

**GENERAL NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS WHICH WOULD AFFECT THE WORK UNDER THIS CONTRACT.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO LUMP SUM ITEMS AND UNIT PRICE ITEMS.
3. ALL NEW CONDUIT, JUNCTION BOXES AND APPURTENANCES ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. THE ACTUAL LOCATIONS IN THE FIELD SHALL MEET WITH APPROVAL OF THE ENGINEER.
4. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH NEC/IES AND THE FOLLOWING LATEST STATE OF ILLINOIS STANDARD AND SPECIFICATIONS; THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 AND SPECIAL PROVISIONS ADOPTED IN JANUARY 2010, IES AND NEC.
5. THE SCALE SHOWN ON PLAN DRAWINGS APPLIES ONLY TO THE FULL SIZE PLANS AND NOT TO REDUCED SIZE PLANS.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL LUMINAIRE LAMPS IN ACCORDANCE WITH THE SUPPLIER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE SPECIFICATIONS. THE COST OF THIS WORK AND MATERIAL SHALL BE INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEM. SEPARATE PAYMENT WILL NOT BE MADE.
7. THE CONTRACTOR SHALL FURNISH AND INSTALL POLE WIRING AT EACH POLE. THIS SHALL BE CONSIDERED INCIDENTAL TO THE LIGHT POLE PAY ITEMS. NO EXTRA COMPENSATION WILL BE ALLOWED FOR THIS ITEM.
8. ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THE LUMINAIRES MAY REQUIRE NIGHT-TIME OPTICAL ADJUSTMENT UPON INSPECTION BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEMS. SEPARATE PAYMENT WILL NOT BE MADE.
9. FOR THE EXISTING LIGHT POLE AND FOUNDATIONS THAT ARE TO BE REMOVED, THE ASSOCIATED UNDERGROUND CONDUITS AND CABLE SHALL BE SEPARATED FROM RESPECTIVE FOUNDATIONS AT 2.5 FEET (760 mm) BELOW GRADE AND SHALL BE ABANDONED.
10. EXISTING UNDERGROUND WIRING SHOWN ON PLANS IS DIAGRAMMATIC. CONTRACTOR SHALL MAINTAIN CONTINUITY TO ALL EXISTING WIRING TO EXISTING LIGHTING TO REMAIN.
11. UNLESS NOTED OTHERWISE, ALL LIGHTING EQUIPMENT REMOVED AS PART OF THIS CONTRACT SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED TO THE STATE'S ELECTRICAL MAINTENANCE CONTRACTOR'S FACILITY LOCATED WITHIN DISTRICT 1 IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
12. CONDUITS AND UNIT DUCTS SHALL BE INSTALLED AT A MINIMUM 36 INCH DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS AND THE ENGINEER.
13. WHERE MULTIPLE CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL WILL NOT BE PAID FOR EACH CONDUIT, BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
14. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION IN WRITING PRIOR TO EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES AND REMOVE EXISTING OBSTRUCTIONS AND FOUNDATIONS TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PAY ITEM.
15. THE CONTRACTOR SHALL COORDINATE ALL WORK AND MATERIALS WITH SPECIAL ATTENTION TO ALL OTHER CONSTRUCTION CONTRACTS. THIS WORK SHALL BE INCLUDED IN THE COST OF THIS CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
16. THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) 72 HOURS BEFORE EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS. UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ABOVE AND BELOW GROUND UTILITIES, EVEN THOUGH THEY MAY NOT APPEAR ON THE PLANS. ANY DAMAGE DONE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
18. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
19. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK AND COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION.
20. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL UTILITY COMPANIES.
21. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC.
22. QUANTITIES OF RIGID GALVANIZED STEEL CONDUIT AND PVC CONDUIT WHERE INDICATED ON THE PLANS, ARE APPROXIMATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND SHALL INSTALL RACEWAYS IN COMPLETE CONFORMANCE WITH SPECIFIED REQUIREMENTS.

**GENERAL NOTES (CONTINUED):**

23. GROUNDING CONNECTIONS AT ALL EQUIPMENT FOUNDATIONS SHALL BE EXOTHERMICALLY WELDED, UNLESS NOTED OTHERWISE, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING, AS APPLICABLE.
24. NO EQUIPMENT OR MATERIAL SHALL BE DELIVERED TO THE JOB SITE PRIOR TO THE APPROVAL AND INSPECTION OF THE ENGINEER. ANY EQUIPMENT OR MATERIAL DELIVERED TO THE JOB SITE PRIOR TO APPROVAL AND INSPECTION SHALL BE REMOVED FROM THE JOB SITE AT THE CONTRACTOR'S EXPENSE.
25. CONDUIT PUSHED AND IN TRENCH SHALL EXTEND (2') BEYOND THE SHOULDER, CURB, BARRIER WALL AND/OR GUARDRAIL, AS APPLICABLE.
26. THE PROPOSED LIGHTING CONTROL CABINET SHALL BE INSTALLED WITHIN THE RIGHT OF WAY WITH THE EXACT LOCATION TO BE CONFIRMED BY THE CONTRACTOR IN THE FIELD.
27. THE CONTRACTOR SHALL PREPARE A PRELIMINARY SCHEDULE WHEN THE CONTRACT COMMENCES WHICH ESTABLISHES THE DATE WHEN THE ELECTRICAL SERVICES WILL BE REQUIRED. THIS SCHEDULE SHALL BE FORWARDED IN WRITING TO COMMONWEALTH EDISON COMPANY (ComEd). SUBSEQUENT UPDATING OF THE SCHEDULE SHALL BE FORWARDED TO COMED AS CHANGES MAY OCCUR IN THE DATE OF SERVICE REQUIREMENTS. TEN (10) DAYS BEFORE THE ELECTRICAL SERVICES ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY COMED BY PHONE AND CONFIRM THE REQUEST IN WRITING. COMED SERVICE CONTRACT AND AGREEMENT SHALL BE FORWARDED TO IDOT FOR REVIEW AND SIGNATURE.
28. ALL PITS USED FOR INSTALLING PUSHED (JACKED) STEEL CONDUITS UNDER EXISTING ROADWAYS SHALL BE LOCATED 5'-0" (MINIMUM) CLEAR FROM THE EDGE OF SHOULDER. LOCATIONS OF THE CONDUIT CROSSINGS SHOWN ARE APPROXIMATE AND MAY BE SHIFTED AS NECESSARY TO MEET THE MINIMUM CLEARANCE REQUIRED. THE CONTRACTOR SHALL SUBMIT PLANS FOR THE LOCATION AND SIZE OF EACH PIT AND MAINTENANCE AND PROTECTION OF TRAFFIC AT THE SITE OF EACH PIT FOR THE APPROVAL OF THE ENGINEER BEFORE THE EXCAVATION OF ANY PIT MAY BEGIN.
29. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
30. THE CONTRACTOR WILL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED, WIRED, TESTED, AND ACCEPTED BY THE ENGINEER.
31. ALL TEMPORARY LIGHT POLES AND PROPOSED HIGH MAST LIGHT TOWERS SHALL BE LOCATED TO PROVIDE SAFETY CLEARANCES FROM THE ADJACENT COMED UTILITY POLES AND LINES AS REQUIRED BY COMED STANDARDS AND NATIONAL ELECTRICAL SAFETY CODE.
32. ALL 60 FT, CLASS 4 WOOD POLES AND 15 FT MAST ARMS UTILIZED IN THIS PROJECT SHALL BE OBTAINED FROM THE STATE'S STOCK. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH IDOT AND RETRIEVE AND TRANSPORT ALL MATERIALS TO THE PROJECT SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "LIGHT POLE, WOOD, 60 FOOT, CLASS 4 (INSTALL ONLY)" PAY ITEM.
33. THE CONTRACTOR IS RESPONSIBLE TO RETURN ALL STATE OWNED MATERIALS TO THE STATE AFTER MATERIALS ARE REMOVED AND THEY ARE NO LONGER REQUIRED. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "REMOVAL OF TEMPORARY LIGHTING UNIT, SALVAGE" PAY ITEM.
34. ALL LUMINAIRES USED FOR TEMPORARY LIGHTING AND LATER INSTALLED AS PERMANENT LIGHTING ON HIGH MAST LIGHT TOWERS SHALL MEET THE LUMINAIRE SPECIAL PROVISION INCLUDING THE PHOTOMETRIC CALCULATIONS, AND SHALL BE FROM THE SAME BATCH THAT WERE SUBJECTED TO, AND PASSED THE INDEPENDENT LUMINAIRE TESTING.

**SUGGESTED LIGHTING PHASING NOTES:**

- STAGE 1**
1. AFTER RAMP D IS CLOSED, REMOVE ALL RAMP D TEMPORARY LIGHTING AND TEMPORARY LIGHTING CONTROLLER. COORDINATE THE REMOVAL OF EXISTING ELECTRIC SERVICE WITH COMED. REMOVE TEMPORARY LIGHTING IN MANNER TO ALLOW FOR RELOCATION. SEE NOTE 2.
  2. FURNISH, INSTALL, AND ENERGIZE PROPOSED LIGHTING CONTROLLER "T", TEMPORARY LIGHTING FOR WEST FRONTAGE ROAD, AND TEMPORARY LIGHTING FOR EAST FRONTAGE ROAD. COORDINATE THE INSTALLATION OF NEW ELECTRIC SERVICE WITH COMED. UTILIZE TEMPORARY LIGHTING UNITS REMOVED FROM RAMP D PER NOTE 1.
  3. FURNISH, INSTALL, AND ENERGIZE TEMPORARY LIGHTING UNITS THAT WILL REPLACE REMOVED HIGH MAST LIGHT TOWERS. REMOVE SPECIFIC HIGH MAST LIGHT TOWERS, AND CONNECT TEMPORARY OVERHEAD WIRING TO REMAINING EXISTING UNDERGROUND HIGH MAST LIGHT TOWER WIRING.
- STAGE 2**
1. FURNISH, INSTALL, AND ENERGIZE PROPOSED LIGHTING CONTROLLER "A". COORDINATE THE INSTALLATION OF NEW ELECTRIC SERVICE WITH COMED.
  2. INSTALL TRENCHED CONDUIT FOR FUTURE USE. PROVIDE WATERTIGHT SEAL AT CONDUIT OPENINGS.
  3. FURNISH, INSTALL, AND ENERGIZE HIGH MAST LIGHT TOWERS SHOWN.
  4. FURNISH AND INSTALL BRIDGE JUNCTION BOX.
  5. FURNISH, INSTALL, AND ENERGIZE BUCK-BOOST TRANSFORMERS AS REQUIRED.
  6. INSTALL CONDUITS AND GROUND ROD FOR EACH HIGH MAST TOWER LOCATED ALONG THE RETAINING WALL AS THE TOWER FOUNDATION IS BEING CONSTRUCTED.
- STAGE 3**
1. FURNISH, INSTALL, AND ENERGIZE ADDITIONAL LIGHT TOWERS AND CONNECT TO EXISTING TOWERS.
  2. FURNISH, INSTALL, AND ENERGIZE LIGHT TOWERS AND CONNECT TO PROPOSED LIGHTING CONTROLLER "T".
  3. FURNISH, INSTALL, AND ENERGIZE UNDERPASS LIGHTING FOR RAMP C BRIDGE.
  4. FURNISH, INSTALL, AND ENERGIZE BUCK-BOOST TRANSFORMERS AS REQUIRED.
  5. AFTER EXISTING RAMPS A AND B ARE CLOSED, REMOVE EXISTING PERMANENT HIGH MAST TOWERS AND TEMPORARY LIGHTING UNITS EAST OF I-55 AS SHOWN. STORE AND PROTECT REMOVED LUMINAIRES FOR REUSE ON HIGH MAST TOWERS INSTALLED IN STAGE 4.
  6. INSTALL TRENCHED CONDUIT FOR FUTURE USE. PROVIDE WATERTIGHT SEAL AT CONDUIT OPENINGS.
  7. INSTALL CONDUITS AND GROUND ROD FOR EACH HIGH MAST TOWER LOCATED ALONG THE RETAINING WALL AS THE TOWER FOUNDATION IS BEING CONSTRUCTED.
- STAGE 4**
1. INSTALL CONDUITS AND GROUND ROD FOR EACH HIGH MAST TOWER LOCATED ALONG THE RETAINING WALL AS THE TOWER FOUNDATION IS BEING CONSTRUCTED.
  2. FURNISH, INSTALL, AND ENERGIZE ADDITIONAL LIGHT TOWERS AND CONNECT TO EXISTING WIRING AND EXISTING TOWERS.
  3. FURNISH, INSTALL, AND ENERGIZE ADDITIONAL LIGHT TOWERS AND CONNECT TO PROPOSED LIGHTING CONTROLLER "T".
  4. FURNISH, INSTALL, AND ENERGIZE BUCK-BOOST TRANSFORMERS AS REQUIRED.
  5. FURNISH AND INSTALL BRIDGE JUNCTION BOX FOR WEST FRONTAGE CONNECTOR BRIDGE. FURNISH, INSTALL, AND ENERGIZE UNDERPASS LIGHTING FOR WEST FRONTAGE CONNECTOR BRIDGE.
  6. AFTER PROPOSED HIGH MAST LIGHTING IS INSTALLED, ENERGIZED, AND ACCEPTED, REMOVE ALL TEMPORARY LIGHTING FOR THE EAST FRONTAGE ROAD, REMOVE ALL TEMPORARY LIGHTING FOR THE WEST FRONTAGE ROAD, REMOVE ALL TEMPORARY LIGHTING FOR THE OLD INTERCHANGE, REMOVE THE REMAINING ORIGINAL EXISTING HIGH MAST LIGHT TOWERS, AND REMOVE ORIGINAL EXISTING LIGHTING CONTROLLER "T". COORDINATE THE REMOVAL OF EXISTING ELECTRIC SERVICE WITH COMED.

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		DRAWN - CJM	REVISED -
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	PLOT DATE = 2/3/2011	DATE - 2/4/11	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**I-55 AT ARSENAL ROAD**  
**ELECTRICAL GENERAL NOTES**

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	99-2HB-2B-1	WILL	756	348
CONTRACT NO. 60F12				
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				