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REGULATIONS GOVERNING THE LAYING AND REPAIR OF CONCRETE SIDEWALKS, APRONS, AND CURBING

CONCRETE WALKS SHALL BE OF ONE-COURSE CONSTRUCTION AND SHALL BE 4.5 INCHES IN THICKNESS, EXCEPT ALONG ARTERIAL AND COLLECTOR STREETS WHERE THEY MUST BE 6 INCHES IN THICKNESS. CONCRETE FOR WALKS, CURBS, DRIVES, AND APRONS SHALL BE CLASS "C" CONCRETE AS PER ITEM 608 AND SPECIAL OF THE "SUPPLEMENTAL TO STATE SPECIFICATIONS FOR THE CITY OF CLEVELAND" 1967.

WHEN CONCRETE BLOCKS ARE LAID ON CLAY, EXTRA EXCAVATION TO A DEPTH OF 1 1/2 INCHES MUST BE MADE AND FILLED WITH SAND OR GRAVEL TO ACT AS A FOUNDATION TO THE FOUR INCHES OF SIDEWALK PROPER.

NO BLOCKS OFF CONCRETE SHALL BE LARGER THAN 6 FEET AND THE JOINTS MUST BE CUT BY THE USE OF AN APPROVED GROOVING TOOL MAKING A GROOVE ONE-FOURTH (1/4") INCHES DEEP. ALL EDGES SHALL BE ROUNDED WITH AN APPROVED EDGING TOOL TO A RADIUS OF ONE-FOURTH INCH.

EXISTING APRONS AND "DRIVE AREAS" OF THE WALK MUST BE CONSTRUCTED OF CONCRETE. APRONS AND THE AREA OF WALK OVER WHICH VEHICLES DRIVE MUST BE NO LESS THAN 6 INCHES IN THICKNESS, AND MUST BE LAID IN ACCORDANCE WITH SUPPLEMENTAL TO STATE SPECIFICATIONS FOR THE CITY OF CLEVELAND.

AT ALL WATER-METER COVERS, GAS BOXES, HYDRANTS, OR OTHER OBSTRUCTIONS, NEATLY FITTED OPENINGS SHALL BE CUT IN THE SIDEWALK. NO WALK SHALL BE LAID UNTIL ALL THESE OBSTRUCTIONS HAVE BEEN RAISED OR LOWERED TO THE CORRECT ELEVATIONS.

NO OBSTRUCTIONS SHALL BE PLACED IN FRONT OF ANY CATCH BASIN, FIRE HYDRANT, FIRE ALARM BOX OR LETTERBOX, OR NEAR ENOUGH TO THE SAME TO INTERFERE WITH THEIR USE.

NO CHANGE IN THE WIDTH OF THE WALK TO BE LAID SHALL BE MADE FROM THAT OF EXISTING WALKS ON THE STREET AT THE TIME WORK IS DONE UNDER THIS PERMIT, UNLESS SPECIALLY PERMITTED BY THE DIRECTOR OF PUBLIC SERVICE. TREES, LAWNS, AND SHRUBBERY SHALL NOT BE INTERFERED WITH OR DESTROYED BY ANY WORK PERFORMED BY THE CONTRACTOR. WALKS MUST BE LAID TO THE SAME GRADE AS EXISTING WALKS ON THE STREET, UNLESS PERMISSION FOR CHANGE OF GRADE IS OBTAINED FROM THE DIRECTOR OF PUBLIC SERVICE.

ONLY ONE-HALF OF THE SIDEWALK IN THE BUSINESS DISTRICT CAN BE OBSTRUCTED AT ONE TIME, UNLESS CONTRACTOR HAS AN OBSTRUCTION PERMIT. GUTTERS MUST BE LEFT OPEN AT ALL TIMES.

THE SPACING BETWEEN THE WALK AND THE CURB LINE MUST BE GRADED TO ALLOW WATER DRAINAGE, AND MUST BE OF A GRADUAL SLOPE FROM THE WALK TO THE CURB LINE.

THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DIRT AND RUBBISH CAUSED BY HIS WORK.

FAILURE OF A CONTRACTOR TO COMPLY WITH THESE REGULATIONS SHALL RESULT IN THE WITHHOLDING OF FUTURE PERMITS AND SHALL SUBJECT THE HOLDER OF THIS PERMIT TO THE PENALTIES PRESCRIBED IN THE SIDEWALK ORDINANCE.

CURBING: CURBING SHALL CONFORM TO THE STANDARDS
ESTABLISHED FOR SIZE AND QUALITY IN THE DISTRICT IN WHICH IT
IS TO BE INSTALLED. CAST-IN-PLACE CONCRETE CURBS AND
INTEGRAL CURBS, WHERE USED, SHALL CONFORM TO DETAIL PLAN
NO. ME-246 OF THE CITY OF CLEVELAND.

COPIES OF THESE SPECIFICATIONS AND PLANS FOR PAVEMENT REPAIR AND LAYING OF CONCRETE SIDEWALKS MAY BE OBTAINED, UPON REQUEST, FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION OF THE CITY OF CLEVELAND.

SCOPE OF WORK

- A. THE CONTRACTOR SHALL RELOCATE OR REMOVE ALL CLEVELAND PUBLIC POWER FACILITIES AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER ONLY AFTER CPP HAS VISIBLY CONFIRMED THAT SAID CPP FACILITIES HAVE BEEN DE-ENERGIZED AND DISCONNECTED. THIS WORK SHALL BE PROPERLY COMPLETED, INCLUDING INCIDENTALS, AS SHOWN ON THE DRAWINGS AND HEREINAFTER SPECIFIED.
- B. THE MAJOR ITEMS OF WORK TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE AS FOLLOWS:

WORK BY THE PROJECT CONTRACTOR:

THE CONTRACTOR SHALL CONSTRUCT THE CPP UNDERGROUND POWER DISTRIBUTION NETWORK WITHIN THE PROJECT LIMITS. THIS WORK INCLUDES BUT IS NOT LIMITED TO:

- FURNISHING AND INSTALLING CONCRETE ENCASED PVC DUCT BANKS OF VARIOUS ARRANGEMENTS
- FURNISHING AND INSTALLING 36" ROUND CPP CASTINGS FOR MANHOLES LOCATED AT STA. 7+66 & STA. 11+82.
- ${\it MODIFYING}$ EXISTING VAULTS TO ACCOMODATE THE PROPOSED 5" CONDUITS.
- REMOVING EXISTING UNDERGROUND DUCT BANKS AND MANHOLE CASTINGS.
- COORDINATING WITH CPP AND ITS CONTRACTORS
- REMOVING EXISTING CPP OWNED POWER POLES
- FURNISHING AND INSTALLING FIBER REINFORCED EPOXY (FRE) DUCT BANK SYSTEMS ACROSS BRIDGES INCLUDING BEAM SUPPORT SYSTEMS
- FINISHING AND INSTALLING WOODEN POWER POLES FOR TRANSITIONS FROM UNDERGROUND TO OVERHEAD SYSTEMS AND WHERE OVERHEAD SYSTEMS ARE IMPACTED BY PROJECT CONTRACTOR'S WORK
- FURNISHING AND INSTALLING OVERHEAD ELECTRICAL CABLES, SPLICES AND HARDWARE

WORK BY CPP:

- DE-ENERGIZING ELECTRICAL SYSTEM
- REMOVING EXISTING CPP PRIMARY DISTRIBUTION CABLES ACROSS SCRANTON ROAD OVER IR-90 AFTER CABLES HAVE BEEN DE-ENERGIZED.
- FURNISHING AND INSTALLING NEW ELECTRICAL CABLE IN DUCTS.
- TESTING NEW PRIMARY DISTRIBUTION CABLES.
- INSTALLING CABLE ID TAGS ON NEW CABLES AS NECESSARY.
- ENERGIZING ELECTRICAL SYSTEM

ALONG PORTIONS OF THE CORRIDOR, THE PROJECT CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE EXISTING ELECTRICAL SYSTEM UNTIL COMPLETION AND ACTIVATION OF THE PROPOSED UNDERGROUND POWER SYSTEM. THE CONTRACTOR SHALL COORDINATE THE DETAILS OF THIS WORK WITH CPP.

SUBMITTALS

IN ADDITION TO THE REQUIREMENTS OF CMS 105, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY CPP ENGINEERING DEPARTMENT ON ALL EQUIPMENT AND MATERIAL FURNISHED AND REQUIRED TO PERFORM THE WORK.

DEFINITIONS

WHENEVER IN THESE SPECIFICATIONS OR IN ANY DOCUMENT OR INSTRUCTIONS ON CONSTRUCTION WHERE THESE SPECIFICATIONS GOVERN, THE FOLLOWING TERMS (OR PRONOUNS IN PLACE OF THEM)ARE USED, THE INTENT AND MEANING SHALL BE INTERPRETED AS FOLLOWS: THE CITY OF CLEVELAND, IS THE DIRECTOR OF CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES.

STATUS OF CITY INSPECTOR

INSPECTORS AS DESIGNATED BY THE CITY OF CLEVELAND SHALL BE AUTHORIZED TO INSPECT ALL WORK DONE AND MATERIALS FURNISHED. SUCH INSPECTING MAY EXTEND TO ALL OR ANY PART OF THE WORK, AND TO THE PREPARATION OR MANUFACTURING OF THE MATERIALS TO BE USED IN THE WORK. THE CITY INSPECTOR, AS DESIGNATED BY THE DIRECTOR OF PUBLIC UTILITIES SHALL GIVE WORK INSTRUCTIONS TO THE PROJECT ENGINEER.

ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN

THIS ITEM CONSISTS OF CONSTRUCTING NINE (9) 5 INCH CONDUITS IN A CONCRETE ENVELOPE WITH 4000 PSI (CITY OF CLEVELAND CONCRETE MIX SPECIFICATIONS) AS PER THE DETAILED DRAWINGS. ENCASED CONCRETE CONDUITS SHALL BE MEASURED FROM THE CENTER OF THE ADJUSTED CPP MANHOLES. PAYMENT SHALL BE FOR ACCEPTED QUANTITIES PER FOOT FOR FURNISHING AND INSTALLING THE NINE (9) 5 INCH CONDUITS ENCASED IN A CONCRETE ENVELOPE FOR ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN. ANY PAVEMENT, CURB AND SIDEWALK THAT IS OUTSIDE THE PROPOSED FULL DEPTH PAVEMENT LIMITS AND IS DISTURBED TO PERFORM THIS WORK SHALL BE REPLACED IN KIND. PAYMENT FOR PERFORMING THE WORK SHALL BE INCIDENTAL TO THIS ITEM.

THE FOLLOWING ITEMS HAVE BEEN ADDED TO THE PLANS AND CARRIED TO THE GENERAL SUMMARY FOR PERFORMING THIS WORK.

ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN (5" PVC)

ITEM 625 - TRENCH, 48" DEEP

ITEM 625 - CONDUIT, MISC.: CPP BRIDGE MOUNTED CONDUITS AND INCIDENTALS

THIS ITEM CONSISTS OF CONSTRUCTING THE FRE CONDUITS IN THE BRIDGE STRUCTURE, UTILITY SUPPORT HANGERS AND ALL INCIDENTAL ITEMS SUCH AS CONDUIT FRAME, COUPLINGS AND EXPANSION JOINTS. FRE CONDUIT SHALL CONFORM TO UL1684 & 1684A AND SHALL HAVE A MINIMUM WALL THICKNESS OF 0.110 INCHES. FRE CONDUIT SHALL HAVE A 5 INCH INSIDE DIAMETER MOUNTED AS INDICATED ON THE DRAWINGS. COUPLINGS SHALL HAVE A BELL ON ONE END AND A SPIGOT ON THE OTHER END. ALL COUPLINGS SHALL BE MADE OF THE SAME MATERIAL. EXPANSION FITTINGS SHALL BE PROVIDED ON ALL EXPOSED CONDUIT RUNS.

THIS ITEM SHALL ALSO INCLUDE ALL MATERIALS AND LABOR FOR GRID STYLE CONDUIT SUPPORT BRACKET AS SHOWN ON THE BRIDGE PLANS. THE CONTRACTOR SHALL COORDINATE WITH CPP AND GET CPP APPROVAL BEFORE ORDERING THE BRACKETS.

PAYMENT SHALL BE MADE AT THE BID PRICE PER LINEAR FOOT OF CONDUIT PER ITEM 625, CONDUIT, MISC.: CPP BRIDGE MOUNTED CONDUITS & INCIDENTALS AND INCLUDES THE ENTIRE LENGTH OF CONDUIT THAT RUNS ACROSS THE BRIDGE.

ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN (5" PVC)

A. WORK INCLUDED

THE CONTRACTOR SHALL FURNISH ALL MATERIALS FOR AND SHALL PROPERLY CONSTRUCT AND CONNECT TO MANHOLES, AS SHOWN ON THE PLANS OR AS DIRECTED. ALL NON-REINFORCED AND REINFORCED CONCRETE ENCASED PVC/FRE CONDUIT AS REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTRACT. ALL CONDUITS SHALL BE CONCRETE ENCASED UNLESS NOTED OTHERWISE.

B. CONDUIT AND FITTINGS

POLYVINYL CHLORIDE PVC CONDUIT SHALL CONFIRM TO THE UL651 STANDARDS, 5 INCH IRON PIPE SIZE (I.P.S) WITH CONCRETE ENCASEMENT AS DETAILED ON THE PLANS. COUPLINGS SHALL BE SOCKET TYPE, END BELLS AT MANHOLE ENTRANCE, 5 DEGREES SWEEPS, 11 1/4 DEGREE TO 90 DEGREES INCLUDING FILED DEGREES ANGLE COUPLINGS, STANDARD COUPLINGS, VARIOUS BENDS AND PLUGS OR CAPS TO CLOSE UNUSED CONDUITS, SHALL BE MADE OF THE SAME MATERIAL AS THE CONDUIT. CONDUIT SPACERS SHALL BE SURE AS SHOWN IN THE PLAN DETAILS. CONCRETE BLOCK SPACERS WILL NOT BE ACCEPTED.

C. CONCRETE

CONCRETE USED FOR ENCASEMENT OF CONDUITS SHALL CONFORM TO ROADWAY PLAN GENERAL NOTE CONCRETE DESIGN MIX (CLEVELAND 650). 4000 PSI CITY OF CLEVELAND MIX.

D. INSTALLATION

CONDUIT SHALL BE INSTALLED BY THE BUILT-UP METHOD WITH JOINTS IN ADJACENT DUCTS STAGGERED. NECESSARY SPACERS SHALL BE PLACED AT NO GREATER THAN 8 FEET INTERVALS TO HOLD DUCTS IN THE DESIRED CONFIGURATION, WITH THE DUCT BANK BRACED SECURELY TO KEEP IT FROM SHIFTING AND FLOATING WHILE CONCRETE IS POURED. SEALER COMPOUND FURNISHED BY THE CONDUIT AND EACH SECTION SHALL BE TAPED SECURELY INTO PLACE IN THE PREVIOUS COUPLING TO OBTAIN JOINTS THAT ARE TIGHT AND LEAK-PROOF.

- 1. CONCRETE SHALL BE WORKED INTO SPACES BETWEEN DUCTS SO THAT THE CONDUIT BANK IS EFFECTIVELY ENCASED IN CONCRETE WITHOUT VOIDS OR EMPTY SPACES.
 REINFORCING RODS SHALL BE INSTALLED AS REQUIRED AND WHERE SHOWN ON THE PLANS.
- 2. CONDUIT WHICH IS CUT TO FIT SHORT SECTIONS SHALL BE DEBURRED ON THE DUCT END AND THE END OF THE BELL SHALL BE REAMED IN THE INSIDE DIAMETER FOR EACH ENTRY OF THE DUCT INTO COUPLING TO PRODUCE THE SAME JOINTING CONDITIONS AS PROVIDED BY FACTORY MADE CONDUIT SECTIONS.
- 3. THE END BELLS SHALL BE GROUTED IN PLACE.
- 4. INSTALL PULLING LINE IN EACH CONDUIT.
- E. BACKFILLING

REFER TO NOTES "BACKFILL MATERIAL AND BACKFILLING PROCEDURES AND FLOWABLE FILL SPECIFICATION FOR UTILITY TRENCHES".



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| | | | | | SHEET | T NUM. | | <u> </u> | | PA | RT. | ITEM | ITEM | GRAND | UNIT | DESCRIPTION |
|----|---------------|----------|----|----|-------|--------|-----|----------------|--|----------------|-----------|------------|----------------|----------------|----------|--|
| 5A | 6 | 18 | 8 | 24 | 42 | 45 | 45A | 46 | | 01/BRO/BR | 02/NFP/BR | | EXT | TOTAL | | |
| | | | | | | | | | | | | | | | | LIGHTING |
| | | | | | | | 2 | | | 2 | | 202 | 75801 | 2 | EACH | DISCONNECT EXISTING CIRCUIT, AS PER PLAN |
| | | | | | | | | 24 | | 24 | | 625 | 00450 | 24 | EACH | CONNECTION, FUSED PULL APART |
| | | | | | | | | 16 | | 16 | | 625 | 10614 | 16 | EACH | LIGHT POLE ANCHOR BOLTS ON STRUCTURE |
| | | | | | | | | 3,741 | | 3,741 | | 625 | 23000 | 3,741 | FT | NO. 4 AWG 600 VOLT DISTRIBUTION CABLE |
| | | | | | | | | 312 | | 312 | | 625 | 23306 | 312 | FT | NO. 10 AWG 600 VOLT DISTRIBUTION CABLE |
| | | | | | | | | 1.510 | | 1 510 | | C2F | 25.402 | 1 510 | CT | CONDUIT OF 705 OF |
| | -+- | | | | | | | 1,516 1,050 | | 1,516 1,050 | | 625 625 | 25402 25803 | 1,516 1,050 | FT FT | CONDUIT, 2", 725.05 CONDUIT, CONCRETE ENCASED, AS PER PLAN (2") |
| | | | | | | | | 4 | | 1,000 | | 625 | 27561 | 4 | EACH | LUMINAIRE, INSTALLATION ONLY, AS PER PLAN |
| | | | | | | | | 417 | | 417 | | 625 | 29200 | 417 | FT | TRENCH, 48" DEEP |
| | $\overline{}$ | | | | | | | 7 | | 7 | | 625 | 29920 | 7 | | STRUCTURE JUNCTION BOX |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | 77000 | | 5100 | |
| | | | | | | | | 1 | | 1 | | 625 | 33000 | 1 | | STRUCTURE GROUNDING SYSTEM |
| | -+- | | | | | | | 1 | | , | | 625 | 34001 | 1 | EACH | POWER SERVICE, AS PER PLAN |
| | | | | | | | | 1 | | 1 | | 625 | 34450 | 1 | | CONTROL CENTER CABINET, COMPLETE |
| | +- | | | | | | | 4 | | 4 | | 625 | 35011 | 4 | EACH | REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN |
| | | | | | | | | 2 | | 2 | | 625 | 39520 | 2 | EACH | PULL BOX CLEANED |
| | | | | | | LS | | | | LS | | SPECIAL | 62540000 | LS | | MAINTAIN EXISTING LIGHTING |
| | | | | | | | | 5 | | 5 | | 625 | 98000 | 5 | EACH | LIGHTING, MISC.: CPP STREET LIGHTING PULL BOX |
| | $\overline{}$ | | | | | | | | | | | | | | | ELECTRICAL |
| | +- | | | | | | | 166 | | | 166 | 202 | 98200 | 166 | FT | REMOVAL MISC.:CPP DUCT BANK |
| | | | | | | | | 2 | | | 2 | 611 | 99690 | 2 | | MANHOLE, MISC.: REPLACE EXISTING CASTINGS |
| | | | | | | | | 210 | | | 210 | 625 | 25803 | 210 | FT | CONDUIT, CONCRETE ENCASED, AS PER PLAN (5" PVC) |
| | -+ | | | | | | | 2,862 | | | 2,862 | 625 | 25920 | 2,862 | | CONDUIT, MISC.: CPP BRIDGE MOUNTED CONDUITS AND INCIDENTALS |
| | | | | | | | | 210 | | | 210 | 625 | 29200 | 210 | FT | TRENCH, 48" DEEP |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 070 | 07100 | | | TRAFFIC CONTROL |
| | | , | , | | 26 | | | | | 26 | | 630 630 | 03100 79000 | 26 1 | | GROUND MOUNTED SUPPORT, NO. 3 POST |
| | -+- | 7. | 5 | - | | | | | | 7.5 | | 630 | 80100 | 7.5 | SF | SIGN HANGER ASSEMBLY, SPAN WIRE SIGN, FLAT SHEET |
| | $\overline{}$ | / • | .5 | | 1 | | | | | 1.0 | | 630 | 84900 | 1.5 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL |
| | | | | | 9 | | | | | 9 | | 630 | 85100 | 9 | | REMOVAL OF GROUND MOUNTED SIGN AND DISFOSAL |
| | | | | | 3 | | | | | .3 | | 630 | 86002 | 3 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND TIELELECTION REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL |
| | | | | | | | | | | | | | | | | |
| | 0.5 | | | | | | | | | 0.5 | | 642 | 00300 | 0.5 | MILE | CENTER LINE, TYPE 1 |
| | 0.08 | | | | | | | | | 0.08 | | 644 | 00104 | 0.08 | | EDGE LINE, 6" |
| | 0.26 | | | | | | | | | 0.26 | | 644 | 00204 | 0.26 | | LANE LINE, 6" |
| | 1,100 250 | | | | | | | | | 1,100 250 | | 644 644 | 00404 00720 | 1,100 250 | | CHANNELIZING LINE, 12" CHEVRON MARKING |
| | 230 | | | | | | | | | 230 | | 044 | 00120 | 230 | FI | CHEVION MARKING |
| | 180 | | | | | | | | | 180 | | 644 | 01510 | 180 | FT | DOTTED LINE, 6" |
| | | | | | 0.3 | | | | | 0.3 | | 646 | 10000 | 0.3 | | EDGE LINE, 4" |
| | | | | | 0.18 | | | | | 0.18 | | 646 | 10200 | 0.18 | | CENTER LINE |
| | | | | | 55 | | | | | 55 | | 646 | 10400 | 55 | | STOP LINE |
| | -+- | | | | 261 | | | | | 261 | | 646 | 10500 | 261 | FT | CROSSWALK LINE |
| | +- | | | | 229 | | | | | 229 | | 646 | 10600 | 229 | FT | TRANSVERSE/DIAGONAL LINE |
| | | | | | 200 | | | | | 200 | | 646 | 20500 | 200 | | DOTTED LINE |
| | | | | | 3 | | | | | 3 | | 646 | 20600 | 3 | | BIKE LANE SYMBOL MARKING |
| | | | | | 5 | | | | | 5 | | 646 | 20650 | 5 | EACH | SHARED LANE MARKING |
| | $\overline{}$ | | | | | | | | | | | | | | | TRAFFIC SIGNALS |
| | | 35 | 5 | | | | | | | 35 | | 625 | 25400 | 35 | FT | CONDUIT, 2", 725.04 |
| | | 35 | | | | | | | | 35 | | 625 | 29000 | 35 | FT | TRENCH |
| | | 1 | 1 | | | | | | | 1 | | 625 | 30706 | 1 | | PULL BOX, 725.08, 24" |
| | | | | | | | | | | | | | | | | |
| | | 2 | | | | | | | | 2 | | 632 | 05007 | 2 | | VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN |
| | | 1 | | | | | | | | 1 | | 632 | 05065 | 1 | | VEHICULAR SIGNAL HEAD, (LED), 4-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN |
| | - | 52 | | | | - | 1 | | | 52 | | 632 | 30200 | 52 52 | | MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES |
| | | 52 27 | | | | | | + | | 52 270 | | 632 632 | 30600 40600 | 52 270 | | TETHER WIRE, WITH ACCESSORIES SIGNAL CABLE, 6 CONDUCTOR, NO. 14 AWG |
| | + | ' | | | | | | | | 210 | | 002 | ,,,,,,,, | 210 | '' | STATE STATES OF CONDUCTORY NOT 11 AND |
| | | 21 | 12 | | | | | | | 242 | | 632 | 40700 | 242 | FT | SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG |
| | | 24 | | | _ | | | 1 1 | 1 1 | . , _ | I | 632 | 70400 | 1 | EACH | CONDUIT RISER, 2" DIAMETER |
| | | 1 | | | | | | | | / | | | | | | |
| | | | 1 | | | | | | | 1 2 | | 632 632 | 80700 89301 | 1 2 | EACH | SIGNAL SUPPORT, MISC.: WEATHERHEAD WOOD POLE, AS PER PLAN |

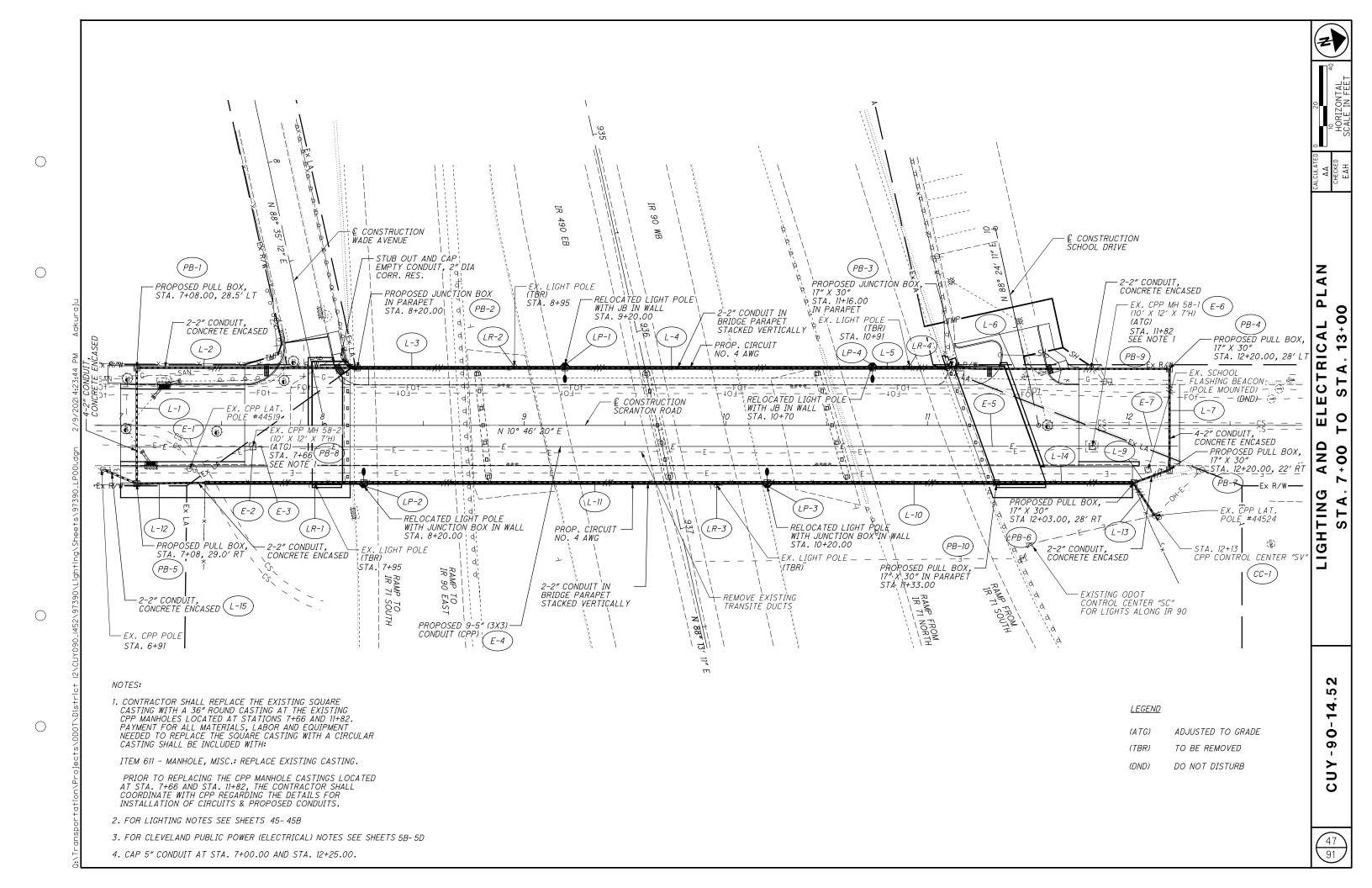
| | | | | | 202 | 625 | 625 | 625 | 625 | 625 | 625 | 625 | 625 | 625 | 62 | 5 625 | 625 | 625 | 625 | 625 | SPECIAL | 625 | 632 | 611 |
|--------------------|----------|---------------------|---------------------|----------|---------|----------------------------|-------------------------------|--|---|----------|----------------------------------|-------------|--|---|--|-----------|---------------------|------------------------------|---------------------------|--------|----------|-------------------------------|----------|--|
| | | | | | T BANK | PULL | BOL 75 | T E | I.T | 5 | ENCASED, | C) | P BRIDGE ITS AND S | UMINAIRE, INSTALLATION ONLY, AS PER PLAN | 48″ | BOX | SYSTEM | NET, | S PER | | PIEHTING | TREET K | , PLAN | MANHOLE, MISC.: REPLACE EXISTING CASTINGS |
| | Ċ | | | | DOC | | R B(| NO. 4 AWG 600 VOL DISTRIBUTION CABL | VO. 10 AWG 600 VOL DISTRIBUTION CABL | 725.05 | ENC | ENCA: | P BK 75 4 S | -LA7 PLA1 | TRENCH, | | S 9 _N | L CENTER CABINET COMPLETE | E, A. | -EANED | 1917 | P STI BOX | PER | ZEPL INGS |
| NO | NO | | | 3 | ۵ | CONNECTION, FUSED APART | POLE ANCHOR E ON STRUCTURE | 00° | 300 NV C | , , | CONDUIT, CONCRETE AS PER PLAN | E7E , | CONDUIT, MISC.:CPP MOUNTED CONDUIT INCIDENTALS | STAL ER | TRE | JUNCTION | STRUCTURE GROUNDING | ER (| D REERE POLE, , AN | CLE | EXISTING | PULL B | AS | AST |
| | 13. | STATION 7 | O STATION | SID | C.:CP! | PAR | AN | 77. 17.77. | WG 4 | 8 | NCR 7 PL | IT, CONCRET | ISC. | IS P | | | 400 | ENT | VE AND LIGHT H PLAI | ВОХ | TST | SC.: | CE, | O O. |
| KE! | SHE | | | , | MISC. | 717.7 | 21CE V S | 7 AN RIBU | 7 A V | CONBUIT, | CO | CO H | ED NCI | rrE, r, A | SNILHSIT | STRUCTURE | F 61 | 000 | VE , | | EX | LIGHTING, MISC. LIGHTING P | SERVICE, | E, I |
| | S | | | | - 1 | NEC | 9 7 |). 4 ISTI | 1. 16 | JWC | 117, AS | 11, 5 PE | TIU TWC | INA I | 111 | 1. H.L. | - URI | RO | NG NG | PULL | | NG, | | 10H 12KIS |
| | | | | | REMOVAI | 000 | ІСНТ | N 0 | NC. | Š | NDV | NDUI. | OND WO | Wn7 | 1917 | LEC | SNC | CONTROL | REMO EXISTING | _ | MAINTAIN | | WER | MAN/ E |
| | | | | | REN | | 7 | | | | 00 | 100 | Ğ | 7 | | 4 0 | STF | J | EX | | Ň | 017 | PO | _ < |
| | | | | | FT | EACH | EACH | FT | FT | FT | FT | FT | FT | EACH | F7 | EACH | EACH | EACH | EACH | EACH | LUMP | EACH | EACH | EACH |
| P-1 | 47 | | TO PO.00 | LT | | 2 | 4 | | 78 | | | | | 1 | | 1 | 1 | | | | | | | |
| -2 | 47 | | 0.00 | RT | | 2 | 4 | | 78 | | | | | 1 | | 1 | 1 | | | | | | | |
| <u>-</u> '-3 | 47 | | 20.00 | RT | | 2 | 4 | | 78 | | | | | 1 | | 1 | | | | | | | | |
| 2-4 | 47 | 10+7 | 70.00 | LT | | 2 | 4 | | 78 | | | | | 1 | | 1 | | | | | | | | |
| -1 | 47 | 7+08.00 | 7+08.00 | LT/RT | | | | | | | 232 | | | | 58 | | | | | | | | | |
| -2 | 47 | 7+08.00 | 8+20.00 | LT | | | | 366 | | | 224 | | | | 112 | | | | | | | | | |
| -3 | 47 | 8+20.00 | 9+20.00 | LT | | | | 330 | | 200 | | | | | | | | | | | | | | |
| -4 | 47 | 9+20.00 | 10+70.00 | LT | | | | 480 | | 300 | | | | | | | | | | | | | | |
| -5 | 47 | 10+70.00 | 11+16.00 | LT | | | | 168 | | 92 | | | | | \vdash | | | | | | | | | |
| -6 | 47 | 11+16.00 | 12+20.00 | LT | | | | 342 | | | 208 | | | | 104 | | | | | | | | | |
| -7 | 47 | 12+20.00 | | LT/RT | | | | 180 | | | 200 | | | | 50 | | | | | | | | | |
| -0 | 47 | 12+20.00 | 12+03.00 | RT | | | | 90 | | | 40 | | | | 20 | | | | | | | | | |
| -9 -10 | 47 | 11+33.00 | 10+20.00 | RT | | | | 369 | | 226 | 40 | | | | 20 | | | | | | | | | |
| ,,, | | 55155 | 7.5 20100 | 7 | | | | | | | | | | | | | | | | | | | | |
| -11 | 47 | 10+20.00 | 8+20.00 | RT | | | | 630 | | 400 | | | | | | | | | | | | | | |
| -12 -13 | 47 47 | 8+20.00 12+03.00 | 7+08.00 12+13.00 | RT RT | | | | 369 90 | | 158 | 68 40 | | | | <i>34 20</i> | | | | | | | | 1 | |
| 14 | 47 | 11+33.00 | 12+03.00 | RT | | | | 240 | | 140 | 40 | | | | 20 | | | | | | | | 1 | |
| -15 | 47 | 6+91.00 | 7+08.00 | RT | | | | 87 | | | 38 | | | | 19 | | | | | | | | | |
| | 47 | 7.0 | 75.00 | 0.7 | | | | | | | | | | | | | | | | | | | | |
| ?- <i>1</i> ?-2 | 47 47 | | 95.00 95.00 | RT LT | | | | | | | | | | | | | | | 1 | | | | | |
| 2-3 | 47 | | 95.00 | RT | | | | | | | | | | | | | | | 1 | | | | | |
| ?-4 | 47 | 10+3 | 91.00 | LT | | | | | | | | | | | | | | | 1 | | | | | |
| 3-1 | 47 | 7+0 | 08.00 | LT | | 2 | | | | | | | | | | | | | | | | 1 | | |
| 2-2 | 47 | | 20.00 | LT | | 2 | | | | | | | | | | 1 | | | | | | , | | |
| 3-3 | 47 | | 6.00 | LT | | 2 | | | | | | | | | | 1 | | | | | | | | |
| R-4 R-5 | 47 47 | | 20.00 08.00 | LT RT | | 2 2 | | | | | | | | | | | | | | | | 1 | | |
| 5-5 | 47 | 7+0 | 00.00 | K / | | 2 | | | | | | | | | | | | | | | | 1 | | |
| 8-6 | 47 | | 03.00 | RT | | 2 | | | | | | | | | | | | | | | | 1 | | |
| -7 | 47 | | 20.00 | RT | | 2 | | | | | | | | | | | | | | | | 1 | | |
| 1-8 1-9 | 47 47 | | 86.00 82.00 | RT RT | | | | | | | | | | | + + | | | | | 1 1 | | | | |
| -10 | 47 | | 33.00 | RT | | 2 | | | | | | | | | | 1 | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-1 | 47 | 12+1 | 13.00 | RT | | | | | | | | | | | \vdash | | | 1 | | | | | | |
| | | ELEC | TRICAL | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| -1 | 47 | 7+00.00 | 7+66.00 | RT | 66 | | | | | | | 66 | | | \Box | 66 | | | | | | | | |
| -2 -3 | 47 47 | 7+66.00 | 86.00 | RT RT | 45 | | | | | | | 45 | | | \vdash | 45 | | | | | | | | / |
| -4 | 47 | 8+10.05 | 11+27.33 | RT | ,,, | | | | | | | 10 | 2862 | | | | | | | | | | | |
| -5 | 47 | 11+27.33 | 11+82.00 | RT | 55 | | | | | | | 55 | | | | 55 | | | | | | | | |
| -6 | 47 | 11.0 | <u> </u> 32.00 | RT | | | | | | | | | | | | | | | | | | | | 1 |
| -6 -7 | 47 | 11+82.00 | 12+25.00 | RT | | | | | | | | 44 | | | + | 44 | | | | | | | | / |
| | | 52.00 | ,2 , 20 , 00 | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | 1 | 1 | | | | | | | | | | | | | | | 1 | | | | |
| | | | TOTAL | | | | | | | | | | | | 417 | 210 | | | | | | | | |

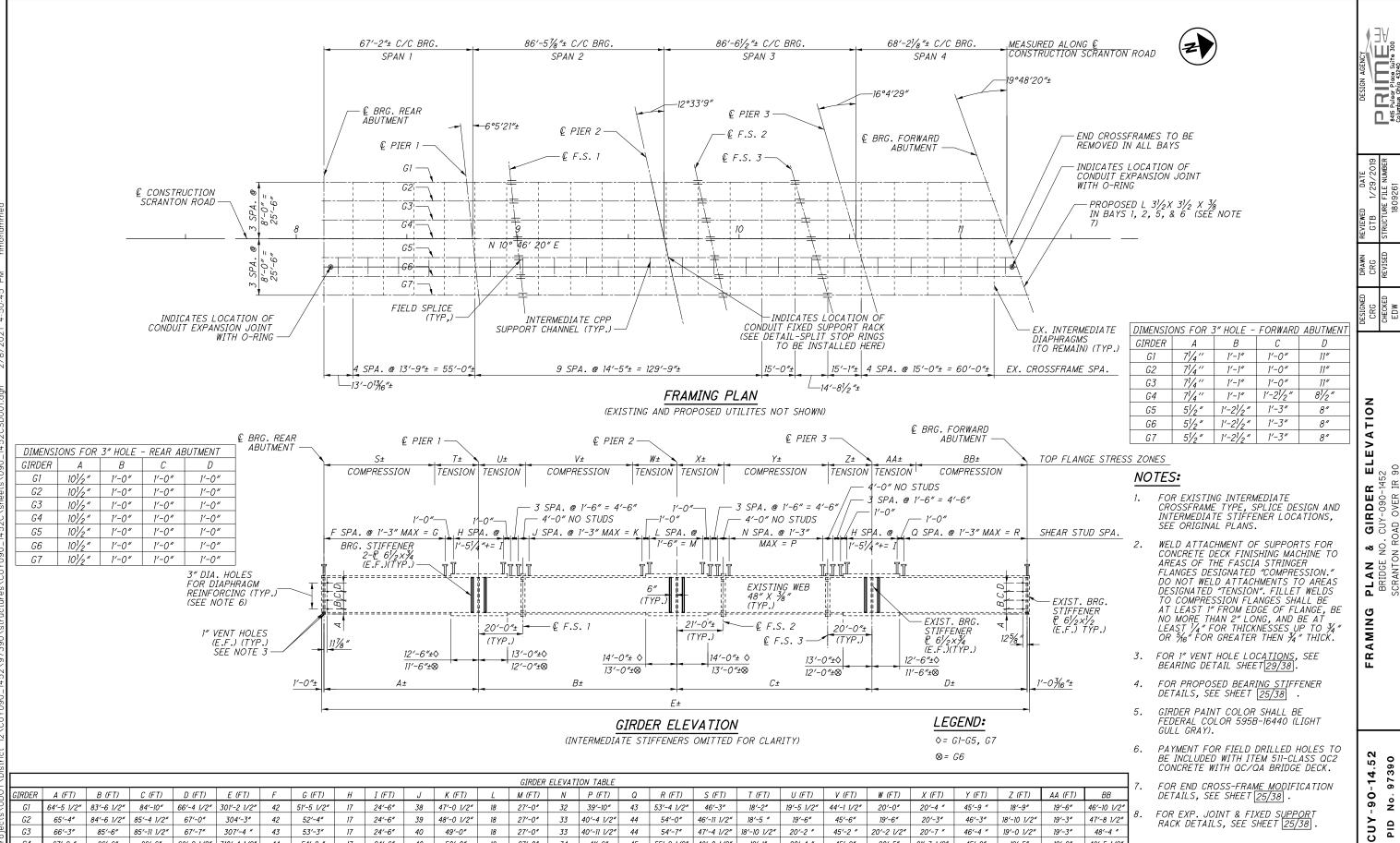
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| 2 | | GIRDER ELEVATION TABLE | | | | | | | | | | | | | | | 7. FC | | | | | | | | | | | | |
|------|--------|------------------------|------------|-------------|------------|-------------|----|-------------|----|--------|----|-------------|----|--------|----|-------------|-------|------------|-------------|-------------|-------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| 00 | GIRDER | A (FT) | B (FT) | C (FT) | D (FT) | E (FT) | F | G (FT) | Н | I (FT) | J | K (FT) | L | M (FT) | Ν | P (FT) | Q | R (FT) | S (FT) | T (FT) | U (FT) | V (FT) | W (FT) | X (FT) | Y (FT) | Z (FT) | AA (FT) | ВВ | DE |
| 9 | G1 | 64′-5 1/2″ | 83'-6 1/2" | 84'-10" | 66'-4 1/2" | 301'-2 1/2" | 42 | 51′-5 1/2″ | 17 | 24'-6" | 38 | 47'-0 1/2" | 18 | 27′-0″ | 32 | 39′-10″ | 43 | 53'-4 1/2" | 46′-3″ | 18'-2" | 19'-5 1/2" | 44'-1 1/2" | 20'-0" | 20'-4 " | 45′-9 ″ | 18′-9″ | 19'-6" | 46′-10 1/2″ | l |
| cts | G2 | 65′-4″ | 84'-6 1/2" | 85'-4 1/2" | 67′-0″ | 304'-3" | 42 | 52'-4" | 17 | 24'-6" | 39 | 48'-0 1/2" | 18 | 27'-0" | 33 | 40'-4 1/2" | 44 | 54'-0" | 46'-11 1/2" | 18'-5 " | 19'-6" | 45′-6″ | 19'-6" | 20′-3″ | 46′-3″ | 18'-10 1/2" | 19'-3" | 47'-8 1/2" | 8. FC RA |
| je. | G3 | 66′-3″ | 85′-6″ | 85′-11 1/2″ | 67′-7″ | 307′-4 " | 43 | 53′-3″ | 17 | 24'-6" | 40 | 49'-0" | 18 | 27′-0″ | 33 | 40'-11 1/2" | 44 | 54′-7″ | 47'-4 1/2" | 18'-10 1/2" | 20'-2 " | 45'-2 " | 20'-2 1/2" | 20′-7 ″ | 46'-4 " | 19'-0 1/2" | 19'-3" | 48'-4 " | i '\'- |
| Pro | G4 | 67′-2 ″ | 86'-6" | 86′-6″ | 68'-2 1/2" | 310'-4 1/2" | 44 | 54'-2 " | 17 | 24'-6" | 40 | 50'-0" | 18 | 27′-0″ | 34 | 41'-6" | 45 | 55'-2 1/2" | 48'-0 1/2" | 19′-1″ | 20'-4 " | 45′-9″ | 20′-5″ | 21'-3 1/2" | 45′-9″ | 19′-5″ | 19'-9" | 48'-5 1/2" | ۱ |
| \u | G5 | 68′-1 ″ | 87′-6 " | 87'-0 1/2" | 68'-10" | 313'-5 1/2" | 45 | 55′-1 ″ | 17 | 24'-6" | 41 | 51'-0" | 18 | 27′-0″ | 34 | 42'-0 1/2" | 45 | 55′-10″ | 48'-11 1/2" | 19'-1 1/2" | 20'-5 1/2" | 46'-6 1/2" | 20'-6 " | 21'-4 1/2" | 45'-10 1/2" | 19'-9 1/2" | 19'-9" | 49'-1 " | 9. PA |
| atic | G6 | 68'-11 1/2" | 88′-5 1/2″ | 87'-7 1/2" | 69′-5″ | 316′-6″ | 46 | 56'-11 1/2" | 16 | 23'-0" | 43 | 52'-11 1/2" | 17 | 25′-6″ | 35 | 42'-7 1/2" | 46 | 57′-5″ | 49′-7″ | 19'-4 1/2" | 20'-7 1/2" | 47'-5 1/2" | 20′-5 ″ | 21'-5 1/2" | 46'-6 1/2" | 19'-7 1/2" | 19′-10″ | 49′-7 ″ | PF |
| ort | G7 | 69'-10 1/2" | 89'-5 1/2" | 88'-2" | 70'-0 1/2" | 319′-7 ″ | 46 | 56'-10 1/2" | 17 | 24'-6" | 43 | 52'-11 1/2" | 18 | 27′-0″ | 35 | 43'-2" | 46 | 57′-0 1/2″ | 50'-1 1/2" | 19'-9 " | 20'-11 1/2" | 48'-5 1/2" | 20'-0 1/2" | 21′-4 " | 47'-0" | 19'-10" | 19'-10 1/2" | 50′-2″ | SH |

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6. PAYMENT FOR FIELD DRILLED HOLES TO BE INCLUDED WITH ITEM 511-CLASS OC2 CONCRETE WITH QC/QA BRIDGE DECK.

FOR END CROSS-FRAME MODIFICATION DETAILS, SEE SHEET 25/38 .

FOR EXP. JOINT & FIXED SUPPORT RACK DETAILS, SEE SHEET [25/38]

PAYMENT LIMITS FOR ITEM 514 SHALL BE AS FOLLOWS: FOR SURFACE PREPRATION AND PRIME COAT, LIMITS SHALL INCLUDE THE ENTIRE BEAM
LENGTH. FOR INTERMEDIATE COAT AND
FINAL COAT, LIMITS SHALL EXTEND
FROM FACE TO FACE OF ABUTMENT DIAPHRAGM.

24/38 91

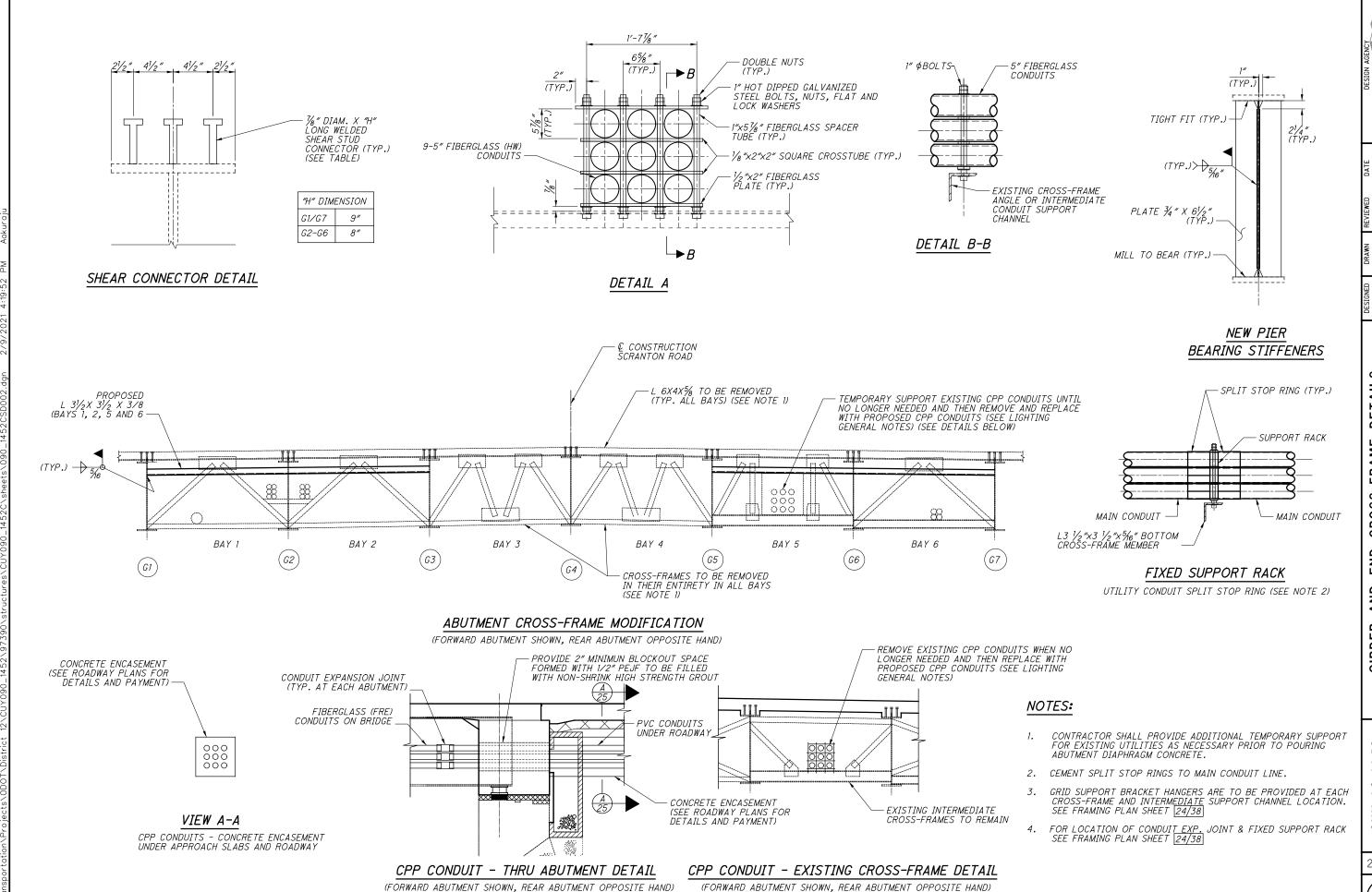
97390

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PID

Pulsar Place Suite

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8415 Pulsar Place Suite 300 Columbus Ohio 43240

VIEWED DATE
GTB 1/29/2019
RUCTURE FILE NUMBER
1809261

CRG GTB 1/2
REVISED STRUCTURE FILE
180926

CRG CRG
CHECKED REVISED
EDW

DETAILS

ROSS-FRAME DI CUY-090-1452 DAD OVER IR 90

ND END CROSS BRIDGE NO. CUY-O SCRANTON ROAD ON

GIRDER AND

CUY-90-14.52 PID No. 97390

25/38

72 91