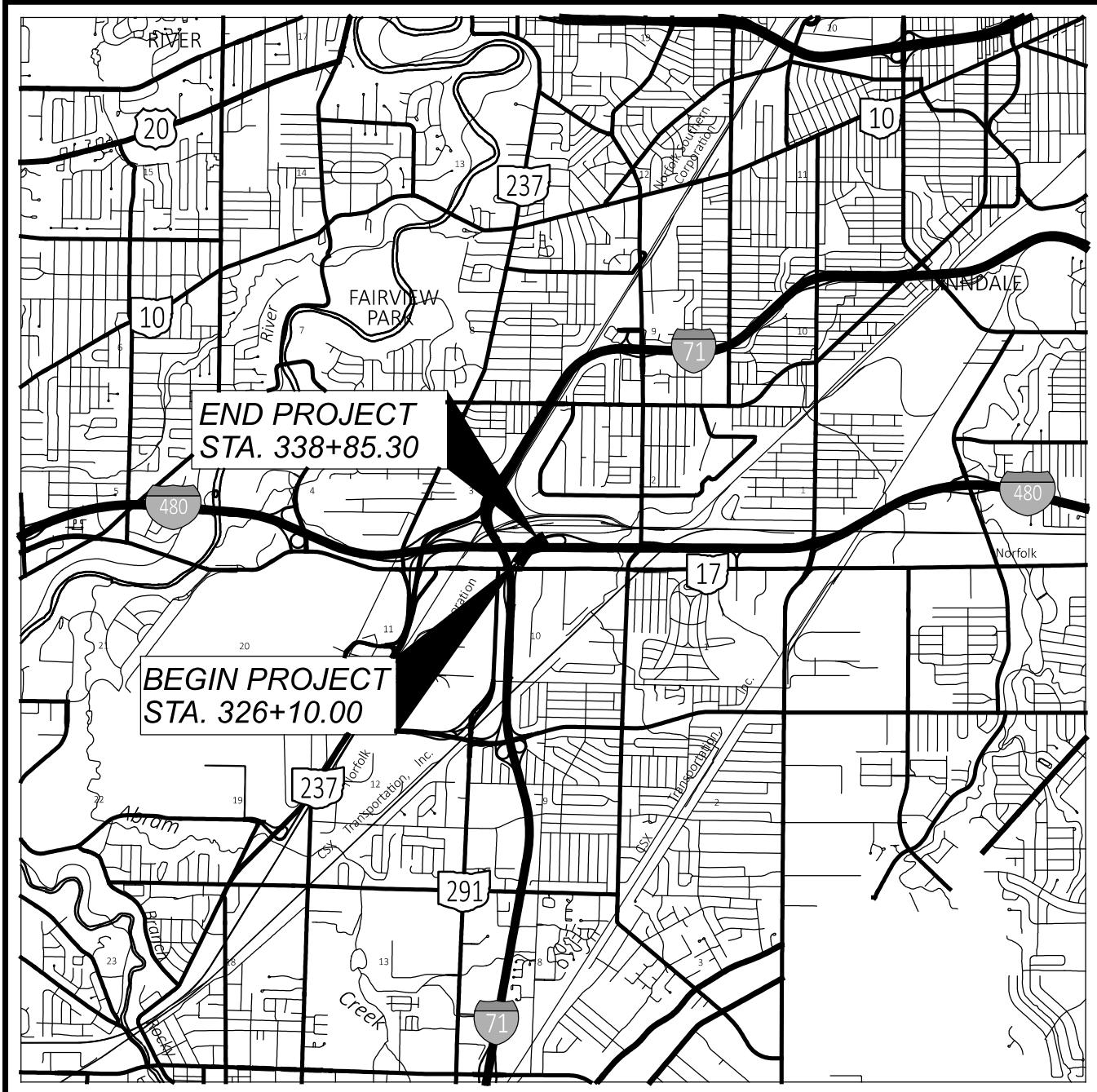


# STATE OF OHIO

## DEPARTMENT OF TRANSPORTATION

# CUY-71-10.07 SW

CITY OF CLEVELAND & CITY OF BROOKPARK  
CUYAHOGA COUNTY



### LOCATION MAP

LATITUDE: 41°25'14" LONGITUDE: 81°48'56"



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

### DESIGN DESIGNATION

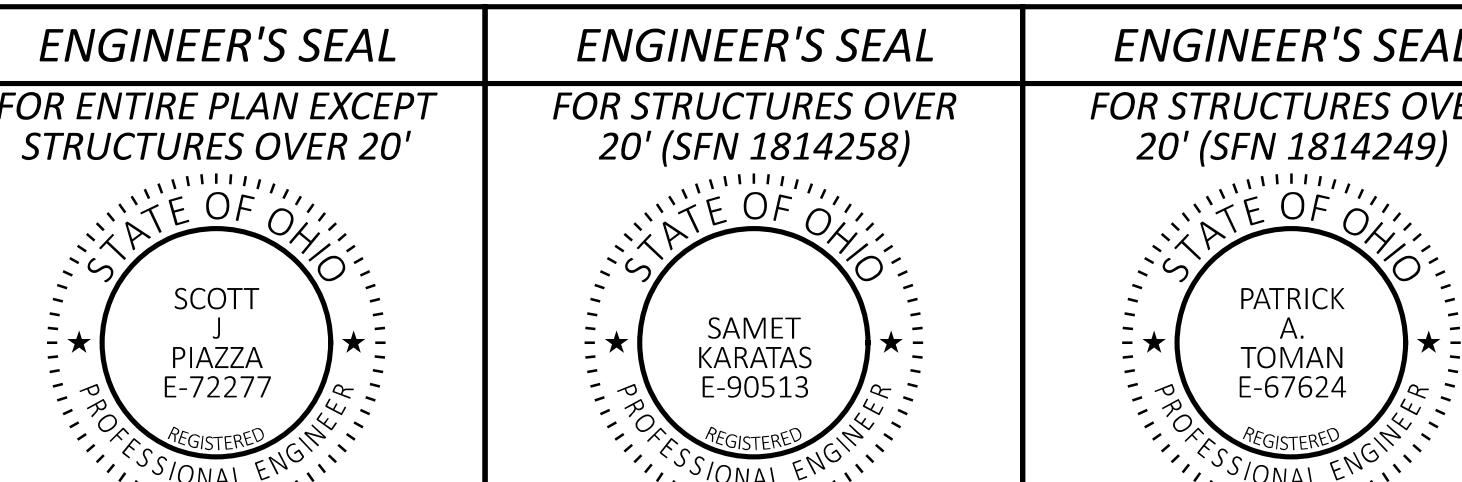
CURRENT ADT (2023) 11497  
DESIGN YEAR ADT (2043) 11497  
DESIGN HOURLY VOLUME (2043) 1098  
DIRECTIONAL DISTRIBUTION 100%  
TRUCKS (24 HOUR B&C) 2%  
DESIGN SPEED 60 MPH  
LEGAL SPEED 60 MPH  
DESIGN FUNCTIONAL CLASSIFICATION:  
URBAN INTERSTATE  
NHS PROJECT YES

### DESIGN EXCEPTIONS

NONE

### ADA DESIGN WAIVERS

NONE



STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-1.1	7/28/00	MGS-2.1	7/18/25	HL-10.11	7/21/23	MT-95.30	7/18/25	TC-42.20	10/18/13	800-2023	7/16/25
BP-2.1	1/21/22	MGS-3.1	7/18/25	HL-10.12	7/21/23	MT-95.40	7/18/25	TC-61.10	4/21/23	808	7/19/24
BP-2.2	1/15/21	MGS-3.2	7/18/25	HL-10.13	1/20/23	MT-95.45	7/21/23	TC-61.30	7/19/24	832	7/18/25
BP-2.3	7/18/14	MGS-4.2	7/18/25	HL-20.11	7/18/25	MT-95.50	7/21/17	TC-72.20	7/18/25	869	10/17/14
BP-2.4	7/19/13	MGS-4.3	7/18/25	HL-20.14	4/17/20	MT-98.11	1/17/20			873	4/16/21
		MGS-6.1	1/19/18	HL-30.11	7/21/23	MT-98.21	7/21/23	A-1-20	7/19/24	908	1/17/25
CB-3A	7/19/24			HL-30.21	4/17/20	MT-98.29	1/17/20	AS-1-15	1/20/23		
DM-1.1	1/17/25	RM-4.2	7/18/25	HL-30.22	1/17/25	MT-99.30	1/17/20	AS-2-15	7/21/23		
DM-1.2	1/17/25	RM-4.3	7/18/25	HL-30.31	7/18/25	MT-99.60	7/19/24	EXJ-4-87	1/19/24		
DM-4.1	7/17/20	RM-4.4	1/17/25	HL-30.41	1/17/25	MT-101.70	7/19/24	GSD-1-19	7/19/24		
DM-4.2	7/20/12	RM-4.5	7/18/25	HL-50.11	1/16/15	MT-101.75	7/21/23	HW-2.2	7/20/18		
DM-4.3	1/15/16	RM-4.6	7/18/25	HL-50.21	7/15/22	MT-101.80	1/17/20	PCB-91	7/17/20		
DM-4.4	1/15/16			HL-60.11	7/21/17	MT-101.90	7/17/20	SBR-1-20	7/19/24		
						MT-102.10	7/21/23				

### FEDERAL PROJECT NUMBER

E241001

### RAILROAD INVOLVEMENT

NONE

### PROJECT DESCRIPTION

THIS IS A BRIDGE REPLACEMENT OF THE STRUCTURE CARRYING NB IR-71 TO WB IR-480 TRAFFIC ("RAMP T"), SFN 1814258 OVER IR-480 EB & WB MAINLINE. THE PROJECT INCLUDES ROADWAY RECONSTRUCTION AND SHOULDER WIDENING. PROJECT INCLUDES PAINTING OF SFN 1814258 AND SFN 1814249.

### EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 1.24 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: N/A  
ROUTINE MAINTENANCE

### 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 AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS DESCRIBED ON SHEET P.9 & P.10 AND AS SHOWN ON SHEETS P.17 TO P.20, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John Picuri, P.E., P.S.  
District 12 Deputy Director

Pamela Boratyn  
Director, Department of Transportation

### UNDERGROUND UTILITIES

Contact Two Working Days  
Before You Dig



OHIO 811, 8-1-1, or 1-800-362-2764  
(Non members must be called directly)

PLAN PREPARED BY:

MOTT MACDONALD

20445 EMERALD PKWY, SUITE 100, CLEVELAND, OH 44135  
PHONE: (216) 535-3640  
FAX: (216) 285-2816

TITLE SHEET

DESIGN AGENCY  
**M** MOTT MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135  
DESIGNER  
SMS  
REVIEWER  
SJP 09/17/25  
PROJECT ID  
114536  
SHEET TOTAL  
P.1 167

**UTILITIES**

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.

**ROUNDING**

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

**BENCHING OF FOUNDATION SLOPES**

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

**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	248 CU. YD.
659, REPAIR SEEDING AND MULCHING	112 SQ. YD.
659, INTER-SEEDING	112 SQ. YD.
659, COMMERCIAL FERTILIZER	0.31 TON
659, LIME	0.46 ACRES
659, WATER	12.1 M. GAL.
659, MOWING	15 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.

**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.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**SURVEYING PARAMETERS**

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

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

**PROJECT CONTROL**

POSITIONING METHOD: GPS  
MONUMENT TYPE: CONCRETE MONUMENT SET  
WITH ODOT DISC

**VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD88  
GEOID: GEOID12B

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAD83 (2011)

ELLIPSOID: GRS80

MAP PROJECTION: Lambert Conformal Conic  
COORDINATE SYSTEM: OHIO STATE PLANE,  
NORTH ZONE

COMBINED SCALE FACTOR: 0.99989686

PROJECT ADJUSTMENT FACTOR: 1.00010315

ORIGIN OF COORDINATE SYSTEM: 0,0

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

UNITS ARE IN U.S. SURVEY FEET.

**PROTECTION OF RIGHT-OF-WAY LANDSCAPING**

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRIC ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

**ASBESTOS NOTIFICATION**

AN ASBESTOS SURVEY OF THE BRIDGE SCHEDULED FOR DEMOLITION WAS CONDUCTED BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST. THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE.

THE BRIDGE WHICH WAS SURVEYED AND CONTAINED NO ASBESTOS IS: SFN 1814257

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, WILL BE PROVIDED TO THE SUCCESSFUL BIDDER AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL COMPLETE THE FORM AND RETURN IT TO THE DISTRICT CONSTRUCTION ENGINEER ALONG WITH THE PERMIT FEE IF APPLICABLE. THE COMPLETION OF THIS FORM MAY BE PERFORMED AT THE PRECONSTRUCTION MEETING. THE DISTRICT CONSTRUCTION ENGINEER SHALL SUBMIT THE FORM AND CONTRACTORS FEE TO THE OEPA NORTHWEST DISTRICT OFFICE AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF THE DEMOLITION OF THE BRIDGE. THE DISTRICT CONSTRUCTION ENGINEER SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE CONTRACTOR. THE CONTRACTOR SHALL NOT COMMENCE DEMOLITION OF THE STRUCTURE UNTIL THE ABOVE REQUIREMENTS ARE MET.

**INFORMATION ON THE FORM WILL INCLUDE:**

- THE CONTRACTORS NAME AND ADDRESS.
- THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL.
- A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

A COPY OF THE OEPA FORM IS AVAILABLE FOR INSPECTION AT THE ODOT, DISTRICT 12 OFFICE, AT 5500 TRANSPORTATION BLVD, GARFIELD HEIGHTS, OH 44125

**BASIS FOR PAYMENT**

THE CONTRACTORS SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE BID ITEM 202 FOR **STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN**.

**REVIEW OF DRAINAGE FACILITIES**

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

**AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS**

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 99-FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND THE ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

Federal Aviation Administration

Southwest Regional Office  
Obstruction Evaluation Group  
10101 Hillwood Parkway  
Fort Worth, TX 76177  
FAX: (817) 222-5920  
http://ceaaa.faa.go

Ohio Department of Transportation  
Office of Aviation  
2829 West Dublin-Granville Road  
Columbus, Ohio 43235  
Ohio.airport.protections@dot.ohio.gov

**STAGING AREAS**

THERE ARE NO SPECIFIC AREAS GIVEN IN THE PLANS FOR THE CONTRACTOR TO USE AS A STAGING AREA(S). IF THE CONTRACTOR WANTS TO USE AN AREA(S) FOR STAGING, REGARDLESS IF IT FALLS WITHIN THE PROJECT LIMITS OR NOT, THE CONTRACTOR IS TO USE THE RIGHT OF WAY E-PERMITTING SYSTEM AT <https://odhcp.bemcorp.net/Accounts/Account> IN ORDER TO APPLY FOR A PERMIT PER SECTION 107.02 OF THE CMS. FOR SPECIFIC PERMITTING QUESTIONS, THE CONTRACTOR CAN CONTACT THE DISTRICT PERMITTING OFFICE, (MELVIN SAFFORD) AT 216-584-2137, (ANDREW TOMKO) AT 216-584-2195 OR AT DISTRICT12PERMITS@DOT.OHIO.GOV.

IF A PERMIT IS GRANTED, ALL CONDITIONS OF THE PERMIT SHALL BE MET IN ADDITION TO THE REQUIREMENTS OF 104.04 OF THE CMS, AT NO ADDITIONAL COST TO THE STATE. IF THE PROJECT ENGINEER DEEMS THAT ALL THE CONDITIONS OF THE PERMIT WERE NOT MET, THEN 10% OF THE CONTRACT BID AMOUNT FOR MOBILIZATION SHALL BE WITHHELD UNTIL ALL THE CONDITIONS OF THE PERMIT ARE SATISFIED.

**ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN**

ALL REQUIREMENTS OF C&MS 619 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

THE FIELD OFFICE SHALL BE A SUITE TYPE OFFICE (NO TRAILER OR MODULAR OFFICE) WITH A MINIMUM OF 1,600 SQUARE FEET. THE FLOOR SPACE WILL BE DIVIDED INTO ONE GENERAL OFFICE AREA, NOT LESS THAN FOUR INDIVIDUAL OFFICE AS SEPARATE ENCLOSED ROOMS (NO CUBICLE DIVIDERS WILL BE ACCEPTED).

DESIGN AGENCY  
**M**  
MOTT  
MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

DESIGNER  
**SMS**  
REVIEWER  
**SJP** 09/17/25  
PROJECT ID  
114536  
SHEET TOTAL  
P.6 167

**ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN (CONT.)**

THE CONTRACTOR SHALL FURNISH AND MAINTAIN A BROADBAND INTERNET CONNECTION CAPABLE OF MINIMUM DOWNLOAD SPEEDS OF 1.0 GB/S ALONG WITH A WIRELESS ROUTER THAT SUPPORTS WI-FI STANDARD 802.11AX (WIFI 6) AND A MINIMUM WIRELESS DATA TRANSFER RATE OF 4000 MB/S – ALL FOR THE EXCLUSIVE USE OF THE DEPARTMENT. PROVIDE PRE-WIRED ETHERNET ACCESS FOR ALL INDIVIDUAL OFFICES AND THE GENERAL OFFICE AREA.

REQUESTS FOR ADDITIONAL OFFICE SUPPLIES, PAPER SUPPLIES, COPIER SUPPLIES, AND MAINTENANCE OF COPIER SHALL BE ACCOMODATED IN A TIMELY MANNER AT ANY POINT DURING THE OCCUPANCY OF THE FIELD OFFICE.

THE FIELD OFFICE WILL BE APPROVED IN ADVANCE BY THE ENGINEER AND FULLY OPERATIONAL WITHIN 30 DAYS AFTER THE SIGNING AND EXECUTION OF THE CONTRACT OR PRIOR TO THE START OF ANY CONSTRUCTION WORK, WHICHEVER COMES FIRST.

THE DEPARTMENT WILL MEASURE FIELD OFFICE, TYPE C, AS PER PLAN BY THE NUMBER OF MONTHS THE OFFICE IS MAINTAINED. A PARTIAL MONTH AT THE END OF THE PROJECT WILL BE PAID AS A FULL MONTH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS FOLLOWS:

ITEM 619 – FIELD OFFICE, TYPE C, AS PER PLAN .... 36 MONTHS

#### ROADWAY

##### ITEM 622 – BARRIER, MISC.: CONCRETE BARRIER, TYPE B50

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING TYPE B50 CONCRETE BARRIER ACCORDING TO THE DETAILS SHOWN ON P.5 OF THIS PLAN WITH THE FOLLOWING MODIFICATIONS:

1. INSTALL THE NO. 8 DOWEL BARS BETWEEN THE CONCRETE FOUNDATION AND THE CONCRETE BARRIER. THE SIZE, LENGTH AND PLACEMENT OF THE DOWEL BARS SHALL FOLLOW THE DOWELING DETAILS SHOWN FOR THE 32" NORMAL SECTIONS.
2. THE COST OF THE MIN. 9" THICK, 4' WIDE FOUNDATION SHALL BE INCLUDED IN THIS PAY ITEM. ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING OF EXISTING SHOULDER ASPHALT, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR:

ITEM 622 - BARRIER, MISC.: CONCRETE BARRIER, TYPE B50.

##### ITEM 622 – CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING TYPE D CONCRETE BARRIER ACCORDING TO THE CMS AND STANDARD CONSTRUCTION DRAWING RM-4.5 WITH THE FOLLOWING MODIFICATIONS:

1. PROVIDE A 9" THICK CONCRETE FOUNDATION WITH AN APPROXIMATE WIDTH OF 2.5' AS SHOWN IN THE TYPICAL SECTIONS.

ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING OF EXISTING SHOULDER ASPHALT, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN.

##### ITEM 202 – CONCRETE BARRIER REMOVED, AS PER PLAN

REMOVAL OF THE EXISTING CONCRETE BARRIER FOUNDATION SHALL BE INCLUDED IN THIS ITEM OF WORK. THE CONTRACTOR MAY ELECT TO SAWCUT THE PAVEMENT AT THE BARRIER FOUNDATION EDGE PRIOR TO THE CONCRETE BARRIER AND CONCRETE BARRIER FOUNDATION REMOVAL AS TO PREVENT ADJACENT PAVEMENT FROM BEING DISTURBED. REMOVAL OF THE EXISTING CONDUIT AND DISTRIBUTION CABLE SHALL ALSO BE INCLUDED IN THIS ITEM.

ALL COSTS FOR THIS ITEM OF WORK, INCLUDING SAWCUTTING, LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202 - CONCRETE BARRIER REMOVED, AS PER PLAN.

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

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

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 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.

#### PAVEMENT

##### ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1,(449), (UNDER GUARDRAIL), AS PER PLAN.

HERBICIDE SHALL BE EPA APPROVED FOR PAVING UNDER GUARDRAIL. IT SHALL BE APPLIED TO THE PREPARED AREA AFTER FINAL LEVELING AND GRADING HAS BEEN COMPLETED. THE APPLICATION SHALL BE JUST PRIOR TO PAVING AND SHALL STRICTLY ADHERE TO THE MANUFACTURER'S INSTRUCTIONS.

EACH SUCCESSFUL BIDDER MUST BE LICENSED BY THE OHIO DEPARTMENT OF AGRICULTURE AS A COMMERCIAL APPLICATOR AND ALL PERSONS INVOLVED IN THE ACTUAL SPRAYING SHALL BE LICENSED AS COMMERCIAL OPERATORS IN THE APPROPRIATE SPRAY CATEGORY.

HERBICIDE LABEL, MATERIAL SAFETY DATA SHEET AND COPY OF APPLICATORS LICENSES SHALL BE SUBMITTED TO THE ENGINEER FOR VERIFICATION PRIOR TO COMMENCING WORK.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO A DEPTH OF 3" AND A MAXIMUM WIDTH OF 4' USING ONE OF THE FOLLOWING METHODS:

##### METHOD A:

- 1.SET GUARDRAIL POSTS
- 2.PLACE ITEM 441

##### METHOD B:

- 1.PLACE ITEM 441
- 2.BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
- 3.SET GUARDRAIL POSTS
- 4.PATCH AROUND POSTS.

THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN.

THE FOLLOWING ESTIMATED QTY'S ARE CARRIED TO GENERAL SUMMARY

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN 25 CY

##### ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN

THIS ITEM OF WORK SHALL BE USED TO PREPARE PROPOSED AND EXISTING GUARDRAIL RUNS FOR PAVING UNDER GUARDRAIL, INCLUDING THE REMOVAL AND DISPOSAL OF EXISTING ASPHALT UNDER GUARDRAIL.

A SAWCUT WILL BE PERFORMED, WHEN APPLICABLE, TO ASSIST THE REMOVAL OF EXISTING ASPHALT UNDER GUARDRAIL AND MINIMIZE DAMAGE TO EXISTING SHOULDER ASPHALT. PAYMENT FOR SAWCUTTING WILL BE INCLUDED IN THE BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN.

FILL ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS AND ANCHOR ASSEMBLIES WITH GRANULAR MATERIAL. DO NOT USE FILL MATERIAL CONTAINING SOD. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER AND SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE IS INCLUDED IN THE APPLICABLE GUARDRAIL ITEM.

RESHAPE AND COMPACT SUBGRADE TO ENSURE POSITIVE DRAINAGE. ESTABLISH A CROSS-SLOPE OF 0.042 (HALF INCH PER FOOT). GRADE TO A MAXIMUM WIDTH OF 6' TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE TRAVEL LANES.

ALL COLLECTED DEBRIS AND TOPSOIL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN SECTION 105.17 OF THE CMS.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

IN AREAS WHERE ASPHALT UNDER GUARDRAIL WILL NOT BE REPLACED, THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 AND PLACED TO GRADE AS APPROVED BY THE ENGINEER. SEED AND MULCH THESE AREAS ACCORDING TO SECTION 659.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 209 – RESHAPING UNDER GUARDRAIL, AS PER PLAN AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM THE WORK.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN 9 STA

#### SHOULDER RESTORATION ON IR-480

THE REMOVAL AND CONSTRUCTION OF PIER 2 MAY REQUIRE THE MEDIAN/ADJACENT SHOULDER TO BE REBUILT. CONTRACTOR MAY ELECT TO SAWCUT THE PAVEMENT AT THE EDGE OF PAVEMENT PRIOR TO THE PIER REMOVAL AS TO PREVENT ADJACENT PAVEMENT FROM BEING DISTURBED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG64-22 (THICKNESS = 1.5") 7 CY

ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448), (THICKNESS = 1.75") 8 CY

ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, (449) (THICKNESS = 8.5", 2 LIFTS REQUIRED) 40 CY

ITEM 304 - AGGREGATE BASE (THICKNESS = 10") 48 CY

ITEM 202 - PAVEMENT REMOVED 164 SY

ITEM 605 - 6" UNDERDRAIN 184 LF

ITEM 204 - SUBGRADE COMPACTION 164 SY

ITEM 407 - NON-TRACKING TACK COAT 13 GAL

DESIGN AGENCY  
**M**  
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20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

DESIGNER  
**SMS**

REVIEWER  
**SJP** 09/17/25

PROJECT ID  
**114536**

SHEET TOTAL  
**P.7** 167

## **ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**

**CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:**

1. **SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.**
2. **EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).**

*IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.*
3. **COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.**
4. **APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.**
5. **PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.**
6. **EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANs.**
7. **PROOF ROLL THE STABILIZED AREAS ACCORDING TO C&MS 204.06 TO VERIFY STABILITY.**
8. **FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.**

*THE FOLLOWING ESTIMATED QUANTITIES FOR EXCAVATING THE  
UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE PROVIDED*

<i>ITEM 204 - EXCAVATION OF SUBGRADE</i>	100 CY
<i>ITEM 204 - GRANULAR MATERIAL, TYPE B</i>	100 CY
<i>ITEM 204 - GEOTEXTILE FABRIC</i>	300 SY
<i>ITEM 204 - PROOF ROLLING</i>	1 HOUR

## **TEMPORARY MINIMUM VERTICAL CLEARANCE**

THE TEMPORARY MINIMUM VERTICAL CLEARANCE OVER ROADWAY  
AND SHOULDERS SHALL NOT BE LESS THAN 15'-0" FOR STRUCTURE  
CUY-71-10.07 SW, SFN 1814258 AND NOT LESS THAN 16'-6" FOR  
STRUCTURE CUY-480-08.71 ES, SFN 1814249.

## **NOTIFICATION OF MINIMUM VERTICAL CLEARANCE REDUCTION**

THE CONTRACTOR SHALL NOTIFY THE SPECIAL HAULING PERMITS SECTION OF THE OHIO DEPARTMENT OF TRANSPORTATION AT HAULING.PERMITS@DOT.OHIO.GOV AND THE ENGINEER OF ANY TEMPORARY REDUCTION OF VERTICAL CLEARANCE. THE NOTIFICATION SHALL BE GIVEN AT LEAST 14 DAYS PRIOR TO REDUCING THE VERTICAL CLEARANCE OF A BRIDGE AND SHALL INCLUDE THE FOLLOWING INFORMATION:

1. STATE PROJECT NUMBER
2. PID
3. SFN
4. BRIDGE NUMBER
5. LOCATION MAP
6. DIRECTION OF REDUCED VERTICAL CLEARANCE. FOR EXAMPLE
  - BIDIRECTIONAL
  - CARDINAL (NORTH OR EAST)
  - NON-CARDINAL (SOUTH OR WEST)
7. TEMPORARY VERTICAL CLEARANCE
8. ESTIMATED/ACTUAL START AND END DATES OF THE REDUCTION
9. CONTRACTOR'S CONTACT NAME AND TELEPHONE NUMBER
10. ENGINEER'S NAME AND TELEPHONE NUMBER
11. ANY OTHER INFORMATION REQUESTED BY THE SPECIAL

THE CONTRACTOR SHALL INFORM THE SPECIAL HAULING PERMITS SECTION OF THE OHIO DEPARTMENT OF TRANSPORTATION AND THE ENGINEER WITHIN 14 DAYS AFTER RESTORING THE VERTICAL CLEARANCE OF A BRIDGE TO ITS ORIGINAL VERTICAL CLEARANCE.

THE ABOVE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE WORK THAT CAUSES THE REDUCTION IN THE VERTICAL CLEARANCE.

## ITEM 204 - PROOF ROLLIN

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

ITEM 204 - PROOF ROLLING 4 HOURS

**ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING,  
AS PER PLAN**

PER CMS 623.04 AND 623.05, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING MONUMENT ASSEMBLIES SURVEY CORNERS AND SURVEY CONTROL PRIOR TO BEGINNING ANY WORK AND AFTER PROJECT COMPLETION (IF APPLICABLE). A PRE-INSPECTION REPORT IS TO BE SUBMITTED PRIOR COMMENCEMENT OF WORK AND POST-CONSTRUCTION REPORT SUBMITTED PRIOR TO OR IN CONJUNCTION WITH THE FINAL INSPECTION TO THE DISTRICT SURVEY OPERATIONS MANAGER. EXISTING MONUMENTATION SHALL BE PRESERVED AND PERPETUATED THROUGHOUT THE PROJECT.

*THE DEPARTMENT'S STANDARDIZED VERIFICATION REPORT  
TEMPLATE CAN BE FOUND AT THE FOLLOWING LOCATION:  
[HTTPS://WWW.DOT.STATE.OH.US/DIVISIONS/CONSTRUCTIONMGT/](https://WWW.DOT.STATE.OH.US/DIVISIONS/CONSTRUCTIONMGT/DOCUMENTS)  
DOCUMENTS*

AFTER COMPLETION OF ALL WORK, BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, AN OHIO PROFESSIONAL SURVEYOR SHALL DETERMINE THE MINIMUM VERTICAL CLEARANCES OF ALL EXISTING AND NEW BRIDGES WITHIN THE PROJECT LIMITS. AT A MINIMUM, MEASUREMENTS SHALL BE TAKEN ALONG EACH FASCIA BEAM AT THE EDGE OF SHOULDERS, EDGE LINES, LANE LINES, AND CROWN OF THE ROADWAY BELOW. THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM SHALL BE USED, WHERE APPLICABLE, TO DOCUMENT THE MEASUREMENTS. WHERE THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM IS NOT APPLICABLE, THE MEASUREMENTS SHALL BE DOCUMENTED ON A CONTRACTOR-DEVELOPED FORM THAT CLOSELY RESEMBLES THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM AND ACCURATELY DEPICTS THE BRIDGE AND THE LANE AND SHOULDER CONFIGURATION OF THE ROADWAY THAT PASSES BELOW THE BRIDGE. THE COMPLETED FORM SHALL BEAR THE STAMP OR SEAL OF THE OHIO PROFESSIONAL SURVEYOR WHO HAS TAKEN THE MEASUREMENTS AND SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

*THE ODOT DISTRICT 12 VERTICAL CLEARANCE SURVEY FORM CAN  
BE DOWNLOADED FROM THE FOLLOWING FTP SITE:  
<https://ftp.dot.state.oh.us/pub/Contracts/Attach/CTY-XXXXXX>*

**ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED  
TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRAC  
BID PRICE FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES AND  
SURVEYING, AS PER PLAN.**

**SUGGESTED SEQUENCE OF CONSTRUCTION****PHASE 1 CONSTRUCTION**

PHASE 1 SHALL CONSIST OF THE REMOVAL OF PORTIONS OF THE BRIDGE, CONSTRUCTION OF THE SUPPORT STRUCTURES FOR THE WIDENED BRIDGE DECK TO THE EAST OF THE EXISTING SUPPORT STRUCTURES, PLACEMENT OF NEW STEEL BEAMS AND CONSTRUCTION OF THE BRIDGE DECK FOR THE WIDENED INSIDE SHOULDER.

**PHASE 1 TRAFFIC; IR-71**

RAMP TRAFFIC WILL BE MAINTAINED ON THE EXISTING PAVEMENT, SHIFTED TO THE WEST (OUTSIDE) SHOULDER OF THE EXISTING STRUCTURE AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. DURING THE REMOVAL AND PLACEMENT OF BEAMS AND DURING THE CONCRETE DECK POUR, IR-71 RAMP TO BE CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE PLANS.

**PHASE 1A TRAFFIC; IR-480**

ALL LANES OF BOTH EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL BE SHIFTED TO THE INSIDE SHOULDER(S) TO ALLOW FOR THE SUBSTRUCTURE WORK TO PIERS 1 AND 3, AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. LANE SHIFTS PER SCD MT-102.10 MAY BE UTILIZED TO PROVIDE LATERAL CLEARANCE FROM THESE SUBSTRUCTURE ELEMENTS.

**PHASE 1 TRAFFIC; IR-480 CLOSURES**

IR-480 TO BE CLOSED OVERNIGHT, 10:00 PM TO 5:00 AM, DURING BEAM REMOVAL AND BEAM PLACEMENT OPERATIONS AS SHOWN IN THE PLANS. EASTBOUND AND WESTBOUND CLOSURES OF IR-480 SHOULD NOT COINCIDE.

**PHASE 1B TRAFFIC; IR-480**

ALL LANES OF BOTH EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL BE SHIFTED TO THE OUTSIDE SHOULDER(S) TO ALLOW FOR THE SUBSTRUCTURE WORK TO PIER 2, AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. LANE SHIFTS PER SCD MT-102.10 MAY BE UTILIZED TO PROVIDE LATERAL CLEARANCE FROM THE SUBSTRUCTURE ELEMENTS.

**CONTRACTOR TO UTILIZE IR-480 PHASE 1B TRAFFIC CONFIGURATION ON IR-480 REQUIRED DURING WINTER MONTHS, OCTOBER 15 THROUGH APRIL 1.**

**PHASE 2 CONSTRUCTION**

PHASE 2 SHALL CONSIST OF THE REMOVAL OF THE REMAINDER OF THE EXISTING BRIDGE, PLACEMENT OF NEW STEEL BEAMS AND CONSTRUCTION OF THE BRIDGE DECK, INCLUDING THE CLOSURE POUR. IR-480 MEDIAN WALL AND CONCRETE BARRICADE REPLACEMENT WILL ALSO BE COMPLETED DURING THIS TIME.

**PHASE 2 TRAFFIC; IR-71**

RAMP TRAFFIC WILL BE SHIFTED TO THE NEWLY CONSTRUCTED INSIDE SHOULDER OF THE BRIDGE AS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. DURING THE REMOVAL AND PLACEMENT OF BEAMS AND DURING THE CONCRETE DECK POUR, IR-71 RAMP TO BE CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE PLANS.

**PHASE 2A TRAFFIC; IR-480**

EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL REMAIN IN THE SAME LOCATION AS PHASE 1B, WITH ALL LANES SHIFTED TO THE OUTSIDE SHOULDER(S) TO ALLOW FOR COMPLETION OF THE WORK AT PIER 2 AND MEDIAN WALL.

**PHASE 2B TRAFFIC; IR-480**

EASTBOUND AND WESTBOUND IR-480 TRAFFIC WILL RETURN TO THE SAME LOCATION AS PHASE 1A WITH ALL LANES SHIFTED TO THE INSIDE SHOULDER(S) TO ALLOW FOR COMPLETION OF SUBSTRUCTURE WORK TO PIERS 1 AND 3.

**PHASE 2 TRAFFIC; IR-480 CLOSURES**

IR-480 TO BE CLOSED OVERNIGHT, 10:00 PM TO 5:00 AM, DURING BEAM REMOVAL AND BEAM PLACEMENT OPERATIONS AS SHOWN IN THE PLANS. EASTBOUND AND WESTBOUND CLOSURES OF IR-480 SHOULD NOT COINCIDE.

**PHASE 3 CONSTRUCTION**

PHASE 3 SHALL CONSIST OF PAINTING THE BRIDGE STEEL SUPERSTRUCTURES SFN 1814258 AND SFN 1814249 ON PORTIONS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS.

**PHASE 3 TRAFFIC; IR-480**

TRAFFIC TO REMAIN IN PLACE FOLLOWING PHASE 2B. SHORT TERM LANE CLOSURES, AS PER THE PLCS, MAY BE ENACTED TO COMPLETE PAINTING OPERATIONS. LANE CLOSURES PER SCD MT-95.30 AND MT-98.11. CONTRACTOR TO VERIFY PLCS SCHEDULE PRIOR TO SUBMITTING TRAFFIC CONTROL PLAN.

**PHASE 4 CONSTRUCTION**

PHASE 4 SHALL CONSIST OF PAINTING THE BRIDGE STEEL SUPERSTRUCTURES ON THE REMAINING PORTIONS SHOWN ON THE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS.

**PHASE 4 TRAFFIC; IR-480**

TRAFFIC TO BE RESET TO PERMANENT STRIPING LOCATIONS. SHORT TERM LANE CLOSURES, AS PER THE PLCS, MAY BE ENACTED TO COMPLETE PAINTING OPERATIONS. LANE CLOSURES PER SCD MT-95.30 AND MT-98.11. CONTRACTOR TO VERIFY PLCS SCHEDULE PRIOR TO SUBMITTING TRAFFIC CONTROL PLAN.

**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 SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION 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.

**NOTICE OF CLOSURE SIGN TIME TABLE**

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
START OF CONSTRUCTION	N/A	14 CALENDAR DAYS PRIOR TO TRAFFIC PATTERN CHANGES 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.

**ITEM 614 - MAINTAINING TRAFFIC**

ON THE IR-71 RAMP TO WESTBOUND IR-480, A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES - EXCEPT AS NOTED IN THE DETOUR PLANS - BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 502 STRUCTURE FOR MAINTAINING TRAFFIC, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, ITEM 615 ROADS FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

ON IR-480, A MINIMUM OF 3 LANES EASTBOUND AND 4 LANES WESTBOUND SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT; WITH THE EXCEPTION OF THE DETOUR PLANS AND SHORT TERM PAINTING OPERATIONS.

**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. 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.

**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 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.

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.

**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 5 M. GAL.  
ITEM 616, CALCIUM CHLORIDE 0.5 TON

**ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)**

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)	GENERAL/REGULAR ELECTION DAY
THANKSGIVING	MEMORIAL DAY
CHRISTMAS (OBSERVED)	FOURTH OF JULY (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 OR SPECIAL EVENT	TIME ALL LANES 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

NEWLY CONSTRUCTED LANE ADDITIONS, ONCE COMPLETED AND INITIALLY OPENED TO TRAFFIC, SHALL BE OPEN TO TRAFFIC DURING ALL SUBSEQUENT DESIGNATED HOLIDAYS AND SPECIAL EVENTS, AND RELATED PERIODS OF TIME, SPECIFIED ABOVE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

**PERMITTED LANE CLOSURE SCHEDULE (PLCS)**

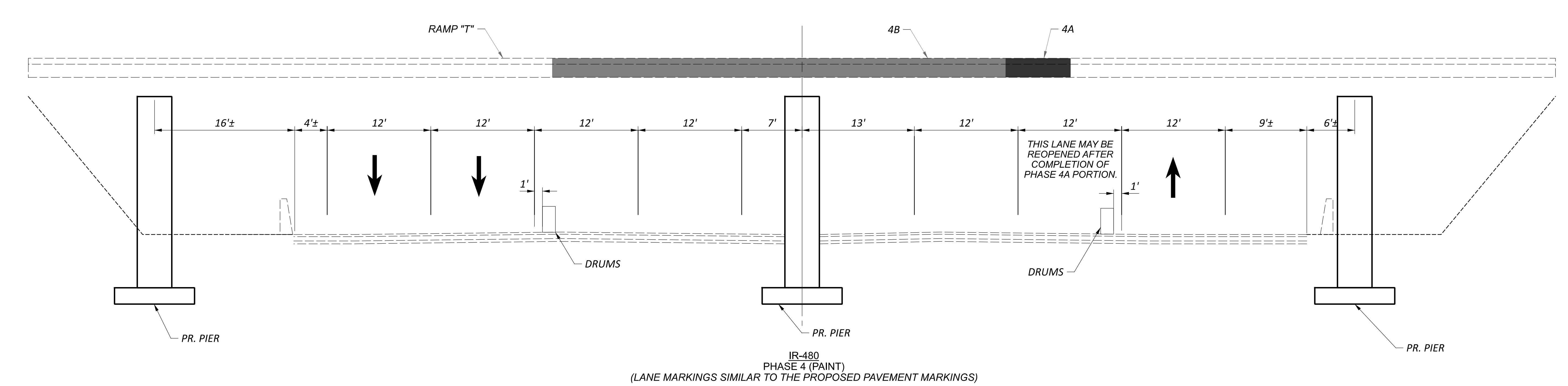
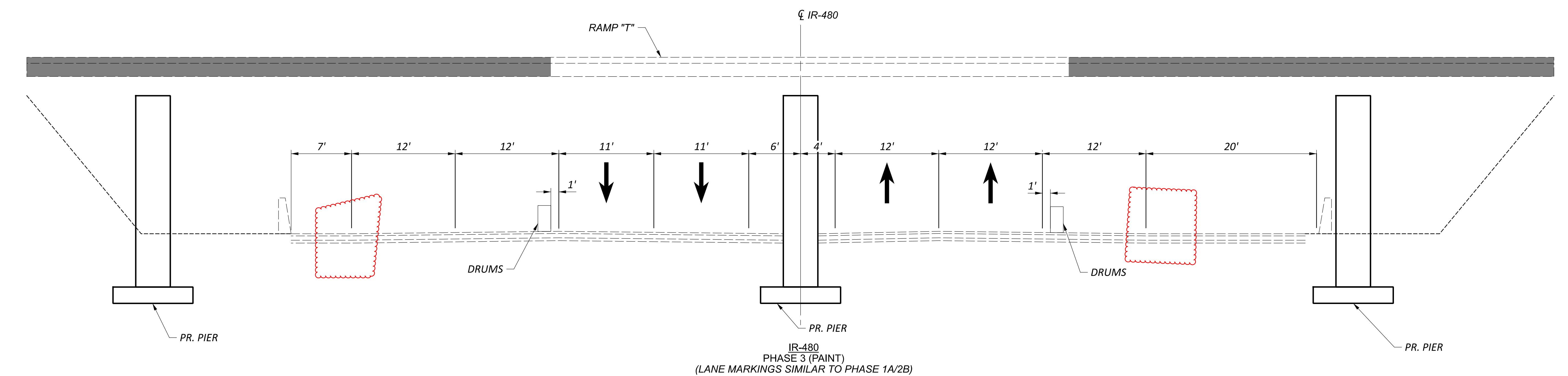
LANE CLOSURE(S) SHALL CONFORM TO THE PLCS. PUBLISHED PLCS INFORMATION CAN BE FOUND ON THE ODOT WEBSITE AT: [HTTPS://WWW.TRANSPORTATION.OHIO.GOV/WPS/PORTAL/GOV/ODOT/WORKING/DATA-TOOLS/RESOURCES/PERMITTED-LANE-](https://WWW.TRANSPORTATION.OHIO.GOV/WPS/PORTAL/GOV/ODOT/WORKING/DATA-TOOLS/RESOURCES/PERMITTED-LANE-)

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH PLCS SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMprise THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURE(S) SHALL MATCH MONTH OF PLCS USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.

DESIGN AGENCY  
**M**  
MOTT MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135  
DESIGNER  
**SMS**

REVIEWER  
**SJP** 09/17/25  
PROJECT ID  
**114536**  
SHEET TOTAL  
**P.9** 167

# MAINTENANCE OF TRAFFIC SUBSUMMARY



LEGEND

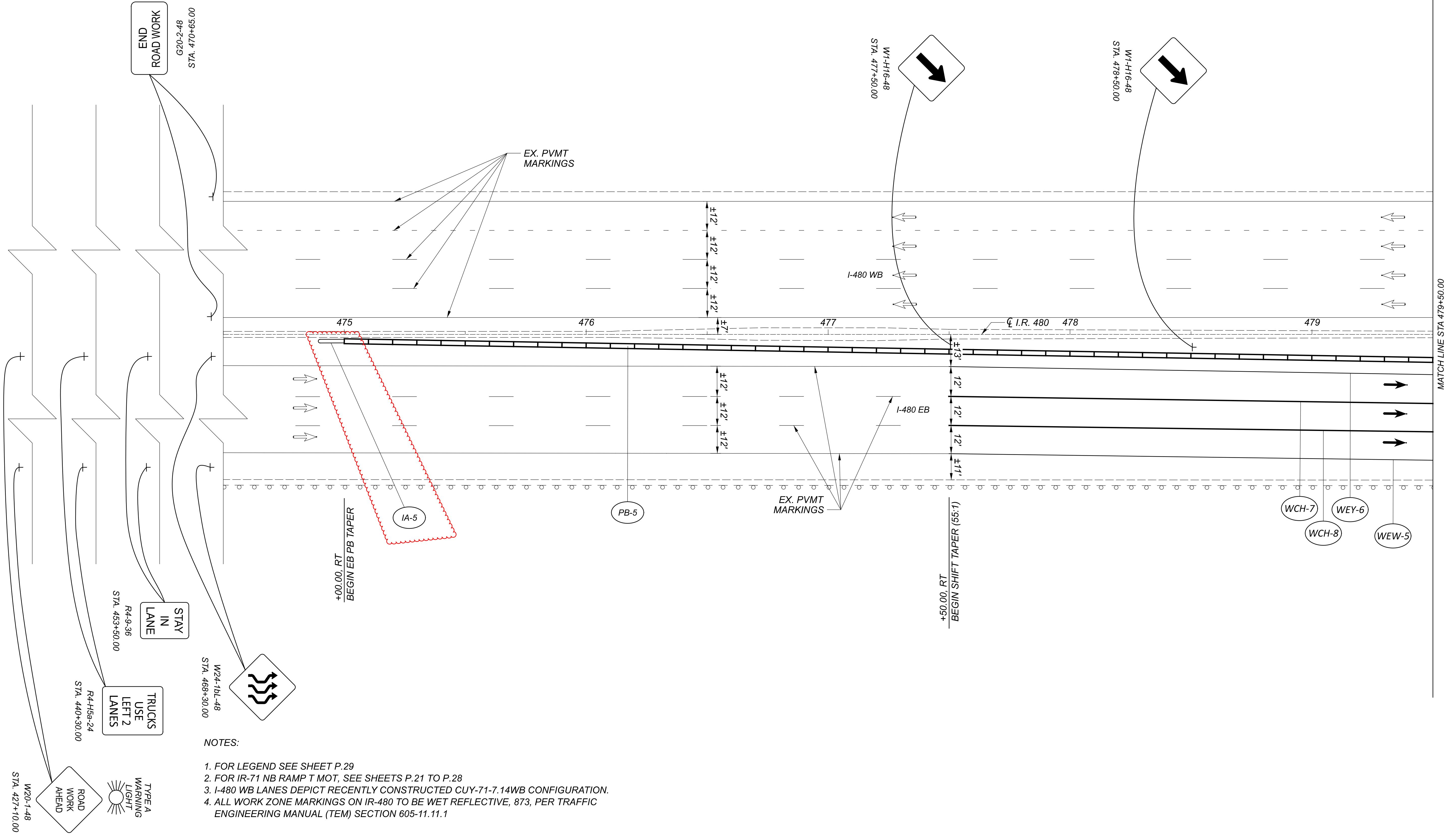
- AREA TO BE PAINTED
- DIRECTION OF TRAFFIC

NOTES:

1. THE WORK IN PHASE 3 AND 4 CONSISTS OF PAINTING THE STEEL SUPERSTRUCTURE FOR SFN. 1814258 AND SFN 1814249.
2. SINGLE AND DOUBLE LANE CLOSURES ON IR-480 DURING PLC ONLY TO COMPLETE WORK.  
WB IR-480 MAY BE REDUCED TO 2-LANES FROM 6:30 PM UNTIL 6:30 AM DAILY.  
EB IR-480 MAY BE REDUCED TO 1-LANE FROM 10:30 PM UNTIL 4:30 AM DAILY.  
EB IR-480 MAY BE REDUCED TO 2-LANES FROM 6:30 PM UNTIL 5:30 AM DAILY.
3. TYPICALS REPRESENT CLOSURES PER PLC.
4. LANE CLOSURES PER SCD MT 95.30.

**MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS**

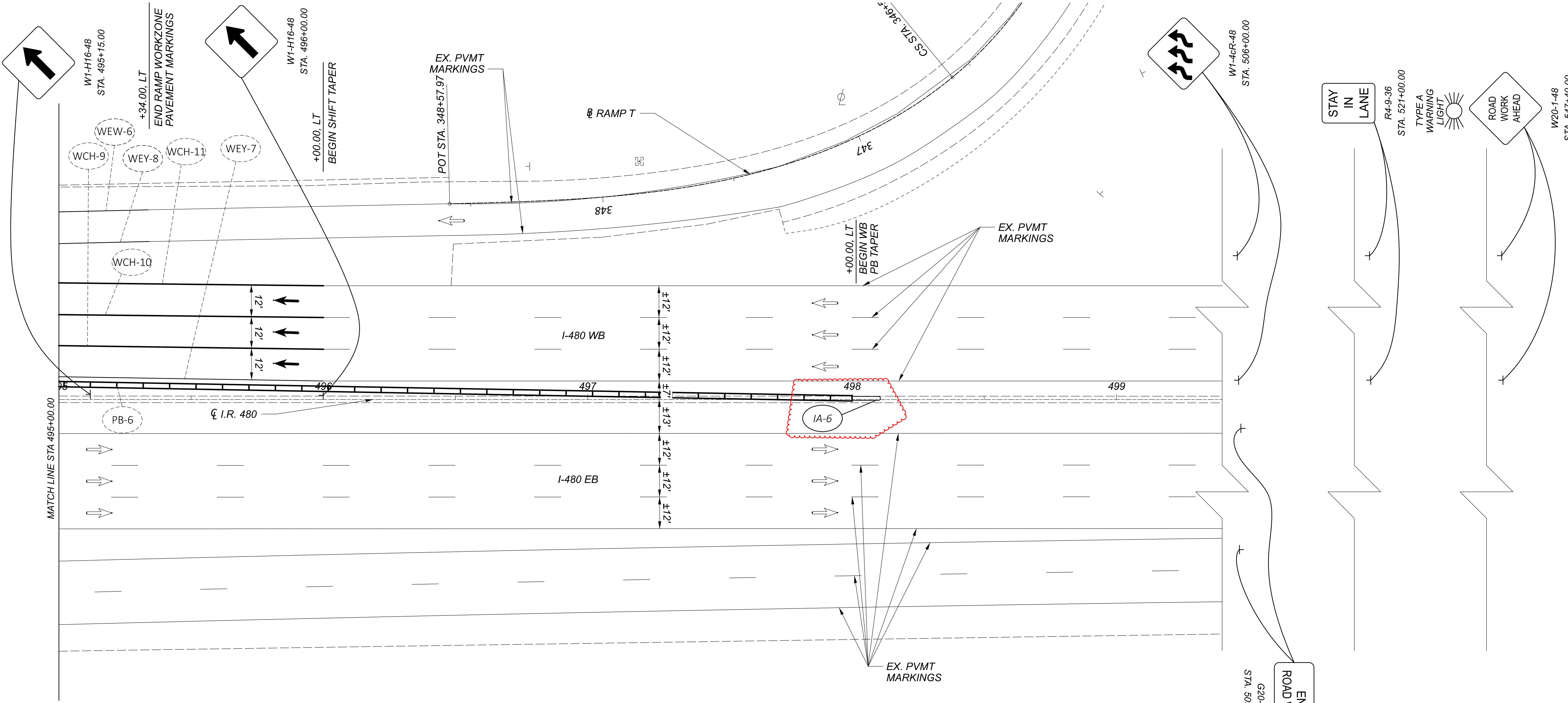
DESIGN AGENCY  
**M** MOTT MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135  
DESIGNER  
**RKC**  
REVIEWER  
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PROJECT ID  
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SHEET TOTAL  
**P.16** 167



DESIGN AGENCY	
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<b>SMS</b>	
REVIEWER	
<b>SJP 09/17/25</b>	
PROJECT ID	
<b>114536</b>	
SHEET	TOTAL
<b>P.34</b>	<b>167</b>

A horizontal scale bar divided into three equal segments. The leftmost segment is shaded black. The rightmost segment is also shaded black. The middle segment is white with the number '20' printed in black. Above the scale bar, the text 'HORIZONTAL SCALE IN FEET' is printed vertically.

**MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A  
STA 474+50.00 TO STA 479+50.00**



DESIGN AGENCY  
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SHEET TOTAL  
P.38 167

MAINTENANCE OF TRAFFIC - I-480 - PHASES 1B, 2A  
STA 495+00.00 TO STA 499+40.00

HORIZONTAL SCALE IN FEET  
0 20 40



42	SHEET NUM.				PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	76	86	99	01/BRO	02/IMS							
LIGHTING												
	10			10			625	00450	10	EACH	CONNECTION, FUSED PULL APART	
	15			15			625	00480	15	EACH	CONNECTION, UNFUSED PERMANENT	
	2			2			625	10490	2	EACH	LIGHT POLE, CONVENTIONAL, DESIGN A15B40	
	3			3			625	10490	3	EACH	LIGHT POLE, CONVENTIONAL, DESIGN AT15B40	
	2			2			625	10614	2	EACH	LIGHT POLE ANCHOR BOLTS ON STRUCTURE	86
	3			3			625	14000	3	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
	5			5			625	18200	5	EACH	BRACKET ARM, 15'	
	3,834			3,834			625	23302	3,834	FT	NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	
	750			750			625	23400	750	FT	NO. 10 AWG POLE AND BRACKET CABLE	
	668			668			625	25400	668	FT	CONDUIT, 2", 725.04	
	580			580			625	25402	580	FT	CONDUIT, 2", 725.05	
	5			5			625	26252	5	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED) TYPE II, 125W	
	768			768			625	29002	768	FT	TRENCH, 24" DEEP	
	2			2			625	29900	2	EACH	JUNCTION BOX, HL-30.31	
	3			3			625	30700	3	EACH	PULL BOX, 725.08, 18"	
	2			2			625	31510	2	EACH	PULL BOX REMOVED	
	5			5			625	32000	5	EACH	GROUND ROD	
	768			768			625	36010	768	FT	UNDERGROUND WARNING/MARKING TAPE	
	1			1			625	39520	1	EACH	PULL BOX CLEANED	86
	5			5			625	75400	5	EACH	LIGHT POLE REMOVED	
	3			3			625	75500	3	EACH	LIGHT POLE FOUNDATION REMOVED	
TRAFFIC CONTROL												
26				26			626	00110	26	EACH	BARRIER REFLECTOR, TYPE 2, (BI-DIRECTIONAL)	
	40			40			630	02100	40	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
	29			29			630	03100	29	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
	35			35			630	80100	35	SF	SIGN, FLAT SHEET	
	5			5			630	86002	5	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	0.38			0.38			646	10010	0.38	MILE	EDGE LINE, 6"	
	123			123			646	10310	123	FT	CHANNELIZING LINE, 12"	
	715			715			646	10620	715	FT	CHEVRON MARKING	
	1.21			1.21			807	12010	1.21	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	
	1.23			1.23			807	12110	1.23	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	
	1,738			1,738			807	12310	1,738	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, CHANNELIZING LINE, 12"	
	633			633			807	12430	633	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 12"	
STRUCTURE OVER 20 FOOT SPAN (SFN 1814258)												
	LS		LS				202	11003	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	92
	87		87				202	22900	87	SY	APPROACH SLAB REMOVED	
	LS		LS				503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	
	1,540		1,540				503	21100	1,540	CY	UNCLASSIFIED EXCAVATION	
	LS		LS				505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	
	6,705		6,705				507	00100	6,705	FT	STEEL PILES HP10X42, FURNISHED	
	6,100		6,100				507	00150	6,100	FT	STEEL PILES HP10X42, DRIVEN	
	555		555				507	92201	555	FT	PREBORED HOLES, AS PER PLAN	93
	287,336		287,336				509	10000	287,336	LB	EPOXY COATED STEEL REINFORCEMENT	
	14,644		14,644				509	30020	14,644	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
	564		564				511	34446	564	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
	137		137				511	34450	137	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
	177		177				511	41012	177	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	
	253		253				511	44112	253	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	
	422		422				511	46512	422	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	
	1,647		1,647				512	10100	1,647	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	70		70				512	10300	70	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
	91		91				512	33000	91	SY	TYPE 2 WATERPROOFING	
	771,146		771,146				513	10300	771,146	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5	
	9,048		9,048				513	20000	9,048	EACH	WELDED STUD SHEAR CONNECTORS	

DESIGN AGENCY  
**M** MOTT MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135  
DESIGNER SMS  
REVIEWER SJP 09/17/25  
PROJECT ID 114536  
SHEET TOTAL  
P.40 167



# EARTHWORK SUBSUMMARY

STA	CUT	FILL	EARTHWORK QUANTITIES				EXCAVATION	EMBANKMENT	203		
			ADD'L CUT FOR BENCHING	ADD'L FILL FOR BENCHING	TOTAL CUT	TOTAL FILL					
			SQ FT	SQ FT					CU YD		
326+00.00	0	0			0	0					
326+10.00	10	1			10	1	2		0		
326+25.00	10	1			10	1	6		1		
326+50.00	12	1			12	1	10		1		
326+75.00	13	1			13	1	12		1		
327+00.00	14	1			14	1	13		1		
327+25.00	14	2			14	2	13		1		
327+50.00	16	2			16	2	14		2		
327+75.00	18	3			18	3	16		2		
328+00.00	19	5			19	5	17		4		
328+25.00	18	20	95	92	113	112	61		54		
328+50.00	48	25	87	77	135	102	115		99		
328+75.00	42	35	104	91	146	126	130		106		
329+00.00	40	55	114	109	154	164	139		134		
329+25.00	36	109	241	234	277	343	200		235		
329+42.45	34	153	176	172	210	325	157		216		
329+60.76	38	272	317	311	355	583	192		308		
329+81.00	19	310	271	263	290	573	242		433		
333+80.28	20	6			20	6					
334+10.28	35	6			35	6	31		7		
334+47.80	32	120	185	182	217	302	175		214		
334+75.00	33	151	183	181	216	332	218		319		
335+00.00	33	99	152	150	185	249	186		269		
335+25.00	35	83	87	86	122	169	142		193		
335+33.40	38	92	72	71	110	163	36		52		
335+50.00	16	64	57	52	73	116	56		86		
335+75.00	15	73	94	88	109	161	85		128		
336+00.00	15	78	93	86	108	164	101		150		
336+25.00	15	71	116	108	131	179	111		159		
336+50.00	15	61	114	104	129	165	120		159		
336+75.00	13	49	80	71	93	120	103		132		
337+00.00	12	38	81	78	93	116	86		109		
337+25.00	13	17	59	53	72	70	76		86		
337+50.00	13	16	74	71	87	87	74		73		
337+75.00	13	11	43	43	56	54	66		65		
338+00.00	12	2			12	2	31		26		
338+28.89	11	0			11	0	12		1		
338+50.00	14	0			14	0	10		0		
338+75.00	9	0			9	0	11		0		
338+85.30	0	0			0	0	0		0		
339+00.00	0	0			0	0	0		0		
339+25.00	0	0			0	0	0		0		
Slope Between Rear Abutment to Pier 1							386		0		
Slope Between Pier 3 to Forward Abutment							1581		0		
TOTALS CARRIED TO GENERAL SUMMARY							5033		3826		

SEEDING QUANTITIES			
STA	WIDTH	SF	SY
326+00.00	0		
326+10.00	6	30	3
326+25.00	6	90	10
326+50.00	6	150	17
326+75.00	6	150	17
327+00.00	6	150	17
327+25.00	7	163	18
327+50.00	8	188	21
327+75.00	10	225	25
328+00.00	13	288	32
328+25.00	25	475	53
328+50.00	27	650	72
328+75.00	28	688	76
329+00.00	36	800	89
329+25.00	52	1100	122
329+42.45	60	977	109
329+60.76	82	1300	144
329+81.00	54	1376	153
333+80.28	9		
334+10.28	7	240	27
334+47.80	37	825	92
334+75.00	44	1102	122
335+00.00	39	1038	115
335+25.00	33	900	100
335+33.50	31	272	30
335+50.00	24	454	50
335+75.00	27	638	71
336+00.00	29	700	78
336+25.00	31	750	83
336+50.00	29	750	83
336+75.00	25	675	75
337+00.00	23	600	67
337+25.00	16	488	54
337+50.00	23	488	54
337+75.00	20	538	60
338+00.00	10	375	42
338+28.89	6	231	26
338+50.00	5	116	13
338+75.00	5	125	14
338+85.30	0	0	0
339+00.00	0	0	0
339+25.00	0	0	0

DESIGN AGENCY  
**M**  
**MOTT**  
**MACDONALD**  
**M**  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

---

DESIGNER  
**SMS**

---

REVIEWER  
**SJP 09/17/25**

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PROJECT ID  
**114536**

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SHEET TOTAL  
**P.44 167**

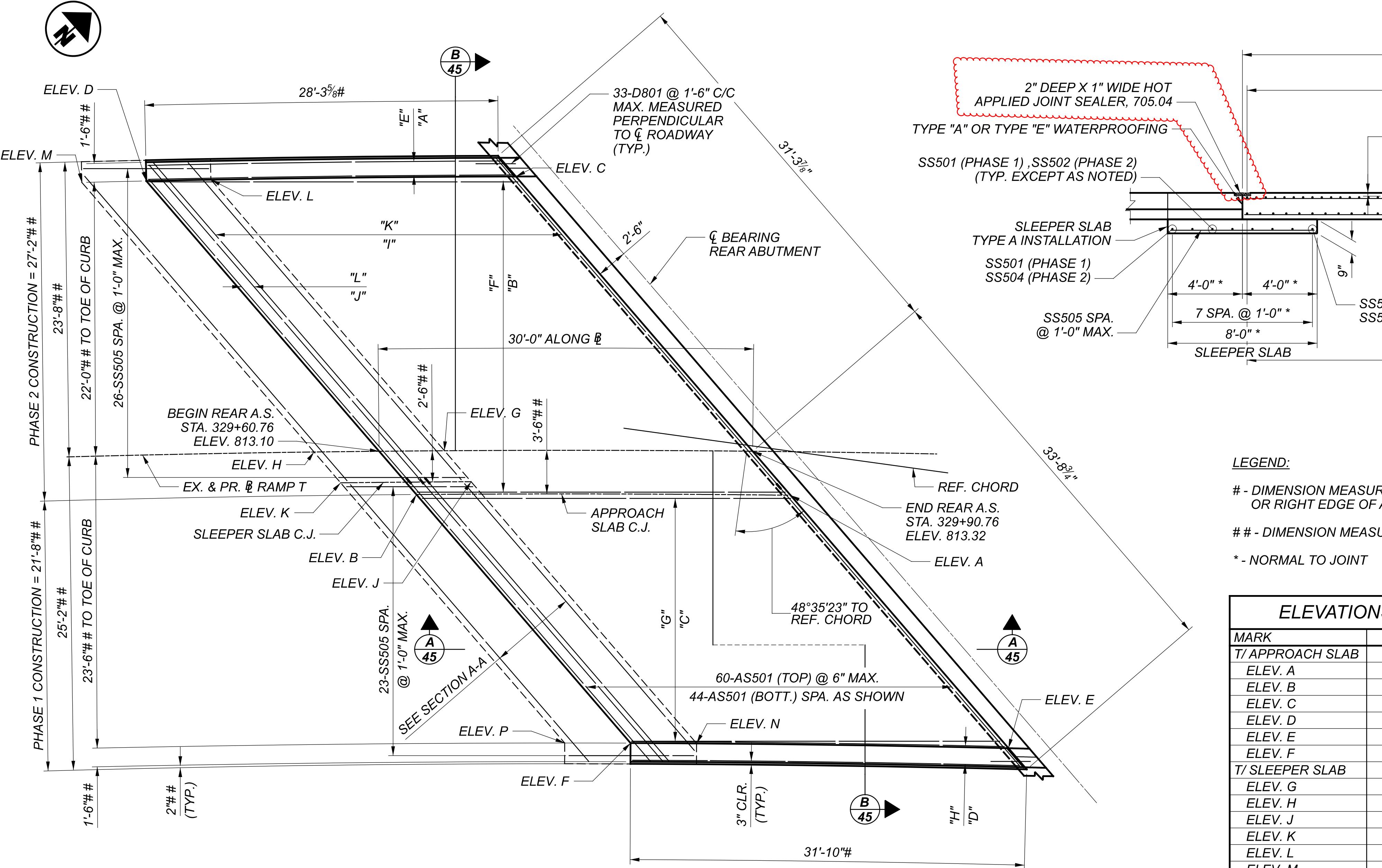
ESTIMATED QUANTITIES								CALC.	DATE	CHK'D	DATE
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GENERAL	SHEET REF.		
202	11003	LS	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					3/51		
202	22900	87	SY	APPROACH SLAB REMOVED			87				
503	11101	LS	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					3/51		
503	21100	1,540	CY	UNCLASSIFIED EXCAVATION	1,160	380					
505	11100	LS	LS	PILE DRIVING EQUIPMENT MOBILIZATION							
507	00100	6,705	FT	STEEL PILES HP10X42, FURNISHED	4,095	2,610					
507	00150	6,100	FT	STEEL PILES HP10X42, DRIVEN	3,780	2,320					
507	92201	555	FT	PREBORED HOLES, AS PER PLAN	555				4/51		
509	10000	287,336	LB	EPOXY COATED STEEL REINFORCEMENT	46,284	73,433	167,619				
509	30020	14,644	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			14,644				
511	34447	564	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			564		4/51		
511	34450	137	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			137				
511	41012	177	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	177						
511	44112	253	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	253						
511	46512	422	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	422						
512	10100	1,647	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	210	510	927				
512	10300	70	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			70				
512	33000	91	SY	TYPE 2 WATERPROOFING	91						
513	10300	771,146	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			771,146				
513	20000	9,048	EACH	WELDED STUD SHEAR CONNECTORS			9,048				
514	00060	34,727	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			34,727				
514	00066	34,727	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			34,727				
516	11210	153	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			153				
516	44101	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (11 IN x 18 IN x 2.1284 IN) (PTFE)	12				4/51		
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (15 IN x 24 IN x 2.7784 IN)	6						
516	44100	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (16 IN x 24 IN x 2.9084 IN)	6						
516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (17 IN x 26 IN x 3.0884 IN)	6						
518	20000	226	SY	PREFABRICATED GEOCOMPOSITE DRAIN	226						
518	40000	202	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	202						
518	40010	98	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	98						
526	30010	327	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")			327				
526	90010	154	FT	TYPE A INSTALLATION			154				
601	20000	656	SY	CRUSHED AGGREGATE SLOPE PROTECTION			656				

ESTIMATED QUANTITIES  
BRIDGE NO. CUY-71-10.07 SW  
IR-71 NB RAMP TO IR-480 WB

SFN 1814258  
DESIGN AGENCY  
**M** MOTT MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135  
DESIGNER LLB CHECKER SK  
REVIEWER JMR 09/17/25  
PROJECT ID 114536  
SUBSET TOTAL  
6 51  
SHEET TOTAL  
P.99 167

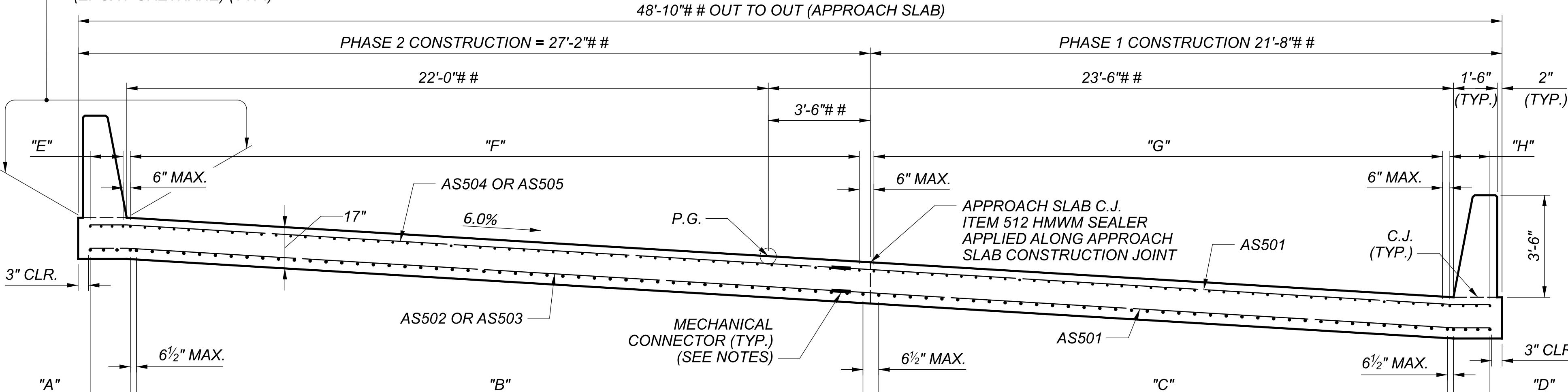
**REAR APPROACH SLAB PLAN & SECTIONS**  
**BRIDGE NO. CUY-71-10.07 SW**  
**IR-71 NB RAMP TO IR-480 WB**

APPROACH SLAB PLAN & SECTION  
BRIDGE NO. CUY-71-10.07 SW  
IR-71 NB RAMP TO IR-480 WB



## REAR APPROACH SLAB PLAN

## LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (TYP.)



**SECTION B-B**

<b>ELEVATIONS</b>	
<b>MARK</b>	<b>ELEV.</b>
<i>T/ APPROACH SLAB</i>	
<i>ELEV. A</i>	813.13
<i>ELEV. B</i>	812.92
<i>ELEV. C</i>	814.51
<i>ELEV. D</i>	814.25
<i>ELEV. E</i>	812.01
<i>ELEV. F</i>	811.85
<i>T/ SLEEPER SLAB</i>	
<i>ELEV. G</i>	811.73
<i>ELEV. H</i>	811.63
<i>ELEV. J</i>	811.59
<i>ELEV. K</i>	811.50
<i>ELEV. L</i>	812.87
<i>ELEV. M</i>	812.77
<i>ELEV. N</i>	810.38
<i>ELEV. P</i>	810.46

## LEGEND

**# - DIMENSION MEASURED ALONG THE LEFT OR RIGHT EDGE OF APPROACH SLAB**

# # - DIMENSION MEASURED RADIALLY

**\* - NORMAL TO JOINT**

## NOTES:

1. *EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL COUPLER ATTACHMENT.*
2. *SEE STRUCTURE NOTES FOR REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPMENT LENGTHS.*
3. *MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509 EPOXY COATED REINFORCING STEEL.*

## **SUGGESTED REFERENCES:**

1. SEE SHEET **47/51** FOR THE BARRIER ELEVATIONS  
AND DETAILS

## STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:  
AS-1-15  
AS-2-15  
SPP 1-20

LEGEND	BAR MARK	LOCATION	NO. OF SETS	SPACING
"A"	AS1003 (SERIES)	BOTTOM	4	6½" MAX.
"B"	AS1001	BOTTOM	47	6½" MAX.
"C"	AS1001	BOTTOM	37	6½" MAX.
"D"	AS1002 (SERIES)	BOTTOM	4	6½" MAX.
"E"	AS508 (SERIES)	TOP	4	6" MAX.
"F"	AS506	TOP	51	6" MAX.
"G"	AS506	TOP	40	6" MAX.
"H"	AS507 (SERIES)	TOP	4	6" MAX.
"I"	AS502 (SERIES)	BOTTOM	42	AS SHOWN
"J"	AS503 (SERIES)	BOTTOM	2	AS SHOWN
"K"	AS504 (SERIES)	TOP	57	6" MAX.
"L"	AS505 (SERIES)	TOP	3	6" MAX.

The logo consists of several text elements arranged vertically. At the top is the acronym 'SFN' in a bold, sans-serif font. Below it is the number '1814258' in a large, bold, sans-serif font. A horizontal line separates these from the text 'DESIGN AGENCY' in a smaller, bold, sans-serif font. Below this line is a large, bold, stylized letter 'M' in a blocky, geometric font. To the right of this 'M' is another large, bold, stylized letter 'M', also in a blocky, geometric font. At the bottom is the company name 'MOTT MACDONALD' in a bold, sans-serif font, with 'MOTT' on the first line and 'MACDONALD' on the second line.

MACDONALD  
20445 EMERALD PKWY  
SUITE 100  
CLEVELAND, OH 44135

DESIGNER	CHECKER
JTW	JMR
REVIEWER	
SK	09/17/25

PROJECT ID  
**114536**

SUBSET	TOTAL
45	51
SHEET	TOTAL
P.138	167

## NOTES:

1. EXTEND BARS THROUGH CONSTRUCTION JOINT AS REQUIRED TO PROVIDE LENGTH FOR MECHANICAL CONNECTOR ATTACHMENT.
2. SEE STRUCTURE NOTES FOR REQUIREMENTS FOR CHAMFER, CONCRETE COVER, AND REINFORCING STEEL LAP AND DEVELOPMENT LENGTHS.
3. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509-EPOXY COATED REINFORCING STEEL.

## SHEET REFERENCES:

1. SEE SHEET 47-51 FOR THE BARRIER ELEVATIONS AND DETAILS.

## STANDARD CONSTRUCTION DRAWINGS:

1. REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS FOR DETAILS NOT SHOWN:

AS-1-15  
AS-2-15  
SBR-1-20

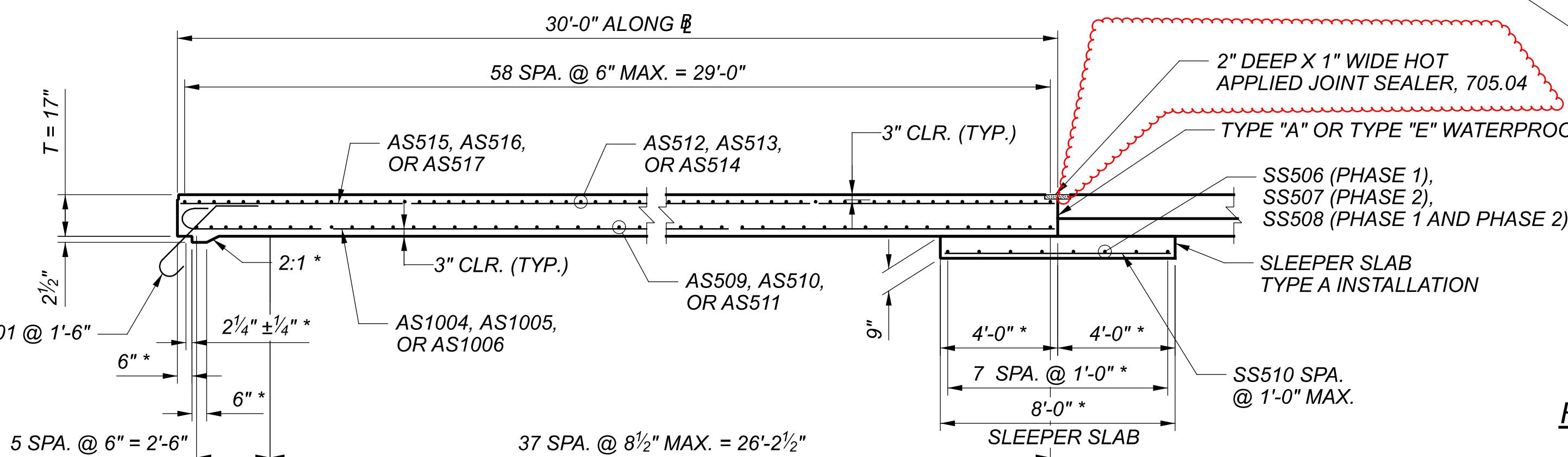
## LEGEND:

# - DIMENSION MEASURED ALONG THE LEFT OR RIGHT EDGE OF APPROACH SLAB

REQ'D LAP LENGTH	HORIZONTAL
#5	2'-5"

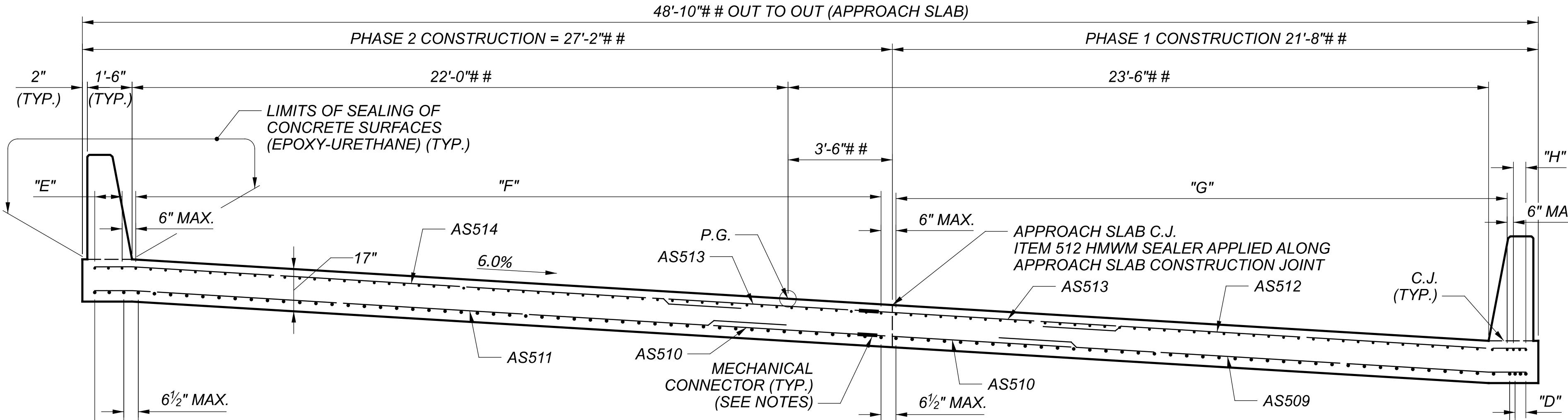
# # - DIMENSION MEASURED RADIALLY

\* - NORMAL TO JOINT



FORWARD APPROACH SLAB PLAN

## SECTION A-A

SECTION B-B  
(OTHER REINFORCEMENT NOT SHOWN FOR CLARITY)

ELEVATIONS	
MARK	ELEV.
T/ APPROACH SLAB	
ELEV. A	807.75
ELEV. B	806.71
ELEV. C	810.42
ELEV. D	809.54
ELEV. E	805.50
ELEV. F	804.38
T/ SLEEPER SLAB	
ELEV. G	805.95
ELEV. H	805.43
ELEV. J	805.67
ELEV. K	805.14
ELEV. L	808.34
ELEV. M	807.89
ELEV. N	803.23
ELEV. P	802.69

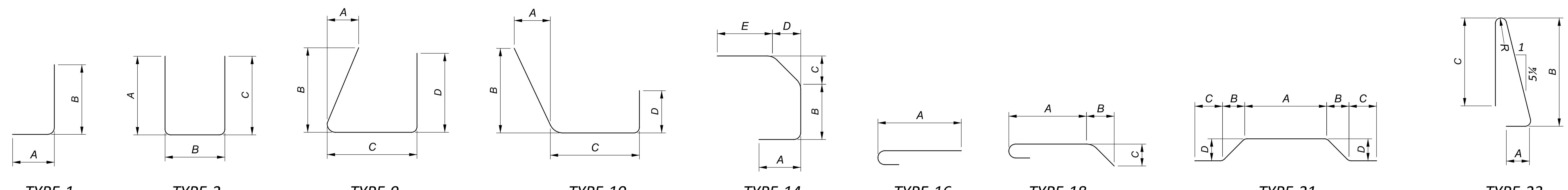
LEGEND	BAR MARK	LOCATION	NO. OF SETS	SPACING
"A"	AS1006 (SERIES)	BOTTOM	3	6½" MAX.
"B"	AS1004	BOTTOM	47	6½" MAX.
"C"	AS1004	BOTTOM	39	6½" MAX.
"D"	AS1005 (SERIES)	BOTTOM	3	6½" MAX.
"E"	AS515 (SERIES)	TOP	3	6" MAX.
"F"	AS516	TOP	51	6" MAX.
"G"	AS516	TOP	42	6" MAX.
"H"	AS517 (SERIES)	TOP	3	6" MAX.
"I"	AS509	BOTTOM	43	AS SHOWN
"J"	AS510	BOTTOM	43	AS SHOWN
"K"	AS511	BOTTOM	43	AS SHOWN
"L"	AS512	TOP	58	6" MAX.
"M"	AS513	TOP	59	6" MAX.
"N"	AS514	TOP	59	6" MAX.

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	PHASE 1	PHASE 2	TOTAL				LBS.	A	B	C	D	E	R
<b>REAR APPROACH SLAB (FOR REFERENCE ONLY)</b>													
*AS501	104		104	29'- 6"	3,200	STR							
		1	1	34'- 0"									
*AS502		S.O.	S.O.	T O	1,513	STR							5/16"
		42	42	35'- 1"									
		1	1	32'- 2"									
*AS503		S.O.	S.O.	T O	68	STR							1'-2"
		2	2	33'- 4"									
		1	1	34'- 0"									
*AS504		S.O.	S.O.	T O	2,054	STR							1/4"
		57	57	35'- 1"									
		1	1	32'- 2"									
*AS505		S.O.	S.O.	T O	103	STR							9 1/2"
		3	3	33'- 9"									
AS506	40	51	91	29'- 6"	2,800	STR							
	1		1	29'- 7"									
AS507	S.O.		S.O.	T O	127	STR							6 5/16"
	4		4	31'- 2"									
		1	1	28'- 1"									
AS508	S.O.	S.O.	T O	120	STR								4 11/16"
	4	4	29'- 3"										
AS1001	37	47	84	30'- 11"	11,175	16	29'- 6"						
	1		1	31'- 3"			29'- 10"						
AS1002	S.O.		S.O.	T O	549	16	T O						5 5/16"
	4		4	32'- 7"			31'- 2"						
		1	1	29'- 6"			28'- 1"						
AS1003	S.O.	S.O.	T O	518	16	T O							4 11/16"
	4	4	30'- 8"				29'- 3"						
SS501	7		7	29'- 4"	214	STR							
SS502		7	7	33'- 7"	245	STR							
SS503	1		1	28'- 3"	29	STR							
SS504		1	1	32'- 3"	34	STR							
SS505	23	26	49	10'- 0"	511	STR							

23,260 TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL

26,682 TOTAL ITEM 509E10000 - EPOXY COATED REINFORCING STEEL

**REINFORCING SCHEDULE (4 OF 4)**  
**BRIDGE NO. CUY-71-10.07 SW**  
**IR-71 NB RAMP TO IR-480 WB**



## TYPE-1

## TYPE-2

## TYPE-S

## TYPE-10

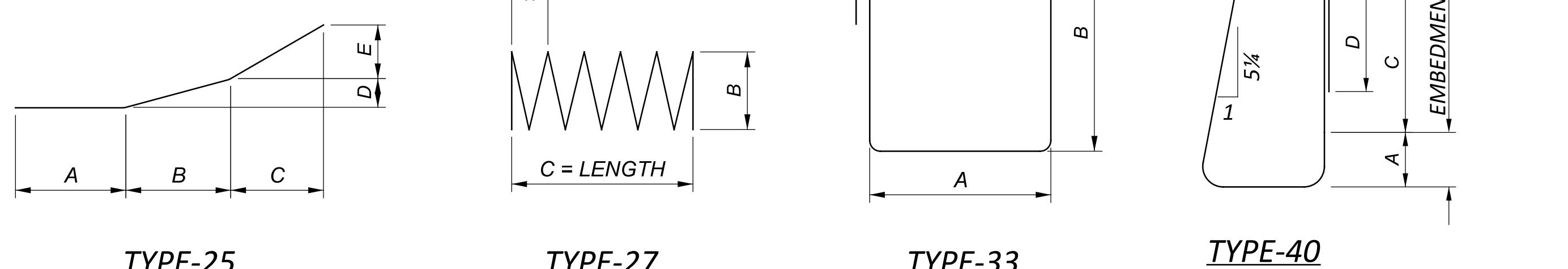
## TYPE-14

## TYPE-16

## TYPE-18

## TYPE-21

## TYPE-23



## TYPE-25

## TYPE-2

### **TYPE-3**

## TYPE-40

## TYPE-51

\* DENOTES BAR REQUIRING MECHANICAL CONNECTOR. BAR DIMENSIONS GIVEN ARE TO THE CENTER OF MECHANICAL CONNECTOR.

SFN <b>1814258</b>	
DESIGN AGENCY	
<b>M</b>	
<b>M</b>	
<b>MOTT MACDONALD</b>	
20445 EMERALD PKWY SUITE 100 CLEVELAND, OH 44135	
DESIGNER <b>JMR</b>	CHECKER <b>LLB</b>
REVIEWER <b>SK</b> <b>09/17/25</b>	
PROJECT ID <b>114536</b>	
SUBSET <b>51</b>	TOTAL <b>51</b>
SHEET <b>P.144</b>	TOTAL <b>167</b>

## **STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:**

**REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:**  
800                    DATED                    7-16-21

BRIDGE NO. CUY-480-09.69

## **PROPOSED WORKS**

#### **CLEAN AND PAINT THE STRUCTURAL STEEL**

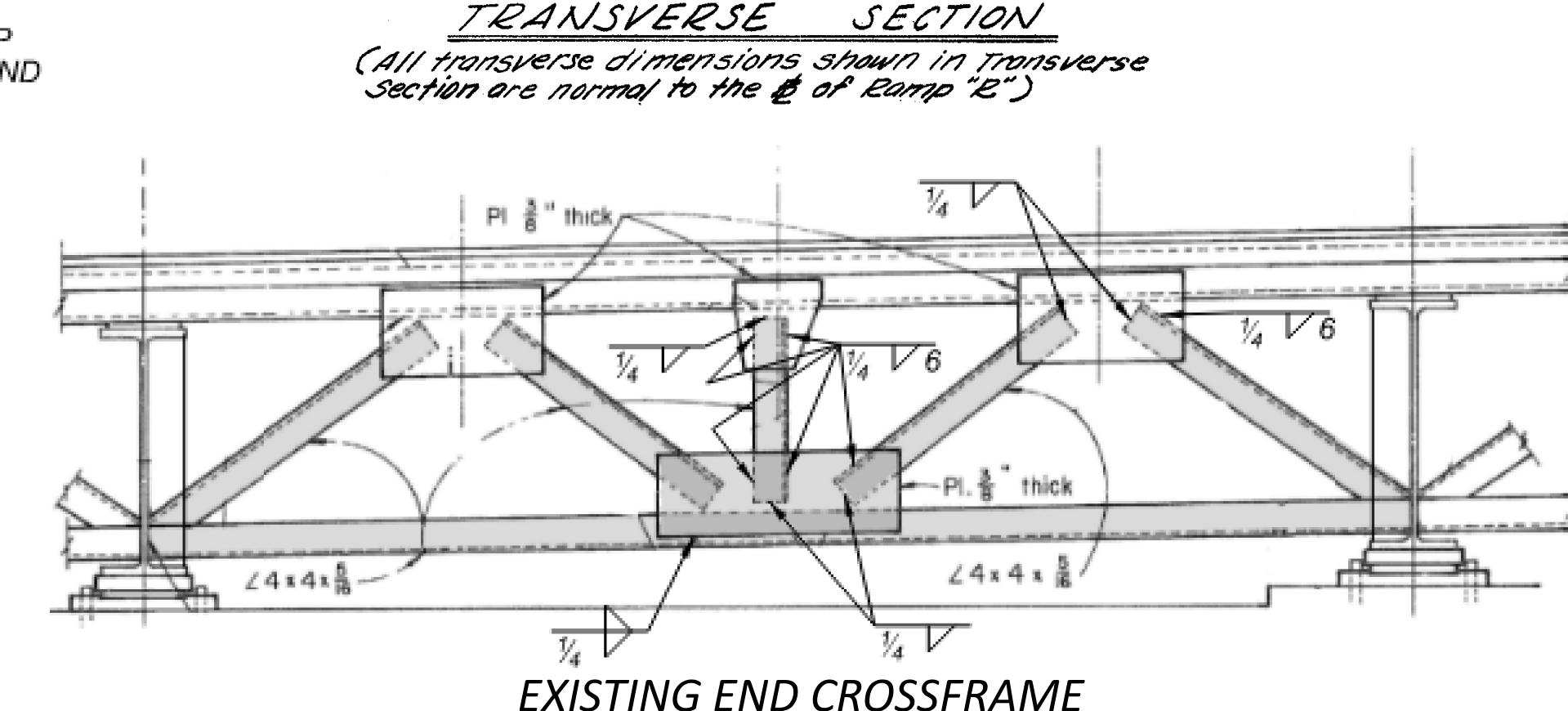
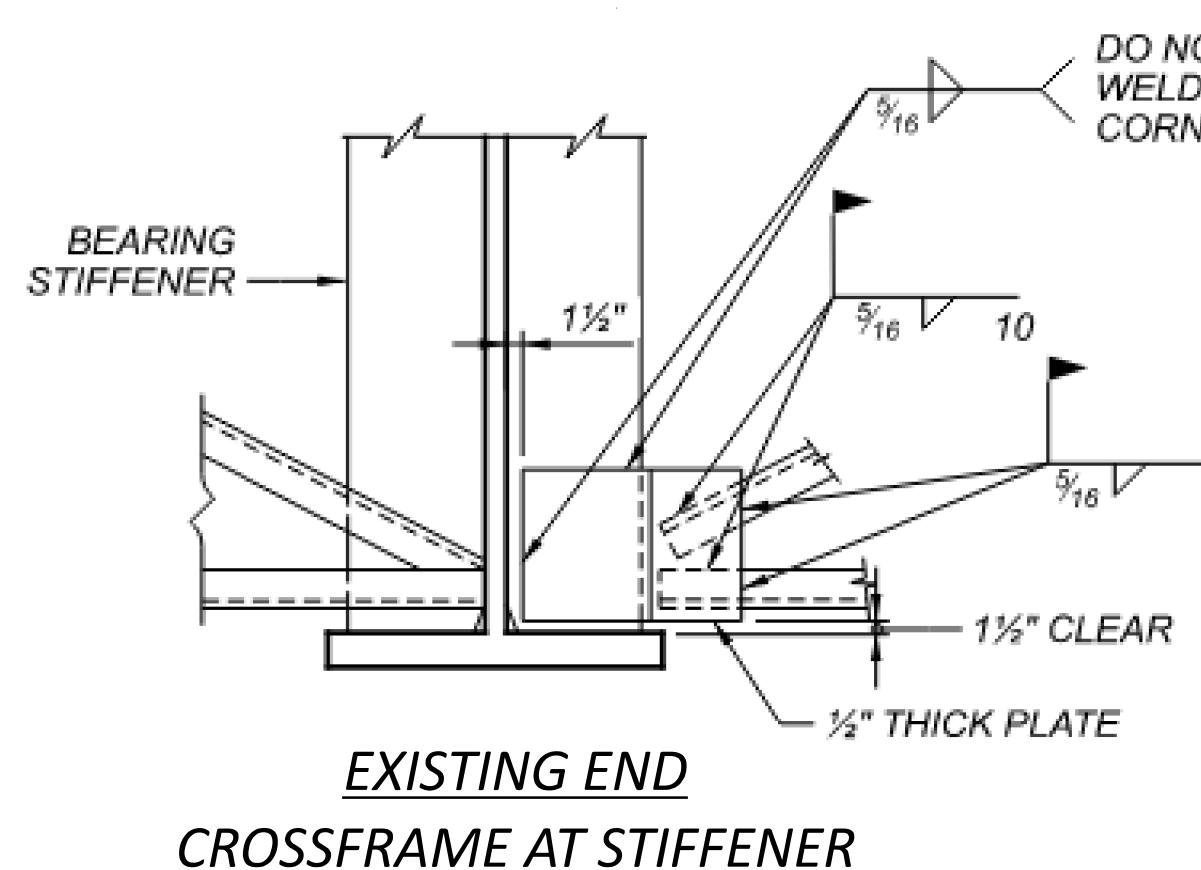
## **ITEM 514- FIELD PAINTING**

THE CONTRACTOR SHALL NOT OVERSPRAY ONTO THE CONCRETE SUPERSTRUCTURE COMPONENTS OR CONCRETE SUBSTRUCTURE COMPONENTS (E.G. DECK, RAILING, BACKWALL, ABUTMENT, AND PIERS). THE PAINTING SHALL BE CONFINED TO THE STRUCTURAL STEEL COMPONENTS.

CUY-480-08.69, SFN 181249:  
THE COLOR OF THE FINISH COAT SHALL BE AMS-STD-595A COLOR NO. 16440 (LIGHT GRAY, GLOSS)  
FOR ALL STEEL SURFACES.

*THE CONTRACTOR SHALL PROVIDE A DRAWDOWN CARD AS SPECIFIED IN CMS 708.02 FOR EACH OF THE URETHANE FINISH COAT COLORS.*

**ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE WORK  
DESCRIBED ABOVE SHALL BE INCLUDED IN THE APPROPRIATE 514 ITEM BID PRICES.**



## STRUCTURE ESTIMATED QUANTITES:

CLJY-480-08 69: RAMP "B" OVER I-480: SEN 1814249

ITEMS	QTY	UNIT	DESCRIPTION
514	31,400	SQ FT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL
514	31,400	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (PRIME COAT)
514	31,900	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (INTERMEDIATE COAT)
514	31,900	SQ FT	FIELD PAINTING OF EXISTING STRUCTURAL STEEL (FINISH COAT)
514	29	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL
514	21	EACH	FINAL INSPECTION REPAIR

### ***ALL QUANTITIES CARRIED TO GENERAL SUMMARY***

## **EXISTING VERTICAL CLEARANCE**

*THE EXISTING MINIMUM VERTICAL CLEARANCES OF SFN 1814129 ARE 19.7' FOR IR-480EB AND 17.6' FOR IR-480-WB.*

## NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT, ESTIMATED QUANTITIES AND/OR AS DESCRIBED IN THE GENERAL NOTES.

## TRANSVERSE SECTION AND ESTIMATED QUANTITIES

CUY-480-08.71 ES  
DAMD "D" OV/ED | 1900

SFN  
1814249  
DESIGN AGENCY



DESIGNER	CHEC
TSR	RH
REVIEWER	
PAT	07-18-
PROJECT ID	
114536	
SUBSET	TOTAL
1	3
SHEET	TOTAL
P.145	16