EQUIPMENT NAMING CONVENTION

3. DIMENSIONS MARKED "+/-" ARE TO BE VERIFIED IN THE FIELD. THOSE MARKED N.T.S. ARE SHOWN NOT TO

5. CONTRACTOR SHALL VERIFY ALL DOOR SWINGS BEFORE INSTALLING SWITCH BOXES. FOR EXACT

12. ALL ITEMS REMOVED SHALL BECOME PROPERTY OF THE OWNER AND SHALL BE DISPOSED OF AS PER

13. USE OF THE OWNER'S ELEVATORS AND BUILDING CORRIDORS FOR HANDLING OF THE REMOVED

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE KEEPING OF THEIR OWN PROPERTY ON THE JOB

NOTES:

SCALE, ALL OTHERS ASSUMED TO BE CORRECT AND SHOULD BE CHECKED WITH OTHER TRADE

STORED ON SITE BY OWNER SHALL BE REMOVED FROM THE BUILDING IMMEDIATELY, AT CONTRACTORS

EQUIPMENT AND MATERIALS SHALL BE AT THE DIRECTION OF THE OWNER AND SHALL BE COORDINATED

CONDUCTORS SHALL NOT BE PERMITTED

POWER SYSTEM

MULTIPLE PANELBOARD DESIGNATION AND/OR ROOM NUMBER (AS REQUIRED)

LP:

N:

TRANSFORMER

POWER/RECEPTACLE PANELBOARD

LIGHTING CONTROL PANEL

BUSDUCT

SECOND FLOOR

1C 10 13 6AT

6B 61 01 8 EFB8S

4C 40 11 6 EFB6S

ABBREVIATIONS

ANTENNA

CONSTRUCTION

CONDUIT

CABINET

HORZ.

FUT.

F.I.

FDR.

EX.

F.S.

GROUND FAULT SENSING RELAY COIL

FUTURE

FLOW SWITCH

HIGH INTENSITY DISCHARGE

FIRE ALARM

EXISTING TO REMAIN

EMERGENCY

CIRCUITING NOTES:

REFERENCE TO NEAREST BLOCK OR BRICK COURSING.

5.1.1. CONDUCTORS FOR 20A POWER CIRCUITS SHALL BE MINIMUM #12 AWG.

5.3.3. CIRCUITS EXCEEDING 425 LINEAR FEET SHALL BE #6 AWG, MINIMUM.

5.8.1. CIRCUITS EXCEEDING 175 LINEAR FEET SHALL BE #8 AWG, MINIMUM.

5.8.  208V, 1-PHASE, 30A CIRCUITS:

CENTERED

6'-6"

00"

N.C.

M.S.P.

O.S.&Y.

L.S.

J.B.

OVERCURRENT PROTECTION

PLUMBING CONTRACTOR

KILOWATT HOUR

LIGHTNING ARRESTER

FINISHED FLOOR

UNDERGROUND TELEPHONE

TELEPHONE HAND HOLE

TYPE 1

EQUIPMENT ENCLOSURE

BOX

GLAZING

CONTACT CLOSURE

CCTV CAMERA

AUTO-OPENER

POWER SUPPLY

PS - PAY STATION W - WALL

1-GANG DEEP METAL BOX

2-GANG DEEP METAL BOX

1-GANG DEEP METAL BOX

CENTER OF BOX BEHIND DISPLAY

CENTER OF BOX BEHIND DISPLAY

HEIGHT

HEIGHT

CEILING

FX#X

J

PB

13

X = QUANTITY OF VOICE OR DATA JACKS IF OTHER THAN THREE.

STYLE ADAPTER AND BEZEL

1ELS 1A1 A1

B:

S:

HATCH DEPICTS SECONDARY SIDELIGHTED AREA

LIGHTING DEVICE CONTROL NOMENCLATURE:

(1) DUPLEX RECEPTACLE AND (1) DATA GANG EVERY 2'-0" U.N.O.

RECESSED WALL WASH

MS - LOW VOLTAGE MASTER SWITCH

VD - VACANCY SENSOR LOW VOLTAGE DIMMING SWITCH

A1 - IR TECHNOLOGY 180 DEGREE

C2 - ULTRASONIC TECHNOLOGY 360 DEGREE

LA

LA

CENTER OF BOX BEHIND DISPLAY

HEIGHT

HEIGHT

CEILING

PP-N-4E-L1/5

GFSC

TC

G

CONDUIT STUBBED OUT OR INTO HUNG CEILING SPACE

THROUGH WALL CONDUIT SEALING FITTING

ELECTRICAL HEAT TRACING

GROUND ROD

[INDICATES TYPE OF SERVICE]

[INDICATES TYPE OF SERVICE]

BPIS

BYPASS SECTION

EMH OR EHH - ELECTRIC MANHOLE OR HANDHOLE
1. PROVIDE MINIMUM 3/4" EMT FROM ACCESSIBLE CEILING SPACE DOWN WALL TO ALL DEVICES ALONG 2ND/3RD/4TH CASEWORK RECEPTACLES UNLESS NOTED OTHERWISE.

2. LABORATORY EQUIPMENT RATED 120V/1PH, 20A WITH A FLEXIBLE CORD SHALL BE POWERED VIA INTEGRAL PROVIDE 3/4" RACEWAY THROUGH MULLION FROM CARD READERS TO ABOVE ACCESSIBLE CEILING.

3. CABLES TO TELEPHONE BOARD OR AV RACK, U.O.N. PRIOR TO INSTALLATION.

4. CONTRACTOR. COORDINATE ROUTING OF CONDUITS TO ROOF TOP EQUIPMENT WITH CONSTRUCTION MANAGER AND DIVISION 23 AND PLUMBING EQUIPMENT WITH DIVISION 22 AND 23 CONTRACTORS PRIOR TO ROUGH-IN.

5. DISCREPANCIES PRIOR TO ROUGH-IN. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICTS OR COORDINATE LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF ALL DEVICES WITH ARCHITECTURAL PLANS, COORDINATE LOCATION OF ALL WIRING DEVICES INSTALLED IN MILLWORK WITH MILLWORK CONTRACTOR.

6. FOR DRAWING NOTES, ABBREVIATIONS, MOUNTING HEIGHTS, AND SYMBOLS, REFER TO SHEET E001.

7. PROVIDE (2) 1" CONDUITS FOR AV TO ABOVE ACCESSIBLE CEILING. EXACT LOCATIONS AND REQUIREMENTS WITH DIVISION 23 CONTRACTOR PRIOR TO ROUGH-IN. FOR FURTHER PROVIDE POWER CONNECTION FROM HEAT TRACE CONTROLLER TO TERMINAL BLOCK AT PIPING. COORDINATE PROVIDE POWER CONNECTION TO DOOR OPERATOR AND ASSOCIATED ACTUATORS PER MANUFACTURER'S DEVICE TO ABOVE ACCESSIBLE CEILING, REFER TO DETAIL 8/E504.

8. PROVIDE (2) 1" CONDUITS FOR AV, (1) 1-1/4" CONDUIT FOR TELE/DATA, AND (1) 3/4" CONDUIT FOR POWER FROM EXACT LOCATION AND REQUIREMENTS WITH DIVISION 22/23 CONTRACTOR PRIOR TO ROUGH-IN. PROVIDE MOTOR RATED TOGGLE SWITCH AND POWER CONNECTION TO DIVISION 22/23 EQUIPMENT. COORDINATE NOT USED.

9. PROVIDE DEVICES INDICATED AND FLUSH MOUNT CENTERED BELOW DISPLAY BOX AT STANDARD HEIGHTS.

10. PROVIDE DISPLAY BOX FLUSH MOUNTED IN WALL BEHIND TV. PROVIDE TELE/DATA AND ELECTRICAL DEVICES INDICATED AND MOUNT TO DISPLAY BOX. COORDINATE WITH AV CONTRACTOR PRIOR TO ROUGH-IN.

11. PROVIDE DEVICES INDICATED AND FLUSH MOUNTED IN WALL BEHIND TV. PROVIDE TELE/DATA AND ELECTRICAL DEVICES INDICATED AND MOUNT TO DISPLAY BOX. COORDINATE WITH AV CONTRACTOR PRIOR TO ROUGH-IN.

12. PROVIDE DEVICES INDICATED AND FLUSH MOUNTED IN WALL BEHIND TV. PROVIDE TELE/DATA AND ELECTRICAL DEVICES INDICATED AND MOUNT TO DISPLAY BOX. COORDINATE WITH AV CONTRACTOR PRIOR TO ROUGH-IN.
GENERAL POWER PLAN NOTES:

1. For drawing notes, abbreviations, mounting heights, and symbols, refer to sheet E001.
2. For additional general power plan notes, refer to sheet E200.2.

SCALE: 1/4" = 1'-0"
GENERAL POWER PLAN NOTES:

FOR ADDITIONAL GENERAL POWER PLAN NOTES, REFER TO SHEET E200.2.

PROVIDE MOTOR RATED TOGGLE SWITCH AND POWER CONNECTION TO DIVISION 22/23 EQUIPMENT. COORDINATE DEVICES IN ROOM.

PROVIDE (1)1-1/4" AND (2) 3/4" CONDUITS FOR AV ROUTED ABOVE CEILING FROM PROJECTOR BOX TO ABOVE BP/R2

PROVIDE (2) 1" CONDUITS FOR AV BETWEEN J1 AND R3 DEVICES & (1)1-1/4" AND (1)1" CONDUITS FOR AV FROM J1 CONNECTION. CIRCUIT BREAKER SHALL BE TURNED TO THE "OFF" POSITION WITH THE LOCKING DEVICE ENGAGED.

PROVIDE (2)#12, (1)#12G IN 3/4"C TO JUNCTION BOX ABOVE CEILING AND TERMINATE WITH WIRE NUTS FOR FUTURE

RELOCATE EXISTING EQUIPMENT DISCONNECT FROM CURRENT LOCATION TO NEW LOCATION SHOWN.

COMPLETE INSTALLATION.

FROM PANELBOARD CIRCUIT(S) INDICATED.

FUME HOOD ALARM CIRCUIT.

SUBCONTRACTOR'S SHOP DRAWINGS, NOR RELIEVE DOCUMENT BY BALLINGER SHALL NOT MAKE BALLINGER PREPARED TO SUCH SUBCONTRACTORS IN THEIR TO THIS STATEMENT OF CONDITIONS OF USE, SOLELY AS A DOCUMENT. CONTRACTOR MAY MAKE ELECTRONIC FILES OF BALLINGER'S COPYRIGHT AND OTHER SUCH RIGHTS IN THIS AGREEMENT BETWEEN THE OWNER AND BALLINGER AND TO DOCUMENT IS SUBJECT TO THE CONDITIONS OF THE CONTRACTOR, IN EITHER PAPER OR ELECTRONIC FORM, THE WHEN THIS DOCUMENT IS SUPPLIED TO EITHER OWNER OR
Verify exterior utility yard exact pad size & location requirements with approved submittals and coordinate with construction manager prior to installation. Coordinate bollard locations to allow all access panel to fully open.

Provide power connection to compactor motor and controls. Coordinate exact location of disconnect switch and control panel prior to rough-in. For disconnect sizes, refer to sheet E303.

Route branch circuit conduits below grade. Provide equipment rack for mounting of distribution equipment. Provide weather proof wireway as indicated on sheet E302.

Coordinate exact locations of charging equipment stations with construction manager prior to rough-in.

Provide (4)#8, (1)#10G in (1) 1" conduit below grade from junction box and route to within electrical 100E2 for future forklift charger.

General Power Plan Notes:

For drawing notes, abbreviations, mounting heights, and symbols, refer to sheet E001. For additional general power plan notes, refer to sheet E200.2.

1.

POWER PLAN KEYED NOTES:

Provide power connection to compactor motor and controls. Coordinate exact location of disconnect switch and control panel prior to rough-in. For disconnect sizes, refer to sheet E303.

Route branch circuit conduits below grade. Provide equipment rack for mounting of distribution equipment. Provide weather proof wireway as indicated on sheet E302.

Coordinate exact locations of charging equipment stations with construction manager prior to rough-in.

Provide (4)#8, (1)#10G in (1) 1" conduit below grade from junction box and route to within electrical 100E2 for future forklift charger.

2.
THIRD FLOOR POWER PLAN PART 4

MATERIALS

PAINTING

PLUMBING

MECHANICAL

ELECTRICAL

FLOOR FINISHES

INSTRUMENTATION

CIRCUITS IN THIS AREA SHALL BE ALL 120V AND 208V NORMAL REQUIREMENTS, REF (LE-CVE-0517)

ARCHITECT PRIOR TO PURCHASE. PROVIDE WITH 12' CORD AND COORDINATE EXACT LOCATION IN FIELD TO ALLOW EXACT LOCATION AND REQUIREMENTS WITH DIVISION 22/23 CONTRACTOR PRIOR TO ROUGH-IN.

CONNECT TRANSFORMER SECONDARY GROUND AND TELECOMM GROUNDING BUSBAR TO BUILDING STEEL.

FOR ADDITIONAL GENERAL POWER PLAN NOTES, REFER TO SHEET E200.

1. FOR ALTERNATE SCOPE OF WORK, REFER TO 2/E220.

07/31/17 ISSUE NO. 5
08/24/17 ISSUE NO. 6
01/19/18 ISSUE NO. 10
05/25/18 RFI-506
06/01/18 ISSUE NO. 19

PROJECT NO: KC.G.ENGR.2015.002
NEW ENGINEERING

KINGSTON, RI
FOURTH FLOOR POWER PLAN PART 2

CIRCUITS IN THIS AREA SHALL BE ALL 120V AND 208V NORMAL.

OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE

9.6 ACTUATOR WALL MOUNTED
29 RS2 WALL MOUNTED BAS
19 FR4EX

FOR ADDITIONAL GENERAL POWER PLAN NOTES, REFER TO SHEET E200.2.
FOR DRAWING NOTES, ABBREVIATIONS, MOUNTING HEIGHTS, AND SYMBOLS, REFER TO SHEET E001.

COORDINATE WITH AV CONTRACTOR PRIOR TO ROUGH-IN.
COORDINATE WITH AV CONTRACTOR PRIOR TO ROUGH-IN.

INSTRUCTIONS.
PROVIDE POWER CONNECTION TO DOOR OPERATOR AND ASSOCIATED ACTUATORS PER MANUFACTURER'S

PER PERPREPARATION OF THEIR REQUIRED SHOP DRAWINGS.
SUBCONTRACTORS FROM FULL RESPONSIBILITY FOR RESPONSIBLE IN ANY WAY FOR ANY ASPECT OF THE

THE PROVISION OF THIS CONVENIENCE TO SUCH SUBCONTRACTORS IN THEIR
THIS DOCUMENT AVAILABLE TO SUBCONTRACTORS, SUBJECT

AGREEMENT BETWEEN THE OWNER AND BALLINGER AND TO

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NEW ENGINEERING BUILDING
KINGSTON, RI
PROJECT NO: KC.G.ENGR.2015.002

FOURTH FLOOR POWER PLAN PART 5

E204.5

1/4" = 1'-0"

CONDITION OF USE
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PROVIDE POWER CONNECTION TO FACTORY INSTALLED DISCONNECT SWITCH ON DIVISION 23 EQUIPMENT.

CIRCUITS IN THIS AREA SHALL BE ALL 120V AND 208V NORMAL
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<th>DESCRIPTION</th>
<th>LOCATION</th>
<th>VOLTS</th>
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<td>2 &amp; 3 CHEM ENG SENIOR LAB</td>
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| CONSULTANTS:                                  | SUBCONTRACTORS FROM FULL RESPONSIBILITY FOR SUBCONTRACTOR'S SHOP DRAWINGS, NOR RELIEVE RESPONSIBLE IN ANY WAY FOR ANY ASPECT OF THE CONTRACTOR, IN EITHER PAPER OR ELECTRONIC FORM, THE NEW ENGINEERING CONDITION OF USE BUILDING KINGSTON, RI
Feeder Change per Issue #6 to be implemented as it is needed to feed CAC Units. 480V and Feeder Changed in Issue #6 to coincide with Issue #6 Mechanical Drawings.

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<td>3W250 (3)250KCMIL, (1)#4 G, (1) 2-1/2&quot;C 3W400M (3)#3/0 , (1)#4G, (1) 2&quot;C</td>
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IG - ISOLATED GROUND  T - TRANSFORMER SECONDARY
M - MOTOR FEEDER  V - UPSIZED FOR VOLTAGE DROP
S - SERVICE

3 WIRE + GND (GENERAL) 3 WIRE + GND (MOTORS) 4 WIRE + GND (GENERAL)

4W4000V 12 SETS - [(4)600KCMIL, (1)750KCMIL G, (1) 4 "C]
4W800 3 SETS - [(4)300KCMIL, (1)#1/0 G, (1) 3"C]
4W600T 2 SETS - [(4)350KCMIL, (1)#1 G, (1) 3"C]

EQUIPMENT NAME  ROOM NAME  ROOM #  SHEET

Feeder Change per Issue #8 to be implemented as 600V and Feeder Changed in Issue #6 to coincide with Issue #6 Mechanical Drawings.
## Panelboard Notes:

- **Lock-Off Clamp**
- **Lock-On Clamp**
- **Red Lock-On Clamp**

### Recpt 49060 VA

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<tbody>
<tr>
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<tbody>
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### Enclosure:

- Spare 20 1 -- 0 0 -- 1 20 Spare

### HVAC - CIRCULATION 000C2 FPB-135 15 1 HVAC 1065 0 -- 1 20 Spare

### HVAC - CIRCULATION 000C2 FPB-130 15 1 HVAC 1065 0 -- 1 20 Spare

### DWH-1 15 3 Equip 2000 LO

### SUPPORT 094 20 1 Recpt 540 10517 -- -- -- --

### GLASSWARE WASHER/DRYER #1 40 3 Equip 7067 7067 Equip 3 40 PWR - GLASS WASH 075 <GWD>

### Circuit Description

- **TX-N-LE**
- **ELEC ROOM 000E2**
- **Type 1**
- **Mounting:** Surface
- **Phases:** 3
- **Voltage:** 480/277 Wye
- **Feed Thru Lug:** -
- **Ground Bus:** -
- **Isolated Grn Bus:** -
- **Total Conn. Load:** 143667 VA
- **Total Conn. Current:** 120 A
- **Total Load:** 20385 VA

### Comments (NORTH)

- OPERATOR (SOUTH)

### Seal:

DOCUMENT BY BALLINGER SHALL NOT MAKE BALLINGER RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING.
### Panelboard Notes

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### Circuit Description

- **PP-EOS1-LW**
  - Rating: 30 VA
  - Poles: 4
  - Load Class: A
  - Notes: 1

- **PP-EOS2-LW**
  - Rating: 30 VA
  - Poles: 4
  - Load Class: A
  - Notes: 1

### MCB Rating

- **MCB**
  - Rating: 120/208 Wye
  - Sections: 1
  - Feed Thru Lug: X
  - Neutral Bus: X
  - Total Conn. Current: 180

### Subsequent Use of Information

The information contained herein is for the use of the electrical engineer at the Kingston, RI location. Use of this information for other purposes is prohibited without express written permission.
**Panelboard Notes:**

- Diagram: To single-line for wire size.
- Refer:
  - Lock-off clamp
  - Handle-tie
- GFEP breaker, 30mA
- GFI breaker, 5mA

### Load Classification

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<thead>
<tr>
<th>Connected Load</th>
<th>Demand Factor</th>
<th>Estimated Demand</th>
<th>Panel Totals</th>
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### Branch Panel: PP-N-LW-2

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### Load Classification

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### Comments

- Location:
  - ELEC ROOM 000E1
  - TELE DATA 000TC1

### Rating

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- Comments: Should be filled out by responsible party.
- Enclosure: Should be filled out by responsible party.
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### Panelboard Notes

For wire size, refer to lock-off clamp handle-tie.

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#### Circuit Description

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#### PROJECTORS

- (LE-CVE-0011)
- (LE-CVE-0527)

#### PUMP

- CENTRIFUGAL PUMP (LE-CVE-0001)
- ULTRASOUND (LE-ECB-0500)
- DREMEL/GRINDER (LE-ECB-0442/0437)

#### Recpt

- REC - HYDRAULICS 100 CSP 20 2 Recpt 360 1656 Equip 1 20 PWR - ENVIRONMENTAL 105 <WTS> OVEN REC - BME LAB 110 SOUTH FLOOR 20 1 Recpt 1080 1440 Recpt 1 20 REC - BME TECH OFC 110C TABLETOP GENERAL 20 1 Recpt 540 720 Recpt 1 20 REC - ENVIRONMENTAL 105 TABLETOP REC - NEURO 110B, BME OFC 110C NEURO-PHYSIOLOGICAL SUPPORT

#### Panels

- Branch Panel: PP-CM321E-TDC
- Branch Panel: PP-M1/1D-12
- Branch Panel: PP-M1/1D-2
- Branch Panel: PP-M1/1D-3
- Branch Panel: BB-M1/1E-BHOP1
- Branch Panel: PP-DPS-1E

#### General Information

- THIS DOCUMENT AVAILABLE TO SUBCONTRACTORS, SUBJECT TO CHANGE WITHOUT NOTICE.
- KINGSTON, RI 02801
- E601.2
- 06/01/18 ISSUE NO. 19
### Panelboard Notes

**To Single-Line Lock-Off Clamp**

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### OTHER INFORMATION

- **Number:**
- **Preparation of Their Required Shop Drawings:**
- **Subcontractor's Shop Drawings, Nor Relieve:**
- **This Document Available to Subcontractors, Subject**
  - **Ballinger's Copyright and Other Such Rights in This**
  - **Subsequent Use of the Information Contained on the**
  - **E602.2**

### BUILDING

- **Kingston, RI**
- **Second Floor Panelboard Schedules**

---

**Note:** The table contains detailed information about panelboards, including supply sources, enclosures, and various ratings and specifications. Each row likely represents a specific panelboard configuration or a part of a larger electrical system diagram.
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**General Notes:**
- This table provides a detailed breakdown of branch panels, including their types, voltages, total current, and connections.
- It is used to ensure proper electrical distribution within the building.
- The table includes columns for comments, supply from, and spare equipment, indicating the flexibility and reliability of the electrical system.
**Panelboard Notes:**

**Diagram:**

- **Light 0 VA 0.00% 0 VA**
- **Recpt 83520 VA 55.99% 46760 VA**
  - 83
  - 71
  - 67
  - 63
  - 37
  - 33
  - 29
  - 15
  - 11
  - 33
  - 25

**Enclosure:**

- **Comments**
  - Spare 20 1 -- 0 50 Equip 1 20 PWR - FAUCET/FLUSH VALVES
  - Spare 20 1 -- 0 720 -- -- -- --
  - -- -- -- -- 562 720 Recpt 1 20 REC - COMPUTER LAB 353/355 SYSTEMS
  - REC - ELEC 3E2, TELEDATA 3TC2, PIPE
  - Recpt 20 1 Recpt 540 720 Recpt 3 20 REC - HUMAN FACTORS 345A, COMP. LAB
  - REC - CIRC. 3C3 EAST, SOUTHEAST 20 1 Recpt 720 720 -- -- -- --
  - REC - OFFICE 389, 391, 393 QUAD 20 1 Recpt 1080 720 -- -- -- --
  - Unusable Space -- -- -- 0 36031 HVAC; Recpt;
  - Space -- -- -- 0 0 -- -- -- Space
  - Space -- -- -- 0 0 -- -- -- Space
  - Space -- -- -- 0 0 -- -- -- Space

**Electrical 300E2**

- **Type 1**
  - **Total Amps:**
    - 36031 VA 35260 VA 36447 VA
  - **Neutral Rating:**
    - 66 A
  - **Bus Rating:**
    - 120/208 Wye
  - **Neutral Bus:**
    - X
  - **MLO/MCB**
    - Double Lugged:
      - 10,000A
  - **Ground Bus:**
    - X

**Aux Gutter:**

- **Equip 3 250 PANEL PP-N-3E-1 VIA XFMR TX-N-3E**
- **Equip 1 250 PANEL PP-EOS2-3W-1**
- **Equip 1200 1260 Recpt 1 20 REC - CONF. ROOM 362, 364 WALL**
- **Equip 1 20 PWR - FAUCET VALVE WOMEN'S 3T1, 3T2**
- **Equip 600 307 Equip 1 20 PWR - NANO MATERIALS 335 <UCR-1> U/C**
- **Equip 701 0 -- 1 20 Spare**
- **Equip 701 0 -- 1 20 Spare**
- **Equip 701 0 -- 1 20 Spare**
- **Equip 1 20 REC - DEPT. CHAIR SUITE 360 SYS.**
- **Equip 293 HVAC 2 15 HVAC - LOUNGE 323 FCU-323-1**
- **Equip 1 20 PWR - COPY/STORAGE 360A PRINTER 20 1**
- **Equip 1 20 PWR - RESEARCH LAB 367A INCUBATOR**
  - **REFRIGERATOR (LE-COE-0047) 20 1 Equip 701 0 -- 1 20 Spare**
  - **REFRIGERATOR (LE-COE-0073) 20 1 Equip 701 701 Recpt 1 20 REC - HUMAN FACTORS 375**
  - **REFRIGERATOR (LE-COE-0025) 20 1 Equip 701 432 Recpt 1 20 PWR - RESEARCH LAB 367A INCUBATOR**
  - **FREEZER 20 1 Equip 696 180 Recpt 1 20 REC - HUMAN FACTORS 375**
  - **(LE-CVE-0263) 20 1 Equip 701 180 Recpt 1 20 REC - GROWTH/EXPANSION 365**
  - **LTG - THIRD FLOOR EXIT SIGNS 20 1 Light 149 0 -- 1 20 Spare**
  - **EM LTG - THIRD FLOOR CORRIDORS**
  - **LTG - DEPARTMENT CHAIR SUITE 20 1 Light 2288 0 -- 1 20 Spare**
  - **LTG - SOUTHWEST WING 20 1 Light 3363 3239 Light 1 20 LTG - EAST WING**
  - **FEED THRU LUG TO PANEL LP-ELS-2E 0 3 Light 5685 0 -- 1 20 Spare**

**Rating Circuit Description**

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**Location:**

- **Type 1**
  - **Total Est. Demand:**
    - 345/345A GENERAL 35083 VA
  - **120/208 Wye**

**Rating:**

- **Location:**
  - **Total Conn. Load:**
    - 107737 VA
  - **Neutral Rating:**
    - X
  - **Bus Rating:**
    - X
  - **Aux Gutter:**
    - X
  - **Ground Bus:**
    - X

**Mounting:**

- **Type 1**
  - **Total Conn. Load:**
    - 129 A 130 A 128 A
  - **Total Est. Demand:**
    - 143 A 143 A 121 A
  - **Phases:**
    - 3
  - **Phases:**
    - 4
  - **Phases:**
    - 3

**562 720 Recpt 1 20 REC - COMPUTER LAB 353/355 SYSTEMS**

**Location:**

- **Type 1**
  - **Total Conn. Load:**
    - 129 A 130 A 128 A
  - **Total Est. Demand:**
    - 143 A 143 A 121 A
  - **Phases:**
    - 3
  - **Phases:**
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    - 3

**Mounting:**

- **Type 1**
  - **Total Conn. Load:**
    - 129 A 130 A 128 A
  - **Total Est. Demand:**
    - 143 A 143 A 121 A
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    - 4
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    - 3

**Location:**

- **Type 1**
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    - 129 A 130 A 128 A
  - **Total Est. Demand:**
    - 143 A 143 A 121 A
  - **Phases:**
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### Panelboard Notes

**Diagram Handle-Tie GFI Breaker, 5mA**

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**Spare 20 1 -- 0 0 -- 1 20 Spare**

**REC - BIO MED WET SUPPORT 325A**

**DEHUMIDIFIER (LE-COE-0058) 15 2**

**Equip 350 360**

**Recpt 1 20**

**REC - BIOMED WET LAB GAS**

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**Aux Gutter:**

**ISC Rating:**

**Location:** GROWTH/EXP 365

**Type 1**

**BUILDING KINGSTON, RI**

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**Circuit Description**

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**Title:**

**Consultants:**

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<tr>
<th>NUMBER</th>
<th>SEAL</th>
</tr>
</thead>
</table>

**PANELBOARD NOTES:**

- To single-line for wire size, refer handle-tie.

**Equip:** 997 VA 60.00% 598 VA

**Recpt:** 15300 VA 82.68% 12650 VA

<table>
<thead>
<tr>
<th>REC - Human Factors</th>
<th>375A CSP 20</th>
<th>2 Recpt 360</th>
<th>360 Recpt 2</th>
<th>20</th>
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<tbody>
<tr>
<td>REC - Human Factors</td>
<td>370 EAST</td>
<td>370 WEST</td>
<td>SYSTEMS</td>
<td>FURNITURE 20</td>
</tr>
<tr>
<td>REC - Human Factors</td>
<td>375 WALL</td>
<td></td>
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**BIO MED DRY**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Poles</th>
<th>Load Class</th>
<th>Notes</th>
<th>Load Class</th>
<th>Poles</th>
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<tbody>
<tr>
<td>10,000A</td>
<td></td>
<td>120/208 Wye</td>
<td></td>
<td>Neutral Bus:</td>
<td>- MLO/MCB</td>
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</tbody>
</table>

**Trip Sections:** Recessed

**Total Load:** 5520 VA 5977 VA 4800 VA

**Bus Rating:**

**Aux Gutter:**

**Neutral Bus:**

**Neutral Rating:**

**Total Est. Demand:** 12960 VA

** документ is subject to the conditions of the 07/31/17 ISSUE NO. 5 04/17/18 ISSUE NO. 15**
### Panelboard Notes:

- **TO SINGLE-LINE GFI BREAKER, 5mA**

### Rating Poles Load Class Notes

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
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### Load Classification

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<th>Demand Factor</th>
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<tbody>
<tr>
<td>41</td>
<td>0.00%</td>
<td>3216 VA</td>
</tr>
<tr>
<td>37</td>
<td>0.00%</td>
<td>360 VA</td>
</tr>
<tr>
<td>33</td>
<td>0.00%</td>
<td>23 VA</td>
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### Supply From:

<table>
<thead>
<tr>
<th>Branch Panel</th>
<th>PWR - TELE / DATA 400TC2 IDF (EAST) 20 2 Equip 1040</th>
<th>0 -- 1 20 Spare</th>
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<tbody>
<tr>
<td></td>
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### Rating Circuit Description

<table>
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<tr>
<th>11700 VA</th>
<th>3216 VA</th>
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<tbody>
<tr>
<td>6120 VA</td>
<td>5940 VA</td>
</tr>
<tr>
<td>5760 VA</td>
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</tbody>
</table>

### Comments

- **Circuit Description**
  - Type 1: TX-EOS2-E-TD
  - TELE DATA 400TC2

### Mounting:

- **Surface**
  - 50A
  - Feed Thru Lug: 225A

### Bus Rating:

- **X**
  - Neutral Bus: -
  - Neutral Rating: X

### Neutral Rating:

- **X**
  - Total Conn. Current: -
  - Total Est. Demand: -
**PANELBOARD NOTES:**

TO SINGLE-LINE FOR WIRE SIZE, REFER

HANDLE-TIE GFI BREAKER, 5mA

RED LOCK-ON CLAMP

---

**Supply From:**

REC - SMART CITIES 425 CSP 20 2 Recpt 360 360 Recpt 2 20 REC - SMART CITIES 425 CSP

---

**Location:**

BD-N-4E-L

---

**Rating Poles Load Class Notes A B C Notes Load Class Poles**

---

**Sections:**

1

---

**Voltage:**

MLO/MCB

---

**MCB Rating:**

41 A 39 A 38 A 4320 VA 4140 VA 3600 VA

---

**Total Conn. Load:**

120/208 Wye

---

**Total Conn. Current:**

- 100%

---

**Total Est. Demand:**

- 33 A

---

**Total Est. Demand Current:**

- 78

---

**Enclosure:**

WALL GENERAL (ALTERNATE)

---

**Mounting:**

X

---

**Phases:**

- 1

---

**Trip:**

- 6

---

**WALL GENERAL**

(ALTERNATE)

---

**Equip 0 VA 0.00% 0 VA**
### Panelboard Notes:

- **Diagram to Single-Line:**
  - Lock-Off Clamp
  - Lock-On Clamp
  - Handle-Tie
  - GFE Breaker, 30mA
  - GFI Breaker, 5mA

<table>
<thead>
<tr>
<th>Light 0 VA</th>
<th>HVAC 0 VA</th>
<th>Load Classification</th>
<th>Connected Load</th>
<th>Demand Factor</th>
<th>Estimated Demand</th>
<th>Panel Totals</th>
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</thead>
<tbody>
<tr>
<td>0 VA</td>
<td>0 VA</td>
<td>0.00%</td>
<td>0 VA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Supply From:**
- REC - Future Expansion 465 CSP
- REC - Future Expansion 465 SPINE
- REC - Future Expansion 465 CSP

**Rating Poles Load Class Notes A B C Notes Load Class Poles**
- Sections: 10,000A
- Phases: 4
- Wires: 3960 VA 3420 VA
- MCB Rating: 120/208 Wye
- Bus Rating: -
- Double Lugged: Total Est. Demand 35 A
- Total Conn. Current: -
- Isolated Grn Bus:
- Neutral Bus:

**Enclosure:**
- Spare 20 1
- REC - Future Expansion 465 GENERAL
- REC - Future Expansion 465 SPINE
- REC - Future Expansion 465 CSP

**Comments**
- Total Amps: 38 A 36 A 38 A
- Type 1
- BD-N-4W-L

**KEYPLAN:**
- RESPONSIBLE IN ANY WAY FOR ANY ASPECT OF THE PREPARATION OF SHOP DRAWINGS. THE PROVISION OF THIS DOCUMENT, CONTRACTOR MAY MAKE ELECTRONIC FILES OF BALLINGER'S COPYRIGHT AND OTHER SUCH RIGHTS IN THIS DOCUMENT IS SUBJECT TO THE CONDITIONS OF THE SUBSEQUENT USE OF THE INFORMATION CONTAINED ON THE DOCUMENT.
GROUNDING RISER

EG301

BUILDING
KINGSTON, RI

CONDITION OF USE

THE UNIVERSITY OF RHODE ISLAND
NEW BOROUGH PROJECT

EG301

GROUNDING
RISER

EG301

NEW ENGINEERING
DIAGRAM

08/24/17 ISSUE NO. 6

07/31/17 ISSUE NO. 5

01/19/17 ISSUE NO. 10

DIAGRAM

RECORD DRAWING

15085.00

R A W  T E X T  E N D
LOWER LEVEL LIGHTING PLAN

CIRCULATION

ELEVATOR

VESTIBULE

MEETING ROOM

TELE DATA

CLASSROOM

CLOSET

IMAGING

LAB TECH

LAB

FUTURE IMAGING

BLDG MGMT

MATLS MGMT /

STOCKROOM

FIRE PUMP ROOM

SCALE UP

PRIOR TO ROUGH-IN. NOTIFY ARCHITECT AND ENGINEER OF ANY CONFLICTS OR
COORDINATE LOCATIONS, MOUNTING HEIGHTS AND FINISHES OF ALL WIRING DEVICES WITH ARCHITECTURAL PLANS,
MEET 1.0 FOOT-CANDLE AVERAGE, 0.1 FOOT-CANDLE MINIMUM AND A 40:1 MAXIMUM/MINIMUM RATIO ALONG THE
FOR LIGHTING CONTROL SCHEDULES, REFER TO SHEET EL501.

FOR DRAWING NOTES, ABBREVIATIONS, MOUNTING HEIGHTS, AND SYMBOLS, REFER TO SHEET E001.

PRESET DIMMING SWITCH FOR CIRCULATION #000C4 LIGHTING, REFER TO 2/EL301
FROM CIRCUIT #19 ON AL17A
CHAIR OFFICE
38
COPY/STORAGE/MAIL AL1
STAIR NO.1

OFFICE 300S2
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE

BL10
STAIR NO.1

310
312
314
302
304

CIRCULATION

LOBBY
CLOSET

LUMINARIES SHALL BE CONNECTED TO ALL THIRD FLOOR RELAY LIGHTING RELAY PANEL "LCP-N-3E" U.O.N.

GENERAL LIGHTING PLAN NOTES:
1/8" = 1'-0"

SUBCONTRACTOR'S SHOP DRAWINGS, NOR RELIEVE DOCUMENT BY BALLINGER SHALL NOT MAKE BALLINGER THIS DOCUMENT AVAILABLE TO SUBCONTRACTORS, SUBJECT

PROJECT NO:  KC.G.ENGR.2015.002
KINGSTON, RI
NOTES:

21 EXTERIOR EMERGENCY WITH INTEGRAL FIXTURE OCCUPANCY

4 CEILING SENSOR(S) SHALL PROVIDE OVERALL CONTROL FOR ALL ZONES WITHIN AREA. PROVIDE A SEPARATE SWITCH FOR EACH INDIVIDUAL ZONE AS INDICATED ON DRAWINGS.

2 PROVIDE ADDITIONAL REMOTE LOW VOLTAGE SWITCH WHERE REQUIRED FOR 3 OR 4-WAY CONTROL.

WHERE INDICATED ON DRAWINGS, PROVIDE UL 924 LISTED AUTOMATIC LOAD CONTROL RELAY (ALC) TO BYPASS CONTROLS AND PROVIDE 100% OUTPUT VIA EMERGENCY CIRCUIT INDICATED.

CEILING SENSOR(S) AND PRESET DIMMING

ACTIVE LEARNING CLASSROOM

CLASSROOM/CONFERENCE

STORAGE/RECEIVING/COMPUTER LABS

HIGH BAY/SHOP

CONFERENCE

OFF - AUTOMATICALLY VIA 20 MINUTE TIMER
SAME AS DAYTIME - OFF

OFF - AUTOMATICALLY OFF IF AMBIENT LIGHT IS > 1 FC

ON - AUTOMATICALLY IF AMBIENT LIGHT IS <= 1 FC

OFF - AUTOMATICALLY WITHIN 20 MINUTES

CEILING VACANCY SENSOR - UPON DETECTION OF OCCUPANCY:

AMBIENT LIGHT LEVEL FROM PHOTOCELL 'KIRK'.

AMBIENT LIGHT LEVEL FROM PHOTOCELL 'NEB-1'.

OFF - MANUAL OVERRIDE VIA REMOTE LOW VOLTAGE SWITCH

RELAY PANEL:

OVERRIDE VIA REMOTE LOW VOLTAGE SWITCH

ON - AUTOMATICALLY VIA PROGRAMMED SCHEDULE OR MANUAL

ON - MANUAL VIA LOW VOLTAGE WALL SWITCHES

CEILING VACANCY SENSOR - UPON DETECTION OF OCCUPANCY:

AMBIENT LIGHT LEVEL FROM PHOTOCELL 'NEB-2'.

OVERRIDE VIA REMOTE LOW VOLTAGE SWITCH

RELAY PANEL:

ON - AUTOMATIC OVERRIDE OF INDICATED RELAY

OFF - AUTOMATICALLY WITHIN 20 MINUTES

ON - 2HR MANUAL OVERRIDE VIA REMOTE LOW VOLTAGE SWITCH

RELAY PANEL:

ON - AUTOMATIC OVERRIDE OF INDICATED RELAY

OFF - AUTOMATICALLY VIA PROGRAMMED SCHEDULE

OFF - AUTOMATICALLY WITHIN 20 MINUTES

ON - 2HR MANUAL OVERRIDE VIA REMOTE LOW VOLTAGE SWITCH

RELAY PANEL:

ON - AUTOMATIC OVERRIDE OF INDICATED RELAY

OFF - AUTOMATICALLY WITHIN 20 MINUTES

ON - 2HR MANUAL OVERRIDE VIA REMOTE LOW VOLTAGE SWITCH

RELAY PANEL:

ON - AUTOMATIC OVERRIDE OF INDICATED RELAY

OFF - AUTOMATICALLY VIA PROGRAMMED SCHEDULE

SAME AS DAYTIME - 1

SAME AS DAYTIME - 1, 2

MANUAL VIA REMOTE RAISE/LOWER CONTROL 1

AMBIENT LIGHT LEVEL

RAISE/LOWER CONTROL INTEGRATED WITH FIXTURES ON ASSOCIATED ZONE BASED ON HOURS

1) DAYLIGHT SENSOR SHALL AUTOMATICALLY DIM

PHOTOCELL SHALL AUTOMATICALLY REDUCE OUTPUT FROM COMPUTER LAB LIGHTING CONTROLS

2. LABELING SHALL BE FACTORY PROVIDED PER SPECIFICATIONS.
### Lighting Control Schedules

<table>
<thead>
<tr>
<th>Switchbank Schedules</th>
<th>Relay Panel Schedules</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Switchbank Schedules" /></td>
<td><img src="image2.png" alt="Relay Panel Schedules" /></td>
</tr>
</tbody>
</table>

**Note:**
- The schedules include detailed information about the lighting control systems, including switchbank and relay panel configurations.
- Each schedule is meticulously organized to facilitate easy reference and understanding.
- The data includes technical specifications, connectivity details, and operational parameters.

---

**Title:**

**PERFORMANCE OF THEIR REQUIRED SHOP DRAWINGS.**

**DOCUMENT BY BALLINGER SHALL NOT MAKE BALLINGER THIS DOCUMENT AVAILABLE TO SUBCONTRACTORS, SUBJECT**

**CONDITION OF USE**

**LIGHTING CONTROL**

**EL501**

**KINGSTON, RI**
**GENERAL NOTES**

**DEFINITIONS:**

1. CONTRACTOR SHALL PROVIDE THE FOLLOWING WITH THEIR BID:
   - Selection, furnishing, and installation of secondary wiring from remote transformers.
   - LED drivers: control devices that maintain constant amount of current to the LED light source. LED drivers help in controlling the LED’s current and maintaining a consistent light output.
   - Color rendering index (CRI): measures how objects look under an electric light source compared to a reference source. The higher the CRI, the more accurate the colors will appear.

2. UNLESS OTHERWISE NOTED, HIGH WATTAGE H.I.D. LAMP BALLASTS SHALL BE CWA TYPE; LOW WATTAGE H.I.D. LAMP BALLASTS WILL BE SUPPLIED. THE SUBMITTAL SHALL INCLUDE THE FOLLOWING:
   - Submission of plans and specifications showing the location and quantity of LED lamp and power supplies, details showing method of installation, and a complete Bill of Materials for review by design professionals.
   - Evidence of performance warranty from the manufacturer.
   - Coloring of installation details using a broad color swatch book that is compatible with the approved manufacturer.

3. CONTRACTOR SHALL SELECT, FURNISH AND INSTALL THE CORRECT SIZE OF SECONDARY WIRING FROM REMOTE TRANSFORMERS.

4. ALSO PROVIDE LENGTHS AS SHOWN ON ARCHITECTURAL DRAWINGS, UNLESS OTHERWISE NOTED.

5. CONTRACTOR SHALL PROVIDE AT LEAST ONE DAY OF A FACTORY-TRAINED AND CERTIFIED TECHNICIAN TO PROVIDE WARRANTY AND TECHNICAL SUPPORT.

6. CONTRACTOR SHALL FOCUS LIGHTING AFTER DARK IF DIRECTED BY THE OWNER'S REPRESENTATIVE.

7. CONTRACTOR SHALL PROVIDE THE FOLLOWING WITH THEIR SHOP DRAWINGS:
   - Scaled plans and sections of the proposed lighting fixtures.
   - Complete Bill of Materials for review by design professionals.
   - Evidence of performance warranty from the manufacturer.

8. REDUCE CURRENT REDUCTION (CCR) OR BY PULSE WIDTH MODULATION (PWM) DIMMING FOR CONSTANT CURRENT DRIVERS.

9. LED REQUIREMENTS:
   - 1-LIGHT LED ADJUSTABLE LUMINAIRE, NOMINAL 5 INCH SQUARE HOUSING: IP2-4FK-1-D101-27 LUMEN OUTPUT.
   - 50,000 HOURS TO L70, 5 YEAR WARRANTY.

### LIGHTING FIXTURE SCHEDULE

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Manufacturer</th>
<th>Catalog Number</th>
<th>Length</th>
<th>Watts</th>
<th>Lumens</th>
<th>Color</th>
<th>CRI</th>
<th>Life</th>
<th>Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL1A</td>
<td>Semi-recessed 2x2 luminaire with 4-inch dropped frosted LED</td>
<td>NEO-RAY</td>
<td>SL2L-LOP-0 [Length]-FLP-[CEILING</td>
<td>180</td>
<td>20</td>
<td>2000</td>
<td>35K</td>
<td>80+</td>
<td>50,000</td>
<td>5 YEAR</td>
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<td>AL1B</td>
<td>Semi-recessed 2x2 luminaire with 4-inch dropped frosted LED</td>
<td>NEO-RAY</td>
<td>SL4L-LOP-0 [Length]-RLP-TG-80CRI-35K</td>
<td>180</td>
<td>60</td>
<td>6000</td>
<td>35K</td>
<td>80+</td>
<td>50,000</td>
<td>5 YEAR</td>
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<tr>
<td>AL2</td>
<td>LED requirements: for recessed linear wallwasher</td>
<td>MARK LIGHTING</td>
<td>SL2F-LNWSH-600LMF-MIN1-277</td>
<td>180</td>
<td>10</td>
<td>600</td>
<td>35K</td>
<td>80+</td>
<td>50,000</td>
<td>5 YEAR</td>
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<tr>
<td>AL3</td>
<td>LED requirements: for recessed linear wallwasher</td>
<td>MARK LIGHTING</td>
<td>SL4F-LNWSH-MIN1-277</td>
<td>180</td>
<td>30</td>
<td>1800</td>
<td>35K</td>
<td>80+</td>
<td>50,000</td>
<td>5 YEAR</td>
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<tr>
<td>AL4</td>
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<td>MARK LIGHTING</td>
<td>SL6F-LNWSH-600LMF-MIN1-277</td>
<td>180</td>
<td>50</td>
<td>3000</td>
<td>35K</td>
<td>80+</td>
<td>50,000</td>
<td>5 YEAR</td>
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<tr>
<td>AL5</td>
<td>LED requirements: for recessed linear wallwasher</td>
<td>MARK LIGHTING</td>
<td>SL8F-LNWSH-600LMF-MIN1-277</td>
<td>180</td>
<td>70</td>
<td>4200</td>
<td>35K</td>
<td>80+</td>
<td>50,000</td>
<td>5 YEAR</td>
</tr>
</tbody>
</table>

**NOTES:**

- All fixtures shall be installed in accordance with the manufacturer's instructions and local codes.
- All fixtures shall be installed in a manner that allows for easy access for maintenance and repair.
- All fixtures shall be installed in a manner that minimizes electrical noise and electromagnetic interference.
- All fixtures shall be installed in a manner that provides adequate protection against vandalism and theft.
- All fixtures shall be installed in a manner that provides adequate lighting for pedestrian safety and vehicle visibility.

**CONDITIONS:**

- All fixtures shall be installed in accordance with the manufacturer's instructions and local codes.
- All fixtures shall be installed in a manner that allows for easy access for maintenance and repair.
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**RECOGNITION:**

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- All fixtures shall be installed in a manner that provides adequate protection against vandalism and theft.
- All fixtures shall be installed in a manner that provides adequate lighting for pedestrian safety and vehicle visibility.
AND OCCUPANCY SENSOR.

BLZAK REFLECTOR, PROVIDE 20-DEGREE BEAM OPTICS, PROVIDE ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS.

ALUMINUM HOUSING, ALUMINUM REFLECTOR WITH MAXIMUM 1/2 50,000 HOURS TO L70, 5 YEAR WARRANTY.

LED REQUIREMENTS:

BLUE LENS, INTEGRAL 0-10V DRIVER CAPABLE OF DIMMING TO 10% CCT, 80+ CRI, 50,000 HOURS TO L70, 5 YEAR WARRANTY.

LED REQUIREMENTS:

TO 40 DEGREES, PROVIDE 30-DEGREE BEAM OPTICS, INTEGRAL HORIZONTAL 365 DEGREE ROTATION, LOCKABLE VERTICAL TILT UP 3500K CCT, 80+ CRI, 50,000 HOURS TO L70, 5 YEAR WARRANTY.

300 INITIAL DELIVERED LUMENS PER SQUARE FOOT, 3500K CCT, MINIMUM 80 CRI, 75,000 HOURS TO L80, 5 YEAR WARRANTY.

NOMINAL 1500 INITIAL DELIVERED LUMENS, 3500K CCT, 80+ CRI, 75,000 HOURS TO L80, 5 YEAR WARRANTY.

RECSLED LED PERIMETER SLOT LIGHT, NOMINAL 4 INCH WIDE X 3 INCH LENGTHS AS SHOWN ON ARCHITECTURAL DRAWINGS, STEEL RECESSED LED PERIMETER SLOT LIGHT, NOMINAL 4 INCH WIDE X 6-1/2 INCH DEEP STEEL HOUSING, SEMI-SPECULAR CLEAR ALZAK REFLECTOR AND TRIM FLANGE, SNAP-IN ENDCAPS, FROSTED ACRYLIC LENS, OVERALL Recessed 2 INCH DIAMETER LED ADJUSTABLE ACCENT, NOMINAL Recessed 4 INCH DIAMETER LED DOWNLIGHT, NOMINAL 11 INCH TALL DELIVERED LUMEN OUTPUT.

NOMINAL 450 INITIAL DELIVERED LUMENS PER LINEAR FOOT, 3500K CCT, 80+ CRI, 50,000 HOURS TO L70, 5 YEAR WARRANTY.

NOMINAL 750 INITIAL DELIVERED LUMENS PER LINEAR FOOT, 3500K CCT, 80+ CRI, 50,000 HOURS TO L70, 5 YEAR WARRANTY.

GOTHAM ICO-SQADJ-35/10-2AR-LSS-30D-MVOLT- [MOD]

GOTHAM EVO-WW-35/10-4AR-LSS-MVOLT-EZ10 - LEDS BY MANUFACTURER 14.0 15.6 277 0-10V LIGHTOLIER -

GOTHAM EVO-35/07-4AR-MWD-LSS-MVOLT-EZ1 - LEDS BY MANUFACTURER 10.3 11.4 120/277 0-10V LIGHTOLIER -

GOTHAM EVO-WW-35/07-4AR-LSS-MVOLT-EZ1 - LEDS BY MANUFACTURER 10.3 11.4 277 0-10V LIGHTOLIER -

INTERLUX E95708-T-60 - LEDS BY MANUFACTURER 15.0 16.7 277 0-10V LUMENPULSE COOLEDGE - LEDS BY MANUFACTURER 3 / SQ FT 3.3 / SQ FT 277 0-10V NO APPROVED GOTHAM - EQUALS - LEDS BY MANUFACTURER 7.8 / FT 8.6 / FT 277 0-10V LITHONIA - Z SERIES CALCULITE SERIES - LEDS BY MANUFACTURER 6.5 / FT 7.2 / FT 277 0-10V NEO-RAY - LEDS BY MANUFACTURER 13 14.4 277 0-10V PRESCOLITE - LEDS BY MANUFACTURER 13 14.4 277 0-10V PRESCOLITE -

AMERLUX - EVOKE - LEDS BY MANUFACTURER 17.3 19.2 277 0-10V LIGHTOLIER -

GOTHAM EVO-WW-35/15-4AR-MWD-LSS-MVOLT-EZ1 - LEDS BY MANUFACTURER 17.3 19.2 277 0-10V LIGHTOLIER -

GOTHAM EVO-35/15-4AR-MWD-LSS-MVOLT-EZ1 - LEDS BY MANUFACTURER 17.3 19.2 120/277 0-10V LIGHTOLIER -
ADJUSTABLE VERTICAL TILT IN 15 DEGREE INCREMENTS, INTEGRAL
ASYMMETRIC DISTRIBUTION, SNAP-IN MOUNTING BRACKETS,
ARCHITECTURAL DRAWINGS, AND PROVIDE 0-10V DRIVER CAPABLE
OF DIMMING TO 1% LUMEN OUTPUT, PROVIDE POWER LEADS AND
DRAWINGS, EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS,
LINEAR LED DIRECT/INDIRECT PENDANT, NOMINAL 4-1/2 INCH WIDE
X 4-1/2 INCH TALL X 6 FOOT LONG EXTRUDED ALUMINUM HOUSING,
LINEAR LED DIRECT/INDIRECT PENDANT, NOMINAL 4-1/2 INCH WIDE
X 1-1/2 INCH WIDE X 2 INCH TALL X 13 FOOT LONG EXTRUDED
LINEAR LED GRAZER MOUNTED IN DOWNLIGHT POSITION, NOMINAL
3-1/2 INCH WIDE X MAXIMUM TALL X LENGTHS AS SHOWN ON
ARCHITECTURAL DRAWINGS, EXTRUDED ALUMINUM HOUSING, POLYCARBONATE LENS WITH
9-DEGREE BEAM OPTICS, SNAP-IN MOUNTING BRACKETS,
LED LINEAR COVE LIGHT, NOMINAL 3-1/2 INCH WIDE X 1-1/2 INCH WIDE X 2 INCH TALL X LENGTHS AS SHOWN ON
ARCHITECTURAL DRAWINGS, ALL SECONDARY WIRING TO BE CONCEALED IN ALL IncreMENTS, INTEGRAL 0-10V DRIVER
CAPABLE OF DIMMING TO 1% OF LIGHT OUTPUT.

NOMINAL 700 INITIAL DELIVERED LUMENS PER LINEAR FOOT, 3500K CCT, 80+ CRI,
50,000 HOURS TO L70, 5 YEAR WARRANTY.

NOMINAL 300 INITIAL DELIVERED LUMENS PER SQUARE FOOT, 3500K CCT, 80+ CRI,
50,000 HOURS TO L70, 5 YEAR WARRANTY.

NOMINAL 200 DELIVERED LUMENS PER FOOT, 3500K CCT, 80+ CRI,
50,000 HOURS TO L70, 5 YEAR WARRANTY.

CONTRACTOR SHALL PROVIDE QUANTITY OF LUMINAIRES AND
CONNECTING LEADS AS REQUIRED FOR FULLY LUMINOUS LIGHT BOX AND ALL
PROJECT NO: KC.G.ENGR.2015.002 LIGHTING FIXTURE
NEW ENGINEERING KINGSTON, RI
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<th>PROJECT NUMBER</th>
<th>TITLE</th>
<th>SCALE</th>
<th>TITLE NUMBER</th>
<th>ISSUE NUMBER</th>
<th>SUMMARY</th>
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**NOTES:**
- Issue 10 direction from URI does not include this revision. Revision is to remain on drawings and a resolution is to follow.
AND DIFFUSING LENS
DESIGN PROFESSIONAL, IES TYPE III OPTICAL DISTRIBUTION.
50,000 HOURS TO L70, 5 YEAR WARRANTY.

LED REQUIREMENTS:
LOCATION LISTED.
50,000 HOURS TO L70, 5 YEAR WARRANTY.

NOMINAL 150 INITIAL DELIVERED LUMENS, 3000K CCT, 80+ CRI,
LED REQUIREMENTS:
DRIVER, U.L. WET LOCATION LISTED.

OVERALL BLACK FINISH.
EXTERIOR LED EXIT SIGN. BACKMOUNT LIGHTING SERVICES
OF POLE.

PROVIDE 3-1/2 INCH DIAMETER X 18 INCH HIGH ALUMINUM POST
4" SQ. x 8'-0" LONG LINEAR WITH 50% DIRECT/50% INDIRECT OPTICS
SURFACE MOUNT LINEAR LED 7000 LUMEN PACKAGE LITHONIA ZL1D L48 7000LM FST  277 35K 90CRI
PENDANT LINEAR LED 5000 LUMEN PACKAGE LITHONIA ZL1D L 48 5000LM FST  277 35K 90CRI
RECESSED LED TROFFER 2'X4' 4000 LUMEN PACKAGE LITHONIA 2GTL 4 40L A19 277 SLD LP835 - LEDs BY MANUFACTURER 39.0 43.3 277 N/A COOPER RECESSED
HOUSING, WHITE ACRYLIC OUTER LENS, IES TYPE III LIGHT
INCH HIGH X 20 INCH WIDE OCTAGONAL ALUMINUM ALLOW
SAME AS TYPE PL1, EXCEPT PROVIDE GFCI OUTLET AT BASE OF
CONTRACTOR SHALL PROVIDE QUANTITY OF LUMINAIRES AND
DRAWINGS FOR MOUNTING DETAILS.

REMOTE 0-10V DIMMING DRIVER. REFER TO ARCHITECTURAL
BOARD, LED SPACING TO BE NOMINAL 1-1/3 INCH ON CENTER,
PANEL SIGNAGE, NOMINAL 12 INCH SQUARE FLEXIBLE CIRCUIT
LED FLEXIBLE SHEET FOR MOUNTING WITHIN LAMINATE GLASS
DETERMINED IN FIELD WITH DESIGN PROFESSIONAL, U.L. WET
SELECTED BY DESIGN PROFESSIONAL, MOUNTING HEIGHT TO BE
6- INCH DIAMETER STABILITY FLANGE, OVERALL FINISH TO BE
HONEYCOMB LOUVER, MOUNT TO NOMINAL 3-1/2 INCH WIDE X 17-1/2
8 INCH LONG ALUMINUM HOUSING WITH 1 INCH REGRESSED SOFT
LED GROUND-MOUNTED FLOODLIGHT, NOMINAL 3 INCH DIAMETER X
CCT, MINIMUM 80 CRI, 50,000 HOURS TO L80, 5 YEAR WARRANTY.
LED REQUIREMENTS:

CONTRACTOR TO PROVIDE WITH THEIR SUBMITTAL SCALED
MOUNTING AND ELECTRICAL ACCESSORIES AS REQUIRED FOR A
WITH 40-DEGREE BEAM OPTIC, SNOOT WITH 2-INCH REGRESS,
INCH LONG ALUMINUM FLOODLIGHT HOUSING, SAFETY GLASS LENS
RATED LIFE OF 50,000 HOURS, AND 5-YEAR LIMITED WARRANTY.

LED REQUIREMENTS:
SAME AS TYPE PL1, EXCEPT PROVIDE GFCI OUTLET AT BASE OF
CONTRACTOR SHALL PROVIDE QUANTITY OF LUMINAIRE HEADS SHALL BE MOUNTED AT 180
GENERAL FIRE ALARM PLAN NOTES:

FIRE ALARM DEVICES IN AREAS OF EXPOSED CEILING SHALL BE MOUNTED TO UNDERSIDE OF BEAM (DENOTED <UB>).

FORWARD COMPLETED FIRE ALARM CERTIFICATE OF COMPLETION TO THE OWNER.

SUPPLY DIFFUSER OR RETURN AIR OPENING.

INFORMATION ON CONTRACT DOCUMENTS IS GENERAL INFORMATION AND FOR BID PURPOSES ONLY. PERFORM SYSTEM SHALL ALSO MEET ALL APPLICABLE BUILDING CODES, FIRE CODES AND THE REQUIREMENTS OF THE FIRE ALARM SYSTEM DESIGN, INSTALLATION AND MATERIALS SHALL BE IN ACCORDANCE WITH NFPA 70 AND NFPA 72.

FOR ADDITIONAL INFORMATION.

PROVIDE EXTERNALLY MOUNTED 60-HOUR BATTERY BACKUP ABOVE FIRE ALARM NAC. REFER TO SPECIFICATIONS.
FIRE ALARM PLAN ALTERNATE NOTES:

1. GENERAL FIRE ALARM PLAN NOTES:

   FOR DRAWING NOTES, ABBREVIATIONS, MOUNTING HEIGHTS, AND SYMBOLS, REFER TO SHEET E001.

   FOR ADDITIONAL INFORMATION.

PREPERATION OF SHOP DRAWINGS. THE PROVISION OF THIS AGREEMENT BETWEEN THE OWNER AND BALLINGER AND TO WHEN THIS DOCUMENT IS SUPPLIED TO EITHER OWNER OR
1. ELECTRICAL

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07/31/17 ISSUE NO. 5

08/24/17 ISSUE NO. 6

10/26/17 ISSUE NO. 8

06/29/18 ISSUE NO. 21

GENERAL FIRE ALARM PLAN NOTES:

FOR DRAWING ABBREVIATIONS, NOTES, AND SYMBOLS, REFER TO SHEET E001.

FOR GENERAL FIRE ALARM PLAN NOTES, REFER TO SHEET EY100.

MOUNT FIRE ALARM DEVICES TO UNDERSIDE OF BEAM OR WITHIN BEAM POCKET AS SHOWN.

FOR AIR HANDLING UNIT AND DUCTWORK LAYOUT, REFER TO MECHANICAL SHEETS.

1. ELECTRICAL

2. MECHANICAL

3. FIRE ALARM PLAN KEYED NOTES:

SCALE: 1/8" = 1'-0"

CONSULTANTS:

TITLE:

NUMBER:

EY105