GARDEN CITY
STNANDARD REVISIONS FOR ISPWC
DIVISION 1102 STREETLIGHTS

General Information

All work shall conform to the requirements of the latest edition of the Idaho Standards for Public Works Construction (ISPWC), the Supplementary Conditions and theses Standard Revisions. Contractor shall become familiar with these documents to ensure full understanding of the requirements of this Project. Failure to do so does not relieve the Contractor of the duties, obligations and responsibilities addressed within those documents.

The Idaho State Electrical Board has determined that all street lights are to be provided with an external fuse disconnect, in a junction box between the power source and the streetlight pole. See attached standard drawings for connection requirements.

Streetlight installation inspections will be required for the concrete base reinforcing, the trench depth and bedding, and for the pole. Contact Garden City for inspections at least two working days prior to the desired inspection (208) 472-2921.

Revisions to the standard Specifications

Part 1 General

1.7 GENERAL RESTRICTIONS
Add the following clause:
B. No privately owned electrical systems, sprinkler irrigation systems, outlets, or area lighting will be allowed to connect to any public street light system.
Add the following sections:

1.8 INSPECTIONS
A. Streetlight installations inspections will be required for the concrete base reinforcing for poles with concrete bases.
B. Visual confirmation of the backfill compaction around the pole base.
C. The conduit trench installation shall be inspected for the depth of trench and verification of the bedding suitability and placement.
D. The final inspection shall be to verify the pole is installed plumb and that the wiring in the pole and junction boxes conform to these specifications.

SECTION 1102

STREET LIGHTING

Part 2 Materials

2.3 Fuse Holders

Replace Paragraph A with the following:

A. Insulated fuse holders (installed at the base of each metal pole), one per each 'hot' lines.

a. Include the following fuse holder as approved.
SEC Model 1791-DF or SEC Model 1791-SF

Add the following paragraph

B. Insulated fuse holders (in fused junction box), one per each 'hot' lines.
SEC Model 1791-DF or SEC Model 1791-SF
b. Include the following fuse holder as approved.

2.4 CONDUCTOR

C. Pole Wiring

Change as follows:

1. Between the power source and the over-current protection fuse (located in the pole): minimum No. L AWG THWN insulated copper wire.
2. Between over-current protection fuse and luminaire: Minimum No. 10 AWG THWN insulated copper wire.

2.5 CONDUIT

B. Underground Conduit
3. Locating wire not required if wire/conductor is installed.

2.7 DISCONNECT BOXES

D. Disconnect boxes are only required for overhead wiring.

2.8 MAST ARMS FOR WOOD POLES NOT USED FOR GARDEN CITY INSTALLATIONS

2.9 WOOD POLES NOT USED FOR GARDEN CITY INSTALLATIONS

2.10 METAL POLES

Replace paragraphs B, C, and D with the following:

B. Pole finish shall be;
1. Concrete base mounted poles, hard coated anodic anodized or baked enamel.
2. Direct burial poles, electrostatic powder coating, fusion bonded externally and internally to one foot above bury depth.

C. Pole installation shall require an approved direct burial pole or be installed with a concrete base (see paragraph 2.14). See Standard Drawings SE-1109, SD-1116 and SD-1117.

D. Poe height shall be as shown on the bidding documents measured from finished grade.

Add the following paragraphs:

E. Use only fixtures and mast arms compliant with manufacturer's recommendations.

F. Poles may be square, round or tapered round. Decorative Poles are prohibited.

2.11 FIBERGLASS POLES

Replace line A and B with the following:

A. All poles must be wind-load rated in accordance with AASHTO's Standard Specification for Structural Supports for Highway Signs, Luminaries, and Traffic Signal, dated 1980 or latest version thereof. The wind load Rating Number is calculated on the Allowable Project Area (corrected for shape) at an 80 mph steady wind plus a 1.3 Gust Factor.

B. Use only fixtures and mast arms compliant with manufacturer's recommendations.

Add the following paragraph:

C. Poles may be square, round or tapered round. Decorative poles are prohibited.

2.13 BOLLARDS NOT USED FOR GARDEN CITY INSTALLATIONS.

2.15 PREFABRICATED BASES NOT FOR USE IN GARDEN CITY INSTALLATIONS

2.16 SERVICE PEDISTAL

Replace the color for powder coat finish in paragraph C with "White"

2.17 LIGHT FIXTURES

Replace paragraphs C, E and F with the following:

C. Fixtures to have E.I.S. full cutoff distribution reflector.

G. Acrylic or glass flat lens with internal refractor providing an I.E.S. Type III distribution

H. Approved fixture types as follows:

1. Shoe Box fixture, Lithonia Lighting, Contour series, KAD 1005 TB; GE Decashield Series, or approved equal.

Add the following paragraph for historical light fixtures.

I. See standard drawing BC SD-8 for approved fixture model numbers. Fixtrues to incorporate internal "dark skies" reflector.

PART 3 Workmanship

3.1 EXAMINATIONS

Replace paragraph A with the following:

A. Verify the pole excavation location and depth match the plans and these specifications, prior to installation of the pole.

B. Add the references Standard Drawing DS-1124 and SD-1122 to this section regarding clearances.

3.2 JUNCTION BOX INSTALLATION

Replace paragraph A with the following:

A. Install to locations as shown on the plans and at the power source (per BC SD-23). If not shown, space equidistant, not to exceed 400 feet, along straight conduit runs, at sharp bends, at wire splices, or where direct burial and conduit junctions occur.

Replace paragraph C with the following:

C. Install the junction box on a 6" thick bed of compacted ¾" crushed aggregate base material that extends 4 inches beyond the exterior of the box sides.

3.3 CONDUIT INSTALLATION

B. Underground:

Add to item 5 "Locating wires only required for conduit in which the conductors are not installed in conjunction with the conduit."

3.6 DISCONNECT BOXES NOT USED FOR GARDEN CITY INSTALLATIONS

3.7 GROUNDING

Add to paragraph C reference to City of Garden City standard drawing BC SD-23

3.8 POLE INSTALLATION

In paragraph B delete reference to wood poles. Add reference to City of Garden City standard drawing BC SD-23

Replace paragraph F and replace with the following:

F. Backfill and compaction requirements:
    1. Backfill voids within 6-inches of the pole with crushed aggregate conforming to Section 802, Type I. Compact the backfill material to 95% maximum dry density. Use of sonotube forms to contain the imported material is acceptable but is not required.
    2. Back fill other disturbed soils in accordance with Section 204. Compact the backfill material to 92% maximum dry density.

G. NOT USED FOR GARDEN CITY INSTALLATIONS

Delete paragraph H and replace with the following:

H. Install direct burial ploes in accordance with SD-1119. The insertion hole shall be a minimum diameter of 12 inches. (See paragraph F. for compaction requirements)

3.11 SERVICE PEDISTAL

Replace standard drawing references SD-1123 and SD-1124 in paragraph B with SD-1125 and SD-1126

REVISIONS TO STANDARD DRAWINGS

SD-1109 Revise Pole Foundation Schedule, second line, Mt Ht to be 25'-30'

SD-1117 Delete this drawing. Replace with new SD-1117, Standard Concrete Base Street Light Installation.

SD-1119 Delete this drawing. Replace with new SD-1119, Standard Direct Burial Street Light Installation

SD-1120 Delete this drawing

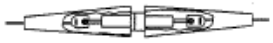
SD-1121 Delete this drawing

SD-1122 Delete this drawing. Replace with new SD-1122, Required Power Company Power Clearances.

SD-1123 Delete this drawing

SD-1124 Delete this drawing. Replace with new SD-1122, Required Power Company Power Clearances.

SD-1127 Replace this drawing with new Sd-1127

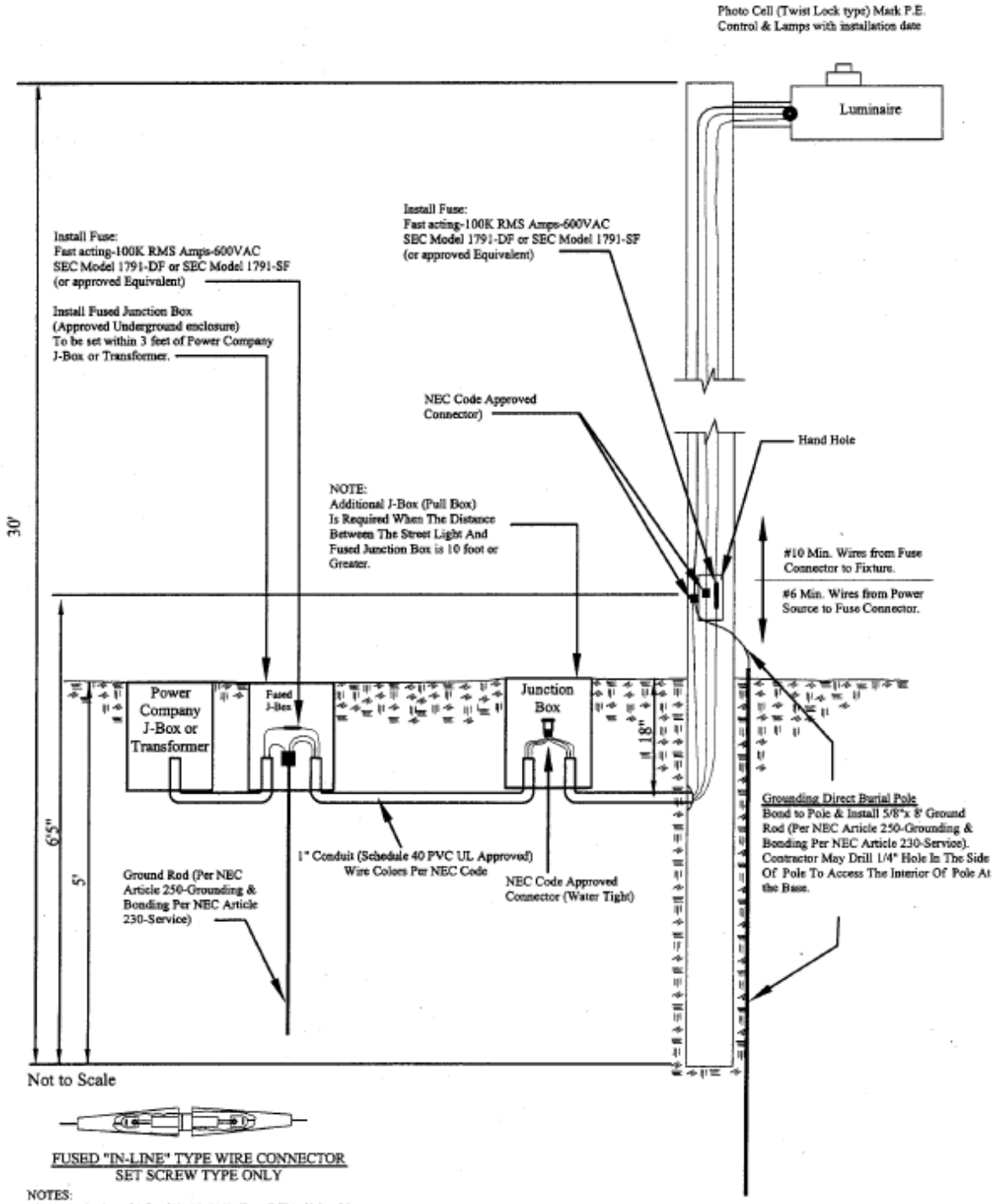


FUSED "IN-LINE" TYPE WIRE CONNECTOR
SET SCREW TYPE ONLY

NOTES:
(1) THE CONTRACTOR SHALL VERIFY LINE VOLTAGE PRIOR TO CONNECTING WIRE CONNECTORS.

(2) CONTRACTOR SHALL CONNECT CONDUCTOR FROM THE WIRE CONNECTOR TO NEW LUMINAIRE WITH A NO. 10 AWG. TYPE THW. 600V INSULATED WIRE.

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	STREET LIGHT INSTALLATION 25' STANDARD CONCRETE BASE	STANDARD DRAWING NO. SD-1117 REVISED: 08/10/2006



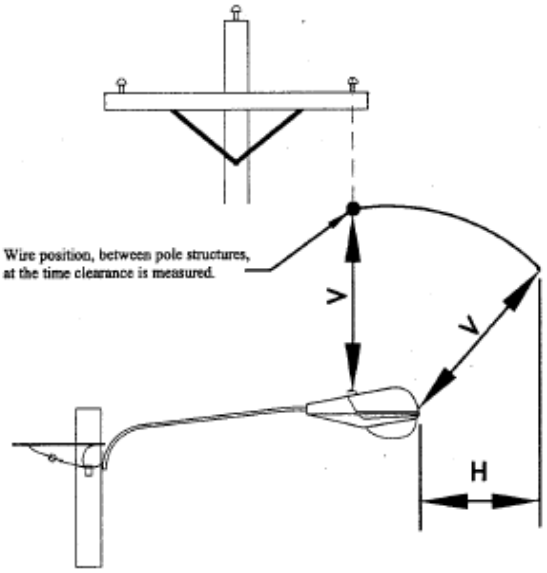
Not to Scale

FUSED "IN-LINE" TYPE WIRE CONNECTOR
SET SCREW TYPE ONLY

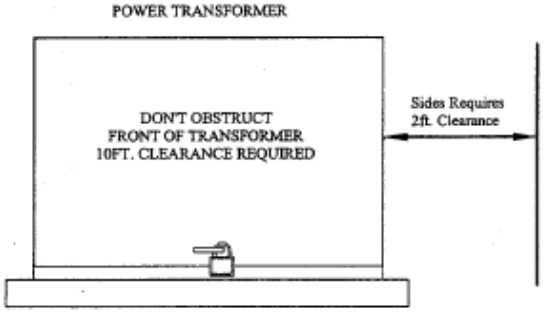
NOTES:
(1) THE CONTRACTOR SHALL VERIFY LINE VOLTAGE PRIOR TO CONNECTING WIRE CONNECTORS.

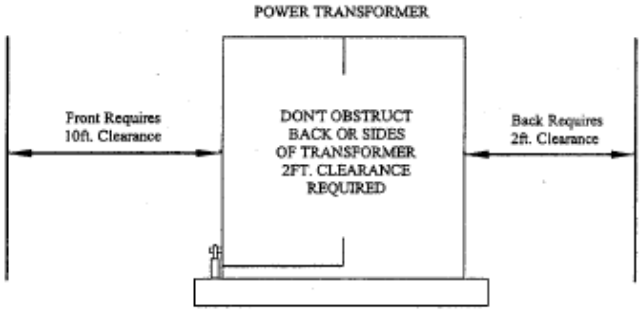
(2) CONTRACTOR SHALL CONNECT CONDUCTOR FROM THE WIRE CONNECTOR TO NEW LUMINAIRE WITH NO. 10 AWG. TYPE THW. 600V INSULATED WIRE.

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	STREET LIGHT INSTALLATION 25' STANDARD DIRECT BURIAL	STANDARD DRAWING NO. SD-1119 REVISED: 08/10/2006



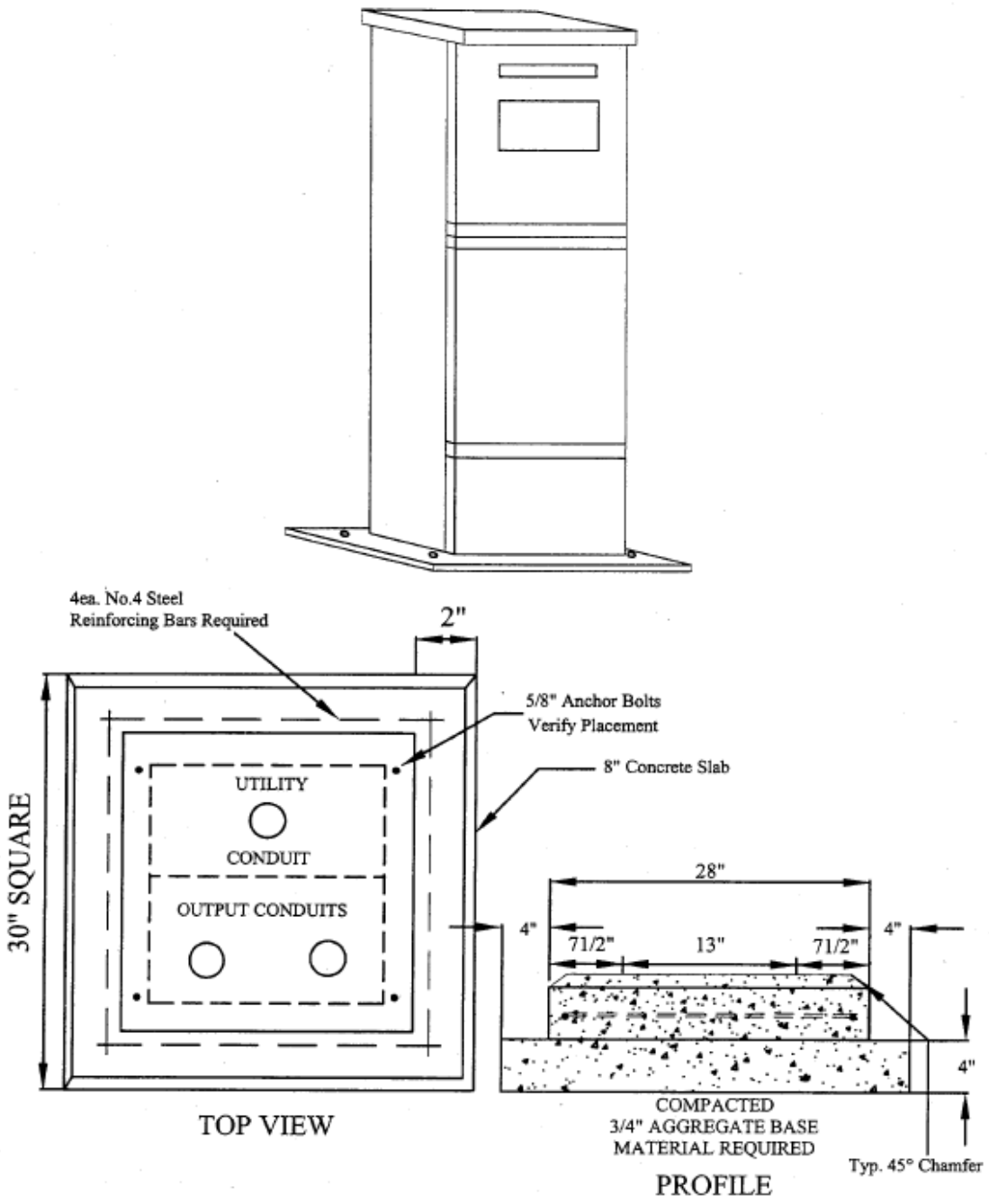
NOTE:
Minimum (H) Horizontal (V) Vertical clearances is 10 feet (NESC OSHA) plus appropriate provision for high temperature and wind displacement. Temperature and displacement data can be obtained from Local Power Company.





IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	REQUIRED POWER CLEARANCES	STANDARD DRAWING NO. SD-1122 REVISED: 08/10/2006

TYPICAL SERVICE PEDESTAL



IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	STREET LIGHT SERVICE PEDESTAL BASE	STANDARD DRAWING NO. SD-1127 REVISED: 08/10/2006

*This document was amended from Boise City Standard Revisions for ISPWC Division 1102 Streetlights to meet the needs of Garden City