

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
**TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES**

City of Sacramento - Qualified Products List

April 4, 2026 (List expires December 31, 2026)

Products shown in the list may be updated, added or deleted prior to expiration date without notice.

Please contact John Matoba at jmatoba@cityofsacramento.org for products to be tested and considered to be added to the Qualified Products List.

A. TRAFFIC SIGNAL CABINETS / CONTROLLERS

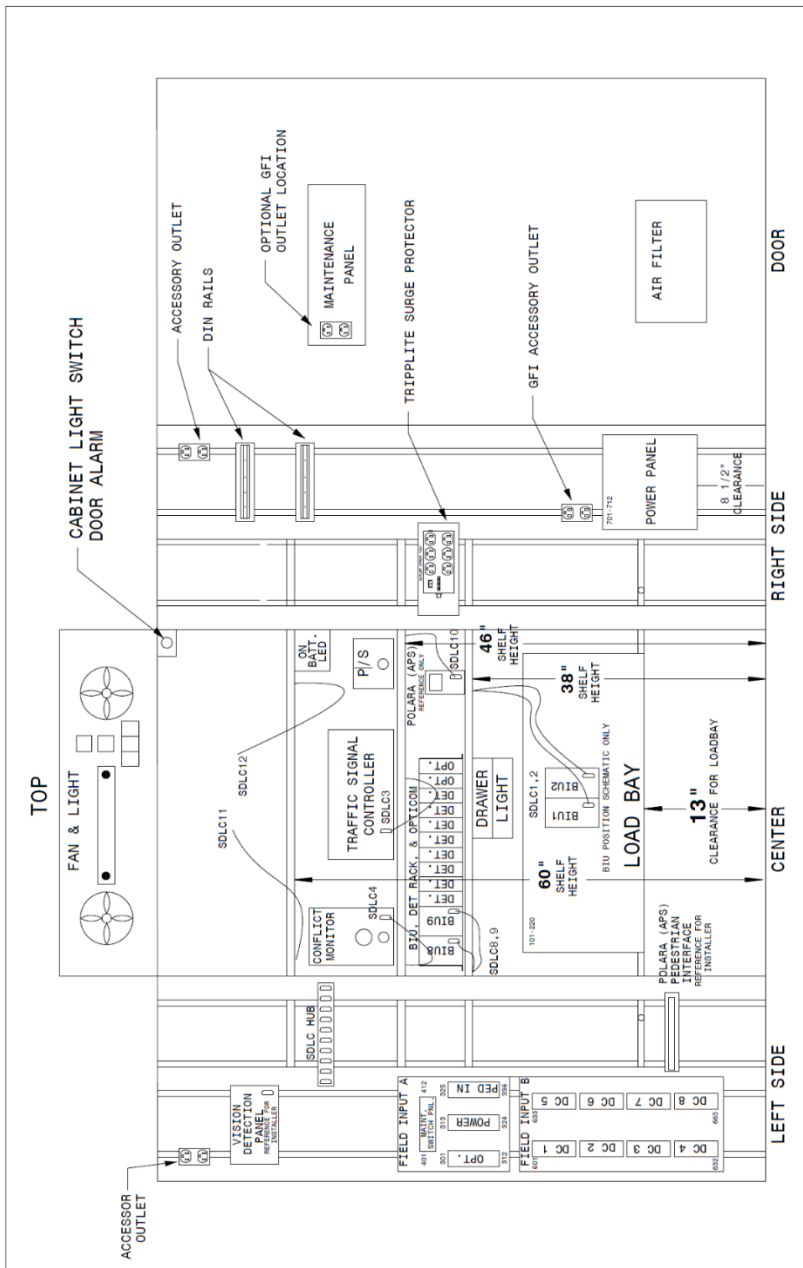
All traffic signal cabinets and controllers shall be supplied from the following approved manufacturers. All cabinets shall be furnished with controller, D4 software version 1.7.1 or higher, Network Switch, Power Supply and all auxiliary equipment listed below. Cabinet shall be equipped with all components for an 8 vehicle phases, 4 pedestrian phases, and 4 overlaps. All components meet NEMA TS2 Type 1 standards.

Traffic Signal Cabinet Type R TS2 Type 1 and Controller TS2 Type 2

1. McCain TS2 Type 1 Cabinet Model# M92150
2. Western System TS2 Type 1 Model# 254006007
3. McCain ATC EX2 Controller TS2 Type 2, EB4 (ABCD plugs)
4. Fourth Dimension D4 software Version 1.7.1 or higher.
5. Network Switch Cisco IE-3100-8T2C-E, PWR-IE50W-AC-IEC, GLC-BX40-U-I (qty 1), GLC-BX40-D-I (qty 1).
6. Power Supply Surge Suppressor Tripp-lite ISOBAR6ULTRA – 6 outlet

Type R Cabinet Auxiliary Equipment to Include:
(16) Load Switches – EDI Model 510
(1) Solid State Flashers – EDI Model 810, Reno Model FL-200
(1) Malfunction Management Unit (MMU) - EDI MMU-16LE, Econolite MMU-16, or Reno MMU-1600G
(6) Bus Interface Unit (BIU) – EDI Model 700, Econolite BIU-64
(1) Power Supply – Econolite PS200 TS2, EDI Model MMU2-16LE, Reno TS-2
(8) Inductive Loop Detectors – Reno A&E Y/2-200
(x) Flasher Transfer Relay
(1) Network Switch – Cisco IE 3100-8T2C-E (See Network Switch in this QPL)
(1) Surge Suppressor (See Surge Suppressor in this QPL)

Layout of Type R Cabinet (TS 2 Type 1) with Controller (TS2 Type 2)



CITY OF SACRAMENTO TS2 R CABINET
 CONTROLLER CABINET LAYOUT
 PUBLISHED 1 - 5 - 2024

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES

Traffic Signal Cabinet 332LS or 342LX and Controller 2070LX

1. Caltrans 332LS Cabinet (without auxiliary loadbay) Econolite or Swaco\McCain
2. Caltrans 342LX Cabinet - Econolite or Swaco\McCain2070LX Controller Econolite or Econolite
3. Fourth Dimension D4 Software
4. Network Switch Cisco IE-3100-8T2C-E, PWR-IE50W-AC-IEC, GLC-BX40-U-I= (qty 1), and GLC-BX40-D-I (qty 1).
5. Power Supply Surge Suppressor Tripp-lite ISOBAR12ULTRA – 12 outlet

Controller 2070LX – Controller shall be equipped with the following modules:

2070-1C CPU, EB4 Module
2070-2E Field I/O Module
2070-LX Front Panel Display
2070-4A 10A Power Supply
Linux Operating System with D4 Software
Back cover plates
Data Key (min 2 megabits)

332LS Auxiliary Equipment to Include:

(1) Conflict Monitor 2010ECLIP
(12) Load Switches 200
(4) Flash Transfer Relays
(1) Power Supply Model 206L
(2) Flasher Units 204
(1) PDA #2LX
(8) Inductive Loop Detector Cards Model 222
(3) DC Isolators 242
(1) LED Light Assembly
(1) Surge Suppressor (See Surge Suppressor in this QPL)
(1) set of anchor bolts
(1) Network Switch per cabinet. (See Network Switch in this QPL)
ID Tag: Manufacturer, Model #, Year Mfgr.

342LX Auxiliary Equipment to Include:

(1) Conflict Monitor 2010ECLIP
(12) Load Switches 200
(4) Flash Transfer Relays
(1) Power Supply Model 206L
(2) Flasher Units 204
(1) PDA #2LX
(8) Inductive Loop Detector Cards Model 222
(3) DC Isolators 242
(1) LED Light Assembly
(1) Surge Suppressor (See Surge Suppressor in this QPL)
(1) set of anchor bolts
(1) Network Switch per cabinet. (See Network Switch in this QPL)
ID Tag: Manufacturer, Model #, Year Mfgr.

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
**TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES**

Network Switch

Network Switch	Cisco Network Switch and Accessories <ul style="list-style-type: none">• Model: IE-3100-8T2C-E• Power Supply: PWR-IE50W-AC-IEC• Small Form Factor Pluggable Module: GLC-BX40-U-I= (qty 1)• Small Form Factor Pluggable Module: GLC-BX40-D-I= (qty 1)• 19" DIN Rail STK-RACK-DINRAIL (if applicable)
----------------	---

Surge Suppressor

Tripp-Lite Power Supply	Surge Suppressor <ul style="list-style-type: none">• Type R Cabinet: ISOBAR6ULTRA – 6 outlet• 332 Cabinet: ISOBAR12ULTRA – 12 outlet
-------------------------	---

B. ELECTRICAL EQUIPMENT

CCTV

<p>AXIS</p>	<p>Camera and Accessories</p> <ul style="list-style-type: none"> • Camera: Axis P3747-PLVE • Power Injector: Axis 02172-004 30W Midspan • Pendant Bracket: Axis TP3108-E • Cat 6 Cable: Belden 7927A • Bracket Corner Pole: AXIS T91B67
-------------	--

GPS EV

<p>Global Traffic Technologies (GTT)</p>	<p>GPS Opticom Series–</p> <ul style="list-style-type: none"> • Phase Selector: Model 764 • Radio Unit: Model 3100 • Auxiliary Interface Panel: Model 768 • Card Rack with Power Supply: Model 760 • Intersection Cabling: Model 1070 • Mounting Hardware: Opticom
--	--

Video Detection System

<p>Video Detection</p>	<p>Econolite – Full Intersection</p> <ul style="list-style-type: none"> • (4) Autoscope Vision (AVISION) Camera • (4) Econolite Mounting Brackets 28” • Econolite 3-wire cable • Autoscope Vision Comm Manager (AVCM) • SDLC Cable <p>Econolite – Full intersection</p> <ul style="list-style-type: none"> • (4) OptiVu Camera • (4) Econolite Mounting Brackets 28” • Econolite 3-wire cable • Autoscope OptiVu Processor • SDLC Cable
------------------------	---

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
**TRAFFIC SIGNAL AND STREET LIGHTING
 PRODUCT QUALIFICATION PROCEDURES**

C. FIBER OPTIC

Fiber Strand

Description	Part Number	Manufacturer	Use
12 Strand	012ZU4-T4F22D20	Corning	Per Plan
12 Strand SST Drop (flat)	012EB4-14101A20	Corning	Per Plan
24 Strand	024ZU4-T4F22D20	Corning	Per Plan
48 Strand	048ZU4-T4F22D20	Corning	Per Plan
96 Strand	096EU4-T4700D20 or 096EU4-T4701D20	Corning	Per Plan
144 Strand	144EU4-T4701D20	Corning	Per Plan
288 Strand	288EU4-T4701D20	Corning	Per Plan

Fiber Patch Cable (OS2 Jumpers)

Description	Part Number	Manufacturer	Use
1m	040402G5120001M	Corning	OS2 Jumpers
2m	040402G5120002M	Corning	OS2 Jumpers

Tracer Tape

Description	Part Number	Manufacturer	Use
Detectable Muletape	DT1250P	Neptco DT1250P, Dura line WP12LC or equivalent	Tracer Tape

Fiber Patch Panel for In-Cabinet Use

Type R Cabinet			
Description	Part Number	Manufacturer	Description
Fiber Panel in R Cabinet	SPH-01P with 12 strand adapter LC panel and SMFO pigtail. SPH-CS-12-A9-P00RE	Corning	Fiber Panel for 12 count in SPH panel

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES

Fiber Patch Panel for In-Cabinet Use

332 Cabinets			
Description	Part Number	Manufacturer	Description
Fiber Panel in 332 Cabinet	CCH-01U (or CCH-04U patch panel (Rack Channel standoff bracket #12309-704)) with CCH-CS12-A9-P00RE splice cassette (standard density). CCH-CS24-A9-P00RE splice cassette (high density), if specified.	Corning	Fiber Panel for 12 count in CCH panel

Splice Case/Tray

Description	Part Number	Manufacturer	Description
Splice Case	8006877	Coyote	Dome Closure 6.5x22
Splice Tray	80805514	Coyote	Long Low-Profile for up to 96 strand
Splice Case	8006944	Coyote	Dome Closure 6.5x17
Splice Tray	80809958	Coyote	for up to 48 strand
Inline Runt	8006915	Coyote	In-Line Runt Closure
Splice Tray	80809958	Coyote	For up to 48 strand

D. TRAFFIC SIGNAL HARDWARE

Vehicle Signal Housing

Vehicle Signal Housing	<p>McCain</p> <ul style="list-style-type: none"> • Model: 12" Housing, Aluminum, Powder Coated Black, • Aluminum Signal Tunnel Visor • Backplate – Yellow Retroreflective 2" Border, Aluminum, louvered and painted black. • Retroreflective border shall be manufactured by 3M. Model 4081 Series Diamond Grade VIP Reflective sheeting.
------------------------	---

Pedestrian Signal Housing

Pedestrian Signal Housing	<p>McCain</p> <ul style="list-style-type: none"> • Model: 16" x 18" Housing, Aluminum, Powder Coated Black
---------------------------	---

Light Emitting Diode (LED) Signal Modules

Display Modules	<ul style="list-style-type: none"> • 12" LED Modules for Traffic Signal Display with Clear Front Shell, Red Yellow Green, Arrow • LED Countdown for Pedestrian Display • Manufactured by Dialight, Leotek, Duralite, or EOI. No exceptions.
-----------------	--

Signal Framework

Framework	<ul style="list-style-type: none"> • Manufactured by McCain • Black • Bronze
-----------	---

Accessible Pedestrian Signal (APS)

APS	<p>Polara Engineering Inc. Model: Polara 2 Wire iDS29UB1-Y PPB w/iDetect</p> <ul style="list-style-type: none"> • Control Unit: Polara iCCU-S2 for TS1, TS2 cabinets. • Control Unit: Polara iCCU-C2 Rack Mount Control Unit for 332 cabinet. • Interconnect Board for 332 or TS2 cabinet. • Size of Sign: 9"x12". R10-3b (CA) sign for Pedestrian Displays with Countdown feature. • Housing Color: Yellow button cover. • Custom Messages: Special Voice Message for Wait to Cross Street Name and Walk Sign is On to cross Street Name. • Braille on faceplate. • SDLC for TS2 Type 1 cabinets. 850-217 (50 pin harness) for TS 1 cabinets. • Bi-directional arrow.
-----	---

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES

E. RECTANGULAR RAPID FLASHING BEACON (RRFB) WITH APS

The RRFB system shall be manufactured by Carmanah Traffic.	
SC315-G	<ul style="list-style-type: none"> • AC-Powered (unless otherwise specified) • Dual Light Bar • Polara APS Push Button Station • Carmanah Control Box Enclosure • 9"x12" instructional sign.

F. LIGHTING

Post Top Luminaire

Luminaire	<p>Acuitybrands Contempo LED Series 245L</p> <ul style="list-style-type: none"> • Model: 245L-P104-MVOLT-30K-R3-RNA-GY-SA-PR7-OPTION HSS(Louvered house side shield). No photocell. 3000K. Type 3 Distribution.
Pole	<p>Valmont</p> <ul style="list-style-type: none"> • Model: City of Sacramento Type "B" Series, 20' length, Galvanized, Anchor Bolt: 1" dia, 36" length, 4" hook, 9" bolt circle

Mastarm Streetlight Luminaire

Light Engine	<p>Traffic Signal Intersection Lighting</p> <ul style="list-style-type: none"> • EOI eLite Star SL3x-M LED Street light – model # ESU FD A01 3M 032 40 M 130 (type 3 Distribution) - for Traffic Signal Intersection lighting at 1300ma. (15,824 Lumens, 134 Watts) • Leotek Green Cobra Jr LED Street light – GCM2-60J-MV-3R-GY-155-WL-RWG-LPCR for Traffic Signal Intersection lighting (15,400 Lumens, 100 Watts) <p>General Roadway Lighting</p> <ul style="list-style-type: none"> • EOI eLite Star SL3x-M LED Street light model #ESU FD A01 3M 032 40 M 105 (12,959 Lumens, 110 Watts) for General Roadway • EOI Compass Series Medium LED Street light – Model #CRLM-A48L120UD3M40GY10V-7R-N - for General Roadway Lighting (up to 12,000 lumens) • Leotek Green Cobra Jr LED Street light - GCJ4-30J-MV-40K-3R-GY-130-WL-RWG-LPCR (13,047 Lumens, 87 Watts) for General Roadway • Leotek Green Cobra Midsize LED Street light – Model #GCM1-60J-MV-40K-3R-GY-125-PCR7-WL-RWG-BBL (up to 13,402 Lumens) - for General Roadway Lighting <p>Post Top (20 foot tall poles) with 6' Slip-fitter application</p> <ul style="list-style-type: none"> • EOI Compass Series Small LED Street light – Model #CRLS-A24L090UD3M30GY10V-7R-N – For Post Top Poles in Residential Roadway Lighting with 6' Slip-fitter arm • Leotek GreenCobra Jr. size LED Street light - GCJ3-30J-MV-30K-3R-GY-090-PCR7-WL-RWG-BBL – For Post Top Poles in Residential Roadway Lighting with 6' Slip-fitter arm
--------------	--

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES

Ornamental Streetlight

Light Engine	<ul style="list-style-type: none">• VEGA, model D4A, 40 watts, Mogul base, 30K for residential (or 40K for pedestrian crossing), T5M, E39 mogul base, Base Down, Standard (no diming).
Globe	<ul style="list-style-type: none">• Model: Lexalite 424 Acrylic Prismatic Top
Pole	<ul style="list-style-type: none">• City of Sacramento Style 1, 12' length, Cast Iron Base, Steel Tapered Shaft, Cast Iron Capital, 3/4" x 30" anchor bolts (4)• City of Sacramento Style 2 - 12' length, Cast Iron Base, Steel Tapered Shaft, Cast Iron Capital, 3/4" x 30" anchor bolts (4)• Manufacturers: Union Metal Corporation or GBL Solutions Inc. or South Coast Lighting & Design

CITY OF SACRAMENTO • DEPARTMENT OF PUBLIC WORKS
TRAFFIC SIGNAL AND STREET LIGHTING
PRODUCT QUALIFICATION PROCEDURES

G. COMMUNICATION HUB CABINET

Communication HUB Cabinet

344LX assembly and components shall conform to all requirements in the Caltrans Transportation Electrical Equipment Specifications (TEES).	
Safetran by Econolite	344LX; or
McCain Inc	344LX
Components:	(1) SPD (TEES A6-12) (1) SPDA (TEES A6-40) (1) LED Light Assembly (1) Surge Suppressor (See Surge Suppressor in this QPL) ID Tag: Manufacturer, Model #, Year Mfgr. Location Tag: Intersection of use.

H. ELECTRICAL UNDERGROUND MATERIALS

Locking Lid Pull Boxes for Streetlight Applications

The following locking lid pull boxes shall be used for streetlight applications. Pull boxes for traffic signals shall be the standard reinforced concrete lid.	
	#5 PB - Locklid 1324 Lid LL K-S TrxPlt Sac Glv; #6 PB - LockLid 1730 Lid LL K-SD TrxPlt Sac Glv).
	#5 PB - Sipra Corp's Lockjaw! Security lids #6 PB - Sipra Corp's Lockjaw! Security lids
	#5 PB - Mr. Steel Security Security lids #6 PB - Mr. Steel Security Security lids

I. ELECTRICAL SERVICE PEDESTALS

Traffic Signal and Street Lighting Service Pedestals

All service pedestals shall be metered and manufactured by Tesco Controls, Inc.
