

DOCUMENT 00 91 00

ADDENDA**PART 1 - ADDENDUM NO. 2**, issued March 9, 2015**1.1 QUESTIONS RECEIVED DURING THE PROPOSAL SUBMITTAL PHASE**

- A. In regards to Section 99 00 01/ 8.4.2.2 College of San Mateo “Provide re-connection to existing control system via BMS system to all replaced and retrofitted luminaires. Re-configuration of zones shall be allowed for in the new design. Improvement of control sequences and operations shall be implemented. Design shall outline control sequences and allow flexibility for the District.”
1. **QUESTION:** Does the College of San Mateo (CSM) campus already have a network in place that links all exterior fixtures? **RESPONSE:** The existing exterior fixtures in the Project at the CSM campus are controlled in one of the following ways: lighting control panel or relay to BMS or time clock. Most of the exterior fixtures at CSM in the Project are controlled via older WattStopper lighting control panels; refer to section 4.2.3 for locations of lighting control panels.
 2. **QUESTION:** Are new wireless fixture level controls only needed at the Skyline and Cañada campuses? **RESPONSE:** Wireless controls are requested for design only at Cañada and Skyline. A compatible additional wireless control system is an option for San Mateo pending the details on how the Design-Build Entity would integrate it into the existing system, but is not required per the Project.
- B. In regards to Section 99 00 01/ 8.4.2.1 B Cañada and Skyline Colleges “The user shall be able to modify occupied and security status for all new fixtures globally within the lighting control system without having to modify them for each fixture. The light level setpoints can reside anywhere in the lighting control system but have to be globally adjustable by the user without having to adjust the level for each fixture separately.”
1. **QUESTION:** Does the existing BMS system have these control capabilities or will these controls need to come strictly from the wireless fixture control system (assuming the fixture control system is linked to the BMS via BACnet)? **RESPONSE:** The lighting control system proposed by the Design-Build Entity shall provide these control capabilities with main control from the BMS system.
 2. **QUESTION:** Are wireless controls required on every new exterior fixture including wall packs, bollards, etc? **RESPONSE:** No, wireless controls are geared towards pole mounted fixtures that are located at a distance from the source of power/ control. Other fixtures shall be controlled from the same system, but not necessarily wireless.
- C. **QUESTION:** Are all CFL fixtures that are listed as ‘NO CHANGE’ on the fixture surveys intended to remain untouched? **RESPONSE:** These do not need to be retrofit, as they already use energy efficient lamps. These are included for reference for circuit loading and control modifications.
- D. **QUESTION:** Do the CFL fixtures mentioned in the previous question require wireless fixture control? **RESPONSE:** They should be controlled from the same system as the new replacement fixtures but depending on location may not need to be wireless networked.
- E. **QUESTION:** For fixture types listed as ‘STAIRWAY’ on the survey, what style of fixture are these (ie recessed can)? **RESPONSE:** These are generally recessed into concrete on wall side of stair.
- F. **QUESTION:** Is there a preference on color temperature (Kelvin) for new fixtures? **RESPONSE:** Per Section 99 00 01\ 8.2.3, color temperature should range between 3500K and 4000K. All fixtures proposed shall have the same color temperature.
- G. **QUESTION:** What model of ‘Cooper Lighting Invue Mesa’ is being used on the other lighting projects? Please provide a cutsheet. **RESPONSE:** A cutsheet with Catalog Number ‘MSA-B06-LED-E1-SL2-AP-DIMRF-LN’ is attached. This fixture is scheduled for Parking Lot 5 and the Loop Road as part of the Cañada College Roadways and Parking Lot Lighting project.
- H. **QUESTION:** Should savings calculations or payback numbers be provided in the proposal? If so, what is the blended kWh rate? **RESPONSE:** Savings calculations and payback numbers are not

necessary for the proposal submittal. Should the Design Build Entity elect to evaluate savings performance, use the blended kWh rate of \$0.092/kWh. The Design Build Entity may want to refer to Proposition 39 Guidelines, which was provided in the previous addendum as a reference document, for other assumptions with respect to life cycle cost analyses.

- I. **QUESTION:** Clarify the location of Entry 28 which is listed on the Cañada College Existing Fixture Survey. **RESPONSE:** See sheet 'E1.1 Cañada Site Lighting Plan ADD 2.pdf' dated 3/9/15.

END OF DOCUMENT

DESCRIPTION

The geometric form of MESA LED allows it to adapt to either contemporary or traditional architectural settings. Available in single or twin pole mount configurations with optional wall mounting capability, MESA mounting options allow for harmonized site design whether at the entryway or in the parking lot. UL/cUL listed for use in wet locations.

SPECIFICATION FEATURES
Construction

HOUSING: Die-cast aluminum main housing and spider mount base maintain a minimum 0.125 wall thickness. Integral aluminum heat sink provides superior thermal heat transfer in +40°C ambient environments. **DOOR ASSEMBLY:** Top mounted, heavy wall, die-cast aluminum door maintains a nominal 0.125 thickness. Door includes a self-retaining interior hinge. **GASKET:** Continuous silicone gasket provided to seal housing door assembly and optic tray. **LENS:** Downlight lens is LED board integrated acrylic over-optics, each individually sealed for IP66 rating. **HARDWARE:** Four (4) inset fasteners on underside of housing provide access to luminaire interior. Concealed, stainless steel four (4) bar hinge lock allows door to lock in the open position.

Optics

DISTRIBUTION: Choice of twelve (12) patented, high-efficiency AccuLED Optics™, featuring designs that maximize light collection and directional distribution onto the application region. Each optical lens is precision manufactured via injection-molding then precisely arranged and sealed on the board

media. LEDs: High output LEDs, 50,000+ hours life at >70% lumen maintenance, offered standard in 4000°K (+/- 275K) CCT and nominal 70 CRI. Mesa LightBAR optic tray is removable and able to rotate 360° in 90° increments for specific placement of the distribution relative to fixture.

Electrical

DRIVER: LED drivers are potted and heat sunk for optimal performance and prolonged life. Standard drivers feature electronic universal voltage (120-277V/50-60hz), greater than 0.9 power factor, less than 20% harmonic distortion and feature ambient temperature range of +40°C (104°F) down to minimum starting temperature of -30°C (-22°F). Shipped standard with Cooper Lighting proprietary circuit module designed to withstand 10kV of transient line surge. All LED LightBARs™ and drivers are mounted to dedicated mounting trays and are easily replaced by use of quick disconnects for ease of wiring. Driver tray is removable without the use of tools. Options to control light levels, energy savings and egress capabilities (battery pack and separate circuit) are available.

Mounting

Fitter assembly mounts over 3" OD tenon and is secured via (3) concealed stainless steel set screws. Design of fitter provides seamless transition to 4" round poles. Additional mounting accessories include a dual fixture post top mounting arm and wall mount arm.

Finish

Housing is finished in 5 stage Super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. LightBAR™ cover plates are standard white and may be specified to match finish of luminaire housing. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult Outdoor Architectural Colors brochure for a complete selection.

Warranty

Mesa LED features a five-year limited warranty.

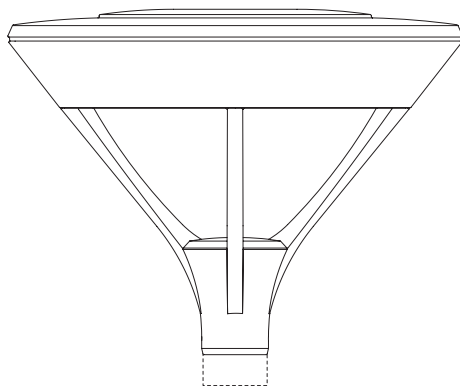
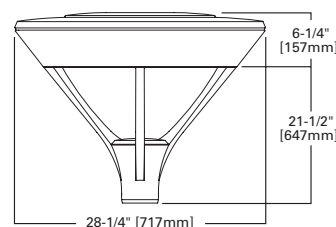
INVUE®


Catalog #	Type
Project	
Comments	Date
Prepared by	


MSA MESA LED

 1-6 LightBARs
Solid State LED

DECORATIVE LUMINAIRE



DIMENSIONS

CERTIFICATION DATA

 UL/cUL Listed
ISO 9001
IP66 LightBARs
ARRA Compliant
LM79 / LM80 Compliant
2G Vibration Tested

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60hz, 347V/60hz, 480V/60hz
-30°C Minimum Temperature
40°C Ambient Temperature Rating

EPA
Effected Projected Area
1.1 Sq. Ft.

SHIPPING DATA
Approximate Net Weight:
50 lbs. (22.7 kgs.)

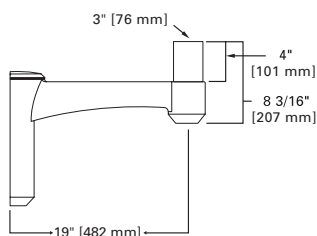


POWER AND LUMENS BY BAR COUNT

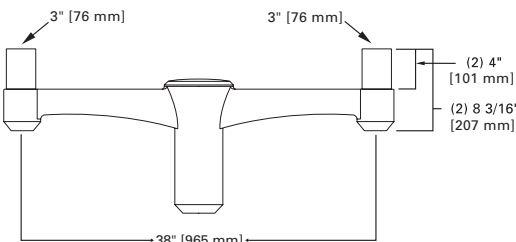
Number of LightBARs	DISTRIBUTION													
	Power [Watts]	Current @ 120V [A]	Current @ 277V [A]	T2	T3	T4	SL2	SL3	SL4	5MQ	5WQ	5XQ	RW	SLR/SL
7 LED LIGHTBAR														
C01	27	0.23	0.13	1,708	1,709	1,668	1,718	1,668	1,675	1,845	1,770	1,791	1,701	1,609
C02	54	0.46	0.21	3,291	3,294	3,215	3,311	3,214	3,228	3,566	3,412	3,451	3,277	3,102
C03	77	0.65	0.29	4,751	4,755	4,641	4,779	4,640	4,660	5,133	4,925	4,982	4,731	4,478
C04	101	0.86	0.37	6,270	6,276	6,125	6,308	6,124	6,151	6,775	6,500	6,575	6,244	5,910
C05	131	1.11	0.50	7,508	7,515	7,334	7,553	7,333	7,365	8,112	7,783	7,873	7,477	7,076
C06	154	1.3	0.58	9,086	9,094	8,875	9,140	8,874	8,913	9,817	9,419	9,528	9,048	8,563
21 LED LIGHTBAR														
B01	27	0.23	0.13	2,101	2,102	2,052	2,113	2,052	2,061	2,269	2,177	2,203	2,092	1,980
B02	51	0.43	0.20	4,048	4,052	3,954	4,072	3,954	3,971	4,374	4,196	4,245	4,031	3,815
B03	73	0.62	0.28	5,844	5,849	5,708	5,879	5,707	5,732	6,314	6,058	6,128	5,820	5,507
B04	95	0.81	0.35	7,712	7,720	7,534	7,759	7,533	7,566	8,333	7,995	8,087	7,681	7,269
B05	124	1.05	0.48	9,235	9,243	9,021	9,290	9,020	9,059	9,978	9,573	9,684	9,197	8,703
B06	146	1.24	0.56	11,176	11,186	10,917	11,243	10,915	10,963	12,075	11,585	11,719	11,130	10,533

ACCESSORIES

WALL MOUNT ARM



DUAL MOUNT ARM [EPA 1.36]



LUMEN MULTIPLIER

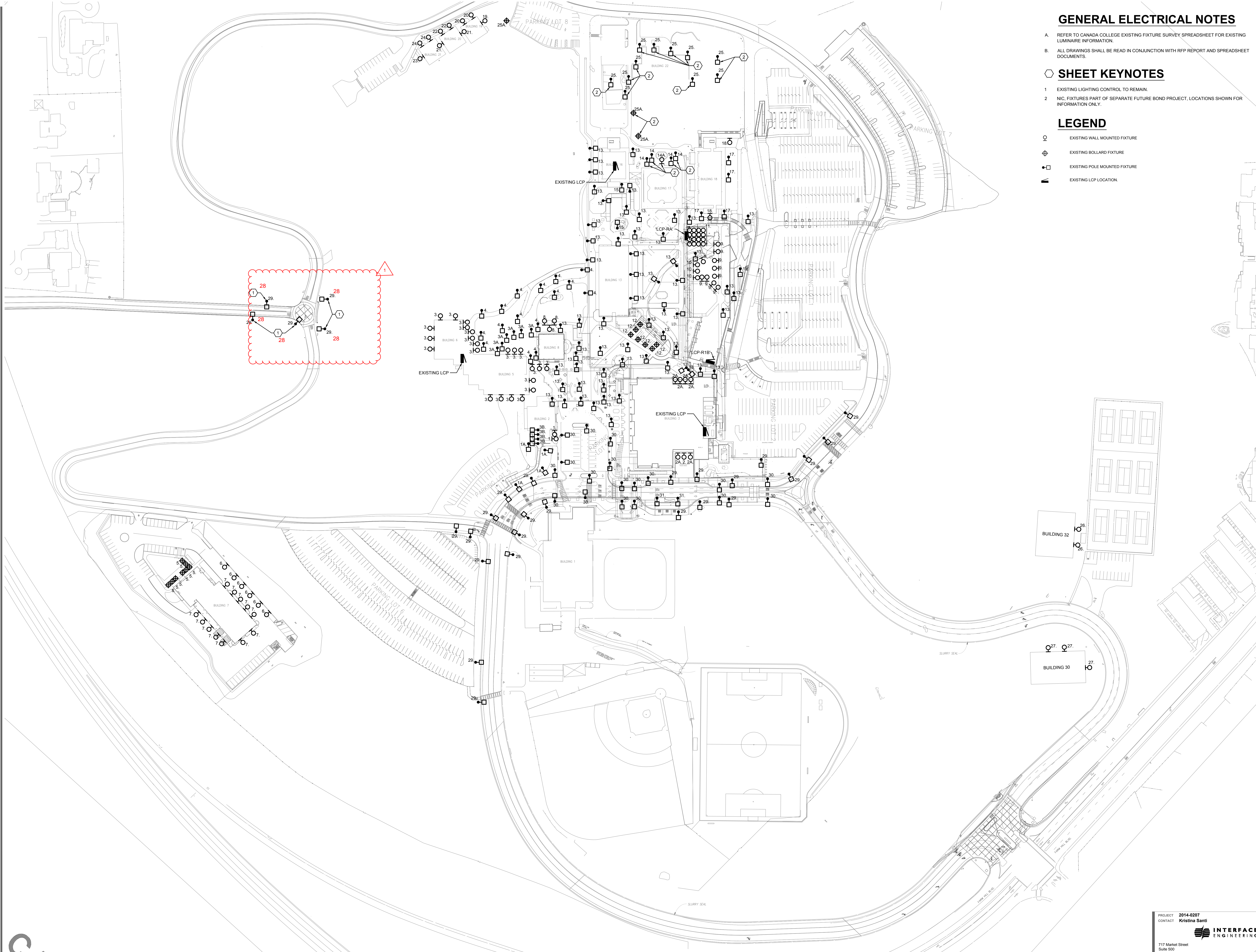
Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96

ORDERING INFORMATION

Sample Number: **MSA-B06-LED-E1-T3-BK**

<p>Product Family¹ MSA-Mesa (Slip-fits Over 3" OD Tenon)</p>	<p>Lamp Type LED-Solid State Light Emitting Diodes</p>	<p>Voltage E1=Electronic (120-277V) 347=347V 480=480V</p>	<p>Finish⁴ BK=Black AP=Grey BZ=Bronze WH=White DP=Dark Platinum GM=Graphite Metallic</p>	<p>Options⁵ PC=Button Type Photocell (specify voltage) R=NEMA Photocontrol Receptacle 2L=Two Circuits⁶ LCF=LightBAR Cover Plate Matches Housing Finish 7060=70 CRI/6000K CCT⁷ 8030=80 CRI/3000K CCT⁷ ICB=Integral Cold Weather Battery⁸ Pack (Specify 120 or 277)</p>
<p>Number of Lightbars^{2,3} B01=[1] 21 LED LightBAR B02=[2] 21 LED LightBARs B03=[3] 21 LED LightBARs B04=[4] 21 LED LightBARs B05=[5] 21 LED LightBARs B06=[6] 21 LED LightBARs C01=[1] 7 LED LightBARs C02=[2] 7 LED LightBARs C03=[3] 7 LED LightBARs C04=[4] 7 LED LightBARs C05=[5] 7 LED LightBARs C06=[6] 7 LED LightBARs</p>	<p>Distribution T2=Type II T3=Type III T4=Type IV 5MQ=Type V Square Medium 5WQ=Type V Square Wide 5XQ=Type V Square Extra Wide RW=Rectangular Wide SL2: Type II w/Spill Control SL3: Type III w/Spill Control SL4: Type IV w/Spill Control SLL: 90 Degree Spill Light Eliminator Left SLR: 90 Degree Spill Light Eliminator Right</p>	<p>Accessories⁹ VA6028-AP: Dual Mount Arm VA6029-AP: Wall Mount Arm OA/RA1016: NEMA Photocontrol - Multi-Tap OA/RA1027: NEMA Photocontrol - 480V OA/RA1201: NEMA Photocontrol - 347V MA1253: 10kV Circuit Module Replacement</p>		

- Notes:**
- DesignLights™ Consortium Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
 - Standard 4000 K CCT and greater than 70 CRI.
 - 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
 - Custom and RAL color matching available upon request. Consult your customer service representative for further information.
 - Add as suffix in the order shown.
 - Low-level output varies by bar count. Consult factory. Not available with 347V or 480V. Requires quantity two or more LightBARS.
 - Consult customer service for lead times and lumen multiplier.
 - Available with B01 - B04, C01 - C04 configurations only. Specify 120 or 277V. LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates (1) lightbar for 90 minutes. Not available in all configurations, consult factory. Rated for use in 25°C ambient.
 - Order separately, replace XX with color suffix.



GENERAL ELECTRICAL NOTES

- A. REFER TO CANADA COLLEGE EXISTING FIXTURE SURVEY SPREADSHEET FOR EXISTING LUMINAIRE INFORMATION.
- B. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH RFP REPORT AND SPREADSHEET DOCUMENTS.

SHEET KEYNOTES

- 1. EXISTING LIGHTING CONTROL TO REMAIN.
- 2. NIC. FIXTURES PART OF SEPARATE FUTURE BOND PROJECT, LOCATIONS SHOWN FOR INFORMATION ONLY.

LEGEND

- ⊗ EXISTING WALL MOUNTED FIXTURE
- ⊕ EXISTING BOLLARD FIXTURE
- ⊠ EXISTING POLE MOUNTED FIXTURE
- █ EXISTING LCP LOCATION

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DISTRICT WIDE EXTERIOR LIGHTING UPGRADE

SAN MATEO COMMUNITY COLLEGE DISTRICT
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SHEET TITLE

REVISIONS
1 Addendum 2

DRAWN BY

CHECKED BY

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1 CANADA COLLEGE SITE LIGHTING PLAN