

24" DIA.

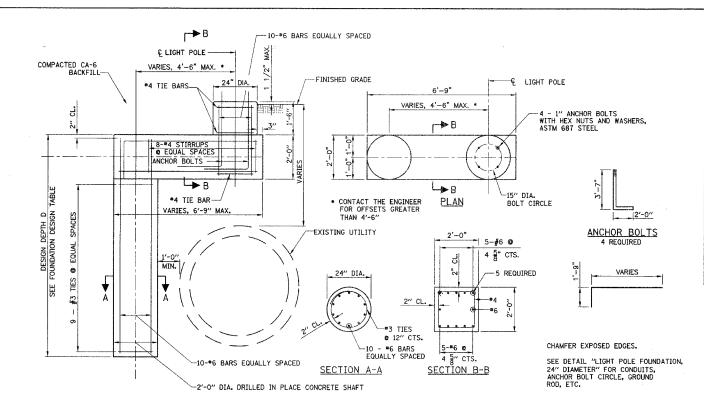
CIRCLE

TOP VIEW

12" SQ.

2 1/2"

1-8UNC-2A, 4' LG.-CARRIAGE BOLTS



DESIGN TABLE LIGHT POLE FOUNDATION. 24" DIAMETER, OFFSET

24 DIAMETER, OFFSET	
TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION D
SOFT CLAY	13'-0"
MEDIUM CLAY	9′-6"
STIFF CLAY	7′-0′′
LOOSE SAND	9'-0"
MEDIUM SAND	8'-3"
DENSE SAND	7′-9′′

NOTES FOR LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET:

OFFSET FOUNDATION WILL ONLY BE USED WHEN CONDITIONS IN THE FIELD MAKES IT IMPOSSIBLE TO USE METAL FOUNDATION.

STA.

SECTION

1338 05-00083-00-FP

CONTRACT NO. 83980 TOTAL SHEET SHEET NO.

167 114

COUNTY

TO STA-

FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT M-8003(512)

COOK

- THE QUANTITY FOR LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 3. THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE. THE CONTRACTOR SHALL NOT ORDER REINFORCEMENT BARS UNTIL THE OFFSET AND DIMENSION D ARE DETERMINED.
- EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" OR 30" IN DIAMETER.
- THE CONTRACTOR SHALL USE *3 SPIRAL AT 6" PITCH OR AT HIS OPTION MAY SUBSTITUTE *3 TIES AT 12" CENTER.
- 6. THE ANCHOR SHALL BE A TACK WELDED TYPE BOLT OR HOOK TYPE BOLT. COLD BENDING OF THE HOOK BOLT WILL NOT BE ALLOWED.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONRETE IS PLACED IN THE FORM.
- 8. THE ENTIRE LENGTH OF THE ANCHOR BOLTS AS WELL AS THE NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM DESIGNATION A 153.
- CONCRETE SHALL BE CLASS "SI". CONCRETE FOUNDATION MUST BE CURED FOR (10) TEN DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
- 10. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.
- 11. ANCHOR BOLTS SHALL PROJECT 3" ABOVE THE TOP OF THE FOUNDATION.
- 12. RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
- 13. THE CONTRACTOR SHALL COORDINATE THE EXTENSION OF ANCHOR BOLTS
 ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S
- 14. A MINIMUM OF 3" OF THE THREADING ON THE ANCHOR BOLTS SHALL REMAIN BELOW THE TOP OF THE FOUNDATION.

NOTES FOR METAL FOUNDATION

- METAL FOUNDATION SHALL BE THE FOUNDATION USED FOR ALL LIGHTING AND DECORATIVE LIGHTING UNITS UNLESS CONDITIONS IN THE FIELD MAKES IT IMPOSSIBLE TO USE METAL FOUNDATIONS, THEN AN OFFSET FOUNDATION SHALL BE USED.
- 2. FINISH: HOT DIP GALVANIZED PER ASTM-A123 (LATEST REVISION).
- BASE PLATE TO BE PERPENDICULAR TO SHAFT AXIS AND HOLE CENTERLINE CONCENTRIC TO SHAFT AXIS.
- 4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC AND IN LINE.
- CUT TWO SLOTS PERPENDICULAR TO THE BASEPLATE AND ALIGN PARALLEL TO ROADWAY OR BACK OF CURB.
- PREHEAT, TUMBLEBLAST, HAND GRIND AND CLEAN BASEPLATE, HELIX, AND PILOT POINT ON ALL WELDED AREAS.
- MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
- ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:

BASE PLATE: ASTM A36-(LATEST REVISION) STRUCTURAL STEEL (CONFORM TO AASHTO TECH. BUL. #270)

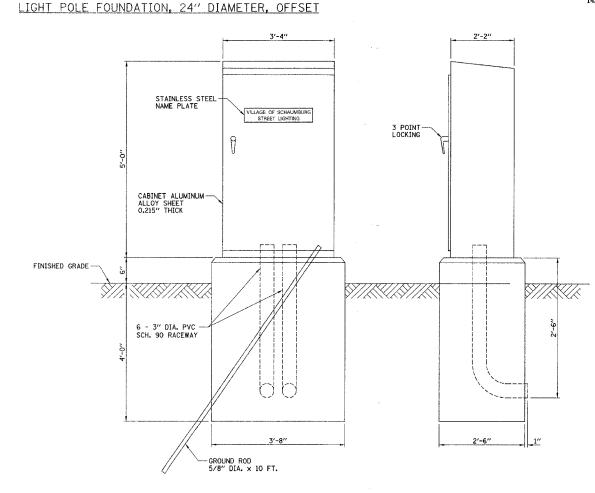
SHAFT:

ASTM A252-(LATEST REVISION) GRADE 2, STEEL PIPE PILES ALTERNATE MATERIAL: ASTM A53-(LATEST REVISION)
TYPE E OR S, GRADE 8, STELL PIPE OR ASTM A530-(LATEST REVISION) GRADE 8, STRUCTURAL STEEL TUBING.

HELIX: ASTM A635-(LATEST REVISION) HOT ROLLED STEEL.

PILOT POINT: HOT ROLLED STEEL ASTM A575 (LATEST REVISION) STEEL BAR

- CARRIAGE BOLTS PER ANSI B-18.2.1, SAE J429 GRADE-5.
- 9. BOLT CLEARANCE SLOTS IN SHAFT UNDER BASEPLATE.
- BASEPLATE IS PERMANENTLY STAMPED WITH MANUFACTURER'S IDENTIFICATION IN 1/2" LETTERS AND DATE CODE IN 1/4" LETTERS.
- 11. CORNERS OF BASEPLATE SHALL BE ROUNDED.
- 12. WELDS TO WITHSTAND A MINIMUM OF 10,000 FT. LBS. OF TORQUE APPLIED ABOUT THE VERTICAL AXIS.



CONTROL CABINET - CONSOLE TYPE

NOTES FOR CONTROL CABINET

THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3 CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

CONTROL WIRING SHALL BE NO. 12 AWG., GOOV, TYPE 'SIS' GRAY SWITCHBOARD WIRE, STRANDED COPPER.

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUS CONNECTION AND GREEN FOR GROUND BUS CONNECTORS.

PROVIDE SEALING GROMMETS FOR ALL WIRING EXTENDING FROM DEVICE ENCLOSURES.

ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL 'ENCLOSED INDUSTRIAL CONTROL PANEL'.

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR, FURNISH THE APPROVED COPY OF 'CONTROL CABINET WIRING DIAGRAM'.

CONTROLLER CABINET PAINTING NOTE:

THE CABINET SHALL BE PRIMED AND PAINTED GREEN,
A SAMPLE SHALL BE SUBMITTED WITH THE SHOP
DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE
COST OF PAINTING THE CABINET SHALL BE INCIDENTAL
TO THE COSTS OF MATERIAL AND INSTALLATION OF
STREET LIGHTING CONTROLLER.

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS

WISE ROAD

DATE: 9/28/07 DESIGNED BY: SJC CHECKED BY: DNM

ALL RADIAL SECTIONS NORMAL TO AXIS ±3" -ALL RADIAL SECTIONS NORMAL TO AXIS ±3"

-14" DTA. HELTX

- 1/2 - 13UNC TAPPED HOLE FOR GROUNDING PURPOSES

POLE FOUNDATION METAL

HELIX MUST BE FORMED BY MATCHING METAL DIE (SIDE VIEW OF TRUE HELICAL FORM)