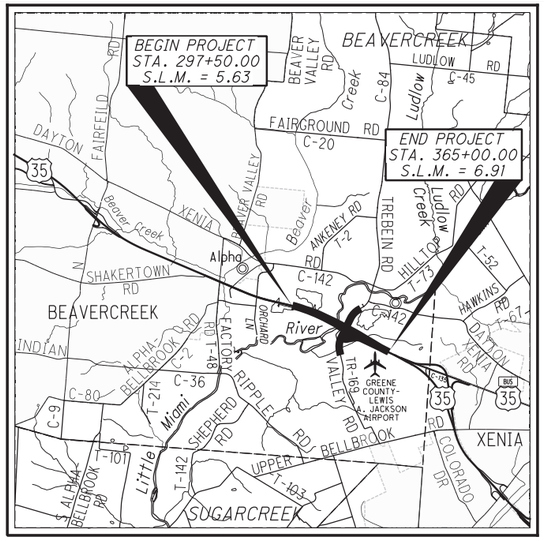
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
GRE-US 35-5.63
BEAVERCREEK TOWNSHIP
GREENE COUNTY



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 59681 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-51.11	1/15/16	800-2019	SEE PROPOSAL
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-52.10	10/18/13	807	1/21/22
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-52.20	1/15/21	808	1/18/19
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-61.10	1/17/20	813	10/19/18
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-61.30	7/19/19	821	4/20/12
				RM-4.1	7/21/17			MT-95.71	1/17/20	MT-110.10	7/19/13	TC-65.10	1/17/14	832	10/19/18
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	MT-120.00	7/15/22	TC-65.11	7/15/22	836	1/19/18
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-71.10	7/15/22	839	7/16/21
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-9.31	7/16/21	TC-72.20	7/20/18	840	4/16/21
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-12.31	4/15/22	TC-73.20	1/17/20	846	4/17/15
CB-6	1/21/22			RM-4.6	7/19/13	HL-20.13	7/15/22	MT-98.21	1/17/20	TC-15.116	7/16/21			850	1/21/22
CB-8	7/16/21	F-2.1	7/20/18			HL-30.11	1/15/21	MT-98.28	1/17/20	TC-21.11	7/16/21			851	1/21/22
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-21.21	7/15/22			867	1/15/21
		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-21.50	4/17/20			878	1/21/22
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-22.20	1/17/14			902	7/19/19
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-41.10	7/19/13			905	4/17/20
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-41.20	10/18/13			908	10/20/17
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-41.30	10/18/13			913	4/16/21
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-41.50	10/18/13			921	4/20/12
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-42.10	10/18/13			939	1/17/20
		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-42.20	10/18/13			1120	4/15/22

SUPPLEMENTAL SPECIFICATIONS

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

SPECIAL PROVISIONS

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

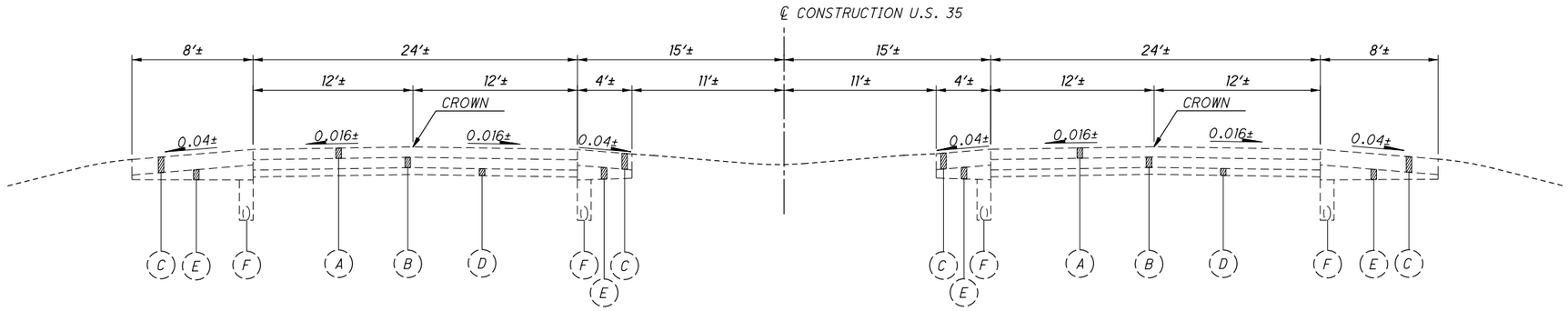
SIGNED: Jason T. Centers
DATE: 08/24/22

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



EXISTING NORMAL SECTION - U.S. 35

STA. 288+75.00 TO STA. 322+56.00
STA. 334+25.00 TO STA. 391+00.00

EXISTING LEGEND

- (A) 8½"± ASPHALT CONCRETE
- (B) 6"±-12"± VARIABLE THICKNESS REINFORCED CONCRETE
- (C) 13½"± ASPHALT CONCRETE
- (D) 4"± AGGREGATE BASE
- (E) 4"±-9¼"± VARIABLE THICKNESS AGGREGATE BASE
- (F) 6" PIPE UNDERDRAIN
- (G) CONCRETE MEDIAN
- (H) 12"± CONCRETE APPROACH SLAB
- (J) AGGREGATE BASE
- (K) 9½"± ASPHALT CONCRETE
- (L) 13"± ASPHALT CONCRETE

PROPOSED LEGEND

- (1) ITEM 442 - 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5 mm, TYPE A (447)
- (2) ITEM 442 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 mm TYPE A (446)
- (3) ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22
- (4) ITEM 304 - 6" AGGREGATE BASE
- (5) ITEM 452 - 11½" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA
- (6) ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA
- (7) ITEM 441 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448)
- (8) ITEM 441 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) PG64-22
- (9) ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22
- (10) ITEM 407 - NON-TRACKING TACK COAT (0.050 GAL/SY)
- (11) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS, 707.31 OR 707.41
- (12) ITEM 605 - 6" BASE PIPE UNDERDRAINS, 707.31 OR 707.41
- (13) RETAINING WALL
- (14) ITEM 659 - SEEDING AND MULCHING
- (15) ITEM 606 - GUARDRAIL, TYPE MGS
- (16) ITEM 606 - GUARDRAIL, BARRIER DESIGN, TYPE MGS
- (17) ITEM 609 - CONCRETE MEDIAN, 6"
- (18) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=17")
- (19) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=15")
- (20) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=17"), AS PER PLAN A
- (21) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=17"), AS PER PLAN B
- (22) ITEM 204 - SUBGRADE COMPACTION
- (23) ITEM 609 - CURB, TYPE 4-C
- (24) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1
- (25) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE C
- (26) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (27) ITEM 601 - PAVED GUTTER, TYPE 1-4, AS PER PLAN
- (28) NOT USED
- (29) ITEM 204 - GEOTEXTILE FABRIC
- (30) ITEM 304 - 8" AGGREGATE BASE
- (31) ITEM 617 - COMPACTED AGGREGATE, 4"
- (32) ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP
- (33) ITEM 601 - PAVED GUTTER, TYPE 1-2, AS PER PLAN
- (34) STANDARD LONGITUDINAL JOINT
- (35) ITEM 204 - PROOF ROLLING
- (36) ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POST
- (37) ITEM 304 - 12" AGGREGATE BASE
- (38) ITEM 204 - EXCAVATION OF SUBGRADE, 12" DEEP GRANULAR MATERIAL, TYPE C

CALCULATED | CHECKED

EXISTING TYPICAL SECTIONS - US 35 AND LEGEND

GRE-US 35-5.63

11
698

UTILITIES

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

AES OHIO
1900 DRYDEN ROAD
DAYTON, OH 45439
CONTACT: MR. WILLIAM WARD
PHONE: (937) 554-9063
WILLIAM.WARD@AES.COM

GREENE COUNTY SANITARY ENGINEERING:
667 DAYTON XENIA ROAD
XENIA, OH 45385
CONTACT: PROJECT MANAGER
SED_PM@CO.GREENE.OH.US

ODOT DISTRICT 8:
505 SOUTH STATE ROUTE 741
PO BOX 272
BUILDING 2801
LEBANON, OH 45036
CONTACT: MS. JIM JUDD
PHONE: (513) 933-6692

TELEPHONE:
AT&T METRO/LNS
CCI NETWORKS, LLC
2649 GARDNER ROAD
BROADVIEW, IL 60155
CONTACT: TIM LAPOINTE
PHONE: (713) 830-7437
tl0695@att.com

TELEPHONE:
AT&T TRANSMISSION LONG DISTANCE
7555 E. PLEASANT VALLEY RD. SUITE 140
INDEPENDANCE, OH 44131
CONTACT: MICHAEL DIEDERICH
PHONE: (216) 750-0135
MD4145@ATT.COM

TELEPHONE:
AT&T OHIO
DAYTON, OH 45459
CONTACT: HOWARD LAUDERMILK
PHONE: (937) 296-3588

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ROUNDING

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

EXISTING PLANS

EXISTING PLANS ENTITLED GRE-35-(0.13-9.45) AND GRE-35-1.17 MAY BE INSPECTED IN THE ODOT DISTRICT 8 OFFICE IN LEBANON, OHIO

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET NO. 5 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: STATIC GNSS
MONUMENT TYPE: A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID03

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD85(1995)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE SOUTH ZONE
COMBINED SCALE FACTOR: 0.99991836
ORIGIN OF COORDINATE SYSTEM: 0,0

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

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING. TREE REMOVAL IS NOT REQUIRED FOR FENCE REPLACEMENT ACTIVITIES. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	TOTAL
18"	939
30"	166
48"	6

BENCHING OF FOUNDATION SLOPES

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

ITEM 204 - PROOF ROLLING

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

ITEM 204 - PROOF ROLLING 45 HOURS.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 50 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

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

FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
OBSTRUCTION EVALUATION GROUP
10101 HILLWOOD PARKWAY
FORT WORTH, TX 76177
FAX: (817) 222-5920
HTTP://CEAAA.FAA.GOV

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OHIO 43235
OHIO.AIRPORT.PROTECTION@DOT.OHIO.GOV

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

EXISTING PAVEMENT THICKNESS

THE EXISTING PAVEMENT THICKNESS SHOWN ON SHEETS 11,12, 27, AND 29 ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO REFER TO THE CORRESPONDING BORING LOG/SOIL PROFILE INFORMATION SHEETS FOR THE PAVEMENT THICKNESS AT SPECIFIC LOCATIONS.

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 9 CU. YDS.
ITEM 202 - PAVEMENT REMOVED, AS PER PLAN 24 SQ. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 13" INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

ORANGE PLASTIC CONSTRUCTION FENCE

ORANGE PLASTIC CONSTRUCTION FENCE SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH MT-110.10, EXCEPT THE FENCE SHALL BE 72" HIGH AND THE TOP EDGE SHALL NOT SAG BELOW 60". THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED FOR PLACING THE ORANGE PLASTIC CONSTRUCTION FENCE.

LOCATION:
US 35 STA. 295+00 LT. TO STA. 323+50 LT.
TREBEIN RD. STA. 890+50 RT. TO 898+00 RT.

ORANGE PLASTIC CONSTRUCTION FENCE 3600 FT

PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTENANCE OF TRAFFIC AND SHALL INCLUDE ALL MATERIAL, EQUIPMENT, PARTS, LABOR, AND TOOLS NEEDED TO SECURELY PLACE, MAINTAIN, AND REMOVE THE ORANGE PLASTIC CONSTRUCTION FENCE.

ITEM 206 - MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS, AS PER PLAN

OBTAIN SOIL SAMPLES AS OUTLINED IN SUPPLEMENT 1120 FOLLOWING EXCAVATION OR EMBANKMENT PLACEMENT TO THE DESIGN SUBGRADE LEVEL. THE SOIL SAMPLES FOR SUPPLEMENT 1120 TESTING ARE TO BE OBTAINED FROM THE ACTUAL SUBGRADE SOILS. SAMPLING OF THE SOILS OUTSIDE THE ACTUAL STABILIZATION LIMITS OR FROM A BORROW AREA IS PROHIBITED. THE CONSTRUCTION SCHEDULE SHALL INCLUDE SPECIFIC ACTIVITIES FOR SAMPLING AND TESTING OF THE SUBGRADE SOILS FOR ALL PHASES OR PARTIAL PHASES OF CONSTRUCTION. THE INDIVIDUAL CONSTRUCTION PHASES ARE CONSIDERED TO BE PHASE 1, 1A, 2, 3, AND 4. PERFORM THE MIXTURE DESIGN PROCEDURE FOR EACH PHASE AS OUTLINED IN SUPPLEMENT 1120. DURING CONSTRUCTION, OBTAIN FIELD VERIFICATION SAMPLES FOR EACH PHASE OF CONSTRUCTION AND SUBMIT THE TEST RESULTS FOR EACH PHASE AS THE LABORATORY TESTING IS COMPLETE.

CALCULATED | CHECKED

GENERAL NOTES

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"	
		5,485									5,485			202	38000	5,485	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	
									15,096		15,096			202	75000	15,096	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	
										LS	LS			206	30001	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS, AS PER PLAN	30
			12,175.5								12,175.5			606	15050	12,175.5	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	
									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 CHECKED JAE

GENERAL SUMMARY

GRE-US 35-5.63

177
698

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
186	187		476	478	479		483		509		01/NHS/OT	02/NHS/BR	03/NHS/BR						
																		LIGHTING	
									4,065		4,065			625	23200	4,065	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
									1,980		1,980			625	23400	1,980	FT	NO. 10 AWG POLE AND BRACKET CABLE	
									7,001		7,001			625	24320	7,001	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
									1,190		1,190			625	25504	1,190	FT	CONDUIT, 3", 725.051	
									19		19			625	26253	19	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN	508
									7,058		7,058			625	29000	7,058	FT	TRENCH	
									5		5			625	29940	5	EACH	BARRIER JUNCTION BOX	
									33		33			625	30706	33	EACH	PULL BOX, 725.08, 24"	
									19		19			625	32000	19	EACH	GROUND ROD	
									1		1			625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM	
									2		2			625	34000	2	EACH	POWER SERVICE	
									2		2			625	34450	2	EACH	CONTROL CENTER CABINET, COMPLETE	
									7,058		7,058			625	36010	7,058	FT	UNDERGROUND WARNING/MARKING TAPE	
																		TRAFFIC CONTROL	
							86				86			620	00500	86	EACH	DELINEATOR, POST GROUND MOUNTED	
							376				376			621	00100	376	EACH	RPM	
							376				376			621	54000	376	EACH	RAISED PAVEMENT MARKER REMOVED	
					15						15			625	32000	15	EACH	GROUND ROD	
	18										18			626	00102	18	EACH	BARRIER REFLECTOR, TYPE 1, ONE-WAY (WHITE)	
	82										82			626	00102	82	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL (YELLOW/YELLOW)	
	5										5			626	00102	5	EACH	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL (YELLOW/RED)	
119											119			626	00110	119	EACH	BARRIER REFLECTOR, TYPE 2, ONE-WAY (WHITE)	
119											119			626	00110	119	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL (YELLOW/YELLOW)	
20											20			626	00110	20	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL (YELLOW/RED)	
43	2										45			626	00110	45	EACH	BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL (WHITE/RED)	
				963.5							963.5			630	03100	963.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
				33.5							33.5			630	06400	33.5	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	
				114.4							114.4			630	06500	114.4	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W6X9	
				10.5							10.5			630	07000	10.5	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W8X18	
				62.2							62.2			630	07500	62.2	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X22	
				42.5							42.5			630	07600	42.5	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W10X12	
				140.4							140.4			630	08000	140.4	FT	GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W12X30	
				14							14			630	08600	14	EACH	SIGN POST REFLECTOR	
				16							16			630	09000	16	EACH	BREAKAWAY STRUCTURAL BEAM CONNECTION	
					4						4			630	72320	4	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 6	
					1						1			630	72330	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 10	
					2						2			630	72340	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.31, DESIGN 12	
					2						2			630	72410	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.116, DESIGN 1	
					2						2			630	73210	2	EACH	COMBINATION OVERHEAD SIGN SUPPORT, TYPE TC-9.31, DESIGN 2	
					2						2			630	75000	2	EACH	SIGN ATTACHMENT ASSEMBLY	
				6							6			630	79610	6	EACH	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED	
				563.66							563.66			630	80100	563.66	SF	SIGN, FLAT SHEET	
				846							846			630	80200	846	SF	SIGN, GROUND MOUNTED EXTRUSHEET	
					1,754.5						1,754.5			630	80224	1,754.5	SF	SIGN, OVERHEAD EXTRUSHEET	
					2						2			630	84010	2	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC-21.50	
				16							16			630	84500	16	EACH	GROUND MOUNTED STRUCTURAL BEAM SUPPORT FOUNDATION	
					13						13			630	84510	13	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
			81								81			630	84900	81	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
			1								1			630	85100	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
			5								5			630	85400	5	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
			1								1			630	85600	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	
			74								74			630	86002	74	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
			12								12			630	86102	12	EACH	REMOVAL OF GROUND MOUNTED STRUCTURAL BEAM SUPPORT AND DISPOSAL	
					2						2			630	87100	2	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	
			4								4			630	87400	4	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	

CALCULATED TES
CHECKED JAE

GENERAL SUMMARY

GRE-US 35-5.63

180
698

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 PAVEMENT REMOVED, AS PER PLAN SY	202 CONCRETE MEDIAN REMOVED SY	202 PIPE REMOVED, 24" AND UNDER FT	202 PIPE REMOVED, OVER 24" FT	202 GUARDRAIL REMOVED FT	202 GUARDRAIL REMOVED, BARRIER DESIGN FT	202 IMPACT ATTENUATOR REMOVED EACH	202 MAILBOX REMOVED EACH	202 BUILDING DEMOLISHED, GRAIN SILO EACH	202 CATCH BASIN REMOVED EACH	202 INLET REMOVED EACH	202 REMOVAL MISC.: SEPTIC TANK AND LEACH FIELD LS	202 REMOVAL MISC.: PRECAST CONCRETE OUTLET EACH	202 REMOVAL MISC.: PRIVATE WOODEN SIGN EACH	202 REMOVAL MISC.: CONCRETE BUMPER BLOCKS EACH	202 REMOVAL MISC.: CONCRETE FOUNDATION EACH	202 REMOVAL MISC.: ROCK CHANNEL PROTECTION SY	202 ABANDON MISC.: PIPE 24" AND UNDER FT	203 EXCAVATION CY	203 EMBANKMENT CY
		US 35																						
R-1	224	346+00.00	350+00.00	LT						400														
R-2	224	346+00.00	348+32.00	LT					232															
R-1	225	350+00.00	354+00.00	LT						400														
R-2	225	352+34.00	354+00.00	LT					166															
R-3	225	351+06.00	351+06.00	RT/LT			63							1										
R-4	225	351+78.00	354+00.00	RT					222															
R-1	226	354+00.00	358+00.00	LT						400														
R-2	226	356+07.00	356+07.00	RT/LT			60							1										
R-3	226	354+00.00	358+00.00	LT					400															
R-4	226	354+00.00	358+00.00	RT					400															
R-5	226	357+21.00	358+00.00	RT						79	1													
R-1	227	358+00.00	362+00.00	LT						400														
R-2	227	358+00.00	362+00.00	LT					400															
R-3	227	358+00.00	362+00.00	RT					400															
R-4	227	359+00.00	359+07.00	RT																2				
R-5	227	361+07.00	361+07.00	RT/LT				60						1										
R-1	228	362+00.00	365+49.00	LT						349	1													
R-2	228	362+00.00	366+00.00	LT					400															
R-3	228	362+00.00	365+00.00	RT					300															
R-1	229	366+00.00	370+00.00	RT						400	1													
R-2	229	366+00.00	368+87.50	LT					288															
R-1	230	370+00.00	375+00.00	RT						500														
R-2	230	379+63.00	380+00.00	LT						37														
R-3	230	375+00.00	380+00.00	RT						500														
R-1	231	380+00.00	381+46.00	LT						146	1													
R-2	231	380+00.00	385+00.00	RT						500														
R-3	231	385+00.00	388+15.00	RT						315	1													
		VALLEY ROAD																						
R-1	355	862+70.00	862+91.00	LT			21																	
		TREBEIN ROAD																						
R-1	361	885+27.00	885+27.00	LT									1											
R-1	362	885+90.00	888+80.00	LT			297							2										
R-2	362	886+31.00	887+50.00	RT												1								
R-1	363	890+28.00	890+28.00	LT								1												
R-2	363	890+91.00	891+32.00	RT/LT			89																	
R-3	363	891+11.00	891+11.00	RT														1						
R-4	363	889+13.00	889+97.00	RT															9					
		GLENN THOMPSON ACCESS DRIVE																						
R-1	366	8+50.00	8+50.00	RT/LT			68																	
		DRIVE AT VALLEY ROAD																						
R-1	428	1+28.00	1+28.00	RT								1												
TOTALS CARRIED TO SHEET 185					0	0	598	60	3208	4426	5	2	1	5	0	1	0	1	9	2	0	0	0	0

CALCULATED JAE CHECKED DYB

ROADWAY SUBSUMMARY

GRE-US 35-5.63

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 PAVEMENT REMOVED, AS PER PLAN	202 CONCRETE MEDIAN REMOVED	202 PIPE REMOVED, 24" AND UNDER	202 PIPE REMOVED, OVER 24"	202 GUARDRAIL REMOVED	202 GUARDRAIL REMOVED, BARRIER DESIGN	202 IMPACT ATTENUATOR REMOVED	202 MAILBOX REMOVED	202 BUILDING DEMOLISHED, GRAIN SILO	202 CATCH BASIN REMOVED	202 INLET REMOVED	202 REMOVAL MISC.: SEPTIC TANK AND LEACH FIELD	202 REMOVAL MISC.: PRECAST CONCRETE OUTLET	202 REMOVAL MISC.: PRIVATE WOODEN SIGN	202 REMOVAL MISC.: CONCRETE BUMPER BLOCKS	202 REMOVAL MISC.: CONCRETE FOUNDATION	202 REMOVAL MISC.: ROCK CHANNEL PROTECTION	202 ABANDON MISC.: PIPE 24" AND UNDER	203 EXCAVATION	203 EMBANKMENT
					SY	SY	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	LS	EACH	EACH	EACH	EACH	SY	FT	CY	CY
		US 35																						
R-1	*404*	*297+50.00*	*323+30.03*	*LT*	*10422*																			
R-2	*404*	*297+50.00*	*323+30.03*	*RT*	*10459*																			
R-3	*405*	*325+85.20*	*365+00.00*	*LT*	*17344*																			
R-4	*405*	*325+85.20*	*365+00.00*	*RT*	*16844*																			
		VALLEY ROAD																						
R-5	*405*	*862+00.00*	*879+53.00*	*LT*	*4727*																			*2753*
		TREBEIN ROAD																						
R-6	*405*	*880+64.00*	*802+04.00*	*LT*	*676*																		*131*	
R-7	*405*	*884+95.00*	*897+90.97*	*LT*	*4414*																			
TOTALS THIS SHEET					*64886*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*131*	*2753*
TOTALS FROM SHEET 183					*0*	*769*	*1127*	*30*	*2277*	*4706*	*3*	*0*	*0*	*6*	*6*	*0*	*2*	*1*	*0*	*0*	*21*	*10*	*0*	*0*
TOTALS FROM SHEET 184					*0*	*0*	*598*	*60*	*3208*	*4426*	*5*	*2*	*1*	*5*	*0*	*1*	*0*	*1*	*9*	*2*	*0*	*0*	*0*	*0*
TOTALS CARRIED TO GENERAL SUMMARY					*64886*	*769*	*1725*	*90*	*5485*	*9132*	*8*	*2*	*1*	*11*	*6*	*1*	*2*	*2*	*9*	*2*	*21*	*10*	*131*	*2753*

CALCULATED JAE
CHECKED DYB

ROADWAY SUBSUMMARY

GRE-US 35-5.63

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	606 GUARDRAIL, TYPE MGS	606 GUARDRAIL, TYPE MGS WITH LONG POST	606 GUARDRAIL, BARRIER DESIGN, TYPE MGS	606 FLARED END SECTION	606 ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016	606 ANCHOR ASSEMBLY, MGS TYPE T	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	606 MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	606 IMPACT ATTENUATOR, TYPE 2 (BIDIRECTIONAL) SPEED = 60 MPH, HAZARD = 36"		626 BARRIER REFLECTOR, TYPE 2, ONE-WAY (WHITE)	626 BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL (YELLOW/YELLOW)	626 BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL (YELOW/RED)	626 BARRIER REFLECTOR, TYPE 2, BIDIRECTIONAL (WHITE/RED)						
					FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH		EACH	EACH	EACH	EACH						
		US 35																						
GR-1	484	273+87.50	275+62.50	RT	112.5				1	1					3									
GR-1A	209	287+12.50	298+12.50	RT	50.0	987.5			1	1						24								
GR-2	209	288+75.63	323+02.53	LT/CL	50.5	874.5	2475.0	2			1					36								
GR-3	211	298+24.50	299+99.50	LT	112.5				1	1					3									
GR-4	212	300+00.00	301+62.50	RT	100.0				1	1					3									
GR-5	216	317+93.13	323+32.53	RT	462.5				1		1				7									
GR-6	217	321+80.03	323+32.03	LT	137.5					1		1			3									
GR-7	218	325+83.20	328+47.70	RT	250.0					1		1			4									
GR-8	221	336+46.00	338+21.00	RT	112.5				1	1					3									
GR-9	223	941+87.50, RAMP G	365+00.00	RT	2262.5				1						25									
GR-10	223	1042+62.50, RAMP H	368+87.50	LT	2612.5					1					28									
GR-11	227	359+77.50	365+16.90	LT/CL	512.5						1		1			7								
GR-12	229	366+25.00	391+12.50	RT		2300.0	175.0	1		1			1			26								
GR-13	229	367+81.25	392+43.75	LT		2300.0	150.0			1			1			26								
		RAMP E																						
GR-20	214	706+57.51	722+72.01	LT	1600.0					1		1						18						
	214	722+72.01	729+39.92	LT														8						
GR-21	244	721+94.97	722+71.97	RT	62.5					1		1					2							
	244	722+71.97	730+50.00	RT													9							
		RAMP H																						
GR-22	258	1039+24.22	866+13.16, TREBEIN RD	LT/RT	1187.5				2						6			8						
	258	1031+29.00	1039+06.37	RT													9							
		VALLEY ROAD																						
GR-30	357	869+53.39	878+67.89	LT	900.0					1		1			11									
	360	878+67.52	881+70.00	LT											4									
GR-31	358	870+51.68	933+61.99, RAMP G	RT	562.5				1	1					4			5						
GR-32	359	841+34.63, RAMP F	878+65.45	RT	487.5				1		1				5			2						
	360	878+65.45	881+67.00	RT											4									
		TREBEIN ROAD																						
GR-33	360	729+51.42, RAMP E	886+99.76	LT	600.0				1		1				6			2						
TOTALS CARRIED TO GENERAL SUMMARY					12175.5	6462.0	2800.0	3	12	14	5	5	3		119	119	20	43						

CALCULATED JAE
CHECKED DYB

ROADWAY SUBSUMMARY

GRE-US 35-5.63

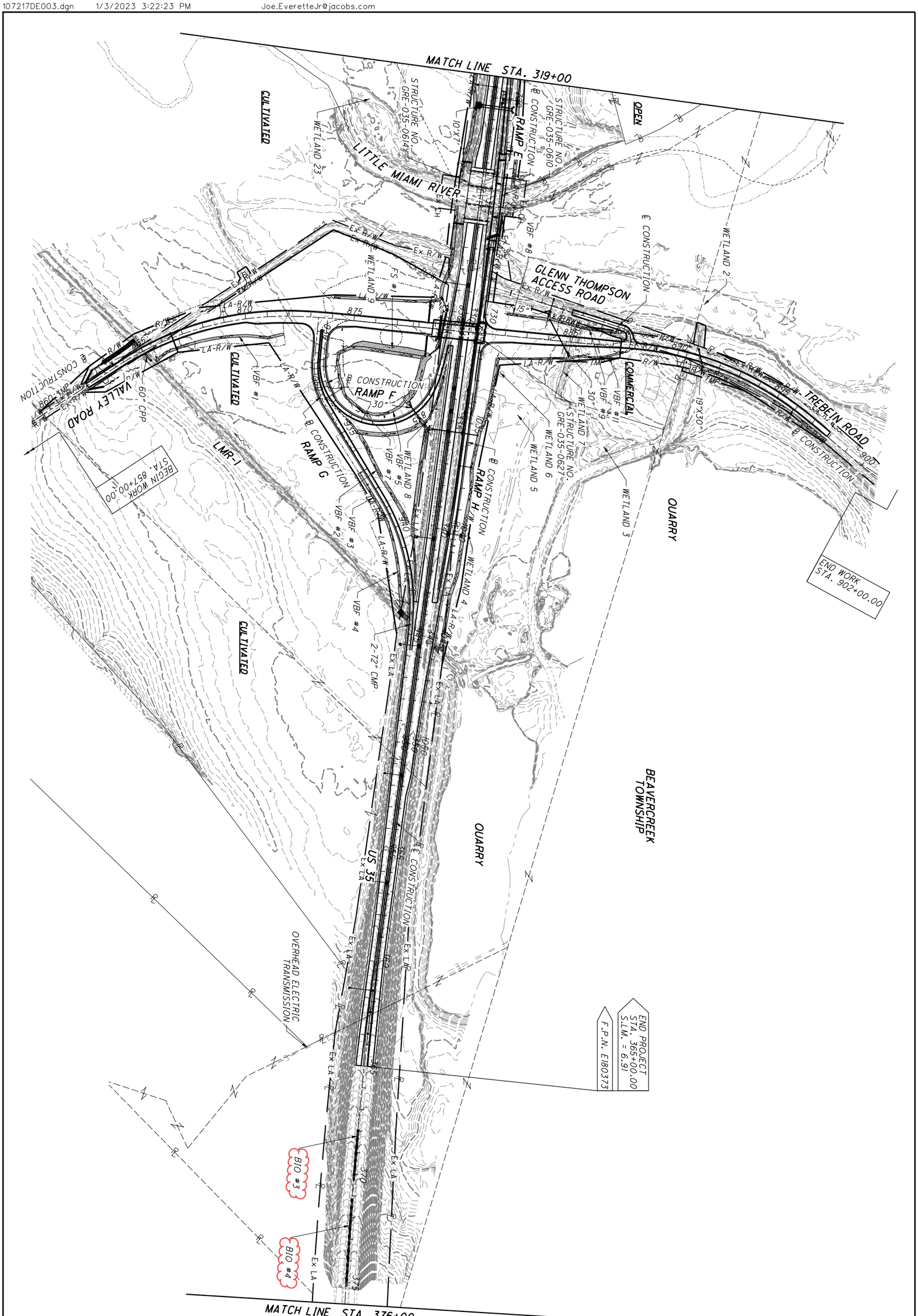
REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	614 WORK ZONE DOTTED LINE, CLASS I, 6" 807 PAINT (WHITE)	614 WORK ZONE STOP LINE, CLASS I	614 WORK ZONE ISLAND MARKING, CLASS I	614 WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS III, 6" 642 PAINT (WHITE)	614 WORK ZONE STOP LINE, CLASS III, 642 PAINT	614 WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT	648 LANE LINE, 6"	648 EDGE LINE, 6" (WHITE)	648 EDGE LINE, 6" (YELLOW)	648 CHANNELIZING LINE, 12"	648 DOTTED LINE, 6" (WHITE)	648 STOP LINE	644 ISLAND MARKING
					MILE	MILE	MILE	FT	FT	FT	SF	MILE	MILE	MILE	FT	FT	FT	SF	MILE	MILE	MILE	FT	FT	FT	SF
		US 35 / RAMPS																							
		POST PHASE 4 / FINAL CONFIGURATION			3.40	8.22	1.01	4389	3362	30	39	3.40	8.22	1.01	4389	3362	30	39	3.40	8.22	1.01	4389	3362	30	39
TOTALS CARRIED TO GENERAL SUMMARY					3.40	8.22	1.01	4389	3362	30	39	3.40	8.22	1.01	4389	3362	30	39	3.40	8.22	1.01	4389	3362	30	39

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS I, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT (WHITE)	614 WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT	614 WORK ZONE TRANSVERSE / DIAGONAL LINE, CLASS I, 642 PAINT	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT	614 WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS III, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS III, 4", 642 PAINT (WHITE)	614 WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	614 WORK ZONE TRANSVERSE / DIAGONAL LINE, CLASS III, 642 PAINT	614 WORK ZONE STOP LINE, CLASS III, 642 PAINT
					MILE	MILE	MILE	FT	FT	FT	FT	MILE	MILE	MILE	FT	FT	FT	FT
		TREBEIN ROAD / VALLEY ROAD																
		POST PHASE 3 / FINAL CONFIGURATION			0.04	1.44	1.88	1041	226	754	36	0.04	1.44	1.88	1041	226	754	36
TOTALS CARRIED TO GENERAL SUMMARY					0.04	1.44	1.88	1041	226	754	36	0.04	1.44	1.88	1041	226	754	36

CALCULATED | CHECKED

MAINTENANCE OF TRAFFIC SUBSUMMARY
POST PHASE 3 AND 4 PAVEMENT MARKINGS

GRE-US 35-5.63

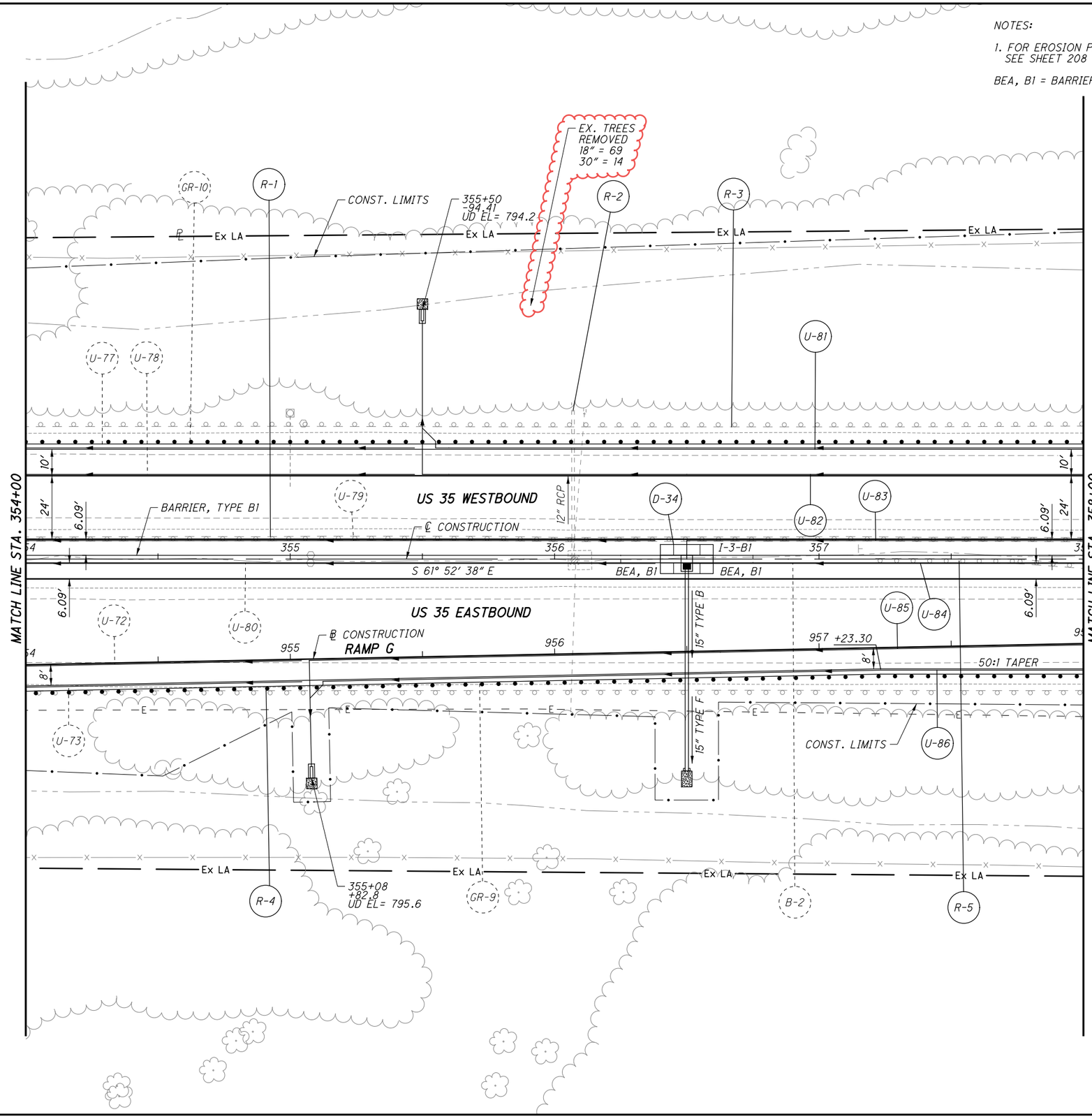


206 / 698	GRE-US 35-5.63	PROJECT SITE PLAN US 35 STA. 319+00 TO STA. 376+00	CALCULATED / CHECKED	0 200 100 400 HORIZONTAL SCALE IN FEET

NOTES:

1. FOR EROSION PROTECTION LEGEND, SEE SHEET 208

BEA, B1 = BARRIER END ANCHORAGE, TYPE B1



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED | CHECKED

PLAN - US 35
STA. 354+00 TO STA. 358+00

GRE-US 35-5.63

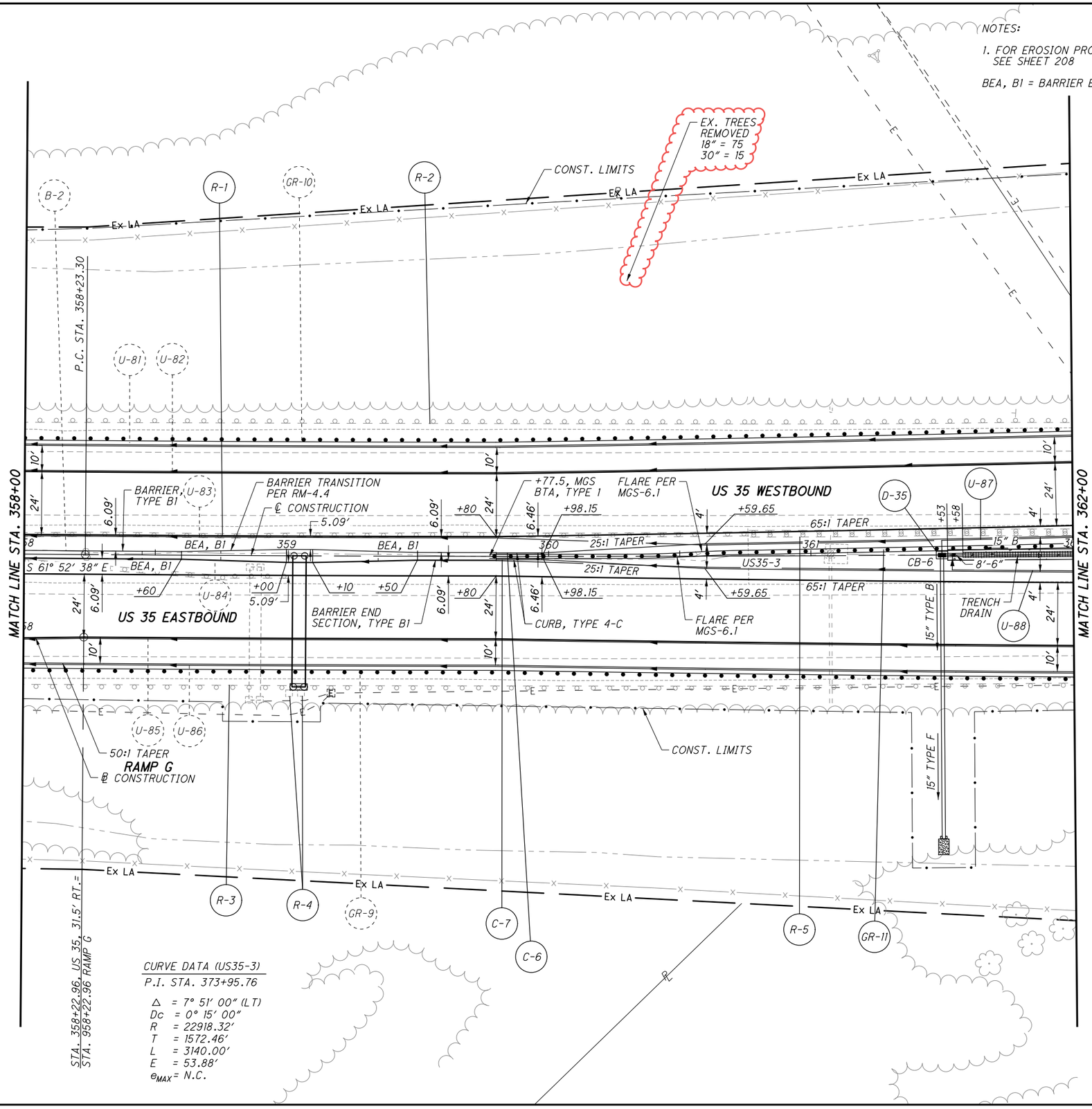
226
698

107217gp040.dgn Sheet 1/3/2023 9:10AM CH_ODOTV8i_Half_BW.pen ProjectWise Dynamic Composition Server JEGSVCPWU01

NOTES:

1. FOR EROSION PROTECTION LEGEND, SEE SHEET 208

BEA, B1 = BARRIER END ANCHORAGE, TYPE B1



CURVE DATA (US35-3)

P.I. STA. 373+95.76

△ = 7° 51' 00" (LT)
Dc = 0° 15' 00"
R = 22918.32'
T = 1572.46'
L = 3140.00'
E = 53.88'
e_{MAX} = N.C.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED

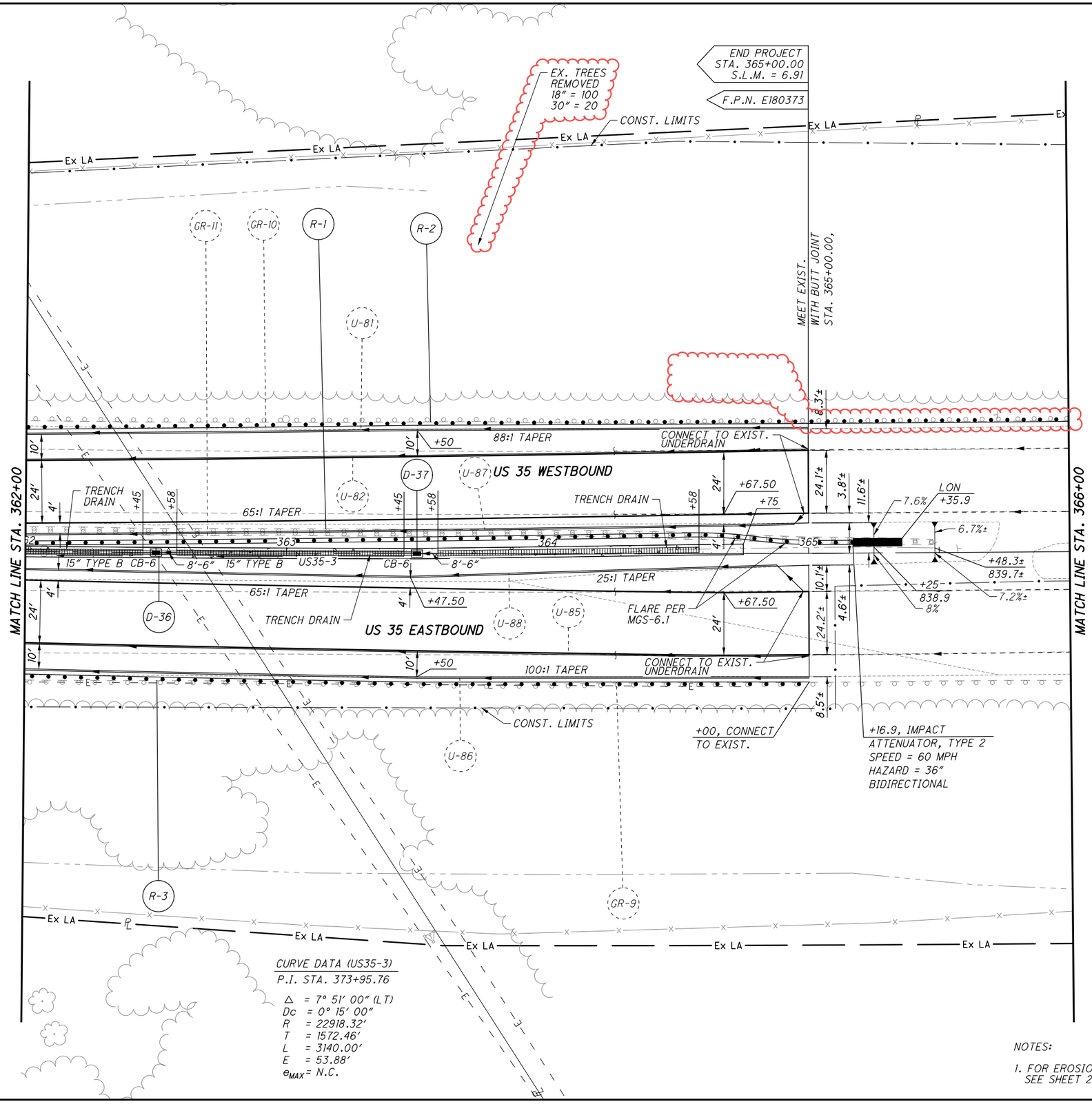
CHECKED

PLAN - US 35
STA. 358+00 TO STA. 362+00

GRE-US 35-5.63

227
698

107217gp041.dgn Sheet 1/3/2023 9:10AM CH_ODOTV8i_Half_BW.pen ProjectWise Dynamic Composition Server JEGSVCPWU01



NOTES:

1. FOR EROSION PROTECTION LEGEND, SEE SHEET 208

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED | CHECKED

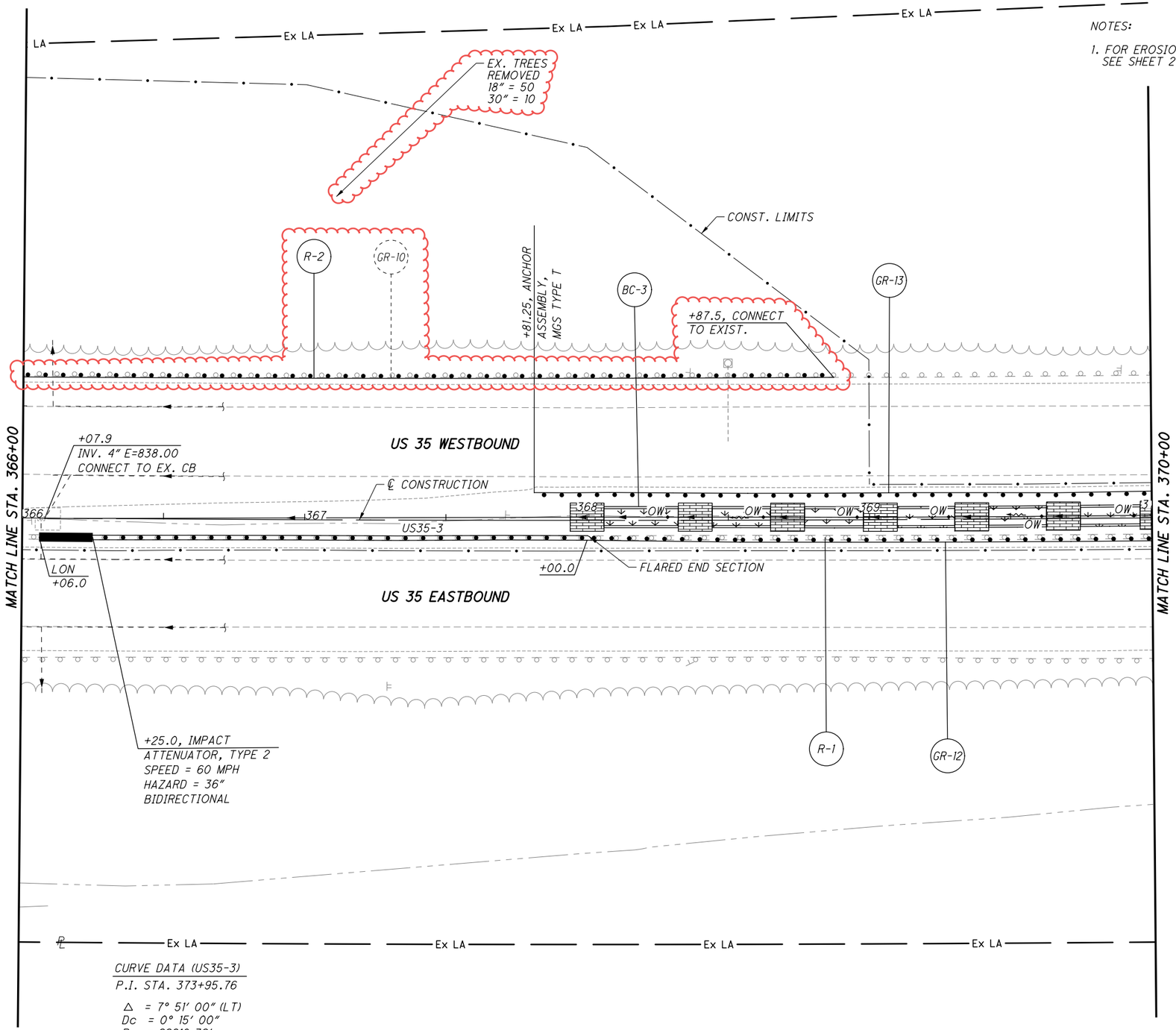
PLAN - US 35
STA. 362+00 TO STA. 366+00

GRE-US 35-5.63

228
698

NOTES:

1. FOR EROSION PROTECTION LEGEND, SEE SHEET 208



CURVE DATA (US35-3)

P.I. STA. 373+95.76

Δ = 7° 51′ 00″ (LT)
Dc = 0° 15′ 00″
R = 22918.32′
T = 1572.46′
L = 3140.00′
E = 53.88′
e_{MAX} = N.C.

PLAN - US 35
STA. 366+00 TO STA. 370+00

GRE-US 35-5.63

229
698

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED | CHECKED

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			
5860	507	00600	5860	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	4180	1680			
6355	507	00650	6355	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	4515	1840			
190393	509	26000	190393	LB	GALVANIZED STEEL REINFORCMENT	40207	27795	122391		
374	511	34447	374	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			374		4/36
127	511	34451	127	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			127		4/36
79	511	41012	79	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		79			
67	511	43512	67	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	67				
231	511	44112	231	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	231				
182	511	46512	182	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	123	59			
1365	512	10101	1365	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	270	220	875		4/36
16	512	33000	16	SY	TYPE 2 WATERPROOFING	16				
404562	513	10300	404562	LB	STRUCTURAL STEEL MEMBERS, LEVEL 5			404562		
3840	513	20000	3840	EACH	WELDED STUD SHEAR CONNECTORS			3840		
1307	514	00060	1307	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			1307		17/36
1307	514	00066	1307	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			1307		17/36
69	516	11210	69	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL			69		
164	516	13600	164	SF	1" PREFORMED EXPANSION JOINT FILLER			164		
4	516	44101	4	EACH	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)					
4	516	44201	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE		4			24/36
					(NEOPRENE), AS PER PLAN (16" x 26" X 3.50" PAD WITH 17" x 27" x 2" PLATE)					
8	516	44301	8	EACH	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)					
268	518	20000	268	SY	PREFABRICATED GEOCOMPOSITE BOARD	268				
34	518	21200	34	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	34				
129	518	40000	129	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	129				
38	518	40010	38	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	38				
8	523	20000	8	EACH	DYNAMIC LOAD TESTING	4	4			
8	523	20500	8	EACH	RESTRIKE	4	4			
85	526	25010	85	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")				85	
100	526	30010	100	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				100	
1319	840	23000	1319	CY	SELECT GRANULAR BACKFILL	1319				

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

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
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		
4	511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	4				
148	511	34412	148	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			148		
436	511	34447	436	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN			436		3/30
30	511	34451	30	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			30		3/30
70	511	41012	70	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		70			
252	511	43512	252	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	252				
63	511	46512	63	CY	CLASS QC1 CONCRETE WITH QC/QA, 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,			8		
					LEVEL 3, TYPE WF60-49 (104'-9" LONG)					
8	515	15110	8	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS,			8		
					LEVEL 3, TYPE WF60-49 (73'-0" LONG)					
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	8				22/30
					(NEOPRENE), AS PER PLAN (14" x 21" X 2.5735" PAD WITH 16" x 25" 1.75" PL)					
8	516	44101	8	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE	8				22/30
					(NEOPRENE), AS PER PLAN (14" x 19.5" X 2.5735" PAD WITH 16" x 25" 1.75" PL)					
16	516	44101	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE		16			22/30
					(NEOPRENE), AS PER PLAN (14" x 19.5" X 2.5735" PAD WITH 16" x 40" 1.75" PL)					
206	517	75120	206	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)			206		
3	518	12301	3	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN			3		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			
6	523	20500	6	EACH	RESTRIKE	4	2			
561	526	30011	561	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (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

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

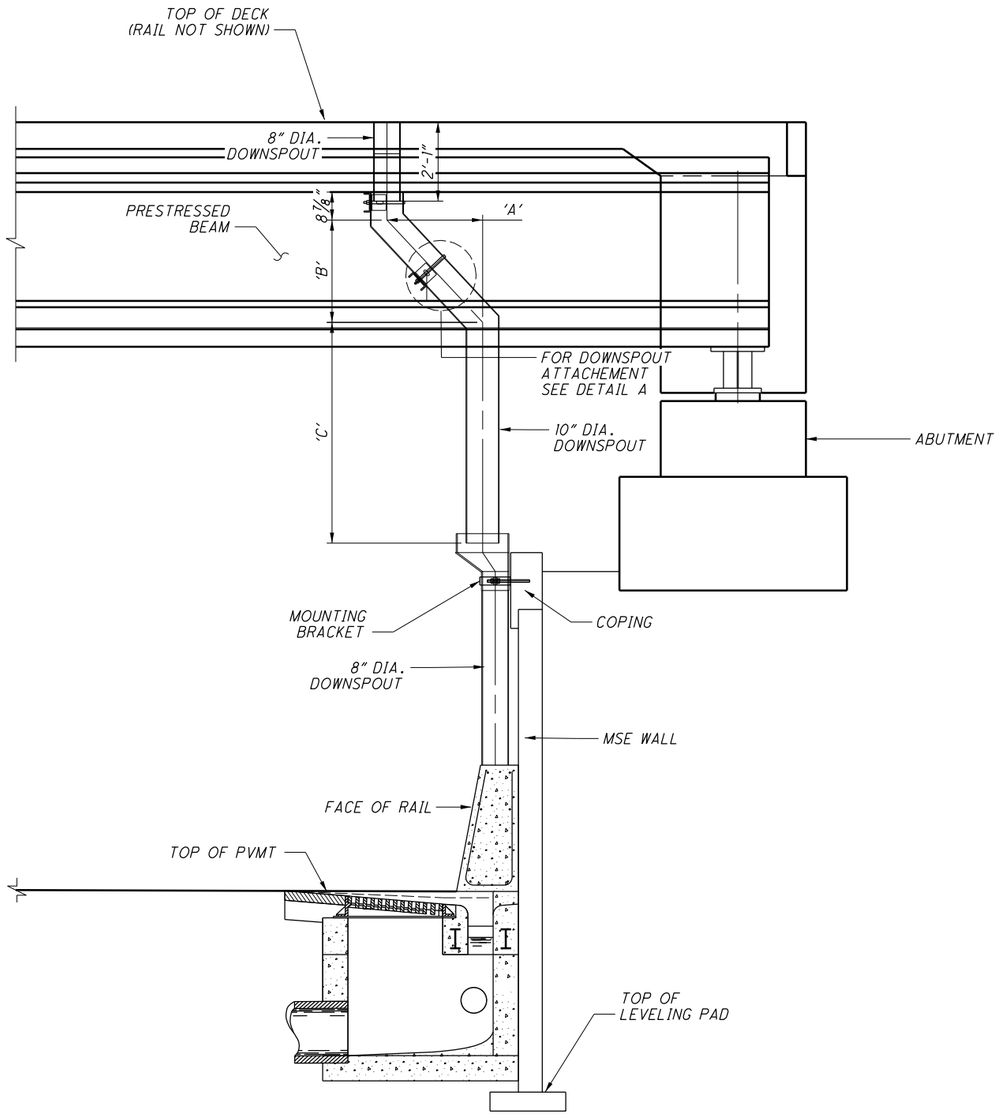
GENERAL NOTES II & ESTIMATED QUANTITIES

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

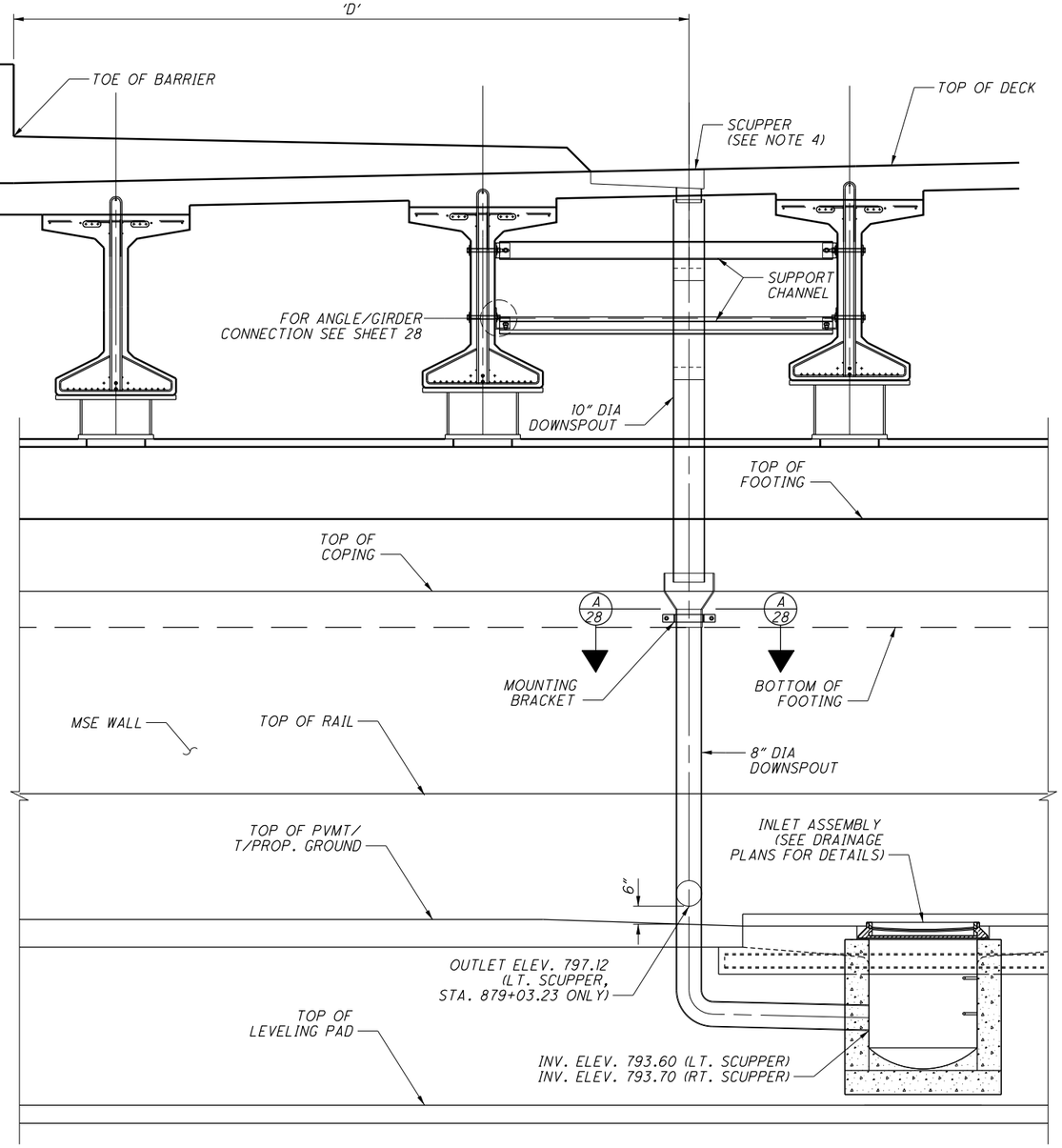
GRE-US 35-5.63
PID No. 107217

575
698

DIMENSION	STA. 879+03.23 LT.	STA. 880+60.00 LT.	STA. 880+58.00 RT.
'A'	0'-0"	6'-8 7/16"	6'-8 3/4"
'B'	0'-0"	2'-8 7/16"	2'-8 7/16"
'C'	8'-6 3/8"	5'-9 15/16"	5'-9 15/16"
'D'	2'-8 11/16"	2'-8 11/16"	5'-7 3/8"



LEFT SIDE ELEVATION



LEFT SIDE SECTION

(RIGHT SIDE IS A MIRROR IMAGE OF THE LEFT)

NOTES:

1. DOWNSPOUT PIPE SHALL BE PER CMS 748.06.
2. DOWNSPOUTS AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED PER CMS 711.02 AND INCLUDED WITH ITEM 518, SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN FOR PAYMENT.
3. SEE SHEET 28 FOR ADDITIONAL SCUPPER AND DOWNSPOUT DETAILS.
4. FOR THE LEFT SCUPPERS, PROVIDE A NEENAH FOUNDRY MODEL R-3910-V OR AN APPROVED EQUAL. FOR THE RIGHT SCUPPER, PROVIDE A NEENAH FOUNDRY MODEL R-3945-A DESIGNED FOR CONTINUOUS TRAFFIC LOADING (WITH -2% SLOPE) OR AN APPROVED EQUAL.

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	

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

GRE-US 35-5.63
PID No. 107217

27/30

599
698

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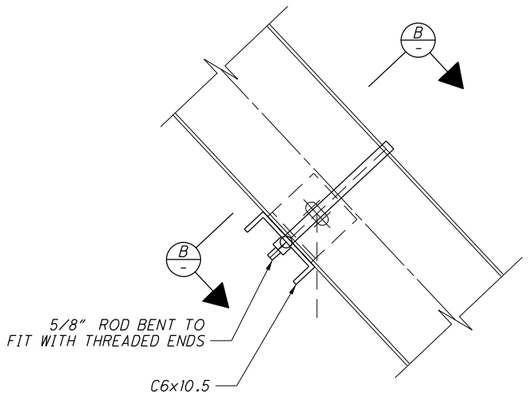
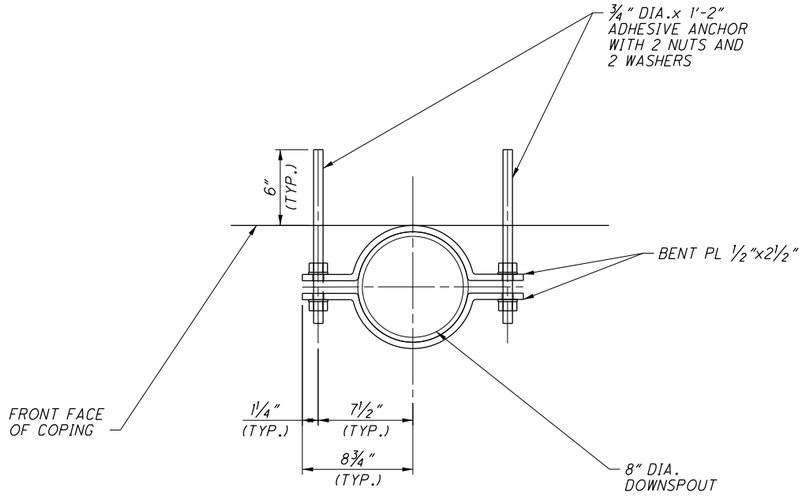
NOTES:

1. SCUPPER AND DOWNSPOUT STEEL PIPE IN ACCORDANCE WITH CMS 748.06. ALL OTHER STEEL SHAPES SHALL BE ASTM A709 GRADE 50. BOLTS SHALL BE ASTM A325, TYPE 1.
2. GALVANIZE SCUPPER, DOWNSPOUT PIPE, ALL ASSOCIATED STEEL HARDWARE, AND BOLTS IN ACCORDANCE WITH CMS 711.02 AND INCLUDED WITH ITEM 518, SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN FOR PAYMENT.
3. ADHESIVE ANCHORS SHALL BE ANCHOR BOLTS IN HOLES FILLED WITH NONSHRINKING EPOXY GROUT MEETING THE REQUIREMENTS OF CMS 705.20. CARE SHALL BE TAKEN NOT TO DAMAGE REINFORCING STEEL WHILE DRILLING FOR ADHESIVE ANCHORS.
4. SEE SHEET 27 FOR SECTION A-A LOCATION.

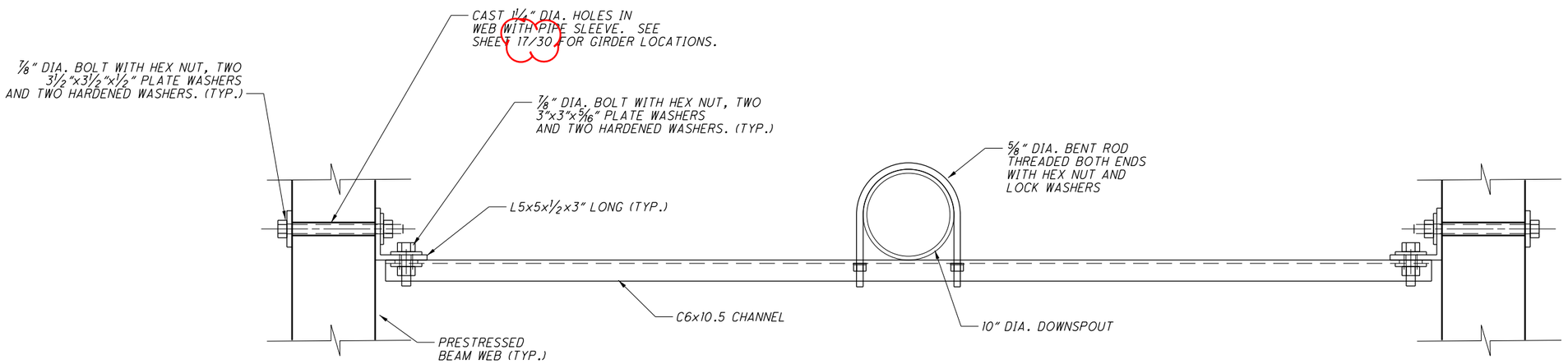


DETAIL A

(LOWER SUPPORT BRACKET SHOWN, UPPER SUPPORT BRACKET SIMILAR)



SECTION A-A



SECTION B-B

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	

SCUPPER DETAILS

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

GRE-US 35-5.63
PID No. 107217

Jason.Centers@jacobs.com

1/6/2023 9:09:42 AM

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REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 FENCE REMOVED	202 GATE REMOVED		607 FENCE, TYPE 47	607 FENCE REMOVED AND REBUILT		625 GROUND ROD							FOR INFORMATION ONLY: END POST ASSEMBLY (E.P.A.)	CORNER POST ASSEMBLY (C.P.A.)	ABUTMENT CONNECTION (A.C.)	INTERMEDIATE ANCHOR POST ASSEMBLY (I.A.P.)	DEFLECTION POINT (D.P.)	FENCE CROSSING, TYPE 2	FENCE CROSSING, TYPE 3
		FROM	TO		FT	EACH		FT	FT		EACH							EACH	EACH	EACH	EACH	EACH	EACH	EACH
		US 35																						
R-1	603	295+00.00	320+00.00	LT	2500																			
R-2	603	297+50.00	320+00.00	RT	2250																			
F-1	603	295+00.00	320+00.00	LT				2500	7		12										6	1		
F-2	603	297+50.00	320+00.00	RT				2250			12										5	2		2
R-1	604	320+00.00	323+48.03	LT	392																			
R-2	604	325+67.20	327+06.05	LT	188																			
R-3	604	884+97.00 (TREBEIN RD)	889+00.00 (TREBEIN RD)	RT/LT	540	1																		
R-4	604	885+32.20 (TREBEIN RD)	345+00.00	LT	2026																			
R-5	604	320+00.00	323+48.03	RT	383																			
R-6	604	325+67.20	327+57.40	RT	248																			
R-7	604	328+96.77	345+00.00	RT	1604																			
F-1	604	320+00.00	322+77.90	LT				341											1	1	1			1
F-2	604	322+79.01	323+48.03	LT				85										1	2	1				
F-3	604	325+67.20	326+47.71	LT				89										2	1					1
F-4	604	326+47.68	886+88.84 (TREBEIN RD)	LT				881										2	2		2			3
F-5	604	887+35.00 (TREBEIN RD)	345+00.00	RT				1844										1	1		2			
F-6	604	320+00.00	323+48.03	RT				440										2	1					1
F-7	604	325+67.20	871+00.00 (VALLEY RD)	RT				1262										2	2		2	1		1
F-8	604	871+00.00 (VALLEY RD)	345+00.00	RT				1491											1		2	1	1	
R-1	605	345+00.00	365+00.00	LT	2014																			
R-2	605	345+00.00	365+00.00	RT	2005																			
F-1	605	345+00.00	365+00.00	LT				2000			3							1			3	1	1	
F-2	605	345+00.00	365+00.00	RT				2022			4								6		2	1		
		VALLEY/TREBEIN ROAD																						
R-1	606	888+00.00	897+90.97	RT	946	2																		
F-1	606	866+49.97	868+80.00	LT				230										2			1			
F-2	606	869+28.00	871+00.00	LT				172										1						
F-3	606	866+49.96	871+00.00	RT				450										1						
TOTALS					15096	3		16057	7		31							15	17	2	26	7	2	9
TOTALS CARRIED TO GENERAL SUMMARY					15096	3		16057	7		31													

CALCULATED JAE CHECKED DYB

FENCE SUBSUMMARY

GRE-US 35-5.63

602
698