



1126 S. Commerce St.
Harlingen, TX 78550
Off: (956) 230-3435
Fax: (956) 720-0830
www.ethoseng.net

September 20, 2024

IDEA Public Schools - San Antonio Electrical and Lighting Upgrades IDEA Carver

ADDENDUM NO. 1

A. PURPOSE AND INTENT

This addendum is issued for the purpose of modifying the plans for the project referenced above. This addendum shall become part of the contract and all contractors shall be bound by its content. All aspects of the specifications and drawings not covered here in shall remain the same. The General Conditions and the Special Conditions of the specifications shall govern all parts of the work and apply in full force to this addendum.

B. SCOPE

I. Clarifications

- 1) Bid due date has changed to Monday, September 30, 2024 at 2:00PM. Bids due location remains unchanged.
- 2) See attached pre-bid sign-in sheet.
- 3) See attached plan holder list.
Contractor Questions:
- 4) Is there a wage scale for this project?
Response: There is no wage scale for this project.
- 5) Existing fixtures are Owner's right of 1st refusal?
Response: Correct.
- 6) Contractor to provide manifest papers of lighting fixture disposal?
Response: Refer to specification section 265117 Fluorescent Lamps and Ballast Disposal.
- 7) Contractor shall assume no conduit daisy chain exists in place?
Response: Contractor shall not make any assumptions. Contractor shall field verify existing conditions prior to bid. A walk through is scheduled for Wednesday September 25, 2024 at 9:00am.

- 8) Contractor shall assume emergency lighting as shown is new and contractor is responsible to modify & extend constant hot conductor for new emergency driver?
Response: Correct.
- 9) Confirm that work hours will be after school until midnight. What about weekends?
Response: Work hours will need to be coordinated with the Carver Campus leadership team such that it does not interfere with campus operations & instruction. After-hour work is expected including weekends and scheduled school holidays.
- 10) Are we to reuse existing corner supports for new light fixtures?
Response: Contractor to provide new corner supports as per detail.
- 11) Is pulling a permit required?
Response: Contractor is responsible for pulling permits and paying fees as required by City of San Antonio.
- 12) Existing 2x4 fluorescent light have return air capability. Do the new ones have it?
Response: Contractor to provide new fixtures with air return capabilities.
- 13) Do the plans show how exterior lighting is to be controlled?
Response: Exterior lighting controls for building "B" are to be per detail #04/E8.01.
- 14) LED tubes retrofit specs are showing to be dimmed capabilities, is that the intent?
Response: No, the intent is to be switched.

II. Specifications:

- 1) Section 000400 – Bid Proposal Form:
a) Revised bid form. See attached sheets.
- 2) Section 260924 – Lighting Controls:
a) Prior approval request #2: WaveLinx (wireless) is an acceptable substitution. It shall meet or exceed the basis of design.

III. Drawings:

- 1) Sheet ES1.01:
a) Revised Keyed Notes: See attached sheet.
- 2) Sheet E2.02:
a) Provide in-wall sensor in lieu of wireless switch and wireless power pack at the following rooms: Toilet A103, Toilet A104, Stor 150, IDF 151, Staff Tlt A108, Toilet A107, Jan/Stor A110, Restroom 801, Storage 802, Storage 899, and Electrical 803.

- 3) Sheet E3.02:
 - a) Provide in-wall sensor in lieu of wireless switch and wireless power pack at the following rooms: Closet B111A, Closet B113A, Toilet B116, Rest Area B117, Toilet B127, Toilet B128, Restroom 264, Restroom 254, Restroom 901, Storage 902, and Electrical 903.

- 4) Sheet E4.02:
 - a) Provide in-wall sensor in lieu of wireless switch and wireless power pack at the following rooms: Restroom 514, Restroom 510, IDF 512, IDF 415, Boys 413, and Girls 410.

- 5) Sheet E5.02:
 - a) Provide in-wall sensor in lieu of wireless switch and wireless power pack at the following rooms: Janitor 697, Staff Toilet 696, Girl's Restroom 695, Boy's Restroom 694.

- 6) Sheet E6.02:
 - a) Provide in-wall sensor in lieu of wireless switch and wireless power pack at the following rooms: Tel/Data E109, Staff Toilet E106, Office 704, Stor 503A, Sprinkler Riser E112B, Janitor E113B, Tlt Rm E113A, Office 512E.

- 7) Sheet E7.01:
 - a) Luminaire Schedule:
 - i) Types "A2", "A2E", "A3", "A3E", "A4", "A4E", "A5", "A5E", "A6", AND "A6E": Provide air return capability type.
 - ii) Type "B": Provide non-dimming replacement lamp.
 - iii) Type "M": Provide non-dimming replacement lamp.
 - iv) Type "P1": Revised solar light pole. Include a 10-year maintenance plan. See attached sheet.
 - b) Prior Approval Request #1:
 - i) Light fixtures and replacement bulbs manufactured by Columbia, Current, Compass, Architectural Area, Coronet, LEDscape, Kim, LEDI, Solar Path and Mule are acceptable substitutions. They shall meet or exceed the basis of design.
 - c) Prior Approval Request #2:
 - i) Light fixtures and replacement bulbs manufactured by Metalux, PQL, Halo, Evenlite, WAC, TCP, Spitzer, Diode LED, LA, iO, Cooper, and SPI are acceptable substitutions. They shall meet or exceed the basis of design.

- 8) Sheet 7.02:
 - a) Revised Luminaire Images. See attached sheet.



PRE-BID MEETING SIGN-IN SHEET:



IDEA Public Schools

CSP #30-SAELU-0524 - Pre Proposal Meeting

Wednesday, September 18, 2024

1:00 PM

Attendance:

Antonio Guevara	IDEA Public Schools
Bonnibelle Trejo	IDEA Public Schools
Steve Rodriguez	Project Manager
Verenice Marquez	IDEA Public Schools
Cesar Gonzalez	Ethos Engineering
Mario Tamez	Project Coordinator All American Pro Electric, LLC Electrical Contractor
Jay Morris	Negawatt Patrnrs, LLC 806-778-7569, jaymorris@negawattpartners.com
Mike Medina	Central Eletric, 210-433-999, bids@centralelectricsa.com
Isaiah Ramdeen	Solution Sales Team Lead Facility Solutions Group (FSG) Eletrical Contractor, isaiah.ramdeen@fsgi.com
Jim Bergan	D Wilson Construction, 830-360-0667, jimb@dwilsonconstruction.com
Angelica	CRI Electric, Inc.
Donald Watson	Core Electrical Group, 830-627-4503,
Jim Martin	Bell And McCoy Lighting Manufacture Rep

Agenda:

Introductions	Antonio Guevara
Key Milestones	Antonio Guevara
Scope of Work	Ethos Engineering
Questions by Friday, 5:00 pm	

Questions:

The equipment installation schedule, can the equipment be installed as it is delivered?



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Project: San Antonio Electrical and Lighting Upgrades- IDEA Carver CSP#30-SAELU-0524
 Bid Date: Monday, September 20, 2024 @2:00 PM
 Bid Conference: Wednesday, September 18, 2024 @1:00 PM

Contractor Name: Milica Yurong- Dodge Construction Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: _____
 Email: milica.yurong@construction.com Plan# _____
 Check # _____

Contractor Name: AGC San Juana Shwarz Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: _____
 Email: sanjuana@rgvagc.org Plan# _____
 Check # _____

Contractor Name: Construct Connect Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: _____
 Email: matthew.douglas@constructconnect.com Plan# _____
 Check # _____

Contractor Name: Virtual Builders -Heidi Shaffer Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: _____
 Email: southdesk@virtualbx.com Plan# _____
 Check # _____

Contractor Name: Consolidated Electric Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: 210-695-3451
 Email: ceswade@satx.rr.com Plan# _____
 Check # _____

Contractor Name: FSG Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: 210-259-1833
 Email: wyatts@fsgi.com Plan# _____
 Check # _____



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Project: San Antonio Electrical and Lighting Upgrades- IDEA Carver CSP#30-SAELU-0524
 Bid Date: Monday, September 30, 2024 @2:00 PM
 Bid Conference: Wednesday, September 18, 2024 @1:00 PM

Contractor Name: Core Electrical Group Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: 210-669-0180 Don; 210-602-2879 Jonathan
 Email: don@coretxllc.com & jonathan@coretxllc.com Plan# _____
 Check # _____

Contractor Name: Consolidated Electric Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: 210-695-3451
 Email: ceswade@satx.rr.com Plan# _____
 Check # _____

Contractor Name: _____ Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: (832) 960-9517
 Email: roel@rejelectriccompany.com Plan# _____
 Check # _____

Contractor Name: D Wilson Contstruction Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: (830) 360-0667
 Email: jimb@dwilsonconstruction.com Plan# _____
 Check # _____

Contractor Name: MPWR Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: _____
 Email: jacinto@mpwrdirect.com Plan# _____
 Check # _____

Contractor Name: _____ Addendum# _____ Date: _____
 Address: _____ Addendum# _____ Date: _____
 City,State,Zip: _____ Addendum# _____ Date: _____
 Phone & Fax#: _____
 Email: _____ Plan# _____
 Check # _____

000400 – BID PROPOSAL FORM

PROJECT TITLE: San Antonio Electrical and Lighting Upgrades – IDEA Carver

PROPOSAL NO: CSP# 30-SAELU-0524

DUE DATE, TIME & PLACE: Monday, September 30, 2024 at 2:00 pm
Idea Public Schools San Antonio Regional Office
7035 San Pedro Ave., San Antonio, Texas 78216

ESTIMATED COST: \$550,000.00

1. The undersigned OFFEROR proposes and agrees, if this proposal is accepted, to enter into an Agreement with OWNER to provide and install Equipment and Materials as specified or indicated in the Contract Documents for the Contract Price and within the Contract, Time indicated in this Proposal and in accordance with the Contract Documents.
2. OFFEROR accepts all of the terms and conditions of the Instructions to Bidders and Supplementary Instructions to Bidders. This Proposal shall remain in effect for a period of no less than sixty (60) days after the date of Proposal opening.
3. In submitting this Bid, OFFEROR certifies that:

(a) OFFEROR has examined copies of all the Contact Documents and the following Addenda:

<u>Date</u>	<u>Number</u>
_____	_____
_____	_____
_____	_____

(receipt of all of which is hereby acknowledged) and also copies of the Advertisement or Invitation to Submit Proposal and the Instructions to BIDDERS; and

- (b) This Proposal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; OFFEROR has not directly or indirectly induced or solicited any other OFFEROR to submit a false or sham Bid; OFFEROR has not solicited or induced any person, firm or a corporation to refrain from proposing; and OFFEROR has not sought by collusion to obtain for himself any advantage over any other OFFEROR or over OWNER.
4. Project Deadlines and Penalties: This provision shall be enforced, except in the event of inclement weather, unnecessary delay caused by OWNER or his agent, or other natural disaster or Act of God beyond Contractor's control.
 - (a) For penalties, refer to AIA Contract between Owner and Contractor, along with all applicable amendments.
5. Communications concerning this Proposal shall be addressed to:

000400 – BID PROPOSAL FORM

Guillermo Quintanilla
1126 South Commerce Street
Harlingen, Texas 78550
Phone: (956) 230-3435; Fax: (956) 720-0830
Email: gquin@ethoseng.net

NOTICE:

In determining the best value for the district, the district is not restricted to considering price alone but may consider any other factor stated in the selection criteria.

It is the intent of the OWNER to award a Contract to the OFFEROR that offers the best value for the OWNER, according to the following weighted selection criteria established by the OWNER.

The OWNER reserves the right to accept or reject any and/or all Bids, to accept the Proposal that, in the OWNER'S judgment, is in the OWNER'S best interest, and to waive informalities or irregularities in a Proposal received.

The OWNER will document the basis of its selection and will make the evaluations public not later than the seventh day after the date the contract is awarded.

Bids received from nonresident Offerors will be evaluated by the Owner as required by House Bill 620, 69th Legislature, 1985.

000400 – BID PROPOSAL FORM

OFFEROR will supply and install on-site mechanical/electrical equipment and services as specified in the Project Manual dated September 6, 2024, for the following price:

BASE PROPOSAL:

[Proposal amount includes Allowances as per specifications section 012100].

\$ _____ (number)

_____ (words)

ALTERNATE PROPOSAL # 1: Replacement of exterior light fixtures and all related electrical modifications as noted on plans.

\$ _____ (number)

_____ (words)

ALTERNATE PROPOSAL # 2: Replacement of exterior light poles and all related electrical modifications as noted on plans.

\$ _____ (number)

_____ (words)

PROPOSED SUBSTANTIAL COMPLETION DATE of the project in its entirety.

Our Proposal proposes to use the following Contractors, Subcontractors, Manufacturers, Products, Material Suppliers and Equipment Suppliers for the principal portions of the work.

NAME(S) OF SUB-CONTRACTORS:

NAME(S) OF EQUIPMENT SUPPLIERS:

OTHER:

000400 – BID PROPOSAL FORM

000400 – BID PROPOSAL FORM

Name and Address of OFFEROR:

Signature

Name and Title

Telephone _____

Sworn to and subscribed before me this ____ day of _____, 2024.

SEAL

Notary Public in and for the State of Texas

SEAL (If Proposal is By a Corporation)

EnGo Slim

Solar Street Light

An ideal solution for:

- neighborhood
- business centers
- city centers
- streets



**Environmental
Sensors**



**Remote
Management System**



**Easy Installation
& Maintenance**



Smart Sensors



**High Quality
Lithium Battery**



**Powered By
The Sun**

EnGo Slim 8

Technical Data Sheet

SLIM 8 GENERAL SPECIFICATIONS

LED Lamp	54 W 97200 lm (+/-)
Solar Power	320Wp (8x40Wp ^{5%}), Monocrystalline
Battery System	Lithium Ion Phosphate - LiFePO4 12V, 104Ah
Charge Controller	MPPT Controller - 24 V
Pole	Hot Dip Galvanized + Powder Coated 8 m / 26 ft
Total Weight	195 kg / 430 lbs
Environmental Sensors	Available upon request

SOLAR PANEL MAIN CHARACTERISTICS

Maximum Output Power (Pmpp)	40 Wp
Power Tolerance	+/-5%
Solar Cell Efficiency	≥ 20%
Voltage at Pmpp (Vmpp)	17.6 V
Current at Pmpp (Impp)	2.27 A
Open Circuit Voltage (Voc)	20.8 V
Short Circuit Current (Isc)	2.45 A
Operating Temperature	-40 °C ↔ +85 °C / -40 °F ↔ 185 °F
Maximum System Voltage	700 V
Maximum Series Fuse Rating	10 A

SOLAR PANEL MECHANICAL CHARACTERISTICS

Solar Cell Type	Monocrystalline 156.75 x 156.75 mm / 6.17 x 6.17 in
Dimensions of Module	1335 x 170 x 4.5 mm / 52.6 x 6.7 x 0.2 in
Cables Specialized for PV use	2.5mm2 x 1 m
Weight	2.3 kg / 5.1 lbs
Environmental Resistances	800g steel ball fall down from 1m height 60m/s wind

SOLAR PANEL TEMPERATURE CHARACTERISTICS

Current Temperature Coefficient	0.05 % / °C
Voltage Temperature Coefficient	-0.35 % / °C
Power Temperature Coefficient	-0.45 % / °C

GEL Deep Cycle BATTERY MAIN CHARACTERISTICS

Type	GEL Deep Cycle Battery
Rated Voltage	12 V
Nominal Capacity	100 Ah
Internal Resistance	5 mOhm
Dimensions	330 x 171 x 220 mm / 13 x 6.7 x 8.7 in
Weight	30.5 kg / 67.2 lbs
Cycle Life	Approx. 1100 cycles 50% DOD
Maximum Charging Current	25 A
Operating Temperature	-10 °C ↔ +60 °C / 14 °F ↔ +140 °F

PACKAGING DETAILS

Pole	one unit Packaged Dimensions 375 x 300 x 8230 mm / 14.8 x 11.8 x 324 in Packaged Weight 164 kg / 361.6 lbs
Arm	two units Packaged Dimensions 330 x 300 x 1530 mm / 13 x 11.8 x 60.2 in Packaged Weight 14 kg / 30.9 lbs

POLE CHARACTERISTICS

Height	8 m / 26 ft
Pole Wall Thickness	approx. 4mm / 9 gauge*
Finishing Colors	White - RAL 9003 or Black - RAL 9005
Battery Storage	LifePO4: Inside Pole / GEL: Underground
Arm - Pole Angle	90° or 105°

CHARGER CONTROLLER MODEL CHARACTERISTICS

Model	VICTRON ENERGY SmartSolar MPPT 75/15 or EnGoPlanet MPPT Controller
Battery Voltage (auto select)	24 V
Rated Charge Current	15 A
Nominal PV Power, 12 V	440 W
Max. PV Short Circuit Current	15 A
Max. PV Open Circuit Voltage	75 V
Peak Efficiency	98%
Self-Consumption - Load On/Off	24 V: 15 mA
Charge Voltage 'Absorption'	28.8 V (Adjustable)
Charge Voltage 'Float'	27.6 V (Adjustable)
Operating Temperature	-30°C ↔ +60°C / -22°F ↔ +140°F
Safety Standards	EN/IEC 62109-1, UL 1741, CSA C22.2
Color	Blue (RAL 5012)
Protection Category	IP43 (electronic components), IP22 (connection area)
Weight	0.5 kg / 1.1 lbs
Dimensions	100 x 113 x 40 mm 3.9 x 4.5 x 1.6 in

LED LAMP CHARACTERISTICS

Rated Power	54 W
Operating Temperature	-40 °C ↔ +50 °C -40 °F ↔ +122 °F
Power Factor (PF)	>0.9
Protection	Class I (Class II Optional)
Rated Voltage	12/24 VDC
Lumen Output	9720 lm (+5%)
Correlated Color Temperature (CCT)	2200 K ↔ 6500 K
Ratings	IP 66 IK 10
Lifetime	> 100.000 hours - L70 @25°C (77 °F)
Body	Aluminum

LiFePO4 BATTERY MAIN CHARACTERISTICS

Type	LiFePO4
Rated Voltage	12.8 V
Rated Capacity	52 Ah
Internal Resistance	≤ 45 Ohm
Dimensions	936 mm 82 mm 42 mm 36.9 in 3.2 in 1.7 in
Weight	2.9 kg / 6.4 lbs
Shell Material	Poly Vinyl Chloride (PVC)
Charge Voltage	14.4 +/- 0.15 V
Charge Current	≤ 5 A
Operating Temperature	-15 °C ↔ +70 °C / 5 °F ↔ +158 °F
Passive Protection	Over-charge Protection Over-discharge Protection Temperature Protection Balanced Function

*Varies based on specific requirements



IDEA PUBLIC SCHOOLS
 SAN ANTONIO ELECTRICAL AND LIGHTING UPGRADES
 IDEA CARVER



KEYED NOTES:

- 1 ALTERNATE #2: DISCONNECT AND REMOVE EXISTING LIGHT POLE INCLUDING WIRING. PROVIDE NEW SOLAR LIGHT POLE AS SCHEDULE - TYPICAL.
- 2 ALTERNATE #1: PROVIDE NEW LED BULB LIGHT AS SCHEDULE - TYPICAL.



01 ELECTRICAL SITE PLAN
 SCALE : 1" = 20'

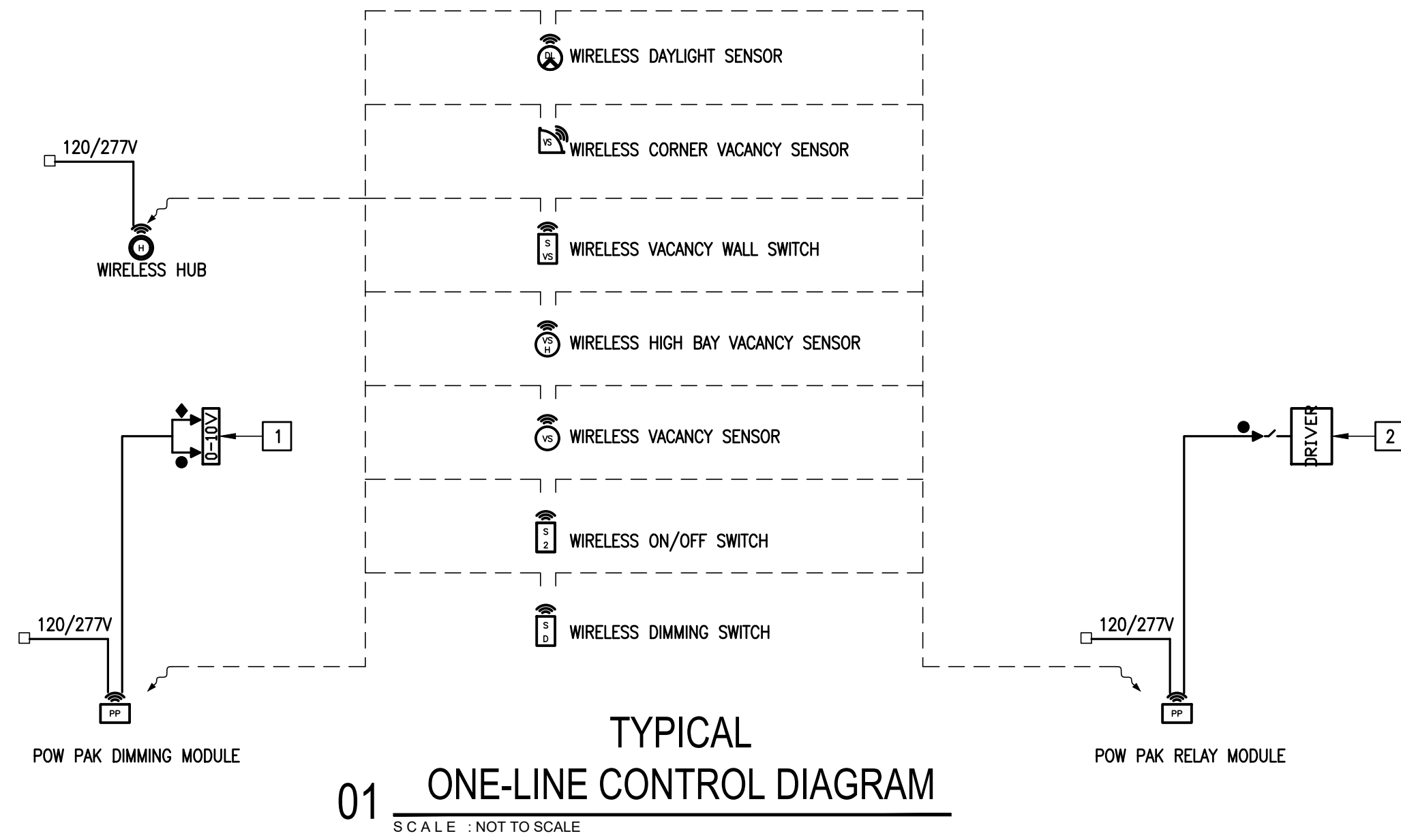


KEYED NOTES:

- 1 LED LIGHT FIXTURE DIMMING DRIVER. REFER TO LIGHTING PLANS FOR QUANTITIES
- 2 LED LIGHT FIXTURE DRIVER. REFER TO LIGHTING PLANS FOR QUANTITIES.

LINE TYPE LEGEND:

LINE	DESCRIPTION
---	RF (RADIO FREQUENCY) CONNECTION
---	WIRED CONNECTION
•	2#12 & #12G
◆	0-10V SIGNAL: 2#18



02 LUTRON LRF2 CEILING WIRELESS SENSOR
SCALE: NOT TO SCALE



03 LUTRON LRF2 WALL WIRELESS VACANCY SENSOR
SCALE: NOT TO SCALE



04 LUTRON RMJS-8T DIMMING MODULE
SCALE: NOT TO SCALE



05 LUTRON HJS WIRELESS VIVE HUB
SCALE: NOT TO SCALE



06 LUTRON PJ2-3BRL WIRELESS DIMMING SWITCH
SCALE: NOT TO SCALE



07 LUTRON PJ2-2B WIRELESS SWITCH
SCALE: NOT TO SCALE



08 LUTRON VACANCY WALL SWITCH MS-OPS6M2-DV-WH
SCALE: NOT TO SCALE



09 LUTRON LRF2 WIRELESS DAYLIGHT SENSOR
SCALE: NOT TO SCALE

CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTES	LUMENS	LUMEN MAINTENANCE	HOURS
A2	LED	2'X2' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG30L840-2-RS-UNV-DIM	22	MULTIPLE		3040	L70	100,000
A2E	LED	2'X2' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG30L840-2-RS-UNV-DIM-BSL10LST	22	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	3040	L70	100,000
A3	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG38L840-4-RS-UNV-DIM	27	MULTIPLE		3820	L70	100,000
A3E	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG38L840-4-RS-UNV-DIM-BSL10LST	27	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	3820	L70	100,000
A4	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG43L840-4-RS-UNV-DIM	31	MULTIPLE		4341	L70	100,000
A4E	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG43L840-4-RS-UNV-DIM-BSL10LST	31	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4341	L70	100,000
A5	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG48L840-4-RS-UNV-DIM	36	MULTIPLE		4863	L70	100,000
A5E	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG48L840-4-RS-UNV-DIM-BSL10LST	36	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4863	L70	100,000
A6	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG54L840-4-RS-UNV-DIM	41	MULTIPLE		5450	L70	100,000
A6E	LED	2'X4' LAY-IN TROFFER	0-10V	RECESSED	SIGNIFY: 2FGXG54L840-4-RS-UNV-DIM-BSL10LST	41	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5450	L70	100,000
B	LED	REPLACEMENT BULB	0-10V	RETROFIT	PHILIPS: 14.5T8/COR/48-840/MF21/G/DIM25/1	42	MULTIPLE	PROVIDE FIVE BULBS.DISCONNECT AND REMOVE FLUORESCENT BALLAST.	6300		
C8	LED	8" DOWNLIGHT	0-10V	RECESSED	SIGNIFY: M8RDL059CSWCLWHZ10U	6.1	MULTIPLE		500	L80	72,000
C605	LED	6" DOWNLIGHT	0-10V	RECESSED	SIGNIFY: M6RDL059CSWCLWHZ10U	6.1	MULTIPLE		500	L80	72,000
C610	LED	6" DOWNLIGHT	0-10V	RECESSED	SIGNIFY: M6RDL109CSWCLWHZ10U	10.9	MULTIPLE		1000	L80	72,000
C610E	LED	6" DOWNLIGHT	0-10V	RECESSED	SIGNIFY: M6RDL109CSWCLWHZ10U-EM6R	10.9	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	1000		
C615	LED	6" DOWNLIGHT	0-10V	CEILING	SIGNIFY: M6RDL109CSWCLWHZ10U	15.5	MULTIPLE		1500	L80	72,000
C615E	LED	6" DOWNLIGHT	0-10V	CEILING	SIGNIFY: M6RDL109CSWCLWHZ10U	15.5	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK.	1500	L80	72,000
D4	LED	WALL BRACKET	0-10V	WALL	SIGNIFY: FSS440L840-UNV-DIM	30	MULTIPLE		4077	L70	50,000
E1	LED	EMERGENCY LED LIGHT	0-10V	SURFACE	EELP: EM20-E-HO-SD-WG-E-S	5.4	MULTIPLE	PROVIDE WIRE GUARD.	550		
F	LED	SCONCE	0-10V	WALL	GARDCO: GCS A02-840T4M UNV MG	5	MULTIPLE	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR.STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	450		
G	LED	LED RETROFIT LAMP	0-10V	CEILING	PHILIPS: PAR16E26 X3	4.2	MULTIPLE	PROVIDE ONE BULB.	400		
H	LED	PENDANT LIGHT	0-10V	PENDANT	BROWNLEE: 2700 -TG-L52-GYC-40K-UP1	52	MULTIPLE		3945	L70	100,000
J4	LED	UNDERCABINET LED FIXTURE	0-10V	SURFACE	KELVIX: UC40-3040-010V-120277-WH	20	MULTIPLE		1444		
K4	LED	4' WRAPAROUND	0-10V	SURFACE	KELVIX: QX-550-40K-4-01V-120277-SV	18	MULTIPLE		2019		50,000
L4E	LED	4' WRAPAROUND	0-10V	SURFACE	ELITE: 4-0W1B-LED-2000L-DIM10-MVOLT-40K-85	21	MULTIPLE	PROVIDE WITH AN EMERGENCY BATTERY PACK	2000	L70	50,000
M	LED	REPLACEMENT BULB	0-10V	RETROFIT	PHILIPS: 14.5T8/COR/48-840/MF21/G/DIM25/1	70	MULTIPLE	PROVIDE FIVE BULBS.DISCONNECT AND REMOVE FLUORESCENT BALLAST.	10500		
N	LED	SUSPENDING LINEAR LIGHT	0-10V	PENDANT	4-OC1R-LED-3000L/4000L/5000L-DIM10-MVOLT-35L/40K/50K-85-SYM-WH	31	MULTIPLE		4249		
NE	LED	SUSPENDING LINEAR LIGHT	0-10V	PENDANT	4-OC1R-LED-3000L/4000L/5000L-DIM10-MVOLT-35L/40K/50K-85-SYM-WH-0-EMG-LED-10W	31	MULTIPLE		4249		
O	LED	WALLWASH LIGHT	0-10V	SURFACE	KELVIX: Z7AC-2-9-W-Z-40-50-S2-TG	18	MULTIPLE	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS.STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	1800		
P1	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	ENGO PLANET: ENGO SLIM 8 CONTACT: BRIAN HOOTON MOBILE: 832-360-4680	54	MULTIPLE	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 26" SQUARE STRAIGHT ALUMINUM & RATED FOR 120MPH WINDS. STANDARD COLOR FINISH TO BE BLACK. POLE ANCHOR BOLT PATTERN SHALL MATCH EXISTING. PROVIDE 10 YEAR MAINTENANCE PLAN.	9720	L70	100,000
Q	LED	SCONCE	0-10V	WALL	SOLERA: SPRUCE 18W 2076 4000K UNV WM CPL U WL TP	18	MULTIPLE	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR.STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	2076		
R	LED	LED RETROFIT LAMP	0-10V	PENDANT	INCLUDE AN ALLOWANCE OF \$400 PER FIXTURE		MULTIPLE	VERIFY TO MATCH EXISTING BULB DIMENSIONS & SOCKET CONNECTION TYPE.	0		
S	LED	LED RETROFIT LAMP	0-10V	RETROFIT	INCLUDE AN ALLOWANCE OF \$300 PER FIXTURE	64	MULTIPLE	VERIFY TO MATCH EXISTING BULB DIMENSIONS & SOCKET CONNECTION TYPE.	0		
T	LED	TAPE LIGHT	0-10V	SURFACE	KELVIX: RX277 40K 500 H240	22	MULTIPLE	PROVIDE PLASTIC MOUNTING BASE & JUMPER CABLES TO TURN CORNERS MODEL#RX277-CH-PL-2M/RX277-JP-6	2000		
U	LED	LED RETROFIT LAMP		RETROFIT	PHILIPS: 15GC/LED/840/ND E26 BB 6/1	15	MULTIPLE	VERIFY TO MATCH EXISTING BULB DIMENSIONS & SOCKET CONNECTION TYPE.	2500		25,000
V	LED	LED RETROFIT LAMP		RETROFIT	PHILIPS: 25GC/LED/830/ND E26 BB 6/1	25	MULTIPLE	VERIFY TO MATCH EXISTING BULB DIMENSIONS & SOCKET CONNECTION TYPE.	3600		25,000
X1	LED	SINGLE SIDED EXIT SIGN		WALL/CEILING	EELP LIGHTING: CAHAU1RBEMSD	5	MULTIPLE	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0		
X2	LED	DOUBLE SIDED EXIT SIGN	ELECTRONIC	WALL/CEILING	EELP LIGHTING: CAHAU2RBEMSD	5	MULTIPLE	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0		
X3	LED	SINGLE SIDED EXIT SIGN		WALL/CEILING	EELP LIGHTING: XC2RB-LED-HO	5	MULTIPLE	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0		
Z	LED	LED RETROFIT LAMP	0-10V	WALL	PHILIPS: 11A19/CNG/840/FR/P/E26/D12/1CT	11	MULTIPLE	VERIFY TO MATCH EXISTING BULB DIMENSIONS & SOCKET CONNECTION TYPE.	1100		15,000

- GENERAL NOTES:**
- 1. OTHER LIGHT FIXTURE MANUFACTURERS THAN THOSE LISTED ON THIS SCHEDULE ARE REQUIRED TO OBTAIN PRIOR APPROVAL BY SUBMITTING CUT SHEETS OF THEIR SUBSTITUTIONS AT LEAST (10) BUSINESS DAYS PRIOR TO BID. CUT SHEETS SHALL INDICATE/HIGHLIGHT PHOTOMETRIC CURVE, EFFICIENCY & CONSTRUCTION FOR DIRECT COMPARISON WITH SPECIFIED FIXTURES.
 - 2. EXTRA MATERIALS: SEE SPECIFICATIONS.
 - 3. EMERGENCY BATTERY PACKS SHALL BE COMPLETE FACTORY INSTALLED WITH NI-CAD BATTERY, CHARGER INDICATING LIGHT, ELECTRONIC CIRCUITRY, 1400 LUMENS OUTPUT, 90 MINUTES DURATION & FIVE FULL YEARS WARRANTY.
 - 4. INCLUDE VERIFICATION OF LIGHT FIXTURE EFFICIENCY IN LIGHT FIXTURE SUBMITTALS BY ATTACHING ONE OF THE FOLLOWING:
 - * SCREENSHOT OF DLC WEBSITE LISTING FOR SPECIFIC LIGHT FIXTURE. CAN BE FOUND AT [HTTPS://WWW.DESIGNLIGHTS.ORG](https://www.designlights.org)
 - * SCREENSHOT OF ENERGY STAR WEBSITE LISTING FOR SPECIFIC LIGHT FIXTURE. CAN BE FOUND AT [HTTPS://WWW.ENERGYSTAR.GOV](https://www.energystar.gov)
 - * PART EFFICIENCY DOCUMENTATION IN THE FORM OF LM-79 OR LM-80 DOCUMENTS WITH ADDITIONAL DOCUMENTATION DISPLAYING THE LINK BETWEEN THE PART AND THE LIGHT FIXTURE.





01 LIGHT FIXTURE TYPE "A2", "A2E" IMAGES
SCALE: NOT TO SCALE



02 LIGHT FIXTURE TYPE "A3", "A3E", "A4", "A4E", "A5", "A5E", "A6", "A6E" IMAGES
SCALE: NOT TO SCALE



03 LIGHT FIXTURE TYPE "B" IMAGE
SCALE: NOT TO SCALE



04 LIGHT FIXTURE TYPE "C605", "C610", "C610E", "C615", "C615E", "C8" IMAGES
SCALE: NOT TO SCALE



05 LIGHT FIXTURE TYPE "D4" IMAGE
SCALE: NOT TO SCALE



06 LIGHT FIXTURE TYPE "E1" IMAGE
SCALE: NOT TO SCALE



07 LIGHT FIXTURE TYPE "F" IMAGE
SCALE: NOT TO SCALE



08 LIGHT FIXTURE TYPE "G" IMAGE
SCALE: NOT TO SCALE



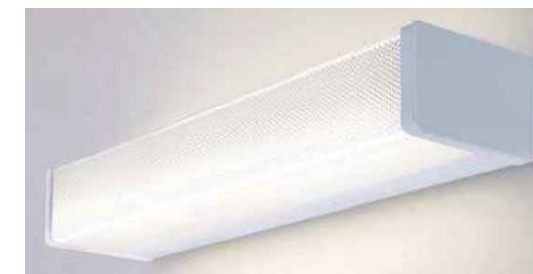
09 LIGHT FIXTURE TYPE "H" IMAGE
SCALE: NOT TO SCALE



10 LIGHT FIXTURE TYPE "J4" IMAGE
SCALE: NOT TO SCALE



11 LIGHT FIXTURE TYPE "K4" IMAGE
SCALE: NOT TO SCALE



12 LIGHT FIXTURE TYPE "L4E" IMAGE
SCALE: NOT TO SCALE



13 LIGHT FIXTURE TYPE "M" IMAGE
SCALE: NOT TO SCALE



14 LIGHT FIXTURE TYPE "N" & "NE" IMAGE
SCALE: NOT TO SCALE



15 LIGHT FIXTURE TYPE "O" IMAGE
SCALE: NOT TO SCALE



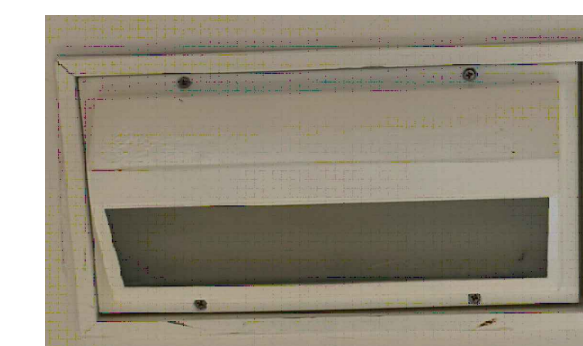
16 LIGHT FIXTURE TYPE "P1" IMAGES - ALTERNATE#2
SCALE: NOT TO SCALE



17 LIGHT FIXTURE TYPE "Q" IMAGE
SCALE: NOT TO SCALE



18 LIGHT FIXTURE TYPE "R" IMAGE
SCALE: NOT TO SCALE



19 LIGHT FIXTURE TYPE "S" IMAGE
SCALE: NOT TO SCALE



20 LIGHT FIXTURE TYPE "T" IMAGE
SCALE: NOT TO SCALE



21 LIGHT FIXTURE TYPE "U" IMAGE
SCALE: NOT TO SCALE



22 LIGHT FIXTURE TYPE "V" IMAGE
SCALE: NOT TO SCALE



23 LIGHT FIXTURE TYPE "X1", "X2" IMAGE
SCALE: NOT TO SCALE



24 LIGHT FIXTURE TYPE "X3" IMAGE
SCALE: NOT TO SCALE



25 LIGHT FIXTURE TYPE "Z" IMAGE
SCALE: NOT TO SCALE