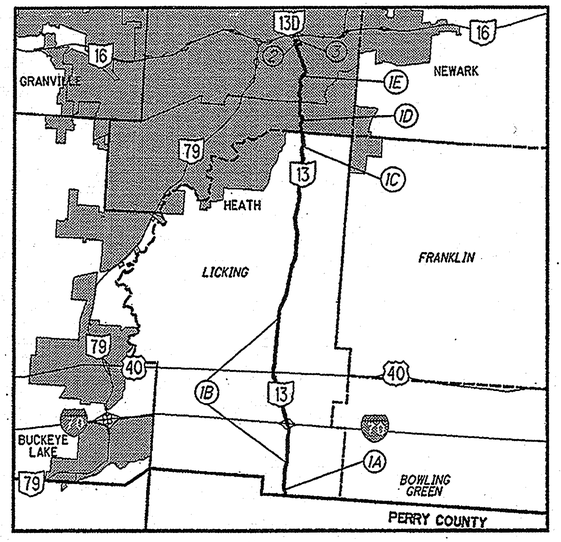

LOCATION MAP

LATITUDE: 39° 59′ 28″ LONGITUDE: 82° 24′ 24″

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

DESIGN DESIGNATION	LOCATIONS				
	1A	1B	1C	1D	1E
Functional Classification	MA	MA	MA	MA/PA	PA
Opening Year ADT (2015)	13,000	9,900	7,500	13,000	8,700
Design Year ADT (2027)	14,000	11,000	7,800	14,000	9,200
Design Hourly Volume (2027)	1,700	1,100	780	1,400	830
Directional Distribution	70%	66%	64%	64%	59%
Trucks (24 Hour B&C)	3%	3%	4%	3%	4%
Design Speed	55mph	55mph	55mph	55mph	55mph
Legal Speed	55mph	55mph	55mph	55mph	55mph

MA = MINOR ARTERIAL
PA = PRINCIPAL ARTERIAL

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.
OHIO Utilities Protection SERVICE
Call Before You Dig 1-800-362-2764
(Non-members must be called directly)
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE
1-800-925-0988

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

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
LIC-13-0.00
PART 1
CITY OF HEATH AND NEWARK
LICKING TOWNSHIP
LICKING COUNTY

FOR PART 2, SEE LIC-CR 311-0.00 (HOPEWELL DRIVE)
FOR PART 3, SEE LIC-SR 13-3.88 (DAWES ARBORETUM)

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ENGINEER'S SEAL

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

SIGNED: Jason A. Lutz
DATE: 7/11/16

STANDARD CONSTRUCTION DRAWINGS

							SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7/18/14	MGS-1.1	7/19/13	TC-64.10	7/17/15	800	7/15/16
BP-4.1	7/19/13	MGS-2.1	7/19/13	TC-65.10	1/17/14	832	1/17/14
BP-5.1	7/19/13			TC-65.11	7/18/14		
		MT-97.10	7/18/14	TC-71.10	1/17/14		
CB-1.1	1/15/16	MT-97.12	7/18/14	TC-82.10	7/17/15		
CB-2.2	1/15/16	MT-99.20	7/19/13				
CB-2.3	1/15/16	MT-101.70	1/17/14				
		MT-101.90	7/17/15				
HW-2.1	1/15/16	MT-102.10	7/18/14				
HW-2.2	1/15/16	MT-105.10	7/19/13			SPECIAL PROVISIONS	
MH-1.2	1/15/16	TC-41.20	10/18/13				
		TC-42.20	10/18/13				
DM-4.4	1/15/16	TC-52.10	10/18/13				
		TC-52.20	7/18/14				

PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING ON S.R. 13 AND THE ODOT DISTRICT 5 COMPLEX IN LICKING COUNTY WITH PAVED GUTTER WORK ON THE S.R. 13 HILL, GUARDRAIL INSTALLTION IN DAWES ARBORETUM, AND DRAINAGE WORK IN THE VILLAGE OF JACKSONTOWN

PROJECT EARTH DISTURBED AREA = 0.80 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 0.15 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA = 0.95 ACRES

LOCATION	PLAN SPLIT	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/VILLAGE
1A	1	LIC	13	0.00	0.54	0.54	
1B	2	LIC	13	0.54	6.48	5.94	
1C	1	LIC	13	6.48	7.76	1.28	
1D	3	LIC	13	7.76	8.37	0.61	HEATH
1E	4	LIC	13	8.37	9.78	1.41	NEWARK
2	4	LIC	13D	0.31	0.41	0.10	NEWARK
3	5	LIC	LOCUST ST.	0.10	0.18	0.08	NEWARK
	6	LIC	ODOT - D05 COMPLEX				

2016 SPECIFICATIONS

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

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

APPROVED Mark D. Johnson
DATE 5/18/16 CITY OF HEATH MAYOR

APPROVED Ben R. Mitchell
DATE 7/8/2016 CITY ENGINEER CITY OF NEWARK

APPROVED Lee Lipps
DATE 7/11/16 DISTRICT DEPUTY DIRECTOR

APPROVED Jerry Wray
DATE 7-20-16 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E120(890)
PID NO. 92958
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
LIC-13-0.00
1/90

(LIC - SR 13-00.00 (PART 1, 2 AND 3)
160533 PID - 92958
Dist 5 10/6/2016
Conformed Set
Contract Proposal Available @ www.Contracts.dot.state.oh.us/home

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

AT&T OHIO
160 NORTH SIXTH STREET
ZANESVILLE, OHIO 43701
ATTN: BARRETT TAMASOVICH
740-454-3574

CENTURYLINK TELEPHONE
441 WEST BROAD STREET
PATASKALA, OHIO 43062
ATTN: DEE REED
74-927-8282

COLUMBIA GAS OF OHIO
2429 NORTH LINDEN AVENUE
ZANESVILLE, OHIO 43701
ATTN: MICHAEL DIBENEDETTO
740-260-0370

LICKING COUNTY WATER/WASTE WATER
4455 WALCUTT ROAD
BUCKEYE LAKE, OHIO 43008
ATTN: KEVIN EBY
740-928-0349

WINDSTREAM
66 NORTH FOURTH STREET
NEWARK, OHIO 43055
ATTN: DAVE HOLTON
740-349-8804

TIME WARNER CABLE
111 NORTH 11TH STREET
NEWARK, OHIO 43055
ATTN: BRIAN AMENDE
740-322-6703

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.

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.

PART-WIDTH CONSTRUCTION

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

ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH ACCORDING TO 209.06 OF THE CMS.

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.

IN ADDITION TO PREPARING THE SHOULDER FOR PAVING, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

ALL LINEAR GRADING WORK BEYOND THE 10 INCH WIDE STRIP FOR THE SAFETY EDGE, SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING VARIES BETWEEN 1.5" AND 3.25" AS SHOWN ON PAVEMENT DATA TABLE. 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.

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 THE PAVEMENT PLANING OPERATION.

THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". THE MINIMUM WIDTH OF THE REPAIRS SHALL BE 4'. 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.

REPAIR QUANTITIES MAY BE USED ON 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-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253, PAVEMENT REPAIR
LOCATION 1A - 100 CU.YD.
LOCATION 1B – 700 CU.YD.
LOCATION 1C – 120 CU.YD.
LOCATION 1D – 60 CU.YD.
LOCATION 1E – 220 CU.YD.

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.

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN

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

ITEM 621, RAISED PAVEMENT MARKER REMOVED

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

ITEM 644 PARKING LOT STALL MARKING

AN ESTIMATED QUANTITY OF PARKING LOT STALL MARKINGS HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE IN THE CITY OF NEWARK. PLACEMENT SHALL BE AS PER PLAN SHEETS OR AS DIRECTED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL CONTACT THE CITY OF NEWARK ENGINEER BEFORE PLACING FINAL MARKINGS SO AS TO CONFIRM FINAL LOCATIONS.

CALCULATED LME CHECKED JSL

GENERAL NOTES

LIC-13-0.00

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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 AUXILIARY 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. **LONG LINE PAVEMENT MARKINGS SHALL BE PLACED PER SECTION 301-4 OF ODOT'S TRAFFIC ENGINEERING MANUAL AND DETAIL ON SHEET 16.**

RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 441 ASPHALT CONCRETE, HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL EXTEND AN AVERAGE OF 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT). THE ENGINEER MAY EXTEND PAVING DISTANCE FOR ASPHALT DRIVEWAYS IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED, THEREFORE, A QUANTITY OF ITEM 304 AGGREGATE BASE HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO PROVIDE A SMOOTH TRANSITION FOR AGGREGATE DRIVES.

FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK AN AVERAGE OF 4' WITHOUT CREATING A BUTT JOINT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CREATE A BUTT JOINT FOR EXISTING ASPHALT/CONCRETE DRIVES/APRONS. GRAVEL DRIVES WITH ASPHALT APRONS SHALL NOT HAVE BUTT JOINTS, BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

BUTT JOINT AT THE END OF ALL DRIVEWAYS SHALL BE 1.5" IN DEPTH TO ACCOMMODATE 1.5" SURFACE COURSE. NO WORK SHALL BE PERFORMED ON DRIVEWAYS LOCATED IN CURB SECTIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

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

ITEM 202, WEARING COURSE REMOVED
LOCATION 1A - 230 SQ.YD.
LOCATION 1B – 1110 SQ.YD.
LOCATION 1C – 290 SQ.YD.
LOCATION 1D – 110 SQ.YD.

ITEM 304, AGGREGATE BASE
LOCATION 1A - 1 CU.YD.
LOCATION 1B – 4 CU.YD.
LOCATION 1C – 1 CU.YD.
LOCATION 1D – 1 CU.YD.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M
LOCATION 1A - 10 CU.YD.
LOCATION 1B – 46 CU.YD.
LOCATION 1C – 12 CU.YD.
LOCATION 1D – 5 CU.YD.

MAILBOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAILBOX 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 MAILBOX TURN OUTS 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 PURPOSES.

ITEM 202, WEARING COURSE REMOVED
LOCATION 1A - 100 SQ.YD.
LOCATION 1B – 610 SQ.YD.
LOCATION 1C – 110 SQ.YD.
LOCATION 1D – 60 SQ.YD.

ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M
LOCATION 1A - 5 CU.YD.
LOCATION 1B - 26 CU.YD.
LOCATION 1C – 5 CU.YD.
LOCATION 1D – 3 CU.YD.

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

THESE ITEMS SHALL BE USED TO ADJUST TO GRADE CATCH BASINS, MANHOLES, AND WATER VALVE BOXES LOCATED THROUGH OUT 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 1E - 3 EACH
ODOT D05 COMPLEX – 24 EACH

ITEM 611, MANHOLE ADJUSTED TO GRADE
LOCATION 1D - 1 EACH
LOCATION 1E – 34 EACH
LOCATION 2 – 5 EACH
LOCATION 3 – 2 EACH
ODOT D05 COMPLEX – 4 EACH

ITEM 638, VALVE BOX ADJUSTED TO GRADE
LOCATION 1E - 22 EACH
LOCATION 2 – 6 EACH
LOCATION 3 – 2 EACH

ITEM 606, ANCHOR ASSEMBLY, MGS TYPE B

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

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

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

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

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

ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E

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

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

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

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

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

CALCULATED LME CHECKED JSL

GENERAL NOTES

LIC-13-0.00

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ITEM 632, DETECTOR LOOP, AS PER PLAN

ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWER HEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE 20' OR AS DIRECTED. THE STOP LINE DETECTOR LOOPS SHALL NOT BE WIRED TO ANY OTHER LOOPS AND SHALL HAVE ITS OWN DETECTOR CHANNEL. ALL STOP LINE DETECTION SHALL BE TESTED FOR A BICYCLE TARGETAND ALL DILEMMA DETECTION ZONES SHALL BE TESTED FOR A MOTORCYCLE TARGET.

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10.

ALL DETECTOR LOOPS SHALL BE CUT INTO THE PLANED SURFACE OR THE PROPOSED INTERMEDIATE COURSE AT A DEPTH OF 4" FROM THE PROPOSED SURFACE ELEVATION. THE CONTRACTOR SHALL TEST ALL LEAD-IN CABLES PRIOR TO MAKING THE FINAL SPLICE. PLACEMENT SHALL BE AS PER SPECIFICATION 632.10.

FINAL LOCATIONS, SIZE AND ORIENTATION SHALL BE PROVIDED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632, DETECTOR LOOP, AS PER PLAN.

THE FOLLOWING CONTIGENCY QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE PURPOSES.

ITEM 632, DETECTOR LOOP, AS PER PLAN

LOCATION 1B –12 EACH

ON S.R. 13 N.B. BEFORE U.S. 40 – 1 DILEMMA
ON U.S. 40 W.B. AT S.R. 13 – 1 POWERHEAD
ON S.R. 13 S.B. BEFORE U.S. 40 – 1 DILEMMA

ON S.R. 13 N.B. AT DORSEY MILL RD. – 1 POWERHEAD, 4 DILEMMA
DORSEY MILL RD. (LEFT) – 2 POWERHEAD
DORSEY MILL RD. (RIGHT) – 2 POWERHEAD

LOCATION 1C – 5 EACH

ON S.R. 13 S.B. AT DORSEY MILL RD. – 1 POWERHEAD, 4 DILEMMA

LOCATION 1D – 3 EACH

ON S.R. 13 N.B. AT HOPEWELL DR. – 1 POWERHEAD
ON S.R. 13 S.B. AT HOPEWELL DR. – 1 POWERHEAD
ON HOPEWELL DR. (RIGHT) – 1 POWERHEAD

LOCATION 1E – 3 EACH

ON S.R. 13 N.B. AT WILWOOD AVE. – 1 POWERHEAD, 1 DILEMMA
ON S.R. 13 S.B. AT WILWOOD AVE. – 1 DILEMMA

SAFETY EDGE

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 1A - 8 CU.YD.
LOCATION 1B - 83 CU.YD.
LOCATION 1C - 18 CU.YD.
LOCATION 1D – 9 CU.YD.

CURB REPAIR (ODOT D-5 COMPLEX)

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY AND SHALL BE USED TO REPLACE BROKEN/DEFICIENT CURB WITHIN THE ODOT D-5 COMPLEX ***AS DIRECTED BY THE ENGINEER****.*

ODOT D-5 COMPLEX:
ITEM 202, CURB REMOVED – 100 FT
ITEM 609, CURB, TYPE 6 – 100 FT

SIDEWALK REPAIR (VILLAGE OF JACKSONTOWN)

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 1B SUB-SUMMARY AND SHALL BE USED TO REPAIR DETERIORATED CONCRETE WALK WITHIN THE VILLAGE OF JACKSONTOWN ***AS DIRECTED BY THE ENGINEER****.*

LOCATION 1B (JACKSONTOWN):
ITEM 202, WALK REMOVED – 400 SF
ITEM 608, 4" CONCRETE WALK – 400 SF

PAVED GUTTER REPAIR (S.R. 13 HILL)

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE LOCATION 1B SUB-SUMMARY AND SHALL BE USED TO REPAIR THE PAVED CONCRETE GUTTER PRIOR TO RESURFACING ***AS DIRECTED BY THE ENGINEER.***

LOCATION 1B (GUTTER):
ITEM 613, LOW STRENGTH MORTAR BACKFILL,
TYPE 2, AS PER PLAN - 10 CU. YD.

THE GUTTER SHALL BE CLEANED OF ALL DIRT, LOOSE CONCRETE, AND ALL OTHER DEBRIS PRIOR TO APPLYING LOW STRENGTH MORTAR. THE ADDITIONAL WORK SHALL BE INCLUDED IN PAYMENT FOR LOW STRENGTH MORTAR BACKFILL, TYPE 2, AS PER PLAN.

ITEM SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS

THIS ITEM SHALL BE USED TO REINFORCE LONGITUDINAL WIDENING JOINT FOR TURN LANE CONSTRUCTION AT DAWES ARBORETUM ON S.R. 13. PLACE REINFORCING MESH ON PLANED SURFACE, 5.0' WIDE CENTERED OVER LONGITUDINAL JOINT. REINFORCING MATERIAL SHALL BE GLASGRID CG100 OR EQUIVALENT AND SHALL BE PLACED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND THIS NOTE.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 690 SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS.

LOCATION 1B:
ITEM 690 SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS - 1,000 SQ.YD.

CALCULATED LME CHECKED JSL

GENERAL NOTES

LIC-13-0.00

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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE STANDARD DRAWINGS ***MT-97.10 AND MT-97.12****.*

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.

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

RESURFACING OF THE ODOT D-5 FACILITY SHALL BE COORDINATED WITH ODOT D-5 FACILITIES. ***CONTACT FACILITIES MANAGER BOB ROAHRIG AT 740.323.5150*** *FOR COORDINATION AND ACCEPTANCE OF WORK.*

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

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

TIME RESTRICTIONS

ALL LANES OF TRAFFIC ON ***S.R. 13*** *SHALL BE OPEN BY* ***3:30 PM*** *EACH DAY FOR THE FOLLOWING WORK:*

- *DRAINAGE WORK IN THE VILLAGE OF JACKSONTOWN*
- *PAVED GUTTER WORK ON THE S.R. 13 HILL*

ANY EXTENSION OF WORK BEYOND 3:30 PM SHALL BE AT THE APPROVAL OF THE ENGINEER. WORK ZONE LENGTHS SHOULD BE LIMITED TO THE AMOUNT OF WORK THE CONTRACTOR FEELS CAN BE COMPLETED IN A GIVEN DAY.

DROP-OFFS IN WORK ZONES

DROP-OFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING ***MT-101.90*** *EXCEPT AS STATED BELOW.*

A MAXIMUM DROP-OFF OF ***TWELVE (12) INCHES*** *WILL BE PERMITTED FOR THE TIME RESTRICTED WORK NOTED ABOVE. THE FOLLOWING PRECAUTIONS SHALL OCCUR PRIOR TO ACCEPTANCE OF THE 12" DROP-OFF:*

- *TEN (10) FOOT DRUM SPACING PLACED ON THE SHOULDER BETWEEN TRAFFIC AND THE ADJACENT DROP-OFF*
- *35 MPH SPEED ADVISORY PLATES (W13-1P-30) SHALL BE PLACED APPROXIMATELY 500 FEET PRIOR TO THE DROP-OFF*

WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED ABOVE, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

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.
1A	S.R. 13	BEGIN WORK	0.00	2
1B	S.R. 13	BRIDGE: LIC-13-0513	5.13	3
1E	S.R. 13	BRIDGE: LIC-13-0880	8.80	3
1E	S.R. 13	CHURCH AND 3RD ST.	9.78	3
1E	S.R. 13	TOTAL		6
2	LOCUST	LOCUST AND 3RD ST.	0.18	2
3	S.R. 13D	BEGIN WORK	0.31	3

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

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 1A: 2 EACH
LOCATION 1B: 31 EACH
LOCATION 1C: 1 EACH
LOCATION 1D: 2 EACH

R4-1 (DO NOT PASS):
LOCATION 1A: 5 EACH
LOCATION 1B: 36 EACH
LOCATION 1C: 5 EACH
LOCATION 1D: 2 EACH
LOCATION 1E: 4 EACH

R4-2 (PASS WITH CARE):
LOCATION 1B: 14 EACH
LOCATION 1C: 3 EACH
LOCATION 1D: 1 EACH

ITEM 614, WORK ZONE MARKING SIGN
LOCATION 1A: 7 EACH
LOCATION 1B: 81 EACH
LOCATION 1C: 9 EACH
LOCATION 1D: 5 EACH
LOCATION 1E: 4 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.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE

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

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

- *DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.*
- *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 TH CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH TH 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 1B - 80 HRS, LOCATION 1D – 16 HRS, LOCATION 1E – 40 HR

CALCULATED LME CHECKED JSL

MAINTENANCE OF TRAFFIC NOTES

LIC-13-0.00

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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 SIGN 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 CLICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 475 FT. AND 650 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 SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO CMS 614.03, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

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.

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

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

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 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 CONTRACTORS NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

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

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK. THE CONTRACTOR SHALL ONLY BE PAID FOR PCMS UNITS WHEN THEY ARE IN OPERATION ON THE PROJECT AS SPECIFIED IN THE PLANS OR BY THE ENGINEER.

*A TOTAL OF **4 PCMS** WILL BE REQUIRED FOR THIS PROJECT (4 SIGNS X 45 DAYS = 180 DAY)*

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION SUB-SUMMARIES:

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

LOCATION 1A - 60 DAY
LOCATION 1B – 60 DAY
LOCATION 1E - 60 DAY

CALCULATED LME CHECKED JSL

MAINTENANCE OF TRAFFIC NOTES

LIC-13-0.00

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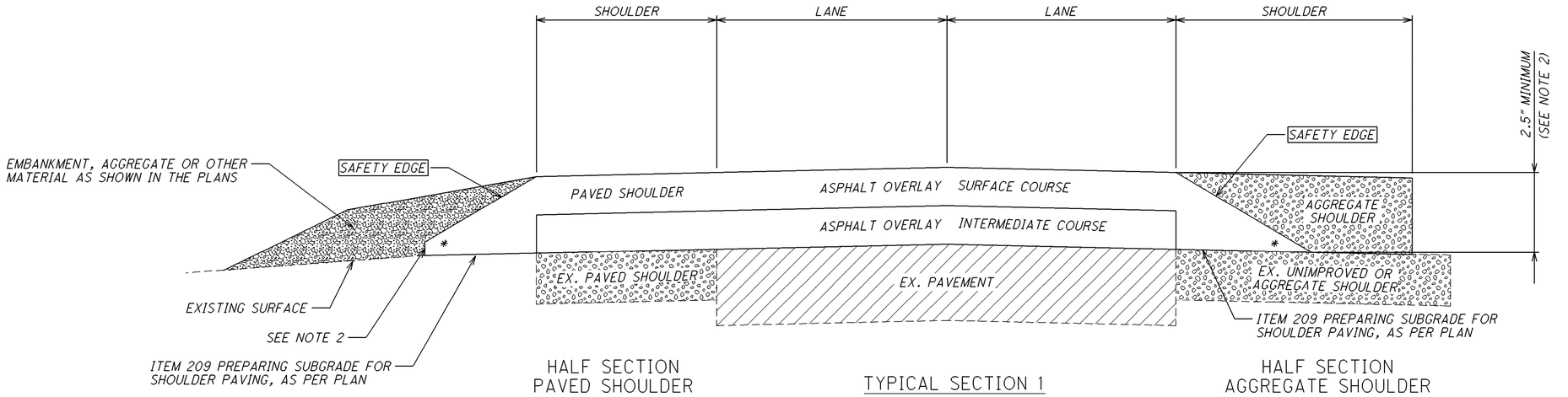
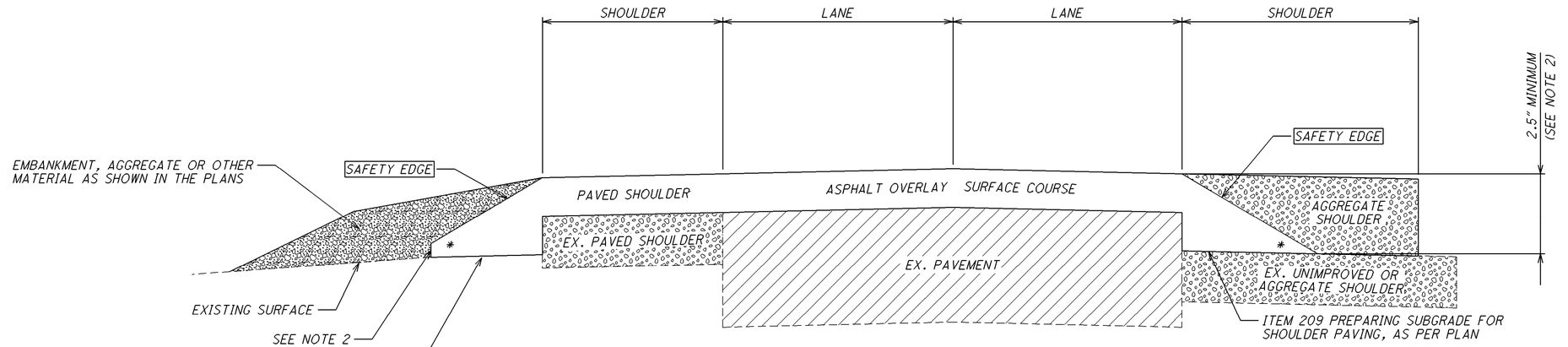


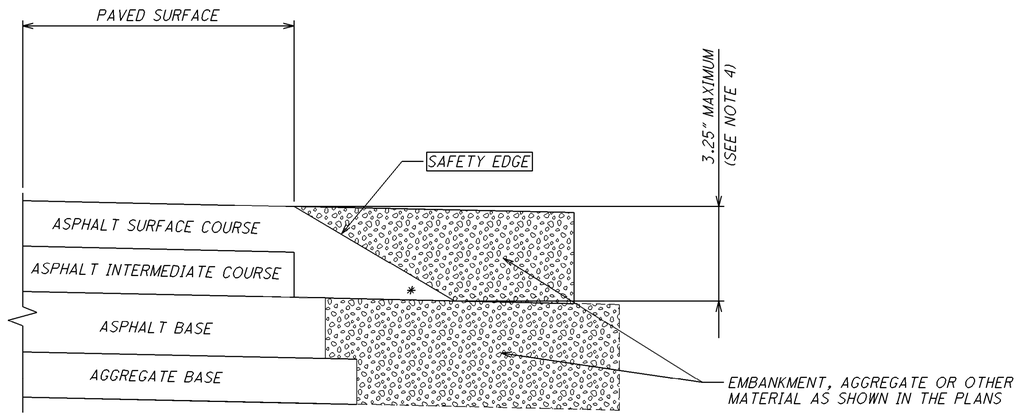
TYPICAL SECTION 1

N.T.S.



TYPICAL SECTION 2

N.T.S.



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

SAFETY EDGE DETAIL

CALCULATED LME
CHECKED JSL

LIC-13-0.00

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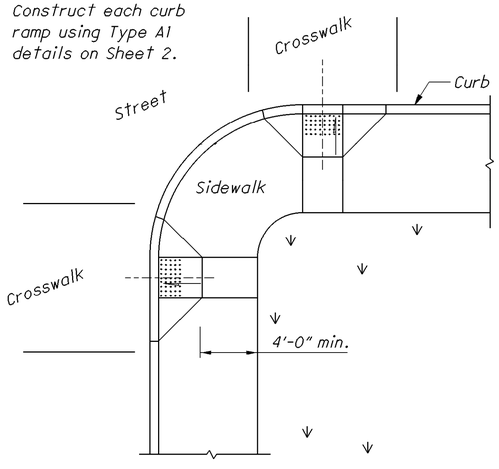
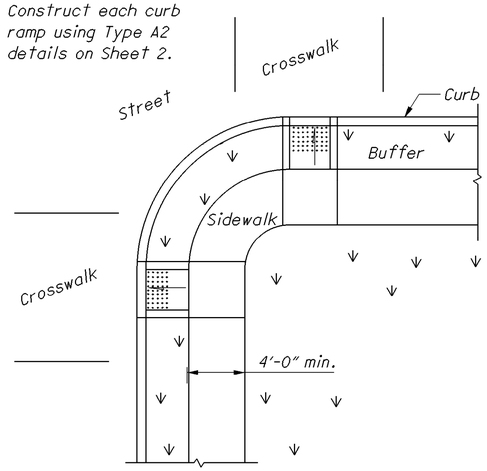
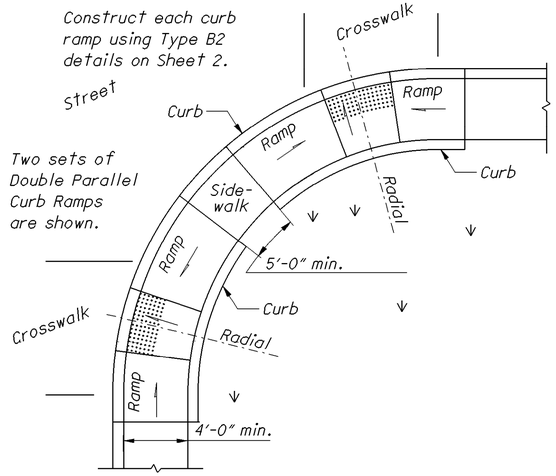


Use curb ramps with flared sides at locations with wide sidewalks.



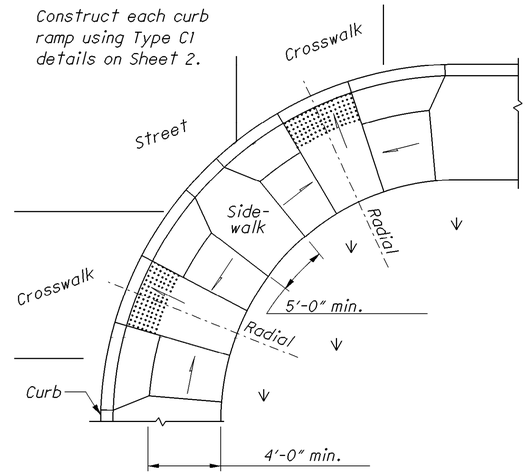
Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.

PERPENDICULAR CURB RAMPS



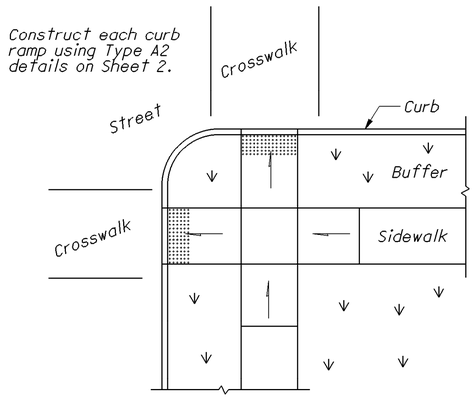
Place on streets having wide turning radius and where sidewalks are narrow.

PARALLEL CURB RAMPS



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

COMBINATION CURB RAMPS



LEGEND

[1] 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.

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 2 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown on the project plans.

Curb ramps added to an existing intersection or walk should be individually detailed on the project plans to assure that the design is appropriate for site constraints and all items can be constructed to ADA standards. The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

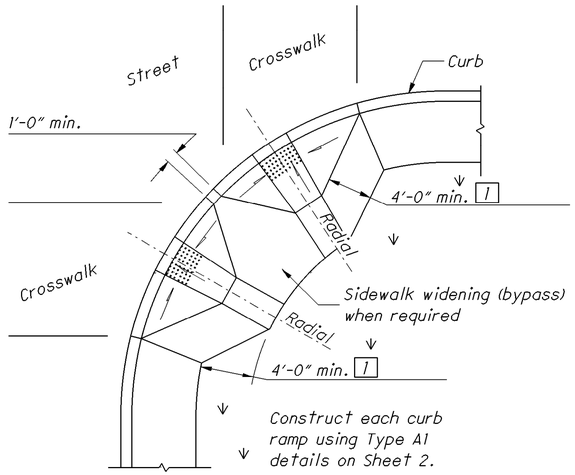
METHOD OF MEASUREMENT: The Department will measure Curb Ramps by the number of each completed curb ramp. The Department will measure Detectable Warnings in existing curb ramps and at grade crossings by the number of square feet completed.

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.

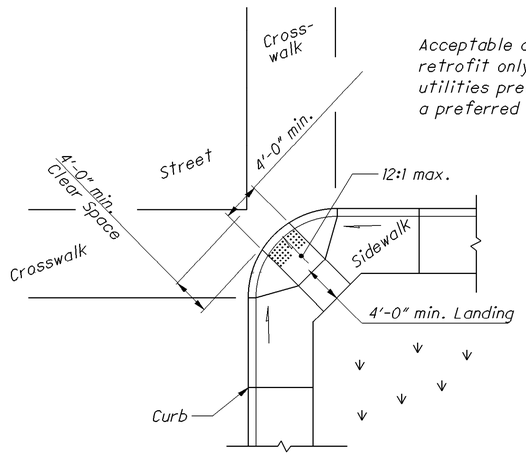
Detectable Warnings constructed in existing curb ramps or for at-grade crossing locations are paid for under Item 690-Special Misc.: Detectable Warning (Sq. Ft.) and is full compensation for excavation, backfill, base course material, reinforcing steel, expansion joint materials, and any incidentals 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.



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



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

CURB RAMP AND DETECTABLE WARNING DETAILS

CALCULATED LME CHECKED JSL

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1 / 3

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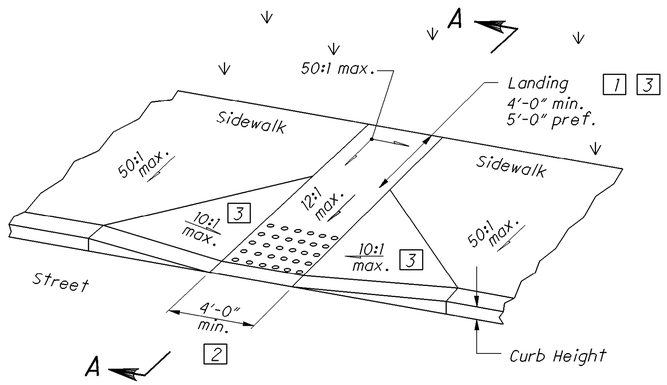
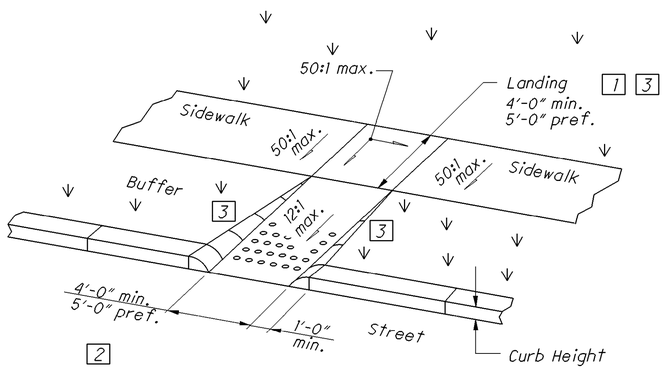
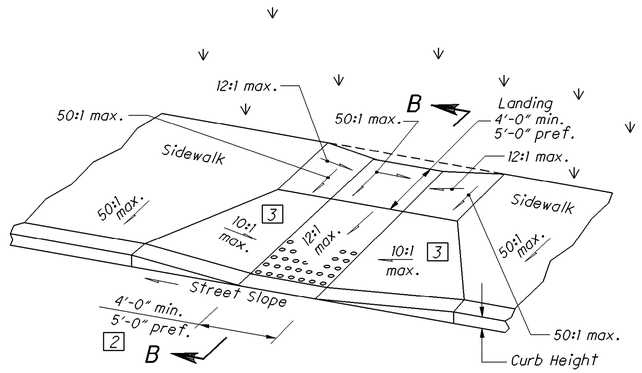


Type A1 (Perpendicular with flared sides)

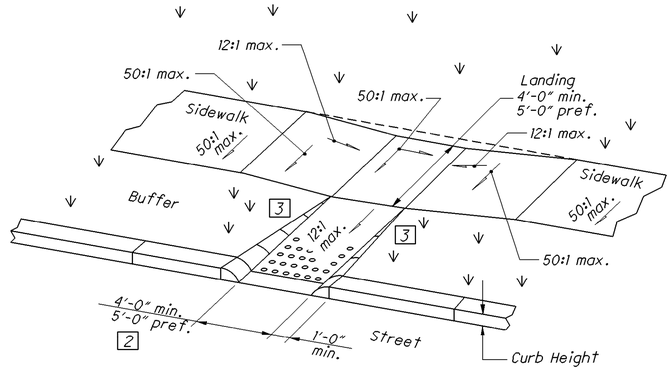


Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

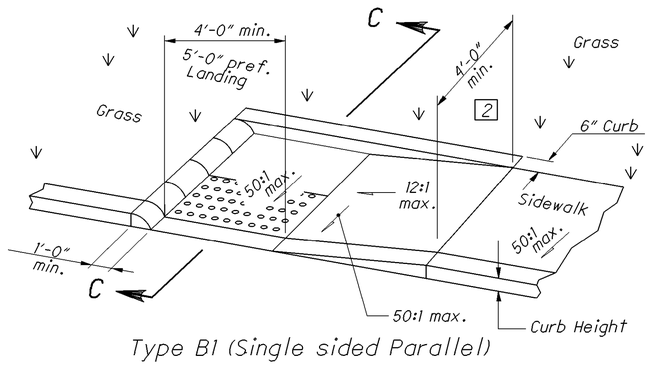


Type C1 (Combined with flared sides)

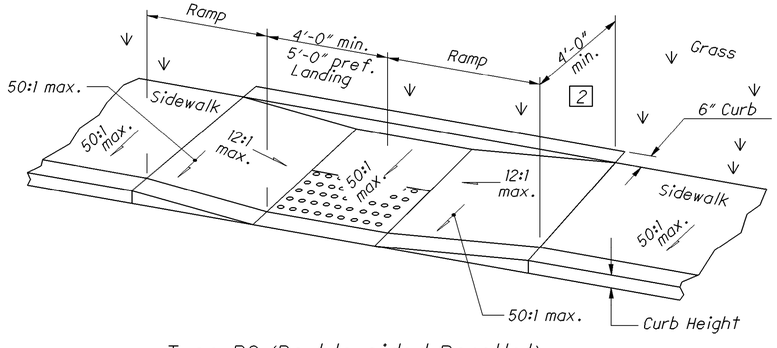


Type C2 (Combined with returned curb)

COMBINED CURB RAMP DETAILS



Type B1 (Single sided Parallel)



Type B2 (Double sided Parallel)

PARALLEL CURB RAMP DETAILS

NOTES CONTINUED

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 indefinitely, 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.

DETECTABLE WARNINGS: Install Detectable warnings on each curb reamp with approved materials as shown on Sheet 3. Install these proprietary products as per manufacturer's written instructions.

DRAINAGE: Contractor is to ensure the base of each constructed ramp allows for proper drainage, without exceeding allowable cross slope or ramp slope. 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.

SURFACE TEXTURE: Texture concrete surfaces by coarse brooming transverse to the ramp slopes to be rougher than the adjacent walk.

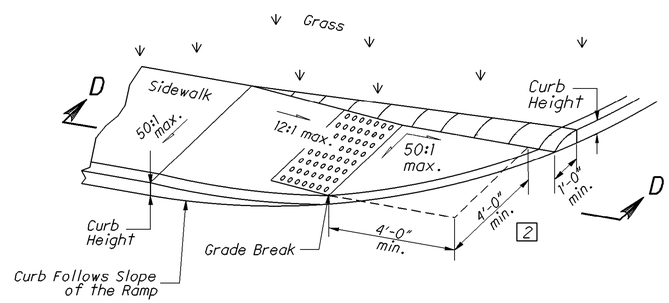
LEGEND

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 3 for Sections.



Type B3 (Single sided Parallel)

CALCULATED LME CHECKED JSL

CURB RAMP AND DETECTABLE WARNING DETAILS

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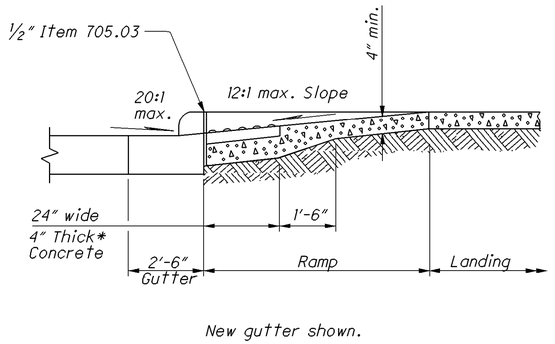
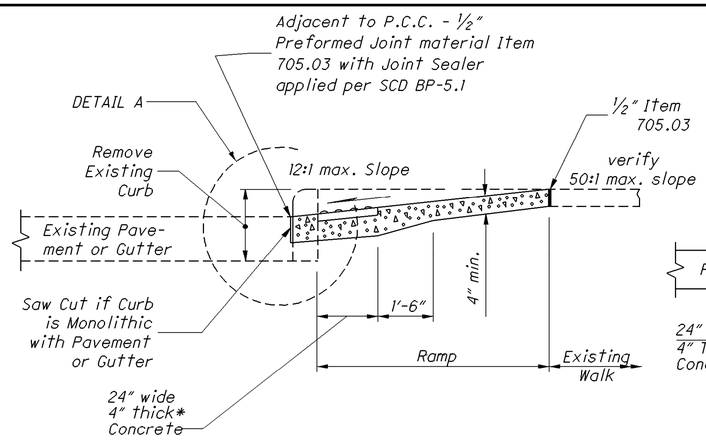


New gutter shown.

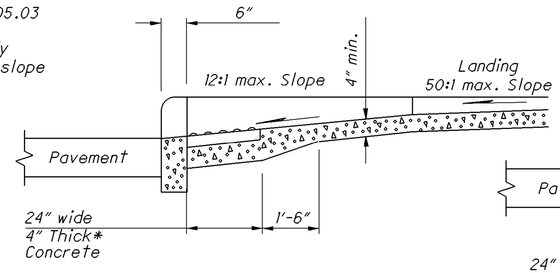
SECTION A-A NORMAL DETAIL

See Sheet 2.



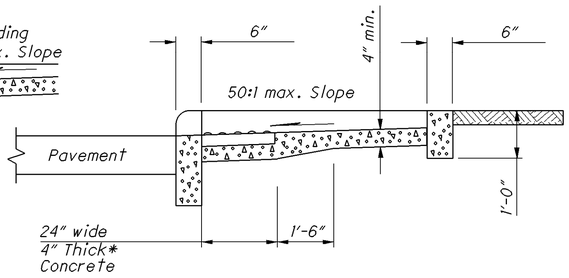
SECTION A-A EXISTING WALK DETAIL

See Sheet 2.



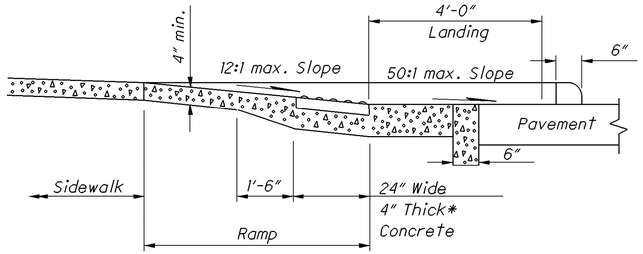
SECTION B-B

See Sheet 2.



SECTION C-C

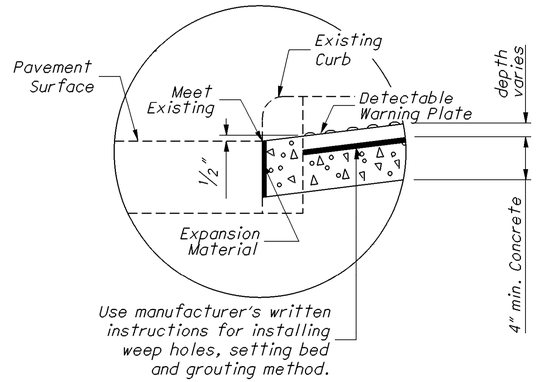
See Sheet 2.



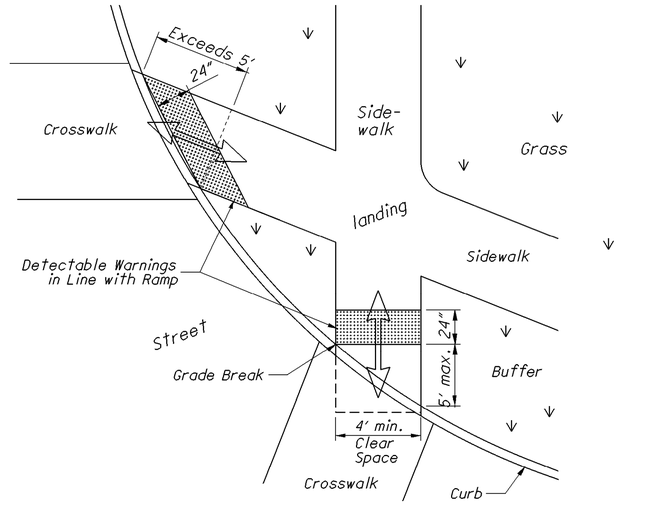
SECTION D-D

See Sheet 2.

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



DETAIL A



DETECTABLE WARNING ALIGNMENT

DETECTABLE WARNINGS NOTES

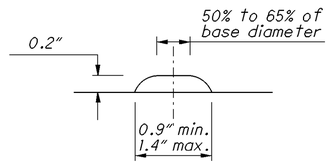
GENERAL: *Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.*

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 2.*

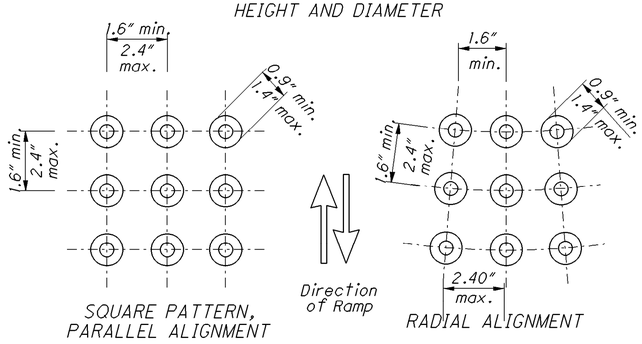
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

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 see DETECTABLE WARNING ALIGNMENT DETAIL. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.*

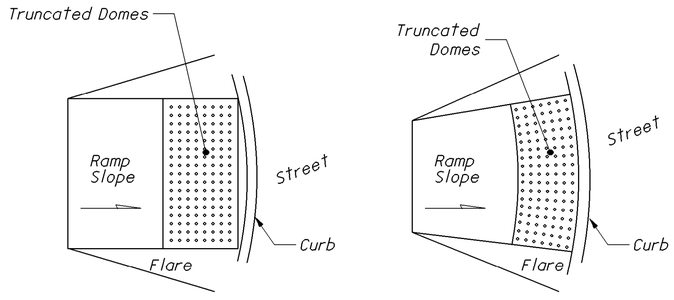
PRODUCTS & COLORS: *Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per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



HEIGHT AND DIAMETER



TRUNCATED DOMES DETAILS



DOME ALIGNMENT ON RADIUSED CURB

CALCULATED LME CHECKED JSL

CURB RAMP AND DETECTABLE WARNING DETAILS

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PAVEMENT AREAS:

LOT A: 1,361 SQ.YD.
LOT B: 6,480 SQ.YD.
LOT C: 1,230 SQ.YD.
LOT D: 4,667 SQ.YD.
DRIVES: 7,109 SQ.YD.

TOTALS: 20,847 SQ.YD.

SEE SHEET 4 FOR CURB REPAIR QUANTITIES
SEE SHEET 14 FOR RESURFACING QUANTITIES
SEE SHEETS 22,24,40 AND 41 FOR STRIPING QUANTITIES/DETAILS

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED LME
CHECKED JSL

PLAN SHEET
O.D.O.T. D05 COMPLEX

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90

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S.R. 13 CURVE AT DAWES ARBORETUM

LEFT EDGE OF SHOULDER	LEFT SHOULDER WIDTH	LEFT SHOULDER SLOPE	LEFT EDGE CORRECTION (INCHES)	LEFT EDGE OF PAVEMENT	LEFT PAVEMENT WIDTH	LEFT PAVEMENT SLOPE	PROPOSED CENTERLINE SURVEY & CONSTRUCTION	PROPOSED PROFILE GRADE	RIGHT PAVEMENT SLOPE	RIGHT PAVEMENT WIDTH	RIGHT EDGE OF PAVEMENT	SAW CUT LINE WIDTH	SAW CUT EDGE OF PAVEMENT	RIGHT SHOULDER SLOPE	RIGHT SHOULDER WIDTH	RIGHT EDGE OF SHOULDER	COMMENTS
1014.72	2.0	-0.040	0.00	1014.80	11.77	0.006	206+40.38	1014.74	-0.043	11.77	1014.23	11.48	1014.24	-0.043	2.0	1014.14	MATCH EXISTING
1014.57	2.0	-0.040	0.28	1014.65	11.80	0.008	206+50.00	1014.56	-0.044	11.89	1014.03	11.44	1014.05	-0.044	2.0	1013.94	
1014.20	2.0	-0.040	1.23	1014.28	11.90	0.016	206+75.00	1014.10	-0.048	12.22	1013.51	11.29	1013.55	-0.048	2.0	1013.41	
1013.86	2.0	-0.040	2.93	1013.94	12.00	0.023	207+00.00	1013.67	-0.056	12.54	1012.96	11.01	1013.05	-0.056	2.0	1012.85	
1013.55	2.2	-0.039	3.40	1013.63	12.00	0.031	207+25.00	1013.27	-0.059	12.86	1012.51	11.12	1012.61	-0.059	2.0	1012.39	
1013.20	2.3	-0.032	2.77	1013.27	12.00	0.038	207+50.00	1012.82	-0.060	13.19	1012.03	10.99	1012.16	-0.060	2.0	1011.91	
1012.95	2.4	-0.027	2.22	1013.02	12.00	0.043	207+65.38	1012.51	-0.063	13.39	1011.66	10.98	1011.81	-0.063	2.0	1011.53	PC
1012.79	2.5	-0.024	1.79	1012.85	12.00	0.046	207+75.00	1012.31	-0.065	13.51	1011.43	10.86	1011.60	-0.065	2.0	1011.30	
1012.32	2.9	-0.017	0.67	1012.37	12.00	0.053	208+00.00	1011.74	-0.071	13.83	1010.76	10.12	1011.02	-0.071	2.0	1010.62	
1012.14	3.6	0.061	0.35	1011.92	12.00	0.061	208+25.00	1011.20	-0.076	14.16	1010.12	9.82	1010.45	-0.076	2.0	1009.97	
1011.62	4.5	4' ROUNDING	0.35	1011.51	12.00	0.068	208+50.00	1010.70	-0.080	14.48	1009.54	10.23	1009.88	-0.080	2.0	1009.38	
1011.25	5.0	4' ROUNDING	-0.02	1011.13	12.00	0.075	208+75.00	1010.23	-0.083	14.80	1009.00	10.05	1009.39	-0.083	2.0	1008.83	
1011.05	5.1	4' ROUNDING	0.23	1010.93	12.00	0.080	208+90.38	1009.97	-0.081	15.00	1008.75	9.97	1009.16	-0.081	2.0	1008.59	BEGIN FULL SUPER LT
1010.90	5.2	4' ROUNDING	-0.07	1010.78	12.00	0.080	209+00.00	1009.82	-0.082	15.16	1008.58	9.86	1009.01	-0.082	2.0	1008.41	
1010.53	5.2	4' ROUNDING	-0.51	1010.41	12.00	0.080	209+25.00	1009.45	-0.079	15.59	1008.21	9.65	1008.68	-0.079	2.0	1008.05	
1010.30	4.8	4' ROUNDING	0.07	1010.17	12.00	0.080	209+50.00	1009.21	-0.077	16.02	1007.98	9.71	1008.46	-0.077	2.0	1007.82	
1010.26	4.6	4' ROUNDING	0.43	1010.13	12.00	0.080	209+56.95	1009.17	-0.077	16.14	1007.93	9.99	1008.40	-0.077	2.0	1007.78	END FULL SUPER LT
1010.07	4.3	4' ROUNDING	1.47	1009.95	12.00	0.075	209+75.00	1009.05	-0.074	16.45	1007.83	10.53	1008.27	-0.074	2.0	1007.69	
1009.97	3.6	0.068	1.76	1009.73	12.00	0.068	210+00.00	1008.91	-0.068	16.88	1007.75	11.17	1008.14	-0.068	2.0	1007.61	
1009.64	3.0	0.062	3.32	1009.46	12.00	0.062	210+25.00	1008.72	-0.056	17.31	1007.75	10.29	1008.14	-0.056	2.0	1007.64	
1009.11	2.5	-0.015	4.33	1009.14	12.00	0.055	210+50.00	1008.49	-0.046	17.74	1007.67	10.79	1007.99	-0.046	2.0	1007.58	
1008.78	2.5	-0.022	5.82	1008.83	12.00	0.048	210+75.00	1008.26	-0.037	18.17	1007.58	11.20	1007.84	-0.040	2.0	1007.50	
1008.68	2.5	-0.024	5.79	1008.74	12.00	0.046	210+81.95	1008.19	-0.036	18.28	1007.53	11.26	1007.78	-0.040	2.0	1007.45	PT
1008.44	2.5	-0.028	5.92	1008.51	12.00	0.042	211+00.00	1008.02	-0.032	18.59	1007.42	11.35	1007.65	-0.040	2.0	1007.34	
1008.06	2.6	-0.035	6.01	1008.15	12.00	0.035	211+25.00	1007.74	-0.023	19.02	1007.30	11.14	1007.48	-0.040	2.0	1007.22	
1007.73	2.4	-0.040	6.51	1007.82	12.00	0.028	211+50.00	1007.49	-0.020	19.45	1007.10	11.31	1007.26	-0.040	2.0	1007.02	
1007.41	2.3	-0.040	6.71	1007.50	12.00	0.021	211+75.00	1007.25	-0.024	19.88	1006.76	11.35	1006.97	-0.040	2.0	1006.68	
1007.12	2.0	-0.040	6.67	1007.20	12.00	0.015	212+00.00	1007.03	-0.026	20.31	1006.50	11.70	1006.72	-0.040	2.0	1006.42	
1006.80	2.0	-0.040	5.36	1006.88	12.00	0.008	212+25.00	1006.79	-0.025	20.74	1006.26	11.67	1006.49	-0.040	2.0	1006.18	
1006.48	2.0	-0.040	4.54	1006.56	12.00	0.001	212+50.00	1006.55	-0.024	21.17	1006.05	11.68	1006.27	-0.040	2.0	1005.97	
1006.13	2.0	-0.040	3.86	1006.21	12.00	-0.006	212+75.00	1006.28	-0.022	21.59	1005.81	11.73	1006.02	-0.040	2.0	1005.73	
1005.79	2.0	-0.040	2.55	1005.87	12.00	-0.012	213+00.00	1006.02	-0.019	22.02	1005.80	11.61	1005.80	-0.040	2.0	1005.72	
1005.44	2.0	-0.040	0.33	1005.52	12.00	-0.019	213+25.00	1005.75	-0.014	22.45	1005.43	11.69	1005.58	-0.040	2.0	1005.35	
1005.15	2.0	-0.040	0.00	1005.23	12.00	-0.026	213+50.00	1005.54	-0.016	22.88	1005.17	11.52	1005.35	-0.040	2.0	1005.09	MATCH EXISTING

NOTES:

THE SUPERELEVATION CORRECTION FOR THE S.R. 13 CURVE AT DAWES ARBORETUM SHALL BE DONE BY PAVEMENT PLANING AND VARIABLE DEPTH ASPHALT PAVEMENT. THE CONTRACTOR SHALL COME AS CLOSE AS POSSIBLE TO MEETING THE ELEVATIONS IN THE TABLE ABOVE.

THE RIGHT SIDE OF TABLE WAS CALCULATED FROM THE PART 3 DAWES ARBORETUM TURN LANE WIDENING.

THE STATIONING IN THE TABLE ABOVE REFLECTS APPROXIMATE SLM 3.87-4.04.

CALCULATED JSL CHECKED JSL

SUPERELEVATION DATA – S.R. 13 CURVE AT DAWES

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PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	PAVEMENT AREA	254			407		441				614	
					MILES	LIN. FT.				DEPTH OF PAVEMENT PLANING	PAVEMENT PLANING, ASPHALT CONCRETE, 1.50"	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT @ 0.05 GAL./S.Y.	SMA-HT	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	SMA-HT	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	WORK ZONE CENTER LINE, CLASS II	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
									SQ. YD.	INCHES	SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	MILE	MILE
1A	LIC	S.R. 13	0.00	0.10	0.10	528.0	36.0	1	2,112.0	1.50	2,112.0		158.4				1.50	88.0		0.10
1A	LIC	S.R. 13	0.10	0.22	0.12	633.6	30.0 AVG	1	2,112.0	1.50	2,112.0		158.4				1.50	88.0		0.12
1A	LIC	S.R. 13	0.22	0.54	0.32	1,689.6	24.0	1	4,505.6	1.50	4,505.6		337.9				1.50	187.7		0.32
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)											**8,729.6**		**654.7**					**363.7**		**0.54**
1B	LIC	S.R. 13	0.54	1.15	0.61	3,220.8	24.0	1	8,588.8	1.50	8,588.8		644.2				1.50	357.9		0.61
1B	LIC	S.R. 13	1.15	1.23	0.08	422.4	30.0 AVG	2	1,408.0	1.50	1,408.0		105.6				1.50	58.7		0.08
1B	LIC	S.R. 13	1.23	1.28	0.05	264.0	36.0	2	1,056.0	1.50	1,056.0		79.2				1.50	44.0		0.05
1B	LIC	S.R. 13	1.28	1.39	0.11	580.8	36.0	3	2,323.2	1.50	2,323.2		174.2				1.50	96.8		0.11
1B	LIC	S.R. 13	1.39	1.41	0.02	105.6	36.0	1	422.4	1.50	422.4		31.7				1.50	17.6		0.02
1B	LIC	S.R. 13	1.41	1.46	0.05	264.0	48.0 AVG	1	1,408.0	1.50	1,408.0		105.6				1.50	58.7		0.05
1B	LIC	S.R. 13	1.46	1.75	0.29	1,531.2	60.0	1	10,208.0	1.50	10,208.0		765.6				1.50	425.3		0.29
1B	LIC	S.R. 13	1.75	1.87	0.12	633.6	48.0 AVG	1	3,379.2	1.50	3,379.2		253.4				1.50	140.8		0.12
1B	LIC	S.R. 13	1.87	2.12	0.25	1,320.0	36.0	1	5,280.0	1.50	5,280.0		396.0				1.50	220.0		0.25
1B	LIC	S.R. 13	2.12	2.18	0.06	316.8	48.0	1	1,689.6	1.50	1,689.6		126.7				1.50	70.4		0.06
1B	LIC	S.R. 13	2.18	2.31	0.13	686.4	30.0 AVG	1	2,288.0	1.50	2,288.0		171.6				1.50	95.3		0.13
1B	LIC	S.R. 13	2.31	2.64	0.33	1,742.4	24.0	1	4,646.4	1.50	4,646.4		348.5				1.50	193.6		0.33
1B	LIC	S.R. 13	2.64	2.81	0.17	897.6	24.0	2	2,393.6	3.25		2,393.6	179.5	119.7	1.75	116.4	1.50	99.7	0.17	0.17
1B	LIC	S.R. 13	2.81	3.87	1.06	5,596.8	24.0	1	14,924.8	1.50	14,924.8		1,119.4				1.50	621.9		1.06
1B	LIC	S.R. 13	3.87	4.04	0.17	897.6	30.0 AVG	1	2,992.0	VAR		2,992.0	224.4	149.6	4.25 AVG	353.3	1.50	124.7	0.17	0.17
1B	LIC	S.R. 13	4.04	4.10	0.06	316.8	36.0	1	1,267.2	3.25		1,267.2	95.0	63.4	1.75	61.6	1.50	52.8	0.06	0.06
1B	LIC	S.R. 13	4.10	4.24	0.14	739.2	30.0 AVG	1	2,464.0	3.25		2,464.0	184.8	123.2	1.75	119.8	1.50	102.7	0.14	0.14
1B	LIC	S.R. 13	4.24	6.30	2.06	10,876.8	24.0	1	29,004.8	1.50	29,004.8		2,175.4				1.50	1,208.5		2.06
1B	LIC	S.R. 13	6.30	6.36	0.06	316.8	30.0 AVG	1	1,056.0	1.50	1,056.0		79.2				1.50	44.0		0.06
1B	LIC	S.R. 13	6.36	6.48	0.12	633.6	36.0	1	2,534.4	1.50	2,534.4		190.1				1.50	105.6		0.12
	BRIDGE DEDUCTIONS								(352.0)		(352.0)		(26.4)				1.50	(14.7)		(0.03)
SUB-TOTALS													7,423.7	455.9						
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)											**89,865.6**	**9,116.8**	**7,879.6**			**651.1**		**4,124.3**	**0.54**	**5.91**
1C	LIC	S.R. 13	6.48	6.56	0.08	422.4	36.0	1	1,689.6	1.50	1,689.6		126.7				1.50	70.4		0.08
1C	LIC	S.R. 13	6.56	6.64	0.08	422.4	30.0 AVG	1	1,408.0	1.50	1,408.0		105.6				1.50	58.7		0.08
1C	LIC	S.R. 13	6.64	7.76	1.12	5,913.6	24.0	1	15,769.6	1.50	15,769.6		1,182.7				1.50	657.1		1.12
LOCATION 1C TOTALS (CARRIED TO SUB-SUMMARY)											**18,867.2**		**1,415.0**					**786.2**		**1.28**
1D	LIC	S.R. 13	7.76	8.15	0.39	2,059.2	24.0	1	5,491.2	1.50	5,491.2		411.8				1.50	228.8		0.39
1D	LIC	S.R. 13	8.15	8.20	0.05	264.0	30.0 AVG	1	880.0	3.25		880.0	66.0	44.0	1.75	42.8	1.50	36.7	0.05	0.05
1D	LIC	S.R. 13	8.20	8.26	0.06	316.8	36.0	1	1,267.2	3.25		1,267.2	95.0	63.4	1.75	61.6	1.50	52.8	0.06	0.06
1D	LIC	S.R. 13	8.26	8.30	0.04	211.2	30.0 AVG	1	704.0	3.25		704.0	52.8	35.2	1.75	34.3	1.50	29.3	0.04	0.04
1D	LIC	S.R. 13	8.30	8.37	0.07	369.6	24.0	1	985.6	1.50	985.6		73.9				1.50	41.1		0.07
SUB-TOTALS													699.5	142.6						
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)											**6,476.8**	**2,851.2**	**842.1**			**138.7**		**388.7**	**0.15**	**0.61**

CALCULATED LIME
CHECKED JSL

ASPHALT CONCRETE DATA

LIC-13-0.00

13
90

jlutz1

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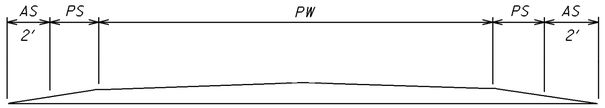
PW = PAVEMENT WIDTH
PS = PAVED SHOULDER
AS = AGGREGATE SHOULDER

TYPICAL 1



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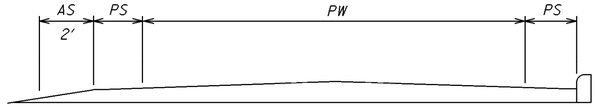
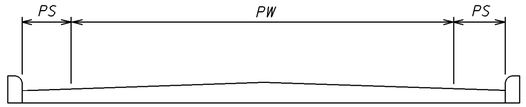


SEE NEXT SHEET FOR STRAIGHT LINE DIAGRAMS

TYPICAL 2



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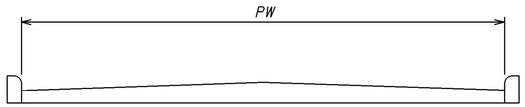

PAVEMENT DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	PAVEMENT AREA	254			407		441				614	
					MILES	LIN. FT.				DEPTH OF PAVEMENT PLANING	PAVEMENT PLANING, ASPHALT CONCRETE, 1.50"	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	NON-TRACKING TACK COAT @ 0.075 GAL./S.Y.	NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	WORK ZONE CENTER LINE, CLASS II	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
									SQ. YD.	INCHES	SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	MILE	MILE
1E	LIC	S.R. 13	8.37	8.44	0.07	369.6	30.0 AVG	4	1,232.0	1.50	1,232.0		92.4				1.50	51.3		0.07
1E	LIC	S.R. 13	8.44	8.76	0.32	1,689.6	35.0	4	6,570.7	1.50	6,570.7		492.8				1.50	273.8		0.32
1E	LIC	S.R. 13	8.76	8.84	0.08	422.4	28.0	4	1,314.1	1.50	1,314.1		98.6				1.50	54.8		0.08
1E	LIC	S.R. 13	8.84	8.90	0.06	316.8	35.0	4	1,232.0	3.25		1,232.0	92.4	61.6	1.75	59.9	1.50	51.3	0.06	0.06
1E	LIC	S.R. 13	8.90	9.10	0.20	1,056.0	35.0	4	4,106.7	1.50	4,106.7		308.0				1.50	171.1		0.20
1E	LIC	S.R. 13	9.10	9.36	0.26	1,372.8	36.0	4	5,491.2	1.50	5,491.2		411.8				1.50	228.8		0.26
1E	LIC	S.R. 13	9.36	9.40	0.04	211.2	24.0	4	563.2	1.50	563.2		42.2				1.50	23.5		0.04
1E	LIC	S.R. 13	9.40	9.43	0.03	158.4	50.0	4	880.0	1.50	880.0		66.0				1.50	36.7		0.03
1E	LIC	S.R. 13	9.43	9.69	0.26	1,372.8	64.0	4	9,762.1	1.50	9,762.1		732.2				1.50	406.8		0.26
1E	LIC	S.R. 13	9.69	9.78	0.09	475.2	62.0	4	3,273.6	1.50	3,273.6		245.5				1.50	136.4		0.09
		BRIDGE DEDUCTIONS							(537.8)		(537.8)		(40.3)				1.50	(22.4)		(0.04)
		SUB-TOTALS											2,541.6	61.6						
LOCATION 1E TOTALS (CARRIED TO SUB-SUMMARY)											**32,655.8**	**1,232.0**	**2,603.2**			**59.9**		**1,412.1**	**0.06**	**1.37**
2	LIC	S.R. 13D	0.31	0.41	0.10	528.0	64.0	4	3,754.7	1.50	3,754.7		281.6				1.50	156.4		0.10
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)											**3,754.7**		**281.6**					**156.4**		**0.10**
3	LIC	LOCUST ST.	0.10	0.18	0.08	422.4	40.0	4	1,877.3	1.50	1,877.3		140.8				1.50	78.2		0.08
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)											**1,877.3**		**140.8**					**78.2**		**0.08**
		ODOT DISTRICT 5 COMPLEX					VAR	4	20,847.0	1.50	20,847.0		1,563.5				1.50	868.6		
DISTRICT 5 COMPLEX TOTALS (CARRIED TO GENERAL SUMMARY)											**20,847.0**		**1,563.5**					**868.6**		

CALCULATED LME
CHECKED JSL

ASPHALT CONCRETE DATA

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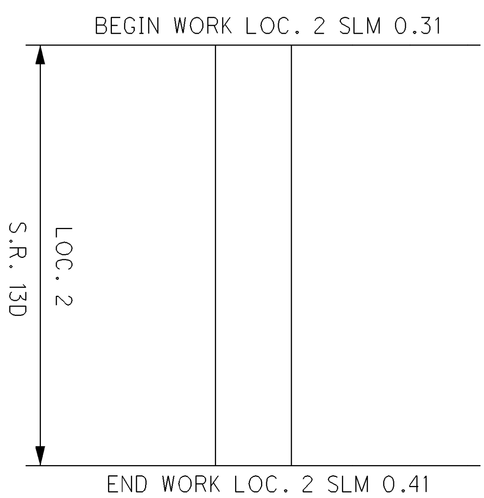
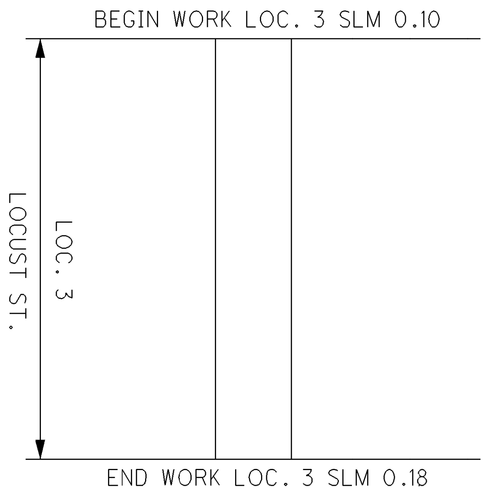
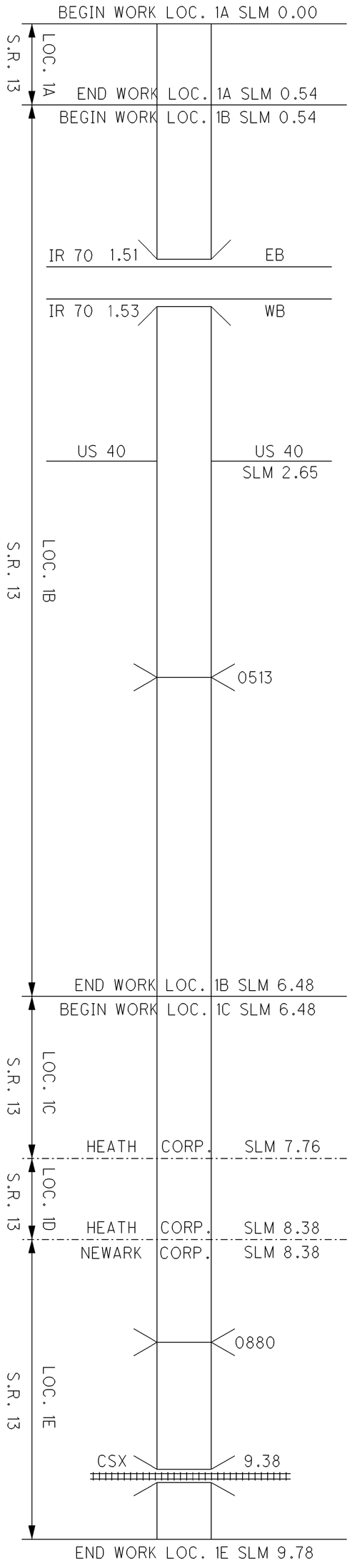


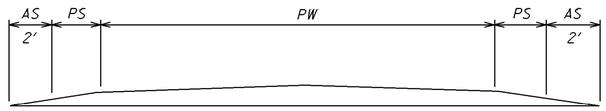




STRAIGHT LINE DIAGRAMS

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

TYPICAL 1



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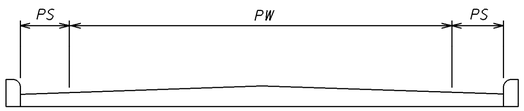
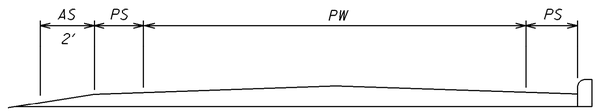


TYPICAL 3



SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED SHOULDER WIDTH (FT.) (WIDTHS ARE AVERAGE THROUGHOUT SECTION)		SHOULDER AREA	209	254			407		408	441				617		
					MILES	LIN. FT.		A	B		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	DEPTH OF PAVEMENT PLANING	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	PAVEMENT PLANING, ASPHALT CONCRETE, 3.25"	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT @ 0.05 GAL./S.Y.	PRIME COAT, AS PER PLAN	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH)	SHOULDER PREPARATION
										SQ. YD.	MILE	INCHES	SQ. YD.	SQ. YD.	GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.
1A	LIC	S.R. 13	0.00	0.54	0.54	2851.2	1	3	3	1,900.8	1.08	1.50	1900.8		142.6		506.9			1.50	79.2	2.00	70.4	1,267.2
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)											**1.08**		**1900.8**		**142.6**		**506.9**				**79.2**		**70.4**	**1267.2**
1B	LIC	S.R. 13	0.54	1.15	0.61	3220.8	1	3	3	2,147.2	1.22	1.50	2147.2		161.0		572.6			1.50	89.5	2.00	79.5	1,431.5
1B	LIC	S.R. 13	1.15	1.28	0.13	686.4	2	4	4	610.1	0.26	1.50	610.1		45.8		122.0			1.50	25.4	2.00	16.9	305.1
1B	LIC	S.R. 13	1.28	1.39	0.11	580.8	3	4	4	516.3	0.22	1.50	516.3		38.7		103.2			1.50	21.5	2.00	14.3	258.1
1B	LIC	S.R. 13	1.39	1.46	0.07	369.6	1	4	4	328.5	0.14	1.50	328.5		24.6		65.7			1.50	13.7	2.00	9.1	164.3
1B	LIC	S.R. 13	1.46	2.28	0.82	4329.6	1	6	6	5,772.8	1.64	1.50	5772.8		433.0		769.7			1.50	240.5	2.00	106.9	1,924.3
1B	LIC	S.R. 13	2.28	2.64	0.36	1900.8	1	3	3	1,267.2	0.72	1.50	1267.2		95.0		337.9			1.50	52.8	2.00	46.9	844.8
1B	LIC	S.R. 13	2.64	2.81	0.17	897.6	2	3	3	598.4	0.34	3.25		598.4	44.9	29.9	159.6	1.75	29.1	1.50	24.9	2.00	22.2	398.9
1B	LIC	S.R. 13	2.81	3.26	0.45	2376.0	1	3	3	1,584.0	0.90	1.50	1584.0		118.8		422.4			1.50	66.0	2.00	58.7	1,056.0
1B	LIC	S.R. 13	3.26	3.87	0.61	3220.8	1	2	2	1,431.5	1.22	1.50	1431.5		107.4		572.6			1.50	59.6	2.00	79.5	1,431.5
1B	LIC	S.R. 13	3.87	4.04	0.17	897.6	1	2	2	398.9	0.34	VAR		398.9	29.9	19.9	159.6	1.75 AVG	19.4	1.50	16.6	2.00	22.2	398.9
1B	LIC	S.R. 13	4.04	4.24	0.20	1056.0	1	2	2	469.3	0.40	3.25		469.3	35.2	23.5	187.7	1.75	22.8	1.50	19.6	2.00	26.1	469.3
1B	LIC	S.R. 13	4.24	5.07	0.83	4382.4	1	2	2	1,947.7	1.66	1.50	1947.7		146.1		779.1			1.50	81.2	2.00	108.2	1,947.7
1B	LIC	S.R. 13	5.07	5.18	0.11	580.8	1	8	8	1,032.5	0.22	1.50	1032.5		77.4		103.2			1.50	43.0	2.00	14.3	258.1
1B	LIC	S.R. 13	5.18	6.23	1.05	5544.0	1	2	2	2,464.0	2.10	1.50	2464.0		184.8		985.6			1.50	102.7	2.00	136.9	2,464.0
1B	LIC	S.R. 13	6.23	6.48	0.25	1320.0	1	10	10	2,933.3	0.50	1.50	2933.3		220.0		234.7			1.50	122.2	2.00	32.6	586.7
	BRIDGE DEDUCTIONS									(234.7)	(0.10)		(234.7)		(17.6)		(93.9)			1.50	(9.78)	2.00	(13.0)	(234.7)
SUB-TOTALS															1745.0	73.3								
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)											**11.78**		**21800.4**	**1466.6**	**1818.3**		**5481.7**		**71.3**		**969.4**		**761.3**	**13704.5**
1C	LIC	S.R. 13	6.48	6.68	0.20	1056.0	1	10	10	2,346.7	0.40	1.50	2346.7		176.0		187.7			1.50	97.8	2.00	26.1	469.3
1C	LIC	S.R. 13	6.68	7.76	1.08	5702.4	1	2	2	2,534.4	2.16	1.50	2534.4		190.1		1,013.8			1.50	105.6	2.00	140.8	2,534.4
LOCATION 1C TOTALS (CARRIED TO SUB-SUMMARY)											**2.56**		**4881.1**		**366.1**		**1201.5**				**203.4**		**166.9**	**3003.7**
1D	LIC	S.R. 13	7.76	8.15	0.39	2059.2	1	2	2	915.2	0.78	1.50	915.2		68.6		366.1			1.50	38.1	2.00	50.8	915.2
1D	LIC	S.R. 13	8.15	8.30	0.15	792.0	1	2	2	352.0	0.30	3.25		352.0	26.4	17.6	140.8	1.75	17.1	1.50	14.7	2.00	19.6	352.0
1D	LIC	S.R. 13	8.30	8.37	0.07	369.6	1	2	2	164.3	0.14	1.50	164.3		12.3		65.7			1.50	6.8	2.00	9.1	164.3
SUB-TOTALS															107.3	17.6								
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)											**1.22**		**1079.5**	**352.0**	**124.9**		**572.6**		**17.1**		**59.6**		**79.5**	**1,431.5**

CALCULATED LME CHECKED JSL

SHOULDER DATA

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SEE NEXT SHEET FOR EXTRA AREA DETAILS/NOTE

EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DIMENSIONS A	INTERSECTIONS DIMENSIONS B	INTERSECTIONS DIMENSIONS C	AREA	202 WEARING COURSE REMOVED	407 TACK COAT @ 0.075 GAL./S.Y.	407 TACK COAT @ 0.05 GAL./S.Y.	441 THICKNESS	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	441 THICKNESS	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448),PG 64-22
					FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.
1A	LIC	S.R. 13	RT	BOUNDARIES RD (CR 9)	50	35	113	411.2	411.2	30.9				1.50	17.2
1A	LIC	S.R. 13	LT	LAKE SHORE BLVD (TWP 196)	23	21	58	101.0	101.0	7.6				1.50	4.3
1A	LIC	S.R. 13	LT	PARK DRIVE (TWP 197)	25	16	61	107.0	107.0	8.1				1.50	4.5
1A	LIC	S.R. 13	LT	MAPLE AVE (TWP 433)	19	19	55	78.2	78.2	5.9				1.50	3.3
1A	LIC	S.R. 13	LT	MILLER AVE	20	11	39	55.6	55.6	4.2				1.50	2.4
1A	LIC	S.R. 13	LT	EDGEWATER (TWP 196)	22	20	58	95.4	95.4	7.2				1.50	4.0
1A	LIC	S.R. 13	LT	CRISTLAND HILL RD (CR 596)	41	25	79	236.9	236.9	17.8				1.50	9.9
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)									**1,085.3**	**81.7**					**45.6**
1B	LIC	S.R. 13	RT	KINDLE RD (TWP 325)	15	21	46	55.9	55.9	4.2				1.50	2.4
1B	LIC	S.R. 13	LT	SOUTH ST	15	21	46	55.9	55.9	4.2				1.50	2.4
1B	LIC	S.R. 13	LT	SECOND ST	21	17	42	68.9	68.9	5.2				1.50	2.9
1B	LIC	S.R. 13	LT	US 40 (WEST SIDE)	32	28	84	199.2	199.2	15.0	10.0	1.75	9.7	1.50	8.3
1B	LIC	S.R. 13	RT	US 40 (EAST SIDE)	50	38	100	383.4	383.4	28.8	19.2	1.75	18.7	1.50	16.0
1B	LIC	S.R. 13	LT	STADDEN ALLEY	10	12	20	17.8	17.8	1.4				1.50	0.8
1B	LIC	S.R. 13	LT	LARASON AVE	24	12	42	72.0	72.0	5.4				1.50	3.0
1B	LIC	S.R. 13	LT	NORTH AVE	31	15	52	115.4	115.4	8.7				1.50	4.9
1B	LIC	S.R. 13	LT	COOPER RD	32	18	49	119.2	119.2	9.0				1.50	5.0
1B	LIC	S.R. 13	LT	RIDGELY TRACT RD (TWP 308)	24	11	30	54.7	54.7	4.2				1.50	2.3
1B	LIC	S.R. 13	RT	ONE MILE RD	22	20	42	75.8	75.8	5.7				1.50	3.2
1B	LIC	S.R. 13	RT	WOODLAND DRIVE	19	34	43	81.3	81.3	6.1				1.50	3.4
1B	LIC	S.R. 13	RT	HUPP RD (TWP 309)	35	17	71	171.2	171.2	12.9				1.50	7.2
1B	LIC	S.R. 13	LT	DAVIS DRIVE (TWP 309)	27	20	49	103.5	103.5	7.8				1.50	4.4
1B	LIC	S.R. 13	RT	HIRST RD (CR 310)	35	20	50	136.2	136.2	10.3				1.50	5.7
1B	LIC	S.R. 13	LT	WHITE CHAPEL RD (TWP 306)	32	21	53	131.6	131.6	9.9				1.50	5.5
1B	LIC	S.R. 13	RT	WHITE CHAPEL RD (TWP 306)	23	16	46	79.3	79.3	6.0				1.50	3.4
1B	LIC	S.R. 13	LT	SANDY LANE	25	19	47	91.7	91.7	6.9				1.50	3.9
1B	LIC	S.R. 13	LT	KIRBY RD	21	20	44	74.7	74.7	5.7				1.50	3.2
1B	LIC	S.R. 13	RT	AT TRAILER PARK	19	31	65	101.4	101.4	7.7				1.50	4.3
1B	LIC	S.R. 13	LT	DORSEY MILL RD (CR 343)	75	40	190	958.4	958.4	71.9				1.50	40.0
1B	LIC	S.R. 13	RT	DORSEY MILL RD (CR 343)	75	40	190	958.4	958.4	71.9				1.50	40.0
SUB-TOTALS										308.9	29.2				
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)									**4,105.9**	**338.1**			**28.4**		**172.2**
1D	LIC	S.R. 13	RT	HOPEWELL DR.	50	24	98	338.9	338.9	25.5				1.50	14.2
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)									**338.9**	**25.5**					**14.2**

CALCULATED LME
CHECKED JSL

EXTRA AREA DATA

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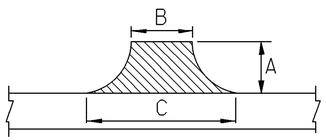
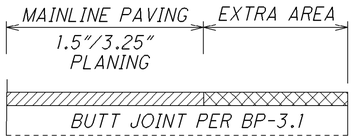
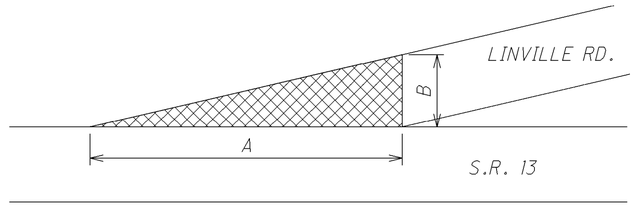


$$AREA = \left[A \frac{(B + C)}{2} \right] / 9$$



NOTES:
1. AREAS SHOWN IN THE TABLE WITH INTERMEDIATE COURSE SHALL HAVE 3.25" DEPTH BUTT JOINT AND 2 COURSES OF ASPHALT SHALL BE PLACED.



EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DIMENSIONS			AREA	202	407		441			
					A	B	C		WEARING COURSE REMOVED	NON-TRACKING TACK COAT @ 0.075 GAL./S.Y.	NON-TRACKING TACK COAT @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448),PG 64-22
					FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.
1E	LIC	S.R. 13	RT	LINVILLE RD.	82	53		241.5	241.5	18.2				1.50	10.1
1E	LIC	S.R. 13	LT	ORCHARD ST.	15	24	45	57.5	57.5	4.4				1.50	2.4
1E	LIC	S.R. 13	RT	BONER ST.	20	24	45	76.7	76.7	5.8				1.50	3.2
1E	LIC	S.R. 13	LT	GAINOR AVE.	12	23	40	42.0	42.0	3.2				1.50	1.8
1E	LIC	S.R. 13	RT	ISABELL RD.	20	40	50	100.0	100.0	7.5				1.50	4.2
1E	LIC	S.R. 13	LT	PROSPECT ST.	16	24	36	53.4	53.4	4.1				1.50	2.3
1E	LIC	S.R. 13	LT	WILWOOD AVE.	40	24	60	186.7	186.7	14.1				1.50	7.8
1E	LIC	S.R. 13	LT	S. 5TH ST.	36	38	70	216.0	216.0	16.2				1.50	9.0
1E	LIC	S.R. 13	RT	W. NATIONAL DR.	30	34	64	163.4	163.4	12.3				1.50	6.9
1E	LIC	S.R. 13	RT	GILBERT ST.	12	16	20	24.0	24.0	1.8				1.50	1.0
1E	LIC	S.R. 13	RT	HOLLIDAY ST.	16	24	40	56.9	56.9	4.3				1.50	2.4
1E	LIC	S.R. 13	LT	HARRISON ST.	16	28	66	83.6	83.6	6.3				1.50	3.5
1E	LIC	S.R. 13	RT	HARRISON ST.	16	28	66	83.6	83.6	6.3				1.50	3.5
1E	LIC	S.R. 13	LT	RAILROAD ST.	10	12	24	20.0	20.0	1.5				1.50	0.9
1E	LIC	S.R. 13	RT	RAILROAD ST.	10	16	30	25.6	25.6	2.0				1.50	1.1
1E	LIC	S.R. 13	LT	WALNUT ST.	20	25	63	97.8	97.8	7.4				1.50	4.1
1E	LIC	S.R. 13	RT	WALNUT ST.	20	25	63	97.8	97.8	7.4				1.50	4.1
1E	LIC	S.R. 13	RT	CANAL ST.	10	18	24	23.4	23.4	1.8				1.50	1.0
1E	LIC	S.R. 13	LT	MARKET ST.	10	18	24	23.4	23.4	1.8				1.50	1.0
LOCATION 1E TOTALS (CARRIED TO SUB-SUMMARY)									**1,673.3**	**126.4**					**70.3**

CALCULATED LME
CHECKED JSL

EXTRA AREA DATA

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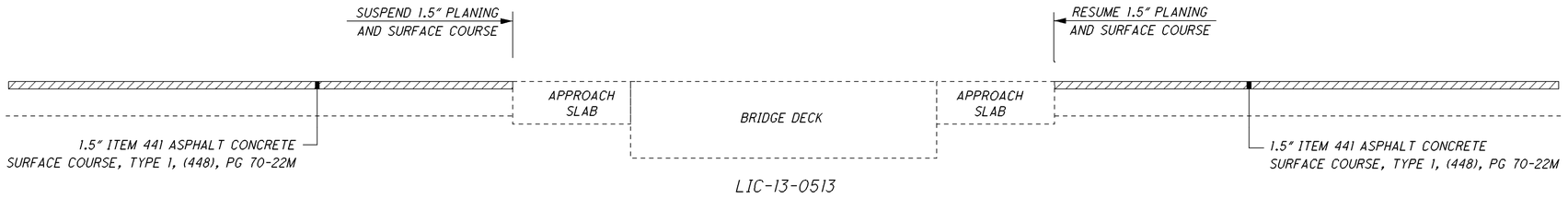
DETAIL 1



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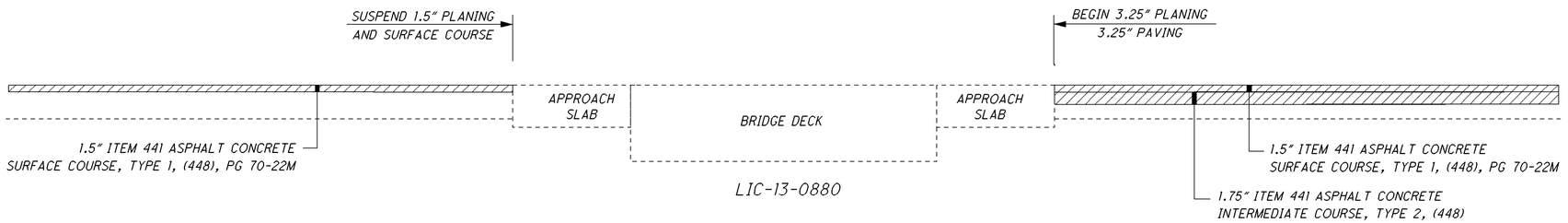
BUTT JOINT AT APPROACH SLABS

DETAIL 2



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BUTT JOINT AT APPROACH SLABS

BRIDGE TREATMENT DATA

LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	BRIDGE DECK DETAIL (SEE THIS SHEET)	MAINLINE DEDUCTIONS (CARRIED TO SHEETS 13,14)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 16)	202		407		441				512	516
											DEPTH OF WEARING COURSE REMOVED	WEARING COURSE REMOVED	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT @ 0.05 GAL./S.Y.	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	TYPE 3 WATERPROOFING	2" DEEP JOINT SEALER, AS PER PLAN
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.		SQ.YD.	SQ.YD.		SQ.YD.	GALLON	GALLON	INCHES	CU.YD.	INCHES	CU.YD.	SQ.YD.	FEET
1B	LIC-13-0151	OVERHEAD - MILL AND FILL ROADWAY																		
1B	LIC-13-0513	92.0	43.3	442.7	20.0	43.0	191.1	1	352.0	234.7										86
	BRIDGE DEDUCTIONS								352.0	234.7										
	LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)																			**86**
1E	LIC-13-0880	202.0	35.8	803.6	20.0	28.0	124.4	2	537.8											56
1E	LIC-13-0938	OVERHEAD - MILL AND FILL ROADWAY																		
	BRIDGE DEDUCTIONS								537.8											
	LOCATION 1E TOTALS (CARRIED TO SUB-SUMMARY)																			**56**

CALCULATED LME CHECKED JSL

BRIDGE TREATMENT DATA

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CURB RAMP CALCULATIONS

REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202			608		609	690 SPECIAL-MISC.:			COMMENTS
				CURB AND GUTTER REMOVED	WALK REMOVED	CURB REMOVED	4" CONCRETE WALK, (CURB RAMP AREA)	4" CONCRETE WALK, (EXTRA WALK AREA)	CURB, TYPE 6	DETECTABLE WARNING	CURB RAMPS,		
											TYPE A1	TYPE A2	
			CL./LT./RT.	SQ. YD.	SQ. FT.	FT.	SQ. FT.	SQ. FT.	FT.	SQ. FT.	EACH	EACH	
		S.R. 13 - NEWARK											
1-CR	X	ISABELLE RD.	RT		184.0	5	56.0	120.0		8			LANDING PLUS 15' WALK IN EACH DIRECTION
2-CR	X	ON S.R. 13 AT ISABELLE RD.	LT			5	20.0		10			1	
3-CR	X	S. 5TH ST.	LT		70.0	10	70.0		10		1		
4-CR	X	S. 5TH ST.	LT		82.0	17	60.0	22.0	17		1		
SUB-TOTALS							206.0	142.0					
TOTALS (CARRIED TO LOCATION 1B SUB-SUMMARY)					336.0	37	348.0		37	8	2	1	

SEE SHEET 36 FOR CURB RAMP PLAN SHEET

CALCULATED LME
CHECKED JSL

CURB RAMP DATA

LIC-13-0.00

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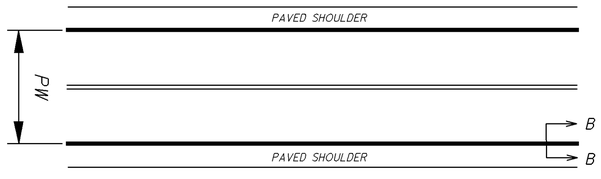
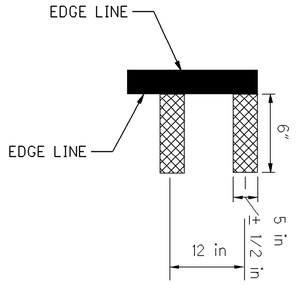
ITEM 648 EDGE LINE, 6"

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	TOTAL LENGTH (MILES)	INFORMATION ONLY: WHITE EDGE LINE QUANTITIES TOTAL MILES	HIGHWAY MILES	RAMP MILES	648 TOTAL EDGE LINE (6") MILE	618 EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE) MILE	REMARKS
1A	LIC	S.R. 13	0.00	0.54	0.54	1.08	1.08		1.08	1.08	PERRY COUNTY TO SLM
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)									**1.08**	**1.08**	
1B	LIC	S.R. 13	0.54	6.48	5.94	11.88	11.88		11.88	11.88	SLM TO DORSEY MILL RD.
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)									**11.88**	**11.88**	
1C	LIC	S.R. 13	6.48	7.76	1.28	2.56	2.56		2.56	2.56	DORSEY MILL RD. TO HEATH CORP.
LOCATION 1C TOTALS (CARRIED TO SUB-SUMMARY)									**2.56**	**2.56**	
1D	LIC	S.R. 13	7.76	8.37	0.61	1.22	1.22		1.22		HEATH CORP. TO NEWARK CORP.
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)									**1.22**		

EDGE LINE STRIPING DETAIL



EDGE LINE PLACEMENT SHALL BE MEASURED FROM CENTER OF LINES, PLACED ACCORDING TO PAVEMENT WIDTH (PW) AS SHOWN ON DATA TABLE (SHEET 13).



SECTION B-B
EDGE LINE RUMBLE STRIPE

SEE DETAIL FOR EDGE LINE PLACEMENT. EDGE LINE TO BE PLACED AT EDGE OF RUMBLE, NOT IN RUMBLE, ALL OTHER SPECIFICATIONS SHALL BE AS PER SCD TC-64.10, 7-17-15.

CALCULATED LME CHECKED JSL

PAVEMENT MARKING DATA - LONG LINE

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ITEM 644/648 CENTER/LANE LINE

LOCATION	COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	TOTAL LENGTH (MILES)	INFORMATION ONLY: CENTER LINE QUANTITIES TOTAL MILES	INFORMATION ONLY: CENTER LINE QUANTITIES EQUIVALENT SOLID LINE	644 TOTAL CENTER LINE MILES	648 TOTAL CENTER LINE MILES	644 TOTAL LANE LINE (4") MILES	648 TOTAL LANE LINE (6") MILES	REMARKS
1A	LIC	S.R. 13	0.00	0.54	0.54	0.54	1.300		0.54			PERRY COUNTY TO SLM
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)									**0.54**			
1B	LIC	S.R. 13	0.54	6.48	5.94	5.94	10.856		6.29			SLM TO DORSEY MILL RD.(EXTRA FOR TURN LANES)
1B	LIC	S.R. 13 N.B.	1.42	1.49	0.07						0.07	
1B	LIC	S.R. 13	1.49	1.74	0.25						0.50	NORTHBOUND AND SOUTHBOUND
1B	LIC	S.R. 13 N.B.	1.74	1.88	0.14						0.14	SOUTHBOUND
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)									**6.29**		**0.71**	
1C	LIC	S.R. 13	6.48	7.76	1.28	1.28	2.425		1.37			DORSEY MILL RD. TO HEATH CORP.
LOCATION 1C TOTALS (CARRIED TO SUB-SUMMARY)									**1.37**			
1D	LIC	S.R. 13	7.76	8.37	0.61	0.61	1.281		0.74			HEATH CORP. TO NEWARK CORP.
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)									**0.74**			
1E	LIC	S.R. 13	8.37	9.42	1.05	1.05	2.012	1.05				NEWARK CORP. TO WALNUT ST. (RT)
1E	LIC	S.R. 13	9.42	9.78	0.36	0.36	0.525	0.48				WALNUT ST. TO N. 3RD ST.
1E	LIC	S.R. 13 S.B.	9.44	9.69	0.25					0.25		WALNUT ST. TO CHURCH ST., SEE SHEETS 37-38
LOCATION 1E TOTALS (CARRIED TO SUB-SUMMARY)								**1.53**		**0.25**		
2	LIC	S.R. 13D	0.31	0.41	0.10	0.10	0.200	0.10		0.12		LOCUST ST. TO CHURCH ST., SEE SHEETS 38-39
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)								**0.10**		**0.12**		
3	LIC	LOCUST ST.	0.10	0.18	0.08	0.09	0.180	0.09				S.R. 13D TO 3RD ST.
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)								**0.09**				
O.D.O.T. D05 COMPLEX					0.30	0.30	0.600	0.30				
TOTALS (CARRIED TO GENERAL SUMMARY)								**0.30**				

CALCULATED LME CHECKED JSL

PAVEMENT MARKING DATA - LONG LINE

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ITEM 644 AUXILARY MARKING

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	SLM	TRANSEVERSE/ DIANGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT		LANE ARROWS			8" CHANNELIZING LINE	ISLAND MARKING (YELLOW)	LANE REDUCTION ARROW	REMARKS
										ONLY		TURN						
						WHITE	YELLOW			72"	96"	THRU	LT.	RT.				
						FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	FEET	SQ.FT.	EACH	
1A	LIC	S.R. 13		ON S.R. 13 BEFORE LAKESHORE BLVD.							1		1		123			SEE SHEET 25
1A	LIC	S.R. 13	RT	BOUNDARIES RD				15										PLACE 25' FROM SR 13 EOP
1A	LIC	S.R. 13	LT	LAKESHORE BLVD				14										PLACE 16' FROM SR 13 EOP
1A	LIC	S.R. 13		ON S.R. 13 BEFORE BOUNDARIES RD.			200				1		2		200			SEE SHEET 25
1A	LIC	S.R. 13	LT	DELL AVE				9										PLACE 20' FROM SR 13 CENTERLINE
1A	LIC	S.R. 13	LT	PARK DR				20										PLACE 22' FROM SR 13 CENTERLINE
1A	LIC	S.R. 13	LT	MAPLE AVE				14										PLACE 24' FROM SR 13 CENTERLINE
1A	LIC	S.R. 13	LT	MILLER AVE				9										PLACE 23' FROM SR 13 CENTERLINE
1A	LIC	S.R. 13	LT	EDGEWATER BEACH BLVD				14										PLACE 23' FROM SR 13 CENTERLINE
1A	LIC	S.R. 13	LT	CRISTLAND HILL RD				29										PLACE 23' FROM SR 13 CENTERLINE
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)							**200**	**124**			**2**		**3**		**323**			
1B	LIC	S.R. 13	RT	KINDLE RD				10										PLACE 20' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13		SLM 1.15-1.45			358				2		6		160	114		SEE SHEETS 26-27
1B	LIC	S.R. 13		SLM 1.46-1.62		217	60	69			2		4		560			BETWEEN RAMPS, SEE SHEET 28
1B	LIC	S.R. 13		SLM 1.62-1.88			386	24								57	1	SEE SHEETS 29-30
1B	LIC	S.R. 13		SLM 1.88-2.13			276				1		2		280			BEFORE ODOT SEE SHEETS 30-31
1B	LIC	S.R. 13		SLM 2.13-2.30			250				1		2		180	57		AFTER ODOT SEE SHEET 31
1B	LIC	S.R. 13	LT	SOUTH ST				13										PLACE 22' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	SECOND ST				13										PLACE 22' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13		SR 13 AT US 40				16										SOUTH SIDE PLACE 90' FROM US 40 CL
1B	LIC	S.R. 13		SR 13 AT US 40				12										NORTH SIDE PLACE 45' FROM US 40 CL
1B	LIC	S.R. 13	RT	ON US 40 W.B.				13										PLACE 45' FROM SR 13 CL
1B	LIC	S.R. 13	LT	STADDEN ALLEY				10										PLACE 22' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	LARASON AVE				10										PLACE 22' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	NORTH AVE				20										PLACE 18' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	COOPER RD				18										PLACE 20' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	RIDGLEY TRACK RD				13										PLACE 20' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	RT	ONE MILE RD				13										PLACE 17' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	RT	WOODLAND				20										PLACE 21' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13		ON S.R. 13 - DAWES TURN LANE			358				1		2		215	57		SEE SHEET 32
1B	LIC	S.R. 13	RT	HUPP RD				24										PLACE 21' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	DAVIS DR				16										PLACE 23' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	RT	HIRST RD				22										PLACE 20' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	RT	WHITE CHAPEL RD				19										PLACE 20' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	WHITE CHAPEL RD				15										PLACE 19' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	SANDY LA				15										PLACE 19' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	LT	KIRBY RD				14										PLACE 22' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13	RT	TRAILER PK				24										PLACE 20' FROM SR 13 CENTERLINE
1B	LIC	S.R. 13		ON SR 13 BEFORE DORSEY MILL RD.			121	27			2		3		450			AT DORSEY MILL SEE SHEETS 33-34
1B	LIC	S.R. 13	LT	DORSEY MILL RD				23										SEE SHEET 33
SUB-TOTALS						**217**	**1809**											
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)						**2,026**		**473**			**9**		**19**		**1,845**	**285**	**1**	

CALCULATED LME CHECKED JSL

PAVEMENT MARKING DATA - AUXILARY

LIC-13-0.00

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ITEM 644 AUXILARY MARKING

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	SLM	TRANSEVERSE/ DIANGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT		LANE ARROWS			8" CHANNELIZING LINE	HANDICAP SYMBOL MARKING	SHARED LANE MARKING	PARKING STALL MARKING	REMARKS
										ONLY		TURN							
						WHITE	YELLOW			72"	96"	LT/THRU	LT.	RT.					
						FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	FEET	EACH	EACH	FEET	
1C	LIC	S.R. 13	RT	DORSEY MILL RD.				24											SEE SHEET 33
1C	LIC	S.R. 13		ON S.R. 13 AFTER DORSEY MILL RD.			169	28			1		3		290				SEE SHEET 34
LOCATION 1C TOTALS (CARRIED TO SUB-SUMMARY)							**169**	**52**			**1**		**3**		**290**				
1D	LIC	S.R. 13		ON S.R. 13 BEFORE HOPEWELL DR.			117	24					2		70				SEE SHEET 35
			RT	HOPEWELL DR.				13											SEE SHEET 35
				ON S.R. 13 AFTER HOPEWELL DR.			112						2		70				SEE SHEET 35
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)							**229**	**37**					**4**		**140**				
1E	LIC	S.R. 13	RT	LINVILLE RD				28											PLACE 19' FROM CL SR 586
1E	LIC	S.R. 13	LT	ORCHARD ST					64										PLACE 21' FROM CL SR 586
1E	LIC	S.R. 13	RT	BONNER ST					50										PLACE 18' FROM CL SR 586
1E	LIC	S.R. 13	LT	GANIOR AVE					50										PLACE 20' FROM CL SR 586
1E	LIC	S.R. 13	RT	ISABELLE RD					80										PLACE 19' FROM CL SR 586
1E	LIC	S.R. 13		SR 13 AT ISABELLE RD				35	72				2		75				SEE SHEET 36
1E	LIC	S.R. 13	LT	PROSPECT ST					54										PLACE 20' FROM CL SR 586
1E	LIC	S.R. 13		SR 13 AT WILWOOD AVE.				41	72			1		2	63				SEE SHEET 36
1E	LIC	S.R. 13	LT	S. 5TH ST.				20	95										SEE SHEET 36
1E	LIC	S.R. 13	RT	GILBERT ST					36										PLACE 22' FROM CL SR 586
1E	LIC	S.R. 13	RT	HOLIDAY ST					52										PLACE 17' FROM CL SR 586
1E	LIC	S.R. 13	RT	HARRISON ST					66										PLACE 21' FROM CL SR 586
1E	LIC	S.R. 13	LT	HARRISON ST					54										PLACE AS DIRECTED
1E	LIC	S.R. 13	RT	RAILROAD ST					60										PLACE AS DIRECTED
1E	LIC	S.R. 13	LT	RAILROAD ST					54										PLACE AS DIRECTED
1E	LIC	S.R. 13		ON S.R. 13 BETWEEN RAILROAD & MAIN ST.		41		32	140		1		8		288	1		748	SEE SHEET 37
1E	LIC	S.R. 13		ON S.R. 13 BETWEEN MAIN ST. & CHURCH ST.		41		64	256		2		5		331	1		710	SEE SHEET 38
1E	LIC	S.R. 13		ON S.R. 13 (CHURCH ST.)		45		32	130		2		4		295	3	5	872	SEE SHEET 39
1E	LIC	S.R. 13	LT	WALNUT ST					72										PLACE AS DIRECTED
1E	LIC	S.R. 13	RT	WALNUT ST					72										PLACE AS DIRECTED
1E	LIC	S.R. 13	RT	CANAL ST					48										PLACE AS DIRECTED
1E	LIC	S.R. 13	LT	MARKET ST					48										PLACE AS DIRECTED
SUB-TOTALS												**1**	**19**	**2**					
LOCATION 1E TOTALS (CARRIED TO SUB-SUMMARY)						**127**		**252**	**1,625**		**5**		**22**		**1,052**	**5**	**5**	**2,330**	
2	LIC	S.R. 13D		ON S.R. 13 BETWEEN CHURCH ST. & LOCUST ST.				84	256		2		4		270			376	SEE SHEET 38
LOCATION 2 TOTALS (CARRIED TO SUB-SUMMARY)								**84**	**256**		**2**		**4**		**270**			**376**	
3	LIC	LOCUST ST.		LOCUST ST. BETWEEN 3RD AND 4TH ST.				48	110		2		4		140				SEE SHEET 39
LOCATION 3 TOTALS (CARRIED TO SUB-SUMMARY)								**48**	**110**		**2**		**4**		**140**				
O.D.O.T. D05 COMPLEX								70	48				2		115	5		5,995	SEE SHEETS 40-41
TOTALS (CARRIED TO GENERAL SUMMARY)						**122**		**70**	**48**				**2**		**115**	**5**		**5,995**	

CALCULATED LIME CHECKED JSL

PAVEMENT MARKING DATA - AUXILARY

LIC-13-0.00

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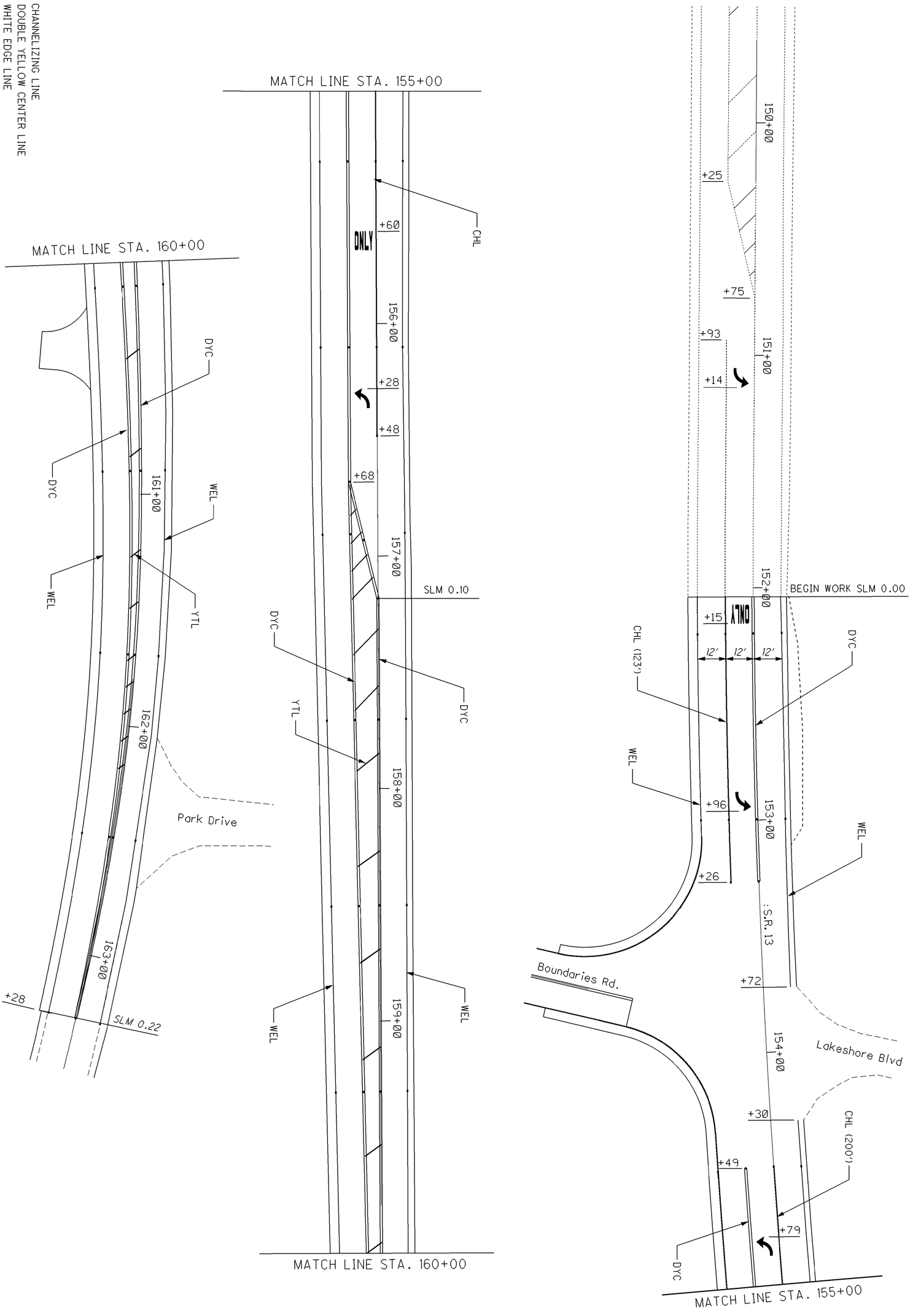
CHL = CHANNELIZING LINE
DYC = DOUBLE YELLOW CENTER LINE
WEL = WHITE EDGE LINE
YTL = YELLOW TRANSVERSE/DIAGONAL LINE



SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

25/90	LIC-13-0.00	PAVEMENT MARKING DETAIL BOUNDARIES RD. TURN LANE	CALCULATED LME CHECKED JSL	0 20 10 40 HORIZONTAL SCALE IN FEET

CHL = CHANNELIZING LINE
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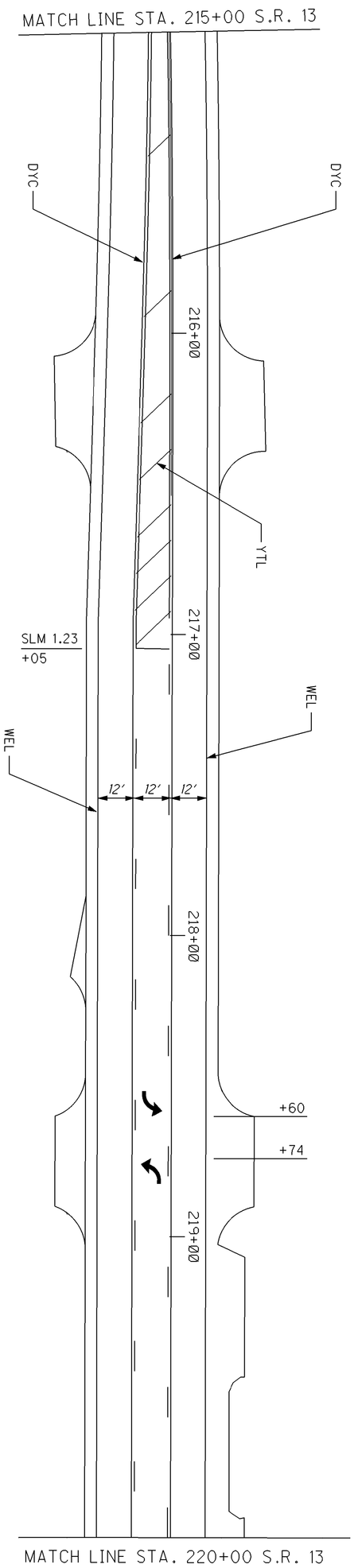

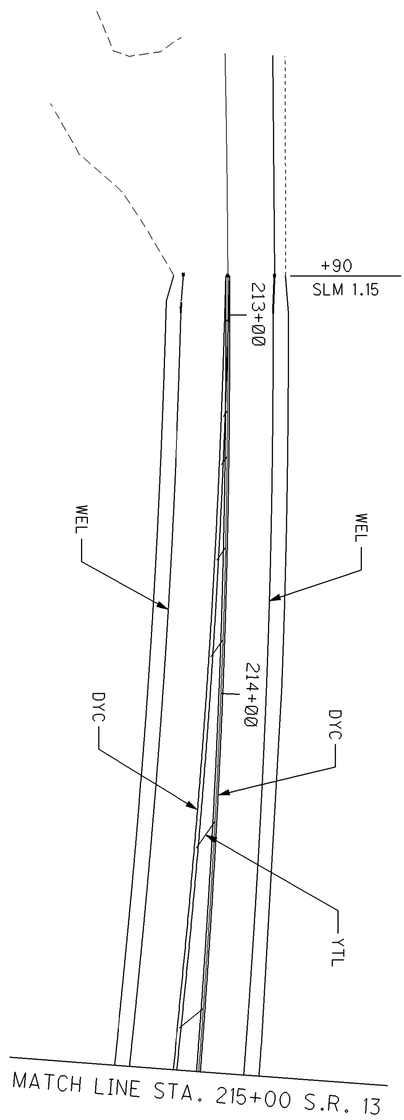

SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

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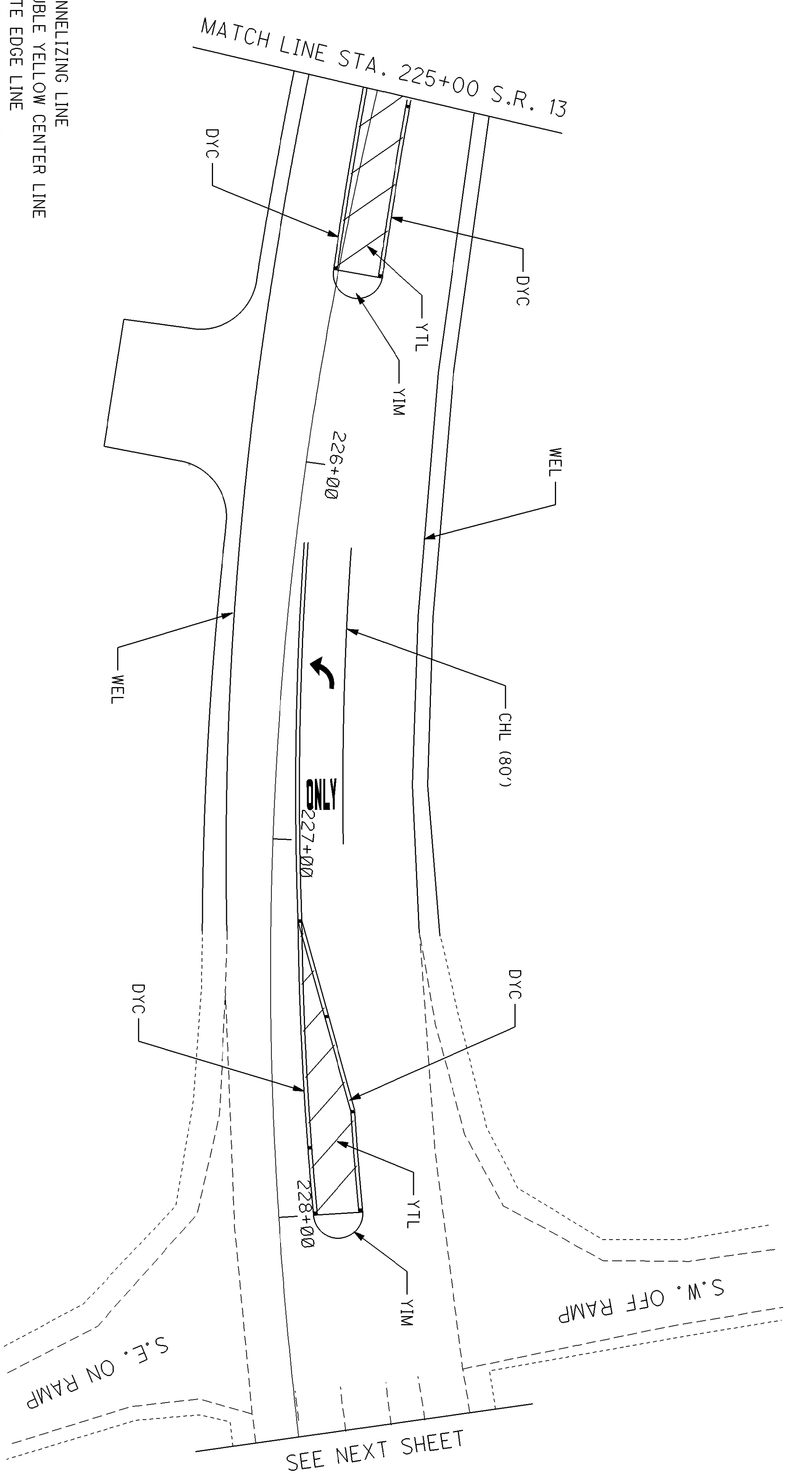
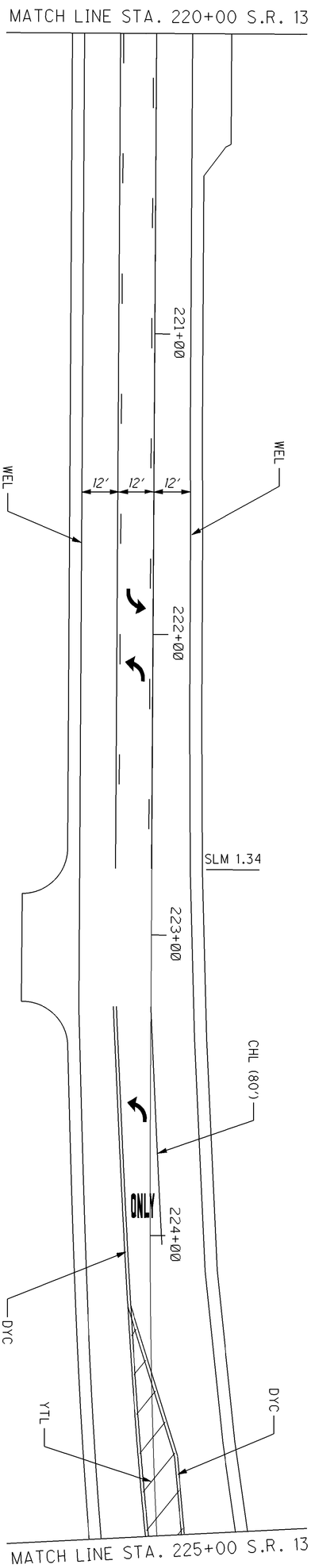
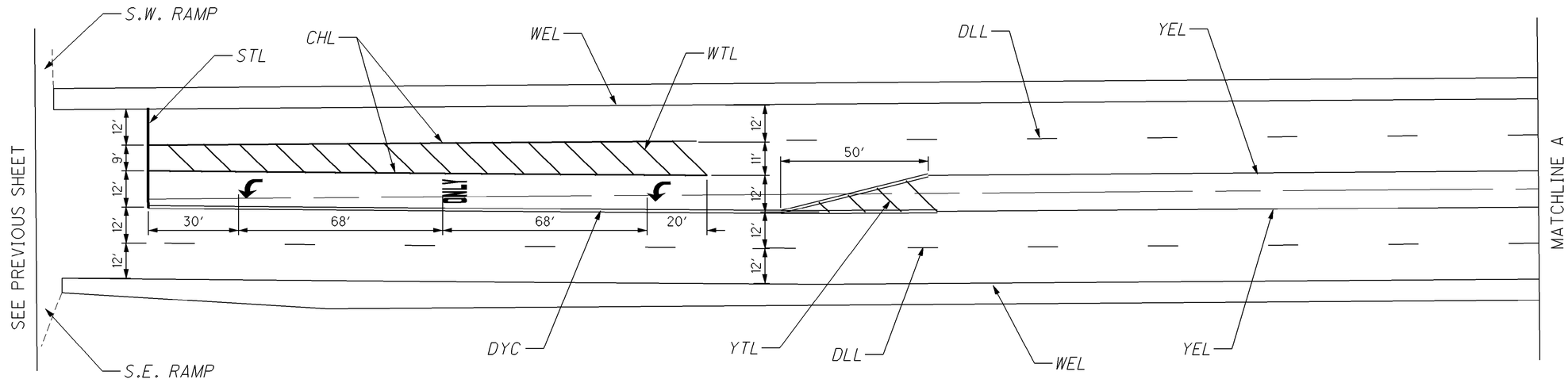
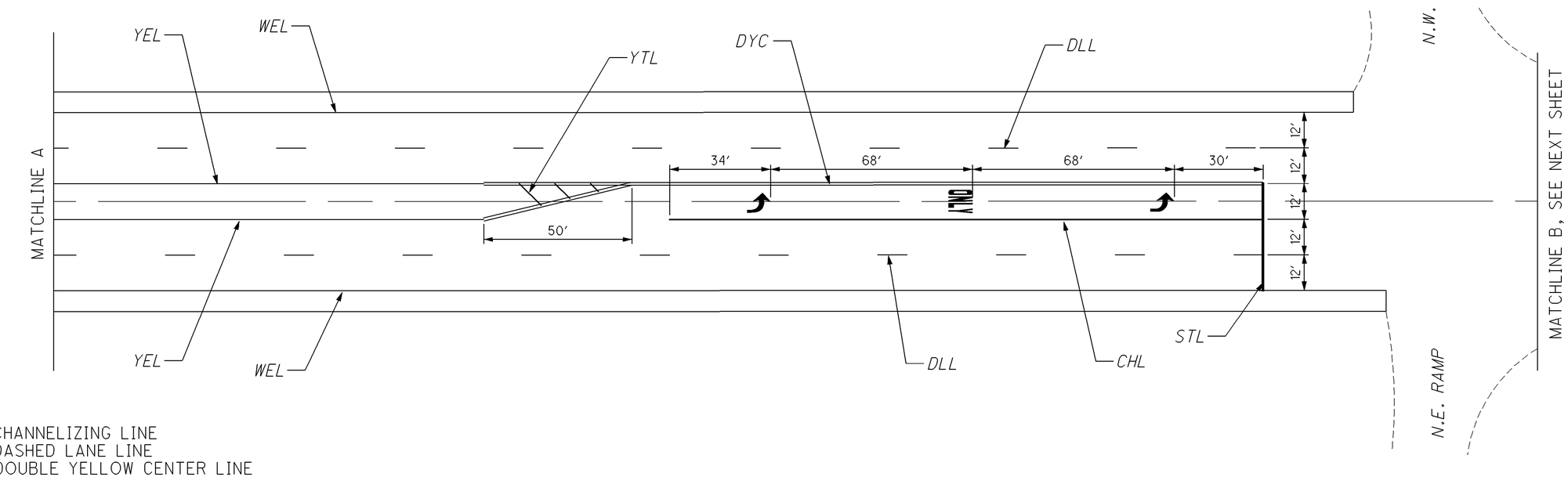




SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

27/90	LIC-13-0.00	PAVEMENT MARKING DETAIL S.R. 13 SOUTH OF I.R. 70	CALCULATED LME CHECKED JSL	0 20 10 40 HORIZONTAL SCALE IN FEET





CHL = CHANNELIZING LINE
DLL = DASHED LANE LINE
DYC = DOUBLE YELLOW CENTER LINE
STL = STOP LINE
WEL = WHITE EDGE LINE
WTL = WHITE TRANSVERSE/DIAGONAL LINE
YEL = YELLOW EDGE LINE
YIM = YELLOW ISLAND MARKING
YTL = YELLOW TRANSVERSE/DIAGONAL LINE

SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 AT I.R. 70 INTERCHANGE

LIC-13-0.00

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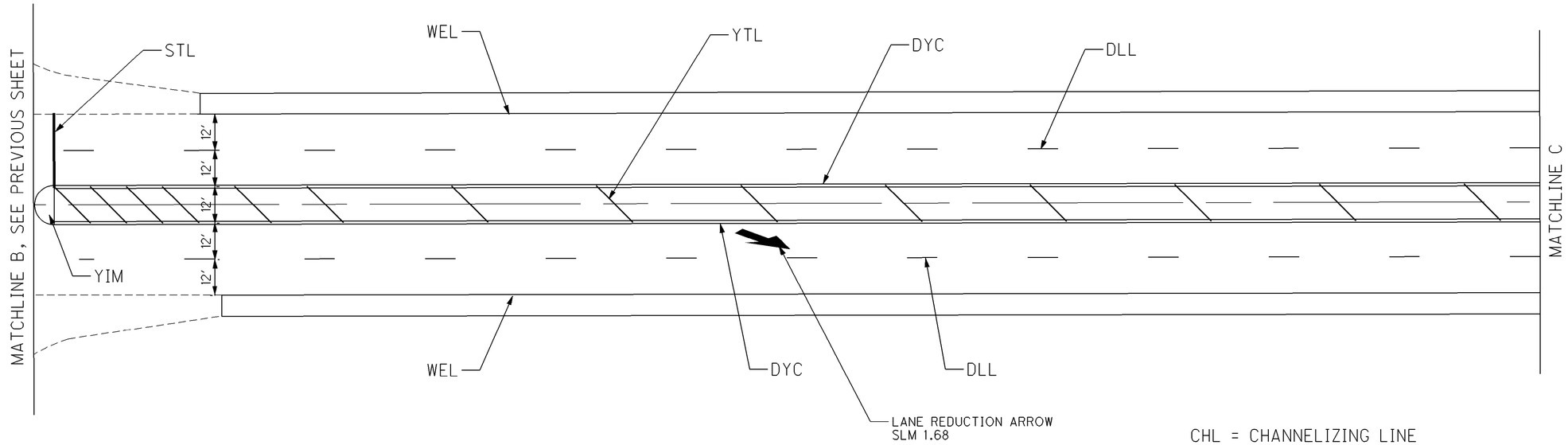

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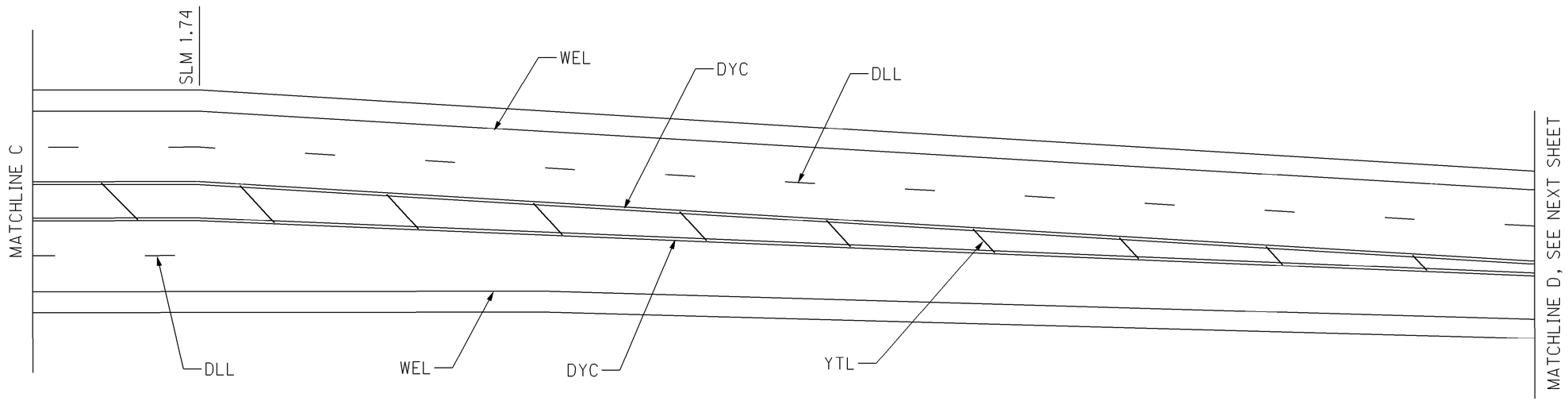

SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 NORTH OF I.R. 70

LIC-13-0.00

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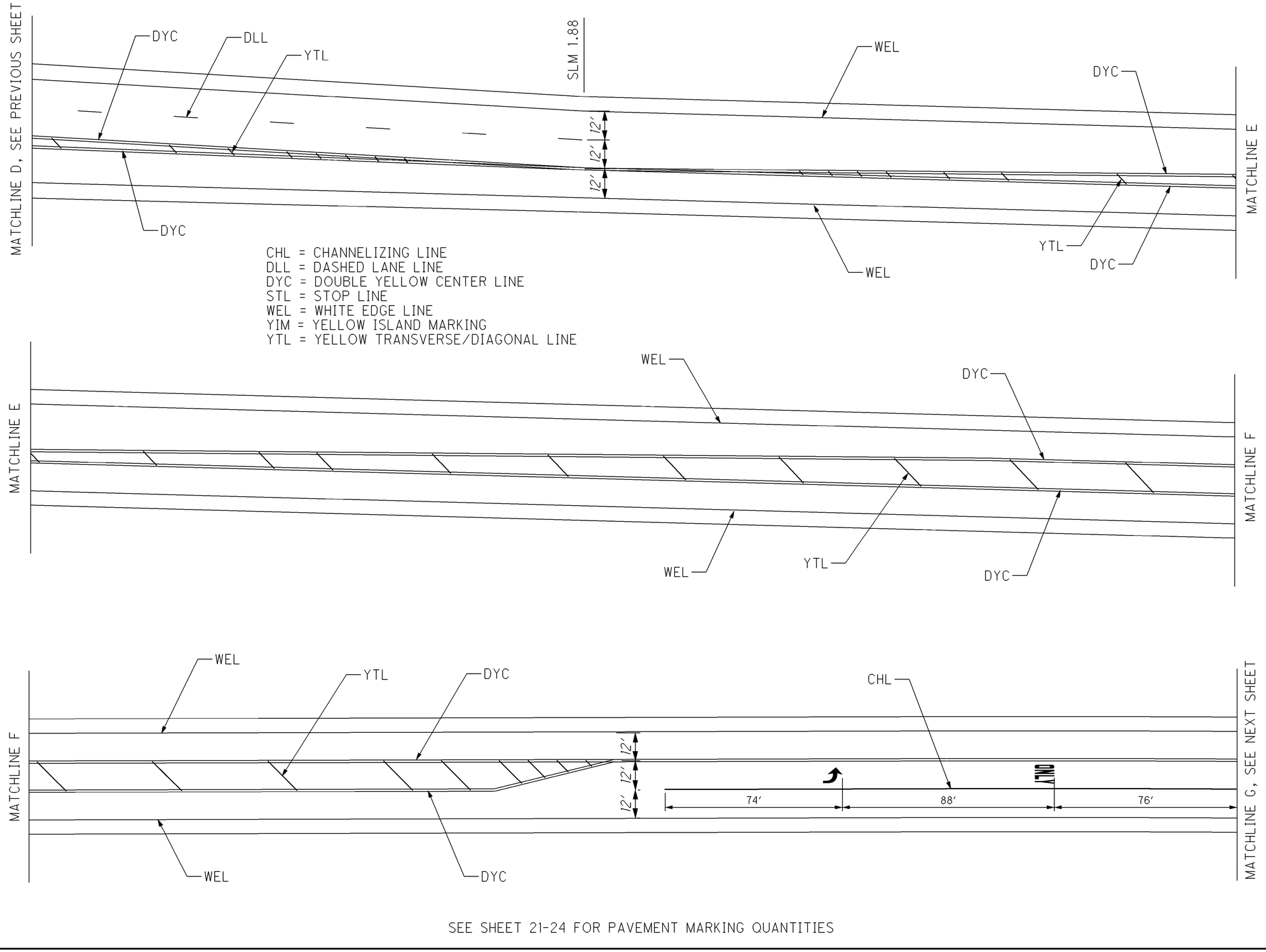

SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

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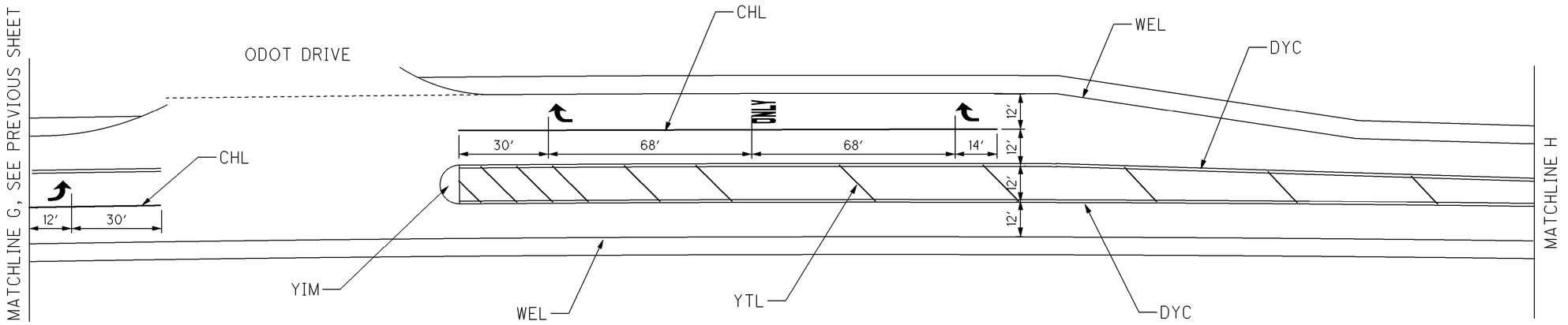
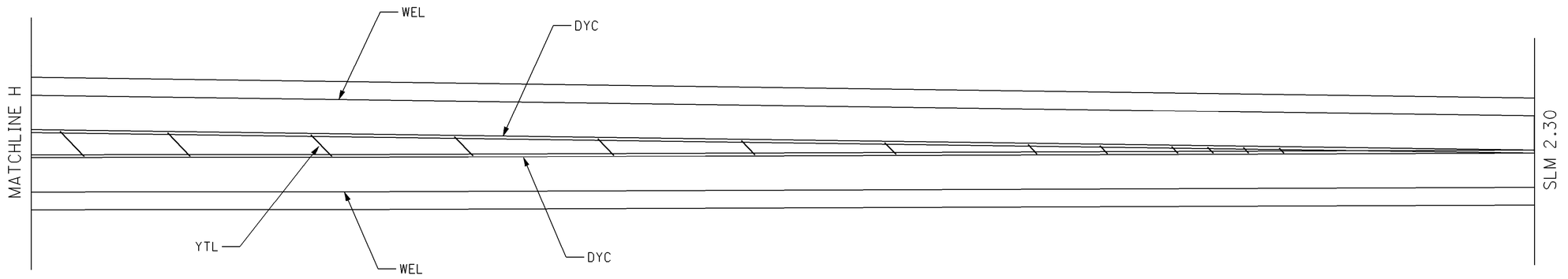
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 SOUTH OF ODOT DISTRICT 5

LIC-13-0.00





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SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 AT ODOT DISTRICT 5

LIC-13-0.00

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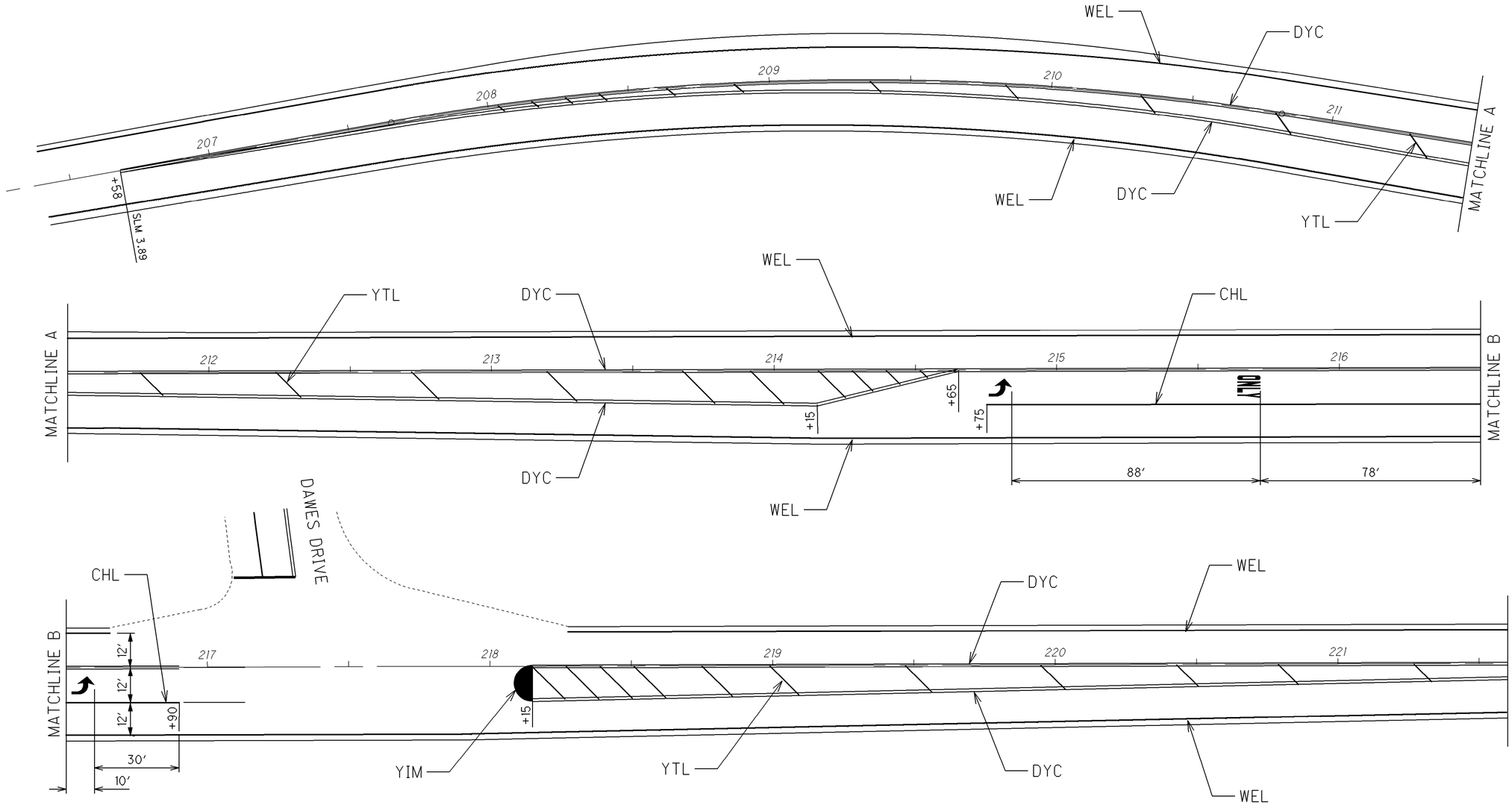

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SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 AT DAWES ARBORETUM

LIC-13-0.00

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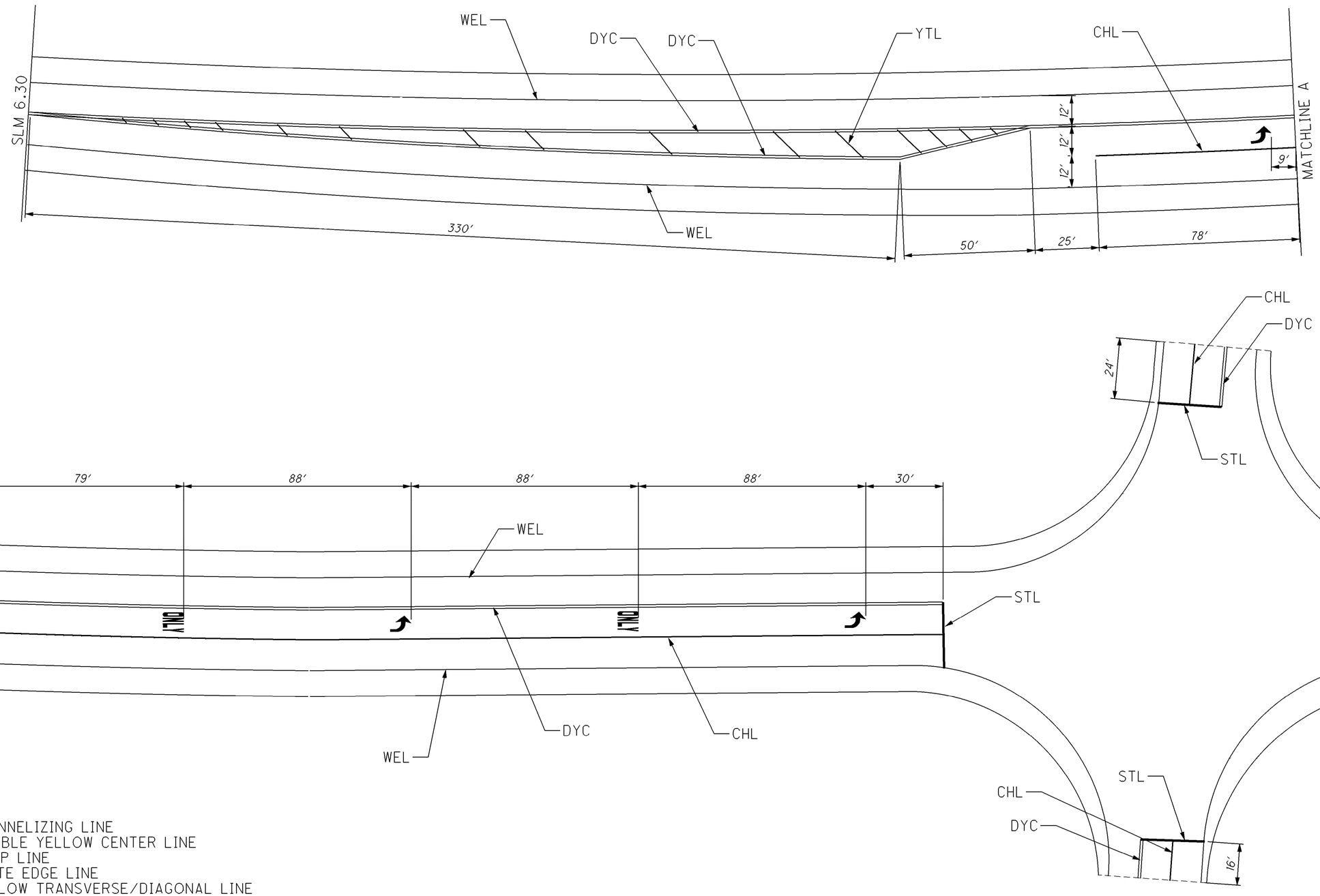

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SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 AT DORSEY MILL RD.

LIC-13-0.00

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CHL = CHANNELIZING LINE
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STL = STOP LINE
WEL = WHITE EDGE LINE
YTL = YELLOW TRANSVERSE/DIAGONAL LINE

SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

N

0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
S.R. 13 AT DORSEY MILL RD.

LIC-13-0.00

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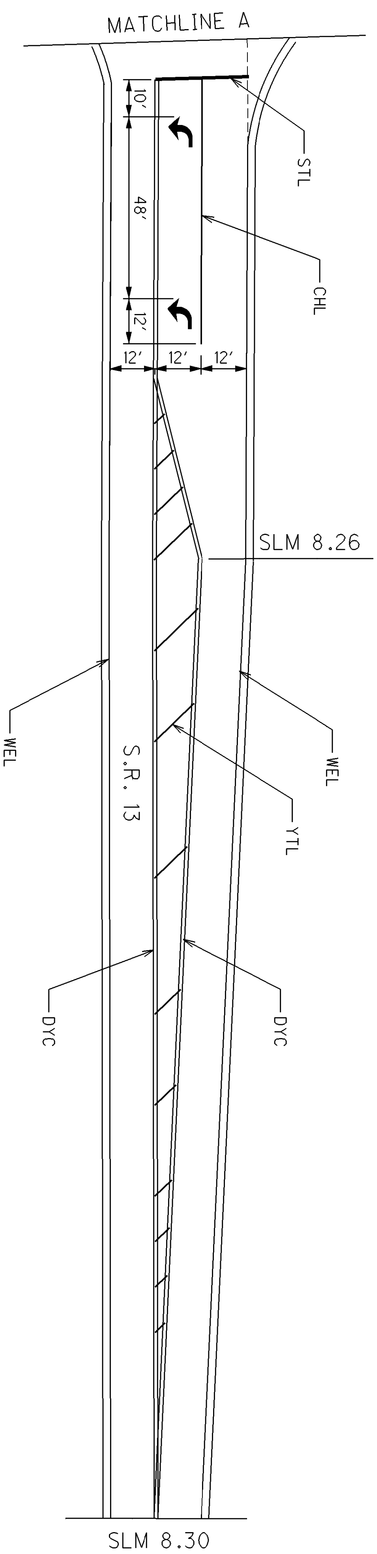
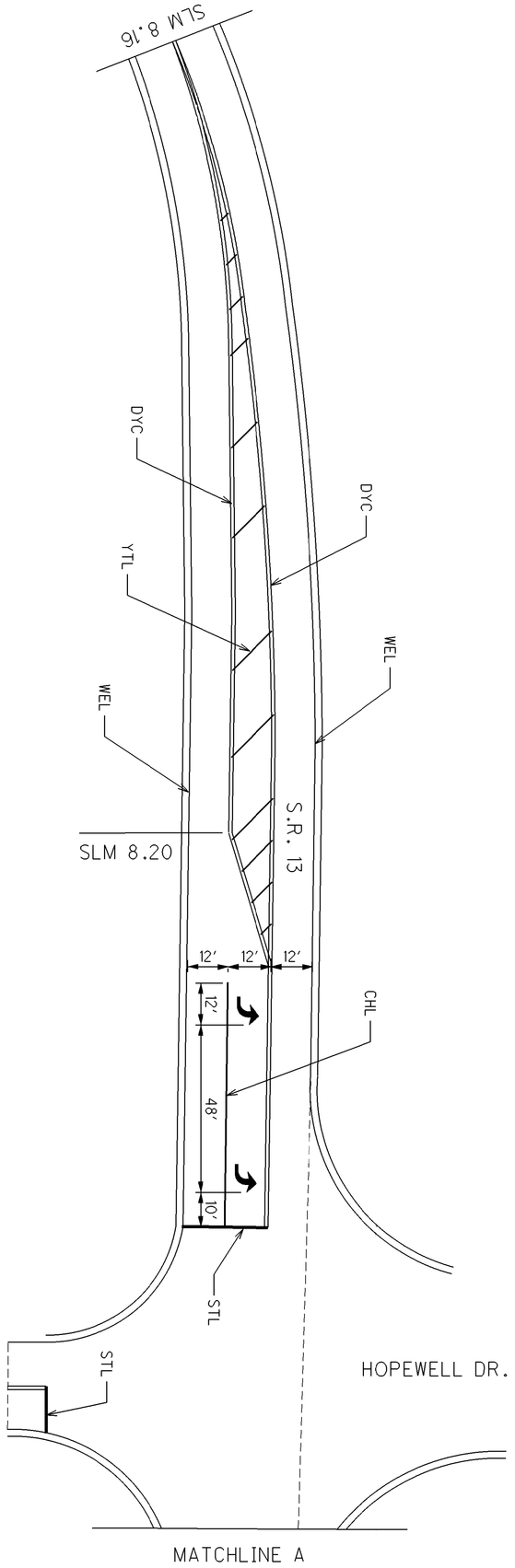
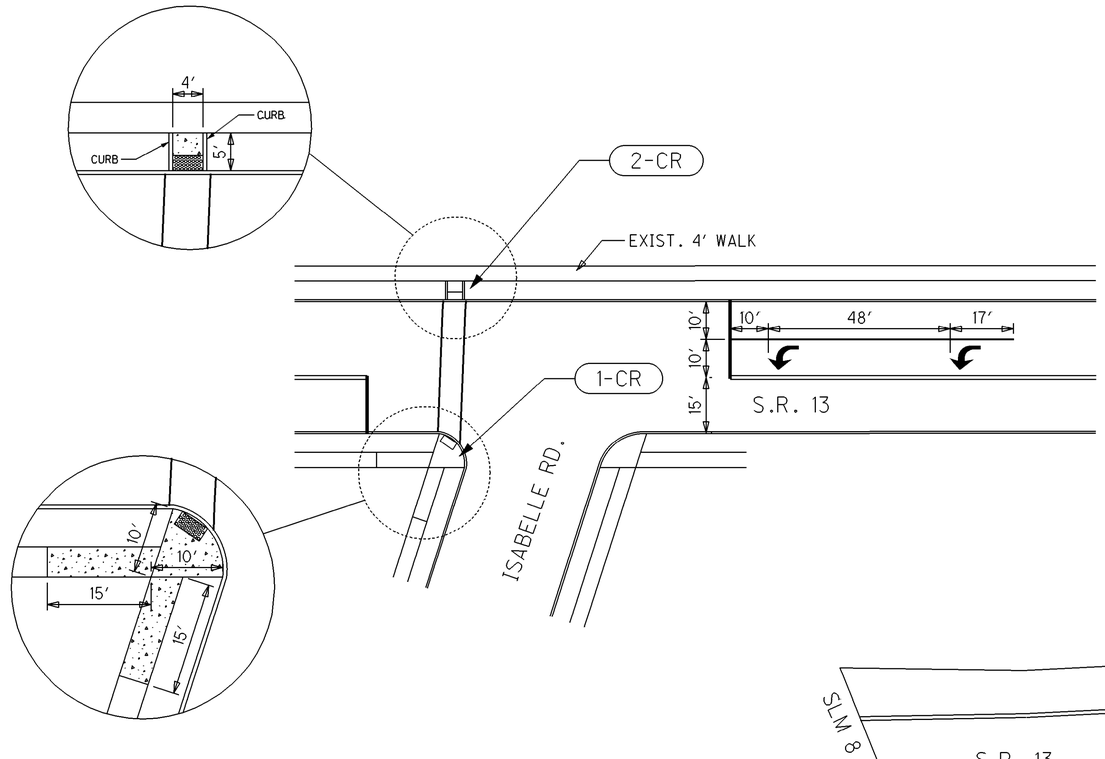
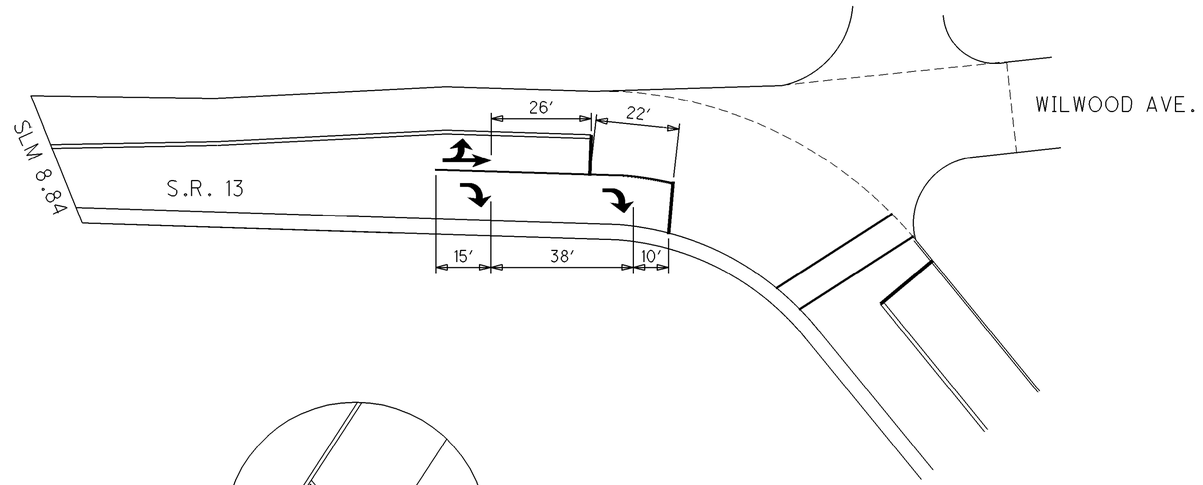


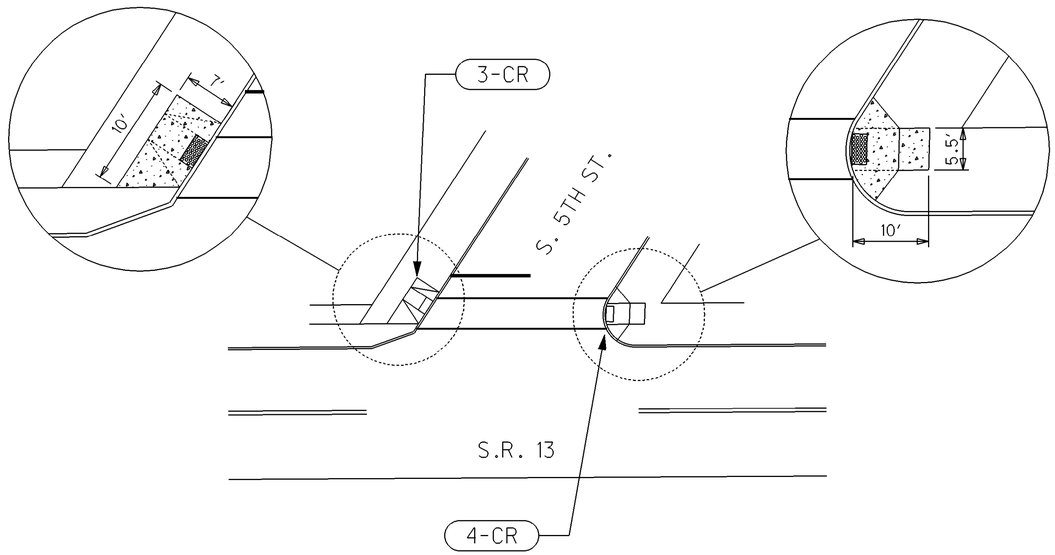


SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

35/90	LIC-13-0.00	PAVEMENT MARKING DETAIL S.R. 13 AT HOPEWELL DR.	CALCULATED LME CHECKED JSL 0 10 20 40 HORIZONTAL SCALE IN FEET







SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES
SEE SHEET 20 FOR CURB RAMP QUANTITIES

DRAWING NOT TO SCALE

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING/CURB RAMP DETAILS
S.R. 13 - CITY OF NEWARK

LIC-13-0.00

36
90

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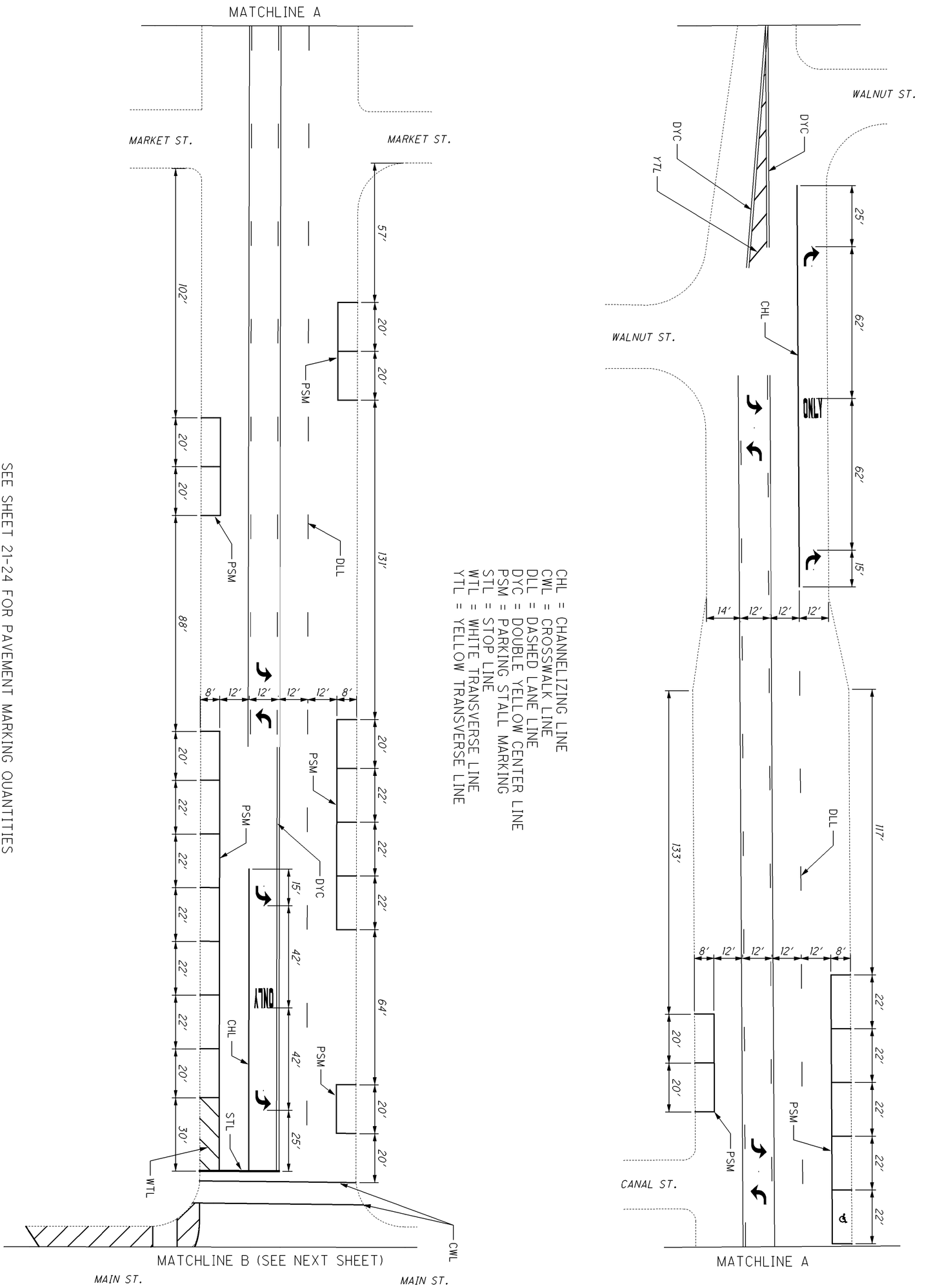
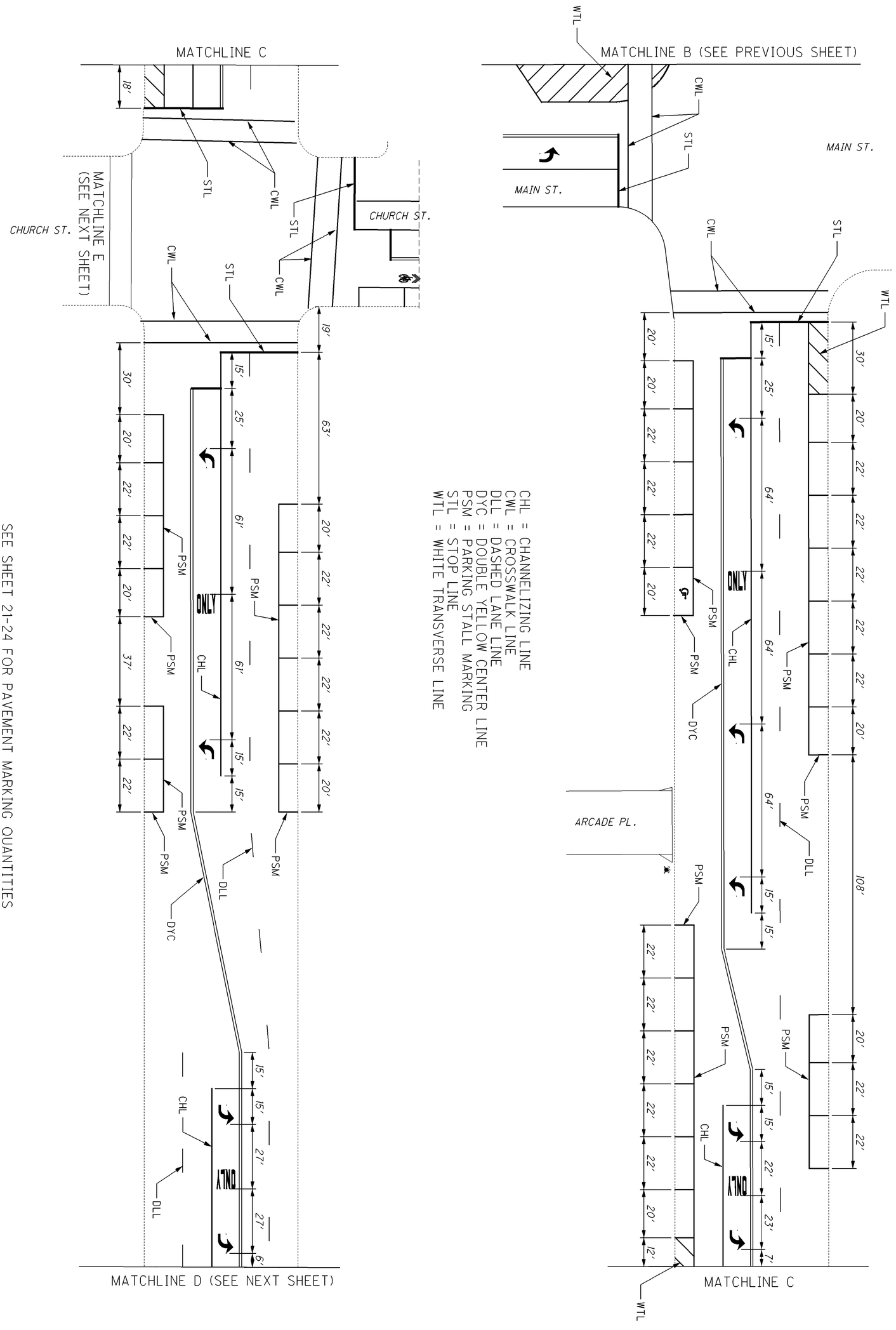


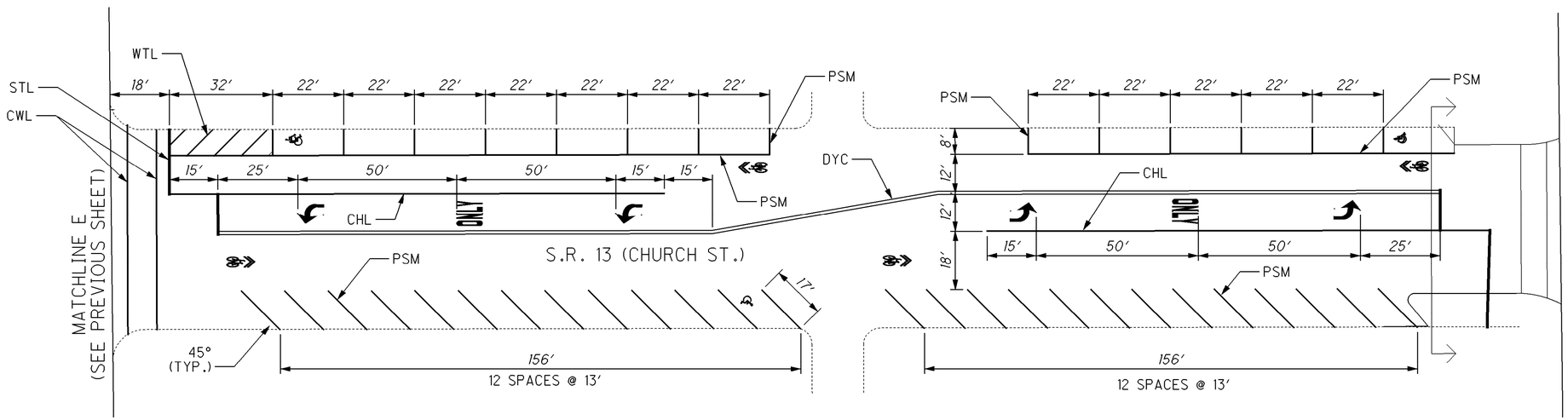
SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

37 / 90	LIC-13-0.00	PAVEMENT MARKING DETAIL S.R. 13 - NEWARK	CALCULATED LME CHECKED JSL	0 10 20 40 HORIZONTAL SCALE IN FEET



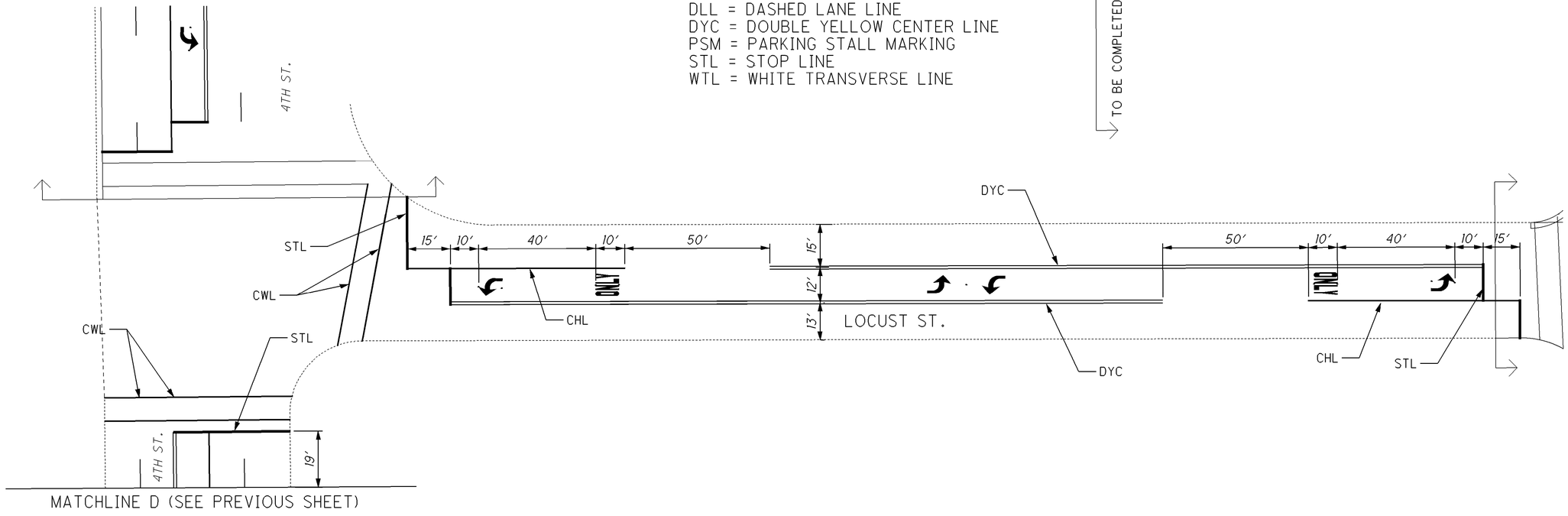
SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

38/90	LIC-13-0.00	PAVEMENT MARKING DETAIL S.R. 13 - CITY OF NEWARK	CALCULATED LME CHECKED JSL 0 10 20 40 HORIZONTAL SCALE IN FEET



CHL = CHANNELIZING LINE
CWL = CROSSWALK LINE
DLL = DASHED LANE LINE
DYC = DOUBLE YELLOW CENTER LINE
PSM = PARKING STALL MARKING
STL = STOP LINE
WTL = WHITE TRANSVERSE LINE

TO BE COMPLETED BY OTHERS



SEE SHEET 21-24 FOR PAVEMENT MARKING QUANTITIES

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
CHURCH ST. & LOCUST ST. - NEWARK

LIC-13-0.00

39
90

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SEE SHEET 24 FOR PAVEMENT MARKING QUANTITIES

DRAWING NOT TO SCALE

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
O.D.O.T. D05 COMPLEX - LOTS A & B

LIC-13-0.00

40
90

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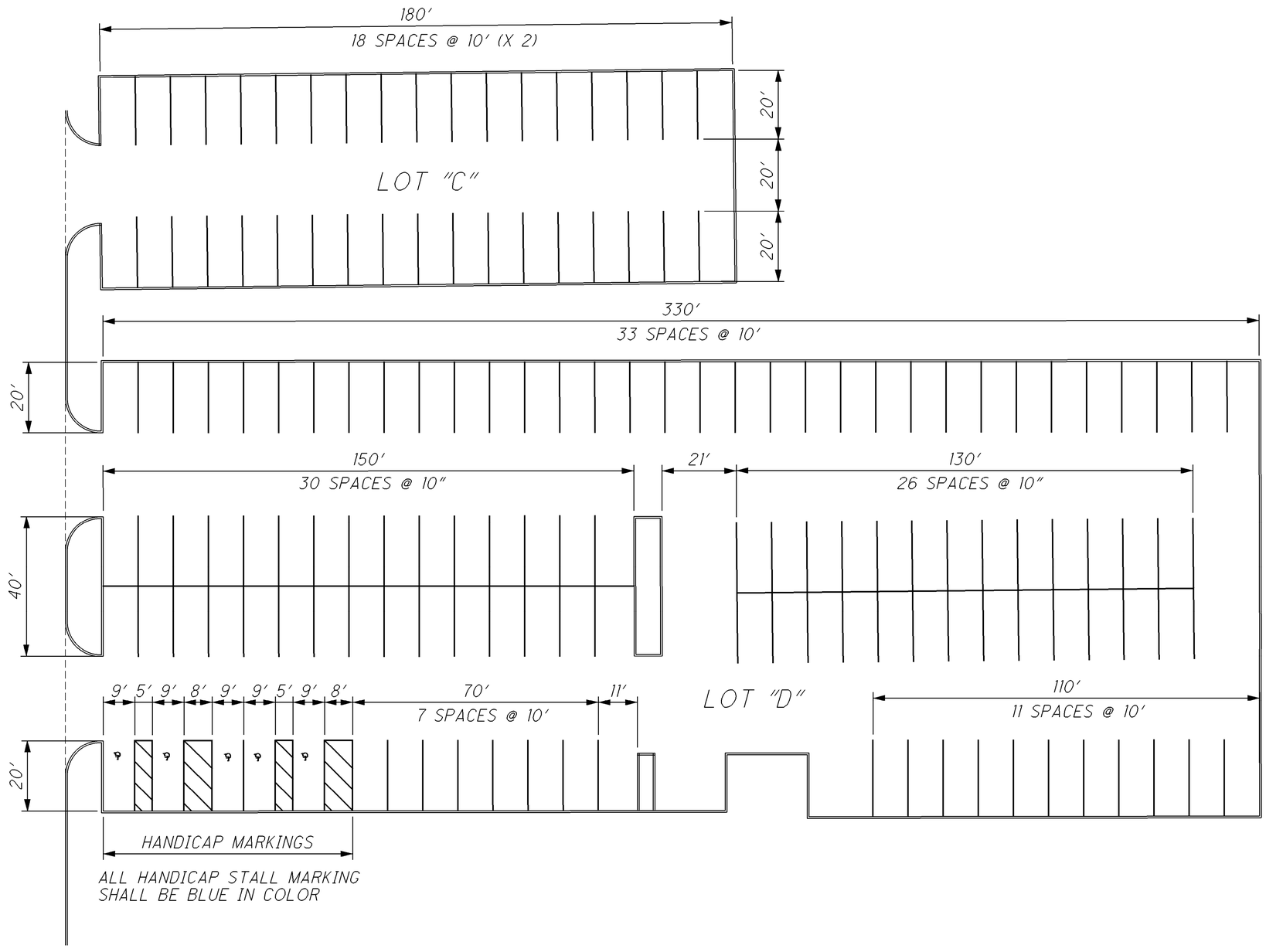

SEE SHEET 24 FOR PAVEMENT MARKING QUANTITIES

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DRAWING NOT TO SCALE

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DETAIL
O.D.O.T. D05 COMPLEX - LOTS C & D

LIC-13-0.00

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	
1A	LIC	S.R. 13	0.00	0.16	0.16	845	GAP / 10	28	28			18	10		START PER. CO.
1A	LIC	S.R. 13	0.16	0.21	0.05	264	11	14	14			14			PC 0.16 PT 0.21 L=317' DEG 6
1A	LIC	S.R. 13	0.21	0.54	0.33	1,742	GAP	22	22			22			
SUB-TOTALS												54	10		
LOCATION 1A TOTALS (CARRIED TO SUB-SUMMARY)								**64**	**64**						
1B	LIC	S.R. 13	0.54	0.71	0.17	898	GAP	12	12			12			
1B	LIC	S.R. 13	0.71	0.76	0.05	264	11	7	7			7			PC 0.71 PT 0.76 L=264' DEG 6
1B	LIC	S.R. 13	0.76	1.15	0.39	2,059	GAP	26	26			26			
1B	LIC	S.R. 13	1.15	1.23	0.08	422	REM	12	12			12			2 LANE TO 3 LANE TRANSITION
1B	LIC	S.R. 13	1.23	1.34	0.11	581	9	16	16			16			2 WAY LEFT TURN
1B	LIC	S.R. 13	1.34	1.46	0.12	634	10 / 7	38	38	16		16	6		
1B	LIC	S.R. 13	1.46	1.63	0.17	898	REM	82	82	32		14	36		DIVIDED AND UNDIVIDED WITH LEFT TURN LANES
1B	LIC	S.R. 13	1.63	1.74	0.11	581	REM	48	48	16		16	16		SEPARATED 4 LANE
1B	LIC	S.R. 13	1.74	2.30	0.56	2,957	REM	96	96			74	22		SEPARATION/TRANSITION WITH TURN LANES
1B	LIC	S.R. 13	2.30	2.65	0.35	1,848	7	40	40	16		24			AT US 40
1B	LIC	S.R. 13	2.65	2.81	0.16	845	7	38	38	16		22			AT US 40
1B	LIC	S.R. 13	2.81	3.89	1.08	5,702	GAP	72	72			72			
1B	LIC	S.R. 13	3.89	3.93	0.04	211	10	6	6			6			TURN LANE TRANSITION
1B	LIC	S.R. 13	3.93	3.97	0.04	211	10 / 11	6	6			6			PC 3.93 PT 3.97 L=211' DEG 9, TURN LANE TRANSITION
1B	LIC	S.R. 13	3.97	4.23	0.26	1,373	10	42	42			36	6		LEFT TURN AT DAWES
1B	LIC	S.R. 13	4.23	4.31	0.08	422	GAP	6	6			6			
1B	LIC	S.R. 13	4.31	4.35	0.04	211	11	6	6			6			PC 4.31 PT 4.35 L=211' DEG 6
1B	LIC	S.R. 13	4.35	4.93	0.58	3,062	GAP	39	39			39			
1B	LIC	S.R. 13	4.93	4.97	0.04	211	11	6	6			6			PC 4.93 PT 4.97 L=211' DEG 5
1B	LIC	S.R. 13	4.97	5.57	0.60	3,168	GAP	40	40			40			
1B	LIC	S.R. 13	5.57	5.60	0.03	158	11	4	4			4			PC 5.57 PT 5.60 L=158' DEG 9
1B	LIC	S.R. 13	5.60	6.30	0.70	3,696	GAP	47	47			47			
1B	LIC	S.R. 13	6.30	6.48	0.18	950	10	52	52	16		24	12		AT DORSEY MILL ROAD
SUB-TOTALS										112		531	98		
LOCATION 1B TOTALS (CARRIED TO SUB-SUMMARY)								**741**	**741**						

SEE NEXT SHEET FOR DETAILS

CALCULATED LME
CHECKED JSL

RAISED PAVEMENT MARKER DATA

LIC-13-0.00

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DETAIL	SEE STD. DWG. TC-65.11
1	ENTRANCE RAMP
2	EXIT RAMP
3	MULTI-LANE DIVIDED HIGHWAY

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	THROUGH APPROACH
9	TWO-WAY LEFT TURN LANE

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH WTH LEFT-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	
1C	LIC	S.R. 13	6.48	6.64	0.16	845	10	49	49	16		22	11		AT DORSEY MILL ROAD
1C	LIC	S.R. 13	6.64	7.12	0.48	2,534	GAP	32	32			32			
1C	LIC	S.R. 13	7.12	7.29	0.17	898	12	28	28			28			PC 7.21 PT 7.25 L=211' DEG 10
1C	LIC	S.R. 13	7.29	7.32	0.03	158	11	4	4			4			PC 7.29 PT 7.32 L=158' DEG 6
1C	LIC	S.R. 13	7.32	7.48	0.16	845	12	28	28			28			PC 7.38 PT 7.43 L=264' DEG 11
1C	LIC	S.R. 13	7.48	7.62	0.14	739	12	25	25			25			PC 7.48 PT 7.53 L=264' DEG 13
1C	LIC	S.R. 13	7.62	7.76	0.14	739	GAP	10	10			10			HEATH CORP
SUB-TOTALS										16		149	11		
LOCATION 1C TOTALS (CARRIED TO SUB-SUMMARY)								**176**	**176**						
1D	LIC	S.R. 13	7.76	7.81	0.05	264	GAP	4	4			4			
1D	LIC	S.R. 13	7.81	8.03	0.22	1,162	12	28	28			28			PC 7.90 PT 7.95 L=264' DEG 11
1D	LIC	S.R. 13	8.03	8.14	0.11	581	12	28	28			28			PC 8.03 PT 8.14 L=581' DEG 11
1D	LIC	S.R. 13	8.14	8.23	0.09	475	10 / 11	31	31	16		12	3		PC 8.14 PT 8.23 L=475' DEG 9, TURN LANE AT HOPEWELL DR.
1D	LIC	S.R. 13	8.23	8.30	0.07	370	10	29	29	16		10	3		TURN LANE AT HOPEWELL DR.
1D	LIC	S.R. 13	8.30	8.37	0.07	370	GAP	5	5			5			
SUB-TOTALS										32		87	6		
LOCATION 1D TOTALS (CARRIED TO SUB-SUMMARY)								**125**	**125**						

CALCULATED LME CHECKED JSL

RAISED PAVEMENT MARKER DATA

LIC-13-0.00

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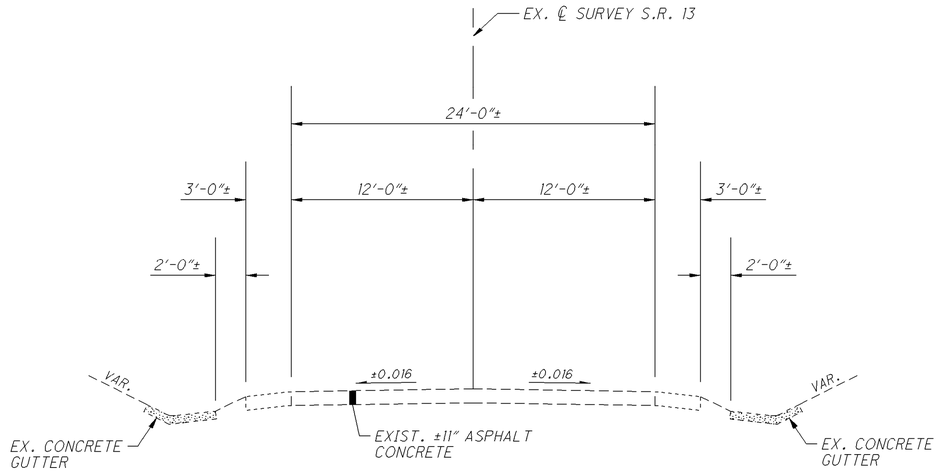


S.R. 13 (EXISTING)
NORMAL SECTION APPLIES:

STA. 202+47.06 TO STA. 211+99.98 = 952.92 FT.
TOTAL 952.92 FT.

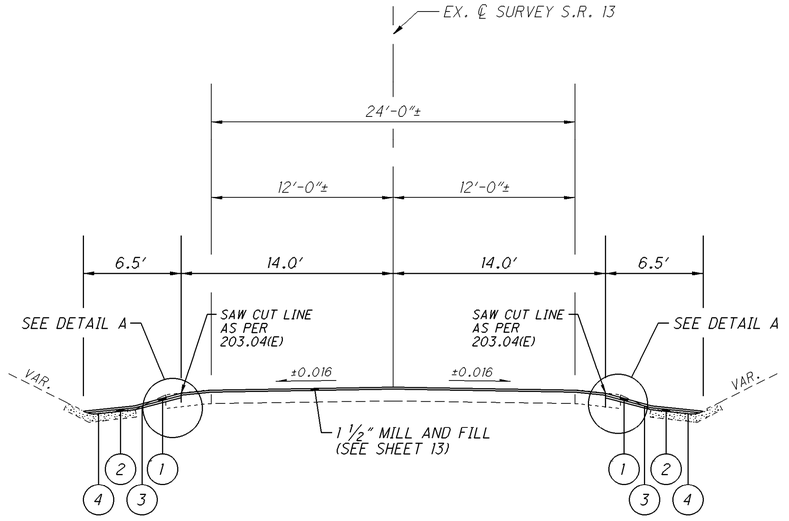
LEGEND

(1) ITEM 441, 1 ½" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22

(2) ITEM 441, 1 ¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)

(3) ITEM 407, TACK COAT (@ 0.05 GAL/SY)

(4) ITEM 407, TACK COAT, 702.13 (@ 0.075 GAL/SY)



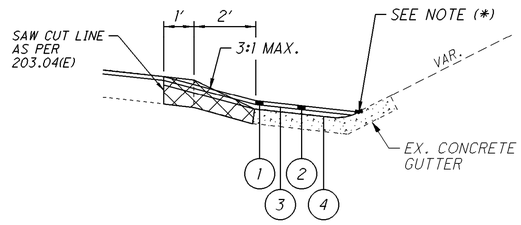
S.R. 13 (PROPOSED)
GUTTER LIMITS (LT.):

STA. 202+47.06 TO STA. 211+99.22 = 952.16 FT.
TOTAL 952.16 FT.

S.R. 13 (PROPOSED)
GUTTER LIMITS (RT.):

STA. 203+43.29 TO STA. 211+99.98 = 856.69 FT.
TOTAL 856.69 FT.

DETAIL A



ITEM 203, EXCAVATION (6" AVG.)
ITEM 203, EMBANKMENT (4.5" AVG.)

(*) - SEAL THE JOINT BETWEEN THE PROP. ASPHALT CONCRETE AND EXIST. CONCRETE GUTTER WITH 4" BAND OF ITEM 407, TACK COAT, 702.13 (@ 0.075 GAL/SY).

CALCULATED JLS
CHECKED JSL

PAVED GUTTER TYPICAL SECTIONS

LIC-13-0.00

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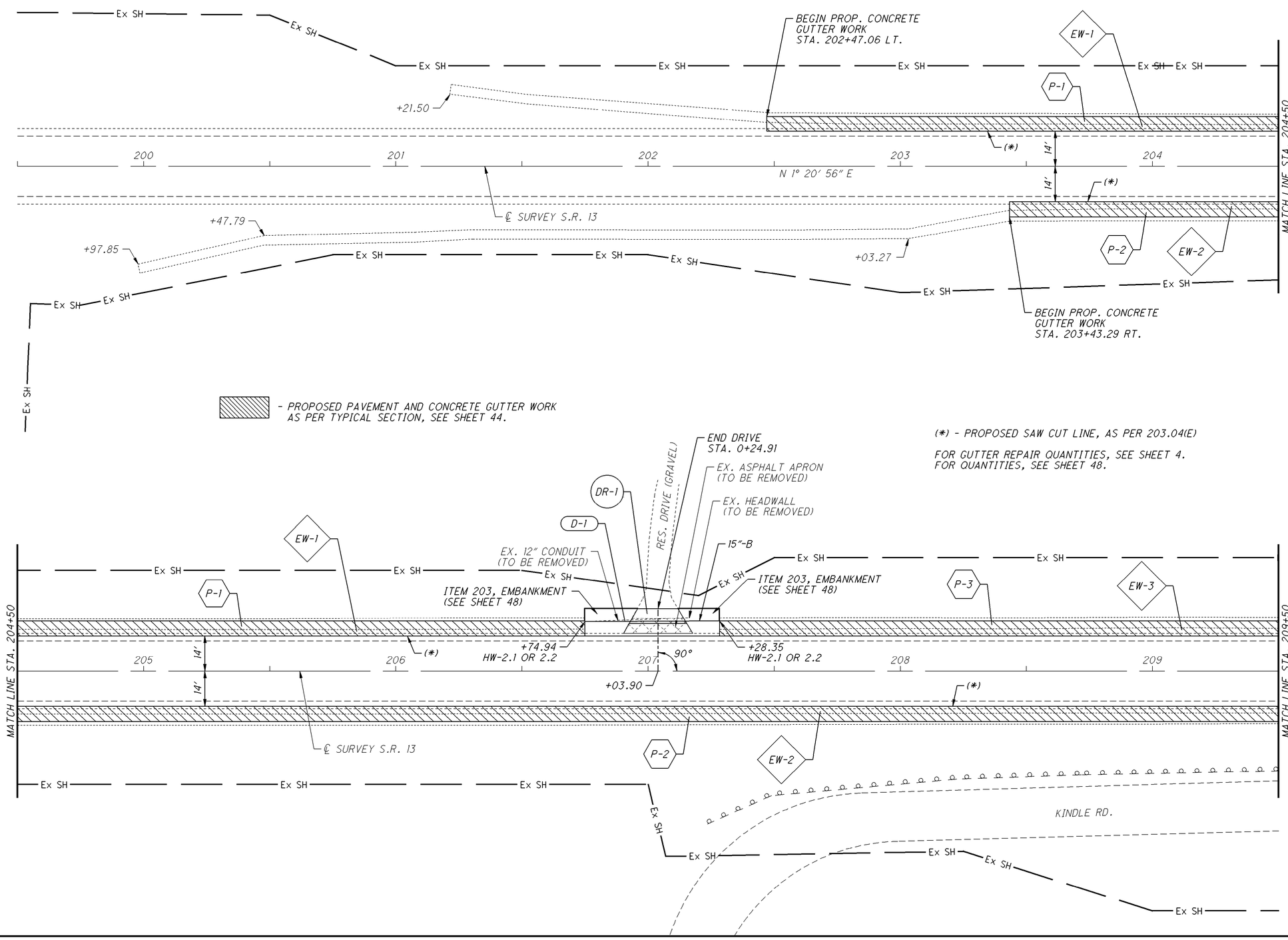

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JLS
CHECKED JSL

PAVED GUTTER PLAN (S.R. 13)
STA. 202+47.06 TO STA. 209+50

LIC-13-0.00

45
90

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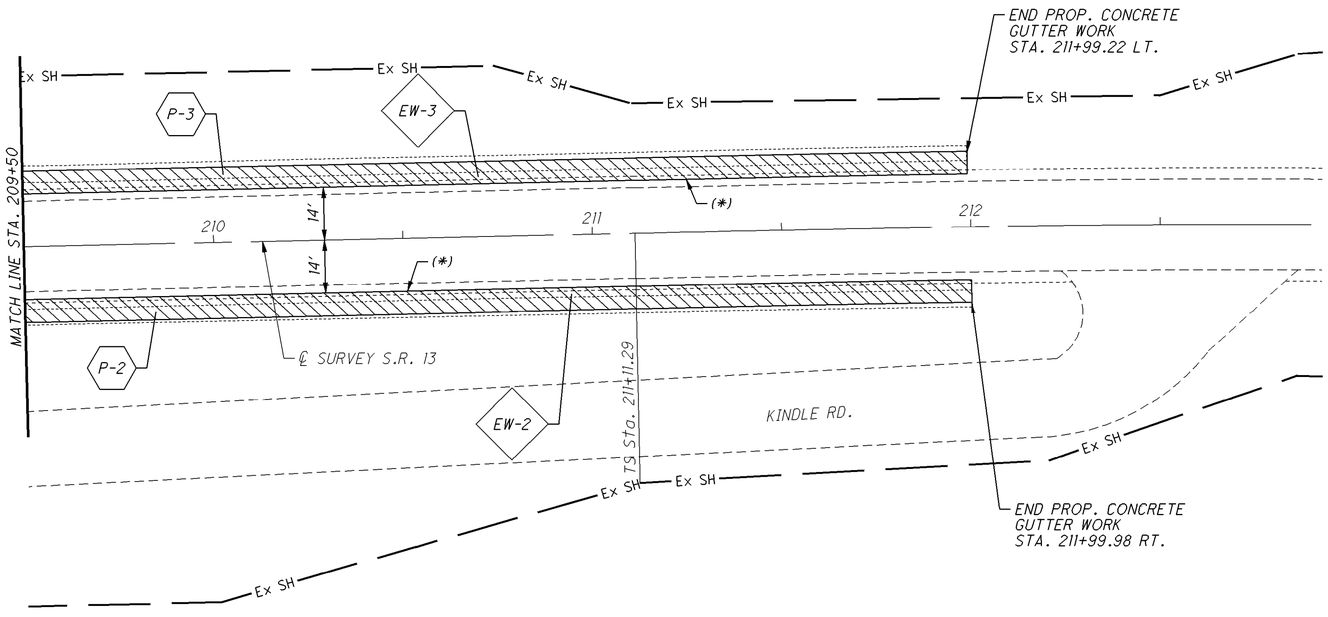
CN PT	LOCATION	STATION & OFFSET	NORTHING	EASTING	ELEVATION	FEATURE CODE
SV3015	S.R. 13	STA. 211+11.41, 32.97' LT.	705841.421	1994151.578	1085.78	1" REBAR W/ ALUM. ODOT CAP



(*) - PROPOSED SAW CUT LINE, AS PER 203.04(E)

FOR GUTTER REPAIR QUANTITIES, SEE SHEET 4.
FOR QUANTITIES, SEE SHEET 48.

- PROPOSED PAVEMENT AND CONCRETE GUTTER WORK AS PER TYPICAL SECTION, SEE SHEET 44.

N

0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED JLS CHECKED JSL

PAVED GUTTER PLAN (S.R. 13) STA. 209+50 TO STA. 211+99.98

LIC-13-0.00

46
90

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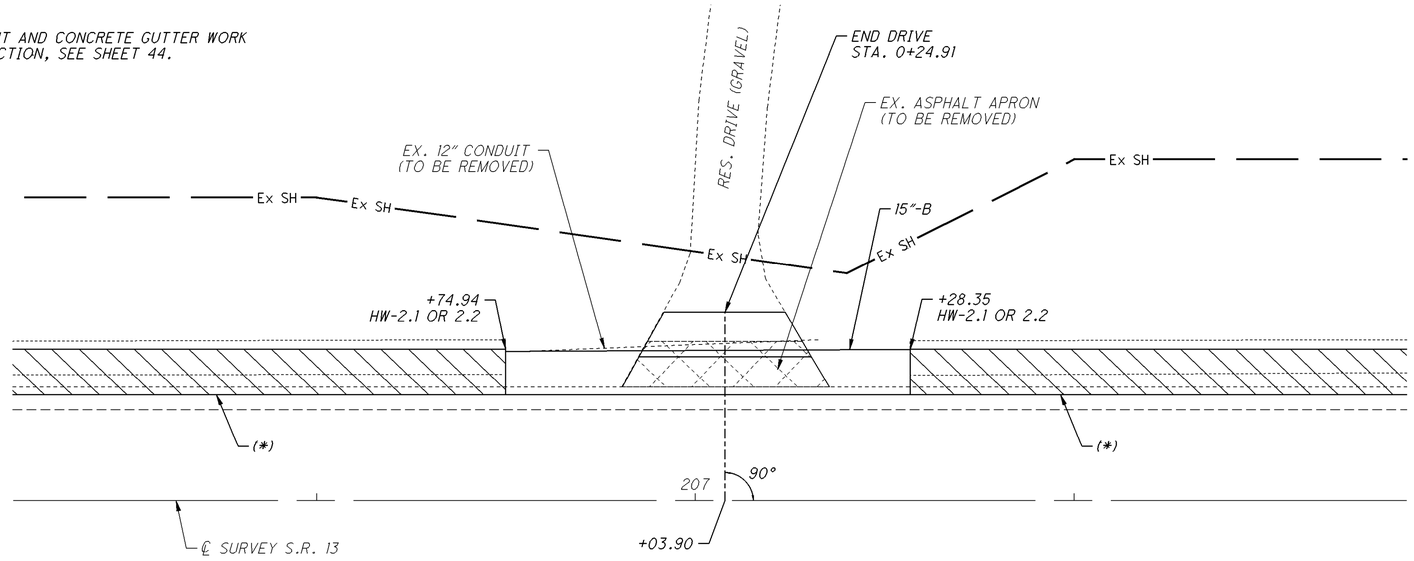
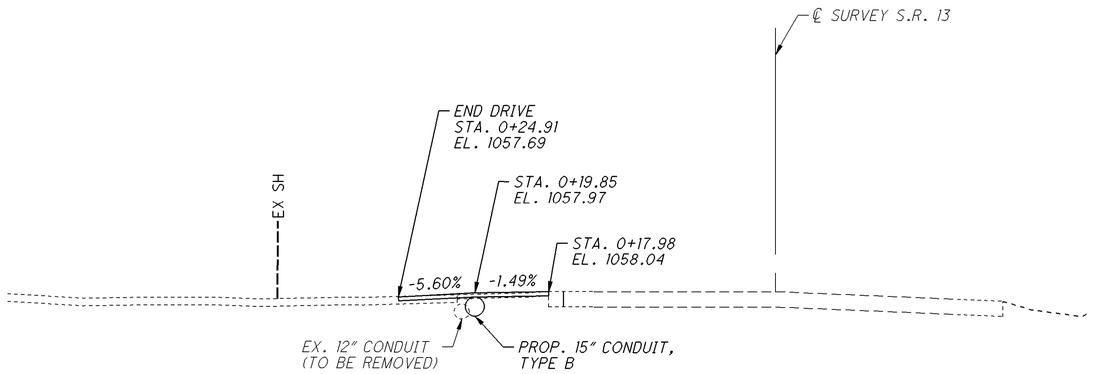
- PROPOSED PAVEMENT AND CONCRETE GUTTER WORK AS PER TYPICAL SECTION, SEE SHEET 44.

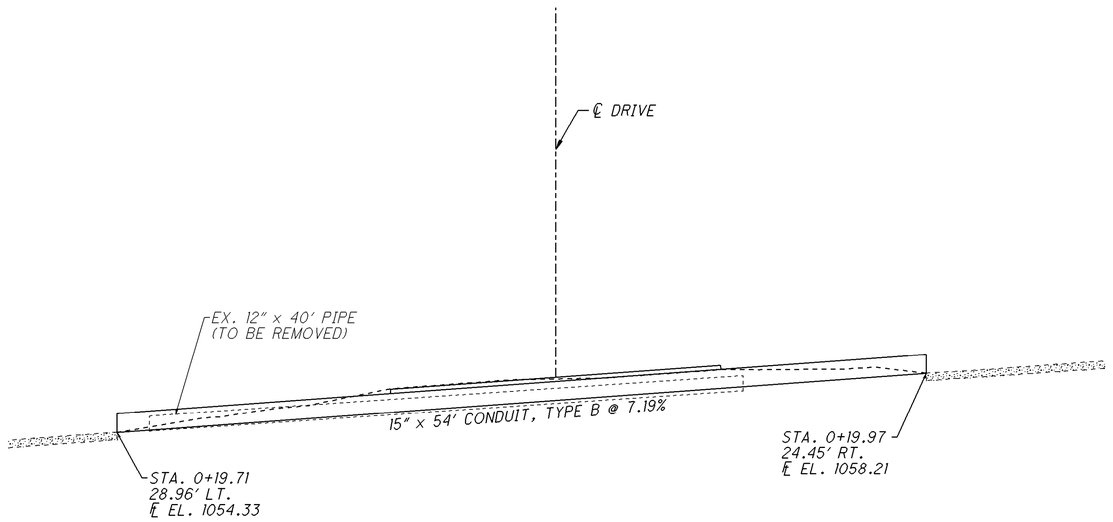


(*) - PROPOSED SAW CUT LINE, AS PER 203.04(E)

FOR QUANTITIES, SEE SHEET 48.



DRIVE PROFILE



DRIVE PIPE PROFILE

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED JLS
CHECKED JSL

PAVED GUTTER DRIVE DETAILS STA. 207+03.90 LT (S.R. 13)

LIC-13-0.00

47
90

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PAVED GUTTER CALCULATIONS

CALCULATED JLS
CHECKED JSL

Reference No.	Sheet No.	Location	Side	Length	Width	Area	202		203		407		441		602	611
							HEADWALL REMOVED	PIPE REMOVED, 24" AND UNDER	6.00" (Avg.) EXCAVATION	4.50" (Avg.) EMBANKMENT	TACK COAT (@0.05 Gal/SY)	TACK COAT, 702.13 (@0.075 Gal/SY)	1.50" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	CONCRETE MASONRY	15" CONDUIT, TYPE B
			Lt./Rt.	Lin. Ft.	Ft.	Sq. Yd.	EACH	FT	CY	CY	GAL	GAL	CY	CY	CY	FT
		S.R. 13														
P-1	45	Sta. 202+47.06 to Sta. 206+74.94	Lt.	427.88	6.5	309.1					15.5	23.2	12.9	15.0		
P-2	45-46	Sta. 203+43.29 to Sta. 211+99.98	Rt.	856.69	6.5	618.8					30.9	46.4	25.8	30.1		
P-3	45-46	Sta. 207+28.35 to Sta. 211+99.22	Lt.	470.87	6.5	340.1					17.0	25.5	14.2	16.5		
EW-1	45	Sta. 202+47.06 to Sta. 206+74.94	Lt.	427.88	3.0	142.7			23.8	17.8		0.9(*)				
EW-2	45-46	Sta. 203+43.29 to Sta. 211+99.98	Rt.	856.69	3.0	285.6			47.6	35.7		1.8(*)				
EW-3	45-46	Sta. 207+28.35 to Sta. 211+99.22	Lt.	470.87	3.0	157.0			26.2	19.6		1.0(*)				
D-1	45, 47	Sta. 206+74.94 to Sta. 207+28.35	Lt.				1	40							0.54	54
Totals (Carried to Location 1b Sub-Summary)							1	40	98	74	64	99	53	62	0.54	54

(*) - Additonal for sealing Proposed Pavement and Existing Gutter

Reference No.	Sheet No.	Location	Side	Description	Exist. Surface	Apron Area (Calculated By Computer)	Treated Area (Calculated By Computer)	Total Area (Apron Area + Treated Area)	202	203	204	301	304	407	441
									PAVEMENT REMOVED, ASPHALT	EMBANKMENT	SUBGRADE COMPACTION	4.75" ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	8.00" AGGREGATE BASE	TACK COAT, @ 0.040 GAL./SQ. YD.	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), (DRIVEWAYS)
			Lt./Rt.			Sq. Yd.	Sq. Yd.	Sq. Yd.	SY	CY	SY	CY	CY	GAL	CY
		S.R. 13													
DR-1	45, 47	Sta. 207+03.9	Lt.	Residential	Aggregate	11.2	12.8	24.0	16.1	10(*)	11.2	1.5	1.7	0.5	0.4
Totals (Carried to Location 1b Sub-Summary)									17	10	12	2	2	1	1

(*) - Quanitity to be used for the grading of the adjacent drive areas

LIC-13-0.00

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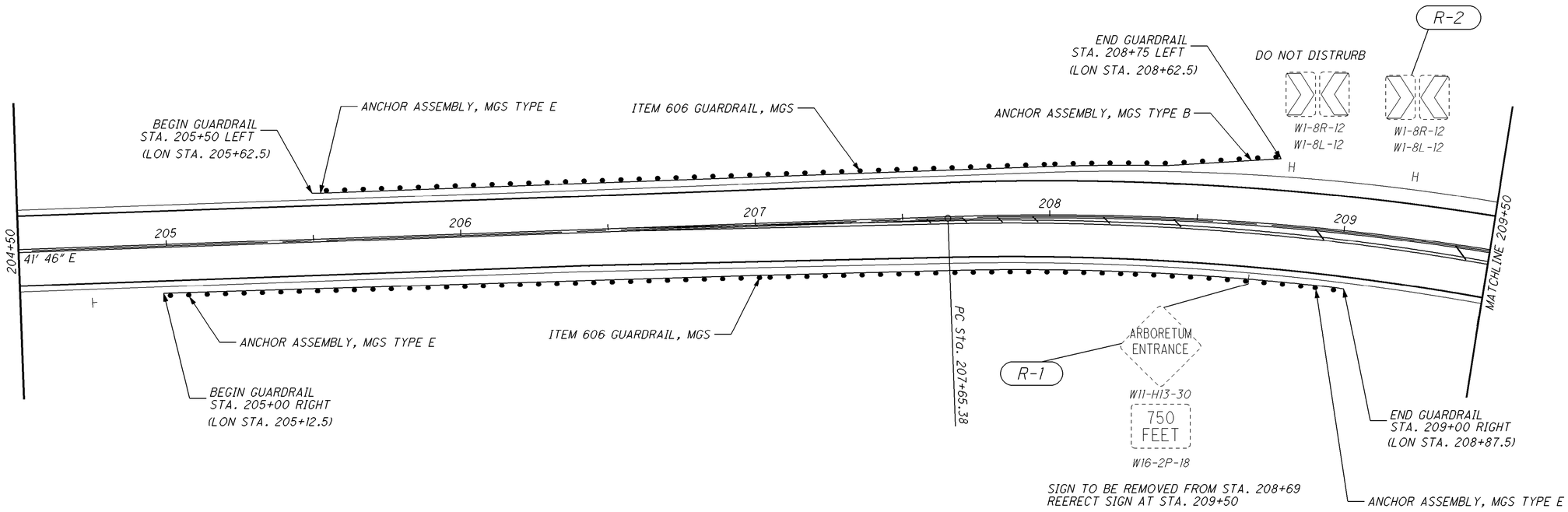

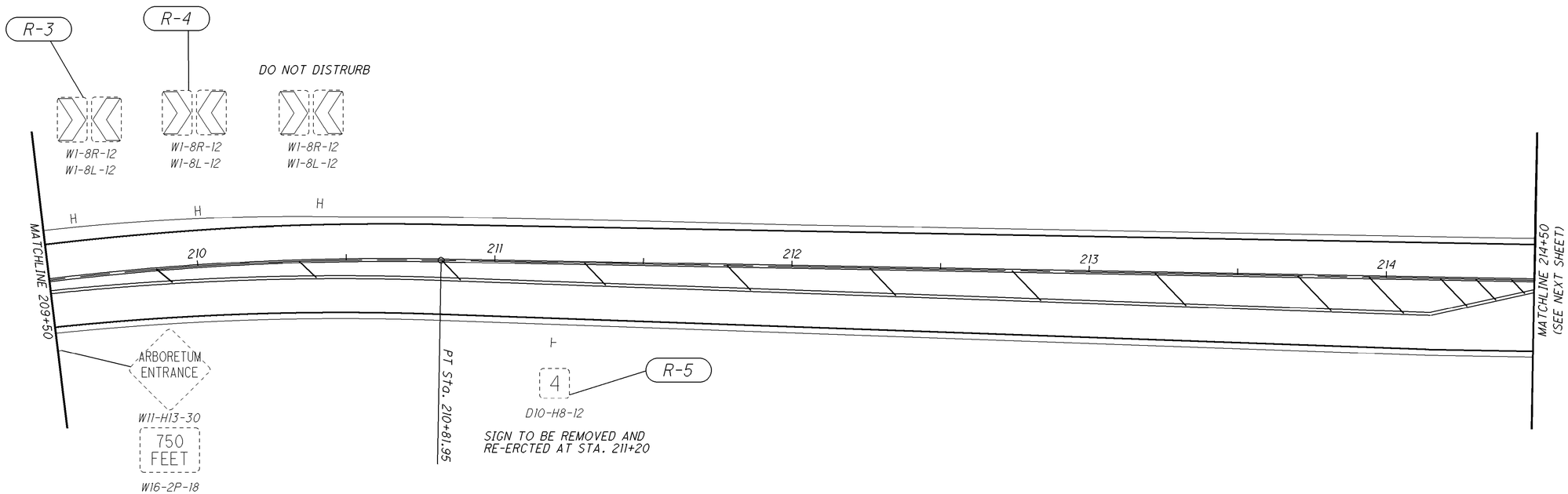

SEE NEXT SHEET FOR SIGN QUANTITIES
SEE NEXT SHEET FOR GUARDRAIL QUANTITIES

N

0 10 20 40
HORIZONTAL
SCALE IN FEET

CALCULATED LME
CHECKED JSL

TRAFFIC CONTROL PLAN SHEET
GUARDRAIL/SIGNS DAWES ARBORETUM

LIC-13-0.00

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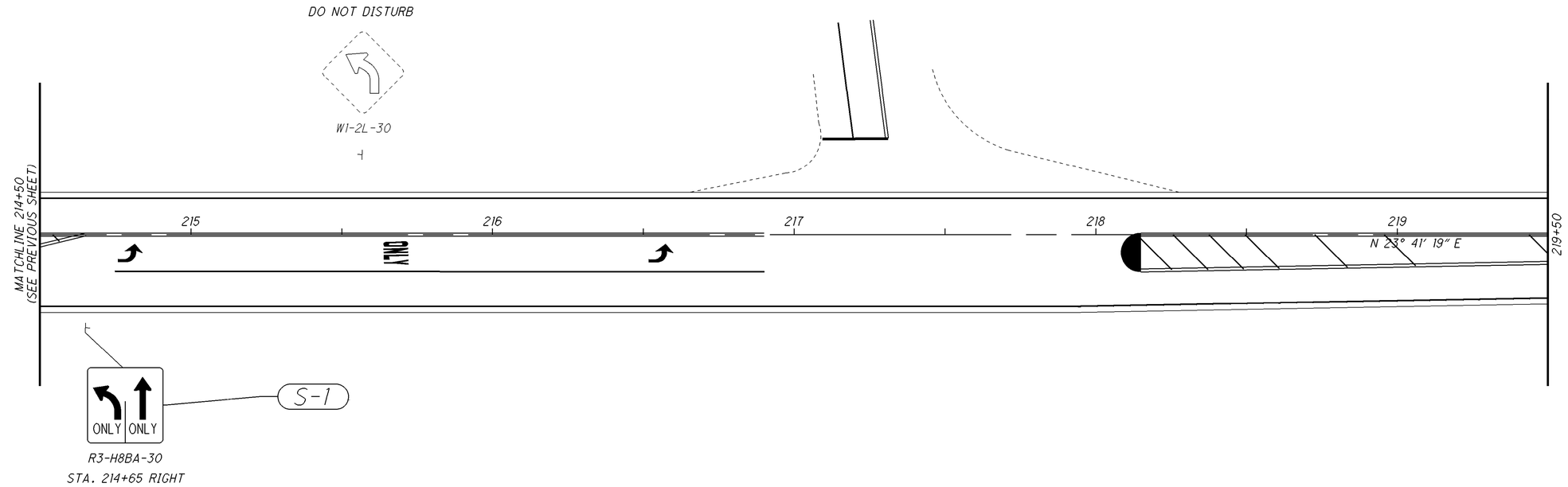

Reference No.	Sheet No.	Location	Side	Sign Code	Sign Size (Inches)	202 GUARDRAIL REMOVED	606 GUARDRAIL, TYPE MGS	606 ANCHOR ASSEMBLY, MGS TYPE B	606 ANCHOR ASSEMBLY, MGS TYPE E	630 GROUND MOUNTED SUPPORT, NO. 3 POST	630 SIGN, FLAT SHEET	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
						FEET	FEET	EACH	EACH	FEET	SF	EACH	EACH	EACH
		S.R. 13 AT DAWES ARBORETUM												
	49	STA. 206+49 TO STA. 207+99	LT.			150								
	49	STA. 206+06 TO STA. 207+56	RT.			150								
	49	STA. 205+50 TO STA. 208+75	LT.				237.5	1	1					
	49	STA. 205+00 TO STA. 209+00	RT.				300.0		2					
R-1	49	REMOVE STA. 208+69, REERECT STA. 209+50	RT.	W11-H13						14.0			1	1
				W16-2P									1	
R-2	49		LT.	W1-8R								1		1
				W1-8L								1		
R-3	49		LT.	W1-8R								1		1
				W1-8L								1		
R-4	49		LT.	W1-8R								1		1
				W1-8L								1		
R-5	49	STA. 211+20	RT.	D10-H8						8.5			1	1
S-1	50	STA. 214+65	RT.	R3-H8ba	30 x 30					12.0	6.25			
TOTALS (CARRIED TO LOCATION 1B SUB-SUMMARY)						**300**	**537.5**	**1**	**3**	**34.5**	**6.25**	**6**	**3**	**5**

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED LME
CHECKED JSL

TRAFFIC CONTROL PLAN/QUANTITIES SHEET
SIGNAGE AT DAWES ARBORETUM

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LOCATION 1A SHEET TOTALS												ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	6	13	16	17	21	22	23	42					
																ROADWAY
	330						1,086					202	23500	1,416	SY	WEARING COURSE REMOVED
						1.08						209	72501	1.08	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
																PAVEMENT
100												253	02000	100	CY	PAVEMENT REPAIR
					8,730	1,901						254	01000	10,631	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.50"
	1											304	20000	1	CY	AGGREGATE BASE
					655	143	82					407	10000	880	GAL	TACK COAT
						507						408	10001	507	GAL	PRIME COAT, AS PER PLAN
							46					441	50000	46	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	15	8			364	80						441	50100	467	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
												441	50300		CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
						71						617	10101	71	CY	COMPACTED AGGREGATE, AS PER PLAN
						1,268						617	20000	1,268	SY	SHOULDER PREPARATION
								1.08				618	41000	1.08	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
																TRAFFIC CONTROL
											64	621	00100	64	EACH	RPM
											64	621	54000	64	EACH	RAISED PAVEMENT MARKER REMOVED
										323		644	00400	323	FT	CHANNELIZING LINE, 8"
										124		644	00500	124	FT	STOP LINE
										200		644	00700	200	FT	TRANSVERSE/DIAGONAL LINE
										3		644	01300	3	EACH	LANE ARROW
										2		644	01410	2	EACH	WORD ON PAVEMENT, 96"
								1.08				648	00104	1.08	MILE	EDGE LINE, 6"
									0.54			648	00300	0.54	MILE	CENTER LINE
																MAINTENANCE OF TRAFFIC
			7									614	12460	7	EACH	WORK ZONE MARKING SIGN
			2									614	13000	2	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				60								614	18401	60	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
					0.54							614	21550	0.54	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

CALCULATED LME CHECKED JSL

LOCATION 1A SUB-SUMMARY

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LOCATION 1B SHEET TOTALS														ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	6	13	16	17	19	21	22	23	42	50					
																		ROADWAY
	1,720						4,106							202	23500	5,826	SY	WEARING COURSE REMOVED
													300	202	38000	300	FT	GUARDRAIL REMOVED
						11.78								209	72501	11.78	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
													537.5	606	15050	537.5	FT	GUARDRAIL, TYPE MGS
													1	606	26050	1	EACH	ANCHOR ASSEMBLY, MGS TYPE B
													3	606	26150	3	EACH	ANCHOR ASSEMBLY, MGS TYPE E
																		PAVEMENT
700														253	02000	700	CY	PAVEMENT REPAIR
					89,866	21,801								254	01000	111,667	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.50"
					9,117	1,467								254	01000	10,584	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 3.25"
	4													304	20000	4	CY	AGGREGATE BASE
					7,880	1,819	339							407	10000	10,038	GAL	TACK COAT
						5,482								408	10001	5,482	GAL	PRIME COAT, AS PER PLAN
							173							441	50000	173	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	72	83			4,125	970								441	50100	5,250	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
					652	72	28							441	50300	752	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
								86						516	31011	86	FT	2" DEEP JOINT SEALER, AS PER PLAN
						762								617	10101	762	CY	COMPACTED AGGREGATE, AS PER PLAN
						13,705								617	20000	13,705	SY	SHOULDER PREPARATION
									11.88					618	41000	11.88	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
		1,000												690	12050	1,000	SY	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS
																		TRAFFIC CONTROL
												741		621	00100	741	EACH	RPM
												741		621	54000	741	EACH	RAISED PAVEMENT MARKER REMOVED
													34.5	630	03100	34.5	EACH	GROUND MOUNTED SUPPORT, NO. 3 POST
													6.25	630	80100	6.25	SF	SIGN, FLAT SHEET
													6	630	84900	6	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL
													3	630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION
													5	630	86002	5	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
		12												632	26501	12	EACH	DETECTOR LOOP, AS PER PLAN
											1,845			644	00400	1,845	FT	CHANNELIZING LINE, 8"
											473			644	00500	473	FT	STOP LINE
											2,026			644	00700	2,026	FT	TRANSVERSE/DIAGONAL LINE
											285			644	00900	285	SF	ISLAND MARKING
											19			644	01300	19	EACH	LANE ARROW
											1			644	01350	1	EACH	LANE REDUCTION ARROW
											9			644	01410	9	EACH	WORD ON PAVEMENT, 96"
									11.88					648	00104	11.88	MILE	EDGE LINE, 6"
										0.71				648	00204	0.71	MILE	LANE LINE, 6"
										6.29				648	00300	6.29	MILE	CENTER LINE
																		MAINTENANCE OF TRAFFIC
			80											614	11110	80	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			81											614	12460	81	EACH	WORK ZONE MARKING SIGN
			3											614	13000	3	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				60										614	18401	60	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
					0.54									614	21400	0.54	MILE	WORK ZONE CENTER LINE, CLASS II
					5.91									614	21550	5.91	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

CALCULATED LME CHECKED JSL

LOCATION 1B SUB-SUMMARY

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Location 1b Sheet Totals												ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
4	48	63	64	65	83	84										
																ROADWAY
	1											202	20010	1	EACH	HEADWALL REMOVED
	17		456			96						202	23010	569	SY	PAVEMENT REMOVED, ASPHALT
400						433						202	30000	833	SF	WALK REMOVED
	40			1,512								202	35100	1,552	FT	PIPE REMOVED, 24" AND UNDER
				10								202	58100	10	EACH	CATCH BASIN REMOVED
				1								202	58500	1	EACH	CATCH BASIN ABANDONED
				165								202	70000	165	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT
	98				190							203	10000	288	CY	EXCAVATION
	84		42		42	7						203	20000	175	CY	EMBANKMENT
	12					141						204	10000	153	SY	SUBGRADE COMPACTION
400												608	10000	400	SF	4" CONCRETE WALK
						460						608	13000	460	SF	6" CONCRETE WALK
																EROSION CONTROL
				6								601	32100	6	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER
					171							653	10000	171	CY	TOPSOIL FURNISHED AND PLACED
					2,994							659	00500	2,994	SY	SEEDING AND MULCHING, CLASS 1
		150										659	14000	150	SY	REPAIR SEEDING AND MULCHING
		150										659	15000	150	SY	INTER-SEEDING
		0.42										659	20000	0.42	TON	COMMERCIAL FERTILIZER
		0.62										659	31000	0.62	ACRE	LIME
		17										659	35000	17	MGAL	WATER
																DRAINAGE
	0.54			0.81								602	20000	1.35	CY	CONCRETE MASONRY
				45								611	02000	45	FT	8" CONDUIT, TYPE C
				5								611	04400	5	FT	12" CONDUIT, TYPE B
	54			2,421								611	05900	2,475	FT	15" CONDUIT, TYPE B
				11								611	98180	11	EACH	CATCH BASIN, NO. 3A
				2								611	98370	2	EACH	CATCH BASIN, NO. 6
				7								611	98470	7	EACH	CATCH BASIN, NO. 2-2B
				1								611	99574	1	EACH	MANHOLE, NO. 3
				1								611	99710	1	EACH	PRECAST REINFORCED CONCRETE OUTLET
																PAVEMENT
			19									301	46000	19	CY	ASPHALT CONCRETE BASE, PG64-22
	2					20						301	48000	22	CY	ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)
	2	15				12						304	20000	29	CY	AGGREGATE BASE
	65					6						407	10000	71	GAL	TACK COAT
	99											407	13901	99	GAL	TACK COAT, 702.13, AS PER PLAN
	53											441	50000	53	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	62											441	50300	62	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
	1					6						441	50400	7	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), (DRIVEWAYS)
			1,376									609	26000	1,376	FT	CURB, TYPE 6
		25	93									613	41300	118	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 2)
10												613	41301	10	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 2), AS PER PLAN

CALCULATED JLS CHECKED JSL

LOCATION 1B SUB-SUMMARY (GUTTER AND JACKSONTOWN)

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LOCATION 1C SHEET TOTALS										ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	13	16	21	22	24	43					
														ROADWAY
	400									202	23500	400	SY	WEARING COURSE REMOVED
					2.56					209	72501	2.56	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
														PAVEMENT
120										253	02000	120	CY	PAVEMENT REPAIR
				18,868	4,882					254	01000	23,750	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.50"
	1									304	20000	1	CY	AGGREGATE BASE
				1,415	367					407	10000	1,782	GAL	TACK COAT
					1,202					408	10001	1,202	GAL	PRIME COAT, AS PER PLAN
										441	50000		CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	17	18		787	204					441	50100	1,026	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
										441	50300		CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
					167					617	10101	167	CY	COMPACTED AGGREGATE, AS PER PLAN
					3,004					617	20000	3,004	SY	SHOULDER PREPARATION
						2.56				618	41000	2.56	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
														TRAFFIC CONTROL
									176	621	00100	176	EACH	RPM
									176	621	54000	176	EACH	RAISED PAVEMENT MARKER REMOVED
		5								632	26501	5	EACH	DETECTOR LOOP, AS PER PLAN
								290		644	00400	290	FT	CHANNELIZING LINE, 8"
								52		644	00500	52	FT	STOP LINE
								169		644	00700	169	FT	TRANSVERSE/DIAGONAL LINE
								3		644	01300	3	EACH	LANE ARROW
								1		644	01410	1	EACH	WORD ON PAVEMENT, 96"
						2.56				648	00104	2.56	MILE	EDGE LINE, 6"
							1.37			648	00300	1.37	MILE	CENTER LINE
														MAINTENANCE OF TRAFFIC
			9							614	12460	9	EACH	WORK ZONE MARKING SIGN
				1.28						614	21550	1.28	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

CALCULATED LME CHECKED JSL

LOCATION 1C SUB-SUMMARY

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LOCATION 1D SHEET TOTALS											ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	13	16	17	21	22	24	43					
															ROADWAY
	170					339					202	23500	509	SY	WEARING COURSE REMOVED
					1.22						209	72501	1.22	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
															DRAINAGE
	1										611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE
															PAVEMENT
60											253	02000	60	CY	PAVEMENT REPAIR
				6,477	1,080						254	01000	7,557	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.50"
				2,852	352						254	01000	3,204	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 3.25"
	1										304	20000	1	CY	AGGREGATE BASE
				843	125	26					407	10000	994	GAL	TACK COAT
					573						408	10001	573	GAL	PRIME COAT, AS PER PLAN
						12					441	50000	12	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	7	9		389	60						441	50100	465	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
				139	18						441	50300	157	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
					80						617	10101	80	CY	COMPACTED AGGREGATE, AS PER PLAN
					1,432						617	20000	1,432	SY	SHOULDER PREPARATION
															TRAFFIC CONTROL
										125	621	00100	125	EACH	RPM
										125	621	54000	125	EACH	RAISED PAVEMENT MARKER REMOVED
		3									632	26501	3	EACH	DETECTOR LOOP, AS PER PLAN
									140		644	00400	140	FT	CHANNELIZING LINE, 8"
									37		644	00500	37	FT	STOP LINE
									229		644	00700	229	FT	TRANSVERSE/DIAGONAL LINE
									4		644	01300	4	EACH	LANE ARROW
							1.22				648	00104	1.22	MILE	EDGE LINE, 6"
								0.74			648	00300	0.74	MILE	CENTER LINE
															MAINTENANCE OF TRAFFIC
			16								614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			5								614	12460	5	EACH	WORK ZONE MARKING SIGN
				0.15							614	21400	0.15	MILE	WORK ZONE CENTER LINE, CLASS II
				0.61							614	21550	0.61	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

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LOCATION 1D SUB-SUMMARY

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LOCATION 1E SHEET TOTALS													ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	6	14	7	17	19	20	22	24	16					
																	ROADWAY
							1,674						202	23500	1,674	SY	WEARING COURSE REMOVED
									336				202	30000	336	SF	WALK REMOVED
									37				202	32000	37	FT	CURB REMOVED
									348				608	10000	348	SF	4" CONCRETE WALK
									2				690	98000	2	EACH	SPECIAL - CURB RAMP, TYPE A1
									1				690	98000	1	EACH	SPECIAL - CURB RAMP, TYPE A2
									8				690	98200	8	SF	SPECIAL - DETECTABLE WARNING
																	DRAINAGE
	3												611	98630	3	EACH	CATCH BASIN ADJUSTED TO GRADE
	34												611	99654	34	EACH	MANHOLE ADJUSTED TO GRADE
	22												638	10800	22	EACH	VALVE BOX ADJUSTED TO GRADE
																	PAVEMENT
220													253	02000	220	CY	PAVEMENT REPAIR
					32,656								254	01000	32,656	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.50"
					1,232								254	01000	1,232	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 3.25"
					2,604		127						407	20000	2,731	GAL	NON-TRACKING TACK COAT
							71						441	50000	71	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
					1,413								441	50100	1,413	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
					60								441	50300	60	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
								56					516	31011	56	FT	2" DEEP JOINT SEALER, AS PER PLAN
									37				609	26000	37	FT	CURB, TYPE 6
																	TRAFFIC CONTROL
		3											632	26501	3	EACH	DETECTOR LOOP, AS PER PLAN
										0.25			644	00200	0.25	MILE	LANE LINE, 4"
										1.53			644	00300	1.53	MILE	CENTER LINE
											1,052		644	00400	1,052	FT	CHANNELIZING LINE, 8"
											252		644	00500	252	FT	STOP LINE
											1,625		644	00600	1,625	FT	CROSSWALK LINE
											127		644	00700	127	FT	TRANSVERSE/DIAGONAL LINE
											2,330		644	01200	2,330	EACH	PARKING LOT STALL MARKING
											22		644	01300	22	EACH	LANE ARROW
											5		644	01410	5	EACH	WORD ON PAVEMENT, 96"
											5		644	01600	5	EACH	HANDICAP SYMBOL MARKING
											5		644	19000	5	EACH	SHARED LANE MARKING
																	MAINTENANCE OF TRAFFIC
			40										614	11110	40	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
			4										614	12460	4	EACH	WORK ZONE MARKING SIGN
			6										614	13000	6	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				60									614	18401	60	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
					0.06								614	21400	0.06	MILE	WORK ZONE CENTER LINE, CLASS II
					1.37								614	21550	1.37	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

CALCULATED LME CHECKED JSL

LOCATION 1E SUB-SUMMARY

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LOCATION 2 SHEET TOTALS					ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
3	5	14	22	24					
									DRAINAGE
5					611	99654	5	EACH	MANHOLE ADJUSTED TO GRADE
6					638	10800	6	EACH	VALVE BOX ADJUSTED TO GRADE
									PAVEMENT
		3,755			254	01000	3,755	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.50"
		282			407	20000	282	GAL	NON-TRACKING TACK COAT
		157			441	50100	157	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
									TRAFFIC CONTROL
			0.12		644	00200	0.12	MILE	LANE LINE, 4"
			0.10		644	00300	0.10	MILE	CENTER LINE
				270	644	00400	270	FT	CHANNELIZING LINE, 8"
				84	644	00500	84	FT	STOP LINE
				256	644	00600	256	FT	CROSSWALK LINE
				376	644	01200	376	EACH	PARKING LOT STALL MARKING
				4	644	01300	4	EACH	LANE ARROW
				2	644	01410	2	EACH	WORD ON PAVEMENT, 96"
									MAINTENANCE OF TRAFFIC
	2				614	13000	2	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
		0.10			614	21550	0.10	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

LOCATION 3 SHEET TOTALS					ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
3	5	14	22	24					
									DRAINAGE
2					611	99654	2	EACH	MANHOLE ADJUSTED TO GRADE
2					638	10800	2	EACH	VALVE BOX ADJUSTED TO GRADE
									PAVEMENT
		1,878			254	01000	1,878	SY	PAVEMENT PLANING, ASPHALT CONCRETE ,1.50"
		141			407	20000	141	GAL	NON-TRACKING TACK COAT
		79			441	50100	79	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
									TRAFFIC CONTROL
			0.09		644	00300	0.09	MILE	CENTER LINE
				140	644	00400	140	FT	CHANNELIZING LINE, 8"
				48	644	00500	48	FT	STOP LINE
				110	644	00600	110	FT	CROSSWALK LINE
				4	644	01300	4	EACH	LANE ARROW
				2	644	01410	2	EACH	WORD ON PAVEMENT, 96"
									MAINTENANCE OF TRAFFIC
	3				614	13000	3	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
		0.08			614	21550	0.08	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT

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LOCATION 2 & 3 SUB-SUMMARIES

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LOCATION TOTALS									FUNDING SPLITS						ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
1A	1B	1B GJ	1C	1D	1E	2	3	D05 COMPLEX	01/S<2/PV	02/STR/PV	03/NHS/ PV/HEAT	04/NHS/ PV/NEWA	05/NHS/ OT/NEWA	06/STR/PV						
																			ROADWAY	
		1								1					202	20010	1	EACH	HEADWALL REMOVED	
		569								569					202	23010	569	SY	PAVEMENT REMOVED, ASPHALT	
1,416	5,826		400	509	1,674				1,816	5,826	509	1,674			202	23500	9,825	SY	WEARING COURSE REMOVED	
		833			336					833			336		202	30000	1,169	SF	WALK REMOVED	
					37			100					37	100	202	32000	137	FT	CURB REMOVED	
		1,552								1,552					202	35100	1,552	FT	PIPE REMOVED, 24" AND UNDER	
	300									300					202	38000	300	FT	GUARDRAIL REMOVED	
		10								10					202	58100	10	EACH	CATCH BASIN REMOVED	
		1								1					202	58500	1	EACH	CATCH BASIN ABANDONED	
		165								165					202	70000	165	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT	63
		288								288					203	10000	288	CY	EXCAVATION	
		175								175					203	20000	175	CY	EMBANKMENT	
		153								153					204	10000	153	SY	SUBGRADE COMPACTION	
1.08	11.78		2.56	1.22					3.64	11.78	1.22				209	72051	16.64	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	2
	537.5									537.5					606	15050	537.5	FT	GUARDRAIL, TYPE MGS	
	1									1					606	26050	1	EACH	ANCHOR ASSEMBLY, MGS TYPE B	
	3									3					606	26150	3	EACH	ANCHOR ASSEMBLY, MGS TYPE E	
		400			348					400			348		608	10000	748	SF	4" CONCRETE WALK	
		460								460					608	13000	460	SF	6" CONCRETE WALK	
					2								2		690	98000	2	EACH	SPECIAL - CURB RAMP, TYPE A1	8,9,10
					1								1		690	98000	1	EACH	SPECIAL - CURB RAMP, TYPE A2	8,9,10
					8								8		690	98200	8	SF	SPECIAL - DETECTABLE WARNING	8,9,10
																			EROSION CONTROL	
		6								6					601	32100	6	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
		171								171					653	10000	171	CY	TOPSOIL FURNISHED AND PLACED	
		2,994								2,994					659	00500	2,994	SY	SEEDING AND MULCHING, CLASS 1	
		150								150					659	14000	150	SY	REPAIR SEEDING AND MULCHING	
		150								150					659	15000	150	SY	INTER-SEEDING	
		0.42								0.42					659	20000	0.42	TON	COMMERCIAL FERTILIZER	
		0.62								0.62					659	31000	0.62	ACRE	LIME	
		17								17					659	35000	17	MGAL	WATER	

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GENERAL SUMMARY

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LOCATION TOTALS									FUNDING SPLITS						ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
1A	1B	1B GJ	1C	1D	1E	2	3	D05 COMPLEX	01/S<2/PV	02/STR/PV	03/NHS/ PV/HEAT	04/NHS/ PV/NEWA	05/NHS/ OT/NEWA	06/STR/PV						
																			DRAINAGE	
		1.35								1.35					602	20000	1.35	CY	CONCRETE MASONRY	
		45								45					611	02000	45	FT	8" CONDUIT, TYPE C	
		5								5					611	04400	5	FT	12" CONDUIT, TYPE B	
		2,475								2,475					611	05900	2,475	FT	15" CONDUIT, TYPE B	
		11								11					611	98180	11	EACH	CATCH BASIN, NO. 3A	
		2								2					611	98370	2	EACH	CATCH BASIN, NO. 6	
		7								7					611	98470	7	EACH	CATCH BASIN, NO. 2-2B	
					3			24				3		24	611	98630	27	EACH	CATCH BASIN ADJUSTED TO GRADE	
		1								1					611	99574	1	EACH	MANHOLE, NO. 3	
				1	34	5	2	4			1	39	2	4	611	99654	46	EACH	MANHOLE ADJUSTED TO GRADE	
		1								1					611	99710	1	EACH	PRECAST REINFORCED CONCRETE OUTLET	
					22	6	2					28	2		638	10800	30	EACH	VALVE BOX ADJUSTED TO GRADE	
																			PAVEMENT	
100	700		120	60	220				220	700	60	220			253	02000	1,200	CY	PAVEMENT REPAIR	
10,631	111,667		23,750	7,557	32,656	3,755	1,878	20,847	34,381	111,667	7,557	36,411	1,878	20,847	254	01000	212,741	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.50"	
	10,584			3,204	1,232					10,584	3,204	1,232			254	01000	15,020	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 3.25"	
		19								19					301	46000	19	CY	ASPHALT CONCRETE BASE, PG64-22	
		22								22					301	48000	22	CY	ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	
1	4	14	1	1					2	18	1				304	20000	21	CY	AGGREGATE BASE	
880	10,038	71	1,782	994					2,662	10,109	994				407	10000	13,765	GAL	TACK COAT	
		99								99					407	13900	99	GAL	TACK COAT, 702.13	
					2,731	282	141	1,564				3,013	141	1,564	407	20000	4,718	GAL	NON-TRACKING TACK COAT	
507	5,482		1,202	573					1,709	5,482	573				408	10001	7,764	GAL	PRIME COAT, AS PER PLAN	2
46	173	53		12	71				46	226	12	71			441	50000	355	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
467	5,250		1,026	465	1,413	157	79	869	1,493	5,250	465	1,570	79	869	441	50100	9,726	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
	752	62		157	60					814	157	60			441	50300	1,031	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
		7								7					441	50400	7	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), (DRIVEWAYS)	
	86				56					86		56			516	31011	142	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
		1,376			37			100		1,376			37	100	609	26000	1,513	FT	CURB, TYPE 6	
		118								118					613	41300	118	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 2)	
		10								10					613	41301	10	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 2), AS PER PLAN	4
71	762		167	80					238	762	80				617	10101	1,080	CY	COMPACTED AGGREGATE, AS PER PLAN	2
1,268	13,705		3,004	1,432					4,272	13,705	1,432				617	20000	19,409	SY	SHOULDER PREPARATION	
1.08	11.88		2.56						3.64	11.88					618	41000	15.52	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)	
	1,000									1,000					690	12050	1,000	SY	SPECIAL - REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	5

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GENERAL SUMMARY

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LOCATION TOTALS									FUNDING SPLITS						ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
1A	1B	1B GJ	1C	1D	1E	2	3	D05 COMPLEX	01/S<2/PV	02/STR/PV	03/NHS/ PV/HEAT	04/NHS/ PV/NEWA	05/NHS/ OT/NEWA	06/STR/PV						
																			TRAFFIC CONTROL	
64	741		176	125					240	741	125				621	00100	1,106	EACH	RPM	
64	741		176	125					240	741	125				621	54000	1,106	EACH	RAISED PAVEMENT MARKER REMOVED	
	34.5									34.5					630	03100	34.5	EACH	GROUND MOUNTED SUPPORT, NO. 3 POST	
	6.25									6.25					630	80100	6.25	SF	SIGN, FLAT SHEET	
	6									6					630	84900	6	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
	3									3					630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
	5									5					630	86002	5	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	12		5	3	3				5	12	3	3			632	26501	23	EACH	DETECTOR LOOP, AS PER PLAN	4
					0.25	0.12						0.37			644	00200	0.37	MILE	LANE LINE, 4"	
					1.53	0.10	0.09	0.30				1.63	0.09	0.30	644	00300	2.02	MILE	CENTER LINE	
	1,845		290	140	1,052	270	140	115	290	1,845	140	1,322	140	115	644	00400	3,852	FT	CHANNELIZING LINE, 8"	
124	473		52	37	252	84	48	70	176	473	37	336	48	70	644	00500	1,140	FT	STOP LINE	
200					1,625	256	110	48	200			1,881	110	48	644	00600	2,239	FT	CROSSWALK LINE	
	2,026		169	229	127			122	169	2,026	229	127		122	644	00700	2,673	FT	TRANSVERSE/DIAGONAL LINE	
	285									285					644	00900	285	SF	ISLAND MARKING	
					2,330	376		5,995				2,706		5,995	644	01200	8,701	EACH	PARKING LOT STALL MARKING	
	19		3	4	22	4	4	2	3	19	4	26	4	2	644	01300	58	EACH	LANE ARROW	
	1									1					644	01350	1	EACH	LANE REDUCTION ARROW	
	9		1		5	2	2		1	9		7	2		644	01410	19	EACH	WORD ON PAVEMENT, 96"	
					5			5				5		5	644	01600	10	EACH	HANDICAP SYMBOL MARKING	
					5							5			644	19000	5	EACH	SHARED LANE MARKING	
1.08	11.88		2.56	1.22					3.64	11.88	1.22				648	00104	16.74	MILE	EDGE LINE, 6"	
	0.71									0.71					648	00204	0.71	MILE	LANE LINE, 6"	
0.54	6.29		1.37	0.74					1.91	6.29	0.74				648	00300	8.94	MILE	CENTER LINE	
																			MAINTENANCE OF TRAFFIC	
	80			16	40					80	16	40			614	11110	136	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	5
7	81		9	5	4				16	81	5	4			614	12460	106	EACH	WORK ZONE MARKING SIGN	
2	3				6	2	3		2	3		8	3		614	13000	16	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
60	60				60				60	60		60			614	18401	180	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	6
	0.54			0.15	0.06					0.54	0.15	0.06			614	21400	0.75	MILE	WORK ZONE CENTER LINE, CLASS II	
0.54	5.91		1.28	0.61	1.37	0.10	0.08		1.82	5.91	0.61	1.47	0.08		614	21550	9.89	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
																			INCIDENTALS	
									LUMP	LUMP	LUMP	LUMP			103	05000		LS	PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
									LUMP	LUMP	LUMP	LUMP			614	11000		LS	MAINTAINING TRAFFIC	
										6					619	16000	6	MNTH	FIELD OFFICE, TYPE A	
									LUMP	LUMP	LUMP	LUMP			623	10000		LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
									LUMP	LUMP	LUMP	LUMP			624	10000		LS	MOBILIZATION	

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GENERAL SUMMARY

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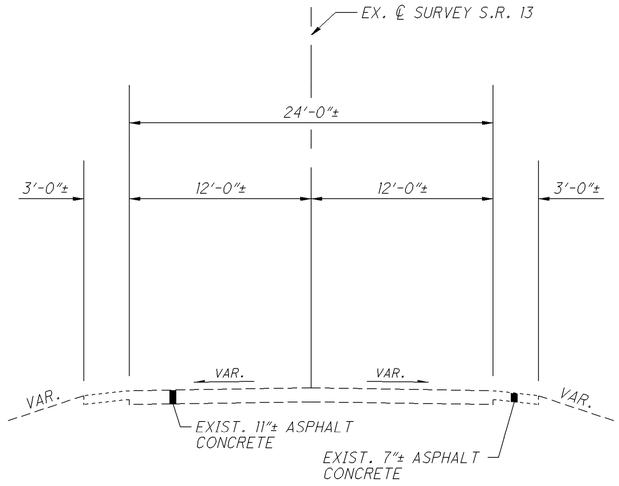


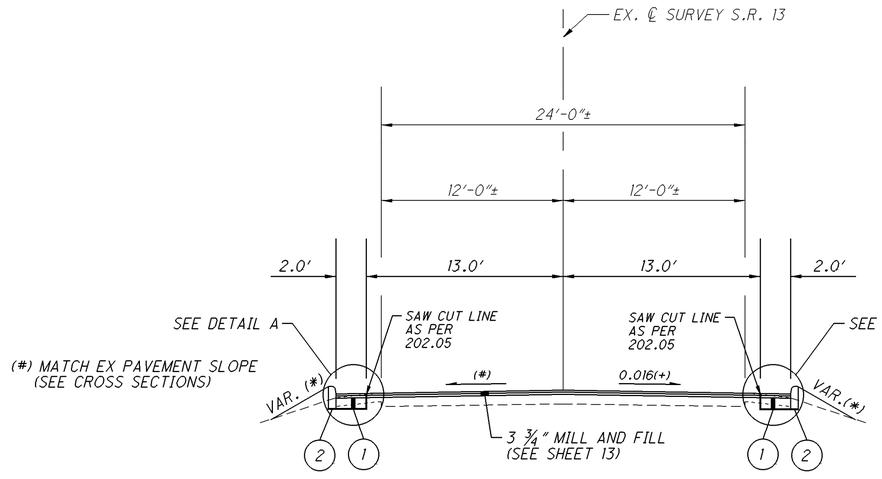
S.R. 13 (EXISTING) NORMAL SECTION APPLIES:

STA. 11+50.00 TO STA. 26+00.00 = 1,450.00 FT.
TOTAL 1,450.00 FT.

LEGEND

(1) ITEM 613, LOW STRENGTH MORTAR BACKFILL (TYPE 2)

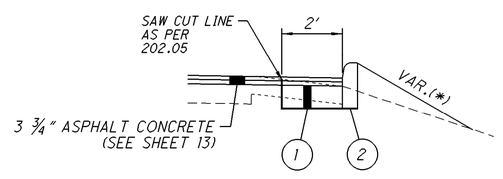
(2) ITEM 609, CURB, TYPE 6



(*) SEE CROSS SECTIONS

(+) EX PAVEMENT SLOPE NEEDS CORRECTED TO ACHIEVE 0.016 CROSS SLOPE

DETAIL A



S.R. 13 (PROPOSED) CURB LIMITS (LT.):

STA. 11+98.00 TO STA. 18+70.00 = 672.00 FT.
TOTAL 672.00 FT.

S.R. 13 (PROPOSED) CURB LIMITS (RT.):

STA. 11+91.00 TO STA. 18+95.00 = 704.00 FT.
TOTAL 704.00 FT.

CALCULATED JLS
CHECKED JSL

TYPICAL SECTIONS

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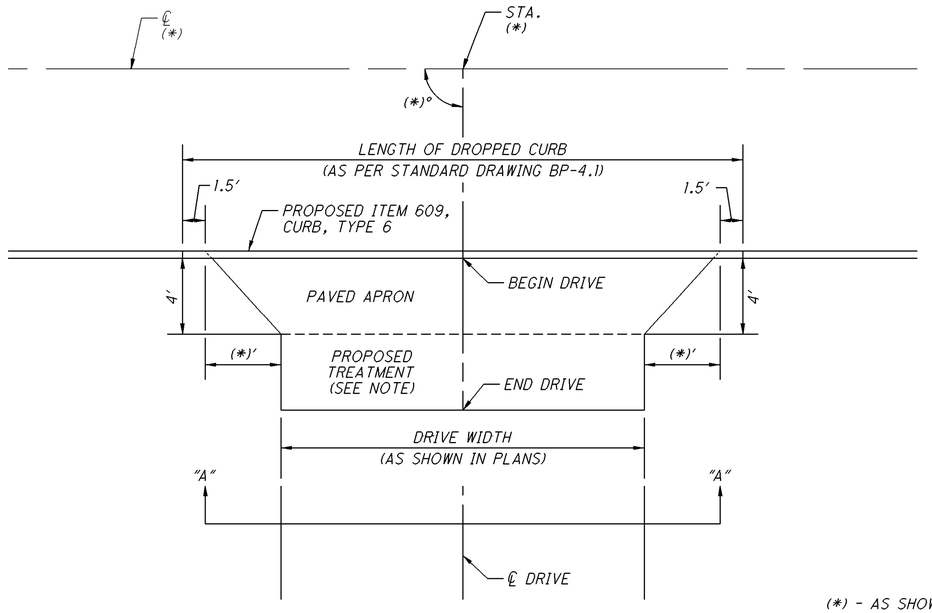
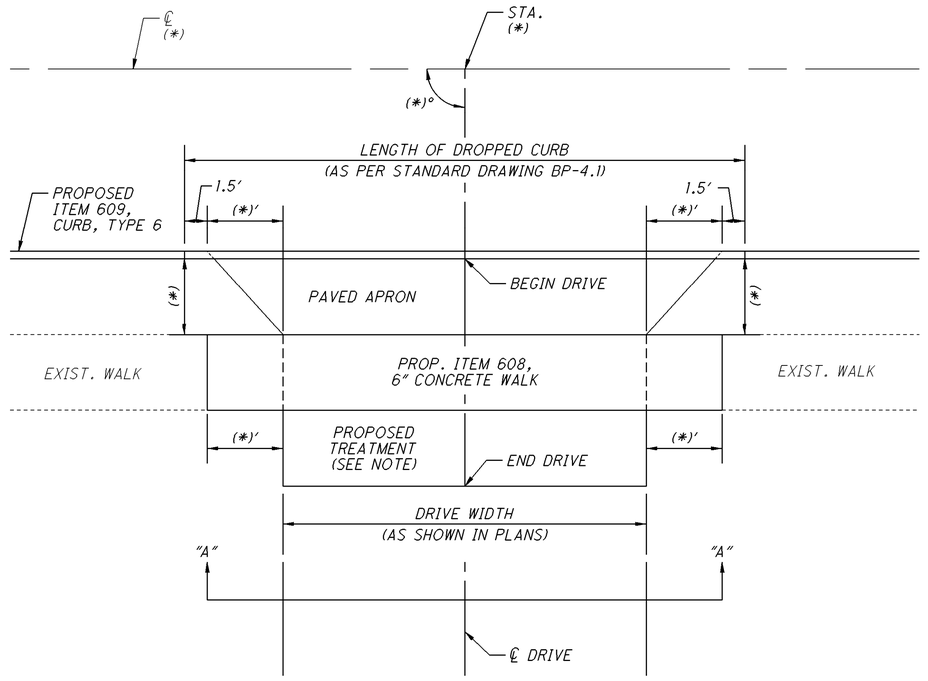
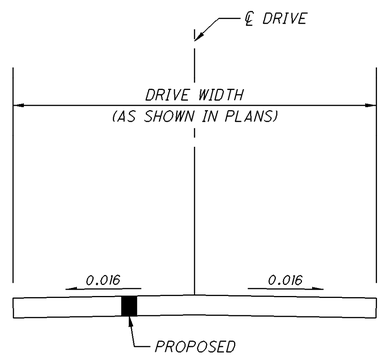




(*) - AS SHOWN IN PLANS

NOTE:
PROPOSED DRIVE SURFACE BEYOND PAVED APRON SHALL MATCH EXISTING DRIVE SURFACE (i.e. REPLACE EXISTING AGGREGATE WITH PROPOSED AGGREGATE, etc.).



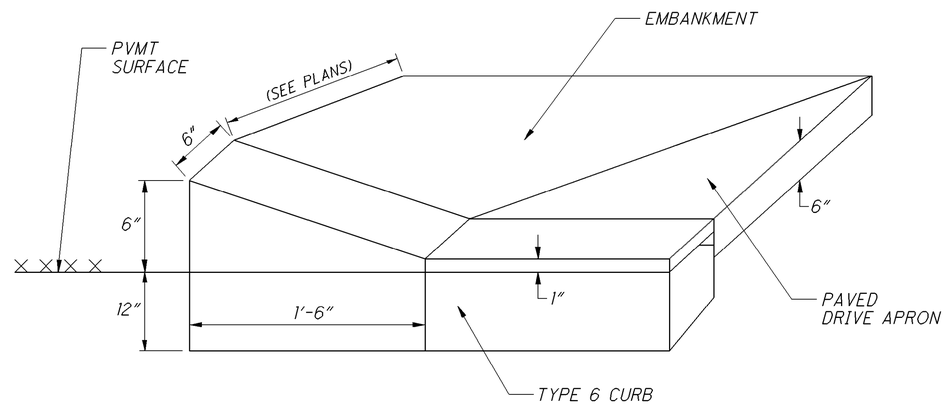
SECTION A-A

RESIDENTIAL DRIVE

- 1 ¼" OF ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG64-22 (DRIVEWAYS)
- ITEM 407 TACK COAT, SURFACE COURSE @ (0.040 GAL./SQ. YD.)
- 4 ¾" OF ITEM 301, ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)

AND/OR

- 8" ITEM 304, AGGREGATE BASE



DEPRESSED CURB AT DRIVE

CALCULATED JLS
CHECKED JSL

PROPOSED TYPICAL SECTIONS (DRIVES)

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UTILITIES

SEE SHEET 3 FOR UTILITY LISTING IN THE VILLAGE OF JACKSONTOWN.

SEEDING AND MULCHING

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

LOCATION 1B (JACKSONTOWN):

ITEM 659, SEEDING AND MULCHING, CLASS 1 SEE SHEET 83

ITEM 659, REPAIR SEEDING AND MULCHING 150 SQ. YD.
(5% OF THE PERMANENT SEEDING AREA)
0.05 x 2,994 = 149.7

ITEM 659, INTER-SEEDING 150 SQ. YD.
(5% OF THE PERMANENT SEEDING AREA)
0.05 x 2,994 = 149.7

ITEM 659, COMMERCIAL FERTILIZER 0.42 TON
(ONE TON PER 7,410 SQ.YD. OF THE PERMANENT SEEDED AREA)
(2,994 ÷ 7,410) = 0.42

ITEM 659, LIME 0.62 ACRE
(PERMANENT SEEDED AREA)
2,994 SQ.YD. x 9 SQ.FT./SQ.YD. ÷ 43,560 SQ. FT. /ACRE = 0.62 ACRE

ITEM 659, WATER 17 M. GAL.
(0.0027 M. GAL. PER SQ.YD. OF THE PERMANENT SEEDED AREA)
2 x (2,994 x 0.0027) = 16.17

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

CROSSINGS AND CONNECTIONS 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.

RESTORATION FOR PIPE INSTALLATIONS

THE QUANTITIES BELOW SHALL BE USED FOR RESTORATION FROM OPEN CUT STORM SEWER INSTALLATION. PAVEMENT SHALL BE RESTORED USING LOW STRENGTH MORTAR BACKFILL, TYPE 2 FROM THE TOP OF PIPE UP TO THE EXISTING PAVEMENT SURFACE. 8 INCHES OF AGGREGATE BASE SHALL BE USED WHEN OPEN CUTTING THROUGH AGGREGATE DRIVEWAYS. THE TRENCH WIDTH SHALL BE 1.5 TIMES THE DIAMETER OF THE PIPE.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE LOCATION 1B SUB-SUMMARY FOR THE WORK DESCRIBED ABOVE:

ITEM 304, AGGREGATE BASE..... 15 CU.YD.
ITEM 613, LOW STRENGTH MORTAR BACKFILL, TYPE 2..... 25 CU.YD.

NOTE: AGGREGATE BASE MAY BE USED FOR PAVEMENT RESTORATION FOR THE STORM SEWER UNDER THE NORTH SHOULDER ON U.S. 40 DUE TO THE WIDE VARYING SHOULDER.

SPECIAL, FILL AND PLUG EXISTING CONDUIT

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

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

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

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

SURVEYING PARAMETERS

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING AND SEE TABLES IN PLANS FOR CONTROL POINTS FOR THE PROJECT.

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.

CALCULATED JLS CHECKED JSL

DRAINAGE NOTES

LIC-13-0.00

63
90

I:\ProjectData\LIC\92958\Design\Drainage\Sheets\92958_DN001.dgn 28-JUL-2016 9:54AM jlutz1

Reference No.	Sheet No.	Location	Side	202 PAVEMENT REMOVED, ASPHALT	203 EMBANKMENT (10" Depth)	301 ASPHALT CONCRETE BASE, PG64-22 (10" Avg. Depth)	609 CURB, TYPE 6	613 LOW STRENGTH MORTAR BACKFILL (TYPE 2) (12" Depth)
			Lt./Rt.	SY	CY	CY	FT	CY
		U.S. 40						
P-1	66	S.R. 13/U.S. 40 Southwest Quadrant		12.7		8.6		
P-2	66	S.R. 13/U.S. 40 Northwest Quadrant		16.1		9.6		
		S.R. 13						
C-1	70, 72	Sta. 11+91.0 to Sta. 18+95.0	Rt.	186.7			704	62.3
C-2	70, 72	Sta. 11+98.0 to Sta. 18+70.0	Lt.	90.9			672	30.3
R-1	70	Sta. 11+91.89 to Sta. 12+55.68	Lt.	57.3	16.0			
R-2	70	Sta. 12+67.28 to Sta. 13+24.84	Lt.	49.9	13.9			
R-3	70	Sta. 13+42.87 to Sta. 13+90.73	Lt.	41.6	11.6			
Totals (Carried to Location 1b Sub-Summary)				**456**	**42**	**19**	**1,376**	**93**

CALCULATED JLS
CHECKED JSL

ROADWAY CALCULATIONS (JACKSONTOWN)

LIC-13-0.00

ROADWAY

64
90

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Reference No.	Sheet No.	Location (Station to Station)		Side	202				601	602	611							
					PIPE REMOVED, 24" AND UNDER	CATCH BASIN REMOVED	CATCH BASIN ABANDONED	SPECIAL - FILL AND PLUG EXISTING CONDUIT	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	CONCRETE MASONRY	8" CONDUIT, TYPE C	12" CONDUIT, TYPE B	15" CONDUIT, TYPE B	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 6	CATCH BASIN, NO. 2-2B	MANHOLE, NO. 3	PRECAST REINFORCED CONCRETE OUTLET
		From	To	Lt./Rt.	FT	EACH	EACH	FT	CY	CY	FT	FT	FT	EACH	EACH	EACH	EACH	EACH
		U.S. 40																
D-1	66	200+52.0	202+11.31	Rt.		1	1	160										
D-2	66	200+56.0	200+61.36	Lt./Rt.		1							44		1			
D-3	66	200+56.0	202+50.0	Lt.	194	1					5	5	194		1			
D-4	66	202+50.0	203+62.0	Lt.					5.2	0.27			112				1	
		S.R. 13																
D-5	70	12+86.0	13+90.0	Rt.									104	1				
D-6	70	13+14.0	13+82.0	Lt.	68			5					68	1				
D-7	70	13+14.0	13+16.18	Lt.	10						10							
D-8	70	13+82.00	14+76.00	Lt.	94								94	1				
D-9	70	13+82.00	13+82.63	Lt.	9						9							
D-10	70	13+90.00	14+87.00	Rt.									97	1				
D-11	70	14+75.93	14+76.00	Lt.	9						9							
D-12	70	14+76.00	15+75.00	Lt.	99								99	1				
D-13	70	14+87.00	16+00.00	Rt.									113	1				
D-14	70, 72	15+75.00	17+48.00	Lt.	178	1							174	1				
D-15	70, 72	16+00.00	17+48.00	Rt.									148	1				
D-16	72	17+48.00		Lt./Rt.									30	1				
D-17	72	17+48.00	18+50.00	Lt.	102	1							102	1				
D-18	72	18+50.00		Lt.							12					1		
D-19	72	18+50.00	20+25.00	Lt.	175	1							175	1				
D-20	72, 74	20+25.00	22+00.00	Lt.	175	1							175			1		
D-21	72	20+35.00	20+75.00	Rt.	35					0.54			40					
D-22	74	22+00.00	24+00.00	Lt.	200	3							200			1		
D-23	74	22+17.00	23+65.00	Rt.									148			1		
D-24	74	23+65.00	25+45.90	Rt.	41								181			1		
D-25	74	24+00.00	25+19.57	Lt.	120								120			1		
D-26	74	25+33.11		Rt.														1
D-27	74	25+45.90		Rt.	5								5			1		
Totals (Carried to Location 1b Sub- Summary)					1,514	10	1	165	6	0.81	45	5	2,423	11	2	7	1	1

CALCULATED JLS
CHECKED JSL

DRAINAGE CALCULATIONS (JACKSONTOWN)

LIC-13-0.00

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CN PT	LOCATION	STATION & OFFSET	NORTHING	EASTING	ELEVATION	FEATURE CODE
SV2	S.R. 13	STA. 10+39.00, 30.19' LT.	713717.040	1992584.197	1012.08	1" REBAR W/ ALUM. ODOT CAP

PARKING LOT (ASPHALT)
STA. 10+41.98
18.0' LT.
S.R. 13
STA. 10+41.98
12.40' LT.
S.R. 13
P-2
EXIST. ℄ S.R. 13
Ex R/W
Ex R/W
UNKNOWN OUTLET
50' RAD.
EX. CB (REMOVED)
PROP. SAW CUT LINE, AS PER 202.05
EX. 12" CLAY (REMOVE)
D-3
STA. 200+36.45
15.14' LT.
U.S. 40
EX. 12" CLAY (REMAIN)
CB, NO. 6
15"-B
5' OF 12"-B
STA. 200+36.45
12.26' LT.
U.S. 40
200
201
S 87° 08' 42" E
EXIST. ℄ U.S. 40
MATCH LINE STA. 202+00
STA. 200+36.45
12.16' RT.
U.S. 40
P-1
D-2
CB, NO. 6
STA. 200+36.45
14.95' RT.
U.S. 40
EX. 12" CLAY
FILL & PLUG
5' OF EX 12"
EX. CB (REMOVED)
PROP. SAW CUT LINE, AS PER 202.05
D-1
EX. 12" CLAY (PLUG)
PARKING LOT (ASPHALT)
40' RAD.
STA. 200+75.72
47.05' RT.
U.S. 40
STA. 200+73.03
47.30' RT.
U.S. 40
Ex R/W
Ex R/W

SAN
D-4
HW 2.1 or 2.2
15"-B
MH-3, 48"
+TEL
EX. 96" CMP
D-3
15"-B
MATCH LINE STA. 202+00
202
203
204
S 87° 08' 42" E
EXIST. ℄ U.S. 40
EX. 12" CLAY (PLUG)
EX. CB (ABANDON BY OTHERS)
D-1
EX. 12" CLAY (ABANDON BY OTHERS)
SA
Ex R/W
Ex R/W
Ex R/W
Ex R/W
Ex R/W
Ex R/W

NOTES:
- FOR QUANTITIES, SEE SHEETS 64-65.
- FOR DRIVE DETAILS, SEE SHEETS 84-90.

HORIZONTAL SCALE IN FEET
0 10 20
CALCULATED JSL
CHECKED JSL

PLAN SHEET (U.S. 40)
STA. 199+50 TO STA. 204+50

LIC-13-0.00

66
90

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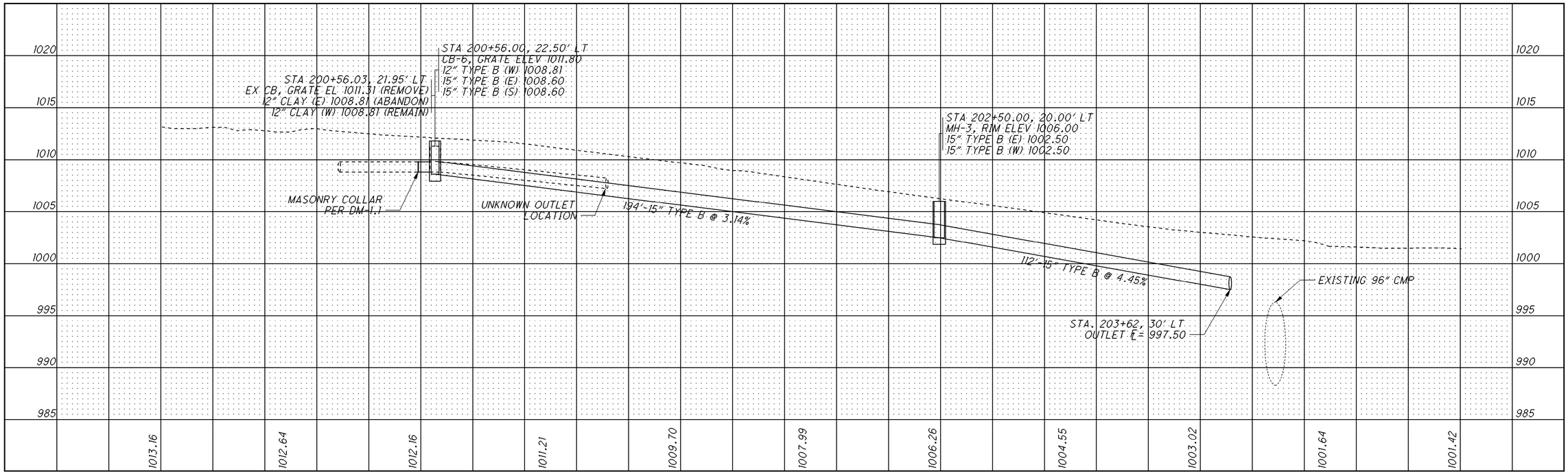
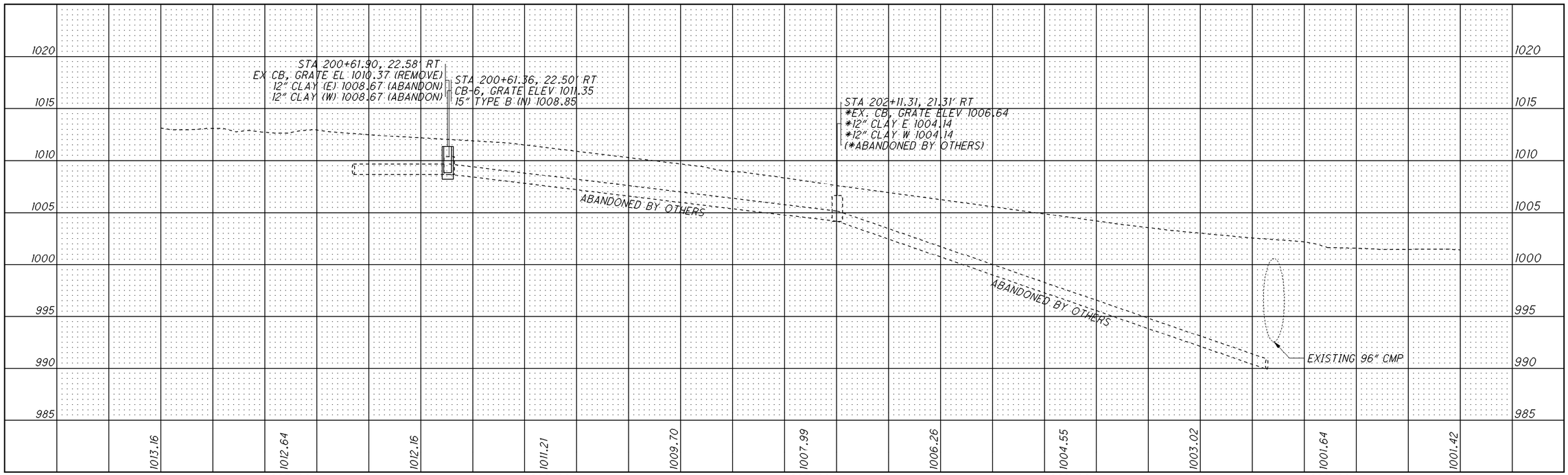
LEFT SIDE PROFILE



RIGHT SIDE PROFILE



CALCULATED JSL
CHECKED JSL

PROFILE SHEET (U.S. 40)
STA. 199+50.00 TO STA. 204+50.00

LIC-13-0.00

67
90

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SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL

CHECKED JSL

EX R/W

STA 202+50.00, 20.00' LT
MH-3, RIM ELEV 1006.00
15" TYPE B (E) 1002.50
15" TYPE B (W) 1002.50

EX 12" CLAY
(ABANDON BY
OTHERS)

202+50.00
1006.26

STA 202+11.31, 21.31' RT
*EX. CB, GRATE ELEV 1006.64
*12" CLAY E 1004.14
*12" CLAY W 1004.14
(*ABANDONED BY OTHERS)

15" TYPE B

202+00.00
1007.99

15" TYPE B

EX 12" CLAY
(ABANDON BY
OTHERS)

201+50.00
1009.70

STA 200+56.00, 22.50' LT
CB-6, GRATE ELEV 1011.80
12" TYPE B (W) 1008.60
15" TYPE B (E) 1008.60
15" TYPE B (S) 1008.60

STA 200+61.36, 22.50' RT
CB-6, GRATE ELEV 1011.35
15" TYPE B (N) 1008.85

STA 200+56.03, 21.95' LT
EX CB, GRATE EL 1011.31 (REMOVE)
12" CLAY (E) 1008.81 (ABANDON)
12" CLAY (W) 1008.81 (REMAIN)

STA 200+61.90, 22.58' RT
EX CB, GRATE EL 1010.37 (REMOVE)
12" CLAY (E) 1008.67 (ABANDON)
12" CLAY (W) 1008.67 (ABANDON)

±10" ITEM 301

200+58.63
1012.04

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

CROSS SECTIONS (U.S. 40)
STA. 200+58.63 TO STA. 202+50.00

LIC-13-0.00

68
90

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SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JSL

CHECKED JSL

1005
1000
995
990

EX R/W

EXISTING 96" CMP

EX R/W

203+79.40
1002.40

1005
1000
995

EX R/W

15" TYPE B

EX R/W

203+50.00
1003.02

EX 12" CLAY (ABANDON BY OTHERS)

1010
1005
1000

EX R/W

15" TYPE B

EX R/W

EX 12" CLAY (ABANDON BY OTHERS)

203+00.00
1004.55

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

CROSS SECTIONS (U.S. 40)
STA. 203+00.00 TO STA. 203+79.40

LIC-13-0.00

69
90

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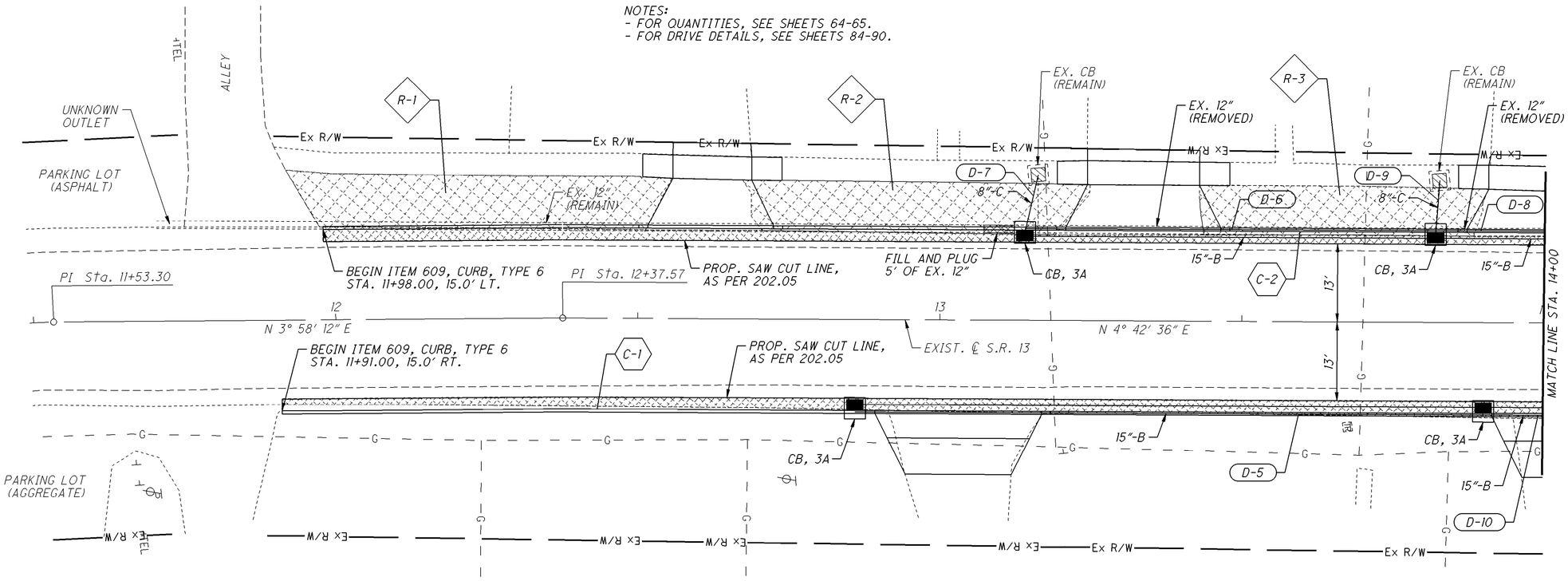
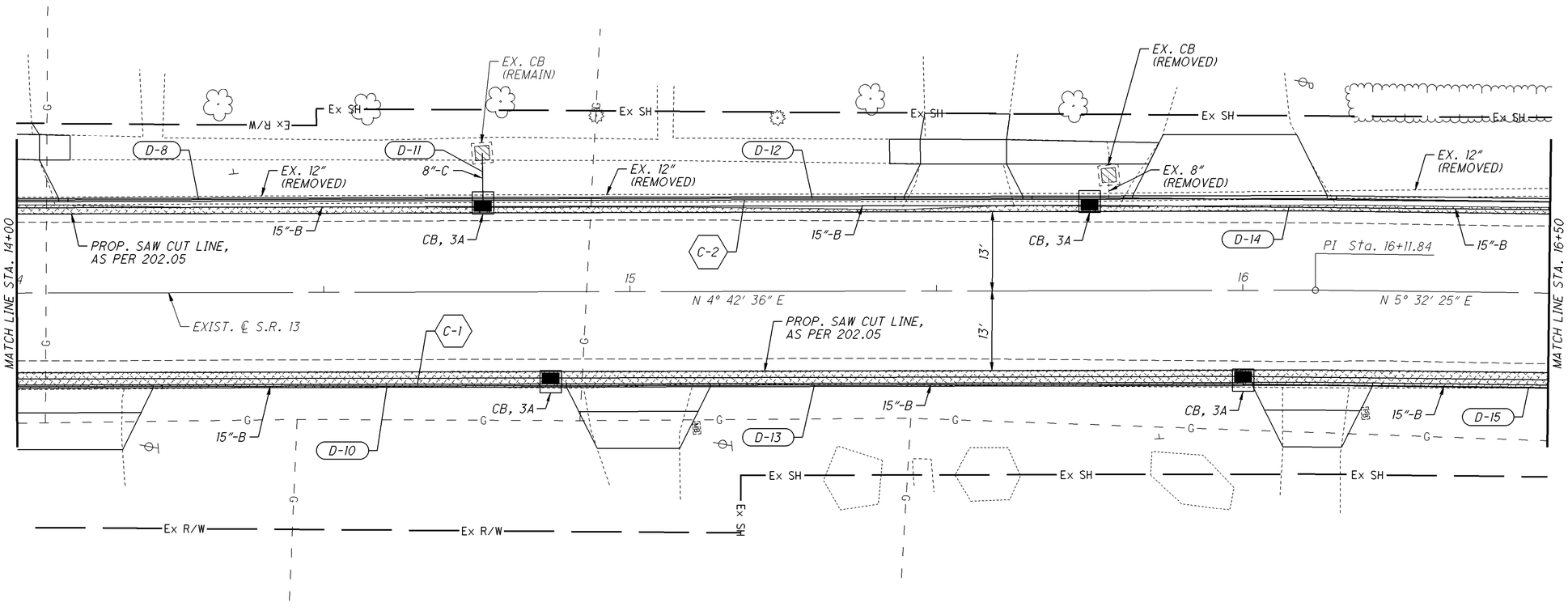
NOTES:
- FOR QUANTITIES, SEE SHEETS 64-65.
- FOR DRIVE DETAILS, SEE SHEETS 84-90.





HORIZONTAL SCALE IN FEET
0 10 20

CALCULATED JLS
CHECKED JSL

PLAN SHEET (S.R. 13)
STA. 11+50 TO STA. 16+50

LIC-13-0.00

70
90

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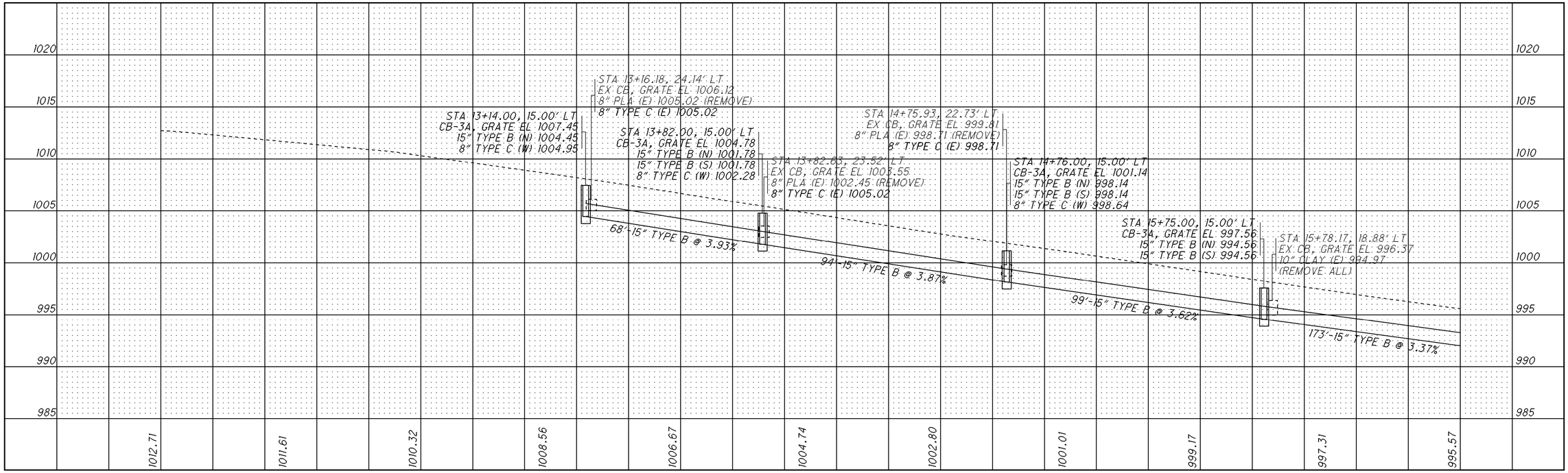
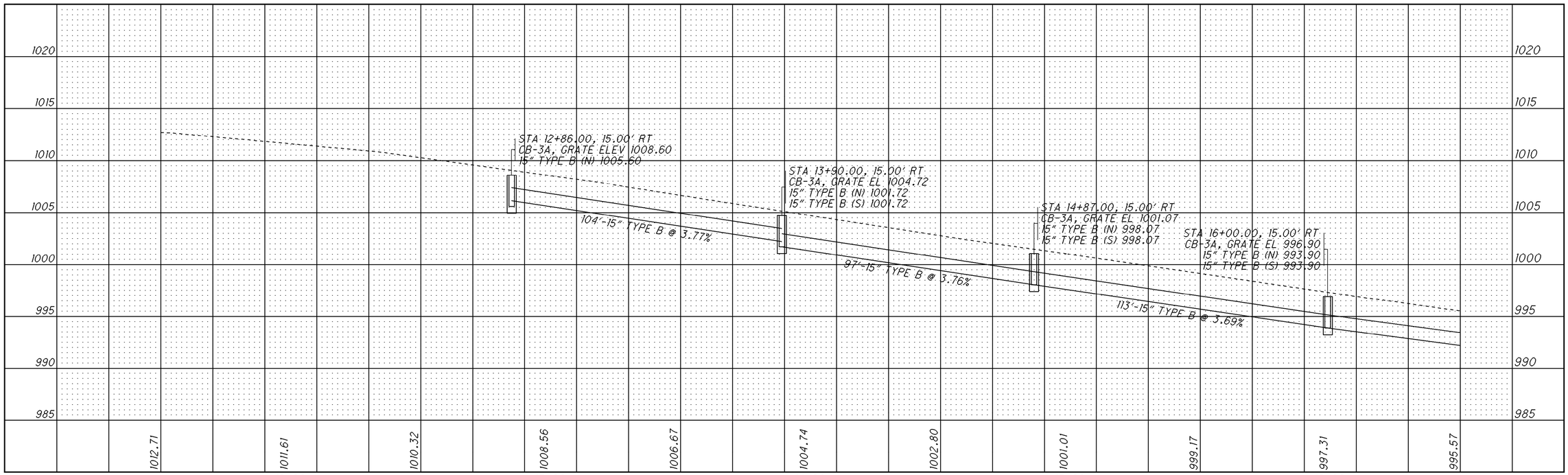
LEFT SIDE PROFILE



RIGHT SIDE PROFILE



CALCULATED JSL
CHECKED JSL

PROFILE SHEET (S.R. 13)
STA. 11+50.00 TO STA. 16+50.00

LIC-13-0.00

71
90

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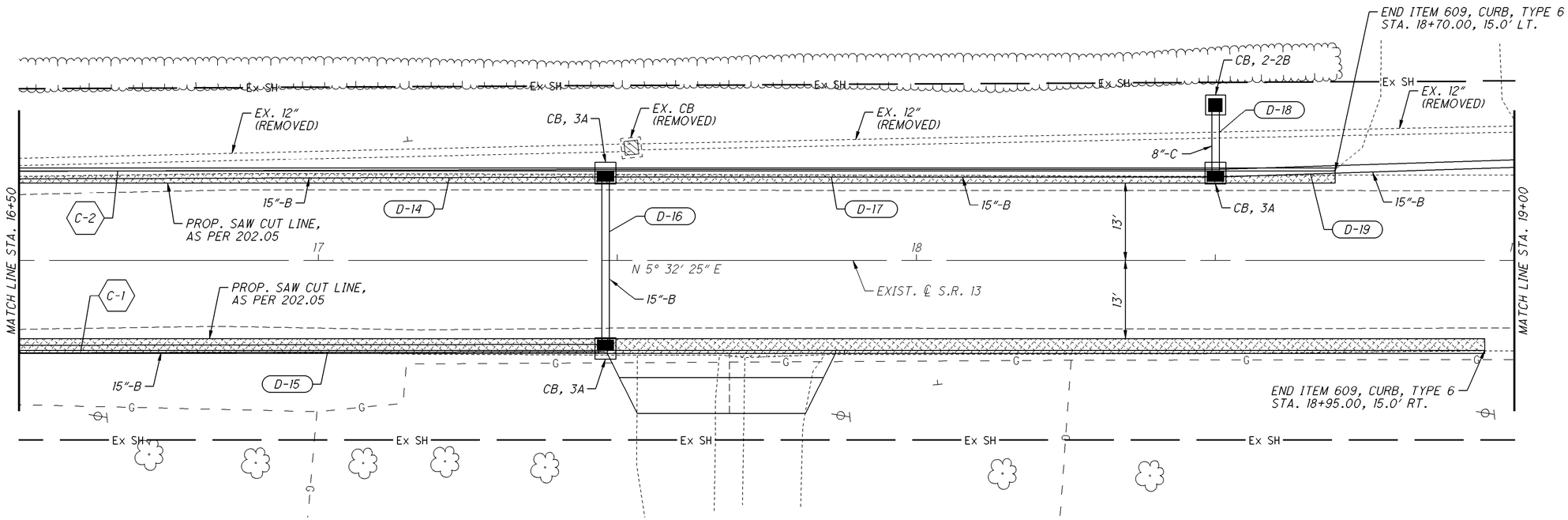
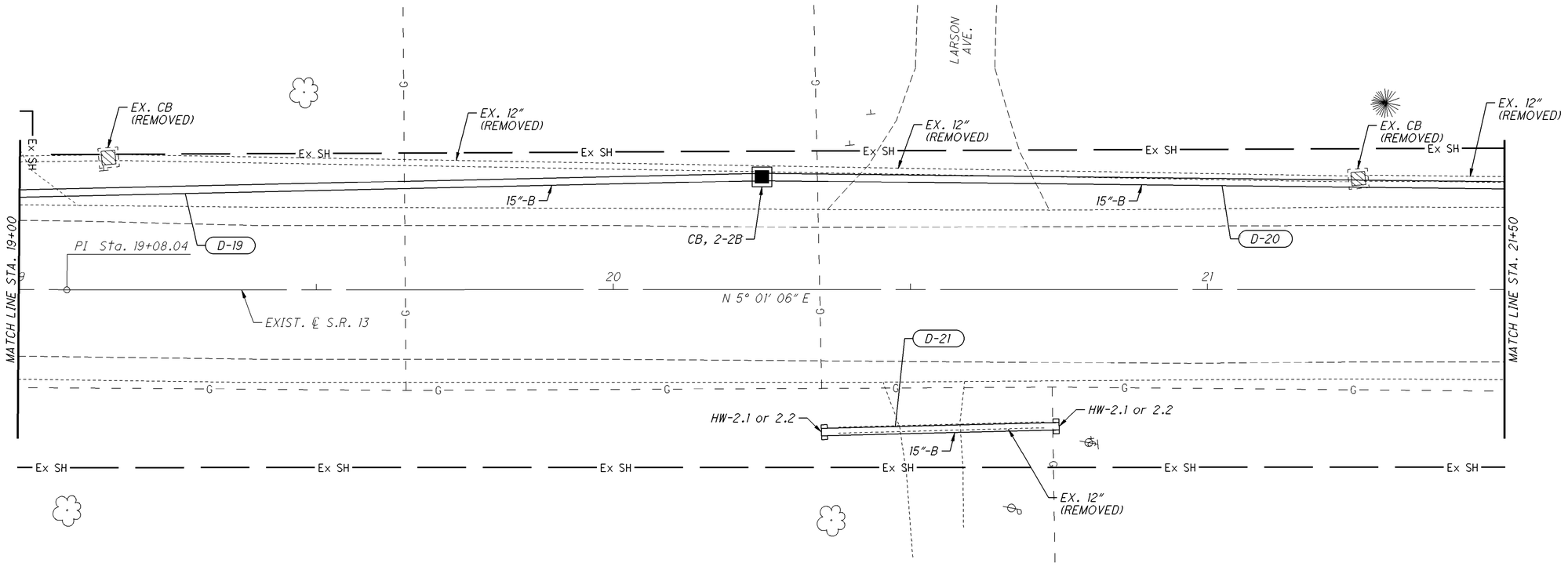
NOTES:
- FOR QUANTITIES, SEE SHEETS 64-65.
- FOR DRIVE DETAILS, SEE SHEETS 84-90.





HORIZONTAL SCALE IN FEET
0 10 20

CALCULATED JLS
CHECKED JSL

PLAN SHEET (S.R. 13)
STA. 16+50 TO STA. 21+50

LIC-13-0.00

72
90

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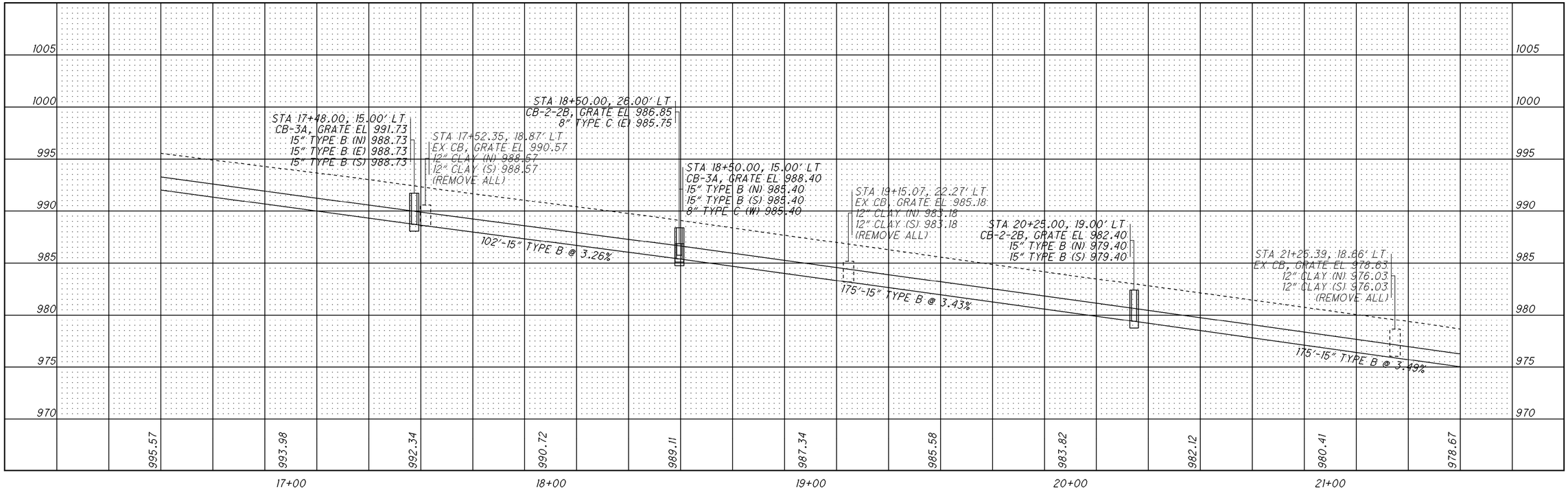
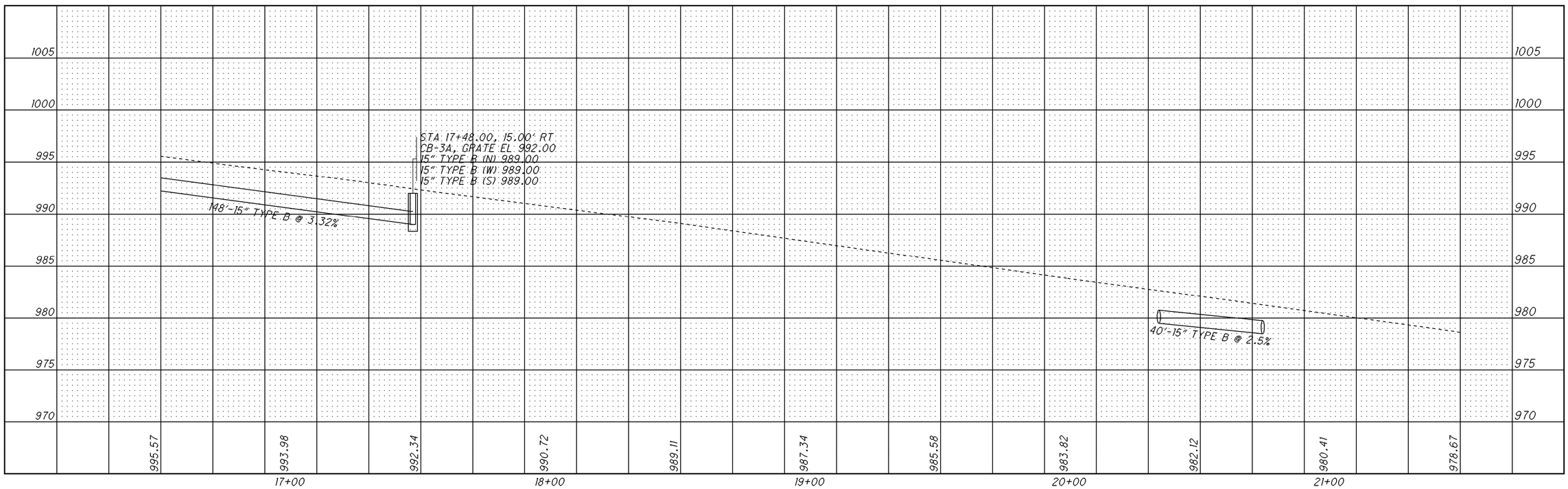
LEFT SIDE PROFILE



RIGHT SIDE PROFILE



CALCULATED JSL
CHECKED JSL

PROFILE SHEET (S.R. 13)
STA. 16+50.00 TO STA. 21+50.00

LIC-13-0.00

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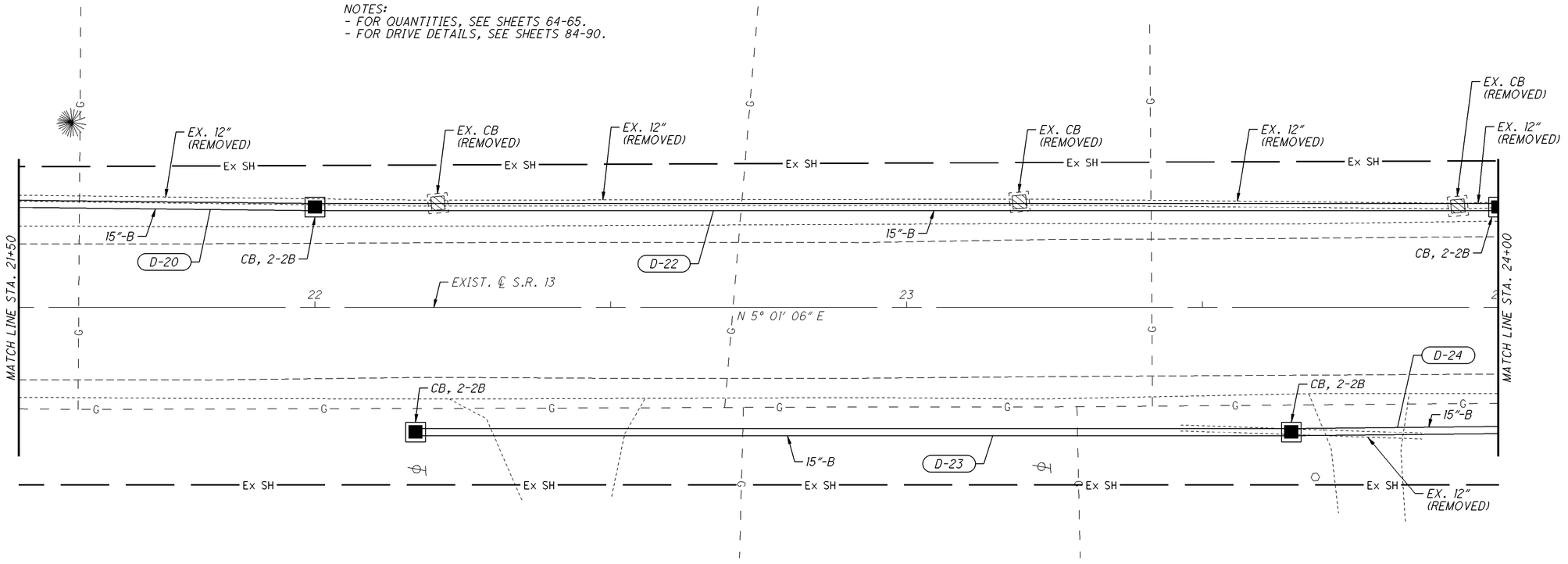
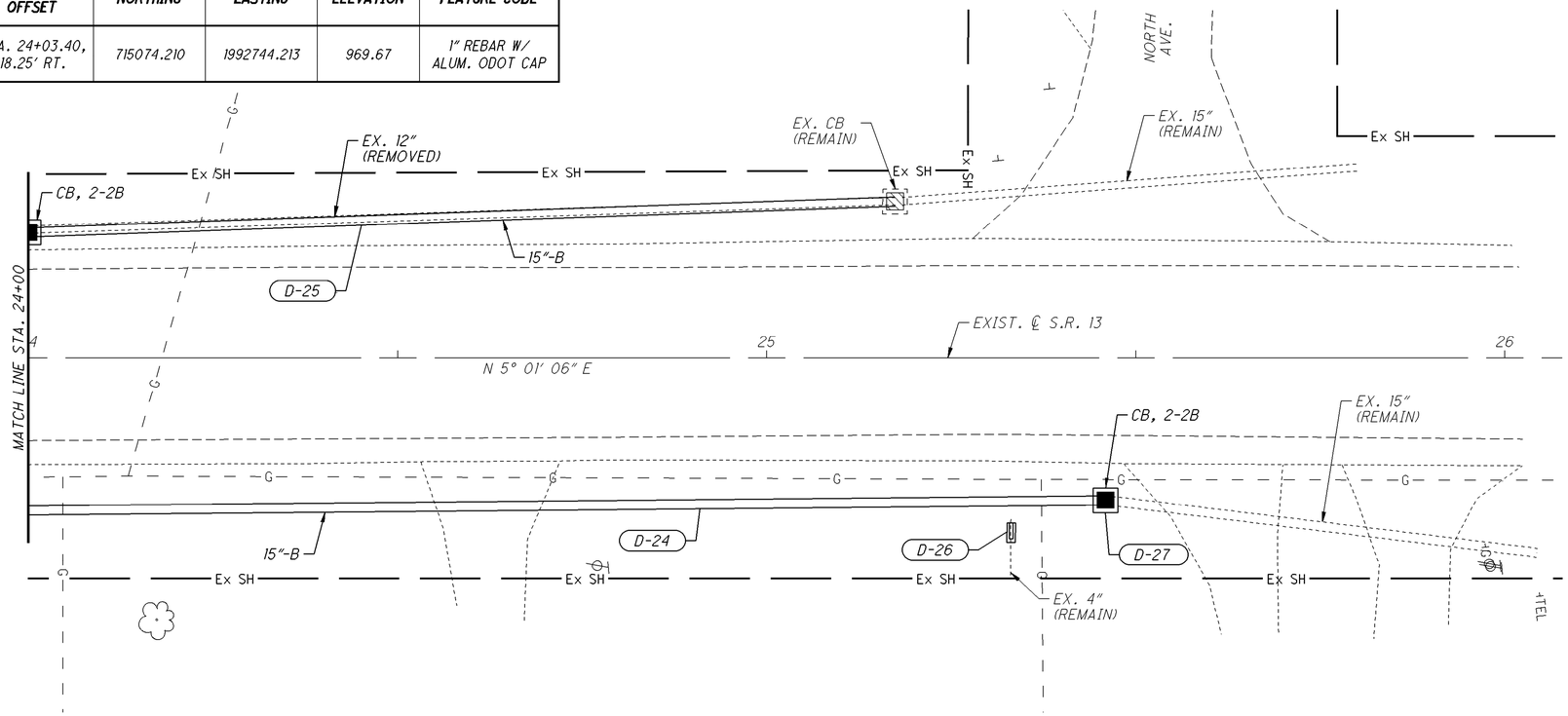
NOTES:
- FOR QUANTITIES, SEE SHEETS 64-65.
- FOR DRIVE DETAILS, SEE SHEETS 84-90.



CN PT	LOCATION	STATION & OFFSET	NORTHING	EASTING	ELEVATION	FEATURE CODE
SV5	S.R. 13	STA. 24+03.40, 18.25' RT.	715074.210	1992744.213	969.67	1" REBAR W/ ALUM. ODOT CAP



HORIZONTAL SCALE IN FEET
0 10 20

CALCULATED JLS
CHECKED JSL

PLAN SHEET (S.R. 13)
STA. 21+50 TO STA. 26+00

LIC-13-0.00

74
90

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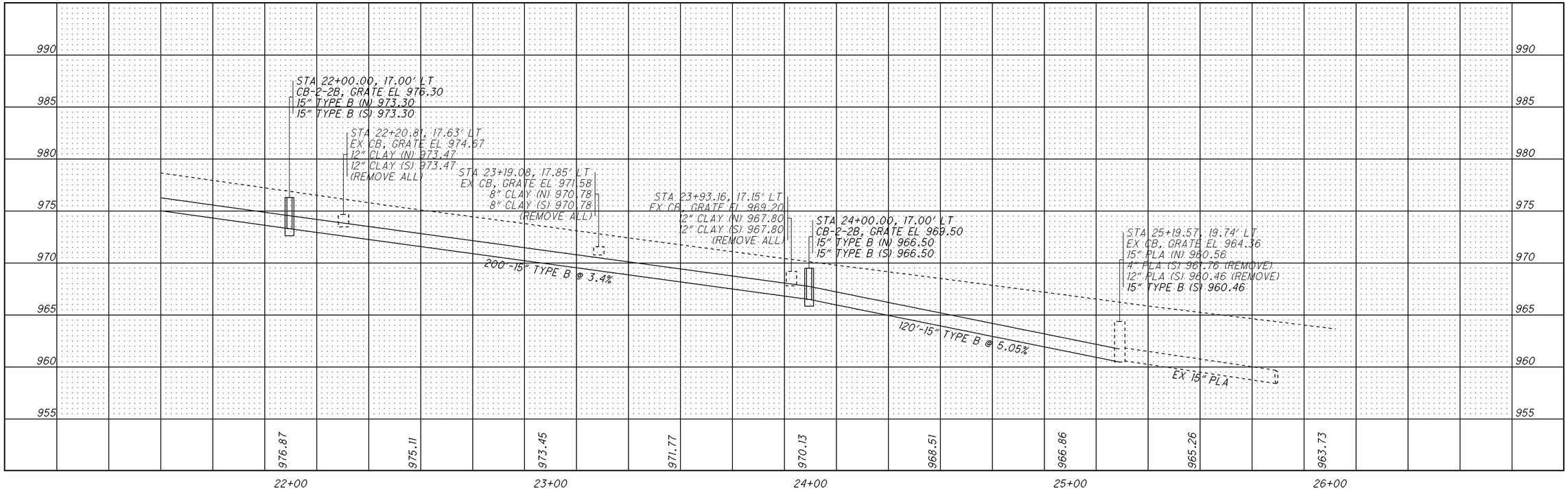
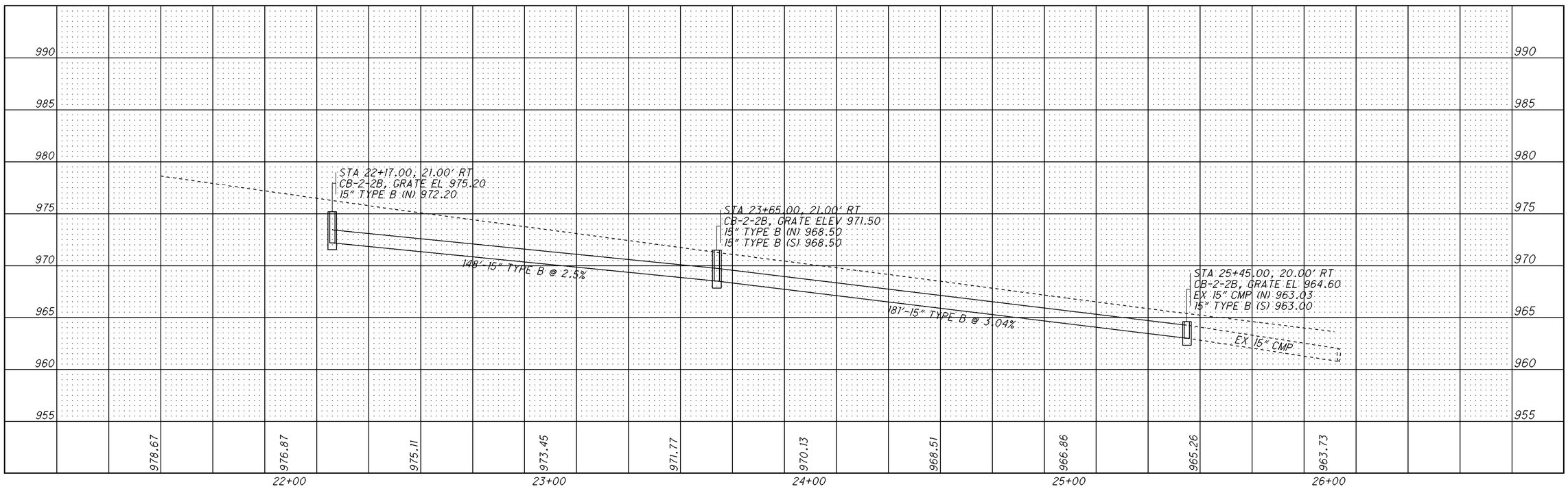
LEFT SIDE PROFILE



RIGHT SIDE PROFILE



CALCULATED JSL
CHECKED JSL

PROFILE SHEET (S.R. 13)
STA. 21+50.00 TO STA. 26+00.00

LIC-13-0.00

75
90

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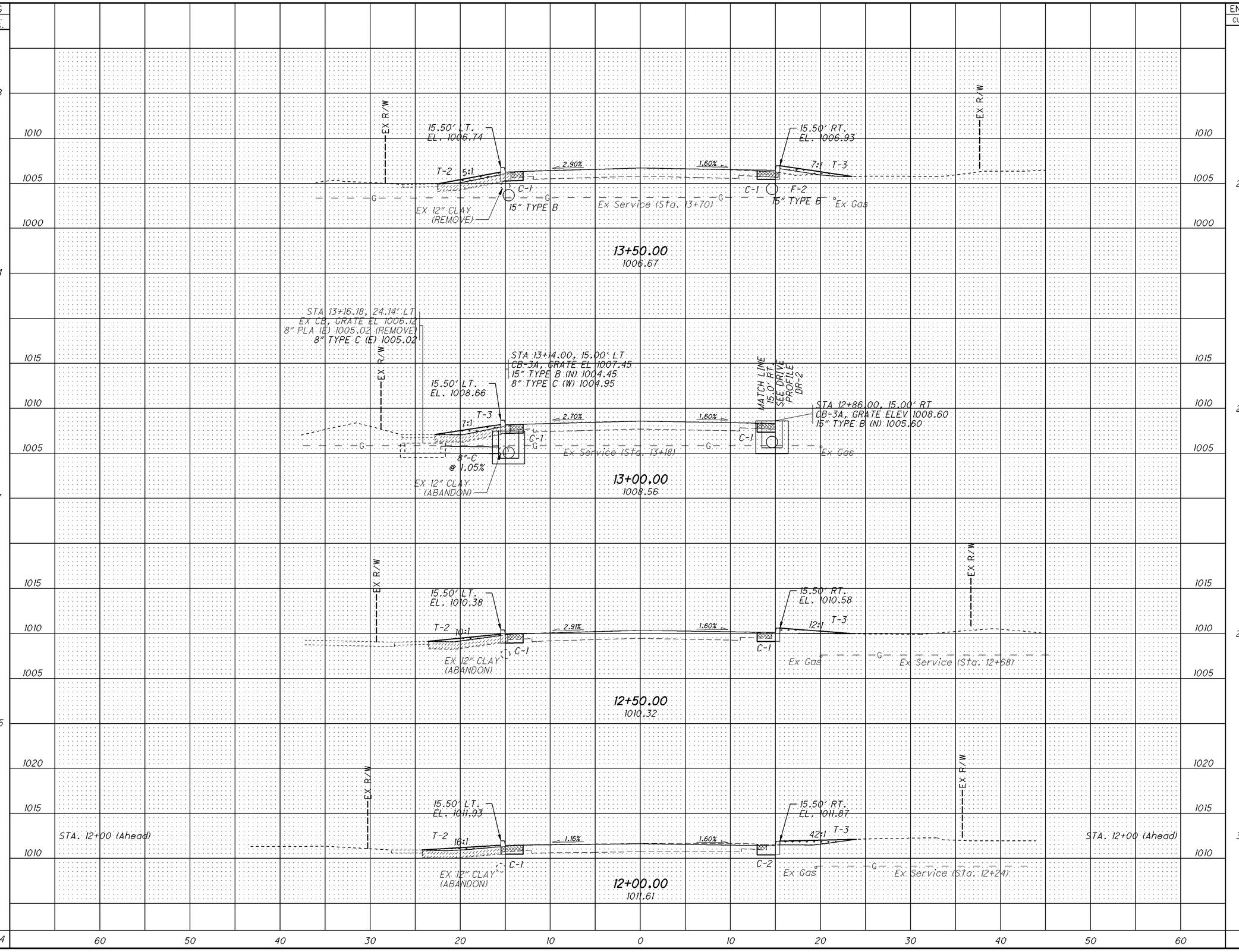
SEEDING	
END WIDTH	SQ. YDS.
21	58
	94
13	
	97
22	
	125
23	
	374



END AREA	
CUT	FILL
2	2
2	0
3	0

VOLUME	
CUT	FILL
4	2 T-5
4	2 T-7
4	0 T-7
2	0 T-5
5	0 T-9
	T-28
17	4

CALCULATED JLS
CHECKED JSL

CROSS SECTIONS (S.R. 13) STA. 12+00.00 TO STA. 13+50.00

LIC-13-0.00

76
90

jlutz1
08-JUL-2016 2:13PM
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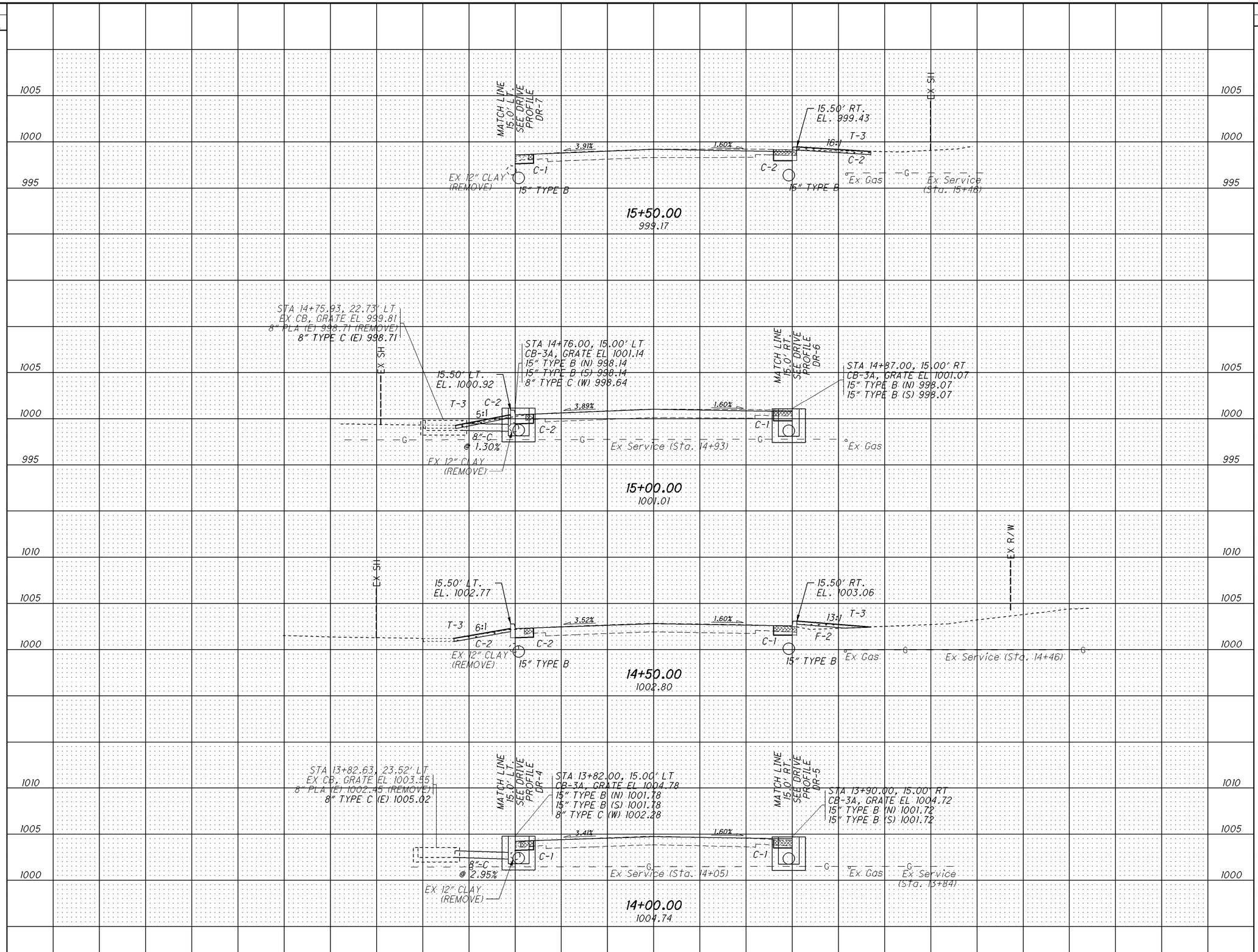
SEEDING	
END WIDTH	SQ. YDS.
13	72
	67
11	
	86
20	
	56
0	
	281



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		9	0 T-6
5	0 T-3		
		9	1 T-6
5	1 T-3		
		9	3 T-8
5	2 T-6		
		6	2 T-6
2	0 T-0		
			T-26
		33	6

CALCULATED JLS
CHECKED JSL

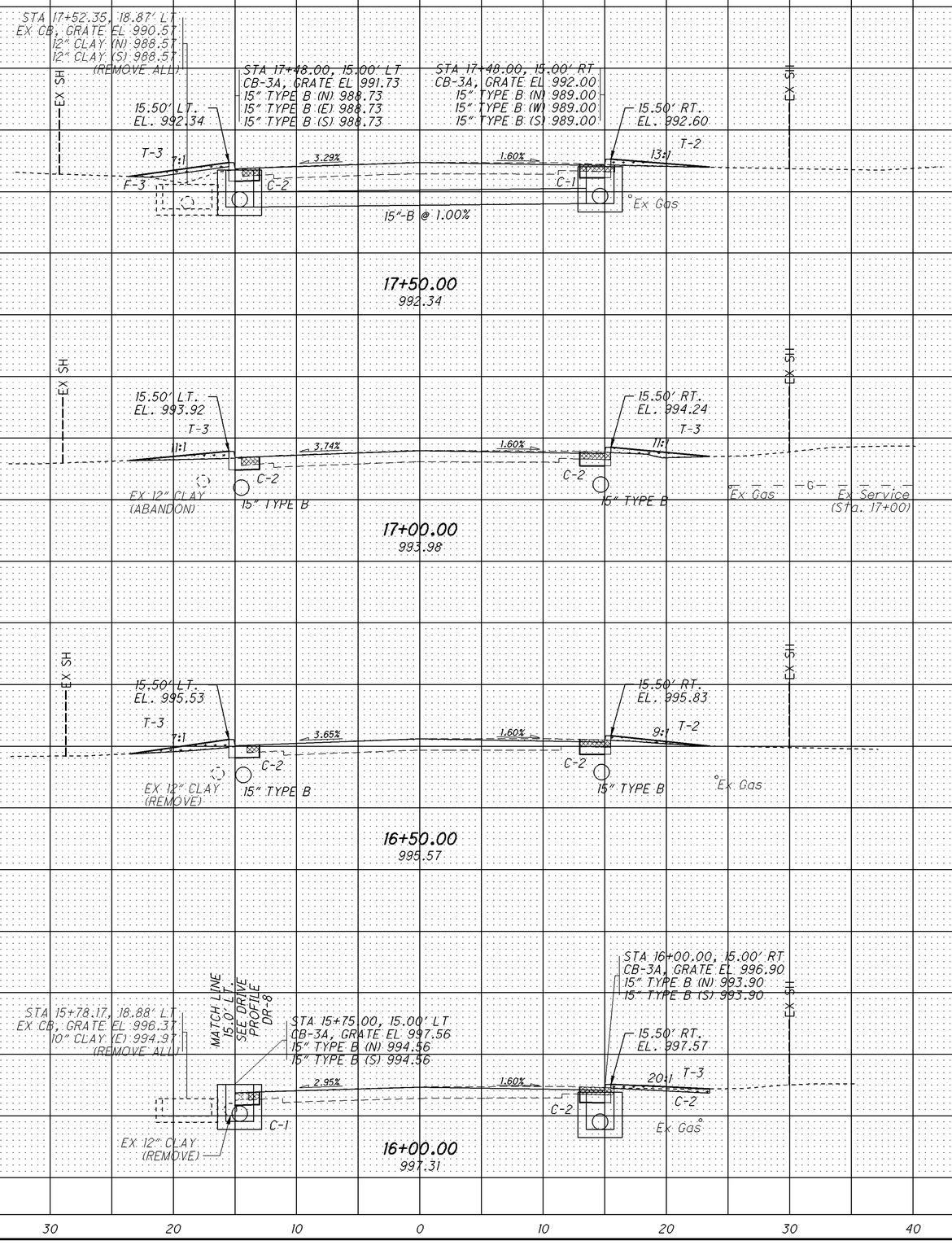
CROSS SECTIONS (S.R. 13)
STA. 14+00.00 TO STA. 15+50.00

LIC-13-0.00

77
90

I:\ProjectData\LIC\92958\Design\Drainage\Sheets\92958_XS002.dgn 08-JUL-2016 2:13PM jlutz1

SEEDING END WIDTH	SEEDING SQ. YDS.
22	125
	122
22	
	122
22	97
13	
	466



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		6	4 T-11
3	3 T-5		
		6	3 T-10
4	0 T-6		
		7	0 T-10
4	0 T-5		
		8	0 T-7
5	0 T-3		
			T-38
		27	7

CALCULATED JLS
CHECKED JSL

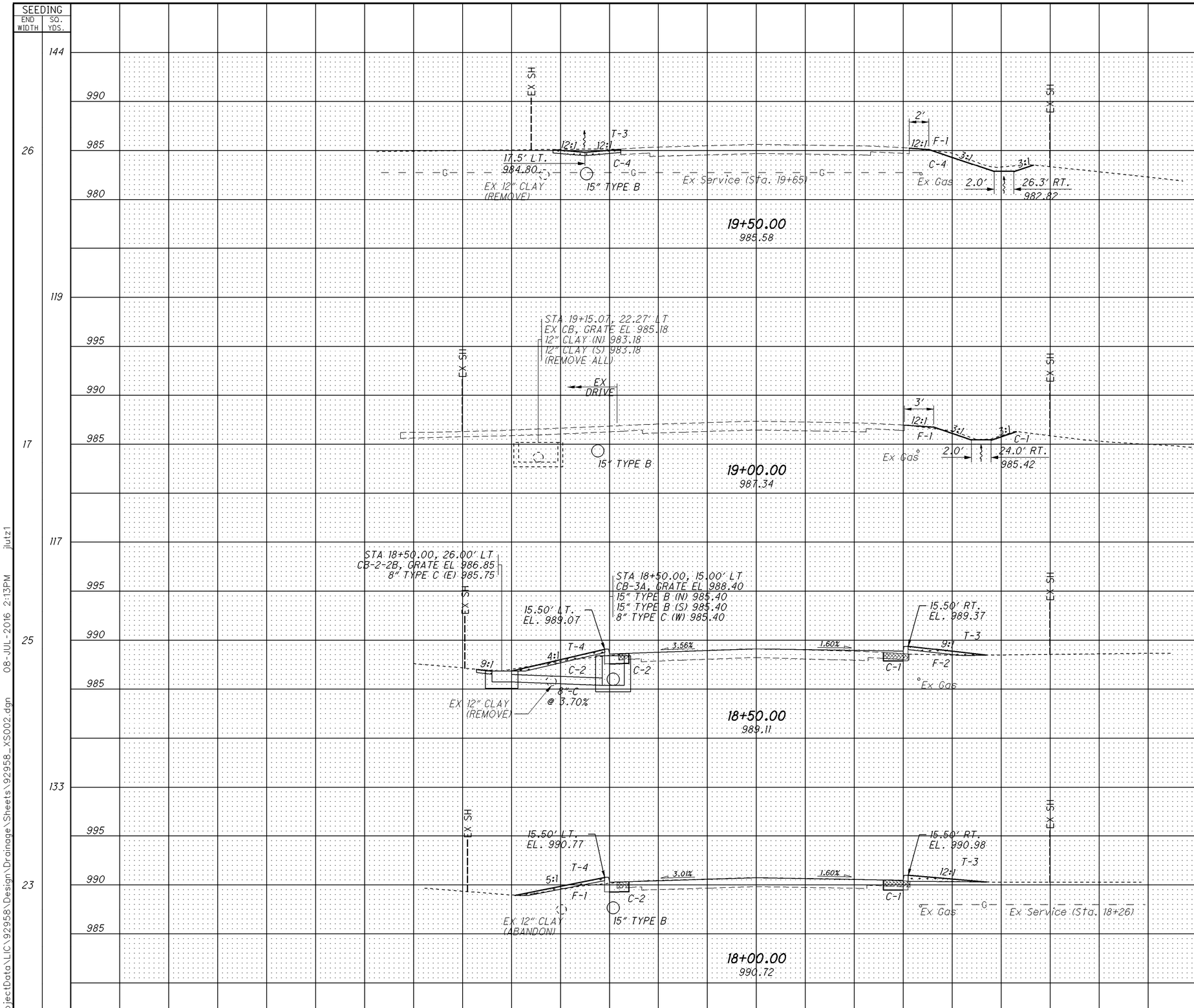
CROSS SECTIONS (S.R. 13) STA. 16+00.00 TO STA. 17+50.00

LIC-13-0.00

78
90

I:\ProjectData\LIC\92958\Design\Drainage\Sheets\92958_XS002.dgn 08-JUL-2016 2:13PM jlutz1

SEEDING END WIDTH	SEEDING SQ. YDS.
26	144
17	119
25	117
23	133
	513



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		14	2 T-6
8	1 T-3		
		8	2 T-3
1	1 T-0		
		6	3 T-6
5	2 T-7		
		7	3 T-13
3	1 T-7		
			T-28
		35	10

CALCULATED JLS
CHECKED JSL

CROSS SECTIONS (S.R. 13) STA. 18+00.00 TO STA. 19+50.00

LIC-13-0.00

79
90

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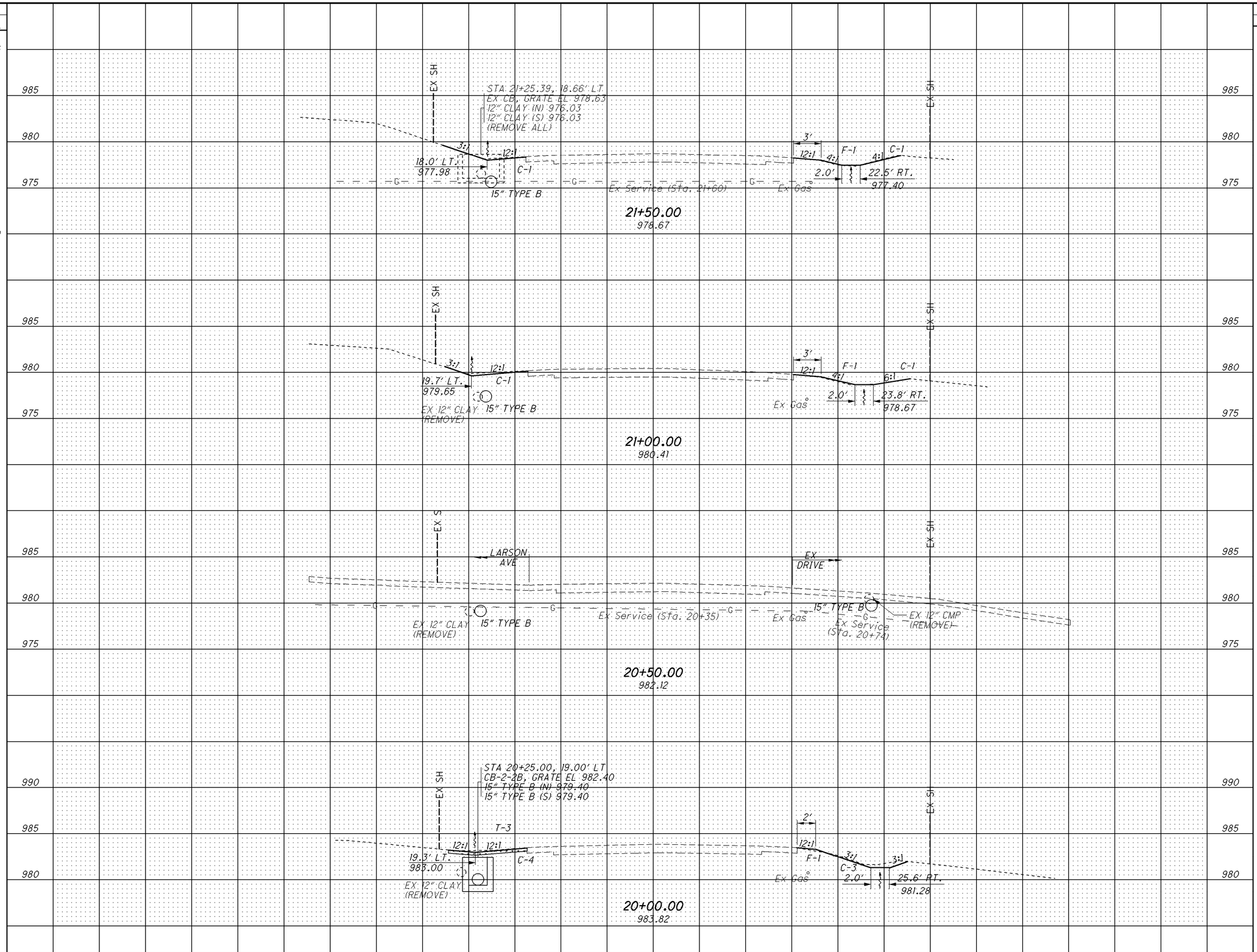
SEEDING	
END WIDTH	SQ. YDS.
27	156
	150
27	
	75
0	
	72
26	
	453



END AREA		VOLUME	
CUT	FILL	CUT	FILL
2	1 T-0	3	2 T-0
		4	2 T-0
2	1 T-0		
		2	1 T-0
0	0 T-0	6	1 T-3
7	1 T-3		
			T-3
		15	6

CALCULATED JLS
CHECKED JSL

CROSS SECTIONS (S.R. 13)
STA. 20+00.00 TO STA. 21+50.00

LIC-13-0.00

80
90

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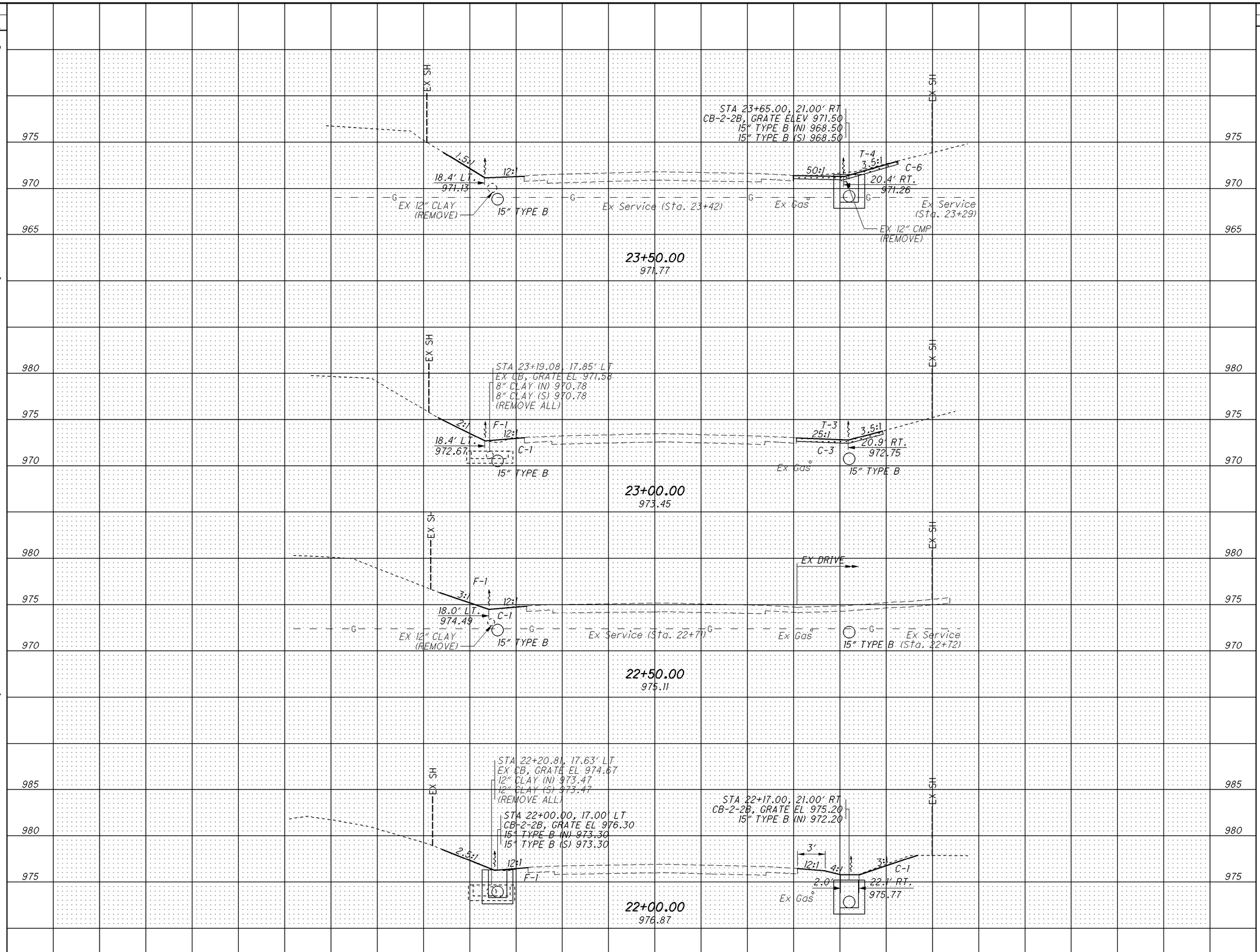
60 50 40 30 20 10 0 10 20 30 40 50 60

SEEDING END WIDTH	SEEDING SQ. YDS.
26	139
25	142
15	111
29	122
	514



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		10	0 T-6
6	0 T-4		
		9	1 T-6
4	1 T-3		
		5	2 T-3
1	1 T-0		
		2	2 T-0
1	1 T-0		
			T-15
		26	5

CALCULATED JLS
CHECKED JSL

CROSS SECTIONS (S.R. 13) STA. 22+00.00 TO STA. 23+50.00

LIC-13-0.00

81
90

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

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SEEDING END WIDTH	SEEDING SQ. YDS.
19	49
	64
27	
	144
25	
	136
24	
	393

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
		4	2 T-4
3	4 T-5		
		5	2 T-6
7	0 T-8		
		15	0 T-14
9	0 T-7		
		13	0 T-9
5	0 T-3		
			T-33
		37	4

CALCULATED JLS
CHECKED JSL

CROSS SECTIONS (S.R. 13)
STA. 24+00.00 TO STA. 25+25.00

LIC-13-0.00

82
90

25+25.00
966.04

STA 25+19.57, 19.74' LT
EX CB, GRATE EL 964.36
15" PLA (N) 960.56
4" PLA (S) 961.76 (REMOVE)
12" PLA (S) 960.46 (REMOVE)
15" TYPE B (S) 960.46

EX SH
F-4
25:1
T-5
5:1
C-3
20.6' RT.
965.55
15" TYPE B
Ex Gas

EX SH
T-3
5:1
12:1
20.9' LT
965.53
C-4
EX 12" CLAY (REMOVE)
15" TYPE B
T-5
25:1
10:1
C-3
21.2' RT.
966.40
15" TYPE B
Ex Gas

25+00.00
966.86

EX SH
T-3
3:1
12:1
18.5' LT.
967.48
C-4
EX 12" CLAY (REMOVE)
15" TYPE B
T-4
3:1
50:1
C-5
19.9' RT.
968.20
15" TYPE B
Ex Gas

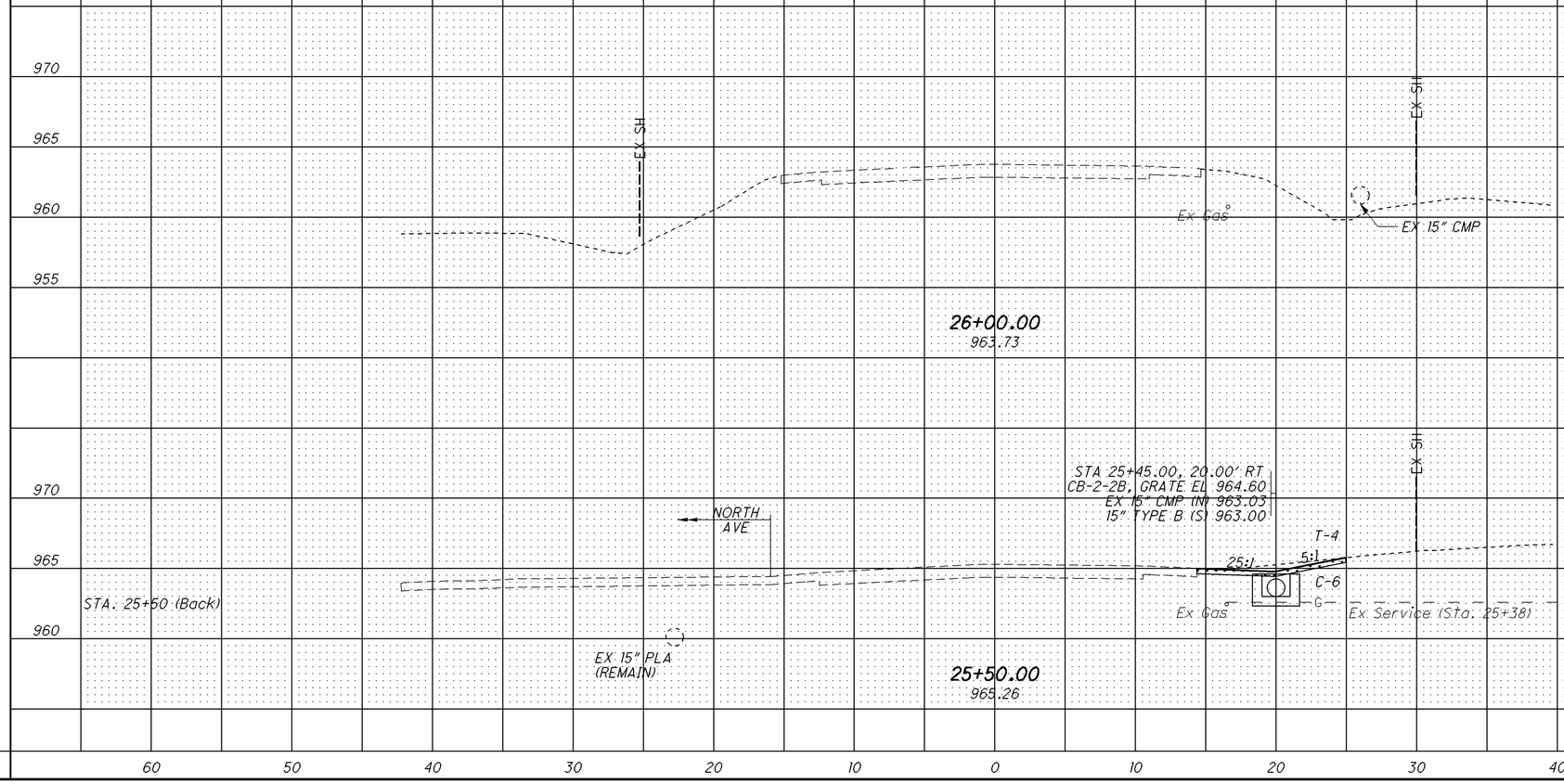
24+50.00
968.51

EX SH
STA 23+93.16, 17.15' LT
EX CB, GRATE EL 969.20
12" CLAY (N) 967.80
12" CLAY (S) 967.80
(REMOVE ALL)
STA 24+00.00, 17.00' LT
CB-2-2B, GRATE EL 969.50
15" TYPE B (N) 966.50
15" TYPE B (S) 966.50
1.5:1
12:1
C-1
Ex Service (Sta. 24+18)
T-3
3.5:1
50:1
C-4
19.0' RT.
969.78
15" TYPE B
Ex Gas
Ex Service (Sta. 24+05)

24+00.00
970.13

SEEDING	
END WIDTH	SQ. YDS.

Sheet No.	Location	203 EXCAVATION (CY)	203 EMBANKMENT (CY)		653 TOPSOIL FURNISHED AND PLACED (CY)		659 SEEDING AND MULCHING, CLASS 1 (SY)
	S.R. 310						
76	Sta. 12+00 to Sta. 13+50	17	4		28		374
77	Sta. 14+00 to Sta. 15+50	33	6		26		281
78	Sta. 16+00 to Sta. 17+50	27	7		38		466
79	Sta. 18+00 to Sta. 19+50	35	10		28		513
80	Sta. 20+00 to Sta. 21+50	15	6		3		453
81	Sta. 22+00 to Sta. 23+50	26	5		15		514
82	Sta. 24+00 to Sta. 25+25	37	4		33		393
83	Sta. 25+50 to Sta. 26+00	0	0		0		0
Totals (Carried to Location 1b Sub-Summary)		**190**	**42**		**171**		**2,994**



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
JLS	JSL

CROSS SECTIONS (S.R. 13)
STA. 25+50.00 TO STA. 26+00.00

LIC-13-0.00

83
90

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Reference No.	Sheet No.	Location	Side	Description	Exist. Surface	Apron Area (Calculated By Computer)	Treated Area (Calculated By Computer)	Total Area (Apron Area + Treated Area)	202		203	204	301	304	407	441	608
									PAVEMENT REMOVED, ASPHALT	WALK REMOVED	4.00" EMBANKMENT	SUBGRADE COMPACTION	4.75" ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)	8.00" AGGREGATE BASE	TACK COAT, @ 0.040 GAL./SQ. YD.	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), (DRIVEWAYS)	6" CONCRETE WALK
			Lt./Rt.			Sq. Yd.	Sq. Yd.	Sq. Yd.	SY	SF	CY	SY	CY	CY	GAL	CY	SF
		S.R. 13															
DR-1	85	Sta. 12+61.4	Lt.	Residential	Asph./Agg.	14.4	3.1	17.5	14.5	89.1	1.7	14.4	1.9	0.5	0.6	0.5	89.1
DR-2	85	Sta. 13+03.1	Rt.	Residential	Aggregate	11.4	13.8	25.2				11.4	1.6	1.9	0.5	0.4	
DR-3	85	Sta. 13+33.9	Lt.	Residential	Asph./Agg.	17.3	4.1	21.4	18.9	112.2	2.1	17.3	2.3	0.6	0.7	0.7	112.2
DR-4	85	Sta. 13+97.2	Lt.	Residential	Asph./Agg.	11.7	2.5	14.2	13.1	93.3	1.5	11.7	1.6	0.4	0.5	0.5	93.3
DR-5	85	Sta. 14+06.8	Rt.	Residential	Aggregate	12.8	15.9	28.7				12.8	1.7	2.1	0.6	0.5	
DR-6	85	Sta. 15+01.3	Rt.	Residential	Aggregate	9.6	11.1	20.7				9.6	1.3	1.5	0.4	0.4	
DR-7	86	Sta. 15+54.2	Lt.	Residential	Asph./Agg.	9.9	6.7	16.6	12.4	138.4	1.4	9.9	1.4	0.9	0.4	0.4	164.7
DR-8	86	Sta. 15+97.9	Lt.	Commercial	Asphalt	29.8	0.0	29.8	36.9			29.8	4.0		1.2	1.1	
DR-9	86	Sta. 16+11.2	Rt.	Residential	Aggregate	7.9	8.5	16.4				7.9	1.1	1.2	0.4	0.3	
DR-10	86	Sta. 17+59.9	Rt.	Residential	Aggregate	8.7	11.4	20.1				8.7	1.2	1.6	0.4	0.4	
DR-11	86	Sta. 17+76.3	Rt.	Residential	Aggregate	7.5	9.5	17.0				7.5	1.0	1.3	0.3	0.3	
Totals (Carried to Location 1b Sub- Summary)									96	433	7	141	20	12	6	6	460

DRIVE CALCULATIONS (JACKSONTOWN)

CALCULATED JLS
CHECKED JSL

LIC-13-0.00

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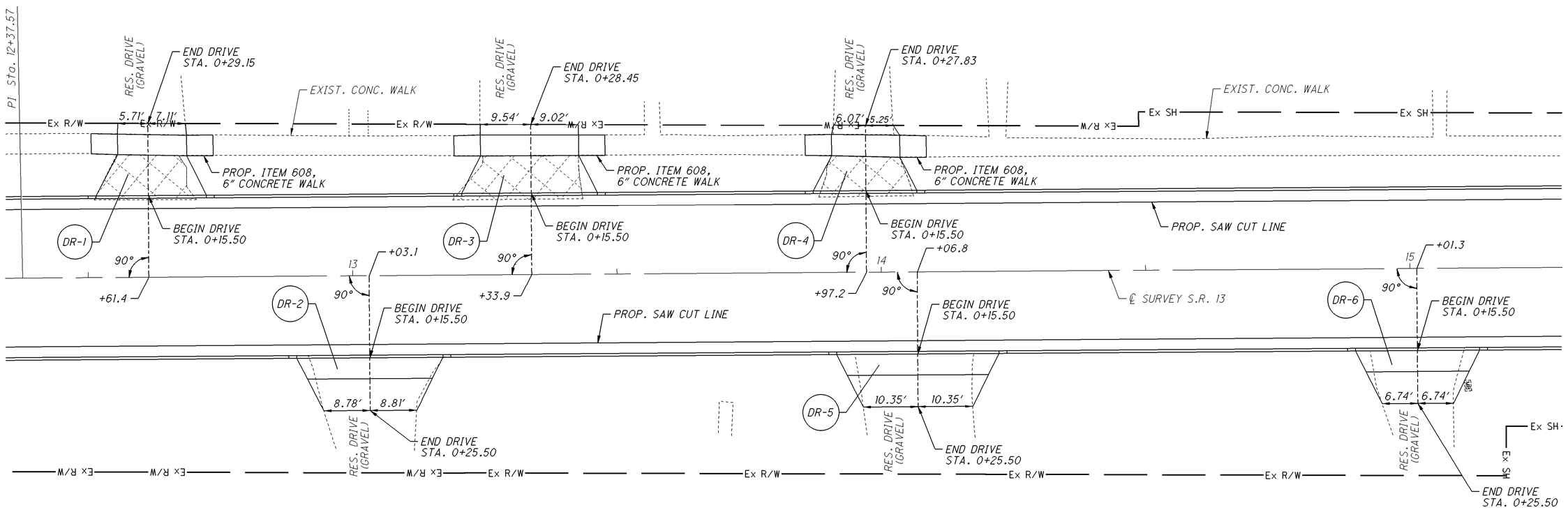

FOR DRIVE QUANTITIES, SEE SHEET 84.
FOR ITEM 608, 6" CONCRETE WALK DETAILS, SEE SHEET 87.

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED JLS
CHECKED JSL

DRIVE DETAIL SHEET
STA. 12+61.4 TO STA. 15+01.3

LIC-13-0.00

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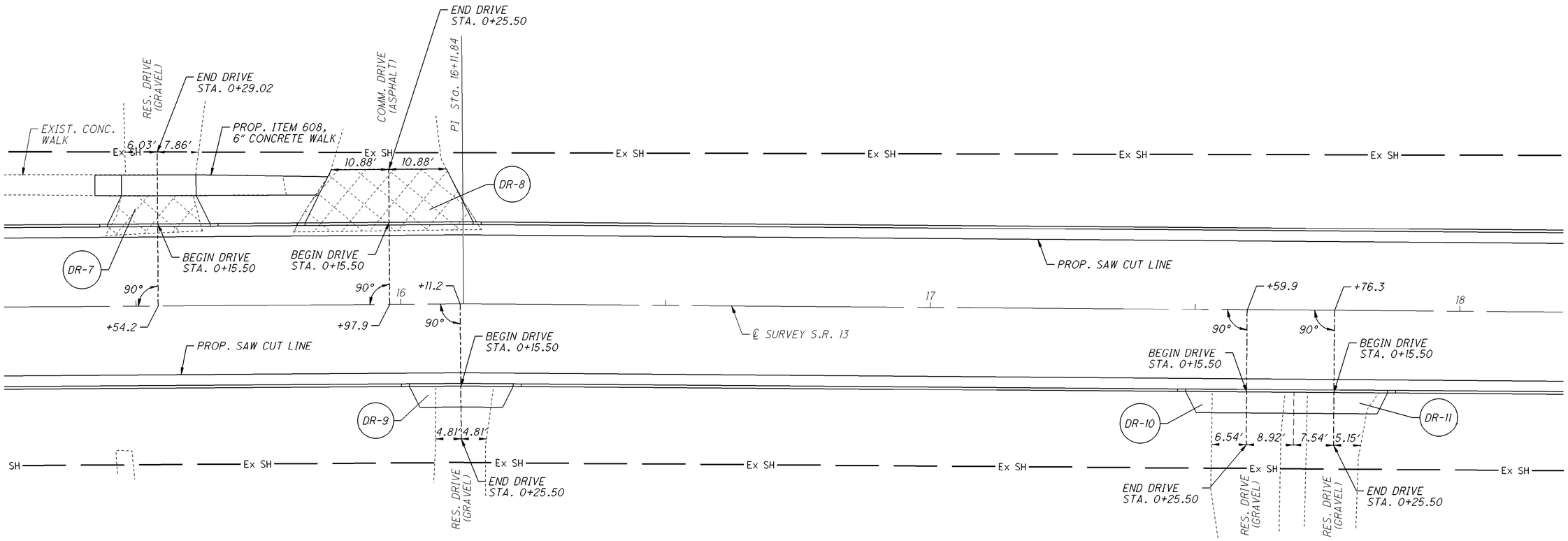

FOR DRIVE QUANTITIES, SEE SHEET 84.
FOR ITEM 608, 6" CONCRETE WALK DETAILS, SEE SHEET 87.

N

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED JLS
CHECKED JSL

DRIVE DETAIL SHEET
STA. 15+54.2 TO STA. 17+76.3

LIC-13-0.00

86
90

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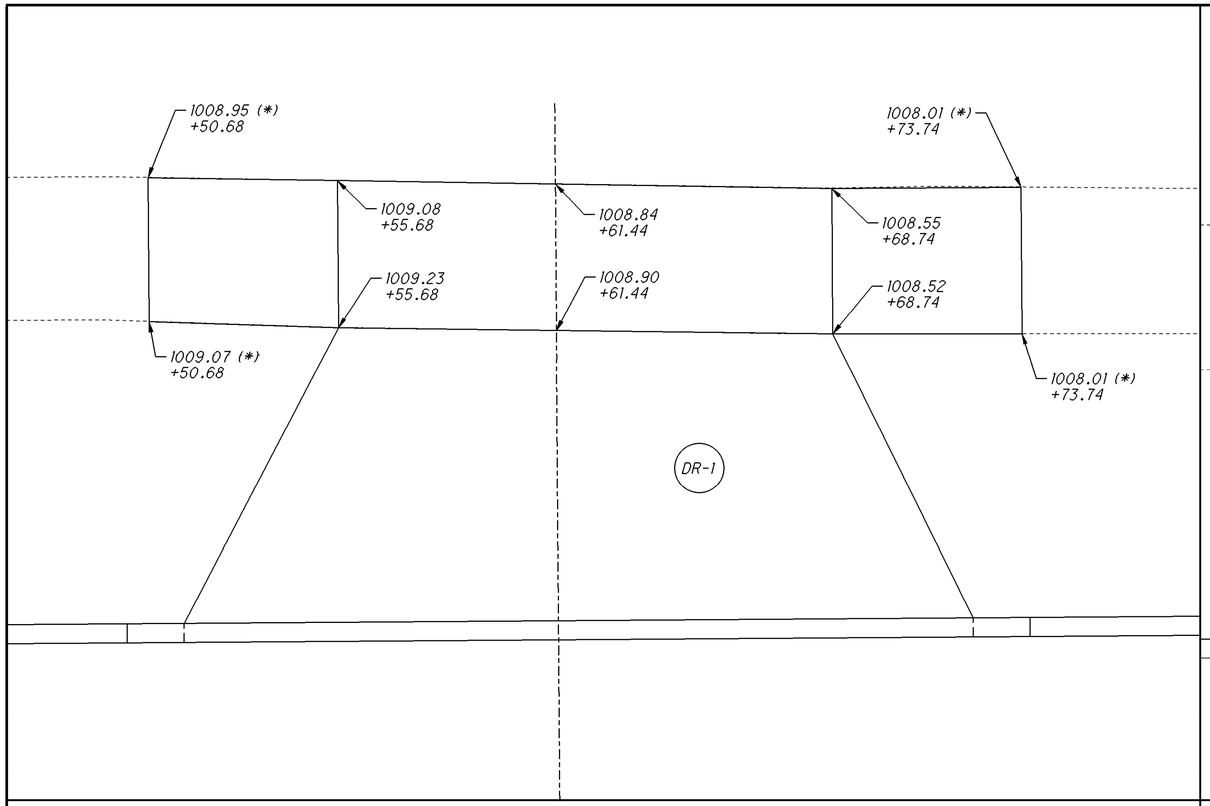
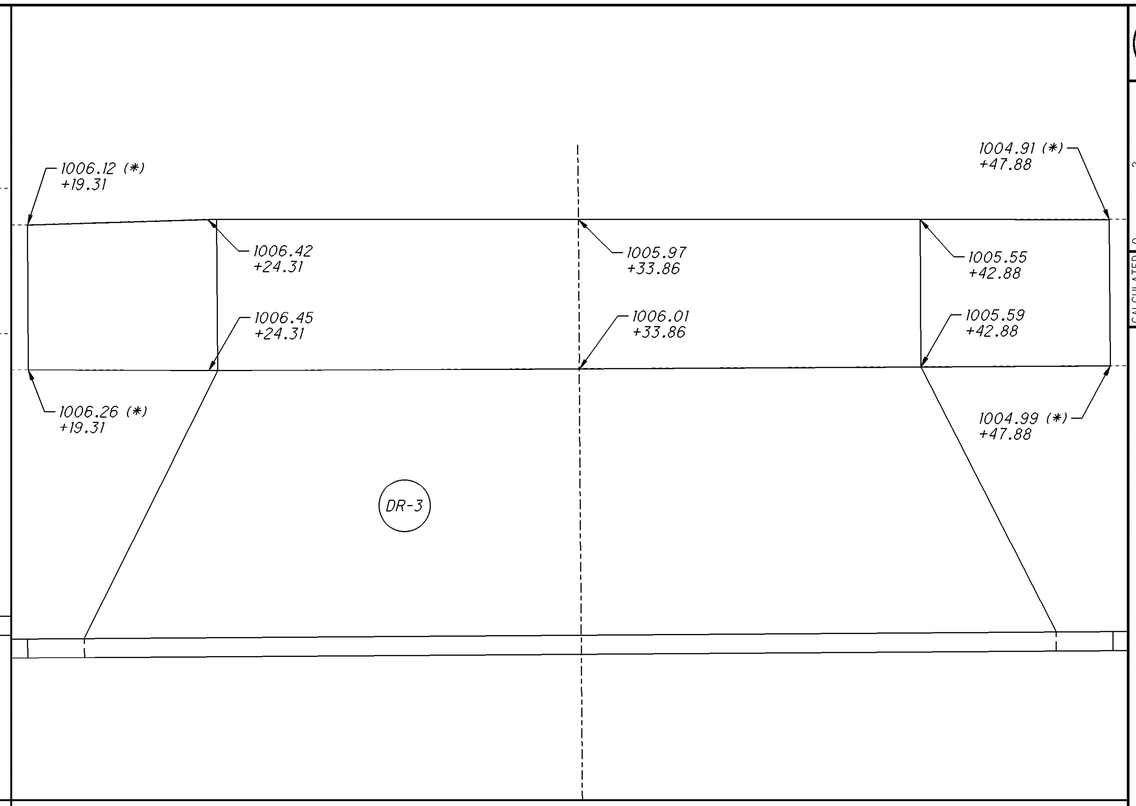
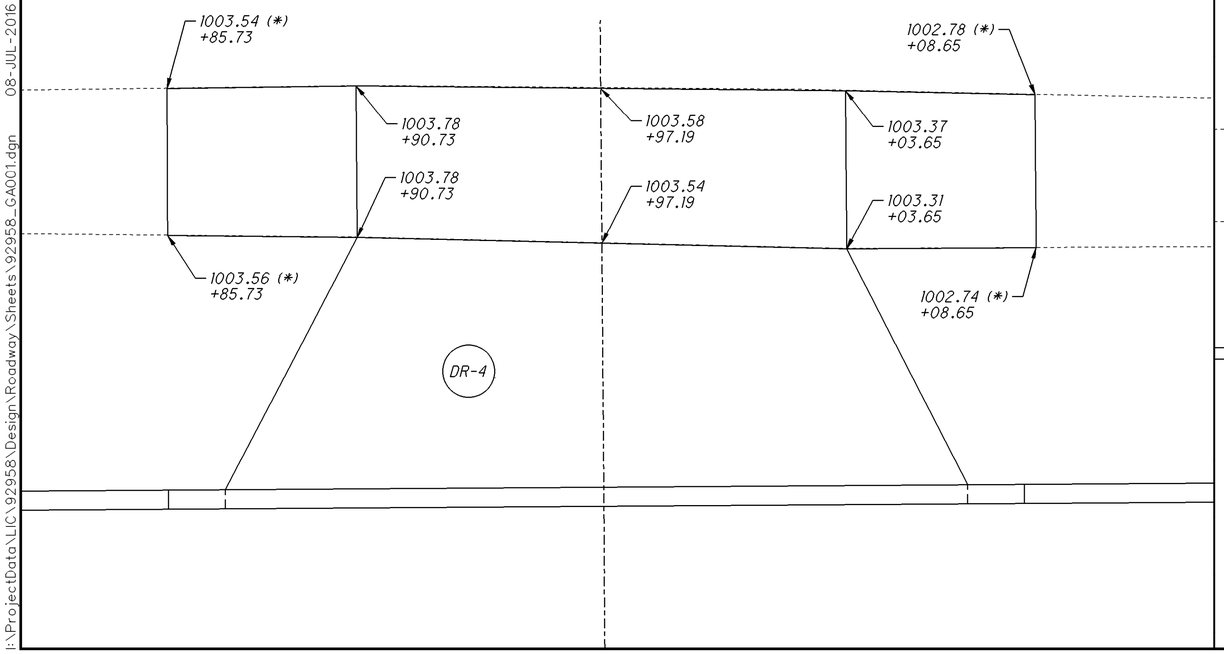
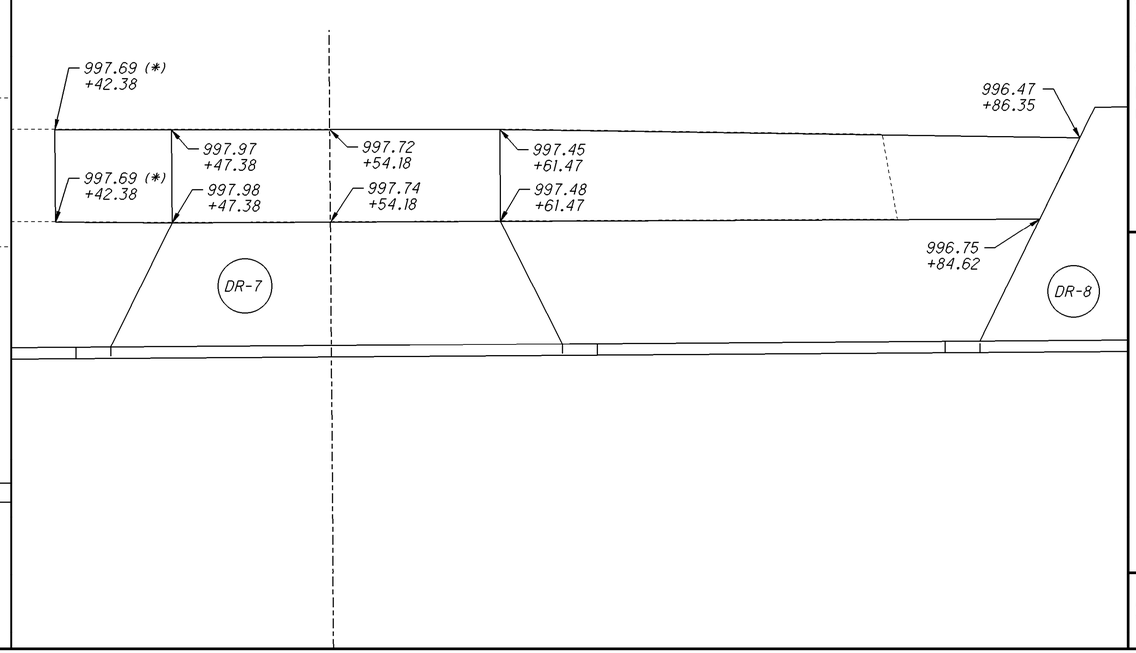




(*) MEET EXISTING WALK ELEVATION.
FOR ITEM 608, 6" CONCRETE WALK QUANTITIES, SEE SHEET 84.





HORIZONTAL SCALE IN FEET
0 2 4

CALCULATED JLS
CHECKED JSL

PROPOSED SIDEWALK DETAIL SHEET AT PROPOSED DRIVES

LIC-13-0.00

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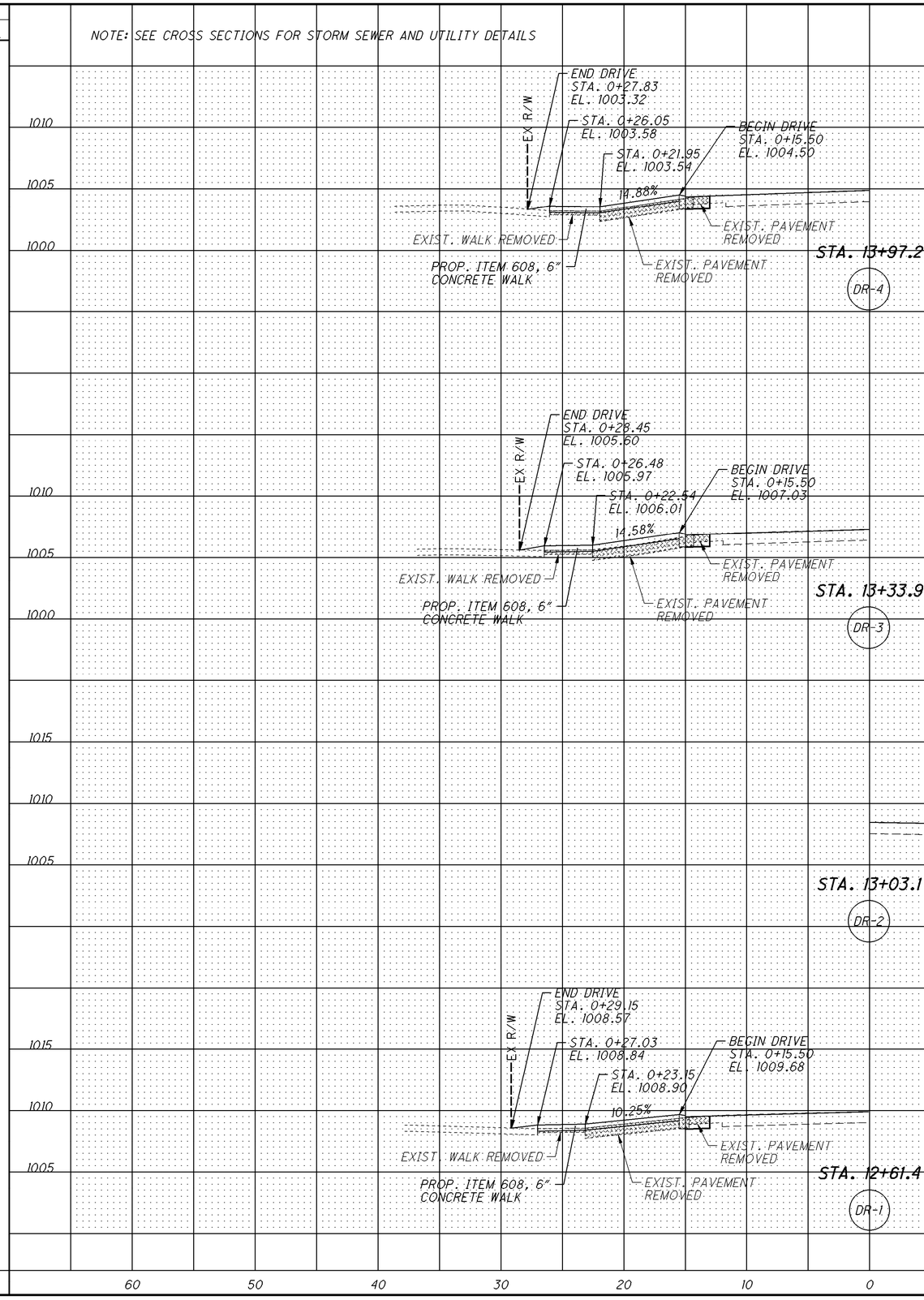
SEEDING	
END WIDTH	SQ. YDS.

NOTE: SEE CROSS SECTIONS FOR STORM SEWER AND UTILITY DETAILS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JLS
CHECKED JSL

DRIVE PROFILES (S.R. 13)
STA. 12+61.40 TO STA. 13+97.20

LIC-13-0.00

88
90

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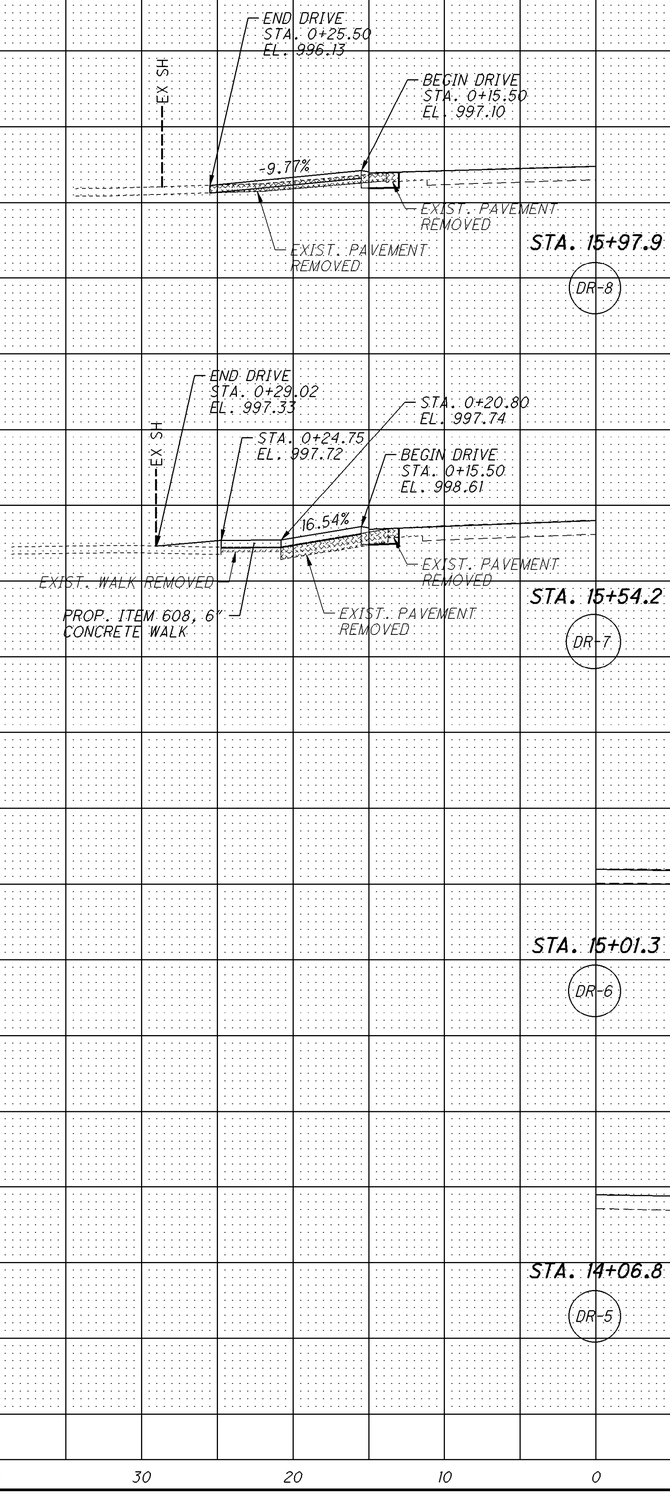
SEEDING	
END WIDTH	SQ. YDS.

NOTE: SEE CROSS SECTIONS FOR STORM SEWER AND UTILITY DETAILS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JLS
CHECKED JSL



DRIVE PROFILES (S.R. 13)
STA. 12+06.80 TO STA. 15+97.90

LIC-13-0.00

89
90

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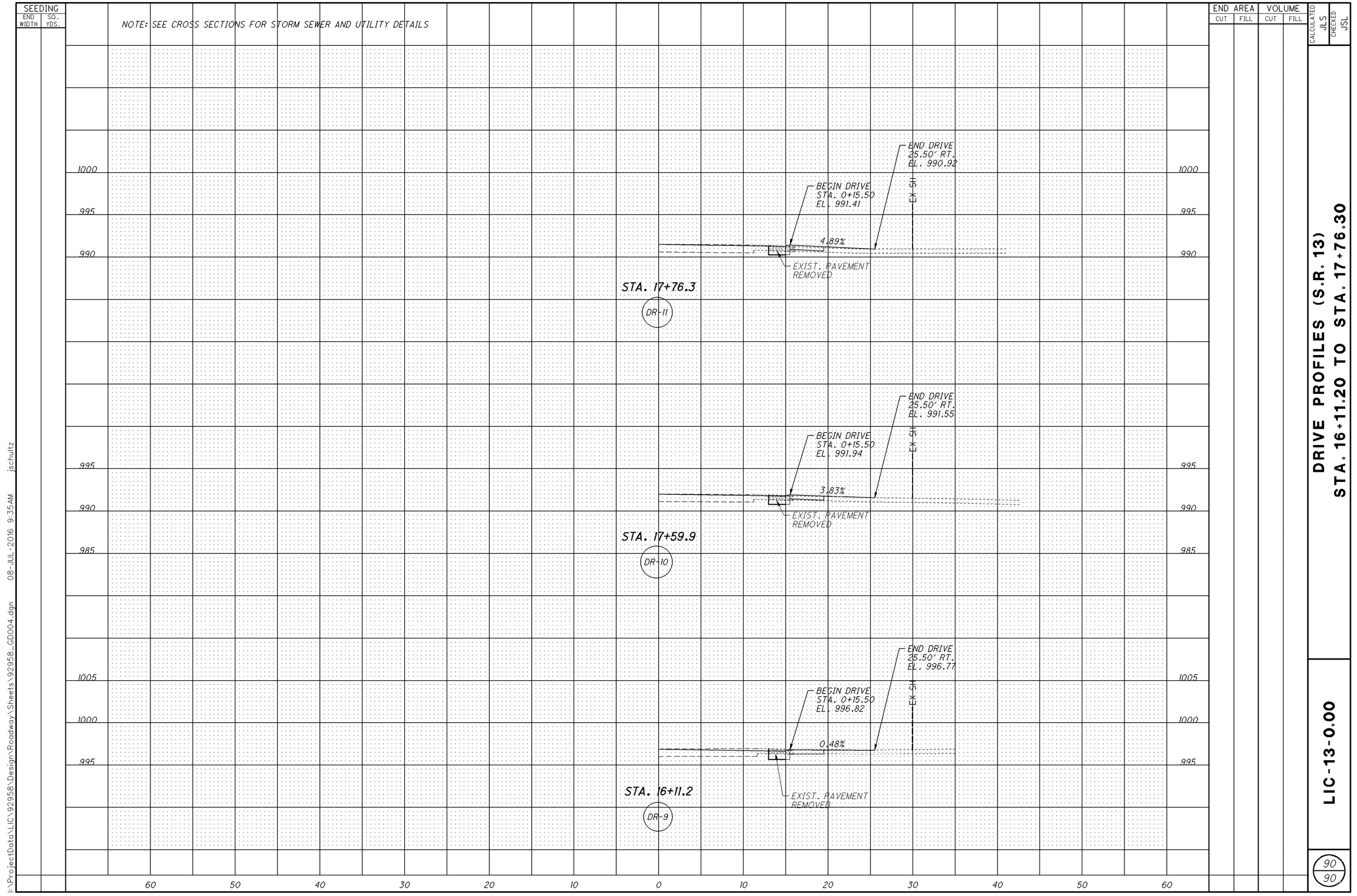
SEEDING	
END WIDTH	SQ. YDS.

NOTE: SEE CROSS SECTIONS FOR STORM SEWER AND UTILITY DETAILS

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED JLS

CHECKED JSL



DRIVE PROFILES (S.R. 13)
STA. 16+11.20 TO STA. 17+76.30

LIC-13-0.00

90
90

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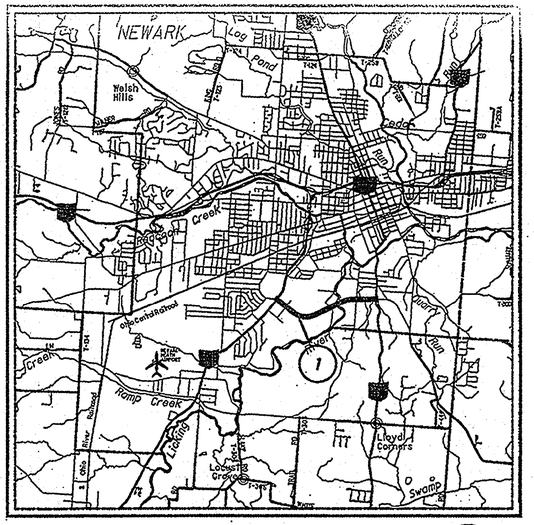
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

LIC-CR 311-0.000
(HOPEWELL DRIVE)

CITY OF HEATH, LICKING COUNTY

PART 2



LOCATION MAP

LATITUDE: 40°02'08" LONGITUDE: 82°25'07"

PORTION TO BE IMPROVED

DESIGN DESIGNATION — HOPEWELL DRIVE

DESIGN FUNCTIONAL CLASSIFICATION: — URBAN COLLECTOR

LEGAL SPEED — 50 MPH

DESIGN EXCEPTIONS

NONE

INDEX OF SHEETS:

TITLE SHEET	1
GENERAL NOTES	2-4
GENERAL SUMMARY	5
ASPHALT CONCRETE DATA	6
EXTRA AREA DATA	7
TRAFFIC CONTROL	8-15
PAVEMENT MARKING SUBSUMMARY	16-20
SIGNING SUBSUMMARY	21-22
HEATH STANDARD DRAWINGS	

LOC	COUNTY	ROUTE	PROJECT TERMINI		NET LENGTH
			BEGIN	END	MILES
1	LIC	CR 311	0.00	1.48	1.48

PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING AND RELATED WORK ON HOPEWELL DRIVE LOCATED INSIDE THE CITY OF HEATH IN LICKING COUNTY.

PROJECT EARTH DISTURBED AREA:=
N/A *MAINTENANCE PROJECT*

ESTIMATED CONTRACTOR EARTH DISTURBED AREA:=
N/A *MAINTENANCE PROJECT*

NOTICE OF INTENT EARTH DISTURBED AREA:=
N/A *MAINTENANCE PROJECT*

2016 SPECIFICATIONS

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

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: **1-800-929-0988**

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 PLANS AND ESTIMATES.

APPROVED _____ CITY OF HEATH
DATE 5/18/16 MAYOR

APPROVED _____ CITY OF HEATH
DATE 5-18-16 CHIEF, BUILDING AND ZONING

APPROVED _____
DATE 7/11/16 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 7-20-16 DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS
SEE PART 1	SPECIAL PROVISIONS

ENGINEERS SEAL:

STATE OF OHIO
Susan J. Derwacter
E-70349
Registered
PROFESSIONAL ENGINEER

SIGNED: Susan J. Derwacter
DATE: 05-18-2016

PLAN PREPARED BY:

Jobes Henderson & ASSOCIATES

Breaking Ground | Breaking Boundaries

Tel: 740.344.5451
Fax: 740.344.5746

59 Grant Street
Newark, Ohio 43055

www.jobeshenderson.com

FEDERAL PROJECT NO. E120890

PID NO. 92958

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

LIC-CR 311-0.000 (HOPEWELL DR)

1 / 22

5/13/2016 — 1:40:39 PM — cslyh — M:\2401-138 Hopewell Paving\8695018\Roadway\Sheets\8695018T001.dgn

SPECIFICATIONS

THE CONSTRUCTION AND MATERIALS SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING ALL SUPPLEMENTS THERETO, AS WELL AS THE MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION SHALL GOVERN THE MATERIALS AND WORKMANSHIP TO COMPLETE THE IMPROVEMENTS SET FORTH IN THESE PLANS.

UTILITY OWNERS

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THE PROJECT:

WATER:
CITY OF HEATH
WATER DISTRIBUTION
60 DORSEY MILL RD. EAST
HEATH, OH 43056
(740) 522-6282

SANITARY SEWER:
CITY OF HEATH
SEWAGE TREATMENT PLANT
719 LICKING VIEW DR.
HEATH, OH 43056
(740) 522-4802

WATER:
CITY OF HEATH
WATER TREATMENT
70 DORSEY MILL RD. EAST
HEATH, OH 43056
(740) 522-1677

STORM
CITY OF HEATH
STREET DEPARTMENT
550 DOG LEG ROAD
HEATH, OH 43056
(740) 522-4858

GAS:
THE ENERGY COOPERATIVE
120 O'NEIL DRIVE
HEBRON, OHIO 43025
(740) 348-1254
ATTN: GREG WILSON

POWER:
AMERICAN ELECTRIC POWER
777 HOPEWELL DRIVE
HEATH, OHIO 43056
(740) 349-4029
ATTN: TERRY WISEMAN

GAS:
COLUMBIA GAS OF OHIO, INC.
2429 LINDEN AVENUE
ZANESVILLE, OHIO 43701
(740) 450-1216
ATTN: ERIC MORRISON

TELEPHONE:
AT&T OHIO
111 N. 4th STREET
COLUMBUS, OHIO 43215
(614) 223-7276
ATTN: GARY VAN ALMSICK

CABLE TV:
TIME WARNER CABLE
3760 INTERCHANGE RD.
COLUMBUS, OHIO 43204
(614) 255-6349
ATTN: JOHN MOHLER

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THESE PLANS. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

SURVEYS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL DETAIL SURVEYS NEEDED FOR CONSTRUCTION.

MODIFICATIONS

ANY MODIFICATIONS OR CHANGES TO THE WORK, AS SHOWN ON THE DRAWINGS, MUST HAVE PRIOR WRITTEN APPROVAL BY OHIO DEPARTMENT OF TRANSPORTATION (ODOT) AND THE CITY OF HEATH.

REVIEW OF PROJECT SITE

PRIOR TO BIDDING THE CONTRACTOR SHALL, BY PERSONAL EXAMINATION, SATISFY HIMSELF AS TO THE LOCATION OF THE PROPOSED WORK AND TO ACQUAINT HIMSELF THOROUGHLY WITH THE EXISTING CONDITIONS AND THE DIFFICULTIES THAT ARE LIKELY TO BE ENCOUNTERED IN THE PERFORMANCE OF THE PROPOSED WORK.

IRON PINS AND MONUMENTS

THE CONTRACTOR SHALL REFERENCE ALL IRON PINS AND MONUMENTS BEFORE EXCAVATING AT OR NEAR THEM. IF ANY IRON PINS OR MONUMENTS ARE DESTROYED OR DAMAGED BY THE CONTRACTOR, THEY SHALL BE ACCURATELY REPLACED BY A REGISTERED SURVEYOR EMPLOYED BY THE CONTRACTOR AT THE COMPLETION OF THE PROJECT AND AT NO EXPENSE TO ODOT, THE CITY, OR THE PROPERTY OWNER.

SANITARY FACILITIES

THE CONTRACTOR SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKERS AND INSPECTORS FOR THE DURATION OF THE WORK.

SAFETY

THE CONTRACTOR SHALL SOLELY BE RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS INCLUDING EMPLOYEES AND PROPERTY. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SECURING THE PROJECT SITE FROM THE GENERAL PUBLIC BOTH DURING AND AFTER HIS WORKING HOURS. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL LIGHTS, SIGNS, FENCES OR ANY OTHER SAFETY DEVICE TO PREVENT UNAUTHORIZED PERSONNEL FROM HAZARDOUS OR DANGEROUS CONDITIONS ON THE PROJECT SITE. THE COST OF SUCH WORK SHALL BE INCLUDED IN THE VARIOUS ITEMS BID FOR FURNISHING AND INSTALLING MATERIALS ON THIS PROJECT.

PRIOR TO COMMENCEMENT OF WORK:

A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, THE CITY OF HEATH, ODOT, AND THE PROJECT ENGINEER BEFORE ANY CONSTRUCTION BEGINS. AT THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE REFLECTING ALL WORK THAT IS TO BE CONDUCTED.

THE CONTRACTOR SHALL NOTIFY ODOT A MINIMUM OF FIVE (5) DAYS BEFORE BEGINNING WORK, HOLIDAYS AND WEEKENDS EXCLUDED. WHEN THE CONTRACTOR SUSPENDS OPERATIONS FOR TWO (2) OR MORE WORKING DAYS, HE SHALL NOTIFY ODOT A MINIMUM OF TWENTY-FOUR(24) HOURS BEFORE RESUMING WORK.

AT LEAST SEVENTY-TWO HOURS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UTILITY FACILITY SHOWN IN THE PLANS.

USE OF FIRE HYDRANTS

THE CONTRACTOR IS HEREBY NOTIFIED THAT THE USE OF FIRE HYDRANTS WILL NOT BE PERMITTED AND THAT THE USE OF FIRE HYDRANTS WILL RESULT IN THE CONTRACTOR'S PROSECUTION FOR THEFT OF A PUBLIC UTILITY. THE CONTRACTOR SHALL COORDINATE WITH THE DIVISION OF WATER TO ACCESS THE CITY'S WATER SUPPLY. CONTACT: JOHN GELLER (740)522-1677

WORKING HOURS

WORKING HOURS ARE LIMITED TO 7:00AM TO 7:00PM MONDAY THROUGH FRIDAY & 7:00AM TO 5:00PM ON SATURDAY. NO WORK SHALL BE PERFORMED ON SUNDAY OR ODOT HOLIDAYS WITHOUT PRIOR WRITTEN APPROVAL. IF THE CONTRACTOR NEEDS TO WORK ON A SUNDAY OR A HOLIDAY, HE SHALL SUBMIT HIS REQUEST STATING THE REASONS FOR WORKING THOSE DAYS TO ODOT AND THE CITY A MINIMUM OF TWO BUSINESS DAYS PRIOR TO THE HOLIDAY OR SUNDAY.

LEGAL DIMENSION AND WEIGHT LIMITS

PURSUANT TO SECTIONS 5577.04 AND 5577.05 OHIO REVISED CODE (ORC), LEGAL LIMITS FOR DIMENSIONS AND WEIGHTS FOR HIGHWAY VEHICLES WERE AMENDED EFFECTIVE OCTOBER 1, 1992. THE AMENDED ORC MAY AFFECT THE CONTRACTOR'S COST FOR PERFORMING THE VARIOUS ITEMS OF WORK ON THIS PROJECT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FACTOR ANY ADDITIONAL COSTS RESULTING FROM THE AMENDED ORC INTO THE UNIT BID PRICE FOR THE VARIOUS ITEMS OF WORK TO BE PERFORMED ON THIS PROJECT. NO ADDITIONAL REIMBURSEMENT FOR THE COSTS WILL BE PAID BY ODOT OR THE CITY.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS NOR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER." PAYMENT FOR THESE ITEMS WILL BE MADE ONLY WHEN THE WORK UNDER THE PARTICULAR ITEM HAS BEEN PERFORMED.

EMERGENCY PHONE NUMBER

THE CONTRACTOR SHALL PROVIDE ODOT AND THE CITY OF HEATH WITH A 24 HOUR TELEPHONE NUMBER TO READILY CONTACT A RESPONSIBLE PARTY IN THE CASE OF AN EMERGENCY. COSTS AND/OR DAMAGES INCURRED RELATED TO WORK PERFORMED BY THE CONTRACTOR IN SUCH EMERGENCIES ARE THE CONTRACTOR'S RESPONSIBILITY AND NOT THAT OF ODOT OR THE CITY OF HEATH.

FINAL CLEAN-UP

THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM HIS OPERATIONS AND RESTORE ALL SURFACES, STRUCTURES, DITCHES, AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER.

WORK LIMITS

THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT OR THE EXISTING RIGHT-OF-WAYS, CONSTRUCTION AND/OR PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER.

NON-RUBBER TIRE VEHICLES

NO NONRUBBER TIRE VEHICLES SHALL BE MOVED ON ANY STREETS. EXCEPTIONS MAY BE GRANTED BY ODOT AND THE CITY WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE CITY. THE CONTRACTOR SHALL USE EXTREME CARE WHEN OPERATING NONRUBBER TIRE VEHICLES ON STREETS OR DRIVEWAYS TO AVOID MARKING OR DAMAGING THE PAVEMENT. PROTECTION OF THE PAVEMENT FROM DAMAGE RESULTING FROM THE TRACKS OF NON-RUBBER TIRE VEHICLES UTILIZED IN TRENCH EXCAVATION SHALL BE REQUIRED. A WOOD PLANK SYSTEM, USED TIRES, RUBBER MATS OR OTHER MEANS AS APPROVED BY ODOT AND THE CITY'S REPRESENTATIVE SHALL BE USED TO PROTECT THE PAVEMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

INCLUSIVE BID

THE CONTRACTOR'S BID SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE PROJECT. COMPENSATION FOR ANY WORK WHICH DOES NOT HAVE A SPECIFIC PAY ITEM WILL BE INCLUDED IN THE PRICE BID FOR THE INDIVIDUAL ITEMS.

PAVEMENT CLEANING

THE CONTRACTOR IS HEREBY NOTIFIED THAT HE/SHE SHALL BE RESPONSIBLE FOR CLEANING OF STREETS OR ANY MUD, DIRT, SAND, GRAVEL, STONES, OR ANY KIND OF MATERIAL THAT HAVE DEPOSITED AS A RESULT OF HIS/HER OR SUB-CONTRACTOR'S OPERATIONS. PAVEMENTS SHALL BE CLEANED AT THE END OF EACH WORK DAY OR MORE OFTEN AS DETERMINED BY ODOT OR THE CITY.

WEATHER CONDITIONS

ALL CONSTRUCTION AND MATERIAL USAGE SHALL BE IN ACCORDANCE WITH CLIMATIC CONDITIONS ADDRESSED IN CURRENT ISSUE OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS.

JOINTS AT INTERSECTIONS AND PROJECT LIMITS

ALL JOINTS AT INTERSECTIONS AND BEGIN/END LOCATIONS SHALL BE SEALED BUTT JOINTS AS PER ODOT SCD BP-3.1.

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH ODOT SCD BP-3.1.

ALIGNMENT AND PROFILE

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT WILL NOT BE CHANGED.

CALCULATED DMW
CHECKED SRH

GENERAL NOTES

LIC-CR 311-0.000
(HOPEWELL DR)

6/24/2016 - 10:50:49 AM - cslyh - M:\HO1-138 Hopewell Paving\89501\Roadway\sheets\89501GN001.dgn

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN WITHIN THESE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 40 FEET. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

Express Processing Center
The Federal Aviation Administration
Southwest Regional Office
Air Traffic Airspace Branch ASW-520
2601 Meachan Blvd.
Fort Worth, TX 76137-4298

Ohio Department of Transportation
Office of Aviation
2829 West Dublin-Granville Road
Columbus, Ohio 43235
614-387-2346

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 THE PAVEMENT PLANING AND PAVING OPERATIONS. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUBBASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". 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, PG 64-22 (PLACED AND COMPACTED AS DIRECTED). 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 CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

253, PAVEMENT REPAIR 60 CU. YD.

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"

IN ADDITION TO THE WORK REQUIRED UNDER ITEM 254 PAVEMENT PLANING, THE DEPTH OF PAVEMENT PLANING SHALL BE AS DESCRIBED BELOW OR AS DIRECTED BY THE ENGINEER. 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. IN ADDITION THE MILLING WIDTH SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER AT CERTAIN DRIVEWAYS TO REMOVE ANY UNSOUND ASPHALT THAT WOULD BE LEFT BY A SHORT APRON. ANY ADDITIONAL PASSES WITH THE PLANING MACHINE OR VARIATIONS IN DEPTH OF THE PLANING TO MEET ALL OF THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

PLANE 1.5" IN DEPTH FULL WIDTH OF PAVEMENT

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. ITEM 408 PRIME COAT, AS PER PLAN, SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

RESIDENCE AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 441 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT).

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, GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVEWAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M.

441, ASPHALT CONCRETE SURFACE COURSE, TYPE1, (448), PG 70-22M 7 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 DIRECTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

ITEM 611 MANHOLE ADJUSTED TO GRADE, AS PER PLAN
ITEM 638 VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

THESE ITEMS SHALL BE USED TO ADJUST MANHOLES AND WATER VALVE BOXES LOCATED THROUGH OUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PLACE A CONCRETE COLLAR AROUND THE VALVE AS PER HEATH STANDARD. ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW.

ANY GAS VALVE BOXES AND TELEPHONE MANHOLES LOCATED WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO GRADE BY THEIR RESPECTIVE OWNERS.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN 7 EACH

638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN 1 EACH

ITEM 423 - CRACK SEALING, MISC.: SEALING OF CURBS

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR CONTRACTOR'S USE TO SEAL THE JOINT BETWEEN CONCRETE CURB AND ASPHALT PAVEMENT ALONG HOPEWELL DRIVE. THE CONTRACTOR SHALL UTILIZE CRACK SEALING TYPE II OR III.

423, CRACK SEALING, MISC.: SEALING OF CURB 750 FT.

MAINTENANCE OF TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND/OR THE COMPLETED PAVEMENT.

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

PLACING OF THE ASPHALT CONCRETE SURFACE COURSE SHALL OCCUR AS CLOSE BEHIND THE PLANING OPERATION AS POSSIBLE. TRAFFIC SHALL NOT BE PLACED ON THE PLANED SURFACE.

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

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

OW-167 (BEGIN ROAD CONSTRUCTION AHEAD) - 7

OC-8 (END ROAD CONSTRUCTION) - 7

ITEM 614 WORK ZONE PAVEMENT MARKINGS

ONE APPLICATION FOR PAVEMENT MARKINGS HAS BEEN INCLUDED IN THE GENERAL SUMMARY. THE CONTRACTOR SHALL APPLY THE FIRST APPLICATION FOLLOWING PLACEMENT OF THE SURFACE COURSE PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

WORK ZONE PAVEMENT MARKINGS SHALL BE IN PLACE AT THE END OF EACH WORK DAY.

ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

A QUANTITY OF ASPHALT CONCRETE FOR MAINTAINING TRAFFIC HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS AS DIRECTED BY THE ENGINEER.

614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 1 CU. YD.

CALCULATED DMW CHECKED SRH

GENERAL NOTES

LIC-CR 311-0.000
(HOPEWELL DR)

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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. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIAL MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 475 FT. AND 650 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 OR A LOCAL UTILITY COMPANY. PCMS TRAILERS SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO CMS 614.03, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

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 HIGLY VISIBLE POSITION YET PROTECTED FORM 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 RETROFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGNAL 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 ONE HOUR 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 CABABILITY 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...

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PREPROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

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 CONTRACTORS 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.

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

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. THE CONTRACTOR SHALL ONLY BE PAID FOR PCMS UNITS WHEN THEY ARE IN THE OPERATION ON THE PROJECT AS SPECIFIED IN THE PLANS OR BY THE ENGINEER.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS 30 DAYS
(2 SIGNS 15 DAYS)

ITEM 621 RAISED PAVEMENT MARKER REMOVED

THE CONTRACTOR SHALL REMOVE ALL EXISTING RAISED PAVEMENT MARKERS ON HOPEWELL DRIVE. ALL DEPRESSIONS CREATED BY THE REMOVAL SHALL BE FILLED WITH ASPHALT CONCRETE BY THE END OF THE NEXT WORKDAY AND SHALL BE FLUSH WITH THE PAVEMENT. REMOVED RAISED PAVEMENT MARKERS BECOME THE PROPERTY OF THE CONTRACTOR.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT TO PERFORM THE ABOVE DESCRIBED WORK. THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 621 - RAISED PAVEMENT MARKER REMOVED 480 EACH

ITEM 209 LINEAR GRADING

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

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

ALL LINEAR GRADING WORK SHALL BE DONE BEFORE PLACING THE SURFACE COURSE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE SUB SUMMARY FOR THE ABOVE PURPOSES.

ITEM 209 LINEAR GRADING
LOCATION 1 - 2.5 MILE

ITEM 632 DETECTOR LOOP, AS PER PLAN, (ANGULAR)

ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWER HEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS CURRENTLY CALLED FOR IN THE PLANS. THE STOP LINE DETECTOR LOOPS SHALL NOT BE WIRED TO ANY OTHER LOOPS AND SHALL HAVE ITS OWN DETECTOR CHANNEL. ALL STOP LINE DETECTION SHALL BE TESTED FOR A BICYCLE TARGET AND ALL DILEMMA DETECTION ZONES SHALL BE TESTED FOR A MOTOR-CYCLE TARGET.

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10.

ALL DETECTOR LOOPS SHALL BE CUT INTO THE PLANED SURFACE OR THE PROPOSED INTERMEDIATE COURSE AT A DEPTH OF 4" FROM THE PROPOSED SURFACE ELEVATION. THE CONTRACTOR SHALL TEST ALL LEAD-IN CABLES PRIOR TO MAKING THE FINAL SPLICE. PLACEMENT SHALL BE AS PER SPECIFICATION 632.10. FINAL LOCATIONS, SIZE AND ORIENTATION SHALL BE PROVIDED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632, DETECTOR LOOP, AS PER PLAN, (ANGULAR).

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB SUMMARY FOR THE ABOVE PURPOSES.

ITEM 632 DETECTOR LOOP, AS PER PLAN, (ANGULAR)
LOCATION 1 - 3 EACH

CALCULATED DMW CHECKED SRH

GENERAL NOTES

LIC-CR 311-0.000
(HOPEWELL DR)

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SHEET NUM.											PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	6	7	16	17	18	19	20	21	22	01/SL2/ PV/HEAT						
																ROADWAY	
	2.5										2.5	209	60500	2.5	MILE	LINEAR GRADING	
																DRAINAGE	
7											7	611	99655	7	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	3
																PAVEMENT	
			2,449								2,449	202	23500	2,449	SY	WEARING COURSE REMOVED	
60											60	253	02000	60	CY	PAVEMENT REPAIR	3
		31,450									31,450	254	01000	31,450	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	3
		2,674	209								2,883	407	20000	2,883	GAL	NON-TRACKING TACK COAT	
		1,139									1,139	408	10001	1,139	GAL	PRIME COAT, AS PER PLAN	3
			103								103	441	50000	103	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
7		1,312									1,319	441	50100	1,319	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	3
		159									159	617	10101	159	CY	COMPACTED AGGREGATE, AS PER PLAN	3
750											750	423	98200	750	FT	CRACK SEALING, MISC.:SEALING OF CURB	3
																WATER WORK	
1											1	638	10801	1	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	3
																TRAFFIC CONTROL	
						91	226	166			483	621	00100	483	EACH	RPM	
	480										480	621	54000	480	EACH	RAISED PAVEMENT MARKER REMOVED	
									442	104	546	630	02100	546	FT	GROUND MOUNTED SUPPORT, NO. 2 POST, (TYPE 5)	
									6		6	630	08600	6	EACH	SIGN POST REFLECTOR	
									215	47	262	630	80100	262	SF	SIGN, FLAT SHEET	
									29	8	37	630	84900	37	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
									37	11	48	630	86002	48	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	3										3	632	26501	3	EACH	DETECTOR LOOP, AS PER PLAN, (ANGULAR)	4
								2.37			2.37	644	00100	2.37	MILE	EDGE LINE, 4"	
						0.86	1.6				2.46	644	00300	2.46	MILE	CENTER LINE	
							3,632				3,632	644	00400	3,632	FT	CHANNELIZING LINE, 8"	
						362					362	644	00500	362	FT	STOP LINE	
								697			697	644	00700	697	FT	TRANSVERSE/DIAGONAL LINE	
				53	27						80	644	01300	80	EACH	LANE ARROW	
					20	5					25	644	01410	25	EACH	WORD ON PAVEMENT, 96"	
								98			98	644	01520	98	FT	DOTTED LINE, 12"	
																MAINTENANCE OF TRAFFIC	
14											14	614	12460	14	EACH	WORK ZONE MARKING SIGN	3
1											1	614	13000	1	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	3
	30										30	614	18401	30	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
						0.86	1.6				2.46	614	21400	2.46	MILE	WORK ZONE CENTER LINE, CLASS II	
							3,632				3,632	614	23680	3,632	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
						362					362	614	26610	362	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																INCIDENTALS	
											LUMP	103	05000	LS		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
											LUMP	614	11000	LS		MAINTAINING TRAFFIC	
											LUMP	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LUMP	624	10000	LS		MOBILIZATION	

CALCULATED DMW
CHECKED SRH

GENERAL SUMMARY

LIC-CR 311-0.000
(HOPEWELL DR)

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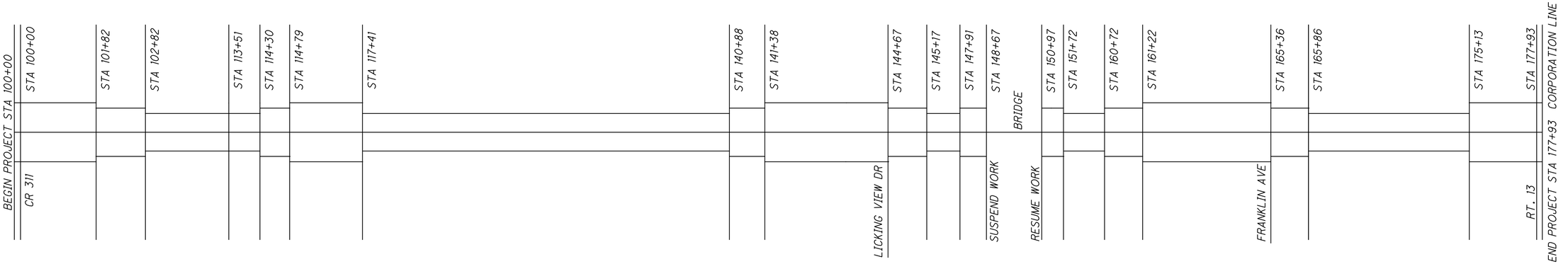
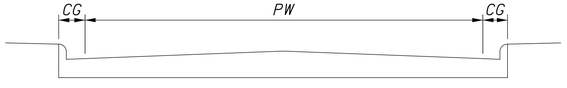
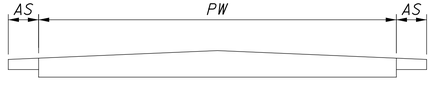
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT STA	END LOG POINT STA	LENGTH		AVERAGE PAVEMENT WIDTH	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254	407	408	441		617			
											PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	NON-TRACKING TACK COAT @ 0.085 GAL/SQ YD	PRIME COAT, AS PER PLAN	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2.0 FT AVERAGE WIDTH)		
					MILES	FEET	FEET			SQ. YD.	SQ. YD.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.		
1	LIC	HOPEWELL DR	100+00	101+82		182	55.0	1	441	1112.3	1112.3	94.5		1.5	46.4				
1	LIC	HOPEWELL DR	101+82	102+82		100	45.5	1	441	505.6	505.6	43.0		1.5	21.1				
1	LIC	HOPEWELL DR	102+82	113+51		1,069	34.5	1	441	4097.9	4097.9	348.3		1.5	170.8				
1	LIC	HOPEWELL DR	113+51	114+30		79	33.1	2	441	290.6	290.6	24.7	14.1	1.5	12.1	2.0	2.0		
1	LIC	HOPEWELL DR	114+30	114+79		49	39.0	2	441	212.4	212.4	18.1	8.8	1.5	8.9	2.0	1.2		
1	LIC	HOPEWELL DR	114+79	117+41		262	39.7	2	441	1155.8	1155.8	98.2	46.6	1.5	48.2	2.0	6.5		
1	LIC	HOPEWELL DR	117+41	140+88		2,347	33.7	2	441	8788.3	8788.3	747.0	417.3	1.5	366.2	2.0	58.0		
1	LIC	HOPEWELL DR	140+88	141+38		49	39.4	2	441	214.6	214.6	18.2	8.8	1.5	9.0	2.0	1.2		
1	LIC	HOPEWELL DR	141+38	143+98		261	46.6	2	441	1351.4	1351.4	114.9	46.4	1.5	56.3	2.0	6.5		
1	LIC	HOPEWELL DR	143+98	144+67		69	47.1	2	441	361.1	361.1	30.7	12.3	1.5	15.1	2.0	1.7		
1	LIC	HOPEWELL DR	144+67	145+17		51	40.7	2	441	230.7	230.7	19.6	9.1	1.5	9.6	2.0	1.3		
1	LIC	HOPEWELL DR	145+17	147+91		273	34.6	2	441	1049.6	1049.6	89.2	48.6	1.5	43.8	2.0	6.8		
1	LIC	HOPEWELL DR	147+91	148+67		76	39.2	2	441	331.1	331.1	28.1	13.6	1.5	13.8	2.0	1.9		
1	LIC	HOPEWELL DR	150+97	151+72		266	43.3	2	441	1279.8	1279.8	108.8	47.3	1.5	53.4	2.0	6.6		
1	LIC	HOPEWELL DR	151+72	160+72		900	34.3	2	441	3430.0	3430.0	291.6	160.0	1.5	143.0	2.0	22.3		
1	LIC	HOPEWELL DR	160+72	161+22		50	40.3	2	441	223.9	223.9	19.0	8.9	1.5	9.4	2.0	1.3		
1	LIC	HOPEWELL DR	161+22	165+36		414	45.8	2	441	2106.8	2106.8	179.1	73.6	1.5	87.8	2.0	10.3		
1	LIC	HOPEWELL DR	165+36	165+86		49	39.7	2	441	216.2	216.2	18.4	8.8	1.5	9.0	2.0	1.2		
1	LIC	HOPEWELL DR	165+86	175+13		928	33.6	2	441	3464.6	3464.6	294.5	165.0	1.5	144.4	2.0	23.0		
1	LIC	HOPEWELL DR	175+13	177+93		280	33.0	2	441	1026.7	1026.7	87.3	49.8	1.5	42.8	2.0	7.0		
TOTALS CARRIED TO GENERAL SUMMARY											31,450	2,674	1,139		1,312		159		





TYPICAL 1



TYPICAL 2

PW = PAVEMENT WIDTH
CG = CURB AND GUTTER
AS = AGGREGATE SHOULDER

CALCULATED DMW
CHECKED SRH

ASPHALT CONCRETE DATA

LIC-CR 311-0.000 (HOPEWELL DR)

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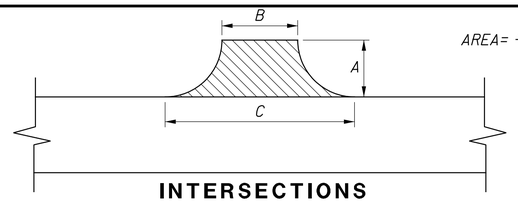
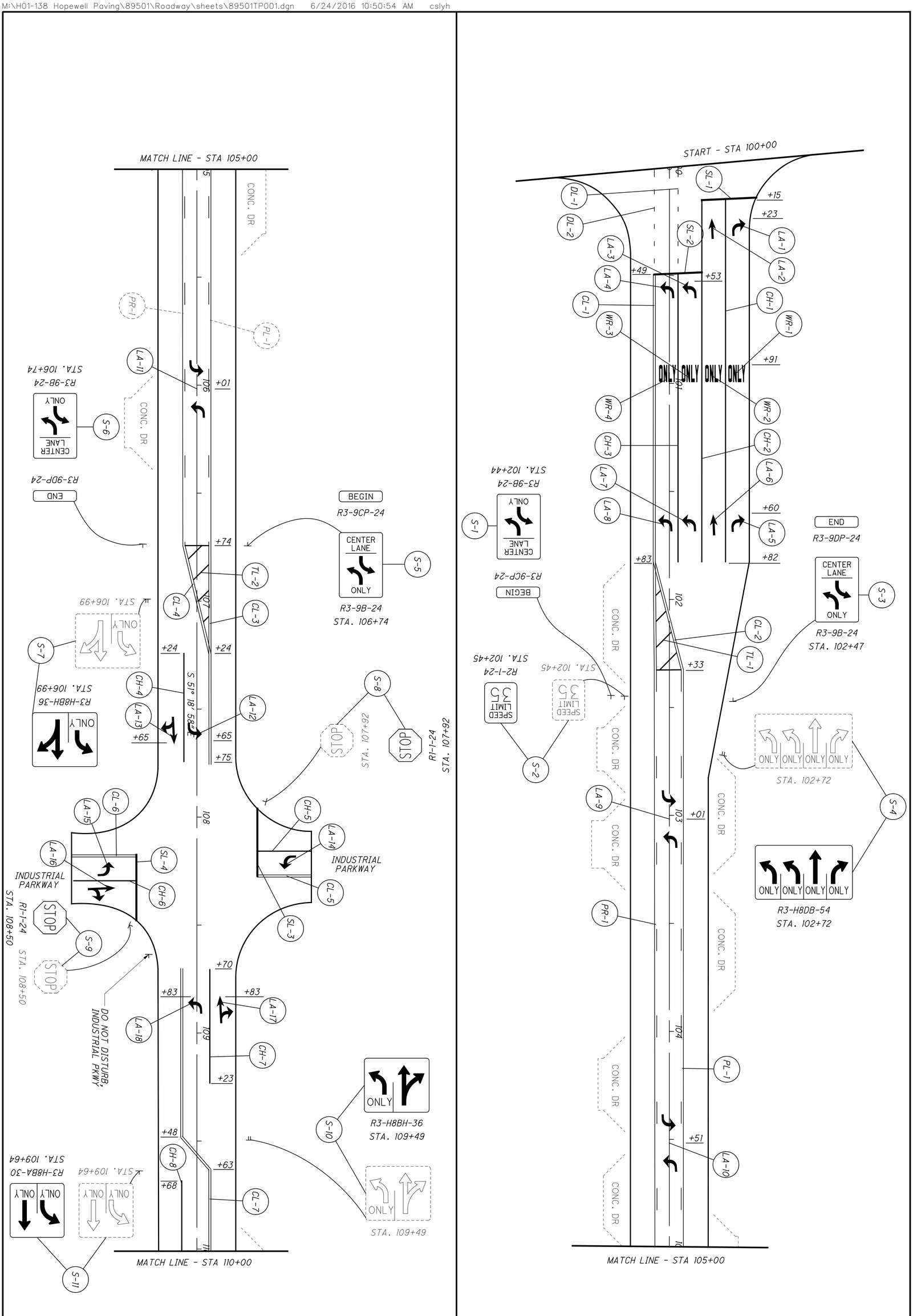
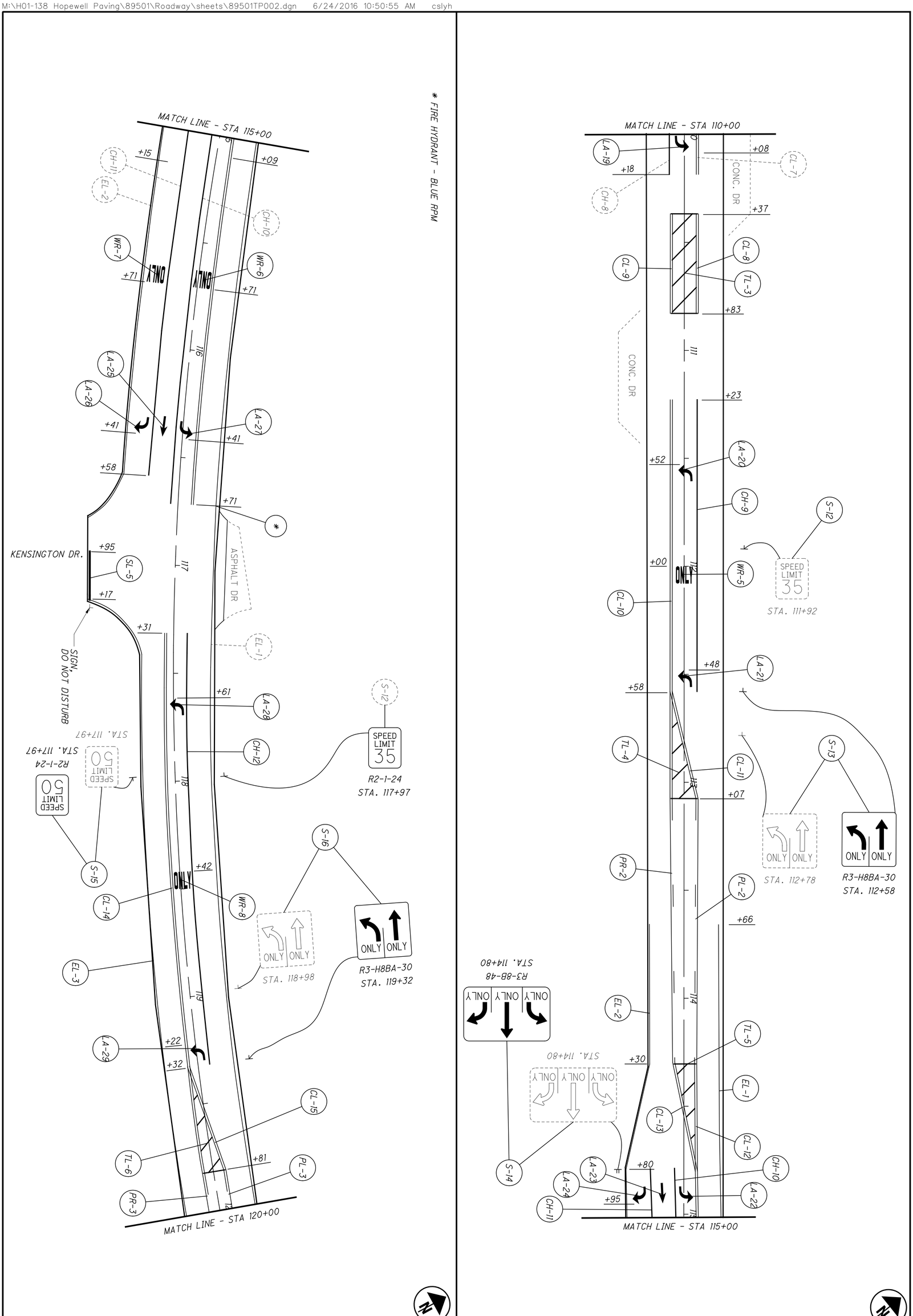


INTERSECTIONS

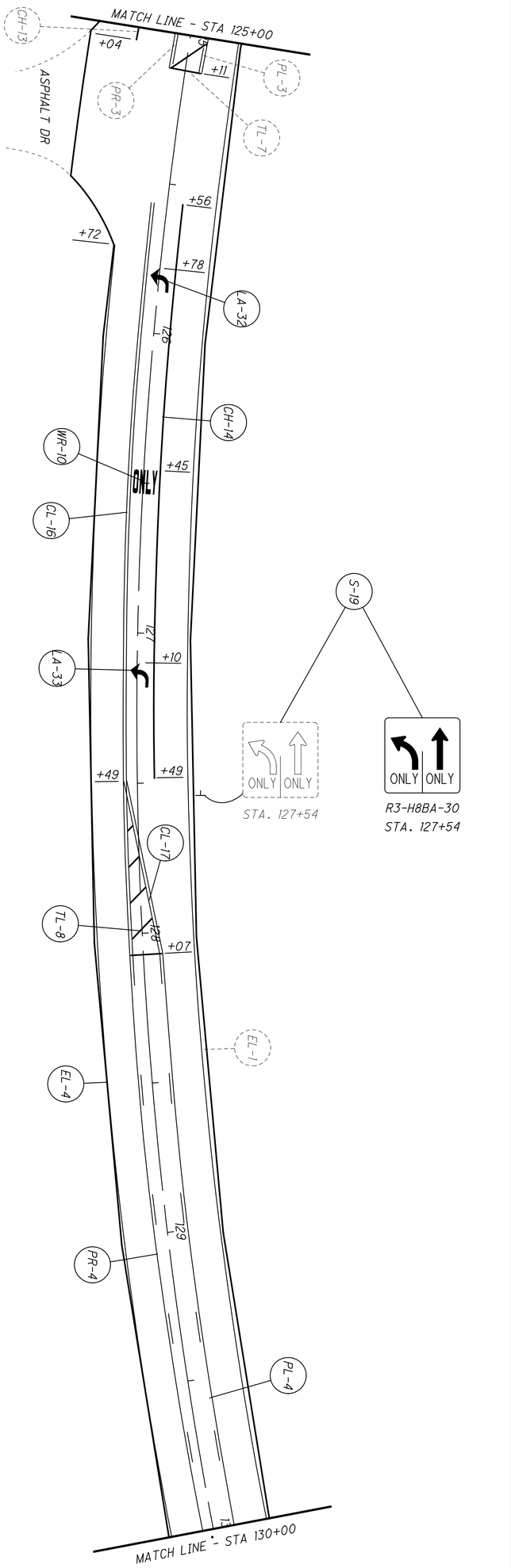
LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS DETAIL DIMENSION A	B	C	AREA	202 WEARING COURSE REMOVED	407 NON-TRACKING TACK COAT @0.085 GAL/SQ YD	THICKNESS	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
					FT	FT	FT	SQ YD	SQ. YD.	GAL.	INCHES	CU. YD.
1	LIC	CR 311	RT	INTERSECTION-INDUSTRIAL PKWY	40.0	32.9	92.9	279.6	279.6	23.8	1.5	11.7
1	LIC	CR 311	LT	INTERSECTION-INDUSTRIAL PKWY	35.0	33.0	103.0	264.5	264.5	22.5	1.5	11.1
1	LIC	CR 311	RT	INTERSECTION-KENSINGTON	14.3	39.7	67.0	84.8	84.8	7.2	1.5	3.6
1	LIC	CR 311	RT	INTERSECTION-LICKING VIEW DR	35.3	35.5	110.7	286.8	286.6	24.4	1.5	12.0
1	LIC	CR 311	LT	INTERSECTION-LICKING VIEW DR	36.8	32.4	102.5	275.8	275.8	23.5	1.5	11.5
1	LIC	CR 311	RT	INTERSECTION-FRANKLIN	62.4	37.2	111.6	515.9	515.9	43.9	1.5	21.5
1	LIC	CR 311	LT	INTERSECTION-FRANKLIN	63.8	35.0	111.8	520.4	520.4	44.3	1.5	21.7
1	LIC	CR 311	RT	INTERSECTION-DOG LEG RD	38.0	24.4	42.0	220.9	220.9	18.8	1.5	9.2

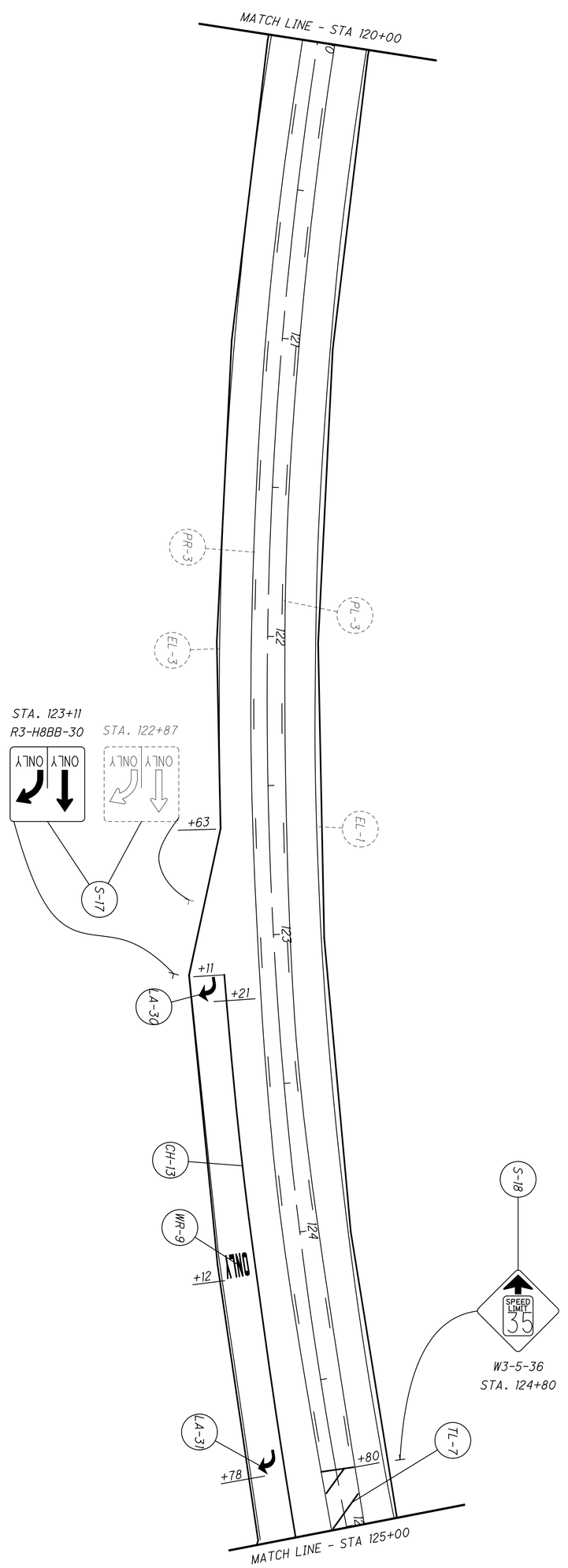


8 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 100+00 TO STA. 110+00	CALCULATED DMW / CHECKED SRH	HORIZONTAL SCALE IN FEET 0 10 20 40

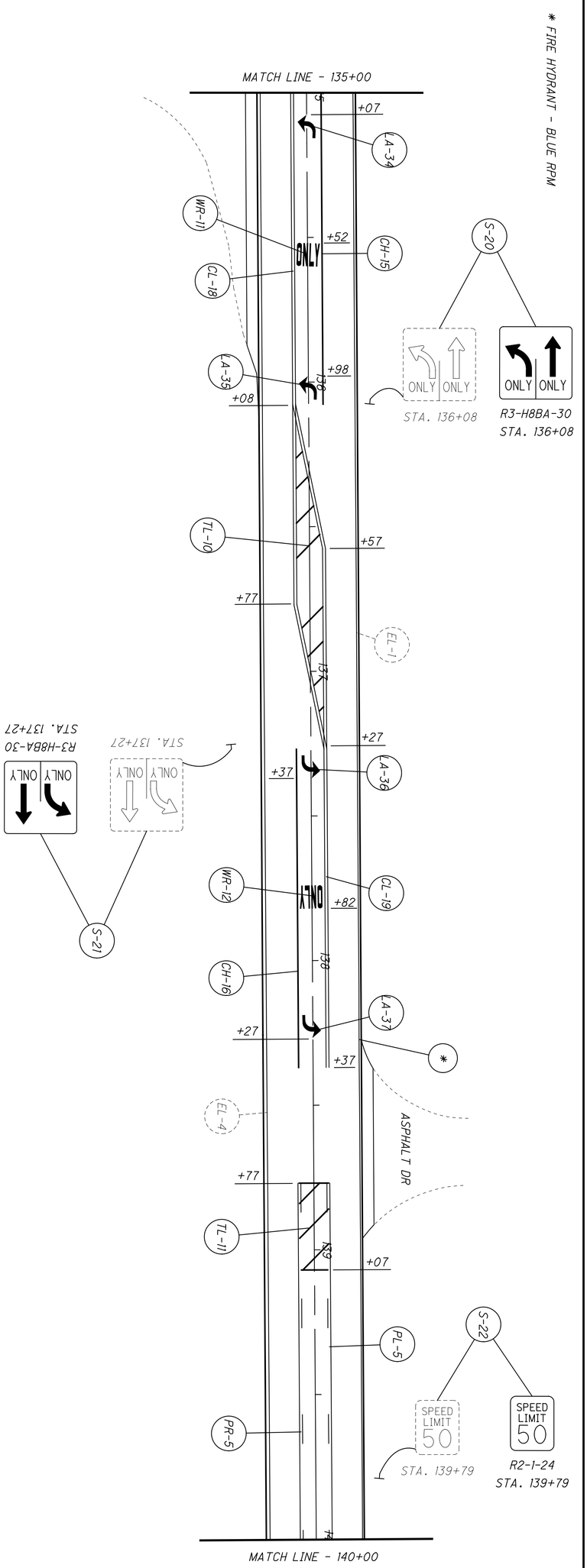


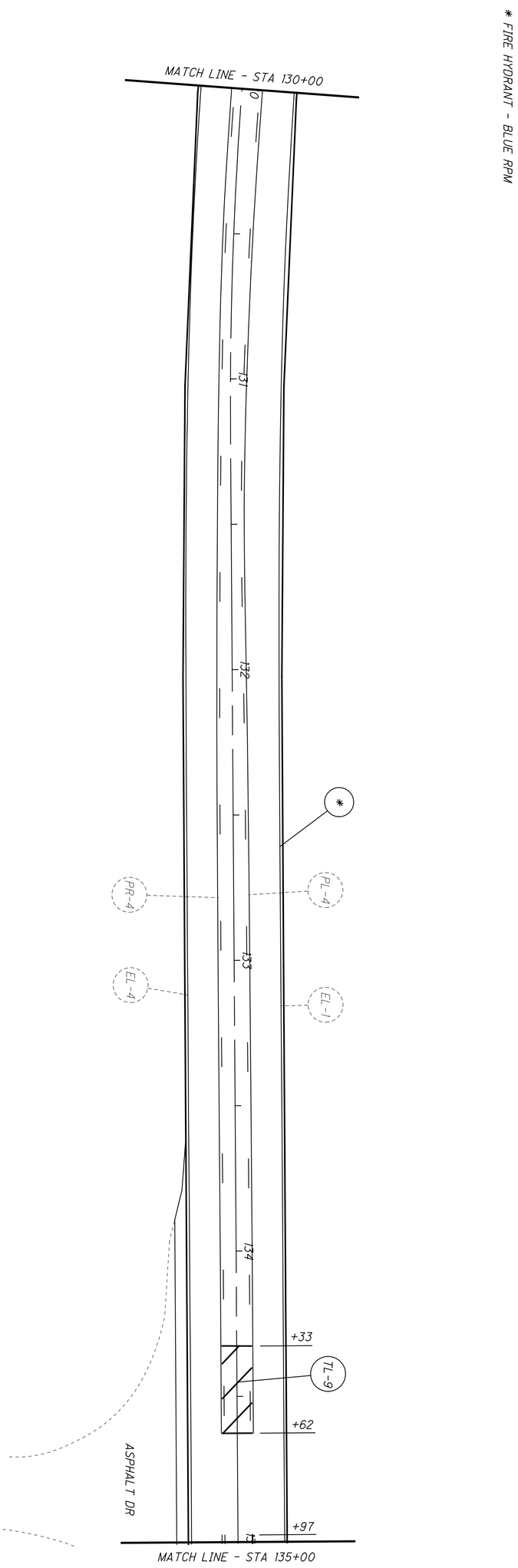
9 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 110+00 TO STA. 120+00	CALCULATED DMW; CHECKED SRH; 0 20 10 40 HORIZONTAL SCALE IN FEET



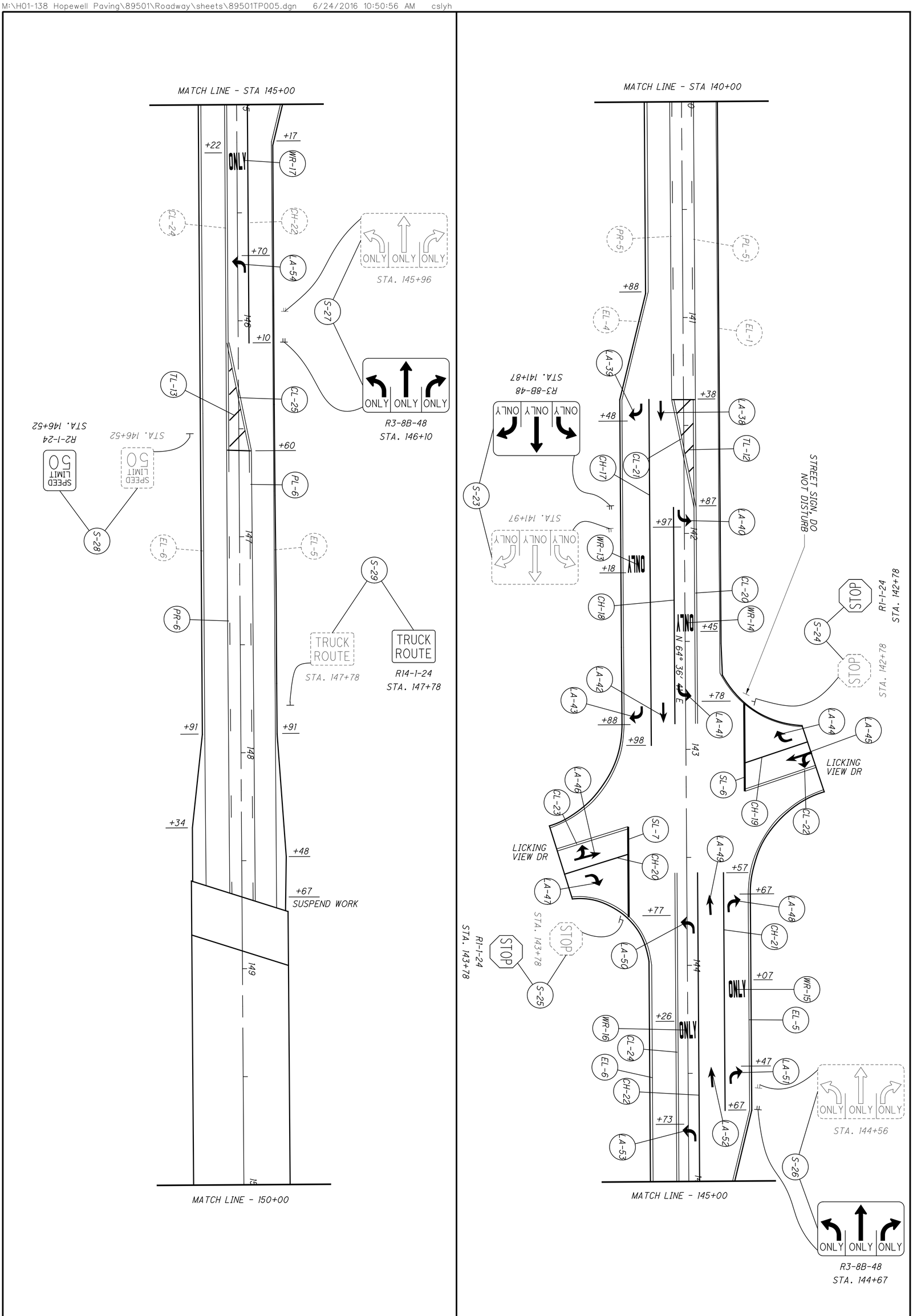


10 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 120+00 TO STA. 130+00	CALCULATED DMW / CHECKED SRH	0 10 20 40 HORIZONTAL SCALE IN FEET

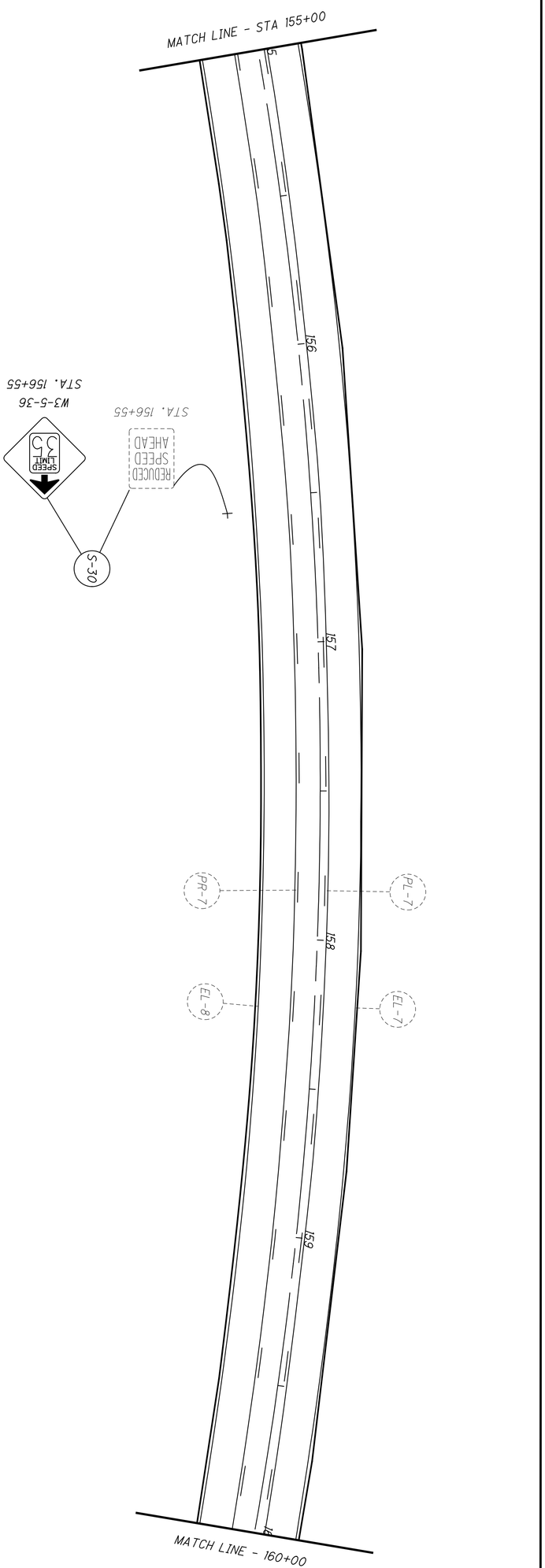


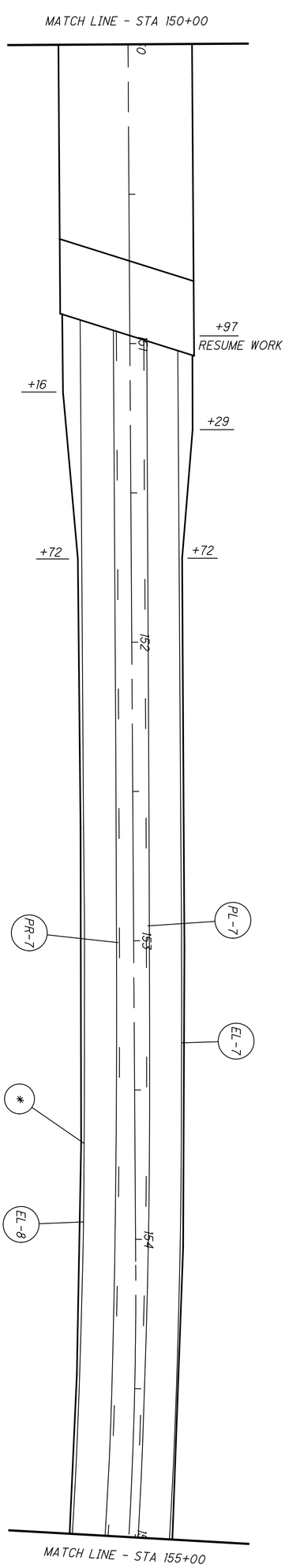


22 / 11	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA 130+00 TO STA 140+00	CALCULATED DMW / CHECKED SRH	0 20 10 40 HORIZONTAL SCALE IN FEET



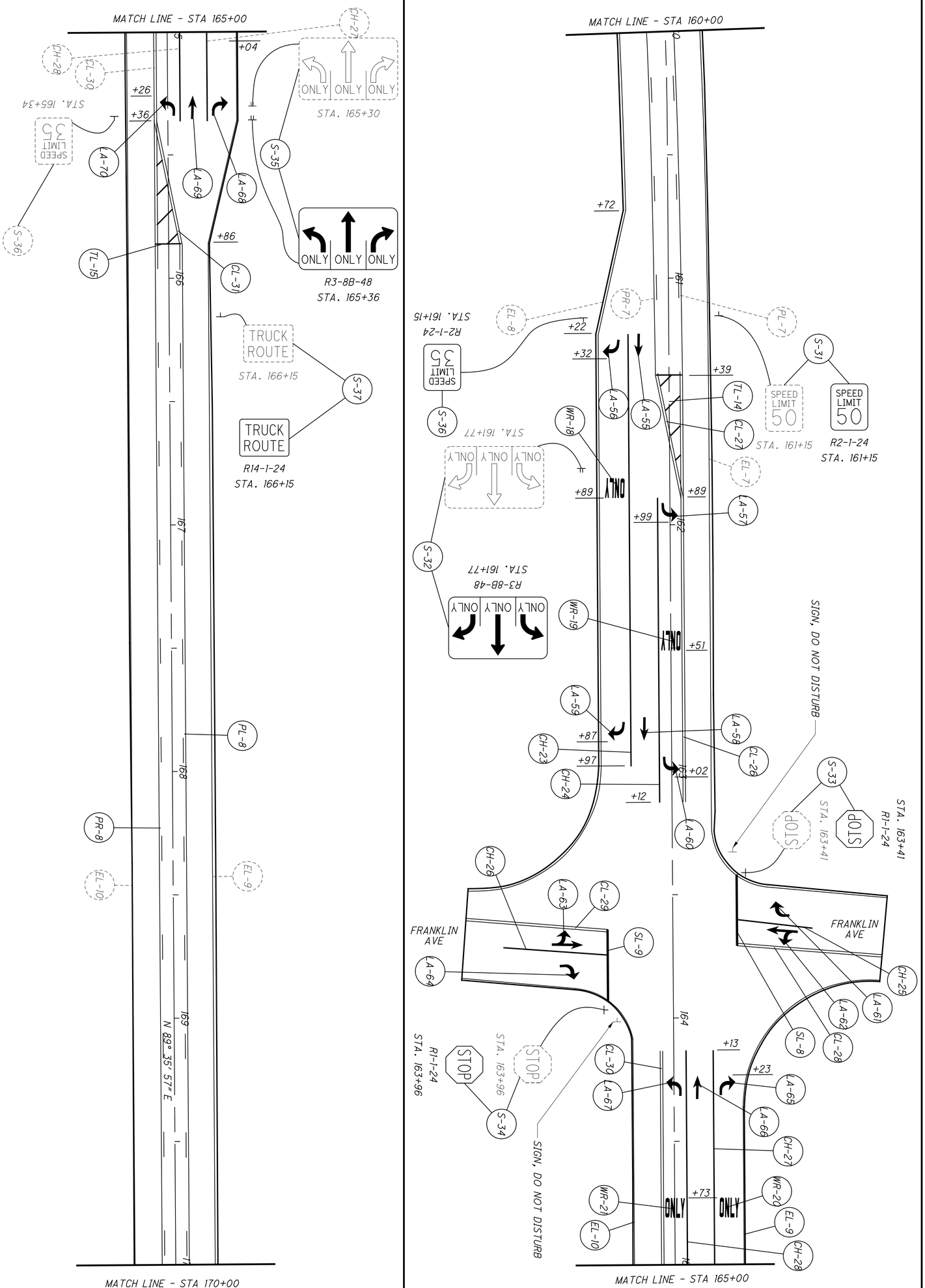
12 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 140+00 TO STA. 150+00	CALCULATED DMW / CHECKED SRH	0 20 / 10 40 HORIZONTAL SCALE IN FEET



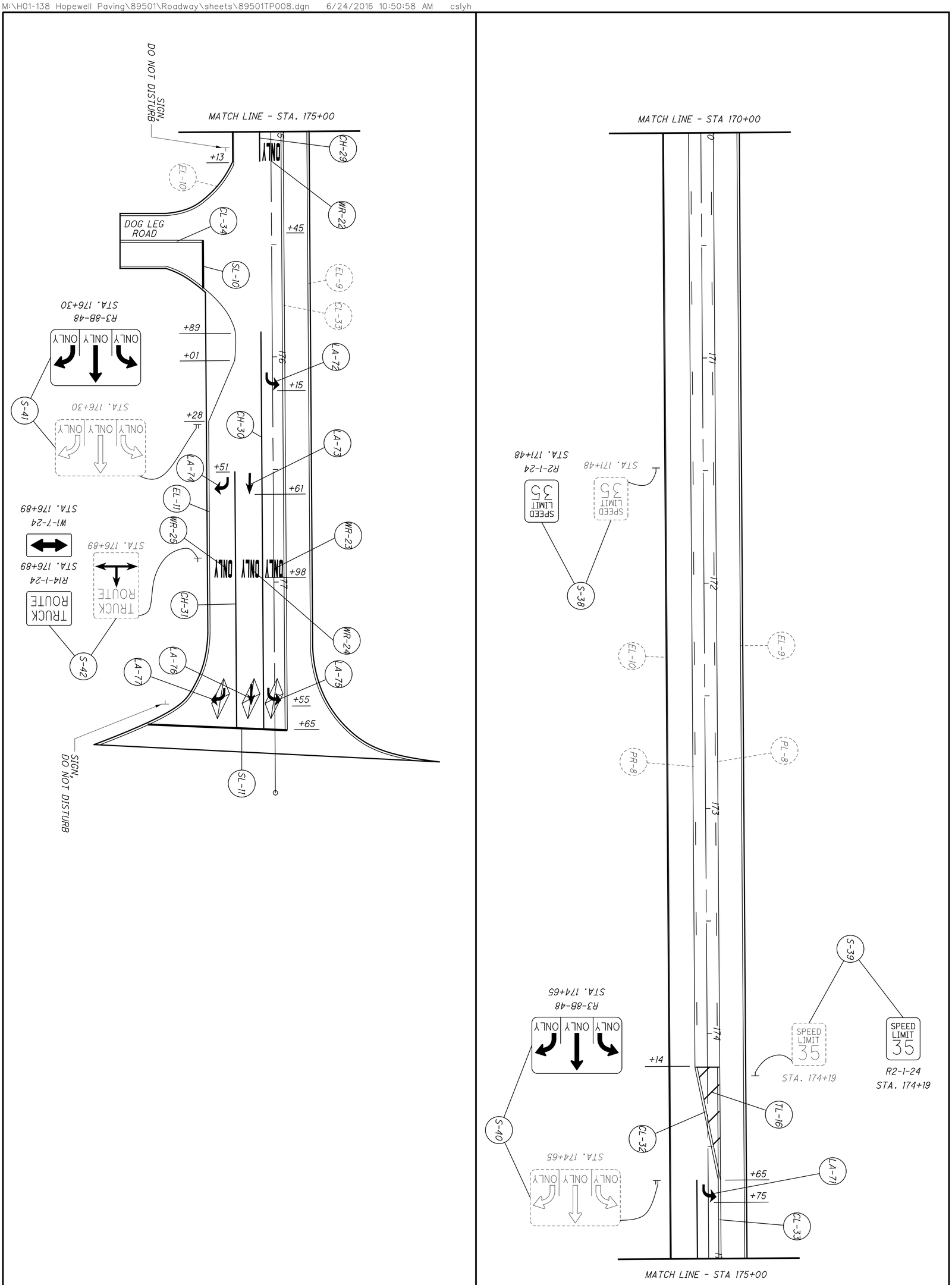


* FIRE HYDRANT - BLUE RPM

13 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 150+00 TO STA. 160+00	CALCULATED DMW; CHECKED SRH; 0 20 10 40 HORIZONTAL SCALE IN FEET



14 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 160+00 TO STA. 170+00	CALCULATED DMW / CHECKED SRH	0 20 / 10 40 HORIZONTAL SCALE IN FEET



15 / 22	LIC-CR 311-0.000 (HOPEWELL DR)	TRAFFIC CONTROL STA. 170+00 TO STA. 177+93	CALCULATED DMW / CHECKED SRH	HORIZONTAL SCALE IN FEET

SHEET NO.	REFERENCE NO.	ROUTE	STATION FROM	STATION TO	LANE SIDE	614 WORK ZONE CENTERLINE CLASS II (MILE)	614 WORK ZONE CHANNELIZING LINE CLASS III (FT)	614 WORK ZONE STOP LINE CLASS III (FT)	644 EDGE LINE (MILE)	644 CENTER LINE (MILE)	644 CHANNELIZING LINE (FT)	644 STOP LINE (FT)	644 TRANSVERSE LINE (FT)	644 LANE ARROW (EACH)	644 WORD ON PAVEMENT, 96 INCH (EACH)	644 DOTTED LINE, 12 INCH (FT)		621 RAISED PAVEMENT MARKING EACH W	621 RAISED PAVEMENT MARKING EACH Y/Y	621 RAISED PAVEMENT MARKING EACH W/R	SPACING			
8	LA-1	HOPEWELL	100+23	100+23	LT									1										
8	LA-2	HOPEWELL	100+23	100+23	LT									1										
8	LA-3	HOPEWELL	100+53	100+53	LT									1										
8	LA-4	HOPEWELL	100+53	100+53	RT									1										
8	LA-5	HOPEWELL	101+60	101+60	LT									1										
8	LA-6	HOPEWELL	101+60	101+60	LT									1										
8	LA-7	HOPEWELL	101+60	101+60	LT									1										
8	LA-8	HOPEWELL	101+60	101+60	RT									1										
8	LA-9	HOPEWELL	103+01	103+01	℄									2										
8	LA-10	HOPEWELL	104+51	104+51	℄									2										
8	LA-11	HOPEWELL	106+01	106+01	℄									2										
8	LA-12	HOPEWELL	107+65	107+65	RT									1										
8	LA-13	HOPEWELL	107+65	107+65	RT									1										
8	LA-14	INDUSTRIAL	108+21	108+21	LT									1										
8	LA-15	INDUSTRIAL	108+23	108+23	RT									1										
8	LA-16	INDUSTRIAL	108+34	108+34	RT									1										
8	LA-17	HOPEWELL	108+83	108+83	LT									1										
8	LA-18	HOPEWELL	108+83	108+83	℄									1										
9	LA-19	HOPEWELL	110+08	110+08	℄									1										
9	LA-20	HOPEWELL	111+52	111+52	℄									1										
9	LA-21	HOPEWELL	112+48	112+48	℄									1										
9	LA-22	HOPEWELL	114+95	114+95	℄									1										
9	LA-23	HOPEWELL	114+95	114+95	RT									1										
9	LA-24	HOPEWELL	114+95	114+95	RT									1										
9	LA-25	HOPEWELL	116+41	116+41	RT									1										
9	LA-26	HOPEWELL	116+41	116+41	RT									1										
9	LA-27	HOPEWELL	116+41	116+41	℄									1										
9	LA-28	HOPEWELL	117+61	117+61	℄									1										
9	LA-29	HOPEWELL	119+22	119+22	℄									1										
10	LA-30	HOPEWELL	123+21	123+21	RT									1										
10	LA-31	HOPEWELL	124+78	124+78	RT									1										
10	LA-32	HOPEWELL	125+78	125+78	℄									1										
10	LA-33	HOPEWELL	127+10	127+10	℄									1										
11	LA-34	HOPEWELL	135+07	135+07	℄									1										
11	LA-35	HOPEWELL	135+98	135+98	℄									1										
11	LA-36	HOPEWELL	137+37	137+37	℄									1										
11	LA-37	HOPEWELL	138+27	138+27	℄									1										
12	LA-38	HOPEWELL	141+48	141+48	RT									1										
12	LA-39	HOPEWELL	141+48	141+48	RT									1										
12	LA-40	HOPEWELL	141+97	141+97	℄									1										
12	LA-41	HOPEWELL	142+78	142+78	℄									1										
12	LA-42	HOPEWELL	142+88	142+88	RT									1										
12	LA-43	HOPEWELL	142+88	142+88	RT									1										
12	LA-44	LICKING VIEW	142+95	142+95	LT									1										
12	LA-45	LICKING VIEW	143+05	143+05	LT									1										
12	LA-46	LICKING VIEW	143+47	143+47	RT									1										
12	LA-47	LICKING VIEW	143+59	143+59	RT									1										
12	LA-48	HOPEWELL	143+67	143+67	LT									1										
12	LA-49	HOPEWELL	143+67	143+67	LT									1										
12	LA-50	HOPEWELL	143+77	143+77	℄									1										
TOTALS CARRIED TO GENERAL SUMMARY														53										

CALCULATED DMW
CHECKED SRH

PAVEMENT MARKING SUBSUMMARY

LIC-CR 311-0.000 (HOPEWELL DR)

M:\H01-138 Hopewell Paving\8950\Roadway\sheets\8950TS001.dgn 6/24/2016 10:50:58 AM csly/h

SHEET NO.	REFERENCE NO.	ROUTE	STATION FROM	STATION TO	LANE SIDE	614 WORK ZONE CENTERLINE CLASS II (MILE)	614 WORK ZONE CHANNELIZING LINE CLASS III (FT)	614 WORK ZONE STOP LINE CLASS III (FT)	644 EDGE LINE (MILE)	644 CENTER LINE (MILE)	644 CHANNELIZING LINE (FT)	644 STOP LINE (FT)	644 TRANSVERSE LINE (FT)	644 LANE ARROW (EACH)	644 WORD ON PAVEMENT, 96 INCH (EACH)	644 DOTTED LINE, 12 INCH (FT)		621 RAISED PAVEMENT MARKING EACH B	621 RAISED PAVEMENT MARKING EACH Y/Y	621 RAISED PAVEMENT MARKING EACH W/R	SPACING				
12	LA-51	HOPEWELL	144+47	144+47	LT									1											
12	LA-52	HOPEWELL	144+47	144+47	LT									1											
12	LA-53	HOPEWELL	144+73	144+73	℄									1											
12	LA-54	HOPEWELL	145+70	145+70	℄									1											
14	LA-55	HOPEWELL	161+32	161+32	RT									1											
14	LA-56	HOPEWELL	161+32	161+32	RT									1											
14	LA-57	HOPEWELL	161+99	161+99	℄									1											
14	LA-58	HOPEWELL	162+87	162+87	RT									1											
14	LA-59	HOPEWELL	162+87	162+87	RT									1											
14	LA-60	HOPEWELL	163+02	163+02	℄									1											
14	LA-61	FRANKLIN	163+56	163+56	LT									1											
14	LA-62	FRANKLIN	163+66	163+66	LT									1											
14	LA-63	FRANKLIN	163+68	163+68	RT									1											
14	LA-64	FRANKLIN	163+81	163+81	RT									1											
14	LA-65	HOPEWELL	164+23	164+23	℄									1											
14	LA-66	HOPEWELL	164+23	164+23	LT									1											
14	LA-67	HOPEWELL	164+23	164+23	LT									1											
14	LA-68	HOPEWELL	165+26	165+26	LT									1											
14	LA-69	HOPEWELL	165+26	165+26	LT									1											
14	LA-70	HOPEWELL	165+26	165+26	℄									1											
15	LA-71	HOPEWELL	174+75	174+75	℄									1											
15	LA-72	HOPEWELL	176+15	176+15	℄									1											
15	LA-73	HOPEWELL	176+61	176+61	RT									1											
15	LA-74	HOPEWELL	176+61	176+61	RT									1											
15	LA-75	HOPEWELL	177+55	177+55	℄									1											
15	LA-76	HOPEWELL	177+55	177+55	RT									1											
15	LA-77	HOPEWELL	177+55	177+55	RT									1											
8	WR-1	HOPEWELL	100+91	100+91	LT										1										
8	WR-2	HOPEWELL	100+91	100+91	LT										1										
8	WR-3	HOPEWELL	100+91	100+91	LT										1										
8	WR-4	HOPEWELL	100+91	100+91	℄										1										
9	WR-5	HOPEWELL	112+00	112+00	℄										1										
9	WR-6	HOPEWELL	115+71	115+71	℄										1										
9	WR-7	HOPEWELL	115+71	115+71	RT										1										
9	WR-8	HOPEWELL	118+42	118+42	℄										1										
10	WR-9	HOPEWELL	124+12	124+12	RT										1										
10	WR-10	HOPEWELL	126+45	126+45	℄										1										
11	WR-11	HOPEWELL	135+52	135+52	℄										1										
11	WR-12	HOPEWELL	137+82	137+82	℄										1										
12	WR-13	HOPEWELL	142+18	142+18	RT										1										
12	WR-14	HOPEWELL	142+45	142+45	℄										1										
12	WR-15	HOPEWELL	144+07	144+07	RT										1										
12	WR-16	HOPEWELL	144+26	144+26	℄										1										
12	WR-17	HOPEWELL	145+22	145+22	℄										1										
13	WR-18	HOPEWELL	161+89	161+89	RT										1										
13	WR-19	HOPEWELL	162+51	162+51	℄										1										
13	WR-20	HOPEWELL	164+73	164+73	LT										1										
TOTALS CARRIED TO GENERAL SUMMARY														27	20										

CALCULATED DMW
CHECKED SRH

PAVEMENT MARKING SUBSUMMARY

LIC-CR 311-0.000
(HOPEWELL DR)

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SHEET NO.	REFERENCE NO.	ROUTE	STATION FROM	STATION TO	LANE SIDE	614 WORK ZONE CENTERLINE CLASS II	614 WORK ZONE CHANNELIZING LINE CLASS III	614 WORK ZONE STOP LINE CLASS III	644 EDGE LINE	644 CENTER LINE	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE	644 LANE ARROW	644 WORD ON PAVEMENT, 96 INCH	644 DOTTED LINE, 12 INCH		621 RAISED PAVEMENT MARKING EACH B	621 RAISED PAVEMENT MARKING EACH Y/Y	621 RAISED PAVEMENT MARKING EACH W/R	SPACING			
						MILE	FT	FT	MILE	MILE	FT	FT	FT	EACH	EACH	FT								
14	WR-21	HOPEWELL	164+73	164+73	℄										1									
15	WR-22	HOPEWELL	175+13	175+13	℄										1									
15	WR-23	HOPEWELL	176+98	176+98	℄										1									
15	WR-24	HOPEWELL	176+98	176+98	RT										1									
15	WR-25	HOPEWELL	176+98	176+98	RT										1									
8	SL-1	HOPEWELL	100+15	100+15	LT			25.4				25.4												
8	SL-2	HOPEWELL	100+49	100+49	LT			22.0				22.0												
8	SL-3	INDUSTRIAL	107+96	108+27	LT			31.2				31.2												
8	SL-4	INDUSTRIAL	108+17	108+47	RT			30.4				30.4												
9	SL-5	KENSINGTON	116+95	117+17	RT			30.4				30.4												
12	SL-6	LICKING VIEW	142+79	143+19	LT			40.0				40.0												
12	SL-7	LICKING VIEW	143+36	143+77	RT			41.0				41.0												
14	SL-8	FRANKLIN	163+42	163+70	LT			28.0				28.0												
14	SL-9	FRANKLIN	163+64	163+92	RT			28.0				28.0												
15	SL-10	DOG LEG	175+53	175+84	RT			30.9				30.9												
15	SL-11	HOPEWELL	177+65	177+65	RT			54.5				54.5												
8	CL-1	HOPEWELL	100+49	102+33	LT	.04				.04									3		80′			
8	CL-2	HOPEWELL	101+83	102+33	LT & RT	.01				.01									3		*			
8	CL-3	HOPEWELL	106+74	107+75	LT	.02				.02									3		80′			
8	CL-4	HOPEWELL	106+74	107+24	LT & RT	.01				.01									3		*			
8	CL-5	INDUSTRIAL	108+27	108+27	LT	.01				.01														
8	CL-6	INDUSTRIAL	108+17	108+17	RT	.01				.01														
8	CL-7	HOPEWELL	108+70	110+18	LT & RT	.03				.03									4		80′			
9	CL-8	HOPEWELL	110+37	110+83	LT	.01				.01									2		80′			
9	CL-9	HOPEWELL	110+37	1110+83	RT	.01				.01									2		80′			
9	CL-10	HOPEWELL	111+23	113+07	RT	.04				.04									3		80′			
9	CL-11	HOPEWELL	112+58	113+07	LT & RT	.01				.01									3		*			
9	CL-12	HOPEWELL	114+30	116+71	LT	.05				.05									4		80′			
9	CL-13	HOPEWELL	114+30	114+80	LT & RT	.01				.01									3		80′ *			
9	CL-14	HOPEWELL	117+31	119+81	RT	.05				.05									4		80′			
9	CL-15	HOPEWELL	119+32	119+81	LT & RT	.01				.01									3		*			
10	CL-16	HOPEWELL	125+56	128+07	RT	.05				.05									4		80′			
10	CL-17	HOPEWELL	127+49	128+07	LT & RT	.01				.01									3		*			
11	CL-18	HOPEWELL	134+97	137+27	LT & RT	.09				.05									6		80′ *			
11	CL-19	HOPEWELL	136+08	138+37	LT & RT	.05				.05									6		80′ *			
12	CL-20	HOPEWELL	141+38	142+88	LT	.03				.03									2		80′			
12	CL-21	HOPEWELL	141+38	141+87	LT & RT	.01				.01									3		*			
12	CL-22	LICKING VIEW	143+08	143+19	LT	.01				.01														
12	CL-23	LICKING VIEW	143+36	143+46	RT	.01				.01														
12	CL-24	HOPEWELL	143+57	146+60	RT	.06				.06									4		80′			
12	CL-25	HOPEWELL	146+10	146+60	LT & RT	.01				.01									3		*			
14	CL-26	HOPEWELL	161+39	163+12	LT	.04				.04									3		80′			
14	CL-27	HOPEWELL	161+39	161+89	LT & RT	.01				.01									3		*			
14	CL-28	FRANKLIN	163+70	163+75	LT	.02				.02														
14	CL-29	FRANKLIN	163+59	163+64	RT	.02				.02														
14	CL-30	HOPEWELL	164+13	165+86	RT	.06				.06									3		80′			
14	CL-31	HOPEWELL	165+36	165+86	LT & RT	.01				.01									3		*			
15	CL-32	HOPEWELL	174+14	174+65	LT & RT	.01				.01									3		*			
15	CL-33	HOPEWELL	174+65	177+65	LT	.07				.07									5		80′			
15	CL-34	DOG LEG	175+53	175+53	RT	.01				.01														
TOTALS CARRIED TO GENERAL SUMMARY						.86		362		.86		362			5			91						
																		91						

CALCULATED DMW CHECKED SRH

PAVEMENT MARKING SUBSUMMARY

LIC-CR 311-0.000 (HOPEWELL DR)

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SHEET NO.	REFERENCE NO.	ROUTE	STATION FROM	STATION TO	LANE SIDE	614 WORK ZONE CENTERLINE CLASS II	614 WORK ZONE CHANNELIZING LINE CLASS III	614 WORK ZONE STOP LINE CLASS III	644 EDGE LINE	644 CENTER LINE	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE	644 LANE ARROW	644 WORD ON PAVEMENT, 96 INCH	644 DOTTED LINE, 12 INCH		621 RAISED PAVEMENT MARKING EACH B	621 RAISED PAVEMENT MARKING EACH Y/Y	621 RAISED PAVEMENT MARKING EACH W/R	SPACING				
						MILE	FT	FT	MILE	MILE	FT	FT	FT	EACH	EACH	FT									
8	CH-1	HOPEWELL	100+15	101+83	LT		168				168									5	40′				
8	CH-2	HOPEWELL	100+15	101+83	LT		168				168									5	40′				
8	CH-3	HOPEWELL	100+49	101+83	LT		134				134									4	40′				
8	CH-4	HOPEWELL	107+24	107+75	RT		51				51									3	*				
8	CH-5	INDUSTRIAL	108+15	108+15	LT		25				25														
8	CH-6	INDUSTRIAL	108+29	108+29	RT		29				29														
8	CH-7	HOPEWELL	108+70	109+23	LT		53				53									3	*				
8	CH-8	HOPEWELL	109+68	110+18	RT		50				50									3	*				
9	CH-9	HOPEWELL	111+23	112+58	LT		135				135									4	40′				
9	CH-10	HOPEWELL	114+80	116+71	RT		191				191									5	40′				
9	CH-11	HOPEWELL	114+80	116+58	RT		178				178									5	40′				
9	CH-12	HOPEWELL	117+31	119+32	LT		201				201									5	40′				
10	CH-13	HOPEWELL	123+11	125+04	RT		193				193									5	40′				
10	CH-14	HOPEWELL	125+56	127+49	LT		193				193									5	40′				
11	CH-15	HOPEWELL	134+97	136+08	RT		111				111									3	40′				
11	CH-16	HOPEWELL	137+27	138+37	LT		110				110									3	40′				
12	CH-17	HOPEWELL	141+38	142+98	RT		160				160									3	40′				
12	CH-18	HOPEWELL	141+87	142+88	RT		101				101									3	40′				
12	CH-19	LICKING VIEW	142+97	143+07	LT		31				31														
12	CH-20	LICKING VIEW	143+49	143+57	RT		31				31														
12	CH-21	HOPEWELL	143+57	144+67	LT		110				110									3	40′				
12	CH-22	HOPEWELL	143+57	146+10	LT		253				253									7	40′				
14	CH-23	HOPEWELL	161+22	162+97	RT		175				175									3	40′				
14	CH-24	HOPEWELL	161+89	163+12	RT		123				123									3	40′				
14	CH-25	FRANKLIN	163+60	163+64	LT		31				31														
14	CH-26	FRANKLIN	163+71	163+74	RT		43				43														
14	CH-27	HOPEWELL	164+13	165+36	LT		123				123									3	40′				
14	CH-28	HOPEWELL	164+13	165+36	LT		123				123									3	40′				
15	CH-29	HOPEWELL	174+65	175+13	RT		48				48									7	40′				
15	CH-30	HOPEWELL	175+89	177+65	RT		176				176									7	40′				
15	CH-31	HOPEWELL	176+51	177+65	RT		114				114									3	40′				
8	PL-1	HOPEWELL	102+33	106+74	LT	.09				.09									6		80′				
9	PL-2	HOPEWELL	113+07	114+30	LT	.03				.03									2		80′				
9	PL-3	HOPEWELL	119+81	125+11	LT	.10				.10									7		80′				
10	PL-4	HOPEWELL	128+07	134+62	RT	.13				.13									9		80′				
11	PL-5	HOPEWELL	138+77	141+38	LT	.05				.05									4		80′				
12	PL-6	HOPEWELL	146+60	148+67	LT	.04				.04									4		80′				
13	PL-7	HOPEWELL	150+97	161+39	LT	.20				.20									14		80′				
14	PL-8	HOPEWELL	165+86	174+14	LT	.16				.16									11		80′				
8	PR-1	HOPEWELL	102+33	106+74	RT	.09				.09									6		80′				
9	PR-2	HOPEWELL	113+07	114+06	RT	.03				.03									2		80′				
9	PR-3	HOPEWELL	119+81	125+11	RT	.10				.10									7		80′				
10	PR-4	HOPEWELL	128+07	134+62	RT	.13				.13									9		80′				
11	PR-5	HOPEWELL	138+77	141+38	RT	.05				.05									4		80′				
12	PR-6	HOPEWELL	146+60	148+67	RT	.04				.04									20		80′				
13	PR-7	HOPEWELL	150+97	161+39	RT	.20				.20									14		80′				
14	PR-8	HOPEWELL	165+86	174+14	RT	.16				.16									11		80′				
TOTALS CARRIED TO GENERAL SUMMARY						1.60	3632			1.60	3632							130	96	226					

CALCULATED DMW CHECKED SRH

PAVEMENT MARKING SUBSUMMARY

LIC-CR 311-0.000 (HOPEWELL DR)

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SHEET NO.	REFERENCE NO.	ROUTE	STATION FROM	STATION TO	LANE SIDE	614 WORK ZONE CENTERLINE CLASS II	614 WORK ZONE CHANNELIZING LINE CLASS III	614 WORK ZONE STOP LINE CLASS III	644 EDGE LINE	644 CENTER LINE	644 CHANNELIZING LINE	644 STOP LINE	644 TRANSVERSE LINE	644 LANE ARROW	644 WORD ON PAVEMENT, 96 INCH	644 DOTTED LINE, 12 INCH		621 RAISED PAVEMENT MARKING EACH B	621 RAISED PAVEMENT MARKING EACH Y/Y	621 RAISED PAVEMENT MARKING EACH W/R	SPACING			
			MILE			FT	FT	MILE	MILE	FT	FT	FT	EACH	EACH	FT									
8	TL-1	HOPEWELL	101+83	102+33	LT & RT							41.3												
8	TL-2	HOPEWELL	106+74	107+24	LT & RT							39.0												
9	TL-3	HOPEWELL	110+37	110+83	LT & RT							84.5												
9	TL-4	HOPEWELL	112+58	113+07	LT & RT							40.0												
9	TL-5	HOPEWELL	114+30	114+80	LT & RT							32.7												
9	TL-6	HOPEWELL	119+32	119+81	LT & RT							34.1												
10	TL-7	HOPEWELL	124+80	125+11	LT & RT							59.1												
10	TL-8	HOPEWELL	127+49	128+07	LT & RT							33.0												
11	TL-9	HOPEWELL	134+33	134+62	LT & RT							57.2												
11	TL-10	HOPEWELL	136+08	137+27	LT & RT							51.7												
11	TL-11	HOPEWELL	138+77	139+07	LT & RT							55.8												
12	TL-12	HOPEWELL	141+38	141+87	LT & RT							33.5												
12	TL-13	HOPEWELL	146+10	146+60	LT & RT							33.5												
14	TL-14	HOPEWELL	161+39	161+89	LT & RT							32.1												
14	TL-15	HOPEWELL	165+36	165+86	LT & RT							33.5												
15	TL-16	HOPEWELL	174+14	174+65	LT & RT							35.9												
9	EL-1	HOPEWELL	113+66	142+90	LT				.56									3		37	80'			
9	EL-2	HOPEWELL	113+66	116+80	RT				.07											5	80'			
9	EL-3	HOPEWELL	117+16	124+98	RT				.16											11	80'			
10	EL-4	HOPEWELL	125+72	143+36	RT				.34											23	80'			
12	EL-5	HOPEWELL	143+19	148+67	LT				.11											8	80'			
12	EL-6	HOPEWELL	143+68	148+67	RT				.10											7	80'			
13	EL-7	HOPEWELL	150+97	163+51	LT				.24											15	80'			
13	EL-8	HOPEWELL	150+97	163+48	RT				.25									1		17	80'			
14	EL-9	HOPEWELL	163+85	177+78	LT				.28											19	80'			
14	EL-10	HOPEWELL	163+83	175+13	RT				.22											16	80'			
15	EL-11	HOPEWELL	175+61	177+63	RT				.04											4	80'			
8	DL-1	HOPEWELL	100+00	100+49	LT											49								
8	DL-2	HOPEWELL	100+00	100+49	RT											49								
TOTALS CARRIED TO GENERAL SUMMARY									2.37				697			98		4		162				
																		166						

CALCULATED DMW
CHECKED SRH

PAVEMENT MARKING SUBSUMMARY

LIC-CR 311-0.000
(HOPEWELL DR)

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SHEET NO.	REFERENCE NO.	STATION	DESCRIPTION	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 2 POST, TYPE S FT	630 SIGN, FLAT SHEET, SQ FT	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH	630 SIGN POST REFLECTOR EACH
8	S-1	102+44	BEGIN	RT	R3-9CP-24	12X24	13	2			
			CENTER LANE		R3-9B-24	36X24		6			
8	S-2	102+45	SPEED LIMIT 35	RT	R2-1-24	18X24	13	3	1	1	
8	S-3	102+47	END	LT	R3-9DP-24	12X24	13	2			
			CENTER LANE		R3-9B-24	36X24		6			
8	S-4	102+72	ARROW	LT	R3-H8DB-54	54X30	13	11.25	1	2	
8	S-5	106+74	BEGIN	LT	R3-9CP-24	12X24	13	2			
			CENTER LANE		R3-9B-24	36X24		6			
8	S-6	106+74	END	RT	R3-9CP-24	12X24	13	2			
			CENTER LANE		R3-9B-24	36X24		6			
8	S-7	106+99	ARROW	RT	R3-H8BH-36	36X30	13	7.5	1	2	
8	S-8	107+92	STOP	LT	R1-1-24	24X24	13	4	1	1	1
8	S-9	108+50	STOP	RT	R1-1-24	24X24	13	4	1	1	1
8	S-10	109+49	ARROW	LT	R3-H8BH-36	36X30	13	7.5	1	2	
8	S-11	109+64	ARROW	RT	R3-H8BA-30	30X30	13	6.25	1	1	
9	S-12	111+92 & 117+97	SPEED LIMIT 35	LT	R2-1-24	18X24	13	3	1	1	
9	S-13	112+58	ARROW	LT	R3-H8BA-30	30X30	13	6.25	1	1	
9	S-14	114+80	ARROW	RT	R3-8B-48	48X30	13	10	1	2	
9	S-15	117+97	SPEED LIMIT 50	RT	R2-1-24	18X24	13	3	1	1	
9	S-16	119+32	ARROW	LT	R3-H8BB-30	30X30	13	6.25	1	1	
10	S-17	123+11	ARROW	RT	R3-H8BA-30	30X30	13	6.25	1	1	
10	S-18	124+80	REDUCE SPEED 35	RT	W3-5-36	36X36	13	9			
10	S-19	127+54	ARROW	LT	R3-H8BA-30	30X30	13	6.25	1	1	
11	S-20	136+08	ARROW	LT	R3-H8BA-30	30X30	13	6.25	1	1	
11	S-21	137+27	ARROW	RT	R3-H8BA-30	30X30	13	6.25	1	1	
11	S-22	139+79	SPEED LIMIT 50	LT	R2-1-24	18X24	13	3	1	1	
12	S-23	141+87	ARROW	RT	R3-8B-48	48X30	13	10	1	2	
12	S-24	142+78	STOP	LT	R1-1-24	24X24	13	4	1	1	1
12	S-25	143+78	STOP	RT	R1-1-24	24X24	13	4	1	1	1
12	S-26	144+67	ARROW	LT	R3-8B-48	48X30	13	10	1	2	
12	S-27	146+10	ARROW	LT	R3-8B-48	48X30	13	10	1	2	
12	S-28	146+52	SPEED LIMIT 50	RT	R2-1-24	18X24	13	3	1	1	
12	S-29	147+78	TRUCK ROUTE	LT	R14-1-24	24X18	13	3	1	1	
13	S-30	156+55	REDUCE SPEED 35	RT	W3-5-36	36X36	13	9	1	1	
14	S-31	161+15	SPEED LIMIT 50	LT	R2-1-24	18X24	13	3	1	1	
14	S-32	161+77	ARROW	RT	R3-8B-48	48X30	13	10	1	2	
14	S-33	163+41	STOP	LT	R1-1-24	24X24	13	4	1	1	1
14	S-34	163+96	STOP	RT	R1-1-24	24X24	13	4	1	1	1
TOTALS CARRIED TO GENERAL SUMMARY							442	215	29	39	6

CALCULATED DMW
CHECKED SRH

SIGNING SUBSUMMARY

LIC-CR 311-0.000 (HOPEWELL DR)

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SHEET NO.	REFERENCE NO.	STATION	DESCRIPTION	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 2 POST, TYPE S (FT)	630 SIGN, FLAT SHEET, (SQ FT)	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (EACH)	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (EACH)	630 SIGN POST REFLECTOR (EACH)									
14	S-35	165+36	ARROW	LT	R3-8B-48	48X30	13	10	1	2										
14	S-36	161+15 & 165+34	SPEED LIMIT 35	RT	R2-1-24	18X24	13	3	1	1										
14	S-37	166+15	TRUCK ROUTE	LT	R14-1-24	24X18	13	3	1	1										
15	S-38	171+48	SPEED LIMIT 35	RT	R2-1-24	18X24	13	3	1	1										
15	S-39	174+19	SPEED LIMIT 35	LT	R2-1-24	18X24	13	3	1	1										
15	S-40	174+65	ARROW	RT	R3-8B-48	48X30	13	10	1	2										
15	S-41	176+30	ARROW	RT	R3-8B-48	48X30	13	10	1	2										
15	S-42	176+89	TRUCK ROUTE	RT	R14-1-24	24X18	13	3	1	1										
			ARROW		W1-7-24	24X12		2												
TOTALS CARRIED TO GENERAL SUMMARY							104	47	8	13										

CALCULATED DMW
CHECKED SRH

SIGNING SUBSUMMARY

LIC-CR 311-0.000 (HOPEWELL DR)

22
22

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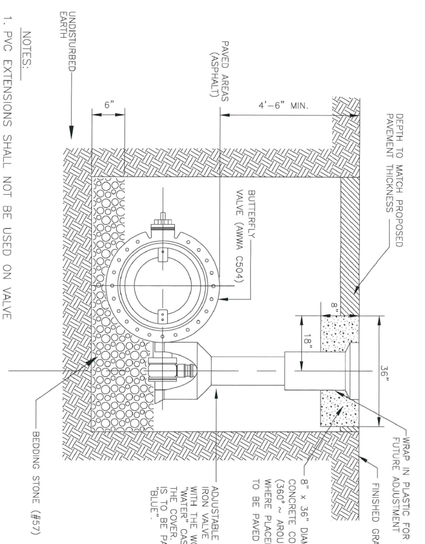
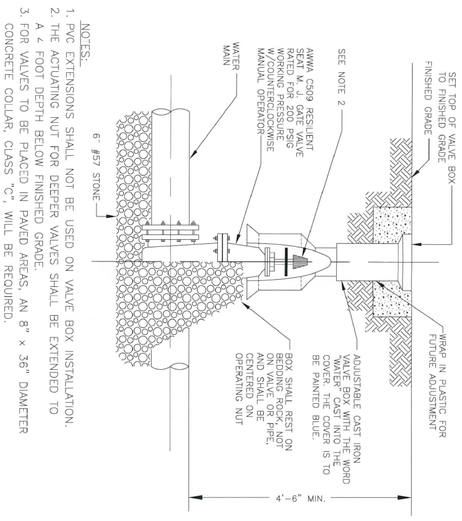


NOTES:

1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. ALL WATER SHUT-OFF VALVES SIXTEEN (16) INCHES AND LARGER SHALL BE BUTTERFLY VALVES EQUIPPED WITH A BYPASS.

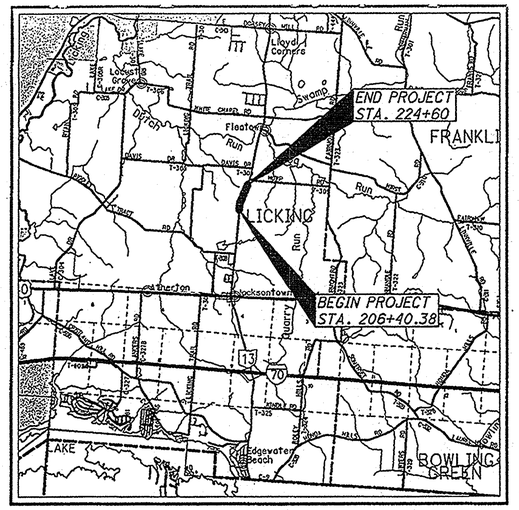
1 / 1	NUMBER WA-4	STANDARD CONSTRUCTION DRAWING BUTTERFLY VALVE WITH BOX (FOR VALVES 16" OR LARGER)	DATE 02-2022	CITY OF HEATH DIRECTOR OF UTILITIES



NOTES:

1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO A 4 FOOT DEPTH BELOW FINISHED GRADE.
3. FOR VALVES TO BE PLACED IN PAVED AREAS, AN 8" x 36" DIAMETER CONCRETE COLLAR, CLASS "C", WILL BE REQUIRED.

1 / 1	NUMBER WA-3	STANDARD CONSTRUCTION DRAWING GATE VALVE WITH BOX (FOR VALVES UP TO BUT NOT INCLUDING 16" SIZE)	DATE 02-2022	CITY OF HEATH DIRECTOR OF UTILITIES



LOCATION MAP

LATITUDE: 39°58'49" LONGITUDE: 82°24'38"

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED _____

INTERSTATE HIGHWAY _____

FEDERAL ROUTES _____

STATE ROUTES _____

COUNTY & TOWNSHIP ROADS _____

OTHER ROADS _____

DESIGN DESIGNATION

CURRENT ADT (2017)	9,900
DESIGN YEAR ADT (2037)	12,000
DESIGN HOURLY VOLUME (2037)	1,200
DIRECTIONAL DISTRIBUTION	66%
TRUCKS (24 HOUR B&C)	3%
DESIGN SPEED	55
LEGAL SPEED	55

DESIGN FUNCTIONAL CLASSIFICATION:
RURAL ARTERIAL

NHS PROJECT ____ NO

DESIGN EXCEPTIONS

SHOULDER WIDTH 4/1/16

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE — *Call Before You Dig* 1-800-362-2764

(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

PLAN PREPARED BY:

GPD GROUP®
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102

Gbus, Pyle, Schomer, Burns & DeHaven, Inc.
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ENGINEERS SEAL:

STATE OF OHIO * MARK R. GROSSMAN E-61120 REGISTERED PROFESSIONAL ENGINEER *

SIGNED: MRG

DATE: 6-30-16

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

LIC SR 13 3.88 PART 3

DAWES ARBORETUM

LEFT TURN LANE

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2
TYPICAL SECTIONS	3
GENERAL NOTES	4-5
MAINTENANCE OF TRAFFIC	6-20
GENERAL SUMMARY	21-22
ROADWAY SUBSUMMARY - PAVEMENT CALCULATIONS	23
PROJECT SITE PLAN	24
ROADWAY PLANS	25-28
CROSS SECTIONS	29-46
RIGHT OF WAY	47-55
SOIL PROFILE SHEETS	

STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
SEE PART 1		

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE WIDENING OF S.R. 13 FOR APPROXIMATELY 1800 FT. FOR THE INSTALLATION OF A NORTHBOUND LEFT TURN LANE AT DAWES ARBORETUM ENTRANCE.

PROJECT EARTH DISTURBED AREA:	1.37 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	4.90 ACRES

2016 SPECIFICATIONS

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

I HEREBY APPROVED 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 PLANS AND ESTIMATES.

APPROVED Gary R. Simpson
DATE 7/11/16 DISTRICT DEPUTY DIRECTOR

APPROVED Jerry Wray
DATE 9-26-16 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E120890

PID NO. 92958

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

LIC SR 13 3.88 PART 3

1/55

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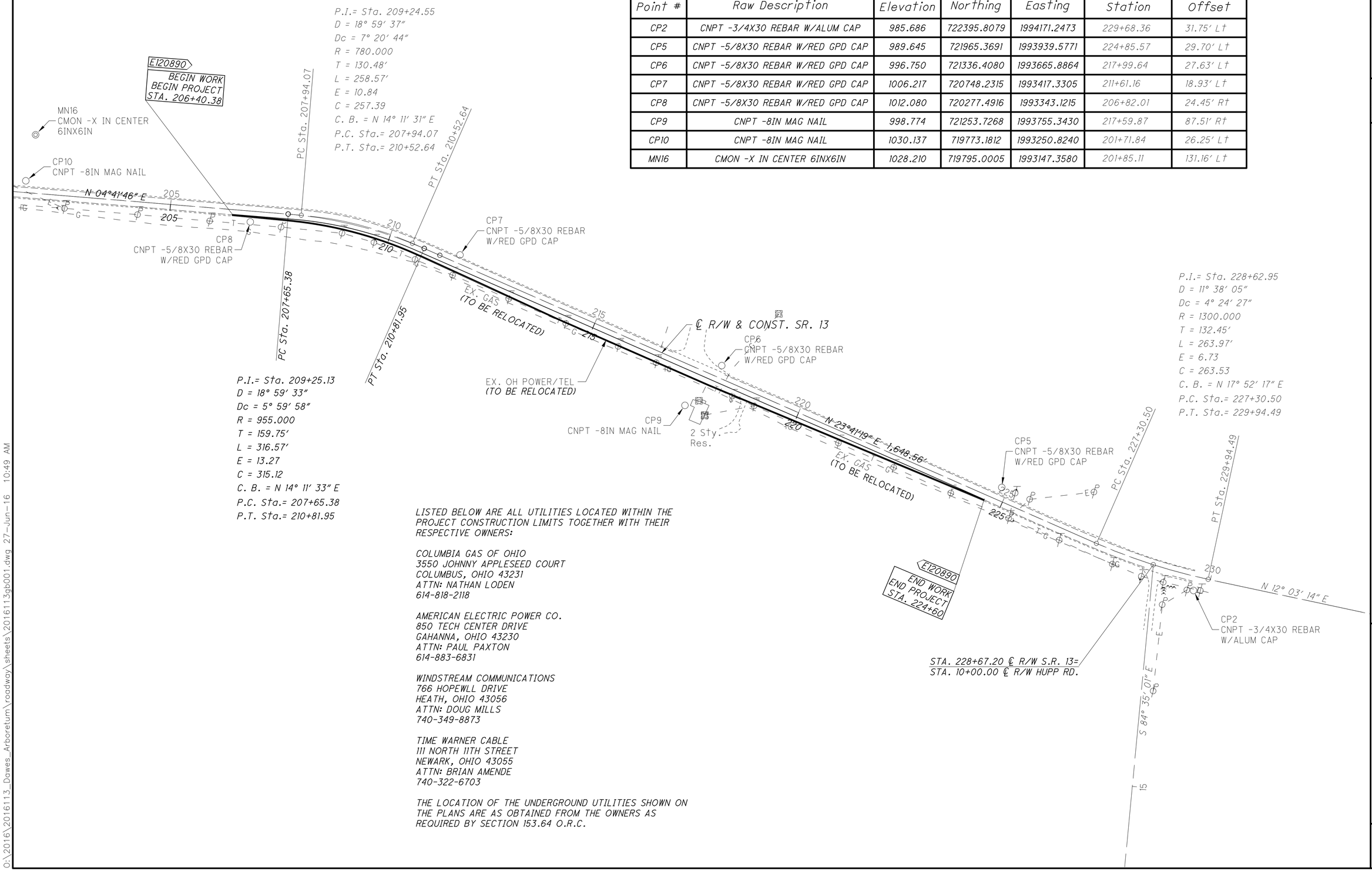
Point Table						
Point #	Raw Description	Elevation	Northing	Easting	Station	Offset
CP2	CNPT -3/4X30 REBAR W/ALUM CAP	985.686	722395.8079	1994171.2473	229+68.36	31.75' Lt
CP5	CNPT -5/8X30 REBAR W/RED GPD CAP	989.645	721965.3691	1993939.5771	224+85.57	29.70' Lt
CP6	CNPT -5/8X30 REBAR W/RED GPD CAP	996.750	721336.4080	1993665.8864	217+99.64	27.63' Lt
CP7	CNPT -5/8X30 REBAR W/RED GPD CAP	1006.217	720748.2315	1993417.3305	211+61.16	18.93' Lt
CP8	CNPT -5/8X30 REBAR W/RED GPD CAP	1012.080	720277.4916	1993343.1215	206+82.01	24.45' Rt
CP9	CNPT -8IN MAG NAIL	998.774	721253.7268	1993755.3430	217+59.87	87.51' Rt
CP10	CNPT -8IN MAG NAIL	1030.137	719773.1812	1993250.8240	201+71.84	26.25' Lt
MN16	CMON -X IN CENTER 6INX6IN	1028.210	719795.0005	1993147.3580	201+85.11	131.16' Lt



P.I.= Sta. 209+25.13
D = 18° 59' 33"
Dc = 5° 59' 58"
R = 955.000
T = 159.75'
L = 316.57'
E = 13.27
C = 315.12
C. B. = N 14° 11' 33" E
P.C. Sta.= 207+65.38
P.T. Sta.= 210+81.95

P.I.= Sta. 228+62.95
D = 11° 38' 05"
Dc = 4° 24' 27"
R = 1300.000
T = 132.45'
L = 263.97'
E = 6.73
C = 263.53
C. B. = N 17° 52' 17" E
P.C. Sta.= 227+30.50
P.T. Sta.= 229+94.49

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

COLUMBIA GAS OF OHIO
3550 JOHNNY APPLESEED COURT
COLUMBUS, OHIO 43231
ATTN: NATHAN LODEN
614-818-2118

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

WINDSTREAM COMMUNICATIONS
766 HOPEWLL DRIVE
HEATH, OHIO 43056
ATTN: DOUG MILLS
740-349-8873

TIME WARNER CABLE
111 NORTH 11TH STREET
NEWARK, OHIO 43055
ATTN: BRIAN AMENDE
740-322-6703

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.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JES
CHECKED TDM

SCHEMATIC PLAN

LIC SR 13 3.88 PART 3

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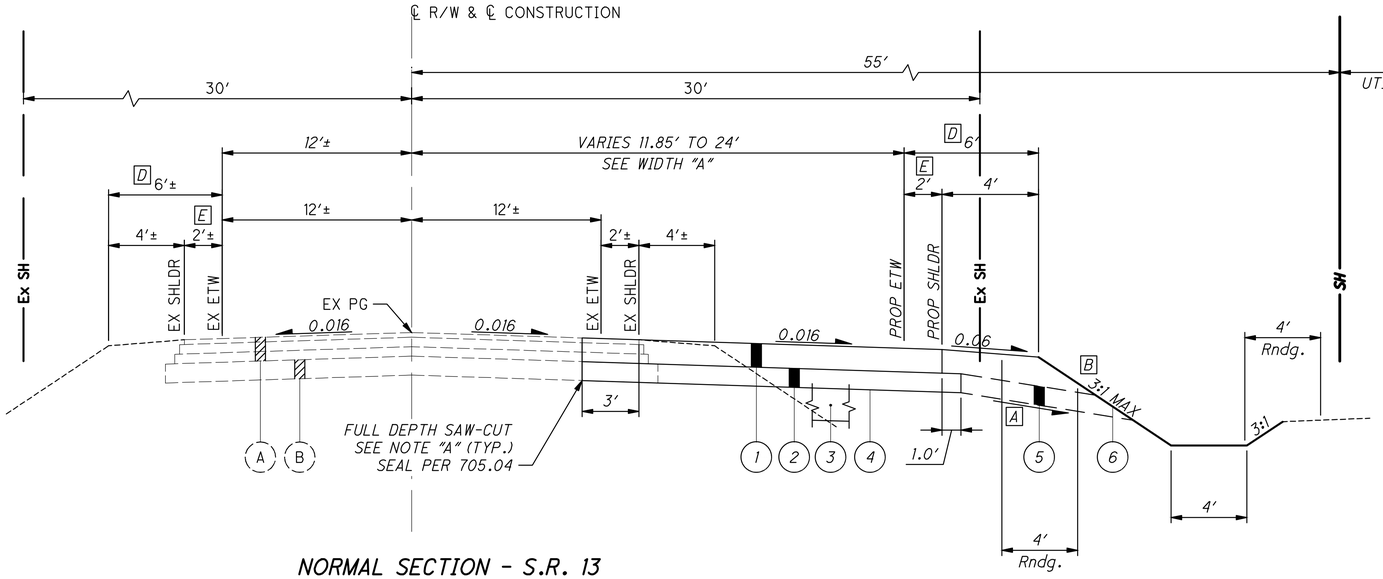


NORMAL SECTION - S.R. 13

STA. 213+50 TO STA. 224+60

WIDTH "A"			
BEGIN STATION	END STATION	BEGIN WIDTH	END WIDTH
206+40.38	208+90.38	11.77′	15.00′
208+90.38	214+15	15.00′	24.00′
214+15	217+90	24.00′	24.00′
217+90	224+60	24.00′	11.85′

WIDTH "B"			
BEGIN STATION	END STATION	BEGIN WIDTH	END WIDTH
204+40.39	207+65.38	0.00′	0.00′
207+65.38	209+23.66	0.00′	2.43′
209+23.66	210+81.95	2.43′	0.00′
210+81.95	224+60	0.00′	0.00′

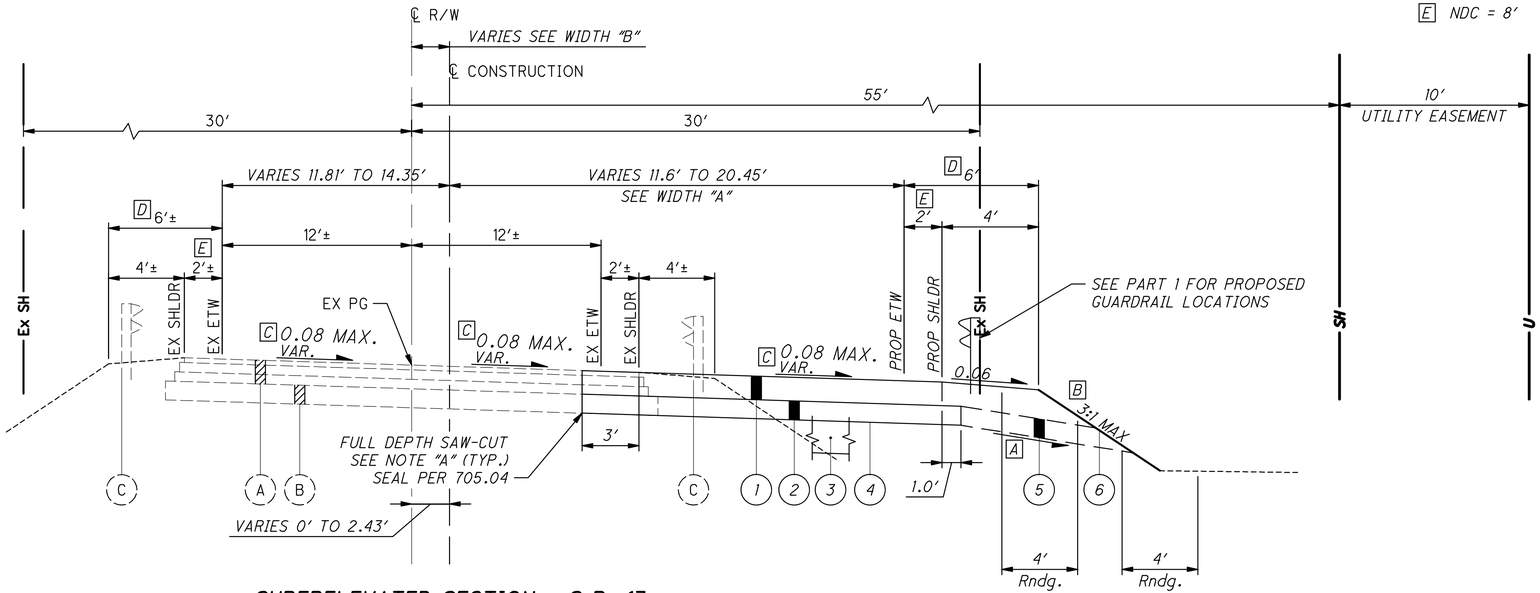
[A] 0.04 MIN., 0.08 DESIRABLE

[B] SEE CROSS SECTIONS

[C] SEE PART 1 (SHEET __) FOR SUPERELEVATION TABLE

[D] NDC = 10′

[E] NDC = 8′



SUPERELEVATED SECTION - S.R. 13

STA. 206+40.38 TO STA. 213+50

Existing typical section information taken from record drawing LIC-13-(2.65-5.22) sheet 2 of 17. Widths taken from field survey.

NOTE "A"
The existing pavement edges shall be saw-cut to locate a sound pavement edge per sec. 203.04(f) of the CMS. The saw cut line shall be offset 3 ft. from the existing edge of paved shoulder. Cost for the pavement removed to be included in Item 203 Excavation.

LEGEND

1. ITEM 301 - 14" ASPHALT CONCRETE BASE, PG64-22 (6" MAX LIFT)
2. ITEM 204 - 6" GRANULAR MATERIAL, TYPE B
3. SUBGRADE STABILIZATION PER NOTES AND DETAIL ON SHEET 5
4. ITEM 204 - SUBGRADE COMPACTION / PROOF ROLLING
5. ITEM 605 - AGGREGATE DRAINS
6. ITEM 659 - SEEDING AND MULCHING

A 14"± ASPHALT CONCRETE

B 6"± AGGREGATE BASE

C EXIST. GUARDRAIL

TYPICAL SECTIONS

LIC SR 13 3.88 PART 3

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ROUNDING

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

UTILITIES

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

COLUMBIA GAS OF OHIO
3550 JOHNNY APPLESEED COURT
COLUMBUS, OHIO 43231
ATTN: NATHAN LODEN
614-818-2118

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

WINDSTREAM COMMUNICATIONS
766 HOPEWLL DRIVE
HEATH, OHIO 43056
ATTN: DOUG MILLS
740-349-8873

TIME WARNER CABLE
111 NORTH 11TH STREET
NEWARK, OHIO 43055
ATTN: BRIAN AMENDE
740-322-6703

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

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD:	GPS
MONUMENT TYPE:	¾" IPIN w/ Alum Cap

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM:	NAVD 88
GEOID:	GEOID12A

HORIZONTAL POSITIONING

REFERENCE FRAME:	NAD83(2011)
ELLIPSOID:	NAD83
MAP PROJECTION:	Lambert
COORDINATE SYSTEM:	Ohio State Plane South
COMBINED SCALE FACTOR:	1.000052373
ORIGIN OF COORDINATE SYSTEM:	0,0

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

WORK LIMITS

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

CLEARING AND GRUBBING

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION.

A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31 (BY OTHERS). THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

SEEDING AND MULCHING

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

659, TOPSOIL	133 CU. YD.
659, SEEDING AND MULCHING	4865 SQ. YD.
659, REPAIR SEEDING AND MULCHING	244 SQ. YD.
659, COMMERCIAL FERTILIZER	0.7 TON
659, LIME	1 ACRES
659, WATER	13.1 M. GAL.

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

ROUNDING

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

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

PART-WIDTH CONSTRUCTION

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

AGGREGATE DRAINS

THE FOLLOWING TABLE SHOWS THE LOCATION AND LENGTHS OF AGGREGATE DRAINS TO BE CARRIED TO THE GENERAL SUMAMRY.

AGGREGATE DRAINS	
STATION	LENGTH
206+50	15'
207+00	10'
207+50	10'
208+00	10'
208+50	10'
209+00	10'
209+50	10'
210+00	10'
210+50	10'
211+00	10'
211+50	10'
212+00	10'
212+50	10'
213+00	10'
213+50	10'
214+00	10'
214+50	10'
215+00	10'
215+50	10'
216+00	10'

AGGREGATE DRAINS	
STATION	LENGTH
216+50	10'
217+00	10'
217+50	10'
218+00	10'
218+50	10'
219+00	10'
219+50	10'
220+00	10'
220+50	10'
221+00	10'
221+50	10'
222+00	10'
222+50	10'
223+00	10'
223+50	10'
224+00	10'
224+50	10'
TOTAL	375'

EARTHWORK SUBSUMMARY

SHEET NO.	203 EXCAVATION	203 EMBANKMENT	204 EXCAVATION OF SUBGRADE	204 GRANULAR MATERIAL, TYPE B	204 GEOTEXTILE FABRIC
	CU. YD.	CU. YD.	CU. YD.	CU. YD.	SQ. YD.
29	6	0	0	0	0
30	33	17	0	0	0
31	21	21	0	0	0
32	36	45	0	0	0
33	44	61	36	36	57
34	78	101	58	58	91
35	65	99	46	46	71
36	142	216	96	105	156
37	248	221	44	49	75
38	264	269	0	0	0
39	245	292	62	90	178
40	539	82	115	135	267
41	535	0	86	86	167
42	220	318	0	0	0
43	383	694	22	26	53
44	257	471	58	60	125
45	113	195	17	17	37
46	0	0	0	0	0
TOTALS	3229	3102	640	708	1277

CALCULATED JES CHECKED MRG

GENERAL NOTES

LIC SR 13 3.88 PART 3

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ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.

IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO 204.03.

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

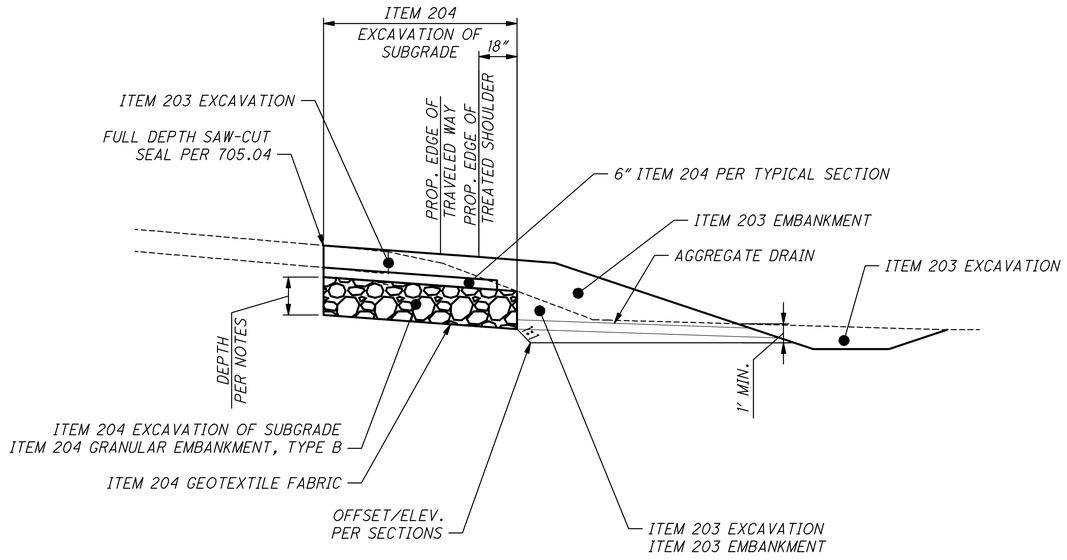
THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

UNSUITABLE SUBGRADE LIMITS:

STA: 209 + 00 to STA: 212 + 50 (2'-0")

UNSTABLE SUBGRADE LIMITS:

STA: 215+50 to STA: 219+00 (1'-6")
STA: 222+00 to STA: 224+60 (1'-6")



EXCAVATION OF UNSUITABLE OR UNSTABLE SOILS DETAIL

CALCULATED JES
CHECKED MRG

GENERAL NOTES

LIC SR 13 3.88 PART 3

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SEQUENCE OF CONSTRUCTION

PHASE 1

THE CONTRACTOR SHALL CONSTRUCT THE TEMPORARY PAVEMENT ADJACENT TO THE EXISTING SHOULDER ON THE WEST SIDE OF S.R. 13 AT LOCATIONS SHOWN IN THE PLANS UNDER A TWO-WAY/ONE-LANE SCENARIO UTILIZING FLAGGER CONTROL AS PER MT-97.10. DURING ALL NON-WORKING HOURS THE CONTRACTOR SHALL OPEN THE ROAD TO TWO LANES OF TRAFFIC.

PHASE 2

THE EXISTING TRAFFIC SHALL BE SHIFTED TO THE WEST SIDE OF THE ROAD ON THE EXISTING AND TEMPORARY PAVEMENT. THE CONTRACTOR SHALL CONSTRUCT THE EAST SIDE OF THE ROAD.

PHASE 3

THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PAVEMENT AND PLACE THE SIGNAGE AND TEMPORARY MARKINGS THROUGHOUT THE ENTIRE PROJECT. DURING FINAL PAVEMENT MARKING OPERATIONS, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MT-99.20. SEE PART 1 FOR INTERMEDIATE, SURFACE COURSE AND FINAL PAVEMENT MARKING INFORMATION.

NOTIFICATIONS

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING ENTITIES IN WRITING AND VIA TELEPHONE AT LEAST EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. INCLUDED IN THE NOTIFICATION SHALL BE THE PROJECTED DATES AND FRAMES OF ANY ROAD CLOSURES:

HEATH POLICE DEPARTMENT
1287 HEBRON ROAD
HEATH, OHIO 43056
(740) 522-2141

HEATH FIRE DEPARTMENT
1365 BLACKFOOT TRAIL
HEATH, OHIO 43056
(740) 522-5101

HEATH BOARD OF EDUCATION
107 LANCASTER DRIVE
HEATH, OHIO 43056
(740) 522-2816

LICKING COUNTY SHERIFF
155 EAST MAIN STREET
NEWARK, OHIO 43055
(740) 670-5546

OHIO DEPARTMENT OF TRANSPORATATION
DISTRICT 5
9600 JACKSON ROAD
JACKSONTOWN, OHIO 43030
(740) 323-4400

STATE HIGHWAY PATROL
3855 OUTVILLE ROAD SW
GRANVILLE, OH 43023
(740) 927-0065

SHOULD THE PROJECT DATES AND TIME FRAMES OF THE START AND END OF THE ROAD CLOSURES CHANGE THROUGHOUT THE DURATION OF THE PROJECT, THE AGENCIES LISTED ABOVE MUST BE NOTIFIED IMMEDIATELY OF SUCH CHANGES.

ITEM 614 - MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION DURING PHASE 2 SHALL BE MAINTAINED ON THE EXISTING AND TEMPORARY PAVEMENT.
2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (740) 323-4400, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
4. ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
5. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
6. FOR EACH PHASE OF CONSTRUCTION THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, REMOVE, AND COVER PAVEMENT MARKINGS, DRUMS, SIGNS, BARRICADES, AND ANY OTHER TRAFFIC CONTROL DEVICES NEEDED IN ORDER TO MAINTAIN TRAFFIC AS SHOWN IN THESE PLANS.
7. RPM REMOVAL SHALL BE PERFORMED PRIOR TO THE SHIFTING OF TRAFFIC. SEE PART I FOR QUANTITIES.

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

TRENCH FOR WIDENING

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

DROP-OFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON SCD MT-101.90.

DUST CONTROL

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

ITEM 616 - WATER	30 MGAL

ITEM 614 - WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 622 - PORTABLE BARRIER PLACEMENT

DURING THE PLACEMENT OF THE PORTABLE BARRIER, TRAFFIC WILL BE PROHIBITED FROM OCCUPYING THE TRAVEL LANE ADJACENT TO THE BARRIER. THE BARRIER WILL BE PLACED AT NIGHT PER THE WORK HOUR RESTRICTION NOTE AND IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE MAP. THE CLOSURE OF THE ADJACENT LANE WILL BE PER THE STANDARD DRAWING MT-95.30.

THE CONTRACTOR WILL SUBMIT A PLAN TO THE ENGINEER FOR APPROVAL SEVEN (7) DAYS IN ADVANCE OF THE PLANNED LANE CLOSURE. WORK WILL NOT BEGIN UNTIL APPROVAL OF THE PLANS HAS BEEN GRANTED.

ALL COSTS INVOLVED IN PLACING THE PORTABLE CONCRETE BARRIER WILL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM 622 PORTABLE CONCRETE BARRIER.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) AND EXISTING GUARDRAIL LOCATED WITHIN FIVE (5) FEET OF THE EDGE OF THE WORK ZONE TRAVEL LANE.

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

THE ESTIMATED QUANTITIES HAVE BEEN PROVIDED IN THE MAINTENANCE OF TRAFFIC PHASE 2 SUBSUMMARY.

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

ITEM 615 - ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN

THIS ITEM INCLUDES THE SHOULDER PREPARATION FOR ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN. THE TEMPORARY PAVEMENT SHALL BE INSTALLED TO THE DIMENSIONS SHOWN IN THE MOT PLANS. AFTER THE TEMPORARY PAVEMENT IS NO LONGER NEEDED IT SHALL BE REMOVED AND BACKFILLED WITH ITEM 203 EMBANKMENT. SUBGRADE COMPACTION SHALL CONFORM TO CMS 204.03.

EARTHWORK AND SEEDING QUANTITIES ARE GIVEN BELOW FOR ESTIMATING PURPOSES AND SHALL BE INCLUDED IN THE LUMP SUM BID.

EXCAVATION FOR MAINTAINING TRAFFIC	0.0 CY
EMBANKMENT FOR MAINTAINING TRAFFIC	4.9 CY
ITEM 659 - SEEDING AND MULCHING	520 SY

PAYMENT SHALL BE MADE AT THE LUMP SUM BID AND INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN

THE FLEXIBLE BUILDUP FOR TEMPORARY PAVEMENT SHALL BE THE FOLLOWING:

ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE I, (448), PG64-22

ITEM 407 - TACK COAT

ITEM 301 - 7" ASPHALT CONCRETE BASE, PG64-22

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE DRIVING SURFACE THROUGHOUT THE USE OF THE PAVEMENT, AT THE APPROVAL OF THE ENGINEER.

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

ITEM 614 - MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED)

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

CALCULATED SLB CHECKED AKF

MAINTENANCE OF TRAFFIC NOTES

LIC SR 13 3.88 PART 3

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TEMPORARY TRAFFIC CONTROL SUBSUMMARY - PHASE 2

MAINTENANCE

LIC SR 13 3.88 PART 3

CALCULATED SLB
CHECKED AKF

SHEET NO.	REF. NO.	LOCATION	STATION FROM	STATION TO	SIDE	614 WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL) EACH	614 BARRIER REFLECTOR, TYPE B EACH	614 OBJECT MARKER, ONE WAY EACH	614 WORK ZONE CENTER LINE, CLASS I, DOUBLE SOLID MILE	614 WORK ZONE EDGE LINE, CLASS I (WHITE) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I FT	614 WORK ZONE ARROW, CLASS I EACH	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN SY	622 PORTABLE BARRIER, 32" FT
10	PB-1	S.R. 13	205+60	207+00	RT	1	4	4						140
10	CDS-1	S.R. 13	201+65	207+00	CEN/LT				0.101					
10	EW-1	S.R. 13	201+65	207+00	LT					0.101				
10	EW-2	S.R. 13	201+65	207+00	RT					0.101				
10		S.R. 13	203+50	207+00	LT								81	
10		S.R. 13	206+49	207+00	LT		2	2						
11	PB-2	S.R. 13	207+00	212+50	RT		11	11						550
11	CDS-2	S.R. 13	207+00	212+50	LT				0.104					
11	EW-3	S.R. 13	207+00	212+50	LT					0.104				
11	EW-4	S.R. 13	207+00	212+50	RT					0.104				
11		S.R. 13	207+00	212+50	LT								125	
11		S.R. 13	207+00	208+01	LT		2	2						
12	PB-3	S.R. 13	212+50	218+00	RT		11	11						550
12	CDS-3	S.R. 13	212+50	218+00	LT				0.104					
12	EW-5	S.R. 13	212+50	218+00	LT					0.104				
12	EW-6	S.R. 13	212+50	218+00	RT					0.104				
12		S.R. 13	212+50	216+90	LT								98	
13	PB-4	S.R. 13	218+00	223+00	RT		10	10						500
13	CDS-4	S.R. 13	218+00	223+00	LT				0.095					
13	EW-7	S.R. 13	218+00	223+00	LT					0.095				
13	EW-8	S.R. 13	218+00	223+00	RT					0.095				
13		S.R. 13	218+20	223+00	LT								107	
14	PB-5	S.R. 13	223+00	224+70	RT	1	4	4						170
14	CDS-5	S.R. 13	223+00	227+65	LT/CEN				0.088					
14	EW-9	S.R. 13	223+00	227+65	LT					0.088				
14	EW-10	S.R. 13	223+00	227+65	RT					0.088				
14		S.R. 13	223+00	226+77	LT								84	
SUBTOTALS						2	44	44	0.50	0.99			495	1910
TOTALS CARRIED TO GENERAL SUMMARY						2	44	44	0.50	0.99			495	1910

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SHEET NO.	REF. NO.	LOCATION	STATION		SIDE	614	614	614	614	614	614	614	615	622
						WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	BARRIER REFLECTOR, TYPE B	OBJECT MARKER, ONE WAY	WORK ZONE CENTER LINE, CLASS I, DOUBLE SOLID	WORK ZONE EDGE LINE, CLASS I (WHITE)	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE ARROW, CLASS I	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN	PORTABLE BARRIER, 32"
			FROM	TO		EACH	EACH	EACH	MILE	MILE	FT	EACH	SY	FT
15	CDS-6	S.R. 13	201+65	206+00	CEN				0.082					
15	EW-11	S.R. 13	201+65	206+00	LT					0.082				
15	EW-12	S.R. 13	201+65	206+00	RT					0.082				
16	CDS-7	S.R. 13	206+00	211+00	CEN				0.095					
16	CDS-8	S.R. 13	206+58	211+00	RT				0.084					
16	EW-13	S.R. 13	206+00	211+00	LT					0.095				
16	EW-14	S.R. 13	206+00	211+00	RT					0.095				
17	CDS-9	S.R. 13	211+00	216+00	CEN				0.095					
17	CDS-10	S.R. 13	211+00	214+65	RT				0.069					
17	EW-15	S.R. 13	211+00	216+00	LT					0.095				
17	EW-16	S.R. 13	211+00	216+00	RT					0.095				
17	CH-1	S.R. 13	214+75	216+00	RT						125			
17	LA-1	S.R. 13	214+84		RT							1		
17	LA-2	S.R. 13	215+72		RT							1		
18	CDS-11	S.R. 13	216+00	221+00	CEN				0.095					
18	CDS-12	S.R. 13	218+15	221+00	RT				0.054					
18	EW-17	S.R. 13	216+00	221+00	LT					0.095				
18	EW-18	S.R. 13	216+00	221+00	RT					0.095				
18	CH-2	S.R. 13	216+00	216+90	RT						90			
18	LA-3	S.R. 13	216+60		RT							1		
19	CDS-13	S.R. 13	221+00	226+00	CEN				0.095					
19	CDS-14	S.R. 13	221+00	224+60	RT				0.068					
19	EW-19	S.R. 13	221+00	226+00	LT					0.095				
19	EW-20	S.R. 13	221+00	226+00	RT					0.095				
20	CDS-15	S.R. 13	226+00	227+65	CEN				0.031					
20	EW-21	S.R. 13	226+00	227+65	LT					0.031				
20	EW-22	S.R. 13	226+00	227+65	RT					0.031				
SUBTOTALS									0.77	0.99	215	3		
TOTALS CARRIED TO GENERAL SUMMARY									0.77	0.99	215	3		

CALCULATED SLB CHECKED AKF

MAINTENANCE OF TRAFFIC SUBSUMMARY - PHASE 3

LIC SR 13 3.88 PART 3

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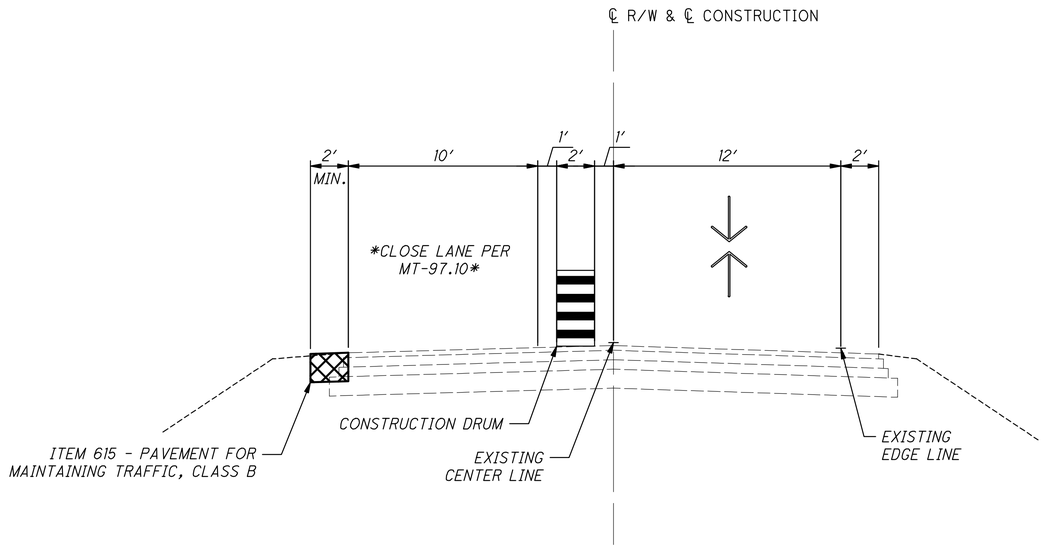
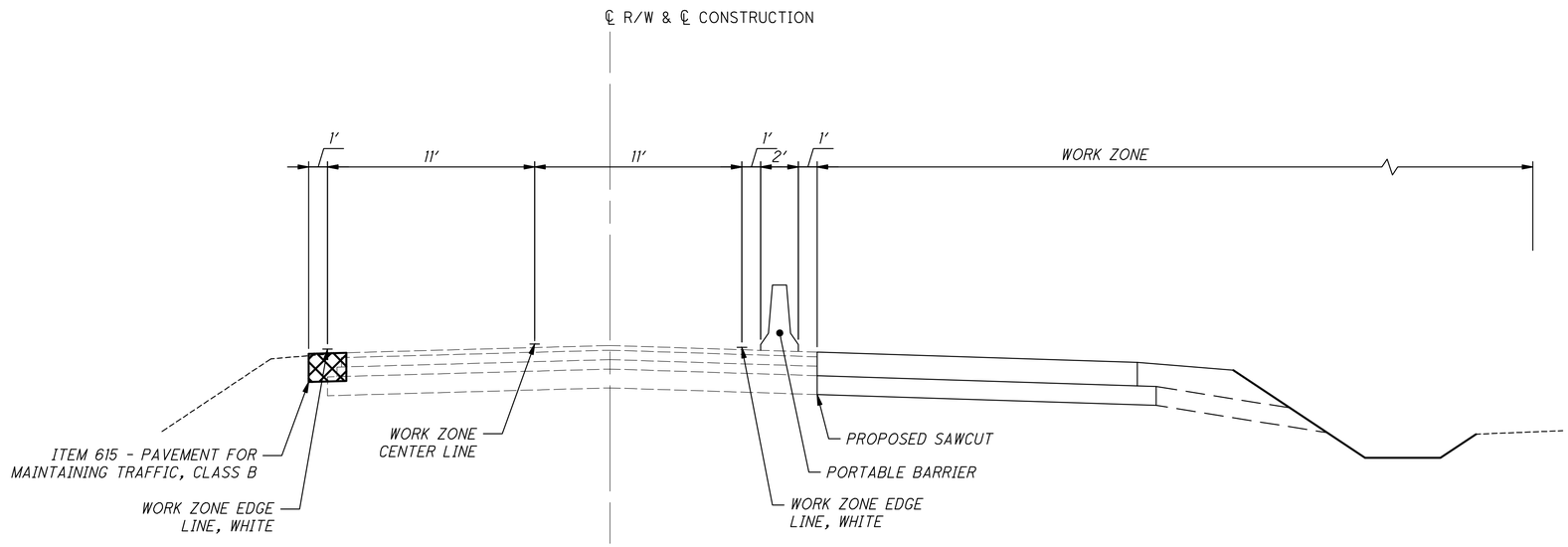


PHASE 1 - S.R. 13



PHASE 2 - S.R. 13

CALCULATED SLB
CHECKED AKF

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS

LIC SR 13 3.88 PART 3

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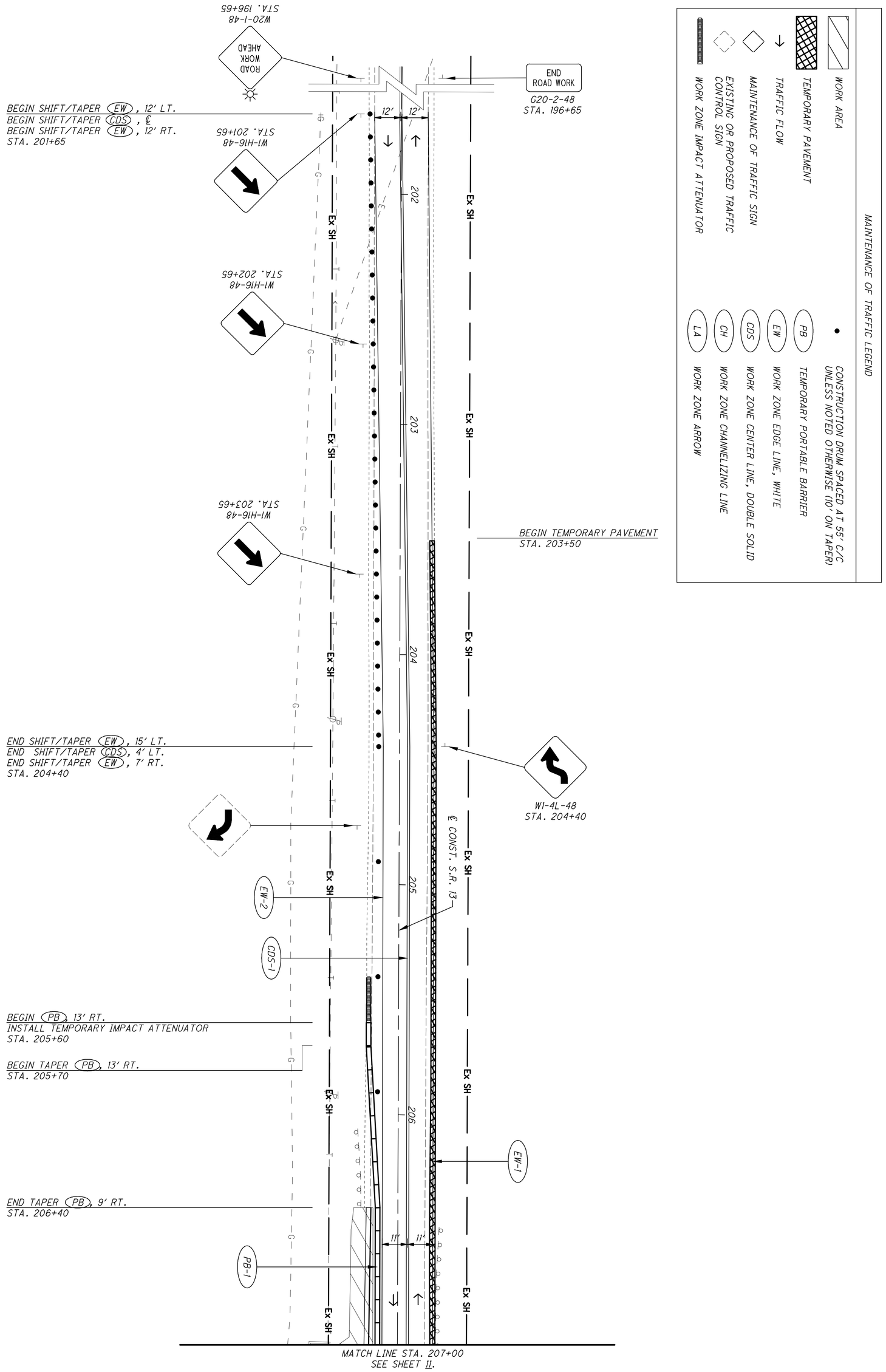

LIC SR 13 3.88 PART 3

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
BEGIN TO STA. 207+00

CALCULATED SLB
CHECKED AKF

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HORIZONTAL SCALE IN FEET

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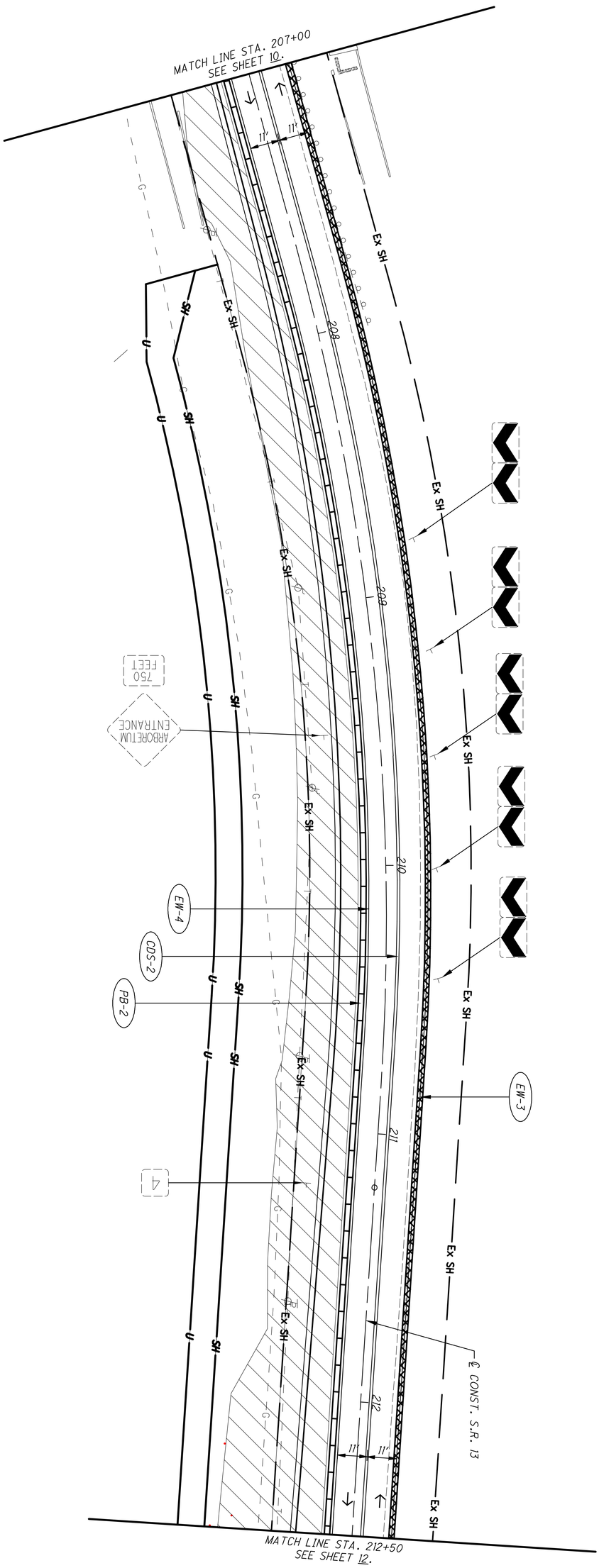
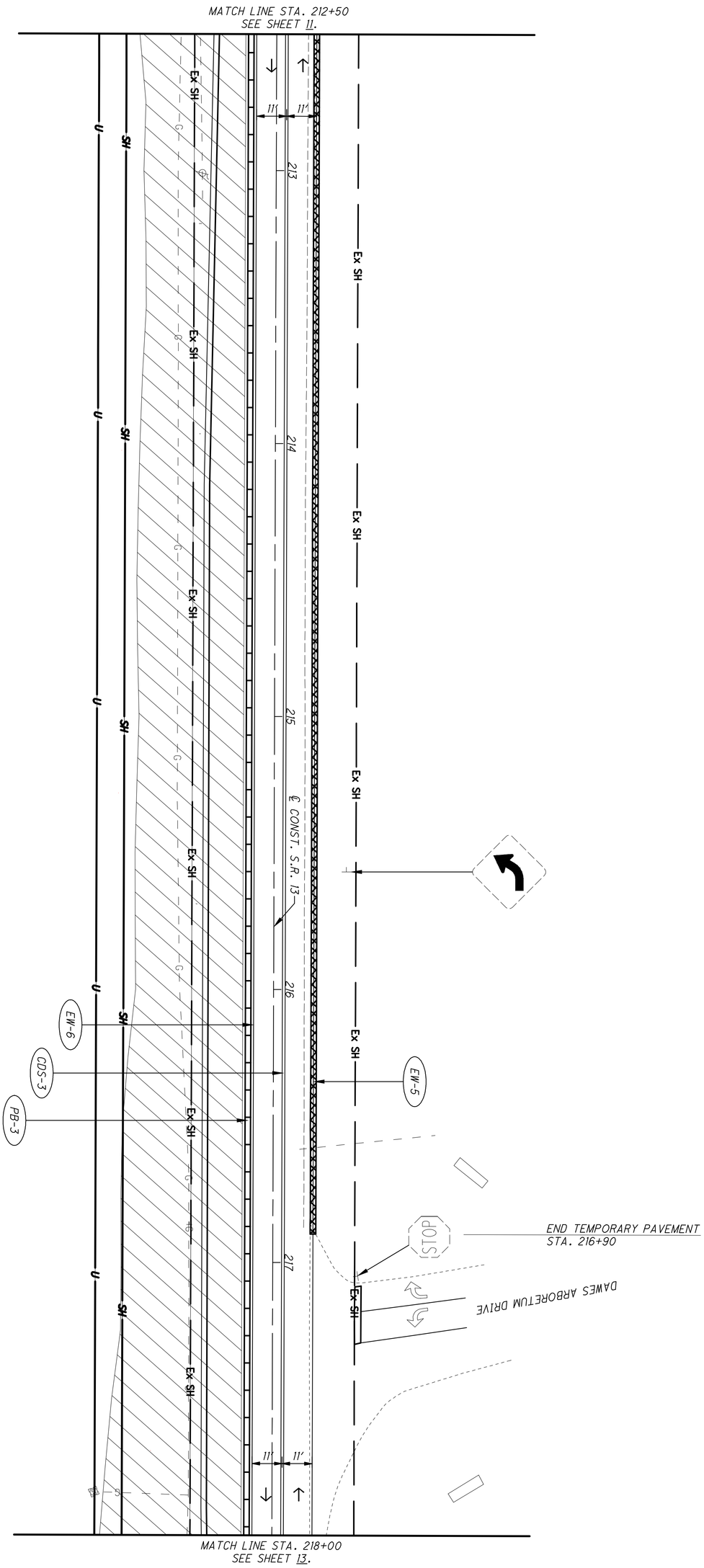


FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 207+00 TO STA. 212+50

CALCULATED SLB
CHECKED AKF

0 10 20 40
HORIZONTAL SCALE IN FEET



FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

LIC SR 13 3.88 PART 3

MAINTENANCE OF TRAFFIC PLAN - PHASE 2
STA. 212+50 TO STA. 218+00

CALCULATED SLB
CHECKED AKF

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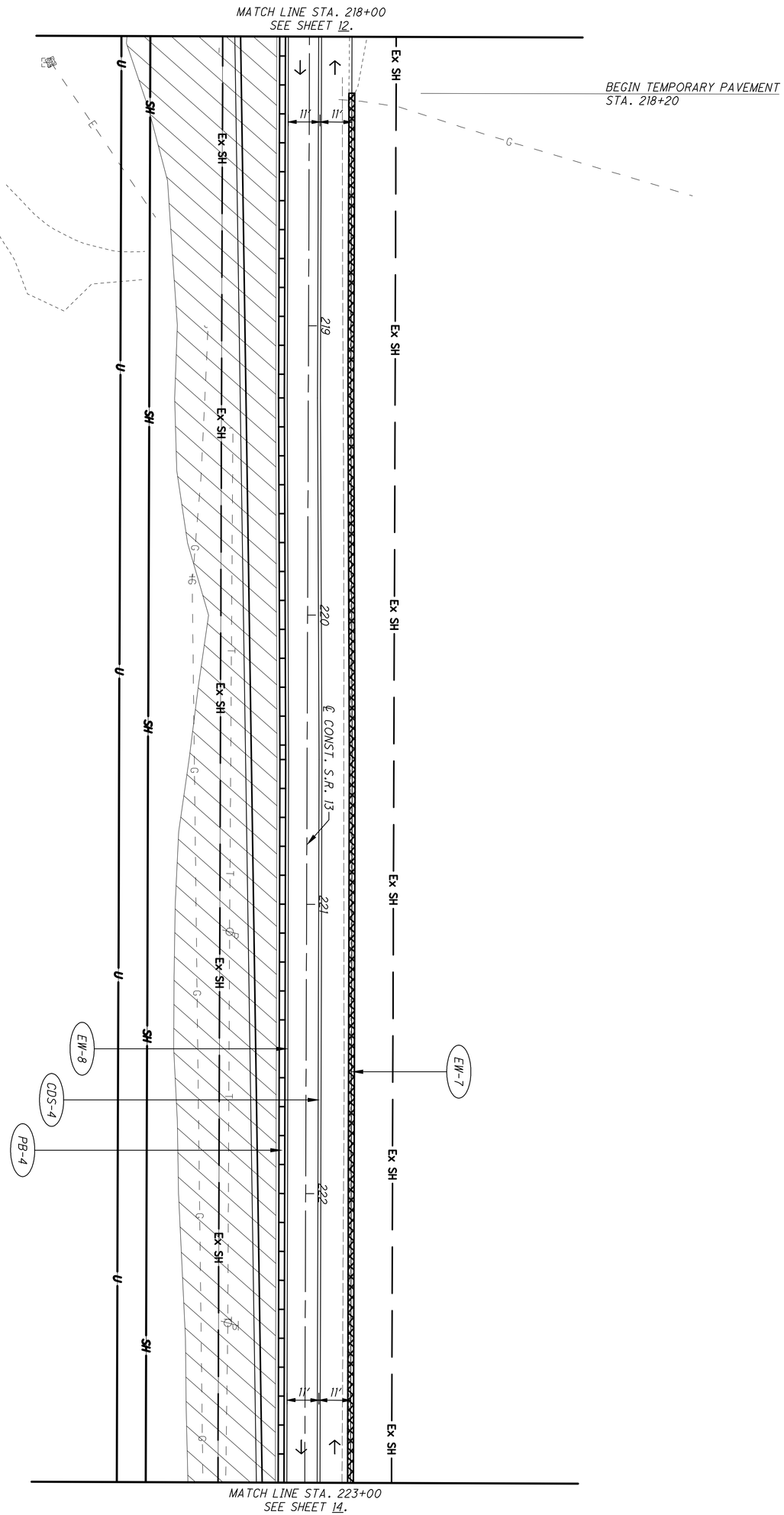
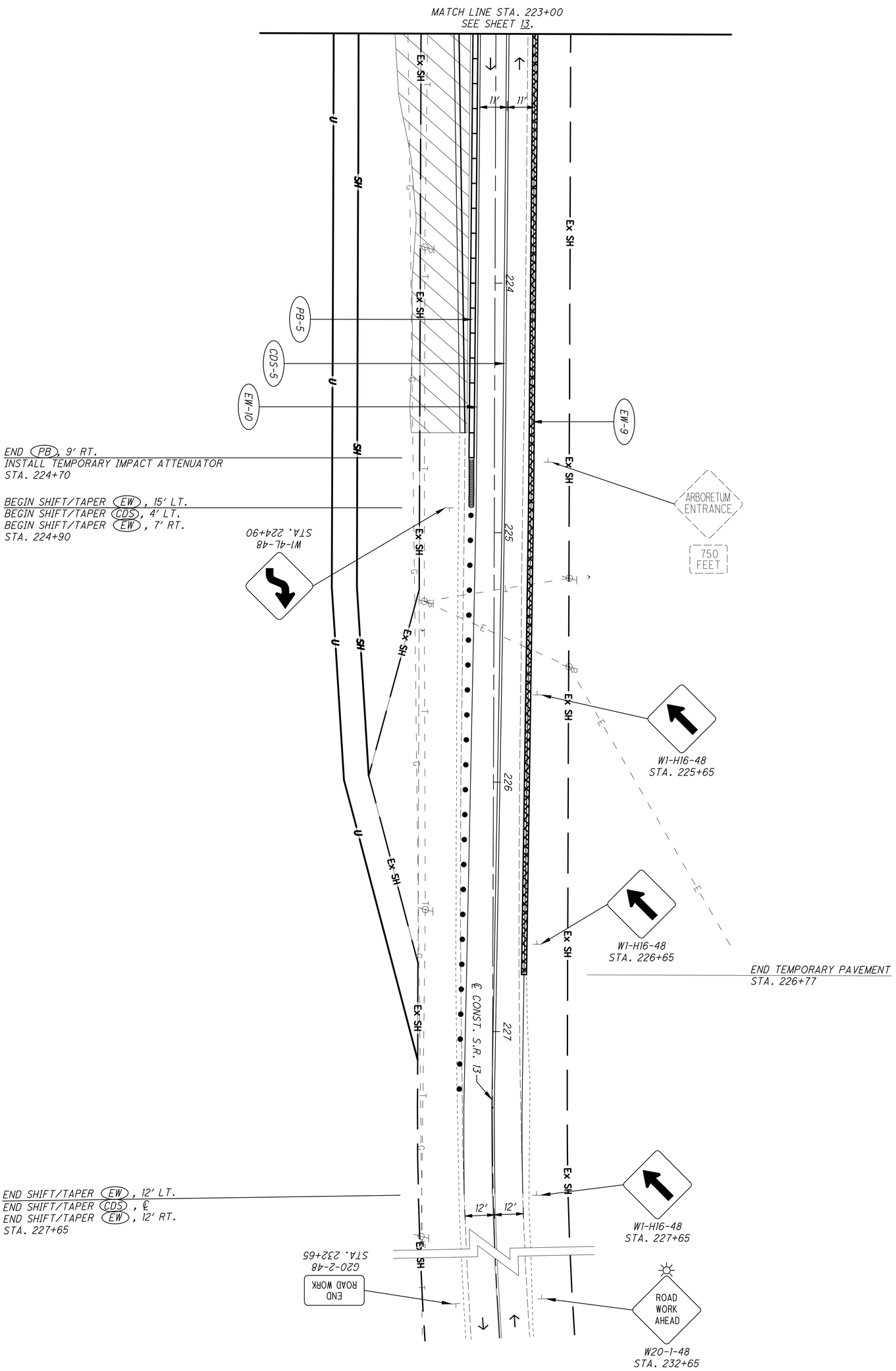
HORIZONTAL SCALE IN FEET



FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

55 / 13	LIC SR 13 3.88 PART 3	MAINTENANCE OF TRAFFIC PLAN - PHASE 2 STA. 218+00 TO STA. 223+00	CALCULATED SLB CHECKED AKF	0 20 10 40 HORIZONTAL SCALE IN FEET



FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

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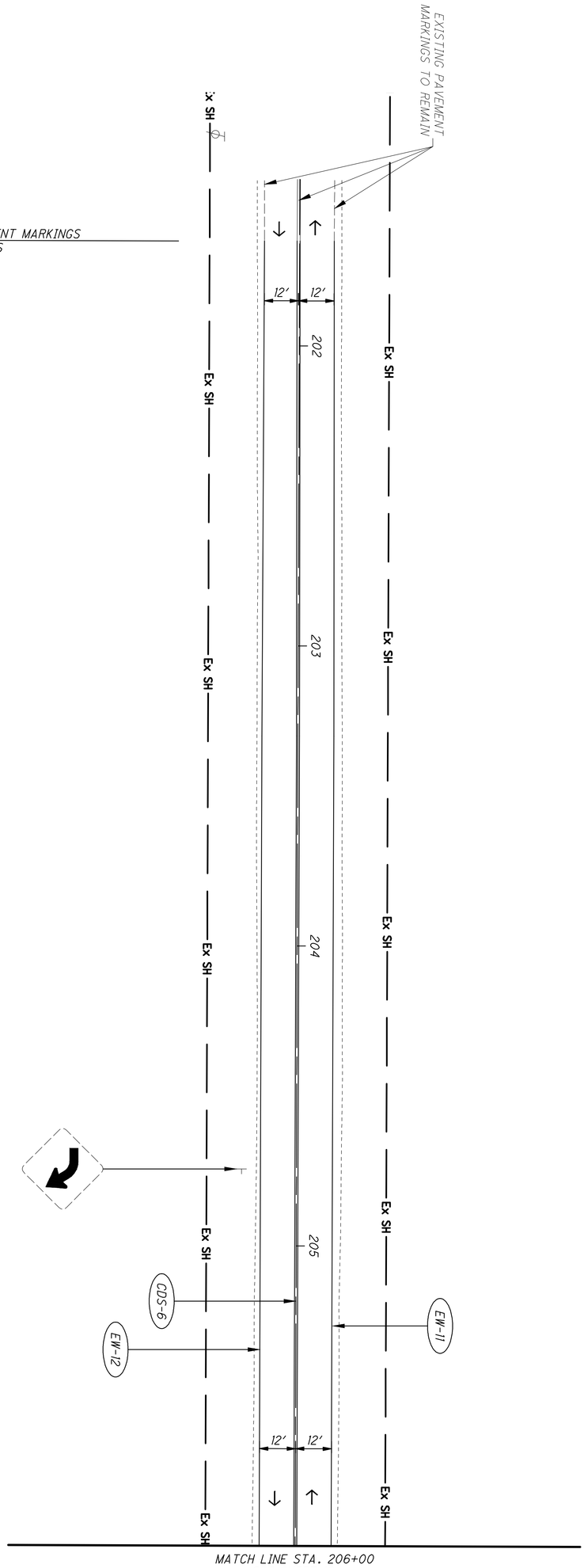
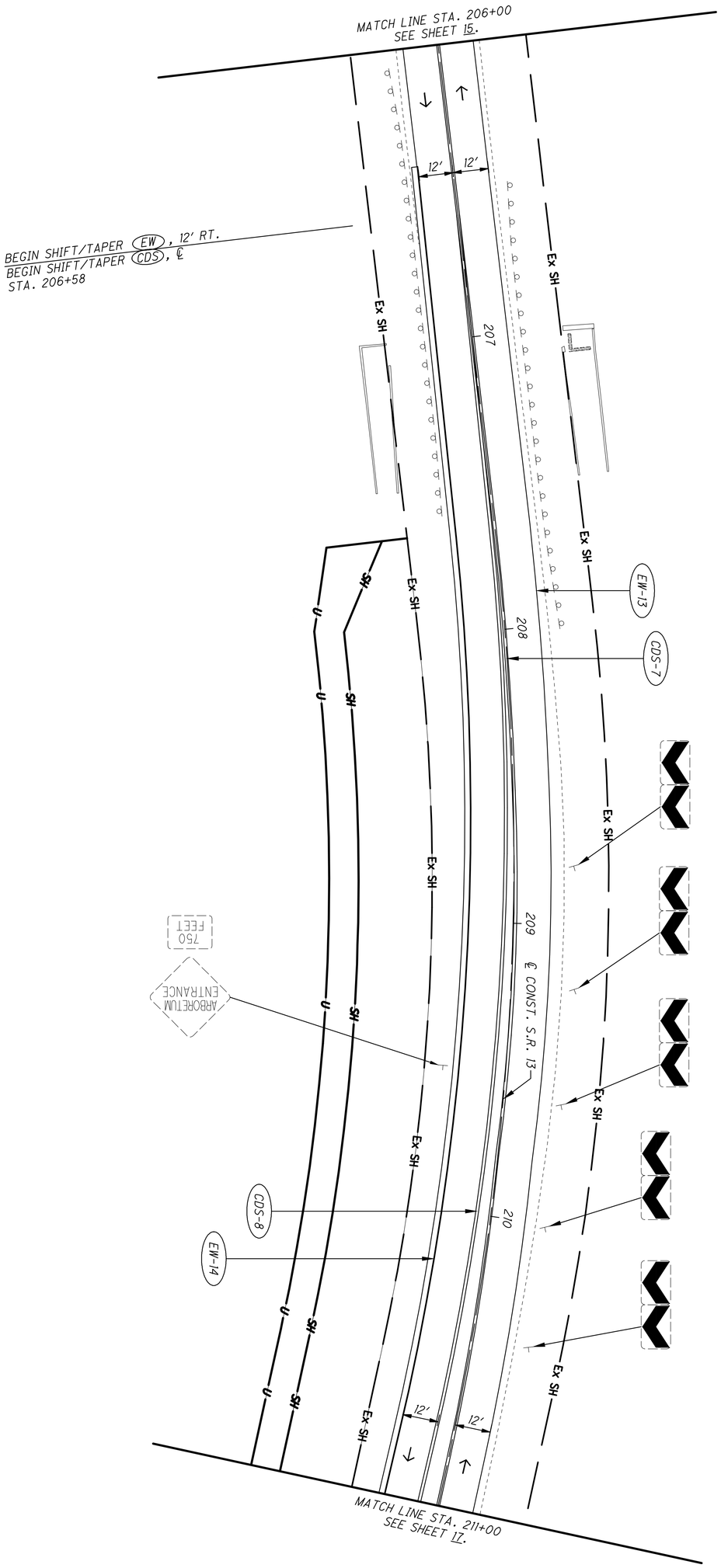


FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

15 / 55	LIC SR 13 3.88 PART 3	MAINTENANCE OF TRAFFIC PLAN - PHASE 3 BEGIN TO STA. 206+00	CALCULATED SLB CHECKED AKF	0 10 20 40 HORIZONTAL SCALE IN FEET



FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

55 / 16	LIC SR 13 3.88 PART 3	MAINTENANCE OF TRAFFIC PLAN - PHASE 3 STA. 206+00 TO STA. 211+00	CALCULATED SLB CHECKED AKF	0 20 10 40 HORIZONTAL SCALE IN FEET

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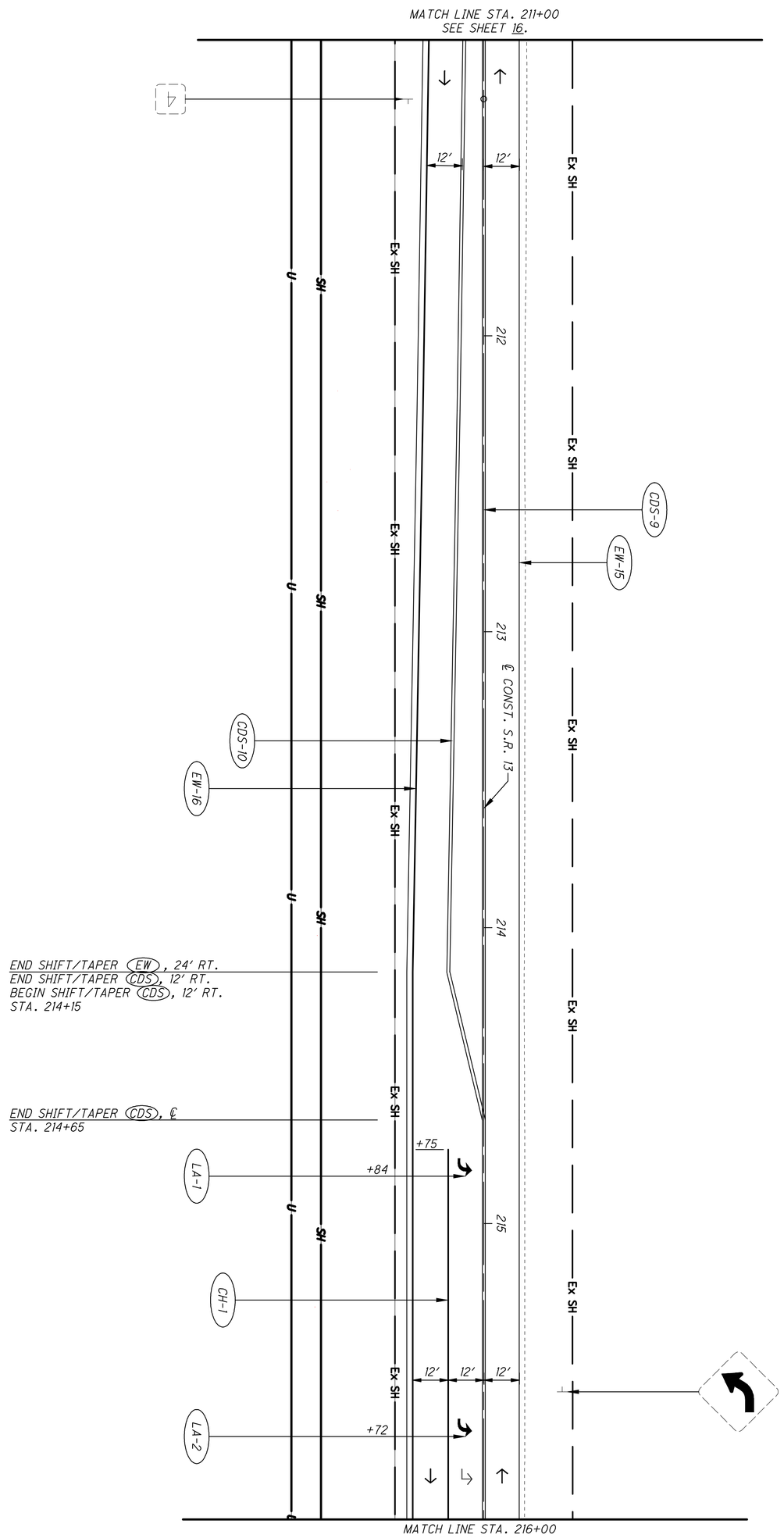

FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

17 / 55	LIC SR 13 3.88 PART 3	MAINTENANCE OF TRAFFIC PLAN - PHASE 3 STA. 211+00 TO STA. 216+00	CALCULATED SLB CHECKED AKF	0 20 10 40 HORIZONTAL SCALE IN FEET

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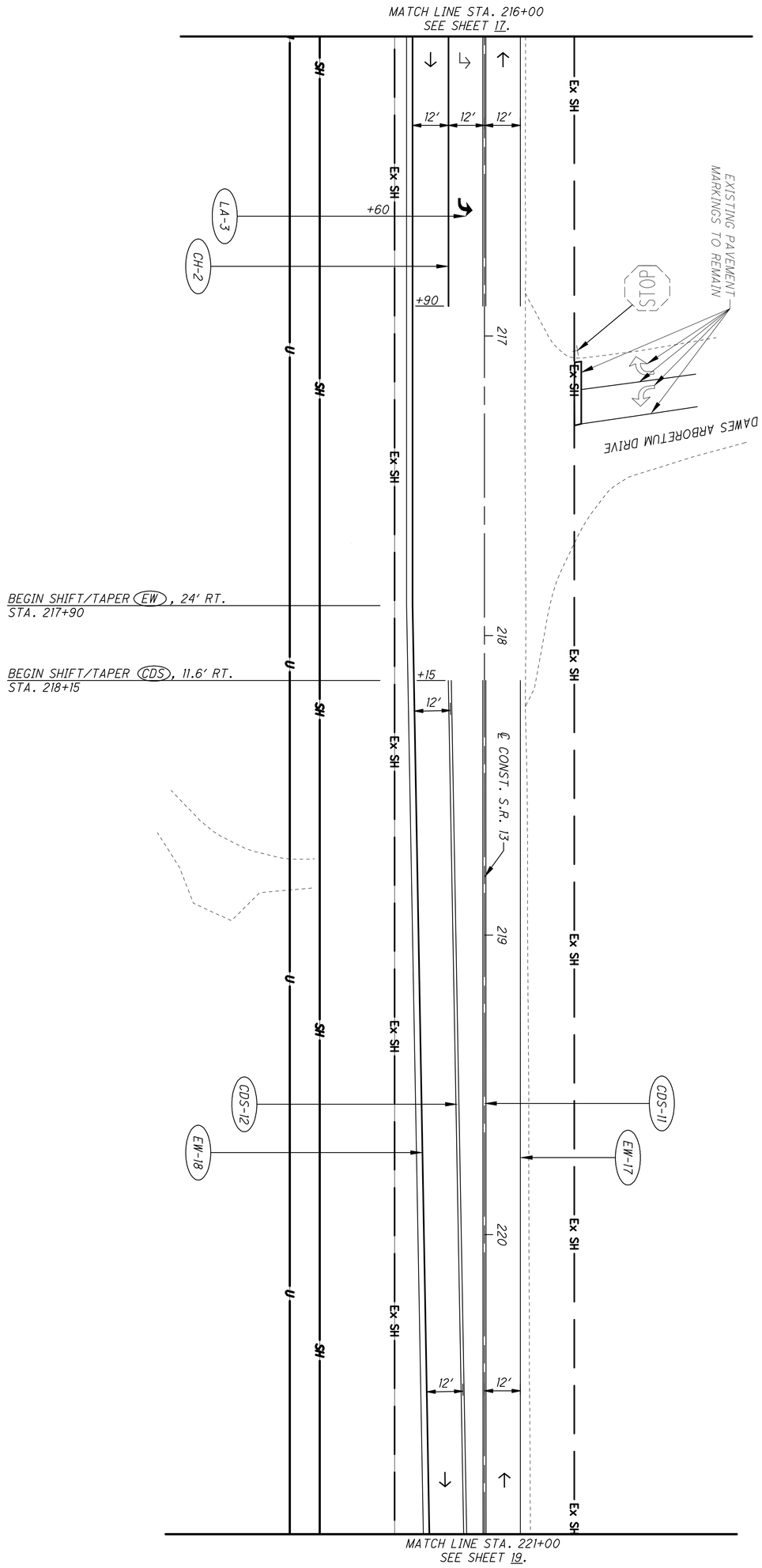

FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

MAINTENANCE OF TRAFFIC PLAN - PHASE 3
STA. 216+00 TO STA. 221+00

CALCULATED SLB
CHECKED AKF
0 10 20 40
HORIZONTAL SCALE IN FEET

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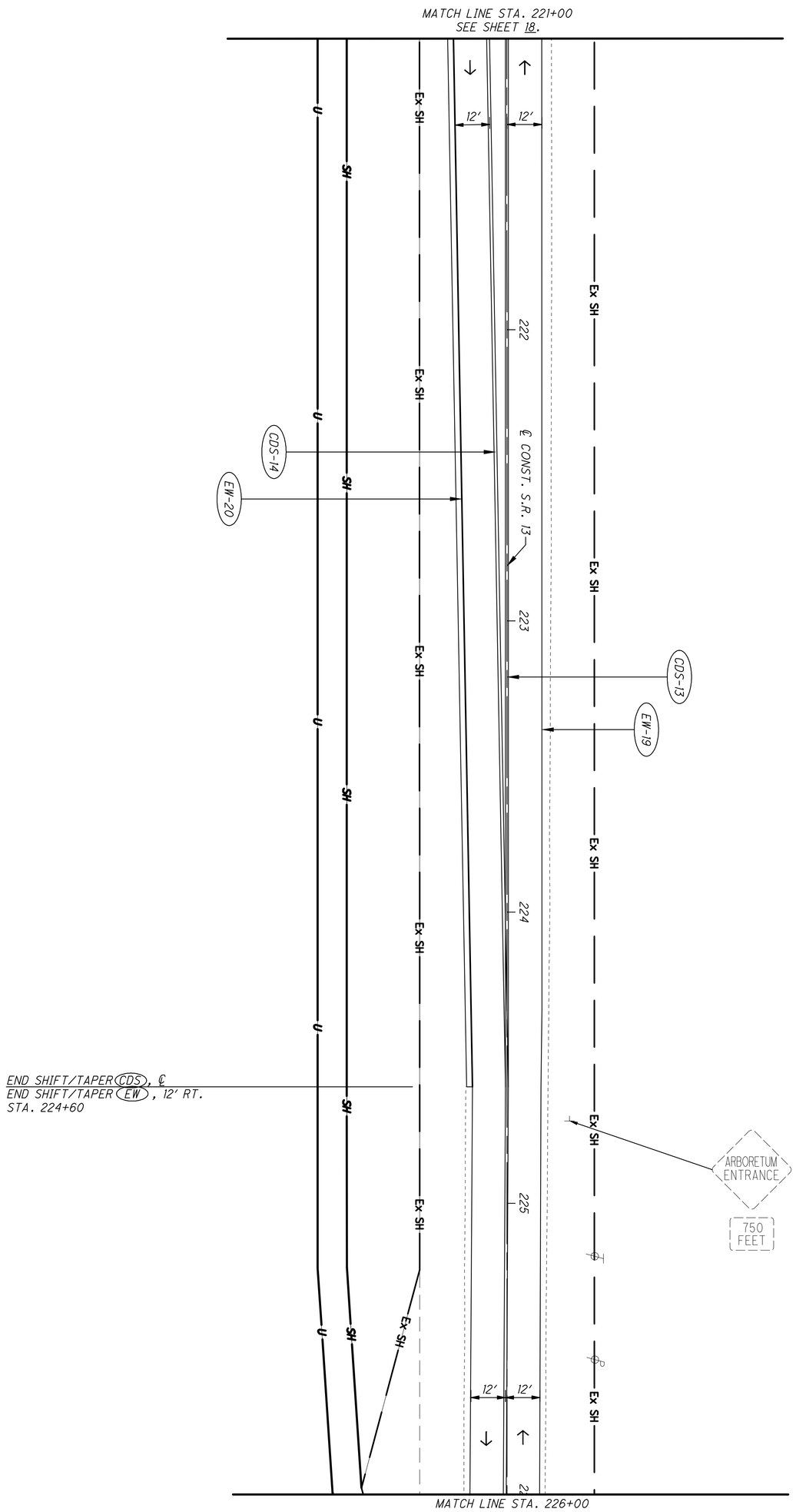
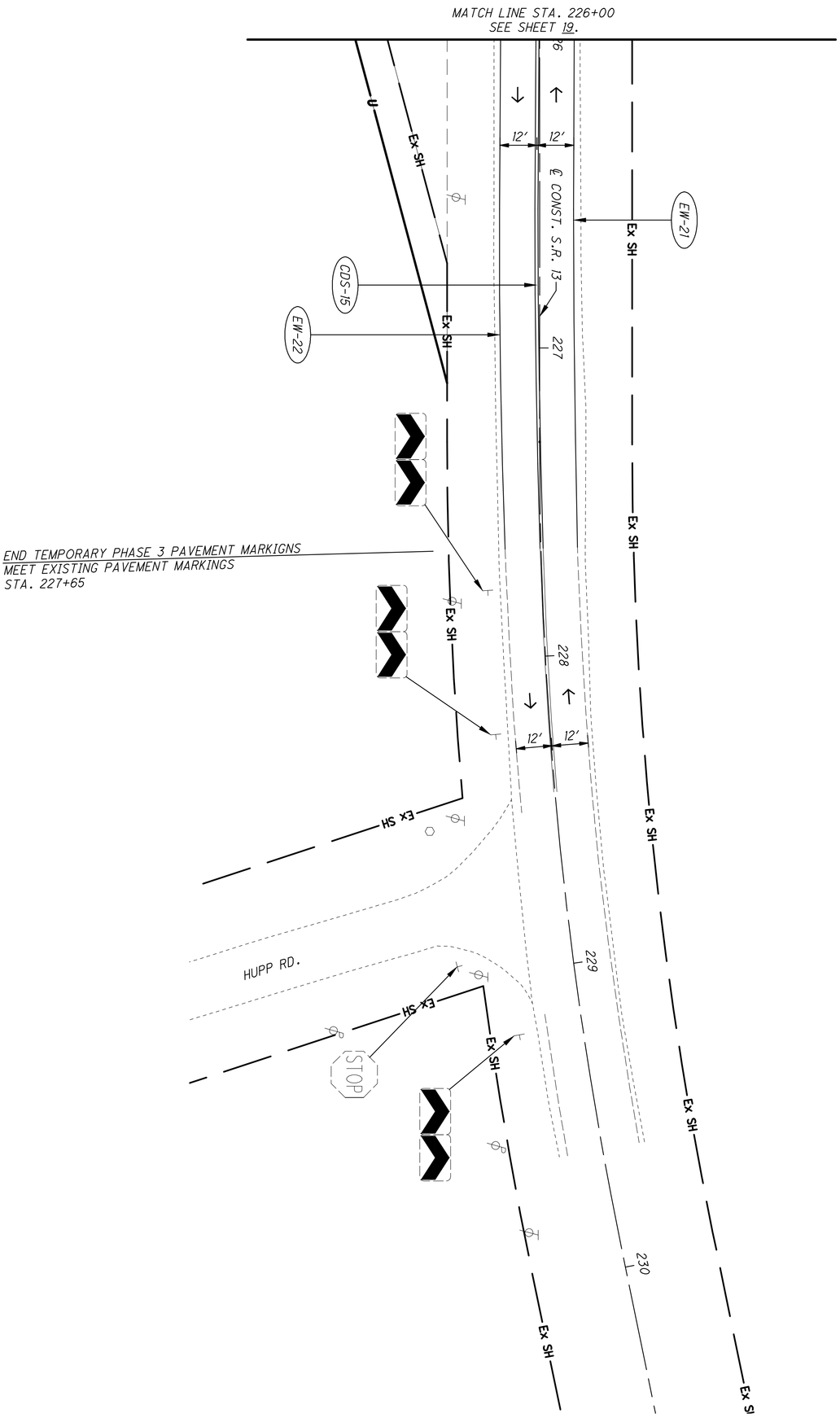


FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

19 / 55	LIC SR 13 3.88 PART 3	MAINTENANCE OF TRAFFIC PLAN - PHASE 3 STA. 221+00 TO STA. 226+00	CALCULATED SLB CHECKED AKF	0 20 10 40 HORIZONTAL SCALE IN FEET



FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 10.

20/55	LIC SR 13 3.88 PART 3	MAINTENANCE OF TRAFFIC PLAN - PHASE 3 STA. 226+00 TO END	CALCULATED SLB CHECKED AKF	0 10 20 40 HORIZONTAL SCALE IN FEET

SHEET NUMBER												PARTICIPATION	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4				23								08/STR/PV/DAWE						
																	ROADWAY	
LUMP												LUMP	201	11000	LUMP		CLEARING AND GRUBBING	
				306								306	202	35100	306	FT	PIPE REMOVED, 24" AND UNDER	
				1								1	202	98100	1	EACH	REMOVAL MISC. MAILBOX	
3229												3229	203	10000	3229	CY	EXCAVATION	
3102												3102	203	20000	3102	CY	EMBANKMENT	
				2341								2341	204	10000	2341	SY	SUBGRADE COMPACTION	
640												640	204	13000	640	CY	EXCAVATION OF SUBGRADE	
				1								1	204	45000	1	HOUR	PROOF ROLLING	
1277												1277	204	50000	1277	SY	GEOTEXTILE FABRIC	
																	PAVEMENT	
708				374								1082	204	30010	1082	CY	GRANULAR MATERIAL, TYPE B	
				793								793	301	46000	793	CY	ASPHALT CONCRETE BASE, PG64-22	
																	EROSION CONTROL	
133												133	659	00300	133	CY	TOPSOIL	
4865												4865	659	10000	4865	SY	SEEDING AND MULCHING	
244												244	659	14000	244	SY	REPAIR SEEDING AND MULCHING	
0.7												0.7	659	20000	0.7	TON	COMMERCIAL FERTILIZER	
1												1	659	31000	1	ACRES	LIME	
13.1												13.1	659	35000	13.1	MGAL	WATER	
				665								665	670	00710	665	SY	DITCH EROSION PROTECTION MAT, TYPE A	
												LUMP	832	15000	LUMP		STORM WATER POLLUTION PREVENTION PLAN	
												23774	832	30000	23774	EACH	EROSION CONTROL	
																	DRAINAGE	
375												375	605	31100	375	FT	AGGREGATE DRAINS	

CALCULATED JES
CHECKED MRG

GENERAL SUMMARY

LIC SR 13 3.88 PART 3

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SHEET NUMBER												PARTICIPATION	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7	8										08/STR/PV/DAWE						
																	MAINTENANCE OF TRAFFIC	
	2											2	614	12338	2	EACH	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL)	
	44											44	614	13300	44	EACH	BARRIER REFLECTOR, TYPE B	
	44											44	614	13350	44	EACH	OBJECT MARKER, ONE WAY	
	0.50	0.77										1.27	614	21000	1.27	MILE	WORK ZONE CENTER LINE, CLASS I	
	0.99	0.99										1.98	614	22000	1.98	MILE	WORK ZONE EDGE LINE, CLASS I	
		215										215	614	23000	215	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
		3										3	614	30000	3	EACH	WORK ZONE ARROW, CLASS I	
30												30	616	10000	30	MGAL	WATER	
LUMP												LUMP	615	10000	LUMP		ROADS FOR MAINTAINING TRAFFIC	
	495											495	615	25001	495	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN	6
	1910											1910	622	41000	1910	FT	PORTABLE BARRIER, 32"	
																	INCIDENTIALS	
												LUMP	103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND	
												LUMP	614	11000	LUMP		MAINTAINING TRAFFIC	
												LUMP	623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
												LUMP	624	10000	LUMP		MOBILIZATION	

CALCULATED JES
CHECKED MRG

GENERAL SUMMARY

LIC SR 13 3.88 PART 3

22
55

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REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 REMOVAL MISC: MAILBOX (EACH)	202 PIPE REMOVED, 24" AND UNDER (FT)				670 DITCH EROSION PROTECTION MAT, TYPE A (SQ. YD.)												
E-1	26-27	212+00	219+97	RT.						665												
E-2	27	219+97		RT.																		
R-1	27	218+54		RT.	1																	
PR-1	27	217+02	220+08	RT		306																
TOTALS CARRIED TO GENERAL SUMMARY					1	306				665												

STATION TO STATION		SIDE	LENGTH L	AVERAGE WIDTH W	SURFACE AREA A A=LxW	PLANIMETERED AREAS	204 SUBGRADE COMPACTION (18" BEYOND EDGE OF PAVED SHOULDER) (SQ. YD.)	204 PROOF ROLLING (HOUR)	204 GRANULAR MATERIAL, TYPE B (CU. YD.)	301 ASPHALT CONCRETE BASE, PG64-22 (CU. YD.)
206+40.38	208+90.38	RT.	250	4.89	1222.50					52.84
206+40.38	208+90.38	RT.	250	5.89	1472.50				27.27	
206+40.38	208+90.38	RT.	250	6.38	1595.00		177.22	0.06		
208+90.38	214+15	RT.	524.62	10.5	5508.51					238.09
208+90.38	214+15	RT.	524.62	11.5	6033.13				111.72	
208+90.38	214+15	RT.	524.62	12	6295.44		699.49	0.23		
214+15	217+90	RT.	375	15	5625.00					243.13
214+15	217+90	RT.	375	16	6000.00				111.11	
214+15	217+90	RT.	375	16.5	6187.50		687.50	0.23		
217+90	224+60	RT.	670	8.93	5983.10					258.60
217+90	224+60	RT.	670	9.93	6653.10				123.21	
217+90	224+60	RT.	670	10.43	6988.10		776.46	0.26		
TOTALS CARRIED TO GENERAL SUMAMRY							2341	1	374	793

CALCULATED JES CHECKED MRG

ROADWAY SUBSUMMARY - PAVEMENT CALCULATIONS

LIC SR 13 3.88 PART 3

23
55

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PROJECT DATA			
TOTAL AREA (RIGHT OF WAY).....3.73 AC.	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE 0.9		
PROJECT EARTH DISTURBED AREA.....1.37 AC.	RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE 0.8		
ESTIMATED CONTRACTOR EARTH DISTURBED AREA.....0.25 AC.	POST CONSTRUCTION BMP: VEGETATED BIOFILTER *		
	STATION	LATITUDE	LONGINTUDE
NOTICE OF INTENT DISTURBED AREA.....4.90 AC.	212+50	N 39° 58′ 43.8445″	W 82° 24′ 38.9952″
	219+78	N 39° 58′ 50.9175″	W 82° 24′ 35.0748″
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE.....1.28 AC.	IMMEDIATE RECEIVING WATERS: LICKING RIVER		
IMPERVIOUS (PAVED) AREA FOR POST CONSTRUCTION SITE.....1.57 AC.	SUBSEQUENT RECEIVING WATERS: MUSKINGUM RIVER		

* TREATMENT PROVIDED 0.93 AC.
TREATMENT REQUIRED 0.27 AC.
CALCULATED PER L & D VOL. 2, SEC. 1115.7

BEGIN PROJECT
STA. 206+40.39

C/L CONST. S.R. 13

PC Sta. 207+65.38

PT Sta. 210+81.95

PC Sta. 221+30.50

PT Sta. 223+94.49

END PROJECT
STA. 224+60.00

VEGETATED BIOFILTER

CONST. LIMITS

WETLAND

ITEM 670 - DITCH EROSION PROTECTION MAT, TYPE A (7.5′ WIDE)

USGS QUADRANT NO. 39082-H4-TF-024

LATITUDE 39° 58′ 49″
LONGITUDE 82° 24′ 38″ △

△ APPROXIMATE CENTER OF PROJECT

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE WIDENING OF S.R. 13 FOR APPROXIMATELY 1800 FT. FOR THE INSTALLATION OF A NORTHBOUND LEFT TURN LANE INTO DAWES ARBORETUM.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JES
CHECKED MRG

PROJECT SITE PLAN

LIC SR 13 3.88 PART 3

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NOTES:
TREE AND STUMP REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

FOR BENCHMARKS SEE TABLE ON SHEET 2

The Trustees of the Dawes Arboretum
Vol. 290, Pg. 277

WETLAND AVOIDANCE AREA

P.I.= Sta. 209+25.13
D = 18° 59′ 33″
Dc = 5° 59′ 58″
R = 955.000
T = 159.75′
L = 316.57′
E = 13.27
C = 315.12
C. B. = N 14° 11′ 33″ E
P.C. Sta.= 207+65.38
P.T. Sta.= 210+81.95

P.I.= Sta. 209+24.56
D = 18° 59′ 37″
Dc = 7° 20′ 44″
R = 780.000
T = 130.48′
L = 258.57′
E = 10.84
C = 257.39
C. B. = N 14° 11′ 31″ E
P.C. Sta.= 207+34.07
P.T. Sta.= 210+52.64

BEGIN WORK
BEGIN PROJECT
STA. 206+40.38
E120890

GUARDRAIL REMOVED AND REPLACED IN PART 1

P.C. Sta. 207+65.38
PC Sta. 207+94.07
P.T. Sta. 210+52.64
P.T. Sta. 210+81.95

CONC. RET. WALL
RAMP TO TUNNEL
CONC. RET. WALL
GUARD RAIL
60" X 72" TUNNEL
GUARD RAIL
CONC. RET. WALL
RAMP TO TUNNEL
CONC. RET. WALL

Ex SH
CONST. LIMITS
GRASS
ASPHALT
WETLANDS

℄ R/W SR 13
℄ CONST. SR 13
℄ R/W & CONST. SR 13
PROP. SAWCUT

N 04°41′46″ E
N 23°41′19″ E

206
207
208
209
210

11.77′
2.71′
+40.38
11.77 RT

GUARDRAIL REMOVED AND REPLACED IN PART 1 (TYP.)

2" STEEL 'QL-B'

OVERHEAD TELECOM. AND ELEC. (RELOCATED BY OTHERS)
TO BE RELOCATED (BY OTHERS)
(RELOCATED BY OTHERS)
OVERHEAD TELECOM. AND ELEC.

20" BC
18" BC

SIGN

809.61′ TAPER @ 66.20:1

MATCH LINE 211+00
SEE SHEET 26

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Vol. 678, Pg.636

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JES
CHECKED MRG

ROADWAY PLAN
BEGIN TO STA. 211+00

LIC SR 13 3.88 PART 3

25
55

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ITEM 670 - DITCH EROSION PROTECTION MAT, TYPE A (7.5' WIDE)

NOTES:
TREE AND STUMP REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

FOR BENCHMARKS SEE TABLE ON SHEET 2

The Trustees of the Dawes Arboretum
Vol. 290, Pg. 277

MATCH LINE 211+00
SEE SHEET 25

MATCH LINE 216+00
SEE SHEET 27

Ex SH — GRASS — CONST. LIMITS — GRASS — Ex SH — GRASS

212 ASPHALT 213 N 23°41'19" E 214 ASPHALT 215

℄ R/W & CONST. SR 13

30' 30' 24.00' 30'

PROP. SAWCUT — TO BE RELOCATED (BY OTHERS) — PROP. SAWCUT

(RELOCATED BY OTHERS) OVERHEAD TELECOM. AND ELEC.

2" STEEL 'QL-B' — 2" STEEL 'QL-B' — E-1

24" BC 15" BC 18" BC 18" BC 18" BC 20" BC 15" BC 18" BC 8" BC 12" BC 10" SILVER MAPLE 12" BC

SH — U — GRASS — 7.5' WIDE (TYP.)

CONST. LIMITS — TO BE RELOCATED (BY OTHERS) — CONST. LIMITS

+15.00 24.00 RT

809.61' TAPER @ 66.20:1

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Vol. 678, Pg.636

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JES
CHECKED MRG

ROADWAY PLAN
STA. 211+00 TO STA. 216+00

LIC SR 13 3.88 PART 3

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ITEM 670 - DITCH EROSION PROTECTION MAT, TYPE A (7.5' WIDE)

NOTES:
TREE AND STUMP REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

FOR BENCHMARKS SEE TABLE ON SHEET 2

POTENTIAL ENDANGERED BAT ROOST TREE

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UNK. GAS 'QL-B'

SIGN

SIGN

DAWES ARBORETUM DRIVE
ASPHALT

1-2 AL 'QL-B' (UNDG. ELEC.)

24" SWEETGUM

Ex SH — GRASS — CONST. LIMITS — GRASS

MATCH LINE 216+00 SEE SHEET 26

ASPHALT

217

N 23°41'19" E

218

219

ASPHALT

220

MATCH LINE 221+00 SEE SHEET 28

PROP. SAWCUT

PR-1

℄ R/W & CONST. SR 13

R-1

PROP. SAWCUT

DITCH

24" CPP

24" CPP (RELOCATED BY OTHERS)

OVERHEAD TELECOM. AND ELEC.

DITCH

E-1

2" STEEL 'QL-B'

GRASS

42" MAPLE

2" STEEL 'QL-B'

GRASS

TO BE RELOCATED (BY OTHERS)

GRASS

2" STEEL 'QL-B'

BIRD HOUSE (RELOCATED BY OTHERS)

CONST. LIMITS

SH — U

7.5' WIDE (TYP.)

18" BC

CONST. LIMITS

DITCH

BUSH

OVERHEAD ELEC.

GRAVEL

+90.00

24.00 RT

℄ CONC. WALK

EXIST. BUILDING

BIRD HOUSE (DND)

670.00' TAPER @ 55:1

EXISTING BUILDING, WALK, AND UTILITY SERVICE LINES TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION

The Trustees of the Dawes Arboretum
Vol. 678, Pg.636

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JES
CHECKED MRG

ROADWAY PLAN
STA. 216+00 TO STA. 221+00

LIC SR 13 3.88 PART 3

27
55

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NOTES:
TREE AND STUMP REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

FOR BENCHMARKS SEE TABLE ON SHEET 2

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MATCH LINE 221+00
SEE SHEET 27

END WORK
END PROJECT
STA. 224+60.00
E120890

Ex SH — GRASS — CONST. LIMITS — 30' — 222 — N 23°41'19" E — 223 — ASPHALT — ℄ R/W & CONST. SR 13 — 30' — 224 — 225 — 226 — ASPHALT — GRASS

PROP. SAWCUT — PROP. SAWCUT — 11.85' — 1.86'

OVERHEAD ELEC. — OVERHEAD TELECOM. — OVERHEAD ELEC. — OVERHEAD TELECOM. AND ELEC.

12" CPP — 2" STEEL 'QL-B' — DITCH — (RELOCATED BY OTHERS) OVERHEAD TELECOM. AND ELEC. — TO BE RELOCATED (BY OTHERS) — CONST. LIMITS

BIRD HOUSE (RELOCATED BY OTHERS) — BIRD HOUSE (RELOCATED BY OTHERS) — BIRD HOUSE (RELOCATED BY OTHERS)

12" CMP — DITCH

+60.00
11.85 Rt

The Trustees of the Dawes Arboretum
Vol. 678, Pg.636

670.00' TAPER @ 55:1

N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JES
CHECKED MRG

ROADWAY PLAN
STA. 221+00 TO END

LIC SR 13 3.88 PART 3

28
55

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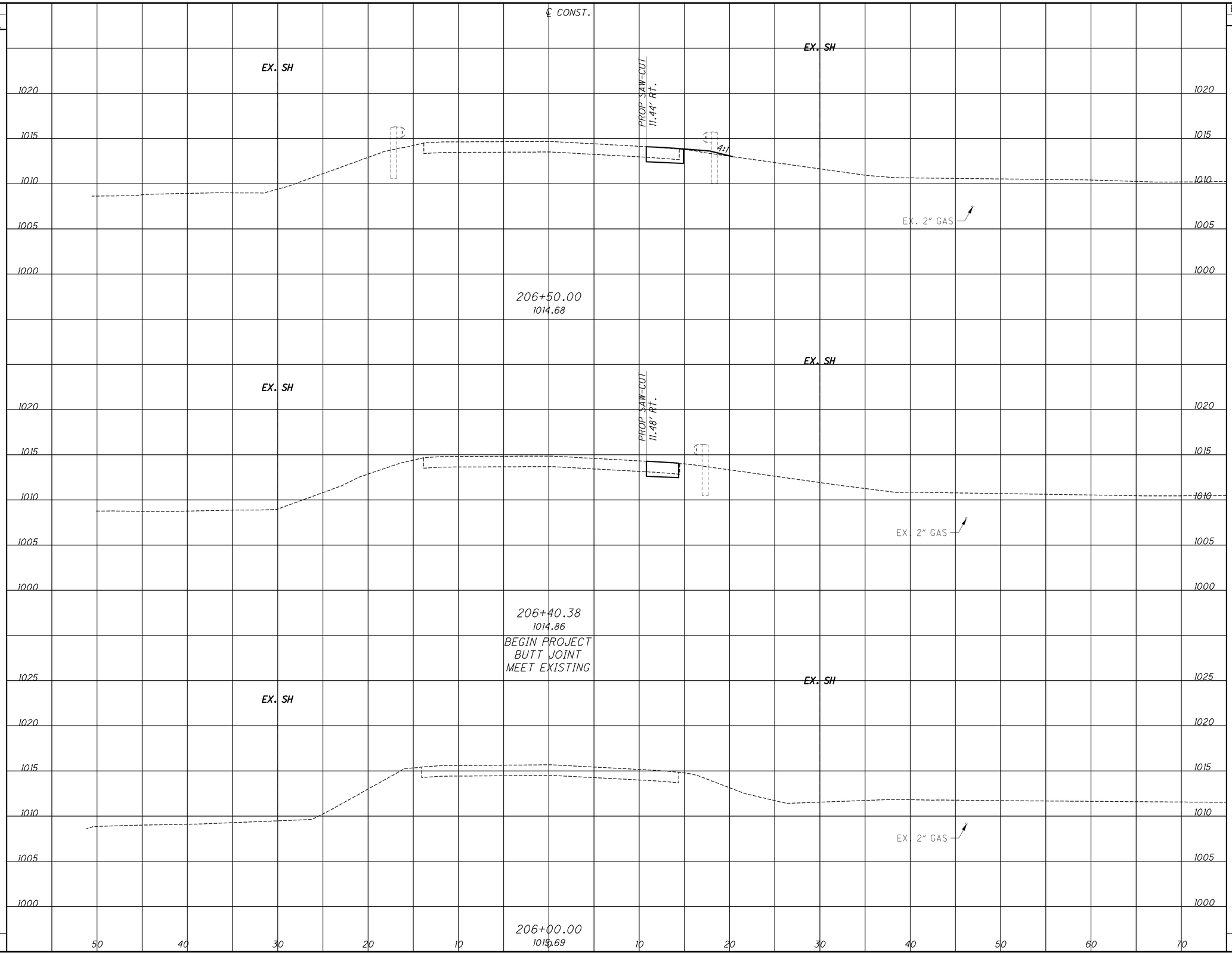
SEEDING	
END WIDTH	SQ. YDS.
10	8
5	8

END AREA	
CUT	FILL
7	1
6	0

VOLUME	
CUT	FILL
2	0
4	0
6	0

CALCULATED JES
CHECKED MRG



CROSS SECTIONS
STA. 206+00 TO STA. 206+50

LIC SR 13 3.88 PART 3

29
55

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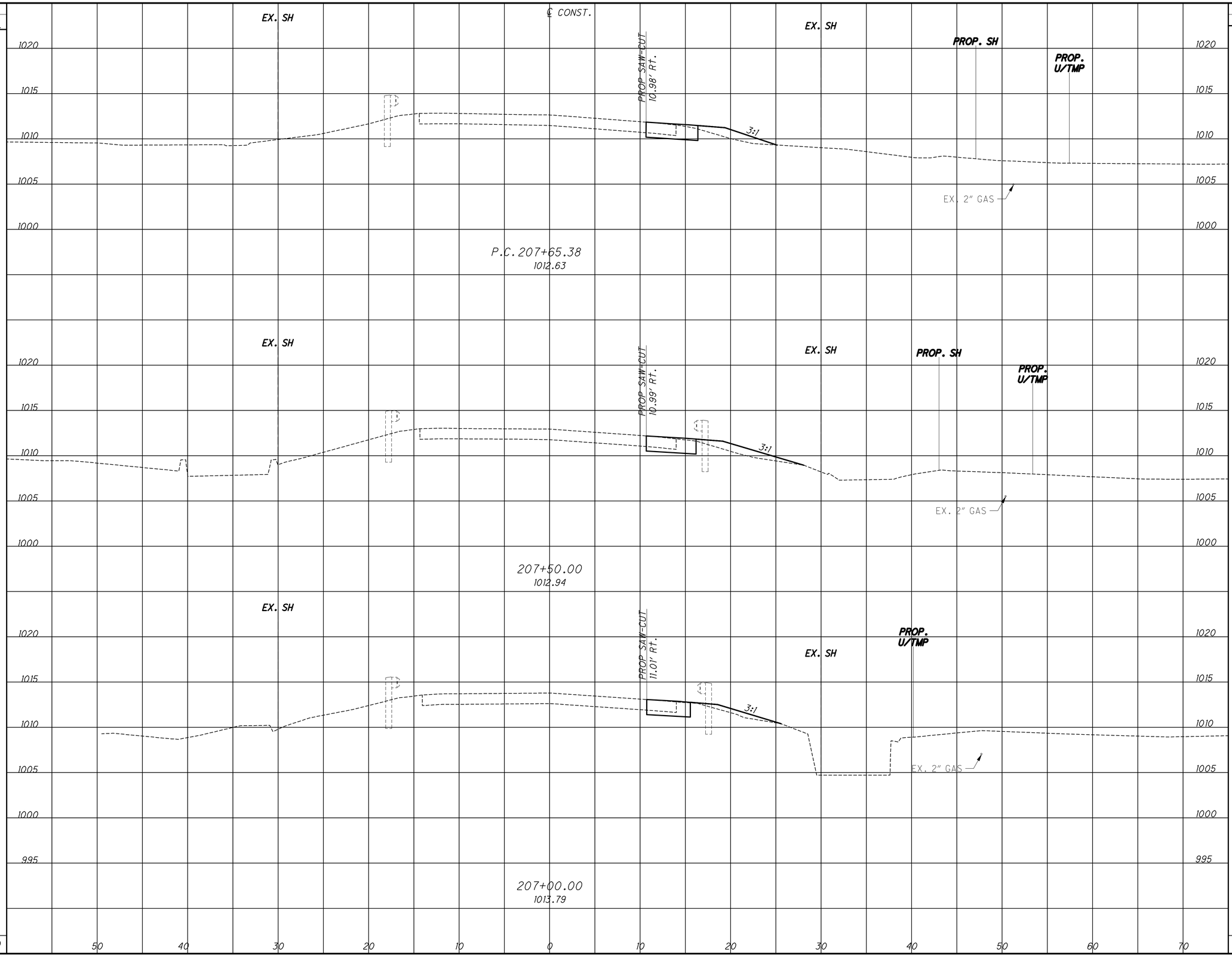
SEEDING		END AREA		VOLUME		CALCULATED	CHECKED
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL	JES	MRG
12	23	9	6	5	4		
21	92	9	7	15	10		
12	61	8	3	13	4		
	160			33	17		



CROSS SECTIONS

STA. 207+00 TO P.C. STA. 207+65.38

LIC SR 13 3.88 PART 3

30
55

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SEEDING	
END WIDTH	SQ. YDS.
15	42
15	39
13	13
	94

END AREA	
CUT	FILL
10	14
10	11
9	7

VOLUME	
CUT	FILL
9	13
9	9
3	3
21	21

CALCULATED JES
CHECKED MRG

℄ CONST.

208+25.00
1011.32

208+00.00
1011.86

207+75.00
1012.43

EX. SH
PROP. SAW-CUT 9.82' RT.
PROP. SAW-CUT 10.12' RT.
PROP. SAW-CUT 10.86' RT.
3:1
PROP. SH
PROP. U/TMP
EX. 2" GAS (RELOCATED BY OTHERS)
EX. 2" GAS

1020
1015
1010
1005
1000
995

50 40 30 20 10 0 10 20 30 40 50 60 70

CROSS SECTIONS
STA. 207+75 TO STA. 208+25

LIC SR 13 3.88 PART 3

31
55

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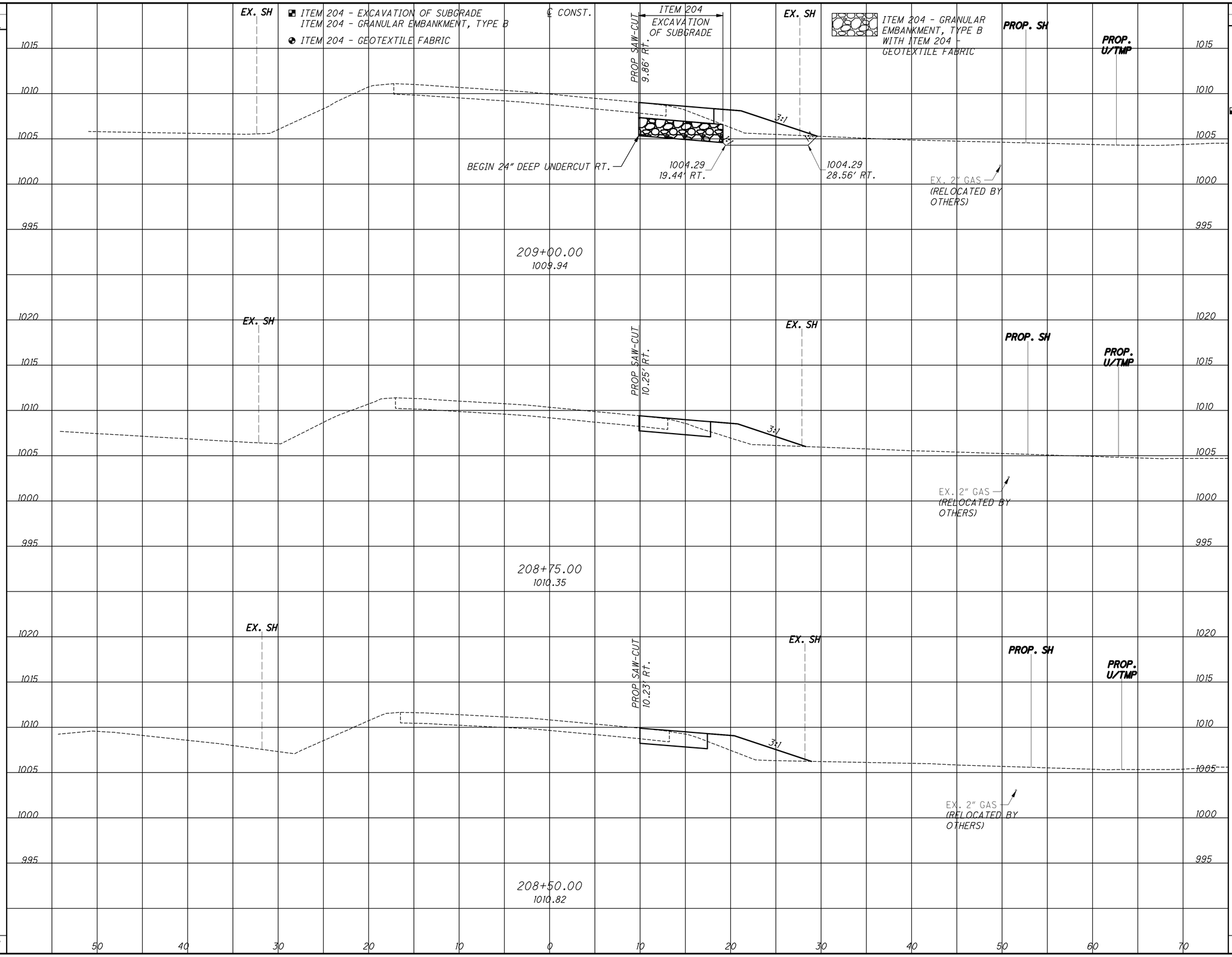
SEEDING END WIDTH	SEEDING SQ. YDS.
10	16
	42
14	
	40
15	
	42
124	



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
19	19		
24	30		
		16	20
10	12		
		10	13
11	14		
		10	14
		36	45

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 208+50 TO STA. 209+00

LIC SR 13 3.88 PART 3

32
55

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SEEDING	
END WIDTH	SQ. YDS.
10	16
	28 43
10	15
	2 3
	27 42
	57 88

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC

℄ CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

EX. SH
PROP. SH
PROP. U/TMP
ITEM 204 EXCAVATION OF SUBGRADE
PROP SAW-CUT 9.71' RT.
3:1
1:1
1003.44 20.48' RT.
1003.44 30.09' RT.
EX. 2" GAS (RELOCATED BY OTHERS)
209+50.00
1009.33

EX. SH
PROP. SH
PROP. U/TMP
ITEM 204 EXCAVATION OF SUBGRADE
PROP SAW-CUT 9.59' RT.
3:1
1:1
1003.88 19.88' RT.
1003.88 29.13' RT.
EX. 2" GAS (RELOCATED BY OTHERS)
209+25.00
1009.57

EX. SH
PROP. SH
PROP. U/TMP
ITEM 204 EXCAVATION OF SUBGRADE
PROP SAW-CUT 9.59' RT.
3:1
1:1
1003.91 19.84' RT.
1003.91 29.02' RT.
EX. 2" GAS (RELOCATED BY OTHERS)
209+23.66
1009.59

END AREA		VOLUME	
CUT	FILL	CUT	FILL
20 25	20 32		
		18 22	18 33
19 24	19 40		
		1 1	1 2
19 24	19 30		
		17 21	17 26
		36 44	36 61

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 209+23.66 TO STA. 209+50

LIC SR 13 3.88 PART 3

33
55

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SEEDING	
END WIDTH	SQ. YDS.
11	17
	31
	47
11	17
	31
	45
11	16
	29
	45
91	
137	

■ ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
◕ ITEM 204 - GEOTEXTILE FABRIC

℄ CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

210+25.00
1008.84

PROP SAW-CUT 10.29' RT.
ITEM 204 EXCAVATION OF SUBGRADE
EX. SH
PROP. SH
PROP. U/TMP
3:1
1:1
1002.75 22.32' RT.
1002.75 32.88' RT.
EX. 2" GAS (RELOCATED BY OTHERS)

210+00.00
1009.03

PROP SAW-CUT 11.17' RT.
ITEM 204 EXCAVATION OF SUBGRADE
EX. SH
PROP. SH
PROP. U/TMP
3:1
1:1
1002.86 21.75' RT.
1002.86 32.20' RT.
EX. 2" GAS (RELOCATED BY OTHERS)

209+75.00
1009.17

EX. SH
PROP SAW-CUT 10.53' RT.
ITEM 204 EXCAVATION OF SUBGRADE
EX. SH
PROP. SH
PROP. U/TMP
3:1
1:1
1003.17 21.05' RT.
1003.17 30.96' RT.
EX. 2" GAS (RELOCATED BY OTHERS)

END AREA	
CUT	FILL
21	21
29	40
21	21
28	38
20	20
28	35
21	21
28	38
20	20
28	35
21	21
29	40
20	20
27	36
19	19
26	34
19	19
25	31
58	58
78	101

VOLUME	
CUT	FILL
20	20
27	36
19	19
26	34
19	19
25	31
58	58
78	101

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 209+75 TO STA. 210+25

LIC SR 13 3.88 PART 3

34
55

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SEEDING	
END WIDTH	SQ. YDS.
11	22
	9
	16
11	20
	31
	54
11	190
	31
	50
	71
	120

■ ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
◕ ITEM 204 - GEOTEXTILE FABRIC

℄ CONST.

▨ ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

EX. SH **PROP. SH** **PROP. U/TMP**

1015 / 1010 / 1005 / 1000 / 995

ITEM 204 EXCAVATION OF SUBGRADE
PROP SAW-CUT 11.26' RT.
3:1
1:1
1001.67 24.33' RT.
EX. 2" GAS (RELOCATED BY OTHERS)
1001.67 38.28' RT.

P.T. 210+81.95
1008.31

ITEM 204 EXCAVATION OF SUBGRADE
PROP SAW-CUT 11.20' RT.
3:1
1:1
1001.75 24.16' RT.
EX. 2" GAS (RELOCATED BY OTHERS)
1001.75 36.37' RT.

210+75.00
1008.38

ITEM 204 EXCAVATION OF SUBGRADE
PROP SAW-CUT 10.79' RT.
3:1
1:1
1002.25 23.25' RT.
EX. 2" GAS (RELOCATED BY OTHERS)
1002.25 34.63' RT.

210+50.00
1008.61

50 40 30 20 10 0 10 20 30 40 50 60 70

END AREA		VOLUME	
CUT	FILL	CUT	FILL
21	22		
34	59		
		6	6
		8	14
21	22		
32	52		
		20	20
		29	45
21	21		
31	46		
		20	20
		28	40
		46	46
		65	99

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 210+50 TO P.T. STA. 210+81.95

LIC SR 13 3.88 PART 3

35
55

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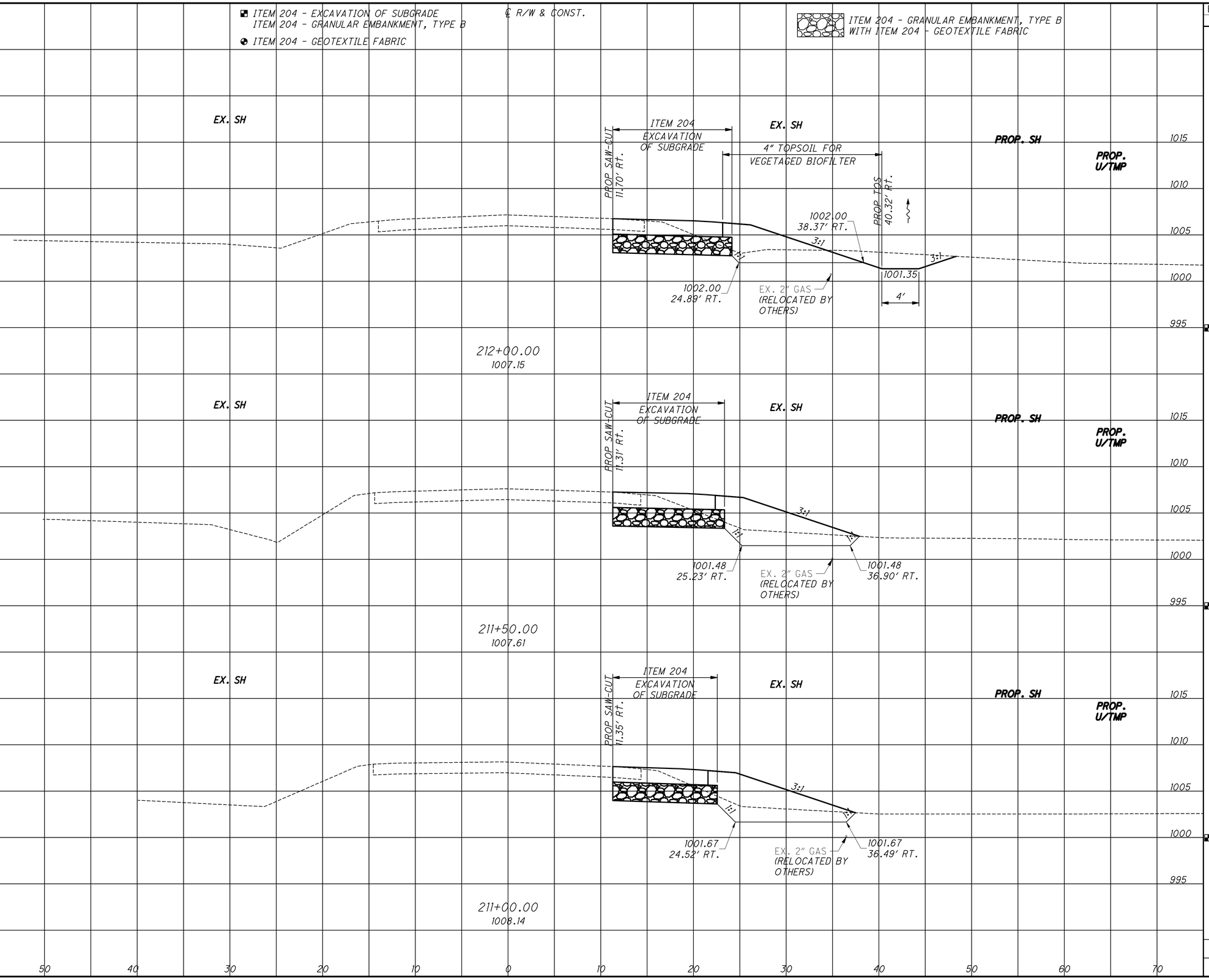
SEEDING	
END WIDTH	SQ. YDS.
13	
29	
	70
	133
12	
19	
	64
	108
11	
20	
	22
	42
	156
	283

■ ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
◕ ITEM 204 - GEOTEXTILE FABRIC

℄ R/W & CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC



END AREA		VOLUME	
CUT	FILL	CUT	FILL
23	26		
42	37		
		42	46
		66	82
22	24		
29	51		
		40	44
		55	96
21	23		
30	53		
		14	15
		21	38
		96	105
		142	216

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 211+00 TO STA. 212+00

LIC SR 13 3.88 PART 3

36
55

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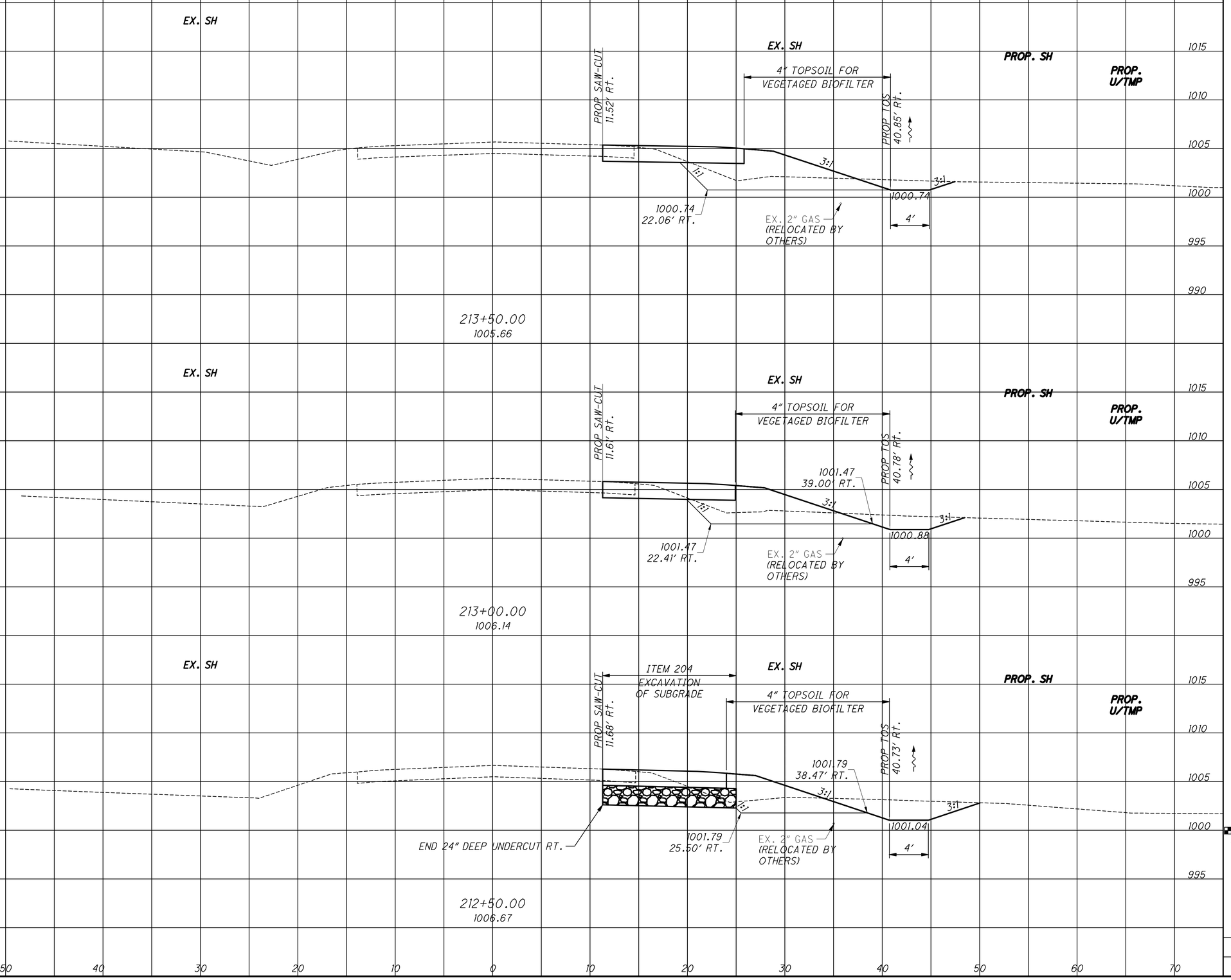
SEEDING END WIDTH	SEEDING SQ. YDS.
26	150
28	164
14	31
75	167
75	481

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC
℄ R/W & CONST.
ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
43	50	81	84
44	41	84	70
24 / 47	27 / 35	44 / 83	49 / 67
		44 / 248	49 / 221

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
212+50 TO STA. 213+50
LIC SR 13 3.88 PART 3

37
55

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SEEDING END WIDTH	SEEDING SQ. YDS.
26	147
27	147
26	145
	439

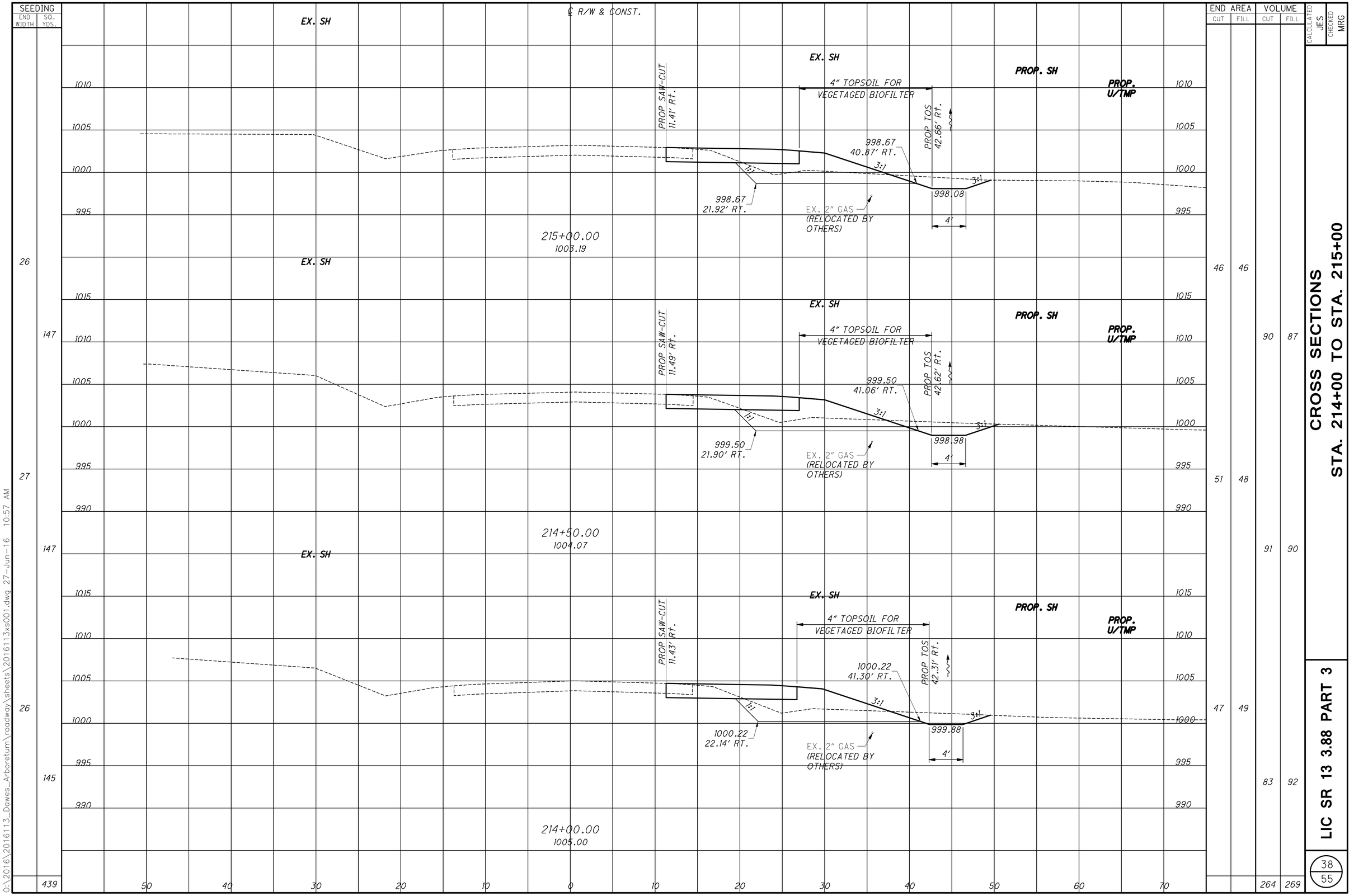
END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
46	46	90	87
51	48	91	90
47	49	83	92
		264	269

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 214+00 TO STA. 215+00

LIC SR 13 3.88 PART 3

38
55



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SEEDING	
END WIDTH	SQ. YDS.
16	32
	89 164
16	27
	89 153
16	28
	150
	178 467

END AREA		VOLUME	
CUT	FILL	CUT	FILL
20	24		
46	35		
		33	45
		82	92
15	24		
42	64		
		29	45
		80	108
16	24		
44	53		
		83	92
		62	90
		245	292

CALCULATED JES
CHECKED MRG

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC

℄ R/W & CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

EX. SH

PROP. SH

PROP. U/TMP

ITEM 204 EXCAVATION OF SUBGRADE

4" TOPSOIL FOR VEGETAGED BIOFILTER

PROP SAW-CUT 11.72' RT.

PROP TOS 43.98' RT.

3:1

994.83 26.99' RT.

994.83 31.99' RT.

994.83 4'

EX. 2" GAS (RELOCATED BY OTHERS)

216+50.00
1000.46

PROP SAW-CUT 11.47' RT.

PROP TOS 43.76' RT.

995.73 22.62' RT.

995.73 4'

EX. 2" GAS (RELOCATED BY OTHERS)

216+00.00
1001.30

PROP SAW-CUT 11.48' RT.

PROP TOS 44.19' RT.

BEGIN 18" DEEP UNDERCUT RT.

997.09 23.28' RT.

997.09 42.76' RT.

996.62 4'

EX. 2" GAS (RELOCATED BY OTHERS)

215+50.00
1002.26

50 40 30 20 10 0 10 20 30 40 50 60 70

CROSS SECTIONS
STA. 215+50 TO STA. 216+50

LIC SR 13 3.88 PART 3

39
55

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SEEDING	
END WIDTH	SQ. YDS.
16	89
43	222
16	89
37	197
16	89
34	183
	267
	602

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC

℄ R/W & CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

EX. SH
PROP. SH
PROP. U/TMP

ITEM 204 EXCAVATION OF SUBGRADE
4" TOPSOIL FOR VEGETAGED BIOFILTER
PROP SAW-CUT 11.58' RT.
PROP TOS 37.34' RT.
3:1
993.60 4'
PR-1
EX. 2" GAS (RELOCATED BY OTHERS)
EX. 24" STM

218+00.00
997.67

ITEM 204 EXCAVATION OF SUBGRADE
4" TOPSOIL FOR VEGETAGED BIOFILTER
PROP SAW-CUT 11.54' RT.
PROP TOS 39.86' RT.
3:1
994.35 4'
PR-1
EX. 2" GAS (RELOCATED BY OTHERS)
EX. 24" STM

217+50.00
998.68

ITEM 204 EXCAVATION OF SUBGRADE
4" TOPSOIL FOR VEGETAGED BIOFILTER
PROP SAW-CUT 11.44' RT.
PROP TOS 41.85' RT.
3:1
993.87 18.07' RT.
993.87 23.07' RT.
994.63 4'
EX. 2" GAS (RELOCATED BY OTHERS)

217+00.00
999.57

END AREA		VOLUME	
CUT	FILL	CUT	FILL
24	24		
171	0		
		45	45
		269	0
24	24		
120	0		
		37	45
		169	25
16	24		
63	27		
		33	45
		101	57
		115	135
		539	82

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 217+00 TO STA. 218+00

LIC SR 13 3.88 PART 3

40
55

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SEEDING END WIDTH	SEEDING SQ. YDS.
26	142
14	25
81	147
15	28
86	197
167	486

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC

℄ R/W & CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

EX. SH **PROP. SH** **PROP. U/TMP**

4" TOPSOIL FOR VEGETAGED BIOFILTER

PROP SAW-CUT 10.73' Rt.

PROP TOS 34.03' Rt.

3:1 3:1

991.95

4'

EX. 2" GAS (RELOCATED BY OTHERS)

PR-1 EX. 24" STM

1005 1000 995 990 985

219+50.00
995.20

EX. SH **PROP. SH** **PROP. U/TMP**

ITEM 204 EXCAVATION OF SUBGRADE

4" TOPSOIL FOR VEGETAGED BIOFILTER

PROP SAW-CUT 11.31' Rt.

PROP TOS 36.58' Rt.

3:1 3:1

END 18" DEEP UNDERCUT RT.

EX. 2" GAS (RELOCATED BY OTHERS)

992.10

4'

PR-1 EX. 24" STM

219+00.00
995.85

EX. SH **PROP. SH** **PROP. U/TMP**

ITEM 204 EXCAVATION OF SUBGRADE

4" TOPSOIL FOR VEGETAGED BIOFILTER

PROP SAW-CUT 12.05' Rt.

PROP TOS 37.35' Rt.

3:1 3:1

EX. 2" GAS (RELOCATED BY OTHERS)

992.80

4'

EX. 24" STM

PR-1

218+50.00
996.70

50 40 30 20 10 0 10 20 30 40 50 60 70

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
60	0	124	0
21	21	42	42
73	0	160	0
23	23	44	44
100	0	251	0
		86	86
		535	0

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 218+50 TO STA. 219+50

LIC SR 13 3.88 PART 3

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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
27	139	72	129	113	207
23	106	50	94	55	99
15	114				
	357			220	318

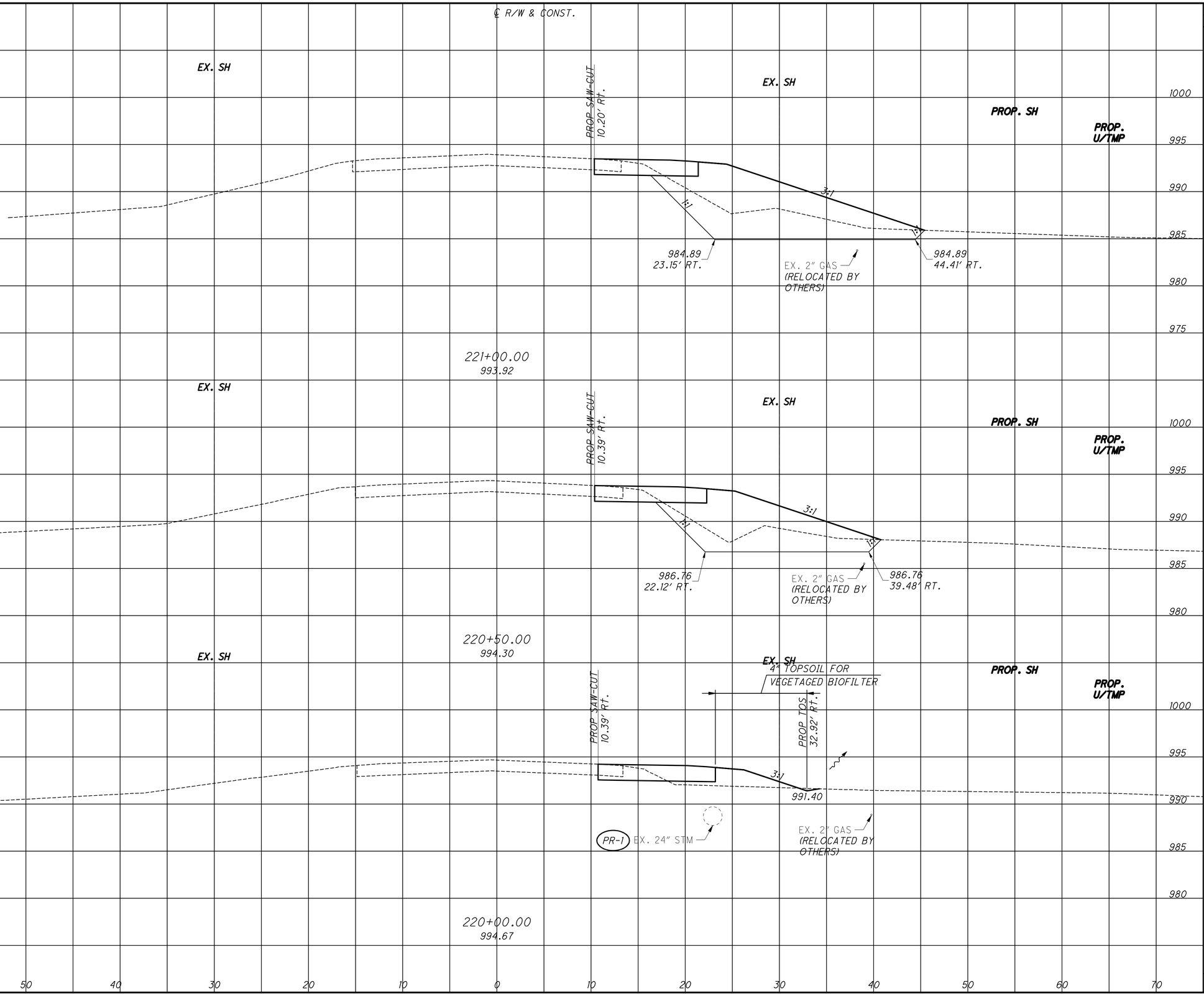
CALCULATED JES

CHECKED MRG

CROSS SECTIONS
STA. 220+00 TO STA. 221+00

LIC SR 13 3.88 PART 3

42
55



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SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
9	27	12	13		
	53				
	153	53	100	22	26
10	28	12	15		
		63	121		
	161			133	241
30		81	139		
	158			142	248
	53			22	26
	472			383	694

EX. SH — ITEM 204 - EXCAVATION OF SUBGRADE; ITEM 204 - GRANULAR EMBANKMENT, TYPE B; ITEM 204 - GEOTEXTILE FABRIC — ℄ R/W & CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

PROP. SH — PROP. U/TMP

PROP SAW-CUT 10.23' RT.

3:1 — 1:1

984.77 22.78' RT.

984.77 40.39' RT.

EX. 2" GAS (RELOCATED BY OTHERS)

222+50.00
993.33

PROP SAW-CUT 10.19' RT.

BEGIN 18" DEEP UNDERCUT RT.

984.32 22.96' RT.

984.32 42.98' RT.

222+00.00
993.49

PROP SAW-CUT 10.23' RT.

984.20 22.83' RT.

984.20 44.79' RT.

221+50.00
993.66

1000 995 990 985 980 975

50 40 30 20 10 0 10 20 30 40 50 60 70

CALCULATED JES CHECKED MRG

CROSS SECTIONS
STA. 221+50 TO STA. 222+50

LIC SR 13 3.88 PART 3

43
55

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SEEDING	
END WIDTH	SQ. YDS.
6	
21	
	36
	117
7	
21	
	42
	133
8	
27	
	47
	150
	125
	400

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC

℄ R/W & CONST.

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

EX. R/W

EX. SH

PROP. SH

PROP. U/TMP

PROP. SAW-CUT 10.78' RT.

PROP. SAW-CUT 10.22' RT.

PROP. SAW-CUT 10.03' RT.

3:1

1:1

984.10 21.03' RT.

984.10 30.69' RT.

984.75 21.56' RT.

984.75 31.39' RT.

984.50 23.02' RT.

984.50 39.45' RT.

EX. 2" GAS (RELOCATED BY OTHERS)

224+00.00
992.52

223+50.00
992.78

223+00.00
993.05

995 990 985 980 975 1000

50 40 30 20 10 0 10 20 30 40 50 60 70

END AREA		VOLUME	
CUT	FILL	CUT	FILL
8	8		
45	78		
		17	17
		79	139
10	10		
40	72		
		20	20
		83	153
11	12		
49	93		
		21	23
		95	179
		58	60
		257	471

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 223+00 TO STA. 224+00

LIC SR 13 3.88 PART 3

44
55

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SEEDING	
END WIDTH	SQ. YDS.
0	
	70
5 22	
6 25	
5 23	
31 122	
37	
	217

ITEM 204 - EXCAVATION OF SUBGRADE
ITEM 204 - GRANULAR EMBANKMENT, TYPE B
ITEM 204 - GEOTEXTILE FABRIC

ITEM 204 - GRANULAR EMBANKMENT, TYPE B WITH ITEM 204 - GEOTEXTILE FABRIC

℄ R/W & CONST.

EX. SH

PROP. SH

PROP. U/TMP

EX. 2" GAS (RELOCATED BY OTHERS)

225+00.00
991.96

PROP SAW-CUT
11.12' RT.

END 18" DEEP UNDERCUT RT.

3:1

2:1

1'

983.65
23.82' RT.

983.65
29.82' RT.

224+60.00
992.23

END PROJECT
BUTT JOINT
MEET EXISTING

PROP SAW-CUT
11.03' RT.

983.71
22.77' RT.

983.71
28.77' RT.

224+50.00
992.31

END AREA	
CUT	FILL
0	0
7 34	7 41
7 35	7 76
17	17
113	195

VOLUME	
CUT	FILL
26	30
3 13	3 22
14 74	14 143

CALCULATED JES
CHECKED MRG

CROSS SECTIONS
STA. 224+50 TO STA. 225+00

LIC SR 13 3.88 PART 3

45
55

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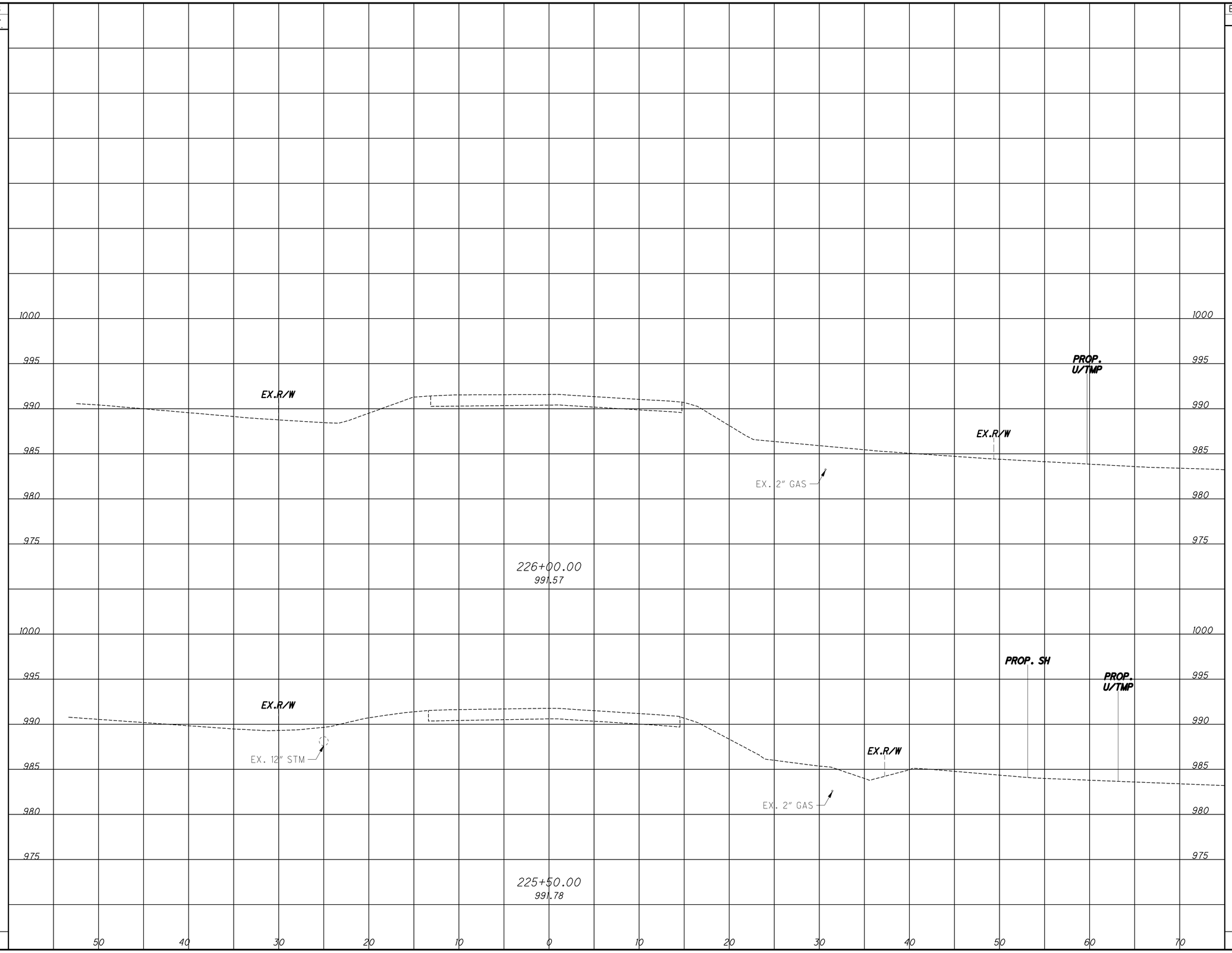
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

CALCULATED JES

CHECKED MRG



CROSS SECTIONS

STA. 225+50 TO STA. 226+00

LIC SR 13 3.88 PART 3

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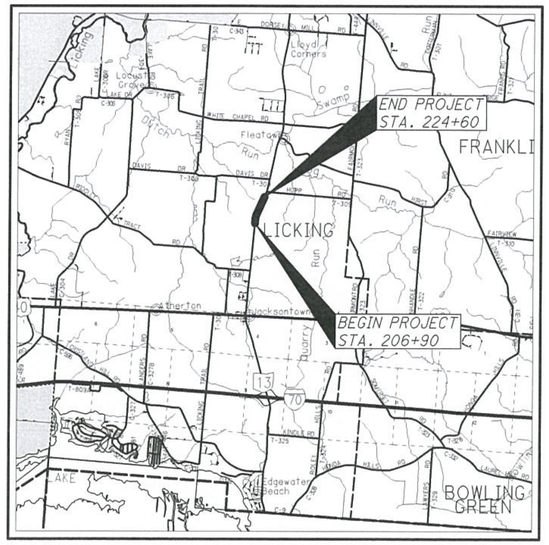
RIGHT OF WAY
LEGEND SHEET
LIC-S.R.13-3.88

TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
LOT 16, 4TH QTR, T1N, R12W, U.S.M.L.



LOCATION MAP

LATITUDE: 39°58'49" LONGITUDE: 82°24'38"

SCALE IN MILES
0 1 2 3 4

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE WIDENING OF S.R. 13 FOR APPROXIMATELY 1800 FT. FOR THE INSTALLATION OF A NORTHBOUND LEFT TURN LANE INTO DAWES ARBORETUM.

PLANS PREPARED BY:

520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax: 330.572.2102
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
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FIRM NAME : GPD GROUP
R/W DESIGNER: TRAVIS D. McCARTY
R/W REVIEWER: STEVEN L. MULLANEY
FIELD REVIEWER: DON QUINCEL
PRELIMINARY FIELD REVIEW DATE: 4-11-16
TRACINGS FIELD REVIEW DATE: 5-25-16
OWNERSHIP UPDATED BY: CODY SHAFFER
DATE COMPLETED: 5-25-16
PLAN COMPLETION DATE: 6-24-16

INDEX OF SHEETS:

LEGEND SHEET	1
CENTERLINE PLAT	2
PROPERTY MAP & SUMMARY SHEET	3-4
R/W DETAIL SHEETS	5-9

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

COLUMBIA GAS OF OHIO
3550 JOHNNY APPLESEED COURT
COLUMBUS, OHIO 43231
ATTN: NATHAN LODEN
614-818-2118

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

WINDSTREAM
66 NORTH FOURTH STREET
NEWARK, OHIO 43055
ATTN: DAVE HOLTON
740-349-8804

TIME WARNER CABLE
111 NORTH 11TH STREET
NEWARK, OHIO 43055
ATTN: BRIAN AMENDE
740-322-6703

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.

PROJECT CONTROL

STATE PLANE GRID SOUTH ZONE
PROJECT ADJUSTMENT FACTOR 0.99994763

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.P.F. IRON PIN FOUND
- I.P.F. IRON PIN FOUND W/ ID CAP
- I.P.S. IRON PIN SET W/ ID CAP
- P.F. IRON PIPE FOUND
- P.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE — Call Before You Dig 1-800-362-2764
(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

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

CONVENTIONAL SYMBOLS

County Line
Township Line
Section Line
Corporation Line or
Fence Line (Ex) (Pr)
Center Line
Right of Way (Ex) Ex R/W
Right of Way (Pr) R/W
Standard Highway Ease.(Ex) Ex SH
Standard Highway Ease.(Pr) SH
Temporary Right of Way TMP
Channel Ease. (Pr) CH
Utility Ease. (Ex) Ex U
Railroad or
Guardrail (Ex) (Pr)
Construction Limits
Edge of Pavement (Ex)
Edge of Pavement (Pr)
Edge of Shoulder (Ex)
Edge of Shoulder (Pr)

Ditch / Creek (Ex)
Ditch / Creek (Pr)
Tree Line (Ex)
Ownership Hook Symbol , Example
Property Line Symbol , Example
Break Line Symbol , Example
Tree (Pr) , Tree (Ex) , Shrub (Ex)
Tree (Remove) , Shrub (Remove)
Evergreen (Ex) , Stump
Evergreen (Remove) , Stump (Remove)
Wetland (Pr) , Grass (Pr) , Aerial Target
Post (Ex) , Mailbox (Ex) MB , Mailbox (Pr) MB
Light (Ex) , Telephone Marker (Ex) TEL
Fire Hydrant (Ex) , Water Meter (Ex) W
Water Valve (Ex) , Utility Valve Unknown (Ex.)
Telephone Pole (Ex) , Power Pole (Ex)
Light Pole (Ex)

I, Steven L. Mullaney, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation in February 2016. The results of that survey are contained herein. The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinate System, South Zone on NAD 83 (2011) datum. The Project Coordinates (US Survey feet) are relative to State Plane Grid Coordinates (meters or US Survey feet) by a Project Adjustment Factor multiplier of 0.99994763. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for property takes contained herein. All of my work contained herein was conducted in accordance with Ohio Administrative Code 4733-37 commonly known as "A Minimum Standards for Boundary Surveys in the State of Ohio" unless noted. The words I and my as used herein are to mean either myself or someone working under my direct supervision.

STATE OF OHIO — STEVEN L MULLANEY 7900 REGISTERED SURVEYOR

Steven L. Mullaney, Professional Land Surveyor No. 7900

Date: 6/30/2016

FEDERAL PROJECT NO.
PID NO. 92958
CALCULATED TDM CHECKED SLM
RIGHT OF WAY LEGEND SHEET
LIC-S.R.13-3.88
1 / 9
47 / 55

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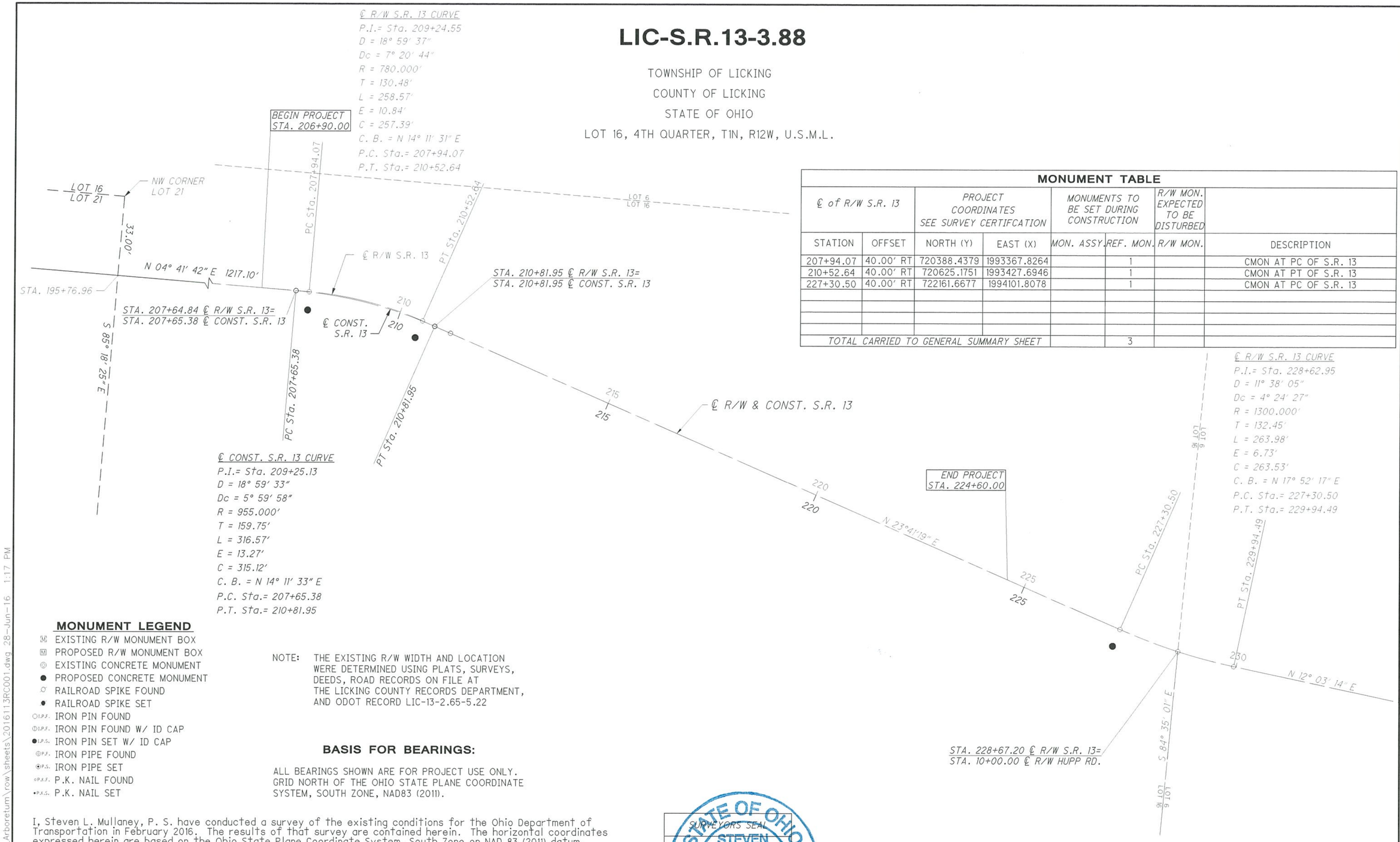
LIC-S.R.13-3.88

TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
LOT 16, 4TH QUARTER, T1N, R12W, U.S.M.L.



MONUMENT TABLE

℄ of R/W S.R. 13		PROJECT COORDINATES SEE SURVEY CERTIFCATION		MONUMENTS TO BE SET DURING CONSTRUCTION		R/W MON. EXPECTED TO BE DISTURBED	
STATION	OFFSET	NORTH (Y)	EAST (X)	MON. ASSY.	REF. MON.	R/W MON.	DESCRIPTION
207+94.07	40.00' RT	720388.4379	1993367.8264		1		CMON AT PC OF S.R. 13
210+52.64	40.00' RT	720625.1751	1993427.6946		1		CMON AT PT OF S.R. 13
227+30.50	40.00' RT	722161.6677	1994101.8078		1		CMON AT PC OF S.R. 13
TOTAL CARRIED TO GENERAL SUMMARY SHEET					3		

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.P.F. IRON PIN FOUND
- I.P.F. IRON PIN FOUND W/ ID CAP
- I.P.S. IRON PIN SET W/ ID CAP
- P.F. IRON PIPE FOUND
- P.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING PLATS, SURVEYS, DEEDS, ROAD RECORDS ON FILE AT THE LICKING COUNTY RECORDS DEPARTMENT, AND ODOT RECORD LIC-13-2.65-5.22

BASIS FOR BEARINGS:

ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY. GRID NORTH OF THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83 (2011).

I, Steven L. Mullaney, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation in February 2016. The results of that survey are contained herein. The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinate System, South Zone on NAD 83 (2011) datum. The Project Coordinates (US Survey feet) are relative to State Plane Grid Coordinates (meters or US Survey feet) by a Project Adjustment Factor multiplier of 0.99994763. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for property takes contained herein. All of my work contained herein was conducted in accordance with Ohio Administrative Code 4733-37 commonly known as "A Minimum Standards for Boundary Surveys in the State of Ohio" unless noted. The words I and my as used herein are to mean either myself or someone working under my direct supervision.

Steven L. Mullaney, Professional Land Surveyor No. 7900

Date: 6/30/2016

SURVEYORS SEAL
STATE OF OHIO
STEVEN L MULLANEY 7900 REGISTERED SURVEYOR

PROJECT CONTROL

STATE PLANE GRID SOUTH ZONE
PROJECT ADJUSTMENT FACTOR 0.99994763

RECEIVED _____, 20___
RECORDED _____, 20___
BOOK _____ PAGE _____
COUNTY RECORDER

HORIZONTAL SCALE IN FEET
0 25 50 100

PID NO. 92958
R/W DESIGNER TDM
R/W REVIEWER SLM

CENTERLINE PLAT

LIC-S.R.13-3.88

2 / 9
48 / 55

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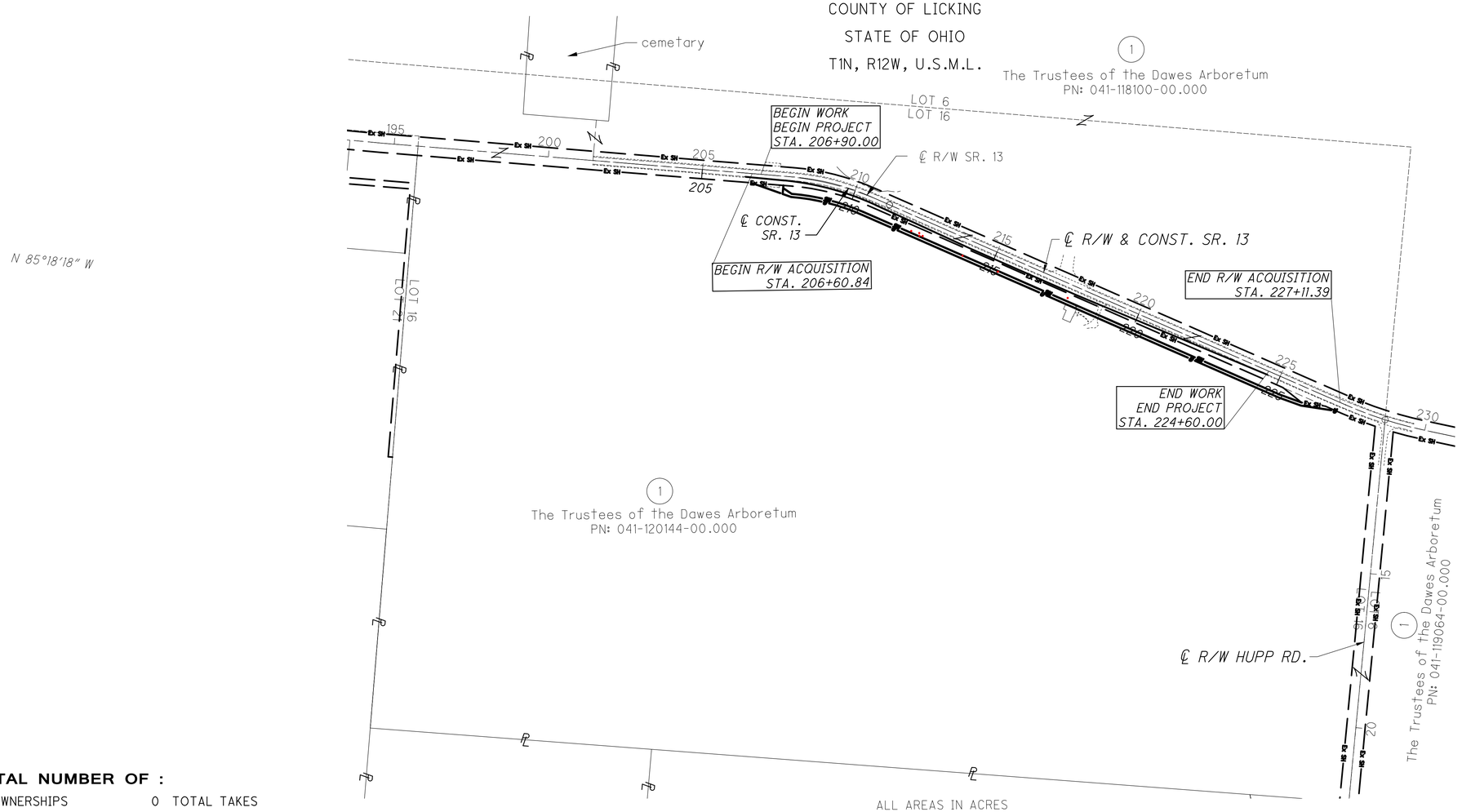
LIC-S.R.13-3.88

TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
T1N, R12W, U.S.M.L.

NOTE: FOR PERIPHERY VIEW SHOWING ALL CONTIGUOUS PARCELS OWNED BY "THE TRUSTEES OF THE DAWES ARBORETUM" SEE SHEET 4.



TOTAL NUMBER OF :

1 OWNERSHIPS 0 TOTAL TAKES
3 PARCELS 1 OWNERSHIPS W/ STRUCTURES INVOLVED

ALL AREAS IN ACRES
NET TAKE = GROSS TAKE - PRO IN TAKE

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS	AS ACQUIRED INSTRUMENT NO.
1-SH	The Trustees of the Dawes Arboretum	5-8	Vol. 678, Pg. 636	041-120144-00.000	244.97	3.137	1.017	0.000	1.017	NO		240.815		roadway reconstruction, grading, take 42" maple, 15" BC (2), 18" BC (3), 20" BC, 24" BC	
			Vol. 290, Pg. 277	041-118100-00.000	338.28	3.161								no r/w required	
			Inst. 200609270028280	041-119064-00.000	46.772	2.330								no r/w required	
1-U		5-9		041-120144-00.000	244.97	3.138	0.442	0.000	0.442	NO				utility relocation	
1-T		5-9		041-120144-00.000	244.97	3.138	0.475	0.000	0.475	YES				grading, take 10" silver maple, 8" BC, 12" BC (2), 18" BC (3), 20" BC (2), 28" BC	

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

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

TYPES OF TITLE LEGEND:
SH = STANDARD HIGHWAY EASEMENT
U = UTILITY EASEMENT
T = TEMPORARY EASEMENT

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

GRANTEE:

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

REV. BY		
FIELD REVIEW BY DON QUINCEL		DATE: 5-25-16
OWNERSHIP VERIFIED BY CODY SHAFFER		DATE: 5-25-16
DATE COMPLETED 6-24-16		

HORIZONTAL SCALE IN FEET
0 50 100 200

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

PROPERTY MAP / SUMMARY

LIC-S.R.13-3.88

3 / 9

49 / 55

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LIC-S.R.13-3.88

TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO

PERIPHERY VIEW - SHOWING ALL CONTIGUOUS PARCELS OWNED BY "THE TRUSTEES OF THE DAWES ARBORETUM"

The Trustees of the Dawes Arboretum PN: 041-119586-00.000
The Trustees of the Dawes Arboretum PN: 041-118590-00.000
The Trustees of the Dawes Arboretum PN: 041-118590-00.000
The Trustees of the Dawes Arboretum PN: 041-118578-00.000
The Trustees of the Dawes Arboretum PN: 041-120108-00.000
The Trustees of the Dawes Arboretum PN: 041-118100-00.000
The Trustees of the Dawes Arboretum PN: 041-118100-00.000
The Trustees of the Dawes Arboretum PN: 041-118938-00.000
The Trustees of the Dawes Arboretum PN: 041-119622-00.000
The Trustees of the Dawes Arboretum PN: 041-118866-00.000
The Trustees of the Dawes Arboretum PN: 041-119622-00.000
The Trustees of the Dawes Arboretum PN: 041-118866-00.000
The Trustees of the Dawes Arboretum PN: 041-118100-00.000
cemetary
LOT 6
LOT 16
The Trustees of the Dawes Arboretum PN: 041-123762-00.000
The Trustees of the Dawes Arboretum PN: 041-118866-00.000
LOT 16
LOT 17
The Trustees of the Dawes Arboretum PN: 041-120144-00.000
LOT 8
LOT 9
The Trustees of the Dawes Arboretum PN: 041-120144-00.000
The Trustees of the Dawes Arboretum PN: 041-119064-00.000
Trustees of the Dawes Arboretum PN: 041-118566-00.000
The Dawes Arboretum PN: 041-120144-00.000
The Dawes Arboretum PN: 041-120318-00.000
The Dawes Arboretum PN: 041-120144-00.000

HORIZONTAL SCALE IN FEET
0 250 500 1000

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

PROPERTY MAP

LIC-S.R.13-3.88

4 / 9

50 / 55

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 6-24-16

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TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
LOT 16, 4TH QUARTER, T1N, R12W, U.S.M.L.

NOTES:
TREE REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION. STUMPS MAY REMAIN.

BC = BALD CYPRESS
✱ - UTILITY POLE RELOCATED BY OTHERS

POTENTIAL ENDANGERED BAT ROOST TREE

℄ CONST. S.R. 13 CURVE
P.I.= Sta. 209+25.13
D = 18° 59′ 33″
Dc = 5° 59′ 58″
R = 955.000′
T = 159.75′
L = 316.57′
E = 13.27′
C = 315.12′
C. B. = N 14° 11′ 33″ E
P.C. Sta.= 207+65.38
P.T. Sta.= 210+81.95

℄ R/W S.R. 13 CURVE
P.I.= Sta. 209+24.55
D = 18° 59′ 37″
Dc = 7° 20′ 44″
R = 780.000′
T = 130.48′
L = 258.57′
E = 10.84′
C = 257.39′
C. B. = N 14° 11′ 31″ E
P.C. Sta.= 207+94.07
P.T. Sta.= 210+52.64

(1) The Trustees of the Dawes Arboretum
Vol. 290, Pg. 277
PN: 041-118100-00.000
7770 Jacksontown Rd.
Charitable Exempt

STA. 207+64.84 ℄ R/W S.R. 13 =
STA. 207+65.38 ℄ CONST. S.R. 13

STA. 210+81.95 ℄ R/W S.R. 13 =
STA. 210+81.95 ℄ CONST. S.R. 13

BEGIN WORK
BEGIN PROJECT
STA. 206+90.00

NW CORNER LOT 21
LOT 16 / LOT 21
33.00′
N 04° 41′ 42″ E
STA. 195+76.96
S 85° 18′ 25″ E
LOT 16 / LOT 21

WOODS
CONC. RET. WALL
RAMP TO TUNNEL
CONC. RET. WALL
GUARD RAIL
60′ x 72″ TUNNEL
ASPHALT
GRASS
BUSH
20″ WALNUT
18″
10″ 36″ 3″ 24″ 4″ 6″ 12″ 8″ 6″ 8″ 3″
PC Sta. 207+65.38
PC Sta. 207+94.07
Ex SH
SIGN
℄ R/W SR 13
℄ CONST. SR 13
℄ R/W & CONST. SR 13
207 208 209 210
30′
N 23° 41′ 19″ E
PT Sta. 210+81.95
MATCHLINE 211+00
SEE SHEET 6

WETLANDS
24″ BC 15″ BC 26″ BC 40″ BC 28″ BC 10″ BC (2) 18″ BC

207+64.84 30.00′ R
207+94.07 30.00′ R
207+64.84 38.63′ R
207+94.07 55.00′ R
207+64.84 57.60′ R
207+92.75 65.00′ R
206+60.84 30.00′ R
210+52.64 30.00′ R
210+52.64 55.00′ R
210+52.64 65.00′ R

OVERHEAD TELECOM. AND ELEC.
CONST. LIMITS
2″ STEEL 'QL-B'
1-SH 1-U 1-T
BUTTONBUSH
20″ BC 18″ BC 10″
(2) 20″ BC 30″ BC 15″ BC 24″ BC 12″ 8″ 18″ 28″ BC

BEGIN R/W ACQUISITION
STA. 206+60.84

(1) The Trustees of the Dawes Arboretum
Vol. 678, Pg.636
PN: 041-120144-00.000
7739 Jacksontown Rd.
General Farm

LINE TABLE

LINE	BEARING	DISTANCE
L1	N 04° 41′ 42″ E	29.22′
L2	N 23° 41′ 19″ E	1470.18′
L3	S 23° 41′ 19″ W	1469.31′
L4	S 33° 57′ 15″ W	33.50′
L5	N 85° 18 14″ W	8.63′
L6	S 23° 41′ 19″ W	1469.64′
L7	S 19° 33′ 22″ W	28.87′
L8	N 85° 18 14″ W	18.97′
L9	N 04° 41′ 42″ E	104.00′
L10	S 19° 33′ 22″ W	136.47′

C1
R = 750.00′
Δ = 18° 59′ 37″
C.B. = N 14° 11′ 31″ E
C.D. = 247.49′
L = 248.63′

C2
R = 725.00′
Δ = 18° 59′ 37″
C.B. = S 14° 11′ 31″ W
C.D. = 239.24′
L = 240.34′

C3
R = 715.00′
Δ = 19° 05′ 58″
C.B. = S 14° 08′ 20″ W
C.D. = 237.24′
L = 238.34′

LEGAL DESCRIPTION TIE DATA

TIE	BEARING	DISTANCE
1-2	N 04° 41′ 42″ E	1187.88′
2-3	S 85° 18 14″ E	30.00′
2-4	S 85° 18 14″ E	38.63′
1-5	N 04° 41′ 42″ E	1083.88′
5-6	S 85° 18 14″ E	30.00′

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 6-24-16

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

DETAIL SHEET
BEGIN TO STA. 211+00

LIC-S.R.13-3.88

5 / 9
51 / 55

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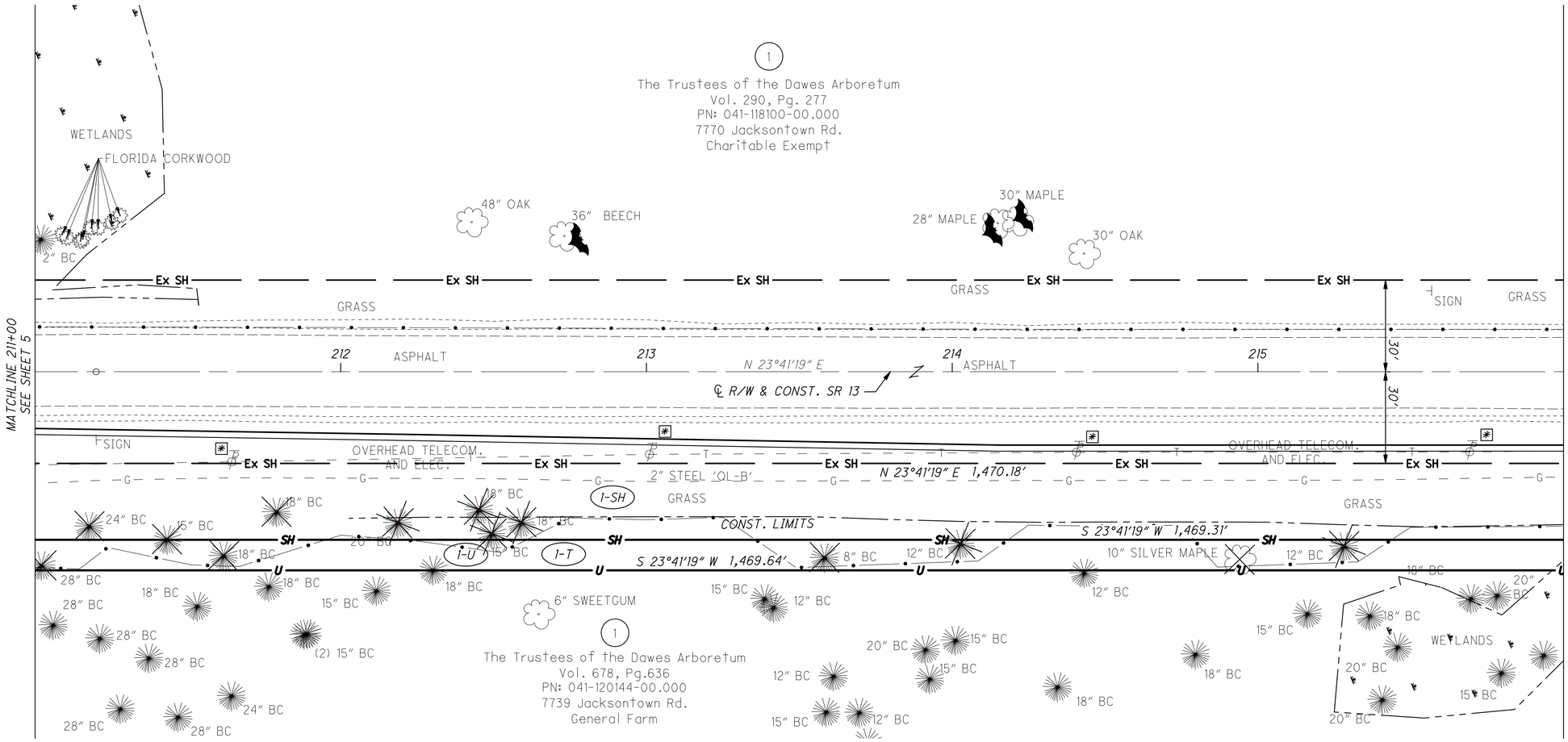
TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
LOT 16, 4TH QUARTER, T1N, R12W, U.S.M.L.

NOTES:
TREE REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION. STUMPS MAY REMAIN.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

POTENTIAL ENDANGERED BAT ROOST TREE



REV. BY	DATE	DESCRIPTION

DATE COMPLETED 6-24-16

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

DETAIL SHEET
STA 211+00 TO STA. 216+00
LIC-S.R.13-3.88

6 / 9
52 / 55

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TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
LOT 16, 4TH QUARTER, T1N, R12W, U.S.M.L.

NOTES:
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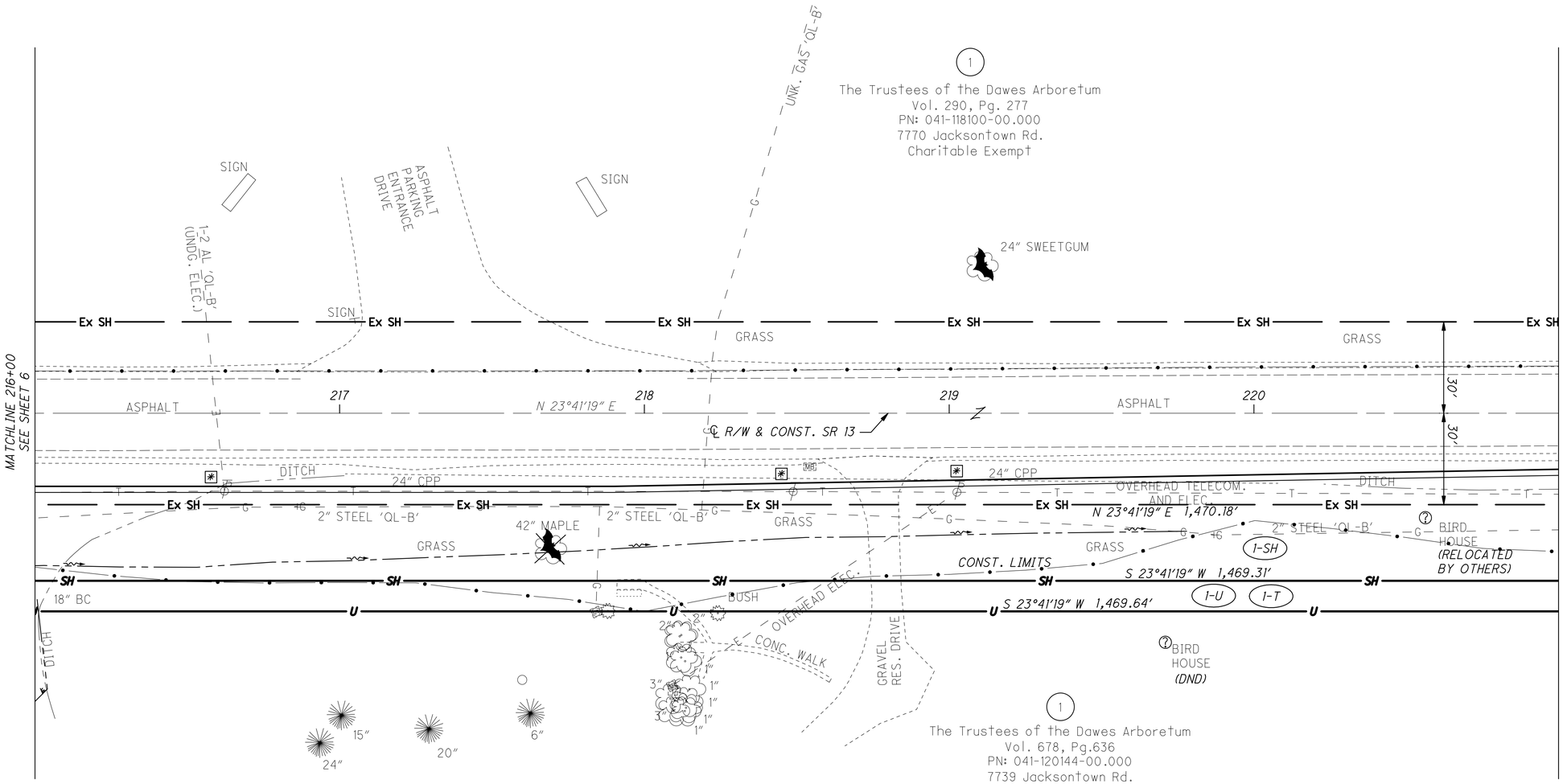
BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

POTENTIAL ENDANGERED BAT ROOST TREE



REV. BY	DATE	DESCRIPTION

DATE COMPLETED 6-24-16

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

DETAIL SHEET
STA 216+00 TO STA. 221+00

LIC-S.R.13-3.88

7 / 9

53 / 55

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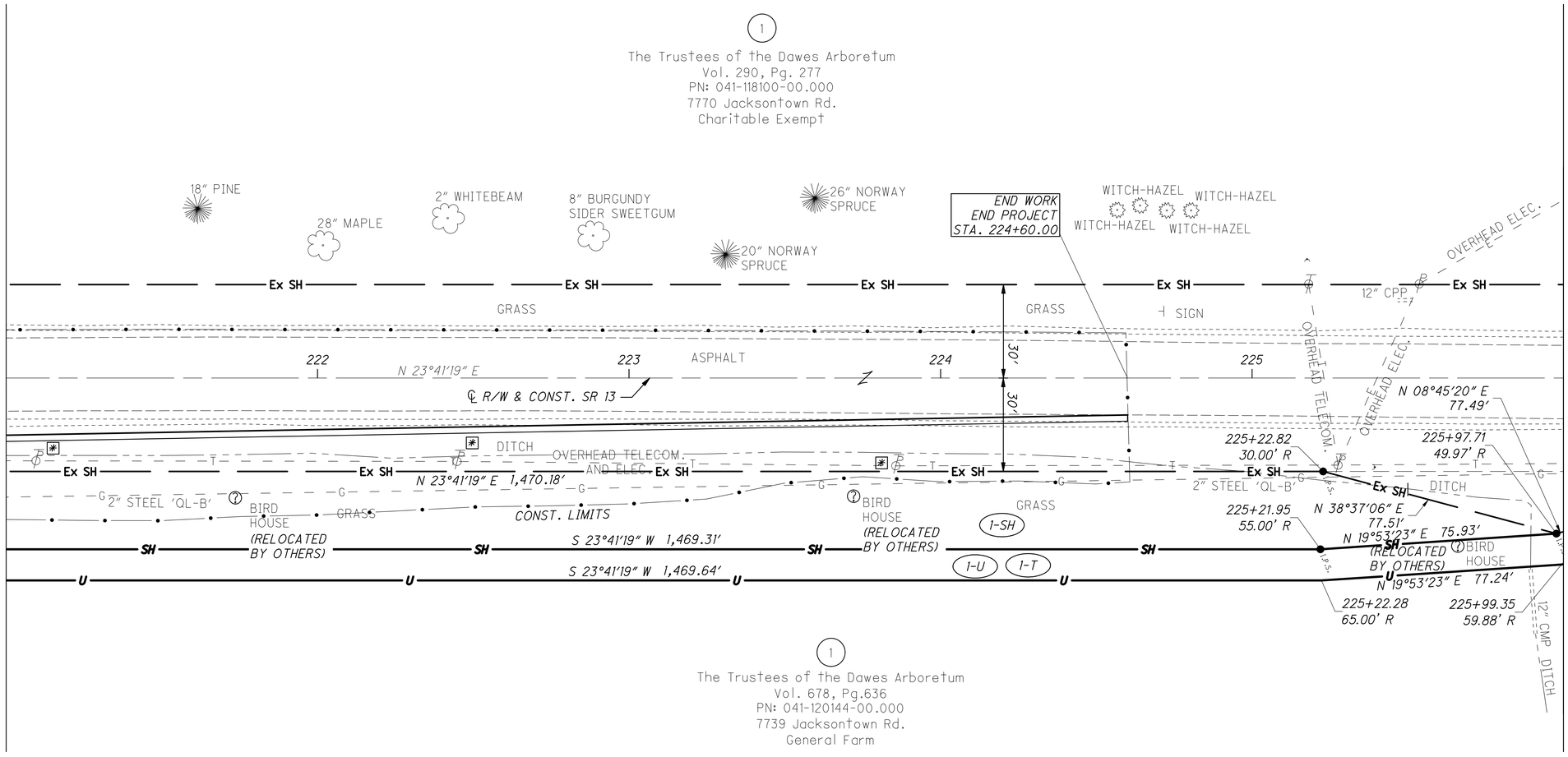
TOWNSHIP OF LICKING
COUNTY OF LICKING
STATE OF OHIO
LOT 16, 4TH QUARTER, T1N, R12W, U.S.M.L.

NOTES:
TREE REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION. STUMPS MAY REMAIN.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

POTENTIAL ENDANGERED BAT ROOST TREE



REV.	BY	DATE	DESCRIPTION

DATE COMPLETED 6-24-16

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

DETAIL SHEET
STA 221+00 TO STA. 226+00

LIC-S.R.13-3.88

8 / 9

54 / 55

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TOWNSHIP OF LICKING

COUNTY OF LICKING

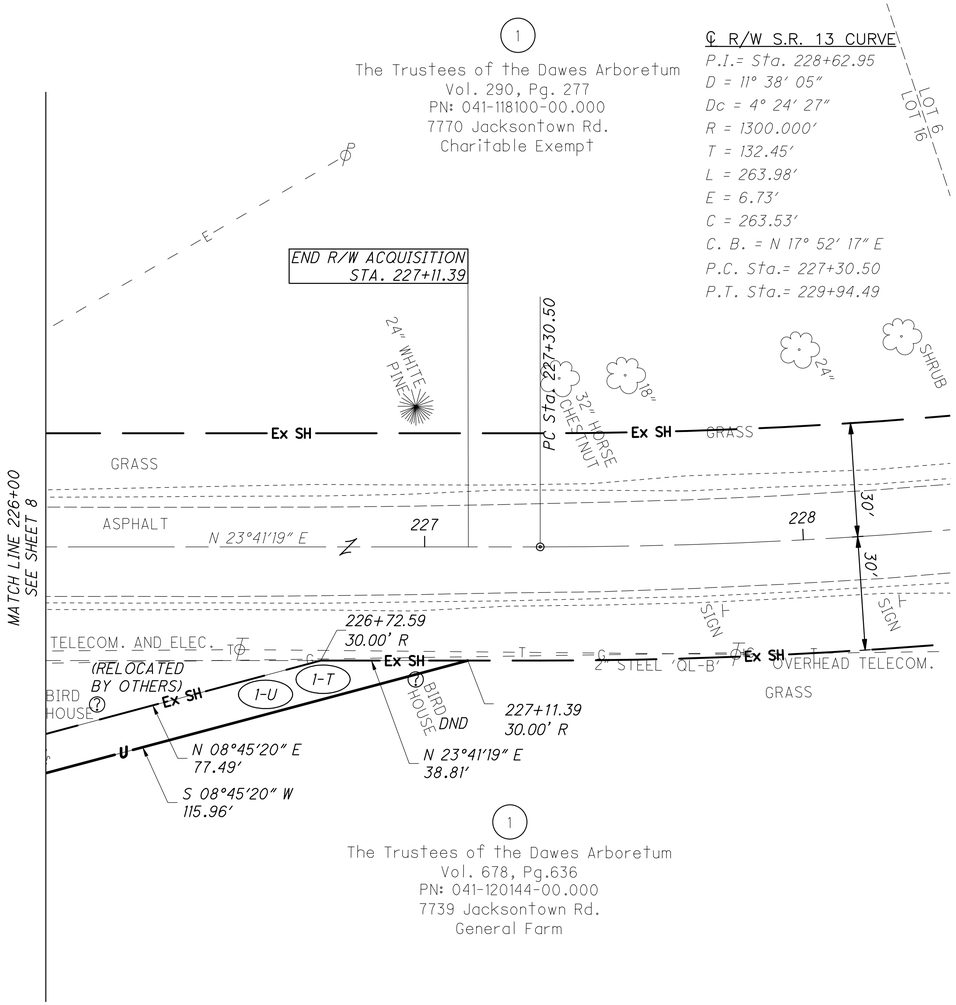
STATE OF OHIO

LOT 16, 4TH QUARTER, T1N, R12W, U.S.M.L.

NOTES:
TREE REMOVAL TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION. STUMPS MAY REMAIN.

BC = BALD CYPRESS
[*] - UTILITY POLE RELOCATED BY OTHERS

POTENTIAL ENDANGERED BAT ROOST TREE



REV. BY	DATE	DESCRIPTION

DATE COMPLETED 6-24-16

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 92958

R/W DESIGNER TDM
R/W REVIEWER SLM

DETAIL SHEET
STA 226+00 TO END

LIC-S.R.13-3.88

9 / 9

55
55

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PROJECT DESCRIPTION

THE PROPOSED IMPROVEMENTS ALONG THE STATE ROUTE (SR) 13 AND ADDITION OF TURN LANES DEDICATED FOR DAWES ARBORETUM IN THE CITY OF HEATH, OHIO. IT IS UNDERSTOOD THAT THE ROADWAY WILL BE WIDENED TO THE EAST ALONG THE SR 13 BETWEEN STATION 206+90 AND STA. 224+60.

HISTORIC RECORDS

NO HISTORIC RECORDS WERE OBTAINED FOR THIS PROJECT.

GEOLOGY

THIS AREA IS CHARACTERIZED AS A ROLLING UPLAND, TRANSITIONING BETWEEN THE GENTLY ROLLING TILL PLAIN AND THE HILLY GLACIATED ALLEGHENY PLATEAU, AND IS TYPICALLY COMPRISED OF MEDIUM-TO LOW-LIME WISCONSINAN-AGE TILL OVERLYING MISSISSIPPIAN-AGE SHALES AND SANDSTONES. THE SOIL AT THE SITE CONSISTS OF SILTY LOAM TILL (DARBY, BELLEFONTAINE, CENTERBURG, GRAND LAKE, ARCANUM, KNIGHTSTOWN TILLS).

BASED ON BEDROCK GEOLOGY AND TOPOGRAPHY MAPS OBTAINED FROM THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), THE BEDROCK UNDERLYING THE GLACIAL DEPOSITS CONSISTS OF THE MISSISSIPPIAN-AGED LOGAN AND CUYAHOGA FORMATIONS UNDIVIDED. THE LOGAN FORMATION CONSISTS OF GRAY, YELLOW AND BROWN SANDSTONE AND SILTSTONE. THE SANDSTONE LAYERS CONTAIN LENSES AND BEDS OF COARSE SAND GRAINS TO FINE-PEBBLE CONGLOMERATE AND THE SILTSTONE CONTAINS SHALE INTERBEDS AND PARTINGS AND IS LOCALLY FOSSILIFEROUS. THE CUYAHOGA FORMATION CONSISTS OF GRAY, OLIVE, BROWN AND YELLOW SANDSTONE, SILTSTONE AND SHALE. THE SANDSTONE IS SILTY TO CONGLOMERATIC AND THE SILTSTONE AND SHALE ARE LOCALLY FOSSILIFEROUS AND INTERTONGUE AND INTERGRADE. THE ENTIRE UNDIVIDED FORMATION RANGES BETWEEN 250 TO 1,050 FEET THICK. ACCORDING TO BEDROCK TOPOGRAPHY MAPPING, THE BEDROCK SURFACE SLOPES DOWN TO THE NORTHWEST ACROSS THE SITE, WITH THE ELEVATION OF THE BEDROCK SURFACE APPROXIMATELY 985 TO 1015 FEET MSL (MEAN SEA LEVEL), WHICH IS APPROXIMATELY 65 TO 135 FEET BELOW THE GROUND SURFACE.

RECONNAISSANCE

THE PROJECT SITE IS LOCATED APPROXIMATELY 1.5 MILES NORTH OF JACKSONTOWN AND SOUTHEAST OF THE CITY OF HEATH, OHIO. WITHIN THE PROJECT CORRIDOR, SR 13 IS ALIGNED IN A PRIMARILY NORTH-TO-SOUTH ORIENTATION WITH HUPP ROAD ORIENTED IN EAST-TO-WEST ALIGNMENT AT THE END OF THE PROJECT. THE EXISTING SR 13 IS AN ASPHALT PAVED ROADWAY THAT CURRENTLY MAINTAINS TWO (2) THROUGH LANES IN BOTH THE NORTHBOUND AND SOUTHBOUND DIRECTION, WITH NO DEDICATED CENTRAL TURN LANE ALONG THE ENTIRE PROJECT ALIGNMENT. THE EXISTING PAVEMENT ALONG SR 13 IS IN FAIR CONDITION, WITH A SIGNIFICANT AMOUNT OF CRACK SEALING EVIDENT THROUGH THE ENTRANCE TO THE DAWES ARBORETUM. GAS AND PHONE UTILITIES ARE PRESENT AT THE SITE ALONG WITH OVERHEAD ELECTRIC WHICH RUNS ALONG THE EAST SIDE OF THE ROADWAY. TRAFFIC VOLUME IS ESTIMATED TO BE LOW TO MODERATE THROUGHOUT THE PROJECT CORRIDOR. LAND USE ALONG THE EAST SIDE OF THE PROJECT CORRIDOR CONSISTS PRIMARILY OF FARM AND AGRICULTURE AND AREAS TO THE WEST OF THE PROJECT APPEARS TO BE HEAVILY WOODED WITH SPARSELY POPULATED RESIDENTIAL UNITS AND THE PROPERTY OWNED BY DAWES ARBORETUM. THE EXISTING TERRAIN ACROSS THE SUBJECT SITE WAS OBSERVED TO BE RELATIVELY FLAT, WITH A GENTLE SLOPE TO THE NORTH. SURFACE DRAINAGE IS DIRECTED TO GRASS DITCHES THAT LINE BOTH SIDES OF SR 13.

SUBSURFACE EXPLORATION

A TOTAL OF EIGHT (8) BORINGS, DESIGNATED AS B-001-0-16 THROUGH B-008-0-16, WERE DRILLED TO COMPLETION DEPTHS RANGING FROM 7.0 TO 11.0 FEET BELOW THE EXISTING GROUND SURFACE. THE BORING LOCATIONS WERE DETERMINED AND LOCATED IN THE FIELD BY RII REPRESENTATIVES PRIOR TO THE DRILLING OPERATIONS. GEOGRAPHIC LATITUDE AND LONGITUDE COORDINATES WERE COLLECTED USING A HANDHELD GPS DEVICE, AND GROUND SURFACE ELEVATIONS AT THE BORING LOCATIONS WERE INTERPOLATED USING AVAILABLE TOPOGRAPHIC INFORMATION PROVIDED BY GPD GROUP .

THE BORINGS WERE DRILLED WITH A MOBILE B-53 TRUCK-MOUNTED ROTARY DRILLING MACHINE, UTILIZING A 4.5-INCH OUTSIDE DIAMETER, CONTINUOUS FLIGHT AUGER TO ADVANCE THE HOLES. RII UTILIZED A CALIBRATED AUTOMATIC DROP HAMMER TO GENERATE CONSISTENT ENERGY TRANSFER TO THE SAMPLER. THE HAMMER FOR THE MOBILE B-53 TRUCK-MOUNTED DRILL RIG USED FOR THIS PROJECT WAS CALIBRATED ON MAY 13, 2015 AND HAS A DRILL ROD ENERGY RATIO OF 77.1 PERCENT.

EXPLORATION FINDINGS

ALL BORINGS WERE PERFORMED WITHIN THE EXISTING PAVEMENT ALONG SR 13 AND ENCOUNTERED 12.0 TO 14.0 INCHES OF ASPHALT OVERLAYING 2.0 TO 5.5 INCHES OF AGGREGATE BASE AT THE GROUND SURFACE.

BENEATH THE PAVEMENT MATERIALS IN BORINGS B-003-0-16 AND B-004-0-16, MATERIAL IDENTIFIED AS POSSIBLE FILL WAS ENCOUNTERED EXTENDING TO A DEPTH OF 7.5 AND 4.5 FEET BELOW THE GROUND SURFACE, RESPECTIVELY. THE FILL MATERIAL CONSISTED OF MEDIUM STIFF TO VERY STIFF, BROWN AND BROWNISH GRAY SILT, SILT AND CLAY AND SILTY CLAY (ODOT A-4b, A-6a, A-6b) AND LOOSE, BROWN TO GRAY SANDY SILT (ODOT A-4b). ORGANICS AND WOOD FRAGMENTS WERE PRESENT AT THE BOTTOM OF THE FILL MATERIAL IN BORING B-003-0-16, AND SHALE FRAGMENTS WERE PRESENT THROUGHOUT THE FILL MATERIAL IN BORING B-004-0-16.

LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH.	CLASSIFIED VISUAL
GRAVEL AND/OR STONE FRAGMENTS	A-2-4	1	-
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-2-6	2	2
GRAVEL AND/OR STONE FRAGS. WITH SAND & SILT	A-4a	6	6
GR. AND/OR ST. FRAGS. WITH SAND, SILT & CLAY	A-4b	1	-
SANDY SILT	A-6a	6	6
SILT	A-6b	-	4
	TOTAL	16	18

XXXX PAVEMENT OR BASE = X = APPROXIMATE THICKNESS

BORING LOCATION - PLAN VIEW.

DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.

WC INDICATES WATER CONTENT IN PERCENT.

N_{60} INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.

W— INDICATES FREE WATER ELEVATION.

● INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.

* INDICATES A SAMPLE TAKEN WITHIN 3 FT OF PROPOSED GRADE.

SS INDICATES A SPLIT SPOON SAMPLE.

ST INDICATES A SHELBY TUBE SAMPLE.

NP INDICATES A NON-PLASTIC SAMPLE.

EXPLORATION FINDINGS (CONTINUED)

UNDERLYING THE PAVEMENT MATERIALS AND EXISTING FILL, WHERE ENCOUNTERED, NATURAL COHESIVE SOILS WERE ENCOUNTERED WITH INTERMITTENT SEAMS OF GRANULAR MATERIAL. THE NATURAL COHESIVE WERE GENERALLY DESCRIBED AS MEDIUM STIFF TO VERY STIFF, BROWN, GRAYISH BROWN, BROWNISH GRAY AND DARK BROWN SANDY SILT, SILT AND CLAY AND SILTY CLAY (ODOT A-4a, A-6a, A-6b). THE NATURAL GRANULAR SOILS WERE GENERALLY DESCRIBED AS LOOSE TO DENSE, BROWN GRAVEL WITH SAND AND SILT AND GRAVEL WITH SAND, SILT AND CLAY (ODOT A-2-4, A-2-6).

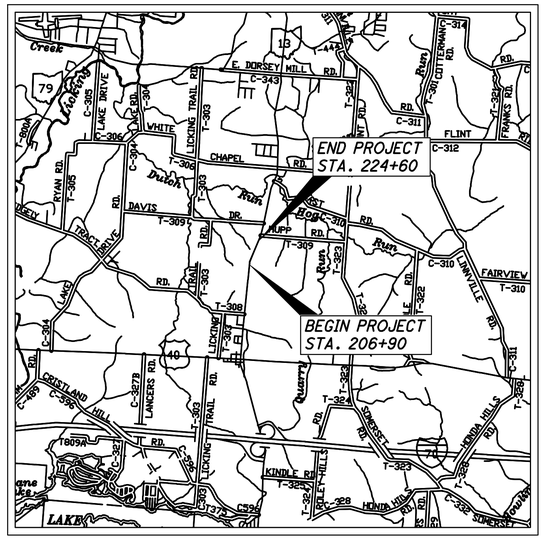
THE COHESIVE SOILS ENCOUNTERED ACROSS THE SITE RANGED FROM MEDIUM STIFF (0.5 < HP ≤ 1.0 TSF) TO VERY STIFF (2.0 < HP ≤ 4.0 TSF). THE UNCONFINED COMPRESSIVE STRENGTH OF THE COHESIVE SOIL SAMPLES TESTED, OBTAINED FROM THE HAND PENETROMETER, RANGED FROM 1.0 TSF TO 3.5 TSF. BASED ON THE SPT BLOW COUNTS OBTAINED, THE GRANULAR SOILS ENCOUNTERED RANGED FROM LOOSE (5 ≤ N60 ≤ 10 BLOWS PER FOOT [BPF]) TO DENSE (31 ≤ N60 ≤ 50 BPF). OVERALL BLOW COUNTS RECORDED FROM THE SPT SAMPLING RANGED FROM 5 TO 31 BLOWS PER FOOT.

NATURAL MOISTURE CONTENTS OF THE SOIL SAMPLES TESTED RANGED FROM 7 TO 26 PERCENT. THE NATURAL MOISTURE CONTENTS OF THE COHESIVE SOIL SAMPLES TESTED FOR PLASTICITY INDEX RANGED FROM 6 PERCENT BELOW TO 16 PERCENT ABOVE THEIR CORRESPONDING PLASTIC LIMITS. IN GENERAL, THE SOILS EXHIBITED NATURAL MOISTURE CONTENTS ESTIMATED TO BE MODERATELY BELOW TO SIGNIFICANTLY ABOVE OPTIMUM MOISTURE LEVELS.

SULFATE TESTING WAS PERFORMED IN ALL OF THE BORINGS IN ACCORDANCE WITH THE ODOT S1122 IN THE UPPER SOILS OF THE EXISTING SUBGRADE ALONG THE PROPOSED ALIGNMENT, AS OUTLINED IN THE CURRENT ODOT SGE AND GEOTECHNICAL BULLETIN GB1: PLAN SUBGRADES (GB1). BASED ON THE RESULTS OF THE TESTING, THE SULFATE CONTENTS OF THE SUBGRADE SOILS RANGE FROM 67 TO 153 PARTS PER MILLION (PPM OR MG/KG OF MATERIAL).

BEDROCK WAS NOT ENCOUNTERED IN ANY OF THE BORINGS PERFORMED FOR THIS EXPLORATION.

GROUNDWATER SEEPAGE WAS ENCOUNTERED DURING DRILLING IN BORINGS B-002-0-16 AND B_003_0-16 AT A DEPTH OF 4.8 AND 9.4 FEET BELOW THE EXISTING GROUND SURFACE, RESPECTIVELY. THE REMAINING BORINGS WERE OBSERVED TO BE DRY, MEANING THAT NO MEASURABLE AMOUNT OF WATER ACCUMULATED IN THE BOREHOLES DURING OR AT THE COMPLETION OF DRILLING PRIOR TO BACKFILLING THE BOREHOLES .



LOCATION MAP

SCALE IN MILES

0 1 2 3 4

N

PARTICLE SIZE DEFINITIONS

12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm
BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT	CLAY
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE		

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JANUARY 2016.

AVAILABLE INFORMATION

ALL AVAILABLE SOIL AND BEDROCK INFORMATION THAT CAN BE CONVENIENTLY SHOWN ON THE GEOTECHNICAL EXPLORATION SHEETS HAS BEEN SO REPORTED. ADDITIONAL EXPLORATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE OR THE OFFICE OF GEOTECHNICAL ENGINEERING AT 1980 WEST BROAD STREET.

RECON. -	BKS	03/10/16
DRILLING -	BKS	03/18/16
DRAWN -	RRM	04/12/16
REVIEWED -	PSL	04/12/16

DESIGN AGENCY
RESOURCE INTERNATIONAL
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OHIO 43231

PID NO.

SOIL PROFILE

LIC SR 13 00.00 PART 3

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SUMMARY OF SOIL TEST DATA
C/L CONST. SR-13

EXPLORATION NO., STATION & OFFSET	FROM	TO	SAMPLE ID	N_{60}	% REC	HP tsf	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	SO4 ppm
B-001-0-16	01.20	02.70	SS-1	21	56	3.50	V. STIFF, BR. SILT AND CLAY, SM. C-F GRAVEL, LI. C-F SAND								12	A-6a (V)*	113
STA. 203+82.52, 12.2' RT.	02.70	04.20	SS-2	31	67	-	39	19	13	25	4	NP	NP	NP	11	A-2-4 (0)*	
LATITUDE = 39.976604063	04.20	05.70	SS-3	10	67	2.25	9	20	7	44	20	31	20	11	20	A-6a (6)	
LONGITUDE = -82.411859152	05.70	07.20	SS-4	17	78	2.00	SAME AS SS-3								17	A-6a (V)	
B-002-0-16	01.00	02.50	SS-1	13	67	3.50	29	11	6	33	21	31	20	11	14	A-6a (4)*	73
STA. 207+58.24, 12.6' RT.	02.50	04.00	SS-2	18	89	2.25	SAME AS SS-1								14	A-6a (V)*	
LATITUDE = 39.977631757	04.00	05.50	SS-3	9	67	-	45	17	6	24	8	31	20	11	14	A-2-6 (0)	
LONGITUDE = -82.411746592	05.50	07.00	SS-4	12	89	-	SAME AS SS-3								15	A-2-6 (V)	
B-003-0-16	01.50	03.00	SS-1	19	78	2.75	11	11	8	52	18	28	20	8	13	A-4b (7)*	67
STA. 210+43.50, 11.2' RT.	03.00	04.50	SS-2	10	78	-	SAME AS SS-3								18	A-4a (V)	
LATITUDE = 39.978383882	04.50	06.00	SS-3	9	100	-	6	19	12	49	14	NP	NP	NP	19	A-4a (6)	
LONGITUDE = -82.411527983	06.00	07.50	SS-4	6	100	1.00	POS. FILL: MD. ST., BR-GY SILTY CLAY, TR. C-F SA., TR. FINE GR.								24	A-6b (V)	
	07.50	09.50	ST-5	-	75	1.00	ST. TO V. ST., GY-BR SILTY CLAY, TR. C-F SAND, TR. FINE GRAVEL								23	A-6b (V)	
	09.50	11.00	SS-6	14	100	2.00	SAME AS ST-5								24	A-6b (V)	
B-004-0-16	01.50	03.00	SS-1	21	89	3.25	11	11	9	51	18	31	20	11	12	A-6a (7)*	120
STA. 214+05.81, 12.3' RT.	03.00	04.50	SS-2	12	100	2.50	SAME AS SS-1								16	A-6a (V)	
LATITUDE = 39.979292753	04.50	06.00	SS-3	13	100	2.25	8	9	9	57	17	30	18	12	21	A-6a (9)	
LONGITUDE = -82.411007121	06.00	07.50	SS-4	17	100	1.75	STIFF, BR-GY SANDY SILT, TRACE FINE GRAVEL, TRACE CLAY								21	A-4a (V)	
B-005-0-16	01.50	03.00	SS-1	14	78	-	SAME AS SS-2								12	A-2-6 (V)*	100
STA. 217+54.76, 12.2' RT.	03.00	04.50	SS-2	9	67	-	50	19	5	18	8	31	20	11	10	A-2-6 (0)	
LATITUDE = 39.980169593	04.50	06.00	SS-3	9	100	2.00	12	15	13	40	20	30	19	11	18	A-6a (5)	
LONGITUDE = -82.410505958	06.00	07.50	SS-4	17	100	3.00	SAME AS SS-3								20	A-6a (V)	
B-006-0-16	01.50	03.00	SS-1	24	44	-	30	27	6	24	13	26	18	8	7	A-4a (0)*	
STA. 220+16.30, 10.5' RT.	03.00	04.50	SS-2	27	56	2.00	SAME AS SS-1								14	A-4a (V)	107
LATITUDE = 39.980828634	04.50	06.00	SS-3	14	89	2.50	5	19	16	38	22	22	17	5	16	A-4a (5)	
LONGITUDE = -82.410135831	06.00	07.50	SS-4	15	56	1.25	STIFF, BROWN SILTY CLAY, TR. C-F SAND, TR. FINE GRAVEL								24	A-6b (V)	
B-007-0-16	01.50	03.00	SS-1	12	89	3.50	10	15	14	36	25	26	18	8	15	A-4a (5)*	153
STA. 223+62.26, 9.4' RT.	03.00	04.50	SS-2	5	33	0.75	SAME AS SS-1								19	A-4a (V)	
LATITUDE = 39.981699135	04.50	06.00	SS-3	14	89	3.50	6	18	11	39	26	21	17	4	16	A-4a (6)	
LONGITUDE = -82.409642329	06.00	07.50	SS-4	15	100	2.00	SAME AS SS-3								17	A-4a (V)	
B-008-0-16	01.50	03.00	SS-1	15	100	2.50	11	28	8	37	16	21	17	4	18	A-4a (4)*	87
STA. 227+20.79, 11.8' RT.	03.00	04.50	SS-2	13	100	2.00	SAME AS SS-1								26	A-4a (V)	
LATITUDE = 39.982597214	04.50	06.00	SS-3	12	100	1.25	25	19	12	23	21	30	18	12	22	A-6a (2)	
LONGITUDE = -82.409119039	06.00	07.50	SS-4	12	100	1.75	SAME AS SS-3								22	A-6a (V)	

DRAWN RRM
CHECKED PSL

SOIL PROFILE
SUMMARY OF SOIL TEST DATA

LIC SR 13 00.00 PART 3

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WOODED

SCATTERED TREES AND AGRICULTURAL

202 203 204 205

202 203 B-001-0-16 204 205

℄ R/W & CONST. SR 13

MATCH LINE STA. 206+00

B-001-0-16
12.2' RT.
ASPHALT = 1.2'
BASE = 0.2'

21	12
31	11
10	20
17	17
N_{60}	WC

1030 1025 1020 1015 1010 1005 1000 995

1032.21 1027.40 1022.78 1018.75 1015.69

202+00 203+00 204+00 205+00 206+00

℄ CONST. SR 13

SOIL PROFILE
STA. 201+50 TO STA. 206+00 SR 13

LIC SR 13 00.00 PART 3

3 / 8

HORIZONTAL SCALE IN FEET
0 10 20 40

DRAWN RRM
CHECKED BRT

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WOODED

BEGIN WORK
BEGIN PROJECT
STA. 206+90.00

PC Sta. 207+65.38

PC Sta. 207+94.07

℄ R/W & CONST. SR 13

MATCH LINE STA. 206+00

N 04°41'46" E

B-002-0-16

PROP. SAWCUT

℄ R/W SR 13

℄ CONST. SR 13

PROP. SAWCUT B-003-0-16

PT Sta. 210+52.64

PT Sta. 210+81.95

MATCH LINE STA. 211+00

SCATTERED TREES AND AGRICULTURAL

B-002-0-16
12.6' RT.
ASPHALT = 1.0'
BASE = 0.2'

13	14
18	14
W 9	14
12	15
N_{60}	WC

B-003-0-16
11.2' RT.
ASPHALT = 1.2'
BASE = 0.5'

19	13
10	18
9	19
6	24
W	23
14	24
N^{60}	WC

1030 1025 1020 1015 1010 1005 1000 995

1015.69 1013.79 1011.86 1009.94 1009.03 1008.14

206+00 207+00 208+00 209+00 210+00 211+00

℄ CONST. SR 13

HORIZONTAL SCALE IN FEET
0 10 20 40

DRAWN RRM
CHECKED BRT

SOIL PROFILE
STA. 206+00 TO STA. 211+00 SR 13
LIC SR 13 00.00 PART 3

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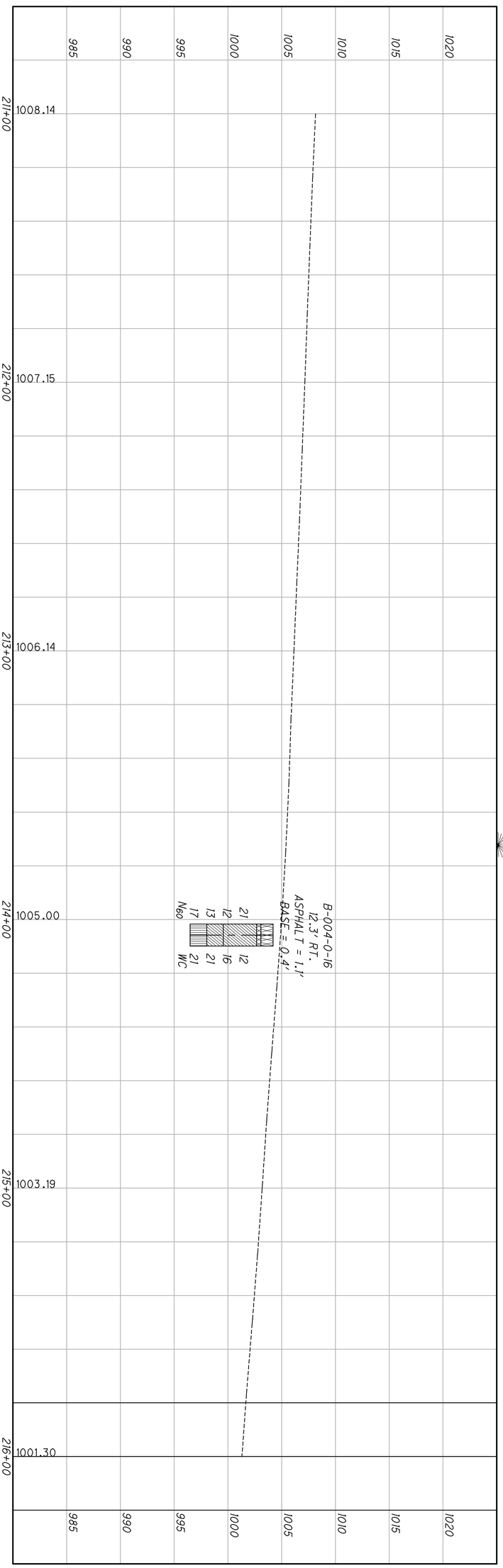
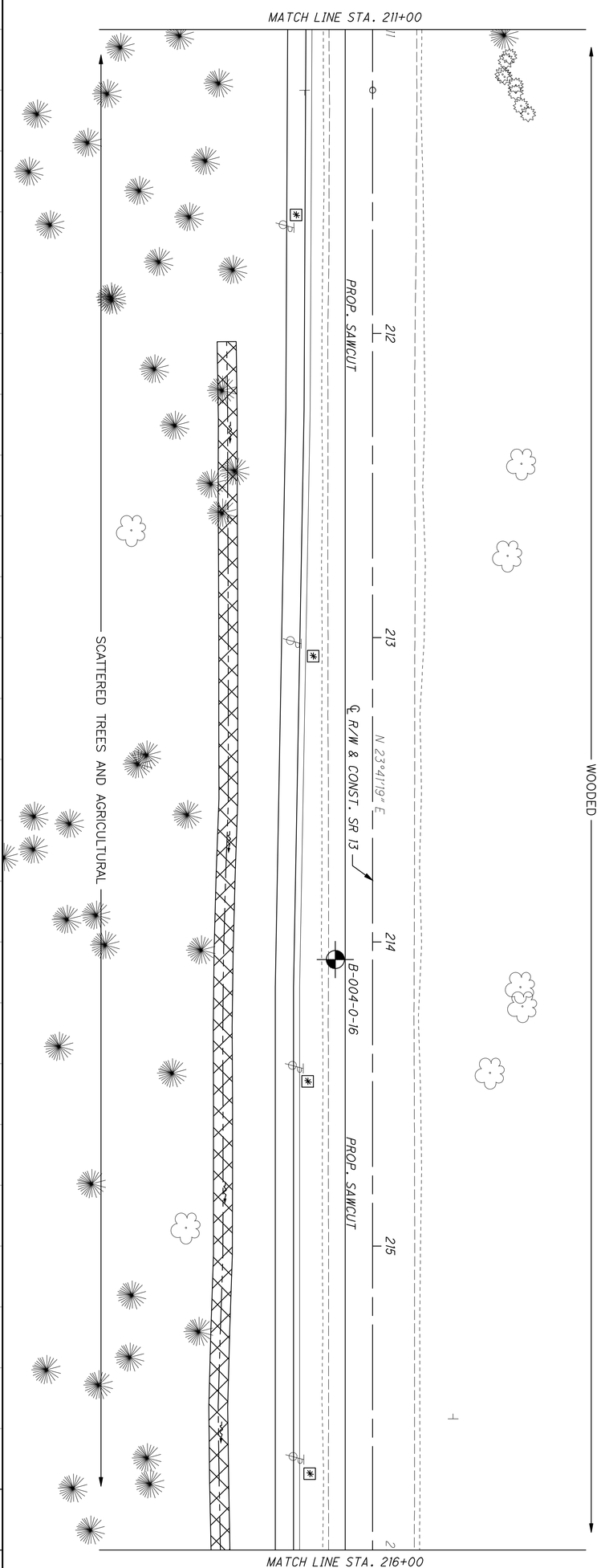
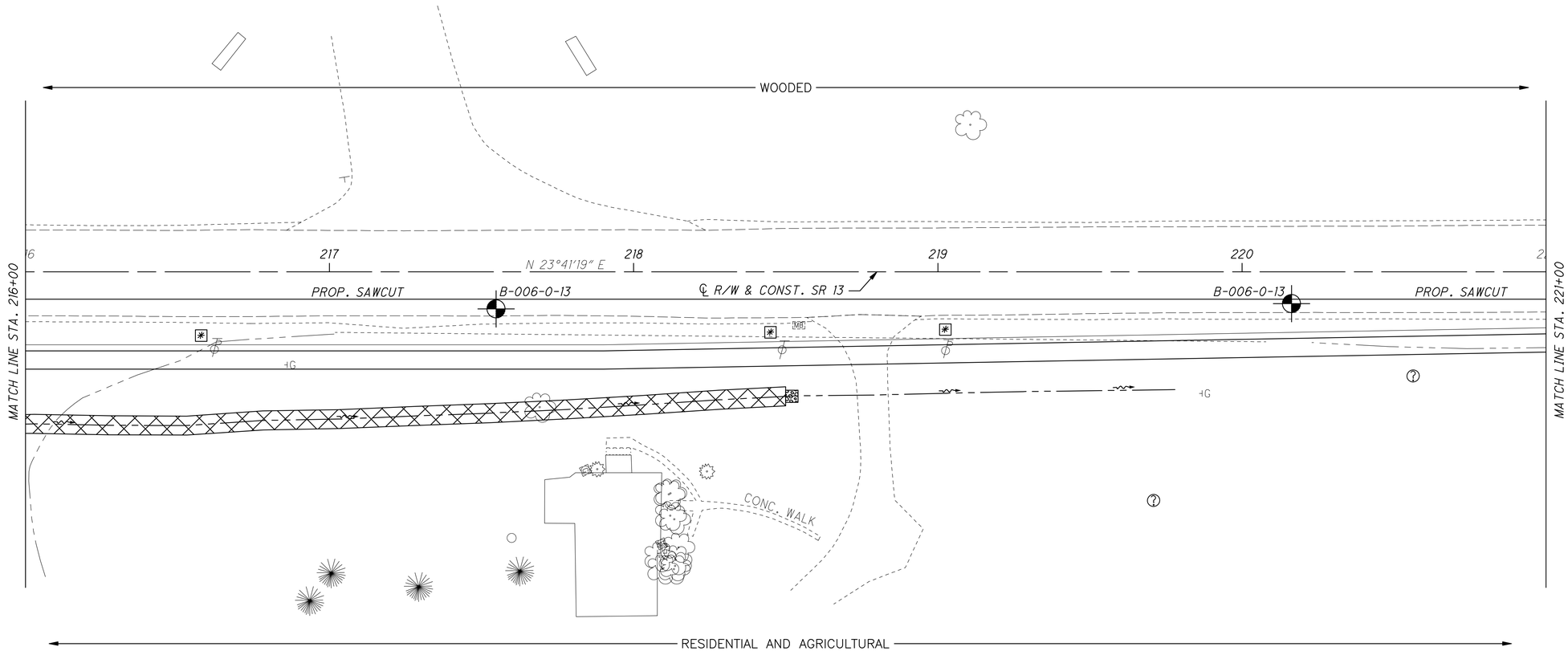
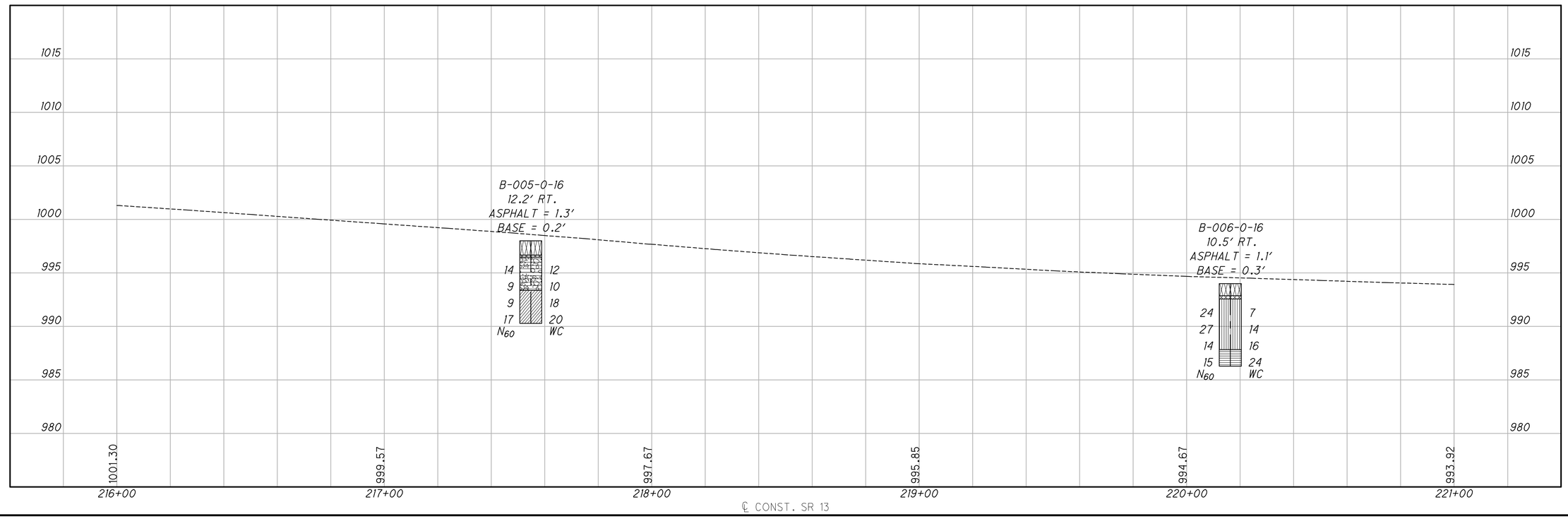




	5/8	LIC SR 13 00.00 PART 3	SOIL PROFILE STA. 211+00 TO STA. 216+00 SR 13	DRAWN RRM CHECKED BRT	0 20 10 40 HORIZONTAL SCALE IN FEET





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HORIZONTAL SCALE IN FEET
0 10 20 40

DRAWN RRM
CHECKED BRT

SOIL PROFILE
STA. 216+00 TO STA. 221+00 SR 13

LIC SR 13 00.00 PART 3

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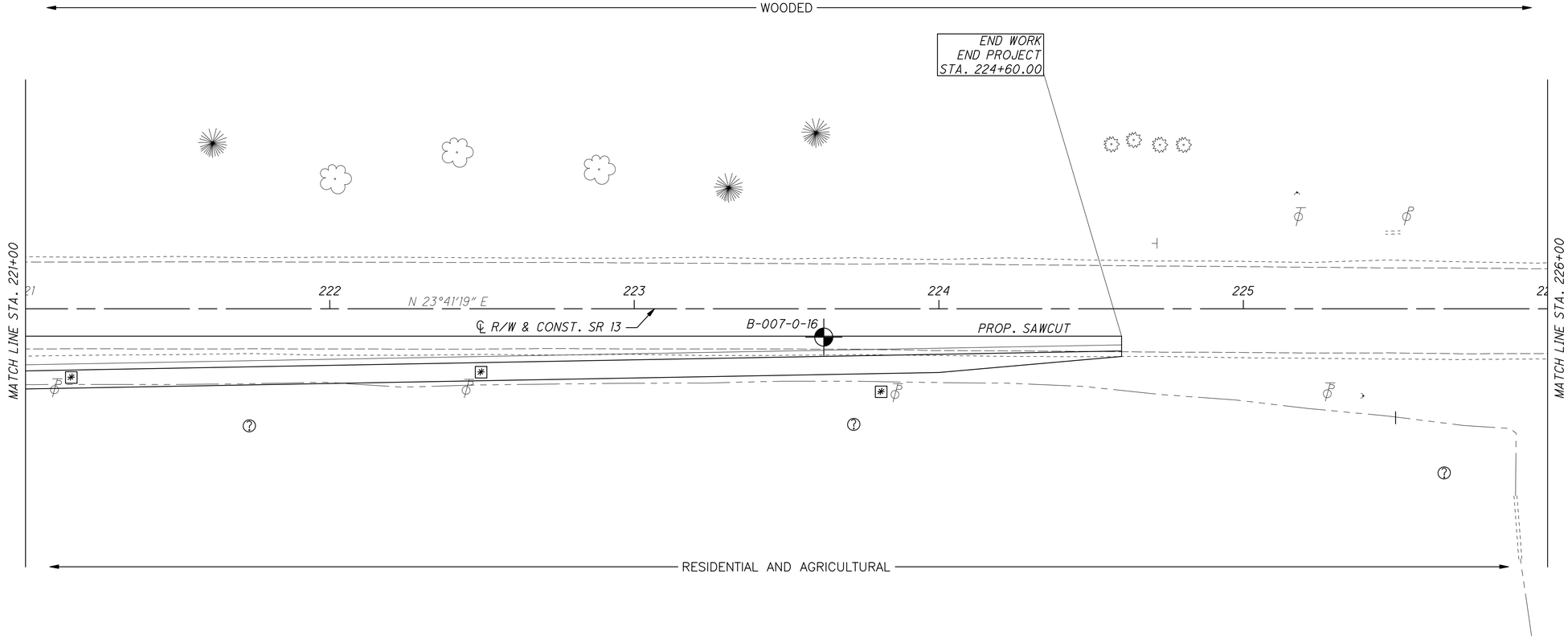

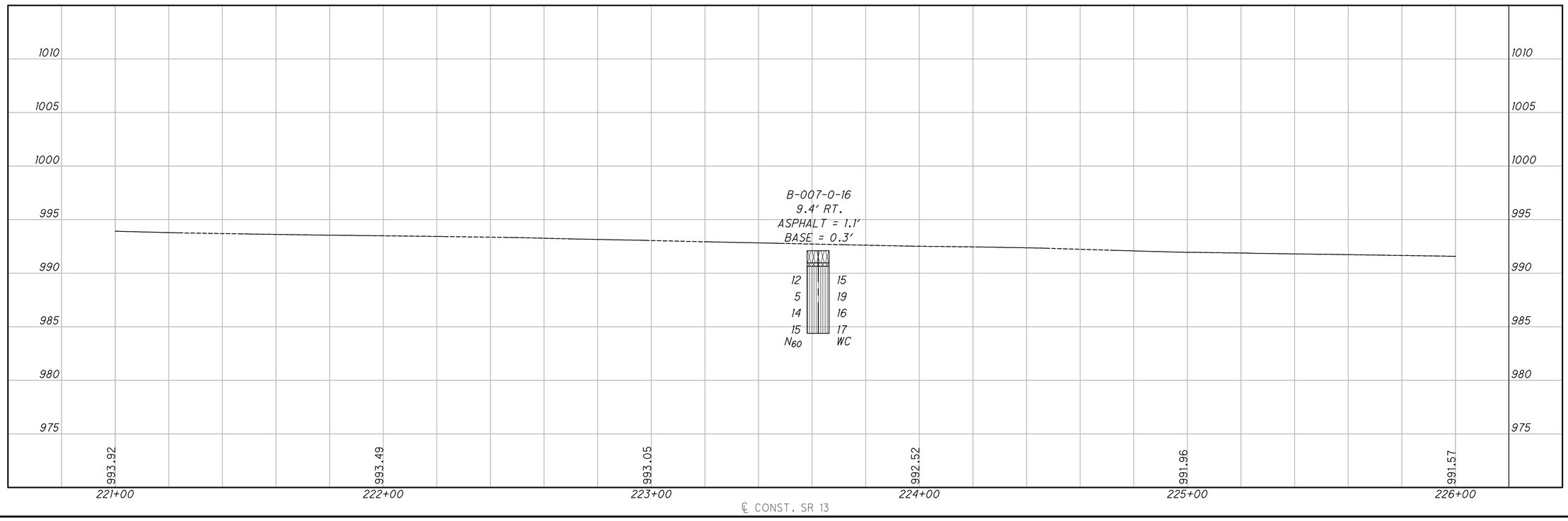

N

0 10 20 40
HORIZONTAL SCALE IN FEET

DRAWN RRM
CHECKED BRT

SOIL PROFILE
STA. 221+00 TO STA. 226+00 SR 13

LIC SR 13 00.00 PART 3

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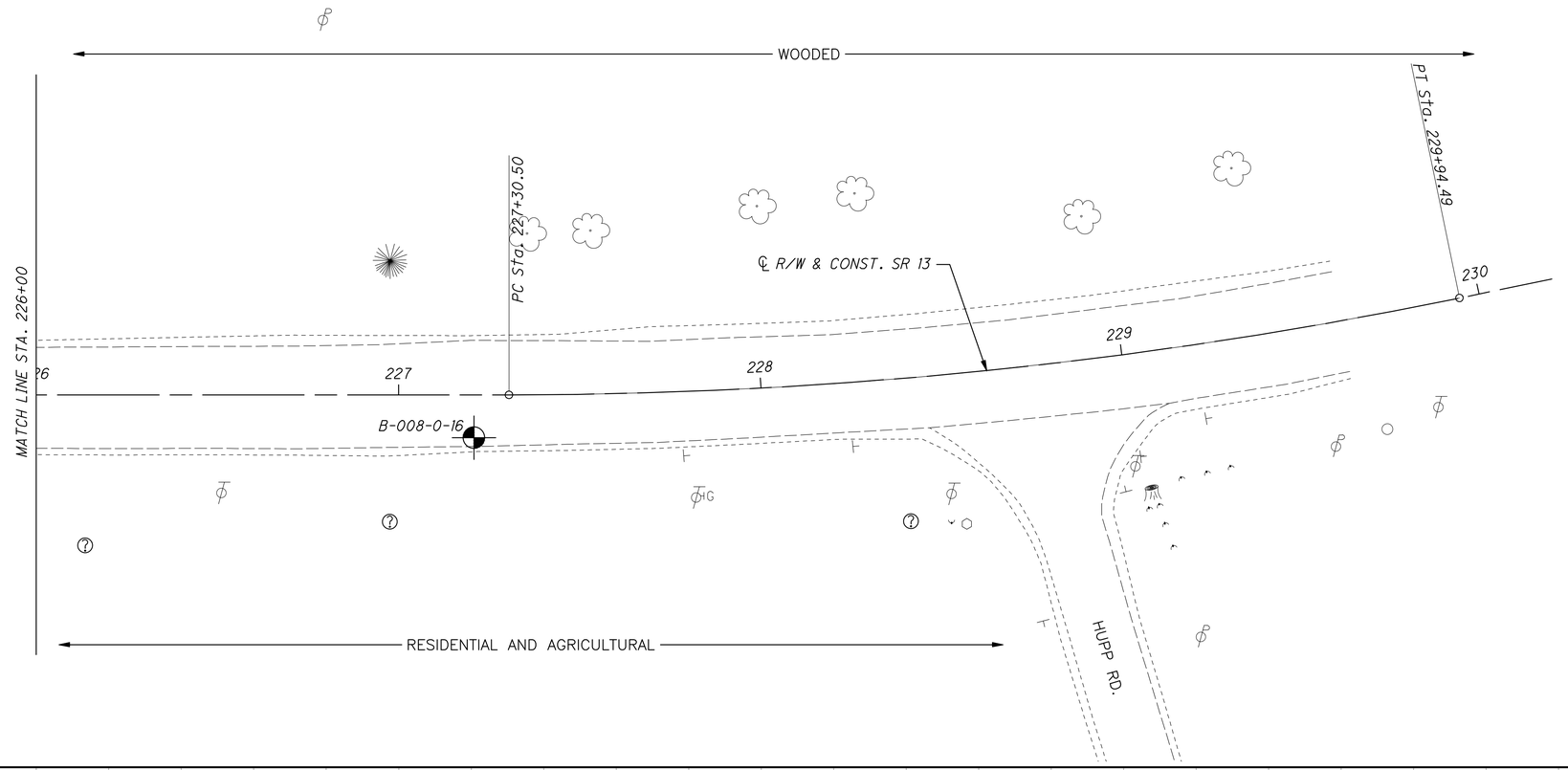

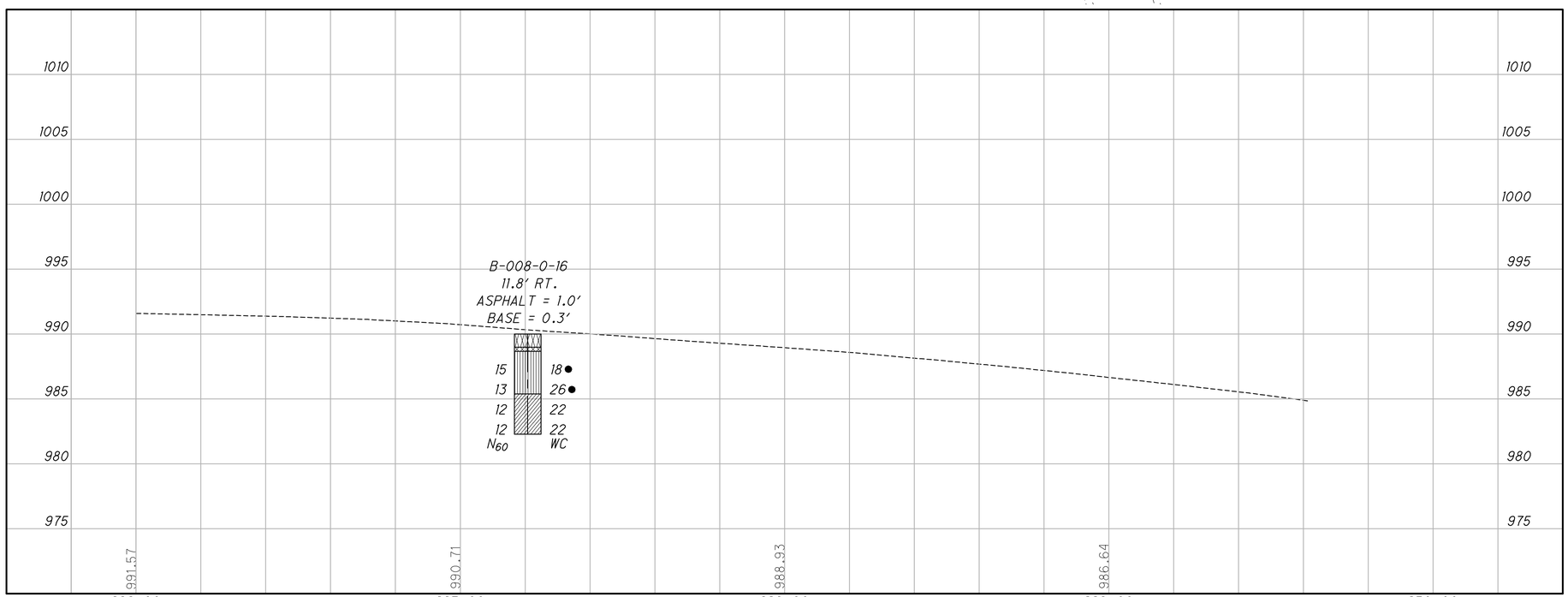

HORIZONTAL SCALE IN FEET
0 10 20 40

DRAWN RRM
CHECKED BRT

SOIL PROFILE
STA. 226+00 TO STA. 229+60 SR 13

LIC SR 13 00.00 PART 3

8 / 8

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