UTAH ARMY NATIONAL GUARD
PROJECT JUPITER
GENERATOR ADDITION

SALT LAKE CITY, UTAH
CONSTRUCTION DOCUMENTS
DATE: 2008-05-20

STATE OF UTAH
DEPARTMENT OF ADMINISTRATIVE SERVICES
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
4110 State Office Building / Salt Lake City, Utah 84114 / 801.538.3018 / www.dfcm.state.ut.us

DFCM PROJECT NO. 06295480

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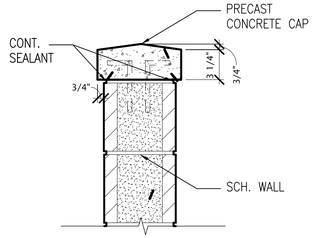
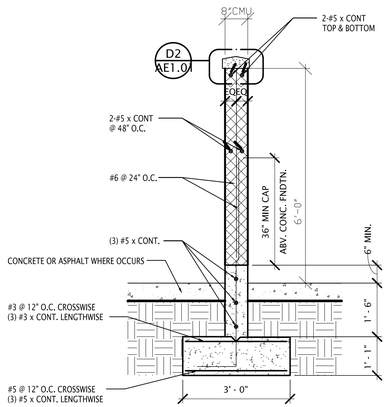
SHEET INDEX



PRECAST CONCRETE CAP DETAIL

SCALE: 1 1/2" = 1'-0"

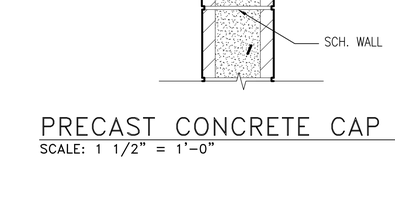
D2 / AE1.01



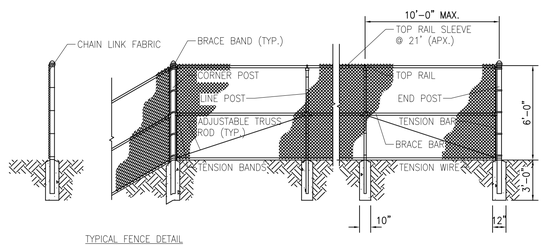
FLOOR PLAN

SCALE: 1/2" = 1'-0"

B2 / AE1.01



TYPICAL GATE DETAIL

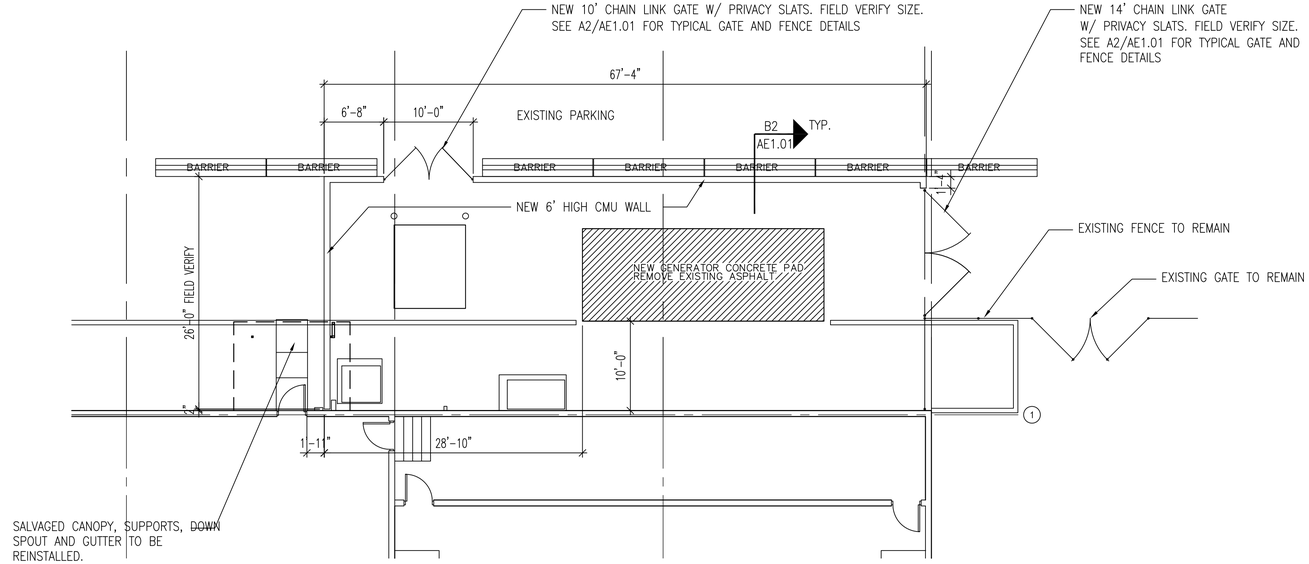


TYPICAL FENCE DETAIL

FENCE AND GATE DETAILS

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

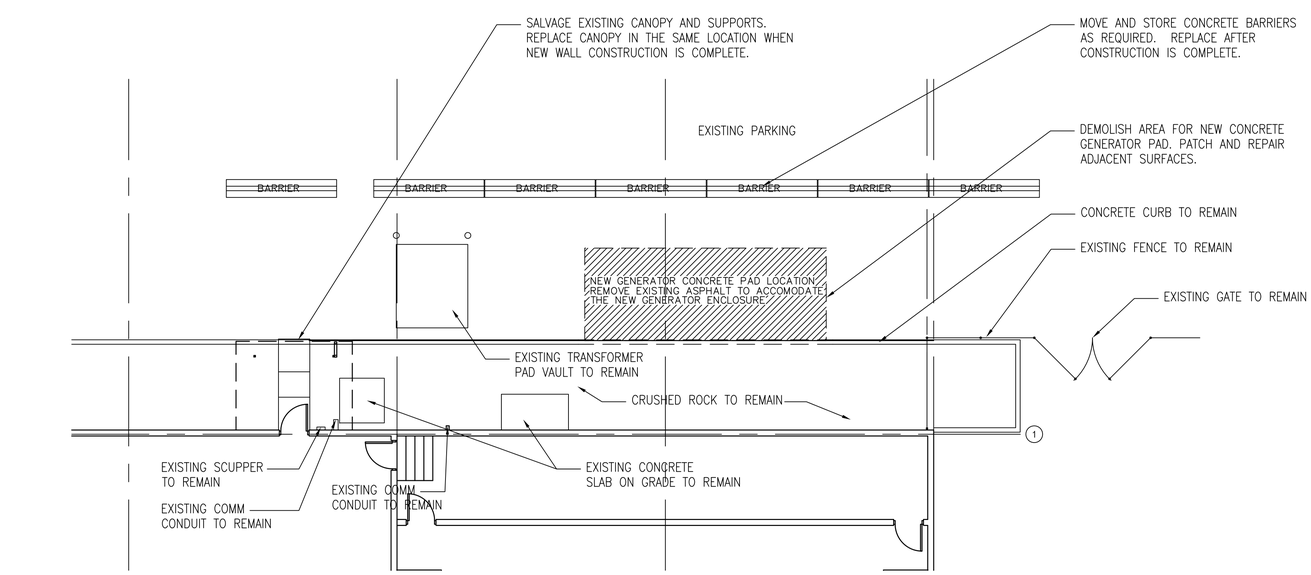
A2 / AE1.01



FLOOR PLAN

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

A3 / AE1.01



SITE DEMO PLAN

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

A3 / AE1.01

NOTE:
COORDINATE ALL DEMOLITION AND NEW CONSTRUCTION WITH ELECTRICAL AND STRUCTURAL PLANS

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STATE OF UTAH · MICHAEL JOHN STANSFIELD · 116302 · LICENSED ARCHITECT

JUPITER GENERATOR ADDITION

MARK	DATE	DESCRIPTION
5		
4		
3		
2		
1		

ISSUE:
DATE: 5/20/08

PROJECT NO:
DRAWN BY: TK
CHECKED BY: MK
DESIGNED BY: TK
RECORD DRAWING DATE:

SIGNATURE:

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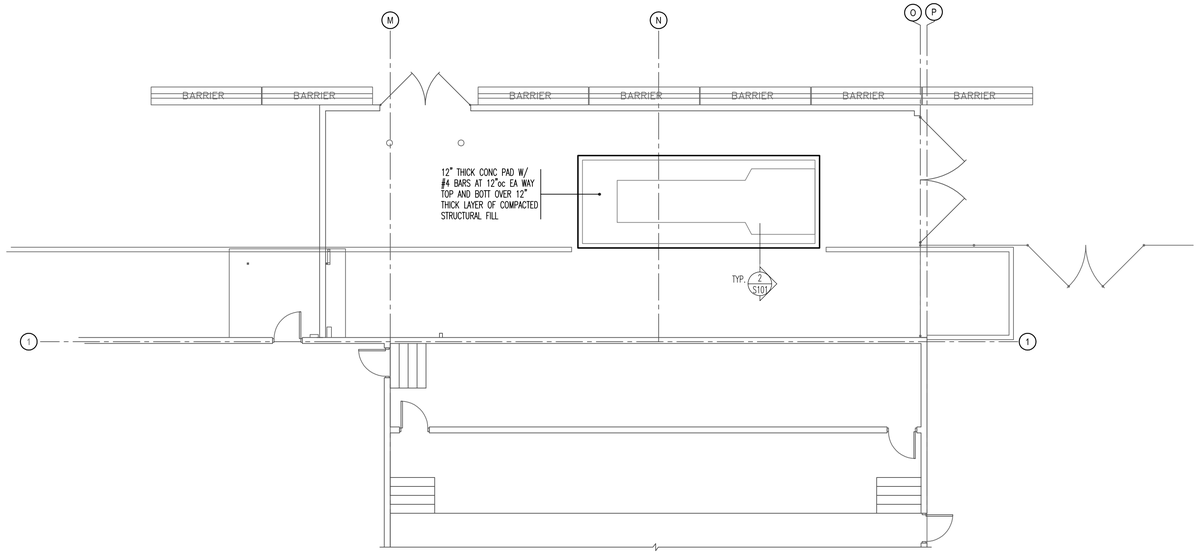
SHEET TITLE
ARCHITECTURAL SITE PLAN

AE101

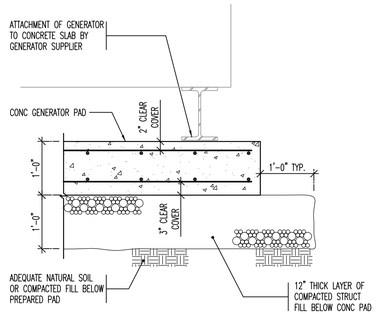


1 GENERATOR PAD PLAN

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

GENERATOR PAD PLAN NOTES:

1. REMOVE ALL INADEQUATE SOILS BELOW GENERATOR PAD AND REPLACE WITH STRUCTURAL FILL. SEE SOILS REPORT FOR ADEQUATE SOIL PROPERTIES.
2. PROVIDE DCI CORROSION INHIBITING ADMIXTURE BY GRACE CONSTRUCTION PRODUCTS OR APPROVED EQUAL IN GENERATOR PAD CONCRETE. DOSAGE RATE OF .3 GALLONS PER CUBIC YARD.
3. COORDINATE PLAN DIMENSIONS OF CONCRETE PAD WITH GENERATOR SUPPLIER.
4. IF GENERATOR SET DOES NOT HAVE EFFECTIVE VIBRATION ISOLATION EQUIPMENT THE MASS OF THE FOUNDATION MUST BE INCREASED. THIS MASS CAN BE ATTAINED BY MAKING THE FOUNDATION 24" THICK.



2 TYPICAL GENERATOR PAD DETAIL

NO SCALE

28119S101

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JUPITER GENERATOR ADDITION

MARK	DATE	DESCRIPTION
5		
4		
3		
2		
1		

ISSUE:
DATE:

PROJECT NO:
DRAWN BY: BDR
CHECKED BY: ML
DESIGNED BY: ML
RECORD DRAWING DATE:
SIGNATURE:

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SHEET TITLE
GENERATOR PAD PLAN

S101

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CONDUCTOR AND CONDUIT SCHEDULE

(**) SCHEDULE NUMBER
SUBSCRIPT (NOTE 5) (E.G.) (5)IG

SYM	AMP	CONDUIT SIZE	CONDUCTOR(NOTE 1) QTY	SIZE	G	IG	SE	NOTES
1	20	.75	2	12	12	12	8	2
2	20	.75	3	12	12	12	8	2,3
3	20	.75	4	12	12	12	8	2,3
4	30	.75	2	10	10	10	8	2
5	30	.75	3	10	10	10	8	2
6	30	.75	4	10	10	10	8	2
7	40	1	2	8	10	8	6	2
8	40	1	3	8	10	8	6	2
9	40	1	4	8	10	8	6	2
10	55	1	2	6	10	8	4	2
11	55	1	3	6	10	8	4	2
12	55	1.25	4	6	10	8	4	2
13	70	1	2	4	8	4	2	2
14	70	1.25	3	4	8	4	2	2
15	70	1.25	4	4	8	4	2	2
16	85	1.25	2	3	8	3	2	2
17	85	1.25	3	3	8	3	2	2
18	85	1.25	4	3	8	3	2	2
19	95	1.25	3	2	8	2	2	2
20	95	1.50	4	2	8	2	2	2
21	130	1.50	3	1	6	2	2	2
22	130	1.50	4	1	6	2	2	2
23	150	2	3	1/0	6	2	1/0	2
24	150	2	4	1/0	6	2	1/0	2
25	175	2	3	2/0	6	2	2/0	2
26	175	2	4	2/0	6	2	2/0	2
27	200	2	3	3/0	6	2	2/0	2
28	200	2.50	4	3/0	6	2	2/0	2
29	230	2.50	3	4/0	4	2	2/0	2
30	230	2.50	4	4/0	4	2	2/0	2
31	255	2.50	3	250	4	1	2/0	2
32	255	2.50	4	250	4	1	2/0	2
33	310	3	3	350	3	1/0	3/0	2
34	310	3	4	350	3	1/0	3/0	2
35	380	3.50	3	500	3	3/0	3/0	2
36	380	4	4	500	3	3/0	3/0	2
37	400	2 EA 2	3	3/0	3	3/0	3/0	2
38	400	2 EA 2.50	4	3/0	3	3/0	3/0	2
39	510	2 EA 2.50	3	250	1	4/0	3/0	2
40	510	2 EA 3	4	250	1	4/0	3/0	2
41	620	2 EA 3	3	350	1/0	4/0	3/0	2,4
42	620	2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
44	760	2 EA 4	4	500	1/0	4/0	3/0	2,4
45	855	3 EA 3	3	300	2/0	4/0	3/0	2,4
46	855	3 EA 3	4	300	2/0	4/0	3/0	2,4
47	1000	3 EA 3.50	3	400	2/0	4/0	3/0	4
48	1000	3 EA 3.50	4	400	2/0	4/0	3/0	4
49	1140	3 EA 4	3	500	3/0	4/0	3/0	4
50	1140	3 EA 4	4	500	3/0	4/0	3/0	4
51	1240	4 EA 3	3	350	3/0	4/0	3/0	4
52	1240	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	5 EA 3.50	4	400	4/0	4/0	4/0	4
54	2010	6 EA 3.50	4	400	250	250	250	4
55	2660	7 EA 4	4	500	350	350	350	4
56	3040	8 EA 4	4	500	500	500	500	4
57	4180	11 EA 4	4	500	500	500	500	4
58		5 EA 4						6
59		5						6
60		7 EA 4						6

CONDUCTOR AND CONDUIT SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.
2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
5. WHEN SYMBOL SUBSCRIPT INDICATES "IG", INCLUDE "IG" OR INSULATED GROUND CONDUCTOR SCHEDULED ALONG WITH GROUND OR EQUIPMENT GROUND CONDUCTOR. WHEN SYMBOL SUBSCRIPT INDICATES "SE", SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEMS.
6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
REFERENCE AND LINE SYMBOLS	
A5 / E-501	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
A5 / E-201	ELEVATION OR SECTION INDICATOR, EXTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
A5 / E-201	ELEVATION OR SECTION INDICATOR, INTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
100	ROOM OR SPACE NUMBER.
1	KEYNOTE INDICATOR.
1	REVISION INDICATOR.
CU-1	EQUIPMENT INDICATOR.
	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING.
	BREAK, ROUND.
	NEW LINE: MEDIUM LINE.
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE.
	EXISTING TO REMAIN LINE: THIN LINE.
	DEMOLITION LINE: DASHED, MEDIUM LINE.
	PROPERTY LINE: DASHED, WIDE LINE.
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE.
WIRING METHODS	
	WIRING.
A-1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
1 A-1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT SCHEDULE. FOR BRANCH WIRING USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
1	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE-LINE DIAGRAM.
	JUNCTION BOX.
	CABLE TRAY: WIRE-BASKET TYPE (BLACK FINISH).
	CABLE TRAY: WIRE-BASKET TYPE (RED FINISH).
LIGHTING (REFER TO FIXTURE SCHEDULE FOR SYMBOLS)	
(W-3)	FIXTURE IDENTIFICATION: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
(W-3)	FIXTURE IDENTIFICATION, EMERGENCY WITH BATTERY PACK, CONNECTED TO GENERATOR AS INDICATED: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
EM	EMERGENCY.
NL	NIGHT LIGHT: DO NOT SWITCH.
WIRING DEVICES	
	RECEPTACLE, DUPLEX, CONNECTED TO UPS: NEMA 5-20R.
W	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WET LABEL, "WEATHERPROOF IN USE": NEMA 5-20R.
	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
PP#	POWER POLE. "#" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN SECTION 16140 FOR CONFIGURATION AND DEVICES.
X $	SWITCH, SINGLE POLE ("x" INDICATES FIXTURES CONTROLLED).
X $3	SWITCH, THREE-WAY ("x" INDICATES FIXTURES CONTROLLED).
	OCCUPANCY SENSOR, DUAL TECHNOLOGY, CEILING.
SP	OCCUPANCY SENSOR, POWER PACK.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
ELECTRICAL POWER AND DISTRIBUTION	
	FUSE WITH RATING (ONE-LINE DIAGRAM).
	DISCONNECT, FUSED (ONE-LINE DIAGRAM).
	DISCONNECT, NONFUSED (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
MCP	CIRCUIT BREAKER, MOTOR CIRCUIT PROTECTION (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, SOLID STATE (ONE-LINE DIAGRAM).
GFP	CIRCUIT BREAKER, SOLID STATE WITH GROUND FAULT PROTECTION (ONE-LINE DIAGRAM).
	TRANSFORMER (ONE-LINE DIAGRAM).
225/3 "1H"	PANELBOARD WITH MAIN LUGS ONLY. BUS SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
225/3 "1H"	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).
DMM	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).
	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM).
G	GENERATOR, POWER (ONE-LINE DIAGRAM).
M	METER.
	DISCONNECT SWITCH, FUSED.
	DISCONNECT SWITCH, UNFUSED.
	STARTER, COMBINATION WITH DISCONNECT SWITCH.
	STARTER OR MOTOR CONTROLLER.
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
DP#__	DISTRIBUTION PANEL OR SWITCHBOARD.
75	TRANSFORMER: NUMBER INDICATES kVA.
	BYPASS-ISOLATION TYPE, AUTOMATIC TRANSFER SWITCH (ONE-LINE DIAGRAM).
	GROUND BUS BAR.
FIRE ALARM	
FSA	FIRE SYSTEM ANNUNCIATOR.
FCP	FIRE ALARM CONTROL PANEL, SEMI-RECESSED.
CM	CONTROL MODULE.
MM	MONITOR MODULE.
P	FIRE ALARM MANUAL PULL STATION.
R	SHUT DOWN RELAY: INSTALL RELAY IN CONTROL CIRCUIT OF EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A FIRE.
	DETECTOR, SMOKE, DUCT WITH HOUSING AND SAMPLING TUBE.
	ALARM, HORN/STROBE, ONE ASSEMBLY.
75	ALARM, HORN/STROBE, ONE ASSEMBLY. SUBSCRIPT INDICATES CANDELA RATING.
FSD	FIRE AND SMOKE DAMPER.
EPO	EMERGENCY POWER OFF (EPO) SWITCH PUSHBUTTON.

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

1P	SINGLE POLE	KV	KILOVOLT
1PH	SINGLE-PHASE	KVA	KILOVOLT AMPERE
1WAY	ONE-WAY	kVAR	KILOVOLT AMPERE REACTIVE
2/C	TWO-CONDUCTOR	kW	KILOWATT
2WAY	TWO-WAY	kWh	KILOWATT HOUR
3/C	THREE-CONDUCTOR	LED	LIGHT EMITTING DIODE
3PH	THREE-PHASE	LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
3WAY	THREE-WAY	LFNC	LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
4OUT	QUADRUPLE RECEPTACLE OUTLET	LPS	LOW PRESSURE SODIUM
4PDT	FOUR-POLE DOUBLE THROW	LRA	LOCKED ROTOR AMPS
4PST	FOUR-POLE SINGLE THROW	LTG	LIGHTING
4W	FOUR-WIRE	LV	LOW VOLTAGE
4WAY	FOUR-WAY	MATV	MASTER ANTENNA TELEVISION SYSTEM
A	ABOVE COUNTER	MAX	MAXIMUM
AC	ARMORED CABLE	MC	METAL CLAD
ADA	AMERICANS WITH DISABILITIES ACT	MCA	MINIMUM CIRCUIT AMPS
ADJ	ADJACENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AFG	ABOVE FINISHED GRADE	MCP	MOTOR CIRCUIT PROTECTION
AIC	AMPERE INTERRUPTING CAPACITY	MDP	MAIN DISTRIBUTION PANEL
ALUM	ALUMINUM	MG	MOTOR GENERATOR
AMP	AMPERE	MH	MANHOLE
ANN	ANNUNCIATOR	MIN	MINIMUM
AP	ACCESS POINT (WIRELESS DATA)	MLO	MAIN LUGS ONLY
AR	AS REQUIRED	MOCP	MAXIMUM OVERCURRENT PROTECTION
ASC	AMPS SHORT CIRCUIT	NA	NOT APPLICABLE
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED
AV	AUDIO VISUAL	NEC	NATIONAL ELECTRICAL CODE
AWG	AMERICAN WIRE GAGE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
BB XFMR	BUCK-BOOST TRANSFORMER	NFC	NATIONAL FIRE CODE
C	CEILING MOUNTED	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CATV	COMMUNITY ANTENNA TELEVISION	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	NL	NIGHT LIGHT
CCBA	CUSTOM COLOR AS SELECTED BY ARCHITECT	NO	NORMALLY OPEN
CCTV	CLOSED CIRCUIT TELEVISION	NTS	NOT TO SCALE
CFBA	CUSTOM FINISH AS SELECTED BY ARCHITECT	OC	ON CENTER
CF/CI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED	OCP	OVER CURRENT PROTECTION
CF/OI	CONTRACTOR FURNISHED/ OWNER INSTALLED	OF/CI	OWNER FURNISHED/ CONTRACTOR INSTALLED
CKT	CIRCUIT	OF/OI	OWNER FURNISHED/ OWNER INSTALLED
CM	CONSTRUCTION MANAGER	OFP	OBTAIN FROM PLANS
CND	CONDUIT	OH DR	OVERHEAD (COILING) DOOR
CO	CONVENIENCE OUTLET	OL	OVERLOAD
COR	CONTRACTING OFFICER'S REPRESENTATIVE	PB	PUSHBUTTON
CP	CONTROL PANEL	PF	POWER FACTOR
CT	CURRENT TRANSFORMER	PH	PHASE
CTV	CABLE TELEVISION	PNL	PANEL
CU	COPPER	PT	POTENTIAL TRANSFORMER
dBA	UNIT OF SOUND LEVEL	PTZ	PAN/TILT/ZOOM
DPDT	DOUBLE POLE DOUBLE THROW	QTY	QUANTITY
DS	DISCONNECT SWITCH	R	REMOVE
EA	EACH	RCP	REFLECTED CEILING PLAN
EM	EMERGENCY	RMC	RIGID METAL CONDUIT
EMT	ELECTRICAL METALLIC TUBING	RMP	ROCKY MOUNTAIN POWER
ENT	ELECTRICAL NONMETALLIC TUBING	RNC	RIGID NONMETALLIC CONDUIT
EPO	EMERGENCY POWER OFF	RPM	REVOLUTIONS PER MINUTE
EQUIP	EQUIPMENT	RR	REMOVE AND RELOCATE
EXIST	EXISTING	SCA	SHORT CIRCUIT AMPS
F	FURNITURE MOUNTED	SCBA	STANDARD COLOR AS SELECTED BY ARCHITECT
FA	FIRE ALARM	SF	SQUARE FOOT (FEET)
FCP	FIRE ALARM CONTROL PANEL	SFBA	STANDARD FINISH AS SELECTED BY ARCHITECT
FLA	FULL LOAD AMPS	SPDT	SINGLE POLE, DOUBLE THROW
FMC	FLEXIBLE METALCONDUIT	SPEC	SPECIFICATION
FOB	FREIGHT ON BOARD	SPST	SINGLE POLE, SINGLE THROW
FVNR	FULL VOLTAGE NON-REVERSING	S/S	START/STOP
FVR	FULL VOLTAGE REVERSING	ST	SINGLE THROW
G	GROUND	SWBD	SWITCHBOARD
GEN	GENERATOR	SWGR	SWITCHGEAR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TL	TWIST LOCK
GFP	GROUND FAULT PROTECTION	TP	TELEPHONE POLE
HD	HEAVY DUTY	TP	TWISTED PAIR
HID	HIGH INTENSITY DISCHARGE	TTB	TELEPHONE TERMINAL BOARD
HOA	HAND-OFF-AUTOMATIC	TV	TELEVISION
HP	HORSE POWER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
HPF	HIGH POWER FACTOR	TYP	TYPICAL
HPS	HIGH PRESSURE SODIUM	UF	UNDERFLOOR
HV	HIGH VOLTAGE	UGND	UNDERGROUND
HZ	HERTZ	UPS	UNINTERRUPTIBLE POWER SUPPLY
IG	ISOLATED GROUND	V	VOLTS
IMC	INTERMEDIATE METAL CONDUIT	VA	VOLT AMPERE
IN/IS	INSULATED/ISOLATED	VFC	VARIABLE FREQUENCY CONTROLLER
I/O	INPUT/OUTPUT	W/	WITH
IR	INFRARED	W/O	WITHOUT
J-BOX	JUNCTION BOX	WP	WEATHERPROOF
		XFMR	TRANSFORMER

GENERAL ELECTRICAL NOTES

1. CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.
2. OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.
   - 2.1. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.
   - 2.2. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.
   - 2.3. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.
3. EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.
4. SUBMITTALS: PROVIDE SUBMITTALS IN THREE RING BINDERS WITH JOB NAME, SUBCONTRACTOR, AND VOLUME ON THE BINDING. PREPARE TABS FOR EACH SPECIFICATION SECTION REQUIRING SUBMITTALS. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.
5. REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...

ELECTRICAL SHEET INDEX

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JUPITER GENERATOR ADDITION

SHEET TITLE
SYMBOL LEGEND & SHEET INDEX

EE001

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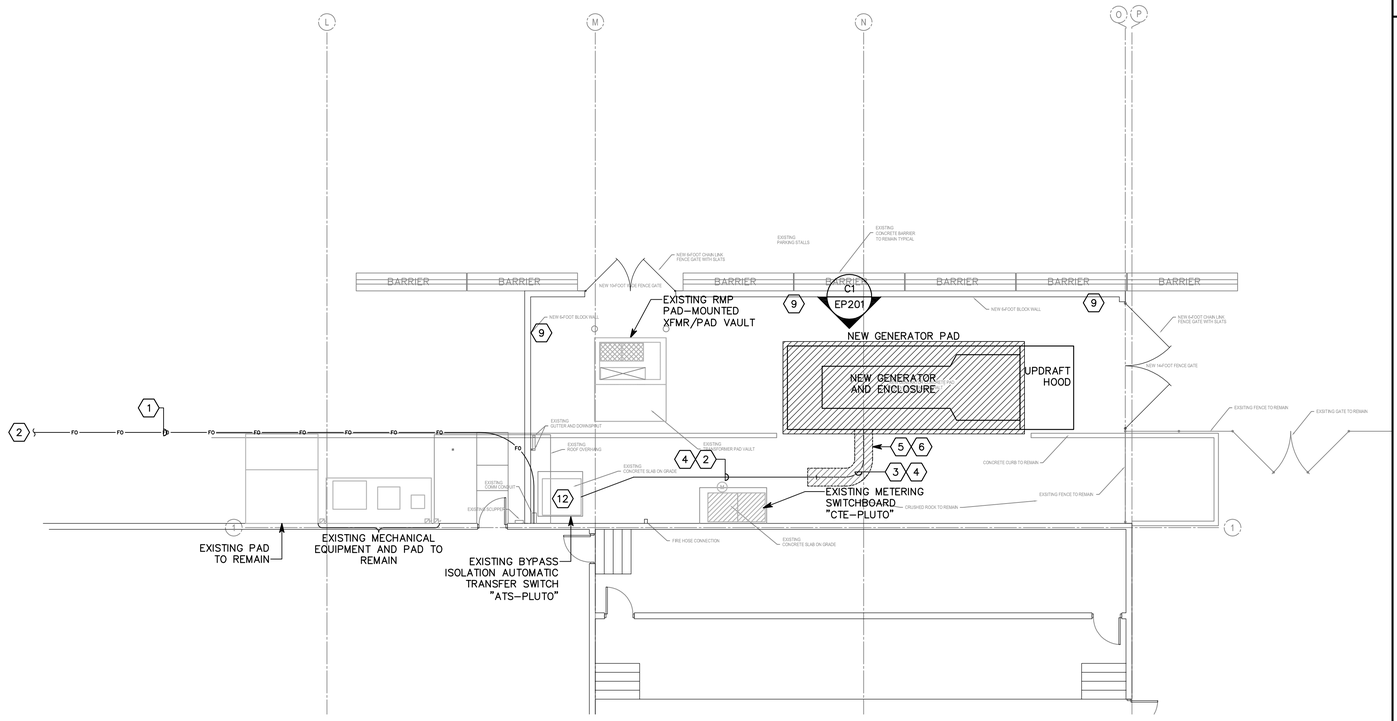
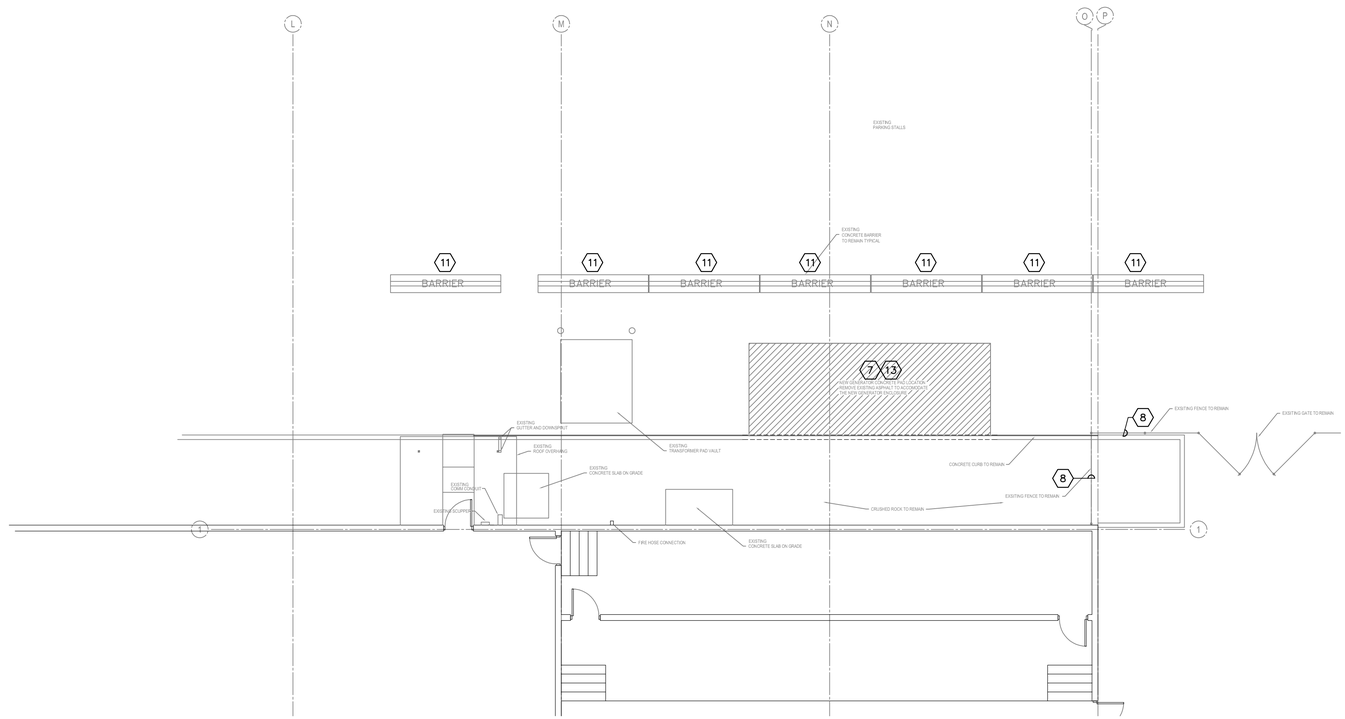


C2 ELECTRICAL EQUIPMENT YARD PLAN

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



A2 ELECTRICAL DEMOLITION EQUIPMENT YARD PLAN

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

SHEET KEYNOTES

1. EXISTING UNDERGROUND FIBER OPTIC LINE.
2. EXISTING CONDUIT STUBS UNDERGROUND. INTERCEPT CONDUITS AND EXTEND TO GENERATOR CONNECTION POINT. FIELD VERIFY EXACT LOCATION OF EXISTING CONDUIT STUBS.
3. NEW UNDERGROUND CONDUITS. SEE ON-LINE DIAGRAM.
4. PROVIDE NEW CONDUCTORS AS SHOWN ON THE ONE-LINE DIAGRAM.
5. REMOVE EXISTING ASPHALT CRUSHED ROCK AND CURBING TO TRENCH AS REQUIRED TO EXTEND FEEDER CONDUITS TO THE GENERATOR.
6. REPAIR ASPHALT, CURBING AND CRUSHED ROCK BACK TO ITS ORIGINAL CONDITION. SEE ARCHITECTURAL.
7. REMOVE EXISTING CONCRETE CURBING AND ASPHALT IN THIS AREA TO ACCOMMODATE THE GENERATOR PAD. EXCAVATE TO BELOW GRADE FOR PAD AND BASE. SEE STRUCTURAL.
8. EXISTING FENCE TO REMAIN.
9. PROVIDE NEW 6-FOOT TALL BLOCK WALL AND CHAIN LINK GATES WITH PRIVACY SLATS. SEE ARCHITECTURAL.
10. NOT USED.
11. REMOVE EXISTING CONCRETE BARRIERS DURING CONSTRUCTION AND REPLACE ON THE OUTSIDE OF THE FENCE ONCE CONSTRUCTION OF THE FENCE AND GATES IS COMPLETE. SEE ARCHITECTURAL.
12. EXISTING ATS IS TYPE GE ZENITH CONTROLS ZBTS/ZBTSD SERIES ENTELLISWITCH MX250. COORDINATE REQUIREMENTS FOR CONNECTION TO EQUIPMENT WITH EXISTING CONDITIONS AND MANUFACTURER.
13. PROVIDE NEW REINFORCED CONCRETE PAD. COORDINATE ACTUAL REQUIRED SIZE WITH GENERATOR MANUFACTURER'S PUBLISHED DATA.

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SHEET TITLE
ELECTRICAL EQUIPMENT YARD PLANS

EP101

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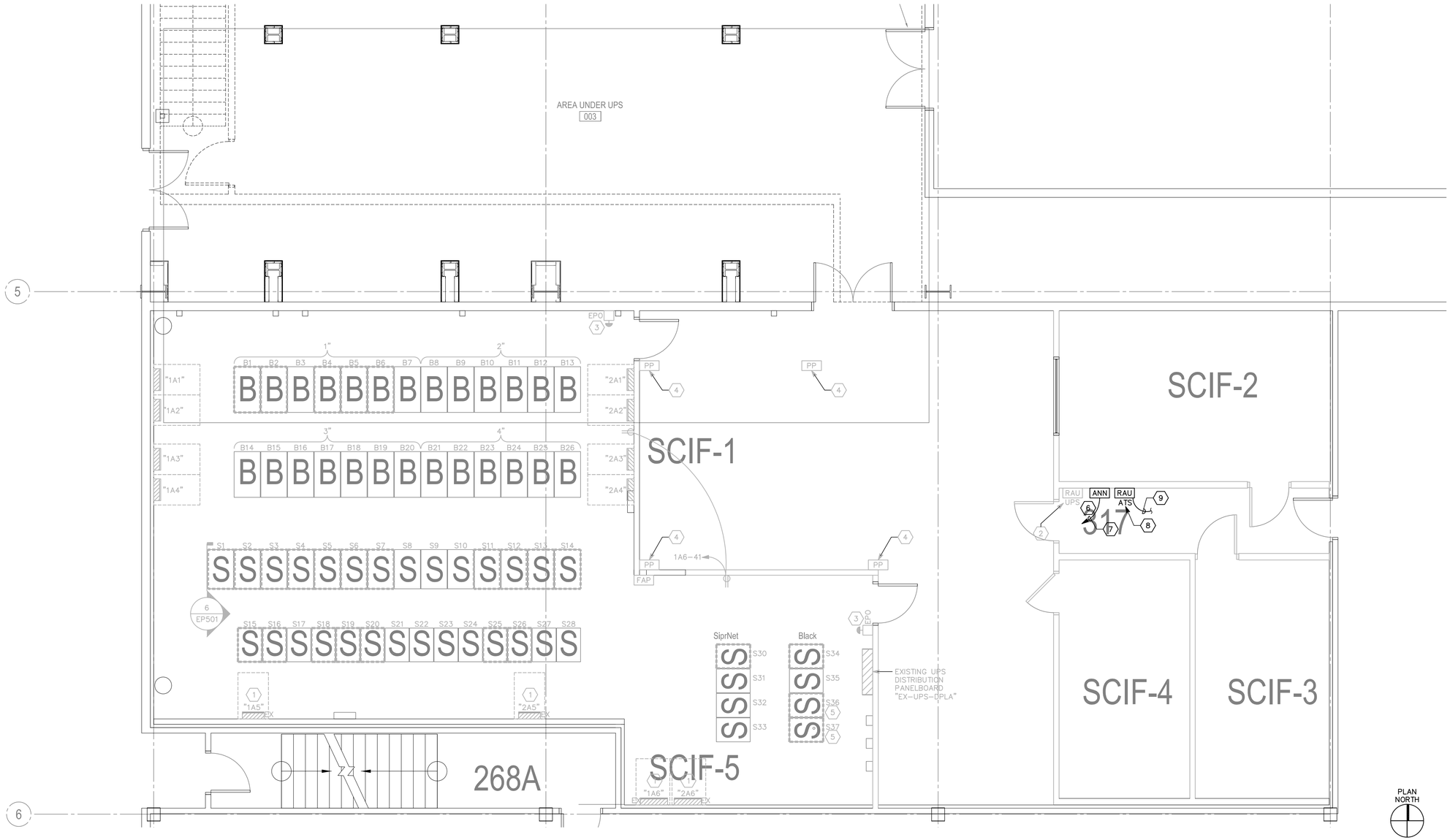
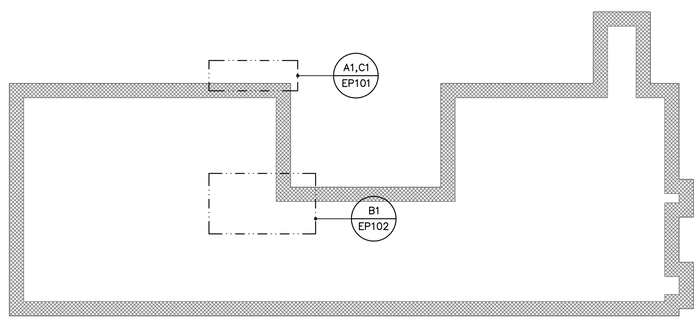


MAIN FLOOR POWER PLAN

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



A3 KEYPLAN

NTS

SHEET KEYNOTES

1. EXISTING PANELBOARD TO BE RE-FED FROM NEW UPS DISTRIBUTION (SEE ONE-LINE DIAGRAM).
2. LOCATE REMOTE ANNUNCIATOR UNIT FOR UPS SYSTEM ON WALL AS APPROVED BY UTNG.
3. PROVIDE EMERGENCY POWER OFF (EPO) SWITCH FOR SHUTDOWN OF UPS/MECHANICAL EQUIPMENT. SEE ONE-LINE DIAGRAM. VERIFY DESIRED LOCATION OF SWITCH WITH UTAH NATIONAL GUARD PRIOR TO ROUGH-IN.
4. RELOCATE POWER POLE EXTEND EXISTING CONDUIT AND CONDUCTORS TO NEW LOCATION. FIELD VERIFY EXISTING LOCATION AND COORDINATE WITH UTAH NATIONAL GUARD.
5. EXISTING RACK TO REMAIN. RECONNECT TO EXISTING CIRCUITS SERVING THIS RACK. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED. FIELD VERIFY REQUIREMENTS.
6. NEW GENERATOR ANNUNCIATOR PANEL. COORDINATE DESIRED LOCATION WITH UTAH NATIONAL GUARD.
7. CONTROL WIRING IN CONDUIT BACK TO GENERATOR PER GENERATOR MANUFACTURER'S REQUIREMENTS.
8. PROVIDE NEW ATS ANNUNCIATOR PANEL TO MATCH EXISTING ATS. ATS TYPE GE ZENITH CONTROLS ZBTS/ZBTSD SERIES ENTELLISWITCH MX250. COORDINATE LOCATION WITH UTAH NATIONAL GUARD.
9. PROVIDE NEW CONTROL WIRING IN CONDUIT BACK TO ATS PER MANUFACTURER'S INSTRUCTIONS.

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SHEET TITLE
POWER PLAN

JUPITER GENERATOR ADDITION

EP102

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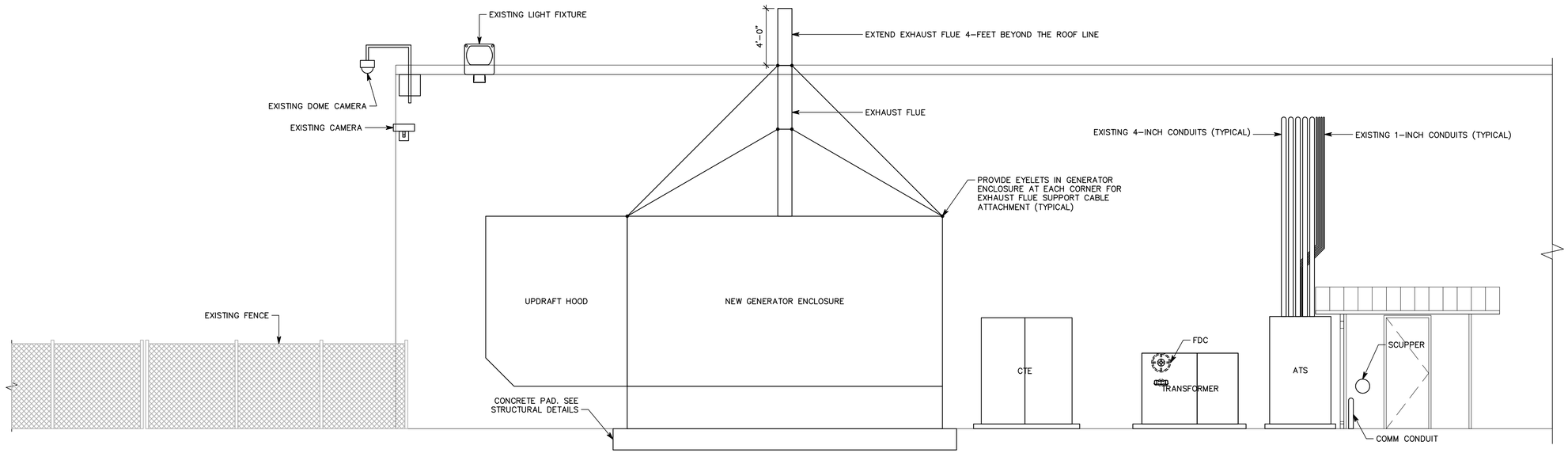

C1 ELECTRICAL ELEVATION

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

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SHEET TITLE
ELECTRICAL ELEVATION

EP201

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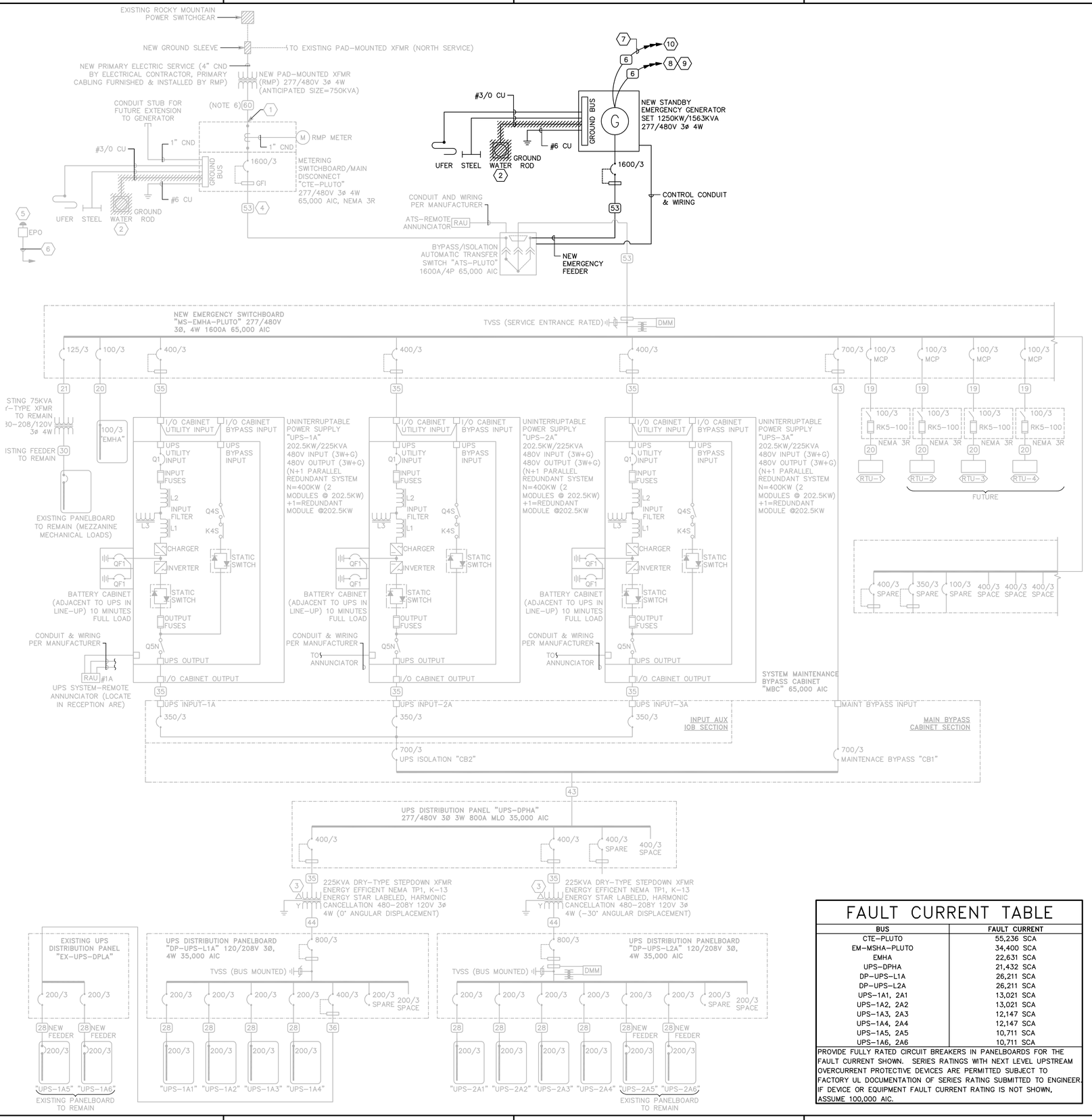

GENERAL SHEET NOTES

1. PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.
2. REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.
3. ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT.

⬡SHEET KEYNOTES

1. RMP IS CURRENTLY PLANNING ON RUNNING 5-SETS OF CONDUCTORS INTO THE METERING SWITCHBOARD. POWER TO ACCOMMODATE FUTURE NEEDS, 7 CONDUITS HAVE BEEN REQUESTED. INCLUDE 7-SETS OF #750 KCMIL AL/CU LUGS IN "CTE" FOR TERMINATION OF CURRENT AND FUTURE RMP SERVICE CONDUCTORS.
2. METAL UNDERGROUND WATER PIPING IN COMPLIANCE WITH NEC 250.52 (A)(1) IS NOT AVAILABLE AND THEREFORE WILL NOT BE CONNECTED TO THE GROUNDING ELECTRODE SYSTEM.
3. TRANSFORMERS SHALL HAVE THE FOLLOWING FEATURES:
   a. 130C TEMP RISE.
   b. TP1 EFFICIENCIES @ 35% AND 65% LOAD.
   c. COPPER WINDINGS.
   d. ELECTROSTATIC SHIELD.
   e. K-13 LOAD PROFILE RATING.
   f. SINGLE OUTPUT WITH ANGULAR DISPLACEMENT AS SHOWN.
   g. 200% NEUTRAL.
4. PROVIDE GROUND CONDUCTOR IN ADDITION TO PHASE AND NEUTRAL CONDUCTORS.
5. PROVIDE EMERGENCY POWER OFF (EPO) SWITCH FOR SHUTDOWN OF UPS EQUIPMENT AND MECHANICAL ROOFTOP EQUIPMENT SERVING THE UPS & SERVER AREAS. TYPICAL OF 2 SWITCHES.
6. PROVIDE CONDUITS AND WIRING TO UPS EQUIPMENT AND TRANSFER SWITCH OR BREAKERS SERVING ROOFTOP EQUIPMENT AS REQUIRED FOR SHUTDOWN OF EQUIPMENT. VERIFY REQUIREMENTS OF EQUIPMENT INPUTS AND PROVIDE RELAYS AS REQUIRED FOR INTERFACE. NOTE: REPLACEMENT OF STANDARD BREAKERS TO SHUNT-TRIP BREAKERS SERVING ROOF TOP UNITS WILL BE REQUIRED IF ATS INTERFACE IS NOT AVAILABLE FOR SHUTDOWN.
7. PROVIDE CONNECTION TO GENERATOR JACKET HEATER. VERIFY REQUIREMENTS WITH MANUFACTURER.
8. PROVIDE CONNECTION TO AUXILIARY GENERATOR EQUIPMENT. (LIGHTS, OUTLETS, BATTERY CHARGER ETC) VERIFY REQUIREMENTS WITH MANUFACTURER.
9. CONNECT TO SPARE 20A/1P BREAKERS IN PANEL UPS-1A6.
10. CONNECT TO SPARE 30A/3P BREAKER IN PANEL EMHA.

FAULT CURRENT TABLE

BUS	FAULT CURRENT
CTE-PLUTO	55,236 SCA
EM-MSHA-PLUTO	34,400 SCA
EMHA	22,631 SCA
UPS-DPHA	21,432 SCA
DP-UPS-L1A	26,211 SCA
DP-UPS-L2A	26,211 SCA
UPS-1A1, 2A1	13,021 SCA
UPS-1A2, 2A2	13,021 SCA
UPS-1A3, 2A3	12,147 SCA
UPS-1A4, 2A4	12,147 SCA
UPS-1A5, 2A5	10,711 SCA
UPS-1A6, 2A6	10,711 SCA

PROVIDE FULLY RATED CIRCUIT BREAKERS IN PANELBOARDS FOR THE FAULT CURRENT SHOWN. SERIES RATINGS WITH NEXT LEVEL UPSTREAM OVERCURRENT PROTECTIVE DEVICES ARE PERMITTED SUBJECT TO FACTORY UL DOCUMENTATION OF SERIES RATING SUBMITTED TO ENGINEER. IF DEVICE OR EQUIPMENT FAULT CURRENT RATING IS NOT SHOWN, ASSUME 100,000 AIC.

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SHEET TITLE
ONE-LINE DIAGRAM

JUPITER GENERATOR ADDITION

EP601

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