENERAL SUMMARY

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LOCATION TOTALS									PLAN SPLITS					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1	1 MEDIAN	2A	2A MEDIAN	2B	2B MEDIAN	2C	2D	3	01/STR/PV	02/S<2/PV	03/S<2/PV/ CAMB	04/S<2/OT/ CAMB	05/S<2/OT						
																		MAINTENANCE OF TRAFFIC	
								50		50				614	11110	50	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
1		12		20			5		13	25				614	12460	38	EACH	WORK ZONE MARKING SIGN	
2		6		9		3	4	10	8	23	3			614	13000	34	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		6		6				6	6	12				614	18601	18	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
0.02	0.02	4.62	4.62	7.46	2.28	0.52	1.26	0.56	9.28	11.56	0.52			614	20110	21.36	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
0.02		4.62		7.46		0.52	1.26	0.56	4.64	9.28	0.52			614	20560	14.44	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
			3.70	2.46	2.12	0.53	1.11		3.70	5.69	0.53			614	21100	9.92	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
				2.46		0.53	1.11			3.57	0.53			614	21550	4.10	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
0.40	0.02	9.24	11.11	10.14	6.19	1.06	1.58	3.72	20.77	21.63	1.06			614	22110	43.46	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
0.40		9.24		10.14		1.06	1.58	3.72	9.64	15.44	1.06			614	22360	26.14	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
				482			130	425		1,037				614	23200	1,037	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
				482			130	425		1,037				614	23680	1,037	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
					427					427				614	24200	427	FT	WORK ZONE DOTTED LINE, CLASS I, 642 PAINT	
				48		13		29		77	13			614	26200	90	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
				48		13		29		77	13			614	26610	90	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																		INCIDENTALS	
									LS	LS	LS	LS	LS	614	11000		LS	MAINTAINING TRAFFIC	
									6	6	2		1	619	16020	15	MNTH	FIELD OFFICE, TYPE C	
									LS	LS	LS	LS	LS	623	10000		LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
									LS	LS	LS	LS	LS	624	10000		LS	MOBILIZATION	

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GENERAL SUMMARY

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0 100 200 400
HORIZONTAL SCALE IN FEET

CALCULATED PTB
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SCHEMATIC PLAN
STA. 19+50 TO STA. 135+00

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CURVE 4

P.I. Sta. 173+47.46
Δ = 21° 21' 30" (LT)
Dc = 1° 00' 00"
R = 5,729.57'
T = 1,080.46'
L = 2,135.83'
E = 100.98'
emax 0.0208 (50 MPH)

CURVE 5

P.I. Sta. 228+44.37
Δ = 27° 04' 00" (RT)
Dc = 1° 29' 00"
R = 3,862.64'
T = 929.71'
L = 1,824.72'
E = 110.31'
emax 0.0358 (55 MPH)

0 100 200 400
HORIZONTAL SCALE IN FEET

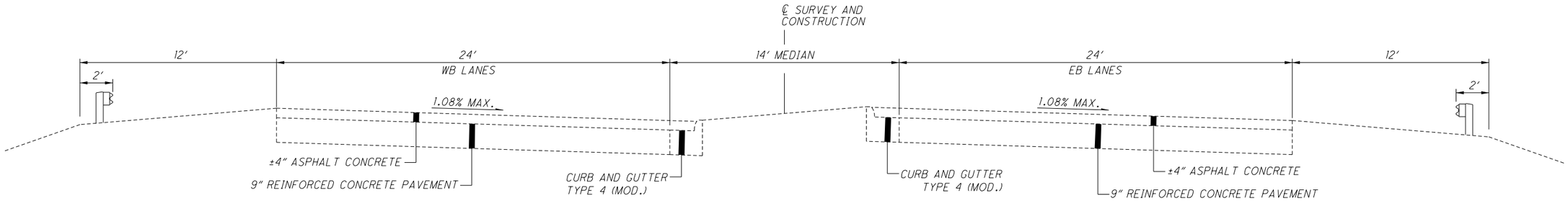
CALCULATED PTB
CHECKED JSL

SCHEMATIC PLAN
STA. 135+00 TO STA. 237+40

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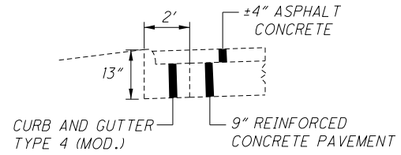
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188

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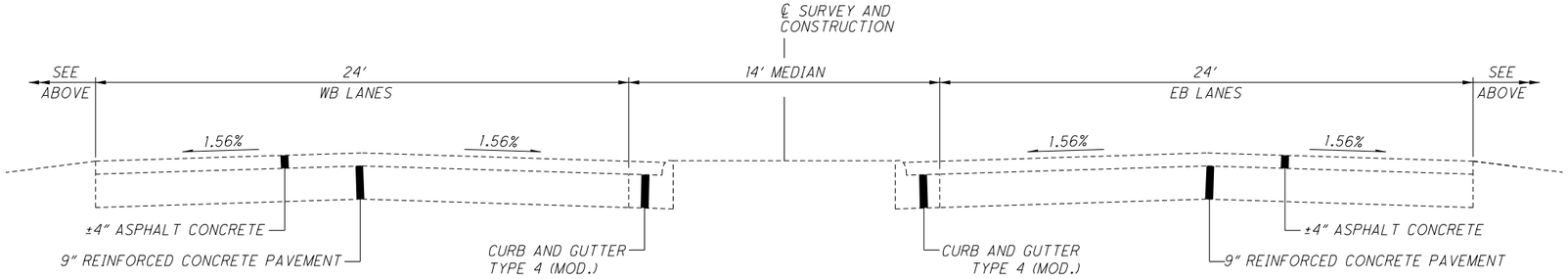
U.S. 22 SUPERELEVATED RIGHT/BIFURCATED SECTION APPLIES:

STA. 23+71.00 TO STA. 44+75.00 = 2,104.00 FT.



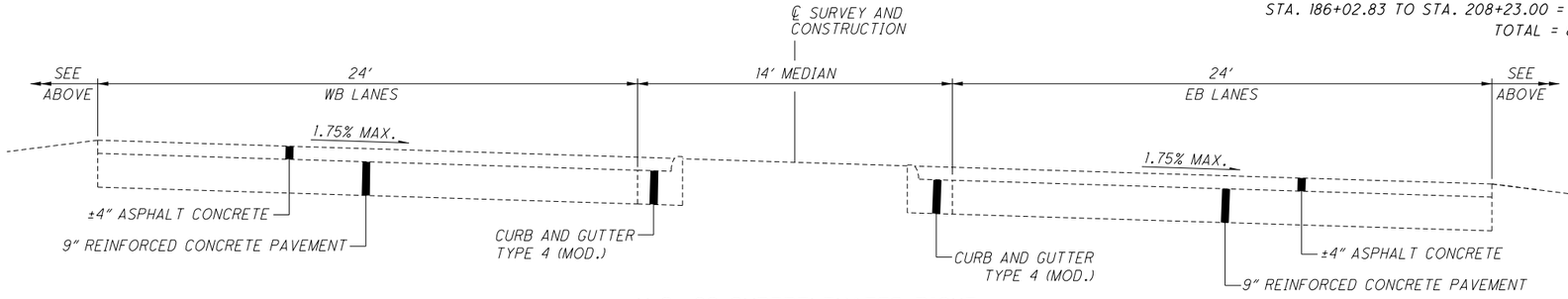
U.S. 22 EDGE OF OUTSIDE LANE LEFT SECTION APPLIES:

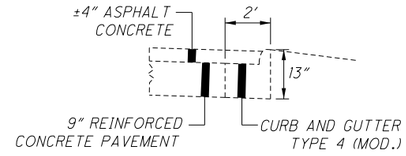
STA. 30+96.00 TO STA. 34+15.00 = 319.00 FT.
STA. 53+25.00 TO STA. 91+63.50 = 3,838.50 FT.
STA. 102+75.00 TO STA. 117+17.00 = 1,442.00 FT.
STA. 139+85.50 TO STA. 154+95.00 = 1,509.50 FT.
STA. 161+26.00 TO STA. 178+98.00 = 1,772.00 FT.
TOTAL = 8,881.00 FT.



U.S. 22 NORMAL SECTION APPLIES:

STA. 44+75.00 TO STA. 52+18.20 = 743.20 FT.
STA. 81+79.87 TO STA. 120+75.00 = 3,895.13 FT.
STA. 140+90.65 TO STA. 160+67.00 = 1,976.35 FT.
STA. 186+02.83 TO STA. 208+23.00 = 2,220.17 FT.
TOTAL = 8,834.85 FT.



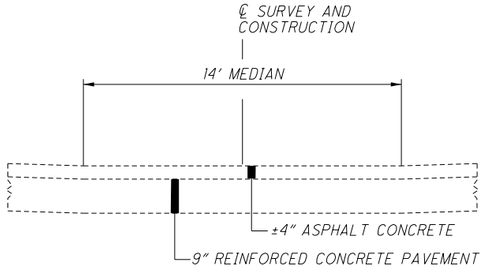


U.S. 22 EDGE OF OUTSIDE LANE RIGHT SECTION APPLIES:

STA. 21+37.50 STA. 26+70.00 = 532.50 FT.
STA. 47+00.00 TO STA. 48+15.50 = 115.50 FT.
STA. 64+40.00 TO STA. 65+17.00 = 77.00 FT.
STA. 65+90.00 TO STA. 67+55.00 = 165.00 FT.
STA. 81+00.00 TO STA. 91+63.50 = 1,063.50 FT.
STA. 103+50.00 TO STA. 117+21.50 = 1,371.50 FT.
STA. 131+47.50 TO STA. 156+03.00 = 2,455.50 FT.
TOTAL = 5,780.50 FT.

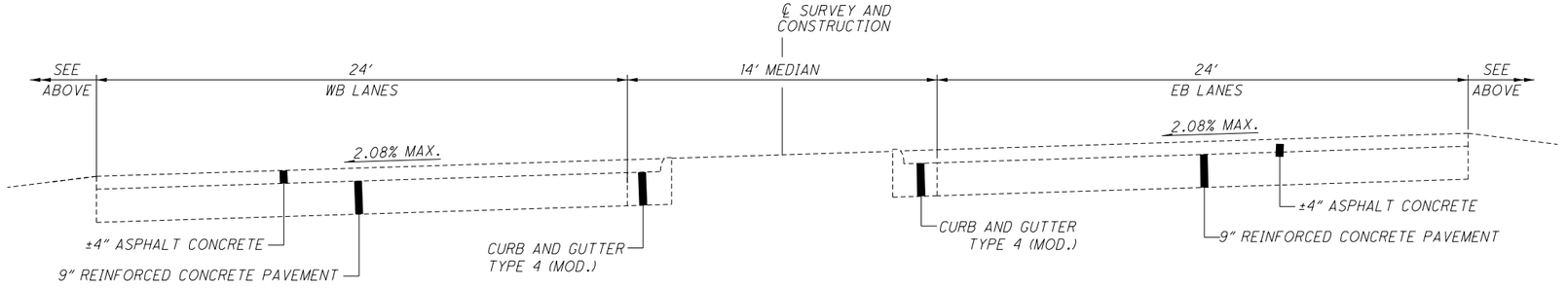
U.S. 22 SUPERELEVATED RIGHT SECTION APPLIES:

STA. 120+75.00 TO STA. 140+90.65 = 2,015.65 FT.



MEDIAN CROSSOVER SECTION APPLIES:

VARIOUS LOCATIONS
(SEE PLANS)



U.S. 22 SUPERELEVATED LEFT SECTION APPLIES:

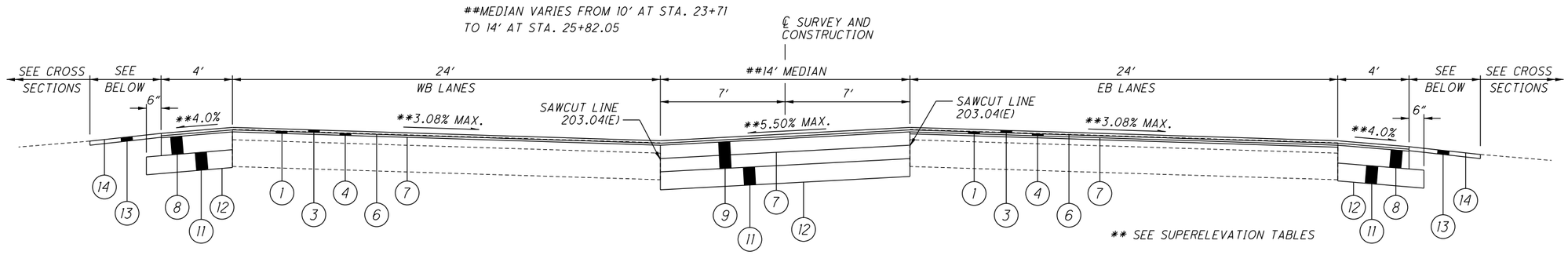
STA. 52+18.20 TO STA. 81+79.87 = 2,960.67 FT.
STA. 160+67.00 TO STA. 186+02.83 = 2,535.83 FT.
TOTAL = 5,496.50 FT.

CALCULATED LME
CHECKED JSL

EXISTING TYPICAL SECTIONS

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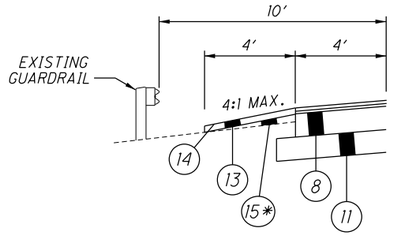


SHLD. BEGINS AT STA. 22+15.00 LT.

U.S. 22 SUPERELEVATED RIGHT/BIFURCATED SECTION APPLIES:

STA. 23+71.00 TO STA. 43+50.00 = 1,979.00 FT.

SHLD. BEGINS AT STA. 21+35.00 RT.



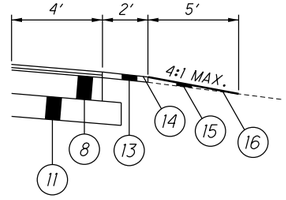
* TYPICAL ON HIGH SIDE OF SUPERELEVATION

GUARDRAIL SECTION

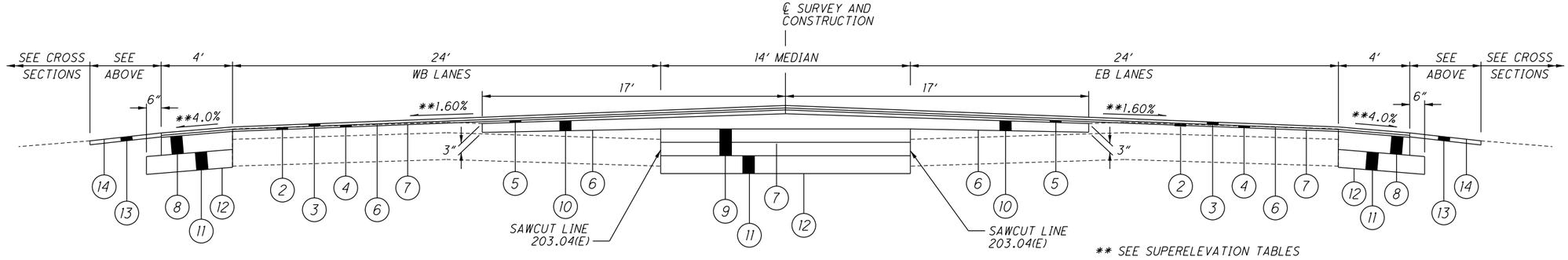
NOTES:
SHOULDERS THROUGH PAVED DRIVES SHALL APPROXIMATE EXISTING DRIVE PROFILE (SEE SUPERELEVATION TABLES FOR ELEVATIONS)

SHOULDERS THROUGH AGGREGATE DRIVES SHALL REMAIN AT 4.0% CROSS SLOPE AND GRADED AS DETAILED IN THE PLANS

SUSPEND FULL DEPTH PAVEMENT AT ALL MEDIAN CROSSOVERS AND SIDE ROADS UNLESS DETAILED IN THE PLANS



NORMAL SECTION



SHLD. ENDS AT STA. 210+73.00 LT.

U.S. 22 NORMAL SECTION APPLIES:

STA. 43+50.00 TO STA. 54+00.00 = 1,050.00 FT.
STA. 81+50.00 TO STA. 122+00.00 = 4,050.00 FT.
STA. 140+50.00 TO STA. 161+00.00 = 2,050.00 FT.
STA. 186+00.00 TO STA. 208+23.00 = 2,223.00 FT.
TOTAL = 9,373.00 FT.

SHLD. ENDS AT STA. 210+73.00 RT.

(1) ITEM 254, 1.25" PAVEMENT PLANING, ASPHALT CONCRETE

(2) ITEM 254, VARIABLE DEPTH (0.00"-2.20") PAVEMENT PLANING, ASPHALT CONCRETE

(3) ITEM 441, 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 70-22M

(4) ITEM 441, 1.00" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)

(5) ITEM 441, VARIABLE DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)

(6) ITEM 407, TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 GAL/SY)

(7) ITEM 407, TACK COAT (@ 0.08 GAL/SY)

(8) ITEM 301, 6" ASPHALT CONCRETE BASE, PG64-22

(9) ITEM 301, 9" ASPHALT CONCRETE BASE, PG64-22

(10) ITEM 301, VARIABLE DEPTH ASPHALT CONCRETE BASE, PG64-22

(11) ITEM 304 - 6" AGGREGATE BASE

(12) ITEM 204 - SUBGRADE COMPACTION

(13) ITEM 617 - 3" COMPACTED AGGREGATE, AS PER PLAN

(14) ITEM 408 - PRIME COAT, AS PER PLAN

(15) ITEM 203 - EMBANKMENT

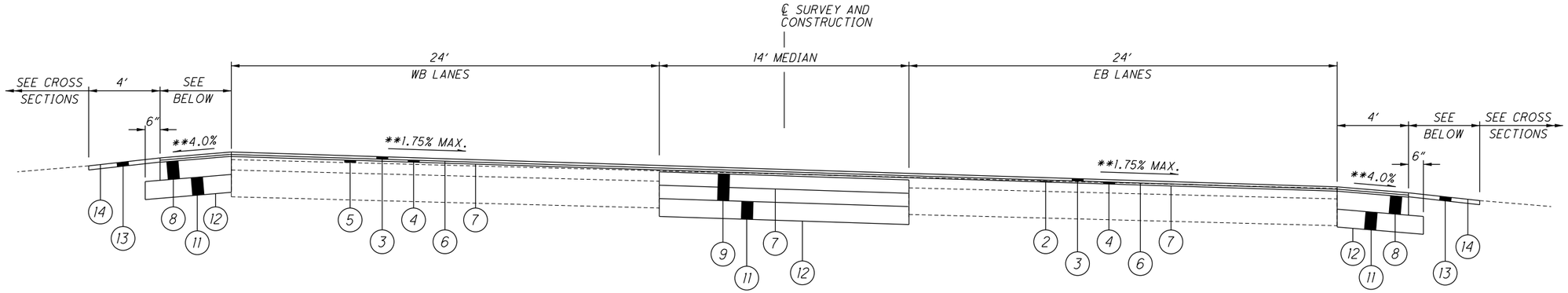
(16) ITEM 659 - SEEDING AND MULCHING, CLASS 2

CALCULATED LME
CHECKED JSL

PROPOSED TYPICAL SECTIONS

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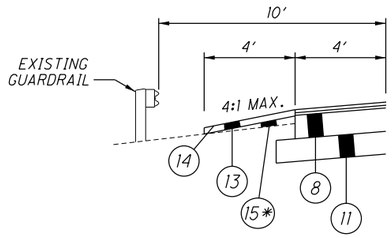
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U.S. 22 SUPERELEVATED RIGHT SECTION APPLIES:

STA. 122+00.00 TO STA. 140+50.00 = 1,850.00 FT.

** SEE SUPERELEVATION TABLES



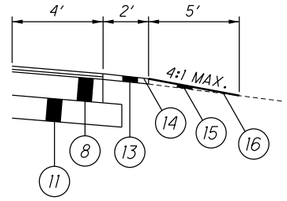
GUARDRAIL SECTION

* TYPICAL ON HIGH SIDE OF SUPERELEVATION

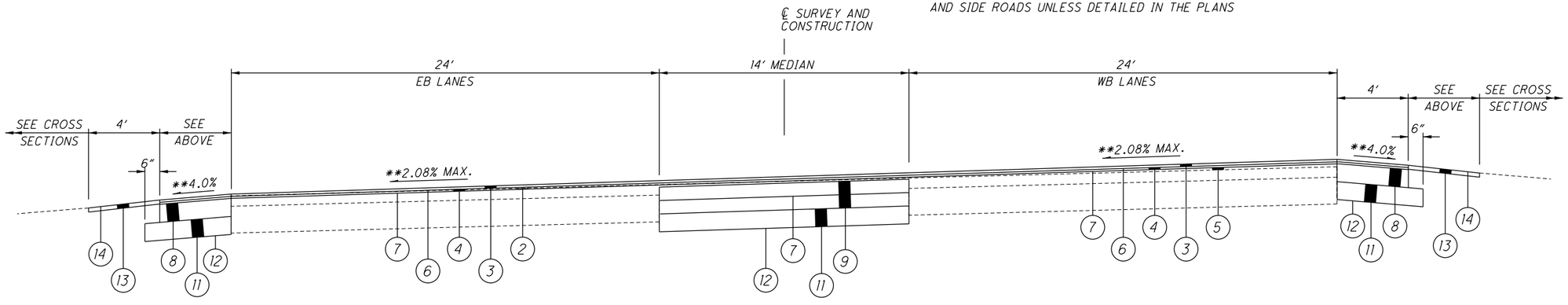
NOTES:
SHOULDERS THROUGH PAVED DRIVES SHALL APPROXIMATE EXISTING DRIVE PROFILE (SEE SUPERELEVATION TABLES FOR ELEVATIONS)

SHOULDERS THROUGH AGGREGATE DRIVES SHALL REMAIN AT 4.0% CROSS SLOPE AND GRADED AS DETAILED IN THE PLANS

SUSPEND FULL DEPTH PAVEMENT AT ALL MEDIAN CROSSOVERS AND SIDE ROADS UNLESS DETAILED IN THE PLANS



NORMAL SECTION



U.S. 22 SUPERELEVATED LEFT SECTION APPLIES:

STA. 54+00.00 TO STA. 81+50.00 = 2,750.00 FT.
STA. 161+00.00 TO STA. 186+00.00 = 2,500.00 FT.
TOTAL = 5,250.00 FT.

** SEE SUPERELEVATION TABLES

(1) ITEM 254, 1.25″ PAVEMENT PLANING, ASPHALT CONCRETE

(2) ITEM 254, VARIABLE DEPTH (0.00″-2.20″) PAVEMENT PLANING, ASPHALT CONCRETE

(3) ITEM 441, 1.25″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 70-22M

(4) ITEM 441, 1.00″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)

(5) ITEM 441, VARIABLE DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)

(6) ITEM 407, TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 GAL/SY)

(7) ITEM 407, TACK COAT (@ 0.08 GAL/SY)

(8) ITEM 301, 6″ ASPHALT CONCRETE BASE, PG64-22

(9) ITEM 301, 9″ ASPHALT CONCRETE BASE, PG64-22

(10) ITEM 301, VARIABLE DEPTH ASPHALT CONCRETE BASE, PG64-22

(11) ITEM 304 - 6″ AGGREGATE BASE

(12) ITEM 204 - SUBGRADE COMPACTION

(13) ITEM 617 - 3″ COMPACTED AGGREGATE, AS PER PLAN

(14) ITEM 408 - PRIME COAT, AS PER PLAN

(15) ITEM 203 - EMBANKMENT

(16) ITEM 659 - SEEDING AND MULCHING, CLASS 2

CALCULATED LME
CHECKED JSL

PROPOSED TYPICAL SECTIONS

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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 THE WORK LIMITS.

CONTINGENCY QUANTITIES

*THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED **"AS DIRECTED BY THE ENGINEER"** UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.*

UTILITIES

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

CABLE TV
SPECTRUM CABLE TV
4547 NORTH LEEDOM RD.
CHANDLERSVILLE, OHIO 43727
ATTN: BRAD ST. CLAIR
740-819-3083
BRADLEY.STCLAIR@CHARTER.COM

ELECTRIC
AMERICAN ELECTRIC POWER CO. (DISTRIBUTION)
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
ATTN: PAUL PAXTON
614.883.6831
PTPAXTON@AEP.COM

GUERNSEY-MUSKINGUM ELECTRIC COOPERATIVE, INC.
17 SOUTH LIBERTY STREET
NEW CONCORD, OHIO 43762
ATTN: BOB CAMPBELL
740-826-7661
BCAMPBELL@GMENERGY.COM

GAS
COLUMBIA GAS OF OHIO
98 STEUBENVILLE AVENUE
CAMBRIDGE, OHIO 43725
ATTN: WILLIAM RICH
740-648-0079
WRICH@NISOURCE.COM

NATIONAL GAS AND OIL COOP.
120 O'NEIL DRIVE
HEBRON, OHIO 43025
ATTN: GREG WILSON
740-348-1254
GWILSON@THEENERGYCOOP.COM

DOMINION ENERGY
21 EAST STATE STREET #911
COLUMBUS, OHIO 43214
ATTN: TRACY
330-478-3104
TRACY14@DOMINIONENERGY.COM
RELOCATION@DOMINIONENERGY.COM

TENNESSEE GAS PIPELINE CO.
ATTN: MITCH MYER
740-698-4951
MITCHELL_MYER@KINDERMORGAN.COM
R/W TECH
ATTN: ANDY GEYER
ANDY_GEYER@KINDERMORGAN.COM

UTILITIES (CONT'D)

TELEPHONE
FRONTIER COMMUNICATIONS
9444 CAMPBELL STREET
CAMBRIDGE, OHIO 43725
ATTN: ASHLEY MILLER
740-432-6961
ASHLEY.MILLER@FTR.COM

HORIZON NETWORK PARTNERS
68 EAST MAIN STREET
CHILLICOTHE, OH 45601
ATTN: ROGER STEELE JR.
740-804-7333
ROGER.STEELEJR@HORIZONTEL.COM

WATER & SEWER
GUERNSEY COUNTY WATER AND SEWER DEPARTMENT
11272 EAST PIKE
CAMBRIDGE, OHIO 43725
ATN: JEFF ALFMAN
740-439-1269
GUERNSEYH20@FIREWIREINTERNET.COM

CAMBRIDGE WATER AND SEWER
1131 STEUBENVILLE AVENUE
CAMBRIDGE, OHIO 43725
ATTN: DEBBIE MCKEE
UTILITIES OFFICE MANAGER
740-432-5453, 740-432-4252
CAMB-UTILITIES@CAMBRIDGEOH.ORG

WESTERN GUERNSEY REGIONAL WATER DISTRICT
61786 SHAW ROAD
CAMBRIDGE, OHIO 43725
ATTN: JERRY WILLIAMS
740-432-7298
WESTERNGUERNSEYREGIONALWATER@GMAIL.COM

VILLAGE OF NEW CONCORD
2 WEST MAIN STREET
NEW CONCORD, OHIO 43762
ATTN: CHARLOTTE COLLEY
740-826-7617
CCOLLEY@NEWCONCORD-OH.GOV

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE. ODOT ASSUMES NO RESPONSIBILITY FOR THE LOCATION OR THE DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THESE PLANS.

AT LEAST 48 HOURS BEFORE DIGGING, THE CONTRACTOR SHALL CALL THE OHIO UTILITIES PROTECTION SERVICE AT THE NUMBER LISTED ON THE TITLE SHEET. NON-MEMBER UTILITY COMPANIES MUST BE CALLED DIRECTLY. THE NAMES AND ADDRESSES OF THE UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS ARE LISTED ABOVE.

SURVEYING PARAMETERS

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING AND SEE TABLE ON SHEET FOR CONTROL POINT DATA FOR THE PROJECT.

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID12A

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE – SOUTH ZONE
COMBINED SCALE FACTOR: 1.000000000

UNITS ARE IN U.S. SURVEY FEET.

SURVEYING PARAMETERS (CONT'D)

U.S. 22 MEDIAN

CN PT	STATION, OFFSET	NORTHING	EASTING	ELEV.	FEATURE CODE
SV1	22+74.80, 33.12' LT	727,432.901	2,185,289.577	846.02	1" REBAR W/ ALUM. ODOT CAP
SV2	38+90.33, 42.23' LT	727,722.110	2,186,882.181	830.99	1" REBAR W/ ALUM. ODOT CAP
SV3	54+75.06, 43.48' RT	727,477.163	2,188,453.076	830.18	1" REBAR W/ ALUM. ODOT CAP
SV4	70+71.98, 41.50' RT	727,544.487	2,190,055.228	829.12	1" REBAR W/ ALUM. ODOT CAP
SV5	88+16.38, 45.97' LT	728,139.116	2,191,698.142	879.34	1" REBAR W/ ALUM. ODOT CAP
SV6	104+02.48, 45.15' RT	728,579.999	2,193,224.460	895.55	1" REBAR W/ ALUM. ODOT CAP
SV7	120+33.33, 38.66' RT	729,127.813	2,194,760.566	939.71	1" REBAR W/ ALUM. ODOT CAP
SV8	135+27.31, 1.99' RT	729,596.272	2,196,176.823	914.46	MAG NAIL AERIAL TARGET
SV9	149+65.43, 45.09' RT	729,845.532	2,197,593.535	844.54	1" REBAR W/ ALUM. ODOT CAP
SV10	162+72.28, 45.73' RT	730,104.703	2,198,874.476	829.58	1" REBAR W/ ALUM. ODOT CAP
SV11	177+93.34, 43.80' RT	730,607.261	2,200,317.939	823.31	1" REBAR W/ ALUM. ODOT CAP
SV12	190+39.58, 39.33' RT	731,261.038	2,201,383.402	817.58	MAG NAIL AERIAL TARGET
SV13	208+16.90, 44.44' LT	732,294.863	2,202,831.542	808.94	1" REBAR W/ ALUM. ODOT CAP

U.S. 22/S.R. 723 TRAFFIC SIGNAL

CN PT	STATION, OFFSET	NORTHING	EASTING	ELEV.	FEATURE CODE
SV20	295+68.98, 34.59' LT	734,261.983	2,213,918.371	836.31	1" REBAR W/ ALUM. ODOT CAP

CALCULATED PTB
CHECKED JSL

GENERAL NOTES (MEDIAN)

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CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

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

ITEM 659, SEEDING AND MULCHING, CLASS 2
LOCATION 2A – 10,925 SQ. YD.
LOCATION 2B – 3,925 SQ. YD.

ITEM 659, REPAIR SEEDING AND MULCHING
LOCATION 2A – 546 SQ. YD.
LOCATION 2B – 196 SQ. YD.

ITEM 659, INTER-SEEDING
LOCATION 2A – 546 SQ. YD.
LOCATION 2B – 196 SQ. YD.

ITEM 659, COMMERCIAL FERTILIZER
LOCATION 2A – 1.52 TON
LOCATION 2B – 0.55 TON

ITEM 659, LIME
LOCATION 2A – 2.26 ACRE
LOCATION 2B – 0.81 ACRE

ITEM 659, WATER
LOCATION 2A – 60 MGAL
LOCATION 2B – 22 MGAL

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.

EXCAVATION AND EMBANKMENT

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CALCULATED FROM THE CROSS SECTION SHEETS AND HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES.

PLACE ITEM 653, TOPSOIL, FURNISHED AND PLACED AS DESCRIBED IN THE VEGETATED BIOFILTER NOTE ON THIS SHEET.

ITEM 203, EXCAVATION
LOCATION 2A – 360 CU. YD.
LOCATION 2B – 163 CU. YD.

ITEM 203, EMBANKMENT
LOCATION 2A – 280 CU. YD.
LOCATION 2B – 79 CU. YD.

ITEM 653, TOPSOIL, FURNISHED AND PLACED
LOCATION 2A – 55 CU. YD.

VARIABLE DEPTH ASPHALT CONCRETE

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CALCULATED FROM THE CROSS SECTION SHEETS AND CARRIED TO THE LOCATION SUB-SUMMARIES FOR PROVIDING THE PROPOSED PAVEMENT CROSS SLOPES AS SHOWN IN THE SUPERELEVATION TABLES.

ITEM 301, ASPHALT CONCRETE BASE, PG64-22 (VARIABLE)
LOCATION 2A – 2,200 CU. YD.
LOCATION 2B – 1,304 CU. YD.

ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448) (VARIABLE)
LOCATION 2A – 563 CU. YD.
LOCATION 2B – 193 CU. YD.

ITEM 202, CURB AND GUTTER REMOVED, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING ASPHALT CONCRETE (APPROX. 4 INCHES) ON TOP OF THE GUTTER PLATE.

ALL DRIVE/ SIDE ROAD RADIUS CURB AND GUTTER SHALL BE REMOVED AND FILLED WITH 12 INCHES OF ITEM 301, ASPHALT CONCRETE. QUANTITIES HAVE BEEN ITEMIZED BELOW. CURB AND GUTTER THAT EXTENDS BEYOND THE EXISTING RIGHT-OF-WAY LIMITS SHALL NOT BE DISTURBED.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, METERIALS, AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE:

LOCATION 1: 226' MEDIANS + 485' RT = 937 FT

LOCATION 2A: 21,550' (MEDIAN) + 6,445' (LT) + 5,008' (RT) + 350' (DRIVE RADIUS) = 33,353 FT

LOCATION 2B: 9,730' (MEDIAN) + 2,437' (LT) + 773' (RT) + 250' (DRIVE RADIUS) = 13,190'

ITEM 202, CURB AND GUTTER REMOVED, AS PER PLAN
LOCATION 1 – 937 FT
LOCATION 2A – 33,353 FT
LOCATION 2B– 13,190 FT

ITEM 202, CURB REMOVED, TYPE 6 (MEADOW/SHAW RD.)
LOCATION 2B – 120 FT

ITEM 202, CONCRETE MEDIAN REMOVED
LOCATION 2A – 276 SY
LOCATION 2B– 198 SY

LOCATION 2A: 6 SY x 46 LOCATIONS = 276 SY
LOCATION 2B: 6 SY x 33 LOCATIONS = 198 SY

ITEM 301, ASPHALT CONCRETE BASE, PG64-22 (DRIVES)
LOCATION 2A – 26 CU. YD.
LOCATION 2B – 19 CU. YD.

LOCATION 2A: 350' x 2' x 1' = 26 CY
LOCATION 2B: 250' x 2' x 1' = 19 CY

ITEM 204, SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO CMS 204.05.

   IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO CMS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN ON **SHEET 61**. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

   PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO CMS 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO CMS 204.07.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO CMS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204, EXCAVATION OF SUBGRADE.

UNDERDRAIN OUTLETS HAVE BEEN PROVIDED TO DRAIN ITEM 204, GRANULAR MARTERIAL, TYPE B WHERE POSITIVE DRAINAGE EXISTS, AT APPROVAL OF THE ENGINEER.

SEE **SHEET 61** FOR ALL QUANTITIES ASSOCIATED WITH THE WORK DESCRIBED ABOVE.

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE ITEM 653 TOPSOIL, FURNISHED AND PLACED AND ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 DITCH EROSION PROTECTION AS SPECIFIED IN THE PLANS

CALCULATED PTB
CHECKED JSL

GENERAL NOTES (MEDIAN)

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REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

UNRECORDED DRAINAGE

FURNISH NO CONTINUANCE FOR ANY UNRECORDED UNTREATED NON-STORM WATER DRAINAGE SUCH AS UNTREATED SEPTIC, UNTREATED WASTEWATER, UNTREATED CURTAIN/GRADIENT DRAINS, AND UNTREATED FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. PLUG ANY UNRECORDED UNTREATED NON-STORM WATER DRAINAGE WITH CLASS C CONCRETE AT THE RIGHT OF WAY LINE. PAYMENT FOR PLUGGING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 OR 203 ITEM. ***NOTIFY THE PROJECT ENGINEER PRIOR TO THE PLUGGING OF ANY CONDUITS.***

FURNISH A CONTINUANCE FOR ALL UNRECORDED TREATED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE, AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT. THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

FURNISH A CONTINUANCE FOR ALL UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS SUCH AS SANITARY, WASTEWATER, CURTAIN/GRADIENT DRAINS, AND FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. FURNISH AN UNOBSTRUCTED CONTINUANCE OF THE UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS TO THE SATISFACTION OF THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT. ALL SANITARY AND SANITARY WASTEWATER CONTINUANCE MAY ALSO REQUIRE A NPDES PERMIT FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY. REPORT ALL CONTINUANCE TO THE LOCAL HEALTH DEPARTMENT. THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.42, 707.43, 707.44, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35, 706.01, 706.02, OR 706.08 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES, ***AS DIRECTED BY THE ENGINEER****, FOR THE ABOVE DESCRIBED PURPOSE:*

LOCATION 2A
ITEM 611, 4" CONDUIT, TYPE B – 20 FT.
ITEM 611, 6" CONDUIT, TYPE B – 20 FT.

LOCATION 2B
ITEM 611, 4" CONDUIT, TYPE B – 20 FT.
ITEM 611, 6" CONDUIT, TYPE B – 20 FT.

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS

WHEN NECESSARY TO OPEN CUT EXISTING FULL DEPTH PAVEMENT FOR INSTALLATION OF PIPES UNDER ITEM 611 AND/OR TO MAINTAIN TRAFFIC THEREAFTER. PAVEMENT SHALL BE RESTORED TO THE EXISTING ELEVATION UNTIL FINAL FULL DEPTH PAVEMENT CAN BE PLACED. TRENCH WIDTH SHALL BE 1.5 TIMES THE DIAMETER OF THE PIPE.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES, ***AS DIRECTED BY THE ENGINEER****, FOR THE ABOVE DESCRIBED PURPOSE:*

ITEM 613, LOW STRENGTH MORTAR BACKFILL, TYPE 2
LOCATION 2A – 25 CU. YD.
LOCATION 2B – 25 CU. YD.

ITEM 202, CATCH BASIN ABANDONED, AS PER PLAN

ALL EXISTING CATCH BASINS SHOWN IN THE PLANS HAVE AN AVERAGE DEPTH OF ***4 FT*** *WITH* ***12 INCH*** *STORM SEWER CONNECTING PIPES SLOPED AT APPROX. 1.0%.*

TO MAINTAIN DRAINAGE DURING PHASED CONSTRUCTION, CONNECT ALL EXISTING PIPES THROUGH ABANDONED BASINS PER CMS 202.11. THE LAST CATCH BASIN OF A CONNECTED RUN TO BE ABANDONED, SHALL HAVE ALL PIPES PLUGGED PER CMS 202.11, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ITEM 611, CATCH BASIN RECONSTRUCTED, AS PER PLAN

THIS ITEM SHALL CONSIST OF RECONSTRUCTING AN EXISTING NO. 3 CATCH BASIN WITH A NO. 6 CATCH BASIN GRATE AND FRAME.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, METERIALS, AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

DRAINAGE CONTINGENCY QUANTITIES

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES, ***AS DIRECTED BY THE ENGINEER****, TO BE USED IN LIEU OF ABANDONING A CATCH BASIN OR STORM SEWER PIPE AS DESCRIBED ABOVE.*

ITEM 202, PIPE REMOVED, 24" AND UNDER
LOCATION 2A – 250 FT.
LOCATION 2B – 250 FT.

ITEM 202, CATCH BASIN REMOVED
LOCATION 2A – 10 EACH
LOCATION 2B – 10 EACH

ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT
LOCATION 2A – 250 FT.
LOCATION 2B – 250 FT.

ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 12 INCH DIAMETER CONDUIT AND FILLING THE AREA THUS SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION TO THE DEPARTMENT:

THE CONTRACTOR SHALL PROVIDE AS-BUILT DATA FOR THE SPECIFIED COMPLETED CONSTRUCTION ITEMS IN OHIO STATE PLANE COORDINATES (GRID). THE CONSTRUCTION ITEMS SHALL BE LOCATED AS PER THE SURVEY FEATURE CODE LIST FOUND ON THE OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF CADD & MAPPING SERVICES WEBSITE. ***AN EMAIL*** *CONTAINING A COMMA DELIMITED ASCII FILE AND A SURVEYOR'S CERTIFICATION SHALL BE DELIVERED TO* ***CODY.GIERHART@DOT.OHIO.GOV*** *AFTER ALL INFORMATION HAS BEEN COLLECTED. THE ASCII FILE SHALL INCLUDE A HEADER CONTAINING NAME OF SURVEYOR, DATE(S) OF COLLECTION, HORIZONTAL DATUM (I.E. NAD83 (2011), OHIO STATE PLANE COORDINATE SYSTEM NORTH OR SOUTH), VERTICAL DATUM (I.E. NAVD 88, GEOID12A) AND METHOD OF COLLECTION (I.E. OHIO VRS, GPS RTK, TOTAL STATION, ETC.) AND BE IN A TABLE FORM AS FOLLOWS:*

POINT NUMBER, NORTHING, EASTING, ELEVATION, FEATURE CODE, DESCRIPTION

BELOW IS A LIST OF THE ITEMS THE CONTRACTOR IS REQUIRED TO PROVIDE FOR THE PROJECT:

- CATCH BASINS AND OUTLETS
- POST-CONSTRUCTION BMPS
- TRAFFIC SIGNAL POLES, PULL BOXES, AND CABINET

THE ABOVE ITEMS SHALL BE COLLECTED USING SURVEY GRADE EQUIPMENT MEETING THE REQUIREMENTS OF SECTION 400 IN THE OHIO DEPARTMENT OF TRANSPORTATION SURVEY & MAPPING SPECIFICATIONS MANUAL.

ALL COST ASSOCIATED WITH OBTAINING THE INFORMATION LISTED ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 623 CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

CALCULATED PTB
CHECKED JSL

GENERAL NOTES (MEDIAN)

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ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATION SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER. THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING POSTS AND OTHER MATERIAL NOT CONSIDERED SALVAGEABLE AND DISPOSED OF IN ACCORDANCE WITH 202.02.

WOOD POSTS SHALL BE NOMINAL 4" x 4" SQUARE OR 4½" DIAMETER ROUND, AND CONFORM TO 710.14. THE WOOD PLATE THAT IS ATTACHED TO THE TOP OF THE POST SHALL BE PRESSURE TREATED WOOD. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181. HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03 AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST. THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

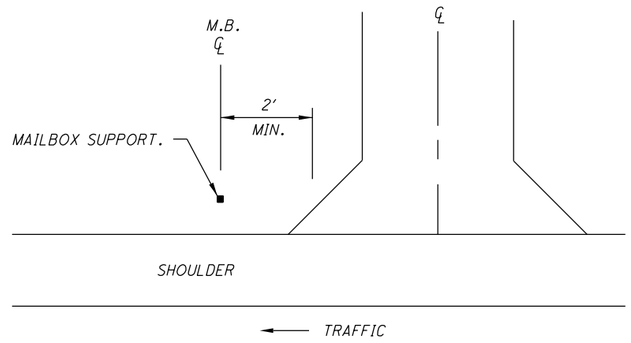
THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

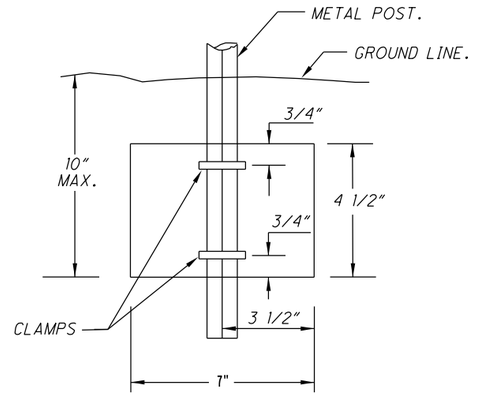
PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY. MAILBOX SUPPORTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUBSUMMARIES TO BE USED AS DIRECTED BY THE ENGINEER:

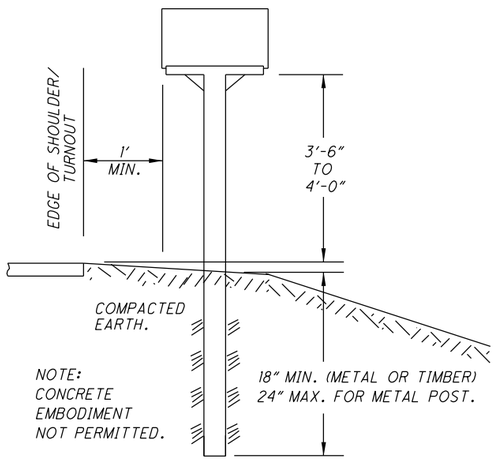
LOCATION 2A
ITEM SPECIAL, MAILBOX SUPPORT SYSTEM, SINGLE - 2 EACH
ITEM SPECIAL, MAILBOX SUPPORT SYSTEM, DOUBLE - 2 EACH
ITEM SPECIAL, MAILBOX REMOVED AND RESET - 2 EACH

LOCATION 2B
ITEM SPECIAL, MAILBOX SUPPORT SYSTEM, SINGLE - 2 EACH
ITEM SPECIAL, MAILBOX SUPPORT SYSTEM, DOUBLE - 2 EACH
ITEM SPECIAL, MAILBOX REMOVED AND RESET - 2 EACH

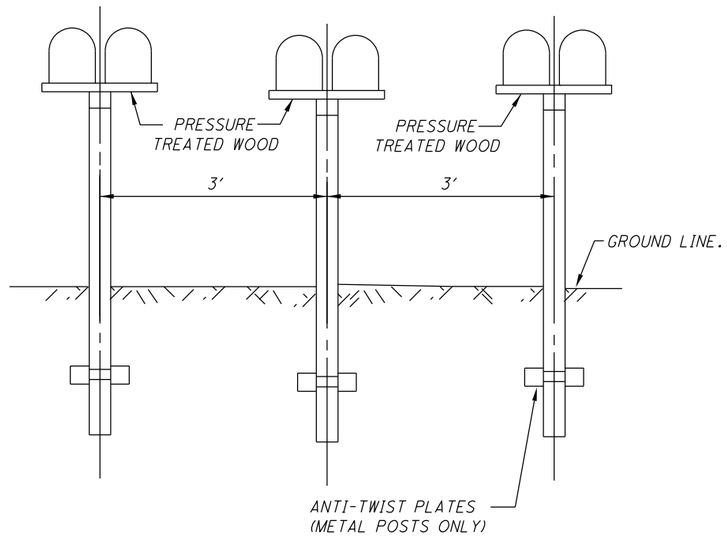




ANTI-TWIST PLATE



TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT



GROUP MAILBOX INSTALLATION

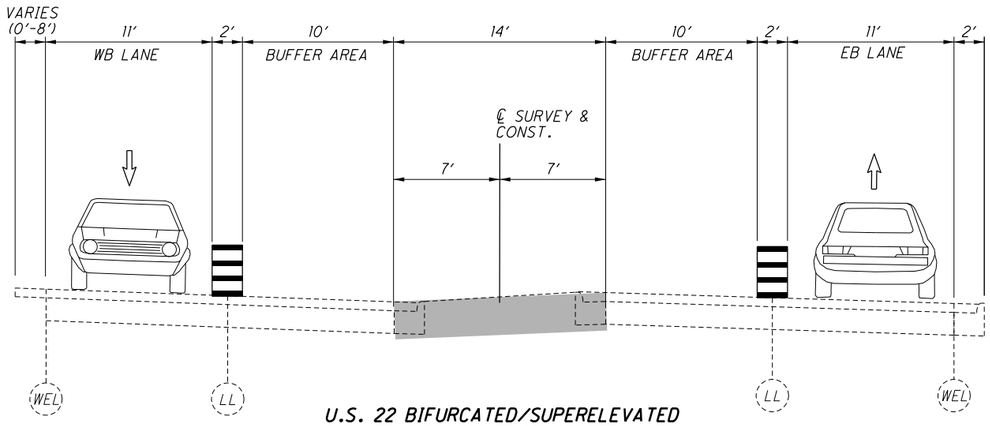
CALCULATED PTB
CHECKED JSL

MAILBOX DETAILS

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/0.70

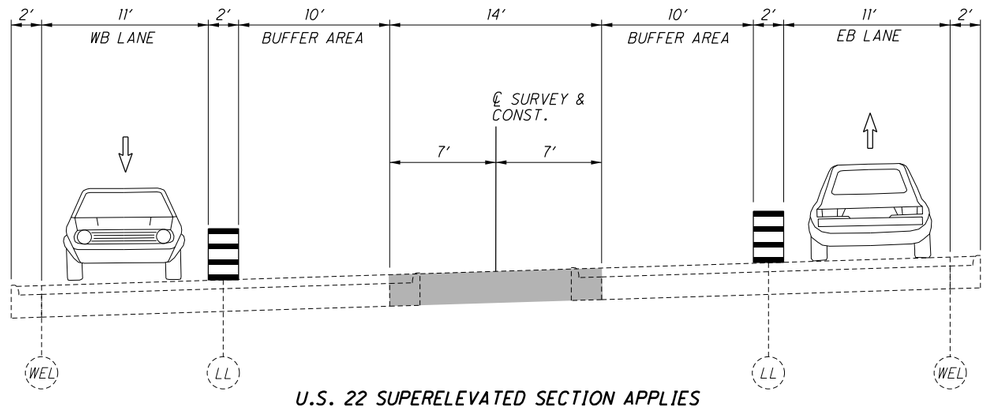
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PHASE 1



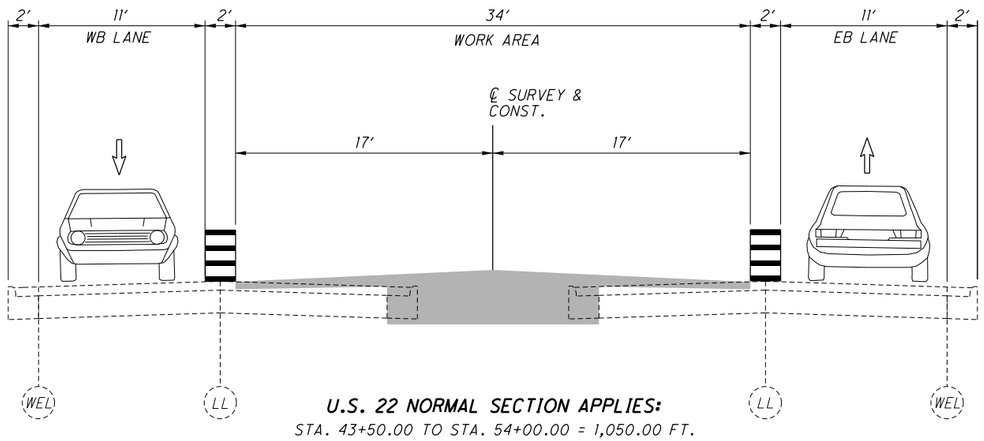
U.S. 22 BIFURCATED/SUPERELEVATED SECTION APPLIES

STA. 23+71.00 TO STA. 43+50.00 = 1,979.00 FT.



U.S. 22 SUPERELEVATED SECTION APPLIES

STA. 54+00.00 TO STA. 81+50.00 = 2,750.00 FT.
STA. 122+00.00 TO STA. 140+50.00 = 1,850.00 FT.
STA. 161+00.00 TO STA. 186+00.00 = 2,500.00 FT.
TOTAL = 7,100.00 FT.



U.S. 22 NORMAL SECTION APPLIES:

STA. 43+50.00 TO STA. 54+00.00 = 1,050.00 FT.
STA. 81+50.00 TO STA. 122+00.00 = 4,050.00 FT.
STA. 140+50.00 TO STA. 161+00.00 = 2,050.00 FT.
STA. 186+00.00 TO STA. 208+23.00 = 2,223.00 FT.
TOTAL = 9,373.00 FT.

(LL) EX LANE LINE

(WEL) EX WHITE EDGE LINE

CALCULATED PTB
CHECKED JSL

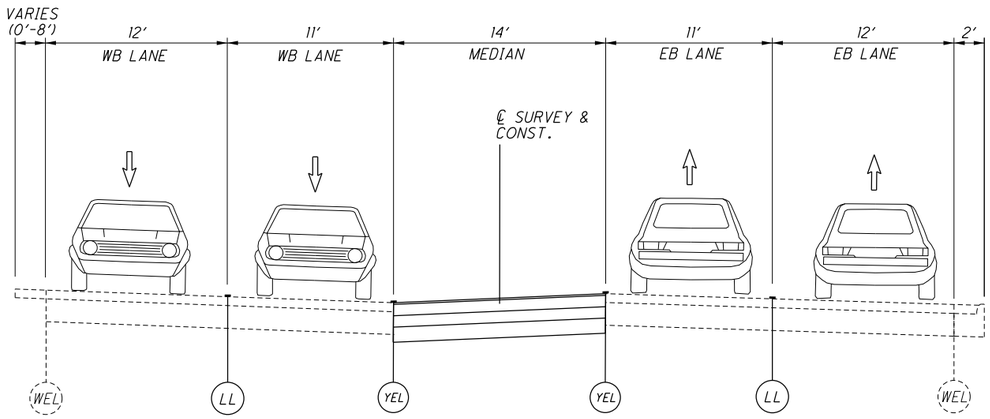
MOT TYPICAL SECTIONS - PHASE 1

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/ 0.70

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188

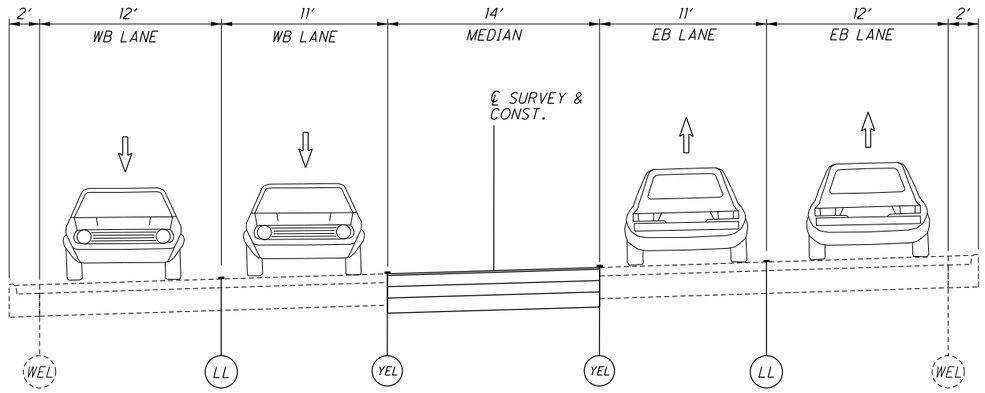
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PHASE 2 (WINTER SHUTDOWN)



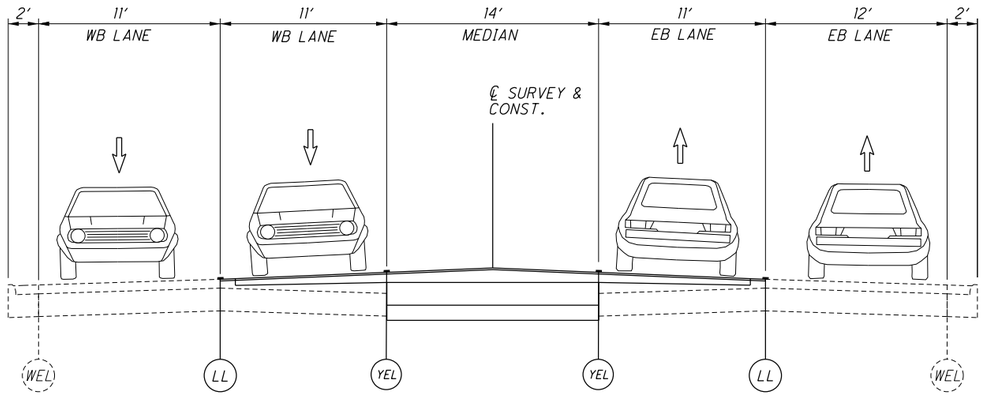
U.S. 22 BIFURCATED/SUPERELEVATED SECTION APPLIES

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STA. 186+00.00 TO STA. 208+23.00 = 2,223.00 FT.
TOTAL = 9,373.00 FT.

(WEL) EX WHITE EDGE LINE

(LL) ITEM 614 WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT

(YEL) ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)

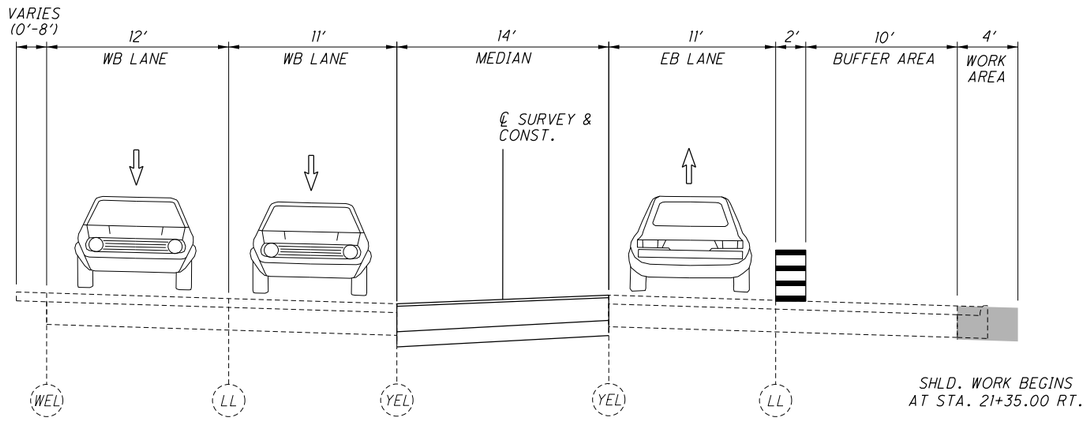
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CHECKED JSL

MOT TYPICAL SECTIONS - PHASE 2

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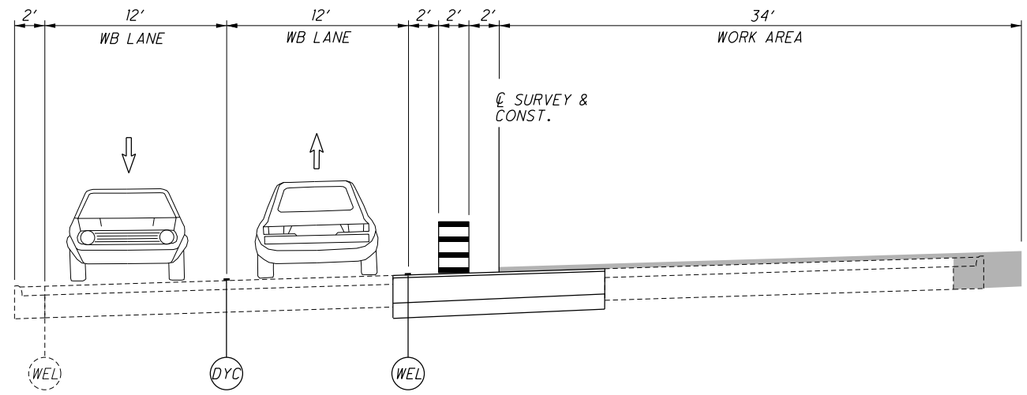
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PHASE 3



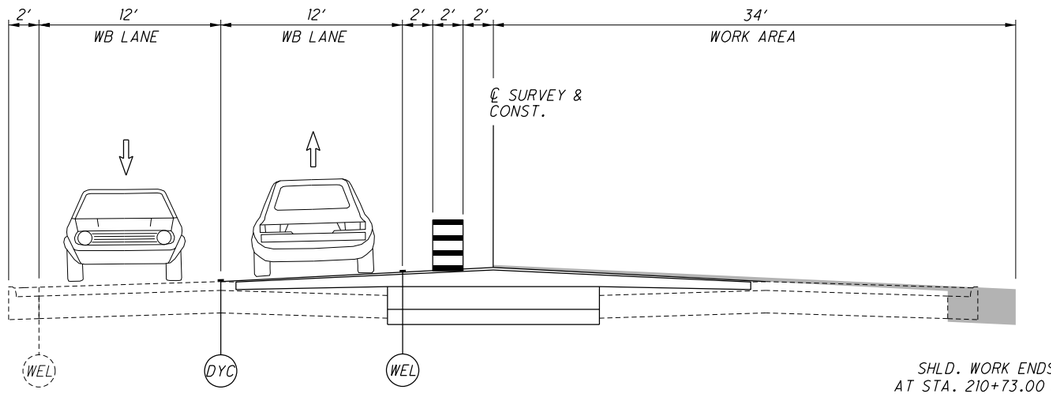
U.S. 22 SUPERELEVATED RIGHT/BIFURCATED SECTION APPLIES:

STA. 23+71.00 TO STA. 43+50.00 = 1,979.00 FT.



U.S. 22 SUPERELEVATED SECTION APPLIES

STA. 54+00.00 TO STA. 81+50.00 = 2,750.00 FT.
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TOTAL = 7,100.00 FT.



U.S. 22 NORMAL SECTION APPLIES:

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STA. 140+50.00 TO STA. 161+00.00 = 2,050.00 FT.
STA. 186+00.00 TO STA. 208+23.00 = 2,223.00 FT.
TOTAL = 9,373.00 FT.

NOTE: PLANING AND INTERMEDIATE COURSE IN TAPERED SECTIONS (STA. 45+00 TO STA. 51+00, STA. 204+00 TO STA. 208+23) SHALL BE DONE WITH FINAL RESURFACING COURSES

(LL) EX LANE LINE

(WEL) EX WHITE EDGE LINE

(YEL) EX YELLOW EDGE LINE

(DYC) ITEM 614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT

(WEL) ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)

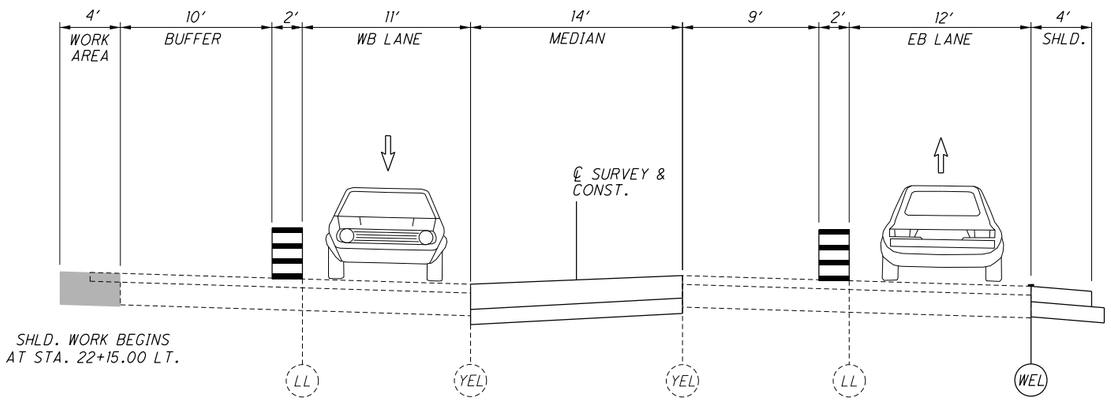
CALCULATED PTB
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MOT TYPICAL SECTIONS - PHASE 3

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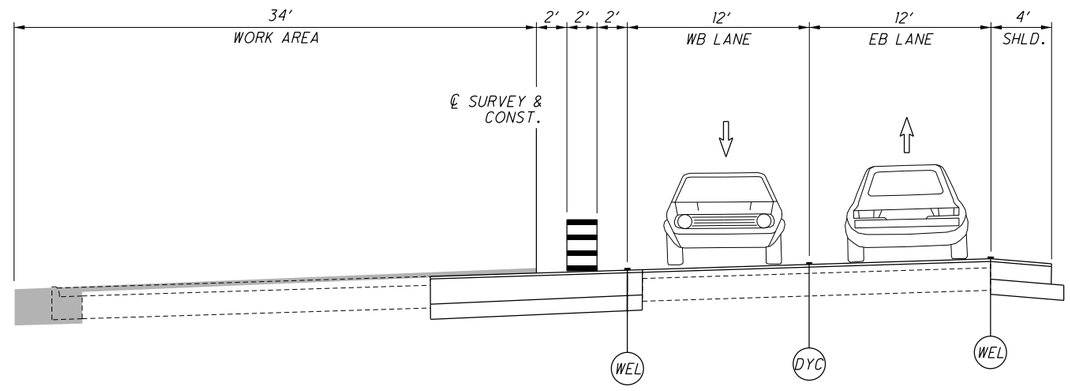
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PHASE 4



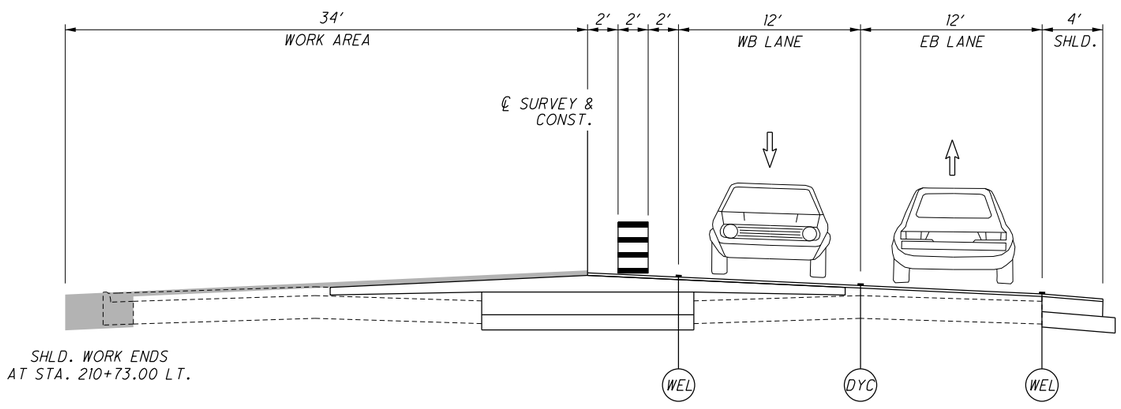
U.S. 22 SUPERELEVATED RIGHT/BIFURCATED SECTION APPLIES:

STA. 23+71.00 TO STA. 43+50.00 = 1,979.00 FT.



U.S. 22 SUPERELEVATED SECTION APPLIES

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U.S. 22 NORMAL SECTION APPLIES:

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STA. 81+50.00 TO STA. 122+00.00 = 4,050.00 FT.
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STA. 186+00.00 TO STA. 208+23.00 = 2,223.00 FT.
TOTAL = 9,373.00 FT.

NOTE: PLANING AND INTERMEDIATE COURSE IN TAPERED SECTIONS (STA. 45+00 TO STA. 51+00, STA. 204+00 TO STA. 208+23) SHALL BE DONE WITH FINAL RESURFACING COURSES

(LL) EX LANE LINE

(YEL) EX YELLOW EDGE LINE

(DYC) ITEM 614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT

(WEL) ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)

(YEL) ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)

CALCULATED PTB
CHECKED JSL

MOT TYPICAL SECTIONS - PHASE 4

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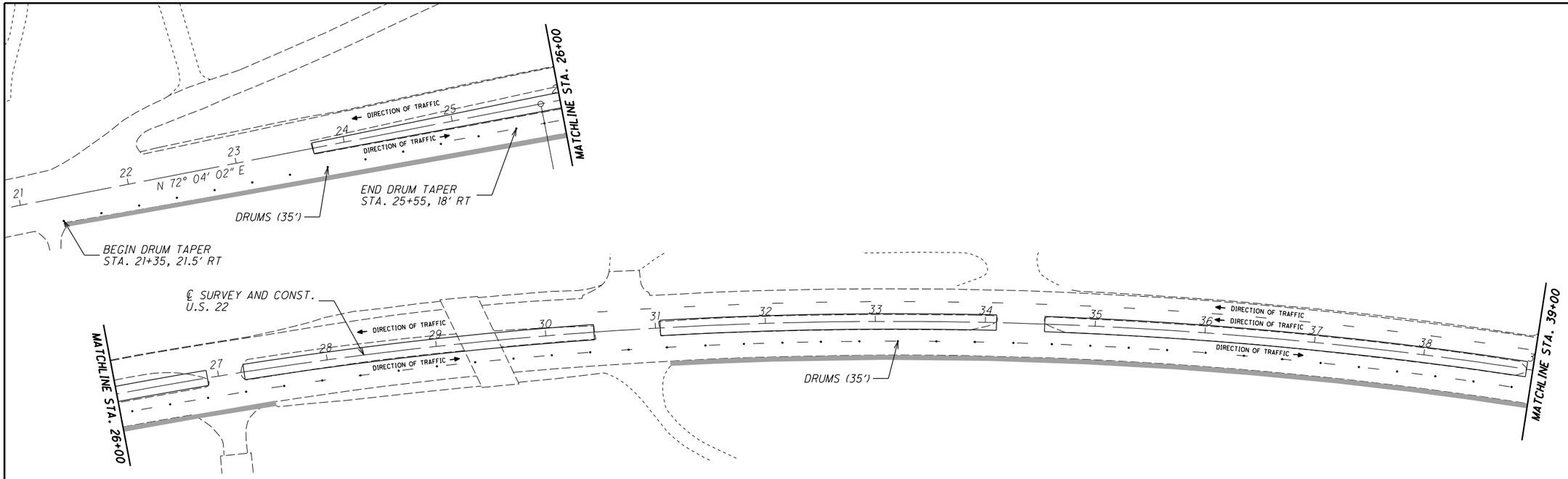
LOCATION (STATION TO STATION)	PHASE	614					COMMENTS
		WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	WORK ZONE CENTER LINE, CLASS 1, 6", 642 PAINT	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)	WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)	WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT	
		MILE	MILE	MILE	MILE	FT	
LOCATION 1							
23+71.00 TO 26+33.53	1	NO WORK ZONE MARKINGS REQUIRED					
23+71.00 TO 26+33.53	2	0.02			0.10		EASTBOUND & WESTBOUND
23+71.00 TO 26+33.53	3	NO WORK ZONE MARKINGS REQUIRED					
23+71.00 TO 26+33.53	4			0.05			
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)		**0.02**		**0.15**			
LOCATION 2A							
26+33.53 TO 148+29.98	1	NO WORK ZONE MARKINGS REQUIRED					
26+33.53 TO 148+29.98	2	4.62			4.62		EASTBOUND & WESTBOUND
26+33.53 TO 45+00.00	3	NO WORK ZONE MARKINGS REQUIRED					
45+00.00 TO 51+00.00	3			0.12	0.12		TAPER SECTION
51+00.00 TO 148+29.98	3		1.85	1.85			
26+33.53 TO 45+00.00	4			0.36			
45+00.00 TO 51+00.00	4			0.23	0.12		TAPER SECTION
51+00.00 TO 148+29.98	4		1.85	3.69			
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)		**4.62**	**3.70**	**11.11**			
LOCATION 2B							
148+29.98 TO 208+23.00	1	NO WORK ZONE MARKINGS REQUIRED					
148+29.98 TO 208+23.00	2	2.28			2.28		EASTBOUND & WESTBOUND
148+29.98 TO 204+00.00	3		1.06	1.06			
204+00.00 TO 210+20.00	3			0.12	0.20	215	ADDED 0.08 YELLOW EDGE FOR WB LANE CLOSURE
148+29.98 TO 204+00.00	4		1.06	2.11			
204+00.00 TO 210+00.00	4			0.23	0.12		TAPER SECTION
210+00.00 TO 215+10.00	4			0.07		212	WB LANE CLOSURE
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)		**2.28**	**2.12**	**6.19**		**427**	

CALCULATED PTB
CHECKED JSL

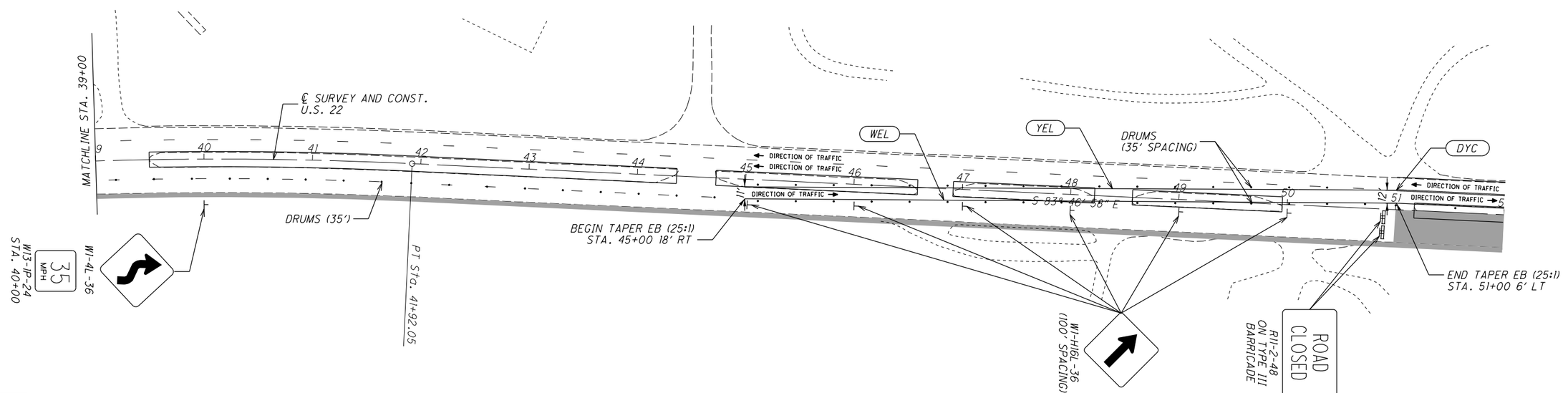
WORK ZONE MARKING CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/ 0.70

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NOTE: MAINTAIN ALL DRIVE AND MEDIAN CROSSOVER ACCESS



WORK AREA

DYC = ITEM 614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT

WEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)

YEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)

NOTE: INCREASE DRUM SPACING TO 55' AFTER TAPER

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

MAINTENANCE OF TRAFFIC - U.S. 22
PHASE 3 (STA. 21+00 TO STA. 52+00)

GUE-22/723-0.00
/0.70

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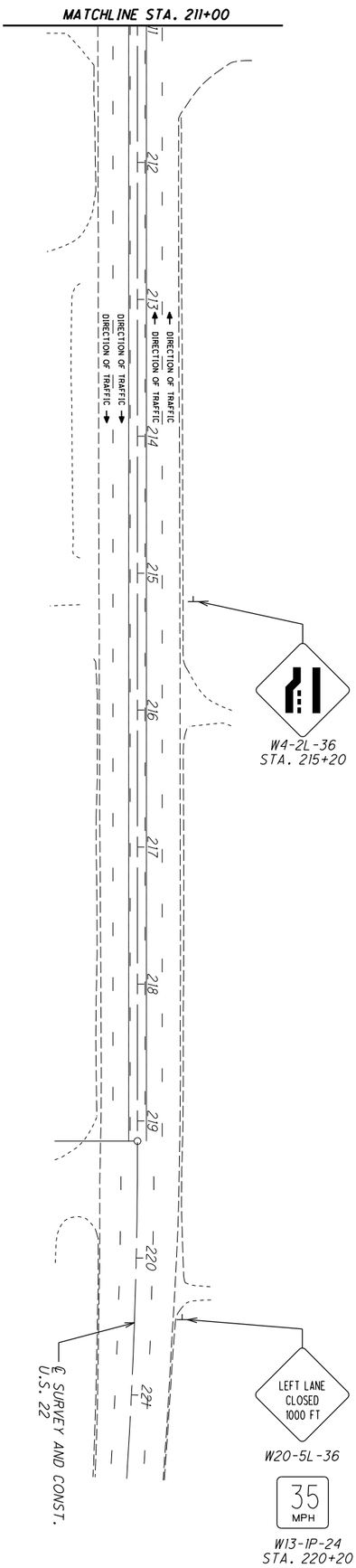
WORK AREA

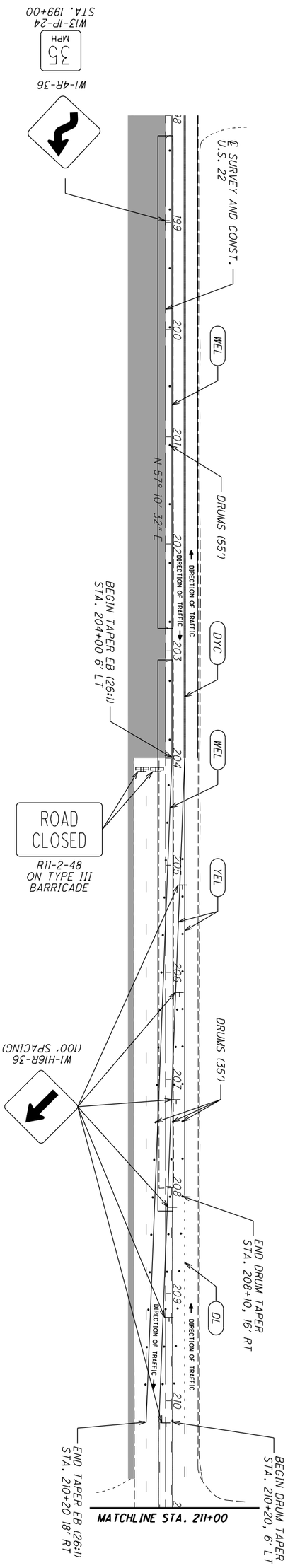
DL = ITEM 614 WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

DYC = ITEM 614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT

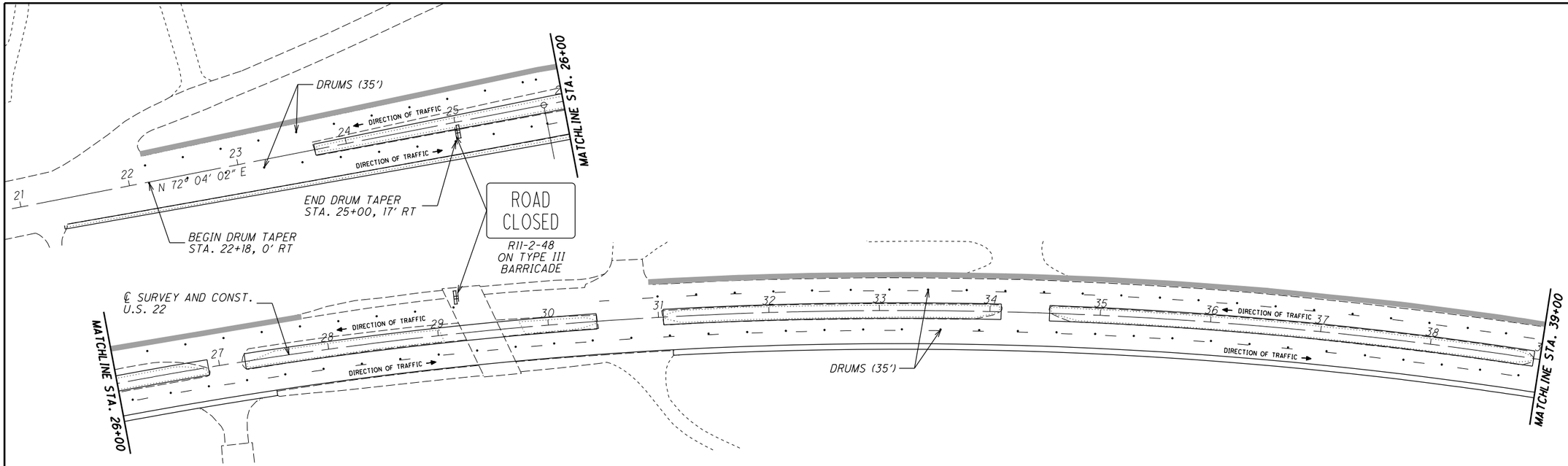
WEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)

YEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)

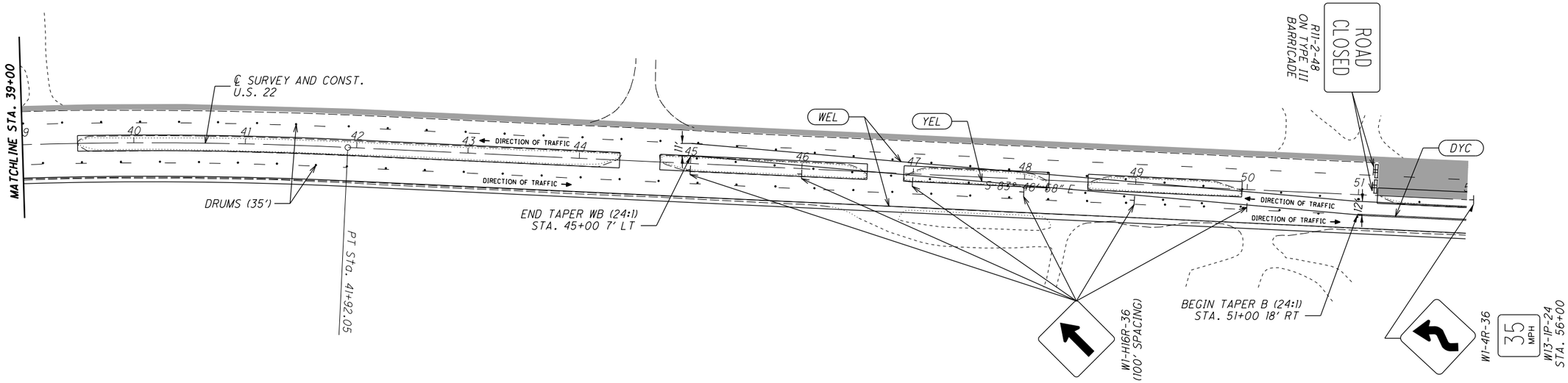




58 / 188	GUE-22/723-0.00 / 0.70	MAINTENANCE OF TRAFFIC - U.S. 22 PHASE 3 (STA. 198+00 TO STA. 221+00)	CALCULATED PTB / CHECKED JSL	0 50 25 100 HORIZONTAL SCALE IN FEET



NOTE: MAINTAIN ALL DRIVE AND MEDIAN CROSSOVER ACCESS



WORK AREA

DYC = ITEM 614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT

WEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)

YEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)

NOTE: INCREASE DRUM SPACING TO 55' AFTER TAPER

HORIZONTAL SCALE IN FEET
0 25 50 100

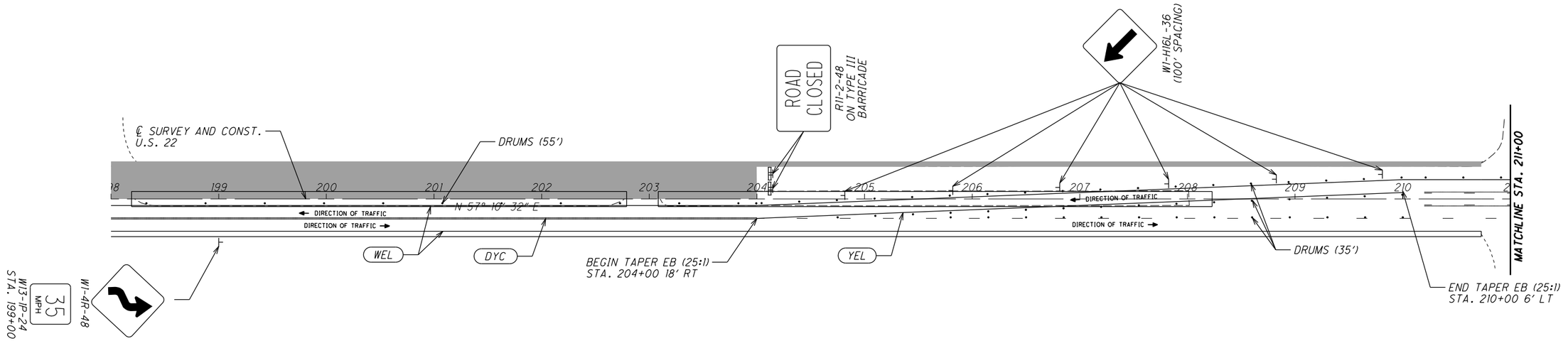
CALCULATED PTB
CHECKED JSL

MAINTENANCE OF TRAFFIC - U.S. 22
PHASE 4 (STA. 21+00 TO STA. 52+00)

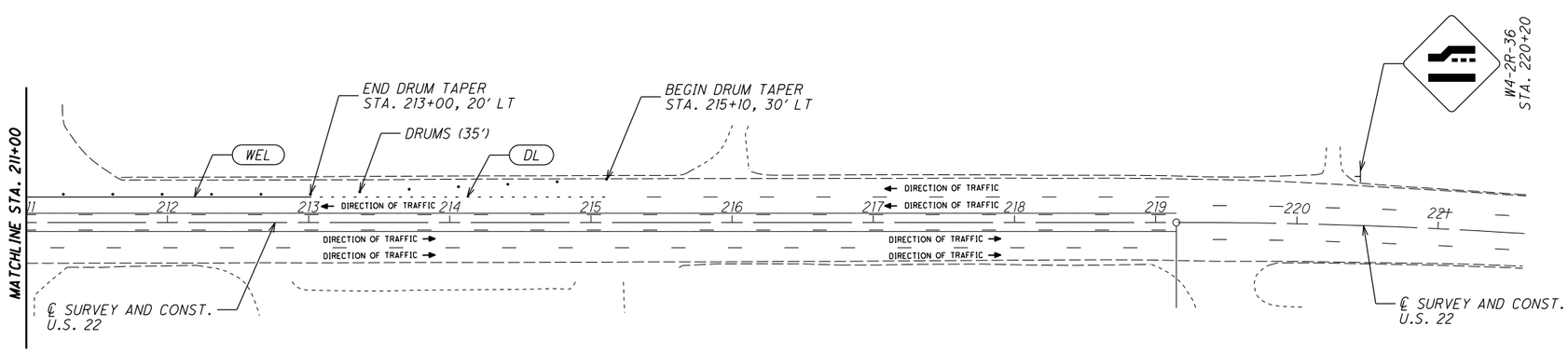
GUE-22/723-0.00
/0.70

59
188

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NOTE: MAINTAIN ALL DRIVE AND MEDIAN CROSSOVER ACCESS



WORK AREA

DL = ITEM 614 WORK ZONE DOTTED LINE, CLASS 1, 642 PAINT

DYC = ITEM 614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT

WEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)

YEL = ITEM 614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

MAINTENANCE OF TRAFFIC - U.S. 22
PHASE 4 (STA. 198+00 TO STA. 221+00)

GUE-22/723-0.00
/0.70

60
188

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LOCATION (STATION TO STATION)	UNSUITABLE/ UNSTABLE	SIDE	LENGTH	WIDTH	AREA	DEPTH	204				601	611	
							EMBANKMENT	EXCAVATION OF SUBGRADE	GRANULAR MATERIAL, TYPE B	GEOTEXTILE FABRIC	**TIED CONCRETE BLOCK MAT, TYPE 1	**CONDUIT, BORED OR JACKED: 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, 707.33, 707.42, OR 707.45	**PRECAST REINFORCED CONCRETE OUTLET
			FT	FT	SQ.YD.	IN	CY	CY	CY	SY	SY	FT	EACH
LOCATION 2A													
61+75.00 TO 63+74.83	UNSTABLE	MEDIAN	199.83	14.0	310.9	24		207.3	207.3	310.9	2	60	1
64+07.73 TO 65+54.90	UNSTABLE	MEDIAN	147.17	14.0	229.0	24		152.7	152.7	229.0	2	60	1
70+00.00 TO 76+00.00	UNSUITABLE	MEDIAN	600.00	14.0	933.4	18	466.7	466.7		933.4			
76+00.00 TO 76+33.49	UNSTABLE	MEDIAN	33.49	14.0	52.1	12		17.4	17.4	52.1	2	60	1
76+62.26 TO 77+94.59	UNSTABLE	MEDIAN	132.33	14.0	205.9	12		68.6	68.6	205.9	2	60	1
78+29.42 TO 85+83.60	UNSTABLE	MEDIAN	754.18	14.0	1,173.2	12		391.1	391.1	1,173.2	2	60	1
86+12.67 TO 90+94.19	UNSUITABLE	MEDIAN	481.52	14.0	749.1	18	374.6	374.6		749.1			
91+24.24 TO 95+29.64	UNSUITABLE	MEDIAN	405.40	14.0	630.7	18	315.4	315.4		630.7			
95+64.88 TO 97+00.35	UNSUITABLE	MEDIAN	135.47	14.0	210.8	18	105.4	105.4		210.8			
97+29.67 TO 97+75.00	UNSUITABLE	MEDIAN	45.33	14.0	70.6	18	35.3	35.3		70.6			
105+75.00 TO 109+75.00	UNSTABLE	MEDIAN	400.00	14.0	622.3	12		207.4	207.4	622.3	2	60	1
											**AS DIRECTED BY THE ENGINEER		
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)							**1,298**	**2,342**	**1,045**	**5,188**	**12**	**360**	**6**
LOCATION 2B													
153+50.00 TO 154+07.89	UNSTABLE	MEDIAN	57.89	14.0	90.1	12		30.0	30.0	90.1	2	60	1
154+43.23 TO 155+43.45	UNSTABLE	MEDIAN	100.22	14.0	155.9	12		52.0	52.0	155.9	2	60	1
156+74.48 TO 157+50.00	UNSTABLE	MEDIAN	75.52	14.0	117.5	12		39.2	39.2	117.5	2	60	1
157+50.00 TO 158+38.74	UNSUITABLE	MEDIAN	88.74	14.0	138.1	21	80.6	80.6		138.1			
158+66.27 TO 161+75.00	UNSUITABLE	MEDIAN	308.73	14.0	480.3	21	280.2	280.2		480.3			
161+75.00 TO 165+75.00	UNSTABLE	MEDIAN	400.00	14.0	622.3	12		207.4	207.4	622.3	2	60	1
169+50.00 TO 172+27.95	UNSTABLE	MEDIAN	277.95	14.0	432.4	12		144.1	144.1	432.4	2	60	1
172+61.01 TO 173+75.00	UNSTABLE	MEDIAN	113.99	14.0	177.4	12		59.1	59.1	177.4	2	60	1
177+75.00 TO 179+43.85	UNSTABLE	MEDIAN	168.85	14.0	262.7	12		87.6	87.6	262.7	2	60	1
179+89.07 TO 182+00.00	UNSTABLE	MEDIAN	210.93	14.0	328.2	12		109.4	109.4	328.2	2	60	1
202+00.00 TO 202+79.03	UNSTABLE	MEDIAN	79.03	14.0	123.0	12		41.0	41.0	123.0	2	60	1
203+07.76 TO 206+00.00	UNSTABLE	MEDIAN	292.24	14.0	454.6	12		151.5	151.5	454.6	2	60	1
											**AS DIRECTED BY THE ENGINEER		
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)							**361**	**1,283**	**922**	**3,383**	**20**	**600**	**10**

CALCULATED PTB
CHECKED JSL

SUBGRADE CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/ 0.70

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LOCATION (STATION TO STATION)	SIDE	LENGTH (L)	PAVEMENT WIDTH (W)	PAVEMENT AREA (A)	203 D = 15" EXCAVATION (10' AVG. WIDTH)	204 SUBGRADE COMPACTION S=A	204 PROOF ROLLING S/2000	301 D = 9" ASPHALT CONCRETE BASE, PG64-22 L x W x (D/12)/27	304 D = 6" AGGREGATE BASE L x W x (D/12)/27	407 NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.
		FT	FT	SY	CY	SY	HOUR	CY	CY	GAL.
LOCATION 1										
23+71.00 TO 26+33.53	CL	262.53	12.0 AVG.	350.1	121.6	350.1	0.18	87.6	58.4	17.6
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)					**122**	**351**	**1**	**88**	**59**	**18**
LOCATION 2A										
26+33.53 TO 26+89.86	CL	56.33	14.0	87.7	26.1	87.7	0.05	22.0	14.7	4.4
27+23.66 TO 29+02.91	CL	179.25	14.0	278.9	83.0	278.9	0.14	69.8	46.5	14.0
29+76.11 TO 30+43.90	CL	67.79	14.0	105.5	31.4	105.5	0.06	26.4	17.6	5.3
31+04.36 TO 34+10.20	CL	305.84	14.0	475.8	141.6	475.8	0.24	119.0	79.3	23.8
34+54.04 TO 38+94.27	CL	440.23	14.0	684.9	203.9	684.9	0.35	171.3	114.2	34.3
39+49.52 TO 44+36.30	CL	486.78	14.0	757.3	225.4	757.3	0.38	189.4	126.3	37.9
44+72.59 TO 46+58.71	CL	186.12	14.0	289.6	86.2	289.6	0.15	72.4	48.3	14.5
46+91.59 TO 48+22.06	CL	130.47	14.0	203.0	60.5	203.0	0.11	50.8	33.9	10.2
48+57.07 TO 49+95.38	CL	138.31	14.0	215.2	64.1	215.2	0.11	53.8	35.9	10.8
51+17.19 TO 63+74.83	CL	1,257.64	14.0	1,956.4	582.3	1,956.4	0.98	489.1	326.1	97.9
64+07.73 TO 65+54.90	CL	147.17	14.0	229.0	68.2	229.0	0.12	57.3	38.2	11.5
65+79.73 TO 67+33.98	CL	154.25	14.0	240.0	71.5	240.0	0.12	60.0	40.0	12.0
67+96.74 TO 76+33.49	CL	836.75	14.0	1,301.7	387.4	1,301.7	0.66	325.5	217.0	65.1
76+62.26 TO 77+94.59	CL	132.33	14.0	205.9	61.3	205.9	0.11	51.5	34.4	10.3
78+29.42 TO 85+83.60	CL	754.18	14.0	1,173.2	349.2	1,173.2	0.59	293.3	195.6	58.7
86+12.67 TO 90+94.19	CL	481.52	14.0	749.1	223.0	749.1	0.38	187.3	124.9	37.5
91+24.24 TO 95+29.64	CL	405.40	14.0	630.7	187.7	630.7	0.32	157.7	105.2	31.6
95+64.88 TO 97+00.35	CL	135.47	14.0	210.8	62.8	210.8	0.11	52.7	35.2	10.6
97+29.67 TO 102+92.35	CL	562.68	14.0	875.3	260.5	875.3	0.44	218.9	145.9	43.8
103+21.61 TO 110+43.51	CL	721.90	14.0	1,123.0	334.3	1,123.0	0.57	280.8	187.2	56.2
110+73.79 TO 115+25.09	CL	451.30	14.0	702.1	209.0	702.1	0.36	175.6	117.1	35.2
115+60.33 TO 119+38.83	CL	378.50	14.0	588.8	175.3	588.8	0.30	147.2	98.2	29.5
119+74.31 TO 122+63.12	CL	288.81	14.0	449.3	133.8	449.3	0.23	112.4	74.9	22.5
122+93.45 TO 134+19.72	CL	1,126.27	14.0	1,752.0	521.5	1,752.0	0.88	438.0	292.0	87.6
134+67.93 TO 135+17.26	CL	49.33	14.0	76.8	22.9	76.8	0.04	19.2	12.8	3.9
135+45.72 TO 138+25.97	CL	280.25	14.0	436.0	129.8	436.0	0.22	109.0	72.7	21.8
138+76.81 TO 139+37.33	CL	60.52	14.0	94.2	28.1	94.2	0.05	23.6	15.7	4.8
139+66.23 TO 148+28.98	CL	862.75	14.0	1,342.1	399.5	1,342.1	0.68	335.6	223.7	67.2
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)					**5,131**	**17,235**	**9**	**4,310**	**2,874**	**863**

NOTES
SEE SHEETS 11-12 FOR SURFACE AND INTERMEDIATE QUANTITIES

CALCULATED LME
CHECKED JSL

PAVEMENT CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/ 0.70

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LOCATION (STATION TO STATION)	SIDE	LENGTH (L)	PAVEMENT WIDTH (W)	PAVEMENT AREA (A)	203 D = 15" EXCAVATION (10' AVG. WIDTH)	204 SUBGRADE COMPACTION S=A	204 PROOF ROLLING S/2000	301 D = 9" ASPHALT CONCRETE BASE, PG64-22 L x W x (D/12)/27	304 D = 6" AGGREGATE BASE L x W x (D/12)/27	407 NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.
		FT	FT	SY	CY	SY	HOUR	CY	CY	GAL.
LOCATION 2B										
148+57.46 TO 149+38.39	CL	80.93	14.0	125.9	37.5	125.9	0.07	31.5	21.0	6.3
149+68.16 TO 150+15.78	CL	47.62	14.0	74.1	22.1	74.1	0.04	18.6	12.4	3.8
150+44.29 TO 152+28.02	CL	183.73	14.0	285.9	85.1	285.9	0.15	71.5	47.7	14.3
152+63.45 TO 154+07.89	CL	144.44	14.0	224.7	66.9	224.7	0.12	56.2	37.5	11.3
154+43.23 TO 155+43.45	CL	100.22	14.0	155.9	46.4	155.9	0.08	39.0	26.0	7.8
156+74.48 TO 158+38.74	CL	164.26	14.0	255.6	76.1	255.6	0.13	63.9	42.6	12.8
158+66.27 TO 166+43.00	CL	776.73	14.0	1,208.3	359.6	1,208.3	0.61	302.1	201.4	60.5
166+73.64 TO 167+96.75	CL	123.11	14.0	191.6	57.0	191.6	0.10	47.9	32.0	9.6
169+09.85 TO 172+27.95	CL	318.10	14.0	494.9	147.3	494.9	0.25	123.8	82.5	24.8
172+61.01 TO 173+99.72	CL	138.71	14.0	215.8	64.3	215.8	0.11	54.0	36.0	10.8
174+43.05 TO 179+43.85	CL	500.80	14.0	779.1	231.9	779.1	0.39	194.8	129.9	39.0
179+89.07 TO 183+92.34	CL	403.27	14.0	627.4	186.7	627.4	0.32	156.9	104.6	31.4
184+22.43 TO 186+67.65	CL	245.22	14.0	381.5	113.6	381.5	0.20	95.4	63.6	19.1
186+97.69 TO 190+15.40	CL	317.71	14.0	494.3	147.1	494.3	0.25	123.6	82.4	24.8
190+72.72 TO 191+60.48	CL	87.76	14.0	136.6	40.7	136.6	0.07	34.2	22.8	6.9
192+19.67 TO 194+39.90	CL	220.23	14.0	342.6	102.0	342.6	0.18	85.7	57.1	17.2
194+83.47 TO 196+64.04	CL	180.57	14.0	280.9	83.6	280.9	0.15	70.3	46.9	14.1
196+95.45 TO 197+87.80	CL	92.35	14.0	143.7	42.8	143.7	0.08	36.0	24.0	7.2
198+19.02 TO 202+79.03	CL	460.01	14.0	715.6	213.0	715.6	0.36	178.9	119.3	35.8
203+07.76 TO 208+23.00	CL	515.24	14.0	801.5	238.6	801.5	0.41	200.4	133.6	40.1
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)					**2,363**	**7,936**	**5**	**1,985**	**1,324**	**398**

NOTES
SEE SHEETS 11-12 FOR SURFACE AND INTERMEDIATE QUANTITIES

CALCULATED LME
CHECKED JSL

PAVEMENT CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/ 0.70

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LOCATION (STATION TO STATION)	SIDE	LENGTH (L)	SHOULDER WIDTH (W)	SHOULDER AREA (A)	203 D = 12" EXCAVATION (4.5' AVG. WIDTH)	204 SUBGRADE COMPACTION S=A + STEP	204 PROOF ROLLING S/2000	301 D = 6" STEP = 0" ASPHALT CONCRETE BASE, PG64-22 L x (Step/12+W) x (D/12)/27	304 D = 6" STEP = 6" AGGREGATE BASE L x (Step/12+W) x (D/12)/27
		FT	FT	SY	CY	SY	HOUR	CY	CY
LOCATION 1									
22+15.00 TO 26+45.20	LT	430.20	4.0	191.2	71.7	215.1	0.11	31.9	35.9
21+35.00 TO 26+21.22	RT	486.22	4.0	216.1	45.0*	243.1	0.13	36.1	40.6
	*EX CURB & GUTTER REMOVED FROM QTY								
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)					**117**	**459**	**1**	**68**	**77**
LOCATION 2A									
26+45.20 TO 27+79.65	LT	134.45	4.0	59.8	22.4	67.3	0.04	10.0	11.3
30+92.58 TO 39+01.63	LT	809.05	4.0	359.6	74.9*	404.5	0.21	60.0	67.5
39+36.10 TO 44+15.28	LT	479.18	4.0	213.0	79.9	239.6	0.12	35.5	40.0
44+93.83 TO 50+23.94	LT	530.11	4.0	235.7	88.4	265.2	0.14	39.3	44.2
51+00.00 TO 95+15.27	LT	4,415.27	4.0	1,962.4	408.8*	2,207.7	1.11	327.1	368.0
95+87.68 TO 115+15.74	LT	1,928.06	4.0	857.0	321.3	964.1	0.49	142.9	160.7
115+67.91 TO 134+31.26	LT	1,863.35	4.0	828.2	172.5*	931.7	0.47	138.1	155.3
134+79.71 TO 148+28.98	LT	1,349.27	4.0	599.7	224.9	674.7	0.34	100.0	112.5
26+21.22 TO 26+76.44	RT	55.22	4.0	24.6	5.1*	27.7	0.02	4.1	4.7
27+32.66 TO 27+48.22	RT	15.56	4.0	7.0	2.6	7.9	0.01	1.2	1.3
31+11.71 TO 119+16.31	RT	8,804.60	4.0	3,913.2	1,467.4	4,402.3	2.21	652.2	733.8
119+93.29 TO 148+28.98	RT	2,835.69	4.0	1,260.4	472.6	1,417.9	0.71	210.1	236.4
	*EX CURB & GUTTER REMOVED FROM QTY								
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)					**3,341**	**11,611**	**6**	**1,721**	**1,936**
LOCATION 2B									
148+28.98 TO 155+43.22	LT	714.24	4.0	317.5	66.1*	357.2	0.18	53.0	59.6
156+05.62 TO 210+73.00	LT	5,467.38	4.0	2,430.0	911.2	2,733.7	1.37	405.0	455.7
148+28.98 TO 156+06.84	RT	777.86	4.0	345.8	72.0*	389.0	0.20	57.7	64.9
156+91.08 TO 210+73.00	RT	5,381.92	4.0	2,392.0	897.0	2,691.0	1.35	398.7	448.5
	*EX CURB & GUTTER REMOVED FROM QTY								
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)					**1,947**	**6,171**	**4**	**915**	**1,029**

NOTES
SEE SHEETS 11-12 FOR SURFACE AND INTERMEDIATE QUANTITIES

CALCULATED LME
CHECKED JSL

SHOULDER CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/ 0.70

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LOCATION (STATION TO STATION)	SIDE	LENGTH	DRIVE WIDTH (AVG.)	DRIVE AREA	203		204	301	304
					D = 6"	D = 12"		D = 6"	D = 6"
					EXCAVATION	EXCAVATION	SUBGRADE COMPACTION	ASPHALT CONCRETE BASE, PG64-22	AGGREGATE BASE
		FT	FT	SY	CY	CY	SY	CY	CY
LOCATION 2A									
33+79.87 TO 34+68.06	LT	88.19	7.5	73.5	12.3		73.5		12.3
67+10.92 TO 67+63.73	LT	52.81	12.5	73.4	12.3		73.4		12.3
85+91.53 TO 88+04.30	LT	212.77	9.0	212.8	35.5		212.8		35.5
63+50.97 TO 64+30.66	RT	79.69	6.0	53.2		11.9	53.2	1.6	8.9
67+61.37 TO 68+14.67	RT	53.30	6.0	35.6		8.0	35.6	1.1	6.0
77+75.21 TO 78+51.11**	RT	75.90	6.0	50.6		11.3	50.6	1.6	8.5
134+21.21 TO 134+52.18	RT	30.97	12.5	43.1	7.2		43.1		7.2
**MORGAN RD.									
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)					**99**		**543**	**5**	**91**
LOCATION 2B									
154+40.60 TO 155+20.07	LT	79.47	13.5	119.3	19.9		119.3		19.9
166+40.60 TO 167+23.77	LT	83.17	12.5	115.6	19.3		115.6		19.3
168+57.46 TO 169+41.24	LT	83.78	12.5	116.4	19.4		116.4		19.4
194+35.23 TO 194+96.73	LT	61.50	7.5	51.3	8.6		51.3		8.6
179+47.73 TO 179+93.18	RT	45.45	6.0	30.4		3.4	30.4	1.0	5.1
183+71.95 TO 184+49.75	RT	77.80	6.0	51.9		5.8	51.9	1.6	8.7
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)					**77**		**485**	**3**	**81**

NOTES
THE ABOVE QUANTITIES SHALL BE USED FOR DRIVE ADJUSTMENTS AS SHOWN IN THE CROSS SECTIONS

ALL DRIVES SHALL BE PAVED A MINIMUM OF 4' FROM EDGE OF PAVED SHOULDER AS DESCRIBED ON SHEET 3

SEE SHEET 3 FOR SURFACE AND INTERMEDIATE QUANTITIES

CALCULATED LME
CHECKED JSL

DRIVE CALCULATIONS (MEDIAN)

GUE-22/723-0.00 / 0.70

64A
188

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REF NO.	SHEET NO.	LOCATION	SIDE	202		601	602	611					670
				INLET ABANDONED	CATCH BASIN ABANDONED, AS PER PLAN	TIED CONCRETE BLOCK MAT, TYPE 1	CONCRETE MASONRY	15" CONDUIT, TYPE B	CONDUIT, BORED OR JACKED: 15" TYPE B	CATCH BASIN, NO. 6	CATCH BASIN, NO. 2-2B	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	DITCH EROSION PROTECTION MAT, TYPE B
				EACH	EACH	SY	CY	FT	FT	EACH	EACH	EACH	SY
		LOCATION 1											
R-1	76	23+25	L/R		1								
R-2	76	24+25	RT		2								
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)					**3**								
		LOCATION 2A											
R-3	76	26+50	L/R		2								
R-4	76	27+40	RT		1								
R-5	76	31+50	L/R		1								
R-6	76	34+00	L/R		1								
R-7	76	36+50	L/R		1								
R-8	76	39+75	L/R		1								
R-9	76	41+50	L/R		1								
R-10	76	44+00	RT		1								
R-11	77	45+00	L/R		2								
R-12	77	52+50	L/R		2								
R-13	77	55+50	L/R		2								
R-14	77	58+00	L/R		2								
R-15	77	60+50	L/R		2								
R-16	77	63+00	L/R		2								
R-17	77	65+50	L/R		2								
R-18	77	68+00	LT		1								
R-19	77	68+30	RT		1								
R-20	78	70+50	L/R		2								
R-21	78	73+00	L/R		2								
R-22	78	75+50	L/R		2								
R-23	78	78+00	LT		1								
R-24	78	79+00	RT		1								
R-25	78	80+50	LT		1								
R-26	78	81+00	RT		1								
R-27	78	83+00	L/R		4								
R-28	78	85+50	L/R		4								
R-29	78	88+50	L/R		4								
R-30	78	92+50	RT		2								
LOCATION 2A TOTALS (CARRIED TO NEXT SHEET)					**49**								

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CALCULATED PTB
CHECKED JSL

DRAINAGE CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/0.70

REF NO.	SHEET NO.	LOCATION	SIDE	202		601	602	611					670
				INLET ABANDONED	CATCH BASIN ABANDONED, AS PER PLAN	TIED CONCRETE BLOCK MAT, TYPE 1	CONCRETE MASONRY	15" CONDUIT, TYPE B	CONDUIT, BORED OR JACKED: 15" TYPE B	CATCH BASIN, NO. 6	CATCH BASIN, NO. 2-2B	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	DITCH EROSION PROTECTION MAT, TYPE B
				EACH	EACH	SY	CY	FT	FT	EACH	EACH	EACH	SY
LOCATION 2A TOTALS (CARRIED FROM PREVIOUS SHEET)					**49**								
R-31	79	95+22	LT		1								
R-32	79	96+50	RT		2								
R-33	79	100+00	RT		2								
R-34	79	103+50	L/R		4								
R-35	79	106+50	L/R		4								
R-36	79	109+50	L/R		2								
R-37	79	112+00	L/R		4								
R-38	79	114+50	L/R		2								
R-39	79	117+00	L/R		2								
R-40	79	119+28	RT		1								
R-41	80	120+12	L/R		3								
R-42	80	126+50	L/R		1								
R-43	80	129+00	L/R		1								
R-44	80	131+50	L/R		1								
R-45	80	134+00	L/R		2								
R-46	80	136+50	L/R		1								
R-47	80	138+06	RT		1								
R-48	80	139+00	L/R		1								
R-49	80	141+50	L/R		2								
R-50	80	144+00	L/R		4								
R-51	81	146+45	L/R		4								
D-1	76	26+43	RT			2	0.27		72	1			
D-2	76	29+00	LT									1	
D-3	76	31+56	RT			2	0.27		63	1			
D-4	76	33+93	RT			2	0.27		63	1			
D-5	76	36+44	RT			2	0.27		59	1			
D-6	76	39+80	RT			2	0.27		50	1			
D-7	78	70+50	LT			2	0.27		111		1		450
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)					**94**	**12**	**1.62**		**418**	**5**	**1**	**1**	**450**

CALCULATED PTB
CHECKED JSL

DRAINAGE CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/ 0.70

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REF NO.	SHEET NO.	LOCATION	SIDE	202		601	602	611					670
				INLET ABANDONED	CATCH BASIN ABANDONED, AS PER PLAN	TIED CONCRETE BLOCK MAT, TYPE 1	CONCRETE MASONRY	15" CONDUIT, TYPE B	CONDUIT, BORED OR JACKED: 15" TYPE B	CATCH BASIN, NO. 6	CATCH BASIN, NO.2-2B	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	DITCH EROSION PROTECTION MAT, TYPE B
				EACH	EACH	CY	CY	FT	FT	EACH	EACH	EACH	SY
		LOCATION 2B											
R-52	81	149+00	L/R		4								
R-53	81	152+00	L/R		4								
R-54	81	155+00	L/R		7								
R-55	81	158+00	L/R		2								
R-56	81	161+00	L/R		2								
R-57	81	164+00	L/R		2								
R-58	81	166+00	RT		1								
R-59	81	166+35	L/R		1								
R-60	81	167+50	RT		1								
R-61	81	168+70	LT		1								
R-62	82	170+50	RT		1								
R-63	82	171+50	LT		1								
R-64	82	173+50	RT		1								
R-65	82	174+00	LT		1								
R-66	82	176+50	L/R		2								
R-67	82	179+00	L/R		2								
R-68	82	181+50	L/R	1									
R-69	82	183+50	L/R	1									
R-70	82	186+50	L/R		2								
R-71	82	189+70	L/R		2								
R-72	82	192+50	L/R		2								
R-73	83	195+50 TO 196+00	L/R		2								
R-74	83	197+50	L/R		2								
R-75	83	200+50	L/R		2								
R-76	83	202+00	L/R		2								
R-77	83	205+50	L/R		2								
R-78	83	208+00	L/R		2								
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)				**2**	**51**								

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CALCULATED PTB
CHECKED JSL

DRAINAGE CALCULATIONS (MEDIAN)

GUE-22/723-0.00
/0.70

STA. 21+50 TO STA. 43+50 (BIFURCATED)

LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	LEFT MEDIAN EDGE	BASELINE SURVEY & CONSTRUCTION	MEDIAN SLOPE	RIGHT MEDIAN EDGE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
SNOOTS LN (NO WORK)			851.86	26.2		852.07	**21+35.00**		852.07	24.0		851.73	-0.040	4.0	851.57	BEGIN SHLD RT
			851.24	26.2		851.49	**21+50.00**		851.49	24.0		851.11	-0.040	4.0	850.95	
			849.14	26.2		849.55	**22+00.00**		849.55	24.0		849.01	-0.040	4.0	848.85	
848.54	4.0	**-0.010**	848.58	24.0		848.95	**22+15.00**	NO MEDIAN	848.95	24.0		848.46	-0.040	4.0	848.30	BEGIN SHLD LT
847.28	4.0	**-0.010**	847.32	24.7		847.55	**22+50.00**		847.55	24.6		847.19	-0.040	4.0	847.03	
845.52	4.0	**-0.010**	845.56	25.9		845.70	**23+00.00**		845.70	25.6		845.47	-0.040	4.0	845.31	
843.86	4.0	**-0.010**	843.90	26.6		844.05	**23+50.00**		844.05	26.5		843.75	-0.040	4.0	843.59	
842.44	4.0	**0.010**	842.40	22.2		842.33	**24+00.00**	-0.006	842.39	22.2		841.99	-0.040	4.0	841.83	BEGIN SUPER RUNOUT
840.94	4.0	**0.010**	840.90	22.8	MATCH EXISTING	840.75	**24+50.00**	-0.014	840.90	22.8	MATCH EXISITNG	840.44	-0.040	4.0	840.28	
839.67	4.0	**0.010**	839.63	23.2		839.37	**25+00.00**	-0.024	839.66	23.2		839.04	-0.040	4.0	838.88	
838.47	4.0	**0.010**	838.43	23.7		838.19	**25+50.00**	-0.023	838.49	23.7		837.77	-0.040	4.0	837.61	BEGIN FULL SUPER
837.27	4.0	**0.010**	837.23	24.0		836.68	**26+00.00**	-0.041	837.25	24.0		836.65	-0.040	4.0	836.49	
836.11	4.0	**0.010**	836.07	24.0		835.70	**26+50.00**	-0.038	836.23	24.0		835.55	-0.040	4.0	835.39	
835.18	4.0	**0.010**	835.14	24.0		834.86	**27+00.00**	-0.022	835.17	24.0		834.66	PATCH RD (NO WORK)			
834.45	4.0	**0.010**	834.41	24.0		834.12	**27+50.00**	-0.033	834.58	24.0		834.16				
EXISTING SHLD. (NO WORK)			833.97	24.0		833.51	**28+00.00**	-0.036	834.01	24.0		833.59				
			833.51	24.0		833.00	**28+50.00**	-0.042	833.59	24.0		833.16				
			833.40	24.0		832.64	**29+00.00**	-0.055	833.41	24.0		832.85	EXISTING SHLD. (NO WORK)			
			BRIDGE GUE-22-0006													
			832.56	24.0		832.29	**30+00.00**	-0.027	832.67	24.0		832.06				
FITZGERALD LN			832.36	24.0		832.01	**30+50.00**	-0.021	832.31	24.0		831.79				
832.06	4.0	-0.040	832.22	24.0		831.78	**31+00.00**	-0.019	832.05	24.0		831.58				
831.96	4.0	-0.040	832.12	24.0		831.60	**31+50.00**	-0.028	831.99	24.0		831.33	-0.040	4.0	831.17	
831.71	4.0	-0.040	831.87	24.0		831.37	**32+00.00**	-0.030	831.79	24.0		831.11	-0.040	4.0	830.95	
831.63	4.0	-0.040	831.79	24.0		831.17	**32+50.00**	-0.035	831.66	24.0		830.97	-0.040	4.0	830.81	
831.47	4.0	-0.040	831.63	24.0		830.99	**33+00.00**	-0.034	831.46	24.0		830.88	-0.040	4.0	830.72	
831.32	4.0	-0.040	831.48	24.0		830.86	**33+50.00**	-0.027	831.24	24.0		830.61	-0.040	4.0	830.45	
831.07	4.0	-0.040	831.23	24.0		830.69	**34+00.00**	-0.024	831.03	24.0		830.33	-0.040	4.0	830.17	DRIVE LT
830.87	4.0	-0.040	831.03	24.0		830.61	**34+50.00**	-0.023	830.93	24.0		830.17	-0.040	4.0	830.01	DRIVE LT
830.79	4.0	-0.040	830.95	24.0		830.52	**35+00.00**	-0.034	830.99	24.0		830.17	-0.040	4.0	830.01	
830.71	4.0	-0.040	830.87	24.0		830.41	**35+50.00**	-0.034	830.89	24.0		830.13	-0.040	4.0	829.97	
830.58	4.0	-0.040	830.74	24.0	MATCH EXISTING	830.33	**36+00.00**	-0.037	830.85	24.0	MATCH EXISTING	830.08	-0.040	4.0	829.92	
830.56	4.0	-0.040	830.72	24.0		830.23	**36+50.00**	-0.040	830.79	24.0		829.99	-0.040	4.0	829.83	
830.64	4.0	-0.040	830.80	24.0		830.22	**37+00.00**	-0.041	830.80	24.0		830.06	-0.040	4.0	829.90	
830.64	4.0	-0.040	830.80	24.0		830.29	**37+50.00**	-0.039	830.84	24.0		830.13	-0.040	4.0	829.97	
830.71	4.0	-0.040	830.87	24.0		830.35	**38+00.00**	-0.039	830.90	24.0		830.22	-0.040	4.0	830.06	
830.69	4.0	-0.040	830.85	24.0		830.38	**38+50.00**	-0.043	830.98	24.0		830.31	-0.040	4.0	830.15	
830.95	4.0	-0.040	831.11	24.0		830.53	**39+00.00**	-0.026	830.90	24.0		830.48	-0.040	4.0	830.32	
831.08	4.0	-0.040	831.24	24.0		830.83	**39+50.00**	-0.027	831.21	24.0		830.71	-0.040	4.0	830.55	
831.30	4.0	-0.040	831.46	24.0		830.90	**40+00.00**	-0.044	831.52	24.0		830.88	-0.040	4.0	830.72	
831.53	4.0	-0.040	831.69	24.0		831.14	**40+50.00**	-0.044	831.75	24.0		831.13	-0.040	4.0	830.97	
831.78	4.0	-0.040	831.94	24.0		831.45	**41+00.00**	-0.039	832.00	24.0		831.34	-0.040	4.0	831.18	
831.88	4.0	-0.040	832.04	24.0		831.61	**41+50.00**	-0.040	832.17	24.0		831.57	-0.040	4.0	831.41	
832.03	4.0	-0.040	832.19	24.0		831.81	**42+00.00**	-0.032	832.26	24.0		831.77	-0.040	4.0	831.61	
832.14	4.0	-0.040	832.30	24.0		832.13	**42+50.00**	-0.021	832.42	24.0		831.95	-0.040	4.0	831.79	
832.21	4.0	-0.040	832.37	24.0	-0.002	832.42	**43+00.00**	-0.014	832.62	24.0	-0.016	832.24	-0.040	4.0	832.08	
832.35	4.0	-0.040	832.51	24.0	-0.009	832.72	**43+50.00**	-0.007	832.82	24.0	-0.016	832.43	-0.040	4.0	832.27	

CALCULATED PTB CHECKED JSL

SUPERELEVATION TABLE STA. 21+35 TO STA. 43+50

GUE-22/723-0.00 / 0.70

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STA. 44+00 TO STA. 76+50

LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
832.40	4.0	-0.0400	832.56	31.0	-0.0160	**44+00.00**	833.06	31.0	-0.0160	832.56	-0.0400	4.0	832.40	
832.60	4.0	-0.0400	832.76	31.0	-0.0160	**44+50.00**	833.26	31.0	-0.0160	832.76	-0.0400	4.0	832.60	
832.82	4.0	-0.0400	832.98	31.0	-0.0160	**45+00.00**	833.48	31.0	-0.0160	832.98	-0.0400	4.0	832.82	
833.03	4.0	-0.0400	833.19	31.0	-0.0160	**45+50.00**	833.69	31.0	-0.0160	833.19	-0.0400	4.0	833.03	
833.25	4.0	-0.0400	833.41	31.0	-0.0160	**46+00.00**	833.91	31.0	-0.0160	833.41	-0.0400	4.0	833.25	
833.27	4.0	-0.0400	833.43	31.0	-0.0160	**46+50.00**	833.93	31.0	-0.0160	833.43	-0.0400	4.0	833.27	DRIVE RT
833.33	4.0	-0.0400	833.49	31.0	-0.0160	**47+00.00**	833.99	31.0	-0.0160	833.49	-0.0400	4.0	833.33	
833.34	4.0	-0.0400	833.50	31.0	-0.0160	**47+50.00**	834.00	31.0	-0.0160	833.50	-0.0400	4.0	833.34	
833.29	4.0	-0.0400	833.45	31.0	-0.0160	**48+00.00**	833.95	31.0	-0.0160	833.45	-0.0400	4.0	833.29	
833.23	4.0	-0.0400	833.39	31.0	-0.0160	**48+50.00**	833.89	31.0	-0.0160	833.39	-0.0400	4.0	833.23	DRIVE RT
833.15	4.0	-0.0400	833.31	31.0	-0.0160	**49+00.00**	833.81	31.0	-0.0160	833.31	-0.0400	4.0	833.15	
833.00	4.0	-0.0400	833.16	31.0	-0.0160	**49+50.00**	833.66	31.0	-0.0160	833.16	-0.0400	4.0	833.00	
832.74	4.0	-0.0400	832.90	31.0	-0.0160	**50+00.00**	833.40	31.0	-0.0160	832.90	-0.0400	4.0	832.74	DRIVE RT
DRIVE (NO WORK)			832.66	31.0	-0.0160	**50+50.00**	833.16	31.0	-0.0160	832.66	-0.0400	4.0	832.50	
832.19	4.0	-0.0400	832.35	31.0	-0.0160	**51+00.00**	832.85	31.0	-0.0160	832.35	-0.0400	4.0	832.19	DRIVE LT
831.91	4.0	-0.0400	832.07	31.0	-0.0160	**51+50.00**	832.57	31.0	-0.0160	832.07	-0.0400	4.0	831.91	
831.67	4.0	-0.0400	831.83	31.0	-0.0160	**52+00.00**	832.33	31.0	-0.0160	831.83	-0.0400	4.0	831.67	
831.57	4.0	-0.0400	831.73	31.0	-0.0160	**52+50.00**	832.23	31.0	-0.0160	831.73	-0.0400	4.0	831.57	
831.31	4.0	-0.0400	831.47	31.0	-0.0160	**53+00.00**	831.97	31.0	-0.0088	831.70	-0.0400	4.0	831.54	BEGIN SUPER RUNOUT
830.94	4.0	-0.0400	831.10	31.0	-0.0160	**53+50.00**	831.60	31.0	0.0016	831.65	-0.0400	4.0	831.49	
830.61	4.0	-0.0400	830.77	31.0	-0.0160	**54+00.00**	831.27	31.0	0.0105	831.60	-0.0400	4.0	831.44	
830.36	4.0	-0.0400	830.52	31.0	-0.0200	**54+50.00**	831.14	31.0	0.0195	831.74	-0.0400	4.0	831.58	
830.19	4.0	-0.0400	830.35	31.0	-0.0208	**55+00.00**	830.99	31.0	0.0208	831.63	-0.0400	4.0	831.47	BEGIN FULL SUPER
830.04	4.0	-0.0400	830.20	31.0	-0.0208	**55+50.00**	830.84	31.0	0.0208	831.48	-0.0400	4.0	831.32	
829.76	4.0	-0.0400	829.92	31.0	-0.0208	**56+00.00**	830.56	31.0	0.0208	831.20	-0.0400	4.0	831.04	
829.56	4.0	-0.0400	829.72	31.0	-0.0208	**56+50.00**	830.36	31.0	0.0208	831.00	-0.0400	4.0	830.84	
829.29	4.0	-0.0400	829.45	31.0	-0.0208	**57+00.00**	830.09	31.0	0.0208	830.73	-0.0400	4.0	830.57	
829.00	4.0	-0.0400	829.16	31.0	-0.0208	**57+50.00**	829.80	31.0	0.0208	830.44	-0.0400	4.0	830.28	
828.78	4.0	-0.0400	828.94	31.0	-0.0208	**58+00.00**	829.58	31.0	0.0208	830.22	-0.0400	4.0	830.06	
828.45	4.0	-0.0400	828.61	31.0	-0.0208	**58+50.00**	829.25	31.0	0.0208	829.89	-0.0400	4.0	829.73	
828.20	4.0	-0.0400	828.36	31.0	-0.0208	**59+00.00**	829.00	31.0	0.0208	829.64	-0.0400	4.0	829.48	
828.00	4.0	-0.0400	828.16	31.0	-0.0208	**59+50.00**	828.80	31.0	0.0208	829.44	-0.0400	4.0	829.28	
827.75	4.0	-0.0400	827.91	31.0	-0.0208	**60+00.00**	828.55	31.0	0.0208	829.19	-0.0400	4.0	829.03	
827.52	4.0	-0.0400	827.68	31.0	-0.0208	**60+50.00**	828.32	31.0	0.0208	828.96	-0.0400	4.0	828.80	
827.27	4.0	-0.0400	827.43	31.0	-0.0208	**61+00.00**	828.07	31.0	0.0208	828.71	-0.0400	4.0	828.55	
827.02	4.0	-0.0400	827.18	31.0	-0.0208	**61+50.00**	827.82	31.0	0.0208	828.46	-0.0400	4.0	828.30	
826.83	4.0	-0.0400	826.99	31.0	-0.0208	**62+00.00**	827.63	31.0	0.0208	828.27	-0.0400	4.0	828.11	
826.58	4.0	-0.0400	826.74	31.0	-0.0208	**62+50.00**	827.38	31.0	0.0208	828.02	-0.0400	4.0	827.86	
826.37	4.0	-0.0400	826.53	31.0	-0.0208	**63+00.00**	827.17	31.0	0.0208	827.81	-0.0400	4.0	827.65	
826.11	4.0	-0.0400	826.27	31.0	-0.0208	**63+50.00**	826.91	31.0	0.0208	827.55	-0.0400	4.0	827.39	
825.93	4.0	-0.0400	826.09	31.0	-0.0208	**64+00.00**	826.73	31.0	0.0208	827.37	**-0.0492**	4.0	827.18	DRIVE RT (SEE SHEET 110)
825.81	4.0	-0.0400	825.97	31.0	-0.0208	**64+50.00**	826.61	31.0	0.0208	827.25	-0.0400	4.0	827.09	
825.71	4.0	-0.0400	825.87	31.0	-0.0208	**65+00.00**	826.51	31.0	0.0208	827.15	-0.0400	4.0	826.99	
825.69	4.0	-0.0400	825.85	31.0	-0.0208	**65+50.00**	826.49	31.0	0.0208	827.13	-0.0400	4.0	826.97	DRIVE RT
825.73	4.0	-0.0400	825.89	31.0	-0.0208	**66+00.00**	826.53	31.0	0.0208	827.17	-0.0400	4.0	827.01	
825.83	4.0	-0.0400	825.99	31.0	-0.0208	**66+50.00**	826.63	31.0	0.0208	827.27	-0.0400	4.0	827.11	
825.93	4.0	-0.0400	826.09	31.0	-0.0208	**67+00.00**	826.73	31.0	0.0208	827.37	-0.0400	4.0	827.21	
826.07	4.0	-0.0400	826.23	31.0	-0.0208	**67+50.00**	826.87	31.0	0.0208	827.51	-0.0400	4.0	827.35	DRIVE LT
826.40	4.0	-0.0400	826.56	31.0	-0.0208	**68+00.00**	827.20	31.0	0.0208	827.84	**-0.0492**	4.0	827.65	DRIVE RT (SEE SHEET 111)
826.66	4.0	-0.0400	826.82	31.0	-0.0208	**68+50.00**	827.46	31.0	0.0208	828.10	-0.0400	4.0	827.94	
827.01	4.0	-0.0400	827.17	31.0	-0.0208	**69+00.00**	827.81	31.0	0.0208	828.45	-0.0400	4.0	828.29	
827.49	4.0	-0.0400	827.65	31.0	-0.0208	**69+50.00**	828.29	31.0	0.0208	828.93	-0.0400	4.0	828.77	
828.04	4.0	-0.0400	828.20	31.0	-0.0208	**70+00.00**	828.84	31.0	0.0208	829.48	-0.0400	4.0	829.32	
828.63	4.0	-0.0400	828.79	31.0	-0.0208	**70+50.00**	829.43	31.0	0.0208	830.07	-0.0400	4.0	829.91	
829.23	4.0	-0.0400	829.39	31.0	-0.0208	**71+00.00**	830.03	31.0	0.0208	830.67	-0.0400	4.0	830.51	
829.87	4.0	-0.0400	830.03	31.0	-0.0208	**71+50.00**	830.67	31.0	0.0208	831.31	-0.0400	4.0	831.15	
830.64	4.0	-0.0400	830.80	31.0	-0.0208	**72+00.00**	831.44	31.0	0.0208	832.08	-0.0400	4.0	831.92	
831.41	4.0	-0.0400	831.57	31.0	-0.0208	**72+50.00**	832.21	31.0	0.0208	832.85	-0.0400	4.0	832.69	
832.27	4.0	-0.0400	832.43	31.0	-0.0208	**73+00.00**	833.07	31.0	0.0208	833.71	-0.0400	4.0	833.55	
833.14	4.0	-0.0400	833.30	31.0	-0.0208	**73+50.00**	833.94	31.0	0.0208	834.58	-0.0400	4.0	834.42	
834.10	4.0	-0.0400	834.26	31.0	-0.0208	**74+00.00**	834.90	31.0	0.0208	835.54	-0.0400	4.0	835.38	
835.19	4.0	-0.0400	835.35	31.0	-0.0208	**74+50.00**	835.99	31.0	0.0208	836.63	-0.0400	4.0	836.47	
836.22	4.0	-0.0400	836.38	31.0	-0.0208	**75+00.00**	837.02	31.0	0.0208	837.66	-0.0400	4.0	837.50	
837.41	4.0	-0.0400	837.57	31.0	-0.0208	**75+50.00**	838.21	31.0	0.0208	838.85	-0.0400	4.0	838.69	
838.58	4.0	-0.0400	838.74	31.0	-0.0208	**76+00.00**	839.38	31.0	0.0208	840.02	-0.0400	4.0	839.86	
839.84	4.0	**-0.0134**	839.90	31.0	-0.0208	**76+50.00**	840.54	31.0	0.0208	841.18	-0.0400	4.0	841.02	STILLMEADOW LN LT

CALCULATED PTB
CHECKED JSL

SUPERELEVATION TABLE
STA. 44+00 TO STA. 76+50

GUE-22/723-0.00
/ 0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_GE002.dgn Sheet 3/4/2019 3:22:14 PM jlutzi

STA. 77+00 TO STA. 109+50

LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
841.06	4.0	-0.0400	841.22	31.0	-0.0208	**77+00.00**	841.86	31.0	0.0208	842.50	-0.0400	4.0	842.34	
842.40	4.0	-0.0400	842.56	31.0	-0.0208	**77+50.00**	843.20	31.0	0.0208	843.84	-0.0400	4.0	843.68	
843.81	4.0	-0.0400	843.97	31.0	-0.0208	**78+00.00**	844.61	31.0	0.0208	845.25	**-0.0492**	4.0	845.06	MORGAN RD. RT (SEE SHEET 115)
845.27	4.0	-0.0400	845.43	31.0	-0.0208	**78+50.00**	846.07	31.0	0.0208	846.71	-0.0400	4.0	846.55	
846.91	4.0	-0.0400	847.07	31.0	-0.0208	**79+00.00**	847.71	31.0	0.0208	848.35	-0.0400	4.0	848.19	END FULL SUPER
848.57	4.0	-0.0400	848.73	31.0	-0.0197	**79+50.00**	849.34	31.0	0.0192	849.94	-0.0400	4.0	849.78	
850.32	4.0	-0.0400	850.48	31.0	-0.0160	**80+00.00**	850.98	31.0	0.0102	851.30	-0.0400	4.0	851.14	
851.95	4.0	-0.0400	852.11	31.0	-0.0160	**80+50.00**	852.61	31.0	0.0012	852.65	-0.0400	4.0	852.49	
853.79	4.0	-0.0400	853.95	31.0	-0.0160	**81+00.00**	854.45	31.0	-0.0092	854.16	-0.0400	4.0	854.00	
855.70	4.0	-0.0400	855.86	31.0	-0.0160	**81+50.00**	856.36	31.0	-0.0160	855.86	-0.0400	4.0	855.70	BEGIN NORMAL CROWN
857.43	4.0	-0.0400	857.59	31.0	-0.0160	**82+00.00**	858.09	31.0	-0.0160	857.59	-0.0400	4.0	857.43	
859.38	4.0	-0.0400	859.54	31.0	-0.0160	**82+50.00**	860.04	31.0	-0.0160	859.54	-0.0400	4.0	859.38	
861.40	4.0	-0.0400	861.56	31.0	-0.0160	**83+00.00**	862.06	31.0	-0.0160	861.56	-0.0400	4.0	861.40	
863.43	4.0	-0.0400	863.59	31.0	-0.0160	**83+50.00**	864.09	31.0	-0.0160	863.59	-0.0400	4.0	863.43	
865.53	4.0	-0.0400	865.69	31.0	-0.0160	**84+00.00**	866.19	31.0	-0.0160	865.69	-0.0400	4.0	865.53	
867.49	4.0	-0.0400	867.65	31.0	-0.0160	**84+50.00**	868.15	31.0	-0.0160	867.65	-0.0400	4.0	867.49	
869.37	4.0	-0.0400	869.53	31.0	-0.0160	**85+00.00**	870.03	31.0	-0.0160	869.53	-0.0400	4.0	869.37	
871.24	4.0	-0.0400	871.40	31.0	-0.0160	**85+50.00**	871.90	31.0	-0.0160	871.40	-0.0400	4.0	871.24	
872.98	4.0	-0.0400	873.14	31.0	-0.0160	**86+00.00**	873.64	31.0	-0.0160	873.14	-0.0400	4.0	872.98	
874.69	4.0	-0.0400	874.85	31.0	-0.0160	**86+50.00**	875.35	31.0	-0.0160	874.85	-0.0400	4.0	874.69	
876.27	4.0	-0.0400	876.43	31.0	-0.0160	**87+00.00**	876.93	31.0	-0.0160	876.43	-0.0400	4.0	876.27	
877.86	4.0	-0.0400	878.02	31.0	-0.0160	**87+50.00**	878.52	31.0	-0.0160	878.02	-0.0400	4.0	877.86	
879.36	4.0	-0.0400	879.52	31.0	-0.0160	**88+00.00**	880.02	31.0	-0.0160	879.52	-0.0400	4.0	879.36	
880.80	4.0	-0.0400	880.96	31.0	-0.0160	**88+50.00**	881.46	31.0	-0.0160	880.96	-0.0400	4.0	880.80	
882.13	4.0	-0.0400	882.29	31.0	-0.0160	**89+00.00**	882.79	31.0	-0.0160	882.29	-0.0400	4.0	882.13	
883.38	4.0	-0.0400	883.54	31.0	-0.0160	**89+50.00**	884.04	31.0	-0.0160	883.54	-0.0400	4.0	883.38	
884.56	4.0	-0.0400	884.72	31.0	-0.0160	**90+00.00**	885.22	31.0	-0.0160	884.72	-0.0400	4.0	884.56	
885.63	4.0	-0.0400	885.79	31.0	-0.0160	**90+50.00**	886.29	31.0	-0.0160	885.79	-0.0400	4.0	885.63	
886.66	4.0	-0.0400	886.82	31.0	-0.0160	**91+00.00**	887.32	31.0	-0.0160	886.82	-0.0400	4.0	886.66	
887.63	4.0	-0.0400	887.79	31.0	-0.0160	**91+50.00**	888.29	31.0	-0.0160	887.79	-0.0400	4.0	887.63	
888.51	4.0	-0.0400	888.67	31.0	-0.0160	**92+00.00**	889.17	31.0	-0.0160	888.67	-0.0400	4.0	888.51	
889.37	4.0	-0.0400	889.53	31.0	-0.0160	**92+50.00**	890.03	31.0	-0.0160	889.53	-0.0400	4.0	889.37	
890.12	4.0	-0.0400	890.28	31.0	-0.0160	**93+00.00**	890.78	31.0	-0.0160	890.28	-0.0400	4.0	890.12	
890.79	4.0	-0.0400	890.95	31.0	-0.0160	**93+50.00**	891.45	31.0	-0.0160	890.95	-0.0400	4.0	890.79	
891.38	4.0	-0.0400	891.54	31.0	-0.0160	**94+00.00**	892.04	31.0	-0.0160	891.54	-0.0400	4.0	891.38	
891.90	4.0	-0.0400	892.06	31.0	-0.0160	**94+50.00**	892.56	31.0	-0.0160	892.06	-0.0400	4.0	891.90	
892.39	4.0	-0.0400	892.55	31.0	-0.0160	**95+00.00**	893.05	31.0	-0.0160	892.55	-0.0400	4.0	892.39	
SAMPSON RD (NO WORK)			892.93	31.0	-0.0160	**95+50.00**	893.43	31.0	-0.0160	892.93	-0.0400	4.0	892.77	
893.12	4.0	-0.0400	893.28	31.0	-0.0160	**96+00.00**	893.78	31.0	-0.0160	893.28	-0.0400	4.0	893.12	
893.41	4.0	-0.0400	893.57	31.0	-0.0160	**96+50.00**	894.07	31.0	-0.0160	893.57	-0.0400	4.0	893.41	
893.61	4.0	-0.0400	893.77	31.0	-0.0160	**97+00.00**	894.27	31.0	-0.0160	893.77	**-0.0206**	4.0	893.69	DRIVE RT (GREENBRIAR RD)
893.82	4.0	-0.0400	893.98	31.0	-0.0160	**97+50.00**	894.48	31.0	-0.0160	893.98	-0.0400	4.0	893.82	
893.98	4.0	-0.0400	894.14	31.0	-0.0160	**98+00.00**	894.64	31.0	-0.0160	894.14	-0.0400	4.0	893.98	
894.15	4.0	-0.0400	894.31	31.0	-0.0160	**98+50.00**	894.81	31.0	-0.0160	894.31	-0.0400	4.0	894.15	
894.32	4.0	-0.0400	894.48	31.0	-0.0160	**99+00.00**	894.98	31.0	-0.0160	894.48	-0.0400	4.0	894.32	
894.54	4.0	-0.0400	894.70	31.0	-0.0160	**99+50.00**	895.20	31.0	-0.0160	894.70	-0.0400	4.0	894.54	
894.71	4.0	-0.0400	894.87	31.0	-0.0160	**100+00.00**	895.37	31.0	-0.0160	894.87	-0.0400	4.0	894.71	
894.84	4.0	-0.0400	895.00	31.0	-0.0160	**100+50.00**	895.50	31.0	-0.0160	895.00	-0.0400	4.0	894.84	
895.06	4.0	-0.0400	895.22	31.0	-0.0160	**101+00.00**	895.72	31.0	-0.0160	895.22	-0.0400	4.0	895.06	
895.29	4.0	-0.0400	895.45	31.0	-0.0160	**101+50.00**	895.95	31.0	-0.0160	895.45	-0.0400	4.0	895.29	
895.47	4.0	-0.0400	895.63	31.0	-0.0160	**102+00.00**	896.13	31.0	-0.0160	895.63	-0.0400	4.0	895.47	
895.69	4.0	-0.0400	895.85	31.0	-0.0160	**102+50.00**	896.35	31.0	-0.0160	895.85	-0.0400	4.0	895.69	
895.91	4.0	-0.0400	896.07	31.0	-0.0160	**103+00.00**	896.57	31.0	-0.0160	896.07	-0.0400	4.0	895.91	
896.25	4.0	-0.0400	896.41	31.0	-0.0160	**103+50.00**	896.91	31.0	-0.0160	896.41	-0.0400	4.0	896.25	
896.66	4.0	-0.0400	896.82	31.0	-0.0160	**104+00.00**	897.32	31.0	-0.0160	896.82	-0.0400	4.0	896.66	
897.07	4.0	-0.0400	897.23	31.0	-0.0160	**104+50.00**	897.73	31.0	-0.0160	897.23	-0.0400	4.0	897.07	
897.54	4.0	-0.0400	897.70	31.0	-0.0160	**105+00.00**	898.20	31.0	-0.0160	897.70	-0.0400	4.0	897.54	
898.31	4.0	-0.0400	898.47	31.0	-0.0160	**105+50.00**	898.97	31.0	-0.0160	898.47	-0.0400	4.0	898.31	
899.27	4.0	-0.0400	899.43	31.0	-0.0160	**106+00.00**	899.93	31.0	-0.0160	899.43	-0.0400	4.0	899.27	
900.45	4.0	-0.0400	900.61	31.0	-0.0160	**106+50.00**	901.11	31.0	-0.0160	900.61	-0.0400	4.0	900.45	
901.80	4.0	-0.0400	901.96	31.0	-0.0160	**107+00.00**	902.46	31.0	-0.0160	901.96	-0.0400	4.0	901.80	
903.10	4.0	-0.0400	903.26	31.0	-0.0160	**107+50.00**	903.76	31.0	-0.0160	903.26	-0.0400	4.0	903.10	
904.67	4.0	-0.0400	904.83	31.0	-0.0160	**108+00.00**	905.33	31.0	-0.0160	904.83	-0.0400	4.0	904.67	
906.28	4.0	-0.0400	906.44	31.0	-0.0160	**108+50.00**	906.94	31.0	-0.0160	906.44	-0.0400	4.0	906.28	
907.99	4.0	-0.0400	908.15	31.0	-0.0160	**109+00.00**	908.65	31.0	-0.0160	908.15	-0.0400	4.0	907.99	
909.89	4.0	-0.0400	910.05	31.0	-0.0160	**109+50.00**	910.55	31.0	-0.0160	910.05	-0.0400	4.0	909.89	

CALCULATED PTB
CHECKED JSL

SUPERELEVATION TABLE
STA. 77+00 TO STA. 109+50

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STA. 110+00 TO STA. 142+50

LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
911.83	4.0	-0.0400	911.99	31.0	-0.0160	**110+00.00**	912.49	31.0	-0.0160	911.99	-0.0400	4.0	911.83	
913.94	4.0	-0.0400	914.10	31.0	-0.0160	**110+50.00**	914.60	31.0	-0.0160	914.10	**-0.0086**	4.0	914.07	DRIVE RT
915.98	4.0	-0.0400	916.14	31.0	-0.0160	**111+00.00**	916.64	31.0	-0.0160	916.14	-0.0400	4.0	915.98	
917.99	4.0	-0.0400	918.15	31.0	-0.0160	**111+50.00**	918.65	31.0	-0.0160	918.15	-0.0400	4.0	917.99	
920.00	4.0	-0.0400	920.16	31.0	-0.0160	**112+00.00**	920.66	31.0	-0.0160	920.16	-0.0400	4.0	920.00	
921.86	4.0	-0.0400	922.02	31.0	-0.0160	**112+50.00**	922.52	31.0	-0.0160	922.02	-0.0400	4.0	921.86	
923.68	4.0	-0.0400	923.84	31.0	-0.0160	**113+00.00**	924.34	31.0	-0.0160	923.84	-0.0400	4.0	923.68	
925.44	4.0	-0.0400	925.60	31.0	-0.0160	**113+50.00**	926.10	31.0	-0.0160	925.60	-0.0400	4.0	925.44	
927.12	4.0	-0.0400	927.28	31.0	-0.0160	**114+00.00**	927.78	31.0	-0.0160	927.28	-0.0400	4.0	927.12	
928.68	4.0	-0.0400	928.84	31.0	-0.0160	**114+50.00**	929.34	31.0	-0.0160	928.84	-0.0400	4.0	928.68	
930.20	4.0	-0.0400	930.36	31.0	-0.0160	**115+00.00**	930.86	31.0	-0.0160	930.36	-0.0400	4.0	930.20	
BEST RD (NO WORK)			931.74	31.0	-0.0160	**115+50.00**	932.24	31.0	-0.0160	931.74	-0.0400	4.0	931.58	
932.88	4.0	-0.0400	933.04	31.0	-0.0160	**116+00.00**	933.54	31.0	-0.0160	933.04	-0.0400	4.0	932.88	
934.04	4.0	-0.0400	934.20	31.0	-0.0160	**116+50.00**	934.70	31.0	-0.0160	934.20	-0.0400	4.0	934.04	
935.24	4.0	-0.0400	935.40	31.0	-0.0160	**117+00.00**	935.90	31.0	-0.0160	935.40	-0.0400	4.0	935.24	
936.21	4.0	-0.0400	936.37	31.0	-0.0160	**117+50.00**	936.87	31.0	-0.0160	936.37	-0.0400	4.0	936.21	
937.08	4.0	-0.0400	937.24	31.0	-0.0160	**118+00.00**	937.74	31.0	-0.0160	937.24	-0.0400	4.0	937.08	
937.95	4.0	-0.0400	938.11	31.0	-0.0160	**118+50.00**	938.61	31.0	-0.0160	938.11	-0.0400	4.0	937.95	
938.76	4.0	-0.0400	938.92	31.0	-0.0160	**119+00.00**	939.42	31.0	-0.0160	938.92	-0.0400	4.0	938.76	
939.49	4.0	-0.0400	939.65	31.0	-0.0160	**119+50.00**	940.15	31.0	-0.0160	939.65	MOORES LN (NO WORK)			
940.10	4.0	-0.0400	940.26	31.0	-0.0160	**120+00.00**	940.76	31.0	-0.0160	940.26	-0.0400	4.0	940.10	
940.63	4.0	-0.0400	940.79	31.0	-0.0160	**120+50.00**	941.29	31.0	-0.0160	940.79	-0.0400	4.0	940.63	
940.89	4.0	-0.0400	941.05	31.0	-0.0160	**121+00.00**	941.55	31.0	-0.0160	941.05	-0.0400	4.0	940.89	
941.18	4.0	-0.0400	941.34	31.0	-0.0160	**121+50.00**	941.84	31.0	-0.0160	941.34	-0.0400	4.0	941.18	
941.48	4.0	-0.0400	941.64	31.0	-0.0117	**122+00.00**	942.00	31.0	-0.0160	941.50	-0.0400	4.0	941.34	BEGIN SUPER RUNOUT
941.75	4.0	-0.0400	941.91	31.0	-0.0009	**122+50.00**	941.94	31.0	-0.0160	941.44	-0.0400	4.0	941.28	
942.07	4.0	-0.0400	942.23	31.0	0.0109	**123+00.00**	941.89	31.0	-0.0160	941.39	-0.0400	4.0	941.23	
942.17	4.0	-0.0400	942.33	31.0	0.0175	**123+50.00**	941.79	31.0	-0.0175	941.25	-0.0400	4.0	941.09	BEGIN FULL SUPER
942.05	4.0	-0.0400	942.21	31.0	0.0175	**124+00.00**	941.67	31.0	-0.0175	941.13	-0.0400	4.0	940.97	
941.77	4.0	-0.0400	941.93	31.0	0.0175	**124+50.00**	941.39	31.0	-0.0175	940.85	-0.0400	4.0	940.69	
941.42	4.0	-0.0400	941.58	31.0	0.0175	**125+00.00**	941.04	31.0	-0.0175	940.50	-0.0400	4.0	940.34	
941.01	4.0	-0.0400	941.17	31.0	0.0175	**125+50.00**	940.63	31.0	-0.0175	940.09	-0.0400	4.0	939.93	
940.49	4.0	-0.0400	940.65	31.0	0.0175	**126+00.00**	940.11	31.0	-0.0175	939.57	-0.0400	4.0	939.41	
939.95	4.0	-0.0400	940.11	31.0	0.0175	**126+50.00**	939.57	31.0	-0.0175	939.03	-0.0400	4.0	938.87	
939.26	4.0	-0.0400	939.42	31.0	0.0175	**127+00.00**	938.88	31.0	-0.0175	938.34	-0.0400	4.0	938.18	
938.49	4.0	-0.0400	938.65	31.0	0.0175	**127+50.00**	938.11	31.0	-0.0175	937.57	-0.0400	4.0	937.41	
937.66	4.0	-0.0400	937.82	31.0	0.0175	**128+00.00**	937.28	31.0	-0.0175	936.74	-0.0400	4.0	936.58	
936.75	4.0	-0.0400	936.91	31.0	0.0175	**128+50.00**	936.37	31.0	-0.0175	935.83	-0.0400	4.0	935.67	
935.68	4.0	-0.0400	935.84	31.0	0.0175	**129+00.00**	935.30	31.0	-0.0175	934.76	-0.0400	4.0	934.60	
934.62	4.0	-0.0400	934.78	31.0	0.0175	**129+50.00**	934.24	31.0	-0.0175	933.70	-0.0400	4.0	933.54	
933.38	4.0	-0.0400	933.54	31.0	0.0175	**130+00.00**	933.00	31.0	-0.0175	932.46	-0.0400	4.0	932.30	
932.10	4.0	-0.0400	932.26	31.0	0.0175	**130+50.00**	931.72	31.0	-0.0175	931.18	-0.0400	4.0	931.02	
930.74	4.0	-0.0400	930.90	31.0	0.0175	**131+00.00**	930.36	31.0	-0.0175	929.82	-0.0400	4.0	929.66	
929.31	4.0	-0.0400	929.47	31.0	0.0175	**131+50.00**	928.93	31.0	-0.0175	928.39	-0.0400	4.0	928.23	
927.73	4.0	-0.0400	927.89	31.0	0.0175	**132+00.00**	927.35	31.0	-0.0175	926.81	-0.0400	4.0	926.65	
926.08	4.0	-0.0400	926.24	31.0	0.0175	**132+50.00**	925.70	31.0	-0.0175	925.16	-0.0400	4.0	925.00	
924.34	4.0	-0.0400	924.50	31.0	0.0175	**133+00.00**	923.96	31.0	-0.0175	923.42	-0.0400	4.0	923.26	
922.47	4.0	-0.0400	922.63	31.0	0.0175	**133+50.00**	922.09	31.0	-0.0175	921.55	-0.0400	4.0	921.39	
920.56	4.0	-0.0400	920.72	31.0	0.0175	**134+00.00**	920.18	31.0	-0.0175	919.64	-0.0400	4.0	919.48	
BEST RD (NO WORK)			918.63	31.0	0.0175	**134+50.00**	918.09	31.0	-0.0175	917.55	-0.0400	4.0	917.39	DRIVE RT
916.34	4.0	-0.0400	916.50	31.0	0.0175	**135+00.00**	915.96	31.0	-0.0175	915.42	-0.0400	4.0	915.26	
914.14	4.0	-0.0400	914.30	31.0	0.0175	**135+50.00**	913.76	31.0	-0.0175	913.22	-0.0400	4.0	913.06	
911.86	4.0	-0.0400	912.02	31.0	0.0175	**136+00.00**	911.48	31.0	-0.0175	910.94	-0.0400	4.0	910.78	
909.55	4.0	-0.0400	909.71	31.0	0.0175	**136+50.00**	909.17	31.0	-0.0175	908.63	-0.0400	4.0	908.47	
907.12	4.0	-0.0400	907.28	31.0	0.0175	**137+00.00**	906.74	31.0	-0.0175	906.20	-0.0400	4.0	906.04	
904.63	4.0	-0.0400	904.79	31.0	0.0175	**137+50.00**	904.25	31.0	-0.0175	903.71	-0.0400	4.0	903.55	
902.25	4.0	-0.0400	902.41	31.0	0.0175	**138+00.00**	901.87	31.0	-0.0175	901.33	-0.0400	4.0	901.17	
899.74	4.0	-0.0400	899.90	31.0	0.0175	**138+50.00**	899.36	31.0	-0.0175	898.82	-0.0400	4.0	898.66	END FULL SUPER
897.03	4.0	-0.0400	897.19	31.0	0.0096	**139+00.00**	896.89	31.0	-0.0160	896.39	-0.0400	4.0	896.23	DRIVE RT
894.24	4.0	-0.0400	894.40	31.0	-0.0020	**139+50.00**	894.46	31.0	-0.0160	893.96	-0.0400	4.0	893.80	
891.41	4.0	-0.0400	891.57	31.0	-0.0128	**140+00.00**	891.97	31.0	-0.0160	891.47	-0.0400	4.0	891.31	
888.76	4.0	-0.0400	888.92	31.0	-0.0160	**140+50.00**	889.42	31.0	-0.0160	888.92	-0.0400	4.0	888.76	BEGIN NORMAL CROWN
886.38	4.0	-0.0400	886.54	31.0	-0.0160	**141+00.00**	887.04	31.0	-0.0160	886.54	-0.0400	4.0	886.38	
883.84	4.0	-0.0400	884.00	31.0	-0.0160	**141+50.00**	884.50	31.0	-0.0160	884.00	-0.0400	4.0	883.84	
881.28	4.0	-0.0400	881.44	31.0	-0.0160	**142+00.00**	881.94	31.0	-0.0160	881.44	-0.0400	4.0	881.28	
878.81	4.0	-0.0400	878.97	31.0	-0.0160	**142+50.00**	879.47	31.0	-0.0160	878.97	-0.0400	4.0	878.81	

CALCULATED PTB
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SUPERELEVATION TABLE
STA. 110+00 TO STA. 142+50

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LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
876.34	4.0	-0.0400	876.50	31.0	-0.0160	**143+00.00**	877.00	31.0	-0.0160	876.50	-0.0400	4.0	876.34	
873.84	4.0	-0.0400	874.00	31.0	-0.0160	**143+50.00**	874.50	31.0	-0.0160	874.00	-0.0400	4.0	873.84	
871.27	4.0	-0.0400	871.43	31.0	-0.0160	**144+00.00**	871.93	31.0	-0.0160	871.43	-0.0400	4.0	871.27	
868.73	4.0	-0.0400	868.89	31.0	-0.0160	**144+50.00**	869.39	31.0	-0.0160	868.89	-0.0400	4.0	868.73	
866.23	4.0	-0.0400	866.39	31.0	-0.0160	**145+00.00**	866.89	31.0	-0.0160	866.39	-0.0400	4.0	866.23	
863.66	4.0	-0.0400	863.82	31.0	-0.0160	**145+50.00**	864.32	31.0	-0.0160	863.82	-0.0400	4.0	863.66	
861.25	4.0	-0.0400	861.41	31.0	-0.0160	**146+00.00**	861.91	31.0	-0.0160	861.41	-0.0400	4.0	861.25	
858.84	4.0	-0.0400	859.00	31.0	-0.0160	**146+50.00**	859.50	31.0	-0.0160	859.00	-0.0400	4.0	858.84	
856.42	4.0	-0.0400	856.58	31.0	-0.0160	**147+00.00**	857.08	31.0	-0.0160	856.58	-0.0400	4.0	856.42	
854.22	4.0	-0.0400	854.38	31.0	-0.0160	**147+50.00**	854.88	31.0	-0.0160	854.38	-0.0400	4.0	854.22	
852.15	4.0	-0.0400	852.31	31.0	-0.0160	**148+00.00**	852.81	31.0	-0.0160	852.31	-0.0400	4.0	852.15	
850.07	4.0	-0.0400	850.23	31.0	-0.0160	**148+50.00**	850.73	31.0	-0.0160	850.23	-0.0400	4.0	850.07	
848.18	4.0	-0.0400	848.34	31.0	-0.0160	**149+00.00**	848.84	31.0	-0.0160	848.34	-0.0400	4.0	848.18	
846.33	4.0	-0.0400	846.49	31.0	-0.0160	**149+50.00**	846.99	31.0	-0.0160	846.49	-0.0400	4.0	846.33	
844.60	4.0	-0.0400	844.76	31.0	-0.0160	**150+00.00**	845.26	31.0	-0.0160	844.76	-0.0400	4.0	844.60	DRIVE LT
843.08	4.0	-0.0400	843.24	31.0	-0.0160	**150+50.00**	843.74	31.0	-0.0160	843.24	-0.0400	4.0	843.08	
841.59	4.0	-0.0400	841.75	31.0	-0.0160	**151+00.00**	842.25	31.0	-0.0160	841.75	-0.0400	4.0	841.59	
840.30	4.0	-0.0400	840.46	31.0	-0.0160	**151+50.00**	840.96	31.0	-0.0160	840.46	-0.0400	4.0	840.30	
839.09	4.0	-0.0400	839.25	31.0	-0.0160	**152+00.00**	839.75	31.0	-0.0160	839.25	-0.0400	4.0	839.09	
837.97	4.0	-0.0400	838.13	31.0	-0.0160	**152+50.00**	838.63	31.0	-0.0160	838.13	-0.0400	4.0	837.97	DRIVE LT
836.96	4.0	-0.0400	837.12	31.0	-0.0160	**153+00.00**	837.62	31.0	-0.0160	837.12	-0.0400	4.0	836.96	
836.10	4.0	-0.0400	836.26	31.0	-0.0160	**153+50.00**	836.76	31.0	-0.0160	836.26	-0.0400	4.0	836.10	
835.32	4.0	-0.0400	835.48	31.0	-0.0160	**154+00.00**	835.98	31.0	-0.0160	835.48	-0.0400	4.0	835.32	DRIVE RT
834.60	4.0	-0.0400	834.76	31.0	-0.0160	**154+50.00**	835.26	31.0	-0.0160	834.76	-0.0400	4.0	834.60	DRIVE L/R
834.06	4.0	-0.0400	834.22	31.0	-0.0160	**155+00.00**	834.72	31.0	-0.0160	834.22	-0.0400	4.0	834.06	
MEADOW RD (NO WORK)			833.79	31.0	-0.0160	**155+50.00**	834.29	31.0	-0.0160	833.79	-0.0400	4.0	833.63	DRIVE RT
			833.45	31.0	-0.0160	**156+00.00**	833.95	31.0	-0.0160	833.45	-0.0400	4.0	833.29	
833.11	4.0	-0.0400	833.27	31.0	-0.0160	**156+50.00**	833.77	31.0	-0.0160	833.27	SHAW RD (NO WORK)			
832.89	4.0	-0.0400	833.05	31.0	-0.0160	**157+00.00**	833.55	31.0	-0.0160	833.05	-0.0400	4.0	832.89	
832.57	4.0	-0.0400	832.73	31.0	-0.0160	**157+50.00**	833.23	31.0	-0.0160	832.73	-0.0400	4.0	832.57	
832.39	4.0	-0.0400	832.55	31.0	-0.0160	**158+00.00**	833.05	31.0	-0.0160	832.55	-0.0400	4.0	832.39	
832.21	4.0	-0.0400	832.37	31.0	-0.0160	**158+50.00**	832.87	31.0	-0.0160	832.37	-0.0400	4.0	832.21	
832.01	4.0	-0.0400	832.17	31.0	-0.0160	**159+00.00**	832.67	31.0	-0.0160	832.17	-0.0400	4.0	832.01	
831.74	4.0	-0.0400	831.90	31.0	-0.0160	**159+50.00**	832.40	31.0	-0.0160	831.90	-0.0400	4.0	831.74	
831.56	4.0	-0.0400	831.72	31.0	-0.0160	**160+00.00**	832.22	31.0	-0.0160	831.72	-0.0400	4.0	831.56	
831.39	4.0	-0.0400	831.55	31.0	-0.0160	**160+50.00**	832.05	31.0	-0.0160	831.55	-0.0400	4.0	831.39	
831.33	4.0	-0.0400	831.49	31.0	-0.0160	**161+00.00**	831.99	31.0	-0.0160	831.49	-0.0400	4.0	831.33	BEGIN SUPER RUNOUT
831.06	4.0	-0.0400	831.22	31.0	-0.0160	**161+50.00**	831.72	31.0	-0.0085	831.46	-0.0400	4.0	831.30	
830.79	4.0	-0.0400	830.95	31.0	-0.0160	**162+00.00**	831.45	31.0	0.0018	831.51	-0.0400	4.0	831.35	
830.50	4.0	-0.0400	830.66	31.0	-0.0160	**162+50.00**	831.16	31.0	0.0108	831.49	-0.0400	4.0	831.33	
830.17	4.0	-0.0400	830.33	31.0	-0.0201	**163+00.00**	830.95	31.0	0.0197	831.56	-0.0400	4.0	831.40	
829.94	4.0	-0.0400	830.10	31.0	-0.0208	**163+50.00**	830.74	31.0	0.0208	831.38	-0.0400	4.0	831.22	BEGIN FULL SUPER
829.78	4.0	-0.0400	829.94	31.0	-0.0208	**164+00.00**	830.58	31.0	0.0208	831.22	-0.0400	4.0	831.06	
829.45	4.0	-0.0400	829.61	31.0	-0.0208	**164+50.00**	830.25	31.0	0.0208	830.89	-0.0400	4.0	830.73	
829.27	4.0	-0.0400	829.43	31.0	-0.0208	**165+00.00**	830.07	31.0	0.0208	830.71	-0.0400	4.0	830.55	
829.02	4.0	-0.0400	829.18	31.0	-0.0208	**165+50.00**	829.82	31.0	0.0208	830.46	-0.0400	4.0	830.30	
828.85	4.0	-0.0400	829.01	31.0	-0.0208	**166+00.00**	829.65	31.0	0.0208	830.29	-0.0400	4.0	830.13	
828.59	4.0	-0.0400	828.75	31.0	-0.0208	**166+50.00**	829.39	31.0	0.0208	830.03	-0.0400	4.0	829.87	DRIVE LT
828.47	4.0	-0.0400	828.63	31.0	-0.0208	**167+00.00**	829.27	31.0	0.0208	829.91	-0.0400	4.0	829.75	
828.18	4.0	-0.0400	828.34	31.0	-0.0208	**167+50.00**	828.98	31.0	0.0208	829.62	-0.0400	4.0	829.46	
827.93	4.0	-0.0400	828.09	31.0	-0.0208	**168+00.00**	828.73	31.0	0.0208	829.37	-0.0400	4.0	829.21	
827.78	4.0	-0.0400	827.94	31.0	-0.0208	**168+50.00**	828.58	31.0	0.0208	829.22	-0.0400	4.0	829.06	
827.57	4.0	-0.0400	827.73	31.0	-0.0208	**169+00.00**	828.37	31.0	0.0208	829.01	-0.0400	4.0	828.85	DRIVE LT
827.31	4.0	-0.0400	827.47	31.0	-0.0208	**169+50.00**	828.11	31.0	0.0208	828.75	-0.0400	4.0	828.59	
827.12	4.0	-0.0400	827.28	31.0	-0.0208	**170+00.00**	827.92	31.0	0.0208	828.56	-0.0400	4.0	828.40	
826.82	4.0	-0.0400	826.98	31.0	-0.0208	**170+50.00**	827.62	31.0	0.0208	828.26	-0.0400	4.0	828.10	
826.65	4.0	-0.0400	826.81	31.0	-0.0208	**171+00.00**	827.45	31.0	0.0208	828.09	-0.0400	4.0	827.93	
826.47	4.0	-0.0400	826.63	31.0	-0.0208	**171+50.00**	827.27	31.0	0.0208	827.91	-0.0400	4.0	827.75	
826.18	4.0	-0.0400	826.34	31.0	-0.0208	**172+00.00**	826.98	31.0	0.0208	827.62	-0.0400	4.0	827.46	
825.92	4.0	-0.0400	826.08	31.0	-0.0208	**172+50.00**	826.72	31.0	0.0208	827.36	-0.0400	4.0	827.20	
825.70	4.0	-0.0400	825.86	31.0	-0.0208	**173+00.00**	826.50	31.0	0.0208	827.14	-0.0400	4.0	826.98	
825.43	4.0	-0.0400	825.59	31.0	-0.0208	**173+50.00**	826.23	31.0	0.0208	826.87	-0.0400	4.0	826.71	
825.28	4.0	-0.0400	825.44	31.0	-0.0208	**174+00.00**	826.08	31.0	0.0208	826.72	-0.0400	4.0	826.56	
825.02	4.0	-0.0400	825.18	31.0	-0.0208	**174+50.00**	825.82	31.0	0.0208	826.46	-0.0400	4.0	826.30	
824.83	4.0	-0.0400	824.99	31.0	-0.0208	**175+00.00**	825.63	31.0	0.0208	826.27	-0.0400	4.0	826.11	
824.59	4.0	-0.0400	824.75	31.0	-0.0208	**175+50.00**	825.39	31.0	0.0208	826.03	-0.0400	4.0	825.87	

CALCULATED PTB
CHECKED JSL

SUPERELEVATION TABLE
STA. 143+00 TO STA. 175+50

GUE-22/723-0.00
/0.70

72
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_GE005.dgn Sheet 3/4/2019 3:22:35 PM jlutzi

STA. 176+00 TO STA. 208+50

LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT	PAVEMENT WIDTH	PAVEMENT SLOPE	BASELINE SURVEY & CONSTRUCTION	PROFILE GRADE	PAVEMENT WIDTH	PAVEMENT SLOPE	RIGHT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
824.40	4.0	-0.0400	824.56	31.0	-0.0208	**176+00.00**	825.20	31.0	0.0208	825.84	-0.0400	4.0	825.68	
824.17	4.0	-0.0400	824.33	31.0	-0.0208	**176+50.00**	824.97	31.0	0.0208	825.61	-0.0400	4.0	825.45	
823.96	4.0	-0.0400	824.12	31.0	-0.0208	**177+00.00**	824.76	31.0	0.0208	825.40	-0.0400	4.0	825.24	
823.70	4.0	-0.0400	823.86	31.0	-0.0208	**177+50.00**	824.50	31.0	0.0208	825.14	-0.0400	4.0	824.98	
823.45	4.0	-0.0400	823.61	31.0	-0.0208	**178+00.00**	824.25	31.0	0.0208	824.89	-0.0400	4.0	824.73	
823.24	4.0	-0.0400	823.40	31.0	-0.0208	**178+50.00**	824.04	31.0	0.0208	824.68	-0.0400	4.0	824.52	
823.09	4.0	-0.0400	823.25	31.0	-0.0208	**179+00.00**	823.89	31.0	0.0208	824.53	-0.0400	4.0	824.37	
822.97	4.0	**-0.0200**	823.05	31.0	-0.0208	**179+50.00**	823.69	31.0	0.0208	824.33	**-0.0492**	4.0	824.14	MAYFAIR LN. LT/ DRIVE RT (SEE SHEET 156)
822.69	4.0	-0.0400	822.85	31.0	-0.0208	**180+00.00**	823.49	31.0	0.0208	824.13	-0.0400	4.0	823.97	
822.46	4.0	-0.0400	822.62	31.0	-0.0208	**180+50.00**	823.26	31.0	0.0208	823.90	-0.0400	4.0	823.74	
822.27	4.0	-0.0400	822.43	31.0	-0.0208	**181+00.00**	823.07	31.0	0.0208	823.71	-0.0400	4.0	823.55	
822.03	4.0	-0.0400	822.19	31.0	-0.0208	**181+50.00**	822.83	31.0	0.0208	823.47	-0.0400	4.0	823.31	
821.77	4.0	-0.0400	821.93	31.0	-0.0208	**182+00.00**	822.57	31.0	0.0208	823.21	-0.0400	4.0	823.05	
821.58	4.0	-0.0400	821.74	31.0	-0.0208	**182+50.00**	822.38	31.0	0.0208	823.02	-0.0400	4.0	822.86	
821.40	4.0	-0.0400	821.56	31.0	-0.0208	**183+00.00**	822.20	31.0	0.0208	822.84	-0.0400	4.0	822.68	
821.25	4.0	-0.0400	821.41	31.0	-0.0208	**183+50.00**	822.05	31.0	0.0208	822.69	-0.0400	4.0	822.53	END FULL SUPER
821.10	4.0	-0.0400	821.26	31.0	-0.0166	**184+00.00**	821.77	31.0	0.0143	822.21	**0.0557**	4.0	822.44	DRIVE RT (SEE SHEET 158)
820.89	4.0	-0.0400	821.05	31.0	-0.0160	**184+50.00**	821.55	31.0	0.0053	821.71	-0.0400	4.0	821.55	
820.57	4.0	-0.0400	820.73	31.0	-0.0160	**185+00.00**	821.23	31.0	-0.0043	821.10	-0.0400	4.0	820.94	
820.40	4.0	-0.0400	820.56	31.0	-0.0160	**185+50.00**	821.06	31.0	-0.0150	820.60	-0.0400	4.0	820.44	
820.12	4.0	-0.0400	820.28	31.0	-0.0160	**186+00.00**	820.78	31.0	-0.0160	820.28	-0.0400	4.0	820.12	BEGIN NORMAL CROWN
819.89	4.0	-0.0400	820.05	31.0	-0.0160	**186+50.00**	820.55	31.0	-0.0160	820.05	-0.0400	4.0	819.89	
819.67	4.0	-0.0400	819.83	31.0	-0.0160	**187+00.00**	820.33	31.0	-0.0160	819.83	-0.0400	4.0	819.67	
819.44	4.0	-0.0400	819.60	31.0	-0.0160	**187+50.00**	820.10	31.0	-0.0160	819.60	-0.0400	4.0	819.44	
819.21	4.0	-0.0400	819.37	31.0	-0.0160	**188+00.00**	819.87	31.0	-0.0160	819.37	-0.0400	4.0	819.21	
818.93	4.0	-0.0400	819.09	31.0	-0.0160	**188+50.00**	819.59	31.0	-0.0160	819.09	-0.0400	4.0	818.93	
818.75	4.0	-0.0400	818.91	31.0	-0.0160	**189+00.00**	819.41	31.0	-0.0160	818.91	-0.0400	4.0	818.75	
818.43	4.0	-0.0400	818.59	31.0	-0.0160	**189+50.00**	819.09	31.0	-0.0160	818.59	-0.0400	4.0	818.43	
818.19	4.0	-0.0400	818.35	31.0	-0.0160	**190+00.00**	818.85	31.0	-0.0160	818.35	**-0.0700**	4.0	818.07	
818.06	4.0	-0.0400	818.22	31.0	-0.0160	**190+50.00**	818.72	31.0	-0.0160	818.22	**-0.0700**	4.0	817.94	DRIVE LT/ WESTLAND ST. RT
817.94	4.0	-0.0400	818.10	31.0	-0.0160	**191+00.00**	818.60	31.0	-0.0160	818.10	-0.0400	4.0	817.94	
817.74	4.0	-0.0400	817.90	31.0	-0.0160	**191+50.00**	818.40	31.0	-0.0160	817.90	-0.0400	4.0	817.74	
817.49	4.0	-0.0400	817.65	31.0	-0.0160	**192+00.00**	818.15	31.0	-0.0160	817.65	-0.0400	4.0	817.49	DRIVE LT
817.32	4.0	-0.0400	817.48	31.0	-0.0160	**192+50.00**	817.98	31.0	-0.0160	817.48	-0.0400	4.0	817.32	
817.13	4.0	-0.0400	817.29	31.0	-0.0160	**193+00.00**	817.79	31.0	-0.0160	817.29	-0.0400	4.0	817.13	
816.94	4.0	-0.0400	817.10	31.0	-0.0160	**193+50.00**	817.60	31.0	-0.0160	817.10	**-0.0700**	4.0	816.82	DRIVE L/R
816.68	4.0	-0.0400	816.84	31.0	-0.0160	**194+00.00**	817.34	31.0	-0.0160	816.84	**-0.0700**	4.0	816.56	DRIVE RT
816.41	4.0	-0.0400	816.57	31.0	-0.0160	**194+50.00**	817.07	31.0	-0.0160	816.57	**-0.0700**	4.0	816.29	DRIVE L/R
816.15	4.0	-0.0400	816.31	31.0	-0.0160	**195+00.00**	816.81	31.0	-0.0160	816.31	-0.0400	4.0	816.15	
815.83	4.0	-0.0400	815.99	31.0	-0.0160	**195+50.00**	816.49	31.0	-0.0160	815.99	-0.0400	4.0	815.83	
815.59	4.0	-0.0400	815.75	31.0	-0.0160	**196+00.00**	816.25	31.0	-0.0160	815.75	-0.0400	4.0	815.59	
815.38	4.0	-0.0400	815.54	31.0	-0.0160	**196+50.00**	816.04	31.0	-0.0160	815.54	-0.0400	4.0	815.38	
815.20	4.0	-0.0400	815.36	31.0	-0.0160	**197+00.00**	815.86	31.0	-0.0160	815.36	-0.0400	4.0	815.20	
814.94	4.0	-0.0400	815.10	31.0	-0.0160	**197+50.00**	815.60	31.0	-0.0160	815.10	-0.0400	4.0	814.94	
814.68	4.0	-0.0400	814.84	31.0	-0.0160	**198+00.00**	815.34	31.0	-0.0160	814.84	-0.0400	4.0	814.68	SMALL LN. LT
814.41	4.0	-0.0400	814.57	31.0	-0.0160	**198+50.00**	815.07	31.0	-0.0160	814.57	-0.0400	4.0	814.41	
814.15	4.0	-0.0400	814.31	31.0	-0.0160	**199+00.00**	814.81	31.0	-0.0160	814.31	-0.0400	4.0	814.15	
813.84	4.0	-0.0400	814.00	31.0	-0.0160	**199+50.00**	814.50	31.0	-0.0160	814.00	-0.0400	4.0	813.84	
813.71	4.0	-0.0400	813.87	31.0	-0.0160	**200+00.00**	814.37	31.0	-0.0160	813.87	-0.0400	4.0	813.71	
813.55	4.0	-0.0400	813.71	31.0	-0.0160	**200+50.00**	814.21	31.0	-0.0160	813.71	-0.0400	4.0	813.55	
813.28	4.0	-0.0400	813.44	31.0	-0.0160	**201+00.00**	813.94	31.0	-0.0160	813.44	-0.0400	4.0	813.28	
813.13	4.0	-0.0400	813.29	31.0	-0.0160	**201+50.00**	813.79	31.0	-0.0160	813.29	-0.0400	4.0	813.13	
812.88	4.0	-0.0400	813.04	31.0	-0.0160	**202+00.00**	813.54	31.0	-0.0160	813.04	-0.0400	4.0	812.88	
812.60	4.0	-0.0400	812.76	31.0	-0.0160	**202+50.00**	813.26	31.0	-0.0160	812.76	-0.0400	4.0	812.60	
812.35	4.0	-0.0400	812.51	31.0	-0.0160	**203+00.00**	813.01	31.0	-0.0160	812.51	-0.0400	4.0	812.35	
812.12	4.0	-0.0400	812.28	31.0	-0.0160	**203+50.00**	812.78	31.0	-0.0160	812.28	-0.0400	4.0	812.12	
811.94	4.0	-0.0400	812.10	31.0	-0.0160	**204+00.00**	812.60	31.0	-0.0160	812.10	-0.0400	4.0	811.94	
811.65	4.0	-0.0400	811.81	31.0	-0.0160	**204+50.00**	812.31	31.0	-0.0160	811.81	-0.0400	4.0	811.65	
811.45	4.0	-0.0400	811.61	31.0	-0.0160	**205+00.00**	812.11	31.0	-0.0160	811.61	-0.0400	4.0	811.45	
811.19	4.0	-0.0400	811.35	31.0	-0.0160	**205+50.00**	811.85	31.0	-0.0160	811.35	-0.0400	4.0	811.19	
810.99	4.0	-0.0400	811.15	31.0	-0.0160	**206+00.00**	811.65	31.0	-0.0160	811.15	-0.0400	4.0	810.99	
810.73	4.0	-0.0400	810.89	31.0	-0.0160	**206+50.00**	811.39	31.0	-0.0160	810.89	-0.0400	4.0	810.73	
810.52	4.0	-0.0400	810.68	31.0	-0.0160	**207+00.00**	811.18	31.0	-0.0160	810.68	-0.0400	4.0	810.52	
810.31	4.0	-0.0400	810.47	31.0	-0.0160	**207+50.00**	810.97	31.0	-0.0160	810.47	-0.0400	4.0	810.31	
810.12	4.0	-0.0400	810.28	31.0	-0.0160	**208+00.00**	810.78	31.0	-0.0160	810.28	-0.0400	4.0	810.12	
810.03	4.0	-0.0400	810.19	31.0	-0.0160	**208+23.00**	810.69	31.0	-0.0160	810.19	-0.0400	4.0	810.03	

CALCULATED PTB
CHECKED JSL

SUPERELEVATION TABLE
STA. 176+00 TO STA. 208+23

GUE-22/723-0.00
/0.70

73
188

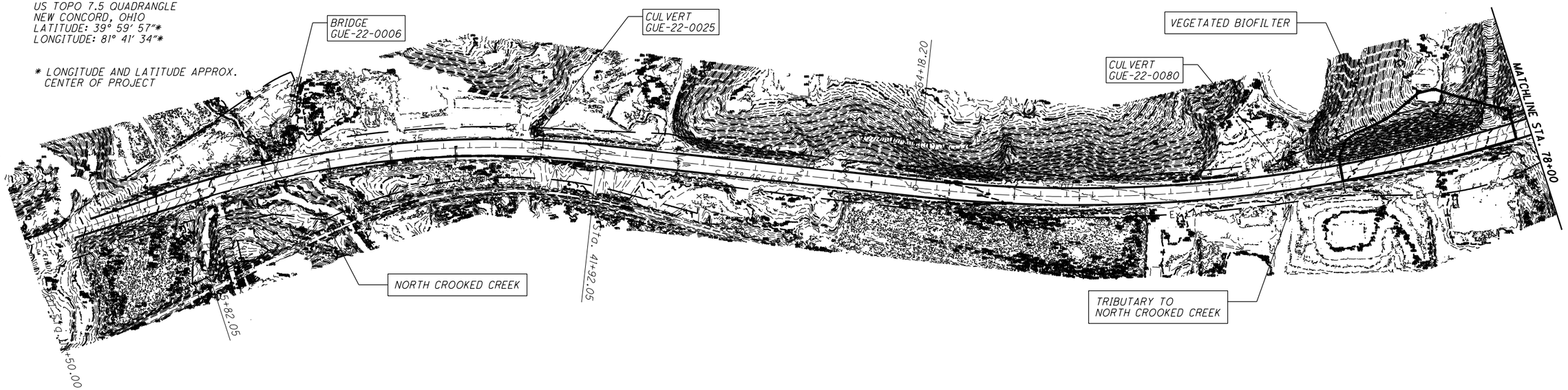
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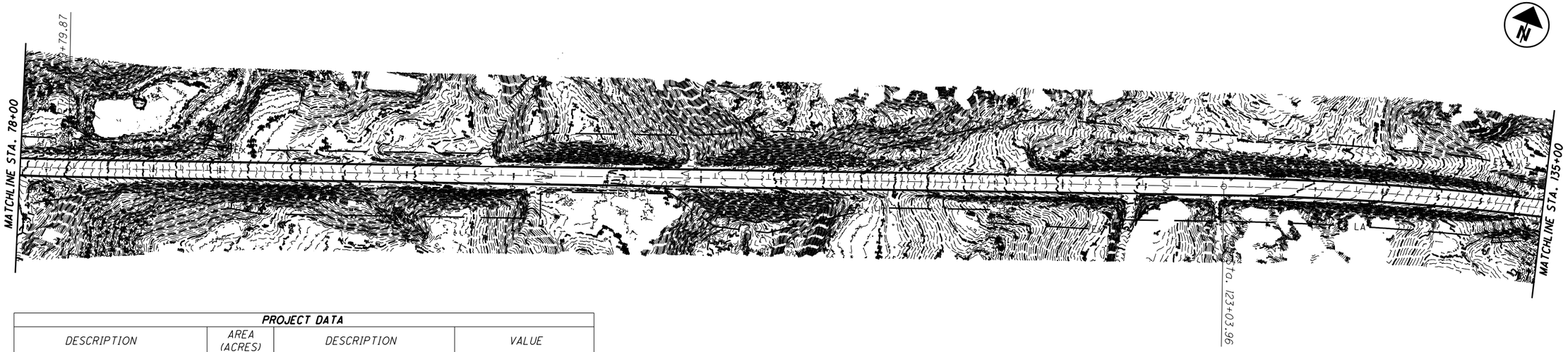
PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING AND RELATED WORK ON U.S. 22 AND S.R. 723 INCLUDING REMOVAL OF EXISITING GRASS MEDIAN AND ADDITION OF SHOULDERS ON U.S. 22 FROM SLM 26.64-27.73 AND 0.00-3.46 IN MUSKINGUM AND GUERNSEY COUNTIES

US TOPO 7.5 QUADRANGLE
NEW CONCORD, OHIO
LATITUDE: 39° 59′ 57″*
LONGITUDE: 81° 41′ 34″*

* LONGITUDE AND LATITUDE APPROX.
CENTER OF PROJECT





PROJECT DATA			
DESCRIPTION	AREA (ACRES)	DESCRIPTION	VALUE
TOTAL AREA (RIGHT-OF-WAY)	104	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.65
PROJECT EARTH DISTURBED AREA	12.5	RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE	0.67
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	1.0	IMMEDIATE RECEIVING WATER	TRIBUTARY OF NORTH CROOKED CREEK
NOTICE OF INTENT EARTH DISTURBED AREA	13.5	SUBSEQUENT RECEIVING WATER	NORTH CROOKED CREEK
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE	23.5		
IMPERVIOUS (PAVED) AREA FOR POST-CONSTRUCTION SITE	29.4		

POST-CONSTRUCTION BMP DATA						
BMP TYPE	LOCATION		BOTTOM WIDTH	EDA TREATMENT (ACRES)		
	LATITUDE	LONGITUDE		REQUIRED*	PROVIDED	CREDIT
VEGETATED BIOFILTER STA. 70+60 TO STA. 76+00 LT.	39.99507	-81.708148	7.5 FT	2.50	3.12	2.83

*CALCULATED PER L&D VOL. 2, SEC 1115.7
12.5 ACRES X 0.20 (REDEVELOPMENT) = 2.50 ACRES

HORIZONTAL SCALE IN FEET
0 100 200 400

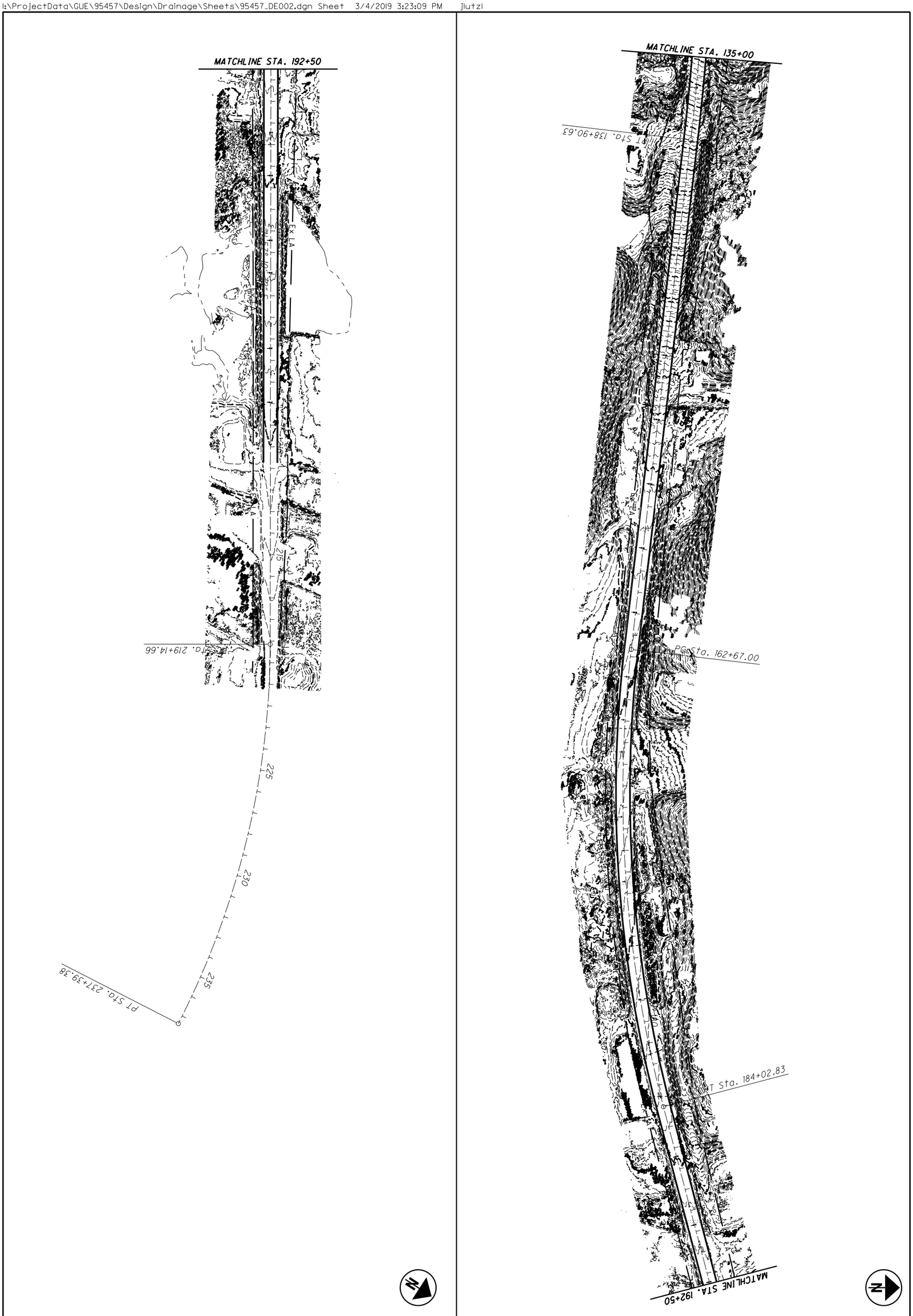
CALCULATED PTB
CHECKED JSL

PROJECT SITE PLAN - U.S. 22
STA. 19+50 TO STA. 135+00

GUE-22/723-0.00
/ 0.70

74
188

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75 / 188	GUE-22/723-0.00 / 0.70	PROJECT SITE PLAN - U.S. 22 STA. 135+00 TO STA. 221+00	CALCULATED PTB CHECKED JSL 0 100 200 400 HORIZONTAL SCALE IN FEET

BEGIN FULL DEPTH
SHLD. LT
STA. 22+15.00

BEGIN FULL DEPTH
MEDIAN
STA. 23+71.00

BEGIN FULL DEPTH
SHLD. RT
STA. 22+35.00

POT Sta. 19+50.06

SNOOTS LN.

EASTLAND DR.

FITZGERALD LN.

PATCH RD.

NORTH COOKED CREEK

WASTEWATER TREATMENT PLANT DR.

Ex LA

CONST. LIMITS

SAW CUT LINE

N 72° 04' 02" E

PC Sta. 25+82.05

PT Sta. 41+76.14

PT Sta. 44+92.05

GUE-22-0006

D-1 D-2 D-3 D-4 D-5 D-6

R-1 R-2 R-3 R-4 R-5 R-6 R-7 R-8 R-9 R-10

U.S. 22 WESTBOUND

U.S. 22 EASTBOUND

MATCH LINE STA. 32+00

MATCH LINE STA. 44+50

20 21 22 23 24 25 26 27 28 29 30 31 33 34 35 36 37 38 39 40 41 42 43 44

NOTES
PLACE TIED CONCRETE BLOCK MAT, TYPE 1
AT ALL PROPOSED PIPE OUTLETS PER DM-1.1

SEE SHEETS 65-67 FOR DRAINAGE QUANTITIES

EXISTING DRAINAGE (TO BE ABANDONED)

N

HORIZONTAL SCALE IN FEET
0 25 50 100

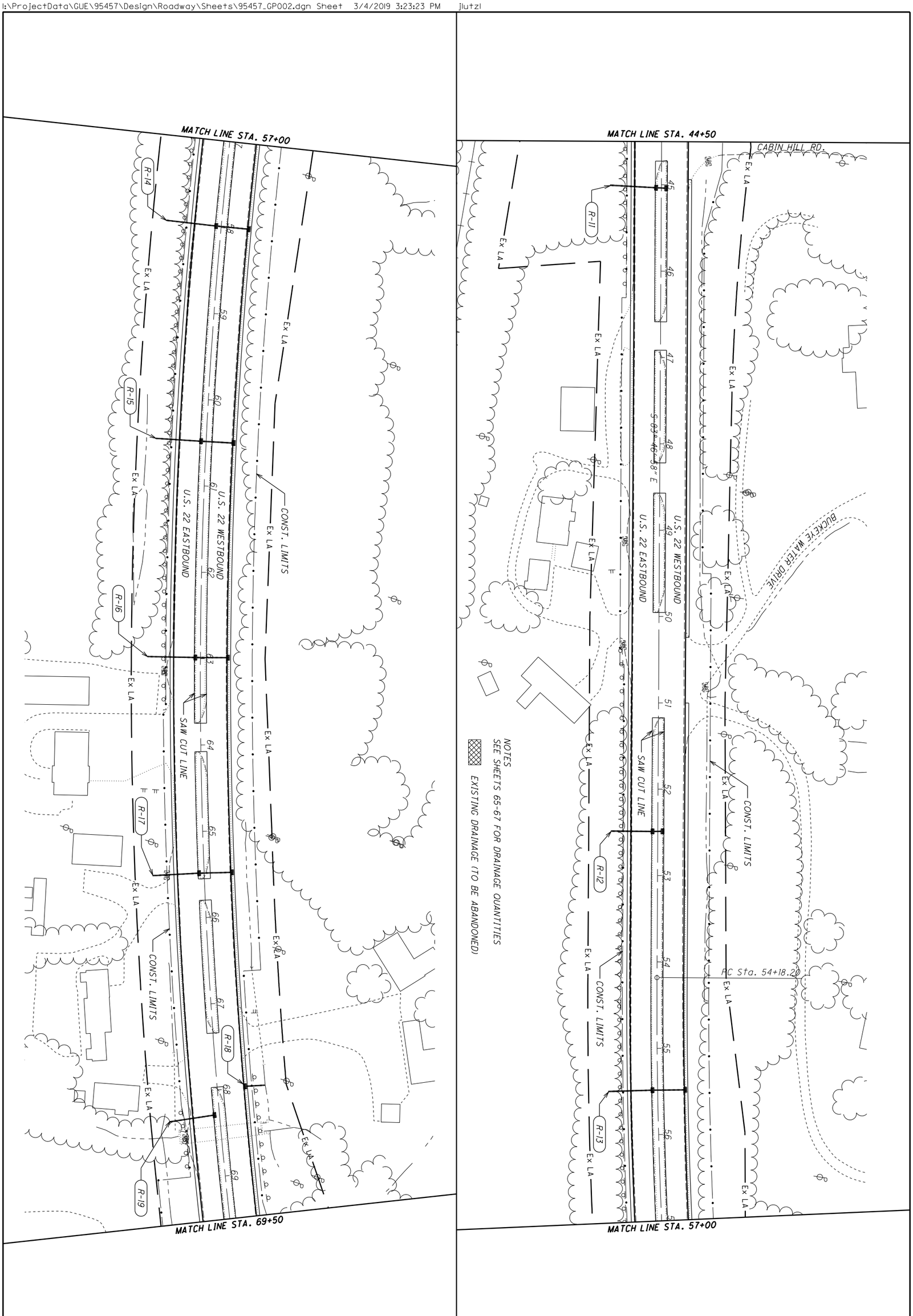
CALCULATED PTB
CHECKED JSL

PLAN SHEET - U.S. 22
STA. 19+50 TO STA. 44+50

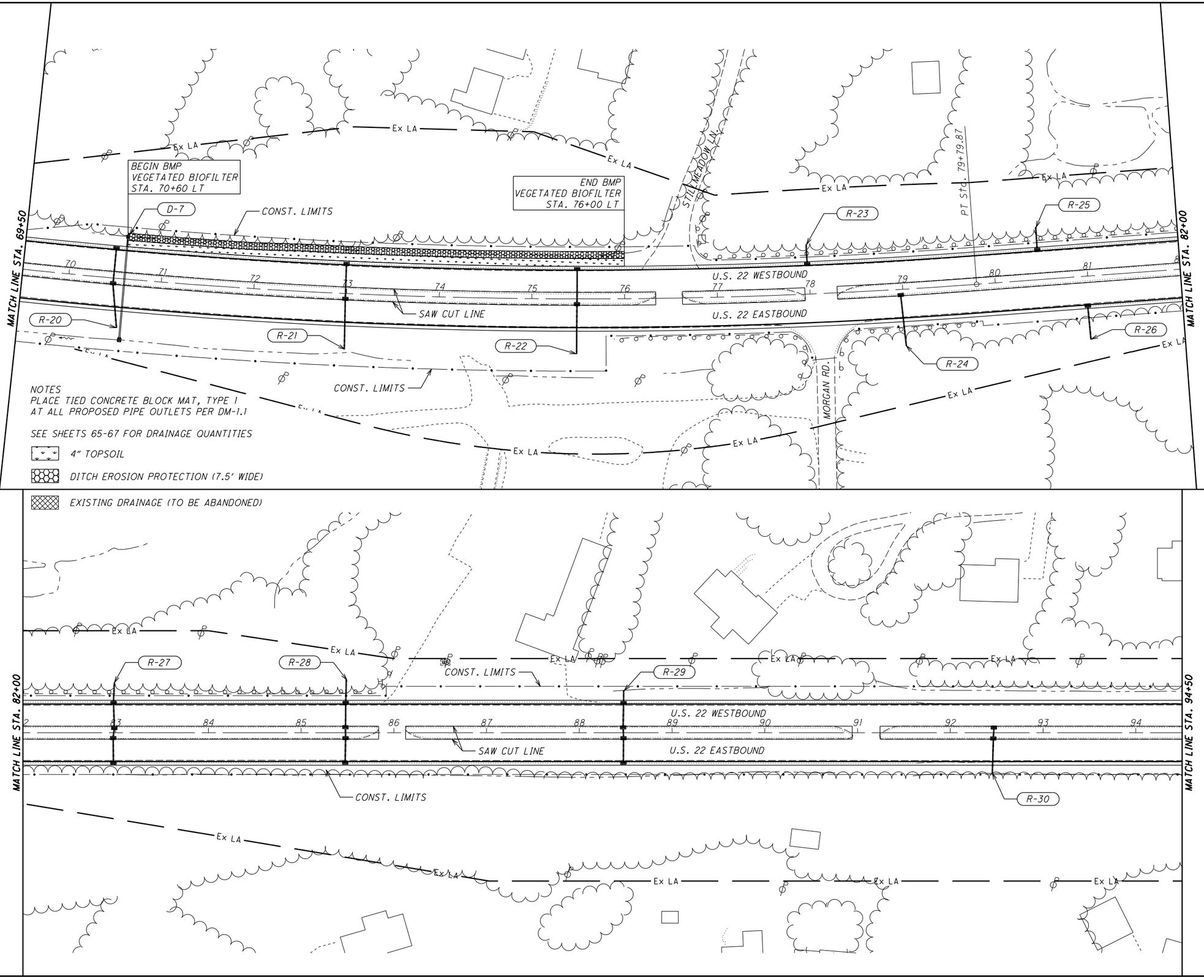
GUE-22/723-0.00
/ 0.70

76
188

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77 / 188	GUE-22/723-0.00 / 0.70	PLAN SHEET - U.S. 22 STA. 44+50 TO STA. 69+50	CALCULATED PTB; CHECKED JSL; 0 25 50 100 HORIZONTAL SCALE IN FEET; N



HORIZONTAL SCALE IN FEET
0 25 50 100

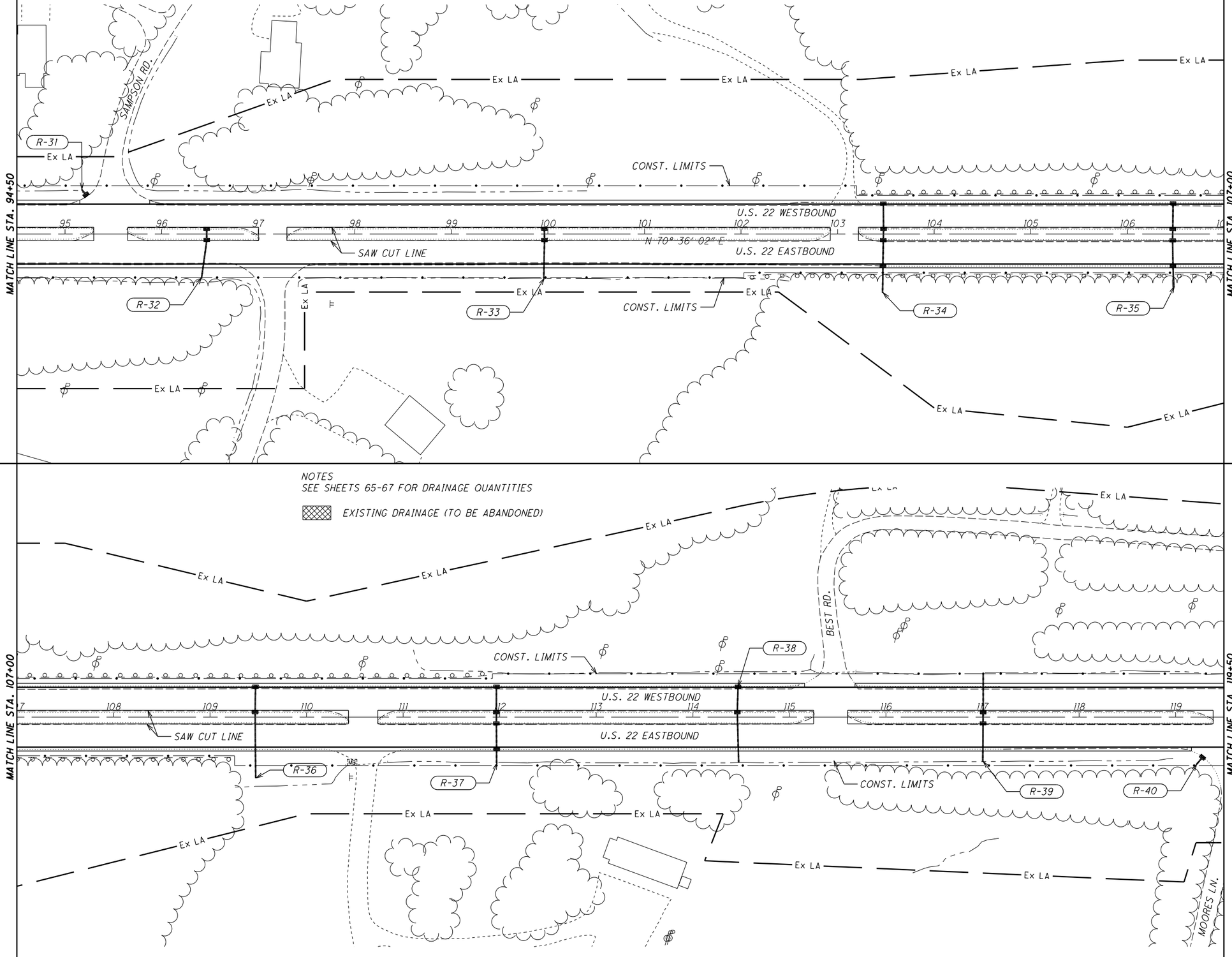
CALCULATED PTB
CHECKED JSL

PLAN SHEET - U.S. 22
STA. 69+50 TO STA. 94+50

GUE-22/723-0.00
/ 0.70

78
188

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HORIZONTAL SCALE IN FEET
0 25 50 100

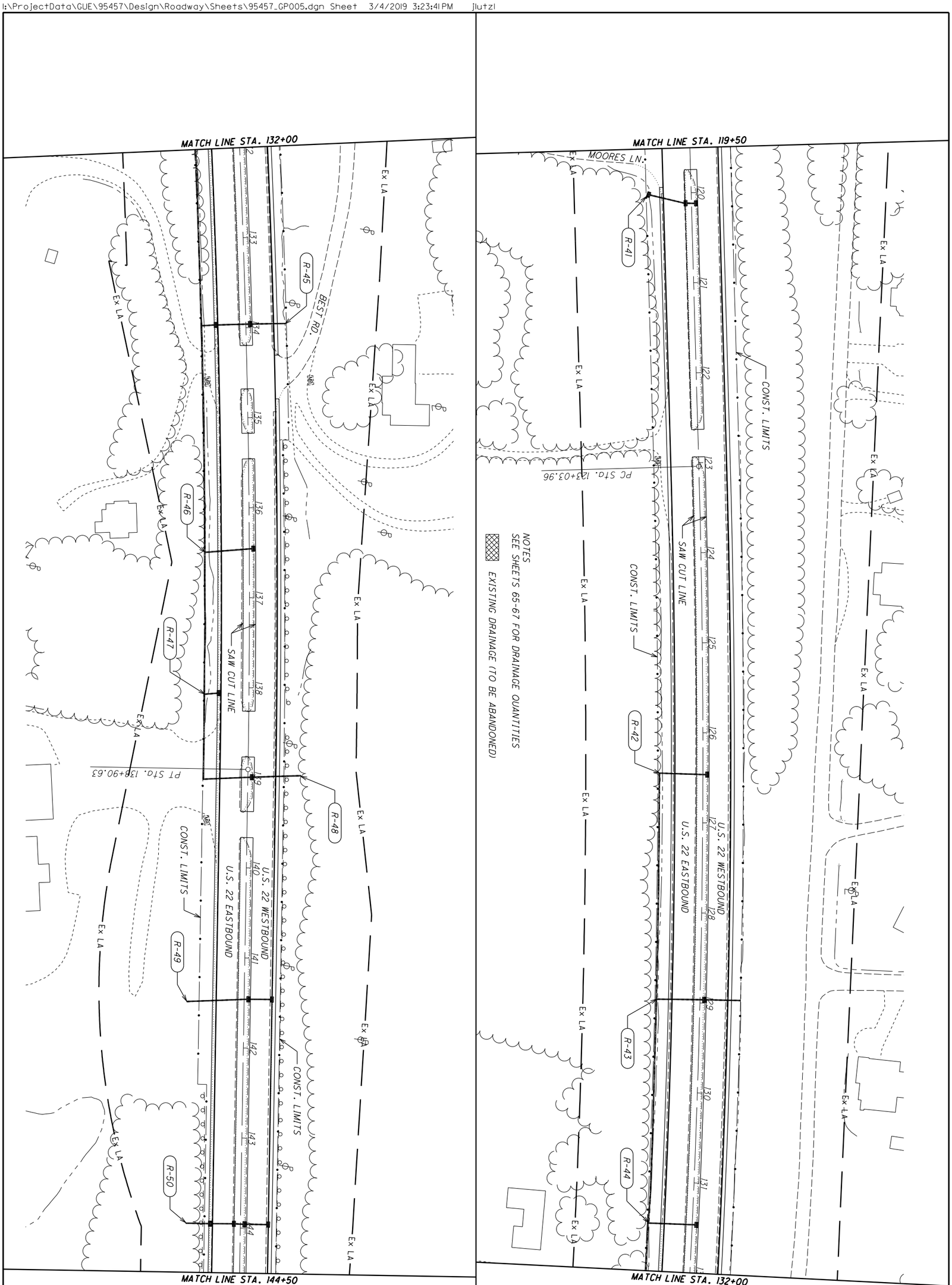
CALCULATED PTB
CHECKED JSL

PLAN SHEET - U.S. 22
STA. 94+50 TO STA. 119+50

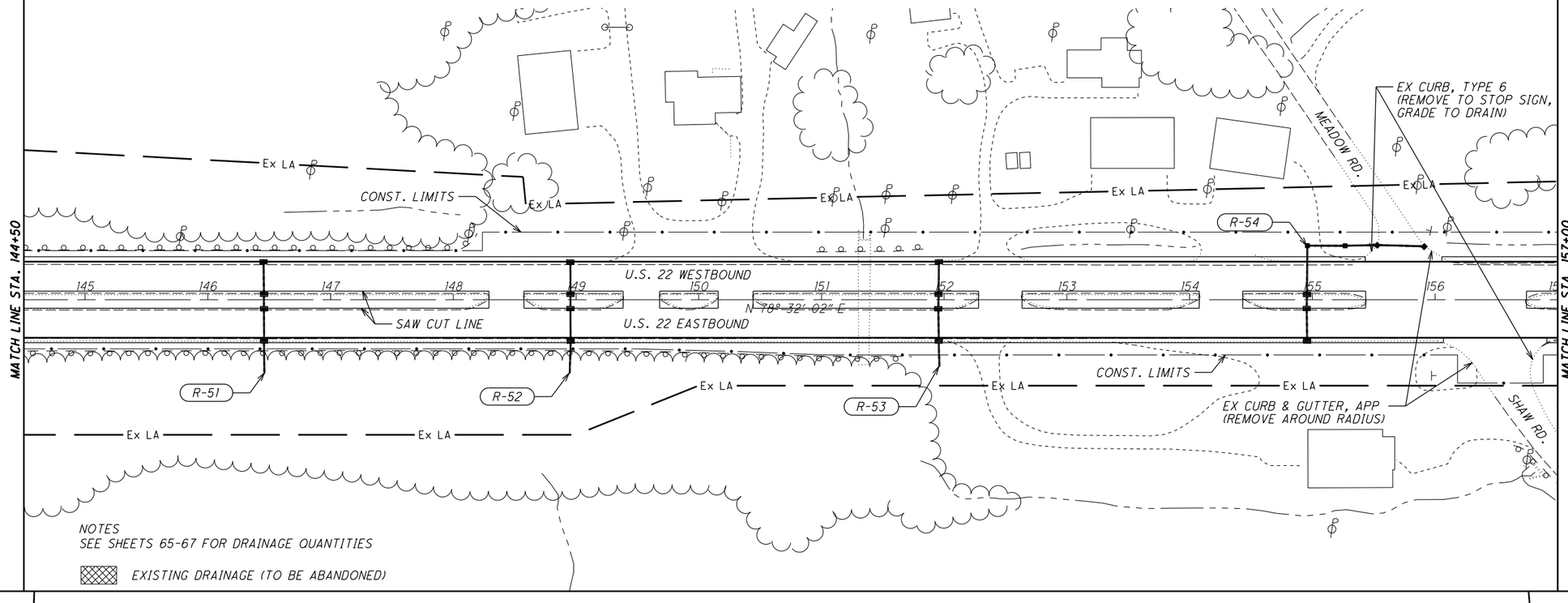
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/ 0.70

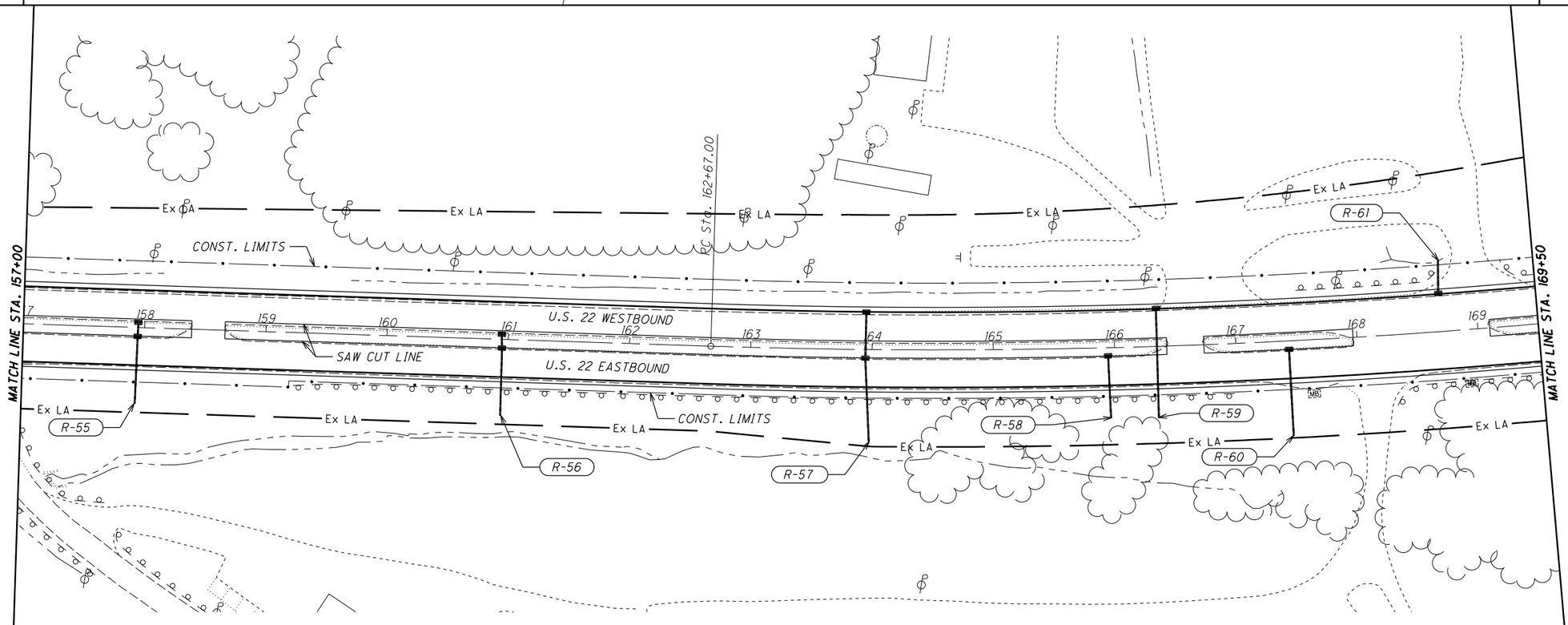
79
188

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80 / 188	GUE-22/723-0.00 / 0.70	PLAN SHEET - U.S. 22 STA. 119+50 TO STA. 144+50	CALCULATED PTB / CHECKED JSL	0 50 25 100 HORIZONTAL SCALE IN FEET





N

HORIZONTAL SCALE IN FEET
0 25 50 100

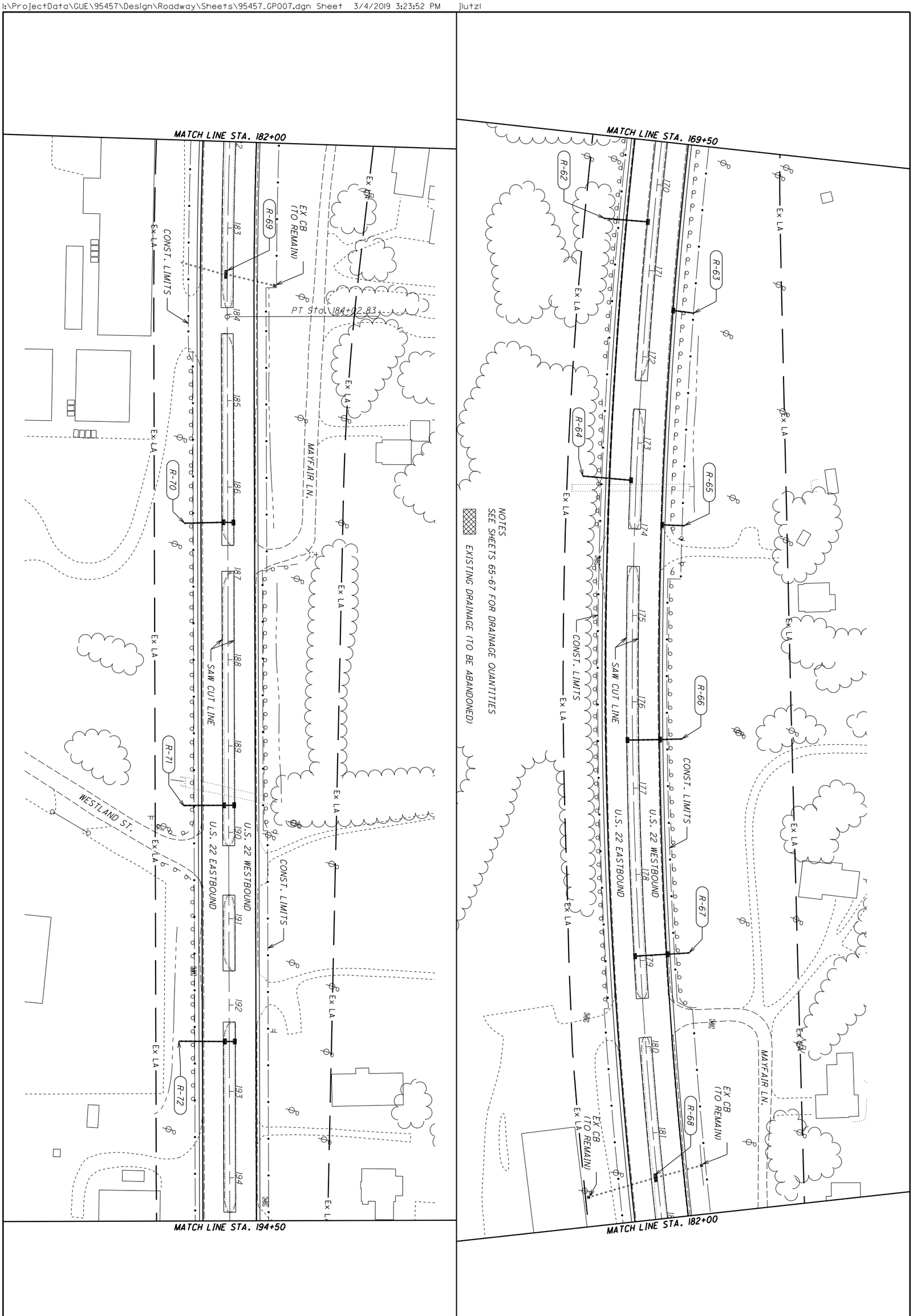
CALCULATED PTB
CHECKED JSL

PLAN SHEET - U.S. 22
STA. 144+50 TO STA. 169+50

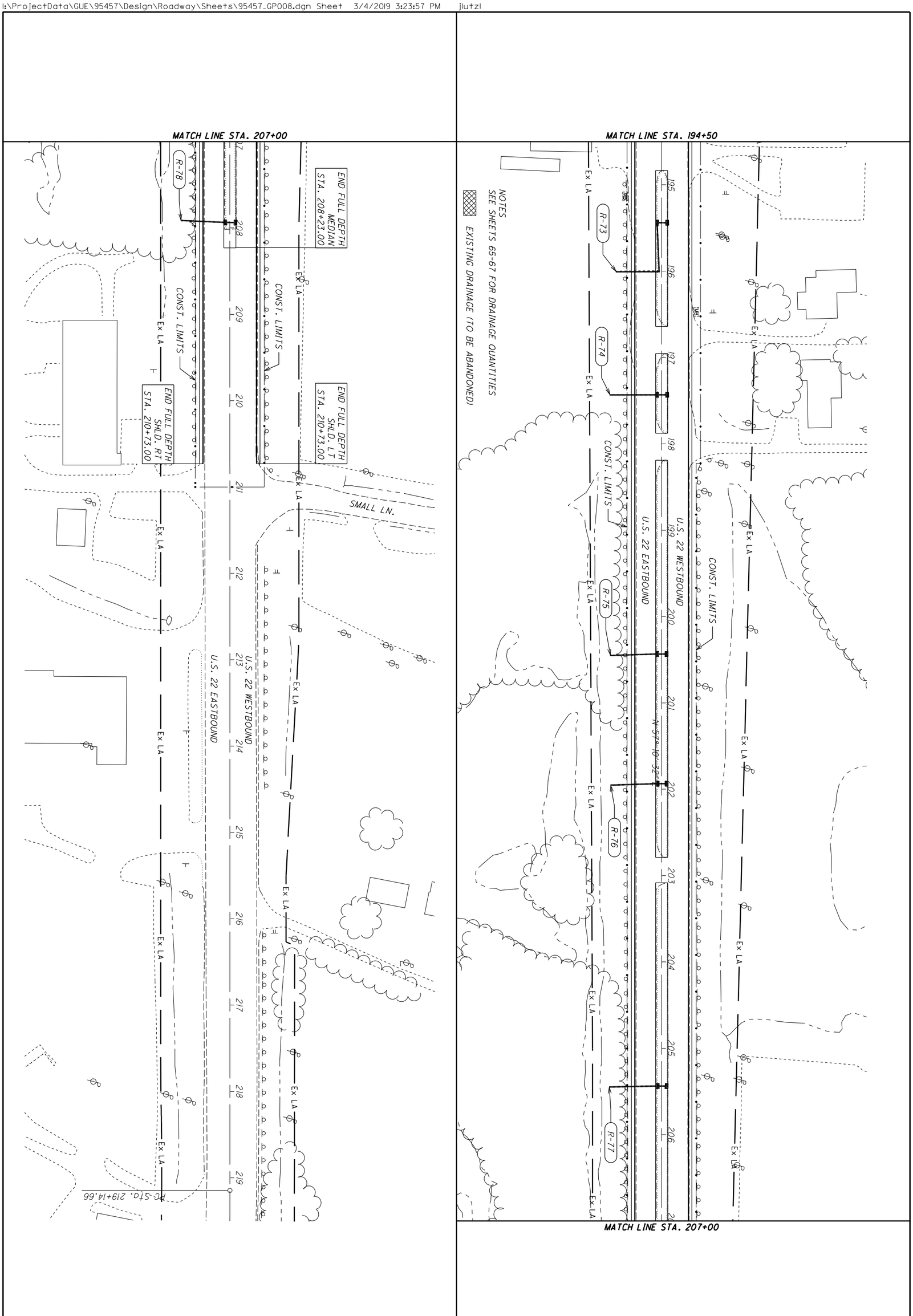
GUE-22/723-0.00
/ 0.70

81
188

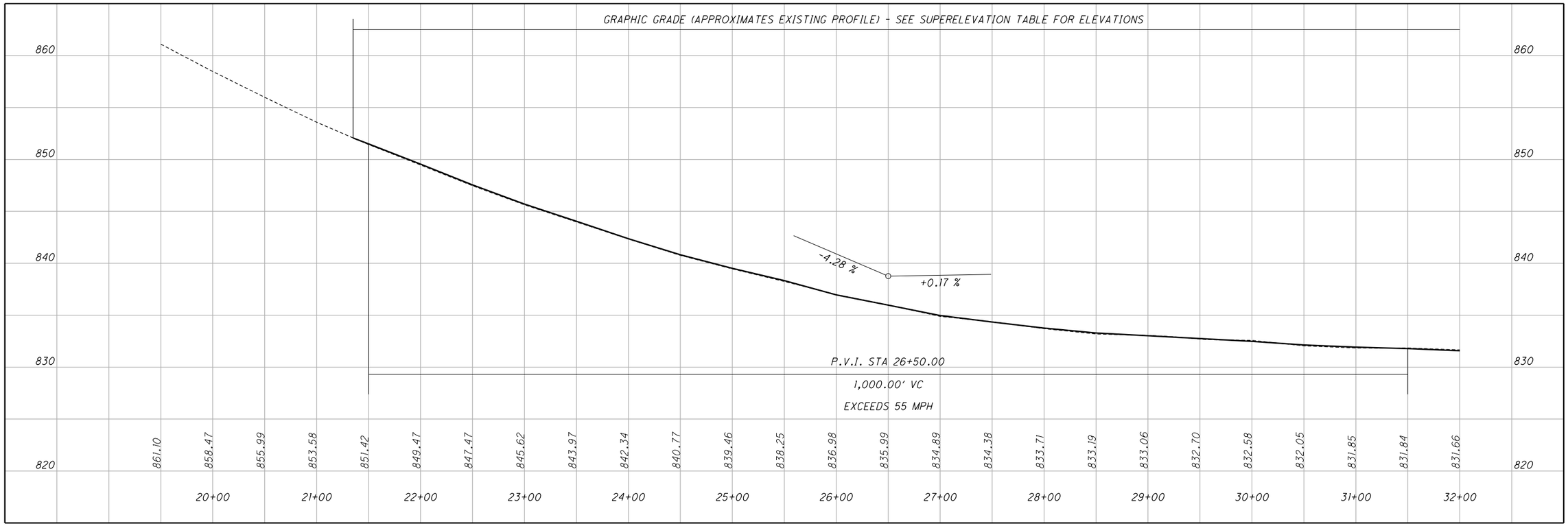
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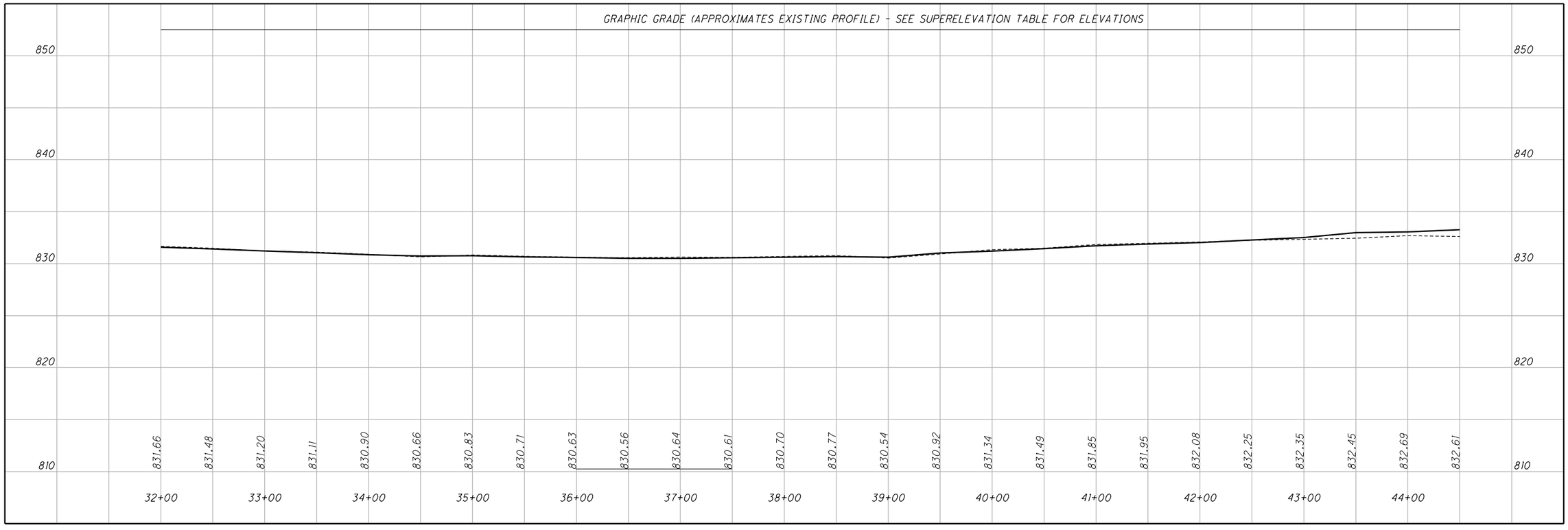


82 / 188	GUE-22/723-0.00 / 0.70	PLAN SHEET - U.S. 22 STA. 169+50 TO STA. 194+50	CALCULATED PTB / CHECKED JSL	0 50 25 100 HORIZONTAL SCALE IN FEET



83 / 188	GUE-22/723-0.00 / 0.70	PLAN SHEET - U.S. 22 STA. 194+50 TO STA. 219+50	CALCULATED PTB / CHECKED JSL	0 50 25 100 HORIZONTAL SCALE IN FEET



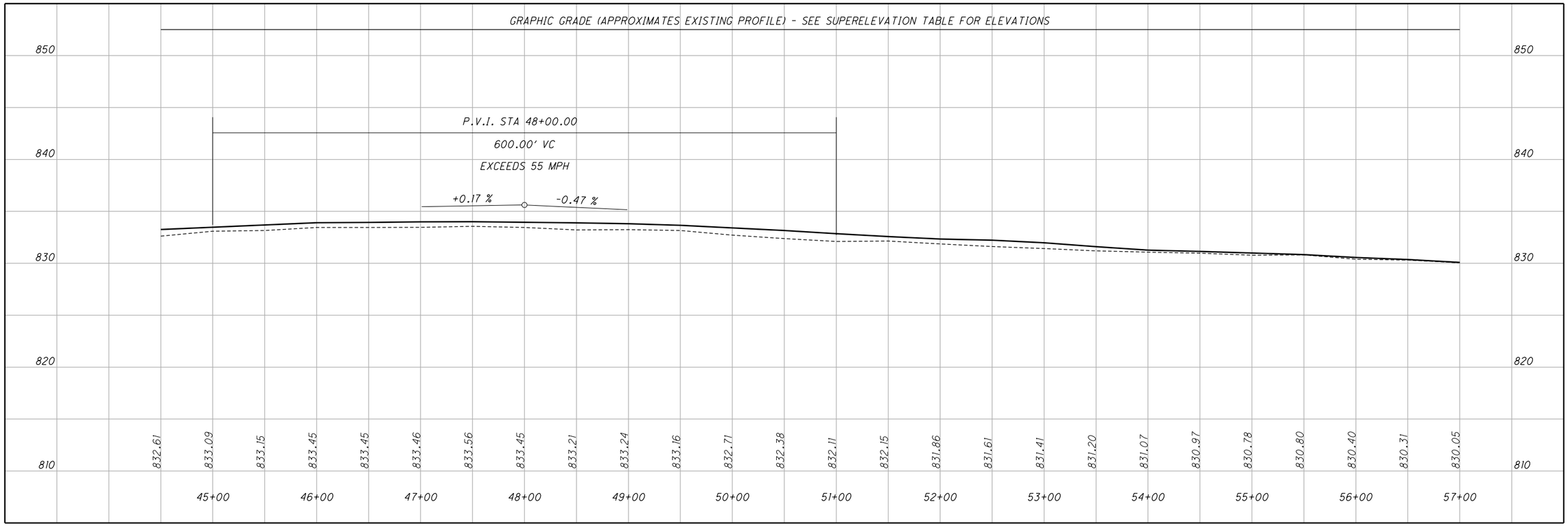


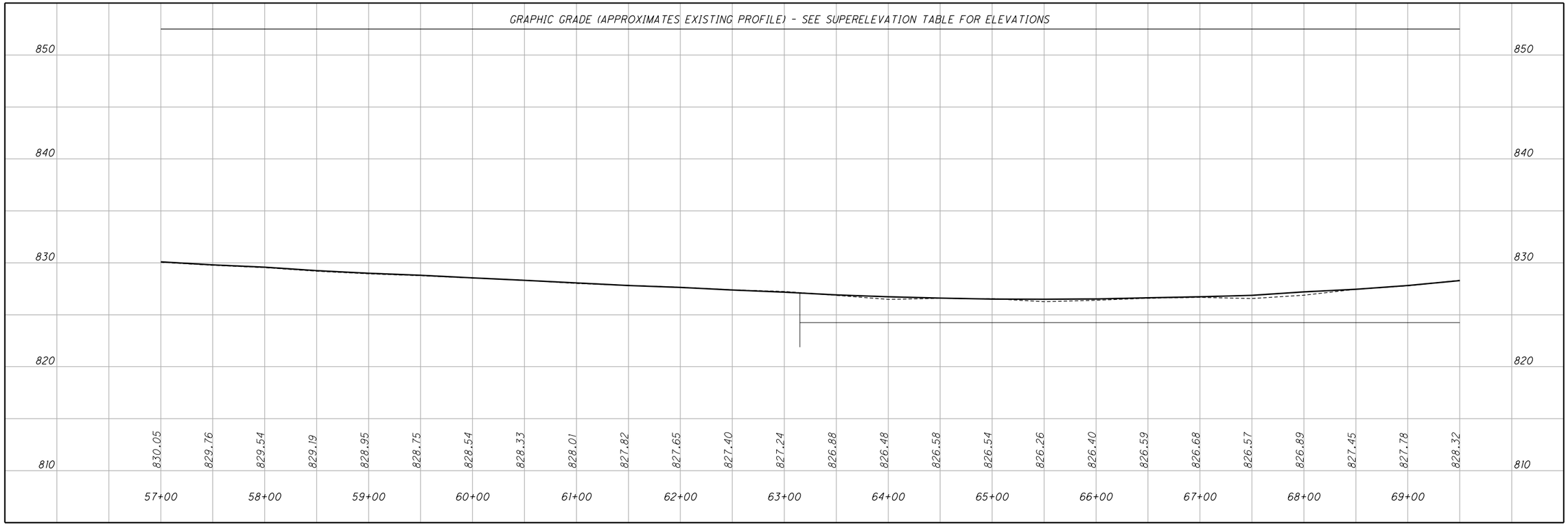
CALCULATED PTB
CHECKED JSL

PROFILE SHEET - U.S. 22 (STA. 19+50 TO STA. 44+50)

GUE-22/723-0.00
/0.70

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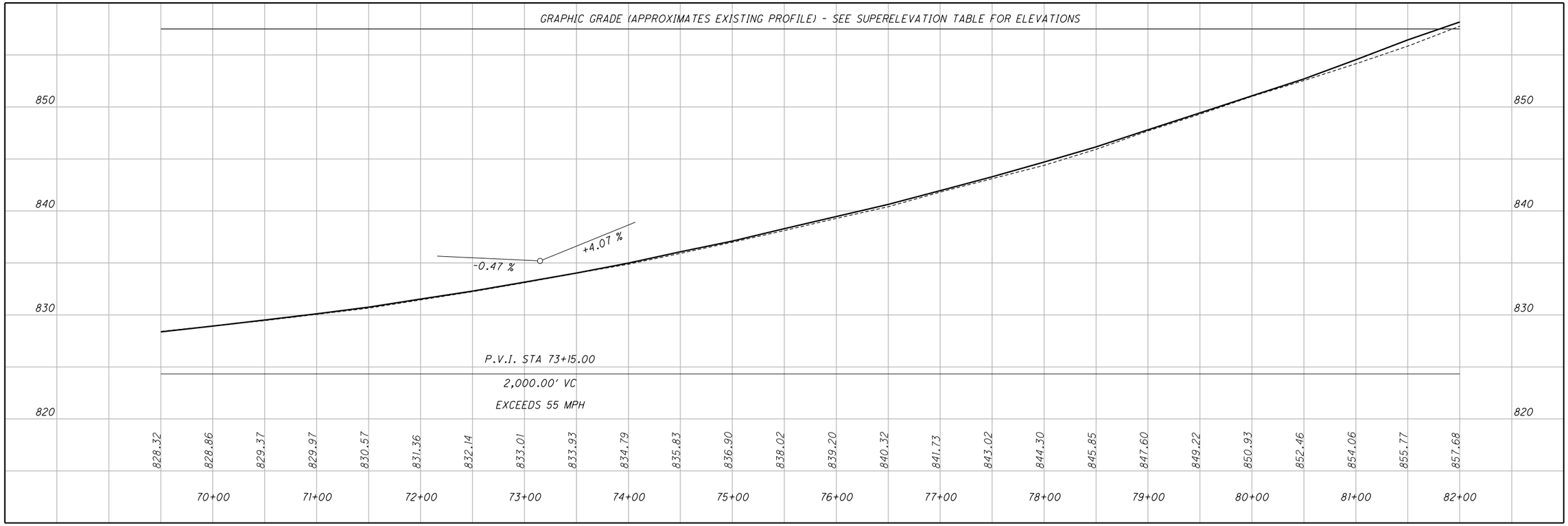


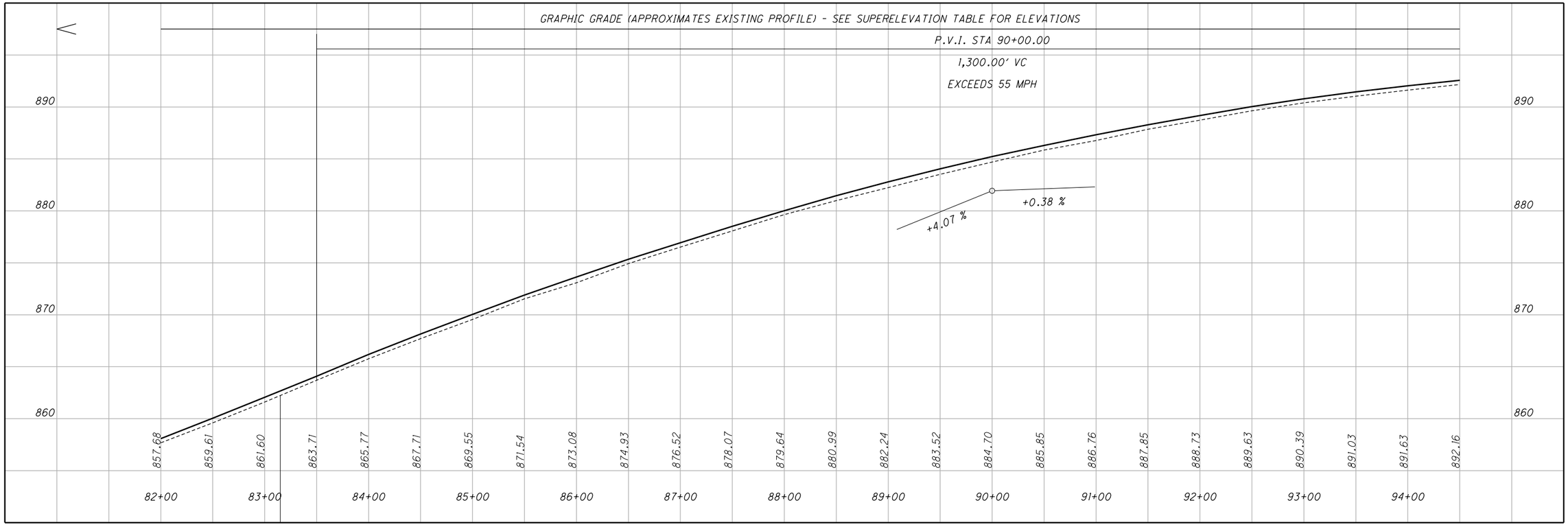
CALCULATED PTB
CHECKED JSL

PROFILE SHEET - U.S. 22 (STA. 44+50 TO STA. 69+50)

GUE-22/723-0.00
/ 0.70

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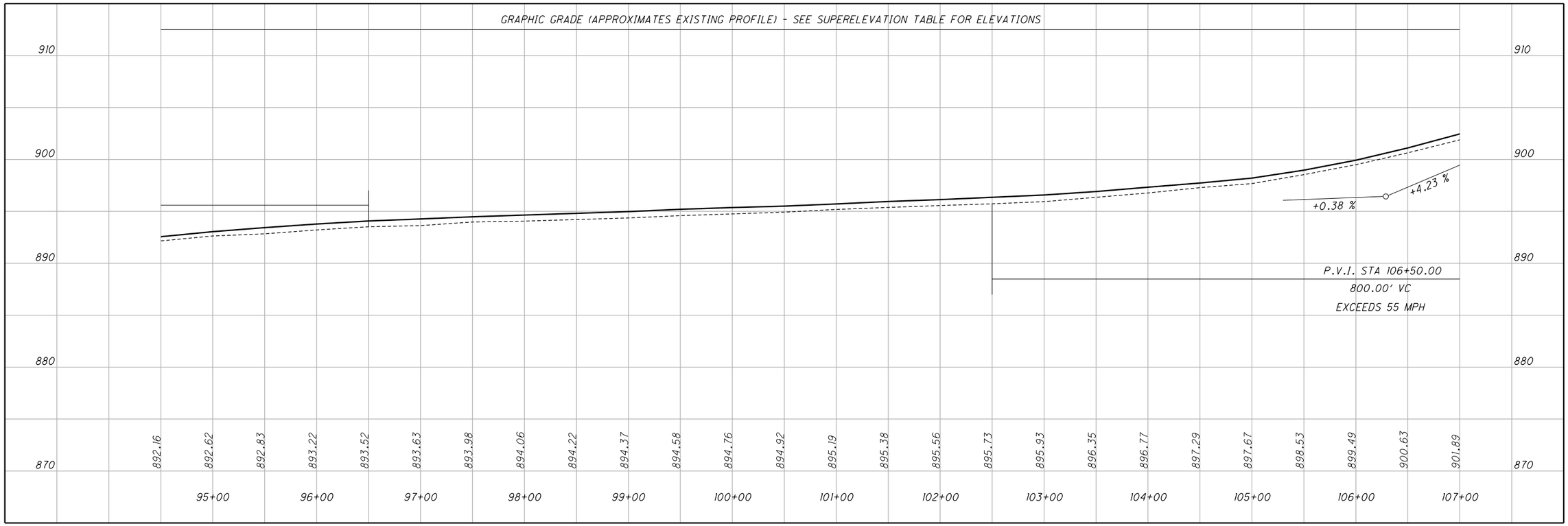


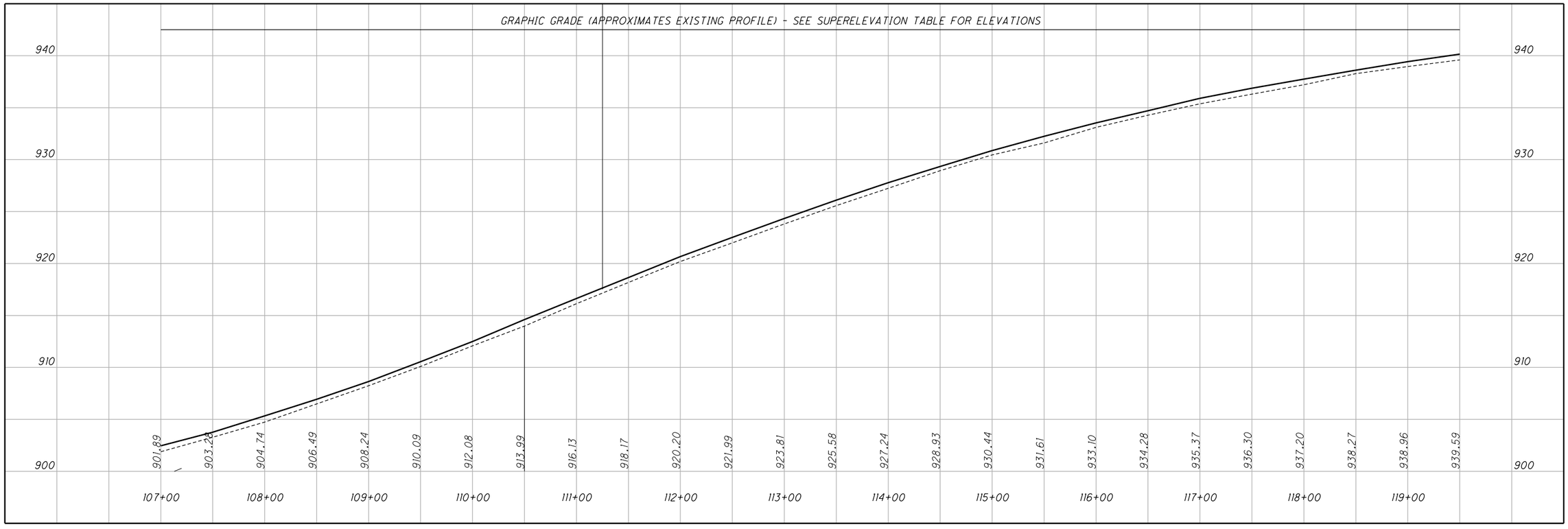
CALCULATED PTB
CHECKED JSL

PROFILE SHEET - U.S. 22 (STA. 69+50 TO STA. 94+50)

GUE-22/723-0.00
/ 0.70

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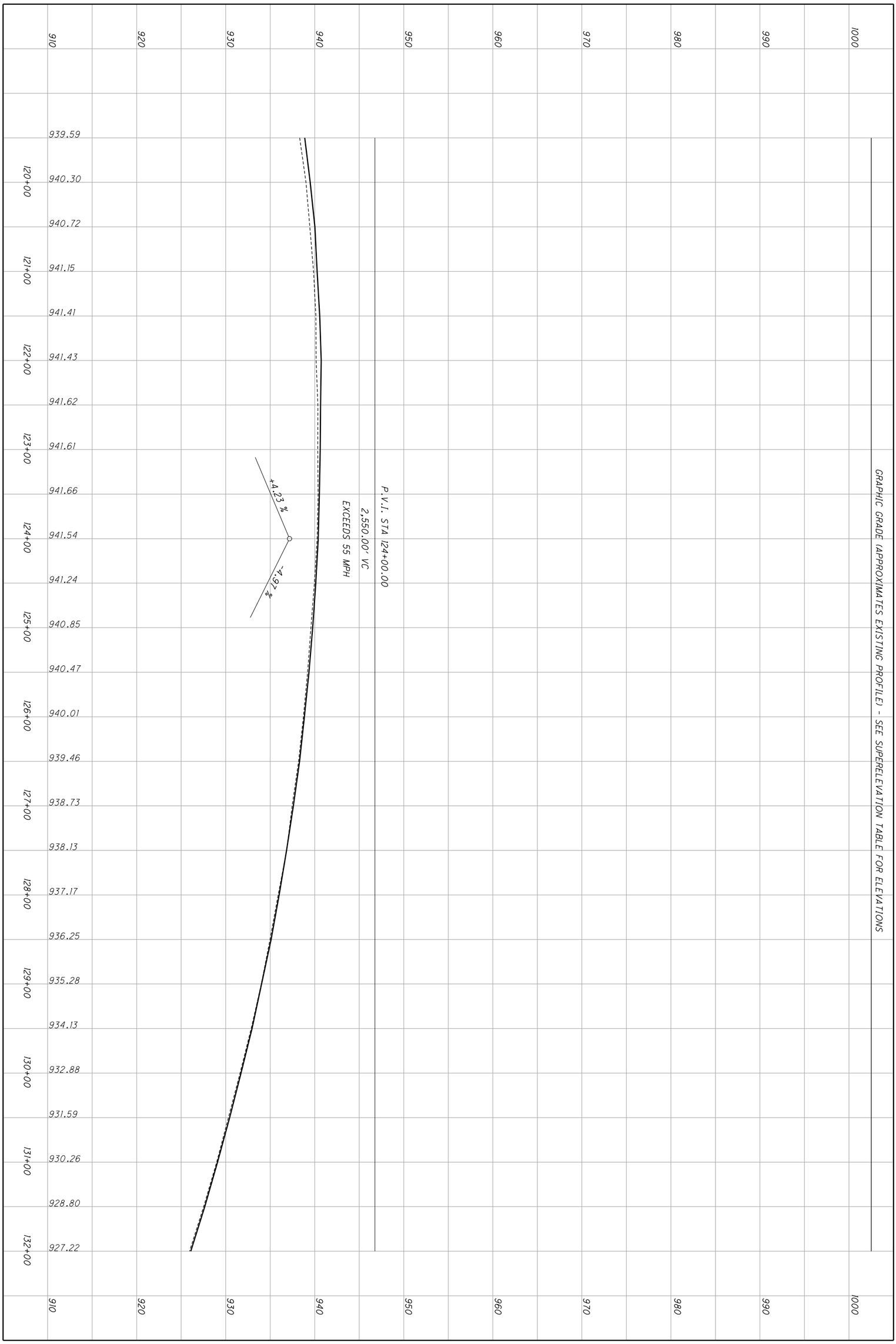
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CHECKED JSL

PROFILE SHEET - U.S. 22 (STA. 94+50 TO STA. 119+50)

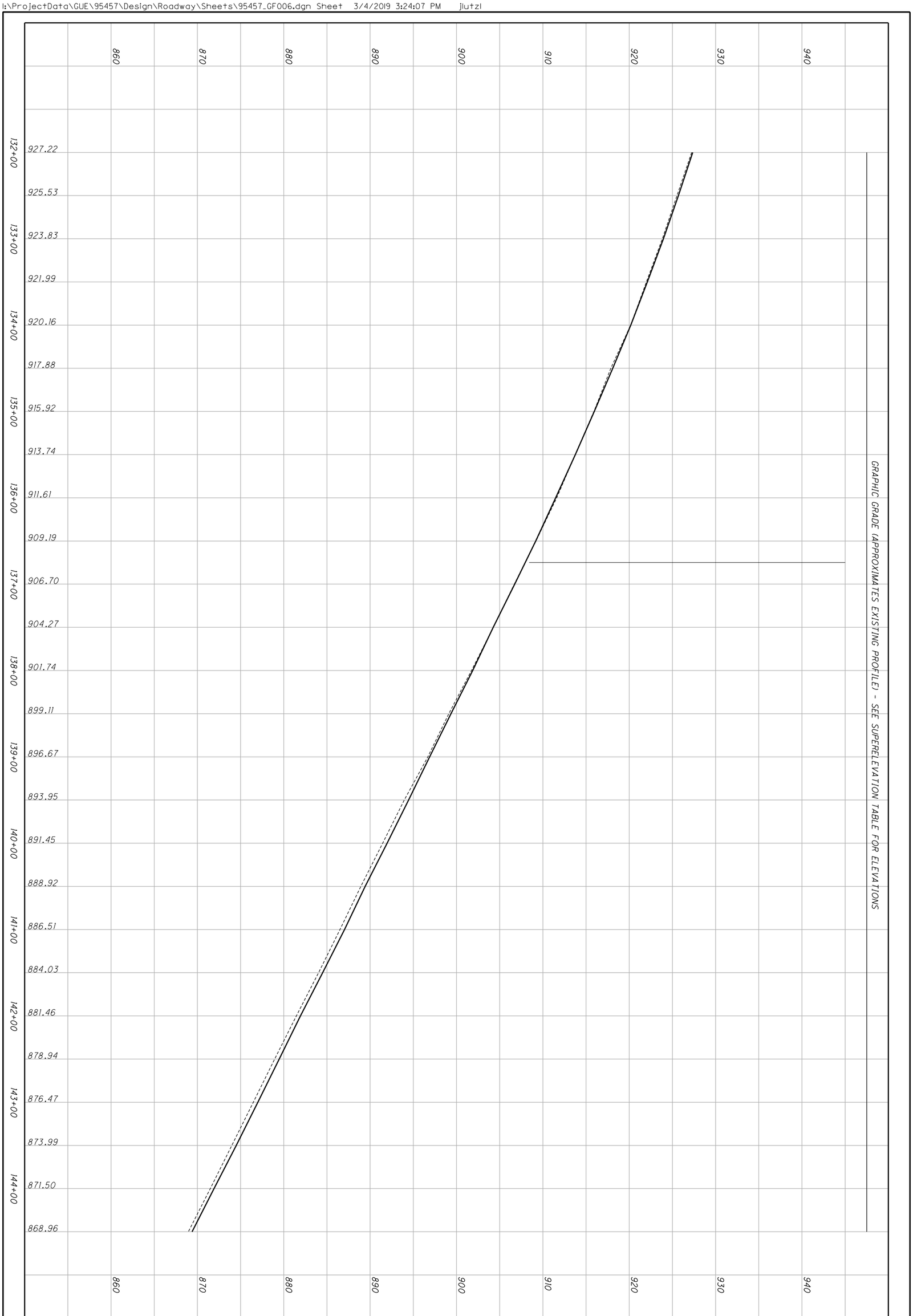
GUE-22/723-0.00
/0.70

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I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_GF005.dgn Sheet 3/4/2019 3:24:06 PM jlutzl



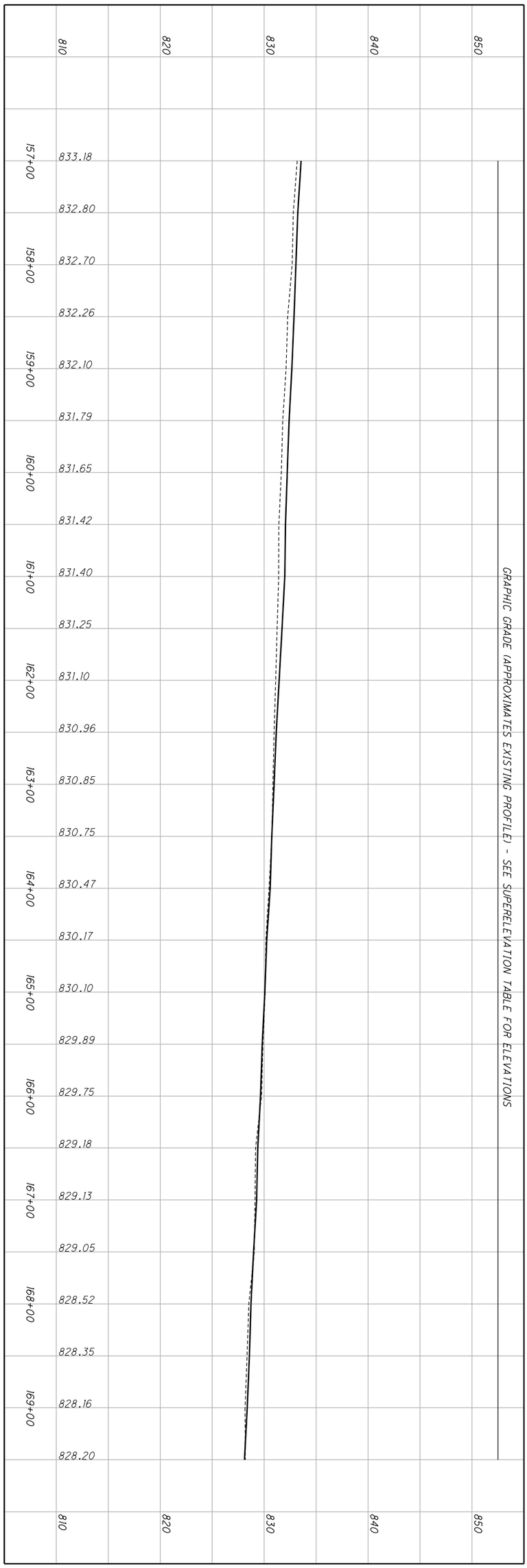
88 / 188	GUE-22/723-0.00 / 0.70	PROFILE SHEET - U.S. 22 (STA. 119+50 TO STA. 132+00)	CALCULATED PTB / CHECKED JSL

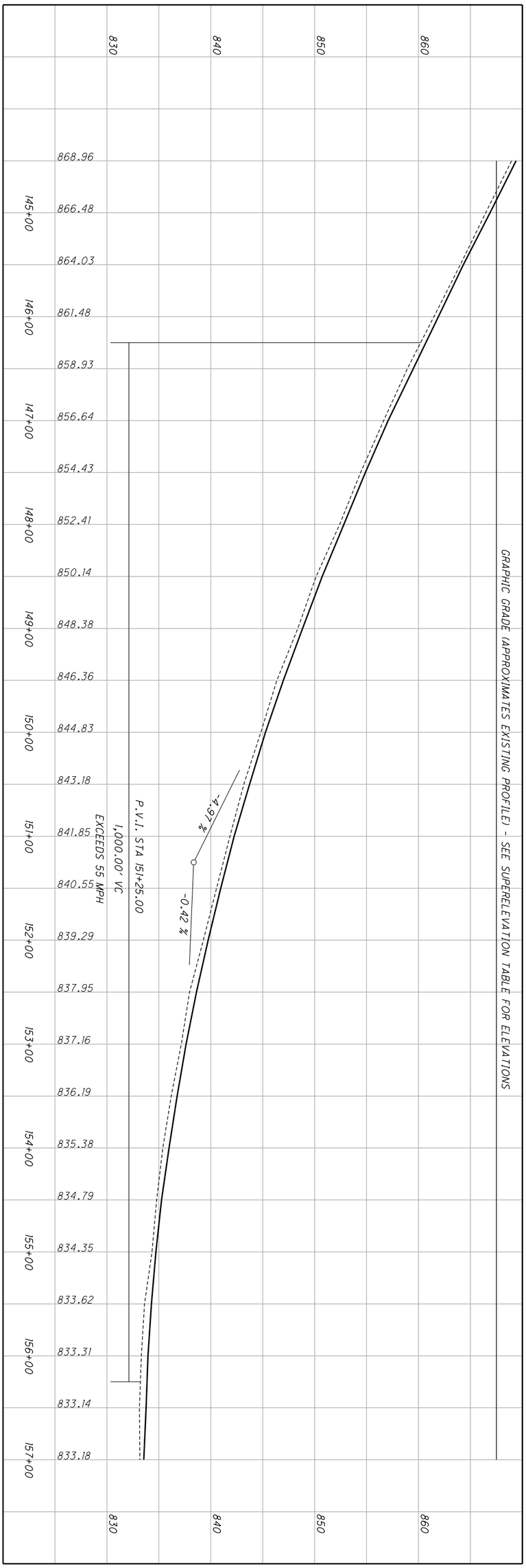


GUE-22/723-0.00 / 0.70

PROFILE SHEET - U.S. 22 (STA. 132+00 TO STA. 144+50)

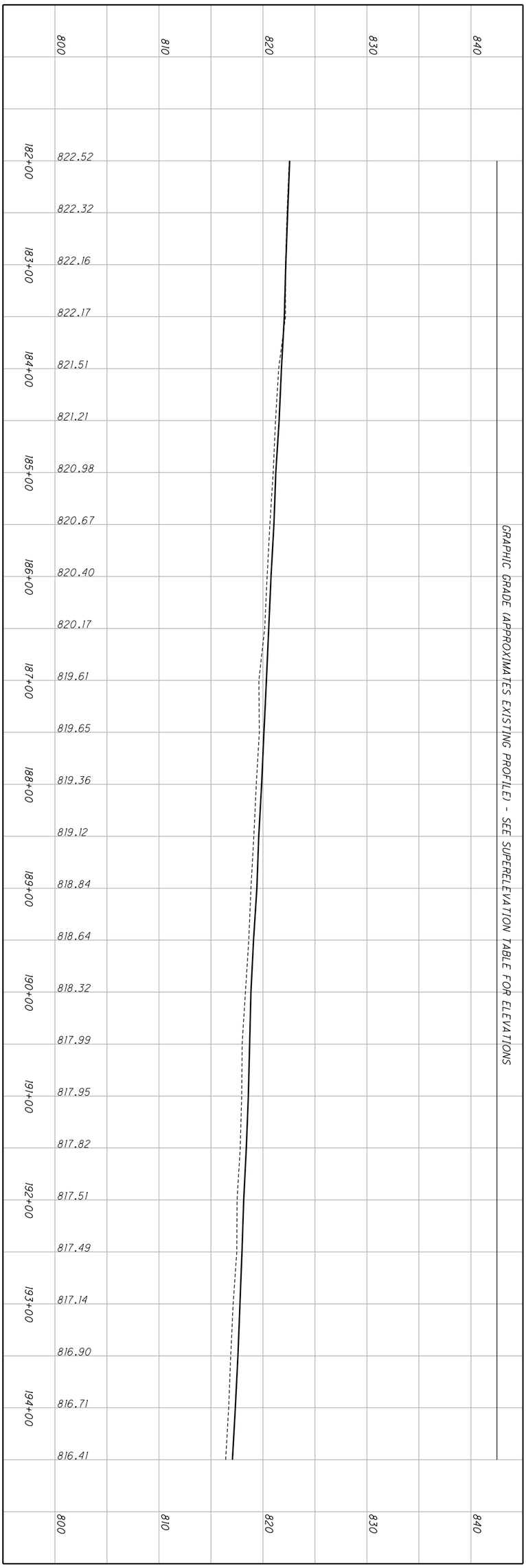
CALCULATED PTB
CHECKED JSL

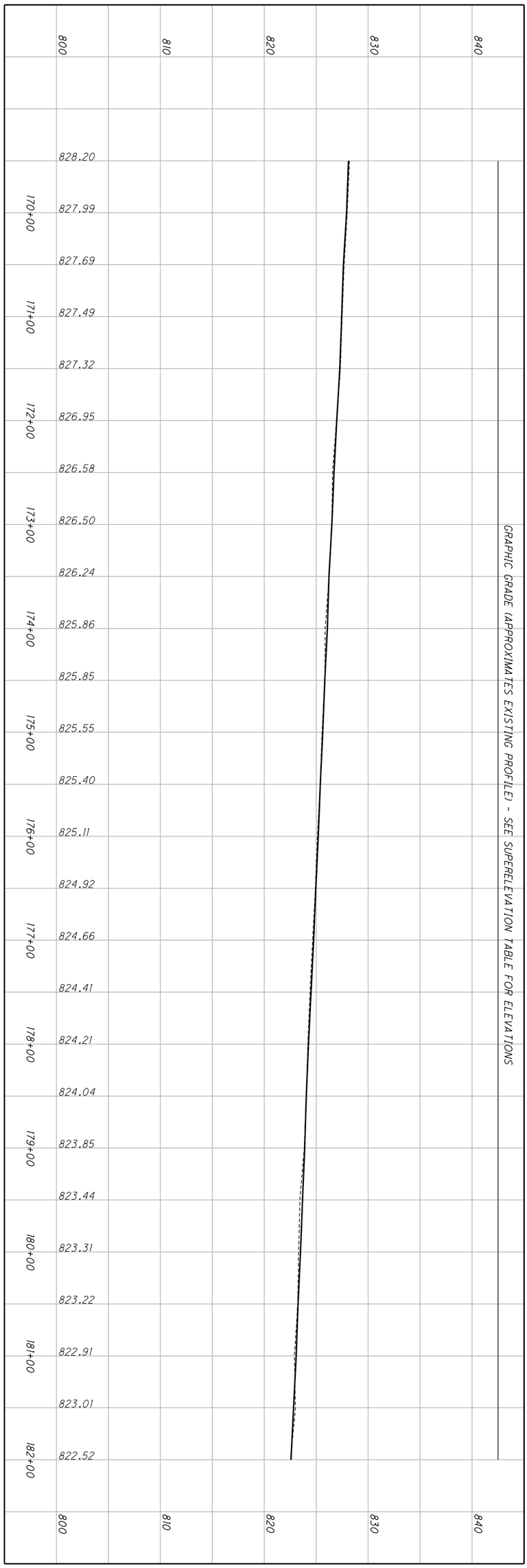


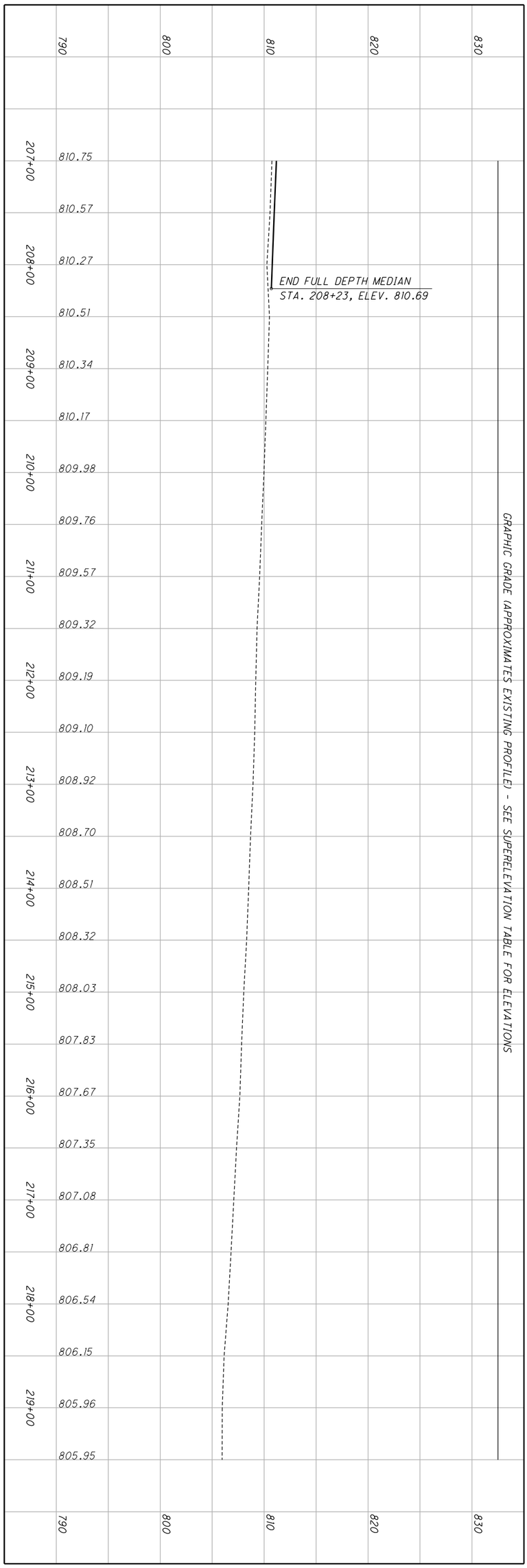


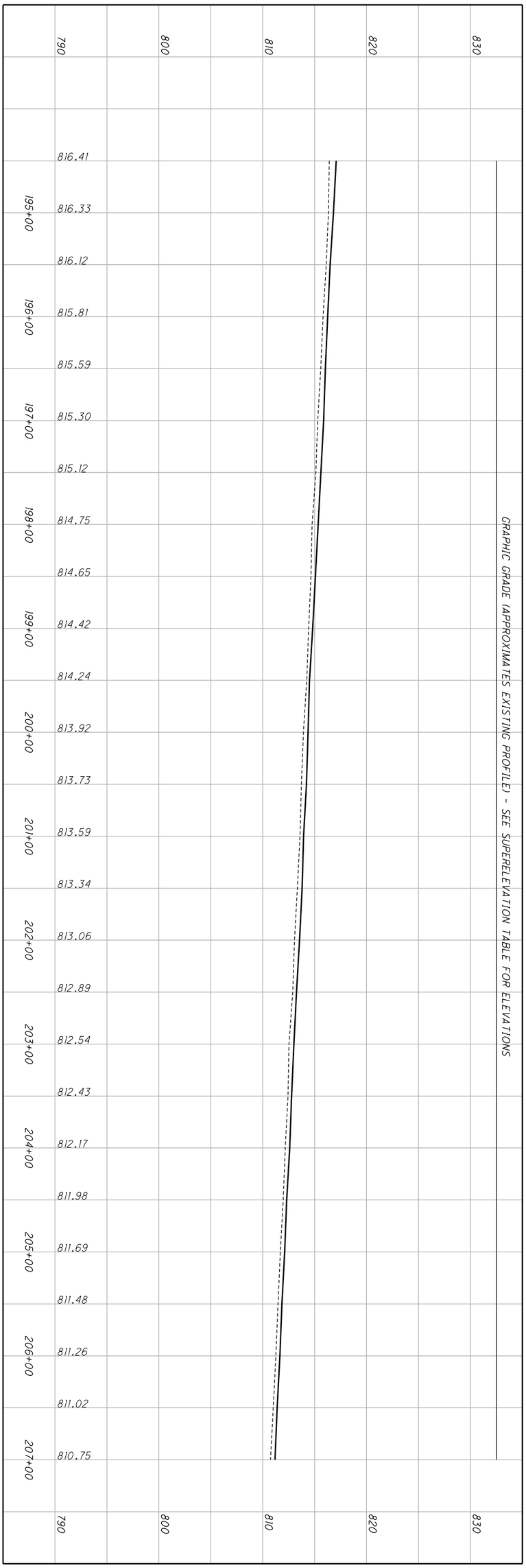
90 / 188	GUE-22/723-0.00 / 0.70	PROFILE SHEET - U.S. 22 (STA. 144+50 TO STA. 169+50)

CALCULATED PTB
CHECKED JSL


800
810
820
830
840
182+00
822.52
183+00
822.16
184+00
821.51
185+00
820.98
186+00
820.40
187+00
819.61
188+00
819.36
189+00
818.84
190+00
818.32
191+00
817.95
192+00
817.51
193+00
817.14
194+00
816.90
816.71
816.41
GRAPHIC GRADE (APPROXIMATES EXISTING PROFILE) - SEE SUPERELEVATION TABLE FOR ELEVATIONS


800
810
820
830
840
169+00
828.20
170+00
827.99
171+00
827.69
172+00
827.49
173+00
827.32
174+00
826.95
175+00
826.58
176+00
826.50
177+00
826.24
178+00
825.86
179+00
825.85
180+00
825.55
181+00
825.40
182+00
825.11
824.92
824.66
824.41
824.21
824.04
823.85
823.44
823.31
823.22
822.91
823.01
822.52
GRAPHIC GRADE (APPROXIMATES EXISTING PROFILE) - SEE SUPERELEVATION TABLE FOR ELEVATIONS





92
188

GUE-22/723-0.00
/0.70

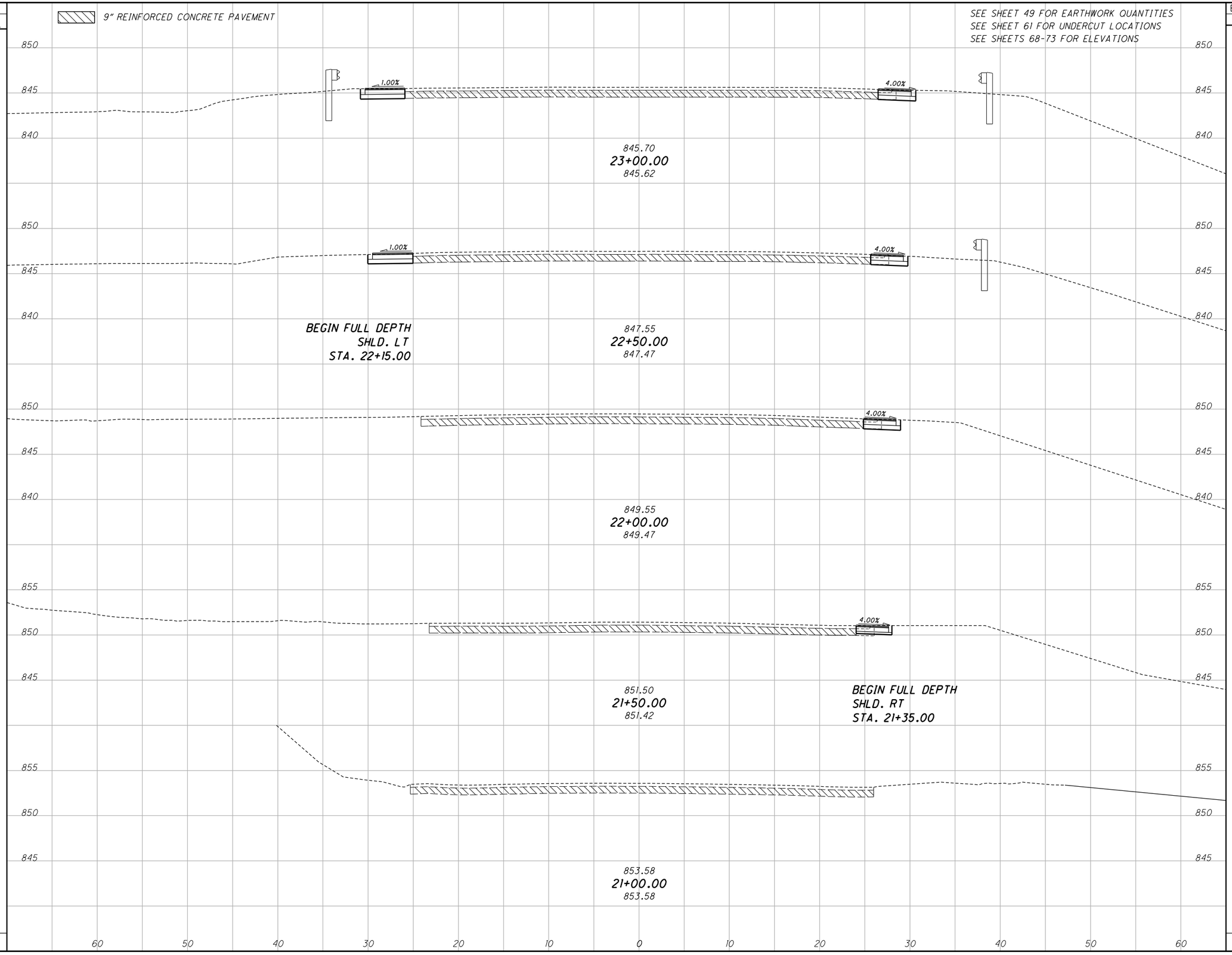
PROFILE SHEET - U.S. 22 (STA. 194+50 TO STA. 219+50)

CALCULATED PTB
CHECKED JSL

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 21+00.00 TO STA. 23+00.00

GUE-22/723-0.00
/ 0.70

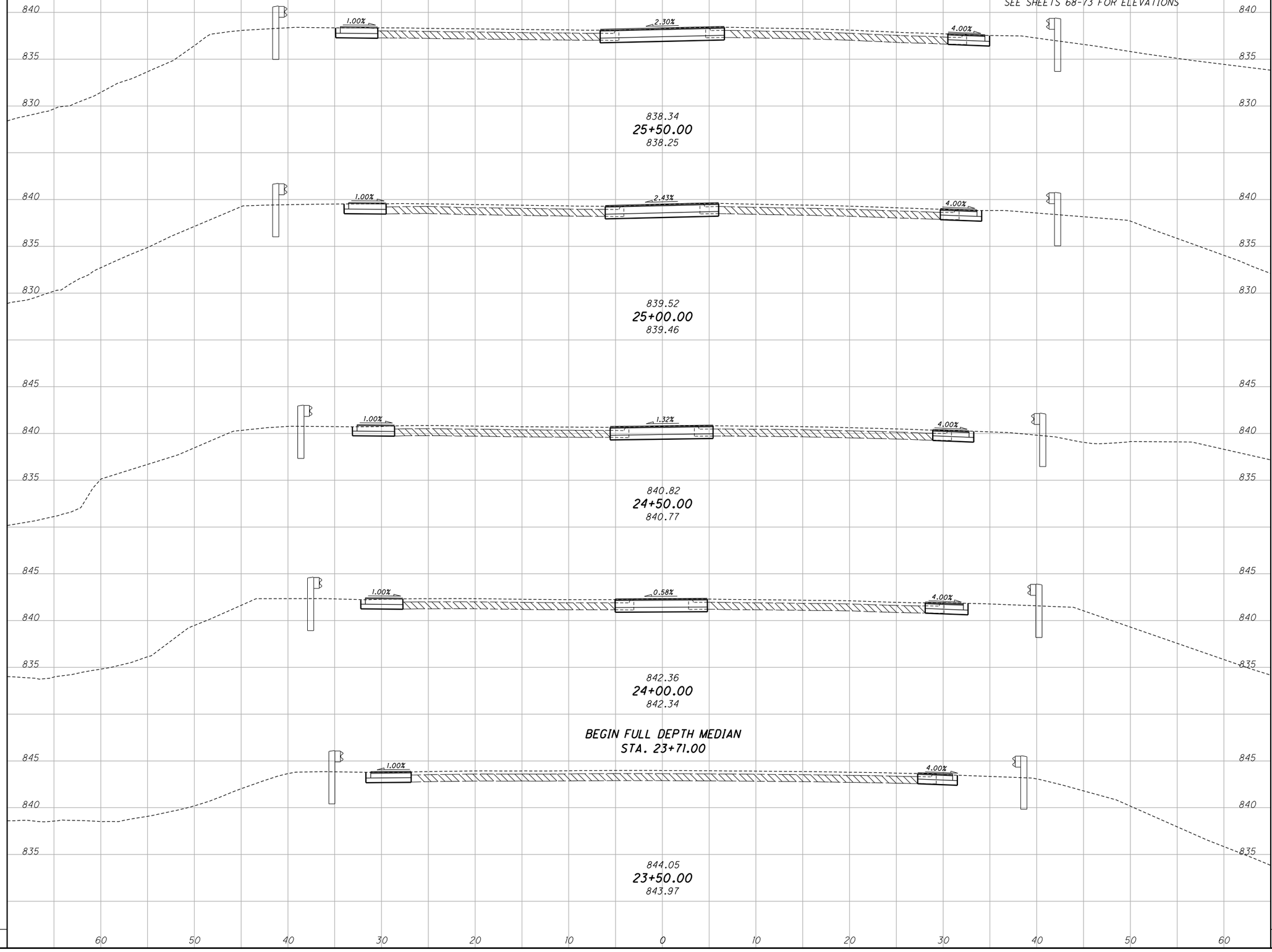
93
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 23+50.00 TO STA. 25+50.00

GUE-22/723-0.00
/0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_2 3/4/2019 3:24:18 PM jlutzl

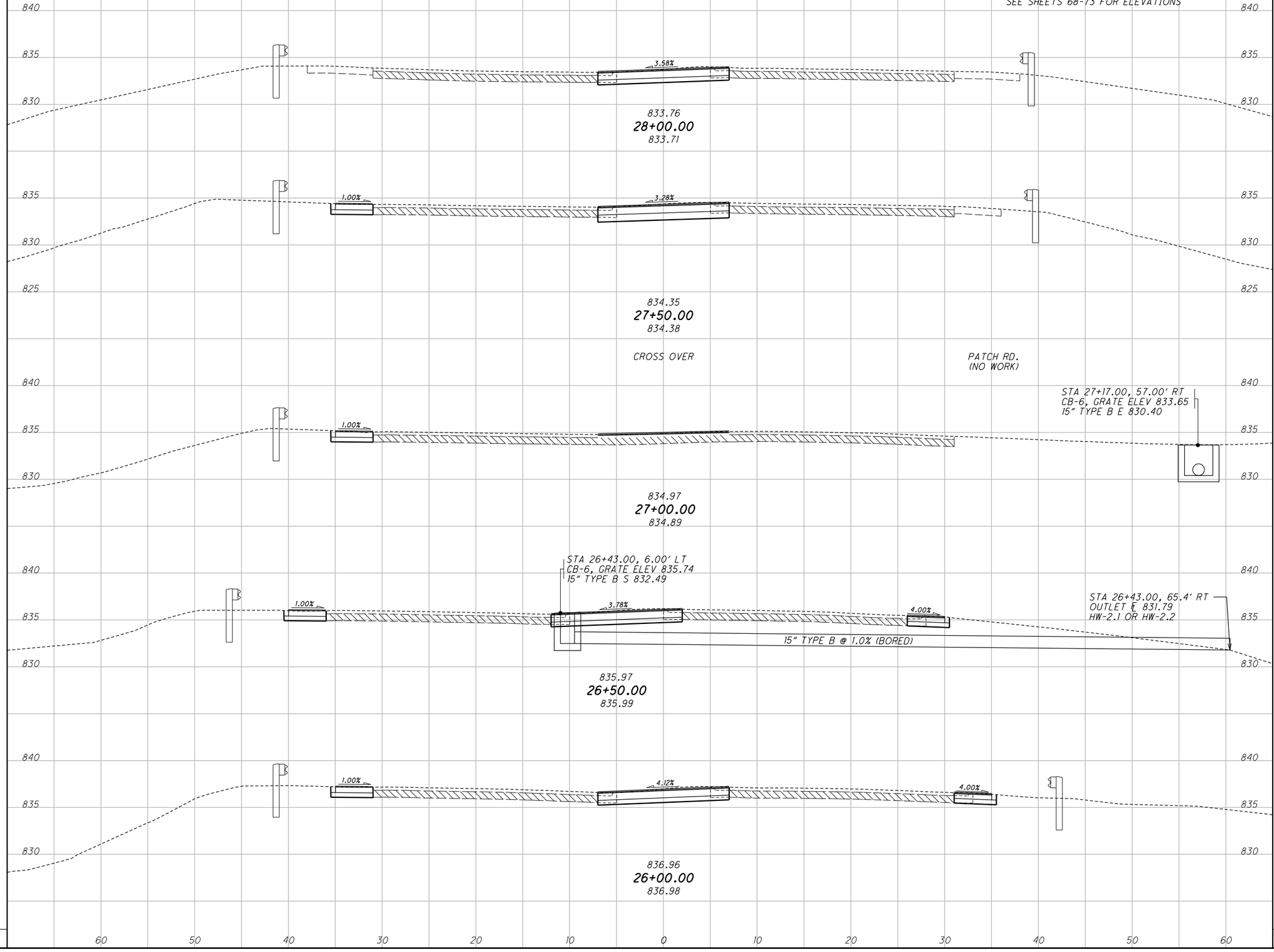
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 26+00.00 TO STA. 28+00.00

GUE-22/723-0.00
/0.70

H:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_3 3/4/2019 3:24:20 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

CROSS OVER

WASTERWATER TREATMENT PLANT DR
(NO WORK)

4.00%

831.93
31+00.00
831.85

FITZGERALD LN
(NO WORK)

CROSS OVER

832.13
30+50.00
832.05

2.71%

832.48
30+00.00
832.58

BRIDE GUE-22-0006
(STA. 29+03 TO STA. 29+76)

5.49%

STA 29+00.00, 6.00' LT
CB-6, GRATE ELEV 832.70
(RECONSTRUCT TOP)

833.03
29+00.00
833.06

4.21%

833.29
28+50.00
833.19

835
830
825

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 28+50.00 TO STA. 31+00.00

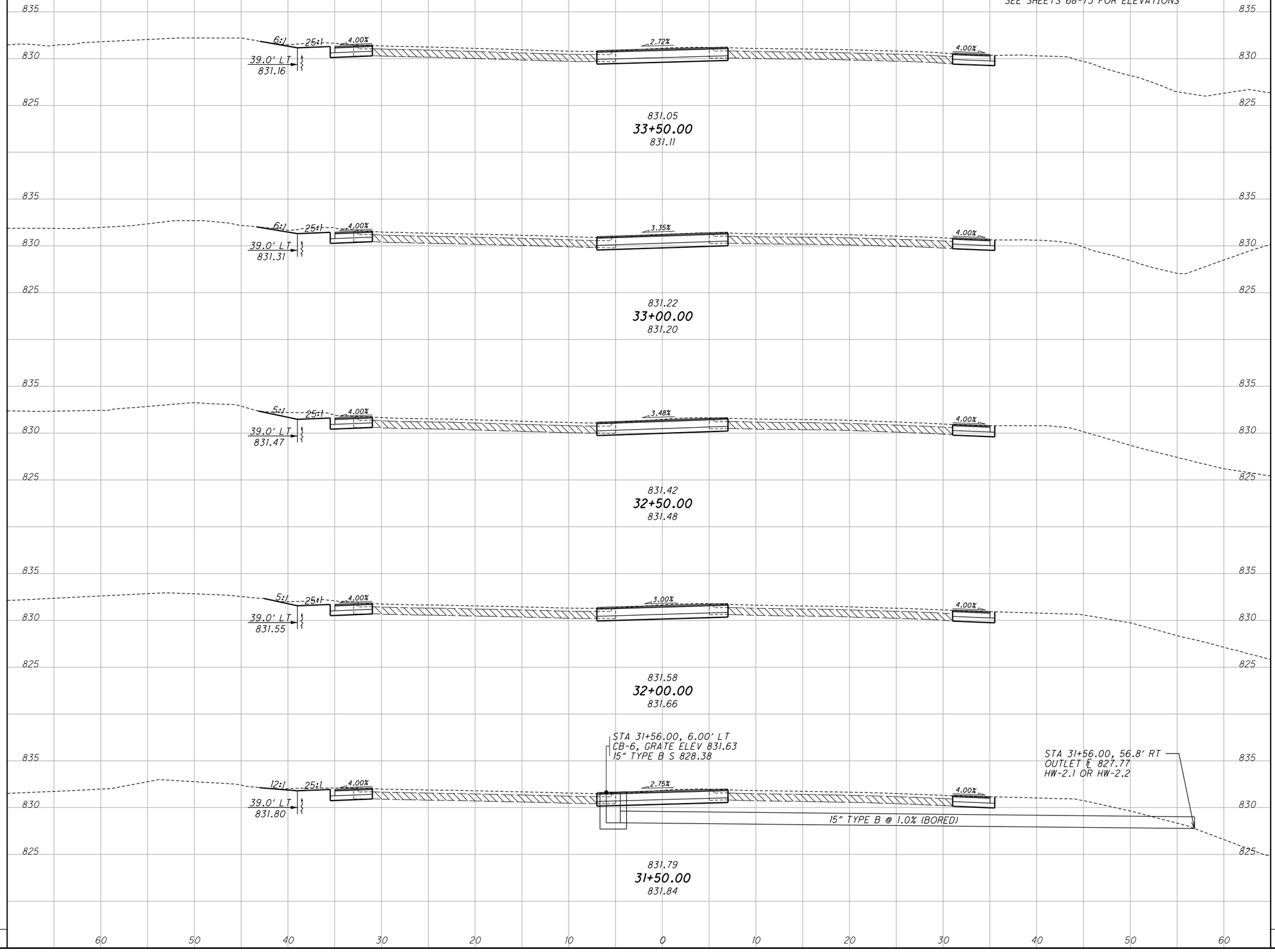
GUE-22/723-0.00
/ 0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 31+50.00 TO STA. 33+50.00

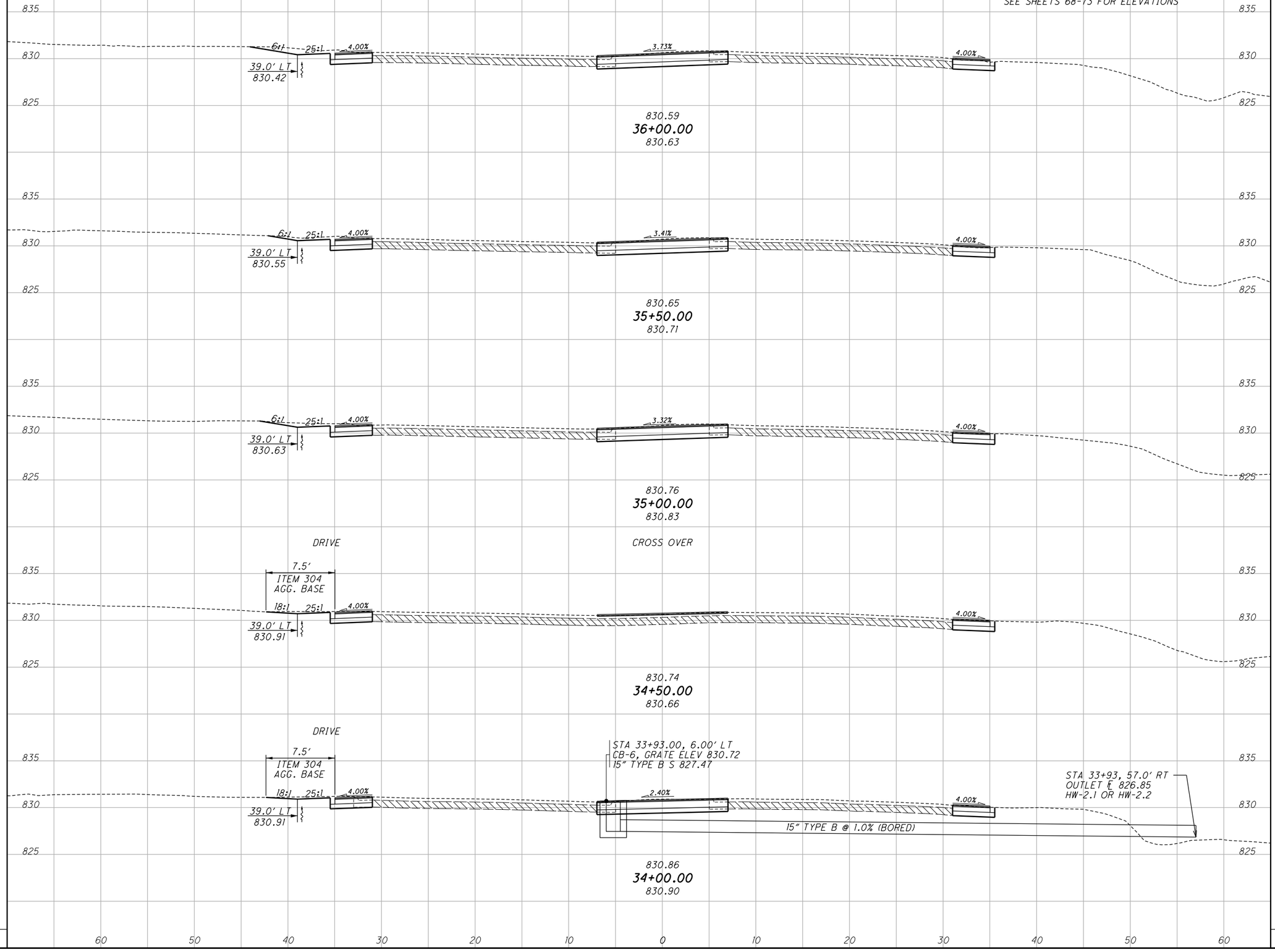
GUE-22/723-0.00
/0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 34+00.00 TO STA. 36+00.00

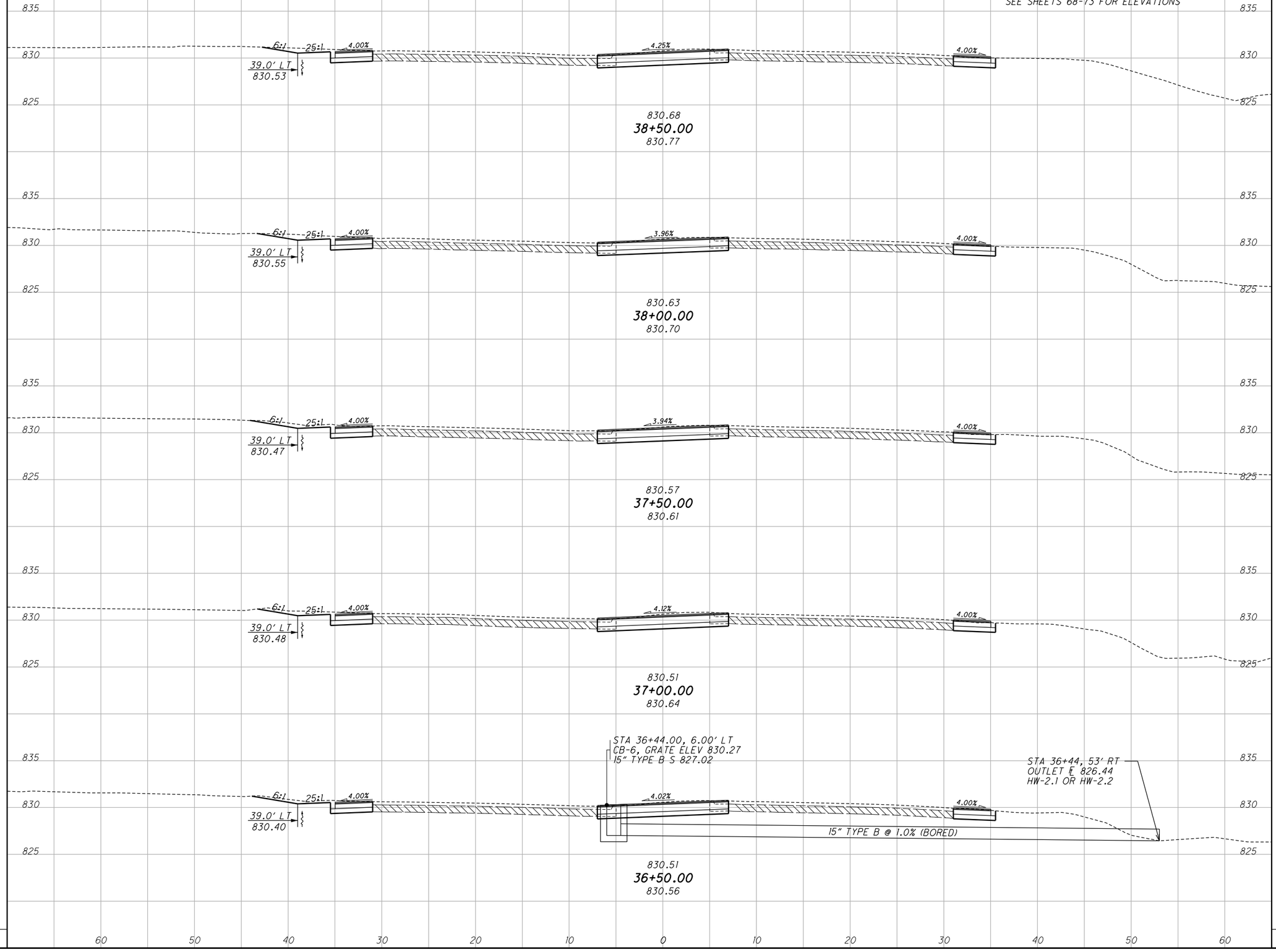
GUE-22/723-0.00
/0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 36+50.00 TO STA. 38+50.00

GUE-22/723-0.00
/ 0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

835
830
825

4.00% 3.94% 4.00%

831.72
41+00.00
831.85

4.00% 4.39% 4.00%

831.45
40+50.00
831.49

STA 39+80.00, 6.00' LT
CB-6, GRATE ELEV 830.91
15" TYPE B N 827.66

STA 39+80, 56' LT
OUTLET ℄ 827.16
HW-2.1 OR HW-2.2

4.00% 4.39% 4.00%

15" TYPE B @ 1.0% (BORED)

831.21
40+00.00
831.34

4.00% 2.74% 4.00%

831.02
39+50.00
830.92

FITZGERALD LN
(NO WORK)

CROSS OVER

4.00% 4.00%

830.62
39+00.00
830.54

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 39+00.00 TO STA. 41+00.00

GUE-22/723-0.00
/0.70

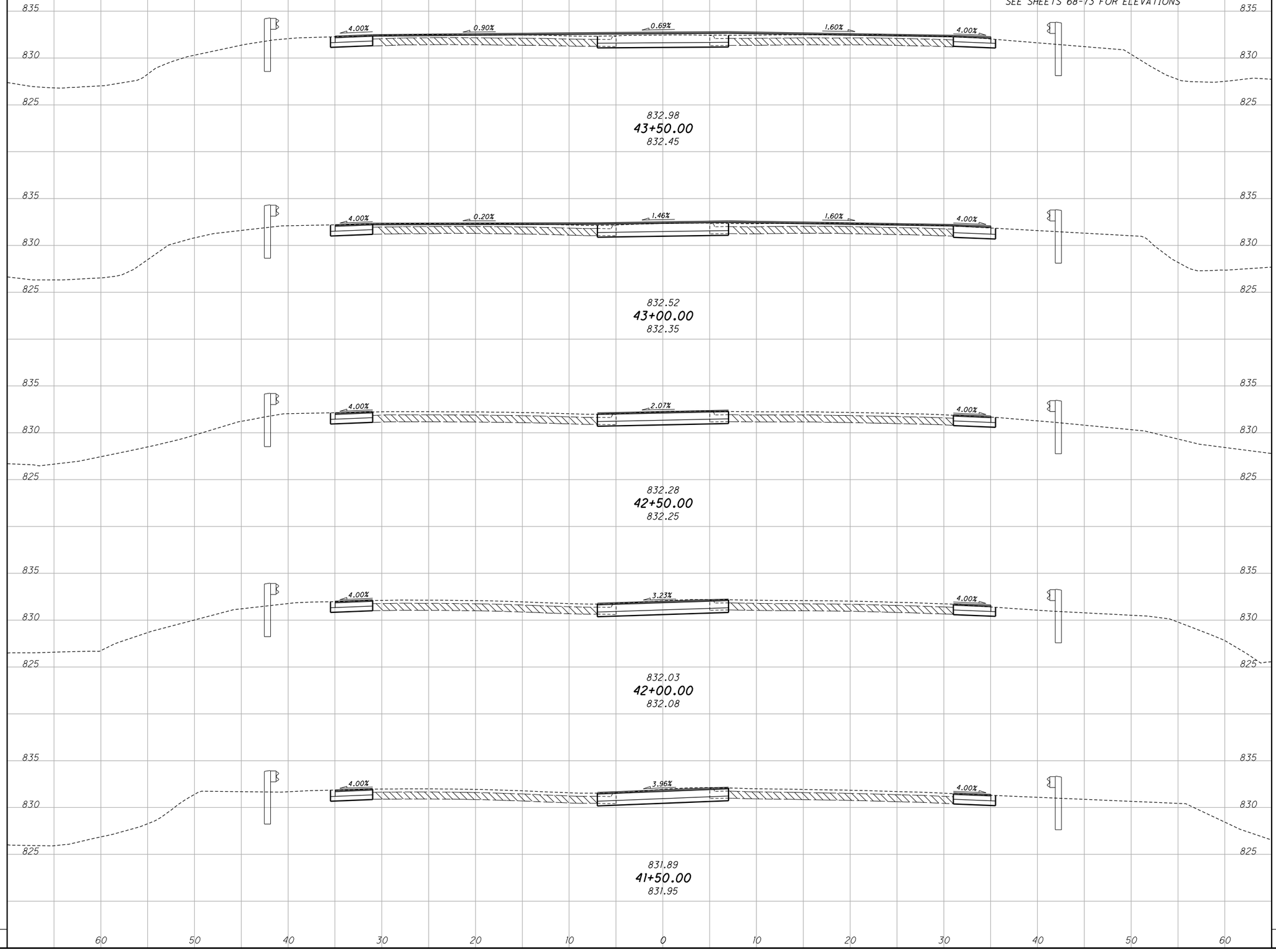
100
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 41+50.00 TO STA. 43+50.00

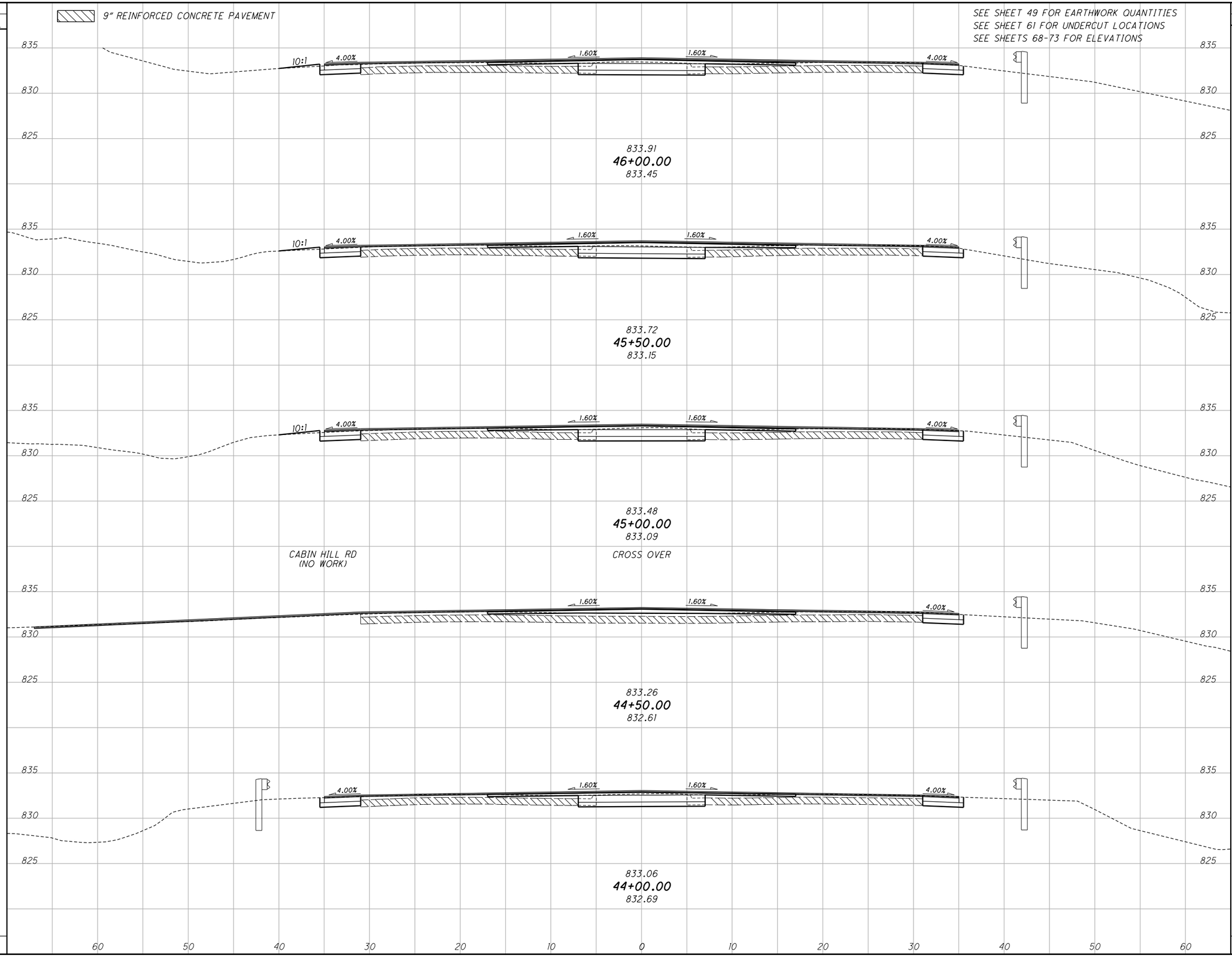
GUE-22/723-0.00
/ 0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 44+00.00 TO STA. 46+00.00

GUE-22/723-0.00
/ 0.70

102
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

CROSS OVER

DRIVE

840
835
830
825

14:1 4.00% 1.60% 1.60% 4.00%

833.89
48+50.00
833.21

10:1 4.00% 1.60% 1.60% 4.00% 25:1

833.95
48+00.00
833.45

13:1 4.00% 1.60% 1.60% 4.00% 25:1

834.00
47+50.00
833.56

10:1 4.00% 1.60% 1.60% 4.00% 25:1

833.99
47+00.00
833.46

DRIVE

13:1 4.00% 1.60% 1.60% 4.00%

833.93
46+50.00
833.45

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 46+50.00 TO STA. 48+50.00

GUE-22/723-0.00
/ 0.70

103
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

DRIVE — CROSS OVER

832.85
51+00.00
832.11

DRIVE (NO WORK) — CROSS OVER

833.16
50+50.00
832.38

CROSS OVER — DRIVE

833.40
50+00.00
832.71

833.66
49+50.00
833.16

833.81
49+00.00
833.24

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 49+00.00 TO STA. 51+00.00

GUE-22/723-0.00
/ 0.70

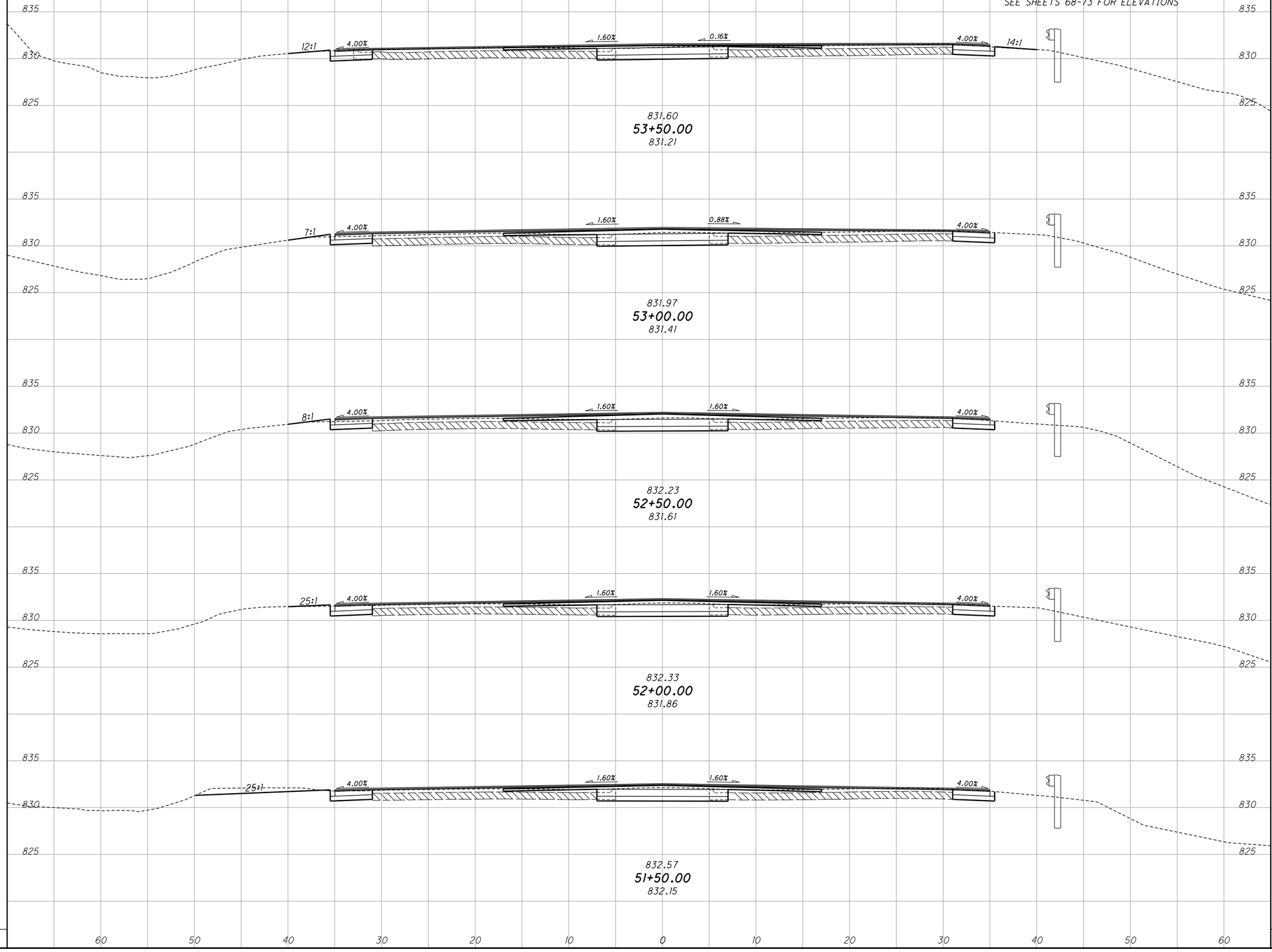
104
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 51+50.00 TO STA. 53+50.00

GUE-22/723-0.00
/ 0.70

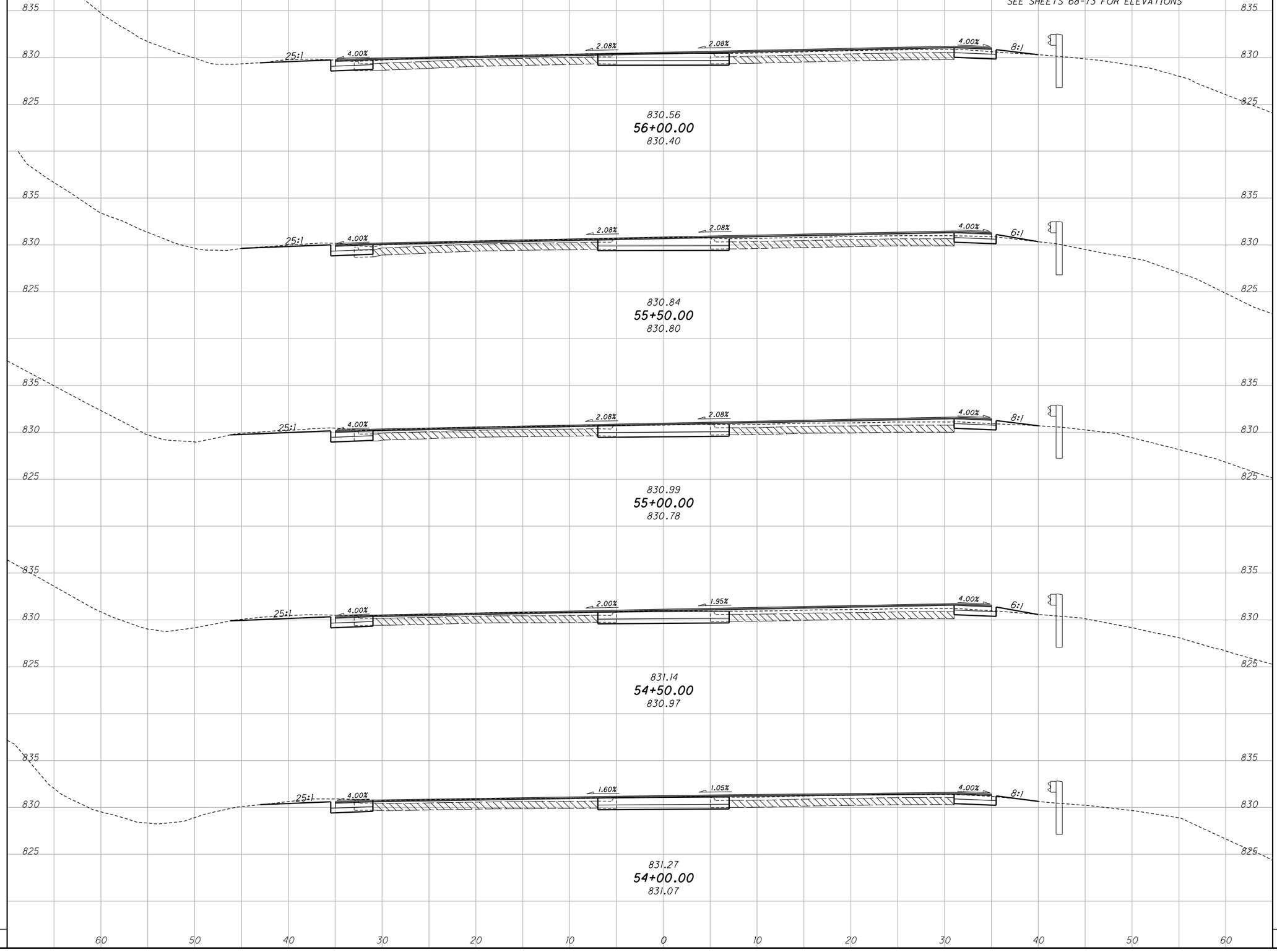
105
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 54+00.00 TO STA. 56+00.00

GUE-22/723-0.00
/0.70

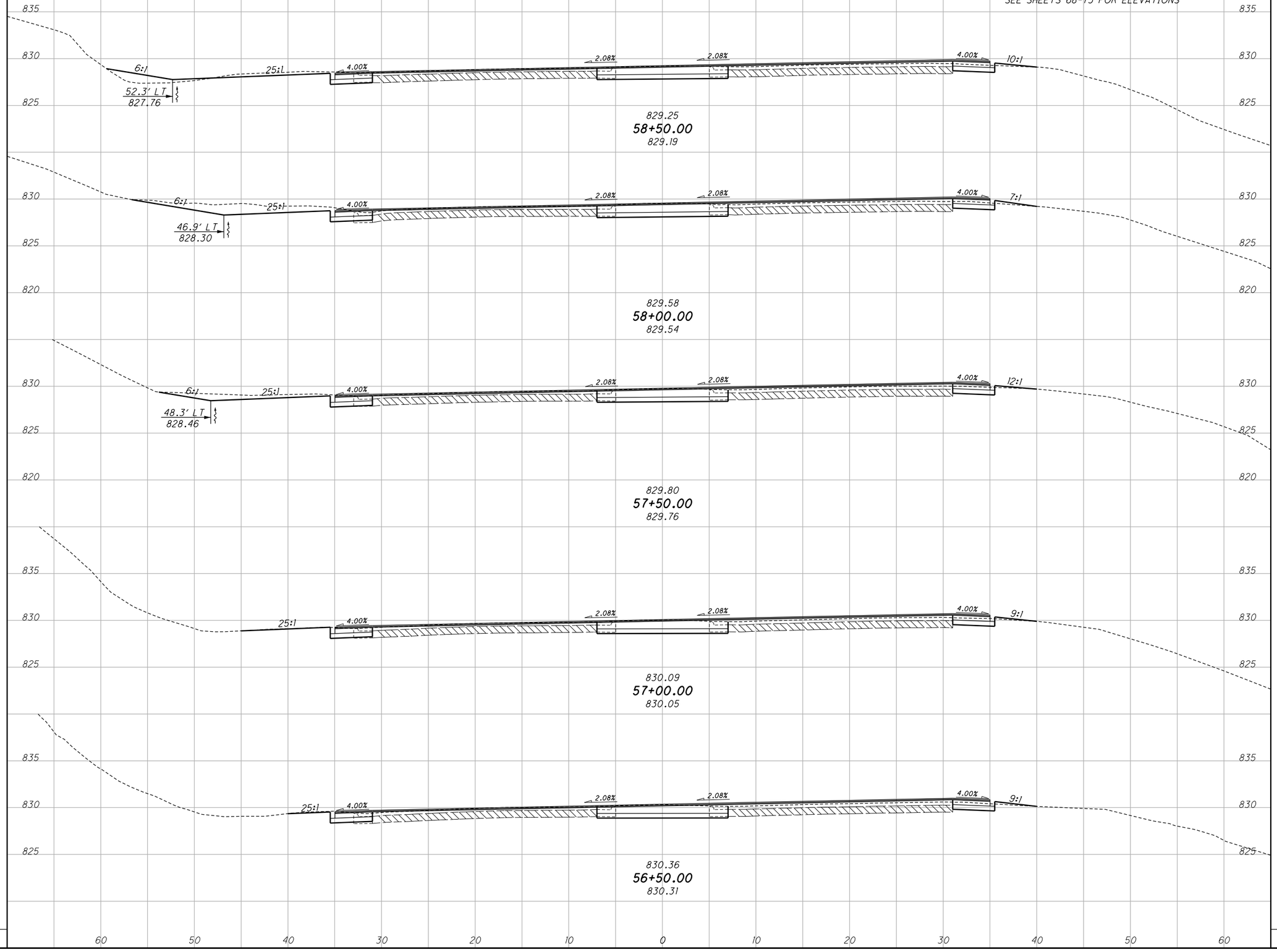
106
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 56+50.00 TO STA. 58+50.00

GUE-22/723-0.00
/ 0.70

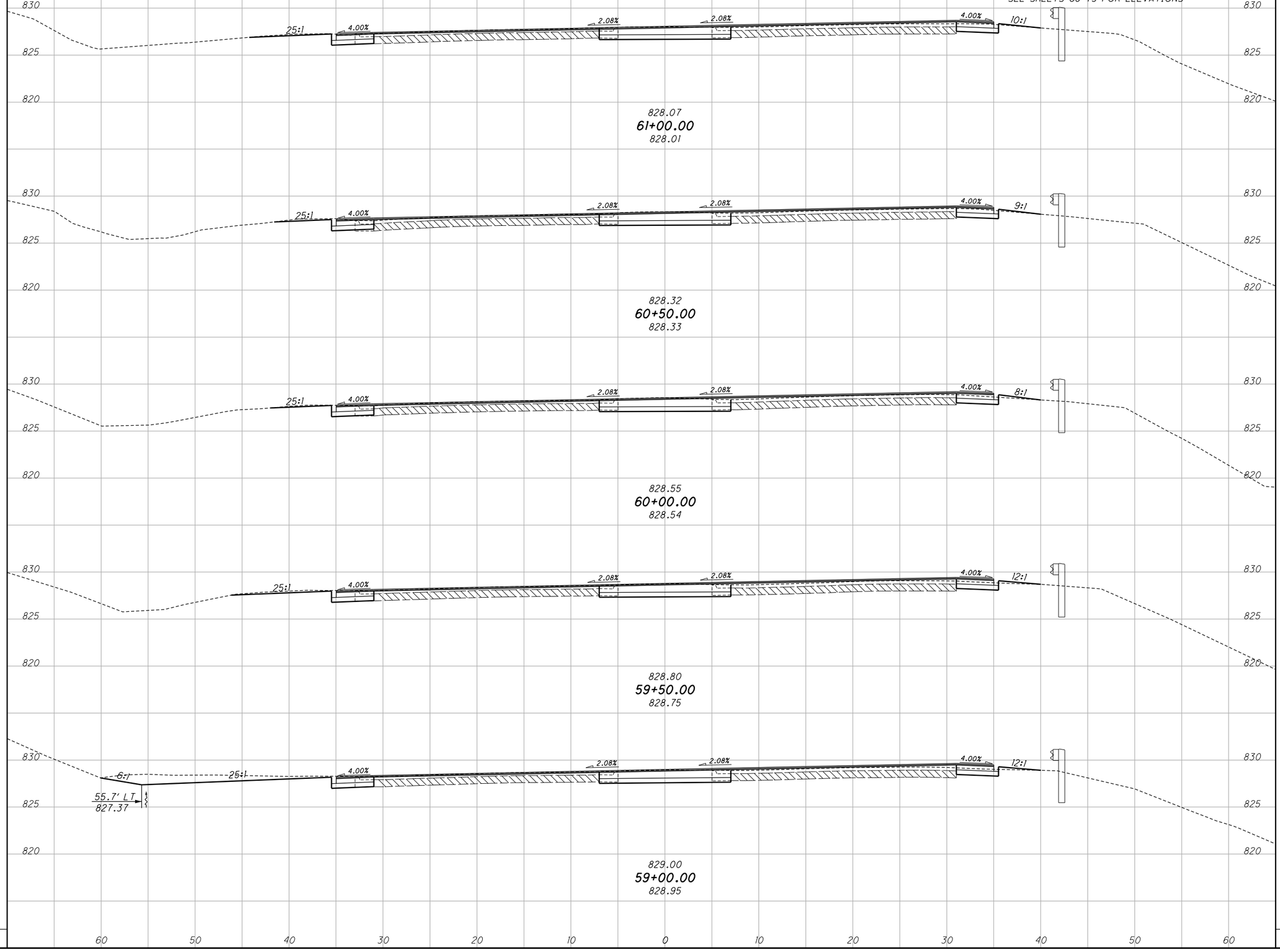
107
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 59+00.00 TO STA. 61+00.00

GUE-22/723-0.00
/ 0.70

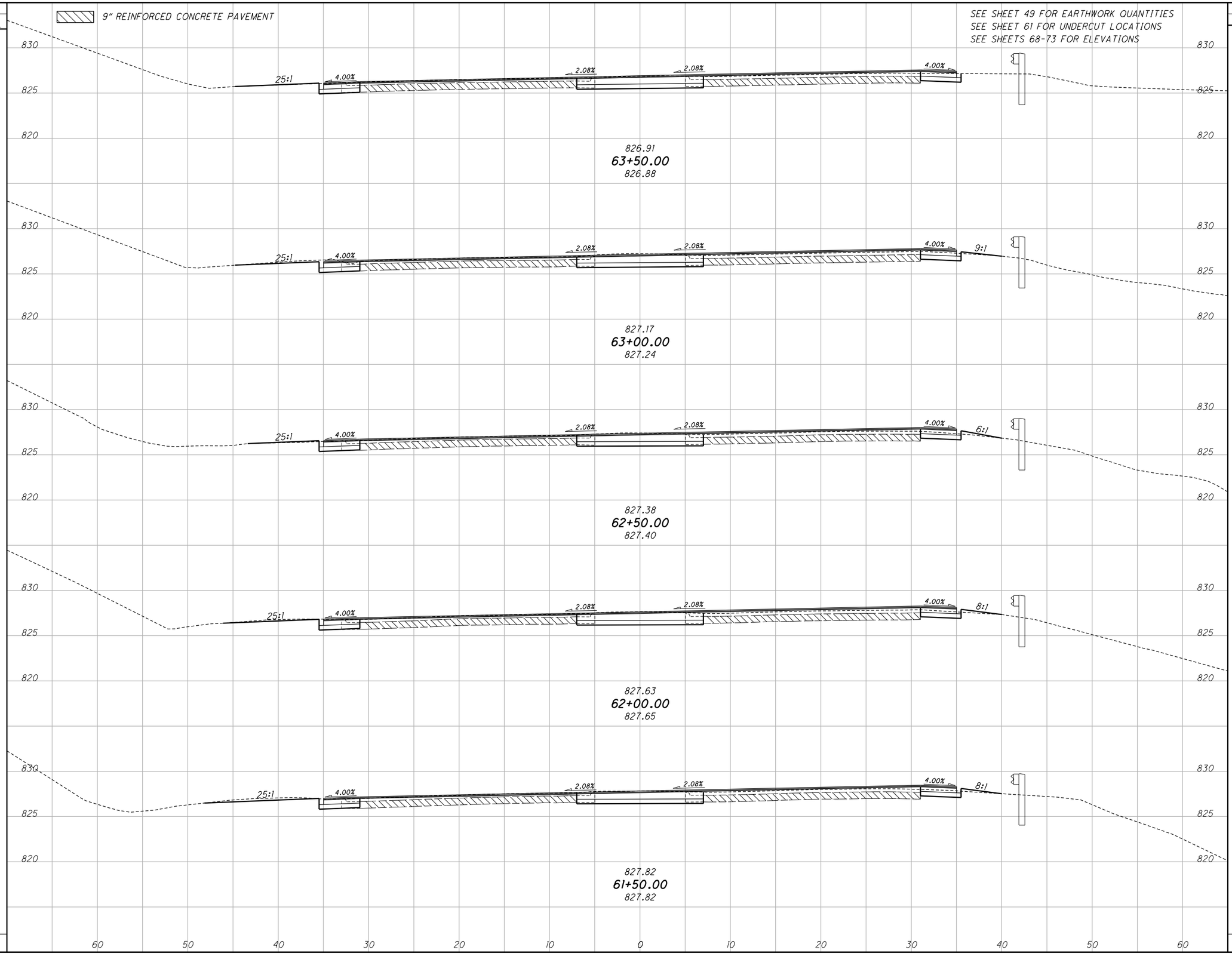
108
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 61+50.00 TO STA. 63+50.00

GUE-22/723-0.00
/ 0.70

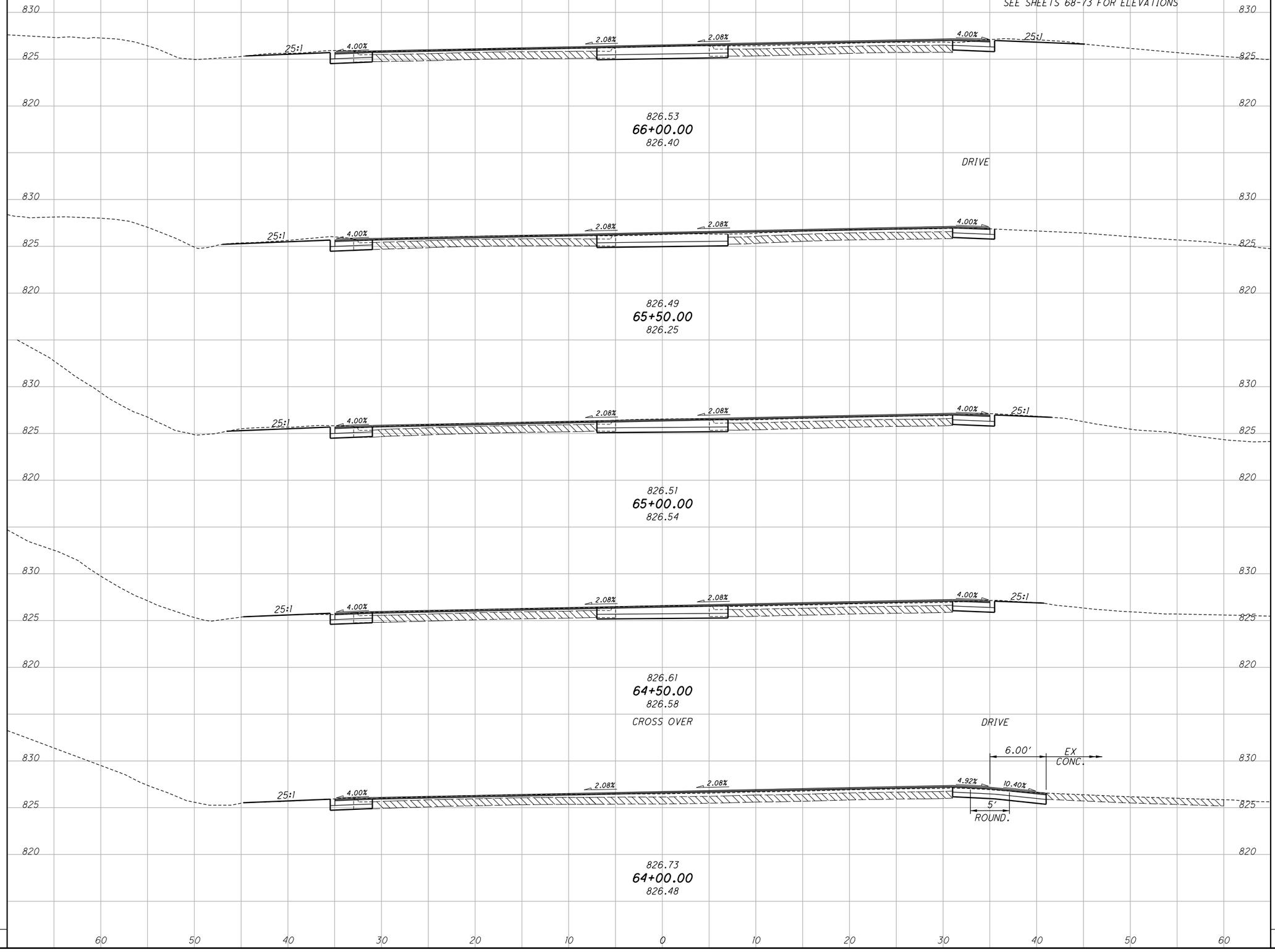
109
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 64+00.00 TO STA. 66+00.00

GUE-22/723-0.00
/ 0.70

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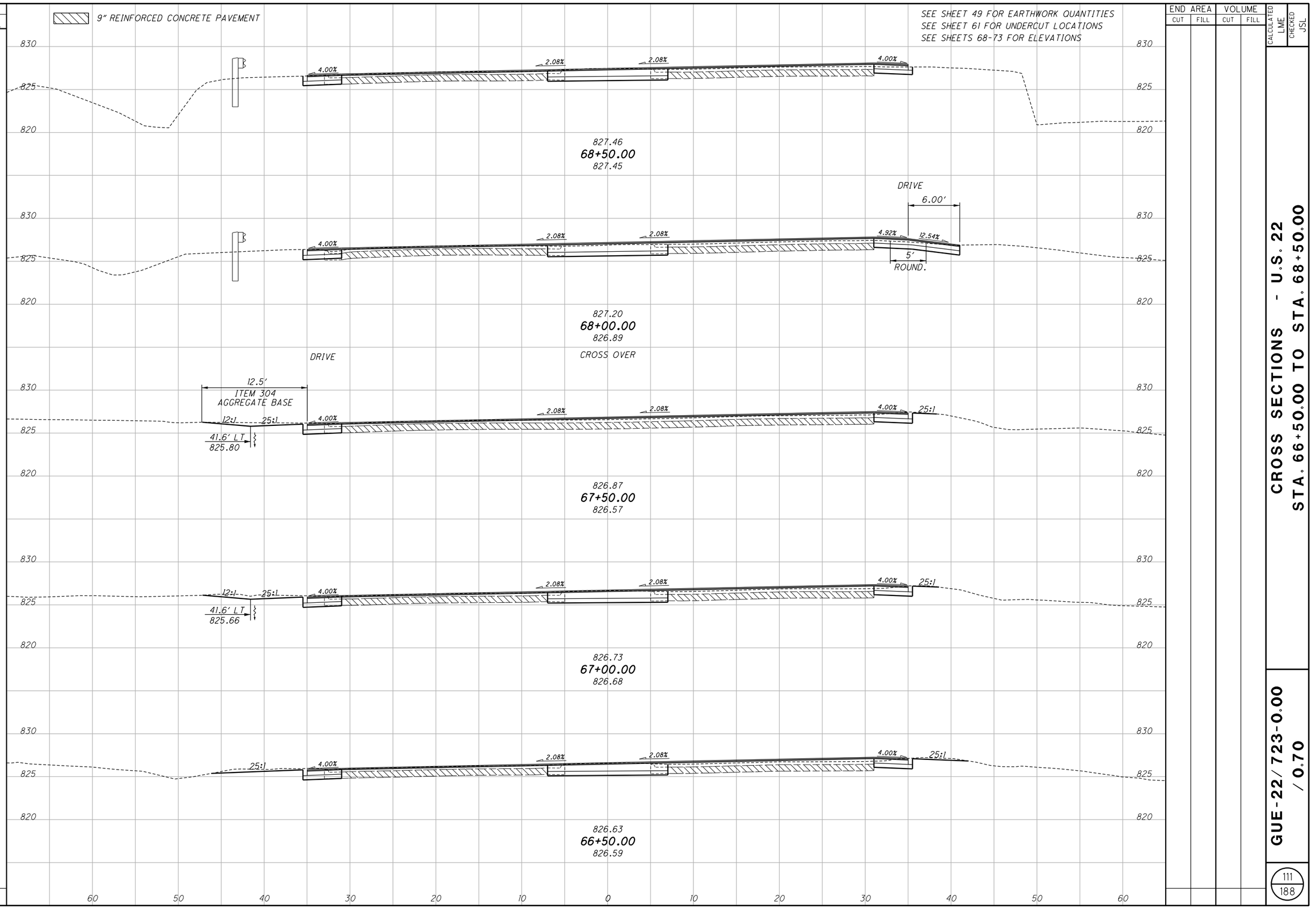
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 66+50.00 TO STA. 68+50.00

GUE-22/723-0.00
/ 0.70

111
188

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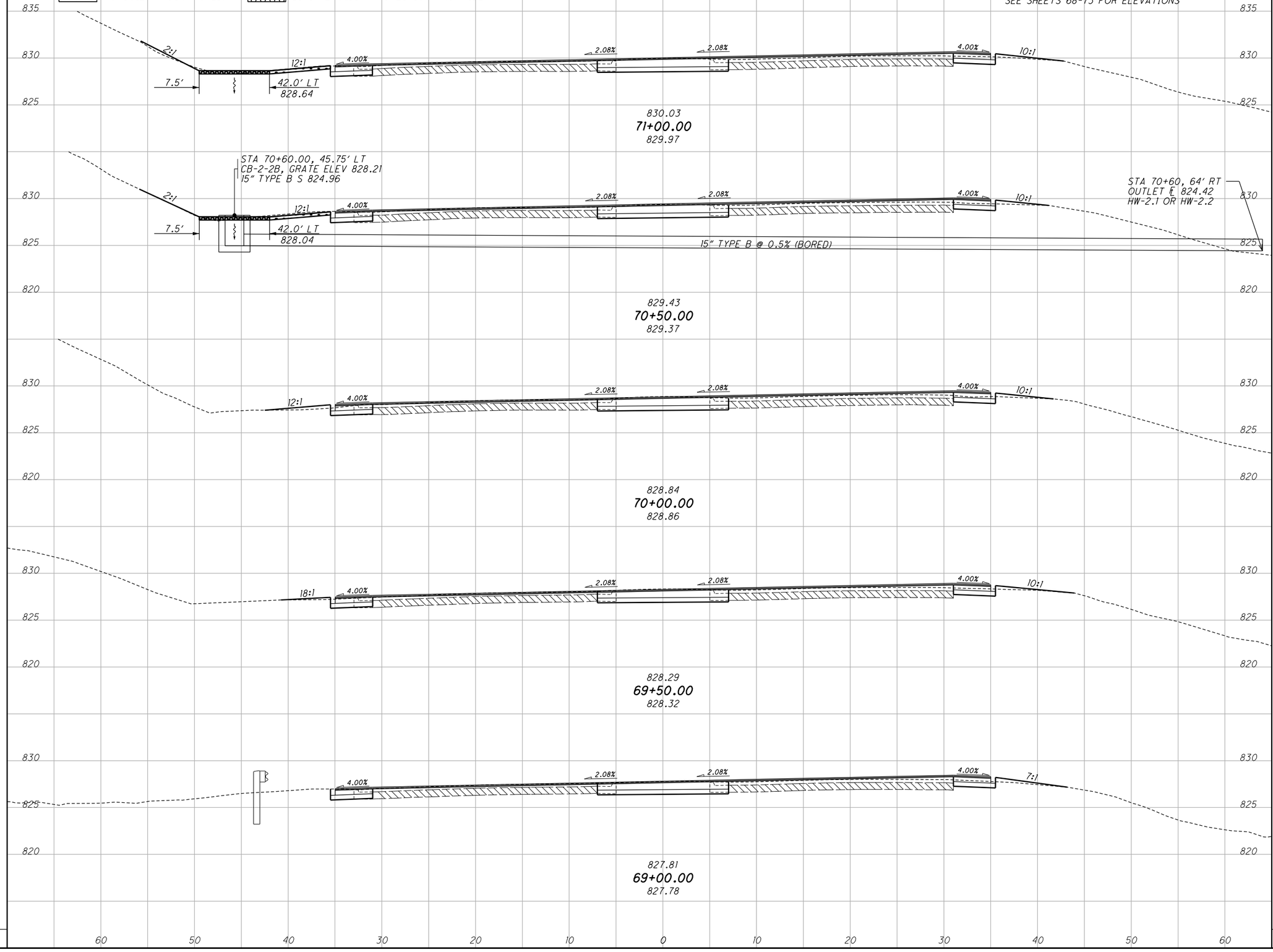
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

TOPSOIL (4" COMPACTED)

DITCH EROSION PROTECTION (7.5' WIDE)

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 69+00.00 TO STA. 71+00.00

GUE-22/723-0.00
/ 0.70

112
188

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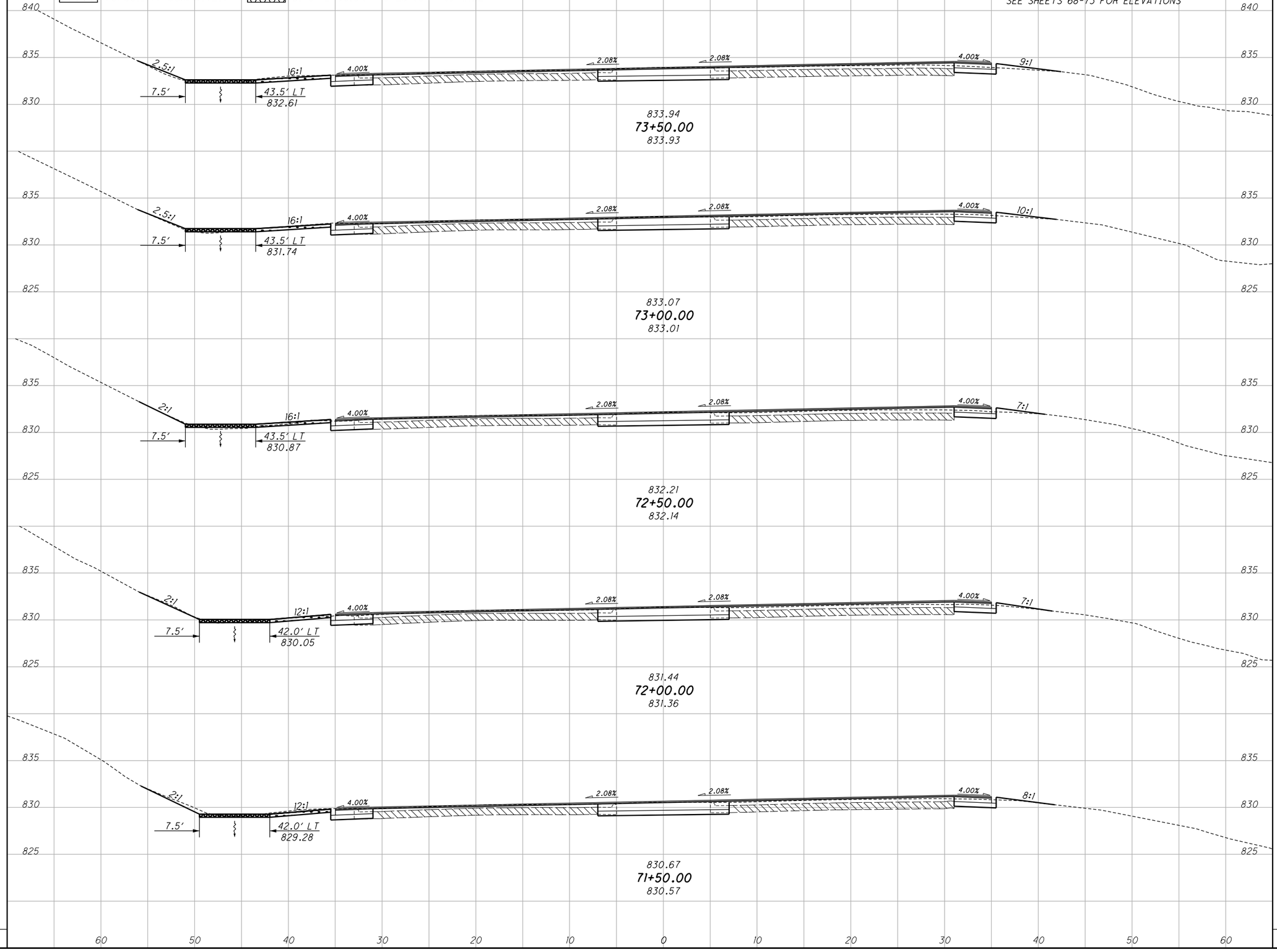
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

TOPSOIL (4" COMPACTED)

DITCH EROSION PROTECTION (7.5' WIDE)

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 71+50.00 TO STA. 73+50.00

GUE-22/723-0.00 / 0.70

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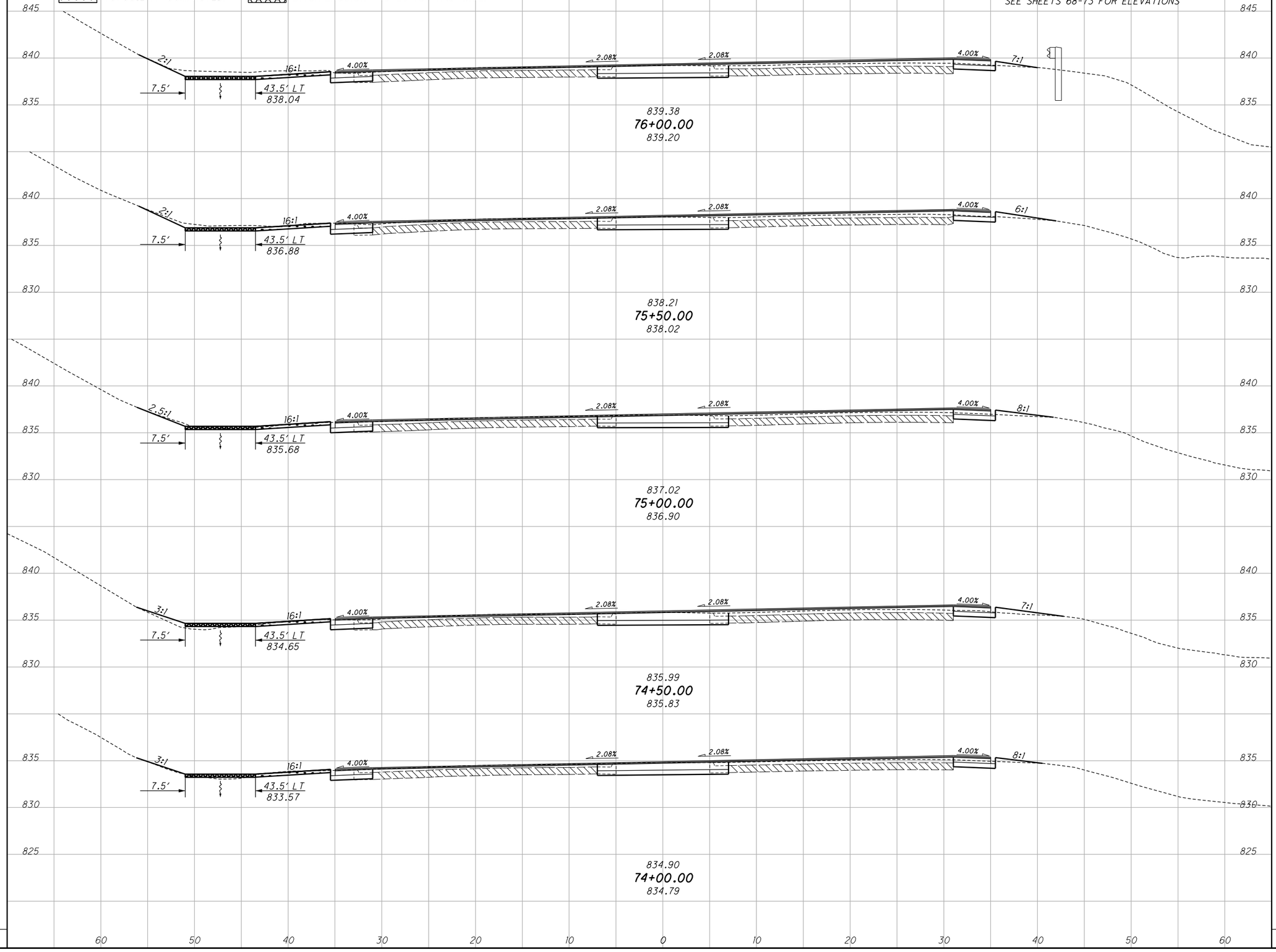
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

TOPSOIL (4" COMPACTED)

DITCH EROSION PROTECTION (7.5' WIDE)

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 74+00.00 TO STA. 76+00.00

GUE-22/723-0.00
/ 0.70

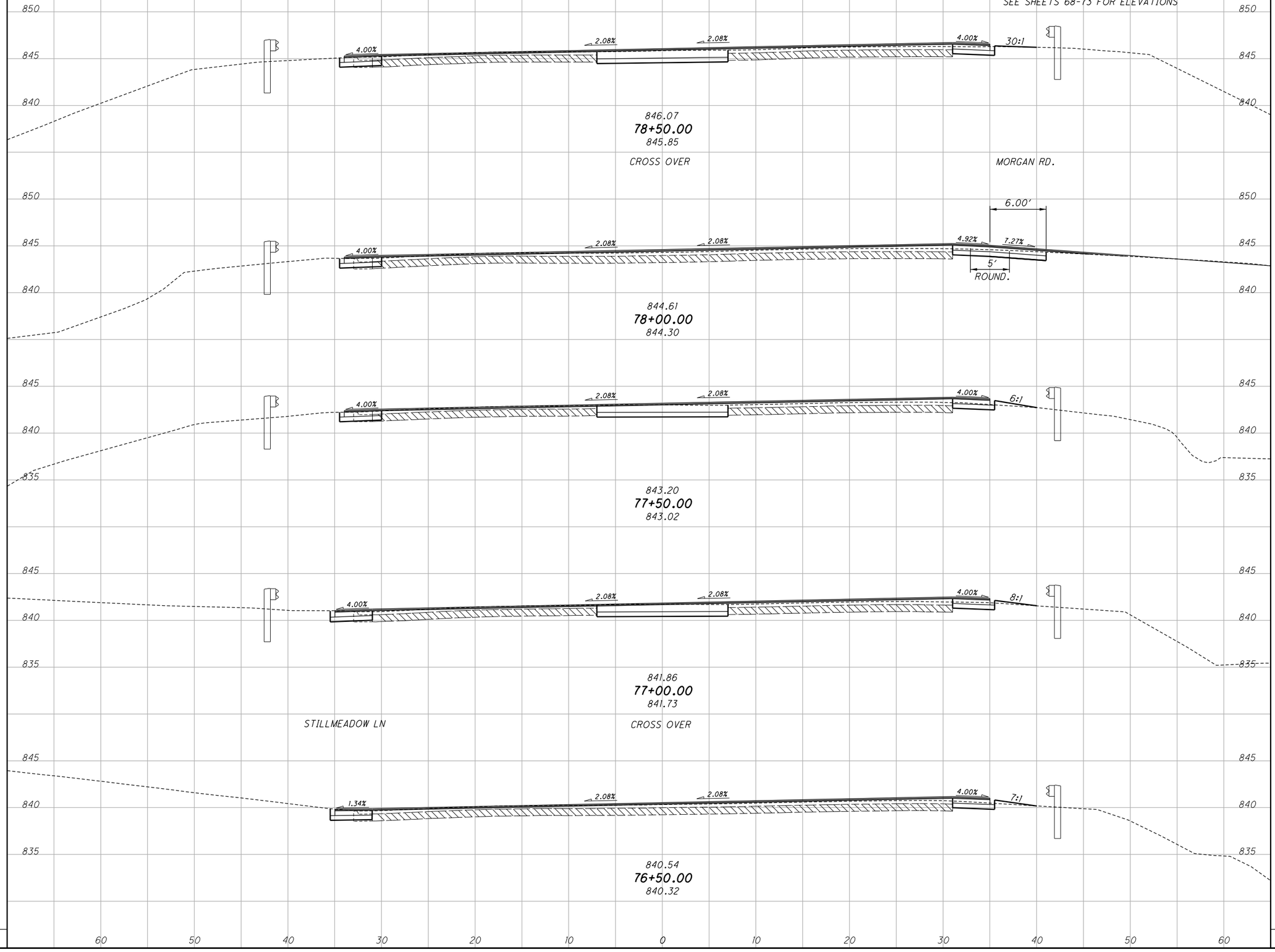
114
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 76+50.00 TO STA. 78+50.00

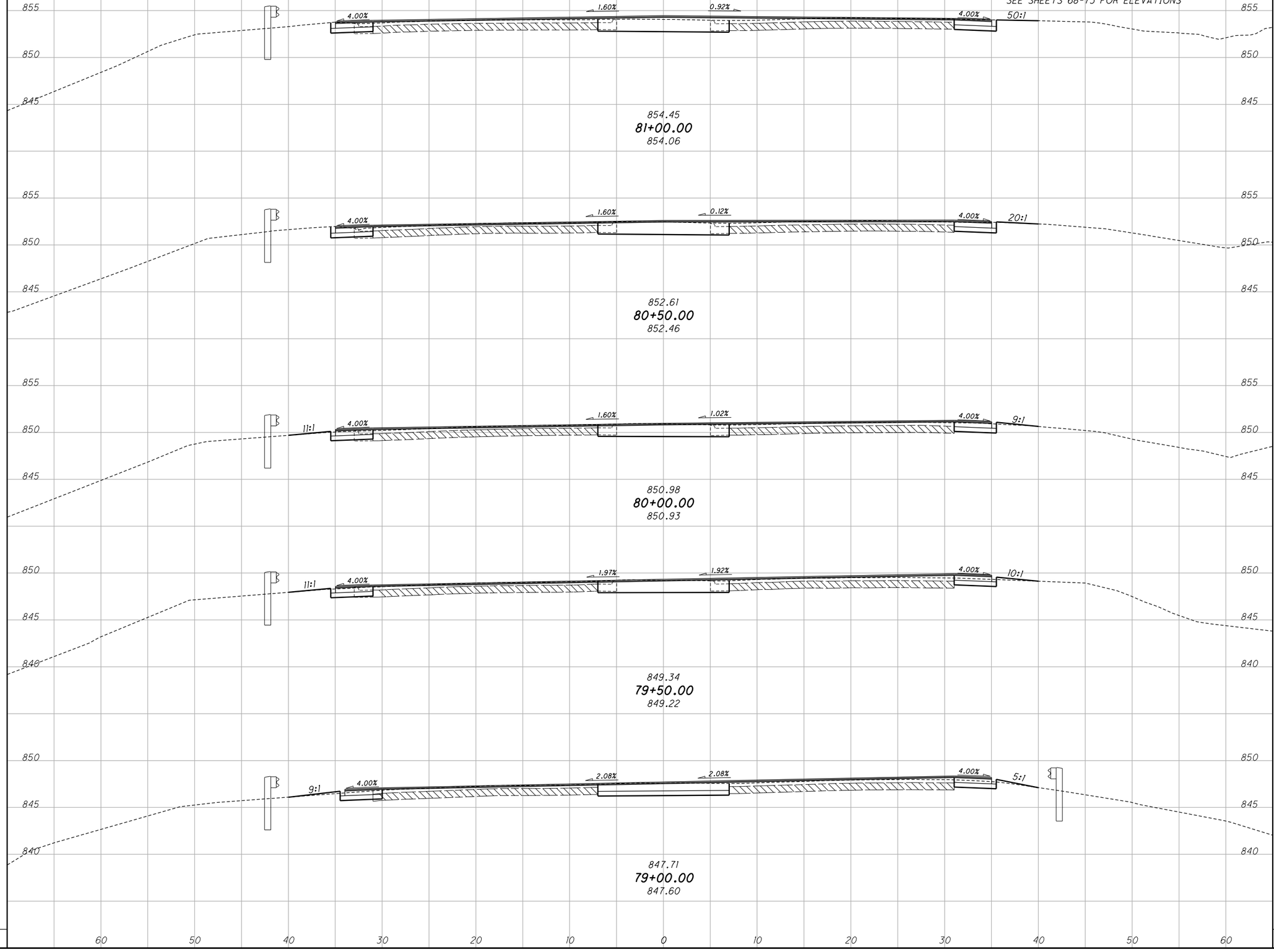
GUE-22/723-0.00
/ 0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_23 3/4/2019 3:25:24 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 79+00.00 TO STA. 81+00.00

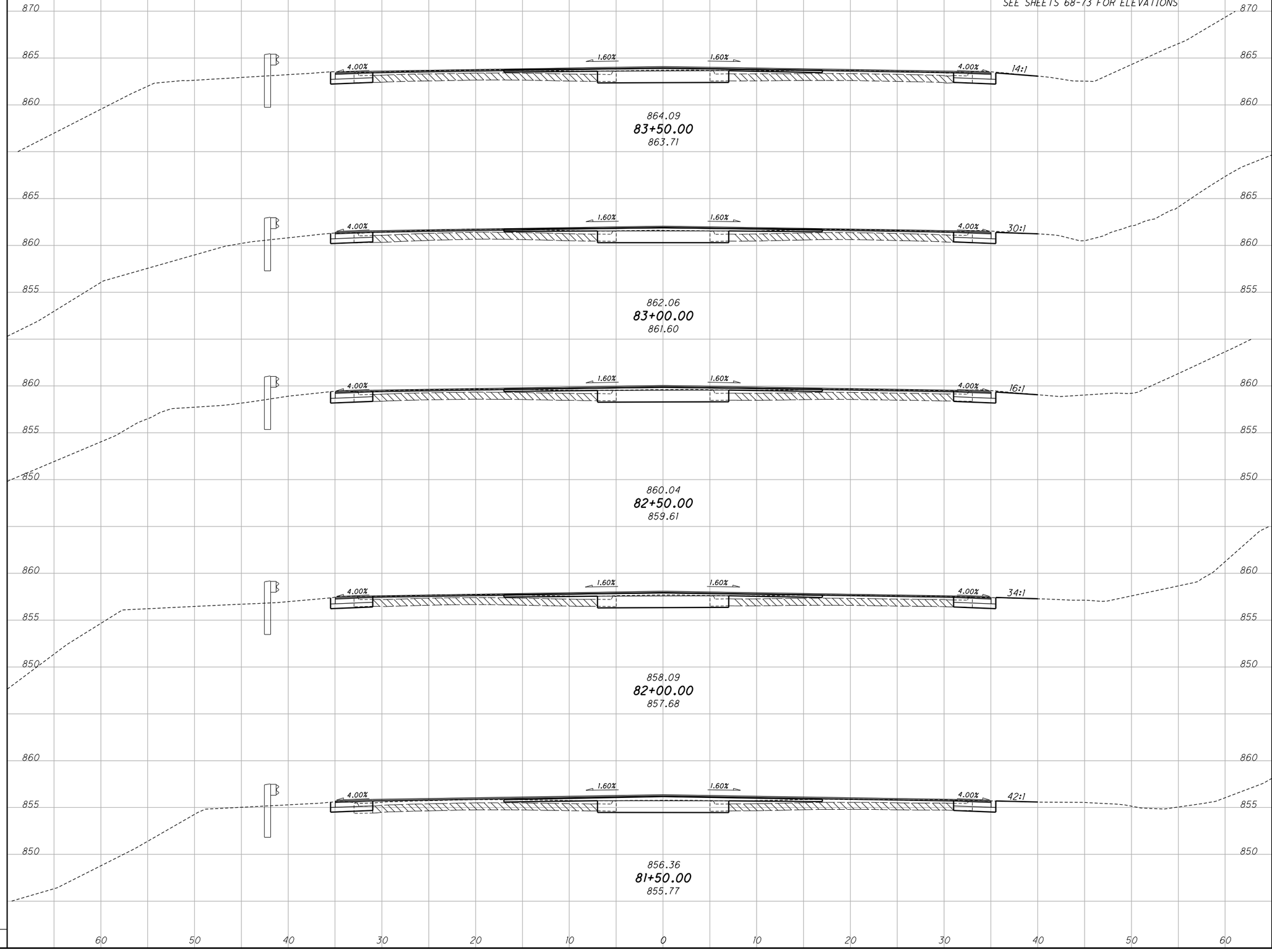
GUE-22/723-0.00
/0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_24 3/4/2019 3:25:27 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 81+50.00 TO STA. 83+50.00

GUE-22/723-0.00
/ 0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_25 3/4/2019 3:25:29 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

DRIVE

12.5'
ITEM 304
AGGREGATE BASE

12:1 25:1 4.00% 1.60% 1.60% 4.00% 13:1

40.3' LT
872.78

873.64
86+00.00
873.08

4.00% 1.60% 1.60% 4.00% 25:1

871.90
85+50.00
871.54

4.00% 1.60% 1.60% 4.00% 17:1

870.03
85+00.00
869.55

4.00% 1.60% 1.60% 4.00% 10:1

868.15
84+50.00
867.71

4.00% 1.60% 1.60% 4.00% 9:1

866.19
84+00.00
865.77

CROSS OVER

880 875 870 865 860

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 84+00.00 TO STA. 86+00.00

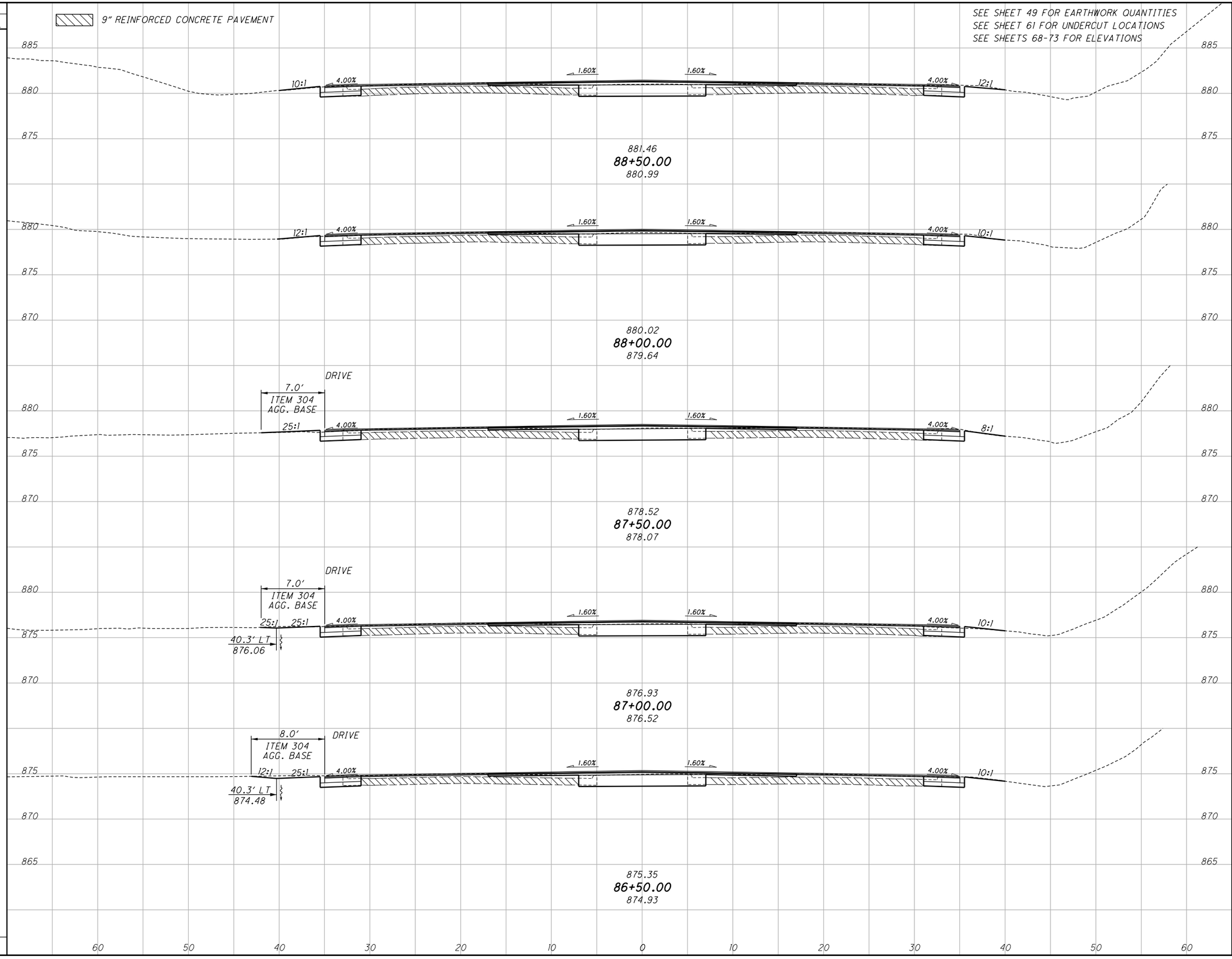
GUE-22/723-0.00
/ 0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 86+50.00 TO STA. 88+50.00

GUE-22/723-0.00
/ 0.70

119
188

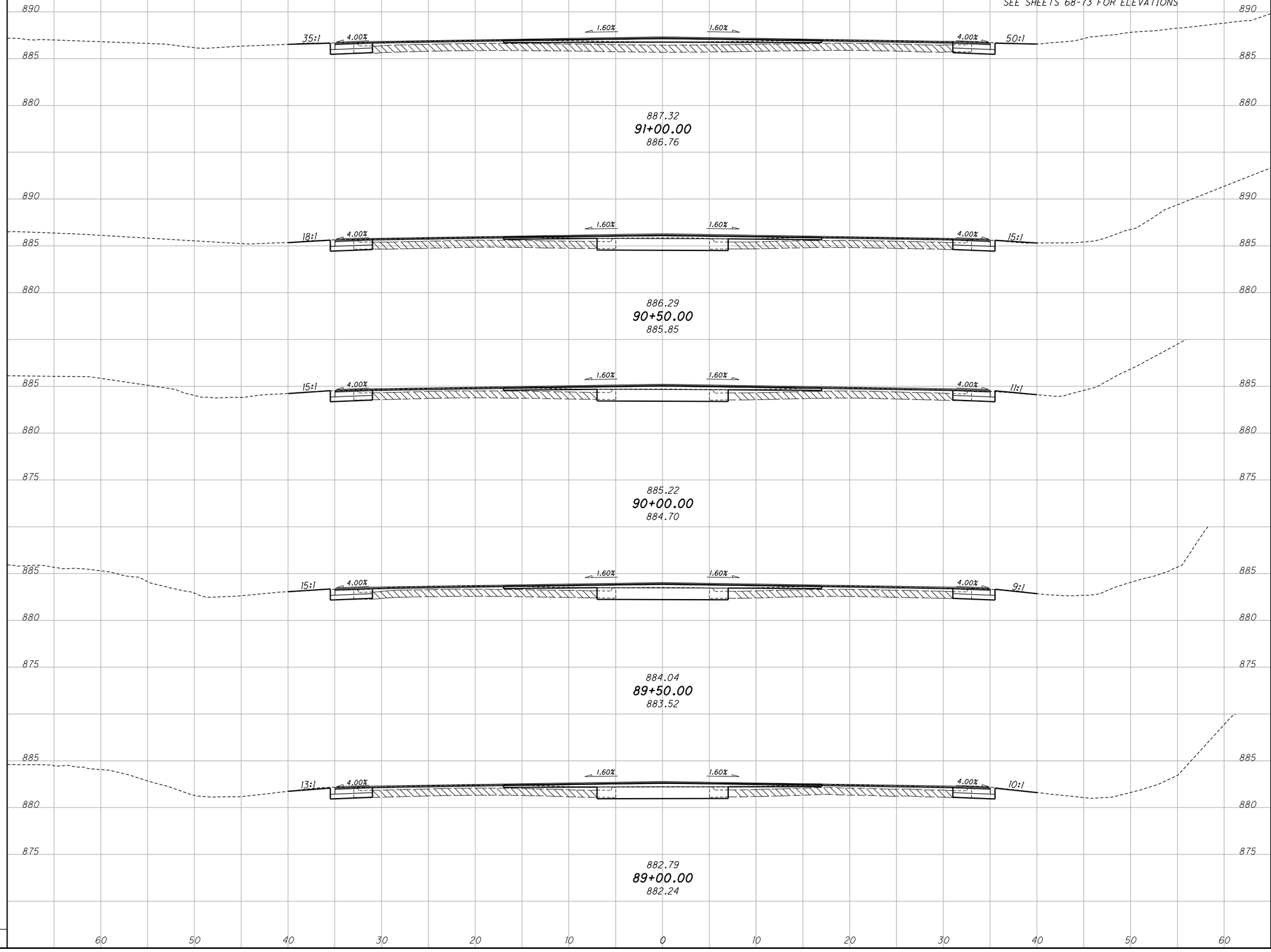
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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

CROSS OVER

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 89+00.00 TO STA. 91+00.00

GUE-22/723-0.00
/ 0.70

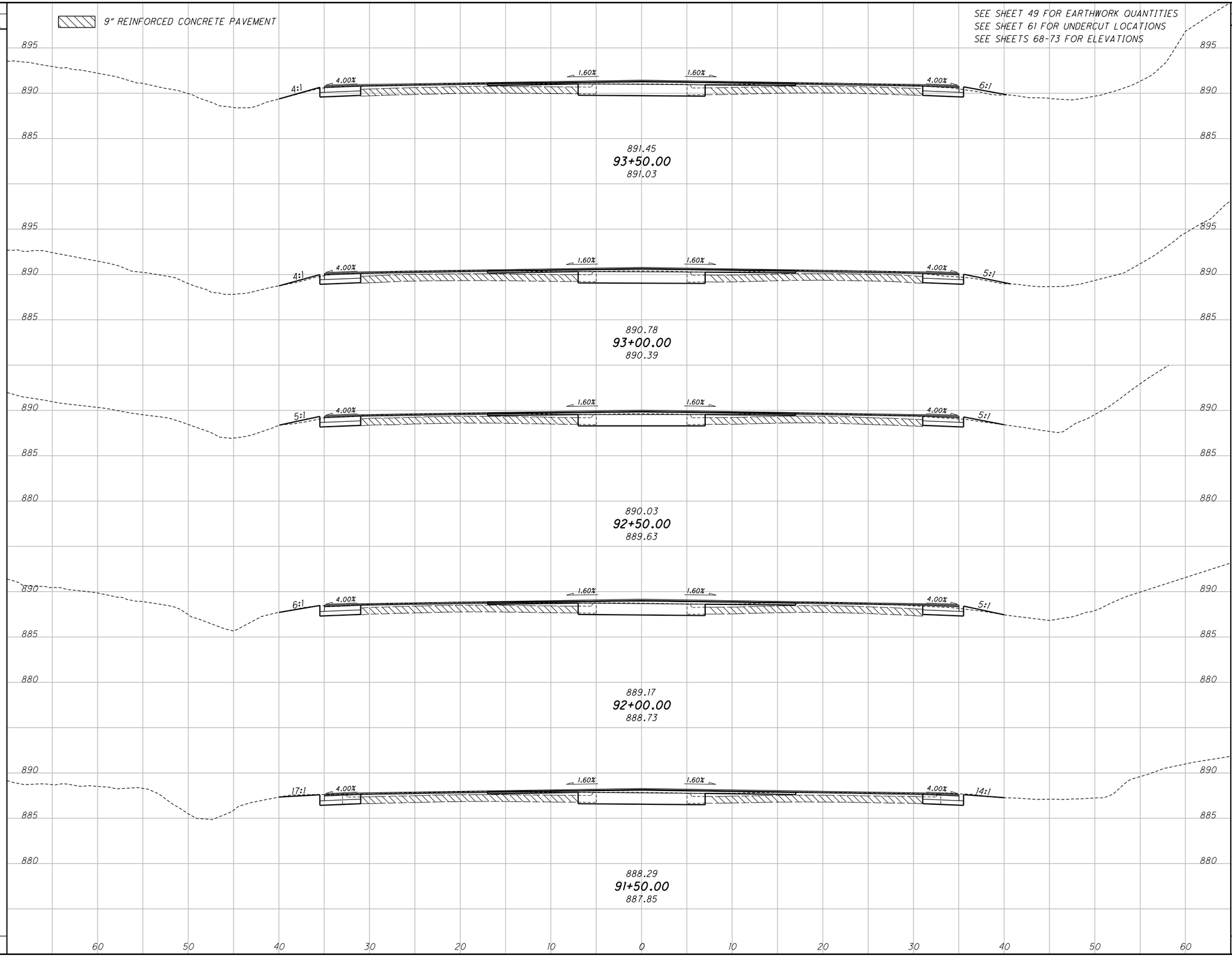
120
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_28 3/4/2019 3:25:36 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 91+50.00 TO STA. 93+50.00

GUE-22/723-0.00
/ 0.70

121
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_29 3/4/2019 3:25:38 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

893.78
96+00.00
893.22

CROSS OVER

SAMPSON RD.
(NO WORK)

893.43
95+50.00
892.83

893.05
95+00.00
892.62

892.56
94+50.00
892.16

892.04
94+00.00
891.63

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 96+00.00 TO STA. 94+00.00

GUE-22/723-0.00
/ 0.70

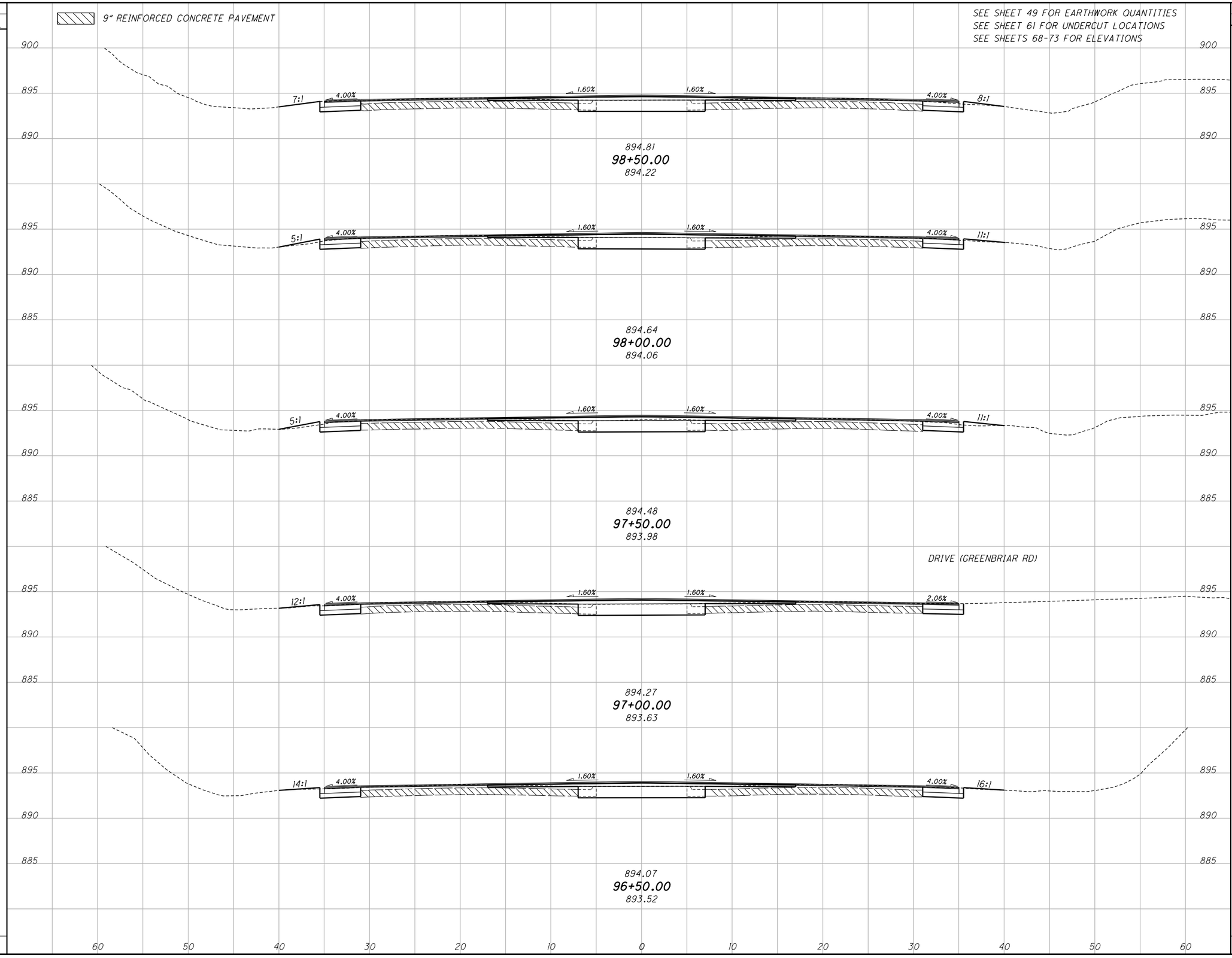
122
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 96+50.00 TO STA. 98+50.00

GUE-22/723-0.00
/ 0.70

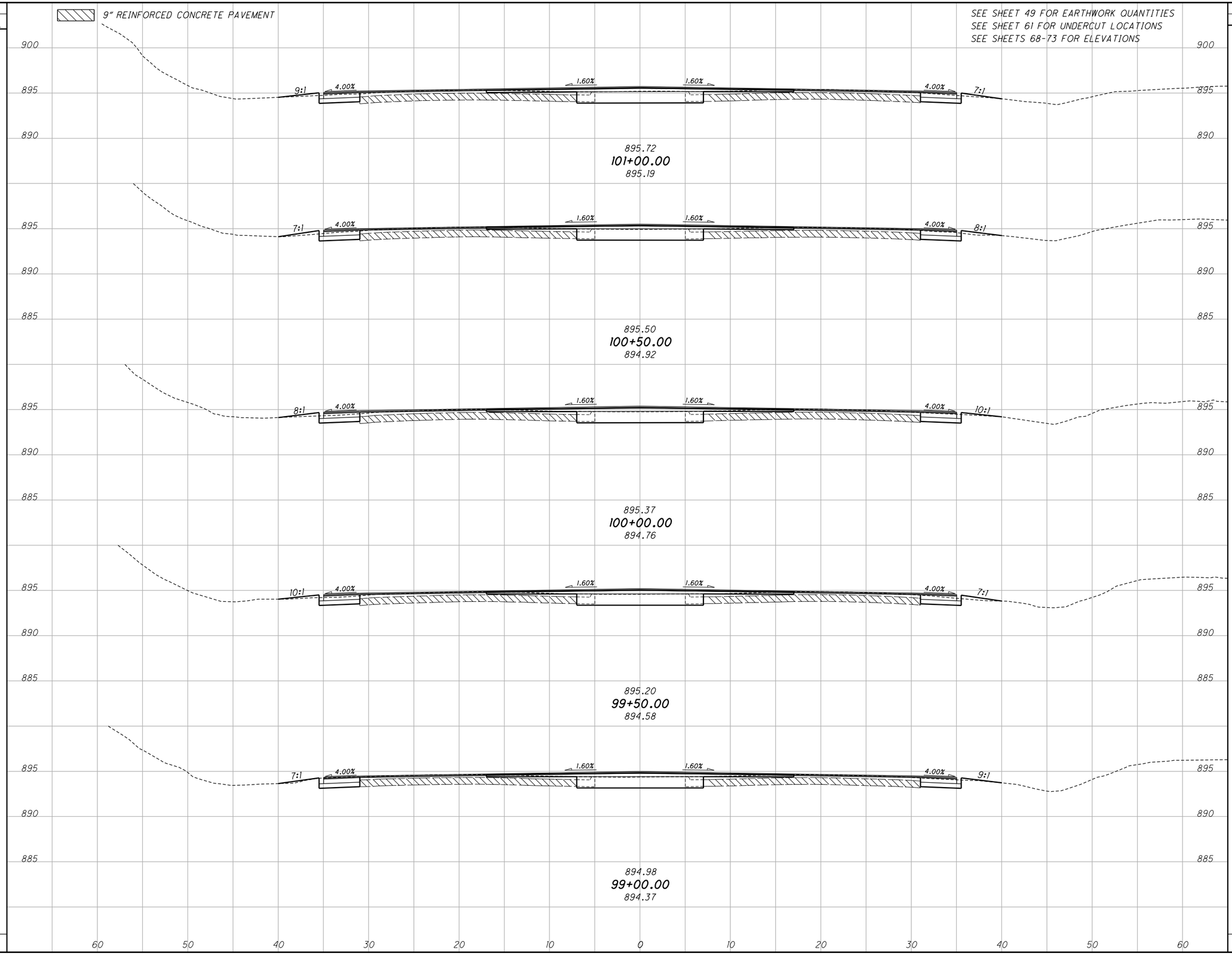
123
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_3| 3/4/2019 3:25:43 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 99+00.00 TO STA. 101+00.00

GUE-22/723-0.00
/ 0.70

124
188

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SEEDING	
END WIDTH	SQ. YDS.

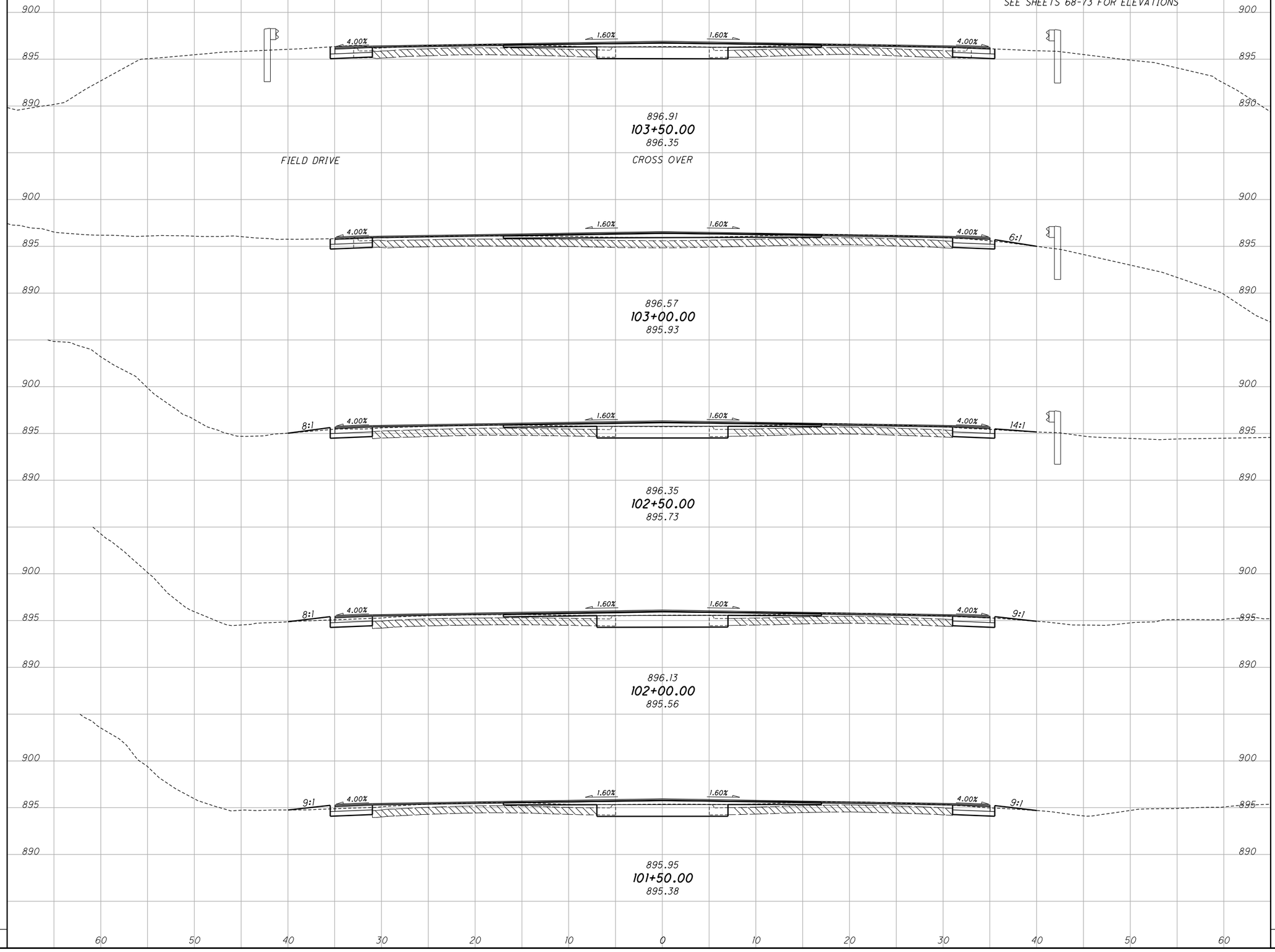
9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 101+50.00 TO STA. 103+50.00

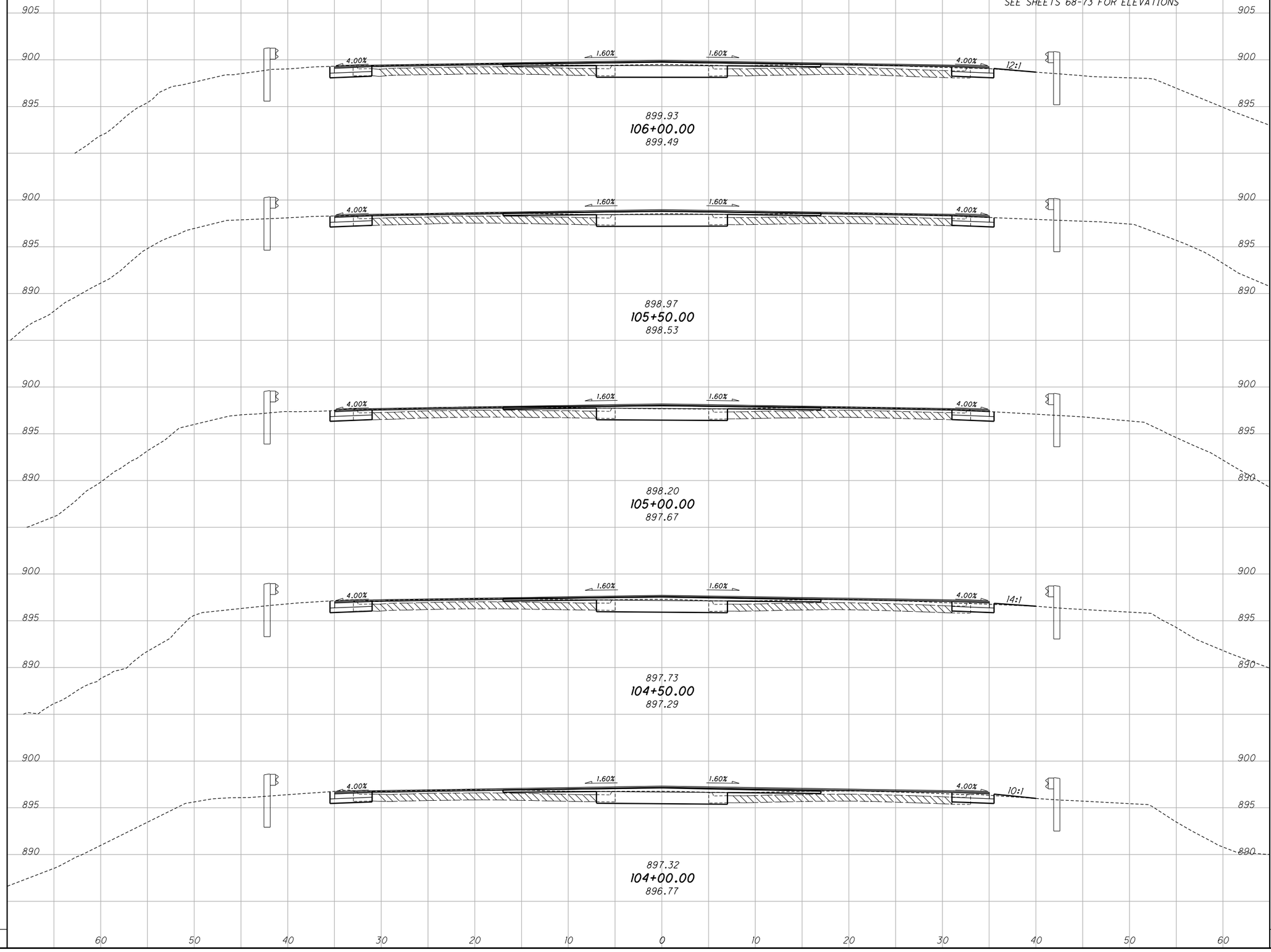
GUE-22/723-0.00
/ 0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 104+00.00 TO STA. 106+00.00

GUE-22/723-0.00
/ 0.70

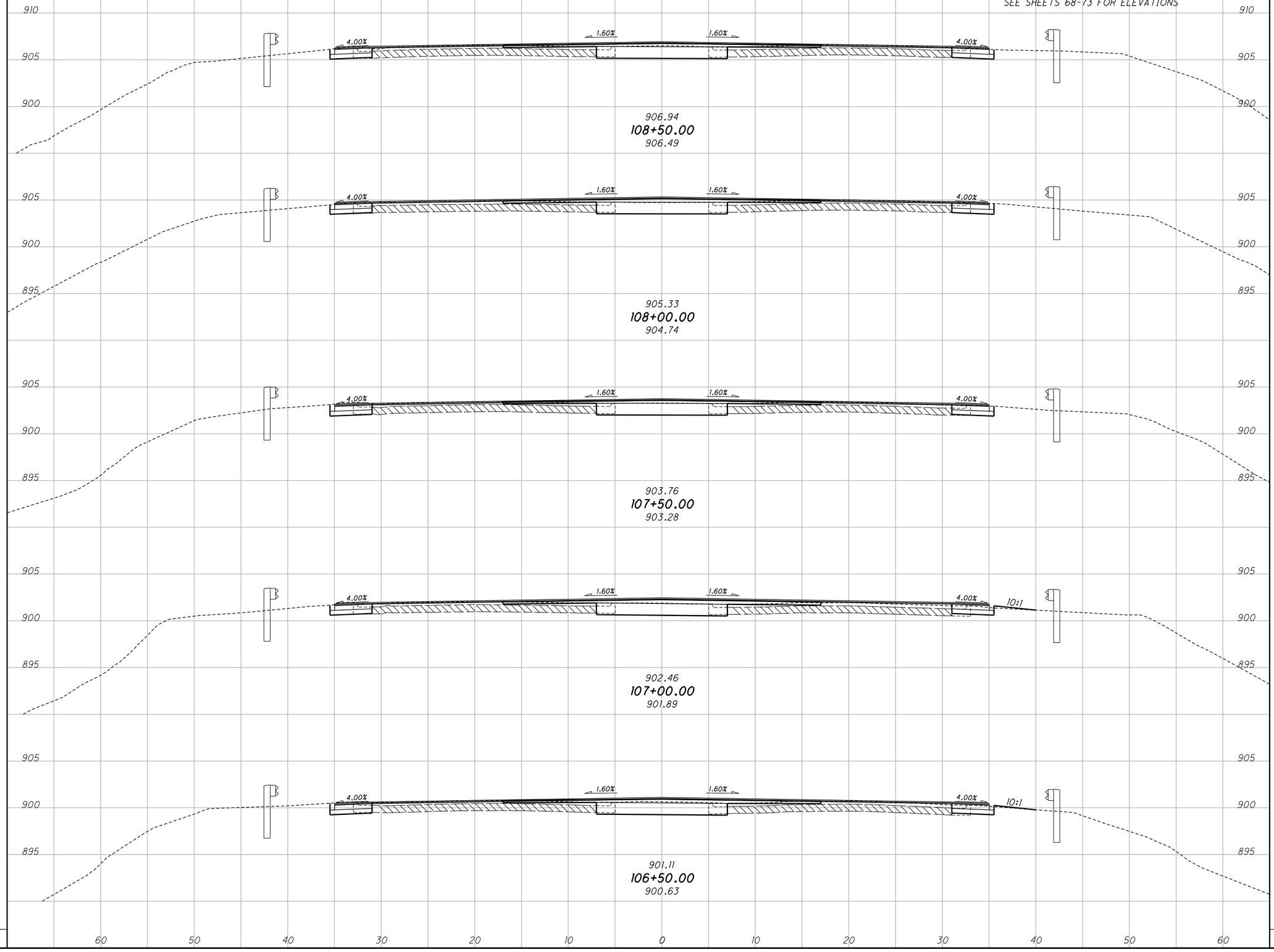
126
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_34 3/4/2019 3:25:50 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 106+50.00 TO STA. 108+50.00

GUE-22/723-0.00
/ 0.70

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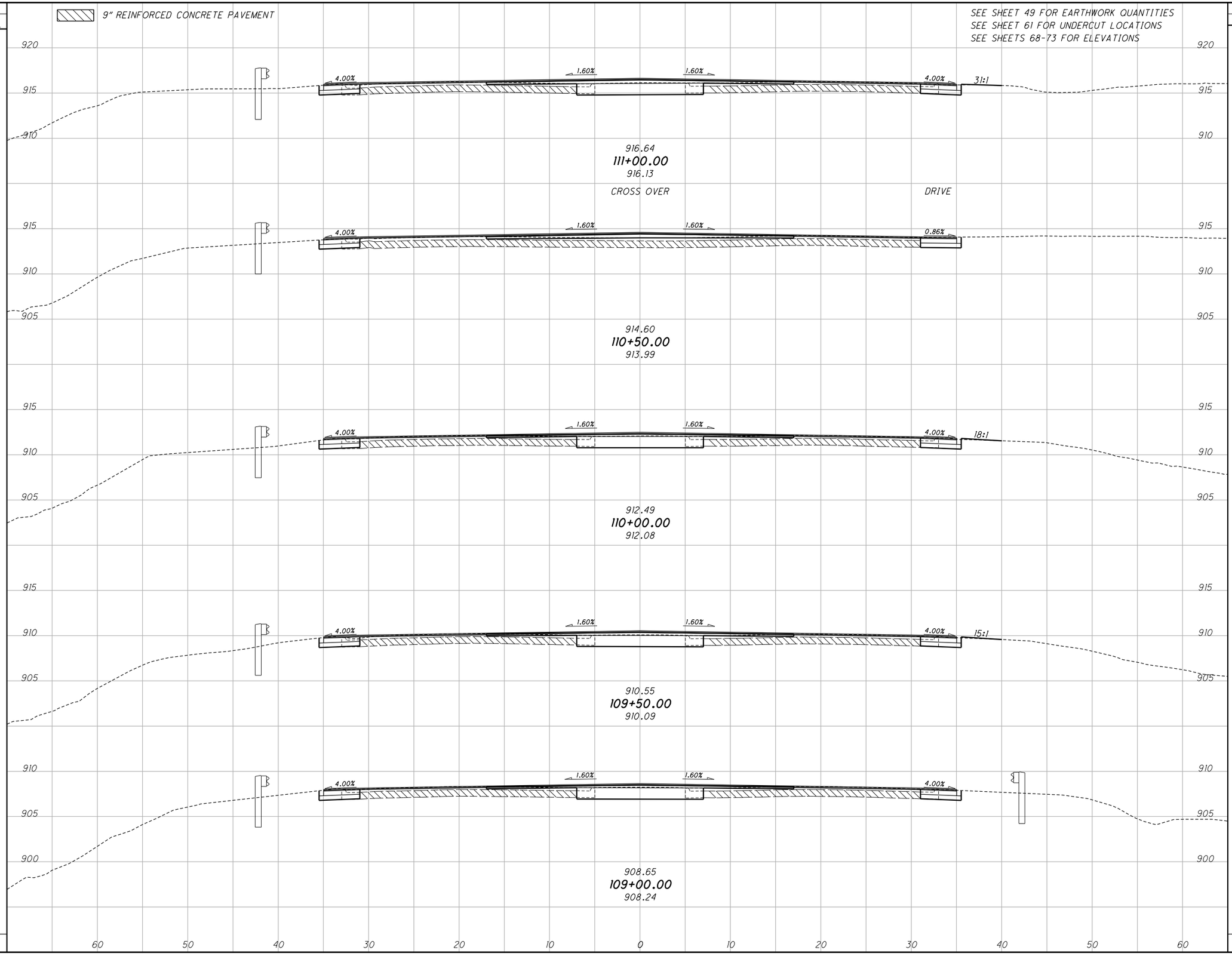
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 109+00.00 TO STA. 111+00.00

GUE-22/723-0.00
/ 0.70

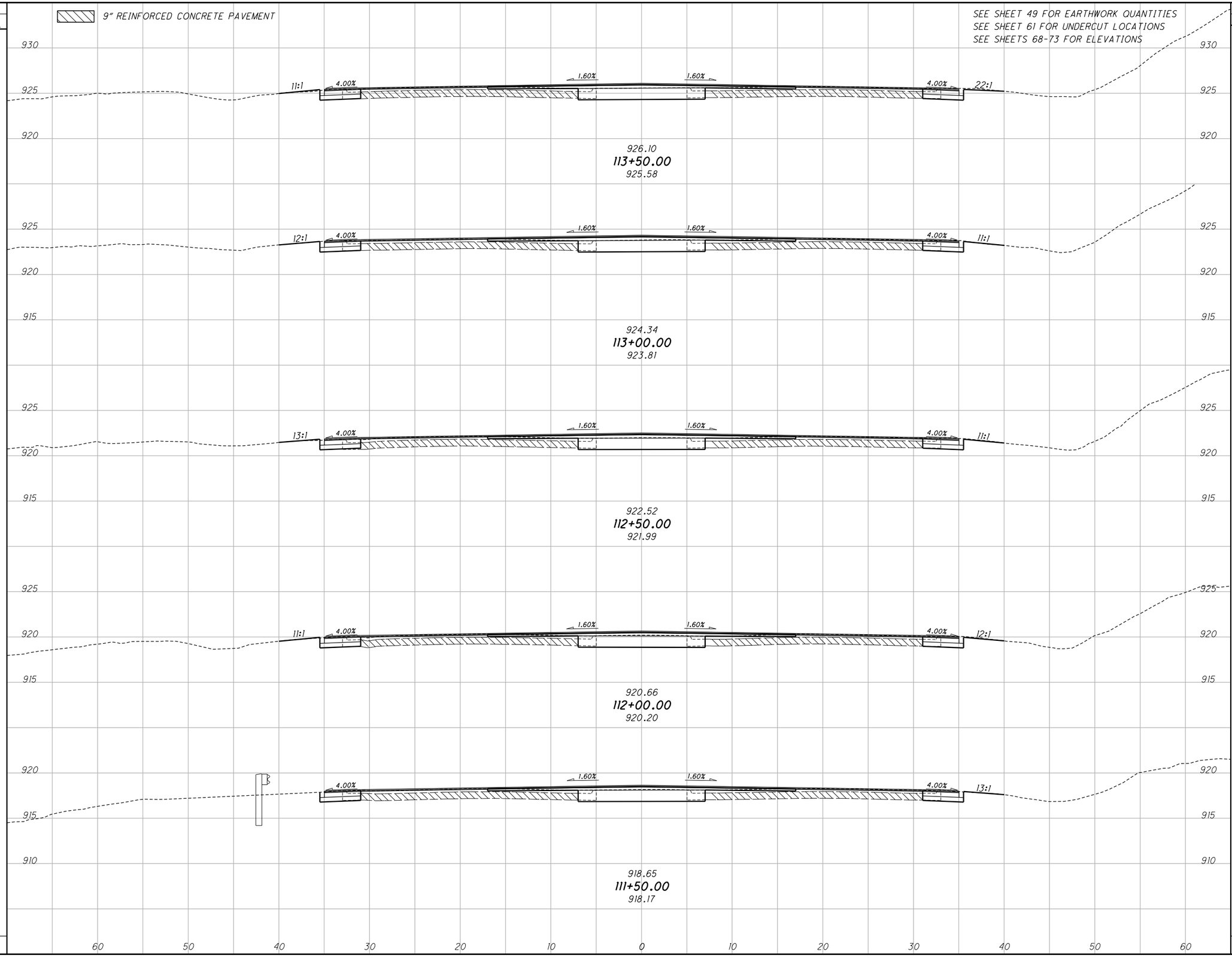
128
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 111+50.00 TO STA. 113+50.00

GUE-22/723-0.00
/0.70

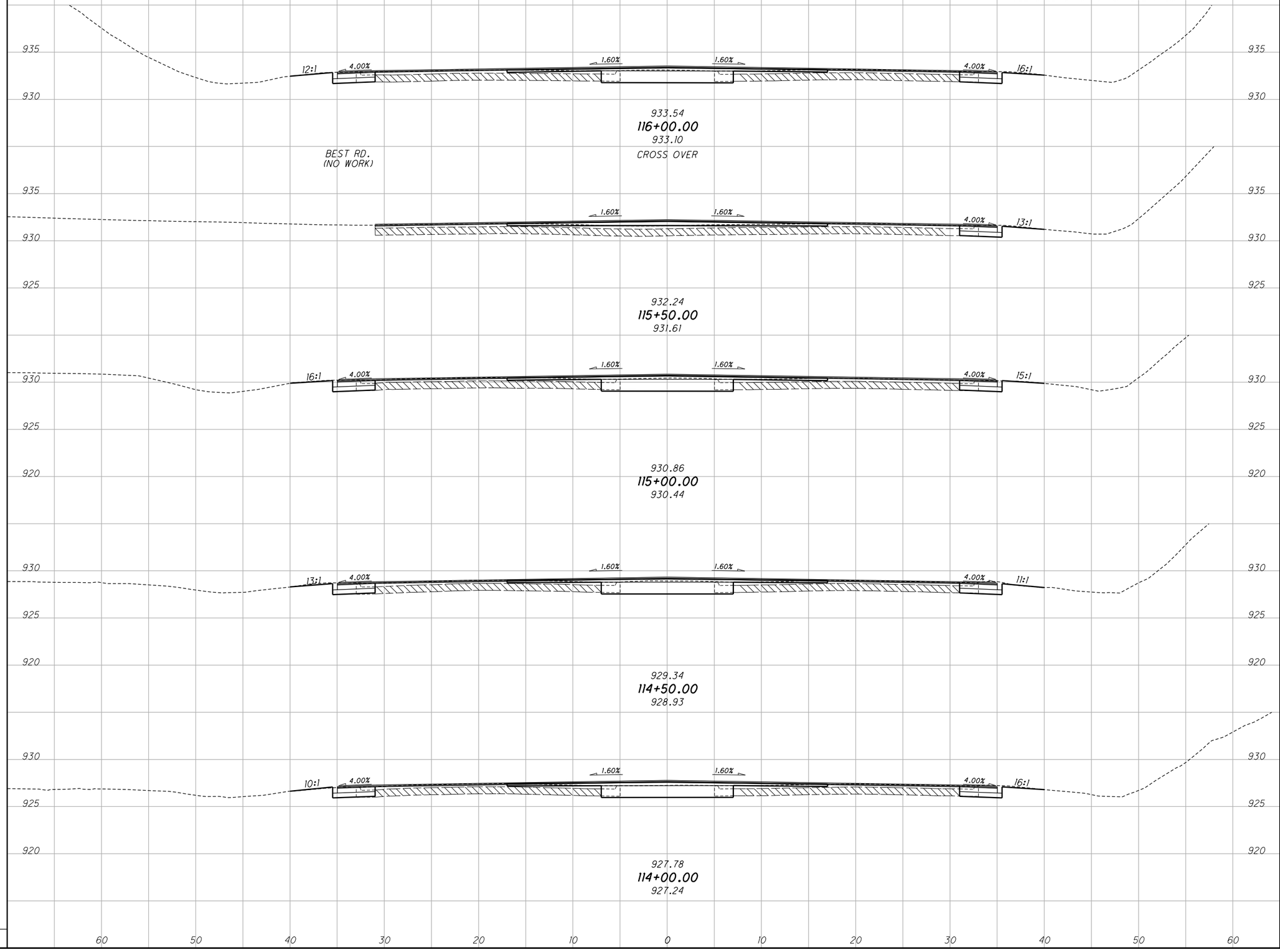
129
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 114+00.00 TO STA. 116+00.00

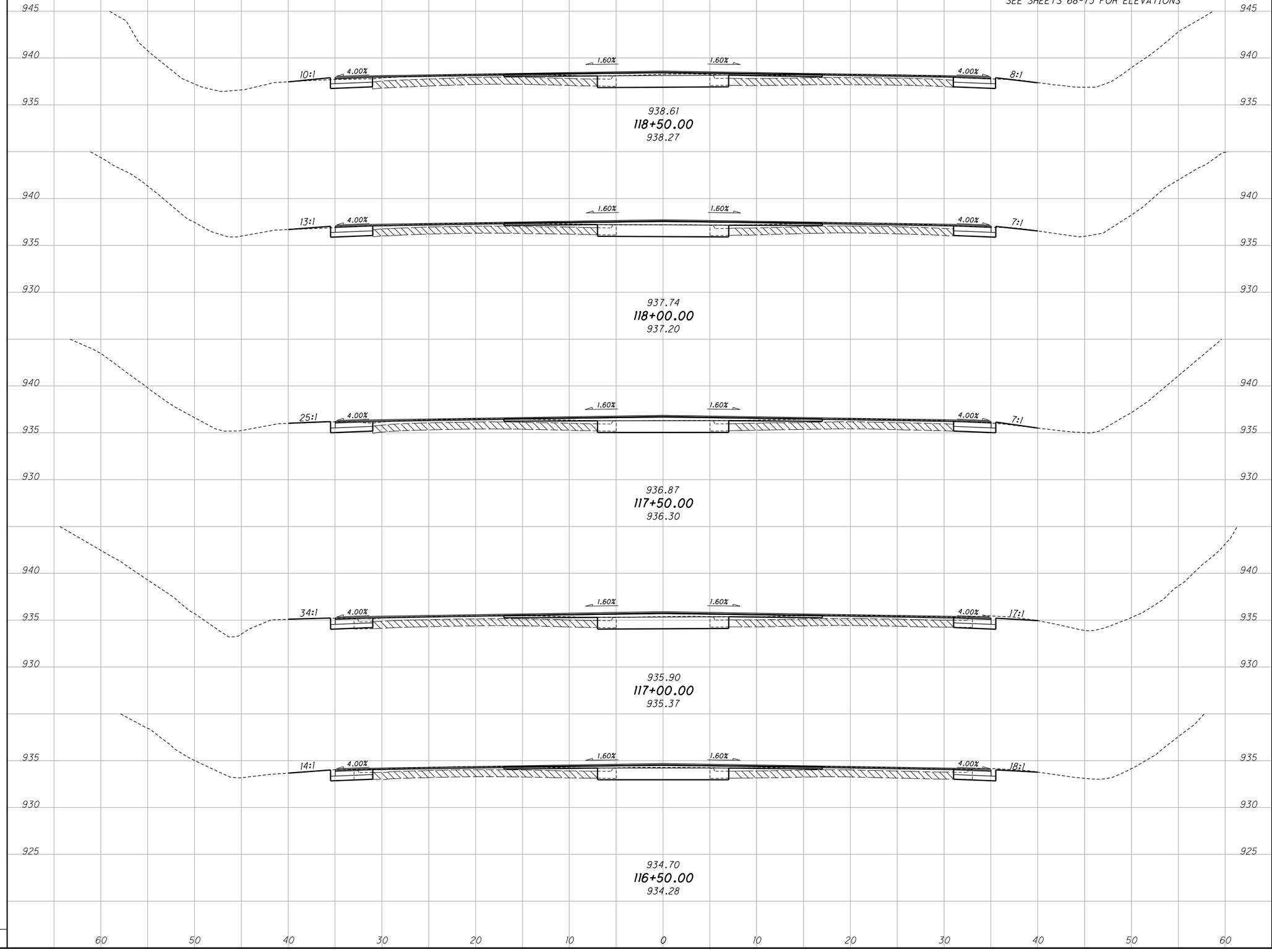
GUE-22/723-0.00
/ 0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 116+50.00 TO STA. 118+50.00

GUE-22/723-0.00
/ 0.70

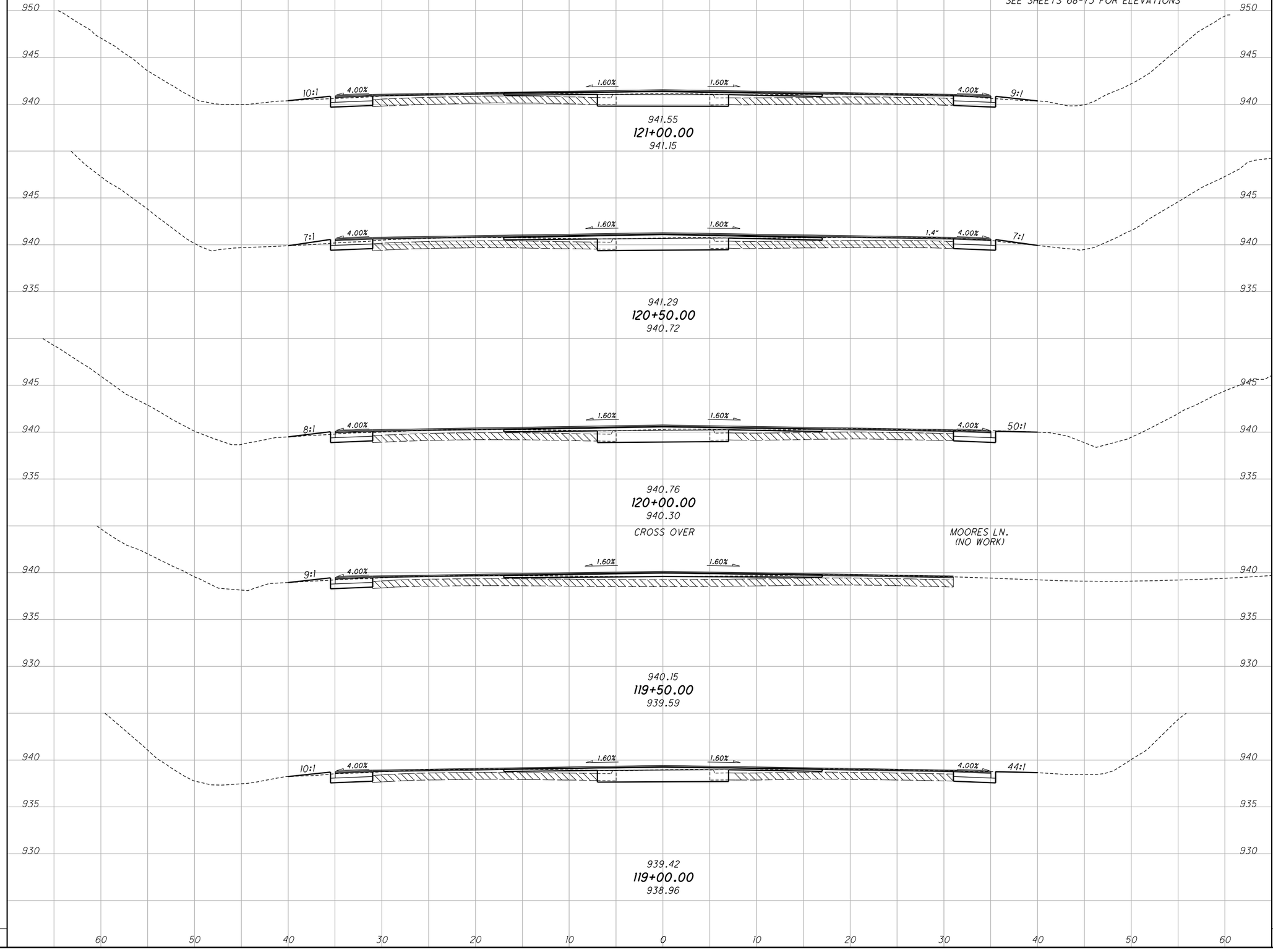
131
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 119+00.00 TO STA. 121+00.00

GUE-22/723-0.00
/ 0.70

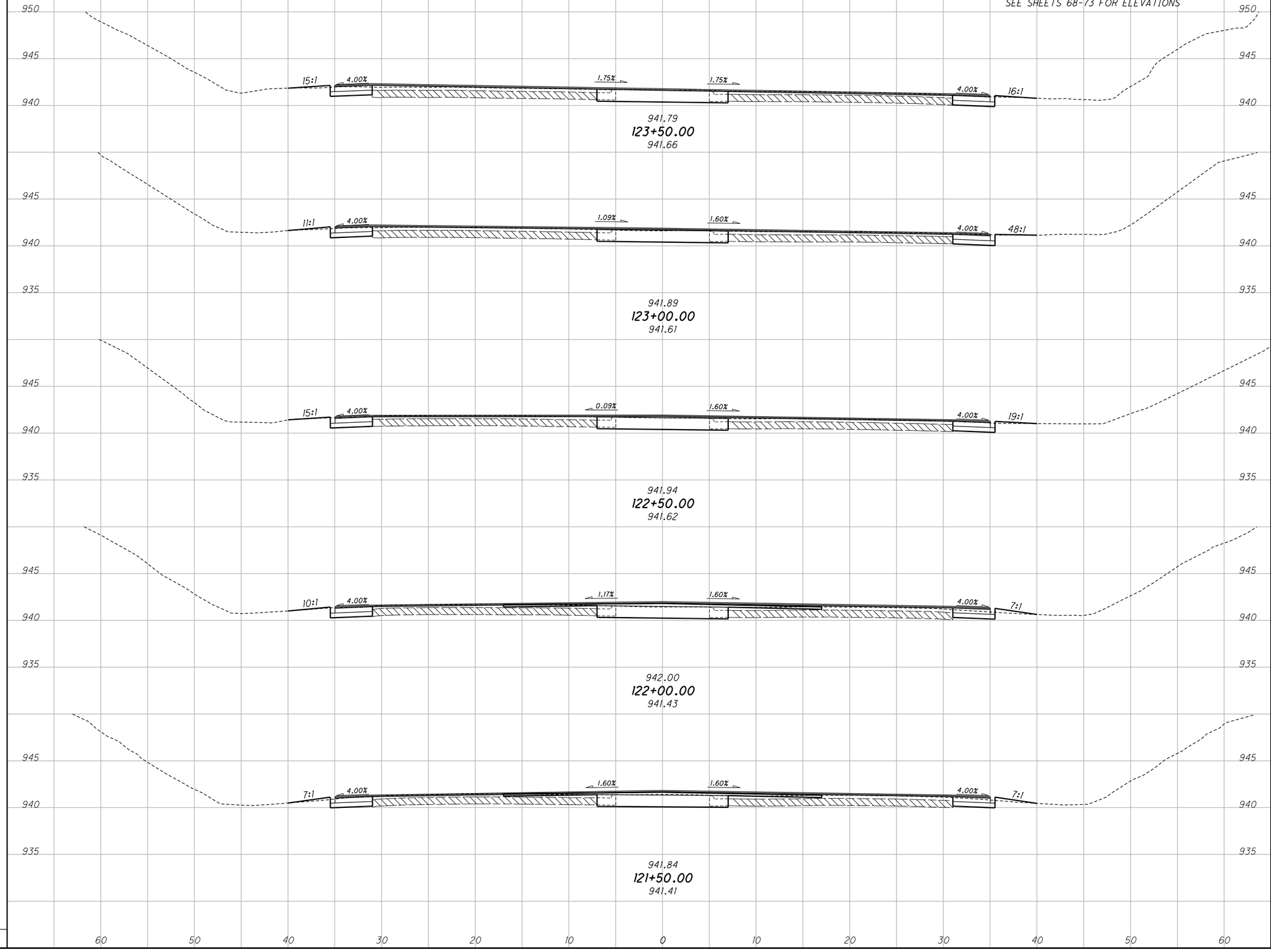
132
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 121+50.00 TO STA. 123+50.00

GUE-22/723-0.00
/ 0.70

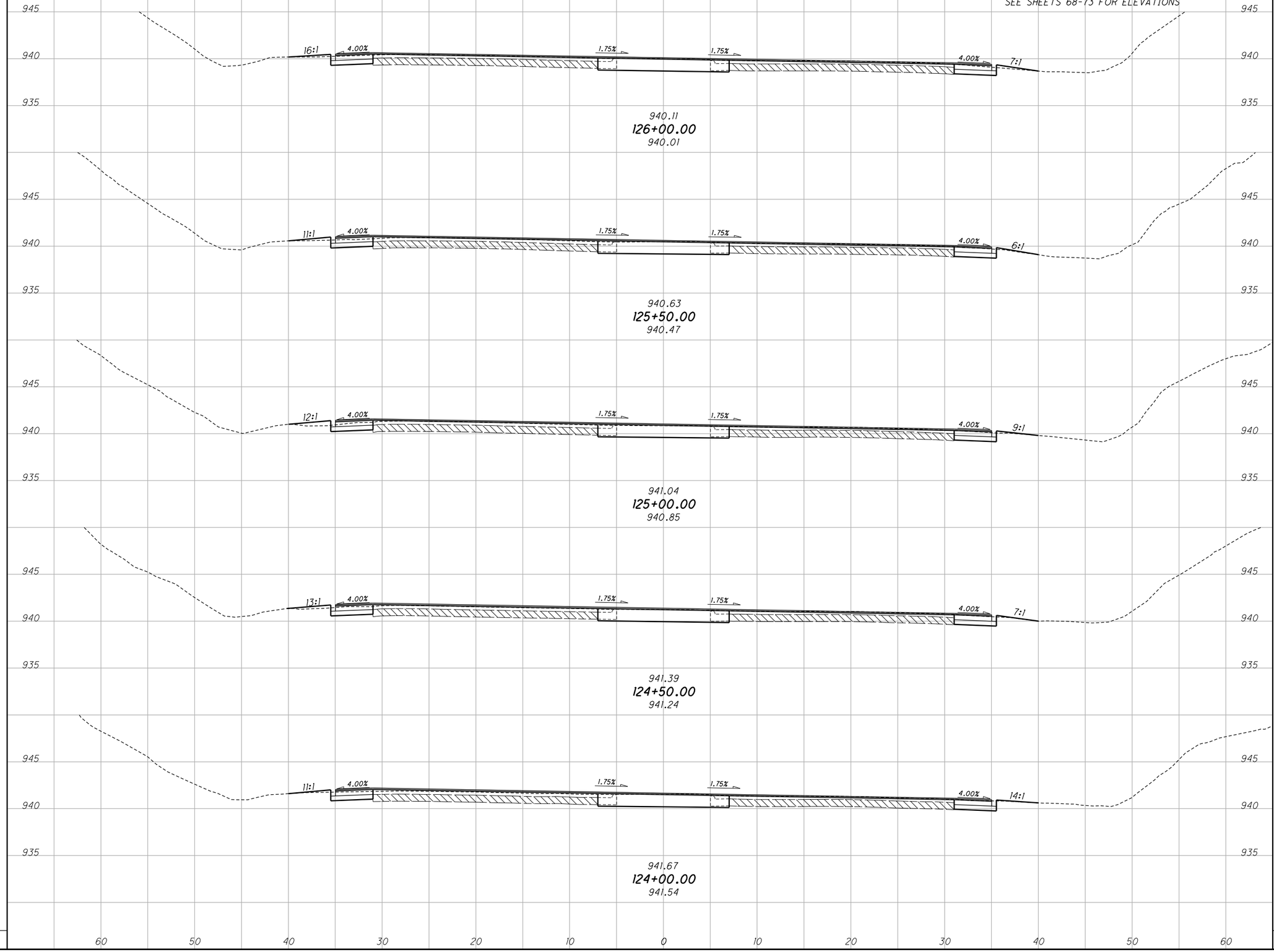
133
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 124+00.00 TO STA. 126+00.00

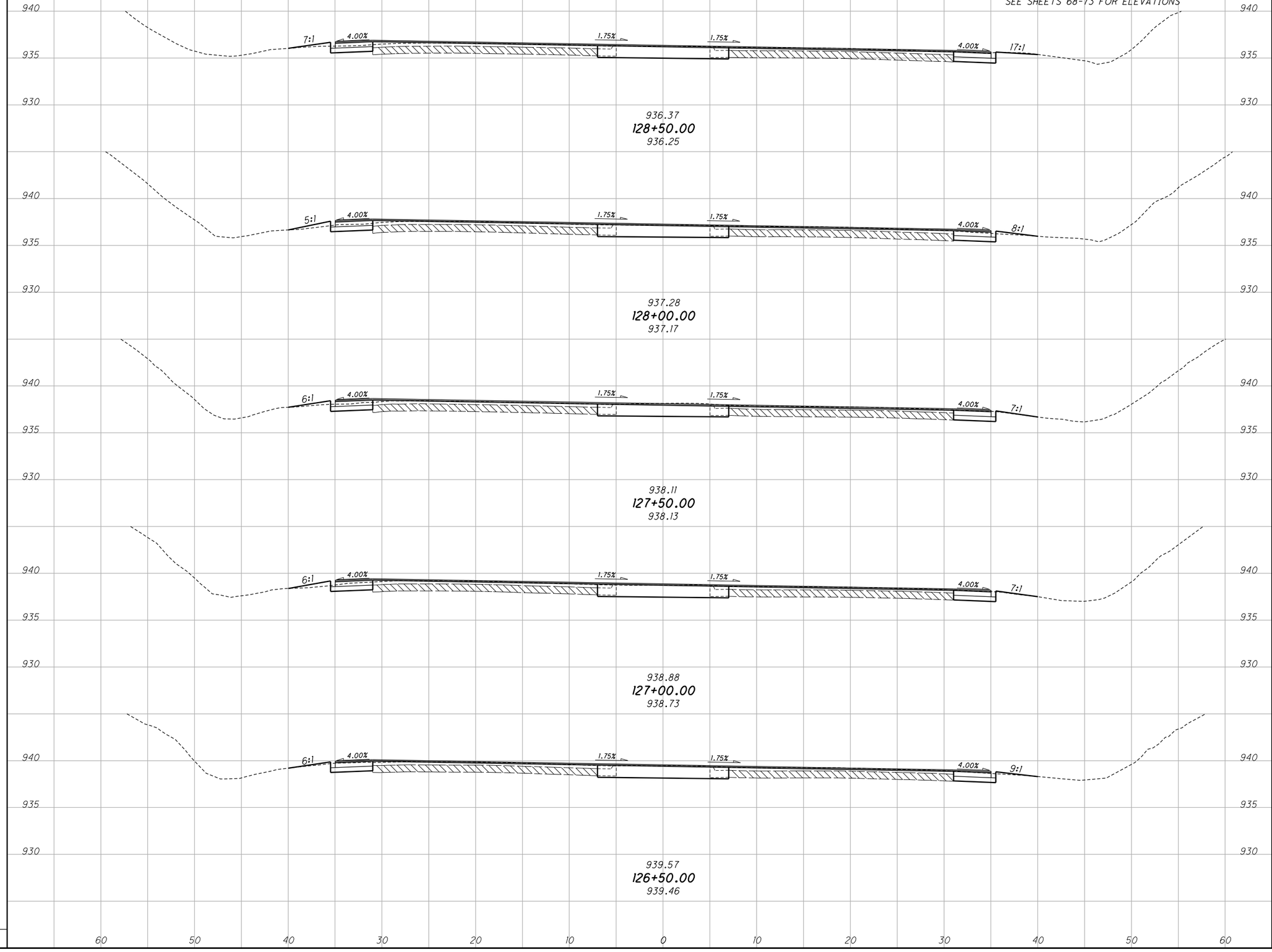
GUE-22/723-0.00
/0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 126+50.00 TO STA. 128+50.00

GUE-22/723-0.00
/ 0.70

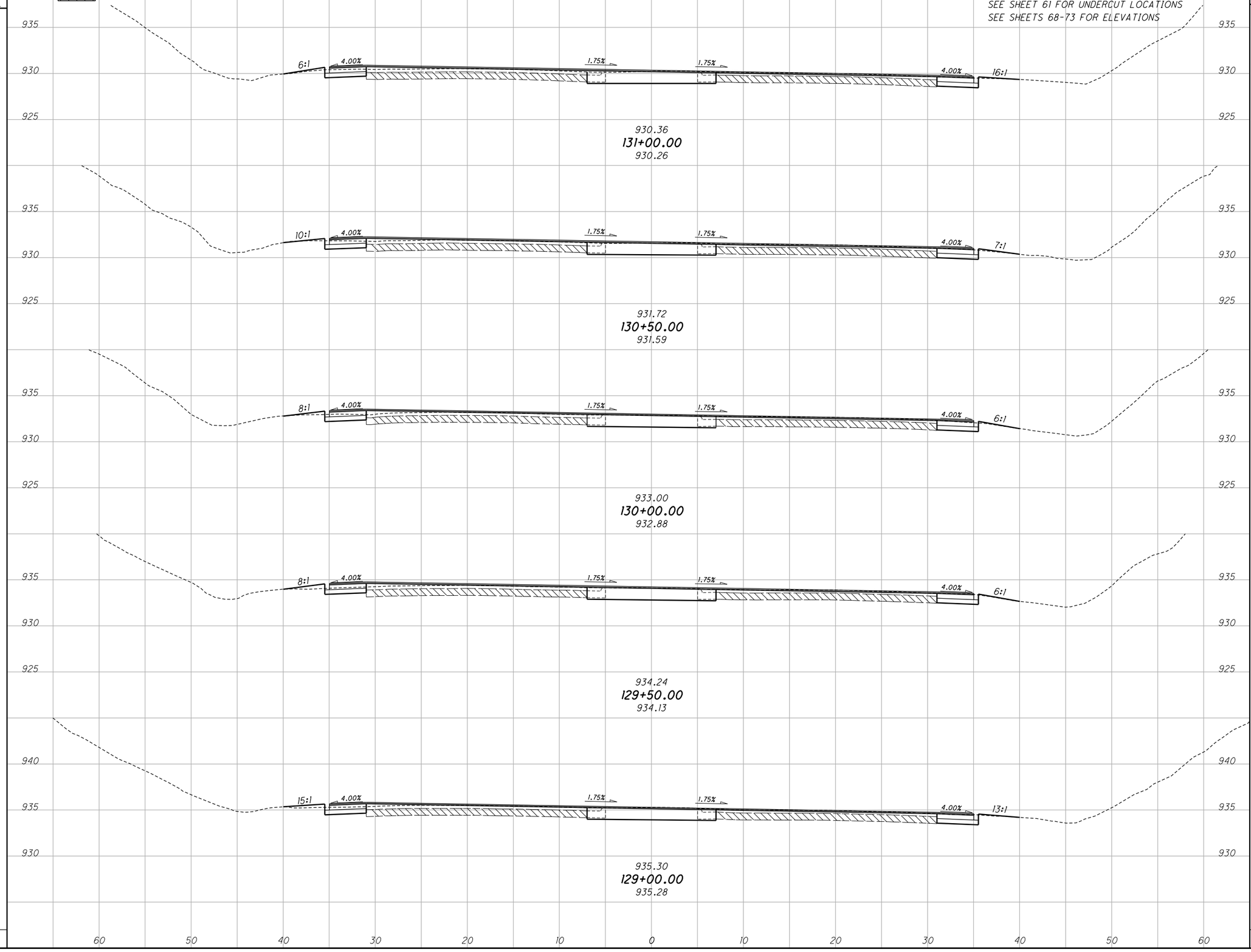
135
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 129+00.00 TO STA. 131+00.00

GUE-22/723-0.00
/ 0.70

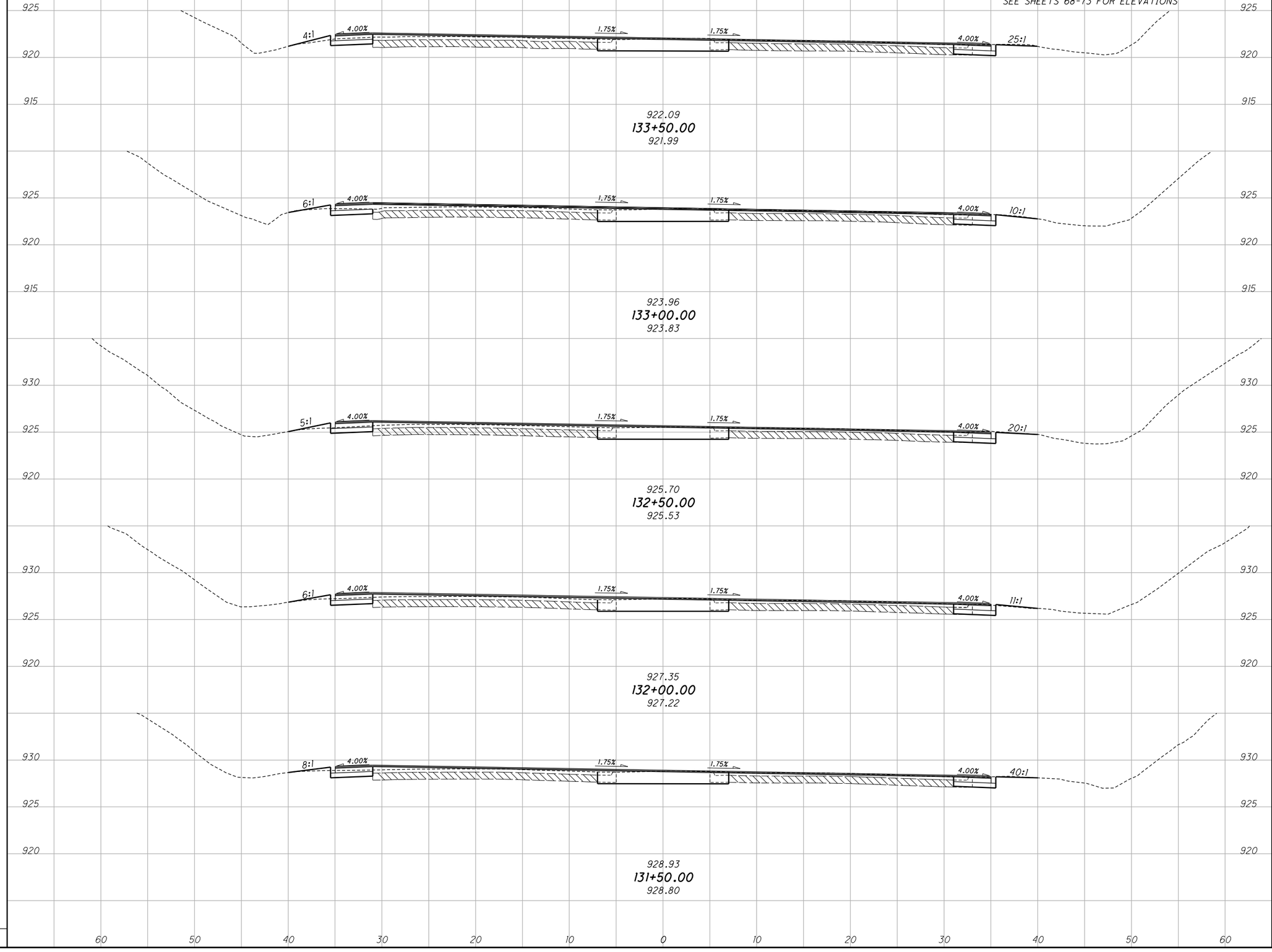
136
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_44 3/4/2019 3:26:14 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 131+50.00 TO STA. 133+50.00

GUE-22/723-0.00
/0.70

137
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_45 3/4/2019 3:26:17 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

915
910
905

4.00% 1.75% 1.75% 4.00% 12:1

911.48
136+00.00
911.60

915
910
905

4.00% 1.75% 1.75% 4.00% 50:1

913.76
135+50.00
913.74

DRIVE

920
915
910

4.00% 1.75% 1.75% 4.00% 25:1

915.96
135+00.00
915.92

CROSS OVER

BEST RD.
(NO WORK)

DRIVE

12.5'
ITEM 304
AGGREGATE BASE

920
915
910

1.75% 1.75% 4.00% 25:1 9:1

39.0' RT
917.23

918.09
134+50.00
917.88

925
920
915

9:1 4.00% 1.75% 1.75% 4.00% 25:1 25:1

39.0' RT
919.32

920.18
134+00.00
920.16

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 134+00.00 TO STA. 136+00.00

GUE-22/723-0.00
/0.70

138
188

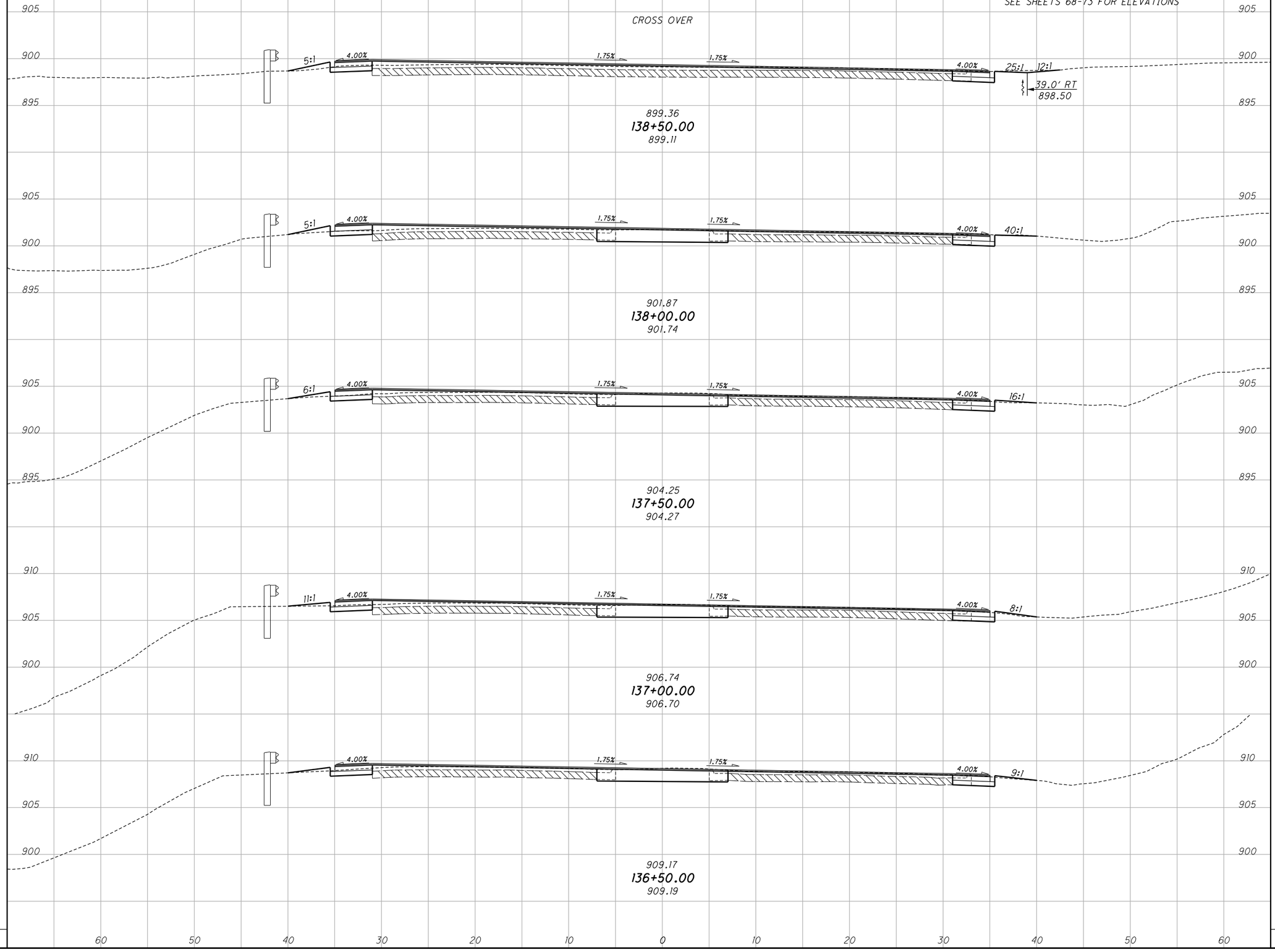
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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

CROSS OVER



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 136+50.00 TO STA. 138+50.00

GUE-22/723-0.00
/ 0.70

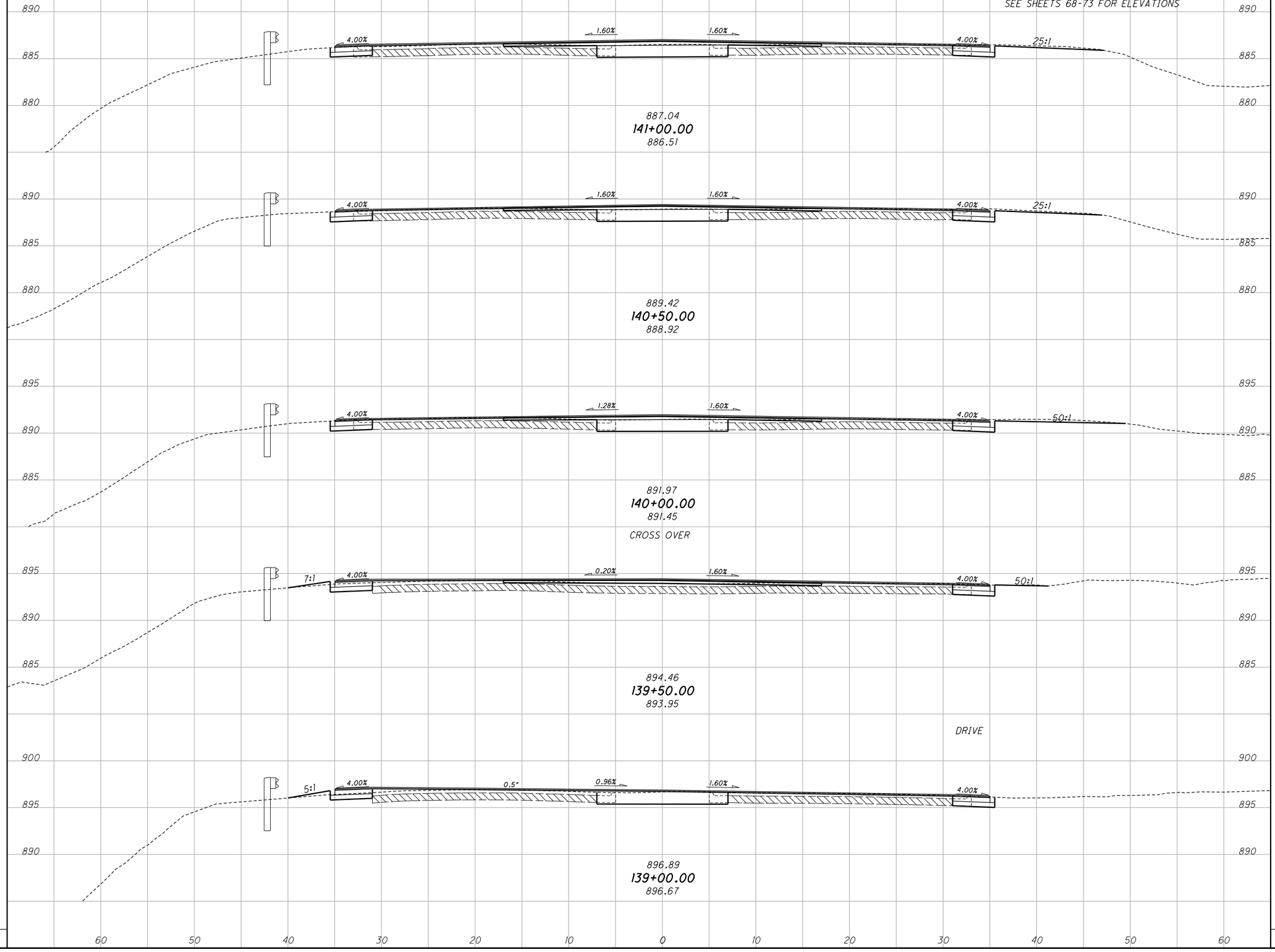
139
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_47 3/4/2019 3:26:21 PM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 139+00.00 TO STA. 141+00.00

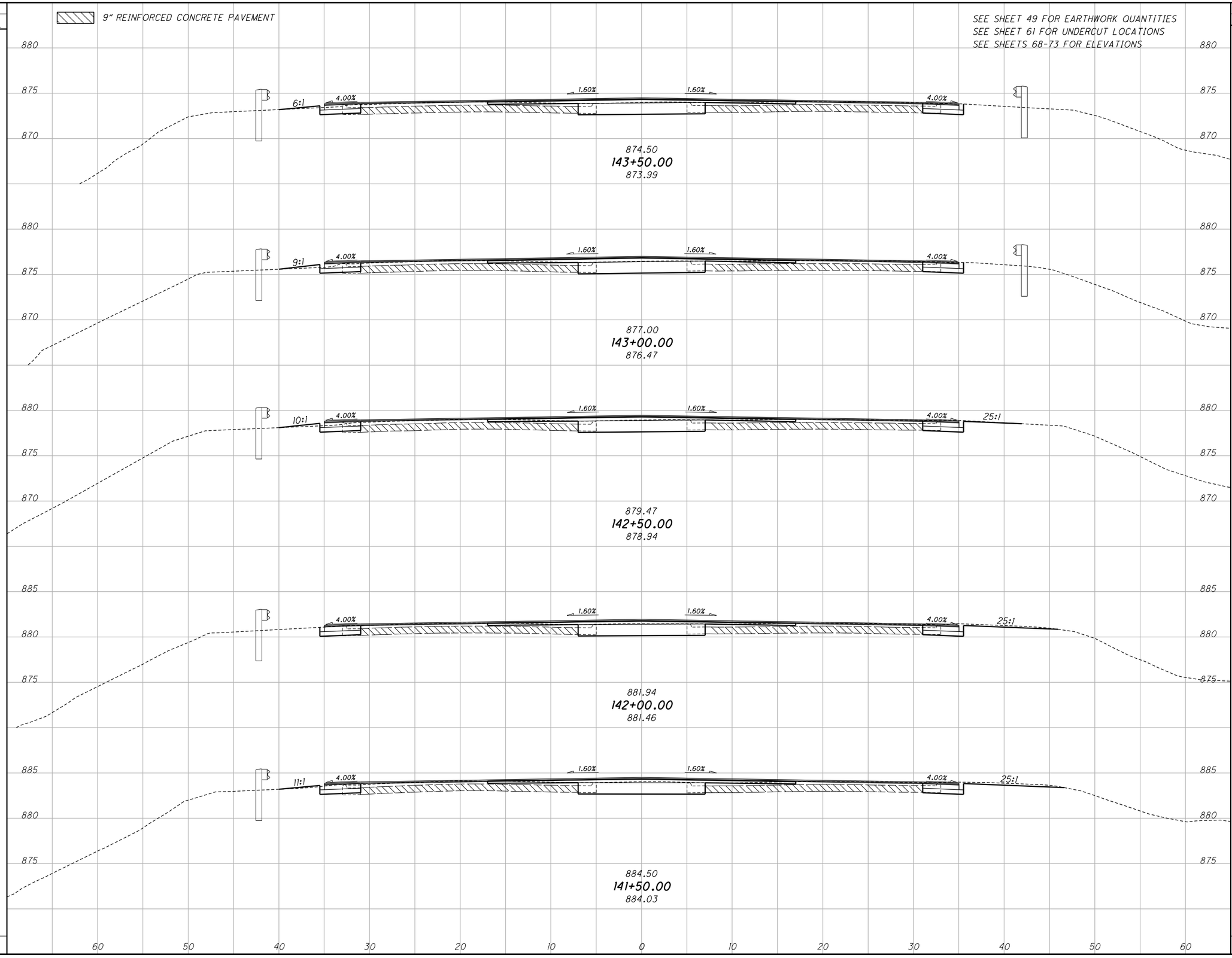
GUE-22/723-0.00
/0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_48 3/4/2019 3:26:24 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 141+50.00 TO STA. 143+50.00

GUE-22/723-0.00
/ 0.70

141
188

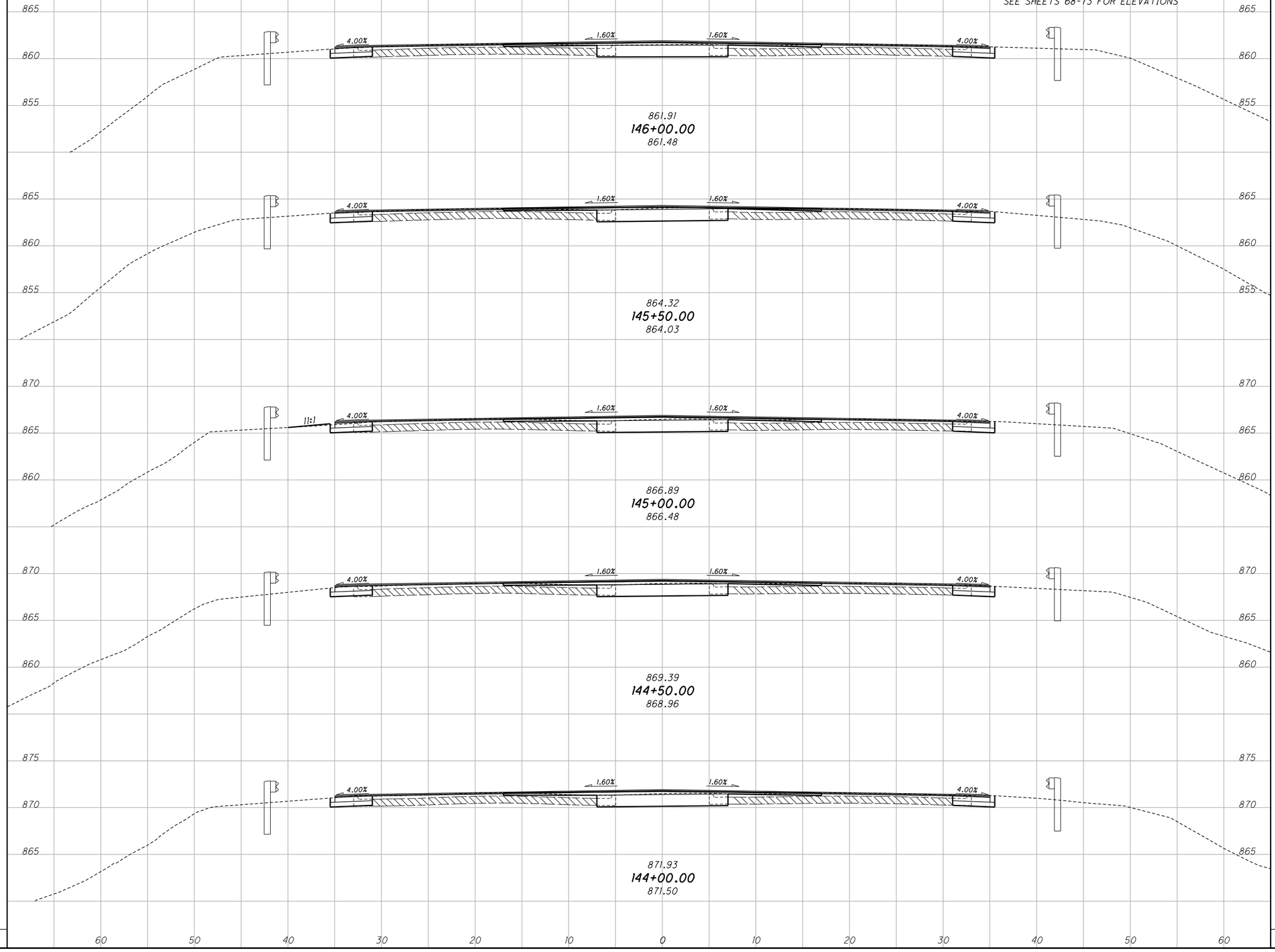
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SEEDING

END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 144+00.00 TO STA. 146+00.00

GUE-22/723-0.00
/ 0.70

142
188

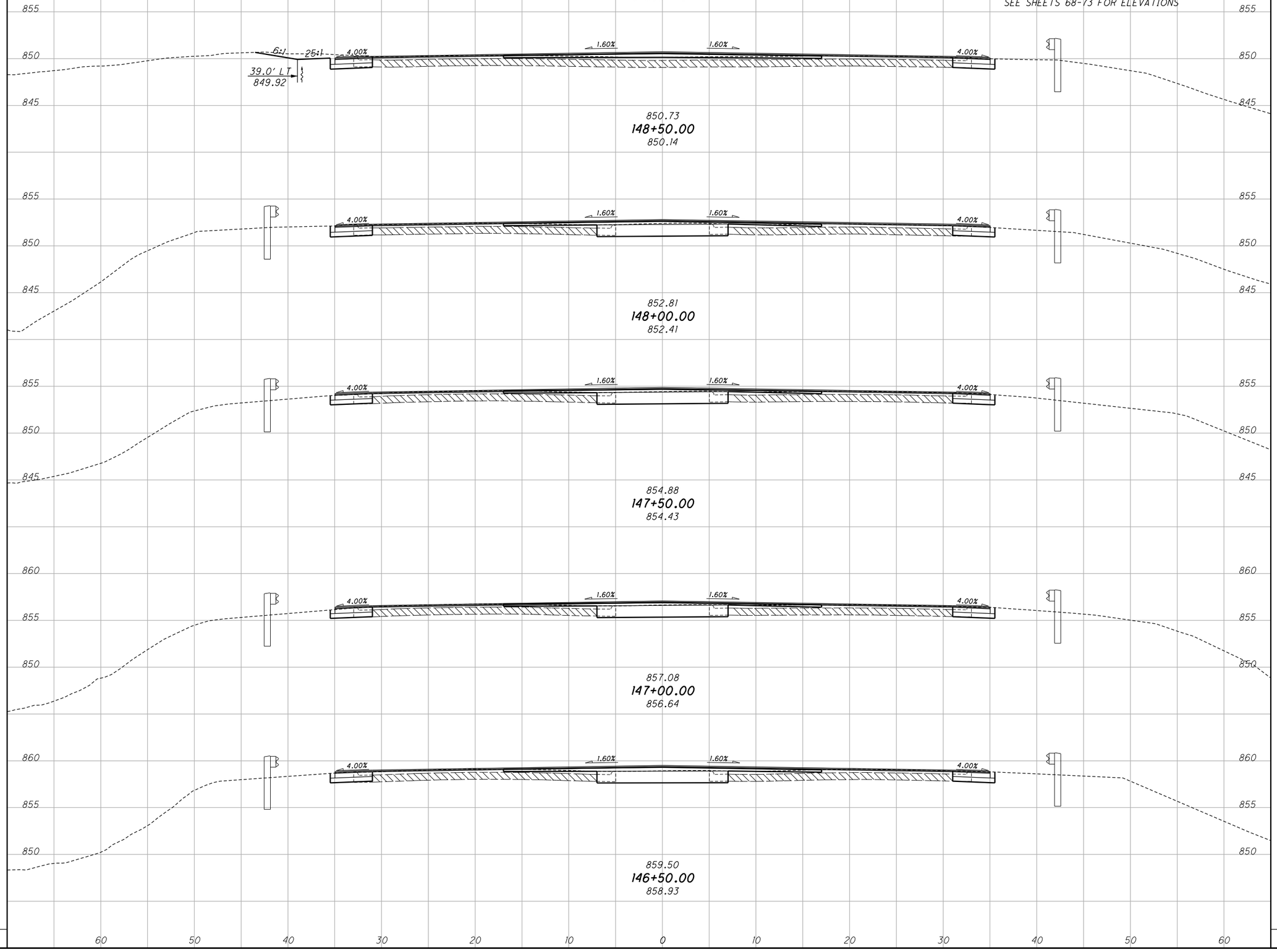
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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

CROSS OVER

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 146+50.00 TO STA. 148+50.00

GUE-22/723-0.00
/ 0.70

143
188

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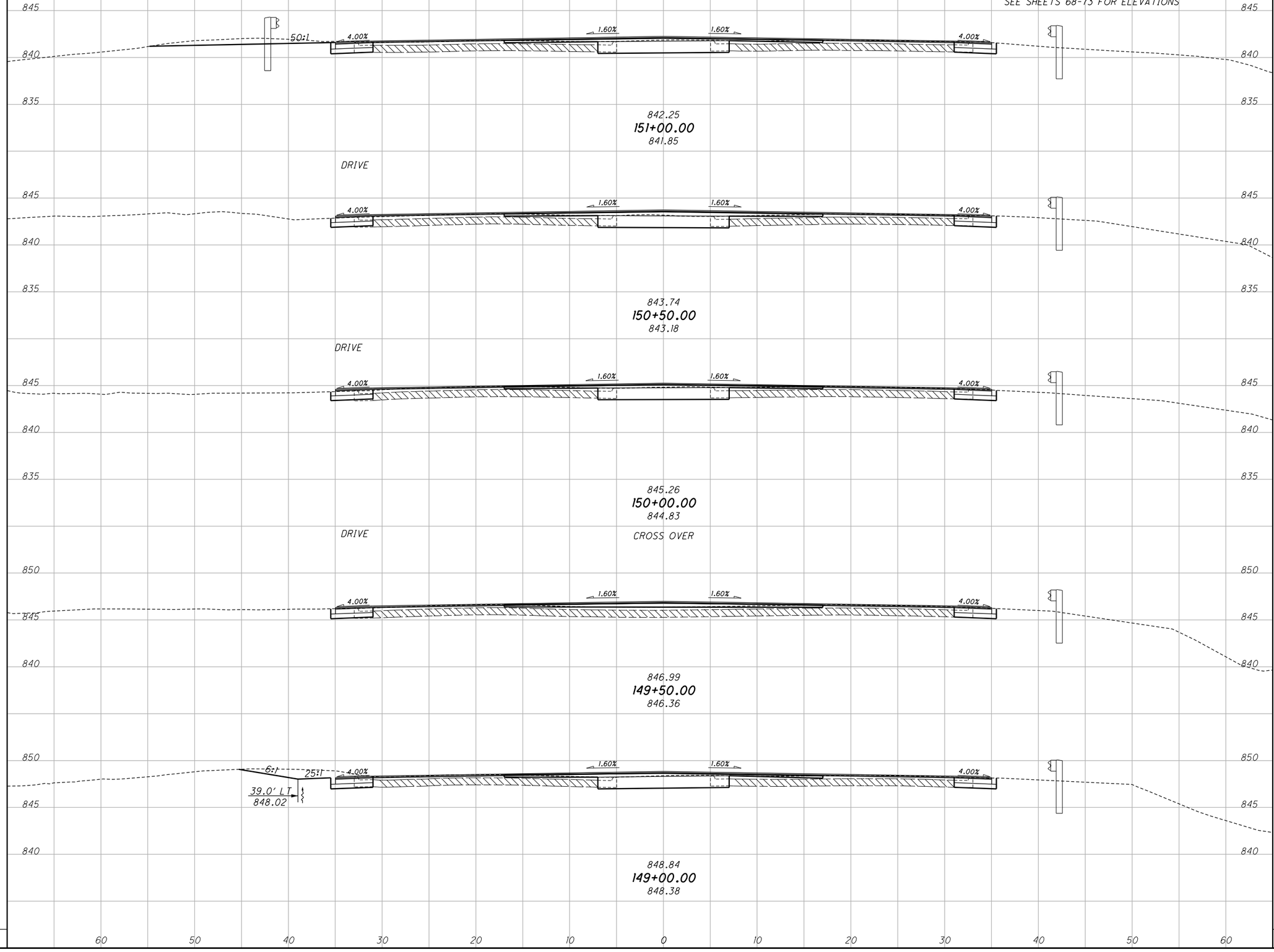
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 149+00.00 TO STA. 151+00.00

GUE-22/723-0.00
/ 0.70

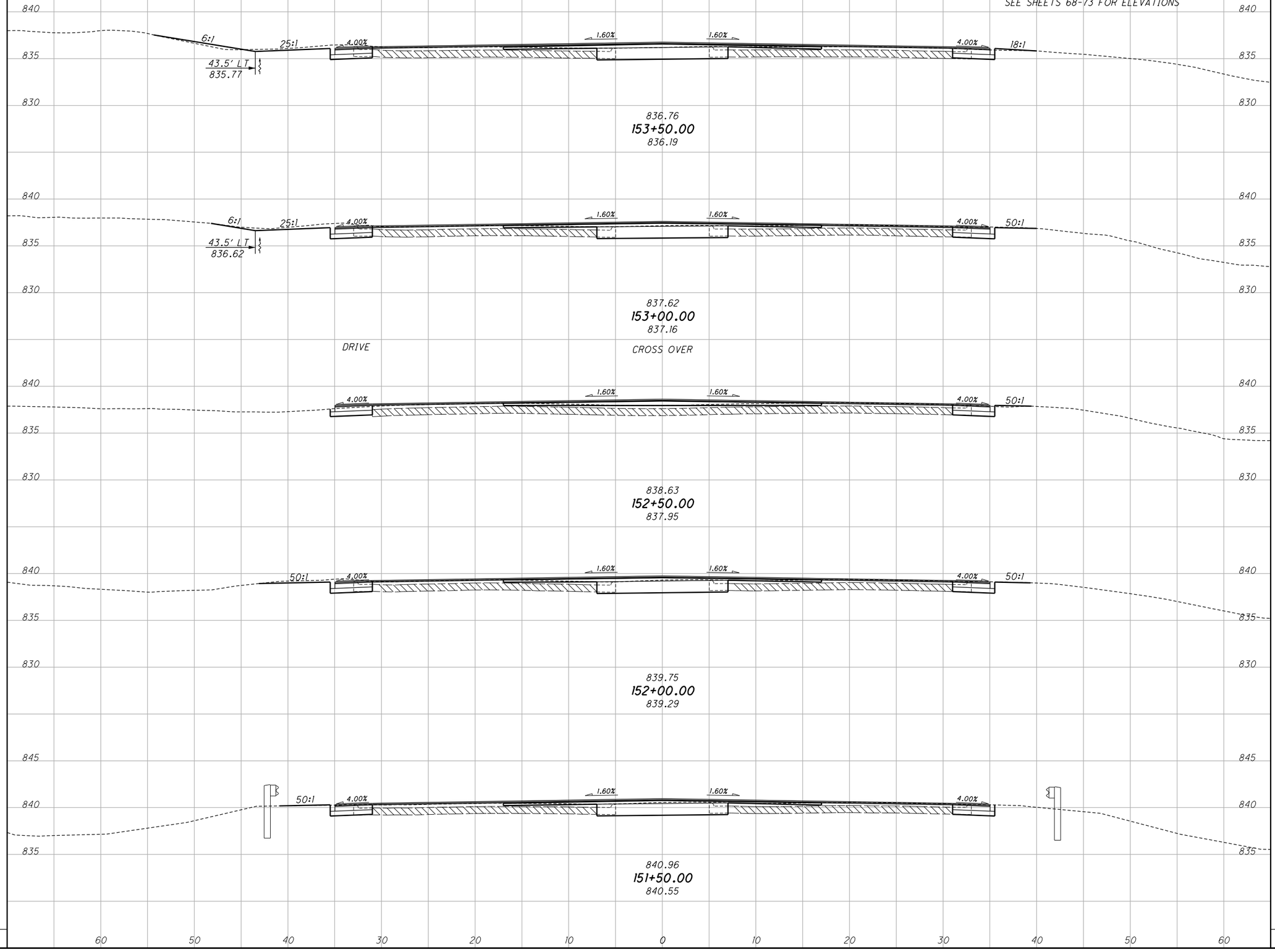
144
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_52 3/4/2019 3:26:33 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 151+50.00 TO STA. 153+50.00

GUE-22/723-0.00
/ 0.70

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_53 3/4/2019 3:26:36 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

MEADOW RD. (NO WORK) — CROSS OVER — DRIVE

840 / 835 / 830 / 825

1.60% 1.60% 4.00%

833.95
156+00.00
833.31

MEADOW RD. (NO WORK) — CROSS OVER — DRIVE

1.60% 1.60% 4.00%

834.29
155+50.00
833.62

10.0' DRIVE
ITEM 304 AGGREGATE BASE
6:1 25:1
43.5' LT
833.72

DRIVE

1.60% 1.60% 4.00% 4.00%

834.72
155+00.00
834.35

18.5' DRIVE
ITEM 304 AGGREGATE BASE
6:1 25:1
43.5' LT
834.26

DRIVE

1.60% 1.60% 4.00% 4.00%

835.26
154+50.00
834.79

DRIVE

12:1 25:1
43.5' LT
834.98

1.60% 1.60% 4.00% 4.00%

835.98
154+00.00
835.38

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 154+00.00 TO STA. 156+00.00

GUE-22/723-0.00
/ 0.70

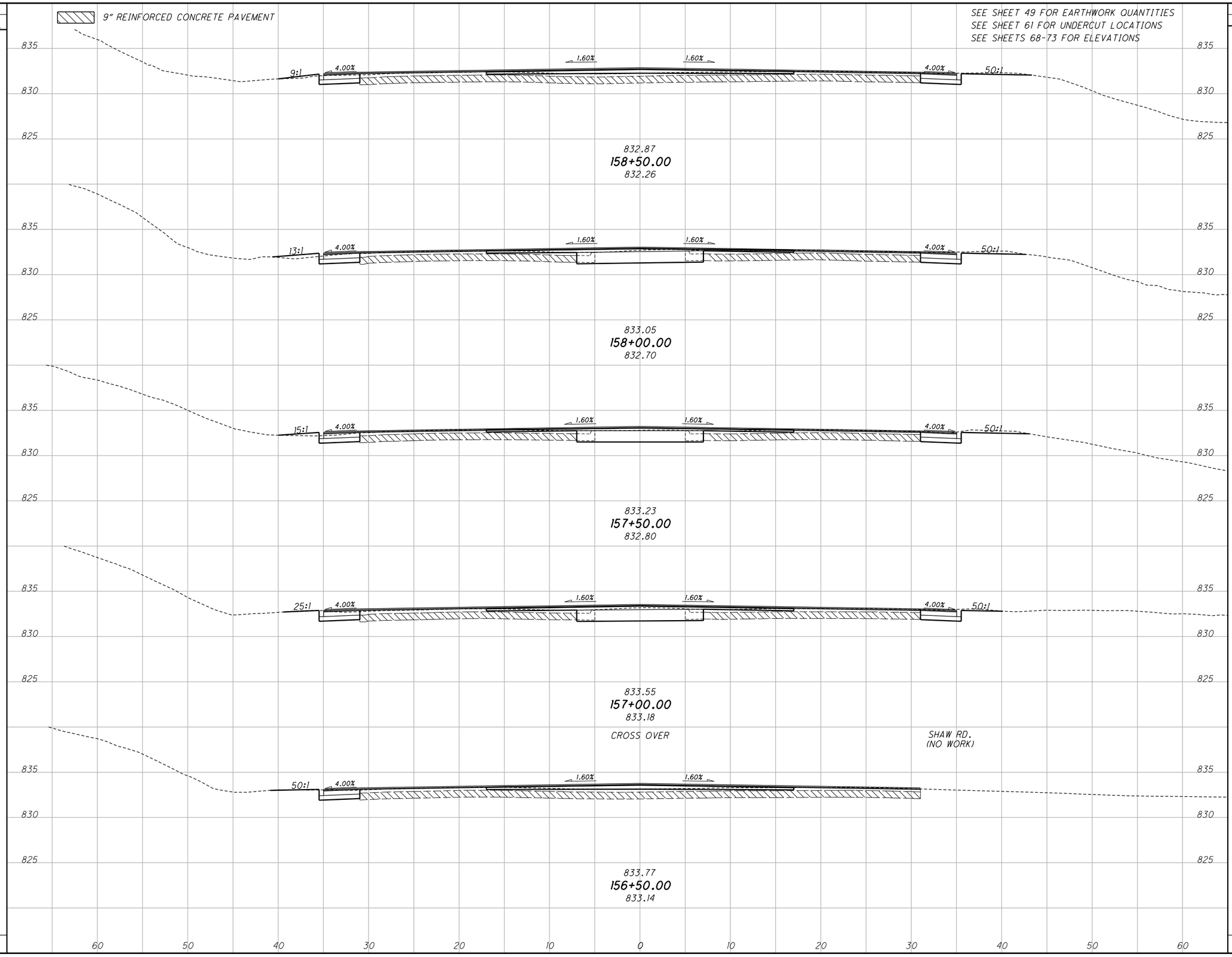
146
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_54 3/4/2019 3:26:38 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 156+50.00 TO STA. 158+50.00

GUE-22/723-0.00
/ 0.70

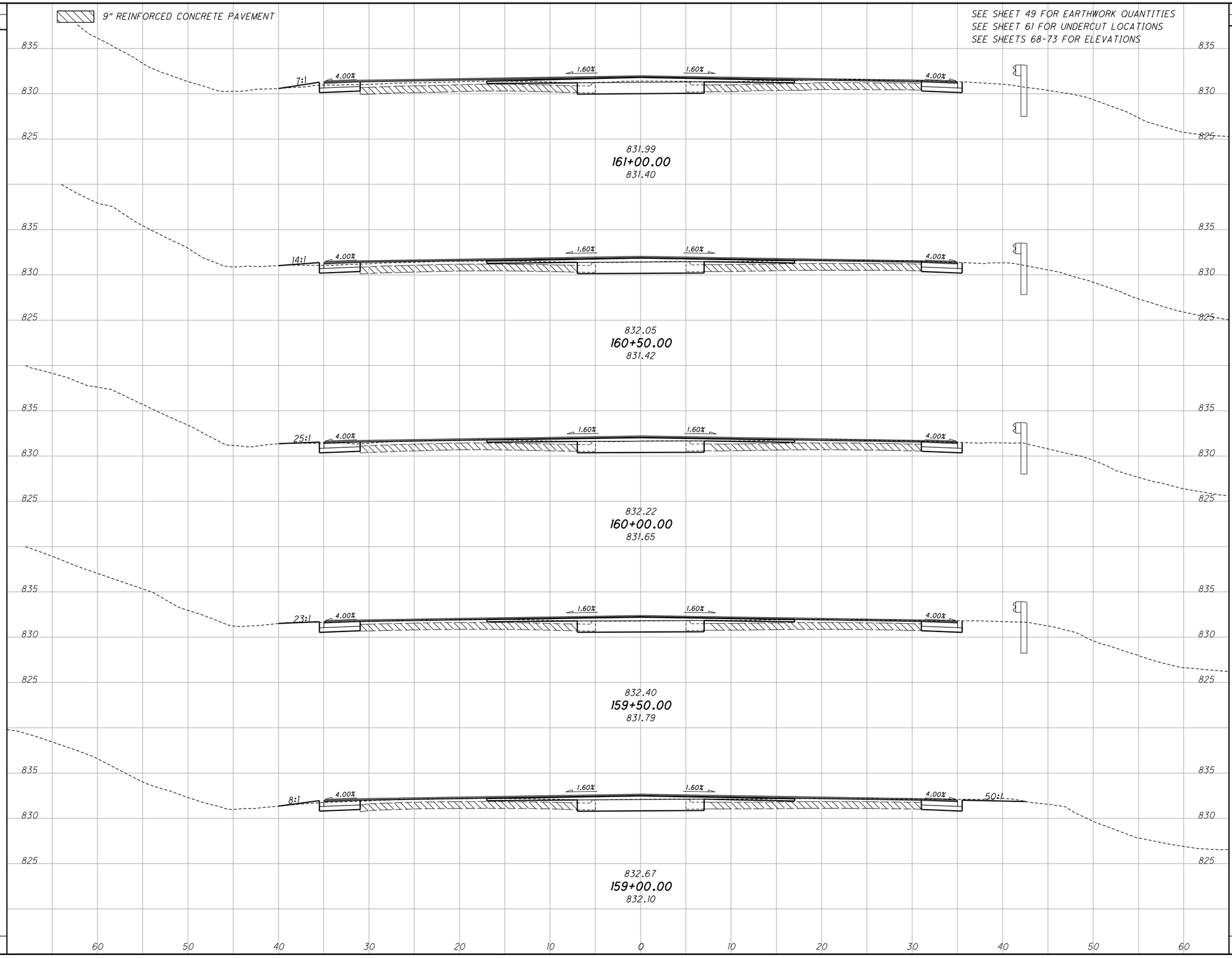
147
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name.55 3/4/2019 3:26:40 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 159+00.00 TO STA. 161+00.00

GUE-22/723-0.00
/ 0.70

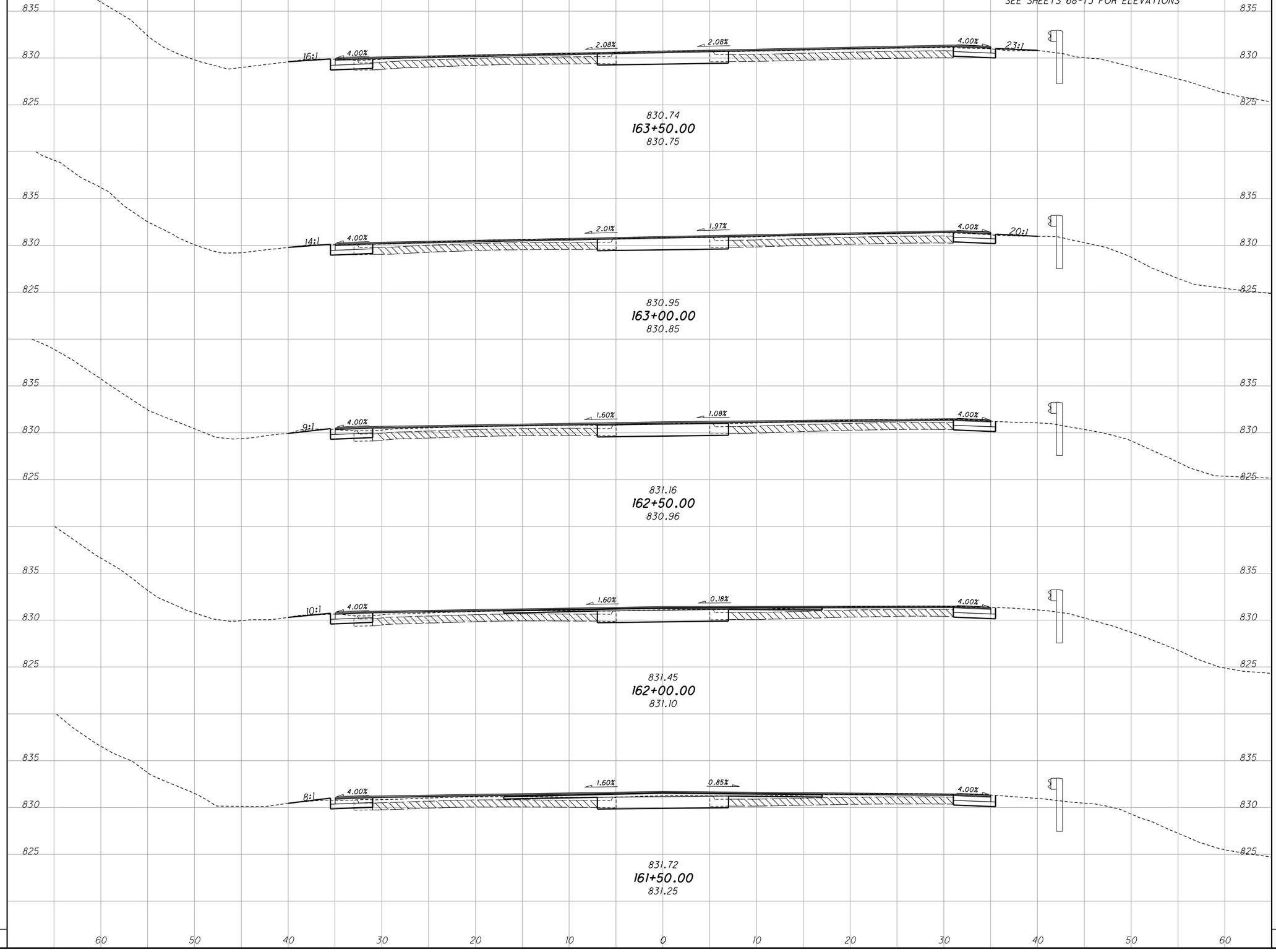
148
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_56 3/4/2019 3:26:43 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 161+50.00 TO STA. 163+50.00

GUE-22/723-0.00
/ 0.70

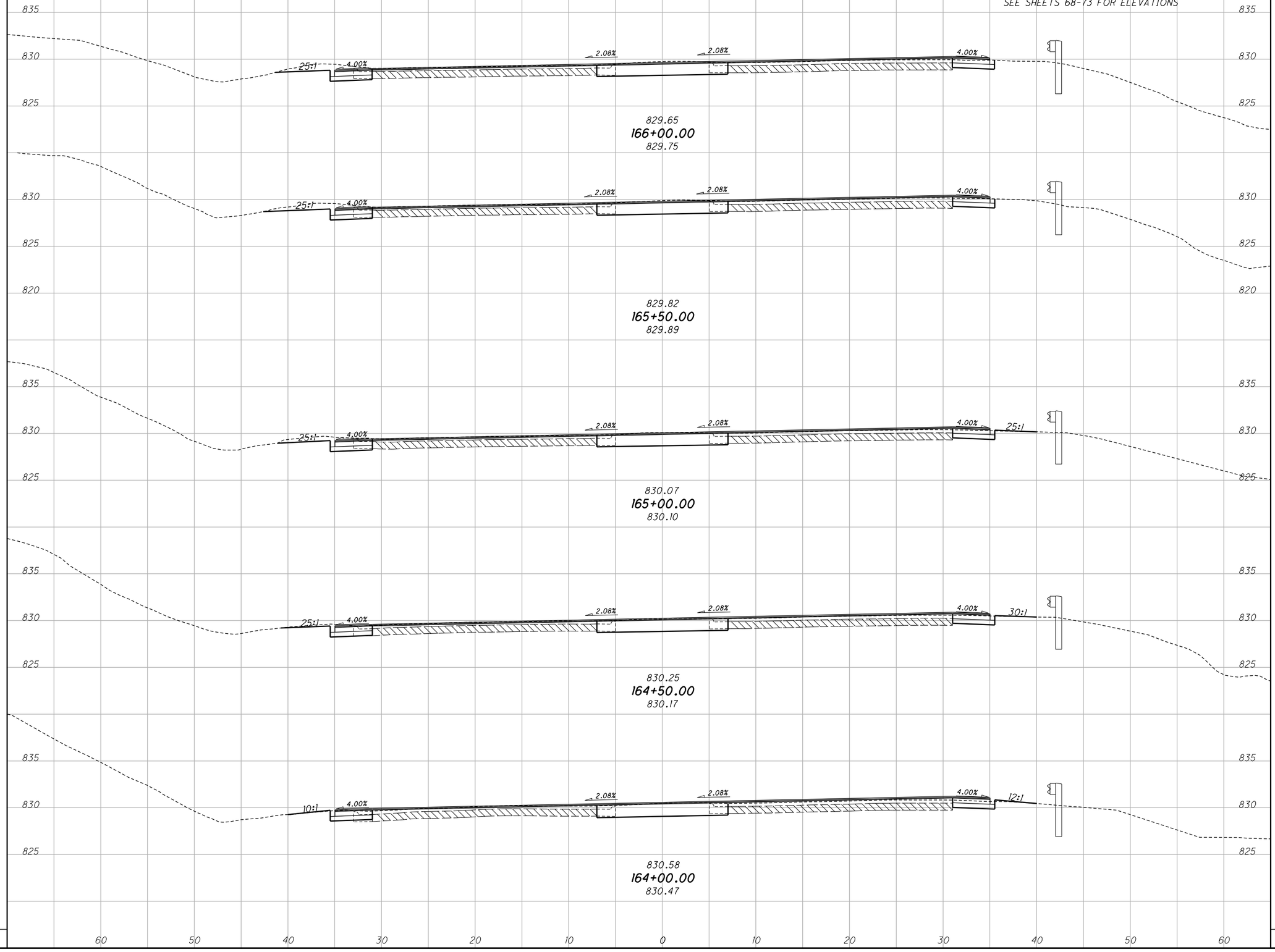
149
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 164+00.00 TO STA. 166+00.00

GUE-22/723-0.00
/ 0.70

150
188

i:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_58 3/4/2019 3:26:47 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

CROSS OVER

828.58
168+50.00
828.35

CROSS OVER DRIVE

828.73
168+00.00
828.52

12:1 25:1 39.0' LT 828.01

828.98
167+50.00
829.05

12.5' ITEM 304 AGGREGATE BASE DRIVE

12:1 25:1 39.0' LT 828.30

829.27
167+00.00
829.13

CROSS OVER

12.5' ITEM 304 AGGREGATE BASE DRIVE

12:1 25:1 39.0' LT 828.42

829.39
166+50.00
829.18

50:1 25:1 9:1 4.00% 2.08% 2.08% 4.00%

830 825 820

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 166+50.00 TO STA. 168+50.00

GUE-22/723-0.00
/ 0.70

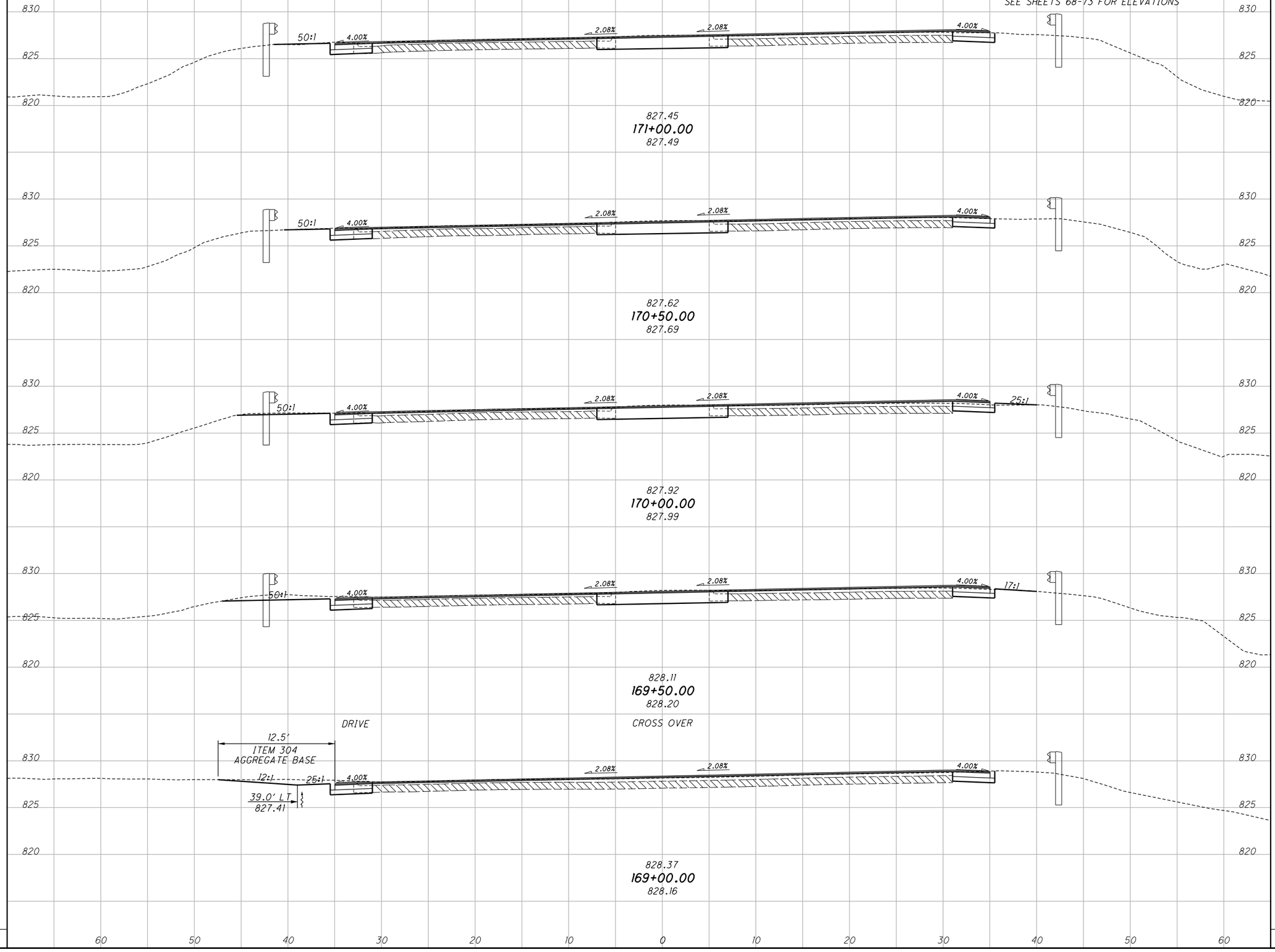
151
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 169+00.00 TO STA. 171+00.00

GUE-22/723-0.00
/ 0.70

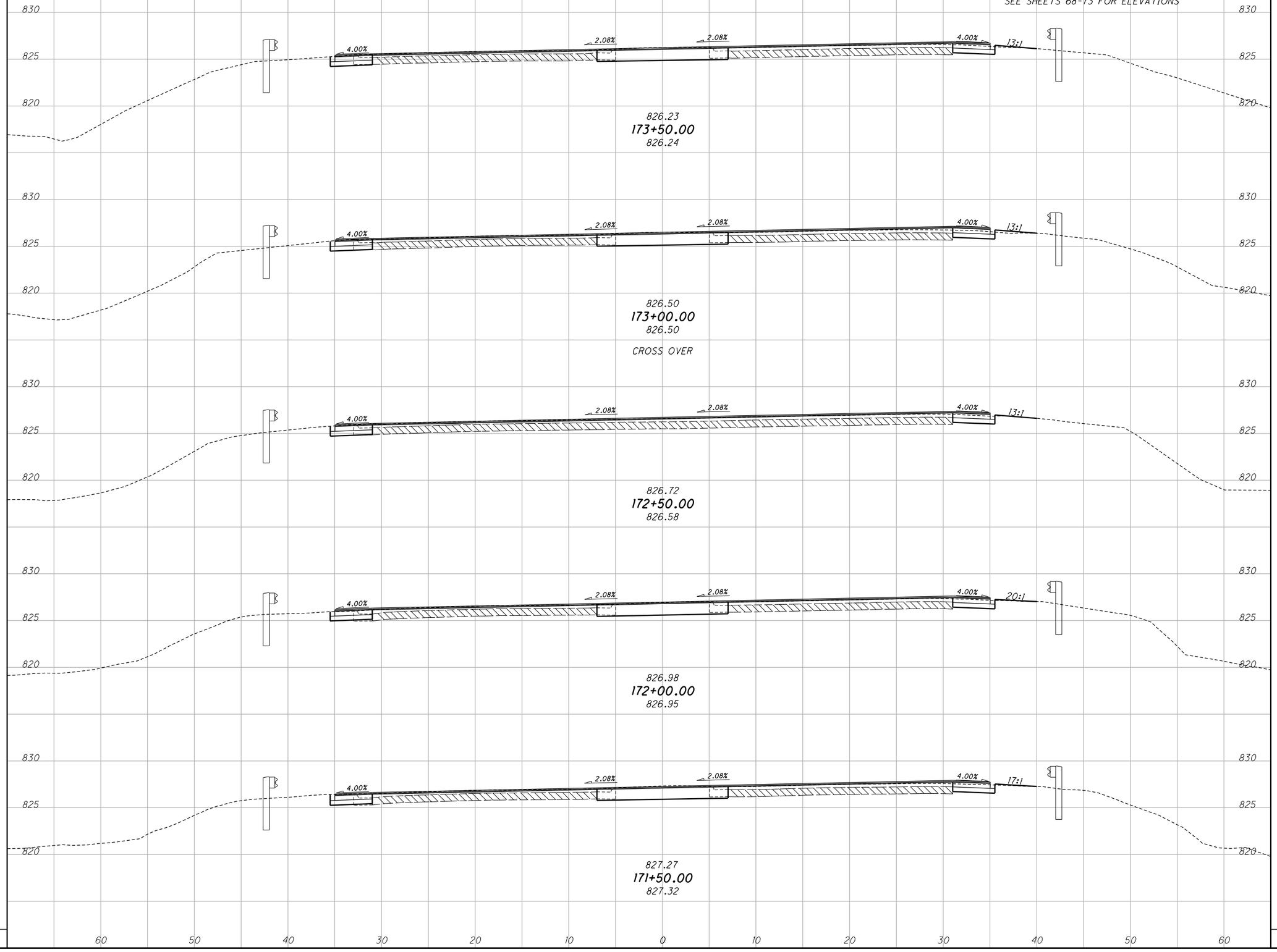
152
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 171+50.00 TO STA. 173+50.00

GUE-22/723-0.00
/0.70

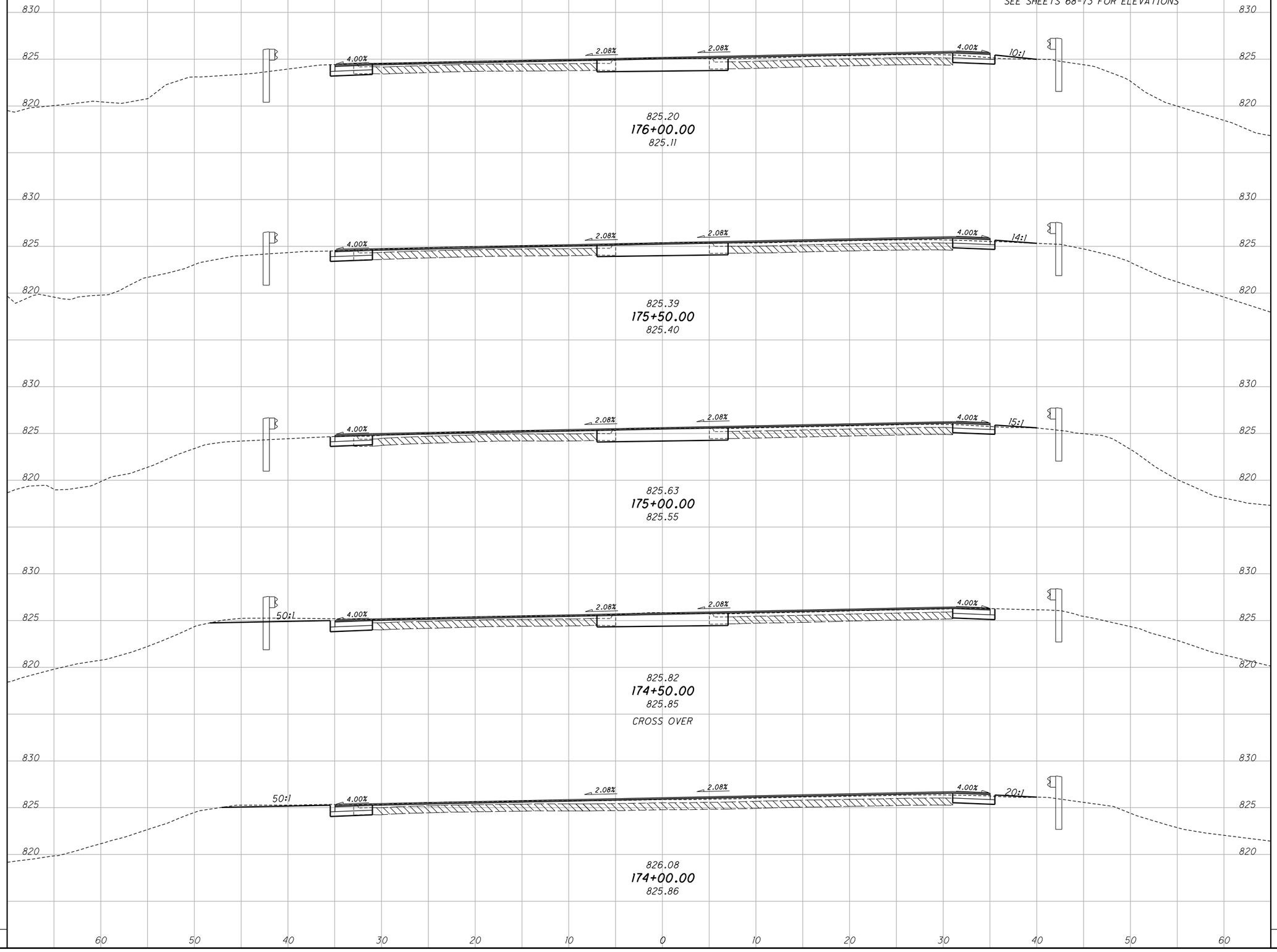
153
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_61 3/4/2019 3:26:54 PM jlutzi

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 174+00.00 TO STA. 176+00.00

GUE-22/723-0.00
/0.70

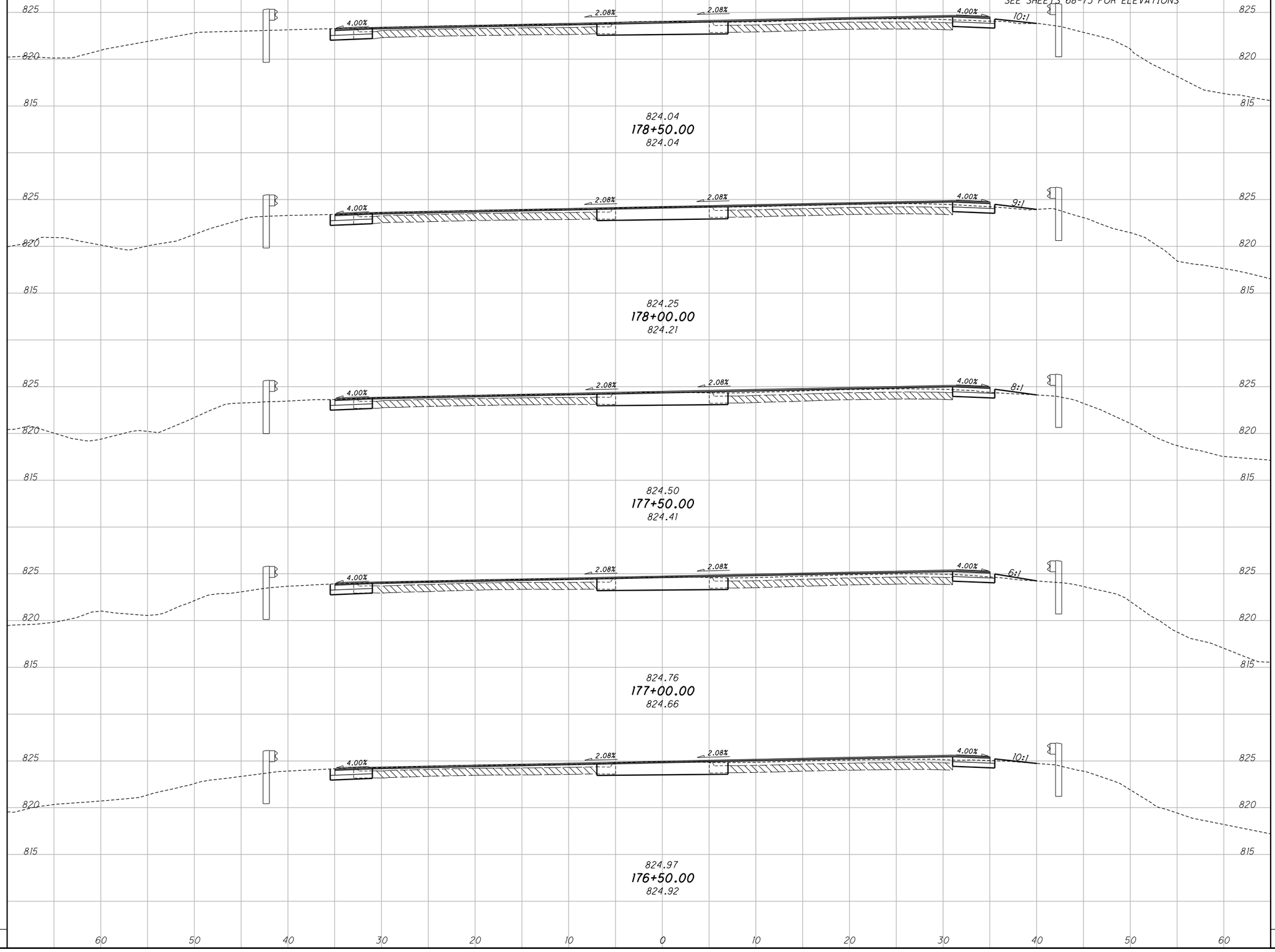
154
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 176+50.00 TO STA. 178+50.00

GUE-22/723-0.00
/ 0.70

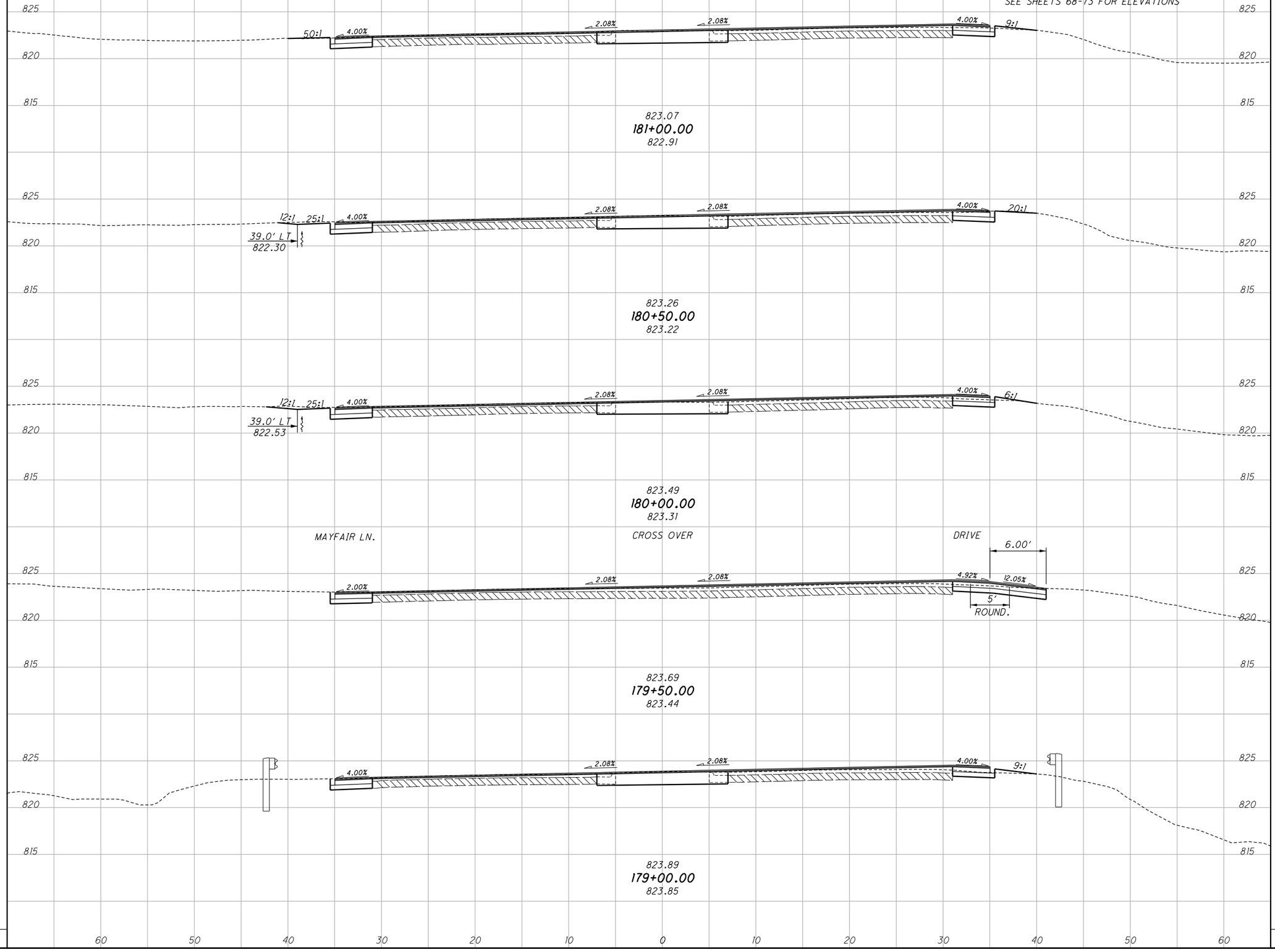
155
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 179+00.00 TO STA. 181+00.00

GUE-22/723-0.00
/0.70

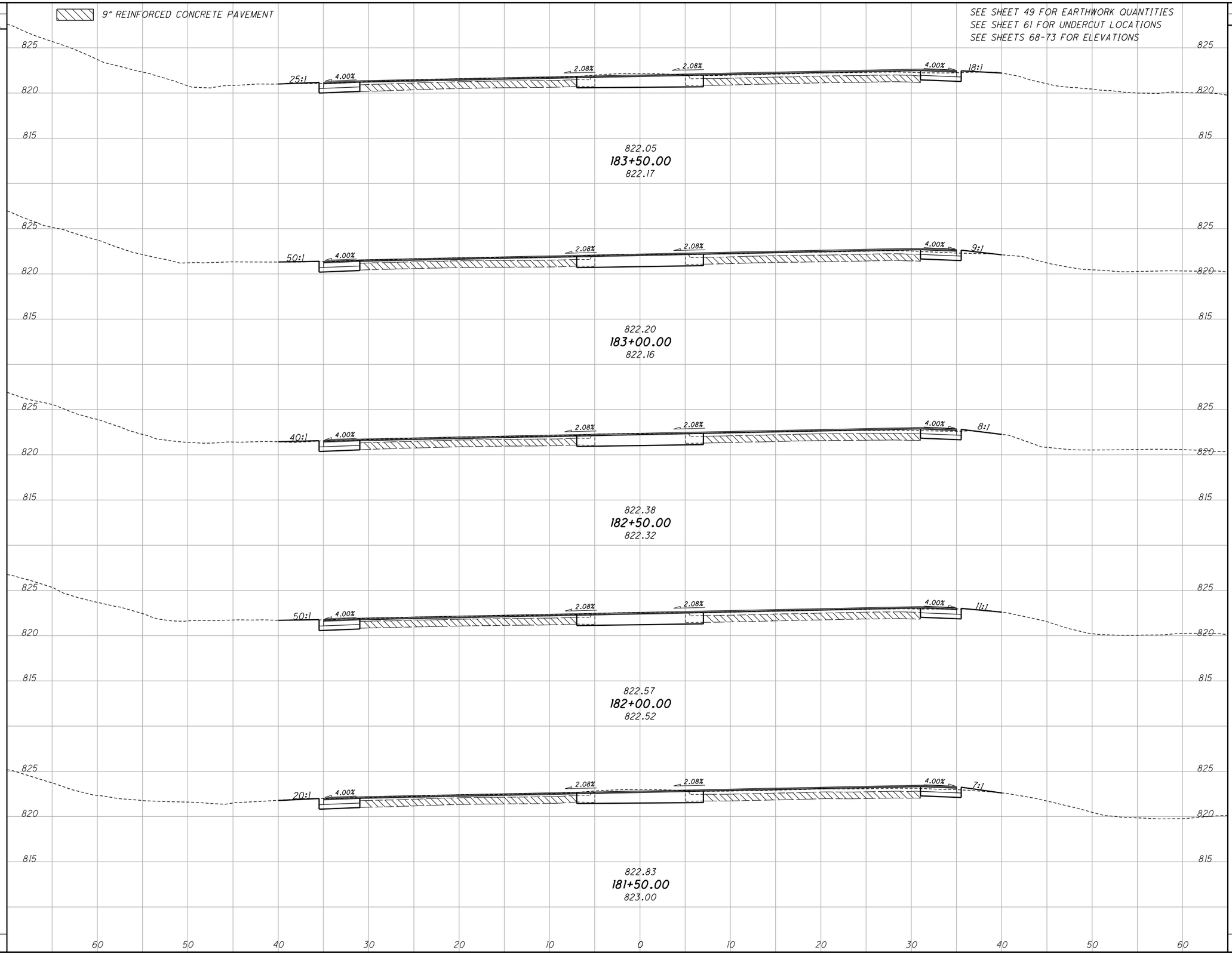
156
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 181+50.00 TO STA. 183+50.00

GUE-22/723-0.00
/ 0.70

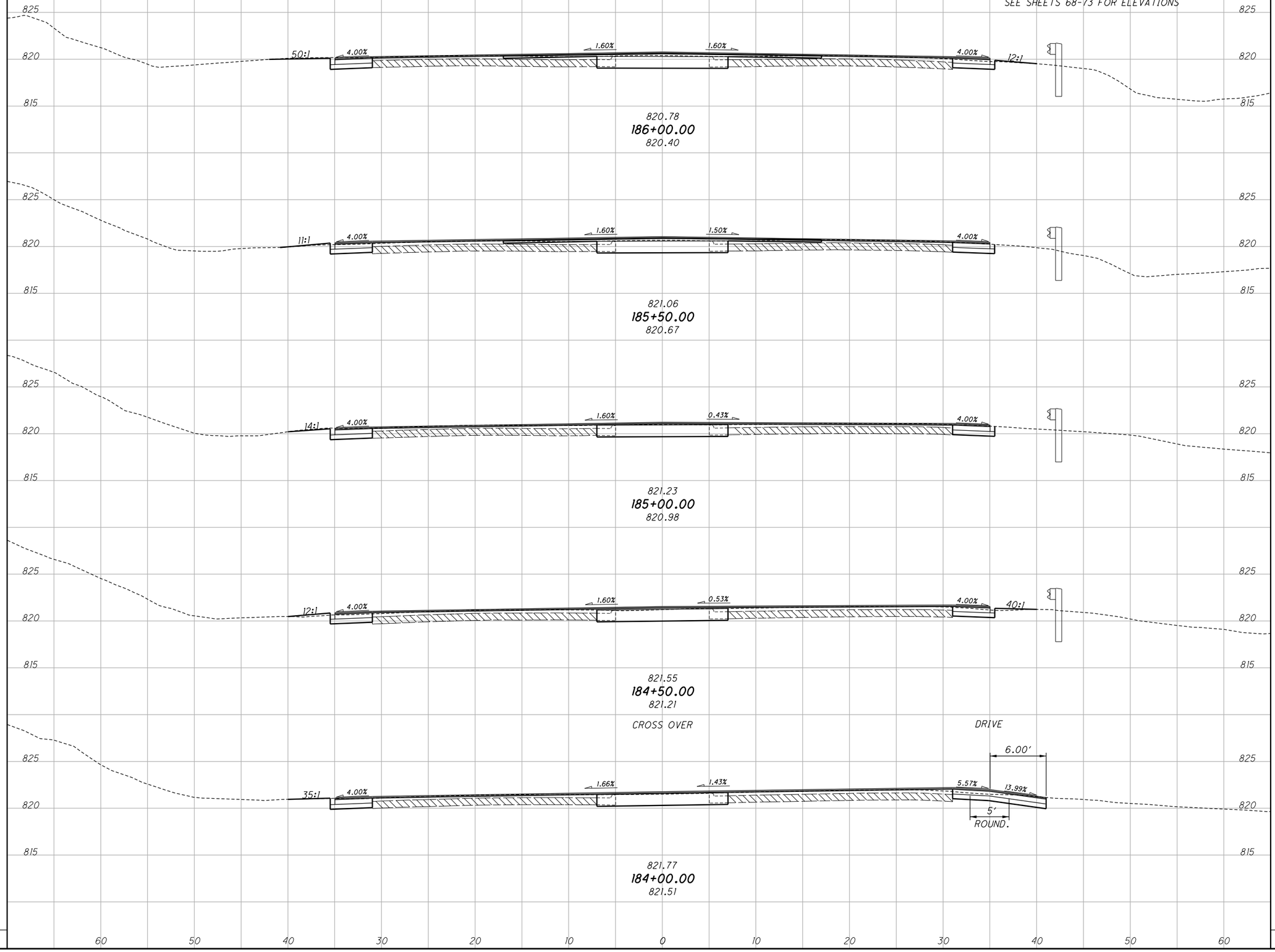
157
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 184+00.00 TO STA. 186+00.00

GUE-22/723-0.00
/ 0.70

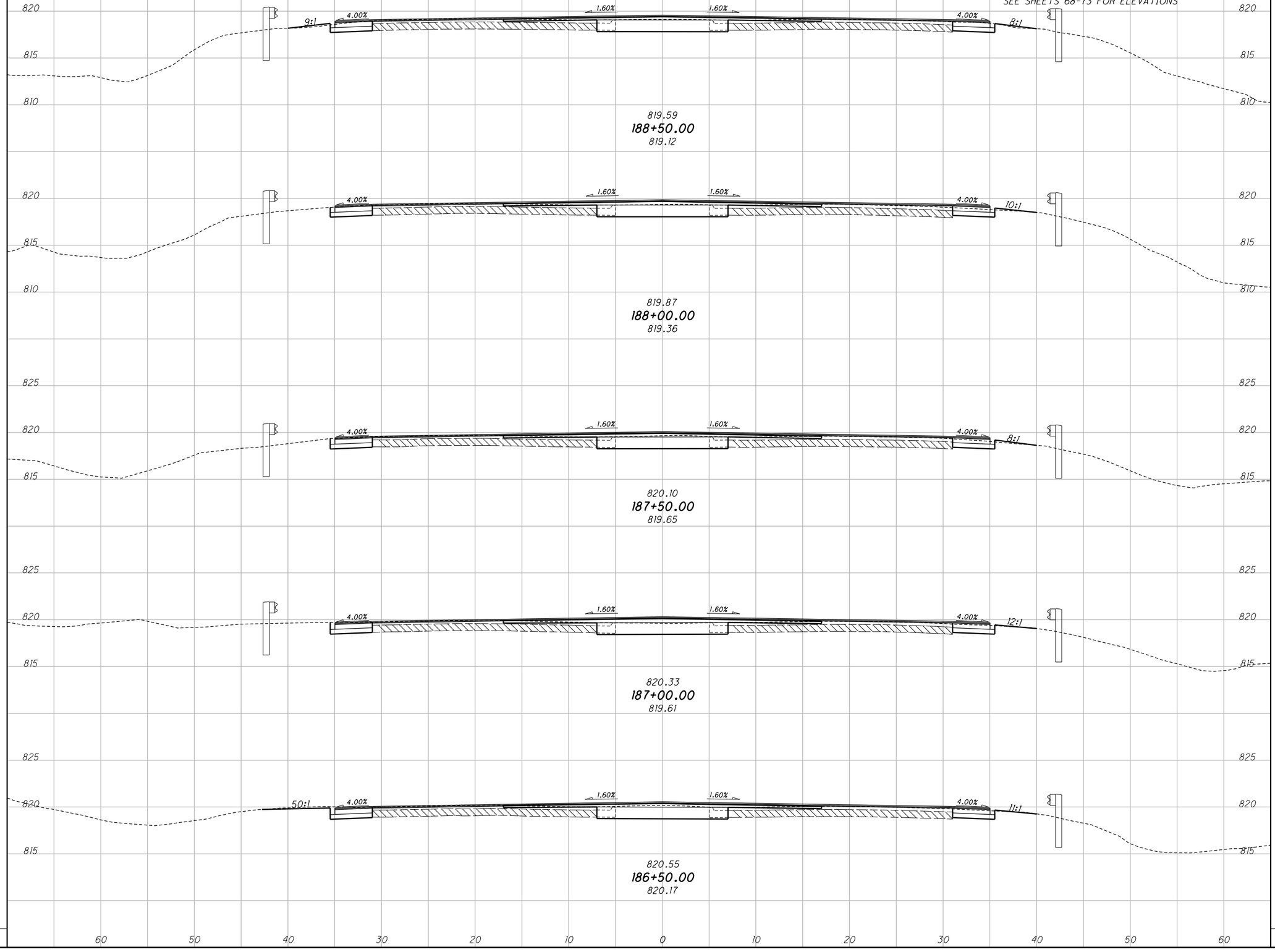
158
188

I:\ProjectData\GUE\95457\Design\Roadway\Sheets\95457_XS001.dgn XS_SHEET_temporary_model_name_66 3/4/2019 3:27:06 PM jlutzl

SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 186+50.00 TO STA. 188+50.00

GUE-22/723-0.00
/0.70

159
188

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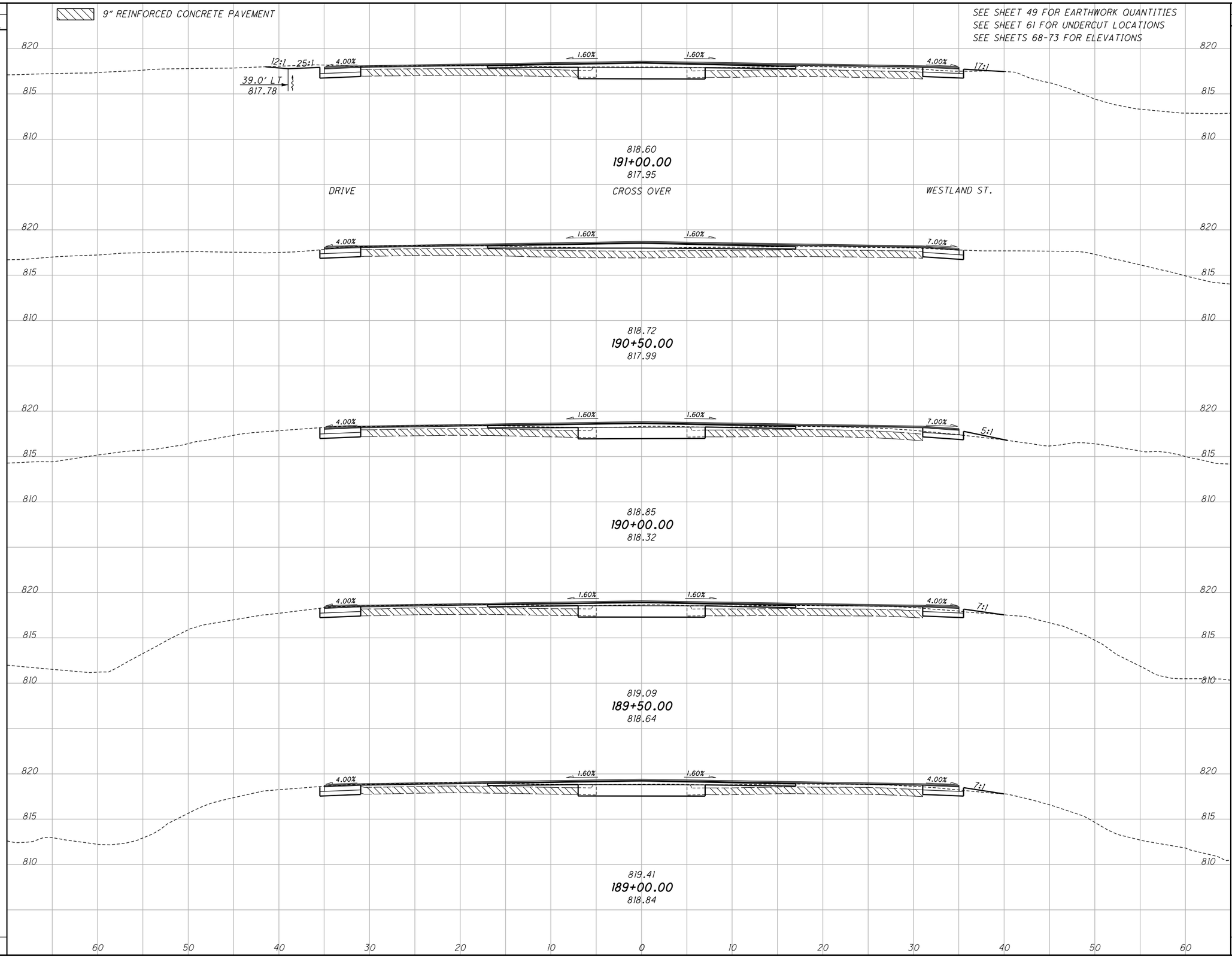
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 189+00.00 TO STA. 191+00.00

GUE-22/723-0.00
/ 0.70

160
188

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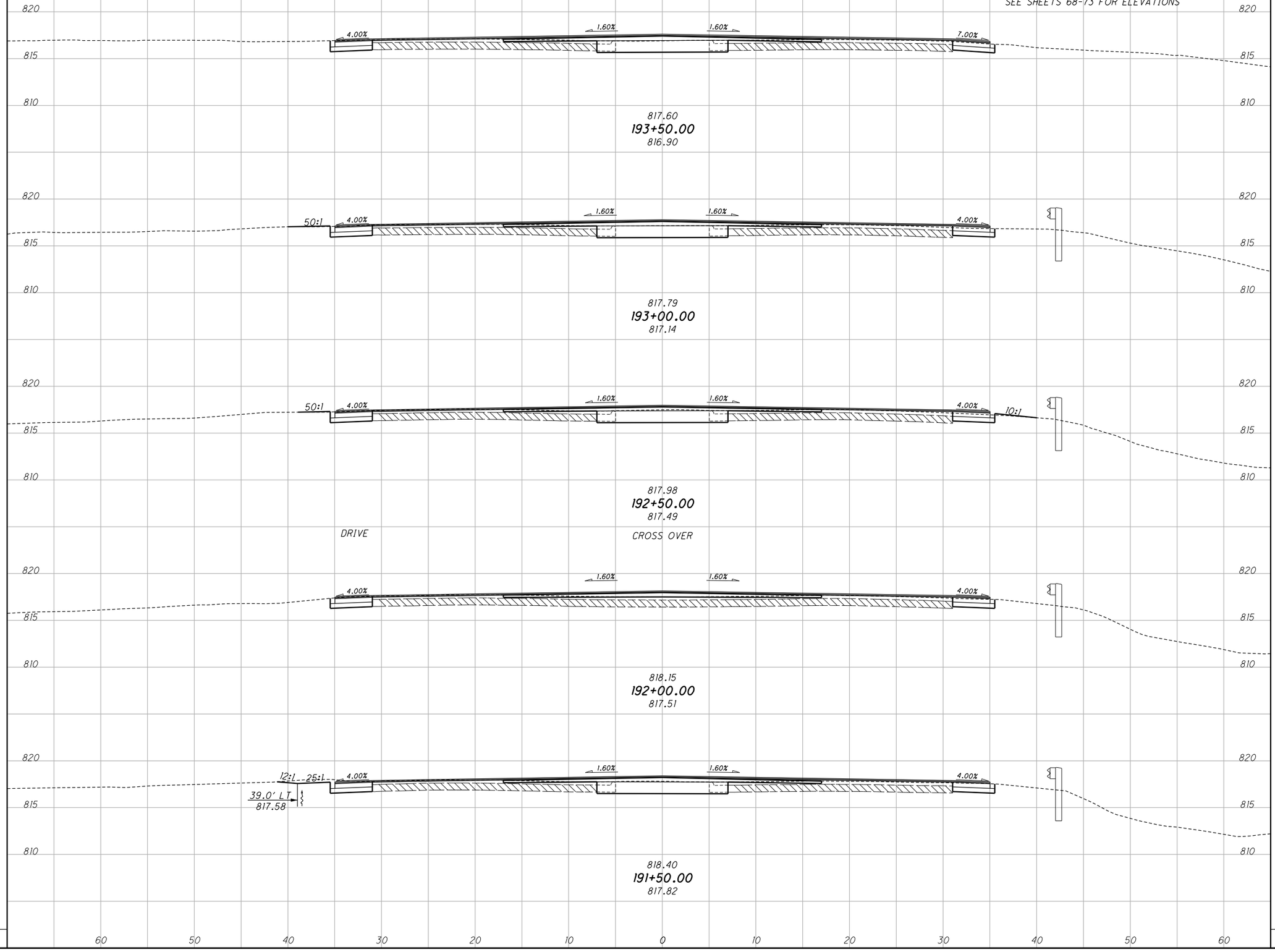
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

DRIVE

DRIVE

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LME	JSL

CROSS SECTIONS - U.S. 22
STA. 191+50.00 TO STA. 193+50.00

GUE-22/723-0.00
/ 0.70

161
188

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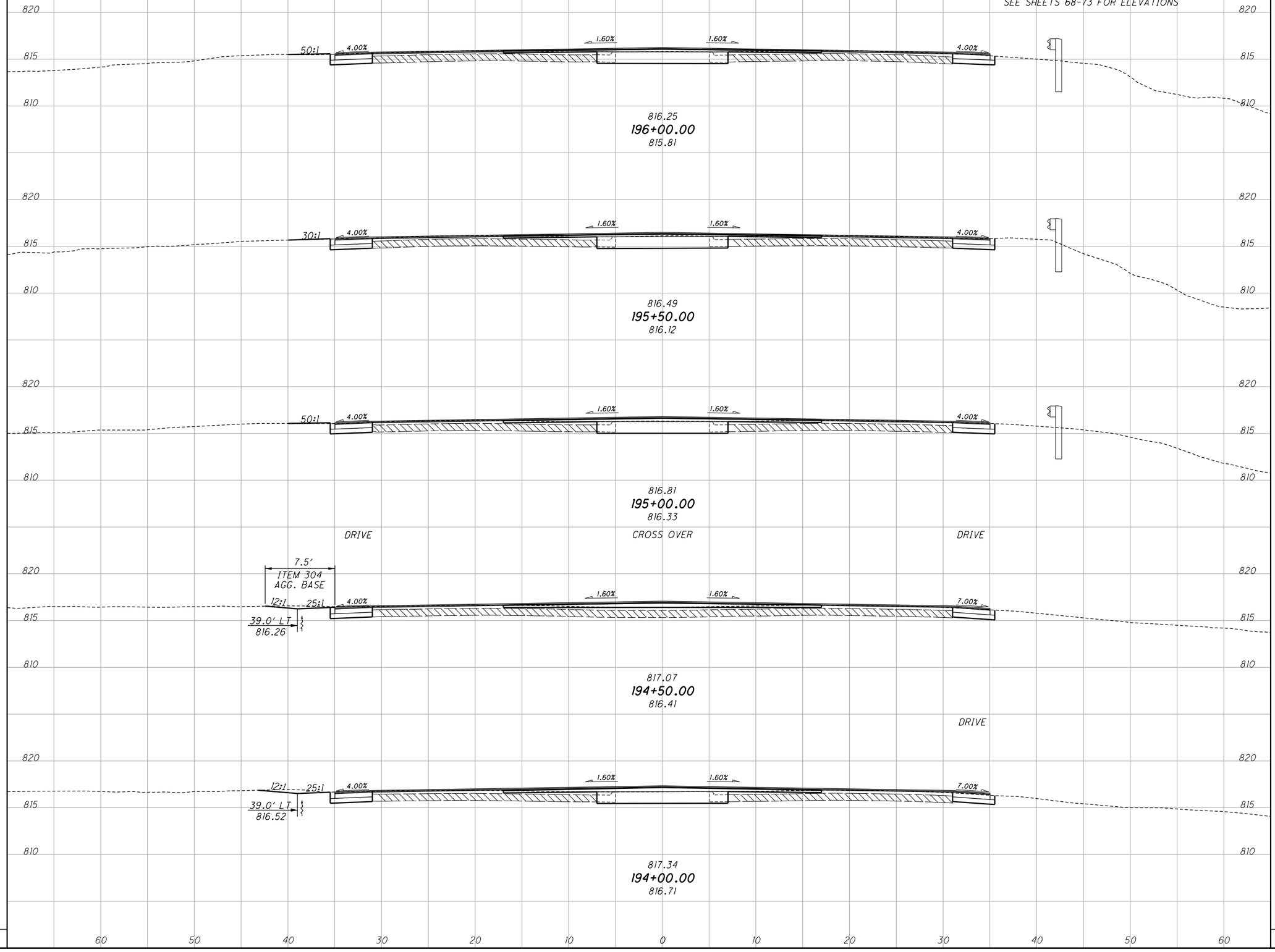
SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 194+00.00 TO STA. 196+00.00

GUE-22/723-0.00
/ 0.70

162
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

815.07
198+50.00
814.65

SMALL LN.

CROSS OVER

815.34
198+00.00
814.75

815.60
197+50.00
815.12

21:1

14:1

815.86
197+00.00
815.30

816.04
196+50.00
815.59

4.00% 1.60% 1.60% 4.00%

815 810 805 820

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 196+50.00 TO STA. 198+50.00

GUE-22/723-0.00
/0.70

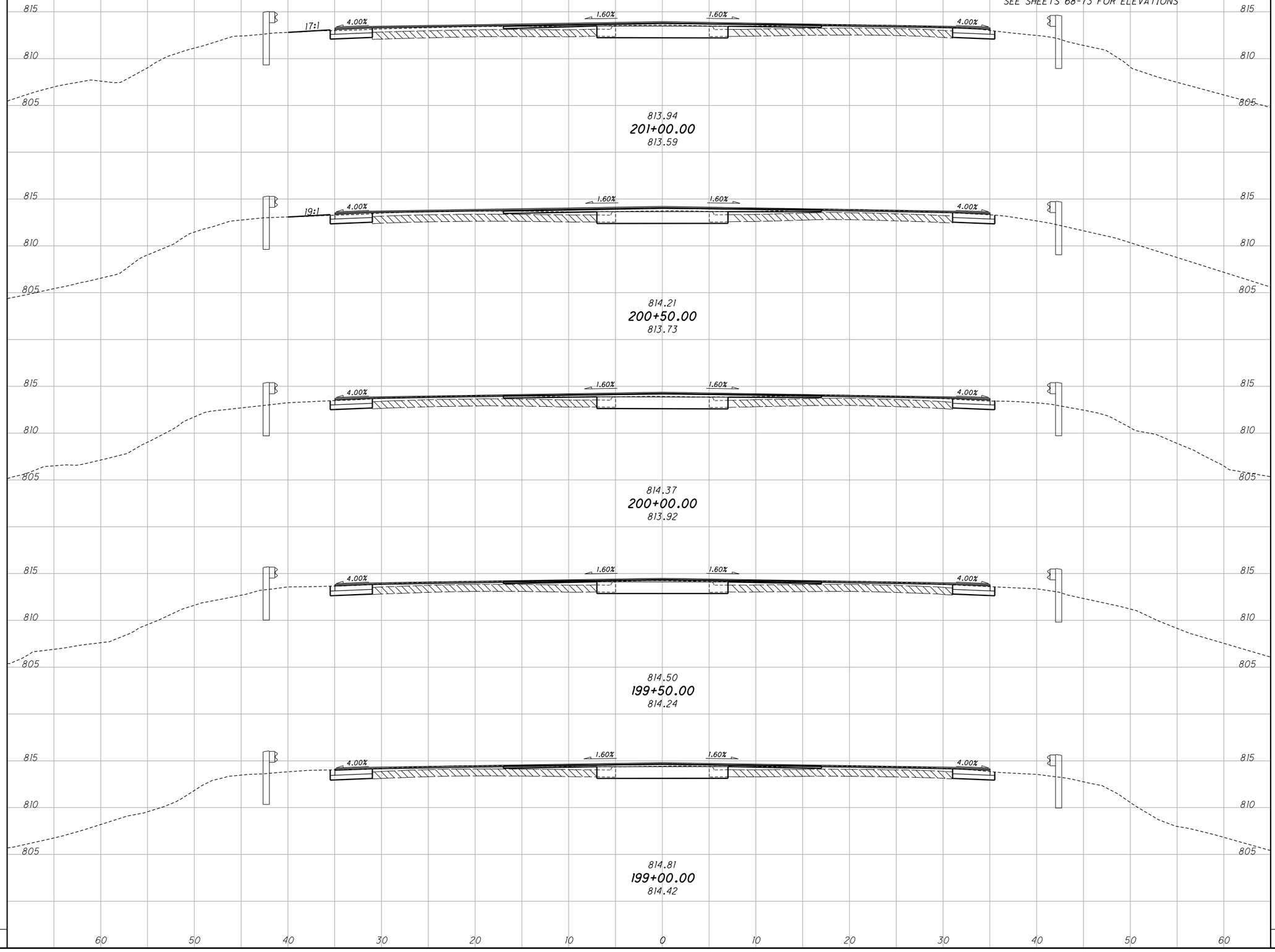
163
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 199+00.00 TO STA. 201+00.00

GUE-22/723-0.00
/ 0.70

164
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

812.78
203+50.00
812.43
CROSS OVER

813.01
203+00.00
812.54

813.26
202+50.00
812.89

813.54
202+00.00
813.06

813.79
201+50.00
813.34

4.00% 1.60% 1.60% 4.00%
15:1
16:1
815 810 805
60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 201+50.00 TO STA. 203+50.00

GUE-22/723-0.00
/ 0.70

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SEEDING

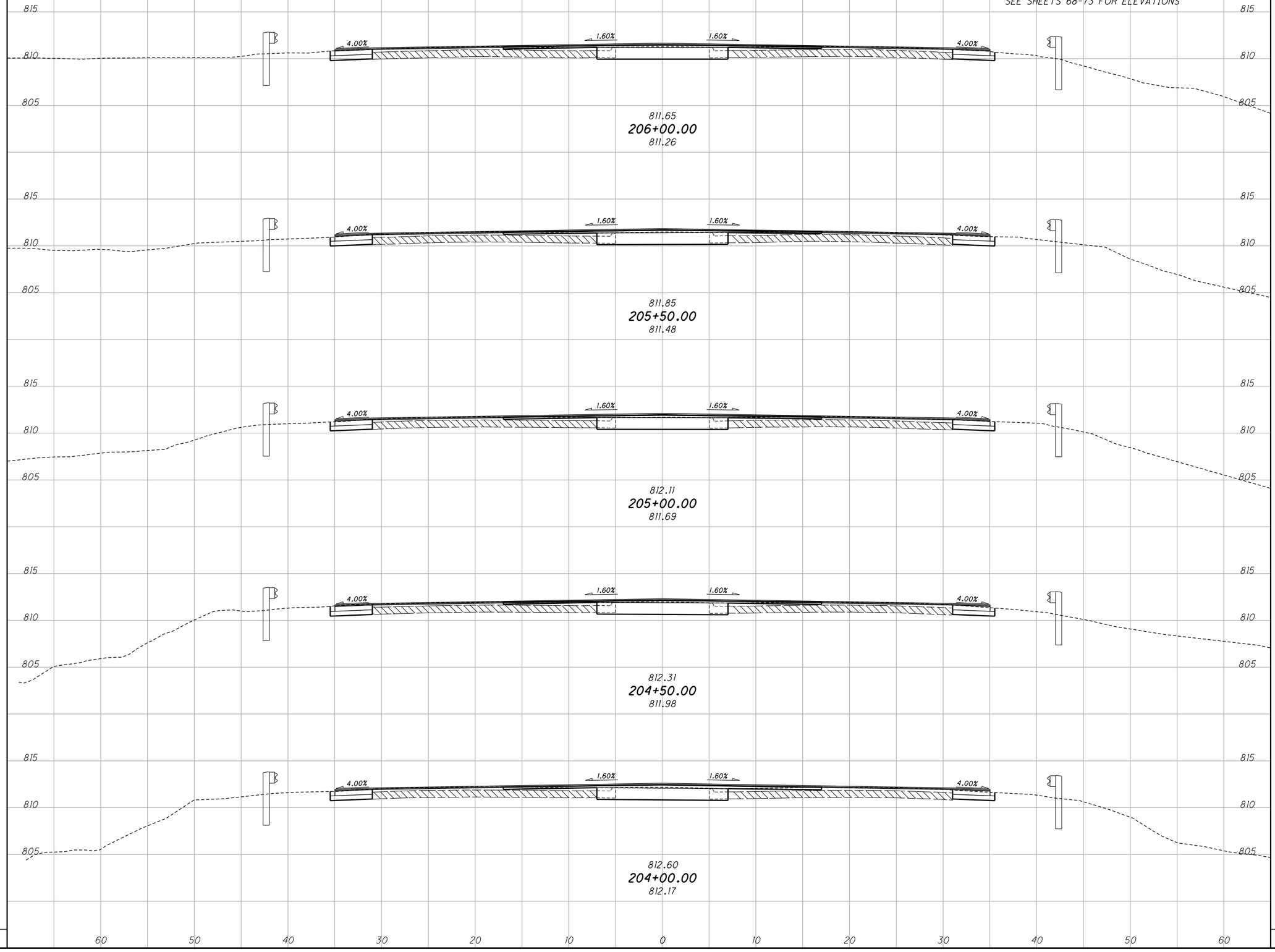
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL



CROSS SECTIONS - U.S. 22
STA. 204+00.00 TO STA. 206+00.00

GUE-22/723-0.00
/ 0.70

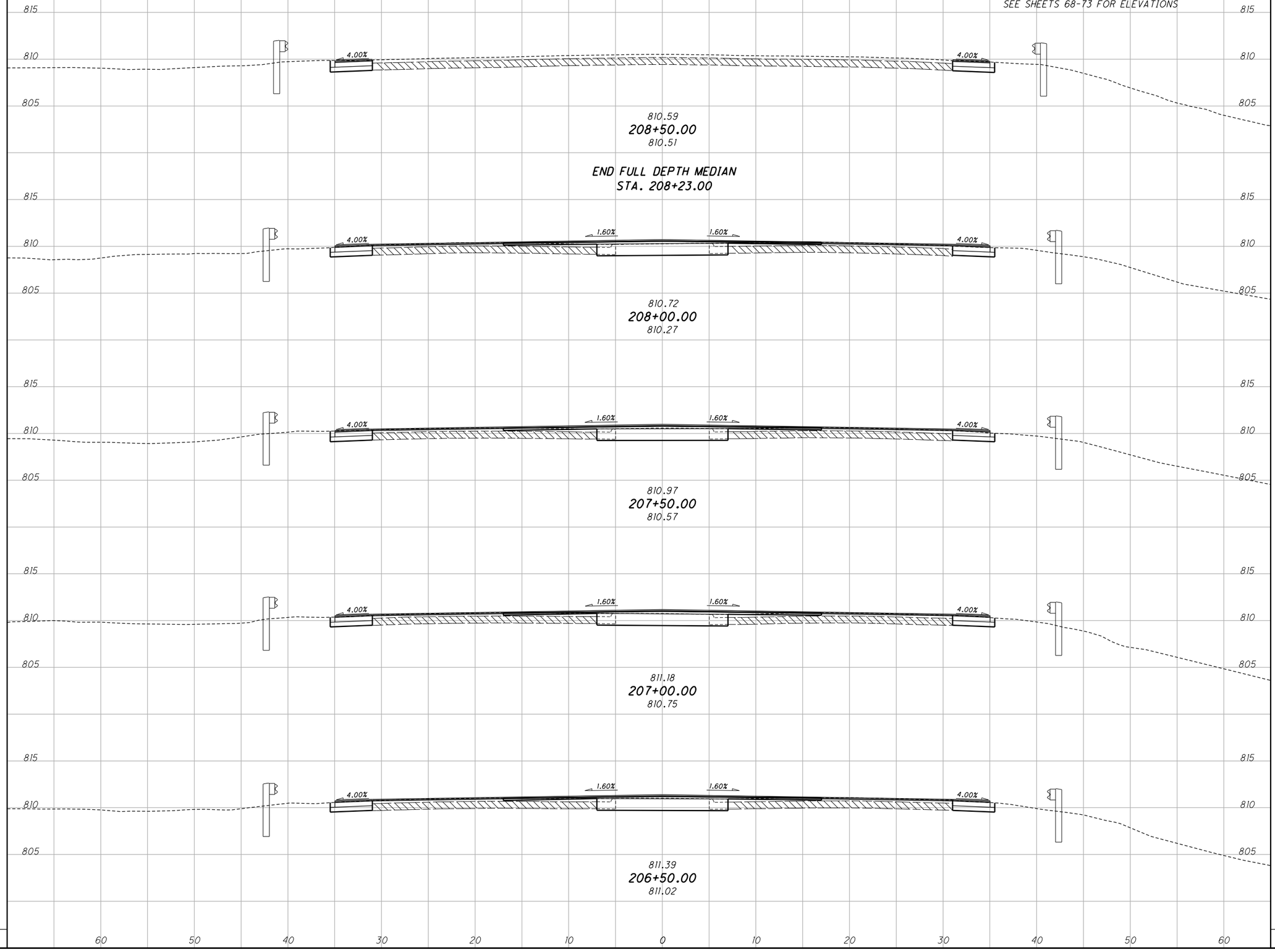
166
188

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 206+50.00 TO STA. 208+50.00

GUE-22/723-0.00
/0.70

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SEEDING	
END WIDTH	SQ. YDS.

9" REINFORCED CONCRETE PAVEMENT

SEE SHEET 49 FOR EARTHWORK QUANTITIES
SEE SHEET 61 FOR UNDERCUT LOCATIONS
SEE SHEETS 68-73 FOR ELEVATIONS

DRIVE

DRIVE

END FULL DEPTH
SHLD. LT
STA. 210+73.00

END FULL DEPTH
SHLD. RT
STA. 210+73.00

809.65
211+00.00
809.57

809.84
210+50.00
809.76

810.06
210+00.00
809.98

810.25
209+50.00
810.17

810.42
209+00.00
810.34

4.00%

815
810
805

60 50 40 30 20 10 0 10 20 30 40 50 60

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED LME
CHECKED JSL

CROSS SECTIONS - U.S. 22
STA. 209+00.00 TO STA. 211+00.00

GUE-22/723-0.00
/0.70

167A
188

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REF NO.	SHEET NO.	STATION	DESCRIPTION	SIDE	CODE	SIZE (INCHES) (W x H)	630				
							GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
							FT	SF	EACH	EACH	EACH
			LOCATION 1								
S-1	170	23+00	INTERSECTING RD RIGHT	RT	W2-2R	36 x 36	14.7	9	1		1
			PATCH RD		W16-H8P	48 x 8		2.7	1		
S-2	170	23+50	NO ENGINE BREAK	LT	R20-H1	24 x 30	13.0	5	1		1
S-3	170	24+00	KEEP RIGHT	CL	R4-7B	36 x 36	14.7	9	1		1
S-4	170	24+75	DO NOT PASS	LT	R4-1	24 x 30	13.0	5	1		1
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)							**55.4**	**30.7**	**5**		**4**
			LOCATION 2A								
S-5	170	26+18	SPEED LIMIT 55	RT	R2-1	30 x 36	13.5	7.5	1		1
			MILEMARKER 0							1	
S-6	170	27+00	SPEED LIMIT 35	LT	R2-1	30 x 36	13.5	7.5	1		1
S-7	170	30+00	EAST	RT	M3-2	36 x 18	17.5	4.5	1		1
			U.S. 22		M1-4	36 x 36		9	1		
			U.S. 40		M1-4	36 x 36		9	1		
S-8	170	30+25	SPEED LIMIT 35 AHEAD	LT	W3-5	36 x 36	14.7	9	1		1
S-9	170	31+50	SR723 6 CAMBRIDGE 8	RT	D2-H2	72 x 24	25.0	12	1		2
S-10	170	31+50	NEW CONCORD WASTEWATER PLANT	RT	SPECIAL	30 x 36	27.0			1	2
S-11	170	32+50	ADOPT A HIGHWAY	LT			26.0			1	2
			BRIDGE ICES BEFORE RD		W8-13	36 x 36		9	1		
S-12	170	35+50	INTERSECTING RD LEFT	LT	W2-2	36 x 36	14.7	9	1		1
			PATCH RD		W16-H8P	48 x 8		2.7	1		
S-13	170	37+50	LEFT LANE ENDS	LT	W4-2	36 x 36	14.7	9	1		1
S-14	170	40+00	INTERSECTING RD LEFT	RT	W2-2L	36 x 36	14.7	9	1		1
			CABIN HILL RD		W16-H8P	48 x 8		2.7	1		
S-15	171	45+00	BEGIN	RT	R3-9CP	36 x 12	31.0	3			
			CENTER TURN LANE		R3-9B	36 x 48		12			
S-16	171	45+00	END	LT	R3-9DP	36 x 12	31.0	3			
			CENTER TURN LANE		R3-9B	36 x 48		12			
S-17	171	48+37	DIVIDED HIGHWAY ENDS	LT					1		1
S-18	171	49+50	INTERSECTION RD RIGHT	LT	W2-2R	36 x 36	14.7	9	1		1
			CABIN HILL RD		W16-H8P	48 x 8		2.7	1		
S-19	172	71+00	INTERSECTING RD LEFT/RIGHT	RT	W2-7L	36 x 36	14.7	9	1		1
			← STILLMEADOW LN		W16-H8AP	48 x 16		5.4	1		
			MORGAN RD →								
S-20	172	79+25	DEER	RT	W11-3	36 x 36	14.7	9	1		1
			MILEMARKER 1							1	1
S-21	172	83+00	INTERSECTING RD LEFT/RIGHT	LT	W2-7L	36 x 36	14.7	9	1		1
			← MORGAN RD		W16-H8AP	48 x 16		5.4	1		
			STILLMEADOW LN →								
LOCATION 2A TOTALS (CARRIED TO NEXT SHEET)							**302.1**	**179.4**	**21**	**4**	**19**

CALCULATED PTB
CHECKED JSL

SIGNING DATA (MEDIAN)

GUE-22/723-0.00
/ 0.70

I:\ProjectData\GUE\95457\Design\Traffic\Sheets\95457_T0007.dgn Sheet 3/11/2019 4:51:20 PM jlutzi

REF NO.	SHEET NO.	STATION	DESCRIPTION	SIDE	CODE	SIZE (INCHES) (W x H)	630 GROUND MOUNTED SUPPORT, NO. 3 POST	SIGN, FLAT SHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
							FT	SF	EACH	EACH	EACH
LOCATION 2A TOTALS (CARRIED FROM PREVIOUS SHEET)							**302.1**	**179.4**	**21**	**4**	**19**
S-22	172	90+50	INTERSECTING RD LEFT/RIGHT	RT	W2-7L	36 x 36	14.7	9	1		1
			← SAMPSON RD		W16-H8AP	48 x 16		5.4	1		
			GREENBRIAR RD →								
S-23	173	102+50	INTERSECTING RD LEFT/RIGHT	LT	W2-7L	36 x 36	14.7	9	1		1
			← GREENBRIAR RD		W16-H8AP	48 x 16		5.4	1		
			SAMPSON RD →								
S-24	174	131+00	MILEMARKER 2	RT	SPECIAL	18 x 18	9.0			1	1
S-25	174	131+00	DEER	LT	W11-3	36 x 36	14.7	9	1		1
S-26	174	131+75	ADOPT A HIGHWAY	LT			26.0			1	2
			BRIDGE ICES BEFORE RD		W8-13	36 x 36		9	1		
			MILEMARKER 2							1	
S-27	175	148+00	SPEED LIMIT 55	LT	R2-1	30 x 36	13.5	7.5	1		1
LOCATION 2A TOTALS (CARRIED TO SUB-SUMMARY)							**394.7**	**233.7**	**28**	**7**	**26**
			LOCATION 2B								
S-28	175	151+00	INTERSECTION AHEAD	RT	W2-1	36 x 36	14.7	9	1		1
			← MEADOW RD SHAW RD →		W16-H8AP	48 x 16		6.7	1		
S-29	175	151+75	WEST	RT	M3-4	36 x 18	17.5	4.5	1		1
			U.S. 22		M1-4	36 x 36		9	1		
			U.S. 40		M1-4	36 x 36		9	1		
S-30	175	151+70	EAST	LT	M3-2	36 x 18	17.5	4.5	1		1
			U.S. 22		M1-4	36 x 36		9	1		
			U.S. 40		M1-4	36 x 36		9	1		
S-31	175	161+00	INTERSECTION AHEAD	LT	W2-1	36 x 36	14.7	9	1		1
			← SHAW RD MEADOW RD →		W16-H8AP	48 x 16		6.7	1		
S-32	175	161+50	SPEED LIMIT 55	RT	R2-1	30 x 36	13.5	7.5	1		1
S-33	177	203+00	TRUCK ENTRANCE	RT	W11-H13	36 x 36	14.7	9	1		1
S-34	177	209+75	BEGIN	RT					1		2
			CENTER TURN LANE						1		
S-35	177	209+75	END	LT					1		2
			CENTER TURN LANE						1		
S-36	177	217+25	END	LT	R3-9DP	36 x 12	31.0	3	1		2
			CENTER TURN LANE		R3-9B	36 x 48		12	1		
S-37	177	217+25	BEGIN	RT	R3-9CP	36 x 12	31.0	3	1		2
			CENTER TURN LANE		R3-9B	36 x 48		12	1		
S-38	177	219+00	TRUCK ENTRANCE	RT	W11-H13	36 x 36	14.7	9	1		1
LOCATION 2B TOTALS (CARRIED TO SUB-SUMMARY)							**169.3**	**131.9**	**21**		**15**

CALCULATED PTB
CHECKED JSL

SIGNING DATA (MEDIAN)

GUE-22/723-0.00
/ 0.70

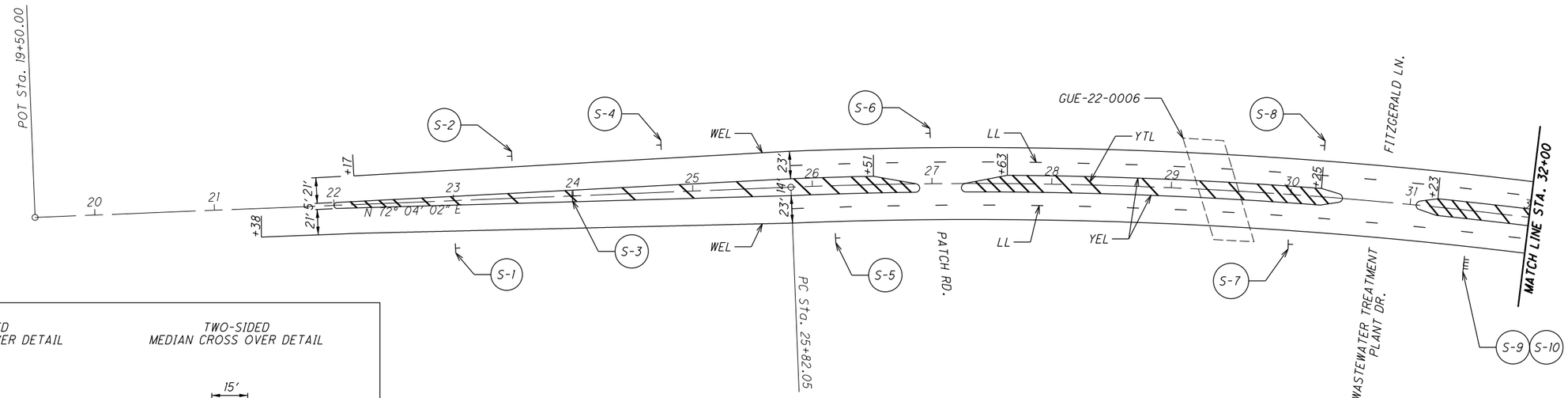
I:\ProjectData\GUE\95457\Design\Traffic\Sheets\95457_T0008.dgn Sheet 3/11/2019 1:51:35 PM jlutzi

NOTES
PLACE PROPOSED SIGNS BEHIND GUARDRAIL IF PRESENT

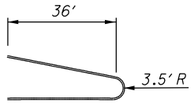
SPACING OF YELLOW TRANSVERSE LINES SHALL BE AS PER TC-71.10

SEE SHEETS 168-169 FOR SIGNING QUANTITIES

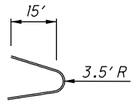
LL = LANE LINE
WEL = WHITE EDGE LINE
YEL = YELLOW EDGE LINE
YTL = YELLOW TRANSVERSE LINE

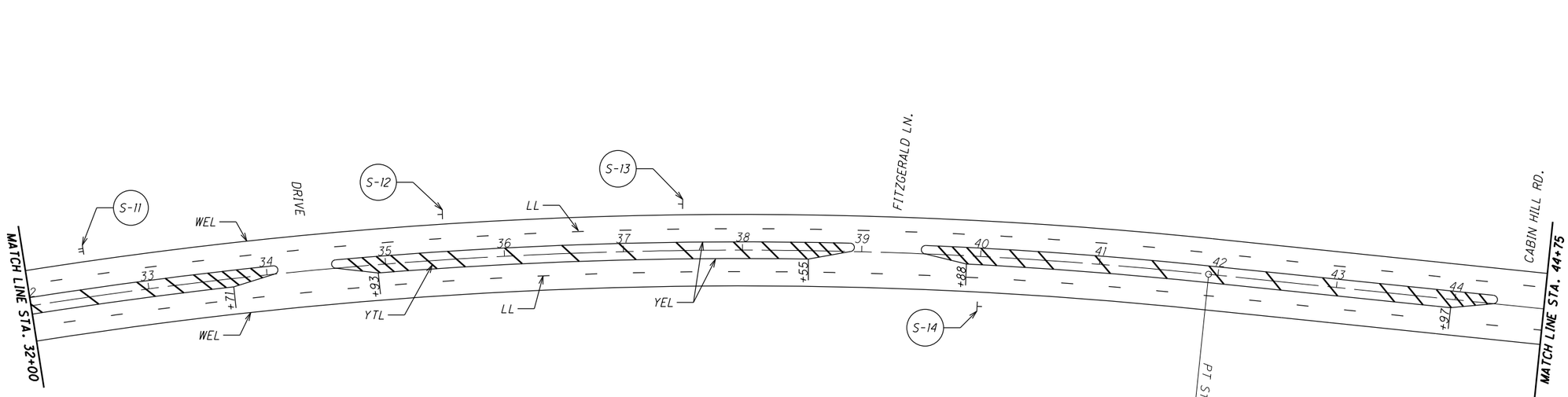


ONE-SIDED
MEDIAN CROSS OVER DETAIL

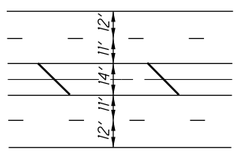


TWO-SIDED
MEDIAN CROSS OVER DETAIL





LANE WIDTH (TYPICAL)
STA. 25+82 TO STA. 44+75



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HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

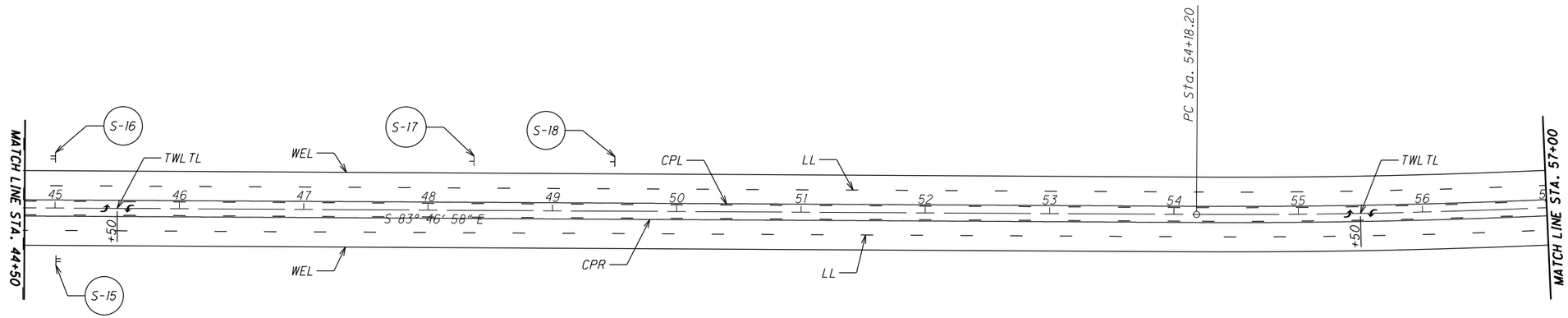
TRAFFIC CONTROL PLAN - U.S. 22
STA. 19+50 TO STA. 44+75

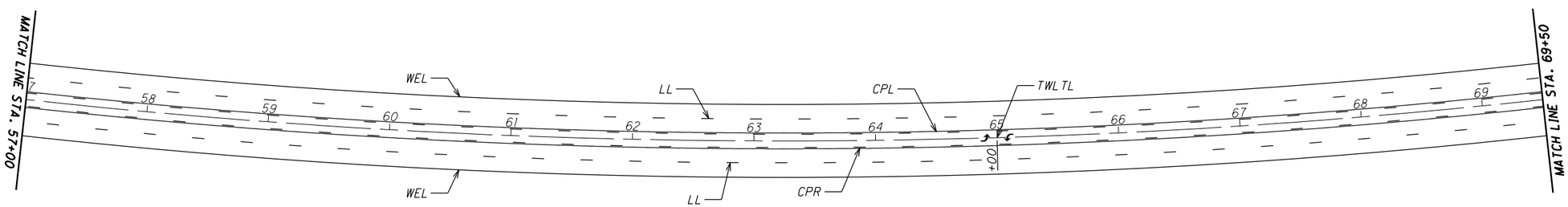
GUE-22/723-0.00
/ 0.70

NOTES
PLACE PROPOSED SIGNS BEHIND GUARDRAIL IF PRESENT

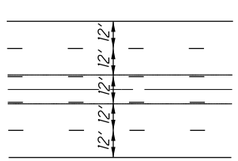
SEE SHEETS 168-169 FOR SIGNING QUANTITIES

CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE





LANE WIDTH (TYPICAL)
STA. 44+75 TO STA. 69+50



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 44+75 TO STA. 69+50

GUE-22/723-0.00
/0.70

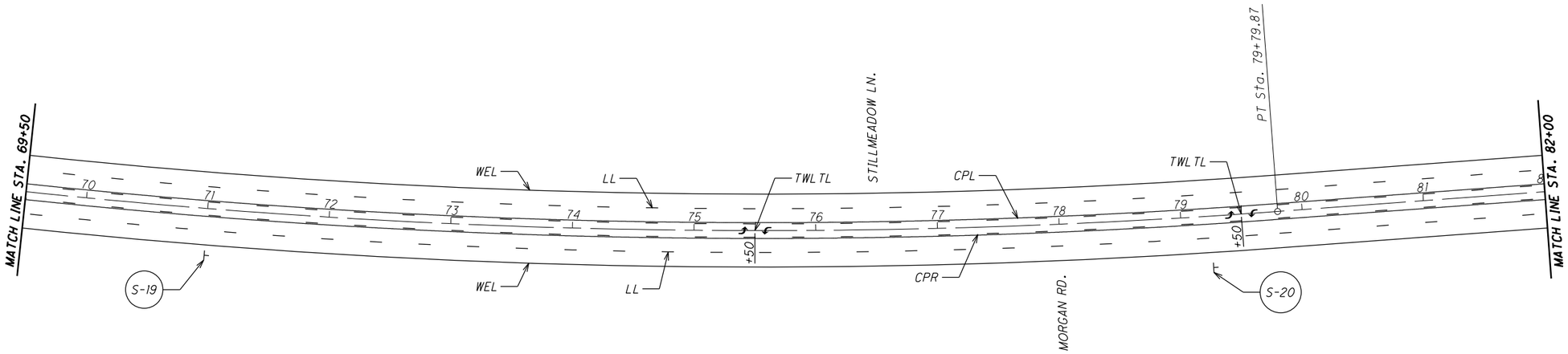
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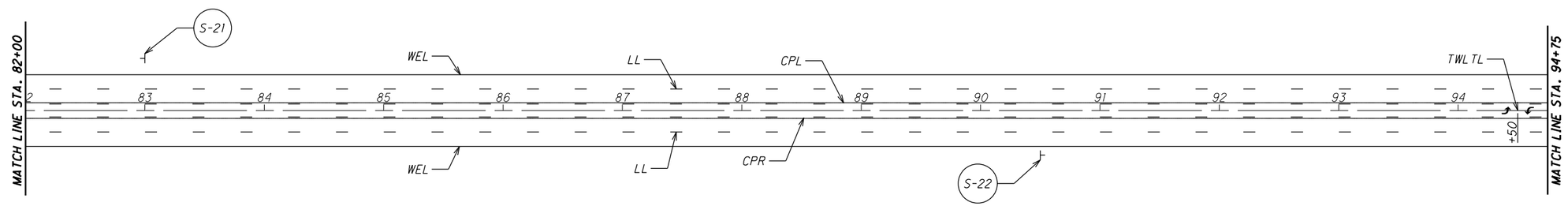
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NOTES
PLACE PROPOSED SIGNS BEHIND GUARDRAIL IF PRESENT

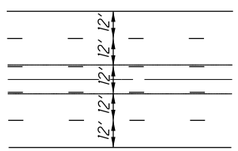
SEE SHEETS 168-169 FOR SIGNING QUANTITIES

CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE





LANE WIDTH (TYPICAL)
STA. 69+50 TO STA. 94+75



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 69+50 TO STA. 94+75

GUE-22/723-0.00
/0.70

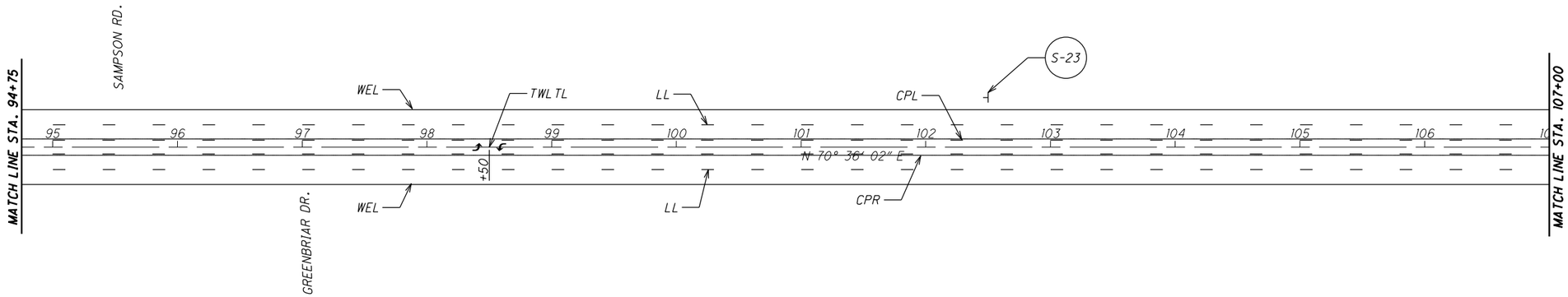
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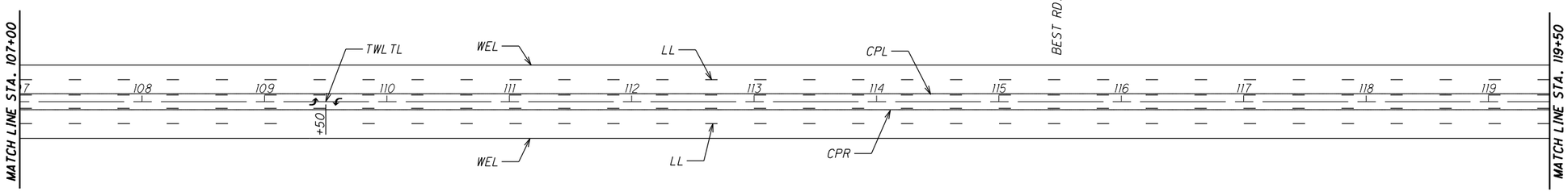
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NOTES
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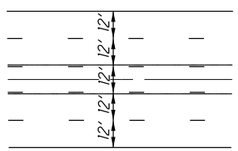
SEE SHEETS 168-169 FOR SIGNING QUANTITIES

CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE





LANE WIDTH (TYPICAL)
STA. 94+75 TO STA. 119+50



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 94+75 TO STA. 119+50

GUE-22/723-0.00
/0.70

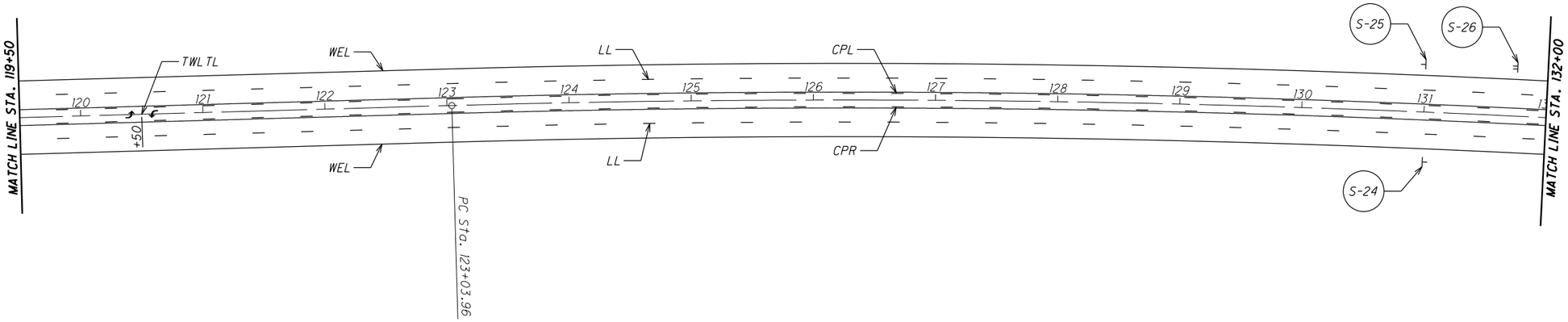
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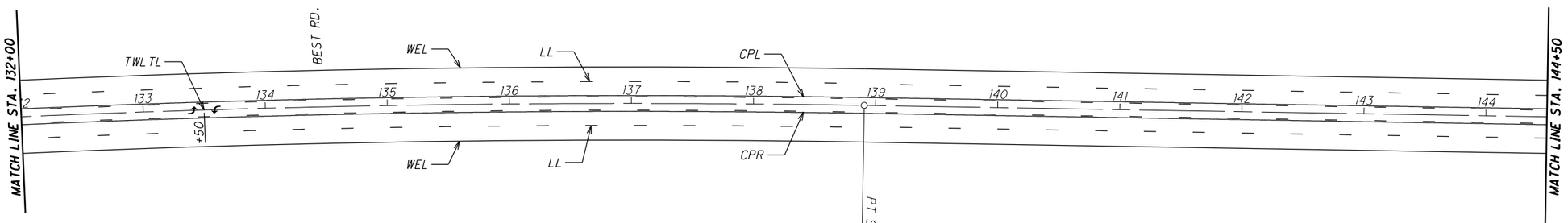
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NOTES
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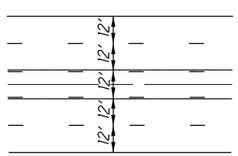
SEE SHEETS 168-169 FOR SIGNING QUANTITIES

CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE





LANE WIDTH (TYPICAL)
STA. 119+50 TO STA. 144+50



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 119+50 TO STA. 144+50

GUE-22/723-0.00
/ 0.70

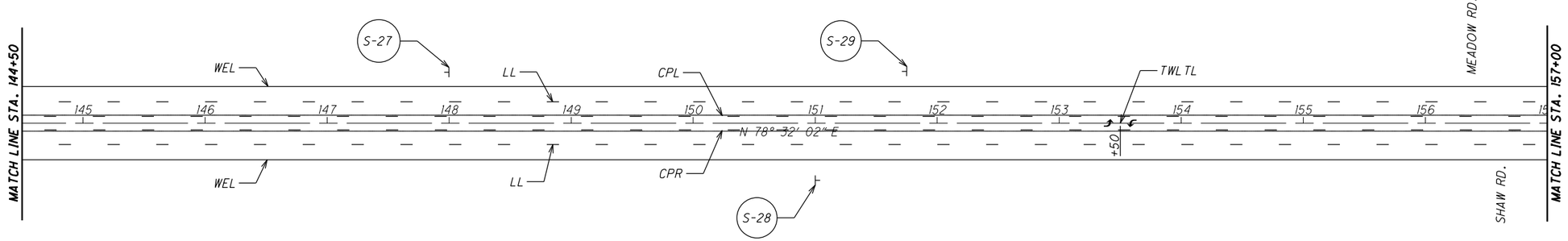
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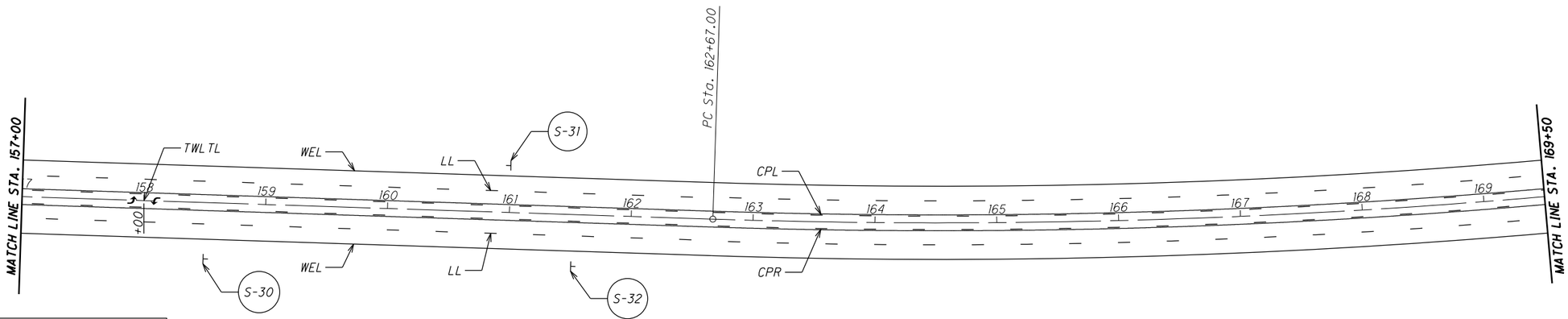
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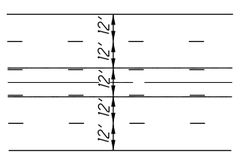
SEE SHEETS 168-169 FOR SIGNING QUANTITIES

CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE





LANE WIDTH (TYPICAL)
STA. 144+50 TO STA. 169+50



N

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 144+50 TO STA. 169+50

GUE-22/723-0.00
/ 0.70

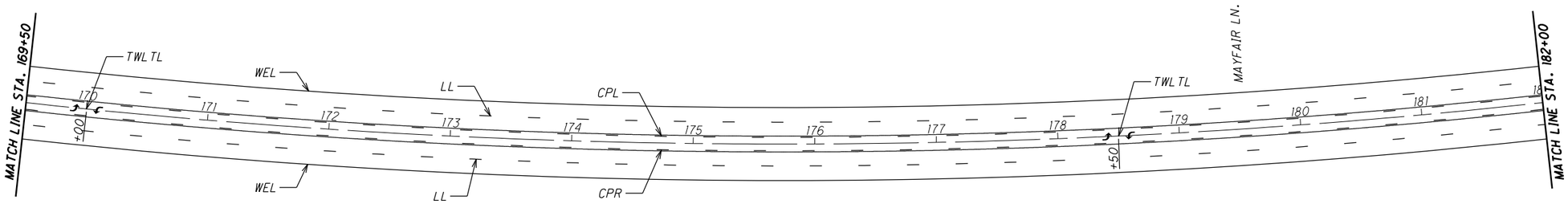
175
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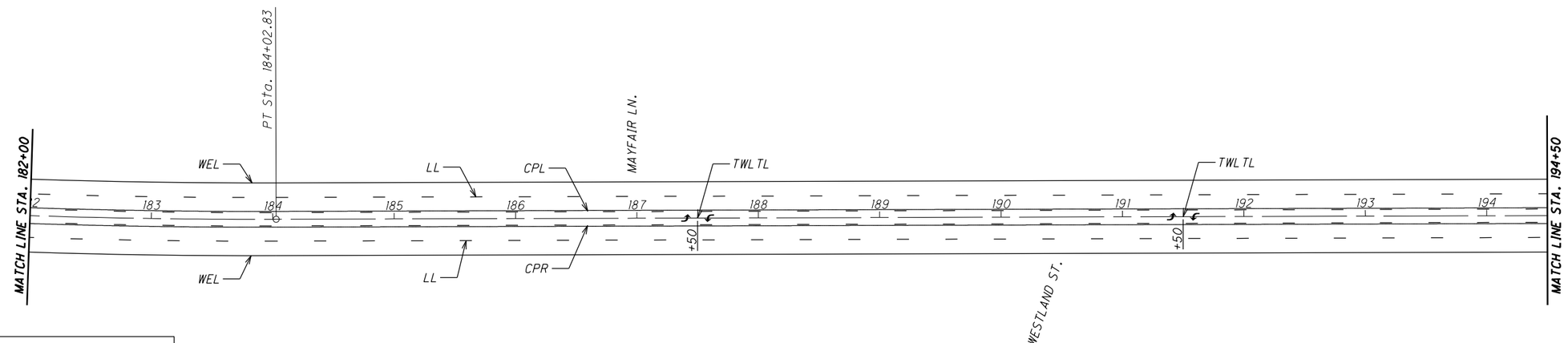
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NOTES
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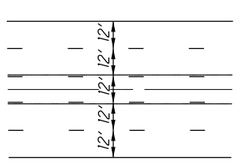
SEE SHEETS 168-169 FOR SIGNING QUANTITIES

CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE





LANE WIDTH (TYPICAL)
STA. 169+50 TO STA. 194+50



HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 169+50 TO STA. 194+50

GUE-22/723-0.00
/0.70

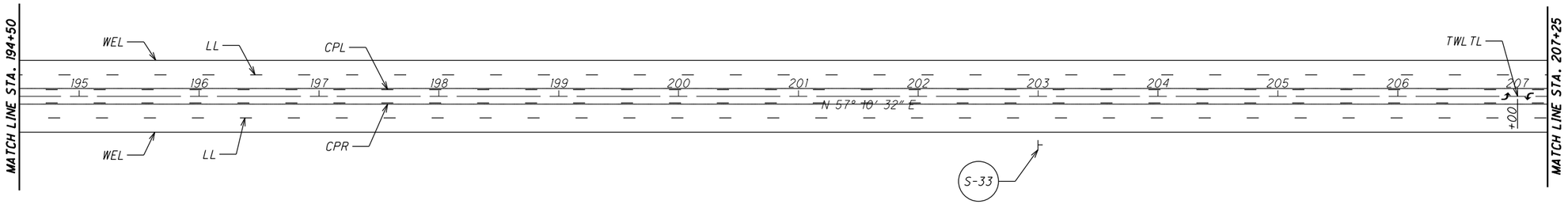
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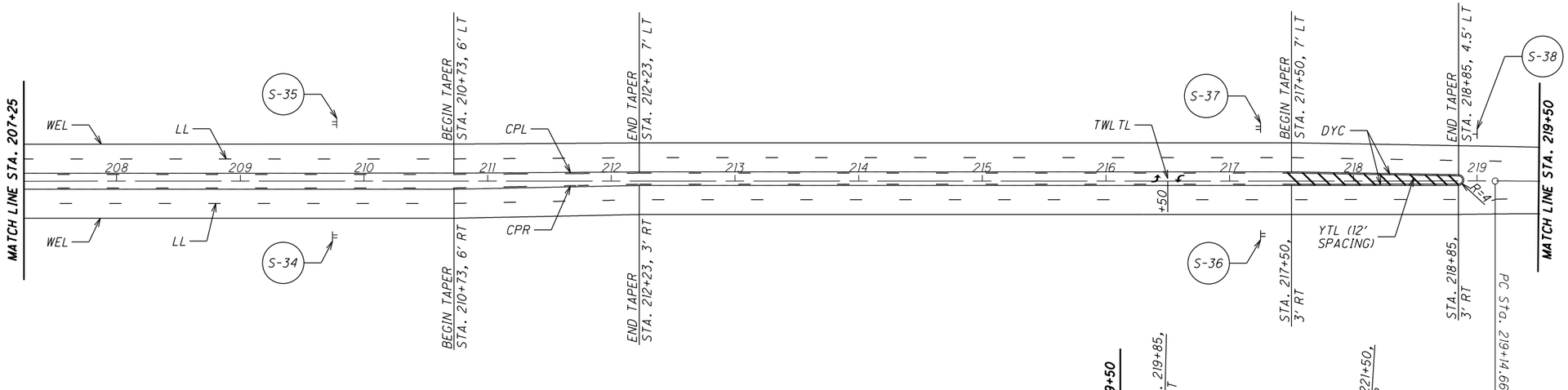
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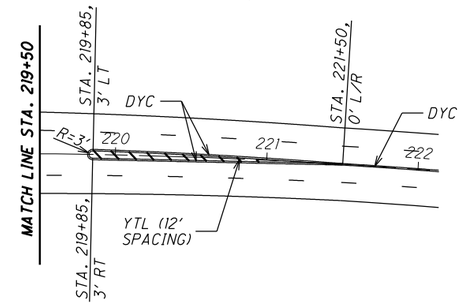
NOTES
PLACE PROPOSED SIGNS BEHIND GUARDRAIL IF PRESENT

SEE SHEETS 168-169 FOR SIGNING QUANTITIES

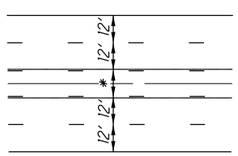
CPL = CENTER LINE (PASS PROH. LEFT)
CPR = CENTER LINE (PASS PROH. RIGHT)
DYC = DOUBLE YELLOW CENTER LINE
LL = LANE LINE
TWLTL = TWO WAY LEFT TURN LANE ARROWS
WEL = WHITE EDGE LINE
YTL = YELLOW TRANSVERSE LINE







LANE WIDTH (TYPICAL)
STA. 194+50 TO STA. 222+00



*VARIES (SEE ABOVE)

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED PTB
CHECKED JSL

TRAFFIC CONTROL PLAN - U.S. 22
STA. 194+50 TO STA. 222+00

GUE-22/723-0.00
/ 0.70

177
188

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TRAFFIC SIGNAL NOTES

UTILITIES

SEE **SHEET 48** FOR UTILITY INFORMATION

GENERAL

THE CONTRACTOR SHALL FURNISH AND INSTALL TRAFFIC CONTROL EQUIPMENT AND MATERIALS IN CONFORMANCE TO THESE PLANS AND SPECIFICATIONS, THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS), SUPPLEMENTAL SPECIFICATIONS (SS), STANDARD CONSTRUCTION DRAWINGS (SCD) AND PLAN INSERT SHEETS (PIS).

BEFORE ANY EQUIPMENT IS ORDERED OR INSTALLATION HAS BEGUN, THREE SETS OF A COMPLETE SCHEDULE OF EQUIPMENT INCLUDING CATALOG CUTS, DIAGRAMS, DRAWINGS, BROCHURES OR OTHER DESCRIPTIVE DATA SHALL BE SUBMITTED TO THE ENGINEER. ONE COPY WILL BE RETURNED MARKED "APPROVED" IF FOUND SATISFACTORY. WORK MAY BEGIN WHEN THE APPROVED COPY IS RECEIVED BY THE CONTRACTOR.

ANY EQUIPMENT OR MATERIAL NOT SPECIFICALLY CALLED FOR IN THESE SPECIFICATIONS BUT NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFULLY OPERATING SYSTEM SHALL BE FURNISHED AS INCIDENTAL TO THE CONTRACT. PAYMENT FOR SUCH ITEMS WILL BE MADE UNDER THE APPROPRIATE RELATED ITEM AT THE CONTRACT BID PRICE, COMPLETE AND IN PLACE.

ALL NECESSARY SIGNS AND PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE ANY SIGNAL MAY BE PLACED IN OPERATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF **180 DAYS** FOLLOWING COMPLETION OF THE TEN-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION, THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY. EQUIPMENT, MATERIAL, AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLERS, RADAR DETECTION, SPREAD SPECTRUM RADIO AND ALL ASSOCIATED EQUIPMENT.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM SHALL BE INCIDENTAL TO AND INCLUDED IN THE UNIT PRICE BID OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

VARMINT GUARDS

VARMINT GUARDS SHALL BE INSTALLED ON ALL SIGNAL SUPPORTS. ATTACH VARMINT SCREEN WITH STAINLESS STEEL BAND AND MINIMUM 2" OVERLAP. TIE OVERLAPPING SCREEN WITH **STAINLESS STEEL** WIRE TIES. SCREEN SHALL BE EXPANDED METAL SHEET, STAINLESS STEEL OR GALVANIZED, WITH OPENINGS NO LARGER THAN 3/8", OR APPROVED EQUAL. SEE **SCD HL-10.31** FOR DETAILS. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SUPPORT.

SIGNAL SUPPORT SHOP DRAWINGS

THE SIGNAL SUPPORT DESIGNER SHALL PROVIDE DRAWINGS FOR ALL SIGNAL SUPPORTS IN THESE PLANS, WITH STRUCTURAL ASPECTS OF THE DESIGN AND MATERIALS IN COMPLIANCE WITH THE 2001 AASHTO STANDARD SPECIFICATIONS, WITH 2006 INTERIM REVISIONS. THE SIGNAL SUPPORT SHALL BE ASTM A595 GRADE A WITH A MINIMUM YIELD STRENGTH OF 50 KSI. THE FOLLOWING DESIGN PARAMETERS SHALL BE USED:

1. BASIC WIND SPEED = 90 MPH
2. DESIGN LIFE = 25 YEARS
3. FATIGUE CATEGORY = III
4. GALLOPING: NO
5. TRUCK INDUCED GUST: NO

SUBMIT, TO THE ENGINEER PRIOR TO INCORPORATION: TWO COPIES OF THE SIGNAL SUPPORT DRAWINGS AND SHOP DRAWINGS, WHICH IDENTIFY AND DESCRIBE EACH MANUFACTURED SIGNAL SUPPORT AND SIGNAL SUPPORT WHICH IS BEING INCORPORATED INTO THE CONSTRUCTION. THE SIGNAL SUPPORT DRAWINGS AND SHOP DRAWINGS SHALL EACH BE REVIEWED, SEALED, SIGNED, AND DATED BY TWO OHIO REGISTERED PROFESSIONAL ENGINEERS.

PAYMENT SHALL BE INCIDENTAL TO THE ERECTION OF THE SIGNAL SUPPORT.

SIGNAL SUPPORT FOUNDATIONS

PRIOR TO ORDERING THE SIGNAL SUPPORTS, THE CONTRACTOR SHALL CONTACT OUPS TO HAVE ALL THE UTILITIES LOCATED IN THE FIELD THEN MEET WITH THE PROJECT ENGINEER TO LOCATE THE PROPOSED SUPPORT LOCATIONS TO INSURE THERE ARE NO CONFLICTS WITH UTILITIES. IF THERE ARE ISSUES, THE PROJECT ENGINEER SHALL PROVIDE GUIDANCE AS TO THE RELOCATION OF THE SUPPORT POLES.

ELEVATIONS SHOWN IN THE PLANS FOR SIGNAL SUPPORT FOUNDATIONS ARE FOR COMPUTATIONAL PURPOSES ONLY. THE ACTUAL ELEVATION OF THE FOUNDATION SHALL BE IN ACCORDANCE WITH **SCD TC-21.20**.

PAYMENT SHALL BE INCIDENTAL TO THE INSTALLATION OF THE SIGNAL FOUNDATION.

ITEM 632, REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN

TRAFFIC SIGNAL INSTALLATIONS SHALL BE REMOVED IN ACCORDANCE WITH **CMS 632.26** AND SHALL BE DISPOSED OR SALVAGE EQUIPMENT AS DESCRIBED BELOW.

REMOVE ALL EXISTING STRAIN POLES, SIGNAL HEADS, MESSENGER WIRE, CONDUITS, SIGNAL CABLE, CONTROLLER, CABINET, UPS CABINET, WORK PAD, AND FOUNDATIONS.

SALVAGE: NOTHING

TRAFFIC PULL BOXES TO BE REMOVED ARE ITEMIZED SEPARATELY.

PAYMENT FOR ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN. PAYMENT SHALL MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM.

ITEM 632, POWER SERVICE, AS PER PLAN

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

AMERICAN ELECTRIC POWER
SOLUTION CENTER
PHONE: 1-800-277-2177

ALL POWER SERVICES SHALL BE POLE MOUNTED AS SPECIFIED IN **CMS 632.24, 732.20, AND SCD TC-83.10** AT EACH INTERSECTION SHOWN IN THE TRAFFIC SIGNAL PLANS.

THE CONTRACTOR SHALL SUPPLY **120/240 VOLT, SINGLE PHASE, 3-WIRE** POWER WITH **TWO (2) 30 AMP DISCONNECTS** FOR THE SIGNAL **AND ONE (1) 20 AMP DISCONNECT** FOR THE LIGHTING AS SHOWN ON **SHEET 185**.

THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. **A MINIMUM OF THREE (3) MONTHS NOTICE SHALL BE GIVEN TO THE POWER COMPANY FOR NEW INSTALLATIONS**. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE SERVICE CABLE INTO THE POWER COMPANY'S CIRCUITS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES ASSOCIATED WITH THE SERVICE. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE SIGNAL SERVICE IS ACCEPTED BY THE MAINTAINING AGENCY.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RUNNING POWER SERVICE FROM THE TOP OF THE SIGNAL POLE TO THE POLE MOUNTED METER BASE, DISCONNECT(S), AND CABINET. IF THE PROPOSED POWER SERVICE LOCATION SHOWN IN PLANS IS NOT FEASIBLE THEN THE CONTRACTOR SHALL MOVE THE POWER SERVICE LOCATION AT APPROVAL OF THE ENGINEER. ITEMIZED QUANTITIES SHALL BE ADJUSTED.

DISCONNECT SWITCH ENCLOSURES SHALL BE PER **CMS 732.21** AND INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS AND SHALL BE KEYED IN ACCORDANCE WITH **CMS 631.06**. EACH ENCLOSURE SHALL HAVE A SAFETY SWITCH DISCONNECT.

PAYMENT FOR THE AFOREMENTIONED WORK SHALL BE MADE AT THE UNIT PRICE BID FOR EACH POWER SERVICE, COMPLETE IN PLACE, INCLUDING WEATHER-HEAD, CONDUIT RISER, FITTINGS, CLAMPS, DISCONNECT SWITCH WITH ENCLOSURE, METER BASE, GROUND RODS, MOUNTING HARDWARE, PADLOCK AND KEY, POWER CABLE, AND ALL OTHER INCIDENTALS (UNLESS ITEMIZED SEPARATELY) NECESSARY FOR COMPLETE SERVICE AS SHOWN IN PLANS, ALL CONNECTIONS TESTED AND ACCEPTED.

ITEM 625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (150W, 120V, TYPE II)

THE CONVENTIONAL LUMINAIRE SPECIFIED ABOVE SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 813 AND 913 AND SELECTED FROM THE APPROVED LIST OF LED LUMINAIRES:

HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/CONSTRUCTIONMGT/MATERIALS/APPROVED%20LIST/SOLID_STATE_LUMINAIRES_SS_813.PDF

IF THE SIGNAL SUPPORT/BRACKET ARM IS BEING PAINTED THE LUMINAIRE HOUSING SHALL BE POWDER COATED TO MATCH.

A PHOTOCELL SHALL BE INCLUDED TO BE MOUNTED ON THE STRAIN POLE TO CONTROL ALL LUMINAIRES AT THE INTERSECTION.

THE CONTRACTOR SHALL SUBMIT THE LUMINAIRE TO THE ENGINEER FOR ACCEPTANCE PRIOR TO ORDERING.

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ITEM 632, VEHICULAR SIGNAL HEAD, (LED), BY SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF **CMS 632 & 732**, THE FOLLOWING SHALL APPLY:

1. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF **YELLOW** POLYCARBONATE PLASTIC WITH VISORS AS SPECIFIED AND MEET ITE SPECIFICATIONS.

2. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

3. ALL UPPER SIGNAL SUPPORT HARDWARE AND PIPING UP TO AND INCLUDING THE WIRE INLET FITTING SHALL BE FERROUS METAL AND **MATCH THE COLOR OF THE SIGNAL SUPPORT.**

4. THE ENTRANCE FITTING SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.

5. ALL SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO THE MAST ARM WITH THE YELLOW LENS LOCATED IN FRONT OF THE MAST ARM.

6. ALUMINUM BACKPLATES SHALL BE IN ACCORDANCE WITH **CMS 732.22** AND INCLUDE A FLUORESCENT YELLOW REFLECTIVE BORDER, **REFLECTIVE SHEETING SHALL BE TYPE ASTM D4956 TYPE XI LISTED UNDER TYPE J ON THE DEPARTMENTS QUALIFIED PRODUCTS LIST.**

7. THE LIGHT EMITTING DIODE (LED) SIGNAL LAMP UNITS SHALL MEET THE REQUIREMENTS OF **CMS 732.04-C**. THE CONTRACTOR SHALL PROVIDE ODOT, IN WRITING, WITH THE LED MANUFACTURER NAME, SERIAL NUMBER, PART NUMBER, DESCRIPTION OF LAMP, AND DATE OF MANUFACTURE FOR ALL LED UNITS THAT ARE TO BE USED IN THE SIGNAL HEAD PRIOR TO INSTALLATION, FOR ACCEPTANCE AND WARRANTY PURPOSES.

8. SIGNAL HEADS SHALL HAVE A MINIMUM WALL THICKNESS OF 0.117 INCHES.

9. SIGNAL HEADS SHALL INCLUDE CUTAWAY TYPE VISORS UNLESS OTHERWISE SPECIFIED IN THE PLANS.

10. APPLY A BEAD OF SILICONE TO THE SIGNAL HEAD, WASHER, AND ENTRANCE ADAPTER SERRATIONS TO PREVENT WATER INTRUSION. ALSO, FILL THE SPACE BETWEEN CONCENTRIC SERRATION RINGS ON THE TOP OF THE SIGNAL HEAD TO COMPLETELY EXCLUDE WATER FROM THE SPACE BETWEEN THE CONCENTRIC RINGS.

11. BALANCE ADJUSTERS SHALL NOT BE USED ON ONE-WAY HEADS OR TETHERED HEADS.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH COMPLETE SIGNAL HEAD, FURNISHED AND INSTALLED, INCLUDING ALL LABOR, EQUIPMENT, MATERIALS, AND NEW ATTACHMENT HARDWARE.

ITEM 633 CONTROLLER ITEM MISC.: CONTROLLER UNIT, TYPE COBALT, WITH CABINET, TYPE 332

IN ADDITION TO THE REQUIREMENTS OF C&MS 633 AND 733, THE FOLLOWING REQUIREMENTS SHALL APPLY:

CONTROLLER SHALL BE AN ECONOLITE COBALT RACKMOUNT AND SHALL HAVE AN ATC COMPLIANT ENGINE BOARD. THE CONTROLLER SHALL BE DESIGNED FOR USE IN CALTRANS CABINETS USING THE BACKSIDE C1 CONNECTOR AS THE PRIMARY CONTROLLER-TO-CABINET INTERFACE.

THE CABINET SHALL BE FURNISHED WITH AN EDI 2010 ECLCLIP CONFLICT MONITOR AS ALLOWED ON THE TAP/APPROVED PRODUCTS LIST.

THE CONTRACTOR SHALL NOT REASSIGN THE CABINET DETECTOR INPUTS TO REDUCE THE NUMBER OF 2-CHANNEL DETECTOR UNITS SUPPLIED, BUT SHALL USE THE STANDARD CALTRANS INPUT FILE DESIGNATIONS.

THE TIMING PLAN SHOWN IN THESE PLANS SHALL BE PROGRAMMED BY THE CONTRACTOR.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH UNIT, COMPLETE IN PLACE, AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIAL, CABINET AND MOUNTING HARDWARE, AND ALL OTHER INCIDENTALS NECESSARY FOR A FULLY OPERATIONAL CONTROLLER CABINET, ALL CONNECTIONS TESTED AND ACCEPTED.

ITEM 633, UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF **CMS 633 & 733**, THE CONTRACTOR SHALL PROVIDE A 12" CABINET RISER AND ANCHOR BOLTS FOR THE GROUND MOUNTED UNINTERRUPTIBLE POWER SUPPLY (UPS). SEE **PIS 208320** FOR MOUNTING DETAILS.

THE CONTRACTOR SHALL FURNISH, INSTALL AND TEST UPS STATUS INDICATOR LAMPS THAT ALLOW MAINTENANCE PERSONNEL AND LAW ENFORCEMENT TO QUICKLY ASSESS WHETHER A TRAFFIC SIGNAL CABINET IS BEING POWERED BY A UPS. A 1-INCH WATERPROOF NEMA 4X OR IP66 LAMP WITH A DOMED RED LENS SHALL BE USED TO INDICATE THE CABINET IS OPERATING UNDER UPS BACKUP POWER (THE "BACKUP" OPERATING CONDITION). THIS LAMP SHALL BE WIRED USING MINIMUM 20GA STRANDED, INSULATED HOOKUP WIRE TO THE STATUS RELAY OUTPUTS OF THE UPS. THE WIRES SHALL BE TERMINATED BY LUGS AT THE DISPLAY END AND PERMANENTLY LABELED "BACK- UP POWER STATUS DISPLAY," WITH WIRE POLARITY INDICATED. THIS ITEM INCLUDES PROGRAMMING THE UPS STATUS RELAY OUTPUTS TO PRODUCE THE LAMP STATUS DISPLAYS. THE STATUS DISPLAY SHALL BE SOLID 100% DUTY CYCLE (NOT FLASHING). THE LAMP SHALL BE PLACED IN THE UPS CABINET WALL (NOT THE ROOF) IN SUCH A MANNER AS TO BE SEALED FROM WATER INTRUSION AND VISIBLE FROM A VEHICLE AT THE STOP LINE IN THE CLOSEST LANE OF AT LEAST ONE APPROACH TO THE SIGNALIZED INTERSECTION. THE OPERATING VOLTAGE OF THE LED LAMP SHALL BE 120V AC.

DURING A POWER OUTAGE, THE UPS SHALL BE PROGRAMMED TO RUN THE INTERSECTION CONTINUOUSLY UNTIL POWER RUNS OUT. THE INTERSECTION SHALL NOT GO INTO FLASH.

THE GENERATOR POWER PANEL SHALL BE CONSTRUCTED IN ACCORDANCE WITH **PIS 203012.**

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH UNIT, COMPLETE IN PLACE, INCLUDING WIRE FOR ALARM OUTPUT TO CONTROLLER AND ALL OTHER INCIDENTALS NECESSARY FOR A FULLY OPERATIONAL UPS, ALL CONNECTIONS TESTED AND ACCEPTED.

ITEM 633, CONTROLLER WORK PAD, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ADDITIONAL EXCAVATION, EMBANKMENT, AND CONCRETE NECESSARY TO EXTEND THE CONTROLLER WORK PAD TO THE DIMENSIONS **105" L X 72" W** AND PROVIDE A LEVEL WORK PAD.

THE CONTRACTOR SHALL CONSTRUCT THE WORK PAD AS FOLLOWS:

- EXCAVATE A MINIMUM OF 9" BELOW GRADE
- PLACE AND COMPACT 6" OF MATERIAL CONFORMING TO 304.02
- INSTALL A CAST-IN-PLACE WORK PAD THAT IS A MINIMUM OF 4" THICK

THE CONTROLLER WORK PAD SHALL BE IN ACCORDANCE WITH **CMS 633.11, SCD TC-83.20**, AND **PIS 208320.**

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY TO CONSTRUCT THE CONCRETE WORK PAD.

ITEM 633, CABINET FOUNDATION, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ADDITIONAL EXCAVATION AND CONCRETE NECESSARY TO EXTEND THE CONTROLLER CABINET FOUNDATION TO SUPPORT THE UNINTERRUPTIBLE POWER SUPPLY (UPS) CABINET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A FOUNDATION LARGE ENOUGH TO ACCOMMODATE THE UPS BEING PROVIDED BY SEPARATE BID ITEM.

THE CONTROLLER AND UPS CABINET FOUNDATION SHALL BE IN ACCORDANCE WITH **CMS 633.10, SCD TC-83.20**, AND **PIS 208320.**

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS NECESSARY TO CONSTRUCT THE FOUNDATION, INCLUDING CONDUIT ELLS AND ANCHOR BOLTS, RESTORATION OF DISTURBED AREA AND DISPOSAL OF SURPLUS MATERIAL AS PER CMS 104.04.

CALCULATED PTB CHECKED JSL

TRAFFIC SIGNAL NOTES

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ITEM 809, STOP BAR RADAR DETECTION

*THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT IN CONFORMANCE WITH **SS 809** AND THE FOLLOWING:*

1. *POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.*
2. *ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.*
3. *THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.*
4. *SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.*
5. *THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT TO THE CITY OF ZANESVILLE MAINTENANCE PERSONAL.*
6. *A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MIN. 7 FEET)*
7. *THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.*

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, AND ALL OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM, ALL CONNECTIONS TESTED AND ACCEPTED

ITEM 809, ADVANCE RADAR DETECTION

*THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR ADVANCE DETECTION UNIT (MODEL SS-200E) IN CONFORMANCE WITH **SS 809** AND THE FOLLOWING:*

1. *POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.*
2. *ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.*
3. *THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.*
4. *SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.*
5. *THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT TO THE CITY OF ZANESVILLE MAINTENANCE PERSONAL.*
6. *A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MIN. 7 FEET)*
7. *THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.*

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, AND ALL OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM, ALL CONNECTIONS TESTED AND ACCEPTED

CALCULATED PTB
CHECKED JSL

TRAFFIC SIGNAL NOTES

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GROUNDING AND BONDING

IN ADDITION TO THE REQUIREMENTS OF **CMS 625 & 725**, THE FOLLOWING SHALL APPLY:

1) ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.

   A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.

   B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.

   C. METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.

   D. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.

   E. IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.

   F. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.

2) CONDUITS.

   A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.

   B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.

   C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

   D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3) WIRE FOR GROUNDING AND BONDING.

   A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:

      I) USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.

      II) USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.

      III) USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.

      IV) THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.

   B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

4) GROUND ROD.

   A. A 3/4 INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.

   B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.

5) THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

COND. NO.	COLOR	VEHICLE SIGNAL	PEDESTRIAN SIGNAL
1	BLACK	GREEN BALL	#1 WALK
2	WHITE	AC NEUTRAL	AC NEUTRAL
3	RED	RED BALL	#1 DW/FDW
4	GREEN	EQUIPMENT GROUND	EQUIPMENT GROUND
5	ORANGE	YELLOW BALL	#2 DW/FDW
6	BLUE	GREEN ARROW	# 2 WALK
7	WHITE/BLACK STRIPE	YELLOW ARROW	NOT USED

6) POWER SERVICE AND DISCONNECT SWITCH.

   A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.

   B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.

      I) NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.

      II) IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

7) PAYMENT

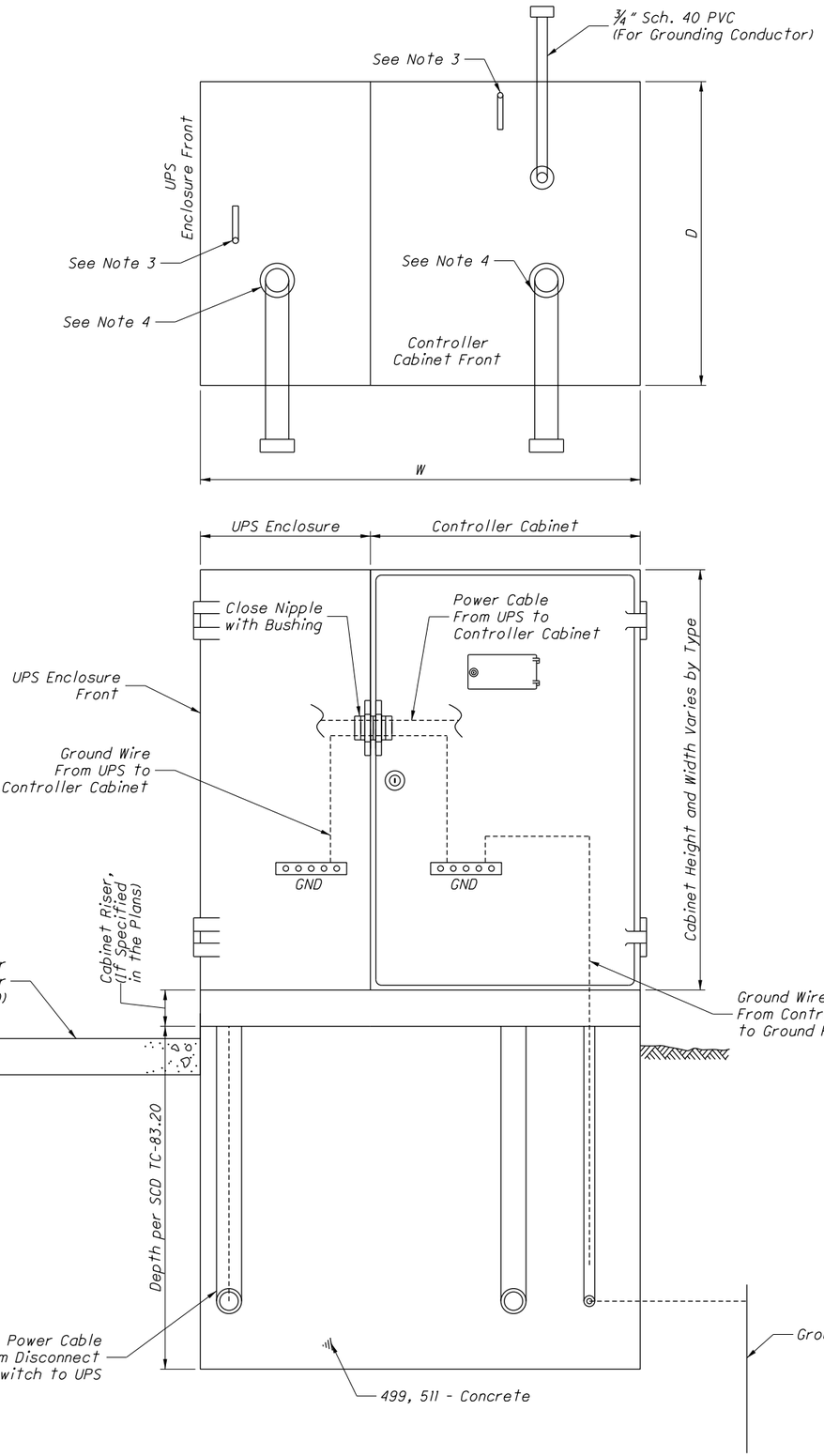
   ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT. GROUND RODS HAVE BEEN ITEMIZED SEPARATELY.

CALCULATED PTB CHECKED JSL

TRAFFIC SIGNAL NOTES

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NOTES:

1. The Uninterruptible Power Supply (UPS) enclosure shall be mounted flush up against the traffic signal cabinet and sealed with silicone. The Contractor shall be responsible for providing the necessary power cable between the UPS unit and signal cabinet.
2. The UPS should be placed on the opposite side of the pull box on a 332/336 cabinet (per Standard Construction Drawing (SCD) TC-83.20). The UPS placement for a NEMA cabinet varies, placement should provide adequate access with respect to slope, guardrail spacing, etc.
3. The size, number, and location of anchor bolts shall be in accordance with the manufacturer's recommendations.
4. The size, number, and orientation of conduit ells shall be as shown in the plan, except that a ¾" schedule 40 PVC shall be installed in each foundation.
5. 1/2" preformed joint filler as per CMS 705.03 shall be used between foundations and adjacent paved areas.
6. See SCD TC-83.20 for further details.

TYPE	W (IN.)	D (IN.)	FOUNDATION CONCRETE (CU. YD.)
TS-1	60	24	1.23
TS-2	70	36	2.16
2070/170	50	36	1.54

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
REVISION DATE 7/18/2014
CHECKED CHECKED

PLAN INSERT SHEET 208320

UNINTERRUPTIBLE POWER SUPPLY (UPS) AND CONTROLLER CABINET FOUNDATION

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MATERIAL SPECIFICATIONS FOR BBS GENERATOR POWER PANEL EQUIPMENT

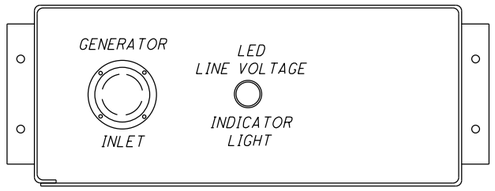
GENERATOR INLET - The inlet shall be 30 amp, 125/250V, locking, four (4) wire grounding and meet the NEMA configuration number L14-30-P 30A 125/250V specification. The inlet shall be a Hubbell catalog #2715.

LINE VOLTAGE GENERATOR SWITCH - The switch shall be 30 amp, 125/250V AC, two (2) pole, three (3) position (On, Off, On). The switch shall be a Hubbell catalog #1388.

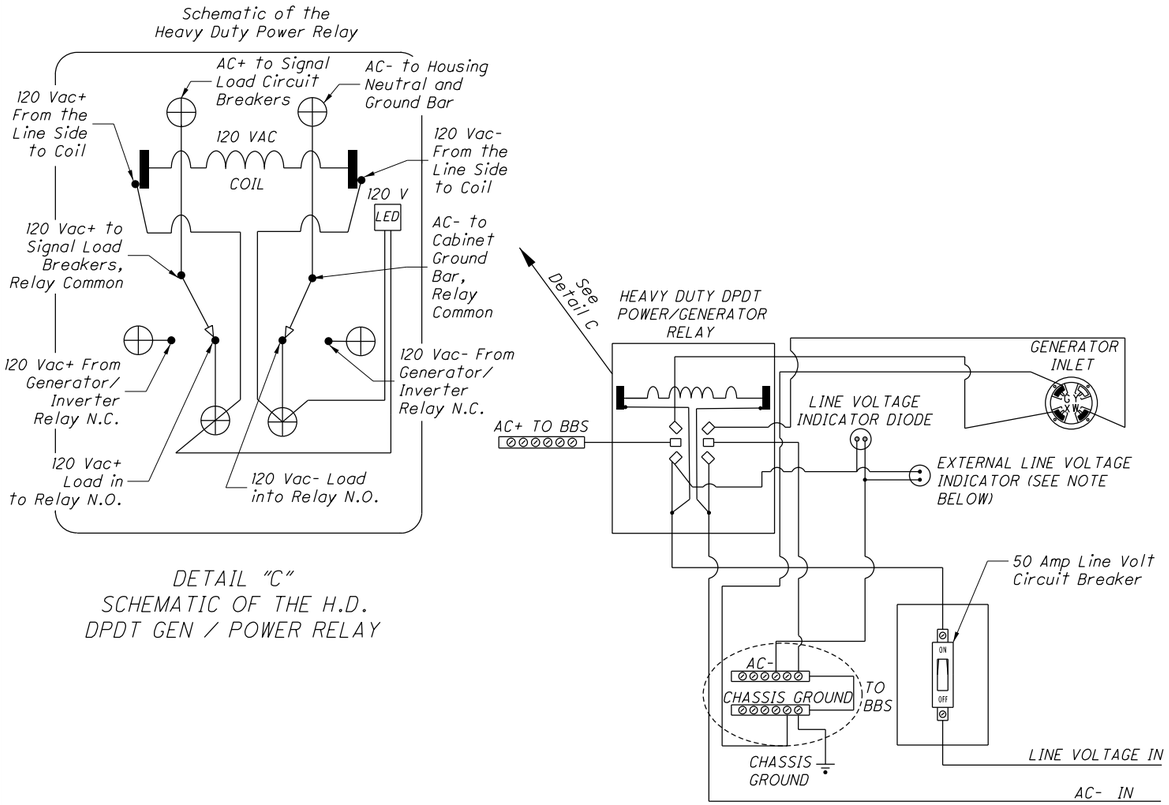
LINE VOLTAGE INDICATOR LIGHT - The indicator light shall be 125V AC light emitting diode with a red lens.

LINE VOLTAGE CIRCUIT BREAKER - The circuit breaker shall be single pole single throw and a minimum of 30 amps. The amperage shall be increased to accomodate greater loads, if necessary. The gauge of the power cable shall be of proper size per N.E.C.

EXTERNAL LINE VOLTAGE INDICATOR LIGHT - The indicator light shall be a 1" waterproof NEMA 4X or IP66 LED lamp with a green lens.



FRONT VIEW OF GENERATOR POWER PANEL

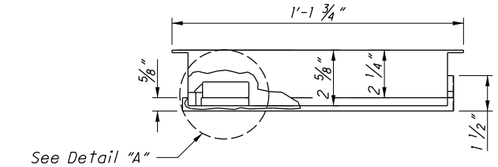


DETAIL "C"
SCHEMATIC OF THE H.D.
DPDT GEN / POWER RELAY

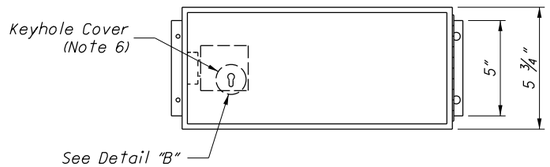
ELECTRICAL HOOKUP DETAIL FOR THE BBS GENERATOR POWER PANEL

NOTE: EXTERNAL LINE VOLTAGE INDICATOR LIGHT required when called for in the plans. EXTERNAL LINE VOLTAGE INDICATOR LIGHT shall be located on the enclosure exterior for visibility from the adjacent roadway when all cabinet, and generator panel doors are closed.

GENERATOR POWER PANEL ENCLOSURE



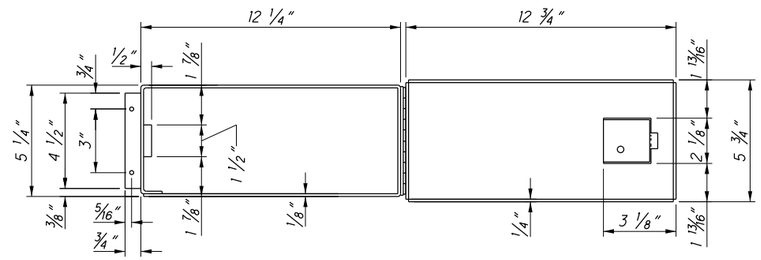
TOP VIEW



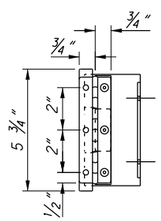
FRONT VIEW CLOSED DOOR

NOTES:

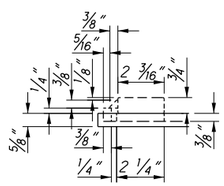
1. The enclosure shall be constructed of 1/8" thick alumimum.
2. The lock shall be the standard police door type, keyed with the standard flasher door skeleton key.
3. The door shall be sealed with a foam rubber gasket to prevent moisture from entering the enclosure.
4. The enclosure shall be mounted onto the outside of the controller cabinet with non-accessible bolts and sealed with a high quality silicon caulk at all surfaces touching the cabinet.
5. The hinge shall be of stainless steel or equivalent corrosive-resistant material.
6. Keyhole shall be covered with a movable circular aluminum or brass cover with top pivot pin.



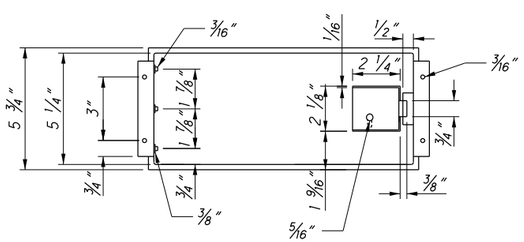
FRONT VIEW OPEN DOOR



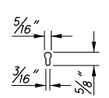
RIGHT SIDE VIEW
CLOSED DOOR



DETAIL "A"



BACK VIEW CLOSED DOOR



DETAIL "B"

THIS DRAWING REPLACES PIS 203012 DATED 04-20-2012.

PLAN INSERT SHEET 203012

BATTERY BACKUP SYSTEM (BBS)
GENERATOR POWER PANEL

OFFICE OF ROADWAY ENGINEERING

DESIGNED XXX
REVIEWED XXX
REVISION DATE 7/18/2014
CHECKED CHECKED

GUE-22/723-0.00
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REF NO.	SHEET NO.	LOCATION	625 CONNECTION, FUSED PULL APART EACH	625 CONNECTION, UNFUSED PULL APART EACH	625 CONNECTION, UNFUSED PERMANENT EACH	625 BRACKET ARM, 20' EACH	625 CONDUIT, 2", 725.05 FT	625 CONDUIT, 4", 725.05 FT	625 CONDUIT, JACKED OR DRILLED, 725.04, 4" FT	625 LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN (150W, 120V, TYPE II) EACH	625 TRENCH, 24" DEEP FT	625 PULL BOX, 725.08, 24" EACH	625 PULL BOX REMOVED EACH	625 GROUND ROD EACH	632 VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN EACH	632 COVERING OF VEHICULAR SIGNAL HEAD EACH	632 SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG FT	632 SIGNAL SUPPORT FOUNDATION EACH	632 POWER CABLE, 3 CONDUCTOR, NO. 8 AWG FT	632 POWER SERVICE, AS PER PLAN EACH	632 SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3 EACH	632 COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, DESIGN 3 EACH	632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN EACH	633 CABINET FOUNDATION, AS PER PLAN EACH	633 CONTROLLER WORK PAD, AS PER PLAN EACH	633 UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN EACH	633 CONTROLLER ITEM, MISC.:CONTROLLER UNIT, TYPE COBALT, WITH CABINET, TYPE 332 EACH	809 ADVANCE RADAR DETECTION EACH	809 STOP LINE RADAR DETECTION EACH
		U.S. 22 / S.R. 723											8												1						
C-1	185	GROUND MOUNTED CABINET												1												1	1	1	1		
PS-1	185	POWER SERVICE																			1										
P-1	185	SIGNAL SUPPORT				1				1				1				1						1							
P-2	185	SIGNAL SUPPORT												1				1				1									
P-3	185	SIGNAL SUPPORT				1				1				1				1					1								
2A	185	SIGNAL HEAD													1	1															
2B	185	SIGNAL HEAD													1	1															
4A	185	SIGNAL HEAD													1	1															
4B	185	SIGNAL HEAD													1	1															
6A	185	SIGNAL HEAD													1	1															
6B	185	SIGNAL HEAD													1	1															
D-2	185	ADVANCE RADAR DETECTION																												1	
D-4A	185	ADVANCE RADAR DETECTION																												1	
D-4B	185	STOP LINE RADAR DETECTION																													1
D-6	185	ADVANCE RADAR DETECTION																												1	
PB-1	185	PULL BOX											1																		
PB-2	185	PULL BOX											1																		
PB-3	185	PULL BOX											1																		
PB-4	185	PULL BOX											1																		
PB-5	185	PULL BOX											1																		
PB-6	185	PULL BOX											1																		
PB-7	185	PULL BOX											1																		
PB-8	185	PULL BOX											1																		
CONDUIT	185	PS-1 TO PB-6					28			14										59											
		PB-6 TO PB-8					104			104																					
		PB-8 TO P-3					12			12																					
		PB-6 TO PB-4							124											67											
		PB-4 TP P-1					17			17																					
		PB-4 TO PB-2					73			73										78											
		PB-2 TO C-1					21			21										31											
		C-1 TO PB-1						21		21																					
		PB-1 TO PB-3						58		58																					
		PB-3 TO P-1						10		10																					
		PB-3 TO PB-5							64																						
		PB-5 TO P-2						8		8																					
		PB-5 TO PB-7						89		89																					
		PB-7 TO P-3						12		12																					
SIGNAL CABLE	185	C-1 TO 2A, 2B															186														
		C-1 TO 4A, 4B															239														
		C-1 TO 6A, 6B															349														
POWER CABLE																															
	185	PS-1 TO L-1,L-2	2	2	6															396											
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)			**2**	**2**	**6**	**2**	**255**	**198**	**188**	**2**	**439**	**8**	**8**	**4**	**6**	**6**	**774**	**3**	**631**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**3**	**1**

TRAFFIC SIGNAL SUBSUMMARY
U.S. 22/ S.R. 723

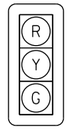
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SIGNAL INDICATIONS



SIGNAL
2A,2B,4A,4B,6A,6B

Ex LA

EX. OVERHEAD POWER SERVICE TO BE REMOVED

2" CONDUIT, 725.05, IN TRENCH = 104'

4" CONDUIT, 725.05, IN TRENCH = 89'

4" CONDUIT, 725.05, IN TRENCH = 12'

2" CONDUIT, 725.05, IN TRENCH = 12'

PB-7

P-3

PB-8

D-2

L2

6A

6B

4B

4A

D-4B

P-2

4" CONDUIT, 725.04, IN TRENCH = 8'

PS-1

PR. METER AND DISCONNECT (2 - 1 LIGHTING, 1 SIGNAL) ON EX. WOOD POLE

2-2" CONDUIT, 725.05, IN TRENCH = 14'

PR. OVERHEAD POWER SERVICE

EX. WOOD POLE

PB-6

PB-5

4" CONDUIT, 725.04, JACKED OR DRILLED = 64'

EX. ℄ SURVEY AND CONST. U.S. 22

291 292 293 294 295 296

N 84° 13' 59" E

Z-6 ϕ6

ϕ2 Z-2

2B

2A

D-6

L1

2-4" CONDUIT, 725.04, JACKED OR DRILLED = 62'

PB-3

PB-4

2" CONDUIT, 725.05, IN TRENCH = 17'

4" CONDUIT, 725.05, IN TRENCH = 10'

P-1

D-4A

4" CONDUIT, 725.05, IN TRENCH = 58'

2" CONDUIT, 725.05, IN TRENCH = 73'

PB-2

PB-1

2" CONDUIT, 725.05, IN 24" TRENCH = 21'

4" CONDUIT, 725.05, IN 24" TRENCH = 21'

C-1

PR. DISCONNECT ON PR. CABINET

EX DETECTOR CABLE (ABANDON) (TYP.)

Z-4A-B

Z-4A-A

42

43

EX. ℄ SURVEY AND CONST. S.R. 723

ONLY ONLY

Z-4B

ϕ4

Ex LA

LEGEND

	PROP	EXIST
TRAFFIC SIGNAL, 3 UNIT HEAD, 12"	●→	○→
SIGNAL SUPPORT POLE	■	▣
CONTROLLER CABINET AND WORK PAD (332)	▣	⊠
TRAFFIC PULL BOX	TR	TR
DILEMMA ZONE RADAR DETECTION UNIT	Ⓓ	
STOP BAR RADAR DETECTION UNIT	Ⓢ	
RADAR UNIT DETECTION ZONE	▭	

REFERENCE	STATION	OFFSET
P-1	SEE SHEET 186	
P-2		
P-3		
C-1	43+75.00	40.0' RT
PB-1	43+98.00	35.0' RT
PB-2	43+98.00	38.0' RT
PB-3	294+93.00	31.5' RT
PB-4	295+10.00	30.0' RT
PB-5	294+77.00	30.5' LT
PB-6	294+88.00	27.0' LT
PB-7	293+88.00	30.0' LT
PB-8	293+85.00	27.0' LT

N

0 10 20 40 HORIZONTAL SCALE IN FEET

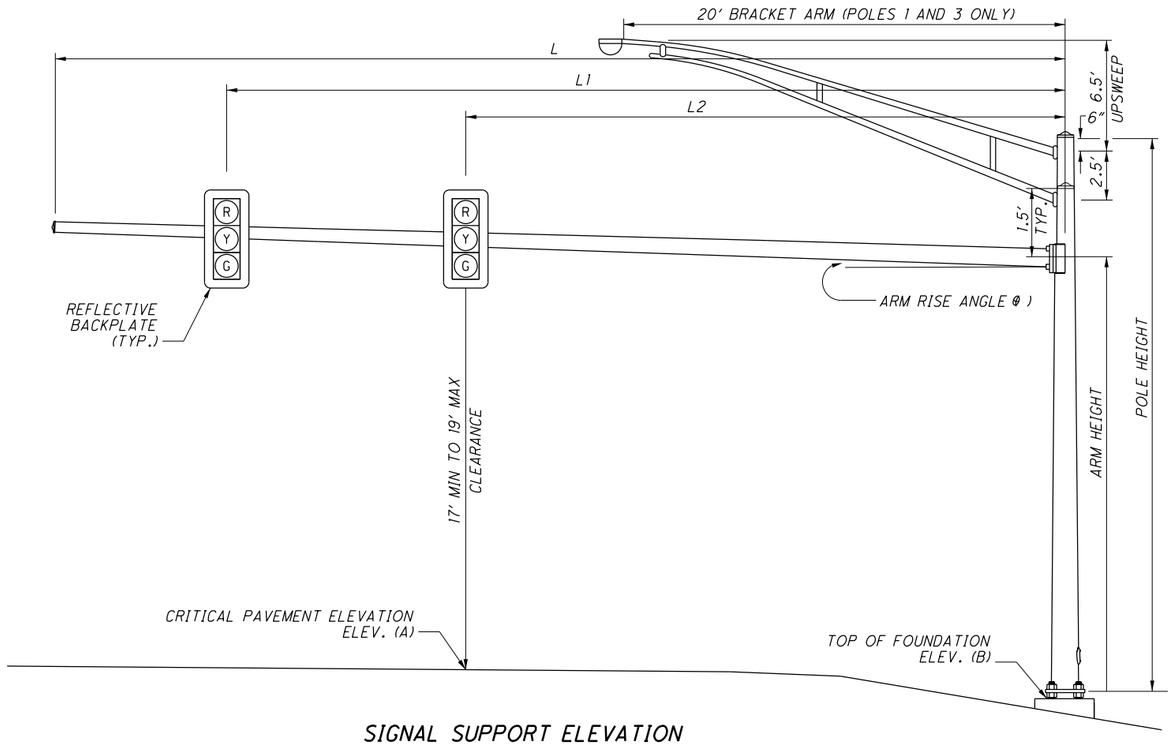
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TRAFFIC SIGNAL PLAN
U.S. 22/ S.R. 723

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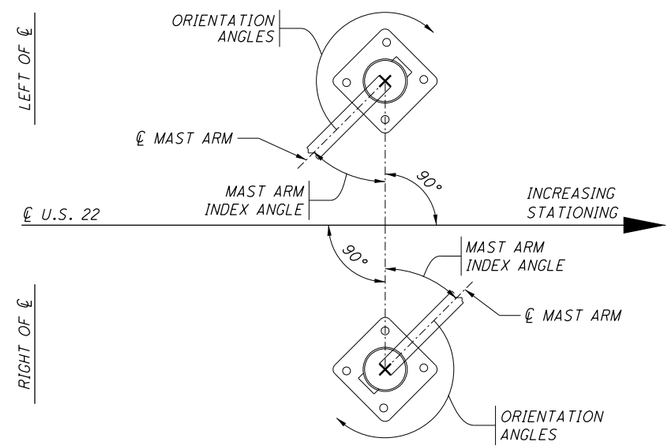
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SIGNAL SUPPORT ELEVATION

POLE ORIENTATION



SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS											MAST ARM INDEX ANGLE	ORIENTATION ANGLES		
			A	B	DESIGN TYPE	DESIGN NO.	MAST ARM DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	L4	ARM RISE		CONTROLLER	HANDHOLE	BRACKET ARM
								FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG
P-1	294+97.00	40.0' RT	839.35	836.97	TC-81.21	3		26	22.5	37	34	22			0.5	0		180	0
P-2	294+77.00	38.0' LT	841.25	839.59	TC-81.21	3		23	19.5	35	32	20			0.5	92.5		180	
P-3	293+80.00	38.0' LT	843.51	841.92	TC-81.21	3		26	22.5	35	32	20			0.5	0		180	0

CALCULATED PTB
CHECKED JSL

TRAFFIC SIGNAL MAST ARM DETAILS
U.S. 22/ S.R. 723

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SIGNAL TIMING CHART

INTERSECTION: U.S. 22 AND S.R. 723 MAINTAINING AGENCY: ODOT										
START UP			DUAL ENTRY: ϕ2 & ϕ6							
START IN		Y/R FLASH								
TIME FOR FLASH OR ALL RED		4 (SEC.)								
FIRST PHASES		2 & 6	OVERLAP				A	B	C	D
COLOR DISPLAYED		GREEN	PHASE							
INTERVAL OR FEATURE			ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8
INTERSECTION MOVEMENT				EB		NB		WB		
MINIMUM GREEN (INITIAL)		(SEC)		15		15		15		
ADDED INITIAL	(SEC/ACTUATION)			0.5				0.5		
MAXIMUM INITIAL		(SEC)		22				22		
PASSAGE TIME		(SEC)		5		4.5		5		
TIME BEFORE REDUCTION		(SEC)								
MINIMUM GAP		(SEC)								
TIME TO REDUCE		(SEC)								
MAXIMUM GREEN I		(SEC)		30		30		30		
MAXIMUM GREEN II		(SEC)								
YELLOW CHANGE		(SEC)		4		4		4		
ALL RED CLEARANCE		(SEC)		1		1		1		
WALK		(SEC)								
PEDESTRIAN CLEARANCE		(SEC)								
RECALL	MAXIMUM	(ON/OFF)								
	MINIMUM	(ON/OFF)								
	PEDESTRIAN	(ON/OFF)								
MEMORY		(ON/OFF)								

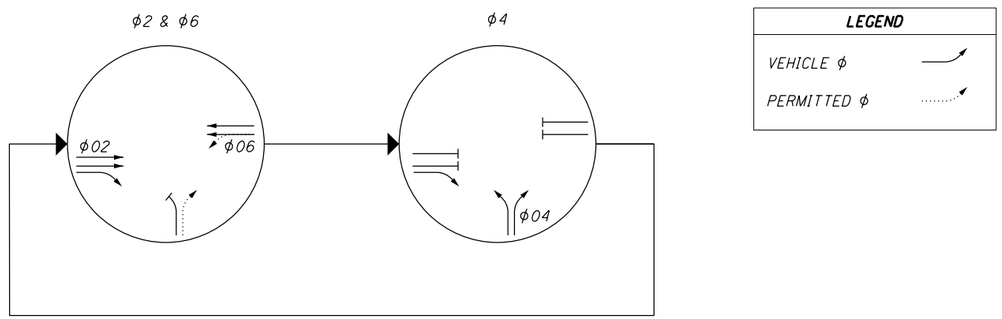
NOTES:

- ALL MOVEMENTS SHALL BE ACTUATED. THE PRIMARY THRU MOVEMENT SHOULD HAVE MIN RECALL ACTIVE TO REST IN GREEN.
- RADAR DETECTION UNITS FOR DILEMMA ZONE DETECTION SHALL PLACE A CONSTANT CALL TO THE CONTROLLER WHEN VEHICLES TRAVEL TIMES TO THE STOP BAR ARE BETWEEN 2.5 AND 6 SECONDS. SPEED TRIGGER SHALL BE SET FOR VEHICLES TRAVELING 35 MPH AND GREATER.
- RADAR SHALL HAVE QUEUE DETECTION CONFIGURED AND A ZONE PLACED AT 100-200 FEET FROM STOP BAR FOR SLOW MOVING VEHICLE EXTENSIONS. SPEED TRIGGER SHALL BE SET AT 1-35 MPH.
- ALL DETECTOR DELAYS SHALL BE PLACED IN THE CONTROLLER.

RADAR DETECTION CHART

RADAR DETECTION UNIT	RADAR DETECTION ZONE	RADAR TYPE	DELAY SEC.)	MIN. EXTENSION (SEC.)	ASSOCIATED CONTROLLER PHASE
D-2	Z-2	DILEMMA ZONE			ϕ2
D-4A	Z-4A-A	STOP BAR	8		ϕ4
	Z-4A-B	STOP BAR			ϕ4
D-4B	Z-4B	DILEMMA ZONE			ϕ4
D-6	Z-6	DILEMMA ZONE			ϕ6

PHASING DIAGRAM



CALCULATED PTB
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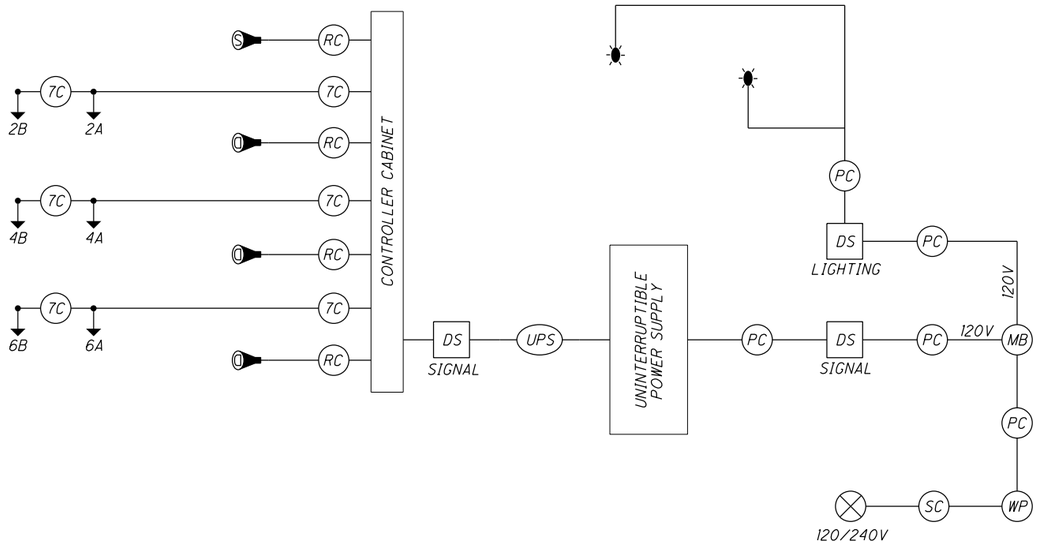
TRAFFIC SIGNAL PHASING DETAILS
U.S. 22/ S.R. 723

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WIRING DIAGRAM



FIELD WIRING HOOK-UP CHART

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
2A	R	ϕ2 R	R
	Y	ϕ2 Y	
	G	ϕ2 G	
2B	R	ϕ2 R	R
	Y	ϕ2 Y	
	G	ϕ2 G	
4A	R	ϕ4 R	R
	Y	ϕ4 Y	
	G	ϕ4 G	
4B	R	ϕ4 R	R
	Y	ϕ4 Y	
	G	ϕ4 G	
6A	R	ϕ6 R	R
	Y	ϕ6 Y	
	G	ϕ6 G	
6B	R	ϕ6 R	R
	Y	ϕ6 Y	
	G	ϕ6 G	

WIRING DIAGRAM LEGEND

- 3 SECTION VEHICULAR SIGNAL HEAD, 1-WAY
- 20' BRACKET ARM W/ 150W LUMINAIRE
- DILEMMA ZONE RADAR DETECTION UNIT
- STOP BAR RADAR DETECTION UNIT
- POWER SOURCE
- (7C) SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
- (RC) RADAR DETECTION CABLE
- (SC) SERVICE CABLE, 3 CONDUCTOR, NO. 8 AWG
- (PC) POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
- (WP) EXISTING WOOD POWER POLE
- (MB) METER BASE
- [DS] DISCONNECT SWITCH
- (UPS) UNINTERRUPTIBLE POWER SUPPLY CABLE

CALCULATED PTB
CHECKED JSL

TRAFFIC SIGNAL WIRING DETAILS
U.S. 22/ S.R. 723

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PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING AND RELATED WORK ON U.S. 22 AND S.R. 723 INCLUDING REMOVAL OF EXISTING GRASS MEDIAN AND ADDITION OF SHOULDERS ON U.S. 22 FROM SLM 26.64-27.73 AND 0.00-3.46 IN MUSKINGUM AND GUERNSEY COUNTIES. UPGRADE TO TRAFFIC SIGNAL AT U.S. 22/S.R. 723.

HISTORIC RECORDS

HISTORICAL BORINGS WERE OBTAINED FROM ODOT OFFICE OF GEOTECHNICAL ENGINEERING. MUS/GUE-22/40-27.81/0.00 WAS COMPLETED IN 1941. AUGER BORINGS WERE COMPLETED FOR THE RECONSTRUCTION OF THE TWO-LANE ROADWAY WITH AN ADDITIONAL 2 LANES. THIS INFORMATION WAS REVIEWED, BUT NOT UTILIZED WITHIN THE CURRENT DESIGN AND THE INFORMATION IS NOT SHOWN FOR CLARITY.

GEOLOGY

THE PROJECT IS LOCATED WITHIN THE TRANSITION BETWEEN THE NON-GLACIATED MUSKINGUM-PITTSBURGH PLATEAU AND NON-GLACIATED MARIETTA PLATEAU. THE PROJECT GENERALLY FOLLOWS THE WIDE FLOOD PLAIN OF THE CROOKED CREEK WHICH CONTAINS GLACIALLY DEPOSITED LACUSTRINE SOIL WITH AREAS CUTTING THROUGH RIDGES. THE LACUSTRINE SOILS ARE TYPICALLY COHESIVE SOILS WHICH HAVE HIGHER MOISTURE CONTENTS. OUTSIDE OF THE FLOOD PLAIN AREAS TYPICALLY THIN RESIDUAL SOILS ARE LOCATED ALONG THE RIDGE TOPS AND HILLSIDE AND THIN TO THICK COLLUVIAL SOILS ARE LOCATED AT THE BASE OF THE HILLS. PENNSYLVANIAN AGED SHALE, SILTSTONE, MUDSTONE, SANDSTONE, LIMESTONE AND COAL BEDROCK ARE FOUND WITHIN THE PROJECT AREA. THE CONEMAUGH GROUP COMPRISES THE BEDROCK FOUND WITHIN THE WESTERN TWO THIRDS OF THE PROJECT AND THE ALLEGHENY AND POTTSVILLE GROUPS COMPRISES THE BEDROCK OF THE EASTERN THIRD.

RECONNAISSANCE

FIELD RECONNAISSANCE WAS COMPLETED BY PERSONNEL FROM THE OFFICE OF GEOTECHNICAL ENGINEERING ON AUGUST 9, 2018. THE SITE TRAVERSES MANY DIFFERENT TERRAINS WITHIN THE PROJECT LIMITS. LAND USAGE WITHIN THE PROJECT VARIED FROM COMMERCIAL, RESIDENTIAL, WOODED, AGRICULTURAL AND FALLOW. THE EXISTING PAVEMENT WAS NOTED AS BEING IN FAIR CONDITION DUE TO AGE WITH A GRASS MEDIAN.

FOR THE MAJORITY OF THE PROJECT, THE ROADWAY IS SUPPORTED ON MINOR CUT, EMBANKMENT FILL OR AT GRADE. ALONG THE WESTBOUND (WB) LANES, WELL VEGETATED CUT SECTIONS WERE NOTED BETWEEN APPROXIMATE STA. 40 TO 64, 70 TO 76, 96 TO 103 AND 159 TO 164. CUT SECTIONS, WHICH WERE WELL VEGETATED, WERE NOTED ALONG THE EB LANES BETWEEN APPROXIMATE STA. 81 TO 96 AND 112 TO 118. THE EXISTING ALIGNMENT WAS CONSTRUCTED WITHIN A THROUGH CUT BETWEEN APPROXIMATE STA. 118 TO 134. WITHIN THE THROUGH CUT MOST OF THE CUT WAS COMPLETED WITHIN PREDOMINATELY WEATHERED SHALES, WITH THE SLOPES BEING RELATIVELY WELL VEGETATED ALONG WITH AREAS OF MINOR SURFACE EROSION NOTED. AT APPROXIMATELY STA. 130+00 AN AREA OF HEAVY EROSION WITH SIGNIFICANT LOSS OF MATERIAL WAS NOTED IN THE NORTHERN SLOPE. MORE SIGNIFICANT EMBANKMENT FILLS WERE NOTED SUPPORTING THE ENTIRE ROADWAY BETWEEN APPROXIMATELY STA. 103 TO 109.

BETWEEN APPROXIMATELY STA. 33 TO 39 THE DITCH LINE ALONG THE EASTBOUND (EB) LANES WERE NOTED AS BEING WET. BETWEEN APPROXIMATE STA. 156+50 AND 158 THE WB DITCH WAS NOTED AS BEING WET. ALONG THE EB LANES BETWEEN APPROXIMATE STA. 162 AND 168 A MINOR STREAM BED WAS NOTED WHICH CONTAINED WET MATERIAL BETWEEN THE STREAM AND THE ROADWAY. ADDITIONALLY, THE STREAM WAS NOTED TO BE UNDERCUTTING THE TOE OF THE SLOPE BETWEEN APPROXIMATELY STA. 162 AND 165. BETWEEN APPROXIMATELY STA. 187 TO 190 AND 198 TO 205 BOTH SIDES OF THE ROADWAY WAS NOTED AS BEING LOW LYING AND WET.

SUBSURFACE EXPLORATION

TWENTY-SEVEN (27) BORINGS WERE COMPLETED AS PART OF THE SUBSURFACE EXPLORATION BETWEEN AUGUST 28 AND SEPTEMBER 4, 2018 UTILIZING A TRUCK MOUNT CME 75 ROTARY DRILL RIG, USING 3¼-INCH I.D. HOLLOW STEM AUGERS TO ADVANCE THE BORINGS THROUGH THE SOIL. DISTURBED SAMPLES WERE COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT CONTINUOUS INTERVALS FOR THE FULL DEPTH OF THE BORINGS. THE HAMMER SYSTEM USED WAS LAST CALIBRATED IN JUNE 1, 2017, AND THE AVERAGE DRILL ROD ENERGY RATIO (ER) WAS 85%. ADDITIONALLY, TWENTY-TWO (22) DYNAMIC CONE PENETRATION TEST SOUNDINGS WERE COMPLETED ON SEPTEMBER 18, 2018 UTILIZING A HUMBOLDT DUEL MASS DCP UNIT.

EXPLORATION FINDINGS

THE MAJORITY OF THE BORINGS WERE COMPLETED WITHIN THE GRASS MEDIAN AND ENCOUNTERED BETWEEN 2 AND 7 INCHES OF TOPSOIL. B-39 ENCOUNTERED 18 INCHES OF TOPSOIL. B-3, B-11, B-12, B-25, B-34, B-40, B-41, AND B-43 WERE DRILLED WITHIN PAVED MEDIAN SECTIONS WHICH ENCOUNTERED 3 TO 4 INCHES OF ASPHALT UNDERLAIN BY 4 TO 9 INCHES OF CONCRETE. AGGREGATE BASE WAS ENCOUNTERED IN B-12, B-25, B-41, AND B-43 WHICH RANGED BETWEEN 3 TO 6 INCHES. B-48 WAS LOCATED AT THE END OF THE CONTINUOUS PAVED MEDIAN LOCATED AT THE EASTERN TERMINUS AND ENCOUNTERED 18 INCHES OF ASPHALT.

LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH.	CLASSIFIED VISUAL
GRAVEL AND/OR STONE FRAGMENTS	A-1-a	1	-
GRAVEL AND/OR STONE FRAGS. WITH SAND & SILT	A-2-4	5	-
GR. AND/OR ST. FRAGS. WITH SAND, SILT & CLAY	A-2-6	2	1
SANDY SILT	A-4a	5	4
SILT	A-4b	1	-
SILT AND CLAY	A-6a	11	5
SILTY CLAY	A-6b	25	20
CLAY	A-7-6	7	2
	TOTAL	57	32
SANDSTONE	VISUAL		
SHALE	VISUAL		
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		

B-00X-0-18 BORING LOCATION - PLAN VIEW.

DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.

D-00X-0-18 DCP SOUNDING LOCATION - PLAN VIEW.

DYNAMIC CONE SOUNDING PLOTTED TO VERTICAL SCALE ONLY.

WC INDICATES WATER CONTENT IN PERCENT.

N_{60} INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.

X/Y/Z NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT):
X= NUMBER OF BLOWS FOR FIRST 6 INCHES.
Y= NUMBER OF BLOWS FOR SECOND 6 INCHES.
Z= NUMBER OF BLOWS FOR THIRD 6 INCHES.

X/Y/D″ NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT):
X= NUMBER OF BLOWS FOR 6 INCHES (UNCORRECTED).
Y/D″ = NUMBER OF BLOWS (UNCORRECTED) FOR D″ OF PENETRATION AT REFUSAL.

LOI INDICATES ORGANIC CONTENT BY LOSS ON IGNITION, AASHTO T267.

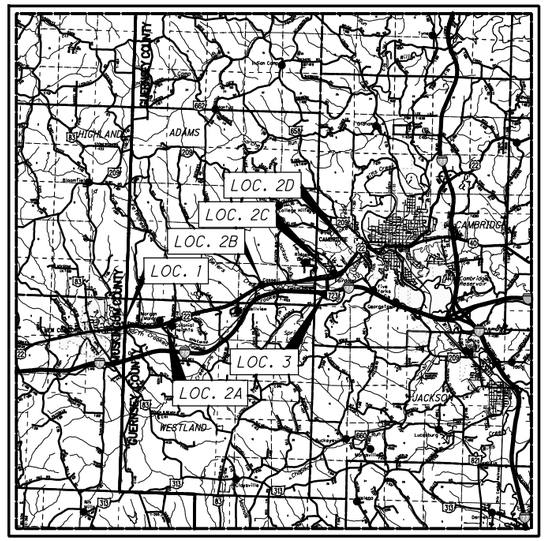
NP INDICATES A NON-PLASTIC SAMPLE.

PPM INDICATES SULFATE CONTENT IN PARTS PER MILLION.

SS INDICATES A SPLIT SPOON SAMPLE.

TR INDICATES TOP OF ROCK ELEVATION.

RECON. - PPP 08/09/18
DRILLING - ZJB 08/28-30/18
JMB 08/29/18-09/04/18
AMJ 08/30/18-09/04/18
DRAWN - AR 02/19
REVIEWED - SAT 02/19



LOCATION MAP

SCALE IN MILES

0 2 4 6 8

N

PARTICLE SIZE DEFINITIONS

12″	3″	2.0 mm	0.42 mm	0.074 mm	0.005 mm
BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT	CLAY
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE	

INDEX OF SHEETS

SUMMARY OF SOIL TEST DATA, SHEETS 3 & 4

LOCATION FROM STA.	TO STA.	PLAN VIEW SHEET	PROFILE SHEET	CROSS-SECTION SHEET	CUT MAX.	FILL EMB. MAX.
U.S. 22						
19+50	32+00	5	5	-	<1 FT	<1 FT
27+50		-	-	22	<1 FT	<1 FT
32+00	44+50	6	6	-	<1 FT	<1 FT
44+50	57+00	7	7	-	<1 FT	<1 FT
57+00	69+50	8	8	-	<1 FT	<1 FT
69+50	82+00	9	9	-	<1 FT	<1 FT
82+00	94+50	10	10	-	- FT	<1 FT
94+50	107+00	11	11	-	- FT	<1 FT
107+00	119+50	12	12	-	- FT	<1 FT
119+50	132+00	13	13	-	- FT	<1 FT
132+00	144+50	14	15	-	<1 FT	<1 FT
144+50	157+00	16	16	-	- FT	<1 FT
157+00	169+50	17	17	-	<1 FT	<1 FT
169+50	182+00	18	18	-	<1 FT	<1 FT
182+00	194+50	19	19	-	<1 FT	<1 FT
194+50	207+00	20	20	-	- FT	<1 FT
207+00	219+50	21	21	-	- FT	<1 FT

DCP SOUNDINGS, SHEETS 23-33

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1980 W. BROAD ST. COLUMBUS, OH 43223

PID NO. 95457

SOIL PROFILE

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EXPLORATION FINDINGS (CONT.)

BENEATH THE TOPSOIL OR PAVEMENT, THE BORING PREDOMINATELY ENCOUNTERED COHESIVE SOILS CONSISTING OF SANDY SILT (A-4a), SILT AND CLAY (A-6a), AND SILTY CLAY (A-6b) RANGING FROM STIFF TO HARD IN CONSISTENCY. CLAY (A-7-6) WAS ENCOUNTERED IN B-21, B-23, B-25, B-31, B-37, B-39 RANGING FROM VERY STIFF TO HARD CONSISTENCY AND VERY STIFF SILT (A-4b) WAS ENCOUNTERED IN B-35. NON-COHESIVE SOILS CONSISTING OF STONE FRAGMENTS WITH SAND AND SILT (A-2-4) AND STONE FRAGMENTS WITH SAND, SILT AND CLAY (A-2-6) WERE ENCOUNTERED IN B-1, B-3, B-5, B-12, AND B-43 RANGING BETWEEN MEDIUM DENSE TO VERY DENSE COMPACTNESS. SLIGHTLY ORGANIC TO MODERATELY ORGANIC MATERIALS WERE ENCOUNTERED IN B-5, B-9, B-11, B-12, B-39, AND B-45. SHALE BEDROCK WAS ENCOUNTERED WITHIN B-1, B-13, B-17, B-19, B-25, AND B-27 AT VARYING DEPTH, AND SANDSTONE BEDROCK WAS ENCOUNTERED IN B-45.

DCP SOUNDINGS COMPLETED INDICATED SOFT MATERIALS IMMEDIATELY AT THE GROUND SURFACE BUT INDICATED ADEQUATE SUPPORT AT THE SUBGRADE ELEVATIONS.

UNSUITABLE MATERIALS CONSISTING OF SHALE BEDROCK WAS ENCOUNTERED AT SUBGRADE ELEVATION BETWEEN APPROXIMATE STA. 70 TO 76 AND 86 TO 97+75. UNSUITABLE MATERIAL CONSISTING OF SILT (A-4b) WAS ENCOUNTERED WITHIN THREE FEET OF SUBGRADE BETWEEN APPROXIMATELY STA. 157+50 TO 161+75. UNSTABLE MATERIAL WHICH WAS EITHER WEAK OR WET WAS ENCOUNTERED AT OR NEAR SUBGRADE ELEVATION BETWEEN APPROXIMATE STA. 61+75 TO 65+75, 76+00 TO 86+00, 105+75 TO 109+75, 153+50 TO 157+50, 161+75 TO 165+75, 169+50 TO 173+50, 177+75 TO 182+00, AND 202+00 TO 206+00.

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2018.

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN ON THE GEOTECHNICAL EXPLORATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL EXPLORATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE OR THE OFFICE OF GEOTECHNICAL ENGINEERING AT 1980 WEST BROAD STREET.

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DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL ENGINEERING
1980 W. BROAD ST. COLUMBUS, OH 43223

PID NO. 95457

SOIL PROFILE
EXPLORATION NOTES (CONT.)

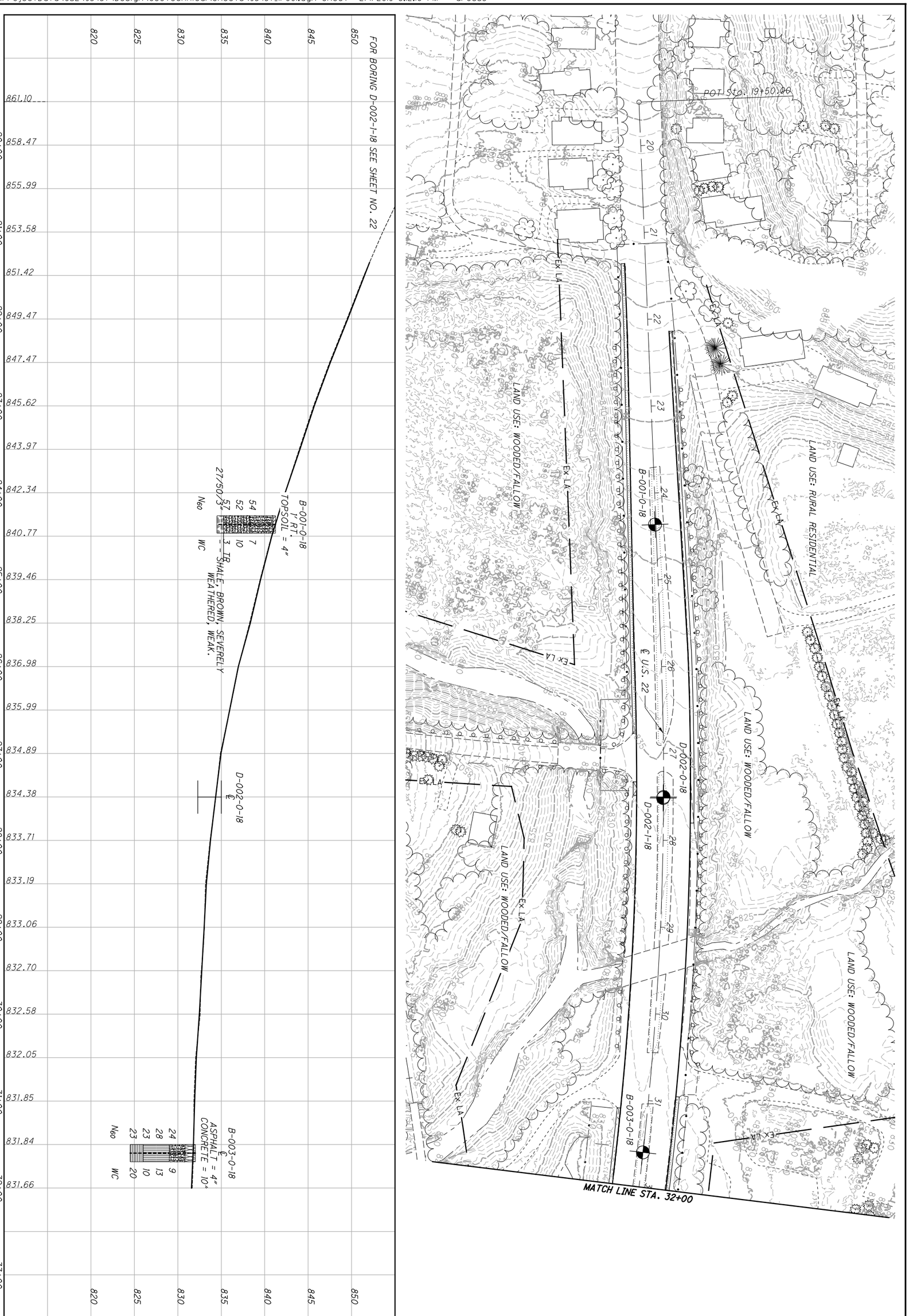
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SUMMARY OF SOIL TEST DATA
US 22

EXPLORATION ID., STATION & OFFSET	FROM	TO	SAMPLE ID	N60	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO4
B-001-0-18	1.50	3.00	SS-1	54	44	-	60	12	11	10	7	27	18	9	7	A-2-4 (0)	240
STA. 24+36, 1' RT.	3.00	4.50	SS-2	52	78	-	81	6	3	6	4	31	20	11	10	A-2-6 (0)	360
LATITUDE = 39.994694	4.50	6.00	SS-3	57	22	-				SAME AS SS-2					3	A-2-6 (VISUAL)	-
LONGITUDE = -81.725660																	
B-003-0-18	1.50	3.00	SS-1	24	56	-	76	7	4	7	6	30	20	10	9	A-2-4 (0)	110
STA. 31+60, 0' RT.	3.00	4.50	SS-2	28	56	4.50	39	13	6	15	27	30	21	9	13	A-4a (1)	<100
LATITUDE = 39.995175	4.50	6.00	SS-3	23	72	4.50				SAME AS SS-2					10	A-4a (VISUAL)	-
LONGITUDE = -81.723158	6.00	7.50	SS-4	23	67	2.50	43	5	6	19	27	37	19	18	20	A-6b (5)	-
B-005-0-18	1.50	3.00	SS-1	14	67	-	71	10	5	7	7	27	19	8	11	A-2-4 (0)	100
STA. 39+64, 4' RT.	3.00	4.50	SS-2	11	67	-	77	7	4	6	6	NP	NP	NP	10	A-1-a (0)	110
LATITUDE = 39.995271	4.50	6.00	SS-3	9	67	1.50	2	9	12	41	36	36	20	16	28	A-6b (10)	-
LONGITUDE = -81.720297	6.00	7.50	SS-4	9	44	2.00	2	0	2	64	32	33	20	13	26	A-6a (9)	-
B-007-0-18	1.50	3.00	SS-1	18	100	4.00	28	12	9	26	25	34	18	16	16	A-6b (5)	380
STA. 47+76, 1' RT.	3.00	4.50	SS-2	13	67	2.00	0	0	2	62	36	39	15	24	24	A-6b (14)	-
LATITUDE = 39.995036	4.50	6.00	SS-3	11	83	1.50				SAME AS SS-2					26	A-6b (VISUAL)	-
LONGITUDE = -81.717416	6.00	7.50	SS-4	13	22	0.50				SAME AS SS-2					24	A-6b (VISUAL)	-
B-009-0-18	1.50	3.00	SS-1	33	100	4.00	27	15	9	27	22	33	16	17	12	A-6b (5)	400
STA. 55+84, 1' RT.	3.00	4.50	SS-2	31	100	4.50	12	9	8	36	35	34	15	19	13	A-6b (11)	150
LATITUDE = 39.994783	4.50	6.00	SS-3	11	56	4.50				SAME AS SS-2					11	A-6b (VISUAL)	-
LONGITUDE = -81.714554	6.00	7.50	SS-4	7	89	0.50	15	8	8	37	32	32	16	16	20	A-6b (9)	-
B-011-0-18	1.50	3.00	SS-1	6	17	1.50				SAME AS SS-2					21	A-6a (VISUAL)	-
STA. 63+79, 2' LT.	3.00	4.50	SS-2	7	67	0.50	18	9	13	36	24	28	15	13	24	A-6a (6)	<100
LATITUDE = 39.994750	4.50	6.00	SS-3	0	100	0.50	10	5	10	47	28	29	18	11	25	A-6a (8)	<100
LONGITUDE = -81.711719	6.00	7.50	SS-4	4	100	1.50				SAME AS SS-3					26	A-6a (VISUAL)	-
B-012-0-18	1.50	3.00	SS-1	28	89	-	53	17	10	13	7	25	18	7	7	A-2-4 (0)	<100
STA. 67+96, 1' LT.	3.00	4.50	SS-2	14	78	-	50	16	9	16	9	26	18	8	13	A-2-4 (0)	100
LATITUDE = 39.994848	4.50	6.00	SS-3	20	50	2.00				SAME AS SS-4					12	A-6a (VISUAL)	-
LONGITUDE = -81.710234	6.00	7.50	SS-4	6	89	0.50	0	1	10	54	35	31	18	13	26	A-6a (9)	-
B-013-0-18	1.50	2.10	SS-1A	88	100	-	28	22	13	21	16	29	19	10	10	A-4a (0)	190
STA. 71+97, 1' LT.	2.10	3.00	SS-1B			-	SHALE, BLACK, HIGHLY WEATHERED, WEAK, LAMINATED, ARENACEOUS.								-	Rock (VISUAL)	-
LATITUDE = 39.995021																	
LONGITUDE = -81.708824	3.00	3.75	SS-2	-	67	-				SAME AS SS-1B					8	Rock (VISUAL)	-
	4.50	4.70	SS-3	-	50	-				SAME AS SS-1B					4	Rock (VISUAL)	-
B-015-0-18	1.50	3.00	SS-1	7	72	2.00	13	12	15	32	28	32	17	15	13	A-6a (7)	560
STA. 79+89, 4' RT.	3.00	4.50	SS-2	15	94	1.50	23	8	8	34	27	34	16	18	18	A-6b (8)	140
LATITUDE = 39.995572	4.50	6.00	SS-3	17	78	3.50				SAME AS SS-2					15	A-6b (VISUAL)	-
LONGITUDE = -81.706088	6.00	7.50	SS-4	19	83	3.00				SAME AS SS-2					21	A-6b (VISUAL)	-
B-017-0-18	1.50	2.42	SS-1	-	100	-	SHALE, BROWN, HIGHLY WEATHERED, WEAK, LAMINATED, ARENACEOUS.								5	Rock (VISUAL)	-
STA. 87+83, 0' LT.																	
LATITUDE = 39.996287	3.00	3.67	SS-2	-	100	-				SAME AS SS-1					5	Rock (VISUAL)	-
LONGITUDE = -81.703411	4.50	5.17	SS-3	-	100	-				SAME AS SS-1					5	Rock (VISUAL)	-
B-019-0-18	1.50	2.00	SS-1A	-	89	-				SILTY CLAY					11	A-6b (VISUAL)	-
STA. 95+85, 2' RT.	2.00	2.20	SS-1B			-	SHALE, BROWN, HIGHLY WEATHERED, WEAK, ARENACEOUS.								-	Rock (VISUAL)	-
LATITUDE = 39.996995	3.00	3.92	SS-2	-	100	-				SAME AS SS-1B					6	Rock (VISUAL)	-
LONGITUDE = -81.700702	4.50	4.67	SS-3	-	100	-				SAME AS SS-1B					5	Rock (VISUAL)	-
B-021-0-18	1.50	3.00	SS-1	17	78	2.50	14	6	6	30	44	41	18	23	20	A-7-6 (13)	260
STA. 103+84, 3' LT.	3.00	4.50	SS-2	21	72	3.00	40	9	8	27	16	31	16	15	10	A-6a (3)	<100
LATITUDE = 39.997718	4.50	6.00	SS-3	23	100	4.50				SAME AS SS-4					9	A-6b (VISUAL)	-
LONGITUDE = -81.698010	6.00	7.50	SS-4	13	100	2.50	27	7	7	26	33	33	15	18	14	A-6b (8)	-
B-023-0-18	1.50	3.00	SS-1	37	89	4.00	7	10	8	34	41	36	16	20	11	A-6b (12)	230
STA. 111+80, 1' RT.	3.00	4.50	SS-2	38	100	4.50	2	8	13	30	47	42	18	24	11	A-7-6 (14)	170
LATITUDE = 39.998413	4.50	6.00	SS-3	67	100	-	SHALE, BROWN, HIGHLY WEATHERED, VERY WEAK, LAMINATED TO VERY THIN BEDDED, SLIGHTLY ARENACEOUS.								9	Rock (VISUAL)	-
LONGITUDE = -81.695318																	
	6.00	7.50	SS-4	96	100	-				SAME AS SS-3					8	Rock (VISUAL)	-
B-025-0-18	1.50	3.00	SS-1	23	61	2.00	6	3	5	37	49	43	20	23	18	A-7-6 (14)	140
STA. 119+75, 6' LT.	3.00	4.50	SS-2	67	94	-	SHALE, GRAY, MODERATELY WEATHERED, VERY WEAK, LAMINATED, SLIGHTLY ARENACEOUS.								12	Rock (VISUAL)	-
LATITUDE = 39.999139																	
LONGITUDE = -81.692639	4.50	5.92	SS-3	-	100	-				SAME AS SS-2					10	Rock (VISUAL)	-
B-027-0-18	1.50	3.00	SS-1	33	72	-	1	0	6	44	49	35	17	18	11	A-6b (11)	260
STA. 127+79, 0' LT.	3.00	3.40	SS-2	-	100	-	SHALE, GRAY, MODERATELY WEATHERED, WEAK, LAMINATED.								4	Rock (VISUAL)	-
LATITUDE = 39.999814	4.50	4.60	SS-3	-	100	-				SAME AS SS-2					6	Rock (VISUAL)	-
LONGITUDE = -81.689907																	
B-029-0-18	1.50	3.00	SS-1	24	83	4.50	17	6	8	34	35	35	17	18	17	A-6b (10)	110
STA. 135+73, 1' RT.	3.00	4.50	SS-2	16	89	3.00	18	7	16	32	27	27	17	10	15	A-4a (5)	<100
LATITUDE = 40.000356	4.50	6.00	SS-3	34	67	4.00				SAME AS SS-2					15	A-4a (VISUAL)	-
LONGITUDE = -81.687165	6.00	7.50	SS-4	35	100	4.50				SAME AS SS-2					12	A-4a (VISUAL)	-
B-031-0-18	1.50	3.00	SS-1	13	56	3.00	9	7	6	35	43	42	21	21	19	A-7-6 (13)	110
STA. 143+72, 1' RT.	3.00	4.50	SS-2	30	44	2.50	9	6	9	35	41	43	23	20	20	A-7-6 (13)	170
LATITUDE = 40.000785	4.50	6.00	SS-3	21	22	3.50				SAME AS SS-2					19	A-7-6 (VISUAL)	-
LONGITUDE = -81.684368	6.00	7.50	SS-4	35	72	4.00				SAME AS SS-2					16	A-7-6 (VISUAL)	-
B-033-0-18	1.50	3.00	SS-1	18	78	4.50	31	7	7	25	30	35	19	16	14	A-6b (6)	250
STA. 151+69, 1' RT.	3.00	4.50	SS-2	27	100	4.50	32	8	7	19	34	35	19	16	14	A-6b (6)	200
LATITUDE = 40.001200	4.50	6.00	SS-3	21	83	2.50				SAME AS SS-2					19	A-6b (VISUAL)	-
LONGITUDE = -81.681573	6.00	7.50	SS-4	11	83	3.50				SAME AS SS-2					17	A-6b (VISUAL)	-
B-034-0-18	1.50	3.00	SS-1	10	94	2.00	6	1	3	47	43	40	15	25	23	A-6b (14)	110
STA. 155+49, 1' LT.	3.00	4.50	SS-2	14	83	2.00	5	3	5	52	35	34	16	18	21	A-6b (11)	<100
LATITUDE = 40.001405	4.50	6.00	SS-3	11	100	2.00				SAME AS SS-2					22	A-6b (VISUAL)	-
LONGITUDE = -81.680245	6.00	7.50	SS-4	14	94	1.50				SAME AS SS-2					22	A-6b (VISUAL)	-

SUMMARY OF SOIL TEST DATA
US 22 (CONT.)

EXPLORATION ID., STATION & OFFSET	FROM	TO	SAMPLE ID	N60	% REC	tsf HP	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	ppm SO4
B-035-0-18	1.50	3.00	SS-1	20	83	4.00	12	8	8	50	22	25	18	7	16	A-4b (7)	<100
STA. 159+74, 2' RT.	3.00	4.50	SS-2	14	100	3.50	6	11	13	47	23	25	16	9	16	A-4a (7)	160
LATITUDE = 40.001616	4.50	6.00	SS-3	17	100	3.00	8	13	16	39	24	26	18	8	16	A-4a (6)	-
LONGITUDE = -81.678752	6.00	7.50	SS-4	14	78	1.50				SAME AS SS-3					16	A-4a (VISUAL)	-
B-037-0-18	1.50	3.00	SS-1	21	72	4.50	6	5	7	31	51	43	22	21	21	A-7-6 (13)	610
STA. 167+73, 2' RT.	3.00	4.50	SS-2	14	72	2.00	10	5	6	37	42	37	20	17	21	A-6b (11)	190
LATITUDE = 40.002094	4.50	6.00	SS-3	14	100	2.50				SAME AS SS-2					23	A-6b (VISUAL)	-
LONGITUDE = -81.675968	6.00	7.50	SS-4	13	100	3.50				SAME AS SS-2					22	A-6b (VISUAL)	-
B-039-0-18	1.50	3.00	SS-1	14	56	3.00	6	4	6	44	40	36	18	18	18	A-6b (11)	310
STA. 175+84, 2' LT.	3.00	4.50	SS-2	14	100	2.00	2	3	4	46	45	39	17	22	23	A-6b (13)	-
LATITUDE = 40.002867	4.50	6.00	SS-3	20	67	3.00	3	3	3	48	43	36	19	17	21	A-6b (11)	-
LONGITUDE = -81.673256	6.00	7.50	SS-4	28	89	3.00	7	8	8	34	43	42	20	22	22	A-7-6 (13)	-
B-040-0-18	1.50	3.00	SS-1	7	28	1.50	13	7	7	32	41	39	16	23	26	A-6b (13)	660
STA. 179+86, 0' LT.	3.00	4.50	SS-2	9	56	1.50	15	3	3	51	28	31	16	15	22	A-6a (10)	140
LATITUDE = 40.003348	4.50	6.00	SS-3	10	22	1.50				SAME AS SS-2					20	A-6a (VISUAL)	-
LONGITUDE = -81.671967	6.00	7.50	SS-4	13	56	1.50				SAME AS SS-2					26	A-6a (VISUAL)	-
B-041-0-18	1.50	3.00	SS-1	9	44	3.00	16	10	10	31	33	31	17	14	13	A-6a (7)	<100
STA. 183+99, 3' LT.	3.00	4.50	SS-2	10	67	4.00	3	3	6	44	44	34	18	16	21	A-6b (10)	120
LATITUDE = 40.003924	4.50	6.00	SS-3	10	78	4.00				SAME AS SS-2					21	A-6b (VISUAL)	-
LONGITUDE = -81.670699	6.00	7.50	SS-4	16	78	4.00				SAME AS SS-2					18	A-6b (VISUAL)	-
B-043-0-18	1.50	3.00	SS-1	10	67	3.00	14	16	14	28	28	31	17	14	15	A-6a (6)	150
STA. 191+90, 5' LT.	3.00	4.50	SS-2	24	56	4.00	27	8	5	27	33	38	20	18	16	A-6b (8)	<100
LATITUDE = 40.005088	4.50	6.00	SS-3	31	56	4.50				SAME AS SS-2					16	A-6b (VISUAL)	-
LONGITUDE = -81.668314	6.00	7.50	SS-4	51	44	4.50	52	17	9	11	11	29	15	14	17	A-2-6 (0)	-
B-045-0-18	1.50	3.00	SS-1	7	33	3.50	15	8	10	33	34	34	19	15	14	A-6a (8)	170
STA. 199+94, 3' LT.	3.00	4.50	SS-2	11	33	3.50	12	9	10	32	37	37	19	18	17	A-6b (10)	170
LATITUDE = 40.006264	4.50	6.00	SS-3	30	78	4.50				SAME AS SS-2					16	A-6b (VISUAL)	-
LONGITUDE = -81.665885	6.00	6.50	SS-4A	71	81	4.50				SAME AS SS-2					14	A-6b (VISUAL)	-
	6.50	7.50	SS-4B			-	SANDSTONE, DARK REDDISH BROWN, HIGHLY WEATHERED, WEAK, VERY FINE TO FINE GRAINED.									6	Rock (VISUAL)	-
B-048-0-18	1.50	3.00	SS-1	13	44	3.00	20	10	9	33	28	33	19	14	12	A-6a (7)	140
STA. 208+76, 0' LT.	3.00	4.50	SS-2	13	44	4.00	14	4	5	37	40	37	21	16	16	A-6b (10)	120
LATITUDE = 40.007551	4.50	6.00	SS-3	23	67	4.50				SAME AS SS-2					14	A-6b (VISUAL)	-
LONGITUDE = -81.663218	6.00	7.50	SS-4	24	67	4.50				SAME AS SS-2					18	A-6b (VISUAL)	-

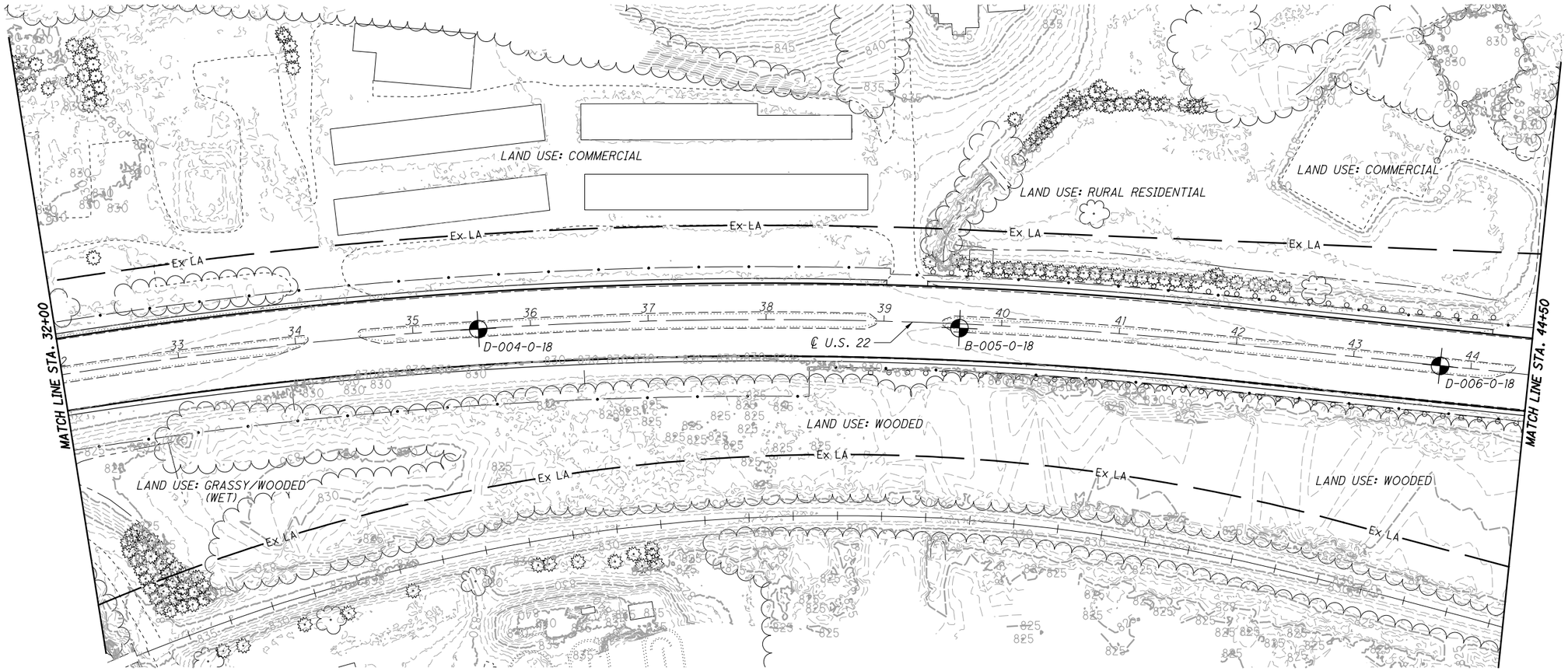


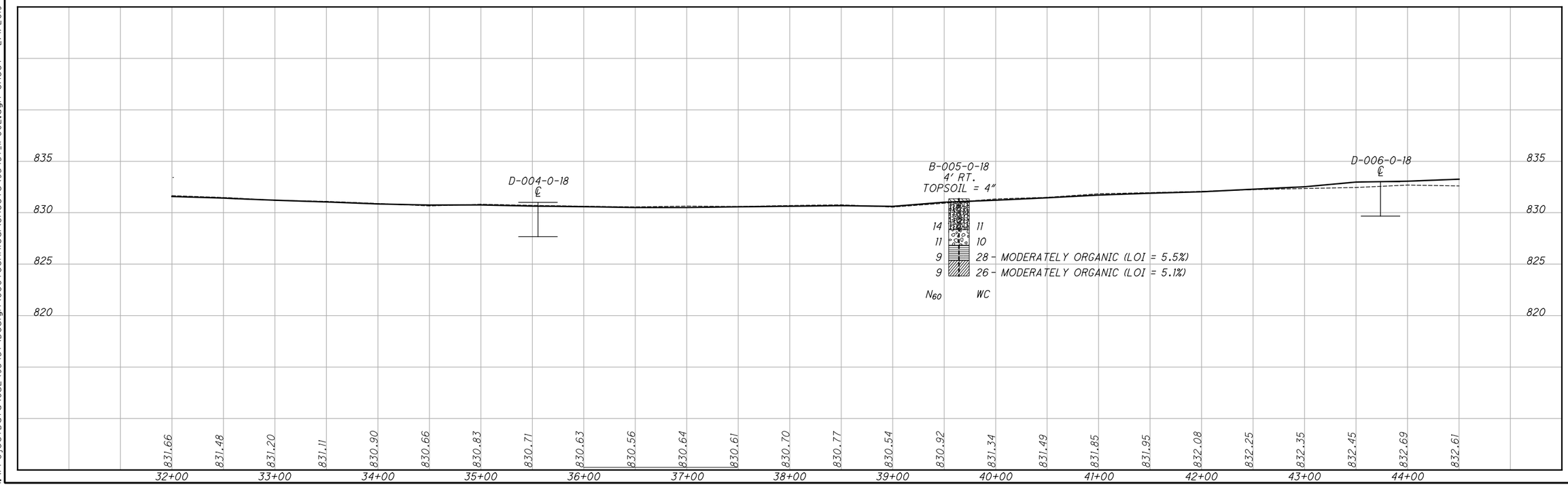
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SOIL PROFILE
STA. 19+50 TO STA 32+00 U.S. 22

DRAWN AR
CHECKED SAT

0 50
25 100
HORIZONTAL SCALE IN FEET





HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN AR CHECKED SAT

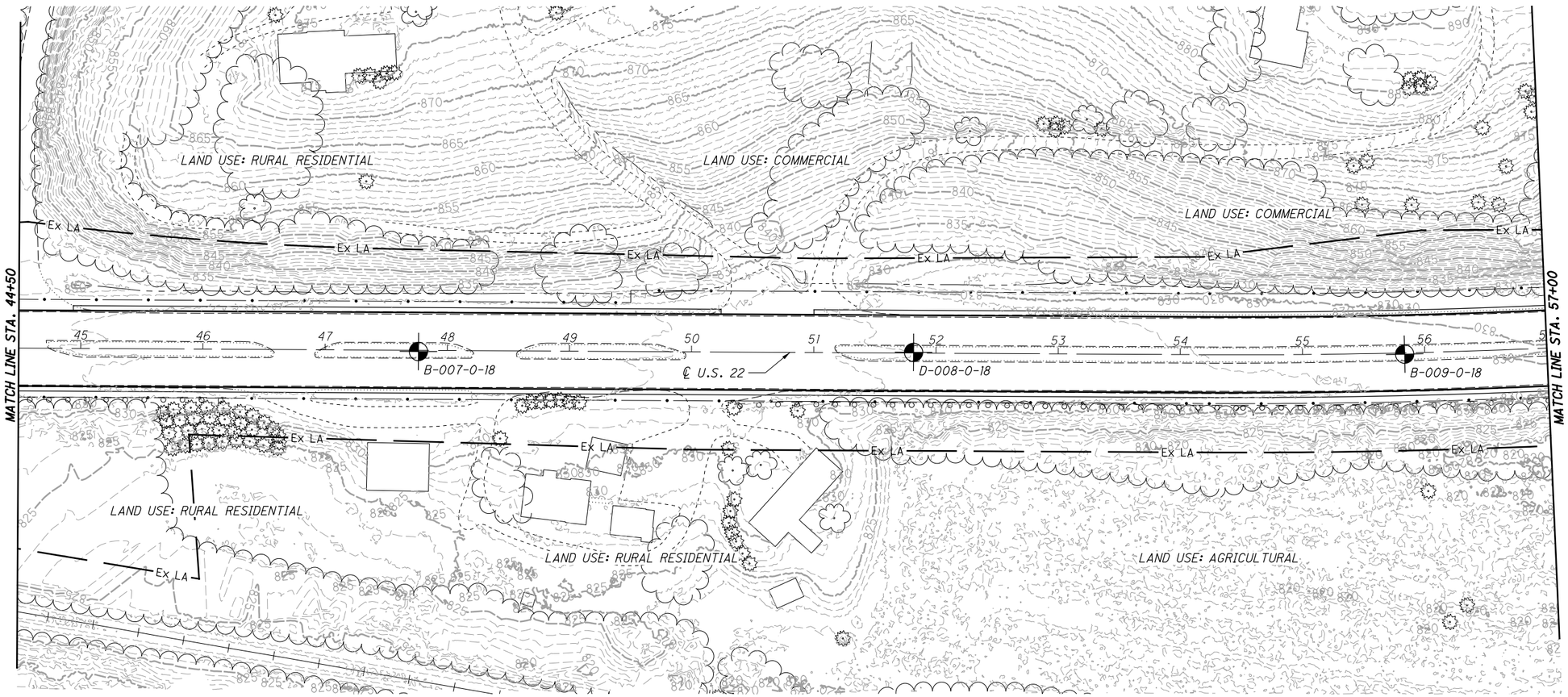
SOIL PROFILE
STA. 32+00 TO STA 44+50 U.S. 22

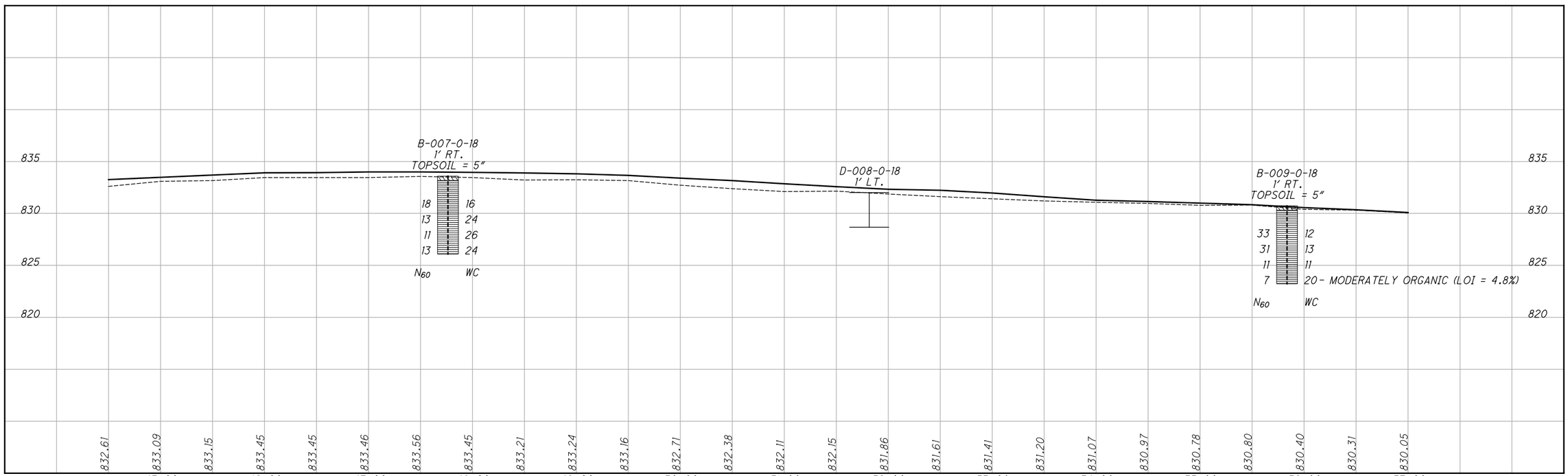
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6 / 33

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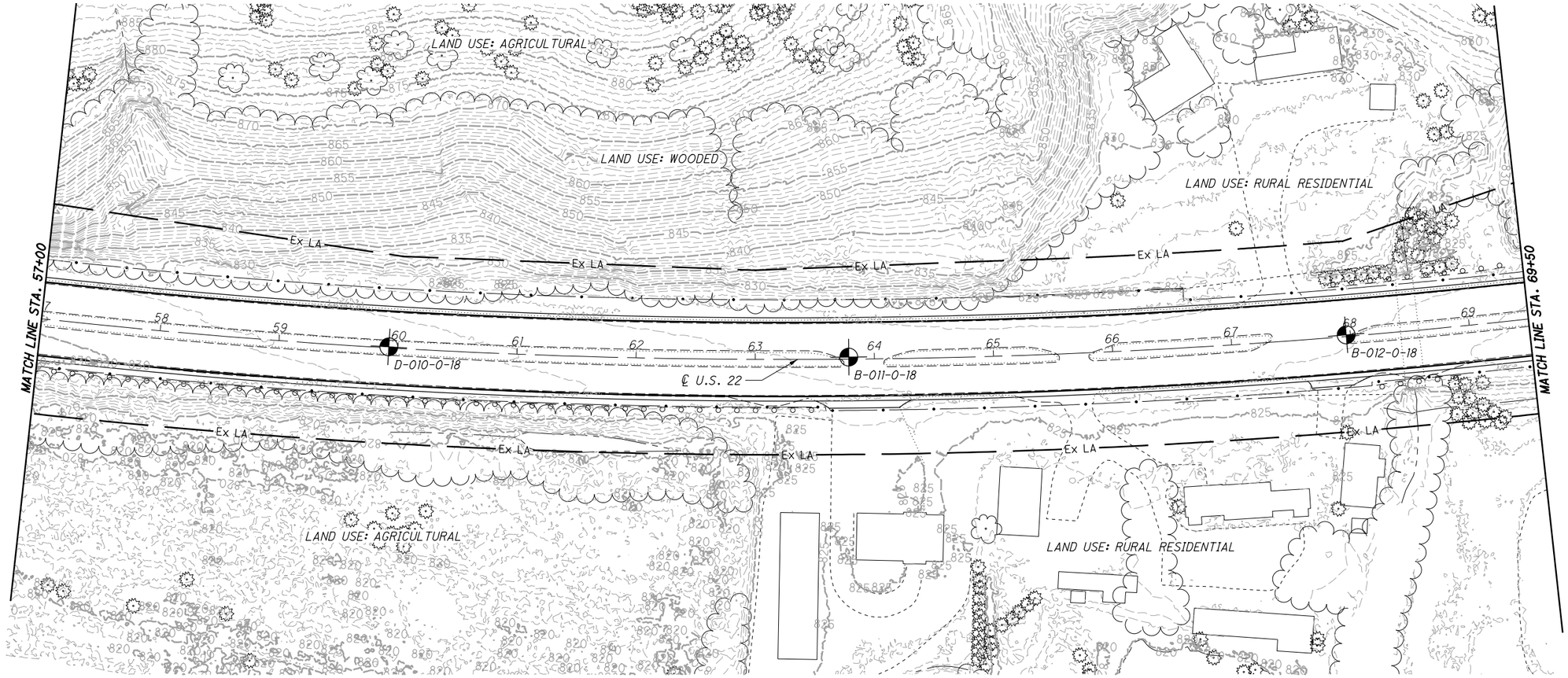


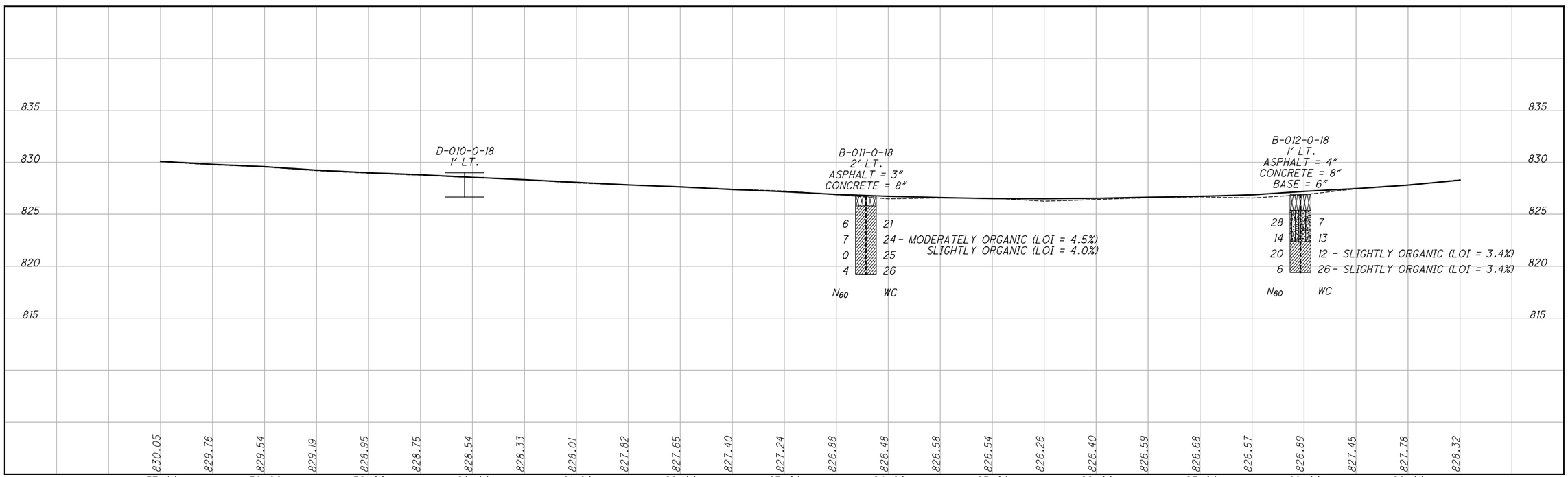


SOIL PROFILE
STA. 44+50 TO STA 57+00 U.S. 22
GUE-22/723-0.00
/ 0.70
7 / 33

HORIZONTAL SCALE IN FEET
0 25 50 100
DRAWN AR
CHECKED SAT

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_JP003.dgn Sheet 2/1/2019 3:12:41 PM gross3





N

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN AR
CHECKED SAT

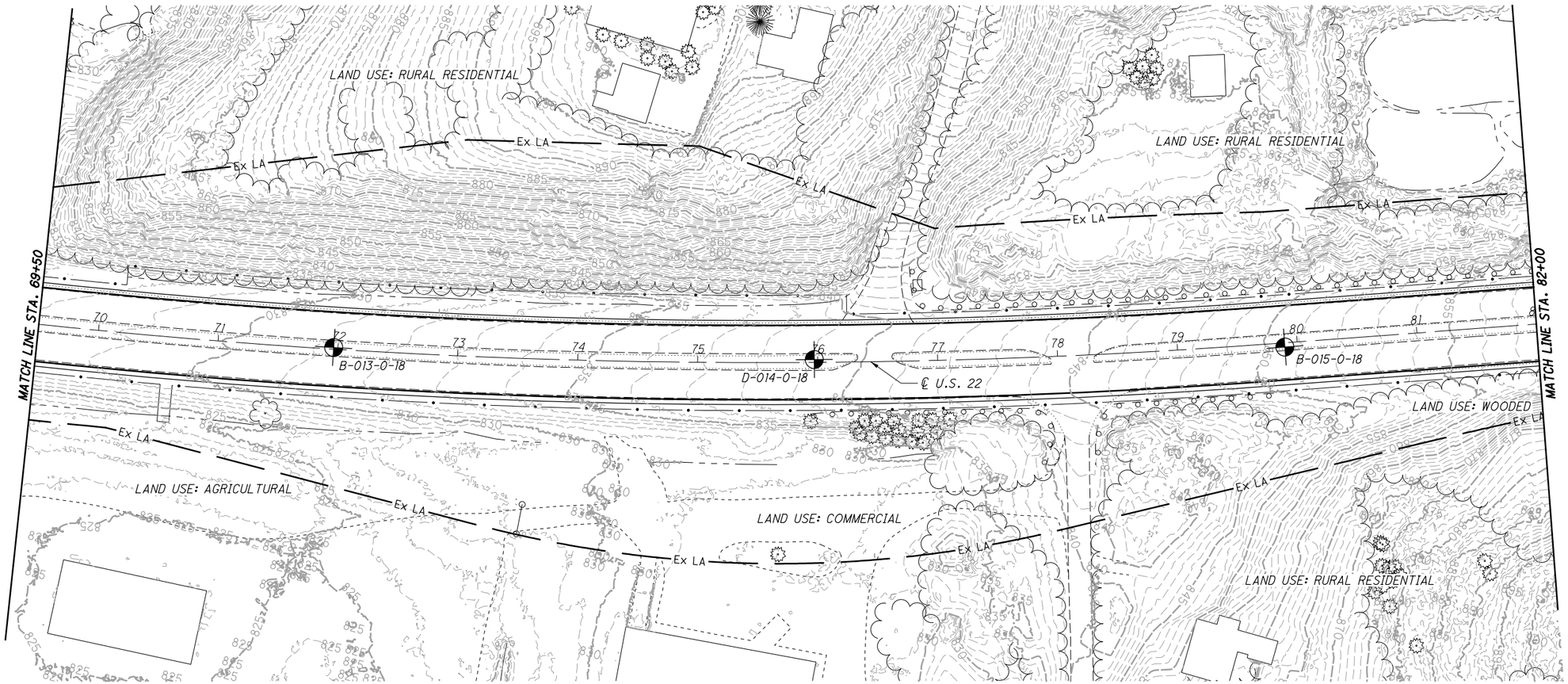
SOIL PROFILE
STA. 57+00 TO STA 69+50 U.S. 22

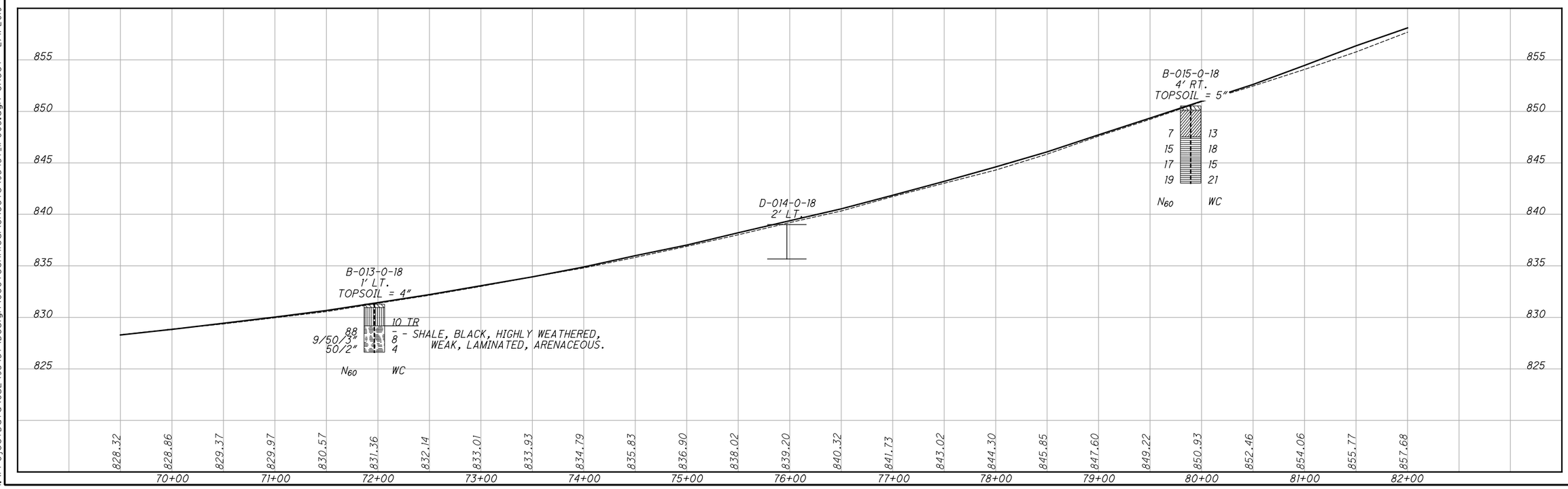
GUE-22/723-0.00
/ 0.70

8 / 33

1

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HORIZONTAL SCALE IN FEET
0 25 50 100

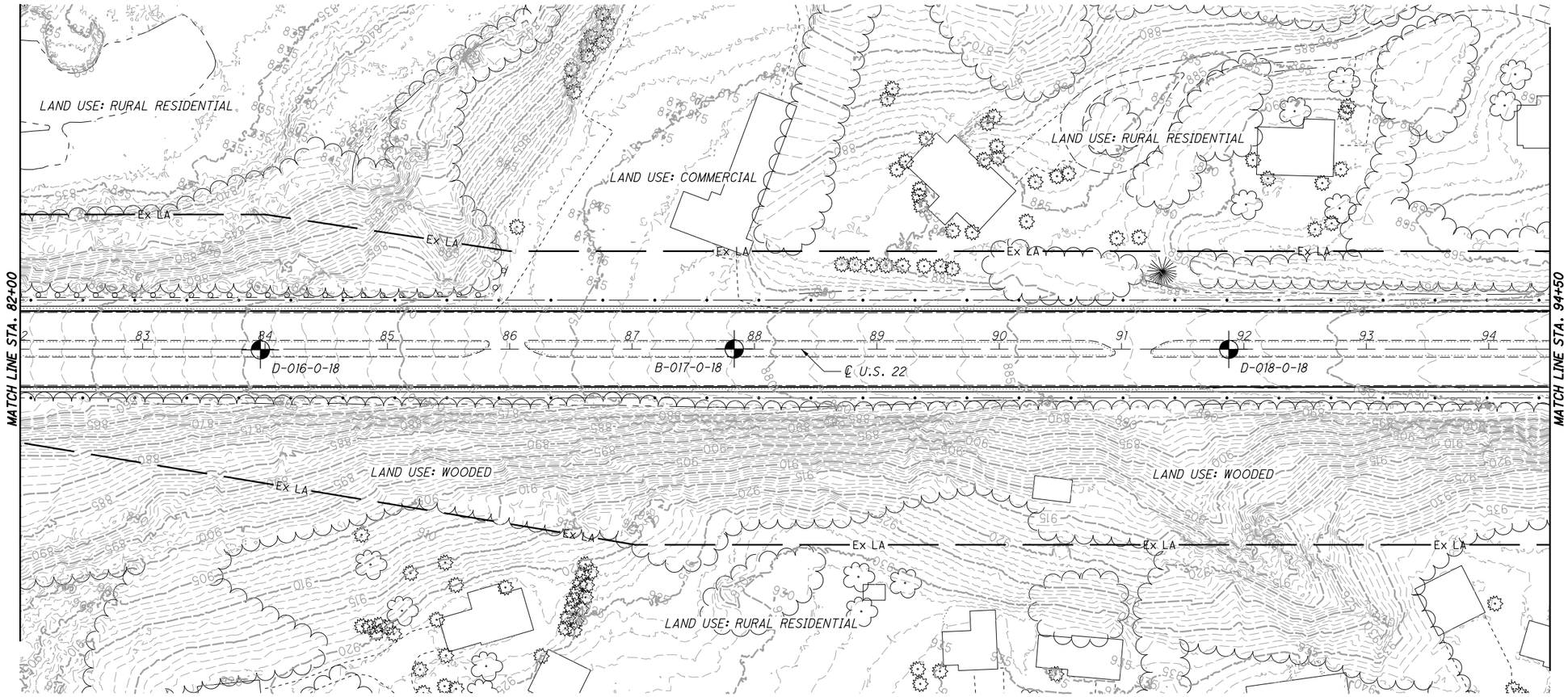
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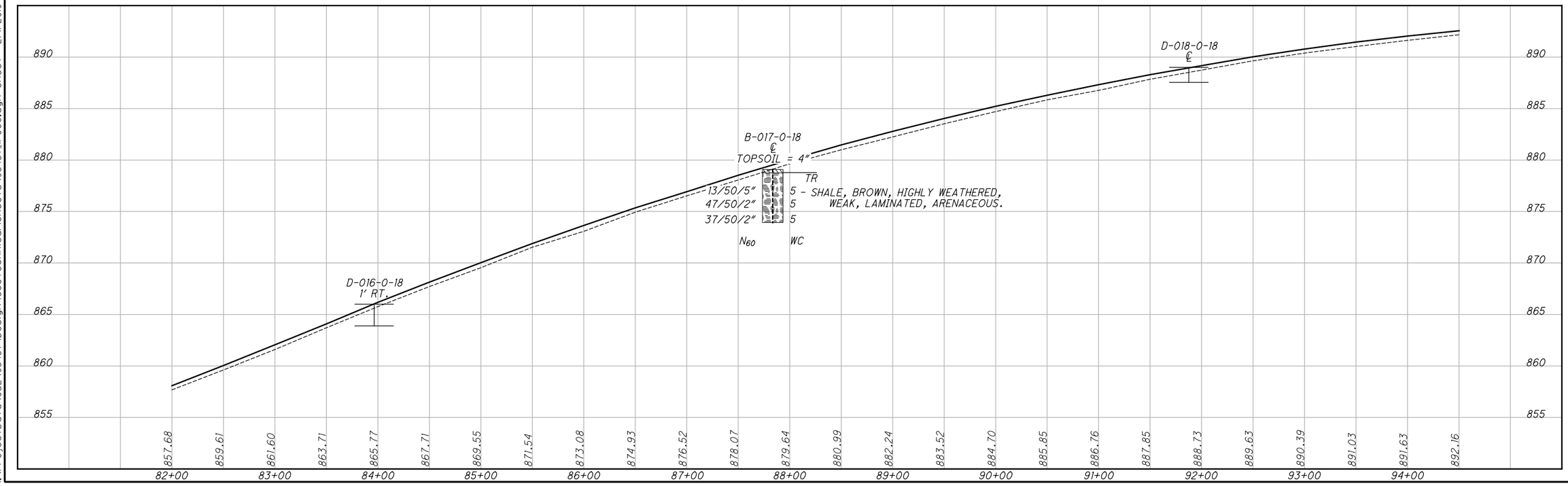
SOIL PROFILE
STA. 69+50 TO STA 82+00 U.S. 22

GUE-22/723-0.00
/0.70

9/33

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N

0 25 50 100
HORIZONTAL SCALE IN FEET

DRAWN AR
CHECKED SAT

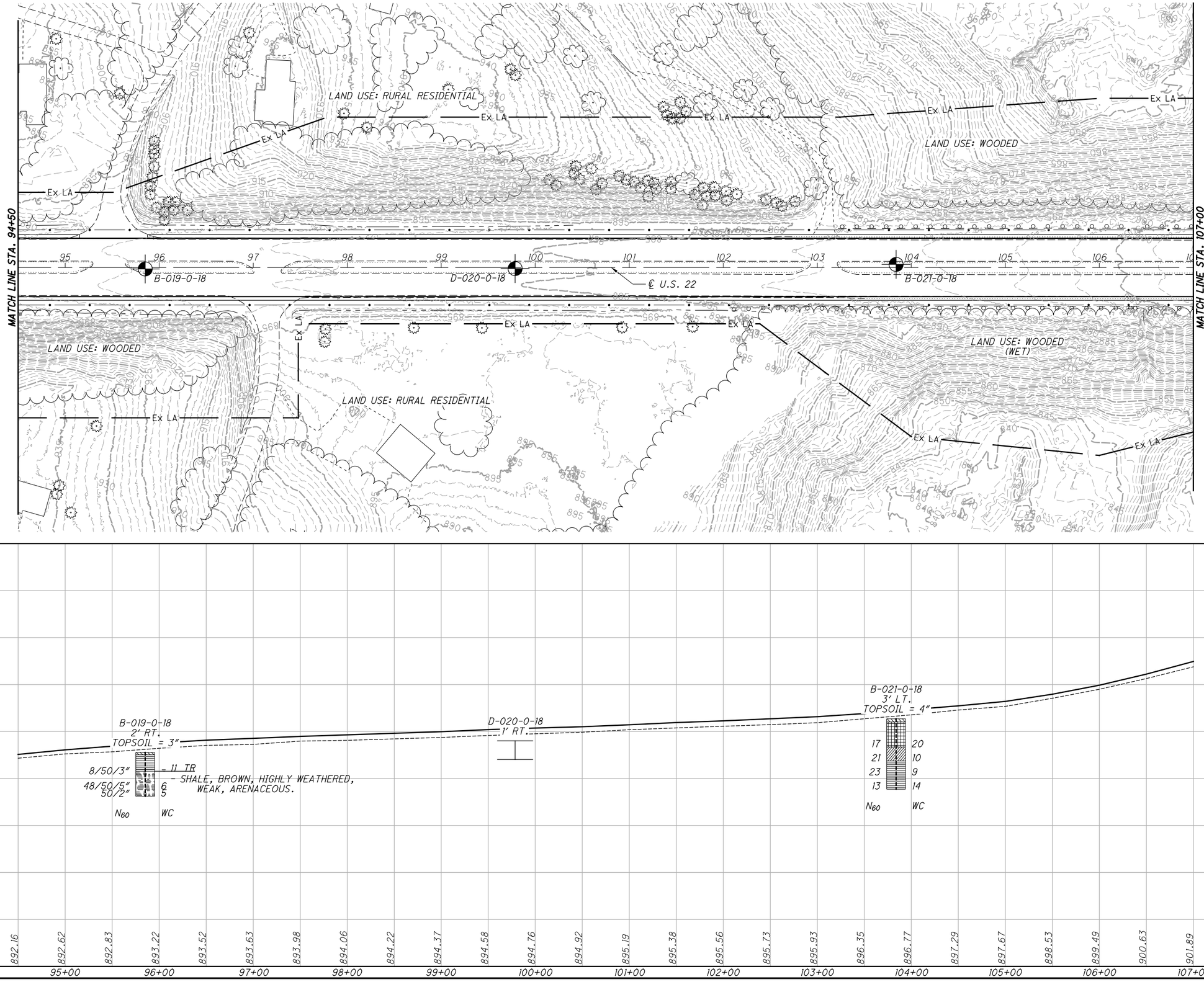
SOIL PROFILE
STA. 82+00 TO STA 94+50 U.S. 22

GUE-22/723-0.00
/ 0.70

10 / 33

1

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N

HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN AR
CHECKED SAT

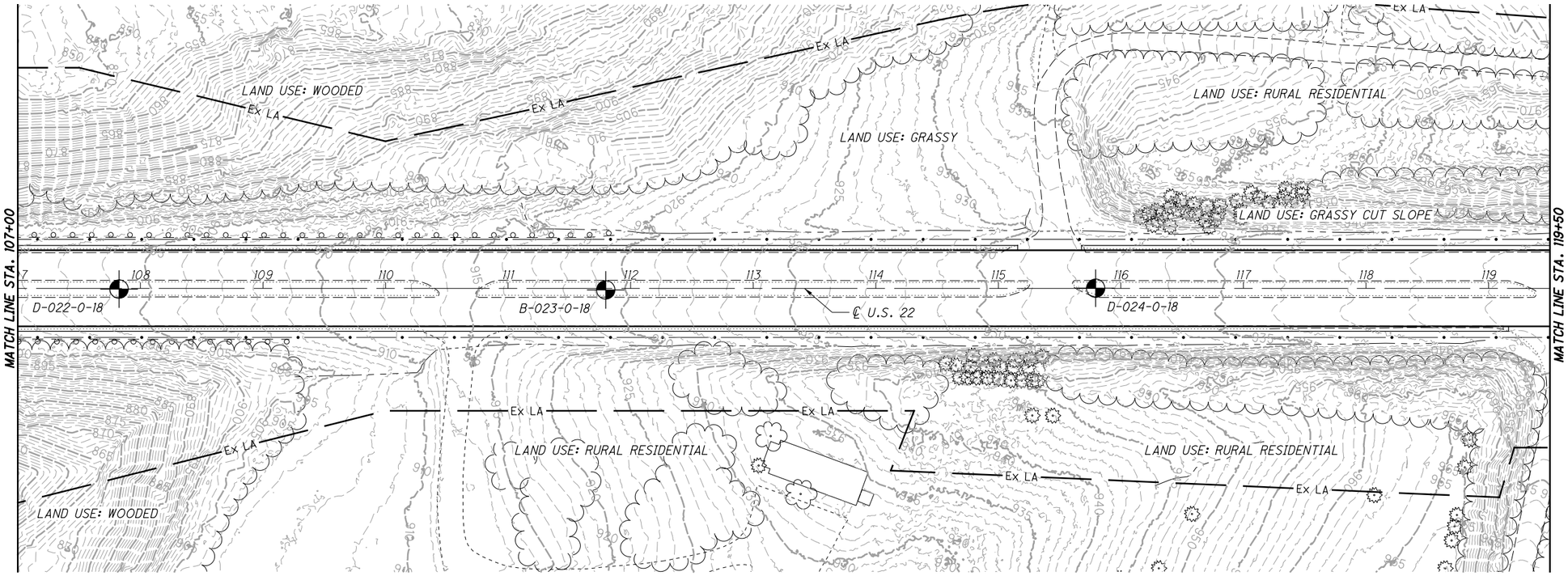
SOIL PROFILE

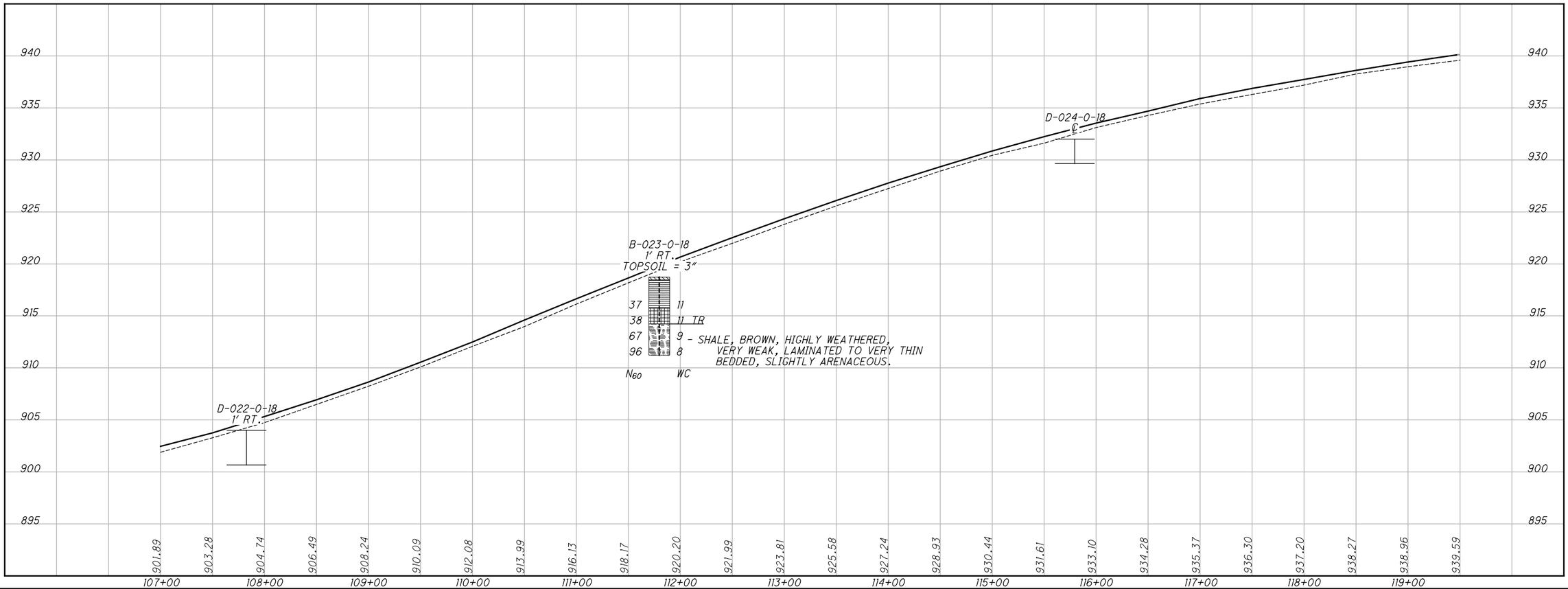
STA. 94+50 TO STA 107+00 U.S. 22

GUE-22/723-0.00
/0.70

11 / 33

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_IP007.dgn Sheet 2/1/2019 3:13:33 PM gross3





HORIZONTAL SCALE IN FEET
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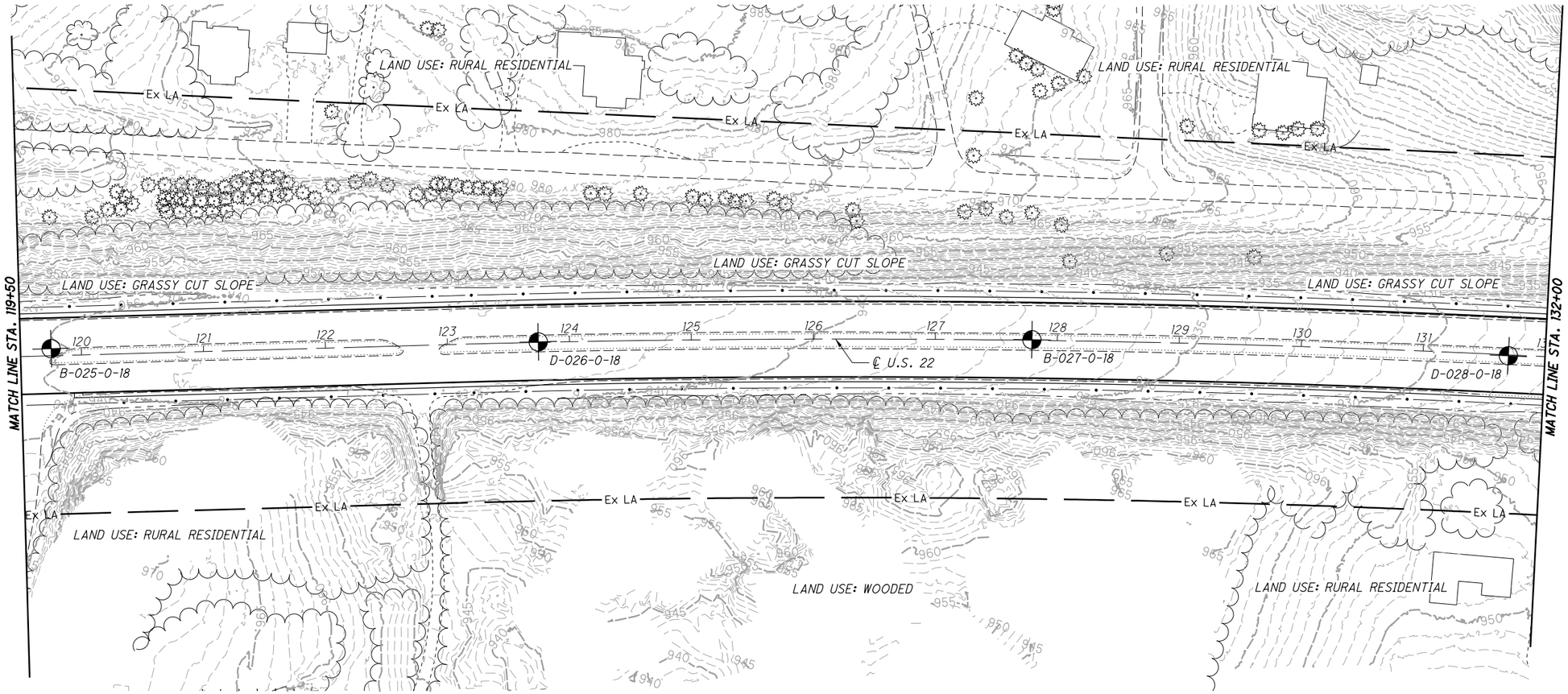
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CHECKED SAT

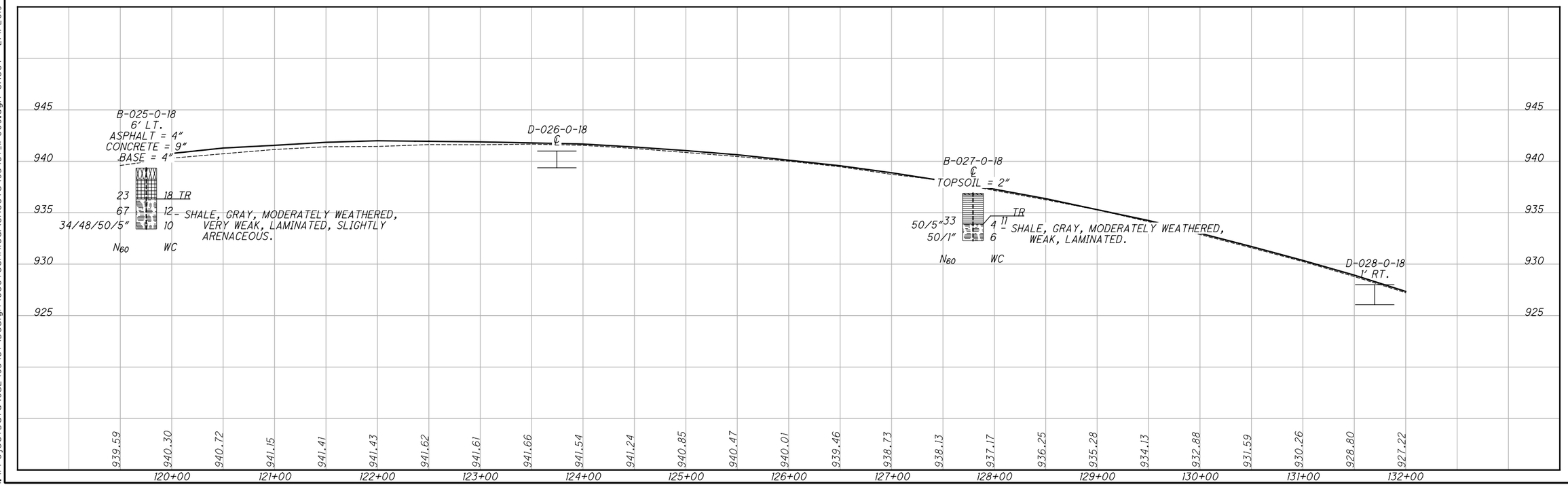
SOIL PROFILE
STA. 107+00 TO STA. 119+50 U.S. 22

GUE-22/723-0.00
/0.70

12/33

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_IP008.dgn Sheet 2/1/2019 3:13:46 PM gross3





HORIZONTAL SCALE IN FEET
0 25 50 100

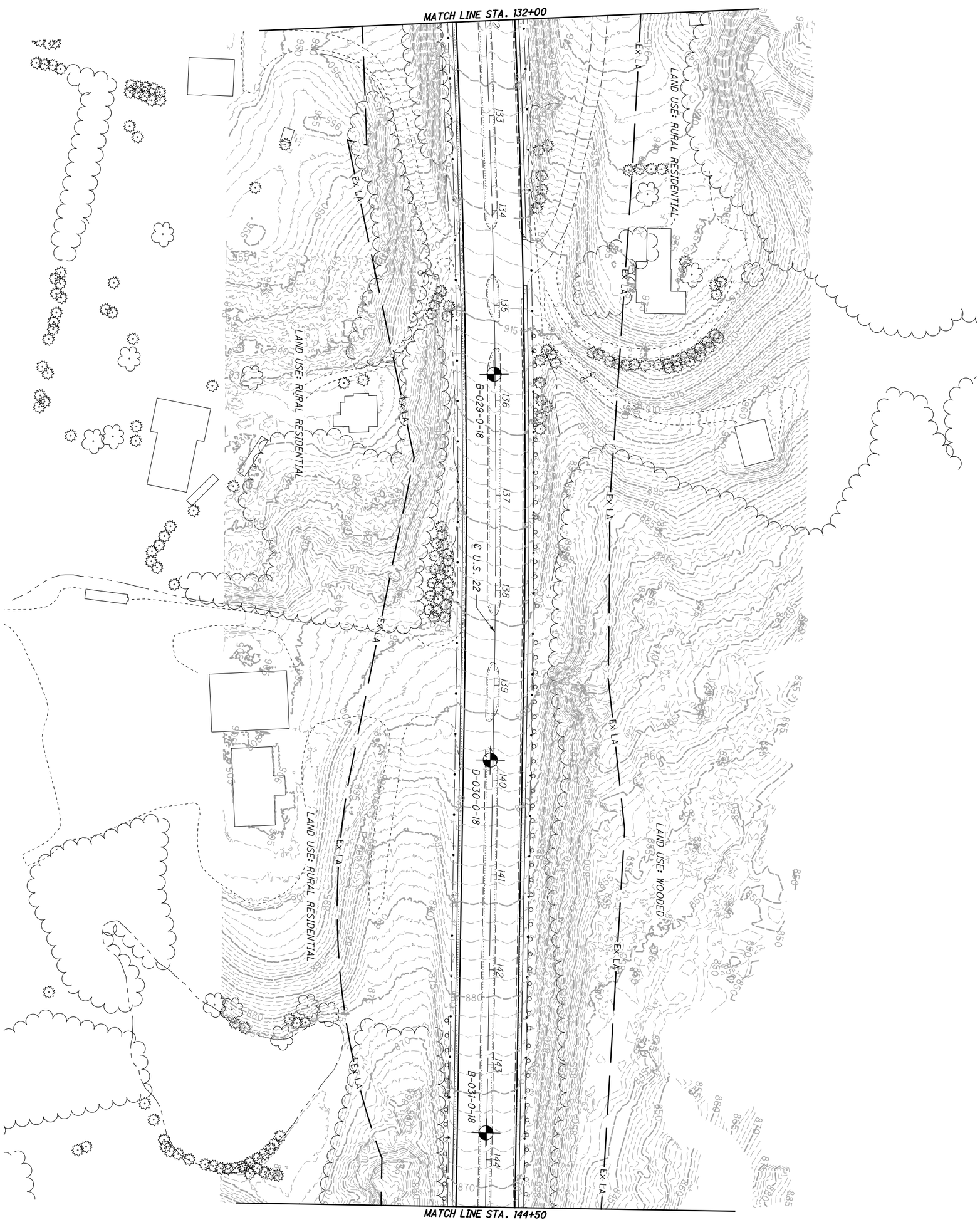
DRAWN AR
CHECKED SAT

SOIL PROFILE
STA. 119+50 TO STA 132+00 U.S. 22

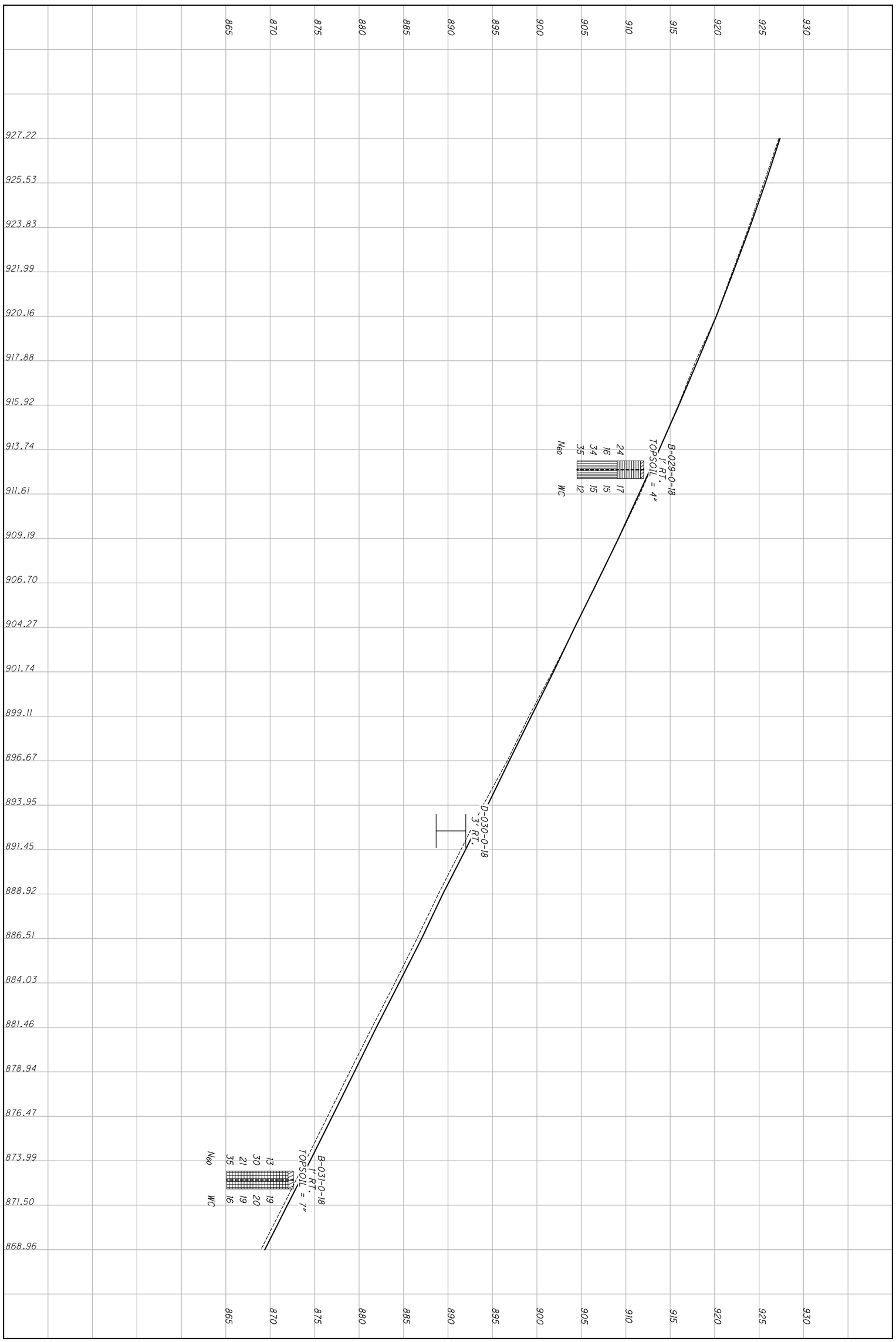
GUE-22/723-0.00
/0.70

13 / 33

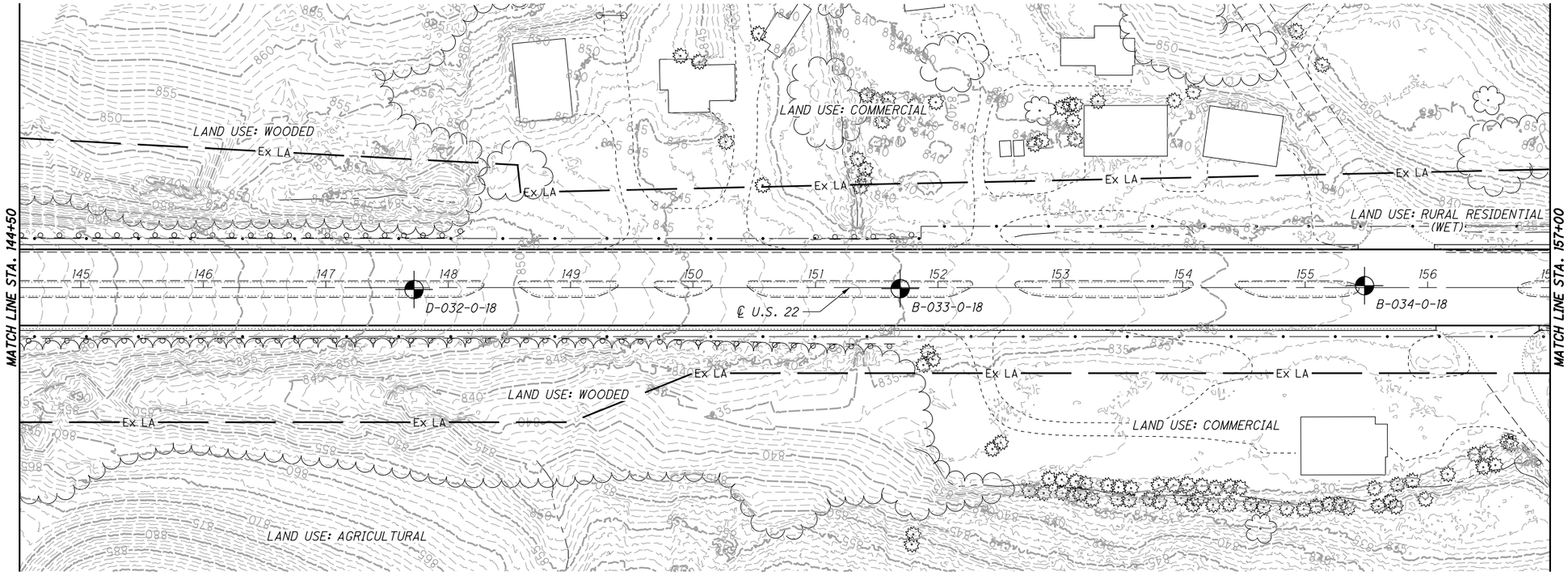
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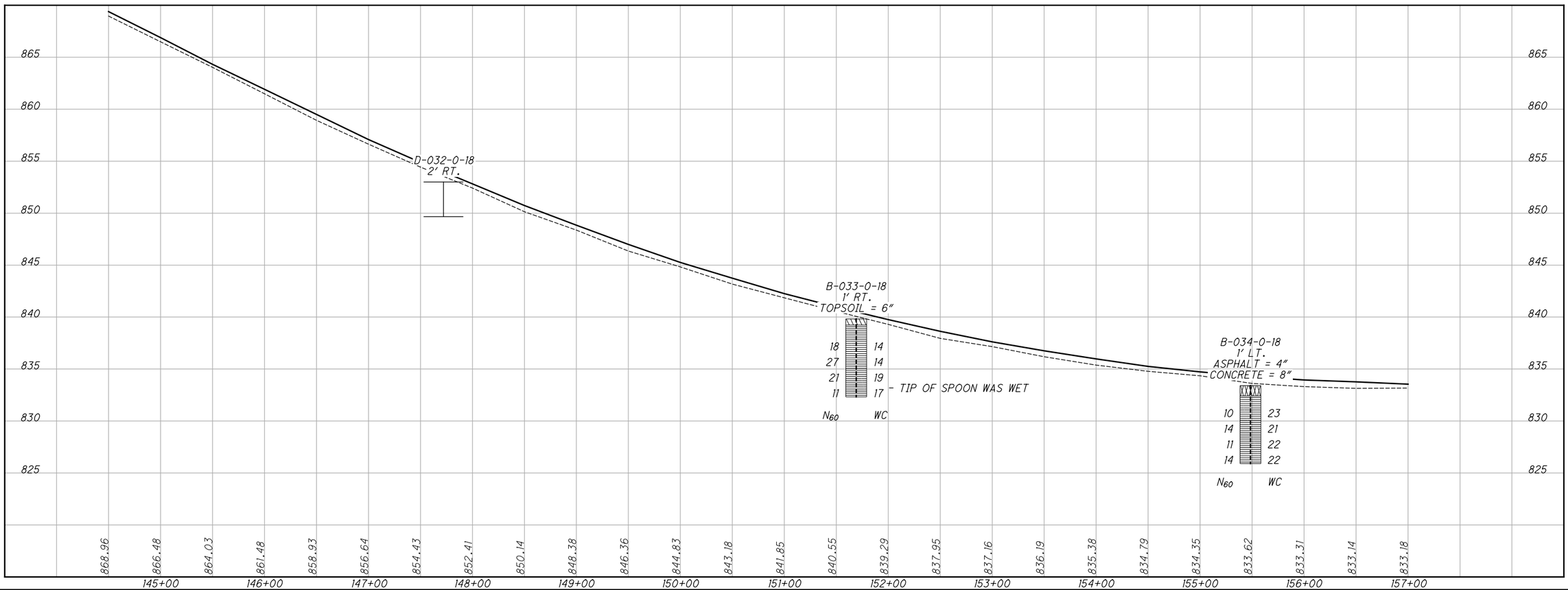


	14/33	GUE-22/723-0.00 / 0.70	SOIL PROFILE STA. 132+00 TO STA 144+50 U.S. 22	DRAWN AR / CHECKED SAT	0 50 25 100 HORIZONTAL SCALE IN FEET



15/33	GUE-22/723-0.00 / 0.70	SOIL PROFILE STA. 132+00 TO STA 144+50 U.S. 22	DRAWN AR / CHECKED SAT	0 50 25 100 HORIZONTAL SCALE IN FEET





N

0 25 50 100 HORIZONTAL SCALE IN FEET

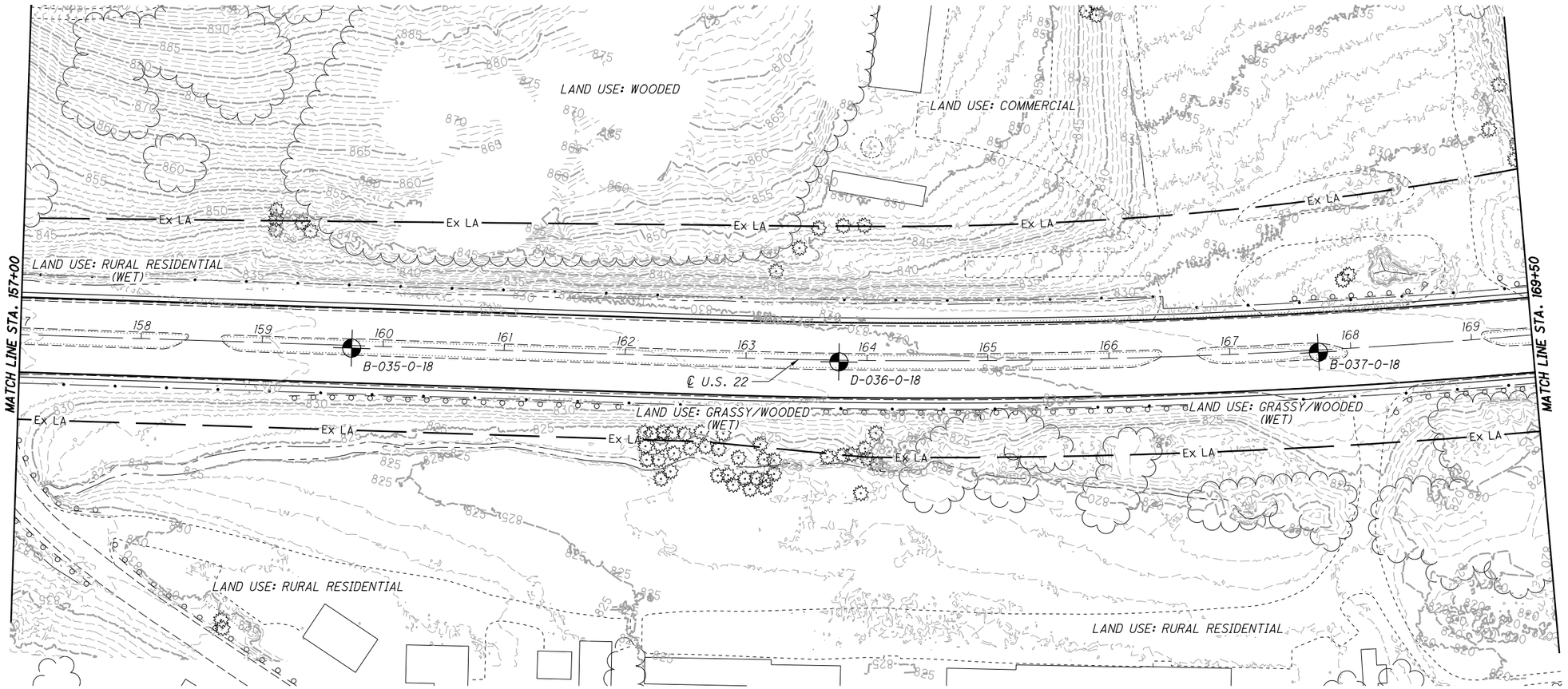
DRAWN AR CHECKED SAT

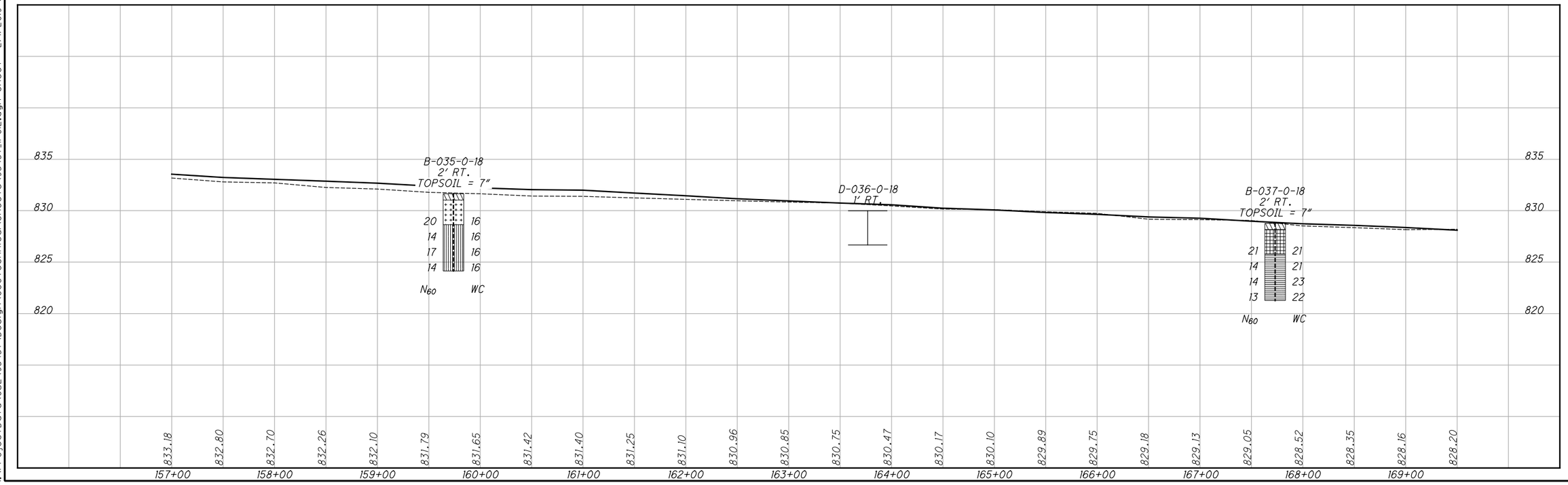
SOIL PROFILE
STA. 144+50 TO STA. 157+00 U.S. 22

GUE-22/723-0.00
/0.70

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SOIL PROFILE

STA. 157+00 TO STA 169+50 U.S. 22

HORIZONTAL SCALE IN FEET
0 25 50 100

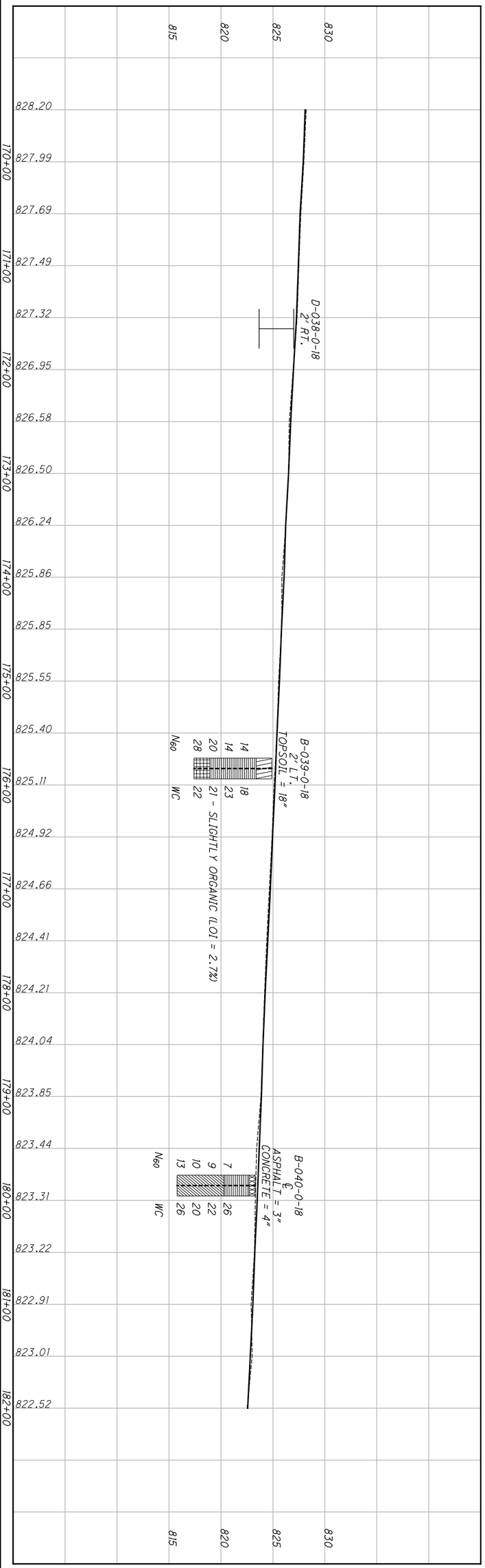
DRAWN AR CHECKED SAT

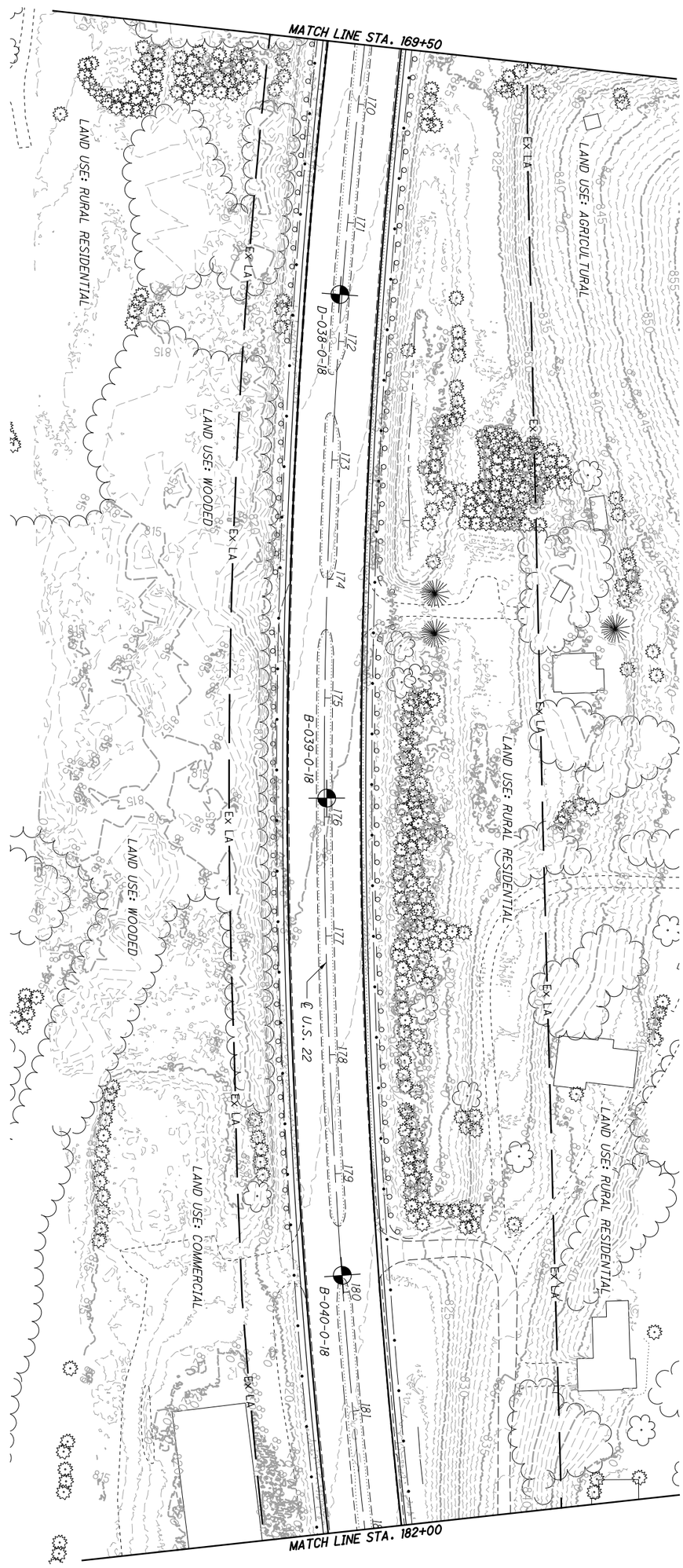
GUE-22/723-0.00
/0.70

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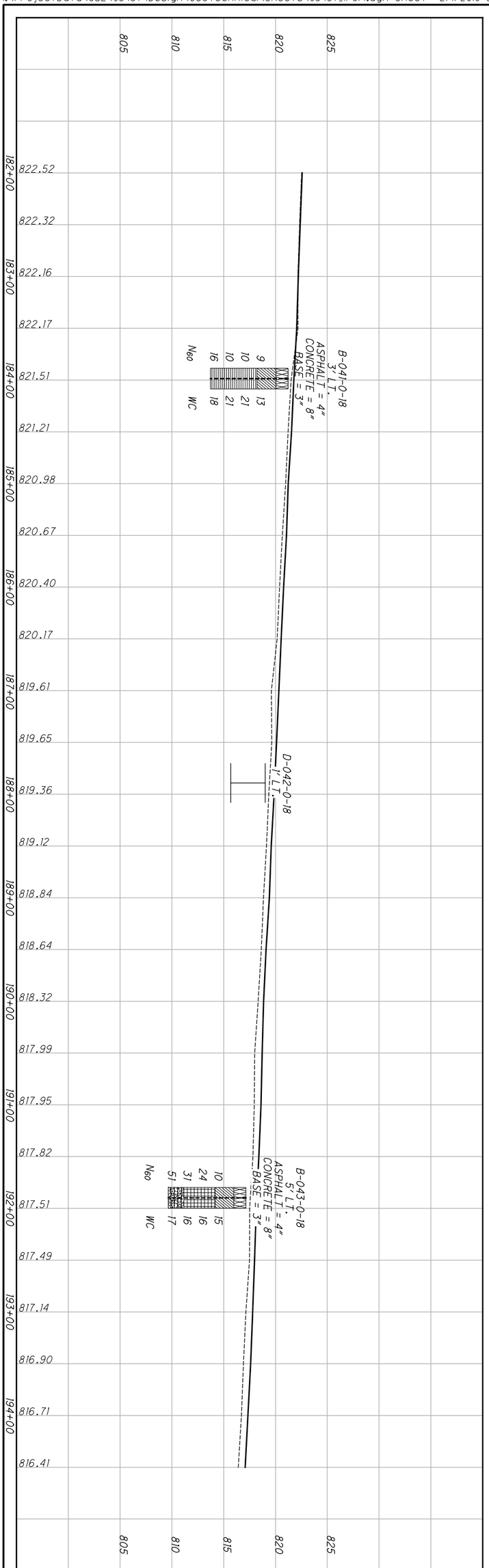
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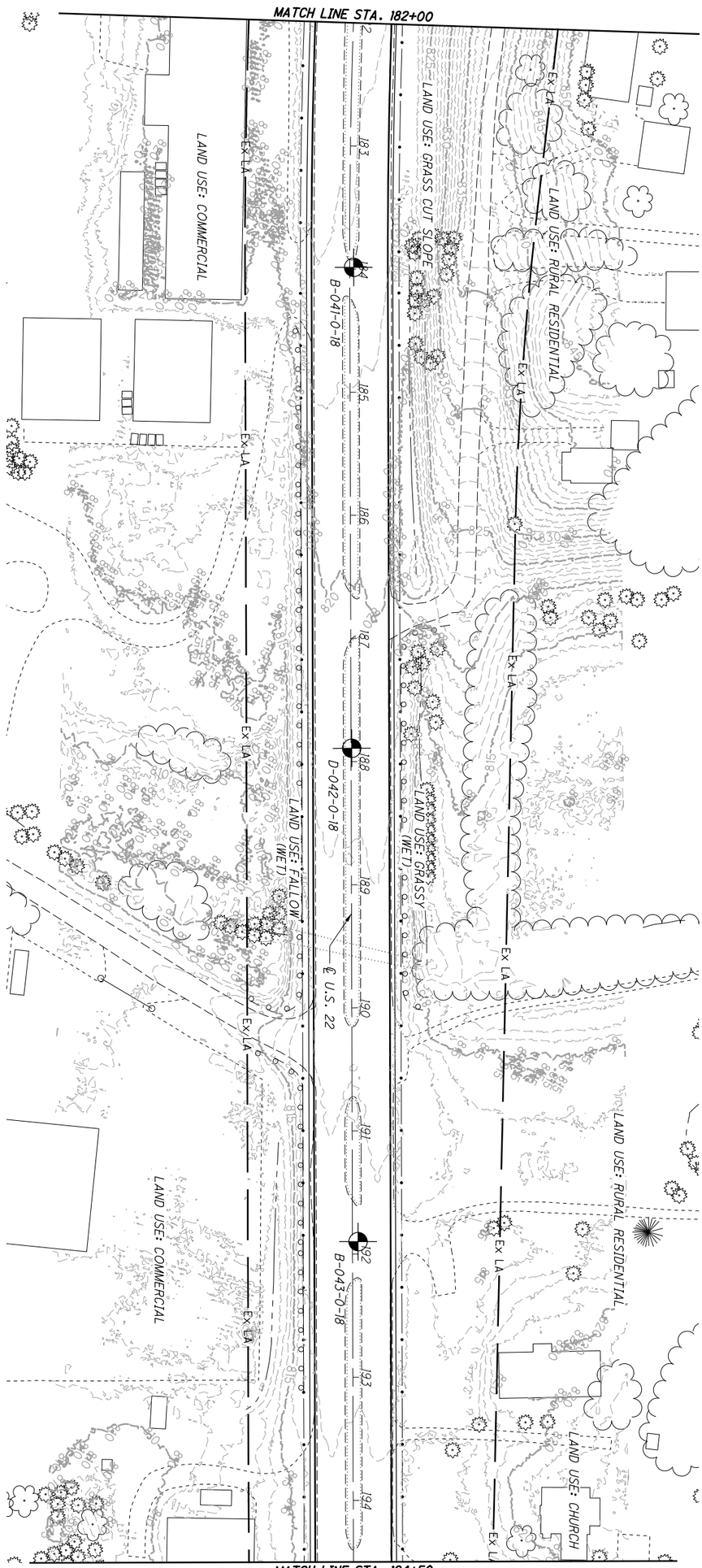




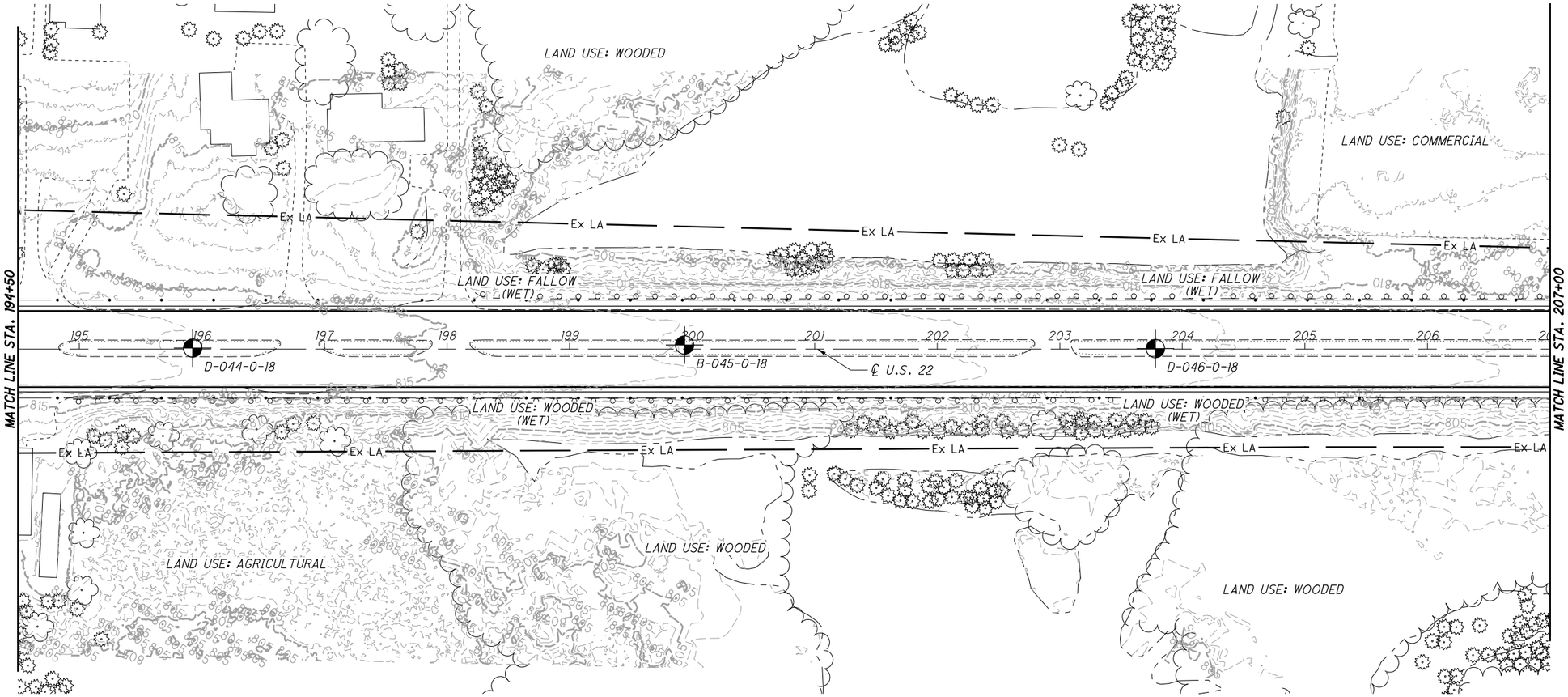
	18/33	GUE-22/723-0.00 / 0.70	SOIL PROFILE STA. 169+50 TO STA 182+00 U.S. 22	DRAWN AR / CHECKED SAT	0 50 25 100 HORIZONTAL SCALE IN FEET

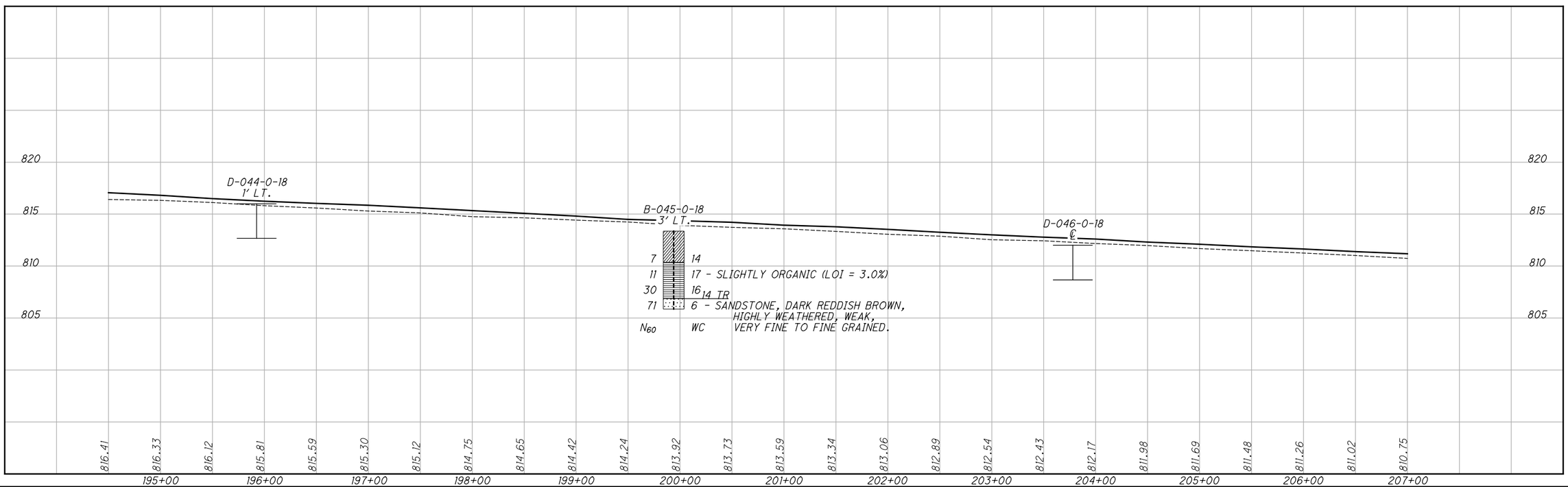
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19/33	GUE-22/723-0.00 / 0.70	SOIL PROFILE STA. 182+00 TO STA 194+50 U.S. 22	DRAWN AR	0 50	
			CHECKED SAT	25 100 HORIZONTAL SCALE IN FEET	





HORIZONTAL SCALE IN FEET
0 25 50 100

DRAWN AR
CHECKED SAT

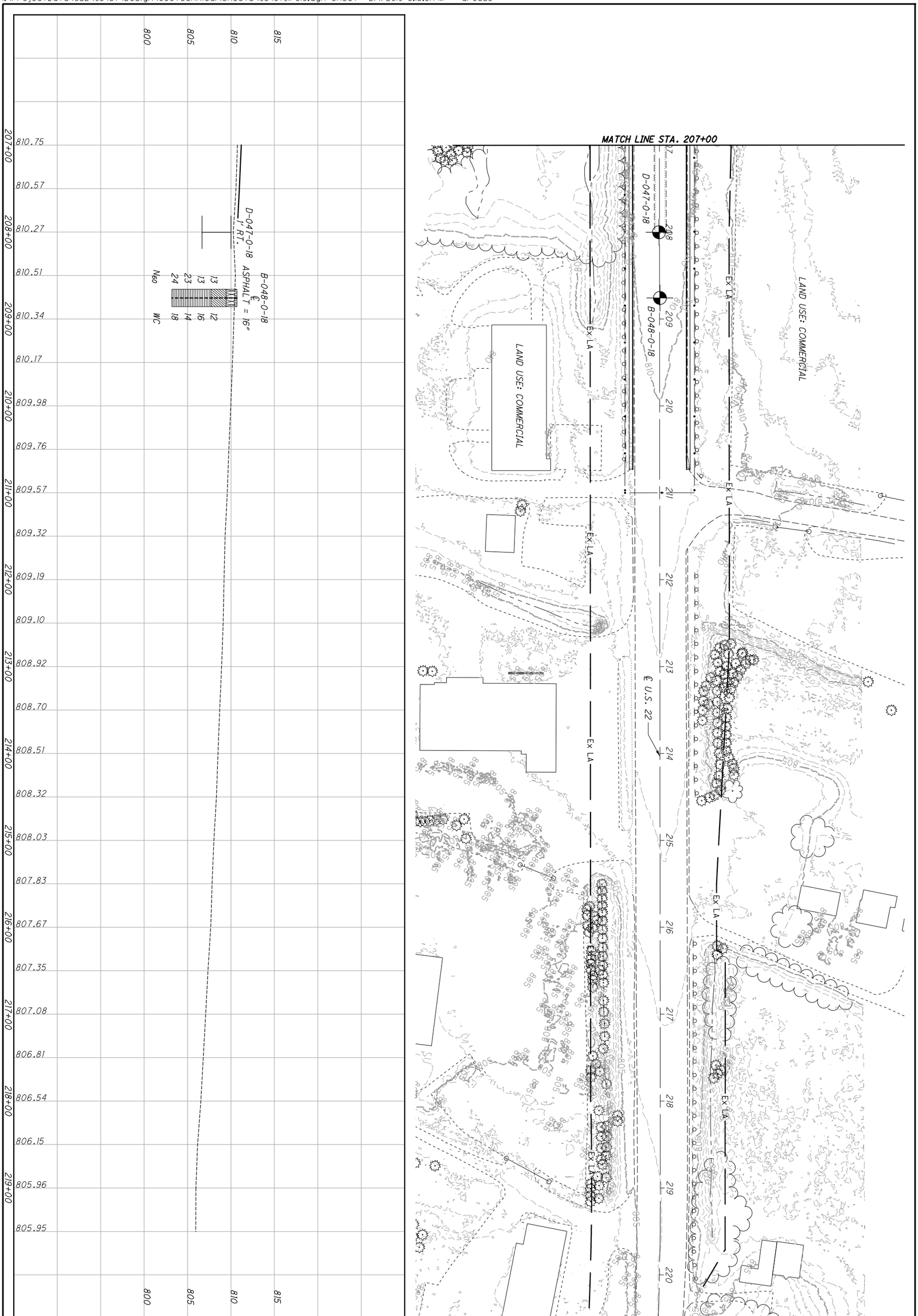
SOIL PROFILE
STA. 194+50 TO STA 207+00 U.S. 22

GUE-22/723-0.00
/ 0.70

20/33

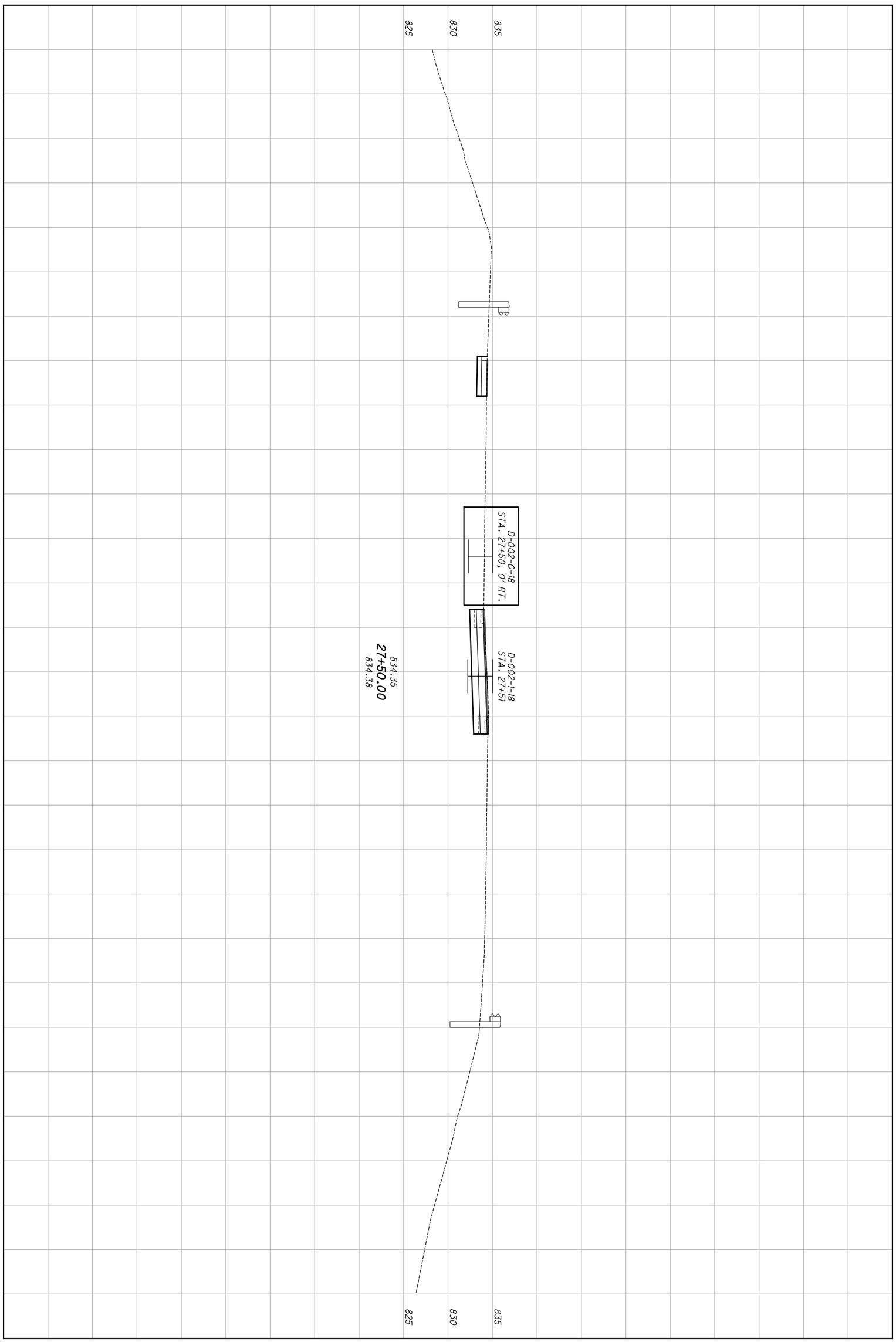
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	21/33	GUE-22/723-0.00 / 0.70	SOIL PROFILE STA. 207+00 TO STA 219+50 U.S. 22	DRAWN AR / CHECKED SAT	0 50 25 100 HORIZONTAL SCALE IN FEET

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_IX001.dgn Sheet 2/1/2019 3:15:34 PM gross3



22/33	GUE-22/723-0.00 /0.70	SOIL PROFILE CROSS SECTION STA. 27+50 U.S. 22	DRAWN AR CHECKED SAT	0 5 2.5 10 HORIZONTAL SCALE IN FEET

DCP TEST DATA

File Name:

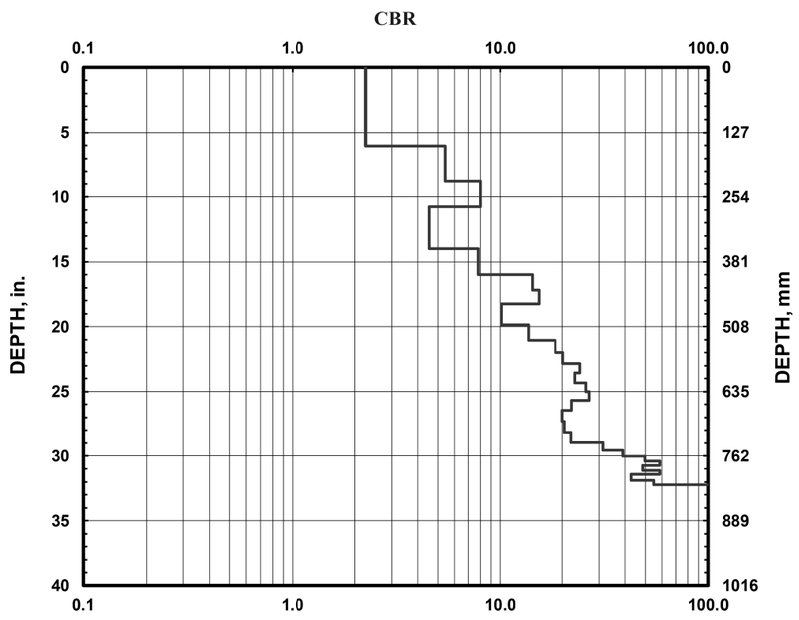
Project: *GUE-22* **Date:** 19-Sep-18

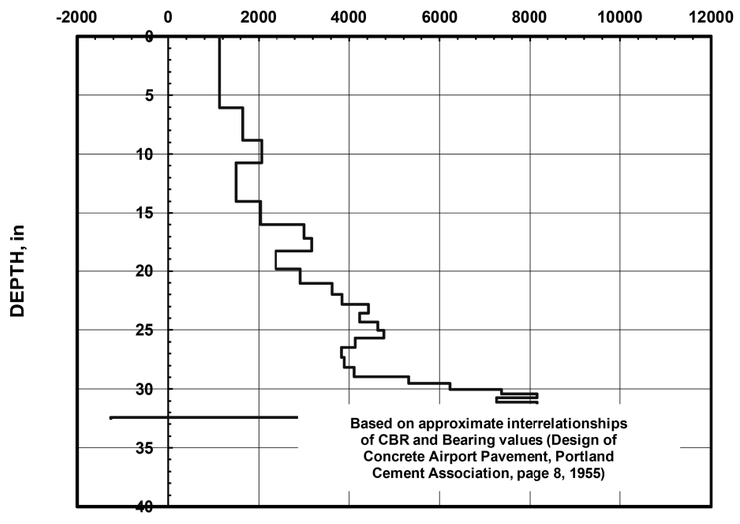
Location: D-002-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	153.7	1
2	223.8	1
2	273.3	1
2	355.7	1
2	406.3	1
2	435.9	1
2	463.6	1
2	504	1
2	534.7	1
2	558.2	1
2	580	1
2	598.4	1
2	617.8	1
2	635.2	1
2	652	1
2	672	1
2	693.9	1
2	715.4	1
2	735.5	1
2	750.2	1
2	762.3	1
2	772	1
2	780.4	1
2	790.3	1
2	798.7	1
2	809.8	1
2	818.7	1
2	823.4	1
2	825.7	1
		1
		1
		1
		1
		1
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		1





DCP TEST DATA

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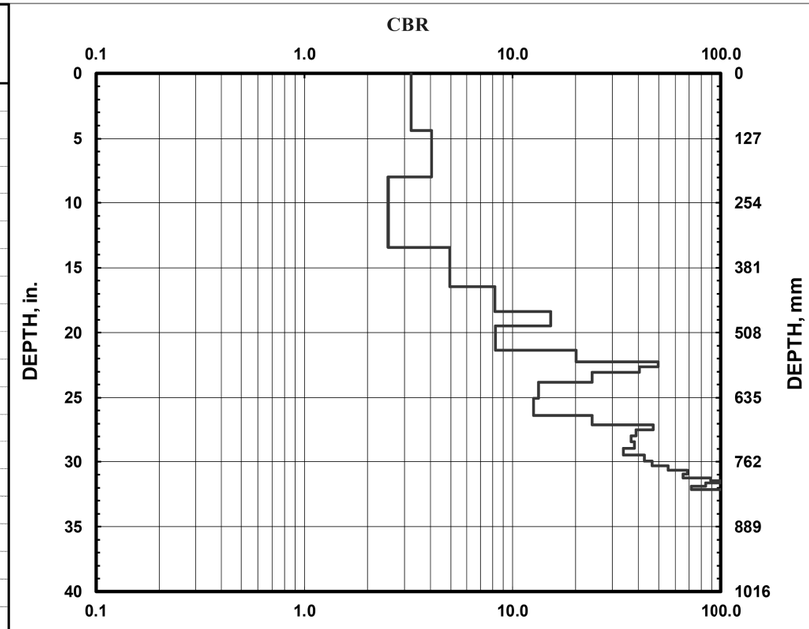
Project: *GUE-22* **Date:** 19-Sep-18

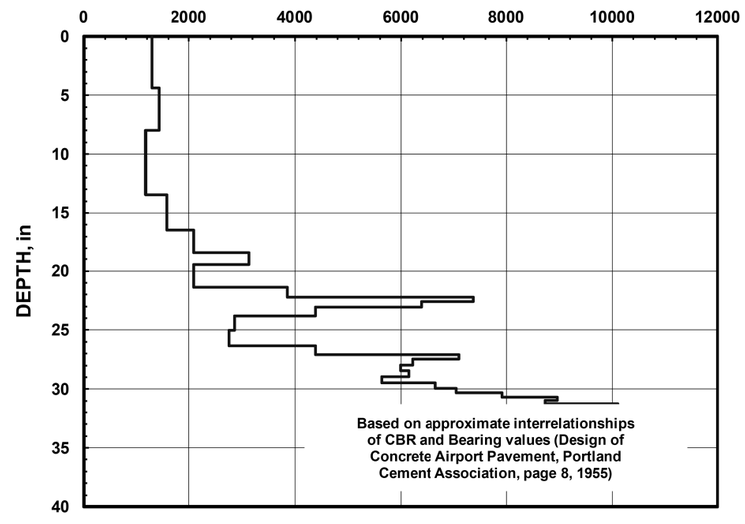
Location: D-002-1-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	111.2	1
2	202.4	1
2	341.8	1
2	417.9	1
2	466.4	1
2	494.5	1
2	542.7	1
2	564.5	1
2	574.2	1
2	585.9	1
2	604.5	1
2	636.1	1
2	669.2	1
2	687.8	1
2	698	1
2	710.1	1
2	722.8	1
2	735.1	1
2	748.8	1
2	759.9	1
2	770.2	1
2	779	1
2	786.3	1
2	793.9	1
2	799.7	1
2	803.5	1
2	809.6	1
2	816.6	1
2	820.1	1
2	825.2	1
2	828.7	1
2	833.4	1
2	837.9	1
2	841.9	1
2	846	1
		1
		1
		1
		1
		1
		1
		1





DRAWN AR | CHECKED SAT

SOIL PROFILE

DCP TEST RESULTS D-002-0-18 & D-002-1-18

GUE-22/723-0.00

/0.70

23/33

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DCP TEST DATA

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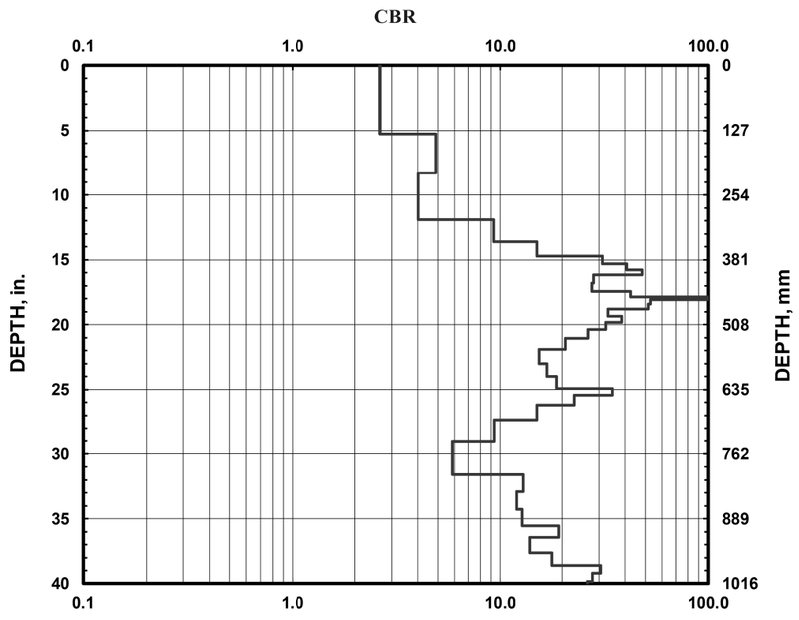
Project: *GUE-22* **Date:** 19-Sep-18

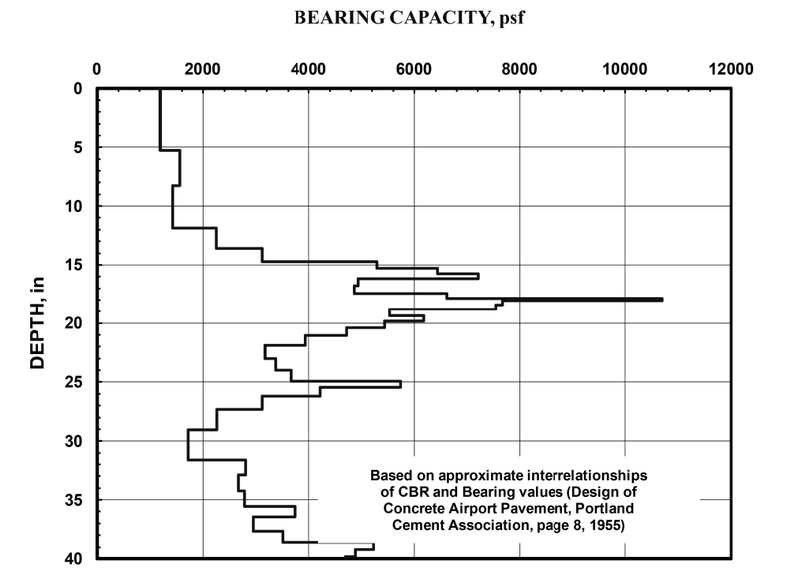
Location: D-004-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	133.5	1
2	210.4	1
2	302	1
2	345.5	1
2	373.9	1
2	388.7	1
2	400.3	1
2	410.3	1
2	426.4	1
2	442.8	1
2	454	1
2	458.8	1
2	468	1
2	477.4	1
2	491.4	1
2	503.6	1
2	517.9	1
2	534.9	1
2	556.1	1
2	583.9	1
2	609.6	1
2	632.8	1
2	646.2	1
2	665.7	1
2	694.1	1
2	737.4	1
2	803	1
2	835.5	1
2	870.2	1
2	903	1
2	925.7	1
2	956.1	1
2	980.6	1
2	995.6	1
2	1011.9	1
2	1029	1
2	1049.5	1
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DCP TEST DATA

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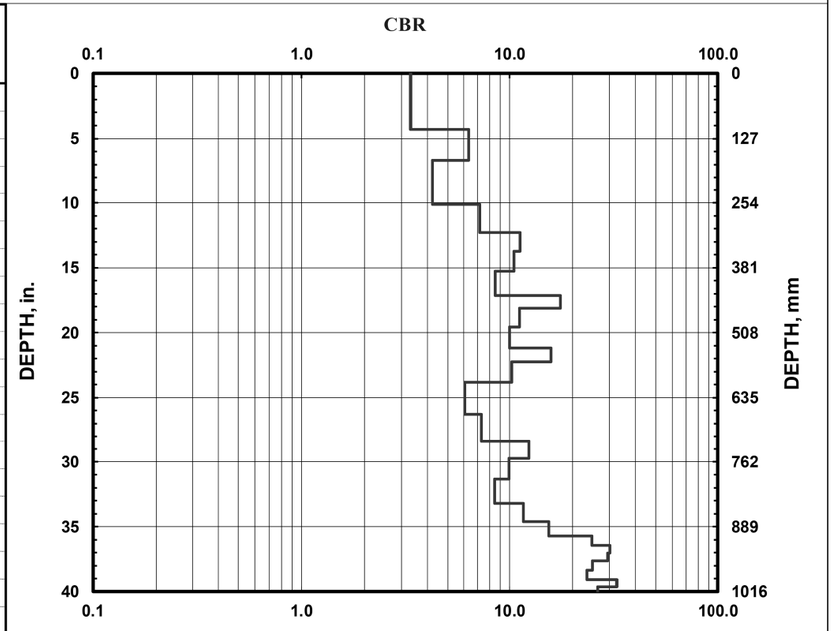
Project: *GUE-22* **Date:** 19-Sep-18

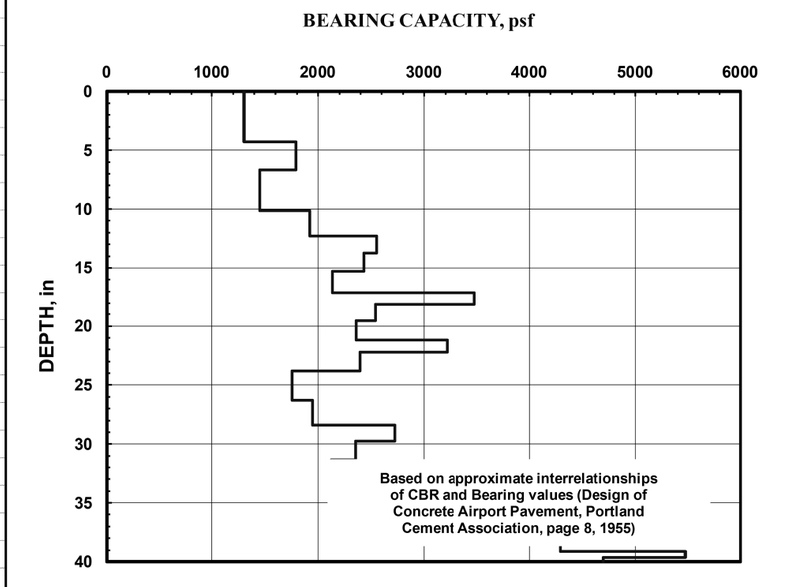
Location: D-006-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	108.7	1
2	169.8	1
2	257.6	1
2	312.4	1
2	349.1	1
2	388.2	1
2	435.1	1
2	459.8	1
2	496.7	1
2	537.5	1
2	564.7	1
2	604.7	1
2	668	1
2	721.8	1
2	755.5	1
2	796.4	1
2	843.6	1
2	879.3	1
2	907.1	1
2	925.2	1
2	940.4	1
2	955.9	1
2	973.9	1
2	993	1
2	1007.2	1
2	1024.3	1
2	1046.6	1
2	1100.5	1
2	1190.7	1
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SOIL PROFILE

DCP TEST RESULTS D-004-0-18 & D-006-0-18

GUE-22/723-0.00

/ 0.70

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_ID004.dgn Sheet 2/1/2019 3:16:4 PM gross3

DCP TEST DATA

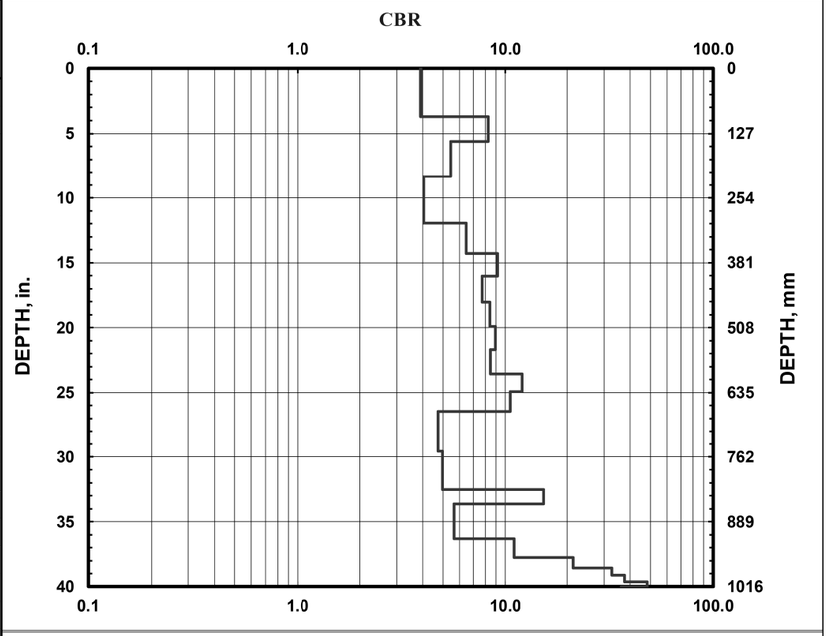
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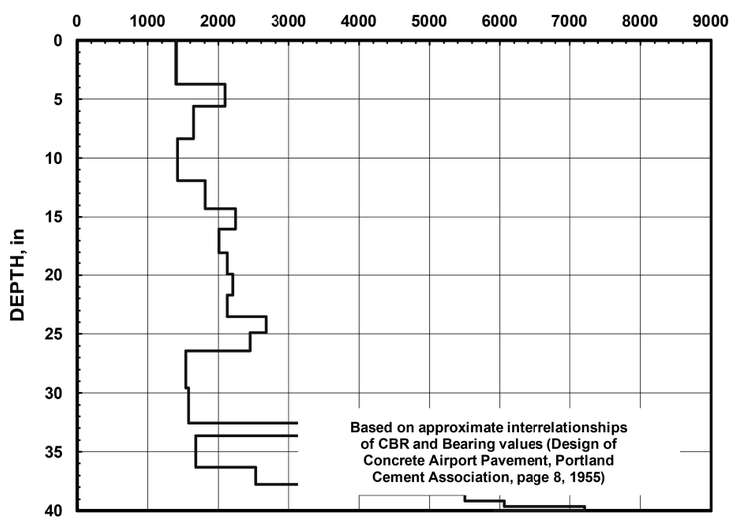
Project: *GUE-22*
Location: D-008-0-18
Date: 19-Sep-18
Soil Type(s): TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	94	1
2	142.2	1
2	212.1	1
2	303.2	1
2	363.3	1
2	407.2	1
2	458.5	1
2	505.9	1
2	550.9	1
2	598.1	1
2	632.6	1
2	671.5	1
2	750.7	1
2	826.5	1
2	854.4	1
2	922.1	1
2	959.4	1
2	980.1	1
2	994.2	1
2	1006.7	1
2	1016.7	1
2	1029.6	1
2	1038.3	1
2	1041	1
2	1043.9	1
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DCP TEST DATA

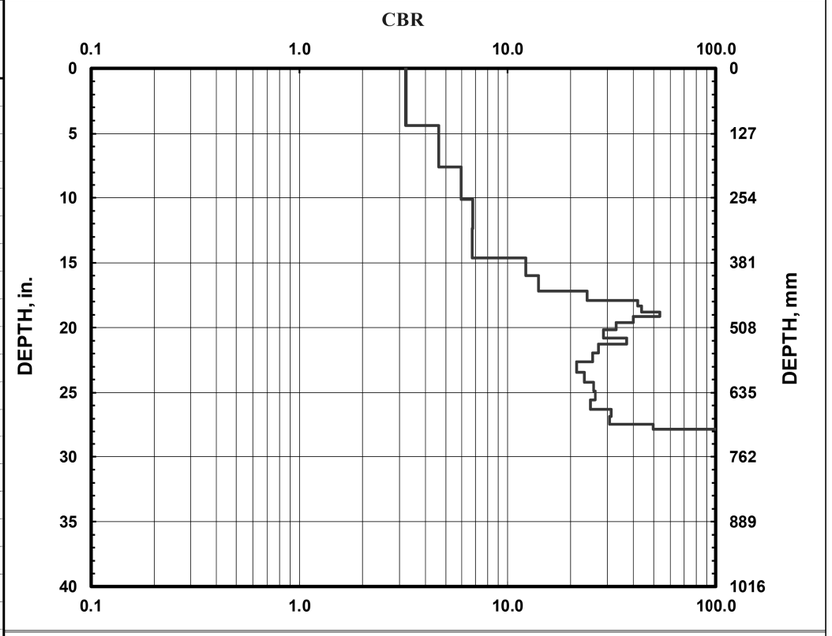
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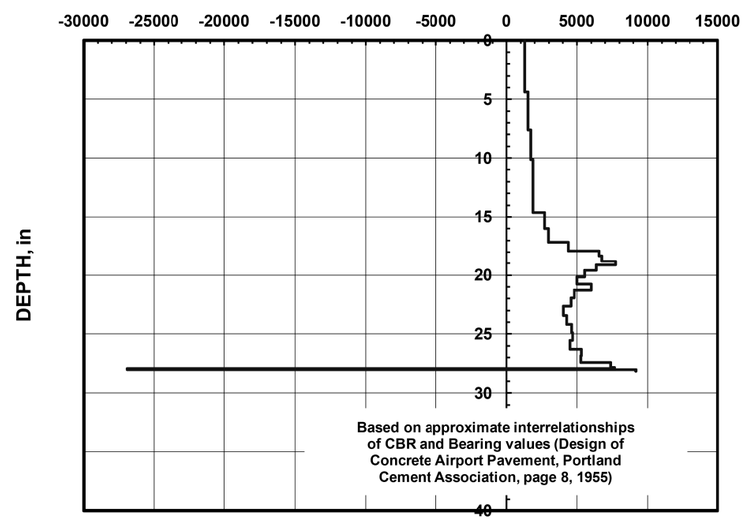
Project: *GUE-22*
Location: D-010-0-18
Date: 19-Sep-18
Soil Type(s): TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	111.7	1
2	192.8	1
2	257.2	1
2	314.5	1
2	372.1	1
2	406.1	1
2	436.2	1
2	454.8	1
2	466.1	1
2	477	1
2	486.1	1
2	497.9	1
2	511.9	1
2	527.7	1
2	540.3	1
2	556.9	1
2	574.6	1
2	595.3	1
2	614.5	1
2	632	1
2	649.2	1
2	667.2	1
2	681.9	1
2	696.8	1
2	706.5	1
2	709.5	1
2	711.2	1
2	714.5	1
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SOIL PROFILE
DCP TEST RESULTS D-008-0-18 & D-010-0-18

GUE-22/723-0.00
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DCP TEST DATA

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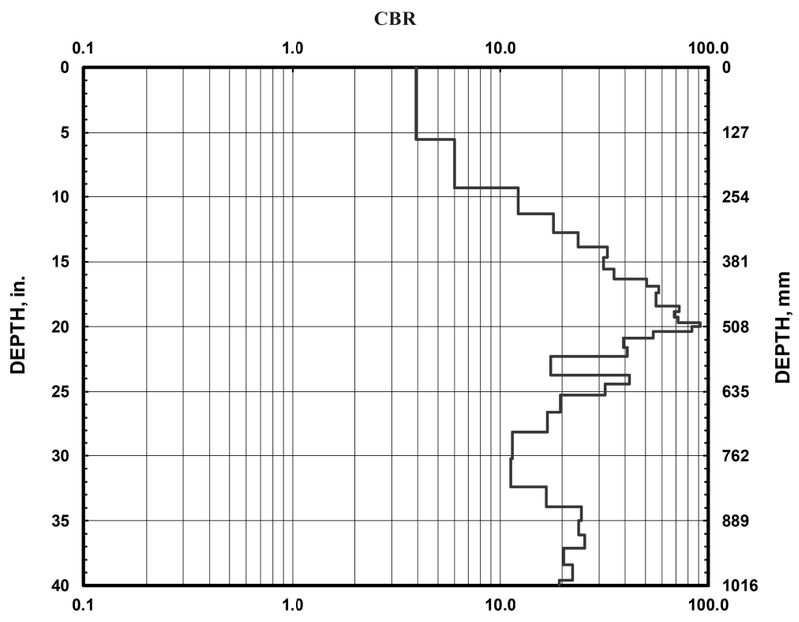
Project: *GUE-22* **Date:** 19-Sep-18

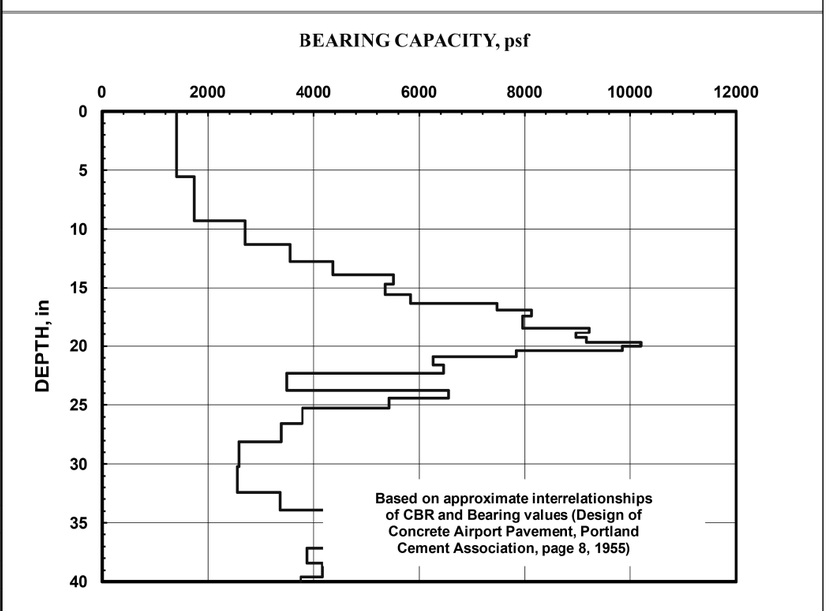
Location: D-014-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	140.4	1
3	236.5	1
3	287.7	1
3	323.9	1
3	352	1
3	373.1	1
3	395	1
3	414.7	1
3	429	1
3	441.7	1
3	454.8	1
3	467.9	1
3	478.3	1
3	489.2	1
3	499.7	1
3	508.2	1
3	517.4	1
3	530.8	1
3	548.8	1
3	566.1	1
3	603.2	1
3	620.2	1
3	641.7	1
3	675.1	1
3	713.5	1
3	767.7	1
3	822.9	1
3	861.7	1
3	888.9	1
3	916.8	1
3	943.1	1
3	975.5	1
3	1005.2	1
3	1039	1
3	1082.5	1
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3	1169.3	1
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DCP TEST DATA

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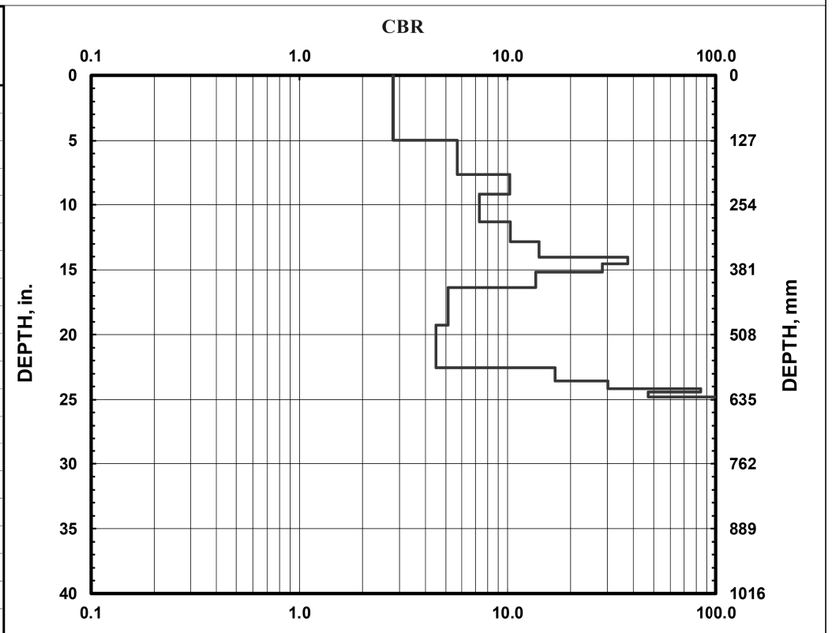
Project: *GUE-22* **Date:** 18-Sep-18

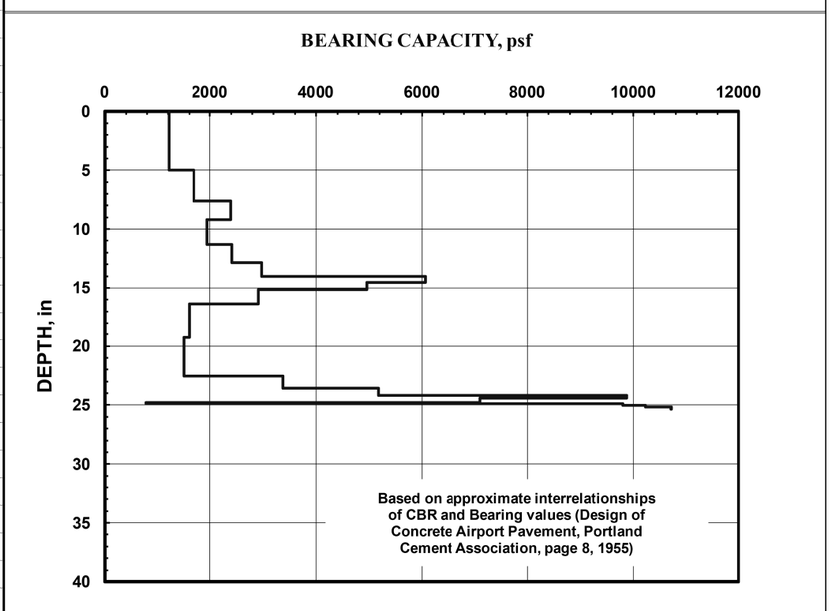
Location: D-016-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	126.5	1
2	193.4	1
2	233.4	1
2	287.1	1
2	326.7	1
2	356.7	1
2	369.2	1
2	385.2	1
2	416.1	1
2	489.7	1
2	572.9	1
2	598.5	1
2	613.7	1
2	619.8	1
2	630	1
2	632.4	1
2	635.9	1
2	639.6	1
2	643.8	1
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SOIL PROFILE

DCP TEST RESULTS D-014-0-18 & D-016-0-18

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DCP TEST DATA

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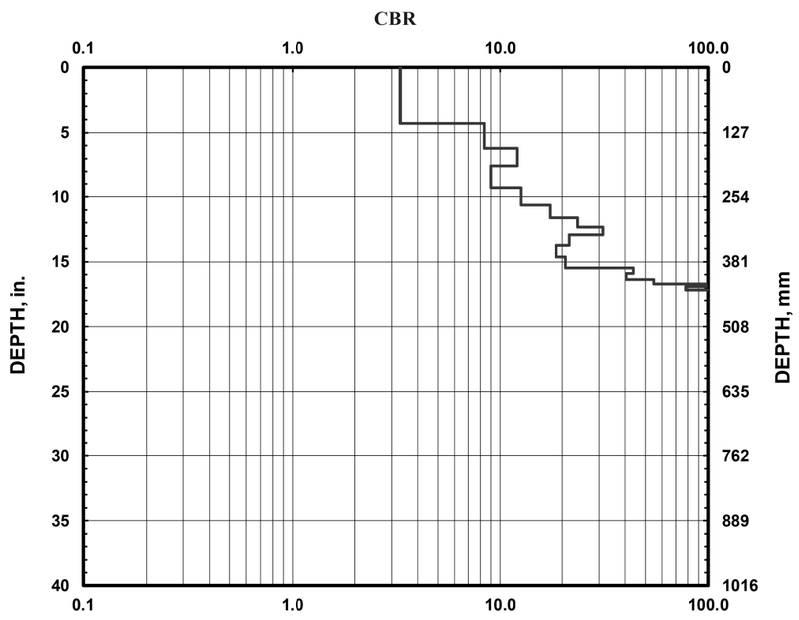
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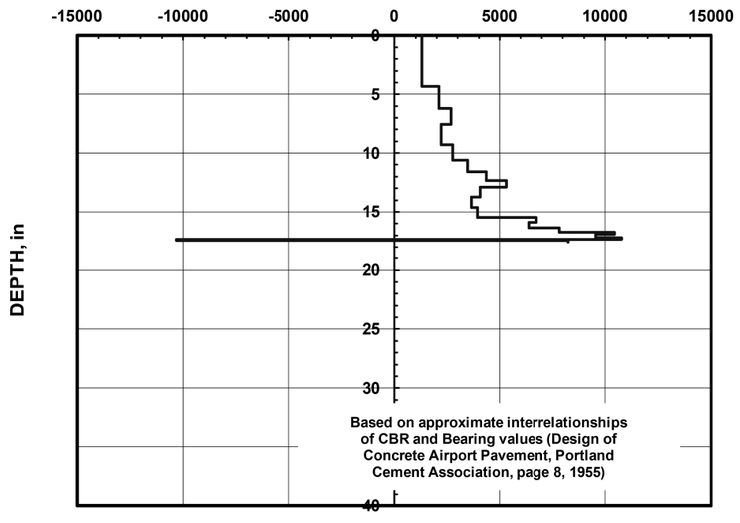
Location: D-018-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	109.6	1
2	157.3	1
2	191.8	1
2	236.6	1
2	269.8	1
2	294.7	1
2	313.5	1
2	328.2	1
2	348.7	1
2	372	1
2	393.3	1
2	404.2	1
2	415.9	1
2	424.8	1
2	430.1	1
2	436.6	1
2	441.1	1
2	443.1	1
2	446.2	1
		1
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DCP TEST DATA

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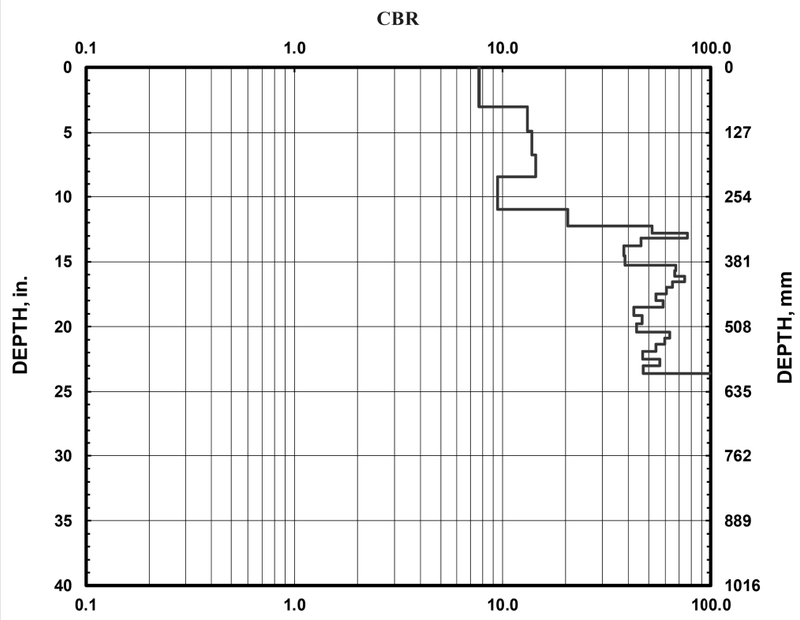
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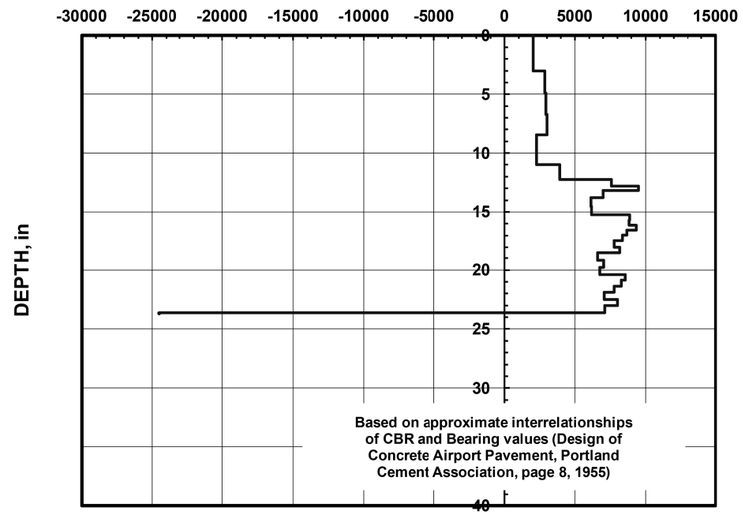
Location: D-020-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	76.9	1
3	124.7	1
3	170.5	1
3	214.7	1
3	278.8	1
3	311	1
3	325	1
3	334.9	1
3	350.5	1
3	369	1
3	387.3	1
3	398.4	1
3	409.6	1
3	419.8	1
3	431.3	1
3	443.5	1
3	457	1
3	469.6	1
3	486.4	1
3	501.9	1
3	518.2	1
3	530	1
3	542.4	1
3	555.9	1
3	571.3	1
3	584.3	1
3	599.6	1
3	602.2	1
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SOIL PROFILE

DCP TEST RESULTS D-018-0-18 & D-020-0-18

GUE-22/723-0.00
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DCP TEST DATA

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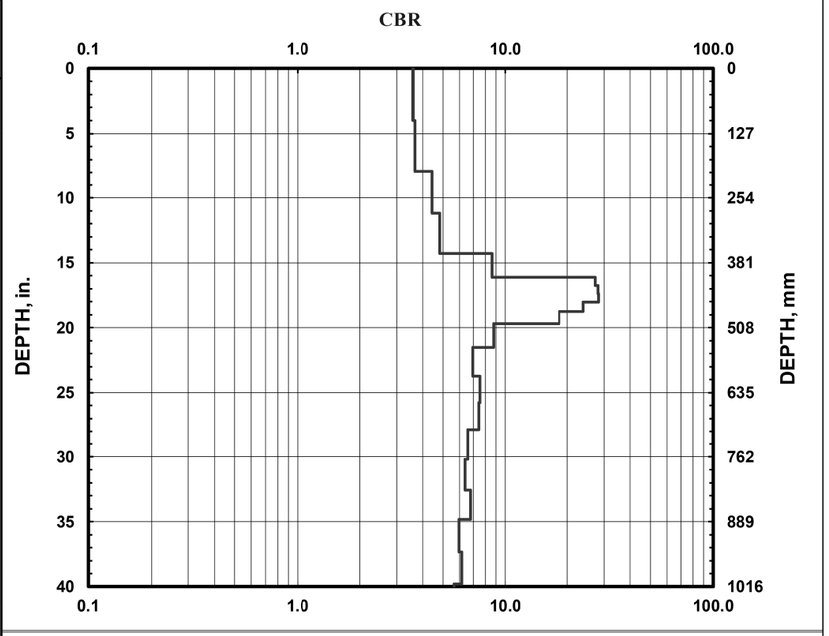
Project: *GUE-22* **Date:** 18-Sep-18

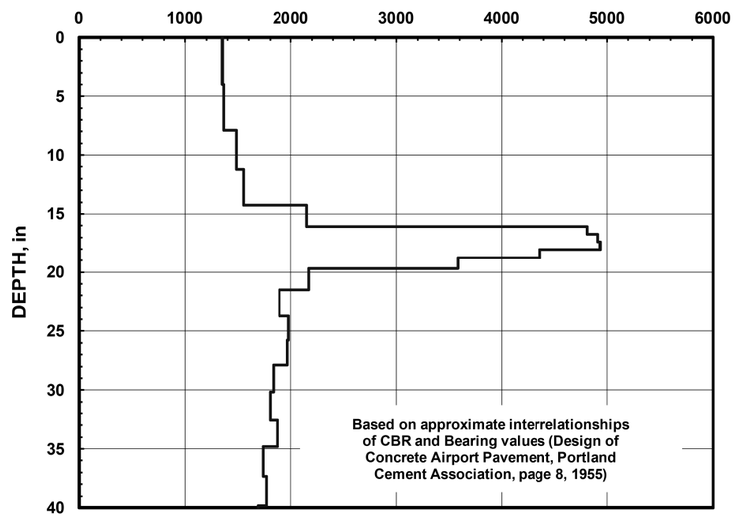
Location: D-022-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	101.1	1
2	200.5	1
2	284.6	1
2	362.5	1
2	409	1
2	425.6	1
2	441.8	1
2	457.9	1
2	476.6	1
2	500.4	1
2	546.2	1
2	602.5	1
2	654.9	1
2	707.8	1
2	766.7	1
2	827.2	1
2	884.5	1
2	948.8	1
2	1011.3	1
2	1078.8	1
2	1124.9	1
2	1157.2	1
2	1194.4	1





DCP TEST DATA

File Name:

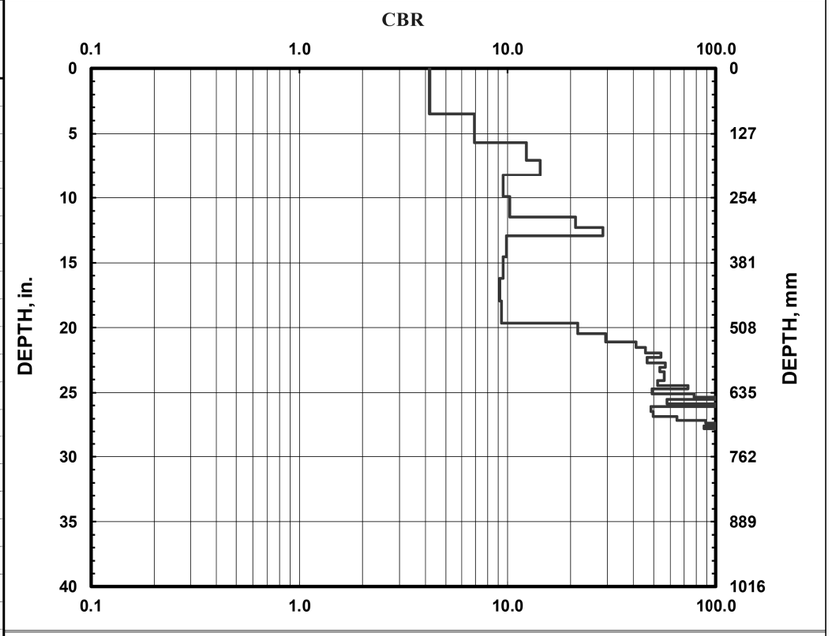
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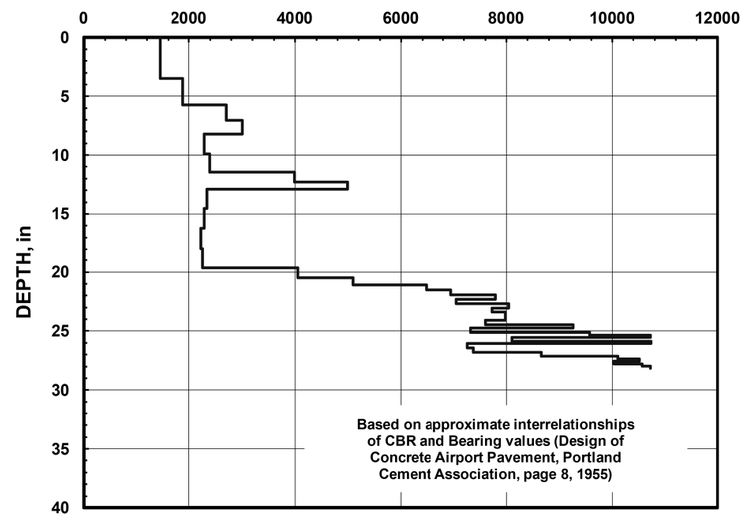
Location: D-024-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	88.5	1
2	145.1	1
2	179	1
2	208.6	1
2	251.2	1
2	291.2	1
2	312.1	1
2	328	1
2	369.3	1
2	411.8	1
2	455.9	1
2	499.3	1
2	519.8	1
2	535.3	1
2	546.8	1
2	557.3	1
2	566.3	1
2	576.6	1
2	585.2	1
2	594.3	1
2	603	1
2	611.7	1
2	621	1
2	627.9	1
2	637.7	1
2	644.2	1
2	648.4	1
2	656.9	1
2	661.6	1
2	671.5	1
2	681.2	1
2	688.9	1
2	694.7	1
2	699.9	1
2	705.8	1
2	710.9	1
2	715.1	1
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SOIL PROFILE

DCP TEST RESULTS D-022-0-18 & D-024-0-18

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DCP TEST DATA

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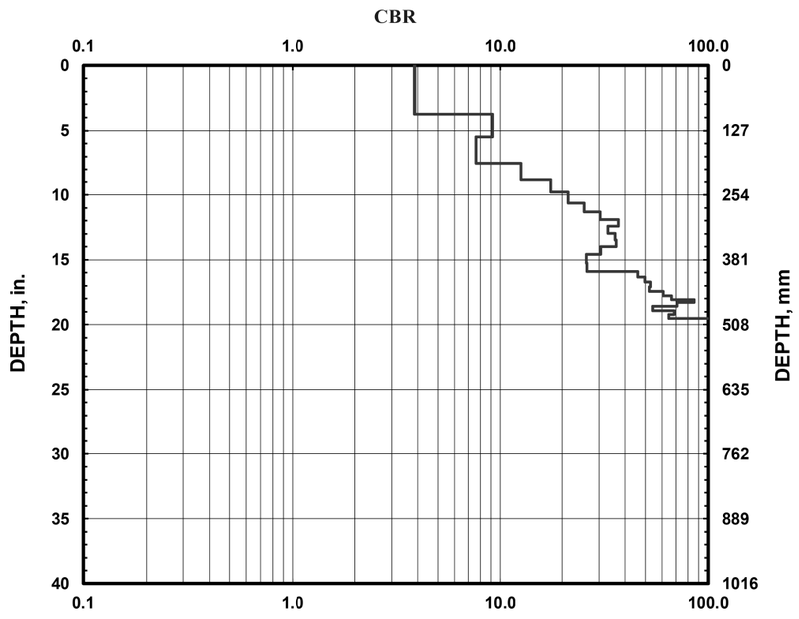
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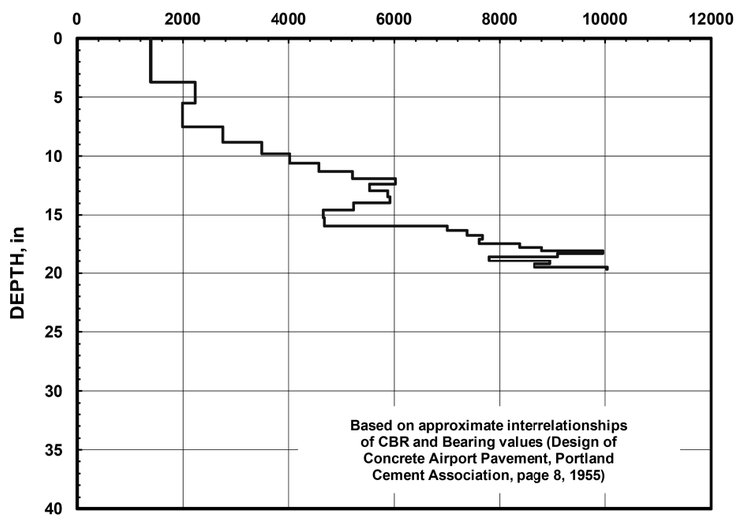
Location: D-026-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	95.1	1
2	139.2	1
2	191.1	1
2	224.3	1
2	249	1
2	269.7	1
2	287.4	1
2	302.5	1
2	315.1	1
2	329.1	1
2	342.1	1
2	355	1
2	370	1
2	387.3	1
2	404.5	1
2	414.9	1
2	424.6	1
2	433.8	1
2	443.1	1
2	451.2	1
2	458.7	1
2	464.7	1
2	471.8	1
2	480.8	1
2	488.1	1
2	495.8	1
2	499.4	1





DCP TEST DATA

File Name:

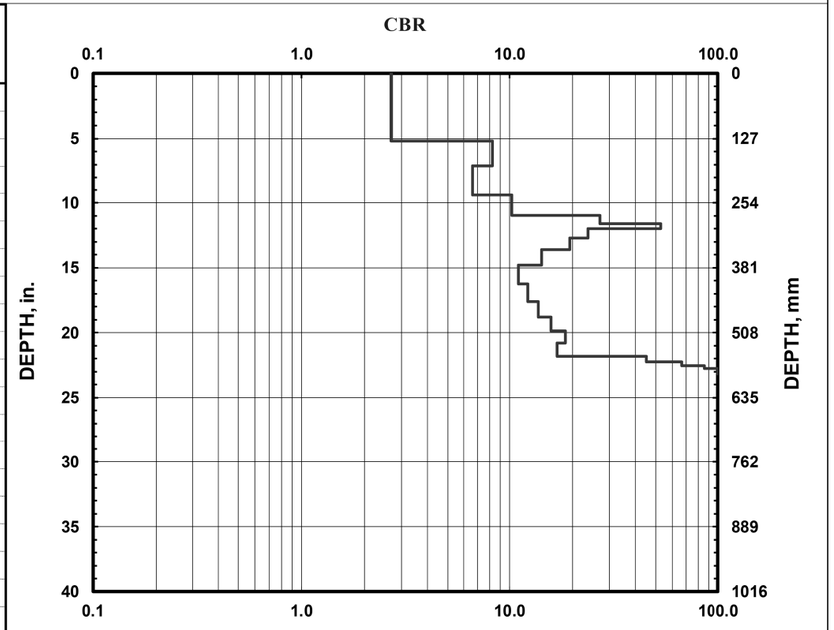
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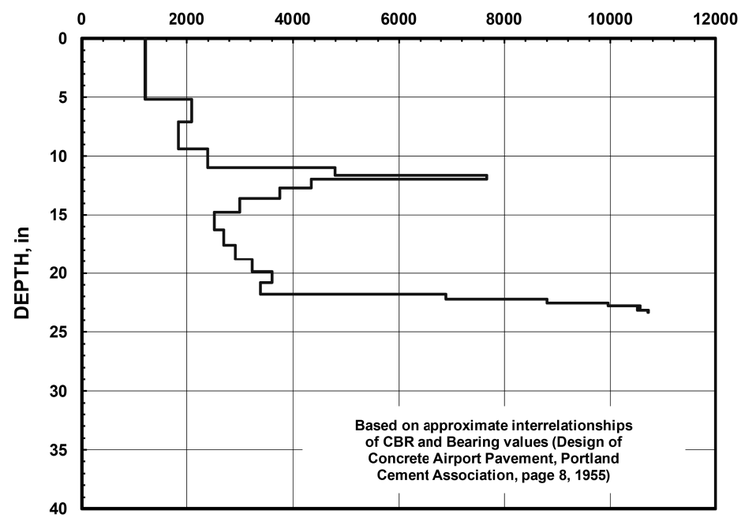
Location: D-028-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	131.5	1
2	179.9	1
2	238.6	1
2	278.5	1
2	295.2	1
2	304.4	1
2	323.2	1
2	345.7	1
2	375.4	1
2	412.8	1
2	446.9	1
2	477.7	1
2	504.8	1
2	528.4	1
2	553.9	1
2	564.5	1
2	572	1
2	578	1
2	583.1	1
2	588.3	1
2	592.5	1





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SOIL PROFILE

DCP TEST RESULTS D-026-0-18 & D-028-0-18

GUE-22/723-0.00 / 0.70

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DCP TEST DATA

File Name:

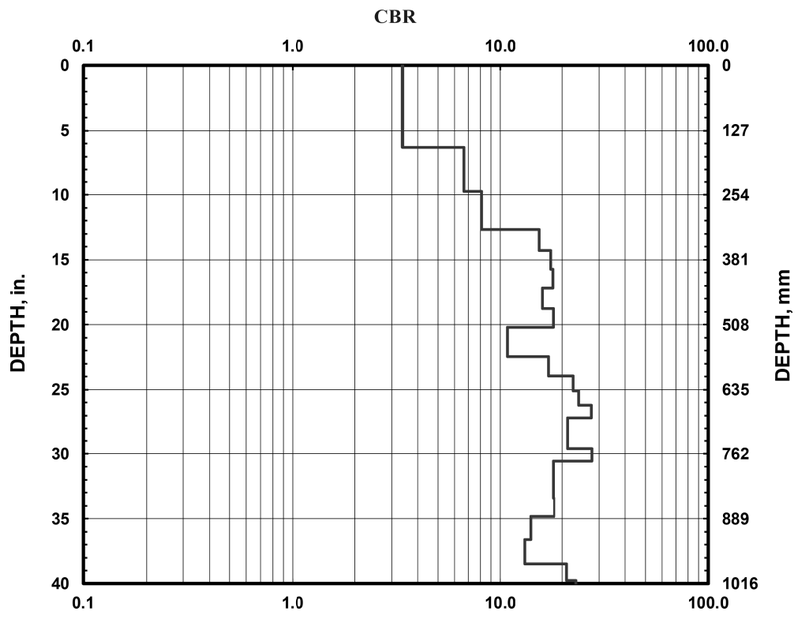
Project: *GUE-22* **Date:** 18-Sep-18

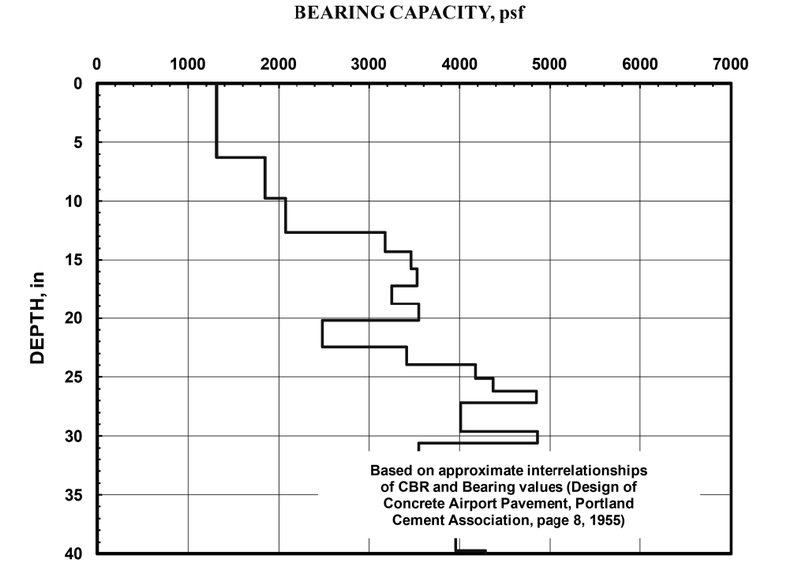
Location: D-030-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	160.2	1
3	247.8	1
3	321.4	1
3	362.9	1
3	400.1	1
3	436.5	1
3	476.8	1
3	512.9	1
3	569.9	1
3	607.8	1
3	637.4	1
3	665.4	1
3	690.1	1
3	721.2	1
3	752.3	1
3	776.9	1
3	813	1
3	849.2	1
3	884.9	1
3	930	1
3	977.9	1
3	1009.5	1
3	1038.2	1
3	1063.5	1
3	1085.2	1
3	1116.9	1
3	1144.6	1
3	1164.1	1
3	1196.2	1
3	1229.1	1
3	1256.9	1





DCP TEST DATA

File Name:

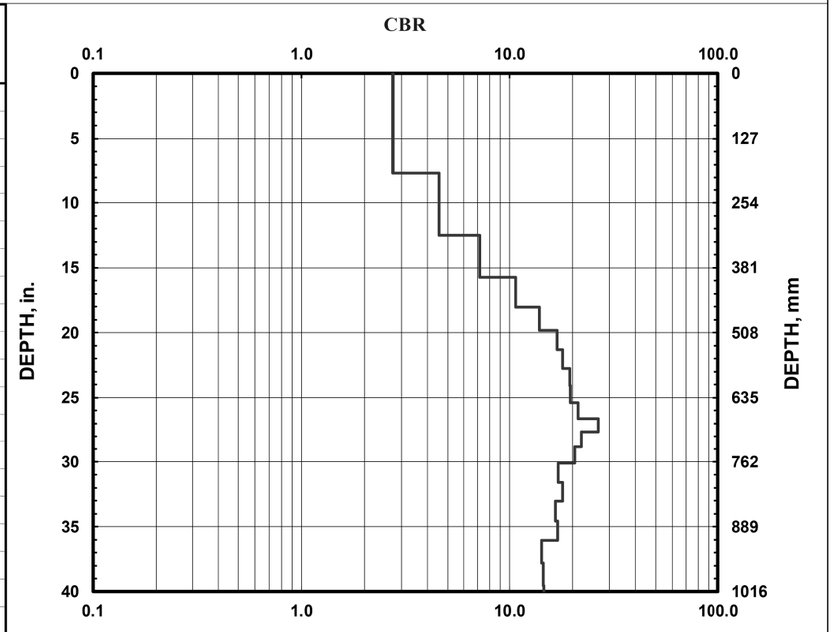
Project: *GUE-22* **Date:** 18-Sep-18

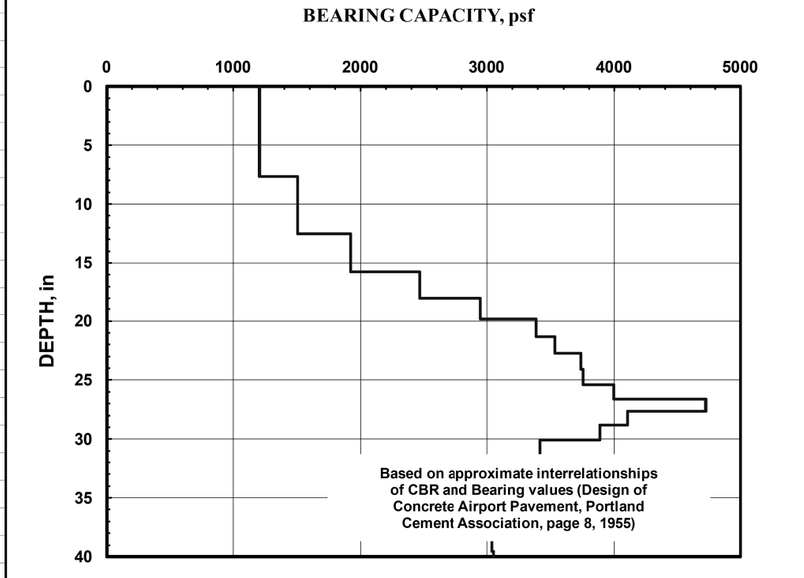
Location: D-032-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	194.3	1
3	317.7	1
3	399.9	1
3	457.5	1
3	503.1	1
3	541.4	1
3	577.7	1
3	611.6	1
3	645.3	1
3	676.5	1
3	702	1
3	732.2	1
3	764.5	1
3	802.4	1
3	838.8	1
3	877.7	1
3	915.9	1
3	960.6	1
3	1004.5	1
3	1048.1	1
3	1093.5	1
3	1148.5	1
3	1210.3	1





DRAWN AR
CHECKED SAT

SOIL PROFILE

DCP TEST RESULTS D-030-0-18 & D-032-0-18

GUE-22/723-0.00
/0.70

30/33

I:\Project Data\GUE\95457\Design\Geotechnical\Sheets\95457_ID010.dgn Sheet 2/1/2019 3:20:13 PM gross3

DCP TEST DATA

File Name:

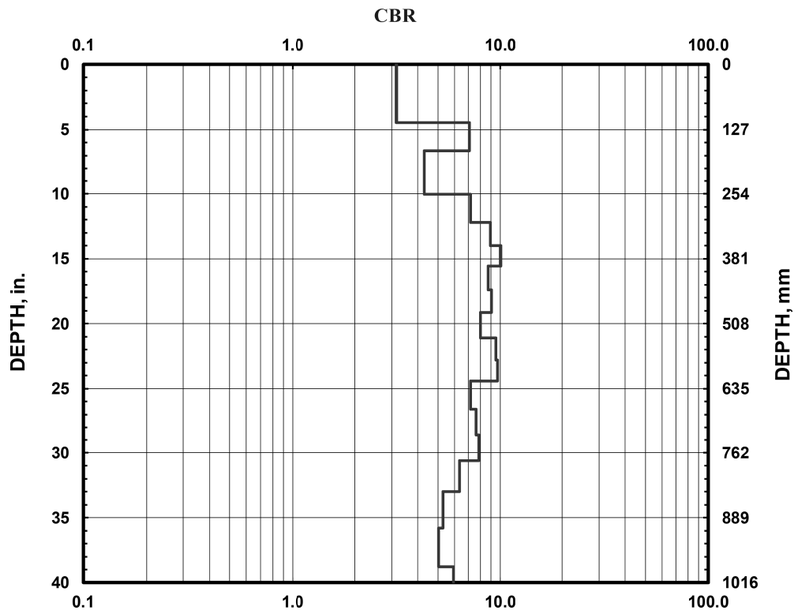
Project: *GUE-22* **Date:** 18-Sep-18

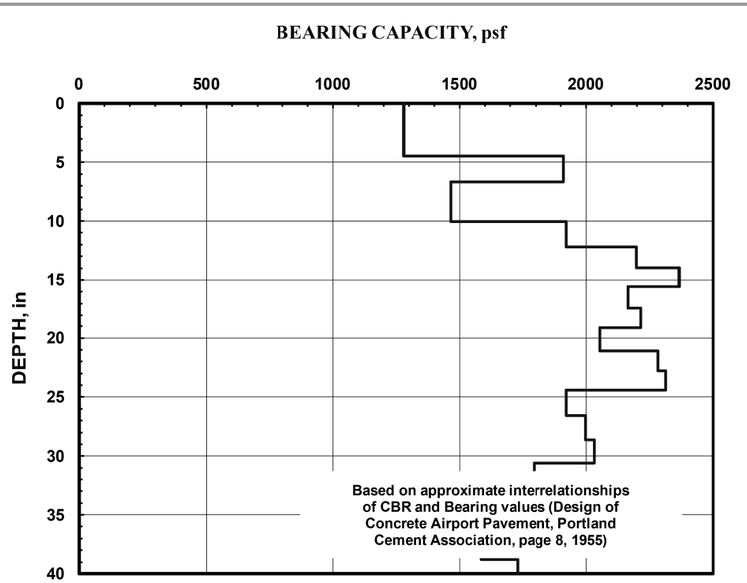
Location: D-036-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	113.7	1
2	168.9	1
2	255.3	1
2	310.1	1
2	355.1	1
2	395.7	1
2	441.7	1
2	486.2	1
2	535.8	1
2	578.5	1
2	620.4	1
2	675.2	1
2	726.9	1
2	777.3	1
2	838.2	1
2	909.8	1
2	984.7	1
2	1049.3	1
2	1129.3	1
2	1217.6	1





DCP TEST DATA

File Name:

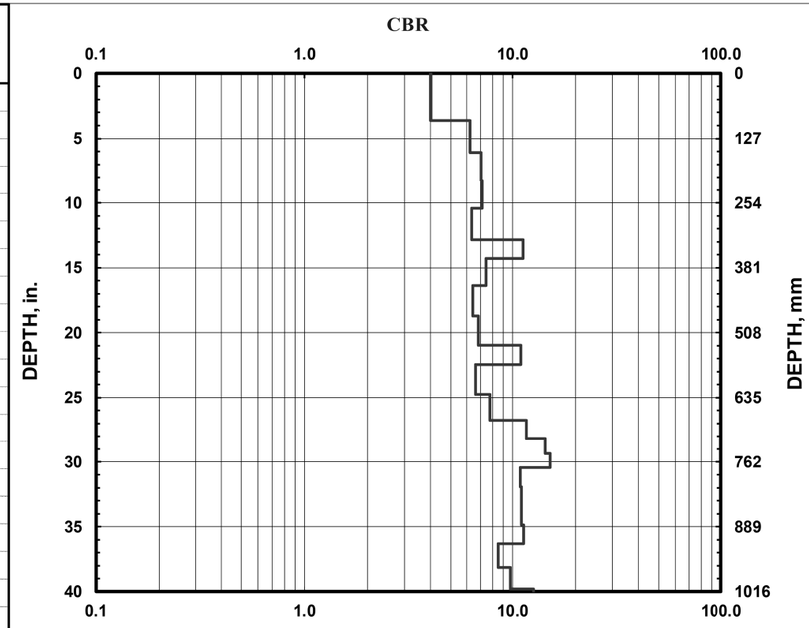
Project: *GUE-22* **Date:** 18-Sep-18

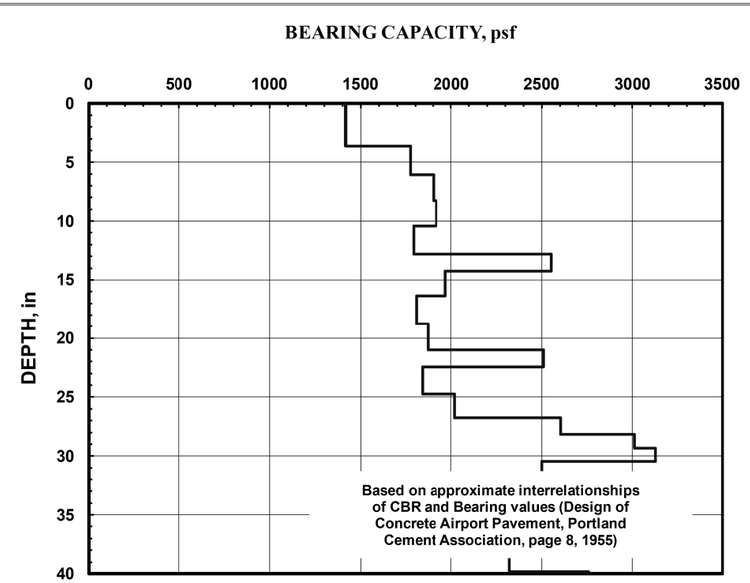
Location: D-038-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	91.9	1
2	154	1
2	209.7	1
2	264.7	1
2	325.8	1
2	362.5	1
2	415.4	1
2	475.7	1
2	532.8	1
2	570.3	1
2	628.9	1
2	679.8	1
2	715.5	1
2	745.1	1
2	773.3	1
2	811	1
2	848.4	1
2	885.7	1
2	922.3	1
2	969.4	1
2	1011.1	1
2	1044.2	1
2	1082.2	1
2	1124.3	1
2	1166.3	1
2	1193.3	1





DRAWN AR
CHECKED SAT

SOIL PROFILE
DCP TEST RESULTS D-036-0-18 & D-038-0-18

GUE-22/723-0.00
/ 0.70

31/33

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_IDOIL.dgn Sheet 2/1/2019 3:20:53 PM gross3

DCP TEST DATA

File Name:

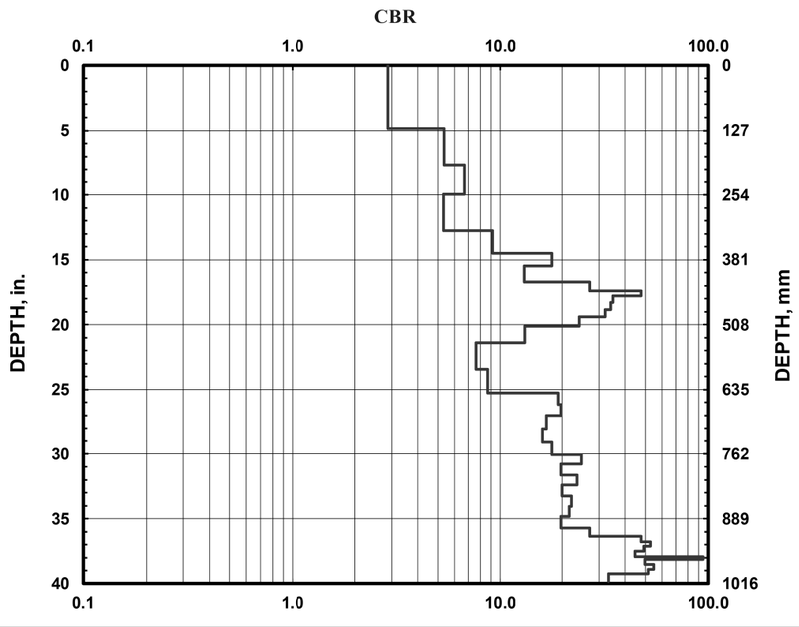
Project: *GUE-22* **Date:** 18-Sep-18

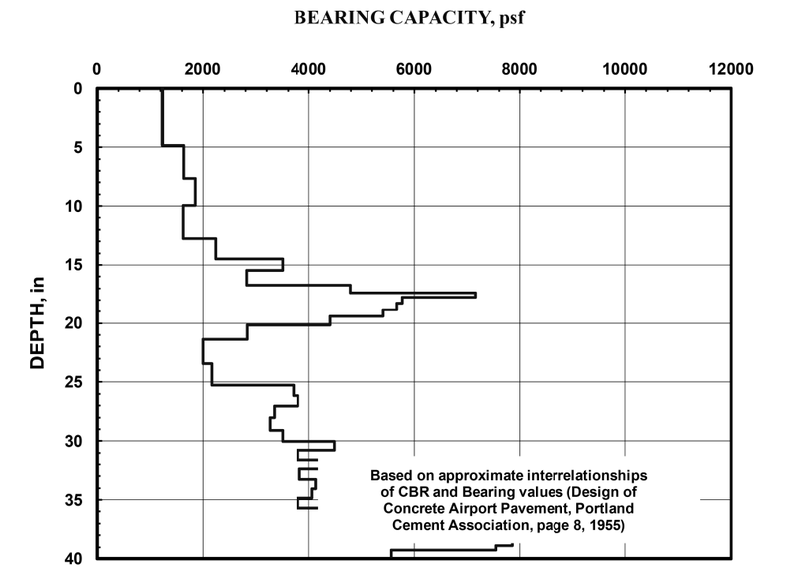
Location: D-042-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	123.6	1
2	194.6	1
2	252.7	1
2	324.2	1
2	368.2	1
2	392.7	1
2	424.8	1
2	441.5	1
2	451.6	1
2	464.9	1
2	478.5	1
2	492.9	1
2	511.4	1
2	543.4	1
2	595.1	1
2	641.2	1
2	664	1
2	686.2	1
2	712.1	1
2	738.9	1
2	763.4	1
2	781.5	1
2	803.7	1
2	822.7	1
2	844.7	1
2	864.7	1
2	885.1	1
2	907.3	1
2	924	1
2	934.1	1
2	943.3	1
2	953.1	1
2	963.8	1
2	969.3	1
2	979	1
2	987.9	1
2	997.3	1
2	1011.2	1
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		1
		1
		1





DCP TEST DATA

File Name:

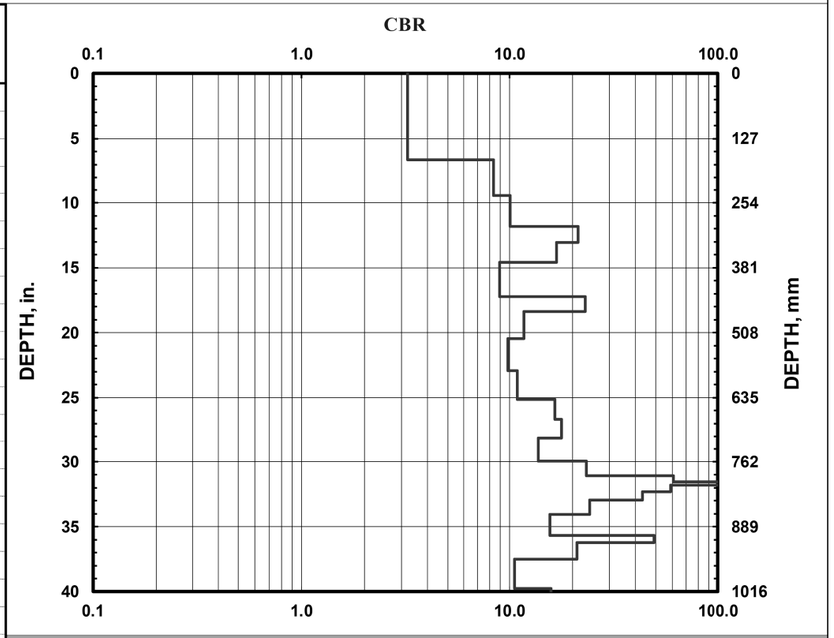
Project: *GUE-22* **Date:** 18-Sep-18

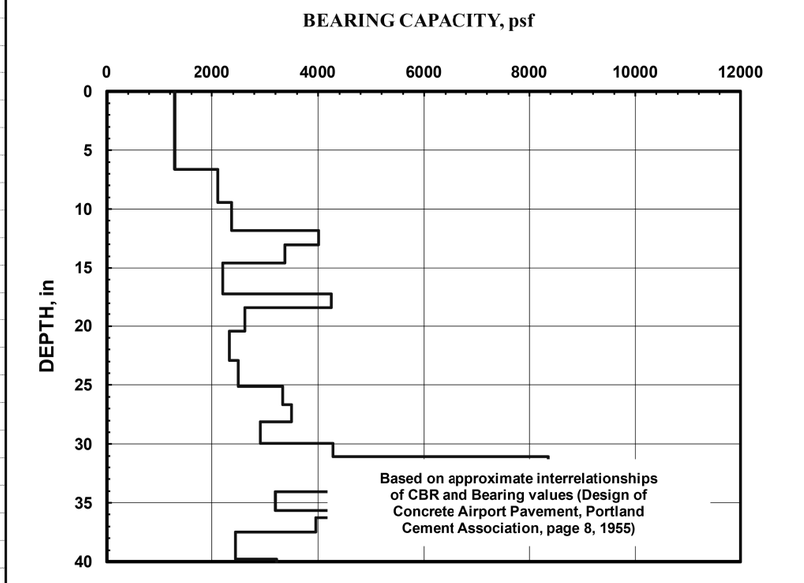
Location: D-044-0-18 **Soil Type(s):** TBD

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	168.1	1
3	239.8	1
3	300.6	1
3	331.7	1
3	370.2	1
3	437.6	1
3	466.6	1
3	519.6	1
3	581.9	1
3	638.5	1
3	677.6	1
3	714.3	1
3	760.5	1
3	789.2	1
3	801.4	1
3	807.9	1
3	820.4	1
3	836.9	1
3	864.7	1
3	905.9	1
3	920.6	1
3	952.2	1
3	1010.3	1
3	1051.1	1
3	1074.2	1
3	1110.3	1
3	1185.1	1
3	1239.3	1
3	1282.3	1
		1
		1
		1
		1
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		1
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		1





DRAWN AR
CHECKED SAT

SOIL PROFILE
DCP TEST RESULTS D-042-0-18 & D-044-0-18

GUE-22/723-0.00
/0.70

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_ID012.dgn Sheet 2/1/2019 3:21:33 PM cross3

DCP TEST DATA

File Name:

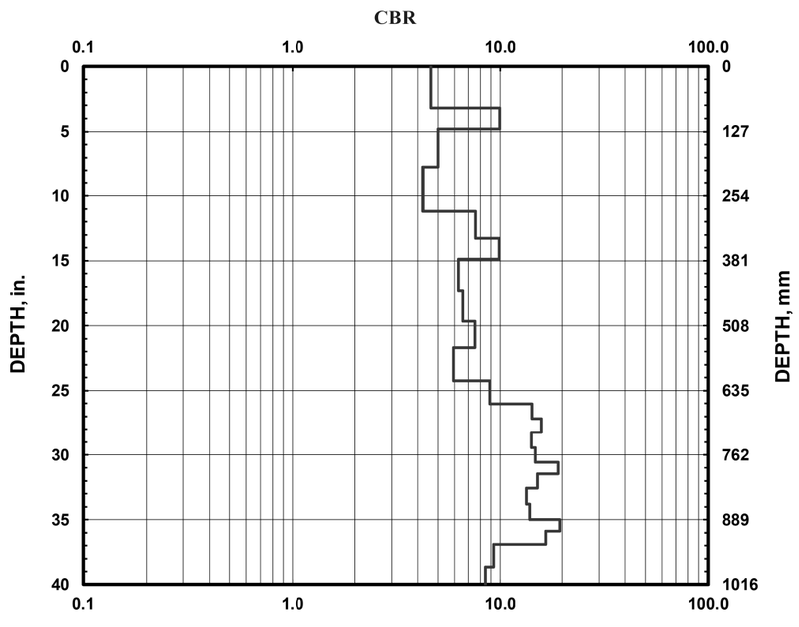
Project: *GUE-22* **Date:** 18-Sep-18

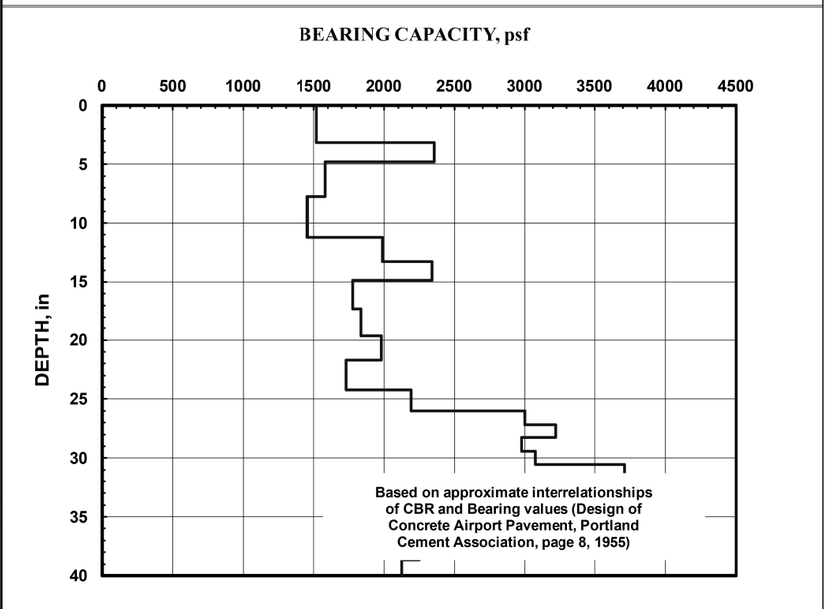
Location: D-046-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	80.7	1
2	121.6	1
2	196.9	1
2	284.5	1
2	336.6	1
2	377.9	1
2	439.7	1
2	498.6	1
2	551	1
2	615.6	1
2	660.8	1
2	690.5	1
2	717.7	1
2	747.7	1
2	776.5	1
2	799.3	1
2	827.5	1
2	858.9	1
2	889.3	1
2	911.7	1
2	937.7	1
2	981.3	1
2	1028.6	1
2	1072.7	1
2	1103.4	1
2	1124.9	1
2	1145.6	1
2	1167.7	1
2	1194.3	1
		1
		1
		1
		1
		1
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DCP TEST DATA

File Name:

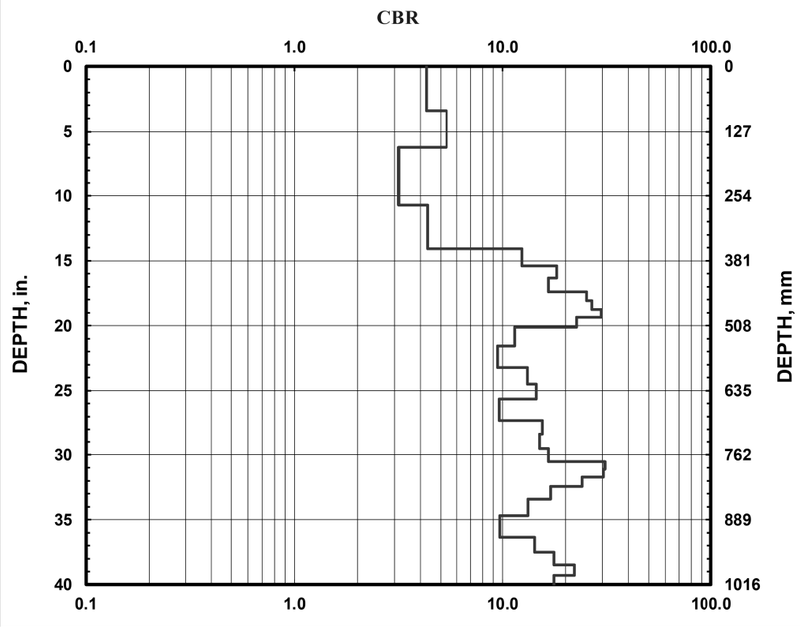
Project: *GUE-22* **Date:** 18-Sep-18

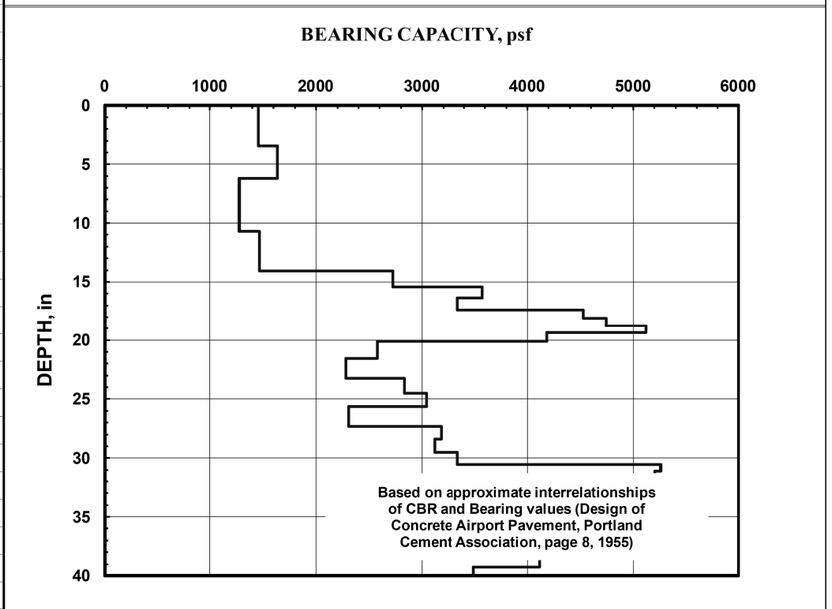
Location: D-047-0-18 **Soil Type(s):** TBD

Hammer: ○ 10.1 lbs. ◉ 17.6 lbs. ○ Both hammers used

Soil Type: ○ CH ○ CL ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	86.9	1
2	157.9	1
2	271.9	1
2	357.7	1
2	391.4	1
2	415.3	1
2	441.3	1
2	459.2	1
2	476.1	1
2	491.5	1
2	511.2	1
2	547.4	1
2	590.2	1
2	622.2	1
2	651.4	1
2	693.5	1
2	721.1	1
2	749.4	1
2	775.4	1
2	790.3	1
2	805.4	1
2	824	1
2	849.4	1
2	881.1	1
2	923.1	1
2	952.8	1
2	977.4	1
2	997.5	1
2	1022.1	1
2	1047.7	1
2	1064.7	1
2	1087.1	1
2	1112.6	1
2	1131.5	1
2	1153.6	1
2	1174.4	1
2	1196.7	1
2	1221.2	1
		1
		1
		1
		1





DRAWN AR CHECKED SAT

SOIL PROFILE

DCP TEST RESULTS D-046-0-18 & D-047-0-18

GUE-22/723-0.00

/0.70

33/33

I:\ProjectData\GUE\95457\Design\Geotechnical\Sheets\95457_ID013.dgn Sheet 2/1/2019 3:22:12 PM gross3