Westminster Lighting Details

Arterial/Collector Style Pole
Galvanized Steel Standard

Sheet 1 of 11

T-Base Mount normally not used

Drawing/Engineered by Others
Westminster Lighting Details

Arterial/Collector Style Pole
Galvanized Steel Standard

T-Base Mount
normally not used

Sheet 2 of 11

Drawing/Engineered by Others
Westminster Lighting Details
Arterial/Collector Style Pole
Optional Galvanized Steel Pole
Sheet 3 of 11

POLE DATA

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ANCHOR BOLT

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FINISH COLOR TO BE GALVANIZED

Finished by Others

GALVANIZED
Davit Steel Pole - Federal Green Paint over Galvanize

Cobra Head Style LED Luminaire

GE Evolve LED Roadway Lighting
Scalable Cobrahead (ERS1, ERS2, ERS3, ERS4)
1 - 4 LED sections

LED Luminaire selection based upon roadway lighting requirements (Lumens vary)

Adaptive Control Requirements
GE or Telensa (Ripley) Adaptive Lighting Controls -
Depending on project requirements either a GE Gateway
or a Telensa Base Station may be required

GE Standard or Stand-alone Node selection to be based
on individual project specifications by the City

Westminster Lighting Details
Arterial/Collector Style Poles & Fixtures

Drawings by Others  Sheet 4 of 11
Decorative Steel Pole - Federal Green Paint over Galvanize
72nd & Raleigh Style

- 207" X 3/8" THICK RING IS WELDED TO SCROLL ARM BOLTED TO POLE WITH SELF DRILLING/TAPPING SCREWS
- SCROLL ARM TO BE 1-1/2" X 2" TUBING ATTACHED TO POLE WITH 5 THREADED FASTENERS
- BAND TO BE 2 1/4" X 1/12" THICK WELDED TO THE POLE & DRILLED AND TAPPED FOR ARM

WESTMINSTER LOGO MEDALLION PER CITY STD

4" X 6" HANGING BASE ON DECORATIVE BASE

Decorative Extended Denver Style 2-PIECE WRAP-AROUND HIGH DENSITY ELASTOMER BASE, 73 LB PER CUBE FOOT.

1003.1-1000 LUMINARIE (LED)

515-5450 LIGHT STANDARD METAL (35 FOOT)

Decorative Arterial Steel Pole - Beige Paint over Galvanize
Orchard Pkwy Style

- LIGHT STANDARD DETAIL
- 28 FT
- 3" X 6" HANGING BASE ON DECORATIVE BASE

Decorative Residential Steel Pole - Black Paint over Galvanize
Hyland Village Style

- FIXTURE KING LUMINAIRE KB29 LED WITH RIPLEY ALADDIN ADAPTIVE CONTROL DIMMING
- MOUNTING HEIGHT 28 FT
- MOUNTING HEIGHT 28 FT

28 FT ROUND STEEL POLE - FEDERAL BEIGE PAINT OVER GALVANIZE FINISH

HIGH DENSITY ELASTOMER DECORATIVE BASE OF 71 LBS PER CUBE FOOT

15 FT ROUND STRAIGHT ALUMINUM 4.0" OD POLE

HIGH DENSITY ELASTOMER DECORATIVE BASE OF 71 LBS PER CUBE FOOT

HAND HOLE BEHIND BASE

FIXTURE KING LUMINAIRE KB29 LED WITH RIPLEY ALADDIN ADAPTIVE CONTROL DIMMING

815-6200 LIGHT STANDARD FOUNDATION LIGHT STANDARD FOUNDATION PER FOOT $415-1

515-5450 LIGHT STANDARD METAL (35 FOOT)

PHOTO CELL RECEPTACLE IN POLE TOP TO ACCEPT TELENSA TELECELL WIRELESS SYSTEM CONTROLS

PHOTO CELL RECEPTACLE IN POLE TOP TO ACCEPT TELENSA TELECELL OR GE NODE WIRELESS SYSTEM CONTROLS

Westminster Lighting Details
Decorative Style Poles & Fixtures

Drawings by Others Sheet 5 of 11
**Curvelinear Steel Pole - Federal Green Paint over Galvanize**

Pole:
- 28 ft found tapered Federal Green over galvanized Steel, Diameter 8" to 4" Taper

Curvilinear Fixture used:
- Cyclone CD20S2
- Clear tempered glass lens, 98% transmissive
- LED 203-5 IESNA type III refractor lenses
- Lamp- LED 4000k
- Dimmable driver 0-10 volts
- 7-pin receptacle

**Direct Buried LED Post Top**

Pole used:
- CMT Cat #: TB24-O-200
- Black Fiberglass
- Mounting Height 20 ft
- Shaft Length- 24 ft
- Tip OD - 4.41 inches
- Butt OD - 9.59

Curvilinear Post Top Fixture used:
- Cyclone CD20S2
- Clear tempered glass lens, 98% transmissive
- LED 203-5 IESNA type III refractor lenses
- Lamp- LED 4000k
- Dimmable driver 0-10 volts
- 7-pin receptacle

**Legacy Ridge Style LED Post Top**

Pole used:
- Spring City Fixture provided by Mountain States Lighting

12 ft Extruded Fluted Aluminum Pole
- Legacy Ridge Color
- Bold Circle 12 Inch

12 ft Extruded Fluted Aluminum Pole
- Legacy Ridge Color
- Bold Circle 12 Inch

High Density Elastomer Decorative Base
- Handhole behind 2-piece Base

GE Controls Module with Decorative Cover

Flat Tempered Glass
- No Globe

**Luminaire Specifications:**
- Ht: 43 5/8 inches
- W: 17 1/4 inches
- Cast Aluminum Alloy
- 40 or 67 Watt Cree XTE LED System
- Color Temp: 4000k
- Dimming Driver/Dimming Photocell

**Westminster Lighting Details**

Collector/Residential Style Poles & Fixtures

Drawings by Others

Sheet 6 of 11
**WESTMINSTER LIGHTING DETAILS**

**NOTES:**
1. All conduits installed above ground shall be GRS.
2. Conduit attached to bridges shall have expansion fittings installed at each end of the bridge and at each expansion joint on the bridge.
3. All GRS conduits shall be electrically bonded to a grounding bushing and ground wire as detailed.
4. Install the conduit and connector assembly to permit a 1/2" minimum standoff from any other direction.

---

**Pull Box Details**

**NOTES:**
1. All conduits installed above ground shall be GRS.
2. Conduit attached to bridges shall have expansion fittings installed at each end of the bridge and at each expansion joint on the bridge.
3. All GRS conduits shall be electrically bonded to a grounding bushing and ground wire as detailed.
4. Install the conduit and connector assembly to permit a 1/2" minimum standoff from any other direction.

---

**Conduit Locations**

**NOTES:**
1. Supply water direct surface shall be furnised as item
2. The conduit shall be beamed and approved by the City Engineer, to be buried at proper depth, coated conduit material and proper conduit end treatment.

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**Conduit Marking Detail**

**NOTES:**
1. All conductors shall be placed at the top of the curb directly over the conduit.
2. Markers shall be installed by drilling the curb and installing a marker in place. If installed in a wall or curb ramp, the top of the marker shall be flush with the concrete surface.
3. No diurnal passing shall be made for conduit markers, they are subject to the installation of conductors.

---

**Conduit and Pull Box**

**Sheet 7 of 11**

**Drawings by Others**

---
NOTES

1. DIMENSIONS FOR FOLLOWING ITEMS: ANCHOR BASE AND ANCHOR BOLTS ARE VARYING FOR THE HEIGHT OF THE LIGHT STANDARD AND THE MOST APPROPRIATE FOUNDATION DESIGN.

2. FOUNDATION SHALL BE 7 FT. FOR LIGHT STANDARDS 30 FT. THRU 40 FT., AND 6 FT. FOR LIGHT STANDARDS LESS THAN 30 FT.

3. LIGHT STANDARD FOUNDATION DEPTH IS BASED ON A MAXIMUM POLE HEIGHT OF 40 FT.

4. ASSUMED TO BE GROUND WITH N > 5 OR WINDWEIGHT WITH N > 15 AS DETERMINED BY ASTM G 158 STANDARD PENETRATION TEST.

CONCRETE SHALL BE CLASS B.

5. FOUNDATIONS FOR LIGHT STANDARDS HIGHER THAN 40 FT. OR LIGHT STANDARDS WITH MULTIPLE LUMINARIES OR BANDES, OR VARYING SOIL OR WIND CONDITIONS, SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER AND SHOWN ON THE PLANS.

WHERE FOUNDATION IS LOCATED IN THE SIDEWALK, THE TOP OF THE FOUNDATION SHALL BE FLUSH WITH THE TOP OF THE SIDEWALK CONFORMING TO ADA REQUIREMENTS.

PULL BOX REQUIRED AT EACH POLE

Westminster Lighting Details
Foundations
Sheet 8 of 11
NOTE: Both distribution cables typically use a single conduit to pull box adjacent to the pole. Contractor may install two conduits if desired.

POLE WIRING DETAILS

NOTE: Ground rod required for all concrete bases

BREAK-AWAY FUSED ELECTRICAL CONNECTORS

BREAK-AWAY NON FUSED ELECTRICAL CONNECTOR

GROUND ROD CONNECTION DETAILS

NOTES:
1. Pole remains in "Caged Sola" after break-away.
2. Ground "Slug" remains in "Caged Sola" after break-away.
3. Connectors shall have set screw type terminals to attach cables.

SECONDARY SERVICE CONNECTION DETAILS

NOTES:
1. Contractor shall install a conduit stub 24" to 6" above ground at utility pole. Conduit shall be secured to the side of the pole that will allow a direct run up the pole to the transformer without crossing other utility lines or cables. The end of the conduit shall be capped.
2. Contractor shall install conduit in a trench to within 24" of pedestal or pad mount transformers and leave a 18" x 36" x 36" access hole in the ground. Contractor shall keep open trench covered and promptly backfill access hole when service is completed.

WESTMINSTER LIGHTING DETAILS

ELECTRICAL CONNECTIONS

Sheets 9 of 11

Drawings by Others
DO NOT USE INTERNAL PHOTOELECTRIC CELL WITH CONTACTOR SWITCHING UNLESS SPECIFICALLY APPROVED BY THE CITY.

NOTES:
1. If used, photoelectric cell to be oriented to the north or east.
2. Seal around joint between cabinet and base with lifetime silicone caulk.
3. All exposed edges of the base shall have a 1" camfer.

Westminster Lighting Details
Power Supply

Drawings by Others
Sheet 10 of 11
APPROVED POWER SUPPLY
MILBANK CP3B MAIN LOAD SERIES
ENSURE SUPPLIED CABINET MEETS ALL OF XCEL ENERGY CURRENT REQUIREMENTS

“A” Style 16” Metered Commercial Pedestal

TYPICAL STREET LIGHT CIRCUIT CONNECTS DIRECTLY TO THE CIRCUIT BREAKER WITH EACH STREET LIGHT FIXTURE OUTFITTED WITH AN APPROVED WIRELESS ADAPTIVE CONTROL NODE OR PHOTOCELL.

Pad Mount Base or (4) 5/8-11 X 18” Anchor Bolts Recommended

Westminster Lighting Details
Approved Power Supply
Sheet 11 of 11

Drawings by Others