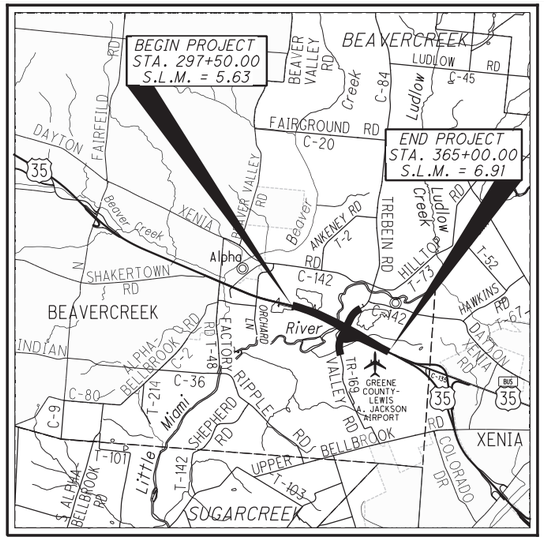
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
GRE-US 35-5.63
BEAVERCREEK TOWNSHIP
GREENE COUNTY



LOCATION MAP

LATITUDE: 39°42'00" LONGITUDE: -83°59'50"

SCALE IN MILES

0 1 2 3 4

N

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

DESIGN DESIGNATION	US 35	VALLEY ROAD (TR 169)/ TREBEIN ROAD (CR 84)
CURRENT ADT (2025)	36,990	7,850
DESIGN YEAR ADT (2045)	45,220	9,200
DESIGN HOURLY VOLUME (2045)	5,480	930
DIRECTIONAL DISTRIBUTION	53%	51%
TRUCKS (24 HOUR B&C)	12%	7%
DESIGN SPEED	65 MPH	60 MPH
LEGAL SPEED	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	02 OTHER FREEWAYS & EXPRESSWAYS (URBAN)	05 MAJOR COLLECTOR ROADS (URBAN)
NHS PROJECT	YES	

DESIGN EXCEPTION: NONE REQUIRED

ADA DESIGN WAIVER: NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
Jacobs
2 CROWN POINT COURT, SUITE 100
CINCINNATI, OHIO 45241
TEL: (513) 595 7500

INDEX OF SHEETS:

ENGINEERS SEAL:

STATE OF OHIO DANIEL Y. BAAH 59981 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Daniel Baah
DATE: 08-24-2022

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF RECONSTRUCTING US 35, REMOVING AT-GRADE INTERSECTION AND CONSTRUCTING A NEW INTERCHANGE, WHILE MAINTAINING LOCAL ACCESS. THIS IMPROVEMENT INVOLVES UPGRADING APPROXIMATELY 1.28 MILES OF US 35 TO A LIMITED-ACCESS FACILITY, INCLUDING THREE HIGHWAY BRIDGE STRUCTURES, RETAINING WALLS, AND RECONSTRUCTION OF APPROXIMATELY 0.68 MILES OF SIDE ROADS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 53.28 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 19.70 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 72.98 ACRES

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.

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS SHOWN ON SHEETS NO. 59 & 59, AND THAT THE PROVISIONS FOR MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED Tony K Caudill
DATE 8-30-22 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS

BP-1.1	7/28/00	I-3B	3B1, 7/15/22	MGS-4.3	1/18/13	SBR-2-20	1/15/21	HL-60.31	1/17/20	MT-102.20	4/19/19	TC-52.10	10/18/13		
BP-2.1	1/21/22	I-3C	3C1, 7/15/22	MGS-5.3	7/15/16	SICD-1-21	1/21/22			MT-102.30	10/16/15	TC-52.20	1/15/21		
BP-2.2	1/15/21	I-3D	7/15/22	MGS-6.1	1/19/18	SICD-2-14	1/15/21	MT-95.30	7/19/19	MT-103.10	1/21/22	TC-61.10	1/17/20		
BP-2.3	7/18/14					TST-1-99	1/15/21	MT-95.45	1/17/20	MT-104.10	10/16/15	TC-61.30	7/19/19		
BP-3.1	1/21/22	MH-3	7/16/21	RM-1.1	1/15/21	VPF-1-90	7/20/18	MT-95.50	7/21/17	MT-105.10	1/17/20	TC-65.10	1/17/14		
				RM-4.1	7/21/17			MT-95.71	1/17/20	MT-120.00	7/15/22	TC-65.11	7/15/22		
CB-2-2A 2B, 2C,	7/15/22	BP-4.1	7/19/13	RM-4.2	4/17/20	HL-10.11	7/15/22	MT-97.10	4/19/19			TC-71.10	7/15/22		
CB-2-3 2-4,	7/16/21	BP-5.1	7/15/22	RM-4.3	1/21/22	HL-10.12	1/20/17	MT-98.10	1/17/20	TC-9.31	7/16/21	TC-72.20	7/20/18		
CB-3	7/16/21	BP-7.1	7/17/20	RM-4.4	7/19/19	HL-10.13	4/17/20	MT-98.11	1/17/20	TC-12.31	4/15/22	TC-73.20	1/17/20		
CB-3A	7/16/21	BP-9.1	1/18/19	RM-4.5	7/21/17	HL-20.11	1/15/21	MT-98.20	4/19/19	TC-15.116	7/16/21				
CB-6	1/21/22			RM-4.6	7/19/13	HL-20.13	7/15/22	MT-98.21	1/17/20	TC-21.11	7/16/21				
CB-8	7/16/21	F-2.1	7/20/18			HL-30.11	1/15/21	MT-98.28	1/17/20	TC-21.21	7/15/22				
CB-4A 5A, 8A,	7/16/21	F-3.1	7/19/13	A-1-20	1/21/22	HL-30.21	4/17/20	MT-99.20	4/19/19	TC-21.50	4/17/20				
		F-3.3	7/19/13	AS-1-15	7/17/15	HL-30.22	1/15/21	MT-99.30	1/17/20	TC-22.20	1/17/14				
DM-1.1	7/17/20	F-3.4	7/19/13	AS-2-15	1/18/19	HL-30.31	4/17/20	MT-99.60	7/15/16	TC-41.10	7/19/13				
DM-1.2	7/16/21			BR-2-15	1/21/22	HL-30.32	4/17/20	MT-100.00	7/16/21	TC-41.20	10/18/13				
DM-2.1	1/18/13	MGS-1.1	7/16/21	EXJ-4-87	7/15/22	HL-30.33	1/21/22	MT-101.60	1/17/20	TC-41.30	10/18/13				
DM-4.1	7/17/20	MGS-2.1	1/19/18	GSD-1-19	1/15/21	HL-30.41	1/21/22	MT-101.70	1/17/20	TC-41.50	10/18/13				
DM-4.3	1/15/16	MGS-3.1	1/19/18	HW-2.1	7/20/18	HL-40.20	7/15/22	MT-101.75	1/17/20	TC-42.10	10/18/13				
DM-4.4	1/15/16	MGS-3.2	1/18/13	HW-2.2	7/20/18	HL-50.21	7/15/22	MT-101.90	1/17/20	TC-42.20	10/18/13				
		MGS-4.2	7/19/13	PSID-1-13	1/15/21	HL-60.11	7/21/17	MT-102.10	1/17/20	TC-51.11	1/15/16				

SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
800-2019	SEE PROPOSAL	
807	1/21/22	
808	1/18/19	
813	10/19/18	
821	4/20/12	
832	10/19/18	
836	1/19/18	
839	7/16/21	
840	4/16/21	
846	4/17/15	
850	1/21/22	
851	1/21/22	
867	1/15/21	
878	1/21/22	
902	7/19/19	
905	4/17/20	
908	10/20/17	
913	4/16/21	
921	4/20/12	
939	1/17/20	
1120	4/15/22	

ENGINEERS SEAL:
FOR TRAFFIC CONTROL AND LIGHTING

STATE OF OHIO RAMNARAYAN NUNNA E-69028 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Ramnarayan Nunna
DATE: 08/24/22

ENGINEERS SEAL:
FOR STRUCTURES

STATE OF OHIO JASON T. CENTERS 71869 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Jason T. Centers
DATE: 08/24/22

ENGINEERS SEAL:
FOR SOIL PROFILE

STATE OF OHIO BRIAN R. TRENNER E-76271 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Brian Trenner
DATE: 08/23/2022

FEDERAL PROJECT NO. E180373
PID NO. 107217
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
GRE-US 35-5.63
1 / 698

SURFACE WATER PROTECTION

STREAMBANK VEGETATION WILL BE LEFT UNDISTURBED TO THE MAXIMUM EXTENT POSSIBLE. AREAS WHERE THE VEGETATION IS TEMPORARILY REMOVED WILL BE RE-VEGETATED WITH NATIVE FLOODPLAIN SPECIES FROM THE NATIVE VEGETATION LIST OF THE ODNR SCENIC RIVERS PROGRAM. MEASURES WILL BE TAKEN TO AVOID DAMAGE TO TREE TRUNKS, ROOTS, OR LIMBS OF LIVE STANDING TREES. TREES AND SHRUBS THAT MUST BE REMOVED WITHIN 25 FEET OF THE BANK OF THE LITTLE MIAMI RIVER MUST BE REPLACED IN ACCORDANCE WITH THE STIPULATIONS OF THE NATIONAL PARK SERVICE. EXCESSED LANDS IN THE AREA OF THE LITTLE MIAMI RIVER FLOODPLAIN WILL BE RESTORED WITH NATIVE FLOODPLAIN VEGETATION. NATIVE GRASSES AND FORBS MAY BE USED IN LIEU OF WOODY VEGETATION WHERE APPROPRIATE.

NO WORK WILL BE PERFORMED WITHIN THE BED AND BANKS OF THE LITTLE MIAMI RIVER. IMPACTS AT THE RIVER WILL BE LIMITED TO CONNECTING ROADSIDE DRAINAGE SWALES BETWEEN AUGUST 1st-OCTOBER 31st. ALL HEAVY EQUIPMENT MUST REMAIN ABOVE THE ORDINARY HIGH WATER MARK OF THE LITTLE MIAMI RIVER. ANY WORK BELOW OHWM OF THE LITTLE MIAMI RIVER SHALL BE CONDUCTED DURING DRY PERIODS OF EXTREMELY LOW FLOW (AUGUST 1 THROUGH OCTOBER 31). IN-STREAM WORK IS DEFINED AS THE ACTIVE REMOVAL OR PLACEMENT OF FILL BELOW THE ORDINARY HIGH-WATER MARK (OWHM).

ALL FILL MATERIAL USED IN LMR-1 SHALL BE RELATIVELY FREE FROM FINE PARTICULATE MATTER. IN-STREAM WORK SHOULD BE CONDUCTED THROUGH THE USE OF WATER DIVERSIONS NOT REQUIRING THE PLACEMENT OF EARTHEN FILL (I.E. SHEET PILING, MEMBRANE DAMS, ETC.) WHEREVER POSSIBLE. ANY FILL WILL BE COMPLETELY REMOVED FROM THE STREAMBED IMMEDIATELY UPON COMPLETION OF WORK NECESSITATING USE OF IN-STREAM WORK PLATFORMS.

IF DEWATERING IS REQUIRED, NO WASTEWATER OF ANY KIND WILL BE DIRECTLY DISCHARGED INTO THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER OR ANY OF ITS TRIBUTARY STREAMS, DRAINAGE WAYS OR DITCHES. IF DEWATERING IS NECESSARY TO FACILITATE IN-STREAM WORK, ALL WASTEWATER SHALL BE PUMPED ONTO A VEGETATED AREA A SUFFICIENT DISTANCE FROM THE RIVER TO ALLOW FOR COMPLETE INFILTRATION. IF DISCHARGE TO A VEGETATED AREA IS NOT FEASIBLE, THEN WASTEWATER SHALL BE DISCHARGED INTO A SEDIMENT FILTER BAG OR INTO A TEMPORARY DETENTION/RETENTION POND OR APPROPRIATE SEDIMENT CONTROL SUFFICIENT RETENTION TIME TO PERMIT FOR THE SETTLING OF ALL SUSPENDED SOLIDS.

ANY AND ALL CONSTRUCTION DEBRIS, EARTHEN DEBRIS, EXCESS ASPHALT OR CONCRETE, WOOD DEBRIS FROM CLEARING, EXCESS FILL MATERIAL, EXCAVATED MATERIAL AND TRASH WILL BE DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE 100 YEAR FLOOD ELEVATIONS. CONSTRUCTION AND/OR WORKER GENERATED DEBRIS WILL BE CONTAINED ON SITE IN PROPERLY COVERED CONTAINERS; DAILY CLEAN-UP WILL BE PERFORMED TO PREVENT MATERIALS FROM ENTERING THE RIVER.

DISPOSAL OF ANY SUCH MATERIALS WITHIN 1000 FEET OF THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER IS PROHIBITED.

PARKS

THE CONTRACTOR WILL NOTIFY THE DISTRICT ENVIRONMENTAL COORDINATOR AT LEAST ONE WEEK IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES AFFECTING THE GLENN THOMPSON RESERVE, INCLUDING ACCESS FROM TREBEIN ROAD.

ODOT WILL COORDINATE DETAILS OF PROJECT DESIGN, CONSTRUCTION, AND SITE RESTORATION AT THE GLENN THOMPSON RESERVE WITH THE GREENE COUNTY PARKS AND TRAILS AND ODNR DURING DETAILED DESIGN, INCLUDING SIGNAGE AT THE PARK ENTRANCE, AND RECONSTRUCTION OF THE EAGLE PASS CANOE LAUNCH AND TRAILS. THE RIGHT-OF-WAY FENCE ALONG US 35 AT THE PARK WILL BE RECONSTRUCTED.

THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN ACCESS TO THE GLENN THOMPSON RESERVE AT ALL TIMES THROUGHOUT CONSTRUCTION.

TEMPORARY CONSTRUCTION FENCING WILL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS AT THE PARK PRIOR TO THE START OF CONSTRUCTION ACTIVITIES IN ORDER TO PROTECT THE PARK PROPERTY, AND THE PUBLIC. NO STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT WILL OCCUR OUTSIDE OF THE PROJECT CONSTRUCTION LIMITS WITHIN THE GLENN THOMPSON RESERVE.

AREAS OF THE PARK PROPERTY THAT ARE TEMPORARILY DISTURBED WILL BE FULLY RESTORED, I.E., THE PROPOSED FINAL CONDITION OF THE LAND WILL BE AT LEAST AS GOOD AS THE CURRENT CONDITION.

SCENIC RIVERS PROGRAM

THE CONTRACTOR SHALL INVITE THE SOUTHWEST OHIO ASSISTANT REGIONAL SCENIC RIVERS MANAGER, AARON ROURKE, TO A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR PRESENT. THE CONTRACTOR SHALL NOTIFY AARON OF THE PROJECT START DATE ONE WEEK PRIOR TO THE COMMENCEMENT OF WORK. AARON MAY BE CONTACTED AT (614) 230-8534 OR AARON.ROURKE@DNR.OHIO.GOV. PERIODIC INSPECTIONS OF THE PROJECT SHOULD TAKE PLACE TO ENSURE SCENIC RIVER REQUIREMENTS ARE BEING MET. AARON SHALL ALSO BE CONTACTED ONE WEEK PRIOR TO COMPLETION OF THE PROJECT TO CONDUCT A FINAL SITE INSPECTION. THE FINAL SITE INSPECTION SHALL BE SCHEDULED WHILE THE CONTRACTOR IS PRESENT TO ENSURE THAT FINAL SITE STABILIZATION HAS BEEN ACHIEVED.

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET. DEMARCATE CLEARING LIMITS IN ADVANCE TO AVOID ANY UNAUTHORIZED TREE CLEARING.

OTHER RARE SPECIES

THIS PROJECT IS WITHIN THE RANGE OF THE EASTERN MASSASAUGA RATTLESNAKE (SISTRURUS CATENATUS) A STATE ENDANGERED AND FEDERAL CANDIDATE SPECIES. DO NOT HARM OR KILL THE SNAKES AND USE CAUTION SINCE THE MASSASAUGA RATTLESNAKE IS A VENOMOUS SPECIES. IF EASTERN MASSASAUGA RATTLESNAKES ARE ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS, STOP ALL CONSTRUCTION OPERATIONS WITHIN THE VICINITY OF THE SNAKE IMMEDIATELY. THE PROJECT ENGINEER WILL IMMEDIATELY CONTACT THE DISTRICT ENVIRONMENTAL COORDINATOR. DO NOT RESUME CONSTRUCTION ACTIVITIES WITHIN THE VICINITY OF THE SNAKE UNTIL THE DISTRICT ENVIRONMENTAL COORDINATOR DETERMINES THE COORDINATION/CONSULTATION WITH ODNR AND THE US FISH AND WILDLIFE SERVICE IS COMPLETE.

IF INITIAL CLEARING AND GRUBBING WILL OCCUR IN GRASSLANDS DURING THE BREEDING SEASON OF PROTECTED THE NORTHERN HARRIER (APRIL 1 TO AUGUST 1), A SURVEY FOR THE NORTHERN HARRIER WILL BE CONDUCTED IN SUITABLE HABITATS PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL CONTACT THE ODOT DISTRICT ENVIRONMENTAL COORDINATOR IN ADVANCE OF ANY WORK IN STREAM LMR-1 (PERENNIAL TRIBUTARY EAST OF THE LITTLE MIAMI RIVER) TO ENSURE A MUSSEL SALVAGE AND RELOCATION HAS BEEN COMPLETED AND APPROVAL HAS BEEN RECEIVED FROM ODNR.

PAINTING AND BLASTING

IF PAINTING, SAND, OR WATER BLASTING ANY PORTION OF THE BRIDGE IS NECESSARY, THEN APPROPRIATE APRONS SHOULD BE UTILIZED TO PROVIDE FOR COMPLETE CONTAINMENT OF ALL PAINT DEBRIS PARTICLES AND OTHER DEBRIS. APPROPRIATE APRONS SHALL BE UTILIZED TO PROVIDE FOR COMPLETE CONTAINMENT OF ALL PAINT AND/OR SEALANT OVERSPRAY. ANY SUCH DEBRIS SHALL BE REMOVED IMMEDIATELY FROM 1000 FEET OF THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER AND DISPOSED OF AT AN APPROVED UPLAND SITE ABOVE THE 100-YEAR FLOOD ELEVATIONS. DISPOSAL IN WETLANDS, FLOODPLAINS OR WITHIN 1000 OF THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER IS PROHIBITED.

SOLE SOURCE AQUIFER

THIS PROJECT IS LOCATED WITHIN THE GREATER MIAMI SOLE SOURCE AQUIFER AND IS LOCATED WITHIN THE DRINKING WATER PROTECTION AREA THE GREENE COUNTY NORTHWEST REGIONAL VALLEY SPRINGS WELLHEAD PROTECTION AREA (US 35 STA 285+00 TO 265+00 AND VALLEY ROAD/TREBEIN ROAD STA 862+00 TO STA 898+00). USE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. DO NOT STORE FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. MAINTAIN A SPILL KIT ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. IMMEDIATELY MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. THE CONTRACTOR WILL DEVELOP A SPILL PREVENTION COUNTERMEASURE AND CONTINGENCY PLAN (SPCC) IN THE EVENT OF A SPILL OR BREAK IN AN EQUIPMENT HYDRAULIC LINE, WHICH MAY DISCHARGE INTO SURFACE WATERS OR GROUNDWATER. REPORT ALL SPILLS OR EVENTS TO THE BEAVERCREEK FIRE DEPARTMENT AT (937) 426-1213. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS) CONTACT THE BEAVERCREEK FIRE DEPARTMENT AT (937) 426-1213 OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

MUSSEL SURVEY

THE MUSSEL SURVEY AND MUSSEL RELOCATION HAVE BEEN COMPLETED. THERE ARE NO IN-STREAM WORK RESTRICTIONS RELATED TO MUSSELS.

CANOE MAINTENANCE OF TRAFFIC

THE CONTRACTOR SHALL CONTACT NATALIE PIRVU, ODNR DIVISION OF PARKS AND WATERCRAFT LAND AND WATER ADMINISTRATOR TO ASSIST WITH ANY NECESSARY SIGNAGE, COORDINATION, AND COMMUNICATIONS. SHE CAN BE REACHED AT 614-265-6466 OR NATALIE.PIRVU@DNR.OHIO.GOV. THE ODNR DIVISION OF PARKS AND WATERCRAFT SHALL BE NOTIFIED BY THE CONTRACTOR AT LEAST 2 WEEKS IN ADVANCE OF CONSTRUCTION TO POST NOTICE OF THE IMPENDING PROJECT ON ODNR'S ONLINE BOATING WEBPAGE AND ANY ASSOCIATED MAPS. IF ON-THE-WATER LAW ENFORCEMENT ASSISTANCE IS NEEDED DURING ANY PORTION OF THE DEMOLITION OR CONSTRUCTION PHASE OR IF YOU HAVE ANY SPECIFIC QUESTIONS ABOUT NAVIGATION ON THE LITTLE MIAMI RIVER PLEASE CONTACT THE DIVISION OF PARKS AND WATERCRAFT LAW ENFORCEMENT SUPERVISOR, SHANNON HOFFER AT 937-902-4950 OR SHANNON.HOFFER@DNR.OHIO.GOV.

SCENIC RIVER SIGNAGE

SIGNS STATING LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER SHALL BE PROVIDED AND INSTALLED AT THE ENDS OF BOTH APPROACHES OF THE NEW BRIDGE. A SIGN STATING (BRIDGE NAME, TRAIL NAME/NUMBER) SHALL BE INSTALLED ON THE UPSTREAM AND DOWNSTREAM SIDE OF THE NEW BRIDGE SO AS TO PROVIDE A LOCATIONAL REFERENCE TO RECREATIONAL BOATERS USING THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER.

SWPPP AND SPILLS

THE SWPPP SHALL BE DESIGNED TO ADDRESS SPILLS OF TOXIC AND/OR HAZARDOUS MATERIALS THAT HAVE THE POTENTIAL TO BE CONVEYED TO THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER AND/OR ITS FLOODPLAIN, TRIBUTARIES, OR DRAINAGE WAYS. PETROCHEMICALS AND TOXIC/HAZARDOUS MATERIALS SHOULD NOT BE DISCHARGED INTO THE LITTLE MIAMI STATE AND NATIONAL SCENIC RIVER, ITS FLOODPLAIN OR ANY OF ITS TRIBUTARY DRAINAGE WAYS, DITCHES, OR STREAMS.

TREE REMOVAL PRIOR TO WATERWAY PERMIT APPROVAL

TREE REMOVAL WORK WITHIN THE DELINEATED STREAMS AND WETLANDS SHALL BE LIMITED TO DROPPING THE CUT TREES IN PLACE ONLY, UNTIL THE WATERWAY PERMITS (SECTION 404 AND 401) ARE APPROVED. NO HEAVY EQUIPMENT CAN BE USED WITHIN THESE AREAS UNTIL THE WATERWAY PERMITS ARE APPROVED.

CALCULATED | CHECKED

GENERAL NOTES

GRE-US 35-5.63

TEMPORARY WALLS AND TEMPORARY SHORING
WHERE TEMPORARY RETAINING WALLS OR TEMPORARY SHORING ARE REQUIRED TO COMPLETE WORK IDENTIFIED IN THE PLANS AS "CONSTRUCTION CRITICAL FOR NEXT PHASE", DETAILS FOR THE TEMPORARY WALLS OR TEMPORARY SHORING ARE INCLUDED IN THE PROJECT PLANS.

WORK IDENTIFIED IN THE PLANS AS "CONSTRUCTION AVAILABLE THIS PHASE" MAY NOT BE ABLE TO BE COMPLETED ENTIRELY DURING THAT PARTICULAR PHASE WITHOUT THE NEED FOR ADDITIONAL TEMPORARY WALLS OR SHORING. IF THE CONTRACTOR ELECTS TO ACCELERATE WORK IN AREAS IDENTIFIED AS "CONSTRUCTION AVAILABLE THIS PHASE" SUCH THAT ADDITIONAL TEMPORARY WALLS OR SHORING ARE REQUIRED, THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF THE TEMPORARY WALLS OR SHORING AT NO ADDITIONAL COST TO THE DEPARTMENT.

TEMPORARY SHORING FOR STORM PIPE INSTALLATION
TEMPORARY SHORING REQUIRED FOR STORM PIPE INSTALLATION (DUE TO PART WIDTH CONSTRUCTION) SHALL BE CONSIDERED INCIDENTAL TO ITEM 614, MAINTENANCE OF TRAFFIC. NO SEPARATE PAYMENT SHALL BE MADE.

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT
OHIO TIM IS OHIO'S TRAFFIC INCIDENT MANAGEMENT PROGRAM WHICH IS COMMITTED TO MAINTAINING THE SAFE AND EFFECTIVE FLOW OF TRAFFIC DURING EMERGENCIES AS TO PREVENT FURTHER DAMAGE, INJURY OR UNDUE DELAY OF THE MOTORING PUBLIC. IN ADDITION TO COMPLYING WITH THE PROVISION OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS, THE CONTRACTOR SHALL ACTIVELY PARTICIPATE IN TIM PLANNING AND IMPLEMENTATION AS OUTLINED BELOW.

1. SUPERINTENDENT SHALL IDENTIFY THE INDIVIDUAL PERSONS ON THE PROJECT WHO WILL, OR MAY NEED TO, PERFORM THE DUTIES HEREIN. AT A MINIMUM, INCLUDE THE SUPERINTENDENT, FOREMEN AND SUPERVISORS (OR EQUIVALENT) AS WELL AS THE WORKSITE TRAFFIC SUPERVISOR (WTS; IF APPLICABLE TO THE PROJECT). THESE INDIVIDUALLY IDENTIFIED PERSONS SHALL COLLECTIVELY BE KNOWN AS CONTRACTOR TRAFFIC INCIDENT MANAGEMENT (TIM) CONTACTS. NOTIFY THE PROJECT ENGINEER OF THE CONTRACTOR TIM CONTACTS (ALONG WITH CONTACT INFORMATION FOR EACH) AT OR BEFORE THE PRECONSTRUCTION MEETING.

2. SUPERINTENDENT SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY CONTRACTOR TIM CONTACT IS ADDED, REMOVED OR THE CONTACT INFORMATION CHANGES OVER THE COURSE OF THE PROJECT.

3. PRIOR THE FIRST DAY OF WORK IN THE FIELD, EACH CONTRACTOR TIM CONTACT ON THE PROJECT SHALL HAVE ATTENDED AND SUCCESSFULLY COMPLETED OHIO TIM TRAINING PROVIDED BY THE DEPARTMENT OR DESIGNEE. TRAINING INFORMATION CAN BE FOUND AT WWW.OHIOTIM.COM.

4. SUPERINTENDENT, AT A MINIMUM, SHALL ATTEND AND ACTIVELY PARTICIPATE IN A DEPARTMENT SCHEDULED TIM MEETING BEFORE CONSTRUCTION WORK BEGINS AND BEFORE EACH PHASE CHANGE. THESE MEETINGS WILL RESULT IN A DEPARTMENT ISSUED PROJECT SPECIFIC TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP). AT THE TIM MEETINGS THE ATTENDING CONTRACTOR TIM CONTACTS SHALL:

   A. COLLABORATE WITH ODOT AND SAFETY FORCES;

   B. SHARE PROJECT SPECIFIC DETAILS THAT IMPACT TIM RESPONDERS; AND

TRAFFIC INCIDENT MANAGEMENT (TIM) DURING MOT (CONT'D)

   C. RECOMMEND WAYS TO INCORPORATE NECESSARY EMERGENCY ACCESS AND OTHER TIM ELEMENTS FOR TIM RESPONDERS GIVEN PROJECT SPECIFIC WORK BEING COMPLETED AND PROJECT SPECIFIC PHASING.

5. CONTRACTOR TIM CONTACTS SHALL IMPLEMENT COMPONENTS OF THE RESULTING TIMP (SUCH AS APPROVED EMERGENCY INGRESS/EGRESS POINTS, ETC), AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

6. CONTRACTOR TIM CONTACTS SHALL PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS WHEN AN INCIDENT/CRASH OCCURS:

   A. IF OBSERVED OR PRESENT WHEN OCCURS, CALL 911 AND THEN NOTIFY THE TRAFFIC MANAGEMENT CENTER (TMC) TO PROVIDE THE FOLLOWING:

      I. LOCATION, INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL

      II. NUMBER AND TYPE OF VEHICLES INVOLVED, IF KNOWN

      III. ESTIMATED EXTENT OF DAMAGE OR INJURY, IF KNOWN

      IV. ESTIMATED NUMBER OF PATIENTS INVOLVED, IF KNOWN

      V. ANY POTENTIAL HAZARDOUS CONDITIONS, IF KNOWN

      VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE, IF APPLICABLE AND VISIBLE

   B. FOLLOWING AN INCIDENT/CRASH:

      I. INITIATE TRAFFIC MANAGEMENT/PROVIDE TEMPORARY TRAFFIC CONTROL AS INDICATED IN THE TIMP, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

      II. RECOMMEND ROADWAY REPAIR NEEDS.

      III. PROVIDE REPAIR RESOURCES AND INITIATE REPAIRS, AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH 109.05.

      IV. ATTEND AND PARTICIPATE IN AN AFTER ACTION REVIEW (AAR).

ALL COSTS, UNLESS OTHERWISE SPECIFIED, RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE FOR ITEM 614, MAINTAINING TRAFFIC. FAILURE TO PERFORM THE REQUIREMENTS OF THIS PLAN NOTE WILL RESULT IN A DAILY FINE OF 2% OF ITEM 614, MAINTAINING TRAFFIC AND MAY RESULT IN ONE OR MORE CONTRACTOR TIM CONTACTS BEING REMOVED FROM THE LIST OF OHIO TIM TRAINED INDIVIDUALS (AT THE SOLE DISCRETION OF THE OHIO TIM EXECUTIVE COMMITTEE). IN THE EVENT AN INDIVIDUAL IS REMOVED FROM THE OHIO TIM TRAINED LIST, THE INDIVIDUAL WILL BE REMOVED FROM CONTRACTOR TIM CONTACT RESPONSIBILITIES ON ALL PROJECTS.

ITEM 614, WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN
WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15 THROUGH APRIL 1.

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

AN ESTIMATED QUANTITY OF 2480 EACH OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

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

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

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

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

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

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

DELINEATION OF PORTABLE AND PERMANENT BARRIER (CONT'D)
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	1018 EACH
ITEM 614, BARRIER REFLECTOR, TYPE 1 (TWO-WAY)	132 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	1150 EACH
[ITEM 614, INCREASED BARRIER DELINEATION	2412 FEET

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

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL
BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL; AND, ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

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

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

ITEM 614, BARRIER REFLECTOR, TYPE 2, ONE-WAY	28 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	28 EACH

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

ITEM 614 - DETOUR SIGNING
THE CONTRACTOR SHALL ERECT, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL DETOUR SIGNING AND SUPPORTS SPECIFIED IN THE DETOUR-SIGNING PLANS, AND IN ACCORDANCE WITH CMS 614.06. AN INTERIM COMPLETION TIME PERIOD HAS BEEN ESTABLISHED FOR THE DETOUR OPERATION

SHOULD THE CONTRACTOR FAIL TO REMOVE THE DETOUR SIGNING AND SUPPORTS BY THE REQUIRED TIME LIMIT, LIQUIDATED DAMAGES AS SPECIFIED IN PLAN NOTES, SHALL BE ASSESSED IN ACCORDANCE WITH CMS 108.07.

PAYMENT SHALL BE MADE AT THE LUMP SUM CONTRACT PRICE FOR ITEM 614, DETOUR SIGNING. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND OTHER INCIDENTALS NECESSARY TO INSTALL AND ERECT, MAINTAIN, AND REMOVE THE DESIGNATED DETOUR ROUTE.

ITEM 606, ANCHOR ASSEMBLY, TYPE T
USE TYPE T ANCHOR ASSEMBLIES ON THE TRAILING END OF EXISTING GUARDRAIL RUNS AS SPECIFIED ON THE PHASING PLANS AND IN ACCORDANCE WITH DETAILS SHOWN ON SHEETS 102-103.

AN ESTIMATED QUANTITY OF 3 EACH OF ITEM 606 ANCHOR ASSEMBLY, TYPE T HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMAMRY.

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC GENERAL NOTES

GRE-US 35-5.63

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OPEN TO TRAFFIC:

- ADJUST EXISTING SIGNAL HEADS FOR US 35 WESTBOUND AND EASTBOUND AT THE EXISTING VALLEY ROAD/TREBEIN ROAD INTERSECTION FOR ALL TRAFFIC PHASES OF CONSTRUCTION. ALL MATERIALS AND LABOR REQUIRED FOR ADJUSTING AND MODIFYING SIGNAL HEADS AND TRAFFIC LANE USE SIGNS FOR THE PURPOSE OF MAINTAINING TRAFFIC SHALL BE CONSIDERED INCIDENTAL TO ITEM 614, MAINTENANCE OF TRAFFIC.
- SHIFT US 35 WESTBOUND TRAFFIC TOWARD OUTSIDE SHOULDER
- SHIFT PORTION OF US 35 EASTBOUND TRAFFIC TOWARD OUTSIDE SHOULDER FOR CROSSOVERS CONSTRUCTION
- NEW VALLEY ROAD/TREBEIN ROAD
- GLENN THOMPSON ACCESS DRIVE
- DRIVE AT VALLEY ROAD, STA 869+02.36, LT
- EXISTING VALLEY ROAD AT US 35 INTERSECTION (SOUTH)

CLOSED TO TRAFFIC:

- EXISTING TREBEIN ROAD AT US 35 INTERSECTION (NORTH)
- TURN LANES ON NEW VALLEY ROAD/TREBEIN ROAD TO RAMP E AND RAMP G

CONSTRUCTION CRITICAL TO PHASE 2, STEP 2

TEMPORARY ROADWAY (DIVERSIONS)

- DIVERSION NO. 4A – US 35 WESTBOUND EXISTING MEDIAN SHOULDER WIDENING, WEST OF EXISTING VALLEY ROAD/TREBEIN ROAD INTERSECTION
- DIVERSION NO. 4B – US 35 WESTBOUND EXISTING MEDIAN SHOULDER WIDENING, EAST OF EXISTING VALLEY ROAD/TREBEIN ROAD INTERSECTION
- CROSSOVER NO. 1 (WEST END OF PROJECT) - PARTIAL
- CROSSOVER NO. 2 (EAST END OF PROJECT) – PARTIAL

CONSTRUCTION AVAILABLE THIS TRAFFIC PHASE

PERMANENT ROADWAY CONSTRUCTION

- RAMP E STA 721+00 TO STA 727+50
- RAMP H STA 1030+90 TO STA 1045+00

PERMANENT BRIDGE CONSTRUCTION

- GRE-035-0610: RAMP E OVER LITTLE MIAMI RIVER

PERMANENT RETAINING WALL CONSTRUCTION

- RW-02A: RAMP E
- RW-02B: RAMP H

PHASE 2, STEP 2

TRAFFIC ROUTING – SAME AS IN PHASE 2, STEP 1 EXCEPT AS NOTED BELOW:

- SHIFT US 35 WESTBOUND TRAFFIC TOWARD EXISTING MEDIAN SHOULDER WIDENED IN PHASE 2, STEP 1

CONSTRUCTION CRITICAL TO PHASE 3

TEMPORARY ROADWAY (DIVERSIONS)

- DIVERSION NO. 6 – US 35 WESTBOUND OUTSIDE SHOULDER WIDENING, WEST OF VALLEY ROAD/TREBEIN ROAD
- DIVERSION NO. 7 – US 35 WESTBOUND OUTSIDE SHOULDER WIDENING, EAST OF VALLEY ROAD/TREBEIN ROAD

PERMANENT ROADWAY CONSTRUCTION

- RAMP E
- RAMP H
- COMPLETION OF CROSSOVER NO. 1 (WEST END OF PROJECT)
- COMPLETION OF CROSSOVER NO. 2 (EAST END OF PROJECT)

PERMANENT BRIDGE CONSTRUCTION

- GRE-035-0610: RAMP E OVER LITTLE MIAMI RIVER

PERMANENT RETAINING WALL CONSTRUCTION

- RW-02A: RAMP E
- RW-02B: RAMP H

PHASE 3 CONSTRUCTION

OBJECTIVE: CONSTRUCT US 35 EASTBOUND MAINLINE PAVEMENT REHABILITATION

PRE-PHASE 3

- INSTALL TEMPORARY TRAFFIC SIGNALS AT RAMP E AND RAMP H INTERSECTION WITH NEW TREBEIN ROAD. TEMPORARY TRAFFIC SIGNALS SHALL BE MAINTAINED AND SUBSEQUENTLY REMOVED AT PROJECT COMPLETION.
- RECONFIGURE AND INSTALL TEMPORARY TRAFFIC SIGNAL AT EXISTING VALLEY ROAD AND US 35 INTERSECTION. EXISTING VALLEY ROAD AT US 35 INTERSECTION REMAINS OPEN. ALL MATERIALS AND LABOR REQUIRED FOR RECONFIGURING AND INSTALLING TEMPORARY TRAFFIC SIGNAL FOR THE PURPOSE OF MAINTAINING TRAFFIC SHALL BE CONSIDERED INCIDENTAL TO ITEM 614, MAINTENANCE OF TRAFFIC.

PRE-PHASE 3 TRAFFIC ROUTING:

- DIVERT US 35 WB TO USE NEWLY CONSTRUCTED RAMP E AND RAMP H
- INSTALL PORTABLE BARRIER ALONG EDGE OF EXISTING MEDIAN SHOULDER FROM STA 318+00, 13' RT TO STA 321+25, 13' RT ON EASTBOUND US 35
- EB US 35 TRAFFIC REMAINS AS IN PHASE 2, STEP 2
- PROPOSED CULVERT (MIDDLE PORTION) UNDER EXISTING WB – INSTALL MIDDLE PORTION OF PROPOSED CULVERT AS SHOWN ON SHEET 152.
- INSTALL TEMPORARY PAVEMENT TO RESTORE EXISTING PAVEMENT OVER CULVERT.

CONSTRUCT PHASE 3 CONSTRUCTION IN 2 STEPS.

PHASE 3, STEP 1

TRAFFIC ROUTING

OPEN TO TRAFFIC:

- RAMP E
- RAMP H
- NEW VALLEY ROAD/TREBEIN ROAD (SAME AS IN PHASE 2, STEPS 1 AND 2, EXCEPT TURN LANES TO RAMP E ARE OPENED)
- MAINTAIN US 35 WB ON NEWLY CONSTRUCTED RAMP E AND RAMP H
- EXISTING VALLEY ROAD AND US 35 AT-GRADE INTERSECTION FOR EASTBOUND

CONSTRUCTION CRITICAL TO PHASE 3, STEP 2

PERMANENT ROADWAY CONSTRUCTION

- US 35 EASTBOUND STA 297+50 TO 329+75
- US 35 EASTBOUND STA 345+00 TO 365+00

PHASE 3, STEP 2

TRAFFIC ROUTING - SAME AS PHASE 3, STEP 1 EXCEPT AS NOTED BELOW:

OPEN TO TRAFFIC:

- EXIT RAMP F (EB) OPEN TO NEW INTERCHANGE

CLOSED TO TRAFFIC:

VALLEY ROAD/TREBEIN ROAD TO US 35 EB (RAMP G IS CLOSED) - THREE WEEKS

- CLOSURE OF EXISTING VALLEY ROAD/US 35 INTERSECTION TO COMPLETE PLUG-IN (FOR US 35 EB)

DETOUR

- DIVERT VALLEY ROAD/TREBEIN ROAD TO US 35 EB TRAFFIC TO USE THE SUPER STREET TURNAROUND (ORCHARD LANE) VIA RAMP E (WESTBOUND ENTRANCE RAMP)

CONSTRUCTION CRITICAL TO NEXT TRAFFIC PHASE

PERMANENT BRIDGE CONSTRUCTION

- EXISTING BRIDGE GRE-035-0614 (US 35 OVER LITTLE MIAMI RIVER) TO REMAIN, EXCEPT REMOVE EXISTING RAISED CONCRETE MEDIAN TRAFFIC ISLAND AND CONSTRUCT NEW MEDIAN CONCRETE BARRIER

PHASE 4 CONSTRUCTION

OBJECTIVE: COMPLETE US 35 MAINLINE WESTBOUND RECONSTRUCTION

TRAFFIC PHASE 4

TRAFFIC ROUTING – SAME AS IN PHASE 3, STEP 2, EXCEPT AS FOLLOWS:

OPEN TO TRAFFIC:

- SHIFT US 35 EASTBOUND BACK TO EASTBOUND LANES
- RAMP G (FULL)
- RAMP F (FULL)
- MAINTAIN US 35 WESTBOUND VIA RAMP E AND RAMP H

CONSTRUCTION CRITICAL TO NEXT TRAFFIC PHASE

PERMANENT ROADWAY CONSTRUCTION

- US 35 WESTBOUND STA 297+50 TO 365+00
- BMP IN US 35 MEDIAN (STA 285+00 TO STA 297+50; STA 365+00 TO STA 385+00).

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION NOTES

GRE-US 35-5.63

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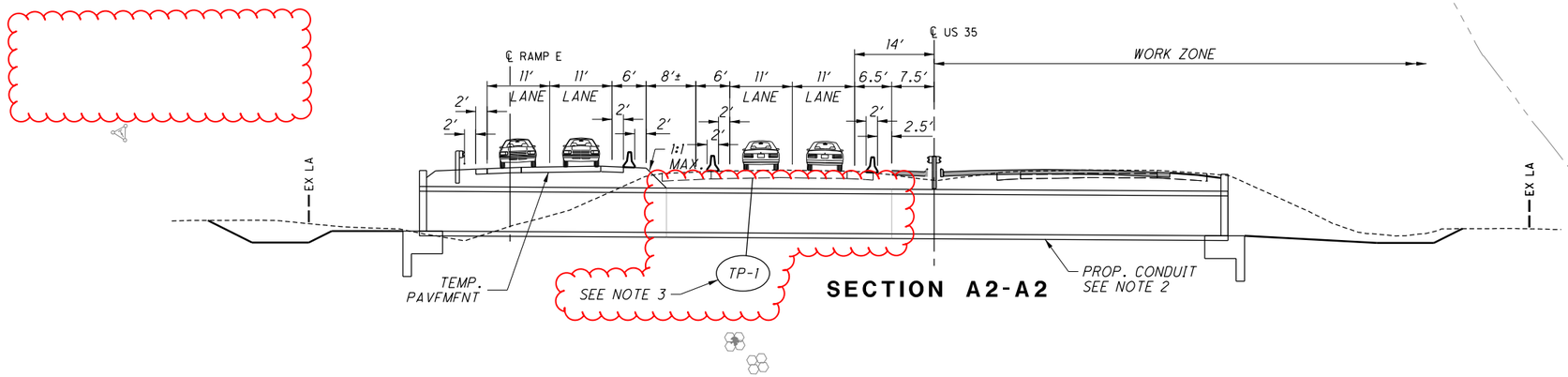
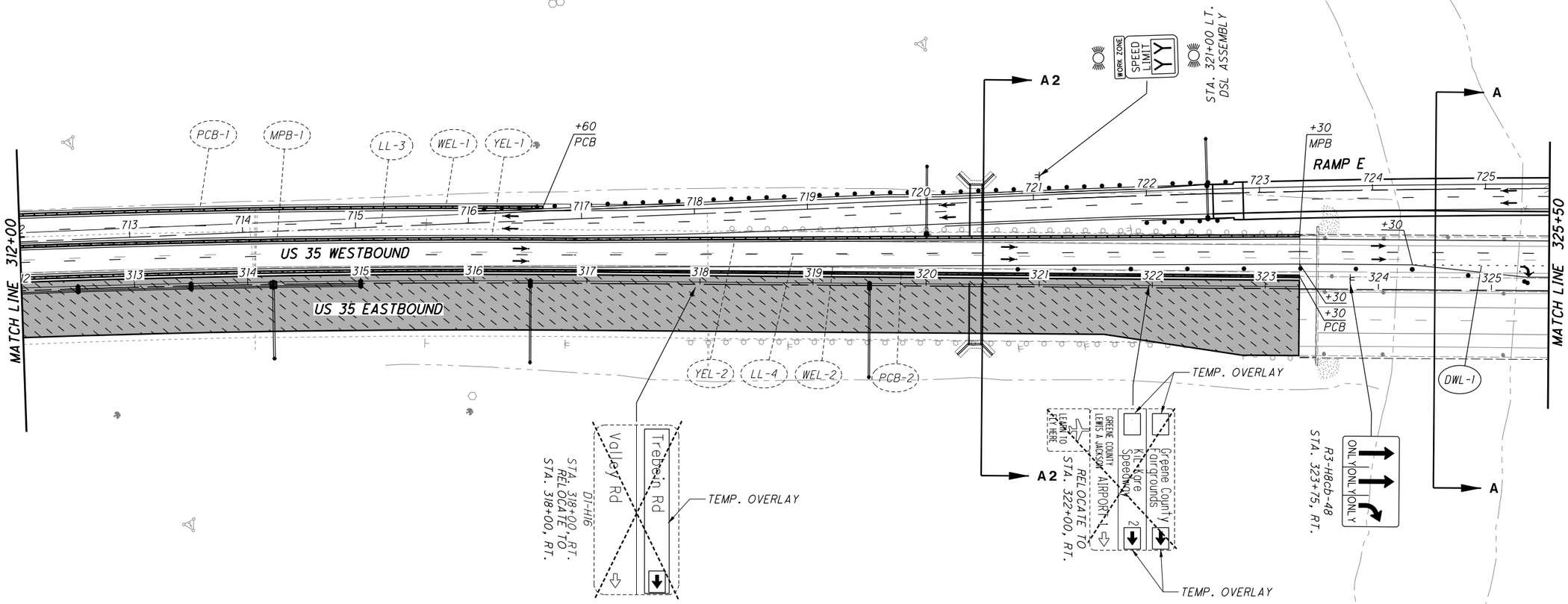
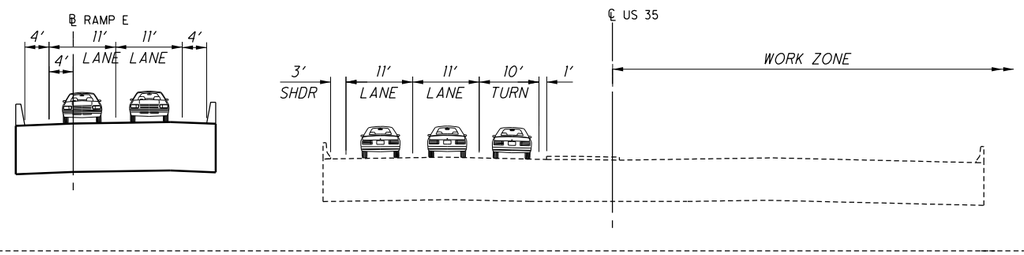


SECTION A2-A2





SECTION A-A

NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. TEMPORARY SHORING REQUIRED FOR STORM PIPE INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO ITEM 614, MAINTENING TRAFFIC. NO SEPARATE PAYMENT SHALL BE MADE.
3. SEE SHEET 43 FOR SEQUENCE OF CONSTRUCTION NOTES FOR TEMPORARY PAVEMENT INSTALLATION AND MIDDLE PORTION OF CULVERT INSTALLATION (PRE-PHASE 3 CONSTRUCTION).

HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC - PHASE 3 - STEP 1
US 35 - STA. 312+00 TO STA. 325+50

GRE-US 35-5.63

152
698

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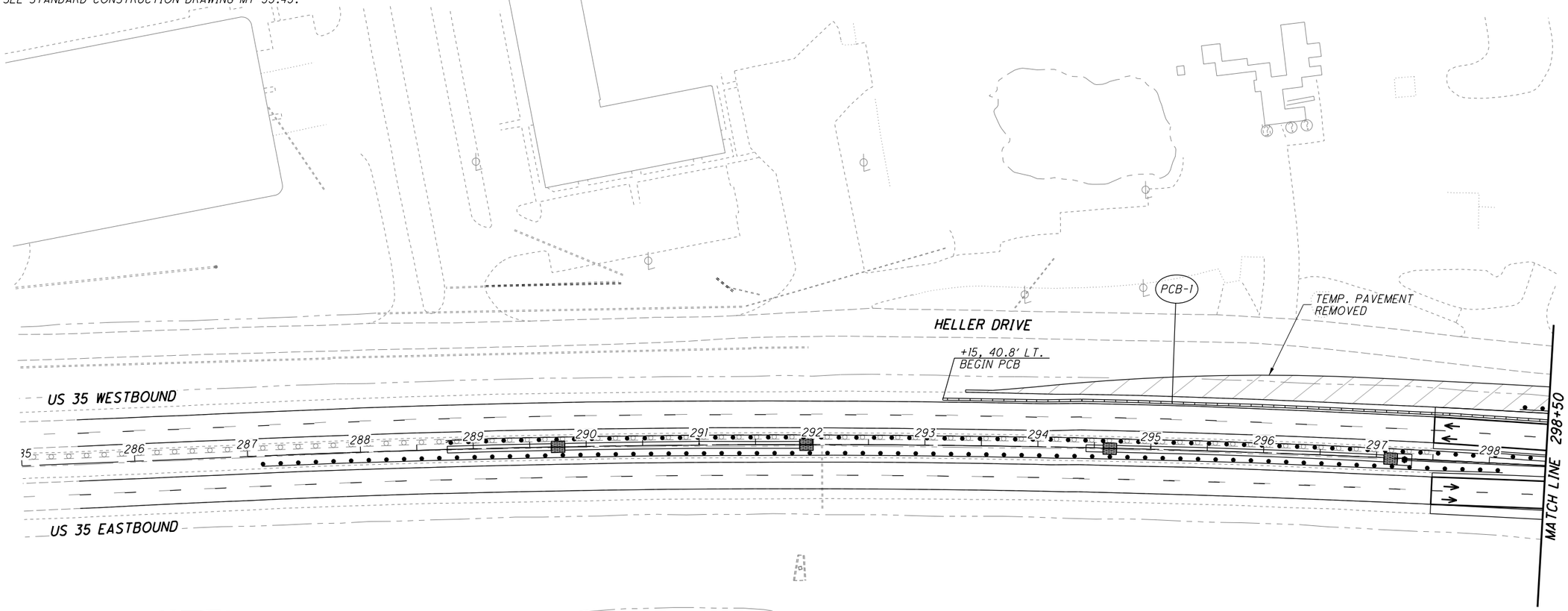
NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. FOR PAVEMENT MARKINGS AND SIGNAGE, SEE TRAFFIC CONTROL SHEETS 476 - 507B.
3. FOR SHOULDER CLOSURE DETAILS AND SIGNAGE, SEE STANDARD CONSTRUCTION DRAWING MT-95.45.



N

HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC - PHASE 5
US 35 - STA. 285+00 TO STA. 298+50

GRE-US 35-5.63

172A
698

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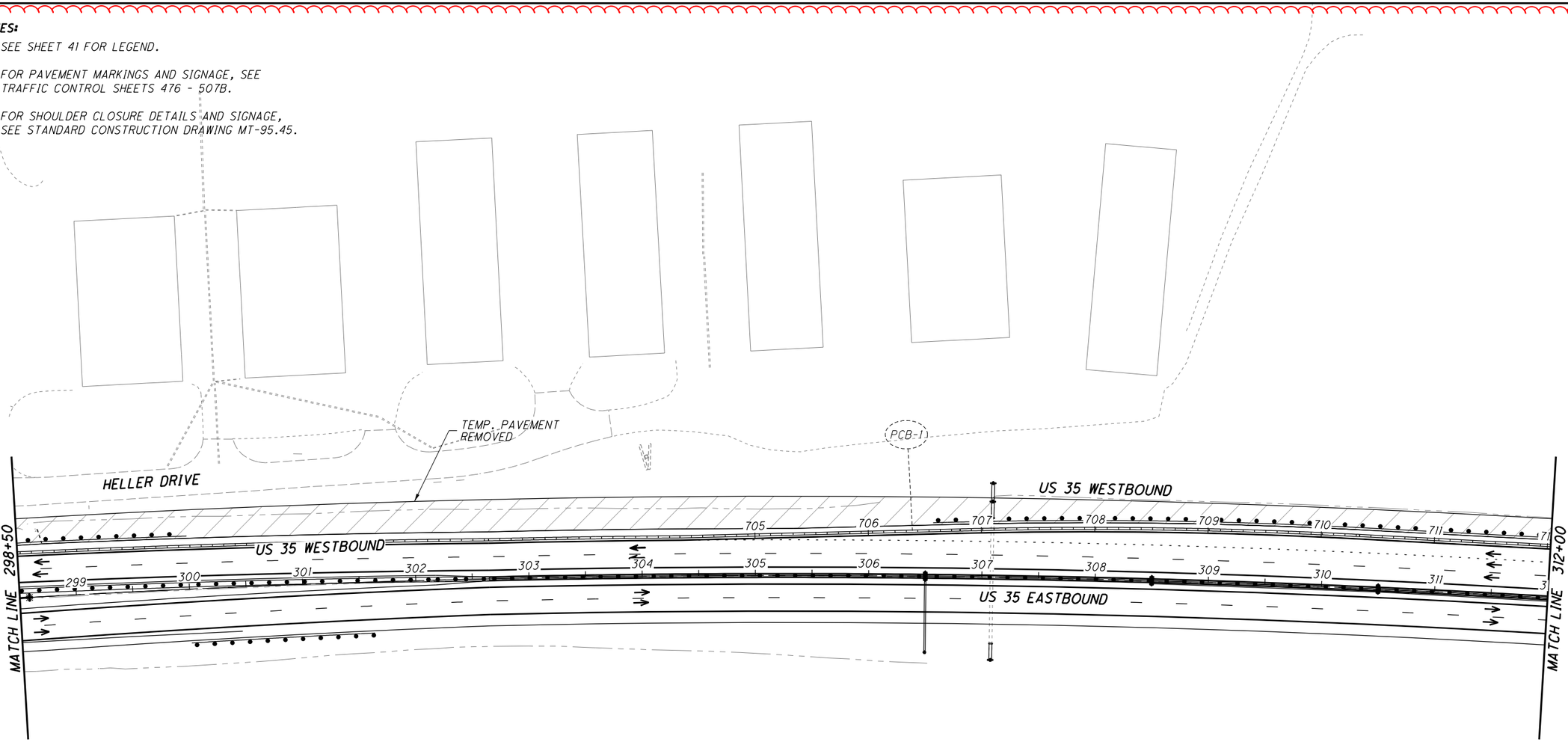
NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. FOR PAVEMENT MARKINGS AND SIGNAGE, SEE TRAFFIC CONTROL SHEETS 476 - 507B.
3. FOR SHOULDER CLOSURE DETAILS AND SIGNAGE, SEE STANDARD CONSTRUCTION DRAWING MT-95.45.



HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC - PHASE 5
US 35 - STA. 298+50 TO STA. 312+00

GRE-US 35-5.63

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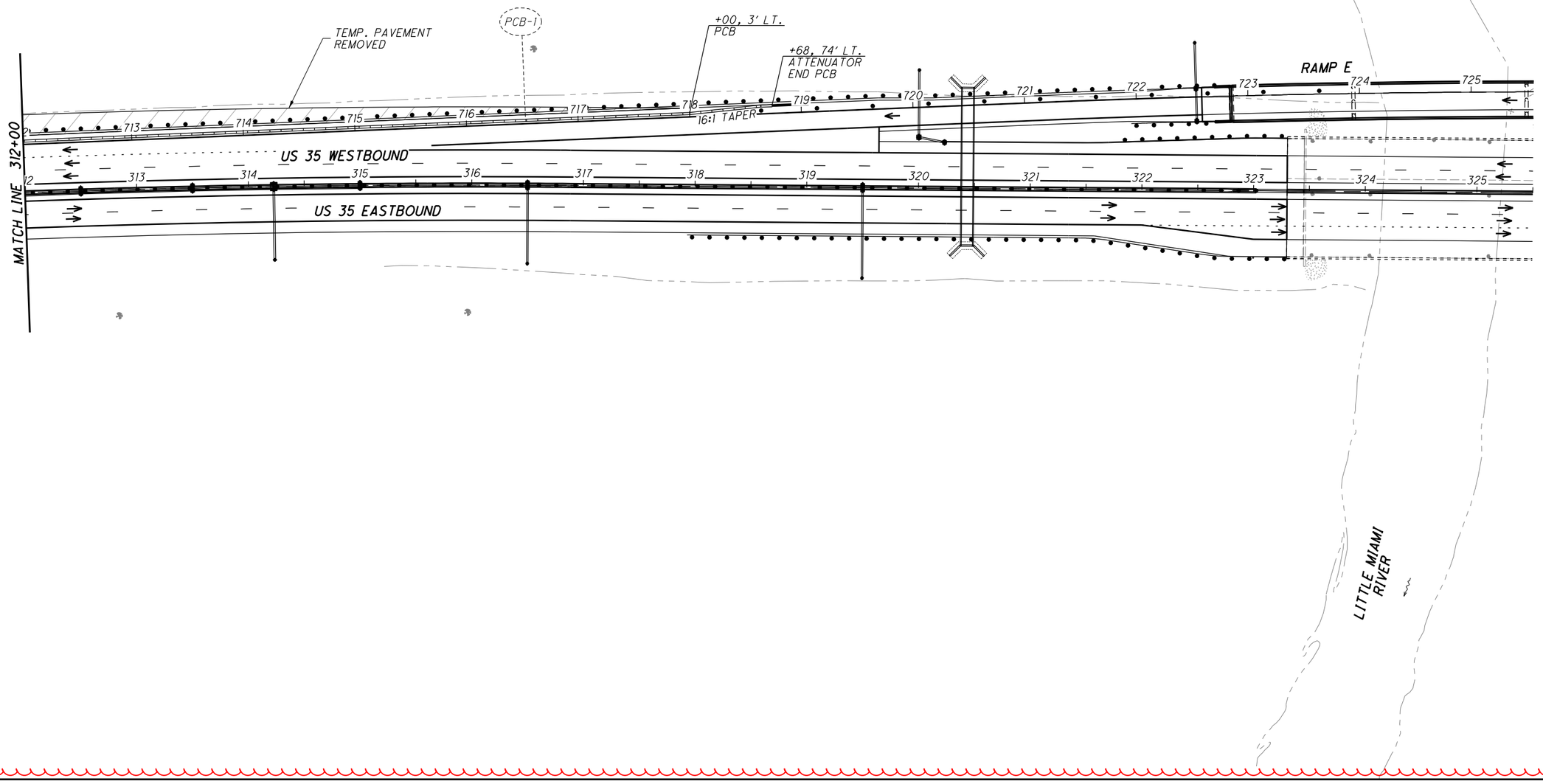
NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. FOR PAVEMENT MARKINGS AND SIGNAGE, SEE TRAFFIC CONTROL SHEETS 476 - 507B.
3. FOR SHOULDER CLOSURE DETAILS AND SIGNAGE, SEE STANDARD CONSTRUCTION DRAWING MT-95.45.



MAINTENANCE OF TRAFFIC - PHASE 5
US 35 - STA. 312+00 TO STA. 325+50

GRE-US 35-5.63

172C
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HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED | CHECKED

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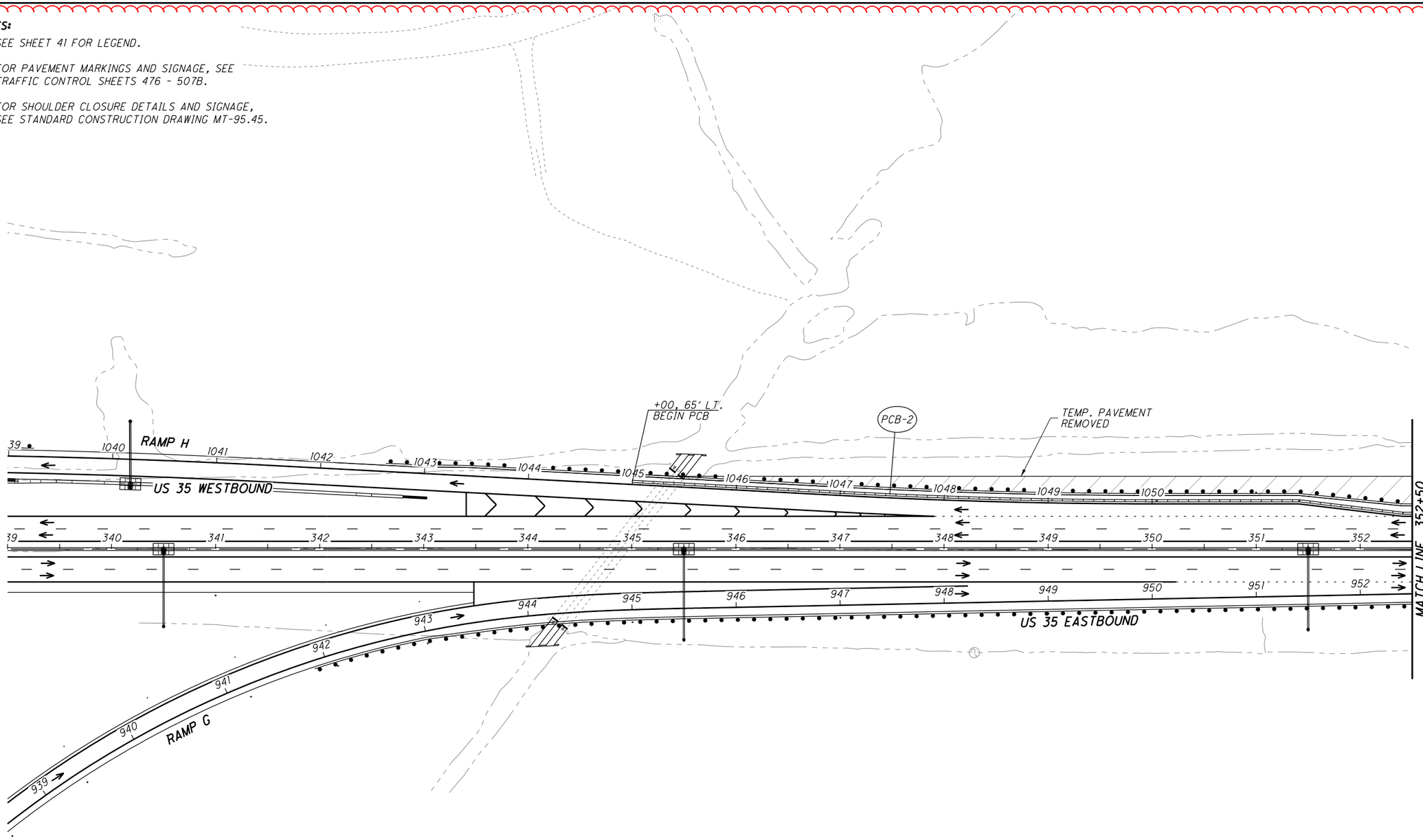
NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. FOR PAVEMENT MARKINGS AND SIGNAGE, SEE TRAFFIC CONTROL SHEETS 476 - 507B.
3. FOR SHOULDER CLOSURE DETAILS AND SIGNAGE, SEE STANDARD CONSTRUCTION DRAWING MT-95.45.



HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC - PHASE 5
US 35 - STA. 339+00 TO STA. 352+50

GRE-US 35-5.63

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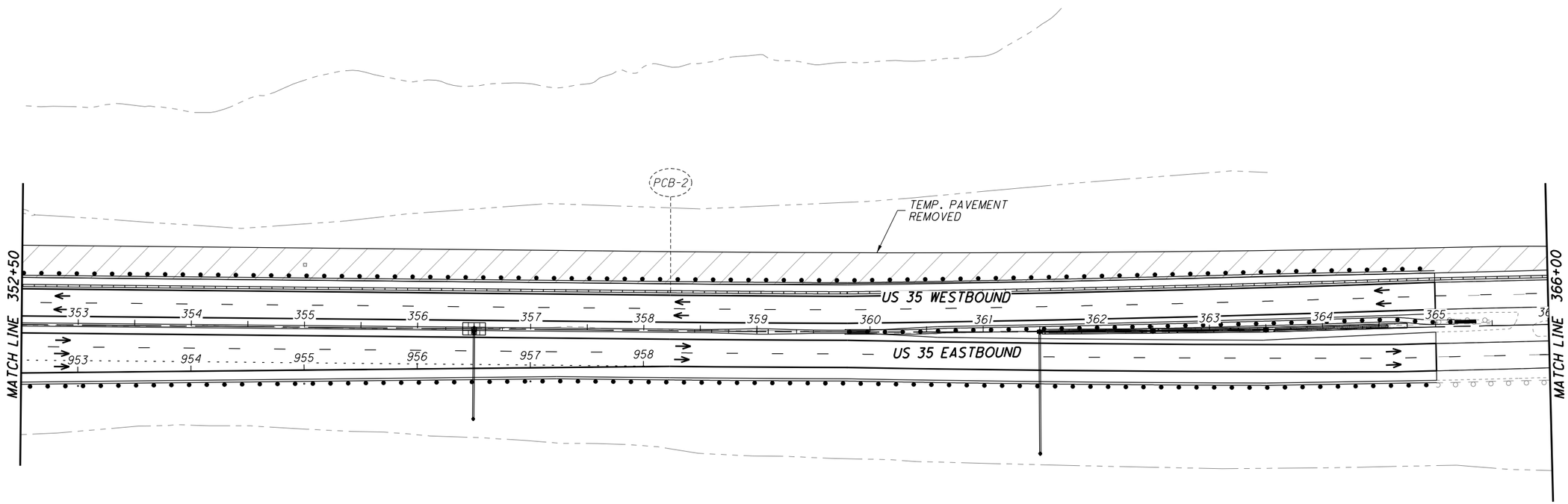
NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. FOR PAVEMENT MARKINGS AND SIGNAGE, SEE TRAFFIC CONTROL SHEETS 476 - 507B.
3. FOR SHOULDER CLOSURE DETAILS AND SIGNAGE, SEE STANDARD CONSTRUCTION DRAWING MT-95.45.



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0 50 100 HORIZONTAL SCALE IN FEET

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC - PHASE 5

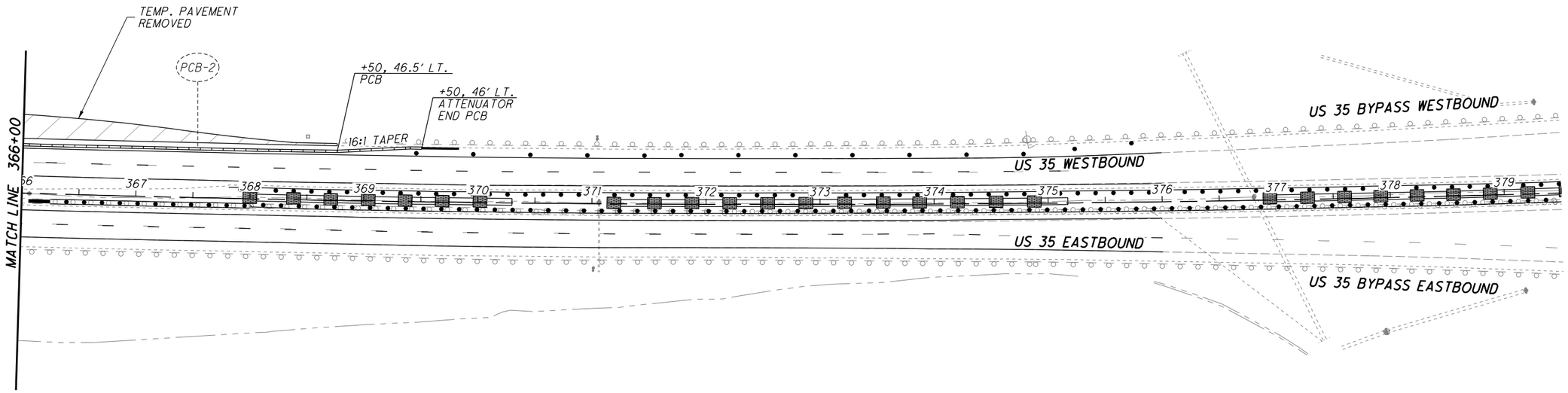
US 35 - STA. 352+50 TO STA. 366+00

GRE-US 35-5.63

172E
698

NOTES:

1. SEE SHEET 41 FOR LEGEND.
2. FOR PAVEMENT MARKINGS AND SIGNAGE, SEE TRAFFIC CONTROL SHEETS 476 - 507B.
3. FOR SHOULDER CLOSURE DETAILS AND SIGNAGE, SEE STANDARD CONSTRUCTION DRAWING MT-95.45.



HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC - PHASE 5
US 35 - STA. 366+00 TO STA. 379+50

GRE-US 35-5.63

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
30		185	186	187		189		195	602	Office Calcs.	01/NHS/OT	02/NHS/BR	03/NHS/BR						
																		ROADWAY	
LS											LS			201	11000	LS		CLEARING AND GRUBBING	
24		64,886									64,910			202	23001	64,910	SY	PAVEMENT REMOVED, AS PER PLAN	32
		769									769			202	30600	769	SY	CONCRETE MEDIAN REMOVED	
		1,725									1,725			202	35100	1,725	FT	PIPE REMOVED, 24" AND UNDER	
		90				39					129			202	35200	129	FT	PIPE REMOVED, OVER 24"	
		5,097									5,097			202	38000	5,097	FT	GUARDRAIL REMOVED	
		9,132									9,132			202	38300	9,132	FT	GUARDRAIL REMOVED, BARRIER DESIGN	
		8									8			202	47800	8	EACH	IMPACT ATTENUATOR REMOVED	
		2									2			202	53100	2	EACH	MAILBOX REMOVED	
		1									1			202	56100	1	EACH	BUILDING DEMOLISHED, GRAIN SILO	
		11									11			202	58100	11	EACH	CATCH BASIN REMOVED	
		6									6			202	58200	6	EACH	INLET REMOVED	
									15,046		15,046			202	75000	15,046	FT	FENCE REMOVED	
									3		3			202	75250	3	EACH	GATE REMOVED	
		1									1			202	98100	1	EACH	REMOVAL MISC.: SEPTIC TANK AND LEACH FIELD	
		2									2			202	98100	2	EACH	REMOVAL MISC.: PRECAST CONCRETE OUTLET	
		2									2			202	98100	2	EACH	REMOVAL MISC.: PRIVATE WOODEN SIGN	
		9									9			202	98100	9	EACH	REMOVAL MISC.: CONCRETE BUMPER BLOCKS	
		2									2			202	98100	2	EACH	REMOVAL MISC.: CONCRETE FOUNDATION	
		21									21			202	98300	21	SY	REMOVAL MISC.: ROCK CHANNEL PROTECTION	
		10									10			202	98700	10	FT	ABANDON MISC.: PIPE 24" AND UNDER	
		131		24,705							24,836			203	10000	24,836	CY	EXCAVATION	
								1,479			1,479			203	10001	1,479	CY	EXCAVATION, AS PER PLAN (VERTICAL SIDES ONLY)	32
		2,753		227,731				84			230,568			203	20000	230,568	CY	EMBANKMENT	
										6,586	6,586			203	20001	6,586	CY	EMBANKMENT, AS PER PLAN	32
											12			SPECIAL	20365000	12	EACH	SETTLEMENT PLATFORM	35
										4,224	4,224			204	10000	4,224	SY	SUBGRADE COMPACTION	
										162	162			204	13000	162	CY	EXCAVATION OF SUBGRADE	
										162	162			204	30020	162	CY	GRANULAR MATERIAL, TYPE C	
57											57			204	45000	57	HOUR	PROOF ROLLING	
										2,517	2,517			204	50000	2,517	SY	GEOTEXTILE FABRIC	
										2,764	2,764			206	10500	2,764	TON	CEMENT	
										106,793	106,793			206	11000	106,793	SY	CURING COAT	
										106,793	106,793			206	15010	106,793	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP	
										LS	LS			206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	
			18,250								18,250			606	15050	18,250	FT	GUARDRAIL, TYPE MGS	
			6,462								6,462			606	15100	6,462	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
			2,800								2,800			606	15550	2,800	FT	GUARDRAIL, BARRIER DESIGN, TYPE MGS	
			3								3			606	20000	3	EACH	FLARED END SECTION	
			12								12			606	26150	12	EACH	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	
			14								14			606	26550	14	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			5								5			606	35002	5	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
			5								5			606	35102	5	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	
				1							1			606	60022	1	EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL), SPEED = 60 MPH, HAZARD = 28"	
			3								3			606	60028	3	EACH	IMPACT ATTENUATOR, TYPE 2 (BIDIRECTIONAL), SPEED = 60 MPH, HAZARD = 36"	
									16,057		16,057			607	15000	16,057	FT	FENCE, TYPE 47	
3,600											3,600			607	30000	3,600	FT	FENCE, SNOW	
									7		7			607	35000	7	FT	FENCE REMOVED AND REBUILT	
				2,785							2,785			622	10100	2,785	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	
				205							205			622	10120	205	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C	
				40							40			622	10121	40	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C, AS PER PLAN	32
				862							862			622	10160	862	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
				94							94			622	10161	94	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN A	32
				156							156			622	10161	156	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN B	32
				1							1			622	24840	1	EACH	CONCRETE BARRIER END SECTION, TYPE B	
				2							2			622	24850	2	EACH	CONCRETE BARRIER END SECTION, TYPE B1	
				1							1			622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D	

CALCULATED TES
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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
31	33	187	188	189	190	192	195		602	615	01/NHS/OT	02/NHS/BR	03/NHS/BR						
																		ROADWAY	
		28									28			622	25006	28	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1	
		4									4			622	25008	4	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C	
		14									14			622	25050	14	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D	
										16	16			623	38500	16	EACH	MONUMENT ASSEMBLY, TYPE C	
										14	14			623	40500	14	EACH	REFERENCE MONUMENT, TYPE A	
									31		31			625	32000	31	EACH	GROUND ROD	
											LS			878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
2											2			SPECIAL	69050100	2	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	31
	LS										LS			SPECIAL	69098400	LS		CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	33
																		EROSION CONTROL	
				7.66							7.66			601	10000	7.66	SY	RIPRAP	
						64					64			601	21050	64	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
					210		1,045				1,255			601	21060	1,255	SY	TIED CONCRETE BLOCK MAT WITH TYPE 2 UNDERLAYMENT	
				16.93							16.93			601	32100	16.93	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
			26	14							40			601	32200	40	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
					197						197			601	38001	197	FT	PAVED GUTTER, TYPE 1-4, AS PER PLAN	32
							1,572				1,572			601	45050	1,572	CY	BIORETENTION CELL	
3											3			659	00100	3	EACH	SOIL ANALYSIS TEST	
31,331											31,331			659	00300	31,331	CY	TOPSOIL	
		282,260									282,260			659	10000	282,260	SY	SEEDING AND MULCHING	
14,113											14,113			659	14000	14,113	SY	REPAIR SEEDING AND MULCHING	
14,113											14,113			659	15000	14,113	SY	INTER-SEEDING	
39.38											39.38			659	20000	39.38	TON	COMMERCIAL FERTILIZER	
58											58			659	31000	58	ACRE	LIME	
1,563											1,563			659	35000	1,563	MGAL	WATER	
635.09											635.09			659	40000	635.09	MSF	MOWING	
					2,594						2,594			670	00500	2,594	SY	SLOPE EROSION PROTECTION	
					17,243						17,243			670	00700	17,243	SY	DITCH EROSION PROTECTION	
							1,415				1,415			671	15000	1,415	SY	EROSION CONTROL MAT, TYPE A	
											LS	LS	LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
											LS	LS	LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
											LS	LS	LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
											729,162			832	30000	729,162	EACH	EROSION CONTROL	
					128						128			836	10000	128	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	
					389						389			836	10030	389	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 3	
																		DRAINAGE	
				LS							LS			503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
				LS							LS			503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, A	439
LS											LS			503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN, B (TAF)	31
			6.1	9.1							15.2			602	20000	15.2	CY	CONCRETE MASONRY	
							1,664				1,664			605	05201	1,664	FT	4" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN	32
						30,419					30,419			605	11100	30,419	FT	6" SHALLOW PIPE UNDERDRAINS	
						1,172					1,172			605	13300	1,172	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
						20,343					20,343			605	14000	20,343	FT	6" BASE PIPE UNDERDRAINS	
							940				940			611	00200	940	FT	4" CONDUIT, TYPE C, 707.33, 707.42 OR 707.45	
						1,823					1,823			611	00510	1,823	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
				40							40			611	04900	40	FT	12" CONDUIT, TYPE D	
			2,290								2,290			611	05900	2,290	FT	15" CONDUIT, TYPE B	
			164								164			611	06100	164	FT	15" CONDUIT, TYPE C	
				104							104			611	06400	104	FT	15" CONDUIT, TYPE D	
			181								181			611	06700	181	FT	15" CONDUIT, TYPE F	
			264								264			611	07400	264	FT	18" CONDUIT, TYPE B	

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
30		187	188	189		192		483	509	Office Calcs.	01/NHS/OT	02/NHS/BR	03/NHS/BR						
																		DRAINAGE	
				56							56			611	10900	56	FT	24" CONDUIT, TYPE D, 706.02	
				30							30			611	13200	30	FT	30" CONDUIT, TYPE A, 707.01 (ALUMINIZED), 707.04	
				72							72			611	13200	72	FT	30" CONDUIT, TYPE A, 706.02 OR 36" 707.01 (ALUMINIZED), 707.04, 707.21, 707.33	
				184							184			611	13200	184	FT	30" CONDUIT, TYPE A, 706.02, 707.01 (ALUMINIZED), 707.04, 707.21, 707.33, 748.06 (0.5")	
			207								207			611	13400	207	FT	30" CONDUIT, TYPE B	
			284								284			611	21100	284	FT	48" CONDUIT, TYPE C	
				60							60			611	23600	60	FT	60" CONDUIT, TYPE A, 707.33	
				80							80			611	52300	80	FT	19" X 30" CONDUIT, TYPE A, 706.04	
				50							50			611	97400	50	FT	CONDUIT, MISC.: 33" CONDUIT, TYPE D	
			2								2			611	98150	2	EACH	CATCH BASIN, NO. 3	
			20								20			611	98180	20	EACH	CATCH BASIN, NO. 3A	
			3								3			611	98370	3	EACH	CATCH BASIN, NO. 6	
			2								2			611	98410	2	EACH	CATCH BASIN, NO. 8	
			1								1			611	98434	1	EACH	CATCH BASIN, NO. 8A	
			1								1			611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
			7								7			611	99100	7	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	
			1								1			611	99101	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN	32
			1								1			611	99110	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1	
			3								3			611	99114	3	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
			5								5			611	99115	5	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D, AS PER PLAN	32
			1								1			611	99574	1	EACH	MANHOLE, NO. 3	
						32					32			611	99710	32	EACH	PRECAST REINFORCED CONCRETE OUTLET	
			308								308			839	30000	308	FT	TRENCH DRAIN, TYPE B WITH STANDARD GRATE	
																		PAVEMENT	
9										1,596	1,605			301	56000	1,605	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
										11,106	11,106			302	56000	11,106	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
										17,977	17,977			304	20000	17,977	CY	AGGREGATE BASE, 6"	
										486	486			304	20000	486	CY	AGGREGATE BASE, 8"	
										252	252			304	20000	252	CY	AGGREGATE BASE, 12"	
										7,983	7,983			407	20000	7,983	GAL	NON-TRACKING TACK COAT	
										372	372			441	50000	372	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
										526	526			441	50300	526	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
										3,416	3,416			442	10080	3,416	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
										2,868	2,868			442	10300	2,868	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)	
										242	242			SPECIAL	45130000	242	FT	PRESSURE RELIEF JOINT, TYPE A	
										7,455	7,455			452	12020	7,455	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
										14,097	14,097			452	14122	14,097	SY	11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
		4,542									4,542			609	24510	4,542	FT	CURB, TYPE 4-C	
		35.5									35.5			609	72100	35.5	CY	CONCRETE MEDIAN, 6"	
										235	235			617	10100	235	CY	COMPACTED AGGREGATE	
								6.86			6.86			618	40600	6.86	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
																		LIGHTING	
									36		36			625	00450	36	EACH	CONNECTION, FUSED PULL APART	
									18		18			625	00460	18	EACH	CONNECTION, UNFUSED PULL APART	
									12		12			625	00470	12	EACH	CONNECTION, UNFUSED BOLTED	
									123		123			625	00480	123	EACH	CONNECTION, UNFUSED PERMANENT	
									18		18			625	10490	18	EACH	LIGHT POLE, CONVENTIONAL, AT15B40	
									1		1			625	10490	1	EACH	LIGHT POLE, CONVENTIONAL, A15B40	
									18		18			625	14100	18	EACH	LIGHT POLE FOUNDATION, 24" X 8' DEEP	
									1		1			625	14300	1	EACH	MEDIAN LIGHT POLE FOUNDATION, 8' DEEP	

CALCULATED TES
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GENERAL SUMMARY

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
36		40	41		201		476	479	481	482	01/NHS/OT	02/NHS/BR	03/NHS/BR						
																		TRAFFIC CONTROL	
								2			2			630	89100	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND REERECTION, TYPE TC-12.30	
							2				2			630	89804	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL, TYPE TC-15.115	
										1.8	1.8			644	00100	1.8	MILE	EDGE LINE, 4"	
										0.04	0.04			644	00200	0.04	MILE	LANE LINE, 4"	
										1.44	1.44			644	00300	1.44	MILE	CENTER LINE	
										421	421			644	00400	421	FT	CHANNELIZING LINE, 8"	
									18	36	54			644	00500	54	FT	STOP LINE	
										754	754			644	00700	754	FT	TRANSVERSE/DIAGONAL LINE	
									293		293			644	00720	293	FT	CHEVRON MARKING	
									39		39			644	00900	39	SF	ISLAND MARKING	
									12	7	19			644	01300	19	EACH	LANE ARROW	
									2		2			644	01350	2	EACH	LANE REDUCTION ARROW	
									2		2			644	01360	2	EACH	WRONG WAY ARROW	
										56	56			644	01510	56	FT	DOTTED LINE, 6"	
										15	15			644	01514	15	FT	DOTTED LINE, 8"	
									18		18			644	20800	18	FT	YIELD LINE	
										0.08	0.08			646	10000	0.08	MILE	EDGE LINE, 4"	
										156	156			646	10300	156	FT	CHANNELIZING LINE, 8"	
									12		12			646	10400	12	FT	STOP LINE	
										3	3			646	20300	3	EACH	LANE ARROW	
										155	155			646	20506	155	FT	DOTTED LINE, 8"	
										19	19			646	90000	19	FT	PAVEMENT MARKING, MISC.: CENTER LINE	497
									0.69		0.69			807	12010	0.69	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, EDGE LINE, 6"	
									1		1			807	12110	1	MILE	WET REFLECTIVE EPOXY PAVEMENT MARKING, LANE LINE, 6"	
									1		1			807	12410	1	FT	WET REFLECTIVE EPOXY PAVEMENT MARKING, DOTTED LINE, 6"	
									7.7		7.7			807	13010	7.7	MILE	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, EDGE LINE, 6"	
									3.4		3.4			807	13110	3.4	MILE	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, LANE LINE, 6"	
									4,389		4,389			807	13310	4,389	FT	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, CHANNELIZING LINE, 12"	
									3,362		3,362			807	13410	3,362	FT	WET REFLECTIVE SPRAY THERMOPLASTIC PAVEMENT MARKING, DOTTED LINE, 6"	
									10.62		10.62			850	10010	10.62	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
									3,592		3,592			850	10110	3,592	FT	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (ASPHALT)	
									4,370		4,370			850	10130	4,370	FT	GROOVING FOR 12" RECESSED PAVEMENT MARKING, (ASPHALT)	
									1.21		1.21			850	20010	1.21	MILE	GROOVING FOR 6" RECESSED PAVEMENT MARKING, (CONCRETE)	
																		RETAINING WALLS (RW-01, RW-02A & RW-02B)	
																		FOR RETAINING WALL GENERAL SUMMARY	451
																		RETAINING WALLS (TEMPORARY RETAINING WALL NOS. 1 & 2)	
																		FOR RETAINING TEMPORARY WALL GENERAL SUMMARY	473
																		STRUCTURE 20 FOOT SPAN AND UNDER (GRE-035-0604)	
																		FOR US 35 OVER FLOOD PLAIN RELIEF DITCH GENERAL SUMMARY	524
																		STRUCTURE 20 FOOT SPAN AND UNDER (GRE-035-0654)	
																		FOR US 35 OVER TRIBUTARY TO LITTLE MIAMI RIVER GENERAL SUMMARY	529
																		STRUCTURE OVER 20 FOOT SPAN (GRE-035-0614)	
																		FOR US 35 OVER LITTLE MIAMI RIVER GENERAL SUMMARY	532
																		STRUCTURE OVER 20 FOOT SPAN (GRE-035-0610)	
																		FOR RAMP E OVER LITTLE MIAMI RIVER GENERAL SUMMARY	541
																		FOR VALLEY/TREBEIN ROAD OVER US 35 GENERAL SUMMARY	575
																		MAINTENANCE OF TRAFFIC	
			800								800			253	02000	800	CY	PAVEMENT REPAIR	
		3									3			606	26500	3	EACH	ANCHOR ASSEMBLY, TYPE T	
2,000											2,000			614	11110	2,000	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		2,412									2,412			614	11630	2,412	FT	INCREASED BARRIER DELINEATION	
					21						21			614	12380	21	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
					1						1			614	12390	1	EACH	WORK ZONE IMPACT ATTENUATOR, OVER 24" AND LESS THAN 36" WIDE HAZARDS, (UNIDIRECTIONAL)	

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
		37	38	39	40	41		201	202		01/NHS/OT	02/NHS/BR	03/NHS/BR						
																		MAINTENANCE OF TRAFFIC	
					LS						LS			614	12420	LS		DETOUR SIGNING	
		8									8			614	12484	8	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		25									25			614	12500	25	EACH	REPLACEMENT SIGN	
		100									100			614	12600	100	EACH	REPLACEMENT DRUM	
		2									2			614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
					2,480						2,480			614	12801	2,480	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	40
					1,018						1,018			614	13310	1,018	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
					28						28			614	13312	28	EACH	BARRIER REFLECTOR, TYPE 2, ONE WAY	
					1,178						1,178			614	13350	1,178	EACH	OBJECT MARKER, ONE WAY	
				52							52			614	18601	52	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	39
								5.16	3.4		8.56			614	20056	8.56	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
								0.52	0.04		0.56			614	20110	0.56	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
									3.44		3.44			614	20560	3.44	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
									1.44		1.44			614	21100	1.44	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
									1.44		1.44			614	21550	1.44	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
								16.12	9.23		25.35			614	22056	25.35	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
								8.52	1.88		10.4			614	22110	10.4	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
									1.88		1.88			614	22350	1.88	MILE	WORK ZONE EDGE LINE, CLASS III, 4", 642 PAINT	
									9.23		9.23			614	22360	9.23	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
								12,952			12,952			614	23100	12,952	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 807 PAINT	
									4,389		4,389			614	23110	4,389	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
									1,041		1,041			614	23200	1,041	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
									1,041		1,041			614	23680	1,041	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
									4,389		4,389			614	23690	4,389	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
								170	3,362		3,532			614	24102	3,532	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
									226		226			614	24200	226	FT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT	
									226		226			614	24610	226	FT	WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	
									3,362		3,362			614	24612	3,362	FT	WORK ZONE DOTTED LINE, CLASS III, 6", 642 PAINT	
									754		754			614	25200	754	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	
									754		754			614	25620	754	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	
									30		30			614	26000	30	FT	WORK ZONE STOP LINE, CLASS I	
								133	36		169			614	26200	169	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
									66		66			614	26610	66	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
									39		39			614	32700	39	SF	WORK ZONE ISLAND MARKING, CLASS I	
									39		39			614	32800	39	SF	WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT	
				LS							LS			615	10001	LS		ROADS FOR MAINTAINING TRAFFIC, AS PER PLAN	
								14,704			14,704			615	20001	14,704	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	39
								7,021			7,021			615	25001	7,021	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN	39
				800							800			616	10000	800	MGAL	WATER	
								6,458			6,458			622	41011	6,458	FT	PORTABLE BARRIER, 50", AS PER PLAN	39
								51,744			51,744			622	41100	51,744	FT	PORTABLE BARRIER, UNANCHORED	
									30		30			644	00500	30	FT	STOP LINE	
									39		39			644	00900	39	SF	ISLAND MARKING	
									9.23		9.23			648	00104	9.23	MILE	EDGE LINE, 6"	
									3.4		3.4			648	00204	3.4	MILE	LANE LINE, 6"	
									4,389		4,389			648	00404	4,389	FT	CHANNELIZING LINE, 12"	
									3,362		3,362			648	01510	3,362	FT	DOTTED LINE, 6"	
			96								96			808	18700	96	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																		INCIDENTALS	
											LS			614	11000	LS		MAINTAINING TRAFFIC	
											27			619	16020	27	MNTH	FIELD OFFICE, TYPE C	
											LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS			624	10000	LS		MOBILIZATION	

CALCULATED TES CHECKED JAE

GENERAL SUMMARY

GRE-US 35-5.63

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, OVER 24" FT		503 COFFERDAMS AND EXCAVATION BRACING LS	503 COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN A LS		601 RIPRAP SY	601 ROCK CHANNEL PROTECTION, TYPE B WITH FILTER CY	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER CY		602 CONCRETE MASONRY CY		611 12" CONDUIT, TYPE D FT	611 15" CONDUIT, TYPE D FT	611 24" CONDUIT, TYPE D, 706.02 FT	611 30" CONDUIT, TYPE A, 707.01 (ALUMINIZED), 707.04 FT	611 30" CONDUIT, TYPE A, 706.02 OR 36" 707.01 (ALUMINIZED), 707.04, 707.21, 707.33 FT	611 30" CONDUIT, TYPE A, 706.02, 707.01 (ALUMINIZED), 707.04, 707.21, 707.33, 748.06 (0.5") FT	611 60" CONDUIT, TYPE A, 707.33 FT	611 19" X 30" CONDUIT, TYPE A, 706.04 FT	611 33" CONDUIT, TYPE D FT
		VALLEY ROAD																							
D-52	355	862+57.59	863+07.58	LT								1.33													50
D-53	355	862+59.82	863+07.83	RT								1.33					48								
		TREBEIN ROAD																							
D-54	363	889+96.54	890+37.32	RT												40									
D-55	363	890+56.63	891+13.64	RT													56								
		US 35																							
	439	307+08.60		CL	30			LS				4.20		1.2						30					
		VALLEY ROAD																							
	440	865+00.69		CL	9		LS				15.6			3.6										60	
		RAMP F																							
	441	835+00.00		CL						3.83		2.00		1.5							72				
		GLENN THOMPSON DRIVE																							
	442	6+50.00		CL								1.80		0.9				56							
		TREBEIN ROAD																							
	443	884+58.15		CL								1.80		1.2								184			
		TREBEIN ROAD																							
	444	891+13.71		CL						3.83		1.33		0.7										80	
TOTALS CARRIED TO GENERAL SUMMARY					39		LS	LS		7.66	16	14		9		40	104	56	30	72	184	60	80	50	

CALCULATED TES CHECKED CTS

DRAINAGE SUBSUMAMRY

GRE-US 35-5.63

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698

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE IMPACT ATTENUTATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 WORK ZONE IMPACT ATTENUTATOR, 24" TO 36" WIDE HAZARDS, (UNIDIRECTIONAL) EACH		614 WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) MILE	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT FT		614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 8", 807 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6" 807 PAINT (WHITE) FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN SY	622 PORTABLE BARRIER, 50", AS PER PLAN FT	622 PORTABLE BARRIER, UNANCHORED FT
		MOT-PHASE 3 - STEP 1																			
		US 35																			
LL-1	150	286+00	289+20	LT									0.06								
LL-2	150	285+00	287+40	RT									0.05								
WEL-1	150	286+00	329+96	LT										0.84							
CH-1	150	289+20	300+00	LT												1086					
YEL-1	150	286+00	373+00	LT											1.65						
WEL-2	150	285+00	327+77	LT & RT										0.81							
CH-2	150	287+40	300+00	LT & RT												1264					
YEL-2	150	285+00	375+40	LT & RT											1.71						
MPB-1	150	291+45	323+30	LT																3195	
PCB-1	150	293+40	316+60	LT																	2335
PCB-2	150	297+32	323+30	RT	1																2600
LL-3	151	300+00	329+96	LT									0.57								
LL-4	151	300+00	328+00	LT									0.53								
DWL-1	152	324+30	326+00	LT													170				
TP-1	152	320+25	320+63	LT & RT														163			
WEL-3	153	326+00	328+00	LT										0.04							
PCB-3	153	327+55	329+73	LT																	218
PCB-4	153	328+34	265+07	LT																	3748
SL-1	153			LT							41										
WEL-4	153	331+24	334+00	LT										0.05							
WEL-5	153	331+74	373+00	LT										0.78							
LL-5	153	331+24	362+41	LT									0.59								
PCB-5	155	344+88	368+59	LT	1																2369
MPB-2	155	341+37	374+00	LT																3263	
WEL-6	155	328+96	374+40	LT										0.86							
LL-6	155	328+96	362+41	LT									0.63								
CH-3	156	362+41	373+00	LT												1058					
CH-4	156	362+41	375+40	LT												1306					
PCB-5A	43	318+00	321+25	RT	1																303
		TREBEIN ROAD																			
SL-2	153			LT							27										
		VALLEY ROAD																			
SL-3	153			RT							11										
DY-1	153			RT						0.02											
WEL-7	153			RT					0.04												
WEL-8	153			RT					0.03												
TOTALS THIS SHEET CARRIED TO SHEET 201					3	0		0.00	0.07	0.02	79		2.43	3.38	3.36	4,714	170	163	0	6,458	11,573

MAINTENANCE OF TRAFFIC SUBSUMMARY
PHASE 3 - STEP 1

CALCULATED
CHECKED

GRE-US 35-5.63

200
698

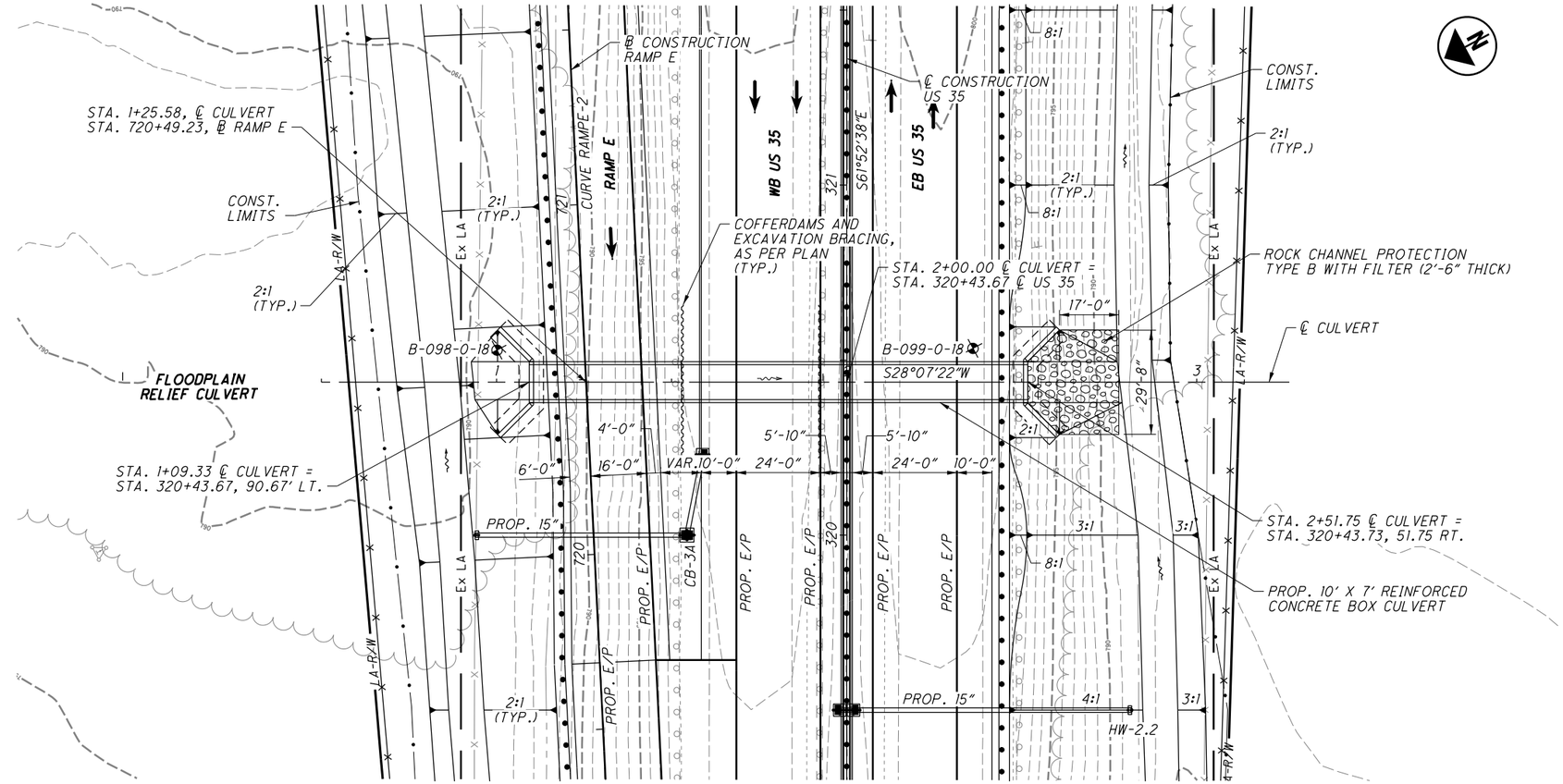
REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) EACH	614 WORK ZONE IMPACT ATTENUATOR, 24" TO 36" WIDE HAZARDS, (UNIDIRECTIONAL) EACH		614 WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT (YELLOW) MILE	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT FT		614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE) MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW) MILE	614 WORK ZONE CHANNELIZING LINE, CLASS I, 8", 807 PAINT FT	614 WORK ZONE DOTTED LINE, CLASS I, 6" 807 PAINT (WHITE) FT	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN SY	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN SY	622 PORTABLE BARRIER, 50", AS PER PLAN FT	622 PORTABLE BARRIER, UNANCHORED FT
		MOT-PHASE 3 - STEP 2																			
		US 35																			
WEL-1	158	328+77	333+50	RT									0.09								
YEL-1	158	328+77	334+00	RT										0.10							
PCB-1	158	329+85	331+35	RT		1															173
PCB2	158	329+85	330+95	RT																	110
		MOT-PHASE 4																			
		US 35																			
PCB-1	165	286+58	303+00	RT	1																1642
PCB-2	169	342+93	343+93	LT																	100
PCB-3	170	359+82	391+10	RT	1																3128
PCB-4	171	368+24	393+05	LT	1																2481
		MOT-PHASE 5																			
		US 35																			
PCB-1		296+15	318+68	LT	1																2253
PCB-2		345+00	369+50	LT	1																2450
TOTALS THIS SHEET					5	1		0.00	0.00	0.00	0		0.00	0.09	0.10	0	0	0	0	0	12337
TOTALS FROM MOT PH 1 & PH 1A STEP 1 THRU STEP 2					6	0		0.52	2.22	2.38	0		0.00	0.00	0.10	0	0	680	6912	0	5358
TOTALS FROM MOT PH 1A STEP 3					1	0		0.00	2.19	1.64	54		0.00	0.14	0.26	0	0	0	109	0	581
TOTALS FROM MOT PH 2 STEP 1					3	0		0.00	0.00	0.00	0		2.08	2.95	2.62	3700	0	6057	0	0	10,471
TOTALS FROM MOT PH 2 STEP 2					4	0		0.00	0.00	0.00	0		0.65	1.65	1.47	4538	0	7804	0	0	11,727
TOTALS FROM MOT PH 3 STEP 1					2	0		0.00	0.07	0.02	79		2.43	3.38	3.36	4714	170	163	0	6458	11,270
TOTALS CARRIED TO GENERAL SUMMARY					21	1		0.52	4.48	4.04	133		5.16	8.21	7.91	12,952	170	14,704	7,021	6458	51,744

MAINTENANCE OF TRAFFIC SUBSUMMARY PHASE 3 - STEP 2, PHASE 4 AND PHASE 5

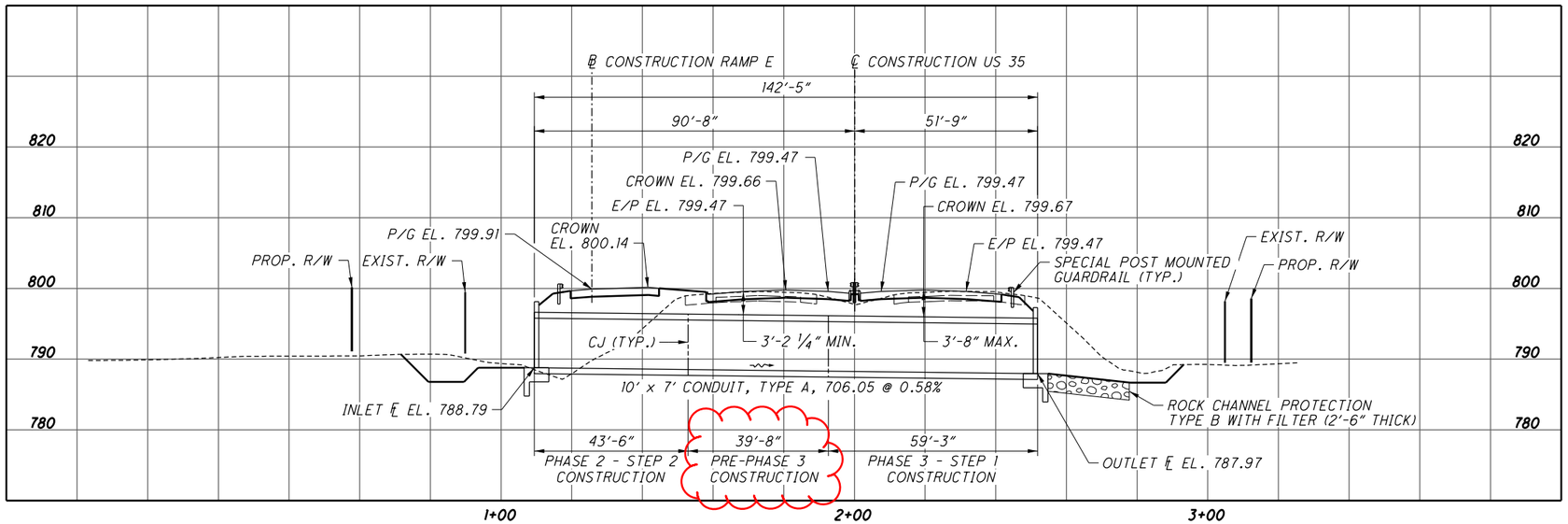
CALCULATED

CHECKED

GRE-US 35-5.63



PLAN



PROFILE ALONG ℄ CULVERT

BENCHMARK DATA

BM #8 STA. 322+55.38, ELEV. 800.45, OFFSET 0.16' LT.
BM #9 STA. 333+64.82, ELEV. 795.50, OFFSET 48.82' RT.

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET (5/698)

NOTES:

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
2025 ADT = 33,790 2025 ADTT = 4060
2045 ADT = 40,970 2045 ADTT = 4920
DIRECTIONAL DISTRIBUTION = 0.51

LEGEND:

BORING LOCATION

CURVE RAMPE-2
P.I. STA. 723+87.32
Δ = 2°48'42" (RT.)
Dc = 0°30'00"
R = 11,459.16
T = 281.21'
L = 562.31'
E = 3.45'

EXISTING STRUCTURE - NONE

PROPOSED STRUCTURE

TYPE: 10' X 7' PRECAST REINFORCED CONCRETE SECTION (ASTM C 1577) WITH REINFORCED CONCRETE FORESLOPE WALLS AND WINGWALLS
SPAN: 10'-0"
ROADWAY: 125'-11" F/F GUARDRAIL
LOADING: HL-93
SKEW: NONE
ALIGNMENT: TANGENT
COORDINATES: LATITUDE N 39°42'06"
LONGITUDE W 84°00'03"

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

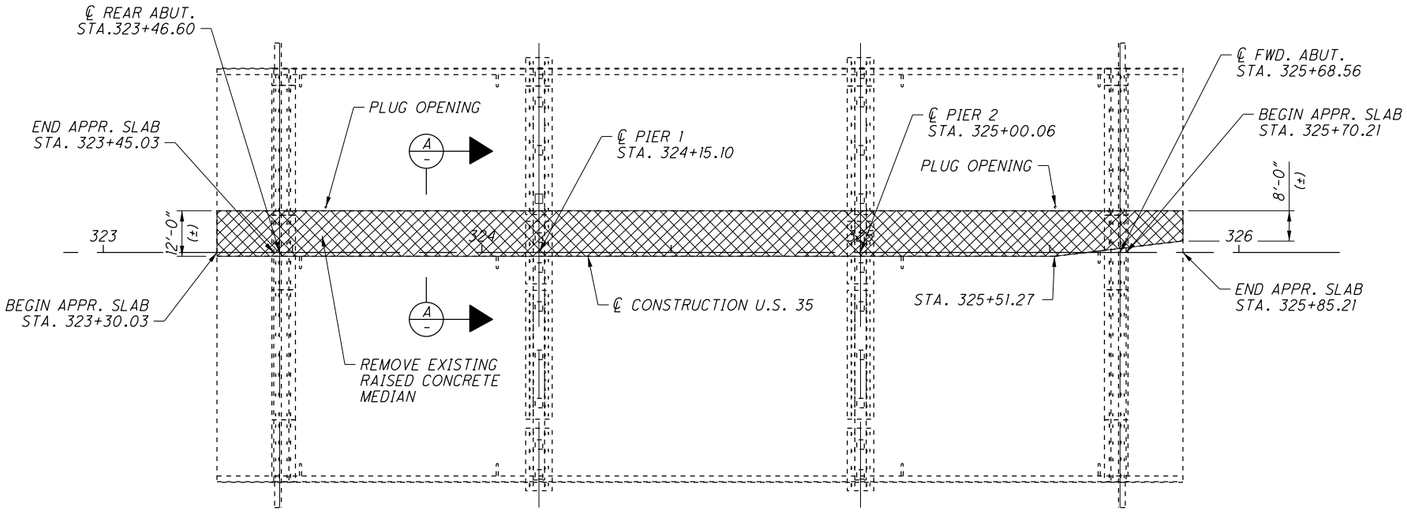
DESIGNED	DRAWN	REVIEWED	DATE
JTC	MME	FBW	9/19
CHECKED	REVISED	STRUCTURE FILE NUMBER	
EJ		2900217	

SITE PLAN
BRIDGE NO. GRE-035-0604
OVER FLOODPLAIN RELIEF DITCH

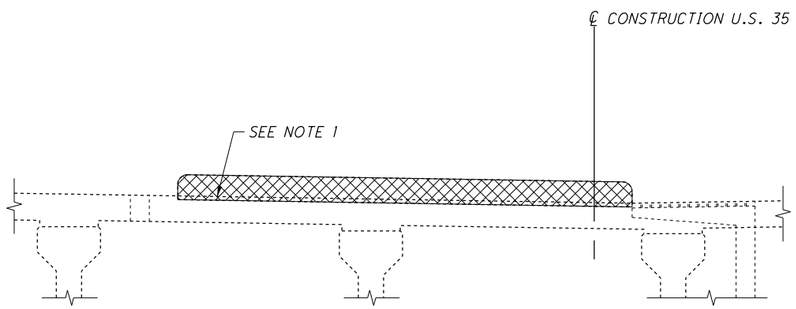
GRE-US 35-5.63
PID No. 107217

1 / 5

523
698



PLAN



A SECTION

NOTES:

1. REMOVE RAISED MEDIAN, INCLUDING 1¼" OF THE EXISTING DECK WITHIN LIMITS OF RAISED MEDIAN. CUT ALL REINFORCING STEEL FLUSH WITH TOP OF CONCRETE. REPLACE THE PORTION OF DECK REMOVED WITH MICRO SILICA MODIFIED CONCRETE OVERLAY. PAYMENT FOR 1¼" DECK REMOVAL (USING HYDRODEMOLITION) WILL BE INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN AND 1¼" OVERLAY WILL BE INCLUDED WITH ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN. AFTER THE OVERLAY MATERIAL HAS BEEN CONSOLIDATED FINISHED AND CURED, IT SHALL BE SAWED TRANSVERSELY (MATCHING EXISTING) WITH SAW CUTS PER CMS 511.17.

LEGEND:

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED	DRAWN	REVIEWED	DATE
JTC	JTC	FBW	9/19
CHECKED	REVISED	STRUCTURE FILE NUMBER	
EJ		2900289	

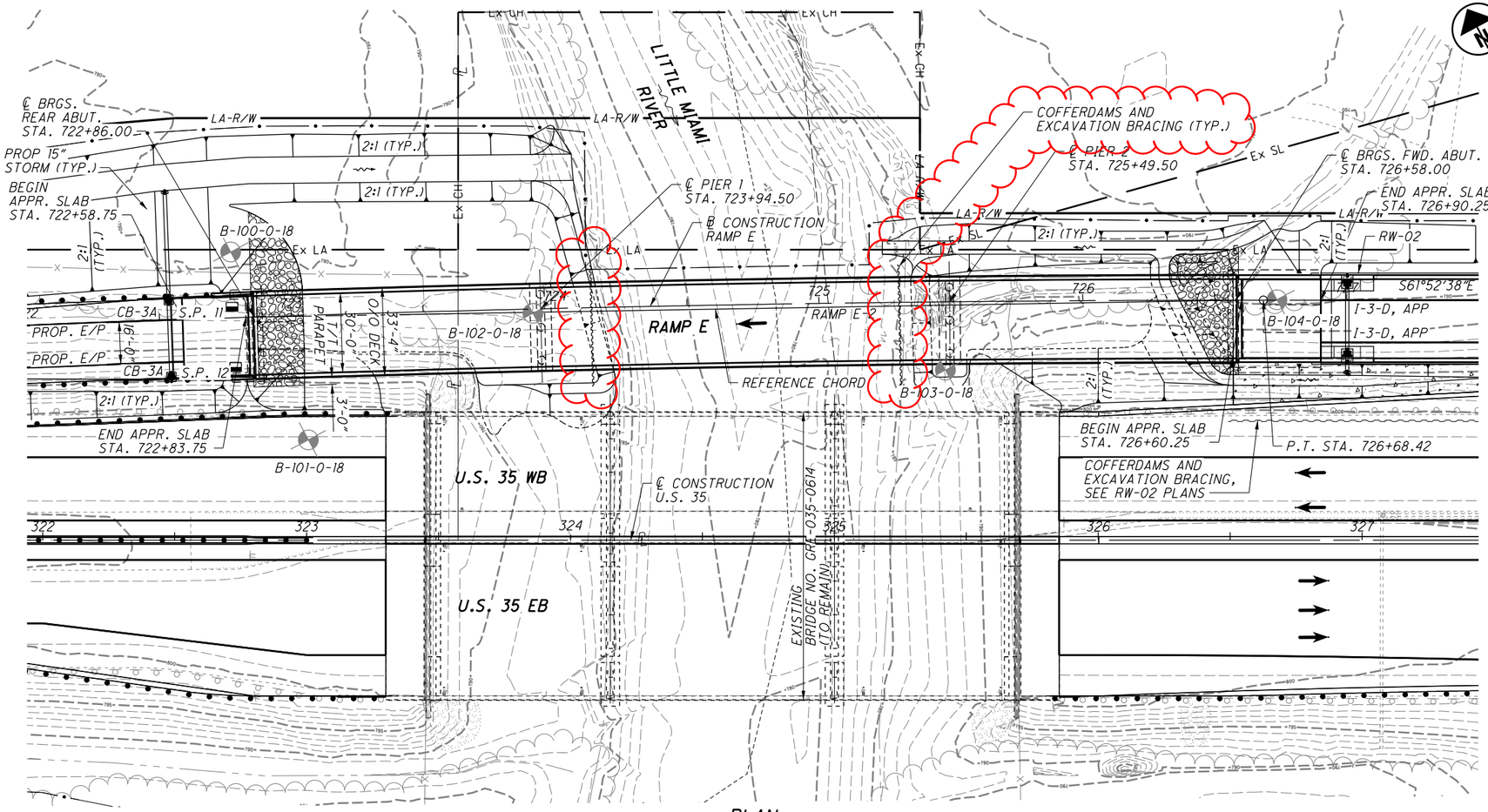
REMOVAL DETAILS
BRIDGE NO. GRE-035-0614
U.S. 35 OVER LITTLE MIAMI RIVER

GRE-US 35-5.63
PID No. 107217

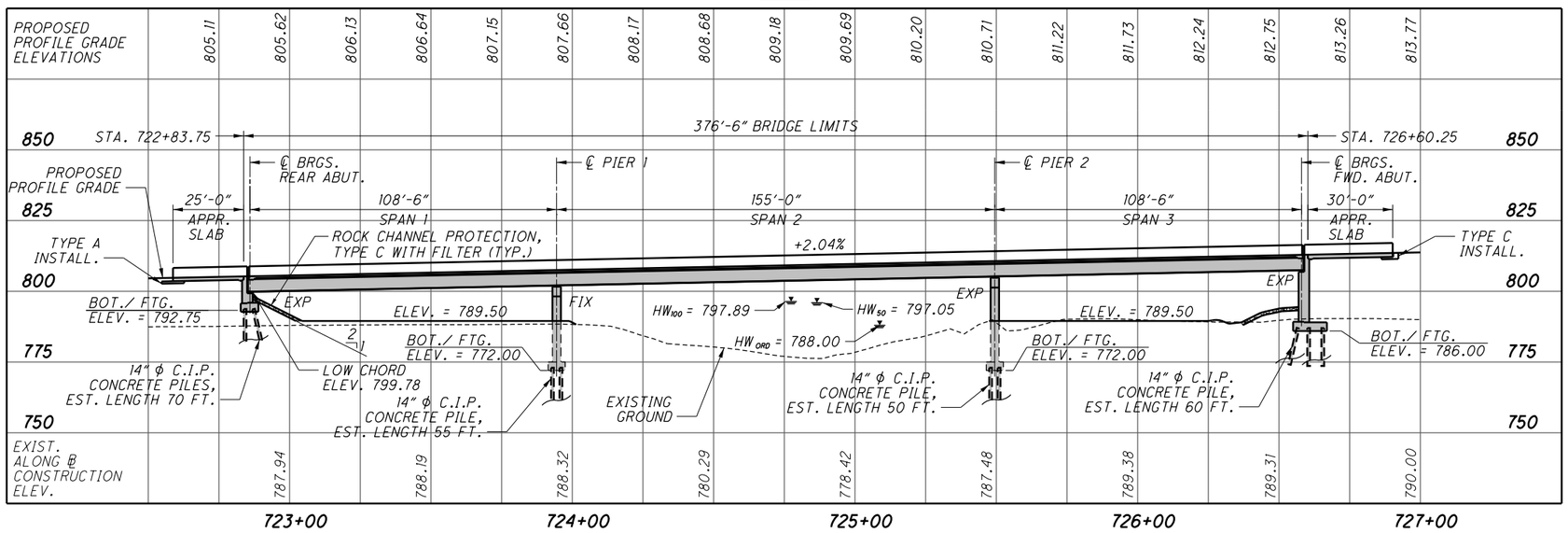
4 / 7

534
698

035_0614sv001.dgn 12/2/2022 10:37:36 AM Jason.Centers@jacobs.com



PLAN



PROFILE ALONG ℄ RAMP E

BENCHMARK DATA

BM #8 STA. 322+55.38, ELEV. 800.45 , OFFSET 0.16 LT.
BM #9 STA. 333+64.82, ELEV. 795.50 , OFFSET 48.82 RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEET (S 698)

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR SETTLEMENT PLATFORM LOCATION TABLE AND NOTES, SEE SHEET 35/698.

DESIGN TRAFFIC:
2025 ADT = 2280 2025 ADTT = 160
2045 ADT = 3230 2045 ADTT = 230
DIRECTIONAL DISTRIBUTION = 1.00

HYDRAULIC DATA

DRAINAGE AREA = 295.0 SQ. MILES
DESIGN STORM = 50 YEAR
Q (50) = 22,100 CFS Q (100) = 26,400 CFS
V (50) = 15.6 FPS V (100) = 12.3 FPS
HW (50) = 797.05 HW (100) = 797.89
FREEBOARD HW (50) = 2.73 FEET.

LEGEND

- BORING LOCATION
- SETTLEMENT PLATFORM (SEE NOTE 2)

CURVE DATA (RAMP E-2)

P.I. STA. = 723+87.32
Δ = 2°48'42" RT.
Dc = 0°30'00"
R = 11,459.16'
T = 281.21'
L = 562.32'
E = 3.45'

EXISTING STRUCTURE - NONE

PROPOSED STRUCTURE

TYPE: 3-SPAN CONTINUOUS CURVED COMPOSITE STEEL PLATE GIRDERS (ASTM A709 GRADE 50W) WITH REINFORCED CONCRETE DECK & SUBSTRUCTURES ON PILES.

SPANS: 108'-6", 155'-0", 108'-6" C/C BEARINGS
ROADWAY: 30'-0" TOE/TOE PARAPET
LOADING: HL-93, FWS=60 PSF
WEARING SURFACE: MONOLITHIC CONCRETE
SKEW: NONE (RADIAL)
APPROACH SLABS: REAR = AS-1-15, 25'-0" LONG; FWD = AS-1-15, 30'-0" LONG AS-2-15 INSTALLATION
ALIGNMENT: 0°30'00" RIGHT CURVE
SUPERELEVATION: 0.016 FT/FT
COORDINATES: LATITUDE N39°42'05" LONGITUDE W83°59'58"

DESIGN AGENCY
JACOBS
1880 WATYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED PEG | CHECKED FBW
DRAWN PEG | REVISED
REVIEWED JTC | STRUCTURE FILE NUMBER 2900215
DATE 9/20

GREENE COUNTY
STA. 722+83.75
STA. 726+60.25

SITE PLAN
BRIDGE NO. GRE-035-0610
RAMP E OVER LITTLE MIAMI RIVER

GRE-US 35-5.63
PID No. 107217

ITEM 511, CLASS QC2 CONCRETE WTIH QC/QA, BRIDGE DECK, AS PER PLAN

THIS ITEM MODIFIES THE STANDARD 511 CONCRETE FOR STRUCTURES SPECIFICATION TO INCLUDE CORROSION INHIBITORS INTO THE SUPERSTRUCTURE CONCRETE. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

PROVIDE MATERIALS CONFORMING TO 511.02 EXCEPT AS MODIFIED BELOW:

PORTLAND CEMENT CONCRETE	499.03, CLASS QC 2 MEETING A DESIGN STRENGTH OF 4,500 PSI
CORROSION INHIBITOR	515.15

THE CLASS QC2 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:
WATER/CEMENT RATIO = 0.40 MAXIMUM

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST WILL APPLY.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CORROSION INHIBITOR IS SUGGESTED TO BE A MCI PRODUCT BY CORTEC OR AN APPROVED EQUAL FROM THE QUALIFIED PRODUCTS LIST. THE CONCRETE SUPPLIER'S CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS. PLEASE BE ADVISED THAT SOME PRODUCTS ON THE LIST EFFECT THE DELIVERED MIX PROPERTIES GREATLY WHILE OTHER PRODUCTS DO NOT.

APPROACH SLABS AND DIAPHRAGMS ARE TO USE THE SAME MIX DESIGN AS THE BRIDGE DECK. THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED.

THE CONTRACTOR SHALL PROVIDE TRADITIONAL BRIDGE DECK FORMS CONFORMING TO CMS 508. PERMANENT STAY-IN-PLACE (SIP) FORMS ARE NOT ALLOWED. THE PLACING OF THE DECK AND THE APPROACH SLABS IN THE SAME CONCRETE POUR IS NOT PERMITTED.

ITEM 511, CLASS QC2 CONCRETE WTIH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN

THIS ITEM MODIFIES THE STANDARD 511 CONCRETE FOR STRUCTURES SPECIFICATION TO INCLUDE MACRO-SYNTHETIC FIBERS, AND CORROSION INHIBITORS INTO THE SUPERSTRUCTURE CONCRETE. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

PROVIDE MATERIALS CONFORMING TO 511.02 EXCEPT AS MODIFIED BELOW:

PORTLAND CEMENT CONCRETE	499.03, CLASS QC 2 MEETING A DESIGN STRENGTH OF 4,500 PSI, WITH MACRO-SYNTHETIC FIBERS WITH MODIFICATION PER 511.02
FIBERS FOR CONCRETE	ASTM C 1116, TYPE III
CORROSION INHIBITOR	515.15

THE CLASS QC2 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:
WATER/CEMENT RATIO = 0.40 MAXIMUM; MINIMUM 5 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.5 IN. MAX.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST WILL APPLY.

ITEM 511, CLASS QC2 CONCRETE WTIH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN, CONT'D.

THE MACRO-SYNTHETIC FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND MACRO-SYNTHETIC FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES. PROVIDE MACRO-SYNTHETIC FIBERS THAT ARE MONOFILAMENT FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE MACRO-SYNTHETIC FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI, A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AND ASPECT RATIO BETWEEN 60 AND 100, AND ARE BETWEEN 1.0 AND 2.5 INCHES IN LENGTH. STORE THE MACRO-SYNTHETIC FIBERS ACCORDING TO THE MANUFACTURER'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT AND MOISTURE. PLACING THE BAG THAT THE FIBERS COME IN INTO THE CONCRETE MIX IS NOT PERMITTED.

USE A MINIMUM DOSAGE RATE OF MACRO-SYNTHETIC FIBERS OF 5.0 LBS/CY OF CONCRETE. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. BEFORE USE, SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE MACRO-SYNTHETIC FIBERS AND THE MIX MEET OR EXCEED THE REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED. THE TRANSIT MIXER CHARGE SHALL BE LIMITED TO3#4OF ITS RATED CAPACITY OR 6 CUBIC YARDS, WHICHEVER IS SMALLER. THE FIRST THREE TRANSIT MIXER LOADS ARE REQUIRED TO BE AT THE MINIMUM YARDAGE LISTED ABOVE TO SHOW PROOF OF THE SUCCESSFUL BATCHING OPERATION. AFTER CONSISTENCY IN THE DELIVERED MATERIAL HAS BEEN ESTABLISHED, THE CONCRETE SUPPLIER MAY INCREASE THE BATCH DELIVERED QUANTITIES AS LONG AS THE QUALITY REMAINS ACCEPTABLE TO THE ENGINEER. THE ENGINEER CAN REDUCE THE BATCH LOAD SIZE AT ANY TIME AS NEEDED TO CORRECT/IMPROVE CONCRETE QUALITY.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CORROSION INHIBITOR IS SUGGESTED TO BE A MCI PRODUCT BY CORTEC OR AN APPROVED EQUAL FROM THE QUALIFIED PRODUCTS LIST. THE CONCRETE SUPPLIER'S CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS. PLEASE BE ADVISEDTHAT SOME PRODUCTS ON THE LIST EFFECT THE DELIVERED MIX PROPERTIES GREATLY WHILE OTHER PRODUCTS DO NOT.

THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED. THIS SPECIFICATION IS INTENDED FOR USE ON NON DECORATIVE BRIDGE RAILING. USE SELF-COMPACTING CONCRETE ON DECORATIVE RAILING SIMILAR TO TEXAS RAILING AND MACRO-SYNTHETIC CONCRETE PER THIS SPECIFICATION ON TRADITIONAL CONCRETE RAILING WHEN APPLICABLE.

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

DUE TO THE RECENT SUPPLY SHORTAGES, THE DEPARTMENT HAS BEEN MADE AWARE OF DIFFICULTIES THAT SUPPLIERS ARE HAVING IN OBTAINING THE NECESSARY MATERIALS FOR EPOXY. ON THIS PROJECT THE CONTRACTOR CAN USE TRADITIONAL EPOXY-URETHANE SEALERS APPROVED ON THE OPL OR ELECT TO SUBSTITUTE BRIDGE COTE XL-70 W/SILANE THAT IS LISTED ON THE APPROVED NOISE SUPPLIER LIST UNDER APPROVED SEALERS FOR NOISE BARRIERS. APPROVEDNOISESUPPLIERSLIST.PDF (OHIO.GOV).

IF BRIDGE COTE XL-70 W/SILANE IS CHOSEN, MEET THE REQUIREMENTS OF THE BRIDGE COTE XL-70 W/SILANE TECHNICAL DATA SHEET WITH THE EXCEPTION OF THE SURFACE PREPARATION THAT WILL STILL FOLLOW THE REQUIREMENTS LISTED UNDER C&MS 512 FOR EPOXY URETHANE SEALERS.

PART.	ESTIMATED QUANTITIES									
02/NHS/BR	ITEM	EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER	GEN.	SHEET
2497	203	20001	2497	CY	EMBANKMENT, AS PER PLAN	2431	66			3/36
LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING		LS			
LS	503	21300	LS		UNCLASSIFIED EXCAVATION	LS	LS			3/36
LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	LS	LS			
				FT						
5800	507	00600	5800	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	4120	1680			
6290	507	00650	6290		14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	4450	1840			
				LB						
190393	509	26000	190393		GALVANIZED STEEL REINFORCMENT	40207	27795	122391		
				CY						
366	511	34447	366	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			366		4/36
123	511	34451	123	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			123		4/36
41	511	41012	41	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		41			
67	511	43512	67	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	67				
186	511	44112	186		CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	186				
				CY						
126	511	46512	126		CLASS QC1 CONCRETE WITH QC/QA, FOOTING	104	22			
				SY						
1365	512	10101	1365	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	270	220	875		4/36
16	512	33000	16		TYPE 2 WATERPROOFING	16				
				LB						
404562	513	10300	404562	EACH	STRUCTURAL STEEL MEMBERS, LEVEL 5			404562		
3840	513	20000	3840		WELDED STUD SHEAR CONNECTORS			3840		
				SF						
1307	514	00060	1307	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			1307		17/36
1307	514	00066	1307		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			1307		17/36
				FT						
35	516	10010	35	FT	ARMORLESS PREFORMED JOINT SEAL				35	
69	516	11210	69	SF	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			69		
164	516	13600	164	EACH	1" PREFORMED EXPANSION JOINT FILLER			164		
4	516	44101	4		ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE		4			24/36
					(NEOPRENE), AS PER PLAN (16" x 26" X 2.50" PAD WITH 17" x 34" x 2" PLATE)					
				EACH						
4	516	44201	4		ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE		4			24/36
				EACH	(NEOPRENE), AS PER PLAN (16" x 26" X 3.50" PAD WITH 17" x 27" x 2" PLATE)					
8	516	44301	8		ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE	8				24/36
					(NEOPRENE), AS PER PLAN (14" x 16" X 4.70" PAD WITH 15" x 17" x 2" PLATE)					
				SY						
268	518	20000	268	CY	PREFABRICATED GEOCOMPOSITE BOARD	268				
34	518	21200	34	FT	POROUS BACKFILL WITH GEOTEXTILE FABRIC	34				
129	518	40000	129	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	129				
38	518	40010	38		6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	38				
				EACH						
8	523	20000	8		DYNAMIC LOAD TESTING	4	4			
				SY						
96	526	25010	96	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")				96	
115	526	30010	115	FT	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				115	
35	526	90010	35	FT	TYPE A INSTALLATION				35	
35	526	90030	35		TYPE C INSTALLATION				35	
				CY						
1319	840	23000	1319		SELECT GRANULAR BACKFILL	1319				
				CF						
35	846	00110	35		POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				35	

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

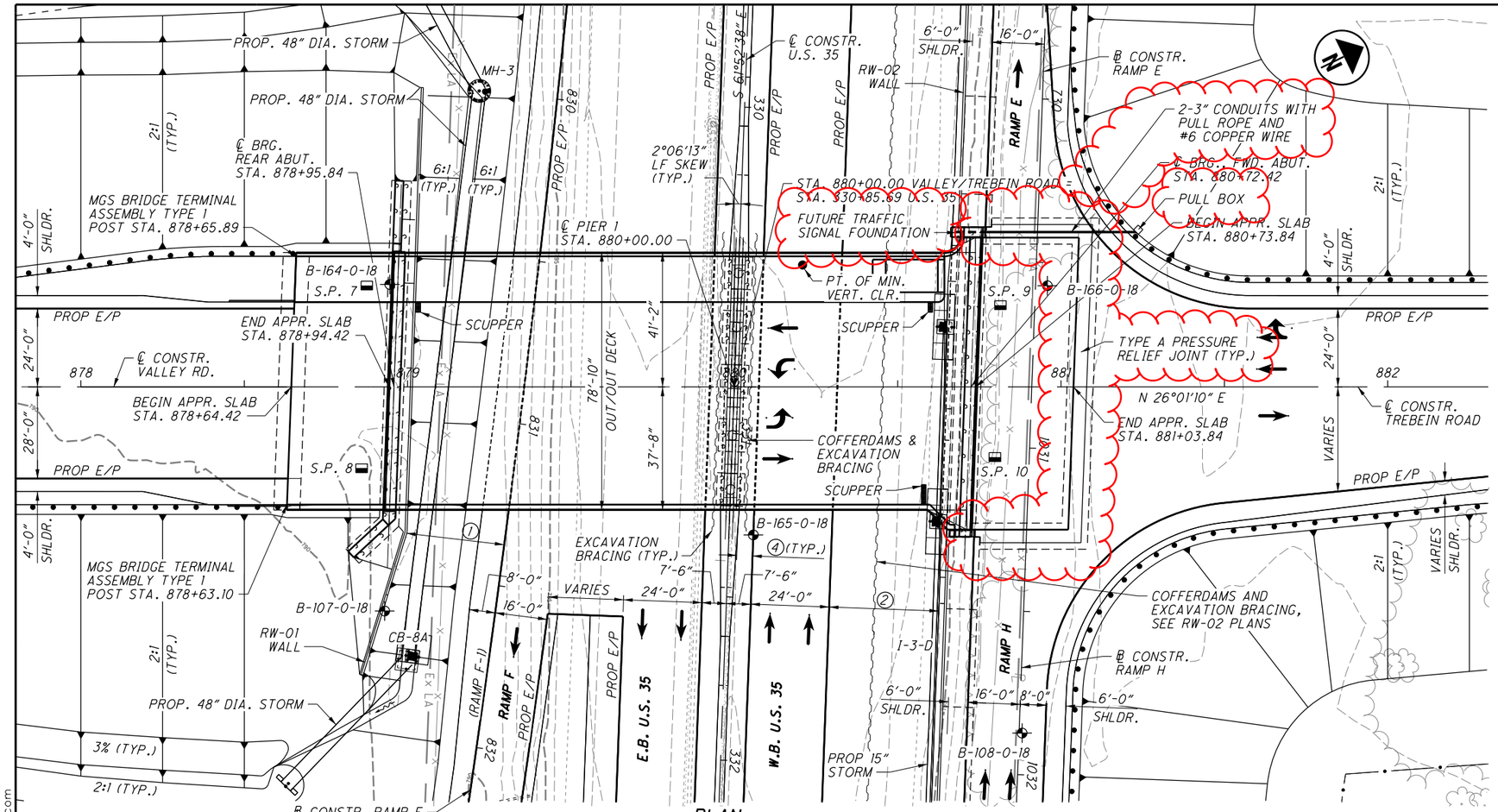
DESIGNED PEG | DRAWN PEG | CHECKED FBW | REVIEWED JTC | DATE 9/20 | REVISED | STRUCTURE FILE NUMBER 2900215

GENERAL NOTES II & ESTIMATED QUANTITIES
BRIDGE NO. GRE-035-0610
RAMP E OVER LITTLE MIAMI RIVER

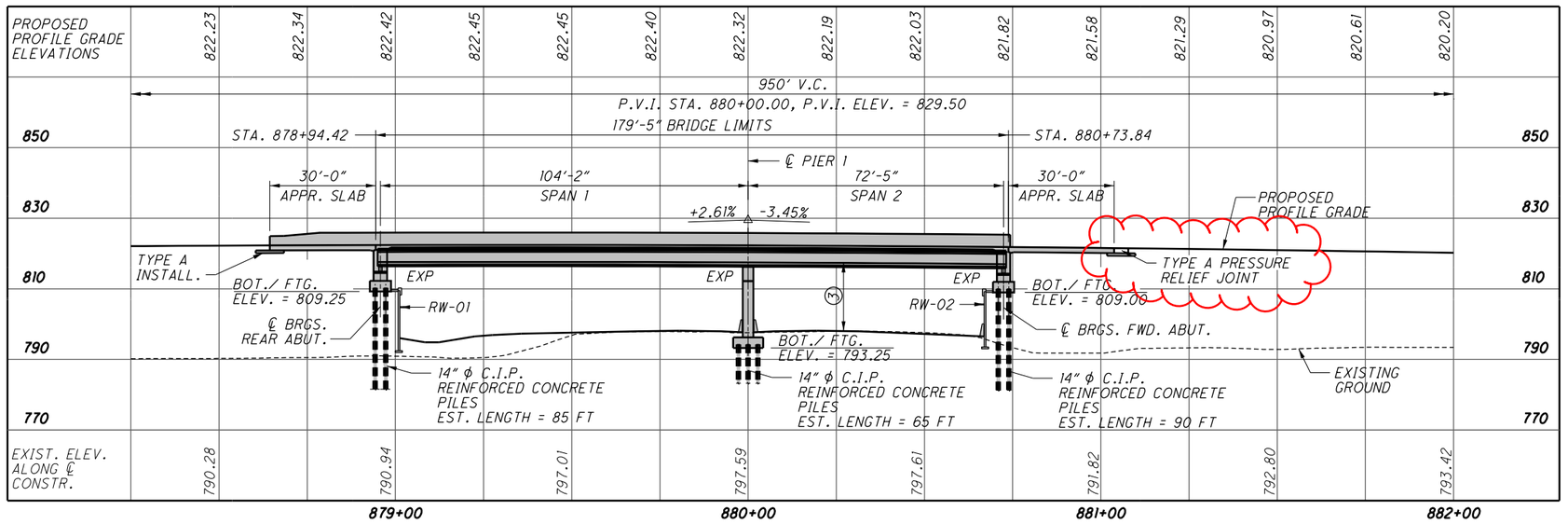
GRE-US 35-5.63
PID No. 107217

541
698

Jason.Centers@jacobs.com



PLAN



PROFILE ALONG ℄ VALLEY/TREBEIN ROAD

BENCHMARK DATA

BM #8 STA. 322+55.38, ELEV. 800.45 , OFFSET 0.16' LT.
BM #9 STA. 333+64.82, ELEV. 795.50 , OFFSET 48.82' RT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEET ⊖

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR SETTLEMENT PLATFORM LOCATION TABLE AND NOTES, SEE SHEET 35/698.
3. FOR PAVEMENT JOINT DETAIL SHEET, SEE SHEET 424/698.

DESIGN TRAFFIC:
2025 ADT = 7840 2025 ADTT = 550
2045 ADT = 9190 2045 ADTT = 640
DIRECTIONAL DISTRIBUTION = 0.51

LEGEND

- BORING LOCATION
- SETTLEMENT PLATFORM (SEE NOTE 2)

CURVE DATA

	RAMP E-2	RAMP F-1	RAMP H-1
P.I. STA. =	723+87.32	829+13.55	1039+50.74
Δ =	2°48'42" RT.	6°14'56" RT.	3°00'47" RT.
Dc =	0°30'00"	1°00'00"	0°45'00"
R =	11,459.16'	5729.58'	7,639.44'
T =	218.21'	312.76'	200.91'
L =	562.31'	624.89'	401.74'
E =	3.45'	8.53'	2.64'

① MIN. HORIZONTAL CLEARANCE
30'-0" REQUIRED
30'-0" PROVIDED

② MIN. HORIZONTAL CLEARANCE
30'-0" REQUIRED
33'-6" PROVIDED TO TOE OF BARRIER

③ MIN. VERTICAL CLEARANCE
17'-0" REQUIRED
17'-1" PROVIDED

④ MIN. HORIZONTAL CLEARANCE
4'-0" REQUIRED
4'-10" PROVIDED TO TOE OF BARRIER

EXISTING STRUCTURE - NONE

PROPOSED STRUCTURE

TYPE: 2-SPAN CONTINUOUS COMPOSITE WIDE FLANGE PRESTRESSED BEAMS WITH REINFORCED CONCRETE DECK, PIERS, AND SEMI-INTEGRAL ABUTMENTS BEHIND MSE WALLS.

SPANS: 104'-2" - 72'-5" C/C BEARINGS

ROADWAY: 62'-0" TOE/PARAPET TO FACE/CURB

LOADING: HL-93, FWS=60 PSF

SKEW: 2°06'13" LF

APPROACH SLABS: 30'-0" LONG (AS-1-15 MODIFIED) & AS-2-15 INSTALLATION

ALIGNMENT: TANGENT

WEARING SURFACE: MONOLITHIC CONCRETE

CROWN: 0.02 FT/FT

COORDINATES: LATITUDE N 39°42'02"
LONGITUDE W 83°59'52"

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED	DRAWN	REVIEWED	DATE
EJ	EJ	JTC	5/2022
CHECKED	REVISED	STRUCTURE FILE NUMBER	
FBW		2900213	

GREENE COUNTY
STA. 878+94.42
STA. 880+73.84

SITE PLAN
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

1 / 30

573
698

035_0627SP001.dgn 11/30/2022 9:06:30 AM Jason.Centers@jacobs.com

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	REVISED	07-17-15	
AS-2-15	REVISED	01-18-19	
BR-2-15	REVISED	01-21-22	
PSID-1-13	REVISED	01-15-21	
SBR-1-13	REVISED	07-20-18	(SEE INSERTS SHEETS 572B-572F)
SICD-1-21	REVISED	01-21-22	
SICD-2-14	REVISED	01-15-21	
TST-1-99	REVISED	01-15-21	
VPF-1-90	REVISED	07-20-18	

DESIGN SPECIFICATION:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 8TH EDITION AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING:

HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT.

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

EPOXY COATED STEEL REINFORCEMENT - MIN. YIELD STRENGTH 60 KSI
GALVANIZED STEEL REINFORCEMENT - MIN. YIELD STRENGTH 60 KSI

CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7.5 KSI
COMPRESSIVE STRENGTH (RELEASE) - 6.0 KSI

WELDED WIRE FABRIC:
YIELD STRENGTH - 70 KSI

PRESTRESSING STRANDS:
AREA = 0.217 SQ.IN (0.6" ϕ)
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH MAXIMUM WHEEL LOAD OF 2.65 KIPS

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103"

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65"

ITEM 625 - STRUCTURE GROUNDING SYSTEM

IN ORDER TO PROPERLY GROUND THIS STRUCTURE, A QUANTITY OF 1 EACH - STRUCTURE GROUNDING SYSTEM IS CARRIED IN THE GENERAL SUMMARY.

PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SS840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR THE INTERNAL STABILITY SHALL INCLUDE A NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOAD DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURE OF 4.04K/FT FOR THE REAR ABUTMENT AND 2.66 K/FT FOR THE FORWARD ABUTMENT, APPLIED PERPENDICULAR TO THE FACE OF WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL IN THE DESIGN CALCULATIONS.

PILE DRIVING CONSTRAINTS

PILE DRIVING TO THE DESIGN LOADS MAY NOT BEGIN UNTIL SUFFICIENT EMBANKMENT AND MSE WALL SETTLEMENT HAS OCCURRED AS DOCUMENTED BY THE SETTLEMENT PLATFORMS. THE ANTICIPATED WAITING PERIOD TO PERMIT SUFFICIENT EMBANKMENT SETTLEMENT IS 60 DAYS. THE DISTRICT GEOTECHNICAL ENGINEER MAY REDUCE OR EXTEND THE WAITING PERIOD BASED ON THE MAGNITUDE AND RATE OF THE EMBANKMENT SETTLEMENT AS DETERMINED BY THE SETTLEMENT PLATFORMS. THE SETTLEMENT WAITING PERIOD BEGINS ONCE THE APPROACH EMBANKMENT REACHES THE DESIGN SUBGRADE LEVEL FOR A MINIMUM DISTANCE OF 100 FT. BEHIND EACH ABUTMENT. THE PLANS HAVE PROVISIONS FOR A TEMPORARY SURCHARGE AT THE ABUTMENT LOCATION TO PERMIT PLACEMENT OF EMBANKMENT TO THE DESIGN SUBGRADE LEVEL. BEGIN PILE DRIVING ONLY FOLLOWING TERMINATION OF THE SETTLEMENT MONITORING WAITING PERIOD BY THE DISTRICT GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY PARTIALLY DRIVE THE PILES TO PRIOR TO MSE WALL CONSTRUCTION TO PERMIT PROPER PLACEMENT.

PILES DRIVEN TO TIP ELEVATION FOR PILE/SOIL SETUP
THE ULTIMATE BEARING VALUE IS 390 KIPS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 390 KIPS PER PILE FOR THE PIER PILES. PART OF THE ULTIMATE BEARING VALUE WILL BE ACHIEVED THROUGH PILE/SOIL SETUP, WHICH IS A TIME-DEPENDENT INCREASE IN RESISTANCE THAT OCCURS IN SOME SOILS.

NOTIFY THE ENGINEER AT LEAST 5 DAYS BEFORE DRIVING PILES SO THAT THE ENGINEER CAN NOTIFY THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING.

DRIVE THE FIRST TWO PILES IN EACH SUBSTRUCTURE TO THE TIP ELEVATION GIVEN BELOW FOR THE SUBSTRUCTURE. DRIVE THE THIRD AND FOURTH PILES TO 75% AND 85% OF THE LENGTH OF THE FIRST TWO PILES. PERFORM DYNAMIC LOAD TESTING ON ALL FOUR PILES WHILE DRIVING. AFTER DRIVING THE FOUR PILES, CEASE ALL DRIVING OPERATIONS AT THE SUBSTRUCTURE FOR A MINIMUM OF 7 DAYS. INCLUDE THE WAITING PERIOD AS A SEPARATE ACTIVITY IN THE PROGRESS SCHEDULE. AFTER THE WAITING PERIOD, PERFORM PILE RESTRIKES ON THE FOUR PILES (TWO RESTRIKE ITEMS). SUBMIT ALL TEST RESULTS TO THE ENGINEER. THE ENGINEER WILL REVIEW THE TEST RESULTS AND ESTABLISH DRIVING CRITERIA FOR THE PILING IN THE SUBSTRUCTURE WITH THE ASSISTANCE OF THE DISTRICT GEOTECHNICAL ENGINEER, THE OFFICE OF CONSTRUCTION ADMINISTRATION, AND THE OFFICE OF GEOTECHNICAL ENGINEERING. THE DRIVING CRITERIA WITH PILE SETUP SHALL BE PEFORMED FOR THE FIRST STAGE OF BRIDGE CONSTRUCTION. THE CONTRACTOR SHALL NOT ORDER PILES FOR SUBSEQUENT PHASES UNTIL AFTER THE DRIVING CRITERIA HAS BEEN ESTABLISHED WITH SETUP. THE DEPARTMENT WILL ADJUST THE FURNISHED PILE QUANTITES BASED ON THE RESTRIKE TEST RESULTS.

IF THE DYNAMIC LOAD TESTING INDICATES A PILE HAS ACHIEVED THE ULTIMATE BEARING VALUE ABOVE THE TIP ELEVATION DURING THE INITIAL DRIVING (BEFORE THE WAITING PERIOD), STOP DRIVING AND NOTIFY THE ENGINEER. IF THE RESTRIKE TEST RESULTS ON THE FOUR PILES INDICATE THAT A PILE DID NOT ACHIEVE THE REQUIRED ULTIMATE BEARING VALUE, DRIVE THE PILE TO THE ESTABLISHED DRIVING CRITERIA. SPLICING OF THE PILES BEYOND THE ESTIMATED LENGTH PROVIDED IN THE PLANS WILL BE PAID BY THE DEPARTMENT UNDER CMS 109.05 WITH A NEGIOTATED PRICE PER SPLICE.

REAR ABUTMENT
32 PILES 90 FEET LONG, ORDER LENGTH
TIP ELEVATION, 728.50 FEET
2 DYNAMIC LOAD TESTING ITEMS
2 RESTRIKES

PIER 1
30 PILES 70 FEET LONG, ORDER LENGTH
TIP ELEVATION, 730.30 FEET
2 DYNAMIC LOAD TESTING ITEMS
2 RESTRIKES

FORWARD ABUTMENT
26 PILES 95 FEET LONG, ORDER LENGTH
TIP ELEVATION, 724.00 FEET
2 DYNAMIC LOAD TESTING ITEMS
2 RESTRIKES

ITEM 690, SPECIAL - MISC.: TEMPORARY SURCHARGE

DESCRIPTION: THIS ITEM CONSISTS OF DESIGNING, CONSTRUCTING, AND REMOVING A TEMPORARY SURCHARGE AT THE REAR AND FORWARD ABUTMENTS OF THE STRUCTURE TO THE LOCATIONS AND LIMITS SHOWN IN THE PLANS.

AS DIRECTED IN THE PILE DRIVING CONSTRAINTS, A TEMPORARY SURCHARGE IS NECESSARY AT THE ABUTMENTS FOR THIS BRIDGE TO MITIGATE EMBANKMENT SETTLEMENT. CONSTRUCT THE TEMPORARY SURCHARGE SO IT EXTENDS VERTICALLY FROM THE ELEVATION OF THE BOTTOM OF THE PROPOSED ABUTMENT FOOTING TO THE PROPOSED ROADWAY SUBGRADE ELEVATION. CONSTRUCT THE TEMPORARY SURCHARGE USING ITEM 203 EMBANKMENT WITH A DRY DENSITY OF AT LEAST 105 PCF AFTER COMPACTION. ALTERNATE MATERIALS, SUCH AS PRECAST CONCRETE, MAY BE UTILIZED FOR ALL OR A PORTION OF THE REQUIRED SURCHARGE LOAD PROVIDED THE APPLIED SURCHARGE IS GREATER THAN OR EQUIVALENT TO THE SURCHARGE OF EMBANKMENT WITH A DRY UNIT WEIGHT OF 110 PCF. SUPPORT THE SIDES OF THE TEMPORARY SURCHARGE SO THAT THE TOP OF THE SURCHARGE MATERIAL ALIGNS WITH THE REAR OF THE ABUTMENT FOOTING. CONSTRUCT THE TEMPORARY SURCHARGE SO THAT IT EXTENDS AT LEAST 100 FEET BEHIND EACH ABUTMENT.

PREPARE AND PROVIDE SHOP DRAWINGS AND DESIGN CALCULATIONS FOR THE TEMPORARY SURCHARGE, INCLUDING THE METHOD USED TO SUPPORT THE SIDES OF THE TEMPORARY SURCHARGE AND ALL DETAILS OF THE SUPPORT SYSTEM. ENSURE THE TEMPORARY SURCHARGE DESIGN ACCOMMODATES THE LOCATION AND COMPOSITION OF THE PROPOSED MSE WALLS FOR THE BRIDGE STRUCTURE. HAVE TWO OHIO REGISTERED ENGINEERS SIGN, SEAL, AND DATE THE DRAWINGS AND CALCULATIONS ACCORDING TO C&MS 501.05. SUBMIT THE DRAWINGS AND CALCULATIONS TO THE ENGINEER AT LEAST 30 DAYS BEFORE CONSTRUCTION OF THE TEMPORARY SURCHARGE BEGINS.

REMOVE THE TEMPORARY SURCHARGE AFTER THE CONDITIONS SPECIFIED IN THE PILE DRIVING CONSTRAINTS ARE SATISFIED AND THE ENGINEER AUTHORIZES REMOVAL.

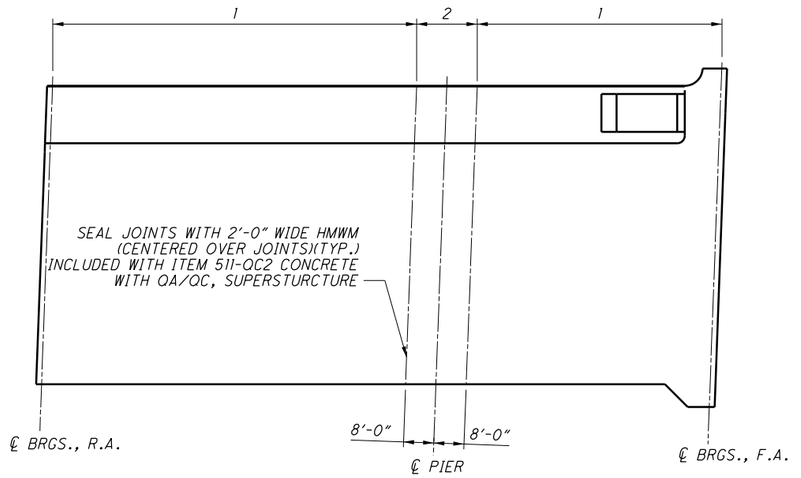
BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO DESIGN, CONSTRUCT AND REMOVE THE TEMPORARY SURCHARGE AT THE REAR AND FORWARD ABUTMENTS FOR THE BRIDGE AT THE CONTRACT LUMP SUM BID PRICE FOR ITEM SPECIAL 690E98400 SPECIAL-MISC.: TEMPORARY SURCHARGE.

ABBREVIATIONS:

ABUT.	ABUTMENT	FTG.	FOOTING	PROP.	PROPOSED
APPR.	APPROACH	FWD.	FORWARD	R.A.	REAR ABUTMENT
APPROX.	APPROXIMATE	LT.	LEFT	REF.	REFERENCE
BOT.	BOTTOM	MAX.	MAXIMUM	REQ.	REQUIRED
BRG.	BEARING	M.O.T.	MAINTENANCE OF TRAFFIC	RT.	RIGHT
C/C	CENTER TO CENTER	NB	NORTHBOUND	SB	SOUTHBOUND
C.I.P.	CAST-IN-IRON	N.F.	NEAR FACE	SER.	SERIES
C.J.	CONSTRUCTION JOINT	NO.	NUMBER	SHLDR.	SHOULDER
CLR.	CLEAR	N.P.C.P.P.	NON-PERFORATED CORRUGATED PLASTIC PIPE	SPA.	SPACING
CONSTR.	CONSTRUCTION	N.T.S.	NOT TO SCALE	STA.	STATION
CONT.	CONTINUED	O/O	OUT TO OUT	TYP.	TYPICAL
C.P.P.	CORRUGATED PLASTIC PIPE	OFF	OFFSET	T/SLOPE	TOP OF SLOPE
DIA.	DIAMETER	P.C.P.P.	PERFORATED CORRUGATED PLASTIC PIPE	T/T	TOE TO TOE
EL.	ELEV. - ELEVATION	P.E.J.F.	PREFORMED EXPANSION JOINT FILLER	U.N.O.	UNLESS NOTED OTHERWISE
EX.	EXIST. - EXISTING			VAR.	VARIES
EXP.	EXPANSION			V.C.	VERTICAL CURVE
E.F.	EACH FACE			VERT.	VERTICAL
F.A.	FORWARD ABUTMENT				
F.F.	FAR FACE				

NOTES:

2 SHALL NOT BE POURED PRIOR TO 1 WITHOUT APPROVAL BY THE ENGINEER. SEQUENCE OF SPAN POURS SHALL BE DETERMINED BY THE CONTRACTOR



DECK POUR SEQUENCE PLAN

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED	DRAWN	REVIEWED	DATE
MM	MM	JTC	5/2022
CHECKED	REVISED	STRUCTURE FILE NUMBER	
FBW		2900213	

GENERAL NOTES I AND DECK POUR SEQUENCE

BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

2 / 30

574
698

ITEM 511, CLASS OC2 CONCRETE WTIH OC/OA, BRIDGE DECK, AS PER PLAN

THIS ITEM MODIFIES THE STANDARD 511 CONCRETE FOR STRUCTURES SPECIFICATION TO INCLUDE CORROSION INHIBITORS INTO THE SUPERSTRUCTURE CONCRETE. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

PROVIDE MATERIALS CONFORMING TO 511.02 EXCEPT AS MODIFIED BELOW:

PORTLAND CEMENT CONCRETE	499.03, CLASS QC 2 MEETING A DESIGN STRENGTH OF 4,500 PSI
CORROSION INHIBITOR	515.15

THE CLASS QC2 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:
WATER/CEMENT RATIO = 0.40 MAXIMUM

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST WILL APPLY.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CORROSION INHIBITOR IS SUGGESTED TO BE A MCI PRODUCT BY CORTEC OR AN APPROVED EQUAL FROM THE QUALIFIED PRODUCTS LIST. THE CONCRETE SUPPLIER'S CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS. PLEASE BE ADVISED THAT SOME PRODUCTS ON THE LIST EFFECT THE DELIVERED MIX PROPERTIES GREATLY WHILE OTHER PRODUCTS DO NOT.

APPROACH SLABS AND DIAPHRAGMS ARE TO USE THE SAME MIX DESIGN AS THE BRIDGE DECK. THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED.

THE CONTRACTOR SHALL PROVIDE TRADITIONAL BRIDGE DECK FORMS CONFORMING TO CMS 508. PERMANENT STAY-IN-PLACE (SIP) FORMS ARE NOT ALLOWED. THE PLACING OF THE DECK AND THE APPROACH SLABS IN THE SAME CONCRETE POUR IS NOT PERMITTED.

ITEM 511, CLASS OC2 CONCRETE WTIH OC/OA, BRIDGE DECK (PARAPET), AS PER PLAN

THIS ITEM MODIFIES THE STANDARD 511 CONCRETE FOR STRUCTURES SPECIFICATION TO INCLUDE MACRO-SYNTHETIC FIBERS, AND CORROSION INHIBITORS INTO THE SUPERSTRUCTURE CONCRETE. THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

PROVIDE MATERIALS CONFORMING TO 511.02 EXCEPT AS MODIFIED BELOW:

PORTLAND CEMENT CONCRETE	499.03, CLASS QC 2 MEETING A DESIGN STRENGTH OF 4,500 PSI, WITH MACRO-SYNTHETIC FIBERS WITH MODIFICATION PER 511.02
FIBERS FOR CONCRETE CORROSION INHIBITOR	ASTM C 1116, TYPE III 515.15

THE CLASS QC2 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:
WATER/CEMENT RATIO = 0.40 MAXIMUM; MINIMUM 5 LBS/CY MACRO-SYNTHETIC FIBERS (1.5 IN. MIN. TO 2.5 IN. MAX.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST WILL APPLY.

ITEM 511, CLASS OC2 CONCRETE WTIH OC/OA, BRIDGE DECK (PARAPET), AS PER PLAN, CONT'D.

THE MACRO-SYNTHETIC FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND MACRO-SYNTHETIC FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES. PROVIDE MACRO-SYNTHETIC FIBERS THAT ARE MONOFILAMENT FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE MACRO-SYNTHETIC FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI, A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AND ASPECT RATIO BETWEEN 60 AND 100, AND ARE BETWEEN 1.0 AND 2.5 INCHES IN LENGTH. STORE THE MACRO-SYNTHETIC FIBERS ACCORDING TO THE MANUFACTURER'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT AND MOISTURE. PLACING THE BAG THAT THE FIBERS COME IN INTO THE CONCRETE MIX IS NOT PERMITTED.

USE A MINIMUM DOSAGE RATE OF MACRO-SYNTHETIC FIBERS OF 5.0 LBS/CY OF CONCRETE. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. BEFORE USE, SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE MACRO-SYNTHETIC FIBERS AND THE MIX MEET OR EXCEED THE REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED. THE TRANSIT MIXER CHARGE SHALL BE LIMITED TO3#4OF ITS RATED CAPACITY OR 6 CUBIC YARDS, WHICHEVER IS SMALLER. THE FIRST THREE TRANSIT MIXER LOADS ARE REQUIRED TO BE AT THE MINIMUM YARDAGE LISTED ABOVE TO SHOW PROOF OF THE SUCCESSFUL BATCHING OPERATION. AFTER CONSISTENCY IN THE DELIVERED MATERIAL HAS BEEN ESTABLISHED, THE CONCRETE SUPPLIER MAY INCREASE THE BATCH DELIVERED QUANTITIES AS LONG AS THE QUALITY REMAINS ACCEPTABLE TO THE ENGINEER. THE ENGINEER CAN REDUCE THE BATCH LOAD SIZE AT ANY TIME AS NEEDED TO CORRECT/IMPROVE CONCRETE QUALITY.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CORROSION INHIBITOR IS SUGGESTED TO BE A MCI PRODUCT BY CORTEC OR AN APPROVED EQUAL FROM THE QUALIFIED PRODUCTS LIST. THE CONCRETE SUPPLIER'S CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS. PLEASE BE ADVISEDTHAT SOME PRODUCTS ON THE LIST EFFECT THE DELIVERED MIX PROPERTIES GREATLY WHILE OTHER PRODUCTS DO NOT.

THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED. THIS SPECIFICATION IS INTENDED FOR USE ON NON DECORATIVE BRIDGE RAILING. USE SELF-COMPACTING CONCRETE ON DECORATIVE RAILING SIMILAR TO TEXAS RAILING AND MACRO-SYNTHETIC CONCRETE PER THIS SPECIFICATION ON TRADITIONAL CONCRETE RAILING WHEN APPLICABLE.

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN

DUE TO THE RECENT SUPPLY SHORTAGES, THE DEPARTMENT HAS BEEN MADE AWARE OF DIFFICULTIES THAT SUPPLIERS ARE HAVING IN OBTAINING THE NECESSARY MATERIALS FOR EPOXY. ON THIS PROJECT THE CONTRACTOR CAN USE TRADITIONAL EPOXY-URETHANE SEALERS APPROVED ON THE QPL OR ELECT TO SUBSTITUTE BRIDGE COTE XL-70 W/SILANE THAT IS LISTED ON THE APPROVED NOISE SUPPLIER LIST UNDER APPROVED SEALERS FOR NOISE BARRIERS. APPROVEDNOISESUPPLIERSLIST.PDF (OHIO.GOV).

IF BRIDGE COTE XL-70 W/SILANE IS CHOSEN, MEET THE REQUIREMENTS OF THE BRIDGE COTE XL-70 W/SILANE TECHNICAL DATA SHEET WITH THE EXCEPTION OF THE SURFACE PREPARATION THAT WILL STILL FOLLOW THE REQUIREMENTS LISTED UNDER C&MS 512 FOR EPOXY URETHANE SEALERS.

PART.	ESTIMATED QUANTITIES									
02/NHS/BR	ITEM	EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER	GEN.	SHEET
158	451	30000	158	FT	SPECIAL - PRESSURE RELIEF JOINT, TYPE A				158	
LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING		LS			
LS	503	21300	LS		UNCLASSIFIED EXCAVATION		LS			
LS	505	11100	LS		PILE DRIVING EQUIPMENT MOBILIZATION	LS	LS			
7010	507	00600	7010	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	5060	1950			
7450	507	00650	7450	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	5350	2100			
198337	509	26000	198337	LB	GALVANIZED STEEL REINFORCEMENT	29535	31153	137649		
2	511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2				
148	511	34412	148	CY	CLASS QC2 CONCRETE WITH OC/OA, SUPERSTRUCTURE			148		
436	511	34447	436	CY	CLASS QC2 CONCRETE WITH OC/OA, BRIDGE DECK, AS PER PLAN			436		3/30
30	511	34451	30	CY	CLASS QC2 CONCRETE WITH OC/OA, BRIDGE DECK (PARAPET), AS PER PLAN			30		3/30
70	511	41012	70	CY	CLASS QCI CONCRETE WITH QC/OA, PIER ABOVE FOOTINGS		70			
252	511	43512	252	CY	CLASS QCI CONCRETE WITH QC/OA, ABUTMENT INCLUDING FOOTING	252				
63	511	46512	63	CY	CLASS QCI CONCRETE WITH QC/OA, FOOTING		63			
97	511	51510	97	CY	CLASS QC2 CONCRETE, SIDEWALK			97		
682	512	10101	682	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	309	158	215		3/30
8	515	15110	8	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF60-49 (104'-9" LONG)			8		
8	515	15110	8	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF60-49 (73'-0" LONG)			8		
28	515	20000	28	EACH	INTERMEDIATE DIAPHRAGMS			28		
10	516	13600	10	SF	1" PREFORMED EXPANSION JOINT FILLER			10		
101	516	13900	101	SF	2" PREFORMED EXPANSION JOINT FILLER	101				
204	516	14020	204	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	204				
8	516	44101	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14" x 21" X 2.5735" PAD WITH 16" x 25" 1.75" PL)	8				22/30
8	516	44101	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14" x 19.5" X 2.5735" PAD WITH 16" x 25" 1.75" PL)	8				22/30
16	516	44101	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (14" x 19.5" X 2.5735" PAD WITH 16" x 40" 1.75" PL)		16			22/30
206	517	75120	206	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)			206		
2	518	12301	2	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			2		27/30
213	518	40000	213	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	213				
54	518	40010	54	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	54				
6	523	20000	6	EACH	DYNAMIC LOAD TESTING	4	2			
561	526	30011	561	SY	REINFORCED CONCRETE APPROACH SLABS WITH OC/OA (T=17"), AS PER PLAN				561	23/30
79	526	90010	79	FT	TYPE A INSTALLATION			79		
165	607	39910	165	FT	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC			165		
165	607	39930	165	FT	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC			165		
20	608	53020	20	SF	DETECTABLE WARNING			20		
110	625	25504	110	FT	CONDUIT, 3", 725.051				110	
1	625	30706	1	EACH	PULL BOX, 725.08, 24"				1	
LS	690	98400	LS		SPECIAL - MISC.: TEMPORARY SURCHARGE				LS	2/30
33	846	00110	33	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				33	

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

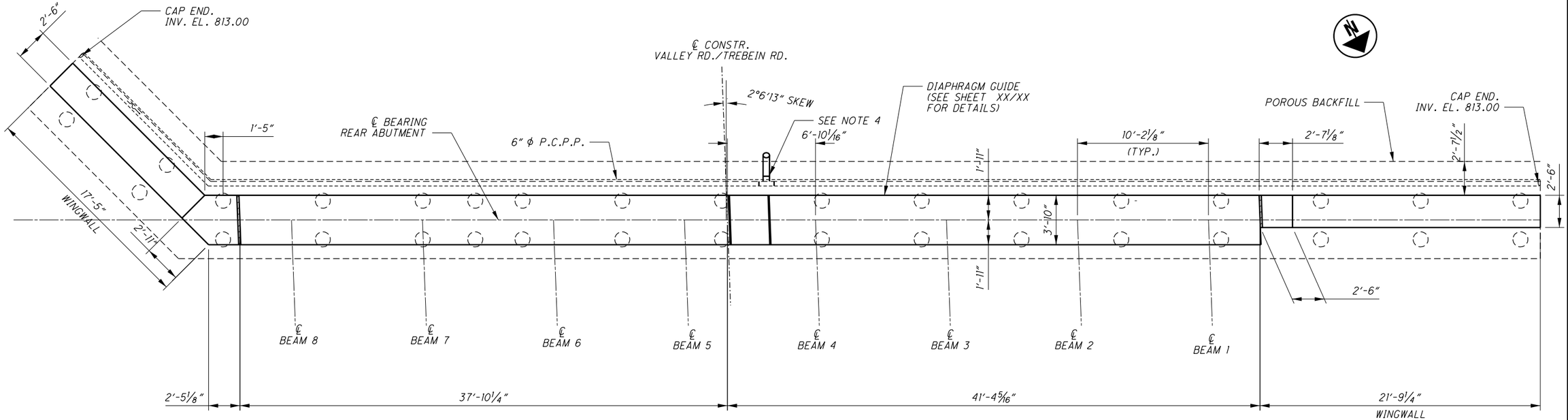
DATE 5/2022
REVIEWED JTC
STRUCTURE FILE NUMBER 2900213
DRAWN MM
REVISED
DESIGNED MM
CHECKED FBW

GENERAL NOTES II & ESTIMATED QUANTITIES

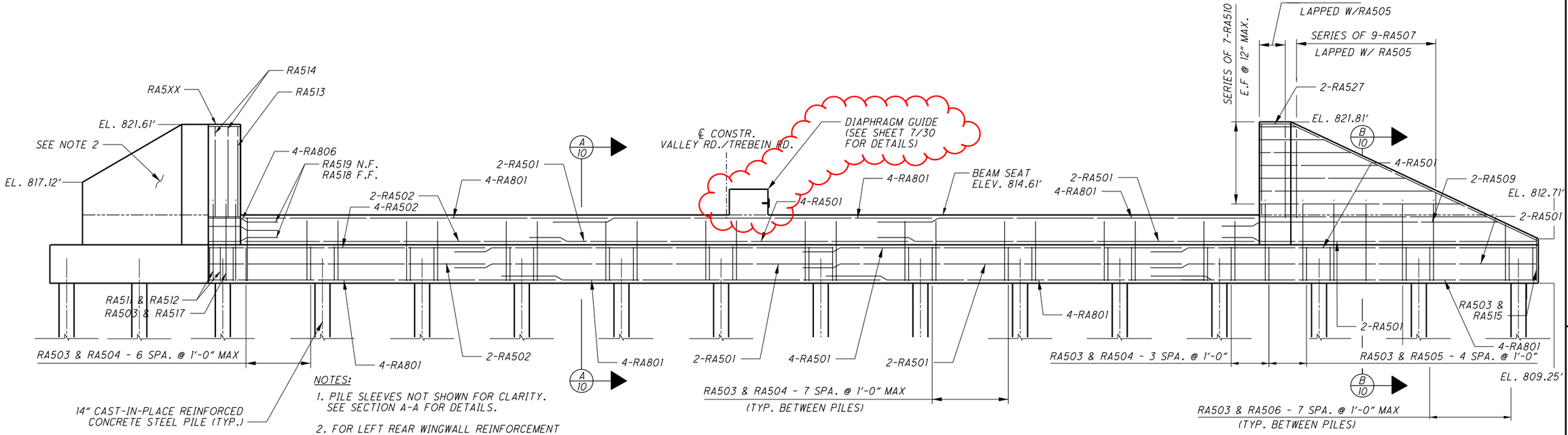
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

575
698



PLAN



ELEVATION

NOTES:

1. PILE SLEEVES NOT SHOWN FOR CLARITY. SEE SECTION A-A FOR DETAILS.
2. FOR LEFT REAR WINGWALL REINFORCEMENT DETAIL, SEE SHEET 8.
3. LAP LENGTHS:
   NO. 5 BAR = 3'-1"
   NO. 8 BAR = 5'-4"
4. 6" NPCPP FITTING AS REQUIRED, INVERT EL. 812.25. PAYMENT FOR PIPE FITTING AND CONNECTING PIPE TO MSE WALL DRAINAGE IS INCLUDED WITH BRIDGE QUANTITES
5. THIS STRUCTURE REQUIRES GROUNDING RODS AND GROUNDING CONDUCTOR RISER CABLES EMBEDDED IN THE ABUTMENT. SEE STD. DWG. HL-50.21 FOR ADDITIONAL INFORMATION.

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

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REAR ABUTMENT
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

6 / 30

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Jason.Centers@jacobs.com

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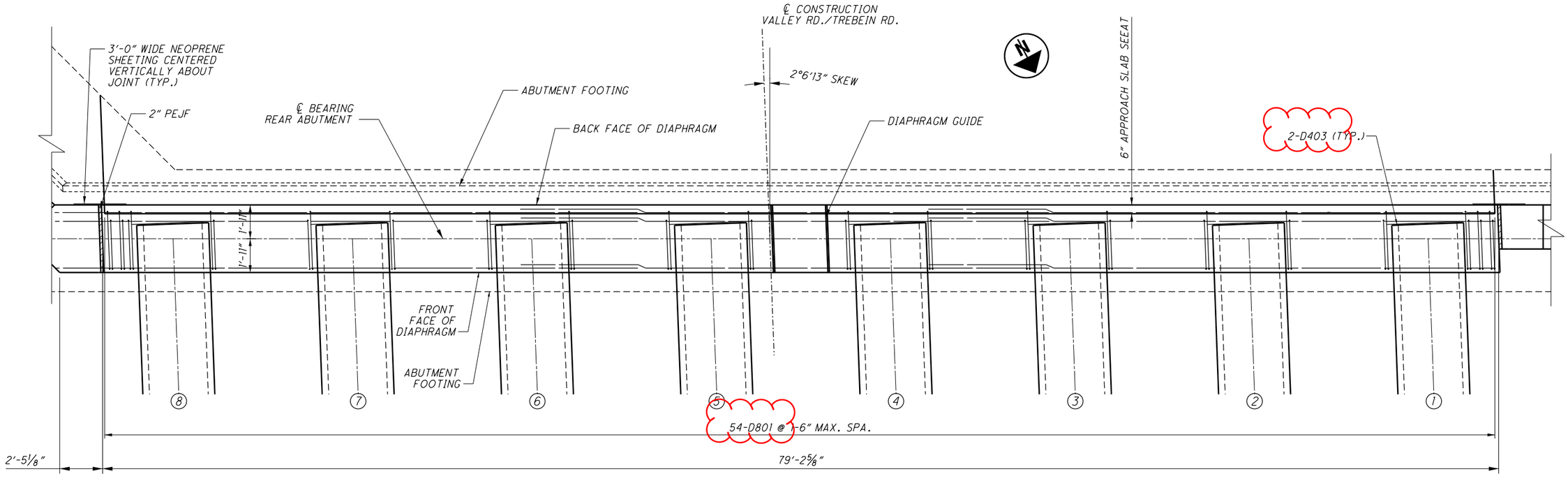
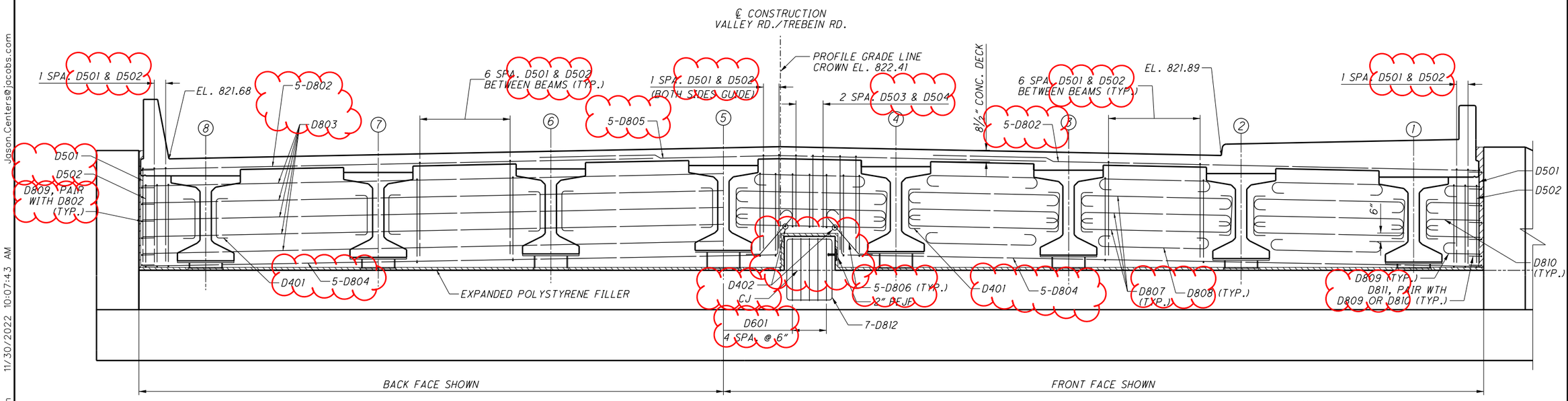


REAR ABUTMENT DIAPHRAGM PLAN



REAR ABUTMENT DIAPHRAGM ELEVATION

NOTES

1. WINGWALLS AND ABUTMENT REINFORCING NOT SHOWN FOR CLARITY.
2. REINFORCEING STEEEL MIN. LAP LENGTHS:
   NO. 5 BARS: 2'-5"
   NO. 8 TOP BARS: 6'-8"
   ALL OTHER NO. 8 BARS: 5'-4"

DESIGN AGENCY
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1880 WAYCROSS ROAD
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REAR ABUTMENT DIAGPHRAM DETAILS

BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
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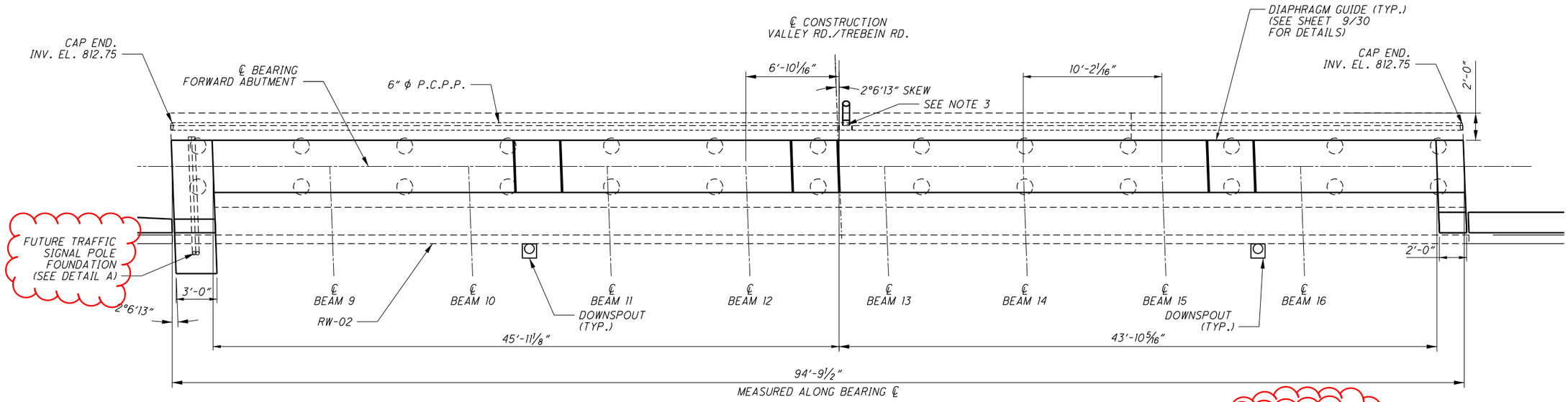
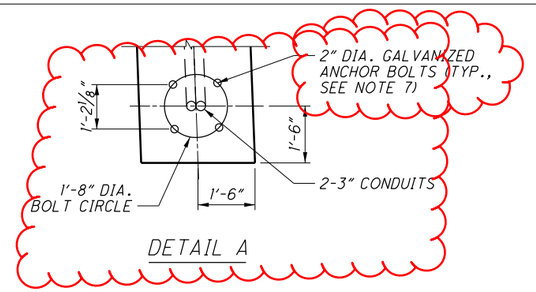
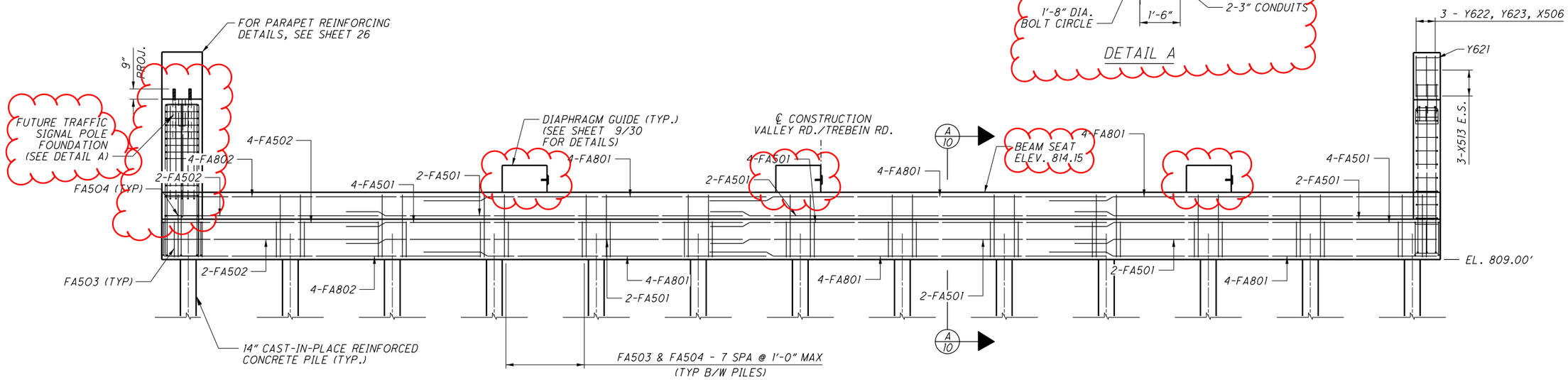


PLAN



DETAIL A



ELEVATION

NOTES:

1. PILE SLEEVES NOT SHOWN FOR CLARITY. SEE SECTION A-A FOR DETAILS.
2. LAP LENGTHS:
   NO. 5 BAR = 3'-1"
   NO. 8 BAR = 5'-4"
3. 6" NPCPP FITTING AS REQUIRED, INVERT EL. 812.00. PAYMENT FOR PIPE FITTING AND CONNECTING PIPE TO MSE WALL DRAINAGE IS INCLUDED WITH BRIDGE QUANTITES.
4. SEE SHEET 11/30 FOR CUTOFF WALL DETAILS.
5. THIS STRUCTURE REQUIRES GROUNDING RODS AND GROUNDING CONDUCTOR RISER CABLES EMBEDDED IN THE ABUTMENT. SEE STD. DWG. HL-50.21 FOR ADDITIONAL INFORMATION.
6. FOR ADDITIONAL SIGNAL POLE FOUNDATION DETAILS, SEE STD. DWGS. TC-81.22 (DESIGN NO. 12) & TC-21.21.
7. GALVANIZED ANCHOR BOLTS ARE INCLUDED WITH ITEM 512, CLASS QCI CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING FOR PAYMENT.

DESIGN AGENCY
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FORWARD ABUTMENT
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
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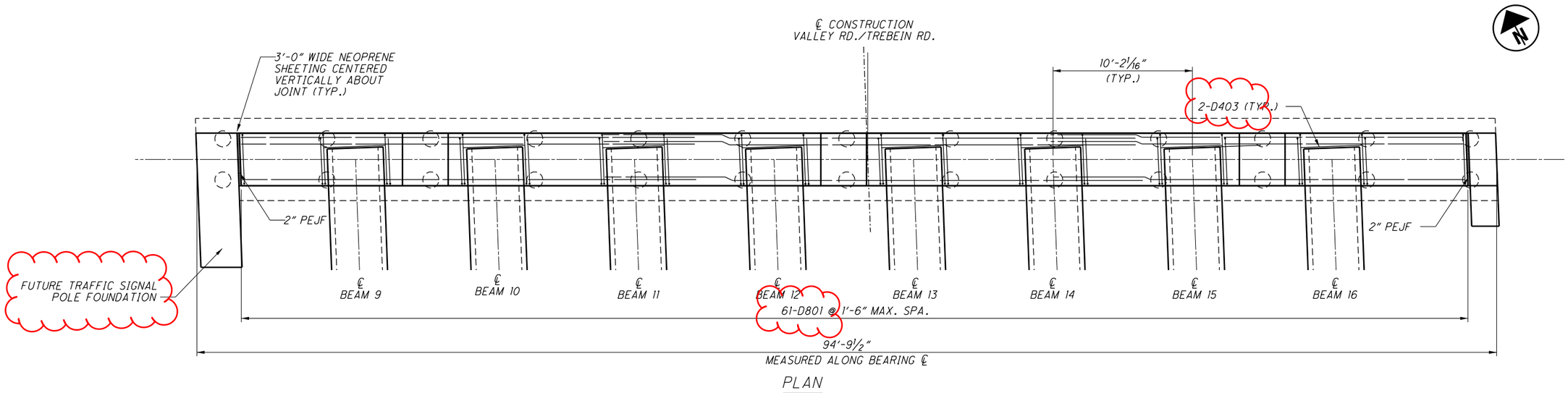

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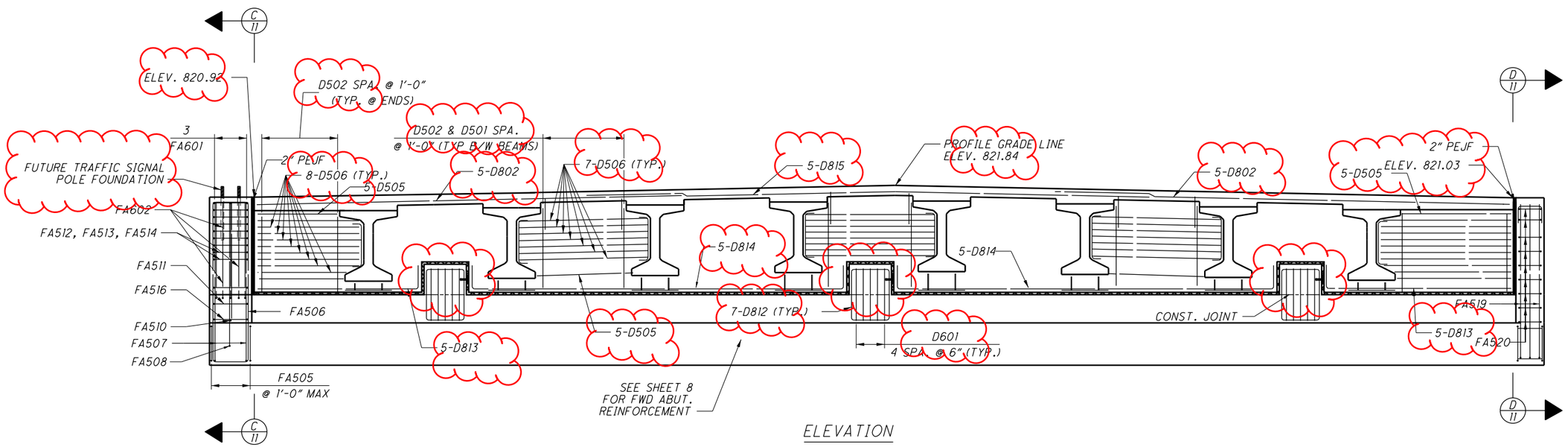

ELEVATION

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CINCINNATI, OHIO 45240

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FORWARD ABUTMENT DIAPHRAGM DETAILS
BRIDGE NO. GRE-035-0627
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GRE-US 35-5.63
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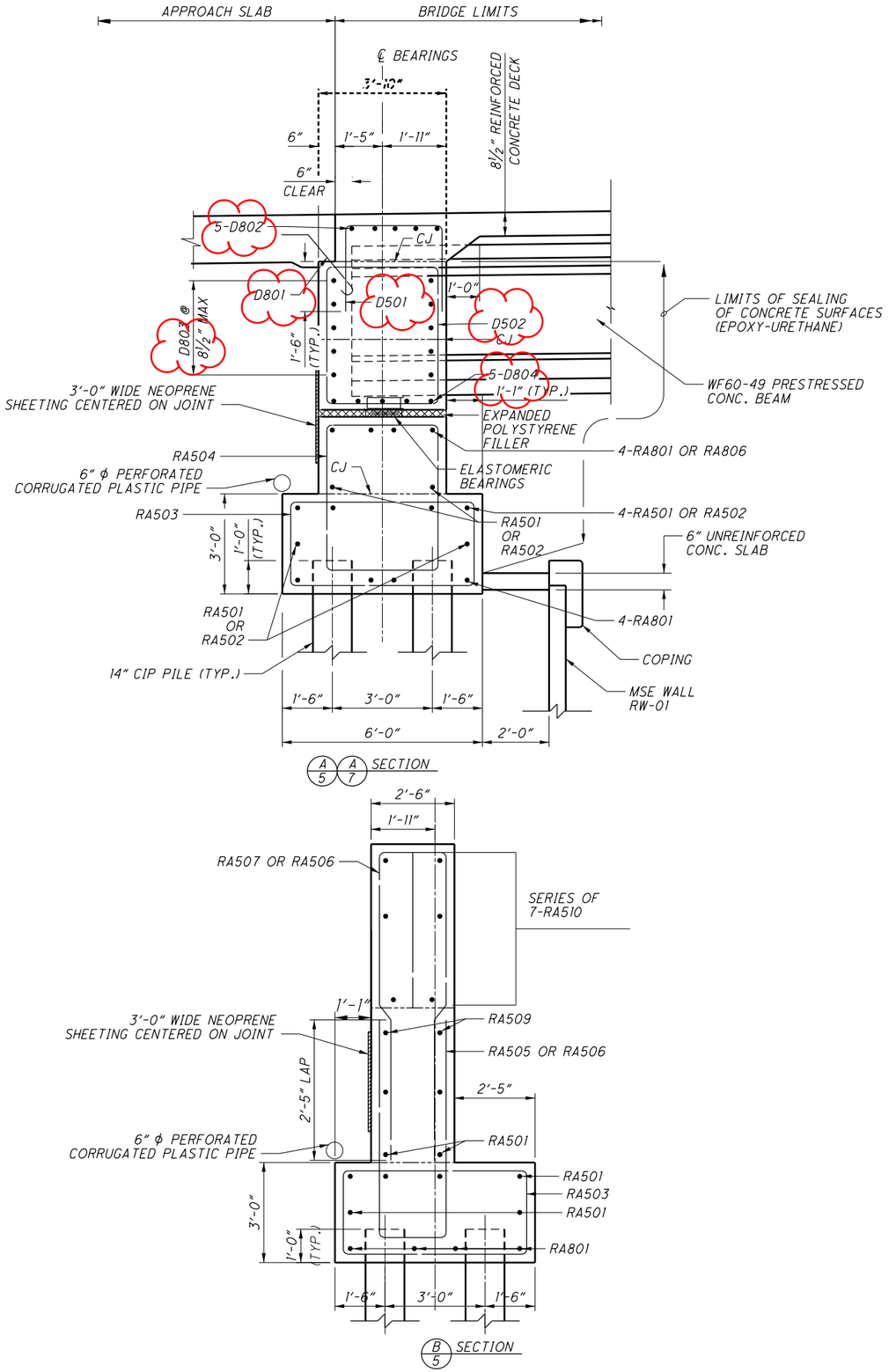

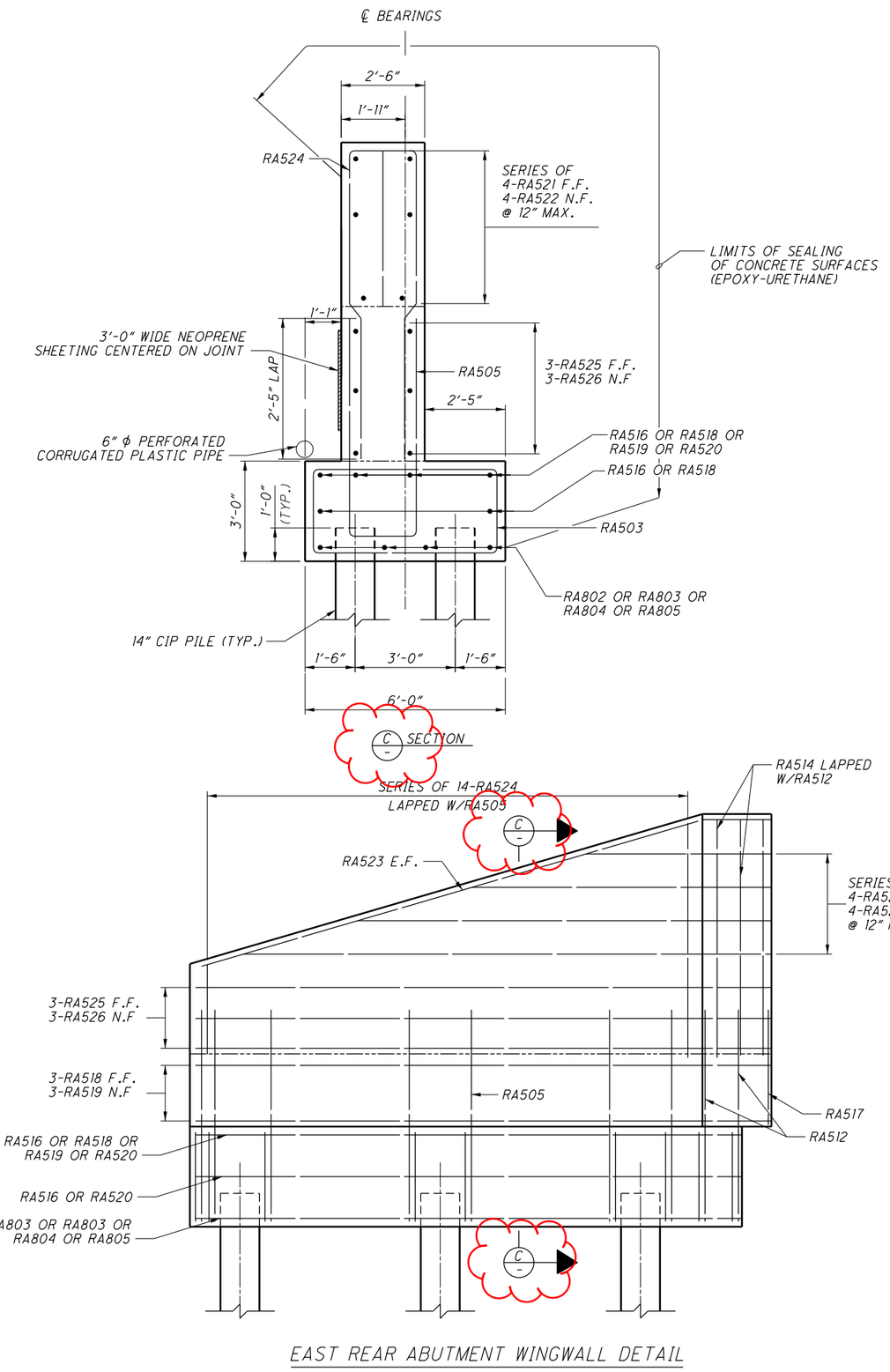

EAST REAR ABUTMENT WINGWALL DETAIL

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

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ABUTMENT SECTION & DETAILS

BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

10 / 30

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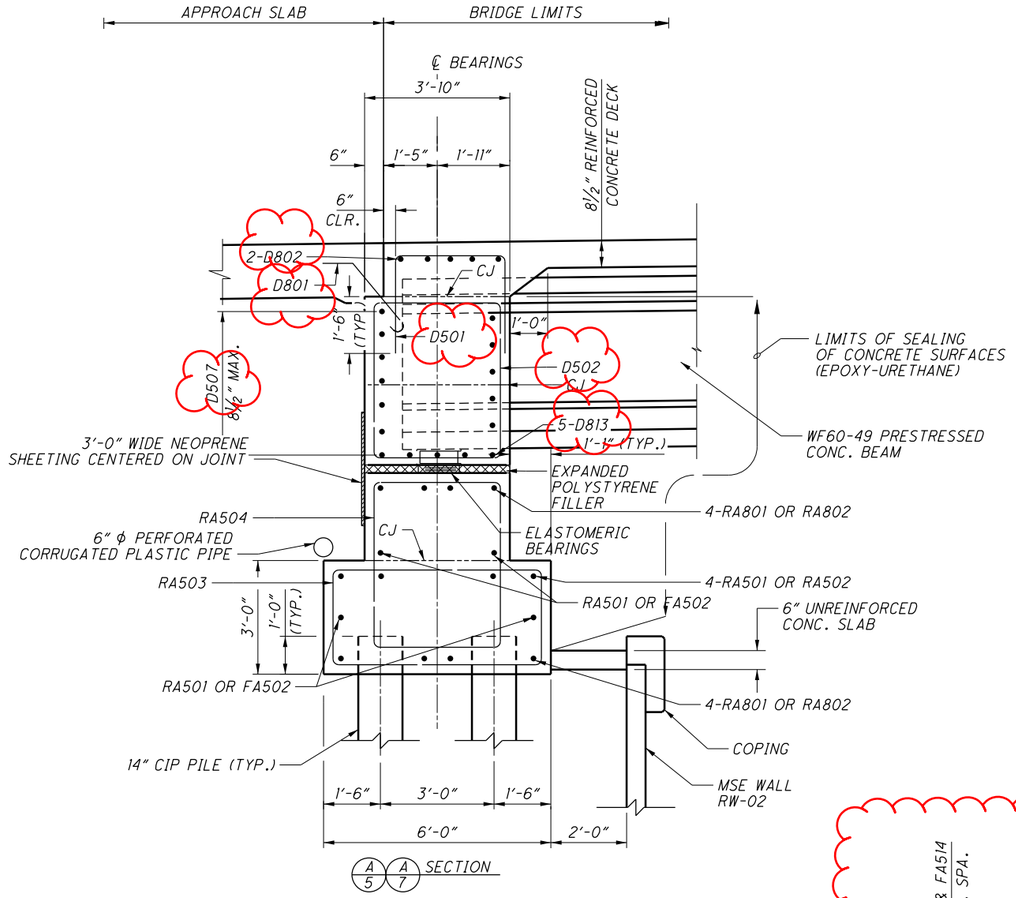
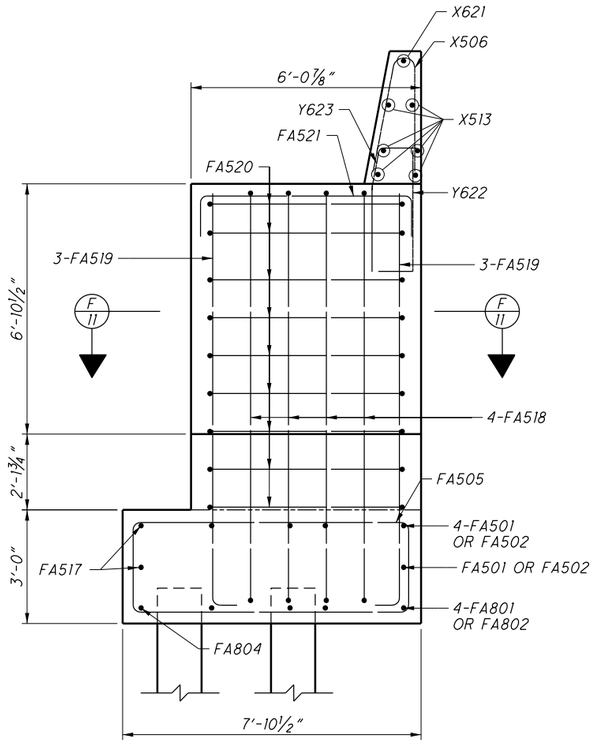
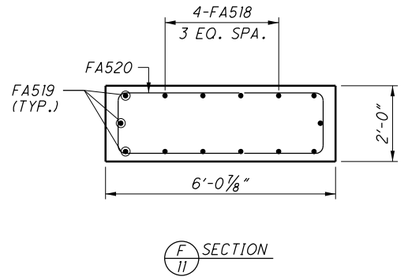
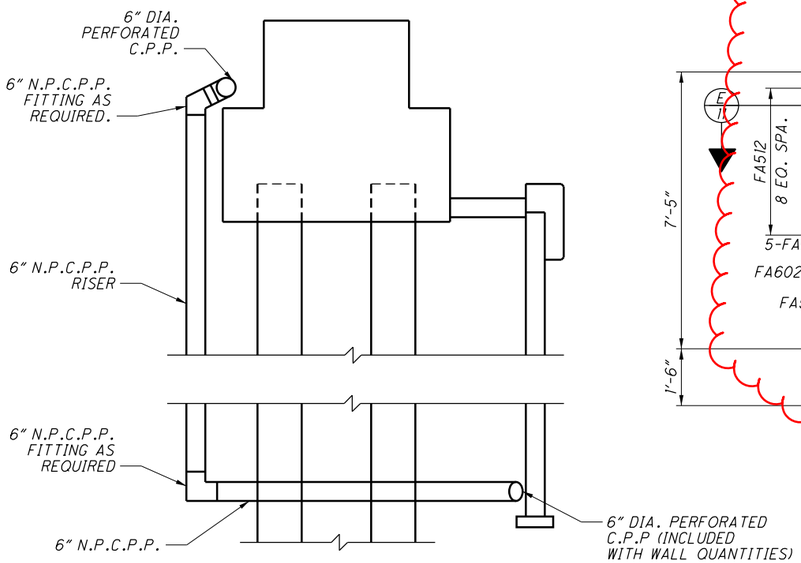
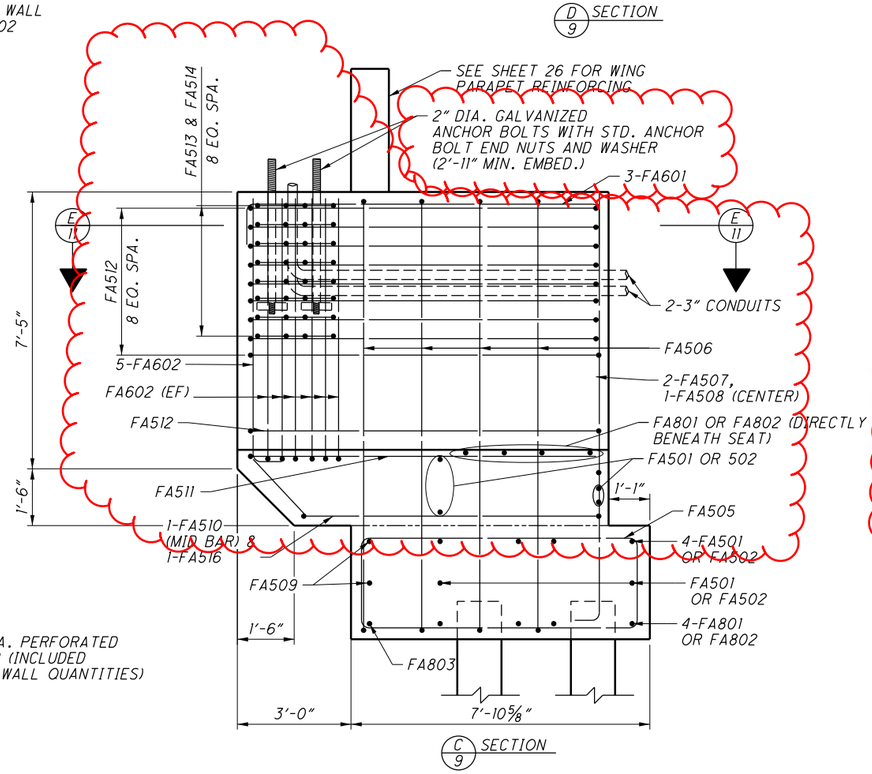


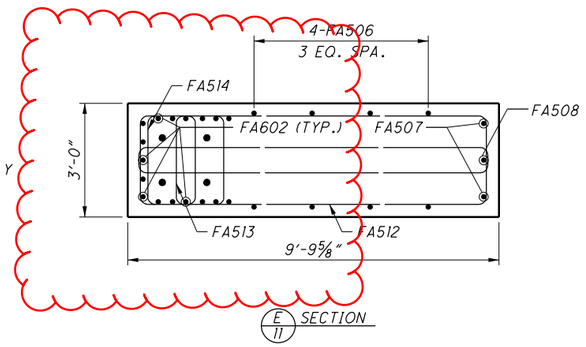






DRAINAGE DETAIL





DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED	DRAWN	REVIEWED	DATE
MM	MM	JTC	5/2022
CHECKED	REVISED	STRUCTURE FILE NUMBER	
FBW		2900213	

ABUTMENT SECTION & DETAILS

BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

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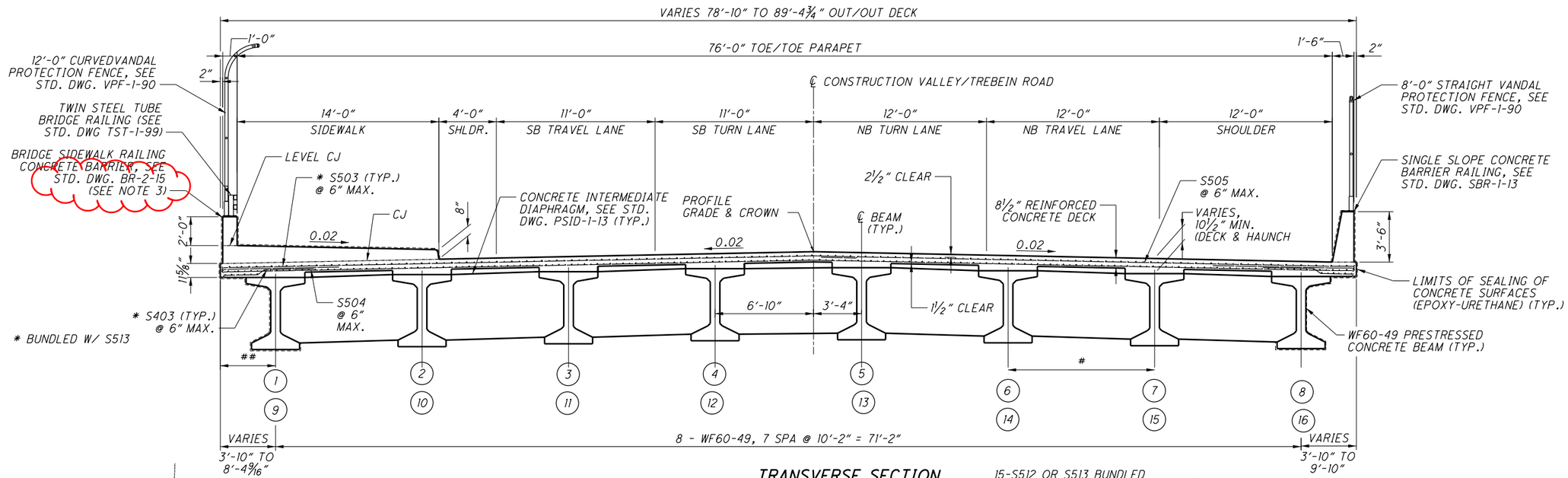
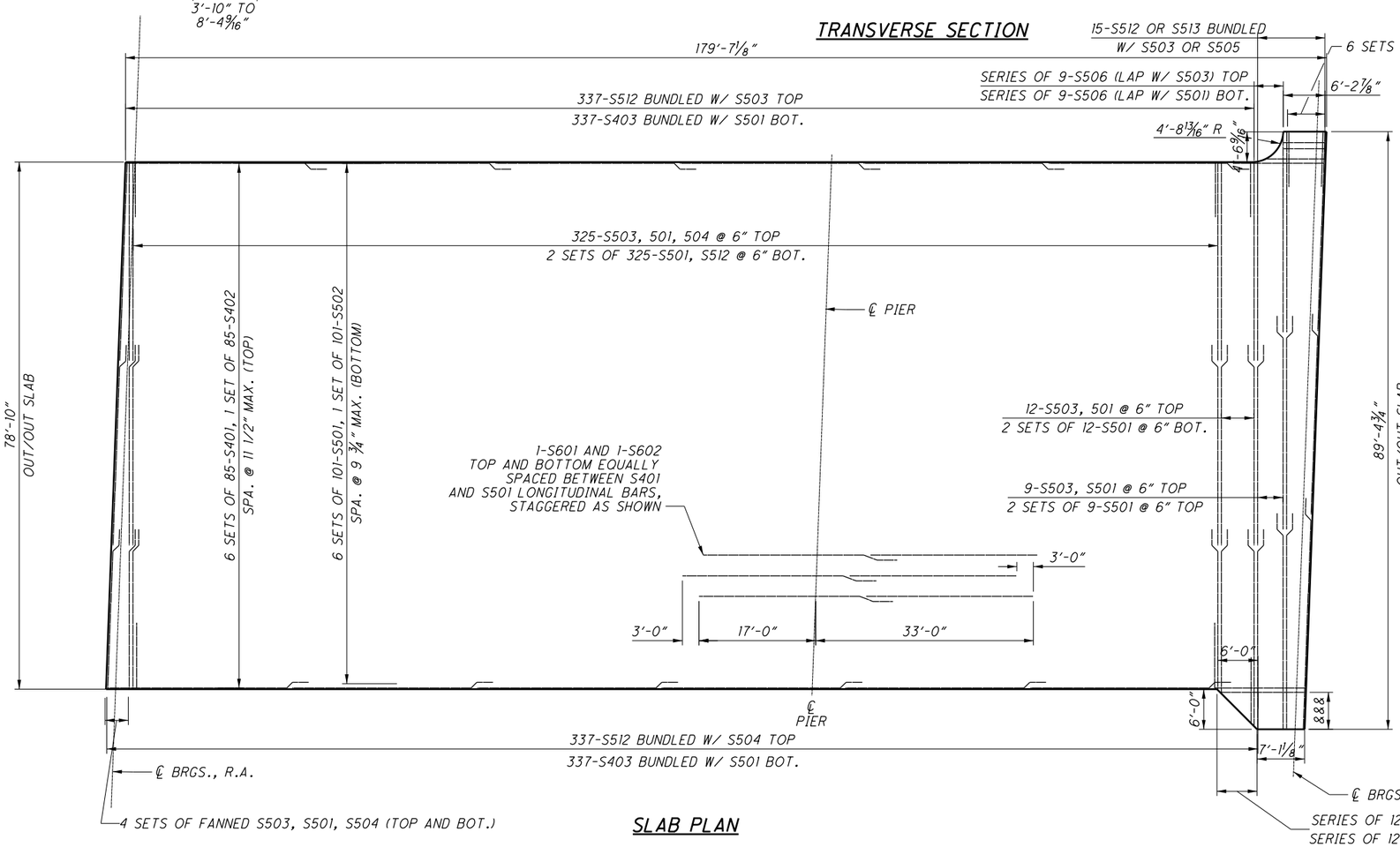


TRANSVERSE SECTION



SLAB PLAN

\# TOP: 11-S401 OR S402 @ EQ. SPA.
10-S601 OR S602 @ EQ. SPA. (OVER PIERS)
BOT: 13-S501 OR S502 @ EQ. SPA.
12-S601 OR S602 @ EQ. SPA. (OVER PIERS)

TOP: 4-S401 OR S402 @ EQ. SPA.
3-S601 OR S602 @ EQ. SPA. (OVER PIERS)
BOT: 5-S501 OR S502 @ EQ. SPA.
10-S601 OR S602 @ EQ. SPA. (OVER PIERS)
THIRD: 6-S601 OR S602 @ 6" SPA. (OVER PIERS)

& TOP: 4-S509
BOT: 4-S509

&& TOP: SERIES OF 3-S509
BOT: SERIES OF 3-S509

&&& TOP: SERIES OF 5-S510
BOT: SERIES OF 5-S510

NOTES:

1. DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO CMS511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT, BEAM CAMBER AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS.

2. LAP LENGTHS:
NO. 4 BAR = 1'-11"
NO. 5 BAR = 3'-0"
NO. 6 BAR = 3'-1"

3. CONCRETE FOR BRIDGE SIDEWALK RAILING CONCRETE BARRIER SHALL BE IN ACCORDANCE WITH THE GENERAL NOTE ON SHEET 3/30 FOR ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN.

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED MM | DRAWN MM | REVIEWED JTC | DATE 5/2022
CHECKED FBW | REVISED | STRUCTURE FILE NUMBER 2900213

TRANSVERSE SECTION & SLAB PLAN
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

18 / 30

590
698

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DECK ELEVATIONS											
LOCATION	DESCRIPTION	℄ BRGS R.A.	0.25 PT	0.50 PT	0.75 PT	℄ BRGS PIER 1 (SPAN 1)	℄ BRGS PIER 1 (SPAN 2)	0.25 PT	0.50 PT	0.75 PT	℄ BRGS F.A.
LEFT EDGE OF DECK	STATION	878+97.35	879+23.12	879+48.89	879+74.66	880+00.43	880+02.59	880+20.47	880+38.35	880+56.22	880+74.10
	FINAL DECK ELEV.	821.59	821.63	821.62	821.58	821.49	821.48	821.39	821.28	821.16	820.92
	SCREED ELEV.	821.59	821.82	821.90	821.77	821.49	821.48	821.44	821.35	821.20	820.92
℄ B1/B9	STATION	878+97.21	879+22.98	879+48.75	879+74.52	880+00.29	880+02.45	880+20.29	880+38.12	880+55.96	880+73.79
	FINAL DECK ELEV.	821.66	821.70	821.70	821.66	821.57	821.56	821.47	821.36	821.23	821.09
	TOP OF HAUNCH ELEV.	820.96	821.19	821.27	821.14	820.86	820.85	820.80	820.72	820.57	820.38
℄ B2/B10	STATION	878+96.84	879+22.61	879+48.38	879+74.15	879+99.92	880+02.08	880+19.91	880+37.75	880+55.58	880+73.42
	FINAL DECK ELEV.	821.87	821.91	821.90	821.86	821.77	821.76	821.68	821.57	821.44	821.29
	TOP OF HAUNCH ELEV.	821.16	821.40	821.49	821.36	821.06	821.06	821.01	820.93	820.78	820.58
LEFT CURB LINE	STATION	878+96.80	879+22.57	879+48.34	879+74.11	879+99.88	880+02.04	880+19.87	880+37.71	880+55.54	880+69.06
	FINAL DECK ELEV.	821.89	821.93	821.93	821.88	821.80	821.79	821.70	821.59	821.46	820.96
	SCREED ELEV.	821.89	822.14	822.22	822.09	821.80	821.79	821.91	822.38	822.01	820.97
℄ B3/B11	STATION	878+96.46	879+22.23	879+48.00	879+73.77	879+99.54	880+01.70	880+19.54	880+37.37	880+55.21	880+73.04
	FINAL DECK ELEV.	822.07	822.11	822.11	822.06	821.98	821.97	821.88	821.77	821.65	821.50
	TOP OF HAUNCH ELEV.	821.36	821.61	821.70	821.56	821.27	821.26	821.22	821.13	820.98	820.79
℄ B4/B12	STATION	878+96.09	879+21.86	879+47.63	879+73.40	879+99.17	880+01.33	880+19.17	880+37.00	880+54.84	880+72.67
	FINAL DECK ELEV.	822.27	822.31	822.31	822.27	822.18	822.17	822.09	821.98	821.85	821.71
	TOP OF HAUNCH ELEV.	821.56	821.81	821.90	821.77	821.47	821.46	821.42	821.34	821.19	821.00
PROFILE & CROWN	STATION	878+95.84	879+21.61	879+47.38	879+73.15	879+98.92	880+01.08	880+18.92	880+36.75	880+54.59	880+72.42
	FINAL DECK ELEV.	822.41	822.45	822.45	822.41	822.32	822.31	822.22	822.12	821.99	821.84
	SCREED ELEV.	822.41	822.66	822.74	822.61	822.32	822.31	822.27	822.18	822.04	821.84
℄ B5/B13	STATION	878+95.72	879+21.49	879+47.26	879+73.03	879+98.80	880+00.96	880+18.79	880+36.63	880+54.46	880+72.30
	FINAL DECK ELEV.	822.34	822.38	822.38	822.34	822.25	822.24	822.16	822.05	821.93	821.78
	TOP OF HAUNCH ELEV.	821.63	821.88	821.97	821.84	821.55	821.54	821.50	821.41	821.26	821.07
℄ B6/B14	STATION	878+95.34	879+21.11	879+46.88	879+72.65	879+98.42	880+00.58	880+18.42	880+36.25	880+54.09	880+71.92
	FINAL DECK ELEV.	822.14	822.18	822.18	822.14	822.05	822.04	821.96	821.85	821.73	821.58
	TOP OF HAUNCH ELEV.	821.43	821.68	821.77	821.63	821.34	821.33	821.29	821.21	821.06	820.87
℄ B7/B15	STATION	878+94.97	879+20.74	879+46.51	879+72.28	879+98.05	880+00.21	880+18.05	880+35.88	880+53.72	880+71.55
	FINAL DECK ELEV.	821.93	821.98	821.98	821.93	821.85	821.84	821.76	821.65	821.52	821.38
	TOP OF HAUNCH ELEV.	821.22	821.47	821.56	821.43	821.14	821.13	821.09	821.01	820.86	820.67
℄ B8/B16	STA.	878+94.60	879+20.37	879+46.14	879+71.91	879+97.68	879+99.84	880+17.67	880+35.51	880+53.34	880+71.18
	FINAL DECK ELEV.	821.73	821.77	821.77	821.73	821.65	821.64	821.55	821.45	821.32	821.18
	TOP OF HAUNCH ELEV.	821.02	821.25	821.34	821.21	820.94	820.93	820.89	820.80	820.66	820.47
RIGHT TOE OF PARAPET	STATION	878+94.52	879+20.29	879+46.06	879+71.83	879+97.60	879+99.76	880+17.59	880+35.43	880+53.26	880+65.83
	FINAL DECK ELEV.	821.68	821.73	821.73	821.69	821.61	821.60	821.51	821.41	821.28	821.03
	SCREED ELEV.	821.68	821.92	822.00	821.88	821.61	821.60	821.55	821.47	821.32	821.04
RIGHT EDGE OF DECK	STATION	878+94.46	879+20.23	879+46.00	879+71.77	879+97.54	879+99.70	880+17.48	880+35.26	880+53.04	880+70.82
	FINAL DECK ELEV.	821.65	821.69	821.70	821.66	821.57	821.56	821.48	821.37	821.25	820.99
	SCREED ELEV.	821.65	821.89	821.97	821.85	821.57	821.56	821.52	821.44	821.29	820.99

NOTES

1. FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOACTION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.
2. SEE SHEET 21 FOR PLAN LOCATIONS OF DECK ELEVATIONS.

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED MM | DRAWN MM | CHECKED FBW | REVIEWED JTC | DATE 5/2022 | REVISED | STRUCTURE FILE NUMBER 2900213

DECK ELEVATIONS
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

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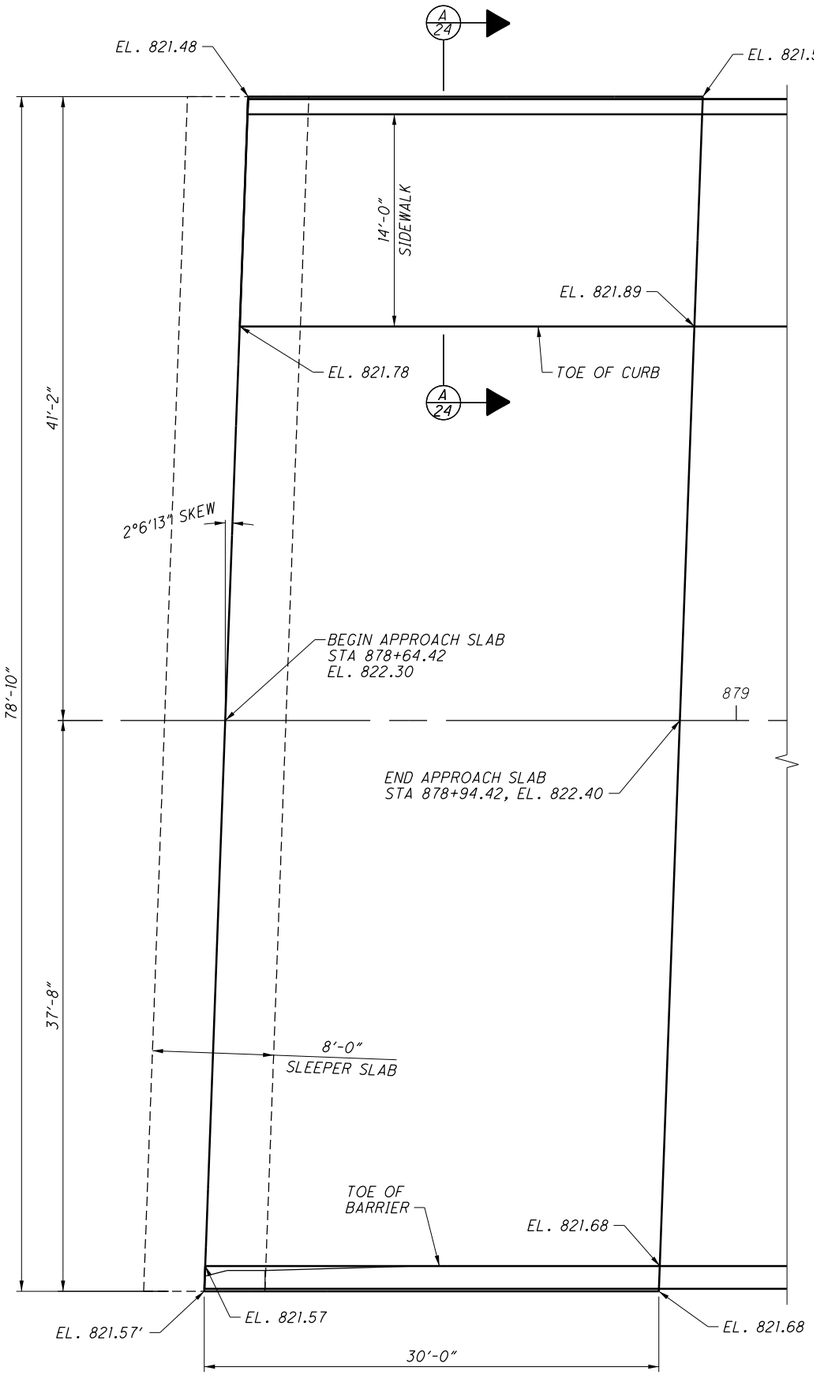
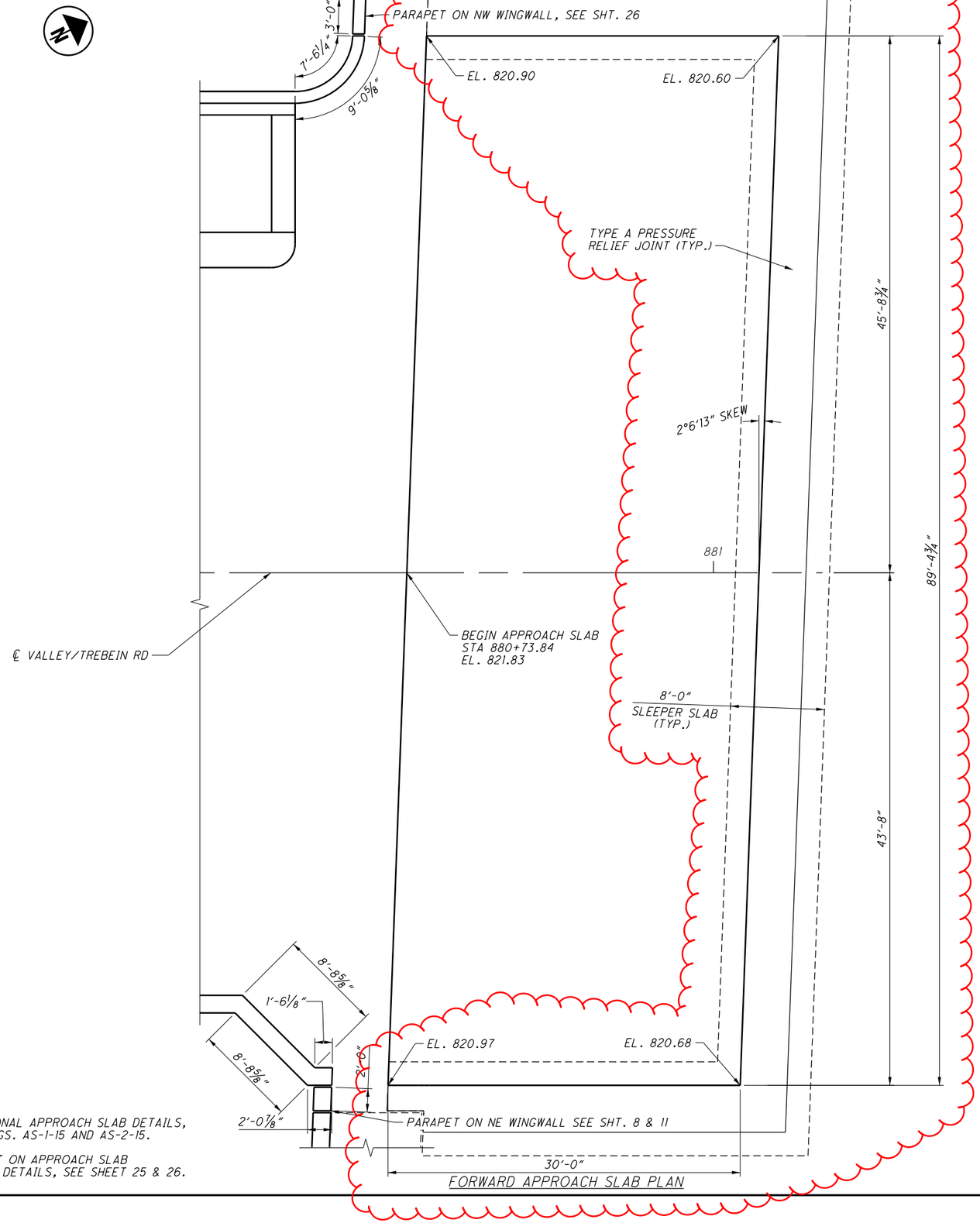


REAR APPROACH SLAB PLAN



FORWARD APPROACH SLAB PLAN

NOTES:

1. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE STD. DWGS. AS-1-15 AND AS-2-15.
2. FOR PARAPET ON APPROACH SLAB REINFORCING DETAILS, SEE SHEET 25 & 26.

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED	DRAWN	REVIEWED	DATE
MM	MM	JTC	5/2022
CHECKED	REVISED	STRUCTURE FILE NUMBER	
FBW		2900213	

APPROACH SLAB DETAILS
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

23 / 30

595
698

Jason.Centers@jacobs.com

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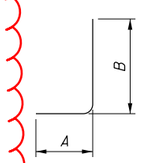
MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
					A	B	C	D	E	R	INC
SUBSTRUCTURE - REAR ABUTMENT											
RA501	24	30'-0"	751	STR							
RA502	8	22'-6"	188	STR							
RA503	120	17'-1"	2,138	3	5'-8"	2'-7"					
RA504	83	17'-1"	1,479	3	3'-6"	4'-9"					
RA505	26	16'-11"	459	2	7'-6"	2'-2"	7'-6"				
	1	13'-6"				4'-4"					
RA506	SER. OF	TO	133	3	2'-2"	TO					0'-8 3/8"
	8	18'-5"				6'-9"					
	1	8'-1"			3'-1"		3'-1"				
RA507	SER. OF	TO	112	2	TO	2'-2"	TO				0'-11 1/2"
	9	15'-9"			6'-11"		6'-11"				
RA508	3	15'-11"	50	2	7'-0"	2'-2"	7'-0"				
RA509	2	21'-8"	45	STR							
	2	2'-8"									
RA510	SER. OF	TO	131	STR							2'-1 3/8"
	7	15'-4"									
RA511	2	17'-3"	36	3	5'-9"	2'-7"					
RA512	2	17'-3"	36	2	7'-6"	2'-6"	7'-6"				
RA513	1	15'-7"	16	2	6'-10"	2'-2"	6'-10"				
RA514	2	15'-9"	33	2	6'-10"	2'-4"	6'-10"				
RA515	1	10'-11"	11	3	2'-2"	3'-0"					
RA516	2	17'-1"	36	19	13'-11"	2'-3"	2'-3"				
RA517	2	18'-3"	38	2	7'-6"	3'-6"	7'-6"				
RA518	4	17'-10"	74	19	14'-4"	2'-6"	2'-6"				
RA519	4	20'-1"	84	19	17'-1"	2'-2"	2'-2"				
RA520	2	21'-7"	45	19	16'-2"	3'-10"	3'-10"				
	1	5'-2"			2'-7"						
RA521	SER. OF	TO	43	19	TO	1'-10"	1'-10"				3'-6"
	4	15'-5"			12'-10"						
	1	7'-6"			5'-4"						
RA522	SER. OF	TO	53	19	TO	1'-7"	1'-7"				3'-6"
	4	17'-9"			15'-7"						
RA523	2	20'-5"	43	19	2'-9"	17'-1"	4'-6"				
	1	6'-9"			2'-5"		2'-5"				
RA524	SER. OF	TO	162	2	TO	2'-2"	TO				0'-8"
	14	15'-5"			6'-9"		6'-9"				
RA525	3	16'-11"	53	19	14'-4"	1'-10"	1'-10"				
RA526	3	19'-3"	60	19	17'-1"	1'-7"	1'-7"				
RA527	2	23'-4"	49	19	2'-4"	19'-0"	9'-0"				
RA801	28	30'-0"	2,243	STR							
RA802	1	18'-8"	50	19	13'-11"	3'-5"	3'-5"				
RA803	1	19'-1"	51	19	14'-4"	3'-5"	3'-5"				
RA804	1	21'-10"	58	19	17'-1"	3'-5"	3'-5"				
RA805	1	20'-11"	56	19	16'-2"	3'-5"	3'-5"				
RA806	4	7'-6"	80	STR							
		SUB-TOTAL	9396								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
					A	B	C	D	E	R	INC
SUBSTRUCTURE - ABUTMENT DIAPHRAGM											
D401	16	4'-8"	50	2	0'-8"	2'-4"	0'-8"				
D402	2	3'-6"	5	STR							
D403	32	4'-6"	96	STR							
D501	50	8'-2"	426	2	2'-7"	3'-0"	2'-7"				
D502	50	17'-8"	921	3	3'-5"	4'-9"					
D503	3	11'-6"	36	2	4'-3"	3'-0"	4'-3"				
D504	3	14'-2"	44	3	3'-1"	3'-0"					
D505	10	5'-8"	59	STR							
D506	37	7'-4"	283	STR							
D507	14	30'-0"	438	STR							
D508	14	36'-0"	526	STR							
D601	20	15'-4"	461	3	3'-5"	3'-9"					
D801	115	4'-2"	1279	18	1'-9"	1'-0"	1'-0"				
D802	10	30'-0"	801	STR							
D803	10	40'-0"	1068	STR							

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
					A	B	C	D	E	R	INC
SUBSTRUCTURE - ABUTMENT DIAPHRAGM, CONT'D.											
D804	20	39'-10"	2127	1	2'-5"	37'-5"					
D805	5	32'-10"	438	STR							
D806	4	5'-0"	53	18	3'-1"	0'-8"	0'-7"				
D807	12	11'-1"	355	17	9'-0"						
D808	3	14-9"	118	17	6'-6"						
D809	2	10'-3"	55	16	2'-0"						
D810	3	11'-4"	91	16	3'-2"						
D811	14	5'-0"	187	2	0'-9"	3'-6"	0'-9"				
D812	28	13'-0"	1009	3	2'-7"	3'-6"					
D813	10	14'-0"	374	1	2'-5"	11'-7"					
D814	10	26'-6"	708	2	2'-5"	26'-6"	2'-5"				
D815	5	40'-0"	534	STR							
		SUB-TOTAL	12542								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
					A	B	C	D	E	R	INC
SUBSTRUCTURE - FORWARD ABUTMENT											
FA501	24	30'-0"	751	STR							
FA502	8	13'-8"	114	STR							
FA503	96	17'-1"	1,711	3	5'-8"	2'-7"					
FA504	96	18'-8"	1,869	3	3'-6"	5'-7"					
FA505	4	20'-7"	86	3	7'-6"	2'-6"					
FA506	4	28'-7"	119	3	2'-8"	11'-4"					
FA507	2	12'-1"	25	1	10"	11'-4"					
FA508	1	11'-1"	12	1	10"	10'-4"					
FA509	2	2'-8"	6	STR							
FA510	1	7'-11"	8	STR							
FA511	1	24'-2"	25	3	2'-6"	9'-4"					
FA512	10	24'-5"	255	3	2'-6"	9'-5"					
FA513	9	6'-3"	59	3	0'-6"	2'-6"					
FA514	9	9'-3"	87	3	2'-0"	2'-6"					
FA515	NOT USED										
FA516	1	21'-5"	32	3	2'-6"	7'-11"					
FA517	2	1'-8"	3	STR							
FA518	4	25'-7"	107	3	1'-6"	11'-0"					
FA519	6	11'-9"	74	1	10"	11'-0"					
FA520	9	15'-3"	143	3	1'-8"	5'-8"					
FA521	1	6'-3"	7	2	10"	5'-8"					
FA601	3	11'-1"	50	2	1'-1"	9'-2"	1'-1"				
FA602	1	7'-7"	195	1	0'-9"	6'-11"					
FA801	24	30'-0"	1,922	STR	1'-0"	9'-5"	1'-0"				
FA802	8	20'-5"	436	STR							
FA803	1	2'-8"	7	STR							
FA804	1	1'-8"	4	STR							
		SUB-TOTAL	8097								



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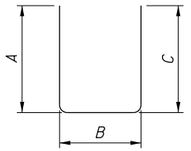

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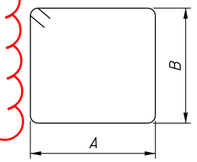
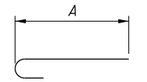
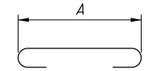


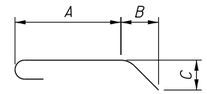
TYPE-3



TYPE-16



TYPE-17



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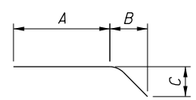
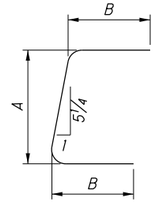
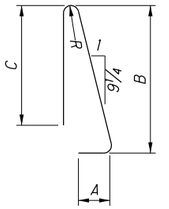


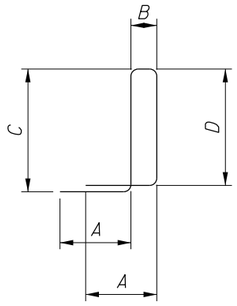
TYPE-19



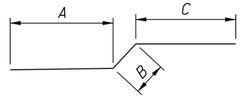
TYPE-28



TYPE-22



TYPE-30



TYPE-37

VARIES FROM B TO C BY INC.

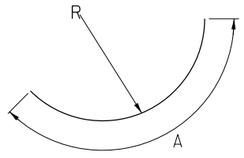
A = NO. OF BAR IN SERIS

TYPE-39

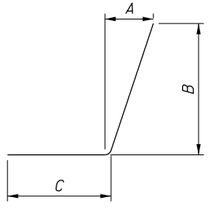
VARIED FROM B TO C BY INC.

A = NO. OF BAR IN SERIS

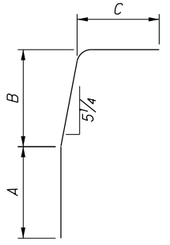
TYPE-38



TYPE-40



TYPE-41



TYPE-42

NOTES:

1. SEE REINFORCING STEEL NOTES ON SHEET 29.

DESIGN AGENCY
JACOBS
1880 WAYCROSS ROAD
CINCINNATI, OHIO 45240

DESIGNED	DRAWN	REVIEWED	DATE
MM	MM	JTC	5/2022
CHECKED	REVISED	STRUCTURE FILE NUMBER	
FBW		2900213	

REINFORCING STEEL LIST II
BRIDGE NO. GRE-035-0627
VALLEY/TREBEIN ROAD OVER U.S. 35

GRE-US 35-5.63
PID No. 107217

30 / 30

601A
698

Nowaza
9/19/2022 9:31:41 AM
035_0627RL002.dgn