

CONSTRUCTION NOTES

1. EXISTING UTILITY LOCATION INFORMATION IS NOT SHOWN ON THE PLAN SHEETS. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES PRIOR TO THE INSTALLATION OF ANY COMPONENTS. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS AND TERRAIN PRIOR TO COMMENCING WORK ON THE PROJECT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
3. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
4. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATION.
5. THE COMMUNICATION VAULT SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE. COMMUNICATION VAULTS SHALL BE INSTALLED AT 4000 FEET MINIMUM INTERVALS.
6. THE CONTRACTOR WILL BE ALLOWED TO INCREASE THE DISTANCE BETWEEN COMMUNICATION VAULTS AS NEEDED TO OPTIMIZE INSTALLATION AND TO MAKE ADJUSTMENTS FOR COMMUNICATION DUCT AND FIBER OPTIC CABLE REEL SIZES. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED CHANGES TO THE DEPARTMENT FOR REVIEW PRIOR TO ORDERING MATERIALS.
7. AFTER INSTALLING THE FIRST THREE MILES OF COMMUNICATIONS DUCT ALONG WITH COMMUNICATION VAULTS, THE CONTRACTOR SHALL CONDUCT A TEST TO DEMONSTRATE TO THE DEPARTMENT THAT THE PROPOSED COMMUNICATION VAULT SPACING IS OPTIMAL FOR EFFICIENT FIBER INSTALLATION. AS PART OF THE TEST, THE CONTRACTOR SHALL INSTALL FIBER OPTIC CABLE IN THE MICRODUCT ALONG THE ENTIRE THREE MILE DUCT LENGTH. IN THE EVENT THAT THE TEST IS UNSUCCESSFUL, THE CONTRACTOR CAN ADJUST COMMUNICATION VAULT SPACING AS REQUIRED FOR FIBER INSTALLATION.
8. THE CONTRACTOR SHALL SUBMIT A FIBER SPLICING PLAN TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO INSTALLING COMMUNICATIONS DUCT AND FIBER.
9. FIBER OPTIC CABLE SHALL BE SPLICED TO CREATE A CONTINUOUS LINK THROUGH THE ENTIRE PROJECT LIMITS. ALL FIBERS WITHIN THE CABLE SHALL BE FUSION SPLICED AND ALL SPLICES SHALL BE PROTECTED BY A WEATHERPROOF SPLICE ENCLOSURE. SPLICES SHALL BE MADE ONLY IN COMMUNICATION VAULTS.
10. THE CONTRACTOR SHALL INSTALL A #12 (XLP-TYPE USE OR THHN) TRACER WIRE ALONG WITH THE FIBER OPTIC CABLE FOR LOCATING PURPOSES. THE TRACER WIRE SHALL BE CONTINUOUS AND BE ACCESSIBLE FROM THE COMMUNICATION VAULTS. THE COST OF FURNISHING AND INSTALLING THE TRACER WIRE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE PAY ITEM "FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE". AT THE CONTRACTOR'S OPTION, THE CONTRACTOR MAY ELECT TO UTILIZE COMMUNICATION DUCT THAT CONTAINS AN INTEGRATED WIRE THAT CAN BE USED FOR UNDERGROUND LOCATING PURPOSES.
11. ALL COMMUNICATIONS DUCT SHALL BE INSTALLED IN AND WILL BE PAID FOR IN ACCORDANCE WITH SECTION 810 "UNDERGROUND RACEWAYS" OF THE STANDARD SPECIFICATIONS.
12. THE LOCATION OF THE CONDUIT AS SHOWN ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE. CONDUIT INSTALLED ALONG THE INTERSTATE AND ROADWAYS SHALL BE LOCATED A MAXIMUM OF 10 FT. FROM THE EDGE OF THE R.O.W UNLESS DIRECTED OTHERWISE BY THE RESIDENT ENGINEER. THE CONDUIT SHALL BE INSTALLED AT A 36" MINIMUM DEPTH EXCEPT WHEN CROSSING WATERWAYS AND DRAINAGE FLOW LINES WHERE IT SHALL BE INSTALLED AT A 60" MINIMUM DEPTH.
13. ALL COSTS ASSOCIATED WITH INSTALLING CONDUIT THROUGH ROCKY TERRAIN (TRENCHING, BORING, SAW-CUTTING, AND OTHER INSTALLATION METHODS AS REQUIRED) AND ROCK EXCAVATION, ROCK DISPOSAL, BACKFILL, AND RESTORATION (INCLUDING TOP SOIL IF NEEDED) SHALL BE INCLUDED IN THE PAY ITEM "UNDERGROUND CONDUIT, MULTI-DUCT, 7-16MM MICRODUCTS". THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.
14. THE PLAN SHEETS IDENTIFY AREAS WHERE COMMUNICATION DUCT WILL NEED TO BE DIRECTIONALLY BORED UNDER ROADWAYS, DRIVEWAYS, BRIDGES, CREEKS, RIVERS, AROUND TREES AND TREE GROVES, AND UNDER DRAINAGE STRUCTURES. THE DEPARTMENT HAS ATTEMPTED TO IDENTIFY THESE AREAS AS ACCURATELY AS POSSIBLE BY UTILIZING ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS PRIOR TO BIDDING. THIS INFORMATION HAS BEEN PROVIDED FOR REFERENCE ONLY AND THERE WILL BE NO ADDITIONAL COMPENSATION FOR ERRORS OR OMISSIONS.
15. POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE COMMUNICATION DUCT PAY ITEM.
16. REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK, PAVEMENT, AND ISLANDS FOR UTILITY LOCATING PURPOSES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE COMMUNICATION DUCT PAY ITEM.
17. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
18. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE COMMUNICATIONS DUCT.
19. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED TO ATTACH THE CONDUITS AND JUNCTION BOXES TO THE STRUCTURE, INCLUDING, BUT NOT LIMITED TO UNI-STRUT, BRACKETS, SEAL-TITE, LBS, FITTINGS, HARDWARE, AND OTHER MISCELLANEOUS ITEMS. THESE ITEMS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR THE CONDUIT ATTACHED TO STRUCTURE PAY ITEM.
20. CONDUIT ATTACHMENT BRACKETS SHALL BE INSTALLED AT 8 FT. SPACINGS (MAXIMUM) ON STRUCTURES.
21. THE CONTRACTOR SHALL FURNISH AND INSTALL EXPANSION/DEFLECTION COUPLINGS (OR OTHER EQUIPMENT AND METHODS AS APPROVED BY THE ENGINEER) FOR ALL BRIDGE JOINTS AS REQUIRED AND DIRECTED BY THE ENGINEER.
22. THE CONTRACTOR SHALL SUBMIT A COMPLETE PACKAGE (INCLUDING CONDUIT BRACKETS, HARDWARE, ATTACHMENT POINTS, ATTACHMENT METHODS, ETC.) TO THE DEPARTMENT FOR REVIEW AND SUBSEQUENT APPROVAL PRIOR TO COMMENCING WORK.
23. ALL SEAL-TITE CONDUIT SHALL BE NON-METALLIC AND SHALL INCLUDE CONNECTORS WITH INTEGRAL STAINLESS STEEL KELLUM GRIPS AT THE ENDS FOR INCREASED STRENGTH AND DURABILITY.
24. ALL CONDUIT ATTACHMENT BRACKETS SHALL BE FULLY GALVANIZED AND ALL HARDWARE SHALL BE EITHER GALVANIZED OR STAINLESS STEEL.
25. THE CONTRACTOR SHALL INSTALL THREAD LOCKER ON ALL ATTACHED CONDUIT THREADED CONNECTIONS TO PREVENT LOOSENING THROUGH VIBRATION.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILE, UNDERDRAIN, AND DRAINAGE STRUCTURE LOCATIONS. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE DAMAGE TO THESE FACILITIES DURING THE INSTALLATION OF CONDUIT AND COMMUNICATION VAULTS. IN THE EVENT THAT THESE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING REPAIRS TO THESE ITEMS TO RESTORE FUNCTIONALITY TO THE SATISFACTION OF THE ENGINEER.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING, BRUSH AND SHRUB REMOVAL, AND SMALL TREE (10" DIAMETER OR LESS) REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND COMMUNICATION VAULTS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF OF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICES FOR THE COMMUNICATION DUCT PAY ITEM.
28. THE CONTRACTOR SHALL PLAN AND CONDUCT CONDUIT AND FIBER INSTALLATION OPERATIONS TO MINIMIZE THE NUMBER OF INTERSTATE AND ROAD LANE CLOSURES AND TO MINIMIZE TRAFFIC DISRUPTIONS AND DELAYS FOR THE MOTORING PUBLIC.
29. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR INSTALLING COMMUNICATIONS DUCT AND COMMUNICATION VAULTS UNDER AND ALONG COUNTY AND TOWNSHIP ROADWAYS.

COMMITMENTS: THERE ARE NO COMMITMENTS MADE IN CONJUNCTION WITH THIS PROJECT.

LEGEND	
---	UNDERGROUND CONDUIT, MULTI-DUCT, 7-16MM MICRODUCTS
.....	UNDERGROUND CONDUIT, MULTI-DUCT, 7-16MM MICRODUCTS (PUSHED UNDER ROADWAYS, STRUCTURES, ETC.)
---	3" GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE
☐	COMMUNICATIONS VAULT
⊙	24" X 24" X 10" STAINLESS STEEL JUNCTION BOX ATTACHED TO STRUCTURE

FILE NAME = S:\GENDRAFT\ITS Fiber Project\68803\68803 - D4 Fiber Project Sheets 1-109 (Macomb) - DRAWN (buh) - Final 4-19-12.dgn
 PLOT SCALE = 1/16" = 1" / in.
 PLOT DATE = 5/24/2012

USER NAME = howlaid	DESIGNED -	REVISED -
DRAWN (buh) - Final 4-19-12.dgn	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: STA. TO STA.

COMMITMENTS AND CONSTRUCTION NOTES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D4 FIBER OPTIC 2012	VARIOUS	220	2
CONTRACT NO. 68803			ILLINOIS FED. AID PROJECT	