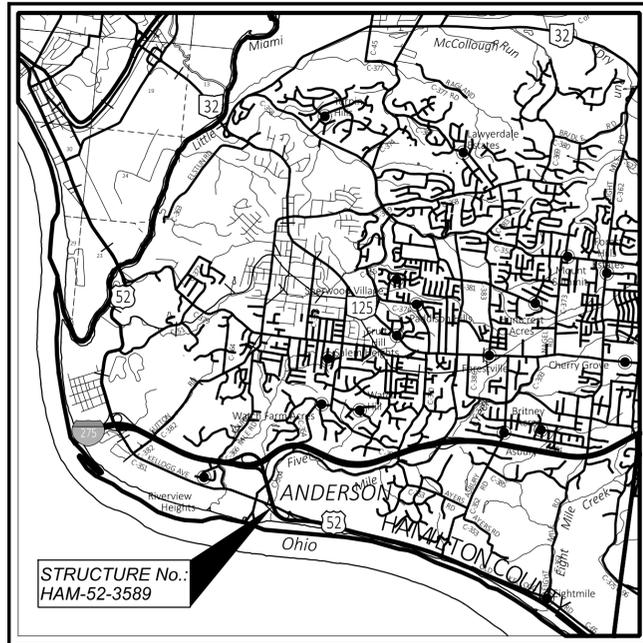


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HAM-52-35.89

ANDERSON TOWNSHIP
HAMILTON COUNTY



LOCATION MAP

LATITUDE: 39° 02' 55" LONGITUDE: -84° 23' 21"



| | |
|-------------------------|-------|
| PORTION TO BE IMPROVED | ————— |
| INTERSTATE HIGHWAY | ===== |
| FEDERAL ROUTES | ===== |
| STATE ROUTES | ===== |
| COUNTY & TOWNSHIP ROADS | ===== |
| OTHER ROADS | ----- |

DESIGN DESIGNATION

SEE SHEETS 30 & 31

DESIGN EXCEPTIONS

| DESIGN FEATURE | APPROVAL DATE | SHEET NUMBERS |
|-------------------------|---------------|---------------|
| HORIZONTAL CURVE RADIUS | 3-11-2024 | 27 |
| SUPERELEVATION RATE | 3-11-2024 | |

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

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

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 8 ENGINEERING
505 SOUTH S.R. 741 LEBANON, OHIO 45036

INDEX OF SHEETS:

| | |
|---|-------|
| TITLE SHEET | 1 |
| TYPICAL SECTIONS | 2-3 |
| GENERAL NOTES | 4 |
| MAINTENANCE OF TRAFFIC | 5-16 |
| GENERAL SUMMARY | 17 |
| ESTIMATED QUANTITIES | 18 |
| CROSS SECTIONS | 19-26 |
| SUPERELEVATION TABLES | 27 |
| TRAFFIC CONTROL | 28-29 |
| STRUCTURES OVER 20 FOOT SPAN HAM-52-3589 | 30-42 |

FEDERAL PROJECT NUMBER

E240420

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

IMPROVEMENT OF A STRUCTURE CARRYING U.S.R. 52 OVER KELLOGG AVENUE BY REPAIRING BUMP AT THE BRIDGE JOINT AND RAISING OF THE APPROACH ROADWAY PROFILE. BRIDGE REPAIR CONSISTS OF REPLACEMENT OF THE EXISTING BEARINGS, REPLACEMENT OF EXISTING EXPANSION JOINTS AND END PORTIONS OF THE REINFORCED CONCRETE DECK. PROJECT INCLUDES THE INSTALLATION OF NEW CURVE WARNING SIGNAGE

EARTH DISTURBED AREAS

| | |
|--|------------------------|
| PROJECT EARTH DISTURBED AREA: | 0.06 ACRES |
| ESTIMATED CONTRACTOR EARTH DISTURBED AREA: | 0.25 ACRES |
| NOTICE OF INTENT EARTH DISTURBED AREA: | N/A (NOI NOT REQUIRED) |

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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

Tammy K. Campbell, P.E.
District 08 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

| STANDARD CONSTRUCTION DRAWINGS | | | | SUPPLEMENTAL SPECIFICATIONS | SPECIAL PROVISIONS |
|--------------------------------|---------|----------|----------|-----------------------------|--------------------|
| BP-3.1 | 1/19/24 | TC-41.20 | 10/18/13 | 800-2023 | 1/19/24 |
| | | TC-42.20 | 10/18/13 | | |
| RM-4.2 | 4/17/20 | TC-52.10 | 10/18/13 | | |
| | | TC-52.20 | 1/15/21 | | |
| EXJ-4-87 | 1/19/24 | TC-65.10 | 1/17/14 | | |
| GSD-1-19 | 1/15/21 | TC-65.11 | 1/19/24 | | |
| PCB-91 | 7/17/20 | | | | |
| | | DM-4.3 | 1/15/16 | | |
| MT-95.40 | 7/21/23 | DM-4.4 | 1/15/16 | | |
| MT-95.41 | 7/21/23 | | | | |
| MT-98.29 | 1/17/20 | | | | |
| MT-101.60 | 4/21/23 | | | | |
| MT-101.70 | 4/21/23 | | | | |
| MT-101.90 | 7/17/20 | | | | |
| MT-101.75 | 7/21/23 | | | | |
| MT-105.10 | 1/17/20 | | | | |

ENGINEER'S SEAL

TITLE SHEET

| | |
|---------------|--------|
| DESIGN AGENCY | |
| DESIGNER | GTF |
| REVIEWER | JDO |
| PROJECT ID | 119272 |
| SHEET | 1 |
| TOTAL | 42 |

HAM US 52 35.89

MODEL: Sheet_SurvFI PAPER SIZE: 34x42 (in.) DATE: 6/7/2024 TIME: 2:06:04 PM USER: gfreeman pwc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 08 Hamilton\119272400-Engineering\Roadway\Sheets\119272_GT001.dgn

UTILITIES

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

TRAFFIC LIGHTING:
ODOT DISTRICT 8 TRAFFIC OPERATIONS DEPT.
505 S. STATE ROUTE 741
LEBANON, OH 45036
JIM JUDD 513-933-6692

DUKE ELECTRIC
139 EAST 4TH STREET, ROOM 467A
CINCINNATI, OHIO 45202
OFFICE: 513-421-9500
FAX: 513-287-1743/513-287-4189
2010 DANA AVENUE
CINCINNATI, OHIO 45207
CINCINNATI, OHIO 45207
CELL: 513-508-9609 (SHANE ERHART)

FIBER:
CINCINNATI BELL TELEPHONE (ALTA FIBER)
221 EAST 4TH STREET, BLDG. 121-900
CINCINNATI, OHIO 45201
DIRECT: (513) 397-0548 (JASON BURNS)
EMAIL: ROADPROJECTS@ALTA FIBER.COM

SEWER:
CINCINNATI METROPOLITAN SEWER DISTRICT
1600 GEST STREET
CINCINNATI, OHIO 45204
513-557-7188 (ROB FRANKLIN)

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

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.

EXISTING PLANS

THE EXISTING STRUCTURE PLANS ARE AVAILABLE ONLINE THROUGH THE FOLLOWING WEBSITE:
<https://ftp.dot.state.oh.us/pub/Contracts/Attach/HAM-119272/REFERENCE%20FILES/>

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL PERTINENT EXISTING DRAWINGS AND DETAILS RELEVANT TO THIS PROJECT.

PERMANENT PAVEMENT MARKINGS

THE CONTRACTOR SHALL REFERENCE ALL PAVEMENT MARKINGS WITHIN THE WORK LIMITS BEFORE THE REMOVAL OF CONFLICTING PAVEMENT MARKINGS NECESSARY TO IMPLEMENT THE MAINTENANCE OF TRAFFIC PHASES. THIS WILL BE NECESSARY TO ASSURE CORRECT PLACEMENT OF MARKINGS IN THEIR ORIGINAL LOCATIONS.

PAYMENT FOR THIS OPERATION SHALL BE INCLUDED WITH EACH RESPECTIVE PAVEMENT MARKING ITEM.

ROUNDING

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

SEEDING AND MULCHING

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

659, TOPSOIL 167 CU. YD.
659, SEEDING AND MULCHING 1500 SQ. YD.
659, REPAIR SEEDING AND MULCHING 75 SQ. YD.
659, COMMERCIAL FERTILIZER 0.20 TON
659, LIME 0.31 ACRES
659, WATER 8.3 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.

ITEM 253 - PAVEMENT REPAIR

AN ESTIMATED QUANTITY OF 10 CUBIC YARDS OF ITEM 253 PAVEMENT REPAIR HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER IN THE SHOULDER PAVEMENT ADJACENT TO BACKWALL REMOVALS IN THE SHOULDER. THIS OPERATION SHALL BE PERFORMED BEFORE THE RESURFACING OF THE ROADWAY.

ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED. ALL TESTING, INSPECTION AND QUALITY CONTROL FOR CONCRETE, NOT INCLUDED UNDER QC/QA PAY ITEMS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY IN ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE TESTING DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT, SUBMIT TO THE ENGINEER FOR APPROVAL, THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.

TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN CMS SPECIFICATIONS 455 RESPECTIVELY.

THROUGH THE CONTRACTOR, THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT CONSTRUCTION INSPECTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIAN(S), ALL EQUIPMENT, AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.

THE TECHNICIAN SHALL BE ACI LEVEL 1 CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT VERSED IN THE REQUIRED TESTING PROCEDURE.

THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TEST AND SHALL SUBMIT FOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN. TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS, TE-45'S, INSPECTORS DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING-RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE-TESTING WORK.

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR.

ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION (CONTINUED)

THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER. ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:
UPON APPROVAL OF CONSULTANT 20%
PROGRESSIVE EQUIVALENT PAYMENTS 50%
UPON SUBMISSION OF FINAL REPORT 30%.

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

DRINKING WATER PROTECTION AREA

THIS PROJECT IS LOCATED IN A DRINKING WATER PROTECTION AREA. IN ORDER TO MINIMIZE THE POTENTIAL FOR CONTAMINATION, THE CONTRACTOR SHALL UTILIZE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS SHALL NOT BE STORED NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. A SPILL KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE GREATER CINCINNATI WATER WORKS (513-591-7970). IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), THE CONTRACTOR SHALL CONTACT THE ANDERSON TOWNSHIP FIRE DEPARTMENT (513-688-8400) OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

DESIGN AGENCY



DESIGNER
GTF

REVIEWER

JDO MM-DD-YY

PROJECT ID

119272

SHEET TOTAL

4 42

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 COMPLETED PAVEMENT.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

| | |
|---------------------------|----------------------|
| NEW YEAR'S (OBSERVED) | ELECTION DAY ((NOV |
| MEMORIAL DAY | THANKSGIVING |
| FOURTH OF JULY (OBSERVED) | CHRISTMAS (OBSERVED) |
| LABOR DAY | |

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY TIME ALL LANES OR SPECIAL EVENT MUST BE OPEN TO TRAFFIC

| | | | |
|-----------|----------------------|---------------------------|-----------|
| SUNDAY | 12:00N | FRIDAY THROUGH 6:00 AM | MONDAY |
| MONDAY | 12:00N | FRIDAY THROUGH 6:00 AM | TUESDAY |
| TUESDAY | 12:00N | MONDAY THROUGH 6:00 AM | WEDNESDAY |
| TUESDAY | (GEN./REG. ELECTION) | | |
| | 5:00 AM | TUESDAY THROUGH 12:00 AM | WEDNESDAY |
| WEDNESDAY | 12:00N | TUESDAY THROUGH 6:00 AM | THURSDAY |
| THURSDAY | 12:00N | WEDNESDAY THROUGH 6:00 AM | FRIDAY |
| THURSDAY | (THANKSGIVING ONLY) | | |
| | 6:00 AM | WEDNESDAY THROUGH 6:00 AM | MONDAY |
| FRIDAY | 12:00N | THURSDAY THROUGH 6:00 AM | MONDAY |
| SATURDAY | 12:00N | FRIDAY THROUGH 6:00 AM | MONDAY |

LANE/RAMP CLOSURES ARE NOT PERMITTED 2 HOURS BEFORE TO 2 HOURS AFTER ALL EVENTS AT RIVERBEND MUSIC CENTER; BALLOON GLOW, FIRE UP THE NIGHT, AND CHRISTMAS NIGHTS OF LIGHTS AT CONEY ISLAND; AND, KENTUCKY DERBY VIEWING AT BELTERRA PARK.

RAMP CLOSURES FOR INSTALLATION OF PHASE 1 AND PHASE 2 MAINTENANCE OF TRAFFIC ITEMS AND RAMP CLOSURES FOR PRE-PHASE 1A CONSTRUCTION OF PAVEMENT WEDGE ARE RESTRICTED FROM 6AM TO 9PM. THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$XXX FOR EACH MINUTE THE RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE FLEXIBLE WINDOW CONTRACT (PN 129).

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.

TRAFFIC SHALL BE MAINTAINED AT ALL INTERSECTIONS AND DRIVES AT ALL TIMES AND SHALL BE CONTROLLED WITH FLAGGERS AND TRAFFIC CONTRAOL DEVICES AS REQUIRED AND SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.

WINDOW CONTRACT TABLE

USE THE FOLLOWING TABLE AS REFERRED TO IN THE PROPOSAL:

| DESCRIPTION OR LOCATION OF CRITICAL WORK | CALENDER DAYS TO COMPLETE | DISINCENTIVE \$ PER DAY | WORK WINDOW | |
|--|---------------------------|-------------------------|-------------------------|-----------|
| | | | START | END |
| COMPLETE ALL PRE-PHASE 1A WORK | 30 | PER C&MS TABLE 108.07-1 | CONTRACT EXECUTION DATE | 8/31/2024 |

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

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. AT 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 1 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.

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.

SEQUENCE OF CONSTRUCTION

PRE-PHASE 1A

PLANE APPROACH PAVEMENT AND TRANSITION TO THE EXISTING BRIDGE DECK ELEVATION PER BP-3.1. PROVIDE A BUTT JOINT AS PER BP-3.1. **INSTALL PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B.**

PRE-PHASE 1B

REMOVE AND REPLACE ALL EXISTING FORWARD AND REAR ABUTMENT BEARINGS.

PHASE 1

PLACE ALL TRAFFIC CONTROL ITEMS FOR MAINTAINING TRAFFIC AS SHOWN IN THE PLANS. PERFORM ALL STRUCTURE REMOVALS & PAVEMENT PLANING IN THE OUTSIDE LANE AND SHOULDER OF EASTBOUND US-52 AND WESTBOUND US-52. CONSTRUCT BACKWALL, INSTALL EXPANSION JOINTS, & RECONSTRUCT DECK ENDS IN THE OUTSIDE LANE AND SHOULDER OF EASTBOUND US-52 AND WESTBOUND US-52. PLACE ASPHALT SURFACE COURSE TO THE DIMENSIONS AND ELEVATIONS SHOWN IN THE CROSS SECTIONS. **ALL RAMPS SHALL REMAIN OPEN.**

PHASE 2

PLACE ALL TRAFFIC CONTROL ITEMS FOR MAINTAINING TRAFFIC AS SHOWN IN THE PLANS. PERFORM ALL STRUCTURE REMOVALS & PAVEMENT PLANING IN THE INSIDE LANE AND SHOULDER OF EASTBOUND US-52 AND WESTBOUND US-52. CONSTRUCT BACKWALL, INSTALL EXPANSION JOINTS, & RECONSTRUCT DECK ENDS IN THE INSIDE LANE AND SHOULDER OF EASTBOUND US-52 AND WESTBOUND US-52. PLACE ASPHALT SURFACE COURSE TO THE DIMENSIONS AND ELEVATIONS SHOWN IN THE CROSS SECTIONS. **ALL RAMPS SHALL REMAIN OPEN.**

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.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR 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.

PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN

THE TEMPORARY PAVEMENT WILL REMAIN IN PLACE. THEREFORE, 6" OF AGGREGATE SHALL BE PLACED AND SHALL NOT BE SUBSTITUTED WITH ASPHALT.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

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

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

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

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

DESIGN AGENCY



DESIGNER

GTF

REVIEWER

SK MM-DD-YY

PROJECT ID

119272

SHEET TOTAL

5 42

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 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.

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

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

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

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

(THE PCMS 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 PROGRAMMED 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 C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (CONTINUED)

WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN _4_ SIGN MONTH ASSUMING _2_ PCMS SIGN(S) FOR _2_ MONTH(S)

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 WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE LISTED CONTACTS. 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.

| NOTIFICATION TIME TABLE | | |
|---|------------------------|--|
| ITEM | DURATION OF CLOSURE | NOTICE DUE TO LISTED CONTACTS |
| RAMP & ROAD CLOSURES | >= 2 WEEKS | 21 CALENDAR DAYS PRIOR TO CLOSURE |
| | > 12 HOURS & < 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | < 12 HOURS | 4 BUSINESS DAYS PRIOR TO CLOSURE |
| LANE CLOSURES & RESTRICTIONS | >= 2 WEEKS | 14 CALENDAR DAYS PRIOR TO CLOSURE |
| | < 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.

CONTACT THE FOLLOWING:
 -DISTRICT PUBLIC INFORMATION OFFICER BY EMAIL AT DOT.D08.PIO@DOT.OHIO.GOV
 -DISTRICT PERMIT SECTION BY EMAIL AT D08.PERMITS@DOT.OHIO.GOV
 -CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY EMAIL AT HAULING.PERMITS@DOT.OHIO.GOV
 -STEVE SIEVERS, ANDERSON TOWNSHIP BY EMAIL AT SSIEVERS@ANDERSONTOWNSHIP.OH.GOV

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 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET. OBJECT 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 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 REFLECTORS.

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, 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:

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 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).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND, AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS) "WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

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

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
 - THE ACTIVE WORK AREA Laterally CLOSEst TO THE OPEN TRAVELED LANE; OR
 - OTHER LOCATION AS APPROVED BY THE ENGINEER.
- THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

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 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 THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

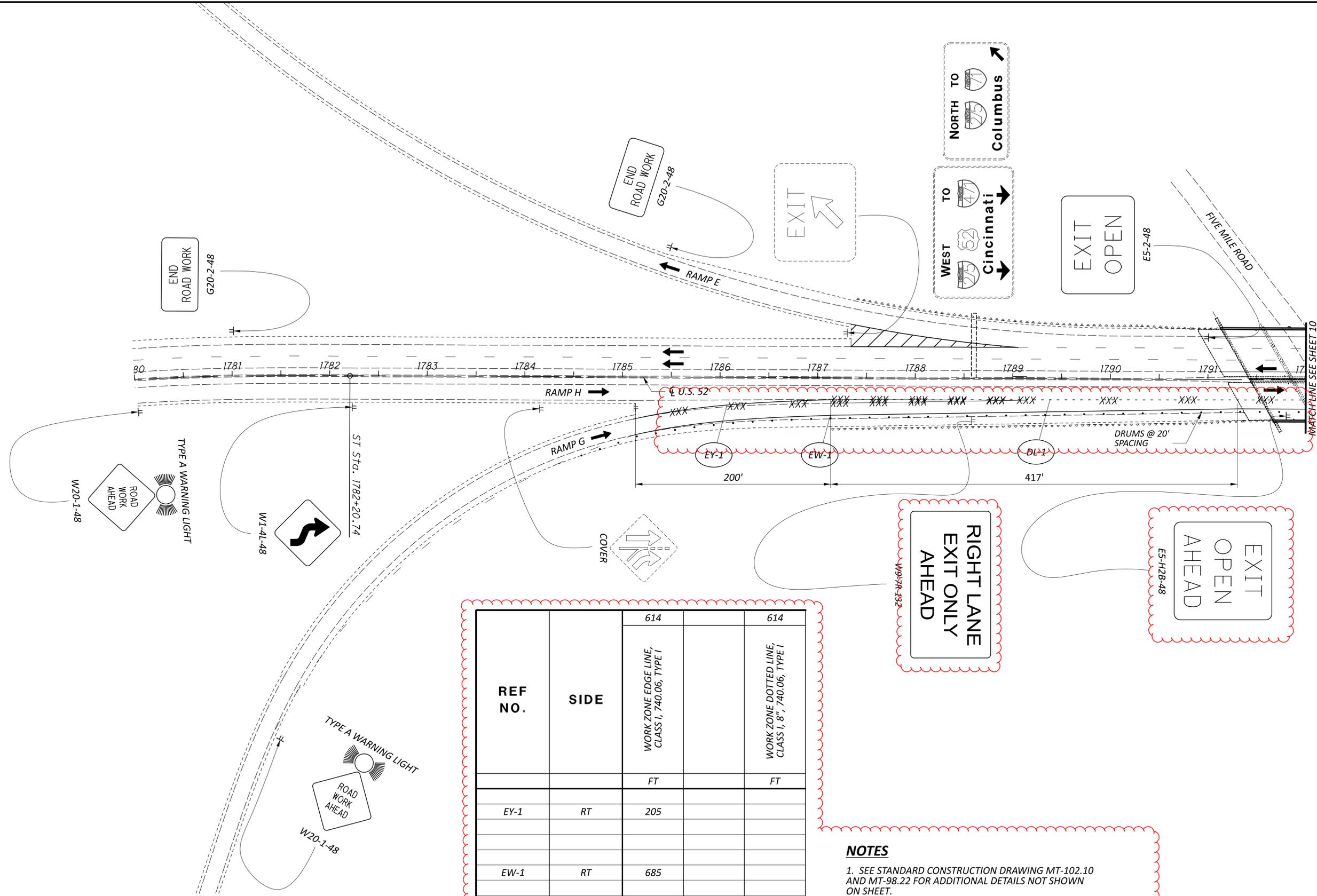
LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 200 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.





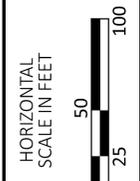
| REF NO. | SIDE | 614 | |
|-------------------------------------|------|--|--|
| | | WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I | WORK ZONE DOTTED LINE, CLASS I, 8", 740.06, TYPE I |
| | | FT | FT |
| EY-1 | RT | 205 | |
| EW-1 | RT | 685 | |
| DL-1 | RT | | 490 |
| TOTALS CARRIED TO SUBSUMMARY | | 890 | 490 |

NOTES

- SEE STANDARD CONSTRUCTION DRAWING MT-102.10 AND MT-98.22 FOR ADDITIONAL DETAILS NOT SHOWN ON SHEET.
- FOR MAINTENANCE OF TRAFFIC SECTIONS, SEE SHEET 8.

LEGEND

- WORK AREA
- XXX COVER CONFLICTING PAVEMENT MARKINGS PER 614-11G.b.



MAINTENANCE OF TRAFFIC PLAN - PHASE 1
 U.S. 52 OVER KELLOGG AVE.

DESIGN AGENCY



DESIGNER
 GTF

REVIEWER
 SK 4-09-24

PROJECT ID
 119272

SHEET TOTAL
 9 42

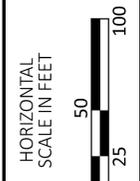
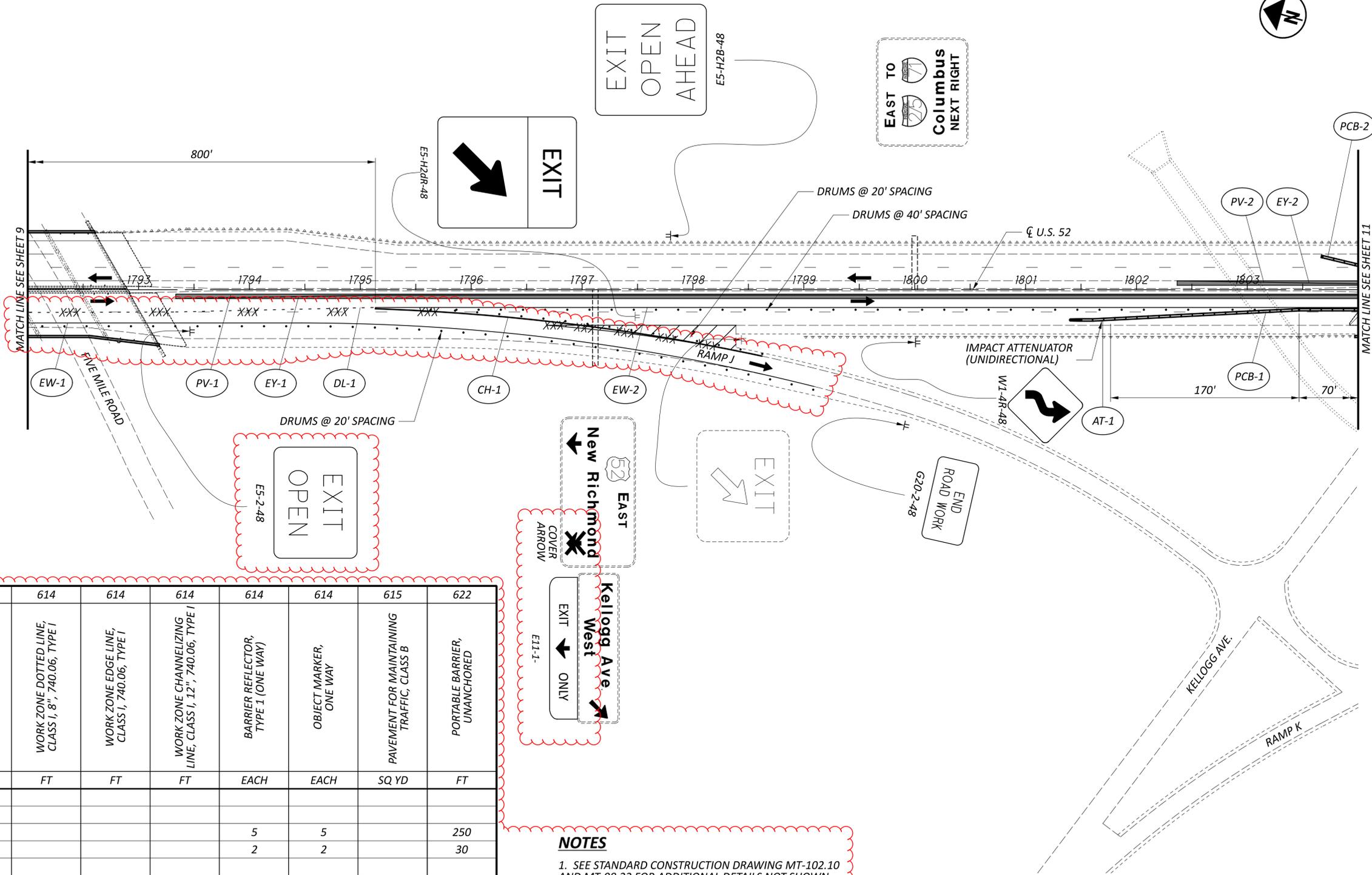
| REF NO. | SIDE | 614 | 614 | 614 | 614 | 614 | 614 | 615 | 622 |
|-------------------------------------|------|---|--|--|---|-------------------------------------|------------------------|---|------------------------------|
| | | WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) FOR 24" WIDE HAZARDS | WORK ZONE DOTTED LINE, CLASS I, 8", 740.06, TYPE I | WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I | WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I | BARRIER REFLECTOR, TYPE 1 (ONE WAY) | OBJECT MARKER, ONE WAY | PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B | PORTABLE BARRIER, UNANCHORED |
| | | EACH | FT | FT | FT | EACH | EACH | SQ YD | FT |
| AT-1 | RT | 1 | | | | | | | |
| PCB-1 | RT | | | | | 5 | 5 | | 250 |
| PCB-2 | LT | | | | | 2 | 2 | | 30 |
| EW-1 | RT | | | 715 | | | | | |
| EW-2 | RT | | | 890 | | | | | |
| EY-1 | RT | | | 1065 | | 25 | 25 | | |
| EY-2 | LT | | | 165 | | | | | |
| DL-1 | RT | | 315 | | | | | | |
| CH-1 | RT | | | | 355 | | | | |
| PV-1 | RT | | | | | | | 475 | |
| PV-2 | LT | | | | | | | 75 | |
| TOTALS CARRIED TO SUBSUMMARY | | 1 | 315 | 2835 | 355 | 32 | 32 | 550 | 280 |

NOTES

- SEE STANDARD CONSTRUCTION DRAWING MT-102.10 AND MT-98.22 FOR ADDITIONAL DETAILS NOT SHOWN ON SHEET.
- FOR MAINTENANCE OF TRAFFIC SECTIONS, SEE SHEETS 8.
- THE RIGHT DOWN ARROW SHALL BE COVERED WITH A LANE CLOSED SIGN, OVERLAY ON THE EASTBOUND US-52 SIGN (US-52 EAST TO NEW RICHMOND).

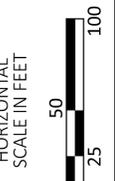
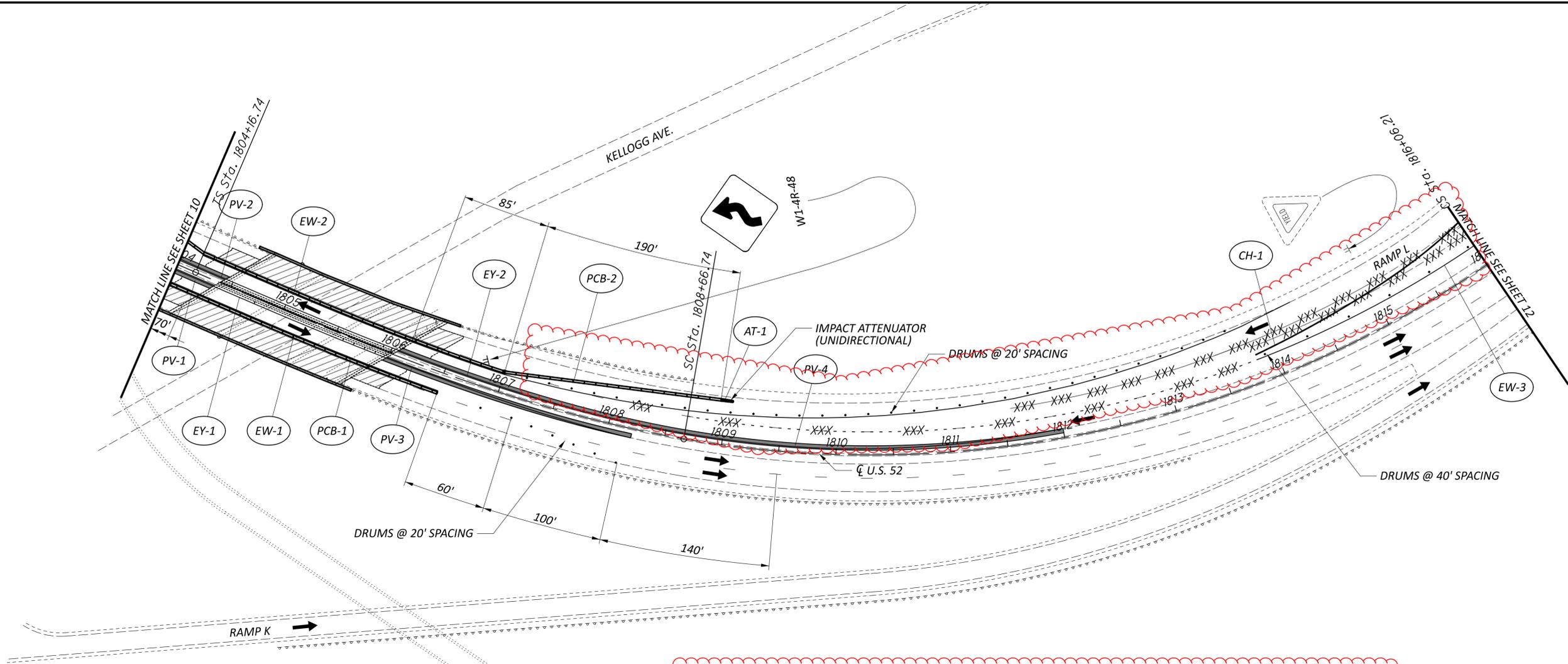
LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, TYPE B
- COVER CONFLICTING PAVEMENT MARKINGS PER 614-11G.b.



MAINTENANCE OF TRAFFIC PLAN - PHASE 1
U.S. 52 OVER KELLOGG ROAD

| | |
|---------------|---------|
| DESIGN AGENCY | |
| DESIGNER | GTF |
| REVIEWER | SK |
| PROJECT ID | 4-09-24 |
| TOTAL SHEETS | 119272 |
| SHEET | 10 |
| TOTAL | 42 |



MAINTENANCE OF TRAFFIC PLAN - PHASE 1
 U.S. 52 OVER KELLOGG AVE.

| REF NO. | SIDE | 614 | 614 | 614 | 614 | 615 | 622 |
|-------------------------------------|------|---|--|---|-------------------------------------|---|------------------------------|
| | | WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) FOR 24" WIDE HAZARDS | WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I | WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I | BARRIER REFLECTOR, TYPE I (ONE WAY) | PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B | PORTABLE BARRIER, UNANCHORED |
| | | EACH | FT | | EACH | SQ YD | FT |
| AT-1 | LT | 1 | | | | | |
| PCB-1 | RT | | | | 6 | | 250 |
| PCB-2 | LT | | | | 10 | | 470 |
| EY-1 | RT | | 425 | | | | |
| EY-2 | LT | | 800 | | | | |
| EW-1 | RT | | 250 | | | | |
| EW-2 | LT | | 940 | | | | |
| EW-3 | LT | | 215 | | | | |
| CH-1 | LT | | | 215 | | | |
| PV-1 | | | | | | 20 | |
| PV-2 | | | | | | 15 | |
| PV-3 | | | | | | 95 | |
| PV-4 | | | | | | 260 | |
| TOTALS CARRIED TO SUBSUMMARY | | 1 | 2630 | 215 | 16 | 390 | 720 |

NOTES

- SEE STANDARD CONSTRUCTION DRAWING MT-102.10 FOR ADDITIONAL DETAILS NOT SHOWN ON SHEET.
- FOR MAINTENANCE OF TRAFFIC SECTIONS, SEE SHEET 8.

LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, TYPE B
- XXX COVER CONFLICTING PAVEMENT MARKINGS PER 614-11G.b.

DESIGN AGENCY

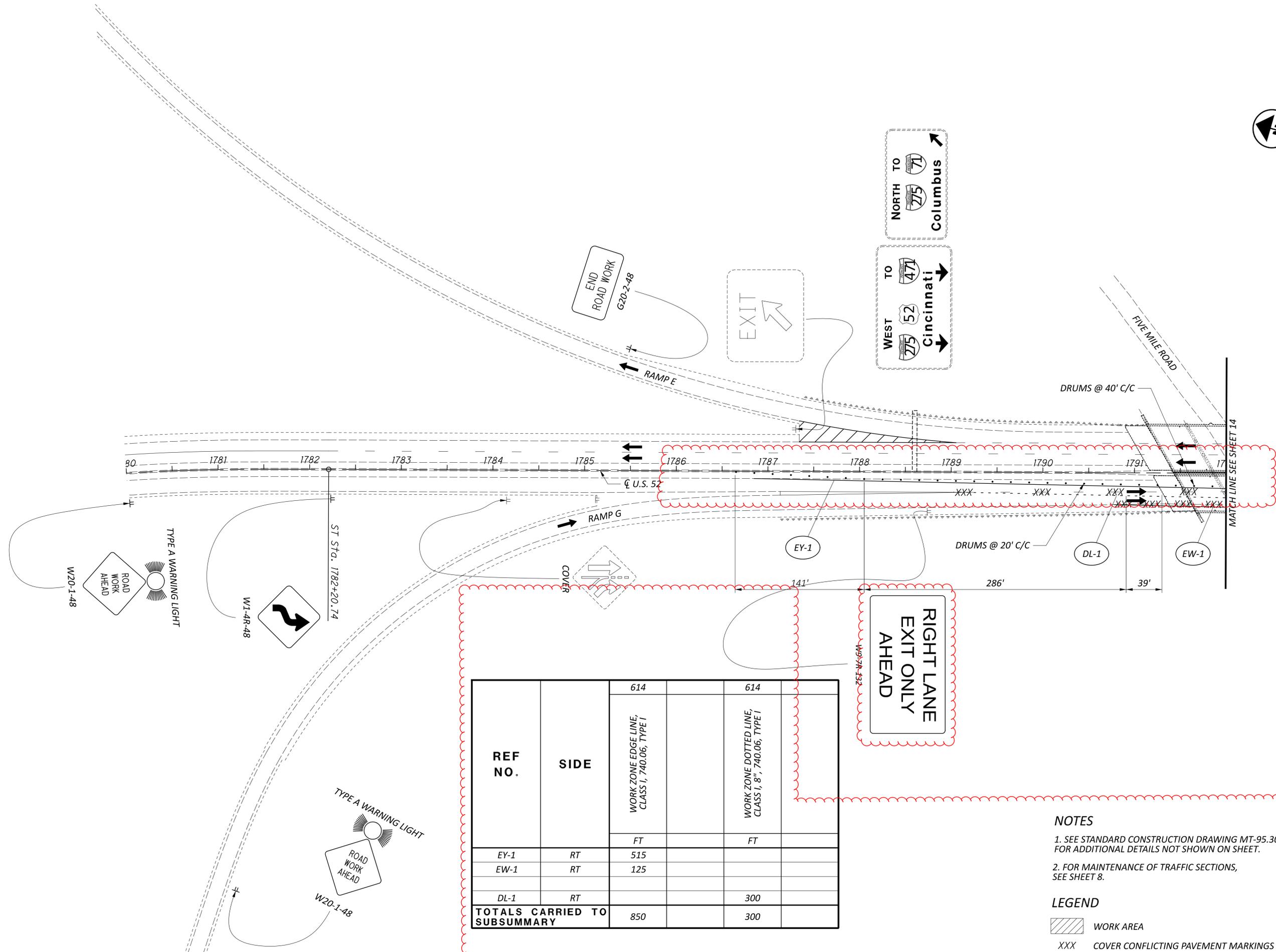


DESIGNER
GTF

REVIEWER
SK 4-09-24

PROJECT ID
119272

SHEET TOTAL
11 42

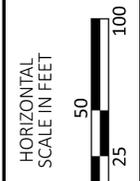


| REF NO. | SIDE | 614 | |
|-------------------------------------|------|--|--|
| | | WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I | WORK ZONE DOTTED LINE, CLASS I, 8", 740.06, TYPE I |
| EY-1 | RT | 515 | |
| EW-1 | RT | 125 | |
| DL-1 | RT | | 300 |
| TOTALS CARRIED TO SUBSUMMARY | | 850 | 300 |

RIGHT LANE EXIT ONLY AHEAD

- NOTES**
- SEE STANDARD CONSTRUCTION DRAWING MT-95.30 FOR ADDITIONAL DETAILS NOT SHOWN ON SHEET.
 - FOR MAINTENANCE OF TRAFFIC SECTIONS, SEE SHEET 8.

- LEGEND**
- WORK AREA
 - COVER CONFLICTING PAVEMENT MARKINGS PER 614-116.b.



**MAINTENANCE OF TRAFFIC PLAN - PHASE 2
 U.S. 52 OVER KELLOGG AVE.**

DESIGN AGENCY

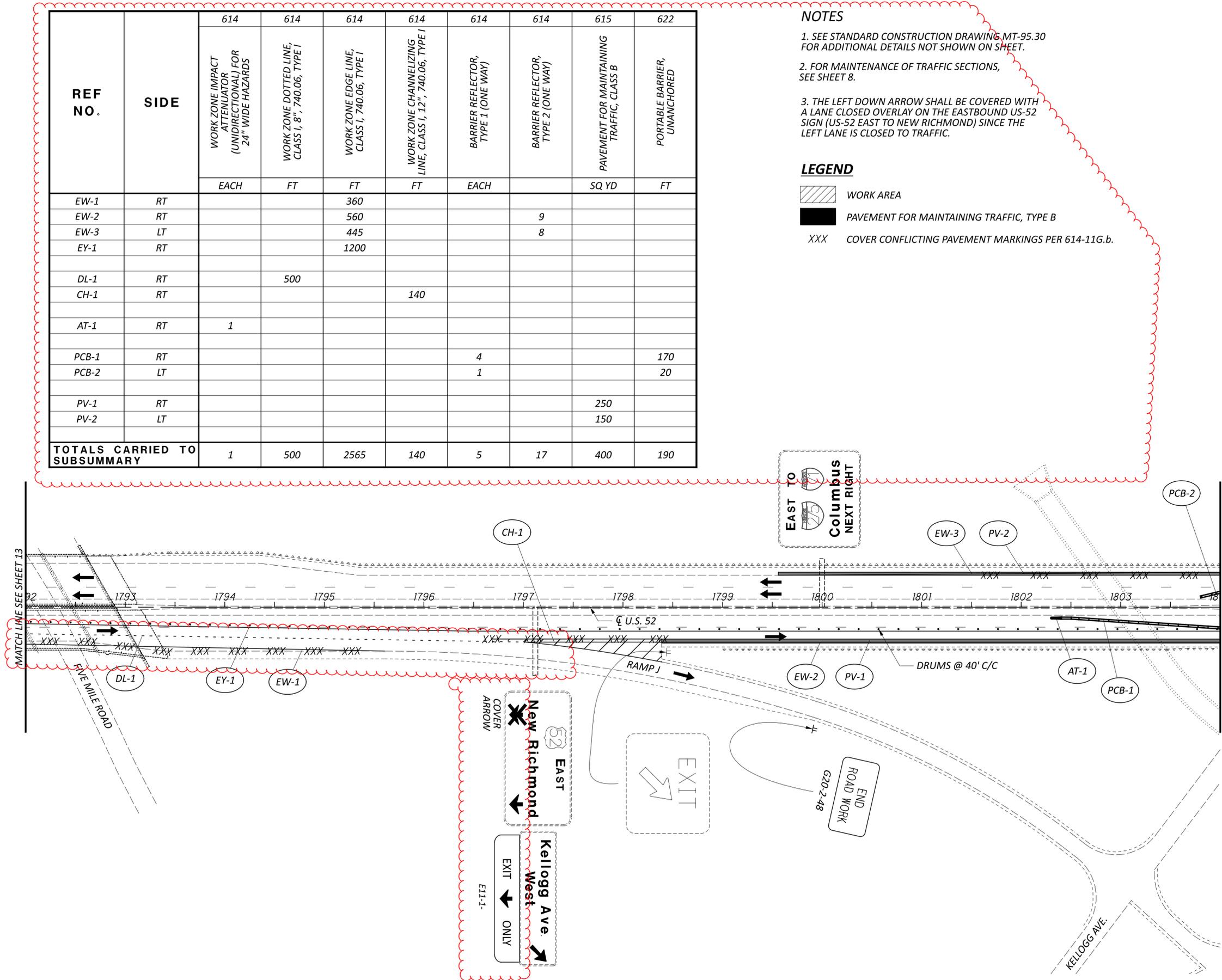
DESIGNER: GTF

REVIEWER: SK MM-DD-YY

PROJECT ID: 119272

SHEET: 13 TOTAL: 42





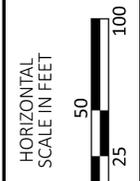
| REF NO. | SIDE | 614 | 614 | 614 | 614 | 614 | 614 | 615 | 622 |
|-------------------------------------|------|---|--|--|---|-------------------------------------|-------------------------------------|---|------------------------------|
| | | WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) FOR 24" WIDE HAZARDS | WORK ZONE DOTTED LINE, CLASS 1, 8", 740.06, TYPE I | WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE I | WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 740.06, TYPE I | BARRIER REFLECTOR, TYPE 1 (ONE WAY) | BARRIER REFLECTOR, TYPE 2 (ONE WAY) | PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B | PORTABLE BARRIER, UNANCHORED |
| | | EACH | FT | FT | FT | EACH | | SQ YD | FT |
| EW-1 | RT | | | 360 | | | | | |
| EW-2 | RT | | | 560 | | | 9 | | |
| EW-3 | LT | | | 445 | | | 8 | | |
| EY-1 | RT | | | 1200 | | | | | |
| DL-1 | RT | | 500 | | | | | | |
| CH-1 | RT | | | | 140 | | | | |
| AT-1 | RT | 1 | | | | | | | |
| PCB-1 | RT | | | | | 4 | | | 170 |
| PCB-2 | LT | | | | | 1 | | | 20 |
| PV-1 | RT | | | | | | | 250 | |
| PV-2 | LT | | | | | | | 150 | |
| TOTALS CARRIED TO SUBSUMMARY | | 1 | 500 | 2565 | 140 | 5 | 17 | 400 | 190 |

NOTES

- SEE STANDARD CONSTRUCTION DRAWING MT-95.30 FOR ADDITIONAL DETAILS NOT SHOWN ON SHEET.
- FOR MAINTENANCE OF TRAFFIC SECTIONS, SEE SHEET 8.
- THE LEFT DOWN ARROW SHALL BE COVERED WITH A LANE CLOSED OVERLAY ON THE EASTBOUND US-52 SIGN (US-52 EAST TO NEW RICHMOND) SINCE THE LEFT LANE IS CLOSED TO TRAFFIC.

LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, TYPE B
- XXX COVER CONFLICTING PAVEMENT MARKINGS PER 614-11G.b.



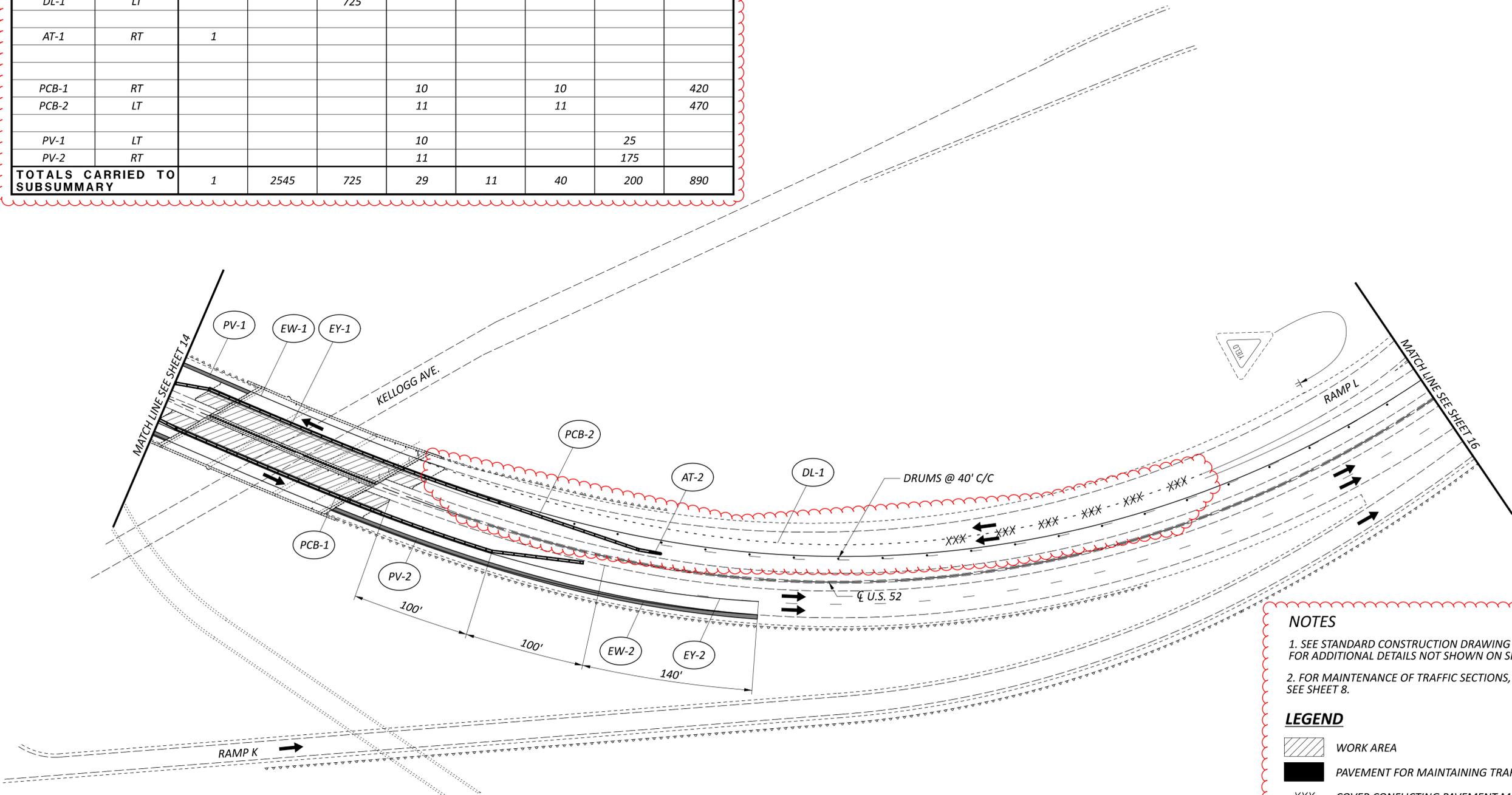
**MAINTENANCE OF TRAFFIC PLAN - PHASE 2
 U.S. 52 OVER KELLOGG AVE.**

| | |
|---------------|---------|
| DESIGN AGENCY | |
| DESIGNER | GTF |
| REVIEWER | SK |
| PROJECT ID | 4-09-24 |
| SHEET | 119272 |
| TOTAL | 14 |
| | 42 |

| REF NO. | SIDE | 614 | 614 | 614 | 614 | 614 | 614 | 615 | 622 |
|-------------------------------------|------|---|--|--|-------------------------------------|-------------------------------------|-----------------------|---|------------------------------|
| | | WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) FOR 24" WIDE HAZARDS | WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE I | WORK ZONE DOTTED LINE, CLASS 1, 8", 740.06, TYPE I | BARRIER REFLECTOR, TYPE 1 (ONE WAY) | BARRIER REFLECTOR, TYPE 2 (ONE WAY) | OBJECT MARKER ONE-WAY | PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B | PORTABLE BARRIER, UNANCHORED |
| | | EACH | FT | | EACH | EACH | EACH | SQ YD | FT |
| EW-1 | LT | | 250 | | 4 | 2 | 6 | | |
| EW-2 | RT | | 555 | | 4 | 9 | 13 | | |
| EY-1 | LT | | 1170 | | | | | | |
| EY-2 | RT | | 570 | | | | | | |
| DL-1 | LT | | | 725 | | | | | |
| AT-1 | RT | 1 | | | | | | | |
| PCB-1 | RT | | | | 10 | | 10 | | 420 |
| PCB-2 | LT | | | | 11 | | 11 | | 470 |
| PV-1 | LT | | | | 10 | | | 25 | |
| PV-2 | RT | | | | 11 | | | 175 | |
| TOTALS CARRIED TO SUBSUMMARY | | 1 | 2545 | 725 | 29 | 11 | 40 | 200 | 890 |



MAINTENANCE OF TRAFFIC PLAN - PHASE 2
 U.S. 52 OVER KELLOGG AVE.



NOTES

- SEE STANDARD CONSTRUCTION DRAWING MT-95.30 FOR ADDITIONAL DETAILS NOT SHOWN ON SHEET.
- FOR MAINTENANCE OF TRAFFIC SECTIONS, SEE SHEET 8.

LEGEND

- WORK AREA
- PAVEMENT FOR MAINTAINING TRAFFIC, TYPE B
- XXX COVER CONFLICTING PAVEMENT MARKINGS PER 614-11G.b.

DESIGN AGENCY



| | |
|------------|---------|
| DESIGNER | GTF |
| REVIEWER | SK |
| PROJECT ID | 4-09-22 |
| SHEET | 119272 |
| TOTAL | 15 |
| | 42 |

| PAVEMENT CALCULATIONS | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------------------|-----------------------|---------------|---------------------------|---|-------------------------|---|-----------------|-----------------|--|------|--|---|-----------------|---------------------------------------|------|-------|---|-------|
| ROUTE | STATION | | LENGTH FT | PAVEMENT AREA SQ YD | PAVEMENT AREA (CADD GENERATED AREA) Surface SQ FT | PAVEMENT WIDTH FT | RESHAPING UNDER GUARDRAIL MILE | 209 | | 254 | | TACK COAT, 702.13 @ 0.08 GAL/SQ YD GAL | 442 | | INLET ADJUSTED TO GRADE EACH | 611 | NOTES | | |
| | FROM | TO | | | | | | DEPTH INCHES | SQ YD | ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (448) THICK- NESS CU YD | | | ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A, (448) (VARIABLE THICK.) AVE. THICK- NESS CU YD | | | | | | |
| | | | | | | | | | | | | | INCHES | CU YD | | | | INCHES | CU YD |
| SEASON 1 | | | | | | | | | | | | | | | | | | | |
| WB HAM SR 52 | 1804+31.82 | 1804+56.72 | 25 | 66 | 598 | 24' | | | 2.00 | 66 | | 5.3 | | | | | | TRANSITION & BUTT JOINT PER BP-3.1 | |
| WB HAM SR 52 | 1806+18.88 | 1806+45.91 | 27 | 72 | 649 | 24' | | | 2.00 | 72 | | 5.8 | | | | | | TRANSITION & BUTT JOINT PER BP-3.1 | |
| EB HAM SR 52 | 1804+01.39 | 1804+26.39 | 25 | 67 | 600 | 24' | | | 2.00 | 67 | | 5.3 | | | | | | TRANSITION & BUTT JOINT PER BP-3.1 | |
| EB HAM SR 52 | 1805+87.59 | 1806+12.83 | 25 | 67 | 606 | 24' | | | 2.00 | 67 | | 5.4 | | | | | | TRANSITION & BUTT JOINT PER BP-3.1 | |
| SEASON 2 | | | | | | | | | | | | | | | | | | | |
| WB HAM SR 52 | 1803+60.00 | 1804+31.70 | 72 | 303 | 2725 | 38' | 0.01 | | 2.00 | 303 | | 48.4 | | 2.00 | 17 | 0.75 | 6.3 | WEDGE COURSE TAPERS TO 0" AT BEGINNING 1.50" MAX. THICKNESS | |
| WB HAM SR 52 | 1804+31.70 | 1804+56.72 | 25 | 67 | 600 | 24' | 0.005 | | 2.00 | 67 | | 10.7 | | 2.00 | 4 | 1.00 | 1.9 | REAR APPROACH SLAB | |
| WB HAM SR 52 | 1806+18.88 | 1806+43.64 | 25 | 66 | 594 | 24' | 0.005 | | 2.00 | 66 | | 10.6 | | 2.00 | 4 | 1.00 | 1.8 | FORWARD APPROACH SLAB | |
| WB HAM SR 52 | 1806+18.88 | 1806+43.64 | 25 | 36 | 322 | 8' (LT) 5' (RT) | 0.005 | | 2.00 | 36 | | 5.7 | | 2.00 | 2 | 1.00 | 1.0 | | |
| WB HAM SR 52 | 1806+43.64 | 1806+75.00 | 31 | 153 | 1380 | 44' | | | | | | 12.3 | | | | 0.50 | 2.1 | WEDGE COURSE TAPERS TO 0" AT BEGINNING AND END 1.25" MAX. THICKNESS | |
| WB HAM SR 52 | 1806+43.64 | 1807+12.50 | 69 | 337 | 3030 | 44' | 0.01 | | 2.00 | 337 | | 26.9 | | 2.00 | 19 | | | | |
| WB HAM SR 52 | 1807+12.50 | 1810+51.39 | 339 | 1431 | 12878 | 38' | | | 2.00 | 1431 | | 114.5 | | 2.00 | 79 | | | | |
| EB HAM SR 52 | 1803+26.59 | 1804+01.39 | 75 | 316 | 2842 | 38' | 0.01 | | 2.00 | 316 | | 50.5 | | 2.00 | 18 | 1.25 | 11.0 | WEDGE COURSE TAPERS TO 0" AT BEGINNING 3.00" MAX. THICKNESS | |
| EB HAM SR 52 | 1804+01.39 | 1804+26.39 | 25 | 36 | 325 | 8' (LT) 5' (RT) | 0.005 | | 2.00 | 36 | | 5.8 | | 2.00 | 2 | 2.25 | 2.3 | | |
| EB HAM SR 52 | 1804+01.39 | 1804+26.39 | 25 | 67 | 600 | 24' | 0.005 | | 2.00 | 67 | | 10.7 | | 2.00 | 4 | 2.25 | 4.2 | REAR APPROACH SLAB | |
| EB HAM SR 52 | 1805+87.59 | 1806+12.83 | 25 | 67 | 606 | 24' | 0.005 | | 2.00 | 67 | | 10.8 | | 2.00 | 4 | 2.00 | 3.7 | FORWARD APPROACH SLAB | |
| EB HAM SR 52 | 1805+87.59 | 1806+12.83 | 25 | 36 | 328 | 8' (LT) 5' (RT) | 0.005 | | 2.00 | 36 | | 5.8 | | 2.00 | 2 | 2.00 | 2.0 | | |
| EB HAM SR 52 | 1806+12.83 | 1806+75.00 | 62 | 262 | 2362 | 38' | | | | | | 21.0 | | | | 2.00 | 14.6 | WEDGE COURSE TAPERS TO 0" AT END 3.00" MAX. THICKNESS | |
| EB HAM SR 52 | 1806+12.83 | 1807+12.50 | 100 | 421 | 3787 | 38' | 0.02 | | 2.00 | 421 | | 33.7 | | 2.00 | 23 | | | | |
| EB HAM SR 52 | 1807+12.50 | 1810+51.39 | 339 | 1431 | 12878 | 38' | | | 2.00 | 1431 | | 114.5 | | 2.00 | 79 | | | | |
| TOTALS CARRIED TO GENERAL SUMMARY | | | | | | | 0.09 | | | | 4886 | | 504 | | | 257 | | 61 | |

ESTIMATED QUANTITIES

| PAVEMENT MARKING CALCULATIONS | | | | | | | | | |
|-----------------------------------|-----------------------|-----------------------|-----------------|-----------------|-----------------|-----------------|--|--|--|
| COUNTY-ROUTE | STATION | | TOTAL MILE | 644 | | REMARKS | | | |
| | FROM | TO | | LANE LINE 6" | | EDGE LINE 6" | | | |
| | | | | DASHED MILE | WHITE MILE | YELLOW MILE | | | |
| WB HAM SR 52 | 1803+60.00 | 1804+56.72 | 0.02 | 0.02 | 0.02 | 0.02 | | | |
| WB HAM SR 52 | 1804+56.72 | 1806+18.88 | | | | | BRIDGE No.: HAM-52-3589 (EXISTING PAVEMENT MARKINGS TO REMAIN) | | |
| WB HAM SR 52 | 1806+18.88 | 1807+12.50 | 0.02 | 0.02 | 0.02 | 0.02 | | | |
| WB HAM SR 52 | 1807+12.50 | 1810+51.39 | 0.07 | 0.07 | 0.07 | 0.07 | | | |
| EB HAM SR 52 | 1803+26.59 | 1804+26.39 | 0.02 | 0.02 | 0.02 | 0.02 | | | |
| EB HAM SR 52 | 1804+26.39 | 1805+87.59 | | | | | BRIDGE No.: HAM-52-3589 (EXISTING PAVEMENT MARKINGS TO REMAIN) | | |
| EB HAM SR 52 | 1805+87.59 | 1807+12.50 | 0.02 | 0.02 | 0.02 | 0.02 | | | |
| EB HAM SR 52 | 1807+12.50 | 1810+51.39 | 0.07 | 0.07 | 0.07 | 0.07 | | | |
| TOTALS CARRIED TO GENERAL SUMMARY | | | | 0.22 | 0.22 | 0.22 | | | |

| RPM CALCULATIONS | | | | | | | |
|-----------------------------------|------------|------------|-----|----------|-------------|----------------------------------|-----------------------|
| ROUTE | STATION | | FT | ITEM 621 | | PRISMATIC RETRO-REFLECTOR COLORS | REMARKS |
| | FROM | TO | | RPM | RPM REMOVED | | |
| | | | | EACH | EACH | | |
| WB HAM SR 52 | 1803+60.00 | 1804+31.70 | 72 | 1 | 1 | 1 | |
| WB HAM SR 52 | 1804+31.70 | 1804+56.72 | 25 | | | | REAR APPROACH SLAB |
| WB HAM SR 52 | 1806+18.88 | 1806+43.64 | 25 | | | | FORWARD APPROACH SLAB |
| WB HAM SR 52 | 1806+43.64 | 1807+12.50 | 69 | 1 | 1 | 1 | |
| WB HAM SR 52 | 1807+12.50 | 1810+51.39 | 339 | 5 | 5 | 5 | |
| EB HAM SR 52 | 1803+26.59 | 1804+01.39 | 75 | 1 | 1 | 1 | |
| EB HAM SR 52 | 1804+01.39 | 1804+26.39 | 25 | | | | REAR APPROACH SLAB |
| EB HAM SR 52 | 1805+87.59 | 1806+12.83 | 25 | | | | FORWARD APPROACH SLAB |
| EB HAM SR 52 | 1806+12.83 | 1807+12.50 | 100 | 2 | 2 | 2 | |
| EB HAM SR 52 | 1807+12.50 | 1810+51.39 | 339 | 5 | 5 | 5 | |
| TOTALS CARRIED TO GENERAL SUMMARY | | | | 15 | 15 | 15 | |