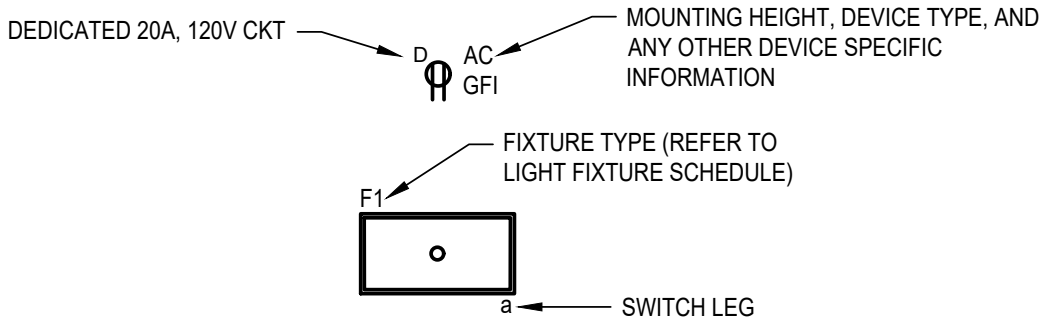


BRANCH CIRCUITRY NOTES



GENERAL CIRCUITRY NOTES:

- A. PROVIDE QUANTITIES OF CONDUCTORS AND RACEWAYS REQUIRED, FOR EQUIPMENT SHOWN ON PLANS. MINIMUM TRADE SIZE CONDUCTOR SHALL BE #12 AWG. MINIMUM TRADE SIZE RACEWAY SHALL BE 3/4", THE USE OF SHARED NEUTRALS IN LIGHTING AND RECEPTACLE BRANCH CIRCUITS IS PROHIBITED. PROVIDE SEPARATE NEUTRAL AND GROUND FOR EVERY CIRCUIT.
- B. DO NOT COMBINE MORE THAN THREE PHASE CONDUCTORS, THREE NEUTRAL CONDUCTORS PLUS THREE GROUND CONDUCTORS, IN ANY ONE BRANCH CIRCUIT CONDUIT, UNLESS OTHERWISE INDICATED ON DRAWINGS.
- C. THE USE OF SHARED NEUTRALS IN LIGHTING AND RECEPTACLE BRANCH CIRCUITS IS PROHIBITED. PROVIDE SEPARATE NEUTRAL AND GROUND FOR EVERY CIRCUIT.

LIGHTING CIRCUITRY NOTES:

- A. UNO, PROVIDE 2#12, 1#12G, 3/4"Ø FOR LIGHTING CIRCUITRY. PROVIDE 2#10, 1#10G, 3/4"Ø FOR LIGHTING CIRCUITS GREATER THAN 100' IN LENGTH TO PANELBOARD. PROVIDE ADDITIONAL CONDUCTOR IN SAME RACEWAY AS OTHER CONDUCTORS FOR 0-10V LED DIMMING.
- B. UNO, IN ROOMS/AREAS WHERE MULTIPLE LIGHT SWITCHES/SENSORS ARE SHOWN, PROVIDE LIGHTING CONTROL CIRCUITRY FROM SWITCHES/SENSORS TO LIGHT FIXTURES WITH SAME SWITCH LEG DESIGNATIONS.
- C. UNO, IN ROOMS/AREAS WHERE ONE LIGHT SWITCH/SENSOR IS SHOWN, CIRCUIT SWITCH/SENSOR IN SUCH A MANNER THAT SWITCH/SENSOR OPERATES ALL LIGHT FIXTURES WITHIN SAME ROOM/AREA.

RECEPTACLE CIRCUITRY NOTES:

- A. UNO, PROVIDE 2#12, 1#12G, 3/4"Ø FOR GENERAL PURPOSE 120V RECEPTACLE CIRCUITS. PROVIDE 2#10, 1#10G, 3/4"Ø FOR RECEPTACLE CIRCUITS GREATER THAN 100' IN LENGTH TO PANELBOARD.

STANDARD MOUNTING HEIGHTS  
(UNO, HEIGHTS ARE A.F.F. TO CENTER OF DEVICE)

RECEPTACLES:	18"
COMMUNICATION DEVICE:	18"
LIGHT SWITCH:	46"
PANELBOARD (MAX TO TOP OF BACKBOX):	72"
STARTER/DISCONNECT SWITCH:	48"
SYSTEMS CABINETS (MAX TO TOP):	72"
SYSTEMS CONTROL PANELS (MAX TO TOP):	72"
PUSH-BUTTON:	46"
FIRE ALARM PULL STATION:	46"
FIRE ALARM NOTIFICATION DEVICE:	80" (TO BOTTOM)
CO NOTIFICATION DEVICE:	80" (TO BOTTOM)
EXIT LIGHT (WALL):	CENTERED ABOVE DOORWAY
EMERGENCY BATTERY PACK:	80"

SYMBOLS LIST

GENERAL SYMBOLS:

- # KEYED NOTE - NEW WORK
- HEAVY LINE-WEIGHT INDICATES TO PROVIDE DEVICES/EQUIPMENT AS NEW

FIRE ALARM SYMBOLS:

- 30 AUDIO/VISUAL SIGNALING DEVICE. NUMBER DENOTES CANDELA RATING.
- 30 VISUAL SIGNALING DEVICE. NUMBER DENOTES CANDELA RATING.
- PULL STATION
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- CO CARBON MONOXIDE SIGNALING DEVICE
- FACE CONTROL PANEL

LIGHTING SYMBOLS:  
(REFER TO LIGHT FIXTURE AND OCCUPANCY SENSOR / CONTROL SCHEDULES)

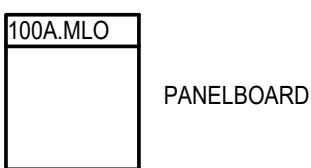
- 3 - 3-WAY  
4 - 4-WAY  
OS - OCCUPANCY SENSOR SWITCH  
LV - DIGITAL WALL, LOW VOLTAGE
- X# CEILING-MOUNTED EXIT LIGHT. HATCH MARKS INDICATES ILLUMINATED FACE, ARROW INDICATES DIRECTION OF TRAVEL.
- X# WALL-MOUNTED EXIT LIGHT. HATCH MARKS INDICATES ILLUMINATED FACE, ARROW INDICATES DIRECTION OF TRAVEL.
- F# 1'x4' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE. SEE SCHEDULE FOR ADDITIONAL DETAILS
- F# CEILING MOUNTED DOWNLIGHT FIXTURE, F# INDICATES TYPE. SEE SCHEDULE FOR ADDITIONAL DETAILS

POWER SYMBOLS:

- DUPLEX RECEPTACLE
- MOTOR CONNECTION  
(REFER TO ELECTRICAL EQUIPMENT & CONTROL SCHEDULE ME601)
- 208V PANELBOARD (SURFACE)
- ELECTRICAL CONNECTION
- SPECIAL RECEPTACLE (NEMA CONFIGURATION INDICATED)

ONE-LINE SYMBOLS:

- CIRCUIT BREAKER
- FUSE
- FUSED DISCONNECT SWITCH
- GROUND



PANELBOARD

GENERAL NOTES:

- UNLESS NOTED OR PROVIDED BY OTHERS, CONTRACTOR SHALL PROVIDE ALL MATERIALS SHOWN ON DRAWINGS. ALL MATERIALS PROVIDED SHALL BE NEW, UNUSED CONDITION.
- COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF THE 2017 NATIONAL ELECTRIC CODE (NEC), 2020 INTERNATIONAL BUILDING CODE, 2020 INTERNATIONAL FIRE CODE, 2020 INTERNATIONAL ENERGY CONSERVATION CODE OF NEW YORK STATE, NATIONAL FIRE PROTECTION ASSOCIATION EQUIPMENT SHALL BE UL LISTED CERTIFIED.
- ALL MATERIALS TO COMPLY WITH UL, NEMA, ASTM, OSHA, IEEE, NEC AND LOCAL CODES AND ORDINANCES.
- NEW YORK STATE LICENSE: THIS CONTRACTOR SHALL POSSESS A LICENSE TO SPECIFICALLY INSTALL FIRE ALARM SYSTEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, INSPECTIONS AND CERTIFICATES ALONG WITH ALL ASSOCIATED FEES.
- CONTRACTOR SHALL PROVIDE A THIRD PARTY INDEPENDENT ELECTRICAL INSPECTION AND CERTIFICATE PRIOR TO APPLICATION FOR FINAL PAYMENT. THE INDEPENDENT ELECTRICAL INSPECTOR SHALL BE CERTIFIED BY THE INTERNATIONAL ASSOCIATION OF ELECTRICAL INSPECTORS.
- PROVIDE TEMPORARY POWER AND LIGHTING AS REQUIRED BY THE PROJECT CONTRACTOR.
- COORDINATE ELECTRICAL WORK WITH OTHER TRADES AND ADJUST EQUIPMENT LOCATIONS ACCORDINGLY TO FIT SPACES ALLOTTED.
- HANDLE PRODUCTS CAREFULLY DURING SHIPPING, STORING AND INSTALLING. DO NOT INSTALL DAMAGED EQUIPMENT OR COMPONENTS; REPLACE WITH NEW.
- PROVIDE SCHEDULE 40 BLACK STEEL PIPE SLEEVES AT ALL CONDUIT PENETRATIONS THROUGH CONCRETE AND MASONRY CONSTRUCTION, AND THROUGH FIRE RATED DRYWALL CONSTRUCTION.
- FIRE SEAL ALL OPENINGS AROUND ELECTRICAL BOXES, RACEWAYS, SLEEVES, ETC. WHERE PASSING THROUGH CONCRETE SLABS AND WALLS. THE FIRE SEAL SHALL BE APPROVED AND INSTALLED IN ACCORDANCE WITH ASTM E814.
- WALK-THRU WITH OWNER REPRESENTATIVE AND VERIFY ALL ELECTRICAL DEVICE & RACEWAY LOCATIONS PRIOR TO INSTALLATION.
- INSTALL ALL CIRCUITRY PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, AND CEILING.
- THE USE OF NON-METALLIC RACEWAY IS PROHIBITED.
- ELECTRICAL EQUIPMENT LOCATIONS ARE APPROXIMATE. VERIFY EXACT EQUIPMENT LOCATIONS PRIOR TO FEEDER ROUGH-IN.
- MOTOR CONNECTION LOCATIONS SHOWN ARE APPROXIMATE. VERIFY EXACT LOCATIONS WITH OTHER TRADES PRIOR TO FEEDER/ CONDUIT ROUGH-IN.
- TO MAINTAIN DRAWING CLARITY, MOTOR CONTROL DEVICES, FOR HVAC/PLUMBING EQUIPMENT, HAVE NOT BEEN SHOWN. REFER TO ELECTRICAL EQUIPMENT & CONTROL SCHEDULE FOR TYPES OF MOTOR CONTROL DEVICES REQUIRED, LOCATIONS WHERE CONTROL DEVICES ARE SCHEDULED FOR INSTALLATION, AND ADDITIONAL INFORMATION.
- REMOVE MATERIALS AS WORK PROGRESSES. UPON COMPLETION OF WORK, LEAVE AREAS IN A CLEAN CONDITION.
- COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT/DEVICES WITH ARCHITECTURAL PLANS, ELEVATIONS, FURNITURE LAYOUTS, AND WITH OTHER DIVISIONS PRIOR TO INSTALLATION. CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT COST TO OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SUPPORT HARDWARE FOR SECURELY FASTENING THE ELECTRICAL CONTROL DEVICES AND ENCLOSURES TO THE BUILDING STRUCTURE. THE REQUIRED HARDWARE INCLUDES, BUT IS NOT LIMITED TO, INTERMEDIATE STEEL ANGLE, UNISTRUCT, FASTENERS, JOISTS CLAMPS, ETC. MOUNT STARTERS, VFD'S, DISCONNECTS, RELAYS, AND OTHER ELECTRICAL CONTROL DEVICES AND ENCLOSURES AT LOCATION(S) INDICATED IN ELECTRIC EQUIPMENT & CONTROL SCHEDULE(S). ALLOW MAINTENANCE ACCESS AND SERVICE SPACE AT EACH LOCATION.
- EACH RECEPTACLE, SWITCH AND JUNCTION BOX, PROVIDED UNDER THIS CONTRACT, SHALL BE LABELED WITH THE CORRESPONDING POWER PANEL NAME AND CIRCUIT BREAKER NUMBER. ALL LABELING SHALL BE TYPEWRITTEN USING A LABEL MAKER AND SHALL BE PERMANENTLY AFFIXED TO EACH FACEPLATE. HANDWRITTEN LABELS WILL NOT BE ACCEPTED. PRIOR TO START OF LABELING, MEET WITH OWNER TO DETERMINE LABELING SCHEME TO BE UTILIZED. PROVIDE LABELING TO MEET OWNER REQUIREMENTS.

ABBREVIATIONS

A	-	AMPERE	EX	-	EXISTING	MDP	-	MAIN DISTRIBUTION PANEL
AC	-	ABOVE COUNTER	EXT	-	EXTERIOR	NF	-	NON-FUSED
AFF	-	ABOVE FINISHED FLOOR	(F)	-	FLANGE LIGHT FIXTURE HARD CEILING	NIC	-	NOT IN CONTRACT
AHU	-	AIR HANDLING UNIT	FA	-	FIRE ALARM	NM	-	NONMETALLIC SHEATHED CABLE
AV	-	AUDIO/VISUAL	FL	-	FLOOR	NTS	-	NOT TO SCALE
ATS	-	AUTOMATIC TRANSFER SWITCH	FLA	-	FULL LOAD AMPS	OC	-	OVER COUNTER
AWG	-	AMERICAN WIRE GAUGE	FLUOR	-	FLUORESCENT	P	-	POLE
AU	-	AT UNIT	GC	-	GENERAL CONTRACTOR	PNL	-	PANEL
BKR	-	BREAKER	GFI	-	GROUND FAULT CIRCUIT INTERRUPTER	PRI	-	PRIMARY
C	-	CONDUIT	GND	-	GROUND	SEC	-	SECONDARY
C/B	-	CIRCUIT BREAKER	HP	-	HORSEPOWER	ST	-	SHUNT TRIP
CKT	-	CIRCUIT	HVAC	-	HEATING VENTILATION & AIR CONDITIONING	SW	-	SWITCH
CLG	-	CEILING	IP	-	INTERNET PROTOCOL	TEL	-	TELEPHONE
DEMO	-	DEMOLISH/DEMOLITION	IP	-	INTERNET PROTOCOL	TV	-	TELEVISION
DTL	-	DETAIL	I.T.	-	INFORMATION TECHNOLOGY	TYP	-	TYPICAL
DWG	-	DRAWING	KVA	-	KILOVOLT AMPS	UC	-	UNDER COUNTER
EA	-	EACH	KW	-	KILOWATTS	UGE	-	UNDERGROUND ELECTRIC
EC	-	ELECTRICAL CONTRACTOR	LED	-	LIGHT EMITTING DIODE	UNO	-	UNLESS NOTED OTHERWISE
EF	-	EXHAUST FAN	LTG	-	LIGHTING	V	-	VOLT
EM	-	EMERGENCY	MCA	-	MINIMUM CIRCUIT AMPS	WG	-	WIRE GUARD
			MCB	-	MAIN CIRCUIT BREAKER	WP	-	WEATHERPROOF
						XFMR	-	TRANSFORMER

NOTE: ABBREVIATIONS MAY OR MAY NOT USE PERIODS, EXAMPLE A.F.F. OR AFF

DEFINITIONS:

CIRCUITRY = UNLESS NOTED OTHERWISE, CIRCUITRY INCLUDES, BUT IS NOT LIMITED TO, WIRING, OUTLETS BOXES, JUNCTION BOXES, RELAYS, WIREMOLD, SURFACE MOUNTED RACEWAY, CONDUITS, CONTROL DEVICES, ETC.



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SHERIDAN ENGINEERING

SYLVAN BEACH DEPARTMENT  
OF PUBLIC WORKS

SYLVAN BEACH, NY 13157

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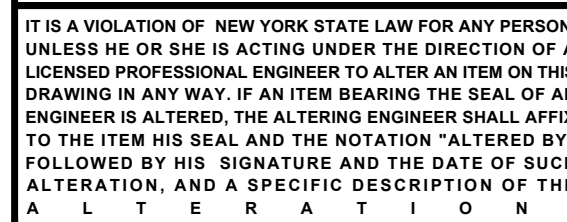
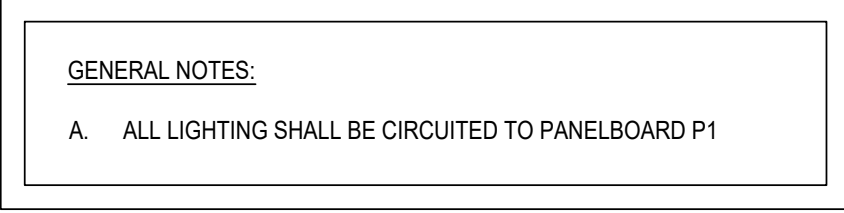
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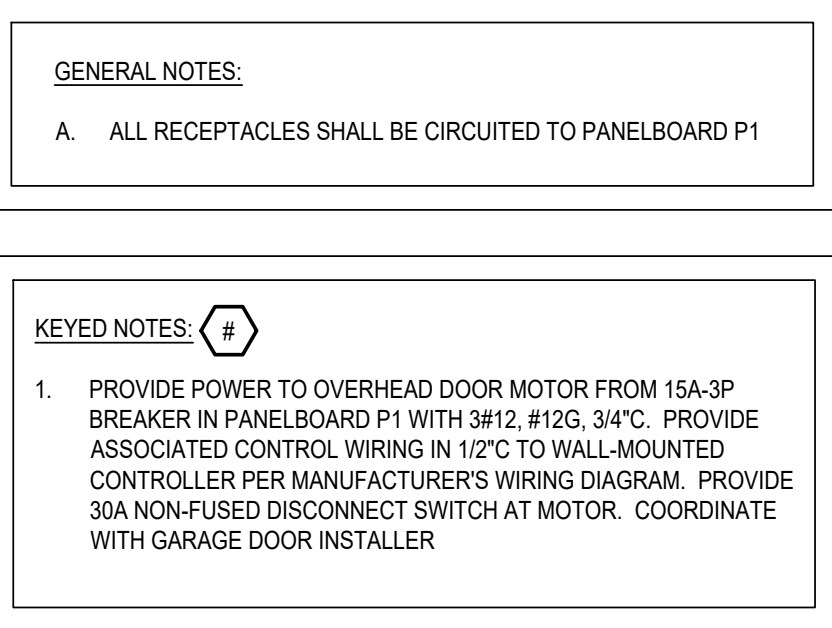
## FLOOR PLAN - LIGHTING

SHEET NUMBER

E-101

1 OVERALL  
SCALE: 1/4" = 1'-0"





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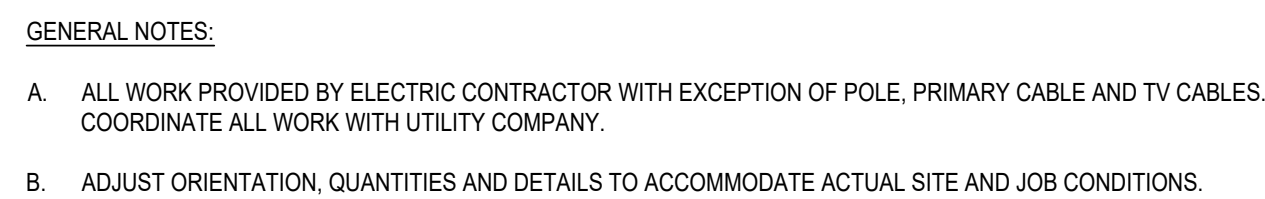
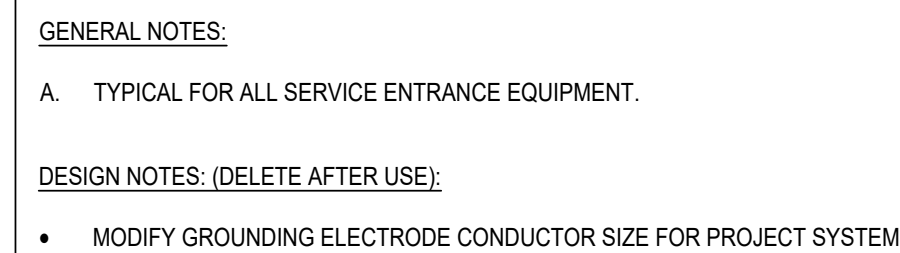
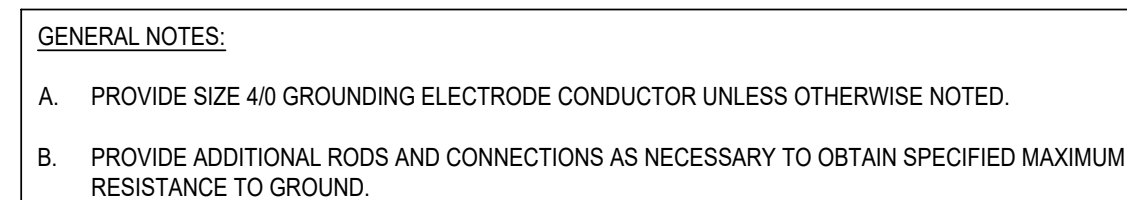
## FLOOR PLAN - POWER

SHEET NUMBER

E-201







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SHEET TITLE

## ELECTRICAL DETAILS

SHEET NUMBER

E-502

