STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

D08-BRIDGE MAINTENANCE-FY2025

CITY OF FRANKLIN, CITY OF CARLISLE
FRANKLIN, HARLAN & WASHINGTON TOWNSHIPS
IN WARREN COUNTY

SEE SHEET #2 FOR LOCATION MAP

LOCATION MAP

LATITUDE: *LONGITUDE:*

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

(REFER TO SHEET 2 FOR ADDITIONAL LOCATION MAP INFORMATION.)

DESIGN DESIGNATION

SEE SHEET 2

DESIGN EXCEPTIONS

N/A

ADA DESIGN WAIVERS

N/A

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:

FEDERAL PROJECT NUMBER

E240467

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REPLACE DETERIORATED CONCRETE PIER PEDESTALS AT WAR-75-6.34. REPAIR ABUTMENT WING WALL AT WAR-75-10.02. INSTALL RIGID OVERLAY AND UPGRADE THE BARRIERS AT WAR-123-0.23. REPLACE EXPANSION JOINTS AT WAR-123-30.84. PATCH DECK WEARING SURFACE AT WAR-71-18.66L. REFURBISH PIER BEARINGS AT HAM-74-19.08R.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	*0 ACRES*
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	*0 ACRES*
NOTICE OF INTENT EARTH DISTURBED AREA:	*N.O.I. 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 EXCEPT AS NOTED ON SHEETS 7 THRU 9, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Tammy K. Campbell
Tammy K. Campbell
District 8 Deputy Director

Pamela Boratyn
Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS

MGS-1.1	7/16/21	MT-95.30	7/19/19	TC-41.20	10/18/13				
MGS-2.1	1/19/18	MT-95.31	7/19/19	TC-41.30	4/21/23				
MGS-4.2	7/19/13	MT-95.32	4/19/19	TC-42.20	10/18/13				
MGS-4.3	1/18/13	MT-95.41	7/21/23	TC-61.30	7/19/24				
MGS-5.3	7/15/16	MT-95.45	7/21/23	TC-65.10	1/17/14				
RM-4.2	4/17/20	MT-95.50	7/21/17	TC-65.11	1/19/24				
BP-3.1	1/19/24	MT-95.60	4/19/19						
		MT-95.61	4/19/19						
BR-2-15	7/19/24	MT-97.10	4/19/19						
DBR-2-73	7/19/02	MT-98.10	1/17/20						
DBR-3-11	7/15/11	MT-98.11	1/17/20						
EXJ-4-87	1/19/24	MT-101.60	4/21/23						
GSD-1-19	7/19/24	MT-101.70	7/19/24						
PCB-91	7/17/20	MT-102.20	4/19/19						
FB-1-82	7/19/24	MT-105.10	1/17/20						
RB-1-55	7/19/24	MT-110.10	7/19/13						

SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
800-2023	7/19/24	ASBESTOS INSPECTION REPORT 10/25/24
809	7/19/24	
832	7/19/24	
848	7/19/24	

ENGINEER'S SEAL

STATE OF OHIO
CHRISTOPHER AARON HOWARD
E-62429
REGISTERED
PROFESSIONAL ENGINEER

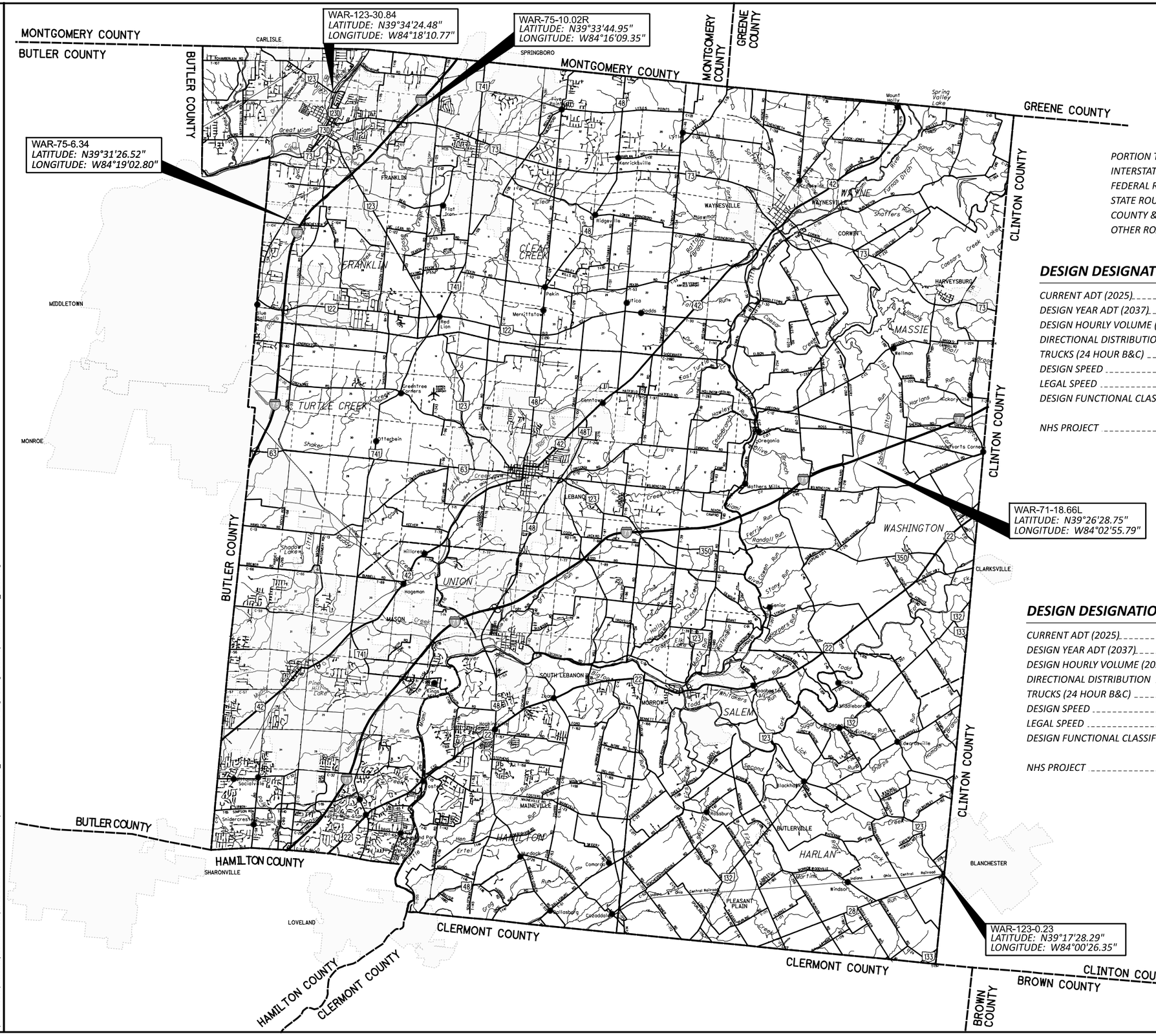
TITLE SHEET

DESIGN AGENCY

DESIGNER CAH
REVIEWER JO 10-23-24
PROJECT ID 110113
SHEET 01 TOTAL 42

D08-BM-FY2025

MODEL: Sheet_Sun/Ft PAPERSIZE: 17x11 (in.) DATE: 1/27/2025 TIME: 1:49:56 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113400-Engineering\Roadway\Sheets\110113_GT001.dgn



ROAD LEGEND

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

DESIGN DESIGNATION

	WAR-123-0.23	WAR-123-30.84
CURRENT ADT (2025)	2,000	12,500
DESIGN YEAR ADT (2037)	2,100	13,000
DESIGN HOURLY VOLUME (2037)	300	1,500
DIRECTIONAL DISTRIBUTION	0.65	0.59
TRUCKS (24 HOUR B&C)	3%	4%
DESIGN SPEED	60 MPH	60 MPH
LEGAL SPEED	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	(05) RURAL COLLECTOR	(03) URBAN ARTERIAL
NHS PROJECT	NO	NO

DESIGN DESIGNATION

	WAR-75-6.34	WAR-75-10.02R	WAR-71-18.66L
CURRENT ADT (2025)	107,000	114,000	43,500
DESIGN YEAR ADT (2037)	108,000	120,000	48,500
DESIGN HOURLY VOLUME (2037)	11,000	13,000	4,800
DIRECTIONAL DISTRIBUTION	0.53	0.52	0.60
TRUCKS (24 HOUR B&C)	22%	21%	24%
DESIGN SPEED	70 MPH	70 MPH	70 MPH
LEGAL SPEED	65 MPH	65 MPH	65 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	(01) URBAN INTERSTATE	(01) URBAN INTERSTATE	(01) RURAL INTERSTATE
NHS PROJECT	YES	YES	YES

NOTES:

1. MAP IS NOT TO SCALE.

LOCATION MAP - WARREN COUNTY

DESIGN AGENCY

DESIGNER CAH

REVIEWER JO 10-23-24

PROJECT ID 110113

SHEET 02 TOTAL 42

D08-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/26/2025 TIME: 8:47:45 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113400-Engineering\Roadway\Sheets\110113_GB001.dgn

UTILITIES

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

AES OHIO
1900 DRYDEN RD
DAYTON, OH 45439
937-554-9063 (WILLIAM WARD)
WILLIAM.WARD@AES.COM

CHARTER COMMUNICATIONS
10920 KENWOOD ROAD
BLUE ASH, OHIO 45242
DL-SOUTHERN-OHIO-OUTSIDE-PLANT@CHARTER.COM
513-386-5499 (KENT RIEGER)
KENT.RIEGER@CHARTER.COM

GREATER CINCINNATI WATER WORKS
4747 SPRING GROVE AVENUE
CINCINNATI, OH 45232
513-352-3723 (DAN LOUIS)
DANIEL.LOUIS@GCWW.CINCINNATI-OH.GOV

CINCINNATI STORMWATER MANAGEMENT UTILITY
225 WEST GALBRAITH ROAD
CINCINNATI, OHIO 45215
(513) 352-4246 (OFFICE) JEFF OXENHAM, PE
(513) 503-1616 (MOBILE)
SMUPLANREVIEW@CINCINNATI-OH.GOV
RAY SCHORK
RAYMOND.SCHORK@CINCINNATI-OH.GOV
513-244-3914

CITY OF CINCINNATI TRAFFIC
801 PLUM ST, ROOM 320
CINCINNATI, OH 45202
513-378-6190 (ANDY CARTER)
ANDREW.CARTER@CINCINNATI-OH.GOV

MCI/VERIZON
8800 GOVERNOR HILL DR
CINCINNATI, OH 45249
513-839-3486 (STEPHEN HOWELL)
STEPHEN.HOWELL@VERIZON.COM

INTELLIGENT TRANSPORTATION SYSTEM (ITS)
OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE OF TRAFFIC ENGINEERING, SIGNALS, AND ITS SECTION HEAD
1980 WEST BROAD STREET
COLUMBUS, OHIO 43223
DIRECT: 614-387-0695 (PAUL BECK) CONTACT
EMAIL: PAUL.BECK@DOT.OHIO.GOV

CROWN CASTLE FIBER
10188 INTERNATIONAL BOULEVARD
CINCINNATI, OH 45246
513-898-1595 (CRAIG SNELL)
CRAIG.SNELL@CROWNCASTLE.COM

WARREN COUNTY WATER AND SEWER
406 JUSTICE DR
LEBANON, OH 45036
513-695-1377 (CHRIS BRAUSCH)

VILLAGE OF BLANCHESTER
BOARD OF PUBLIC AFFAIRS
318 E MAIN ST SUITE 102
PO BOX 158
BLANCHESTER, OHIO 45107
513-767-6118 (BRIAN YORK)

UTILITIES (Continued)

THIS PROJECT REQUIRES THE INSTALLATION OF NEW GUARDRAIL POSTS. SURVEY WORK HAS NOT BEEN PERFORMED ON THIS PROJECT, NOR HAVE THE UTILITY LOCATIONS BEEN CONFIRMED IN THE FIELD. IN ADDITION TO CMS 105.07, IF, DURING THE COURSE OF INSTALLING ANY NEW GUARDRAIL COMPONENT, IT IS DETERMINED THAT A UTILITY CONFLICT MAY RESULT, THE CONTRACTOR IS TO NOTIFY THE PROJECT ENGINEER IMMEDIATELY.

UTILITIES ARE NOT TO BE RELOCATED AS A RESULT OF THIS OPERATION. ADJUSTMENTS TO THE PROPOSED GUARDRAIL WILL ACCOMMODATE THE EXISTING UTILITY. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE GUARDRAIL VIA MEANS THAT WOULD BE COMPLIANT WITH THE IMPACTED UTILITY S SAFETY GUIDELINES AS WELL AS STILL MEETING ODOT S DESIGN CRITERIA.

ANY MINOR ADJUSTMENTS MADE TO THE PROPOSED GUARDRAIL INSTALLATIONS SHALL BE INCIDENTAL TO PAY ITEM 606.

SEEDING AND MULCHING

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

659, TOPSOIL	*62 CU. YD.*
659, SEEDING AND MULCHING	*563 SQ. YD.*
659, REPAIR SEEDING AND MULCHING	*28 SQ. YD.*
659, COMMERCIAL FERTILIZER	*0.08 TON*
659, LIME	*0.12 ACRES*
659, WATER	*3.0 M. GAL.*

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.
ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.
PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

EXISTING PLANS

EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 8 OFFICE IN LEBANON, OHIO.

ITEM SPECIAL - 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.

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.

GENERAL NOTES - 1

DESIGN AGENCY

DESIGNER CAH
REVIEWER JO 10-23-24
PROJECT ID 110113
SHEET 03 TOTAL 42

D08-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/26/2025 TIME: 8:50:24 PM USER: chovard4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113\400-Engineering\Roadway\Sheets\110113_GN001.dgn

ITEM 614- MAINTAINING TRAFFIC

WAR-75-0634 (MANCHESTER RD.): MAINTAIN TRAFFIC ON I-75 PER THE LANE VALUE CONTRACT TABLE. PROVIDE SHOULDER CLOSURES PER STD. DWG. MT-95.45 THAT UTILIZES PORTABLE CONCRETE BARRIER TO PROTECT TEMPORARY SUPPORTS. TRAFFIC ON MANCHESTER RD. SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR A TIME PERIOD AS NOTED IN THE WINDOW CONTRACT TABLE WHEN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 9.

WAR-75-1002R: THE SHOULDER OF THE I-75 NB RAMP MAY BE CLOSED FOR CONTRACTOR ACCESS OR MATERIAL DELIVERY, BUT THE RAMP SHALL REMAIN OPEN AT ALL TIMES. THE WESTBOUND OUTSIDE LANE AND SHOULDER OF SR 73 MAY BE CLOSED PER THE LANE VALUE CONTRACT TABLE FOR CONTRACTOR ACCESS, BUT SHALL REMAIN OPEN AT ALL OTHER TIMES.

WAR-123-0023: TRAFFIC ON SR 123 SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR A PERIOD AS NOTED IN THE WINDOW CONTRACT TABLE WHEN TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEETS 7 & 8.

WAR-123-3084: MAINTAIN 1 LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES. MAINTAIN A MINIMUM OF ONE SIDEWALK AT ALL TIMES. REFER TO PHASED MOT PLANS ON SHEETS 10 & 11.

WAR-71-1866L: MAINTAIN TRAFFIC ON I-71 SB PER THE LANE VALUE CONTRACT TABLE

HAM-74-1908R: MAINTAIN TRAFFIC ON I-74 SB PER THE PERMITTED LANE CLOSURE POLICY.

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 ((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 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

DURING THE SAME PERIODS, MAINTAIN PEDESTRAIN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

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

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.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC TO CLOSE A SHOULDER AND/OR LANE USING DRUMS OR PCB PER MT-95.31, MT-95.41 AND MT-95.45 AT WAR-123-30.48, WAR-75-6.34 AND WAR-75-10.02R. PORTABLE BARRIER SHALL BE USED TO PROTECT OPENINGS IN GUARDRAIL, WORK AREAS AND/OR TEMPORARY BRIDGE SHORING, ETC.

ITEM 614 - WORK ZONE IMPACT ATTENUATOR = 3 EACH
ITEM 622 - PORTABLE BARRIER = 1,200 FT

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.

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

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 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 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:

ITEM	DURATION OF CLOSURE	NOTICE DUE TO OFFICE OF COMMUNICATIONS
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 CLOSURE & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	2 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 NOTICE TO OFFICE OF COMMUNICATIONS TIME TABLE.

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.

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. 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

- 3 SIGN MONTHS ASSUMING 3 PCMS SIGN(S) FOR 1 MONTH(S)
PLACE A SIGN ALONG I-75 NB & I-75 SB APPROACHING WAR-75-6.34.
PLACE A SIGN ON SR 73 WB APPROACHING TO WAR-75-1002R.

- 3 SIGN MONTHS ASSUMING 2 PCMS SIGN(S) FOR 2 MONTH(S)
PLACE A SIGN AT THE INTERSECTION OF MANCHESTER RD. & DIXIE HWY.
PLACE A SIGN AT THE INTERSECTION OF MANCHESTER RD. & UNION RD.

TOTAL = 5 PCMS FOR 7 MONTHS

MAINTENANCE OF TRAFFIC NOTES - 1

DESIGN AGENCY

DESIGNER CAH

REVIEWER SK 10-25-24

PROJECT ID 110113

SHEET 05 TOTAL 42

D08-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/26/2025 TIME: 8:52:08 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D0811011\3400-Engineering\MOT\Sheets\110113_MN001.dgn

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	6	12	15	16					01/IMS/47	02/S5K/47	03/STR/47						
																		MAINTENANCE OF TRAFFIC	
			100								60	40		614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			LUMP								LUMP		LUMP	614	12420	LS		DETOUR SIGNING	
			20									20		614	13312	20	EACH	BARRIER REFLECTOR, TYPE 2 (UNI-DIRECTIONAL)	
			20									20		614	13360	20	EACH	OBJECT MARKER, TWO WAY (UNI-DIRECTIONAL)	
		7									7			614	18601	7	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	5
				0.2								0.2		614	21100	0.2	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
				5								5		614	22110	5	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
				0.16								0.16		614	22200	0.16	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I	
				316								316		614	23200	316	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
				28								28		614	26200	28	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
				17								17		614	30200	17	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
		3									3			614	12380	3	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	6
		1,200									1,200			622	41100	1,200	FT	PORTABLE BARRIER, UNANCHORED	
																		INCIDENTALS	
		LUMP									LUMP	LUMP	LUMP	614	11000	LS		MAINTAINING TRAFFIC	
	LUMP										LUMP	LUMP	LUMP	623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	4
											LUMP	LUMP	LUMP	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY - 2

DESIGN AGENCY

DESIGNER CAH

REVIEWER JO 10-23-24

PROJECT ID 110113

SHEET 14 TOTAL 42

D08-BM-FY2025

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

BR-2-15	*DATED (REVISED) 7/19/24*
DBR-2-73	*DATED (REVISED) 7/19/02*
DBR-3-11	*DATED (REVISED) 7/15/11*
EXJ-4-87	*DATED (REVISED) 1/19/24*
GSD-1-19	*DATED (REVISED) 7/19/24*
FB-1-82	*DATED (REVISED) 7/19/24*
RB-1-55	*DATED (REVISED) 7/19/24*

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

SS 848	*DATED 7/19/24*

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2023 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, CONCRETE BRIDGE RAILINGS, METAL RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS-FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE DEPARTMENT WILL NOT PERMIT THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM STEEL GIRDER, ETC.), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER S APPROVAL BEFORE PERFORMING REPAIR.

DECK REMOVALS - COMPOSITE DECK DESIGNS STEEL SUPERSTRUCTURES: DUE TO THE PRESENCE OF WELDED STUDS TO THE EXISTING STRUCTURAL STEEL, SUBMIT A DETAILED PROCEDURE OF THE DECK REMOVAL TO THE ENGINEER AT LEAST 7 DAYS BEFORE CONSTRUCTION BEGINS. DEPARTMENT ACCEPTANCE IS NOT REQUIRED. THE PROCEDURE SHALL INCLUDE ALL DETAILS, EQUIPMENT AND METHODS TO BE USED FOR REMOVAL OF THE CONCRETE OVER THE FLANGES AND AROUND THE STUDS. REPLACE OR REPAIR MAIN STEEL AND STUDS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE ENGINEER. OBTAIN THE ENGINEER S APPROVAL BEFORE PERFORMING REPAIR.

CUT LINE CONSTRUCTION JOINT PREPARATION
SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

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

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN. FOR MODIFICATIONS TO OR EXTENSIONS OF EXISTING CONCRETE SUBSTRUCTURE MEMBERS, INCLUDE THE FOLLOWING NOTES IN AN ITEM 202, ASPER PLAN NOTE.

MAXIMUM REMOVAL LIMITS

SOUND THE CONCRETE TO DETERMINE THE LIMITS OF THE CONCRETE TO BE REMOVED AND COMPARE THESE LIMITS TO THE AREAS SHOWN IN THE PLANS. IF NEW AREAS ARE DISCOVERED OR IF THE DIMENSIONS OF THE PLAN AREAS INCREASE BY MORE THAN 25% IN ANY DIRECTION, DOCUMENT THE AREAS AND NOTIFY THE ENGINEER FOR EVALUATION TWO WEEKS PRIOR TO REMOVAL. THE ENGINEER WILL DETERMIN IF PATCHING IN DISCRETE SECTIONS/STAGES IN IS NEEDED OR IF THE INSTALLATION OF TEMPORARY FALSWORK IS REQUIRED.

PROPOSED WORK

REHABILITATE BRIDGE WAR-75-0634 (SFN 8303517) WHICH CARRIES MANCHESTER RD. OVER I-75 AS FOLLOWS:

1. *CONCRETE PEDESTALS AT PIER 2 AND PIER 3 ARE DETERIORATED. PROVIDE A TEMPORARY SUPPORT DESIGNED TO SUPPORT DEAD LOAD (TRAFFIC WILL BE DETOURED), REMOVE THE EXISTING CONCRETE PEDESTALS, AND INSTALL A CONTINUOUS CONCRETE BEAM SEAT MATCHING THE PLAN AREA OF THE EXISTING CAPS.*

2. *SEAL THE NEW CAP AREA WITH AN EPOXY URETHANE SEALER MATCHING THE EXISTING SEALER.*

REHABILITATE BRIDGE WAR-75-1002R (SFN 8303851) WHICH CARRIES NORTHBOUND I-75 OVER SR 73 AS FOLLOWS:

1. *THE DIAPHRAGM END WALL AT THE NORTHEAST CORNER IS SEVERELY DETERIORATED DUE TO POOR CONCRETE. IT IS LIKELY THIS CONCRETE CANNOT BE REMOVED FOR REPLACEMENT AS IT CONTAINS THE BACKFILL UNDER THE APPROACH SLAB.*

   REMOVE THE VERY LOOSE DETERIORATED CONCRETE, THEN CONSTRUCT A CONCRETE ENCASEMENT AROUND IT THAT IS ANCHORED TO THE ABUTMENT BELOW AND REINFORCED SUCH THAT IT WILL PASSIVELY RESTRAIN ANY EARTH PRESSURE FROM THE EMBANKMENT UNDER THE APPROACH SLAB AS THE CONCRETE CONTINUES TO DETERIORATE.

2. *SEAL THE NEW CONCRETE ENCASEMENT AREA WITH AN EPOXY-URETHANE SEALER MATCHING THE EXISTING SEALER.*

REHABILITATE BRIDGE WAR-123-0023 (SFN 8304095) WHICH CARRIES SR 123 OVER SECOND CREEK AS FOLLOWS:

1. *REMOVE 1" OF THE EXISTING DECK USING HYDRO-DEMOLITION AND REPLACE WITH 1 ¾" OF SDC CONCRETE ON THE DECK, AB UTMENT BACKWALLS AND APPROACH SLABS. VARY THE DEPTH OF HYDRO-DEMOLITION ON THE APPROACH SLABS TO ALLOW THE TOP OF THE NEW OVERLAY TO MEET THE EXISTING TOP OF APPROACH ASPHALT PAVEMENT OFF OF THE BRIDGE.*

2. *REPLACE THE EXISTING STRIP SEAL GLANDS ONLY. PLACE ¾" X 3 ½" STEEL VERTICAL EXTENSION PLATES OVER THE TOP OF EACH EXPANSION JOINT ANGLE TO ACCOMMODATE THE CHANGE IN PROFILE.*

3. *REPLACE THE COMPRESSION SEAL BETWEEN THE TOP OF BACKWALL AND THE APPROACH SLAB.*

4. *RETROFIT THE EXISTING GUARDRAIL ON THE BRIDGE PER DBR-3-11. INCLUDE REPLACEMENT OF THE "W" RAIL WITH THE RETROFIT.*

5. *REPLACE THE APPROACH GUARDRAIL, TRANSITION, AND END TERMINAL ASSEMBLIES TO CURRENT STANDARDS.*

6. *CLEAR AND GRUB WITHIN 20 FEET OF THE STRUCTURE.*

PROPOSED WORK (CONTINUED)

REHABILITATE BRIDGE WAR-123-3084 (SFN 8304785) WHICH CARRIES SR 123 OVER THE GREAT MIAMI RIVER AS FOLLOWS:

1. *REPLACE THE EXISTING EXPANSION JOINTS INCLUDING 3 FEET OF THE DECK AND THE TOP OF THE BACKWALL DOWN TO THE APPROACH SLAB SEAT WITH A NEW STRIP SEAL EXPANSION JOINT SYSTEM.*

2. *PATCH DETERIORATED AREAS OF APPROACH SLAB WITH A TYPE C PATCH PER PROPOSAL NOTE 512.*

3. *REPLACE THE COMPRESSION SEAL BETWEEN THE TOP OF BACKWALL AND THE APPROACH SLAB.*

4. *REMOVE EXISTING SEALER AND RESEAL THE ABUTMENTS PER 512 SPECIFICATIONS INCLUDING THE BACKWALLS.*

5. *REPLACE SETTLED PORTIONS OF APPROACH SIDEWALK (ROUGHLY 2 TO 3 SQUARES BEHIND THE ABUTMENTS) AT ALL FOUR CORNERS OF THE BRIDGE.*

REHABILITATE BRIDGE WAR-71-1866L (SFN 8302375) WHICH CARRIES I-71 SB OVER GUM RUN AS FOLLOWS:

1. *PATCH THE SOUTHBOUND, RIGHT (WEST) LANE WITH CONCRETE PER PROPOSAL NOTE 512, TYPE B.*

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS 102.05, 105.02, AND/OR 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW REINFORCING STEEL OF THE SAME SIZE AND COATING AT NO COST TO THE DEPARTMENT.

ITEM 509 - UNCOATED STEEL REINFORCING

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS.

STRUCTURE NOTES - 1
BRIDGE No.: VARIES

SFN
VARIES

DESIGN AGENCY

DESIGNER	CHECKER
CAH	GTF

REVIEWER
RSK 10-23-24

PROJECT ID
110113

SUBSET	TOTAL
1	2

SHEET	TOTAL
23	42

DO8-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/27/2025 TIME: 1:04:30 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113\W00-Engineering\Structures\SFN_8303517\Sheets\110113_SFN_8303517_SN001.dgn

ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS, AS WELL AS THEIR CLEARNING AND PAINTING. INCLUDED SHALL BE THE DIS-ASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, INSTALLATION OF NEW ANCHOR RODS/BOLTS WITH BEARING SUPPORT NUTS, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (C&MS 711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES FARENHEIT, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATIFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

INSTALLATION OF SEAL

DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE SUPERSTRUCTURE SIDE OF THE EXPANSION JOINT SEAL, OBSERVE THE SEATING OF BEAMS ON BEARINGS TO ASSURE THAT POSITIVE BEARING IS MAINTAINED.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION AND JACKING TOWER PLANS IN ACCORDANCE WITH C&MS 501.05.
IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDIGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN C&MS 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPT-ABLE METHODS INCLUDE: HIGH-PRESSURE WATER BLAST-ING WITH, OR WITHOUT, ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING.

ITEM 510, DOWEL HOLES, AS PER PLAN:

INSTALL GALVANIZED DOWEL BARS ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR BLACK REBAR PUBLISHED IN THE ICC-ES REPORTS LISTED BELOW.

THE HOLES FOR THE ADHESIVE ANCHORS SHALL BE DRILLED WITH A HAMMER DRILL AND CARBIDE BIT. PRIOR TO THE INSTALLATION OF THE ANCHORS, THE HOLES SHALL BE CLEANED AND DRIED IN A MANNER CONSISTENT WITH THE MANUFACTURER'S REQUIREMENTS FOR DRY CONCRETE.

SELECT FROM ONE OF THE FOLLOWING APPROVED PRODUCTS:

HILTI HIT-HY 200 ADHESIVE ANCHORS
ICC-ES REPORT ESR-3187)

DEWALT PURE110+ EPOXY ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-3298)

SIMPSON STRONG-TIE SET-3G EPOXY ADHESIVE ANCHORS
ICC-ES REPORT ESR-4057)

ATC ULTRABOND HS-1CC ADHESIVE ANCHOR SYSTEM
(ICC-ES REPORT ESR-4094)

THE MANUFACTURER'S INSTALLATION INSTRUCTION PUBLISHED IN THE ICC-ES REPORTS FOR ACCEPTABLE PRODUCTS ARE AVAILABLE AT:

https://icc-es.org/evaluation-report-program/

DEEP BEAM RETROFIT RAILING, AS PER PLAN

PROVIDE AB UPGRADE RETROFIR TO THE EXISTING DEEP BEAM BRIDGE GUARDRAIL SYSTEM PER STD. DWG. DBR-3-11. IN ADDITION TO THE REQUIREMENTS OF DBR-3-11, REMOVE THE EXISTING W-BEAM PORTION OF THE BRIDGE RAILING ON BOTH SIDES OF THE BRIDGE AND REPLACE WITH NEW W-BEAM RAIL SECTIONS.

ERECT RAIL ELEMENTS PER C&MS 606. FURNISH W-BEAM RAIL AND HARDWARE ACCORDING TO C&MS 710.06.

STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN

THIS PAY ITEM SHALL INCLUDE ALL MATERIALS, LABOR, EQUIPMENT, AND ANY MISCELLANEOUS ITEMS (i.e. FILL PLATES, SURVEY, ETC.) REQUIRED TO COMPLETE THE INSTALLATION.

REFER TO STD. DWG. EXJ-4-87 FOR ADDITIONAL DETAIL.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY- URETHANE), AS PER PLAN:
EPOXY-URETHANE SEALING OF THE ENTIRE STRUCTURE SHALL BE COMPLETED IMMEDIATELY AFTER THE BRIDGE IS CONSTRUCTED. SEALING COLOR SHALL BE FEDERAL COLOR 17778 (LIGHT NEUTRAL).

ITEM 516 - VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN:

THIS PAY ITEM SHALL INCLUDE ALL MATERIALS, LABOR, EQUIPMENT, AND ANY MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE INSTALLATION INCLUDING COMPLETE PENETRATION WELDING OF THE EXTENSION BARS ALONG THE CROWN OF THE ROAD.

ITEM 519 - COMPOSITE FIBER WRAP
THIS WORK CONSISTS OF PREPARING EXISTING SOUND CONCRETE SURFACES AND DESIGNING THE SYSTEM TO MEET THE REQUIREMENTS IN THE PLANS, FURNISHING AND INSTALLING FIBER REINFORCED POLYMER (FRP) COMPOSITE WRAP SYSTEMS TO REPAIR OR RETROFIT EXISTING CONCRETE MEMBERS AT THE LOCATIONS SHOWN IN THE PLANS PER PN 519 (07/21/2017). FIBER SHALL BE CARBON (CFRP) .

THE PROPOSED FRP HAS BEEN DESIGNED TO SUPPLEMENT THE EXISTING CLASS 'E' CONCRETE (3.4 KSI) AND 40 KSI 2-LEGGED #5 REBAR STIRRUPS IN THE PIER CAPS OF THE WAR-75-6.34 (MANCHESTER RD.) BRIDGE TO ACCOMMODATE THE EXISTING DEAD LOAD, PROPOSED PIER CAP DEAD LOAD, AND OHIO LEGAL TRUCK LIVE LOADS.

THE DEPARTMENT WILL MEASURE THE FRP COMPOSITE WRAP SYSTEM BY THE NUMBER OF SQUARE FEET OF CONCRETE SURFACE WRAPPED.

FIBER WRAP MATERIALS, EQUIPMENT, AND ANY MISCELLANEOUS ITEMS (i.e. CONCRETE ANCHORS, ETC.) NEEDED TO COMPLETE THE INSTALLATION SHALL BE INCLUDED WITH 519- COMPOSITE FIBER WRAP FOR PAYMENT. ALL FIBER WRAP ITEMS SHALL ADHERE TO THE MANUFACTURER'S SPECIFICATIONS.

APPROVED MANUFACTURERS INCLUDE

CS-NRI FYFE
15341 Vantage Parkway east
Houston, TX 77073
PHONE: +1 855 708 3617
EMAIL: FYFEINFO@CS-NRI.COM

APPROVED EQUAL

STRUCTURE NOTES - 2
BRIDGE No.: VARIES

SFN
VARIES

DESIGN AGENCY

DESIGNER	CHECKER
CAH	GTF

REVIEWER
RSK 10-23-24

PROJECT ID
110113

SUBSET	TOTAL
2	2

SHEET	TOTAL
24	42

D09-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/27/2025 TIME: 1:05:57 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113\W00-Engineering\Structures\SFN_8303517\Sheets\110113_SFN_8303517_SN002.dgn

STRUCTURE REPAIR (WAR-75-6.34)					(100% 01/IMS/47 FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP	LUMP	LUMP		23
509	25000	789	LB	UNCOATED STEEL REINFORCEMENT		789			
510	10001	104	EACH	DOWEL HOLES USING NON-SHRINK, NON-METALLIC GROUT, AS PER PLAN		104			24
511	43210	8	CY	CLASS QC1 CONCRETE, PIER		8			
512	10101	168	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN		168			24
512	10600	30	FT	CONCRETE REPAIR BY EPOXY INJECTION		30			
512	74000	168	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		168			
516	45305	8	EACH	REFURBISH BEARING DEVICE, AS PER PLAN		8			24
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN			LUMP		24
519	100	4465	SF	COMPOSITE FIBER WRAP			4465		24

STRUCTURE REPAIR (WAR-75-10.02R)					(100% 01/IMS/47 FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP	LUMP	LUMP		23
509	25000	72	POUND	UNCOATED STEEL REINFORCEMENT	72				
510	10001	12	EACH	DOWEL HOLES USING NON-SHRINK, NON-METALIC GROUT, AS PER PLAN	12				24
511	45710	0.53	CY	CLASS QC1 CONCRETE, ABUTMENT	0.53				
512	10101	8	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	8				24
512	74000	6	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	6				

STRUCTURE REPAIR (WAR-SR 123-0.23)					(100% 03/STR/47 FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP	LUMP	LUMP		23
516	01300	68	FT	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS			68		
516	10000	68	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL			68		
516	11801	68	FT	VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN			68		24
517	75601	176	FT	DEEP BEAM BRIDGE RETROFIT RAILING, AS PER PLAN			176		24
848	10200	454	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION (T=1.75")	9		267	178	
848	20000	454	SY	SURFACE PREPARATION USING HYDRODEMOLITION	9		267	178	
848	30200	13	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	1		7	5	
848	50000	4	SY	HAND CHIPPING			4		
848	50100	LS	LUMP	TEST SLAB			LUMP		

STRUCTURE REPAIR (WAR-SR 123-30.84)					(100% 02/5SK/47 FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP	LUMP	LUMP		23
509	20001	200	POUND	CONCRETE REINFOREMENT, REPLACEMENT OF EXISTING REINFORCEMENT, AS PER PLAN	150		50		23
509	25000	2128	POUND	UNCOATED STEEL REINFORCEMENT			2128		
511	34410	28	CY	CLASS QC2 CONCRETE, SUPERSTRUCTURE	12		16		
512	10101	252	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	225		27		24
512	74000	225	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	225				
516	10000	115	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL				115	24
516	11211	131	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			131		
519	12304	18	SY	PATCHING CONCRETE BRIDGE DECK - TYPE C				18	

STRUCTURE QUANTITIES - 1
BRIDGE No.: VARIES

SFN
VARIES

DESIGN AGENCY

DESIGNER CAH | CHECKER GTF

REVIEWER
RSK 10-23-24

PROJECT ID
110113

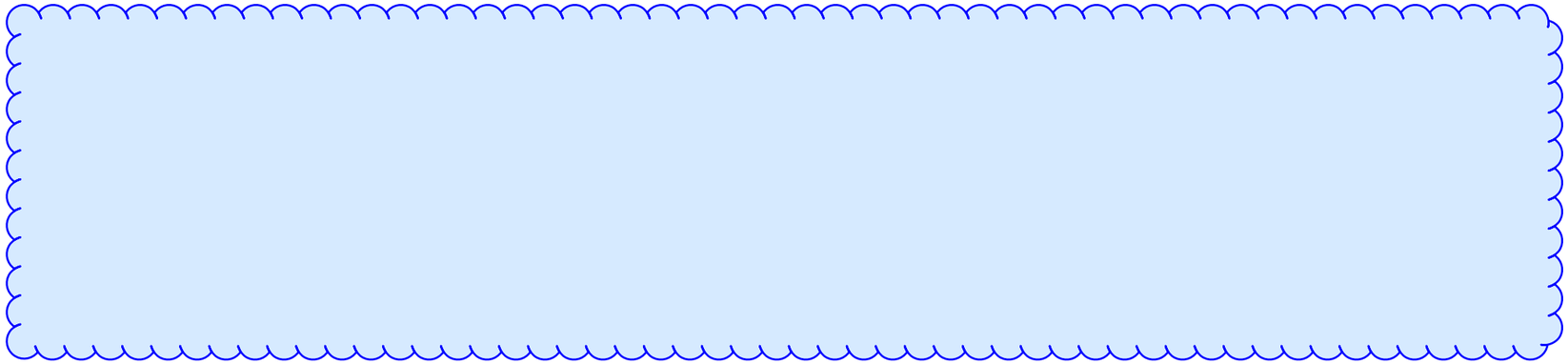
SUBSET 1 | TOTAL 2

SHEET 25 | TOTAL 42

D08-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/27/2025 TIME: 1:06:55 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113\M00-Engineering\Structures\SFN_8303517\Sheets\110113_SFN_8303517_SQ001.dgn

STRUCTURE REPAIR (WAR-71-18.86L)					(100% 01/IMS/47 FUNDING)				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	REFERENCE
519	12300	21	SY	PATCHING CONCRETE BRIDGE DECK - TYPE B			10.5	10.5	



STRUCTURE QUANTITIES - 2
BRIDGE No.: VARIES

D08-BM-FY2025

MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/27/2025 TIME: 1:07:36 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113\V00-Engineering\Structures\SFN_8303517\Sheets\110113_SFN_8303517_SQ002.dgn

SFN
VARIES

DESIGN AGENCY

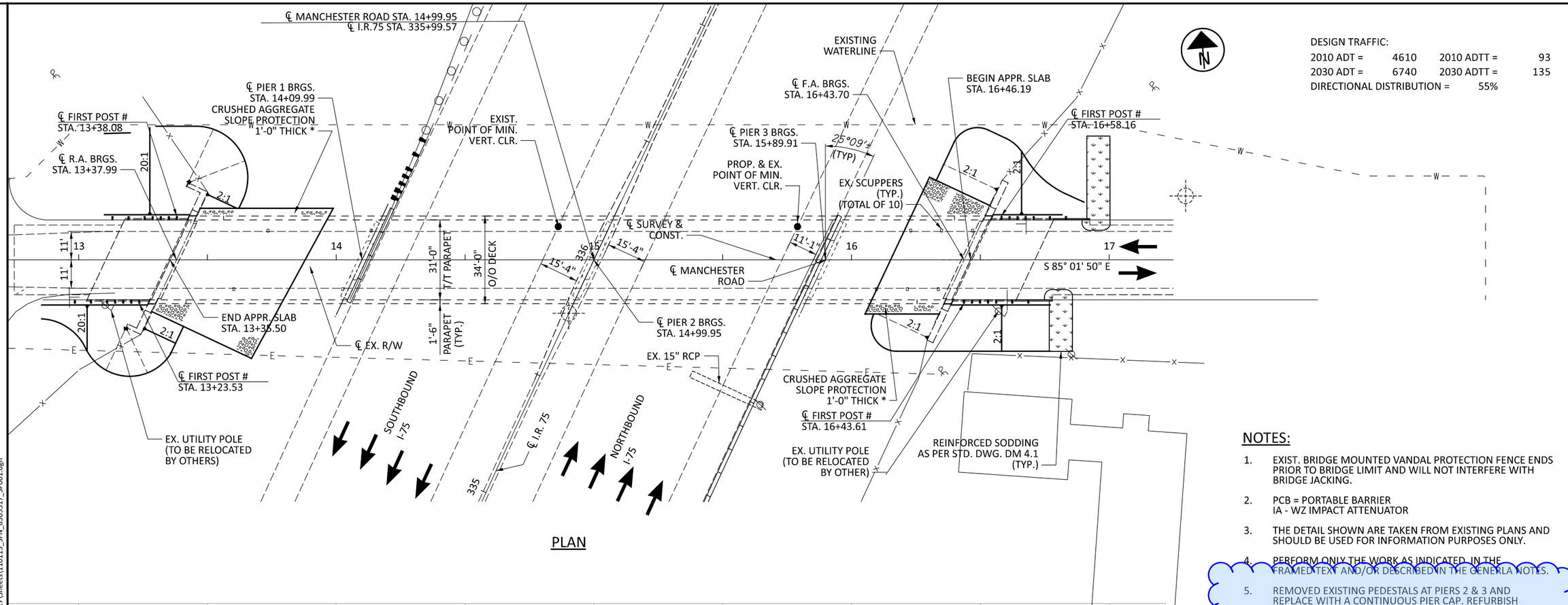
DESIGNER	CHECKER
CAH	GTF

REVIEWER
RSK 10-23-24

PROJECT ID
110113

SUBSET	TOTAL
2	2

SHEET	TOTAL
26	42



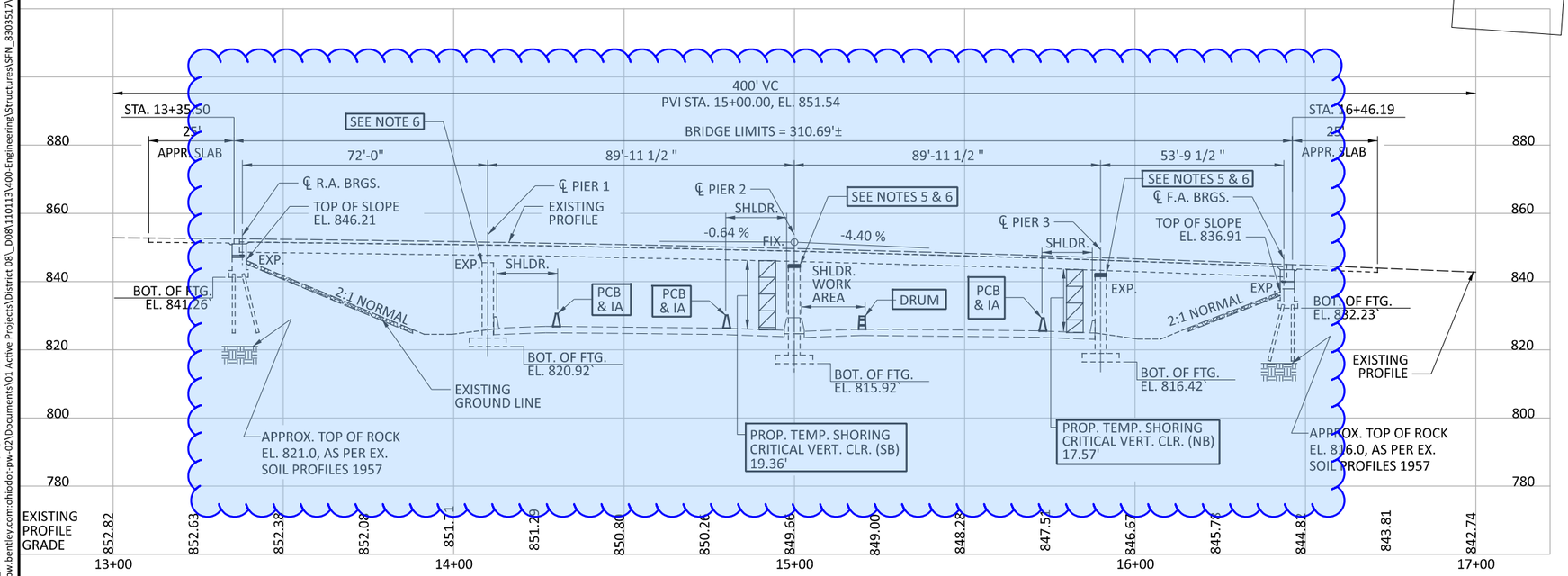
PLAN

DESIGN TRAFFIC:

2010 ADT =	4610	2010 ADTT =	93
2030 ADT =	6740	2030 ADTT =	135
DIRECTIONAL DISTRIBUTION =	55%		

NOTES:

1. EXIST. BRIDGE MOUNTED VANDAL PROTECTION FENCE ENDS PRIOR TO BRIDGE LIMIT AND WILL NOT INTERFERE WITH BRIDGE JACKING.
2. PCB = PORTABLE BARRIER
   IA - WZ IMPACT ATTENUATOR
3. THE DETAIL SHOWN ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
4. PERFORM ONLY THE WORK AS INDICATED IN THE FRAMED TEXT AND/OR DESCRIBED IN THE GENERAL NOTES.
5. REMOVED EXISTING PEDESTALS AT PIERS 2 & 3 AND REPLACE WITH A CONTINUOUS PIER CAP. REFURBISH BEARINGS AT PIERS 2 AND 3 ONLY.
6. APPLY COMPOSITE FIBER WRAP TO ALL PIER CAPS.



PROFILE ALONG | SURVEY & CONSTRUCTION

BENCHMARK DATA

BM #1 STA. 333+95.85, EL. 852.14, OFFSET 411.07 LT,
IRON PIN SET NEXT TO MAILBOX ALONG MANCHESTER ROAD
BM #2 STA. 337+20.21, EL. 826.94, OFFSET 10.65 LT.,
IRON PIN SET IN IR75 MEDIAN BEHIND GUARDRAIL

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH NEW COMPOSITE REINFORCED CONCRETE DECK AND SEMI-INTEGRAL ABUTMENT
SPANS: 72'-0", 89'-11½", 89'-11½", 53'-9½" C/C BEARINGS
ROADWAY: 31' T/T OF PARAPET
LOADING: HS20-44 (CASE II), ALTERNATE MILITARY LOADING AND 60 PSF FUTURE WEARING SURFACE
SKEW: 25°09' L.F.
APPROACH SLABS: 25' LONG (AS-1-81)
ALIGNMENT: TANGENT
WEARING SURFACE: 1" MONOLITHIC CONCRETE
CROWN: 0.0156 FT/FT
COORDINATES: LATITUDE 39° 31' 24" N
LONGITUDE 84° 19' 00" W

SITE PLAN
BRIDGE No.: WAR-75-6.34
MANCHESTER RD. OVER I-75

SFN 8303517
DESIGN AGENCY
DESIGNER CAH | CHECKER GTF
REVIEWER RSK 10-23-24
PROJECT ID 110113
SUBSET 1 | TOTAL 4
SHEET 27 | TOTAL 42

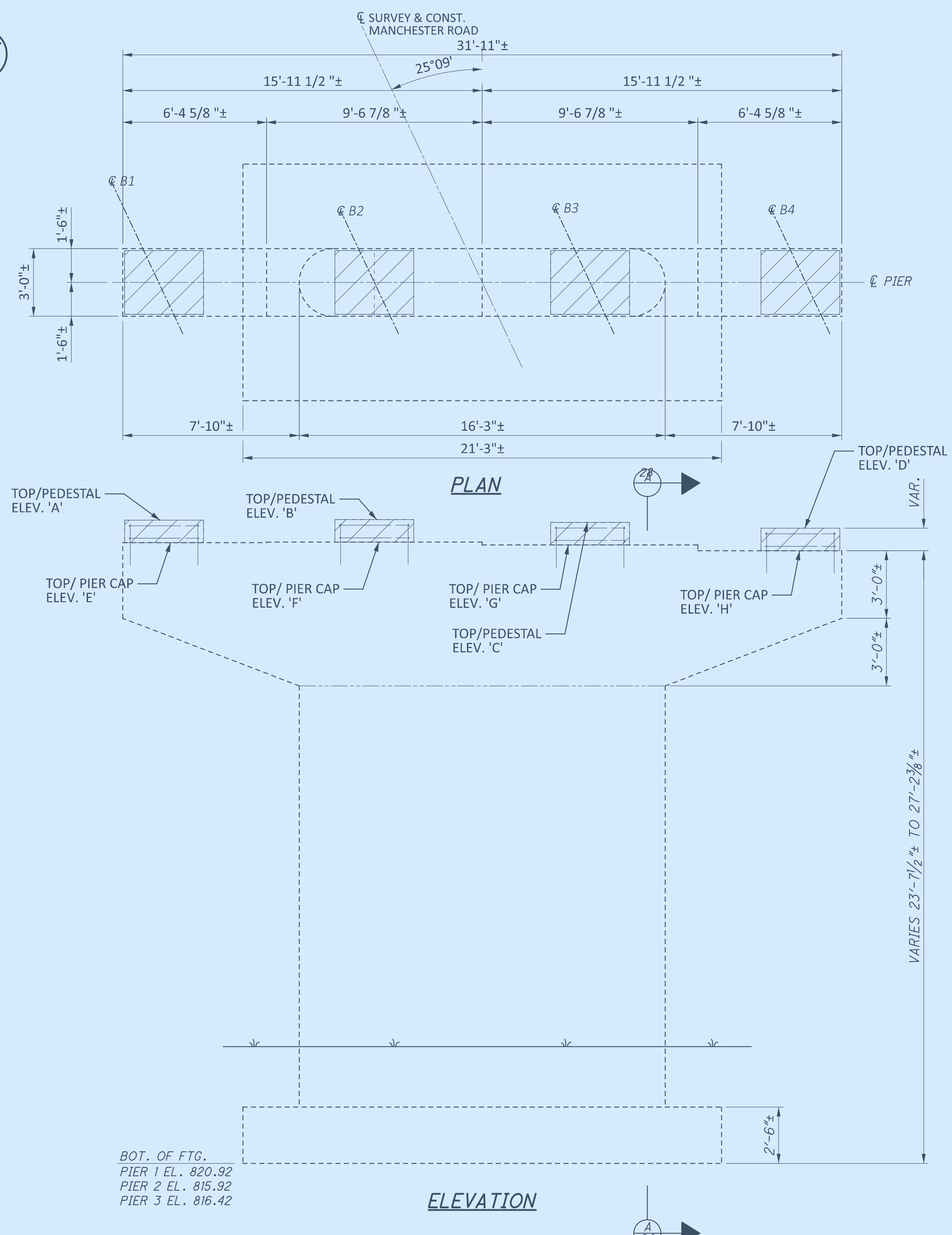
D08-BM-FY2025

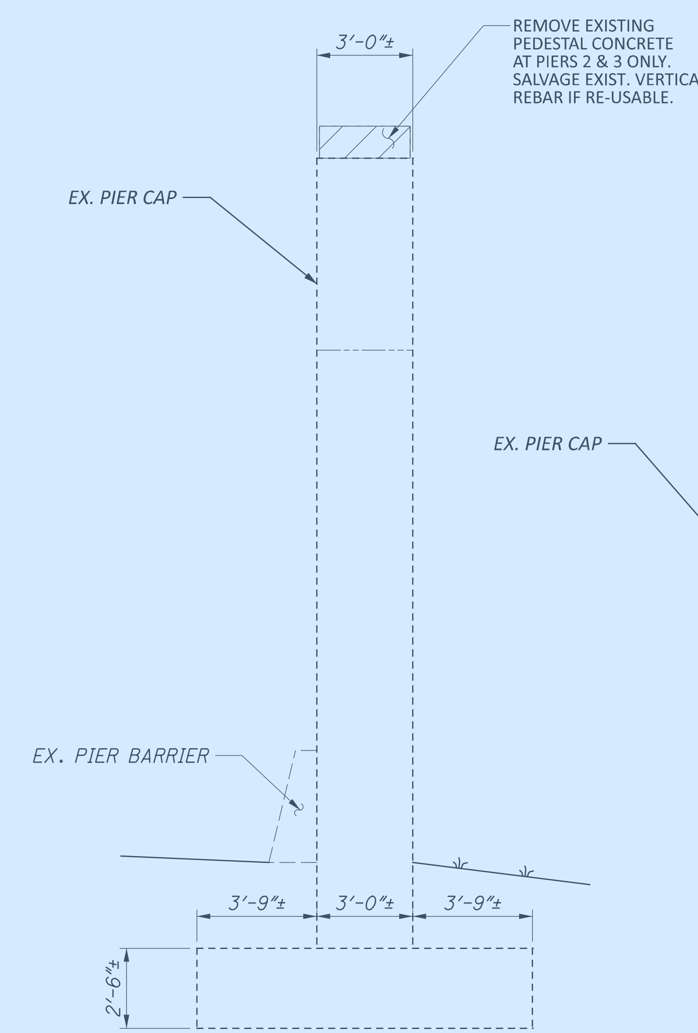
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/26/2025 TIME: 9:52:09 PM USER: choward4
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 08_D08\110113\400-Engineering\Structures\SFN_8303517\Sheets\110113_SFN_8303517_SP001.dgn

NOTES:

1. ERECT TEMPORARY SHORING AT PIERS 2 & 3 THAT WILL ACCOMMODATE STRUCTURE DEAD LOAD. VEHICULAR LIVE LOAD WILL BE DETOURED.
2. RAISE AND TEMPORARILY SUPPORT THE BRIDGE AS NEEDED TO REMOVE THE EXISTING BEARINGS AND ANCHOR RODS AND DEMO THE EXISTING PEDESTALS AT PIERS 2 AND 3. DRILL AS NEEDED TO COMPLETELY REMOVE THE EXISTING ANCHOR RODS. VERIFY THE LOCATION OF THE EXISTING BEARING ANCHOR RODS WHICH WILL BE REPLACED WITH NEW ANCHOR RODS INSTALLED IN THE SAME LOCATION(S). EXISTING BEARINGS AT PIERS 2 AND 3 WILL BE REFURBISHED. DISPOSE OF EXISTING SHEET LEAD UNDER THE BEARINGS.
3. RAISE ALL BEARINGS SIMULTANEOUSLY AT EACH PIER.
4. CONTRACTOR IS REPSONSIBLE FOR VERIFYING EXISTING PIER CAP ELEVATIONS PRIOR TO CONSTRUCTION. RECONSTRUCTED PIER CAP BEARING SEAT ELEVATIONS SHALL MATCH EXISTING. CONTRACTOR SHALL FILL IN THE ELEVATION TABLE AND SUBMIT VERIFIED PIER CAP ELEVATIONS TO THE ENGINEER IN THE FORM OF AN AS-BUILT DRAWING.
5. EXISTING BEAMS ARE W36x230.
6. EXISTING BEARINGS AT PIER 2 ARE B-250 PER STD. DWG. RB-1-55. EXISTING BEARINGS AT PIER 3 ARE R-225 PER STD. DWG. RB-1-55.

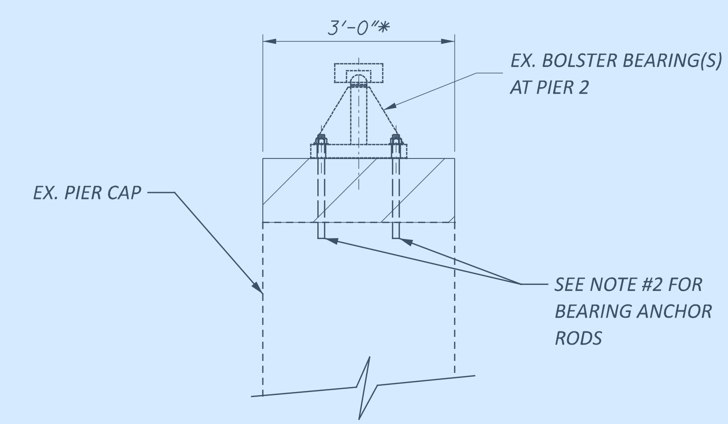
	PIER ELEVATIONS							
	A	B	C	D	E	F	G	H
PIER 1								
PIER 2								





A 28 SECTION

PIER 3 SHOWN
PIER 4 SIMILAR



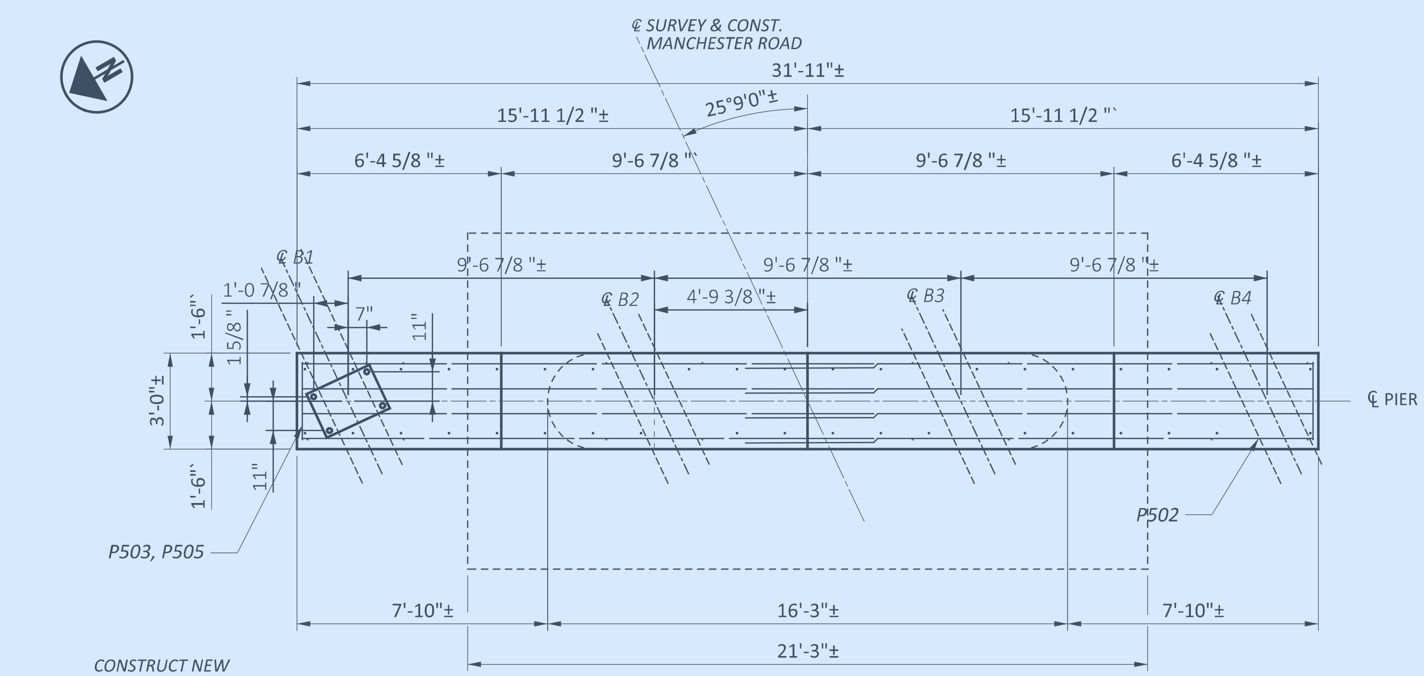
LEGEND

- PORTIONS OF STRUCTURE REMOVED

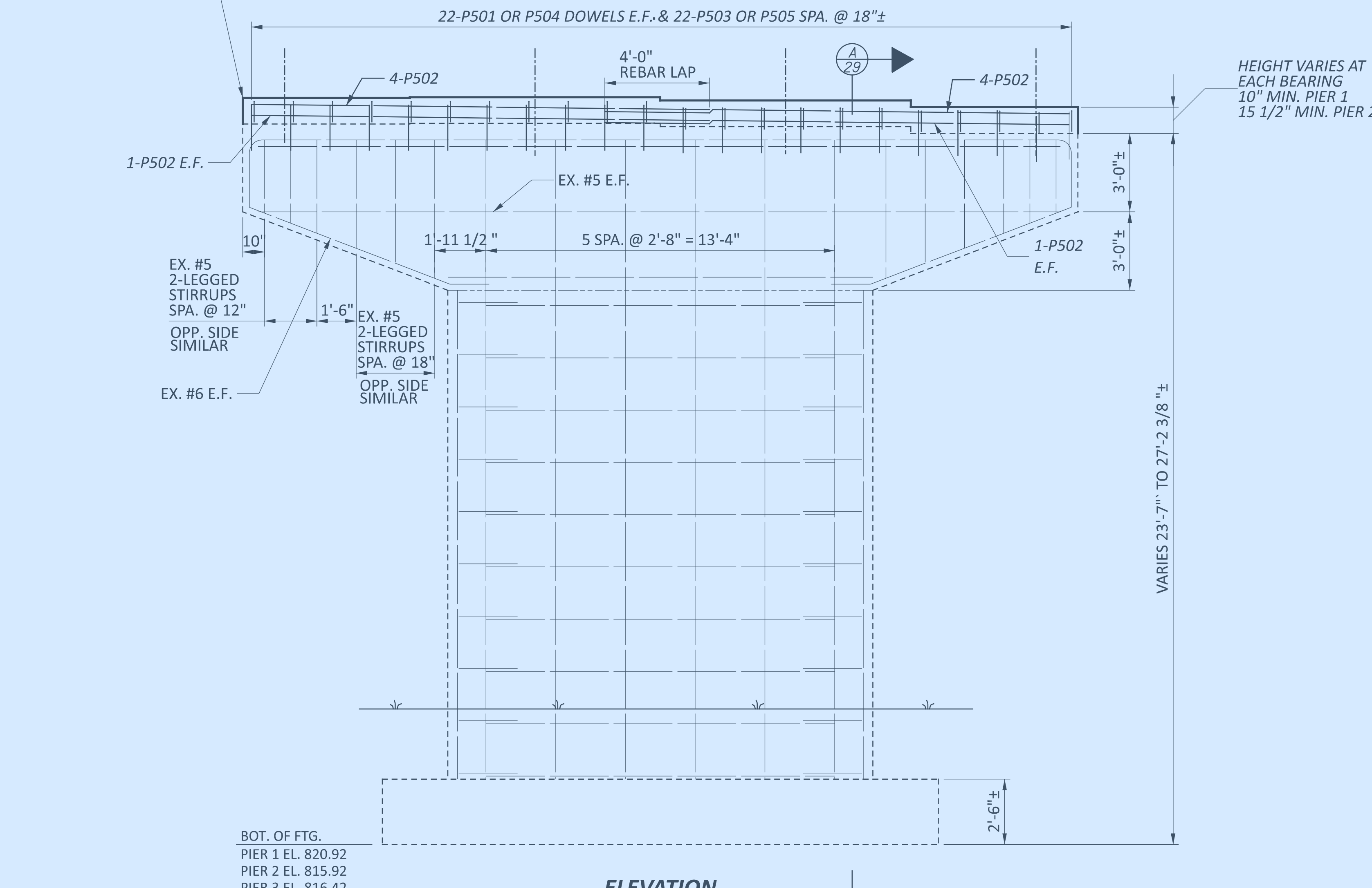
PIER DEMOLITION DETAILS
BRIDGE No.: WAR-75-6.34
MANCHESTER RD. OVER I-75

SFN	8303517
DESIGN AGENCY	
DESIGNER: CAH	CHECKER: GTF
REVIEWER: RSK	10-23-24
PROJECT ID	110113
SUBSET: 2	TOTAL: 4
SHEET: 28	TOTAL: 42

D08-BM-FY2025



PLAN

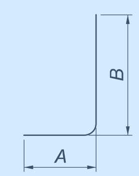


ELEVATION

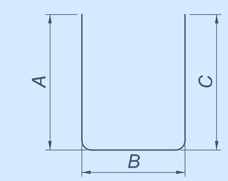
PIER 2 SHOWN,
PIER 3 SIMILAR

A 29

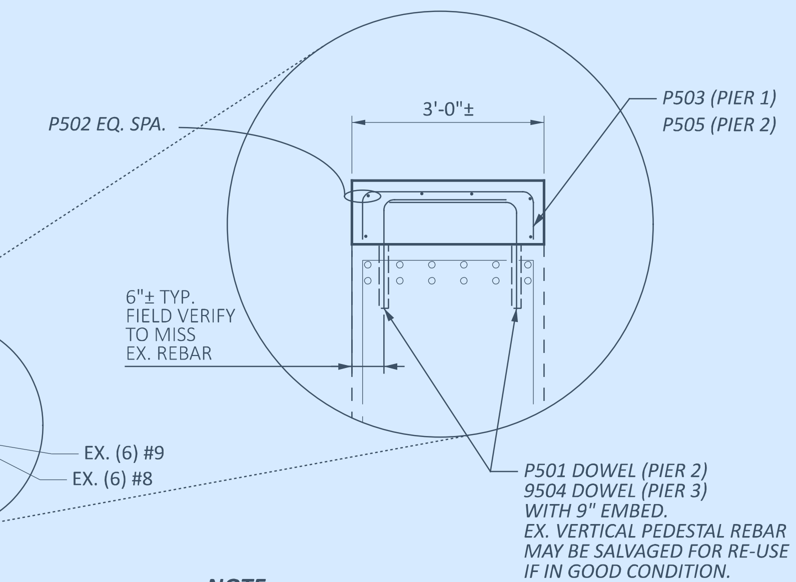
MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	PIER 2	PIER 3	TOTAL				A	B	C	D	E	R	INC
PIER REINFORCING STEEL LIST													
P501	44		44	3'-5"	157	1	2'-0"	1'-7"					
P502	8	8	16	16'-0"	267	STR							
P503	22		22	3'-9"	86	2	0'-8"	2'-8"	0'-8"				
P504		44	44	3'-9"	172	1	2'-0"	1'-10 ½"					
P505		22	22	4'-8"	107	2	1'-1 ½"	2'-8"	1'-1 ½"				
				SUB-TOTAL	789								

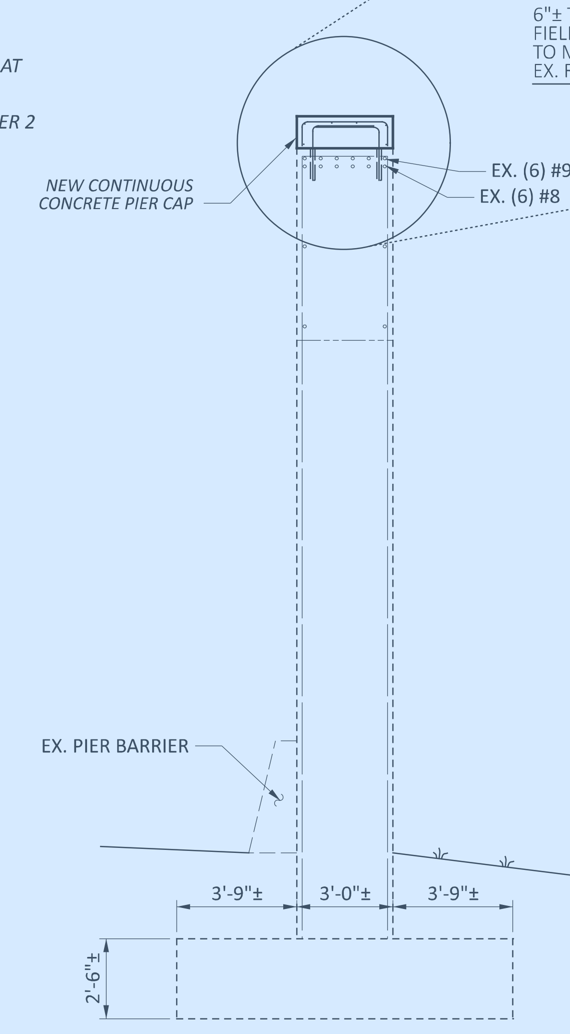


TYPE-1



TYPE-2





A 29 SECTION

PIER 3 SHOWN,
PIER 2 SIMILAR

NOTE:

1. REFURBISH AND RESET BEARINGS AT PIERS 2 & 3. CONSTRUCT NEW PIER CAPS AT PIERS 2 & 3 ONLY.
2. DOWEL BARS MAY BE DRILLED IN AT AN ANGLE IF NEEDED TO MISS EXISTING STRUCTURAL STEEL.
3. ADJUST P501 AND P504 DOWEL LOCATIONS TO AVOID STRUCTURAL STEEL. OBTAIN APPROVAL FROM THE PROJECT ENGINEER BEFORE OMITTING P501 OR P504 DOWEL.
4. FIELD BEND "L" DOWEL BARS AS NEEDED FOR FIT-UP
5. FIELD TRIM REBAR AS NEEDED FOR FIT-UP.
6. ALL DIMENSIONS ARE OUT TO OUT OF BAR
7. DIMENSIONS ON HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE STANDARD HOOKS ARE TO BE USED. REFERENCE CMS 509.
8. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.
9. ALL REBAR SHALL BE BLACK UNCOATED BARS UNLESS NOTED OTHERWISE.
10. FIBER WRAP AND SEAL PIER CAPS AT PIERS 1, 2 AND 3 PER DETAILS ON SHEET 29A. SEAL PIER CAPS WITH EPOXY-URETHANE FEDERAL COLOR 17778 (LIGHT NEUTRAL).
11. ENSURE THAT NO BEARINGS FLOAT AFTER RE-INSTALLATION. ONE SHIM PLATE ALLOWED PER BEARING. COST SHALL BE INCIDENTAL TO THE BEARING REFURBISHMENT.
12. EPOXY-INJECT ANY PIER CAP CRACKS WIDER THAN 0.01 INCHES BEFORE CONSTRUCTING THE NEW PIER CAP. EXISTING VERTICAL CRACK ARE PRESENT ALONG TOP OF PIER CAP.

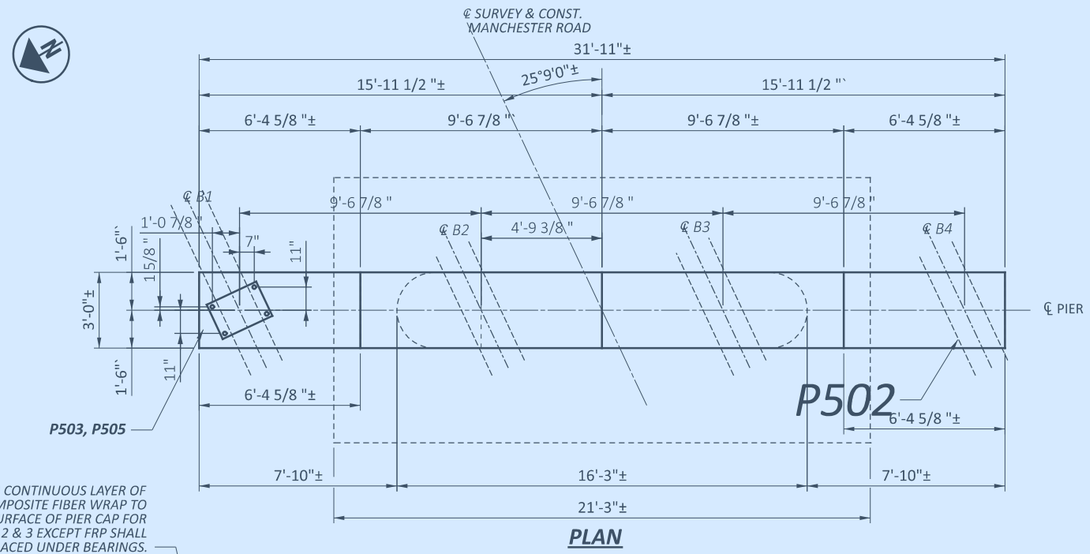
PIER REHABILITATION DETAILS 1

BRIDGE No.: WAR-75-6.34

MANCHESTER RD. OVER I-75

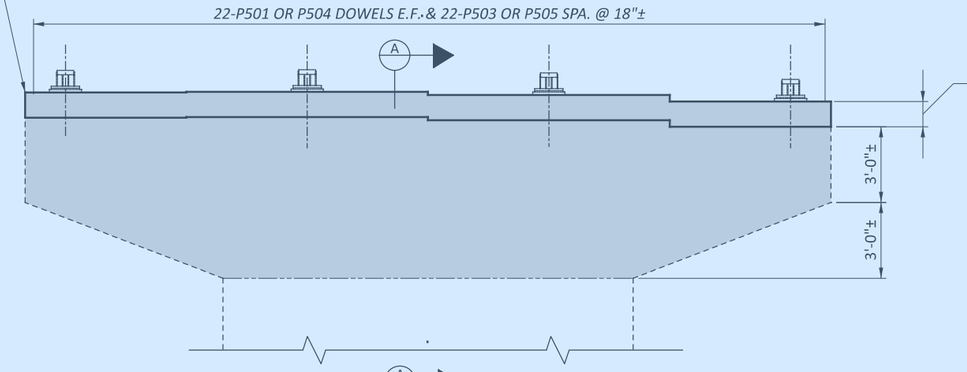
SFN 8303517
DESIGN AGENCY
DESIGNER CAH | CHECKER GTF
REVIEWER RSK 10-23-24
PROJECT ID 110113
SUBSET 3 TOTAL 4
SHEET 29 TOTAL 42

D08-BM-FY2025
MODEL: Sheet_SurvFt PAPERSIZE: 17x11 (in.) DATE: 1/27/2025 TIME: 1:22:04 PM USER: chowand4



PLAN

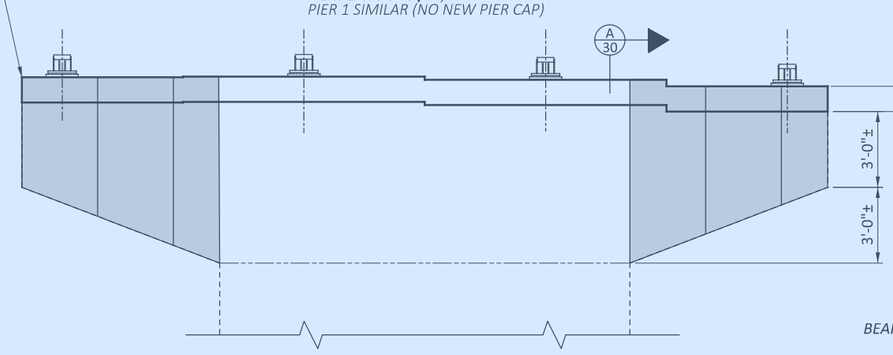
APPLY 1 CONTINUOUS LAYER OF COMPOSITE FIBER WRAP TO ENTIRE SURFACE OF PIER CAP FOR PIERS 1, 2 & 3 EXCEPT FRP SHALL NOT BE PLACED UNDER BEARINGS.



ELEVATION

APPLY 3 ADDITIONAL LAYERS OF COMPOSITE FIBER WRAP TO EACH PIER CAP CANTILEVER OF PIERS 1, 2 & 3 EXCEPT FRP SHALL NOT BE PLACED UNDER BEARINGS.

PIERS 2 & 3 SHOWN,
PIER 1 SIMILAR (NO NEW PIER CAP)

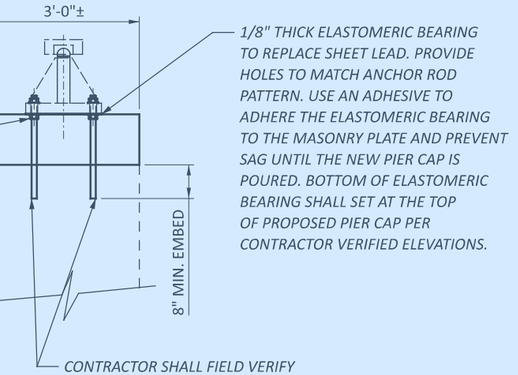


LEGEND

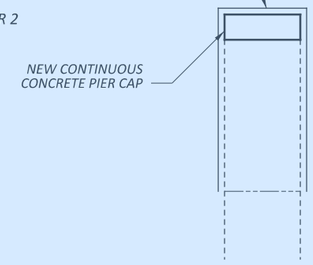
COMPOSITE FIBER WRAP

ELEVATION

PIERS 2 & 3 SHOWN,
PIER 1 SIMILAR (NO NEW PIER CAP)



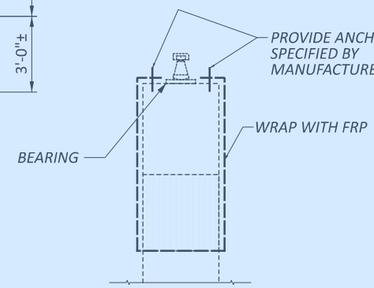
APPLY 1 CONTINUOUS LAYER OF COMPOSITE FIBER WRAP TO ENTIRE SURFACE OF PIER CAP FOR PIERS 1, 2 & 3 EXCEPT FRP SHALL NOT BE PLACED UNDER BEARINGS. INSTALL FRP ANCHORS PER MANUFACTURER'S RECOMMENDATIONS



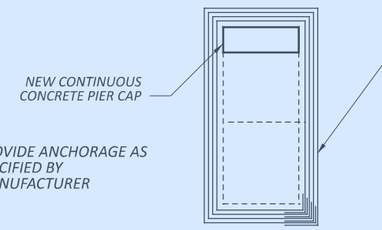
PIER CAP (AT STEM)

NOTE:

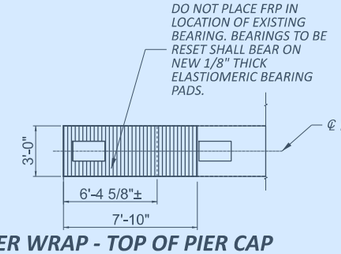
1. REFURBISH AND RESET BEARINGS AT PIERS 2 & 3.
2. SEAL FIBER WRAPPED CONCRETE PIER CAPS WITH EPOXY-URETHANE. COLOR TO MATCH EXISTING CONCRETE SEALER.
3. ENSURE THAT NO BEARINGS FLOAT AFTER RE-INSTALLATION. ONE SHIM PLATE ALLOWED PER BEARING. COST FOR SHIM PLATE(S) IF NEEDED AND NEW ANCHOR RODS SHALL BE INCIDENTAL TO THE BEARING REFURBISHMENT.
4. ONLY UNI-DIRECTIONAL COMPOSITE CARBON FIBER WRAP SHALL BE USED. COMPOSITE CARBON FRP WRAP SHALL MEET ALL REQUIREMENTS OF PN 519 UNLESS NOTED OTHERWISE. FIBER WRAP SHALL BE FYFE TYFO SCH-41 OR APPROVED EQUAL. FRP COMPOSITE MODULUS = 14.6 MSI FRP THICKNESS = 0.08 INCH
5. CFRP FIBERS SHALL BE ORIENTED PERPENDICULAR TO THE GROUND ON VERTICAL SURFACES.



FIBER WRAP ANCHORAGE



PIER CAP CANTILEVERS



FIBER WRAP - TOP OF PIER CAP

PIER REHABILITATION DETAILS - 2
BRIDGE No.: WAR-75-6.34
MANCHESTER RD. OVER I-75

SFN	8303517
DESIGN AGENCY	
DESIGNER	CAH
CHECKER	GTF
REVIEWER	RSK 10-23-24
PROJECT ID	110113
SUBSET	4
TOTAL	4
SHEET	29A
TOTAL	42