

# HARBORMASTER'S OFFICE BUILDING GENERATOR INSTALLATION



## PORT OF BROWNSVILLE BOARD OF COMMISSIONERS

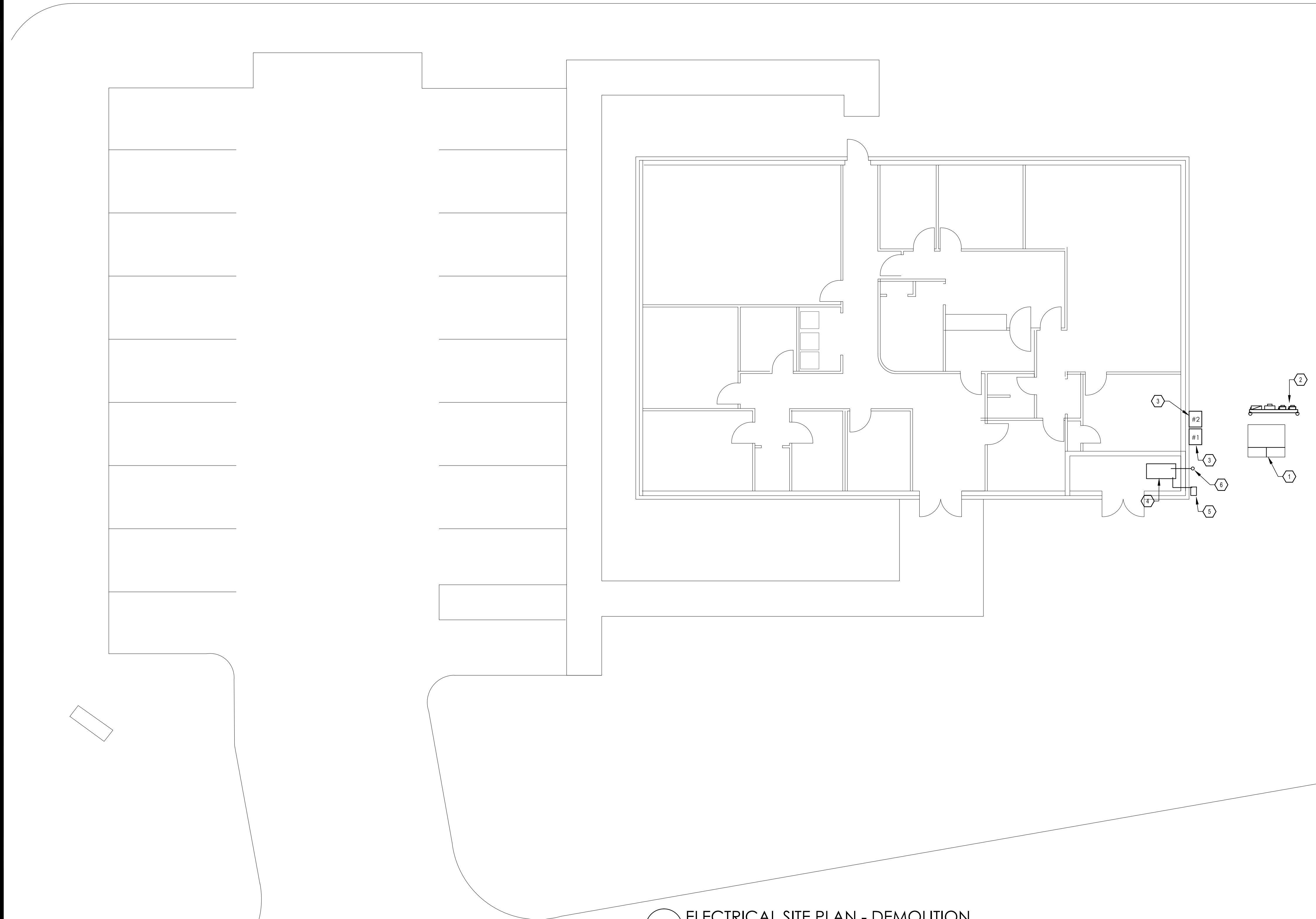
ESTEBAN GUERRA  
RALPH COWEN  
JOHN WOOD  
JOHN REED  
SERGIO "TITO" LOPEZ

CHAIRMAN  
VICE CHAIRMAN  
SECRETARY  
COMMISSIONER  
COMMISSIONER

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1	COVER SHEET
2	SITE PLAN

POB HARBOR MASTER GENERATOR



1 ELECTRICAL SITE PLAN - DEMOLITION  
 SCALE: 1/8"=1'-0"

**GENERAL DEMOLITION NOTES: (TO ALL SHEETS)**

- A. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE ELECTRICAL DOCUMENTS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE WILL BE REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- B. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL EQUIPMENT AND ASSOCIATED CONDUCTORS, CONDUIT, BOXES, ETC. TO PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
- C. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW THE ELECTRICAL DOCUMENTS TO DETERMINE THE COMPLETE SCOPE OF WORK.
- D. WHERE DEVICES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE REMOVED, THE ASSOCIATED BOXES, CONDUIT, AND CONDUCTORS SHALL BE REMOVED BACK TO THEIR SOURCE.
- E. WHERE DEVICES OR EQUIPMENT ARE INDICATED OR REQUIRED TO BE RELOCATED, THE ASSOCIATED BOXES, CONDUIT, AND CONDUCTORS SHALL BE REMOVED BACK TO A CONCEALED JUNCTION BOX AND NEW PRODUCTS SHALL BE USED TO EXTEND THE SERVICE TO THE NEW LOCATION.
- F. WHERE CONDUITS RUN ABOVE INACCESSIBLE CEILINGS OR IN WALLS WHICH ARE NOT PART OF DEMOLITION ARE TO REMAIN UNDISTURBED, CONDUITS SHALL BE REMOVED AND THE CONDUITS CAPPED AND ABANDONED.
- G. WHERE THE REMOVAL OF DEVICES OR EQUIPMENT RENDERS EQUIPMENT DOWNSTREAM INOPERABLE, SERVICE SHALL BE EXTENDED TO THE DOWNSTREAM DEVICE OR EQUIPMENT SO THAT THE DEVICE OR EQUIPMENT IS LEFT IN OPERATING CONDITION.
- H. COORDINATE DEMOLITION OF ELECTRICAL SYSTEMS AS REQUIRED WITH ALL OTHER EXISTING TRADES.
- I. ALL EXISTING ELECTRICAL EQUIPMENT, CONDUIT AND WIRING REMOVED DURING CONSTRUCTION NO LONGER REQUIRED AS PART OF AN ACTIVE SYSTEM AND NOT TO BE REUSED SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
- J. WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION AND APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- K. EXISTING DEVICES AND/OR EQUIPMENT TO BE REUSED SHALL BE CLEANED AND REPAIRED AT THE DISCRETION OF THE ARCHITECT WHERE APPLICABLE.
- L. ALL DEVICES WITH AN "EX" SYMBOL ARE EXISTING TO REMAIN.
- M. ALL DEVICES ATTACHED TO WALLS OR CEILINGS SHALL BE REMOVED PER DEMOLITION NOTE A - L WHETHER SHOWN ON DRAWINGS OR NOT.

**KEYED NOTES: ELECTRICAL**

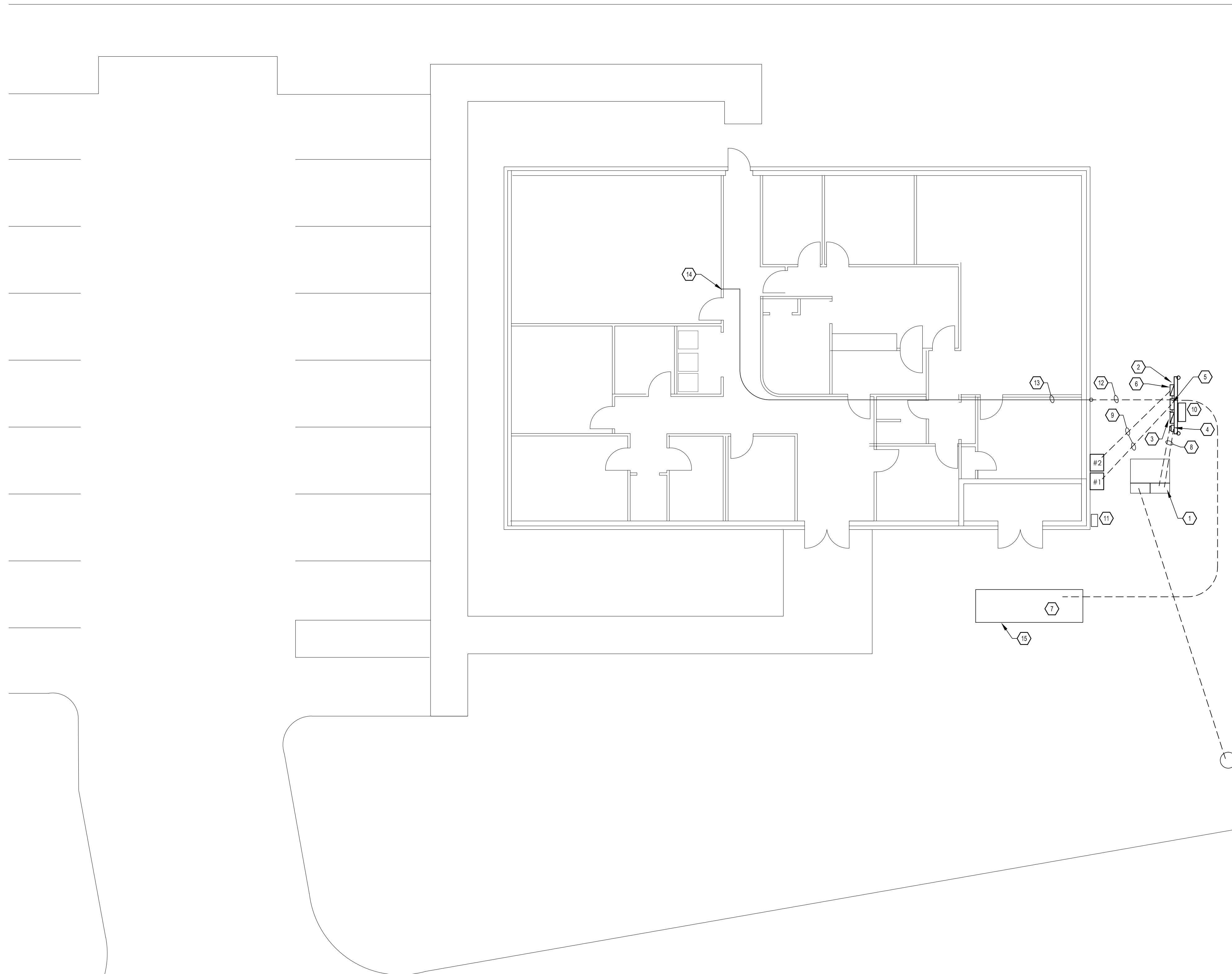
- 1 EXISTING POWER COMPANY PAD MOUNTED TRANSFORMER. FIELD VERIFY EXISTING CONDITIONS.
- 2 EXISTING ELECTRICAL SERVICE EQUIPMENT TO BE REMOVED ONCE THE ELECTRICAL SERVICE IS IN OPERATION. COORDINATE DOWNTIME WITH OWNER 72 HOURS PRIOR TO ANY WORK.
- 3 EXISTING JUNCTION BOX. FIELD VERIFY EXISTING LOCATION.
- 4 EXISTING GENERATOR TO BE REMOVED. COORDINATE WITH OWNER PRIOR TO ANY WORK.
- 5 EXISTING GAS LINE TO GENERATOR TO BE REMOVED UP TO THE METER. FIELD COORDINATE EXISTING CONDITIONS PRIOR TO ANY WORK. SEAL THE EXISTING WALL OPENING WITH SIMILAR WALL MATERIAL.
- 6 EXISTING GENERATOR EXHASUT PIPE TO BE REMOVED. FIELD COORDINATE EXISTING CONDITIONS PRIOR TO ANY WORK. SEAL THE EXISTING WALL OPENING WITH SIMILAR WALL MATERIAL.

**GENERAL ELECTRICAL NOTES (TO ALL SHEETS)**

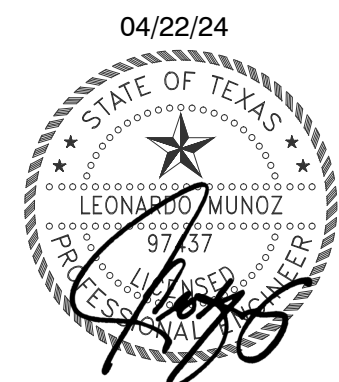
- A. CONTRACTOR TO VERIFY ALL EXISTING MAIN POWER SERVICES AND COORDINATE WITH POWER COMPANY FOR ALL NEW REQUIREMENTS AND ALL COST ASSOCIATED. CONTRACTOR SHALL INCLUDE ANY COST FOR THE NEW TRANSFORMER AND OTHER ASSOCIATED FEES IN BID. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL FEES WITH POWER COMPANY AND TO INCLUDE IN BID. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POWER COMPANY AS SOON THE CONTRACT IS AWARDED TO ORDER TRANSFORMER AND THE RELATED ELECTRICAL SERVICE EQUIPMENT AS SOON AS POSSIBLE.
- B. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.
- C. CONTRACTOR TO VERIFY ALL EXISTING MAIN TELEPHONE SERVICES AND COORDINATE WITH TELEPHONE COMPANY FOR ALL REQUIREMENTS AND ALL COST ASSOCIATED. INCLUDE ALL COST IN BID. CONDUIT FROM MAIN TELEPHONE RISER SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- D. ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.
- E. CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER. ARCHITECT OR ENGINEER. VERIFY PRIOR TO BID DATE.
- F. VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST TO OWNER. ARCHITECT, OR ENGINEER.
- G. IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.
- H. GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- I. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.
- J. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.
- K. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE (NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
- L. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE TO REFER TO OTHER DOCUMENTS SUBMITTED BY THE ARCHITECT/OWNER TO REFERENCE SCALE MEASUREMENTS AND COMPARE TO THE ELECTRICAL DOCUMENTS. ANY DISCREPANCIES SHALL BE BROUGHT UP THE ENGINEER ATTENTION PRIOR TO BID DATE. FAILURE TO DO THIS THE CONTRACTOR IS RESPONSIBLE TO MAKE THE NECESSARY ADJUSTMENTS FOR THIS BID.
- M. ALL WIRING SHALL BE COPPER.
- N. ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.
- O. ARRANGE FOR SOURCES OF TEMPORARY CONSTRUCTION SERVICES. SUCH SERVICES SHALL BE NOMINALLY 120/240V, 1-PHASE, 3-WIRE FROM WHICH A COMPLETE SYSTEM OF TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED FOR ALL CONSTRUCTION NEEDS.
- P. CONTRACTOR IS RESPONSIBLE TO VERIFY AND COORDINATE WITH EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.
- Q. CONTRACTOR IS RESPONSIBLE CALL DIG-TESS; 1-800-DIG-TESS 2-BUSINESS DAYS IN ADVANCE.

**KEYED NOTES: ELECTRICAL**

- 1 EXISTING POWER COMPANY PAD MOUNTED TRANSFORMER. FIELD VERIFY EXISTING CONDITIONS.
- 2 NEW ELECTRICAL SERVICE EQUIPMENT ON A STAINLESS STEEL PIPE/UNISTRUT STAND. FIELD VERIFY EXACT LOCATION.
- 3 NEW BUILDING MAIN SWITCH DISCONNECT 'MS'. PROVIDE WEATHER PROOF LABEL.
- 4 NEW 120/208V, 3Ø, 4W, ELECTRICAL SERVICE METER.
- 5 NEW GENERATOR DOCKING STATION /AUTOMATIC TRANSFER SWITCH PURCHASED BY OWNER INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
- 6 PROPOSED NEW PANEL-MDP IN A NEMA-3R ENCLOSURE. REFER TO ELECTRICAL RISER DIAGRAM.
- 7 NEW KOHLER GAS GENERATOR 180KW PURCHASED BY OWNER INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
- 8 CONTRACTOR TO PROVIDE AND INSTALL PVC CONDUIT FROM EXISTING UTILITY TRANSFORMER TO NEW ELECTRICAL SERVICE EQUIPMENT PER POWER COMPANY STANDARDS. VERIFY ALL REQUIREMENTS PRIOR TO ANY ROUGH-IN. REFER TO ELECTRICAL RISER DIAGRAM.
- 9 CONTRACTOR TO PROVIDE AND INSTALL PVC CONDUIT NEW ELECTRICAL PANEL-MDP TO EXISTING JUNCTION BOX. FIELD COORDINATE WITH EXISTING CONDITIONS PRIOR TO ANY WORK. REFER TO ELECTRICAL RISER DIAGRAM.
- 10 UTILITY CT CABINET PROPOSE LOCATION. FIELD VERIFY EXACT LOCATION.
- 11 EXISTING GAS METER LOCATION. PROVIDE A MINIMUM 2' GAS LINE TO THE GENERATOR. COORDINATE WITH GAS COMPANY. INCLUDE ALL COST ASSOCIATED IN BID.
- 12 PROVIDE 1-1.5"Ø FOR GENERATORS REMOTE ANNUNCIATOR. ROUTE CONDUIT UP ALONG THE EXISTING WALL UP TO THE ABOVE CEILING LEVEL. CORE DRILL EXISTING WALL FOR NEW CONDUIT. FIELD VERIFY EXISTING CONDITIONS AND COORDINATE EXACT LOCATION.
- 13 PROVIDE 1-1.5"Ø ABOVE THE CEILING LEVEL. SUPPORT CONDUIT FROM EXISTING STRUCTURAL.
- 14 PROPOSE GENERATORS REMOTE ANNUNCIATOR LOCATION. FIELD COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
- 15 CONTRACTOR SHALL PROVIDE CONCRETE PAD FOR GENERATOR AND FILL THE AREA WITH ENOUGH FILL FOR GENERATOR TO SIT LEVELED AND SECURE TO AREA. COORDINATE WITH OWNER FOR THE AMOUNT OF AREA TO FILL PRIOR TO BID DATE.



1 ELECTRICAL SITE PLAN - REMODEL  
SCALE: 1/8"=1'-0"



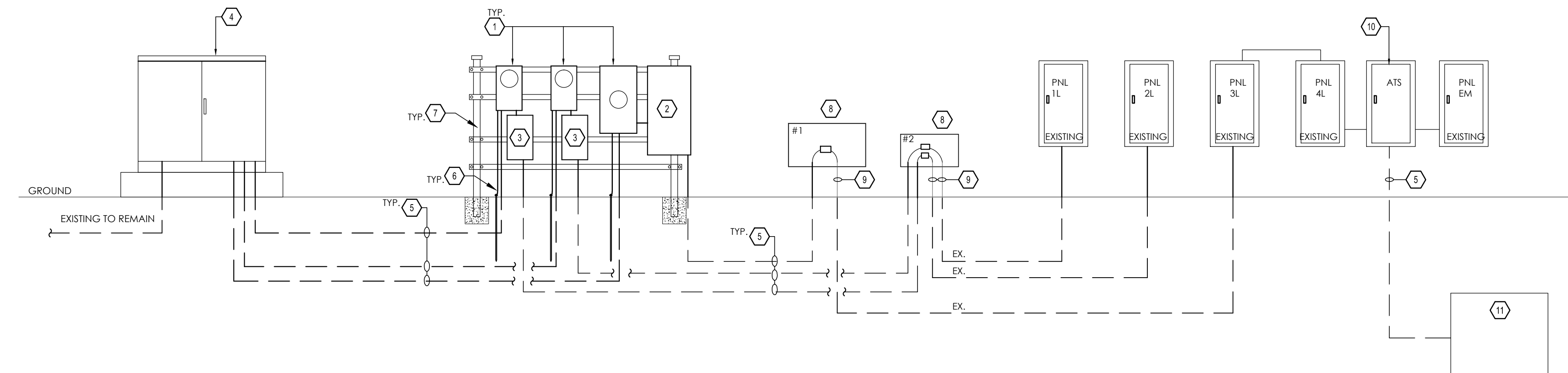
POB HARBOR MASTER GENERATOR

**GENERAL NOTES:**

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
- B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
- C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
- D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
- E. ALL CONDUITS EMPTY OR USED SHALL BE SEALED WITH A RACEWAY SEALANT.
- F. THE REMOVAL OF THE EXISTING ELECTRICAL GEAR IS TO BE PERFORMED AFTER THE NEW ELECTRICAL GEAR IS IN OPERATION. PROVIDE A TIME FRAME OF ALL THE WORK TO BE DONE.

**ELECTRICAL RISER  
 DIAGRAM KEYED NOTES:**

- 1 EXISTING ELECTRICAL UTILITY SERVICE METER 120/208V, 3Ø, 4W TO BE REMOVED.
- 2 EXISTING PROVIDE 400AMPS, 208V, 3Ø, 4W, S/N, N4X STAINLESS STEEL HEAVY DUTY FUSED SERVICE ENTRANCE DISCONNECT, FUSED@400AMPS TO BE REMOVED.
- 3 EXISTING PROVIDE 100AMPS, 208V, 3Ø, 4W, S/N, N4X STAINLESS STEEL HEAVY DUTY FUSED SERVICE ENTRANCE DISCONNECT, FUSED@100AMPS TO BE REMOVED.
- 4 EXISTING POWER COMPANY PAD MOUNT TRANSFORMER 120/208V, 3Ø, 4W TO REMAIN. COORDINATE WITH LOCAL UTILITY POWER COMPANY BRUB TO ACCESS SECONDARY COMPARTMENT FOR NEW ELECTRICAL CONDUITS AND PROVIDE CTS INSIDE THE TRANSFORMER..
- 5 EXISTING CONDUITS TO REMAIN IN PLACE ABANDON. REMOVE EXISTING WIRING.
- 6 EXISTING GROUNDING SYSTEM TO BE REMOVED.
- 7 EXISTING ELECTRICAL GEAR STAND TO BE REMOVED.
- 8 EXISTING JUNCTION BOXES TO REMAIN FIELD VERIFY EXISTING CONDITIONS PRIOR TO ANY WORK.
- 9 EXISTING WIRING/CONDUIT FROM JUNCTION BOX TO EXISTING PANELBOARD TO REMAIN.
- 10 EXISTING AUTOMATIC TRANSFER SWITCH TO BE REMOVED. FIELD VERIFY EXISTING CONDITIONS.
- 11 EXISTING NATURAL GAS GENERATOR TO BE REMOVED. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE EXISTING GAS LINE TO METER. COORDINATE WITH GAS COMPANY FOR ANY ASSOCIATED COST TO BE INCLUDED IN PROJECT. ANY WALL OPENINGS TO BE COVERED UP.



1 ELECTRICAL SCHEMATIC DIAGRAM - DEMOLITION  
 SCALE: NTS



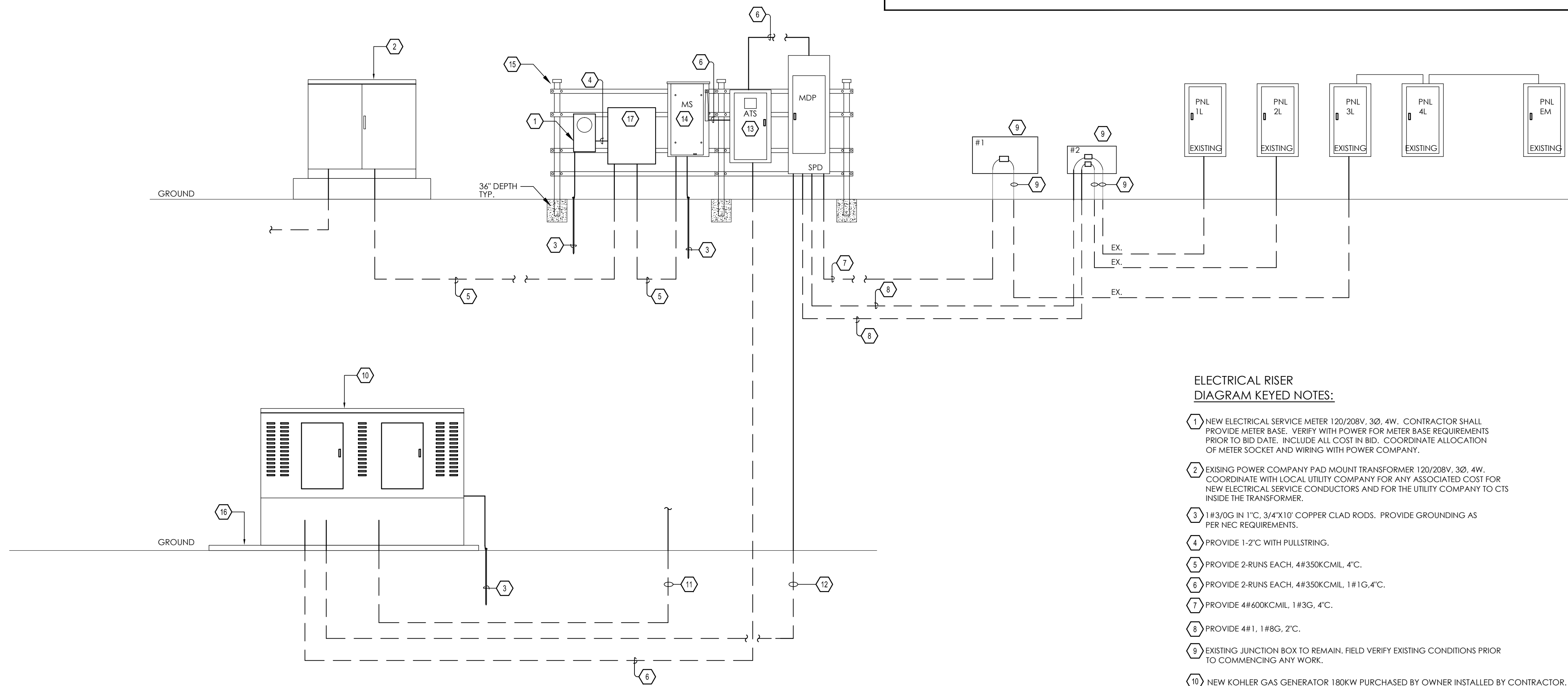
POB HARBOR MASTER GENERATOR

GENERAL NOTES:

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
- B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
- C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
- D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
- E. ALL CONDUITS EMPTY OR USED SHALL BE SEALED WITH A RACEWAY SEALANT.
- F. PROVIDE TRENCHING AND BACKFILLING FOR ALL UNDERGROUND CONDUITS FOR REGULAR NON-ASPHALT/CONCRETE SURFACE.
- G. THE CONTRACTOR SHALL FURNISH AN ARC FLASH HAZARD ANALYSIS STUDY PER NFPA 70E STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE, REFERENCE ARTICLE 130.3 AND ANEX D.
- H. CONTRACTOR SHALL INCLUDE ALL COST TO PROVIDE SHORT CIRCUIT AND PROTECTIVE DEVICE. THE SHORT-CIRCUIT AND PROTECTIVE DEVICE COORDINATE STUDIES SHALL BE SUBMITTED TO THE DESIGN ENGINEER PRIOR TO RECEIVING FINAL APPROVAL OF THE DISTRIBUTION EQUIPMENT SHOP DRAWINGS AND/OR PRIOR TO RELEASE OF EQUIPMENT DRAWINGS FOR MANUFACTURING. APPROVAL FROM THE ENGINEER MAY BE OBTAINED FOR PRELIMINARY SUBMITTAL OF SUFFICIENT STUDY DATA TO ENSURE THAT THE SELECTION OF DEVICE AND CHARACTERISTICS WILL BE SATISFACTORY.
- I. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS. INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.
- J. CONTRACTOR SHALL INCLUDE COST IN BID TO TRANSFER GENERATOR FROM OWNERS STORAGE YARD TO JOBSITE. COORDINATE WITH OWNER PRIOR TO BID DATE FOR EXACT LOCATION OF STORAGE YARD.
- K. CONTRACTOR SHALL INCLUDE ALL COST IN BID TO EXPEDITE ALL ELECTRICAL GEAR AND PROVIDE A LIST OF THE ELECTRICAL GEAR LEAD TIMES.
- M. CONTRACTOR SHALL INSTALL ALL NEW ELECTRICAL SERVICE/GEAR, WIRING, CONDUITS IN PLACE PRIOR TO REMOVAL OF THE EXISTING ELECTRICAL GEAR TO MINIMIZE DOWNTIME. COORDINATE DOWNTIME WITH OWNER PRIOR TO ANY WORK.

PANEL-MDP LOCATION	AMP 600	LUGS MB	NEMA 3R	V(LL) 208	(P) 3	(W) 4	V(LLN) 120	MNT SUR.	KAIC 45	FDR: 2-RUNS EACH.		
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE			POLE BKR SIZE	LOAD KVA	LOAD SERVED		
PANEL-1L	1	8	125	3	4#1, 1#6G, 2" C			3	125	9	PANEL-2L	
EXISTING	3	8								9	4	EXISTING
"	5	8								9	6	"
PANEL-3L	7	29	400	3	4#600KCMIL, 1#3G, 5" C			1	20	1.5	8	BLOCK HEATER
EXISTING	9	29								10		SPACE
"	11	29								12		CHARGER
SPACE	13									14		SPACE
SPACE	15									16		SPACE
SPACE	17									18		SPACE
SPACE	19									20		SPACE
SPACE	21									22		SPACE
SPACE	23									24		SPACE
SPACE	25									26		SPACE
SPACE	27									28		SPACE
SPACE	29									30		SPACE
SPACE	31									32		SPACE
SPACE	33									34		SPACE
SPACE	35									36		SPACE
1.) SPD	37		30	3	3#10, 1#10G, 3/4" C					38		SPACE
"	39									40		SPACE
"	41									42		SPACE
LOADS	- (KVA)									(KVA)	- DESCRIPTIVE LOADS	
CONNECTED LOAD	- 141									0	- LIGHTING	
RESERVE	- 35									0	- RECEPTACLES	
TOTAL LOAD	- 176									0	- COOLING	
TOTAL AMPS	- 488									141	- OTHER	

- NOTES:
- 1) SURGE PROTECTION DEVICE, 120KA EXTERNAL MOUNT IN A NEMA-4X STAINLESS STEEL ENCLOSURE
  - 2) MAIN BREAKER SHALL BE 100% RATED SOLID STATE.
  - 3) BRANCH BREAKER SHALL BE 100% RATED SOLID STATE.
  - 4) NEMA-3R ENCLOSURE SHALL BE STAINLESS STEEL 316.
  - 5) INCLUDE COST IN BID TO QUICK SHIP ELECTRICAL GEAR TO MEET 23 WEEKS LEAD TIME.



1 ELECTRICAL SCHEMATIC DIAGRAM - REMODEL  
SCALE: NTS

STRUCTURAL DELEGATED DESIGN:

- A. CONTRACTOR SHALL OBTAIN COMPREHENSIVE ENGINEERING ANALYSIS BY QUALIFIED PROFESSIONAL STRUCTURAL ENGINEER, USING PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA INDICATED IN THESE DRAWINGS AND SPECIFICATIONS. EVALUATE EXISTING SOIL CONDITIONS, WIND SPEED FACTORS, AND THE SPECIFIED MATERIALS TO DETERMINE THE STRUCTURE REQUIRED. PROVIDE PROFESSIONALLY SIGNED RECOMMENDATIONS AND/OR DESIGN DOCUMENTS FOR THE FOLLOWING:
  - 1. ELECTRICAL GENERATOR CONCRETE PAD.

ELECTRICAL RISER DIAGRAM KEYED NOTES:

- 1) NEW ELECTRICAL SERVICE METER 120/208V, 3Ø, 4W. CONTRACTOR SHALL PROVIDE METER BASE. VERIFY WITH POWER FOR METER BASE REQUIREMENTS PRIOR TO BID DATE. INCLUDE ALL COST IN BID. COORDINATE ALLOCATION OF METER SOCKET AND WIRING WITH POWER COMPANY.
- 2) EXISTING POWER COMPANY PAD MOUNT TRANSFORMER 120/208V, 3Ø, 4W. COORDINATE WITH LOCAL UTILITY COMPANY FOR ANY ASSOCIATED COST FOR NEW ELECTRICAL SERVICE CONDUCTORS AND FOR THE UTILITY COMPANY TO CUTS INSIDE THE TRANSFORMER.
- 3) 1#3/0G IN 1" C, 3/4" X 10" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
- 4) PROVIDE 1-2" WITH PULLSTRING.
- 5) PROVIDE 2-RUNS EACH, 4#350KCMIL, 4" C.
- 6) PROVIDE 2-RUNS EACH, 4#350KCMIL, 1#1G, 4" C.
- 7) PROVIDE 4#600KCMIL, 1#3G, 4" C.
- 8) PROVIDE 4#1, 1#8G, 2" C.
- 9) EXISTING JUNCTION BOX TO REMAIN. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING ANY WORK.
- 10) NEW KOHLER GAS GENERATOR 180KW PURCHASED BY OWNER INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
- 11) PROVIDE 1-1.5" C WITH PULLSTRING FOR REMOTE ANNUNCIATOR. COORDINATE EXACT LOCATION- FOR REMOTE ANNUNCIATOR WITH OWNER PRIOR TO ANY ROUGH-INS. LOCATE REMOTE ANNUNCIATOR IN SUPERVISE AREA. COORDINATE WITH OWNER PRIOR TO BID DATE.
- 12) 1-1" C TO PANEL FOR BLOCK HEATER CKT, 1-1" C TO PANEL FOR BATTERY CHARGER CKT AND (1)-1" C TO ATS FOR START CONTROLS. START CONTROL WIRING SHALL BE 3#14. VERIFY WITH EQUIPMENT SUPPLIER FOR START WIRING. REFER TO PANEL SCHEDULES FOR BLOCK HEATER AND BATTERY CHARGER CIRCUITS.
- 13) NEW GENERATOR DOCKING STATION /AUTOMATIC TRANSFER SWITCH PURCHASED BY OWNER INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ANY WORK.
- 14) PROVIDE 600AMPS, 208V, 3Ø, 4W, S/N, NEMA-4X, HEAVY DUTY FUSED SERVICE ENTRANCE DISCONNECT, FUSED@600AMPS.
- 15) 3"STAINLESS STEEL PIPE WITH UNISTRUT STAND FOR ELECTRICAL SERVICE EQUIPMENT. COORDINATE WITH UTILITY COMPANY AND DIMENSIONS/WEIGHT OF THE ELECTRICAL EQUIPMENT PRIOR TO ANY WORK.
- 16) PROVIDE CONCRETE PAD FOR NEW GENERATOR APPROXIMATELY 6000LBS. CONCRETE PAD SHALL BE DESIGNED BY A LICENSE STRUCTURAL ENGINEER.
- 17) PROVIDE UTILITY CT CABINET, NON CORROSIVE MATERIAL PER UTILITY BPUB STANDARDS. COORDINATE WITH BPUB PRIOR TO BID DATE. INCLUDE ALL COST IN BID.

**TRINITY**  
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