BRIGHTON HIGH SCHOOL - DESTRATIFICATION FANS

CANYONS SCHOOL DISTRICT

JUNE 29, 2026

2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

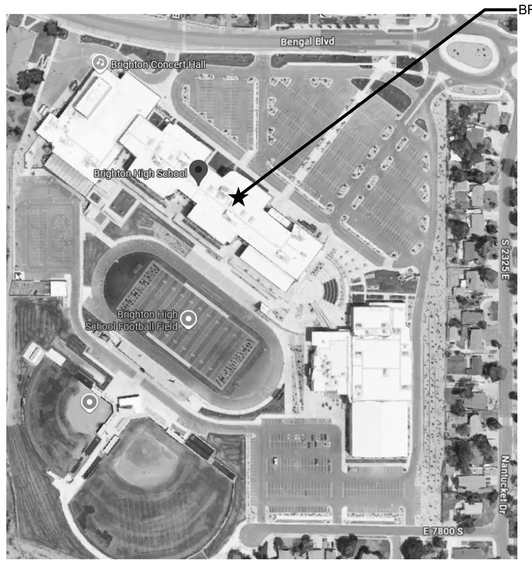
CANYONS SCHOOL DISTRICT

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VICINITY MAP



COTTONWOOD HEIGHTS, UTAH

DRAWING INDEX

TS	TITLE SHEET
M101	THIRD FLOOR MECHANICAL PLAN - EAST
M102	THIRD FLOOR MECHANICAL PLAN - WEST
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E001	ELECTRICAL TITLE SHEET
E101	THIRD FLOOR ELECTRICAL PLAN - EAST
E102	THIRD FLOOR ELECTRICAL PLAN - WEST

OLSEN & PETERSON
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LICENSED PROFESSIONAL ENGINEER
#334524-2202
JAMES AUSTIN BERRETT
UTAH

PROJ. NO.	17082
DATE	JUNE 2026
DRAWN	LCL
CHECKED	MFT

No.	Date	Description

PROPOSED NEW CONSTRUCTION FOR:
PROJECT TITLE
BRIGHTON HIGH SCHOOL - DESTRATIFICATION FANS
2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE
TITLE SHEET

SHEET NO.
TS

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1 THIRD FLOOR MECHANICAL PLAN - EAST

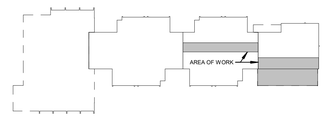
SCALE: 3/32" = 1'-0"

N

REFERENCE NOTES

1 COORDINATE EXACT LOCATION & MOUNTING HEIGH WITH EXISTING CONDITIONS. MOUNTING HEIGHT TO BE ABOVE EXISTING LIGHT FIXTURES. AIR PATTERN MUST NOT INTERFERE WITH EXISTING LIGHT FIXTURES.

2 EXISTING ATC PANEL. TIE NEW CONTROLS INTO EXISTING BMS VIA BACNET TO CONTROL DF-1 & DF-2 FANS. FANS TO BE INDIVIDUALLY CONTROLLED. COORDINATE WITH EXISTING CONDITIONS & ATC CONTRACTOR. INTERFACE OF NEW FAN SYSTEMS TO EXISTING BMS SHALL BE PROVIDED AND INSTALLED BY UTAH YAMAS CONTROLS, SLC, UTAH AS AN EXTENSION OF THE EXISTING SYSTEM.



THIRD FLOOR KEY PLAN

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JAMES AUSTIN BERRETT
6/10/2026
UTAH

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2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE

THIRD FLOOR MECHANICAL PLAN - EAST

SHEET NO.

M101

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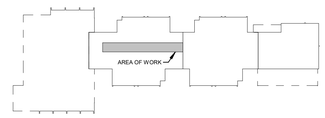


1 THIRD FLOOR MECHANICAL PLAN - WEST

SCALE: 3/32" = 1'-0"

REFERENCE NOTES

1 COORDINATE EXACT LOCATION & MOUNTING HEIGH WITH EXISTING CONDITIONS. MOUNTING HEIGHT TO BE ABOVE EXISTING LIGHT FIXTURES. AIR PATTERN MUST NOT INTERFERE WITH EXISTING LIGHT FIXTURES.



THIRD FLOOR KEY PLAN

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JAMES AUSTIN BERRETT
6/10/2026
UTAH

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PROJECT TITLE
PROPOSED NEW CONSTRUCTION FOR:
BRIGHTON HIGH SCHOOL - DESTRATIFICATION FANS
2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE
THIRD FLOOR MECHANICAL PLAN - WEST

SHEET NO.
M102

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MECHANICAL EQUIPMENT SCHEDULE

DF-1

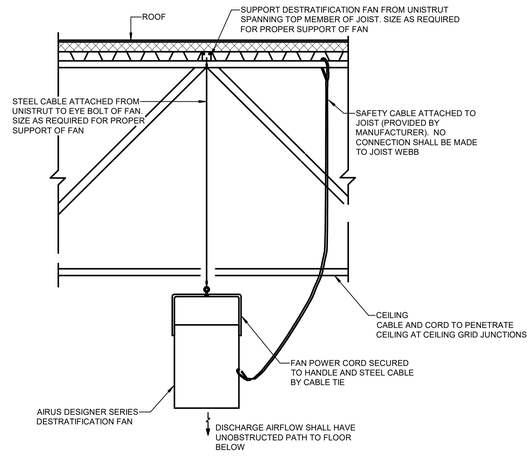
DE-STRAT FAN: MIXED AIR TYPE FOR EXPOSED MOUNTING. MULTI-VANE STATOR AND VENTURI NOZZLE, 6'-0" STEEL SEISMIC SAFETY LEASH, BACNET/IP CONTROL PACKAGE, FACTORY SMART CONTROLLER WITH HIGH/LOW TEMPERATURE SENSORS AND FACTORY INLET GRILLE.

ELECTRICAL: 120/1/60, 0.46 AMPS
MANUFACTURER: AIRIUS FANS DESIGNER SERIES OR APPROVED EQUAL
MODEL: D-25-EC-STD-120. 'OFF-WHITE'

DF-2

DE-STRAT FAN: MIXED AIR TYPE FOR EXPOSED MOUNTING. MULTI-VANE STATOR AND VENTURI NOZZLE, 6'-0" STEEL SEISMIC SAFETY LEASH, BACNET/IP CONTROL PACKAGE, FACTORY SMART CONTROLLER WITH HIGH/LOW TEMPERATURE SENSORS AND FACTORY INLET GRILLE.

ELECTRICAL: 120/1/60, 1.9 AMPS
MANUFACTURER: AIRIUS FANS DESIGNER SERIES OR APPROVED EQUAL
MODEL: D-45-EC-STD-120. 'OFF-WHITE'



NOTES:
1. INSTALL FAN AS CLOSE AS POSSIBLE TO TOP OF CEILING. (TYP. 0'-6" TO 1'-0")
2. OPTIONAL HANGING METHODS INCLUDE: BEAM CLAMP/ BRIDLE RING, CHAIN LINK/ CARABINER, THREADED ROD/ LOCKNUTS ETC.
3. CONTRACTOR TO PROVIDE POWER FEED IN CONDUIT. THE ELECTRICAL CONNECTION CAN BE MADE IN A J-BOX (HARD WIRED) OR PLUG CONNECTION (J-BOX RECEPTACLE).

DESTRATIFICATION FAN DETAIL

SCALE: NTS

1
M501

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LICENSED PROFESSIONAL ENGINEER
JAMES AUSTIN BERRETT
6510626-2202
6/10/2026
UTAH

PROJ. NO.	17082
DATE	JUNE 2026
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CHECKED	MFT

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PROPOSED NEW CONSTRUCTION FOR:

PROJECT TITLE
BRIGHTON HIGH SCHOOL - DESTRATIFICATION FANS
2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE
MECHANICAL SCHEDULES & DETAILS

SHEET NO.
M501

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ELECTRICAL ABBREVIATIONS INDEX

ABBREV.	DESCRIPTION
A	AMPS
AC	ALTERNATING CURRENT
ACLG	ABOVE CEILING
ADC	ANALOG-TO-DIGITAL CONVERTER
AF	AMP FRAME
AFC	AVAILABLE FAULT CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF / A.F.F.	ABOVE FINISH FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPS INTERRUPTING CAPACITY
AL	ALUMINUM
ALT	ALTERNATE
AM	AMPS METER
AMP	AMPERE
AMPL	AMPLIFIER
ANN	ANNUNCIATOR
AOE	AUDIO-OVER-ETHERNET
APPROX	APPROXIMATELY
AQ-STAT	AQUASTAT
ARCH	ARCHITECT, ARCHITECTURAL
AS	AMP SWITCH
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIOVISUAL
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BC	BARE COPPER
BD	BOARD
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
BPM	BEATS-PER-MINUTE
C, CND	CONDUIT
C.O.	CONDUIT ONLY
CW	COMPLETE WITH
CAB	CABINET
CAT	CATEGORY CABLE
CAT#	CATALOG
CATB	COMMUNITY ANTENNA TELEVISION
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CF	CREST FACTOR
CKT	CIRCUIT
CLG	CEILING
CMPR	COMPRESSOR
CNTR	CONTRACTOR
CO	CONDUIT ONLY
CODEC	CODER-DECORDER
COMB	COMBINATION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONV	CONVECTOR
CP	CIRCULATING PUMP
CRT	COMPUTER TERMINAL
CT	CURRENT TRANSFORMER
CU	COPPER
CV	CONSTANT VOLTAGE
DAC	DIGITAL-TO-ANALOG CONVERTER
DB	DECIBEL
DBFS	DB REF: FULL SCALE
DBM	DB REF: 0.001 WATT
DBU	DB REF: 0.775 V
DBV	DB REF: 1 V
DC	DIRECT CURRENT
DCP	DOMESTIC CIRCULATING PUMP
DED	DEDICATED
DEPT	DEPARTMENT
DET	DETAIL
DFA	DROP FROM ABOVE
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DPR	DAMPER
DR	DYNAMIC RANGE
DS	DISCONNECT SWITCH
DT	DOUBLE THROW
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EG	EMERGENCY GENERATOR
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
ELU	EMERGENCY LIGHTING UNIT
EM	EMERGENCY/EGRESS BATTERY
EMI	ELECTRO-MAGNETIC INTERFERENCE
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
ENT	ELEC. NON-METAL. TUBING
EP	ELECTRIC PNEUMATIC
EQUIP	EQUIPMENT
ER	EXISTING TO BE RELOCATED
ES	SOURCE VOLTAGE
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM
FABP	FIRE ALARM BOOSTER PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FOOT CANDLE
FCU	FAN COIL UNIT
FIR	FINITE IMPULSE RESPONSE FILTER
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FMC	FLEXIBLE METAL CONDUIT
FU	FUSE
FUDS	FUSE SAFETY DISCONNECT SWITCH
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEC	GRND. ELEC. COND. AT SES
GEN	GENERATOR
GFCI	GROUND FAULT CURRENT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
GYP BD	GYPSUM BOARD
HOA	HAND-OFF-AUTOMATIC SWITCH
HORIZ	HORIZONTAL
HP	HORSE POWER
HPF	HIGH POWER FACTOR
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HZ	HERTZ
I/W	INTERLOCK WITH
IC	INTERRUPTING CAPACITY
IFC	INTERNATIONAL FIRE CODE
IG	ISOLATED GROUND
IIR	INFINITE IMPULSE RESPONSE FILTER
IMC	INTERMEDIATE METALLIC CONDUIT
INCAND	INCANDESCENT
INFRARED	INFRARED
IT	TOTAL CURRENT
J-BOX	JUNCTION BOX
KCMIL	1000 CIRCULAR MILS (MCM)
KHZ	THOUSANDS OF HZ
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KVAR	KILOVARS
KW	KILOWATT
KWH	KILOWATT HOUR
LCS	C-WEIGHTED SLOW SOUND LEVEL
LEQ	EQUIVALENT SOUND LEVEL
LFMC	LIQUID-TIGHT FLEX. METAL COND.
LFNC	LIQUID-TIGHT FLEX. NON-METAL COND.
LOC	LOCATE OR LOCATION
LP, SPL	SOUND PRESSURE LEVEL
LRA	LOCKED ROTOR AMPS
LT	LIGHT
LTG	LIGHTING
LU	LOUDNESS UNIT METERING
LUFS	LOUDNESS UNIT FULL SCALE
LV	LOW VOLTAGE
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	1000 CIRCULAR MILLS
MDC	MAIN DISTRIBUTION CENTER
MDP	MAIN DISTRIBUTION PANEL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFR	MANUFACTURER
MFS	MAIN FUSED DISCONNECT SWITCH
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MMS	MANUAL MOTOR STARTER
MNF	MANUFACTURER
MOA	MULTI-OUTLET ASSEMBLY
MSBD	MAIN SWITCHBOARD
MSP	MOTOR STARTER PANELBOARD
MSS	MOTOR STARTER SWITCH
MTG	MOUNTING
MTR	MOTOR
MTS	MANUAL TRANSFER SWITCH
N	NEW
N.I.C.	NOT IN CONTRACT
N/A	NOT APPLICABLE
N1	NEMA 1
N3R	NEMA 3R
NAC	NOTIFICATION APPLIANCE CIRCUIT PANEL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECT. MANUFAC. ASSOC
NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NL	NIGHT LIGHT, BYPASS LOCAL SWITCHING
NO	NORMALLY OPENED
NPF	NORMAL POWER FACTOR
NTS	NOT TO SCALE
NVR	NETWORK VIDEO RECORDER
OC	ON CENTER
OH	OVERHEAD
OL	OVERLOADS
OS & Y	OUTSIDE SCREW & YOKE
OSI	OPEN SYSTEM INTEGRATION
PA	PASCAL
PB	PUSHBUTTON
PBB	PRIMARY BONDING BUSBAR
PC	PLUMBING CONTRACTOR
PCM	PULSE CODE MODULATION
PDU	POWER DISTRIBUTION UNIT
PE	PNEUMATIC ELECTRIC
PED	PEDESTAL
PF	POWER FACTOR
PFR	PHASE FAILURE RELAY
PIV	POST INDICATING VALVE
PLEN	PLENUM
PNL	PANEL
POC	POINT OF CONNECTION
POE	POWER OVER ETHERNET
POS	POINT OF SALE
PP	POWER POLE
PPM	PEAK PROGRAM METER
PR	PAIR
PRI	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PSI	POUNDS-PER-SQUARE-INCH
PT	POTENTIAL TRANSFORMER
PTP	POINT TO POINT
PTZ	PAN, TILT, AND ZOOM
PVC	POLYVINYL CHLORIDE CONDUIT
PWR	POWER
QUAN	QUANTITY
R	RESISTANCE
RECEP, RECPT	RECEPTACLE
REQ,REQD	REQUIRED
REX	REQUEST TO EXIT
RF	RADIO FREQUENCY
RFM	ROOF MOUNTED
RL	LOAD RESISTANCE
RLA	RATED LOAD AMPS
RM	ROOM
RMC	RIGID METALLIC CONDUIT
RMP	ROCKY MOUNTAIN POWER
RMS	ROOT MEAN SQUARE
RNC	RIGID NON-METALLIC COND.
RPM	ROTATIONS-PER-MINUTE
RS	SOURCE RESISTANCE
RT	TOTAL RESISTANCE
RTU	ROOF TOP UNIT
RX	RECEIVER
S/N	SOLID NEUTRAL
S/S	STOP/START PUSHBUTTONS
SBB	SECONDARY BONDING BUSBAR
SBG	SUPPLEMENTARY BONDING GRID
SBJ	SYSTEM BONDING JUMPER
SC	SURFACE CONDUIT
SCA	SHORT CIRCUIT AMPERES
SDI	SERIAL DIGITAL INTERFACE
SE	SERVICE ENTRANCE
SEC	SECONDARY
SES	SMOKE EVACUATION SYSTEM
SHT	SHEET
SIM	SIMILAR
SLD	SINGLE-LINE DIAGRAM
SNR	SIGNAL-TO-NOISE RATIO
SP	SPARE
SPDIF	SONY PHILLIPS DIGITAL INTERFACE
SPEC	SPECIFICATIONS
SPKR	LOUDSPEAKER
SPL	SOUND PRESSURE LEVEL
SPP	SINGLE-POINT POWER
SR	SURFACE RACEWAY
SS	SELECTOR SWITCH
SSW	SELECTOR SWITCH
STA	STATION
STD	STANDARD
STP	SHIELDED TWISTED PAIR
SURF	SURFACE MOUNTED
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
SYS	SYSTEM
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBC	TELECOMMUNICATIONS BONDING CONDUCTOR
TC	TEMP. CONTROL CONTR.
TEL	TELEPHONE
TERM	TERMINAL
TL	TWIST LOCK
TR	TAMPER RESISTANT
T-STAT	THERMOSTAT
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TVTC	TELEVISION TERMINAL
TX	TRANSMITTER
TYP	TYPICAL
UC	UNDER COUNTER
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTED POWER SUPPLY
UT	UNDERGROUND TELEPHONE
UTIL	UTILITY
UTP	UNSHIELDED TWISTED PAIR
UV	ULTRAVIOLET
V	VOLT (KV-KILOVOLT)
VA	VOLT/AMPS
VAR, VAR	VOLT-AMPS/REACTIVE
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLTS DC CURRENT
VDT	VIDEO DISPLAY TERMINAL
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VI	VOLUME INDICATOR
VIF	VERIFY IN FIELD
VM	VOLT METER
VOL	VOLUME
VU	VOLUME UNIT
W	WATTS
W/	WITH
W/O	WITHOUT
WG	WIRE GUARD
WH	WATTHOUR METER
WP	WEATHERPROOF/NEMA 3R
XFMR	TRANSFORMER
XFMR SW	SW TRANSFER SWITCH
XFR	TRANSFER
XL	X-CONNECTOR LOCKING
XLR	X-CONNECTOR LOCKING
XP	EXPLOSION PROOF
XR	EXISTING TO BE REMOVED
1P	ONE-POLE
2P	TWO-POLE
3P	THREE-POLE
4P	FOUR-POLE
∠	ANGLE
&	AND
@	AT
°	DEGREE
Δ	DELTA
' FT	FOOT, FEET
" IN	INCH, INCHES
#	NUMBER
Ω, OHM	UNIT OF ELECTRICAL RESISTANCE
Ø, PH	PHASE
℄, CTR	CENTER LINE, CENTER
P	PLATE

SYMBOL LEGEND GENERAL NOTES

1. REFER TO LUMINAIRE SCHEDULE FOR FIXTURE TYPES, MOUNTING REQUIREMENTS, WATTAGE & DETAILS.
2. WIRE LIGHT FIXTURE FROM ADJACENT JUNCTION BOX.
3. CONNECT NEAREST UN-SWITCHED HOT CONDUCTOR TO EMERGENCY BALLAST.
4. LIGHT FIXTURES ARE SCALED WITHIN THE DRAWINGS BASED ON ACTUAL DIMENSIONS.
5. REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.
6. SUBSCRIPT INDICATES FIXTURES TO BE CONTROLLED.
7. HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISHED FLOOR.
8. NOT USED.
9. NEMA TYPE 'ND' NON-FUSED UNLESS NOTED 'F' (FUSED). USE HEAVY DUTY (HD) DEVICE FOR 480 VOLT.
10. SIZE TO THE EQUIPMENT BEING CONTROLLED.
11. PROVIDE H.O.A. & S.S. PUSHBUTTONS AS REQUIRED.
12. DOUBLE ARROWS INDICATES A DOUBLE FACE UNIT.
13. FOR WATER COOLER LOCATION, REFER TO DIAGRAM R002. FOR ALL OTHER LOCATIONS, MOUNT AT +16" TO BOTTOM OF BOX FROM FINISHED FLOOR, OR AS NOTED.
14. ARROWS SHOWN ON DEVICE INDICATE AIMING DIRECTION.
15. COORDINATE WITH DOOR HARDWARE SUPPLIER.
16. MOUNT ON TRACK OF OVERHEAD DOOR, 6" FROM TOP OF DOOR, UNLESS OVERHEAD DOOR IS A ROLL UP DOOR, THEN MOUNT PER MANUFACTURER'S INSTRUCTIONS.
17. INSTALL DEVICES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
18. DASHED LINE INDICATES EQUIPMENT CLEARANCES. ARROW INDICATES FRONT OF RACK.
19. HEIGHT MEASURED TO BOTTOM OF THE DEVICE FROM FINISHED FLOOR.
20. PROVIDE MUD RING &/OR BOX COVER APPROPRIATE FOR DEVICE/FIXTURE SERVED.
21. REFER TO DIAGRAMS, ELEVATIONS, & SCHEDULES FOR CUSTOM ROUGH-IN REQUIREMENTS.
22. ROUGH-IN TO BE HORIZONTAL.
23. REFER TO MANUFACTURER'S RECOMMENDED CABLE REQUIREMENTS FOR EXACT CABLE REQUIRED.
24. FOLLOW BICSI STANDARDS FOR CABLE ROUTING & DISTANCES.
25. SUBSCRIPT INDICATES NEMA CONFIGURATION.
26. USE A 4" X 4" BOX WITH A MUD RING TO MATCH THE DEVICE & INSTALLATION.
27. USE WITH POWER PACK.
28. PROVIDE UL LISTED DEVICE COMPATIBLE WITH THE FIRE ALARM PANEL/SYSTEM.
29. CAMERA TYPES ARE INDICATED INSIDE THE CAMERA SYMBOL.
30. SOLID BOX AROUND DEVICE INDICATES INSTALLED IN FLOOR. DASHED BOX AROUND DEVICE INDICATES INSTALLED IN CEILING.
31. WALL DEVICES NOTED WITH A CHEVRON INDICATE THE PROPOSED INSTALLATION HEIGHT. COORDINATE WITH MILLWORK SHOP DRAWINGS & ELEVATIONS FOR HEIGHT.

GENERAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING	NOTES
	EXISTING	-	-
XR	DEMO	-	-
	TEMPORARY	-	-
	NEW	-	-
	NOT IN CONTRACT	-	-
	SOLID ARCHED LINES INDICATE UNSWITCHED POWER CIRCUITING	-	-
	DASHED ARCHED LINES INDICATE SWITCHED POWER CIRCUITING	-	-
	ONE CIRCUIT, HOME RUN TO PANEL	-	-
	TWO CIRCUITS, HOME RUN TO PANEL	-	-
	THREE CIRCUITS, HOME RUN TO PANEL	-	-
	CONDUIT RUN CONCEALED IN FLOOR OR GROUND	-	-
	CONDUIT RUN CONCEALED IN WALL OR CEILING	-	-
	CONDUIT UP	-	-
	CONDUIT DOWN	-	-
	CONDUIT STUB LOCATION	-	CAP CONDUIT
	CONDUIT / CIRCUIT CONTINUATION	-	-
XX	CONDUIT OHP: OVERHEAD POWER SERVICE UGP: UNDERGROUND POWER SERVICE UGF: UNDERGROUND FIBER SERVICE TEL: TELEPHONE SERVICE	-	-
	CABLE TRAY SOLID BOTTOM LADDER BASKET	AS NOTED	19
	GROUND BUS BAR	+18"	7
RACK	EQUIPMENT CEILING RACK	CEILING	18, SEE SPEC.
	EQUIPMENT CABINET/RACK	WALL / FLOOR	18, SEE SPEC.
	EQUIPMENT 2-POST CABINET/RACK	FLOOR	18, SEE SPEC.
	TELEPHONE DEMARCATION BOARD	+18"	
TC	TIME CLOCK	+48"	
	TV BACKBOX	FLAT PANEL HEIGHT +12"	7, 22
J	JUNCTION BOX	AS NOTED	20
FB PT	FLOOR BOX / POKE-THRU - SEE SCHEDULE FOR TYPE INFORMATION	FLOOR	
	EQUIPMENT SYSTEM PANELS ACS: ACCESS CONTROL PANEL ATS: AUTOMATIC TRANSFER SWITCH IDS: INTRUSION DETECTION PANEL PSP: POWER SUPPLY PANEL RP#: LIGHTING PANEL DAS: DISTRIBUTED ANTENNA SYSTEM ERCCS: FIRST RESPONDER RADIO SYSTEM CATV: CABLE TV CONTENT EQUIPMENT	+60" TO TOP	

GENERAL LEGEND

SYMBOL	DESCRIPTION	MOUNTING	NOTES
#	KEYNOTE		
Space 004	ROOM NAME & NUMBER		
Space 005 XX	ROOM NAME & NUMBER W/ ZONE I.D.		
- ---	DIAGRAM TAG		
MATCH LINE SEE -/--	MATCH LINE TAG		
XRR	DEVICES WITH A CHEVRON INDICATE TO COORDINATE WITH MILLWORK PRIOR TO ROUGH-IN.	32" OR AS INDICATED	8
	ELEVATION TAG. HATCHED AREA INDICATES WHICH WALL. NUMBER INDICATES VIEW, AND CENTER NUMBER INDICATES WHICH SHEET.		
##	REVISION CLOUD DELTA. SHOWN WITH CLOUD AND INDICATES A CHANGE PER THE TITLE BLOCK.		
##	TAG FOR MECHANICAL, KITCHEN, AND SHOP DEVICES. REFER TO SCHEDULES FOR INFO.		

FIRE ALARM LEGEND

SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	NOTES
CM	FIRE ALARM CONTROL MODULE		

POWER DISTRIBUTION EQUIPMENT SYMBOLS

SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	NOTES
	TRANSFORMER SEE SINGLE-LINE DIAGRAM FOR DESCRIPTION & REQUIREMENTS.	4" CONCRETE BASE	18
	POWER DISTRIBUTION PANEL	6'-6" TO TOP	18
	FLUSH PANELBOARD	6'-6" TO TOP	18
	SURFACE PANELBOARD	6'-6" TO TOP	18

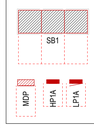
POWER SYMBOLS LEGEND

SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	NOTES
S D Q SP	S: SIMPLEX D: DUPLEX Q: FOURPLEX SP: SPECIAL PURPOSE		
	WALL MOUNTED RECEPTACLE	18"	7, 25, 30
	CEILING MOUNTED RECEPTACLE	CEILING	25, 30
	SWITCHED RECEPTACLE	18"	7
	EMERGENCY RECEPTACLE	18"	7
	GROUND FAULT RECEPTACLE	18"	7
	ISOLATED GROUND RECEPTACLE	18"	7
	RECEPTACLE (SPECIFIC HEIGHT)		7, 8
	CONTROLLED RECEPTACLE	+18" OR AS NOTED	7, 8
#	RECEPTACLE MODIFIERS: SERVICE ##: HEIGHT AFF O.C. WP: WEATHERPROOF W/ IN-USE COVER T: TAMPER-PROOF U: RECEPTACLE WITH USB OUTLET G: GROUND FAULT PROTECTED @ BREAKER H: HOSPITAL GRADE		7, 8, 13
	TOMBSTONE RECEPTACLE	COUNTER TOP	
	SPD PROTECTED RECEPTACLE	+18" OR AS NOTED	7
CR	CORD REEL, DEVICE VARIES	CEILING	
CD	CORD DROP, DEVICE VARIES	CEILING	
	MULTI-OUTLET ASSEMBLY FILLED SQUARES INDICATE 120V OUTLET OPEN SQUARES INDICATE WITH USB	+46"OR AS NOTED	7, REFER TO SPEC
EV	SINGLE / DUAL PORT ELECTRICAL VEHICLE CHARGER	+46"	7
	POWER POLE		
$x	SWITCH MODIFIERS: K: KEYED T: TIMER M: MANUAL STARTER THERMAL OVERLOAD SWITCH	+46"	7
	EMERGENCY POWER OFF PUSH BUTTON	+46"	7
	DOOR OPENER PUSH PLATE	+46"	7
	ELECTRICAL POWER METER	+72" TO TOP	
	FUSED DISCONNECT SWITCH	+60" TO TOP	9, 10
	NON-FUSED DISCONNECT SWITCH	+60" TO TOP	9, 10
	MAGNETIC STARTER	+60" TO TOP	9, 10, 11
	MAGNETIC STARTER WITH FUSED DISCONNECT	+60" TO TOP	9, 10, 11
	MAGNETIC STARTER WITH BREAKER DISCONNECT	+60" TO TOP	9, 10, 11
VFD	VARIABLE FREQUENCY DRIVE	+60" TO TOP	9, 10, 11
	MOTOR		
	PUSHBUTTON	+46"	7

GROUNDING AND LIGHTNING PROTECTION SYMBOLS

SYMBOL	DEVICE/FIXTURE DESCRIPTION	MOUNTING	NOTES
	GROUND ROD	AS NOTED	-
	GROUND ROD WITH TEST WELL	AS NOTED	-
	STATIC GROUND RECEPTACLE	AS NOTED	-
	LIGHTNING PROTECTION AIR TERMINAL	AS NOTED	-
	LIGHTNING PROTECTION CONDUCTOR SPLICE	AS NOTED	-

POWER TAGS LEGEND



NOTES:
1. HATCHED FILL INDICATES SWITCHBOARD OR POWER DISTRIBUTION PANEL.
2. SOLID FILL INDICATES BRANCH PANEL OR LOAD CENTER.
3. DASHED BOX INDICATES CODE-REQUIRED CLEARANCE (WIDTH & DEPTH).
4. DOOR INDICATES FRONT OF RECESSED PANEL.

ELECTRICAL SHEET LIST

E001	ELECTRICAL TITLE SHEET
E101	THIRD FLOOR ELECTRICAL PLAN - EAST
E102	THIRD FLOOR ELECTRICAL PLAN - WEST

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PROFESSIONAL ENGINEER
JOSHUA OAKESON
7670767
REGISTERED
STATE OF UTAH

PROJ. NO. 260395
DATE JUNE 2026
DRAWN CW
CHECKED BG

No.	Date	Description

PROPOSED NEW CONSTRUCTION FOR:

PROJECT TITLE
BRIGHTON HIGH SCHOOL - DESTRATIFICATION FANS
2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE
ELECTRICAL TITLE SHEET

SHEET NO.
E001

6/29/2026 8:58:15 AM



THIRD FLOOR ELECTRICAL PLAN - EAST

SCALE = 3/32" = 1'-0"

MECHANICAL EQUIPMENT SCHEDULE

RESPONSIBILTY LEGEND:
EC - ELECTRICAL CONTRACTOR (DIVISION 26)
MC - MECHANICAL CONTRACTOR (DIVISION 2223)
CC - CONTROL CONTRACTOR

GENERAL NOTES
1. PER NEC 250.122(A), EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN THE PHASE CONDUCTOR
2. OVERCURRENT PROTECTION DEVICE (OCPD) SHOWN IS LOCATED AT POWER PANEL. ALL FUSING TO BE SIZED IN ACCORDANCE WITH FUSE M'FR RECOMMENDATION FO...
3. ALL EQUIPMENT TO BE RATED FOR THE ENVIRONMENT FOR WHICH IT IS INSTALLED.
4. OVERLOAD PROTECTION SHALL BE PROVIDED FOR ALL MOTOR BRANCH CIRCUITS IN COMPLIANCE WITH NEC SECTION 430. SIZE OVERLOAD UNITS BASED ON ACTUAL... DO NOT SIZE BASED ON MOTOR NAME PLATE CURRENT. SIZE OVERLOAD ELEMENTS FOR MECHANICAL EQUIPMENT AFTER AIR AND WATER BALANCING HAVE BEEN...

STARTER / DISCONNECT TYPE
1. NON-FUSED DISCONNECT SWITCH
2. FUSED DISCONNECT SWITCH
3. REMOTE CIRCUIT BREAKER
4. MANUAL STARTER WITH THERMAL OVERLOAD
5. MAGNETIC STARTER
6. MAGNETIC STARTER / NON-FUSED DISCONNECT...
7. MAGNETIC STARTER / FUSED...
8. MAGNETIC STARTER / CIRCUIT BREAKE...
9. VARIABLE FREQUENCY DRIVE WITH...
10. DIRECT CONNECTION
11. JUNCTION BOX
12. RECEPTACLE / SPECIAL PURPOSE...

IDENTITY INFORMATION			ELECTRICAL		LOAD INFORMATION				EM POWER	OCPD		CIRCUIT INFORMATION										STARTER / DISCONNECT		
												PHASE CONDUCTORS				NEUTRAL CONDUCTOR			GROUND CONDUCTOR					
TYPE ID	INSTANCE ID	DESCRIPTION	VOLTAGE	PHASE	MOTOR POWER	APPARENT POWER	REAL POWER	FLA	MCA		TYPE	OCPD	SETS	NO.	SIZE	TYPE	NEUTRAL	SIZE	TYPE	SIZE	TYPE	CONDUIT SIZE	TYPE	FURNISH	INSTALL
DF	1	DE-STRAT FAN	120 V	1	0.00 hp	0.1 kVA	0.0 kW	0.5 A	0.6 A	No	(Motor) Inverse Time Breaker	15 A	1	1	12	Cu	Yes	12	Cu	12	Cu	3/4"	4	EC	EC
DF	2	DE-STRAT FAN	120 V	1	0.00 hp	0.2 kVA	0.2 kW	1.9 A	2.4 A	No	(Motor) Inverse Time Breaker	15 A	1	1	12	Cu	Yes	12	Cu	12	Cu	3/4"	4	EC	EC

KEYNOTES

E1 NEW DE-STRAT FAN POWER CONNECTION; PROVIDE 120V-1P POWER CONNECTION TO NEW DE-STRAT FANS. PROVIDE NEW 15A-1P BREAKER, WIRING, CONDUIT AS REQUIRED. FIELD VERIFY ROUTING, AVAILABLE SPACE AND CIRCUIT NUMBER WITHIN THE INDICATED PANELBOARD. IF BREAKER SPACE IS UNAVAILABLE WITHIN THE INDICATED PANELBOARD, UTILIZE NEAREST CONVENIENT 120/208V PANELBOARD. PROVIDE WALL/CEILING PENETRATIONS AS REQUIRED. PATCH AND PAINT TO MATCH ADJACENT EXISTING FINISHES.

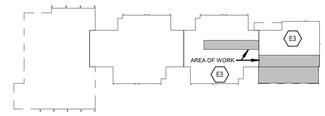
E2 EXISTING ELECTRICAL 'GE' PANELBOARDS, TO REMAIN.

E3 NO ANTICIPATED CONSTRUCTION IN THIS EXISTING UN-GRAYOUT PORTION, UNLESS OTHERWISE NOTED. PROTECT EXISTING ELECTRICAL APPARATUSES AND ELECTRIFIED EQUIPMENT FOR EXISTING FACILITIES AS REQUIRED. RELOCATE, REWIRE, AND/OR RECONNECT EXISTING ELECTRICAL DEVICES AND/OR EQUIPMENT THAT FOR ANY REASON OBSTRUCTS ELECTRICAL CONNECTION TO NEW DE-STRAT FANS.

E4 PROVIDE FIRE ALARM CONTROL MODULE AT EACH DE-STRAT FAN CONTROLLERS. THIS FIRE ALARM CONTROL MODULE IS INSTALLED TO CUT POWER AND STOP MOTORS IMMEDIATELY UPON ACTIVATION OF ANY FIRE ALARM EVENT. TIE INTO EXISTING FIRE ALARM SYSTEM, AS REQUIRED.

GENERAL ELECTRICAL NOTES

1. MECHANICAL COORDINATION: ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL MECHANICAL DE-STRAT FANS AND ELECTRICAL REQUIREMENTS WITH MECHANICAL PRIOR TO ROUGH-INS.
2. FIELD VERIFICATION REQUIRED: ALL EXISTING CONDITIONS, INCLUDING ELECTRICAL CIRCUITS, CONDUIT ROUTING, AND EQUIPMENT CONFIGURATIONS, SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO BIDDING AND AGAIN PRIOR TO INSTALLATION. REPORT DISCREPANCIES TO THE ENGINEER.
3. PROTECTION OF EXISTING SYSTEMS: CONTRACTOR SHALL PROTECT ALL EXISTING ELECTRICAL INFRASTRUCTURE TO REMAIN. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE PROMPTLY REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
4. STRUCTURAL COORDINATION: DO NOT PENETRATE ANY STRUCTURAL MEMBERS OF THE BUILDING WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER. COORDINATE ALL PROPOSED PENETRATIONS WITH THE OWNER.
5. DEVICE AND EQUIPMENT RECONNECTION: DISCONNECT AND RECONNECT ALL DEVICES AND EQUIPMENT REQUIRED FOR PROPER AND SAFE EXECUTION OF THE WORK. PROVIDE ALL LABOR, MATERIALS, AND MEANS TO COMPLETE RECONNECTIONS TO CODE-COMPLIANT AND OPERATIONAL CONDITION.
6. LABELING AND IDENTIFICATION: LABEL NEW CIRCUITS PER PROJECT STANDARDS. UPDATE PANEL SCHEDULES TO REFLECT CHANGES TO CIRCUITS AND EQUIPMENT LOADS.
7. OUTAGES AND SHUTDOWNS: COORDINATE ALL REQUIRED OUTAGES WITH OWNER A MINIMUM OF 72 HOURS IN ADVANCE. MINIMIZE DISRUPTION TO BUILDING OPERATIONS. OBTAIN WRITTEN APPROVAL BEFORE PROCEEDING WITH ANY SHUTDOWN.
8. CODE COMPLIANCE: ALL WORK SHALL COMPLY WITH CURRENT NEC, LOCAL JURISDICTIONAL CODES, AND OWNER STANDARDS.



THIRD FLOOR KEY PLAN

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PROFESSIONAL ENGINEER
JOSHUA OAKESON
7702971 6202
STATE OF UTAH

PROJ. NO. 260395
DATE JUNE 2026
DRAWN CW
CHECKED BG

No.	Date	Description

PROJECT TITLE
PROPOSED NEW CONSTRUCTION FOR:
BRIGHTON HIGH SCHOOL - DESTRATIFICATION FANS
2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE
THIRD FLOOR ELECTRICAL PLAN - EAST

SHEET NO.
E101

6/26/2026 8:58:17 AM



THIRD FLOOR ELECTRICAL PLAN - WEST

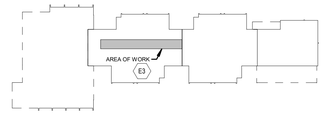
SCALE = 3/32" = 1'-0"

KEYNOTES

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THIRD FLOOR KEY PLAN

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PROFESSIONAL ENGINEER
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REGISTERED
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2220 BENGAL BLVD
COTTONWOOD HEIGHTS, UT 84121

SHEET TITLE
THIRD FLOOR ELECTRICAL PLAN - WEST

SHEET NO.
E102

6/26/2026 8:58:18 AM