LOCATION MAP

LATITUDE: 41°56'15" N LONGITUDE: 80°35'44" W

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UNDERGROUND UTILITIES Contact Two Working Days Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

PLAN PREPARED BY: CT CONSULTANTS, INC. 8150 STERLING COURT MENTOR, OHIO 44060



ENGINEERS SEAL:

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

ATB-US-20-21.86 PART 1

CITY OF CONNEAUT **ASHTABULA COUNTY**

FOR PART 2, SEE ATB-US-20-21.86 (CENTER ROAD BRIDGE REHABILITATION) FOR PART 3, SEE ATB-20/531-21.86/22.11

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STANDARD CONSTRUCTION DRAWINGS

1-15-16 MT-95.32 4-19-19 MT-110.10 7-19-1.

1-15-16 MT-101.70 1-17-20 TC-65.10 1-17-14 MT-101.90 7-17-20 TC-65.11 7-21-17

PARTS 1, 2. AND 3

PROJECT DESCRIPTION

THIS PROJECT ENTAILS THE REPLACEMENT OF TAXEMENT OF FAVORED FOR 0.73 MILES ALONG U.S. 20 AND INCLUDES THE ADDITION OF CURB AND GUTTER, DRAINAGE IMPROVEMENTS AND A ROAD DIET FOR U.S. 20 THAT REDUCES THE NUMBER OF LANES FROM FOUR TO THREE.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 5.25 ACRES ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES NOTICE OF INTENT EARTH DISTURBED AREA: 5.50 ACRES

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY IN THE WESTBOUND DIRECTION AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 10.

SPECIFICATIONS 800-2019 1-15-21 ASBESTOS 11-1-19 10-19-4-18-1 4-17-20 7-17-1

SPECIAL

SUPPLEMENTAL

DATE 12/7/2020 DISTRICT DEPUTY DIRECTOR

DIRECTOR, DEPARTMENT OF TRANSPORTATION

23.74) SLI -US 23.01

m

NTS) 123

PROVISIONS DATE 12-20-20 CONNEAUT CIT

APPROVED_ DATE_

PORTION TO INTERSTATE HIGHWAY _____ FEDERAL ROUTES ... STATE ROUTES COUNTY & TOWNSHIP ROADS...... OTHER ROADS **DESIGN DESIGNATION** CURRENT ADT (2020) ___ DESIGN YEAR ADT (2040)______ 6900 DIRECTIONAL DISTRIBUTION...... 50% TRUCKS (24 HOUR B&C)______2% DESIGN SPEED._____ 40 MPH LEGAL SPEED ______ 35 MPH DESIGN FUNCTIONAL CLASSIFICATION: PRINCIPAL URBAN ARTERIAL NHS PROJECT _____ YES DESIGN EXCEPTIONS ADA DESIGN WAIVER NONE REQUIRED

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:

 \bigcirc

THE ILLUMINATING COMPANY FIRST FNFRGY 6869 MILLER ROAD. SUITE 101 BRECKSVILLE, OHIO 44141 (440) 456-8706 ATTN: JOHN M. ZASSICK jmzassick@firstenergycorp.com

DOMINION FAST OHIO 320 SPRINGSIDE DRIVE, SUITE 320 AKRON, OHIO 44333 (330) 664-2638 ATTN: MICAH RISACHER Micah.J.Risacher @dominionenergy.com

CITY OF CONNEAUT WATER TREATMENT PLANT 770 LAKE ROAD CONNEAUT, OHIO 44030 (440) 593-7420 ATTN: RICH NEUBAUER wfp@conneautoh.org

CITY OF CONNEAUT WATER DEPARTMENT 513 CLARK STREET CONNEAUT, OHIO 44030 (440) 593-7435 ATTN: BOB WEST waterdist@conneautoh.org

SANITARY:

CITY OF CONNEAUT WASTEWATER DEPARTMENT 1206 BROAD STREET EXT CONNEAUT, OHIO 44030 (440) 593-7434 ATTN: BRIAN BIDWELL wwl@conneautoh.org

STORM:

CITY OF CONNEAUT PUBLIC WORKS 283 16TH STREET CONNEAUT, OHIO 44030 (440) 593-7435 ATTN: JOE DIBEL pwd3@conneautoh.org

COMMUNICATION:

OSP ENGINEERING AND CONSTRUCTION (SPRINT) 11370 ENTERPRISE PARK DRIVE SHARONVILLE, OHIO 45241 (814) 553-2300 ATTN: STEVE HUGHES STEVEN.HUGHES@SPRINT.COM

TELEPHONE:

GREAT WAVE COMMUNICATION 224 STATE STREET CONNEAUT, OHIO 44030 (440) 593-7140 ATTN: ENGINEERING DEPT.

CABLE TV:

3315 NORTH RIDGE EAST, SUITE. 100 ASHTABULA, OHIO 44004 (440) 261-4604 ATTN: KIP LINCOLN

UTILITY COORDINATOR (330) 786-4832 ATTN: MATTHEW STEELE matthew.steele@dot.ohio.gov

UTILITY RELOCATIONS AND ISSUES DURING CONSTRUCTION: JAMES HOCKADAY CITY OF CONNEAUT (440) 593-7401

ERIC TROYER CT CONSULTANTS, INC. (614) 779-0038

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. AND FROM LEVEL A AND B SUBSURFACE UTILITY LOCATION SERVICES.

EXISTING PLANS

EXISTING PLANS ENTITLED CLEVELAND BUFFALO ROAD (1930), CLEVELAND BUFFALO ROAD (1947), AND ATB-20-21.96 (2001) MAY BE INSPECTED IN THE ODOT DISTRICT 4 OFFICE IN AKRON, OHIO.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS, SEE SHEET 2 AND 3 THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: VRS BTK MONUMENT TYPE:

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88 GEOID: GEOID 12 A

HORIZONTAL POSITIONING

REFERENCE FRAME: FLL IPSOID: MAP PROJECTION: COORDINATE SYSTEM: COMBINED SCALE FACTOR: ORIGIN OF COORDINATE SYSTEM:

NAD83(2011) EPOCH: 2010.0000 GRS80 LAMBERT CONFORMAL CONIC OHIO NORTH ZONE (3401) 1.0000000

(X,Y) EASTING (X):0, NORTHING (Y):0

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

UNITS ARE IN U.S. SURVEY FEET.

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

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

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN

EXISTING PAVEMENT SHALL BE REMOVED AS PER ITEM 202. THE EXISTING TYPICAL SECTION IS AN APPROXIMATION OF THE EXISTING PAVEMENT BASED ON PAVEMENT BORINGS AND EXISTING PLANS. EXISTING MATERIAL CONSISTS OF CONCRETE BASE, REINFORCED CONCRETE BASE, BRICK PAVERS AND ASPHALT. THE THICKNESSES OF THESE MATERIALS CAN VARY. PAYMENT FOR THE ABOVE SHALL BE MADE UNDER THE UNIT PRICE BID FOR ITEM 202 PAVEMENT REMOVED, AS PER PLAN.

ITEM 202 - MAILBOX REMOVED, AS PER PLAN

THE EXISTING MAILBOX SHALL BE CAREFULLY REMOVED PRIOR TO CONSTRUCTION AND PLACED AT A LOCATION THAT IS ACCESSABLE FOR ALL DELIVERIES AND BY THE RESIDENT DURING THE CONSTRUCTION PROCESS.
AFTER CONSTRUCTION, THE EXISTING MAILBOX SHALL
BE RELOCATED TO ITS FINAL LOCATION. ANY DAMAGED MAILBOXES SHALL BE REPLACED IN KIND BY THE CONTRATOR AT THE CONTRACTOR'S EXPENSE, PAYMENT SHALL BE MADE UNDER THE UNIT PRICE FOR ITEM 202 MAILBOX REMOVED, AS PER PLAN.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING 7 HOUR

UNSTABLE OR UNSUITABLE SOILS FOR PAVEMENT STABILIZATION

THE FOLLOWING ITEMS AND QUANTITIES SHALL BE USED AS DIRECTED BY THE ENGINEER TO ADDRESS UNSTABLE OR UNSUITABLE SOILS ENCOUNTERED:

650 CY

650 CY

1900 SY

ITEM 204 EXCAVATION OF SUBGRADE ITEM 204 GRANULAR MATERIAL, TYPE B ITEM 204 GEOTEXTILE FABRIC,

ITEM 304 AGGREGATE BASE, AS PER PLAN

GRANULATED SLAG (GS) SHALL NOT BE PERMITTED FOR THIS ITEM. ALL OTHER REQUIREMENTS OF SECTIONS 304 AND 703.17 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL STILL BE APPLICABLE.

ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR

THE USE OF GRAVEL FOR COARSE VIRGIN AGGREGATE IS PROHIBITED.

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, TH CONTRACTOR SHALL SEAL THE FOLLOWING LOCATIONS:

ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS. - BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE **APPROACHES**

- BUTT JOINT BETWEEN PAVED SHOULDER AND DRIVEWAY ASPHALT AND TAPERED EDGE WHEN FEATHERING TO AN EXISTING ASPHALT DRIVEWAY PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER

ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

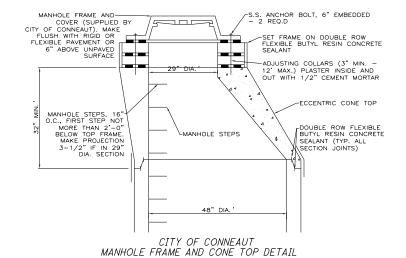
ITEM 611 MANHOLE, AS PER PLAN

STORM MANHOLES SHALL BE AS PER ITEM 611 EXCEPT FOR THE

1. STORM COVERS AND FRAMES SHALL BE SUPPLIED BY THE CITY OF CONNEUAT. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE CITY PRIOR TO CONSTRUCTION TO PROCURE THESE ITEMS.

2. THE ECCENTRIC CONE OR THE FLAT TOP COVER OF THE MANHOLE SHALL BE MODIFIED TO FIT THE CITY OF CONNEAUT FRAME (INSIDE DIAMETER = 29"). THE FRAME SHALL BE ATTACHED TO THE MANHOLE WITH STAINLESS STEEL ANCHOR BOLTS. SEE DETAIL

THE WORK AND MATERIALS DESCRIBED ABOVE AND IN THE DETAIL BELOW (EXCEPT THE FRAME AND THE COVER) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 611 MANHOLE, AS PER PLAN.



ITEM 625 LIGHT POLE FOUNDATION REMOVED, AS PER PLAN

THE EXISTING LIGHT POLE FOUNDATION SHALL BE REMOVED AS PER 625.21 ALONG WITH THE REMAINING LIGHT POLE BASE. THE ELECTRIC POWER LINES TO THE LIGHT POLE BASE SHALL BE CUT AND CAPPED AT THE RIGHT OF WAY LINE.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PRIVATE USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT, AT MAXIMUM OPERATING HEIGHT, SHALL EXCEED A HEIGHT OF 25 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, COORDINATION WITH THE AIRPORT OWNER AND THE ODOT OFFICE OF AVIATION WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. FOR OFERATING SUCH EQUIPMENT ON THE PROJECT. FOR PRIVATE USE AIRPORTS OR HELIPORTS, COORDINATE WITH THE AIRPORT OWNER AND THE ODOT OFFICE OF AVIATION. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL COORDINATION IS MET AND DOCUMENTATION HAS BEEN FURNISHED TO THE PROJECT ENGINEER. IF COORDINATION IS NOT OBTAINED, THEN THE PROJECT ENGINEER WILL HAVE THE AUTHORITY TO PROVIDE RESTRICTIONS AS REQUIRED.

HFI IPORT UH CONNEAUT MEDICAL CENTER 158 WEST MAIN STREET CONNEAUT, OHIO 44038 (440) 593-1131

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)

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.

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BEGIN CONSTRUCTION DATE

NO CONSTRUCTION WORK CAN BEGIN UNTIL MAY 1, 2021 WITHOUT APPROVAL BY THE ODOT DISTRICT 4 CONSTRUCTION ENGINEER.

SEEDING AND MULCHING

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

659, SOIL ANALYSIS TEST	2 EACH
659, TOPSOIL	1104 CU. YD.
659, SEEDING AND MULCHING	9939 SQ. YD.
659, REPAIR SEEDING AND MULCHING	497 SQ. YD.
659, INTER-SEEDING	497 SQ. YD.
659, COMMERCIAL FERTILIZER	1.4 TON

2.1 ACRES 659, LIME 54 M. GAL. 659. WATER 659, MOWING 90 M. SQ.FT.

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

POST CONSTRUCTION STORM WATER TREATMENT

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

MANUFACTURED WATER QUALITY STRUCTURE

THIS PLAN UTILIZES MANUFACTURED WATER QUALITY STRUCTURES FOR WATER QUALITY TREATMENT. AREAS HAVE BEEN SHOWN IN THE PLANS FOR PLACEMENT OF AN OFF-LINE SYSTEM. PAYMENT FOR THESE DEVICES SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR ITEM 895, MANUFACTURED WATER QUALITY STRUCTURE, TYPE 2.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES

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

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

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

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY CITY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

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. LONGITUDINAL JOINTS ARE ONLY ALLOWED AT THE PHASE LINE. TRANSVERSE JOINTS ARE ONLY ALLOWED AT INTERSECTIONS AND AT THE BEGIN AND END PAVEMENT WORK LIMITS.

ITEM SPECIAL - PIPE CLEANOUT, 24" AND UNDER

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

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

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

STA. 120+00, LT	10" STM	50 FT
STA. 120+00, RT	10" STM	50 FT
STA. 129+80, RT	12" STM	100 FT
STA. 140+78, LT	10" STM	30 FT
STA. 144+96, RT	15" STM	100 FT
TOTAL:	330 FT	

SPECIAL, PIPE CLEANOUT, 24" AND UNDER 330 FT.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

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

605, AGGREGATE DRAINS 50 FT. 611, 6" CONDUIT, TYPE F, FOR UNDERDRAIN OUTLETS 50 FT. PRECAST REÍNFORCED CONCRETE OUTLET 5 EACH 605 6" UNCLASSIFIED PIPE UNDERDRAINS 100 FT.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS. PAYMENT FOR THE TEMPORARY DRAINAGE ITEMS ARE ITEMIZED AND CARRIED TO THE GENERAL SUMMARY.

ITEM 611 MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN (SANITARY)

IN ADDITION TO THE REQUIREMENTS OF CMS 611.10.D FOR MANHOLES. THE CONTRACTOR SHALL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE OF THE CASTING) AND ADJUST THE CASTING TO GRADE (ACCORDING TO THE TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN PLACED.

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES THE CONCRETE SHALL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

THE CONTRACTOR SHALL REPLACE THE SANITARY COVERS, FRAMES AND MANHOLE CONES AS PER THE MANHOLE FRAME AND CONE TOP DETAIL SHOWN ON SHEET 7.

THE SANITARY COVERS AND FRAMES SHALL BE SUPPLIED BY THE CITY OF CONNEUAT. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE CITY PRIOR TO CONSTRUCTION TO PROCURE THESE ITEMS.

ALL ITEMS ADJUSTED AND RECONSTRUCTED TO GRADE SHALL BE AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION OF THE NEW CONE, FRAME AND COVER, AND ALL LABOR REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 638.18 FOR VALVE BOXES, THE CONTRACTOR SHALL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE OF THE CASTING) AND ADJUST THE CASTING TO GRADE (ACCORDING TO THE TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN PLACED.

CMS 499 CLASS OCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE SHALL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

ALL ITEMS ADJUSTED TO GRADE SHALL BE AS DIRECTED BY THE

PAYMENT SHALL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION OF THE NEW CASTING, AND ALL LABOR REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

NO LINE VALVE BETWEEN BENDS VARIES - ADJUST FOR FIELD CONDITIONS USE OF BENDS & THRUST BLOCKS OR JOINT DEFLECTION TO BE DETERMINED IN FIELD FOR EACH CROSSING. EXISTING PIPE COMPACTED SAND — PROPOSED PRESSURE PIPING IMPROVEMENTS CONCRETE CRADLE CONDITIONS "X" DIMENSION REQUIREMENTS

a) IF SANITARY OR STORM SEWER PIPE JOINT IS WITHIN PROPOSED IMPROVEMENT TRENCH LIMITS

- b) IF CROSSING A WATER LINE AT ANY POINT
- IF CROSSING SPACE IS LESS THAN MIN.
 SPACE OF CRADLE BELOW PIPE BOTTOM
 PLUS "X" DIMENSION THEN OMIT SAND
 FILL AND USE CONCRETE C)
- a) 6" FOR WATER LINE CROSSING (ALSO FOR GAS & O.B.T. LINES w/NO CRADLE NEEDED)
- 18" FOR SANITARY OR STORM SEWER PIPE
- c) IF CROSSING SPACE IS MORE THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS
 AFOREMENTIONED "X" DIMENSION THEN EXTEND
 "X" DIMENSION TO MAKE UP DIFFERENCE.

PIPE LOWERING DETAIL

ITEM 638 WATERWORK MISC. WATER SERVICE CONNECTION PIPE LOWERING

IN ADDITION TO THE REQUIREMENTS OF CMS 638 FOR WATER SERVICES, THE CONTRACTOR SHALL FOLLOW THE PIPE LOWERING DETAIL ON THIS

WATERLINE CONTINGENCY QUANTITIES

CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE PLANS TO USED AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE WORK:

ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN ITEM 638 - SERVICE BOX ADJUSTED TO GRADE 10 FACH 60 EACH ITEM 638 - WATER SERVICE CONNECTION PIPE LOWERING 400 FT

SPECIAL - GAS VALVE BOX ADJUSTED TO GRADE

IN ADDITION TO THE REQUIREMENTS OF CMS 638.18 FOR VALVE BOXES, THE CONTRACTOR SHALL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE OF THE CASTING) AND ADJUST THE CASTING TO GRADE (ACCORDING TO THE TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN PLACED.

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE SHALL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

ALL ITEMS ADJUSTED TO GRADE SHALL BE AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION OF THE NEW CASTING, AND ALL LABOR REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE WORK:

ITEM SPECIAL - GAS VALVE BOX ADJUSTED TO GRADE

EXISTING ASBESTOS CEMENT WATERLINE

WHEN WORKING AROUND OR REMOVING THE EXISTING ASBESTOS CEMENT WATERLINE, ALL OSHAA REQUIREMENTS SHALL BE ADHERED TO BY THE CONTRACTOR. ANY REMOVALS SHALL BE AS PER CMS 202.04. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS WORK:

ITEM 202 ASBESTOS PIPE REMOVED 489 FT

LOCATIONS OF THE ESTIMATED REMOVALS ARE AS FOLLOWS:

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STA. 119+90 TO STA. 120+05, RT. = 15 FT
STA. 123+45 TO STA. 123+55, RT. = 10 FT
STA. 124+26 TO STA. 124+56, RT. = 30 FT
STA. 126+58 TO STA. 126+68. RT. = 10 FT
STA. 127+62 TO STA. 127+72, RT. = 10 FT
STA. 127+62 TO STA. 127+72, RT. = 10 FT
STA. 129+75 TO STA. 130+23, RT. = 48 FT
STA. 131+25 TO STA. 131+56, RT. = 31 FT
STA. 131+97 TO STA. 132+18, RT. = 21 FT
      133+45 TO STA. 133+65, RT. = 20 FT
STA. 134+31 TO STA. 134+51, RT. = 20 FT
STA. 134+98 TO STA. 135+18, RT. = 20 FT
STA. 136+02 TO STA. 136+22, RT. = 20 FT
STA. 140+84 TO STA. 140+94. RT. = 10 FT
STA. 143+85 TO STA. 143+95, RT. = 10 FT
STA. 144+91 TO STA. 145+01, RT. = 10 FT
STA. 147+35 TO STA. 147+45, RT. = 10 FT
STA. 150+85 TO STA. 150+95, RT. = 10 FT
STA. 152+43 TO STA. 152+69, RT. = 26 FT
STA. 154+35 TO STA. 154+45, RT. = 10 FT
STA. 154+64 TO STA. 154+84, RT. = 20 FT
STA. 155+24 TO STA. 155+44, RT. = 20 FT
STA. 155+95 TO STA. 156+15, RT. = 20 FT
STA. 157+59 TO STA. 157+81, RT. = 22 FT
STA. 158+33 TO STA. 158+57, RT. = 24 FT
STA. 159+02 TO STA. 159+44, RT. = 42 FT
TOTAL =
                                             489 FT
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SIGN LIGHTING, MISC.: REFURBISH SIGN LIGHTING ASSEMBLY

THIS WORK SHALL CONSIST OF REMOVING AND REPLACING ANY DAMAGED, RUSTY OR NON-FUNCTIONING PARTS OF THE EXISTING SIGN LIGHTING ASSEMBLY. ALL ITEMS SHALL BE AS DIRECTED BY THE ENGINEER.

PAYMENT SHALL INCLUDE REMOVAL OF THE EXISTING PART, INSTALLATION OF THE NEW PART, AND ALL LABOR AND DESIGN REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.



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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR PHASE 1 OF CONSTRUCTION WHERE ONE LANE EAST BOUND WILL BE PROVIDED, BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614. WESTBOUND TRAFFIC SHALL BE DETOURED DURING PHASE I AS PER THE DETOUR ROUTE SHOWN ON SHEET 11 FOR A LENGTH OF TIME NOT EXCEEDING

THE FOLLOWING COMPLETION DATES ARE REQUIRED FOR THIS

PHASE 1 AND PHASE 2: OCTOBER 31, 2021

PHASE 3: JULY 31, 2022

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

410, 611, 611.	TRAFFIC COMPACTED SURFACE, TYPE A OR B 12" CONDUIT, TYPE B 18" CONDUIT. TYPE B	300 CU. YD. 50 FT 50 FT
61Í,	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER	PLAN 2 EACH
611, 614.	CATCH BASIN, NO. 2-3 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	2 EACH 50 CU. YD.
615,	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	250 SQ. YD.
615,	ROADS FOR MAINTAINING TRAFFIC,	LUMP SUM
616,	WATER	50 M. GAL.

. WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CRMS 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 İTEMIZED IN THE PLAN.

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 50 M. GAL.

WORK ZONE MARKINGS AND SIGNS

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

PHASE I	
WORK ZONE MARKING SIGN	10 EACH
WORK ZONE EDGE LINE, CLASS I, 6",642 PAINT	1.5 MILE
WORK ZONE CENTER LINE, CLASS I, 642 PAINT	O.1 MILE
WORK ZONE STOP LINE, CLASS I, 642 PAINT	30 FT
WORK ZONE DOTTED LINE, CLASS I, 642 PAINT	210 FT

WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT WORK ZONE CENTER LINE, CLASS I, 642 PAINT	O EACH 1.6 MILE 0.1 MILE
WORK ZONE STOP LINE, CLASS I, 642 PAINT	30 FT 310 FT

PHASE III	
WORK ZONE MARKING SIGN	10 EACH
WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	1.5 MILE
WORK ZONE CENTER LINE, CLASS I, 642 PAINT	1.8 MILE
WORK ZONE STOP LINE, CLASS I, 642 PAINT	60 FT
WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	431 FT
WORK ZONE ARROW, CLASS I, 642 PAINT	21 EACH

WORK ZONE ARROW, CEASS 1, O 12 TARV	LILAUII
TOTAL WORK ZONE MARKING SIGN WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT WORK ZONE CENTER LINE, CLASS I, 642 PAINT WORK ZONE STOP LINE, CLASS I, 642 PAINT WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT WORK ZONE ARROW, CLASS I, 642 PAINT	30 EACH 4.6 MILE 2.0 MILE 120 FT 431 FT 520 FT 21 EACH

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

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

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET 10 OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AND TRAFFIC. AWAY FROM ALL TRAFFIC.

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

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 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 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.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER 30 SIGN MONTH ASSUMING 2 PCMS SIGN(S) FOR 15 MONTH(S)

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL AND ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626.

COBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BURGEST THAN PROPERTY. BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET WITH A 25 FOOT OFFSET FROM THE BARRIER

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

ITEM 614, BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL) 21 EACH

ITEM 614, OBJECT MARKER, 2-WAY 21 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

ITEM 614 - BUSINESS ENTRANCE (M4-H15) SIGN,

THE BUSINESS ENTRANCE (M4-H15) SIGN SHOULD BE PROVIDED AT EACH TEMPORARILY RELOCATED COMMERCIAL DRIVEWAY FOR WHICH THE RELOCATION IS NOT OBVIOUS TO THE MOTORIST. THE PROJECT ENGINEER SHALL DETERMINE WHETHER OR NOT THE DRIVEWAY RELOCATION IS, OR IS NOT, OBVIOUS AND WHETHER OR NOT A SIGN IS, OR IS NOT, OBVIOUS AND WHETHER OR NOT A SIGN SHOULD BE PROVIDED. ONLY ONE SIGN PER BUSINESS SHALL BE PERMITTED. THE SIGN SHALL BE 36 INCH X 48 INCH IN SIZE WITH TYPE G OR TYPE H ORANGE RETROREFLECTIVE SHEETING. THE SIGN LEGEND SHALL BE PLACED ON BOTH SIDES OF THE SIGN (BACK TO BACK). THE SIGN SHALL HAVE THE STANDARD M4-H15 LEGEND WITH THE WORD "BUSINESS" ON THE TOP LINE, EXCEPT UNDER UNUSUAL CIRCUMSTANCES WHERE IT MAY NOT BE INTUITIVE THAT A DRIVEWAY SERVES A SPECIFIC BUSINESS. IN SUCH UNUSUAL CASES, THE ACTUAL BUSINESS NAME MAY BE SUBSTITUTED FOR THE WORD

THE SIGN SHALL BE MOUNTED ON TWO #3 POSTS OR ON TEMPORARY POSTS IN ACCORDANCE WITH SCD MT-105.10 AND IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE SIGN SHALL BE CLEARLY VISIBLE AND SHALL CLEARLY IDENTIFY THE LOCATION OF THE DRIVEWAY. THE SIGN SHOULD BE POSITIONED AT 90 DEGREES TO THE DIRECTION(S) OF TRAFFIC. THE SIGN MAY NEED TO BE MOVED FOR EACH PHASE OF THE MAINTENANCE OF TRAFFIC

PAYMENT FOR ALL COSTS ASSOCIATED WITH MANUFACTURING, MOUNTING, RELOCATING, AND REMOVING THE SIGN, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN THE CONTRACT PRICE PER EACH FOR ITEM 614-BUSINESS ENTRANCE SIGN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM:

ITEM 614, BUSINESS ENTRANCE SIGN, AS PER PLAN 6 EACH

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC 75 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED. COORDINATE THE GEOTECHNICAL EVALUTATION WITH ODOT DISTRICT 4, GEOTECHNICAL SECTION IF NECESSARY.

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

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

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

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

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

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

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

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

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

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

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

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

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 100 HOURS

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

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

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. LAT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN I WEEK.]

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

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

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

DROP-OFFS

DURING NON-WORKING HOURS, WHEN TRAFFIC IS MAINTAINED LESS THAN 3 FEET FROM THE WORK AREA, A 3-INCH MAXIMUM DROP-OFF IS PERMITTED. WHEN TRAFFIC IS MAINTAINED 3 FEET OR MORE FROM THE WORK AREA, A 15-INCH MAXIMUM DROP-OFF IS PERMITTED. SEE DETAIL ON SHEET 13 FOR ADDITIONAL INFORMATION.

IN ORDER TO MAINTAIN A 3-FOOT MINIMUM OFFSET FROM THE TRAVELED LANE TO THE WORK AREA IN DROP-OFF LOCATIONS, A WEDGE OF FIRM AND UNYIELDING BACKFILL (ITEM 410) SHALL BE PLACED AS DETAILED ON SHEET 13. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED FOR THE TREATMENT OF DROP-OFFS:

ITEM 410 TRAFFIC COMPACTED SURFACE, TYPE A OR B 110 CY

NOTIFICATION OF TRAFFIC RESTRICTIONS

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

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

	NOTIFICATI	ION TIME FRAME TABLE
ITEM	DURATION OF CLOSURE	NOTIFICATION DUE TO PERMITS & PIO
	>= 2 weeks	21 BUSINESS DAYS PRIOR TO CLOSURE
RAMP & ROAD CLOSURES	> 12 hours & < 2 weeks	14 BUSINESS DAYS PRIOR TO CLOSURE
	< 12 hours	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES	>= 2 weeks	14 BUSINESS DAYS PRIOR TO CLOSURE
& RESTRICTIONS	< 2 weeks	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

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

CONSTRUCTION SEQUENCE

PHASE 1:

- 1. INSTALL WESTBOUND U.S. 20 DETOUR ROUTE. SEE SHEET 11.
- 2. CLOSE DOWN TWO WESTBOUND LANES OF WESTBOUND U.S. 20 USING SCD MT-101.60 AND INSIDE EASTBOUND LANE PAVEMENT USING MT-95.32. OUTSIDE EASTBOUND PAVEMENT TO REMAIN OPEN TO TRAFFIC THRU THE CLOSURE AND DETOUR. SEE SHEET 13.
- 3. SHIFT TRAFFIC TO EASTBOUND CURB LANE AND MAINTAIN ONE-WAY EASTBOUND TRAFFIC ON EXISTING/TEMPORARY PAVEMENT THRU THE PROJECT.
- 4. CONTRUCT PHASE I IMPROVEMENTS THRU THE INTERMEDIATE COURSE.

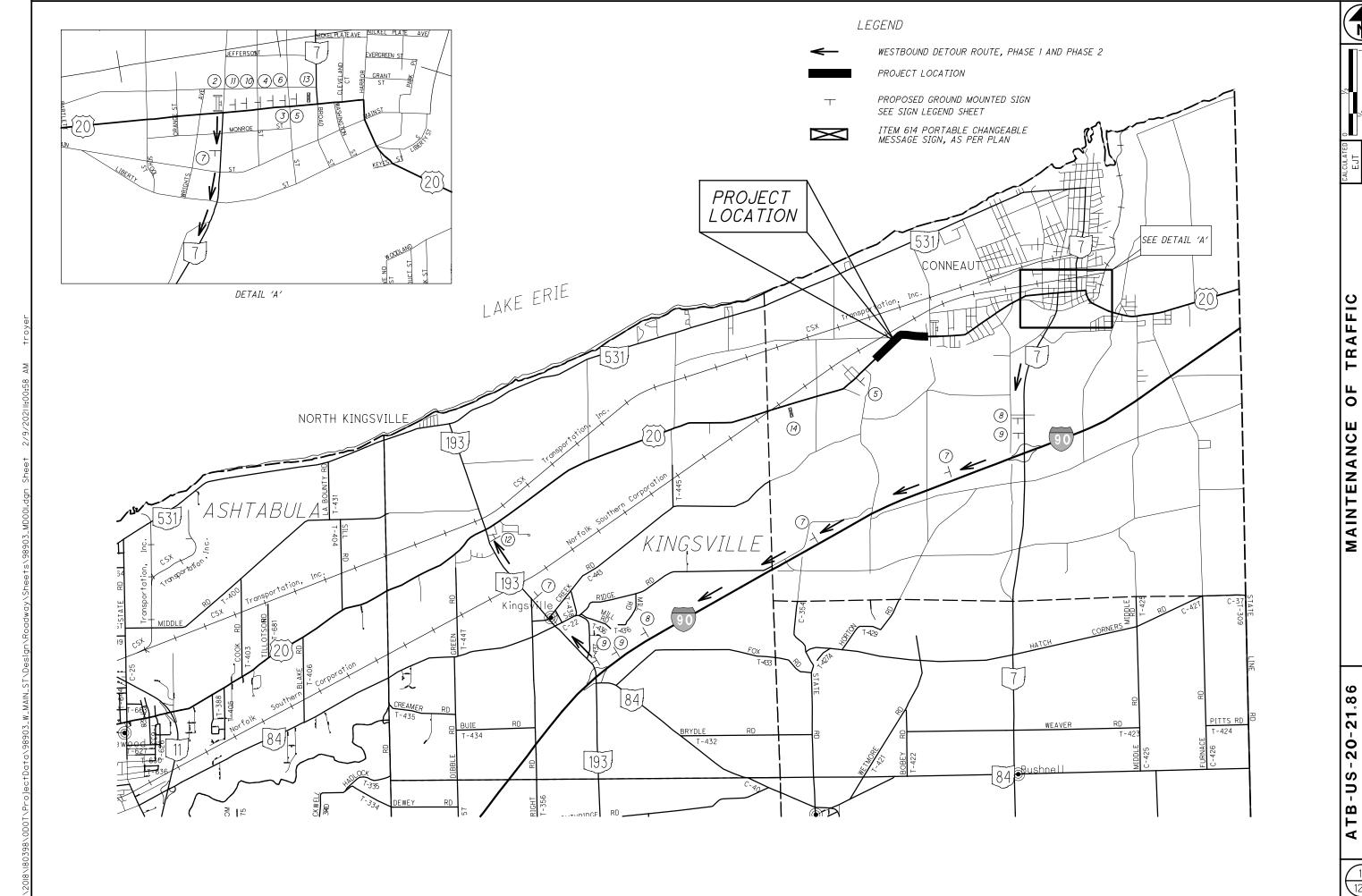
PHASE 2:

- 1. SHIFT TRAFFIC OVER TO COMPLETED PHASE I IMPROVEMENTS, MAINTAINING ONE-WAY, ONE LANE TRAFFIC THROUGHOUT THE PROJECT. MAINTAIN DETOUR ROUTE. SEE SHEET 13.
- 2. CONSTRUCT TYPE 2 MANUFACTURED WATER QUALITY SYSTEM AND PHASE 2 IMPROVEMENTS THROUGH THE INTERMEDIATE COURSE.
- 3. ADD TEMPORARY PAVEMENT MARKINGS IDENTICAL TO PAVEMENT MARKING PLAN. ALSO ADD TEMPORARY EDGE LINES ADJACENT TO NEW CURB AND GUTTER.
- 4. REMOVE MAINTENANCE OF TRAFFIC ITEMS AND OPEN ROADWAY TO FULL TWO-WAY THREE LANE TRAFFIC.

PHASE 3

- 1. CONSTRUCT THE FINAL ASPHALT SURFACE COURSE USING MT-97.11 AND PAVEMENT MARKINGS USING MT-99.20.
- 2. OPEN ROADWAY TO FULL TWO-WAY THREE LANE TRAFFIC.





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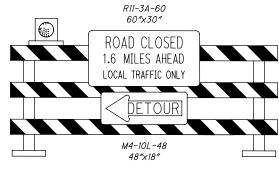
ROUTE

OUR MAINTENANCE PHASE I DETC

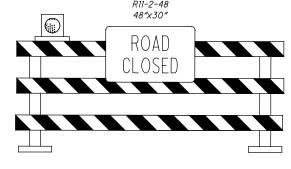
23.74) SLM 23.01 (SLM



SIGNS MOUNTED ON TYPE III PORTABLE BARRICADE



SIGNS MOUNTED ON TYPE III PORTABLE BARRICADE 2



CLOSED AHEAD

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W20-3-36 36"x36" (3)

U.S. 20 OPEN TO PARRISH RD

SPECIAL 36"x24" **(4)**



(5)



DETOUR AHEAD

W20-2-36

1 7

M6-3-12

M1-4-24-2

DETOUR M4-8-12

8

DETOUR

M1-4-24-2

M4-8-12

M5-1-12

M1-4-24-2

M6-1-12

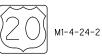
DETOUR M4-8-12

(1)

M1-4-24-2

M4-8-12

M5-1-12



| DETOUR | M4-8-12







10

DETOUR



M4-8A-24 24"x18" (12)



SR 20 AHEAD

(13)

13

(13)

P.C.M.S. MESSAGE 1

FOLLOW DETOUR

P.C.M.S. MESSAGE 2

PHASE 2

ROAD WORK AHEAD

P.C.M.S. MESSAGE 1

(13)

P.C.M.S. MESSAGE 2

ROAD WORK (14) AHEAD

P.C.M.S. MESSAGE 1

PHASE 1

TRAFFIC (14) MAINTAINED

P.C.M.S. MESSAGE 2

HOSPITAL 14) OPEN

P.C.M.S. MESSAGE 3

PHASE 2

ROAD WORK AHEAD

(14)

(14)

P.C.M.S. MESSAGE 1

TRAFFIC (14) MAINTAINED

P.C.M.S. MESSAGE 2

HOSPITAL OPEN

P.C.M.S. MESSAGE 3

€ CONST. U.S. 20

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20'

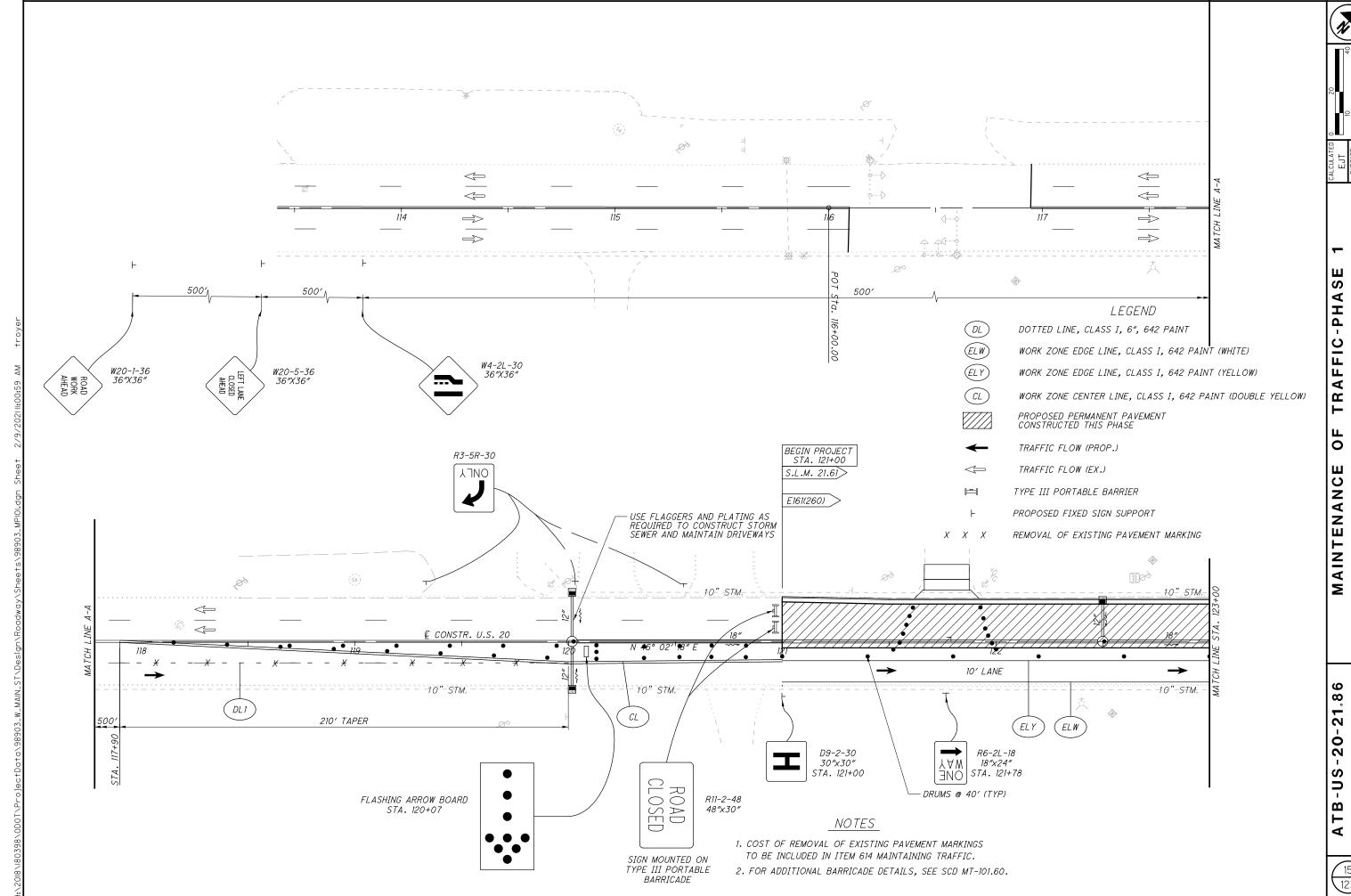
PHASE 2 (LOOKING EAST) ELW

WORK ZONE EDGE LINE, CLASS I, 642 PAINT (WHITE)

ELY

WORK ZONE EDGE LINE, CLASS I, 642 PAINT (YELLOW)

LEGEND



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123+00 ⋖ S 0 118 + 00

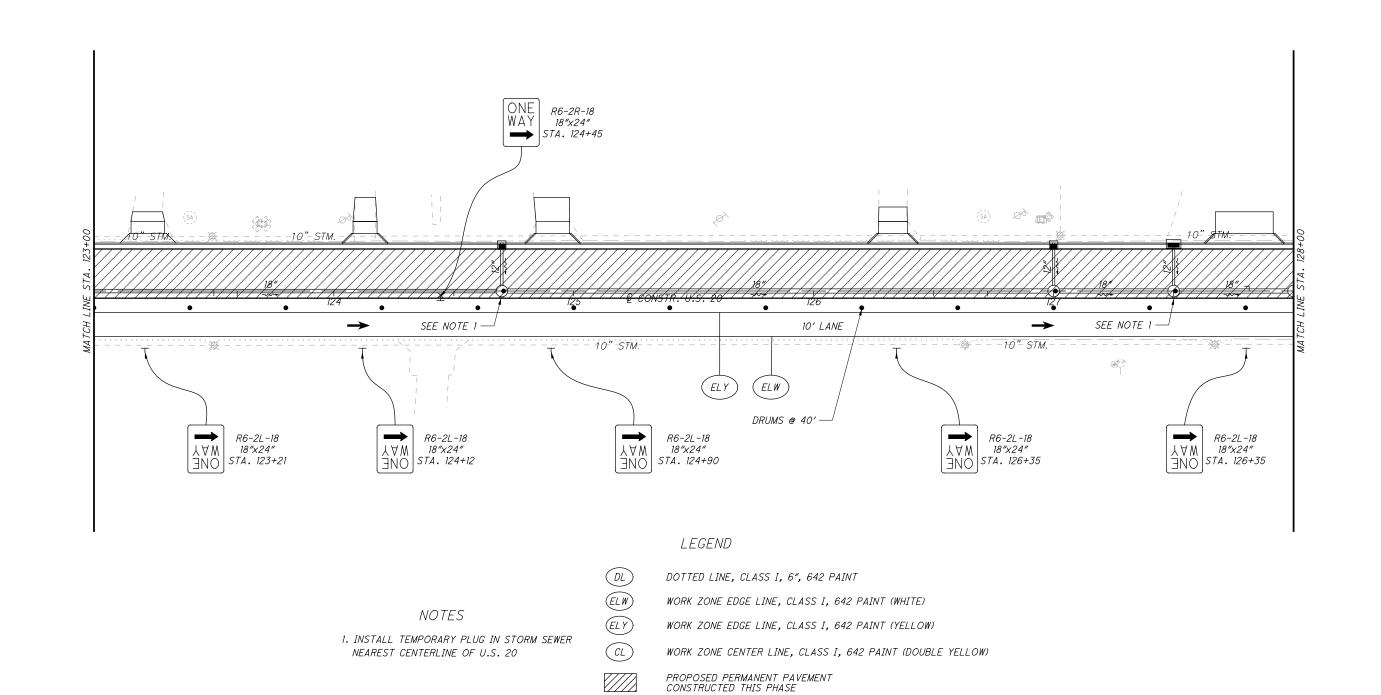
23.74) SLM23.01 WTS)

FRAFFIC-PHASE STA, 128+00

0 MAINTENANCE C STA: 123+00

20-21.86 SLM





TRAFFIC FLOW

 $X \quad X \quad X$

TYPE III PORTABLE BARRIER

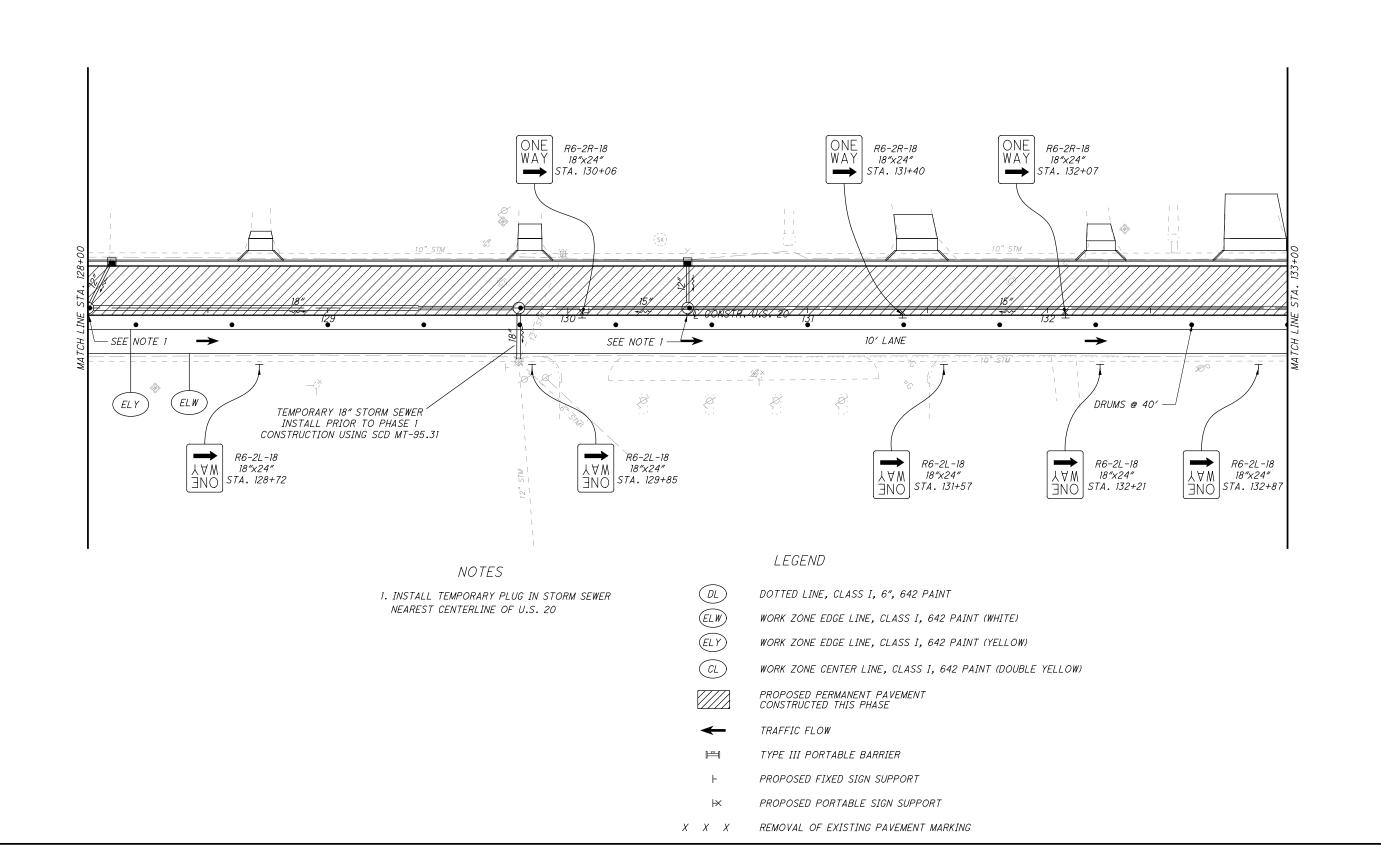
PROPOSED FIXED SIGN SUPPORT PROPOSED PORTABLE SIGN SUPPORT

REMOVAL OF EXISTING PAVEMENT MARKING

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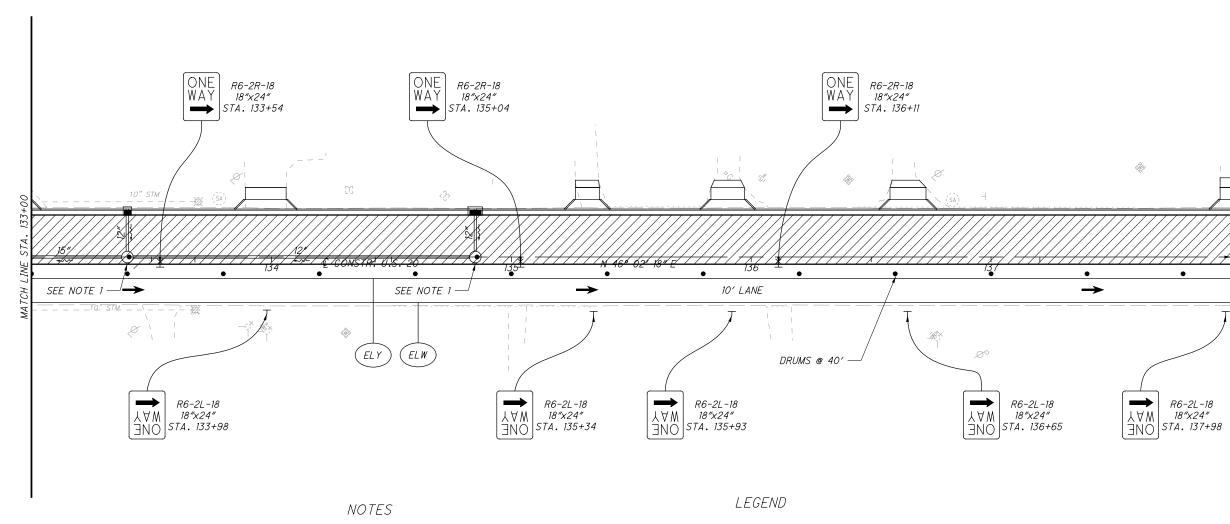


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1. INSTALL TEMPORARY PLUG IN STORM SEWER NEAREST CENTERLINE OF U.S. 20

- DOTTED LINE, CLASS I, 6", 642 PAINT
- WORK ZONE EDGE LINE, CLASS I, 642 PAINT (WHITE)
- WORK ZONE EDGE LINE, CLASS I, 642 PAINT (YELLOW)
- CL WORK ZONE CENTER LINE, CLASS I, 642 PAINT (DOUBLE YELLOW)

PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE

TRAFFIC FLOW

TYPE III PORTABLE BARRIER

PROPOSED FIXED SIGN SUPPORT

PROPOSED PORTABLE SIGN SUPPORT

REMOVAL OF EXISTING PAVEMENT MARKING

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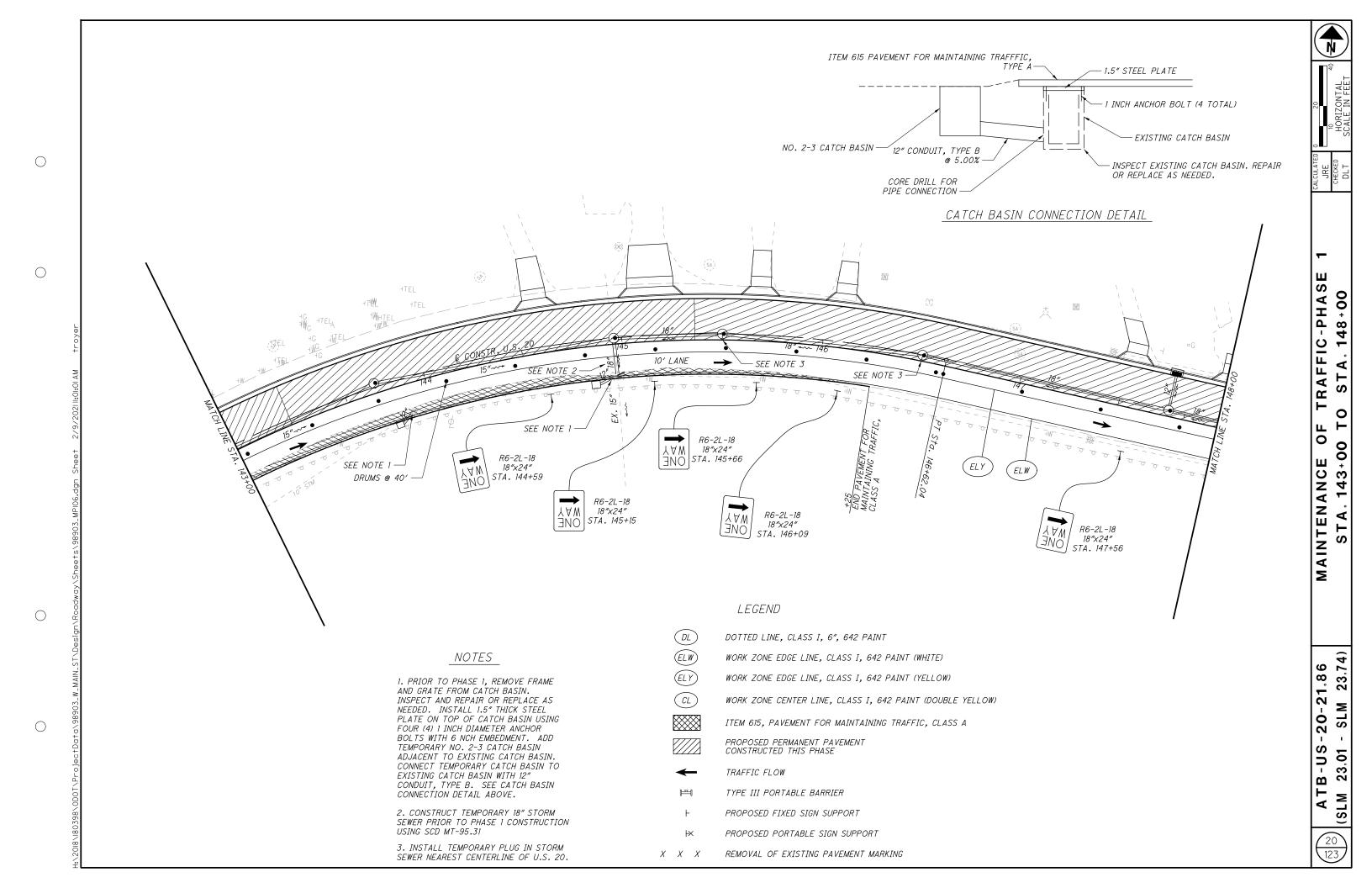


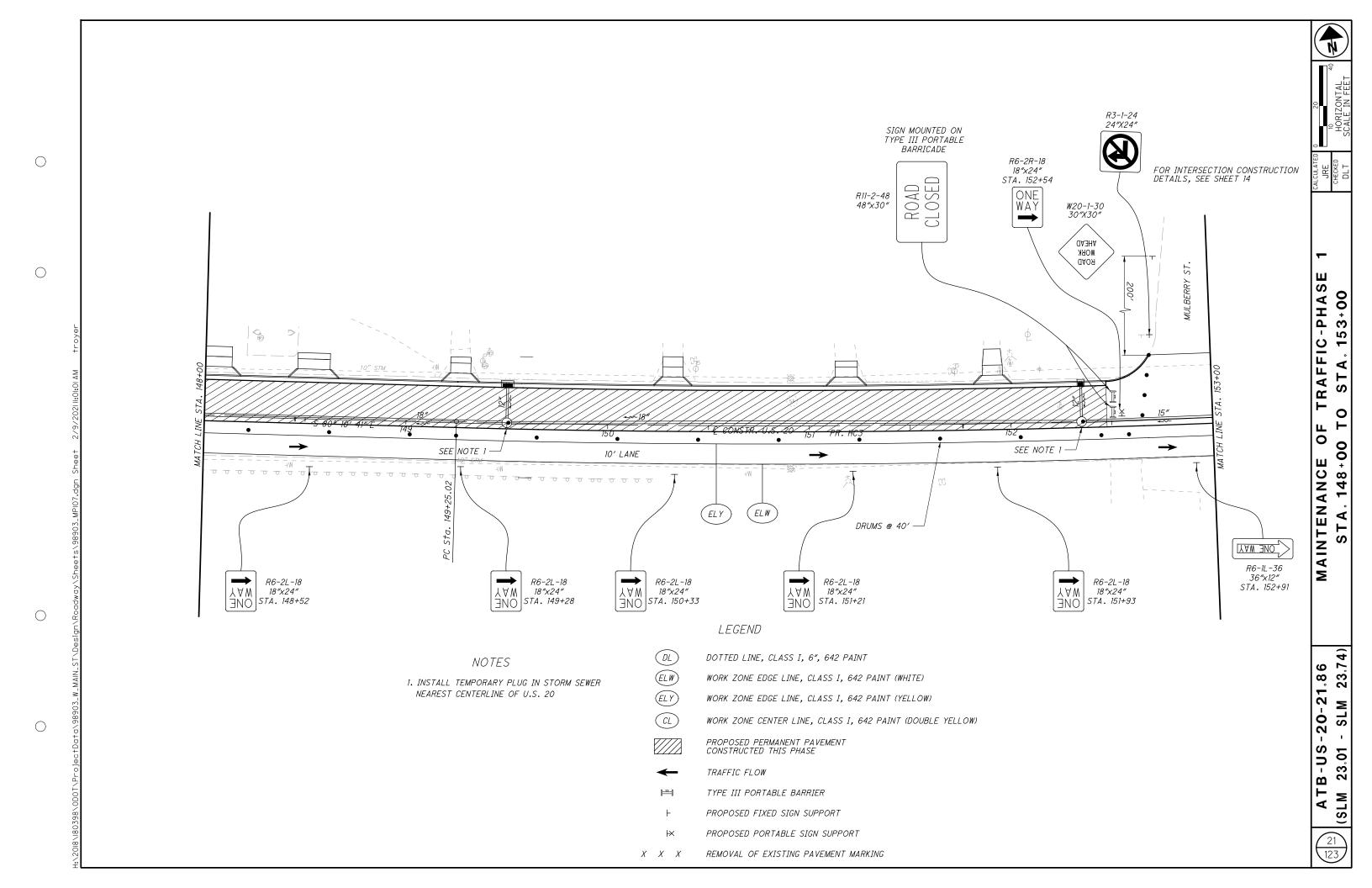
RAFFIC-PHASE 143+00 0 0 . 138 + 00 MAINTENANCE

23.74) 21.8 SLM20-23.01 $\mathbf{\omega}$

WTS)

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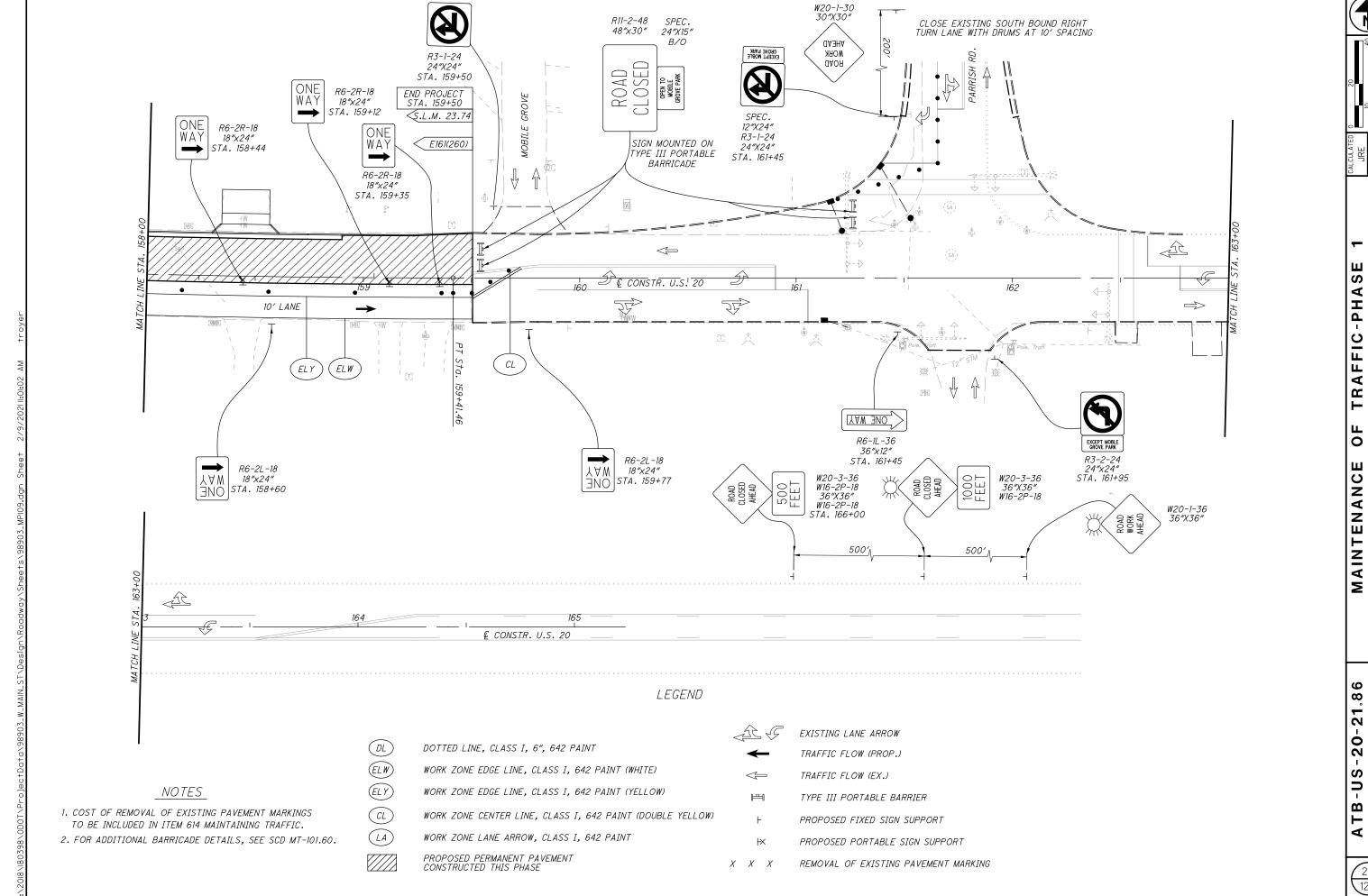


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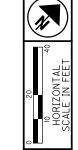
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165+00 0 0 00 MAINTENANCE . 158

23.74) 21.8 SLM20 -US 23.01 \mathbf{m} (SLM

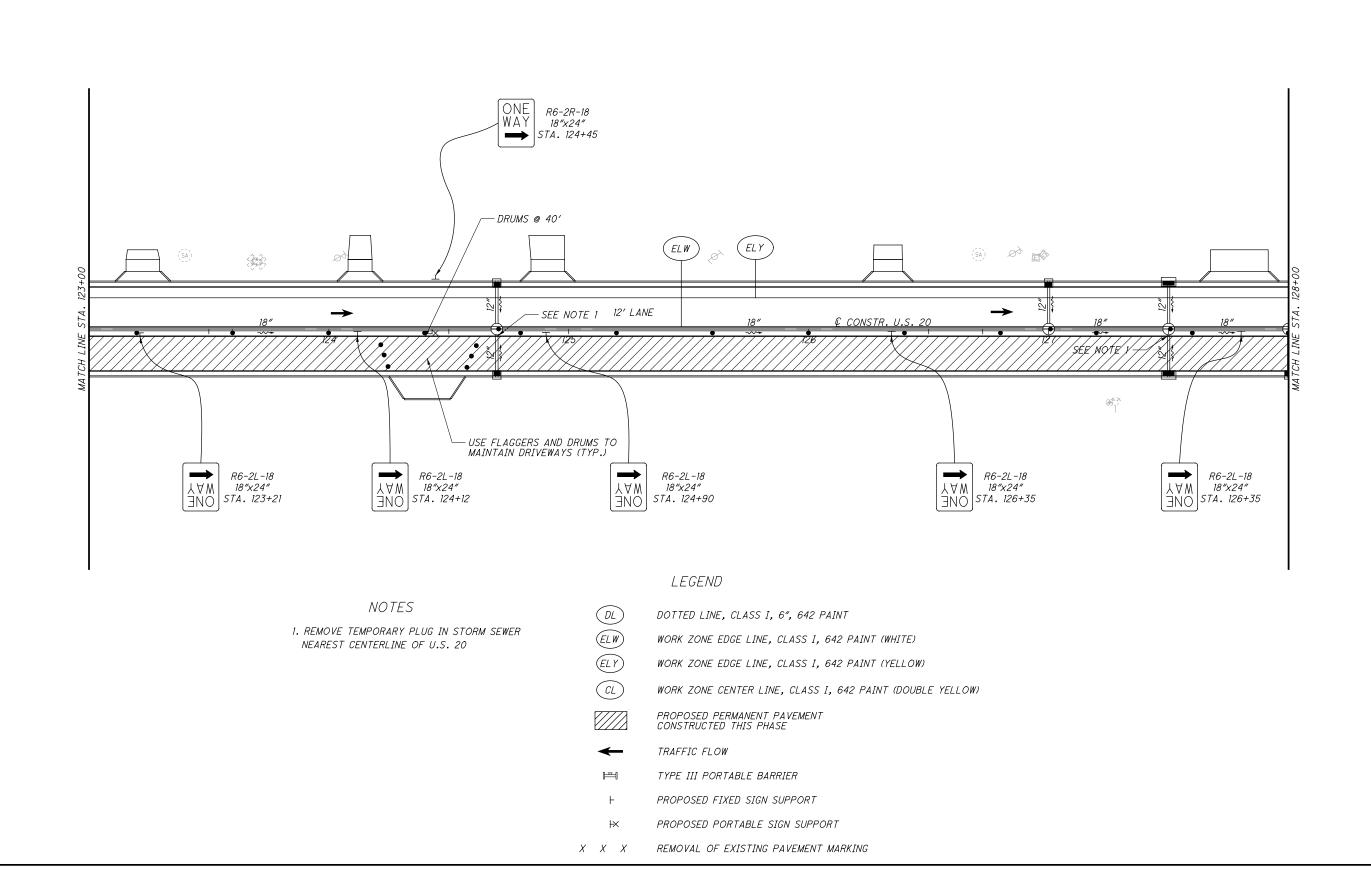
2



128+00 0 STA. 123+00

SLMATB-US 23.01

123

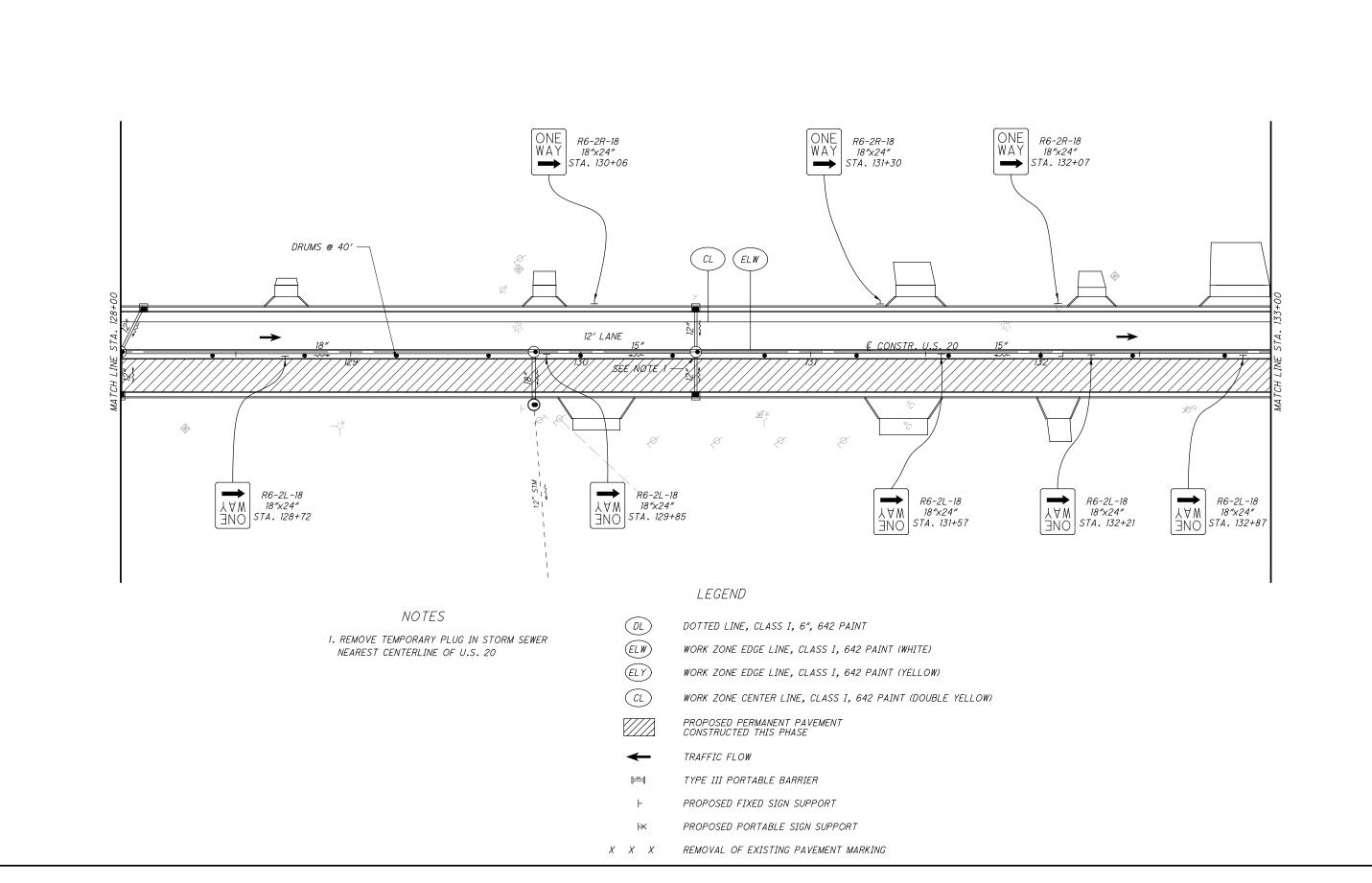


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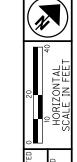
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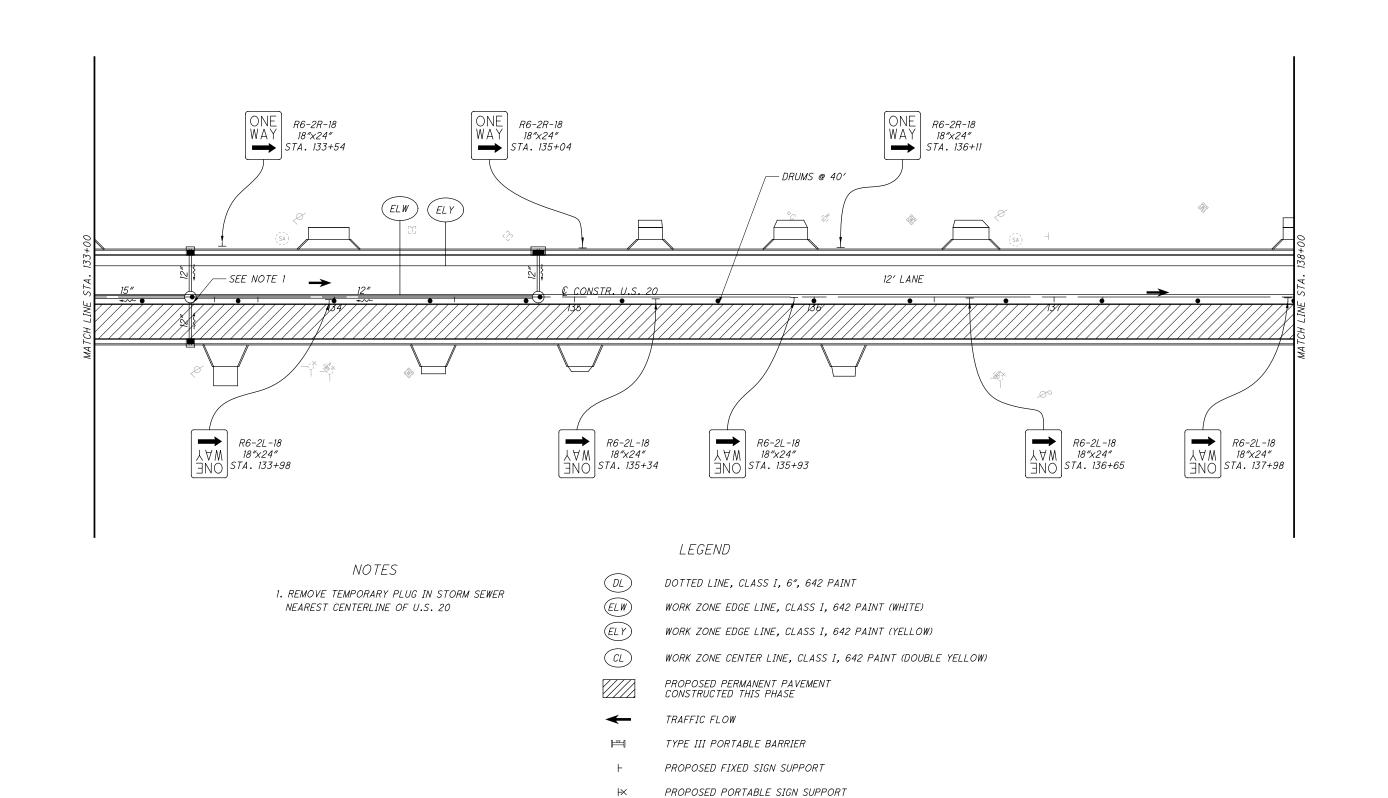
TRAFFIC-PHASE STA.138+00

0 STA. 133+00

23.74) 20-21.86 SLMATB-US 23.01

WTS)

123



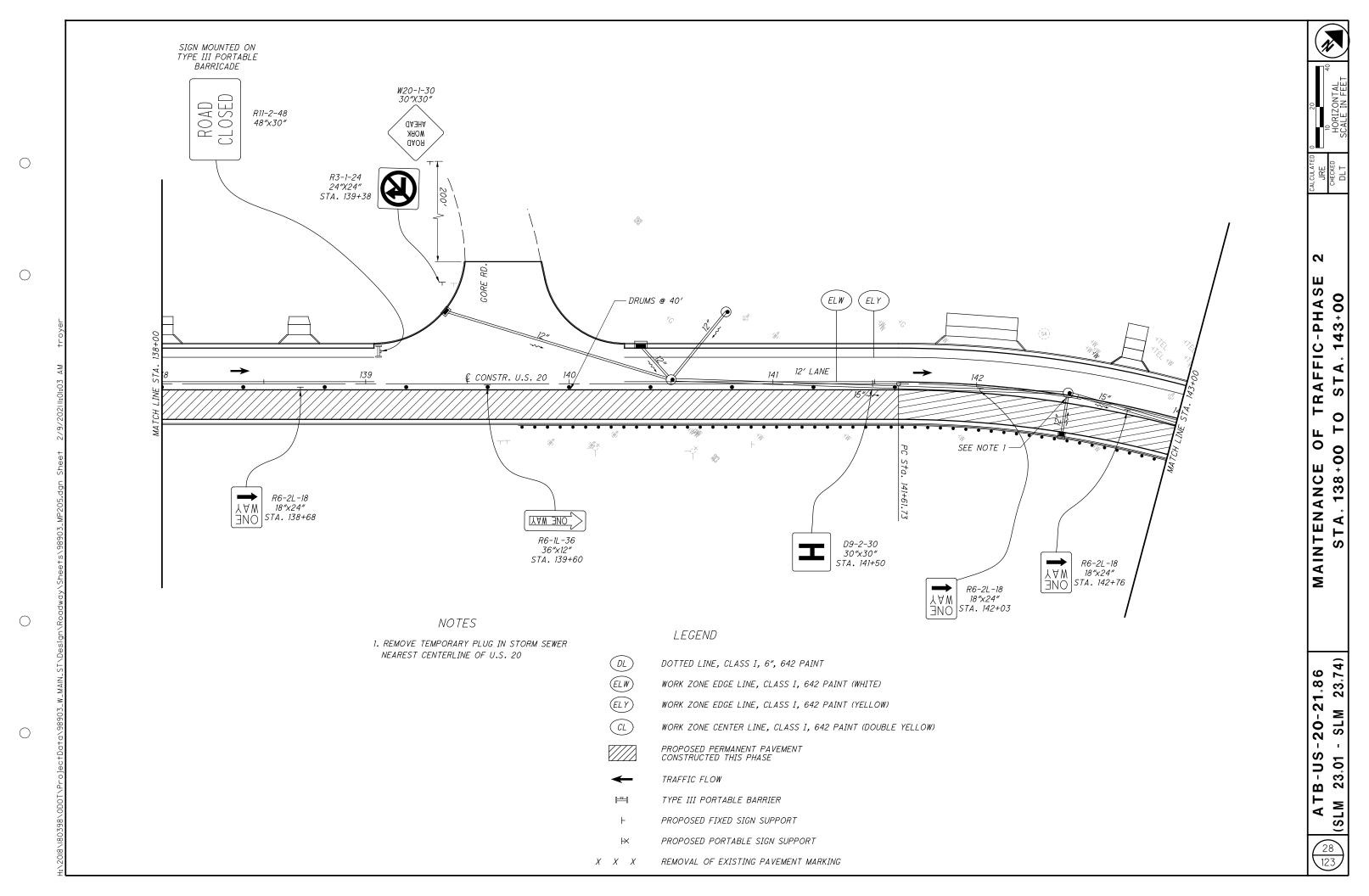
REMOVAL OF EXISTING PAVEMENT MARKING

 $X \quad X \quad X$

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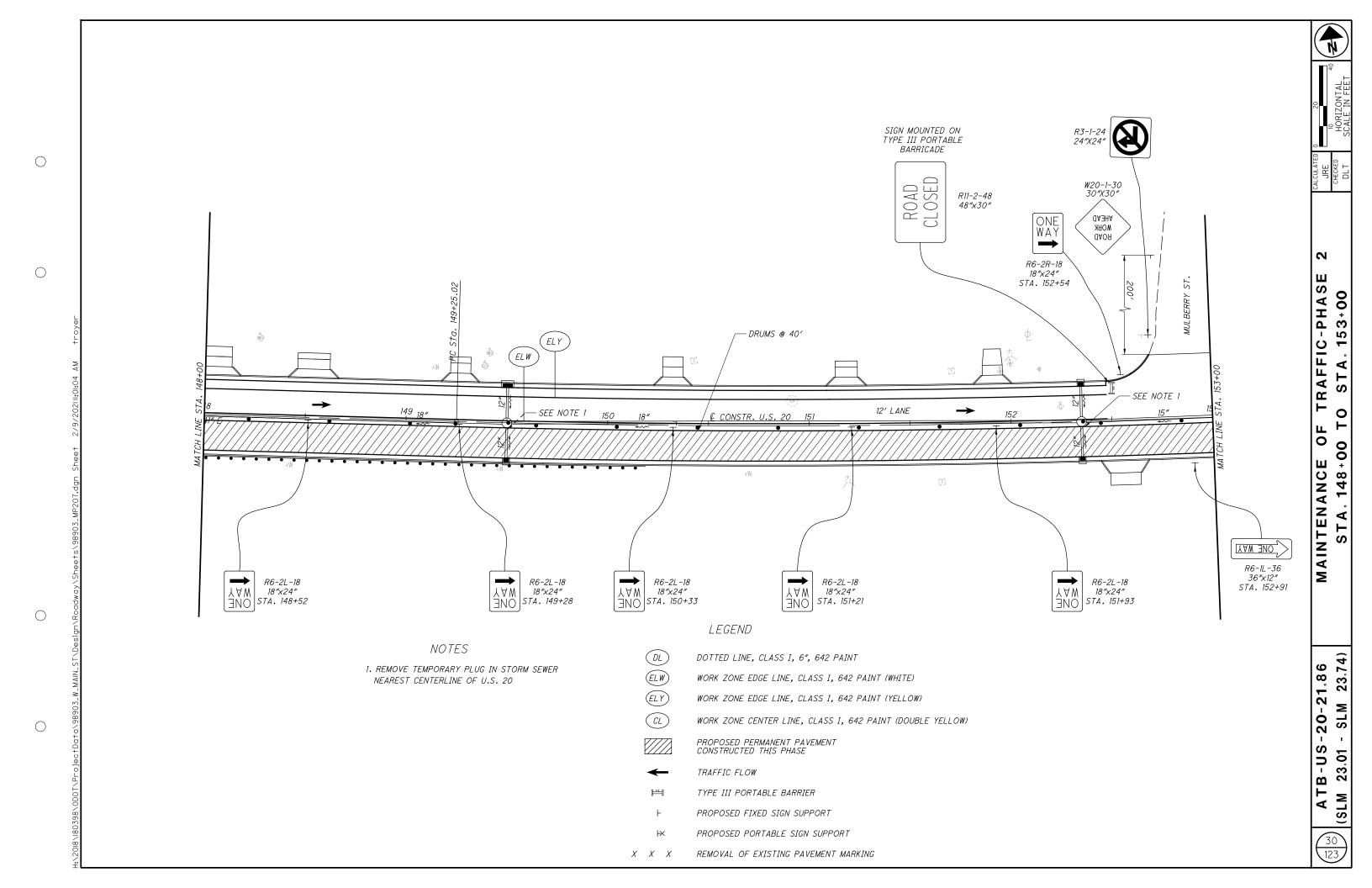




2 TRAFFIC-PHASE 148+00

0 OF 143+00 MAINTENANCE

23-74) 20-21.86 SLMTB-US 23.01 WTS) 4

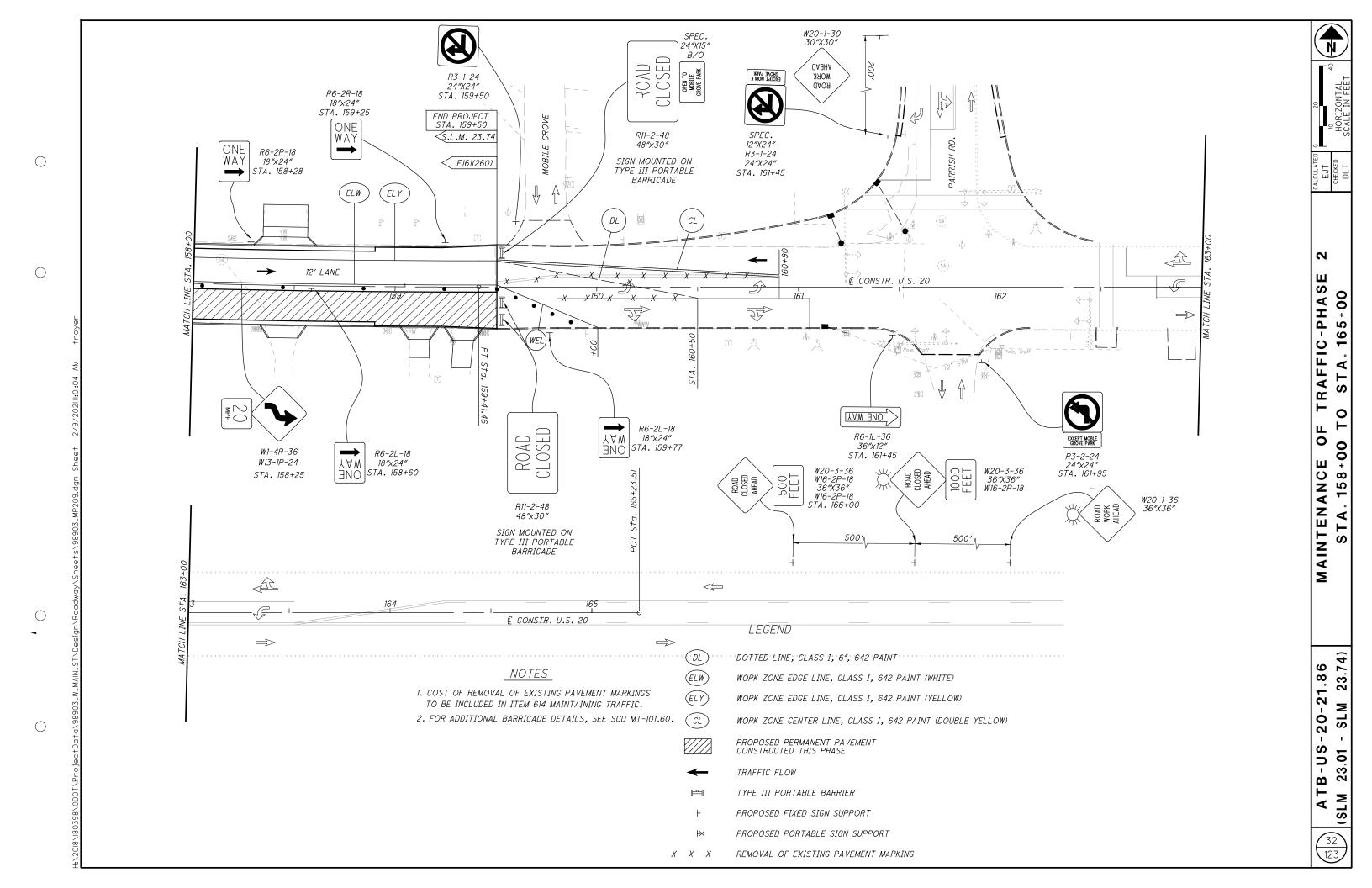


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				S	HEET NU	JM.				1		PAF	RT.	ITEM	ITEM	GRAND	UNIT		SEE HEET	ALCULATEI EJT CHECKED
7	8		36	37	38	39	40	41	42	87	OFFICE CALCS				EXT	TOTAL		N	NO.	CALC
																		ROADWAY		
LS												LS		201	11000	LS		CLEARING AND GRUBBING		
										1,056		1,056		202	23000	1,056	SY	PAVEMENT REMOVED		
										,	17,432	17,432		202	23001	17,432	SY		7	
			4,329	3,157								7,486		202	32000	7,486	FT	CURB REMOVED		
			169									169		202	32500	169	FT	CURB AND GUTTER REMOVED		
			93									93		202	35100	93	FT	PIPE REMOVED, 24" AND UNDER		
	489											489		202	35700	489	FT	ASBESTOS PIPE REMOVED		
			171 1	654 1								825 2		202 202	38000 42812	825	FT EACH	GUARDRAIL REMOVED ANCHOR ASSEMBLY REMOVED FOR STORAGE, TYPE E		
			'	'				46				46		202	53101	2 46	EACH		7	
			14	8								22		202	58100	22	EACH	CATCH BASIN REMOVED		
	330											330		SPECIAL	20270110	330	FT	PIPE CLEANOUT, 24" AND UNDER	8	>
	330											330		SPECIAL	20270110	330	ГІ	PIPE CLEANOUT, 24 AND UNDER	°	8
								4,448		166		4,614		203	10000	4,614	CY	EXCAVATION		۸A
								217				217		203	20000	217	CY	EMBANKMENT		Σ
										993	17,609	18,602		204	10000	18,602	SY	SUBGRADE COMPACTION		
650											·	650		204	13000	650	CY	EXCAVATION OF SUBGRADE		S
650 7												650 7		204 204	30010 45000	650 7	CY HOUR	GRANULAR MATERIAL, TYPE B PROOF ROLLING		ل ا
1,900												1,900		204	50000	1,900	SY	GEOTEXTILE FABRIC		۷
																				2
											93	93		253	01000	93	SY	PAVEMENT REPAIR		N
			325	675								1,000		606	15100	1,000	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS		Ш
			1	1								2		606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	7	5
				30								30		607	30000	30	FT	FENCE, SNOW		
				30								30		007	30000	30		TENOL, GNOW		
			305									305		608	10000	305	SF	4" CONCRETE WALK		
			317									317		608	52000	317	SF	CURB RAMP		
																		EROSION CONTROL		
																		EROSION CONTROL		
	2											2		659	00100	2	EACH	SOIL ANALYSIS TEST		
	1,104 9,939											1,104 9,939		659 659	00300 10000	1,104 9,939	CY SY	TOPSOIL SEEDING AND MULCHING		
	497											497		659	14000	497	SY	REPAIR SEEDING AND MULCHING		
	497											497		659	15000	497	SY	INTER-SEEDING		
	1.4											1.4		659	20000	1.4	TON	COMMERCIAL FERTILIZER		
	2.1											2.1		659	31000	2.1	ACRE	LIME		_
	54											54		659	35000	54	MGAL	WATER		86
	90											90		659	40000	90	MSF	MOWING		1 .8
									LS			LS		832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN		-2
									LS			LS		832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		0
								1	LS			LS		832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		-2
									73,413			73,413		832	30000	73,413	EACH	EROSION CONTROL		S
																				<u> </u>
																				m
																				_
						1														A
	 																			
																				(33) 123

SHEET NUM.														RT.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	CULATED
	8			36	37	38	39	40		87		OFFICE CALCS	01/NHS/ PV/CONN		11211	EXT	TOTAL	01111	DESCIAI IZON	NO.	CALC
																			DRAINAGE		7
	100							6,503					100 6,503		605 605	13300 14020	100 6,503	FT FT	6" UNCLASSIFIED PIPE UNDERDRAINS 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC		
	50												50		605	31100	50	FT	AGGREGATE DRAINS		4
																					_
	50							330					380		611	00510	380	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS		4
						20							20		611	03300	20	FT	10" CONDUIT, TYPE C, 706.02		1
						604	476						1,080		611	04400	1,080	FT	12" CONDUIT, TYPE B		-
						909	145						1,054		611	05900	1,054	FT	15" CONDUIT, TYPE B		╛
						30							30		611	06100	30	FT	15" CONDUIT, TYPE C		4
																				+	\dashv
						1,325	435						1,760		611	07400	1,760	FT	18" CONDUIT, TYPE B]
						26							26		611	07600	26	FT	18" CONDUIT, TYPE C	+	- ;
						5	3						8		611	98150	8	EACH	CATCH BASIN, NO. 3		
						14	6						20		611	98180	20		CATCH BASIN, NO. 3A		_
						1							1		611 611	98370 98470	1	EACH EACH	CATCH BASIN, NO. 6 CATCH BASIN, NO. 2-2B	+	\dashv
						19	4						23		611 611	99575 99581	23	EACH EACH	MANHOLE, NO. 3, AS PER PLAN MANHOLE, NO. 3 WITH 84" BASE I.D. AND 6" WEIR, AS PER PLAN	7	\blacksquare
	5					 '							5		611	99710	5	EACH	PRECAST REINFORCED CONCRETE OUTLET	+ '-	1
						1							1		895	10020	1	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 2		
						'							1		090	10020	I	EACH	MANOFACTURED WATER QUALITY STRUCTURE, TIPE 2		Ⅎ
																			PAVEMENT		
										741		180	921		252	01500	921	FT	FULL DEPTH PAVEMENT SAWING		+
												2,574	2,574		301	46000	2,574	CY	ASPHALT CONCRETE BASE, PG64-22		7
										166		2,932	3,098		304	20001	3,098	CY	AGGREGATE BASE, AS PER PLAN	7	╛
												1,853	1,853		407	20000	1,853	GAL	NON-TRACKING TACK COAT		\dashv
													1,000		101	20000	,	0/12			
										23		537 751	560 751		441 441	50101 50300	560 751	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	7	
										476			476		452	10060	476	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS WITH QC/QA		_
										251			251		452	12060	251	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS WITH QC/QA		4
				4,277	3,035	+							7,312		609	12000	7,312	FT	COMBINATION CURB AND GUTTER, TYPE 2	+	1
				143	222								365		609	26000	365	FT	CURB, TYPE 6		4
																			WATER WORK		╀
				25									25		638	01804	25	FT	10" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 53, PUSH-ON JOINTS AND FITTINGS	+	8
	10												10		638	10801	10	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	8	∄α
	60					_							60		638	10900	60	EACH	SERVICE BOX ADJUSTED TO GRADE		٦٢
	400												400		638	98600	400	FT	WATER WORK, MISC.: WATER SERVICE CONNECTION PIPE LOWERING	8	6
																			SANITARY SEWER		_ '
																					B-US
						1	3						4		611	99661	4	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	8	Ä
																			LIGHTING	+	Ī
																		_			_
-+				1	1	1	1	1					1		625	75501	1	EACH	LIGHT POLE FOUNDATION REMOVED, AS PER PLAN	7	
1			 	 	+	+	+	+	+		 					+				+	-1/

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1				1	SHEET NUM.								RT.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET	ALCULATED EJT CHECKED
1		8	9	10				41		105	106			11211	EXT	TOTAL	0,111	DESCRIPTION		CALC
1																		OTHER UTILITIES		1
8 8 19 19 19 19 19 19 19 19 19 19 19 19 19		10										10		SPECIAL	61199700	10	EACH	GAS VALVE BOX ADJUSTED TO GRADE	8	_
8 8 19 19 19 19 19 19 19 19 19 19 19 19 19																				-
19																		TRAFFIC CONTROL		1
19										82	49	131		621	00100	131	ΕΔCH	RPM		-
1										02	49	131		021	00100	131	LACIT	TALIVI		1
1 1 1 1 1 1 1 1 1 1								19				19		626	00110	19	EACH	BARRIER REFLECTOR, TYPE 2 (BIDIRECTIONAL)		4
10										230	276	506		630	03100	506	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		1
10										3	ρ	11		630	08600	11	EACH	SIGN DOST REFLECTOR		-
1																				1
1										'		-								4
Manual										3	3	0		030	00002	0	EACH	REMIOVAL OF GROUND MOUNTED FOST SUFFORT AND DISPOSAL		┨,
1,05										1	1	2		631	97700	2	EACH	SIGN LIGHTING MISC.: REFURBISH SIGN LIGHTING ASSEMBLY	8	2
1,05										0.05	0.06	0.11		644	00104	0.11	MILE	EDGE LINE, 6"		│
10										1.05	0.68	1.73		644	00300	1.73	MILE	CENTER LINE		
12 8 20 944 01500 20 EACH AVERAGE MARCHING										255	176	431		644	00400	431	FT	CHANNELIZING LINE, 8"		1
1											26									7
MAINTENANCE OF TRAFFC						_				12	8	1								┨ _
100 110										'		'		044	01000	ı	LAOIT	LANE NEDOCHON ANNOW		{
100 110																		MAINTENANCE OF TRAFFIC]
SS SS SS SS SS SS SS S																		MAINTENANCE OF TRAFFIC		∮ ¦
50 50 51 9800 52 EACH (CATCH BASIN NO.23 2 EACH (CATCH BASIN NO.23 2 EACH (CATCH BASIN NO.23 2 EACH (CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 2 511 9800 2 EACH (CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 2 511 9800 5 2 EACH (CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 2 5 4 1110 5 11			300	110								410		410	12000	410	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B		_ L
50 50 51 9800 52 EACH (CATCH BASIN NO.23 2 EACH (CATCH BASIN NO.23 2 EACH (CATCH BASIN NO.23 2 EACH (CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 2 511 9800 2 EACH (CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 2 511 9800 5 2 EACH (CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 2 5 4 1110 5 11			50									50		611	04400	50	FT	12" CONDUIT, TYPE B		∤ ′
2 611 98935 2 EACH CATCH ASSINTECTED TO GRADE, AS PERPLAN 20 100 100 1100 6114 11110 100 HOW LAW ENFORCEMENT OFFICE WITH PATROL CAR FOR ASSISTANCE 30 10 100 1110 1110 1110 1110 1110 1110			50									50		611	07400	50	FT	18" CONDUIT, TYPE B		1
100 100																			20	-
30															00000				20	1
50			30	100								+								-
21															13000		CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC		1
30 30 30 614 18801 30 SNMT PORTABLE CHANGEABLE MESSAGE SIGN AS PER PLAN 9 9 2 614 21100 2 MILE WORK ZONE EDGE LINE, CLASS I, 642 PAINT 1 1 1 1 1 1 1 1 1																				4
2			21									21		014	10000	21	LAOIT	OBJECT MARKET, TWO WAT		1
4.6																		,	9	4
S20									+											1
120			431									431		614	23200	431	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT		1
120			520				1		1			520		614	24202	520	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT		1
6			120									120		614	26200	120	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT		1
LS																			9	Γ
250														-		·		,		19
100									-											1.86
																				Ŕ
No.		100			_			<u> </u>			100		616	10000	100	MGAL	WATER		∣ o	
No.																			-20-	
LS																		INCIDENTALS		ြလ
LS												LS		103	05000	LS		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND		B-US
18 619 16010 18 MNTH FIELD OFFICE, TYPE B																				1 B
			LS			+	+		1			LS		614	11000	LS		MAINTAINING TRAFFIC		₽
LS 623 10000 LS CONSTRUCTION LAYOUT STAKES AND SURVEYING												18		619	16010	18	MNTH	FIELD OFFICE, TYPE B		1
												IS		623	10000	I.S.		CONSTRUCTION LAYOUT STAKES AND SURVEYING		1/7
LS 624 10000 LS MOBILIZATION														020						$\frac{3}{12}$

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						611	611	611	611	611	611	1	611	611		<u> </u>
REF NO.	SHEET NO.	STATIO	N TO STATION	SIDE		12" CONDUIT, TYPE B	15" CONDUIT, TYPE B	18" CONDUIT, TYPE B	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	MANHOLE, NO. 3		MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN (SAN.)	MANHOLE FRAME AND COVER, AS PER PLAN		CALCULATED
						FT	FT	FT	EACH	EACH	EAC		EACH	EACH		\dashv
			ТО			1		1	2,1011	L/(OI)	Erio	511	2,1011	E/torr		┨ .
D46	50	148+00	149+50	CL				150			1					
D47	50	149+50	149+50	LT		20			1	1						_
D48 D49	50 50	149+50 149+50	149+50 152+35	RT CL		20		285		1	1					-
D50	50	152+35	152+35	LT		20		200		1	I					-
D51	50	152+35	152+35	RT		20				1						_
D52	50	152+35	153+00	CL			65									
																コ
S2	50	150+91.5		LT									1	1		\dashv
252	F4	152:00	450.00	21			90									\dashv
D53 D54	51 51	153+00 153+80	153+80 153+80	CL LT		20	80		1		1					\dashv
D55	51	153+80	153+80	RT	 	20			1							\dashv
056	51	153+80	156+15	CL		235			-		1					\dashv
57	51	156+15	156+15	LT		20				1						1
058	51	156+15	156+20	RT		20				1						
59	51	156+15	156+96	LT		81				1						_
																_
S3	51	154+48.3		LT									1	1		\dashv
33	31	134 140.3		L1									'	<u>'</u>		\dashv
S4	52	158+13.8		LT									1	1		-
																\Box
																_
																\dashv
																-
																1
																1
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																4
-																\dashv
					+ + +			+						+		\dashv
																\dashv
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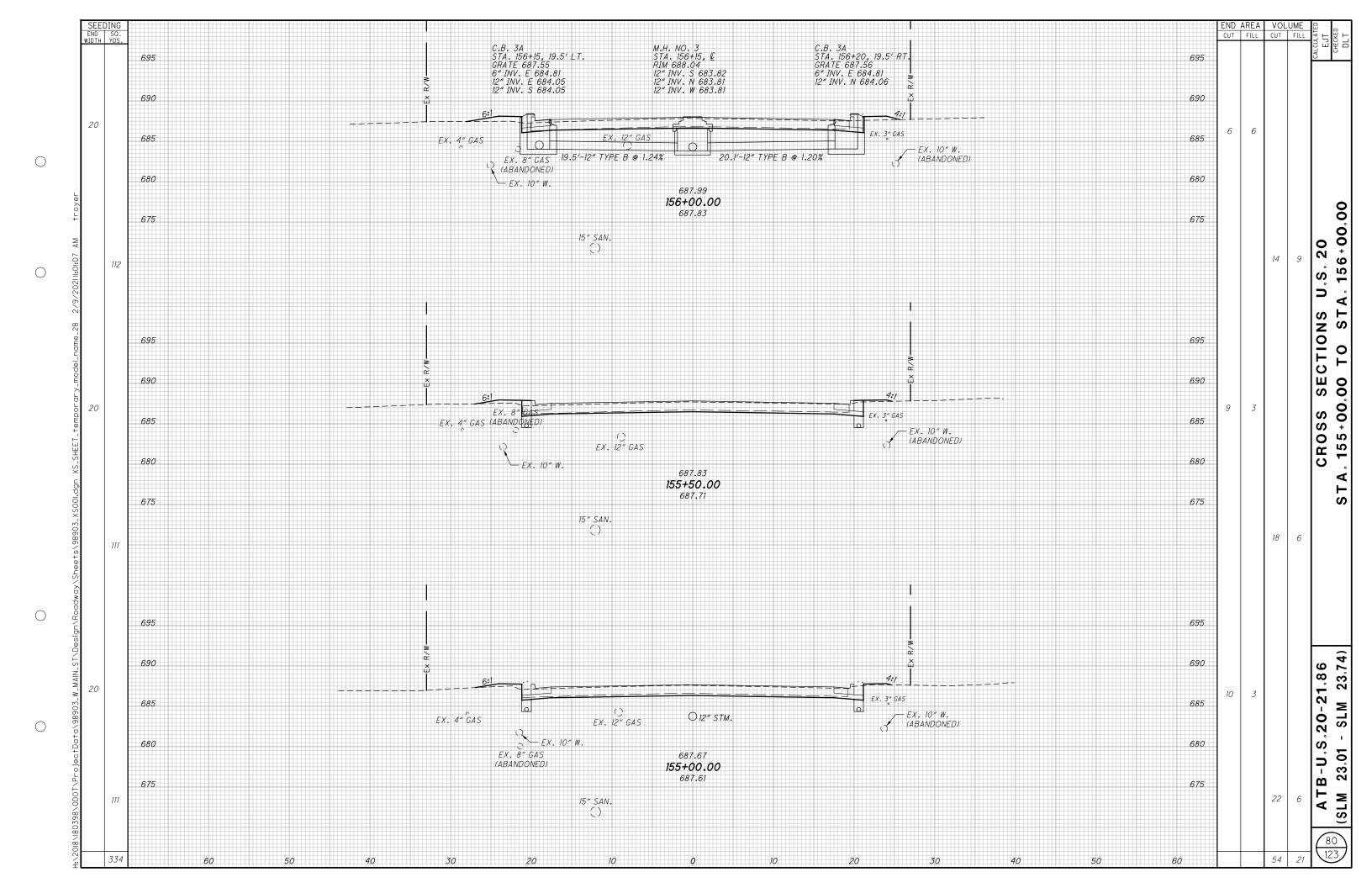
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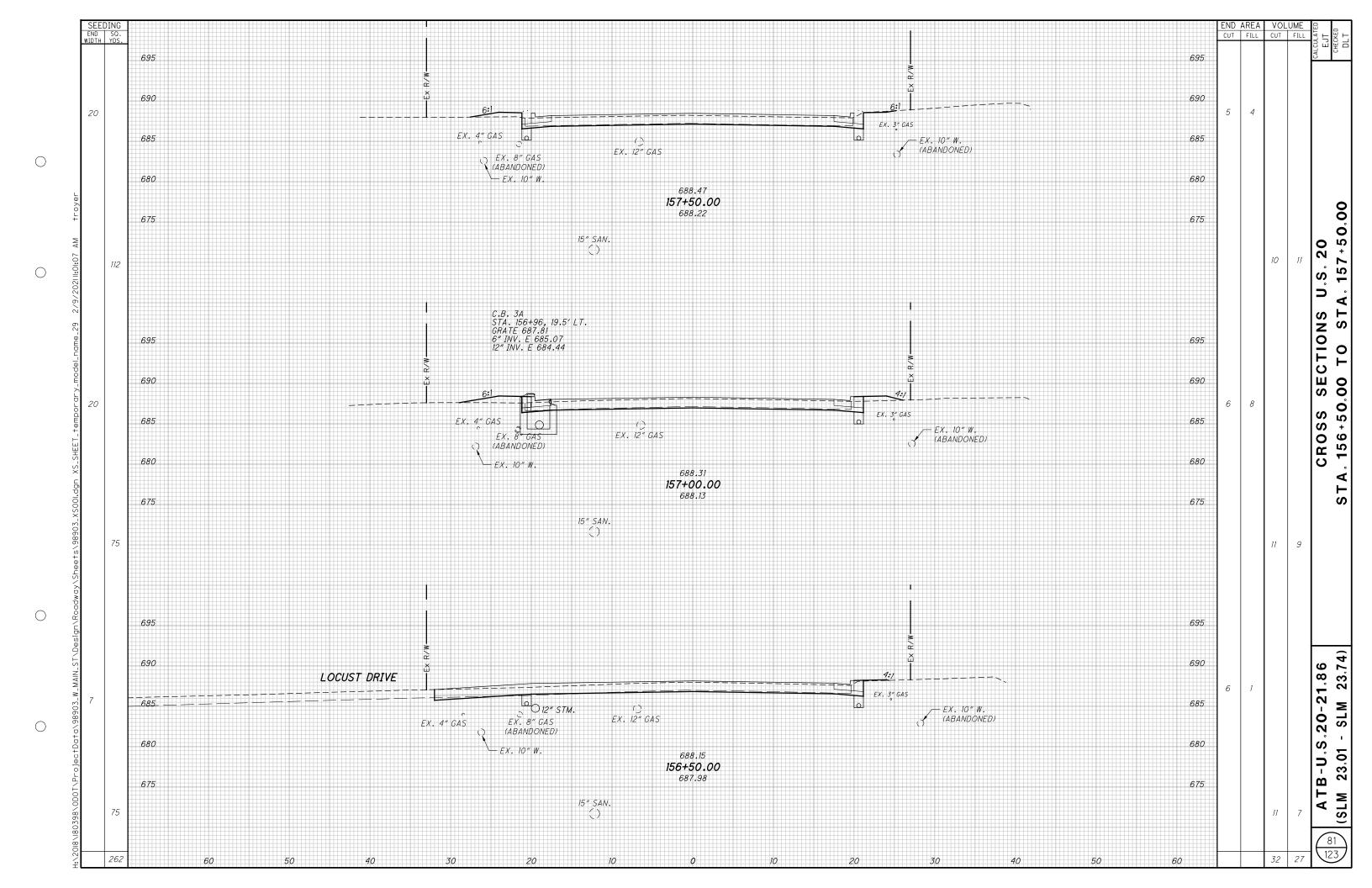
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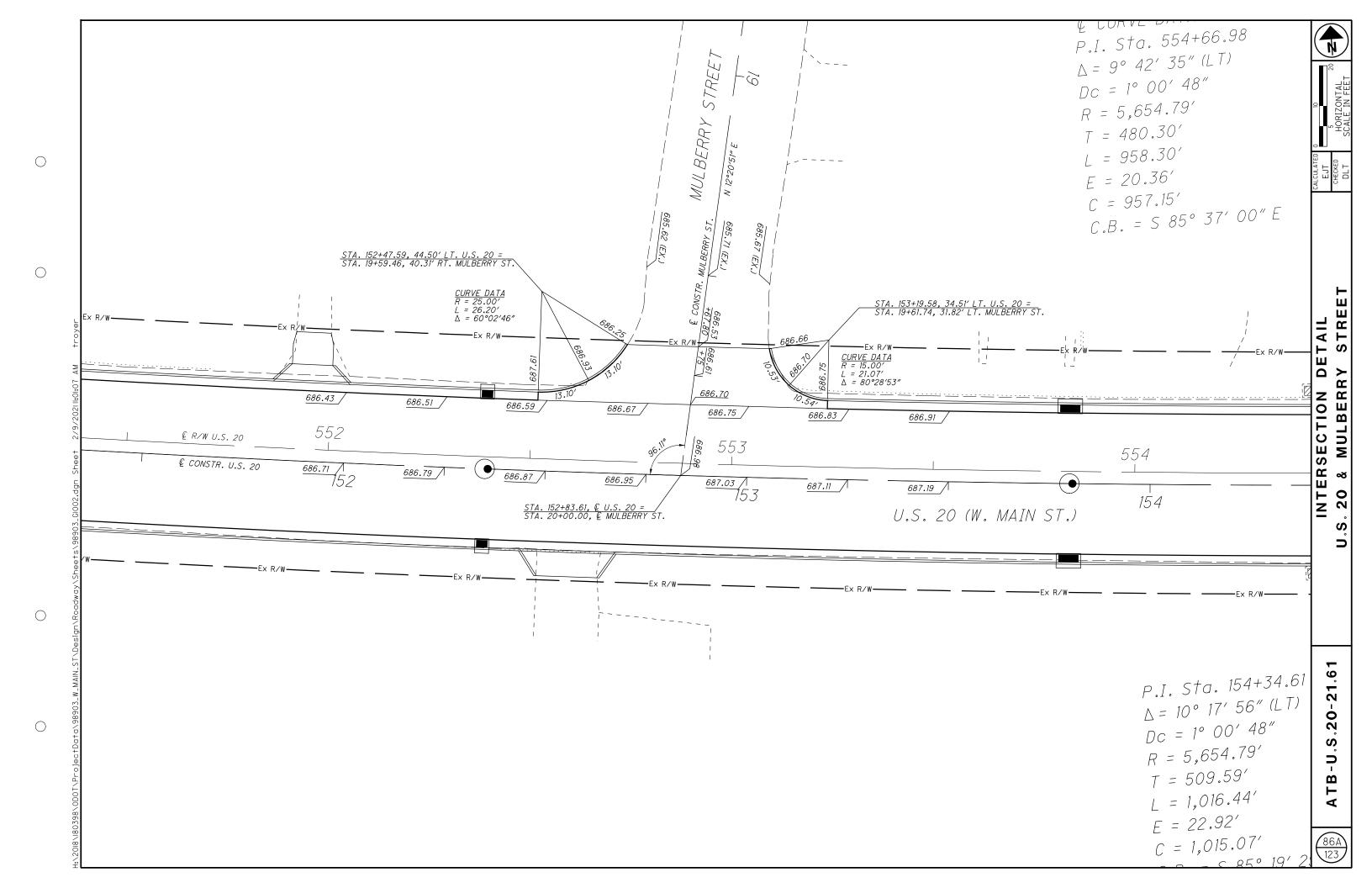
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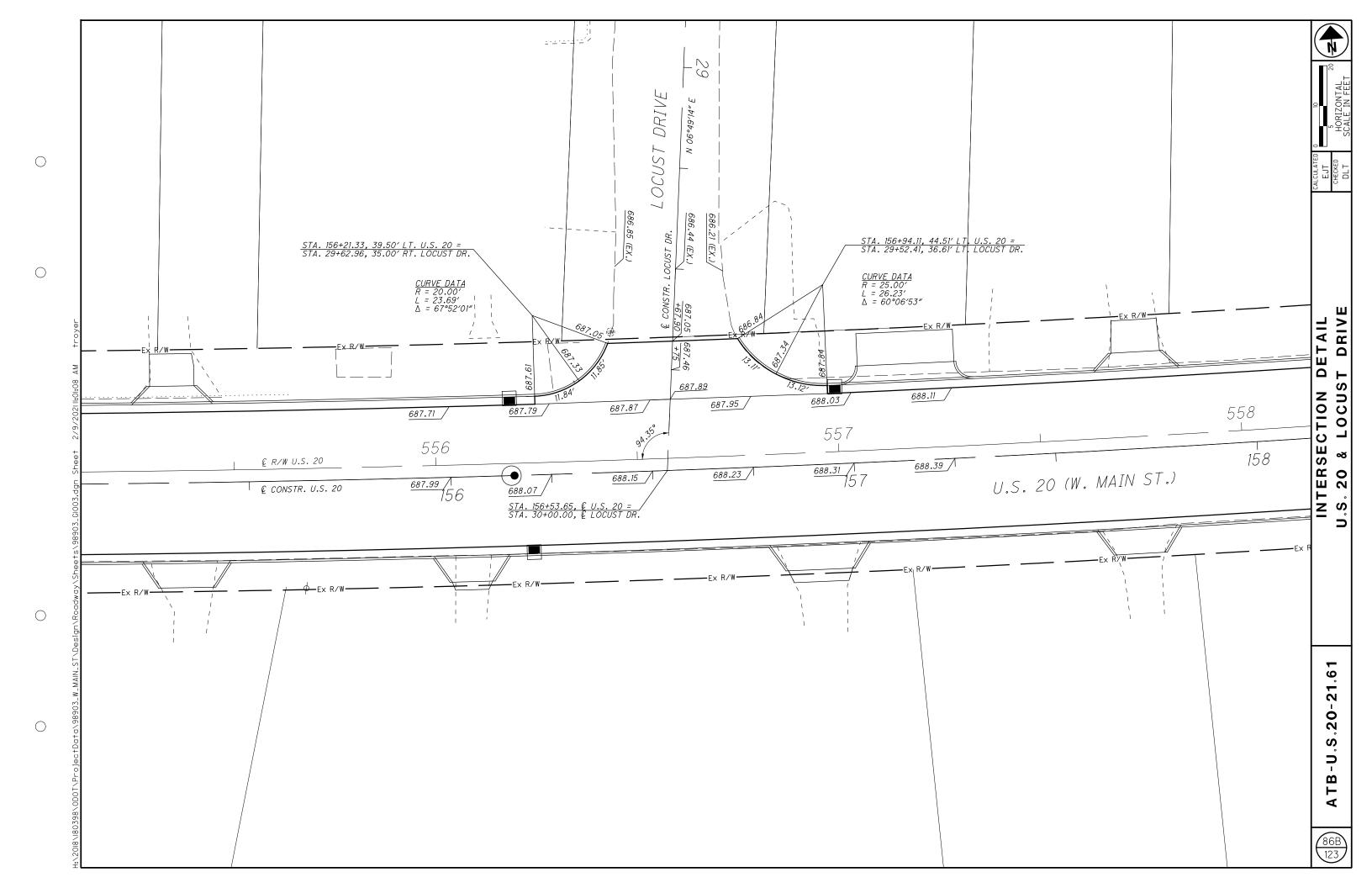
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														202	202	203	204	252	304	441	452	452	
SHEET NO.	REFERENCE NO.	STATION	SIDE	DRIVE TYPE (PROPOSED)	MATERIAL (PROP.)	DRIVE ANGLE	APRON LENGTH "L1"	DRIVEWAY LENGTH "L2"	WIDTH "W"	R1 (LEFT SIDE OF APRON LOOKING FROM ROAD CL)	R2 (RIGHT SIDE OF APRON LOOKING FROM ROAD CL)	CADD GENERATED APRON SURFACE AREA	CADD GENERATED DRIVE SURFACE AREA	PAVEMENT REMOVED, ASPHALT (INFORMATION ONLY)	PAVEMENT REMOVED	6" EXCAVATION	SUBGRADE COMPACTION	FULL DEPTH PAVEMENT SAWING	6" AGGREGATE BASE, AS PER PLAN	3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS WITH QA/QC	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS WITH QA/QC	SEE NOTE 1 (TYP.) R1 L2 R2 SEE NOTE 1 (TYP.)
						DEG.	. <i>FT.</i>	FT.	FT.	FT.	FT.	SQ. FT.	SQ. FT.	S.Y.	S.Y.	C.Y.	S.Y.	FT.	C.Y.	C.Y.	S.Y.	S.Y.	L1 (TYP.) L1
44	DW-1	121+77.0	L	1 (COMM.)	CONC	_	4	5	21	4.5	4.5	88	105	26.0	3.1.	3.6	21.4	21	3.6	0.1.	3.1.	21.4	
45	DW-2	123+22.5	L	2 (RES.)	ASPH		4	3	14	4	4	78	42	15.4		2.2	13.3	14	2.2	0.4	8.7		DROP CURB AS PER — DROP CURB AS PER — SEE NOTE 2 — SCD BP-4.1 (TYP.)
45 45	DW-3 DW-4	124+13.0 124+41.0	L R	2 (RES.) 1 (COMM.)	ASPH CONC		9	5	10 19	9.5	9.5	62 172	50 0	10.0	19.1	2.1 3.2	12.4 19.1	10 19	2.1 3.2	0.5	6.9	19.1	NOTES
45	DW-5	124+91.25		2 (RES.)	ASPH		4	5	14	4	4	78	70	20.4	75.7	2.7	16.4	14	2.7	0.6	8.7	13.1	- NOTES NI CURB AND ―/ コ. CURB HEIGHT = 0" 및 GUTTER
45	DW-6	126+33.0	L	2 (RES.)	CONC		4	3	12	4	4	70	36		14.0	2.0	11.8	12	2.0		11.8		≥ 2. CURB HEIGHT = 6″ ≥
45 46	DW-7 DW-8	127+79.5 128+72.0	<i>L</i>	1 (COMM.) 2 (RES.)	CONC ASPH	90	4	5 3	35 10	4.5	4.5	108 62	120 30	56.0 11.9		4.2 1.7	25.3 10.2	35 10	4.2 1.7	0.3	6.9	25.3	ROAD
46	DW-9	129+84.2	L	2 (RES.)	CONC		4	5	10	4	4	62	50	11.3	13.8	2.1	12.4	10	2.1	0.5	12.4		DRIVEWAY PLAN VIEW (TYPICAL)
46	DW-10	130+06.78	R	1 (COMM.)	CONC	90	9	0	20.5	9.5	9.5	234	0		26.0	4.3	26.0	20.5	4.3			26.0	. 2' . W/2 W/2 . 2' .
46 46	DW-11 DW-12	131+40.33	R	1 (COMM.)	CONC		9	5	21 17	9.5	9.5	238	0 85		26.4	4.4 3.2	26.4	21 17	4.4 3.2		10.4	26.4	
46	DW-12 DW-13	131+45.55 132+07.6	R	2 (RES.) 2 (RES.)	CONC		9	0	10	4	4	90 136	0	10.0	23.0	2.5	19.4 15.1	10	2.5	0.0	19.4 15.1		3/1
- 46	DW-14	132+22.16	L	2 (RES.)	ASPH	90	4	5	11	4	4	70	60	14.6		2.4	14.4	11	2.4	0.6	7.8		TE CROWN
≥ 46	DW-15	132+86.51	L	2 (RES.)	ASPH		4	16	26	4	4	126	393	60.5		9.6	57.7	26	9.6	3.6	14.0		0.080 VARIES* 0.080
₹ 47 % 47	DW-16 DW-17	133+54.68 133+97.64	$\frac{R}{I}$	2 (RES.) 2 (RES.)	ASPH CONC		9	5	10 17	4	4	136 90	39 85	19.5	17.0	3.2 3.2	19.4 19.4	10 17	3.2	0.4	15.1 19.4		VARIES APPEC
	DW-18	134+41.26	R	2 (RES.)	ASPH		9	4	10	4	4	136	40	19.6	17.0	3.3	19.6	10	3.3	0.4	15.1		4:1 (MAX) 4:1 (MAX)
47	DW-19	135+02.44	R	2 (RES.)	CONC		9	0	10	4	4	136	0	7.0		2.5	15.1	10	2.5	0.0	15.1		6 3 4 5 *0.016 MAX. 6
7 47 47	DW-20 DW-21	135+31.7 135+90.23	L	2 (RES.) 2 (RES.)	ASPH ASPH		4	5	10 14	4	4	62 78	40 70	10.0 20.0		1.9 2.7	11.3 16.4	10 14	1.9 2.7	0.4	6.9 8.7		DDIVEWAY TYRICAL SECTION (ASPUALT) (RESIDENTIAL)
47	DW-21	136+12.25	R	2 (RES.)	CONC		9	0	10	4	4	136	0	10.0		2.7	15.1	10	2.7	0.0	15.1		DRIVEWAY TYPICAL SECTION (ASPHALT) (RESIDENTIAL)
± ⊕ 47	DW-23	136+65.35	L	2 (RES.)	ASPH	90	4	3	15	4	4	82	45	14.7		2.4	14.1	15	2.4	0.4	9.1		, 2' , W/2 W/2 , 2' ,
Ž 48	DW-24	138+00.46	L	2 (RES.)	ASPH		4	5	10	4	4	62	50	14.5		2.1	12.4	10	2.1	0.5	6.9		RESIDENTIAL COMMERCIAL
48 8 48	DW-25 DW-26	138+67.34 142+00.51	1 -	2 (RES.) 1 (COMM.)	ASPH CONC	-	4	5 7	11 35	4.5	4.5	66 153	55 245	14.0 63.8		2.2 7.4	13.4 44.2	11 35	2.2 7.4	0.5	7.3	44.2	
48	DW-27	142+72.00	L	2 (RES.)	ASPH	90	4	14	10	4	4	63	140	18.7		3.8	22.6	10	3.8	1.3	7.0		THE CROWN
49	DW-28	144+59.95	L	2 (RES.)	ASPH	+	4	19	12	4	4	71	218	24.9		5.4	32.1	12	5.4	2.0	7.9		0.080 VARIES* 0.080
49	DW-29 DW-30	145+15.36 145+68.07	<u>L</u>	1 (COMM.) 2 (RES.)	CONC ASPH		4	18 15	23 10	4.5	4.5	105 63	393 144	66.1 17.8		9.2 3.8	55.3 23.0	23 10	9.2 3.8	1.3	7.0	55.3	VARIES 4:1 (MAX)
γ 49	DW-30	146+08.8	L	2 (RES.)	ASPH		4	8	10	4	4	63	79	15.6		2.6	15.8	10	2.6	0.7	7.0		4:1 (MAA)
49	DW-32	147+53.59	L	2 (RES.)	ASPH	90	4	11	10	4	4	61	110	23.3		3.2	19.0	10	3.2	1.0	6.8		
50	DW-33	148+05.00	L	2 (RES.)	ASPH		4	5	16	4	4	86	90	22.0 18.4		3.3	19.6	16	3.3	0.8	9.6		DRIVEWAY TYPICAL SECTION (CONCRETE)
50 ≥ 50	DW-34 DW-35	148+53.7 149+26.46	L	2 (RES.) 2 (RES.)	ASPH CONC		4	5	16 10	4	4	86 61	80 60	18.4	16.0	3.1 2.2	18.4 13.4	16 10	3.1 2.2	0.7	9.6 13.4		DATVEWAT THICAE SECTION (CONCRETE)
50	DW-36	150+32.13	L	2 (RES.)	CONC	90	4	8	10	4	4	62	80		19.6	2.6	15.8	10	2.6		15.8		0/ WDIEC WDIEC 2/
50	DW-37	151+18.46	L	2 (RES.)	ASPH		4	5	11	4	4	66	55	15.0		2.2	13.4	11	2.2	0.5	7.3		2' VARIES VARIES 2' RESIDENTIAL COMMERCIAL
50	DW-38 DW-39	151+91.22 152+56.18	L R	2 (RES.) 2 (RES.)	ASPH CONC		6	8	10 15	4	4	62 122	78 0	17.6 10.7		2.6 2.3	15.6 13.6	10 15	2.6	0.7	6.9 13.6		NESIDENTIAL COMMENCIAL
51	DW-40	154+73.67		2 (RES.)	CONC		4	6	11	4	4	66	66	10.7	16.7	2.4	14.7	11	2.4	0.0	14.7		VARIES O" TO 6* (TYP.)
51	DW-41	154+73.77	R	2 (RES.)	CONC		6	0	10	4	4	92	0	8.0		1.7	10.2	10	1.7	0.0	10.2		
51 ≤ 51	DW-42 DW-43	155+31.12 155+34.19	L	2 (RES.) 2 (RES.)	ASPH CONC		6	8	11 13	4	4	66	87 0	21.3		2.8	17.0	11 13	2.8	0.8	7.3		0.080 VARIES* 0.080
51 51	DW-43	156+04.64	R	2 (RES.) 2 (RES.)	ASPH		6	2	10	4	4	110 92	18	10.0 8.0		2.0 2.0	12.2 12.2	10	2.0	0.0	12.2 10.2		INTEGRAL ROLLED
51	DW-45	156+90.58	R	2 (RES.)	ASPH		6	3	16	4	4	128	45	18.0		3.2	19.2	16	3.2	0.4	14.2		
51	DW-46	157+13.87	L	1 (COMM.)	CONC		4	8	24	4.5	4.5	99	192	46.7		5.4	32.3	24	5.4			32.3	6 0 4 5 5 4 2 6 PAID FOR UNDER
51 52	DW-47 DW-48	157+69.66 157+71.14	R	2 (RES.) 2 (RES.)	CONC ASPH		6	8	12 12	4	4	104 70	93	10.0 16.0	+	1.9 3.0	11.6 18.1	12 12	1.9 3.0	0.0	11.6 7.8		DRIVEWAY APRON TYPICAL SECTION
52	DW-49	158+44.83	R	2 (RES.)	CONC		6	0	14	4	4	116	0	70.0	10.7	2.1	12.9	14	2.1	0.0	12.9		LEGEND
52	DW-50	158+45.22	L	2 (RES.)	ASPH	90	4	8	22	4	4	110	176	32.4		5.3	31.8	22	5.3	1.6	12.2		(1) 452 - 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS WITH QA/QC
52	DW-51 DW-52	159+12.13 159+33.96	R R	2 (RES.) 2 (RES.)	CONC		6 5.11	0	10	4	4	91 91	0	-	8.0 6.8	1.7 1.7	10.1 10.1	10 10	1.7 1.7		10.1 10.1		② 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS WITH QA/QC
	SUBT	•	1"	2 (NEO.)	CONC	90	0.11	+ "	10	+ 4	+	91	1 0	838.4	217.2	165.4	992.3	740.5	165.4	22.2	475.8	250.2	3 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), A.P.P., PG70-22M
3003				. TO 65:			40445	····		•	•		1										④ 304 - 6" AGGREGATE BASE, AS PER PLAN
8	101	TALS CAR	KIED) TO GEN	IEKAL	. 501	MMAR	ĽΥ						10	56	166	993	741	166	23	476	251	⑤ 204 - SUBGRADE COMPACTION
Z.														•			•		•	•			6 659 - SEEDING AND MULCHING

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ATB-US-20-21.78 (SLM 23.01 - SLM 23.74)

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DETAILS

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- SLM 23.74) ATB-US-20-21.86 23.01 (SLM

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ITEM 644 - LANE ARROW (TWO-WAY LEFT TURN)

ITEM 644 - STOP LINE

(SL-X)