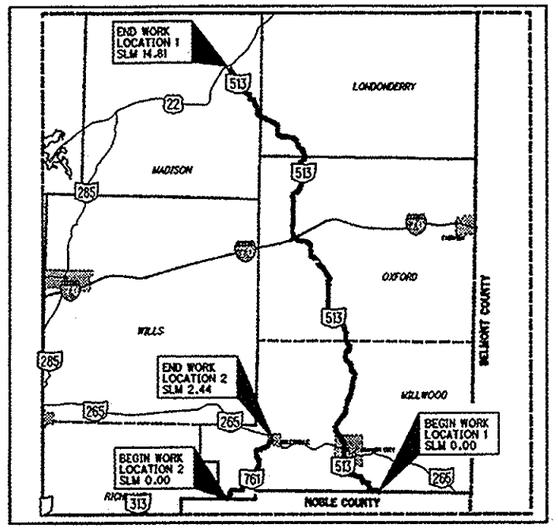


LOCATION MAP

LATITUDE: 40° 02' 25" LONGITUDE: 81° 18' 36"

PORTION TO BE IMPROVED

DESIGN DESIGNATION	LOCATION 1 GUE-S.R. 513	LOCATION 2 GUE-S.R. 761
Functional Classification	MAJOR	MINOR
Opening Year ADT (2014)	550	440
Design Year ADT (2026)	590	560
Design Hourly Volume (2026)	60	60
Directional Distribution	53%	53%
Trucks (24 Hour B&C)	8%	2%
Design Speed	55mph	55mph
Legal Speed	55mph	55mph

MAJOR = RURAL MAJOR COLLECTOR
MINOR = RURAL MINOR COLLECTOR

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

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

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GUE-513-0.00
GUE-761-0.00

VILLAGE OF QUAKER CITY
VILLAGE OF SALESVILLE

MILLWOOD, OXFORD, LONDONDERRY AND MADISON TOWNSHIPS

GUERNSEY COUNTY

PROJECT DESCRIPTION:
ASPHALT CONCRETE RESURFACING AND RELATED WORK ON S.R. 513 AND S.R. 761 IN GUERNSEY COUNTY. PROJECT INCLUDES DRAINAGE WORK TO BE DONE IN QUAKER CITY, BRIDGE WORK ON GUE-513-0180.

Project Earth Disturbed Area = 0.25 Acres
Estimated Contractor Earth Disturbed Area = 0.13 Acres
Notice of Intent Earth Disturbed Area = 0.38 Acres

LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/VILLAGE
1	GUE	513	0.00	14.81	14.81	QUAKER CITY
2	GUE	761	0.00	2.44	2.44	SALESVILLE
3	GUE	513				QUAKER CITY

INDEX OF SHEETS:

TITLE SHEET 1
GENERAL NOTES 2-6
GENERAL SUMMARY 7-8
LOCATION SUB-SUMMARIES 9-12
PLAN CALCULATIONS 13-25
PLAN DETAILS 26-33
PLAN SHEETS (SR 265 & SR 513) 34-41
STORM SEWER PROFILES (SR 265 & SR 513) 42-44
CROSS SECTIONS (SR 265 & SR 513) 45-60
STRUCTURE: GUE-513-0180 61-64

2013 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 PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PANS AND ESTIMATES.

ENGINEER'S SEAL
STATE OF OHIO
DOUGLAS N. MORGAN
E-63839
REGISTERED PROFESSIONAL ENGINEER
SIGNED: Douglas N Morgan
DATE: 10-8-2013

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4-20-12	MT-97.10	7-19-13	800	10-18-13
BP-4.1	7-19-13	MT-97.12	7-19-13	832	10-18-13
BP-5.1	7-19-13	MT-99.20	7-20-12		
CB-1.2	1-18-13	MT-101.90	10-19-12		
CB-2.1	1-18-13	MT-105.10	7-20-12		
CB-2.2	1-18-13				
DM-1.4	1-18-13	TC-65.10	4-20-12		
DM-4.4	7-20-12	TC-65.11	4-20-12	SPECIAL PROVISIONS	
HW-2.1	1-18-13	TC-71.10	10-19-12		
HW-2.2	1-18-13	TC-73.10	4-20-12		
MH-1.1	1-18-13	TC-82.10	1-18-13		
MH-1.2	1-18-13	AS-1-81	1-18-13		

APPROVED
DATE 10/4/13 DISTRICT DEPUTY DIRECTOR

APPROVED Jerry Wray
DATE 10-18-13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E120(466)
PID NO. 92254
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT
GUE-513-0.00
GUE-761-0.00
1/64

GUE - SR-513-0.00; GUE-761-0.00
140012 PID - 92254 Contract Proposal Available @ www.contracts.dot.state.oh.us/home
Dist 5 1/9/2014

P:\GUE\92254\Design\Roadway\Plans\Sheets\General\92254_MTS_001.dgn

UTILITIES

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

AMERICAN ELECTRIC POWER CO.
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
ATTN: PAUL PAXTON
614-883-6831

TIME WARNER CABLE
3760 INTERCHANGE DR.
COLUMBUS, OHIO 43204
ATTN: TERRY ALLEN
614-255-6349

COLUMBIA GAS TRANSMISSION
589 NORTH STATE ROAD
MEDINA, OHIO 44256
ATTN: RUSS JOHNSON
330-721-4163

WINDSTREAM COMMUNICATIONS
32699 OLD NATIONAL RD.
BARNSVILLE, OHIO 43713
ATTN: GREG KUHNASH
740-758-5819

QUAKER CITY WATER DEPARTMENT
305 SMITH AVENUE
QUAKER CITY, OHIO 43773
ATTN: PATRICK TRACY
740-679-2671

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

SURVEYING PARAMETERS

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

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(2011)
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

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

THE CONTRACTOR WILL 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. 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.STATE.OH.US

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT BRIAN.BOSCH@DOT.STATE.OH.US

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

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.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. THE CONTRACTOR SHALL DOCUMENT ALL OF THE EXISTING PAVEMENT MARKING LOCATIONS THAT WILL BE REMOVED/OBLITERATED DURING THIS PROJECT. THE CONTRACTOR SHALL PLACE NEW PAVEMENT MARKINGS AT THE LOCATION OF THE EXISTING MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS. THE METHOD OF DOCUMENTATION SHALL BE APPROVED BY THE ENGINEER IN ORDER TO PROVIDE AN ACCEPTABLE TOLERANCE BETWEEN THE EXISTING AND PROPOSED PAVMENT MARKINGS.

ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

ITEM 253 PAVEMENT REPAIR

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO ANY PLANING OPERATIONS OR PLACING OF CHIP SEAL COURSE. 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 7". THE MINIMUM WIDTH SHALL BE 4 FT. AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED IN TWO LIFTS).

REPAIR QUANTITIES MAY BE USED ON THE MAINLINE PAVEMENT OR ON PAVED SHOULDERS. ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMAR-IES FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR
LOCATION 1 – 2,500 CU.YD.
LOCATION 2 – 500 CU.YD.

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING ON S.R. 513 IN QUAKER CITY SHALL BE 3.0" AS SHOWN ON THE ASPHALT CONCRETE DATA SHEET. PLANING SHALL BE FULL WIDTH OF PAVEMENT, INCLUDING ANY PAVED SHOULDERS.

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.

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.

MINIMUM LENGTH FOR ASPHALT WEDGE AT BUTT JOINTS SHALL BE 10'.

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD.
1	S.R. 513	BEGIN WORK	0.00	0.7
1	S.R. 513	BRIDGE: GUE-513-0180	1.80	2.0
1	S.R. 513	BRIDGE: GUE-513-0620	6.20	1.4
1	S.R. 513	BRIDGE: GUE-513-0871	8.71	1.4
1	S.R. 513	END WORK AT U.S. 22	14.81	0.7
1	**S.R. 513**	**TOTAL**		**6.2**
2	S.R. 761	BEGIN WORK	0.00	0.7
2	S.R. 761	BRIDGE: GUE-761-0221	2.21	1.4
2	S.R. 761	END WORK AT S.R. 265	2.44	0.7
2	**S.R. 761**	**TOTAL**		**2.8**

ITEM 202 WEARING COURSE REMOVED (FOR BEGIN/END BUTT JOINTS)
LOCATION 1 – 428 SQ.YD.
LOCATION 2 – 428 SQ.YD.

THE GRINDING FOR BUTT JOINTS SHALL BE INCLUDED WITH ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE WHERE APPLICABLE.

SR 513 FULL DEPTH SHOULDER QUANTITIES

THE FOLLOWING QUANTITIES ARE FOR INSTALLATION OF A FULL DEPTH SHOULDER ON SR 513 FROM STA. 6+50 TO STA. 7+56.75 RT. (SEE SR 513 PLAN & CROSS SECTION SHEETS FOR DETAILS):

LOCATION 3
ITEM 203, EXCAVATION..... 20 CU. YD.
ITEM 204, SUBGRADE COMPACTION..... 70 SQ.YD.
ITEM 301, 9" ASPHALT CONCRETE BASE, PG64-22..... 20 CU.YD.

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

CALCULATED LME CHECKED DNM

GENERAL NOTES

GUE-513-0.00
GUE-761-0.00

CALCULATED LME CHECKED DNM

GENERAL NOTES

ITEM 304, AGGREGATE BASE, AS PER PLAN

IN AREAS OF PROPOSED CURB PLACEMENT ADJACENT TO EXISTING GRAVEL DRIVES, AGGREGATE BASE SHALL BE PLACED A MINIMUM OF THREE FEET BEHIND THE PROPOSED CURB. SEE SR 513 CROSS SECTION SHEETS FOR APPROXIMATE LIMITS.

PAYMENT FOR ITEM 304, AGGREGATE BASE, AS PER PLAN, SHALL BE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF AGGREGATE BASE PLACED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY:

ITEM 304, AGGREGATE BASE, AS PER PLAN..... 20 CU.YD.

ITEM 407 TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 422 SINGLE CHIP SEAL, AS PER PLAN

THE CONTRACTOR IS REQUIRED TO HAVE A ONE DAY WAITING PERIOD BETWEEN THE TIME THE INTERLAYER CHIP SEAL IS PLACED AND THE OVERLAYING ASPHALT CONCRETE COURSES ARE PLACED. AFTER THE ONE DAY WAITING PERIOD, THE CONTRACTOR HAS A MAXIMUM OF FOUR DAYS TO COVER UP THE CHIP SEAL.

THE CONTRACTOR SHALL NOT BE REQUIRED TO REMOVE EXISTING PAVEMENT MARKING BEFORE PLACING CHIP SEAL INTERLAYER.

ITEM 408 PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. 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.

THE FOLLOWING QUANTITIES OF PRIME COAT, AS PER PLAN HAVE BEEN CARRIED TO THE SUB-SUMMARIES AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408 PRIME COAT, AS PER PLAN
LOCATION 1 –33,946 SQ.YD. X 0.40 GAL./SQ YD = 13,579 GAL
LOCATION 2 –5,727 SQ.YD. X 0.40 GAL./SQ YD = 2,291 GAL

ITEM 608, 4" CONCRETE WALK, AS PER PLAN

THIS ITEM SHALL BE USED TO INSTALL CONCRETE WALK ON SR 513 AT STA. 6+40 RT. THIS ITEM SHALL INCLUDE ANY EMBANKMENT, COMPACTION, AND GRADING NEEDED TO TIE THE PROPOSED WALK INTO THE EXISTING WALK AND MATCH TOP OF PROPOSED CURB. SEE SR 513 PLAN & CROSS SECTION SHEETS FOR DETAILS.

PAYMENT FOR ITEM 608, 4" CONCRETE WALK, AS PER PLAN, SHALL BE AT THE CONTRACT UNIT PRICE PER SQUARE FOOT OF WALK PLACED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

ITEM 609, CURB, TYPE 6, AS PER PLAN

IN AREAS OF CURB PLACEMENT ADJACENT TO THE EXISTING ROADWAY, THE CONTRACTOR SHALL SAW CUT THE PAVEMENT TO PROVIDE A NEAT JOINT, AS DESCRIBED IN 202.05.

LOW STRENGTH MORTAR SHALL BE USED TO BACKFILL VOIDS CREATED BETWEEN PROPOSED CURB AND EXISTING ROADWAY. LOW STRENGTH MORTAR SHALL BE CONSTRUCTED UP TO THE EXISTING PAVEMENT SURFACE, MATCHING THE EXISTING CROSS SLOPE. THE BACKFILL ON THE BACKSIDE OF THE CURB WILL BE COVERED UNDER TOP SOIL OR AGGREGATE BASE.

ALL OF THE MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS INCLUDING THE SAW CUT AND LOW STRENGTH MORTAR NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 609, CURB, TYPE 6, AS PER PLAN.

ITEM 613, LOW STRENGTH MORTAR BACKFILL, AS PER PLAN

THIS ITEM SHALL BE USED FOR PAVEMENT RESTORATION FOLLOWING STORM SEWER AND WATER LINE INSTALLATION. THIS ITEM COVERS LOW STRENGTH MORTAR BACKFILL FROM 6" ABOVE THE TOP OF PIPE UP TO THE EXISTING PAVEMENT SURFACE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY:

ITEM 613, LOW STRENGTH MORTAR BACKFILL, AS PER PLAN.... 650 CU.YD.

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 PLASTICITY INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

ITEM 621 RAISED PAVEMENT MARKER REMOVED

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 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING TOPSOIL BEHIND PROPOSED CURB THROUGHOUT THE PROJECT LIMITS (EXCEPT WHERE AGGREGATE BASE CAN BE PLACED). SEE SR 513 CROSS SECTION SHEETS FOR APPROXIMATE LIMITS. THE CONTRACTOR SHALL BE REQUIRED TO SEED AND MULCH THE TOPSOIL PER CMS 659.

PAYMENT FOR ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN, SHALL BE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL FURNISHED AND PLACED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY:

ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN..... 50 CU.YD.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY AND SHALL BE APPLIED TO ALL DISTURBED EARTH DUE TO CURB INSTALLATION:

ITEM 659, SEEDING AND MULCHING ..... 500 SQ.YD.
ITEM 659, COMMERCIAL FERTILIZER..... 0.07 TON
ITEM 659, WATER..... 3 M. GAL.

RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 448 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 AN AVERAGE OF 6' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT), WITH THE MAXIMUM DISTANCE TO BE DIRECTED BY THE ENGINEER, IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED.

THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. ALL REMOVAL, WHETHER IN ASPHALT OR GRAVEL DRIVES, FOR BUTT JOINTS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 202 WEARING COURSE REMOVED. 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.

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

ITEM 202 WEARING COURSE REMOVED
LOCATION 1 – 184 SQ.YD.
LOCATION 2 – 30 SQ.YD.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1 – 29 CU.YD.
LOCATION 2 – 5 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 – 36 CU.YD.
LOCATION 2 – 6 CU.YD.

LOCATION 3
ITEM 452, 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1
SR 513 (STA. 6+32.26 LT.) – 17 SQ.YD.
SR 513 (STA. 11+28.78 RT.) – 23 SQ.YD.
ITEM 203, EXCAVATION
SR 513 (STA. 6+32.26 LT.) – 3 CU. YD.
SR 513 (STA. 11+28.78 RT.) – 4 CU. YD.

GUE-513-0.00
GUE-761-0.00

92254_MGN_002.DGN 8-21-13

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 TUENOUTRS 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 CARRIED TO THE SUB-SUMMARIES TO PROVIDE EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 – 216 CU.YD.
LOCATION 2 – 36 CU.YD.

ITEM 516 2" DEEP JOINT SEALER, AS PER PLAN

THE CONTRACTOR SHALL PLACE A 1" X 2.0" 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 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE

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

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

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

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

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

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

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

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

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

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
LOCATION 1 – 160 HOURS
LOCATION 2 – 40 HOURS

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 THE DETAIL IN DRAWING BP-4.1. 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 SUB-SUMMARIE FOR THE ABOVE PURPOSES.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 15 CU.YD.
LOCATION 2 - 3 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 - 19 CU.YD.
LOCATION 2 - 4 CU.YD.

DROPOFFS IN WORK ZONES

DROPOFFS 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.

CALCULATED LME
CHECKED DNM

GENERAL NOTES

GUE-513-0.00
GUE-761-0.00

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.

CROSSINGS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

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

UNRECORDED STORM WATER DRAINAGE

FURNISH A CONTINUANCE FOR ALL UNRECORDED 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.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

LOCATION 3
ITEM 611, 4" CONDUIT, TYPE E..... 50 FT

EXISTING PIPE CONNECTIONS

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY FOR DRAINAGE CONNECTIONS BETWEEN EXISTING PIPES AND PROPOSED DRAINAGE STRUCTURES:

LOCATION 3
ITEM 611, 24" CONDUIT, TYPE B..... 20 FT
ITEM 611, 30" CONDUIT, TYPE B..... 10 FT
ITEM 611, 10" CONDUIT, TYPE C..... 10 FT
ITEM 611, 15" CONDUIT, TYPE C..... 10 FT
ITEM 611, 21" CONDUIT, TYPE C..... 10 FT

ITEM 611 CATCH BASIN/ MANHOLE/ INLET ADJUSTED TO GRADE
ITEM 638 VALVE BOX ADJUSTED TO GRADE

THESE ITEMS SHALL BE USED TO ADJUST CATCH BASINS, MANHOLES, INLETS AND WATER VALVE BOXES LOCATED THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW.

ANY GAS VALVE BOXES AND TELEPHONE COMPANY MANHOLES ON THIS PROJECT SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE OWNERS.

ITEM 611 – CATCH BASIN ADJUSTED TO GRADE –
LOCATION - 1 EACH

ITEM 611 –INLET ADJUSTED TO GRADE –
LOCATION 1 - 5 EACH

ITEM 611 – MANHOLE ADJUSTED TO GRADE –
LOCATION 1 - 1 EACH

ITEM 638 – VALVE BOX ADJUSTED TO GRADE –
LOCATION 1 - 6 EACH

ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING CONDUITS 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 SPECIAL, PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

CALCULATED LME CHECKED DNM

GENERAL NOTES

GUE-513-0.00
GUE-761-0.00

92254_MGN_004.DGN 8-21-13

ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON SR 513 AND SR 761 BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING MT-97.10 OR MT-97.12. MAINTAIN ALL DRIVE ACCESSES DURING THE RECONSTRUCTION OF THE APPROACH SLAB OF BRIDGE GUE-513-0180.

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.

ALL LANES OF TRAFFIC ON S.R. 265 AND S.R. 513 IN QUAKER CITY SHALL OPEN TO TRAFFIC AND NO WORK SHALL BE PERMITTED ON THESE ROUTES DURING THE OHIO HILLS FOLK FESTIVAL THAT IS HELD IN QUAKER CITY DURING THE MONTH OF JULY.

TRAFFIC SHALL NOT BE MAINTAINED ON THE PLANED SURFACE IN QUAKER CITY, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC.

ONLY ITEM 614 WORK ZONE CENTER LINE, CLASS II HAS BEEN ITEMIZED IN THE PLAN. ALL OTHER WORK ZONE PAVEMENT MARKINGS NECESSARY SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER FOR THE RESURFACING AND STORM SEWER INSTALLATION. **LENGTH AND DURATION OF LANE CLOSURES, FOR EACH PHASE OF APPROACH SLAB REPALCEMENT FOR BRIDGE GUE-513-0180, SHALL BE FROM 7:00 AM TO 7:00 AM THE FOLLOWING MORNING. IF THE CONTRACTOR FAILS TO OPEN LANES TO TRAFFIC BY THE TIMES REQUIRED, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE OF $2000 PER EVERY HOUR THAT THE LANE REMAINS CLOSED.**

THE CONTRACTOR IS TO HAVE ALL WORK DONE ON THE APPROACH SLAB BEFORE ANY OF THE RESURFACING ADJACENT TO THE BRIDGE TAKES PLACE.

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,AS PER PLAN UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN LICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., 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. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

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, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING 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.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (cont'd)

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 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.

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 2 PCMS SHALL BE REQUIRED FOR THIS PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO SUB-SUMMARY:

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN LOCATION 1 – 4 SIGN MNTH

ITEM 614, WORK ZONE MARKING SIGN

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITIES OF WORK ZONE MARKING SIGN HAVE BEEN CARRIED TO THE SUB-SUMMARIES TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES): LOCATION 1 - 45 EACH, LOCATION 2 - 6 EACH

R4-1 (DO NOT PASS): LOCATION 1- 50 EACH, LOCATION 2 – 6 EACH

R4-2 (PASS WITH CARE): LOCATION 1 -11 EACH

ITEM 614, WORK ZONE MARKING SIGN

LOCATION 1 - 106 EACH
LOCATION 2 - 12 EACH

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. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

CALCULATED LME CHECKED DNM

GENERAL NOTES

GUE-513-0.00
GUE-761-0.00

LOCATION TOTALS			FUNDING PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1 01/STR/PV	LOCATION 2 02/NFA/PV	LOCATION 3 05/STR/OT	01/STR/PV	02/NFA/PV	03/STR/OT	04/NFA/OT	05/STR/OT						
												ROADWAY	
15,183	1,434		15,183	1,434				202	23500	16,617	SQ YD	WEARING COURSE REMOVED	
234		60	234				60	202	30000	294	SQ FT	WALK REMOVED	
20		165	20				165	202	32000	185	FT	CURB REMOVED	
		165					165	202	35100	165	FT	PIPE REMOVED, 24" AND UNDER	
		145					145	202	35200	145	FT	PIPE REMOVED, OVER 24"	
		1					1	202	58000	1	EACH	MANHOLE REMOVED	
		2					2	202	58100	2	EACH	CATCH BASIN REMOVED	
		2					2	202	58500	2	EACH	CATCH BASIN ABANDONED	
		41					41	202	70000	41	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT	
		870					870	202	70100	870	FT	SPECIAL - PIPE CLEANOUT	
		27					27	203	10000	27	CU YD	EXCAVATION	
		70					70	204	10000	70	SQ YD	SUBGRADE COMPACTION	
29.12	4.88		29.12	4.88				209	72051	34.00	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	2
254			254					608	10000	254	SQ FT	4" CONCRETE WALK	
		65					65	608	10001	65	SQ FT	4" CONCRETE WALK, AS PER PLAN	3
1			1					690	98000	1	EACH	SPECIAL - MISC.: CURB RAMP, TYPE C2	
24			24					690	98200	24	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING	
		50					50	653	10001	50	CU YD	TOPSOIL FURNISHED AND PLACED, AS PER PLAN	3
												EROSION CONTROL	
		500					500.00	659	10000	500	SQ YD	SEEDING AND MULCHING	
		0.07					0.07	659	20000	0.07	TON	COMMERCIAL FERTILIZER	
		3					3.00	659	35000	3	M GAL	WATER	
		1,000					1,000	832	30000	1,000	EACH	EROSION CONTROL	
												DRAINAGE	
		1					1	602	20000	1	CU YD	CONCRETE MASONRY	
		50					50	611	00400	50	FT	4" CONDUIT, TYPE E	
		10					10	611	03300	10	FT	10" CONDUIT, TYPE C	
		139					139	611	04400	139	FT	12" CONDUIT, TYPE B	
		10					10	611	06100	10	FT	15" CONDUIT, TYPE C	
		89					89	611	07400	89	FT	18" CONDUIT, TYPE B	
		10					10	611	09100	10	FT	21" CONDUIT, TYPE C	
		310					310	611	10400	310	FT	24" CONDUIT, TYPE B	
		185					185	611	13400	185	FT	30" CONDUIT, TYPE B	
		537					537	611	16400	537	FT	36" CONDUIT, TYPE B	
		5					5	611	98150	5	EACH	CATCH BASIN, NO. 3	
		5					5	611	98180	5	EACH	CATCH BASIN, NO. 3A	
		1					1	611	98510	1	EACH	CATCH BASIN, NO. 2-3	
1			1					611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
5			5					611	99150	5	EACH	INLET ADJUSTED TO GRADE	
		1					1	611	99550	1	EACH	MANHOLE, NO. 1	
		11					11	611	99574	11	EACH	MANHOLE, NO. 3	
1			1					611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE	
		650					650	613	41201	650	CU YD	LOW STRENGTH MORTAR BACKFILL, AS PER PLAN	3
												PAVEMENT	
2,500	500		2,500	500				253	02000	3,000	CU YD	PAVEMENT REPAIR	
4,906			4,906					254	01000	4,906	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
		20					20	301	46000	20	CU YD	ASPHALT CONCRETE BASE, PG64-22	

CALCULATED LME CHECKED DNM

GENERAL SUMMARY

GUE-513-0.00
GUE-761-0.00

92254_MGS_001.DGN 9-27-13

LOCATION TOTALS			FUNDING PARTICIPATION					ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1 01/STR/PV	LOCATION 2 02/NFA/PV	LOCATION 3 05/STR/PV	01/STR/PV	02/NFA/PV	03/STR/OT	04/NFA/OT	05/STR/PV						
												PAVEMENT	
		20					20	304	20001	20	CU YD	AGGREGATE BASE, AS PER PLAN	3
13,932	2,264		13,932	2,264				407	10000	16,196	GALLON	TACK COAT	
9,280	1,502		9,280	1,502				407	14000	10,782	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
13,579	2,291		13,579	2,291				408	10001	15,870	GALLON	PRIME COAT, AS PER PLAN	3
169,594	29,751		169,594	29,751				422	10001	199,345	SQ YD	SINGLE CHIP SEAL, AS PER PLAN	3
5,301	843		5,301	843				448	46020	6,144	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	
6,422	1,088		6,422	1,088				448	46904	7,510	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	
355	10		355	10				448	47020	365	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
		40					40	452	10010	40	SQ YD	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1	
25			25					609	26000	25	FT	CURB, TYPE 6	
		1,165					1,165	609	26001	1,165	FT	CURB, TYPE 6, AS PER PLAN	3
2,829	478		2,829	478				617	10101	3,307	CU YD	COMPACTED AGGREGATE, AS PER PLAN	3
34,172	5,726		34,172	5,726				617	20000	39,898	SQ YD	SHOULDER PREPARATION	
												WATER WORK	
		150					150	638	01050	150	FT	6" WATER MAIN POLYVINYL CHLORIDE PIPE AND FITTINGS, AWWA CLASS 100	
		300					300	638	05300	300	FT	3/4" POLYETHYLENE SERVICE BRANCH	
		1					1	638	10500	1	EACH	FIRE HYDRANT REMOVED AND RESET	
6			6					638	10800	6	EACH	VALVE BOX ADJUSTED TO GRADE	
												TRAFFIC CONTROL	
1,840	289				1,840	289		621	00100	2,129	EACH	RPM	
1,840	289				1,840	289		621	54000	2,129	EACH	RAISED PAVEMENT MARKER REMOVED	
813	61				813	61		644	00500	874	FT	STOP LINE	
244					244			644	00600	244	FT	CROSSWALK LINE	
29.62	4.88				29.62	4.88		648	00100	34.50	MILE	EDGE LINE, 4"	
14.81	2.44				14.81	2.44		648	00300	17.25	MILE	CENTER LINE	
												STRUCTURES	
49			49					202	22901	49	SQ YD	APPROACH SLAB REMOVED, AS PER PLAN	62
38			38					510	10001	38	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	62
120			120					512	33010	120	SQ YD	TYPE 3 WATERPROOFING	
34			34					516	31001	34	FT	JOINT SEALER, AS PER PLAN	62
148	42		148	42				516	31011	190	FT	2" DEEP JOINT SEALER, AS PER PLAN	4
72			72					518	22300	72	FT	SPECIAL - STEEL DRIP STRIP	
49			49					526	10001	49	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN	62
												MAINTENANCE OF TRAFFIC	
160	40.0		160	40				614	11110	200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
106	12.0		106	12				614	12460	118	EACH	WORK ZONE MARKING SIGN	
7	3		7	3				614	13000	10	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
4			4					614	18601	4	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
29.58	4.84				29.58	4.84		614	21400	34.42	MILE	WORK ZONE CENTER LINE, CLASS II	
			86%	14%				103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
			86%	14%				614	11001	LUMP		MAINTAINING TRAFFIC, AS PER PLAN	6
			86%	14%				619	16000	4	MONTH	FIELD OFFICE, TYPE A	
			86%	14%				623	10000	LUMP		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
			86%	14%				624	10000	LUMP		MOBILIZATION	

CALCULATED LME CHECKED DNM

GENERAL SUMMARY

GUE-513-0.00
GUE-761-0.00

LOCATION 1 SHEET TOTALS									ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	13	14	15	16	19					
													ROADWAY
428	184					9,901	4,670		202	23500	15,183	SQ YD	WEARING COURSE REMOVED
								234	202	30000	234	SQ FT	WALK REMOVED
								20	202	32000	20	FT	CURB REMOVED
					29.12				209	72051	29.12	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
								254	608	10000	254	SQ FT	4" CONCRETE WALK
								1	690	98000	1	EACH	SPECIAL - MISC.: CURB RAMP. TYPE C2
								24	690	98200	24	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING
													DRAINAGE
			1						611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE
			5						611	99150	5	EACH	INLET ADJUSTED TO GRADE
			1						611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE
													PAVEMENT
2,500									253	02000	2,500	CU YD	PAVEMENT REPAIR
				4,002	904				254	01000	4,906	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
				13,085	68	745	34		407	10000	13,932	GALLON	TACK COAT
				8,724	46	497	13		407	14000	9,280	GALLON	TACK COAT FOR INTERMEDIATE COURSE
	13,579								408	10001	13,579	GALLON	PRIME COAT, AS PER PLAN
				169,594					422	10001	169,594	SQ YD	SINGLE CHIP SEAL, AS PER PLAN
	29	15		4,902	40	295	20		448	46020	5,301	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
	36	235		6,086	39		26		448	46904	6,422	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
						355			448	47020	355	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
								25	609	26000	25	FT	CURB, TYPE 6
					2,829				617	10101	2,829	CU YD	COMPACTED AGGREGATE, AS PER PLAN
					34,172				617	20000	34,172	SQ YD	SHOULDER PREPARATION
													WATER WORK
			6						638	10800	6	EACH	VALVE BOX ADJUSTED TO GRADE

CALCULATED LME
CHECKED DNM

LOCATION 1 SUB-SUMMARY

GUE-513-0.00
GUE-761-0.00

92254_LSS_001.DGN 9-27-13

LOCATION 1 SHEET TOTALS									ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	4	6	13	16	20	21	24	63					
													TRAFFIC CONTROL
							1,840		621	00100	1,840	EACH	RPM
							1,840		621	54000	1,840	EACH	RAISED PAVEMENT MARKER REMOVED
						813			644	00500	813	FT	STOP LINE
						244			644	00600	244	FT	CROSSWALK LINE
					29.62				648	00100	29.62	MILE	EDGE LINE, 4"
					14.81				648	00300	14.81	MILE	CENTER LINE
													STRUCTURES
								49	202	22901	49	SQ YD	APPROACH SLAB REMOVED, AS PER PLAN
								38	510	10001	38	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN
				120					512	33010	120	SQ YD	TYPE 3 WATERPROOFING
								34	516	31001	34	FT	JOINT SEALER, AS PER PLAN
				148					516	31011	148	FT	2" DEEP JOINT SEALER, AS PER PLAN
				72					518	22300	72	FT	SPECIAL - STEEL DRIP STRIP
								49	526	10001	49	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN
													MAINTENANCE OF TRAFFIC
	160								614	11110	160	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
		106							614	12460	106	EACH	WORK ZONE MARKING SIGN
7									614	13000	7	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
		4							614	18601	4	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
			29.58						614	21400	29.58	MILE	WORK ZONE CENTER LINE, CLASS II

CALCULATED LME CHECKED DNM

LOCATION 1 SUB-SUMMARY

GUE-513-0.00
GUE-761-0.00

92254_LSS_001B.DGN 9-27-13

LOCATION 2 SHEET TOTALS											ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	6	13	14	15	16	20	21	25					
															ROADWAY
428	30					276	700				202	23500	1,434	SQ YD	WEARING COURSE REMOVED
					4.88						209	72051	4.88	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
															PAVEMENT
500											253	02000	500	CU YD	PAVEMENT REPAIR
				2,232		21	11				407	10000	2,264	GALLON	TACK COAT
				1,488		14					407	14000	1,502	GALLON	TACK COAT FOR INTERMEDIATE COURSE
	2,291										408	10001	2,291	GALLON	PRIME COAT, AS PER PLAN
				29,751							422	10001	29,751	SQ YD	SINGLE CHIP SEAL, AS PER PLAN
	5	3		827		8					448	46020	843	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
	6	40		1,033			9				448	46904	1,088	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
						10					448	47020	10	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
					478						617	10101	478	CU YD	COMPACTED AGGREGATE, AS PER PLAN
					5,726						617	20000	5,726	SQ YD	SHOULDER PREPARATION
															TRAFFIC CONTROL
										289	621	00100	289	EACH	RPM
										289	621	54000	289	EACH	RAISED PAVEMENT MARKER REMOVED
									61		644	00500	61	FT	STOP LINE
								4.88			648	00100	4.88	MILE	EDGE LINE, 4"
								2.44			648	00300	2.44	MILE	CENTER LINE
															STRUCTURES
							42				516	31011	42	FT	2" DEEP JOINT SEALER, AS PER PLAN
															MAINTENANCE OF TRAFFIC
		40									614	11110	40	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			12								614	12460	12	EACH	WORK ZONE MARKING SIGN
3											614	13000	3	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				4.84							614	21400	4.84	MILE	WORK ZONE CENTER LINE, CLASS II

CALCULATED LME
CHECKED DNM

LOCATION 2 SUB-SUMMARY

GUE-513-0.00
GUE-761-0.00

92254_LSS_002.DGN 9-27-13

LOCATION 3 SHEET TOTALS							ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	5	17	18	28						
											ROADWAY
			60				202	30000	60	SQ FT	WALK REMOVED
			165				202	32000	165	FT	CURB REMOVED
				165			202	35100	165	FT	PIPE REMOVED, 24" AND UNDER
				145			202	35200	145	FT	PIPE REMOVED, OVER 24"
				1			202	58000	1	EACH	MANHOLE REMOVED
				2			202	58100	2	EACH	CATCH BASIN REMOVED
				2			202	58500	2	EACH	CATCH BASIN ABANDONED
				41			202	70000	41	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT
				870			202	70100	870	FT	SPECIAL - PIPE CLEANOUT
20	7						203	10000	27	CU YD	EXCAVATION
70							204	10000	70	SQ YD	SUBGRADE COMPACTION
			65				608	10001	65	SQ FT	4" CONCRETE WALK, AS PER PLAN
	50						653	10001	50	CU YD	TOPSOIL FURNISHED AND PLACED, AS PER PLAN
											EROSION CONTROL
	500						659	10000	500	SQ YD	SEEDING AND MULCHING
	0.07						659	20000	0.07	TON	COMMERCIAL FERTILIZER
	3						659	35000	3	M GAL	WATER
							832	30000	1,000	EACH	EROSION CONTROL
											DRAINAGE
				1			602	20000	1	CU YD	CONCRETE MASONRY
		50					611	00400	50	FT	4" CONDUIT, TYPE E
		10					611	03300	10	FT	10" CONDUIT, TYPE C
				139			611	04400	139	FT	12" CONDUIT, TYPE B
		10					611	06100	10	FT	15" CONDUIT, TYPE C
				89			611	07400	89	FT	18" CONDUIT, TYPE B
		10					611	09100	10	FT	21" CONDUIT, TYPE C
		20		290			611	10400	310	FT	24" CONDUIT, TYPE B
		10		175			611	13400	185	FT	30" CONDUIT, TYPE B
				537			611	16400	537	FT	36" CONDUIT, TYPE B
				5			611	98150	5	EACH	CATCH BASIN, NO. 3
				5			611	98180	5	EACH	CATCH BASIN, NO. 3A
				1			611	98510	1	EACH	CATCH BASIN, NO. 2-3
				1			611	99550	1	EACH	MANHOLE, NO. 1
				11			611	99574	11	EACH	MANHOLE, NO. 3
	650						613	41201	650	CU YD	LOW STRENGTH MORTAR BACKFILL, AS PER PLAN
											PAVEMENT
20							301	46000	20	CU YD	ASPHALT CONCRETE BASE, PG64-22
	20						304	20001	20	CU YD	AGGREGATE BASE, AS PER PLAN
	40						452	10010	40	SQ YD	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1
			1,165				609	26001	1,165	FT	CURB, TYPE 6, AS PER PLAN
											WATER WORK
					150		638	01050	150	FT	6" WATER MAIN POLYVINYL CHLORIDE PIPE AND FITTINGS, AWWA CLASS 100
					300		638	05300	300	FT	3/4" POLYETHYLENE SERVICE BRANCH
					1		638	10500	1	EACH	FIRE HYDRANT REMOVED AND RESET

CALCULATED LME CHECKED DNM

LOCATION 3 SUB-SUMMARY

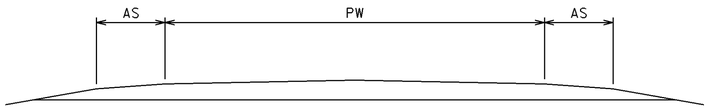
GUE-513-0.00
GUE-761-0.00

92254_LSS_003.DGN 10-7-13

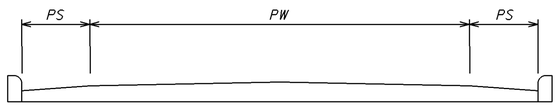
SEE SHEET 26 FOR STRAIGHT LINE DIAGRAM

PW = PAVEMENT WIDTH
PS = PAVED SHOULDER
AS = AGGREGATE SHOULDER

TYPICAL 1



TYPICAL 2



PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	PAVEMENT AREA	254		407		422	448 ASPHALT CONCRETE				614
					MILES	LIN. FT.				THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	SINGLE CHIP SEAL	THICKNESS	INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	SURFACE COURSE, TYPE 1, PG 70-22M	WORK ZONE CENTER LINE, CLASS II
									SQ. YD.	INCHES	SQ. YD.	GAL.	GAL.	SQ. YD.	INCHES	CU. YD.	INCHES	CU. YD.	MILE
1	GUE	S.R. 513	0.00	1.74	1.74	9,187.2	22.0 AVG	1	22,457.6			1,684.3	1,122.9	22,457.6	1.00	623.8	1.25	779.8	3.48
1	GUE	S.R. 513	1.74	1.84	0.10	528.0	22.0 AVG	2	1,290.7	3.00	1,290.7	96.8	64.5		1.50	53.8	1.50	53.8	0.20
1	GUE	S.R. 513	1.84	2.05	0.21	1,108.8	22.0 AVG	1 & 2	2,710.4	3.00	2,710.4	203.3	135.5		1.50	112.9	1.50	113.0	0.42
1	GUE	S.R. 513	2.05	14.81	12.76	67,372.8	20.0 AVG	1	149,717.3			11,228.8	7,485.9	149,717.3	1.00	4158.8	1.25	5,198.6	25.52
BRIDGE DEDUCTIONS									(1,712.9)			(128.5)	(85.6)	(2,581.0)	1.00	(47.5)	1.25	(59.5)	(0.04)
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											**4,001.1**	**13,084.7**	**8,723.2**	**169,593.9**		**4,901.8**		**6,085.7**	**29.58**
2	GUE	S.R. 761	0.00	2.44	2.44	12,883.2	21.0 AVG	1	30,060.8			2,254.6	1,503.0	30,060.8	1.00	835.1	1.25	1,043.8	4.88
BRIDGE DEDUCTIONS									(310.3)			(23.3)	(15.5)	(310.3)	1.00	(8.6)	1.25	(10.8)	(0.04)
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)												**2,231.3**	**1,487.5**	**29,750.5**		**826.5**		**1,033.0**	**4.84**

CALCULATED LME CHECKED DNM

ASPHALT CONCRETE DATA

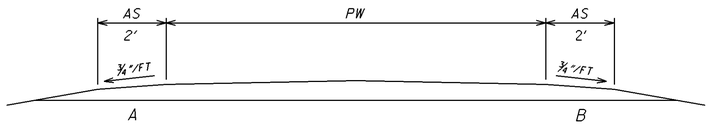
GUE-513-0.00
GUE-761-0.00

92254_MAC_001.DGN 8-21-13

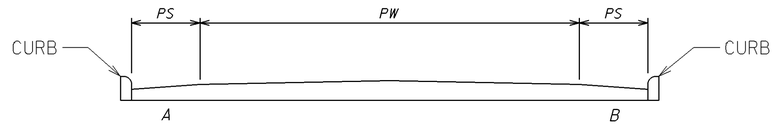
PW = PAVEMENT WIDTH
PS = PAVED SHOULDER
AS = AGGREGATE SHOULDER

CALCULATED LME
CHECKED DNM

TYPICAL 1



TYPICAL 2

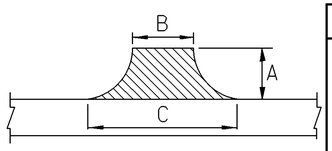


SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)		SHOULDER AREA	209	254		407		422	448 ASPHALT CONCRETE				617		
					MILES	LIN. FT.		A	B		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	SINGLE CHIP SEAL	THICKNESS	INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	SURFACE COURSE, TYPE 1, PG 70-22M	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH)	SHOULDER PREPARATION
										SQ. YD.	MILE	INCHES	SQ. YD.	GAL.	GAL.	SQ. YD.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.
1	GUE	S.R. 513	0.00	1.76	1.76	9292.8	1	2	2	4,130.1	3.52										3.00	344.2	4,130.1
1	GUE	S.R. 513	1.76	1.84	0.08	422.4	2	2	10	563.2		3.00	563.2	42.2	28.2		1.50	23.5	1.50	23.5			
1	GUE	S.R. 513	1.84	1.95	0.11	580.8	2	3	3	387.2		3.00	387.2	29.0	19.4		1.50	16.1	1.50	16.1			
1	GUE	S.R. 513	1.95	1.98	0.03	158.4	2	2	2	70.4		3.00	70.4	5.3	3.5		1.50	2.9	1.50	2.9			
1	GUE	S.R. 513	1.98	14.81	12.83	67742.4	1	2	2	30,107.7	25.66										3.00	2,509.0	30,107.7
BRIDGE DEDUCTIONS										(117.3)	(0.06)		(117.3)	(8.8)	(5.9)		1.00	(3.3)	1.25	(4.1)	3.00	(24.4)	(66.7)
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											**29.12**		**903.5**	**67.7**	**45.2**			**39.2**		**38.4**		**2,828.8**	**34,171.1**
2	GUE	S.R. 761	0.00	2.44	2.44	12883.2	1	2	2	5,725.9	4.88										3.00	477.2	5,725.9
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)											**4.88**											**477.2**	**5,725.9**

92254_MPS_001.DGN 8-21-13

GUE-513-0.00
GUE-761-0.00



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

EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DETAIL DIMENSION A	B	C	AREA	202 WEARING COURSE REMOVED	407 TACK COAT @ 0.075 GAL./S.Y.	407 TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	448 ASPHALT CONCRETE THICKNESS	INTERMEDIATE COURSE, TYPE 1, PG 64-22	448 ASPHALT CONCRETE THICKNESS	SURFACE COURSE, TYPE 1, PG 64-22
					FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	GAL.	IN.	CU. YD.	IN.	CU. YD.
1	GUE	S.R. 513	RT.	HOLLANDER RD. (TWP. RD. 498)	90	20		100.0	100.0	7.5	5.0	1.00	2.8	1.25	3.5
1	GUE	S.R. 513	LT.	RIGEL RD. (Twp Rd 9434)	100	16		88.9	88.9	6.7	4.5	1.00	2.5	1.25	3.1
1	GUE	S.R. 513	RT.	FAIR ST.	50	24	125	413.9	413.9	31.1	20.7	1.50	17.3	1.50	17.3
1	GUE	S.R. 513	LT.	SR 265	200	24		533.4	533.4	40.1	26.7	1.50	22.3	1.50	22.3
1	GUE	S.R. 513	RT.	SR 265	15	22	46	56.7	56.7	4.3	2.9	1.50	2.4	1.50	2.4
1	GUE	S.R. 513	LT.	ALLEY	15	10	15	20.9	20.9	1.6	1.1	1.50	0.9	1.50	0.9
1	GUE	S.R. 513	RT.	ALLEY	15	10	15	20.9	20.9	1.6	1.1	1.50	0.9	1.50	0.9
1	GUE	S.R. 513	LT.	MAIN ST.	25	19	56	104.2	104.2	7.9	5.3	1.50	4.4	1.50	4.4
1	GUE	S.R. 513	RT.	MAIN ST.	30	20	56	126.7	126.7	9.6	6.4	1.50	5.3	1.50	5.3
1	GUE	S.R. 513	RT.	WILLOW LN.	25	16	58	102.8	102.8	7.8	5.2	1.00	2.9	1.25	3.6
1	GUE	S.R. 513	LT.	McBURNEY RD. (TWP. 943)	132	20	134	1,129.4	1,129.4	84.8	56.5	1.00	31.4	1.25	39.3
1	GUE	S.R. 513	LT.	McBURNEY RD. (TWP. 943)	50	20	54	205.6	205.6	15.5	10.3	1.00	5.8	1.25	7.2
1	GUE	S.R. 513	RT.	IPSWITCH RD. (TWP. RD. 4940)	30	18	70	146.7	146.7	11.1	7.4	1.00	4.1	1.25	5.1
1	GUE	S.R. 513	RT.	PUTNEY RIDGE RD. (CO. RD. 47)	45	24	105	322.5	322.5	24.2	16.2	1.00	9.0	1.25	11.2
1	GUE	S.R. 513	LT.	PUTNEY RIDGE RD. (CO. RD. 47)	40	25	115	311.2	311.2	23.4	15.6	1.00	8.7	1.25	10.9
1	GUE	S.R. 513	RT.	PISGAH RD. (CO. RD. 94)	95	45	106	797.0	797.0	59.8	39.9	1.00	22.2	1.25	27.7
1	GUE	S.R. 513	LT.	DAILEY LN. (TWP. RD. 9429)	125	45	133	1,236.2	1,236.2	92.8	61.9	1.00	34.4	1.25	43.0
1	GUE	S.R. 513	LT.	OXFORD RD. (CO. RD. 49)	30	18	70	146.7	146.7	11.1	7.4	1.00	4.1	1.25	5.1
1	GUE	S.R. 513	RT.	OXFORD RD. (CO. RD. 49)	25	20	67	120.9	120.9	9.1	6.1	1.00	3.4	1.25	4.2
1	GUE	S.R. 513	LT.	LYDICK RD. (TWP. RD. 965)	20	19	60	87.8	87.8	6.6	4.4	1.00	2.5	1.25	3.1
1	GUE	S.R. 513	RT.	CALDWELL RD. (TWP. RD. 6923)	50	18	88	294.5	294.5	22.1	14.8	1.00	8.2	1.25	10.3
1	GUE	S.R. 513	RT.	HENDERSON LANE (CO. RD. 9623)	15	18	42	50.0	50.0	3.8	2.5	1.00	1.4	1.25	1.8
1	GUE	S.R. 513	RT.	HENDERSON LANE (CO. RD. 9623)	15	18	42	50.0	50.0	3.8	2.5	1.00	1.4	1.25	1.8
1	GUE	S.R. 513	LT.	BRIDGEWATER RD. (CO. RD. 690)	SEE SHEET 27			491.0	491.0	36.9	24.6	1.00	13.7	1.25	17.1
1	GUE	S.R. 513	RT.	BRIDGEWATER RD. (CO. RD. 690)	SEE SHEET 27			160.0	160.0	12.0	8.0	1.00	4.5	1.25	5.6
1	GUE	S.R. 513	LT.	BLANE RD. (TWP. RD. 6908)	24	20	68	117.4	117.4	8.9	5.9	1.00	3.3	1.25	4.1
1	GUE	S.R. 513	LT.	BAPTIST RD. (TWP. RD. 693)	65	14	100	411.7	411.7	30.9	20.6	1.00	11.5	1.25	14.3
1	GUE	S.R. 513	RT.	PISGAH RD. (CO. RD. 94)	95	16	139	818.1	818.1	61.4	41.0	1.00	22.8	1.25	28.5
1	GUE	S.R. 513	RT.	TYSONS MILL RD. (CO. RD. 94)	40	19	85	231.2	231.2	17.4	11.6	1.00	6.5	1.25	8.1
1	GUE	S.R. 513	LT.	LAPP LANE	24	20	68	117.4	117.4	8.9	5.9	1.00	3.3	1.25	4.1
1	GUE	S.R. 513	RT.	MARSHALL RD. (TWP. RD. 91)	65	19	145	592.3	592.3	44.5	29.7	1.00	16.5	1.25	20.6
1	GUE	S.R. 513	LT.	HOOVER RD.	25	16	72	122.3	122.3	9.2	6.2	1.00	3.4	1.25	4.3
1	GUE	S.R. 513	LT.	BRUSHY FORK RD.	25	14	60	102.8	102.8	7.8	5.2	1.00	2.9	1.25	3.6
1	GUE	S.R. 513	LT.	IOTA DRIVE	24	20	68	117.4	117.4	8.9	5.9	1.00	3.3	1.25	4.1
1	GUE	S.R. 513		U.S.R. 22	30	19	72	151.7	151.7	11.4	7.6	1.00	4.3	1.25	5.3
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)									**9,900.2**	**744.5**	**496.6**		**294.3**		**354.1**
2	GUE	S.R. 761	RT	SYCAMORE RD.	30	10	30	66.7	66.7	5.1	3.4	1.00	1.9	1.25	2.4
2	GUE	S.R. 761	RT	SYCAMORE RD.	30	10	30	66.7	66.7	5.1	3.4	1.00	1.9	1.25	2.4
2	GUE	S.R. 761	LT	NEW GOTTENGEN RD	30	18	67	141.7	141.7	10.7	7.1	1.00	4.0	1.25	5.0
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)									**275.1**	**20.9**	**13.9**		**7.8**		**9.8**

CALCULATED LME
CHECKED DNM

EXTRA AREA DATA

GUE-513-0.00
GUE-761-0.00

92254_MEA_001.DGN 8-21-13

CALCULATED LME CHECKED DNM

BRIDGE TREATMENT

LOCATION 1

DETAIL (1) GUE-513-0180: BUTT JOINT AT APPROACH SLABS, SUSPEND/RESUME PAVEMENT PLANING AT APPROACH SLABS
DETAIL (2) GUE-513-0238: REMOVE ASPHALT CONCRETE FROM BRIDGE DECK AND APPROACH SLABS, PLACE WATERPROOFING & RESURFACE WITH 3.0" OF ASPHALT CONCRETE
GUE-513-0381: NEW BOX CULVERT REPLACED IN 2012, BUTT JOINT AT NEW PAVEMENT WITH 225' TAPERS
DETAIL (3) GUE-513-0620: BUTT JOINT AT APPROACH SLABS WITH 225' TAPERS
DETAIL (4) GUE-513-0871: BUTT JOINT AT BRIDGE DECK, REMOVE AND REPLACE 1.5"± SURFACE COURSE ON APPROACH SLABS

LOCATION 2

DETAIL (4) GUE-761-0221: BUTT JOINT AT BRIDGE DECK, REMOVE AND REPLACE 1.5"± SURFACE COURSE ON APPROACH SLABS

NOTES:
BRIDGE GUE-513-0238: WATERPROOFING, STEEL DRIP STRIP & ASPHALT INTERMEDIATE COURSE MUST BE COMPLETED BEFORE OPENING TO TRAFFIC.
BRIDGE GUE-513-0238: ASPHALT CONCRETE INTERMEDIATE AND SURFACE COURSE QUANTITIES INCLUDE ADDITIONAL ASPHALT NEEDED FOR TAPERS.
BRIDGE GUE-513-0871: ASPHALT CONCRETE SURFACE COURSE QUANTITY INCLUDES ADDITIONAL ASPHALT NEEDED FOR TAPERS.
BRIDGE GUE-761-0221: ASPHALT CONCRETE SURFACE COURSE QUANTITY INCLUDES ADDITIONAL ASPHALT NEEDED FOR TAPERS.

DEDUCTIONS = PAVEMENT/SHOULDER WIDTHS X (BRIDGE LENGTH + APPROACH SLABS)

BRIDGE DATA

LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAIL (SHEET 30)	MAINLINE DEDUCTIONS (CARRIED TO SHEET 13)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 14)	202	407		448				512	516	518
											WEARING COURSE REMOVED (SEE DETAILS)	TACK COAT @ 0.075 GAL/SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL/SQ.YD.	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	TYPE 3 WATERPROOFING	2" DEEP JOINT SEALER, AS PER PLAN	SPECIAL-STEEL DRIP STRIP
		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.	SQ.YD.	FEET	FEET
1	GUE-513-0180	58.0	34.0	219.2	15.0	34.0	113.3	1	215.1	117.3									68.0	
1	GUE-513-0238	36.0	30.0	120.0	20.0	30.0	133.3	2	168.9		1,586.6	19.0	12.7	1.50	19.8	1.50	15.2	120.0		72.0
1	GUE-513-0381	SUSPEND/RESUME AT NEW PAVEMENT							300.0		1,000.0									
1	GUE-513-0620	68.0	30.0	226.7	25.0	30.0	166.7	3	262.2		1,000.0								40.0	
1	GUE-513-0871	295.0	35.0	1,147.3	25.0	34.0	188.9	4	766.7		1,083.0	14.2				1.50	10.2		40.0	
	BRIDGE DEDUCTIONS								1,712.9	117.3										
	LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)										**4,669.6**	**33.2**	**12.7**		**19.8**		**25.4**	**120.0**	**148.0**	**72.0**
2	GUE-761-0221	93.0	32.0	330.7	20.0	32.0	142.2	4	310.3		700.0	10.7				1.50	8.4		42.0	
	BRIDGE DEDUCTIONS								310.3											
	LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)										**700.0**	**10.7**					**8.4**		**42.0**	

92254_MBT_001.dgn 8-21-13

BRIDGE DECK TREATMENT DATA

GUE-513-0.00
GUE-761-0.00

REF. NO.	SHEET NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 WALK REMOVED SQ FT	202 CURB REMOVED FT		608 4" CONCRETE WALK, AS PER PLAN SQ FT	609 CURB, TYPE 6, AS PER PLAN FT
C-1	36	SR 265 / SR 513	107+60	7+54	LT					180
C-2	36		6+10	6+75	RT					70
C-3	36-37		7+72	9+72	RT					210
C-4	36-37	SR 513	7+73	9+45	LT					175
C-5	37-38		9+77	12+43	LT					265
C-6	37-38		9+95	12+47	RT					265
R-1	36	SR 265 / SR 513	107+63	7+54	LT		30			
R-2	36		6+34	6+45	RT	60				
R-3	37	SR 513	9+77	9+98	LT		25			
R-4	38		11+50	12+60	LT		110			
W-1	36	SR 513	6+34	6+45	RT				65	
TOTALS CARRIED TO GENERAL SUMMARY						60	165		65	1165

CALCULATED JSL
CHECKED DNM

LOCATION 3 ROADWAY DATA

GUE-513-0.00
GUE-761-0.00

REF. NO.	SHEET NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, 24" AND UNDER FT	202 PIPE REMOVED, OVER 24" FT	202 MANHOLE REMOVED EACH	202 CATCH BASIN REMOVED EACH	202 CATCH BASIN ABANDONED EACH	602 CONCRETE MASONRY CU YD	611 12" CONDUIT, TYPE B FT	611 18" CONDUIT, TYPE B FT	611 24" CONDUIT, TYPE B FT	611 30" CONDUIT, TYPE B FT	611 36" CONDUIT, TYPE B FT	611 CATCH BASIN, NO. 3 EACH	611 CATCH BASIN, NO. 3A EACH	611 CATCH BASIN, NO. 2-3 EACH	611 MANHOLE, NO. 1 EACH	611 48" MANHOLE, NO. 3 EACH	611 60" MANHOLE, NO. 3 EACH	611 84" MANHOLE, NO. 3 EACH	SPECIAL FILL AND PLUG EXISTING CONDUIT FT	SPECIAL PIPE CLEANOUT FT
D-1	39		104+43	105+75	RT						0.8					132									
D-2	39	SR 265	105+75	106+54	L/R											83							1		
D-3	39		106+54		LT									8											
D-4	39		106+54	107+85	LT											132						1			
D-5	39-40	SR 265 / SR 513	107+85	6+05	LT											20						1			
D-6	39-40		6+04		LT												1								
D-7	39-40		6+05		RT									19											
D-8	40		6+05	7+75	LT											170						1			
D-9	40		7+85	7+75	LT							13						1							
D-10	40		7+85	7+75	RT							21						1							
D-11	40		7+75	9+20	LT										145							1			
D-12	40		9+30	9+20	RT								20				1								
D-13	40		9+20	9+50	LT										30						1				
D-14	40		9+62	9+55	RT									7			1								
D-15	40		9+55	9+50	RT									23					1						
D-16	40	SR 513	9+50	9+92	LT									42							1				
D-17	40		9+75	9+88	LT									13						1					
D-18	41		9+92	10+12	LT									21							1				
D-19	41		10+20	10+12	LT							10						1							
D-20	41		10+20	10+12	RT							18						1							
D-21	41		10+12	11+30	LT									117							1				
D-22	41		11+40	11+70	LT							12						1							
D-23	41		11+30	11+70	LT									40							1				
D-24	41		11+70	11+93	LT								23								1				
D-25	41		11+93	12+30	L/R								46				1								
D-26	41		12+30	12+91	RT						0.2	65					1								
PC-1	39	SR 265	104+43	106+57	RT																				215
PC-2	39		106+57	106+54	L/R																				35
PC-3	39	SR 265 / SR 513	106+54	6+04	LT																				130
PC-4	40	SR 513	6+04	7+73	LT																				170
PC-5	40		7+73	9+49	LT																				180
PC-6	40		9+49	9+88	LT																				40
PC-7	41		9+88	10+90	LT																				100
R-1	39	SR 265	104+43	105+85	RT		145																		
R-2	39		106+54		L/R	15																		10	
R-3	39-40		6+04		LT	10																			
R-4	39-40		6+04	6+06	L/R	30			1																
R-5	40		9+49	9+55	L/R	30			1															10	
R-6	40		9+75	9+88	LT	20		1																	
R-7	40	SR 513	9+88	9+92	LT	10																		10	
R-8	41		10+90		LT																			1	
R-9	41		11+51		LT					1															
R-10	41		12+18		LT					1															
R-11	41		UNKNOWN	12+90	RT	50																		10	
TOTALS CARRIED TO GENERAL SUMMARY						165	145	1	2	2	1	139	89	290	175	537	5	5	1	1	11			41	870

CALCULATED JSL
CHECKED DNM

SECTION 3 DRAINAGE DATA

LOCATIONS

GUE-513-0.00
GUE-761-0.00

CURB RAMP CALCULATIONS

REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202			608		690 SPECIAL-MISC.:				609	COMMENTS
				CURB AND GUTTER REMOVED	WALK REMOVED	CURB REMOVED	4" CONCRETE WALK, (CURB RAMP AREA)	4" CONCRETE WALK, (EXTRA WALK AREA)	DETECTABLE WARNING	CURB RAMPS,			CURB, TYPE 6	
										TYPE A1	TYPE A2	TYPE C2		
			CL./LT./RT.	SQ. YD.	SQ. FT.	FT.	SQ. FT.	SQ. FT.	SQ. FT.	EACH	EACH	EACH	FT.	
		S.R. 513 - QUAKER CITY												
1-CR	34	ON S.R. 513	LT		125.0	6	122.5					1	11	
2-CR	34	S.R. 513 AT FAIR ST.	RT		52.0	14		44.0	8				14	REMOVE AND REPLACE LANDING, ADD TRUNCATED DOMES
3-CR	37	S.R. 513 AT MAIN ST.	LT		57.0			49.0	8					CURB QUANTIY CARRIED WITH ROADWAY
4-CR	37	S.R. 513 AT MAIN ST.	RT					38.0	8					CURB QUANTIY CARRIED WITH ROADWAY
SUB-TOTALS							122.5	131.0						
TOTALS (CARRIED TO LOCATION 1 SUB-SUMMARY)					234.0	20	253.5		24			1	25	

CALCULATED LME
CHECKED DNM

CURB RAMP DATA

GUE-513-0.00
GUE-761-0.00

19
64

92254_CRS_001.DGN 10-4-13

ITEM 648 EDGE LINE, 4"

LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY			TOTAL EDGE LINE (4")	REMARKS
						WHITE EDGE LINE QUANTITIES				
			FROM	TO		TOTAL MILES	HIGHWAY MILES	RAMP MILES	MILES	
1	GUE	S.R. 513	0.00	14.81	14.81	29.62	29.62		29.62	
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)									**29.62**	
2	GUE	S.R. 761	0.00	2.44	2.44	4.88	4.88		4.88	
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)									**4.88**	

ITEM 648 CENTER LINE

LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY		TOTAL CENTER LINE MILES	REMARKS
						CENTER LINE QUANTITIES			
			FROM	TO		TOTAL MILES	EQUIVALENT SOLID LINE		
1	GUE	S.R. 513	0.00	14.81	14.81	14.81	28.153	14.81	
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								**14.81**	
2	GUE	S.R. 761	0.00	2.44	2.44	2.44	4.842	2.44	
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)								**2.44**	

CALCULATED LME CHECKED DNM

PAVEMENT MARKING DATA (LONG LINE)

GUE-513-0.00
GUE-761-0.00

ITEM 644 AUXILARY MARKING

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	SLM	TRANSEVERSE/ DIANGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT ONLY		SCHOOL SYMBOL MARKING		8" CHANNELIZING LINE	RAILROAD SYMBOL MARKING	REMARKS
						WHITE	YELLOW			72"	96"	72"	96"			
						FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH	FEET	EACH	
1	GUE	S.R. 513	HOLLANDER RD. (TWP. RD. 498)	RT.				25								PLACE 18' FROM SR 513 CL
1	GUE	S.R. 513	RIGEL RD. (Twp Rd 9434)	LT.				20								PLACE 18' FROM SR 513 CL
1	GUE	S.R. 513	FAIR ST.	RT.				14	78							PLACE STOP LINE 4' BEHIND CROSSWALK
1	GUE	S.R. 513	ON S.R. 513 ATFAIR ST.						56							PLACE AS DIRECTED
1	GUE	S.R. 513	ON S.R. 513 AT SR 265					15	62							PLACE AS DIRECTED
1	GUE	S.R. 513	SR 265	LT.				12								PLACE 23' FROM SR 513 CL
1	GUE	S.R. 513	SR 265	RT.				12	48							PLACE STOP LINE 4' BEHIND CROSSWALK
1	GUE	S.R. 513	ON S.R. 513 AT SR 265					16								PLACE AS DIRECTED
1	GUE	S.R. 513	ALLEY	LT.												
1	GUE	S.R. 513	ALLEY	RT.												
1	GUE	S.R. 513	MAIN ST.	LT.				13								PLACE 19' FROM SR 513 CL
1	GUE	S.R. 513	MAIN ST.	RT.				20								PLACE 19' FROM SR 513 CL
1	GUE	S.R. 513	WILLOW LN.	RT.				20								PLACE 18' FROM SR 513 CL
1	GUE	S.R. 513	McBURNEY RD. (TWP. 943)	LT.				39								PLACE 21' FROM SR 513 CL
1	GUE	S.R. 513	McBURNEY RD. (TWP. 943)	LT.				12								PLACE 21' FROM SR 513 CL
1	GUE	S.R. 513	IPSWITCH RD. (TWP. RD. 4940)	RT.				20								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	PUTNEY RIDGE RD. (CO. RD. 47)	RT.				34								PLACE 19' FROM SR 513 CL
1	GUE	S.R. 513	PUTNEY RIDGE RD. (CO. RD. 47)	LT.				35								PLACE 20' FROM SR 513 CL
1	GUE	S.R. 513	PISGAH RD. (CO. RD. 94)	RT.				33								PLACE 17' FROM SR 513 CL
1	GUE	S.R. 513	DAILEY LN. (TWP. RD. 9429)	LT.				50								PLACE 15' FROM SR 513 CL
1	GUE	S.R. 513	OXFORD RD. (CO. RD. 49)	LT.				19								PLACE 17' FROM SR 513 CL
1	GUE	S.R. 513	OXFORD RD. (CO. RD. 49)	RT.				18								PLACE 14' FROM SR 513 CL
1	GUE	S.R. 513	LYDICK RD. (TWP. RD. 965)	LT.				23								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	CALDWELL RD. (TWP. RD. 6923)	RT.				36								PLACE 20' FROM SR 513 CL
1	GUE	S.R. 513	HENDERSON LANE (CO. RD. 9623)	RT.				17								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	HENDERSON LANE (CO. RD. 9623)	RT.				20								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	BLANE RD. (TWP. RD. 6908)	LT.				20								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	BAPTIST RD. (TWP. RD. 68)	LT.				37								PLACE 19' FROM SR 513 CL
1	GUE	S.R. 513	PISGAH RD. (CO. RD. 94)	RT.				59								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	TYSONS MILL RD. (CO. RD. 94)	RT.				28								PLACE 19' FROM SR 513 CL
1	GUE	S.R. 513	LAPP LANE	LT.				20								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	MARSHALL RD. (TWP. RD. 91)	RT.				45								PLACE 20' FROM SR 513 CL
1	GUE	S.R. 513	HOOVER RD.	LT.				21								PLACE 19' FROM SR 513 CL
1	GUE	S.R. 513	BRUSHY FORK RD.	LT.				20								PLACE 15' FROM SR 513 CL
1	GUE	S.R. 513	IOTA LANE	LT.				20								PLACE 16' FROM SR 513 CL
1	GUE	S.R. 513	AT U.S. 22					20								PLACE 23' FROM US 22 CL
			SUB-TOTALS													
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								**813**	**244**							
2	GUE	S.R. 761	SYCAMORE RD.	RT				10								PLACE AS DIRECTED
2	GUE	S.R. 761	SYCAMORE RD.	RT				10								PLACE AS DIRECTED
2	GUE	S.R. 761	NEW GOTTENGEN RD	LT				22								PLACE 16' FROM SR 761 CL
2	GUE	S.R. 761	AT S.R. 265					19								PLACE 24' FROM SR 265 CL
			SUB-TOTALS													
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)								**61**								

CALCULATED LME CHECKED DNM

PAVEMENT MARKING DATA (AUXILARY MARKING DATA)

GUE-513-0.00
GUE-761-0.00

92254_PMS_002.DGN 8-21-13

DETAIL	SEE STD. DWG. TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	SEE STD. DWG. TC-65.11
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

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

REM=REMARKS

ITEM 621 RPM SUB-SUMMARY

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	GUE	SR 513	0.00	0.15	0.15	792	12	30	30			30			PC 0.05 PT 0.12 L=370' DEG 16
1	GUE	SR 513	0.15	0.38	0.23	1,214	12	51	51			51			PC 0.15 PT 0.31 L=845' DEG 11
1	GUE	SR 513	0.38	0.55	0.17	898	12	37	37			37			PC 0.38 PT 0.49 L=581' DEG 14
1	GUE	SR 513	0.55	0.70	0.15	792	12	31	31			31			PC 0.55 PT 0.63 L=422' DEG 18
1	GUE	SR 513	0.70	0.83	0.13	686	12	28	28			28			PC 0.70 PT 0.78 L=422' DEG 15
1	GUE	SR 513	0.83	0.87	0.04	211	11	5	5			5			PC 0.83 PT 0.87 L=211' DEG 9
1	GUE	SR 513	0.87	1.07	0.20	1,056	GAP	13	13			13			
1	GUE	SR 513	1.07	1.32	0.25	1,320	12	43	43			43			PC 1.16 PT 1.23 L=370' DEG 15
1	GUE	SR 513	1.32	1.51	0.19	1,003	12	32	32			32			PC 1.37 PT 1.42 L=264' DEG 11
1	GUE	SR 513	1.51	1.63	0.12	634	12	20	20			20			PC 1.51 PT 1.54 L=158' DEG 11
1	GUE	SR 513	1.63	2.24	0.61	3,221	GAP	40	40			40			
1	GUE	SR 513	2.24	2.44	0.20	1,056	12	30	30			30			PC 2.33 PT 2.35 L=106' DEG 19
1	GUE	SR 513	2.44	2.66	0.22	1,162	12	39	39			39			PC 2.50 PT 2.57 L=370' DEG 15
1	GUE	SR 513	2.66	2.95	0.29	1,531	GAP	19	19			19			
1	GUE	SR 513	2.95	3.07	0.12	634	11	16	16			16			PC 2.95 PT 3.07 L=634' DEG 6
1	GUE	SR 513	3.07	3.38	0.31	1,637	GAP	20	20			20			
1	GUE	SR 513	3.38	3.41	0.03	158	11	4	4			4			PC 3.38 PT 3.41 L=158' DEG 8
1	GUE	SR 513	3.41	3.89	0.48	2,534	GAP	32	32			32			
1	GUE	SR 513	3.89	3.92	0.03	158	11	4	4			4			PC 3.89 PT 3.92 L=158' DEG 8
1	GUE	SR 513	3.92	3.96	0.04	211	GAP	3	3			3			
1	GUE	SR 513	3.96	4.16	0.20	1,056	12	37	37			37			PC 4.05 PT 4.13 L=422' DEG 14
1	GUE	SR 513	4.16	4.20	0.04	211	11	5	5			5			PC 4.16 PT 4.20 L=211' DEG 9
1	GUE	SR 513	4.20	4.25	0.05	264	GAP	3	3			3			
1	GUE	SR 513	4.25	4.28	0.03	158	11	4	4			4			PC 4.25 PT 4.28 L=158' DEG 6
1	GUE	SR 513	4.28	4.48	0.20	1,056	12	32	32			32			PC 4.35 PT 4.39 L=211' DEG 19
1	GUE	SR 513	4.48	4.53	0.05	264	GAP	3	3			3			
1	GUE	SR 513	4.53	4.66	0.13	686	11	17	17			17			PC 4.53 PT 4.66 L=686' DEG 9
1	GUE	SR 513	4.66	4.71	0.05	264	GAP	3	3			3			
1	GUE	SR 513	4.71	4.74	0.03	158	11	4	4			4			PC 4.71 PT 4.74 L=158' DEG 6
1	GUE	SR 513	4.74	4.81	0.07	370	12	15	15			15			PC 4.74 PT 4.78 L=211' DEG 25
1	GUE	SR 513	4.81	5.03	0.22	1,162	11	29	29			29			PC 4.81 PT 5.03 L=1162' DEG 7
1	GUE	SR 513	5.03	5.05	0.02	106	GAP	1	1			1			
		SUB-TOTALS										650			
LOCATION 1 TOTALS (CARRIED TO NEXT SHEET)								**650**	**650**						

CALCULATED LME CHECKED DNM

RAISED PAVEMENT MARKER DATA

GUE-513-0.00
GUE-761-0.00

92254_TRM_001.DGN 8-21-13

DETAIL	SEE STD. DWG. TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	SEE STD. DWG. TC-65.11
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

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

ITEM 621 RPM SUB-SUMMARY

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	
	TOTAL FROM PREVIOUS SHEET							650	650			650			
1	GUE	SR 513	5.05	5.29	0.24	1,267	12	40	40			40			PC 5.14 PT 5.20 L=317' DEG 10
1	GUE	SR 513	5.29	5.52	0.23	1,214	GAP	15	15			15			
1	GUE	SR 513	5.52	5.60	0.08	422	11	11	11			11			PC 5.52 PT 5.60 L=422' DEG 8
1	GUE	SR 513	5.60	5.77	0.17	898	GAP	11	11			11			
1	GUE	SR 513	5.77	5.85	0.08	422	11	11	11			11			PC 5.77 PT 5.85 L=422' DEG 8
1	GUE	SR 513	5.85	5.97	0.12	634	GAP	8	8			8			
1	GUE	SR 513	5.97	6.23	0.26	1,373	12	45	45			45			PC 6.06 PT 6.14 L=422' DEG 15
1	GUE	SR 513	6.23	6.86	0.63	3,326	GAP	42	42			42			
1	GUE	SR 513	6.86	7.04	0.18	950	12	21	21			21			PC 6.95 PT 7.02 L=370' DEG 18
1	GUE	SR 513	7.04	7.23	0.19	1,003	12	39	39			39			PC 7.04 PT 7.14 L=528' DEG 14
1	GUE	SR 513	7.23	7.42	0.19	1,003	GAP	13	13			13			
1	GUE	SR 513	7.42	7.49	0.07	370	11	9	9			9			PC 7.42 PT 7.49 L=370' DEG 6
1	GUE	SR 513	7.49	7.66	0.17	898	12	29	29			29			PC 7.56 PT 7.61 L=264' DEG 14
1	GUE	SR 513	7.66	7.73	0.07	370	12	9	9			9			PC 7.66 PT 7.73 L=370' DEG 8
1	GUE	SR 513	7.73	7.81	0.08	422	GAP	5	5			5			
1	GUE	SR 513	7.81	7.87	0.06	317	11	8	8			8			PC 7.81 PT 7.87 L=317' DEG 6
1	GUE	SR 513	7.87	8.05	0.18	950	12	33	33			33			PC 7.89 PT 7.96 L=370' DEG 15
1	GUE	SR 513	8.05	8.16	0.11	581	GAP	7	7			7			
1	GUE	SR 513	8.16	8.37	0.21	1,109	11	28	28			28			PC 8.16 PT 8.37 L=1109' DEG 7
1	GUE	SR 513	8.37	9.86	1.49	7,867	GAP	98	98			98			
1	GUE	SR 513	9.86	9.99	0.13	686	11	17	17			17			PC 9.86 PT 9.99 L=686' DEG 9
1	GUE	SR 513	9.99	10.16	0.17	898	12	29	29			29			PC 10.02 PT 10.07 L=264' DEG 15
1	GUE	SR 513	10.16	10.50	0.34	1,795	GAP	22	22			22			
1	GUE	SR 513	10.50	10.68	0.18	950	12	15	15			15			PC 10.59 PT 10.63 L=158' DEG 15
1	GUE	SR 513	10.68	10.79	0.11	581	12	17	17			17			PC 10.68 PT 10.70 L=106' DEG 11
1	GUE	SR 513	10.79	10.88	0.09	475	12	15	15			15			PC 10.81 PT 10.83 L=106' DEG 19
1	GUE	SR 513	10.88	11.02	0.14	739	12	25	25			25			PC 10.88 PT 10.93 L=264' DEG 21
1	GUE	SR 513	11.02	11.21	0.19	1,003	12	36	36			36			PC 11.04 PT 11.12 L=422' DEG 15
1	GUE	SR 513	11.21	11.23	0.02	106	GAP	1	1			1			
1	GUE	SR 513	11.23	11.44	0.21	1,109	12	32	32			32			PC 11.32 PT 11.35 L=158' DEG 17
1	GUE	SR 513	11.44	11.60	0.16	845	12	27	27			27			PC 11.47 PT 11.51 L=211' DEG 13
		SUB-TOTALS										1,368			
LOCATION 1 TOTALS (CARRIED TO NEXT SHEET)								1,368	1,368						

CALCULATED LME CHECKED DNM

RAISED PAVEMENT MARKER DATA

GUE-513-0.00
GUE-761-0.00

92254_TRM_002.DGN 8-21-13

DETAIL	SEE STD. DWG. TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	SEE STD. DWG. TC-65.11
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

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

ITEM 621 RPM SUB-SUMMARY

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	
	TOTALS FROM PREVIOUS SHEET							1,368	1,368			1,368			
1	GUE	SR 513	11.60	11.75	0.15	792	12	26	26			26			PC 11.63 PT 11.68 L=264' DEG 12
1	GUE	SR 513	11.75	11.79	0.04	211	11	5	5			5			PC 11.75 PT 11.79 L=211' DEG 8
1	GUE	SR 513	11.79	11.89	0.10	528	GAP	7	7			7			
1	GUE	SR 513	11.89	12.05	0.16	845	12	29	29			29			PC 11.98 PT 12.04 L=317' DEG 13
1	GUE	SR 513	12.05	12.15	0.10	528	12	24	24			24			PC 12.05 PT 12.13 L=422' DEG 15
1	GUE	SR 513	12.15	12.20	0.05	264	12	11	11			11			PC 12.15 PT 12.18 L=158' DEG 13
1	GUE	SR 513	12.20	12.39	0.19	1,003	12	38	38			38			PC 12.20 PT 12.30 L=528' DEG 12
1	GUE	SR 513	12.39	12.60	0.21	1,109	12	35	35			35			PC 12.46 PT 12.51 L=264' DEG 19
1	GUE	SR 513	12.60	12.93	0.33	1,742	GAP	22	22			22			
1	GUE	SR 513	12.93	13.13	0.20	1,056	12	29	29			29			PC 13.02 PT 13.04 L=106' DEG 14
1	GUE	SR 513	13.13	13.33	0.20	1,056	12	32	32			32			PC 13.20 PT 13.24 L=211' DEG 15
1	GUE	SR 513	13.33	13.40	0.07	370	GAP	5	5			5			
1	GUE	SR 513	13.40	13.64	0.24	1,267	12	37	37			37			PC 13.49 PT 13.55 L=264' DEG 13
1	GUE	SR 513	13.64	13.86	0.22	1,162	12	44	44			44			PC 13.66 PT 13.77 L=581' DEG 12
1	GUE	SR 513	13.86	14.02	0.16	845	12	27	27			27			PC 13.89 PT 13.93 L=211' DEG 20
1	GUE	SR 513	14.02	14.04	0.02	106	GAP	1	1			1			
1	GUE	SR 513	14.04	14.08	0.04	211	11	5	5			5			PC 14.04 PT 14.08 L=211' DEG 9
1	GUE	SR 513	14.10	14.24	0.14	739	12	26	26			26			PC 14.10 PT 14.15 L=264' DEG 19
1	GUE	SR 513	14.24	14.39	0.15	792	12	23	23			23			PC 14.28 PT 14.30 L=106' DEG 14
1	GUE	SR 513	14.39	14.43	0.04	211	11	5	5			5			PC 14.40 PT 14.43 L=158' DEG 8
1	GUE	SR 513	14.43	14.81	0.38	2,006	GAP	41	41	16		25			STOP AT U. S. 22
			SUB-TOTALS							16		1824			
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								1,840	1,840						

CALCULATED LME
CHECKED DNM

RAISED PAVEMENT MARKER DATA

GUE-513-0.00
GUE-761-0.00

92254_TRM_003.DGN 8-21-13

DETAIL	SEE STD. DWG. TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	SEE STD. DWG. TC-65.11
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

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

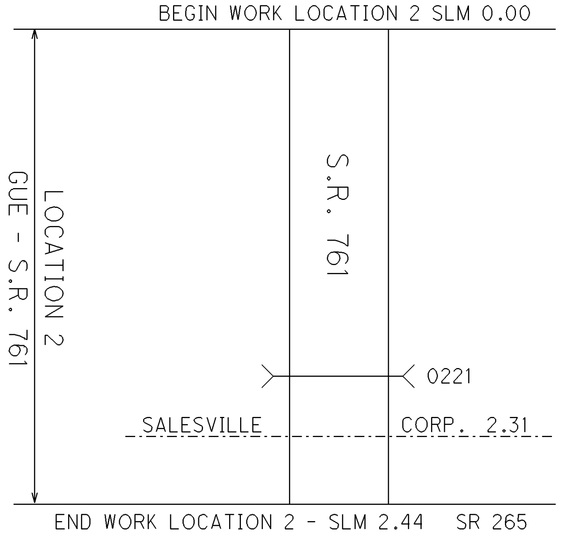
ITEM 621 RPM SUB-SUMMARY

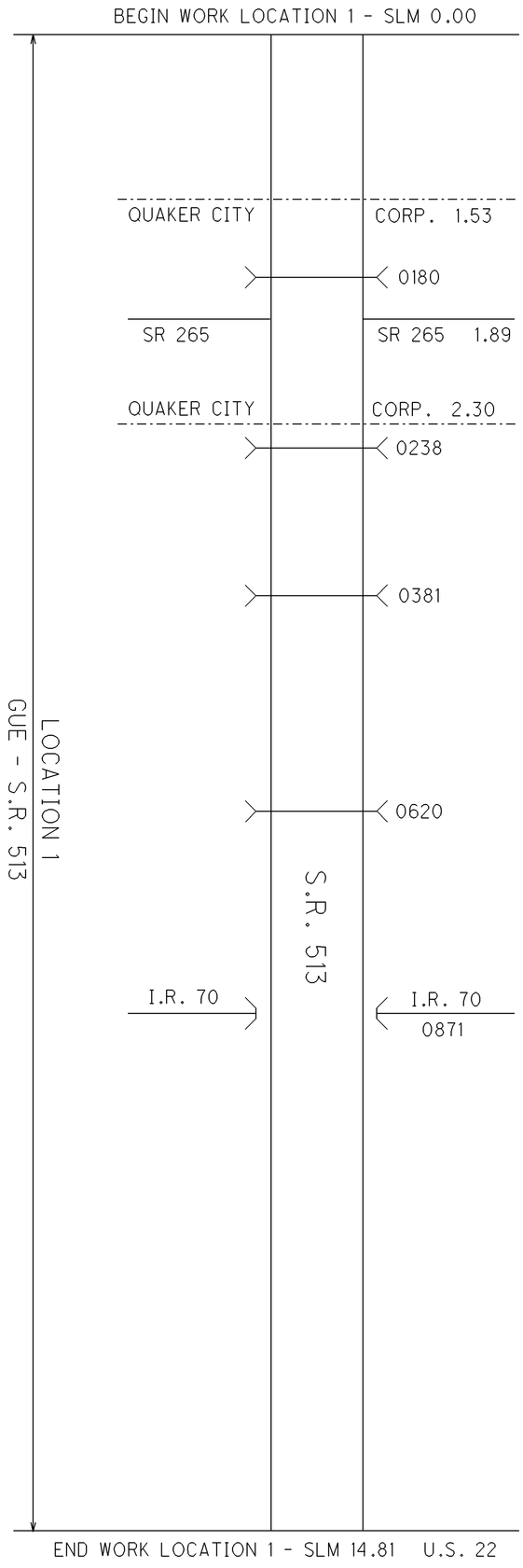
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621		PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
								RAISED PAVEMENT MARKER REMOVED	RPM	INFORMATION ONLY					
										ONE-WAY		TWO-WAY			
					MILES	LIN.FT.		EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED	
2	GUE	S.R. 761	0.00	0.13	0.13	686	GAP	9	9			9			
2	GUE	S.R. 761	0.13	0.15	0.02	106	11	3	3			3			PC 0.13 PT 0.15 L=106' DEG 7
2	GUE	S.R. 761	0.15	0.38	0.23	1,214	12	41	41			41			PC 0.21 PT 0.29 L=422' DEG 15
2	GUE	S.R. 761	0.38	0.49	0.11	581	GAP	7	7			7			
2	GUE	S.R. 761	0.49	0.78	0.29	1,531	12	53	53			53			PC 0.58 PT 0.69 L=581' DEG 16
2	GUE	S.R. 761	0.78	0.88	0.10	528	12	21	21			21			PC 0.78 PT 0.84 L=317' DEG 24
2	GUE	S.R. 761	0.88	0.98	0.10	528	12	17	17			17			PC 0.88 PT 0.91 L=158' DEG 15
2	GUE	S.R. 761	0.98	1.01	0.03	158	11	4	4			4			PC 0.98 PT 1.01 L=158' DEG 9
2	GUE	S.R. 761	1.01	1.34	0.33	1,742	GAP	22	22			22			
2	GUE	S.R. 761	1.34	1.52	0.18	950	12	29	29			29			PC 1.43 PT 1.47 L=211' DEG 18
2	GUE	S.R. 761	1.52	1.54	0.02	106	11	3	3			3			PC 1.52 PT 1.54 L=106' DEG 9
2	GUE	S.R. 761	1.54	1.70	0.16	845	GAP	11	11			11			
2	GUE	S.R. 761	1.70	1.76	0.06	317	11	8	8			8			PC 1.70 PT 1.76 L=317' DEG 6
2	GUE	S.R. 761	1.76	2.44	0.68	3,590	GAP / 7	61	61	16		45			STOP AT U.S. 22
			SUB-TOTALS							16		273			
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								289	289						

CALCULATED LME
CHECKED DNM

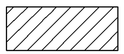
RAISED PAVEMENT MARKER DATA

GUE-513-0.00
GUE-761-0.00



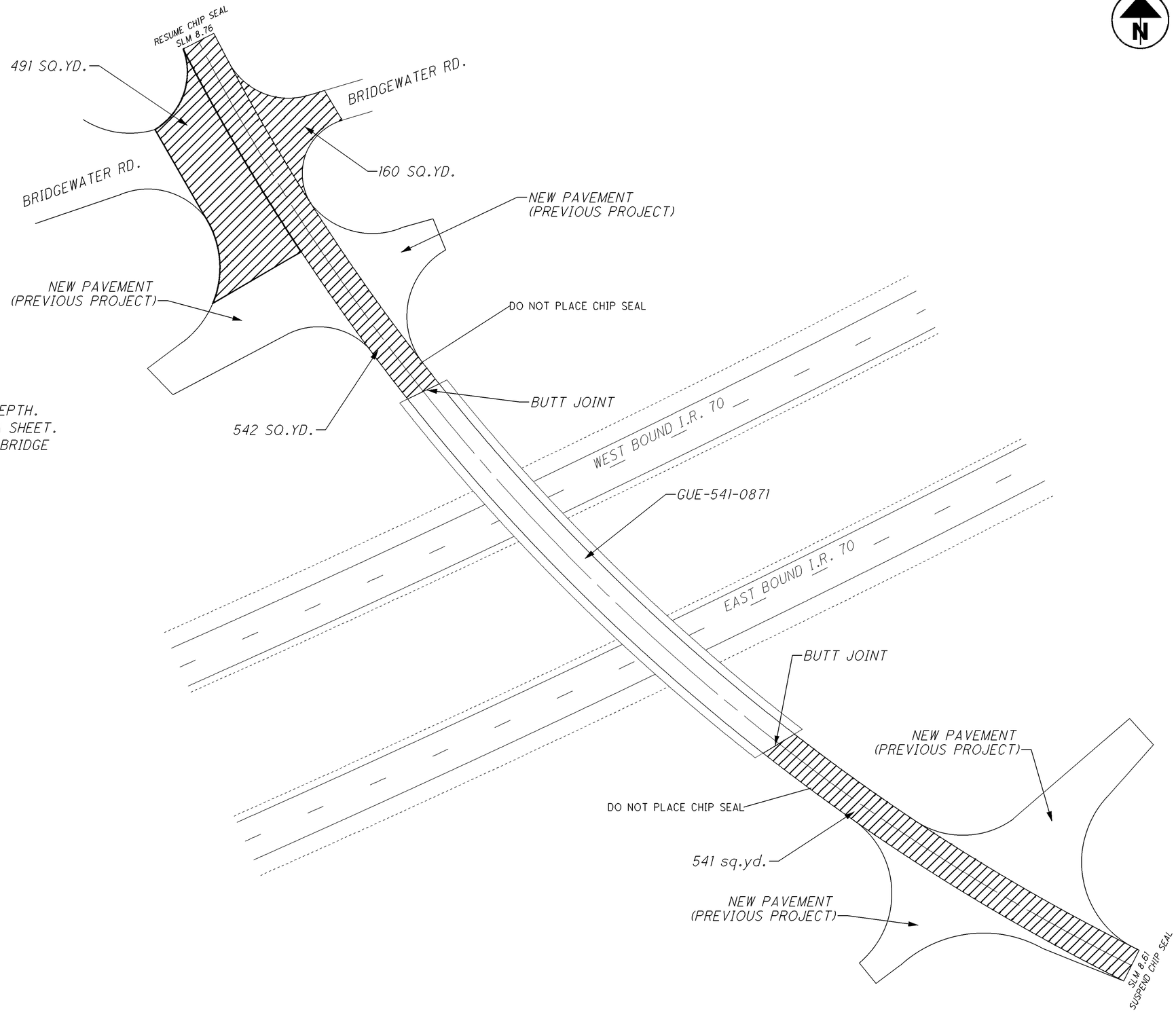


STRAIGHT LINE DIAGRAMS



WEARING COURSE REMOVED

NOTE:
WEARING COURSE REMOVED SHALL BE 2.25" IN DEPTH.
BRIDGEWATER RD. AREAS SHOWN ON EXTRA AREA SHEET.
MAINLINE AREAS CARRIED WITH BRIDGE 0871 ON BRIDGE DECK TREATMENT SHEET.



CALCULATED LME
CHECKED DNM

I.R. 70 & S.R. 513 INTERCHANGE

GUE-513-0.00
GUE-761-0.00

WATER WORK NOTES

WATER MAIN VERTICAL ADJUSTMENTS AND SERVICE LATERAL REPAIRS SHALL BE UTILIZED IN LOCATIONS IN CONFLICT WITH PROPOSED STORM SEWERS AS SHOWN IN THE DETAILS ON THIS SHEET.

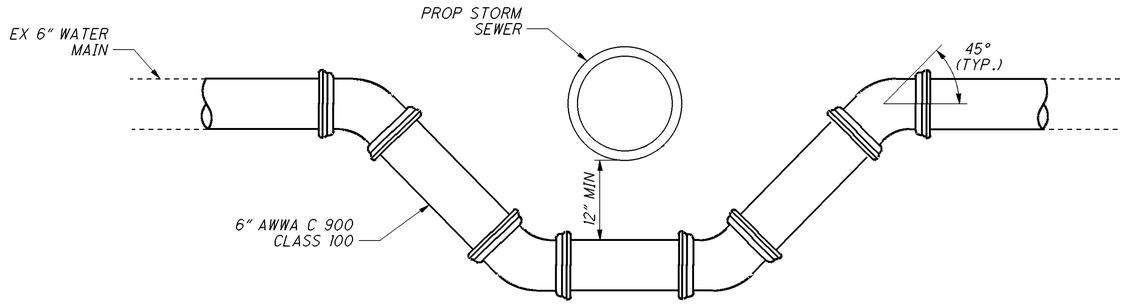
ALL REPAIRS SHALL BE PRESSURE TESTED AND APPROVED BY THE QUAKER CITY WATER DEPARTMENT. CONTACT PATRICK TRACY AT 740.260.2648 FOR INSPECTION.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 3 SUB-SUMMARY AND ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR RELOCATING EXISTING WATER MAINS, REPLACING SERVICE BRANCHES, AND RESETTING FIRE HYDRANTS WHICH CONFLICT WITH PROPOSED STORM SEWERS:

ITEM 638, 6" WATER MAIN POLYVINYL CHLORIDE PIPE AND FITTINGS, AWWA CLASS 100..... 150 FT.

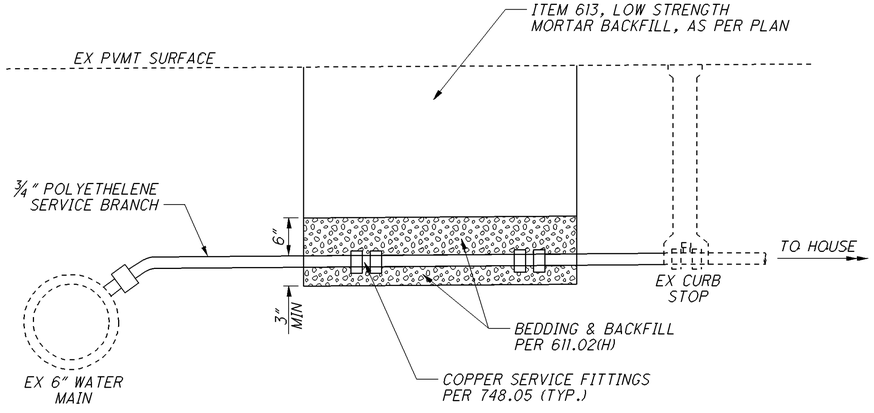
ITEM 638, ¾" POLYETHELENE SERVICE BRANCH..... 300 FT.

ITEM 638, FIRE HYDRANT REMOVED AND RESET..... 1 EACH



WATER MAIN VERTICAL ADJUSTMENT

(NOT TO SCALE)



WATER SERVICE LATERAL REPAIR

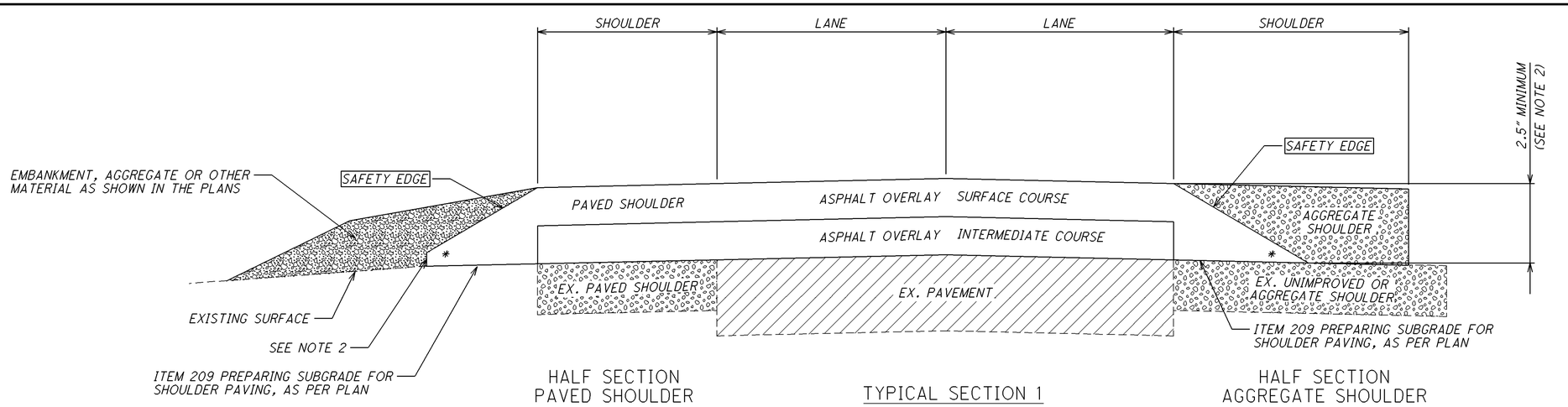
(NOT TO SCALE)

CALCULATED JSL
CHECKED DNM

WATER WORK DETAILS

GUE-513-0.00
GUE-761-0.00

28
64

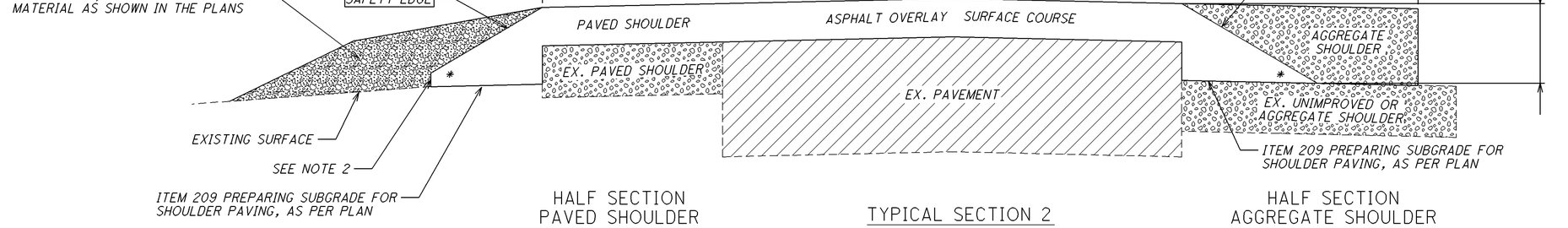


HALF SECTION
PAVED SHOULDER

TYPICAL SECTION 1

N.T.S.

HALF SECTION
AGGREGATE SHOULDER

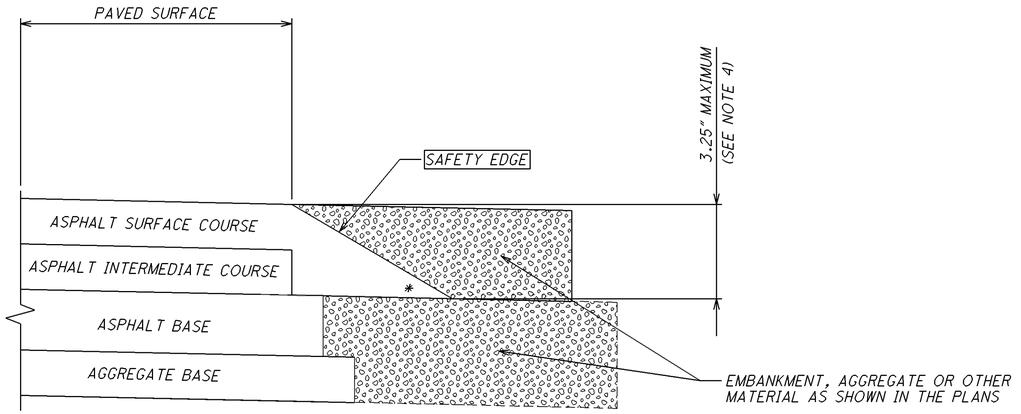


HALF SECTION
PAVED SHOULDER

TYPICAL SECTION 2

N.T.S.

HALF SECTION
AGGREGATE SHOULDER



HALF SECTION
NEW CONSTRUCTION

TYPICAL SECTION 3

N.T.S.

NOTES:

1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).

2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).

3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

4.) FOR NEW PAVEMENT CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF THE SURFACE AND INTERMEDIATE COURSES, NOT TO EXCEED 3.25" (82 MM).

* 40° MAX

CALCULATED

CHECKED

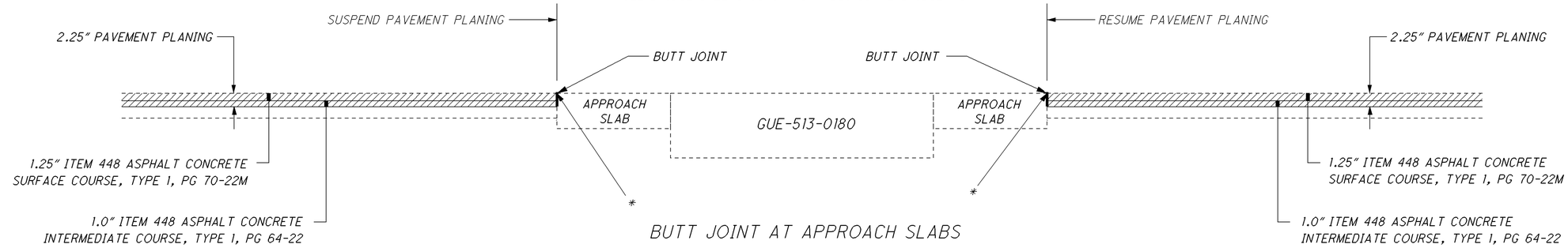
SAFETY EDGE DETAIL

GUE-513-0.00
GUE-761-0.00

92254_SED_001.DGN 8-21-13

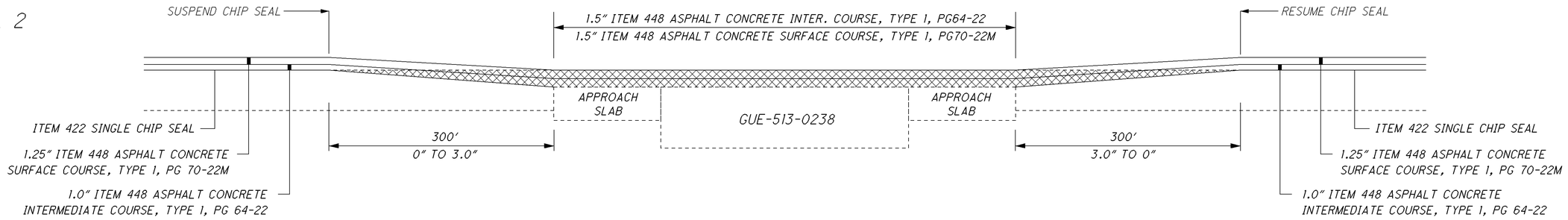
DETAIL 1

SEE BRIDGE SHEETS 60-64 FOR ADDITIONAL BRIDGE WORK



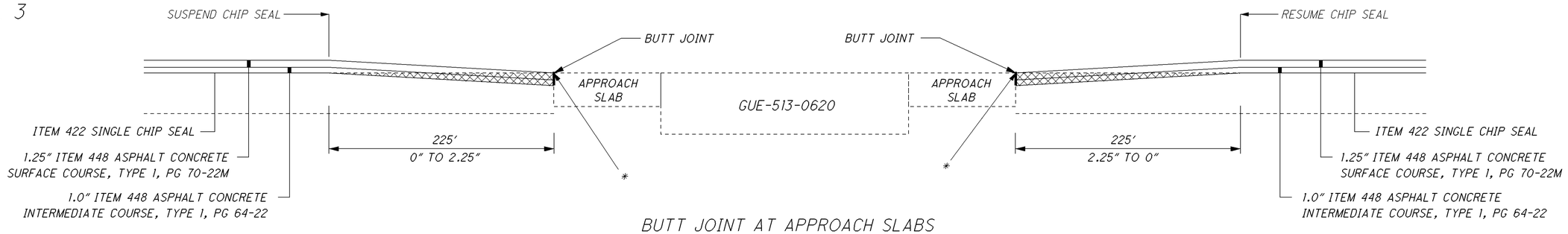
BUTT JOINT AT APPROACH SLABS

DETAIL 2



REMOVE ALL ASPHALT CONCRETE, RE-WATERPROOF & PLACE 3.0" ASPHALT CONCRETE

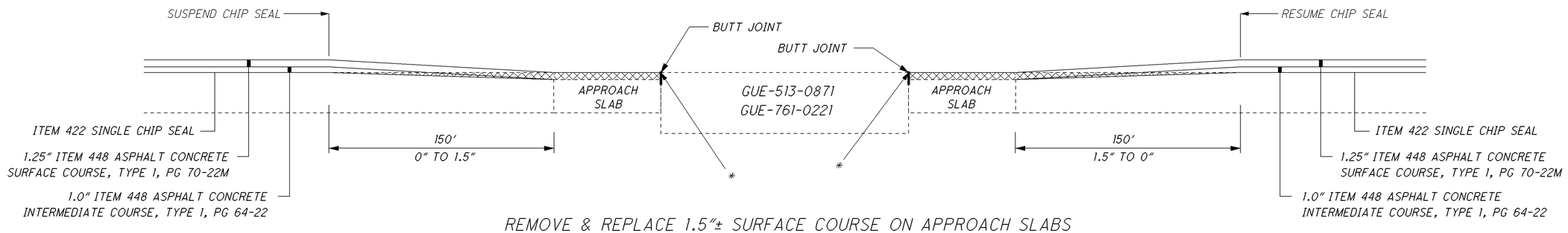
DETAIL 3



BUTT JOINT AT APPROACH SLABS

DETAIL 4

SEE DETAIL SHEET 27 FOR EXTRA WEARING COURSE REMOVED AREA AT GUE-513-0871



REMOVE & REPLACE 1.5"± SURFACE COURSE ON APPROACH SLABS

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

ITEM 202 WEARING COURSE REMOVED

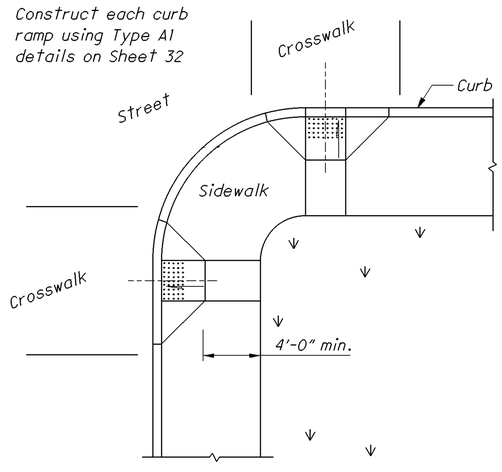
* 2.0" DEEP JOINT SEALER, AS PER PLAN

DETAILS NOT TO SCALE

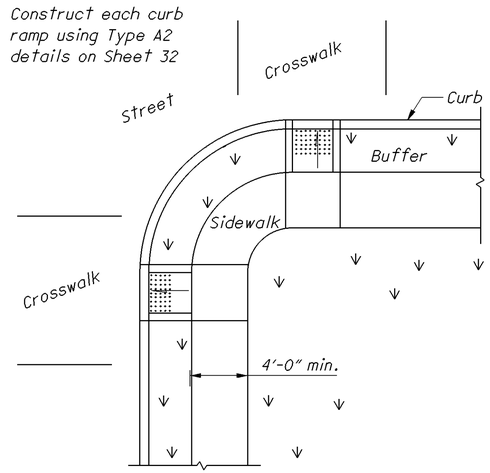
CALCULATED LME CHECKED DNM

BRIDGE DECK TREATMENT DATA

GUE-513-0.00
GUE-761-0.00

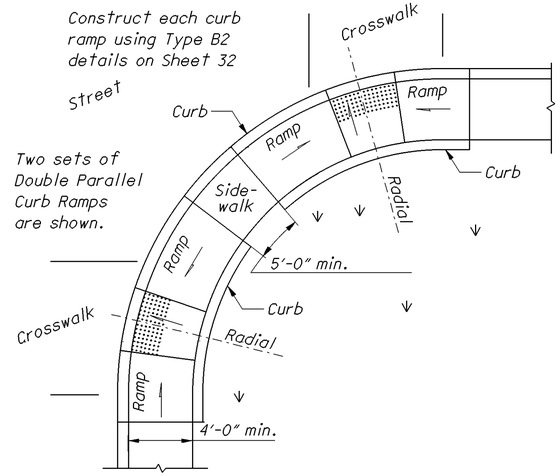


Use curb ramps with flared sides at locations with wide sidewalks.



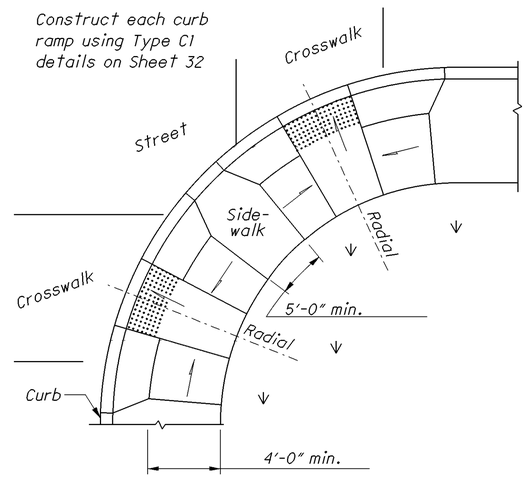
Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.

PERPENDICULAR CURB RAMPS



Place on streets having wide turning radius and where sidewalks are narrow.

PARALLEL CURB RAMPS



Curb ramp placement where streets have wide turning radius, and sufficient sidewalks width.

COMBINATION CURB RAMPS

NOTES

GENERAL: *This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.*

Curb ramp types are shown on Sheet 32 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown in the project plans.

The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

Excavate, form, place, finish, and cure according to 608.03.A, 608.03.B, 608.03.C, and 608.03.E.

DETECTABLE WARNINGS: *Install Detectable Warnings on each curb ramp with approved materials, as shown on Sheet 33. Install these proprietary products as per manufacturer's written instructions.*

DRAINAGE: *Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. Vertical change in level exceeding ⅛" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed.*

JOINTS: *Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. Provide a ½" Item 705.03 expansion joint filler around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edges and slope changes, and do not necessarily indicate joint lines.*

METHOD OF MEASUREMENT: *The Department will measure Curb Ramps by the number of each completed curb ramp. The Department will measure Detectable Warnings in existing curb ramps and at grade crossings by the number of square feet completed.*

Concrete Walk and Curb, Item 608 and 609, will be measured through out the curb ramp area and paid for under their respective Items.

METHOD OF PAYMENT: *New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type __ (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.*

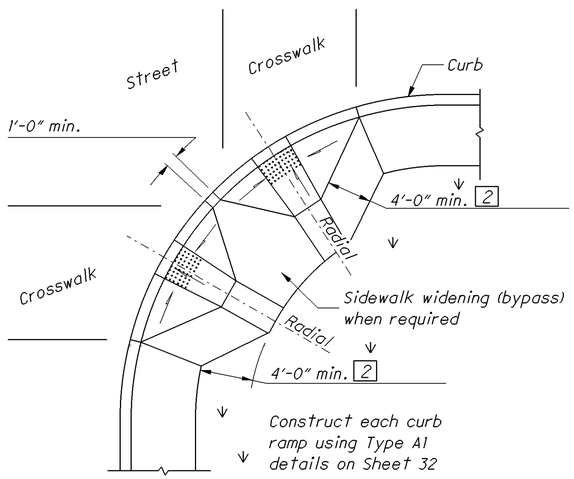
Detectable Warnings constructed in existing curb ramps or for at-grade crossing locations are paid for under Item 690-Special Misc.: Detectable Warning (Sq. Ft.) and is full compensation for excavation, backfill, base course material, reinforcing steel, expansion joint materials, and any incidentals required to complete the installation as specified. The work to cast the tiles in place will also require removal of existing pavement or sidewalk (Item 202) to the nearest joint, or if no joint exists, a minimum of 4 feet.

Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.

LEGEND

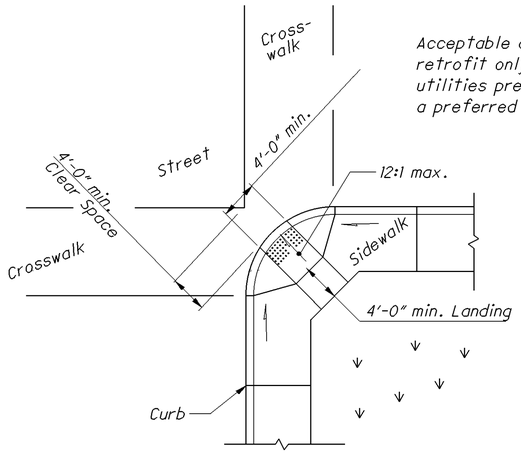
[2] *May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.*

Acceptable design on corners with wide turning radius where user is able to maneuver within crosswalk limits so as not to encroach into adjacent traveled lanes.



PERPENDICULAR RAMPS

Acceptable design for retrofit only where utilities prevent using a preferred layout.



Use this design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using where curb radii are less than 20'-0".

DIAGONAL RAMP (Type D)

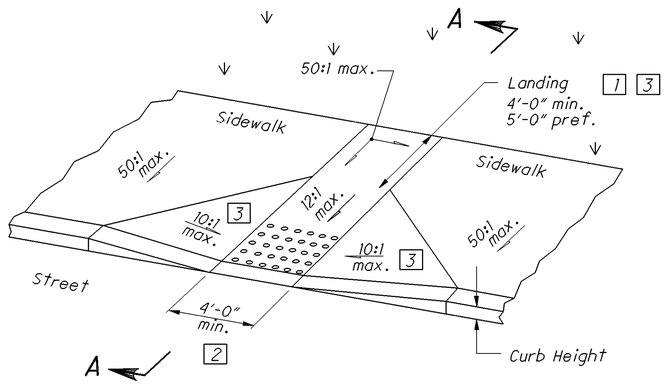
ACCEPTABLE CONSTRUCTION PLACEMENT

CALCULATED JLS CHECKED DNM

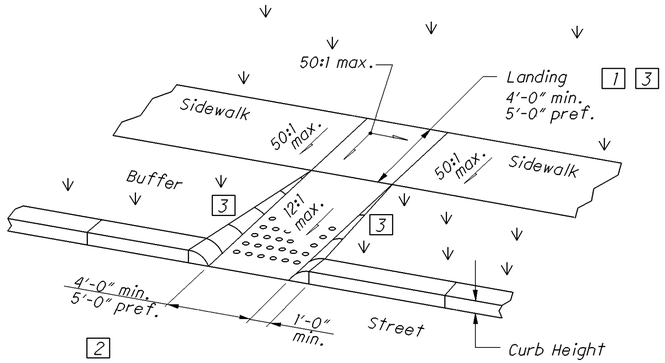
CURB RAMP AND DETECTABLE WARNING DETAILS

GUE-513-0.00
GUE-761-0.00

2519_CRD_001.DGN 2-5-13

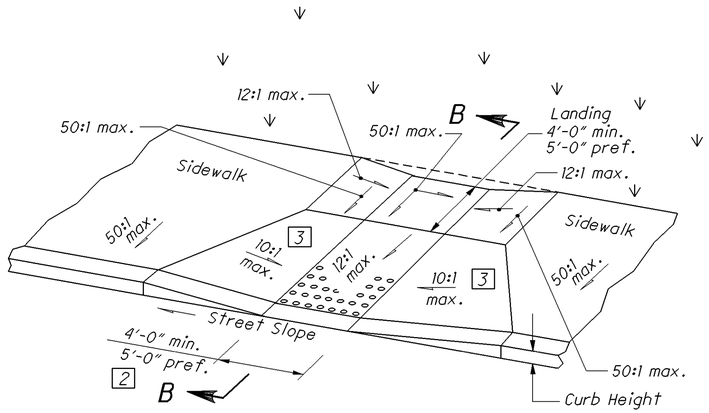


Type A1 (Perpendicular with flared sides)

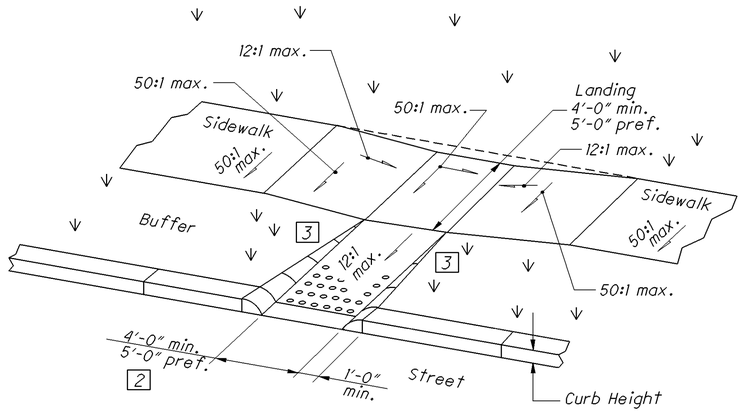


Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

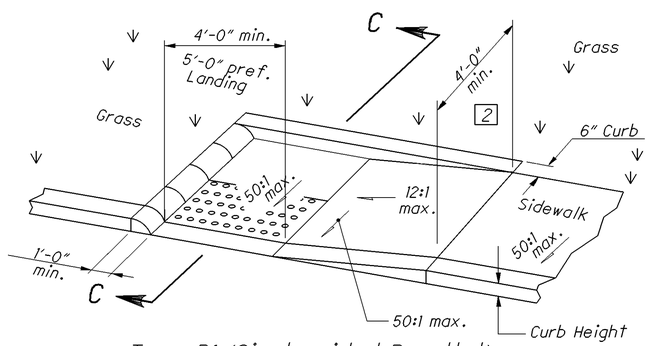


Type C1 (Combined with flared sides)

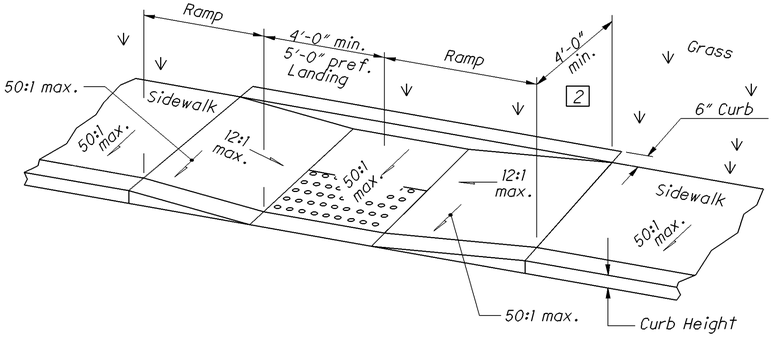


Type C2 (Combined with returned curb)

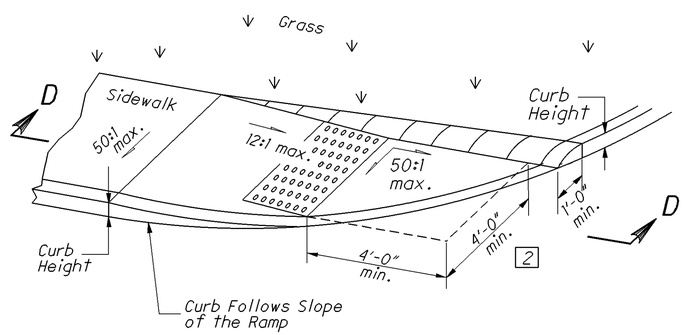
COMBINED CURB RAMP DETAILS



Type B1 (Single sided Parallel)



Type B2 (Double sided Parallel)



Type B3 (Single sided Parallel)

PARALLEL CURB RAMP DETAILS

NOTES

The running slope of the ramp is preferred to be 12:1 or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due to site constraints (e.g. utility poles or vaults, right-of-way limits) it may be reduced as follows:

A) 10:1 for a max. rise of 6",
B) 8:1 for a max. rise of 3",
C) 6:1 over a max. run of 2'-0" for historic areas where a flatter slope is not feasible.

To prevent chasing the grade indefinately, the transition from exisiting sidewalk to the curb ramp area is not required to exceed 15 feet in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the cross walk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transitions shall be 20:1 ot flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

LEGEND

1 Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.

2 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

3 Where landing width (D) has been reduced to 3'-0" the flared sides shall have a maximum slope of 12:1.

Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheelchair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

See Sheet 33 for Sections.

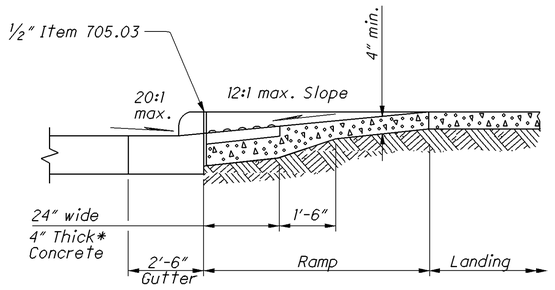
CALCULATED LME CHECKED DNM

DETECTABLE WARNING DETAILS

CURB RAMP AND DE

GUE-513-0.00
GUE-761-0.00

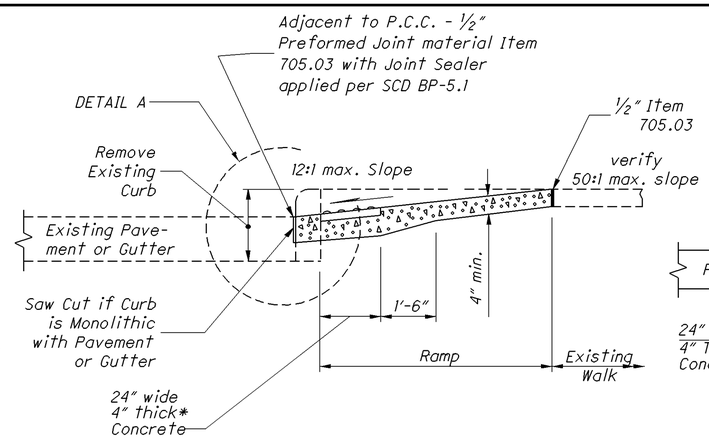
2519LCRD_002.DGN 2-5-13



New gutter shown.

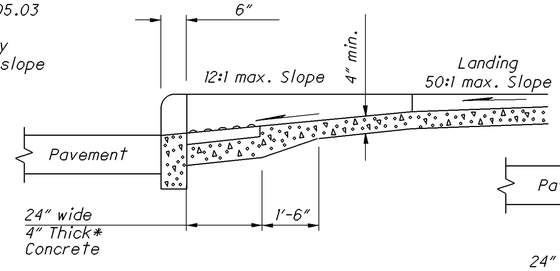
SECTION A-A NORMAL DETAIL

See Sheet 32



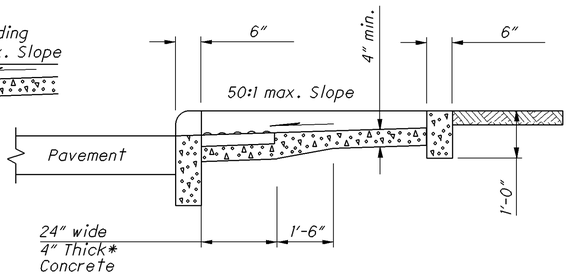
SECTION A-A EXISTING WALK DETAIL

See Sheet 32



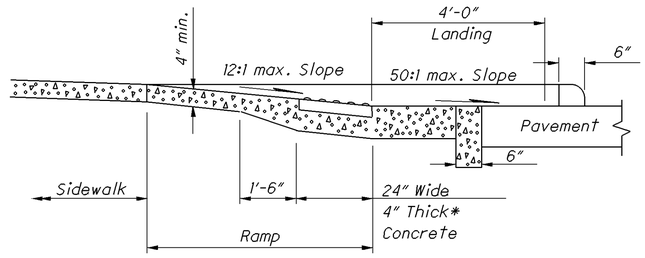
SECTION B-B

See Sheet 32



SECTION C-C

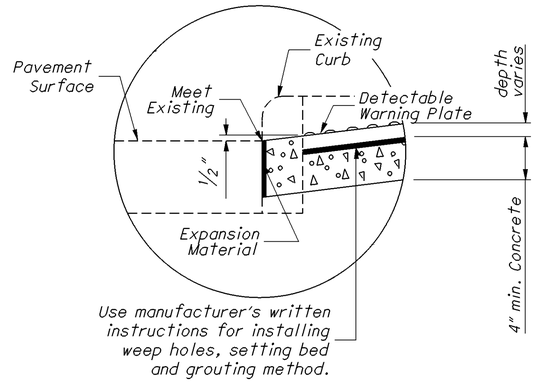
See Sheet 32



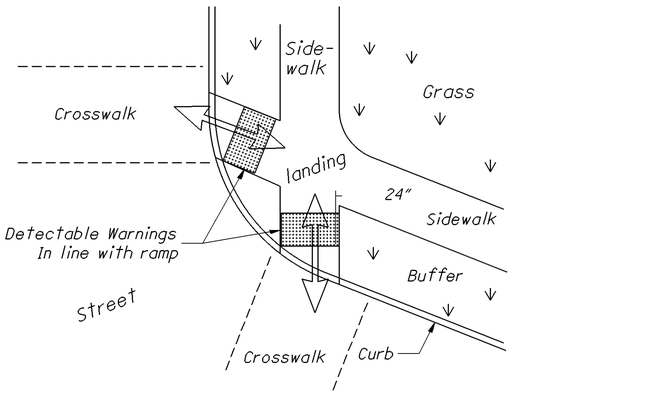
SECTION D-D

See Sheet 32

*Where possible, pour ramp area integral with the curb, otherwise use 6" thick walk.



DETAIL A



DETECTABLE WARNING ALIGNMENT

DETECTABLE WARNINGS NOTES

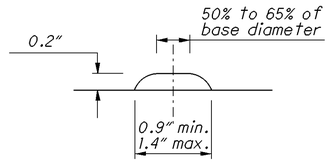
GENERAL: *Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.*

PLACEMENT: *Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 31.*

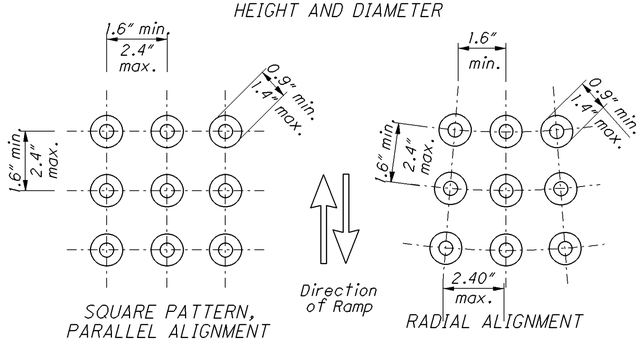
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

ALIGNMENT: *Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but in skewed conditions at least one corner of the 24" strip should be adjacent to the back of curb. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.*

PRODUCTS & COLORS: *Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per manufacturer's printed instructions.*



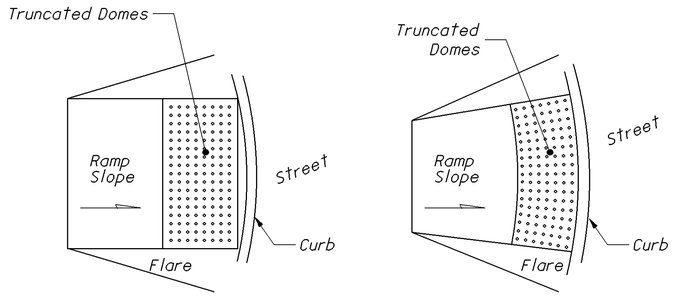
HEIGHT AND DIAMETER



SQUARE PATTERN, PARALLEL ALIGNMENT

RADIAL ALIGNMENT

TRUNCATED DOMES DETAILS



DOME ALIGNMENT ON RADIUSED CURB

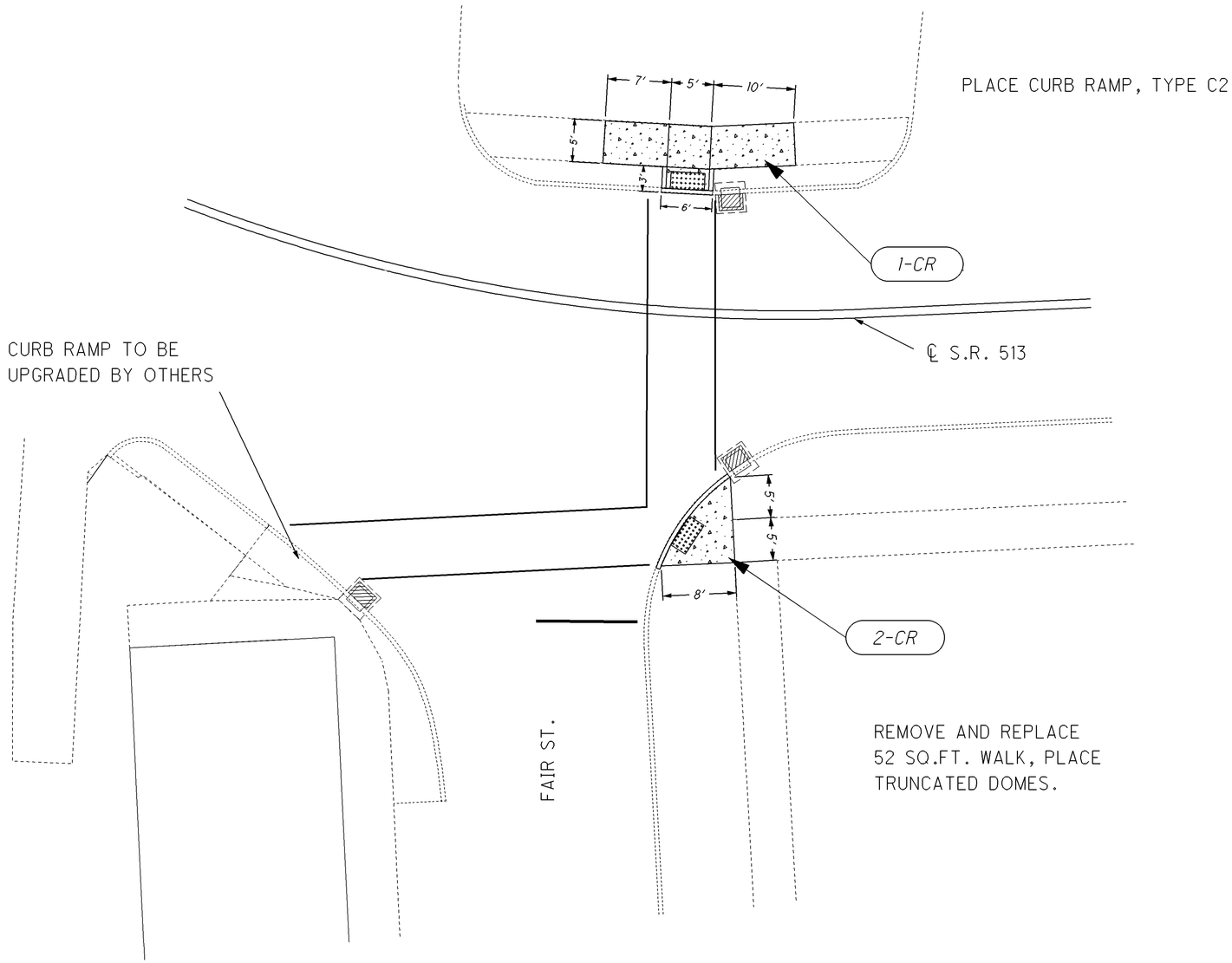
CALCULATED JLS CHECKED DNM

CURB RAMP AND DETECTABLE WARNING DETAILS

GUE-513-0.00
GUE-761-0.00

2591LCRD_003.DGN 2-5-13

SEE SHEET 19 FOR CURB RAMP/WALK QUANTITES



P:\GUE\92254\Design\Roadway\Plan_Sheets\General\92254_CRP_001.dgn 08-OCT-2013 1:51PM leby

DRAWING NOT TO SCALE

CALCULATED LME
CHECKED DNM

CURB RAMP PLAN SHEET
S.R. 513 QUAKER CITY

GUE-513-0.00
GUE-761-0.00

34
64

NOTES
- FOR DRAINAGE DETAILS, SEE SHEET 39

Ex SH
COMMERCIAL DRIVE
COMMERCIAL BUILDING
EX 6" WATER
RT Sta. 105+13.52
105
106
107
℄ CONST SR 265
N 81° 19' 00" E
MATCH LINE STA. 107+25 SR 265
SA

CURVE DATA
P.I. Sta. 104+30.22
Δ = 4° 22' 30" (LT)
Dc = 2° 37' 29"
R = 2,183.00'
T = 83.39'
L = 166.69'
E = 1.59'

HORIZONTAL SCALE IN FEET
0 5 10 20
CALCULATED JSL
CHECKED DNM

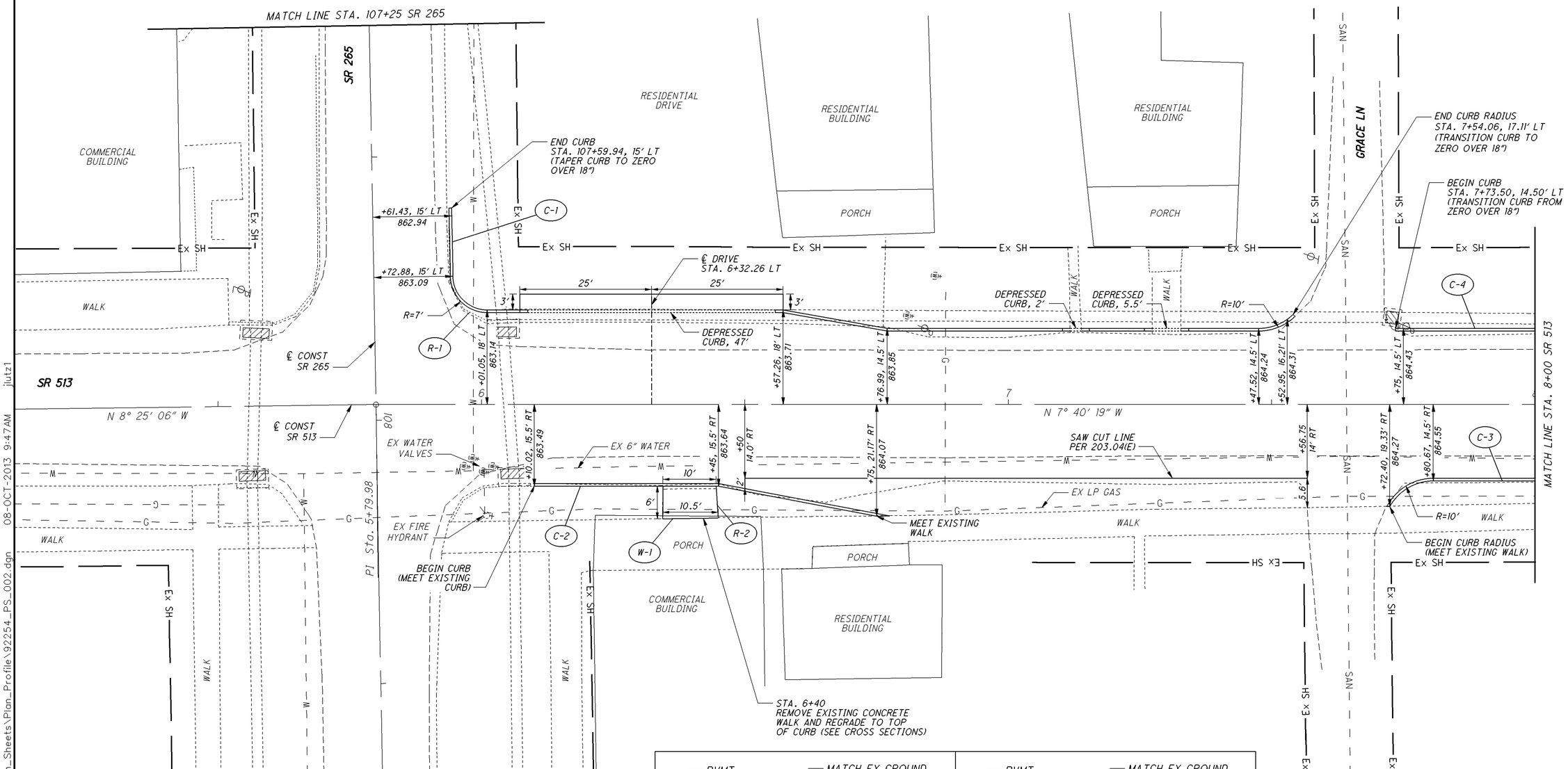
PLAN SHEET - SR 265
STA. 104+50 TO STA. 107+25

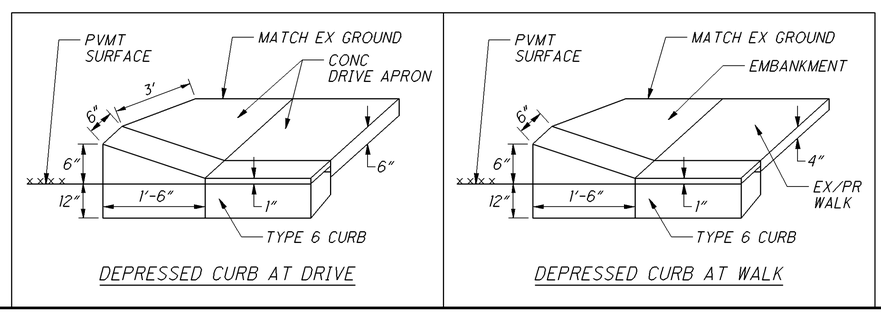
GUE-513-0.00
GUE-761-0.00

35
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Plan_Profile\92254_PS_001.dgn 08-OCT-2013 9:47AM jlutz1

NOTES
- STATION, OFFSET, AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB
- INSTALL DEPRESSED CURB AT ALL DRIVE AND WALK LOCATIONS (SEE DETAILS BELOW)
- FOR DRAINAGE DETAILS, SEE SHEET 40
- FOR ROADWAY QUANTITES, SEE SHEET 17





HORIZONTAL SCALE IN FEET
0 5 10 20
CALCULATED JSL
CHECKED DNM

PLAN SHEET - SR 513
STA. 5+50 TO STA. 8+00

GUE-513-0.00
GUE-761-0.00

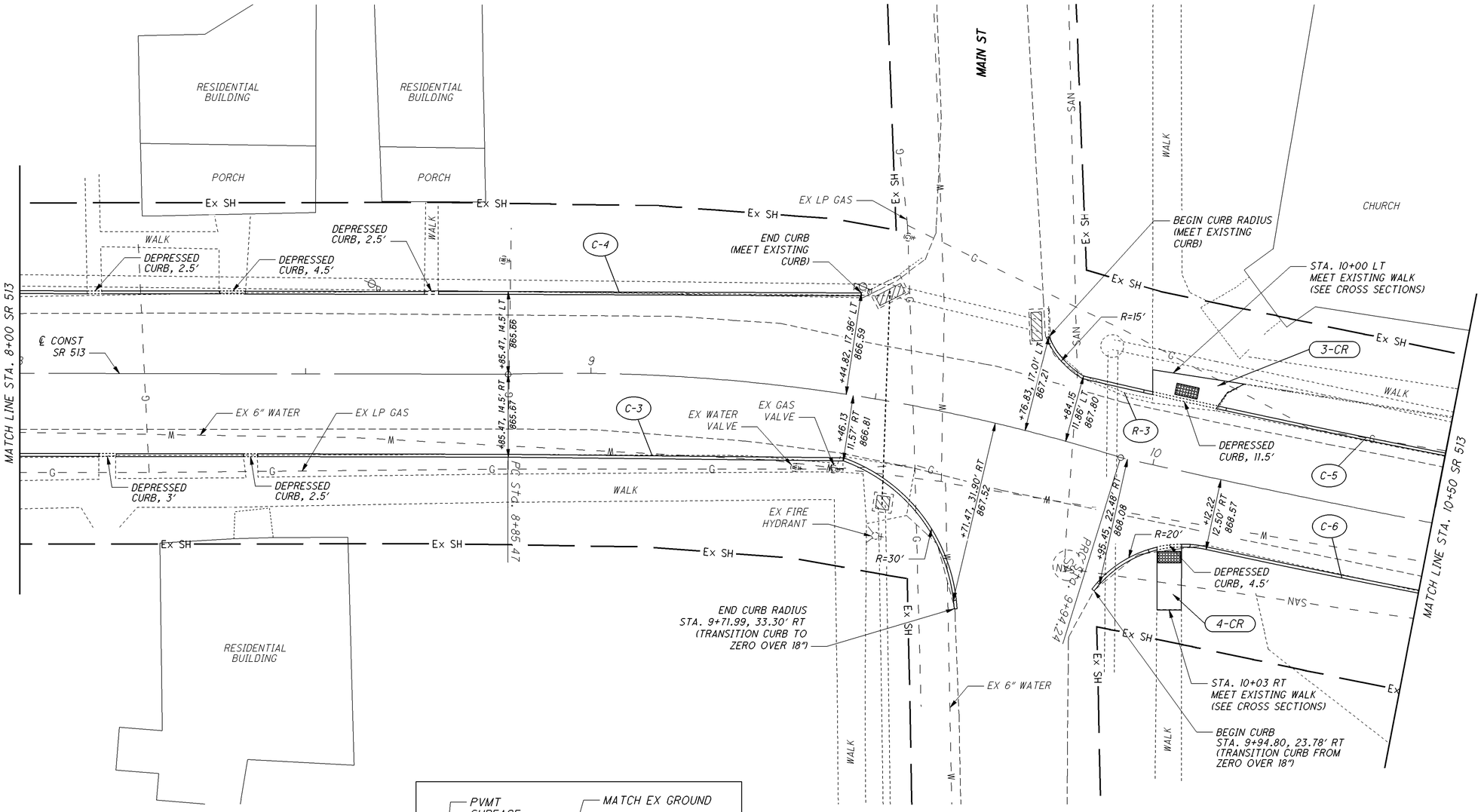
36
64

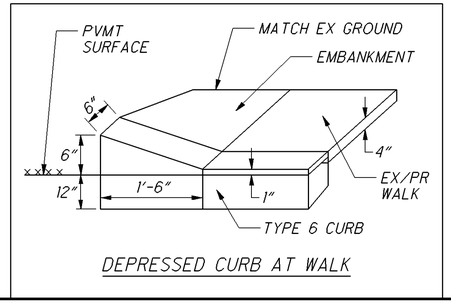
P:\GUE\92254\Design\Roadway\Plan_Sheets\Plan_Profile\92254_PS_002.dgn 08-OCT-2013 9:47AM jlutz1

NOTES
- STATION, OFFSET, AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB
- INSTALL DEPRESSED CURB AT ALL WALK LOCATIONS (SEE DETAIL BELOW)
- FOR DRAINAGE DETAILS, SEE SHEETS 40-41
- FOR ROADWAY QUANTITIES, SEE SHEET 17
- FOR CURB RAMP QUANTITES, SEE SHEET 19

BENCHMARKS

POINT NAME	STATION & OFFSET SR 513	GRID COORDINATES U.S. SURVEY FEET		ELEVATION FEET	DESCRIPTION
		NORTHING	EASTING		
SV2	STA. 9+41.47, 25.58' LT	720135.521	2304727.185	865.82	5/8" REBAR W/ ODOT CAP





DEPRESSED CURB AT WALK

CURVE DATA

P.I. Sta. 9+40.37	P.I. Sta. 10+39.56
Δ = 19° 10' 34" (RT)	Δ = 2° 43' 57" (LT)
Dc = 17° 37' 46"	Dc = 3° 00' 56"
R = 325.00'	R = 1,900.00'
T = 54.90'	T = 45.32'
L = 108.77'	L = 90.61'
E = 4.60'	E = 0.54'

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED JSL
CHECKED DNM

PLAN SHEET
STA. 8+00 TO STA. 10+50

GUE-513-0.00
GUE-761-0.00

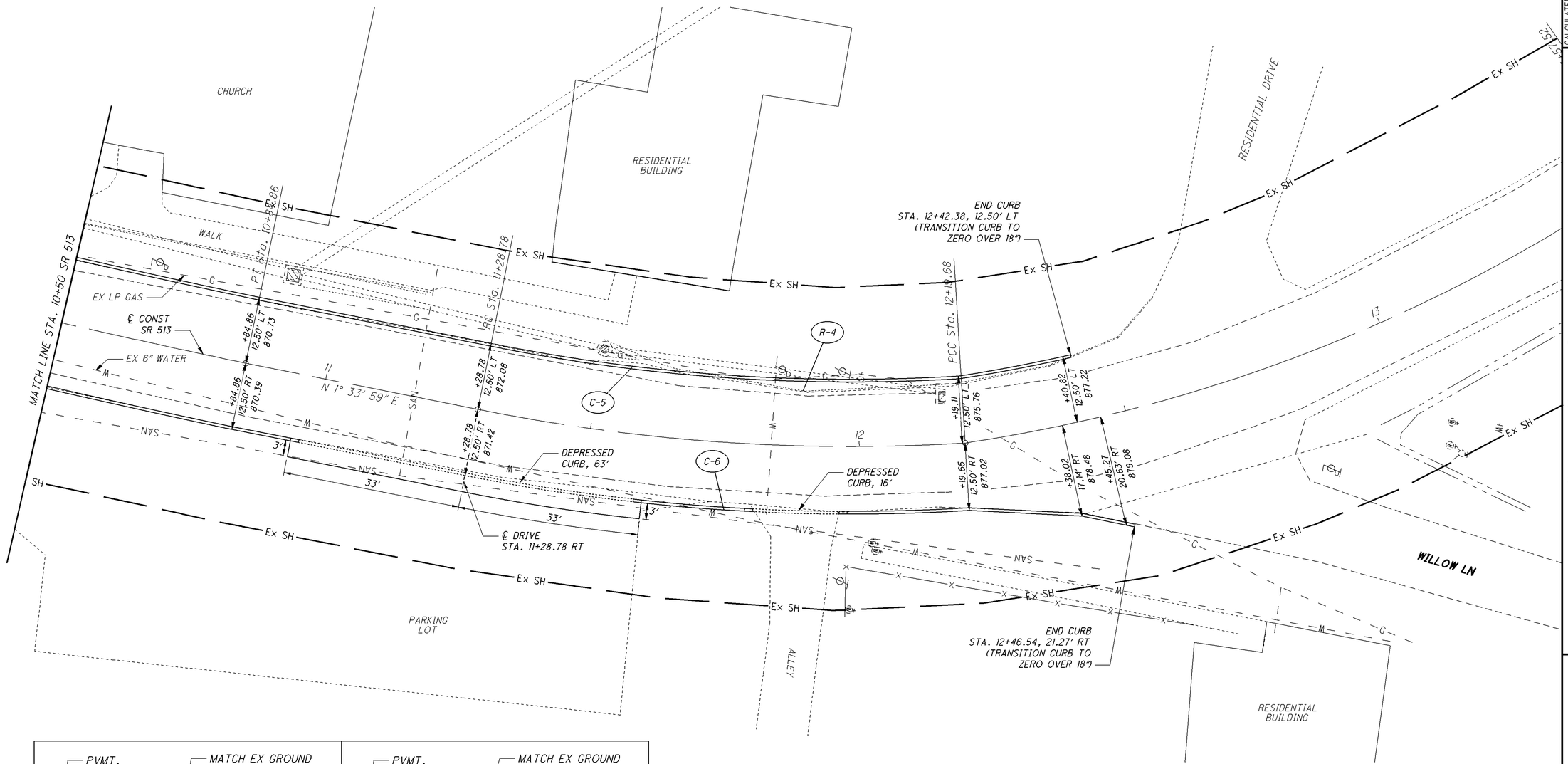
37
64

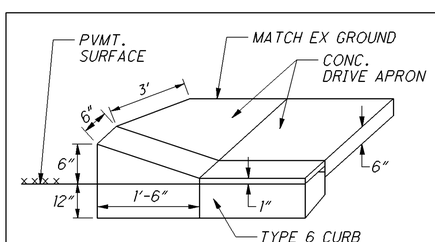
P:\GUE\92254\Design\Roadway\Plan_Sheets\Plan_Profile\92254_PS_003.dgn 08-OCT-2013 3:02PM jlutz1

NOTES
- STATION, OFFSET, AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB
- INSTALL DEPRESSED CURB AT ALL DRIVE AND WALK LOCATIONS (SEE DETAILS BELOW)
- FOR DRAINAGE DETAILS, SEE SHEET 41
- FOR ROADWAY QUANTITIES, SEE SHEET 17

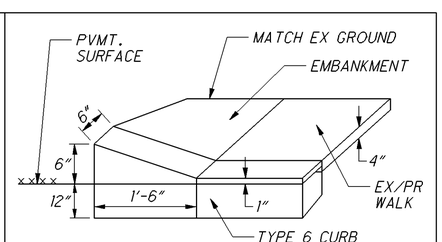
BENCHMARKS

POINT NAME	STATION & OFFSET SR 513	GRID COORDINATES U.S. SURVEY FEET		ELEVATION FEET	DESCRIPTION
		NORTHING	EASTING		
SV3	STA. 12+08.23, 17.81' RT	720404.737	2304774.999	875.25	5/8" REBAR W/ ODOT CAP





DEPRESSED CURB AT DRIVE



DEPRESSED CURB AT WALK

CURVE DATA

P.I. Sta. 11+74.49	P.I. Sta. 12+89.84
Δ = 14° 52' 47" (LT)	Δ = 26° 19' 31" (LT)
Dc = 16° 22' 13"	Dc = 19° 05' 55"
R = 350.00'	R = 300.00'
T = 45.71'	T = 70.16'
L = 90.90'	L = 137.84'
E = 2.97'	E = 8.09'

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED JSL
CHECKED DNM

PLAN SHEET - SR 513
STA. 10+50 TO STA. 13+00

GUE-513-0.00
GUE-761-0.00

38
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Plan_Profile\92254_PS_004.dgn 08-OCT-2013 9:47AM jlutz1

NOTES
- FOR STORM SEWER PROFILE, SEE SHEET 42
- FOR DRAINAGE QUANTITIES, SEE SHEET 18

PCC Sta. 103+46.83
PT Sta. 105+13.52
SR 265
℄ CONST SR 265
103
104
105
106
107
108
109
N 7° 40' 19" W
N 81° 19' 00" E
N 8° 25' 06" W
PI Sta. 5+79.98
℄ CONST SR 513
SR 513
EX DITCH
OUTLET
HEADWALL PER HW-2.1
OR HW-2.2
36" TYPE B
24" TYPE B
EX 30" CLAY
(REMOVE)
EX 24" CONC.
(REMOVE)
EX 24" CLAY
(REMOVE)
EX CB
(REMOVE)
EX 24" CONC
(FILL & PLUG)
EX 24" CONC
EX 30" CLAY
EX CB
EX 24" CLAY
MH-3, 60"
MH-3, 84"
CB-3
D-1
D-2
D-3
D-4
D-5
D-6
D-7
R-1
R-2
R-3
R-4
PC-1
PC-2
PC-3

CALCULATED JSL
CHECKED DNM

HORIZONTAL SCALE IN FEET
0 10 20 40

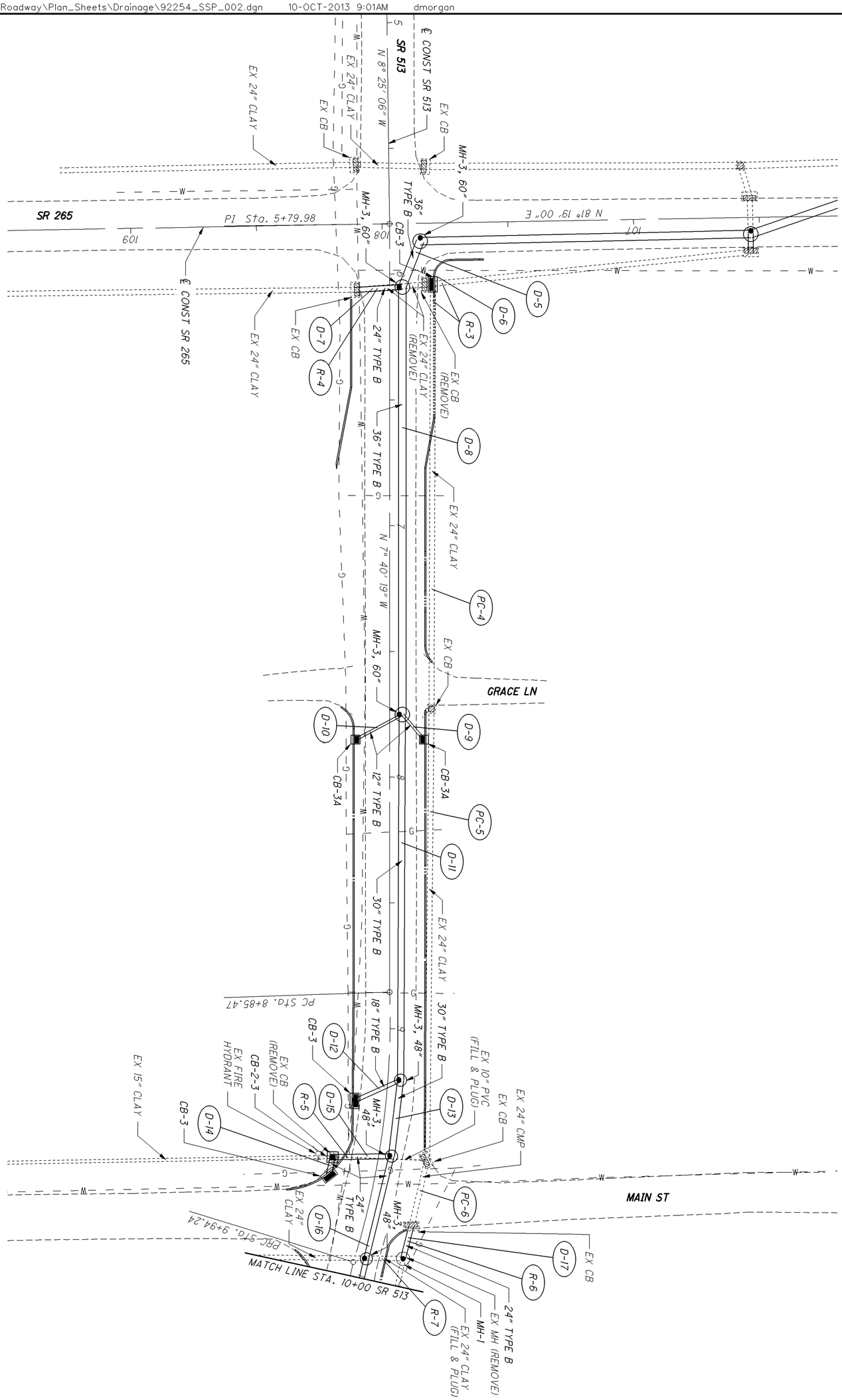
STORM SEWER PLAN SHEET - SR 265
STA. 103+00 TO STA. 109+00

GUE-513-0.00
GUE-761-0.00

39
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Drainage\92254_SSP_001.dgn 10-OCT-2013 9:01AM dmorgan

NOTES
- FOR STORM SEWER PROFILE, SEE SHEET 43
- FOR DRAINAGE QUANTITIES, SEE SHEET 18



40/64	GUE-513-0.00 GUE-761-0.00	STORM SEWER PLAN SHEET - SR 513 STA. 5+00 TO STA. 10+00	CALCULATED JSL CHECKED DNM	0 10 20 40 HORIZONTAL SCALE IN FEET

NOTES
- FOR STORM SEWER PROFILE, SEE SHEET 44
- FOR DRAINAGE QUANTITIES, SEE SHEET 18

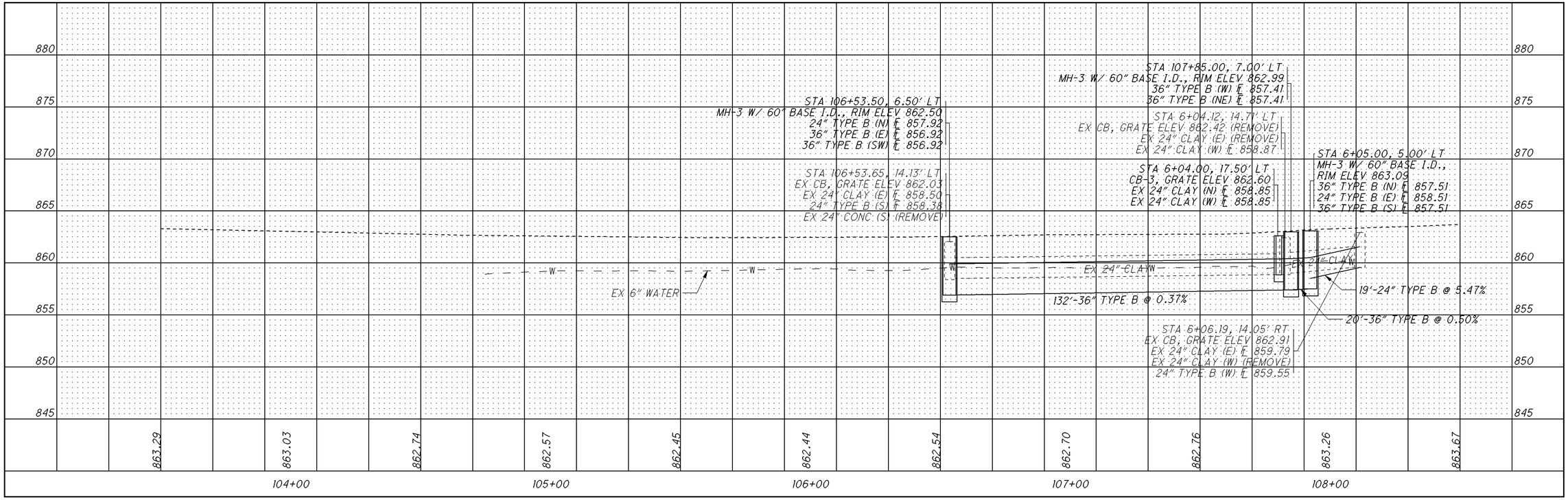
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JSL
CHECKED DNM

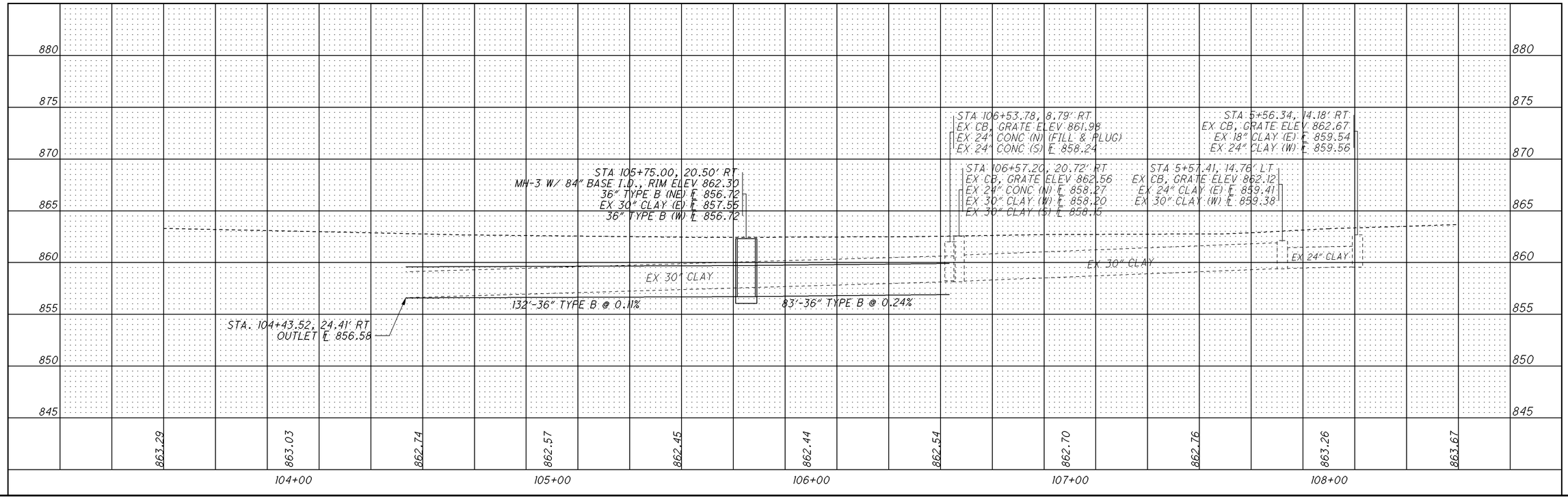
STORM SEWER PLAN SHEET - SR 513
STA. 10+00 TO STA. 15+00

GUE-513-0.00
GUE-761-0.00

LEFT SIDE PROFILE



RIGHT SIDE PROFILE



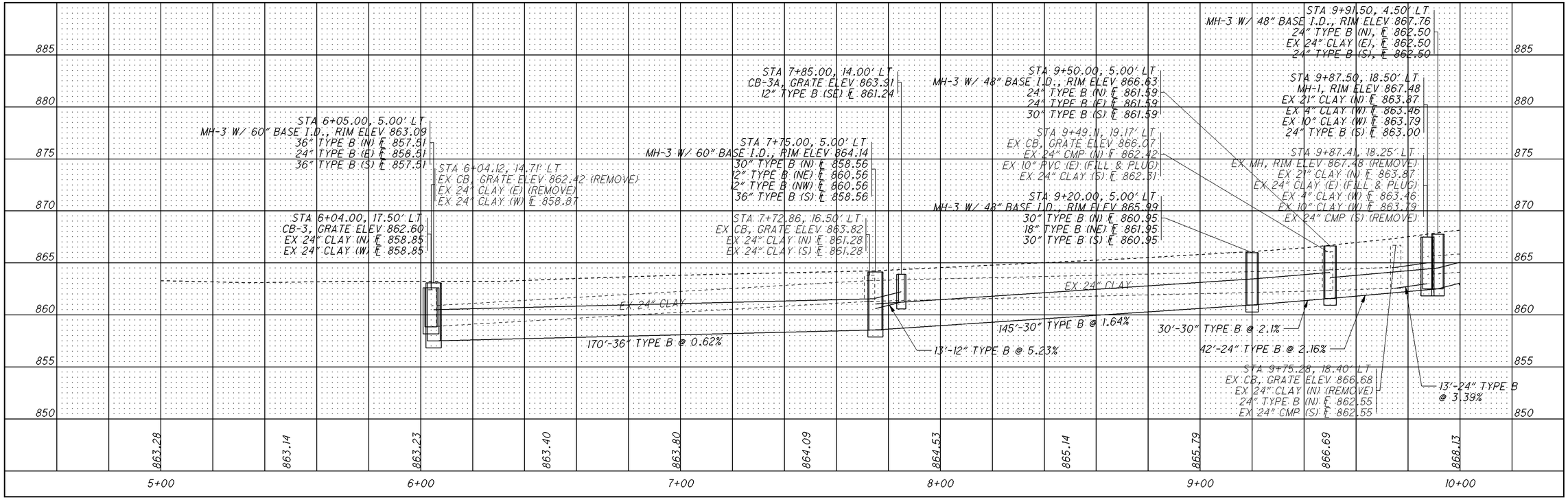
CALCULATED JSL
CHECKED DNM

STORM SEWER PROFILE SHEET - SR 265
STA. 103+50 TO STA. 108+50

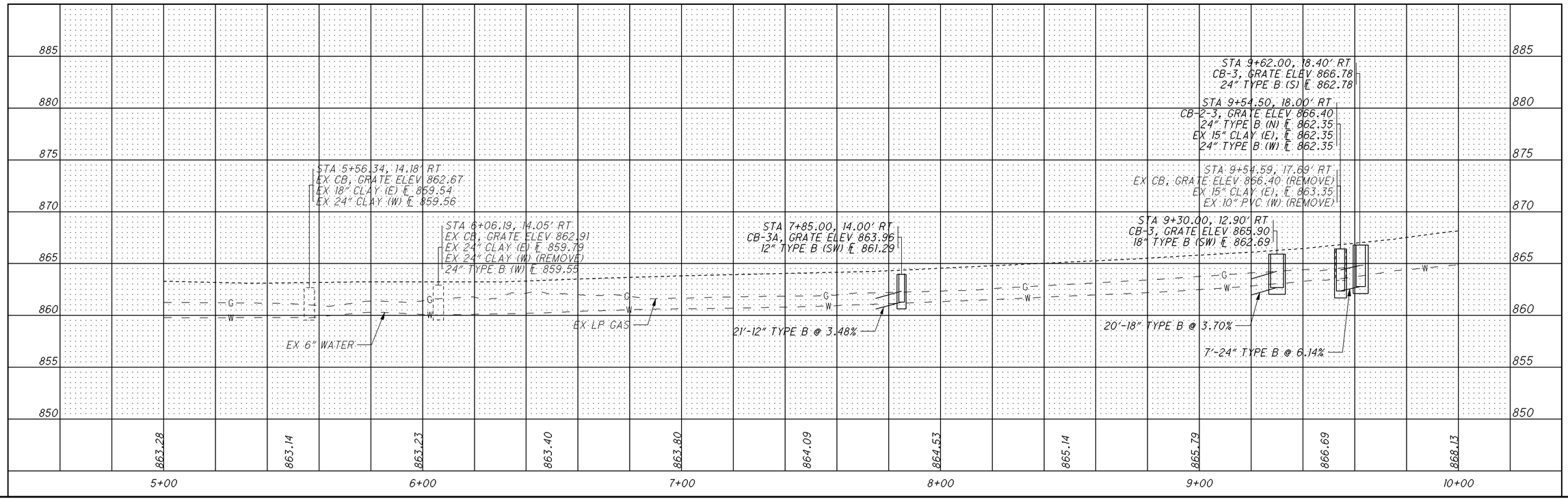
GUE-513-0.00
GUE-761-0.00

P:\GUE\92254\Design\Roadway\Plan_Sheets\Drainage\92254_SSP_004.dgn 09-OCT-2013 3:09PM dmorgan

LEFT SIDE PROFILE



RIGHT SIDE PROFILE

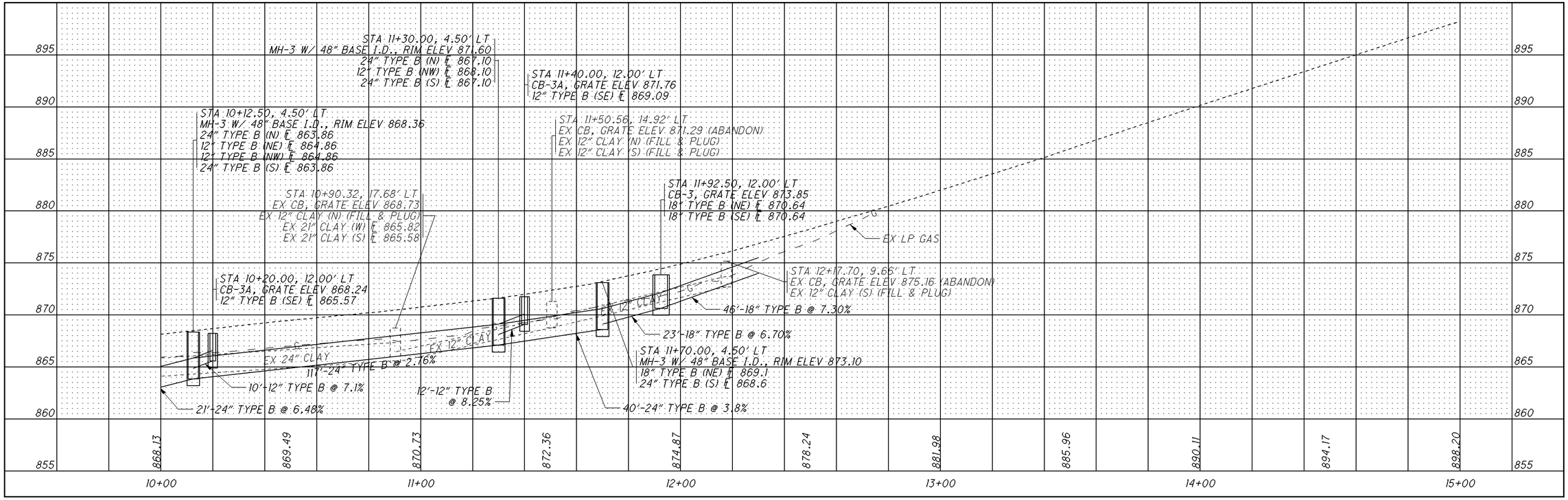


CALCULATED JSL
CHECKED DNM

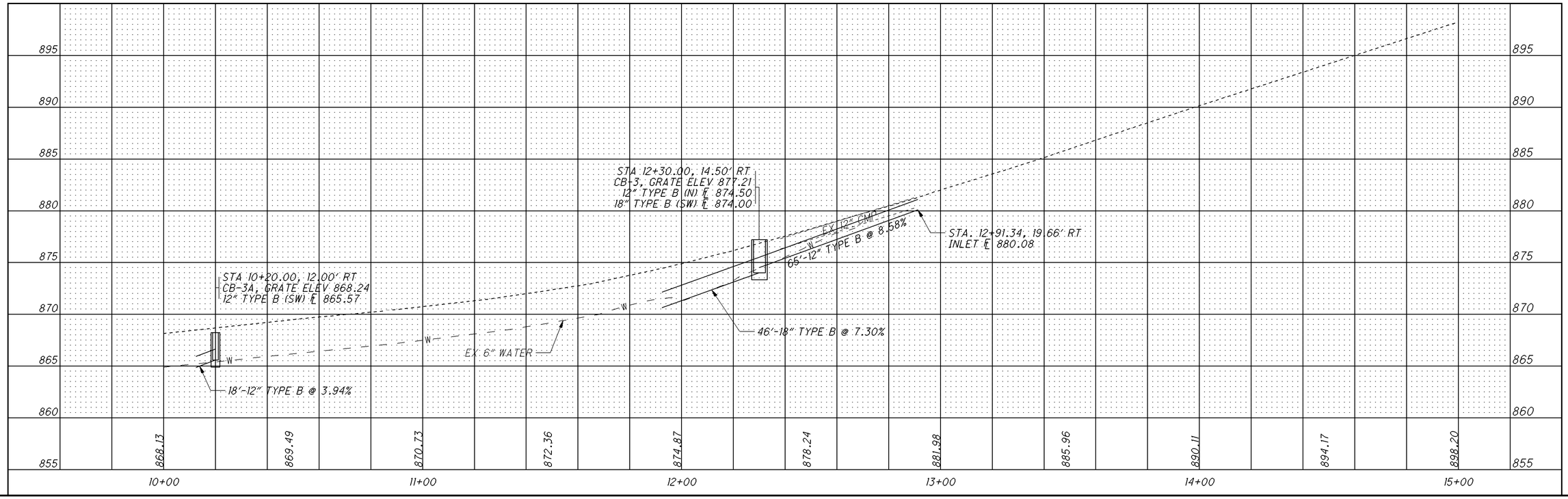
STORM SEWER PROFILE SHEET - SR 513
STA. 5+00 TO STA. 10+00

GUE-513-0.00
GUE-761-0.00

LEFT SIDE PROFILE



RIGHT SIDE PROFILE



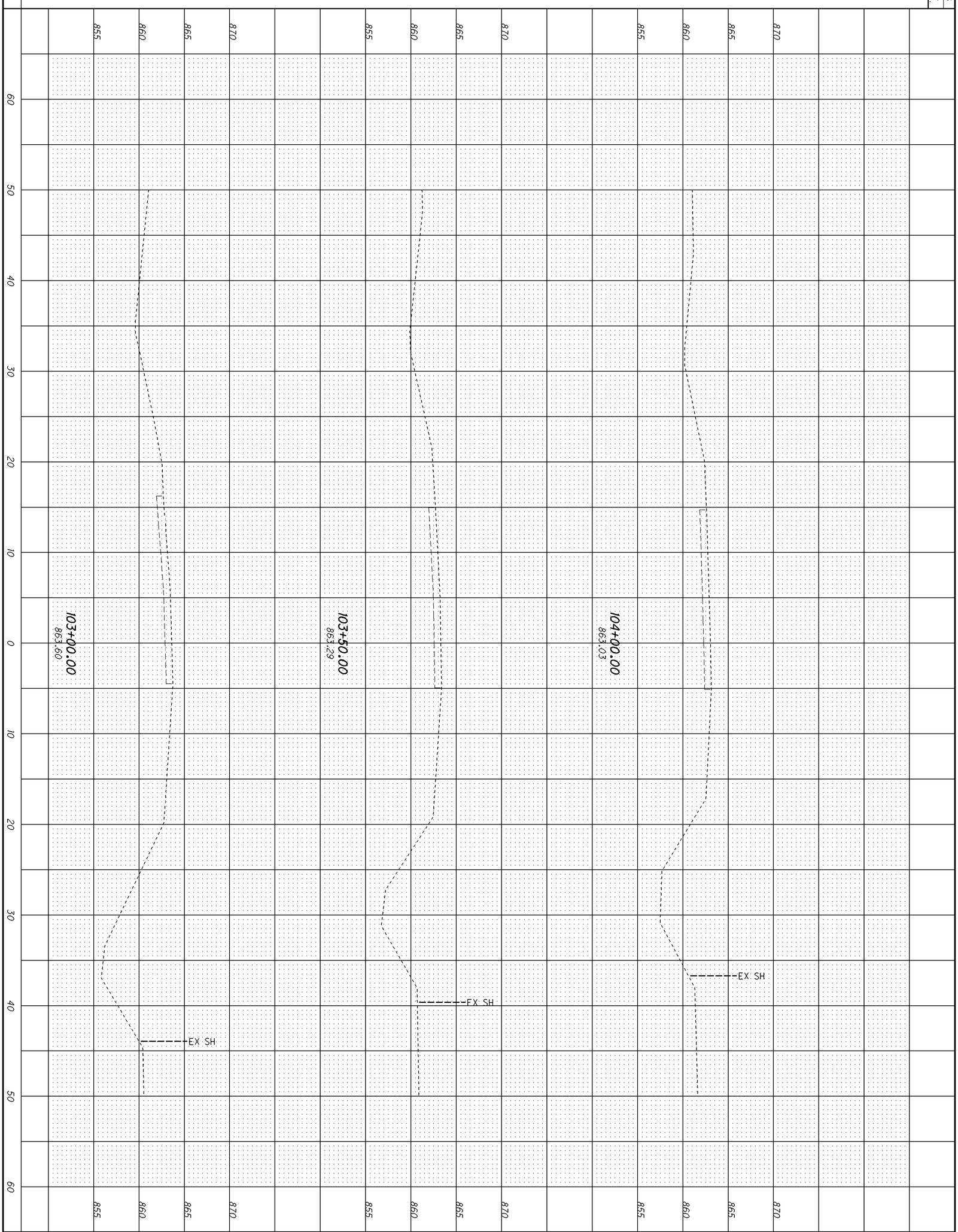
CALCULATED JSL
CHECKED DNM

STORM SEWER PROFILE SHEET - SR 513
STA. 10+00 TO STA. 15+00

GUE-513-0.00
GUE-761-0.00

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_001.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING
END WIDTH | SQ. YDS.



END AREA
CUT | FILL

VOLUME
CUT | FILL

45/64

GUE-513-0.00
GUE-761-0.00

CROSS SECTIONS - SR 265
STA. 103+00.00 TO STA. 104+00.00

CALCULATED JSL
CHECKED DNM

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM

870
865
860
855

EX SH

EX 6" WATER (W)

EX 30" CLAY (REMOVE)

36" TYPE B
℄ 856.61

104+75.00
862.64

EX SH

870
865
860
855

EX 30" CLAY (REMOVE)

36" TYPE B
℄ 856.59

104+50.00
862.74

EX SH

870
865
860
855

EX 30" CLAY (REMOVE)

36" TYPE B
STA. 104+43.52, 24.41' RT
OUTLET ℄ 856.58

104+43.52
862.78

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

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_001.dgn 08-OCT-2013 9:47AM jlutz1

CROSS SECTIONS - SR 265
STA. 104+43.52 TO STA. 104+75.00

GUE-513-0.00
GUE-761-0.00

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM

870
865
860
855

EX. 6" WATER (W)

EX. SH

EX. 30" CLAY (REMOVE)

36" TYPE B
℄ 856.69

105+50.00
862.45

870
865
860
855

EX. 6" WATER (W)

EX. SH

EX. 30" CLAY (REMOVE)

36" TYPE B
℄ 856.67

105+25.00
862.51

870
865
860
855

EX. SH

EX. 6" WATER (W)

EX. SH

EX. 30" CLAY (REMOVE)

36" TYPE B
℄ 856.64

105+00.00
862.57

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

CROSS SECTIONS - SR 265
STA. 105+50.00 TO STA. 105+00.00

GUE-513-0.00
GUE-761-0.00

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_001.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM

870
865
860
855

EX SH

EX 6" WATER (W)

36" TYPE B
E 856.85

EX 30" CLAY

106+25.00
862.47

106+00.00
862.44

STA 105+75.00, 20.50' RT
MH-3 W/ 84" BASE I.D., RIM ELEV 862.30
36" TYPE B (NE) E 856.72
EX 30" CLAY (E) E 857.55
36" TYPE B (W) E 856.72

105+75.00
862.42

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

CROSS SECTIONS - SR 265
STA. 105+75.00 TO STA. 106+25.00

GUE-513-0.00
GUE-761-0.00

48
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_001.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM

870
865
860
855

EX SH

EX 6" WATER (W)
EX 24" CLAY
36" TYPE B
E 857.09
EX 30" CLAY

107+00.00
862.70

106+75.00
862.63

STA 106+53.50, 6.50' LT
MH-3 W/ 60" BASE I.D., RIM ELEV 862.50
24" TYPE B (N) E 857.92
36" TYPE B (E) E 856.92
36" TYPE B (SW) E 856.92

STA 106+57.20, 20.72' RT
EX CB, GRATE ELEV 862.56
EX 24" CONC (N) E 858.27
EX 30" CLAY (W) E 858.20
EX 30" CLAY (S) E 858.15

STA 106+53.65, 14.13' LT
EX CB, GRATE ELEV 862.03
EX 24" CLAY (E) E 858.50
24" TYPE B (S) E 858.38
EX 24" CONC (S) (REMOVE)

STA 106+53.78, 8.79' RT
EX CB, GRATE ELEV 861.98
EX 24" CONC (N) (FILL & PLUG)
EX 24" CONC (S) E 858.24

EX 6" WATER (W)
EX 24" CONC
EX 24" CONC (REMOVE)
EX 24" CONC (FILL & PLUG)
8'-24" TYPE B @ 5.75%

106+50.00
862.54

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

CROSS SECTIONS - SR 265
STA. 106+50.00 TO STA. 107+00.00

GUE-513-0.00
GUE-761-0.00

49
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_001.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM

STA 107+85.00, 7.00' LT
MH-3 W/ 60" BASE I.D., RIM ELEV 862.99
36" TYPE B (W) ℄ 857.41
36" TYPE B (NE) ℄ 857.41

STA 6+04.00, 17.50' LT
CB-3, GRATE ELEV 862.60
EX 24" CLAY (N) ℄ 858.85
EX 24" CLAY (W) ℄ 858.85

STA 5+57.41, 14.76' LT
EX CB, GRATE ELEV 862.12
EX 24" CLAY (E) ℄ 859.41
EX 30" CLAY (W) ℄ 859.38

EX 24" CLAY
EX 6" WATER

107+75.00
862.94

EX SH

EX 24" CLAY
EX 6" WATER
36" TYPE B
℄ 857.28

107+50.00
862.76

EX 6" WATER
EX 24" CLAY
36" TYPE B
℄ 857.19

107+25.00
862.73

EX 30" CLAY

870
865
860
855

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

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_001.dgn 08-OCT-2013 9:47AM jlutz1

CROSS SECTIONS - SR 265
STA. 107+25.00 TO STA. 107+75.00

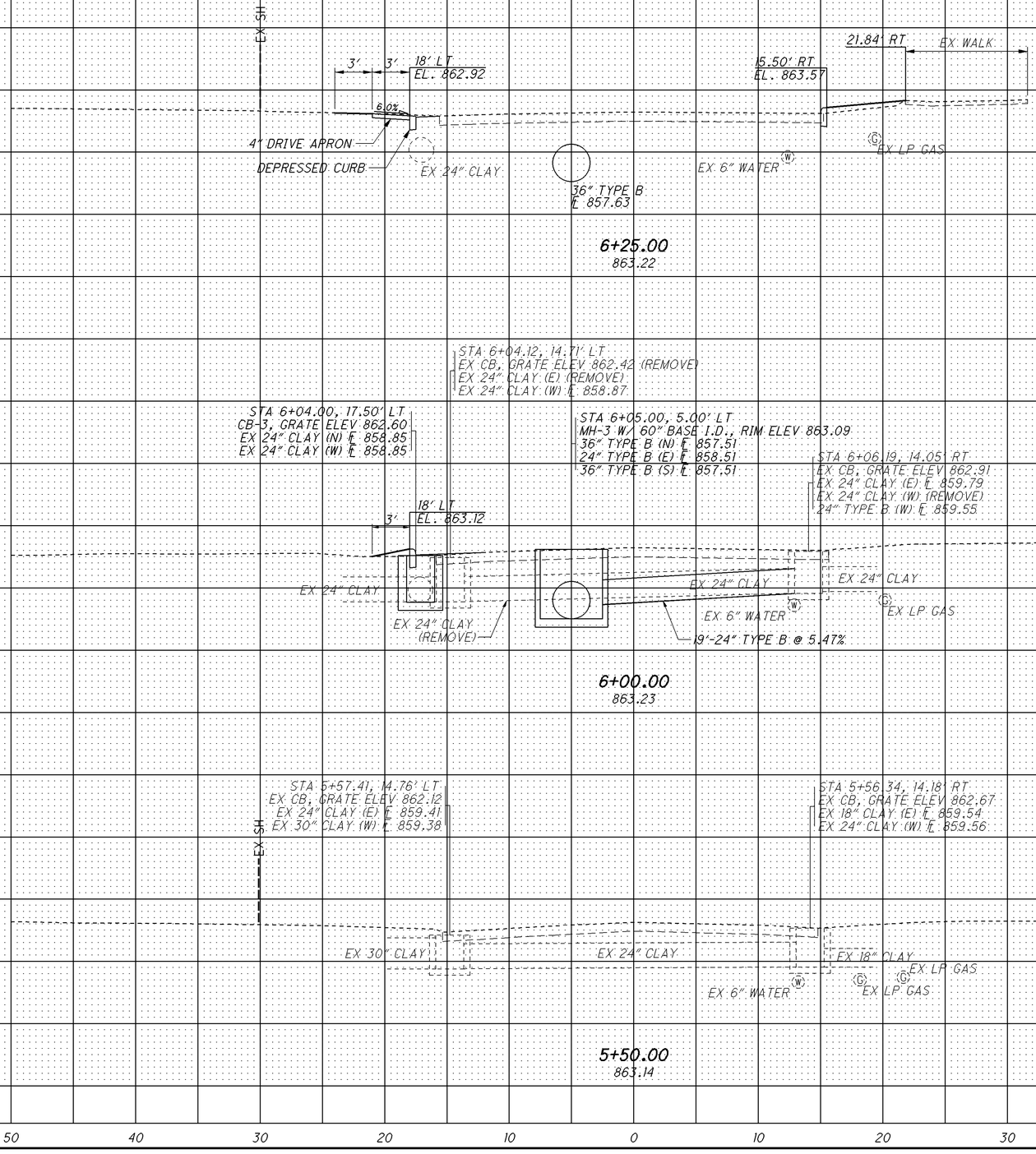
GUE-513-0.00
GUE-761-0.00

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM



CROSS SECTIONS - SR 513
STA. 5+50.00 TO STA. 6+25.00

GUE-513-0.00
GUE-761-0.00

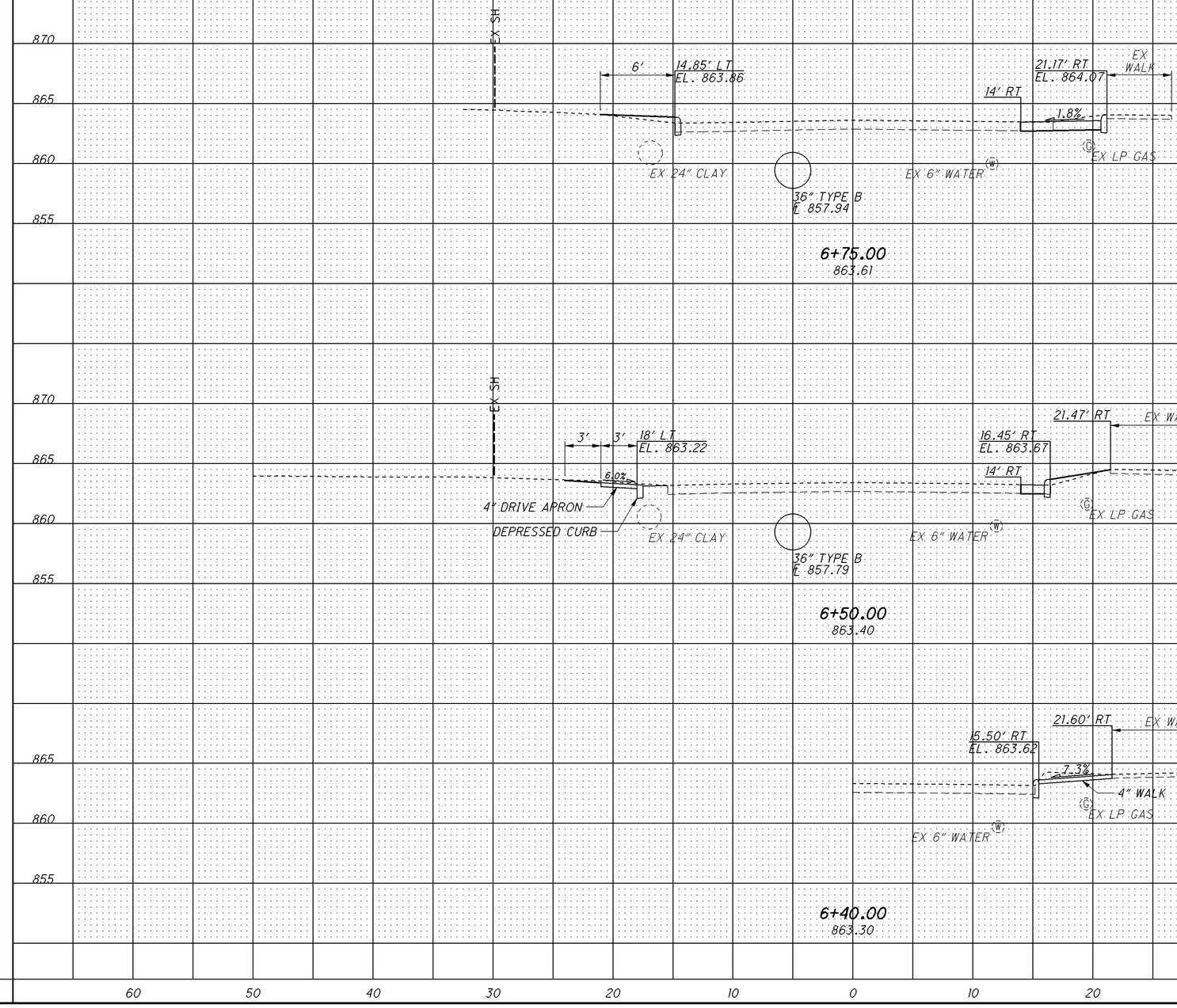
P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM



CROSS SECTIONS - SR 513
STA. 6+40.00 TO STA. 6+75.00

GUE-513-0.00
GUE-761-0.00

52
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:47AM jlutz1

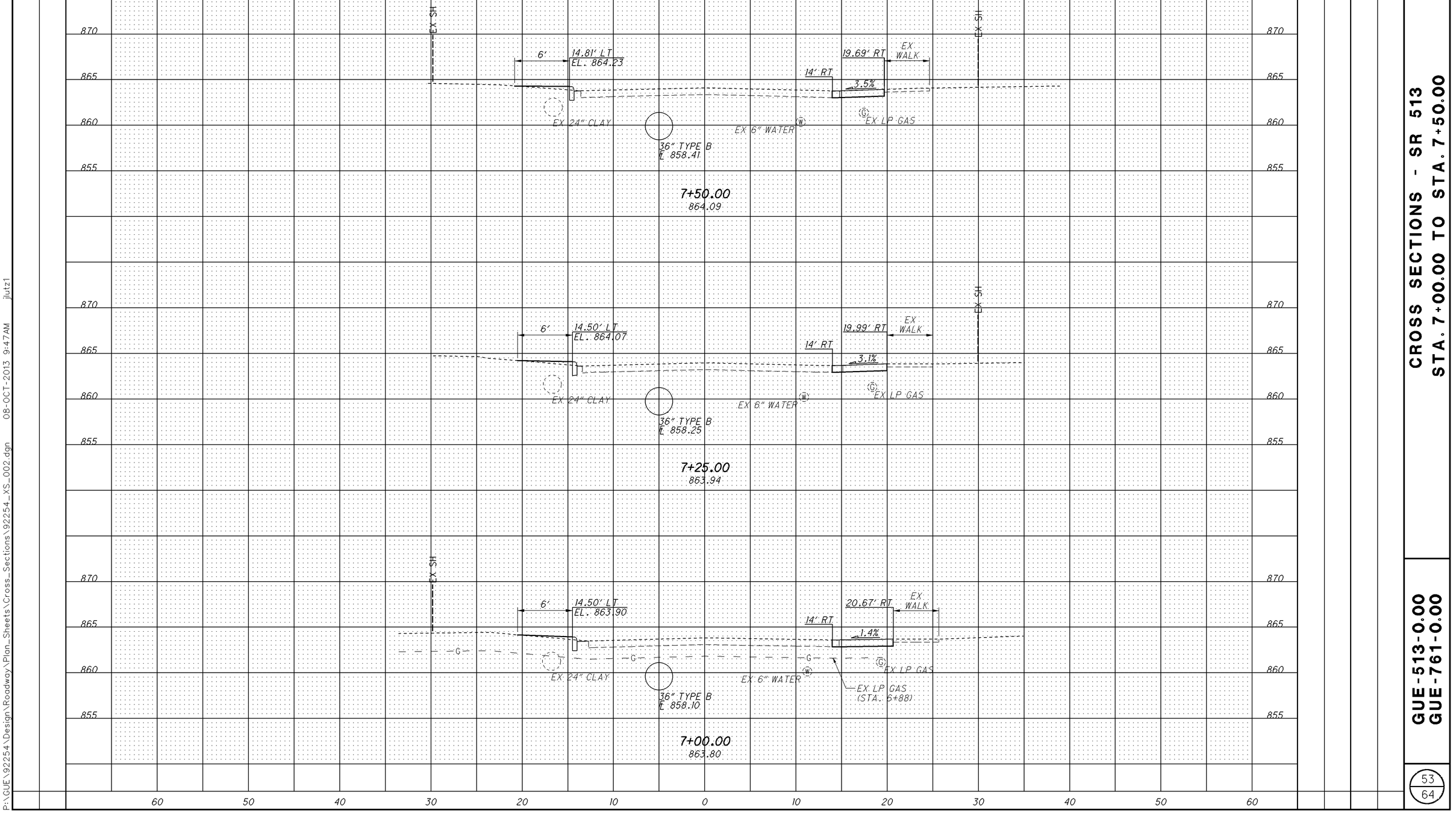
SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM



P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:47AM jlutz1

CROSS SECTIONS - SR 513
STA. 7+00.00 TO STA. 7+50.00

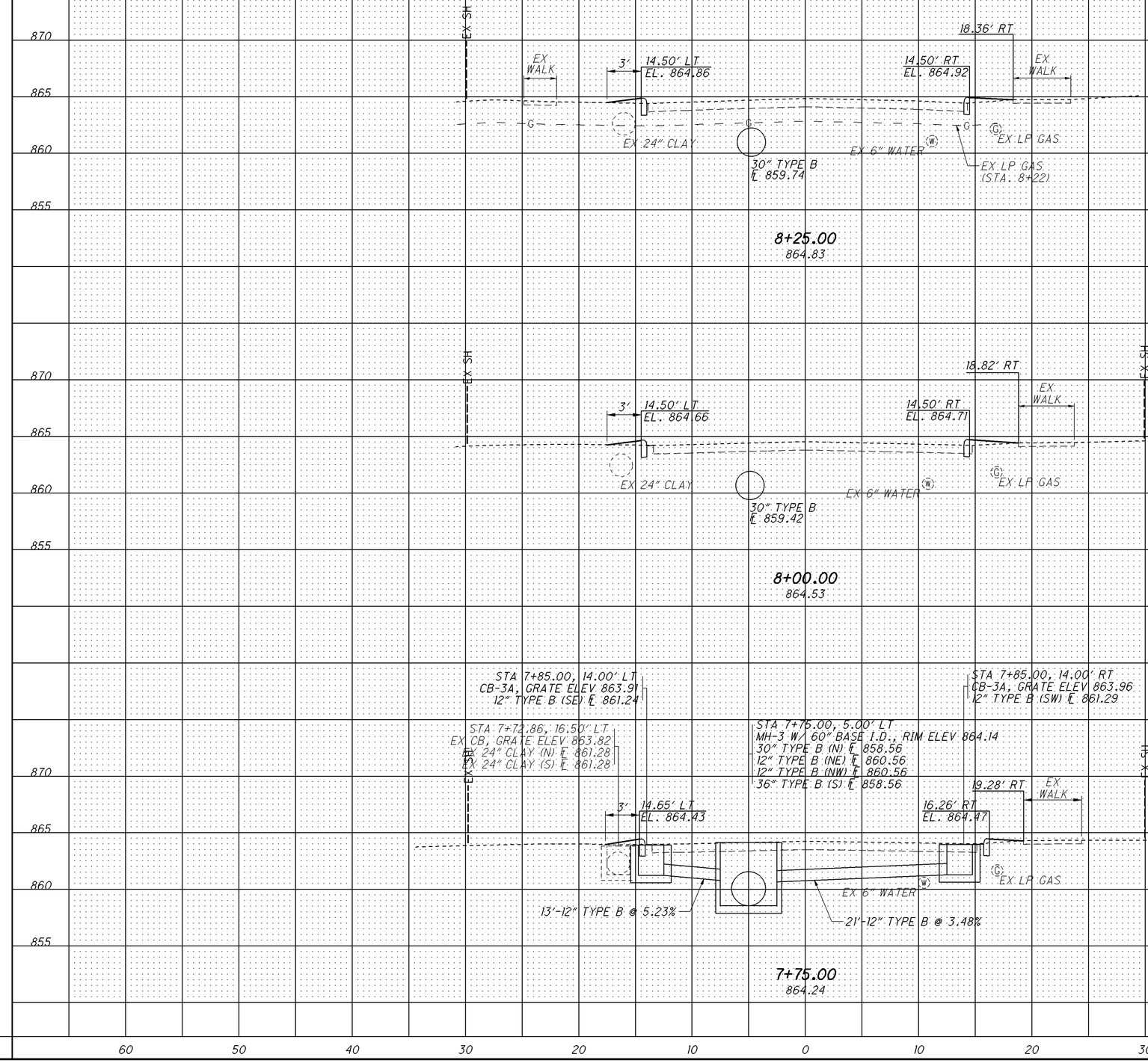
GUE-513-0.00
GUE-761-0.00

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM



CROSS SECTIONS - SR 513
STA. 7+75.00 TO STA. 8+25.00

GUE-513-0.00
GUE-761-0.00

54
64

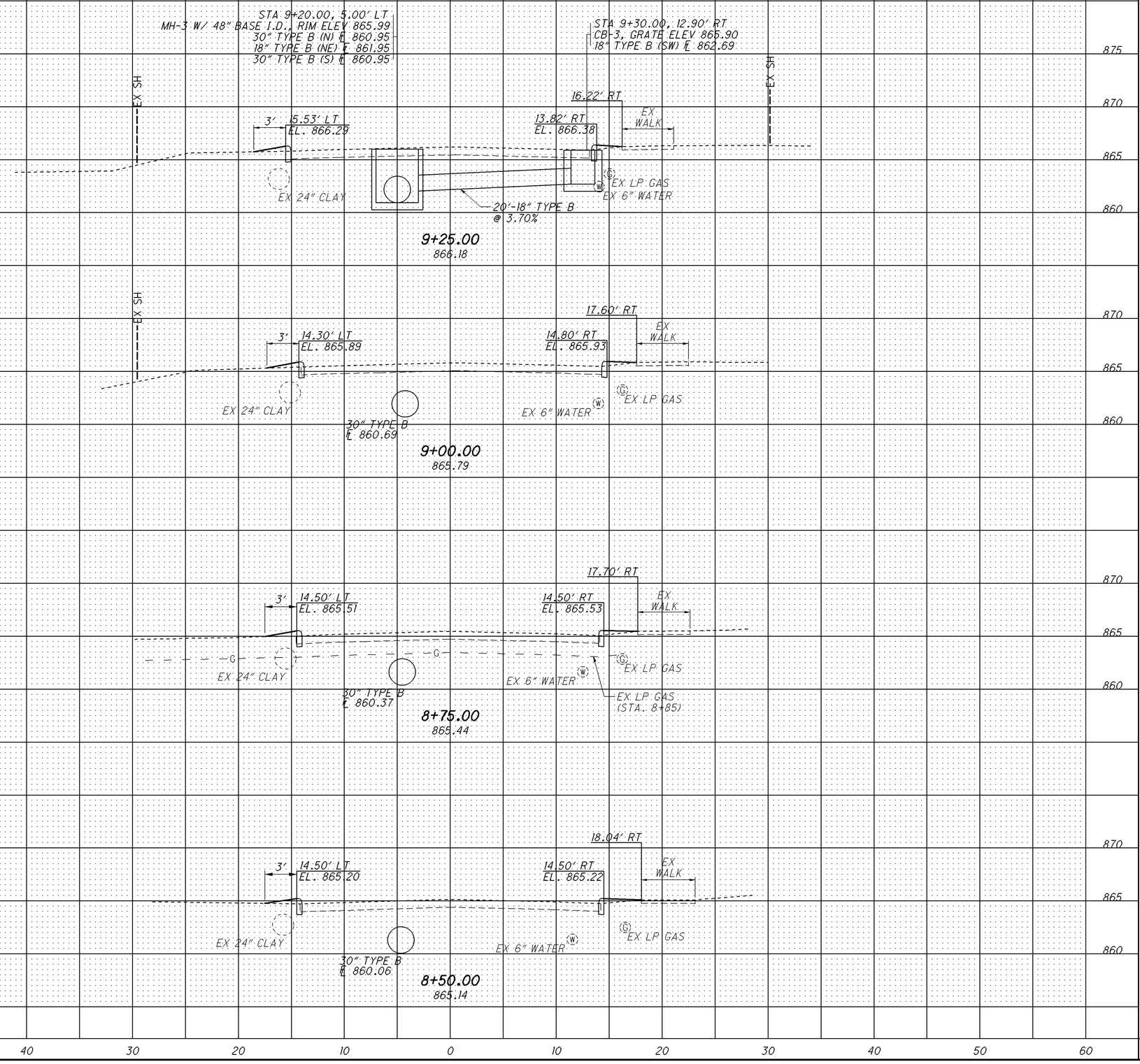
P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 09-OCT-2013 3:08PM dmorgan

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM



CROSS SECTIONS - SR 513
STA. 8+50.00 TO STA. 9+25.00

GUE-513-0.00
GUE-761-0.00

55
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

STA 9+87.50, 18.50' LT
MH-1, RIM ELEV 867.48
EX 21" CLAY (N) E 863.87
EX 4" CLAY (W) E 863.46
EX 10" CLAY (W) E 863.79
24" TYPE B (S) E 863.00

STA 9+87.41, 18.25' LT
EX MH, RIM ELEV 867.48 (REMOVE)
EX 21" CLAY (N) E 863.87
EX 24" CLAY (E) (FILL & PLUG)
EX 4" CLAY (W) E 863.46
EX 10" CLAY (W) E 863.79
EX 24" CMP (S) (REMOVE)

STA 9+91.50, 4.50' LT
MH-3 W/ 48" BASE I.D., RIM ELEV 867.76
24" TYPE B (N) E 862.50
EX 24" CLAY (E) E 862.50
24" TYPE B (S) E 862.50

EX SH

EX WALK
4'
12.50' LT
EL. 867.84
1.8%
17.43' RT
EL. 868.28
3'

EX 10" CLAY
EX LP GAS
EX 4" CLAY
EX 24" CLAY
EX 6" WATER
4" WALK W/ DETECTABLE WARNING
DEPRESSED CURB
EX 24" CLAY (FILL & PLUG)

10+00.00
868.13

STA 9+75.28, 18.40' LT
EX CB, GRATE ELEV 866.68
EX 24" CLAY (N) (REMOVE)
24" TYPE B (N) E 862.55
EX 24" CMP (S) E 862.55

EX LP GAS
24" TYPE B
E 862.14

9+75.00
867.34

STA 9+54.50, 18.00' RT
CB-2-3, GRATE ELEV 866.40
24" TYPE B (N) E 862.35
EX 15" CLAY (E) E 862.35
24" TYPE B (W) E 862.35

STA 9+62.00, 18.40' RT
CB-3, GRATE ELEV 866.78
24" TYPE B (S) E 862.78

STA 9+50.00, 5.00' LT
MH-3 W/ 48" BASE I.D., RIM ELEV 866.63
24" TYPE B (N) E 861.59
24" TYPE B (E) E 861.59
30" TYPE B (S) E 861.59

STA 9+54.59, 17.69' RT
EX CB, GRATE ELEV 866.40 (REMOVE)
EX 15" CLAY (E) E 862.35
EX 10" PVC (W) (REMOVE)

STA 9+49.11, 19.17' LT
EX CB, GRATE ELEV 866.07
EX 24" CMP (N) E 862.42
EX 10" PVC (E) (FILL & PLUG)
EX 24" CLAY (S) E 862.3

15.80' RT
13.82' RT
EL. 866.38

EX LP GAS
EX LP GAS (STA. 9+57)
EX 6" WATER (STA. 9+62)
EX 10" PVC (FILL & PLUG)
EX LP GAS
EX 6" WATER
EX 10" PVC (REMOVE)
EX 15" CLAY
23'-24" TYPE B @ 3.30%

9+50.00
866.69

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM

CROSS SECTIONS - SR 513
STA. 9+50.00 TO STA. 10+00.00

GUE-513-0.00
GUE-761-0.00

56
64

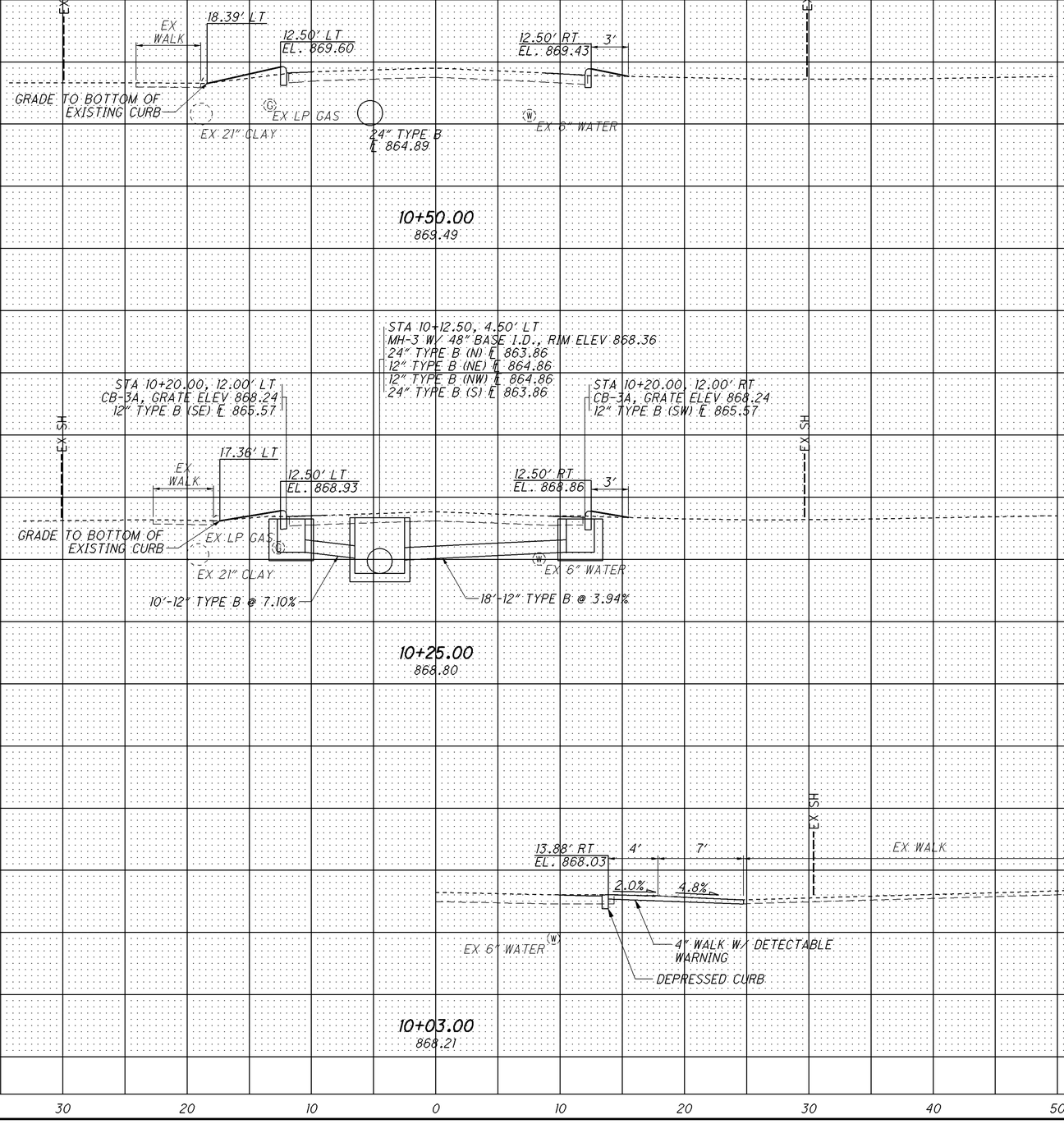
P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:47AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM



CROSS SECTIONS - SR 513
STA. 10+03.00 TO STA. 10+50.00

GUE-513-0.00
GUE-761-0.00

57
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:48AM jlutz1

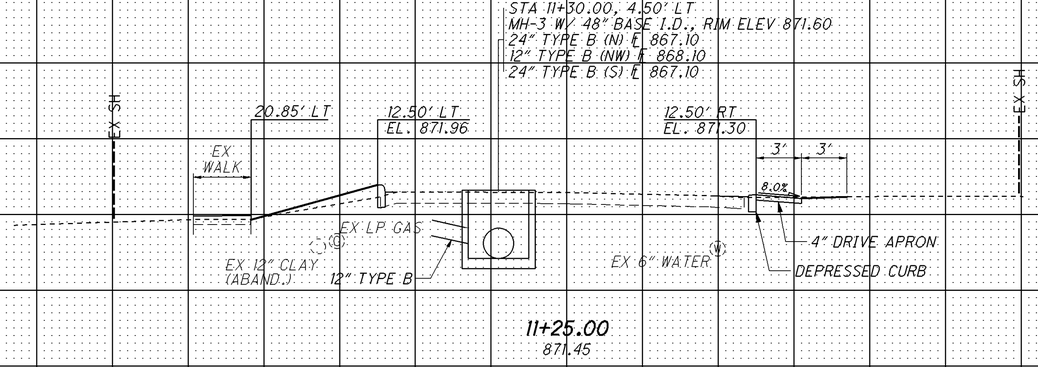
NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

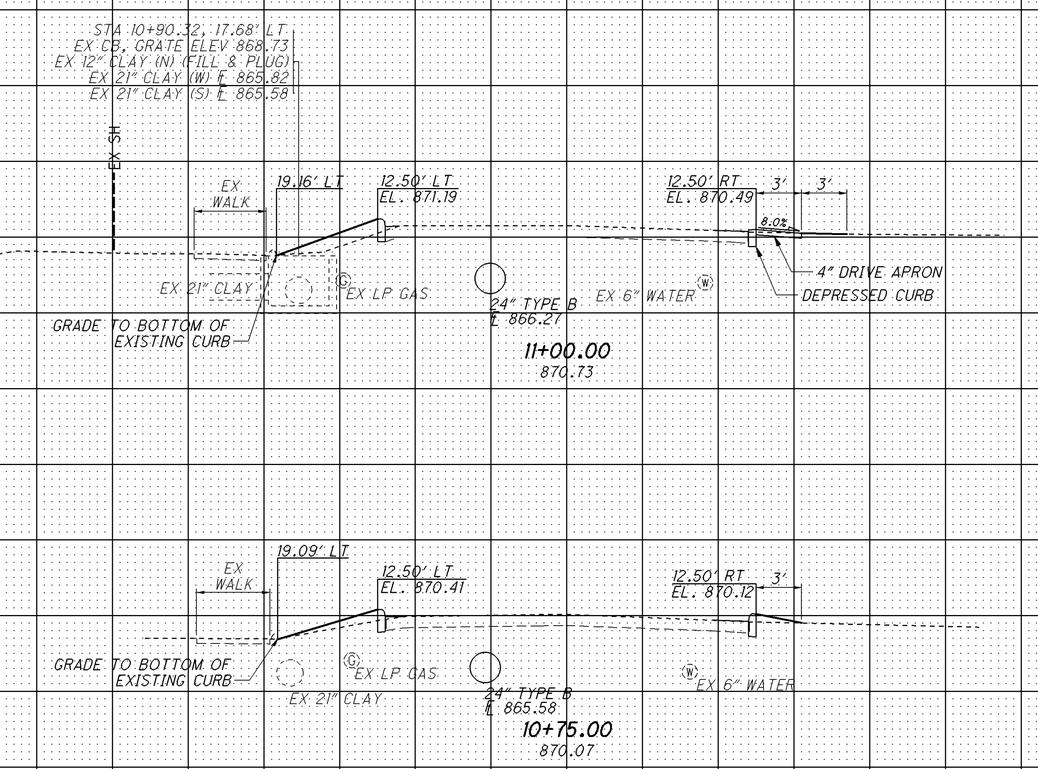
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM





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

CROSS SECTIONS - SR 513
STA. 10+75.00 TO STA. 11+25.00

GUE-513-0.00
GUE-761-0.00

58
64

jlutz1

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:48AM

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JSL
CHECKED DNM

STA 11+92.50, 12.00' LT
CB-3, GRATE ELEV 873.85
18" TYPE B (NE) ℄ 870.64
18" TYPE B (SE) ℄ 870.64

EX SH

3' 12.50' LT
EL. 874.76

12.50' RT 3'
EL. 875.63

EX LP GAS (G)

EX 12" CLAY (ABAND.)

18" TYPE B

18" TYPE B

EX 6" WATER (W)

880 875 870 865

12+00.00
874.87

STA 11+70.00, 4.50' LT
MH-3 W/ 48" BASE I.D., RIM ELEV 873.10
18" TYPE B (NE) ℄ 869.1
24" TYPE B (S) ℄ 868.6

EX SH

3' 12.50' LT
EL. 873.54

12.50' RT 3'
EL. 874.13

EX 12" CLAY (ABAND.) EX LP GAS (G)

18" TYPE B

EX 6" WATER (W)

880 875 870 865

11+75.00
873.49

STA 11+50.56, 14.92' LT
EX CB, GRATE ELEV 871.29 (ABANDON)
EX 12" CLAY (N) (FILL & PLUG)
EX 12" CLAY (S) (FILL & PLUG)

STA 11+40.00, 12.00' LT
CB-3A, GRATE ELEV 871.76
12" TYPE B (SE) ℄ 869.09

EX SH

20.18' LT

12.50' LT
EL. 872.69

12.50' RT 3' 3'
EL. 872.38

8.0%

EX WALK

EX LP GAS (G)

24" TYPE B
℄ 867.85

EX 6" WATER (W)

4" DRIVE APRON

DEPRESSED CURB

12" TYPE B

880 875 870 865

11+50.00
872.36

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

CROSS SECTIONS - SR 513
STA. 11+50.00 TO STA. 12+00.00

GUE-513-0.00
GUE-761-0.00

59
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:48AM jlutz1

SEEDING	
END WIDTH	SQ. YDS.

NOTE: OFFSET AND ELEVATION GIVEN FOR CURBING REPRESENT BACK/TOP OF CURB

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL
CHECKED DNM

885
880
875
870

EX SH

12+91.34
881.28

12" TYPE B
STA. 12+91.34, 19.66' RT
INLET ℄ 880.08

EX 12" CMP
(REMOVE)

12" TYPE B
℄ 878.57

Ⓖ EX LP GAS

12+75.00
880.07

3'

12" TYPE B
℄ 876.30

EX 6" WATER Ⓦ

12+50.00
878.24

STA 12+17.70, 9.66' LT
EX CB, GRATE ELEV 875.16 (ABANDON)
EX 12" CLAY (S) (FILL & PLUG)

3' 12.50' LT
EL. 876.11

STA 12+30.00, 14.50' RT
CB-3, GRATE ELEV 877.21
12" TYPE B (N) ℄ 874.50
18" TYPE B (SW) ℄ 874.00

13.82' RT
EL. 877.49

18" TYPE B

12+25.00
876.50

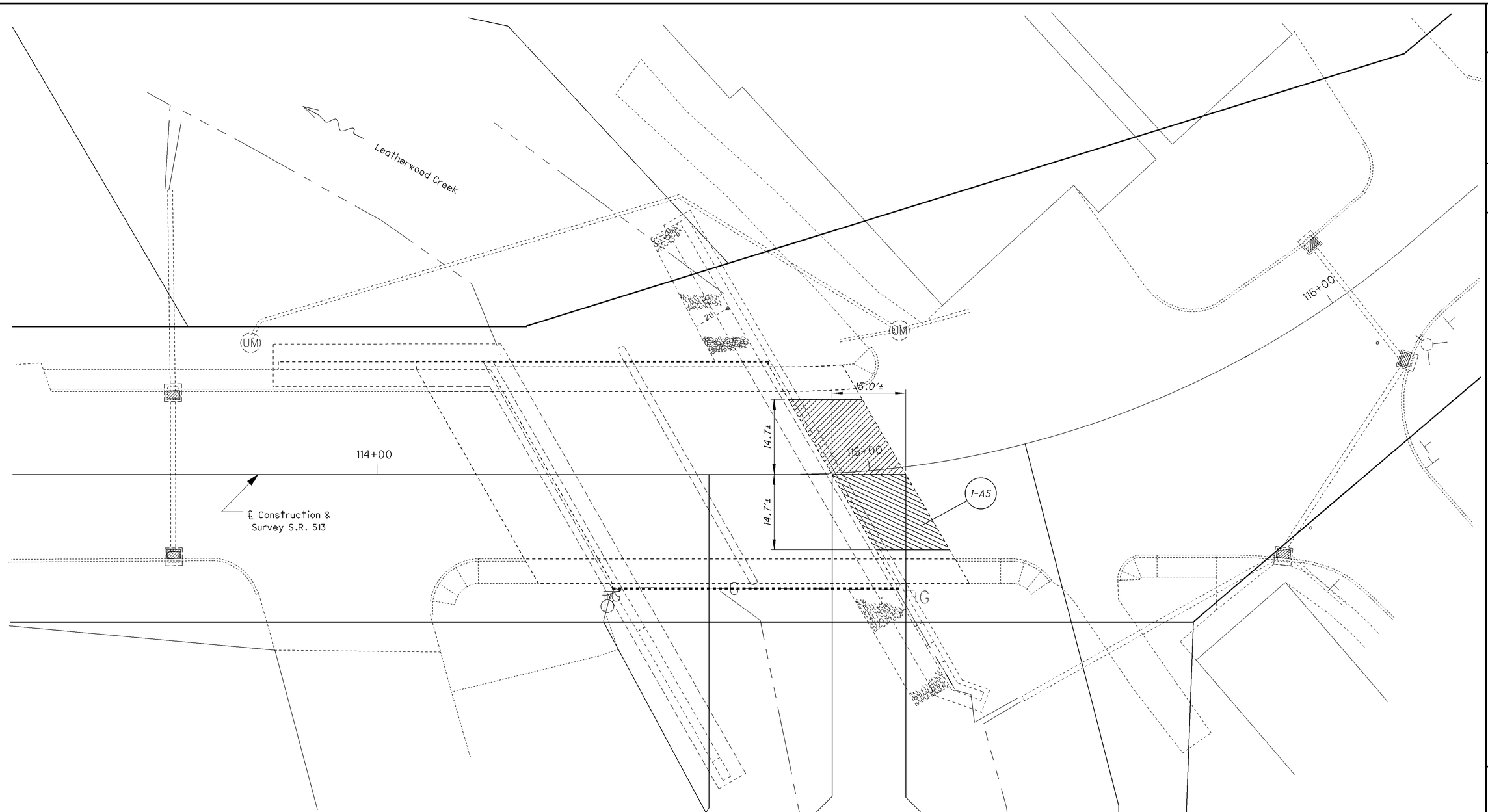
60 50 40 30 20 10 0 10 20 30 40 50 60

CROSS SECTIONS - SR 513
STA. 12+25.00 TO STA. 12+91.34

GUE-513-0.00
GUE-761-0.00

60
64

P:\GUE\92254\Design\Roadway\Plan_Sheets\Cross_Sections\92254_XS_002.dgn 08-OCT-2013 9:48AM jlutz1



REF NO.	STATION		SIDE	202 APPROACH SLAB REMOVED, AS PER PLAN	526 APPROACH SLAB, AS PER PLAN
	FROM	TO		SQ YD	SQ YD
1-AS	114+92.97	115+07.97	-	49	49
TOTALS CARRIED TO GENERAL SUMMARY				49	49

HORIZONTAL CURVE DATA

P.I. = 115+54.65
Δ = 40° 28′ 00″ Lt.
D = 29° 22′ 57″
R = 195.00 ft.
L = 137.72 Ft.
T = 71.88 Ft.

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED TAG
CHECKED JDR

PLAN

GUE-513/761-00.00/00.00

61
64

P:\GUE\92254\DESIGN\BRIDGE\SFN - ROUTE NAME\PLANS_SHEETS\92254_BSD_002.DGN

REFERENCE TO STANDARD DRAWINGS

AS-1-81 DATED: 1-18-13

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 516 - DEEP JOINT SEALER, AS PER PLAN

UPON COMPLETION OF THE PROPOSED APPROACH SLAB, THE CONTRACTOR SHALL FILL THE VOID CREATED BY THE PORTION OF THE COMPRESSION SEAL THAT WAS REMOVED TO INSTALL THE NEW APPROACH SLAB WITH HOT APPLIED JOINT SEALER 705.04. THE VOID SHALL BE CLEANED OUT AND AIRBLASTED THOROUGHLY PRIOR TO PLACEMENT OF THE HOT APPLIED JOINT SEALER AS PER 705.04 AND AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516 JOINT SEALER, AS PER PLAN.

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN

PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF A REINFORCING STEEL BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL HOLE TO EITHER SIDE OF THE EXISTING BAR. DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS EXCEPT AS NOTED ABOVE. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING NON SHRINK, NON METALLIC EPOXY GROUT, 705.20.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN

CONSTRUCTION OF THE PROPOSED REINFORCED CONCRETE APPROACH SLABS SHALL BE IN ACCORDANCE WITH THE DESIGN STRENGTHS LISTED IN THE STANDARD DRAWING AS-1-81 (DATED: 1-18-13).

THE CONTRACTOR SHALL PROVIDE A BOND BREAKER (STYRO FOAM/PEJF) ALONG THE PHASE CONSTRUCTION JOINT BETWEEN THE EXISTING AND PROPOSED APPROACH SLAB SO THAT THE NEW APPROACH SLAB WILL NOT BE DAMAGED DURING THE PHASE 2 REMOVAL.

CONCRETE: TO EXPEDITE WORK, CLASS S CONCRETE WITH AN ACCELERATING ADMIXTURE (SIKA RAPID-1) SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSVE STRENGTH IN 12 HRS. PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEMS TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. THE CLOCK STARTS FOR THE WET CURE WHEN THE CONCRETE PLACEMENT IS COMPLETE. TRAFFIC WILL NOT BE PERMITED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.

REINFORCING STEEL: MIN YIELD STRENGTH = 60000 PSI

ALL REMAINING MATERIALS, DIMENSIONS, BAR SPACING, ETC. SHALL FOLLOW THE PLAN DRAWINGS SHOWN ON THE PROPOSED APPROACH SLAB SHEETS; AND BE INCLUDED IN THE SQ.YD. CONTRACT PRICE FOR ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN

ITEM 202 - APPROACH SLAB REMOVED, AS PER PLAN

THE CONTRACTOR SHOULD NOTE THAT EXISTING APPROACH SLAB HAS BEEN POST TENSION IN THE TRANSVERSE DIRECTION AND SHOULD TAKE ANY PRECAUTION NOT TO DAMAGE ANY PORTION OF THE STRUCTURE THAT SHALL REMAIN IN PLACE.

SAWCUTTING WILL BE PERMITTED ALONG THE LONGITUDINAL REMOVAL LINES. TRANSVERSE SAWCUTTING WILL NOT BE PERMITTED WITHIN 3 FEET OF THE EXISITNG DECK END.

ALL CONCRETE NOT REMOVED BY SAW CUTTING AND LIFTING SHALL BE REMOVED BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

PAYMENT SHALL INCLUDE ALL TIME, MATERIAL AND LABOR COST ASSOCIATED WITH THE REMOVAL OF THE EXISTING APPROACH SLAB PANELS AS DETAILED ON SHEET ??/?? AND SHALL INCLUDE THE PORTION OF COMPRESSION SEAL, DOWEL BARS AND BEARING PADS THAT ARE NEEDED TO BE REMOVED BEFORE PREPARATION FOR THE NEW APPROACH SLAB CAN BE INSTALLED.

CONSTRUCTION NOTIFICATION

IN ORDER FOR ODOT TO PREPARE SIGNING WHEN REQUIRED AND TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 CONSTRUCTION ENGINEER WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER, AREA ENGINEER AND PERMIT TECHNICIAN NOT LESS THAN 7 DAYS BEFORE ACTIVATING SUCH CLOSURE OR LANE RESTRICTION.

SEND NOTIFICATION TO:

KEITH GEIGER
DISTRICT 5 CONSTRUCTION ENGINEER
P.O. BOX 306
JACKSONTOWN, OHIO 43030
(740) 323-5240

CALCULATED TAG CHECKED JDR

BRIDGE NOTES

GUE-513/761-00.00/00.00

FUNDING SPLIT 01/STR/PV	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	ABUT	PIER	SUPER	GNRL	SEE SHEET NO.
					STRUCTURES (20' AND OVER)					
49	202	22901	49	SQ YD	APPROACH SLAB REMOVED, AS PER PLAN				49	
38	510	10001	38	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN				38	
34	516	31001	34	FT	JOINT SEALER, AS PER PLAN				34	
49	526	10001	49	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN				49	

DESIGN AGENCY
OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5

DESIGNED	DRAWN	REVIEWED	DATE
TAG	TAG	TAG	10-08-13
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JDR		3005739	

BRIDGE ESITMATED QUANTITIES

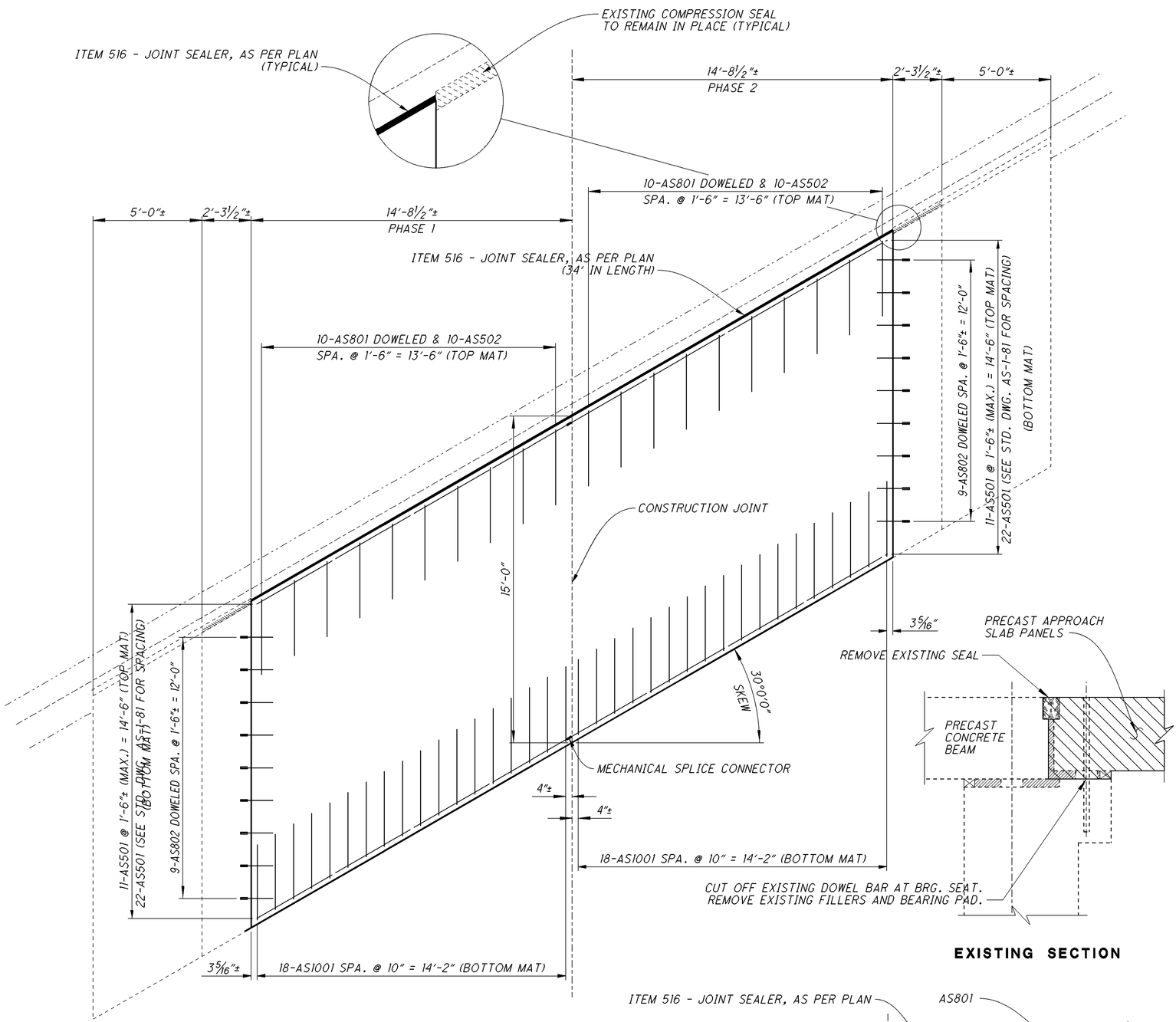
GUE-513/761-
0.00/ 0.00
PID No. 92254

63
64

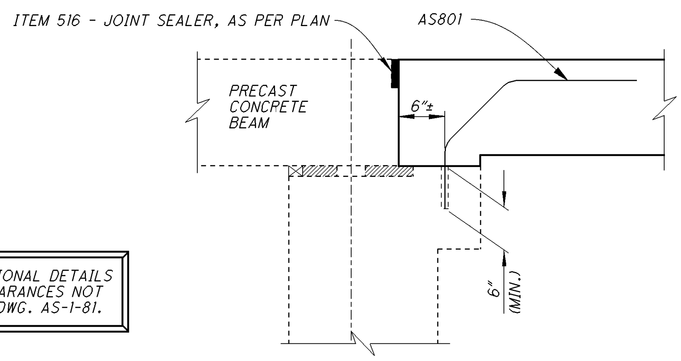
P:\GUE\92254\DESIGN\BRIDGE\SFN - ROUTE NAME\PLAN_SHEETS\92254_BGS_001.DGN

P:GUE\92254\DESIGN\BRIDGE\SFN - ROUTE NAME\PLAN SHEETS\92254 BSD 001.DGN

P:\GUE\92254\Design\Bridge\SFN - Route Name\Plan_Sheets\92254_BSD_001.dgn 10-OCT-2013 2:18PM tgreenwa



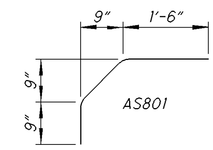
EXISTING SECTION

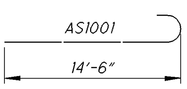


PROPOSED SECTION

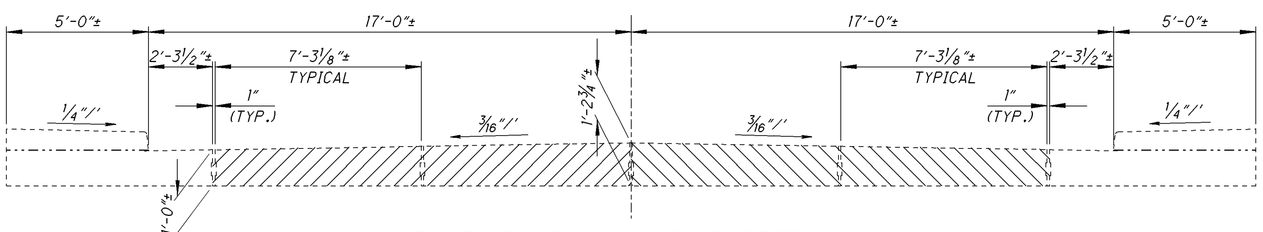
APPROACH SLABS			
MARK	NUMBER REQ'D.	SHAPE	LENGTH
AS501	66	STR.	17'-1"
AS502	20	STR.	14'-6"
AS801	20	STR.	3'-8"
AS802	18	STR.	3'-6"
AS1001	36	STR.	15'-11"

RE-STEEL IS INCLUDED FOR PAYMENT WITH ITEM 526 - APPROACH SLAB, AS PER PLAN

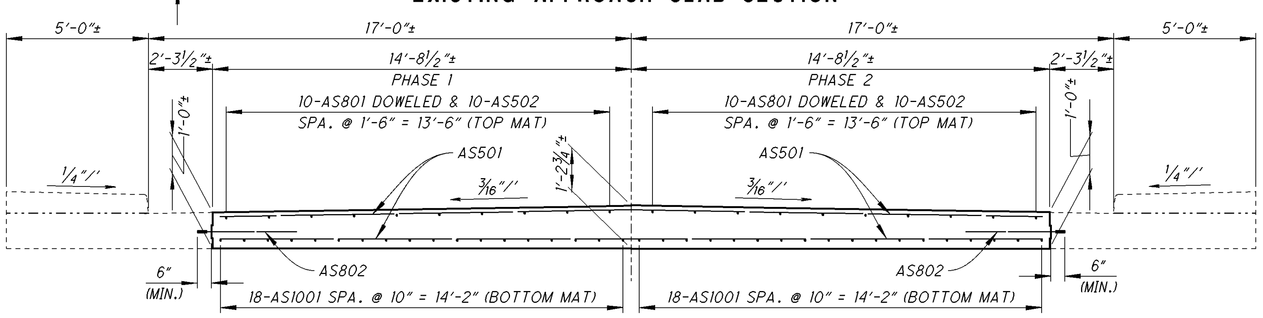




NOTE: FOR ADDITIONAL DETAILS AND RESTEEL CLEARANCES NOT SHOWN SEE STD. DWG. AS-1-81.



EXISTING APPROACH SLAB SECTION



PROPOSED APPROACH SLAB SECTION

64	GUE-513/761-00.00/00.00	APPROACH SLAB DETAILS BRIDGE NO. GUE-513-0180 OVER LEATHERWOOD CREEK	DESIGNED TAG	DRAWN TAG	REVIEWED TAG	DATE 10-08-13	DESIGN AGENCY OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 5
			CHECKED JDR	REVISED	STRUCTURE FILE NUMBER 3005739		