LOCATION MAP

LATITUDE: N 41°25'50" LONGITUDE: W 81°36'10"

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

DESIGN DESIGNATION

ROUTE	ADT (2026)	ADTT (2026)	ADT (2046)	ADTT (2046)	D	DESIGN SPEED	LEGAL SPEED	DESIGN FUNC. CLASS	NHS ROUTE?
S.R. 14 (BROADWAY AVE.)	18500	1295	19000	1330	0.51	35	35	03 - PRINCIPAL ARTERIAL (URBAN)	Y
C.R. 240 (HENRY ST.)	7000	630	7500	675	0.54	25	25	07 - LOCAL (URBAN)	N
CHAINCRAFT RD.						25		07 - LOCAL (URBAN)	N

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

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

PLAN PREPARED BY:
AECOM
564 WHITE POND DRIVE AKRON, OHIO 44320-1100
(330) 836-9111

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CUY-14-6.93

RECONSTRUCTION OF THE EXISTING GRADE-SEPARATED CROSSING WITH THE NORFOLK SOUTHERN RAILROAD AND WHEELING AND LAKE ERIE RAILROAD

CITY OF GARFIELD HEIGHTS
CUYAHOGA COUNTY

INDEX OF SHEETS:

FEDERAL PROJECT NUMBER

E190 (250)

RAILROAD INVOLVEMENT

NORFOLK SOUTHERN AND WHEELING AND LAKE ERIE

PROJECT DESCRIPTION

REPLACE THE WHITEHOUSE CROSSING BRIDGE (SR-14) OVER THE NORFOLK AND SOUTHERN RAILROAD ON A NEW ALIGNMENT. WORK INCLUDES NEW PAVEMENT, CURBS, WALKS, STORM DRAINAGE, 22'X7' AND 8'X4' CULVERTS, MSE WALLS, WATERLINE AND SANITARY RELOCATIONS, TRAFFIC SIGNAL, SIGNING AND PAVEMENT MARKINGS, AND LIGHTING.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	7.72 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	1.00 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	8.72 ACRES

2023 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKINGOF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE SIDE ROADS AS DESCRIBED ON SHEET P.25 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

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

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS

BP-2.2	1/15/21	CB-2-2B	7/19/24	WQ-1.2	1/15/16	TC-41.20	10/18/13	MT-95.31	7/19/19	AS-1-15	1/20/23	800	7/19/24	WATERWAY PERMIT	
BP-3.1	1/19/24	CB-2-3	7/19/24			TC-41.30	4/21/23	MT-95.41	7/21/23	AS-2-15	1/20/23	809	7/19/24	08/15/2024	
BP-3.2	1/18/19	CB-3	7/19/24	HL-10.11	7/21/23	TC-41.40	10/18/13	MT-95.50	7/21/17	BR-2-15	7/19/24	813	7/21/23		
BP-4.1	7/19/13	CB-3A	7/19/24	HL-10.12	7/21/23	TC-42.20	10/18/13	MT-96.11	7/21/23	EXJ-4-87	1/19/24	825	7/19/24		
BP-5.1	7/15/22			HL-10.13	1/20/23	TC-52.10	10/18/13	MT-96.20	7/21/23	GSD-1-19	7/19/24	832	7/19/24		
BP-7.1	7/19/24	DM-1.1	7/17/20	HL-20.11	7/21/23	TC-52.20	1/15/21	MT-97.10	4/19/19	PCB-91	7/17/20	836	1/19/24		
		DM-1.2	7/16/21	HL-20.14	4/17/20	TC-71.10	4/21/23	MT-97.11	1/20/17	VPF-1-24	7/19/24	840	7/19/24		
RM-1.1	1/20/23	DM-4.2	7/20/12	HL-30.11	7/21/23	TC-74.10	7/21/23	MT-101.60	4/21/23			867	4/15/22		
RM-4.2	4/17/20	DM-4.3	1/15/16	HL-30.21	4/17/20	TC-81.11	1/19/24	MT-101.70	7/19/24			895	4/18/14		
RM-4.5	1/17/25	DM-4.4	1/15/16	HL-30.22	1/15/21	TC-81.22	7/21/23	MT-101.75	7/21/23			909	7/19/24		
RM-4.6	7/19/24			HL-30.31	7/19/24	TC-83.10	1/17/20	MT-103.10	1/21/22			913	4/16/21		
		HW-2.1	7/15/22	HL-40.20	7/19/24	TC-83.20	7/19/24	MT-105.10	1/17/20			961	4/17/20		
MH-1	7/15/22	HW-2.2	7/20/18	HL-50.11	1/16/15	TC-85.10	1/19/24	MT-110.10	7/19/13			995	7/17/15		
MH-2	7/19/24			HL-50.21	7/15/22	TC-85.20	4/21/23								
MH-3	7/19/24			HL-60.11	7/21/17										
MH-5	7/19/24			HL-60.31	7/19/24										

ENGINEER'S SEAL	ENGINEER'S SEAL
FOR SHEETS P.1 - P.208	FOR SHEETS P.209 - P.399
STATE OF OHIO ROBERT J. JANKOVSKY E-88606 REGISTERED PROFESSIONAL ENGINEER	STATE OF OHIO JOSHUA DAVID MILLER E-86773 REGISTERED PROFESSIONAL ENGINEER

TITLE SHEET

DESIGN AGENCY
AECOM
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Akron, OH 44320
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DESIGNER RJJ
REVIEWER WFS 08/05/24
PROJECT ID 104132
SHEET P.1 TOTAL 399

CUY-14-6.93
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 2:59:33 PM USER: robert.jankovsky
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132\400-Engineering\Roadway\Sheets\104132_GT001.dgn

MAINTENANCE OF TRAFFIC

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED ON S.R. 14 AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, AND TEMPORARY SURFACES USING ITEM 614. A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON HENRY STREET EXCEPT DURING PHASE 2 WHEN HENRY STREET WILL BE COMPLETELY CLOSED AND TRAFFIC DETOURED.

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

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

NOTICE OF CLOSURE SIGN TIME TABLE:

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

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

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

HENRY STREET

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS FOR PURPOSES PERTAINING TO MAINTAINING TRAFFIC (INCLUDING DETOURS) SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

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

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 409 CU. YD.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 358 M. GAL.

FLOODLIGHTING

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

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

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

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. *EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.*
2. *NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.*

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION. IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE OR THE CITY OF GARFIELD HEIGHTS FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION (CONT.)

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 3 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6 AM TO 9 AM OR 3 PM TO 6 PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF-DUTY CITY OF GARFIELD HEIGHTS POLICE, HIRED BY THE CONTRACTOR:

S.R. 14 / HENRY STREET

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. *TIME OF NOTIFICATION OF MALFUNCTION;*
2. *TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;*
3. *ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;*
4. *A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;*
5. *TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.*

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC
GENERAL NOTES

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DESIGNER STO
REVIEWER WFS 08/05/24
PROJECT ID 104132
SHEET P.16 TOTAL 399

CUY-14-6.93

MODEL: MOT Gen. Notes - 1 PAPERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 4:02:56 PM USER: robert.jankovsky
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SEQUENCE OF CONSTRUCTION AND INTERIM COMPLETION DATE TABLE	CONSTRUCTION PHASE	PHASE 1				
PROJECT LOCATION	CONSTRUCTION SUB-PHASE	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
	BEGIN DATE (SEE NOTE 1)	MARCH 31, 2025 (ANTICIPATED NOTICE TO PROCEED)	- - -	- - -	- - -	OCTOBER 1, 2026
	END DATE (SEE NOTE 1)	- - -	- - -	(SEE NOTE 5)	ICD#1= SEPTEMBER 30, 2026 (SEE NOTE 2)	ICD#2 = OCTOBER 31, 2026 (SEE NOTES 2 & 5)
NORTH OF RAILROAD PROPERTIES	SR 14	MAINTAIN EXISTING TRAFFIC PATTERN; (SEE NOTE 3)	MAINTAIN EXISTING TRAFFIC PATTERN (SEE NOTE 6); COMPLETE WALL 4; CONSTRUCT WALL 3 AS NEEDED FOR OLD BROADWAY CONSTRUCTION BUT NOT TO IMPEDE DETOURED TRAFFIC OR FORWARD ABUTMENT CONSTRUCTION	MAINTAIN ONE LANE EACH WAY ON EXISTING EASTBOUND LANES; COMPLETE GROUND IMPROVEMENT, FOOTING, STEM, ETC., FOR FORWARD ABUTMENT; REMOVE EXISTING WESTBOUND SUPERSTRUCTURE AND SUBSTRUCTURE OF CONCRETE SPANS TO LIMITS SHOWN ON PLANS	COMPLETE WALL 3 AND COMPLETE ALL OTHER PHASE 1 WORK FROM FORWARD ABUTMENT TO END PROJECT EXCEPT FOR FINAL PAVING/STRIPING/SIGNING	COMPLETE PAVING REQUIRED TO IMPLEMENT PHASE 2 MOT, ALONG WITH STRIPING, SIGNING; THEN MOVE TRAFFIC TO MAINTAIN ONE LANE EACH WAY ON COMPLETED CONSTRUCTION
	OLD BROADWAY	CONSTRUCT TEMPORARY DRIVE, THEN MAINTAIN EXISTING OLD BROADWAY TRAFFIC AS IS AND ON TEMPORARY DRIVE TO COMPLETE THE FOLLOWING: ALL GROUND IMPROVEMENTS FOR FORWARD ABUTMENT AND APPROACHES, ALL RMR REMEDIATION; AND ALL UTILITY RELOCATIONS IMPACTED BY THIS WORK. CONSTRUCT OLD BROADWAY DETOUR AFTER ABOVE WORK IS COMPLETED, THEN MOVE OLD BROADWAY TRAFFIC TO THE DETOUR; (SEE NOTE 3)	MAINTAIN DETOUR; COMPLETE CONSTRUCTION OF PROPOSED OLD BROADWAY, EXCEPT FOR FINAL PAVING/STRIPING/SIGNING, WHICH INCLUDES SANITARY SEWER RELOCATION, STORM SEWER, AND ALL DOWNSTREAM STORM SEWER, BMP, MANHOLES, AND HEADWALL; THEN MOVE OLD BROADWAY TRAFFIC TO NEW CONSTRUCTION, INCLUDING TEMPORARY DRIVES	MAINTAIN TRAFFIC ON COMPLETED CONSTRUCTION	MAINTAIN TRAFFIC ON COMPLETED CONSTRUCTION	MAINTAIN TRAFFIC ON COMPLETED CONSTRUCTION
THROUGH AND ADJACENT TO RAILROAD PROPERTIES	SR 14	MAINTAIN EXISTING TRAFFIC PATTERN; BEGIN CONSTRUCTION OF ALL PILE DRIVING, FOOTINGS, STEMS, ETC., FOR PIER 1 (SEE NOTE 3)	MAINTAIN EXISTING TRAFFIC PATTERN (SEE NOTE 6); COMPLETE CONSTRUCTION OF ALL PILE DRIVING, FOOTINGS, STEMS, ETC., FOR PIER 1 AND PIER 2	MAINTAIN ONE LANE EACH WAY ON EXISTING EASTBOUND LANES	COMPLETE ENTIRE SUPERSTRUCTURE OF PROPOSED BRIDGE EXCEPT FOR STRIPING	COMPLETE STRIPING REQUIRED FOR PHASE 2 MOT; THEN MOVE TRAFFIC TO MAINTAIN ONE LANE EACH WAY ON COMPLETED CONSTRUCTION
SOUTH OF RAILROAD PROPERTIES	SR 14	MAINTAIN EXISTING TRAFFIC PATTERN; (SEE NOTE 3)	MAINTAIN EXISTING TRAFFIC PATTERN (SEE NOTE 6)	MAINTAIN ONE LANE EACH WAY ON EXISTING EASTBOUND LANES; REMOVE EXISTING WESTBOUND SUPERSTRUCTURE AND SUBSTRUCTURE OF CONCRETE SPANS TO LIMITS SHOWN ON PLANS; INSTALL TEMPORARY SIGNAL AT HENRY STREET AND REMOVE EXISTING SIGNAL; COMPLETE CONSTRUCTION OF ALL PILE DRIVING, FOOTING, STEM, ETC., FOR REAR ABUTMENT	COMPLETE WALL 1 AND WALL 2; COMPLETE ALL OTHER PHASE 1 WORK FROM BEGIN PROJECT TO REAR ABUTMENT EXCEPT FOR FINAL PAVING/STRIPING/SIGNING	COMPLETE PAVING REQUIRED TO IMPLEMENT PHASE 2 MOT, ALONG WITH STRIPING, SIGNING; THEN MOVE TRAFFIC TO MAINTAIN ONE LANE EACH WAY ON COMPLETED CONSTRUCTION
	HENRY STREET	MAINTAIN EXISTING TRAFFIC PATTERN; (SEE NOTE 3)	MAINTAIN EXISTING TRAFFIC PATTERN	MAINTAIN EXISTING TRAFFIC PATTERN; INSTALL TEMPORARY SIGNAL AT SR 14 AND REMOVE EXISTING SIGNAL	MAINTAIN EXISTING TRAFFIC PATTERN USING TEMPORARY SIGNAL	MAINTAIN EXISTING TRAFFIC PATTERN USING TEMPORARY SIGNAL UNTIL SR 14 TRAFFIC IS SWITCHED OVER TO THE NEW CONSTRUCTION; THEN IMPLEMENT HENRY STREET DETOUR
	CHAINCRAFT ROAD	REDUCE TO ONE LANE OF TWO-WAY TRAFFIC ON EXISTING EASTBOUND LANE WITH TEMPORARY SIGNAL PER MT-96.11 TO ALLOW PIER 1 CONSTRUCTION AND TO COMPLETE PROPOSED MASONRY COLLAR AND 4X6 CULVERT REPLACEMENT, AND COMPLETE SANITARY SEWER RELOCATION; (ALSO SEE NOTE 3)	SWITCH TO MAINTAIN ONE LANE OF TWO-WAY TRAFFIC WITH TEMPORARY SIGNAL ON EXISTING WESTBOUND LANE PER MT-96.11 TO COMPLETE 4X6 CULVERT REPLACEMENT, CHAINCRAFT STORM SEWER AND MANHOLE, JUNCTION CHAMBER #1, AND 4x8 CULVERT RELOCATION TO THE DOWNSTREAM TEMPORARY TIE-IN TO THE 22x7 MILL CREEK CULVERT (SEE NOTE 4)	KEEP ONE LANE OF TWO-WAY TRAFFIC WITH TEMPORARY SIGNAL ON EXISTING WESTBOUND LANE PER MT-96.11 TO ALLOW REAR ABUTMENT CONSTRUCTION	PROVIDE ONE LANE IN EACH DIRECTION	PROVIDE ONE LANE IN EACH DIRECTION

NOTES:

1. THE BEGIN AND END DATES SHOWN IN EACH COLUMN ARE THE LAST DATES TO BEGIN AND END THE PHYSICAL CONSTRUCTION WORK SHOWN. IF A DATE IS POPULATED, THAT DATE IS CONSIDERED A CONTRACTURAL INTERIM COMPLETION DATE.
2. ICD# = INTERIM COMPLETION DATES. ALL WORK LISTED IN THESE COLUMNS MUST BE COMPLETED NO LATER THAN THESE DATES.
3. COORDINATE AND COOPERATE WITH ANY REMAINING PRIVATE UTILITY RELOCATIONS TO BE COMPLETED IN THIS TIMEFRAME PER THE UTILITY NOTE.
4. MAINTAIN FLOW FROM THE EXISTING 4' X 6' CULVERT COMING FROM THE NORFOLK SOUTHERN PROPERTY TO MILL CREEK AT ALL TIMES.
5. FOR SCHEDULING PURPOSES, ASSUME NO FOULING OF NORFOLK SOUTHERN TRACKS WILL BE ALLOWED EACH YEAR BETWEEN OCTOBER 1 AND FEBRUARY 1.
6. WITH ENGINEER APPROVAL, CONTRACTOR MAY IMPLEMENT REDUCING TRAFFIC TO ONE LANE IN EACH DIRECTION ON SR 14 PRIOR TO PHASE 1 STEP 3 TO BEGIN DEMO OF EXISTING WESTBOUND CONCRETE SPANS.

MAINTENANCE OF TRAFFIC
GENERAL NOTES

DESIGN AGENCY
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Akron, OH 44320
(330) 836-9111
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DESIGNER RJJ
REVIEWER WFS 08/05/24
PROJECT ID 104132
SHEET P.19 TOTAL 399

CUY-14-6.93

MODEL: Seq. of Const. - 1 PAPERSIZE: 34x22 (In.) DATE: 2/7/2025 TIME: 3:42:09 PM USER: robert.jankovsky
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SEQUENCE OF CONSTRUCTION AND INTERIM COMPLETION DATE TABLE	CONSTRUCTION PHASE	PHASE 2		PHASE 3
PROJECT LOCATION	CONSTRUCTION SUB-PHASE	STEP 1	STEP 2	STEP 1
	BEGIN DATE (SEE NOTE 1)	NOVEMBER 1, 2026	FEBRUARY 2, 2027	JULY 1, 2027
	END DATE (SEE NOTE 1)	ICD#3 = FEBRUARY 1, 2027 (SEE NOTES 2 & 5)	ICD#4 = JUNE 30, 2027 (SEE NOTE 2)	ICD#5 = AUGUST 31, 2027 (SEE NOTE 2)
NORTH OF RAILROAD PROPERTIES	SR 14	REMOVE REMAINING SUPERSTRUCTURE AND SUBSTRUCTURE OF EXISTING CONCRETE SPANS	COMPLETE WALL 6 AND ALL OTHER PHASE 2 WORK FROM FORWARD ABUTMENT TO END PROJECT, EXCEPT FOR FINAL PAVING/STRIPING/SIGNING	COMPLETE ALL FINAL PAVING/STRIPING/SIGNING AND PLACE TRAFFIC IN COMPLETED LANES
	OLD BROADWAY	MAINTAIN TRAFFIC ON COMPLETED CONSTRUCTION	MAINTAIN TRAFFIC ON COMPLETED CONSTRUCTION	COMPLETE ALL FINAL PAVING/STRIPING/SIGNING AND PLACE TRAFFIC IN COMPLETED LANES
THROUGH AND ADJACENT TO RAILROAD PROPERTIES	SR 14	N/A (SEE NOTE 5)	COMPLETE DEMOLITION OF EXISTING SR 14 BRIDGE OVER TRACKS	COMPLETE FINAL STRIPING AND PLACE TRAFFIC IN COMPLETED LANES
SOUTH OF RAILROAD PROPERTIES	SR 14	REMOVE REMAINING SUPERSTRUCTURE AND SUBSTRUCTURE OF EXISTING CONCRETE SPANS	COMPLETE WALL 5 AND ALL OTHER PHASE 2 WORK FROM BEGIN PROJECT TO REAR ABUTMENT, EXCEPT FOR FINAL PAVING/STRIPING/SIGNING	COMPLETE ALL FINAL PAVING/STRIPING/SIGNING AND PLACE TRAFFIC IN COMPLETED LANES
	HENRY STREET	TRAFFIC IS DETOURED; REMOVE SUPERSTRUCTURE AND SUBSTRUCTURE OF ALL EXISTING CONCRETE SPANS; AND PERFORM REMOVAL OF OLD AND INSTALLATION OF NEW 22' X 7' CULVERT AND JUNCTION CHAMBER #3 (IF NEEDED)	TRAFFIC IS DETOURED; COMPLETE REMOVAL OF OLD AND INSTALLATION OF NEW 22' X 7' CULVERT AND JUNCTION CHAMBER #3 (IF NEEDED); COMPLETE WALL 7 AND ALL OTHER PHASE 2 WORK, EXCEPT FOR FINAL PAVING/STRIPING/SIGNING	COMPLETE ALL FINAL PAVING/STRIPING/SIGNING AND PLACE TRAFFIC IN COMPLETED LANES
	CHAINCRAFT ROAD	REDUCE TO ONE LANE OF TWO-WAY TRAFFIC WITH TEMPORARY SIGNAL ON EXISTING WESTBOUND LANE PER MT-96.11, AND PERFORM REMOVAL OF OLD 22' X 7' CULVERT AND INSTALLATION OF NEW 22' X 7' CULVERT AND JUNCTION CHAMBER #2 (SEE NOTE 4)	KEEP ONE LANE OF TWO-WAY TRAFFIC WITH TEMPORARY SIGNAL ON EXISTING WESTBOUND LANE PER MT-96.11 TO COMPLETE CONSTRUCTION OF NEW 22' X 7' CULVERT AND JUNCTION CHAMBER #2 (SEE NOTE 4); SWITCH UPSTREAM FLOW TO NEW CULVERT; COMPLETE ALL FINAL PAVING/STRIPING/SIGNING FOR EASTBOUND LANE	SWITCH TO MAINTAIN ONE LANE OF TWO-WAY TRAFFIC WITH TEMPORARY SIGNAL ON EASTBOUND LANE PER MT-96.11 TO COMPLETE ALL FINAL PAVING/STRIPING/SIGNING FOR WESTBOUND LANE; THEN PLACE TRAFFIC IN COMPLETED LANES

NOTES:

1. THE BEGIN AND END DATES SHOWN IN EACH COLUMN ARE THE LAST DATES TO BEGIN AND END THE PHYSICAL CONSTRUCTION WORK SHOWN. IF A DATE IS POPULATED, THAT DATE IS CONSIDERED A CONTRACTURAL INTERIM COMPLETION DATE.
2. ICD# = INTERIM COMPLETION DATES. ALL WORK LISTED IN THESE COLUMNS MUST BE COMPLETED NO LATER THAN THESE DATES.
3. COORDINATE AND COOPERATE WITH ANY REMAINING PRIVATE UTILITY RELOCATIONS TO BE COMPLETED IN THIS TIMEFRAME PER THE UTILITY NOTE.
4. MAINTAIN FLOW FROM THE EXISTING 4' X 6' CULVERT COMING FROM THE NORFOLK SOUTHERN PROPERTY TO MILL CREEK AT ALL TIMES.
5. FOR SCHEDULING PURPOSES, ASSUME NO FOULING OF NORFOLK SOUTHERN TRACKS WILL BE ALLOWED EACH YEAR BETWEEN OCTOBER 1 AND FEBRUARY 1.
6. WITH ENGINEER APPROVAL, CONTRACTOR MAY IMPLEMENT REDUCING TRAFFIC TO ONE LANE IN EACH DIRECTION ON SR 14 PRIOR TO PHASE 1 STEP 3 TO BEGIN DEMO OF EXISTING WESTBOUND CONCRETE SPANS.

MAINTENANCE OF TRAFFIC GENERAL NOTES

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REVIEWER WFS 08/05/24

PROJECT ID 104132

SHEET P.20 | TOTAL 399

CUY-14-6.93

MODEL: Seq. of Const. - 2 PAPERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 3:42:11PM USER: robert.jankovsky
pw:\\aecom-nd-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\10432\400-Engineering\MOT\Sheets\104132_MN001.dgn

SHEET NUM.																			PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.11	P.12	P.14	P.61	P.62	P.63	P.64	P.66	P.67	P.68	P.69	P.70	P.71	P.72	P.73	P.74	P.75	P.215	P.327	01/BRO/10						
																								ROADWAY	
LS																			LS	201	11000	LS		CLEARING AND GRUBBING	
				LS															LS	202	11000	LS		STRUCTURE REMOVED (EX. CONC. BLOCK WALL)	
				LS															LS	202	11200	LS		PORTIONS OF STRUCTURE REMOVED (EX. WALL)	
													5,992						5,992	202	23000	5,992	SY	PAVEMENT REMOVED	
													6,418						6,418	202	30000	6,418	SF	WALK REMOVED	
				LS															LS	202	30204	LS		STEPS REMOVED	
													2,068						2,068	202	32000	2,068	FT	CURB REMOVED	
					1,114	1,008		1,465											3,587	202	35100	3,587	FT	PIPE REMOVED, 24" AND UNDER	
							52												52	202	35200	52	FT	PIPE REMOVED, OVER 24"	
				376															376	202	38000	376	FT	GUARDRAIL REMOVED	
					2	4	3												9	202	58000	9	EACH	MANHOLE REMOVED	
					7	8													15	202	58100	15	EACH	CATCH BASIN REMOVED	
				6															6	202	60010	6	EACH	MONUMENT ASSEMBLY REMOVED	
				111															111	202	75000	111	FT	FENCE REMOVED	
				1															1	202	75250	1	EACH	GATE REMOVED	
								12											12	202	75610	12	EACH	VALVE BOX REMOVED	P.158
							258												258	202	98700	258	FT	ABANDON MISC.: PLUG AND FILL 42" SANITARY CONDUIT	P.14
														8,175	5,697	3,465			17,337	203	10000	17,337	CY	EXCAVATION	
														54,541	9,722	17,374			81,637	203	20000	81,637	CY	EMBANKMENT	
												582							582	203	98100	582	SY	ROADWAY, MISC.: #4 WASHED LANDSCAPE GRAVEL, 4" THICK	P.12
									404	5,252	5,770	2,010							13,436	204	10000	13,436	SY	SUBGRADE COMPACTION	P.11
											454								454	204	13000	454	CY	EXCAVATION OF SUBGRADE	
											454								454	204	30010	454	CY	GRANULAR MATERIAL, TYPE B	
7											1								8	204	45000	8	HOUR	PROOF ROLLING	P.11
											1,360								1,360	204	50000	1,360	SY	GEOTEXTILE FABRIC	
			1																1	606	60002	1	EACH	IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL)	P.12
																	951	1,616	2,567	607	39901	2,567	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN	P.213
	LS																		LS	607	98200	LS		FENCE, MISC.: TEMPORARY FENCING	P.12
										12,254	4,144								16,398	608	10000	16,398	SF	4" CONCRETE WALK	
			315																315	608	52000	315	SF	CURB RAMP	
			20																20	608	53020	20	SF	DETECTABLE WARNING	
			868																868	622	10160	868	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
26																			26	623	38500	26	EACH	MONUMENT ASSEMBLY, TYPE C	
23																			23	623	40520	23	EACH	RIGHT-OF-WAY MONUMENT, TYPE B	
												582							582	SPECIAL	69012000	582	SY	FILTER FABRIC	P.12
		400																	400	SPECIAL	69065010	400	TON	WORK INVOLVING SOLID WASTE	P.14
		LS																	LS	SPECIAL	69070000	LS		ENVIRONMENTAL, SITE SPECIFIC HEALTH AND SAFETY PLAN	P.14
		400																	400	SPECIAL	69070020	400	TON	ENVIRONMENTAL, WORK INVOLVING RECYCLED MATERIAL	P.14

GENERAL SUMMARY

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DESIGNER BNC

REVIEWER WFS 08/05/24

PROJECT ID 104132

SHEET P.53 TOTAL 399

CUY-14-6.93

MODEL: GG001A PAPERSIZE: 34x22 (in.) DATE: 2/12/2025 TIME: 11:35:22 AM USER: Britney.Crandall
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132400-Engineering\Roadway\Sheets\104132_GG001.dgn

SHEET NUM.													PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.13	P.63	P.64	P.66	P.67	P.68	P.69	P.70	P.71	P.72	P.158	P.160	01/BRO/10		EXT	TOTAL			
																	DRAINAGE CONT.	
15,000												15,000	SPECIAL	61199820	15,000	LB	MISCELLANEOUS METAL	P.13
8												8	611	99900	8	EACH	DRAINAGE STRUCTURE, MISC.: UTILITY TEST HOLE	P.13
	1											1	611	99900	1	EACH	DRAINAGE STRUCTURE, MISC.: STORM DROP MANHOLE	P.13
		1										1	895	10040	1	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4	
																	PAVEMENT	
									353			353	252	01500	353	FT	FULL DEPTH PAVEMENT SAWING	
						1,086	1,182					2,268	302	56000	2,268	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
					32	965	1,031	335				2,363	304	20000	2,363	CY	AGGREGATE BASE	
						522	568					1,090	407	20000	1,090	GAL	NON-TRACKING TACK COAT	
							729					729	411	10000	729	CY	STABILIZED CRUSHED AGGREGATE	
						218	237					455	442	10000	455	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
						254	276					530	442	20170	530	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (448)	
					311							311	452	12010	311	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
								1,848				1,848	452	13070	1,848	SY	9.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA	
							70					70	609	12001	70	FT	COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	P.12
								951				951	609	14000	951	FT	CURB, TYPE 2-A	
						630	1,338					1,968	609	26000	1,968	FT	CURB, TYPE 6	
						775	146					921	609	26001	921	FT	CURB, TYPE 6, AS PER PLAN	P.12
																	WATER WORK	
				185								185	638	06704	185	FT	20" STEEL PIPE ENCASEMENT, OPEN CUT	
				4								4	638	09200	4	EACH	12" CUTTING-IN SLEEVE, VALVE AND VALVE BOX, CWD STD-005	P.158
				4								4	638	10700	4	EACH	FIRE HYDRANT REMOVED AND DISPOSED OF	P.158
				4								4	638	10800	4	EACH	VALVE BOX ADJUSTED TO GRADE	P.158
				1,581								1,581	SPECIAL	63820174	1,581	FT	12" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS (CWD STD-001)	P.158
											1,600	1,600	SPECIAL	63820496	1,600	FT	TEMPORARY BY PASS COMPLETE WITH JOINTS AND FITTINGS (CWD STD-H14 AND CWD STD-H16)	P.159
				3								3	SPECIAL	63820586	3	EACH	12" GATE VALVE WITH VALVE BOX (CWD STD-005)	P.159
				3								3	638	98000	3	EACH	WATER WORK, MISC.: FURNISHING AND SETTING 6" HYDRANT, COMPLETE, STRAIGHT, CWD STD-H13	P.158
				1								1	638	98000	1	EACH	WATER WORK, MISC.:REPLACE 1 ½" & SMALLER WATER SERVICE CONNECTIONS, LONG SIDE, COMPLETE	P.159
				2								2	638	98000	2	EACH	WATER WORK, MISC.:REPLACE 2" & SMALLER WATER SERVICE CONNECTIONS, LONG SIDE, COMPLETE	P.159
										LS		LS	638	98100	LS		WATER WORK, MISC.: CLEVELAND WATER DEPARTMENT CHARGES	P.158
				482								482	638	98600	482	FT	WATER WORK, MISC.: FILL AND PLUG EXISTING CONDUIT	P.158
											LS	LS	638	98100	LS		WATER WORK, MISC.: TEMPORARY BY PASS FOR WATER SERVICE CONNECTIONS	P.160
																	SANITARY SEWER	
			58									58	611	13400	58	FT	30" CONDUIT, TYPE B	
			163									163	611	20901	163	FT	48" CONDUIT, TYPE B, AS PER PLAN, 707.75	P.14
			158									158	611	21101	158	FT	48" CONDUIT, TYPE C, AS PER PLAN, 707.75	P.14
			1									1	611	98630	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
			5									5	611	99575	5	EACH	MANHOLE, NO. 3, AS PER PLAN	P.13
			4									4	611	99654	4	EACH	MANHOLE ADJUSTED TO GRADE	
			2									2	611	99900	2	EACH	DRAINAGE STRUCTURE, MISC.: DOGHOUSE MANHOLE	P.13

GENERAL SUMMARY

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REVIEWER WFS 08/05/24

PROJECT ID 104132

SHEET P.55 TOTAL 399

CUY-14-6.93

SHEET NUM.												PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
								P.62	P.73	P.75	P.327	01/BRO/10						
																	RETAINING WALLS (WALL 1 THROUGH WALL 7)	
									4,185	364	8,073	12,622	203	35120	12,622	CY	GRANULAR MATERIAL, TYPE C	
											LS	LS	203	98500	LS		ROADWAY, MISC.: COLUMN-SUPPORTED EMBANKMENTS AND WALLS	P.324
											LS	LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
											216,815	216,815	509	10000	216,815	LB	EPOXY COATED STEEL REINFORCEMENT	
											182	182	511	34450	182	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
											1,126	1,126	511	51512	1,126	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK	
											943	943	511	53012	943	CY	CLASS QC2 CONCRETE, MISC.: MOMENT SLAB	
											1,816	1,816	512	10050	1,816	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
											4,795	4,795	512	10100	4,795	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
											806	806	512	10001	806	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	P.323
											2,085	2,085	516	13200	2,085	SF	½" PREFORMED EXPANSION JOINT FILLER	
											4,860	4,860	516	13600	4,860	SF	1" PREFORMED EXPANSION JOINT FILLER	
											37,571	37,571	840	20000	37,571	SF	MECHANICALLY STABILIZED EARTH WALL	
											1,134	1,134	840	21000	1,134	CY	WALL EXCAVATION	
											3,870	3,870	840	22000	3,870	SY	FOUNDATION PREPARATION	
									57,346	3,035	45,760	106,141	840	23000	106,141	CY	SELECT GRANULAR BACKFILL	
											3,194	3,194	840	25010	3,194	FT	6" DRAINAGE PIPE, PERFORATED	
											1,598	1,598	840	26000	1,598	FT	CONCRETE COPING	
											6,438	6,438	840	26050	6,438	SF	AESTHETIC SURFACE TREATMENT	P.323
											5	5	840	27000	5	DAY	ON-SITE ASSISTANCE	
											LS	LS	840	28000	LS		SGB INSPECTION AND COMPACTION TESTING	
											LS	LS	867	00100	LS		TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL	
																	BUILDING DEMOLITION	
								LS				LS	202	56000	LS		BUILDING DEMOLISHED, PARCEL 17, 1 STORY METAL BUILDING	

GENERAL SUMMARY

DESIGN AGENCY

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REVIEWER WFS 08/05/24

PROJECT ID 104132

SHEET P.58 TOTAL 399

CUY-14-6.93

MODEL: GG001F PAPERSIZE: 34x22 (in.) DATE: 2/12/2025 TIME: 6:14:46 PM USER: robert.jankovsky
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132\400-Engineering\Roadway\Sheets\104132_GG001.dgn

SHEET NUM.	PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	01/BRO/10						
						STRUCTURE OVER 20 FOOT SPAN	
						STRUCTURE CUY-00014-06.930 (SFN 1801806) ESTIMATED QUANTITIES	P.215
						STRUCTURE CUY-CR00240-00.610 (SFN 1834038) ESTIMATED QUANTITIES	P.311

GENERAL SUMMARY

CUY-14-6.93

MODEL: GG001G PAPERSIZE: 34x22 (in.) DATE: 2/12/2025 TIME: 6:14:48 PM USER: robert.jankovsky
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60561903-CUY-14-6.93\104132\400-Engineering\Roadway\Sheets\104132_GG001.dgn

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DESIGNER
BNC

REVIEWER
WFS 08/05/24

PROJECT ID
104132

REF NO.	SHEET NO.	STATION TO STATION						606 IMPACT ATTENUATOR, TYPE 1 (UNIDIRECTIONAL) EACH	608 CURB RAMP SF	608 DETECTABLE WARNING SF	622 CONCRETE BARRIER, SINGLE SLOPE, TYPE D FT
				SR 14							
B1	P.78-P.80	366+90.00	RT	TO	369+61.61	RT					271.61
B2	P.78-P.80	367+40.00	LT	TO	368+60.00	LT					120.00
B3	P.80,P.82,P.88	372+28.24	RT	TO	17+40.00	LT					366.02
B4	P.84	381+37.00	LT					1			
B5	P.86	382+70.00	RT	TO	383+80.00	RT					110.00
CR1	P.82	373+65.00	RT						100		
CR1A	P.82	373+66.00	LT							10	
CR2	P.82	373+88.00	RT						100		
CR2A	P.82	374+51.00	RT							10	
CR3	P.84	381+77.00	LT						65		
CR4	P.86	382+76.00	LT						50		
TOTALS CARRIED TO GENERAL SUMMARY								1	315	20	868

ROADWAY SUBSUMMARY

CUY-14-6.93

MODEL: GS001 PAPERSIZE: 34x22 (in.) DATE: 2/11/2025 TIME: 11:10:14 AM USER: Brittney.Crandall
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\605819\03-CUY-14-6.93\104132400-Engineering\Roadway\Sheets\104132_GS001.dgn

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DESIGNER RJJ
REVIEWER WFS 08/05/24
PROJECT ID 104132
SHEET P.61 TOTAL 399

REF NO.	SHEET NO.	STATION TO STATION						202 PIPE REMOVED, 24" AND UNDER FT	202 VALVE BOX REMOVED EACH	638 20" STEEL PIPE ENCASEMENT, OPEN CUT FT	638 12" CUTTING-IN SLEEVE, VALVE AND VALVE BOX, CWD STD-005 EACH	638 FIRE HYDRANT REMOVED AND DISPOSED OF EACH	638 VALVE BOX ADJUSTED TO GRADE EACH	SPECIAL 12" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS FT	SPECIAL 12" GATE VALVE WITH VALVE BOX EACH	638 WATER WORK, MISC.: FURNISHING AND SETTING 6" HYDRANT, COMPLETE, STRAIGHT, CWD STD-H13 EACH	638 WATER WORK, MISC.:REPLACE 1 ½" & SMALLER WATER SERVICE CONNECTIONS, LONG SIDE, COMPLETE EACH	638 WATER WORK, MISC.:REPLACE 2" & SMALLER WATER SERVICE CONNECTIONS, LONG SIDE, COMPLETE EACH	638 WATER WORK, MISC.: FILL AND PLUG EXISTING CONDUIT FT
		HENRY STREET WATER																	
W1	P.171	599+90.00	RT								1								
W2	P.171-P.172	599+90.00	RT	TO	605+26.19	RT								537					
W3	P.171-P.172	600+00.00	RT	TO	603+90.00	LT	401												
W4	P.171	600+06.60	LT					1											
W5	P.171-P.172	603+90.00	LT	TO	606+81.29	LT													346
W6	P.172	604+90.93	RT	TO	605+03.60	LT	37												
W7	P.172	605+01.44	LT					1											
W8	P.172	605+26.19	RT												1				
W9	P.172	605+26.19	RT	TO	607+51.00	RT			169					225					
W10	P.172	606+81.29	LT	TO	607+09.35	LT	20												
W11	P.172	607+09.35	LT	TO	607+51.00	RT													46
W12	P.172	607+57.21	RT					1		1									
W13	P.172	607+43.02	LT								1								
W14	P.172	607+43.02	LT	TO	607+62.95	LT	13	1											
W15	P.172	607+26.89	LT													1			
		OLD BROADWAY AVENUE WATER																	
W16	P.173	499+90.00	RT								1								
W17	P.173	500+00.00	RT	TO	503+78.33	RT				16				379					
W18	P.173-P.174	500+00.00	RT	TO	508+16.93	RT	769												
W19	P.173	500+28.81	RT	TO	500+59.63	LT		1											43
W20	P.173	500+30.72	RT	TO	500+54.24	LT	33	1											
W21	P.173	500+54.24	RT	TO	500+54.24	LT												1	
W22	P.173	501+16.39	RT									1							
W23	P.173	501+16.39	RT	TO	501+16.88	RT	14												
W24	P.173	501+16.69	RT					1											
W25	P.173	501+92.84	RT	TO	501+92.84	RT													47
W26	P.173	502+57.24	RT													1			
W27	P.173	503+78.33	RT												1				
W28	P.173-P.174	503+78.33	RT	TO	506+74.39	RT								297					
W29	P.174	504+44.03	RT	TO	504+44.08	RT	29	1				1							
W30	P.174	505+33.41	RT					1											
W31	P.174	505+33.41	RT					1											
W32	P.174	505+33.43	RT	TO	505+40.41	RT	80												
W33	P.174	506+74.39	RT												1				
W34	P.174	506+74.39	RT	TO	508+16.93	RT								143					
W35	P.174	507+20.94	RT					1											
W36	P.174	507+20.96	RT	TO	507+20.86	RT	33												
W37	P.174	507+20.86	RT	TO	507+20.82	LT												1	
W38	P.174	507+32.02	RT	TO	507+32.38	RT	5	1				1							
W39	P.174	507+46.31	LT													1			
W40	P.174	507+57.52	RT	TO	507+57.82	RT	31												
W41	P.174	507+57.82	RT	TO	507+57.97	LT											1		
W42	P.174	508+22.21	RT								1								
W43	P.174	508+23.03	RT										1						
W44	P.174	508+27.50	RT										1						
W45	P.174	508+56.30	RT										1						
W46	P.174	508+67.65	RT										1						
TOTALS CARRIED TO GENERAL SUMMARY								1465	12	185	4	4	4	1581	3	3	1	2	482

WATER WORK SUBSUMMARY

DESIGN AGENCY
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DESIGNER BNC

REVIEWER WFS 08/05/24

PROJECT ID 104132

SHEET P.67 TOTAL 399

CUY-14-6.93

MODEL: GS006A PAPERSIZE: 34x22 (in.) DATE: 2/10/2025 TIME: 8:01:25 AM USER: Brittney.Crandall
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132400-Engineering\Roadway\Sheets\104132_GS006.dgn

CUY-14-6.93

MODEL: GS008C PAPERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 1:54:42 PM USER: Brittney.Crandall
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132\400-Engineering\Roadway\Sheets\104132_GS008.dgn

STATION RANGE FROM	STATION RANGE TO	SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SQ YD	CADD GENERATED AREA SQ YD	203 ROADWAY, MISC.: #4 WASHED LANDSCAPE GRAVEL, 4" THICK SY	204 SUBGRADE COMPACTION SY	304 AGGREGATE BASE CY	452 9.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA SY	609 CURB, TYPE 2-A FT	SPECIAL FILTER FABRIC SY
CHAINCRAFT RD.												
110+22.50	110+82.50	LT/RT	60.00	23.00	153.33					153.33		
110+22.50	110+82.50	LT/RT	60.00	26.00	173.33			173.33	28.89			
110+22.50	110+82.50	LT	60.00								60.00	
110+45.00	110+82.50	RT	37.50								37.50	
110+82.50	112+05.18	LT	122.68	13.00	177.20					177.20	122.68	
110+82.50	112+05.18	LT	122.68	14.50	197.65			197.65	32.94			
112+05.18	113+36.08	LT	165.36			351.31				351.31	165.36	
112+05.18	113+36.08	LT				379.03		379.03	63.17			
113+36.08	113+78.42	LT	42.34	15.00	70.57					70.57	42.34	
113+36.08	113+78.42	LT	42.34	16.50	77.62			77.62	12.94			
113+78.42	114+00.00	LT	21.58	15.00	35.97			35.97	5.99	35.97		
114+00.00	115+05.00	LT	105.00	12.38	144.38			144.38	24.06	144.38		
115+05.00	115+50.00	LT	45.00	9.75	48.75			48.75	8.13	48.75		
113+78.42	115+50.00	LT	30.82			81.37				81.37	30.82	
113+78.42	115+50.00	LT				86.28		86.28	14.38			
110+82.50	112+40.00	RT	157.50	13.00	227.50					227.50	157.50	
110+82.50	112+40.00	RT	157.50	14.50	253.75			253.75	42.29			
112+40.00	112+80.00	RT	40.00	14.00	62.22					62.22	40.00	
112+40.00	112+80.00	RT	40.00	15.50	68.89			68.89	11.48			
112+80.00	113+84.45	RT	104.45	15.00	174.08					174.08	104.45	
112+80.00	113+84.45	RT	104.45	16.50	191.49			191.49	31.92			
113+84.45	115+12.92	RT	152.48			274.38				274.38	152.48	
113+84.45	115+12.92	RT				299.95		299.95	49.99			
115+12.92	115+50.00	RT	37.08	11.25	46.35					46.35	37.08	
115+12.92	115+50.00	RT	37.08	12.75	52.53			52.53	8.75			
111+60.00	112+90.68	LT				147.46	147.46					147.46
110+90.65	112+96.03	RT				433.87	433.87					433.87
SUBTOTALS							581.33	2009.62	334.94	1847.41	950.21	581.33
TOTALS CARRIED TO GENERAL SUMMARY							582	2010	335	1848	951	582

PAVEMENT CALCULATIONS

DESIGN AGENCY
AECOM
564 White Pond Drive
Akron, OH 44320
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www.aecom.com

DESIGNER RJJ
REVIEWER WFS 08/05/24
PROJECT ID 104132
SHEET P.71 TOTAL 399

NOTE:

1. WHERE STORM SEWER IS PLACED WITHIN MSE WALL BACKFILL LIMITS, USE REINFORCED CONCRETE PIPE PER C&MS 706.02 WITH PREMIUM JOINTS PER 706.11 AND WRAP THE JOINTS WITH GEOTEXTILE FABRIC TYPE A PER 712.09

2. FIELD VISITS SHOW THERE IS A PIPE WHICH OUTLETS INTO THE EXISTING HEADWALL AND AN EXISTING WALL. THIS PIPE AND WALL WAS NOT SURVEYED. CONTINGENCY QUANTITIES WERE INCLUDED TO TIE IN THIS EXISTING PIPE AS NEEDED.REMOVE THE WALL AS NEEDED FOR CONSTRUCTION.

FOR PROFILE BETWEEN D18 AND D20 SEE SHEET P.100

FOR LEGEND SEE SHEET P.78

FOR HENRY ST. PLAN AND PROFILE SEE SHEETS P.88 - P.89

FOR CHAINCRAFT RD. PLAN AND PROFILE SEE SHEETS P.90 - P.91

FOR OLD BROADWAY AVE. PLAN AND PROFILE SEE SHEETS P.92 - P.93

FOR S.R. 14 CROSS SECTIONS SEE SHEETS P.94 - P.108

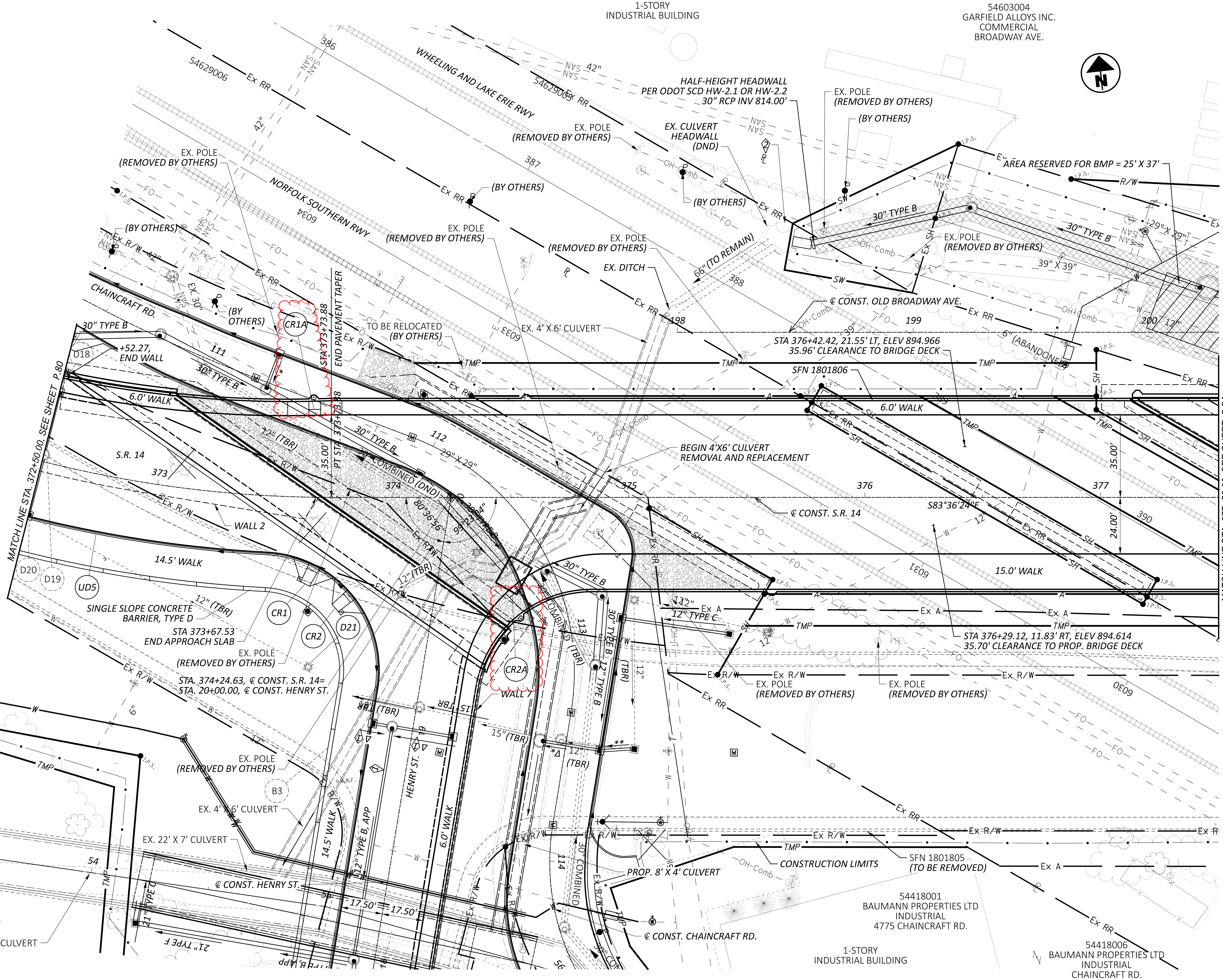
FOR HENRY ST. CROSS SECTIONS SEE SHEETS P.109 - P.117

FOR CHAINCRAFT RD. CROSS SECTIONS SEE SHEETS P.118 - P.131

FOR OLD BROADWAY AVE. CROSS SECTIONS SEE SHEETS P.132 - P.141

FOR INTERSECTION DETAILS SEE SHEET P.145

FOR NOTE ABOUT EXISTING WATER MAIN UNDER PIER 2 SEE NOTE 7 ON SHEET P.225



HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN - S.R. 14
STA. 372+50.00 TO STA. 377+50.00

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DESIGNER
RJJ

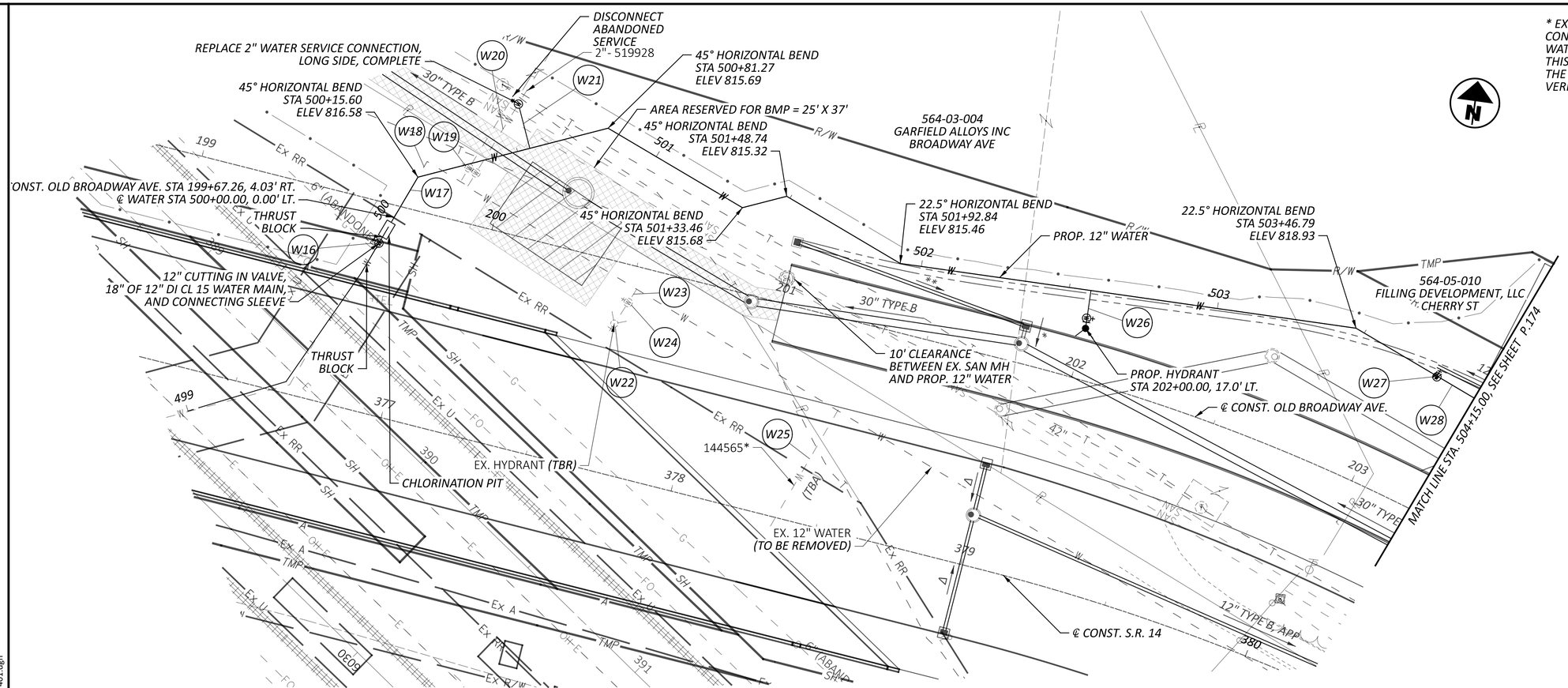
REVIEWER
WFS 08/05/24

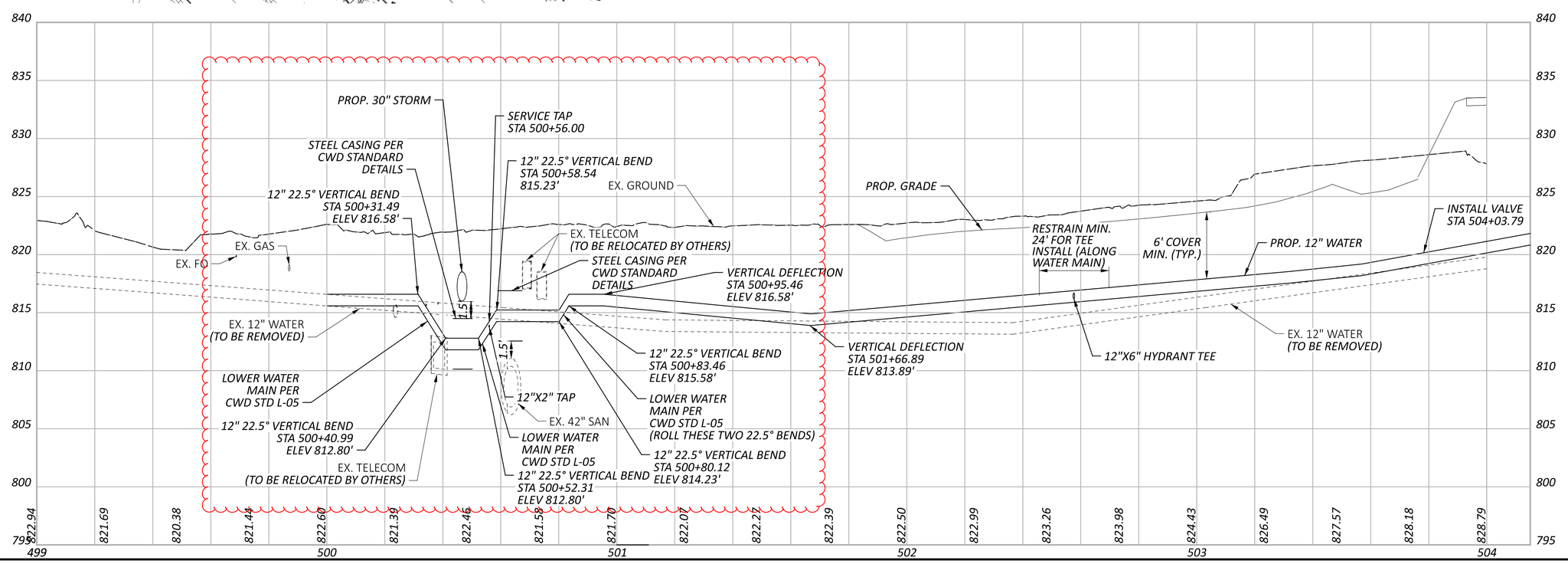
PROJECT ID
104132

SHEET P.82 TOTAL 399

CUY-14-6.93

MODEL: 104132_GP003 PAPERSIZE: 34x22 (in.) DATE: 2/11/2025 TIME: 11:05:10 AM USER: Brittney.Crandall
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132\400-Engineering\Roadway\Sheets\104132_GP003.dgn





WATER WORK PLAN AND PROFILE
BEGIN TO STA. 504+15.00

CUY-14-6.93

MODEL: Old Broadway Water - Plan 3 PAPERSIZE: 34x22 (in.) DATE: 2/7/2025 TIME: 3:10:18 PM USER: Brittney.Crandall
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132\400-Engineering\Utilities\Sheets\104132_UP401.dgn

DESIGN AGENCY
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DESIGNER BNC
REVIEWER WFS 08/05/24
PROJECT ID 104132
SHEET P.173
TOTAL 399

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

AS-1-15	DATED (REVISED)	01-20-23
AS-2-15	DATED (REVISED)	01-20-23
BR-2-15	DATED (REVISED)	01-21-22
EXJ-4-87	DATED (REVISED)	07-15-22
GSD-1-19	DATED (REVISED)	01-15-21
PCB-91	DATED (REVISED)	07-17-20
VPF-1-24	DATED (REVISED)	07-19-24

REFER TO THE FOLLOWING STANDARD CONSTRUCTION DRAWINGS:

BP-7.1	DATED (REIVSED)	01-20-23
RM-4.2	DATED (REVISED)	04-17-20

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SS800	DATED	7-15-22
SS840	DATED	4-15-22
SS867	DATED	4-15-22

DESIGN SPECIFICATIONS:

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

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.06 KIPS/FT^2

PEDESTRIAN LOAD: 0.075 KSF

SPECIAL DESIGN SPECIFICATIONS:

THIS BRIDGE REQUIRED THE USE OF AN IMPROVED 2-DIMENSIONAL GRID MODEL USING FINITE ELEMENT DESIGN METHOD TO ANALYZE THE STRUCTURE PER THE AASHTO G13.1-2019 GUIDELINES FOR STEEL GIRDER BRIDGE ANALYSIS, 2ND EDITION. THIS METHOD REQUIRES THE USAGE OF EQUIVALENT TORSION CONSTANT, WHICH ESTIMATES THE INFLUENCE OF GIRDER WARPING IN RESPONSE ON TORSIONAL STIFFNESS, AS WELL AS ACCOUNTING FOR BOTH THE SHEAR AND BENDING FLEXIBILITY OF THE CROSS-FRAMES. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS MIDAS CIVIL 2021 V1.2. THE BRIDGE COMPONENTS DESIGNED BY THIS METHOD AND THE LIVE LOAD DISTRIBUTION FACTORS USED WERE:

DEAD LOAD DISTRIBUTION: SLAB DEAD LOADS ARE DISTRIBUTED IN RELATION TO GIRDER SPACING AND TRIBUTARY WIDTH. COMPOSITE LOADS ARE DISTRIBUTED EQUALLY TO ALL GIRDERS. WHERE APPLICABLE, PEDESTRIAN LOADS ARE DISTRIBUTED BY INVERSE LEVER RULE TO TRIBUTARY GIRDERS.

LIVE LOAD DISTRIBUTION: TRAFFIC LINE LAYOUT IS INPUT INTO THE MODEL AND THE ANALYSIS SOFTWARE LONGITUDINALLY AND TRANSVERSELY LOCATES THE DESIGN VEHICLE FOR MOVING LOAD OPTIMIZATION. THE DESIGN PROGRAM DISTRIBUTED THE LIVE LOADS BASED ON BOTH THE LONGITUDINAL AND LATERAL STIFFNESS, LIVE LOAD DISTRIBUTION FACTORS VARY ALONG THE LENGTH AND WIDTH OF THE STRUCTURE.

DESIGN DATA:

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI
(SUPERSTRUCTURE)

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI
(SUBSTRUCTURE)

MASS CONCRETE CLASS QC4 - COMPRESSIVE STRENGTH 4.0 KSI

CONCRETE REINFORCEMENT:
EPOXY COATED STEEL REINFORCEMENT - MIN. YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50W - YIELD STRENGTH 50 KSI

STEEL H-PILES - ASTM A572 - YIELD STRENGTH 50 KSI

STEEL CIP PILES - ASTM A252 GRADE 3 - YIELD STRENGTH 45 KSI

MONOLITHIC WEARING SURFACE:

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

PROPOSED WORK:

THE WORK TO BE COMPLETED INCLUDES THE COMPLETE REPLACEMENT OF THE EXISTING BRIDGE.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 414.4 KIPS PER PILE FOR THE REAR AND FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 414.4 KIPS PER PILE FOR THE PIER 01 AND 02 PILES.

REAR ABUTMENT PILES:
125 16" DIAMETER PIPE PILES 25 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM (NON BATTERED PILE)
1 DYNAMIC LOAD TESTING ITEM (BATTERED PILE)

PIER 01 PILES:
44 16" DIAMETER PIPE PILES 25 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 02 PILES:
42 16" DIAMETER PIPE PILES 25 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PROVIDE PLAIN CYLINDRICAL CASINGS WITH A MINIMUM PILE WALL THICKNESS OF 0.46 INCH FOR THE CAST-IN-PLACE REINFORCED CONCRETE PIPE PILES. USE CONICAL STEEL PILE POINTS TO PROTECT THE TIPS OF THE PROPOSED STEEL CIP REINFORCED CONCRETE PIPE PILES AT ALL LOCATIONS.

FOUNDATION BEARING RESISTANCE:

FORWARD ABUTMENT SPREAD FOOTING, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 5.2 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 7.5 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 7.5 KIPS PER SQUARE FOOT.

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 THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.
AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.68 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 IN A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".
FOR THE DECK POUR SEQUENCE AS DETAILED IN THESE PLANS, SCREED RAILS ARE ASSUMED TO BE PLACED OVER GIRDERS A & H.

COLORS AND SURFACE TREATMENT:

ABUTMENTS, PIERS, PARAPETS AND DECK OVERHANGS: SEAL SURFACES, AS NOTED IN THE BRIDGE PLANS, WITH EPOXY-URETHANE USING FEDERAL STANDARD COLOR NUMBER 13522 (BUFF).

PARTIAL PAINTING OF A709 GRADE 50W STEEL: PAINT THE EXPOSED SIDE OF THE FASCIA GIRDERS WEB AND BOTTOM FLANGE FOR THE FULL LENGTH OF THE BRIDGE. IN ADDITION TO THE FASCIA'S, PAINT THE LAST 10 FT OF EACH GIRDER END ADJACENT TO THE ABUTMENTS INCLUDING ALL CROSS-FRAMES AND OTHER STEEL WITHIN THESE LIMITS. THE PRIME COAT SHALL BE PER 708.01. THE TOP COAT COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595B - 20045 OR 20059 (THE COLOR OF WEATHERING STEEL).

ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

FOR DETAILS AND NOTES, INCLUDING PAYMENT FOR PHASED REMOVAL OF THE EXISTING BRIDGE, SEE PHASED CONSTRUCTION DETAILS, SHEETS 8 , 99 THRU 15 , 99 .

REMOVE ALL CONCRETE SUBSTRUCTURE ELEMENTS OF THE EXISTING BRIDGE WITHIN THE RIGHT-OF-WAY LIMITS OF NORFOLK SOUTHERN RAILWAY AND WHEELING & LAKE ERIE RAILWAY DOWN TO THE ELEVATION OF TWO FEET BELOW PROPOSED GRADE.

THE CONTRACTOR SHALL INCLUDE THE TEMPORARY SUPPORT CONSTRUCTION COSTS NECESSARY FOR THE SAFE REMOVAL OF THE BROADWAY AVE. BRIDGE AS AN INCIDENTAL COST EMBEDDED IN THE ITEM 202 LUMP SUM. FOR DETAILS, SEE SHEET 8 , 99 .

MAINTENANCE OF TRAFFIC:

FOR MAINTENANCE OF TRAFFIC NOTES AND DETAILS, INCLUDING TEMPORARY BARRIER DETAILS AND PAY ITEMS, SEE SHEETS P.16 , 399 THRU P.52 , 399 .

ITEM 203 EMBANKMENT, AS PER PLAN:

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF ALL PROJECT APPROACH EMBANKMENT UNLESS NOTED OTHERWISE AS ITEM 203 SELECT GRANULAR BACKFILL.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN. THE COST OF TEMPORARY ANCHORS AS SHOWN ON THE PLANS WILL BE INCLUDED WITH THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

FOR ANY ALTERNATE DESIGNS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND OBTAINING RAILROAD APPROVAL OF THE DESIGN AND CONSTRUCTION OF THE TEMPORARY SUPPORT OF THE EXCAVATION ADJACENT TO THE RAILROAD. THE REQUIREMENTS OF CMS 501.05A SHALL BE MET IN THIS REGARD. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AS IT SHALL BE CONSIDERED INCIDENTAL TO ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN:

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH CMS SECTION 503 AND SHALL INCLUDE THE EXCAVATION REQUIRED TO CONSTRUCT THE NEW ABUTMENTS, WING WALLS AND PIER FOOTINGS. EXCAVATION AND BACKFILLING REQUIRED FOR SUBSTRUCTURE REMOVAL AND STRUCTURE DRAINAGE SHALL BE INCLUDED WITH RESPECTIVE ITEMS 202 AND 518.

ITEM 607 - VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN:

THIS ITEM SHALL BE AS PER THE DETAILS IN THE PLAN, THE APPLICABLE PORTIONS OF STANDARD DRAWING VPF-1-24, AND THE MANUFACTURER'S RECOMMENDATIONS.

THE ANCHORS ON TOP OF THE PROPOSED CONCRETE BRIDGE RAILING SHALL BE CAST IN PLACE WITH 6" OR 7" MINIMUM EMBEDMENT LENGTH, AS SHOWN ON THE STANDARD DRAWING FOR THE SPECIFIED BASE PLATE TYPE.

AT LOCATIONS WHERE THE EXISTING FENCE SPANS ACROSS THE EXPANSION JOINT, DO NOT INSTALL LINE RAILS AND EXPANSION JOINT SLEEVES; HOWEVER, THE FABRIC SHALL REMAIN CONTINUOUS ACROSS THE EXPANSION JOINT.

THE COLOR OF THE FENCE FABRIC, RAILS, POSTS, PLATES, TIE WIRES, AND ADDITIONAL VISUAL HARDWARE AND CAULK SHALL BE BLACK. SUBMIT A PROCEDURE FOR PAINTING ALL UNCOATED VISUAL HARDWARE BLACK.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 607 - VANDAL PROTECTION FENCE 6' STRAIGHT, COATED FABRIC, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

EXISTING STRUCTURE VERIFICATION:

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

UTILITY LINES:

SEE GENERAL NOTES, SHEET P.11 , 399 FOR THE LIST OF UTILITIES IN THE PROJECT AREA.

ALL EXPENSES INVOLVED IN RELOCATIONS (INSTALLING) THE AFFECTED UTILITY LINE(S) SHALL BE BORNE BY THE UTILTY(IES). THE CONTRACTOR AND THE UTILITIES ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

STRUCTURE GROUNDING:

PROVIDE STRUCTURE GROUNDING PER ODOT STD. DWG. HL-50.21. SEE LIGHTING PLANS FOR ADDITIONAL DETAILS AND PAYMENT.

ITEM 516 JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE:

THIS WORK CONSISTS OF TEMORARILY BRACING THE EXISTING STRUCTURES FOR MAINTENANCE OF TRAFFIC TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE.

THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING TEMPORARY SUPPORT PLANS TO THE DEPARTMENT FOR A FOURTEEN (14) DAY REVIEWAL PERIOD PRIOR TO CONSTRUCTION.

ITEM SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION

MONITOR GROUND VIBRATIONS CAUSED BY PILE DRIVING TO MINIMIZE THE POTENTIAL FOR DAMAGE TO THE 4'X6' CULVERT RUNNING UNDER THE PROPOSED PIER 1 FOOTING.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO ESTABLISH THE ACCEPTABLE VIBRATION LIMITS AND TO PERFORM THE VIBRATION MONITORING. USE A VIBRATION SPECIALIST THAT IS AN EXPERT IN THE INTERPRETATION OF VIBRATION DATA, AND WHO MEETS ONE OF THE FOLLOWING CRITERIA: 1) IS A REGISTERED ENGINEER WITH AT LEAST TWO YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS, OR 2) HAS AT LEAST FIVE YEARS OF PROVEN EXPERIENCE IN MONITORING VIBRATIONS ON SIMILAR CONSTRUCTION PROJECTS. DO NOT USE A VIBRATION SPECIALIST THAT IS AN EMPLOYEE OF THE CONTRACTOR.

SUBMIT A RESUME OF THE CREDENTIALS OF THE PROPOSED VIBRATION SPECIALIST AT OR BEFORE THE PRECONSTRUCTION MEETING. INCLUDE IN THE RESUME A LIST OF CONSTRUCTION PROJECTS ON WHICH THE VIBRATION SPECIALIST WAS RESPONSIBLY IN CHARGE OF MONITORING THE VIBRATIONS. LIST A DESCRIPTION OF THE PROJECTS, WITH DETAILS OF THE VIBRATION INTERPRETATIONS MADE ON THE PROJECT. LIST THE NAMES AND TELEPHONE NUMBERS OF PROJECT OWNERS WITH SUFFICIENT KNOWLEDGE OF THE PROJECTS TO VERIFY THE SUBMITTED INFORMATION. OBTAIN THE ENGINEER'S ACCEPTANCE OF THE VIBRATION SPECIALIST BEFORE BEGINNING ANY PILE DRIVING WORK. ALLOW 30 DAYS FOR THE REVIEW OF THIS DOCUMENTATION.

USE SEISMOGRAPHS CAPABLE OF CONTINUOUSLY RECORDING THE PEAK PARTICLE VELOCITY FOR THREE MUTUALLY PERPENDICULAR COMPONENTS OF VIBRATION, AND OF PROVIDING A PERMANENT RECORD OF THE ENTIRE VIBRATION EVENT. USE A SUFFICIENT NUMBER OF SEISMOGRAPHS TO PROVIDE REDUNDANCY IN CASE ONE DEVICE SHOULD FAIL. SUBMIT A PLAN OF THE PROPOSED SEISMOGRAPH LOCATIONS TO THE ENGINEER FOR REVIEW.

THE VIBRATION SPECIALIST SHALL PERFORM THE FOLLOWING:

1. MEASURE THE AMBIENT GROUND VIBRATIONS NEAR EXISTING STRUCTURES BEFORE PILE DRIVING BEGINS.
2. ESTABLISH VIBRATION LIMITS TO MINIMIZE POTENTIAL DAMAGE TO EXISTING STRUCTURES AND EXPLAIN WHY THEY ARE BEING USED TO THE ENGINEER BEFORE DRIVING PILES NEAR EXISTING STRUCTURES.
3. MONITOR GROUND VIBRATIONS DURING PILE DRIVING.
4. IMMEDIATELY INFORM THE CONTRACTOR AND ENGINEER IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED.
5. FURNISH THE DATA RECORDED AND INCLUDE THE FOLLOWING:
   A. IDENTIFICATION OF SEISMOGRAPH.
   B. DISTANCE AND DIRECTION OF SEISMOGRAPH FROM PILE DRIVING.
   C. START TIME AND DURATION OF PILE DRIVING.
   D. LIST OF PILES DRIVEN DURING EACH MONITORING INTERVAL.

IMMEDIATELY SUSPEND ALL PILE DRIVING IF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED. EVALUATE ALTERNATIVE CONSTRUCTION PROCEDURES, SUCH AS PREBORED HOLES, TO REDUCE THE VIBRATIONS.

SUBMIT THREE COPIES OF THE FINAL REPORT WHICH CONTAINS ALL MEASUREMENTS, INTERPRETATIONS, AND RECOMMENDATIONS TO THE ENGINEER.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL – STRUCTURE MISC.: VIBRATION MONITORING. THE DEPARTMENT WILL PAY THE FINAL TWENTY PERCENT AFTER THE ENGINEER RECEIVES THE FINAL REPORT.

THE DEPARTMENT WILL PAY ACCORDING TO C&MS 109.05 FOR ALTERNATIVE CONSTRUCTION PROCEDURES THAT THE ENGINEER DETERMINES ARE NECESSARY TO REDUCE VIBRATIONS.

GENERAL NOTES 1 OF 2
BRIDGE NO. CUY-00014-06.930
BROADWAY AVENUE (S.R. 14) OVER CHAINCRAFT ROAD, W&LE AND NS RAILWAYS

SFN 1801806

DESIGN AGENCY
AECOM
564 White Pond Drive
Akron, OH 44320
(330) 836-9111
www.aecom.com

DESIGNER	CHECKER
JDM	GAD

REVIEWER
MRW 08/05/24

PROJECT ID
104132

SUBSET	TOTAL
5	99

SHEET	TOTAL
P.213	399

CUY-14-6.93

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/12/2025 TIME: 2:30:32 PM USER: hiba.elrassi
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NORFOLK SOUTHERN RAILWAY COMPANY:

ALL WORK TO BE PERFORMED ON, OVER, UNDER, OR ADJACENT TO THE RAILROAD RIGHT-OF-WAY SHALL COMPLY WITH THE NORFOLK SOUTHERN RAILWAY COMPANY ("RAILROAD", "NSR" OR "NS") PUBLIC PROJECTS MANUAL (APPENDIX E, SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS, AND APPENDIX H1, OVERHEAD GRADE SEPARATION DESIGN CRITERIA). WHEN IN CONFLICT WITH OTHER PROJECT SPECIFICATIONS, THE MOST STRINGENT ONE SHALL APPLY.

"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE 2 DAYS IN ADVANCE OF WORK AT THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE THE RAILROAD'S UNDERGROUND FACILITIES. UPON REQUEST FROM THE CONTRACTOR OR SPONSOR, RAILROAD FORCES WILL LOCATE AND PAINT MARK OR FLAG THE RAILROAD'S UNDERGROUND FACILITIES. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE FACILITIES. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD FACILITY, THE CONTRACTOR SHALL COORDINATE WITH THE RAILROAD TO HAVE THE FACILITY POTHOLED MANUALLY WITH CAREFUL HAND EXCAVATION. THE FACILITY SHALL BE PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF THE RAILROAD'S REPRESENTATIVE. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX E, SECTION 3.D).

ALL UTILITY INSTALLATIONS OR RELOCATIONS THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION TO RAILPROS FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT AND APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, & FIBER OPTIC PROJECTS > RAILPROS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

THE CONTRACTOR SHALL NOT COMMENCE ANY WORK ON RAILROAD RIGHTS-OF-WAY UNTIL HE HAS COMPLIED WITH THE CONDITIONS PRESENTED ON NS PUBLIC PROJECTS MANUAL (SEE APPENDIX E, NORFOLK SOUTHERN - SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS).

THE CONTRACTOR SHALL SO ARRANGE AND CONDUCT HIS WORK THAT THERE WILL BE NO INTERFERENCE WITH RAILROAD'S OPERATIONS. WHENEVER WORK IS LIABLE TO AFFECT THE OPERATIONS OR SAFETY OF TRAINS, THE METHODS OF DOING SUCH WORK SHALL FIRST BE SUBMITTED TO THE RAILROAD ENGINEER FOR APPROVAL, BUT SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM ANY LIABILITY.

ALSO SEE RAILROAD FLAGGING SERVICE NOTE ON SHEET P.12. ALL DAYS AND HOURLY WORK WINDOW LENGTHS ARE SUBJECT TO REVIEW BY NORFOLK SOUTHERN. WORK WINDOW LENGTHS WILL BE 2 HOURS MAXIMUM WITH THE ALLOWANCE OF LONGER DURATIONS BASED ON TRACK SCHEDULE. THE CONTRACTOR SHALL PROVIDE 3-WEEK LOOK AHEAD SCHEDULE SPECIFYING HOUR TO HOUR OPERATIONS IN COORDINATION FOR OUTAGE WINDOWS. FOR BIDDING, SEE THE NORFOLK SOUTHERN RAILROAD AGREEMENT FOR THE ANTICIPATED NUMBERS AND SPEEDS OF TRAINS.

NORFOLK SOUTHERN RAILWAY CONTACT:

MR. ELDRIDGE W. CHAMBERS
SENIOR ENGINEER PUBLIC IMPROVEMENTS
NORFOLK SOUTHERN CORPORATION
650 WEST PEACHTREE STREET, NW, BOX 45
ATLANTA, GA 30308
TELEPHONE: (470) 463-6307
EMAIL: eldridge.chambers@nscorp.com

RAILROAD COORDINATION REQUIREMENTS:

IN ADDITION TO THE SUBMITTAL REQUIREMENTS OF ODOT CMS SECTION 501.05, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING TO THE APPROPRIATE RAILROAD AGENCY OR THEIR REPRESENTATIVE FOR APPROVAL. THE FOLLOWING SUBMITTAL'S SHALL BE IN ACCORDANCE WITH NORFOLK SOUTHERN'S REQUIREMENTS AS LISTED IN NORFOLK SOUTHERN'S PUBLICATION "PUBLIC PROJECTS MANUAL".

- STRUCTURE EXCAVATION AND SHORING PLAN (ITEM 503 - COFFERDAMS AND EXCAVATION, AS PER PLAN)
- DEMOLITION PLAN FOR THE EXISTING STRUCTURE (ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN)
- ERECTION PROCEDURE FOR THE NEW STRUCTURE (ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 4)
- TRACK MONITORING PLAN (ITEM 503 - COFFERDAMS AND EXCAVATION, AS PER PLAN)

ALL COSTS ASSOCIATED WITH THESE SUBMITTALS SHALL BE CONSIDERED INCIDENTAL TO THE ITEMS NOTED ABOVE IN PARENTHESIS AND NO SEPARATE PAYMENT WILL BE MADE FOR THESE SUBMITTALS. FOR ADDITIONAL INFORMATION SEE THE RAILROAD AGREEMENT. ALL COSTS ASSOCIATED WITH THESE SUBMITTALS SHALL BE PAID FOR AS INDICATED ABOVE.

CONSTRUCTION CLEARANCE:

MAINTAIN A CONSTRUCTION CLEARANCE OF 14 FEET HORIZONTALLY FROM THE CENTER OF TRACKS AND 23 FEET VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHER RAIL, AND 6 FEET FROM THE CENTER OF TRACKS, AT ALL TIMES.

NORFOLK SOUTHERN RAILWAY SIGNAL AND CONTROL BOX:

NORFOLK SOUTHERN (NS) RAILWAY MAINTAINS A CURRENT TRACK SIGNAL AND CONTROL BOX WEST OF THE CURRENT BRIDGE. DURING THE CONSTRUCTION PHASE OF THE PROJECT, NS WILL RELOCATE THE SIGNAL AND CONTROL BOX TO THE EAST OF THE EXISTING BRIDGE. THE WORK TO INSTALL THE NEW SIGNAL AND CONTROL BOX SHOULD HAVE NO IMPACT TO THE PROJECT CONSTRUCTION AND CAN TAKE PLACE SIMULTANEOUS TO CONSTRUCTION OPERATIONS. THE WORK TO REMOVE THE EXISTING SIGNAL AND CONTROL BOX WILL REQUIRE NS TO ACCESS THE EXISTING FROM CHAINCRAFT ROAD. THIS ACCESS CAN BE AT ANY TIME AFTER NEW SIGNAL OPERATIONS BEGIN AND THE EXISTING SIGNAL IS NO LONGER FUNCTIONING. COORDINATE WITH NS TO PROVIDE ACCESS TO REMOVE THE EXISTING SIGNAL AND CONTROL BOX AT A TIME TO ASSURE NO IMPACT TO THE CHAINCRAFT ROAD MOT ZONES.

ASBESTOS NOTIFICATION:

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST SURVEYED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION; THE SURVEY DETERMINED THAT 5 SQUARE FEET ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE. ODOT SHALL PROVIDE A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

OR

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE:

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

COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 12 OFFICE, 5500 TRANSPORTATION BOULEVARD, GARFIELD HEIGHTS, OHIO 44125.

BASIS FOR PAYMENT – THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN:

ITEM 202 – STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

ITEM SPECIAL – SETTLEMENT PLATFORMS

DESCRIPTION: THIS ITEM CONSISTS OF FURNISHING, CONSTRUCTING, AND MAINTAINING SETTLEMENT PLATFORMS AND OBTAINING SETTLEMENT READINGS AS REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER. AT THE OPTION AND EXPENSE OF THE CONTRACTOR, ADDITIONAL SETTLEMENT PLATFORMS MAY BE INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SETTLEMENT READINGS SHALL BE TAKEN WEEKLY DURING CONSTRUCTION AND DURING ANY SPECIFIED WAITING PERIOD. THE READINGS SHALL BE PLOTTED ON GRAPH PAPER PRESENTING DEFORMATION (ON THE NEGATIVE Y-AXIS) AND FILL HEIGHT (ON THE POSITIVE Y-AXIS) VERSUS TIME (ON THE X-AXIS). IN ORDER TO CREATE THE GRAPH, USE THE SETTLEMENT PLATFORM SPREADSHEET LOCATED AT HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/ENGINEERING/GEOTECHNICAL/GEOTECHNICAL_DOCUMENTS/BLANK_SETTLEMENT_READING_PLOTS-ENGLISH.XLS IN THE OGE WEBSITE PUBLICATIONS AND DOCUMENTS SECTION. A COPY OF EACH CUMULATIVE PLOT SHALL BE SENT TO THE OFFICE OF GEOTECHNICAL ENGINEERING, ATTENTION: GEOTECHNICAL DESIGN COORDINATOR, AFTER EACH SETTLEMENT READING IS RECORDED.

MATERIALS: SOUND LUMBER SUCH AS 19MM (3/4-INCH) EXTERIOR GRADE PLYWOOD SHALL BE USED FOR THE BASE. THE PIPE SHALL BE 64MM (2-1/2-INCH) STANDARD BLACK PIPE WITH THREADED FITTINGS AS SHOWN ON THE PLANS. A STEEL PLATE 915MM X 915MM X 3.2MM (36" X 36" X 1/8") MAY BE SUBSTITUTED FOR THE LUMBER FOR THE PLATFORMS, AT THE CONTRACTOR'S OPTION.

CONSTRUCTION METHODS: THE PLATFORM SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS. THE PLATFORM SHALL BE SET ON A LEVEL SURFACE. THE PIPE SHALL BE FIRMLY SECURED TO THE PLATFORM AND SHALL BE MAINTAINED IN A PLUMB POSITION DURING THE PLACEMENT OF THE EMBANKMENT. THE PIPE SHALL BE MARKED AT INTERVALS TO FACILITATE MEASUREMENT OF THE DEPTH OF FILL. THE CONTRACTOR SHALL STOP WORK IN ANY LOCATION WHERE THE SETTLEMENT PLATFORM HAS BEEN DISTURBED OR DAMAGED.

ITEM SPECIAL – SETTLEMENT PLATFORMS (CONT.)

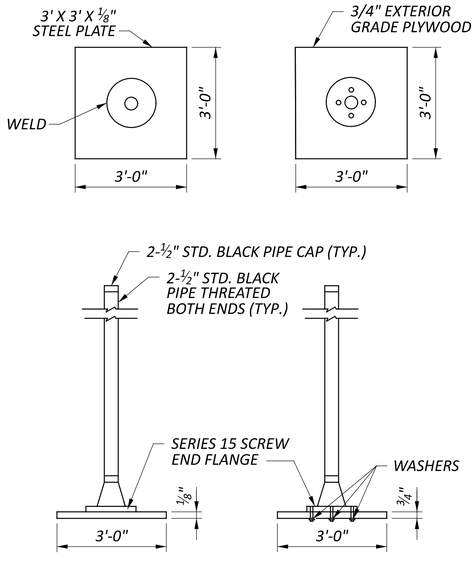
PLATFORMS OR PIPES DAMAGED OR DISPLACED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR PROPER CONDITION AT THE CONTRACTOR'S EXPENSE.

PRIOR TO PAVING, THE TOP OF THE SETTLEMENT PLATFORM PIPE SHALL BE CUT OFF 600MM (TWO FEET) BELOW THE FINISHED SURFACE OF THE SUBGRADE OR FINISHED GROUND SURFACE, WHICHEVER IS APPLICABLE.

METHOD OF MEASUREMENT: THE NUMBER OF SETTLEMENT PLATFORMS TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF SETTLEMENT PLATFORMS COMPLETED, MAINTAINED, AND ACCEPTED BY THE ENGINEER.

BASIS OF PAYMENT: PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE EACH FOR "ITEM SPECIAL – SETTLEMENT PLATFORMS" WHICH IS COMPENSATION FOR CONSTRUCTING MAINTAINING, AND MONITORING THE SETTLEMENT PLATFORMS INCLUDING FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. PAYMENT SHALL NOT BE MADE FOR SETTLEMENT PLATFORMS WHICH BECOME USELESS DUE TO DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS.

SETTLEMENT PLATFORM DETAIL
(NOT TO SCALE)



NOTES:

1. SETTLEMENT PLATFORMS SHALL BE PLACED WITH A MINIMUM OF TWO (2) - BEHIND THE FORWARD ABUTMENT, AT THE MAXIMUM EMBANKMENT FILL LOCATIONS AND TWO (2) AT THE FIELD ENGINEER'S DISCRETION BEHIND THE REAR ABUTMENT OR OLD BROADWAY AVE.

2. CONTRACTOR HAS OPTION OF USING EITHER STEEL OR PLYWOOD PLATFORM BASE.

3. CONTRACTOR SHALL FURNISH MATERIALS AND LABOR TO EXTEND PIPE UP THROUGH ENTIRE FILL.

4. SETTLEMENT PLATFORMS SHALL BE ANCHORED BY STAKES DRIVEN AT EACH CORNER TO PREVENT OVERTURNING.

CLEARANCE FROM CEI/FIRSTENERGY TRANSMISSION LINES

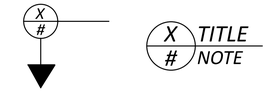
MAINTAIN CLEARANCE BELOW 345,000 VOLT OVERHEAD TRANSMISSION LINES AT ALL TIMES. SEE UTILITY NOTE FOR PIER 2 PILE DRIVING LEAD HEIGHT RESTRICTIONS. SEE BRIDGE NO. CUY-00014-06.930 SITE PLAN 2 OF 2 IN THIS SET FOR BRIDGE DECK CLEARANCES. PROJECT CONSTRUCTION CAN PROCEED WITH NO IMPACT TO TRANSMISSION LINES. SEE UTILITY CONTACT INFORMATION ON P.11.

ABBREVIATIONS AND SYMBOLS

THE FOLLOWING STANDARD ABBREVIATIONS ARE USED THROUGHOUT THE PLANS:

APPR. - APPROACH
B OR BOT. OR BTM. - BOTTOM
BMP - BEST MANAGEMENT PRACTICE
BRG. - BEARING
BTWN - BETWEEN
C/C - CENTER TO CENTER
C.I.P. - CAST IN PLACE
C.J. - CONSTRUCTION JOINT
℄ OR CL - CENTERLINE
CLR. - CLEARANCE
CONST. - CONSTRUCTION
DIA. - DIAMETER
DWG. - DRAWING
EA. - EACH
E.F. - EACH FACE
EL. OR ELEV. - ELEVATION
EQ. - EQUAL
EST. - ESTIMATED
EX. OR EXIST. - EXISTING
EXP. - EXPANSION
F.A. - FORWARD ABUTMENT
F.F. - FAR FACE
F/F - FACE TO FACE
F.S. - FIELD SPLICE
FIX. - FIXED
FTG. - FOOTING
FWD. - FORWARD
GIR. - GIRDER
GIR'S. - GIRDERS
HORIZ. - HORIZONTAL
HW - HIGH WATER MARK
JT. - JOINT
KLF - KIPS PER LINEAR FOOT
LF - LEFT FORWARD
LT. - LEFT
MAX. - MAXIMUM
MID - MIDDLE
MIN. - MINIMUM
N.B. - NORTHBOUND
N.F. - NEAR FACE
NO. - NUMBER
O.C.J. - OPTIONAL CONSTRUCTION JOINT
O/O - OUT TO OUT
ORD. - ORDINARY
PCB - PORTABLE CONCRETE BARRIER
P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
P/G OR P.G.- PROFILE GRADE
P1 - PIER 1
P2 - PIER 2
℗ OR PL. - PLATE
PR. OR PROP. - PROPOSED
R.A. - REAR ABUTMENT
R.C.P. - ROCK CHANNEL PROTECTION
REF. - REFERENCE
REIN. - REINFORCING OR REINFORCEMENT
REQ. OR REQ'D. - REQUIRED
RT. - RIGHT
S.B. - SOUTHBOUND
SER. - SERIES
SHT. - SHEET
SHLD. - SHOULDER
SPA. - SPACE(D) OR SPACING
STA. - STATION
STD. DWG. OR SCD - STANDARD CONSTRUCTION DRAWING
T&B - TOP AND BOTTOM
T/ - TOP
THK. - THICK
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
VAR. - VARIES
VERT. - VERTICAL
W/ - WITH

THE SYMBOLS BELOW DESIGNATE THE NAMES AND LOCATIONS OF THE SECTION DETAILS THROUGHOUT THE STRUCTURE PLANS. THE TOP LETTER DESIGNATES THE SECTION NAME. THE BOTTOM NUMBER(S) SHOW WHICH STRUCTURE SHEET IS BEING CROSS REFERENCED.



GENERAL NOTES 2 OF 2
BRIDGE NO. CUY-00014-06.930
BROADWAY AVENUE (S.R. 14) OVER CHAINCRAFT ROAD, W&LE AND NS RAILWAYS

SFN 1801806
DESIGN AGENCY
AECOM
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Akron, OH 44320
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DESIGNER JDM | CHECKER GAD
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PROJECT ID 104132
SUBSET 6 | TOTAL 99
SHEET P.214 | TOTAL 399

CUY-14-6.93

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/12/2025 TIME: 3:33:41 PM USER: evan.mutch
pw:\\aecom-na-pw.bentley.com:AECOM_DS20_NA_2019\Documents\60581903-CUY-14-6.93\104132\400-Engineering\Structures\SFN_1801806\Sheets\104132_SFN_1801806_SN002.dgn

ESTIMATED QUANTITIES

CALCULATED BY: RG 2/6/2024
CHECKED BY: ERM 2/13/2024

ITEM ODOT	EXT.	PARTICIPATION 01/BRO/10	TOTAL	UNIT	DESCRIPTION	CUY-00014-06.930 ABUTMENTS REAR	ABUTMENTS FORWARD	PIERS	SUPER-STRUCTURE	GENERAL	REF. SHEET
202	11003	LS	LS		STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LS	5 , 99
202	22900	293	293	SY	APPROACH SLAB REMOVED					293	
503	11101	LS	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN					LS	5 , 99
503	21101	5,467	5,467	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	1,813	1,877	1,777			5 , 99
505	11100	LS	LS		PILE DRIVING EQUIPMENT MOBILIZATION					LS	
507	00700	4,220	4,220	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	2,500		1,720			
507	00750	5,275	5,275	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	3,125		2,150			
507	93300	211	211	EACH	STEEL POINTS OR SHOES	125		86			
509	10000	1,063,710	1,063,710	LB	EPOXY COATED STEEL REINFORCEMENT	257,117	283,149	166,187	357,257		
511	34446	1,035	1,035	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK				1,035		
511	34450	111	111	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)				95	16	
511	41012	1,035	1,035	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS			1,035			
511	44112	1,504	1,504	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	756	748				
511	45602	568	568	CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA	307	260				
511	46512	1,899	1,899	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	703	874	322			
511	51512	369	369	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK				329	40	
512	10050	894	894	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)				894		
512	10100	4,519	4,519	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1,128	1,127	1,273	991		
513	10280	1,531,993	1,531,993	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4				1,531,993		
513	20000	15,350	15,350	EACH	WELDED STUD SHEAR CONNECTORS				15,350		
514	00060	10,796	10,796	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT				10,796		
514	00066	10,796	10,796	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT				10,796		
514	10000	7	7	EACH	FINAL INSPECTION REPAIR				7		
516	10010	374	374	FT	ARMORLESS PREFORMED JOINT SEAL					374	
516	11210	330	330	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL				330		
516	13600	337	337	SF	1" PREFORMED EXPANSION JOINT FILLER					337	
516	13900	437	437	SF	2" PREFORMED EXPANSION JOINT FILLER	219	218				
516	44100	11	11	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 18" x 18" x 2.31" WITH 19" x 19" x 1.5" LOAD PLATE	11					
516	44300	9	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 18" x 18" x 5.94" WITH 19" x 19" x 1.5" LOAD PLATE		9				
516	44200	9	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 19" x 26" x 3.94" WITH 20" x 17" x 1.5" LOAD PLATE			9			
516	44200	9	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) 19" x 26" x 3.94" WITH 20" x 38" x 1.5" LOAD PLATE			9			
516	47000	LS	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE					LS	
518	21200	69	69	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	36	33				
518	40000	455	455	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	238	217				
518	40010	70	70	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	30	40				
523	20000	3	3	EACH	DYNAMIC LOAD TESTING	1		2			
526	30001	727	727	SY	REINFORCED CONCRETE APPROACH SLABS (T=17"), AS PER PLAN					727	80 , 99 THRU 88 , 99
526	90030	374	374	FT	TYPE C INSTALLATION					374	
607	39901	951	951	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC, AS PER PLAN				812	139	5 , 99
SPECIAL	20365000	4	4	EACH	SETTLEMENT PLATFORM	1	2			1	6 , 99
SPECIAL	53014000	LS	LS		STRUCTURAL SURVEY AND MONITORING OF VIBRATION					LS	5 , 99

ESTIMATED QUANTITIES
BRIDGE NO. CUY-00014-06.930
BROADWAY AVENUE (S.R. 14) OVER CHAINCRAFT ROAD, W&LE AND NS RAILWAYS

SFN 1801806

DESIGN AGENCY
AECOM
564 White Pond Drive
Akron, OH 44320
(330) 836-9111
www.aecom.com

DESIGNER	CHECKER
RG	ERM

REVIEWER MRW 08/05/24
PROJECT ID 104132
SUBSET 7 | TOTAL 99
SHEET P.215 | TOTAL 399

CUY-14-6.93

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/12/2025 TIME: 2:37:45 PM USER: evan.mutch
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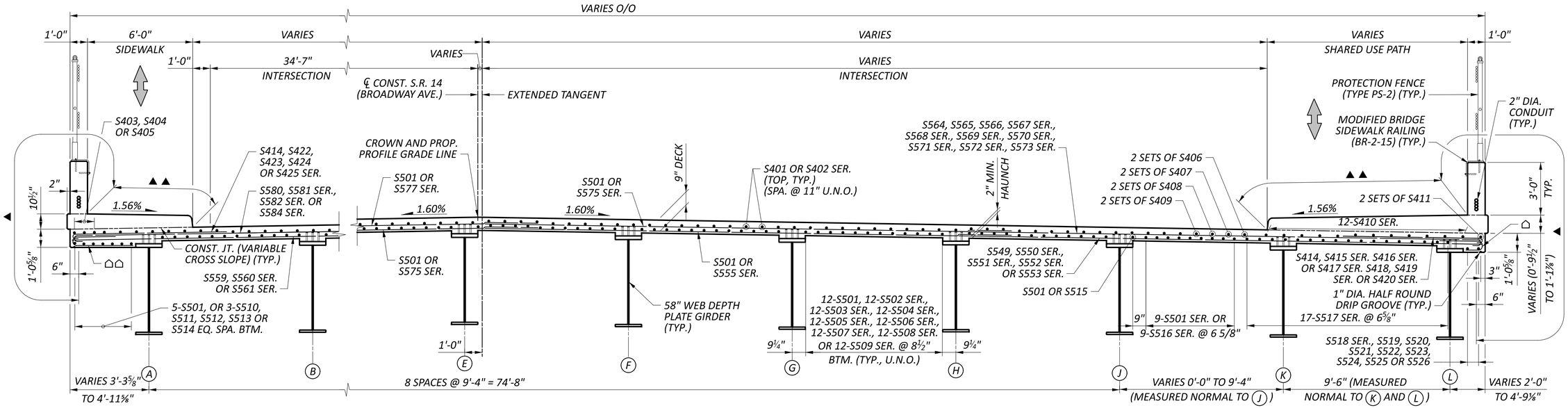
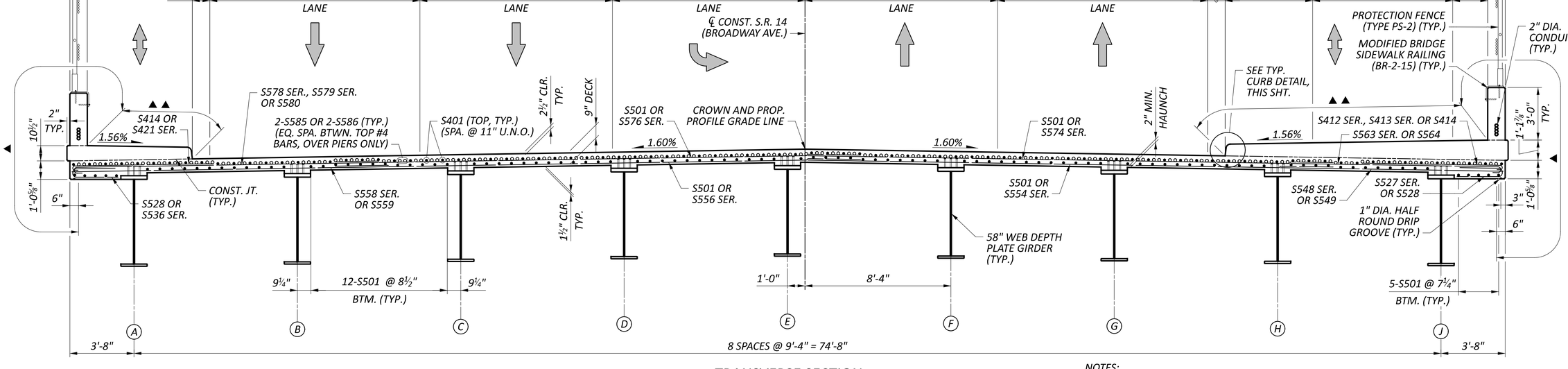


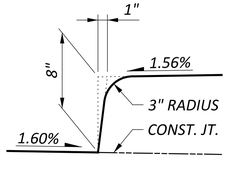
TRANSVERSE SECTION

STA. 373+67.53 TO STA. 374+84.42



TRANSVERSE SECTION

STA. 374+84.42 TO STA. 377+87.00



TYPICAL CURB DETAIL

LEGEND:

- ▲ ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
- ▲▲ ITEM 512 - SEALING OF CONCRETE SURFACES (NON-EPOXY)
- (X) PROPOSED GIRDER MARK
- ⌂ S528 THRU S535 SER.
- ⌂⌂ S528, S537 THRU S547 SER.

NOTES:

1. INTERMEDIATE CROSSFRAMES AND STIFFENERS NOT SHOWN FOR CLARITY. FOR DETAILS, SEE SHEET 59 ¦ 99 .
2. FOR SIDEWALK AND RAILING REINFORCING AND DETAILS, SEE SHEETS 74 ¦ 99 THRU 78 ¦ 99 .
3. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 3.644 INCHES OVER 1 INCH THICK FLANGE AND 2.144 INCHES OVER 2½ INCH THICK FLANGE AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.

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DESIGNER	CHECKER
RHB	JDM

REVIEWER: MRW 08/05/24

PROJECT ID: 104132

SUBSET	TOTAL
68	99

SHEET	TOTAL
P.276	399

CUY-14-6.93

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 2/10/2025 TIME: 10:52:09 AM USER: hiba.elrassi
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TOP OF HAUNCH ELEVATIONS

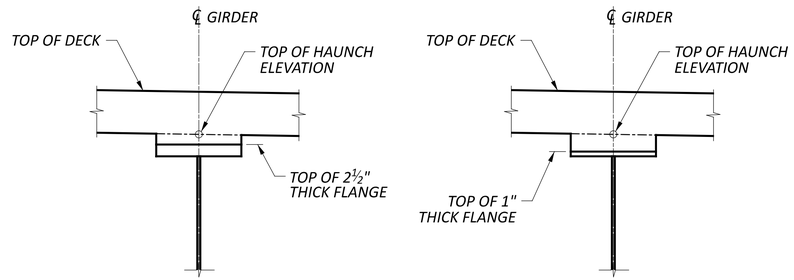
LOCATION		REAR ABUT.	1/8 POINT	1/4 POINT	3/8 POINT	1/2 POINT	5/8 POINT	FS1 POINT	3/4 POINT	7/8 POINT	PIER 1	1/8 POINT	FS2 POINT	1/4 POINT	3/8 POINT	1/2 POINT	5/8 POINT	3/4 POINT	FS3 POINT	7/8 POINT	PIER 2
(A)	STATION	373+14.19	373+28.06	373+42.00	373+55.99	373+70.01	373+83.25	373+89.10	373+96.20	374+09.15	374+22.10	374+42.48	374+57.10	374+62.85	374+83.23	375+03.60	375+23.98	375+44.35	375+50.10	375+64.73	375+85.10
	HAUNCH EL.	848.41	848.91	849.40	849.88	850.30	850.70	850.88	851.08	851.46	851.81	852.40	852.82	852.98	853.51	853.97	854.35	854.65	854.72	854.91	855.17
(B)	STATION	373+29.36	373+43.41	373+57.50	373+71.62	373+85.05	373+98.36	374+05.27	374+11.66	374+24.97	374+38.27	374+58.65	374+73.27	374+79.02	374+99.40	375+19.77	375+40.15	375+60.52	375+66.27	375+80.90	376+01.27
	HAUNCH EL.	849.09	849.58	850.06	850.52	850.93	851.31	851.50	851.68	852.05	852.40	852.96	853.35	853.50	854.01	854.43	854.78	855.06	855.13	855.29	855.53
(C)	STATION	373+44.02	373+58.21	373+72.42	373+86.14	373+99.80	374+13.46	374+21.44	374+27.12	374+40.78	374+54.44	374+74.81	374+89.44	374+95.19	375+15.56	375+35.94	375+56.31	375+76.69	375+82.44	375+97.06	376+17.44
	HAUNCH EL.	849.73	850.22	850.69	851.13	851.53	851.90	852.11	852.26	852.61	852.96	853.49	853.86	854.01	854.48	854.88	855.20	855.44	855.51	855.66	855.86
(D)	STATION	373+58.17	373+72.48	373+86.52	374+00.53	374+14.55	374+28.56	374+37.60	374+42.57	374+56.59	374+70.60	374+90.98	375+05.60	375+11.35	375+31.73	375+52.10	375+72.48	375+92.85	375+98.60	376+13.23	376+33.60
	HAUNCH EL.	850.34	850.83	851.29	851.72	852.11	852.48	852.70	852.82	853.16	853.49	854.00	854.35	854.48	854.93	855.30	855.59	855.81	855.87	856.00	856.18
(E)	STATION	373+71.82	373+86.19	374+00.56	374+14.93	374+29.29	374+43.66	374+53.77	374+58.03	374+72.40	374+86.77	375+07.14	375+21.77	375+27.52	375+47.89	375+68.27	375+88.64	376+09.02	376+14.77	376+29.39	376+49.77
	HAUNCH EL.	850.92	851.41	851.87	852.29	852.68	853.03	853.27	853.37	853.69	854.01	854.48	854.81	854.94	855.36	855.70	855.96	856.16	856.21	856.32	856.47
(F)	STATION	373+85.15	373+99.87	374+14.60	374+29.32	374+44.04	374+58.76	374+69.93	374+73.49	374+88.21	375+02.93	375+23.31	375+37.93	375+43.68	375+64.06	375+84.43	376+04.81	376+25.18	376+30.93	376+45.56	376+65.93
	HAUNCH EL.	851.23	851.72	852.17	852.51	852.90	853.28	853.54	853.62	853.94	854.24	854.68	854.99	855.11	855.49	855.81	856.05	856.22	856.26	856.35	856.48
(G)	STATION	373+98.48	374+13.56	374+28.63	374+43.71	374+58.79	374+73.86	374+86.10	374+88.94	375+04.01	375+19.10	375+39.48	375+54.10	375+59.85	375+80.23	376+00.60	376+20.98	376+41.35	376+47.10	376+61.73	376+82.10
	HAUNCH EL.	851.50	851.97	852.31	852.69	853.12	853.51	853.78	853.83	854.12	854.41	854.82	855.11	855.22	855.58	855.86	856.08	856.22	856.25	856.33	856.43
(H)	STATION	374+11.81	374+27.24	374+42.67	374+58.11	374+73.54	374+88.97	375+02.26	375+04.40	375+19.83	375+35.26	375+55.64	375+70.26	375+76.01	375+96.39	376+16.76	376+37.14	376+57.51	376+63.26	376+77.89	376+98.26
	HAUNCH EL.	851.73	852.06	852.40	852.91	853.42	853.74	853.98	854.02	854.29	854.56	854.94	855.20	855.31	855.63	855.90	856.08	856.20	856.22	856.28	856.35
(J)	STATION	374+25.14	374+40.93	374+56.71	374+72.50	374+88.28	375+04.07	375+18.43	375+19.86	375+35.64	375+51.43	375+71.81	375+86.43	375+92.18	376+12.56	376+32.93	376+53.31	376+73.68	376+79.43	376+94.06	377+14.43
	HAUNCH EL.	851.77	852.04	852.69	853.27	853.62	853.92	000.00	854.19	854.44	854.69	855.04	855.28	855.38	855.68	855.91	856.07	856.15	856.17	856.21	856.26

TOP OF HAUNCH ELEVATIONS (CONTINUED)

LOCATION		PIER 2	1/8 POINT	1/4 POINT	FS4 POINT	3/8 POINT	1/2 POINT	5/8 POINT	3/4 POINT	7/8 POINT	FWD. ABUT.
(A)	STATION	375+85.10	376+01.23	376+17.35	376+18.10	376+33.48	376+49.60	376+65.73	376+81.85	376+97.98	377+14.10
	HAUNCH EL.	855.17	855.39	855.61	855.62	855.82	856.00	856.13	856.21	856.24	856.23
(B)	STATION	376+01.27	376+17.40	376+33.52	376+34.27	376+49.65	376+65.77	376+81.90	376+98.02	377+14.15	377+30.27
	HAUNCH EL.	855.53	855.73	855.93	855.94	856.12	856.27	856.38	856.44	856.44	856.41
(C)	STATION	376+17.44	376+33.56	376+49.69	376+50.44	376+65.81	376+81.94	376+98.06	377+14.19	377+30.31	377+46.44
	HAUNCH EL.	855.86	856.04	856.22	856.23	856.39	856.52	856.61	856.65	856.63	856.57
(D)	STATION	376+33.60	376+49.73	376+65.85	376+66.60	376+81.98	376+98.10	377+14.23	377+30.35	377+46.48	377+62.60
	HAUNCH EL.	856.18	856.34	856.50	856.50	856.64	856.75	856.82	856.83	856.79	856.71
(E)	STATION	376+49.77	376+65.89	376+82.02	376+82.77	376+98.14	377+14.27	377+30.39	377+46.52	377+62.64	377+78.77
	HAUNCH EL.	856.47	856.61	856.75	856.75	856.87	856.96	857.00	856.99	856.93	856.83
(F)	STATION	376+65.93	376+82.06	376+98.18	376+98.93	377+14.31	377+30.43	377+46.56	377+62.68	377+78.81	377+94.93
	HAUNCH EL.	856.48	856.59	856.71	856.72	856.81	856.88	856.90	856.87	856.78	856.66
(G)	STATION	376+82.10	376+98.23	377+14.35	377+15.10	377+30.48	377+46.60	377+62.73	377+78.85	377+94.98	378+11.10
	HAUNCH EL.	856.43	856.52	856.62	856.62	856.70	856.75	856.74	856.69	856.58	856.43
(H)	STATION	376+98.26	377+14.39	377+30.51	377+31.26	377+46.64	377+62.76	377+78.89	377+95.01	378+11.14	378+27.26
	HAUNCH EL.	856.35	856.43	856.51	856.51	856.56	856.59	856.57	856.49	856.36	856.18
(J)	STATION	377+14.43	377+30.56	377+46.68	377+47.43	377+62.81	377+78.93	377+95.06	378+11.18	378+27.31	378+43.43
	HAUNCH EL.	856.26	856.32	856.38	856.38	856.42	856.42	856.37	856.27	856.11	855.91

TOP OF HAUNCH ELEVATIONS

LOCATION		REAR ABUTMENT	1/2 POINT	CONNECTION TO GIRDER J WORK POINT
(K)	STATION	374+38.47	374+45.90	374+54.63
	HAUNCH EL.	851.63	852.10	852.75
(L)	STATION	374+47.05	374+59.69	374+73.63
	HAUNCH EL.	851.60	852.59	853.60



TOP OF HAUNCH DETAIL

NOTES:

1. TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
2. FOR DECK PLAN, SEE SHEETS 62 ¡ 99 THRU 67 ¡ 99 .
3. FOR SCREED ELEVATIONS, SEE SHEET 71 ¡ 99 .
4. FOR FINAL DECK ELEVATIONS, SEE SHEET 73 ¡ 99 .
5. FOR ELEVATION DIAGRAM DEPICTING DECK SURFACE LOCATIONS IN TRANSVERSE SECTION AND PLAN VIEW, SEE SHEET 70 ¡ 99 .
6. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 3.644 INCHES OVER 1 INCH THICK FLANGE AND 2.144 INCHES OVER 2½ INCH THICK FLANGE AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.23.

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