I. OBJECTIVE

THE OBJECTIVE OF THE COLUMBUS DIVISION OF POWER (DOP) LOCK OUT TAG OUT (LOTO) PROCEDURE FOR STREET LIGHTING IS TO PROVIDE SAFE ELECTRICAL AND MECHANICAL CLEARANCE FOR ALL PERSONNEL PERFORMING WORK ON CITY OF COLUMBUS STREET LIGHTING FACILITIES. THIS PROCEDURE IS TO BE FOLLOWED BY ALL CONTRACTORS, SUPERVISORS, ENGINEERS OR EMPLOYEES WORKING ON OR NEAR THE DOP STREET LIGHTING SYSTEM.

II. PROCESS

A. REQUEST FOR LOTO

A CONTRACTOR MUST REQUEST A LOTO FOR ANY STREET LIGHTING CIRCUIT IN WHICH THEY ARE GOING TO BE PERFORMING WORK. THIS REQUEST MUST BE MADE TO THE DOP STREET LIGHTING PROJECT MANAGER OR ENGINEERING SECTION MANAGER VIA TELEPHONE OR EMAIL. THIS REQUEST MUST INCLUDE THE CIRCUIT NUMBER REQUIRED TO BE LOCKED OUT, THE PROJECT BOUNDARIES IN WHICH THE WORK IS TO BE COMPLETED, A DRAWING NUMBER OR PLAN NUMBER CONTAINING THE SCOPE OF WORK, AND THE DETAILS OF CONSTRUCTION.

A LOTO WILL BE SCHEDULED BASED ON THE AVAILABILITY OF THE DIVISION OF POWER REPRESENTATIVE TO COMPLETE THE LOTO.

B. INITIAL LOTO FIELD PROCESS

COMPLETION OF A LOTO IN THE FIELD REQUIRES THE PRESENCE OF THE CONTRACTOR REQUESTING THE LOTO, AND A DOP REPRESENTATIVE. IF ONE OF THESE PARTIES ARE NOT PRESENT, THE STREET LIGHTING CIRCUIT CANNOT BE TURNED OVER TO THE CONTRACTOR. ONCE ALL PARTIES ARE PRESENT AT THE STREET LIGHTING CONTROLLER LOCATION, THE FOLLOWING PROCESS CAN BE COMPLETED:

1) DOP LOCK REMOVAL

A DOP "BLUE LOCK" IS INSTALLED ON ALL STREET LIGHTING CONTROLLERS FOR WHICH THE DOP HAS CONTROL OF AT ANY GIVEN TIME. THIS LOCK CAN ONLY BE REMOVED BY A DOP REPRESENTATIVE. IT IS NOT TO BE CUT BY A CONTRACTOR, OR ANY OTHER INDIVIDUAL TO GAIN ACCESS TO THE CONTROLLER.

TO BEGIN THE LOTO PROCESS, THE DOP REPRESENTATIVE REMOVES THE "BLUE LOCK" FROM THE CONTROLLER. ONCE THE "BLUE LOCK" IS REMOVED, DOP WILL THEN ENERGIZE THE CONTROLLER.

2) INITIAL AMPERAGE/VOLTAGE READINGS

ONCE THE CONTROLLER HAS BEEN ENERGIZED, THE CONTROLLER WILL BE ALLOWED TO "HEAT UP" IN ORDER TO OBTAIN STABILIZED AMPERAGE AND VOLTAGE READINGS. ONCE THE CONTROLLER HAS STABILIZED, DOP WILL TAKE THE INITIAL AMPERAGE AND VOLTAGE READINGS PRIOR TO TURNING THE CONTROLLER OVER TO THE CONTRACTOR. THIS CREATES A BASELINE FOR THOSE READINGS PRIOR TO ANY "NEW" WORK BEING DONE ON THE STREET LIGHTING CIRCUIT.

3) DOP TURNS CIRCUIT/CONTROLLER OVER TO THE CONTRACTOR

AFTER DOP TAKES THE INITIAL AMPERAGE AND VOLTAGE READINGS, THEY WILL VISUALLY INSPECT THE CONTROLLER FOR ANY ISSUES THAT MAY WARRANT NOT COMPLETING THE LOTO. THIS COULD RANGE FROM FAULTY WIRING, TO BLOWN FUSES, TO FAULTY ELECTRICAL EQUIPMENT. THE DOP HAS THE RIGHT TO DENY TURNING THE CONTROLLER OVER TO THE CONTRACTOR BASED ON ANY ISSUES THAT MAY EXIST. ONCE DOP HAS VERIFIED THE CONTROLLER IS SAFE, AND ALL EQUIPMENT IS OPERATIONAL, THEY ARE TO ASK THE CONTRACTOR WHICH "POSITION" THEY WOULD LIKE THE CONTROLLER TO BE PLACED IN. THE CONTRACTOR CAN CHOOSE "AUTO," "OFF," OR "HAND" BASED ON WHEN HE INTENDS TO WORK ON THE STREET LIGHTING CIRCUIT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PLACE THE CONTROLLER IN "AUTO" AT THE END OF EACH DAY SO THAT THE LIGHTING CIRCUIT WILL BE OPERATIONAL DURING THE NIGHT TIME HOURS. ONCE PLACED IN "AUTO," IT REMAINS THERE UNTIL THE SELECTOR SWITCH INSIDE THE CONTROLLER IS CHANGED TO ANOTHER SETTING.

4) INSTALLATION OF A "CONTRACTOR LOCK AND TAG"

ONCE DOP HAS COMPLETED THEIR READINGS, AND PLACED THE CONTROLLER IN THE POSITION CHOSEN BY THE CONTRACTOR, THEY WILL CLOSE THE DOOR TO THE CONTROLLER. AT THIS TIME, THE CONTRACTOR WILL INSTALL THEIR LOCK AND INFORMATION TAG ON THE CONTROLLER HANDLE ASSEMBLY. THIS INDICATES THAT THE DIVISION OF POWER NO LONGER HAS CONTROL OF THE STREET LIGHTING CIRCUIT. THE CONTRACTOR TAG MUST CONTAIN THE FOLLOWING INFORMATION:

A. CONTRACTOR COMPANY NAME
B. CONTRACTOR SUPERVISOR'S NAME
C. CONTRACTOR SUPERVISOR'S TELEPHONE NUMBER (FOR 24 HOUR AVAILABILITY)

THE ABOVE ITEMS MUST BE CLEAR AND LEGIBLE ON THE INFORMATION TAG FOR THE ENTIRE TIME FRAME THAT THE CONTRACTOR HAS CONTROL OF THE STREET LIGHTING CIRCUIT. THE CONTRACTOR WILL ALSO INSTALL EITHER AN ENGRAVED LOCK, OR LOCK WITH AN ENGRAVED TAG SECURELY ATTACHED TO THE LOCK (SEE BELOW FOR REPRESENTATIVE EXAMPLES). IN THE EVENT THE INFORMATION TAG BECOMES ILLEGIBLE, THE CONTRACTOR'S LOCK IS TO BE CLEARLY IDENTIFIED BY WAY OF AN ENGRAVED (ETCHED) OR STAMPED LOCK WITH THE COMPANY NAME, OR A CLEARLY IDENTIFIED ROUND METAL TAG ATTACHED TO THE SHACKLE OR BODY OF THE LOCK. ADDITIONAL REQUIREMENTS FOR THE CONTRACTOR LOCK ARE AS FOLLOWS.

A. THE LOCK MUST BE A "SHACKLE STYLE" LOCK OPERATED BY A KEY. COMBINATION LOCKS ARE NOT PERMITTED.

B. THE COLOR OF THE LOCK IS THE CHOICE OF THE CONTRACTOR. THE LOCK <u>CANNOT</u> BE BLUE OR RED, AS THOSE COLORS REPRESENT DOP AND ODOT RESPECTIVELY.

C. THE FULL COMPANY NAME MUST BE ENGRAVED IN CAPITAL LETTERS INTO THE LOCK/METAL TAG. IT CANNOT BE ABBREVIATED IN ANY FORM OR FASHION.

D. INK STAMPING OF THE CONTRACTOR NAME ON THE LOCK OR TAG IS NOT PERMITTED.

E. THE TAG MUST BE DIRECTLY FIXED AROUND THE SHACKLE, OR AFFIXED TO THE BODY OF THE LOCK. IT CANNOT BE ATTACHED VIA A LANYARD THAT CAN BE EASILY CUT OR REMOVED.



IN THE EVENT THAT THE IDENTIFICATION TAG BECOMES ILLEGIBLE, THE ENGRAVED LOCK/TAG WILL IDENTIFY THE CONTRACTOR IN CONTROL OF THE CIRCUIT. NO CIRCUIT WILL BE TURNED OVER TO A CONTRACTOR WITHOUT AN ENGRAVED LOCK AND TAG CLEARLY STATING THE COMPANY NAME INSTALLED ON THE CONTROLLER. ENFORCEMENT OF THIS SPECIFICATION WILL BEGIN 90 DAYS AFTER THE PUBLICATION OF THIS DOCUMENT.

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	STREET LIGHT LOCKOUT/TAGOUT (LOTO)		
	DRAWN BY: SAW	DATE: 12/1/23	
	APPROVED: Jodi Stefanik		
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5) CONTACTING DOP DISPATCH CENTER

A. ONCE THE BLUE LOCK HAS BEEN REMOVED, THE INITIAL READINGS HAVE BEEN TAKEN, THE SELECTOR SWITCH SET APPROPRIATELY, AND THE CONTRACTOR'S LOCK AND TAG INSTALLED, THE CONTRACTOR MUST CALL THE DOP DISPATCH CENTER AT (614) 645-7627. THE CONTRACTOR WILL INFORM THE DISPATCH CENTER THAT THEY ARE TAKING CONTROL OF A PARTICULAR STREET LIGHTING CIRCUIT, AND THAT THEIR LOCK IS INSTALLED ON THE CONTROLLER. THEY WILL ALSO INFORM DOP DISPATCH THE NAME OF THE DOP REPRESENTATIVE THAT IS ON SITE WITH THEM FOR THE LOTO.

B. AFTER THE CALL WITH THE DOP DISPATCH CENTER IS FINISHED, THE LOTO IS CONSIDERED TO BE COMPLETE, AND THE STREET LIGHTING CIRCUIT IS CONSIDERED TO BE UNDER THE "CONTROL" OF THE CONTRACTOR. BY TAKING CONTROL OF A CIRCUIT, THE CONTRACTOR ACKNOWLEDGES AND AGREES TO THE FOLLOWING REQUIREMENTS.

1. THE CONTRACTOR AGREES TO FOLLOW ALL DOP POLICIES AND PROCEDURES IN REGARDS TO WORKING ON OR AROUND STREET LIGHTING FACILITIES.

2. THE CONTRACTOR ACKNOWLEDGES THAT THE CONTACT PERSON LISTED ON THE INFORMATION TAG WILL BE AVAILABLE FOR CONTACT BY DOP 24 HOURS A DAY/7 DAYS PER WEEK FOR ANY ISSUES RELATED TO THE CIRCUIT THAT THEY ARE LOCKING OUT. THIS MAY RESULT IN THE CONTRACTOR BEING REQUIRED TO MEET THE DOP ON SITE TO UNLOCK THE CONTROLLER, AND INVESTIGATE AND/OR ADDRESS OUTSTANDING ISSUES.

3. THE CONTRACTOR AGREES TO THE REQUIREMENT TO CALL IN TO DOP DISPATCH EACH DAY AND "LOG ON" TO THE CIRCUIT PRIOR TO WORKING ON THE CIRCUIT THAT THEY HAVE LOCKED OUT. "LOGGING ON" INDICATES THE CONTRACTOR IS ACTIVELY ON THE CIRCUIT. THE CONTRACTOR IS ALSO TO CALL DISPATCH EACH DAY WHEN THEY ARE DONE WORKING ON THE CIRCUIT FOR THE DAY TO "LOG OFF" THE CIRCUIT FOR THE DAY. "LOGGING OFF" DOES NOT RETURN THE CIRCUIT CONTROL OF THE CIRCUIT TO DOP. THIS INDICATES THAT THE CONTRACTOR RETAINS CONTROL OF THE CIRCUIT, BUT IS NOT ACTIVELY WORKING ON THE CIRCUIT.

4. THE CONTRACTOR AGREES TO MAINTAIN THE OPERATION OF THE CIRCUIT THAT THEY HAVE LOCKED OUT. THE CIRCUIT IS TO REMAIN OPERATIONAL DURING CONSTRUCTION, AND THE CONTROLLER IN THE "AUTO" POSITION AT THE END OF EACH DAY. ALL LIGHTING NOT IMPACTED BY CONSTRUCTION IS TO REMAIN FULLY FUNCTIONAL.

a. FOR ISSUES / PROBLEMS RELATED TO MAINTAINING THE CIRCUIT, DOP WILL CONTACT THE CONTRACTOR TO INVESTIGATE THE ISSUE.

b. THE CONTRACTOR AGREES TO INVESTIGATE, AND DETERMINE THE CAUSE OF THE ISSUE.

c, IF THE ISSUE IS WITHIN THE PROJECT LIMITS, OR IS CAUSED BY THE PROJECT, THE CONTRACTOR IS RESPONSIBLE TO MAKE REPAIRS AT THIER EXPENSE.

d. IF THE ISSUE IS OUTSIDE THE PROJECT LIMITS, OR IS DETERMINED TO NOT BE A RESULT OF CONSTRUCTION OF THE PROJECT, THE CONTRACTOR WILL NOTIFY THE DOP PROJECT MANAGER. DOP WILL THEN MAKE ARRANGEMENTS TO TAKE CONTROL OF THE CIRCUIT, AND MAKE REPAIRS.

e. ONCE THE REPAIRS ARE COMPLETED, DOP WILL MAKE ARRANGEMENTS TO TURN THE CIRCUIT BACK OVER TO THE CONTRACTOR.

5. THE CONTRACTOR ACKNOWLEDGES THAT NOT FOLLOWING THESE POLICIES WILL RESULT IN REPRIMAND BY DOP, WITH REPEATED VIOLATIONS RESULTING IN REMOVAL FROM THE DOP QUALIFIED CONTRACTOR LIST.

C. ONCE THE CONTRACTOR HAS TAKEN CONTROL OF THE CIRCUIT, THE DOP REPRESENTATIVE IS REQUIRED TO IMMEDIATELY CONTACT THE DOP PROJECT MANAGER TO INFORM THEM THAT THE INITIAL LOTO PROCESS FOR THE CIRCUIT IS COMPLETE. THE DOP PROJECT MANAGER IS THEN REQUIRED TO CHANGE THE DIVISION OF POWER LOTO DASHBOARD TO REFLECT THAT THE PARTICULAR STREET LIGHTING CIRCUIT HAS BEEN PLACED UNDER THE CONTROL OF THE CONTRACTOR, AND IS CONSIDERED TO BE FULLY "LOCKED OUT" BY THE CONTRACTOR.

C. RETURN OF A CIRCUIT/CONTROLLER TO DOP CONTROL

ONCE CONSTRUCTION/WORK HAS BEEN COMPLETED ON A STREET LIGHTING CIRCUIT CONSIDERED TO BE UNDER CONTRACTOR CONTROL, THE PROCESS MAY BE STARTED TO TURN THE STREET LIGHTING CIRCUIT AND CONTROLLER BACK TO DOP. THIS PROCESS REQUIRES THE FOLLOWING STEPS BE COMPLETED BEFORE THE CONTROLLER IS TURNED BACK TO DOP.

1) THE "INSPECTION CHECKLIST" AND PROCESS DETAILED MIS-4: INSPECTION CHECKLIST MUST BE COMPLETED, AND THE INSPECTION CHECKLIST RECEIVED BY THE DOP PROJECT MANAGER.

2) ALL STEPS AND PROCESSES DETAILED BY MIS-2: GUIDELINES FOR INSPECTION & ACCEPTANCE OF STREET LIGHTING SYSTEMS MUST BE COMPLETED, AND THE PROJECT CONSIDERED "ACCEPTABLE" BY DOP. "ACCEPTABLE" IS DEFINED AS THE PROJECT AND CONSTRUCTION THEREOF CONTAINING THE PARTICULAR STREET LIGHTING CIRCUIT MEETS ALL REQUIREMENTS SET FORTH BY THE PROJECT PLANS AND MIS-SPECIFICATIONS. CONSTRUCTION IS CONSIDERED TO BE COMPLETE, WITH NO ADDITIONAL WORK REQUIRED TO BE PERFORMED.

3) THE CONTRACTOR WILL ENERGIZE THE CONTROLLER IF IT HAS NOT ALREADY BEEN ENERGIZED PER THE STEPS DETAILED IN MIS-2. THE CONTROLLER WILL BE ALLOWED TIME TO "STABILIZE" SO THAT ACCURATE READINGS CAN BE TAKEN. "STABILIZED" IS DEFINED AS THE OPERATIONAL STATE OF THE CONTROLLER ONCE THE INITIAL IN-RUSH CURRENT HAS SUBSIDED AFTER THE CONTROLLER HAS BEEN ENERGIZED. THE CONTROLLER SHALL BE ALLOWED TO "STABILIZE" FOR A MINIMUM OF FIVE MINUTES PRIOR TO ANY READINGS BEING TAKEN.

4) AFTER THE CONTROLLER HAS "STABILIZED", THE CONTRACTOR WILL TAKE AMPERAGE READINGS ON EACH LEG (A, B AND C) OF THE CONTROLLER, AS WELL AS VOLTAGE READINGS ON THE CONTROLLER ITSELF. THESE "FINAL READINGS" SHOULD BE TAKEN NO LESS THAN FIVE MINUTES AFTER THE CONTROLLER HAS BEEN ENERGIZED. THE "FINAL READINGS" WILL BE GIVEN TO THE DOP REPRESENTATIVE, AND COMPARED TO THE "INITIAL READINGS" TAKEN AT THE TIME THE CONTROLLER WAS TURNED OVER TO THE CONTRACTOR, AS WELL AS THE READINGS NOTED ON THE MIS-4 INSPECTION CHECKLIST.

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5) IF THE READINGS DO NOT REFLECT NORMAL CONTROLLER AND CIRCUIT OPERATION BASED ON THE CONSTRUCTION OF THE PROJECT OR ANY ADDITIONAL LOAD ADDED TO THE CIRCUIT, THE CIRCUIT WILL NOT BE TURNED BACK TO DOP. THE CONTRACTOR WILL REQUIRED TO DETERMINE THE ISSUE CAUSING THE FAULTY READINGS. THE DOP REPRESENTATIVE MAY CHOOSE TO RE-SCHEDULE THE REMAINDER OF PROCESS UNTIL SUCH TIME A DETERMINATION OF THE CAUSE IS MADE.

   a. IF THE ISSUE CAUSING THE FAULTY READINGS IS INSIDE THE SCOPE OF WORK OF THE PROJECT, THE CONTRACTOR WILL BE REQUIRED TO MAKE REPAIRS WHILE FOLLOWING ALL CONSTRUCTION PROCESSES, POLICIES AND PROCEDURES DETAILED BY THE PLANS AND MIS-SPECIFICATIONS. THE RETURN OF THE CIRCUIT TO DOP WILL NEED TO BE RESCHEDULED.

   b. IF THE ISSUE CAUSING THE FAULTY READINGS IS DETERMINED TO BE OUTSIDE OF THE SCOPE OF THE PROJECT WORK, AND NOT CAUSED BY THE CONSTRUCTION OF THE PROJECT, THE LOTO PROCESS OF TURNING THE CONTROLLER BACK TO DOP WILL NEED TO BE COMPLETED WITH IMMEDIATE NOTIFICATION OF THE ISSUE MADE TO THE DOP PROJECT MANAGER AND DISPATCH CENTER BY THE DOP REPRESENTATIVE.

6) IF THE FINAL READINGS MATCH WHAT IS NOTED ON THE MIS-4 INSPECTION SHEETS, AND REFLECT NORMAL CONTROLLER OPERATION BASED ON CONSTRUCTION OF THE PROJECT AND ADDITIONAL LOAD ADDED TO THE CIRCUIT, THE FUSING FOR EACH LEG OF THE CONTROLLER (A, B, AND C) MUST BE VERIFIED BY THE DOP REPRESENTATIVE. IF THE CONTROLLER IS NOT FUSED APPROPRIATELY FOR THE LOAD ON EACH LEG OF THE CONTROLLER IMPACTED BY CONSTRUCTION OF THE PROJECT, THE CONTRACTOR IS REQUIRED TO IMMEDIATELY CHANGE THE FUSE ON THE IMPACTED LEGS TO THE SIZE REQUIRED AND NOTED IN THE MIS-6XX SERIES DOCUMENTS FOR THE STYLE OF CONTROLLER ON THE CIRCUIT. ANY FUSING NOT IMPACTED BY THE PROJECT THAT IS NOT PROPERLY SIZED WILL REMAIN THE RESPONSIBILITY OF DOP TO CHANGE.

7) ONCE THE CONTROLLER IS APPROPRIATELY FUSED, THE CONTRACTOR WILL THEN ASK THE DOP REPRESENTATIVE IN WHICH POSITION THE SELECTOR SWITCH IS TO BE PLACED. "AUTO" WILL BE THE SELECTION FOR NORMAL CIRCUIT OPERATION. IN THE EVENT THE DOP REPRESENTATIVE IS DIRECTED TO HAVE THE CONTRACTOR PLACE THE CONTROLLER IN A DIFFERENT POSITION (OFF OR HAND) BY EITHER THE DOP DISTRIBUTION DEPARTMENT OR PROJECT MANAGER, THE DOP REPRESENTATIVE WILL INFORM THE CONTRACTOR WHICH POSITION TO PLACE THE SELECTOR SWITCH. THE DOOR TO THE CONTROLLER DOOR IS THEN CLOSED, AND THE "BLUE" LOCK INSTALLED ON THE HANDLE ASSEMBLY BY THE DOP REPRESENTATIVE.

8) ONCE THE BLUE LOCK HAS BEEN INSTALLED, THE FINAL READINGS HAVE BEEN TAKEN, THE SELECTOR SWITCH SET APPROPRIATELY, AND THE BLUE INSTALLED, THE CONTRACTOR MUST CALL THE DOP DISPATCH CENTER AT (614) 645-7627. THE CONTRACTOR WILL INFORM THE DISPATCH CENTER THAT THEY ARE TURNING THE STREET LIGHTING CIRCUIT BACK TO DOP, AND THAT THE BLUE LOCK HAS BEEN INSTALLED ON THE CONTROLLER. THEY WILL ALSO INFORM THE DISPATCH CENTER THE NAME OF THE DOP REPRESENTATIVE IS THAT IS ON SITE WITH THEM FOR THE LOTO.

9) AFTER THE CALL WITH THE DISPATCH CENTER IS FINISHED, THE LOTO IS CONSIDERED TO BE COMPLETE, AND THE STREET LIGHTING CIRCUIT IS CONSIDERED TO BE UNDER THE "CONTROL" OF DOP. THE DOP REPRESENTATIVE WILL THEN IMMEDIATELY CONTACT THE DOP PROJECT MANAGER TO NOTIFY THEM THE CIRCUIT IS NOW UNDER DOP CONTROL. THE DOP PROJECT MANAGER IS THEN REQUIRED TO CHANGE THE DOP LOTO DASHBOARD TO REFLECT THE COMPLETION OF THE PROCESS, AND THE CHANGE OF CONTROL OF THE CIRCUIT FROM THE CONTRACTOR TO DOP.

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