

ALL STREET LIGHTING SYSTEMS THAT WILL BE MAINTAINED BY THE CITY OF COLUMBUS, DIVISION OF POWER, INCLUDING WORK IN PROGRESS, SHALL BE INSPECTED TO ENSURE THAT FACILITIES AND MATERIAL ARE DESIGNED AND INSTALLED IN COMPLIANCE WITH THE DIVISION OF POWER'S CURRENT "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CURRENT CITY OF COLUMBUS, "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMS).

QUALIFIED ELECTRICAL PROFESSIONALS ARE REQUIRED TO ASSIST INSPECTORS AND ENGINEERS WITH THE INSPECTION OF STREET LIGHTING SYSTEMS. THE CONTRACTOR SHALL ASSIST WITH THE INSPECTION OF ALL NEW STREETLIGHT SYSTEMS INSTALLED BY SAID CONTRACTOR.

THE DIVISION OF POWER SHALL MAKE ALL FINAL CONNECTIONS TO EXISTING STREET LIGHT CIRCUITS THAT ARE MAINTAINED BY THE DIVISION OF POWER.

ALL COMMUNICATIONS BETWEEN THE DIVISION OF POWER AND THE CONTRACTOR REGARDING THE CONSTRUCTION, INSTALLATION AND INSPECTION OF A STREET LIGHTING SYSTEM SHALL BE MADE THROUGH THE CITY OF COLUMBUS DIVISION OF DESIGN AND CONSTRUCTION INSPECTION SERVICES OR AN AUTHORIZED INSPECTOR FOR THE DIVISION OF POWER.

1. CONTRACTOR'S RESPONSIBILITIES

- A. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE STREET LIGHTING SYSTEM PER THE DIVISION OF POWER'S CURRENT MATERIAL AND INSTALLATION SPECIFICATIONS AND THE CURRENT CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE DIVISION OF POWER.
- B. CONTRACTORS WORKING ON DIVISION OF POWER FACILITIES ARE REQUIRED TO COMPLY WITH THEIR COMPANY'S OSHA LOCK OUT/TAG OUT PROGRAM, AND COMPLY WITH THE DIVISION OF POWER CONDUCTOR SAFETY PROGRAM AND POLICIES. (SEE MIS-1)
- C. THE CONTRACTOR SHALL ADVISE THE INSPECTION SERVICE OF ANY PROPOSED STREET LIGHTING CHANGE OR DEVIATION OF THE APPROVED CONSTRUCTION PLAN. THE INSPECTION SERVICE SHALL DETERMINE IF THE DIVISION OF POWER SHOULD BE CONTACTED FOR ANY OPINION OR ADVICE REGARDING THE STREET LIGHT CHANGE.
- D. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE APPROPRIATE ELECTRIC PROVIDER FOR PRIMARY SERVICE TO THE CONTROLLER. FOR THE DIVISION OF POWER PLEASE CONTACT (614) 724-4351, (614) 645-6963, OR (614) 645-6851.
- E. THE CONTRACTOR SHALL COMPLY WITH THE INSPECTION SERVICES REQUIREMENTS TO INSPECT DURING CONSTRUCTION. THE CONTRACTOR SHALL COMPLETE ALL PUNCH LIST ITEMS BEFORE THE DIVISION OF POWER ACCEPTS THE NEW STREET LIGHTING SYSTEM.
- F. THE CONTRACTOR SHALL PERFORM OR COMPLETE THE FOLLOWING ITEMS DURING CONSTRUCTION AND PRIOR TO THE REQUEST FOR FINAL ACCEPTANCE OF STREET LIGHTING.
 - 1) THE CONTRACTOR SHALL COMPLETE ALL TESTING AS REQUIRED BY THE INSPECTION CHECKLIST FOR STREET LIGHTING CONSTRUCTION FORMS. THIS FORM MUST BE COMPLETED AND SIGNED BY THE CONTRACTOR, AND PROVIDED TO THE INSPECTOR FOR SUBMITTAL TO THE DIVISION OF POWER.
 - 2) THE CONTRACTOR SHALL TEST THE GROUND WIRE OF EACH UNDERGROUND STREET LIGHT AND DETERMINE THE OHMS FOR THE INSPECTOR TO RECORD ON THE INSPECTION CHECKLIST FOR STREET LIGHTING CONSTRUCTION FORMS. THIS READING SHALL BE 25 OHMS OR LESS.

G. THE INSPECTOR SHALL SUBMIT THE COMPLETED INSPECTION CHECKLIST FOR STREET LIGHTING CONSTRUCTION FORMS TO THE DIVISION OF POWER STREET LIGHTING ENGINEERING SECTION AT LEAST 10 (TEN) WORKING DAYS BEFORE FINAL ACCEPTANCE IS DESIRED.

H. ACCEPTANCE OF A NEW STREET LIGHTING SYSTEM FROM THE CONTRACTOR.

- 1) NEW CIRCUIT / NEW CONTROLLER FED BY AMERICAN ELECTRIC POWER (AEP) OR SOUTH CENTRAL POWER (SCP)
 - A. THE CONTRACTOR SHALL REQUEST AEP/SCP TO MAKE THE FINAL CONNECTION TO THE AEP/SCP TRANSFORMER.
 - B. THE CONTRACTOR SHALL ENERGIZE THE AEP/SCP FED CONTROLLER, AND COVER THE PHOTOCCELL SO THE DIVISION OF POWER AND THE DIVISION OF DESIGN AND CONSTRUCTION INSPECTOR CAN SEE THAT THE PHOTOCCELL AND ALL THE LIGHTS ON THE CIRCUIT ARE WORKING PROPERLY.
 - C. THE CONTRACTOR SHALL ASSIST THE DIVISION OF POWER BY ENERGIZING THE CONTROLLER, CHECKING THE AMPS, VOLTAGE, WIRING AND GROUNDING OF THE CONTROLLER.
 - D. THE CONTRACTOR SHALL ASSIST THE DIVISION OF POWER AND THE INSPECTOR WITH THE EXAMINATION OF ANY CIRCUIT THAT HAS BEEN ENERGIZED EVEN IF THE CONTROLLER IS IN THE OFF POSITION.

2) NEW CIRCUIT/NEW CONTROLLER FED BY COLUMBUS DIVISION OF POWER

- A. BEFORE THE CIRCUIT IS ENERGIZED, THE INSPECTION SERVICE, WITH THE AID OF THE CONTRACTOR SHALL INSPECT THE INSTALLATION AND PREPARE A PUNCH LIST. WHEN REPAIRS ARE MADE, THE CONTRACTOR SHALL NOTIFY THE INSPECTION SERVICE.
- B. THE CONTRACTOR SHALL ASSIST THE DIVISION OF POWER IN THE ACCEPTANCE OF THE STREET LIGHT SYSTEM BY TIC TRACING THE POLES, OPENING THE CONTROLLER, POLE HAND HOLES AND PULL BOXES SO THE WIRING CAN BE CHECKED FOR CORRECTNESS.

ALL CONNECTIONS TO THE DIVISION OF POWER'S TRANSFORMERS OR EXISTING CIRCUITS SHALL BE MADE BY THE DIVISION OF POWER (DOP) ONLY

C. CONNECTING A NEW CIRCUIT TO A DOP TRANSFORMER

1)AFTER THE DIVISION OF POWER APPROVES THE POLE WIRING, A DIVISION OF POWER DISTRIBUTION CREW WILL BE SCHEDULED TO CONNECT THE TRANSFORMER TO THE CONTROLLER WITH THE COILED CABLE PROVIDED BY THE CONTRACTOR AT THE POLE OR PAD. THE DIVISION OF POWER DISTRIBUTION CREW WILL CHECK CONTROLLER FOR CORRECTNESS BEFORE TYING INTO THE TRANSFORMER.

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	GUIDELINES FOR INSPECTION & ACCEPTANCE OF STREET LIGHTING SYSTEMS		
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D. CONNECTING A NEW CIRCUIT TO AN EXISTING DIVISION OF POWER CIRCUIT

- 1) AFTER THE DIVISION OF POWER APPROVES THE POLE WIRING ON THE NEW CIRCUIT WITH THE AID OF THE CONTRACTOR, THE DIVISION OF POWER DISTRIBUTION CREW WILL CONNECT THE NEW STREET LIGHTING TO THE EXISTING CIRCUIT.
- 2) THE DIVISION OF POWER DISTRIBUTION CREW WILL INSPECT AND TIC-TRACE THE EXISTING CONTROLLER AND CIRCUIT AFTER CONNECTING THE NEW CIRCUIT INSTALLED BY THE CONTRACTOR.
- 3) THE CONTRACTOR SHALL BE PRESENT WHEN THE DIVISION OF POWER CONNECTS TO THE NEW CIRCUIT AND ENERGIZES THE CONTROLLER. THE CONTRACTOR AND DIVISION OF POWER SHALL INSPECT AND TIC-TRACE THEIR CIRCUITS FOR PROBLEMS. IF REPAIRS ARE NECESSARY BY EITHER GROUP, THE DIVISION OF POWER DISTRIBUTION CREW WILL DETERMINE IF THE NEW CIRCUIT CAN REMAIN CONNECTED TO THE EXISTING CIRCUIT. ALL REPAIRS SHALL BE MADE WITHIN 48 HOURS. BOTH THE CONTRACTOR AND THE DIVISION OF POWER SHALL COMPLY WITH LOCK OUT/TAG OUT PROCEDURES.

E. THE CONTRACTOR SHALL ASSIST THE DIVISION OF POWER IN THE FINAL INSPECTION OF THE STREET LIGHT SYSTEM BY TIC TRACING THE POLES, OPENING THE CONTROLLER, POLE HAND HOLES, AND PULL BOXES SO THE WIRING CAN BE CHECKED FOR CORRECTNESS.

F. THE DIVISION OF POWER DISTRIBUTION CREW WILL MAKE TWO (2) TRIPS TO A NEW CIRCUIT AT NO COST TO THE CONTRACTOR. THE CONTRACTOR WILL BE CHARGED FOR LABOR AND EQUIPMENT FOR ALL DIVISION OF POWER DISTRIBUTION CREW TRIPS AFTER TWO FIELD VISITS.

G. THE DIVISION OF POWER HAS THE AUTHORITY TO ACCEPT OR REJECT THE NEW STREET LIGHTING BY THE CONTRACTOR. IF THE CONTRACTOR NEEDS TO MAKE REPAIRS TO THE CIRCUIT, THE CONTRACTOR MUST CONTACT THE INSPECTION SERVICE AND FOLLOW THE DIVISION OF POWER LOCK OUT/TAG OUT PROCEDURE. AFTER REPAIRS ARE MADE THE CONTRACTOR SHALL NOTIFY THE INSPECTION SERVICE AND THE INSPECTOR AND THE DIVISION OF POWER WILL CONDUCT A FINAL INSPECTION AND ACCEPTANCE.

2. INSPECTOR'S RESPONSIBILITIES (CITY OF COLUMBUS)

A. ALL STREET LIGHTING SYSTEMS INSTALLED BY CONTRACTORS SHALL REQUIRE AN INSPECTOR TO BE ON SITE TO OVERSEE THE INSTALLATION. THE INSPECTOR SHALL SEE THAT THE STREET LIGHTING SYSTEM IS INSTALLED PER THE DIVISION OF POWER'S CURRENT MATERIAL AND INSTALLATION SPECIFICATIONS, CONTRACT DRAWINGS, AND THE CURRENT CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE DIVISION OF POWER.

B. INSPECTORS ARE REQUIRED BY THE DIVISION OF POWER TO USE THE CURRENT 3 PAGE, "INSPECTION CHECKLIST FOR STREET LIGHTING CONSTRUCTION" FORMS. THE COMPLETED FORMS SHALL BE SUBMITTED BY THE INSPECTOR TO THE DIVISION OF POWER FOR RECORD PURPOSES.

C. THE CONTRACTOR SHALL REQUEST THE INSPECTION SERVICE TO CONTACT THE DIVISION OF POWER STREET LIGHTING ENGINEERING SECTION (10) TEN WORKING DAYS BEFORE A FINAL CONNECTION TO AN EXISTING DIVISION OF POWER STREET LIGHTING CIRCUIT IS NEEDED. IF A PROBLEM IS DETECTED WITH THE CIRCUIT, AND THE DIVISION OF POWER IS UNABLE TO LEAVE THE CIRCUIT ENERGIZED, THE CONTRACTOR MUST MAKE CORRECTIONS AND RESCHEDULE THE FINAL CONNECTION WITH THE INSPECTOR. (DIVISION OF POWER CONTACTS: (614) 724-4351, (614) 645-6963 OR (614) 645-6851.

D. THE INSPECTOR SHALL DETERMINE IF THE DIVISION OF POWER SHOULD BE CONTACTED FOR DIRECTION REGARDING ANY ELECTRICAL CHANGE OR DEVIATION OF THE APPROVED CONSTRUCTION PLAN.

E. THE INSPECTOR SHALL NOT OPEN HAND HOLES, CONTROLLERS OR PULL BOXES ON A STREET

LIGHT CIRCUIT THAT HAS BEEN ENERGIZED EVEN IF THE CIRCUIT IS CURRENTLY DE-ENERGIZED. THE INSPECTOR SHALL HAVE THE CONTRACTOR OPEN ALL POLES, PULL BOXES, CONDUIT, AND CONTROLLERS SO THAT THEY CAN BE INSPECTED.

F. THE INSPECTOR SHALL CONTACT THE DIVISION OF POWER (CHRIS VOGEL, SCOTT WOLFE OR CHRIST STORTS) BY E-MAIL WITH A "NOTIFICATION OF FINAL INSPECTION" WHEN A STREET LIGHTING CIRCUIT IS READY FOR FINAL INSPECTION AND ACCEPTANCE BY THE DIVISION OF POWER. THE INSPECTOR SHALL EMAIL COMPLETED COPIES OF ALL (3) PAGES OF THE "INSPECTION CHECKLIST FOR STREET LIGHTING CONSTRUCTION" TO THE DIVISION OF POWER SO THEY CAN BE USED IN THE FINAL ACCEPTANCE AND INSPECTION PROCESS.

3. DIVISION OF POWER'S RESPONSIBILITIES

A. FINAL CONNECTION PROCEDURE

1) UPON RECEIVING A REQUEST FOR A NEW STREET LIGHTING SYSTEM TO BE CONNECTED WITH AN EXISTING DIVISION OF POWER MAINTAINED CIRCUIT, THE DIVISION OF POWER, WITH THE ASSISTANCE OF THE CONTRACTOR, SHALL INSPECT THE POLE WIRING OF EACH NEW STREET LIGHT AND TEST ALL GROUNDS TO DETERMINE IF OHMS READINGS ARE 25 OHMS OR LESS. FINDINGS SHALL BE RECORDED ON THE DIVISION OF POWER STREET LIGHTING ACCEPTANCE/INSPECTION FORM.

2) AFTER THE DIVISION OF POWER HAS INSPECTED ALL NEW STREET LIGHTING POLES AND POLE BOXES, AND TESTED ALL GROUNDS FOR OHMS READINGS, THE DIVISION OF POWER SHALL MAKE THE DETERMINATION IF THE NEW STREET LIGHTING CIRCUIT IS ACCEPTABLE TO BE CONNECTED TO THE EXISTING STREET LIGHTING CIRCUIT. IF THE NEW STREET LIGHTING CIRCUIT IS FOUND TO BE ACCEPTABLE, THE DIVISION OF POWER DISTRIBUTION CREW MAY MAKE THE CONNECTION TO THE EXISTING STREET LIGHTING CIRCUIT.

3) AFTER THE DIVISION OF POWER DISTRIBUTION CREW ENERGIZES THE CIRCUIT, THE CREW SHALL CHECK THE AMPS, FUSING AND GROUNDING ON THE CONTROLLER. ALL EXISTING STREET LIGHTING POLES SHALL BE TIC-TRACED BY THE DISTRIBUTION CREW BEFORE LEAVING THE CONTROLLER ON AUTOMATIC. INFORMATION SHALL BE RECORDED ON THE APPROPRIATE FORMS.

4) IF THERE IS A PROBLEM ON THE CIRCUIT, THE DIVISION OF POWER DISTRIBUTION CREW SHALL DETERMINE IF THE CIRCUIT CAN REMAIN ENERGIZED. IF REPAIRS ARE NECESSARY BY THE CONTRACTOR. THE DIVISION OF POWER DISTRIBUTION CREW WILL DETERMINE IF THE NEW CIRCUIT CAN REMAIN CONNECTED TO THE EXISTING CIRCUIT. ALL REPAIRS SHALL BE MADE WITHIN 48 HOURS. IF THE CIRCUIT REMAINS ENERGIZED, BOTH THE CONTRACTOR AND DIVISION OF POWER SHALL COMPLY WITH LOCK/OUT, TAG/OUT PROCEDURES. THE DIVISION OF POWER DISTRIBUTION CREW WILL MAKE TWO (2) TRIPS TO A NEW CIRCUIT AT NO COST TO THE CONTRACTOR. THE CONTRACTOR WILL BE CHARGED FOR LABOR AND EQUIPMENT FOR ALL DIVISION OF POWER CREW TRIPS AFTER TWO. THE DIVISION OF POWER WILL CHARGE THEIR TIME TO THE APPROPRIATE PROJECT WORK ORDER.

5) THE DIVISION OF POWER SHALL NOTIFY THE INSPECTOR THAT THE CONTRACTOR NEEDS TO MAKE REPAIRS AND RESCHEDULE THE FINAL CONNECTION.

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B. DIVISION OF POWER ACCEPTANCE OF A STREET LIGHTING SYSTEM

- 1) THE DIVISION OF POWER SHALL INSPECT A STREET LIGHTING SYSTEM WITHIN 10 BUSINESS DAYS OF RECEIVING NOTICE FROM THE INSPECTOR. THE INSPECTION SERVICE SHALL COORDINATE THIS EFFORT WITH THE CONTRACTOR AS NECESSARY. THE CONTRACTOR SHALL ASSIST THE DIVISION OF POWER WITH INSPECTION OF ALL NEW STREET LIGHTING SYSTEMS. THE INSPECTION SHALL CONSIST OF THE FOLLOWING:
 - A. A SYSTEM THAT HAS A NEW CONTROLLER WITH AEP OR SCP WILL BE LOCKED OUT AND DE-ENERGIZED BY THE CONTRACTOR.
 - B. THE GROUNDING WIRE FOR CONTROLLER SHALL BE TESTED AND THE OHMS RECORDED.
 - C. THE CONTROLLER PANEL SHALL BE CHECKED FOR CORRECTNESS. THE AMPS OF EACH CIRCUIT LEG SHALL BE MEASURED AND RECORDED. EACH LEG SHALL BE FUSED ACCORDING TO FOLLOWING CHART:

LOAD AMPERAGE	FUSE SIZE	FUSE REDUCER
1 – 15	15 A	BUSS #216
16 – 30	30 A	BUSS #216
31 – 45	45 A	BUSS #616
46 – 60	60 A	BUSS #616
61 – 80	80 A	N/A

- D. EACH NEW POLE SHALL BE TIC-TRACED BY THE ENGINEER BEFORE TOUCHED.
- E. EACH NEW POLE HAND HOLE SHALL BE OPENED BY THE CONTRACTOR AND CHECKED FOR COMPLIANCE WITH THE MATERIAL INSTALLATION SPECIFICATIONS BY THE DIVISION OF POWER.
- F. THE ENGINEER SHALL CLEAN EACH POLE AND ATTACH A POLE IDENTIFICATION NUMBER AT 6' ABOVE THE POLE BASE.
- G. THE ENGINEER SHALL CLEAN A PORTION OF THE CONTROL BOX DOOR AND ATTACH THE "CONTROL NUMBER" STICKERS, AND "HAZARD WARNING" STICKER
- H. THE ENGINEER SHALL RECORD THE RESULTS OF THE INSPECTION ON THE "STREET LIGHTING ACCEPTANCE" FORMS. THESE ARE TO BE KEPT AT THE DIVISION OF POWER FOR RECORD PURPOSES WITH THE "INSPECTION CHECKLIST FOR STREET LIGHTING CONSTRUCTION" FORMS PREVIOUSLY COMPLETED BY THE CONTRACTOR.
- I. THE DIVISION OF POWER DISTRIBUTION CREW SHALL ENERGIZE THE CIRCUIT UPON COMPLETION OF THE INSPECTION. THE DIVISION OF POWER DISTRIBUTION CREW SHALL TIC-TRACE EACH METAL POLE ON THE CIRCUIT BEFORE THE CIRCUIT IS LEFT ON AUTOMATIC OVERNIGHT.
- J. THE ENGINEER SHALL NOTIFY THE INSPECTOR OF ANY CHANGES THAT NEED TO BE MADE BY THE CONTRACTOR BEFORE THE STREET LIGHTS ARE ACCEPTED.

- K. THE DIVISION OF POWER SHALL RE-INSPECT THE PROJECT AFTER CORRECTIONS HAVE BEEN MADE BY THE CONTRACTOR.
 - L. THE DIVISION OF POWER SHALL SEND THE ACCEPTANCE LETTER TO THE DIVISION OF DESIGN AND CONSTRUCTION INSPECTION SERVICE WITHIN 48 HOURS OF ACCEPTING THE PROJECT.
 - M. THE DIVISION OF POWER SHALL CORRECT MAPS AND CREATE A SINGLE LINE DRAWING REPRESENTING AN AS BUILT OF THE CIRCUIT LAYOUT
- 2) ACCEPTANCE OF A STREET LIGHTING PROJECT BY THE DIVISION OF POWER WILL BE COMPLETE WHEN:
- A. ALL INSPECTION AND TEST FORMS ARE FILLED OUT BY THE INSPECTION SERVICE, THE CONTRACTOR AND DIVISION OF POWER.
 - B. EACH POLE AND CONTROLLER IS LABELED WITH AN ID # AND A "CALL BEFORE YOU DIG" STICKER.
 - C. THE DIVISION OF POWER HAS SENT THE "ACCEPTANCE LETTER" TO THE DIVISION OF DESIGN AND CONSTRUCTION OR AUTHORIZED INSPECTOR.

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