



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

ADDENDUM #1

RFQ #7449409

**TITLE: NEW EMERGENCY GENERATOR/MODIFICATION TO
ELECTRICAL DISTRIBUTION SYSTEM**

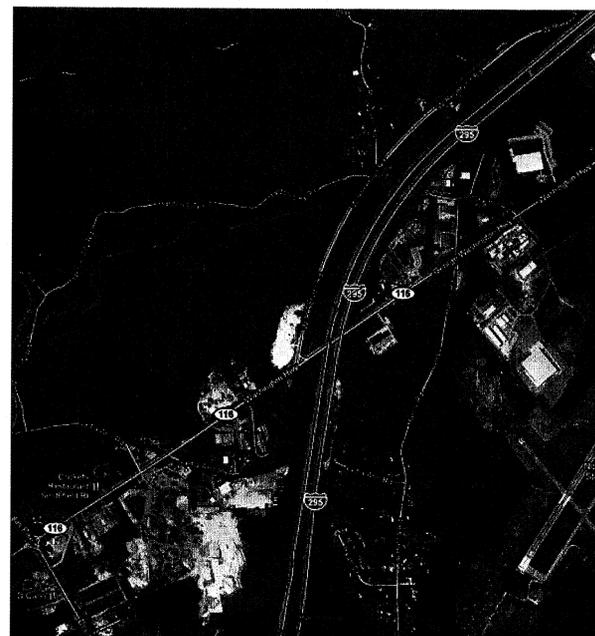
OPENING DATE AND TIME: FEBRUARY 27, 2012 – 11:00 A.M.

Prospective bidders and all concerned are hereby advised of the attached changes/modifications for the above referenced RFQ and are hereby requested to change their copies accordingly.

- Revise location of the new remote annunciator for the generator from the main electrical room, to the corridor adjacent to the existing fire alarm control panel and the fire alarm master box. Extend conduit and wire as indicated on plans to the new location.
- Drawing E-2 attached

**LISA HILL
CHIEF BUYER**

State of Rhode Island Department of Transportation New Generator and Modifications of Electrical Distribution



LOCATION MAP

LIST OF DRAWINGS

T-1	COVER SHEET
E-1	GENERAL NOTES, LEGEND & DETAILS
E-2	POWER DISTRIBUTION SINGLE LINE DIAGRAM AND SCHEDULES
E-3	ELECTRICAL FLOOR PLAN



SITE MAP

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
OCTOBER, 2011

Route 116
Smithfield, Rhode Island

JACOBS™

166 Valley Street
Building 6M, Suite 101
Providence, RI 02909

Voice: 401-272-1969
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SITE UTILITY NOTES

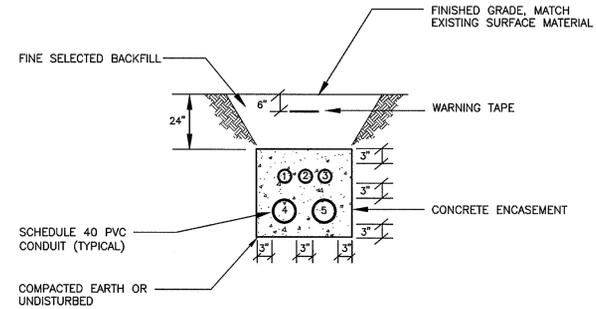
- ALL EXCAVATIONS AND BACKFILL BY THE CONTRACTOR.
- FURNISH & INSTALL ALL GROUNDING, GROUND RODS AND CONNECTORS REQUIRED. INSTALL A COMPLETE GROUND SYSTEM IN ACCORDANCE WITH ALL CODES.
- ALL EMPTY UNDERGROUND CONDUITS SHALL HAVE NYLON PULL-WIRES TO FACILITATE THE PULLING OF CABLES. DUCT BANKS SHALL BE PROVIDED WITH A 6" WIDE METALIZED CONTINUOUS WARNING TAPE INSTALLED 6" BELOW GRADE.
- USE THE ACCEPTABLE METHOD OF PAVEMENT SAW-CUTTING OF THE EXISTING PAVEMENT FOR UTILITY TRENCHING. CONTRACTOR SHALL CAREFULLY SAW TWO PARALLEL 3/8 INCH WIDE BY 1 INCH DEEP CUTS FOR THE WIDTH OF THE REQUIRED UTILITY TRENCH INTO THE EXISTING PAVEMENT SURFACE ENSURING THE LEAST AMOUNT OF DISTURBANCE TO ADJACENT PAVED AREAS ALONG THE OUTER EDGES OF THE TRENCH-LINE.
- LEGALLY DISPOSE OF ALL EXCAVATED ASPHALT BITUMINOUS PAVEMENT AND CONCRETE PAVEMENT MATERIALS AND UNUSED EXCAVATED MATERIAL OFF-SITE AT AN APPROVED LANDFILL.
- UPON COMPLETION OF THE SUBSURFACE EXCAVATION TRENCHING AND UTILITY INSTALLATION, BACKFILL THE TRENCH USING SAME EXCAVATED GRAVEL MATERIAL TO A COMPACTION COMPARABLE TO PRE-EXCAVATED CONDITIONS ACCEPTABLE TO THE ENGINEER.
- REPLACE IN KIND BOTH THE DEPTH AND MATERIAL TYPE AND GRADATION OF HOT MIX ASPHALT TO MATCH THAT OF THE EXCAVATED PAVEMENT MATERIAL. ASPHALT PATCHING OF THE TRENCH SHALL BE PERFORMED AT ONE TIME AND PLACED TO BE FLUSH WITH THE ADJOINING PAVEMENT EDGES ON GRADE AND ELEVATION. SURFACE SHALL BE ROLLED TO ACHIEVE MAXIMUM COMPACTION TO PROHIBIT SETTLEMENT OF THE NEW TRENCH PATCHING.

DEMOLITION NOTES

- EXISTING ELECTRICAL EQUIPMENT INDICATED ON PLANS HAVE BEEN DERIVED FROM BEST AVAILABLE EXISTING INFORMATION AND MUST BE FIELD VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION. EQUIPMENT THAT IS NOT IDENTIFIED AND CONFLICTS WITH CONSTRUCTION SHALL NOT BE DISCONNECTED AND SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER.
- EXISTING ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED SHALL BE REMOVED COMPLETELY INCLUDING WIRING BACK TO EXISTING POWER SOURCE. WHERE WIRING IS TO BE REMOVED, RELOCATED OR RECONNECTED THE CONTRACTOR SHALL PROTECT WIRING FROM DAMAGE. CONTRACTOR SHALL TAKE PRECAUTIONS AND ASSUME THAT WIRING IS ACTIVE. CONTRACTOR TO TEST, VERIFY AND SECURE ALL CIRCUITS BEFORE REMOVAL. UNKNOWN SHALL BE VERIFIED BY THE CONTRACTOR.
- EXISTING EQUIPMENT TO REMAIN SHALL BE PROTECTED FROM DAMAGE AS REQUIRED, DURING THE CONSTRUCTION PERIOD AND LEFT IN GOOD WORKING ORDER, ANY EQUIPMENT DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AT NOT COST TO THE OWNER.
- SYSTEMS THAT ARE REQUIRED TO REMAIN ACTIVE, DURING CONSTRUCTION, SHALL BE TEMPORARILY WIRED TO REMAIN ACTIVE THROUGH OUT THE CONSTRUCTION PERIOD, UNTIL NEW SYSTEMS ARE INSTALLED, TESTED AND ACCEPTED. THE TRANSFER OF EQUIPMENT SHALL BE COORDINATED WITH OWNER.
- ANY DISRUPTION IN ELECTRIC SERVICE SHALL BE COORDINATED WITH THE BUILDING OWNER, PRIOR TO THE DISRUPTION OF SERVICE.
- EXISTING ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

LEGEND

- ELECTRIC PANEL.
- EXISTING DISCONNECT SWITCH.
- EMERGENCY BATTERY UNIT MULE LIGHTING, INC. "MFC SERHES" IZY TUNGSTEN HALOGEN (12W) (E) INDICATES EXISTING.
- ILLUMINATED, SELF CONTAINED, BATTERY EQUIPPED, EXIT SIGN # "MX" SERIES #MXBRU (LED) (E) INDICATES EXISTING.
- FUSED DISCONNECT SWITCH, 30 AMP.W/ 3-30 AMP FUSES, UNLESS OTHERWISE NOTED.
- EXTERIOR, BATTERY EQUIPPED, EMERGENCY LIGHTING UNIT TYPE "A" MULE "EMLED" SERIES-EOE CAT. #EOE-BB-120/277, 15L3 (15W) BRONZE-SB, MOUNT AT 7'-0" AFF.
- WHEN APPLIED TO ANY SYMBOL DENOTES EXISTING ELECTRICAL ITEM TO REMAIN.
- WHEN APPLIED TO ANY SYMBOL DENOTES EXISTING ELECTRICAL ITEM TO BE REMOVED & DISPOSED WITH ALL ASSOCIATED WIRING & COMPONENTS. SEE DEMOLITION NOTE #2.

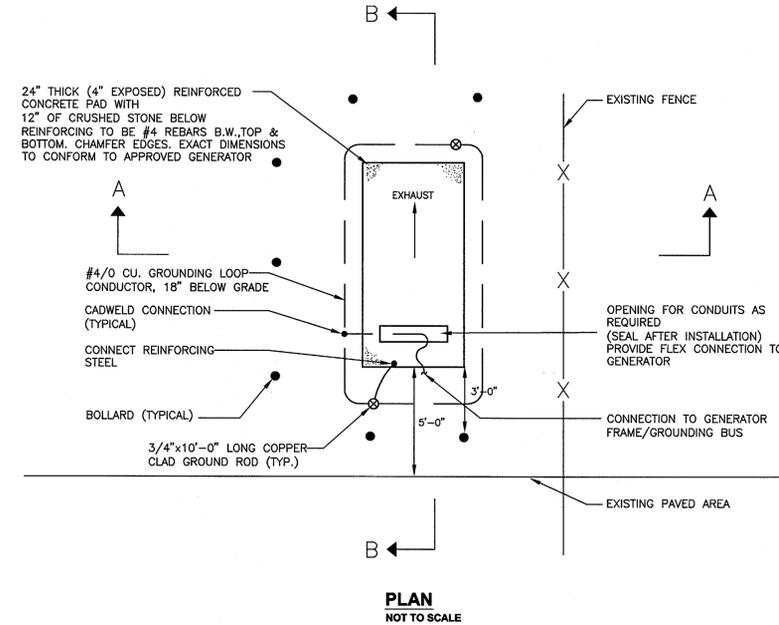


DUCT BANK SCHEDULE	
1	2"C-2#12 & 1/2 EG. BATTERY CHARGER
2	2#10 & 1/2 EG. BLOCK HEATER
2	2"C-28#12 GEN. ANNUNCIATOR
3	2"C-12#12 GEN. CONTROL
4	4"C-SPARE
5	4"C-4#500KCMIL & 1/3 EG TO ATS

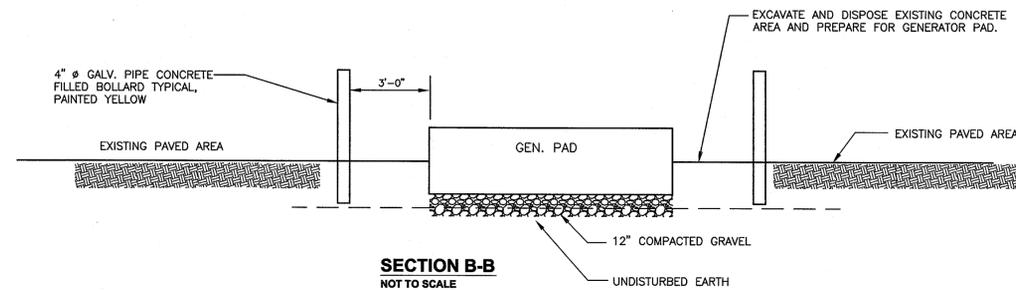
SECTION "A-A"
NOT TO SCALE

GENERAL NOTES

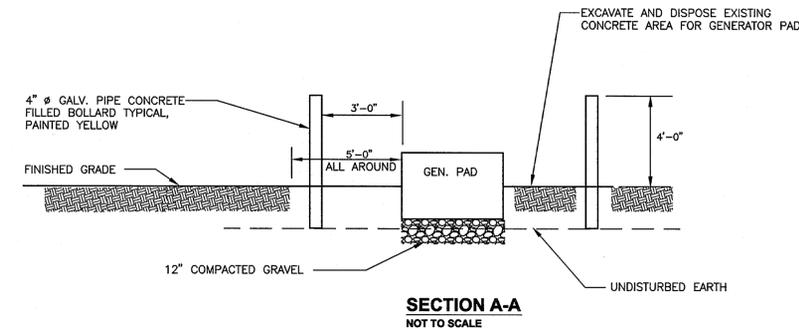
- INSPECT THE SITE. PRIOR TO SUBMITTING HIS BID, AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH THIS WORK WILL BE PERFORMED. FAILURE TO INSPECT EXISTING CONDITIONS OR TO FULLY UNDERSTAND THE WORK WHICH IS REQUIRED SHALL NOT EXCUSE THE CONTRACTOR FROM HIS OBLIGATIONS TO SUPPLY AND INSTALL THE WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND THE DRAWINGS AND UNDER ALL SITE CONDITIONS AS THEY EXIST.
- FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND AS HEREIN SPECIFIED.
- ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.
- THE PLANS DEPICT THE LOCATION OF DEVICES AND ARE INTENDED TO INDICATE THE GENERAL INTENT OF THE WORK IN SCOPE, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK.
- CAREFULLY VERIFY ALL MEASUREMENTS AT THE SITE. DETERMINE THE EXACT LOCATION OF ALL CHASES AND OPENINGS REQUIRED BY HIS WORK AND SHALL FURNISH AND SET ALL SLEEVE, INSERTS AND HANGERS AS REQUIRED FOR THE WORK HEREIN.
- COORDINATE HIS WORK SO THAT IT DOES NOT INTERFERE WITH THE WORK OF OTHER TRADES. IT SHALL BE IN THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT HIS WORK IS INSTALLED IN A TIMELY MANNER.
- PERFORM ALL CUTTING, PATCHING AND FIRE STOPPING FOR ELECTRICAL INSTALLATION.
- ELECTRICAL ARRANGEMENTS/LOCATIONS OF EQUIPMENT SHALL BE VERIFIED WITH ENGINEER.
- ALL WORK SHALL BE NEW, UNLESS OTHERWISE NOTED.
- ALL CIRCUITS TO HAVE A SEPARATE NEUTRALS, DO NOT USE COMMON NEUTRALS.
- ALL WIRING TO BE 3/4"C-3#12, 1#12GND., UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL TEST ALL EXISTING EMERGENCY BATTERY UNITS AND REPLACE BATTERY AND LAMPS WHERE REQUIRED



PLAN
NOT TO SCALE



SECTION B-B
NOT TO SCALE



SECTION A-A
NOT TO SCALE

GENERATOR PAD DETAIL
NOT TO SCALE

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Certification:



Revisions:

No.	Description	Date

Project:

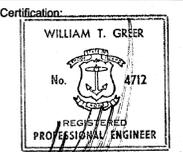
State of Rhode Island
 Department of Transportation
 RT. 116 Smithfield, RI
 New Generator and Modification To
 Existing Electrical Distribution

Drawing Status:

Drawing Title:

**GENERAL NOTES,
LEGEND & DETAILS**

Designed by: D.B.	Date Issued: October 2011
Drawn by: K.L.	Scale: AS NOTED
Checked by: D.B.	Project No.:
Drawing No.:	FW99302



Revisions:

No.	Description	Date

Project:

State of Rhode Island
 Department of Transportation
 RT. 116 Smithfield, RI
 New Generator and Modification To
 Existing Electrical Distribution

Drawing Status:

Drawing Title:
POWER DISTRIBUTION SINGLE-LINE DIAGRAM AND SCHEDULES

Designed by: D.B.	Date issued: October 2011
Drawn by: K.L.	Scale: AS NOTED
Checked by: D.B.	Project No.: FSW99302

EXISTING POWER DISTRIBUTION NOTES

- REMOVE EXISTING DISTRIBUTION PANEL. FURNISH AND INSTALL A NEW DISTRIBUTION PANEL "MDP". INTERCEPT EXISTING CONDUCTORS FEEDING EXISTING LOADS TO REMAIN AND EXTEND TO NEW PANEL.
- REMOVE EXISTING ENCLOSED CIRCUIT BREAKERS AND CONDUIT. EXTEND WIRING TO NEW "MDP". REFEED EXISTING LOADS. REFER TO PANEL SCHEDULE.
- VERIFY LOADS FOR EXISTING ENCLOSED BREAKERS BEFORE REMOVAL AND RECONNECTION TO NEW MDP PANEL.

PANEL: LOCATION: MDP
 VOLTS: 120/208
 PHASE: 3
 WIRE: 4
 SOLID NEUTRAL: YES
 POLE PANEL: 42

SECTION 1

MAIN BREAKER: 400 AMPS
 MAIN BUS: 400
 MOUNTING: SURFACE
 200% NEUTRAL BUS

CIRCUIT DESCRIPTION	BREAKER			φ	BREAKER			CIRCUIT DESCRIPTION
	NO	TRIP	POLE		AMPS	POLE	TRIP	
CONVENIENCE OUTLETS	1	20	1	A	1	20	2	EXISTING LOAD
A/C UNIT	3	20	1	B	1	20	4	A/C UNIT
EXISTING LOAD	5	20	1	C	1	20	6	UNIT HEAT
	7	15	3	A	3	15	8	CONDENSATE PUMP
	9	-	-	B	-	-	10	
	11	-	-	C	-	-	12	
OIL BURNER	13	20	3	A	3	20	14	WATER HEATER
	15	-	-	B	-	-	16	
	17	-	-	C	-	-	18	
SPARE	19	50	3	A	3	70	20	AIR COMPRESSOR
	21	-	-	B	-	-	22	
	23	-	-	C	-	-	24	
PANEL P4	25	125	3	A	3	125	26	PANEL P5
	27	-	-	B	-	-	28	
	29	-	-	C	-	-	30	
PANEL P1	31	125	3	A	3	150	32	PANEL LP1
	33	-	-	B	-	-	34	
	35	-	-	C	-	-	36	
PANEL P3	37	150	3	A	3	175	38	PANEL P4
	39	-	-	B	-	-	40	
	41	-	-	C	-	-	42	

EXISTING MAIN DISTRIBUTION PANEL

SCHEDULE OF CIRCUIT BREAKERS

POLES/AMPS	LOAD SERVED
1P/20A	CONVENIENCE OUTLETS
1P/20A	A/C UNIT
1P/20A	A/C UNIT
1P/20A	NOT IN USE
1P/20A	UNIT HEAT
3P/15A	CONDENSATE PUMP
3P/20A	OIL BURNER
3P/50A	WATER HEATER
3P/50A	SPARE
3P/70A	AIR COMPRESSOR
3P/125A	PANEL P4
3P/125A	PANEL P5
3P/125A	PANEL P1
3P/150A	PANEL LP1
3P/150A	PANEL P3
3P/175A	PANEL P4

EXISTING EQUIPMENT/ CIRCUITS INDICATED IN SCHEDULE ARE TO BE REFEED FROM NEW MDP PANEL. REFER TO SCHEDULE.

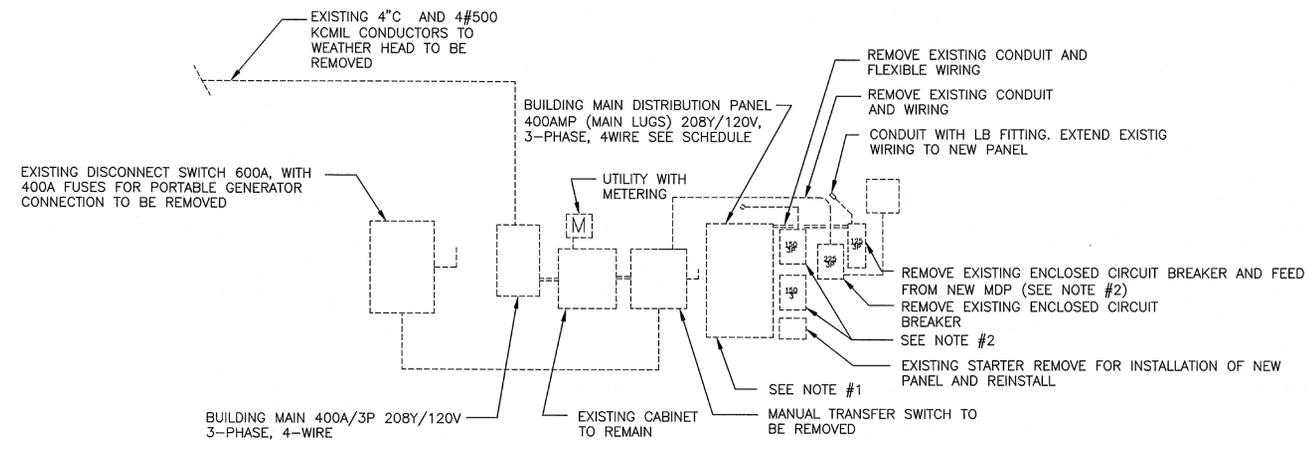
PANEL: LOCATION: MDP
 VOLTS: 120/208
 PHASE: 3
 WIRE: 4
 SOLID NEUTRAL: YES
 POLE PANEL: 42

SECTION 2

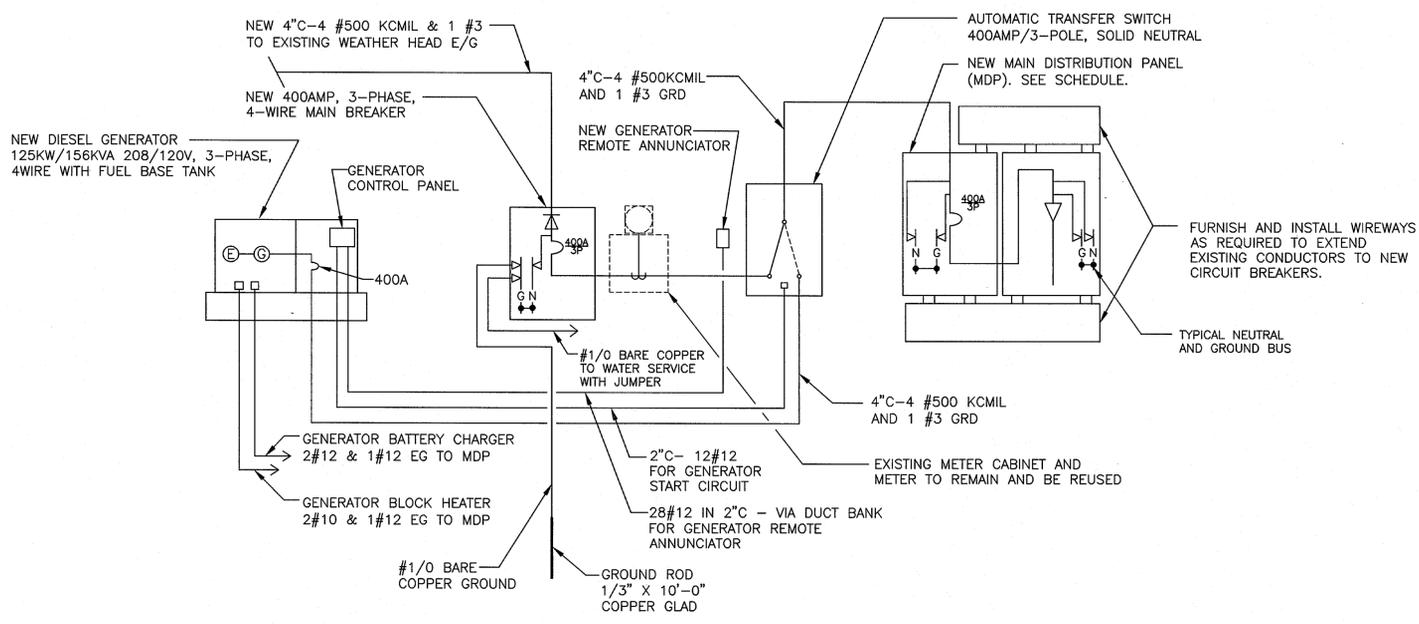
MAIN LUGS: 400 AMP
 MAIN BUS: 400A
 MOUNTING: SURFACE
 200% NEUTRAL BUS

CIRCUIT DESCRIPTION	BREAKER			φ	BREAKER			CIRCUIT DESCRIPTION
	NO	TRIP	POLE		AMPS	POLE	TRIP	
EXISTING ENCLOSED C.B.	1	150	3	A	3	150	2	EXISTING ENCLOSED C.B.
	3	-	-	B	-	-	4	
	5	-	-	C	-	-	6	
EXISTING ENCLOSED C.B.	7	125	3	A	3	-	8	SPACE
	9	-	-	B	-	-	10	
	11	-	-	C	-	-	12	
SPACE	13	-	3	A	3	-	14	SPACE
	15	-	-	B	-	-	16	
	17	-	-	C	-	-	18	
GENERATOR BATTERY CHARGER	19	20	1	.50	A	1.2	20	20
SPARE	21	20	1	B	1	20	22	SPARE
	23	20	1	C	1	20	24	
	25	20	1	A	1	20	26	
	27	20	1	B	1	20	28	
	29	-	-	C	-	-	30	
SPACE	31	-	-	A	-	-	32	
	33	-	-	B	-	-	34	
	35	-	-	C	-	-	36	
	37	-	-	A	-	-	38	
	39	-	-	B	-	-	40	
	41	-	-	C	-	-	42	

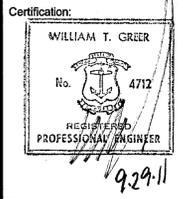
* EXISTING LOADS BEING FED FROM ENCLOSED BREAKERS. ENCLOSED BREAKERS ARE TO BE REMOVED AND FED FROM NEW CIRCUIT BREAKERS IN "MDP". EXTEND EXISTING WIRING TO NEW PANEL.



EXISTING POWER DISTRIBUTION SYSTEM - SINGLE LINE DIAGRAM
 NOT TO SCALE



NEW POWER DISTRIBUTION SYSTEM SINGLE LINE DIAGRAM
 NOT TO SCALE



Revisions:

No.	Description	Date

Project:

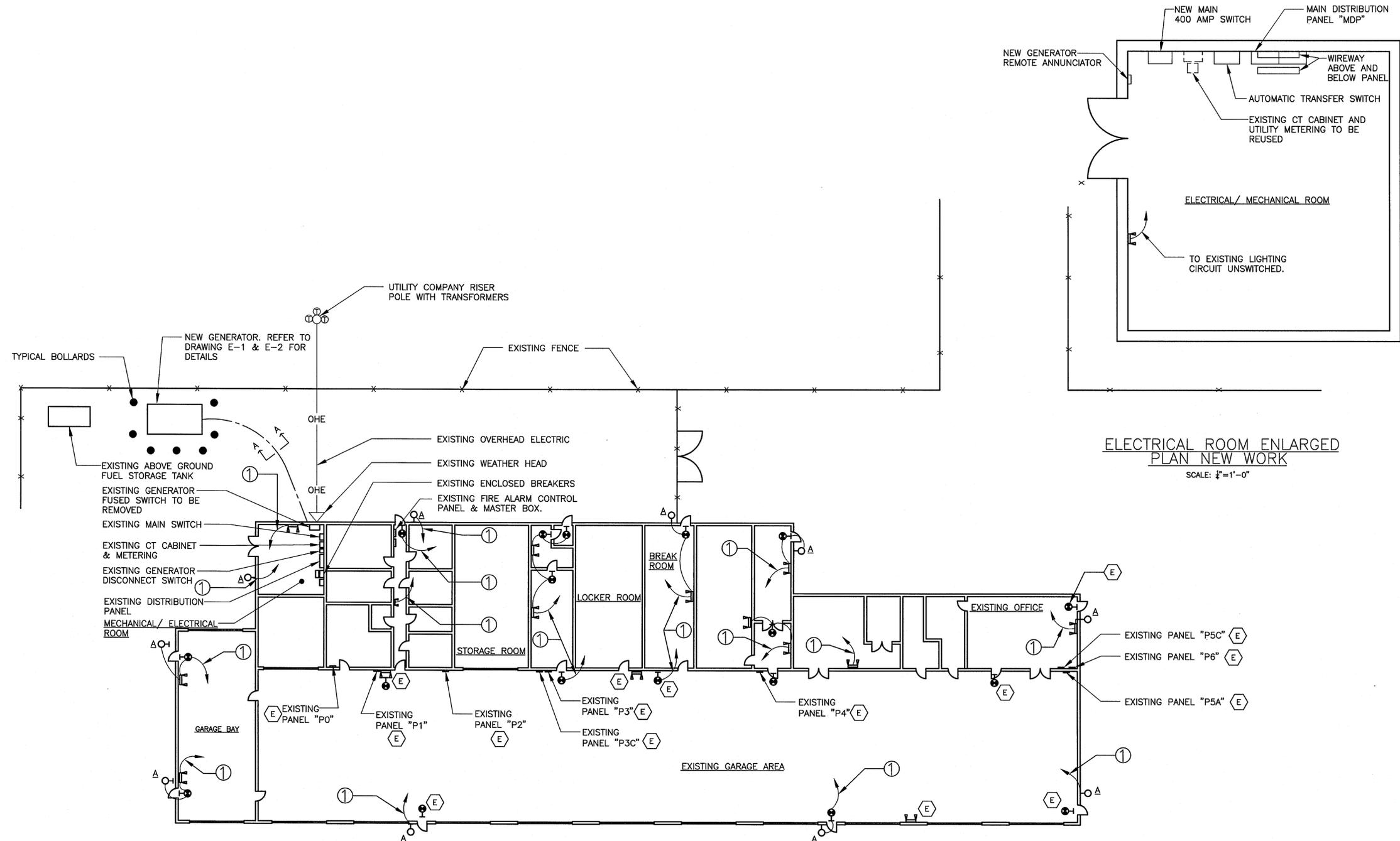
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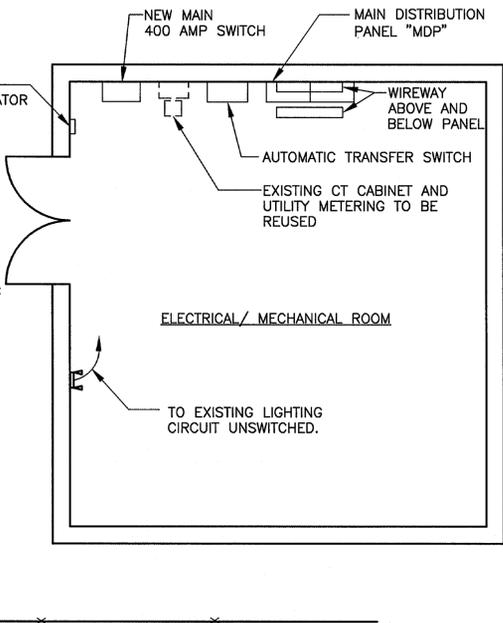
Drawing Title:

ELECTRICAL FLOOR PLAN

Designed by: D.B.	Date Issued: October 2011
Drawn by: K.L.	Scale: AS NOTED
Checked by: D.B.	Project No.: FSW99302
Drawing No.:	



FLOOR PLAN
 SCALE: 1/16" = 1'-0"



ELECTRICAL ROOM ENLARGED
PLAN NEW WORK
 SCALE: 1/4" = 1'-0"

DRAWING KEY NOTES:

① CONNECT TO EXISTING NEAREST 120V LIGHTING CIRCUIT UNSWITCHED. 2 #12 & 1 #12 EG.