









6 #4 VERT. PLACED THUS

- #4 @12<sup>.</sup> TIES

## LIGHTING CONTROLLER AND FOUNDATION DETAIL

LIGHTING CONTROLLER No. 1 WIRING DIAGRAM

DESIGNED OKA REVISED - IDOT REVIEW 2/19/09 IDOT REVIEW 4/22/09 DRAWN MAC REVISED CHECKED JTB FILE - 060807-lighting-details.sh DATE 8-1-08

VILLAGE OF WINTHROP HARBOR, ILLINOIS ILLINOIS ROUTE 137 (SHERIDAN ROAD) AND 7th STREET STREETSCAPE IMPROVEMENTS

ITEM	QTY.	DESCRIPTION
А	1	MAIN CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 240 V. SINGLE-PHASE, 100A, BOLT-ON TYPE, TRIP INTERRUPTING RATING OF 22,000 RMS SYMMETRICAL AMPERES AT 240 V.
В	1	CONTROL CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, SINGLE-POLE, 120 V. SINGLE PHASE 20 A. BOLT-ON TYPE, TRIP INTERRUPTING RATING OF 14,000 RMS SYMMETRICAL AMPERES AT 120 V.
С	1	LIGHTING CONTACTOR MECHANICALLY HELD, SQUARE "D" IVO10600V 200A, 2-POLE, 600 V. WITH 120 COIL OR EQUAL
D	1	CONTROL RELAY CUTLER HAMMER D3PR2 RATED 12 A. AT 120 VAC OR EQUAL
E	1	ON-OFF-AUTO 3-POSITION SELECTOR SWITCH GE CR104P HEAVY DUTY SWITCH, RATED FOR 10 A. AT 600 VAC.
F	1 -	GFCI RECEPTACLE, 120 V., 20 A. SPEC. GRADE, NEMA CONFIG. 5-20R
G	1	SPDT LIMIT SWITCH WITH SIDE PUSH ROD PLUNGER SOUARE "D" 8B082 RATED 10 A. AT 120 V. OR EQUAL
Н	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE, GUARD AND MOUNTING BOX.
I	4	SECONDARY SURGE ARRESTER SQUARE D SDSA1175, 175 VAC PHASE-TO-GROUND MAXIMUM OR EQUAL
J	4	BRANCH CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 240 V. SINGLE-PHASE, 60A, TRIP INTERRUPTING RATING 22,000 RMS SYMMETRICAL AMPERES AT 240 V.
K	8	TERMINAL BLOCK RATED 600 V., 85 A.
L	1	COPPER NEUTRAL BUS
М	1	COPPER GROUND BUS
N	1	PHOTOCELL



## **NOTES**

SCALE: NONE

- CABINET SHALL BE FABRICATED FROM 0.125-INCH SHEET ALUMINUM, ALLOY 5052 FORMED AND ARC WELDED ASSEMBLY WITH NEMA 3R RATING.
- 2. ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL.
- 3. NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH HIGH LETTERS FILLED IN BLACK: LINE ONE "VILLAGE OF WINTHROP HARBOR", LINE TWO "STREET LIGHTING"
- 4. CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- 5. ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
- 6. THE COMPLETED CONTROLLER AND ALL ELECTRICAL COMPONENTS SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508, AND SHOULD BE SERVICE ENTRANCE RATED.
- 7. METAL MOUNTING PANEL SHALL BE \*10 GAUGE GALVANIZED SHEET STEEL FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
- 8. CIRCUIT BREAKERS AND CONTACTOR AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH THICK GLASTIC INSULATION BACK PANEL.
- 9. ALL DEVICES SHALL BE FRONT REMOVABLE.
- 10. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES. NEUTRAL BUS SHALL BE PAINTED WHITE. GROUND BUS SHALL BE PAINTED GREEN.
- 11. ALL LUGS SHALL BE COPPER SCREWS AND CONNECTORS, SPRING HELD.
- 12. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
- 13. ALL CONTROL WIRING SHALL BE 600V MACHINE TOOL WIRE TYPE MTW.
- 14. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW
- 15. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER.
- 16. ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12 AWG STRANDED UNLESS OTHERWISE INDICATED.
- 17. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- 18. SERVICE EQUIPMENT SHALL BE MARKED TO IDENTIFY IT AS BEING SUITABLE FOR USE AS SERVICE EQUIPMENT.

• F.A.P. 352 ILLINOIS ROUTE 137 (SHERIDAN ROAD

SECTION STREET LIGHTING DETAILS 06-00036-00-LS LAKE 70 FED. ROAD DIST. NO. 1 CONTRACT NO. 63167 TO STA. JOB NO. C-91-197-10 | ILLINOIS FED. AID PROJECT ARA-OODI(810)

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