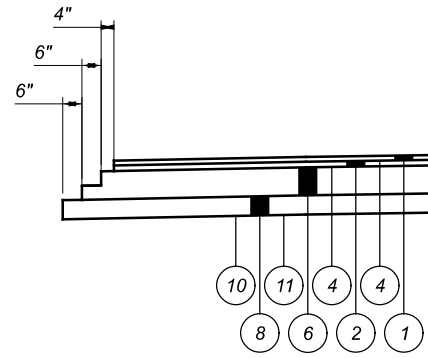
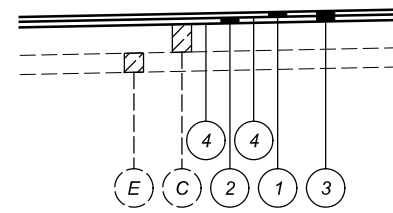


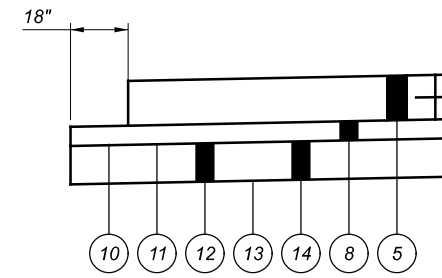
PAVEMENT DETAIL US 42 WITH CURB



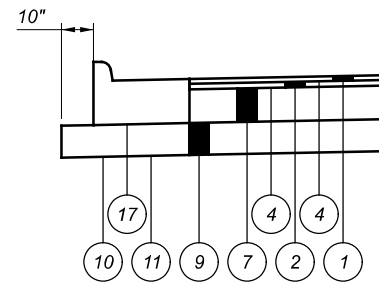
PAVEMENT DETAIL US 42 FULL DEPTH SHOULDER



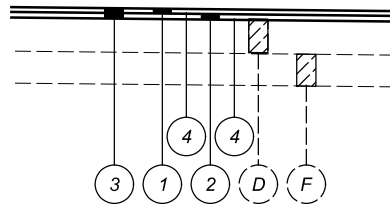
OVERLAY DETAIL US 42



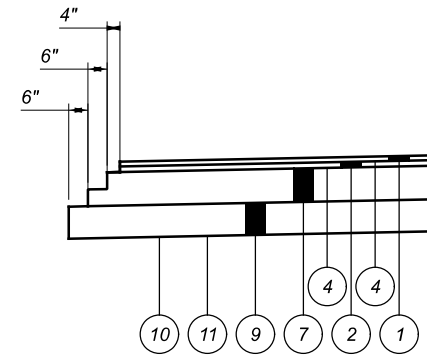
PAVEMENT DETAIL RAMP A



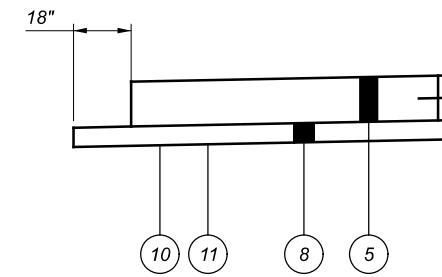
PAVEMENT DETAIL RAMP B CURB



OVERLAY DETAIL RAMP B AND C



PAVEMENT DETAIL RAMP C



PAVEMENT DETAIL RAMP D

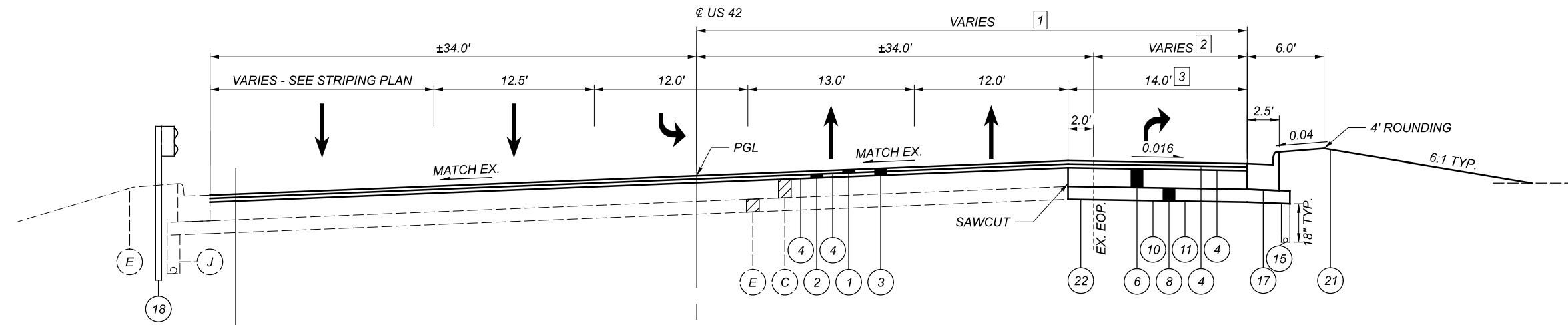
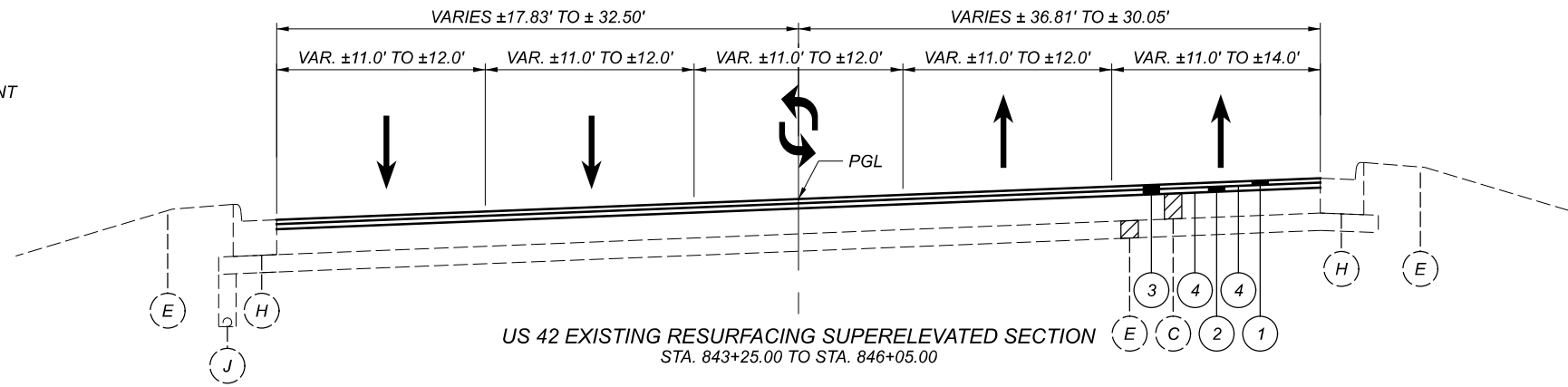
**LEGEND**

- 1 ITEM 441 - 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG 64-22
- 2 ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
- 3 ITEM 254 - 3.25" PAVEMENT PLANING
- 4 ITEM 407 - NON TRACKING TACK COAT
- 5 ITEM 452 - 14" NON-REINFORCED CONCRETE PAVEMENT
- 6 ITEM 301 - 8.75" ASPHALT CONCRETE BASE, PG 64-22
- 7 ITEM 301 - 10.5" ASPHALT CONCRETE BASE, PG 64-22
- 8 ITEM 304 - 6" AGGREGATE BASE
- 9 ITEM 304 - 10" AGGREGATE BASE
- 10 ITEM 204 - SUBGRADE COMPACTION
- 11 ITEM 204 - PROOF ROOLING
- 12 ITEM 204 - EXCAVATION OF SUBGRADE, 12" DEEP
- 13 ITEM 204 - GEOTEXTILE FABRIC
- 14 ITEM 204 - GRANUALR MATERIAL TYPE C
- 15 ITEM 605 - 4" BASE PIPE UNDERDRAIN

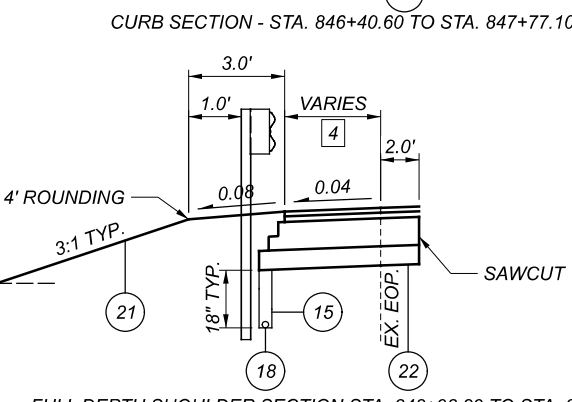
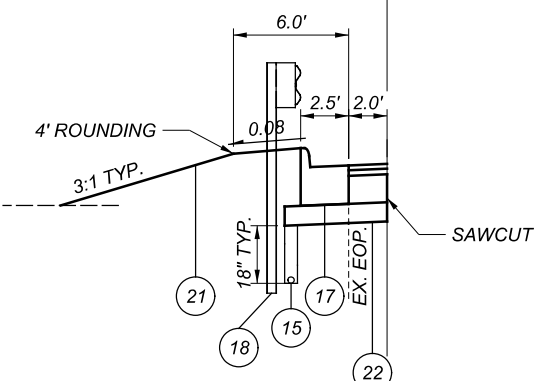
- 16 ITEM 605 - 4" SHALLOW PIPE UNDERDRAIN
- 17 ITEM 609 - CURB, TYPE 2
- 18 ITEM 606 - GUARDRAIL, TYPE MGS
- 19 ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS
- 20 ITEM 608 - 4" CONCRETE WALK
- 21 ITEM 659 - SEEDING AND MULCHING
- 22 ITEM 202 - PAVEMENT REMOVAL

- A ± 1.5" EXISTING ASPHALT CONCRETE SURFACE COURSE
- B ± 1.75" EXISTING ASPHALT CONCRETE INTERMEDIATE COURSE
- C ± 8.75" EXISTING ASPHALT CONCRETE BASE
- D ± 13.75" EXISTING ASPHALT PAVMENT
- E ± 6" EXISTING AGGREGATE BASE
- F ± 10.5" EXISTING AGGREGATE BASE
- G ± 14" EXISTING NON-REINFORCED CONCRETE PAVEMENT
- H EXISTING CURB
- J EXISTING UNDERDRAIN
- K EXISTING CONCRETE ISLAND
- L EXISTING TRENCH DRAIN

- NOTES:  
 1: FOR LEGEND SEE SHEET 3  
 2: FOR INTERSECTION DETAILS SEE SHEETS 77-79  
 3: FOR EARTHWORK GRADING DETAILS SEE SHEET 80  
 4. ALL SAWCUT DEPTHS SHALL BE TO SOUND EXISTING PAVEMENT  
 5. 4' ROUNDING AT PROPOSED GRADE TIE POINTS



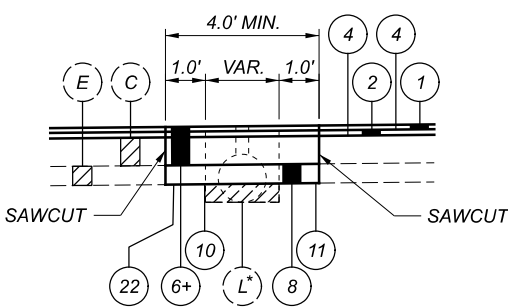
EX. CURB SECTION - STA. 846+05.00 TO STA. 846+40.60



4 WIDTH VARIES FROM 5.65' AT STA. 848+98.29 TO 4.80' AT STA. 849+49.78

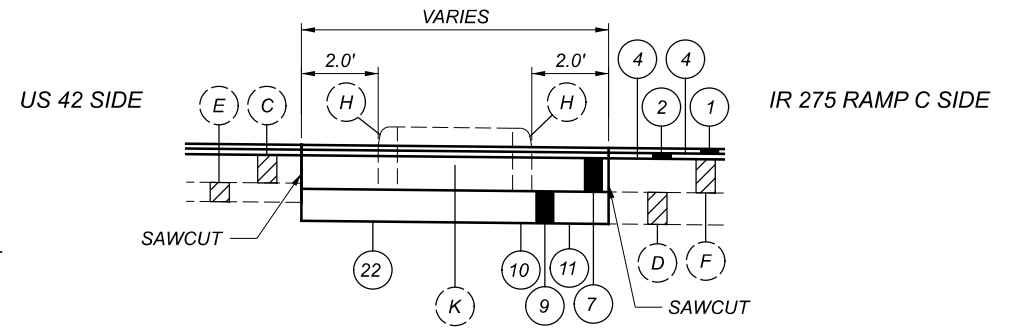
US 42 SUPERELEVATED SECTION  
 STA. 846+05.00 TO STA. 849+79.09  
 IR 275 RAMP A INTERSECTION - LEFT STA. 847+77.10 TO STA. 848+98.29  
 IR 275 RAMP C INTERSECTION - RIGHT STA. 848+66.10 TO STA. 850+05.56

- 1 WIDTH VARIES FROM 30.00' AT STA. 846+05.00 TO 43.00' AT STA. 846+55.00  
 WIDTH = 43.00' FROM STA. 846+55.00 TO STA. 848+66.10
- 2 WIDTH VARIES FROM 0.00' AT STA. 846+05.00 TO 12.76' AT STA. 846+55.00 TO 11.68' AT STA. 848+66.10
- 3 WIDTH VARIES FROM 14.00' AT STA. 848+50.28 TO 18.00' AT STA. 848+66.10



US 42 TRENCH DRAIN AND CATCH BASIN REMOVAL SECTION  
 STA. 847+88.72 TO STA. 849+65.54

\* BACKFILL TRENCH WITH EMBANKMENT FILL  
 + BUILD ITEM 301 TO MATCH EXISTING PAVEMENT SURFACE THEN MILL 3.25" AND PLACE INTERMEDIATE AND SURFACE COURSES



US 42/IR 275 RAMP C CONCRETE ISLAND REMOVAL SECTION  
 US 42 STA. 849+26.00 TO STA. 849+65.00  
 RAMP C STA. 0+38.51 TO STA. 0+72.94

HAM-275-28.29

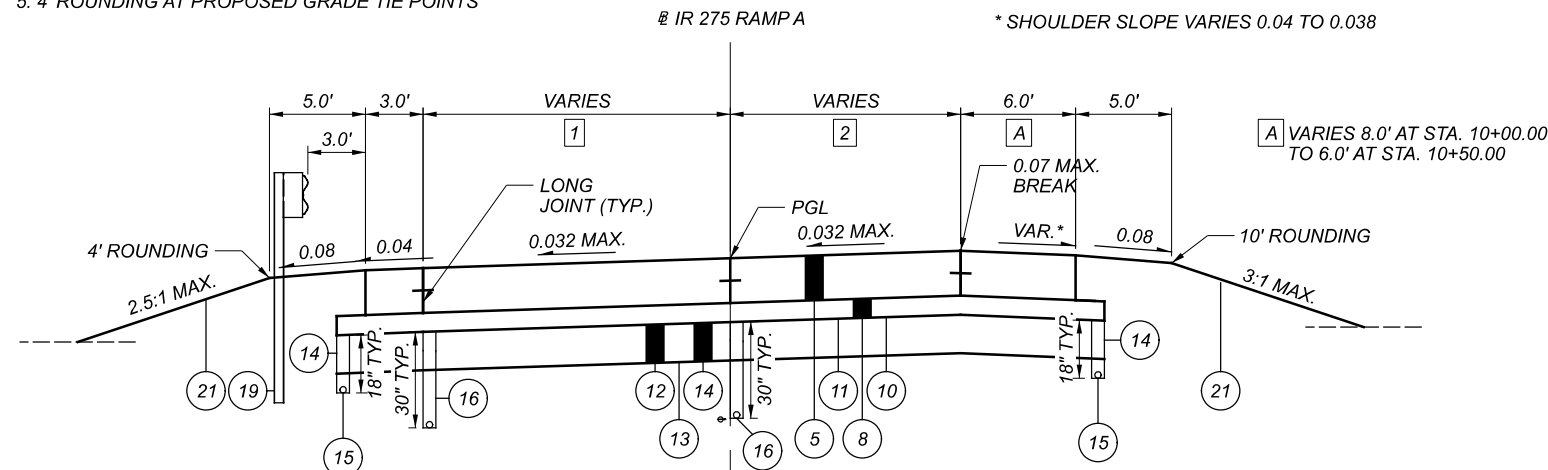
MODEL: Sheet 2 - US 42 TYPICAL SECTION PAPER SIZE: ITXII(In.) DATE: 5/18/2021 TIME: 2:23:48 PM USER: MLORENZ  
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TYPICAL SECTIONS - US 42

DESIGN AGENCY	
DESIGNER	MJL
REVIEWER	SJB
PROJECT ID	106411
SHEET	5
TOTAL	137



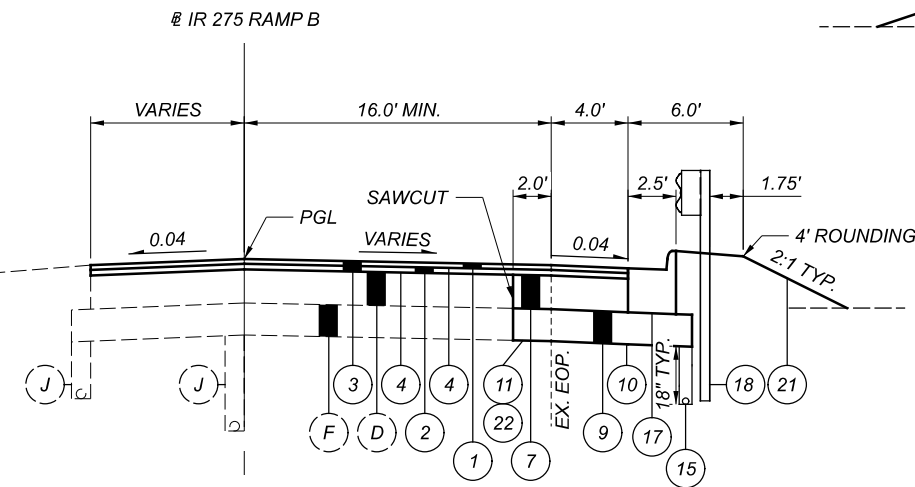
- NOTES:  
 1: FOR LEGEND SEE SHEET 3  
 2: FOR INTERSECTION DETAILS SEE SHEETS 77-79  
 3: FOR EARTHWORK GRADING DETAILS SEE SHEET 80  
 4. ALL SAWCUT DEPTHS SHALL BE TO SOUND EXISTING PAVEMENT  
 5. 4' ROUNDING AT PROPOSED GRADE TIE POINTS



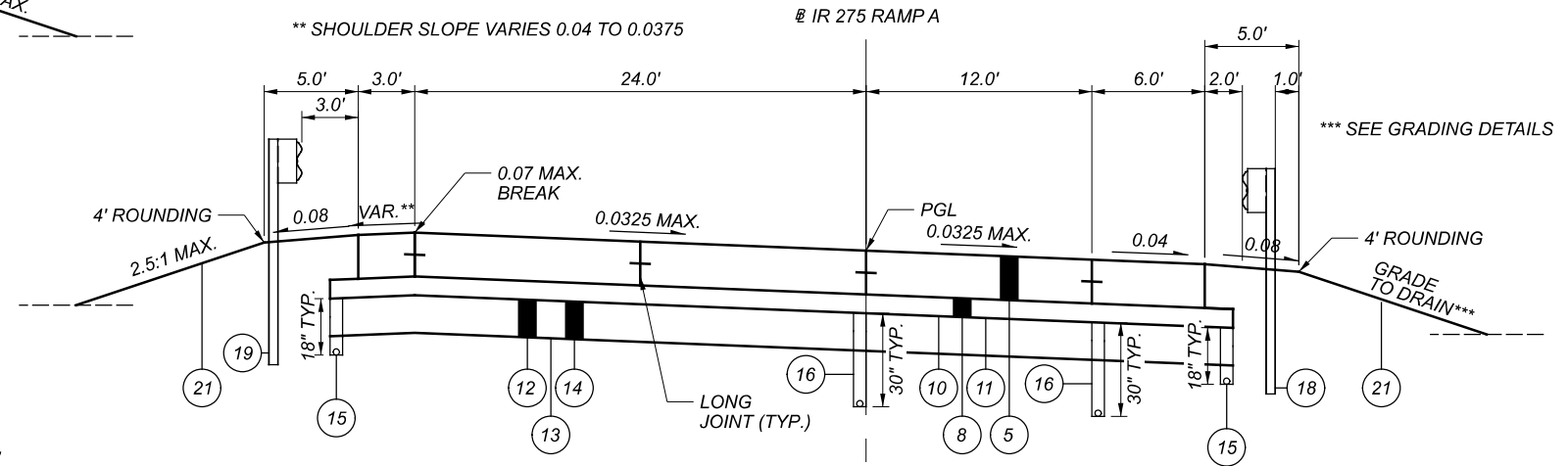
1 WIDTH = 16.00' FROM STA. 10+00.00 TO STA. 12+20.00  
 WIDTH VARIES FROM 16.00' AT STA. 12+20.00 TO 24.00' AT STA. 13+42.46  
 WIDTH = 24.00' FROM STA. 13+42.46 TO STA. 14+09.50

RAMP A SUPERELEVATED LEFT SECTION  
 STA. 10+00.00 TO STA. 14+09.50

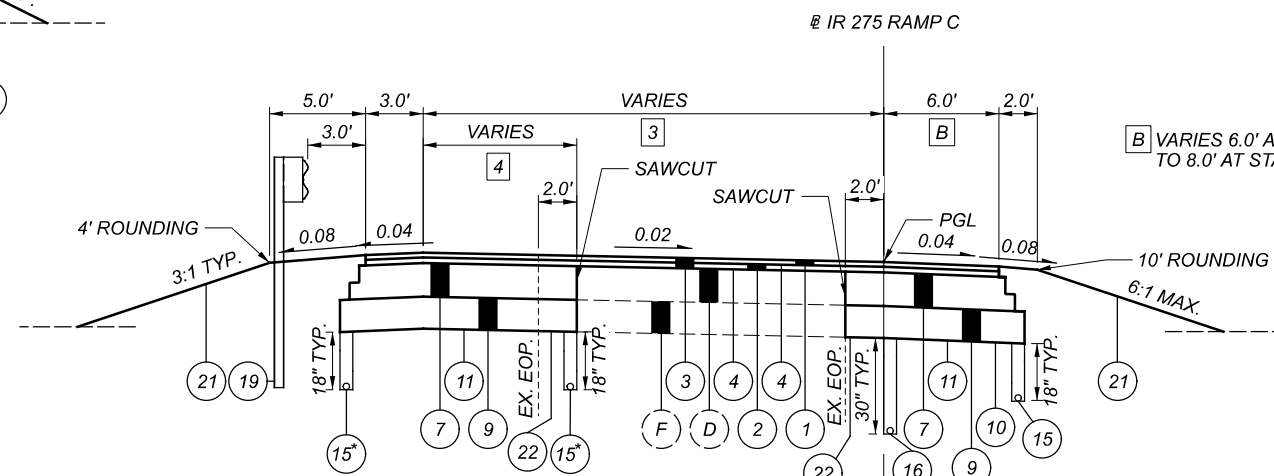
2 WIDTH = 0.00' AT STA. 10+00.00 TO STA. 10+90.87  
 WIDTH VARIES FROM 0.00' AT STA. 10+90.87 TO 12.00' AT STA. 13+73.32  
 WIDTH = 12.00' FROM STA. 13+73.32 TO STA. 14+09.50



IR 275 RAMP B NORMAL SECTION  
 STA. 21+56.47 TO STA. 22+48.41  
 SEE INTERSECTION DETAILS  
 RESURFACE EXISTING PAVEMENT  
 STA. 20+00.00 TO STA. 21+56.47



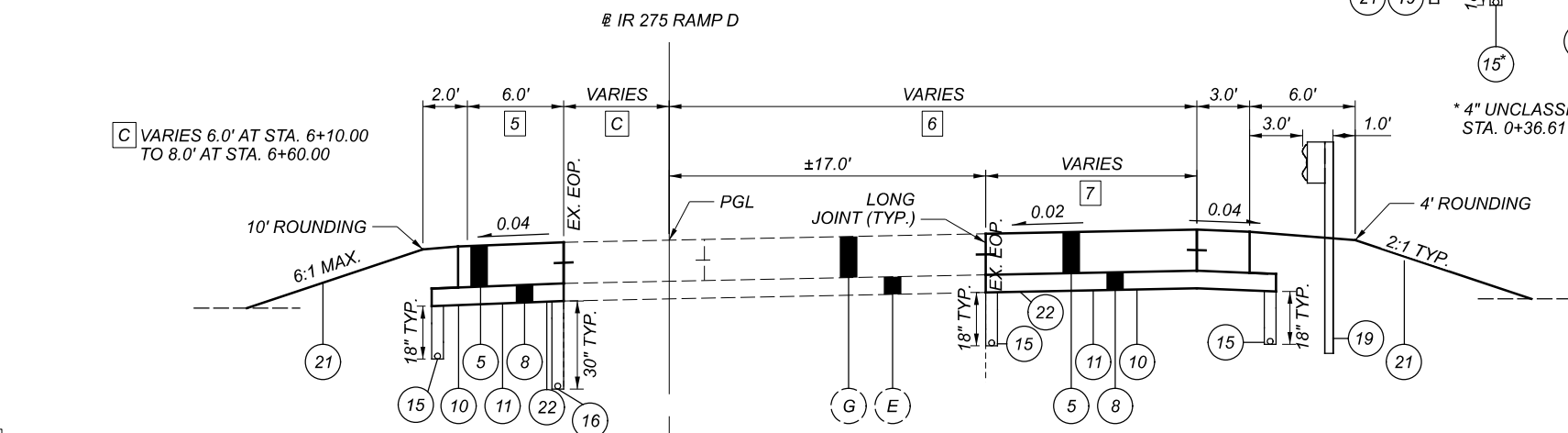
IR 275 RAMP A SUPERELEVATED RIGHT SECTION  
 STA. 14+09.50 TO STA. 17+13.02  
 SEE INTERSECTION DETAILS FOR STA. 16+09.43 TO STA. 17+13.02



IR 275 RAMP C NORMAL SECTION  
 STA. 0+29.80 TO STA. 9+40.00  
 SEE INTERSECTION DETAILS FOR STA. 0+29.80 TO STA. 1+96.55  
 RESURFACE EXISTING PAVEMENT  
 STA. 9+40.00 TO STA. 12+50.00

3 WIDTH VARIES FROM ±37.00' AT STA. 0+29.80 TO 24.00' AT STA. 1+96.55  
 WIDTH = 24.00' FROM STA. 1+96.55 TO STA. 5+00.00  
 WIDTH VARIES FROM 24.00' FROM STA. 5+00.00 TO 16.00' AT STA. 9+40.00

4 WIDTH VARIES FROM ±5.35' AT STA. 0+29.80 TO ±10.50' AT STA. 1+96.55  
 WIDTH = ±10.50' FROM STA. 1+96.55 TO STA. 5+00.00  
 WIDTH VARIES FROM ±10.50' FROM STA. 5+00.00 TO 2.00' AT STA. 9+40.00



IR 275 RAMP D NORMAL SECTION  
 STA. 0+31.83 TO STA. 6+60.00  
 SEE INTERSECTION DETAILS FOR STA. 0+31.83 TO STA. 1+10.52

5 WIDTH VARIES FROM 50.97' AT STA. 0+31.83 TO 6.00' AT STA. 0+85.75  
 WIDTH = 6.00' FROM STA. 0+85.75 TO STA. 4+53.23  
 WIDTH VARIES FROM 6.00' AT STA. 4+53.23 TO 2.00' RIGHT OF PGL AT STA. 5+32.28  
 WIDTH = 2.00' RIGHT OF PGL FROM STA. 5+32.28 TO STA. 6+60.00

6 WIDTH = 30.00' AT STA. 0+31.83 TO STA. 6+00.00  
 WIDTH VARIES FROM 30.00' FROM STA. 6+00.00 TO 17.37' AT STA. 6+60.00

7 WIDTH = ±12.5' AT STA. 0+31.83 TO STA. 6+00.00  
 WIDTH VARIES FROM ±12.50' FROM STA. 6+00.00 TO 0.00' AT STA. 6+60.00

\* 4" UNCLASSIFIED UNDERDRAIN  
 STA. 0+36.61 TO STA. 5+00.00

TYPICAL SECTIONS - IR 275 RAMP A, RAMP B, RAMP C, RAMP D

HAM-275-28.29

MODEL: Sheet 4 - RAMP TYPICAL SECTION PAPER SIZE: 17x11 (in.) DATE: 5/18/2021 TIME: 2:23:20 PM USER: MLORENZ  
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DESIGN AGENCY	
DESIGNER	MJL
REVIEWER	SJB 06/08/20
PROJECT ID	106411
SHEET	TOTAL
8	137

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS**

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22  
 23 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 6 INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

**PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS**

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 611, DRAINAGE STRUCTURES.

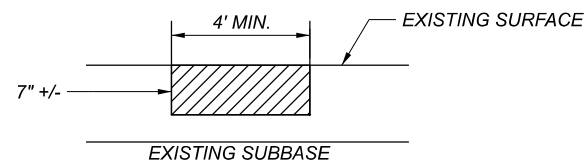
ITEM 301, ASPHALT CONCRETE BASE, PG64-22  
 1 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 6 INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE DRAINAGE STRUCTURE.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

**ITEM 253 - PAVEMENT REPAIR**

AN ESTIMATED QUANTITY OF 40 CU YDS OF ITEM 253 PAVEMENT REPAIR HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF ROADWAY SURFACES.



EXISTING DETERIORATING ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 7" OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH ITEM 301, ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATIONS AND SIZE OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER.

**MANHOLES AND VALVES ADJUSTED TO GRADE (PRIVATELY OWNED)**

ALL MANHOLES AND VALVES ENCOUNTERED IN AREAS THAT REQUIRE GRADE ADJUSTMENT WILL BE PERFORMED PRIOR TO THE APPLICATION OF THE SURFACE COURSE BY THE UTILITY OWNER. CONTACT THE UTILITY OWNER 2 WEEKS PRIOR TO WHEN THE ADJUSTMENTS ARE TO BE COMPLETED.

**ITEM 611 - MANHOLE ADJUSTED TO GRADE**

THE WORK SHALL CONSIST OF ADJUSTING MANHOLES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - MANHOLE ADJUSTED TO GRADE..... 5 EA.

**ITEM 611 - CATCH BASIN ADJUSTED TO GRADE**

THE WORK SHALL CONSIST OF ADJUSTING CATCH BASINS TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE..... 4 EA.

**ITEM 638 - VALVE BOX ADJUSTED TO GRADE**

THE WORK SHALL CONSIST OF ADJUSTING VALVE BOXES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 638 - VALVE BOX ADJUSTED TO GRADE..... 30 EA.

**ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN**

WHERE DESIGNATED, EXISTING ANCHOR ASSEMBLIES INCLUDING ALL POSTS AND HARDWARE SHALL BE REMOVED. THIS ITEM SHALL ALSO INCLUDE THE REMOVAL OF THE ENTIRE CONCRETE ANCHOR AND CONCRETE ENCASUREMENT. ALL HOLES LEFT AFTER REMOVAL OF ASSEMBLIES AND POSTS SHALL BE FILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER. PAYMENT SHALL INCLUDE ALL NECESSARY LABOR AND EQUIPMENT REQUIRED TO PERFORM THE WORK AS INDICATED ABOVE. PAYMENT SHALL BE AT THE UNIT BID PRICE.

ITEM 202 ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

**ADA WAIVER**

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING FEATURES LISTED BELOW CANNOT FEASIBLY BE CONSTRUCTED TO MEET ADA GUIDELINES.

ADA DESIGN WAIVER ADA FEATURE	APPROVAL DATE	SHEET NUMBERS
CURB RAMP B1	1/15/2021	42,82
US 42 STA. 850+07.21		

**COORDINATION WITH CLOSED GAS STATION REDEVELOPMENT**

THE EXISTING CLOSED GAS STATION LOCATED ALONG NORTHBOUND US-42 AT THE SOUTHEAST QUADRANT OF THE IR-275/US-42 INTERCHANGE WILL BE UNDERGOING A SITE REDEVELOPMENT DURING THE CONSTRUCTION TIMEFRAME OF THIS PROJECT. THE PROPOSED DRIVE WORK BETWEEN STATIONS 846+05 AND 847+60, RIGHT, WILL VARY FROM WHAT IS CURRENTLY SHOWN. COORDINATION WITH THE DEVELOPER WILL BE REQUIRED. REVISIONS TO THE DRIVE WORK WILL BE ADDRESSED PER CMS 104.02.

**SEEDING AND MULCHING**

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

659, SEEDING AND MULCHING  
 8491 SQ. YD.

659, REPAIR SEEDING AND MULCHING  
 425 SQ. YD.

659, INTER-SEEDING  
 425 SQ. YD.

659, COMMERCIAL FERTILIZER  
 1.18 TON

659, LIME  
 1.75 ACRES

659, WATER  
 47 M. GAL.

659, MOWING  
 19 M. SQ.FT.

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.

**ITEM 638 SPECIAL ITEMS FOR GCWW REMOVALS AND RELOCATIONS**

ALL GCWW WATER MAIN, FIRE HYDRANT, VALVE, AND SERVICE RELOCATION WORK SHALL BE PERFORMED PER THE PLANS AND PROVISIONS PROVIDED ON SHEETS 85A, 85B, AND 85C. ITEM 638 SPECIAL PAY ITEMS HAVE BEEN PROVIDED IN THE GENERAL SUMMARY TO COVER THIS WORK; HOWEVER A COMPLETE DETAILED BILL OF MATERIALS IS PROVIDED ON SHEET 85A.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

GENERAL NOTES

DESIGN AGENCY



DESIGNER

MJL

REVIEWER

JAS 06/08/20

PROJECT ID

106411

SHEET TOTAL

10 | 137

**ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN**

ALL EXISTING LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, ITEM 615 TEMPORARY PAVEMENT, AND THE PROPOSED PAVEMENT. SHORT TERM LANE CLOSURES ARE PERMITTED ACCORDING TO THE LANE VALUE CONTRACT TABLE.

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT PER LANE
IR-275: MAINTAIN ALL LANES OF TRAFFIC	6 AM TO 8 PM	1 MINUTE	\$350
IR-275: MAINTAIN 2 LANES OF TRAFFIC	5 AM TO 11 PM	1 MINUTE	\$350
US-42: MAINTAIN ALL LANES OF TRAFFIC	7 AM TO 9 AM AND 3 PM TO 7 PM	1 MINUTE	\$350

ALL DRIVEWAYS ON US-42 SHALL BE MAINTAINED AT ALL TIMES. NOTIFICATION SHALL BE GIVEN TO ADJOINING PROPERTIES A MINIMUM OF TWO BUSINESS DAYS IN ADVANCE OF ACCESS INTERRUPTIONS. THE CONTRACTOR SHALL PROVIDE APPROPRIATE SIGHT DISTANCE AT THE DRIVEWAYS.

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

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

**PLACEMENT OF ASPHALT CONCRETE**

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.

**TRENCH FOR WIDENING**

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL BE AT ALL TIMES SUBJECT TO APPROVAL OF THE ENGINEER.

**WORK ZONE MARKINGS AND SIGNS**

ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE MOT SUBSUMMARY FOR USE AT THE LOCATIONS IDENTIFIED IN THE PLANS AND BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

**ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING IMPACT ATTENUATOR. FURNISH AN IMPACT

ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT. WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE. THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE, AND GRADING, NO SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION**

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

- 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 IS ACCEPTED.
- 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 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 MISALIGNED 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.

**MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION (CONTINUED)**

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 OR THE CITY OF CINCINNATI 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.

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 TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 2 HOURS AND SHALL NOT INCLUDE THE HOURS OF 7:00 AM TO 6:00 PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED BY OFF-DUTY CITY OF CINCINNATI POLICE, HIRED BY THE CONTRACTOR:

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:

- TIME OF NOTIFICATION OF MALFUNCTION;
- TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
- ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
- A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
- 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 PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

**DELINEATION OF PORTABLE AND PERMANENT BARRIER**

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPS OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS, AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING, AND REMOVING EACH OF THE ABOVE ITEMS.

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

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED AS PART OF THE ITEM 614, MAINTAINING TRAFFIC LUMP SUM ITEM IN THE GENERAL SUMMARY FOR USE AS A WEDGING COURSE AT MANHOLES, CATCH BASINS, VALVES, AND OTHER ITEMS IN THE EXISTING PAVEMENT.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 25 CU. YD.

**TEMPORARY TRAFFIC SIGNAL**

DUE TO THE INTERIM COMPLETION DATE OF 11/1/2021, THE CONTRACTOR SHALL INSTALL A TEMPORARY 32' WOOD POLE, CLASS 3 AT THE FOLLOWING LOCATIONS TO MAINTAIN THE TEMPORARY TRAFFIC SIGNALS UNTIL PROPOSED STRAIN POLES ARE INSTALLED.

- US 42 STA. 846+88 49' RT
- US 42 STA. 849+42 49' LT
- RAMP C STA. 0+48 45' LT
- US 42 STA. 854+45 46' RT
- US 42 STA. 858+42 83' LT

CONTRACTOR SHALL RELOCATE ALL SIGNAL HEADS, MESSENGER WIRE, WIRING, ETC. TO NEW POLES TO MAKE SIGNAL FULLY OPERATIONAL AND PROVIDE POWER IN ACCORDANCE WITH C&MS 614.10. WHERE EXISTING MAST ARM SIGNAL POLES CANNOT BE MAINTAINED, CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY MESSENGER WIRE, WIRING, AND ANY OTHER NECESSARY EQUIPMENT FOR A FUNCTIONING TEMPORARY SIGNAL. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE IN ACCORDANCE WITH SPECIFICATIONS IN C&MS 632, 633, 731, AND 733. WOOD POLES SHALL BE REMOVED AT COMPLETION OF FINAL TRAFFIC SIGNALS.

ALL WORK SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

DESIGN AGENCY



DESIGNER  
BLD

REVIEWER  
KF 06/08/20

PROJECT ID  
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SHEET TOTAL  
11 137

**SEQUENCE OF CONSTRUCTION**

U.S. 42 PRE-PHASE  
REMOVE TRENCH DRAIN IN THE MEDIAN OF U.S. 42.

RAMP C PRE-PHASE  
CONSTRUCT TEMPORARY PAVEMENT ON SOUTH SIDE OF RAMP C.

U.S. 42 STAGE 1  
SHIFT TRAFFIC TO WEST SIDE OF U.S. 42.

RAMP C PHASE 1  
SHIFT TRAFFIC TO SOUTH SIDE OF RAMP C. REMOVE ISLAND AT RAMP ENTRANCE. CONSTRUCT NORTH SIDE OF RAMP C. CONSTRUCT PROPOSED GUARD RAIL ON NORTH SIDE OF RAMP C.

RAMP D PHASE 1  
SHIFT TRAFFIC TO NORTH SIDE OF RAMP D. CONSTRUCT SOUTH SIDE OF RAMP D.

RAMP C PHASE 2  
SHIFT TRAFFIC TO NORTH SIDE OF RAMP C. CONSTRUCT SOUTH SIDE OF RAMP C. CONSTRUCT PROPOSED GUARD RAIL ON NORTH SIDE OF RAMP C.

RAMP D PHASE 2  
SHIFT TRAFFIC TO NORTH SIDE OF RAMP D. CONSTRUCT SOUTH SIDE OF RAMP D. INSTALL PROPOSED GUARD RAIL ON SOUTH SIDE OF RAMP D.

U.S. 42 STAGE 2  
SHIFT TRAFFIC TO EAST SIDE OF U.S. 42. CONSTRUCT HAUCK ROAD DECELERATION LANE.

RAMP A PHASE 1  
SHIFT TRAFFIC TO SOUTH SIDE OF RAMP A. CONSTRUCT NORTH SIDE OF PROPOSED RAMP A. INSTALL PROPOSED GUARD RAIL ON NORTH SIDE OF RAMP A.

RAMP B PHASE 1  
SHIFT TRAFFIC TO NORTH SIDE OF RAMP B. CONSTRUCT SOUTH SIDE OF RAMP B.

RAMP A PHASE 2  
SHIFT TRAFFIC TO NORTH SIDE OF RAMP A. CONSTRUCT SOUTH SIDE OF RAMP A.

RAMP B PHASE 2  
SHIFT TRAFFIC TO SOUTH SIDE OF RAMP B. CONSTRUCT NORTH SIDE OF RAMP B.

THE CONTRACTOR MAY CHOSE TO BUILD US 42 STAGE 2 AND ASSOCIATED RAMPS PRIOR TO US 42 STAGE 1 AND RAMPS.

**INTERIM COMPLETION REQUIREMENTS**

THE PROJECT HAS AN INTERIM COMPLETION DATE OF NOVEMBER 15, 2021. ON OR BEFORE THE INTERIM COMPLETION DATE;

FROM US 42 843+25 TO 853+64, RAMP A, AND RAMP C: ALL WORK SHALL BE COMPLETED, EXCEPT INSTALLING PROPOSED TRAFFIC SIGNALS ON PROPOSED STRAIN POLES. THE ROADWAY SHALL BE PLACED IN THE FINAL CONDITION, ALL PERMANENT PAVEMENT MARKINGS AND RPMS IN PLACE AND OPEN TO TRAFFIC. TO CLARIFY, ALL STRAIN POLE FOUNDATIONS SHALL BE COMPLETED BY THE INTERIM COMPLETION DATE.

FROM US 42 853+64 TO 856+12, RAMP B, AND RAMP D: ALL WORK SHALL BE COMPLETED, EXCEPT INSTALLING PROPOSED TRAFFIC SIGNALS ON PROPOSED STRAIN POLES AND RESURFACING THE ROADWAY. THE ROADWAY SHALL BE PLACED IN THE FINAL ALIGNMENT, WORK ZONE PAVEMENT MARKINGS AND RPMS IN PLACE AND OPEN TO TRAFFIC. TO CLARIFY, ALL STRAIN POLE FOUNDATIONS SHALL BE COMPLETED BY THE INTERIM COMPLETION DATE. PAVEMENT DROP OFFS ARE NOT PERMITTED BEYOND THE INTERIM COMPLETION DATE, THE WORK SHALL BE COMPLETED FLUSH WITH EXISTING OR PROPOSED SURFACE COURSES; ANY TEMPORARY OR WASTED MATERIAL USED TO ELIMINATE A DROP-OFF SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM ITEM 614 MAINTAINING TRAFFIC.

FROM US 42 856+12 TO 863+48: THE ROADWAY SHALL BE PLACED IN MAINTENANCE OF TRAFFIC STAGE 2 PHASE 2 CONDITION USING THE EXISTING PAVEMENT AND ALL INTERCONNECT RELOCATION WORK PER SHEET 120 SHALL BE COMPLETED.

THE CONTRACT WILL BE SUBJECT DAILY DISINCENTIVES IN THE AMOUNT OF \$3,500 PER DAY FOR FAILURE TO COMPLETE ALL THE REQUIRED WORK, AND ASSOCIATED INCIDENTALS RELATED TO THE WORK. DAILY DISINCENTIVES ARE APPLICABLE TO THE WORK REQUIRED TO THE INTERIM COMPLETION DATE ONLY. THE CONTRACT IS STILL SUBJECT TO LIQUIDATED DAMAGES AS OUTLINED IN CMS 108.07 FOR THE REMAINDER OF THE CONTRACT.

DESIGN AGENCY



DESIGNER  
BLD

REVIEWER  
KF 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
13 137

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	36	38	40	73						01/SAF/OT	02/SAF/OT						
										LS		201	11000	LS		<b>ROADWAY</b>	
	2,476									2,476		202	38000	2,476	FT	CLEARING AND GRUBBING	
	2									2		202	42001	2	EACH	GUARDRAIL REMOVED	
	8									8		202	42206	8	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	10
	6,161									6,161		202	23000	6,161	SY	ANCHOR ASSEMBLY REMOVED	
																PAVEMENT REMOVED	
	286									286		202	32000	286	FT	CURB REMOVED	
	177									177		202	35100	177	FT	PIPE REMOVED, 24" AND UNDER	
	1									1		202	58100	1	EACH	CATCH BASIN REMOVED	
				7,505						7,505		203	10000	7,505	CY	EXCAVATION	
				2,433						2,433		203	20000	2,433	CY	EMBANKMENT	
	3,012.5									3,012.5		606	15050	3,012.5	FT	GUARDRAIL, TYPE MGS	
	662.5									662.5		606	15100	662.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
	2									2		606	35002	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
	2									2		606	35102	2	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
	10									10		606	26550	10	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
	4									4		606	26150	4	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
										LS		878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
																<b>EROSION CONTROL</b>	
			18							18		601	21050	18	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
			6							6		601	21060	6	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT ON GEOTEXTILE FABRIC	
			1							1		601	34200	1	CY	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	
			56							56		659	00300	56	CY	TOPSOIL	
8,491										8,491		659	10000	8,491	SY	SEEDING AND MULCHING	
425										425		659	14000	425	SY	REPAIR SEEDING AND MULCHING	
425										425		659	15000	425	SY	INTER-SEEDING	
1.18										1.18		659	20000	1.18	TON	COMMERCIAL FERTILIZER	
1.75										1.75		659	31000	1.75	ACRE	LIME	
47										47		659	35000	47	MGAL	WATER	
19										19		659	40000	19	MSF	MOWING	
			190							190		670	00700	190	SY	DITCH EROSION PROTECTION	
										58,000		832	30000	58,000	EACH	EROSION CONTROL	
										LS		832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
										LS		832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
										LS		832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
																<b>DRAINAGE</b>	
			0.21							0.21		602	20000	0.21	CY	CONCRETE MASONRY	
			2,493							2,493		605	05100	2,493	FT	4" SHALLOW PIPE UNDERDRAINS	
			6,876							6,876		605	06000	6,876	FT	4" BASE PIPE UNDERDRAINS	
			1,292							1,292		605	05200	1,292	FT	4" UNCLASSIFIED PIPE UNDERDRAINS	
			732							732		611	04400	732	FT	12" CONDUIT, TYPE B	
			9							9		611	98180	9	EACH	CATCH BASIN, NO. 3A	
4										4		611	98630	4	EACH	CATCH BASIN ADJUSTED TO GRADE	
			2							2		611	99574	2	EACH	MANHOLE, NO. 3	
5										5		611	99654	5	EACH	MANHOLE ADJUSTED TO GRADE	
			9							9		611	99710	9	EACH	PRECAST REINFORCED CONCRETE OUTLET	
																<b>PAVEMENT</b>	
			9,281							9,281		204	10000	9,281	SY	SUBGRADE COMPACTION	
			4							4		204	45000	4	HOUR	PROOF ROLLING	
			1,129							1,129		204	13000	1,129	CY	EXCAVATION OF SUBGRADE, 12" DEEP	
			3,387							3,387		204	50000	3,387	SY	GEOTEXTILE FABRIC	
			1,129							1,129		203	35120	1,129	CY	GRANULAR MATERIAL, TYPE C	
40										40		253	02000	40	CY	PAVEMENT REPAIR	
			15,690							15,690		254	01000	15,690	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	
24			1,008							1,032		301	46000	1,032	CY	ASPHALT CONCRETE BASE, PG64-22	
			1,842							1,842		304	20000	1,842	CY	AGGREGATE BASE	
			2,857							2,857		407	20000	2,857	GAL	NON-TRACKING TACK COAT	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER  
MJL

REVIEWER

JAS 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
31 | 137



HAM-275-28.29

MODEL: Sheet 2 PAPER SIZE: 17x11 (in.) DATE: 5/20/2021 TIME: 2:38:16 PM USER: MLORENZ  
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SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	36	38	85A	85B	85C	86	89			01/SAF/OT	02/SAF/OT						
		803								803		441	50000	803	CY	PAVEMENT CONT.	
		937								937		441	50200	937	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
		4,767								4,767		452	17010	4,767	SY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
		3,975								3,975		608	10000	3,975	SF	14" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
		768								768		608	52000	768	SF	4" CONCRETE WALK	
	1,185									1,185		609	12000	1,185	FT	CURB RAMP	
	25									25		609	26000	25	FT	COMBINATION CURB AND GUTTER, TYPE 2	
																CURB, TYPE 6	
30										30		638	10800	30	EACH	WATER WORK	
			40							40		SPECIAL	63811602	40	FT	VALVE BOX ADJUSTED TO GRADE	85A
			40							40		SPECIAL	63811604	40	FT	6" WATER MAIN DIP AND FITTINGS, CINCINNATI SPEC 1101	85A
			140							140		SPECIAL	63811610	140	FT	8" WATER MAIN DIP AND FITTINGS, CINCINNATI SPEC 1101	85A
			10							10		SPECIAL	63820458	10	FT	16" WATER MAIN DIP AND FITTINGS, CINCINNATI SPEC 1101	85A
																18" STEEL PIPE ENCASEMENT, OPEN CUT, CINCINNATI SPEC 1108	
										84		SPECIAL	63820470	84	FT	30" STEEL PIPE ENCASEMENT, OPEN CUT, CINCINNATI SPEC 1108	85A
										3		SPECIAL	63820498	3	EACH	VALVE BOX, CINCINNATI SPEC 1116	85A
										3		SPECIAL	63820746	3	EACH	2" AIR RELEASE VALVE WITH VALVE BOX, COMPLETE, CINCINNATI SPEC 1116	85A
										1		SPECIAL	63820750	1	EACH	6" FIRE HYDRANT, CINCINNATI SPEC 1112	85A
										1		SPECIAL	63820760	1	EACH	FIRE HYDRANT REMOVED AND DISPOSED OF, CINCINNATI SPEC 1114	85A
										2		SPECIAL	63820762	2	EACH	FIRE HYDRANT SERVICE LINE EXTENDED AND ADJUSTED TO GRADE, 6" LONG, CINCINNATI SPEC 1114	85A
										15		SPECIAL	63820778	15	FT	2" COPPER WATER SERVICE LINE, CINCINNATI SPEC 1126	85A
										38		SPECIAL	63820778	38	FT	2" COPPER WATER SERVICE LINE, WITH AQUASHIELD, CINCINNATI SPEC 1126	85A
				1						1		638	98000	1	EACH	WATER WORK, MISC.:MANHOLE CURB AND COVER ADJUSTED TO GRADE, CINCINNATI SPEC 604	85A-85C
				4	1					5		638	98000	5	EACH	WATER WORK, MISC.:VALVE BOX REMOVED, CINCINNATI SPEC 1122	85A-85C
										1		638	98000	1	EACH	WATER WORK, MISC.: RELOCATING EXISTING 2" FROST PROOF METER SETTING, CINCINNATI SPEC 1134	85A-85C
										1		625	32000	1	EACH	TRAFFIC CONTROL	
	54									54		626	00110	54	EACH	GROUND ROD	
										391.3		630	03100	391.3	FT	BARRIER REFLECTOR, TYPE 2 BIDIRECTIONAL	
										26		630	08520	26	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
										16		630	08600	16	EACH	STREET NAME SIGN SUPPORT, NO. 3 POST	
																SIGN POST REFLECTOR	
										1		630	76530	1	EACH	SPAN WIRE SIGN SUPPORT, TYPE TC-17.11, DESIGN 10	
										4		630	79000	4	EACH	SIGN HANGER ASSEMBLY, SPAN WIRE	
										4		630	75000	4	EACH	SIGN ATTACHMENT ASSEMBLY	
										218.7		630	80100	218.7	SF	SIGN, FLAT SHEET	
										264		630	80224	264	SF	SIGN, OVERHEAD EXTRUSHEET	
										264		630	81200	264	SF	SIGN ERECTED, EXTRUSHEET	
										1		630	84520	1	EACH	SPAN WIRE SIGN SUPPORT FOUNDATION	
										32		630	84900	32	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
										4		630	85100	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
										22		630	86002	22	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
										4		630	87100	4	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	
										7		630	87400	7	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
										1		630	89702	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	
										290		621	00100	290	EACH	RPM	
										0.53		644	00104	0.53	MILE	EDGE LINE, 6"	
										0.46		644	00204	0.46	MILE	LANE LINE, 6"	
										0.34		644	00300	0.34	MILE	CENTER LINE	
										1,769		644	00404	1,769	FT	CHANNELIZING LINE, 12"	
										306		644	00500	306	FT	STOP LINE	
										448		644	00600	448	FT	CROSSWALK LINE	
										325		644	00700	325	FT	TRANSVERSE/DIAGONAL LINE	
										88		644	00720	88	FT	CHEVRON MARKING	
										34		644	01300	34	EACH	LANE ARROW	
										2		644	01400	2	EACH	WORD ON PAVEMENT, 72"	
										607		644	01510	607	FT	DOTTED LINE, 6"	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER MJL

REVIEWER

JAS 06/08/20

PROJECT ID 106411

SHEET TOTAL 32 137

SHEET NUM.							PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
89	103					01/SAF/OT	02/SAF/OT							
<b>TRAFFIC CONTROL CONT.</b>														
1.01						1.01		646	10010	1.01	MILE	EDGE LINE, 6"		
0.12						0.12		646	10110	0.12	MILE	LANE LINE, 6"		
0.09						0.09		646	10200	0.09	MILE	CENTER LINE		
2,224						2,224		646	10310	2,224	FT	CHANNELIZING LINE, 12"		
179						179		646	10400	179	FT	STOP LINE		
129						129		646	10620	129	FT	CHEVRON MARKING		
48						48		646	20300	48	EACH	LANE ARROW		
2						2		646	20350	2	EACH	LANE REDUCTION ARROW		
8						8		646	20320	8	EACH	WRONG WAY ARROW		
2						2		646	20400	2	EACH	WORD ON PAVEMENT, 72"		
782						782		646	20504	782	FT	DOTTED LINE, 6"		
4						4		646	50000	4	EACH	REMOVAL OF PAVEMENT MARKING		
1,977						1,977		646	50100	1,977	FT	REMOVAL OF PAVEMENT MARKING		
<b>TRAFFIC SIGNALS</b>														
	30					30		611	00400	30	FT	4" CONDUIT, TYPE E - UNDERDRAIN FOR PULL BOXES		
	83					83		625	25410	83	FT	CONDUIT, 2", 725.052		
	36					36		625	25606	36	FT	CONDUIT, 4", 725.052		
	119					119		625	29002	119	FT	TRENCH, 24" DEEP		
	11					11		625	31510	11	EACH	PULL BOX REMOVED		
	12					12		625	32000	12	EACH	GROUND ROD		
	7					7		630	79000	7	EACH	SIGN HANGER ASSEMBLY, SPAN WIRE		
	16					16		630	79500	16	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED		
	97					97		630	80100	97	SF	SIGN, FLAT SHEET		
	17					17		632	05006	17	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATEVEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	101	
	4					4		632	05086	4	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATEVEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, BLACK	101	
	1					1		632	05086	1	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATEVEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, YELLOW	101	
	6					6		632	20731	6	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	101	
	22					22		632	25000	22	EACH	COVERING OF VEHICULAR SIGNAL HEAD		
	6					6		632	25010	6	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD		
	4					4		632	26001	4	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN	101	
	5					5		632	26501	5	EACH	DETECTOR LOOP, AS PER PLAN	102	
	677					677		632	30400	677	FT	MESSENGER WIRE, 7 STRAND, 1/2" DIAMETER WITH ACCESSORIES		
	677					677		632	30600	677	FT	TETHER WIRE, WITH ACCESSORIES		
	650					650		632	40300	650	FT	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG		
	930					930		632	40500	930	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG		
	3,156					3,156		632	40700	3,156	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG		
	8					8		632	64010	8	EACH	SIGNAL SUPPORT FOUNDATION		
	2					2		632	64020	2	EACH	PEDESTAL FOUNDATION		
	150					150		632	68200	150	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG		
	155					155		632	69800	155	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG		
	2					2		632	70000	2	EACH	POWER SERVICE	101	
	3					3		632	86130	3	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 10		
	1					1		632	86131	1	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 10, AS PER PLAN	101	
	2					2		632	86140	2	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 12		
	1					1		632	86141	1	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 12, AS PER PLAN	101	
	1					1		632	86150	1	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 13		
	1					1		632	89600	1	EACH	PEDESTAL, 8'		
	1					1		632	89800	1	EACH	PEDESTAL, 3', TRANSFORMER BASE		
	1					1		632	90020	1	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM - SIGNAL HEAD	101	
	3					3		632	90020	3	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM - PEDESTRIAN AND AND PUSHBUTTON	101	
	100					100		632	90030	100	FT	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM - 5C SIGNAL CABLE		
	2					2		632	90101	2	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	101	
	6					6		632	90104	6	EACH	REUSE OF TRAFFIC CONTROL ITEM - PREEMPTION		
	162					162		632	90500	162	FT	SIGNALIZATION, MISC.: UNLASH AND RELASH MESSENGER WIRE	101	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER  
MJL


REVIEWER  
JAS 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
33 | 137

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
103	117	122	124							01/SAF/OT	02/SAF/OT						
<b>TRAFFIC SIGNALS CONT.</b>																	
										2		633	65520	2	EACH	CABINET, TYPE 332	
										2		633	67100	2	EACH	CABINET FOUNDATION	
										2		633	67200	2	EACH	CONTROLLER WORK PAD	
										2		633	75001	2	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN	102
										8		809	69110	8	EACH	STOP LINE AND ADVANCE RADAR DETECTION	102
										2		809	69123	2	EACH	ATC V6.24 CONTROLLER, AS PER PLAN	102
<b>TRAFFIC SURVEILLANCE</b>																	
	2,155	600								2,155	600	202	98200	2,755	FT	REMOVAL MISC.: FIBER OPTIC INTERCONNECT CABLE	115
		200									200	625	23000	200	FT	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE	
	282	50								282	50	625	25408	332	FT	CONDUIT, 2", 725.051	
		100									100	625	25740	100	FT	CONDUIT, MULTICELL, JACKED OR DRILLED 4"	
		630									630	625	25750	630	FT	CONDUIT, 4", MULTICELL, 725.20 , EPC-40 4"	
	118									118		625	25902	118	FT	CONDUIT, JACKED OR DRILLED, 725.04 - 2" CONDUIT	
	282	630								282	630	625	29010	912	FT	TRENCH, 30" DEEP	
		1									1	625	30700	1	EACH	PULL BOX, 725.08, 18"	
		2	3							2	3	625	30711	5	EACH	PULL BOX, 725.08, 32", AS PER PLAN	115
		2	2							2	2	625	31510	4	EACH	PULL BOX REMOVED	
		2	5							2	5	625	32001	7	EACH	GROUND ROD, AS PER PLAN	115
	282	630								282	630	625	36010	912	FT	UNDERGROUND WARNING/MARKING TAPE	
	600									600		632	29900	600	FT	MESSENGER WIRE, 7 STRAND, 1/4" DIAMETER WITH ACCESSORIES	
	LS									LS		632	62830	LS		INTERCONNECT, MISC.: SYSTEM INTEGRATION	115
		1									1	632	70000	1	EACH	POWER SERVICE	
	2									2		632	90104	2	EACH	REUSE OF TRAFFIC CONTROL ITEM, ETHERNET SWITCH	115
		1									1	633	67100	1	EACH	CABINET FOUNDATION	
		1,010									1,010	804	15010	1,010	FT	FIBER OPTIC CABLE, 24 FIBER	
	7									7		804	30001	7	EACH	FAN-OUT KIT, 6 FIBER, AS PER PLAN	115
	2,550									2,550		804	32021	2,550	FT	DROP CABLE, 6 FIBER, AS PER PLAN	115
	4									4		804	32990	4	EACH	FIBER OPTIC PATCH CORD, 2 FIBER	
		1									1	804	37001	1	EACH	SPLICE ENCLOSURE, AS PER PLAN	121
	LS									LS		804	37701	LS		FIBER OPTIC CABLE TESTING, AS PER PLAN	116
		1									1	809	60030	1	EACH	CCTV IP-CAMERA SYSTEM, ENHANCED	121
		100									100	809	64550	100	FT	ETHERNET CABLE, OUTDOOR-RATED	
		1									1	809	65001	1	EACH	ITS CABINET - GROUND MOUNTED, AS PER PLAN	121
		1									1	809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF STRAIN POLE	123
		1									1	809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF CCTV CAMERA	123
		1									1	809	65990	1	EACH	ITS DEVICE, MISC.: REMOVAL OF ITS CABINET	123
		LS									LS	809	70000	LS		MAINTAINING ITS DURING CONSTRUCTION	121
<b>LIGHTING</b>																	
		15									15	625	00480	15	EACH	CONNECTION, UNFUSED PERMANENT	
		1									1	625	15201	1	EACH	LIGHT TOWER FOUNDATION, 36" X 25' DEEP, AS PER PLAN	125
		2,250									2,250	625	23200	2,250	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
		650									650	625	25500	650	FT	CONDUIT, 3", 725.04	
		100									100	625	25902	100	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
		650									650	625	29002	650	FT	TRENCH, 24" DEEP	
		4									4	625	30700	4	EACH	PULL BOX, 725.08, 18"	
		2									2	625	32000	2	EACH	GROUND ROD	
		1									1	625	35020	1	EACH	RE-ERECT EXISTING LIGHT TOWER	
		LS									LS	SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	125
		1									1	625	75351	1	EACH	LIGHT TOWER REMOVED, AS PER PLAN	125
		1									1	625	75540	1	EACH	LIGHT TOWER FOUNDATION REMOVED	

GENERAL SUMMARY

DESIGN AGENCY	
DESIGNER	
REVIEWER	MJL
JAS	06/08/20
PROJECT ID	106411
SHEET	TOTAL
34	137

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
12	17	89									01/SAF/OT	02/SAF/OT							
<b>MAINTENANCE OF TRAFFIC</b>																			
250											250		614	11110	250	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE		
	5										5		614	12380	5	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)		
	3										3		614	12384	3	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)		
	94										94		614	13314	94	EACH	BARRIER REFLECTOR, TYPE 3 BIDIRECTIONAL		
	94										94		614	13360	94	EACH	OBJECT MARKER, TWO WAY		
	0.85	0.33									1.18		614	21100	1.18	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT		
	1.69	0.45									2.14		614	20100	2.14	MILE	WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT		
	809	283									1,092		614	26200	1,092	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT		
	4.07	0.53									4.6		614	22100	4.6	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT		
	6,563	1,719									8,282		614	23200	8,282	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT		
	3,627	565									4,192		614	24200	4,192	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT		
2.07											2.07		614	22350	2.07	MILE	WORK ZONE EDGE LINE, CLASS III, 4", 642 PAINT		
1.02											1.02		614	20550	1.02	MILE	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT		
0.75											0.75		614	21550	0.75	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT		
5,662											5,662		614	23680	5,662	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT		
745											745		614	26610	745	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT		
896											896		614	27620	896	FT	WORK ZONE CROSSWALK LINE, CLASS III, 642 PAINT		
1,301											1,301		614	24610	1,301	FT	WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT		
	668										668		614	12800	668	EACH	WORK ZONE RAISED PAVEMENT MARKER		
	LS										LS		615	10000	LS		ROADS FOR MAINTAINING TRAFFIC		
	151										151		615	20000	151	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A		
	4,416										4,416		622	41100	4,416	FT	PORTABLE BARRIER, UNANCHORED		
<b>INCIDENTALS</b>																			
											LS		614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	11	
											LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
											LS		624	10000	LS		MOBILIZATION		

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER  
MJL

REVIEWER  
JAS 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
35 | 137

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	201		202						606						626		609			
				SPECIAL - TREE REMOVED, 4"-12"	TREE REMOVED, 18"	GUARDRAIL REMOVED	ANCHOR ASSEMBLY REMOVED	TYPE A ANCHOR ASSEMBLY REMOVED APP	PAVEMENT REMOVED	CURB REMOVED	PIPE REMOVED, 24" AND UNDER (EXISTING TRENCH DRAIN)	CATCH BASIN REMOVED	GUARDRAIL TYPE MGS	GUARDRAIL TYPE MGS WITH LONG POSTS	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	ANCHOR ASSEMBLY, MGS TYPE T	ANCHOR ASSEMBLY, MGS TYPE E	BARRIER REFLECTOR TYPE 2 (BI-DIRECTIONAL)	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6		
				EACH	EACH	FT	EACH	EACH	SY	FT	FT	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH	FT	FT		
		U.S.42 RAMP A																					
R-1	42	845+28.81 10+78.75	LT/RT			664	2																
GR-1	42	854+29.07 10+79.20	LT/RT							875					1	1	13						
		U.S.42																					
C-1	43	846+05.00 848+66.10	RT						80										261.1				
C-2	43	846+40.60 847+77.10	LT																136.5				
R-2	43	847+81.25	RT																				
R-3	43	847+88.72 849+65.54	LT																				
DR-1	43	846+30.00	RT																25				
		U.S.42 RAMP A																					
R-4	43	849+51.63 15+21.17	LT/RT			340	2																
GR-2	43	849+48.41 11+37.50	LT/RT																				
		U.S.42																					
C-3		NOT USED																					
C-4	43	850+01.32 850+18.66	RT																				
		U.S.42 RAMP C																					
GR-3	43	850+17.47 7+50.00	RT/LT																				
R-5	43	850+14.47 6+78.49	RT/LT			626.5	2																
		U.S.42 RAMP B																					
C-5	44	853+35.02 21+56.47	LT/RT																				
GR-4	44	853+25.00 20+78.76	LT/RT																				
R-6	44	853+25.00 20+78.76	LT/RT																				
		U.S.42																					
R-7	44	854+47.28 855+62.56	LT																				
GR-6	44	854+47.28 855+62.56	LT																				
C-6	44	853+86.24 854+38.57	RT																				
		U.S.42 RAMP D																					
GR-5	44	853+95.51 8+09.90	RT																				
R-8	44	853+95.51 8+09.90	RT			845	2																
		U.S.42																					
C-7	45	858+22.17 862+64.36	LT																				
C-8	45	857+71.33 857+77.87	RT																				
C-9	45	858+14.70 858+21.09	RT																				
C-10	45	858+31.50 858+43.98	RT																				
C-11	46	862+65.82 862+86.39	RT																				
C-12	46	863+35.19 863+42.65	RT																				
R-10	43	847+43.04 847+77.11	LT																				
R-11	43	847+88.83 849+65.49	LT																				
R-12	43	846+04.97 848+61.08	RT																				
R-13	43	848+98.35 849+49.78	LT																				
R-14	43	849+27.24 849+65.00	RT																				
		US 42 RAMP B																					
R-15	44	853+35.03 21+56.47	LT/RT																				
R-16	45	858+20.39 862+64.37	LT																				
		US 42																					
		859+09.65	LT	1																			
		859+71.27	LT		1																		
		860+08.62	LT	2																			
		861+48.13	LT	1																			
		RAMP A																					
R-9	47	0+10.00 16+55.48	LT/RT																				
		RAMP C																					
R-17	50	0+38.27 40+00.00	RT																				
R-18	50	0+27.00 40+00.00	LT																				
		RAMP D																					
R-19	52	0+09.83 6+60.00	RT																				
R-20	52	0+59.37 6+60.00	LT																				
TOTALS CARRIED TO GENERAL SUMMARY						4	1	2475.5	8	2	6161	286	176.82	1	3012.5	662.5	2	2	10	4	54	1184.54	25

ROADWAY SUBSUMMARY

DESIGN AGENCY



DESIGNER  
MJL


REVIEWER  
JAS 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
36 137


SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	AREA MEASURED IN CADD (SF)	204					254	301			304		407		441		452	608	608
			FROM	TO			SUBGRADE COMPACTION	PROOF ROLLING	EXCAVATION OF SUBGRADE 12" DEEP	GEOTEXTILE FABRIC	GRANULAR MATERIAL, TYPE C	3.25" PAVEMENT PLANING	8.75" ASPHALT CONCRETE BASE, PG 64-22	10.5" ASPHALT CONCRETE BASE, PG 64-22	6" AGGREGATE BASE	10" AGGREGATE BASE	NON TRACKING TACK COAT (0.06 GAL/SY)	NON TRACKING TACK COAT (0.09 GAL/SY)	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448) PG 64-22	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	14" NON-REINFORCED CONCRETE PAVEMENT	4" CONCRETE WALK	CURB RAMP	
			SY	HOURS			CY	SY	CY	SY	CY	CY	CY	CY	GAL	GAL	CY	CY	SY	SF	SF			
		U.S. 42	843+25.00	849+79.09	CL	43149												288		200	233			
					CL	37576					4175								376					
			853+64.43	858+00.00	CL	38576												257		179	208			
					CL	37955					4217								380					
			858+00.00	863+44.42	CL	43292												289		200	234			
					CL	38052					4228								381					
			846+40.60	847+77.10	LT	271						7						2						
						722	80	0.03						13										
			848+98.29	849+49.78	LT	380												3						
						402	45	0.01						7										
			846+05.00	848+66.10	RT	3389						92						23						
						4258	473	0.16						79										
			847+88.72	849+65.54	CL	739	82	0.03				20		14				5						
			850+01.32	850+18.67	RT	36																	36	
			853+36.57	853+65.45	LT	199						5						1						
						304	34	0.01						6										
			853+86.24	854+38.57	RT	192																	192	
						147	16	0.01						3										
			855+67.73	856+12.20	RT	459						12						3						
						483	54	0.02						9										
			858+48.64	862+64.36	LT	5240						142						35						
						6844	760	0.25						127										3431
						3431																		
			862+54.79	862+88.18	RT	298																	298	
			863+33.22	863+41.24	RT	18																	18	
		RAMPA	10+00.00	17+13.02	CL	28314																	3146	
						30479	3387	1.13	1129	3387	1129				564									
		RAMP B	20+00.00	21+56.47	CL	4438						493						30	44	21	24			
						3469												23		16	19			
						2471						275							25					
			21+56.47	22+48.41	RT	998							32					7						
						1225	136	0.05						38										
TOTALS CARRIED TO SHEET			38				5067	2	1129	3387	1129	13388	321	860	2169	615	718	3146	3975	0				

PAVEMENT SUBSUMMARY

DESIGN AGENCY  
  
 DESIGNER  
 MJL  
 REVIEWER  
 JAS 06/08/20  
 PROJECT ID  
 106411  
 SHEET TOTAL  
 37 137

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	AREA MEASURED IN CADD (SF)	204					254	301			304		407		441		452	608	608
			FROM	TO			SUBGRADE COMPACTION	PROOF ROLLING	EXCAVATION OF SUBGRADE 12" DEEP	GEOTEXTILE FABRIC	GRANULAR MATERIAL, TYPE C	3.25" PAVEMENT PLANING	8.75" ASPHALT CONCRETE BASE, PG 64-22	10.5" ASPHALT CONCRETE BASE, PG 64-22	6" AGGREGATE BASE	10" AGGREGATE BASE	NON TRACKING TACK COAT (0.06 GAL/SY)	NON TRACKING TACK COAT (0.09 GAL/SY)	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448) PG 64-22	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	14" NON-REINFORCED CONCRETE PAVEMENT	4" CONCRETE WALK	CURB RAMP	
			SY	HOURS			CY	SY	CY	SY	CY	CY	CY	CY	GAL	GAL	CY	CY	SY	SF	SF			
		RAMP C	0+29.80	9+40.00	CL	33052 14075					1564					220	141	153	179					
			9+40.00	12+50.00	CL	6646				738					44	66	31	36						
			0+38.51	0+72.94	RT	889	99	0.03					29	27		9								
			0+29.80	9+40.00	LT	11001 11439	1271	0.42					357	353		110								
			0+29.80	9+40.00	RT	8619 9121	1013	0.34					279	282		86								
		RAMP D	0+31.83	6+60.00	LT	4823 5739	638	0.21					106							536				
			0+31.83	6+60.00	RT	9762 10737	1193	0.40					199							1085				
DR-1		U.S. 42	847+31.45		RT	507						14	9		7		2	3						
DR-2		U.S. 42	846+30.00		RT	336						9	6		4		2	2						
			850+07.21		RT	44																44		
			854+34.09		RT	57																57		
			858+40.00		RT	71																71		
			858+43.40		LT	118																118		
			862+59.96		LT	138																138		
			862+64.19		RT	98																98		
			862+82.29		RT	141																141		
			863+39.34		RT	101																101		
SHEET SUMMARY							4214	2	0	0	0	2302	687	983	688	188	219	1621	0	768				
TOTALS FROM SHEET 37							5067	2	1129	3387	1129	13388	321	860	2169	615	718	3146	3975	0				
TOTALS CARRIED TO GENERAL SUMMARY							9281	4	1129	3387	1129	15690	1008	1842	2857	803	937	4767	3975	768				

PAVEMENT SUBSUMMARY

DESIGN AGENCY	
DESIGNER	
REVIEWER	JAS 06/08/20
PROJECT ID	106411
SHEET TOTAL	38 137

REF. NO.	SHEET NO.	STATION TO STATION		SIDE	601			602	605			611			659	670				
					TIED CONCRETE BLOCK MAT, TYPE 1 SY	TIED CONCRETE BLOCK MAT TYPE 2 ON GEOTECTILE FABRIC SY	ROCK CHANNEL PROTECTION TYPE C WITHOUT FILTER CY	CONCRETE MASONRY CY	4" SHALLOW PIPE UNDERDRAINS FT	4" BASE PIPE UNDERDRAINS FT	4" UNCLASSIFIED PIPE UNDERDRAINS FT	12" CONDUIT TYPE B FT	CATCH BASIN, NO. 3A EACH	MANHOLE, NO. 3 EACH	PRECAST REINFORCED CONCRETE OUTLET EACH	TOP SOIL CY				DITCH EROSION PROTECTION SY
		U.S. 42																		
D-1	84	846+69.00	846+64.00	RT								19								
CB-025	84	846+69.00		RT									1							
CB-030	84	847+00.00		LT									1							
D-2	84	847+00.00	847+00.00	LT								32								
HW-031	84	847+00.00		LT				0.21												
CB-019		NOT USED		RT																
D-3		NOT USED																		
CB-020	84	847+81.00		RT									1							
D-4	84	847+81.00	847+66.00	RT								43								
D-12		NOT USED																		
CB-032	84	849+28.00		LT									1							
D-13	84	849+28.00	849+35.00	LT			1					5								
D-5	84	857+72.52	858+16.18	LT								110								
MH-016	84	858+16.18		LT										1						
D-6	84	858+16.18	858+47.80	LT								148								
MH-015	84	858+47.80		LT										1						
D-7	84	858+47.80	859+00.00	LT								75								
CB-014	84	859+00.00		LT									1							
D-8	84	859+00.00	859+75.00	LT								75								
CB-013	84	859+75.00		LT									1							
D-9	84	859+75.00	860+50.00	LT								75								
CB-012	84	860+50.00		LT									1							
D-10	84	860+50.00	861+25.00	LT								75								
CB-011	84	861+25.00		LT									1							
D-11	84	861+25.00	862+00.00	LT								75								
CB-010	84	862+00.00		LT									1							
		RAMP B																		
E-1	44	21+10.75	21+58.25	RT		6														
		RAMP A																		
E-2	48	14+67.05	16+63.80	LT											56	190				
		U.S. 42																		
U-1	43	846+40.43	846+98.07	LT							58									
U-2	43	847+01.80	847+77.10	LT							75									
U-3	43	846+04.28	846+67.92	RT							66									
U-4	43	846+71.38	847+79.46	RT							109									
		U.S. 42 RAMP C																		
U-5	43	848+66.12	2+48.00	RT					275											
U-6	43	847+82.95	2+48.00	RT							357									
U-7	43	850+01.68	7+00.00	LT/RT	2						167	507		1						
		U.S. 42 RAMP A																		
U-8	43	849+44.87	14+00.00	LT	2						385	15		1						
		U.S. 42 RAMP D																		
U-9	44	854+08.70	0+96.00	RT	2						126	13		1						
U-10	44	854+38.56	0+96.00	RT							85									
U-12	44	856+11.66	4+00.00	RT/LT	2						395	67		1						
		U.S. 42 RAMP B																		
U-11	44	853+34.98	21+54.70	LT/RT							107									
		U.S. 42																		
U-13	45	858+25.15	858+98.22	LT							111									
U-14	45	858+98.84	859+75.00	LT							72									
U-15	45	858+98.84	859+75.00	LT							83									
U-16	45	859+75.00	860+50.00	LT							72									
U-17	45	859+75.00	860+50.00	LT							83									
U-18	45	860+50.00	861+25.00	LT							72									
U-19	45	860+50.00	861+25.00	LT							83									
U-20	46	861+25.00	862+00.00	LT							72									
TOTALS CARRIED TO SHEET 40					8	6	1	0.21	275	2578	602	732	9	2	4	56	190			

DRAINAGE SUBSUMMARY

DESIGN AGENCY



DESIGNER  
REM

REVIEWER

KAG 06/08/20

PROJECT ID  
106411


SHEET TOTAL  
39 126



REF. NO.	SHEET NO.	STATION TO STATION	SIDE	601			602	605			611			659	670				
				TIED CONCRETE BLOCK MAT, TYPE 1 SY	TIED CONCRETE BLOCK MAT/M TYPE 2 ON GEOTECTILE FABRIC SY	ROCK CHANNEL PROTECTION TYPE C WITHOUT FILTER CY	CONCRETE MASONRY CY	4" SHALLOW PIPE UNDERDRAINS FT	4" BASE PIPE UNDERDRAINS FT	4" UNCLASSIFIED PIPE UNDERDRAINS FT	12" CONDUIT TYPE B FT	CATCH BASIN, NO. 3A EACH	MANHOLE, NO. 3 EACH	PRECAST REINFORCED CONCRETE OUTLET EACH	TOP SOIL CY	DITCH EROSION PROTECTION SY			
		U.S. 42																	
U-21	46	861+25.00	862+00.00	LT					85										
U-22	46	862+00.00	862+64.33	LT					64										
U-22A	46	862+00.00	862+64.33	LT					75										
		RAMPA																	
U-23	47	10+00.00	14+00.00	RT	2				398	21			1						
U-24	47	10+00.00	14+00.00	RT				396											
U-25	47	10+00.00	14+00.00	LT	2				393	41			1						
U-26	47	10+00.00	14+00.00	LT				393											
U-27	48	14+00.00	16+72.11	RT	2				301	51			1						
U-28	48	14+00.00	16+50.00	RT				240											
U-29	48	14+00.00	16+50.00	CL				248											
		RAMP C																	
U-30	50	0+36.61	7+00.00	LT					180	465									
U-31		NOT USED																	
U-32	50	2+52.25	7+00.00	RT				446											
U-33	50	2+52.25	7+00.00	LT	2				445	46			1						
U-34		NOT USED																	
U-35	51	7+00.00	9+40.00	RT					238	238									
U-36	51	7+00.00	9+40.00	RT				238											
U-37	51	7+00.00	9+40.00	LT					238	238									
U-38	51	7+00.00	9+40.00	LT					238	238									
		RAMP D																	
U-39	52	1+00.00	4+00.00	RT					298										
U-40	52	1+00.00	4+00.00	RT/LT	2				298	66			1						
U-41	52	1+19.15	4+00.00	LT					278										
U-42	53	4+04.00	6+60.00	RT					258										
U-43	53	4+04.00	6+60.00	RT					256										
U-44	53	4+04.00	6+60.00	LT				257											
U-45	53	4+04.00	6+60.00	LT					257										
SHEET TOTALS					10	0	0	0	2218	4300	690	0	0	0	5	0	0		
TOTALS FROM SHEET 39					8	6	1	0.21	275	2578	602	732	9	2	4	56	190		
TOTALS CARRIED TO GENERAL SUMMARY					18	6	1	0.21	2493	6878	1292	732	9	2	9	56	190		

DRAINAGE SUBSUMMARY

DESIGN AGENCY

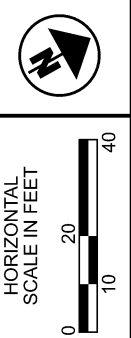
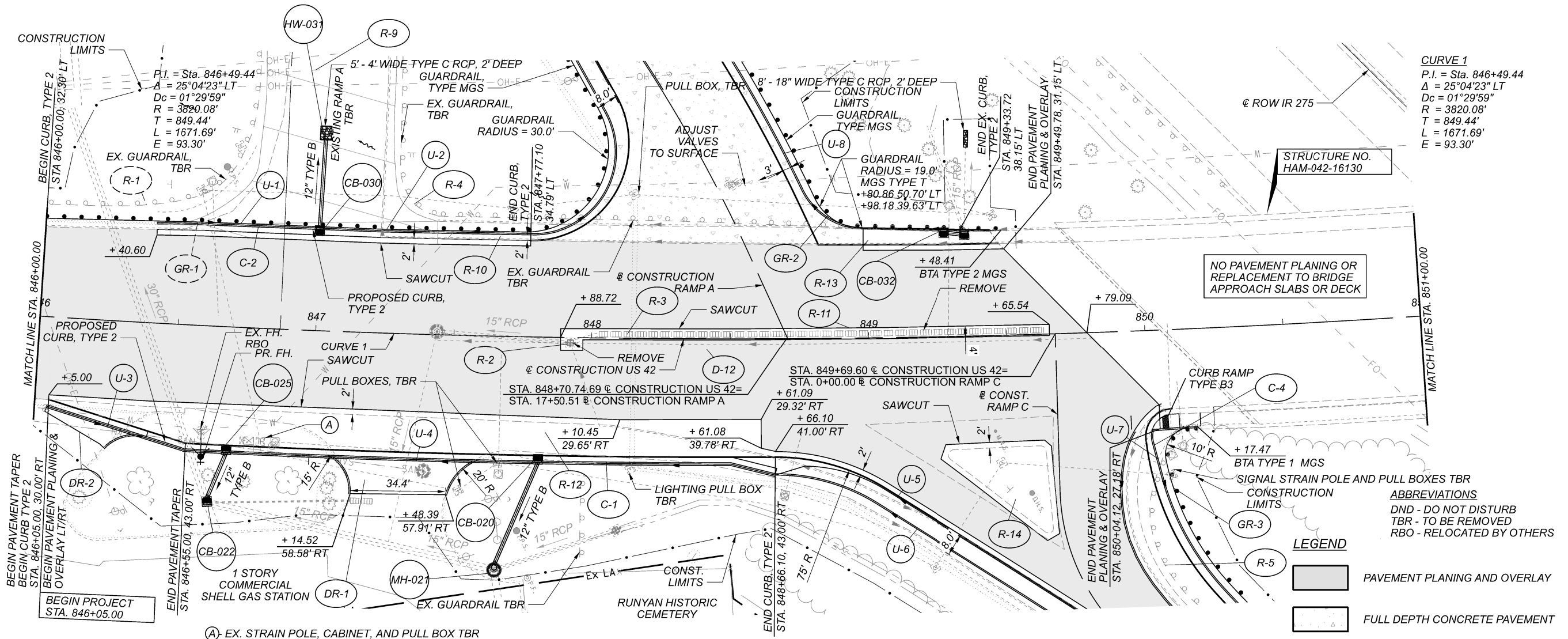


DESIGNER  
REM

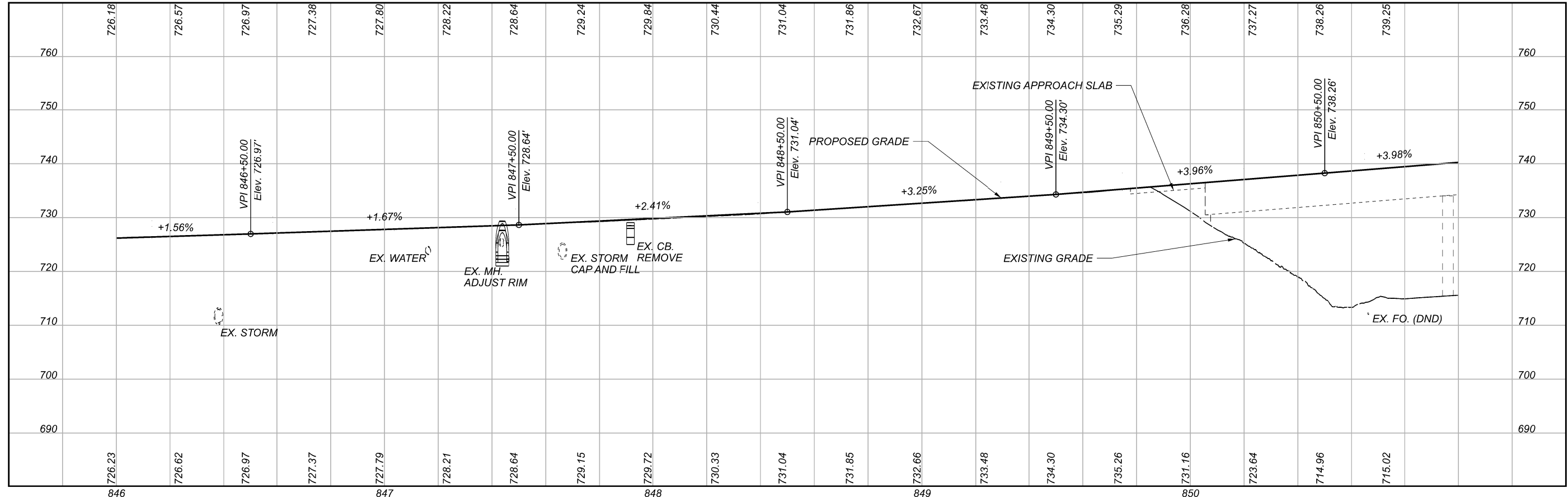
REVIEWER  
KAG 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
40 | 126

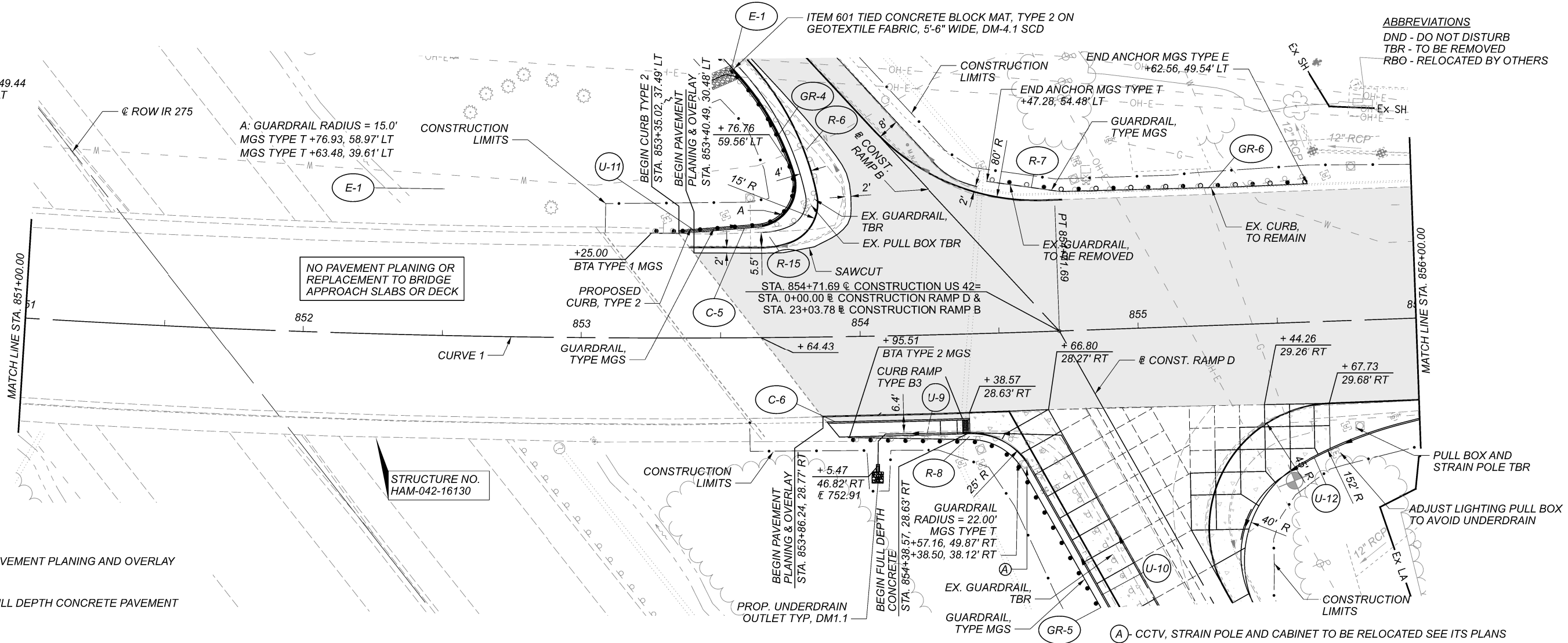


PLAN AND PROFILE - US 42  
 STA. 846+00.00 TO STA. 851+00.00



DESIGN AGENCY	<b>HR</b>
DESIGNER	MJL
REVIEWER	JAS 06/08/20
PROJECT ID	106411
SHEET	TOTAL
43	137

**CURVE 1**  
 P.I. = Sta. 846+49.44  
 $\Delta = 25^{\circ}04'23''$  LT  
 $D_c = 01^{\circ}29'59''$   
 $R = 3820.08'$   
 $T = 849.44'$   
 $L = 1671.69'$   
 $E = 93.30'$

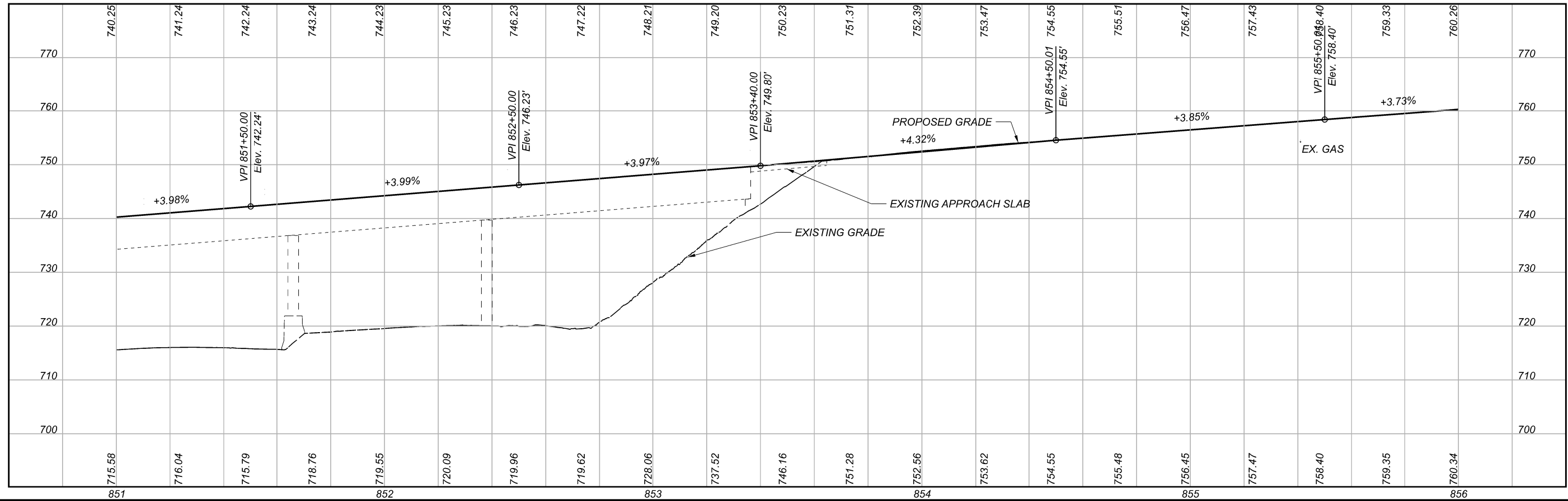


**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TO BE REMOVED  
 RBO - RELOCATED BY OTHERS



**LEGEND**

- PAVEMENT PLANING AND OVERLAY
- FULL DEPTH CONCRETE PAVEMENT



**PLAN AND PROFILE - US 42**  
 STA. 851+00.00 TO STA. 856+00.00



DESIGN AGENCY

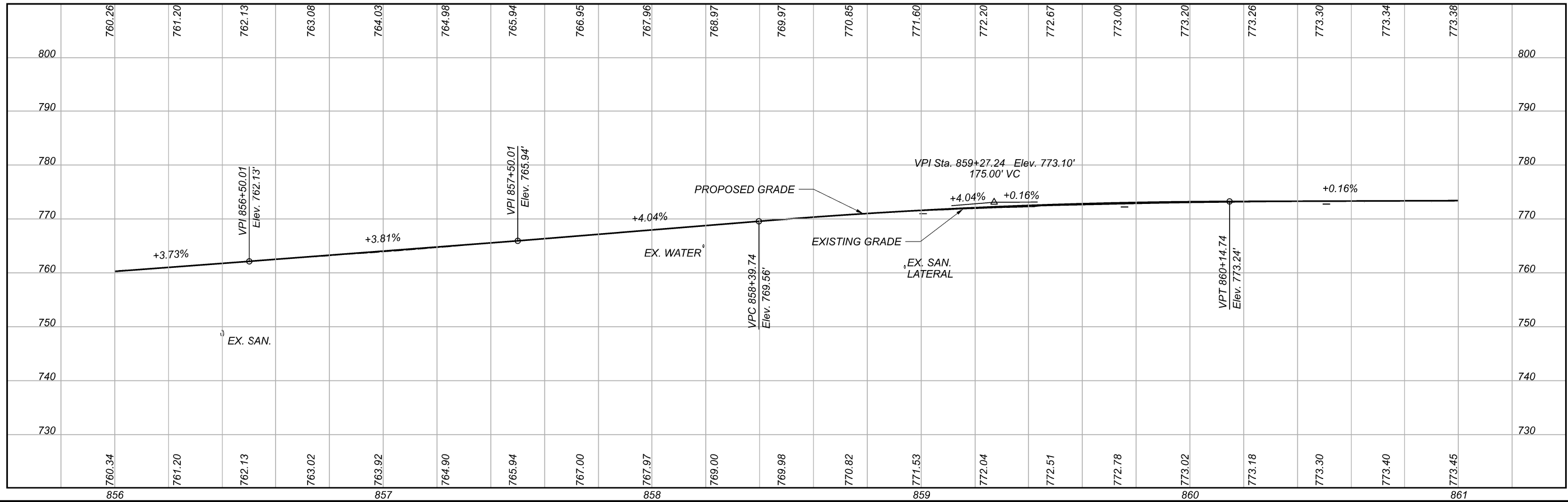
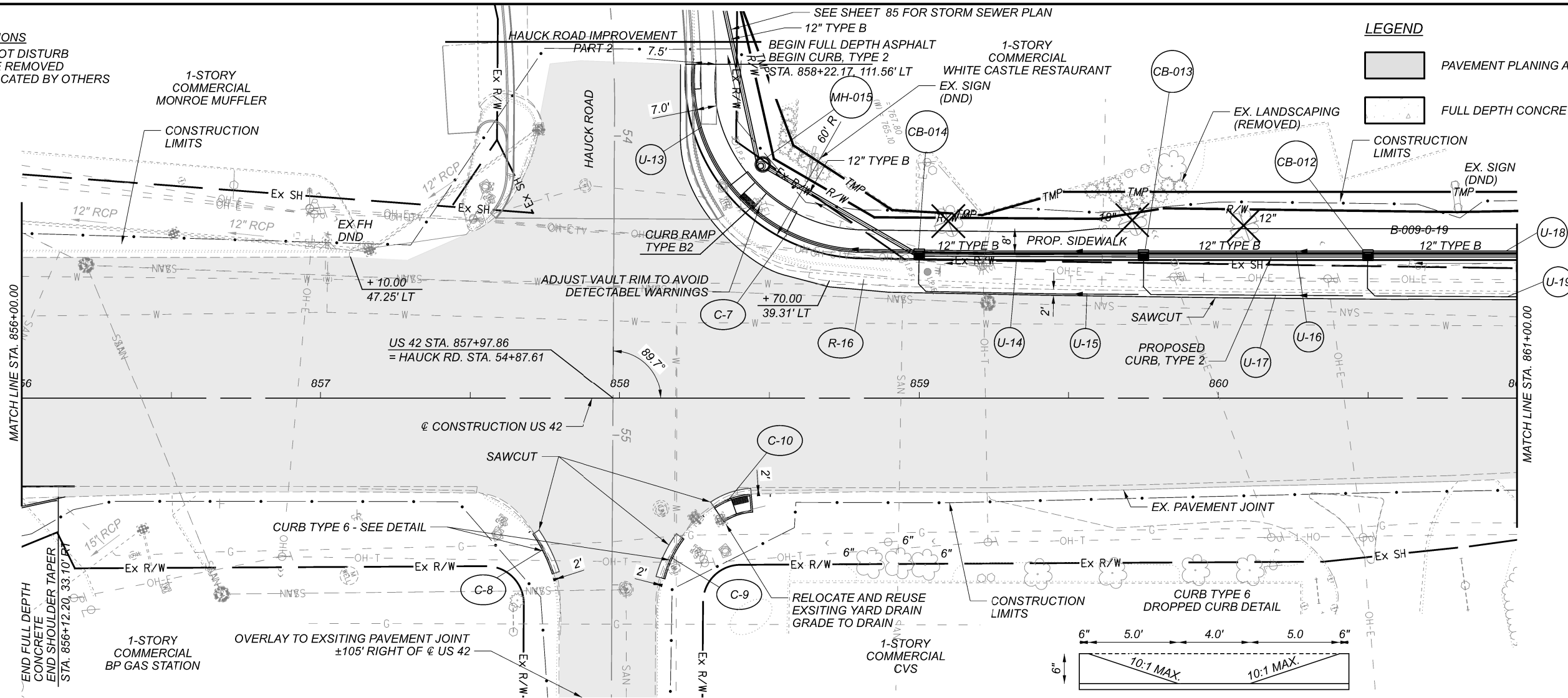


DESIGNER	MJL
REVIEWER	JAS 06/08/20
PROJECT ID	106411
SHEET	TOTAL
44	137

**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TO BE REMOVED  
 RBO - RELOCATED BY OTHERS

**LEGEND**

-  PAVEMENT PLANING AND OVERLAY
-  FULL DEPTH CONCRETE PAVEMENT

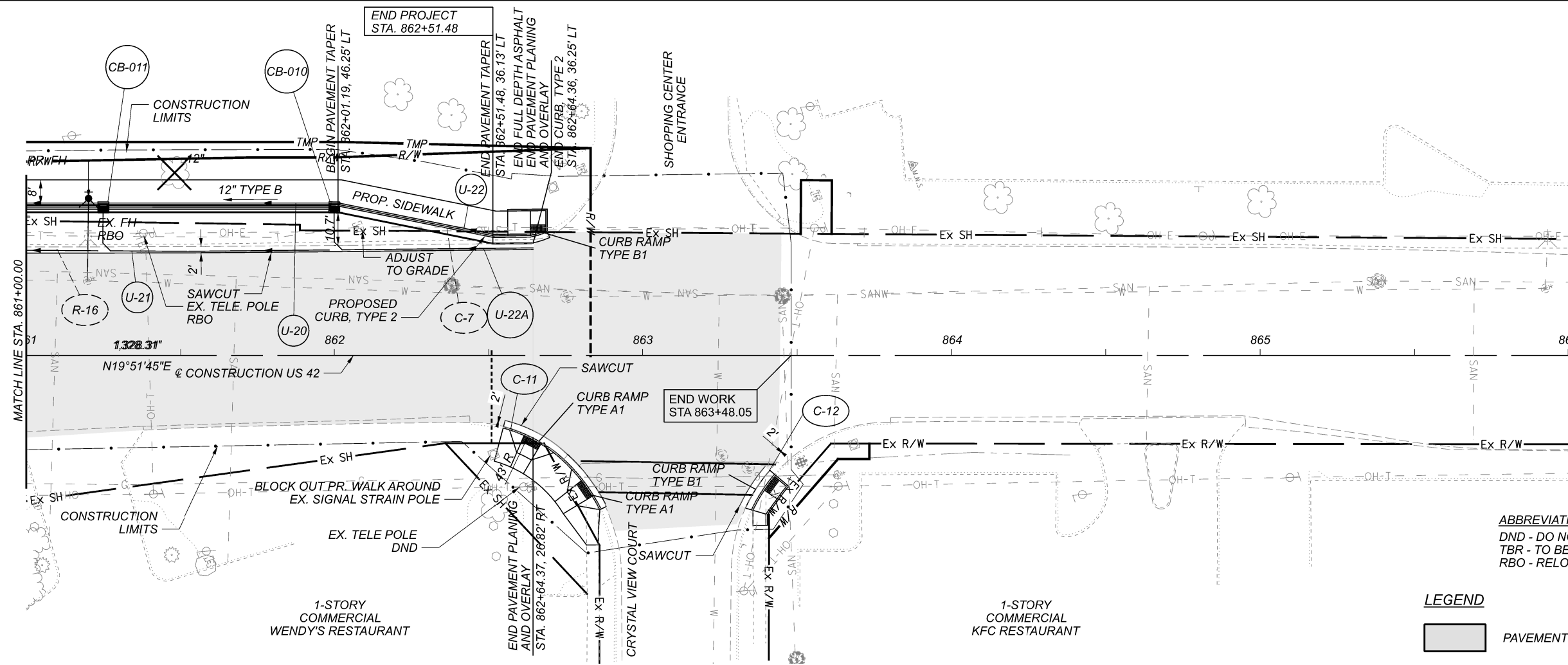


**PLAN AND PROFILE - US 42**  
 STA. 856+00.00 TO STA. 861+00.00

DESIGN AGENCY



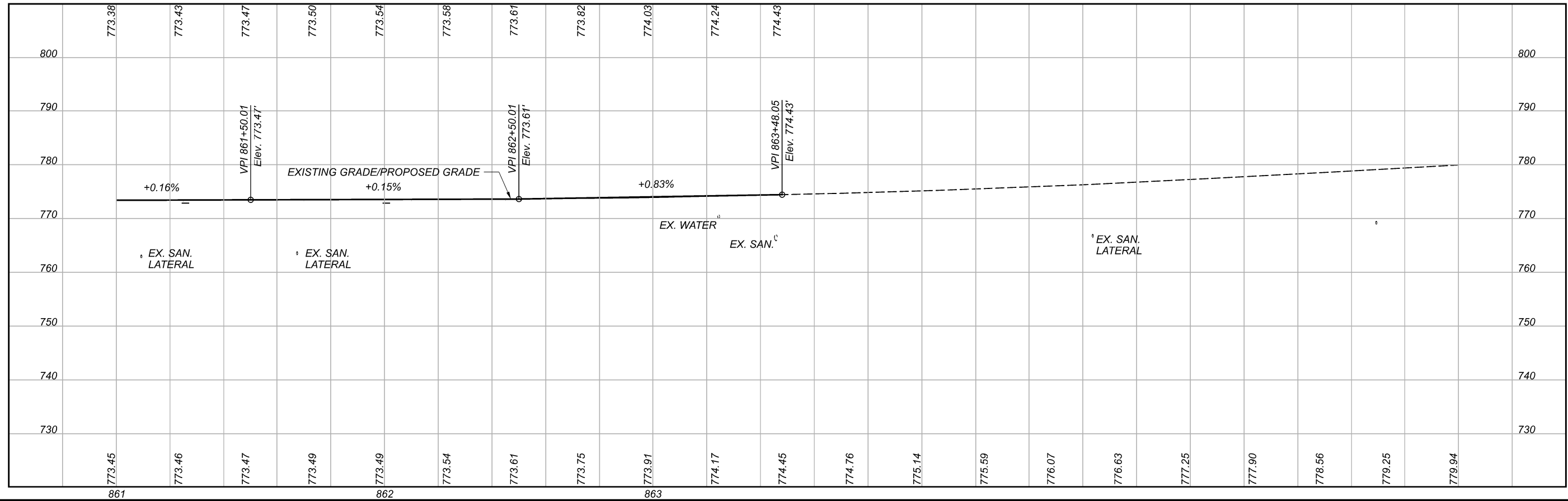
DESIGNER	MJL
REVIEWER	JAS
PROJECT ID	106411
SHEET	45
TOTAL	137



**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TO BE REMOVED  
 RBO - RELOCATED BY OTHERS

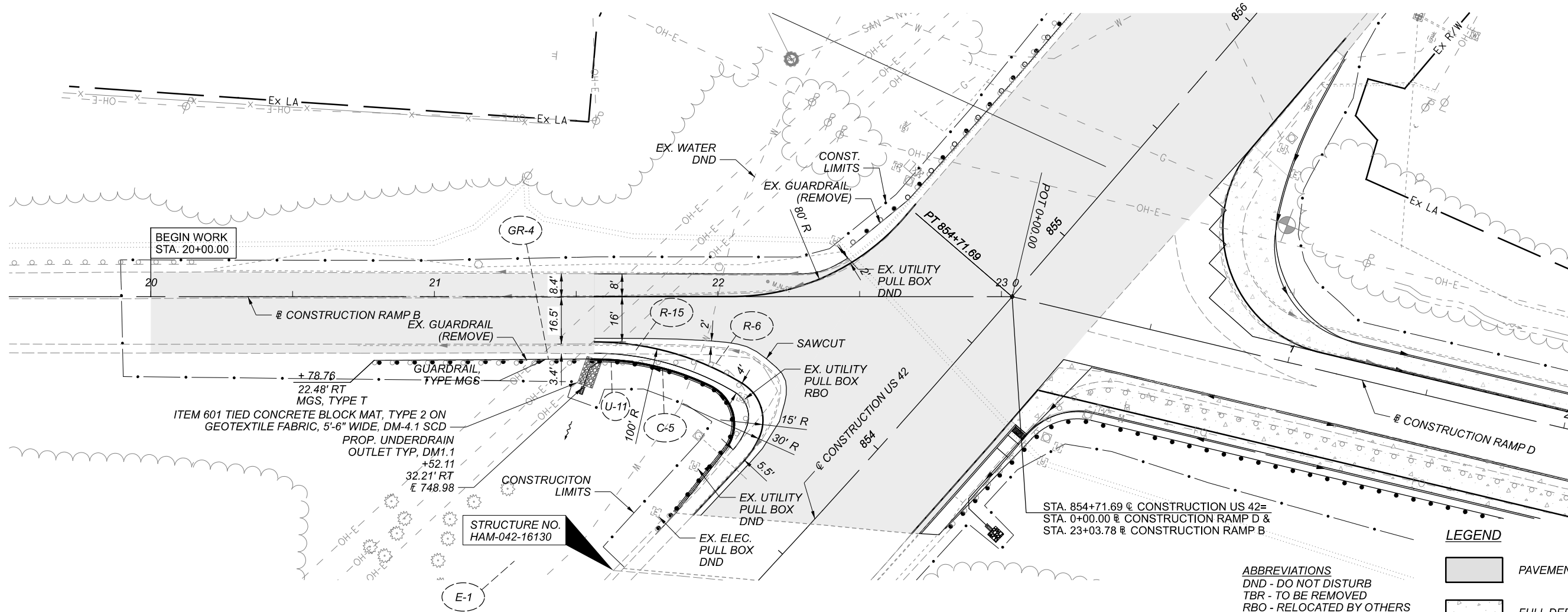
**LEGEND**

- PAVEMENT PLANING AND OVERLAY
- FULL DEPTH CONCRETE PAVEMENT



**PLAN AND PROFILE - US 42**  
**STA. 861+00.00 TO END**

DESIGN AGENCY	<b>HR</b>
DESIGNER	MJL
REVIEWER	JAS 06/08/20
PROJECT ID	106411
SHEET	46
TOTAL	137



BEGIN WORK  
STA. 20+00.00

+78.76  
22.48' RT  
MGS, TYPE T  
ITEM 601 TIED CONCRETE BLOCK MAT, TYPE 2 ON  
GEOTEXTILE FABRIC, 5'-6" WIDE, DM-4.1 SCD  
PROP. UNDERDRAIN  
OUTLET TYP, DM1.1  
+52.11  
32.21' RT  
E 748.98

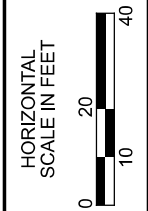
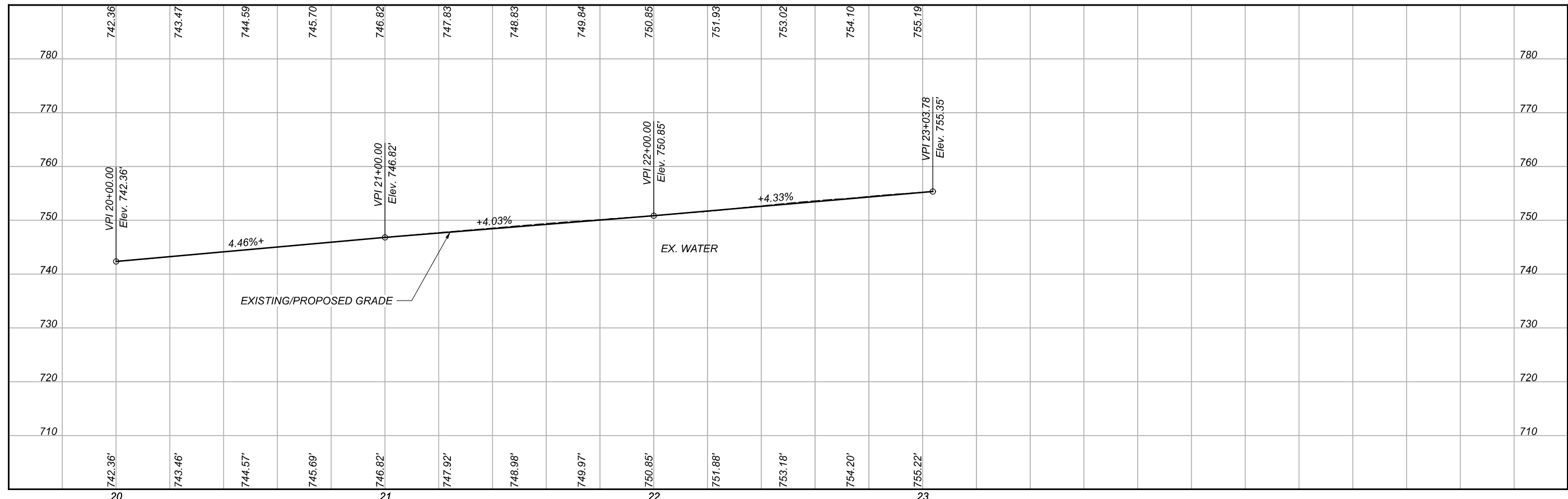
STRUCTURE NO.  
HAM-042-16130

STA. 854+71.69 @ CONSTRUCTION US 42=  
STA. 0+00.00 @ CONSTRUCTION RAMP D &  
STA. 23+03.78 @ CONSTRUCTION RAMP B

ABBREVIATIONS  
DND - DO NOT DISTURB  
TBR - TO BE REMOVED  
RBO - RELOCATED BY OTHERS  
ATG - ADJUST TO GRADE

LEGEND

- PAVEMENT PLANING AND OVERLAY
- FULL DEPTH CONCRETE PAVEMENT



PLAN AND PROFILE - RAMP B  
STA. 20+00.00 TO END

DESIGN AGENCY

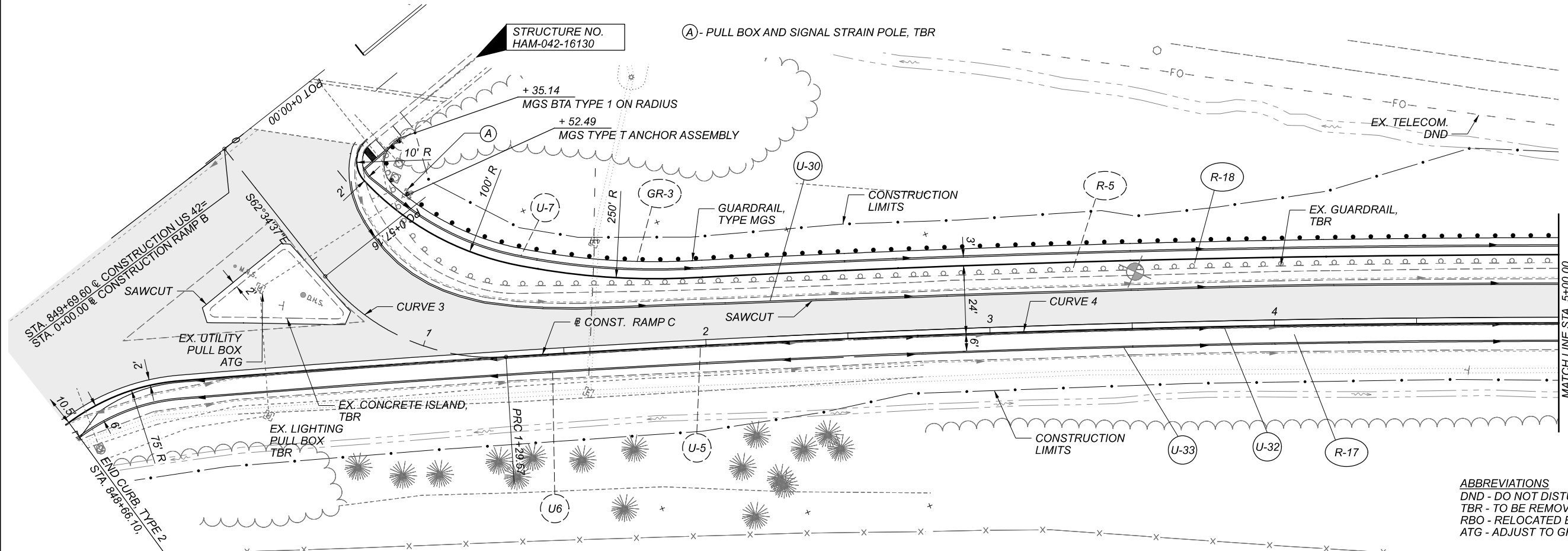


DESIGNER  
MJL

REVIEWER  
JAS 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
49 126



(A) - PULL BOX AND SIGNAL STRAIN POLE, TBR

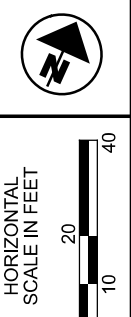
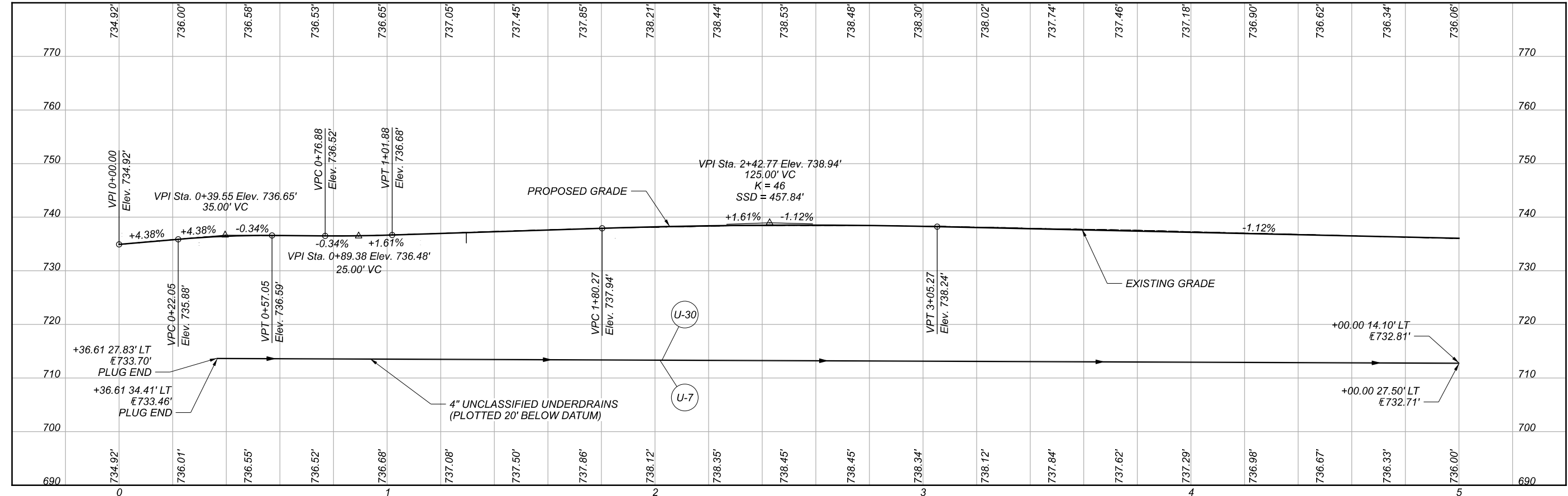
STRUCTURE NO.  
HAM-042-16130

**LEGEND**  
 PAVEMENT PLANING AND OVERLAY

**CURVE 4**  
 P.I. = Sta. 0+96.46  
 $\Delta = 55^\circ 18' 53''$  LT  
 $D_c = 76^\circ 23' 40''$   
 $R = 75.00'$   
 $T = 39.30'$   
 $L = 72.41'$   
 $E = 9.68'$

**CURVE 5**  
 P.I. = Sta. 8+27.73  
 $\Delta = 13^\circ 26' 05''$  RT  
 $D_c = 00^\circ 58' 00''$   
 $R = 5927.71'$   
 $T = 698.16'$   
 $L = 1389.92'$   
 $E = 40.97'$

**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TO BE REMOVED  
 RBO - RELOCATED BY OTHERS  
 ATG - ADJUST TO GRADE



**PLAN AND PROFILE - RAMP C**  
 STA. 0+00.00 TO STA. 5+00.00

DESIGN AGENCY

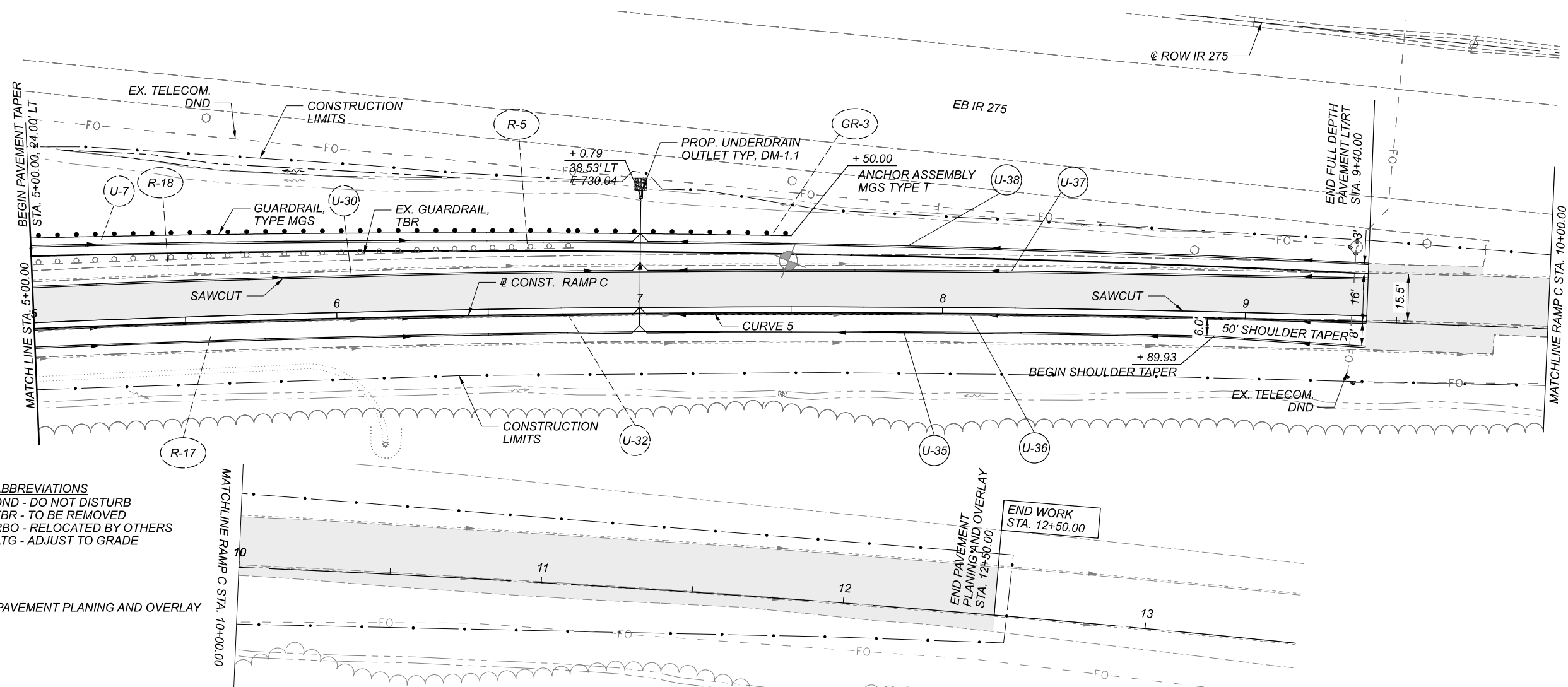
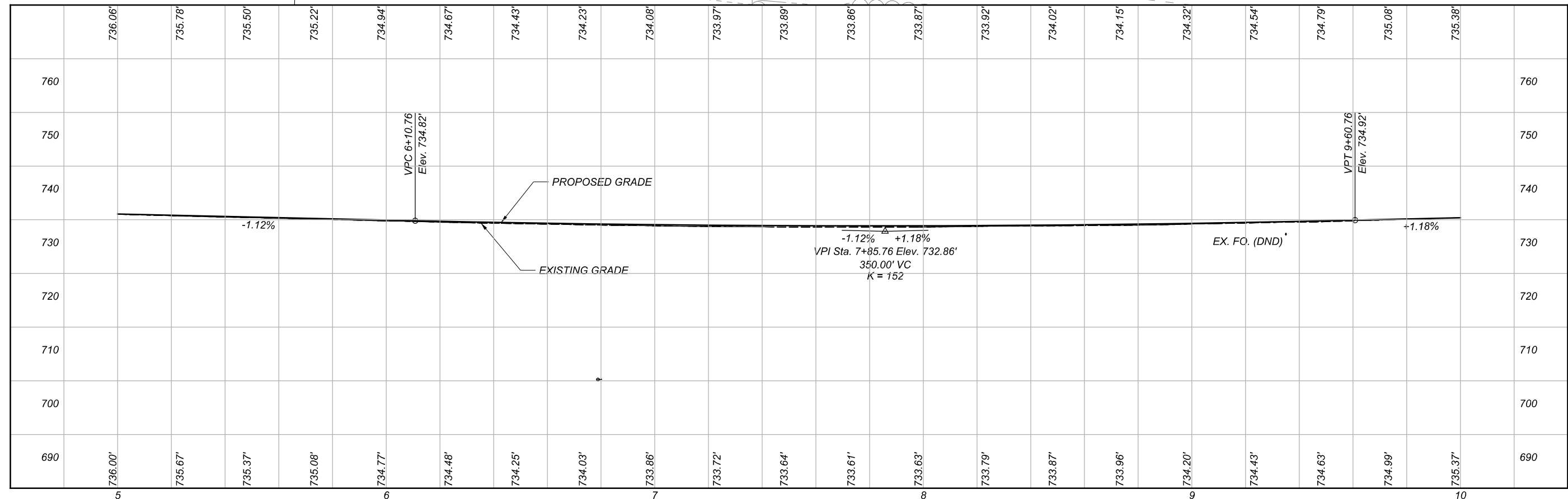


DESIGNER	MJL
REVIEWER	JAS 06/08/20
PROJECT ID	106411
SHEET	TOTAL
50	137

**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TO BE REMOVED  
 RBO - RELOCATED BY OTHERS  
 ATG - ADJUST TO GRADE

**LEGEND**

 PAVEMENT PLANING AND OVERLAY



**PLAN AND PROFILE - RAMP C**  
 STA. 5+00.00 TO STA. 13+50.00

DESIGN AGENCY



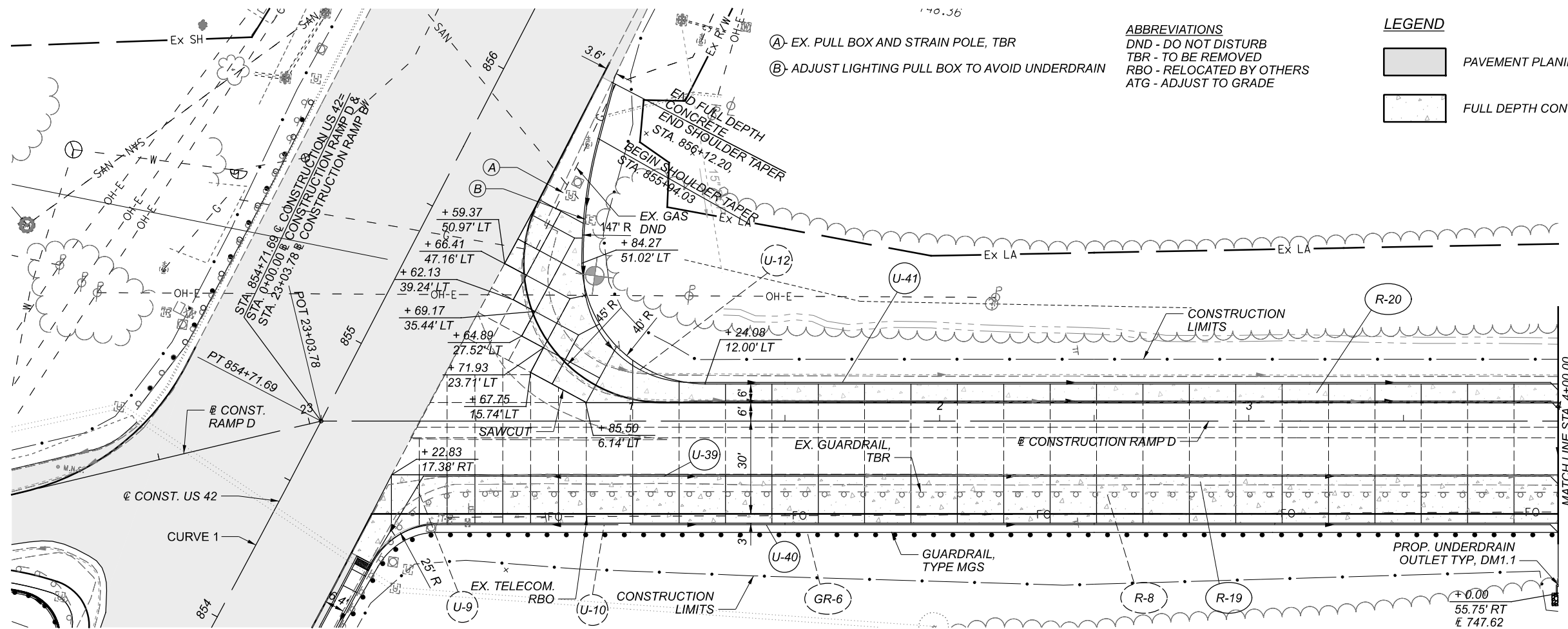
DESIGNER  
MJJ

REVIEWER  
JAS 06/08/20

PROJECT ID  
106411

SHEET TOTAL  
51 | 137



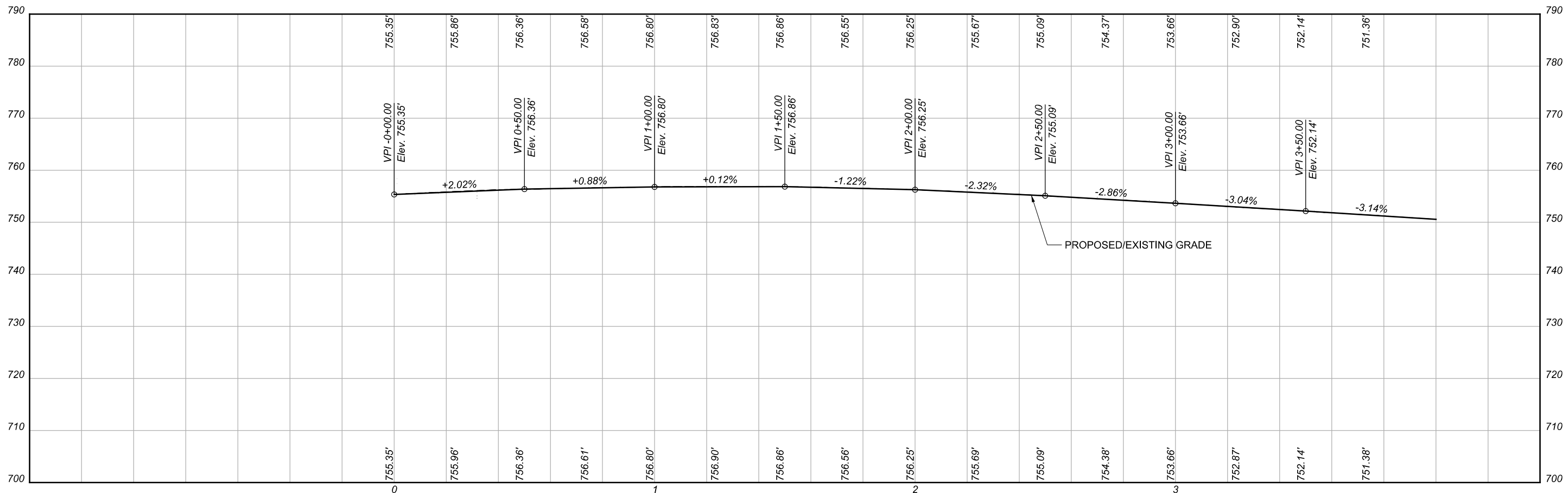
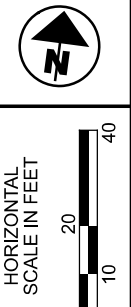


- (A) EX. PULL BOX AND STRAIN POLE, TBR
- (B) ADJUST LIGHTING PULL BOX TO AVOID UNDERDRAIN

**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TO BE REMOVED  
 RBO - RELOCATED BY OTHERS  
 ATG - ADJUST TO GRADE

**LEGEND**

- PAVEMENT PLANING AND OVERLAY
- FULL DEPTH CONCRETE PAVEMENT



**PLAN AND PROFILE - RAMP D**  
 STA. 0+00.00 TO STA. 4+00.00

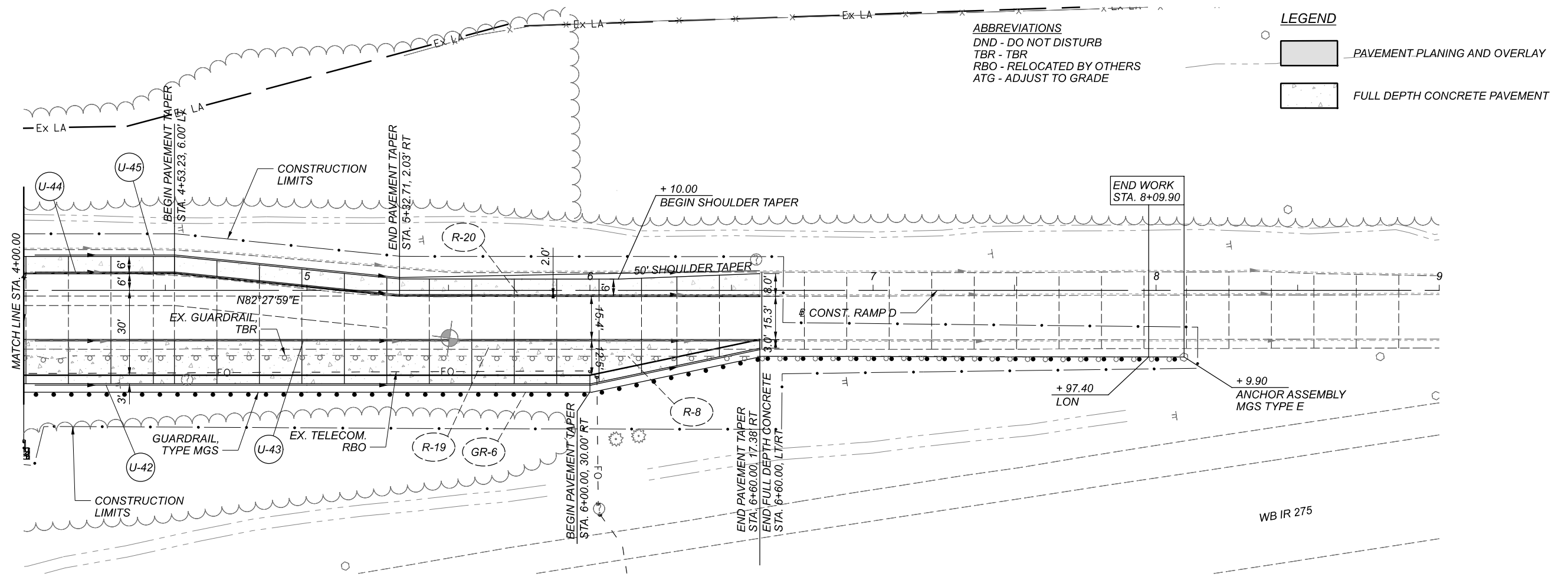
DESIGN AGENCY

DESIGNER  
 MJL

REVIEWER  
 JAS MM-DD-YY

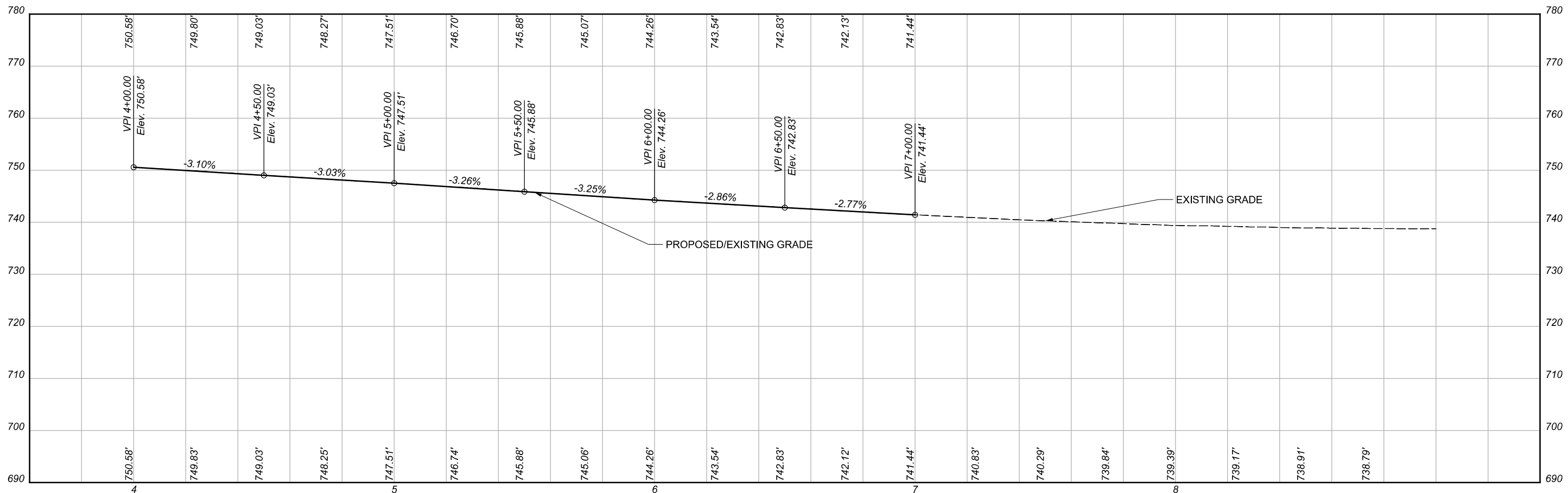
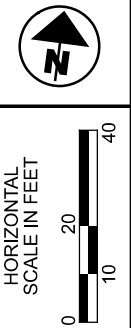
PROJECT ID  
 106411

SHEET TOTAL  
 52 137



**ABBREVIATIONS**  
 DND - DO NOT DISTURB  
 TBR - TBR  
 RBO - RELOCATED BY OTHERS  
 ATG - ADJUST TO GRADE

**LEGEND**  
  
 PAVEMENT PLANING AND OVERLAY  
 FULL DEPTH CONCRETE PAVEMENT



**PLAN AND PROFILE - RAMP D**  
 STA. 4+00.00 TO STA. 9+00.00

DESIGN AGENCY  
  
 DESIGNER  
 MJL  
 REVIEWER  
 JAS MM-DD-YY  
 PROJECT ID  
 106411  
 SHEET TOTAL  
 53 137

SEEDING  
 END SO.  
 WIDTH YDS.

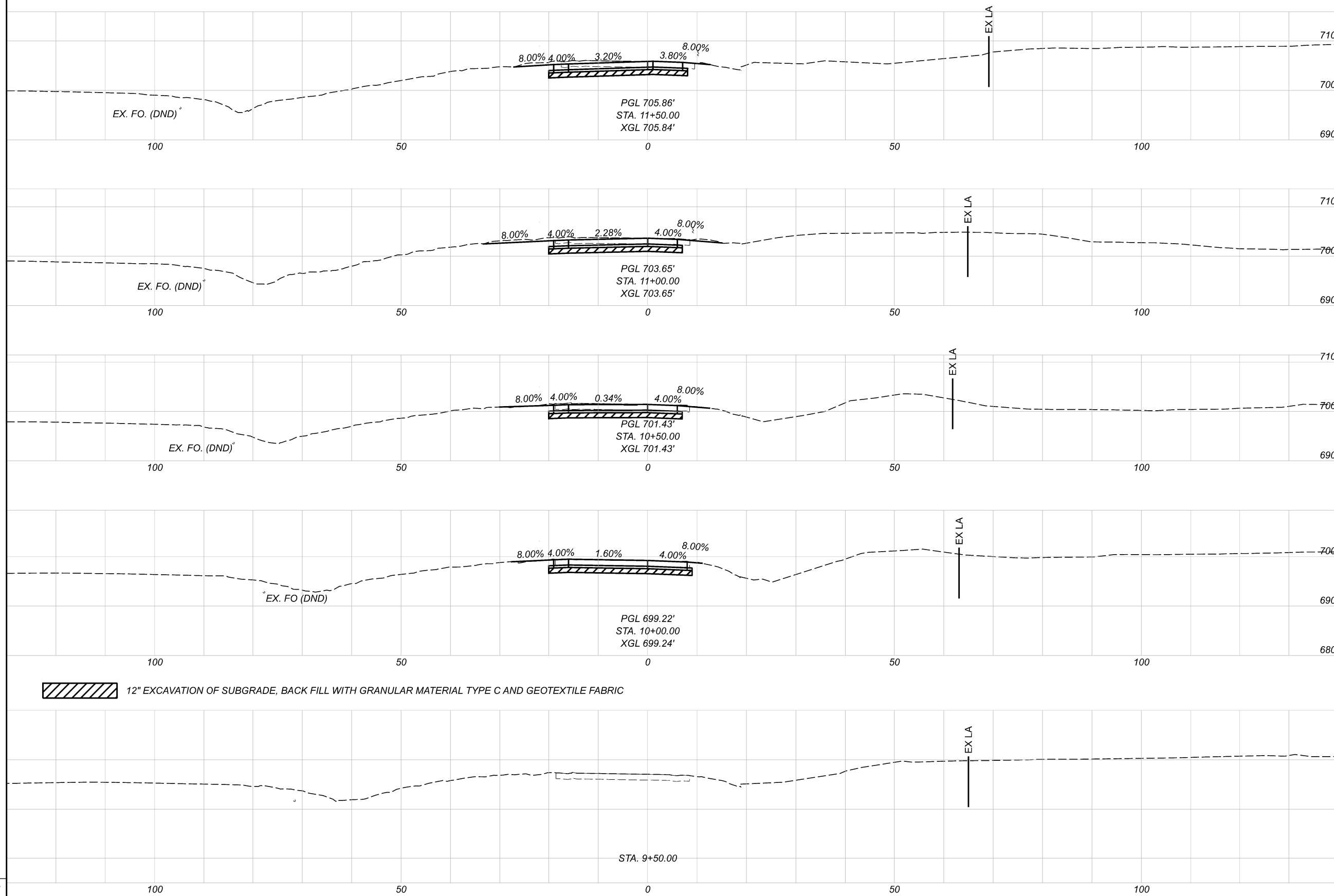
100  
 13  
 72  
 13  
 72  
 13  
 72  
 13  
 36  
 0  
 352


END AREA  
 CUT FILL  
 VOLUME  
 CUT FILL

94 1  
 50 0  
 93 0  
 50 0  
 88 0  
 45 0  
 83 0  
 45 0  
 42 0  
 0 0  
 400 1  
 60 137

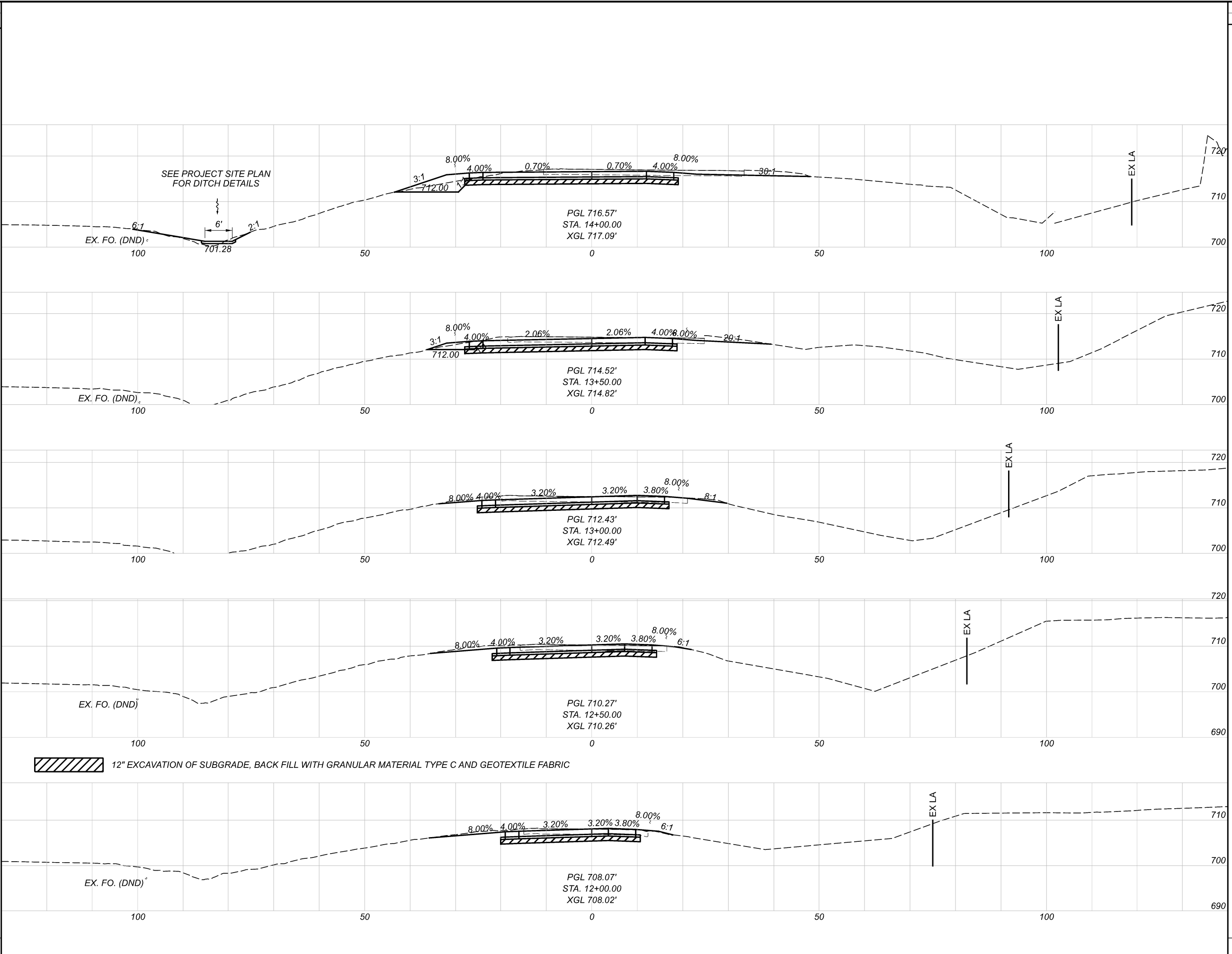
CROSS SECTIONS IR 275 RAMPA  
 STA. 10+00 TO STA. 11+50


DESIGN AGENCY  
  
 DESIGNER  
 MJL  
 REVIEWER  
 JAS 06/08/20  
 PROJECT ID  
 106411  
 SHEET TOTAL  
 60 137



 12" EXCAVATION OF SUBGRADE, BACK FILL WITH GRANULAR MATERIAL TYPE C AND GEOTEXTILE FABRIC

SEEDING	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
400			206	97
47			105	39
217			186	45
31			96	9
150			158	9
23			75	0
128			127	1
23			62	0
128			105	1
23			51	1
1022			782	153

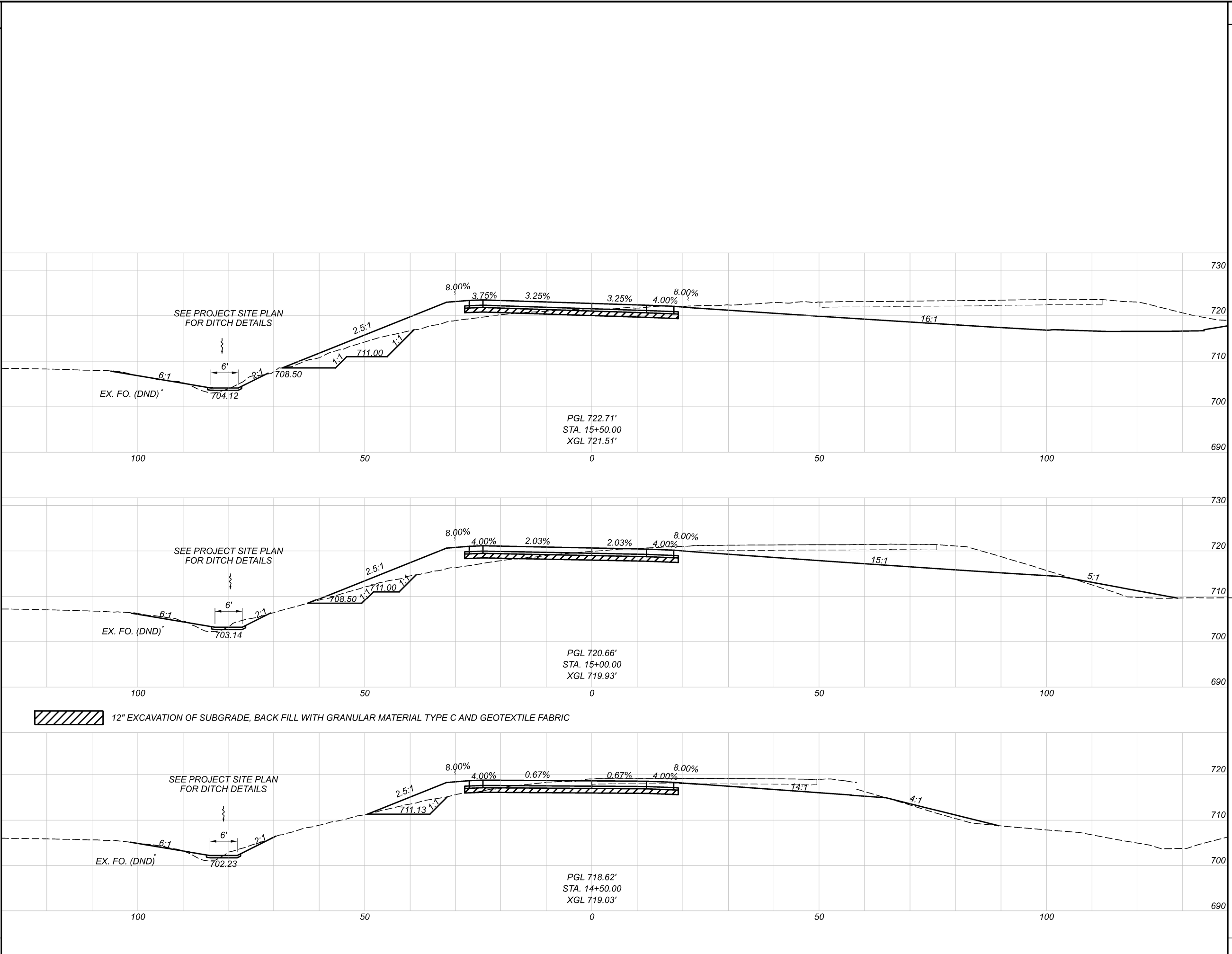


 12" EXCAVATION OF SUBGRADE, BACK FILL WITH GRANULAR MATERIAL TYPE C AND GEOTEXTILE FABRIC

CROSS SECTIONS IR 275 RAMP A  
 STA. 12+00 TO STA. 14+00

DESIGN AGENCY	
DESIGNER	MJL
REVIEWER	JAS 06/08/20
PROJECT ID	106411
SHEET TOTAL	61 137

SEEDING	
END WIDTH	SO. YDS.
786	
162	
864	
149	
683	
97	
2333	



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		807	297
		164	
		719	276
		134	
		355	185
		66	
		1881	758
		62	137

CROSS SECTIONS IR 275 RAMP A  
 STA. 14+50 TO STA. 15+50

DESIGN AGENCY



DESIGNER  
 MJL

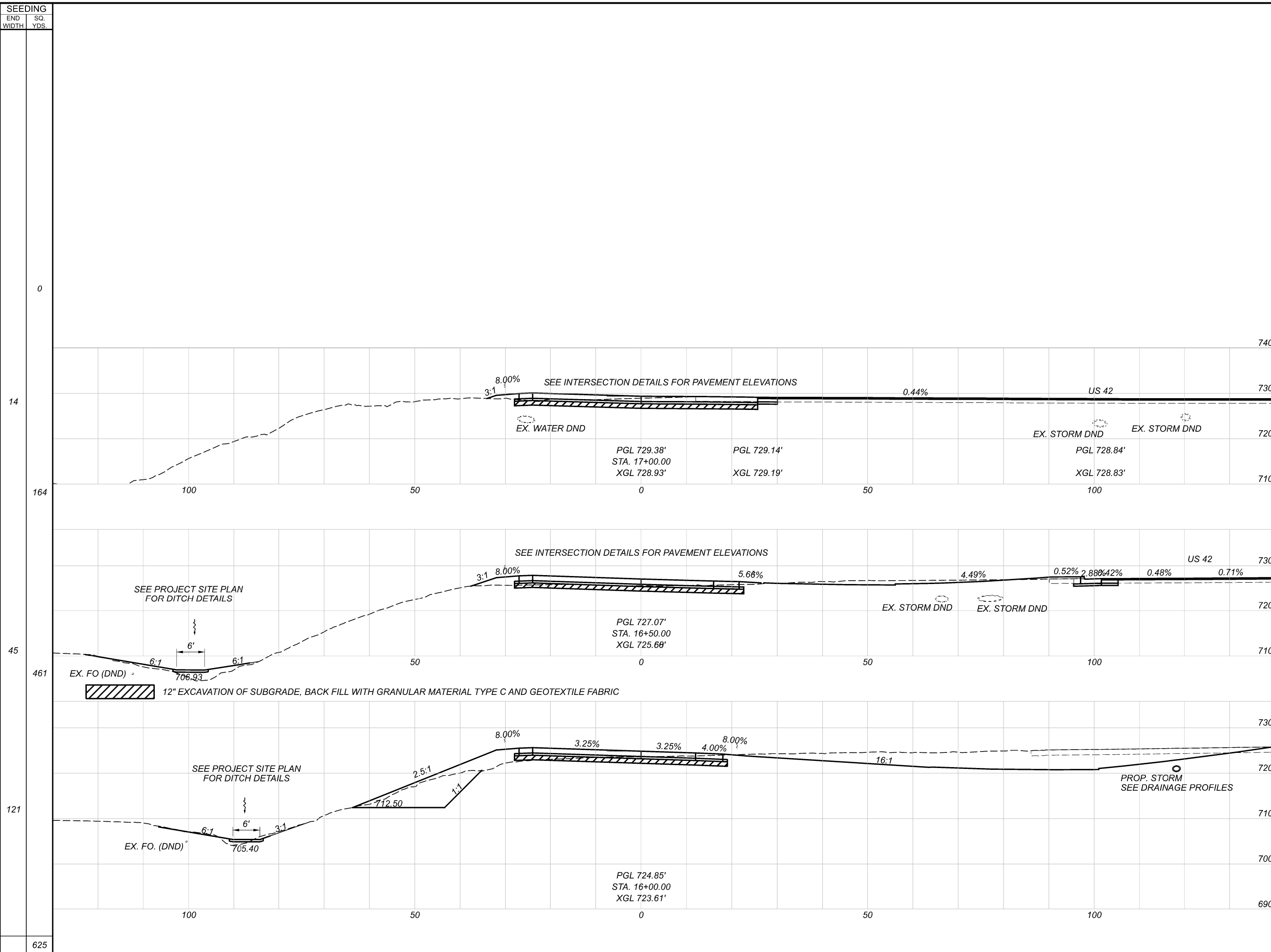
REVIEWER  
 JAS 06/08/20

PROJECT ID  
 106411

SHEET TOTAL  
 62 137

HAM-275-28.29

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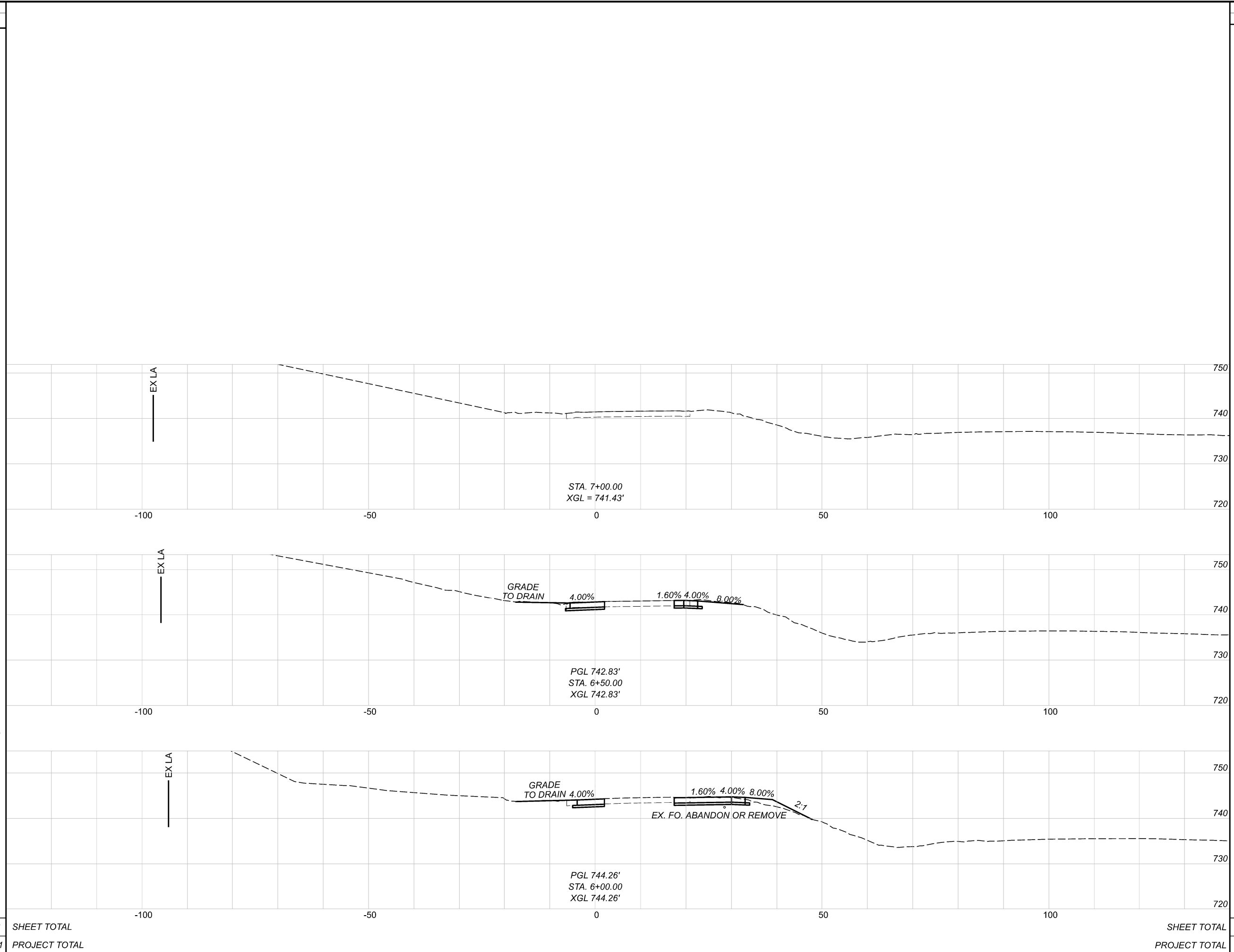


SEEDING	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
0			0	0
14	26	5	31	22
164			343	162
45	9	19	362	156
461				
121				
625			374	184

CROSS SECTIONS IR 275 RAMPA  
 STA. 16+00 TO STA. 17+00

DESIGN AGENCY  
  
 DESIGNER  
 MJL  
 REVIEWER  
 JAS 06/08/20  
 PROJECT ID  
 106411  
 SHEET TOTAL  
 63 137

SEEDING	
END WIDTH	SO. YDS.
0	
23	
21	
103	
16	
126	SHEET TOTAL
8491	PROJECT TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	0	0
9	0	9	0
26	0	26	0
59	9	59	9
38	10	38	10
		68	9
		7505	2433

CROSS SECTIONS IR 275 RAMP D  
 STA. 6+00.00 TO STA. 7+00.00

DESIGN AGENCY



DESIGNER  
MJJ

REVIEWER  
JAS 06/08/20

PROJECT ID  
106411

SHEET	TOTAL
73	137

**WORK ZONE MARKINGS AND SIGNS**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF C&MS 614.04 AND 614.11.

ITEM 614, WORK ZONE CENTERLINE, CLASS I, 642 PAINT	1.27 MILE
ITEM 614, WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	3.03 MILE
ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	81 FT
ITEM 614, WORK ZONE, DOTTED LINE, CLASS I, 8", 642 PAINT	226 FT
ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	150 FT
ITEM 614, WORK ZONE ISLAND MARKING, CLASS I	56 SF
ITEM 614, WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	114 FT
ITEM 614, WORK ZONE ARROW, CLASS I, 642 PAINT	14 EACH
ITEM 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	0.03 MILE
ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT	1.44 MILE
ITEM 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	0.07 MILE
ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	730 FT
ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT	148 FT
ITEM 614, WORK ZONE CROSSWALK LINE, CLASS III, 642 PAINT	682 FT
ITEM 614, WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT	86 SF
ITEM 614, WORK ZONE RAILROAD SYMBOL MARKING, CLASS I, 642 PAINT	3 EACH
ITEM 614, WORK ZONE RAILROAD SYMBOL MARKING, CLASS III, 642 PAINT	3 EACH
ITEM 614, WORK ZONE ARROW, CLASS III, 642 PAINT	33 EACH
ITEM 614, WORK ZONE WORD ON PAVEMENT, 72", CLASS III, 642 PAINT	4 EACH
ITEM 614, WORK ZONE, DOTTED LINE, CLASS III, 8", 642 PAINT	274 FT

**ITEM 622, PORTABLE BARRIER, UNANCHORED, AS PER PLAN**

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 32-INCH PORTABLE CONCRETE BARRIER. THE CONCRETE BARRIER IS TO BE PLACED A MINIMUM OF 20'-0" FROM THE CENTERLINE OF TRACK, PERPENDICULAR TO HAUCK ROAD, TO PREVENT PUBLIC ACCESS OVER THE AT-GRADE CROSSING WHILE THE CROSSING SURFACE IS BEING UPGRADED BY NORFOLK SOUTHERN FORCES. FOR DETAILS, SEE SCD RM-4.2.

A QUANTITY OF 80 FEET HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE AMOUNT OF PORTABLE CONCRETE BARRIER NEEDED TO PROTECT BOTH ENTRANCES OF THE RAILROAD CROSSING.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, UNANCHORED, AS PER PLAN.

**INTERIM COMPLETION DATE 1**

THE PROJECT HAS AN INTERIM COMPLETION DATE (1) OF 10/31/2021. ON OR BEFORE THE INTERIM COMPLETION DATE, THE CULVERT REPLACEMENT AND ASSOCIATED WORK AT APPROXIMATE STATION 33+50 REQUIRING THE 45 DAY CLOSURE SHALL BE COMPLETED.

**INTERIM COMPLETION DATE 2**

THE PROJECT HAS AN INTERIM COMPLETION DATE (2) OF 4/30/2022. ON OR BEFORE THIS INTERIM COMPLETION DATE, ALL MSD WORK WITHIN RAILROAD R/W SHALL BE COMPLETED. WORK SHALL NOT BEGIN UNTIL 4/1/2022

**INTERIM COMPLETION DATE 3**

THE PROJECT HAS AN INTERIM COMPLETION DATE (3) OF 7/1/2022. ON OR BEFORE THIS COMPLETION DATE, ALL WORK ASSOCIATED WITH THE 60 DAY PORTION OF THE 90 DAY CLOSURE SHALL BE COMPLETED. WORK SHALL NOT BEGIN UNTIL 5/1/2022.

**INTERIM COMPLETION REQUIREMENTS**

THE CONTRACT WILL BE SUBJECT TO DAILY DISINCENTIVES FOR FAILURE TO COMPLETE ALL THE REQUIRED WORK, AND ASSOCIATED INCIDENTALS RELATED TO THE WORK, AS OUTLINED IN THE TABLE INCLUDED IN THIS NOTE. APPLICATION OF THE DISINCENTIVES WILL BE BASED ON THE OVERALL CONTRACT AMOUNT. DAILY DISINCENTIVES ARE APPLICABLE TO THE WORK REQUIRED TO THE INTERIM COMPLETION DATE ONLY. THE CONTRACT IS STILL SUBJECT TO LIQUIDATED DAMAGES AS OUTLINED IN CMS 108.07 FOR THE REMAINDER OF THE CONTRACT.

SCHEDULE OF DAILY DISINCENTIVES FOR FAILURE TO MEET THE INTERIM COMPLETION REQUIREMENTS		
ORIGINAL CONTRACT AMOUNT (TOTAL AMOUNT AT THE TIME OF BIDDING)		DAILY DISINCENTIVE FOR EACH FULL OR PARTIAL CALENDAR DAY OF TIME OVERRUN BEYOND THE PLAN INTERIM COMPLETION DATE
FROM MORE THAN	TO AND INCLUDING	
\$0.00	\$500,000	\$800
\$500,000	\$1,000,000	\$1,200
\$1,000,000	\$5,000,000	\$2,500
\$5,000,000	\$10,000,000	\$3,500
\$10,000,000	\$50,000,000	\$5,000
OVER \$50,000,000		\$7,500

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**MAINTENANCE OF TRAFFIC GENERAL NOTES**

**HAM-HAUCK ROAD-  
WIDENING PART 2**



**SEQUENCE OF CONSTRUCTION**

**PRIOR TO PHASE 1**

INSTALL PCMS TO INFORM THE PUBLIC PRIOR TO IMPLEMENTING ANY DETOURS. DETOUR TRAFFIC AS PER THE FIRST DETOUR MAP TO REMOVE EX. CULVERT AT APPROXIMATE STA. 33+50 AND INSTALL NEW CULVERT WITH HEADWALLS, MAKE CHANNEL IMPROVEMENTS, AND INSTALL FULL DEPTH PERMANENT PAVEMENT OVER PROPOSED CULVERT. THIS WORK SHALL BE COMPLETED PER INTERIM COMPLETION DATE (1) REQUIREMENTS.

DETOUR TRAFFIC AS PER THE SECOND DETOUR MAP. THIS DETOUR SHALL BE IN PLACE FOR 90 CONSECUTIVE DAYS. DURING THE FIRST 30 DAYS OF THE 90 DAY DETOUR, COMPLETE THE MSD SANITARY LINE REPLACEMENT WORK WITHIN THE RAILROAD RIGHT OF WAY. THIS WORK SHALL BE COMPLETED PER INTERIM COMPLETION DATE (2) REQUIREMENTS.

DURING THE NEXT 60 DAYS OF THE 90 DAY DETOUR, PERFORM THE RR CROSSING WORK (COMPLETED BY RR CONTRACTOR), CULVERT EXTENSION AND CHANNEL IMPROVEMENTS, AND ROADWAY IMPROVEMENTS BETWEEN READING ROAD TO STATION 13+85. THIS WORK SHALL BE COMPLETED PER INTERIM COMPLETION DATE (3) REQUIREMENTS.

THE RAILROAD CONTRACTOR WILL BE WORKING CONCURRENTLY WITH THIS PROJECT'S WORK ACTIVITIES WITHIN THE RAILROAD RIGHT OF WAY DURING THE 60 DAY CLOSURE. THE RAILROAD WORK INCLUDES: INSTALLATION OF NEW GATES, INSTALLATION OF A CANTILEVER OVERHEAD SIGNAL, WIDENING THE VEHICULAR CROSSING BETWEEN THE TRACKS, AND INSTALLING ASPHALT VEHICULAR CROSSING TO 2' THE OUTSIDE OF THE TRACKS.

**PHASE 1**

CHANGE PCMS MESSAGES TO INFORM THE PUBLIC OF THE CHANGE IN TRAFFIC OPERATION. CONSTRUCT FULL DEPTH PAVEMENT, CURB, AND SIDEWALK ALONG THE NORTH SIDE OF HAUCK ROAD FROM APPROXIMATE STA. 13+85 TO STA. 47+67 BY DETOURING EASTBOUND TRAFFIC AS PER SHEET 12 AND SHIFTING WESTBOUND TRAFFIC TO THE SOUTH SIDE OF HAUCK ROAD. CONSTRUCT PERMANENT DRIVEWAY PAVEMENT, PERMANENT DRAINAGE FEATURES, PERMANENT SIGNAL IMPROVEMENTS, PERMANENT GUARDRAIL, AND THE PERMANENT RETAINING WALL FROM STA. 15+85 TO STA. 17+00 AS PER THE PHASING PLANS.

CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC WITH TEMPORARY CURB FROM APPROXIMATE STA. 51+51 TO STA. 54+27. TEMPORARILY CLOSE THE RIGHT TURN LANE WITHIN THE ABOVE STATION LIMITS, SAW CUT ONE FOOT WITHIN THE EX. EDGE OF PAVEMENT OR UNTIL SOUND PAVEMENT IS FOUND, AND INSTALL TEMPORARY DRAINAGE STRUCTURES TO INTERCEPT EX. 12 INCH PIPES AS PER THE PHASING PLANS.

**PHASE 2**

REMOVE ALL DETOUR SIGNAGE AND SHIFT BOTH LANES OF TRAFFIC TO THE NORTH SIDE OF HAUCK ROAD AND CONSTRUCT FULL DEPTH PAVEMENT, CURB, AND SIDESLOPE GRADING ALONG THE SOUTH SIDE OF HAUCK ROAD. CONSTRUCT DRAINAGE IMPROVEMENTS ALONG THE SOUTH SIDE OF HAUCK ROAD AND (WHERE APPLICABLE) CONNECT TO PROPOSED STORM SEWER CONSTRUCTED DURING PHASE 1 AS PER THE PHASING PLANS. CONSTRUCT PAVEMENT FOR MAINTAINING TRAFFIC WITH TEMPORARY CURB FROM APPROXIMATE STA. 48+90 TO STA. 50+33 ALONG THE PROPOSED EDGE OF PAVEMENT AS PER THE PHASING PLANS.

**SEQUENCE OF CONSTRUCTION (CONT.)**

**PHASE 2A**

WESTBOUND TRAFFIC SHALL REMAIN AS PER THE PHASE 2 CONFIGURATION. EASTBOUND TRAFFIC SHALL BE SHIFTED TO THE PROPOSED SOUTH EDGE OF PAVEMENT. CONSTRUCT FULL DEPTH PAVEMENT AND LATERAL DRAINAGE CONNECTIONS AS PER THE PHASING PLANS.

**PHASE 2B**

EASTBOUND TRAFFIC SHALL REMAIN AS PER THE PHASE 3 CONFIGURATION. WESTBOUND TRAFFIC SHALL BE SHIFTED TO THE SOUTH SO THAT THERE IS NO LONGER A SPLIT BETWEEN EASTBOUND AND WESTBOUND TRAFFIC LANES. REMOVE ALL TEMPORARY NORTHERN SURFACES AND DRAINAGE STRUCTURES. CONSTRUCT NORTHERN FULL DEPTH PAVEMENT, CURBS, SIDEWALK, CURB CATCH BASINS, AND SIDESLOPE GRADING AS PER THE PHASING PLANS.

**PHASE 3**

TRAFFIC SHALL USE THE FINAL PERMANENT LANE CONFIGURATION. DURING NON-PEAK OR OVERNIGHT HOURS, THE CONTRACTOR SHALL CLOSE THE EASTBOUND LANE FROM APPROXIMATE STA. 48+90 TO STA. 50+33 SO AS TO REMOVE THE SOUTHERN TEMPORARY PAVEMENT AND CURB ALONG THE PROPOSED EDGE OF PAVEMENT. THE SAME LANE CLOSURE SHALL BE USED TO CONSTRUCT THE PROPOSED CURB AND SIDESLOPE GRADING BETWEEN THE ABOVE STATIONS. TWO-WAY TRAFFIC SHALL BE MAINTAINED AS PER SCD MT-95.61, BY USING THE PERMANENT WESTBOUND RIGHT TURN LANE FOR WESTBOUND THRU TRAFFIC AND THE PERMANENT WESTBOUND THRU LANE FOR EASTBOUND THRU TRAFFIC.

**PHASE 4**

TRAFFIC SHALL USE THE FINAL PERMANENT LANE CONFIGURATION. DURING NON-PEAK OR OVERNIGHT HOURS, THE CONTRACTOR SHALL MAINTAIN A SINGLE TWO-WAY FLAGGER CONTROLLED LANE AS PER SCD MT-97.12. COMPLETELY RESURFACE HAUCK ROAD AND APPLY FINAL PAVEMENT MARKINGS.

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**MAINTENANCE OF TRAFFIC GENERAL NOTES**

**HAM-HAUCK ROAD -  
WIDENING PART 2**

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