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APPROVED _____
 DATE _____ CITY OF COLUMBUS, DIRECTOR,
 DEPT. OF PUBLIC SERVICE

APPROVED _____
 DATE _____ CITY OF COLUMBUS, DESIGN SECTION ENGINEER
 DIVISION OF DESIGN AND CONSTRUCTION

APPROVED _____
 DATE _____ CITY OF COLUMBUS, ADMINISTRATOR
 DIVISION OF POWER

APPROVED _____
 DATE _____ CITY OF COLUMBUS, ADMINISTRATOR
 DIVISION OF SEWERAGE AND DRAINAGE

APPROVED _____
 DATE _____ CITY OF COLUMBUS, ADMINISTRATOR
 DIVISION OF WATER

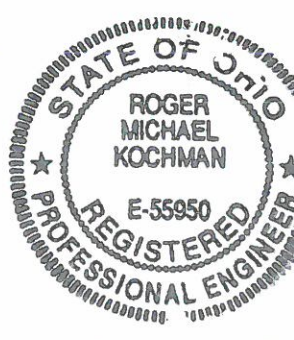
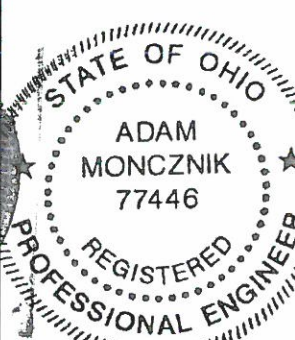
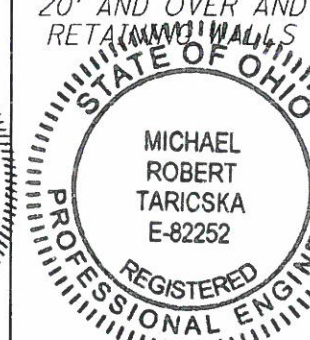
APPROVED _____
 DATE _____ CITY OF COLUMBUS, DIRECTOR
 DEPT. OF RECREATION AND PARKS

APPROVED _____
 DATE _____ CITY OF COLUMBUS, CITY ENGINEER
 ADMINSTRATOR, DIV. OF DESIGN AND CONST.

APPROVED _____
 DATE _____ CITY OF COLUMBUS, DIRECTOR
 DEPT. OF PUBLIC UTILITIES

APPROVED _____
 DATE _____ CITY OF COLUMBUS, FIRE PREVENTION
 BUREAU, DIVISION OF FIRE

APPROVED _____
 DATE _____ CITY OF COLUMBUS, ENGINEERING
 SUPERVISOR, DEPARTMENT OF TECHNOLOGY

ENGINEERS SEAL: FOR STRUCTURE FRA-040-1351  SIGNED: <i>Roger M. Kochman</i> DATE: 7/19/19	ENGINEERS SEAL: FOR RETAINING WALLS N5 AND N6  SIGNED: <i>Adam Moncznik</i> DATE: 7-19-19	ENGINEERS SEAL: FOR ENTIRE PLANS EXCEPT STRUCTURES 20' AND OVER AND RETAINING WALLS  SIGNED: <i>Michael Robert Taricska</i> DATE: 7-19-19
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FOR ADDITIONAL SEALS, SEE SHEET 817

CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWINGS																COC SUPPLEMENTAL SPECIFICATIONS			
1441	4/22/18	2320	4/30/18	4110	10/1/18	4301	8/10/17	MIS-500	1/1/18	AA-S102	12/6/13	AA-S127	12/6/13	L-1001	1/26/18	L-7102A	1/26/18	SS-1524	5/8/14
1645	4/30/18	2328	4/30/18	4111	8/10/17	4330	8/10/17	MIS-501	1/1/18	AA-S104	8/8/14	AA-S128	8/8/14	L-1003	1/26/18	L-7102B	1/26/18	SS-1525	4/1/19
		2331	4/30/18	4121	10/1/18	4331	5/1/14	MIS-600	1/1/18	AA-S106	7/9/12	AA-S129	12/6/13	L-1004	1/26/18	L-7601	1/26/18	SS-1620	9/10/18
2000	3/30/18	2332	4/30/18	4122	10/1/18	4332	5/1/14	MIS-601	1/1/18	AA-S107	7/9/12	AA-S133A	8/8/14	L-6306	1/26/18	L-8502	1/26/18		
2005	3/30/18			4160	10/1/18			MIS-602	1/1/18	AA-S110	9/20/12	AA-S139	12/6/13	L-6309A	1/26/18	L-9901	1/26/18		
2151	4/30/18	4000	8/10/17	4161	8/1/15	MIS-054	1/1/18	MIS-603	1/1/18	AA-S111	12/6/13	AA-S142	12/6/13	L-6309E	1/26/18				
2170	4/30/18	4001	8/1/15	4162	10/1/18	MIS-056	1/1/18	MIS-700	1/1/18	AA-S112	12/6/13	AA-S149	10/15/14	L-6310	1/26/18				
2171	4/30/18	4020	5/1/14	4163	6/1/18	MIS-100	1/1/18	MIS-702	1/1/18	AA-S114	12/6/13	AA-S150	7/9/12	L-6311	1/26/18				
2185	3/30/18	4021	8/10/17	4200	8/1/15	MIS-104	1/1/18	MIS-800	1/1/18	AA-S117	7/9/12	AA-S151	7/9/12	L-6312	1/26/18				
2191	3/30/18	4022	8/10/17	4201	8/1/15	MIS-184	1/1/18	MIS-801	1/1/18	AA-S119	8/8/14	AA-S160	3/11/16	L-6316A	1/26/18				
2202	12/31/18	4023	8/10/17	4205	5/1/14	MIS-203	1/1/18	MIS-902	1/1/18	AA-S121	7/9/12	AA-S171	12/15/16	L-6316B	1/26/18				
2300	4/30/18	4050	8/10/17	4230	10/1/18	MIS-308	1/1/18			AA-S123	8/8/14			L-6637A	1/26/18				
2301	4/30/18	4051	5/1/14	4251	5/1/14	MIS-400	1/1/18	TDMIS-1	1/1/18	AA-S125A	8/8/14			L-6637C	1/26/18				
2319	3/30/18	4106	6/1/18	4253	5/1/14	MIS-404	1/1/18			AA-S125B	8/8/14			L-6640	1/26/18				

FOR LIST OF APPLICABLE ODOT SCD AND SUPPLEMENTAL SPECIFICATIONS, SEE SHEET 1

ENGINEERS SEALS
COLUMBUS SCD/SS/SIGNATURES

FRA-71-17.46

LEGEND

PROPOSED

- ① ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22
- ② ITEM 442 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)
- ③ ITEM 302 - 11 1/2" ASPHALT CONCRETE BASE, PG64-22 (2 - 5 3/4" LIFTS)
- ④ ITEM 304 - 6" AGGREGATE BASE
- ⑤ ITEM 407 - NON-TRACKING TACK COAT (RATE PER CMS 407.06)
- ⑥ ITEM 204 - SUBGRADE COMPACTION
- ⑦ ITEM 659 - SEEDING AND MULCHING, CLASS 2
- ⑧ ITEM 622 - CONCRETE BARRIER, TYPE C1 (FOR DETAIL, SEE SHEET 516)
- ⑨ ITEM 622 - BARRIER, MISC.: TYPE C1 MODIFIED (SEE SHEET 516 FOR DETAILS)
- ⑩ ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS *
- ⑪ ITEM 622 - CONCRETE BARRIER, TYPE D
- ⑫ ITEM 407 - TACK COAT (RATE PER CMS 407.06)
- ⑬ ITEM 609 - CURB, TYPE 6, AS PER PLAN
- ⑭ ITEM 608 - 4" CONCRETE WALK
- ⑮ ITEM SPECIAL - BUFFER WALL - 2.5' - 3.5' HIGH, CMU BLOCK WALL WITH BRICK VENEER AND WALL CAP (SEE DETAILS, SHEETS 670-671)
- ⑯ ITEM 452 - 12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 (FOR DETAIL, SEE SHEET 41)
- ⑰ ITEM 608 - WALKWAYS, MISC.: BRICK PAVER WALK (FOR DETAIL, SEE SHEET 41)
- ⑱ ITEM 608 - WALKWAY, MISC.: BRICK PAVER CROSSWALK (FOR DETAIL, SEE SHEET 41)
- ⑲ ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15")
- ⑳ ITEM 653 - TOPSOIL FURNISHED AND PLACED (SEE LANDSCAPE PLANS FOR DETAILS)
- ㉑ ITEM SPECIAL - MISC.: BRICK PAVEMENT (SEE DETAIL, SHEET 41)
- ㉒ ITEM SPECIAL - MISC.: SAND-BASED STRUCTURAL SOIL MIX FURNISHED AND PLACED (SEE LANDSCAPE PLANS FOR DETAILS)
- ㉓ ITEM 609 - CURB, MISC.: STRAIGHT 18" GRANITE CURB "A" (SEE DETAIL, SHEET 44)
- ㉔ ITEM 605 - 6" BASE PIPE UNDERDRAINS *
- ㉕ ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
- ㉖ ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
- ◇ ㉗ ITEM 305 - 8" CONCRETE BASE, CLASS QC1
- ◇ ㉘ ITEM 305 - CONCRETE BASE, MISC.: 9" CONCRETE BASE, CLASS QC1 WITH QC/QA
- ◇ ㉙ ITEM 305 - CONCRETE BASE, MISC.: 8.5" CONCRETE BASE, CLASS QC1 WITH QC/QA
- ⑳ ITEM 204 - EMBANKMENT
- ㉑ ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
- ㉒ ITEM 452 - 10" NON-REINFORCED CONCRETE PAVEMENT

- ⑳ ITEM 204 - EXCAVATION OF SUBGRADE
- ㉑ ITEM 836 - SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1
- ㉒ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1 1/4" MAX. DEPTH)
- ㉓ ITEM 659 - SEEDING AND MULCHING, CLASS 1, AS PER PLAN
- ㉔ ITEM 609 - CURB, TYPE 4-C, AS PER PLAN
- ㉕ ITEM 204 - PROOF ROLLING
- ㉖ ITEM 609 - CONCRETE MEDIAN
- ㉗ ITEM 622 - CONCRETE BARRIER, TYPE C
- ㉘ ITEM 608 - 8" CONCRETE WALK (SEE STREET INTERSECTION DETAILS SHEETS)
- ㉙ ITEM 609 - CURB, MISC.: STRAIGHT 18" GRANITE CURB "B" (SEE DETAIL, SHEET 44)
- ㉚ ITEM 305 - 6" CONCRETE BASE, CLASS QC1 (SEE SHEET 415 FOR PARKING LOT TYPICAL SECTIONS)
- ㉛ ITEM 407 - TACK COAT, 702.13
- ㉜ ITEM 452 - 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 (SEE SHEET 414 FOR DRIVE TYPICAL SECTIONS)
- ㉝ ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 (SEE SHEET 414 FOR DRIVE TYPICAL SECTIONS)
- ㉞ ITEM SPECIAL - MISC.: GRANITE PAVERS "A" (SEE SHEETS 46 -47 FOR DETAILS)
- ㉟ ITEM SPECIAL - MISC.: GRANITE PAVERS "B" (SEE SHEETS 46 -47 FOR DETAILS)
- ㊱ ITEM 254 - 1 1/2" PAVEMENT PLANING, ASPHALT CONCRETE
- ◇ ㊲ ITEM 305 - CONCRETE BASE, MISC.: 11" CONCRETE BASE, CLASS QC1 WITH QC/QA
- ㊳ ITEM 302 - 5" ASPHALT CONCRETE BASE, PG64-22
- ㊴ ITEM 302 - 9" ASPHALT CONCRETE BASE, PG64-22 (2-4.5" LIFTS)
- ㊵ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE DEPTH); SEE SHEETS 51 & 52
- ㊶ ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448) (VARIABLE DEPTH); SEE SHEETS 51 & 52
- ㊷ ITEM 622 - BARRIER, MISC.: PORTABLE BARRIER (32")
- ㊸ ITEM 622 - BARRIER, MISC.: TYPE D MODIFIED (SEE SHEET 517 FOR DETAILS)
- ㊹ ITEM 609 - 4" CONCRETE MEDIAN
- ㊺ ITEM 622 - BARRIER, MISC.: TYPE C MODIFIED (SEE SHEET 517 FOR DETAILS)

EXISTING

- | | | |
|--|------------------------------|--|
| Ⓐ EXISTING 2 1/2"± ASPHALT CONCRETE SURFACE COURSE & LEVELING COURSE | Ⓕ EXISTING 8"± CONCRETE BASE | Ⓚ EXISTING 1 1/2" ASPHALT CONCRETE SURFACE COURSE |
| Ⓑ EXISTING 9"± CONCRETE BASE | Ⓖ EXISTING 4"± CONCRETE WALK | Ⓛ EXISTING 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE |
| Ⓒ EXISTING 6"± BASE MATERIAL | Ⓗ EXISTING BRICK | Ⓜ EXISTING 11 1/2" ASPHALT CONCRETE BASE |
| Ⓓ EXISTING CONCRETE BARRIER | Ⓘ EXISTING 8"± CONCRETE BASE | Ⓝ EXISTING 6" AGGREGATE BASE |
| Ⓔ EXISTING 3"± ASPHALT CONCRETE | Ⓝ EXISTING RETAINING WALL | Ⓞ EXISTING 4" CURB |

* - NOTE: SHALLOW PIPE UNDERDRAINS TO BE PLACED TYPICALLY 30" BELOW SUBGRADE. BASE PIPE UNDERDRAINS TO BE PLACED TYPICALLY 18" BELOW SUBGRADE. SEE UNDERDRAIN PLAN FOR UNDERDRAIN ELEVATIONS.

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TYPICAL SECTIONS LEGEND

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ROADWAY NOTES

ROUNDING

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

ADDITIONAL SOIL INFORMATION

THE SOIL PROFILE AND/OR STRUCTURE FOUNDATION INVESTIGATIONS SHEETS CONTAIN ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN. ADDITIONAL SUBSURFACE INVESTIGATION INFORMATION IS AVAILABLE FROM ODOT DISTRICT 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 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

PAVEMENT CUTTING, SAWING AND EXCAVATION OPERATION

ALL PUBLIC AGENCIES AND PRIVATE CONTRACTORS PERFORMING PAVEMENT-CUTTING OPERATIONS ON CITY OF COLUMBUS STREETS AND ROADWAYS SHALL PROTECT THE ENVIRONMENT FROM DISCHARGES CREATED BY THEIR PAVEMENT CUTTING OPERATIONS. NOTE THAT COLUMBUS CITY CODE 1145 PROHIBITS NON-STORMWATER DISCHARGE INTO THE CITY OF COLUMBUS SEWER SYSTEM, CURB INLETS AND ANY PART OF ITS MS4 (MUNICIPAL SEPARATE STORM SEWER SYSTEM).

THE REQUIREMENT INCLUDES BUT IS NOT LIMITED TO WET OR DRY SAW-CUTTING, JACK HAMMERING, EXCAVATION EQUIPMENT USE, ETC. THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR WORK CREWS SHALL RECOVER AND DISPOSE OF DETRITUS, POLLUTED WATERS, OR OTHER SUCH DISCHARGES RESULTING FROM THEIR PAVEMENT CUTTING OPERATIONS AND PROTECT ALL STORM SEWER INLETS FROM RECEIVING ANY DISCHARGES FROM THE CONSTRUCTION OPERATIONS. THE AGENCY OR CONTRACTOR RESPONSIBLE FOR EACH PAVEMENT CUTTING ACTIVITY SHALL BE SOLELY LIABLE FOR NOTICE OF VIOLATIONS (NOV/S) AND FINES ISSUED BY CITY OF COLUMBUS AND/OR STATE OF OHIO AUTHORITIES.

EQUIPMENT, MATERIALS AND METHODS SHALL BE PROVIDED BY THE RESPONSIBLE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR TO WORK CREWS PERFORMING THE PAVEMENT CUTTING ACTIVITY AND MADE AVAILABLE TO WORK CREWS FOR USE IN CLEANING UP DISCHARGES RESULTING FROM SUCH CUTTING ACTIVITIES AND PREVENTING RUNOFF. ALL WORK CREWS SHALL BE TRAINED TO EXERCISE AND EMPLOY EQUIPMENT, MATERIALS, AND ENVIRONMENTAL PROTECTIVE MEASURES TO PREVENT POLLUTED DISCHARGES FROM ENTERING THE CITY OF COLUMBUS STORM SEWER SYSTEM AND WATERS OF THE STATE OF OHIO.

THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE INLET PROTECTION IS ADEQUATE. THE MOST STRINGENT PROJECT PLANS, NOTES AND/OR DRAWINGS INCLUDING STORMWATER POLLUTION PREVENTION PLAN (SWP3) OR SPILL PREVENTION/REMEDIATION PLAN SHALL APPLY TO ALL PAVEMENT CUTTING, SAWING OR EXCAVATION OPERATIONS.

NOTE TO SPECIFICATION WRITERS: IF SWP3 OR SPILL PREVENTION/REMEDIATION PLANS ARE INCLUDED IN CONTRACT DOCUMENTS, THEY SHOULD BE CITED IN THE LAST PARAGRAPH ABOVE BY VOLUME, PAGE OR SHEET NUMBERS; SO DIRECTING THE READER TO SUCH PLAN.

SAW CUTTING IS INCLUDED (CITY OF COLUMBUS)

THE COST OF SAW CUTTING FOR THE REMOVAL OF PAVEMENT, CURB, WALKS, ETC. SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 202 WORK ITEMS. SAWCUTTING IS REQUIRED TO PROVIDE SMOOTH STRAIGHT EDGES FOR REMOVAL PURPOSES.

SECURING EXCAVATIONS & TRENCHES FOR NON-WORKING HOURS (CITY OF COLUMBUS)

EXCAVATIONS AND TRENCHES OVER 24 INCHES DEEP SHALL BE SECURELY PLATED OR BACKFILLED DURING NON-WORKING HOURS.

CLEARING AND GRUBBING

UNLESS SHOWN AS "DO NOT DISTURB" OR "TO REMAIN" IN THE PLANS, COMPLETELY REMOVE ALL EXISTING TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED (EXCLUDING THOSE WITHIN HEAVILY VEGETATED AREAS).

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	6	1	7
30"	1	0	0
48"	0	0	0
60"	0	0	0

TREES LISTED IN THE ABOVE TABLE DO NOT ACCOUNT FOR THOSE WITHIN HEAVILY VEGETATED AREAS. FOR MORE INFORMATION REGARDING TREE CLEARING WITHIN THE PROJECT LIMITS WITHIN HEAVILY VEGETATED AREAS, SEE SHEET 204

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

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

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. TREES LABELED AS "DO NOT DISTURB" (DND) WITHIN THE WORK LIMITS SHALL BE PROTECTED. THE CONTRACTOR SHALL AVOID PARKING ANY EQUIPMENT WITHIN THE DRIP EDGE OF THE TREE CANOPY.

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

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS OR WITHIN THE CONSTRUCTION LIMITS ON LANDSCAPING LABELED AS DND, AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE ENGINEER.

MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

SHEETING & BRACING

ANY SHEETING AND BRACING USED BY THE CONTRACTOR AND NOT OTHERWISE CALLED FOR IN THE PLANS SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. NO SEPARATE PAYMENT SHALL BE MADE FOR SHEETING AND BRACING. AT ALL TIMES THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE IN A MANNER THAT IS SAFE TO ALL WORKERS AND THE GENERAL TRAVELING PUBLIC. ALL OSHA REQUIREMENTS SHALL BE UPHELD AND SOUND SAFETY PRACTICES SHALL BE EXERCISED AT ALL TIMES. REMOVAL OF SHEETING AND BRACING ITEMS UPON COMPLETION OF WORK WILL BE REQUIRED AS DIRECTED BY ODOT REPRESENTATIVES.

ITEM 202 - REMOVAL MISC.: BRICK PAVERS REMOVED AND SALVAGED

THIS ITEM SHALL CONSIST OF REMOVAL, SALVAGE, AND DELIVERY OF THE EXISTING BRICK PAVERS FROM THE CITY STREETS. BRICK INDICATED FOR REMOVAL SHALL BE CAREFULLY REMOVED FROM THE ROADWAY WITHOUT UNNECESSARY DAMAGE AND CLEANED. UNDAMAGED BRICK PAVERS SHALL BE STACKED ON PALLETS NO MORE THAN 3' HIGH, SECURELY WRAPPED AND DELIVERED TO THE CITY OF COLUMBUS INFRASTRUCTURE MANAGEMENT, 1850 E. 25TH AVE. MAINTENANCE YARD. CONTRACTOR TO CALL (614) 645-3976 TO SCHEDULE DELIVERY.

COST OF BRICK REMOVAL, SALVAGE, AND DELIVERY IS INCLUDED IN THE CONTRACT PRICE PER SQ. YD. FOR ITEM 202 - REMOVAL MISC.: BRICK PAVERS REMOVED AND SALVAGED.

ITEM 202 - REMOVAL, MISC.: ITEMS

IN ADDITION TO THE REQUIREMENTS OF ODOT CMS 202, THE FOLLOWING ITEMS INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT TO PERFORM THE NECESSARY WORK AS DESCRIBED BELOW. UNLESS THE ENGINEER OR ADDITIONAL PLAN NOTES DIRECT THE CONTRACTOR TO STORE AND DELIVER REMOVED ITEMS, CONTRACTOR SHALL PROPERLY DISPOSE OF REMOVED ITEMS. WHERE ITEMS ARE TO BE SALVAGED, CONTRACTOR SHALL TAKE CARE TO MINIMIZE DAMAGE TO ITEMS DURING THE REMOVAL PROCESS. SALVAGED ITEMS SHALL BE CLEANED, STORED AND/OR PALLETIZED AS DIRECTED BY THE ENGINEER AND PLAN NOTES. DELIVERY OF SALVAGED REMOVAL ITEMS SHALL BE MADE TO THE APPROPRIATE CITY DEPARTMENT AS DIRECTED BY THE ENGINEER AND/OR PLAN NOTES. PAYMENT FOR CLEANING, STORING, PACKAGING, TRANSPORTING, AND/OR OTHERWISE HANDLING SALVAGED ITEMS SHALL BE INCLUDED IN THE APPROPRIATE ITEM 202 BID PRICE.

ITEM 202 - REMOVAL, MISC.: BOLLARD
ITEM 202 - REMOVAL, MISC.: BRICK PILLAR REMOVED
ITEM 202 - REMOVAL, MISC.: DUMPSTER REMOVED
ITEM 202 - REMOVAL, MISC.: DUMPSTER PAD REMOVED
ITEM 202 - REMOVAL, MISC.: STORAGE TRAILER REMOVED
ITEM 202 - REMOVAL, MISC.: FLAG POLE REMOVED
ITEM 202 - REMOVAL, MISC.: LANDSCAPE LIGHT REMOVED
ITEM 202 - REMOVAL, MISC.: STONE CURB REMOVED AND SALVAGED
ITEM 202 - REMOVAL, MISC.: TRENCH DRAIN
ITEM 202 - REMOVAL, MISC.: BRICK PAVERS REMOVED AND SALVAGED
ITEM 202 - PARKING BLOCK REMOVED
ITEM 202 - POST REMOVED
ITEM 202 - TREE GRATE REMOVED
ITEM 202 - WALL REMOVED

ITEM 202 - REMOVAL, MISC.: BENCH AND TRASH CAN REMOVALS

THE CONTRACTOR SHALL REMOVE AND SECURELY STORE ALL THE CITY OF COLUMBUS TRASH RECEPTACLES AND BENCHES WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL AVOID DAMAGING THE TRASH RECEPTACLES AND BENCHES. IF THE BENCH OR TRASH RECEPTACLE IS DAMAGED, THE CONTRACTOR SHALL REPAIR / REPLACE IT AT HIS COST. IF A BENCH OR TRASH RECEPTACLE HAS DAMAGE PRIOR TO ITS REMOVAL, THE CONTRACTOR SHALL DOCUMENT IT AND MAKE THE PROJECT ENGINEER AWARE OF IT.

THE CONTRACTOR SHALL CALL DIVISION OF REC AND PARKS AND DIVISION OF REFUSE WITH THE CITY OF COLUMBUS TO NOTIFY THEM OF WHERE THEY CAN PICK UP THEIR PROPERTY.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS REQUIRED TO REMOVE AND STORE THE CITY BENCHES AND TRASH RECEPTACLES AT THE CONTRACT PRICE AS FOLLOWS:

202E98100 REMOVAL MISC.: TRASH RECEPTACLES REMOVED, EACH
202E98100 REMOVAL MISC.: BENCH REMOVED, EACH

ITEM 202 - CONCRETE MEDIAN REMOVED, AS PER PLAN

THIS ITEM SHALL ENCOMPASS THE COMPLETE REMOVAL OF THE CONCRETE COURSE NOT INCLUDING BARRIER AND WALL REMOVAL.

ITEM 202 - REMOVAL, MISC.: STONE CURB REMOVED AND SALVAGED

AFTER REMOVING AND STORING EXISTING STONE (SANDSTONE, GRANITE) CURBING FROM THE EXISTING STREETS AS DIRECTED BY THE PLAN, CONTRACTOR SHALL DELIVER TO THE CITY OF COLUMBUS. THE CURB SECTIONS SHOWN ON THE PLANS TO BE SALVAGED SHALL BE CAREFULLY REMOVED WITHOUT UNNECESSARY DAMAGE AND CLEANED FOR RE-USE. STRAIGHT CURB SECTIONS TO BE SALVAGED SHALL BE AT LEAST TWO FEET IN LENGTH. CURVED SECTIONS OF ANY LENGTH SHALL BE SALVAGED. ALL CLEANED CURB SECTIONS SHALL BE STACKED (NO MORE THAN FOUR HIGH) AND SECURELY FASTENED OR BOXED ONTO PALLETS PRIOR TO DELIVERY.

WHEN THE CURBING HAS BEEN SECURED ONTO PALLETS, THE CONTRACTOR SHALL TRANSPORT IT TO THE CITY OF COLUMBUS, DIVISION OF PLANNING AND OPERATIONS - 25TH AVE. STREET MAINTENANCE YARD. THE CONTRACTOR SHALL CALL THE MAINTENANCE YARD MANAGER @ (614) 645-3976 AT LEAST TWO WEEKS IN ADVANCE TO MAKE ARRANGEMENTS FOR PICK UP. PAYMENT FOR THIS WORK SHALL BE MADE AFTER THE CURBING HAS BEEN PICKED UP BY CITY OF COLUMBUS CREWS.

THE COST FOR ALL WORK REQUIRED TO REMOVE, CLEAN, SALVAGE, AND DELIVER CURBING SHALL BE INCLUDED IN THE CONTRACT PRICE PER FOOT FOR ITEM 202 - REMOVAL, MISC.: STONE CURB REMOVED AND SALVAGED.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 202, THIS ITEM SHALL INCLUDE THE WALL REMOVAL ALONG THE RIGHT SIDE (IN THE DIRECTION OF STATIONING) OF RAMP R1 FROM STATION 821+19.30 TO THE NORTHERN END OF THE WALL AND THE REMOVAL OF THE WALL UNDER/ALONG LESTER DRIVE FROM APPROXIMATE STATION 125+29.20 TO THE NORTHERN END OF THE WALL. REMOVAL(S) AT RAMP R1 SHALL BE TO A MINIMUM OF 1 FOOT BELOW THE PROPOSED SUBGRADE AND AS NEEDED TO CONSTRUCT THE PROPOSED RAMP AND BARRIER, TO PLACE ANY UTILITIES AND DRAINAGE FACILITIES, AND/OR AS OTHERWISE DIRECTED BY THE ENGINEER. THE EXISTING ROADWAY LIGHT AND SUPPORT AT APPROXIMATE STA. 821+16 (*), RT SHALL BE UNDISTURBED AND REMAIN IN SERVICE AFTER THE WALL REMOVAL. REMOVAL(S) OF THE WALL ALONG LESTER DRIVE SHALL BE TO A MINIMUM OF 2 FEET BELOW PROPOSED SUBGRADE, AS NEEDED TO PLACE ANY UTILITIES AND DRAINAGE FACILITIES AND/OR AS OTHERWISE DIRECTED BY THE ENGINEER. IN ADDITION, PAYMENT FOR THIS ITEM SHALL INCLUDE ANY WORK TO RESTORE ANY PORTIONS OF WALL MARKED TO REMAIN THAT MAY BECOME DAMAGED AS PART OF THE REMOVAL.

ALL OTHER EXISTING WALL REMOVALS ARE INCLUDED IN THE BRIDGE AND RETAINING WALLS ESTIMATED QUANTITIES REMOVAL BID ITEMS FOR PAYMENT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT THE LOCATIONS SPECIFIED ABOVE:

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (LUMP)

ITEM 202 - STRUCTURE REMOVED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 202, CONTRACTOR SHALL REMOVE THE ENTIRE LENGTH OF EXISTING WALLS F AND G (LOCATED ALONG THE EXISTING RAMP CARRYING BROAD STREET TO I-71 NB TRAFFIC) TO A MINIMUM OF 2 FEET BELOW PROPOSED SUBGRADE, OR LOWER AS NEEDED TO PLACE ANY UTILITIES AND DRAINAGE FACILITIES AND/OR AS OTHERWISE DIRECTED BY THE ENGINEER.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT THE LOCATIONS SPECIFIED ABOVE:

ITEM 202, STRUCTURE REMOVED, AS PER PLAN (LUMP)

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENTS AT THE BROAD STREET BRIDGE ABUTMENTS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT THE LOCATION(S) SPECIFIED ABOVE:

ITEM 203 - EMBANKMENT, AS PER PLAN 50 CY

ITEM 204 - PROOF ROLLING

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

ITEM 204 - PROOF ROLLING 29 HOURS

CALCULATED
TK
CHECKED
MRT

GENERAL NOTES

FRA-71-17.46

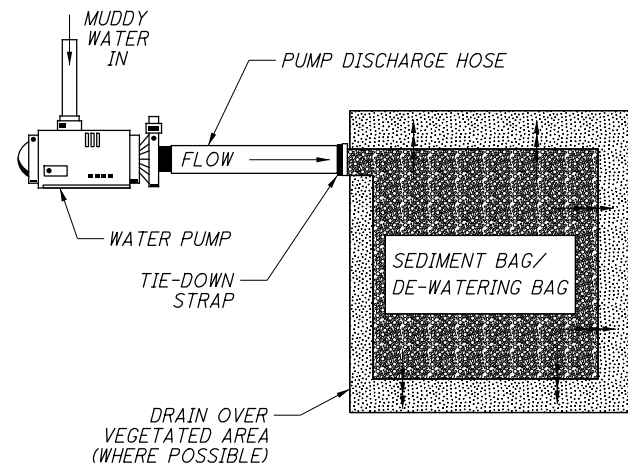
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3490-E

SEDIMENT-LADEN DEWATERING

THE PUMPING OF DIRECT DISCHARGE OF SEDIMENT-LADEN (MUDDY) WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA (OEPA) AND CITY OF COLUMBUS REGULATIONS. ALL INLETS RECEIVING FLOW FROM RUNOFF, PUMPING ACTIVITIES, OR OTHER DIRECT DISCHARGES SHALL BE FITTED WITH AN INLET PROTECTION DEVICE THAT IS PROPERLY SIZED AND SECURED TO REDUCE THE DISCHARGE OF SEDIMENT INTO THE STORM SEWER SYSTEM AND RECEIVING STREAM. INLET PROTECTION IS REQUIRED ON ALL INLETS RECEIVING DISCHARGE REGARDLESS OF WHETHER OR NOT THE INLET IS TRIBUTARY TO ANY DOWNSTREAM EROSION AND SEDIMENT CONTROLS.

DISCHARGE HOSES USED DURING PUMPING ACTIVITIES SHALL BE FITTED WITH SEDIMENT BAGS THAT ARE PROPERLY SIZED PER MANUFACTURER'S RECOMMENDATIONS REGARDLESS OF WHAT OTHER SEDIMENT CONTROLS ARE IN PLACE FURTHER DOWNSTREAM. SEDIMENT BAGS MUST BE PROPERLY SECURED TO THE DISCHARGE HOSE AND PLACED OVER VEGETATED AREAS, WHERE FEASIBLE, DURING DISCHARGE.



SUGGESTED DISCHARGE SET-UP FOR PUMPING MUDDY WATER

DRAINAGE NOTES

MANHOLES AND OTHER CASTINGS

THE CASTING TOPS OF MANHOLES, VALVE BOXES, AND OTHER STRUCTURES REQUIRING ADJUSTMENT THAT ARE OWNED BY PRIVATE UTILITIES NEED TO BE ADJUSTED TO GRADE BY THEIR RESPECTIVE OWNERS. THE ODOT CONTRACTOR SHALL NOTIFY THE PRIVATE OWNER A MINIMUM OF 14 CALENDAR DAYS IN ADVANCE OF WORK OPERATIONS SO THE WORK MAY BE PROPERLY SCHEDULED. THE ODOT CONTRACTOR IS REQUIRED TO CONTACT THE UTILITY VIA PHONE AND EMAIL AND INCLUDE THE ODOT CONSTRUCTION ENGINEER ON THIS CORRESPONDENCE.

IF ADJUSTMENTS HAVE NOT BEEN COMPLETED 14 CALENDAR DAYS AFTER SCHEDULED, THE ODOT CONTRACTOR WILL NOTIFY THE ODOT PROJECT ENGINEER AND PROVIDE SPECIFIC STATION LOCATIONS AND OWNER INFORMATION. THE ODOT PROJECT ENGINEER WILL WORK WITH THE DISTRICT UTILITY COORDINATOR TO ISSUE AND OBSTRUCTION REMOVAL NOTICE WITHIN 5 DAYS OF RECEIPT WHICH WILL INFORM THE PRIVATE UTILITY TO ADJUST THE STRUCTURES AS NECESSARY OR ODOT WILL AUTHORIZE THE ODOT CONTRACTOR TO ADJUST AS NEEDED AND BILL THE OWNER OF THE FACILITY FOR THE ADJUSTMENT TO THE STRUCTURE.

SHOULD THE CONTRACTOR FAIL TO NOTIFY PRIVATE UTILITIES OF EXISTING MANHOLES, VALVE BOXES, AND OTHER STRUCTURES THAT REQUIRE ADJUSTMENTS TO GRADE, AND COVER THESE WITH THE PROPOSED ASPHALT TREATMENT, THE CONTRACTOR WILL BE REQUIRED TO UNCOVER THE MANHOLES, VALVE BOXES, AND OTHER STRUCTURES AT THEIR OWN EXPENSE SO THAT THE NECESSARY ADJUSTMENTS CAN BE MADE. THE METHOD OF REMOVAL AND REPAIR OF THE ASPHALT SHALL MEET ALL REQUIREMENTS OF THE ODOT ENGINEER AND SHALL BE AT THE CONTRACTORS EXPENSE.

LICENSED SEWER TAPPER REQUIREMENT (CITY OF COLUMBUS)

IT SHALL BE UNLAWFUL FOR ANY PERSON TO ENGAGE IN THE BUSINESS OF SEWER TAPPING AND SEWER BUILDING, OR TO OPEN OR TAP ANY SEWER IN ANY STREET, ALLEY OR ANY PUBLIC OR PRIVATE PLACE IN THE CITY OF COLUMBUS WITHOUT FIRST SECURING A LICENSE TO ENGAGE IN SUCH BUSINESS, AS INDICATED IN COLUMBUS CITY CODE SECTION 1131.01.

STORM WATER FACILITIES ON CITY STREETS (CITY OF COLUMBUS)

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OWNER, THE ENGINEER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND OTHER APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. THE ENGINEER SHALL KEEP RECORDS OF THE INSPECTION IN WRITING.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED OR RECONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE OWNER. IN ADDITION TO THE REQUIREMENTS OF CMS 611, THE MAXIMUM ALLOWABLE TOLERANCE IS MINUS 1/4" FOR ALL NEW, ADJUSTED, OR RECONSTRUCTED STRUCTURE LIDS AND GRATES BELOW THE FINISHED PAVEMENT SURFACE. LIDS OR GRATES OF PROPOSED, ADJUSTED, OR RECONSTRUCTED DRAINAGE STRUCTURES SHALL NOT PROTRUDE ABOVE THE FINAL, FINISHED PAVEMENT SURFACE. ANY STRUCTURE LIDS FOUND OUT OF TOLERANCE WILL REQUIRE THE LID BE RESET ALONG WITH FULL-DEPTH PAVEMENT REMOVED AND REPLACED AT ACCEPTABLE TOLERANCE.

ALL EXISTING MANHOLES, CATCH BASINS, DRAINS, SEWERS, AND APPURTENANCES INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR SHALL CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS TO THE SATISFACTION OF THE ENGINEER. THE ABOVE IS NOT APPLICABLE FOR STRUCTURES TO BE ABANDONED. THE CONTRACTOR SHALL REMOVE DEBRIS, SILT, ETC. FROM THE EXISTING MANHOLES AND CATCH BASINS THAT HAVE BEEN AFFECTED BY THE CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL MAINTAIN SERVICE IN EXISTING SEWERS DURING CONSTRUCTION.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 ITEMS.

GRADE CHANGES

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING SEWER, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN SEWER SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED SEWER WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS. IF IT IS DETERMINED THAT THE PROPOSED SEWER WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED SEWER WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

GRADES AND ELEVATIONS SHOWN ON THE PLANS SHALL NOT BE REVISED UNDER ANY CIRCUMSTANCES WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE ENGINEER. INVERT ELEVATIONS SHALL NOT DEVIATE FROM PLAN ELEVATION BY MORE THAN 0.05 FOOT. FAILING TO MEET THE ABOVE REQUIREMENTS IS CAUSE FOR REJECTION OF THE AFFECTED SECTION OF SEWER.

DIVISION OF SEWERAGE AND DRAINAGE UTILITIES

CITY OF COLUMBUS LOCATORS WILL ONLY LOCATE AND MARK MAIN LINE SEWERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SERVICE LATERALS AND FIELD VERIFYING THE LOCATION OF MAIN SEWER LINES. ANY DAMAGE AND/OR REPAIRS TO THE MAIN SEWER LINES OR SERVICE LATERALS ARE THE RESPONSIBILITY OF THE SEWER CONTRACTOR. REPAIRS MUST BE COMPLETED BY A LICENSED SEWER CONTRACTOR UNDER A SEPARATE SEWER PERMIT.

ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN

IN LIEU OF THE PROVISIONS OF ITEM 611, PROVIDE ITEM 613 LOW STRENGTH MORTAR BACKFILL AS STRUCTURAL BACKFILL FOR THE PROPOSED CONDUIT WITHIN THE LIMITS OF PROPOSED BRIDGE APPROACH SLABS. THE ITEM 613 LOW STRENGTH MORTAR BACKFILL IS INCLUDED WITH ITEM 611 12" CONDUIT, TYPE B, AS PER PLAN FOR PAYMENT.

FLEXIBLE PIPE WITHIN CITY OF COLUMBUS RIGHT-OF-WAYS

ANY FLEXIBLE SANITARY OR STORM PIPES USED WITHIN THE CITY OF COLUMBUS'S RIGHT-OF-WAYS, SHALL BE FROM THE CITY OF COLUMBUS PRE-APPROVED SUPPLIER LIST AT THE FOLLOWING WEBSITE:
<https://www.columbus.gov/publicservice/design-and-construction/document-library/>

EXISTING UNDERDRAINS

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION. PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

611, 4" CONDUIT, TYPE F	400 FT.
605, 4" UNCLASSIFIED PIPE UNDERDRAINS	400 FT.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS. PAYMENT FOR THE TEMPORARY DRAINAGE ITEMS ARE ITEMIZED AND CARRIED TO THE GENERAL SUMMARY.

DRAINAGE AT INTERSECTING STREETS

AT INTERSECTING STREETS WHERE THE DRAINAGE IS TOWARD OR INTO THE PROJECT, SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR TO MAINTAIN PROPER GRADE ALONG THE EDGE OF THE PAVEMENT SO THAT WATER WILL NOT POND. AT INTERSECTING STREETS, WHERE THE EDGE OF PAVEMENT CONTINUES ACROSS THE STREET, CARE SHALL BE TAKEN TO FEATHER DOWN AND FORM A NEAT SEAM WITH THE PROPER GRADE.

EXISTING BRICK COMBINATION SEWERS

THE CONTRACTOR SHALL USE EXTREME CAUTION WHERE EXCAVATING OR ADDING CEMENT SUBGRADE OVER UNLINED BRICK SEWERS WITH LESS THAN 5' OF COVER. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATIONS OF BRICK SEWERS AND IF THEY HAVE BEEN LINED OR NOT.

THE CONTRACTOR SHALL NOT USE VIBRATION OR TAMPING EQUIPMENT OVER OR AROUND BRICK SEWERS. NO EQUIPMENT SHALL BE PARKED OVER A BRICK SEWER, NOR SHALL A BRICK SEWER BE EXPOSED WHEN PERFORMING BLIND TAPS INTO IT.

PROTECTION OF STORM SEWERS

ALL STORM SEWERS THAT MAY INTERFERE WITH THE SUBGRADE STABILIZATION PROCESS SHALL BE FLAGGED BEFORE THE STABILIZATION PROCESS BEGINS TO ALERT THOSE INVOLVED TO BE CAUTIOUS IN THOSE AREAS.

TYING INTO EXISTING DRAINAGE STRUCTURES

WHEN A PROPOSED CONDUIT IS BEING TIED INTO AN EXISTING DRAINAGE STRUCTURE, THE HOLE BEING MADE IN THE EXISTING STRUCTURE TO RECEIVE THE PROPOSED CONDUIT SHALL BE A CORED HOLE. FOR CONDUITS OVER 24", THE HOLE CAN BE NEATLY SAWED INSTEAD OF CORED.

THE COST OF TYING INTO AN EXISTING DRAINAGE STRUCTURE SHALL BE INCLUDED IN THE COST OF INSTALLING ITEM 611 CONDUIT.

ITEM 611 - MANHOLE, NO. 3, AS PER PLAN PROPOSED MANHOLES IN THE FREEWAY AND RAMP PAVEMENT

ANY PROPOSED MANHOLES LOCATED IN THE FREEWAY AND RAMP'S PROPOSED PAVEMENT SHALL BE CONSTRUCTED WITH A BOLTED DOWN, NON-VENTED FRAME AND COVER TO THE ELEVATION SHOWN IN THE PLANS.

RECONSTRUCT TO GRADE MANHOLES SHALL BE REMOVED TO THE LIMITS SHOWN IN THE PLANS.

ALL MATERIALS AND LABOR, INCLUDING EXCAVATION AND BACKFILL ARE PAID FOR AT THE CONTRACT PRICE FOR ITEM 611 - MANHOLE, NO. 3, AS PER PLAN.

PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS ON CITY STREETS (CITY OF COLUMBUS)

ANY STORM SEWER CONSTRUCTION ON THE CITY STREET SYSTEM THAT REQUIRES PAVEMENT RESTORATION OF THE EXISTING PAVEMENT TO MAINTAIN TRAFFIC, SHALL BE RESTORED PER THE CITY OF COLUMBUS STANDARD DRAWING 1441.

ALL LABOR, MATERIALS, AND EQUIPMENT FOR THE PAVEMENT RESTORATION SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

DRAINAGE DISCHARGE CONTINUANCE

SHOULD UNRECORDED STORM OR SANITARY CONDUIT BE ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL NOTIFY PROJECT ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH ANY FURTHER WORK IN THE AREA.

FURNISH A DRAINAGE DISCHARGE CONTINUANCE FOR ANY DRAINAGE DISCHARGE DISTURBED BY THE WORK AND NOT SHOWN IN THE PLANS. THE LOCATION, TYPE (CONDUIT OR SWALE), SIZE AND GRADE OF THE DRAINAGE DISCHARGE CONTINUANCE WILL BE AGREED TO BY THE ENGINEER.

FURNISH AN INSPECTION WELL AT THE RIGHT OF WAY LINE IN ACCORDANCE WITH SCD DM-3.1 FOR EACH DRAINAGE DISCHARGE THAT OUTLETS THROUGH A CURB OPENING, OR INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST IS INCLUDED IN ITEM 611, INSPECTION WELL. FURNISH A WELL GRADED TRANSITION BETWEEN THE DITCH AND THE SWALE WHEN OUTLETTING A SWALE TO A DITCH. THE COST FOR THE GRADED TRANSITION IS INCLUDED IN ITEM 203, EMBANKMENT AS PER PLAN.

FURNISH AN EROSION CONTROL PAD AS SHOWN IN SCD DM-1.1 WHEN OUTLETTING A CONDUIT TO A DITCH. THE COST FOR THE EROSION CONTROL PAD IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE (AS NOTED BELOW) FOR DRAINAGE DISCHARGE CONTINUANCE. FURNISH A DRILLED HOLE OR A CURB SECTION WITH A HOLE WHEN OUTLETTING A CONDUIT THROUGH A CURB OPENING. THE COST OF DRILLING, OR FURNISHING THE CURB SECTION WITH HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE (AS NOTED BELOW) FOR DRAINAGE DISCHARGE CONTINUANCE. FURNISH A DRILLED CORE HOLE WHEN OUTLETTING INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST OF THE DRILLED CORE HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE (AS NOTED BELOW).

DOCUMENTATION

THE CONTRACTOR SHALL FURNISH WRITTEN DOCUMENTATION TO THE ENGINEER AND TO THE DISTRICT R/W PERMIT OFFICE. THE DOCUMENTATION INCLUDES THE CONSTRUCTION PROJECT NUMBER, PID, COUNTY, ROUTE, SECTION, LATITUDE AND LONGITUDE OF THE DRAINAGE DISCHARGE AT THE R/W, THE NAME OF PROPERTY OWNER WITH ADDRESS, THE DATE THE DRAINAGE DISCHARGE WAS LOCATED, THE DATE THE DRAINAGE DISCHARGE CONTINUANCE WAS FURNISHED, A DETAILED DESCRIPTION OF THE WORK AND PICTURES OF THE DRAINAGE DISCHARGE CONTINUANCE (IN PDF OR JPEG FORMAT). THE DOCUMENTATION IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE (AS NOTED BELOW) FOR DRAINAGE DISCHARGE CONTINUANCE OR ITEM 203, EMBANKMENT AS PER PLAN.

DRAINAGE DISCHARGE CONTINUANCE REMOVAL

THE ENGINEER MAY REQUIRE THE NEWLY INSTALLED DRAINAGE DISCHARGE CONTINUANCE TO BE REMOVED. REMOVE THE NEWLY INSTALLED CONDUIT AND ANY EXISTING CONDUIT TO THE RIGHT OF WAY LINE. FOR CONDUIT THAT OUTLETS THROUGH THE CURB RESTORE THE CURB BY FILLING THE HOLE WITH CLASS QC 1 CONCRETE OR REPLACE THE CURB SECTION. FOR CONDUIT THAT OUTLETS TO A STORM SEWER OR DRAINAGE STRUCTURE LEAVE 6 INCHES PROTRUDING OUTSIDE OF THE CONDUIT. PLUG THE PROTRUDING CONDUIT WITH EITHER A MANUFACTURED CAP OR CLASS QC 1 CONCRETE. FOR CONDUIT THAT OUTLETS TO THE DITCH REMOVE THE EROSION CONTROL PAD. RESTORE ALL AREAS AS REQUIRED. PLUG THE EXISTING CONDUIT REGARDLESS OF SIZE AT THE RIGHT OF WAY LINE WITH CLASS QC 1 CONCRETE AND RESTORE ALL AREAS AS REQUIRED. ALL COSTS ARE INCLUDED IN ITEM 202, REMOVAL MISC. CONDUIT. DAM THE SWALE THAT OUTLETS TO THE DITCH AT THE R/W AS DIRECTED BY THE ENGINEER. ALL COSTS ARE INCLUDED IN ITEM 203, EMBANKMENT AS PER PLAN REMOVE THE INSPECTION WELL AND RESTORE ALL AREAS AS REQUIRED. THE COST IS INCLUDED IN ITEM 202, REMOVAL MISC. INSPECTION WELL.

CONDUIT MATERIAL TYPES

THE FOLLOWING CONDUIT MATERIAL TYPES MAY BE USED: 707.33, 707.41 NONPERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, AND 707.52 SDR35.

CALCULATED
TK
CHECKED
MRT

GENERAL NOTES

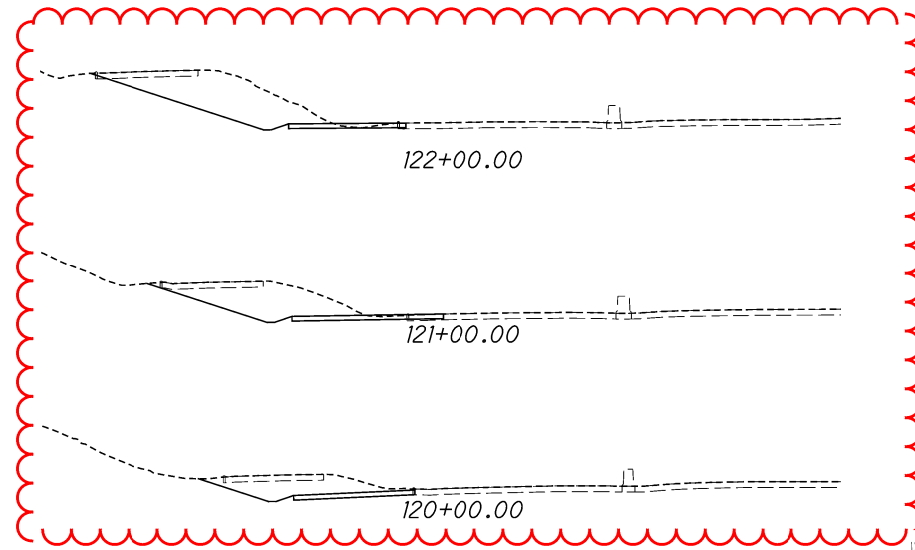
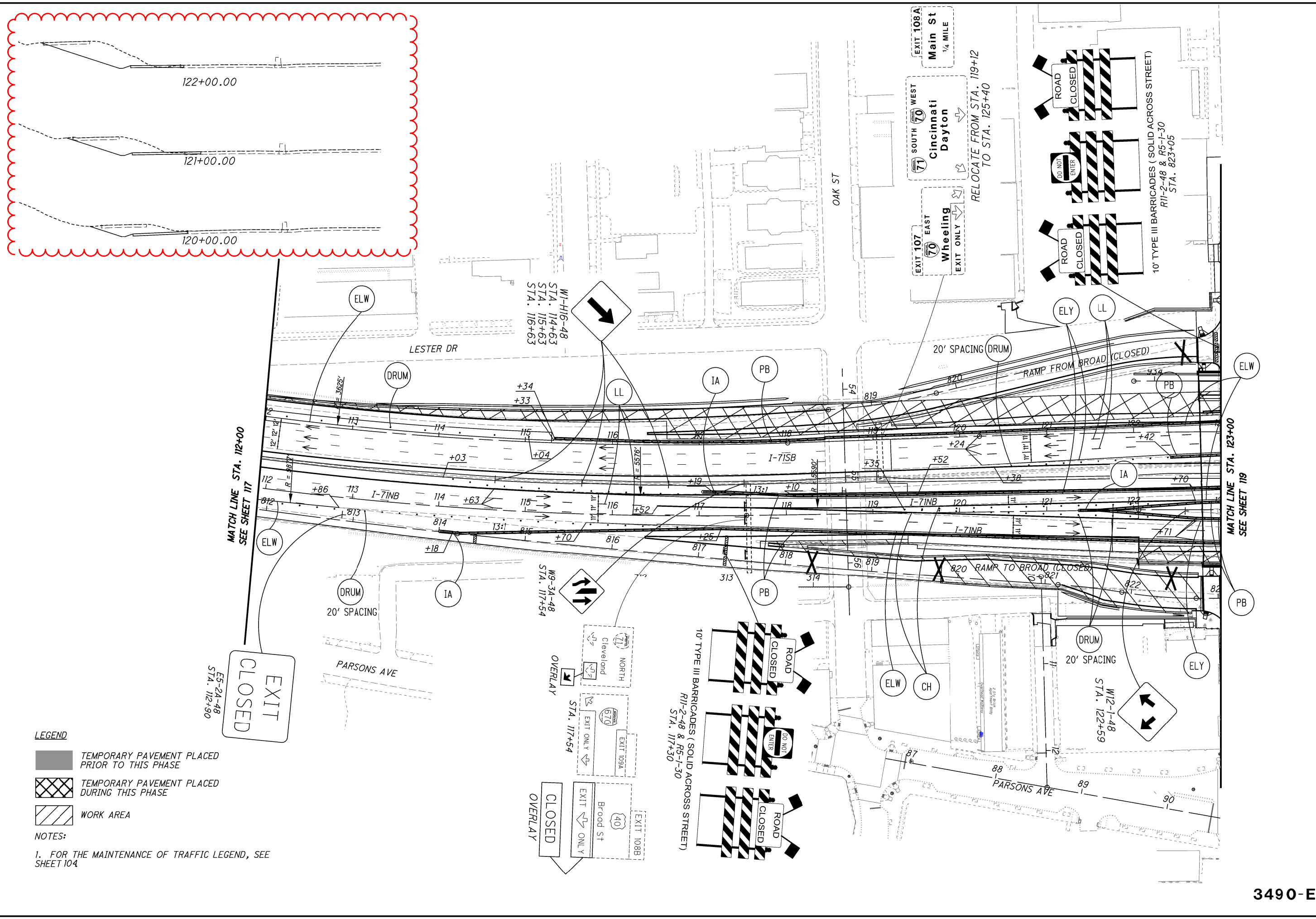
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- LEGEND**
- TEMPORARY PAVEMENT PLACED PRIOR TO THIS PHASE
 - TEMPORARY PAVEMENT PLACED DURING THIS PHASE
 - WORK AREA
- NOTES:**
- FOR THE MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 104

CALCULATED
EMW
CHECKED
SLT

0 50 100
HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC PLAN
MAINLINE I-71 PHASE 2A**

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SHEET NUM.								PART.								ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
493	494	500	502	512-513	604	515A	515D	01/IMS/PV	05/IMS/OT	07/S>2/OT/CLS	08/ENH/OT/CLS	9/IMS/OT/AEP	10/IMS/OT/ATT	11/IMS/OT/TW	12/IMS/OT/VER						
9											9					625	32000	9	EACH	GROUND ROD (ELECTRICAL)	
465											465					625	36000	465	FT	PLASTIC CAUTION TAPE	
2											2					690	98000	2	EACH	SPECIAL -MISC.: 50' POWER POLE, TDMIS-1	
1											1					690	98000	1	EACH	SPECIAL -MISC.: EXISTING DOP VAULT #200 AS PER PLAN	490
1											1					690	98000	1	EACH	SPECIAL -MISC.: GUY WIRE	
1											1					690	98000	1	EACH	SPECIAL -MISC.: MANHOLE #1 AS PER PLAN, TDMIS-1015	490
1											1					690	98000	1	EACH	SPECIAL -MISC.: MANHOLE #2 AS PER PLAN, TDMIS-1015	490
2											2					690	98000	2	EACH	SPECIAL -MISC.: REMOVE POWER POLE	
	225										225					690	98100	225	FT	SPECIAL -CONDUIT, CONCRETE ENCASED: 1-2", TDMIS-1013	490
	165										165					690	98100	165	FT	SPECIAL -CONDUIT, CONCRETE ENCASED: 2-2", TDMIS-1013	490
	135										135					690	98100	135	FT	SPECIAL -CONDUIT, CONCRETE ENCASED: 2-5", TDMIS-1013	
	210										210					690	98100	210	FT	SPECIAL -CONDUIT, CONCRETE ENCASED: 6-5", TDMIS-1013	
	210										210					690	98100	210	FT	SPECIAL -DISTRIBUTION CABLE, 3-#500 KCMIL 15 KV WITH 1-#350 KCMIL 600 VOLT NEUTRAL, TDMIS-1510	
280											280					690	98100	280	FT	SPECIAL -MISC.: AERIAL PRIMARY CONDUCTORS	
150											150					690	98100	150	FT	SPECIAL -MISC.: REMOVE AERIAL PRIMARY CONDUCTORS	
	350										350					690	98100	350	FT	SPECIAL -NO. 2/0 AWG AL TRIPLEX W/ ACSR NEUTRAL, TDMIS-1501	
	LS										LS					690	98400	LS		SPECIAL -CONDUCTOR SAFETY POLICY, TDMIS-1603	490
																				TELECOMMUNICATIONS (AT&T)	
																625	25920	7,014	FT	CONDUIT, MISC.: CONCRETE ENCASED FIBERGLASS CONDUIT, 4"	512
																				TELECOMMUNICATIONS (CHARTER)	
							266							266		625	25920	266	FT	CONDUIT, MISC.:FIBERGLASS CONDUIT, 4", DIRECTIONAL DRILLED	515A
																				TELECOMMUNICATIONS (VERIZON)	
							318							318		625	25920	318	FT	CONDUIT, MISC.:FIBERGLASS CONDUIT, 4"	515D
																				ELECTRICAL (AEP)	
											233					511	53016	233	CY	CLASS QC4 CONCRETE, MISC.: CLASS QC4 CONCRETE, PEA GRAVEL ENCASEMENT, AS PER PLAN	503
											6,234					625	25920	6,234	FT	CONDUIT, MISC.:CONDUIT, PVC, 5", SCH. 40, ELECTRIC RATED, AS PER PLAN	503
											1,253					625	29401	1,253	FT	TRENCH IN PAVED AREAS, AS PER PLAN	501
											1					690	98000	1	EACH	SPECIAL -MISC.: FIBERGLASS BOX PAD INSTALLATION	501
											2					690	98000	2	EACH	SPECIAL -MISC.: PRECAST CONCRETE ELECTRIC MANHOLE	501
											1					690	98000	1	EACH	SPECIAL -MISC.: PRECAST PRIMARY ENCLOSURE	507
																				TELECOMMUNICATIONS (C.O.C. DOT)	
											80					625	25603	80	FT	CONDUIT, 4", 725.05, AS PER PLAN	499
											900					690	98100	900	FT	SPECIAL - MISC.: REMOVAL AND DISPOSAL OF F01.HM FIBER OPTIC CABLE	499
											1,856					690	98100	1,856	FT	SPECIAL - MISC.: REMOVAL AND DISPOSAL OF F02.HH FIBER OPTIC CABLE	499
											1,582					804	98000	1,582	FT	FIBER OPTIC CABLE, MISC.: F01.HH FIBER OPTIC CABLE, 288 STRAND	499
											3,439					804	98000	3,439	FT	FIBER OPTIC CABLE, MISC.: F02.HH FIBER OPTIC CABLE, 288 STRAND	499
											1,185					804	98000	1,185	FT	FIBER OPTIC CABLE, MISC.: F03.HM FIBER OPTIC CABLE, 288 STRAND	499
																				TRAFFIC SURVEILLANCE	
							LS				LS					202	98000	LS		REMOVAL MISC.: REMOVAL OF PROJECT 1 PERMANENT ITS	607
							LS				LS					202	98000	LS		REMOVAL MISC.: REMOVAL OF PROJECT 3 TEMPORARY ITS	607
							56				56					625	25408	56	FT	CONDUIT, 2", 725.051 (SURVEILLANCE)	
							365				365					625	25504	365	FT	CONDUIT, 3", 725.051 (SURVEILLANCE)	
							3,126				3,126					625	25750	3,126	FT	CONDUIT, 4", MULTICELL, 725.20 , EPC-40, (4)-1.25" INNER-DUCTS	
							52				52					625	25802	52	FT	CONDUIT, CONCRETE ENCASED, 4", MULTICELL, EPC-40	
							646				646					625	25900	646	FT	CONDUIT, JACKED OR DRILLED, 4" MULTICELL, EPC-80	
							131				131					625	25906	131	FT	CONDUIT, JACKED OR DRILLED, 725.051, 3"	
							473				473					625	29100	473	FT	TRENCH, 36" DEEP	
							6				6					625	29931	6	EACH	MEDIAN JUNCTION BOX, AS PER PLAN	603
							7				7					625	30700	7	EACH	PULL BOX, 725.08, 18"	
							5				5					625	31510	5	EACH	PULL BOX REMOVED (SURVEILLANCE)	
							4				4					625	31600	4	EACH	PULL BOX, MISC.: CONCRETE, 32" (SURVEILLANCE)	604
							1				1					625	32000	1	EACH	GROUND ROD (SURVEILLANCE)	
							3				3					625	34000	3	EACH	POWER SERVICE	
							27				27					630	03100	27	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							24				24					630	80100	24	SF	SIGN, FLAT SHEET	
							3				3					632	04905	3	EACH	VEHICULAR SIGNAL HEAD, (LED), 2-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN	604
							4				4					632	26500	4	EACH	DETECTOR LOOP	
							3				3					632	28200	3	EACH	DISCONNECT SWITCH WITH ENCLOSURE	3490-E
							1,893				1,893					632	29901	1,893	FT	MESSANGER WIRE, 7 STRAND, 1/4" DIAMETER WITH ACCESSORIES, AS PER PLAN	604

GENERAL SUMMARY



FRA - 71 - 17.46

ESTIMATED QUANTITY FROM SHEET NO.	PLAN SPLIT	202	202	202	202	202	202	202	202	202	202	252	606	606	606	606	606	606	606					
		PAVEMENT REMOVED SY	CONCRETE MEDIAN REMOVED SY	CONCRETE MEDIAN REMOVED, AS PER PLAN SY	CONCRETE BARRIER REMOVED FT	CURB REMOVED FT	GUARDRAIL REMOVED FT	ANCHOR ASSEMBLY REMOVED EACH	IMPACT ATTENUATOR REMOVED EACH	FENCE REMOVED FT	FULL DEPTH PAVEMENT SAWING FT	GUARDRAIL, TYPE MGS FT	ANCHOR ASSEMBLY, TYPE E EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2 EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) EACH	IMPACT ATTENUATOR, TYPE 2 (BIDIRECTIONAL) 55 MPH/ 28" EACH	IMPACT ATTENUATOR, MISC.: WORK ZONE IMPACT ATTENUATOR EACH						
211	1	1107			194	870	344					979	463	1	2		1							
215	1	529			224	228						597					1							
219	1	600			237	406	170					419	413		1	1								
223	1	2032	94		366	419	129		1			781			1		1							
227	1	7186	396		809	448	115		1			290	38	1										
231	1	10241	75		1823	1746	1278	1									1							
235	1	5744	26		318	501	601					323										1		
244	1																							
247	1	1394		193	674	180					186	25												
249	1	1193				347	534				100	120	388	2	2									
TOTALS CARRIED TO GENERAL SUMMARY		30026	591	193	4645	5145	3171	1	2	286	3534	1302	4	6	1	3	1	1						

ESTIMATED QUANTITY FROM SHEET NO.	PLAN SPLIT	607	609	609	622	622	622	622	622	622	622	622	622	622	626	626	626	622	622	626	626					
		FENCE, TYPE CLT FT	CURB, TYPE 4-C, AS PER PLAN FT	4" CONCRETE MEDIAN SY	CONCRETE BARRIER, SINGLE SLOPE, TYPE B FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D FT	CONCRETE BARRIER END SECTION, TYPE B EACH	CONCRETE BARRIER END SECTION, TYPE C1 EACH	CONCRETE BARRIER END SECTION, TYPE D EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1 EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, A EACH	BARRIER, MISC.:TYPE C MODIFIED EACH	BARRIER, MISC.:TYPE C1 MODIFIED EACH	BARRIER, MISC.:TYPE D MODIFIED FT	BARRIER, MISC.:PORTABLE BARRIER 32" FT	BARRIER REFLECTOR, TYPE 1, ONE WAY EACH	BARRIER REFLECTOR, TYPE 2, ONE WAY EACH						
211	1		305							220			2	2	2										7	8
215	1							239			1		3												6	
219	1		427						243	1		1													4	6
223	1		20					66	171	1		3	2	2											13	
227	1		280						173	505		1	1												312	17
231	1				10	254	225	460		1											234			500	21	
235	1						69	265													167			230	10	
244	1								884					6											17	
247	1	149		345					531				6			43							123		13	
249	1	35	38			26		85		1		1													6	9
TOTALS CARRIED TO GENERAL SUMMARY		184	1070	345	10	280	772	3364	4	2	8	5	16	2	43	713	123	730	114	23						

CALCULATED	RLE	MRT
	CHECKED	
MAINLINE AND RAMP ROADWAY SUBSUMMARY		
FRA-71-17.46		
205		881

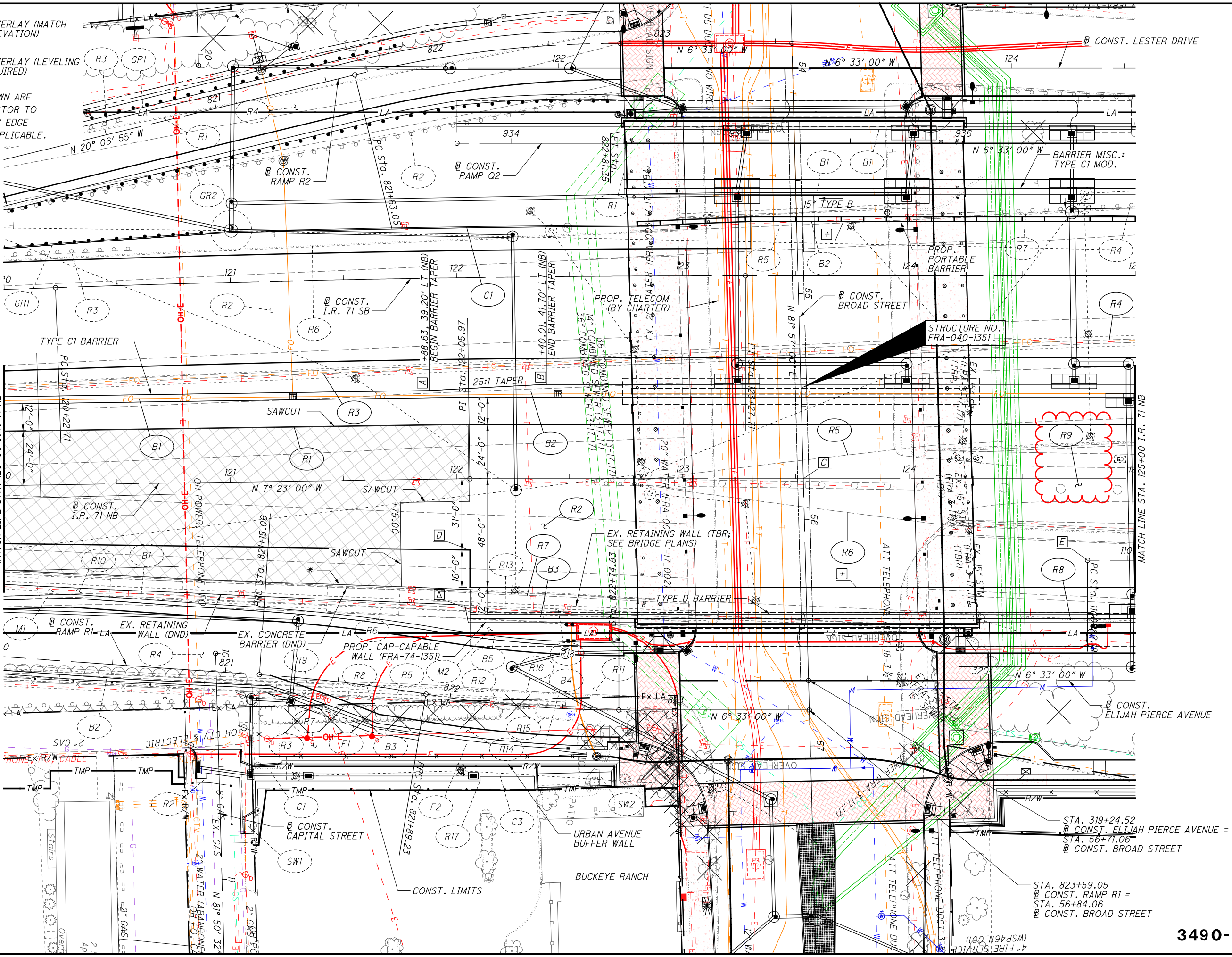
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 MILL AND OVERLAY (MATCH EXISTING ELEVATION)
 MILL AND OVERLAY (LEVELING COURSE REQUIRED)

* NOTE: DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO RESURFACE TO EXISTING EDGE OF SHOULDER WHERE APPLICABLE.

- A END BARRIER MISC.: TYPE C1 MOD
BEGIN TYPE C1 BARRIER
- B END TYPE C1 BARRIER
BEGIN BARRIER MISC.: TYPE C1 MOD
- C STA. 123+53.33
CONST. I.R. 71 NB = STA. 55+81.86
CONST. BROAD STREET
- D STA. 122+05.52, 31.50' RT
END TAPER
- E STA. 124+78.98, 36.00' RT
CONST. I.R. 71 NB = STA. 110+82.19
CONST. RAMP V2
- Δ PROP. SHEETING, SEE STRUCTURE DETAIL SHEETS
- + FUTURE EOP FOR FRA-71-17.14. SEE PAVEMENT MARKING PLAN FOR CLARIFICATION

CROSS REFERENCES SHEET NO.	DESCRIPTION
226	I.R. 71 NB PROFILE SHEET
424, 446 - 452	DRAINAGE PLAN & QUANTITIES
400	RAMP GORE DETAILS
516	BARRIER DETAILS
227	ROADWAY QUANTITIES
417	PARKING LOT DETAIL - BUCKEYE RANCH
390	SUPERELEVATION TABLE

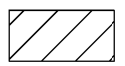


PLAN - I.R. 71 NB
 STA. 120+00.00 TO STA. 125+00.00

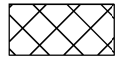
FRA-71-17.46

224
 181

3490-E



MILL AND OVERLAY (MATCH EXISTING ELEVATION)



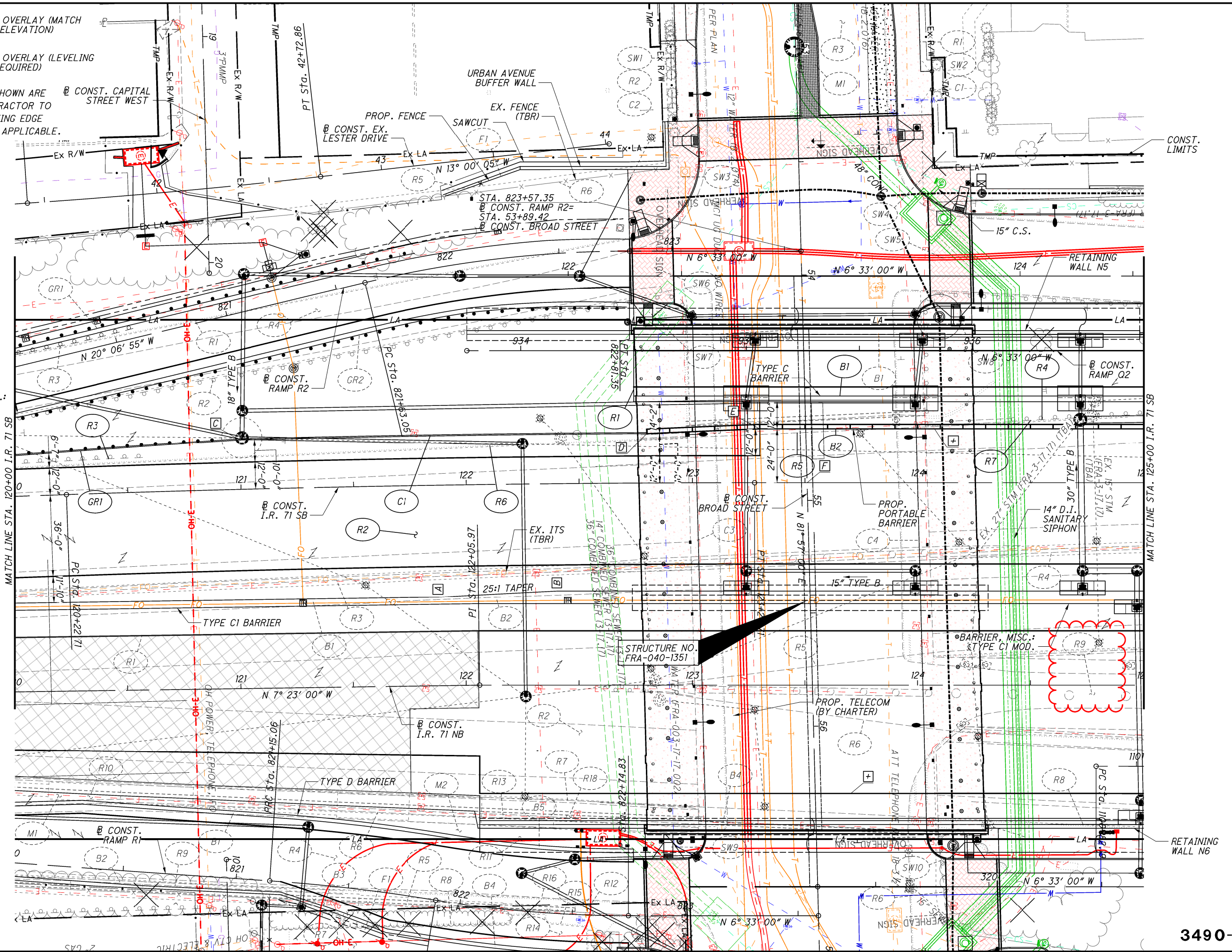
MILL AND OVERLAY (LEVELING COURSE REQUIRED)

* NOTE: DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR TO RESURFACE TO EXISTING EDGE OF SHOULDER WHERE APPLICABLE.

I.R. 71 SB
 P.I. Sta. 121+75.22
 $\Delta = 1^\circ 58' 57''$ (RT)
 $D_c = 0^\circ 39' 00''$
 $R = 8,814.74'$
 $T = 152.52'$
 $L = 305.00'$
 $E = 1.32'$
 $e_{max} = NC$
 $C = 304.98'$
 $C.B. = N 7^\circ 32' 28'' W$
 $P.C. Sta. 120+22.71$
 $P.T. Sta. 123+27.71$

- [A] END BARRIER, MISC.: TYPE C1 MOD BEGIN TYPE C1 BARRIER
- [B] END TYPE C1 BARRIER BEGIN BARRIER, MISC.: TYPE C1 MOD
- [C] STA. 121+00.11, 22.00' LT END TAPER
- [D] STA. 122+79.98, 22.00' LT BEGIN TAPER
- [E] STA. 123+30.00, 24.00' LT END TAPER
- [F] STA. 123+50.95 @ CONST. I.R. 71 SB = STA. 54+92.13 @ CONST. BROAD STREET
- [+] FUTURE EOP FOR FRA-71-17.14. SEE PAVEMENT MARKING PLAN FOR CLARIFICATION.

CROSS REFERENCES	DESCRIPTION
SHEET NO. 226	I.R. 71 SB PROFILE SHEET
421, 416-452	DRAINAGE PLAN & QUANTITIES
516	BARRIER DETAILS
227	ROADWAY QUANTITIES



CALCULATED
 RLE
 CHECKED
 MRT

PLAN - I.R. 71 SB
 STA. 120+00.00 TO STA. 125+00.00

FRA-71-17.46

225
 881

3490-E

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REF NO.	SHEET NO.	STATION TO STATION						202	202	202	202	202	202	252	606	606	609	622	622	622	622	622	622	626					
		PAVEMENT REMOVED	CONCRETE MEDIAN REMOVED	CONCRETE BARRIER REMOVED	CURB REMOVED	GUARDRAIL REMOVED	IMPACT ATTENUATOR REMOVED	FULL DEPTH PAVEMENT SAWING	GUARDRAIL, TYPE MGS	ANCHOR ASSEMBLY, TYPE E	CURB, TYPE 4-C, AS PER PLAN	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	CONCRETE BARRIER END SECTION, TYPE D	CONCRETE BARRIER END SECTION, TYPE C1	BARRIER, MISC.:TYPE C1 MODIFIED	BARRIER, MISC.:PORTABLE BARRIER 32"	BARRIER REFLECTOR, TYPE 1, ONE WAY											
		SY	SY	FT	FT	FT	EACH	FT	FT	EACH	FT	FT	FT	FT	EACH	EACH	FT	FT	EACH	EACH	FT	FT	EACH						
		I.R. 71 NB																											
B1	224	120+00.00	LT	TO	121+88.63	LT												173			1							4	
B2	224	122+40.00	LT	TO	125+00.00	LT																312						4	
B3	224	122+05.97	RT	TO	125+00.00	RT													279	1							3		
R1	224	120+00.00	LT	TO	122+05.97	LT							261																
R2	224	120+00.00	RT<	TO	125+00.00	RT<	3564																						
R3	224	120+00.00	LT	TO	123+00.00	LT		301																					
R4	224	124+05.46	LT	TO	125+00.00	LT		95																					
R5	224	122+60.90	LT	TO	125+00.00	LT			220		1																		
R6	224	122+80.44	RT	TO	125+00.00	RT			221																				
R7	224	122+04.65	RT	TO	124+08.15	RT			203																				
R8	224	124+08.94	RT	TO	125+00.00	RT				91																			
R9	224	122+80.44	RT<	TO	125+00.00	RT<	606																						
		I.R. 71 SB																											
B1	225	122+74.34	LT	TO	125+00.00	LT																226						3	
B2	225	122+80.00	LT	TO	125+00.00	LT																	220					3	
C1	225	120+00.00	LT	TO	122+79.98	LT										280													
GR1	225	120+05.01	LT	TO	120+92.26	LT								37.5	1														
R1	225	122+74.34	RT<	TO	122+74.51	RT<							29																
R2	225	120+00.00	RT<	TO	125+00.00	RT<	3016																						
R3	225	120+00.00	LT	TO	120+57.05	LT						57																	
R4	225	124+41.95	LT	TO	125+00.00	LT						58																	
R5	225	122+77.22	LT	TO	124+41.60	LT			165																				
R6	225	120+00.00	LT	TO	122+98.58	LT				299																			
R7	225	124+41.60	LT	TO	125+00.00	LT				58																			
		TOTALS CARRIED TO SHEET																											
		205			7186		396	809	448	115	1	290	38	1	280	173	505	1	1	312	220	17							

ROADWAY QUANTITIES - I.R. 71	FRA - 71 - 17.46
CALCULATED RLE CHECKED MRT	227 881

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CROSS REFERENCES	
SHEET NO.	DESCRIPTION
230	I.R. 71 NB PROFILE SHEET
425, 446 - 452	DRAINAGE PLAN & QUANTITIES
231	ROADWAY QUANTITIES
516	BARRIER DETAILS

- [A] END BARRIER MISC.: TYPE C1 MOD
BEGIN TYPE C1 BARRIER
- [B] END TYPE C1 BARRIER
BEGIN BARRIER, MISC.: TYPE C1 MOD
- [+] FUTURE EOP FOR FRA-71-17.14. SEE PAVEMENT MARKING PLAN FOR CLARIFICATION.



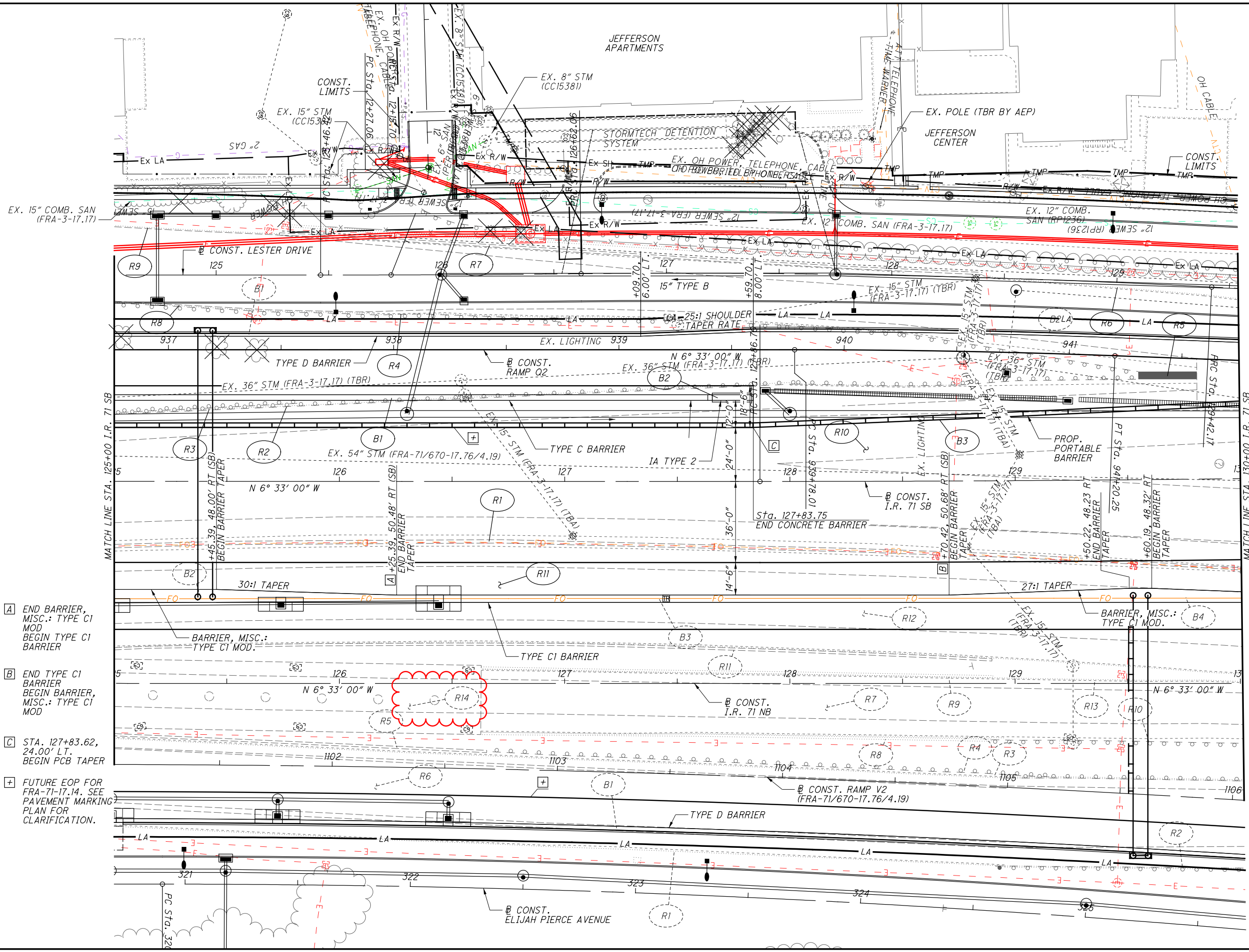
RAMP V2
 P.I. = Sta. 1105+92.84
 D = 6° 48' 02" (RT)
 Dc = 0° 40' 00"
 R = 8,594.37'
 T = 510.65'
 L = 1,020.09'
 E = 15.16'
 e_{max} = 0.020
 C = 1,019.49'
 C.B. = N 3° 08' 58" W


 0 20 40
 HORIZONTAL SCALE IN FEET
 CALCULATED RLE CHECKED MRT

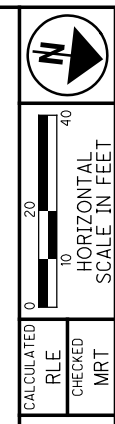
**PLAN - I.R. 71 NB
 STA. 125+00.00 TO STA. 130+00.00**

FRA-71-17.46

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SHEET NO.	CROSS REFERENCES DESCRIPTION
230	I.R. 71 SB PROFILE SHEET
425, 446 - 452	DRAINAGE PLAN & QUANTITIES
231	ROADWAY QUANTITIES
516	BARRIER DETAILS



- A END BARRIER, MISC.: TYPE C1 MOD
BEGIN TYPE C1 BARRIER
- B END TYPE C1 BARRIER
BEGIN BARRIER, MISC.: TYPE C1 MOD
- C STA. 127+83.62, 24.00' LT.
BEGIN PCB TAPER
- + FUTURE EOP FOR FRA-71-17.14. SEE PAVEMENT MARKING PLAN FOR CLARIFICATION.

I.R. 71 SB
P.I. Sta. 130+08.37
 $\Delta = 1^\circ 24' 38''$ (LT)
 $D_c = 0^\circ 19' 05''$
 $R = 18,008.38'$
 $T = 221.67'$
 $L = 443.32'$
 $E = 1.36'$
 $e_{max} = NC$
 $C = 443.31'$
C.B. = $N 7^\circ 15' 19'' W$
P.C. Sta. 127+86.70
P.C.C. Sta. 132+30.02

RAMP V2
P.I. = Sta. 1105+92.84
 $D = 6^\circ 48' 02''$ (RT)
 $D_c = 0^\circ 40' 00''$
 $R = 8,594.37'$
 $T = 510.65'$
 $L = 1,020.09'$
 $E = 15.16'$
 $C = 1,019.49'$
C.B. = $N 3^\circ 08' 58'' W$

PLAN - I.R. 71 SB
STA. 125+00.00 TO STA. 130+00.00

FRA-71-17.46

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REF NO.	SHEET NO.	STATION TO STATION					202	202	202	202	202	202	606		622	622	622	622	622	622	626						
							PAVEMENT REMOVED SY	CONCRETE MEDIAN REMOVED SY	CONCRETE BARRIER REMOVED FT	CURB REMOVED FT	GUARDRAIL REMOVED FT	ANCHOR ASSEMBLY REMOVED EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) EACH	CONCRETE BARRIER, SINGLE SLOPE, TYPE B FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C1 FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D FT	CONCRETE BARRIER END SECTION, TYPE B EACH	BARRIER, MISC.:TYPE C1 MODIFIED FT	BARRIER, MISC.:PORTABLE BARRIER 32" FT	BARRIER REFLECTOR, TYPE 1, ONE WAY EACH						
I.R. 71 NB																											
B1	228	125+00.00	RT	TO	130+00.00	RT														460						5	
B2	228	125+00.00	LT	TO	126+25.41	LT													105							2	
B3	228	126+25.41	LT	TO	128+70.68	LT									225											3	
B4	228	128+70.68	LT	TO	130+00.00	LT													129							2	
R1	228	125+00.00	RT	TO	130+00.00	RT				500																	
R2	228	128+91.33	RT	TO	130+00.00	RT					109																
R3	228	126+65.38	RT	TO	130+00.00	RT				335																	
R4	228	126+65.38	RT	TO	130+00.00	RT					336																
R5	228	125+00.00	RT	TO	126+65.38	RT																					
R6	228	125+00.0	RT	TO	130+00.00	RT																					
R7	228	126+62.89	RT<	TO	130+00.00	RT<																					
R8	228	126+62.74	RT	TO	128+89.38	RT																					
R9	228	126+62.94	LT	TO	128+90.10	LT																					
R10	228	128+89.37	RT	TO	130+00.00	RT																					
R11	228	125+00.00	LT	TO	128+89.76	LT																					
R12	228	125+00.00	LT	TO	130+00.00	LT																					
R13	228	128+90.10	LT	TO	130+00.00	LT																					
R14	228	125+00.00	RT<	TO	126+62.89	RT<																					
I.R. 71 SB																											
B1	229	125+00.00	LT	TO	127+63.50	LT									10	254										3	
B2	229	127+63.50	LT	TO	127+83.75	LT																					
B3	229	125+00.00	LT	TO	130+00.00	LT																					
R1	229	125+00.00	RT	TO	130+00.00	RT																					
R2	229	125+00.00	LT	TO	129+55.09	LT																					
R3	229	125+00.00	LT	TO	128+75.14	LT																					
R4	229	125+00.00	LT	TO	129+55.09	LT																					
R5	229	129+55.09	LT	TO	129+81.16	LT																					
R6	229	128+85.85	LT	TO	130+00.00	LT																					
R7	229	125+73.34	LT	TO	128+85.96	LT																					
R8	229	125+00.00	LT	TO	128+49.12	LT																					
R9	229	125+00.00	LT	TO	125+73.31	LT																					
R10	229	125+00.00	LT	TO	130+00.00	LT																					
R11	229	125+00.00	RT	TO	130+00.00	RT																					
TOTALS CARRIED TO SHEET						205	75	1823	1746	1278	1	1		10	254	225	460	1	234	500	21						

CALCULATED RLE CHECKED MRT	ROADWAY QUANTITIES - I.R. 71	FRA - 71 - 17.46
		231 881

SPECIFICATIONS

THE LATEST EDITION OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMSC), INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL ITEMS ASSOCIATED WITH CONSTRUCTION OF THE SIPHON AND ITS APPURTENANCES UNLESS OTHERWISE NOTED.

PLAN STATIONING

ALL PLAN STATIONING FOR SIPHON CONSTRUCTION SHALL BE SEWER CENTERLINE, BEGINNING AT THE PROPOSED (WEST) MANHOLE ON THE EXISTING 48-INCH DIAMETER COMBINED SEWER AT STATION 10+15 (BROAD ST. STA. 52+99, 0.6' RT.) AND ENDING AT THE PROPOSED (EAST) MANHOLE ON THE EXISTING 48-INCH DIAMETER COMBINED SEWER AT STATION 15+62.7, (BROAD ST. STA. 57+75.1, 1.0' LT.).

BACKFILL

ALL BACKFILL FOR SEWER CONSTRUCTION, INCLUDING THE INLET AND OUTLET STRUCTURES, SHALL BE COMPACTED GRANULAR MATERIAL IN ACCORDANCE WITH C.O.C. ITEM 912 OR ODOT ITEM 304 OR ITEM 613, TYPE 2. THE COST TO FURNISH AND PLACE BACKFILL SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS SEWER ITEMS.

INSPECTION WORK BY THE CITY

THE CITY OF COLUMBUS DIVISION OF SEWERAGE AND DRAINAGE (DOSD) WILL CONDUCT THE INSPECTION OF ALL SANITARY SEWER CONSTRUCTION. THE CONTRACTOR WILL PROVIDE NOTIFICATIONS AND ACCESS TO THE WORK AS SPECIFIED IN ACCORDANCE WITH CMSC 105.11.

THE CONTRACTOR SHALL NOTIFY DOSD (JEREMY CAWLEY @ 645-6795) A MINIMUM OF 28 DAYS PRIOR TO THE START OF SIPHON CONSTRUCTION. DOSD WILL HAVE THEIR OWN INSPECTOR ON SITE.

ITEM SPECIAL - MISC.: INSPECTION FOR STABILIZATION OF EXISTING BRICK SEWER

THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING AND SUPPORTING THE EXISTING 48-INCH DIAMETER COMBINED SEWER FOR CONSTRUCTION OF THE MANHOLES AT STATIONS 10+15 AND 15+62.70 PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PERFORM TELEVISION INSPECTION OF THE EXISTING PIPE FOR DETERMINATION OF CONDITION AND STABILITY. TELEVISION INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT NASSCO SPECIFICATIONS IN PACP FORMAT FROM THE NEAREST UPSTREAM MANHOLE TO THE FIRST DOWNSTREAM MANHOLE AT EACH LOCATION. THE INSPECTION REPORT, ALONG WITH THE CONTRACTOR'S RECOMMENDATIONS FOR REHABILITATION AND SUPPORT, SHALL BE SUBMITTED TO ODOT AND THE DOSD FOR REVIEW AND COMMENT PRIOR TO THE START OF MANHOLE CONSTRUCTION.

DOSD RECORDS (RP 10513-16) INDICATE THAT THE 48 INCH DIAMETER BRICK SEWER HAS BEEN REHABILITATED WITH A CURED IN-PLACE LINER WEST OF THE EXISTING MANHOLE AT STATION 53+29 (BROAD ST.).

THIS WORK WILL BE PAID AT THE LUMP SUM PRICE BID FOR ITEM SPECIAL - INSPECTION FOR STABILIZATION OF EXISTING BRICK SEWER, INCLUDING CLEANING AND TELEVISION OF THE SEWER, EVALUATION, RECOMMENDATIONS, AND REPORTING. THE COST FOR ANY REHABILITATION OF THE SEWER, AS DETERMINED BY THE INVESTIGATION, SHALL BE INCLUDED IN THE PRICE BID PER EACH FOR ITEM SPECIAL - C.O.C. MANHOLE TYPE "E" (AA-S104) WITH 108" DIA. CAST-IN-PLACE BASE.

ITEM SPECIAL - C.O.C. MANHOLE TYPE "C" (AA-S102)
ITEM SPECIAL - C.O.C. MANHOLE TYPE "E" (AA-S104)
ITEM SPECIAL - C.O.C. MANHOLE TYPE "E" (AA-S104) WITH 108" DIA. CAST-IN-PLACE BASE

THESE ITEMS INCLUDE ALL EXCAVATION, SHEETING AND BRACING, DEWATERING, STABILIZATION AND SUPPORT OF EXISTING SEWERS, FORMWORK, CONCRETE, REINFORCING STEEL, MANHOLE CASTINGS AND STEPS, JOINT MATERIAL, COATINGS, BEDDING, BACKFILL, AND ALL OTHER APPURTENANT WORK NECESSARY FOR CONSTRUCTION OF THE MANHOLE IN ACCORDANCE WITH CMSC ITEM 604, COMPLETE, TESTED, AND READY FOR SERVICE.

MANHOLE FLOW CHANNELS

WHERE CHANGES IN DIRECTION OF FLOW OCCUR IN A MANHOLE, THE FLOW CHANNEL SHALL BE SHAPED TO GUIDE THE FLOW THROUGH A SMOOTH CURVE WITH NO SHARP CHANGES IN DIRECTION (REF. COLS. STD. DWG. AA-S117).

ITEM 611 - CONDUIT, TYPE B (8" - 48"), AS PER PLAN

CONDUIT, TYPE B, 8" THROUGH 48" SIZE, SHALL BE FURNISHED, INSTALLED, TESTED, AND ACCEPTED IN ACCORDANCE WITH CITY OF COLUMBUS CMS ITEM 901, WITH TYPE 1 BEDDING.

ITEM SPECIAL - MISC.: SEWER PIPE ABANDONED, 8"-21"
ITEM SPECIAL - MISC.: SEWER PIPE ABANDONED, 24"-48"

THE CONTRACTOR SHALL ABANDON EXISTING SEWER PIPE WHERE INDICATED ON THE PLANS BY EITHER REMOVAL AND DISPOSAL OR FILLING IN PLACE WITH CONTROLLED DENSITY FILL PER 202.041. THE METHOD OF ABANDONMENT SHALL BE AT THE CONTRACTOR'S DISCRETION UNLESS SPECIFICALLY DESIGNATED IN THE PLANS. ALL PIPE ABANDONED WITHIN CITY OF COLUMBUS RIGHTS-OF-WAY SHALL BE REMOVED. PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER LINEAL FOOT FOR ITEM SPECIAL - SEWER PIPE ABANDONED ACCORDING TO THE SIZE RANGES PROVIDED IN THE SUB-SUMMARY.

THE COST OF ABANDONMENT OF THE SIPHON PIPES LOCATED BETWEEN THE EXISTING INLET AND OUTLET STRUCTURES SHALL BE INCLUDED IN ITEM SPECIAL - ABANDON EXISTING SIPHON.

ITEM 202 - MANHOLE ABANDONED, AS PER PLAN

THE CONTRACTOR SHALL ABANDON EXISTING MANHOLES WHERE INDICATED ON THE PLANS IN ACCORDANCE WITH CMSC 202.12. STRUCTURES SHALL BE REMOVED TO A MINIMUM DEPTH OF 2 FEET BELOW FINISHED SUBGRADE OR GROUND SURFACE. AT THE CONTRACTOR'S DISCRETION, OR AS REQUIRED TO COMPLETE THE PROPOSED WORK, MANHOLES CAN BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH CMSC 202.11. PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 202 - MANHOLE ABANDONED, AS PER PLAN, REGARDLESS OF THE METHOD USED.

MANHOLE STEPS

MANHOLE STEPS SHALL BE REINFORCED POLYPROPYLENE PLASTIC TYPE (REF. COLS. STD. DWG. AA-S119).

BULKHEADS

SEWER PIPE BULKHEADS SHALL BE CONSTRUCTED BY THE CONTRACTOR AT THE OPEN ENDS OF ALL SEWER ABANDONED IN PLACE AND AT MANHOLES WHERE PIPE IS REMOVED IN ACCORDANCE WITH CMSC 901.13. THE COST FOR PLACEMENT OF BULKHEADS SHALL BE INCLUDED IN THE UNIT PRICES BID FOR PIPE ABANDONMENT.

ITEM SPECIAL - MISC.: MAINTENANCE OF FLOW

EXISTING SANITARY, STORM, AND COMBINED SEWER FLOWS SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.

DETAILED PLANS FOR BYPASS PUMPING SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. THESE PLANS SHALL INCLUDE A PROPOSED SEQUENCE OF OPERATIONS AND TIMELINE, DRAWINGS INDICATING THE UPSTREAM AND DOWNSTREAM LIMITS OF THE BYPASS, LOCATION OF PUMPING EQUIPMENT AND BYPASS LINES, PROPOSED MAINTENANCE OF TRAFFIC, AND A CONTINGENCY PLAN TO PREVENT DAMAGE DURING HIGH FLOWS.

THE CONTRACTOR SHALL PROVIDE 48-HOUR PRIOR WRITTEN NOTIFICATION TO ALL PROPERTY OWNERS, BUSINESSES, AND RESIDENTS BEING AFFECTED BY THE DIVERSION OF FLOW IN THE SEWER. SUCH NOTIFICATION SHALL INCLUDE THE START TIME AND DURATION OF ANY PLANNED SERVICE OUTAGES. ALL COMMERCIAL ESTABLISHMENTS SHALL BE PROVIDED WITH TEMPORARY SEWER SERVICE. THE CONTRACTOR SHALL SUBMIT A COPY OF ALL PROPERTY OWNER/BUSINESS/RESIDENT NOTIFICATIONS TO THE ENGINEER PRIOR TO DISTRIBUTION.

TEMPORARY BYPASS LINES SHALL BE BURIED WHERE CROSSING PRIVATE ACCESS DRIVES OR PUBLIC STREETS THAT ARE TO REMAIN OPEN. TRENCHES SHALL BE COVERED WITH TEMPORARY PAVEMENT OR BE STEEL PLATED (IF APPROVED BY THE CITY). CHECK VALVES SHALL BE PLACED AHEAD OF ALL PUMPING CONNECTIONS.

THE FOLLOWING FLOW DATA IS TAKEN FROM THE CITY'S "SWMM5" COLLECTION SYSTEM MODEL AND REPRESENTS A BEST ESTIMATE OF DRY AND WET WEATHER FLOWS ENTERING THE EXISTING SIPHON INLET STRUCTURE AT THE EAST END OF THE BROAD STREET BRIDGE. IT SHOULD BE NOTED THAT THESE FLOWS ARE BASED ON MODELING AND NOT HARD FLOW MONITOR DATA. THE WET WEATHER FLOW IS BASED ON A 10-YEAR, 6 HOUR HUFF DESIGN STORM.

DRY WEATHER FLOW 0.397 MGD (PEAK)

WET WEATHER FLOW: 29.69 MGD (PEAK)

AT A MINIMUM, THE BYPASS PUMPING SYSTEM MUST BE SIZED TO CONVEY THE PEAK DAILY DRY WEATHER AND PEAK WET WEATHER FLOWS INDICATED. THE CONTRACTOR SHALL PROVIDE A SIGNIFICANT FACTOR OF SAFETY IN BYPASS PUMPING SYSTEM CAPACITY AND RELEASE ODOT AND THE CITY FROM ALL CLAIMS AND DAMAGES RESULTING FROM ANY INADEQUACY OF THE CONTRACTOR-FURNISHED BYPASS PUMPING SYSTEM.

ITEM SPECIAL - MISC.: MAINTENANCE OF FLOW (CONT'D)

THE CONTRACTOR SHALL HAVE ADEQUATELY SIZED STAND-BY PUMPS ON SITE WHEN BYPASSING THE SEWERS. BYPASS PUMPING SHALL BE MONITORED ON-SITE BY THE CONTRACTOR AT ALL TIMES (24 HOURS PER DAY) WHILE IN OPERATION.

PAYMENT FOR BYPASS PUMPING WILL BE MADE AT THE LUMP SUM PRICE BID, AND SHALL INCLUDE ALL SUBMITTALS, NOTIFICATIONS, PRIMARY AND STAND-BY PUMPING EQUIPMENT, VALVES, BYPASS LINES, TEMPORARY SEWER SERVICE, EXCAVATION, BACKFILL, TEMPORARY PAVEMENT, STEEL PLATES, TRAFFIC MAINTENANCE, AND ALL OTHER WORK AND EQUIPMENT NECESSARY FOR MAINTAINING SEWER FLOW AS SPECIFIED.

ITEM SPECIAL - MISC.: 36" PIPE-PRESTRESSED CONCRETE PRESSURE PIPE, STEEL CYLINDER TYPE, AWWA C301, MANUAL M9, C.O.C. ITEM 801
ITEM SPECIAL - MISC.: 14" PVC PRESSURE PIPE, AWWA C905, DR 25, C.O.C. ITEM 801

CONSTRUCTION OF THE SIPHON PIPING (LOCATED BETWEEN THE INLET AND OUTLET STRUCTURES) SHALL BE IN ACCORDANCE WITH CMSC ITEM 801 FOR WATER MAINS, EXCEPT FOR THE FOLLOWING RESTRICTIONS ON MATERIAL:

- 36-INCH PIPE: *AWWA C301, MANUAL M9, PRESTRESSED CONCRETE PRESSURE PIPE, STEEL CYLINDER TYPE (CMSC ITEM 801)
PIPE, *HOBAS (CCFRPM) PIPE, ASTM D3262, WITH ASTM D4161 JOINTS
14-INCH PIPE: *AWWA C905 POLYVINYL CHLORIDE (PVC) PRESSURE PIPE, DR25, WITH DUCTILE IRON FITTINGS (AWWA C153). FITTINGS SHALL BE P.E. WRAPPED.

TESTING AND ACCEPTANCE SHALL BE IN ACCORDANCE WITH ITEM 901 FOR SANITARY SEWERS.

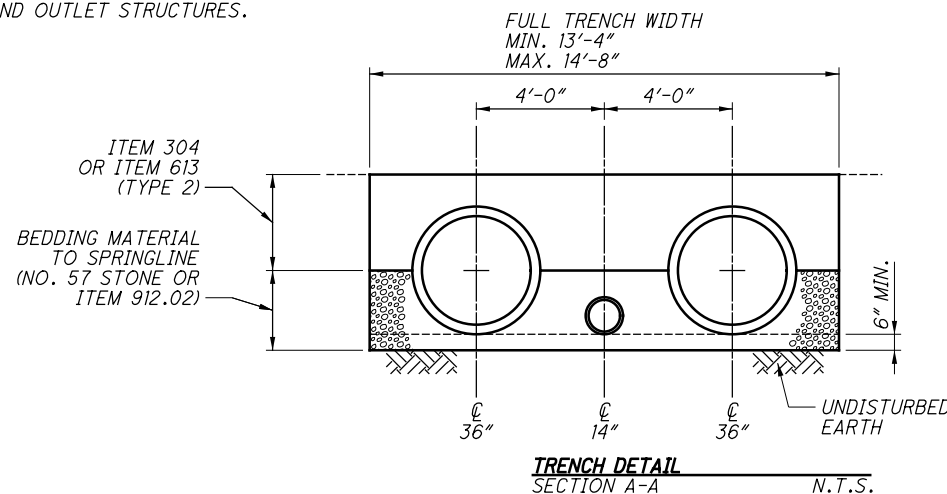
ITEM SPECIAL - MISC.: INLET STRUCTURE
ITEM SPECIAL - MISC.: OUTLET STRUCTURE

THESE ITEMS SHALL INCLUDE ALL EXCAVATION, SHEETING AND BRACING, DEWATERING, FORMWORK, CONCRETE, REINFORCING STEEL, WATERSTOP, GROUT, MANHOLE RISERS AND CASTINGS, STEPS, GRATING, STOP LOGS AND APPURTENANCES, COATINGS, BEDDING, BACKFILL, AND ALL OTHER APPURTENANT WORK NECESSARY FOR CONSTRUCTION OF THE INLET AND OUTLET STRUCTURES IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, COMPLETE, TESTED, AND READY FOR SERVICE.

BENDS ALONG SIPHON BARRELS

FOR PVC PIPE, HORIZONTAL AND VERTICAL DEFLECTIONS CAN BE MADE UP OF A COMBINATION OF STANDARD 11 1/4, 22 1/2, AND 45 DEGREE BENDS ARRANGED TO MEET THE PIPE GRADES SHOWN AND TO MATCH THE HORIZONTAL AND VERTICAL LOCATIONS SPECIFIED FOR THE 45 DEGREE HORIZONTAL BENDS LOCATED ADJACENT TO BOTH RETAINING WALL FOOTINGS. FOR PCCP OR HOBAS PIPE, EACH DEFLECTION SHALL BE MADE USING A SINGLE CUSTOM FITTING MANUFACTURED TO MEET THE HORIZONTAL AND VERTICAL REQUIREMENTS SPECIFIED.

FOR ALL SIPHON BARREL PIPE, REGARDLESS OF MATERIAL, THE CONTRACTOR SHALL SUBMIT A DETAILED LAYING SCHEDULE TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO THE START OF WORK. THE LAYING SCHEDULE MUST INCLUDE THE HORIZONTAL AND VERTICAL LOCATION OF EACH FITTING, FITTING TYPE AND DEFLECTION, AND THE ORDER OF ASSEMBLY OF ALL PIPE AND FITTINGS LOCATED BETWEEN THE INLET AND OUTLET STRUCTURES.



NOTE: TRENCH DETAIL IS TYPICAL ACROSS FREEWAY. PIPE INVERTS WILL VARY FROM STA. 11+21 TO STA. 11+61 AND FROM STA. 14+18 TO STA. 14+57, BUT BEDDING REQUIREMENTS REMAIN THE SAME. EXCAVATION FOR RETAINING WALL FOOTINGS AND PIPE COLLARS SHALL NOT UNDERCUT PIPE TRENCH.

ITEM SPECIAL - MISC.: INLET STRUCTURE
ITEM SPECIAL - MISC.: OUTLET STRUCTURE

WALL FOOTING COLLARS

THE REINFORCED CONCRETE PIPE COLLARS TO BE CONSTRUCTED BENEATH THE PROPOSED WALL FOOTINGS (SEE SHEET 775 OF 881) MUST BE PLACED A MINIMUM OF 3 DAYS PRIOR TO INSERTION OF THE SIPHON PIPING THROUGH THE CIRCULAR OPENINGS TO ALLOW FOR ADEQUATE CURING OF THE CONCRETE.

ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN
ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

MANHOLES SHALL BE ADJUSTED TO GRADE OR RECONSTRUCTED TO GRADE WHERE INDICATED ON THE PLANS IN ACCORDANCE WITH CITY OF COLUMBUS CMS ITEM 604.

ITEM SPECIAL - MISC.: ABANDON EXISTING SIPHON

THE EXISTING SIPHON SYSTEM SHALL REMAIN IN SERVICE UNTIL THE PROPOSED SIPHON SYSTEM IS COMPLETE, TESTED, AND READY FOR CONNECTION TO THE 48-INCH COMBINED SEWER. ONCE THE NEW SYSTEM IS OPERATIONAL, THE CONTRACTOR SHALL REMOVE THE EXISTING CONCRETE INLET AND OUTLET STRUCTURES TO A MINIMUM DEPTH OF 2 FEET BELOW FINISHED SUBGRADE OR GROUND SURFACE, OR TO THE DEPTH REQUIRED TO ACCOMMODATE THE OTHER PROPOSED WORK. ANY PORTION OF A STRUCTURE THAT REMAINS SHALL BE BACKFILLED IN ACCORDANCE WITH ITEM 202. THE EXISTING SIPHON PIPING SHALL BE ABANDONED IN ACCORDANCE WITH ITEM SPECIAL - SEWER PIPE ABANDONED.

ABANDONMENT OF THE EXISTING SIPHON, INCLUDING BOTH STRUCTURES AND ALL PIPE LOCATED BETWEEN THE STRUCTURES WILL BE PAID AT THE LUMP SUM PRICE BID FOR ITEM SPECIAL - ABANDON EXISTING SIPHON. THIS WORK ALSO INCLUDES ALL EXCAVATION, DEMOLITION, BACKFILL, FILLING PIPE IN PLACE, PIPE REMOVAL, DISPOSAL OF ALL WASTE MATERIAL, AND ANY OTHER APPURTENANT WORK ASSOCIATED WITH SIPHON ABANDONMENT.

ABANDONMENT OF THE EXISTING 48-INCH COMBINED SEWER PIPE LOCATED EAST OF THE EXISTING INLET STRUCTURE AND WEST OF THE EXISTING OUTLET STRUCTURE WILL BE PAID UNDER ITEM SPECIAL - SEWER PIPE ABANDONED.

ITEM SPECIAL - MISC.: 8" X 6" DIAMETER WYE FITTING, C.O.C. ITEM 915

PRE-TELEVISION OF THE SEWER TO BE REMOVED BEHIND THE MATTLIN BUILDING, 105 PARSONS AVENUE, INDICATED THE EXISTENCE OF TWO APPARENTLY ACTIVE LATERALS COMING FROM THE BUILDING OR IMMEDIATE PROPERTY. THE CONTRACTOR SHALL EXPOSE THESE LATERALS PRIOR TO CONSTRUCTION OF THE REPLACEMENT SEWER TO DETERMINE THE FINAL LOCATION FOR PLACEMENT OF THE WYE CONNECTIONS. THESE LOCATIONS MUST BE APPROVED BY THE CITY OF COLUMBUS. INSTALLATION OF THE WYES AND CONNECTION TO THE EXISTING LATERALS SHALL BE IN ACCORDANCE WITH C.O.C. ITEM 915 AND STD. DWG. AA-S160.

THE COST OF LOCATING THE EXISTING LATERALS, FURNISHING AND INSTALLING THE WYES, AND CONNECTION OF THE EXISTING LATERALS TO THE NEW WYES SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM SPECIAL - 8" X 6" DIAMETER WYE FITTING, C.O.C. ITEM 915, COMPLETE, BACKFILLED, TESTED, AND READY FOR SERVICE.

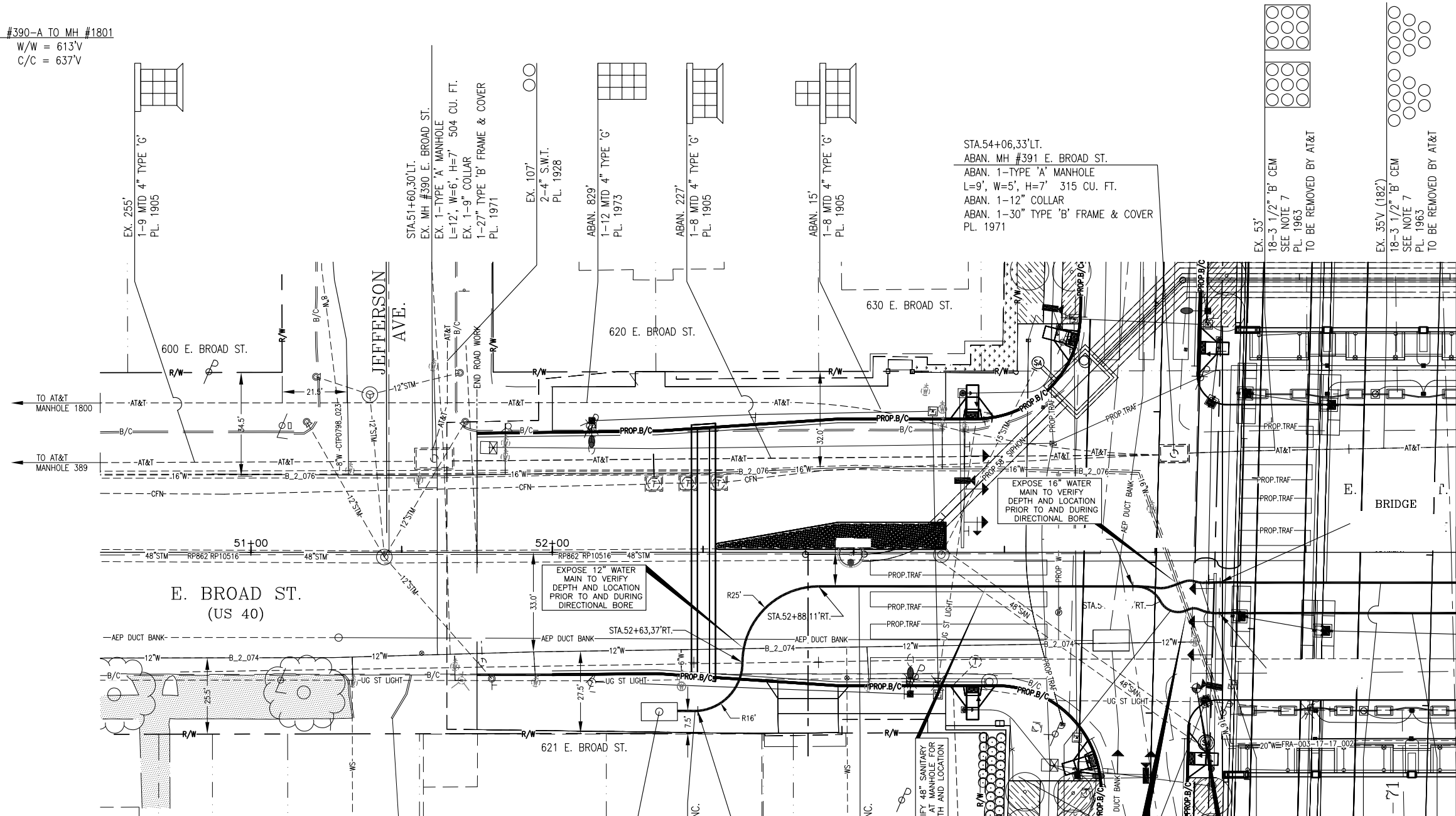
CALCULATED - CHECKED - BROAD STREET SIPHON REPLACEMENT GENERAL NOTES FRA-71-17.46 3490-E 474 881

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MH #390-A TO MH #1801

W/W = 613'V
C/C = 637'V

RECORD NOTE: CLMBOH11 PLAT 90, 91 & 115



MATCH LINE STATION 55+00
SEE SHEET 102

BRIDGE CONTRACTOR TO PLACE
AT&T CONDUIT FROM MANHOLE 390A
TO MANHOLE 1801

CONSTRUCTION NOTES:

- EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO BEGINNING ANY EXCAVATION.
- CONTRACTOR SHALL REPLACE ALL DRIVEWAYS, SIDEWALKS, OR OTHER DISTURBED SURFACES TO A CONDITION EQUAL TO OR BETTER THAN THE PRIOR EXISTING CONDITIONS.
- EXISTING AT&T FACILITIES ARE SHOWN PER RECORDS AVAILABLE AND ARE ONLY APPROXIMATE. CONTRACTOR SHALL HAVE AT&T FACILITIES LOCATED TO DETERMINE EXACT LOCATIONS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND LOCATING ALL SEWERS, WATER, GAS, CABLE TV AND ELECTRIC SERVICES PRIOR TO BEGINNING ANY EXCAVATION.
- AT&T TO REMOVE ASBESTOS WRAPPED DUCTS FROM ABUTMENT TO ABUTMENT.
- ABATEMENT CONTRACTOR TO NOTIFY AT&T INSPECTOR D. JERMAN AT 614-256-1322 PRIOR TO REMOVAL OF ASBESTOS WRAPPED DUCTS AND UPON COMPLETION OF ABATEMENT.

CODE: DESCRIPTION: QUANTITY:

MC130	4" PVC-C	3050
CONTROL POINT 218 MAG NAIL IN SIDEWALK ON SOUTH SIDE OF BROAD STREET EAST OF ON RAMP TO I-71 SOUTH. N=715,725.212 E=1,832,992.081 STA.54+13.77,45.10'RT. ELEVATION 792.36		

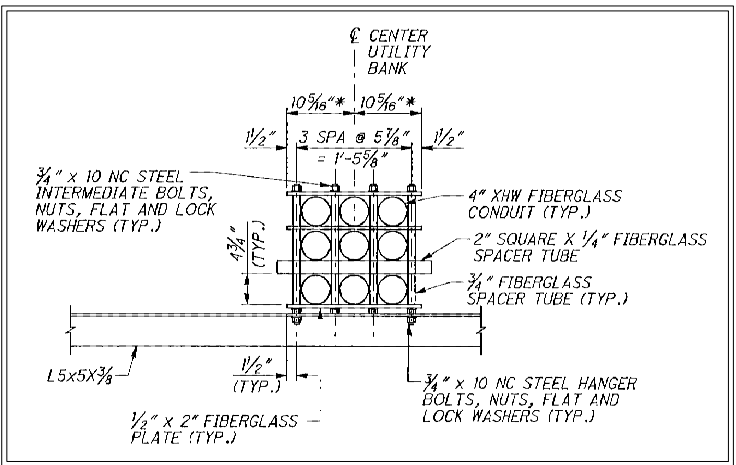
PLAN PREPARED BY:
THAYER POWER AND COMMUNICATION
950 FREEWAY DRIVE N, COLUMBUS, OHIO 43229
PHONE: 614-431-9292 FAX: 614-431-9595

OHIO
Utilities Protection SERVICE
800-362-2764
Call Before You Dig

SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

REF: DATE SERVICE REQUEST

RNO	GEO LOC	WIRE CENTER	DATE ISSUED:
	L31101	CLMBOH11	
MUNICIPALITY	COUNTY	TOWNSHIP	1/4 SEC TAX DIST
COLUMBUS	FRANKLIN	FRANKLIN	
LOCATION & DESCRIPTION: E. BROAD ST. AT I-71 BRIDGE			
PLACE CONDUIT TO AVOID CONFLICTS WITH BRIDGE REPLACEMENT			
DA:	TC:	DATE:	07-09-18
DRAWN BY:	ORIG.	TELEPHONE	PLR:
THAYER	G. VANALMSICK	223-7276	MAJ. CODE
REVISION:			4C
			EW0#
			A012C1W
			PRINT 101 OF 115



UTILITY SUPPORT

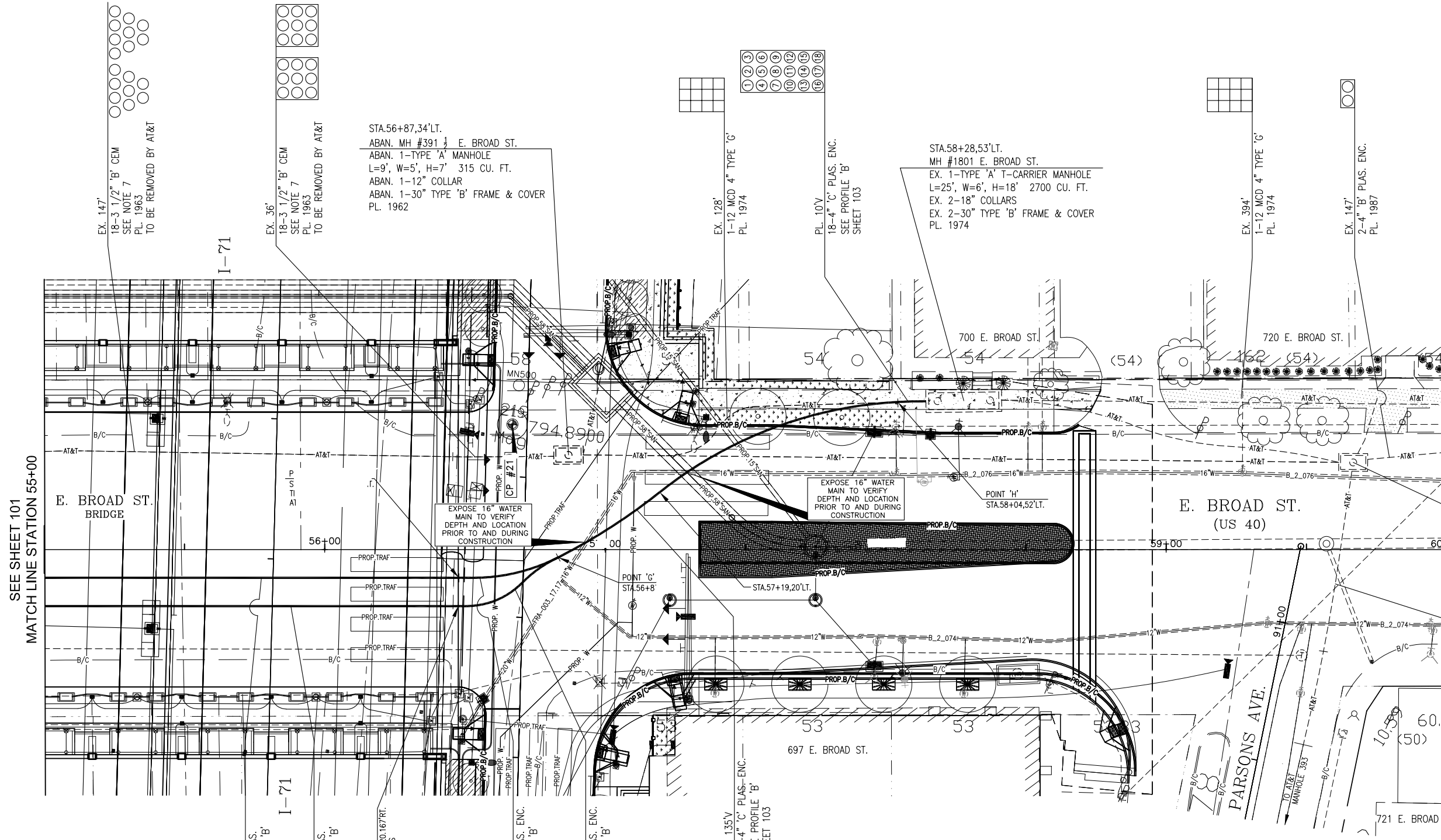
BETWEEN GIRDERS 9 & 10 AND 10 & 11

AT&T RELOCATION
STA. 50+50 TO STA. 55+00

FRA-71-17.46

2916-E
2 / 5

512
881



SEE SHEET 101
MATCH LINE STATION 55+00

BRIDGE CONTRACTOR TO PLACE
AT&T CONDUIT FROM MANHOLE 390A
TO MANHOLE 1801

STA.59+67,31'LT.
MH #392 E. BROAD ST.
EX. 1-TYPE 'A' PRECAST MANHOLE
L=10', W=5', H=7' 350 CU. FT.
EX. 1-6" COLLAR
EX. 1-30" TYPE 'B' FRAME & COVER
PL. 1948

CODE:	DESCRIPTION:	QUANTITY:
MC130	4" PVC-C	3964

CONTROL POINT 219
MAG NAIL IN SIDEWALK ON NORTH SIDE OF BROAD STREET AT ON
RAMP TO I-71 NORTH
N=715,849.499 E=1,833,230.185
STA.56+66.93,44.62'LT. ELEVATION 794.89

PLAN PREPARED BY:
THAYER POWER AND COMMUNICATION
950 FREEWAY DRIVE N, COLUMBUS, OHIO 43229
PHONE: 614-431-9292 FAX: 614-431-9595

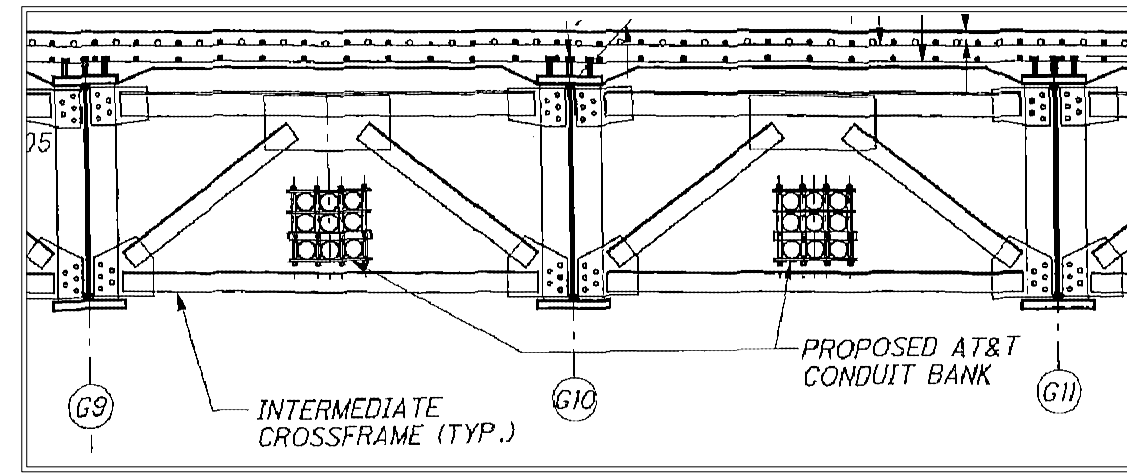
SCALE: HORIZONTAL: 1"=20' VERTICAL: 1"=5'		800-362-2764 <i>Call Before You Dig</i>	
REF:		DATE SERVICE REQUEST	

RNO	GEO LOC	WIRE CENTER	DATE ISSUED:
	L31101	CLMBOH11	
MUNICIPALITY	COUNTY	TOWNSHIP	1/4 SEC TAX DIST
COLUMBUS	FRANKLIN	FRANKLIN	

LOCATION & DESCRIPTION:
E. BROAD ST. AT I-71 BRIDGE

DA:	TC:	DATE:	07-09-18
DRAWN BY:	ORIG.	TELEPHONE	PLR:
THAYER	G. VANALMSICK	223-7276	MAJ. CODE
REVISION:			4C

PLACE CONDUIT TO AVOID CONFLICTS WITH BRIDGE REPLACEMENT
EWO#
A012C1W
PRINT 102 OF 115



HALF TRANSVERSE SECTION

- CONSTRUCTION NOTES:
- EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES PRIOR TO BEGINNING ANY EXCAVATION.
 - CONTRACTOR SHALL REPLACE ALL DRIVEWAYS, SIDEWALKS, OR OTHER DISTURBED SURFACES TO A CONDITION EQUAL TO OR BETTER THAN THE PRIOR EXISTING CONDITIONS.
 - EXISTING AT&T FACILITIES ARE SHOWN PER RECORDS AVAILABLE AND ARE ONLY APPROXIMATE. CONTRACTOR SHALL HAVE AT&T FACILITIES LOCATED TO DETERMINE EXACT LOCATIONS.
 - CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES DURING CONSTRUCTION OPERATIONS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND LOCATING ALL SEWERS, WATER, GAS, CABLE TV AND ELECTRIC SERVICES PRIOR TO BEGINNING ANY EXCAVATION.
 - AT&T TO REMOVE ASBESTOS WRAPPED DUCTS FROM ABUTMENT TO ABUTMENT.
 - ABATEMENT CONTRACTOR TO NOTIFY AT&T INSPECTOR D. JERMAN AT 614-256-1322 PRIOR TO REMOVAL OF ASBESTOS WRAPPED DUCTS AND UPON COMPLETION OF ABATEMENT.

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AT&T RELOCATION
STA. 55+00 TO STA. 60+00

FRA-71-17.46

2916-E
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ITEM 630 - SIGNING, MISC.: ANCHOR BASE FOR POSTS ON CONCRETE SURFACE

THIS ITEM SHALL CONSIST OF SUPPLYING AND INSTALLING THE ANCHOR BASE PLATE DESCRIBED HERE IN AND DETAILED ON THIS SHEET.

THE ANCHOR BASE SHALL BE USED IN AREAS WHERE FULL DEPTH PENETRATION CANNOT BE ACCOMPLISHED OR IS UNDESIRABLE. THE BASE SHALL BE GALVANIZED STRUCTURAL STEEL IN CONFORMANCE TO CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATION, LATEST EDITION, ITEM 711 STRUCTURAL STEEL AND STRUCTURAL INCIDENTALS. THE ANCHOR BASE SHALL HAVE A WELDED SQUARE RECEPTACLE TO ACCEPT THE REQUIRED SIZE SQUARE POST. SQUARE POSTS SHALL BE PROVIDED WITH THE DIMENSIONAL REQUIREMENTS SHOWN ON OHIO DEPARTMENT OF TRANSPORTATION'S STANDARD CONSTRUCTION DRAWING TC-41.20, YIELDING POST, AS A SEPARATE PAY ITEM. ALL WELDS SHALL CONFORM TO ITEM 513 STRUCTURAL STEEL MEMBERS AND ITEM 711.02 GALVANIZED STEEL. SQUARE POSTS AND ANCHOR BASES SHALL BE PAINTED BLACK FOLLOWING MANUFACTURE'S RECOMMENDATIONS AND PAINT SPECIFICATION #595B, SEMI-GLOSS, COLOR #27038. ALL COATED ITEMS SHALL BE SHIPPED IN A MANNER SELECTED BY THE MANUFACTURER, WHICH WILL PROTECT MATERIALS FROM DAMAGE DURING DELIVERY. MATERIALS DAMAGED IN TRANSIT SHALL BE REPAIRED OR REPLACED. ALL COSTS ASSOCIATED WITH CORRECTING DAMAGED MATERIAL SHALL BE BORNE BY THE CONTRACTOR.

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT BID PRICE FOR ITEM 630 - SIGNING MISC.: ANCHOR BASE FOR POSTS ON CONCRETE SURFACE AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT FOR THE INSTALLATION AND FABRICATION OF MATERIALS FOR THE ANCHOR BASE WITH NECESSARY WELDING AND DRILLING OF HOLES, INCLUDING CORNER BOLTS AND ANCHOR BOLTS WITH EXPANSION ANCHORS ASSEMBLED TO SPECIFIED TORQUES AND ALL MISCELLANEOUS HARDWARE.

ITEM 630 - SIGNING, MISC.: REMOVAL OF WAYFINDING SIGN

THE CONTRACTOR AS PART OF THIS PROJECT SHALL CONTACT THE CITY OF COLUMBUS TRAFFIC MAINTENANCE SHOP AT 1820 E. 17TH AVE TO PROPERLY REMOVE SID WAYFINDING SIGNS AND SUPPORTS AT THE LOCATIONS SHOWN IN THE PLANS, OWNED BY THE CITY OF COLUMBUS, WITHIN THE PROJECT LIMITS WHEN REQUIRED. ALL WAYFINDING SIGNAGE SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED. PLEASE CALL THE TRAFFIC MAINTENANCE SHOP AT (614)-645-7393 (7:30AM TO 4:00PM MON. THRU FRI.) (2) WEEKS IN ADVANCE OF WAYFINDING SIGN REMOVAL.

THE CONTRACTOR SHALL ALSO CONTACT MARC CONTE (614) 645-5273 FOR WAYFINDING SIGNAGE, (2) WEEKS PRIOR TO REMOVAL OF ANY EXISTING WAYFINDING SIGN(S).

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT BID PRICE FOR ITEM 630 - SIGNING, MISC.: REMOVAL OF WAYFINDING SIGN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, INCLUDING REQUIRED COORDINATION AND NOTIFICATIONS.

**ITEM 644 PAVEMENT MARKING, MISC: (BY LINE), (BY WIDTH)
ITEM 647 PAVEMENT MARKING, MISC: (BY LINE), (BY WIDTH)**

PAVEMENT MARKING, MISC. ITEMS PLACED ON CITY STREETS SHALL CONFORM TO ALL REQUIREMENTS OF THE ODOT CMS EXCEPT THAT THE WIDTH OF THE MARKING SHALL BE AS SPECIFIED IN THE INDIVIDUAL ITEM DESCRIPTION.

PAYMENT FOR THESE ITEMS WILL BE AT THE CONTRACT BID PRICE FOR THE INDIVIDUAL ITEMS.

ITEM 644 - PAVEMENT MARKING, MISC.: EDGE LINE, 12"

WHEN SPECIFIED IN THE PLAN, A 6" EDGE LINE SHALL BE UPGRADED TO A 12" EDGE LINE.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER FOOT, INCLUDING ALL NECESSARY LABOR, MATERIALS AND ANY OTHER INCIDENTALS NECESSARY TO UPGRADE A SIX INCH WIDE EDGE LINE TO A TWELVE INCH WIDE EDGE LINE.

ITEM 645 - PAVEMENT MARKING MISC.: GROOVE FOR INLAID PAVEMENT MARKINGS

WHEN SPECIFIED IN THE PLAN, ONLY INSTALL THE GROOVE FOR THE SPECIFIED PAVEMENT MARKING, THE PAINT/TAPE WILL BE PLACED DURING PROJECT 3.

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER FOOT, INCLUDING ALL NECESSARY LABOR, MATERIALS AND ANY OTHER INCIDENTALS NECESSARY TO CONSTRUCT THE GROOVE.

ITEM 630 - OVERHEAD MOUNTED SUPPORT, TYPE TC-16.21, DESIGN 9, AS PER PLAN

ITEM 630 - OVERHEAD MOUNTED SUPPORT, TYPE TC-16.21, DESIGN 10, AS PER PLAN

ITEM 630 - OVERHEAD MOUNTED SUPPORT, TYPE TC-16.21, DESIGN 11, AS PER PLAN

ITEM 630 - OVERHEAD MOUNTED SUPPORT, TYPE TC-16.21, DESIGN 13, AS PER PLAN

OVERHEAD MOUNTED SIGN SUPPORTS PLACED ON CITY STREETS SHALL BE IN ACCORDANCE WITH ALL REQUIREMENTS OF ITEM 630 OF THE ODOT CMS AND THE NOTES HEREIN.

THE OVERHEAD MOUNTED SUPPORTS SHALL BE OF THE TYPE SPECIFIED SPECIFIED IN THE PLANS.

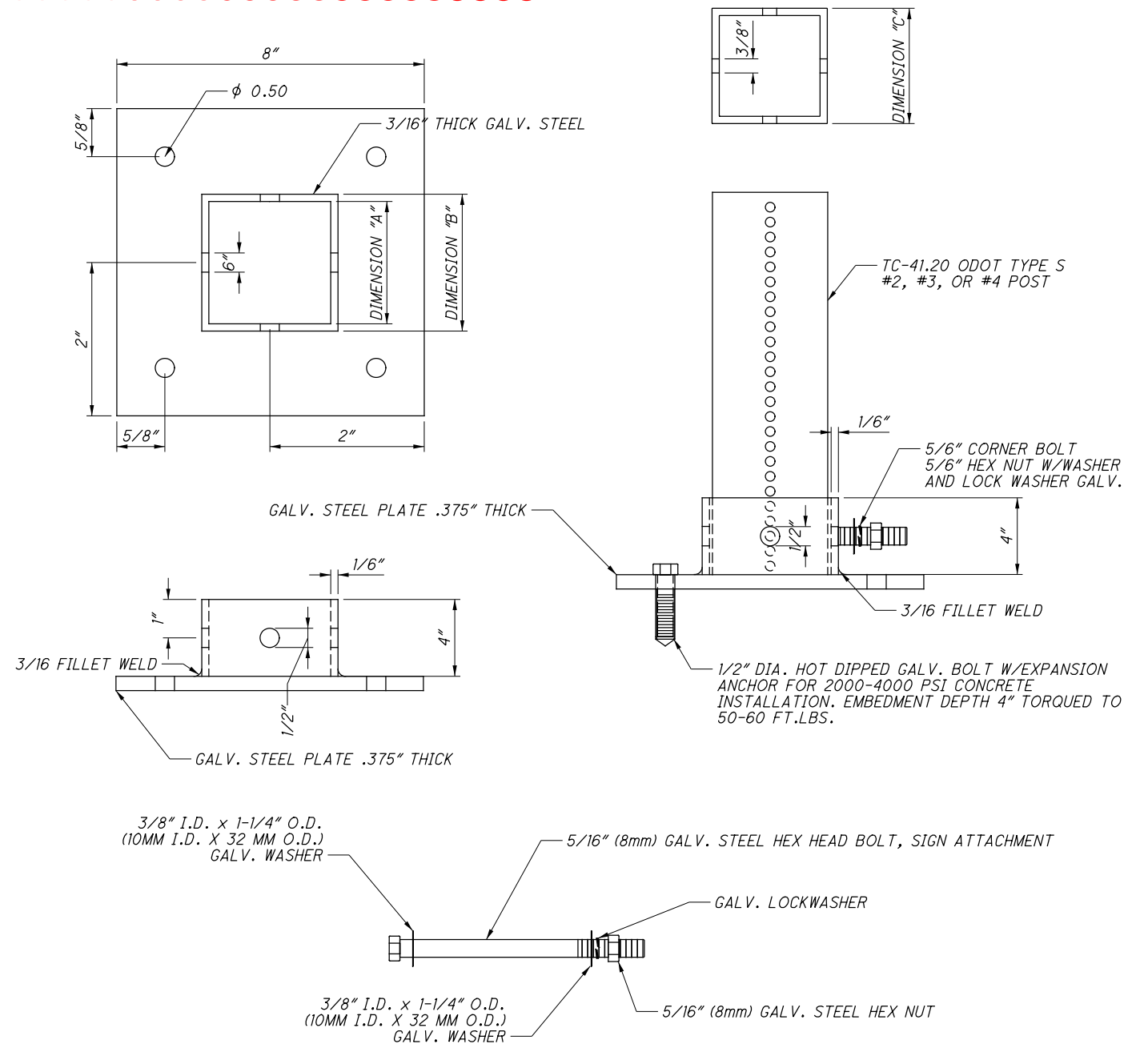
THE SUPPORTS SHALL BE GALVANIZED THEN COATED WITH A BLACK POWDER COATING. THE GALVANIZING SHALL BE PROPERLY PREPARED SO THE POWDER COATING WILL ADHERE TO THE GALVANIZING FOLLOWING MANUFACTURE'S RECOMMENDATIONS AND PAINT SPECIFICATION #595B, SEMI-GLOSS, COLOR #27038. BOLT-NUT COVERS SHALL BE INSTALLED TO COVER ALL ANCHOR BOLTS AND SHALL BE COATED BLACK AS WELL. ALL COATED ITEMS SHALL BE SHIPPED IN A MANNER SELECTED BY THE MANUFACTURER, WHICH WILL PROTECT MATERIALS FROM DAMAGE DURING DELIVERY. MATERIALS DAMAGED IN TRANSIT SHALL BE REPAIRED OR REPLACED. ALL COSTS ASSOCIATED WITH CORRECTING DAMAGED MATERIAL SHALL BE BORNE BY THE CONTRACTOR.

PAYMENT FOR THESE ITEMS WILL BE AT THE CONTRACT BID PRICE FOR THE INDIVIDUAL ITEMS.

ITEM 645 PAVEMENT MARKING, MISC: (BY LINE), (BY WIDTH)

PAVEMENT MARKING, MISC. ITEMS SHALL BE INSTALLED IN A GROOVE AND CONFORM TO THE REQUIREMENTS OF THE CITY OF COLUMBUS CMS SECTION 645 AND CITY OF COLUMBUS STD DWG 1645.

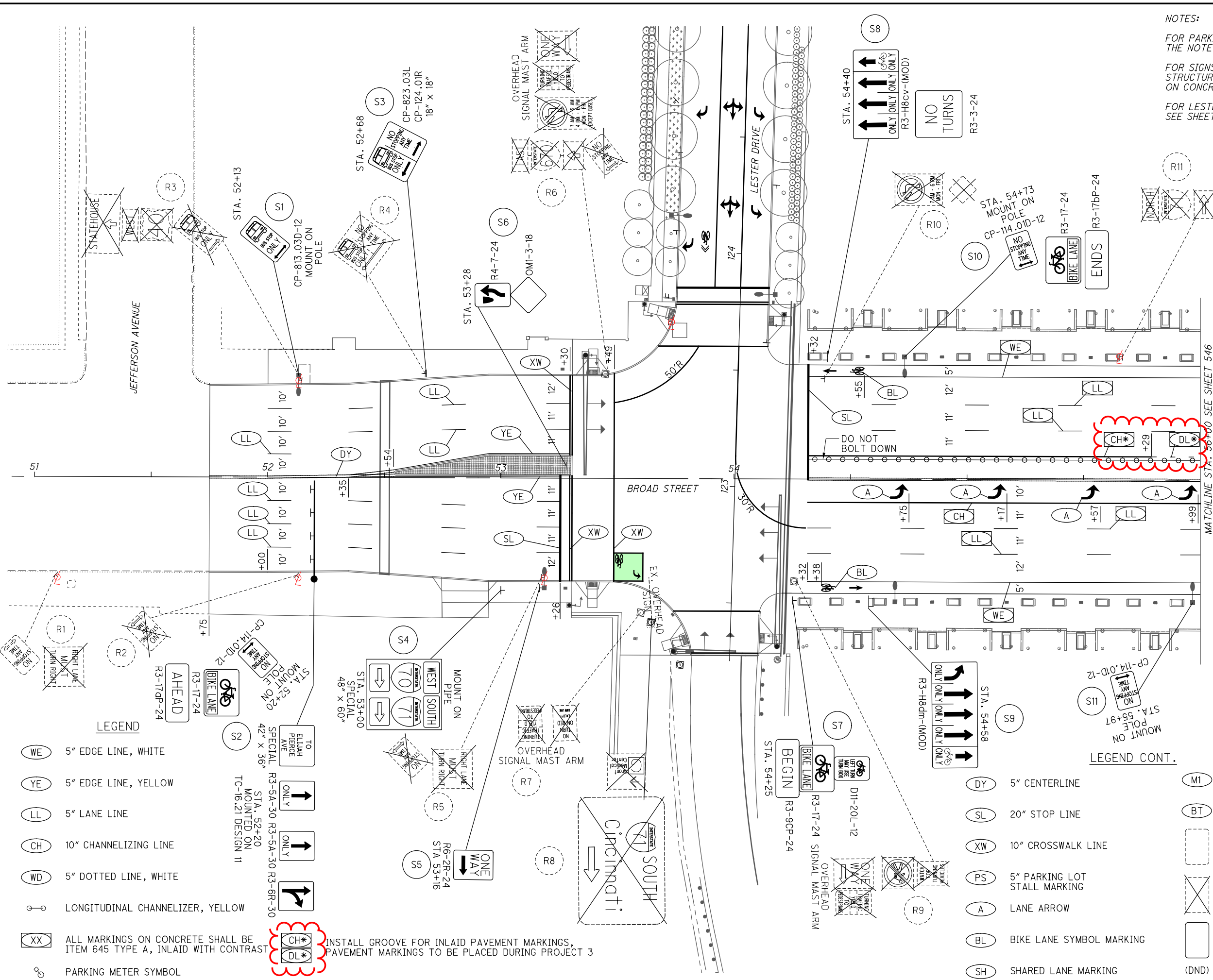
PAYMENT FOR THESE ITEMS WILL BE AT THE CONTRACT BID PRICE FOR THE INDIVIDUAL ITEMS.



	DIMENSION A	DIMENSION B	DIMENSION C
ODOT #2 POST	1.875"	2.25"	1.75"
ODOT #3 POST	2.125"	2.50"	2.00"
ODOT #4 POST	2.75"	3.125"	2.50"

ITEM 630 - SIGNING MISC.: ANCHOR BASE FOR POSTS ON CONCRETE SURFACE DETAILS

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NOTES:
FOR PARKING METER POST HOLE DETAILS, SEE THE NOTE ON SHEET 519.
FOR SIGNS MOUNTED ON THE PROPOSED STRUCTURE, SEE THE ANCHOR BASE FOR POSTS ON CONCRETE SURFACES DETAIL ON SHEET 518.
FOR LESTER DR. SIGNS AND PAVEMENT MARKINGS, SEE SHEETS 550.



SIGN AND PAVEMENT MARKING PLAN
BROAD STREET

FRA-71-17.46

545
881

- LEGEND**
- WE 5" EDGE LINE, WHITE
 - YE 5" EDGE LINE, YELLOW
 - LL 5" LANE LINE
 - CH 10" CHANNELIZING LINE
 - WD 5" DOTTED LINE, WHITE
 - LONGITUDINAL CHANNELIZER, YELLOW
 - XX ALL MARKINGS ON CONCRETE SHALL BE ITEM 645 TYPE A, INLAID WITH CONTRAST
 - PARKING METER SYMBOL

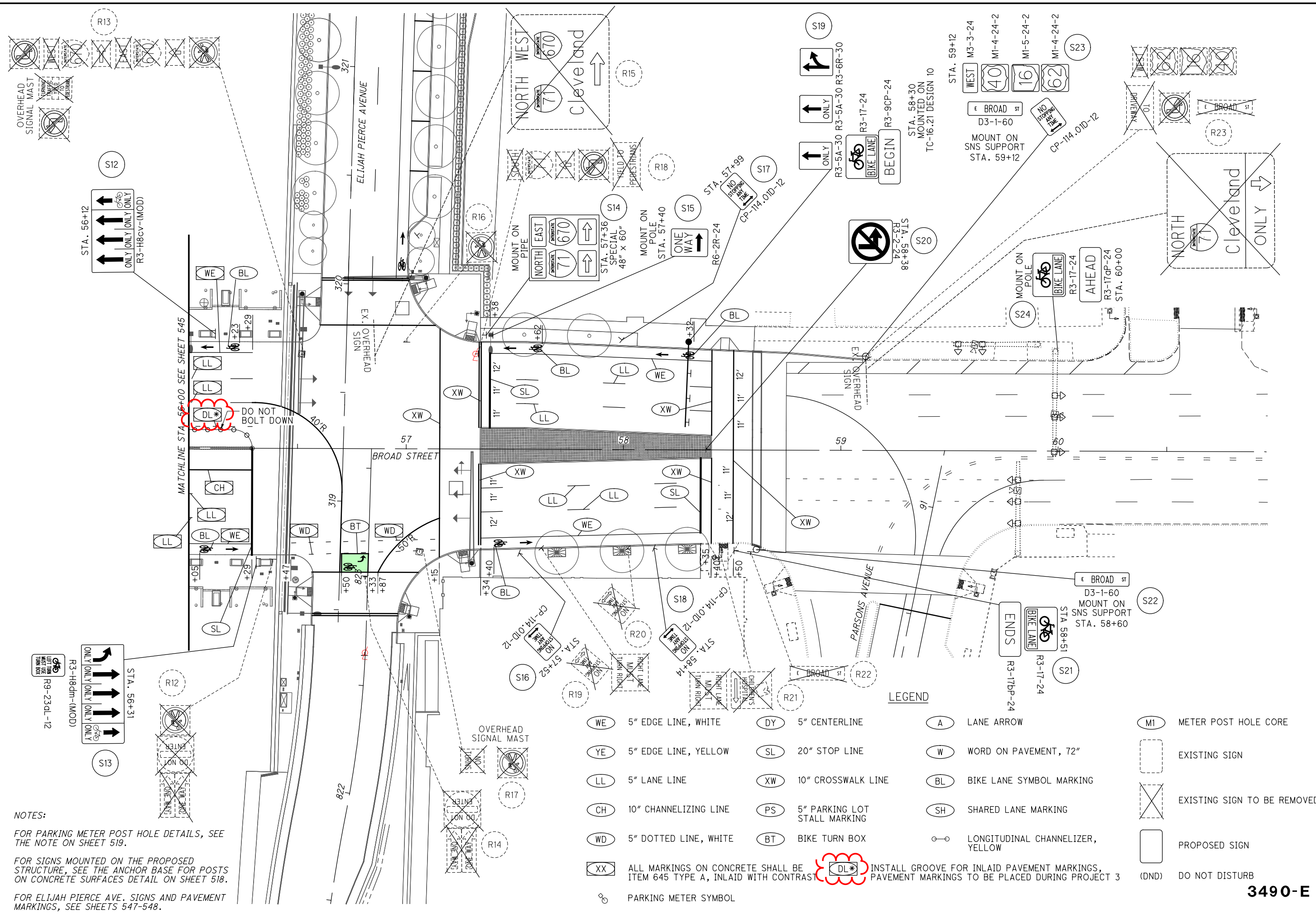
- LEGEND CONT.**
- TO ELIAH PIERCE AVE SPECIAL 42" x 36" MOUNTED ON T-C-16-21 DESIGN 11
 - M1 METER POST HOLE CORE
 - BT BIKE TURN BOX
 - EXISTING SIGN
 - EXISTING SIGN TO BE REMOVED
 - PROPOSED SIGN
 - (DND) DO NOT DISTURB

INSTALL GROOVE FOR INLAID PAVEMENT MARKINGS, PAVEMENT MARKINGS TO BE PLACED DURING PROJECT 3

MATCHLINE STA. 56+00 SEE SHEET 546

3490-E

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NOTES:
 FOR PARKING METER POST HOLE DETAILS, SEE THE NOTE ON SHEET 519.
 FOR SIGNS MOUNTED ON THE PROPOSED STRUCTURE, SEE THE ANCHOR BASE FOR POSTS ON CONCRETE SURFACES DETAIL ON SHEET 518.
 FOR ELIJAH PIERCE AVE. SIGNS AND PAVEMENT MARKINGS, SEE SHEETS 547-548.

- | | | | | | | | |
|------|---|-------|--|---------|----------------------------------|-----------|-----------------------------|
| (WE) | 5" EDGE LINE, WHITE | (DY) | 5" CENTERLINE | (A) | LANE ARROW | (M1) | METER POST HOLE CORE |
| (YE) | 5" EDGE LINE, YELLOW | (SL) | 20" STOP LINE | (W) | WORD ON PAVEMENT, 72" | (EXIST) | EXISTING SIGN |
| (LL) | 5" LANE LINE | (XW) | 10" CROSSWALK LINE | (BL) | BIKE LANE SYMBOL MARKING | (X-EXIST) | EXISTING SIGN TO BE REMOVED |
| (CH) | 10" CHANNELIZING LINE | (PS) | 5" PARKING LOT STALL MARKING | (SH) | SHARED LANE MARKING | (PROP) | PROPOSED SIGN |
| (WD) | 5" DOTTED LINE, WHITE | (BT) | BIKE TURN BOX | (CH-CH) | LONGITUDINAL CHANNELIZER, YELLOW | (DND) | DO NOT DISTURB |
| (XX) | ALL MARKINGS ON CONCRETE SHALL BE ITEM 645 TYPE A, INLAID WITH CONTRAST | (DL*) | INSTALL GROOVE FOR INLAID PAVEMENT MARKINGS, PAVEMENT MARKINGS TO BE PLACED DURING PROJECT 3 | | | | |
| (P) | PARKING METER SYMBOL | | | | | | |

CALCULATED MJT CHECKED MJC

0 20 40
 HORIZONTAL SCALE IN FEET

SIGN AND PAVEMENT MARKING PLAN
BROAD STREET