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DISTRICT 1 DETAILS

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ABBREVIATIONS

AMP	AMPER
AWG	AMERICAN WIRE GAUGE
BC	BOLT CIRCLE
C	CONDUIT
CDA	CHICAGO DEPARTMENT OF AVIATION
DIA	DIAMETER
GRD	GROUND
GS	GALVANIZED STEEL
HDP	HIGH DENSITY POLYETHYLENE
HPS	HIGH PRESSURE SODIUM
JB	JUNCTION BOX
MA	MAST ARM
MH	MOUNTING HEIGHT
N	NEUTRAL
NIC	NOT IN CONTRACT
PH	PHASE
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
USE	UNDERGROUND SERVICE ENTERANCE
W	WATTS
XLP	CROSS-LINKED POLYETHYLENE

FINAL LIGHTING GENERAL NOTES

- PRIOR TO INSTALLATION ON THE NEW UNIT DUCT, CONDUITS, JUNCTION BOXES, LIGHT STANDARD FOUNDATION AND APPURTENANCES, THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLE AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123 OR 811) TO AID IN THIS TASK.
- THE CONTRACTOR MUST VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT PLANS WHICH WOULD EFFECT HIS WORK UNDER THIS CONTRACT FOR THE OPERATION OF THE EXISTING ROADWAY LIGHTING SYSTEM.
- NO MATERIAL OR EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE WITHOUT PRIOR INSPECTION AND APPROVAL BY THE ENGINEER. ANY MATERIAL AND EQUIPMENT NOT APPROVED BY THE ENGINEER MUST BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
- ALL NEW UNIT DUCT, CONDUIT, JUNCTION BOXES AND APPURTENANCES ARE SHOWN DIAGRAMMATICALLY. THE ACTUAL LOCATION IN THE FIELD MUST MEET THE APPROVAL OF THE ENGINEER.
- CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH UNDER DRAINS.
- ALL ELECTRICAL SYSTEMS, EQUIPMENT AND APPURTENANCES SHALL BE PROPERLY GROUNDED IN STRICT CONFORMANCE WITH NATIONAL ELECTRICAL CODE EVEN THOUGH EVERY DETAIL OF REQUIREMENTS IS NOT SPECIFIED OR SHOWN.
- GROUNDED OF POLE INCLUDING GROUND ROD, CONDUCTOR, LUGS INCLUDING EXOTHERMIC WELD TO GROUND ROD SHALL NOT BE PAID SEPARATELY.
- ALL UNDERGROUND WIRING SHALL BE 30 INCHES MINIMUM BELOW GRADE PER IDOT SECTION 810.
- THE NEW ELECTRICAL MATERIALS MUST MEET REQUIREMENTS OF STANDARDS BY THE FOLLOWING ORGANIZATIONS:
 - NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION. (NEMA)
 - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS. (IEEE)
 - ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. (IES)
 - AMERICAN ASSOCIATION OF TRANSPORTATION OFFICIALS. (AATO)
 - U.S. DEPARTMENT OF TRANSPORTATION. (U.S.D.O.T)
 - UNDERWRITERS LABORATORIES. (UL)
 - AMERICAN STANDARD INSTITUTE. (ASI)
 - INSULATED POWER AND CABLE ENGINEERS ASSOCIATION. (IPCEA)
 - NATIONAL ELECTRICAL SAFETY CODE (NESC)
 - NATIONAL ELECTRICAL CODE 2011
 - AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING (ANSI/IESNA RP-8)
- ALL LIGHT POLES EXCEPT POLES MOUNTED ON CONCRETE BARRIER WALL/BEHIND GUARD RAIL, SHALL HAVE FRANGIBLE TYPE BREAKAWAY TRANSFORMER BASE FOR 11 1/2" OR 15" BOLT CIRCLE. IT SHALL BE AASHTO APPROVED BREAKAWAY.
- ALL SPLICING MUST BE IN POLE BASES OR JUNCTION BOXES ABOVE GRADE WITH WATERPROOF SEALANT AND HEAT SHRINKABLE PLASTIC CAPS.
- UNLESS NOTED OTHERWISE ALL SHOULDER MOUNTED POLES SHALL HAVE MINIMUM SETBACK REQUIREMENT AS FOLLOWS:
 - 1- FACE OF THE CURB TO CENTERLINE OF THE POLE AS 3 FT.
 - 2- WHERE CURB IS NOT THERE, THE MINIMUM SETBACK SHALL BE 13 FT FROM THE EDGE OF TRAVELLED PAVEMENT. ALL POLES MUST BE ALIGNED IN STRAIGHT LINE AS APPROVED BY THE ENGINEER.
- FOR OFFSET FOUNDATION SEE DISTRICT 1 DETAIL BE-310.

TEMPORARY LIGHTING GENERAL NOTES

- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY COMPANY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED.
- THE ELECTRIC SERVICE SHALL BE 240/480V. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE INCLUDED AND APPROPRIATELY RATED FOR THE SERVICE VOLTAGE APPLIED.
- THE TEMPORARY LIGHT POLE SETBACK FROM THE FURTHEST EDGE OF TRAVEL PAVEMENT (PER MOT PLANS) SHALL BE 18 FT UNLESS OTHERWISE NOTED BY OFFSET FROM EXISTING EDGE OF PAVEMENT FOR THAT STAGE. TEMPORARY LIGHT POLES INSTALLED BEHIND GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 2 FEET SETBACK FROM THE GUARDRAIL OR WALL OR AS OTHERWISE DIRECTED BY THE ENGINEER. ALL TEMPORARY LIGHTING SHALL BE WOODEN.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY THE INDICATED LIGHTING CONTROLLER. NO LIGHT SHALL BE INDIVIDUALLY CONTROLLED BY PHOTOCCELL.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- IN ACCORDANCE WITH NEC 225.18 AERIAL CONDUCTOR TO MAINTAIN 18' CLEARANCE ABOVE ROAD SURFACE AT ALL TIMES.

TEMPORARY LIGHTING GENERAL NOTES (CONTINUED)

- WHENEVER POSSIBLE THE CONTRACTOR SHALL INSTALL TEMPORARY LIGHTING UNITS IN THE PRESTAGE. TEMPORARY LIGHTING MUST BE FULLY OPERATIONAL BEFORE THE EXISTING LIGHTING ON THE WEST SIDE OF MANNHEIM ROAD MAY BE REMOVED. (EXISTING LIGHTING MUST BE REMOVED BEFORE THE OUTER SHOULDERS MAY BE USED AS A DRIVING LANE.)
- EVERY THIRD TEMPORARY LIGHTING POLE SHALL BE FURNISHED WITH A GROUND ROD CONNECTION. THIS GROUND ROD IS NOT SHOWN ON THE PLAN. 5/8" X 10' COPPER CLAD STEEL GROUND ROD, #2 BARE TINNED COPPER DOWN CONDUCTOR, CABLE GUARD TO 10' ABOVE GRADE ARE INCIDENTAL TO TEMPORARY LIGHTING.
- CONTRACTOR MAY ADJUST TEMPORARY POLE LOCATIONS UP TO 10' IN ANY DIRECTION EXCEPT CLOSER TO THE ROAD, IN ORDER TO ADJUST FOR FIELD CONDITIONS.
- BETWEEN STATION 162+65 AND 185+45 THREE CIRCUITS MUST BE STRUNG ON TEMP POLES. CONTRACTOR SHALL ASSUME THAT MULTIPLE GUY LINES WILL BE REQUIRED FOR THESE POLES. CONTRACTOR MUST PROVIDE CALCULATIONS SHOWING POLES WILL BE ADEQUATELY SUPPORTED PER RUS BULLETIN 1724E-153.

LIGHTING REMOVAL GENERAL NOTES

- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL REVIEW THE CONTRACT DRAWINGS AND ASCERTAIN EXISTING SITE CONDITIONS TO VERIFY THE EXTENT OF DEMOLITION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING ALL RELOCATIONS AND REMOVALS REQUIRED IN THIS CONTRACT. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXISTING CONDITIONS AND COORDINATE AS REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ALL CONDUITS AND WIRES OF THE SAME TYPE AND SIZE REQUIRED TO MAINTAIN THE CONTINUITY OF THE CIRCUIT TO EXISTING LIGHT POLES TO REMAIN WHICH MAY BE AFFECTED BY THIS DEMOLITION. SHUTDOWN OF EXISTING SERVICES SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL FROM THE IDOT, AND THEN ONLY FOR THE DATE AND DURATION AGREED UPON. NEVER DURING NIGHT TIME.
- BRANCH CIRCUIT WIRING FOR EXISTING EQUIPMENT TO BE REMOVED SHALL BE DISCONNECTED AT SOURCE AND REMOVED. REMOVE EXISTING WIRING.
- COMMENCEMENT OF WORK SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING ROADWAY FOR THIS WORK, AND ACCESS TO WORK SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR ADDITIONAL LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, REINSTALLING, REPAIRING, OR REPLACING EQUIPMENT.
- ALL EXISTING EQUIPMENT THAT ARE TO BE REMOVED AND SALVAGED SHALL BE RETURNED TO STATE STOCK.
- LOCATIONS SELECTED FOR COLLECTION OF DEBRIS AND/OR STORAGE OF EQUIPMENT SHALL BE SUBJECT TO THE IDOT PROJECT MANAGER'S APPROVAL.
- WHERE THE CONTINUITY OF CIRCUITS OR CONDUITS SERVING ANY EXISTING LIGHTING/EQUIPMENT TO REMAIN IN OPERATION IS INTERFERED WITH, RE-ROUTE AND RECONNECT SUCH CIRCUITS OR CONDUITS. THE CONTINUITY OF THE CIRCUIT OR CONDUITS WILL BE INCIDENTAL TO THE ROADWAY PROJECT.
- THE REMOVAL OF THE EXISTING CABLE DUCT SHALL BE INCIDENTAL TO ROADWAY CONSTRUCTION.
- TEMPORARY LIGHTS SHALL BE REMOVED AFTER ALL PROPOSED LIGHT POLES HAVE BEEN INSTALLED AND FULLY FUNCTIONAL OR AS DIRECT BY ENGINEER. REMOVAL OF TEMPORARY LIGHTING UNIT REQUIRED ON THIS CONTRACT SHALL BE AT NO ADDITIONAL COST TO THIS CONTRACT. REMOVAL AND RELOCATION WILL INCLUDE ALL ITEMS SUCH AS LUMINAIRE'S, MAST ARM, AERIAL CABLE, CABLE DUCT AND MOUNTING HARDWARE.

E-01

HNTB	USER NAME = mko51r	DESIGNED KA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELECTRICAL SHEET INDEX, GENERAL NOTES, AND ABBREVIATIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN MMK	REVISED -					330	0105-WRS	COOK	537	265	
	PLOT SCALE = 50:1	CHECKED MCD	REVISED -		CONTRACT NO. 60P35								
	PLOT DATE = 23-OCT-2012	DATE 10/19/12	REVISED -		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT					