MEMORANDUM

To: Developers, Engineers, Architects, etc.

From: Dana Q. Shuler, P.E.
City Engineer's Office
Jones & Associates Consulting Engineers

RE: Street Light Standards Modification
Revision 2 to Pleasant View City *Development, Design, & Construction Standards* (e.g. City Standards)

Date: March 24, 2021

On March 23, 2021, Pleasant View City Council approved Revision 2 to the City's *Development, Design, & Construction Standards.* This revision includes a modification to APWA Specification 26 56 19 Roadway Lighting and replaces City Standard detail sheet CS-21 with sheets CS-21, CS-21A, CS-21B, and CS-21C.

For more detailed information, please Specification 26 56 19 M – Roadway Lighting (Modified) and above referenced detail sheets.

If you have any questions, please feel free to contact me.

SECTION 26 56 19 M
ROADWAY LIGHTING (MODIFIED)

PART 1 GENERAL

1.1 **SECTION INCLUDES**

Replace paragraph B with the following:

B. Testing, restoration, salvage.

Add the following paragraph C:

C. Responsibility of DEVELOPER/CONTRACTOR and OWNER

1.2 **REFERENCES**

Replace paragraph D with the following:

D. OWNER Public Works Standard Drawings.

Add the following paragraphs E and F:

E. International Building Code, Structural Requirements, as adopted by OWNER.

F. Rocky Mountain Power Standards.

1.3 **SUBMITTALS**

Add paragraph D:

D. The following shall be submitted and approved by the OWNER:

1. Prior to Installation: Roadway Lighting Plan, showing wiring location, wiring type, voltage, power source location, conduit size and location, junction boxes, and light types. Specifications for cable, conduit, fuse kits, splice kits, junction boxes, and connectors.
2. After Installation, but Prior to Connection to Power: Electronic copy of the Roadway Lighting Plan redlines showing the same items as listed above.
3. Record Drawings: Exact location of the conduit shall be shown and dimensioned or shot in with GPS for future OWNER Blue Staking.

PART 2 PRODUCTS

Replace Section 2.2 with the following:

2.2 **CONDUCTORS/WIRES**

A. Materials:

1. Conductors: Okonite-FMR Type TC-Cable #112-10-4054, Okonite X-Olene Okoseal #112-31-3747, or Anixter VNTC #3H-0603 copper only.
2. Insulation: RHH-RHW-USE grade cross link polyethylene.

3. Wire: No aluminum wire allowed.
    a. #6 AWG-RHW-2 copper lines from power source to boxes.
    b. From pole base or (hand hole) to the fixture head #10 or #12 THHN copper will only be allowed.
    c. Wire to be black, white, green or phased taped at both ends.
    d. Multiple Pole Installation: Wire size shall be designed by an electrical engineer with no more than a 3% drop in the nominal voltage at the base of each pole. The minimum wire size shall be a #6 AWG RHW copper wire suitable for wet conditions.
    e. Wire must extend 18-inches above grade to splice in ground box.

B. Fuse Holders: In-line, watertight LEC-AA.

C. GFCI Outlets: Wired to come on and off with the light.

D. Splicing:
1. Compatible with cable insulation and water seal for underground use. Comply with UL code.
2. Located a minimum of 3-feet and a maximum of 10-feet from Rocky Mountain Power transformer or secondary box, leave pigtail 8-feet long to secondary box.

E. Conduit:
1. Size and Type:
    a. 2” minimum schedule 40 gray non-conductive PVC unless otherwise specified.
    b. Approved cap or duct seal on ends to prevent debris from entering conduit during construction.
    c. Stronger conduit material, larger conduit size, or larger sweeps may be required for long runs or where more than three (3) bends are needed.
2. Cover:
    a. Conduit bury depth: See OWNER Standard Drawings
3. Pull Line:
    a. Flat pull line capable of withstanding 1000 lbs of tension
    b. 72-inches of extra line capable of extending from each end of conduit.
    c. Secure inside the ends of the conduit and both ends capped.
4. Sweeps and Bends: 90-degree sweeps/bends shall have a minimum of 18-inch radius and a maximum of 24-inch radius.
5. Marker Tape: Minimum 6-inch wide plastic marker tape along the entire length of run 12-inches below grade.

Delete 2.3 in its entirety and replace with the following:

2.3 **LIGHTING ASSEMBLY**

A. Base, pole, luminaire support, and luminaire per OWNER Residential (LP-1), Corridor (LP-2), and Intersection (LP-3) shown in OWNER Standard Drawings.

2.4 **JUNCTION BOXES**

Add item 3 to paragraph A:

3. Shall include:
    a. Fuse hot wires in junction boxes.
    b. Supply waterproof splice kit for neutral cable.

Add paragraph C:

C. Connection to light may also serve as a point of disconnect if located within 10-feet of power source.

Replace Section 2.6 in its entirety and replace it with the following:

2.6 **CONNECTIONS**

A. Wire nuts will be allowed in the pole base only.

B. A Littlefuse LEBJJ fuse holder (or equivalent) with weatherproof rubber boots, mechanical connection, 600 volt rated and 65 AMP rated.

C. Fuse shall be 10 AMP BLF, 20 AMP BLN and 65 AMP BLN or equivalent one time fuse.

D. Fuse holder shall be placed on all hot leads.

E. No crimp connections allowed.

Revise Section 2.8 as follows:

2.8 **POLYSULFIDE BASE, SINGLE COMPONENT SEALANT** [Not Used]

PART 3 EXECUTION

3.1 **PREPARATION**

Replace item F with the following:

F. Compact excavated trench material; see Section 33 05 20.

3.2 POLE FOUNDATION

Replace paragraph B, item 3c with the following:

B. Locations:
   3.
      c. As shown on OWNER Public Works Standard Drawings

Add subparagraph d:

      d. For mid-block installations, locate on or near side lot line or extension thereof.

3.8 PAINTING

Add paragraph D:

D. Damage to pole and/or base coating shall be repaired based on manufacturer's recommendations.

3.9 FIELD QUALITY CONTROL

Add paragraph E :

E. OWNER shall conduct Inspections as follows:
   1. Underground infrastructure shall remain unburied until it has been approved by the Inspector.
   2. Foundation shall be inspected before streetlight assembly installation.
   3. Streetlight assembly installation.

3.11 RESTORATION

Replace paragraph B with the following:

B. Restore paved surfaces in compliance with OWNER's standard asphalt patching requirements.

Add paragraph D:

D. Repair or replace damaged sprinklers and lines.

Add the following Part 4:

PART 4 RESPONSIBILITY

4.1 PAYMENT

A. DEVELOPER of a new subdivision shall be responsible for all **costs** associated with the installation and electrical service to new streetlights, including but not limited to:

1. Electrical service to the development from ROCKY MOUNTAIN POWER
    a. Drawings
    b. Approval
    c. Plat (where applicable)
    d. Connection to existing power
    e. Mainline conduit and cable, transformers, secondary boxes, service to all lots
    f. Work order
2. Conduit from power source (transformer or secondary box) to streetlight location.
3. Location of as-built conduit locations (survey-grade GPS).
4. Junction box near power source.
5. Splice box or interim junction boxes.
6. Junction box near streetlight.
7. Sonotube for streetlight foundation.
8. Rebar cage for streetlight foundation.
9. Concrete streetlight foundation.
10. Streetlight bolt pattern / assembly in foundation.
11. Streetlight and fixture assembly (complete).
12. Wire cable from power source to streetlight.
13. Power source connection for streetlight.

4.2 INSTALLATION AND COORDINATION

A. DEVELOPER of a new subdivision shall be responsible for the installation and coordination of the following:

1. Power service to the development from ROCKY MOUNTAIN POWER
    a. Drawings
    b. Approval
    c. Plat (where applicable)
    d. Connection to existing power
    e. Mainline conduit and cable, transformers, secondary boxes, service to all lots
    f. Work order

2. Conduit from power source (transformer or secondary box) to streetlight location with approved OWNER location marker (see drawings).
3. Junction box near power source.
4. Splice box or interim junction boxes.
5. Junction box near streetlight.
6. T-post delineating streetlight location

B. OWNER shall be responsible for the installation and coordination of the following:

1. Work order with ROCKY MOUNTAIN POWER for electrical service to streetlights
2. Location of as-built conduit locations (survey-grade GPS)
3. Sonotube for streetlight foundation
4. Rebar cage for streetlight foundation
5. Concrete streetlight foundation
6. Streetlight bolt pattern / assembly in foundation
7. Streetlight and fixture assembly (complete)
8. Wire cable and accessory connections from power source to streetlight
9. Grounding rod
10. ROCKY MOUNTAIN POWER connection of the power source to the streetlight.

4.3 TABLE OF ABOVE INFORMATION

D = DEVELOPER O = OWNER RMP = ROCKY MOUNTAIN POWER

	Paid For By	Coordinated / Installed By
Power service to the development from RMP: drawings, approval, plat (where applicable), connection to existing power, mainline conduit and cable, transformers, secondary boxes, service to all lots	D	D
Work Order with RMP for electrical service to streetlights	D	O
Conduit from power source (transformer or secondary box) to streetlight location	D	D
Location of as-built conduit location (survey-grade GPS)	D	D or O
Junction Box near power source	D	D
Splice Box or interim junction boxes	D	D
Junction Box near streetlight	D	D

T-post delineating streetlight location	D	D
Sonotube for streetlight foundation	D	O
Rebar cage for streetlight foundation	D	O
Concrete streetlight foundation	D	O
Streetlight bolt pattern/assembly in foundation	D	O
Streetlight pole and fixture assembly (complete)	D	O
Wire cable from power source to streetlight	D	O
Power source connection for streetlight	D	O & RMP

END OF SECTION

SECTION 26 56 19

ROADWAY LIGHTING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Materials and procedures for installing roadway lighting system.

B. Testing, painting, restoration, salvage.

1.2 REFERENCES

A. **ASTM Standards**:

B3 Soft or Annealed Copper Wire.

B8 Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft.

D2301 Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape.

B. **NEMA Standards**:

250 Enclosures for Electrical Equipment (1000 Volts Maximum).

C. **NFPA Standards**:

70 National Electric Code.

D. **SSPC Standards**:

25 BCS Zinc Oxide Alkyld, Linseed Oil Primer for.

1.3 SUBMITTALS

A. Shop Drawings and Product Data: Complete, bound, indexed, large enough for all items included. When requested, supplement the following list by such other data as may be required, including detailed scale drawings and wiring diagrams of any special equipment and of any proposed deviation from the Contract Documents:

1. Performance data for luminaires, including lighting contours on the roadway surface and average maintained level of light in foot-candles.
2. Shop Drawings for luminaires showing pertinent physical characteristics, type of light source, and wattage.
3. Shop Drawings of ornamental poles.
4. Luminaire supports.
5. Pole bases.
6. Wiring schematic.
7. Fixture mounting height.
8. Drawing showing location of poles and underground power conduit.

B. Warranties and instruction sheets.

C. Testing results of this section article 3.9.

1.4 **MAINTAINING EXISTING AND TEMPORARY ELECTRICAL SYSTEMS**

A. Notify ENGINEER before performing any work on existing systems.

B. Allow 20 feet minimum overhead clearance across thoroughfares and 12 feet minimum clearance above sidewalk areas. Do not run temporary conductor on top of the ground or across any sidewalk area unless protected in an electrical raceway and barricaded.

C. Maintain existing electrical systems or approved temporary replacements, in effective operation for the benefit of the traveling public during the progress of the Work, except when shutdown is permitted to allow for alteration or removal of the systems. Do not interfere with the regular lighting schedule.

PART 2 PRODUCTS

2.1 **EXISTING MATERIALS**

A. Where existing systems are to be modified, incorporate existing material in revised system, salvage, or abandon.

2.2 **CONDUCTORS**

A. Materials:

1. Solid or stranded copper of size indicated conforming to ASTM B3 and ASTM B8.

2. Insulation; RHH-RHW-USE grade cross link polyethylene compound.

3. Color and coding of 120/240 volt, Section 26 05 13.

B. Splicing: Compatible with cable insulation and water seal for underground use. Comply with UL code.

C. Conduit: Section 26 05 33.

2.3 **POLES AND LUMINAIRE SUPPORTS**

A. Height, type, configuration and base detail required.

2.4 **JUNCTION BOXES**

A. Buried type; Section 26 05 34 and as follows:

1. Precast reinforced concrete in sidewalk and paved surfaces.

2. Plastic in landscaped surfaces.

B. Cover Stencil: "Street Lighting". Where box contains street lighting voltage greater than 600 volts, stencil "High Voltage".

2.5 INSULATING TAPE

A. Type 1 vinyl chloride, ASTM D2301.

2.6 LUMINAIRE

A. Luminaire Assembly: Standard Highway Luminaire (Cobra Head) shoe box design:
   1. Die-cast aluminum housing with high temperature wiring.
   2. Reflectors, sockets, mounting cradles, and clamps properly fitted to the housing.
   3. Luminaire weight and projected area within design loading limits.
   4 Replaceable air filter and IES distribution type as indicated.

B. Mounting adjustment:
   1. Ten degrees above horizontal for the reflector and refractor.
   2. Five degrees adjustment from vertical on the bracket arm.

C. Lamps: Metal halide, 250 or 400 watts as indicated:
   1. Clear uncoated, pulse start.
   2. Apparent color temperature of 3800 K.
   3. Rated-life of not less than 20,000 hours (400 Watt) or 10,000 hours (250 Watt) when used on a 10 hour per start duty cycle.

D. Ballast: Replaceable prewired with minimum primary power factor of 90 percent with normal secondary load with sufficient open circuit voltage to start lamps at minus 20 deg F Ballast shall provide regulation with five (5) percent variation in lamp watts with a 10 percent variation in primary voltage.

E. Bonding and Grounding: Copper wire strap No. 6 AWG minimum.

F. Paint: None.

2.7 CONTROL EQUIPMENT

A. General: Failure of any electrical component will energize the lighting circuit.

B. Photo-electric Control: At least one (1) and five (5) foot candles sensitivity.

C. Control Relay Contacts Rating: Switch on at 3,000 watts minimum.

D. Remote Control Relays: Normally open.

E. Relays: Either mechanical armature type or mercury tube type, single or double pole, or as indicated:
   1. Mechanical armature type: An operating coil (120 volts), a laminated core, a laminated armature, terminals and silver alloy contacts.
   2. Mercury tube type: An operating coil, hermetically sealed mercury tubes and terminals. Contacts shall be made either mercury to mercury or between mercury and alloy resistant to arcing and mercury amalgamation.

F. Enclosure: NEMA 250 Type 4 with dead front panel, keyed padlock

G. Paint: Waterproof.

2.8 **POLYSULFIDE BASE, SINGLE COMPONENT SEALANT**

A. Chemical curing; capable of being continuously immersed in water, withstand movement up to 20 percent of joint width, and satisfactorily applied throughout a temperature range to 40 to 80 deg F, Shore A hardness of 15 minimum and 50 maximum; nonstaining and non-bleeding; color as selected by ENGINEER.

2.9 **CONCRETE AND GROUT**

A. Concrete: Class 3000 minimum cast-in-place, Section 03 30 04.

B. Grout: Cement, Section 03 61 00.

PART 3 EXECUTION

3.1 **PREPARATION**

A. Locate and preserve utilities, Section 31 23 16.

B. Excavate; Section 31 23 16 and backfill; Section 33 05 20.

C. Do not disturb roadway surface, sidewalk, curb, gutter, or other obstructions without approval.

D. Do not block or restrict pedestrian traffic, vehicle traffic, drainage or utilities.

E. Barricade all Excavations in traveled ways.

F. Compact excavated Trench material; Section 33 05 20 to the requirements of the adjacent areas.

G. After backfilling Excavations, maintain smooth and well-drained surfaces until permanent repairs are effected.

H. Legally dispose of all excess or waste material.

3.2 **POLE FOUNDATION**

A. Construct foundation per details indicated and Section 34 41 13.

B. Locations:

1. 18 inches clear from pull box.
2. Not in pedestrian access way.
3. Unless specified otherwise:
   a. 5 feet from new tree.
   b. 10 feet from existing tree, driveway, or hydrant.
   c. Center of park strip or 24 inches clear from top back of curb on wide park strips.

3.3 **CONDUIT INSTALLATION**

A. In structural applications, use rigid steel conduit in areas subject to vehicular load, on the surface of structures, inside of structures and

foundations, between structures, and the adjacent pull boxes located next to structures.

B. In buried utility applications, place conduit as follows.

Location	Depth of Burial, inches
In front of curb faces	36 to 60
Back of the back of curb	24 to 36
Railroad tracks	36 to 60
Primary power cables	40 minimum

C. Use sizes of conduit indicated or use larger sizes for any run at no additional cost to OWNER. No expanding or reducing fittings will be permitted.

D. Make field cuts square and true so that the ends will come together for full circumference. Paint threads on all rigid steel conduit with rust preventive paint before couplings are made. Repair damaged coating on galvanized steel conduit.

E. Cap all conduit ends with standard pipe caps until wiring is installed. When caps are removed from metallic conduit, provide threaded ends and approved conduit bushings.

F. Clean all existing underground conduit to be incorporated into new system with a mandrel and blow out with compressed air. Where existing rigid steel conduit systems are to be modified or extended, install rigid steel conduit.

G. Make changes in direction by bending the conduit to a radius which will meet code or, preferable, by the use of standard bends or elbows.

H. Install a No. 12 AWG pull wire or equivalent strength cord in all conduits which are to receive future conductors. Leave at least two (2) feet of pull wire extending beyond each end of the conduit run and secure.

I. Center conduit ends within the bolt circle of traffic signal poles or pedestals.

J. Pack conduit ends with sealant after conductors are installed.

K. Cap all conduit terminated without a pull box and identify its location by monumenting.

3.4 CONDUCTOR INSTALLATION

A. Install wiring per the appropriate articles of NFPA 70. Neatly arrange wiring within cabinets, junction boxes, etc.

B. Splice only at junction boxes, transformer leads, in pole bases, or at control equipment. Splice conductors as per manufacturer's recommendations and codes. Provide a fused connector between the line and the ballast, accessible at the hand holes located in the poles.

C. Provide conduit to separate low-voltage conductors from high-voltage conductors in the same raceway (i.e. poles).

D. Splice insulation shall consist of layers of vinyl chloride electrical insulating tape applied to a thickness equal to and well lapped over the original insulation to provide uninterrupted underwater operation.

E. Leave two (2) feet of slack at each pole. Leave 18 inches of slack above top of pull box grade.

F. Mark termination of each conductor. Where circuit and phase are clearly indicated by conductor insulation, bands need not be used, otherwise use bands.

3.5 GROUNDING INSTALLATION

A. Effectively ground metallic cable sheaths, metal conduit, nonmetallic conduit grounding wire, ballast and transformer cases, service equipment, anchor bolts, metal poles, and pedestals, and make mechanically and electrically secure to form a continuous system. Use a copper wire strap for bonding and grounding jumpers of the same cross-sectional area as No. 6 AWG for all lighting systems.

B. Ground one side of the secondary circuit of series-multiple and step-down transformers. Ground metal conduit, service equipment, and neutral conductor at service point as required by NEC and electricity company with grounding conductor No. 6 AWG or larger.

C. In all nonmetallic (PVC) type conduit, provide a No. 8 AWG bare copper wire continuously and ground at each junction box.

D. At each multiple service point, unless otherwise indicated, furnish a ground electrode. Use copper coated ground electrodes of steel or iron in one piece lengths at least 3/4 inch in diameter. Do not use electrodes of nonferrous materials less than 1/2 inch in diameter.

E. Bond metal poles by means of a No. 8 AWG bonding wire attached from a grounding bushing to a foundation bolt or to a 3/16 inch or larger brass or bronze bolt installed in the lower portion of the pole.

F. On wood poles, ground all equipment mounted less than eight (8) feet above the ground surface.

G. Ground metallic conduit or bonding conductor system at intervals less than 500 feet to one of the following:

1. 1 inch galvanized pipe driven eight (8) feet deep.
2. 1/2 inch copper rod driven eight (8) feet deep.
3. Metal water main with the approval of the water company. Clean water main thoroughly before connection.

H. Use galvanized grounding bushings and bonding jumpers for bonding metallic conduit in a concrete pull box. Use lock nuts for bonding metallic conduit in steel pull boxes, one inside and one outside of the box.

I. Pull Boxes: Install 3/4 inch x 10 feet copper clad ground rods at each pull box, six (6) inches above bottom. Ground all metal parts, neutral and ground wire with #6 B.C. Use exothermic weld or hammerlock connection.

3.6 JUNCTION AND PULL BOX INSTALLATION

A. Install at locations indicated, and at additional points when conduit runs are more than 200 feet. Without additional cost to OWNER and at CONTRACTOR's convenience add such additional boxes as may be

desired to facilitate the work.

B. Rest bottom of pull box firmly on 12 inches thick bed of 1 inch crushed rock extending a minimum of six (6) inches beyond the outside edge of box.

C. Establish grade of top of boxes as for foundations.

D. Place long side of box parallel to curb unless indicated.

E. Use box extensions if ballasts or transformers are installed in box.

F. Do not install boxes in Driveway aprons.

3.7 LUMINAIRE AND BALLAST INSTALLATION

A. Immediately before installation, clean all light control surfaces, refractors, and reflectors to provide the maximum lumen output possible. Clean per luminaire manufacturer's recommendations.

B. Mount at height indicated.

C. Adjust luminaires individually to give the optimum light distribution.

3.8 PAINTING

A. Apply coatings, Section 09 91 00.

B. Recoat all painted equipment when relocated.

C. Use two (2) coats of paint on relocated and new work.

3.9 FIELD QUALITY CONTROL

A. Conduct and record date and time of following tests:

1. Continuity of each circuit.
2. Grounds in each circuit.
3. Megger test at 500 volts DC on each completed lighting circuit. The insulation resistance to ground shall be 10 megohms minimum.
4. Voltage and current on each circuit.

B. Functional Test:

1. Perform a functional test. Demonstrate each and every part of the system functions as specified or intended.
2. A functional test for each new or modified electrical system will consist of not less than five (5) days of continuous, satisfactory operation. If unsatisfactory performance of the system develops, correct the condition and repeat the test until the five (5) days continuous satisfactory operation is obtained.
3. Do not start functional tests or turn-ons on Friday, or on the day preceding a legal holiday.
4. Shutdowns caused by factors beyond CONTRACTOR's control will not constitute discontinuity of the functional test.

C. Replace or correct any material revealed by these tests to be faulty.

D. Provide equipment, personnel, cable connections, and electrical energy for testing. Certify that each circuit has been completely tested and testing procedures are satisfied.

3.10 **SALVAGE**

A. Terminate all conduit abandoned in place at least five (5) inches below finished grade.

B. Exercise care in removing equipment to be reused or salvaged so that it will remain in the condition existing before its removal.

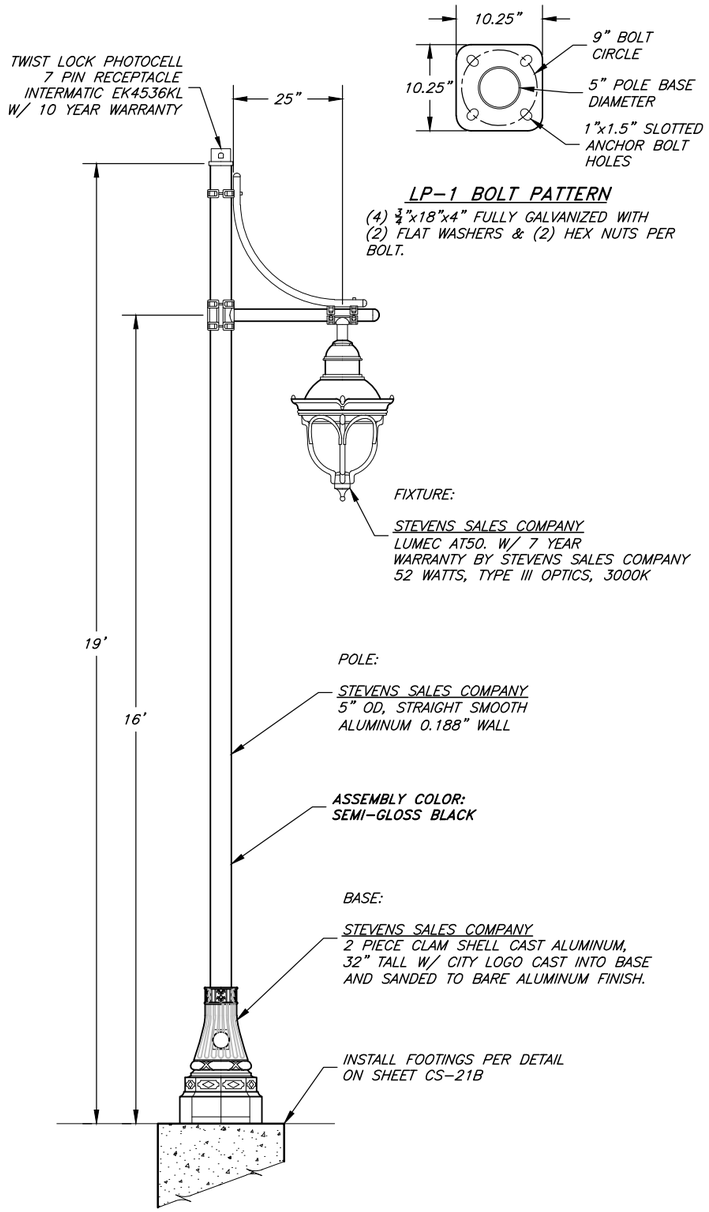
3.11 **RESTORATION**

A. Replace damaged equipment, concrete work or other fixtures or features disturbed or damaged by the installation.

B. Restore paved surfaces, Section 33 05 25.

C. Finish landscaped surfaces to match existing with grass, Section 32 92 00 or with other ground cover, Section 32 93 13.

END OF SECTION

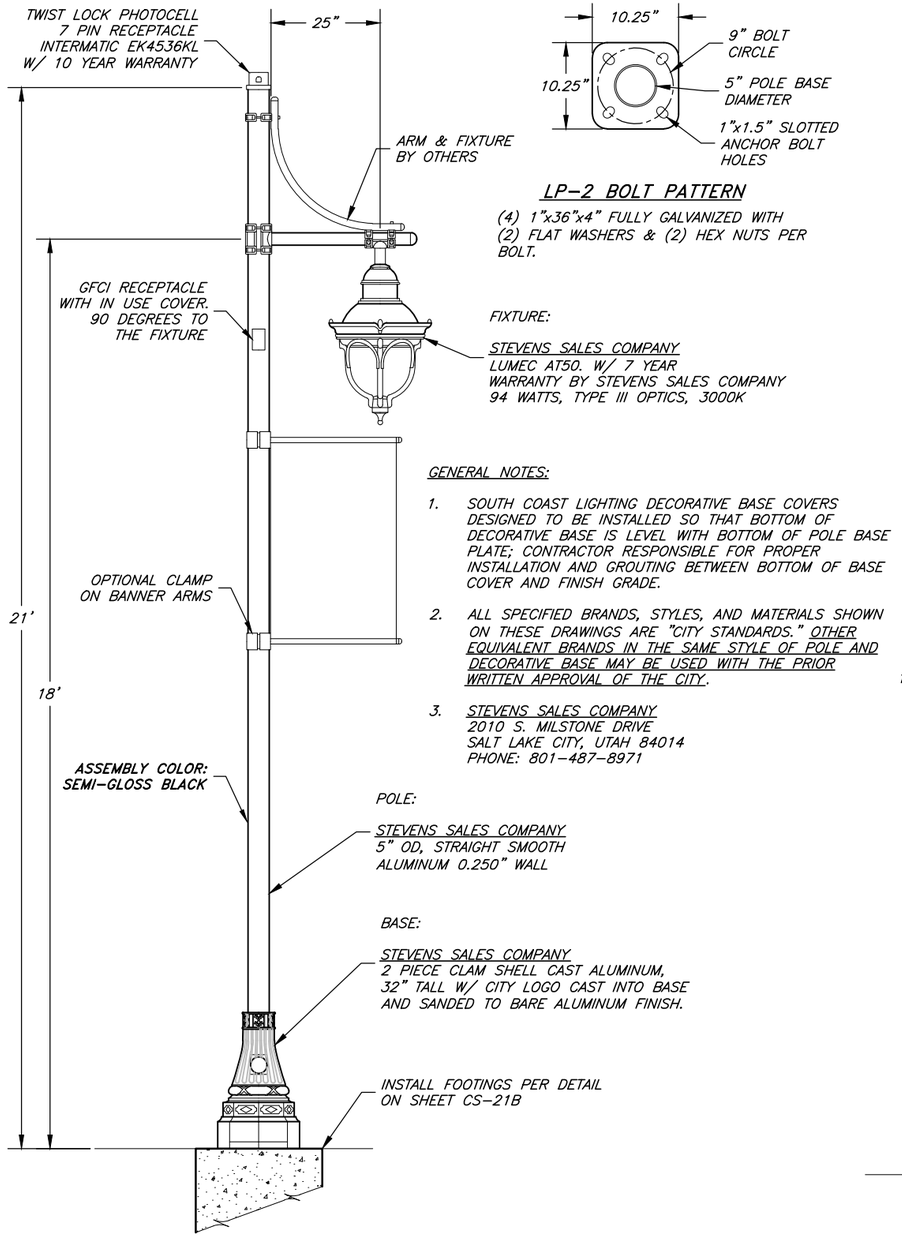


LP-1 BOLT PATTERN

(4) ¾"x18"x4" FULLY GALVANIZED WITH (2) FLAT WASHERS & (2) HEX NUTS PER BOLT.

LP-1 RESIDENTIAL STREETLIGHT

A. ALL HARDWARE STAINLESS STEEL
B. ALL WELDS IN ACCORDANCE WITH AWS WELDING CODE
C. ENTIRE ASSEMBLY FINISH COATED SEMI-GLOSS BLACK PER CITY SPECIFICATIONS



LP-2 BOLT PATTERN

(4) 1"x36"x4" FULLY GALVANIZED WITH (2) FLAT WASHERS & (2) HEX NUTS PER BOLT.

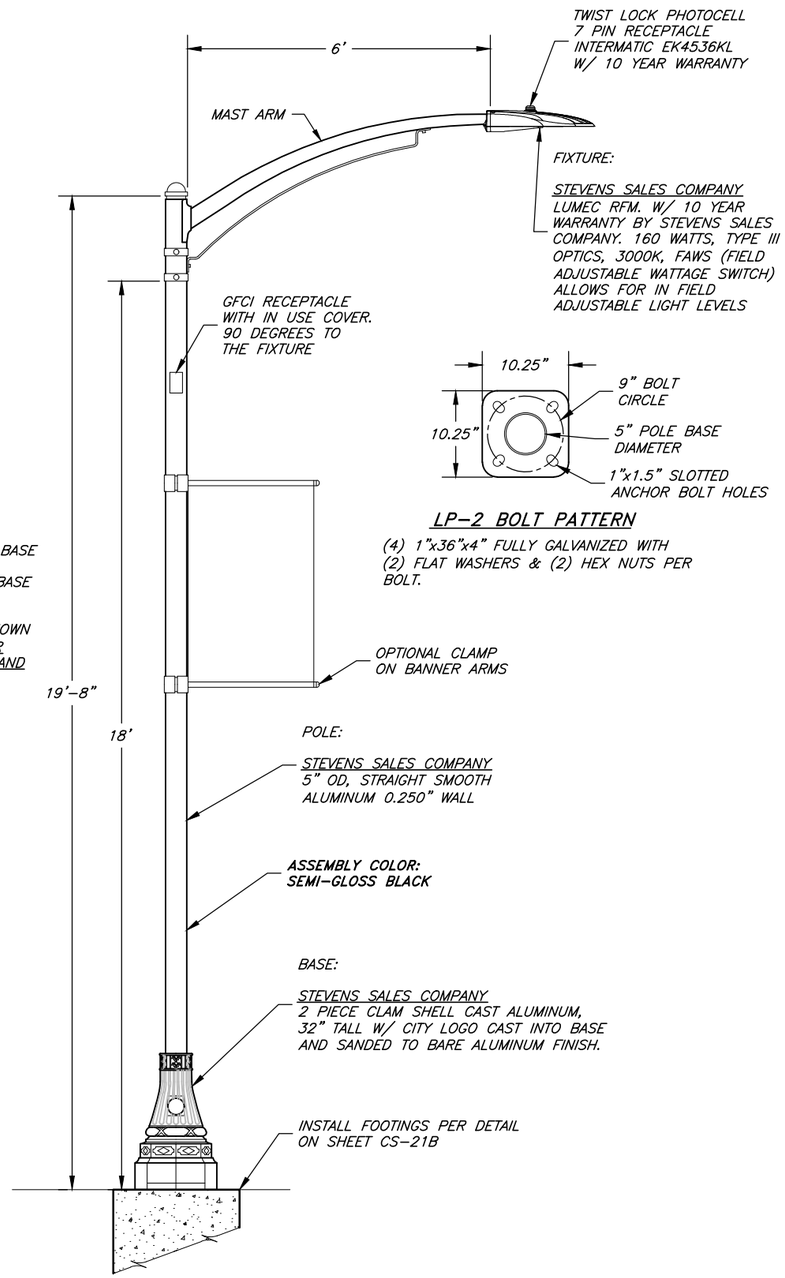
FIXTURE:
STEVENS SALES COMPANY
LUMEC AT50. W/ 7 YEAR WARRANTY BY STEVENS SALES COMPANY
94 WATTS, TYPE III OPTICS, 3000K

GENERAL NOTES:

1. SOUTH COAST LIGHTING DECORATIVE BASE COVERS DESIGNED TO BE INSTALLED SO THAT BOTTOM OF DECORATIVE BASE IS LEVEL WITH BOTTOM OF POLE BASE PLATE; CONTRACTOR RESPONSIBLE FOR PROPER INSTALLATION AND GROUTING BETWEEN BOTTOM OF BASE COVER AND FINISH GRADE.
2. ALL SPECIFIED BRANDS, STYLES, AND MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS IN THE SAME STYLE OF POLE AND DECORATIVE BASE MAY BE USED WITH THE PRIOR WRITTEN APPROVAL OF THE CITY.
3. STEVENS SALES COMPANY
   2010 S. MILSTONE DRIVE
   SALT LAKE CITY, UTAH 84014
   PHONE: 801-487-8971

LP-2 CORRIDOR STREETLIGHT

A. ALL HARDWARE STAINLESS STEEL
B. ALL WELDS IN ACCORDANCE WITH AWS WELDING CODE
C. ENTIRE ASSEMBLY FINISH COATED SEMI-GLOSS BLACK PER CITY SPECIFICATIONS



LP-2 BOLT PATTERN

(4) 1"x36"x4" FULLY GALVANIZED WITH (2) FLAT WASHERS & (2) HEX NUTS PER BOLT.

LP-3 INTERSECTION STREETLIGHT

A. ALL HARDWARE STAINLESS STEEL
B. ALL WELDS IN ACCORDANCE WITH AWS WELDING CODE
C. ENTIRE ASSEMBLY FINISH COATED SEMI-GLOSS BLACK PER CITY SPECIFICATIONS

Adopted by City Council 03/23/2021

PROFESSIONAL ENGINEER — No. 6578621 — DANA Q. SHULER — STATE OF UTAH

PROJECT ENGINEER

2/22/2021
DATE

REV.	DATE	APPR.	
2	FEB '21	DQS	ADDED NEW CITY STREETLIGHT STANDARD DETAILS

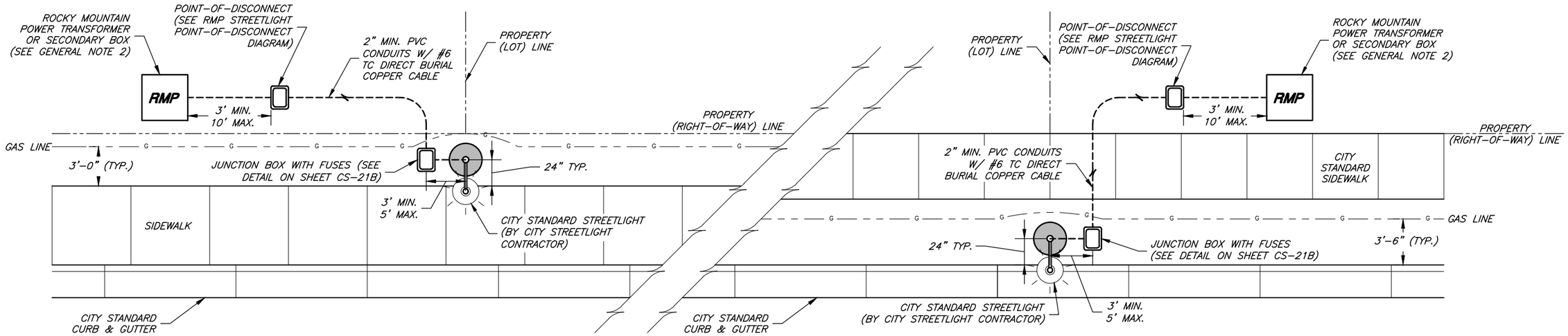
SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

JA JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

PLEASANT VIEW CITY CORPORATION
PUBLIC WORKS STANDARDS
STREET LIGHTING - POLES AND FIXTURES

SHEET: CS-21 OF 22 SHEETS



TYPICAL CONDUIT AND POWER LAYOUT "B"

(STANDARD LOCAL STREET SECTION WITHOUT PARKSTRIP)

TYPICAL CONDUIT AND POWER LAYOUT "A"

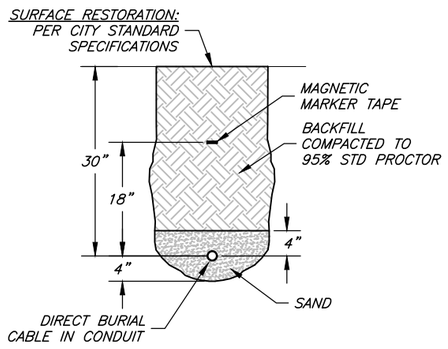
(STANDARD LOCAL STREET SECTION WITH PARKSTRIP)

GENERAL NOTES:

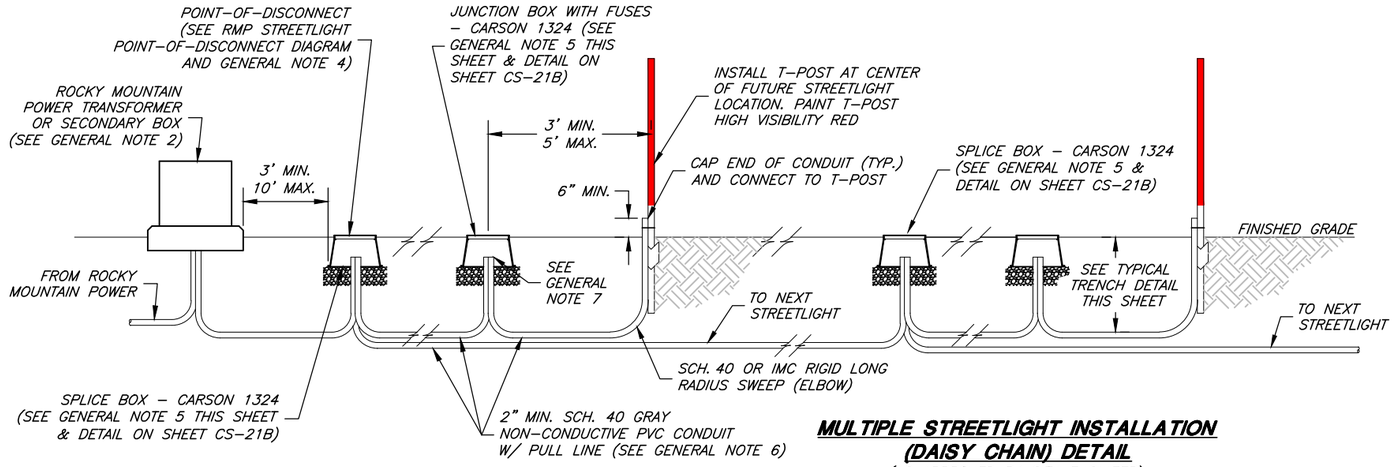
1. SEE SECTION 26 56 19 M OF THE PLEASANT VIEW CITY DEVELOPMENT, DESIGN, & CONSTRUCTION STANDARDS FOR STREET LIGHTING SPECIFICATIONS.
2. DEVELOPER/CONTRACTOR SHALL CONSULT THE POWER COMPANY ON THE JUNCTION BOX LOCATION, PEDESTAL LOCATION, CONDUIT LOCATION, AND DIGGING PRIOR TO INSTALLATION.
3. WHERE POSSIBLE, LOCATE STREETLIGHT CONDUIT PARALLEL WITH RMP CONDUIT.
4. JUNCTION BOX CONNECTING TO STREETLIGHT MAY ALSO SERVE AS POINT-OF-DISCONNECT IF LOCATED WITHIN 10' FROM THE POWER SOURCE.

GENERAL NOTES CONT.:

5. INGROUND BOXES LOCATED WITHIN 20' OF APPROACHES OR INTERSECTIONS SHALL BE TRAFFIC RATED. WHERE APPROVED BY THE CITY ENGINEER, ANY BOX INSTALLATION IN SIDEWALK OR CONCRETE WILL REQUIRE THE GROUND BOX TO BE DESIGNED AND LISTED FOR USE IN CONCRETE. SUBMIT BOX SPECIFICATIONS TO CITY ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. ALL BOXES SHALL HAVE THE WORDS "PLEASANT VIEW STREET LIGHTING" ON THE COVER.
6. FLAT PULL LINE CAPABLE OF WITHSTANDING 1000 LBS OF TENSION, INSTALLED WITH 72 INCHES OF EXTRA LINE CAPABLE OF EXTENDING FROM EACH END OF CONDUIT. THE PULL LINE SHALL BE SECURED INSIDE THE ENDS OF THE CONDUIT AND BOTH ENDS SHALL BE CAPPED.
7. CONDUIT SHALL EXTEND A MAX. OF 3 INCHES ABOVE THE GRAVEL IN THE BASE OF THE GROUND BOX AND A MINIMUM OF 2" ABOVE THE GRAVEL.

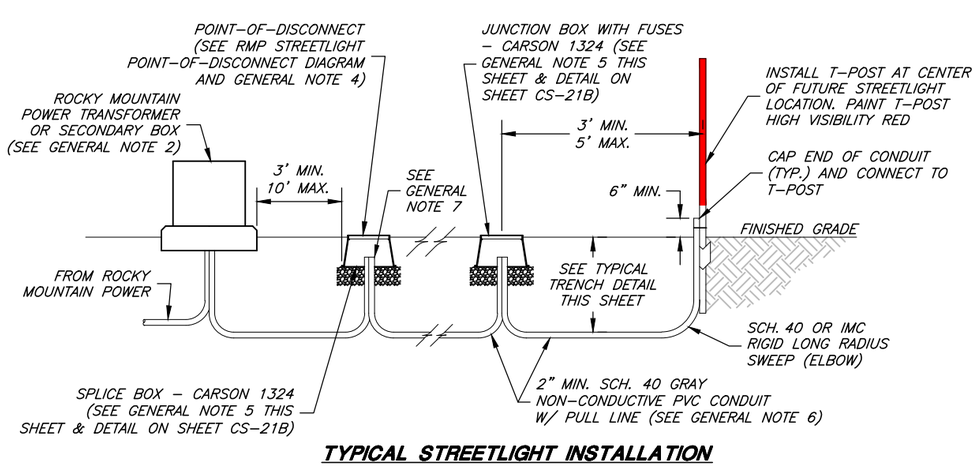


TYPICAL TRENCH DETAIL



MULTIPLE STREETLIGHT INSTALLATION (DAISY CHAIN) DETAIL

(AS APPROVED BY CITY ENGINEER)



TYPICAL STREETLIGHT INSTALLATION

Adopted by City Council 03/23/2021

PROFESSIONAL ENGINEER No. 6578621 DANA Q. SHULER STATE OF UTAH

PROJECT ENGINEER

2/22/2021
DATE

REV.	DATE	APPR.	
2	FEB '21	DQS	ADDED NEW CITY STREETLIGHT STANDARD DETAILS

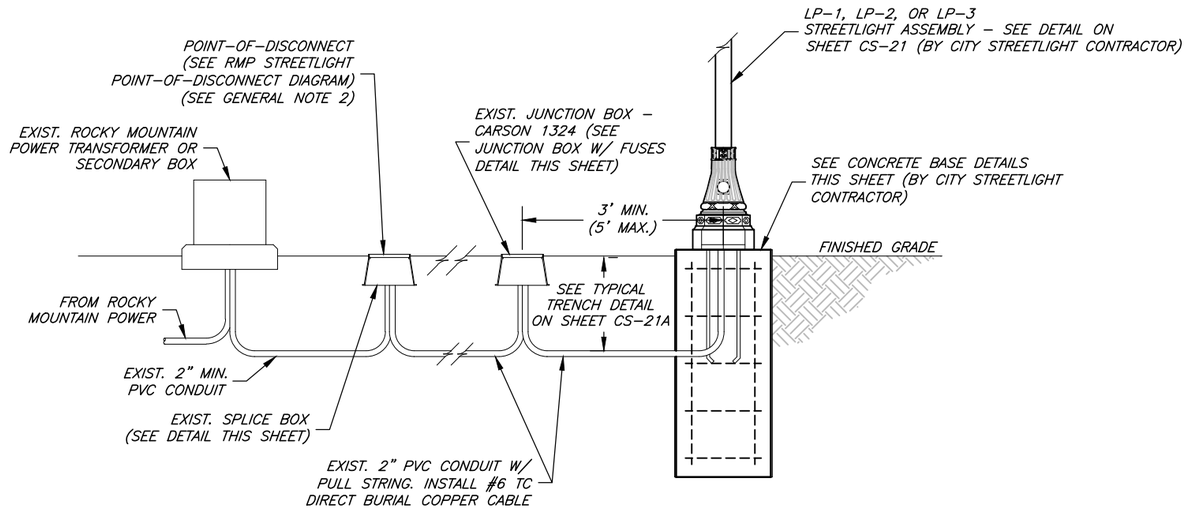
SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

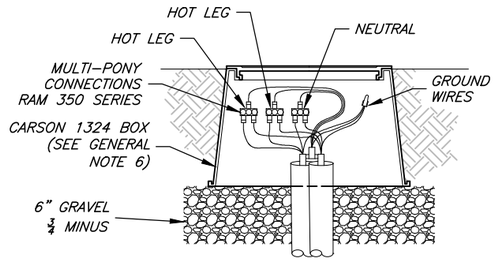
JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

PLEASANT VIEW CITY CORPORATION
PUBLIC WORKS STANDARDS
STREET LIGHTING - DEVELOPER/CONTRACTOR INSTALLATION PORTION OF STREETLIGHT STANDARDS

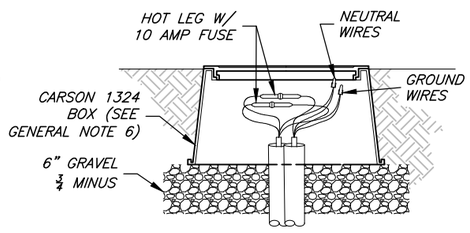
SHEET: CS-21A
OF 22 SHEETS



STANDARD STREETLIGHT WITH BASE



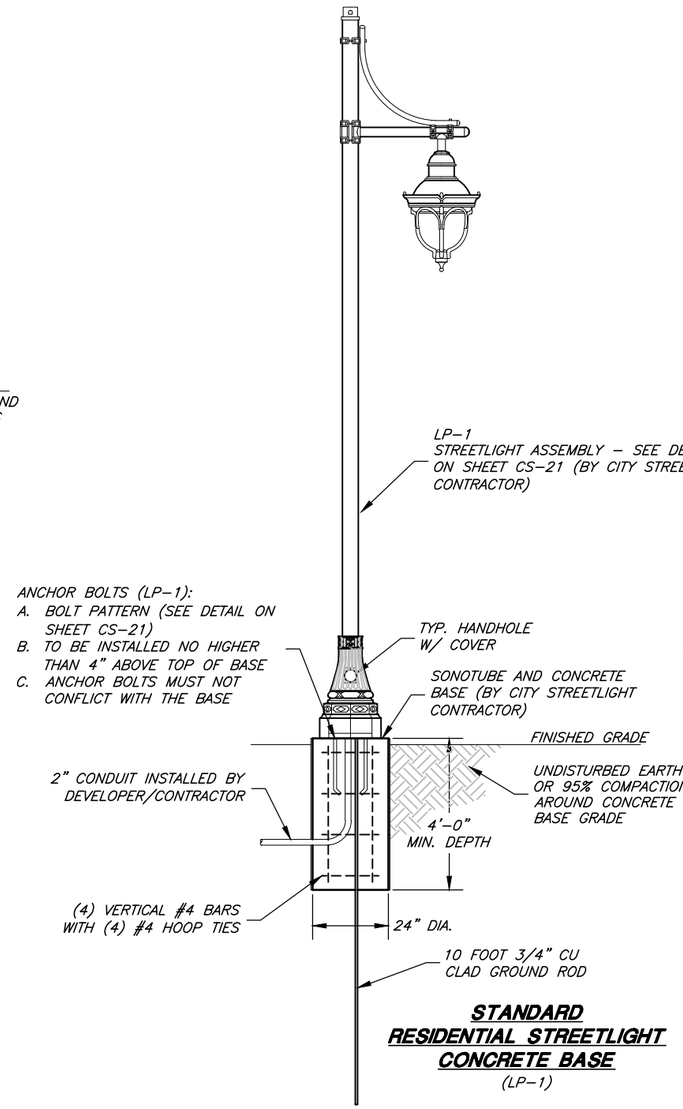
SPLICE BOX DETAIL



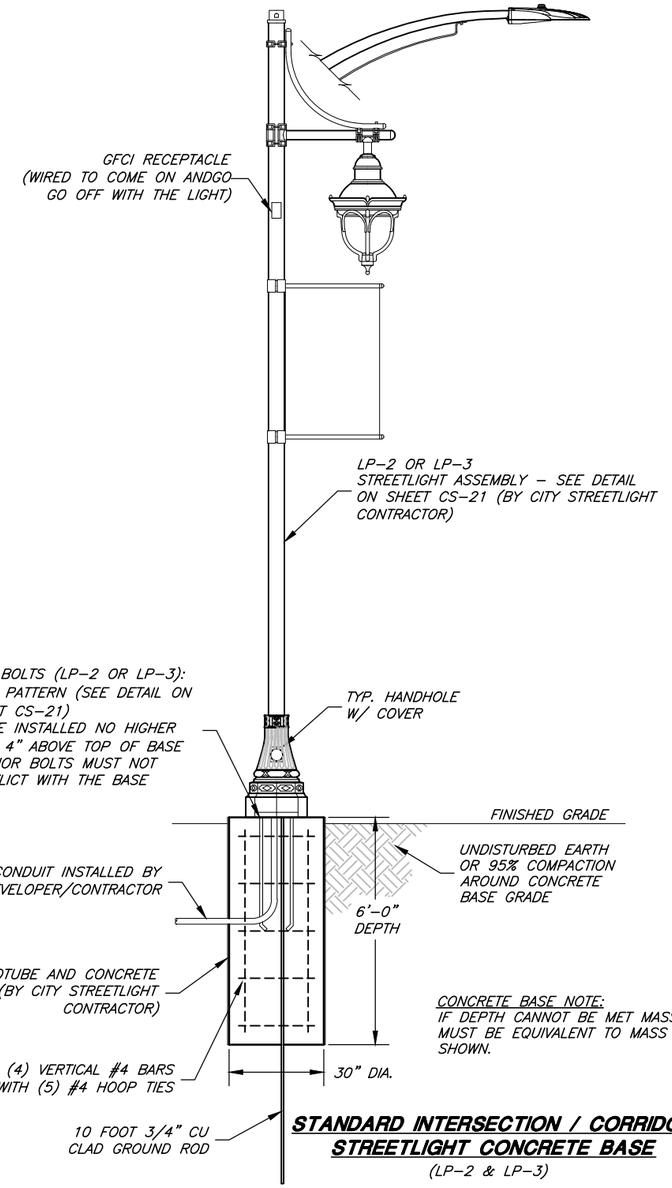
JUNCTION BOX WITH FUSES

GENERAL NOTES:

1. EACH LIGHT POLE ASSEMBLY SHALL HAVE A JUNCTION BOX WITH FUSES. FUSE HOT WIRES IN JUNCTION BOXES, SUPPLY SPLICE KIT FOR NEUTRAL CABLE.
2. LEAVE PIGTAIL 8 FEET LONG TO SECONDARY BOX; ROCKY MOUNTAIN POWER TO MAKE CONNECTION.
3. ALL CONDUCTORS SHALL BE OKONITE-FMR TYPE TC-CABLE #112-10-4054; OKONITE X-OLENE OKOSEAL #112-31-3747; OR ANIXTER VNTC #3H-0603 COPPER ONLY.
4. FUSE HOLDERS SHALL BE IN-LINE, WATER TIGHT LEC-AA
5. WIRE MUST EXTEND 18 INCHES ABOVE GRADE TO SPLICE IN GROUND BOX.
6. CARSON 1324 BOX SPECIFICATIONS:
   a. 12" DEPTH (TYP.)
   b. FLUSH SOLID LID
   c. COLOR OPTION BLACK
   d, LID SECURED WITH STAINLESS STEEL HEX BOLTS
   e. LID MUST SPECIFY "PLEASANT VIEW STREET LIGHTING"
7. ALL BELOW GRADE SPLICING/FUSES SHALL BE WATERTIGHT.



STANDARD RESIDENTIAL STREETLIGHT CONCRETE BASE
(LP-1)



STANDARD INTERSECTION / CORRIDOR STREETLIGHT CONCRETE BASE
(LP-2 & LP-3)

Adopted by City Council 03/23/2021

PROFESSIONAL ENGINEER No. 6578621 DANA Q. SHULER STATE OF UTAH

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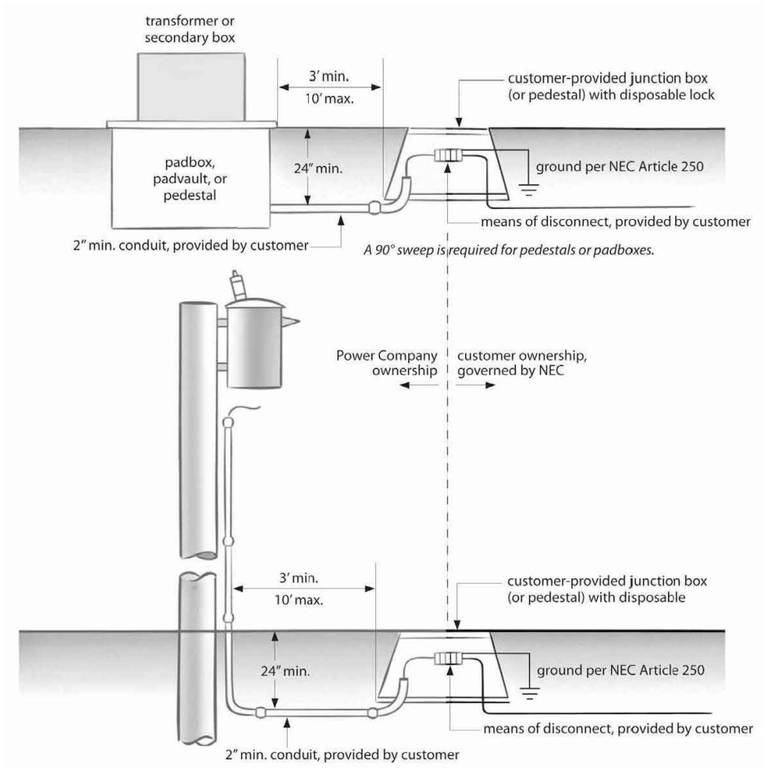
STREET LIGHTING - CITY CONTRACTOR INSTALLATION PORTION OF STREETLIGHT STANDARDS

SHEET: CS-21B
OF 22 SHEETS

Figure 63—Street Lighting Points of Connection Diagram



More information on streetlights is posted online at: https://www.pacificpower.net/working-with-us/municipalities.html and https://www.rockymountainpower.net/working-with-us/municipalities.html.

GENERAL NOTE:

REFER TO THE MOST RECENT EDITION OF THE ROCKY MOUNTAIN POWER ELECTRIC SERVICE REQUIREMENTS MANUAL FOR GUIDANCE AND INSTRUCTIONS ON ELECTRIC SERVICE REQUIREMENTS.

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PUBLIC WORKS STANDARDS

STREET LIGHTING - ROCKY MOUNTAIN POWER DETAIL

SHEET: CS-21C OF 22 SHEETS