

RIGHT OF WAY

ALL WORK SHALL BE PERFORMED WITHING THE EXISTING RIGHT OF WAY OR EASEMENTS.

CONVERSION OF METRIC STANDARD DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON ORIGINAL CONSTRUCTION DATUM.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, ANY SUCH DEVICE SHALL NOT BE OPERATED AT ANY TIME IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

TEMPORARY STREAM CROSSING FORDS

WHERE STREAM CROSSING FORDS ARE REQUIRED FOR EQUIPMENT CROSSING, THE CROSSING SHALL CONSIST OF CLEAN NON-TOXIC GRANULAR OR ROCK MATERIAL, PROPERLY MAINTAINED TO PREVENT EROSION, WITH PROVISIONS FOR CONVEYANCE OF ANTICIPATED HIGH FLOWS, AND SHALL NOT IMPEDE THE MOVEMENT OF AQUATIC LIFE. ROCK OR GRANULAR MATERIAL SHALL BE ROCK AS PER 203.02 OR DUMP ROCK FILL TYPE A, B, C OR D AS PER 601.07, EXCEPT ALL MATERIALS SHALL BE RETAINED ON THE 12.5 mm SIEVE. CONSTRUCTION SHALL BE IN ACCORDANCE WITH PART 330, APPENDIX A, SPECIFIC CATEGORIES OF DISCHARGES- NATIONALLY PERMITTED, PARAGRAPH (A14), MINOR ROAD CROSSING FILLS - THE FEDERAL REGISTER -CORPS OF ENGINEERS FINAL REGULATIONS, CURRENT EDITION.

INSTREAM WORK

INSTREAM WORK WILL BE LIMITED WHERE PRACTICABLE AND ONLY CLEAN NON-ERODIBLE MATERIAL WILL BE USED FOR FORDS OR COFFERDAMS. THIS TEMPORARY PLACED MATERIAL WILL BE REMOVED AND THE STREAM BOTTOM RESTORED TO NEAR NATURAL CONDITIONS WHEN THE WORK IS COMPLETED.

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID AND/OR LIMIT DEMOLITION DEBRIS FROM ENTERING THE STREAM. ANY MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATIONS SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEANOUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

ITEM 203 - EMBANKMENT, AS PER PLAN

THE FOLLOWING CONTINGENCY ITEMS SHALL BE USED TO FILL THE SINKHOLE THAT HAS DEVELOPED ABOVE THE EXISTING DOWNSTREAM HEADWALL. THE CONDUIT IMMEDIATELY BELOW THIS SINKHOLE, WAS PLUGGED AND FILLED BY PROJECT 914-93. THE TOP 3" OF EMBANKMENT SHALL BE A LOOSE FRIABLE, LOAMY SOIL CAPABLE OF SUPPORTING VEGETATION.

ITEM 203-EMBANKMENT, AS PER PLAN 50 C.Y.

ITEM 690 - MISC.: SITE ACCESS

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROVIDE AN ACCESS POINT TO BOTH EXISTING CULVERTS. THIS ITEM SHALL INCLUDE, BUT IS NOT LIMITED TO, EARTHWORK, CLEARING AND GRUBBING, FENCE WORK, ETC. TEMPORARY EROSION CONTROL ITEMS SHALL BE PAID FOR SEPARATELY. THIS ITEM SHALL INCLUDE ALL RESTORATION WORK NECESSARY TO RESTORE ANY DISTURBED AREAS TO AS GOOD AS OR BETTER THAN THEIR ORIGINAL CONDITION WITH THE EXCEPTION OF ITEMS 670 AND 870.

ITEM 690 - MISC.: SITE ACCESS LUMP

ITEM 603 - FIELD PAVING OF EXISTING PIPE, AS PER PLAN "A"

THIS ITEM SHALL INCLUDE THE FIELD PAVING OF THE EXISTING 54" DIAMETER, BITUMINOUS COATED CORRUGATED STEEL CULVERT. THE BOTTOM 1/4 OF THE PIPE'S CIRCUMFERENCE SHALL BE PAVED AS SHOWN ON SHEET 7.

THE METHOD OF WORK SHALL BE AS FOLLOWS:

1. DEWATER CULVERT
2. CLEAN DEBRIS FROM CULVERT
3. INSTALL GALVANIZED WIRE MESH PER ITEM 603
 - A. THIS ITEM SHALL INCLUDE ALL SURFACE PREPARATION NECESSARY TO SECURELY ATTACH THE MESH TO THE EXISTING CONDUIT.
4. PLACE CONCRETE PER 603.12
5. AFTER PLACEMENT AND PROPER CURING OF THE CONCRETE, THE AREA APPROXIMATELY ONE(1) FOOT ABOVE EACH SIDE OF THE PAVING SHALL BE COMPLETELY COATED WITH A BITUMINOUS MATERIAL MEETING THE REQUIREMENTS OF AASHTO M243. THE APPLICATION METHOD SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THIS WORK COMMENCING. THIS AREA SHALL BE CLEAN TO ENSURE A GOOD BOND BETWEEN THE BITUMINOUS MATERIAL AND THE EXISTING CONDUIT.

THE CONTRACTOR SHALL NOTE THAT A 24" CONCRETE PIPE HAS BEEN INSTALLED INTO THE EXISTING 54" CONDUIT WITHOUT A MANHOLE. THIS PIPE RESTRICTS SOME OF THE 54" CONDUIT. THE CONTRACTOR IS ADVISED TO TAKE THIS INFORMATION INTO ACCOUNT WHILE SCHEDULING THEIR OPERATIONS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE THE ABOVE NOTED WORK:

ITEM 603 - FIELD PAVING OF EXISTING PIPE, AS PER PLAN "A" 470 L.F.

ITEM 603 - FIELD PAVING OF EXISTING PIPE, AS PER PLAN "B"

THIS ITEM SHALL INCLUDE THE FIELD PAVING OF THE EXISTING 72" DIAMETER, CORRUGATED STRUCTURAL PLATE CULVERT. THE BOTTOM 1/3 OF THE PIPE'S CIRCUMFERENCE SHALL BE PAVED AS SHOWN ON SHEET 6.

THE METHOD OF WORK SHALL BE AS FOLLOWS:

1. DEWATER CULVERT
2. CLEAN DEBRIS FROM CULVERT
3. INSPECT THE INVERT OF THE EXISTING CULVERT TO DETERMINE IF ADDITIONAL REPAIRS ARE NECESSARY BEYOND THE FIELD PAVING.
4. PERFORM ADDITIONAL REPAIRS IF NECESSARY (SEE ITEM 603 - CONDUIT, MISC.:STRUCTURAL PLATE)
5. INSTALL GALVANIZED WIRE MESH PER ITEM 603
 - A. THIS ITEM SHALL INCLUDE ALL SURFACE PREPARATION NECESSARY TO SECURELY ATTACH THE MESH TO THE EXISTING CONDUIT.
6. PLACE CONCRETE PER ITEM 603
7. AFTER PLACEMENT AND PROPER CURING OF THE CONCRETE, THE AREA APPROXIMATELY ONE(1) FOOT ABOVE EACH SIDE OF THE PAVING SHALL BE COMPLETELY COATED WITH A BITUMINOUS MATERIAL MEETING THE REQUIREMENTS OF AASHTO M243. THE APPLICATION METHOD SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THIS WORK COMMENCING. THIS AREA SHALL BE CLEAN TO ENSURE A GOOD BOND BETWEEN THE BITUMINOUS MATERIAL AND THE EXISTING CONDUIT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE THE ABOVE NOTED WORK:

ITEM 603 - FIELD PAVING OF EXISTING PIPE, AS PER PLAN "B" 490 L.F.

ITEM 603 - CONDUIT, MISC.: STRUCTURAL PLATE

THE FOLLOWING ITEM HAS BEEN INCLUDED TO REPAIR THE INVERT OF THE EXISTING 72" CONDUIT IF THE PROPOSED WIDTH OF THE FIELD PAVING WILL NOT FILL AND COVER THE EXISTING PERFORATION IN THE EXISTING CULVERT. THIS ITEM SHALL INCLUDE THE SELECTION, PREPARATION, AND INSTALLATION OF THE NEW STRUCTURAL PLATES.

SELECTION

THE CONTRACTOR SHALL PROVIDE STRUCTURAL PLATES WHICH MEET THE REQUIREMENTS OF 707.03. THE MINIMUM GAGE STEEL PROVIDED SHALL BE 0.138 INCHES. THE CONTRACTOR SHALL PROVIDE STRUCTURAL PLATES THAT WILL NEATLY FIT WITHIN THE CORRUGATION PATTERN OF THE EXISTING CONDUIT. THE PROPOSED PLATE SHALL BUTT CLOSELY AGAINST THE EXISTING CULVERT SO THAT AN ACCEPTABLE WELD CAN BE COMPLETED TO ATTACH THE NEW PLATE TO THE EXISTING CULVERT.

PREPARATION & INSTALLATION

THE CONTRACTOR SHALL PREPARE THE EXISTING CULVERT AS NECESSARY TO ACCEPT THE NEW STRUCTURAL PLATES AND WELDS. ALL VOIDS UNDER THE NEW PLATES SHALL BE FILLED WITH ITEM 613 - LOW STRENGTH MORTAR BACKFILL, TYPE 1. THE NEW PLATES AND OLD PLATES SHALL BE WELDED WITH A CONTINUOUS WELD ALONG THE PERIMETER OF THE NEW PLATE.

ALL FIELD WELDED JOINTS SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF 863.23.

THE CONTRACTOR IS NOTIFIED THAT THE EXISTING BOLT PATTERN MAY CONFLICT WITH THE INSTALLATION OF THE NEW PLATES. THE CONTRACTOR SHALL MAY HAVE TO CUT HOLES IN THE NEW PLATES SO THAT THE NEW PLATES FIT SNUGLY AGAINST THE EXISTING CONDUIT. THE EXISTING BOLTS MAY **NOT** BE REMOVED BY THE CONTRACTOR. ANY GAPS WHICH ARE CREATED AT THESE BOLT HOLE LOCATIONS SHALL BE COMPLETELY SEALED WITH AN ACCEPTABLE CAULK. THESE AREAS SHALL THEN BE SEALED AGAIN WITH THE BITUMINOUS MATERIAL WHICH MEETS THE REQUIREMENTS OF AASHTO M243.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER:

ITEM 603-CONDUIT, MISC.: STRUCTURAL PLATE 100 S.Y.
ITEM 613-LOW STRENGTH MORTAR BACKFILL, TYPE 1 17 C.Y.