



**State of Rhode Island  
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One Capitol Hill, Providence, Rhode Island 02908-5855  
Tel: (401) 574-8100 Fax: (401) 574-8387**

**ADDENDUM #1**

**RFQ #7549049**

**TITLE: PORTSMOUTH MAINTENANCE FACILITY**

**SUBMISSION DEADLINE: 12/29/14 – 11:00**

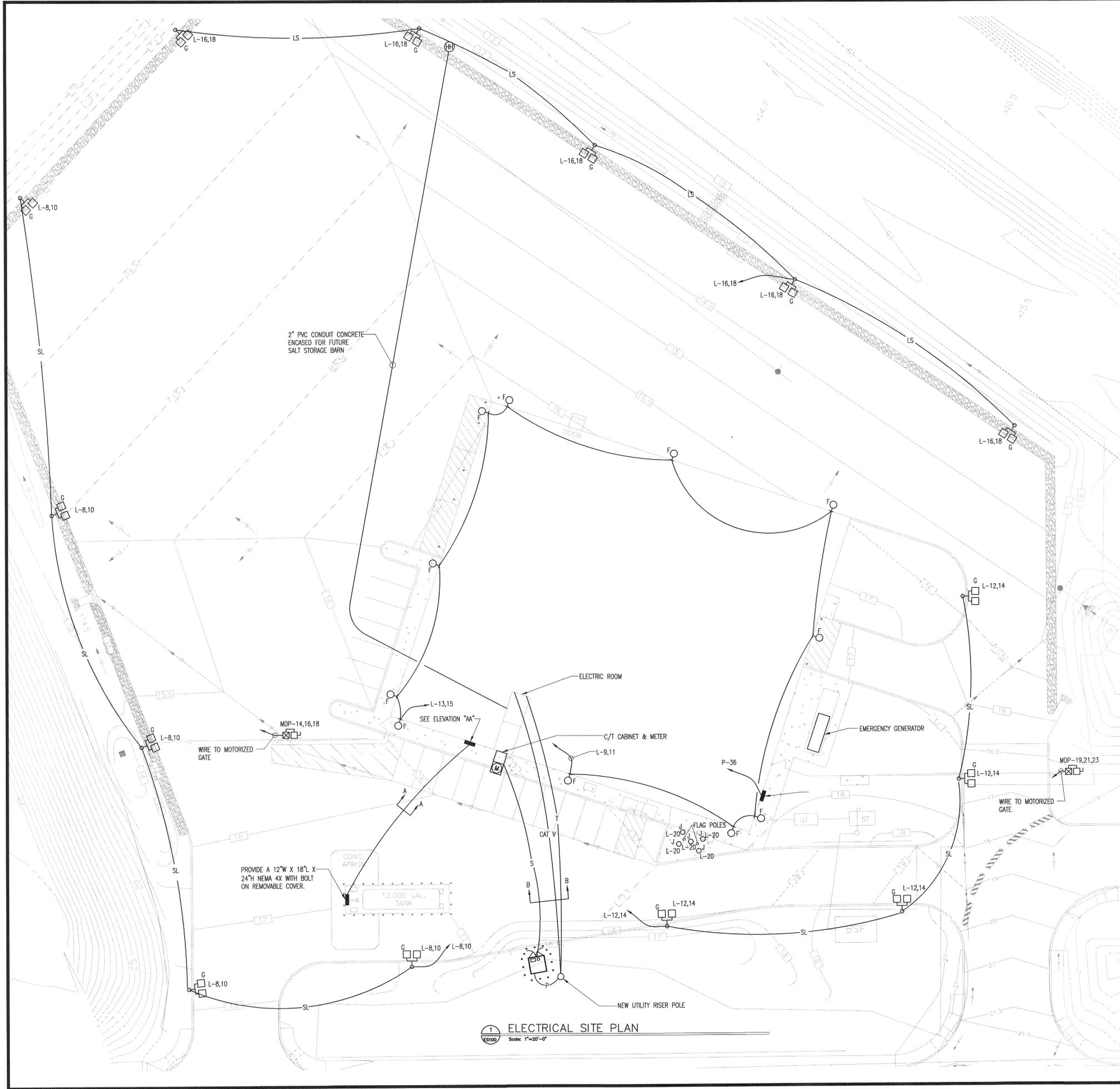
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This addendum includes “E” drawings inadvertently omitted from the solicitation.

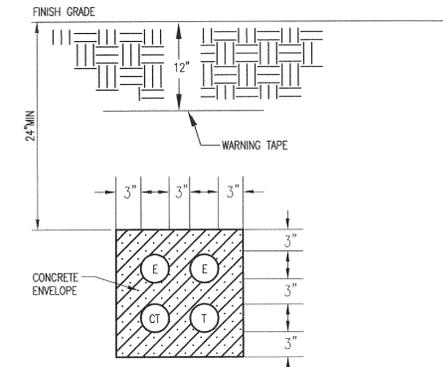
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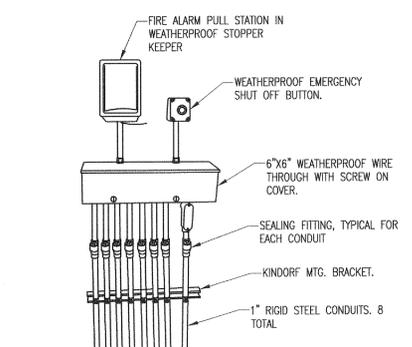
Lisa Hill  
Chief Buyer



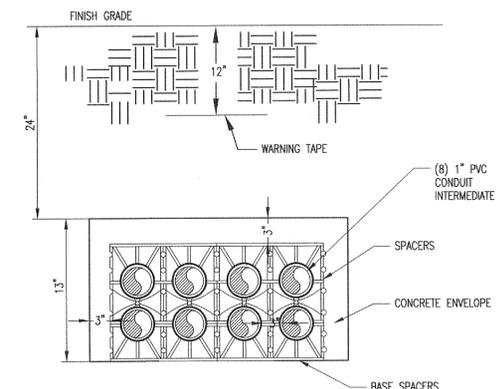
**ELECTRICAL SITE PLAN**  
Scale: 1"=20'-0"



**DUCT BANK DETAIL "B-B"**  
NTS



**ELEVATION "A-A"**  
NTS



**DUCT BANK DETAIL "A-A"**  
NTS

**CREATIVE ENVIRONMENT CONSULTING ENGINEERS**  
 HVAC-ELECTRICAL-PLUMBING  
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CEC# 20140066

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STATE OF RHODE ISLAND  
DEPARTMENT OF  
TRANSPORTATION

PROPOSED  
MAINTENANCE FACILITY  
BOYD'S LANE,  
PORTSMOUTH

Drawing Status  
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Issued On 3-JULY-2014

Sheet Contents  
**ELECTRICAL SITE PLAN**

Project Number. 6110

**ES100**

# ELECTRICAL SYMBOL LEGEND

LIGHTING	POWER	ABBREVIATIONS
<p> FLUORESCENT 1'x4' LIGHTING FIXTURE—LETTER INDICATES TYPE, SUBSCRIPT DENOTES CONTROL AND CIRCUIT NUMBER</p> <p> FLUORESCENT 2'x2' LIGHTING FIXTURE—LETTER INDICATES TYPE, SUBSCRIPT DENOTES CONTROL AND CIRCUIT NUMBER</p> <p> FLUORESCENT 2'x4' LIGHTING FIXTURE—LETTER INDICATES TYPE, SUBSCRIPT DENOTES CONTROL AND CIRCUIT NUMBER</p> <p> WALL MOUNTED LIGHTING OUTLET—LETTER INDICATES TYPE, SUBSCRIPT DENOTES CONTROL AND CIRCUIT NUMBER</p> <p> EXIT SIGN, ONE OR TWO FACED. ARROWS DENOTE DIRECTION. SHADING DENOTES NUMBER AND ORIENTATION OF SIGN FACE(S).</p> <p> EXIT SIGN WITH EMERGENCY LIGHTS</p> <p> EMERGENCY LIGHTING BATTERY UNIT WITH REMOTE CAPACITY, SEE FIXTURE SCHEDULE</p> <p> EMERGENCY LIGHTING BATTERY UNIT</p> <p> REMOTE EMERGENCY HEAD</p> <p> POLE MOUNTED LIGHTING</p> <p> SINGLE POLE SWITCH MTD. 48" A.F.F. ("K" INDICATES KEY TYPE, "P" INDICATES WITH PILOT LIGHT)</p> <p> 3-WAY SWITCH MTD. 48" A.F.F.</p> <p> 60-MINUTE MANUAL, TIMER SWITCH, MTD. 48" A.F.F.</p> <p> OCCUPANCY SENSOR POWER PACK, MOUNTED ABOVE ACCESSIBLE CEILING. PROVIDE A WATTSTOPPER #BZ-150, OR APPROVED EQUAL.</p> <p> WATTSTOPPER #DW-100 OCCUPANCY SENSOR, WALL MOUNTED AT 48" AFF.</p> <p> WATTSTOPPER #CX-100 OCCUPANCY SENSOR, WALL MOUNTED AT 12" BELOW CEILING.</p> <p> WATTSTOPPER #DT-200 OCCUPANCY SENSOR, WALL/CEILING MOUNTED.</p> <p> CEILING MOUNTED MOTION SENSOR. PROVIDE A WATTSTOPPER #LMDC-100 DIGITAL DUAL TECHNOLOGY OR APPROVED EQUAL.</p> <p> EMERGENCY LIGHTING CONTROL— PROVIDE A WATTSTOPPER #ELCU-100, OR APPROVED EQUAL.</p> <p> DAYLIGHT SENSOR</p> <p> TELEVISION OUTLET MOUNTED 18" A.F.F. TO BOTTOM</p> <p> DLM WALL SWITCH MTD. 48" A.F.F. WATTSTOPPER LMSW SERIES.</p>	<p> JUNCTION BOX</p> <p> SINGLE RECEPTACLE</p> <p> DUPLEX RECEPTACLE MTD 18" A.F.F. TO CENTER. "C" INDICATES MTD 6" ABOVE COUNTER TOP. "F" INDICATES FLOOR MOUNTED. "IG" INDICATES ISOLATED GROUND TYPE.</p> <p> GROUND FAULT INTERRUPTING RECEPTACLE MTD 18" A.F.F. TO CENTER. "C" INDICATES MTD 6" ABOVE COUNTER TOP. "F" INDICATES FLOOR MOUNTED. "IG" INDICATES ISOLATED GROUND TYPE. "EWC" INDICATES ELECTRIC WATER COOLER.</p> <p> RANGE RECEPTACLE</p> <p> SPECIAL PURPOSE OUTLET WITH NEMA CONFIGURATION TO MATCH EQUIPMENT</p> <p> FUSED DISCONNECT SWITCH WITH RATINGS</p> <p> FUSED STARTER/DISCONNECT SWITCH WITH RATINGS</p> <p> MAGNETIC MOTOR STARTER</p> <p> MOTOR</p> <p> UTILITY COMPANY ELECTRIC METER, OR AS NOTED</p> <p> ELECTRIC PANEL, SURFACE MOUNTED</p> <p> ELECTRIC PANEL, FLUSH MOUNTED</p> <p> TIME CLOCK</p> <p> POWER MONITOR</p> <p> BELL, MOUNTED WITH TOP EVEN WITH TOP OF DOOR FRAME</p> <p> WALL MOUNTED CLOCK OUTLET, MOUNTED 7'-0" A.F.F.</p> <p> TELECOMMUNICATIONS GROUND BAR</p> <p> CEILING FAN</p> <p> TRANSIENT VOLTAGE SURGE SUPPRESSOR</p> <p> GARBAGE DISPOSAL</p> <p> AQUASTAT</p> <p> CONTACTOR</p> <p> MOTORIZED DAMPER</p> <p> SOLENOID VALVE</p> <p> GAS DETECTOR</p> <p> THERMOSTAT, MOUNTED 60" A.F.F.</p> <p> SPEAKER, WALL MOUNTED</p> <p> CLOSED CIRCUIT TV CAMERA</p> <p> TEL/DATA OUTLET, PROVIDE A 4" SQUARE BOX WITH A SINGLE DEVICE RAISED COVER OPENING, MOUNTED 18" A.F.F. TO CENTER. "W" INDICATES 54" A.F.F., "P" INDICATES 47" A.F.F., "F" INDICATES FLOOR MOUNTED, "C" INDICATES MOUNTED 6" ABOVE COUNTER TOP. ALSO PROVIDE DATA JACKS, INSERTS, NAMEPLATES, COVER PLATES, CAT 6 DATA CABLES AND PATCH PANELS. SEE TELE/DATA SCHEMATIC.</p>	<p><b>A</b> AMPS</p> <p><b>AFF</b> ABOVE FINISHED FLOOR</p> <p><b>AFG</b> ABOVE FINISHED GRADE</p> <p><b>AHJ</b> AUTHORITY HAVING JURISDICTION</p> <p><b>ATS</b> AUTOMATIC TRANSFER SWITCH</p> <p><b>BFG</b> BELOW FINISHED GRADE</p> <p><b>BOF</b> BOTTOM OF FIXTURE</p> <p><b>C</b> CONDUIT</p> <p><b>CAT</b> CATALOG</p> <p><b>CB</b> CIRCUIT BREAKER</p> <p><b>CBA</b> COLOR BY ARCHITECT</p> <p><b>CD</b> CANDELA</p> <p><b>CU</b> COPPER</p> <p><b>DN</b> DOWN</p> <p><b>DWG</b> DRAWING</p> <p><b>ECPS</b> EMPTY CONDUIT W/ PULL STRING</p> <p><b>EG</b> EQUIPMENT GROUND</p> <p><b>EWC</b> ELECTRIC WATER COOLER</p> <p><b>EX</b> EXISTING</p> <p><b>FACP</b> FIRE ALARM CONTROL PANEL</p> <p><b>FLA</b> FULL LOAD AMPS</p> <p><b>G</b> GROUND</p> <p><b>GFCI</b> GROUND FAULT CIRCUIT INTERRUPTER</p> <p><b>HOA</b> HAND-OFF-AUTOMATIC SWITCH</p> <p><b>HP</b> HORSEPOWER</p> <p><b>HVAC</b> HEATING, VENTILATING, AND AIR CONDITIONING</p> <p><b>IG</b> ISOLATED GROUND</p> <p><b>KW</b> KILOWATT</p> <p><b>MTD</b> MOUNTED</p> <p><b>N</b> NEUTRAL</p> <p><b>NA</b> NOT APPLICABLE</p> <p><b>NEC</b> NATIONAL ELECTRICAL CODE</p> <p><b>NF</b> NOT FUSIBLE</p> <p><b>NG</b> NATIONAL GRID (ELECTRIC UTILITY)</p> <p><b>NIC</b> NOT IN CONTRACT</p> <p><b>NL</b> NIGHT LIGHT</p> <p><b>NTS</b> NOT TO SCALE</p> <p><b>P</b> POLE</p> <p><b>PH</b> PHASE</p> <p><b>REC(S)</b> RECEPTACLE(S)</p> <p><b>TEL</b> TELEPHONE</p> <p><b>TTB</b> TELEPHONE TERMINAL BOARD</p> <p><b>TYP</b> TYPICAL</p> <p><b>UG</b> UNDERGROUND</p> <p><b>UL</b> UNDERWRITERS LABORATORIES</p> <p><b>UNO</b> UNLESS NOTED OTHERWISE</p> <p><b>UTP</b> UNSHIELDED TWISTED PAIR</p> <p><b>V</b> VOLT</p> <p><b>VFD</b> VARIABLE FREQUENCY DRIVE</p> <p><b>W</b> WATT</p> <p><b>W/</b> WITH</p> <p><b>WP</b> WEATHERPROOF</p> <p><b>XFMR</b> TRANSFORMER</p>
<b>FIRE ALARM</b>		
<p> FIRE ALARM SMOKE DETECTOR. "D" INDICATES DUCT TYPE.</p> <p> FIRE ALARM PULL STATION</p> <p> HORN/STROBE COMBINATION, MTD 80" A.F.F. TO BOTTOM OF STROBE LENS. "CLG" INDICATES CEILING TYPE, "WP" INDICATES WEATHERPROOF. CANDELA RATING SHALL BE 15/75, UNLESS OTHERWISE NOTED.</p> <p> FIRE ALARM STROBE ONLY, MTD. 80" A.F.F. TO BOTTOM OF STROBE LENS. "CLG" INDICATES CEILING TYPE. CANDELA RATING SHALL BE 15/75, UNLESS OTHERWISE NOTED.</p> <p> FIRE ALARM VOICE EVAC SPEAKER/STROBE, MTD. 80" A.F.F. TO BOTTOM OF STROBE LENS</p> <p> KEY ACCESS BOX</p> <p> FIRE ALARM SYSTEM MASTERBOX</p> <p> FIRE ALARM INDICATING LIGHT, MTD. WITH TOP EVEN WITH TOP OF DOOR. "K" INDICATES WITH KEY OPERATED TEST SWITCH.</p> <p> FIRE ALARM CONTROL PANEL</p>		
		<b>NOTES</b>
		<ol style="list-style-type: none"> <li>DISCONNECT, REMOVE, AND MAKE SAFE ALL CONDUIT AND WIRING NOT IN SERVICE.</li> <li>VERIFY ALL EQUIPMENT NAMEPLATE LOADS AND INSURE PROPER SIZING OF CONDUCTORS AND OVERCURRENT PROTECTION. NOTIFY ENGINEER OF DISCREPANCIES.</li> <li>USE #10 CONDUCTORS FOR ALL HOMERUNS OVER 100 FEET IN LENGTH.</li> <li>BALANCE THE PHASES IN EACH ELECTRICAL PANEL.</li> </ol>

### GENERAL NOTES

- LOCATIONS SHOWN FOR CONNECTIONS TO EQUIPMENT ARE DIAGRAMMATIC. INSTALL FOR EASE OF MAINTENANCE AND TO SUIT EQUIPMENT.
- PROVIDE ALL REQUIRED PULL BOXES, JUNCTION BOXES, AND DISCONNECT SWITCHES.
- DO NOT INSTALL OUTLET BOXES BACK TO BACK.
- COLOR CODE ALL WIRING.
- PROVIDE CONDUIT SLEEVES AS REQUIRED. THROUGH FIRE RATED SEPARATIONS, FIRE SEAL AFTER WIRING IS COMPLETE.
- SUPPORT EACH LIGHTING FIXTURE INDEPENDENTLY OF THE SUSPENDED CEILING SYSTEM AND COORDINATE LOCATIONS WITH REFLECTED CEILING PLAN AND OTHER TRADES TO AVOID CONFLICT.
- PROVIDE A NYLON PULL CORD IN ALL EMPTY CONDUITS.
- VERIFY ALL CEILING TYPES AND MATERIALS BEFORE ORDERING ANY LIGHTING FIXTURES.
- THE LOCATIONS OF HVAC EQUIPMENT SHOWN ON THESE DRAWINGS ARE APPROXIMATE. FOR EXACT LOCATIONS REFER TO HVAC DRAWINGS AND SHOP DRAWINGS.
- CONCEAL ALL WIRING UNLESS OTHERWISE NOTED.
- PROVIDE ALL GROUNDING INCLUDING GREEN EQUIPMENT GROUND IN ALL RACEWAYS. GROUND BUILDING SERVICE ACCORDING TO NEC 250.50 AND ALSO TO STREET SIDE OF WATER METER AND TO APPROVED GROUND ROD.
- CIRCUIT NUMBERS INDICATE PANEL AND CIRCUIT BREAKER FOR EQUIPMENT CONNECTIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSTALL ALL REQUIRED WIRING PER NATIONAL ELECTRIC CODE AND PROJECT SPECIFICATIONS TO PROPERLY ENERGIZE THE ELECTRICAL SYSTEM. ALL WIRING SHALL BE RUN IN A NEAT AND ORDERLY MANNER.
- WIRING SHALL NOT BE LAID ON, OR ATTACHED TO THE SUSPENDED CEILING OR ITS SUPPORT WIRES. ALL CABLES SHALL BE RUN PARALLEL OR PERPENDICULAR TO WALLS. DO NOT RUN CABLES DIAGONALLY THROUGH ANY SPACE.
- WHERE THE NUMBER OF CURRENT CARRYING CONDUCTORS IN A RACEWAY OR CABLE EXCEEDS THREE, THE ALLOWABLE AMPACITY SHALL BE REDUCED PER NATIONAL ELECTRIC CODE TABLE BASED ON NO DIVERSITY. CONSIDER NEUTRALS TO BE CURRENT CARRYING CONDUCTORS.
- DO NOT COMBINE CIRCUITS OR USE COMMON NEUTRALS
- LABEL ("BROTHER P-TOUCH LABELING SYSTEM" OR APPROVED EQUAL) OR ENGRAVE EACH RECEPTACLE PLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER.
- PROVIDE GROUNDING AND BONDING BUSHINGS FOR SERVICE RACEWAYS PER 2011 NEC 250.92(B). SIZE THE BONDING JUMPER PER NEC 250.102.
- SEE SPECIFICATION FOR "STRUCTURAL GROUNDING SYSTEM".
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. NO CLAIM FOR EXTRA COMPENSATION SHALL BE ENTERTAINED FOR WORK WHICH A PRELIMINARY EXAMINATION WOULD HAVE REVEALED. THE SUBMISSION OF A BID WILL BE CONSIDERED AS ACKNOWLEDGMENT ON THE PART OF THE BIDDER OF HIS VISITATION TO THE SITE.
- OBTAIN ALL NECESSARY PERMITS AND CERTIFICATES. PRESENT SATISFACTORY PROOF OF FINAL INSPECTION AND APPROVAL BY AUTHORITIES HAVING JURISDICTION.
- MAINTAIN CORRECT PHASE SEQUENCE OF ALL FEEDERS AND CIRCUITS BY ESTABLISHING PHASE IDENTIFICATION AND MAINTAINING CORRECT RELATIONSHIP THROUGHOUT THE SYSTEM. PROVIDE LINE BALANCE WITHIN 10% OF NORMAL LOADS.

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TRANSPORTATION

PROPOSED  
MAINTENANCE FACILITY  
BOYD'S LANE,  
PORTSMOUTH

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Sheet Contents  
**ELECTRICAL LEGEND**

Project Number 6110

**CREATIVE ENVIRONMENT CORP.**  
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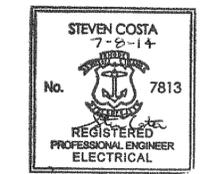
# E101

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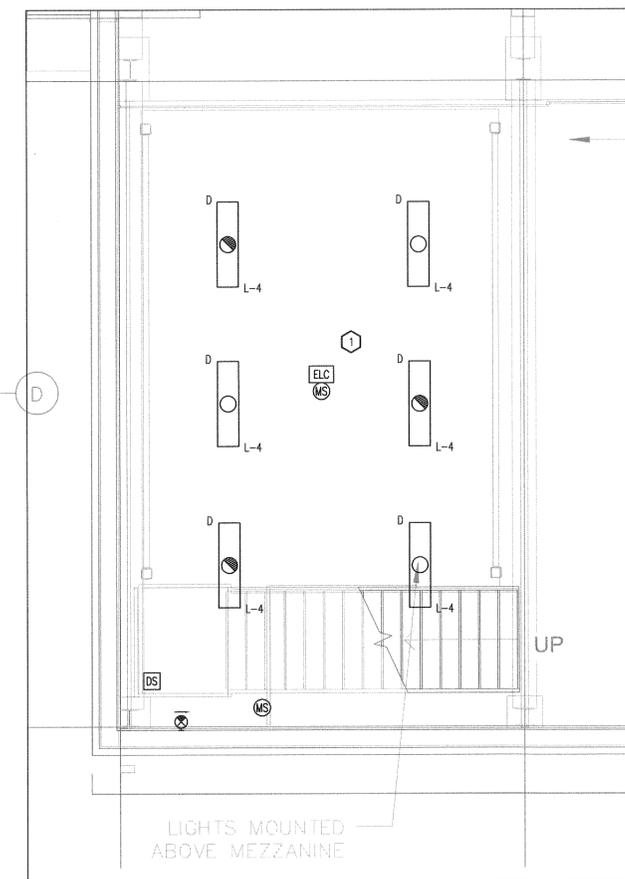
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**LIGHTING NOTES**

- WHERE SWITCH CONTROLS ("a", "b", ETC) ARE INDICATED, WIRE THE SWITCHES TO THE RESPECTIVE LIGHT FIXTURE. IF A FIXTURE HAS TWO OR MORE SWITCH DESIGNATIONS, WIRE FIXTURE SO THAT IT WILL BE CONTROLLED BY SWITCHES INDICATED.
- CIRCUIT ALL EXIT SIGNS TO CIRCUIT LS-8.
- WIRE ALL EMERGENCY LIGHTING FIXTURES AND ASSOCIATED SWITCHING EMERGENCY RELAY. SEE EMERGENCY LIGHTING CONTROL SCHEMATIC.

**SHEET NOTES:**

1 PROVIDE ELCU FOR LIGHTS IN THIS ROOM. SEE ROOM CONTROL DETAIL WITH ELCU-200 SHOWN ON DWG E401. PROVIDE ROOM CONTROLLER, OCCUPANCY SENSOR, DLM ROOM SWITCHES, ETC, AS REQUIRED. FOR A COMPLETE OPERATIONAL SYSTEM.



1 FIRST FLOOR LIGHTING PLAN  
E201 Scale: 1/8"=1'-0"

1 MEZZANINE PART PLAN  
E201 Scale: 1/4"=1'-0"

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Sheet Contents  
ELECTRICAL FIRST  
FLOOR LIGHTING PLAN

Project Number. 6110

E201

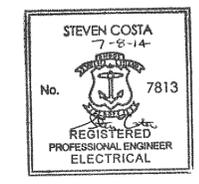
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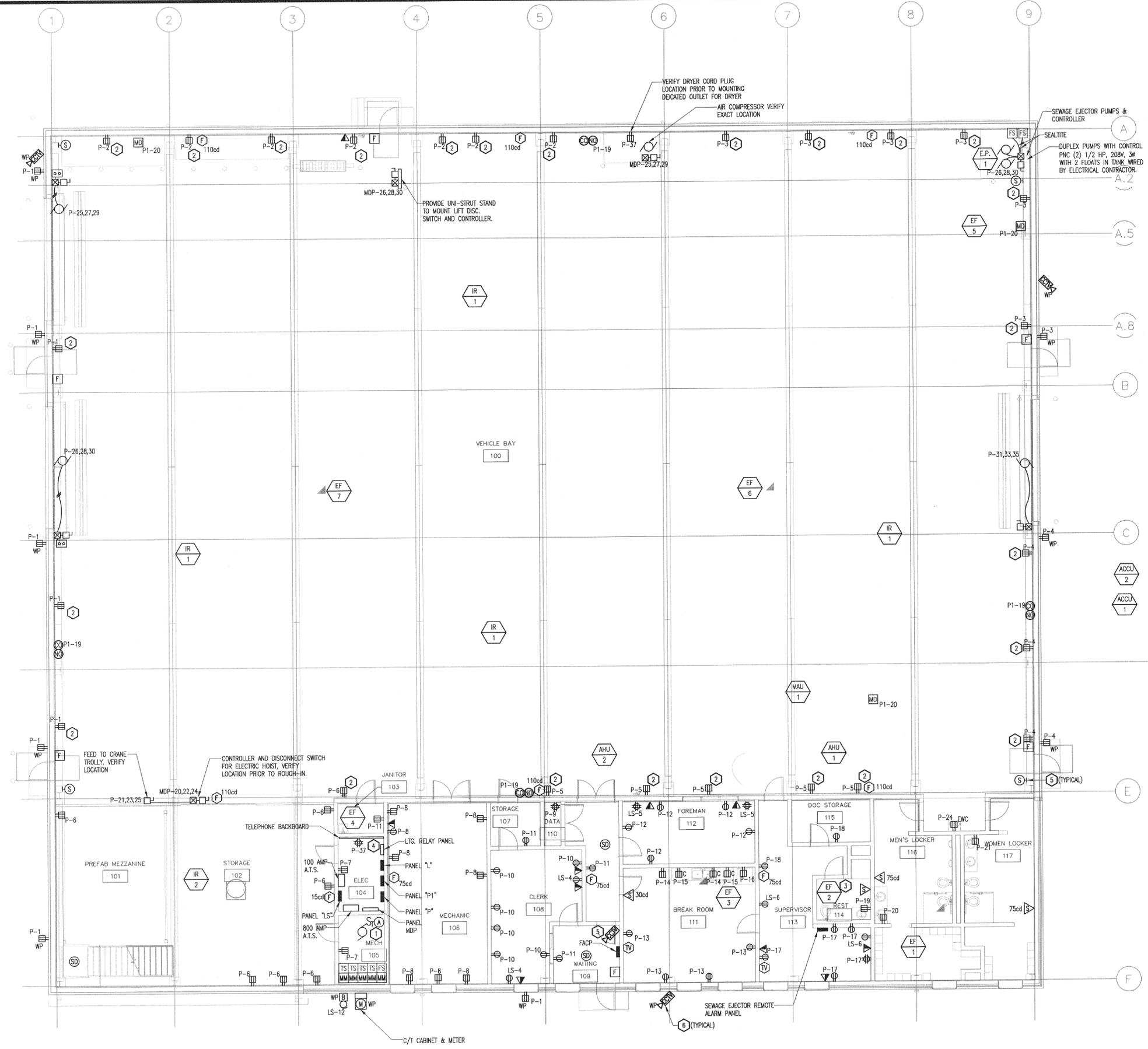
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**SHEET NOTES:**

- 1 PROVIDE 120 VOLT CIRCUIT FOR WATER HEATER.
- 2 MOUNT RECEPTACLE AT 48" A.F.F.
- 3 WIRE EXHAUST FAN TO ROOM LIGHTING CIRCUIT.
- 4 MOUNT MOTOR STARTER FOR EF-5, EF-6, EF-7 AND MAU UNIT AT THIS LOCATION.
- 5 PROVIDE 3/4" C. AND PULL STRING TO DATA CLOSET RM 110. PROVIDE JUNCTION BOX AND MOUNTING AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH THE SECURITY VENDOR PRIOR TO ROUGH-IN.
- 6 PROVIDE 3/4" C. AND PULL STRING TO DATA CLOSET RM 110. PROVIDE JUNCTION BOX AND MOUNTING AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH THE SECURITY VENDOR PRIOR TO ROUGH-IN. PROVIDE 120V CONNECTION TO THE NEAREST RECEPTACLE CIRCUIT IF REQUIRED.



1 FIRST FLOOR POWER PLAN  
E301 Scale: 1/8"=1'-0"

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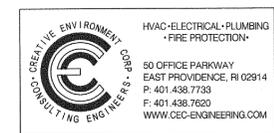
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Issued On 3-JULY-2014

Sheet Contents  
ELECTRICAL  
FIRST FLOOR POWER  
PLAN

Project Number. 6110



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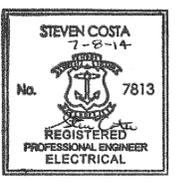
E301

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PORTSMOUTH

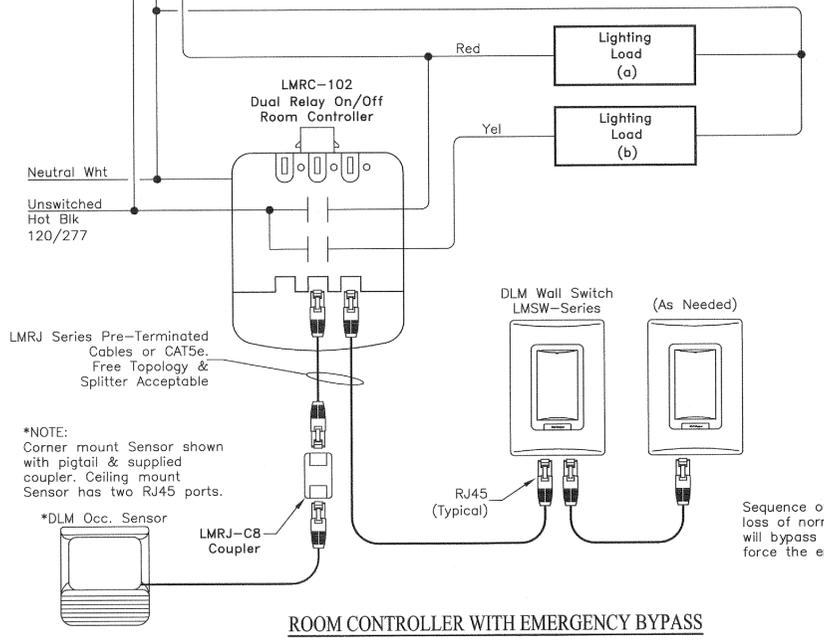
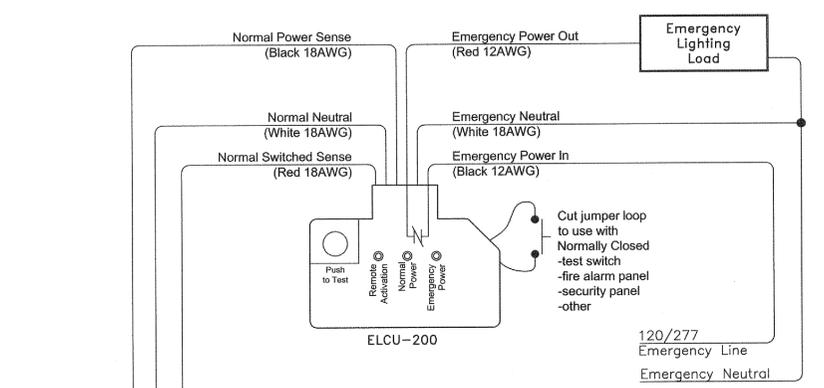
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Sheet Contents  
**ELECTRICAL DETAILS  
AND SCHEMATICS**

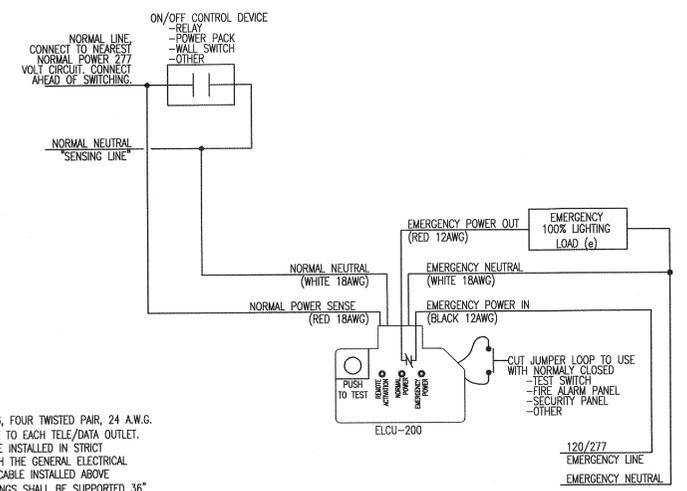
Project Number 6110

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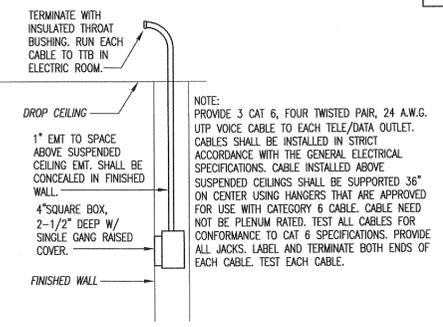
ROOM CONTROLLER WITH EMERGENCY BYPASS

NTS



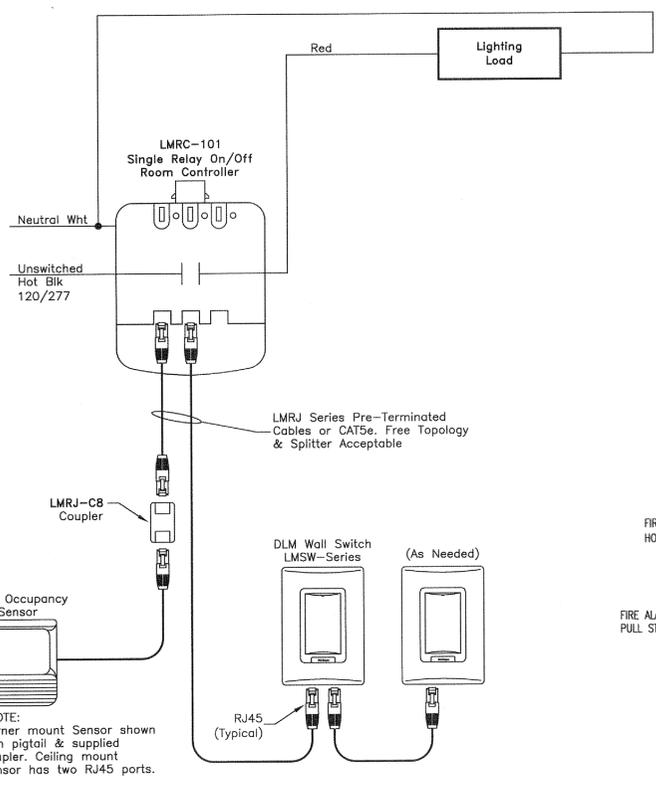
LIGHTING CONTROL DETAIL

NTS



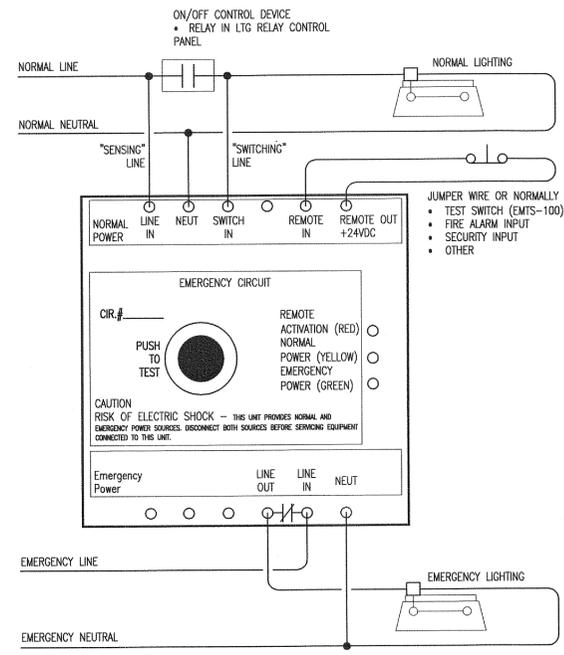
VOICE/DATA DETAIL

NTS



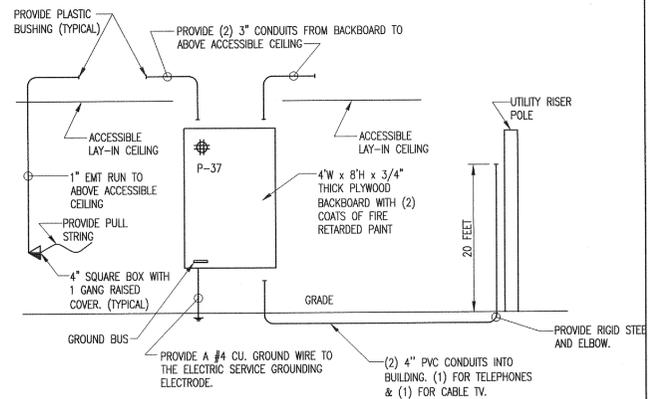
SINGLE RELAY WIRING DIAGRAM

NTS



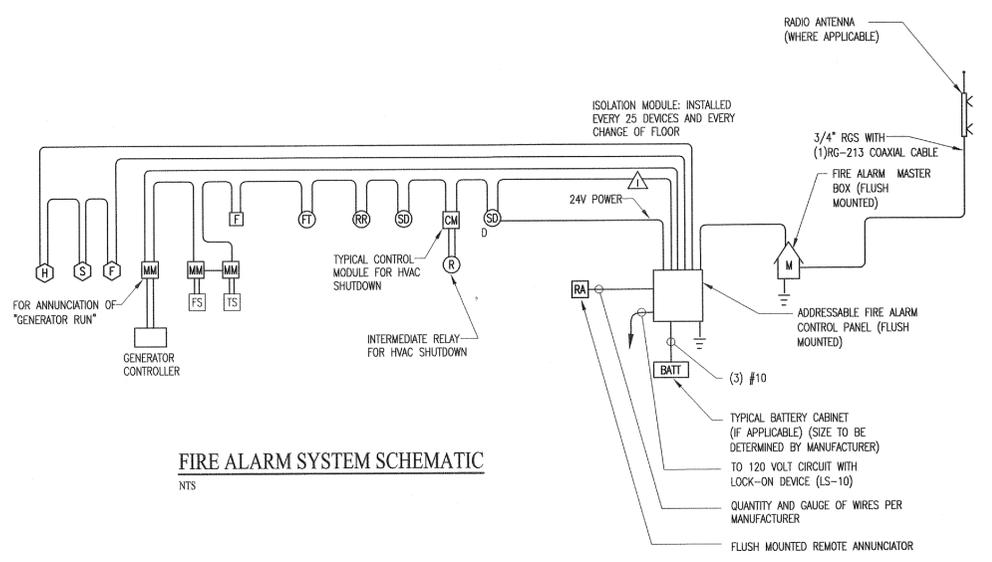
EMERGENCY LIGHTING CONTROL SCHEMATIC

NTS



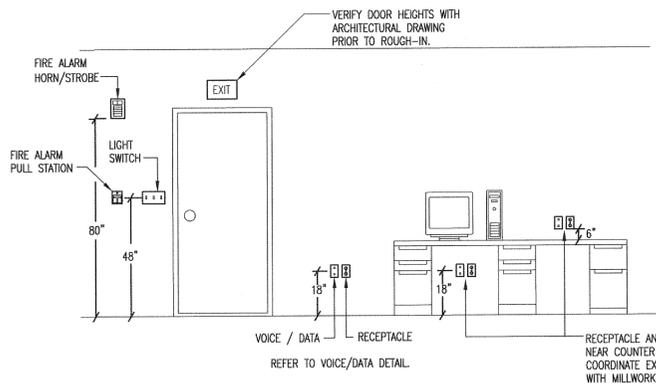
TELE/DATA RACEWAY SCHEMATIC

NTS



FIRE ALARM SYSTEM SCHEMATIC

NTS



TYPICAL MOUNTING HEIGHTS

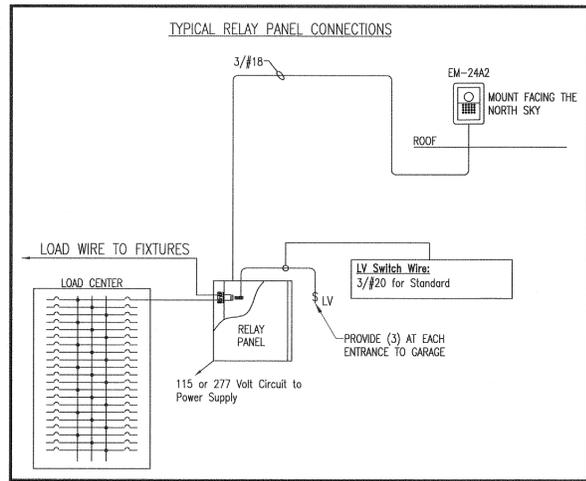
NTS

CEC# 20140066

CREATIVE ENVIRONMENT GROUP CONSULTING ENGINEERS

HVAC-ELECTRICAL-PLUMBING FIRE PROTECTION

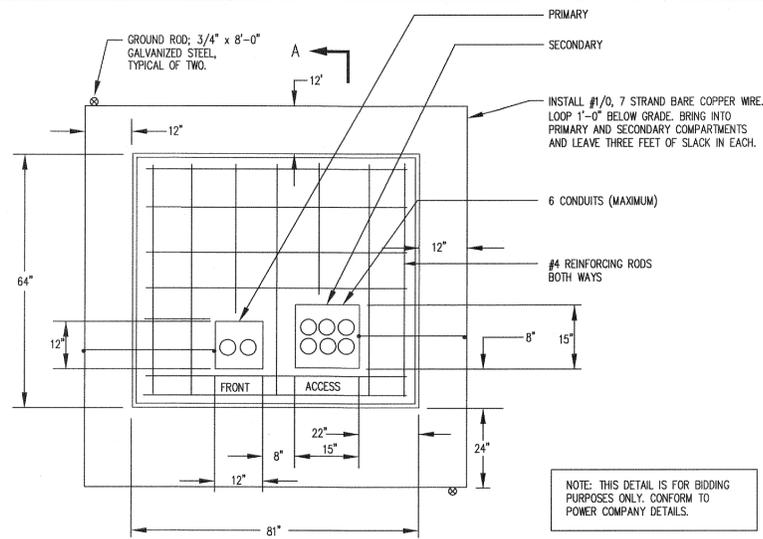
50 OFFICE PARKWAY  
EAST PROVIDENCE, RI 02914  
P: 401.438.7733  
F: 401.438.7820  
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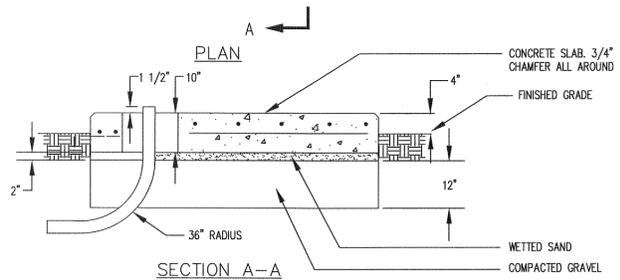
- LIGHTING INTEGRATOR PART NUMBER CONSISTS OF THE FOLLOWING COMPONENTS:
- (1) ENCLOSURE
  - (2) COVER
  - (3) POWER SUPPLY
  - (4) INTERIOR INCLUDING:
    - MOTHER BOARD
    - RELAY DRIVER CARDS
    - COMMUNICATION CARD
    - AUTOMATION CARD
    - GROUP SWITCH CARD(S)
    - RELAYS INSTALLED IN BARRIER

RELAY LIGHTING CONTROL PANELS  
WIRING INTERFACE DIAGRAM

NTS

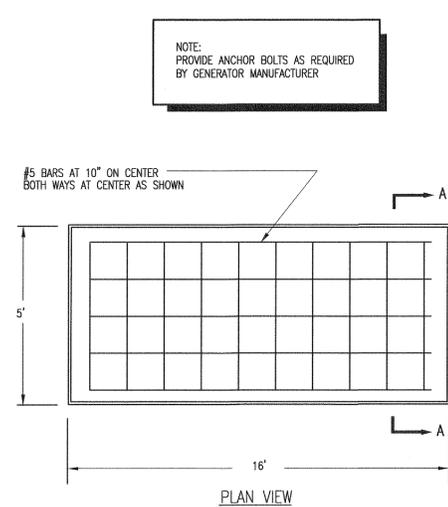


NOTE: THIS DETAIL IS FOR BIDDING PURPOSES ONLY. CONFORM TO POWER COMPANY DETAILS.



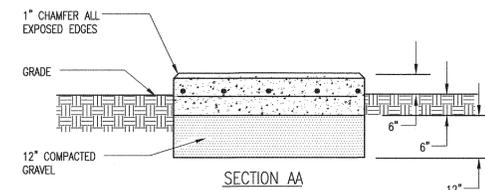
TRANSFORMER PAD DETAIL

NOT TO SCALE

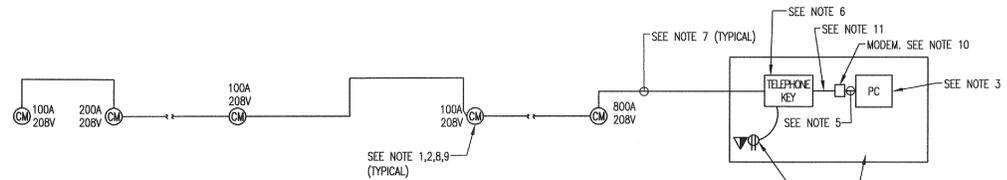


GENERATOR PAD DETAIL

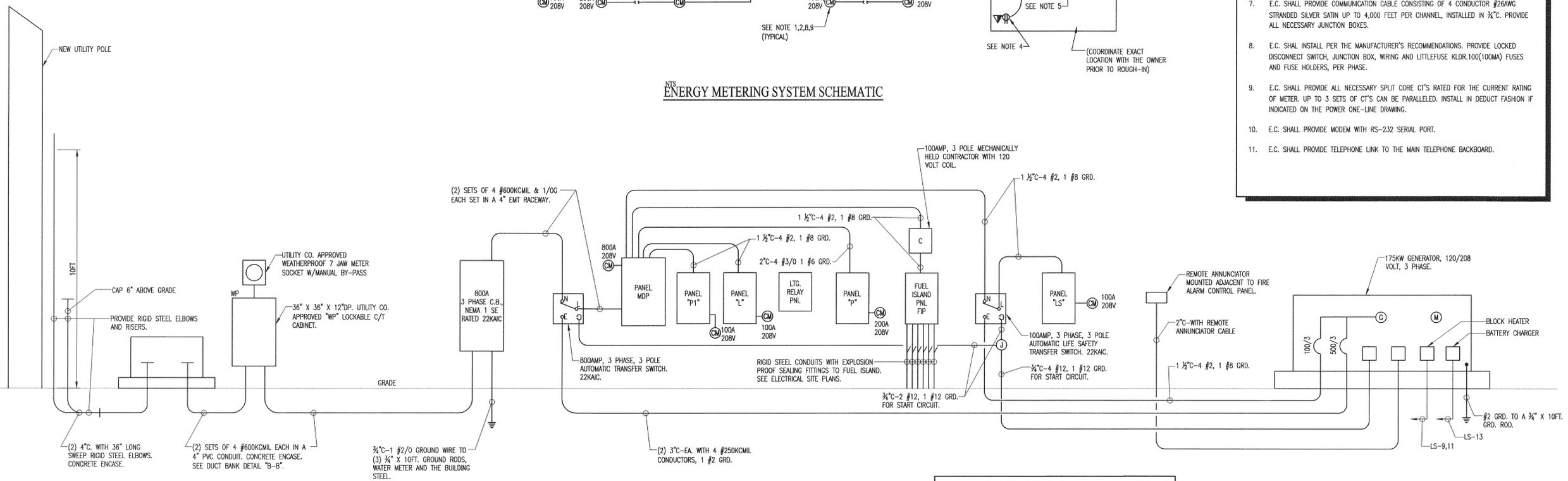
NTS



- ### CUSTOMER METERING NOTES
1. SEE THE POWER ONE-LINE RISER DIAGRAM FOR THE EXACT QUANTITY OR ENERGY/CHECK METERS.
  2. PROVIDE E-MON D-MON CLASS 3000 ADVANCED KWH/DEMAND METERS WITH BACKNET CAPABILITY IN NEMA 1 ENCLOSURE RATED FOR THE VOLTAGE AND AMPERAGE AS INDICATED ON THE POWER ONE-LINE DRAWINGS.
  3. THE PC SHALL BE PROVIDED BY THE OWNER WITH RS232 PORT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE E-MON ENERGY SOFTWARE INCLUDING INSTALLATION AND PROGRAMMING FOR A COMPLETE AND OPERATIONAL SYSTEM. LIGHTING PLUG LOADS, AND HVAC LOAD SHALL BE METERED SEPARATELY.
  4. E.C. SHALL PROVIDE RECEPTACLE AND WIRE TO THE NEAREST 120V RECEPTACLE CIRCUIT.
  5. E.C. SHALL PROVIDE 6' RS232 CABLE.
  6. E.C. SHALL PROVIDE TELEPHONE KEY FOR OFF SITE MONITORING.
  7. E.C. SHALL PROVIDE COMMUNICATION CABLE CONSISTING OF 4 CONDUCTOR #26AWG STRANDED SILVER SATIN UP TO 4,000 FEET PER CHANNEL, INSTALLED IN 3/4" PC. PROVIDE ALL NECESSARY JUNCTION BOXES.
  8. E.C. SHALL INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE LOCKED DISCONNECT SWITCH, JUNCTION BOX, WIRING AND LITTLEFUSE KLDL100(100MA) FUSES AND FUSE HOLDERS, PER PHASE.
  9. E.C. SHALL PROVIDE ALL NECESSARY SPLIT CORE CT'S RATED FOR THE CURRENT RATING OF METER. UP TO 3 SETS OF CT'S CAN BE PARALLELED. INSTALL IN DUCT FASHION IF INDICATED ON THE POWER ONE-LINE DRAWING.
  10. E.C. SHALL PROVIDE MODEM WITH RS-232 SERIAL PORT.
  11. E.C. SHALL PROVIDE TELEPHONE LINK TO THE MAIN TELEPHONE BACKBOARD.



ENERGY METERING SYSTEM SCHEMATIC



POWER DISTRIBUTION SCHEMATIC.

NTS

- ### SHEET NOTES:
1. PROVIDE SPLIT CORE C/T'S ON MAIN CONDUCTORS OF PANEL. PROVIDE AMPERAGE AND VOLTAGE AS INDICATED AT EACH PANEL CUSTOMER METER.

CREATIVE ENVIRONMENT CONSULTING ENGINEERS

HVAC-ELECTRICAL-PLUMBING  
FIRE PROTECTION

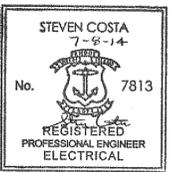
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www.rgb.net



Architecture · Engineering · Interior Design

Project



STATE OF RHODE ISLAND  
DEPARTMENT OF  
TRANSPORTATION

PROPOSED  
MAINTENANCE FACILITY  
BOYD'S LANE,  
PORTSMOUTH

Drawing Status

ISSUED FOR PERMIT  
AND CONSTRUCTION

Issued On 3-JULY-2014

Sheet Contents  
ELECTRICAL DETAILS  
AND SCHEMATICS

Project Number 6110

E402

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Architecture · Engineering · Interior Design

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STATE OF RHODE ISLAND  
DEPARTMENT OF  
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PROPOSED  
MAINTENANCE FACILITY  
BOYD'S LANE,  
PORTSMOUTH

Drawing Status  
ISSUED FOR PERMIT  
AND CONSTRUCTION

Issued On 3-JULY-2014

Sheet Contents  
ELECTRICAL  
SCHEDULES

Project Number 6110

E501

**PANEL: MDP 800 A 208Y/120 V 3PH 4W 60HZ**

22,000 AIC  
CIRCUITS: 42  
BUS RATING: 800A

MAIN LUG ONLY   
MAIN CIRCUIT BREAKER   
SURFACE MOUNTED   
FLUSH MOUNTED   
FLOOR MOUNTED

NOTE: DESCRIPTION  
A AFCT  
G GFCI - 5mA TRIP  
P GFPE - 30 mA TRIP  
S SHUNT TRIP  
L LOCK ON  
IG ISOLATED GROUND  
C VIA LIGHTING CONTROL PANEL

SHUNT TRIP MAIN 200% RATED NEUTRAL ISOLATED GROUND FEED THRU LUGS 100% RATED MAIN BREAKER GROUND FAULT MAIN C.B.

CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER				CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER					
				WIRE SIZE	LOAD KVA	2001	2002					2003	2004	WIRE SIZE	LOAD KVA	2001	2002
1								2		PANEL L							
3	M	PANEL P		3	46.1	1		4	M								
5								6									
7								8									
9	M	PANEL LS		2	10.3	1		10	M	PANEL FUEL ISLAND							
11								12									
13								14									
15	M	FUTURE SALT BOX		2	7.5	1		16	M	GATE #1							
17								18									
19								20									
21	M	GATE #2		12	2.8	1		22	M	CRANE HOIST							
23								24									
25								26									
27	M	AIR COMPRESSOR		10	6.3	1		28	M	LIFT							
29								30									
31								32									
33	M	PANEL P1		22		1		34	M	MAU							
35								36									
37								38									
39	M	SPARE		1				40	M	SPARE							
41								42									

Connected Load 190.7 KVA

R	Receptacle Load	0.0 KVA	Noncontinuous	0.0 KVA
L	Lighting Load	0.0 KVA	Continuous	0.0 KVA
M	Mechanical and Power Load	190.7 KVA	Noncontinuous	190.7 KVA

TOTAL LOAD 190.7 KVA

CIRCUIT BREAKER SIZE: 2001 2002 2003 2004  
CIRCUIT BREAKER COUNT: 1 8 3 1 1 0 0 0

AMPERAGE: 529 AMP

**PANEL: P1 100 A 208Y/120 V 3PH 4W 60HZ**

22,000 AIC  
CIRCUITS: 42  
BUS RATING: 100 AMPS

MAIN LUG ONLY   
MAIN CIRCUIT BREAKER   
SURFACE MOUNTED   
FLUSH MOUNTED   
FLOOR MOUNTED

NOTE: DESCRIPTION  
A AFCT  
G GFCI - 5mA TRIP  
P GFPE - 30 mA TRIP  
S SHUNT TRIP  
L LOCK ON  
IG ISOLATED GROUND  
C VIA LIGHTING CONTROL PANEL

SHUNT TRIP MAIN 200% RATED NEUTRAL ISOLATED GROUND FEED THRU LUGS 100% RATED MAIN BREAKER GROUND FAULT MAIN C.B.

CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER				CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER					
				WIRE SIZE	LOAD KVA	2001	2002					2003	2004	WIRE SIZE	LOAD KVA	2001	2002
1								2		OVERHEAD DOOR							
3	M	OVERHEAD DOOR		12	2.8	1		4	M	OVERHEAD DOOR							
5								6									
7								8									
9	M	OVERHEAD DOOR		12	2.8	1		10	M	EF #5							
11								12									
13								14									
15	M	EF #6		10	3.8	1		16	M	EF #7							
17								18									
19	M	CO + NO SENSORS		12	0.3	1		20	M	MOTORIZED DAMPERS							
21								22		SPARE							
23	M	CRANE LIFT		12	2.9	1		24		SPARE							
25								26									
27		SPARE						28	M	SEAWAGE EJECTOR PUMP CONTROLLER							
29		SPARE						30									
31		SPARE						32		SPARE							
33		SPARE						34		SPARE							
35		SPARE						36		SPARE							
37		SPARE						38		SPARE							
39		SPARE						40		SPARE							
41		SPARE						42		SPARE							

Connected Load 27.0 KVA

R	Receptacle Load	0.0 KVA	Noncontinuous	0.0 KVA
L	Lighting Load	0.0 KVA	Continuous	0.0 KVA
M	Mechanical and Power Load	27.0 KVA	Noncontinuous	27.0 KVA

TOTAL LOAD 27.0 KVA

CIRCUIT BREAKER SIZE: 2001 2002 2003 2004  
CIRCUIT BREAKER COUNT: 18 5 2 1 0 0 0 0

AMPERAGE: 75 AMP

**PANEL: L 100 A 208Y/120 V 3PH 4W 60HZ**

22,000 AIC  
CIRCUITS: 42  
BUS RATING: 100A

MAIN LUG ONLY   
MAIN CIRCUIT BREAKER   
SURFACE MOUNTED   
FLUSH MOUNTED   
FLOOR MOUNTED

NOTE: DESCRIPTION  
A AFCT  
G GFCI - 5mA TRIP  
P GFPE - 30 mA TRIP  
S SHUNT TRIP  
L LOCK ON  
IG ISOLATED GROUND  
C VIA LIGHTING CONTROL PANEL

SHUNT TRIP MAIN 200% RATED NEUTRAL ISOLATED GROUND FEED THRU LUGS 100% RATED MAIN BREAKER GROUND FAULT MAIN C.B.

CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER				CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER					
				WIRE SIZE	LOAD KVA	2001	2002					2003	2004	WIRE SIZE	LOAD KVA	2001	2002
1	L	LIGHTING		12	0.96	1		2	L	LIGHTING							
3	L	LIGHTING		12	1.2	1		4	L	LIGHTING							
5	L	LIGHTING		12	0.32	1		6	L	LIGHTING							
7	L	LIGHTING		12	2.5	1		8	L	EXTERIOR LIGHTING							
9	L	EXTERIOR LIGHTING		8	3	1		10	L	EXTERIOR LIGHTING							
11	L	EXTERIOR LIGHTING		8	3	1		12	L	EXTERIOR LIGHTING							
13	L	EXTERIOR LIGHTING		8	3	1		14	L	EXTERIOR LIGHTING							
15		SPARE						16	L	EXTERIOR LIGHTING							
17		SPARE						18									
19		SPARE						20	L	FLAG POLE LIGHTS							
21		SPARE						22		SPARE							
23		SPARE						24		SPARE							
25		SPARE						26		SPARE							
27		SPARE						28		SPARE							
29		SPARE						30		SPARE							
31		SPARE						32		SPARE							
33		SPARE						34		SPARE							
35		SPARE						36		SPARE							
37		SPARE						38		SPARE							
39		SPARE						40		SPARE							
41		SPARE						42		SPARE							

Connected Load 22.0 KVA

R	Receptacle Load	0.0 KVA	Noncontinuous	0.0 KVA
L	Lighting Load	22.0 KVA	Continuous	22.4 KVA
M	Mechanical and Power Load	0.0 KVA	Noncontinuous	0.0 KVA

TOTAL LOAD 22.4 KVA

CIRCUIT BREAKER SIZE: 2001 2002 2003 2004  
CIRCUIT BREAKER COUNT: 32 5 0 0 0 0 0 0

AMPERAGE: 76 AMP

**PANEL: P 200 A 208Y/120 V 3PH 4W 60HZ**

22,000 AIC  
CIRCUITS: 42  
BUS RATING: 200 AMPS

MAIN LUG ONLY   
MAIN CIRCUIT BREAKER   
SURFACE MOUNTED   
FLUSH MOUNTED   
FLOOR MOUNTED

NOTE: DESCRIPTION  
A AFCT  
G GFCI - 5mA TRIP  
P GFPE - 30 mA TRIP  
S SHUNT TRIP  
L LOCK ON  
IG ISOLATED GROUND  
C VIA LIGHTING CONTROL PANEL

SHUNT TRIP MAIN 200% RATED NEUTRAL ISOLATED GROUND FEED THRU LUGS 100% RATED MAIN BREAKER GROUND FAULT MAIN C.B.

CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER				CKT No.	Load Type	LOAD DESCRIPTION	Note	CIRCUIT BREAKER					
				WIRE SIZE	LOAD KVA	2001	2002					2003	2004	WIRE SIZE	LOAD KVA	2001	2002
1	M	RECEPTACLES		12	1.6	1		2	M	RECEPTACLES							
3	M	RECEPTACLES		12	1.4	1		4	M	RECEPTACLES							
5	M	RECEPTACLES		12	1.4	1		6	M	RECEPTACLES							
7	M	RECEPTACLES		12	0.4	1		8	M	RECEPTACLES							
9	M	RECEPTACLES		12	0.4	1		10	M	RECEPTACLES							
11	M	RECEPTACLES		12	0.8	1		12	M	RECEPTACLES							
13	M	RECEPTACLES		12	0.8	1		14	M	RECEPTACLES							
15	M	RECEPTACLES		12	0.4	1		16	M	RECEPTACLES							
17	M	RECEPTACLES		12	1.4	1		18	M	RECEPTACLES							
19	M	RECEPTACLES		12	0.5	1		20	M	RECEPTACLES							
21	M	RECEPTACLES		12	0.5	1		22	M	RECEPTACLES							
23	M	RECEPTACLES		12	0.5	1		24	M	ELECTRIC WATER COOLER							
25	M	ACCU #1		12	5.4	1		26	M	ACCU #2							
27								28									
29	M	IR #1, IR #2		12	0.8	1		30	M	AHU #1							
31	M	AHU #2		12	4.8	1		32	M	EF #1							
33	M	EF #2		12	0.006	1		34	M	EF #3							
35	M	EF #4		12	0.006	1		36	M	OWTS CONTROL PNL							
37	M	TELEPHONE BACKBOARD		12	0.5	1		38		SPARE							
39		SPARE						40		SPARE							
41		SPARE						42		SPARE							

Connected Load 46.1 KVA

R	Receptacle Load	0.0 KVA	Noncontinuous	0.0 KVA
L	Lighting Load	0.0 KVA	Continuous	0.0 KVA
M	Mechanical and Power Load	46.1 KVA	Noncontinuous	46.1 KVA

TOTAL LOAD 46.1 KVA

CIRCUIT BREAKER SIZE: 2001 2002 2003 2004  
CIRCUIT BREAKER COUNT: 40 0 0 0 0 0 0 0

AMPERAGE: 128 AMP

**PANEL: LS 100 A 208Y/120 V 3PH 4W 60HZ**

22,000 AIC  
CIRCUITS: 42  
BUS RATING: 100 AMPS

MAIN LUG ONLY   
MAIN CIRCUIT BREAKER   
SURFACE M

LIGHTING FIXTURE SCHEDULE						
TYPE	MANUFACTURER	MOUNTING	LAMPS			REMARKS
			WATTS	TYPE	VOLTAGE	
A	PHILIPS FBL24LL40-120-WC6-FB-4E-1W WITH WATT-STOPPER PHOTOCELL CMBPDT-ADC-FB3-36L	PENDANT ON JACK CHAIN	40	LED	120	LED HIGH OUTPUT HIGHBAY FIXTURE PHOTOCELL INSTALLED ON SITE BY CONTRACTOR
B	PHILIPS CFS24PG30L35ULAG-SDIM	RECESSED	44	LED	120	2' x 4' PERFER BASKET FIXTURE WITH STEP DIMMING
C	PHILIPS OMLED39-120-R8LED-35K-WD-CSS	RECESSED	39	LED	120	DOWNLIGHT W/ CLEAR SEMISPECULAR DIFFUSER
D	DAY-BRITE LF4-EZ-38-40-U-LAG	SURFACE	42	LED	120	4 FT. WRAP-AROUND 2 1/4" WIDE
E	LIGHTOLIER SL4GA22UPG	RECESSED	(2) 28	T-5	120	1/2' x 4' LAY-IN W/ CROSS BAFFLE
F	PHILIPS RVM270W160LED4K	BLDG. WALL	(1) 270	LED	208	SINGLE LUMINAIRE W/ BLDG. MOUNTED BRACKET
G	PHILIPS (2) RVM270W160LED4KLE3-UNVGY3PTB-2A W/UL.S. #RTA-845302	POLE	(2) 270	LED	208	DUAL LUMINAIRE MTD. ON DUAL FIXTURE MTC. BRACKET ON A 30 FT. ALUMINUM UM POLE
H	GARCO HLL430LACW-UNV-BRP	WALL	(1) 28	LED	120	BRONZE FINISH WALL PACK
J	HADCO 135N-SP-C	GROUND	(1) 25	LED	120	BRONZE FINISH WELL LIGHT FOR FLAG POLE ILLUMINATION
⊗ ↓	MULE MXARU	UNIVERSAL	2.1	LED	120	THERMOPLASTIC EXIT SIGN W/ RED LETTERS

LIGHTING FIXTURE SCHEDULE NOTES:

1. PROVIDE ALL LAMPS FOR ALL LIGHTING FIXTURES. LAMP COLOR SHALL BE 3500K.
2. PROVIDE UNISTRUT WHERE NEEDED TO MOUNT LIGHTING FIXTURE.
3. ENSURE DIMMING SWITCHES ARE COMPATIBLE WITH LIGHTING FIXTURES BEFORE SUBMITTING SHOP DRAWINGS.

MOTOR STARTER SCHEDULE																			
LOAD TAG	BRANCH CIRCUIT	STARTER LOCATION	LOAD				STARTER		OVERCURRENT DEVICE			ACCESSORIES							
			HP	FLA	VOLT	PH	NEMA SIZE	TYPE	CB	FUSE	MCP	PB	HOA	INDICATING LIGHTS			AUXILIARY		
															R	G	A	CPT	CONTACTS
EF-5	(3)#8 & (1)#12G. IN 1" C.	ELEC RM	5	16.7	208	3	1	FVNR	NA	NA	NA	NO	YES	YES	YES	YES	YES	(2)	(2)
EF-6	(3)#10 & (1)#12G. IN 3/4" C.	ELEC RM	3	10.6	208	3	0	FVNR	NA	NA	NA	NO	YES	YES	YES	YES	YES	(2)	(2)
EF-7	(3)#10 & (1)#12G. IN 3/4" C.	ELEC RM	3	10.6	208	3	0	FVNR	NA	NA	NA	NO	YES	YES	YES	YES	YES	(2)	(2)
EF-5	(3)#8 & (1)#10G. IN 1" C.	ELEC RM	15	60.2	208	3	3	FVNR	NA	NA	NA	NO	YES	YES	YES	YES	YES	(2)	(2)

KEY:  
 FVNR = FULL VOLTAGE NON-REVERSING  
 FVR = FULL VOLTAGE REVERSING  
 2S1W = TWO SPEED SINGLE WINDING  
 2S2W = TWO SPEED TWO WINDING  
 RVAT = REDUCED VOLTAGE AUTOTRANSFORMER  
 RVPW = REDUCED VOLTAGE PART WINDING  
 RYVDOT = REDUCED VOLTAGE WYE DELTA OPEN TRANSITION  
 RYVDCCT = REDUCED VOLTAGE WYE DELTA CLOSED TRANSITION  
 MMS = MANUAL MOTOR STARTER  
 CB = CIRCUIT BREAKER  
 MCP = MOTOR CIRCUIT PROTECTION  
 PB = START AND STOP PUSH BUTTON  
 HOA = HAND-OFF-AUTOMATIC SELECTOR SWITCH  
 CPT = CONTROL POWER TRANSFORMER  
 VFD = VARIABLE FREQUENCY DRIVE

ELECTRICAL CONNECTION SCHEDULE FOR MECHANICAL EQUIPMENT																		
MECH #	DESCRIPTION	EQUIPMENT CHARACTERISTICS							PANEL	CIRCUIT	BREAKER SIZE	FEEDER AND CONDUIT	EQUIPMENT LOCATION	DISCONNECT SWITCH			MOTOR CONTROL	NOTES
		VOLTS	PH	AMPS	HP	KW	MCA	MOCF						CFM	SIZE	FUSE		
1	AIR COOLED CONDENSING UNIT	208	1			15	25		P	25,27	25A/2P	(2)#10 & (1)#10G IN 3/4" C	GRADE	30	25	2	3R	
2	AIR COOLED CONDENSING UNIT	208	1			23	40		P	26,28	40A/2P	(2)#10 & (1)#10G IN 3/4" C	GRADE	60	40	2	3R	

ELECTRICAL CONNECTION SCHEDULE FOR MECHANICAL EQUIPMENT																		
MECH #	DESCRIPTION	EQUIPMENT CHARACTERISTICS							PANEL	CIRCUIT	BREAKER SIZE	FEEDER AND CONDUIT	EQUIPMENT LOCATION	DISCONNECT SWITCH			MOTOR CONTROL	NOTES
		VOLTS	PH	AMPS	HP	KW	MCA	MOCF						CFM	SIZE	FUSE		
1	AIR HANDLING UNIT	120	1			10.8	15		P	30	20A/1P	(2)#12 & (1)#12G IN 3/4" C	GARAGE	NA	NA	NA	NA	St
2	AIR HANDLING UNIT	120	1			13.2	15		P	31	20A/1P	(2)#12 & (1)#12G IN 3/4" C	GARAGE	NA	NA	NA	NA	St

ELECTRICAL CONNECTION SCHEDULE FOR MECHANICAL EQUIPMENT																		
MECH #	DESCRIPTION	EQUIPMENT CHARACTERISTICS							PANEL	CIRCUIT	BREAKER SIZE	FEEDER AND CONDUIT	EQUIPMENT LOCATION	DISCONNECT SWITCH			MOTOR CONTROL	NOTES
		VOLTS	PH	AMPS	HP	KW	MCA	MOCF						CFM	SIZE	FUSE		
1	INFRA-RED HEATER	120	1	1.1					P	29	20A/1P	(2)#12 & (1)#12G IN 3/4" C	GARAGE	NA	NA	NA	NA	
2	INFRA-RED HEATER	120	1	1.1					P	29	20A/1P	(2)#12 & (1)#12G IN 3/4" C	STORAGE	NA	NA	NA	NA	

ELECTRICAL CONNECTION SCHEDULE FOR MECHANICAL EQUIPMENT																		
MECH #	DESCRIPTION	EQUIPMENT CHARACTERISTICS							PANEL	CIRCUIT	BREAKER SIZE	FEEDER AND CONDUIT	EQUIPMENT LOCATION	DISCONNECT SWITCH			MOTOR CONTROL	NOTES
		VOLTS	PH	AMPS	HP	KW	MCA	MOCF						CFM	SIZE	FUSE		
1	EXHAUST FAN	120	1		0.07				P	32	20A/1P	(2)#12 & (1)#12G IN 3/4" C	LOCKER ROOMS	NA	NA	NA	NA	St
2	EXHAUST FAN	120	1		6.1W				P	33	20A/1P	(2)#12 & (1)#12G IN 3/4" C	108 RESTROOM	NA	NA	NA	NA	St
3	EXHAUST FAN	120	1		0.04				P	34	20A/1P	(2)#12 & (1)#12G IN 3/4" C	106 BREAK ROOM	NA	NA	NA	NA	St
4	EXHAUST FAN	120	1		6.1W				P	35	20A/1P	(2)#12 & (1)#12G IN 3/4" C	114 JANITOR	NA	NA	NA	NA	St
5	EXHAUST FAN	208	3	16.7	5	6.0			P1	8,10,12	40A/3P	(3)#8 & (1)#10G IN 3/4" C	GARAGE	60	30	3	3R	3
6	EXHAUST FAN	208	3	10.6	3	3.8			P1	13,15,17	30A/3P	(3)#10 & (1)#10G IN 3/4" C	GARAGE	30	20	3	3R	3
7	EXHAUST FAN	208	3	10.6	3	3.8			P1	14,16,18	30A/3P	(3)#10 & (1)#10G IN 3/4" C	GARAGE	30	20	3	3R	3

ELECTRICAL CONNECTION SCHEDULE FOR MECHANICAL EQUIPMENT																				
MECH #	DESCRIPTION	EQUIPMENT CHARACTERISTICS							PANEL	CIRCUIT	BREAKER SIZE	FEEDER AND CONDUIT	EQUIPMENT LOCATION	DISCONNECT SWITCH			MOTOR CONTROL	NOTES		
		VOLTS	PH	AMPS	HP	KW	MCA	MOCF						CFM	SIZE	FUSE			POLES	NEMA
1	MAKE-UP AIR UNIT	208	3	48.3	15		60.2	100		P1	19,21,23	100A/3P	(3)#6 & (1)#10G IN 3/4" C	GRADE	100	80	3	3R	EF-5	3

ELECTRICAL CONNECTION SCHEDULE FOR PLUMBING EQUIPMENT																				
MECH #	DESCRIPTION	EQUIPMENT CHARACTERISTICS							PANEL	CIRCUIT	BREAKER SIZE	FEEDER AND CONDUIT	EQUIPMENT LOCATION	DISCONNECT SWITCH			MOTOR CONTROL	NOTES		
		VOLTS	PH	AMPS	HP	KW	MCA	MOCF						CFM	SIZE	FUSE			POLES	NEMA
1	DUPLX SEWAGE EJECTOR PUMPS	208	3		(2)1/2			20		P1	26,28,30	20A/3P	(3)#12 & (1)#12G IN 3/4" C	GARAGE	30	20	3	1		2

EQUIPMENT SCHEDULE NOTES:

1. PROVIDE CONTROL MODULE FOR FAN SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM.
2. ELECTRICAL CONTRACTOR TO WIRE BETWEEN PUMPS AND FLOATS TO CONTROL PANEL. ALSO PROVIDE WIRING BETWEEN PUMP CONTROL PANEL AND REMOTE ANNUNCIATOR PANEL.
3. PROVIDE 3 PHASE MAGNETIC MOTOR STARTER. SEE MOTOR STARTER SCHEDULE.

LIGHTING CONTROL PANEL "A"						
DESCRIPTION	ZONE	CIRCUIT NUMBER/S	CIRCUIT WATTAGES	RELAY NUMBER	CONTROL ON/OFF	NOTES
GARAGE AREA	A	L-6, L-7	5	1,2	T/C T/C	PROVIDE (2) ELCU'S
EXTERIOR BLDG. ENTRY LIGHTS	B	LS-7	0.15	3	T/C T/C	PROVIDE BY-PASS RELAY
EXTERIOR BLDG. FLOOD LIGHTS	C	L-9,11	3	4,5	P.C. T/C	
EXTERIOR POLE LIGHTS	D	L-8,10	4.3	6,7,8,9	P.C. T/C	
EXTERIOR POLE LIGHTS	D	L-12,14	2.2	10,11	P.C. T/C	
EXTERIOR POLE LIGHTS	D	L-16,18	2.7	12,13	P.C. T/C	
FLAG POLE LIGHTS	E	L-20	.2	14	P.C. T/C	
SPARE						

NOTE #1: LOW VOLTAGE OVERRIDE SWITCH "X" AT NURSE'S STATION.  
 NOTE #2: LOCAL SWITCH AND LOW VOLTAGE SWITCH "X" AT NURSE'S STATION.

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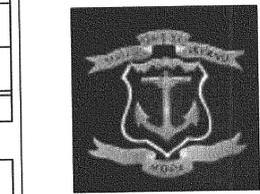
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