

# ELECTRICAL EQUIPMENT & MATERIALS

## Submittals Checklist for Conditional Qualification

PBOT Project Name: \_\_\_\_\_

Contract Number: \_\_\_\_\_

PBOT Project Number: \_\_\_\_\_

PBOT Construction Manager: \_\_\_\_\_

SSL Lead Engineer: \_\_\_\_\_

Engineer of Record: \_\_\_\_\_

Engineer of Record Phone Number: \_\_\_\_\_

Engineer of Record Email Address: \_\_\_\_\_

**Intended for use with the City of Portland  
Standard Construction Specifications**

Date Submitted: \_\_\_\_\_

Submitting Contractor: \_\_\_\_\_

Contractor Contact: \_\_\_\_\_

Contractor Contact Phone Number: \_\_\_\_\_

Contractor Contact Email Address: \_\_\_\_\_

## Instructions

The *Electrical Equipment and Materials Submittals Checklist* includes preapproved items for use on projects with traffic signals, street lighting, or communications. The Contractor is responsible for downloading the current checklist off the website for each project. The checklist can be found on the City of Portland's website at the following address:

<https://www.portland.gov/transportation/engineering/construction>

These sheets will be accepted as an Equipment List in accordance with 00960.02 of the *City of Portland Standard Construction Specifications* for equipment included on this list.

## Other Equipment Not Included On This List

The contractor shall submit a pdf document of the following per 00960.02. Use the *Controller Equipment Checklist* for preapproved controller equipment.

## Submittal Review Process

*The Contractor will:*

1. Fill out the appropriate project related info on the cover sheet and Table of Contents pages.
2. Check the box in the "On Project" column on the Table of Contents pages for all items included on the project.
3. For each item intended for use on the project, check the box for the brand/manufacturer and indicate the catalog/part number.

**Do not mark more than two (2) options, except for conduit, wire, and pole coatings.**

4. If the brand/manufacturer and/or model proposed for use is not shown (i.e. not preapproved), then write this information in the blank field. If the item is not included on the Table of Contents list, then use the template at the end of the document. Submit adequate supporting documentation such as catalog cutsheets, shop drawings, and specifications. It is the contractor's responsibility to clearly show how the product meets the *City of Portland Standard Construction Specifications* and Special Provisions.
5. Write-in products will require additional review time as these products require evaluation.
6. Submit to the construction engineer a complete pdf document which includes:
  - a. Completed checklist with each applicable page.
  - b. Write-in materials with supporting documentation.
  - c. Certificate of Materials Origins (CMO) as required per the checkbox.

*The Engineer and/or Inspector will:*

1. Review the submittals checklist and supporting documentation per 00150.35 of the *City of Portland Standard Construction Specifications*.
2. Return the reviewed pdf document to the Contractor with appropriate notations.

## Construction

All materials delivered to the job site shall be **clearly marked** as to the brand/manufacturer and model/part description, or shall be accompanied by supplier's certification as to brand/manufacturer and model/part description.

*The Contractor will:*

1. Install only materials approved by the Engineer/Inspector through the materials submittal review and approval process described above.
2. Submit required CMO's **prior** to installation.

*The Inspector will:*

1. Verify that materials installed match the approved items on the submittal checklist.
2. Verify the materials are installed per plans and specifications.
3. Fill out Field Inspection Report for items listed in Table of Contents.

Inspector to check each FIR box, and sign and date below to indicate material has been installed per plans and specifications.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Table of Contents

Item	Page	On Project	CMO Required <sup>1</sup>	FIR
<b>Common Electrical</b>				
Electrician Information	1	<input type="checkbox"/>		<input type="checkbox"/>
Qualified Worker Information	2	<input type="checkbox"/>		<input type="checkbox"/>
Bond Connectors	3	<input type="checkbox"/>		<input type="checkbox"/>
Bond Wire	4	<input type="checkbox"/>		<input type="checkbox"/>
Cable Ties	4	<input type="checkbox"/>		<input type="checkbox"/>
Conduit (Metallic)	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conduit (Non-Metallic)	6	<input type="checkbox"/>		<input type="checkbox"/>
Conduit Bushing	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grounding/Bond Bushing	7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conduit Hub	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condulet	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conduit Plug	8	<input type="checkbox"/>		<input type="checkbox"/>
Expansion Fitting	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground Rod	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground Rod Clamp	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-Line Kits, Fuses, and Insulating Boots	10	<input type="checkbox"/>		<input type="checkbox"/>
Junction Box – Cast Iron	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Junction Box – Concrete and Polymer Concrete	12 & 13	<input type="checkbox"/>		<input type="checkbox"/>
Pull Line	14	<input type="checkbox"/>		<input type="checkbox"/>
Terminal Blocks	14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Terminal Cabinet	14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
THWN and XHHW Wire	15	<input type="checkbox"/>		<input type="checkbox"/>
Underground Warning Tape	15	<input type="checkbox"/>		<input type="checkbox"/>
Weatherhead	16	<input type="checkbox"/>		<input type="checkbox"/>
Wire Nut – Water Resistant	16	<input type="checkbox"/>		<input type="checkbox"/>
Multi-Tap Connector	16	<input type="checkbox"/>		<input type="checkbox"/>

<sup>1</sup> Certificate of Material Origin (CMO) when required if steel or iron.  
See City of Portland Standard Construction Specifications and Contract Special Provisions.

Inspector to check each FIR box, and sign and date below to indicate material has been installed per plans and specifications.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Table of Contents

Item	Page	On Project	CMO Required <sup>1</sup>	FIR
<b>Signal Installation</b>				
Bike Signal Assembly (4")	17	<input type="checkbox"/>		<input type="checkbox"/>
Blue LED Light	17	<input type="checkbox"/>		<input type="checkbox"/>
Cabinet Riser Frame	17	<input type="checkbox"/>		<input type="checkbox"/>
Control Cable	18	<input type="checkbox"/>		<input type="checkbox"/>
Loop Feeder Cable	18	<input type="checkbox"/>		<input type="checkbox"/>
Loop - Preformed	19	<input type="checkbox"/>		<input type="checkbox"/>
Loop Wire	19	<input type="checkbox"/>		<input type="checkbox"/>
Loop Sealant	20	<input type="checkbox"/>		<input type="checkbox"/>
Loop Backer-Rod (Hold-Downs)	20	<input type="checkbox"/>		<input type="checkbox"/>
Pedestrian Signal Housing	21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian Signal Mount - Clamshell	21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrian LED Module	21	<input type="checkbox"/>		<input type="checkbox"/>
Plumbizer	22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preemption Cable	22	<input type="checkbox"/>		<input type="checkbox"/>
Push Button	23	<input type="checkbox"/>		<input type="checkbox"/>
Rectangular Rapid Flashing Beacon (RRFB) System	24	<input type="checkbox"/>		<input type="checkbox"/>
Service Cabinet	25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Span Wire Hanger	26	<input type="checkbox"/>		<input type="checkbox"/>
Span Wire/Messenger Cable	26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eyebolt, Turnbuckle, and Strandvise	27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tether/Stabilizer Cable	28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tether Clamp	28	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tri-Stud Adapter	28	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal Adjustable Bracket	29	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal Backplate	29	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal Housing	30	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal Louver	30	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal Visor	31	<input type="checkbox"/>		<input type="checkbox"/>

<sup>1</sup> Certificate of Material Origin (CMO) when required if steel or iron.

See City of Portland Standard Construction Specifications and Contract Special Provisions.

Inspector to check each FIR box, and sign and date below to indicate material has been installed per plans and specifications.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Table of Contents

Item	Page	On Project	CMO Required <sup>1</sup>	FIR
<b>Signal Installation (continued)</b>				
Vehicle Signal LED Modules - Red	32	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal LED Modules - Yellow	33	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle Signal LED Modules - Green	34	<input type="checkbox"/>		<input type="checkbox"/>
Vehicle/Pedestrian Signal Cover	35	<input type="checkbox"/>		<input type="checkbox"/>
Pedestrian Push Button Cover	35	<input type="checkbox"/>		<input type="checkbox"/>
Video Monitoring PTZ Camera System	36	<input type="checkbox"/>		<input type="checkbox"/>
<b>Signs</b>				
Sign – Part Time Restriction (PTR)	37	<input type="checkbox"/>		<input type="checkbox"/>
Sign Mounting Framework	37	<input type="checkbox"/>		<input type="checkbox"/>
School Zone Flasher	38 & 39	<input type="checkbox"/>		<input type="checkbox"/>
<b>Illumination</b>				
Photoelectric Cell	40	<input type="checkbox"/>		<input type="checkbox"/>
Ornamental Luminaires	41	<input type="checkbox"/>		<input type="checkbox"/>
Post Top Luminaires	42 & 43	<input type="checkbox"/>		<input type="checkbox"/>
South Waterfront Luminaire & Lamps	44	<input type="checkbox"/>		<input type="checkbox"/>
South Auditorium Luminaire & Lamps	44	<input type="checkbox"/>		<input type="checkbox"/>
LED Cobrahead Luminaires	45 & 46	<input type="checkbox"/>		<input type="checkbox"/>
<b>Communications</b>				
Communications Bracket	47	<input type="checkbox"/>		<input type="checkbox"/>
Ethernet Cable – CAT6	47	<input type="checkbox"/>		<input type="checkbox"/>
Ethernet Switch	48	<input type="checkbox"/>		<input type="checkbox"/>
Fiber Optic Cable	49	<input type="checkbox"/>		<input type="checkbox"/>
Fiber Optic Patch Panel	49	<input type="checkbox"/>		<input type="checkbox"/>
Fiber Optic Splice Closure	49	<input type="checkbox"/>		<input type="checkbox"/>
Copper Interconnect Cable	50	<input type="checkbox"/>		<input type="checkbox"/>
Wireless Communication System	50	<input type="checkbox"/>		<input type="checkbox"/>

<sup>1</sup> Certificate of Material Origin (CMO) when required if steel or iron.  
See City of Portland Standard Construction Specifications and Contract Special Provisions.

Inspector to check each FIR box, and sign and date below to indicate material has been installed per plans and specifications.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Table of Contents

Item	Page	On Project	CMO Required <sup>1</sup>	FIR
<b>Poles</b>				
Single Mast Arm Pole	51	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Combination Mast Arm Pole	51	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dual Mast Arm Pole	51	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strain Pole	52	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestal (Small) – Pedestrian Pipe Post	52	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestal (Large) – Vehicle Signal	52	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aluminum Illumination Pole	53	<input type="checkbox"/>		<input type="checkbox"/>
Steel Illumination Pole	53	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Twin Ornamental Street Light Pole	54	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Single Ornamental Street Light Pole	54	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bottleneck Street Light Pole	55	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
South Waterfront Steel Combination Pole	55	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cobrahead Small Wireless Facility Pole	56	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Twin Ornamental Wireless Facility Pole	56	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Luminaire Arms	57	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood Poles	57	<input type="checkbox"/>		<input type="checkbox"/>
Pole Caps	58	<input type="checkbox"/>		<input type="checkbox"/>
Pole Coating	58	<input type="checkbox"/>		<input type="checkbox"/>
<b>Blank Form</b>		<input type="checkbox"/>		<input type="checkbox"/>

<sup>1</sup> Certificate of Material Origin (CMO) when required if steel or iron.  
See City of Portland Standard Construction Specifications and Contract Special Provisions.

## **Electrician Information**

**Description:** According to the Oregon Administrative Rule 918-282-0120(1), every person engaged in the installation of electrical equipment and wiring systems shall possess a valid Oregon Electrical Supervising or Journeyman's License, or be registered as an Electrical Apprentice.

**Use:** Information regarding licensed electricians on the job.

### **General Supervising Electrician**

Name: \_\_\_\_\_ License Number: \_\_\_\_\_

### **General Journeyman Electrician**

Name: _____	License Number: _____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

### **Apprentice Electrician**

Name: _____	Apprentice ID: _____
_____	_____
_____	_____
_____	_____
_____	_____

**Qualified Worker Information**

**Description:** Every person working in the NESC supply space or communication worker safety zone shall be a certified journeyman power lineman who has successfully completed the apprenticeship program equivalent to the Oregon state apprenticeship and training council, and are capable of performing as qualified workers as described in 29 CFR 1910.269.

**Use:** Information regarding qualified workers on the job.

**Power Lineman**

Name:	License/Certification Number:
_____	_____
_____	_____
_____	_____
_____	_____

**Power Lineman Apprentice**

Name:	License/Certification Number:
_____	_____
_____	_____
_____	_____
_____	_____



## **Bond Connectors**

**Description:** Mechanically bonding connectors.

**Use:** For connecting bond conductors.

Brand/Manufacturer                      Model/Part Number

### **Single Bolt Vise Type Connector**

- |                          |                        |            |
|--------------------------|------------------------|------------|
| <input type="checkbox"/> | Hubbell/Anderson/Fargo | GC Series  |
| <input type="checkbox"/> | Burndy                 | KSU Series |
| <input type="checkbox"/> | _____                  | _____      |
| <input type="checkbox"/> | _____                  | _____      |

### **Single Center Bolt Parallel Groove Connector**

- |                          |                        |           |
|--------------------------|------------------------|-----------|
| <input type="checkbox"/> | Hubbell/Anderson/Fargo | LC Series |
| <input type="checkbox"/> | _____                  | _____     |
| <input type="checkbox"/> | _____                  | _____     |

### **Transformer/Pole Ground Connector**

- |                          |               |           |
|--------------------------|---------------|-----------|
| <input type="checkbox"/> | Blackburn/T&B | TC Series |
| <input type="checkbox"/> | _____         | _____     |
| <input type="checkbox"/> | _____         | _____     |

### **H-Type Compression Connector – Aluminum**

- |                          |               |             |
|--------------------------|---------------|-------------|
| <input type="checkbox"/> | Blackburn/T&B | UB 214      |
| <input type="checkbox"/> | Burndy        | YACL series |
| <input type="checkbox"/> | _____         | _____       |
| <input type="checkbox"/> | _____         | _____       |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**Bond Wire**

**Description:** 7 strand, class B. Green insulation required in conduits.

**Use:** Bond/grounding wire.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Republic Wire (Anixter)	_____
<input type="checkbox"/> General Cable (Anixter)	_____
<input type="checkbox"/> Rome (Anixter)	_____
<input type="checkbox"/> Superior Essex	_____
<input type="checkbox"/> Southwire	_____
<input type="checkbox"/> Cerro Wire	_____
<input type="checkbox"/> Encore	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**Cable Ties**

**Description:** Black nylon or plastic strips, positive, non-release.

**Use:** Strapping control cable to messenger cable, 6" spacing.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Tyton	T120S0H4
<input type="checkbox"/> Thomas Betts	TY527MX
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Conduit (Metallic)**

**Description:** Rigid galvanized steel conduit, elbows and fittings, and flexible conduit.

**Use:** Rigid for concrete embedment, foundations, and elbows. Flex inside poles for service feeds.

### **Galvanized Rigid Metallic Conduit**

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Republic	_____
<input type="checkbox"/> Picoma	_____
<input type="checkbox"/> Allied Tube & Conduit	_____
<input type="checkbox"/> Conduit Pipe Products	_____
<input type="checkbox"/> Western Tube & Conduit	_____
<input type="checkbox"/> Wheatland Tube Co.	_____
<input type="checkbox"/> Shamrock (T&B)	_____
<input type="checkbox"/> Cal Pipe Manufacturing	_____
<input type="checkbox"/> Ridgeline	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Liquid-Tight Flexible Metallic Conduit**

<input type="checkbox"/> Anamet Electrical Inc. _ (Anaconda Sealtite)	Type UA
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**Conduit (Non-Metallic)**

**Description:** PVC and High Density Polyethylene, and rigid non-metallic conduit and fittings.

**Use:** Houses electrical conductors.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>PVC</b>		
<input type="checkbox"/>	PW Pipe	Sch. 80
<input type="checkbox"/>	Carlton/Prime	Sch. 80
<input type="checkbox"/>	J-M Manufacturing	Sch. 80
<input type="checkbox"/>	Allied/Heritage	Sch. 80
<input type="checkbox"/>	Kraloy	Sch. 80
<input type="checkbox"/>	Cantex	Sch. 80
<input type="checkbox"/>	Ipex/Scepter	Sch. 80
<input type="checkbox"/>	Crestline Northwest	Sch. 80
<input type="checkbox"/>	Ridgeline	Sch. 80
<input type="checkbox"/>	Heritage Plastics Central	Sch. 80
<input type="checkbox"/>	Rocky Mountain Colby Pipe	Sch. 80
<input type="checkbox"/>	Raceways Technology & Manufacturing	Sch. 80
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

<b>HDPE</b>		
<input type="checkbox"/>	Carlton	Sch. 80
<input type="checkbox"/>	Arnco/Dura-Line	Sch. 80
<input type="checkbox"/>	Perma-Guard/UL EPEC 80	Sch. 80

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

<b>Fiberglass</b>		
<input type="checkbox"/>	Champion Fiberglass	_____
<input type="checkbox"/>	FRE Composites	_____
<input type="checkbox"/>	United Fiberglass of America	_____
<input type="checkbox"/>	Raceways Technology & Manufacturing	Sch. 80
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

<b>LFNC</b>		
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Conduit Bushing**

**Description:** Conduit bushing with insulated throat, no bonding lug.

**Use:** Used on the ends of conduit when bonding lugs are not needed (e.g. shielded pairs, communications cable, fiber optic, etc.)

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>Metallic</b>	
<input type="checkbox"/> Bridgeport	#363 to #370
<input type="checkbox"/> T&B	#1224, #1226 to #1229
<input type="checkbox"/> RACO	#1127 to #1134
<input type="checkbox"/> Crouse-Hinds	#1033 to #1038
<input type="checkbox"/> _____	_____

<b>Polymer End Bell</b>	
<input type="checkbox"/> Carlon	_____
<input type="checkbox"/> PW Eagle	_____
<input type="checkbox"/> Ridgeline	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Grounding/Bond Bushing**

**Description:** Metallic (malleable iron) conduit bushings with a lay-in lug. Includes insulated throat. Aluminum not allowed.

**Use:** On ends of conduit to bond conduit system.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Blackjack (Thomas & Betts)	BG Series
<input type="checkbox"/> Appleton	GIB Series
<input type="checkbox"/> Crouse-Hinds (Lazy Lug)	GLL-1 to GLL-12 (All)
<input type="checkbox"/> Arlington Industries	425 to 457
<input type="checkbox"/> Bridgeport	#383 to #390
<input type="checkbox"/> RACO	1214, 1216, 1218, 1290 & 1292
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Conduit Hub**

**Description:** Watertight threaded, nylon insulated, steel/malleable iron, neoprene "O" ring, "Meyers" hub.

**Use:** Watertight connections.

- |   |                          |
|---|--------------------------|
| <u>Brand/Manufacturer</u>               | <u>Model/Part Number</u> |
| <input type="checkbox"/> O-Z/Gedney     | CHM-T                    |
| <input type="checkbox"/> Thomas & Betts | #370 to #379             |
| <input type="checkbox"/> _____          | _____                    |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Condulet**

**Description:** Malleable iron conduit body hot dip galvanized with cover and moisture-proof gasket. It is used to connect various straight conduit sections of the electrical raceway.

**Use:** Conduit transition/pull point.

- |   |                          |
|---|--------------------------|
| <u>Brand/Manufacturer</u>                   | <u>Model/Part Number</u> |
| <input type="checkbox"/> Cooper Couse Hinds | Form 7                   |
| <input type="checkbox"/> _____              | _____                    |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Conduit Plug**

**Description:** Closed cell polyethylene foam, preformed for specific conduit size. Spray foam is not allowed. Cut to supplier suggested length for conduit size, or may be a mechanical device that expands into conduit expanding to form a seal to conduit and wires/cables.

**Use:** Foam/mechanical plug, inserted into exposed end of conduit in foundations and junctions boxes, for seal.

- |   |                                |
|---|--------------------------------|
| <u>Brand/Manufacturer</u>                 | <u>Model/Part Number</u>       |
| <input type="checkbox"/> Foam Factory     | Polyethylene Cylinders (2.2LB) |
| <input type="checkbox"/> Prairie Electric | Molded Plug                    |
| <input type="checkbox"/> Tice Electric    | Clark Foam Products            |
| <input type="checkbox"/> Global Electric  | Conduit Plugger                |
| <input type="checkbox"/> _____            | _____                          |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Expansion Fitting**

**Description:** Fitting shall be weatherproof, malleable iron with a hot-dip galvanized finish. Provides expansion for galvanized conduit while still maintaining a bond, internally or with an external jumper.

**Use:** Provides for conduit expansion movement when crossing expansion joints in/on structures and between fixed enclosures.

Brand/Manufacturer

Model/Part Number

### **Expansion Only**

- |                                       |                      |
|---------------------------------------|----------------------|
| <input type="checkbox"/> O-Z/Gedney   | Type AX & AX8        |
| <input type="checkbox"/> O-Z/Gedney   | Bond Jumper: Type BJ |
| <input type="checkbox"/> O-Z/Gedney   | Type AXB & AXB8      |
| <input type="checkbox"/> Crouse-Hinds | Type XJG             |
| <input type="checkbox"/> _____        | _____                |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Expansion/Deflection**

- |                                |       |
|--------------------------------|-------|
| <input type="checkbox"/> _____ | _____ |
| <input type="checkbox"/> _____ | _____ |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Ground Rod**

**Description:** Copper coated 5/8 inch metal rod, 8' to 10' long.

**Use:** All poles, conduit runs with 120V+ AC, and controller must be bonded to ground rod using full-contact clamps.

Brand/Manufacturer

Model/Part Number

- |   |        |
|---|--------|
| <input type="checkbox"/> Thomas & Betts (Blackburn) | 6258   |
| <input type="checkbox"/> Eritech                    | 615880 |
| <input type="checkbox"/> PP Porcelain Products      | 8438   |
| <input type="checkbox"/> Petron Pacific             | 5/8"   |
| <input type="checkbox"/> _____                      | _____  |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Ground Rod Clamp**

**Description:** Bronze.

**Use:** All poles, conduit runs with 120V+ AC, and controller must be bonded to ground rod using full-contact clamps.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Thomas & Betts (Blackburn)	JAB58H
<input type="checkbox"/> Burndy	GRC58
<input type="checkbox"/> Penn-Union	CAB or CEB
<input type="checkbox"/> PP Porcelain Products	8058
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **In-Line Kits, Fuses, and Insulating Boots**

**Description:** In-line fuse kit, fuses, and insulating boots. Rated for 30 A at 600 V to hold a 5 A KTK fuse. Wire terminals shall be set screw type rated for copper wires.

**Use:** To install in-line 30A fuse for slip-based pole or 10A fuse for fixed base pole. See special provisions.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Cooper Bussman 2 Pole	HEX-JJ
<input type="checkbox"/> Cooper Bussman 1 Pole	HEB-JJ
<input type="checkbox"/> Cooper Bussman Fuse	KTK Series
<input type="checkbox"/> Cooper Bussman Insulating Boot	2A0660
<input type="checkbox"/> Littelfuse 2 Pole	LEX-JJ
<input type="checkbox"/> Littelfuse 1 Pole	LEB-JJ
<input type="checkbox"/> Littelfuse Insulating Boot	WPB1
<input type="checkbox"/> Mersen 2 Pole	FEX-81-81
<input type="checkbox"/> Mersen 1 Pole	FEB-81-81
<input type="checkbox"/> Mersen Insulating Boot	FSB1
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



## **Junction Box – Cast Iron**

**Description:** Watertight boxes of cast iron, gasketed lid held down with stainless steel screws.

**Use:** In traffic areas. (Pavement) Pull box for 120V AC conduit runs. Junction box for DC conduit runs. (Splices to loop feeder.)

Brand/Manufacturer

Model/Part Number

### **Outside Flanged Recessed Cover Box**

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| <input type="checkbox"/> Spring City | Type ER with Slip-not Grade 2 Lid |
| <input type="checkbox"/> _____       | _____                             |
| <input type="checkbox"/> _____       | _____                             |

### **Overlapping Cover Box**

- |                                     |         |
|-------------------------------------|---------|
| <input type="checkbox"/> O-Z Gedney | Type YL |
| <input type="checkbox"/> _____      | _____   |
| <input type="checkbox"/> _____      | _____   |

### **NEMA-3R**

- |                                |           |
|--------------------------------|-----------|
| <input type="checkbox"/> Eaton | 10106WPSC |
| <input type="checkbox"/> _____ | _____     |
| <input type="checkbox"/> _____ | _____     |

### **NEMA-4**

- |                                |       |
|--------------------------------|-------|
| <input type="checkbox"/> Eaton | _____ |
| <input type="checkbox"/> _____ | _____ |
| <input type="checkbox"/> _____ | _____ |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Junction Box – Concrete and Polymer Concrete**

**Description:** Open-bottom boxes of pre-cast reinforced concrete with brass or stainless-steel fasteners. Polymer concrete also allowed.

**Use:** As a pull point or wire access point.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>	
<b>SB-A</b>		
<input type="checkbox"/> CDR	B16111812A/C16111802A	<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> SUBMIT SPECIFIED ITEM  <small>REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.</small>
<input type="checkbox"/> Newbasis	PCA111812	
<input type="checkbox"/> Oldcastle	1118-12	
<input type="checkbox"/> Oldcastle – Duralite	1118-12	
<input type="checkbox"/> Quazite	PG1118BA12/PG1118HA	
<input type="checkbox"/> _____	_____	
<input type="checkbox"/> _____	_____	
<b>SB-B</b>		
<input type="checkbox"/> Armorcast	A6001946TAPCX12	<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> SUBMIT SPECIFIED ITEM  <small>REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.</small>
<input type="checkbox"/> CDR	B16132412A/C16132402A	
<input type="checkbox"/> Newbasis	PCA132412	
<input type="checkbox"/> Oldcastle	1324-12	
<input type="checkbox"/> Oldcastle – Duralite	1324-12	
<input type="checkbox"/> Quazite	PG1324BA12/PG1324HH00	
<input type="checkbox"/> _____	_____	
<input type="checkbox"/> _____	_____	
<b>SB-C</b>		
<input type="checkbox"/> Armorcast	A6001640HDAPCX12	<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> SUBMIT SPECIFIED ITEM  <small>REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.</small>
<input type="checkbox"/> CDR	B16173012A/C16173002A	
<input type="checkbox"/> Newbasis	PCA173012	
<input type="checkbox"/> Oldcastle	1730-12	
<input type="checkbox"/> Oldcastle – Duralite	1730-12	
<input type="checkbox"/> Quazite	PG11730BA12/PG1730HH00	
<input type="checkbox"/> _____	_____	
<input type="checkbox"/> _____	_____	

## **Junction Box – Concrete and Polymer Concrete**

**Description:** Open-bottom boxes of pre-cast reinforced concrete with brass or stainless-steel fasteners. Polymer concrete also allowed.

**Use:** As a pull point or wire access point.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>HH-1</b>		
<input type="checkbox"/>	Armorcast	A6001974HDAPCX24
<input type="checkbox"/>	Newbasis	PCA243624
<input type="checkbox"/>	Oldcastle	2436-24
<input type="checkbox"/>	Oldcastle-Duralite Max	2436MAX
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

<b>HH-2</b>		
<input type="checkbox"/>	Armorcast	A6001430HDAPCX24
<input type="checkbox"/>	Newbasis	PCA304824
<input type="checkbox"/>	Oldcastle	3048-24
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

<b>HH-3</b>		
<input type="checkbox"/>	Armorcast	A6001430HDAPCX36
<input type="checkbox"/>	Newbasis	PCA304836
<input type="checkbox"/>	Oldcastle	3048-36
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pull Line**

**Description:** Polyester line with a break strength of 1200 lbs.

**Use:** Each conduit shall have a polyester pull line installed and 40 inches of slack in box.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Herculine Polyester	P1250W
<input type="checkbox"/> Herculine Kevlar	A1250W
<input type="checkbox"/> Muletape	_____
<input type="checkbox"/> Dottie	DWP1500
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Terminal Blocks**

**Description:** Sectional wire termination points, 600 volt rated, Solderless connections, tubular clamp, sized for wire being terminated, channel mount assembly.

**Use:** For terminating wires/cables in terminal cabinets, etc.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Allen-Bradley	1492-CA1
<input type="checkbox"/> Entrelec	'M' Series
<input type="checkbox"/> Buchanan	200 Series (600V), 900 Series (900V)
<input type="checkbox"/> SQUARE-'D'	Type 'K'
<input type="checkbox"/> Marathon	6H38, 6H12, 602-12 (recessed cabinet), J602 (jumper)
<input type="checkbox"/> Phoenix Contact	UT4, UT6
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Terminal Cabinet**

**Description:** Constructed of 1/8" stainless, galv. steel, or powder coated aluminum. Contains terminal blocks, weatherproof fittings.

**Use:** Pole mounted terminations.

**Instructions:** Shop drawing shall be submitted. Type and size to be indicated.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Fouch	_____
<input type="checkbox"/> Rhino Manufacturing	8000
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**THWN and XHHW Wire**

**Description:** THWN is stranded copper conductor with PVC insulation and nylon jacket. XHHW is stranded copper conductor with cross linked polyethylene insulation. WIRE MUST BE MARKED.

**Use:** All single conductor applications.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>THWN</b>	
<input type="checkbox"/> Southwire	_____
<input type="checkbox"/> Cerrowire	_____
<input type="checkbox"/> Superior Essex	_____
<input type="checkbox"/> General Cable (Anixter)	_____
<input type="checkbox"/> Carol	_____
<input type="checkbox"/> American Insulated Wire	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

<b>XHHW</b>	
<input type="checkbox"/> Rome Cable (Anixter)	_____
<input type="checkbox"/> General Cable (Anixter)	_____
<input type="checkbox"/> Southwire	_____
<input type="checkbox"/> Encore Wire	_____
<input type="checkbox"/> Service Wire Co	_____
<input type="checkbox"/> Kris Tech (KT) Wire	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**Underground Warning Tape**

**Description:** Red polyethylene film, 6" wide, 4 mills thick. Printed with "CAUTION BURIED ELECTRIC LINE"

**Use:** Any conduits outside paved roadway shall be marked full-length with this tape 6 inches below surface.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Dottie	UT-29D
<input type="checkbox"/> Ideal	#42-151
<input type="checkbox"/> Reef Industries	Standard 250
<input type="checkbox"/> Cully	UG Burial Tape
<input type="checkbox"/> Harris	UT-29
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Weatherhead**

**Description:** Watertight method for entering poles.

**Use:** Entering poles with cables.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Wire Nut – Water Resistant**

**Description:** Water resistant silicon gel-filled wire nut.

**Use:** Splicing cables, loops to shielded pairs in wet conditions, below-grade or direct-bury.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Ideal	Models 60,64,66
<input type="checkbox"/>	Dry Conn	King Dark Blue
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Multi-Tap Connector**

**Description:** Electrical splice materials

**Use:** Splicing conductors in wet conditions, below-grade or direct-bury.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	IlSCO	PED3-350SS-DB
<input type="checkbox"/>	Burndy	BIBS3503DB
<input type="checkbox"/>	NSI Polaris	ISPB2/0-3
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Bike Signal Assembly (4")**

**Description:** 3-section 4" bicycle signal cluster with bicycle symbol.

**Use:** Near-side bicycle signal.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	ITEM Ltd	Bike Buddy 4"
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Blue LED Light**

**Description:** Blue LED light with wide angle lens and standard mount.

**Use:** Bicycle detection confirmation light.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Wells Sign	The Informer
<input type="checkbox"/>	Electro-Tech	Tattle Tale
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Cabinet Riser Frame**

**Description:** Aluminum framework of 1/4" channel or 1/8" sheet stock, anodized. 1-piece welded construction for new installs, 2-piece for retrofits.

**Use:** Elevates cabinet 8" above foundation, providing additional workspace. Spec requires building paper gasket between foundation and riser, and non-hardening watertight seal between riser and cabinet.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	McCain	M61036
<input type="checkbox"/>	Safetran	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Control Cable**

**Description:** Multi-conductor cable with assorted stranded copper No. 14 wires, No. 12, etc. Meet color code on Standard Drawings.

**Use:** Between cabinet and field devices, signals, push buttons, etc.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Rome (Anixter)	IMSA 20-1
<input type="checkbox"/> Belden (Anixter)	IMSA 20-1
<input type="checkbox"/> American (Anixter)	IMSA 20-1
<input type="checkbox"/> Advanced Digital Cable	IMSA 20-1
<input type="checkbox"/> Lake Cable (Anixter)	IMSA 20-1
<input type="checkbox"/> Falcon Fine Wire	IMSA 20-1
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Loop Feeder Cable**

**Description:** Polyethylene jacketed shielded cable with 2-14 AWG wires and bare tinned copper drain wire, IMSA Spec. 50-2.

**Use:** Connects loop wires to cabinet.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>IMSA 50-2 14 AWG</b>	
<input type="checkbox"/> Rome (Anixter)	IMSA 20-1
<input type="checkbox"/> Belden (Anixter)	IMSA 20-1
<input type="checkbox"/> American (Anixter)	IMSA 20-1
<input type="checkbox"/> Advanced Digital Cable	IMSA 20-1
<input type="checkbox"/> Lake Cable (Anixter)	IMSA 20-1
<input type="checkbox"/> Falcon Fine Wire	IMSA 20-1
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Multi-conductor (2-Pair)**

<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



## **Loop - Preformed**

**Description:** 4 turns OF #14 XHHW or #16 TFFN wire encased in either Sch. 40 PVC or rubber hydraulic hose totally filled with sealant.

**Use:** Thin pavement, poor pavement, or concrete bridge deck.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Never-Fail Loop Assembly	Model A or C
<input type="checkbox"/> De-Tech (Capital Enterprise)	Sealant filled hydraulic hose
<input type="checkbox"/> Reno	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Loop Wire**

**Description:** Stranded copper conductor, with crosslinked polyethylene insulation, 14 AWG. Encased in a polyethylene tube (sleeve). Wire and tube must be stamped with proper IMSA 51-7.

**Use:** Loop wire in a tube installed in the pavement, twist loop return pairs 4 to 6 turns per foot all the way from loop to junction box.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Kris Tech (KT) Wire	1419-XLP-TUBE 1C14B19LOOP8
<input type="checkbox"/> Coleman/CCI Cable & Wire	06-24273
<input type="checkbox"/> Advance Digital Cable (ADC)	IMSA 51-7 w/PE tube
<input type="checkbox"/> R.J. Wire & Cable	IMSA 51-7 w/PE tube
<input type="checkbox"/> Clifford	IMSA 51-7 w/PE tube
<input type="checkbox"/> Rome (Anixter)	IMSA 51-7 w/PE tube
<input type="checkbox"/> Belden	IMSA 51-7 w/PE tube
<input type="checkbox"/> Lake Cable (Anixter)	IMSA 51-7 w/PE tube
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Loop Sealant**

**Description:** Rubberized asphalt material formulated as resistant yet flexible.

**Use:** Sealant in detector saw-cuts.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Crafco	34271
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Loop Backer-Rod (Hold-Downs)**

**Description:** Closed-cell polyurethane.

**Use:** Place 1" lengths every 12" along saw cuts and 6" from corners. Hold-downs shall fit snugly in saw cuts.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	SOF Rod	_____
<input type="checkbox"/>	HBR XL	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pedestrian Signal Housing**

**Description:** Pole mounted ped signals. Cast aluminum enclosure, powder-coated inside and out. Stainless steel hardware. Polycarbonate not allowed.

**Use:** Ped crossings at signalized intersections.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	McCain	M31826, M32236
<input type="checkbox"/>	Econolite	_____
<input type="checkbox"/>	Eagle	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> SUBMIT SPECIFIED ITEM  <small>REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.</small>
---

## **Pedestrian Signal Mount - Clamshell**

**Description:** Reversible swing open cast aluminum clamshell compartment with watertight neoprene gasket and terminal block.

**Use:** Mounting bracket for ped signal on 4" posts.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	McCain	M28282, M27164
<input type="checkbox"/>	IDC	4805, 4835 (clamshell)
<input type="checkbox"/>	Traffic Signal Hardware, Inc.	Drawing No. 1004
<input type="checkbox"/>	(GDM & Capitol Ent)	_____
<input type="checkbox"/>	PEEK	4805
<input type="checkbox"/>	Eagle	BK15608P001-13P
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> SUBMIT SPECIFIED ITEM  <small>REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.</small>
---

## **Pedestrian LED Module**

**Description:** Flange mount type countdown combination. Uniform appearance hand and person.

**Use:** LED module to illuminate ped signals.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Dialight	430-6479-001X
<input type="checkbox"/>	GE	GTX PS7-CFF1-VLA
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> MAKE CORRECTIONS NOTED <input type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <input type="checkbox"/> SUBMIT SPECIFIED ITEM  <small>REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.</small>
---

## **Plumbizer**

**Description:** Mast arm plumbizer with double rings.

**Use:** Attaches over mast arm tenon and supports the signal head from the top using Tri-Stud Adapter.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Traffic Signal Hardware, Inc.	TSH0072
<input type="checkbox"/> McCain	M30652
<input type="checkbox"/> McCain	M45173
<input type="checkbox"/> Western Systems	7023060039
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Preemption Cable**

**Description:** Opticom detector cable.

**Use:** Installed between Opticom detector and cabinet.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> GTT Opticom detector cable	138
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Push Button**

**Description:** Audible-tactile pushbutton station, control unit and mounting with sign assembly.

**Use:** Accessible pedestrian systems, bicycle push buttons, and RRFB installations.

**Instructions:** Order form shall be submitted for review of audio messages.

Brand/Manufacturer

Model/Part Number

### **Accessible Pedestrian System**

- |                          |                                |                                   |
|--------------------------|--------------------------------|-----------------------------------|
| <input type="checkbox"/> | Polara iNS 3-Wire System       | iNS3 5 A N 1-B with iPHCU3S       |
| <input type="checkbox"/> | Polara Navigator 4-Wire System | EN4 5 A N 1-B (internal use only) |
| <input type="checkbox"/> | _____                          | _____                             |
| <input type="checkbox"/> | _____                          | _____                             |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Push Button for RRFB w/9"x12" Sign**

- |                          |        |       |
|--------------------------|--------|-------|
| <input type="checkbox"/> | Polara | iNX   |
| <input type="checkbox"/> | _____  | _____ |
| <input type="checkbox"/> | _____  | _____ |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Push Button for Bicycle Detection w/9"x15" Sign**

- |                          |                                |                          |
|--------------------------|--------------------------------|--------------------------|
| <input type="checkbox"/> | Polara Bulldog Latching Button | BDL3 ___ - Y with LPBCU2 |
|                          |                                | Button Style:            |
|                          |                                | Left Arrow Button – AL   |
|                          |                                | quantity ____            |
|                          |                                | Right Arrow Button – AR  |
|                          |                                | quantity ____            |
|                          |                                | Up Arrow Button – AU     |
|                          |                                | quantity ____            |
| <input type="checkbox"/> | _____                          | _____                    |
| <input type="checkbox"/> | _____                          | _____                    |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Rectangular Rapid Flashing Beacon (RRFB) System**

**Description:** This item includes RRFB controller, controller cabinet, LED light bars, and solar panels (if applicable). Controller and cabinet must accommodate push button controller.

**Use:** RRFBs are user-actuated amber LEDs that supplement warning signs at unsignalized intersections or mid-block crosswalks. They can be activated by pedestrians manually by a push button.

Brand/Manufacturer

Model/Part Number

### **AC RRFB (Wired)**

- |                                   |  |
|-----------------------------------|--|
| <input type="checkbox"/> Tapco    | Controller 120V AC, Prostar – 15, 120652, hollow, XAV, radio |
| <input type="checkbox"/> Tapco    | RRFB wire harness, dimmable, cable with female connector     |
| <input type="checkbox"/> Tapco    | RRFB light bar, amber with universal mounting kit            |
| <input type="checkbox"/> Carmanah | SC315 AC power   |
| <input type="checkbox"/> _____    | _____  |
| <input type="checkbox"/> _____    | _____  |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM  
  
REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **AC RRFB (Radio)**

- |                                |   |
|--------------------------------|---|
| <input type="checkbox"/> Tapco | Controller 120V AC, 108045, hollow, XAV, radio    |
| <input type="checkbox"/> Tapco | RRFB light bar, amber with universal mounting kit |
| <input type="checkbox"/> _____ | _____   |
| <input type="checkbox"/> _____ | _____   |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM  
  
REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Solar RRFB**

- |                                |  |
|--------------------------------|--|
| <input type="checkbox"/> Tapco | Controller 120V AC, Prostar – 15, 120652, hollow, XAV, radio                               |
| <input type="checkbox"/> Tapco | RRFB light bar, amber with universal mounting kit  |
| <input type="checkbox"/> Tapco | Large cabinet bracket set fits round poles 2-3/8 and up, STD HDW and snap locks for 120652 |
| <input type="checkbox"/> Tapco | Tap battery, 35 AHR, 12V AGM lead acid   |
| <input type="checkbox"/> _____ | _____  |
| <input type="checkbox"/> _____ | _____  |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM  
  
REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## Service Cabinet

**Description:** Pole and base mounted service cabinet without meter base. Includes circuit breakers, contactors, test switches, neutral and ground bars.

**Use:** Verify that size and circuit breakers submitted are as called for by plans.

**Instructions:** Shop drawing shall be submitted.

Brand/Manufacturer

Model/Part Number

### Type US (Pole-Mounted 10"H x 7"W x 4"D, No Test Switch)

- |                                |         |
|--------------------------------|---------|
| <input type="checkbox"/> Fouch | Type US |
| <input type="checkbox"/> _____ | _____   |
| <input type="checkbox"/> _____ | _____   |

### Type A (Pole-Mounted 12"H x 8"W x 6"D, Test Switch)

- |                                |        |
|--------------------------------|--------|
| <input type="checkbox"/> Fouch | Type A |
| <input type="checkbox"/> _____ | _____  |
| <input type="checkbox"/> _____ | _____  |

### Type B (Pole-Mounted 24"H x 12"W x 8"D, Test Switch, Contactors)

- |                                |        |
|--------------------------------|--------|
| <input type="checkbox"/> Fouch | Type B |
| <input type="checkbox"/> _____ | _____  |
| <input type="checkbox"/> _____ | _____  |

### Type C (Base-Mounted 43"H x 16"W x 8 3/4"D, Test Switch, Contactors)

- |                                |        |
|--------------------------------|--------|
| <input type="checkbox"/> Fouch | Type C |
| <input type="checkbox"/> _____ | _____  |
| <input type="checkbox"/> _____ | _____  |

### Flasher Cabinet (Pole-Mounted 16"H x 10"W x 7"D)

- |  |        |
|--|--------|
| <input type="checkbox"/> Fouch               | SC1-FC |
| <input type="checkbox"/> Rhino Manufacturing | SC1-FC |
| <input type="checkbox"/> _____               | _____  |
| <input type="checkbox"/> _____               | _____  |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## Span Wire Hanger

**Description:** A fitting of cast bronze that attaches to the messenger cable with 2 'U' bolts. A wire outlet body hangs from this with a clevis pin through adjustable slot. ALL fasteners shall be Type 304/316 stainless steel.

**Use:** Allows equipment to hang plumb from span wire, provides cable entrance when wire installed with correct drip loop.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	McCain	_____
<input type="checkbox"/>	Traffic Signal Hardware, Inc.	Drawing No. 1003
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## Span Wire/Messenger Cable

**Description:** Bare steel cable comprised of 7 strands of galvanized wire. Utilities grade 3/8" diameter 11,500 lbs break.

**Use:** Supports control cables, signal heads and signs on span wire installation.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Cal-Wire	3/8 inch Utility Grade, Class A
<input type="checkbox"/>	National Strand	3/8 inch Utility Grade, Class A
<input type="checkbox"/>	Bekaert	3/8 inch Utility Grade, Class A
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



## **Eyebolt, Turnbuckle, and Strandvise**

**Description:** Hardware for attaching spans to strain poles. Hot dipped galvanized.

**Use:** Eyebolt and strandvise for messenger cable. Eyebolt, strandvise and turnbuckle for tether ('S' hook to be furnished by PBOT).

**Instructions:** 'S' hook to be furnished by PBOT.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>Eyebolt</b>	
<input type="checkbox"/> Joslyn	J9512(E), J9514(E)
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>Turnbuckle (with Jam Nuts)</b>	
<input type="checkbox"/> Crosby	HG-226(1031314)
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>Strandvise (1/4")</b>	
<input type="checkbox"/> Maclean Power Systems	5100, 5200
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>Strandvise (3/8")</b>	
<input type="checkbox"/> Maclean Power Systems	5102
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Tether/Stabilizer Cable**

**Description:** 1/4 inch galv. steel cable comprised of 7 strands of wire. A coating conforming to ASTM A 475.

**Use:** Attached at bottom of equipment to prevent wind movement.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> National Strand	¼ inch, 7 strand Class A
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Tether Clamp**

**Description:** Attaches to Tri-Stud Adapter on bottom of signal or sign. Is constructed of 1 1/2" galv. steel pipe or galv. metal conduit with plate welded on bottom. Tether wire keeper is bolted to plate. Galv. after fabrication. ALL fasteners shall be Type 304/316 stainless steel.

**Use:** Attaches equipment to 1/4 inch tether cable. Correct assembly is shown on Standard Drawings. Cable attaches UNDER keeper bolts.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> McCain	_____
<input type="checkbox"/> Eagle Precision	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Tri-Stud Adapter**

**Description:** Fitting of cast aluminum w/steel insert, powder coated as per spec. Three bolts, split washers, nylon insert lock-nuts of stainless steel, with 2 stainless backing washers, 72 serrations, 5 degree each.

**Use:** Used for attaching vehicle signal heads/signs to 1 1/2" conduit riser which is supported by a plumbizer or span wire hanger.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Coast Cast, Inc.	Drawing No. A-164
<input type="checkbox"/> Taylor Machine	Drawing No. 10702 (12/22/98)
<input type="checkbox"/> Traffic Signal Hardware	Drawing No. 1003
<input type="checkbox"/> SS Machine Works	Drawing No. TCM37-2
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal Adjustable Bracket**

**Description:** Extruded aluminum assembly that is adjustable. Uses stainless steel cable to attach to arm.

**Use:** To attach vehicle signal to mast arm. Allows for signal height adjustment, and both top and bottom support.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Pelco	AS-0142 (for signs)
<input type="checkbox"/> Pelco	AB-0125 (for signals)
<input type="checkbox"/> Pelco	AS-0149 (for signals)
<input type="checkbox"/> Olson Sky Bracket	SS-SBC64-XX
<input type="checkbox"/> Olson Sky Bracket	SS-SBC64-SCB-XX
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal Backplate**

**Description:** Aluminum housing powder-coated black. Louvered. Paint not allowed. Attach with stainless steel screws and washers. Yellow reflective borders. Bike signals to have yellow backplates.

**Use:** Shield around vehicle signal for sky contrast.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> McCain	M17903, M17910
<input type="checkbox"/> Northwest Signal	1288E, 121212E, 12121212E, 5 cluster-E, 1212121212E
<input type="checkbox"/> Peek	400007
<input type="checkbox"/> Eagle/Brown	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal Housing**

**Description:** Aluminum housing powder-coated black. The number of signal/beacon faces may vary. Fasteners to be type 304/316 stainless steel except for brass terminal screws. Polycarbonate not allowed. Bike signals to be yellow.

**Use:** Red, yellow, green signals and flashing beacons with balls, arrows, and bike signal faces.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> McCain	8" & 12"
<input type="checkbox"/> Peek	8" & 12"
<input type="checkbox"/> Traffic Control Technologies	Die Cast Aluminum
<input type="checkbox"/> Econolite	8" & 12"
<input type="checkbox"/> Eagle/Brown	8" & 12"
<input type="checkbox"/> McCain	3-section HAWK, M42482
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal Louver**

**Description:** Assembly of louver baffles layered at specific locations installed inside full circle visor, or powder-coated metal louver insert. GPL to include all baffles for viewing angle flexibility.

**Use:** Control viewing angle of signal face.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Pelco	GL-1010
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

### **Geometrically Programmed Louver (GPL)**

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Vane Style Louver**

<input type="checkbox"/> Signal Control Products, Inc.	_____
<input type="checkbox"/> McCain	M19250
<input type="checkbox"/> McCain	M19326
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal Visor**

**Description:** Powder-coated, black, aluminum, open at bottom (tunnel). Attaches to signal heads with stainless steel screws.

**Use:** All signal heads.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> McCain	M19263
<input type="checkbox"/> Peek	700027
<input type="checkbox"/> Eagle/Brown	A852307 XX
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**Vehicle Signal LED Modules - Red**

**Description:** Flange mount style, 8" and 12" diameter, tinted lens.

**Use:** LED module to illuminate vehicle signals.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>12" Red Ball</b>	
<input type="checkbox"/> Dialight	433-1210-003XL15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Red Arrow</b>	
<input type="checkbox"/> Dialight	432-1314-001XOD15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>8" Red Ball</b>	
<input type="checkbox"/> Dialight	433-1110-003XL15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Red Bike</b>	
<input type="checkbox"/> Dialight	433-1210-003XLB
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>8" Red Bike</b>	
<input type="checkbox"/> Dialight	433-1110-003XLB
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal LED Modules - Yellow**

**Description:** Flange mount style, 8" and 12" diameter, tinted lens.

**Use:** LED module to illuminate vehicle signals.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>12" Yellow Ball</b>	
<input type="checkbox"/> Dialight	433-3230-901XL15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Yellow Arrow</b>	
<input type="checkbox"/> Dialight	431-3334-901XOD15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>8" Yellow Ball</b>	
<input type="checkbox"/> Dialight	433-3130-001XL15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Yellow Bike</b>	
<input type="checkbox"/> Dialight	433-3230-901XLB
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>8" Yellow Bike</b>	
<input type="checkbox"/> Dialight	433-3130-901XLB
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Vehicle Signal LED Modules - Green**

**Description:** Flange mount style, 8" and 12" diameter, tinted lens.

**Use:** LED module to illuminate vehicle signals.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>12" Green Ball</b>	
<input type="checkbox"/> Dialight	433-2220-001XL15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Green Arrow</b>	
<input type="checkbox"/> Dialight	432-2324-001XOD15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>8" Green Ball</b>	
<input type="checkbox"/> Dialight	433-2120-001XL15
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Green Bike</b>	
<input type="checkbox"/> Dialight	433-2220-001XLB
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>8" Green Bike</b>	
<input type="checkbox"/> Dialight	433-2120-001XLB
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



## **Vehicle/Pedestrian Signal Cover**

**Description:** Yellow pre-fabricated nylon "bag" with mesh insert and integral elastic bands and clips to secure the covers to the signal. Vehicle signal cover shall completely cover signal, including visors and backplate. Pedestrian signal cover shall completely cover pedestrian signal. Legend should be "NOT IN SERVICE" or similar.

**Use:** Fully covers the entire signal head assembly when signal is turned off, but allows visibility of signals through mesh for testing.

Brand/Manufacturer

Model/Part Number

### **Vehicle Signal**

- |   |                             |
|---|-----------------------------|
| <input type="checkbox"/> Freedom ROC                          | Signal Shirt                |
| <input type="checkbox"/> Traffic Sign & Signal Cover Concepts | Vehicle Cover- Yellow - PMI |
| <input type="checkbox"/> _____                                | _____                       |
| <input type="checkbox"/> _____                                | _____                       |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Pedestrian Signal**

- |   |                          |
|---|--------------------------|
| <input type="checkbox"/> Freedom ROC                          | Signal Shirt             |
| <input type="checkbox"/> Traffic Sign & Signal Cover Concepts | Ped Cover - Yellow - PMI |
| <input type="checkbox"/> _____                                | _____                    |
| <input type="checkbox"/> _____                                | _____                    |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pedestrian Push Button Cover**

**Description:** Yellow pre-fabricated nylon "bag" that fits over entire push button and push button sign. Legend should be "NOT IN SERVICE" or similar.

**Use:** Fully covers the entire push button assembly and sign.

Brand/Manufacturer

Model/Part Number

- |   |                  |
|---|------------------|
| <input type="checkbox"/> Freedom ROC                          | T3600-PBS        |
| <input type="checkbox"/> Traffic Sign & Signal Cover Concepts | PPB-0-2          |
| <input type="checkbox"/> Traffic Safety Supply Company        | Pushbutton Cover |
| <input type="checkbox"/> _____                                | _____            |
| <input type="checkbox"/> _____                                | _____            |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Video Monitoring PTZ Camera System**

**Description:** Video camera system with pan-tilt-zoom capability complete with power supply, mounts, and communications, control, and power cabling.

**Use:** Video monitoring of traffic signal operations.

### **PTZ Camera**

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Siqura	PD910
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

### **Camera Mount**

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Sign – Part Time Restriction (PTR)**

**Description:** Flat black painted, aluminum alloy case with part-time legend, till lit. LED illuminated legend. These are custom signs.

**Use:** Restricted turn moves, light rail and railroad preemption.

**Instructions:** Cut sheet of specific sign shall be submitted.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	Wells Manufacturing	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Sign Mounting Framework**

**Description:** Aluminum assembly for mounting signs on a mast arm pole. Includes adjustable brackets.

**Use:** To support aluminum signs on a mast arms.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
---------------------------	--------------------------

### **Tenon Mount Type "A"**

<input type="checkbox"/>	EC Company	ECC 100
<input type="checkbox"/>	GDM (Capitol Ent.)	Drawing No. 1020
<input type="checkbox"/>	Eagle Precision	Bracket, Reflective Sign
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Bracket Mount Type "B"**

<input type="checkbox"/>	Pelco	AB-0144-A-L
<input type="checkbox"/>	Pelco	AB-0142-A-L
<input type="checkbox"/>	Olson Sky Bracket	SS-SBC64-SBK-XXTKXX
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## School Zone Flasher

**Description:** This item includes school zone flasher controller, controller cabinet, pole mounts, cable harness, blue flasher, LED module, and solar panel (if applicable).

**Use:** Used with school speed zone signs to indicate that a 20 MPH speed limit is enforced within the school zone.

Brand/Manufacturer

Model/Part Number

### Controller, Switches, Battery

- |                          |                     |                                 |
|--------------------------|---------------------|---------------------------------|
| <input type="checkbox"/> | Applied Information | 84598 (Time Switch Kit)         |
| <input type="checkbox"/> | Applied Information | 500-070B (Timer Switch, Solar)  |
| <input type="checkbox"/> | Applied Information | 67843 (Battery – 100 AH, Solar) |
| <input type="checkbox"/> | Applied Information | 500-070 (Timer Switch, AC)      |
| <input type="checkbox"/> | _____               | _____                           |
| <input type="checkbox"/> | _____               | _____                           |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### Controller Cabinet

- |                          |          |               |
|--------------------------|----------|---------------|
| <input type="checkbox"/> | Carmanah | 84531 (Solar) |
| <input type="checkbox"/> | Carmanah | 84569 (AC)    |
| <input type="checkbox"/> | _____    | _____         |
| <input type="checkbox"/> | _____    | _____         |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### Mounts

- |                          |          |  |
|--------------------------|----------|--|
| <input type="checkbox"/> | Carmanah | 74454 (Top of Post Mount for Metal Pole) |
| <input type="checkbox"/> | Carmanah | 82800 (Side of Pole Mount for Wood Pole) |
| <input type="checkbox"/> | _____    | _____                                    |
| <input type="checkbox"/> | _____    | _____                                    |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### Cable LED Harness

- |                          |          |                             |
|--------------------------|----------|-----------------------------|
| <input type="checkbox"/> | Carmanah | 84366 (12" Cable, AC/Solar) |
| <input type="checkbox"/> | _____    | _____                       |
| <input type="checkbox"/> | _____    | _____                       |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **School Zone Flasher (continued)**

**Description:** This item includes school zone flasher controller, controller cabinet, pole mounts, cable harness, blue flasher, LED module, and solar panel (if applicable).

**Use:** Used with school speed zone signs to indicate that a 20 MPH speed limit is enforced within the school zone.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<b>Solar Panel</b>	
<input type="checkbox"/> Carmanah	74334 (80 W, Solar)
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>Blue Flasher</b>	
<input type="checkbox"/> Carmanah	TT02-BL-12VDC
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

<b>12" Yellow 12V DC LED Module</b>	
<input type="checkbox"/> Dialight	433-3230-900XL
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Photoelectric Cell**

**Description:** A photoelectronic relay device meeting specifications under 00970.

**Use:** Turning on and off luminaires.

Brand/Manufacturer

Model/Part Number

### **Photoelectric Cell**

- |                          |            |           |
|--------------------------|------------|-----------|
| <input type="checkbox"/> | Ripley     | 6390LL-BK |
| <input type="checkbox"/> | Intermatic | LED4536SC |
| <input type="checkbox"/> | _____      | _____     |
| <input type="checkbox"/> | _____      | _____     |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Twist Lock Receptacle**

- |                          |            |        |
|--------------------------|------------|--------|
| <input type="checkbox"/> | Intermatic | K122   |
| <input type="checkbox"/> | Ripley     | 5927   |
| <input type="checkbox"/> | Ripley     | 5927-L |
| <input type="checkbox"/> | _____      | _____  |
| <input type="checkbox"/> | _____      | _____  |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Ornamental Luminaires**

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Light distribution shall be Type III unless otherwise indicated on plans. Luminaire globe and LED module shall be thoroughly cleaned before installation. Specifications under 00970 and 02920.

**Use:** To illuminate roadways and sidewalks.

\*IES files are available upon request

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
---------------------------	--------------------------

### **Twin Luminaire for Ornamental Pole**

- |                          |                          |                                    |
|--------------------------|--------------------------|------------------------------------|
| <input type="checkbox"/> | Amerlux (LED Tower Only) | EDR-8687-AVI-G3-T-K/V-S0-30-425M   |
| <input type="checkbox"/> | Amerlux (Globe Only)     | EDR-8688-COP Acorn-88269 Custom    |
| <input type="checkbox"/> | Amerlux Shield           | HSS-AVI                            |
| <input type="checkbox"/> | Spring City              | ALMSLO-LE040/EVX/L2-30-CR4-YS29-CU |
| <input type="checkbox"/> | _____                    | _____                              |
| <input type="checkbox"/> | _____                    | _____                              |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Single Luminaire for Ornamental Pole**

#### **3000K**

- |                          |                          |                                     |
|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | Amerlux (LED Tower Only) | EDR-8684-AVI-G3-K/V-S0-30-425M      |
| <input type="checkbox"/> | Amerlux (Globe Only)     | EDR-8685-COP Acorn AP24DR-CL Custom |
| <input type="checkbox"/> | Amerlux Shield           | HSS-AVI                             |
| <input type="checkbox"/> | Spring City              | ALMSLO-LE040/EVX/L2-30-CR4-YS19-CU  |
| <input type="checkbox"/> | _____                    | _____                               |
| <input type="checkbox"/> | _____                    | _____                               |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

#### **2700K (Residential Only)**

- |                          |                          |                                     |
|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | Amerlux (LED Tower Only) | EDR-8684-AVI-G3-K/V-S0-27-425M      |
| <input type="checkbox"/> | Amerlux (Globe Only)     | EDR-8685-COP Acorn AP24DR-CL Custom |
| <input type="checkbox"/> | _____                    | _____                               |
| <input type="checkbox"/> | _____                    | _____                               |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Post Top Luminaires**

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Luminaire shall be thoroughly cleaned before installation. Specifications under 02926.

**Use:** To illuminate roadways and sidewalks.

**Instructions:** Shop drawing shall be submitted.

\*IES files are available upon request

Brand/Manufacturer

Model/Part Number

### **Dark Sky Compliant**

#### **4" Tenon**

- |                          |                                |  |
|--------------------------|--------------------------------|--|
| <input type="checkbox"/> | Spring City William & Mary     | ALMWMM-M8-EVX-2F2-FM3-YPLO-FED-CU-[options]      |
| <input type="checkbox"/> | Spring City Richmond           | ALMRCH-EVX-2F2-FM3-GPLO-FBR-CU-[options]         |
| <input type="checkbox"/> | Spring City Augusta Acorn      | ALMAGS-M20-EVX-2F2-FM3-GPLO-FPL-CU-[options]     |
| <input type="checkbox"/> | Spring City Augusta Round Roof | ALMAGS-M30-EVX-2F2-FM3-GPLO-GSS-FNP-CU-[options] |

Options: Color: Portland Green  Historic Black  Silver   
 Wattage: 40W (arterial)  20W (local)   
 Color Temperature: 3000K (arterial)  2700K (local)   
 4" Adapter (for single ornamentals): Yes  No

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

#### **3" Tenon**

- |                          |                        |  |
|--------------------------|------------------------|--|
| <input type="checkbox"/> | Spring City Yorktown   | ALMYRK-M10-EVX-2F2-FM3-YPLO-FBR-CU-[options] |
| <input type="checkbox"/> | King Luminaire Revolve | K427 P4FL340-7030-120:277V-3K-WS-[options]   |

Options: Color: Bronze  Black   
 Wattage: 40W (arterial)  20W (local)   
 Color Temperature: 3000K (arterial)  2700K (local)

Options: Color: Bronze  Black   
 Photocontrol: Yes  No

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



**Post Top Luminaires (continued)**

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Luminaire shall be thoroughly cleaned before installation. Specifications under 02926.

**Use:** To illuminate roadways and sidewalks.

**Instructions:** Shop drawing shall be submitted.

\*IES files are available upon request

Brand/Manufacturer                      Model/Part Number

**Other Post Top Luminaires, Use for Approved Districts  
Town & Country - 3" Tenon (Local Service Only)**

- |   |   |
|---|---|
| <input type="checkbox"/> GE Lighting Town & Country | GE #EPTT-010-02B-A27-D-P-[Color]-L-P-LSPRTT-021                       |
|   | Color: Bronze <input type="checkbox"/> Black <input type="checkbox"/> |
| <input type="checkbox"/> AEL American Revolution    | 247L-P20-AS-27K-R3-AY-[Color]-P7-SH-SS-TL-HSB-L03                     |
|   | Color: Bronze <input type="checkbox"/> Black <input type="checkbox"/> |

**Town & Country - 3" Tenon (Arterials)**

- |  |                                      |
|--|--------------------------------------|
| <input type="checkbox"/> GE Lighting Salem       | EPST-02-____-____- B-30-D-A-____-021 |
| <input type="checkbox"/> AEL American Revolution | ARDCL-____-____-3K-R3-DDB-NR-TL-SS   |

**Lumec Post Top - 4" Tenon**

- |   |   |
|---|---|
| <input type="checkbox"/> Lumec Z14  | Z14-65W42LED4K-R-AC-RLE3-120-SFZ4   |
| <input type="checkbox"/> Lumec Z40  | Z40-65W42LED4K-R-AC-RLE3-120-SFZ4   |
|   | Color: GN8TX (Green) <input type="checkbox"/> BKTX (Black) <input type="checkbox"/> |
| <input type="checkbox"/> Amerlux Lumec Retrofit<br>(pre 5/2000 fixtures)  | EDR-8306-AVI2-U-SO-30-700M-COP/OL   |
| <input type="checkbox"/> Amerlux Lumec Retrofit<br>(post 5/2000 fixtures) | EDR-8306-AVI2-U-SO-30-700M -COP NL  |
| <input type="checkbox"/> Lumec EcoSwap Retrofit<br>(post 5/2000 fixtures) | 65W42LED4K-R  |
| <input type="checkbox"/> _____  |   |
| <input type="checkbox"/> _____  |   |

**Assorted Models**

- |  |                                     |
|--|-------------------------------------|
| <input type="checkbox"/> AEL Contempo              | 245L-MVOLT-3K-RNA-BK-SD-SS          |
| <input type="checkbox"/> Hadco- Contemporary Acorn | CL32-P-H-L-N-2-A-N-W-32-A-N (Black) |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## South Waterfront Luminaire & Lamps

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Luminaire glassware, reflector and lamp shall be thoroughly cleaned before installation. Specifications under 02920.

**Use:** To illuminate roadways and sidewalks.

\*IES files are available upon request

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Post Top/Twins	Hadco #CL32-P-H-L-N-2-Z-W-N-W-A-3-S-N-N-N-SP1 (FAWS preset = 2)
<input type="checkbox"/> Corner Light	Gardco #CA22L-32L-350-WW-G2-AR3-4-UNV-DD-MGY
<input type="checkbox"/> Canopy Light	Hadco #C14605-ZS312A15
<input type="checkbox"/> Final Light	RAB Lighting #VX100DG - GL100B
<input type="checkbox"/> Final Light Bulb	Sunlite Blue LED Light Bulb #81080-SU
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## South Auditorium Luminaire & Lamps

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Light distribution shall be indicated on plans. Luminaire glassware, reflector and lamp shall be thoroughly cleaned before installation.

**Use:** To illuminate roadways and sidewalks.

\*IES files are available upon request

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Post Top LED Globe Type IV	King KG22-SAPD-IV-50(SSL)-5000-120-K48
<input type="checkbox"/> Post Top LED Globe Type V	King KG22-SAPD-V-50(SSL)-5000-120-K48
<input type="checkbox"/> Mast Arm (85W QL)	Holophane GH85QL -122ASU402B
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **LED Cobrahead Luminares**

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Size of luminaire, number of LEDs, voltage, and light distribution shall be determined by photometric analysis or to match lumen output and distribution type indicated. External Housing shall be rated for 'wet' conditions; Optical chamber to be IP66 rated. Light distribution and lumen output shall be as indicated on plans. Back light shields are standard in residential applications. Use 3000K for arterials, and 2700K in neighborhoods. Luminaire shall be thoroughly cleaned before installation.

**Use:** To illuminate roadways, bikeways, and sidewalks.

**Instructions:** Shop drawing shall be submitted.

\*IES files are available upon request

Brand/Manufacturer

Model/Part Number

### **Arterials**

#### **Leotek**

- |   |   |
|---|---|
| <input type="checkbox"/> Green Cobra Jr. GCJ - H Series | Required Options: PCR7-WL-4B-DSC<br>Shields:<br>HSSGCJ (house-side, residential) <input type="checkbox"/> |
| <input type="checkbox"/> Green Cobra GCM-H Series       | Required Options: PCR7-WL-4B-DSC<br>Shields:<br>HSSGCM (house-side, residential) <input type="checkbox"/> |
| <input type="checkbox"/> Green Cobra GCL-G Series       | Required Options: PCR7-WL-4B-DSC<br>Shields:<br>HSSGCL (house-side, residential) <input type="checkbox"/> |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM  
REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

\*Note: GC 'J-series' has not been approved for City use\*

#### **CREE**

- |  |   |
|--|---|
| <input type="checkbox"/> RSW - Small       | Required Options: SS - Q-dial setting ____<br>Shields:<br>BLSS (back light, residential) <input type="checkbox"/>       |
| <input type="checkbox"/> RSW - Medium      | Required Options: SS - Q-dial setting ____<br>Shields:<br>BLSS (back light, residential) <input type="checkbox"/>       |
| <input type="checkbox"/> RSW - Large       | Required Options: 4BLT-SS - Q-dial setting ____<br>Shields:<br>BLSS (back light, residential) <input type="checkbox"/>  |
| <input type="checkbox"/> RSW - Extra Large | Required Options: 4-BLT-SS - Q-dial setting ____<br>Shields:<br>BLSS (back light, residential) <input type="checkbox"/> |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM  
REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**LED Cobrahead Luminaires (continued)**

**Description:** All luminaires shall bear a UL label (or Oregon approved equivalent). Size of luminaire, number of LEDs, voltage, and light distribution shall be determined by photometric analysis or to match lumen output and distribution type indicated. External Housing shall be rated for 'wet' conditions; Optical chamber to be IP66 rated. Light distribution and lumen output shall be as indicated on plans. Back light shields are standard in residential applications. Use 3000K for arterials, and 2700K in neighborhoods. Luminaire shall be thoroughly cleaned before installation.

**Use:** To illuminate roadways, bikeways, and sidewalks.

**Instructions:** Shop drawing shall be submitted.

\*IES files are available upon request

Brand/Manufacturer    Model/Part Number

**Local Service Streets**

**Leotek**

Comfortview                      CV1-H-MV-27K-2R-GY-025-PCR7-WL-4B-HSSCV

Options: VHCS 80 Degree Cutoff Shield   
 CSSCV Cul-de-Sac Shield

\*Note: VHCS and CSSCV  
 may be stacked with HSSCV

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

**CREE**

RSW – Small                      RSWS-A-HT-2LG-3L-27K8-UL-GY-N-Q3 -BLSS

Options: FLSS Front-Light Shield (narrow streets)

\*Note: FLSS may be stacked with BLSS

CLSS Cul-de-Sac Shield

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Communications Bracket**

**Description:** Bracket for fiber or copper interconnect with circuit breakers.

**Use:** Power and mounting for Ethernet switch in cabinet.

Brand/Manufacturer

Model/Part Number

### **Copper Interconnect**

- |                          |                             |              |
|--------------------------|-----------------------------|--------------|
| <input type="checkbox"/> | McCain                      | M46050       |
| <input type="checkbox"/> | URS Electronics             | 6610872-FPA  |
| <input type="checkbox"/> | Safetran Brand by Econolite | 332-1319-5XX |
| <input type="checkbox"/> | _____                       | _____        |
| <input type="checkbox"/> | _____                       | _____        |

- NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Fiber Optic Interconnect**

- |                          |                             |              |
|--------------------------|-----------------------------|--------------|
| <input type="checkbox"/> | McCain                      | M46050-1     |
| <input type="checkbox"/> | URS Electronics             | 6610247-FPA  |
| <input type="checkbox"/> | Safetran Brand by Econolite | 332-1320-5XX |
| <input type="checkbox"/> | _____                       | _____        |
| <input type="checkbox"/> | _____                       | _____        |

- NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Ethernet Cable - CAT6**

**Description:** Outdoor-rated, solid 23 AWG, shielded.

**Use:** Video systems, radar systems, RRFB push button wiring, central Communications, and other ITS devices.

Brand/Manufacturer

Model/Part Number

### **Outdoor Shielded Network Cable**

- |                          |       |       |
|--------------------------|-------|-------|
| <input type="checkbox"/> | _____ | _____ |
| <input type="checkbox"/> | _____ | _____ |

- NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Network Patch Cable**

- |                          |       |       |
|--------------------------|-------|-------|
| <input type="checkbox"/> | _____ | _____ |
| <input type="checkbox"/> | _____ | _____ |

- NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Ethernet Switch**

**Description:** External Ethernet switch. Provide two single-mode LC/UPC 10km SFP transceivers for fiber and aggregate switches unless otherwise specified. (empty SFPs on VDSL). No conformal coating.

**Use:** Communication between field equipment and central system.

Brand/Manufacturer

Model/Part Number

### **Fiber Optic Switch**

- Siemens/Ruggedcom
- \_\_\_\_\_

RS900G/6GK6090-0GS23-0BA0-Z (A01)

### **VSDL Switch**

- Siemens/Ruggedcom
- \_\_\_\_\_

RSL910/6GK6491-0LB00-1CA0-Z

### **SFP Transceivers**

- LC
- \_\_\_\_\_

SFP1132-1LX10

### **Aggregate Switch**

- Siemens/Ruggedcom
- Siemens/Ruggedcom
- \_\_\_\_\_

RSG2200/ \_\_\_\_\_

RSG2488/ \_\_\_\_\_

### **Field Router**

- Siemens/Ruggedcom
- \_\_\_\_\_

RX1501/ \_\_\_\_\_

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Fiber Optic Cable**

**Description:** Outdoor rated, dielectric, loose tube, single-mode (OS2, ITU G.652.D)

**Use:** Communication between field equipment and central system.

	<u>Brand/Manufacturer</u>	<u>Fiber Count</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____
<input type="checkbox"/>	_____	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Fiber Optic Patch Panel**

**Description:** Single-mode fiber in-cabinet bulkhead.

**Use:** Fiber termination in cabinet.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
_____	_____
_____	_____
_____	_____
_____	_____

### **Pre-Terminated Patch Panel**

<input type="checkbox"/>	Fiber Connections, Inc.	GatorPatch SC/G620J012FRBY-Z
<input type="checkbox"/>	Fiber Connections, Inc.	GatorPatch LC/G620U012FRBY-Z
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Fiber Distribution Unit**

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Fiber Optic Splice Closure**

**Description:** Outdoor rated, dome-style, suitable for aerial and underground installation.

**Use:** Aerial and underground fiber splice.

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	CommScope	FOSC-450 Series/ _____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Copper Interconnect Cable**

**Description:** Shall comply with REA spec, polyethylene jacket. Shielded cable containing 6+ twisted pairs of 22 AWG solid individual conductors.

**Use:** Installed between signal controllers without splices. Is lashed to messenger cable on overhead installations.

Brand/Manufacturer

Model/Part Number

### **PE-39 Cable**

- |                          |                         |              |
|--------------------------|-------------------------|--------------|
| <input type="checkbox"/> | Superior Essex          | Sealpic-F    |
| <input type="checkbox"/> | General Cable (Anixter) | 7524507      |
| <input type="checkbox"/> | Houston Wire            | HW352        |
| <input type="checkbox"/> | Cifford                 | 6P19-B1-BJFA |
| <input type="checkbox"/> | _____                   | _____        |
| <input type="checkbox"/> | _____                   | _____        |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Wireless Communication System**

**Description:** Wireless radio and integrated antenna system including P.O.E. adapter and lightning arrestor.

**Use:** Wireless communications between radio and antenna.

Brand/Manufacturer

Model/Part Number

### **Radio with Integrated Antenna**

- |                          |       |                   |
|--------------------------|-------|-------------------|
| <input type="checkbox"/> | Encom | E-Lite 5.8 Series |
| <input type="checkbox"/> | _____ | _____             |
| <input type="checkbox"/> | _____ | _____             |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Radio/Antenna Mount**

- |                          |       |               |
|--------------------------|-------|---------------|
| <input type="checkbox"/> | Pelco | AB-3009-SS-84 |
| <input type="checkbox"/> | _____ | _____         |
| <input type="checkbox"/> | _____ | _____         |

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



## **Single Mast Arm Pole**

**Description:** Steel single mast arm pole with round or 8-sided cross-section and recessed terminal cabinet.

**Use:** For mounting signal equipment and signs overhead.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Mast Arm Length(s)</u>
<input type="checkbox"/> Ameron	_____
<input type="checkbox"/> Valmont Industries, Inc.	_____
<input type="checkbox"/> Western Utility Telcom, Inc.	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Combination Mast Arm Pole**

**Description:** Steel single mast arm pole with round or 8-sided cross-section, recessed terminal cabinet, and luminaire arm.

**Use:** For mounting signal equipment and signs overhead, and street lighting.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Mast Arm Length(s)</u>
<input type="checkbox"/> Ameron	_____
<input type="checkbox"/> Valmont Industries, Inc.	_____
<input type="checkbox"/> Western Utility Telcom, Inc.	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Dual Mast Arm Pole**

**Description:** Steel dual mast arm pole with round cross-section, recessed terminal cabinet, with or without luminaire arm.

**Use:** For mounting signal equipment and signs overhead for multiple approaches, and street lighting.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Mast Arm Length(s)</u>
<input type="checkbox"/> Ameron	_____
<input type="checkbox"/> Valmont Industries, Inc.	_____
<input type="checkbox"/> Western Utility Telcom, Inc.	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Strain Pole**

**Description:** Steel strain pole with round or 8-sided cross-section.

**Use:** For mounting signal equipment and signs overhead with span wire.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Pole Length(s)</u>
<input type="checkbox"/> Type 1	_____
<input type="checkbox"/> Type 2	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pedestal (Small) – Pedestrian Pipe Post**

**Description:** 4 inch dia. galv. steel pipe mounted on a cast aluminum or galv. cast iron base. Cap and hand hole cover material per Specs.

**Use:** Freestanding pole for mounting of pedestrian signals and pushbuttons.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Pelco	Base: PB5336, PB5334
<input type="checkbox"/> Pelco	Anchor: PB5306
<input type="checkbox"/> Akron Foundry Co.	Base: TS-1000
<input type="checkbox"/> Component Products	Base: CPI-BAS-1
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pedestal (Large) – Vehicle Signal**

**Description:** Galvanized steel post with welded base plate bolted to a cast aluminum or galvanized cast iron transformer base.

**Use:** Freestanding pole for mounting vehicle signals and other equipment. Frangible base pole.

**Instructions:** Shop drawing shall be submitted for tapered poles.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Akron Foundry	TB1-17
<input type="checkbox"/> Akron Foundry	TB3-17
<input type="checkbox"/> Akron Foundry	TB1-20 (internal use only)
<input type="checkbox"/> Pelco	PB-5517
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Aluminum Illumination Pole**

**Description:** Aluminum alloy cobrahead street light pole with round cross section, tapered tubing.

**Use:** For mounting cobrahead street lights for roadway lighting.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
Mounting Height(s):	_____
Luminaire Arm Length(s):	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Steel Illumination Pole**

**Description:** Steel cobrahead street light pole with round cross section, tapered tubing.

**Use:** For mounting cobrahead street lights for roadway lighting.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Valmont	DS-32 Series
<input type="checkbox"/> Ameron	City of Portland "N" Series
<input type="checkbox"/> Union Metal	71049-B36 Series
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
Mounting Height(s):	_____
Luminaire Arm Length(s):	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Twin Ornamental Street Light Pole**

**Description:** Ornamental-style pedestrian scale street light pole with two luminaires.

**Use:** Mounting pedestrian scale luminaires for roadway lighting.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Visco	VI-C-C2-F
<input type="checkbox"/> Spring City Electrical Manufacturing Co.	_____
<input type="checkbox"/> Continental Pole and Lighting, LLC.	_____
<input type="checkbox"/> Olympic Foundry	Castings Only
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Single Ornamental Street Light Pole**

**Description:** Ornamental-style pedestrian scale street light pole with one luminaire.

**Use:** Mounting pedestrian scale luminaires for roadway lighting.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Visco	VI-A-F
<input type="checkbox"/> Spring City Electrical Manufacturing Co.	_____
<input type="checkbox"/> Continental Pole and Lighting, LLC.	_____
<input type="checkbox"/> Olympic Foundry	Castings Only
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Bottleneck Street Light Pole**

**Description:** Smooth-walled, tapered, round street light pole.

**Use:** Mounting pedestrian scale luminaire for roadway lighting and/or rectangular rapid flashing beacon equipment.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Valmont – aluminum	S Avenue Series 50 Anchor Base Light Pole
<input type="checkbox"/> Valmont – steel	S Avenue Series 50 Anchor Base Light Pole with Modifications per Std. Dwg. P-641
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **South Waterfront Steel Combination Pole**

**Description:**

**Use:**

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Cobrahead Small Wireless Facility Pole**

**Description:** Steel street light pole with one or two cobrahead luminaires.

**Use:** Mounting cobrahead street lights for roadway lighting with small cell facilities for one carrier.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Western Utility Telecom	SWLP-25
<input type="checkbox"/> Western Utility Telecom	SWLP-30
<input type="checkbox"/> Western Utility Telecom	SWLP-35
<input type="checkbox"/> Western Utility Telecom	SWLP-40
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Twin Ornamental Wireless Facility Pole**

**Description:** Ornamental-style pedestrian scale street light pole with two luminaires.

**Use:** Pedestrian scale roadway lighting with small cell facilities for one carrier.

**Instructions:** Shop drawing shall be submitted for review of pole details.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Comptek	CPSP 90679
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Luminaire Arms**

**Description:** 2-inch diameter self-supporting, galvanized steel or aluminum luminaire arm.

**Use:** For mounting cobrahead luminaires for roadway lighting.

\*Note: double guy wind rods required for luminaire arms 12 feet or longer

Brand/Manufacturer                      Model/Part Number

### **Wood Poles (galvanized steel)**

- |                          |                |                    |
|--------------------------|----------------|--------------------|
| <input type="checkbox"/> | GE             | RBSCWH4X2GV        |
| <input type="checkbox"/> | GE             | RBSCWH8X2GV        |
| <input type="checkbox"/> | GE             | RBSDWH16X2GV       |
| <input type="checkbox"/> | Utility Metals | P200S040/MTA000033 |
| <input type="checkbox"/> | Utility Metals | P200S080           |
| <input type="checkbox"/> | Utility Metals | D200S120/GUY000023 |
| <input type="checkbox"/> | Utility Metals | D200S160/GUY000024 |
| <input type="checkbox"/> | Salco          | WP-2-4-S           |
| <input type="checkbox"/> | Salco          | WP-2-8-S           |
| <input type="checkbox"/> | Salco          | WPDG-2-12-S        |
| <input type="checkbox"/> | Salco          | WPDG-2-16-S        |
| <input type="checkbox"/> | _____          | _____              |
| <input type="checkbox"/> | _____          | _____              |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Steel Poles (aluminum)**

- |                          |         |               |
|--------------------------|---------|---------------|
| <input type="checkbox"/> | Valmont | 1TA0432PM-SBF |
| <input type="checkbox"/> | Valmont | 1TA0832PM-SBF |
| <input type="checkbox"/> | Valmont | 1TA1232PM-SBF |
| <input type="checkbox"/> | Valmont | 1TA1632PM-SBF |
| <input type="checkbox"/> | _____   | _____         |
| <input type="checkbox"/> | _____   | _____         |

## **Wood Poles**

**Description:** Class 4, machine-shaved Douglas fir. Treated.

**Use:** For mounting speed reader boards, school zone flashers, and cobrahead luminaires for roadway lighting. Also used for attaching overhead runs of communication.

- |                          |                                  |                        |
|--------------------------|----------------------------------|------------------------|
|                          | <u>Manufacturer</u>              | <u>Pole Length(s):</u> |
| <input type="checkbox"/> | McFarland Cascade (Stella Jones) | _____                  |
| <input type="checkbox"/> | _____                            | _____                  |
| <input type="checkbox"/> | _____                            | _____                  |

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pole Caps**

**Description:** UV-resistant, attached to the top of wood pole.

**Use:** Protects top of wood pole from weather, checking, and decay.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Pro Tops	_____
<input type="checkbox"/> Osmose	CoverCap
<input type="checkbox"/> Osmose	Pole Topper
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

## **Pole Coating**

**Description:** Structures coatings per 00962.48

**Use:** For coating metal signal and street lighting poles.

<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/> Wasser	Primer, MC-Ferrox B
<input type="checkbox"/> Wasser	Transit Blue, MC-Luster W211.0233
<input type="checkbox"/> Wasser	Historic Black, MC-Luster W211.79
<input type="checkbox"/> Wasser	Portland Green, MC-Luster W211.0227
<input type="checkbox"/> Wasser	Gold, MC-Luster W211.0226
<input type="checkbox"/> Wasser	Cascade Green, MC-Luster W211.0225
<input type="checkbox"/> Wasser	Chinatown Red, MC-Luster W211.0261
<input type="checkbox"/> Wasser	Silver, MC-Luster W211.82
<input type="checkbox"/> Wasser	Transit Dark Mall Silver, MC-Luster W211.8002
<input type="checkbox"/> Wasser	Signal Bronze, MC-Luster W211.0298
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

NO EXCEPTIONS TAKEN  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 REJECTED  
 SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.



Project Name: \_\_\_\_\_ Project Number: \_\_\_\_\_ Contract Number: \_\_\_\_\_

## **Blank Form**

**Instructions:** Contractor to fill out this template for ALL equipment items that are not currently listed on the Table of Contents page.

### **Item:**

#### **Description:**

#### **Use:**

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Item:**

#### **Description:**

#### **Use:**

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.

### **Item:**

#### **Description:**

#### **Use:**

	<u>Brand/Manufacturer</u>	<u>Model/Part Number</u>
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

- NO EXCEPTIONS TAKEN
- MAKE CORRECTIONS NOTED
- REVISE AND RESUBMIT
- REJECTED
- SUBMIT SPECIFIED ITEM

REVIEW IS IN ACCORDANCE WITH SECTION 00150.35 OF THE STANDARD CONSTRUCTION SPECIFICATIONS OF THE CITY OF PORTLAND, OREGON.