Salt Lake City
Department of Airports

SALT LAKE CITY
INTERNATIONAL AIRPORT

CONSTRUCTION DOCUMENTS

NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT

PROJECT NO. 54 8201 1826

ENVISION
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STATE OF UTAH
10/31/2022

MAYOR OF SALT LAKE CITY ERIN MENDENHALL EXECUTIVE DIRECTOR OF AIRPORTS BILL WYATT	ENGINEERING DIVISION SALT LAKE CITY INTERNATIONAL AIRPORT P.O. BOX 145550 SALT LAKE CITY, UTAH 84114-5550	ROBERT S. BAILEY, PE CIVIL ENGINEERING MANAGER DATE	DRAWING EG001 PROJECT 54 8201 1826 SHEET 1 OF 13

1 VICINITY MAP
SCALE: NTS

NORTH

GENERAL PROJECT NOTES

1. THE CONTRACTOR SHALL FOLLOW THE PANELBOARD SCHEDULES AS INDICATED IN THE DRAWINGS. NO DEVIATION WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE ELECTRICAL ENGINEER.
2. AT A MINIMUM THE CONTRACTOR SHALL INSTALL THE WIRE SIZE AS CALLED OUT ON THE DRAWINGS. HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE WIRE IS SIZED LARGE ENOUGH TO ALLOW FOR VOLTAGE DROP.
3. ELECTRICAL DRAWINGS ARE BASED ON INFORMATION PROVIDED ON EXISTING AS-BUILT DRAWINGS AND FIELD SURVEY. THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION/CONSTRUCTION. THE CONTRACTOR TO VERIFY ALL EXISTING ELECTRICAL UTILITIES PRIOR TO DEMOLITION OR EXCAVATION.
4. THE CONTRACTOR SHALL ENSURE THAT ALL AREAS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.
5. EXAMINE STRUCTURAL ELEMENTS PRIOR TO CUTTING AND CORE DRILLING. STRUCTURAL STEEL SHOULD BE LOCATED BY USING NON-DESTRUCTIVE TESTING PROCEDURES SUCH AS GROUND PENETRATING RADAR (RADIO FREQUENCY) OR OTHER APPROVED MEANS.
6. MATERIALS AND DEVICES ASSUMED TO CONTAIN HAZARDOUS MATERIALS ARE TO BE DISPOSED OF AT A FACILITY THAT IS CERTIFIED BY STATE AND FEDERAL ENVIRONMENTAL AGENCIES TO ACCEPT THESE ITEMS FOR DISPOSAL BY THE PROJECT CONTRACTOR. MATERIALS TO BE REMOVED FROM THE PROJECT SITE FOR DISPOSAL ARE TO BE REPACKAGED IN THE CONTAINERS OF THE REPLACEMENT LIGHTING TUBE BOXES TO HELP ENSURE AGAINST DAMAGE AND BREAKAGE.
7. UTILIZE GALVANIZED RIGID STEEL CONDUIT WHERE CONDUIT IS SUBJECT TO VEHICULAR DAMAGE (0-10' AFF) AND WHERE IT IS EXPOSED TO POTENTIAL DAMAGE OR WEATHER.
8. PROVIDE INTERMEDIATE JUNCTION / PULLBOXES AS REQUIRED BY NEC CODE.
9. PROVIDE TRU TAPE FOR ALL RACEWAY EXCEEDING 100' PRIOR TO WIRE PULLS. MARK AS-BUILT DRAWINGS WITH RACEWAY FOOTAGES.
10. PROVIDE A MINIMUM OF 7 DAY NOTICE FOR ALL UTILITY AND DISTRIBUTION BOARD SHUTDOWNS. COORDINATE WITH THE OWNER.
11. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL SAFETY AND ENVIRONMENTAL REGULATIONS.
12. THE CONTRACTOR SHALL CONFINE CONTRACTOR'S EMPLOYEES AND EQUIPMENT TO THE PROJECT WORK AREA.
13. CONTRACTORS REQUIRING DIMENSIONS NOT NOTED, SHALL CONTACT THE ENGINEER FOR SUCH INFORMATION PRIOR TO PROCEEDING WITH THE WORK IN QUESTION. MOST, BUT NOT ALL UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATION ON THE DRAWINGS.
14. THE CONTRACTOR SHALL INFORM ALL UTILITY OWNERS 48 HOURS PRIOR TO ANY EXCAVATION THAT MIGHT AFFECT THESE UTILITIES. IF DAMAGE TO EXISTING UTILITIES IS CAUSED AS A RESULT OF THE CONTRACTOR'S OPERATIONS, THE UTILITIES SHALL BE IMMEDIATELY REPAIRED TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR. PROVIDE POTHOLING WHERE NECESSARY TO DETERMINE EXISTING UTILITY LOCATIONS.
15. ALL EXCAVATED MATERIAL, REGARDLESS OF CLASSIFICATION, SHALL BE REMOVED FROM AIRPORT PROPERTY AND PROPERLY DISPOSED OF BY THE CONTRACTOR. THE COSTS FOR EXCAVATING, HAULING, AND DISPOSING OF THE EXCAVATED MATERIAL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH TYPE OF EXCAVATION IDENTIFIED AS AN ITEM OF WORK IN THE CONTRACT BID SCHEDULE.
16. THE CONTRACTOR SHALL MAINTAIN A BROOM CLEAN CONDITION ON ALL PUBLIC AND AIRPORT ROADS USED FOR THE CONTRACTOR'S HAULING OPERATION. THE CONTRACTOR SHALL REPAIR AND RESTORE THE ROAD SURFACE, IF DAMAGED AS A RESULT OF CONTRACTOR'S OPERATIONS, TO THE SAME CONDITION AS EXISTED PRIOR TO THE START OF CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE. ANY DAMAGE TO AIRPORT APRONS, RUNWAYS, OR TAXIWAYS AS A RESULT OF CONTRACTOR'S OPERATIONS, WILL ALSO BE REPAIRED IN A LIKE MANNER.
17. THE CONTRACTOR SHALL MEET ALL OPERATING REQUIREMENTS OF THE CONSTRUCTION SAFETY AND SECURITY COMPLIANCE MANUAL FOR THE SLCIA (LATEST EDITION). CONTRACTOR TO SUBMIT A FOD (FOREIGN OBJECT DEBRIS) PLAN MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION.
18. THE CONTRACTOR SHALL ADHERE TO ALL COUNTY, CITY, STATE AND AIRPORT TRAFFIC REGULATIONS CONCERNING THE USE OF STREETS OR ROADS FOR HAULING.
19. ALL UNDERGROUND CONDUITS ENTERING EQUIPMENT, JUNCTION BOXES, AND LIKE SYSTEMS INSIDE OR OUTSIDE SHALL BE SEALED WITH AN APPROVED MATERIAL OR FITTING IN COMPLIANCE WITH NEC ARTICLE 300.5(G) AND CONTRACT DOCUMENTS.
20. INSULATED THROAT CONNECTORS OR PLASTIC BUSHINGS SHALL BE UTILIZED FOR ALL CONDUIT SIZES USED ON THIS PROJECT.
21. A DEDICATED NEUTRAL CONDUCTOR WILL BE PROVIDED FOR ALL CIRCUITS.
22. THE CONTRACTOR SHALL LABEL ALL ELECTRICAL EQUIPMENT AS IT IS CALLED OUT N THE SPECIFICATIONS.
23. THE CONTRACTOR SHALL PATCH, REPAIR, AND SEAL OF ALL PENETRATIONS TO THE EXISTING STRUCTURE AND INCLUDING ANY FIRE STOPPING DAMAGE.

GENERAL DEMOLITION NOTES:

1. UNLESS SPECIFICALLY NOTED OTHERWISE, REMOVE ALL ELECTRICAL ITEMS SHOWN IN DARK & DASHED LINES. ITEMS SHOWN IN LIGHT & SOLID LINES AND WITH ABBREVIATION (E) ARE TO REMAIN. DEMOLITION ITEMS ARE SHOWN TO GIVE A BASIC DESCRIPTION OF THE EXTENT OF DEMOLITION WORK, BUT MAY NOT BE INCLUSIVE. PROVIDE DEMOLITION WORK IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
2. DISCONNECT AND REMOVE ANY/ALL FIXTURES, DEVICES, EQUIPMENT, ETC. REQUIRED FOR PROPER COMPLETION OF THE WORK WHETHER SHOWN OR NOT.
3. RELOCATE, REWIRE, AND/OR RECONNECT ANY/ALL FIXTURES, DEVICES, EQUIPMENT, ETC. THAT FOR ANY REASON OBSTRUCTS CONSTRUCTION.
4. LEAVE ALL EXISTING FIXTURES, DEVICES, EQUIPMENT, ETC. IN PORTIONS OF THE SITE NOT BEING REMODELED, IN WORKING CONDITION. RESTORE ALL INTERRUPTED BRANCH CIRCUITS, FEEDERS, ETC.
5. REMOVE AND DISPOSE OF ALL RACEWAYS, CONDUCTORS, BOXES, DEVICES, EQUIPMENT, ETC. THAT ARE NOT TO BE REUSED.
6. COORDINATE WITH OWNER WHAT EQUIPMENT SHOULD BE DISPOSED OF AND WHAT EQUIPMENT IS TO BE RETURNED TO OWNER.

ELECTRICAL SYMBOL SCHEDULE GENERAL NOTES

1. MOUNT ALL OUTLETS, DEVICES, AND EQUIPMENT AT HEIGHTS INDICATED BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS. UNLESS NOTED OTHERWISE, HEIGHTS ARE GIVEN FROM FINISHED FLOOR TO CENTER OF OUTLET BOX.
2. WHERE OUTLETS, DEVICES, AND EQUIPMENT ARE NOTED BY SUBSCRIPTS, REFER TO ABBREVIATION SCHEDULE FOR DEFINED REQUIREMENTS.
3. NOT ALL ELECTRICAL SYMBOLS MAY BE USED.

GEAR AND CONTROL SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING	REMARKS
S_T	MANUAL STARTER WITH THERMAL OVERLOAD(S)	AT EQUIPMENT	
	ELECTRIC MOTOR		
	NON-FUSED DISCONNECT SWITCH	+60"	
F	FUSED DISCONNECT SWITCH	+60"	
	CIRCUIT BREAKER AND ENCLOSURE	+60"	
	LIGHTING AND APPLIANCE PANELBOARD (SURFACE-MOUNTED)	TOP AT +72"	20"W X 6"D
	LIGHTING AND APPLIANCE PANELBOARD (FLUSH-MOUNTED)	TOP AT +72"	20"W X 6"D
	POWER DISTRIBUTION PANELBOARD/AUTOMATIC TRANSFER SWITCH	TOP AT +72"	

ELECTRONIC SYSTEM GENERAL SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING	REMARKS
PANEL NAME	ELECTRONIC SYSTEM PANELBOARD (SURFACE MOUNT)	TOP AT 72"	ELECTRONIC SYSTEMS MAY INCLUDE BUT ARE NOT SPECIFICALLY LIMITED TO, TELEPHONE, DATA, TELEVISION, LIGHTING CONTROL, CLOCKS, FIRE ALARM, ACCESS CONTROL, SECURITY, CCTV, SOUND SYSTEM, NURSE CALL, OR INTERCOM.
PANEL NAME	ELECTRONIC SYSTEM PANELBOARD (FLUSH MOUNT)	TOP AT 72"	

BRANCH CIRCUITING SYMBOLS

SYMBOL	DESCRIPTION	REMARKS
	1 CIRCUIT, 2 WIRE BRANCH CIRCUIT HOME RUN TO PANEL	ARROWS: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS REQUIRED. SHORT CROSS LINES: NUMBER OF SHORT CROSS LINES INDICATES NUMBER OF PHASE, TRAVELER, AND/OR SWITCHED CONDUCTORS REQUIRED IF GREATER THAN 1 (ONE). LONG CROSS LINES: NUMBER OF LONG CROSS LINES INDICATES NUMBER OF NEUTRAL CONDUCTORS REQUIRED FOR MULTI-WIRE HOME RUNS. EQUIPMENT GROUND AND ISOLATED GROUND CONDUCTORS: EQUIPMENT GROUND AND ISOLATED GROUND CONDUCTORS ARE NOT SHOWN, BUT ARE REQUIRED AS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
	2 CIRCUIT, 3 WIRE BRANCH CIRCUIT HOME RUN TO PANEL	
	3 CIRCUIT, 4 WIRE BRANCH CIRCUIT HOME RUN TO PANEL	
	MULTIPLE WIRE BRANCH CIRCUITING BETWEEN FIXTURES, SWITCHES, DEVICES, ETC.	
	BRANCH CIRCUITING (U.N.O.) TURNED UP OR TOWARDS OBSERVER.	
	BRANCH CIRCUITING (U.N.O.) TURNED DOWN OR AWAY FROM OBSERVER.	
	BRANCH CIRCUITING (U.N.O.) CONTINUATION	
	CONDUIT STUB-IN	CAP AND MARK
	INCOMING SERVICE	
J	JUNCTION BOX	MOUNT AS NOTED. SUBSCRIPT 'F' INDICATES TO PROVIDE A FLOOR BOX WITH BLANK COVERPLATE

ELECTRICAL SHEET INDEX

ABBREVIATION SCHEDULE

NOTE: NOT ALL ABBREVIATIONS MAY BE USED.

A	ABOVE COUNTER	ISO	ISOLATED
A	AMP OR AMPS	KVA	KILO VOLT AMPERES
ADJ	ADJACENT	KW	KILOWATTS
AFF	ABOVE FINISHED FLOOR	LFMC	LIQUID-TIGHT METAL CONDUIT
AHJ	AUTHORITY HAVING JURISDICTION	LFNC	LIQUID-TIGHT NONMETAL CONDUIT
AL	ALUMINUM	MCA	MINIMUM CIRCUIT AMPS
BAS	BUILDING AUTOMATION SYSTEM	MLO	MAIN LUGS ONLY
C	CONDUIT	N.C.	NORMALLY CLOSED
CB	CIRCUIT BREAKER	N.I.C.	NOT IN CONTRACT
CKT	CIRCUIT	N.L.	NIGHT LIGHT
C.O.'S	CONVENIENCE OUTLETS	N.O.	NORMALLY OPEN
CU	COPPER	O.C.	ON CENTER(S)
EA	EACH	OCP	OVER CURRENT PROTECTION
ELEC	ELECTRICAL	QTY	QUANTITY
EM	EMERGENCY	R	REMOVE
EMT	ELECTRIC METALLIC TUBING	REQ.	REQUIREMENTS
ENT	ELECTRIC NONMETALLIC TUBING	RMC	RIGID METAL CONDUIT
EQUIP	EQUIPMENT	RNC	RIGID NONMETALLIC CONDUIT
EWC	ELECTRIC WATER COOLER	RR	REMOVE AND RELOCATE
E. EX	EXISTING	SS	SURGE SUPPRESSION
EXP	EXPLOSION PROOF	SCP	SECURITY CONTROL PANEL
FA	FIRE ALARM	TR	TAMPER RESISTANT
FACP	FIRE ALARM CONTROL PANEL	TYP	TYPICAL
FLA	FULL LOAD AMPS	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
FMC	FLEXIBLE METAL CONDUIT	UF	UNDER FLOOR
FOB	FREIGHT ON BOARD	UG	UNDERGROUND
GND	GROUND CONDUCTOR	U.N.O.	UNLESS NOTED OTHERWISE
HOA	HAND-OFF-AUTO	W/	WITH
HP	HORSE POWER	WP	WEATHER PROOF
IG	ISOLATED GROUND	XFMR	TRANSFORMER
IMC	INTERMEDIATE METAL CONDUIT		
INS	INSULATED		

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SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
SYMBOLS, INDEX, AND VICINITY MAP

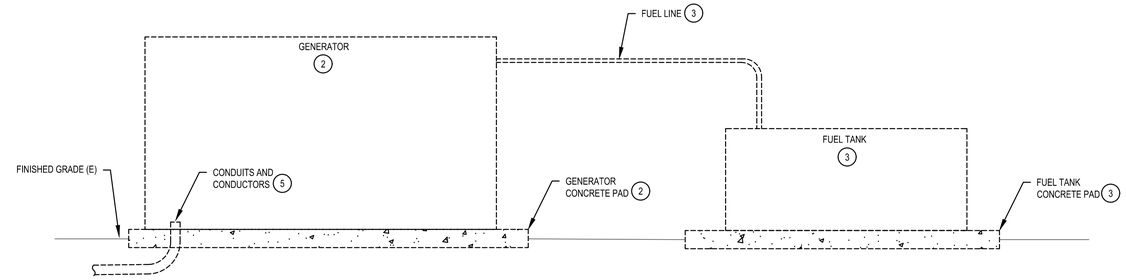
SCALE: AS NOTED

DRAWING EG100
PROJECT 54 8201 1826
SHEET 2OF 13

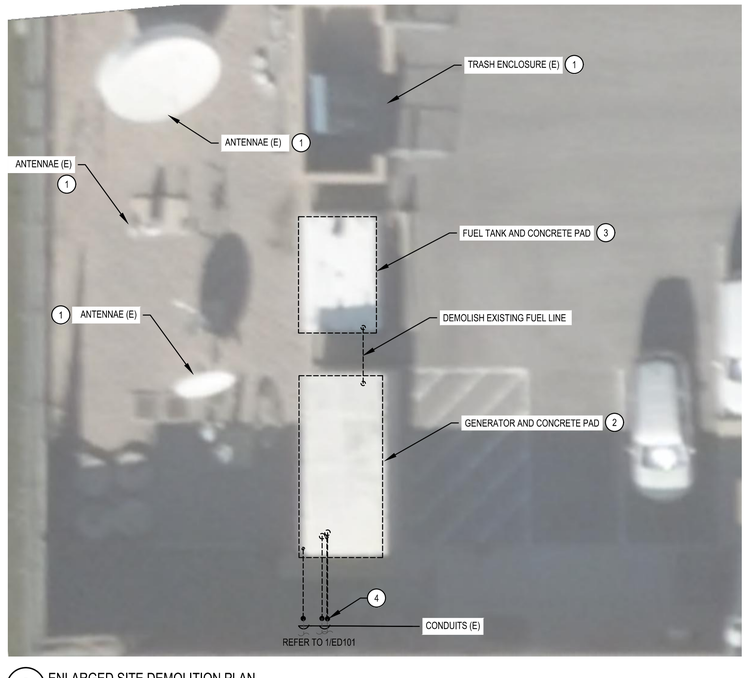
KEYED NOTES: (#)

1. PROTECT AND MAINTAIN.
2. DEMOLISH AND DISPOSE OFF EXISTING GENERATOR AND CONCRETE PAD.
3. REMOVE EXISTING ABOVE GRADE FUEL TANK AND RETURN TO AIRPORT. DEMOLISH CONCRETE PAD INCLUDING ASSOCIATED FUEL LINES AND PIPING. AIRPORT SHALL DRAIN OFF ALL THE REMAINING FUEL IN THE TANK PRIOR TO REMOVAL OF THE TANK.
4. DEMOLISH EXISTING CONDUITS UPTO THE POINT SHOWN. TRENCH EXISTING SIDEWALK AND ASPHALT AS REQUIRED.
5. DEMOLISH ALL EXISTING CONDUCTORS AND CABLES. DEMOLISH EXISTING CONDUITS UPTO THE POINT SHOWN ON SITE PLAN.
6. EXISTING CONDUIT ROUTING SHOWN AND QUANTITY IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD DETERMINE THE EXACT CONDITIONS.

1 OVERALL SITE PLAN
SCALE: 1/16" = 1'-0"



3 GENERATOR AND FUEL TANK DEMOLITION ELEVATION DETAIL
SCALE: NTS



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

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SALT LAKE CITY INTERNATIONAL AIRPORT
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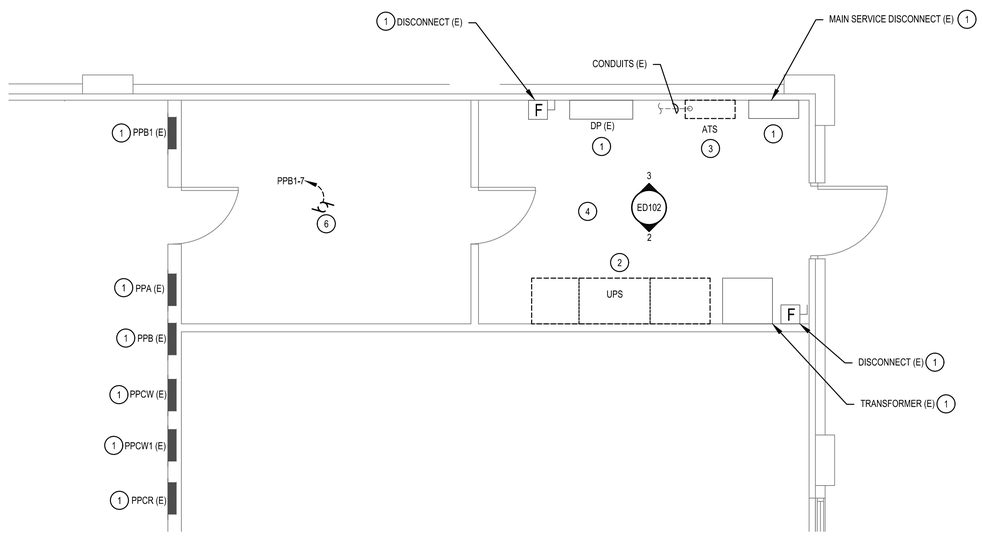
DEMOLITION SITE PLANS

SCALE: AS NOTED

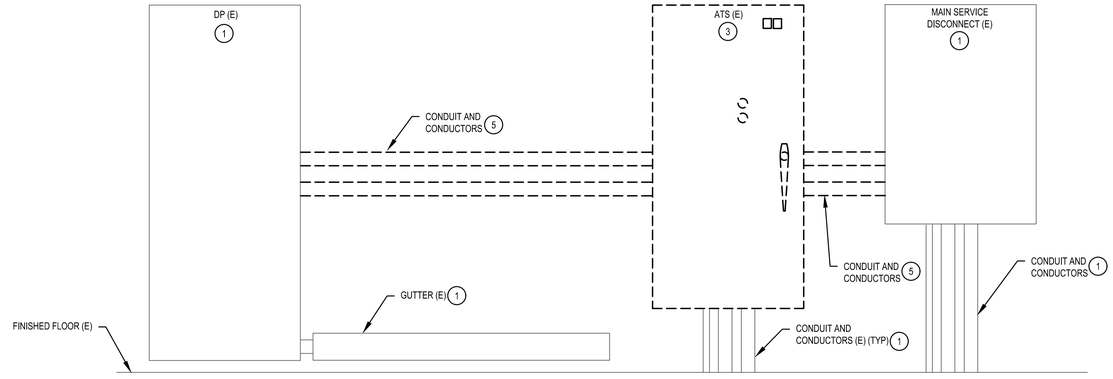
DRAWING ED101
PROJECT 54 8201 1826
SHEET 30F 13

KEYED NOTES: (#)

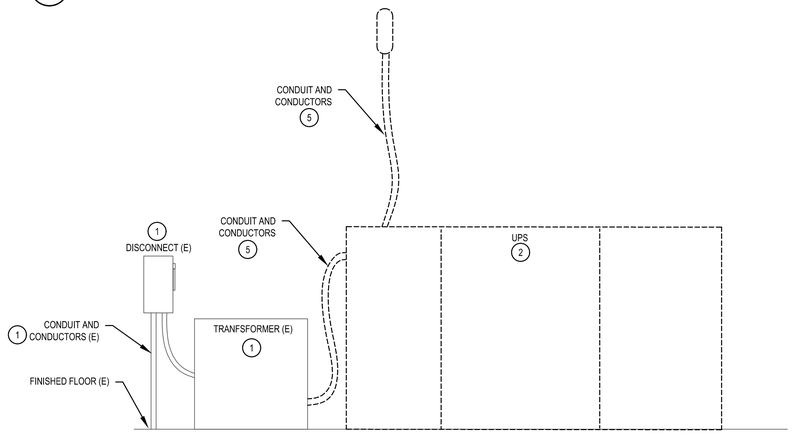
1. PROTECT AND MAINTAIN.
2. DEMOLISH EXISTING BYPASS CABINET, UPS, AND BATTERY CABINET.
3. DEMOLISH EXISTING ATS.
4. PROTECT AND MAINTAIN ALL ELECTRICAL, LIGHTING, FIRE ALARM, SECURITY, AND OTHER EQUIPMENT AND DEVICES IN THIS SPACE UNLESS SHOWN OTHERWISE.
5. DEMOLISH EXISTING CONDUIT AND CONDUCTORS.
6. EXISTING TRANSFER FAN IS BEING DEMOLISHED. REFER TO MECHANICAL DRAWINGS FOR MORE INFORMATION. DEMOLISH EXISTING CONDUCTORS BACK TO SOURCE, PROTECT AND MAINTAIN EXISTING RACEWAY AND BOXES.



1 DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1' 0"



3 ATS DEMOLITION ELEVATION DETAIL
SCALE: NTS



2 UPS DEMOLITION ELEVATION DETAIL
SCALE: NTS

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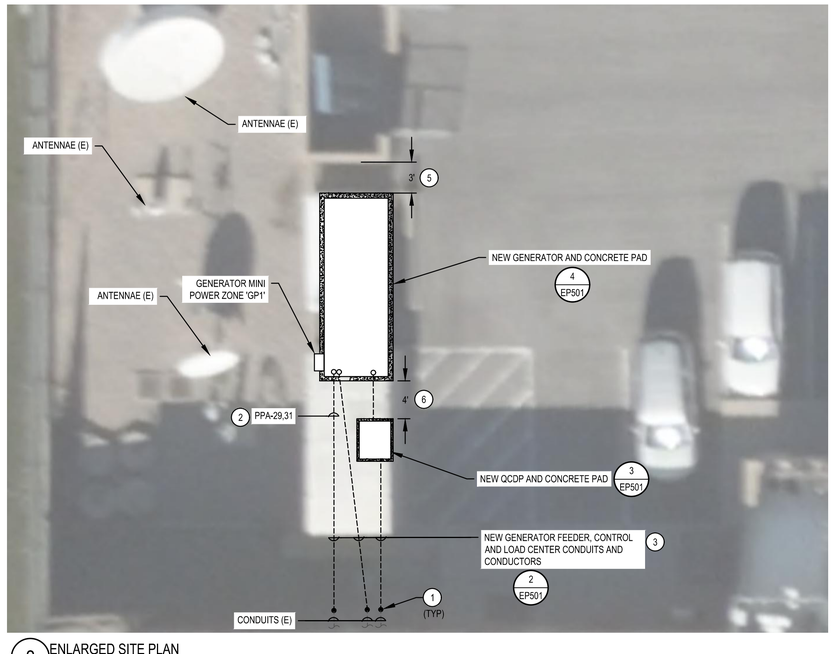
SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
DEMOLITION FLOOR PLANS

SCALE: AS NOTED
DRAWING ED102
PROJECT 54 8201 1826
SHEET 4OF 13

KEYED NOTES: (#)

1. INTERCEPT EXISTING CONDUITS AND EXTEND CONDUITS AS SHOWN TO THE NEW GENERATOR AND QCDP. PATCH AND REPAIR EXISTING SIDEWALK AND ASPHALT TO RESTORE IT TO ORIGINAL CONDITION.
2. EXTEND MINI POWER ZONE PRIMARY CONDUCTORS THROUGH EXISTING AND NEW RACEWAYS TO PANEL SHOWN FOR FEEDING GENERATOR LOAD CENTER.
3. REFER TO ONE-LINE DIAGRAM FOR CONDUIT AND CONDUCTOR SIZES.
4. CONTRACTOR SHALL MANDREL ALL THE EXISTING CONDUITS PRIOR TO PULLING ANY CONDUCTORS/CABLES OR PERFORMING ANY WORK TO DETERMINE IF THE CONDUITS ARE RE-USABLE. IF DETERMINED NOT RE-USABLE ,CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IN CHARGE.
5. MAINTAIN A MINIMUM OF 3' DISTANCE BETWEEN THE EXISTING TRASH ENCLOSURE WALL AND EDGE OF GENERATOR CONCRETE PAD.
6. MAINTAIN A MINIMUM OF 4' DISTANCE BETWEEN THE NEW QCDP AND NEW GENERATOR

1 ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'0"



2 ENLARGED SITE PLAN
SCALE: 1/8" = 1'0"

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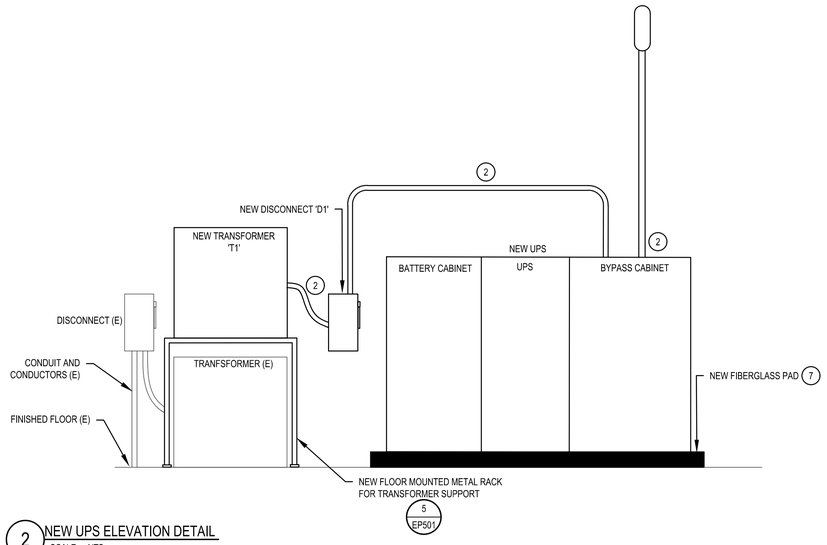
ELECTRICAL SITE PLANS

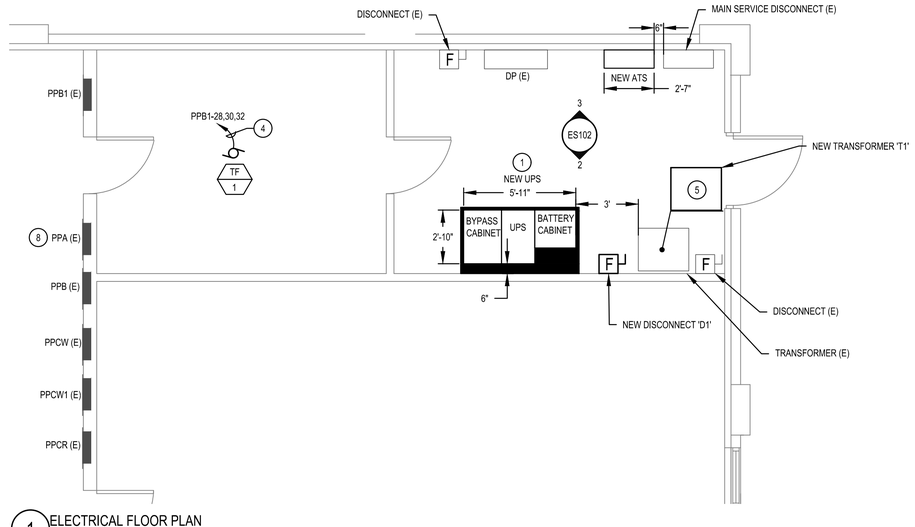
SCALE: AS NOTED
DRAWING ES101
PROJECT 54 8201 1826
SHEET 5OF 13



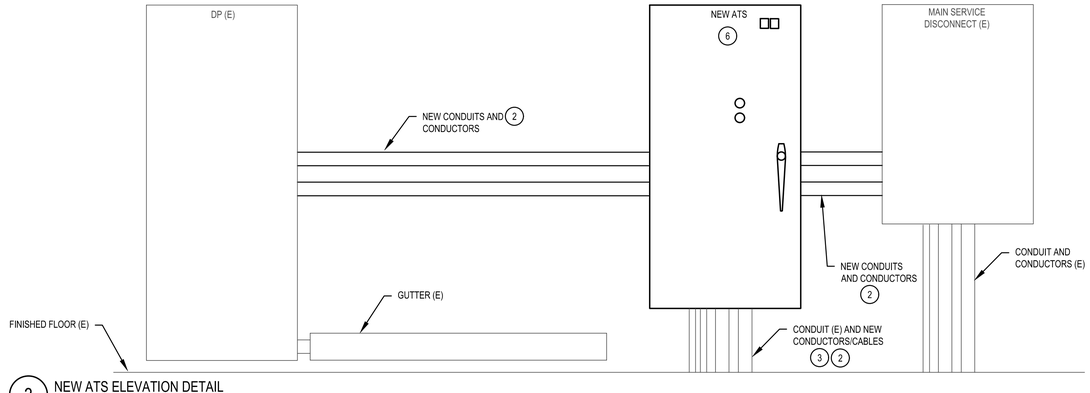
2 NEW UPS ELEVATION DETAIL
SCALE: NTS

KEYED NOTES: (#)

1. NEW UPS AND CONCRETE PAD SHALL NOT EXCEED THE DIMENSIONS SHOWN ON PLANS.
2. REFER TO ONE-LINE DIAGRAM FOR CONDUIT AND CONDUCTOR SIZES.
3. EXTEND EXISTING CONDUITS AS REQUIRED TO MAKE FINAL TERMINATIONS.
4. UTILIZE EXISTING CONDUIT AND PROVIDE NEW CONDUCTORS. REFER TO MECHANICAL EQUIPMENT SCHEDULE CONDUCTOR SIZES AND ADDITIONAL INFORMATION. EXTEND NEW CONDUIT AS REQUIRED FOR A COMPLETE INSTALLATION.
5. STACK NEW TRANSFORMER ON TOP OF THE EXISTING TRANSFORMER. DIV 26 CONTRACTOR SHALL PROVIDE STAMPED STRUCTURAL CALCULATIONS AND DRAWINGS FOR THE UNISTRUT RACK.
6. ATS SHALL BE MOUNTED ON A METAL SUPPORT CHANNEL SYSTEM TO BE A FEW INCHES AWAY FROM THE WALL AS PER THE MANUFACTURERS RECOMMENDATION FOR SUFFICIENT AIR FLOW AND CIRCULATION.
7. PROVIDE CUSTOM PRECAST FIBERGLASS POLYMER HOUSEKEEPING PAD BASETEK (OR APPROVED EQUAL) AS REQUIRED FOR THE NEW UPS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL. PAD SHALL BE ATLEAST 4" HIGH AND BOLTED THE EXISTING CONCRETE SURFACE AS PER MANUFACTURER'S RECOMMENDATION.
8. UTILIZE EXISTING 40A/2P BREAKER IN THE EXISTING PANELBOARD FOR FEEDING GENERATOR LOAD CENTER.



1 ELECTRICAL FLOOR PLAN
SCALE: 1/4" = 1' 0"



3 NEW ATS ELEVATION DETAIL
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SCALE: AS NOTED
DRAWING ES102
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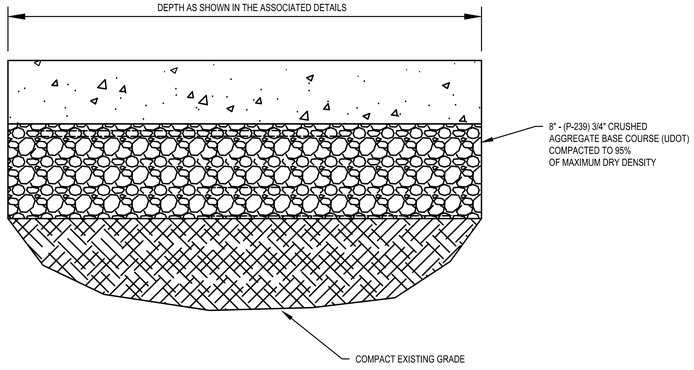
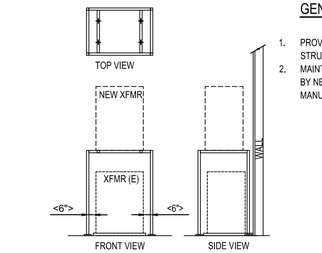
SHEET 6OF 13

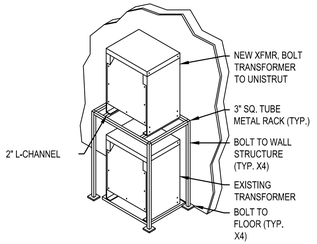


6 EXTERIOR CONCRETE PAD SECTION DETAIL
SCALE: NONE

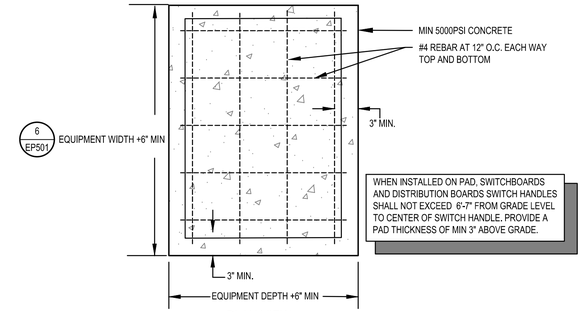


GENERAL NOTES:

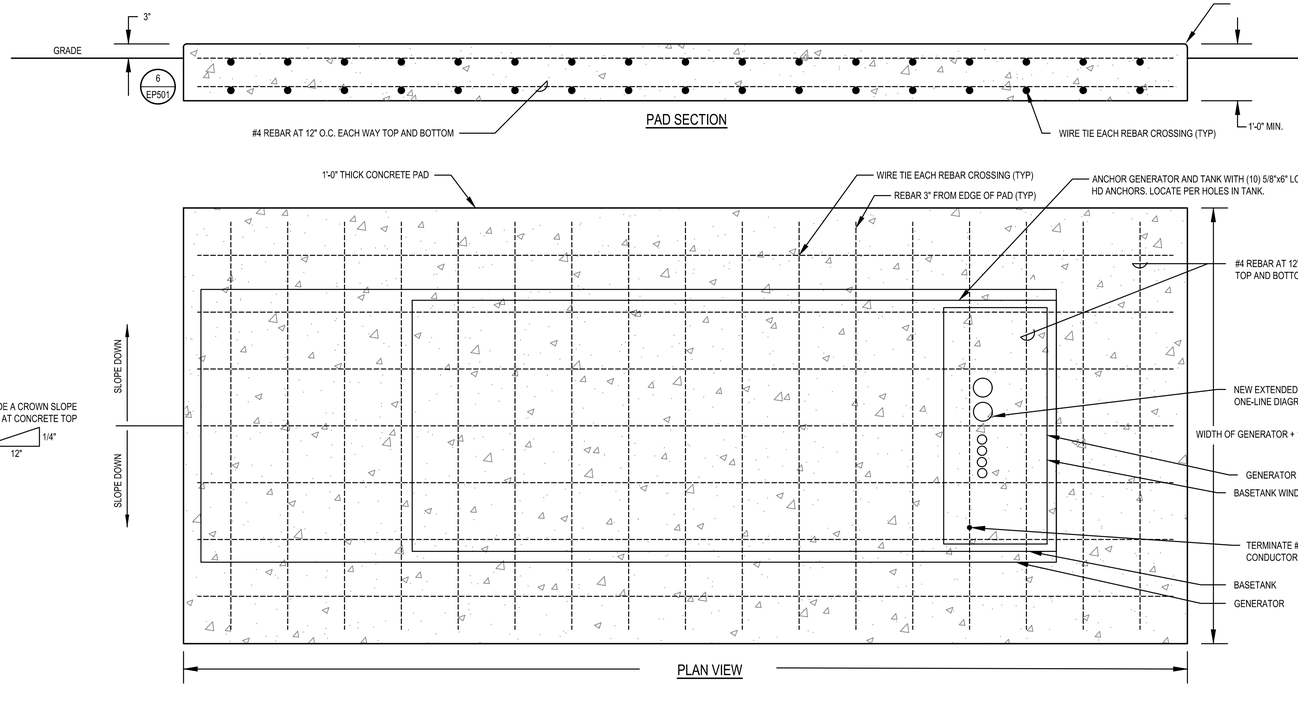
1. PROVIDE STAMPED STRUCTURAL CALCULATIONS BY A STRUCTURAL ENGINEER LICENSED IN UTAH.
2. MAINTAIN ALL CLEARANCE REQUIREMENTS AS REQUIRED BY NEC AND VENTILATION REQUIREMENTS PER THE MANUFACTURER.



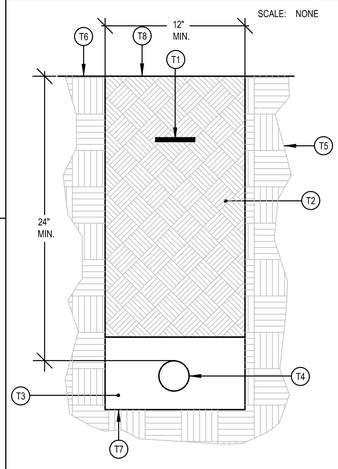
5 STACKED TRANSFORMER DETAIL
SCALE: NTS



3 CONCRETE PAD DETAIL
SCALE: NONE



4 GENERATOR PAD DETAIL
SCALE: NONE



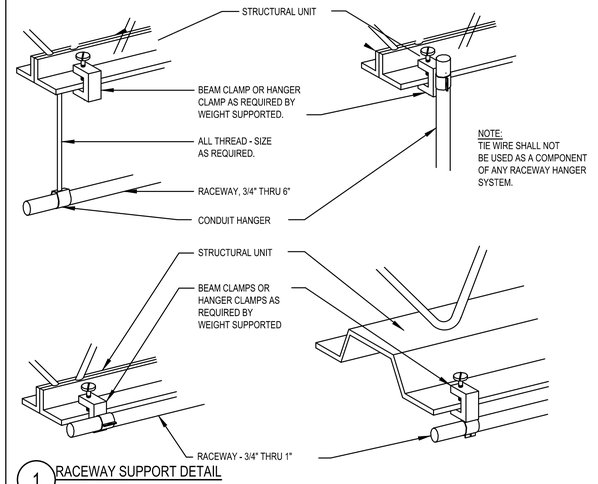
TRENCHING KEYED NOTES:

- T1 MARKER TAPE WITH TRACER WIRE LABELED, "CAUTION BURIED ELECTRIC CONDUITS BELOW" DIRECTLY OVER POWER CONDUITS 6" MINIMUM BELOW GRADE.
- T2 CLEAN BACKFILL CONTAINING NO ROCKS LARGER THAN 4" DIA.
- T3 BACKFILL MATERIAL WITHIN 4" TO 6" OF CONDUIT SHALL PASS THROUGH A 3/4" SIEVE FRAME OR SAND WITHOUT ANY SHARP OR FOREIGN OBJECTS.
- T4 ALL CONDUITS SHOWN SHALL BE SCHEDULE 40 PVC. ALL BENDS AND ELBOWS SHALL BE FIBERGLASS.
- T5 UNDISTURBED EARTH.
- T6 FINISH GRADE
- T7 TRENCHES SHALL BE A UNIFORM DEPTH FOR ENTIRE LENGTH OF TRENCH SO CONDUITS CAN SIT FLAT (HORIZONTAL) WITH THE GROUND.
- T8 SURFACE SHALL BE RESTORED TO EXISTING CONDITIONS AFTER COMPLETION OF WORK.

TRENCHING GENERAL NOTES:

1. PROVIDE PULL 1/4" NYLON ROPES IN ALL CONDUITS.
2. HORIZONTAL AND VERTICAL SEPARATION BETWEEN CONDUIT SHALL BE MAINTAINED BY INSTALLING HIGH IMPACT SPACERS WITH HORIZONTAL INTERVALS OF EIGHT FEET.
3. ALL MARKER TAPE SHALL CONTAIN #10 TRACER WIRE.
4. REFER TO THE ROCKY MOUNTAIN POWER SIX STATE ESR FOR ADDITIONAL INFORMATION.
5. VERIFY ALL REQUIREMENTS WITH QWEST AND COMCAST PRIOR TO TRENCHING.

2 TRENCHING DETAIL
SCALE: NONE



1 RACEWAY SUPPORT DETAIL
SCALE: NONE

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SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
DETAILS

SCALE: AS NOTED
DRAWING EP501
PROJECT 54 8201 1826
SHEET 70F 13

EQUIPMENT SCHEDULE

UNIT NAME	DESCRIPTION	QTY	LOAD	TYPE	VOLTAGE	PHASE	AMPS	CONDUIT SIZE	WIRES			STARTER/DISCONNECT NOTES							NOTES
									NO.	SIZE	EQ. GND SIZE	NOTE	STARTER SIZE	OCP /FUSE SIZE	OCP /FUSE POLES	DISCONNECT SIZE	DISCONNECT POLES	DISCONNECT NEMA	
TF-1	TRANSFER FAN	1	1.50	HP	208	3	6.90	3/4"	3	12	12	10B	NA	NA	NA	NA	NA	NA	UTILIZE EXISTING RACEWAY.
SIZE ALL FUSES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.																			

STARTER / DISCONNECT NOTES:

1. MANUAL STARTER WITH THERMAL OVERLOAD
2. MANUAL STARTER WITH THERMAL OVERLOAD PROTECTION & LOW VOLTAGE RELAY / CONTACTOR FOR ATC CONTROL
3. COMBINATION MAGNETIC STARTER / FUSED DISCONNECT
4. COMBINATION MAGNETIC STARTER / MOTOR CIRCUIT PROTECTOR (MCP)
5. COMBINATION VARIABLE FREQUENCY DRIVE / MOTOR CIRCUIT PROTECTOR (MCP)
6. REDUCED VOLTAGE STARTER
7. COMBINATION TWO-SPEED STARTER / FUSED DISCONNECT
8. COMBINATION TWO-SPEED STARTER / MOTOR CIRCUIT PROTECTOR (MCP)
9. NON-FUSED DISCONNECT SWITCH
10. FUSED DISCONNECT SWITCH
11. BREAKER AND ENCLOSURE
12. DIRECT CONNECTION
13. DUPLEX RECEPTACLE OUTLET
14. SPECIAL PURPOSE OUTLET
15. ELEVATOR POWER MODULE
16. TOGGLE SWITCH
17. DUPLEX GFCI RECEPTACLE OUTLET

INSTALLATION NOTES:

A. FURNISHED, INSTALLED, & CONNECTED UNDER DIVISION 26.
B. FURNISHED & INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTIONS UNDER DIVISION 26.
C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 26.
D. FURNISHED, INSTALLED, & CONNECTED UNDER ANOTHER DIVISION
E. FURNISHED BY OWNER, INSTALLED & CONNECTED BY DIVISION 26
F. REUSE EXISTING DISCONNECTING MEANS

MINI POWER ZONE SCHEDULE

PANEL NAME: GP1
MOUNTING: SURFACE
ENCLOSURE: NEMA 3R
DOOR STYLE: HINGED

VOLTAGE: 240/120
PHASE: 1
WIRE: 3
MIN. A.I.C. RATING: 10KA

MAINS TYPE: MCB
BUS MATERIAL: COPPER
BUS RATING: 100 AMPS
MCB RATING: 80 AMPS

TVSS: NONE
NEUTRAL: 100% RATED
BRANCH OCP TYPE: BOLT-ON CBs
ISOLATED GROUND: NO

KEYED NOTE	CIRCUIT DESCRIPTION	BREAKER AMPS	BREAKER POLE	LOAD TYPE	CKT. #	CONNECTED LOAD/PHASE (VA) A	CONNECTED LOAD/PHASE (VA) B	CKT. #	LOAD TYPE	BREAKER AMPS	BREAKER POLE	CIRCUIT DESCRIPTION	KEYED NOTE
	BATTERY CHARGER	20	1	E	1	720	3,210	2	E	40	2	COOLANT HEATERS	
	SPACE	20	1	-	3		0	4	E	-	-	-	
	SPACE	20	1	-	5	0		6	-	20	1	SPACE	
	TOTAL CONNECTED LOAD PER PHASE (VA):					3,930	3,210						
	TOTAL ESTIMATED DEMAND LOAD PER PHASE (VA):					3,930	3,210						
	TOTAL ESTIMATED DEMAND LOAD PER PHASE (AMPS):					33	27						

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
P	SUB-PANEL	SUB-PANEL LOADS BROKEN OUT BY LOAD CLASIFICATION BELOW			
R	RECEPTACLES	-	-	-	TOTAL CONNECTED LOAD: 7,140 VA
L	LIGHTING	-	-	-	25% OF LARGEST MOTOR: -
C	CONTINUOUS	-	-	-	TOTAL ESTIMATED DEMAND LOAD: 7,140 VA
E	EQUIPMENT	7,140 VA	100%	7,140 VA	TOTAL ESTIMATED DEMAND BALANCED CURRENT: 30 AMPS
M	MOTOR	-	-	-	MAXIMUM ESTIMATED DEMAND PHASE CURRENT: 33 AMPS
K	KITCHEN	-	-	-	
	OTHER	-	-	-	

GENERAL NOTES:
1. REFER TO ONE-LINE DIAGRAM FOR MINI POWER ZONE DETIALS.

PANELBOARD SCHEDULE

PANEL NAME: PPB1 (EXISTING SQUARE D PNL)
MOUNTING: RECESSED
ENCLOSURE: NEMA 1
DOOR STYLE: STANDARD

VOLTAGE: 208Y/120
PHASE: 3
WIRE: 4
MIN. A.I.C. RATING: 22KA

MAINS TYPE: MLO
BUS MATERIAL: COPPER
BUS RATING: 225 AMPS
MCB RATING: NONE

TVSS: NONE
NEUTRAL: 100% RATED
BRANCH OCP TYPE: BOLT-ON CBs
ISOLATED GROUND: NO

KEYED NOTE	CIRCUIT DESCRIPTION	BREAKER AMPS	BREAKER POLE	LOAD TYPE	CKT. #	CONNECTED LOAD/PHASE (VA) A	CONNECTED LOAD/PHASE (VA) B	CONNECTED LOAD/PHASE (VA) C	CKT. #	LOAD TYPE	BREAKER AMPS	BREAKER POLE	CIRCUIT DESCRIPTION	KEYED NOTE
	EXISTING LOAD	20	1		1				2		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		3				4		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		5				6		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		7				8		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		9				10		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		11				12		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		13				14		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		15				16		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		17				18		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		19				20		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		21				22		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		23				24		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		25				26		20	1	EXISTING LOAD	
	EXISTING LOAD	20	1		27		829		28	M	20	3	TF-1	1
	EXISTING LOAD	20	1		29			829	30	M	-	-	-	
	SPACE	20	1		31	829			32	M	-	-	-	
	SPACE	20	1		33				34		-	-	SPACE	
	SPACE	20	1		35				36		-	-	SPACE	
	SPACE	20	1		37				38		-	-	SPACE	
	SPACE	20	1		39				40		-	-	SPACE	
	SPACE	20	1		41				42		-	-	SPACE	
	TOTAL CONNECTED LOAD PER PHASE (VA):					829	829	829						
	TOTAL ESTIMATED DEMAND LOAD PER PHASE (VA):					1,036	1,036	1,036						
	TOTAL ESTIMATED DEMAND LOAD PER PHASE (AMPS):					9	9	9						

TYPE	LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
P	SUB-PANEL	SUB-PANEL LOADS BROKEN OUT BY LOAD CLASIFICATION BELOW			
R	RECEPTACLES	-	-	-	TOTAL CONNECTED LOAD: 2,487 VA
L	LIGHTING	-	-	-	25% OF LARGEST MOTOR: 622 VA
C	CONTINUOUS	-	-	-	TOTAL ESTIMATED DEMAND LOAD: 3,109 VA
E	EQUIPMENT	-	-	-	TOTAL ESTIMATED DEMAND BALANCED CURRENT: 9 AMPS
M	MOTOR	2,487 VA	100%	2,487 VA	MAXIMUM ESTIMATED DEMAND PHASE CURRENT: 9 AMPS
K	KITCHEN	-	-	-	
	OTHER	-	-	-	

PANELBOARD NOTES:
1. PROVIDE NEW BREAKER OF SAME AIC RATING AND MANUFACTURER AS THE EXISTING PANELBOARD.

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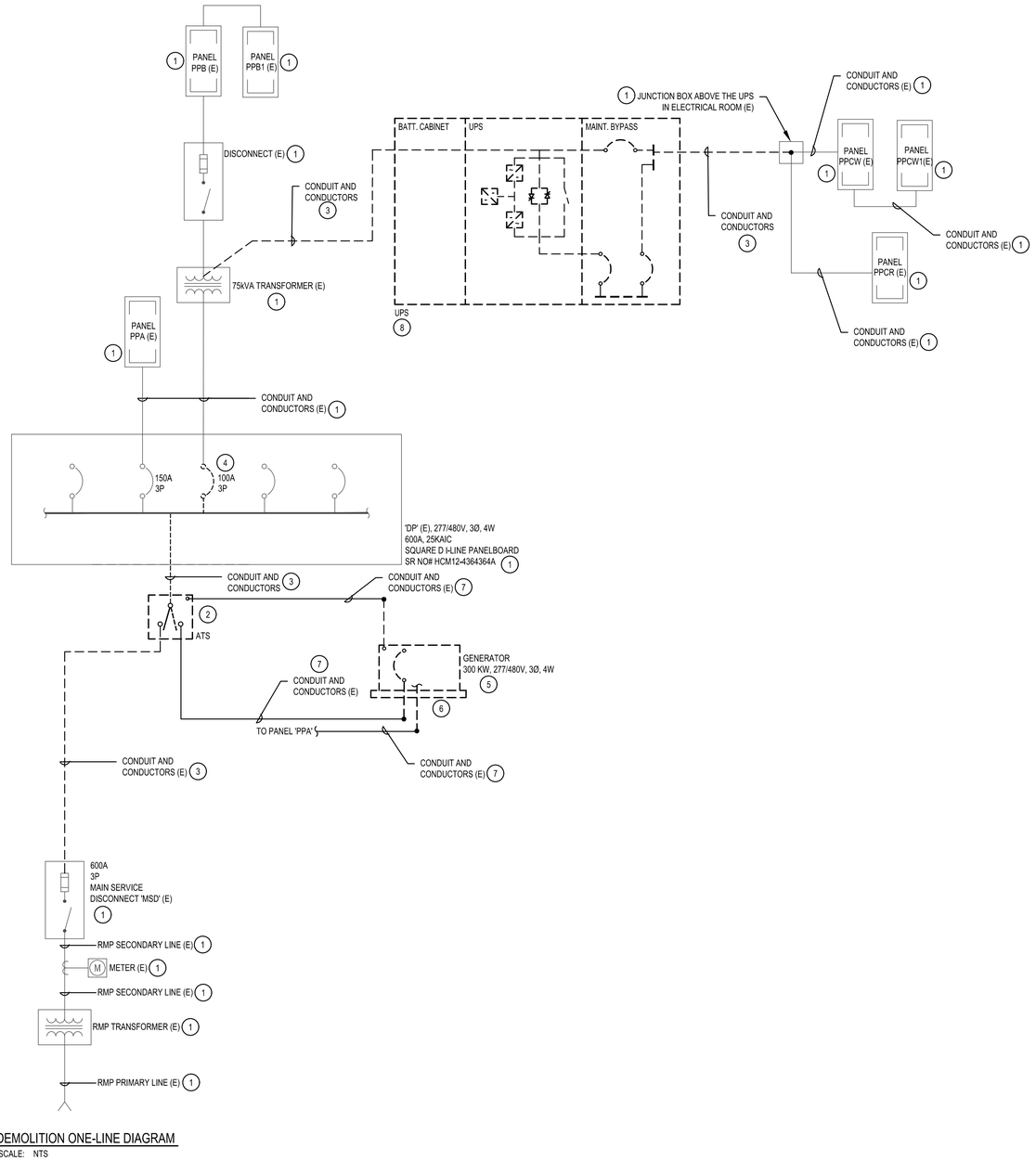
SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
SCHEDULES

SCALE: AS NOTED

DRAWING EP502
PROJECT 54 8201 1826
SHEET 80F 13



1 DEMOLITION ONE-LINE DIAGRAM
SCALE: NTS

GENERAL NOTES:

1. REFER TO SWITCHOVER PLANS FOR ADDITIONAL DETAILS.

KEYED NOTES: (#)

1. PROTECT AND MAINTAIN.
2. DEMOLISH EXISTING ATS AND ASSOCIATED CONTROL WIRING.
3. DEMOLISH EXISTING CONDUIT AND CONDUCTORS.
4. DEMOLISH EXISTING CIRCUIT BREAKER FEEDING THE TRANSFORMER AND RETURN TO OWNER.
5. DEMOLISH EXISTING GENERATOR. REMOVE ALL ASSOCIATED CONDUCTORS, CONTROL WIRING, BATTERY CHARGER AND OTHER ASSOCIATED EQUIPMENT.
6. DEMOLISH EXISTING CONCRETE PAD.
7. DEMOLISH EXISTING CONDUCTORS AND CONTROL CABLING. PROTECT AND MAINTAIN EXISTING CONDUITS FOR RE-USE.
8. DEMOLISH EXISTING BYPASS CABINET, UPS, AND BATTERY CABINET.

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SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
DEMOLITION ONE-LINE DIAGRAM

SCALE: AS NOTED
DRAWING EP801
PROJECT 54 8201 1826
SHEET 9 OF 13

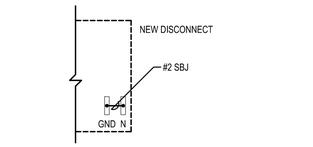
TRANSFER SWITCH SCHEDULE							
NAME	VOLTAGE	POLES	WIRES	AMPERAGE	NEMA RATING	TRANSFER DELAY	TRANSITION	ISOLATION BYASS
ATS	480V	4	4	600	NEMA 1	60 SECONDS	OPEN	NO

FEEDER SCHEDULE							
FEEDER	# OF SETS	CONDUIT DIAMETER (INCH)	CONDUCTOR #	CONDUCTOR SIZE	EQ GND COND	ISOLATED GROUND	SUPPLY SIDE BONDING JUMPER
C125.3S	1	1.5	3	1	6	-	-
C225.4S	1	2.5	4	4/0	4	-	-
C225.4T	1	2.5	4	250	-	-	2
C600.4S	2	3	4	350	1	-	-

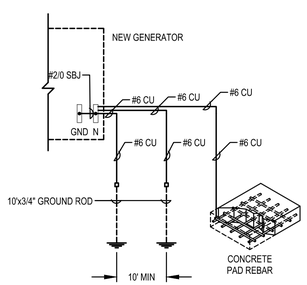
TRANSFORMER SCHEDULE											
NAME	KVA	PRIMARY		SECONDARY		GROUNDING AND K FACTOR			ELECTROSTAIC SHIELD	MOUNTING	ENCLOSURE
		VOLTAGE	CONNECTION	VOLTAGE	CONNECTION	SIZE	CONDUIT	K FACTOR			
T1	75	480	DELTA	208	WYE	2	3/4"	4	YES	UNISTRUT	NEMA 1

ONE-LINE SYMBOLS

SYMBOL	DESCRIPTION
PANEL 'A'	LIGHTING AND APPLIANCE PANEL BOARD
	CIRCUIT BREAKER
XX	MINI POWER ZONE
6	MOTOR
	ELECTRONIC CIRCUIT BREAKER
	FUSED DISCONNECT SWITCH
M	METER
	CT TRANSFORMER
	GROUNDING ELECTRODE & CONDUCTOR
	AUTOMATIC TRANSFER SWITCH
G	GENERATOR
	TRANSFORMER



3 NEW DISCONNECT GROUNDING DETAIL
SCALE: NTS



2 GENERATOR GROUNDING DETAIL
SCALE: NTS

1 NEW ONE-LINE DIAGRAM
SCALE: NTS

GENERAL NOTES:

1. REFER TO SWITCHOVER PLANS FOR ADDITIONAL DETAILS.

KEYED NOTES: (#)

1. UTILIZE EXISTING CONDUITS AND EXTEND NEW CONDUITS AS SHOWN ON SITE PLAN.
2. PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANELBOARD OF SAME MANUFACTURER AND AIC RATING.
3. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED FOR MAKING THE FINAL TERMINATIONS.
4. PROVIDE 480V:240V/1PHASE, 15KVA MINI POWER ZONE FOR FEEDING GENERATOR BATTERY HEATER, CHARGER AND OTHER GENERATOR CIRCUITS AS REQUIRED. MINI POWER ZONE SHALL BE LOCATED INSIDE/ON THE GENERATOR ENCLOSURE.
5. EXTEND NEW CONDUCTORS UPTO THE JUNCTION BOX SHOWN AND PROVIDE SPLICES FOR EXISTING CONDUCTORS.
6. INTERCEPT EXISTING CONDUIT AND EXTEND NEW CONDUIT AND CONDUCTORS AS SHOWN.

SELECTIVE COORDINATION REQUIRMENTS:

1. CONTRACTOR SHALL PROVIDE SELECTIVE COORDINATION STUDY FOR THE THE ENTIRE ELECTRICAL SYSTEM (ALL EQUIPMENT SHOWN ON ONE-LINE DIAGRAM).
2. THE SELECTIVE COORDINATION OF THE SYSTEM (DOWN TO THE SMALLEST OVERCURRENT PROTECTIVE DEVICE) SHALL BE COORDINATED TO A LEVEL OF 0.1 SECONDS FOR ALL NEW OVERCURRENT PROTECTIVE DEVICES AND TO THE EXTENT POSSIBLE FOR EXISTING OVERCURRENT DEVICES.
3. CONTRACTOR SHALL PROVIDE LSI BREAKERS OR BREAKERS WITH LARGER FRAMES AS NECESSARY TO ACHIEVE THE ABOVE STATED LEVEL OF COORDINATION.
4. CONTRACTOR IS RESPONSIBLE TO CONDUCT FIELD OBSERVATION AND GATHER ALL THE REQUIRED INFORMATION FOR THE STUDY (CONDUCTOR SIZES, BREAKER SIZES, FEEDER LENGTHS ETC.).
5. PROVIDE COORDINATION STUDY PRIOR TO RELEASING NEW EQUIPMENT.

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SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
NEW ONE-LINE DIAGRAM

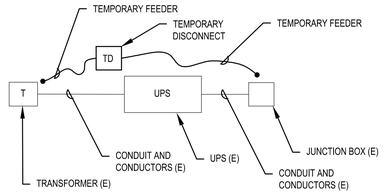
SCALE: AS NOTED
DRAWING EP802
PROJECT 54 8201 1826
SHEET 10 OF 13

GENERAL NOTES:

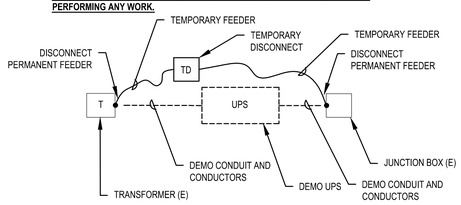
1. **ALL POWER OUTAGES SHALL BE SCHEDULED WITH THE OWNER PRIOR TO A WEEK BEFORE THEY ARE PLANNED.**
2. **OWNER SHALL HAVE THE FINAL AUTHORITY TO POSTPONE ANY SCHEDULED POWER OUTAGES DURING A CRITICAL WEATHER EVENT.**
3. **ALL POWER OUTAGES SHALL BE LIMITED TO A MAXIMUM OF 6 HOURS.**
4. **ALL TEMPORARY EQUIPMENT SHOWN ON THE BELOW SWITCHOVER PLANS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR WITH EXCEPTION TO THE TEMP GENERATOR AND TEMP GENERATOR CABLES (TO BE PROVIDED BY AIRPORT).**

UPS SWITCHOVER PLANS

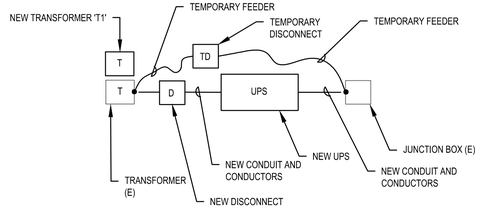
STEP 1:
PREPARE TEMPORARY FEEDERS AND TEMPORARY DISCONNECT FOR THE CONNECTION BETWEEN EXISTING TRANSFORMER AND JUNCTION BOX. NO POWER OUTAGE IS EXPECTED DURING THIS STEP.



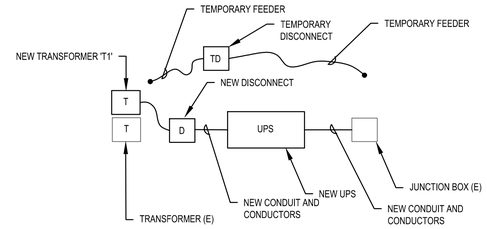
STEP 2:
DISCONNECT EXISTING PERMANENT FEEDERS.CONNECT THE TEMPORARY FEEDER AND DISCONNECT TO RESTORE POWER AS SOON AS POSSIBLE. DEMOLISH EXISTING EXISTING UPS AND CONDUITS, CONDUCTORS BETWEEN THE EXISTING TRANSFORMER AND UPS AND BETWEEN THE UPS UPTO THE EXISTING JUNCTION BOX. **POWER OUTAGE IS EXPECTED DURING THIS STEP. COORDINATE POWER OUTAGE TIME WITH OWNER PRIOR TO PERFORMING ANY WORK.**



STEP 3:
INSTALL NEW UPS, TRANSFORMER, FUSED DISCONNECT AND CONCRETE PAD INCLUDING ASSOCIATED FEEDERS AND CONDUCTORS. REFER TO ONE-LINE DIAGRAM FOR CONDUIT AND CONDUCTOR SIZES. ALL PERMANENT ELECTRICAL CONNECTIONS SHALL OCCUR IN THE NEXT STEP. NO POWER OUTAGE IS EXPECTED DURING THIS STEP.

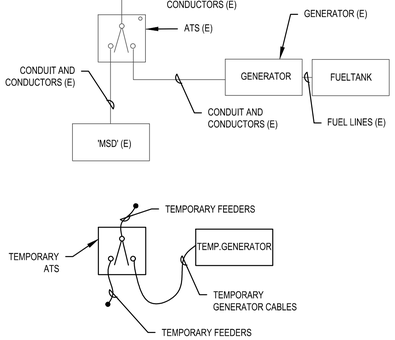


STEP 4:
MAKE THE FINAL PERMANENT TERMINATIONS. REMOVE ALL TEMPORARY FEEDERS AND TEMPORARY DISCONNECT. **POWER OUTAGE IS EXPECTED DURING THIS STEP. COORDINATE POWER OUTAGE TIME WITH OWNER PRIOR TO PERFORMING ANY WORK.**

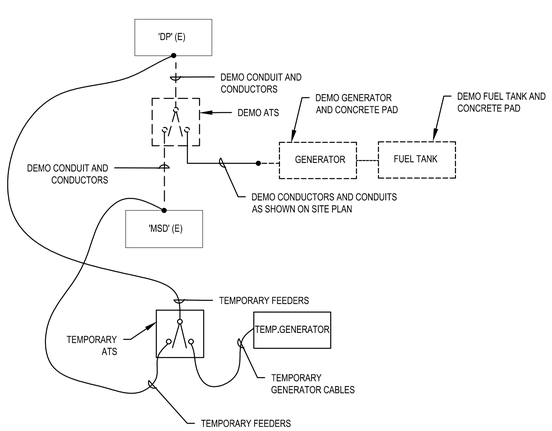


GENERATOR SWITCHOVER PLANS

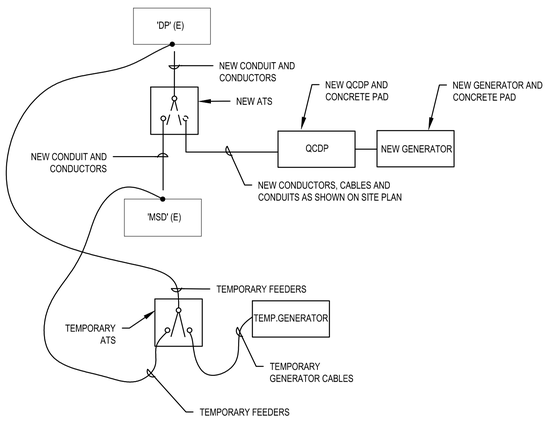
STEP 1:
PREPARE TEMPORARY FEEDERS, ATS, AND TEMPORARY GENERATOR. TEMPORARY GENERATOR AND GENERATOR CABLES TO BE PROVIDED BY AIRPORT. FUEL TO BE PROVIDED BY CONTRACTOR. CONTRACTOR SHALL PROVIDE AT LEAST A WEEK NOTICE TO AIRPORT FOR MOVING THE GENERATOR TO SITE. NO POWER OUTAGE IS EXPECTED DURING THIS STEP.



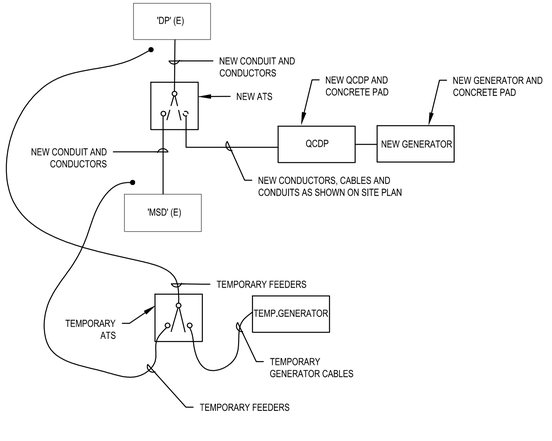
STEP 2:
DISCONNECT EXISTING PERMANENT FEEDERS. CONNECT TEMPORARY GENERATOR AND ATS TO BUILDING ELECTRICAL SYSTEM, DEMOLISH EXISTING ATS, GENERATOR, FUEL TANK, AND ASSOCIATED CONDUITS, FUEL LINES , CONDUCTORS AS SHOWN. **POWER OUTAGE IS EXPECTED DURING THIS STEP. COORDINATE POWER OUTAGE TIME WITH OWNER PRIOR TO PERFORMING ANY WORK.**



STEP 3:
INSTALL NEW GENERATOR, QCDP, CONCRETE PADS AND ASSOCIATED CONDUITS. PULL NEW CONDUCTORS AND CONTROL CABLING AS SHOWN ON ONE-LINE DIAGRAM TO BE READY FOR A FINAL CONNECTION, NO POWER OUTAGE IS EXPECTED DURING THIS STEP.



STEP 4:
MAKE THE FINAL PERMANENT TERMINATIONS. REMOVE ALL TEMPORARY FEEDERS AND TEMPORARY CABLES. **POWER OUTAGE IS EXPECTED DURING THIS STEP. COORDINATE POWER OUTAGE TIME WITH OWNER PRIOR TO PERFORMING ANY WORK.**



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STATE OF UTAH
10/31/2022

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No.	DATE	REMARKS	BY	APV

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DATE 10/31/2022

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SALT LAKE CITY INTERNATIONAL AIRPORT
NATIONAL WEATHER SERVICE BUILDING GENERATOR & UPS REPLACEMENT
SWITCHOVER PLANS

SCALE: AS NOTED

DRAWING EP803
PROJECT 54 8201 1826
SHEET 11 OF 13

LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

MECHANICAL

- POSITIVE PRESSURE DUCT - RISE
- POSITIVE PRESSURE DUCT - DROP
- NEGATIVE PRESSURE DUCT - RISE
- NEGATIVE PRESSURE DUCT - DROP
- ROUND DUCT - RISE
- ROUND DUCT - DROP
- UNDER FLOOR DUCT
- TURNING VANES
- FRESH AIR LOUVER
- RELIEF AIR OR EXHAUST AIR LOUVER
- CEILING SUPPLY DIFFUSER (12X12 / 200)
- CEILING RETURN REGISTER (22X22 / 200)
- CEILING EXHAUST REGISTER, (BALANCE TO MATCH SUPPLY IF RETURN CFM IS NOT SHOWN) (12X12 / 200)
- SIDEWALL SUPPLY REGISTER (24X10 / 200)
- SIDEWALL EXHAUST OR RETURN REGISTER (24X10 / 200)
- CEILING SUPPLY DIFFUSER WITH FLEXIBLE DUCT (12X12 / 200)
- CEILING AIR GRILLE WITH FLEXIBLE DUCT (12X12 / 200)
- CEILING RETURN AIR GRILLE W/ SOUND BOOT

TOP FIGURES INDICATE NECK SIZE, BOTTOM FIGURE INDICATES CFM.

MECHANICAL CONT.

- 3-1" SLOTS @ 45° 400 — LINEAR DIFFUSER WITH PLENUM AND FLEXIBLE DUCT CONNECTION. NO. OF SLOTS & SIZE OF SLOT ON TOP, ACTIVE LENGTH AND CFM ON BOTTOM
- FLEXIBLE DUCT CONNECTION
- FLEXIBLE DUCT
- FAN
- 12/8 FO — FLAT OVAL DUCT WITH FREE AREA DIMENSIONS SHOWN IN INCHES.
- 12/8 — RECTANGULAR DUCT WITH FREE AREA DIMENSIONS SHOWN IN INCHES.
- 12Ø — ROUND DUCT WITH FREE AREA DIMENSIONS SHOWN IN INCHES.
- UP — INCLINED RISE
- DN — INCLINED DROP

WITH RESPECT TO AIR FLOW 15° NOMINAL INCLINE WITH RADIUS TURNS=DEPTH OF DUCT.

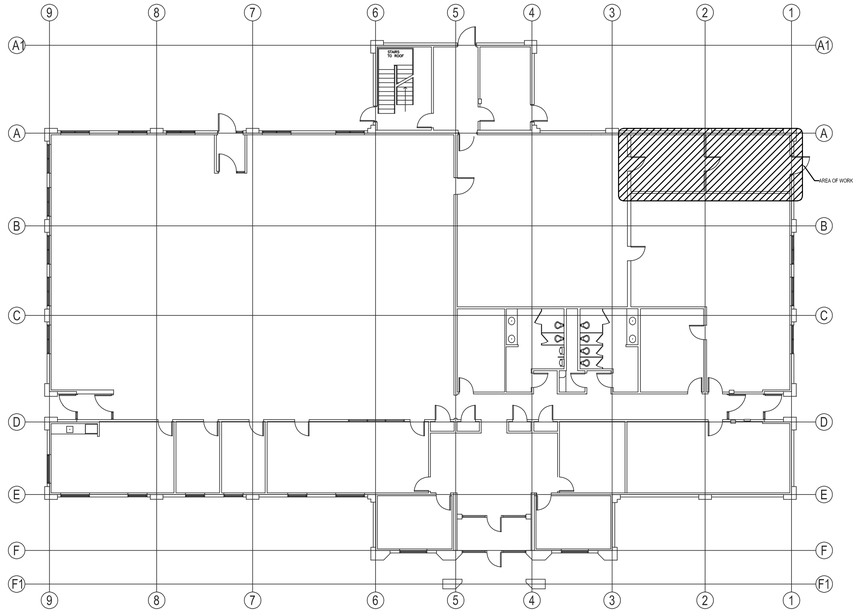
- W R — R/W=1. ROUND DUCT SIMILAR TO RECTANGULAR
- 12/12 8/8 — RECTANGULAR TO RECTANGULAR OR ROUND TO ROUND DUCT TRANSFORMATION MAXIMUM 15° INCLUDED ANGLE EXCEPT WHERE SHOWN OTHERWISE.
- 12/12 12Ø — RECTANGULAR TO ROUND DUCT TRANSFORMATION
- 1.5D 1.25D 45° D D — TAP ENTRY AREA EQUALS 150% OF BRANCH AREA
- 12Ø 12/12 — HIGH EFFICIENCY FITTING

MECHANICAL CONT.

- MANUAL VOLUME DAMPER
- FD — FIRE DAMPER IN DUCT, W/ ACCESS PANEL REQD.
- FSD — COMBINATION FIRE/SMOKE DAMPER W/ ACCESS PANEL
- SD — SMOKE DAMPER W/ ACCESS PANEL
- BDD — BACK DRAFT DAMPER
- ATC OR — ATC DAMPER
- AD — ACCESS PANEL IN DUCT OR PLENUM
- HEATING OR COOLING COIL IN DUCT
- SINGLE DUCT AIR TERMINAL BOX VARIABLE OR CONSTANT VOLUME. MIN. 1-1/2 TERMINAL INLET SIZE STRAIGHT DUCT AT TERMINAL INLET.
- 4-WAY BLOW PATTERN
- 3-WAY BLOW PATTERN
- 2-WAY BLOW PATTERN
- 2-WAY BLOW PATTERN
- 1-WAY BLOW PATTERN
- SD — DUCT SMOKE DETECTOR
- UNIT HEATER

SYMBOLS

- P-1 — PLUMBING FIXTURES
- POINT OF CONNECTION
- A / M-101 — SECTION TAG - TOP FIGURE IS SECTION NO. BOTTOM FIGURE IS SHEET NO.
- A / M101 — DETAIL TAG - TOP FIGURE IS DETAIL NO. BOTTOM FIGURE IS SHEET NO.
- EF / 1 — EQUIPMENT IDENTIFICATION
- 1 — KEYED NOTE IDENTIFICATION



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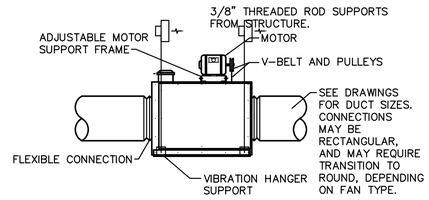
MECHANICAL LEGEND, SYMBOLS AND ABBREVIATIONS

SCALE: AS NOTED
DRAWING M001
PROJECT 54 8201 1826
SHEET 12 OF 13

FAN SCHEDULE

ID	MANUFACTURER	MODEL NUMBER	TYPE	AIR TYPE	AIR: MAXIMUM AIRFLOW RATE (CFM)	AIR: STATIC PRESSURE (IN. WATER)	ELECTRICAL: MOTOR SIZE (HP)	ELECTRICAL: VOLT/PH/HZ	PHYSICAL: LENGTH/ WIDTH/ HEIGHT (IN)	PHYSICAL: WEIGHT (LBS)	CONTROL	NOTES
TF-1	COOK	180SQN17D (VF)	INLINE	TRANSFER AIR	3,900	1	1 1/2	208/3/60	30 / 30 / 24	200	MATCH EXISTING	1,2

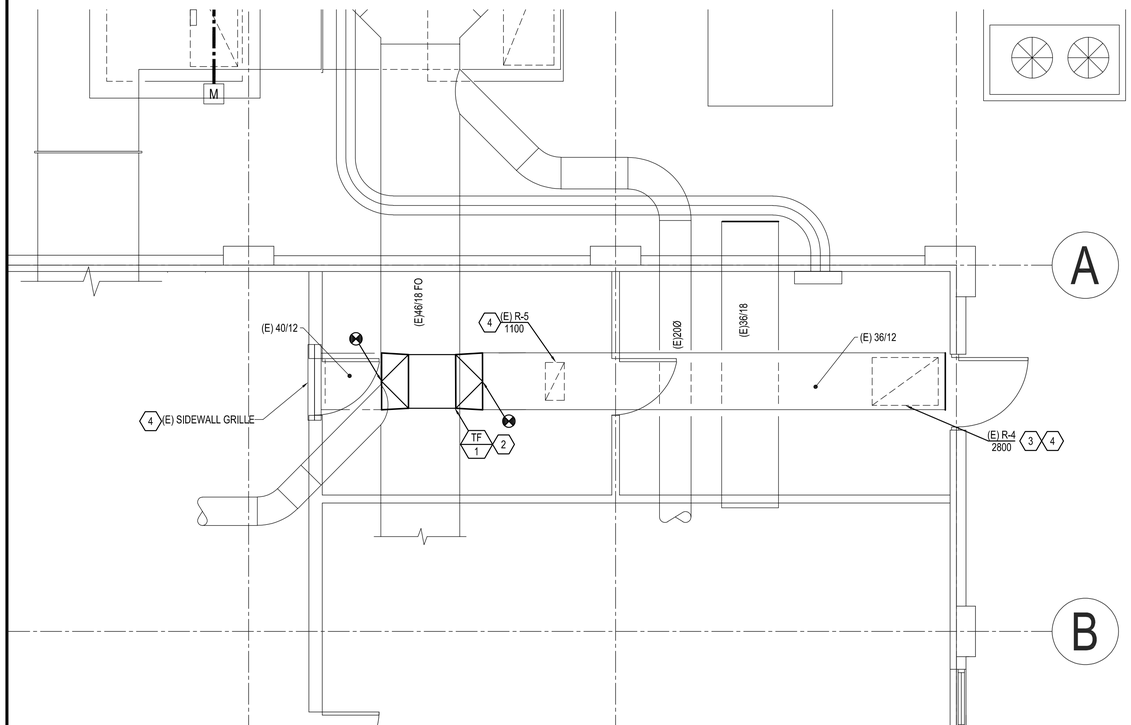
1. INLINE EXHAUST FAN COMPLETE WITH FACTORY PRE-WIRED DISCONNECT, MOTORIZED BACKDRAFT DAMPER, PRE-WIRED SPEED CONTROLLER, AND FAN INLET GUARD.
2. AIRFLOWS AT JOB SITE ELEVATIONS.



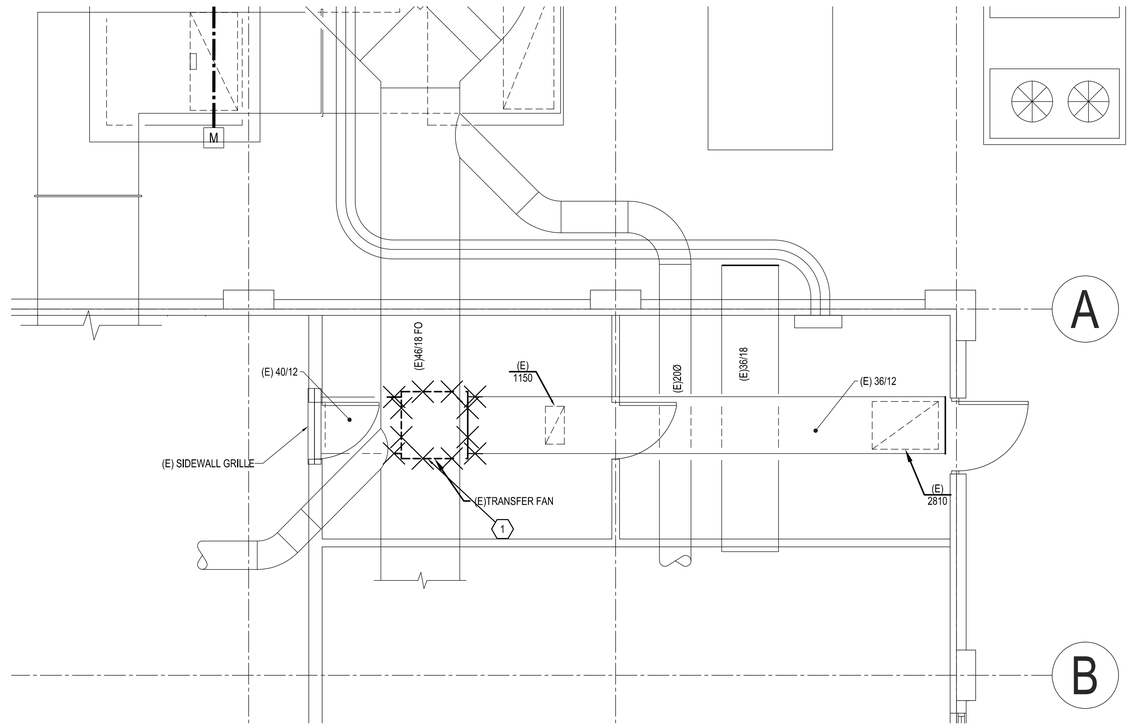
INLINE EXHAUST FAN
NO SCALE

KEYED NOTES

1. REMOVE EXISTING TRANSFER FAN AND PREPARE DUCTWORK FOR NEW FAN.
2. CONNECT NEW TRANSFER FAN AS SHOWN. PROVIDE TRANSITIONS AS REQUIRED TO CONNECT TO EXISTING DUCTWORK.
3. BALANCE EXISTING GRILLE TO NEW AIRFLOW AS INDICATED. PROVIDE NEW BALANCING DAMPER AS REQUIRED. (TYPICAL)
4. REMOVE, CLEAN AND REINSTALL GRILLES. CLEAN DUCTWORK AS REQUIRED.



2 MECHANICAL PLAN
SCALE: 1/4"=1'-0"
0' 4' 8'
N



1 MECHANICAL DEMOLITION PLAN
SCALE: 1/4"=1'-0"
0' 4' 8'
N

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