ADDENDUM NO. 1

Date: February 21, 2014
for
RFP for Energy Service contract for Roadways, Walkways & Parking Lots: Lighting Retrofit at Irvine Valley College

BID # 314D
South Orange County Community College District

General-All project documents including contract documents, drawings, and specifications, shall remain unchanged with the exception of those elements added, revised, deleted, or clarified by this addendum.

CONTENTS
ADDENDUM ITEMS

INDEX

1) Response to questions submitted

2) Revised Drawings (ATTACHMENT H):
   a. ESK-01 – Remove “EXISTING” from site plan drawings titles in sheet index.
   b. ESK-02 – Revised fixture and fuse voltages
   c. ESK – 03 – Revised (3) fixtures in Parking Lot #4 to double head type and added motion sensor to (1) type B fixture
   d. ESK-04 – Removed “EXISTING” from site plan drawing titles
   e. ESK -05 – Added wireless control gateway mounting Detail 4 and Detail 5. Revised gateway mounting to pole mount installation for Detail 3
   f. ESK-06 – Revised note 1 of Detail 1. Lumenwave TOP900-TL receptacle shall be installed by fixture manufacturer and not in the field.
Response to questions submitted (questions 1-11)

1. See attached (ATTACHMENT A) cut of the motion sensors:
   - Page 1 - confirm that I am looking at the right part # product.
   - Page 2 – indicates a round pole/fixture that takes a Lumec SFPH4 collar and that the EW-205-12-LU mounts to that collar.
   - Page 3 – again shows a round pole and there is no other cut sheets on line when part number is searched. Do the specified Motion Sensors mount to a square pole? Are these parts shown on Page #3 interchangeable or and able to be modified to fit 4”, 5” and 6” Square Poles? Sheet #3 would seem to indicate that the bracket (sheet metal 10 GA) is attached to pole by means of hose clamps? Hose clamps? Will we need to order motion sensors based upon sized of poles? Thus adding confusion to the ordering and installation process or is there some universal attachment that can be specified?
   - Page 4 – Again a round pole, indicates ability of sensors to be mounted back to back at same elevation where pictorially on sheet #5 Pir location, they appear to be at different elevations. Please clarify and advise for all.

Response:
   - Yes EW-205-12-LU is the correct motion sensor as shown on sheet E601.
   - The Lumec SFPH4 collar is used for post top application allowing the motion sensor to be mounted to it at the top of the pole. It will not be used for this project because the sensor would be mounted too high to be effective due to our existing pole heights.
   - Although only round poles are shown in the diagrams, the motion sensor can mount to 4”, 5” and 6” square poles per the manufacturer.
   - The motion sensor comes with the mounting bracket. Contractor shall provide pole straps or clamps to attach the bracket to the pole.
   - (2) motion sensors can be mounted on opposite sides of the poles at the same mounting height. (See photo in ATTACHMENT B).

2. There is one fixture called out as an XA2 (ATTACHMENT C). It is only showing one fixture head and is in a planter area in between two type XA2 (double head fixture)

Response: All 3 fixtures shall be double head type. Refer to sketch ESK-03
3. During the pre-proposal conference, a question was asked as to the 480v to 240v transformers and the fixture call out on fixture schedule is 277 Volt. There is concern about whether or not the transformed 240volt would properly supply power to a 277 volt fixture. Engineer’s response was that it will be okay because ALL of the area lights come with a multi tap ballast. On the Area light sheet attached (ATTACHMENT D), this appears to be accurate by using “CW” in the part number when ordering we should get the choices fo 120 volt to 277 bolt and 347 volt to 480 bolt. Please have the engineer verify that this “CW” in part number actually gives above listed choices in every fixture. If prior is true and fixture can be fed with 120/277V or 347/480V, what is the purpose and need for the specified 480/240V transformers? My opinion is that they are not needed on the “Type A = Type XA3H” fixtures. Please clarify and advise.

Response: The ‘UE’ designator in the part number for the XAMU fixture indicates the fixture can operate at any line voltage between 120V and 277V. The new lighting controls cannot operate at 480V therefore we are specifying transformers to step voltage down to 240V

4. On the cut sheet for the Bollards (ATTACHMENT E) , it does not indicate a multi-tap ballast unit. When ordering one must select which voltage to place in voltage box. Per the part number on fixture schedule this would be 277 bolts for all bollards. In attempt to prevent a problem for you and SOCCCD in the near future I must point out that this will not work. Having done work at the College previously, we know that some of the bollards are 120 bolt and some are 277 bolt. Could you please review and confirm.

Response: Although not noted on the cut sheet, the bollard can come equipped with 120/277V multi-tap ballast per the manufacturer. Refer to sketch ESK-02.

5. During the pre-proposal conference, there was a question raised regarding re-use of the fixtures that are going to be removed based upon the requirements of Proposition 39.

Response: Refer to section 01 74 19 Construction Waste Management and Disposal. Please recycle waste as much as possible and submit documentation as required at close of project. This is a requirement of our Proposition 39 Project Funding and is a mandatory requirement of the project.
6. During the pre-proposal conference, the condition of the concrete bases for fixtures in planters was questioned.

   **Response:** College staff surveyed 54 bases and all appeared to be in good condition. The baseplates of the new fixtures do not match existing, so existing anchors will need to be cut off and new anchors provided as part of the scope of work.

7. Clarification by District:

   **Response:** As part of Section 2.3.6 “Technical Proposal” of the RFP, include quantity of each type of fixture in your matrix of light fixtures.

8. Clarification by District:

   **Response:** The Contractor will be able to utilize approximately 25% of the gravel lot adjacent to Lot 9 for laydown and storage for the duration of the project. There will be other contractors utilizing space in this lot as well, so it is recommended that your area be fenced.

9. Clarification by District:

   **Response:** See attached Academic Calendar (ATTACHMENT F). Commencement will be held on Friday, May 23; no work may be done at the College on this day. Please factor this into your schedule.

10. Clarification by District:

    **Response:** College IT will provide a port to land to in the IDF (Room 130) of the SSC Building which will be required for the wireless control Gateway.

11. Clarification by District:

    **Response:** See attached sign in sheet from Mandatory Pre-proposal conference (ATTACHMENT G)
Operating Voltage: 9 to 15 VDC
Current Consumption: maximum 10 mA @ 15 VDC
Requires Lumewave controller, or equivalent
PIR coverage: 270°
Compact design for fixture mounted applications
Designed for indoor and outdoor use
Operating temperature: -40° to 130° F (-40° to 54° C)
UL and cUL listed; UL 773A raintight and UL 1571 for wet locations
Five year warranty

Polycarbonate, Flame retardant
UV resistant

The EW-205-12-LU works with Lumewave’s TOP900-TL, TOP900-TN, and OEM900 controllers to turn outdoor lighting fixtures On and Off based on motion. The sensor is designed for use in wet outdoor locations (UL 773A and UL 1571).

The EW-205-12-LU uses a multi-cell, multi-tier Fresnel lens with a 270 degree field of view for PIR detection. Coverage density and the range of the coverage pattern is determined by mounting height. The coverage pattern shown is tested in a controlled setting with the unit mounted at 8 ft. to 10 ft. The actual outside coverage pattern may vary substantially at the specific installation site and is dependent on several factors including weather, external light sources, mounting height and sensor tilt.

Mount the sensor where it will have a clear line of sight of the area to be sensed.

Figure 1. Dimensions: Sensor and adaptor.

Figure 2. PIR Coverage: Overhead view.

Figure 3. PIR Coverage: Side view.
1. Install the LUMEWAVE TOP900-TL, TOP900-TN, or OEM900 device as described in the instructions provided with the unit.
2. Attach the sensor to the adaptor. Attach the adaptor to the fixture. (Note: the adaptor supplied with this device attaches to a Lumec SFPH4 collar ensuring a watertight seal. The screw holes on the adaptor line up with the holes drilled into the collar.)
3. Connect the EW-205-12-LU to the LUMEWAVE TOP900-TL, TOP900-TN, or OEM900.
4. Restore power from the circuit breaker.

**Power-Up Operation:** After initial power-up (or after a lengthy power outage), there is a sensor warm-up period, which typically lasts 30 seconds before the load turns ON.

**Normal Operation:** When the EW-205-12-LU detects motion it sends a signal to the controller to drive lighting to high mode. If it does not detect motion for the period of the time delay the signal drops and lighting returns to low mode. When the PIR sensor is triggered by motion, the output is pulled to ground for a minimum of 1 second. Longer periods can be observed depending on magnitude and duration of the detection signal. This sensor is intended to interface with a secondary load control device and subsequent control strategies such as daylighting hold-off, time delay, and test-mode are functions of the load control device (Lumewave or equivalent).

### Catalog Information

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<th>Color</th>
<th>Description</th>
<th>Input Voltage</th>
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<td>Black</td>
<td>Low voltage outdoor fixture mounted motion sensor</td>
<td>12 VDC</td>
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Hose clamping these to pole?

HOLE FOR HOSECLAMP

AL-SPACER 80x50x2.5mm

SHEETMETAL, 10GA (TBD)

4"-5"-6" Sq Poles?

Round Pole

Page #3

Does this fit sq poles?
TABS TOUCH POLE, 4 POINTS OF TOUCH FOR STABILITY

6.000" DIA POLE SHOWN HERE

Round Pole

No Cuts Available For 4'-5'-6'
54 Poles?
TWO DIFF ELEVATIONS?
ATTACHMENT D PAGE 1 OF 1

LED AREA LIGHTS - AEROMAX™ MEDIUM (XAMU)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: XAMU FT LED 128 HO CW UE WHT PCR

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Distribution</th>
<th>Light Source</th>
<th># of LEDs</th>
<th>Drive Current</th>
<th>Color Temperature</th>
<th>Input Voltage</th>
<th>Finish</th>
<th>Optional Controls</th>
<th>Optional Sensor/Options</th>
</tr>
</thead>
</table>
| XAMU   | 3 - Type III | LED          | 128       | SS - Super Saver NO-High Output | CW - Cool White NW - Neutral White | UE - Universal Voltage (120-277) | BLK - Black BRZ - Bronze GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White | VirtuNet Wireless Network (requires a VirtuNet controller/Hub link) (blank) - None VCM - Standard (revenue grade) VCMH - Basic VCMH - Standard (Host) DIM - 0-10 Volt Dimming (required for satellite fixtures) Stand-Alone Control (Blank) - None DIM - 0-10 Volt Dimming (from external signal) BLS - Bi-level Switching (from external 120-277V signal) | Sensor
|        |              |              |           |               |                  |               |        |                   | ES - External Sensor² IMS - Integral Motion Sensor³ Options
|        |              |              |           |               |                  |               |        |                   | PCR - Photocell Control Receptacle⁴ |

LUMINAIRE EPA CHART - XAMU

<table>
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<th>EPA Code</th>
<th>Description</th>
<th>Order Number</th>
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<tr>
<td>D180</td>
<td>BKA-XBO-EC-B-GLR 6' Extension Arm</td>
<td>DFK208, 240 Double Fusing (208V, 240V)</td>
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<tr>
<td>D90</td>
<td>BKC-XBO-WM-GLR Wall Mounting Bracket</td>
<td>DFK408 Double Fusing (408V)</td>
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<tr>
<td>TN100</td>
<td>XAMU-3/5FT-HSS House Side Shield (Black only)</td>
<td>HK437 Single Fusing (437V)</td>
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<td>Q90</td>
<td>X4RPP Round Pole Plate for 4' Poles</td>
<td>ROS8120, 240 Remote Box with 120V Occupancy Sensor</td>
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<td>TN120</td>
<td>X5P P Round Pole Plate for 5' Poles</td>
<td>ROS8877, 240 Remote Box with 277V Occupancy Sensor</td>
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<tr>
<td>Q90</td>
<td>PC120 Photocell for use with PCR option (120V)</td>
<td>RPS1210, 240 Wet Location Remote Box with 120V External Photocell</td>
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<tr>
<td>Q90</td>
<td>PC209-277 Photocell for use with PCR option (209V, 240V, 277V)</td>
<td>RPS209-277 Remote Box with 208-277V External Photocell</td>
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<td>PC347 Photocell for use with PCR option (347V)</td>
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<td>Q90</td>
<td>PC348 Photocell for use with PCR option (408V)</td>
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<td>Q90</td>
<td>FX27 Single Fusing (277V)</td>
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<td>FDX27 Single Fusing (277V)</td>
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FOOTNOTES:
1. IMS, DIM and BLS cannot be ordered together.
2. Do not specify for satellite units.
3. Not compatible with VirtuNet wireless systems, DIM or BLS.
4. Photocell must be ordered separately. See Accessories.
5. Factory installed PCR option required.
6. Fusing must be located in the head hole of pole.
7. Includes VCM. To be used in conjunction with VCM option in fixture. Consult factory.
8. To be used in conjunction with any of the VCM control modules and ES sensor option in fixture. Consult factory.

DIMENSIONS (shown with VCM/VCMES option)

1-9/16" (39 mm) Front View
5-3/8" (161 mm) Side View
35-7/8" (900 mm) Bottom View
18-5/16" (465 mm)

XAMU HSS - House Side Shield

12-3/4" (324 mm)

01/21/14
LSI INDUSTRIES INC.
**Construction:**
The luminaire is die cast and permanent mold aluminum. The roof has an internal hinge, hidden from view. Roof and ballast lids are sealed with silicone gaskets. All exposed hardware is weather resistant. Finish: The luminaire has a powder coat finish utilizing a premium TIGIC polyester powder. The finish is a three-stage process that consists of drying, powder application and curing. Before coating, the parts are treated with a five-stage pretreatment process, consisting of a heated alkaline cleaner; rinse, phosphate coating, rinse and sealant.

**Optics:**
Individual precision-molded acrylic lenses provide optimal luminaire spacing and improved uniformity. Lenses are indexed to the circuit board to ensure consistent optical alignment on each, delivering repeatable photometric performance. Choice of three optimized distributions: Type III, Type IV, and Type V. The optical system controls light above 90 degrees, eliminating wasteful up light.

**Electrical:**
Standard and dimming drivers are available in 120-277V, 50/60 Hz. Drivers have power factor >90% and THD <20%. Thermal isolation results in expected driver life of over 60,000 hours. Integral surge protection in accordance with IEEE/ANSI C62.41.2 Category C Low is standard.

**Installation:**
The Resonance Bollard offers a patented impact resistant mounting and leveling design ensuring lifelong performance. Three leveling pads within the base mounting plate are easily accessible through the access panel. The leveling pads provide full contact with the concrete pad, providing a high degree of stability. The base mounting plate is fully welded to the bollard post, providing complete structural support in all directions, giving the bollard superior vandal resistance.

**Listings:**
The luminaire is tested to and meets all NRTL's outdoor requirement standards, wet location use, through the fully accredited and approved CSA laboratory DesignLights™ Consortium qualified product.

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**Sample Catalog number:**

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**Finish**

- DBL: BLACK
- DDB: DARK BRONZE
- DNA: NATURAL ALUMINUM
- DWH: WHITE
- CM: CUSTOM MATCH
- CS: CUSTOM SELECT
- RAL COLORS

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**Notes:**
1. Consult factory for 208 volt available in Canada
Each college may develop a special final exam schedule.

**Vision:** South Orange County Community College District will be a leader in exemplary teaching and learning, student success and community partnerships.

**Mission:** South Orange County Community College District provides a dynamic and innovative learning environment dedicated to student success and economic growth of the region.
**FALL SEMESTER 2013**

- August 12-16 (Monday-Friday) Staff Development Days
- August 19 (Monday) Instruction Begins
- August 19-October 19 (Monday-Sunday) 8-Week Session
- September 2 (Monday) Labor Day — Holiday
- September 3 (Tuesday) Faculty Contractual Day/Classes Not in Session
- October 21-December 21 (Monday-Saturday) 8-Week Session
- November 11 (Monday) Veterans Day — Holiday
- November 27 (Wednesday) Faculty Contractual Day/Classes Not in Session
- November 28-29 (Thursday/Friday) Thanksgiving — Holiday
- December 15-21 (Sunday-Saturday) Final Examinations
- December 23-January 1 (Monday-Wednesday) District/Colleges Closed

**SPRING SEMESTER 2014**

- January 1 (Wednesday) New Year's Day Holiday
- January 14-17 (Tuesday-Friday) Staff Development Days
- January 20 (Monday) Martin Luther King, Jr. — Holiday
- January 21 (Tuesday) Instruction Begins
- January 21-March 22 (Tuesday-Saturday) 8-Week Session
- February 14 (Friday) Lincoln’s Day — Holiday
- February 17 (Monday) Presidents' Day — Holiday
- March 23-29 (Sunday-Saturday) Spring Break/Classes Not in Session
- March 28 (Friday) Friday of Spring Break — Holiday
- March 31-May 22 (Monday-Thursday) 8-Week Session
- May 16-22 (Friday-Thursday) Final Examinations
- May 23 (Friday) Faculty Contractual Day/Classes Not in Session
- May 23 (Friday) Irvine Valley College/Saddleback College Commencements

**SUMMER SESSION 2014**

- May 26 (Monday) Memorial Day — Holiday
- May 27-August 8 (Tuesday-Friday) Summer Session
- July 4 (Friday) Fourth of July — Holiday

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**SUMMARY**

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*Summer 2014 start dates and session lengths may vary. See college online schedules for more information.*
### MEETING SIGN-IN SHEET

**Project:** IVC Site Lighting Retrofit  
**Facilitator:** Mary Opel  
**Meeting Date:** 2/18/14 @ 2:00 PM  
**Place/Room:** IVC M102B

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<th>Name</th>
<th>Title</th>
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<tr>
<td>Patrick Runion</td>
<td>Foreman</td>
<td>Gilbert &amp; Stevens</td>
<td>714-742-5559</td>
<td><a href="mailto:kevan@gilbertandstevens.electric.com">kevan@gilbertandstevens.electric.com</a></td>
</tr>
<tr>
<td>Kevin Bench</td>
<td>Project Estimator</td>
<td>Gilbert &amp; Stevens</td>
<td>714-547-7695</td>
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<tr>
<td>Mike Andersen</td>
<td>Project Manager</td>
<td>Anderson Howard</td>
<td>714-231-7860</td>
<td><a href="mailto:mikea@gmail.com">mikea@gmail.com</a></td>
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<tr>
<td>Brian Morales</td>
<td>Project Manager</td>
<td>Baker Electric</td>
<td>760-708-6085</td>
<td><a href="mailto:b.morales@baker-electric.com">b.morales@baker-electric.com</a></td>
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<tr>
<td>Chris Beauchamp</td>
<td>Project Manager</td>
<td>Newrow-Meadows</td>
<td>594-4161</td>
<td><a href="mailto:c.beauchamp@newrow-meadows.com">c.beauchamp@newrow-meadows.com</a></td>
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<tr>
<td>Jeff Bowens</td>
<td>Electrical Engineer</td>
<td>P2S Engineering</td>
<td>562-997-2499</td>
<td><a href="mailto:jeff.bowens@p2sengineering.com">jeff.bowens@p2sengineering.com</a></td>
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<tr>
<td>Don Capon</td>
<td>Electric Estimator</td>
<td>MacFarlane Elect</td>
<td>714-543-7265</td>
<td><a href="mailto:d.macf@yahoo.com">d.macf@yahoo.com</a></td>
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# SHEET INDEX

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<tr>
<td>E001</td>
<td>GENERAL NOTES, LEGEND, AND SHEET INDEX</td>
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<td>SCHEDULES</td>
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## Light Fixture Schedule

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<th>Symbol</th>
<th>Description</th>
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<td>Single Head Flat Lens LED Area Light - Type V Distribution Using Industries Aeronix Medium or Approved Equal</td>
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<td>Same as Type A1 Except Provide Fixture Complete With House Side Shield</td>
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<td>LED</td>
<td>277</td>
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<td>A3H</td>
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<td>Same as Type A1 Except Provide Fixture Complete With House Side Shield</td>
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<td>136</td>
<td>LED</td>
<td>277</td>
<td>PO</td>
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<td>Single Head Flat Lens LED Area Light - Type V Distribution Using Industries Aeronix Medium or Approved Equal</td>
<td>136</td>
<td>136</td>
<td>LED</td>
<td>240</td>
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<td>136</td>
<td>136</td>
<td>LED</td>
<td>240</td>
<td>PO SEE NOTE 1</td>
</tr>
<tr>
<td>B</td>
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<td>Walkway LED Post Top Ultra High IP68 LED or Approved Equal</td>
<td>73</td>
<td>73</td>
<td>LED</td>
<td>120V</td>
<td>PO SEE NOTE 3</td>
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<td>Walkway LED Post Top Ultra High IP68 LED or Approved Equal</td>
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<td>LED</td>
<td>240</td>
<td>PO SEE NOTES 1, 3</td>
</tr>
<tr>
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<td></td>
<td>Building Entrance LED Post Top Ultra High IP68 LED or Approved Equal</td>
<td>58</td>
<td>58</td>
<td>LED</td>
<td>277</td>
<td>W</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>Tension Resistor or Approved Equal</td>
<td>22</td>
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<td>LED</td>
<td>120V</td>
<td>Q</td>
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<tr>
<td>E</td>
<td></td>
<td>LED Wall Pack or Approved Equal Removen # P#WAPC#CANK#L#D#XX</td>
<td>84</td>
<td>84</td>
<td>LED</td>
<td>120V</td>
<td>W</td>
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### Notes:
1. Provide (2) 25VA, 240VAC Step Down Transformer
2. MCWCO Incl. # M#T#M#2166460 or # M#T#216646246
3. Provide (2) 25VA, 240VAC Step Down Transformers
4. MCWCO Incl. # M#T#M#2166460 or # M#T#216646246
5. Provide Fixture Complete With Construction Grade Photocell Receptacle Installed by Light Fixture Manufacturer

### Abbreviations:
- G = In Grade
- PO = Pole
- W = Wall
GATEWAY MOUNTING DETAIL

5

GATEWAY CONNECTION DIAGRAM

3

NOTES

1. PROVIDE CONDUIT, WIRES AND LUMESTAR SOFTWARE FOR ALL LIGHTING FIXTURES. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. ALL LIGHT POLE FIXTURES SHALL BE REMOVED FROM EXISTING LIGHTING CONTROLS AND CONTROLLED BY THE NEW WIRELESS LIGHTING CONTROLS SYSTEM. COORDINATE WITH LIGHTING MANUFACTURER FOR PROGRAMMING OF THE NEW CONTROL SYSTEM.

ATTACHMENT H PAGE 5 OF 6
NOTES

1. REQUIRES FIXTURE TO BE SUPPLIED WITH LUMIHEAVE'S TWIST-LOCK PHOTOCELL RECEPTACLE INSTALLED BY MANUFACTURER.