2019 DAVIS TECHNICAL COLLEGE FREEPORT CENTER BUILDING D5 COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

12/19/2019
CONSTRUCTION BID SET

DAVISTECH
DAVIS TECHNICAL COLLEGE

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.utah.gov

DFCM PROJECT NO. 20073220

MECHANICAL ENGINEER

WHW ENGINEERING INC
8619 SOUTH SANDY PARKWAY #101 / SANDY, UTAH 84070
801466.4021 / www.whw-engineering.com

ELECTRICAL ENGINEER:

SPECTRUM ENGINEERS
324 SOUTH STATE STREET #400 / SALT LAKE CITY, UTAH
84111 801.328.5151 / www.spdesign.com

Last Plotted: 12/19/2019 1:57:17 PM

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
STATE OF UTAH · SCOTT P. EVANS · NO. 118114 · LICENSED PROFESSIONAL ARCHITECT · 12/19/2019

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL
FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
GI-001

ABBREVIATIONS

@	at
ABV	above
ACOUS	acoustical
ACT	acoustical ceiling tile
AD	area drain
ADJ	adjustable
AFF	above finished floor
ALT	alternate
ALUM	aluminum
APPROX	approximate
ARCH	architect
B.O.	bottom of
BALC	balcony
BD	board
BET	between
BLDG	building
BLKG	blocking
BLW	below
BM	beam
BOT	bottom
BRKT	bracket
BULKHD	bulkhead
BUR	built up roof
C.G.	corner guard
CAB	cabinet
CALK	caulking
CEM	cement
CER	ceramic
CJ	control joint
CLG	ceiling
CLOS	closet
CLR	clear
CO	cased opening
COL	column
CONC	concrete
CONT	continuous
CPT	carpet
CT	ceramic tile
CTR	center
DBL	double
DET	detail
DIA	diameter
DIM	dimension
DN	down
DR	door
DS	down spout
DW	dishwasher
DWG	drawing
Ø	diameter
(E)	existing
E	east
EA	each
EIFS	exterior insulation & finish system
ELEC	electrical
ELEV	elevation
EMER	emergency
ENCL	enclosure
EOS	edge of slab
EQ	equal
EQUIP	equipment
ETR	existing to remain
EW	each way
EWC	electric water cooler
EXP. JT.	expansion joint
EXTG.	existing
F.O.	face of
FA	fire alarm
FAP	fire annunciator panel
FD	floor drain
FE	fire extinguisher
FEC	fire extinguisher cabinet
FG	finish group
FH	fire hydrant
FHC	fire hose cabinet
FIN	finish
FLR	floor
FLUOR	fluorescent
FT	foot or feet
FUR	furring
FV	field verify
GAL	gallon
GALV	galvanized
GB	grab bar
GC	general contractor
GL	glass
GND	ground
GWB	gypsum board
GYP	gypsum
H.W.H.	hot water heater
HC	handicapped
HDWD	hardwood
HDWR	hardware
HM	hollow metal
HORIZ	horizontal
HR	hour
HT	height
ID	inner diameter
INCAN	incandescent
INSUL	insulation
INT	interior
JAN	janitor
JST	joist
JT	joint
LAM	laminate
LAV	lavatory
LB(S)	pounds
LDG	landing
LT	light
MAX	maximum
MECH	mechanical
MEMB	membrane
MFR	manufacturer
MIN	minimum
MISC	miscellaneous
MO	masonry opening
MTD	mounted
MTL	metal
(N)	new
N	north
NIC	not in contract
NO	number
NOM	nominal
NTS	not to scale
O.P.	overflow pipe
OA	overall
OC	on center
OD	outside diameter
OFF	office
OH	opposite hand
OPG	opening
OPP	opposite
PART	partition
PERM	perimeter
PG	paint grade
PLAM	plastic laminate
PLAS	plaster
PLYWD	plywood
PR	pair
PT	paint
PTD	painted
R	riser
RAD	radius
RCP	reflected ceiling plan
RD	roof drain
RE	refer
REF	refrigerator
REINF	reinforced
REQD	required
RESIL	resilient
RM	room
RO	rough opening
RTU	root top unit (mechanical)
S	south
SAFB	sound attenuation fiber batt
SC	scupper
SCHED	schedule
SEAL	sealant
SECT	section
SF	square foot
SHT	sheet
SIM	similar
SPEC	specification
SQ	square
SS	stainless steel
STD	standard
STL	steel
STOR	storage
STRUCT	structural
SUSP	suspended
SYM	symmetrical
T	tread
T&G	tongue & groove
TEL	telephone
TER	terrazzo
THK	thick
THR	threshold
TO	top of
TOM	top of masonry
TYP	typical
UC	undercut
UNFIN	unfinished
UNO	unless noted otherwise
UON	unless otherwise noted
UTIL	utility
VCT	vinyl composition tile
VERT	vertical
VIF	verify in field
VTR	vent termination pipe
VWC	vinyl wall covering
W	west
W/	with
W/O	without
WC	water closet
WIN	window
WP	waterproof
WS	wet stack
WSCT	wainscot
WT	weight

GENERAL NOTES

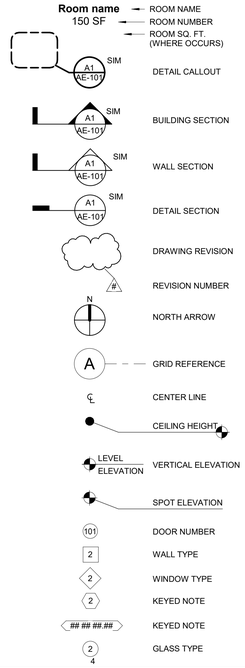
1. THE CONTRACTOR IS TO THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXTENT OF WORK AND COORDINATE ALL TRADES.
2. ALL DIMENSIONS ARE TO BE FIELD VERIFIED - ANY VARIATIONS IN DIMENSIONS ARE TO BE REVIEWED WITH THE ARCHITECT.
3. WHERE EXISTING WALLS ARE REMOVED PATCH REMAINING WALLS AS REQUIRED FOR FLUSH FINISHED APPEARANCE.
4.
5. THIS CONTRACTOR IS RESPONSIBLE FOR PATCHING/ REPAIRING ALL IMPERFECTIONS IN ALL NEW AND EXISTING WALLS AFFECTED BY THIS CONTRACT, INCLUDING HOLES, DENTS, BUMPS WAVES ETC. IT IS THE CONTRACTORS RESPONSIBILITY TO VISIT THE JOB SITE PRIOR TO BIDDING AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL SUCH WORK, THAT WILL BE REQUIRED.
6. CORRIDORS SHALL NOT BE USED FOR STORAGE OF MATERIALS OR STAGING OF THE WORK.
7. PATCH AND REPAIR WALLS AT OUTLETS AND AT OTHER OPENINGS REQUIRED BY THIS REMODELING.
8. GRID LINES ARE ORIGINAL BUILDING GRID LINES.
9. PROTECT EXTG. FINISHES FROM DAMAGE.
10. DO NOT SCALE DRAWINGS. STATED & WRITTEN DIMENSIONS GOVERN. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED BECAUSE OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS, UNLESS THEY CONTRIBUTE TO A CHANGE IN THE SCOPE OF THE WORK. ANY DIFFERENCE WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE ARCHITECT FOR DECISION PRIOR TO ORDERING, MANUFACTURING, OR PROCEEDING WITH THE WORK. HORIZONTAL DIMENSIONS INDICATED ARE TO/FROM FACE OF FINISH, UNLESS NOTED OTHERWISE. VERTICAL DIMENSIONS ARE FROM TOP OF FLOOR SLAB EXCEPT WHERE NOTED TO BE ABOVE FINISHED FLOOR (AFF). DIMENSIONS ARE NOT ADJUSTABLE WITHOUT A APPROVAL OF ARCHITECT UNLESS NOTED +/-.
11. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK REGARDLESS OF THE LOCATION OF THE INFORMATION IN THE DOCUMENTS. THE GENERAL CONTRACTOR SHALL UTILIZE THE CONSTRUCTION DRAWINGS AND WRITTEN SPECIFICATIONS FOR ALL REQUIRED INFORMATION TO PROVIDE COMPLETE CONSTRUCTION OF THIS PROJECT. ITEMS LISTED IN DRAWINGS MAY NOT BE INCLUDED IN SPECIFICATIONS. ITEMS LISTED IN SPECIFICATIONS MAY NOT BE INCLUDED IN DRAWINGS.
12. DISCREPANCIES BETWEEN PORTIONS OF THE CONTRACT DOCUMENTS ARE NOT INTENDED. THE GENERAL CONTRACTOR IS TO CLARIFY WITH THE ARCHITECT ANY SUCH DISCREPANCIES PRIOR TO COMMENCING WORK.
13. THE CONTRACTOR IS TO PROVIDE DUST WALL AS REQUIRED TO PERFORM NEW WORK - COORDINATE LOCATION OF DUST WALLS WITH OWNER.
14. CONTRACTOR'S STAGING AREA IS TO BE PROVIDED WITH A SECURE, LOCKED, 6'-0" (PER IBC 3306) TALL TEMPORARY CHAIN LINK FENCE. STAGING AREA SHALL NOT BLOCK DOORS, DOCKS, SIDEWALKS ETC. ALL GAPS IN FENCE TO BE MAINTAINED LESS THAN 4". REMOVE AND SECURE ALL LADDERS AT THE END OF EACH DAY. DUMPSTER MUST BE KEPT IN LOCKED FENCED AREA. COORDINATE LOCATION OF STAGING WITH OWNER.

DRAWING INDEX

MATERIALS

EARTH
STRUCTURAL FILL
CMU MASONRY
BRICK MASONRY
CONCRETE
GRAVEL
STEEL
ALUMINUM
RIGID INSULATION
BATT INSULATION
PLYWOOD
PARTICLEBOARD
GYPSUM BOARD
ASPHALT PAVING
WOOD (STUDS / NAILERS)
WOOD (BLOCKING)
WOOD

GRAPHIC SYMBOLS



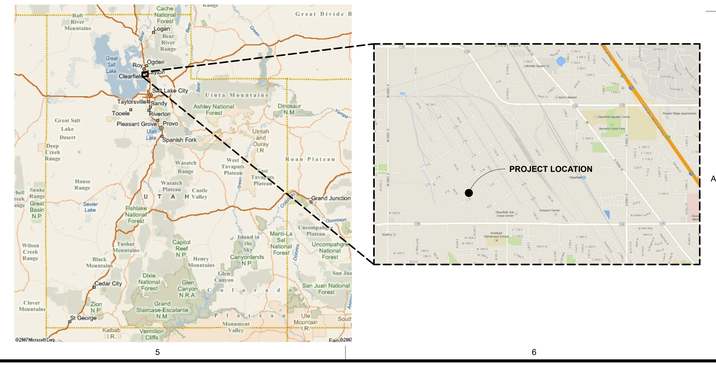
DEFERRED SUBMITTALS

For the purpose of this section, deferred submittals are defined as per section 106.3.4.2 of the IBC. Submittal documents for deferred submittal items shall be submitted to the engineer/architect for their review for general conformance with the design of the building. After submittals are reviewed for general conformance by the architect and engineer of record, deferred submittals must be submitted to the building official for approval and that deferred items are not to be installed until approved by the building official (see IBC 106.3.4.2). Deferred submittals for this project are:

ITEM #1 MODIFICATION TO EXISTING FIRE SUPPRESSION SYSTEM.
EXPECTED 3 WEEKS AFTER BID HAS BEEN AWARDED.

ITEM #2 MODIFICATION TO EXISTING FIRE ALARM SYSTEM.
EXPECTED 3 WEEKS AFTER BID HAS BEEN AWARDED.

PROJECT LOCATION



ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
STATE OF UTAH — SCOTT P. EVANS — NO. 118114 — REGISTERED PROFESSIONAL ARCHITECT — 12/19/2019

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT — REVIEWED FOR CODE COMPLIANCE — SIGNATURE — DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

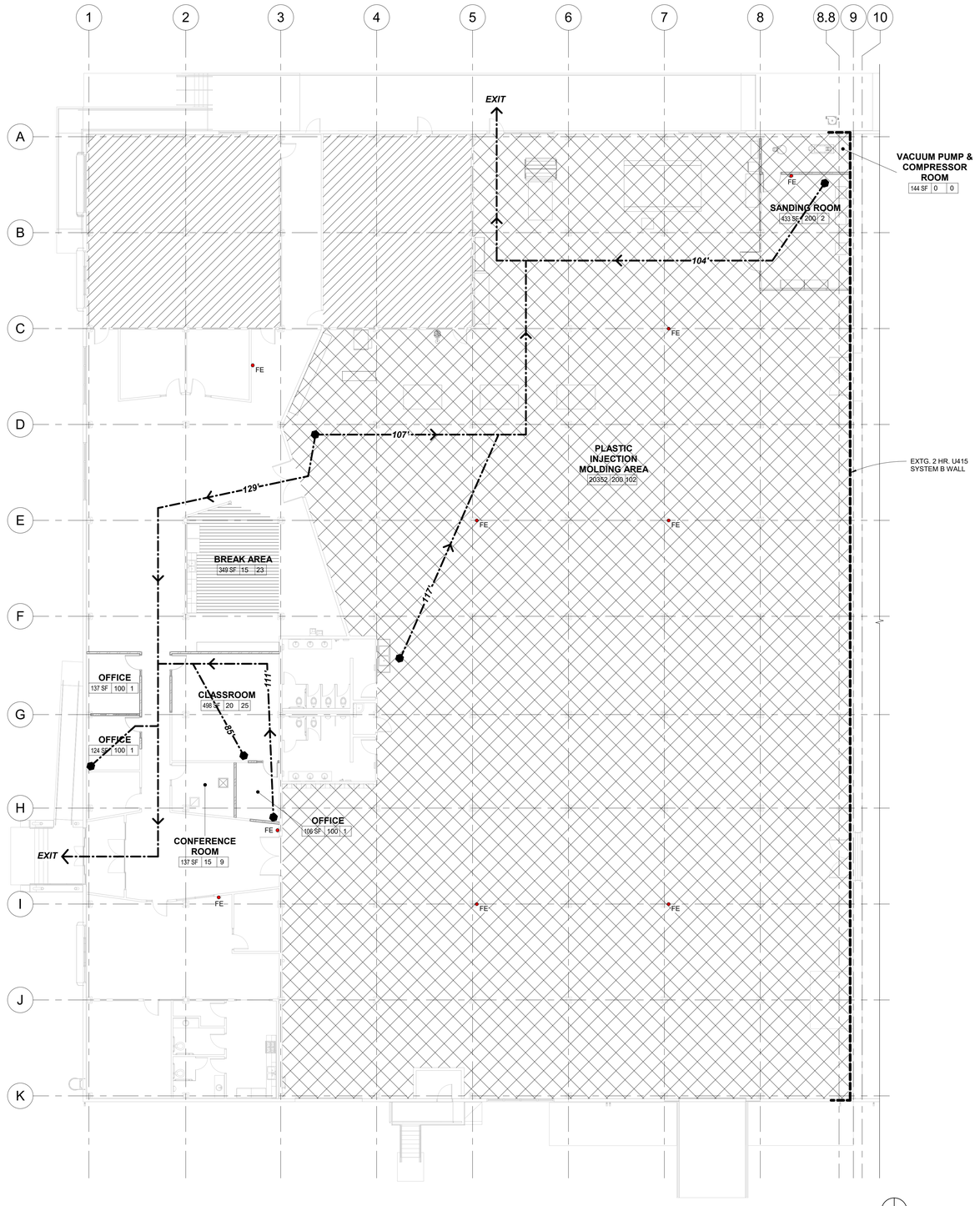
NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:
GENERAL INFORMATION

SHEET NUMBER:
GI-002

Last Plotted: 12/19/2019 1:57:17 PM



A1 LEVEL 01 - OCCUPANCY & EXITING PLAN
3/32" = 1'-0"

NORTH

OCCUPANCY & EXITING LEGEND

ROOM NAME
SF | ### |
OF OCCUPANTS
SQUARE FOOTAGE PER OCCUPANT
SQUARE FOOTAGE OF ROOM

-- T.D. = TRAVEL DISTANCE --

FE FIRE EXTINGUISHER - SEE AE-101

OCCUPANCY "B"

OCCUPANCY "F-1"

OCCUPANCY "A-2"

OCCUPANCY "A-3"

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2018	National Electrical Code	2017
International Mechanical Code	2018	Uniform Code for	
International Plumbing Code	2018	Building Conservation	N.A.
International Fire Code	2018	ADA Accessibility	
International Energy		Guidelines	2010 ADAG
Conservation Code	2018		2009 ANSI 117.1

A. Occupancy and Group: B A-3 A-2 F-1

Change in Use: Yes ____ No X Mixed Occupancy: Yes X No ____

Special Use and Occupancy (e.g. High Rise, Covered Mall): ____

B. Seismic Design Category: D Design Wind Speed: 90 mph

C. Type of Construction (circle one):

I A | I B | II A | II B | III A | III B | IV HT | V A | V B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):

North: 2 hr. South: 0 East: 0 West: 0

E. Mixed Occupancies: YES Nonseparated Uses: YES

F: Sprinklers:

Required: YES Provided: YES Type of Sprinkler System: NFPA 13

G: Number of Stories: 01 Building Height: 31' - 0" +/-

H: Actual Area per Floor (square feet): 32,710 s.f.

I: Tabular Area: N/A

J: Area Modifications: N.A.

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0		Floors - Ceiling Floors	0	
Interior Bearing Walls	0		Roofs - Ceiling Roofs	0	
Exterior Non-Bearing Walls	0		Exterior Doors and Windows	0	
Structural Frame	0		Shaft Enclosures	N.A.	
Partitions - Permanent	0		Fire Walls	N.A.	
Fire Barriers			Fire Partitions	N.A.	
			Smoke Partitions	N.A.	

L. Design Occupant Load: N/A

Exit Width Required: N/A Exit Width Provided: N/A

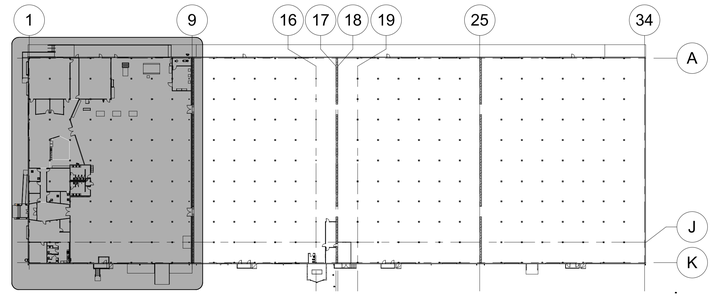
M. Minimum Number of Required Plumbing Facilities:

a) Water Closets - Required (m) 3 (f) 5 Provided (m) 3 (f) 5
b) Urinals - Required (m) 2 (f) ____ Provided (m) 3 (f) ____
c) Lavatories - Required (m) 4 (f) 4 Provided (m) 4 (f) 4
d) Bath Tubs or Showers: 0
e) Drinking Fountains: 2 Service Sinks: 1

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through X - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
   a) High Rise Requirements.
   b) Atriums.
   c) Performance Based Criteria.
   d) Means or Egress Analysis.
   e) Fire Assembly Locator Sheet.
   f) Exterior and Interior Accessibility Route.
   g) Fire Stopping, Including Tested Design Number.



A5 KEY PLAN
1" = 60'-0"

NORTH

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
STATE OF UTAH SCOTT P. EVANS NO. 118114 REGISTERED PROFESSIONAL ARCHITECT
12/19/2019

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 1/10/2020

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL
FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:
CODE COMPLIANCE INFORMATION

SHEET NUMBER:
GI-003

Last Plotted: 12/19/2019 1:57:23 PM

Page 1 of 13

Special Inspection, Material Testing & Structural Observation Items Required by Chapter 17 of the 2015 IBC

Indicate items requiring special inspection, structural testing, or structural observations by checking the appropriate box. All items not requiring inspection/testing should be removed from the form. For items requiring continuous inspection, a special inspector must be present onsite during the performance of that task. In most cases "periodic" inspections/tests shall be performed prior to commencing the task, intermittently during the task, and at the completion of the task. The "Detailed Instructions & Frequency" provides a description of the presumed requirements for tasks requiring "periodic" inspections. The design professional in responsible charge should revise the requirements as needed on a project-specific basis.

FABRICATORS (IBC 1704.2.5 & 1705.10)

☐ Approved Fabricator	Yes	No

Fabricators Name:	
Fabricators plant location	
Required In-plant Inspections	☐ Steel Construction ☐ Cold-formed Construction ☐ Concrete Construction ☐ Other: ____ ☐ Wood Construction ☐ Other: ____

STRUCTURAL STEEL (IBC 1705.2.1, 1705.12.1 & 1705.13.1)

Item			*Detailed Instructions and Frequencies*
PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10):			
Verify welding procedures (WPS) and consumable certificates	☐ Continuous	☐ Periodic	
Material identification	☐ Continuous	☐ Periodic	Verify type and grade of material.
Welder identification	☐ Continuous	☐ Periodic	A system shall be maintained by which a welder who has welded a joint or member can be identified.
Fit-up groove welds	☐ Continuous	☐ Periodic	Verify joint preparation, dimensions, cleanliness, tacking, and backing.
Access holes	☐ Continuous	☐ Periodic	Verify configuration and finish.
Fit-up of fillet welds	☐ Continuous	☐ Periodic	Verify alignment, gaps at root, cleanliness of steel surfaces, and tack weld quality and location.
DURING WELDING (TABLE N5.4-2, AISC 360-10):			
Use of qualified welders	☐ Continuous	☐ Periodic	Verify that welders are appropriately qualified.
Control and handling of welding consumables	☐ Continuous	☐ Periodic	Verify packaging and exposure control.
Cracked tack welds	☐ Continuous	☐ Periodic	Verify that welding does not occur over cracked tack welds.
Environmental conditions	☐ Continuous	☐ Periodic	Verify win speed is within limits as well as precipitation and temperature.
WPS followed	☐ Continuous	☐ Periodic	Verify items such as settings on welding equipment, travel speed, welding materials, shielding gas type/flow rate, preheat applied, interpass temperature maintained, and proper position.
Welding techniques	☐ Continuous	☐ Periodic	Verify interpass and final cleaning, each pass is within profile limitations, and quality of each pass.

Page 2 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

AFTER WELDING (TABLE N5.4-3, AISC 360-10):			
Welds cleaned	☐ Continuous	☐ Periodic	Verify that welds have been propyl cleaned.
Size, length, and location of welds	☐ Continuous	☐ Periodic	
Welds meet visual acceptance criteria	☐ Continuous	☐ Periodic	
Arc strikes	☐ Continuous	☐ Periodic	
k-area	☐ Continuous	☐ Periodic	
Backing & weld tabs removed	☐ Continuous	☐ Periodic	
Repair activities	☐ Continuous	☐ Periodic	
Document acceptance or rejection of welded joint/member	☐ Continuous	☐ Periodic	
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-10):			
CJP welds (Risk Cat. II)	☐ Continuous	☐ Periodic	Ultrasonic testing shall be performed on 10% of CJP groove welds in butt, T- and corner joints subject to transversely applied tension loading in materials 5/16-inch thick or greater. Testing rate must be increased if > 5% of welds tested have unacceptable defects.
CJP welds (Risk Cat. III or IV)	☐ Continuous	☐ Periodic	***A reduction in the rate of ultrasonic testing is allowed per Section N5.5e.***
Access holes (flange > 2")	☐ Continuous	☐ Periodic	
Welded joints subject to fatigue	☐ Continuous	☐ Periodic	
PRIOR TO BOLTING (TABLE N5.6-1, AISC 360-10): ➢ *Not required if only snug-tight joints are specified [per Section N5.6(1) of AISC 360-10].*			
Certifications of fasteners	☐ Continuous	☐ Periodic	
Fasteners marked	☐ Continuous	☐ Periodic	Verify that fasteners have been marked in accordance with ASTM requirements.
Proper fasteners for joint	☐ Continuous	☐ Periodic	Verify grade, type, and bolt length if threads are excluded from the shear plane.
Proper bolting procedure	☐ Continuous	☐ Periodic	Verify proper procedure is used for the joint detail.
Connecting elements	☐ Continuous	☐ Periodic	Verify appropriate faying surface condition and hole preparation, if specified, meet requirements.
Pre-installation verification testing	☐ Continuous	☐ Periodic	Observe and document verification testing by installation personnel for fastener assemblies and methods used.
Proper storage	☐ Continuous	☐ Periodic	Verify proper storage of bolts, nuts, washers, and other fastener components.
DURING BOLTING (TABLE N5.6-2, AISC 360-10): ➢ *Not required if only snug-tight joints are specified [per Section N5.6(1) of AISC 360-10].* ➢ *Not required for pretensioned joints using turn-of-the-nut method with match-marking, direct-tension-indicators, or twist-off type tension control method [per Section N5.6(2) of AISC 360-10].*			
Fastener assemblies	☐ Continuous	☐ Periodic	Verify that fastener assemblies are of suitable condition, paced in all holes, and washers are positioned as required.
Snug-tight prior to pretensioning	☐ Continuous	☐ Periodic	Verify that joints are brought to snug-tight condition prior to pretensioning operation.
Fastener component	☐ Continuous	☐ Periodic	Verify that fastener component is not turned by wrench prevented from rotating.

Page 3 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Pretensioned fasteners	☐ Continuous	☐ Periodic	Verify that fasteners are Pretensioned in accordance with RCSC Specification, progressing systematically from the most rigid point toward the free edges.
AFTER BOLTING (TABLE N5.6-3, AISC 360-10):			
Document acceptance or rejection of bolted connections	☐ Continuous	☐ Periodic	
OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-10; Tables J8-1 & J10-1, AISC 341-10):			
Structural steel details	☐ Continuous	☐ Periodic	All fabricated steel or steel frames shall be inspected to verify compliance with the details shown in the construction documents, such as braces, stiffeners, member locations, and proper application of joint details at each connection.
Anchor rods and other embedments supporting structural steel	☐ Continuous	☐ Periodic	Shall be on the premises during the placement of anchor rods and other embedments supporting structural steel for compliance with construction documents. Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement of concrete.
Reduced beam sections (RBS)	☐ Continuous	☐ Periodic	Verify contour and finish as well as dimensional tolerances *(see Table J8-1 of AISC 341-10)*.
Protected zones	☐ Continuous	☐ Periodic	Verify that no holes or unapproved attachments are made within the protected zone *(see Table J8-1 of AISC 341-10)*.
H-piles	☐ Continuous	☐ Periodic	Verify that no holes or unapproved attachments occur within the protected zones of piling *(see Table J10-1 of AISC 341-10)*.
STEEL ELEMENTS OF COMPOSITE CONSTRUCTION (TABLE N6.1, AISC 360-10; TABLES J9-1 thru J9-3, AISC 341-11):			
Placement and installation of steel deck	☐ Continuous	☐ Periodic	
Placement and installation of steel headed stud anchors	☐ Continuous	☐ Periodic	
Document acceptance or rejection of steel elements	☐ Continuous	☐ Periodic	
Reinforcing steel	☐ Continuous	☐ Periodic	Verify appropriate reinforcement size, spacing, and orientation; that it has not been re-bent in field; that it is correctly tied and supported; and that required steel clearances have been provided.
Composite member size	☐ Continuous	☐ Periodic	Verify that composite member is the required size.

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC 1705.2)

Item			*Detailed Instructions and Frequencies*
STEEL ROOF AND FLOOR DECKS (IBC 1705.2.2; Section 6.1 of SDI QA/QC - 2011):			
Material verification of cold-formed steel deck	☐ Continuous	☐ Periodic	Confirm that identification markings are provided to conform to ASTM standards specified on construction documents.
Floor and roof deck welds	☐ Continuous	☐ Periodic	Visual inspection is required to confirm that weld meets acceptance criteria of AWS D1.3 and SDI C, SDI NC, SDI RD and manufacturer's instructions.

Page 4 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Floor and roof mechanical fasteners	☐ Continuous	☐ Periodic	Visual inspection to confirm fasteners are installed per SDI C, SDI NC, SDI RD and manufacturer's instructions.
Steel deck installation	☐ Continuous	☐ Periodic	Verify deck is installed per the approved construction documents, installation drawings, shop drawings and applicable reference standards.
OPEN-WEB STEEL JOISTS AND JOIST GIRDERS (IBC TABLE 1705.2.3):			
End connections – welded or bolted	☐ Continuous	☐ Periodic	Visual inspection to confirm that end connections conform to the approved plans and shop drawings.
Bridging – horizontal or diagonal	☐ Continuous	☐ Periodic	Visual inspection to confirm that bridging is provided per the approved plans and shop drawings.
COLD-FORMED STEEL CONSTRUCTION (IBC 1705.2.2.1.1, 1705.10.3, and 1705.11.3):			
Trusses spanning > 60-feet	☐ Continuous	☐ Periodic	Verify that temporary and permanent truss bracing is installed in accordance with approved truss package. Performed by code inspection firm.
Wind-force-resisting systems or seismic-force-resisting systems	☐ Continuous	☐ Periodic	Periodic inspections of welding operations. If fastener spacing is < 4"o.c.: Verify that proper screw attachment, bolting, anchoring and other fastening of shear walls, diaphragms, drag struts, braces, shear panels and holdowns has occurred. Performed by code inspection firm.
Cold-formed steel special bolted moment frame	☐ Continuous	☐ Periodic	Visual inspections during installation cold-formed bolted moment frames located in Seismic Design Category 'D-F'.

CONCRETE CONSTRUCTION (IBC 1705.3 & 1705.12.1)

Item			*Detailed Instructions and Frequencies*
Reinforcing steel, including prestressing tendons	☐ Continuous	☐ Periodic	Verify prior to placing concrete that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report.
Welding of reinforcing steel	☐ Continuous	☐ Periodic	Visually inspect all welds and also verify weldability of reinforcing steel based upon carbon equivalent and in accordance with AWS D1.4.
Cast-in bolts & embeds	☐ Continuous	☐ Periodic	Inspection of anchors or embeds cast in concrete is required when allowable loads have been increased or where strength design is used.
Post-installed anchors or dowels	☐ Continuous	☐ Periodic	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report. Horizontally or upwardly inclined anchors that resist sustained tension loads require continuous inspection and approved installers.
Use of required mix design	☐ Continuous	☐ Periodic	Verify that all mixes used comply with the approved construction documents; ACI 318: Ch. 19, 26.4.3, 26.4.4; and IBC 1904.1, 1904.2, 1908.2, 1908.3.

Page 5 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Concrete sampling for strength tests, slump, air content, and temperature	☐ Continuous	☐ Periodic	
Concrete & shotcrete placement	☐ Continuous	☐ Periodic	
Curing temperature and techniques	☐ Continuous	☐ Periodic	Verify that the ambient temperature for concrete is kept at > 50°F for at least 7 days after placement. High-early-strength concrete shall be kept at > 50°F for at least 3 days. Accelerated curing methods may be used (see ACI 318: 26.4.7-26.4.9). The ambient temperature for shotcrete shall be > 40°F for the same period of time as noted for concrete. Shotcrete shall be kept continuously moist for at least 24 hours after shotcreting. All concrete materials, reinforcement, forms, fillers, and ground shall be free from frost. In hot weather conditions ensure that appropriate measures are taken to avoid plastic shrinkage cracking and that the specified water/cement ratio is not exceeded.
Pre-stressed concrete	☐ Continuous	☐ Periodic	
Erection of precast concrete	☐ Continuous	☐ Periodic	Verify that all precast elements are lifted, assembled and braced in accordance with the approved construction documents.
Strength verification	☐ Continuous	☐ Periodic	Verify that adequate strength has been achieved prior to the removal of shores and forms or the stressing of post-tensioned tendons.
Formwork	☐ Continuous	☐ Periodic	Verify that the forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents.

MASONRY CONSTRUCTION (IBC 1705.4)

Item			*Detailed Instructions and Frequencies*
PRIOR TO CONSTRUCTION (ARTICLE 3.1.1, TMS-402/ACI 530.1-13):			
Review material certificates, mix designs, test results and construction procedures	☐ Continuous	☐ Periodic	Verify that materials conform to the requirements of the approved construction documents. Mix design, test results, material certificates, and construction procedures should be submitted for review. Mortar mix designs shall conform to ASTM C 270 while grout shall conform to ASTM C 476. Material certificates shall be provided for the following: reinforcement; anchors, ties, fasteners, and metal accessories; masonry units; mortar and grout materials. Construction procedures for cold-weather or hot-weather construction shall be reviewed.
AS CONSTRUCTION BEGINS (TABLE 3.1.2, TMS-402/ACI 530-13):			
Proportions of site-prepared mortar	☐ Continuous	☐ Periodic	Verify that mortar is of the type and color specified on the construction documents, that it conforms to ASTM C 270, and that it is mixed in accordance with Article 2.6 A of TMS-602.

Page 6 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Construction of mortar joints	☐ Continuous	☐ Periodic	Verify that mortar joints comply with Article 3.3 B of TMS-602.
Grade and size of prestressing tendons and anchorages	☐ Continuous	☐ Periodic	Verify that prestressing tendons comply with Article 2.4 B of TMS-602 and that anchorages, couplers, and end blocks comply with Article 2.4 H.
Location of reinforcement, connectors, and prestressing tendons and anchorages	☐ Continuous	☐ Periodic	Verify that reinforcement is placed in accordance with Article 3.4 of TMS-602. Prestressing tendons shall be placed per Article 3.6 A.
Prestressing technique	☐ Continuous	☐ Periodic	Verify that prestressing technique complies with Article 3.6 B of TMS-602.
Properties of thin-bed mortar for AAC masonry	☐ Continuous	☐ Periodic	Verify that mortar complies with Article 2.1 C of TMS-602.
PRIOR TO GROUTING (TABLE 3.1.2, TMS-402/ACI 530-13):			
Grout space	☐ Continuous	☐ Periodic	Verify that grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and that cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602. *Continuous inspection is required for Risk Category IV buildings.*
Grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages	☐ Continuous	☐ Periodic	Verify that reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors comply with the approved construction documents and Section 1.6 of TMS 402.
Placement of reinforcement, connectors, and prestressing tendons and anchorages	☐ Continuous	☐ Periodic	Verify that reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents and Articles 3.2 E, 3.4, and 3.6 A of TMS 602. *Continuous inspection is required for Risk Category IV buildings.*
Proportions of site-prepared grout and prestressing grout for bonded tendons	☐ Continuous	☐ Periodic	Verify that grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. (see Articles 2.6 B and 2.4 G.1.b of TMS 602.) *Continuous inspection is required for Risk Category IV buildings.*
Construction of mortar joints	☐ Continuous	☐ Periodic	Verify that mortar joints are placed in accordance with Article 3.3 B of TMS 602.
DURING MASONRY CONSTRUCTION (TABLE 3.1.2, TMS-402/ACI 530-13):			
Size and location of structural elements	☐ Continuous	☐ Periodic	Verify the locations of structural elements with respect to the approved plans and confirm that tolerances meet the requirements of Article 3.3 F of TMS 602.
Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction.	☐ Continuous	☐ Periodic	Verify that correct anchorages and connections are provided per the approved plans and Sections 1.16.4.3 and 1.17.1 of TMS 402. *Continuous inspection is required for Risk Category IV buildings.*
Welding of reinforcement	☐ Continuous	☐ Periodic	
Preparation, construction, and protection of masonry during cold weather (<40°F) or hot weather (>90°F).	☐ Continuous	☐ Periodic	Verify that cold-weather construction is performed in accordance with Article 1.8 C of TMS 602 and hot weather construction per Article 1.8 D of TMS 602.
Application and measurement of prestressing force	☐ Continuous	☐ Periodic	

Page 7 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Placement of grout and prestressing grout for bonded tendons is in compliance	☐ Continuous	☐ Periodic	
Placement of AAC masonry units and construction of thin-bed mortar joints	☐ Continuous	☐ Periodic	Verify that mortar is placed in accordance with Article 3.3 B.8 of TMS-602.
Observation of grout specimens, mortar specimens, and/or prisms	☐ Continuous	☐ Periodic	Confirm that specimens/prisms are performed as required by Article 1.4 of TMS-602. *Continuous inspection is required for Risk Category IV buildings.*
MINIMUM TESTING:			
Verification of Slump Flow and Visual Stability Index (VSI) for self-consolidating grout	☐ Continuous	☐ Periodic	Compressive strength tests should be performed in accordance with ASTM C 1019 for slump flow and ASTM C 1611 for VSI.
Verification of f'_m and f'_{AAC}	☐ Continuous	☐ Periodic	Determine the compressive strength for each wythe by the "unit strength method" or by the "prism test method" as specified in Article 1.4 B of TMS 602 prior to construction. *For Risk Category IV buildings this should be verified at every 5,000ft² of construction.*
Verification of proportions of materials in premixed or pre-blended mortar and grout	☐ Continuous	☐ Periodic	Verify that proportions for mortar meet ASTM C 270 and proportions for grout meet ASTM C 476. This applies to *Risk Category IV buildings only.*

WOOD CONSTRUCTION (IBC 1705.5, 1705.11.1 & 1705.12.2)

Item			*Detailed Instructions and Frequencies*
High-load diaphragms	☐ Continuous	☐ Periodic	Verify thickness and grade of sheathing, size of framing members at panel edges, nail/staple diameters and length, and the number of fastener lines and fastener spacing per approved plans. ***Performed by code inspection firm.***
Wood trusses spanning > 60-feet	☐ Continuous	☐ Periodic	Verify that temporary and permanent truss bracing is installed in accordance with approved truss package. ***Performed by code inspection firm.***
Structural wood	☐ Continuous	☐ Periodic	If fastener spacing is < 4"o.c.: Verify that proper nailing, bolting, anchoring and other fastening of shear walls, diaphragms, drag struts, braces, and holdowns. ***Performed by code inspection firm.***

SOILS CONSTRUCTION (IBC 1705.6)

Item			*Detailed Instructions and Frequencies*
Verify subgrade is adequate to achieve design bearing capacity	☐ Continuous	☐ Periodic	Prior to placement of concrete.
Verify excavations extend to proper depth and material	☐ Continuous	☐ Periodic	Prior to placement of compacted fill or concrete.
Verify that subgrade has been appropriately prepared prior to placing compacted fill	☐ Continuous	☐ Periodic	Prior to placement of compacted fill.
Perform classification and testing of compacted fill materials	☐ Continuous	☐ Periodic	All materials shall be checked at each lift for proper classifications and gradations not less than once for each 10,000ft² of surface area.

Page 8 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Verify proper materials, densities and lift thicknesses during placement and compaction.	☐ Continuous	☐ Periodic	

DRIVEN DEEP FOUNDATIONS (IBC 1705.7)

Item			*Detailed Instructions and Frequencies*
Verify materials, sizes and lengths	☐ Continuous	☐ Periodic	
Determine capacities and conduct necessary load tests	☐ Continuous	☐ Periodic	
Observe drilling operations	☐ Continuous	☐ Periodic	
Verify placement locations & plumbness, confirm type & size of hammer, record number of blows per foot, record tip and butt elevations and document any damage to element	☐ Continuous	☐ Periodic	
Perform additional inspections for steel, concrete or other specialty elements.	☐ Continuous	☐ Periodic	Steel per IBC 1705.2 Concrete per IBC 1705.3 Specialty items per registered design professional

CAST-IN-PLACE DEEP FOUNDATIONS (IBC 1705.8)

Item			*Detailed Instructions and Frequencies*
Observe drilling operation and reporting	☐ Continuous	☐ Periodic	
Verify placement locations & plumbness, confirm element diameters, lengths, embedment and adequate end-bearing capacity. Record concrete or grout volumes.	☐ Continuous	☐ Periodic	
Perform additional inspections for concrete elements.	☐ Continuous	☐ Periodic	Concrete per IBC 1705.3

HELICAL PILE FOUNDATIONS (IBC 1705.9)

Item			*Detailed Instructions and Frequencies*
Record installation equipment used, pile dimensions, tip elevations, final depth, and final installation torque	☐ Continuous	☐ Periodic	
Verify that helical piles used match the approved submittal	☐ Continuous	☐ Periodic	

SPRAYED FIRE-RESISTANT MATERIALS (IBC 1705.14)

Item			*Detailed Instructions and Frequencies*
Surface preparation	☐ Continuous	☐ Periodic	Prior to application confirm that surface has been prepared per the approved fire-resistance design and manufacturer's instructions.

Page 9 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Material thickness	☐ Continuous	☐ Periodic	Samples shall be taken from selected floor, roof and wall assemblies and structural members. No more than 10% of the samples shall be less than the thickness required by the fire-resistance design.
Material density	☐ Continuous	☐ Periodic	Density tests shall be performed in accordance with ASTM E 605 for every 2,500ft² of floor, roof or wall area. One sample must also be provided for each beam, girder, truss or column at each story.
Bonding strength	☐ Continuous	☐ Periodic	Bond strength tests shall be performed in accordance with ASTM E 736 for every 2,500ft² of floor, roof or wall area. One sample must also be provided for each beam, girder, truss or column at each story. The bond strength shall not be less than 150psf.

MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (IBC 1705.15)

Item			*Detailed Instructions and Frequencies*
Surface preparation	☐ Continuous	☐ Periodic	Prior to application confirm that surface temperature and substrate are acceptable and that a compatible primer is used in accordance with AWCI 12-B.
Thickness	☐ Continuous	☐ Periodic	Record thickness of primer or other existing coating on substrate prior to application of coating. Final thickness of coating must be verified in multiple locations prior to applying top coat per AWCI 12-B.

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1705.16)

Item			*Detailed Instructions and Frequencies*
Material and installation	☐ Continuous	☐ Periodic	Verify that water-resistive barrier, complying with ASTM E 2570, is installed appropriately over a sheathing substrate. *(Not required if applied over concrete, masonry, or if a means of draining moisture to exterior is provided.)* ***Performed by code inspection firm.***

FIRE-RESISTANT PENETRATIONS AND JOINTS (IBC 1705.17)

➢ *Only required for high-rise buildings or those assigned to Risk Category III or IV per IBC Table 1604.5.*

Item			*Detailed Instructions and Frequencies*
Penetration firestops	☐ Continuous	☐ Periodic	Listed systems shall be inspected in accordance with ASTM E 2393.
Fire-resistant joint systems	☐ Continuous	☐ Periodic	Listed systems shall be inspected in accordance with ASTM E 2393.

SMOKE CONTROL (IBC 1705.18)

Item			*Detailed Instructions and Frequencies*
Verify device locations and perform leakage testing	☐ Continuous	☐ Periodic	During erection of ductwork and prior to concealment. As defined by rational analysis.
Pressure difference testing, flow measurements and detection and control verification	☐ Continuous	☐ Periodic	Prior to occupancy and after sufficient completion. As defined by rational analysis.

Page 10 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

ARCHITECTURAL COMPONENTS (IBC 1705.12.5)

➢ *Only required for buildings located within Seismic Design Category D, E, or F.*

Item			*Detailed Instructions and Frequencies*
Erection and fastening of exterior cladding or interior and exterior veneers	☐ Continuous	☐ Periodic	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. Performed by code inspection firm. (Not required if < 30 feet or less than 5psf).
Erection and fastening of interior and exterior nonbearing walls	☐ Continuous	☐ Periodic	Verify appropriate materials, fasteners and attachment at commencement of work and at completion. Performed by code inspection firm. (Not required if < 30 feet or for interior walls < 15psf).
Access floors	☐ Continuous	☐ Periodic	Verify that anchorage complies with approved construction documents. Inspection of post-installed anchors shall comply with approved ICC-ES report. ***Performed by code inspection firm.***
Storage racks	☐ Continuous	☐ Periodic	Verify that anchorage complies with approved construction documents. Inspection of post-installed anchors shall comply with approved ICC-ES report. ***Performed by code inspection firm.***

MECHANICAL & ELECTRICAL COMPONENTS (IBC 1705.12.4, 1705.12.6 & 1705.13.2)

➢ *Only required for buildings located within Seismic Design Category C, D, E, or F.*

Item			*Detailed Instructions and Frequencies*
Anchorage of emergency or standby power systems	☐ Continuous	☐ Periodic	Verify that anchorage complies with approved construction documents. ***Performed by code inspection firm.***
Installation of piping systems carrying flammable, combustible or highly toxic materials	☐ Continuous	☐ Periodic	Verify that installation and restraint comply with approved construction documents. ***Performed by code inspection firm.***
Installation of HVAC ductwork containing hazardous materials	☐ Continuous	☐ Periodic	Verify that installation and restraint comply with approved construction documents. ***Performed by code inspection firm.***
Installation of vibration isolation systems having a clearance of ≤¼"	☐ Continuous	☐ Periodic	Verify that installation complies with approved construction documents and manufacturer's recommendations. ***Performed by code inspection firm.***
Designated seismic systems	☐ Continuous	☐ Periodic	Confirm that manufacturer's certificate of compliance conforms to the requirements of Section 13.2 of ASCE 7-10. Verify that the label, anchorage or mounting conforms to the manufacturer's certificate of compliance. ***Performed by code inspection firm.***

SEISMICALLY ISOLATED STRUCTURES (IBC 1705.12.8 & 1705.13.4)

Item			*Detailed Instructions and Frequencies*
Prototype tests	☐ Continuous	☐ Periodic	Prototype tests shall be performed on selected samples prior to construction in accordance with Section 17.8 of ASCE 7-10.
Fabrication and installation	☐ Continuous	☐ Periodic	Verify that fabrication and installation of isolator units and energy dissipation devices conform to manufacturer's recommendations and approved construction documents.

Page 11 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

SPECIAL CASES (IBC 1705.1.1) – material alternatives or unusual design applications

Item			*Detailed Instructions and Frequencies*
Material and installation	☐ Continuous	☐ Periodic	Per design professional in responsible charge or report from an accepted accreditation agency (i.e. ICC-ES).

MISCELLANEOUS AREAS

➢ *These inspections may be recommended by the Architect/Engineer and are to be approved by DFCM.*

Item			*Detailed Instructions and Frequencies*
Suspended Acoustical Ceilings	☐ Continuous	☐ Periodic	***Performed by code inspection firm.***
Soil backfill (specify locations and frequency)	☐ Continuous	☐ Periodic	
Soils for curb and gutter (specify locations and frequency)	☐ Continuous	☐ Periodic	
Soils for parking lots (specify locations and frequency)	☐ Continuous	☐ Periodic	
Soils for utility trench backfill	☐ Continuous	☐ Periodic	
Reinforcement for slab on grade sidewalks and drive approaches (specify locations and frequency)	☐ Continuous	☐ Periodic	
Reinforcement for interior slab on grade (specify locations and frequency)	☐ Continuous	☐ Periodic	
Concrete testing for slab on grade sidewalks and drive approaches (specify locations and frequency)	☐ Continuous	☐ Periodic	
Concrete testing for interior slab on grade (specify locations and frequency)	☐ Continuous	☐ Periodic	
Asphalt inspection (specify locations and frequency)	☐ Continuous	☐ Periodic	
Asphalt testing (specify locations and frequency)	☐ Continuous	☐ Periodic	
Steam and water line welding (specify locations and frequency)	☐ Continuous	☐ Periodic	
Seismic supports for duct work and sealing of joints for duct work	☐ Continuous	☐ Periodic	
Seismic supports for electrical raceways, cable trays and lights	☐ Continuous	☐ Periodic	
Seismic supports for plumbing lines including gas, water and steam and condensation	☐ Continuous	☐ Periodic	
Seismic bracing for mechanical units both on slab and suspended	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	
	☐ Continuous	☐ Periodic	

Page 12 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

Special Inspectors Shall:

- Be approved by the Building Official prior to performing any duties;
- Provide proof of licensure as a special inspector by the State of Utah for each type of inspection;
- Inspection reports are to meet the requirements of IBC 1704.2.4 and DFCM standards;
- Inspection reports are to be submitted to the code consultant, architect, DFCM project manager, and the State of Utah Building Official within 48 hours of performing inspections;
- A final inspection report shall be submitted following completion of the project documenting the types of special inspections performed and a statement indicating that the structure is in compliance with the approved construction documents and applicable codes (see IBC 1704.2.4).

Last Revised: 10/2016

THERE ARE NO SPECIAL INSPECTIONS REQUIRED

Page 13 of 13

Division of Facilities Construction & Management
4110 State Office Building
Salt Lake City, Utah 84114
Phone: (801) 538-3018
Website: http://dfcm.utah.gov/

STRUCTURAL OBSERVATIONS (IBC 1704.6)

Item		*Proposed Frequency*	*Name of Structural Observer*
Footings & Piers	☐ Required		
Mat Foundations	☐ Required		
Deep Foundations	☐ Required		
Grade Beams	☐ Required		
Concrete Walls	☐ Required		
Masonry Walls	☐ Required		
Wood Walls	☐ Required		
Steel Moment Frames	☐ Required		
Steel Braced Frames	☐ Required		
Concrete Moment Frames	☐ Required		
Concrete Diaphragms	☐ Required		
Steel Deck Diaphragms	☐ Required		
Wood Diaphragms	☐ Required		
Post-tensioned Deck	☐ Required		
Other:	☐ Required		
Other:	☐ Required		
Other:	☐ Required		
Other:	☐ Required		

Structural Observer's Shall:

- Provide proof of licensure as a licensed professional/structural engineer by the State of Utah;
- If structural observations are performed by individuals other than the design professional in responsible charge, they should first be approved by the Building Official.
- At the conclusion of work a final structural observation report must be submitted to the Building Official noting any deficiencies which, to the best of the structural observer's knowledge, have not been resolved (see IBC 1704.6).

Last Revised: 10/2016

GENERAL DFCM NOTES:

- CONSTRUCTION OF NEW STATE BUILDINGS AND REMODELING OF EXISTING BUILDINGS SHALL COMPLY WITH ALL THE REQUIREMENTS OF THE DFCM STANDARDS. THE DFCM STANDARDS CAN BE FOUND AT THE FOLLOWING WEB SITE: ww.dfcm.utah.gov
- ARCHITECT / ENGINEERS HAS DESIGNED THIS PROJECT TO MEET ALL DFCM STANDARDS.
- PRIOR TO FINAL APPROVAL OF THE PROJECT A FINAL INSPECTION NEEDS TO BE SUBMITTED TO THE BUILDING OFFICIAL INDICATING THAT THE PROJECT IS COMPLETE IN ACCORDANCE WITH THE APPROVED DRAWINGS AND DOCUMENTS.
- THE FOLLOWING DOCUMENTS ARE REQUIRED BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED:
  - A CODE INSPECTION REPORT RECOMMENDING THAT A CERTIFICATE OF OCCUPANCY BE ISSUED.
  - FINAL REPORT FROM THE SPECIAL INSPECTION AGENCY.
  - CERTIFICATE OF FIRE CLEARANCE FROM THE STATE FIRE MARSHALL.
  - REPORT OF THE DISINFECTION OF THE POTABLE WATER SYSTEM IPC 610.
  - A CERTIFICATE OF COMPLIANCE FROM THE APPROVED FABRICATOR, IF APPLICABLE, IBC 1704.2.2.
  - A STAMPED AND SIGNED FINAL INSPECTION REPORT FROM THE STRUCTURAL ENGINEER WHEN STRUCTURAL OBSERVATION IS REQUIRED BY IBC 1710.

The following documents are required before a certificate of occupancy is issued:

- A code inspection report recommending that a certificate of occupancy be issued.
- Final report from the special inspection agency.
- Certificate of fire clearance from the State Fire Marshall.
- ~~Final approval from the State Elevator inspector, if applicable.~~ N.A.
- ~~Final approval from the State boiler inspector, if applicable.~~ N.A.
- ~~Report of the disinfection of the potable water system. IPC 610~~ N.A.
- ~~A Certificate of Compliance from the approved fabricator, if applicable. IBC 1704.2.2~~ N.A.
- ~~A stamped and signed final report from the structural engineer when structural observation is required by IBC 1710.~~ N.A.
- ~~An NFRC Certificate for fenestration without the NFRC label.~~ N.A.
- ~~Final report from the special inspector and the mechanical engineer when smoke control is required. The reports must comply with IBC 909.18.8.3.~~ N.A.

NONSTRUCTURAL COMPONENT CHECKLIST

ITEM DESCRIPTION	*NOT REQUIRED*	*ON CONST. DOCUMENTS*	*DEFERRED SUBMITTAL*	*COMMENTS*
Architectural Components:				
Interior Nonstructural Walls & Partitions	X			
Cantilever Elements *(i.e. parapets, etc.)*	X			
Exterior Nonstructural Wall Elements	X			
Veneer	X			
Penthouses	X			
Ceilings *(i.e. suspended grid or hard-lid)*		X		
Cabinets *(i.e. storage cabinets, equip, etc.)*	X			
Access Floors	X			
Storage Racks	X			
Appendages & Ornamentations	X			
Signs & Billboards	X			
Other:				
Other:				
MEP Components:				
Fire Sprinklers			X	
Mechanical Equipment *(i.e. HVAC, fans, air handlers, boilers, furnaces, tanks, chillers, water heaters, heat exchangers, evaporators, engines, turbines, pumps, compressors, MFR equipment, etc.)*	X			
Electrical Equipment *(i.e. generators, batteries, inverters, transformers, MCC, panel boards, switch gear, cabinets, etc.)*	X			
Elevator & Escalator Components	X			
Communication Equipment, Computers, Instrumentation, and Controls	X			
Roof-mounted Chimneys, Stacks, Cooling & Electrical Towers	X			
Lighting Fixtures		X		
Vibration Isolated Components	X			
Piping & Conduit Systems	X			
Ductwork *(including in-line components)*	X			
Conveyors	X			
Cable Trays	X			
Other:				
Other:				

NOTES:

1. Deferred submittals for seismic restraint of nonstructural components must be submitted to the DFCM Building Official a minimum of two weeks prior to the planned installation in order to allow for plan review and forwarding to inspectors. In the event that the submittal is deficient additional time may become necessary.
2. When seismic restraint of non-structural components is installed prior to receiving DFCM approval it shall not be covered or concealed until receiving both plan review and inspection approval. Further, installers are proceeding at their own risk until plan review and inspection approval occurs.
3. The requirements for seismic restraint of nonstructural components cannot be satisfied by a general reference to Design Manuals. The design professional may utilize these manuals as a basis of their design, but must provide all supporting documentation to ensure that the design conforms to the requirements of ASCE 7-05, Chapter 13.
4. Submittals must include details of the proposed seismic restraint of nonstructural components. These details must show specific information relating to the materials, type, size, and locations of anchorages; materials used for bracing; attachment requirements of bracing to structure and component; and locations of transverse and longitudinal sway bracing and rod stiffeners. Submittals may also require structural calculations, engineering reports, test data, and/or specifications to ensure code compliance.

Page 2 of 2

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

STATE OF UTAH — SCOTT PAUL EVANS — NO. 118114 — LICENSED PROFESSIONAL ARCHITECT — 12/19/2019

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT — REVIEWED FOR CODE COMPLIANCE — SIGNATURE: — DATE: 01/02/2020

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE FREEPORT CENTER BUILDING D5 COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

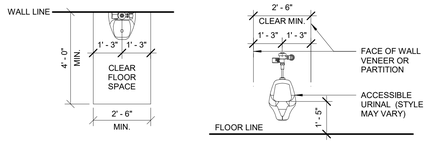
NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

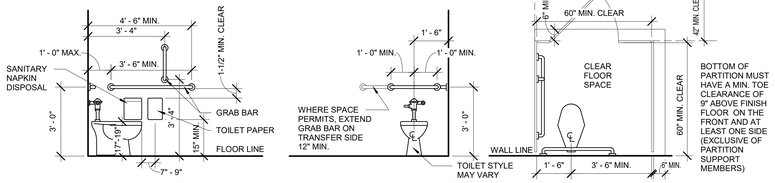
SHEET TITLE: DFCM FORMS

SHEET NUMBER: GI-004

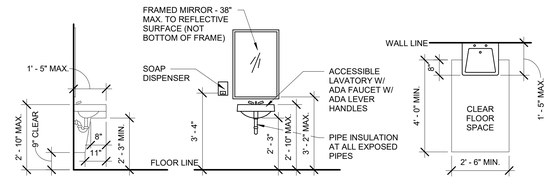
Last Plotted: 12/19/2019 1:57:32 PM



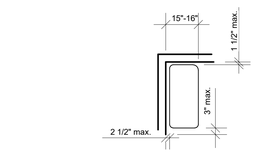
ACCESSIBLE URINAL



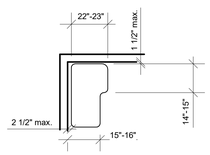
ACCESSIBLE TOILET STALL



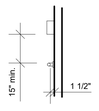
ACCESSIBLE LAVATORY



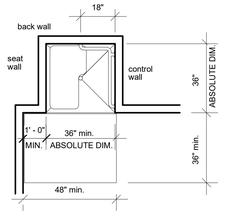
RECTANGULAR SHOWER COMPARTMENT SEAT



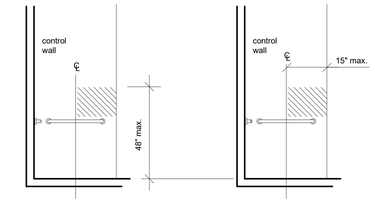
L-SHAPED SHOWER COMPARTMENT SEAT



SPACING OF GRAB BARS

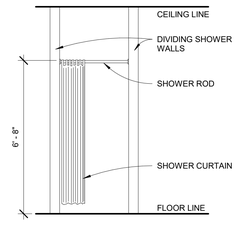


TRANSFER-TYPE SHOWER COMPARTMENT WITH GRAB BARS



CONTROLS IN TRANSFER-TYPE SHOWER

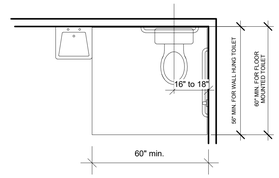
LOCATION OF SHOWER SPRAY UNIT



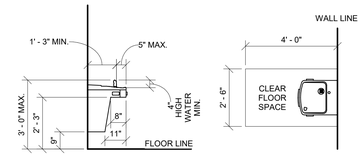
SHOWER ROD AND CURTAIN

ACCESSIBLE SHOWERS

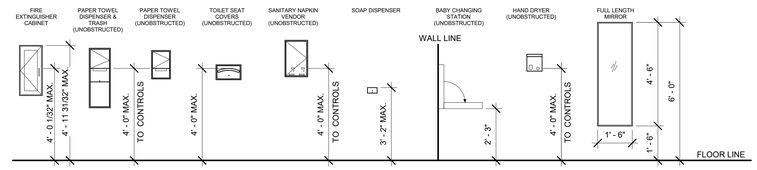
SHOWERS AND ALL RELATED COMPONENTS MUST FULLY COMPLY WITH THE REQUIREMENTS OF "TRANSFER-TYPE SHOWER COMPARTMENTS" AS STATED IN ICC/ANSI A117.1-2003



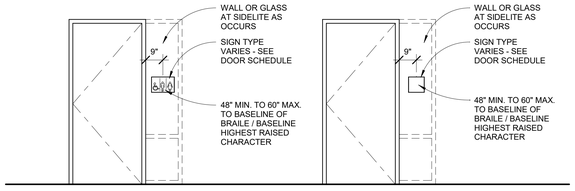
WATER CLOSET LOCATION / CLEAR FLOOR SPACE



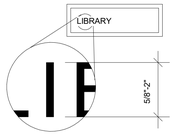
ELECTRIC WATER COOLER



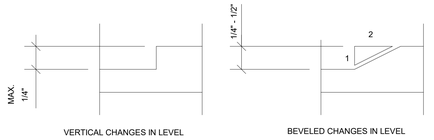
MISC. ACCESSORIES MOUNTING HEIGHT



SIGNAGE AT DOORS



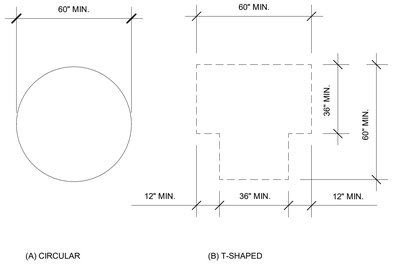
CHARACTER HEIGHT



VERTICAL CHANGES IN LEVEL

BEVELED CHANGES IN LEVEL

ACCESSIBLE CHANGES IN LEVEL



(A) CIRCULAR

(B) T-SHAPED

WHEELCHAIR TURNING SPACE

NOTE:
THE INFORMATION ON THIS SHEET INDICATES GENERAL ADA DESIGN REQUIREMENTS AND IS FOR REFERENCE ONLY - ANY DISCREPANCIES BETWEEN THIS SHEET AND THE REST OF THE DESIGN DRAWINGS SHALL BE RESOLVED IN FAVOR OF THE DESIGN DRAWINGS - IF ANY QUESTIONS ARISE DUE TO DISCREPANCIES OR MISSING INFORMATION CONTACT THE ARCHITECT PRIOR TO PERFORMING WORK.

PROVIDE BLOCKING / BACKING AS REQUIRED FOR ALL WALL MOUNTED ACCESSORIES / APPLIANCES

Last Plotted: 12/19/2019 1:57:34 PM

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

STATE OF UTAH SCOTT PHILLIP EVANS NO. 118114 REGISTERED PROFESSIONAL ARCHITECT 12/19/2019

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT REVIEWED FOR CODE COMPLIANCE SIGNATURE DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

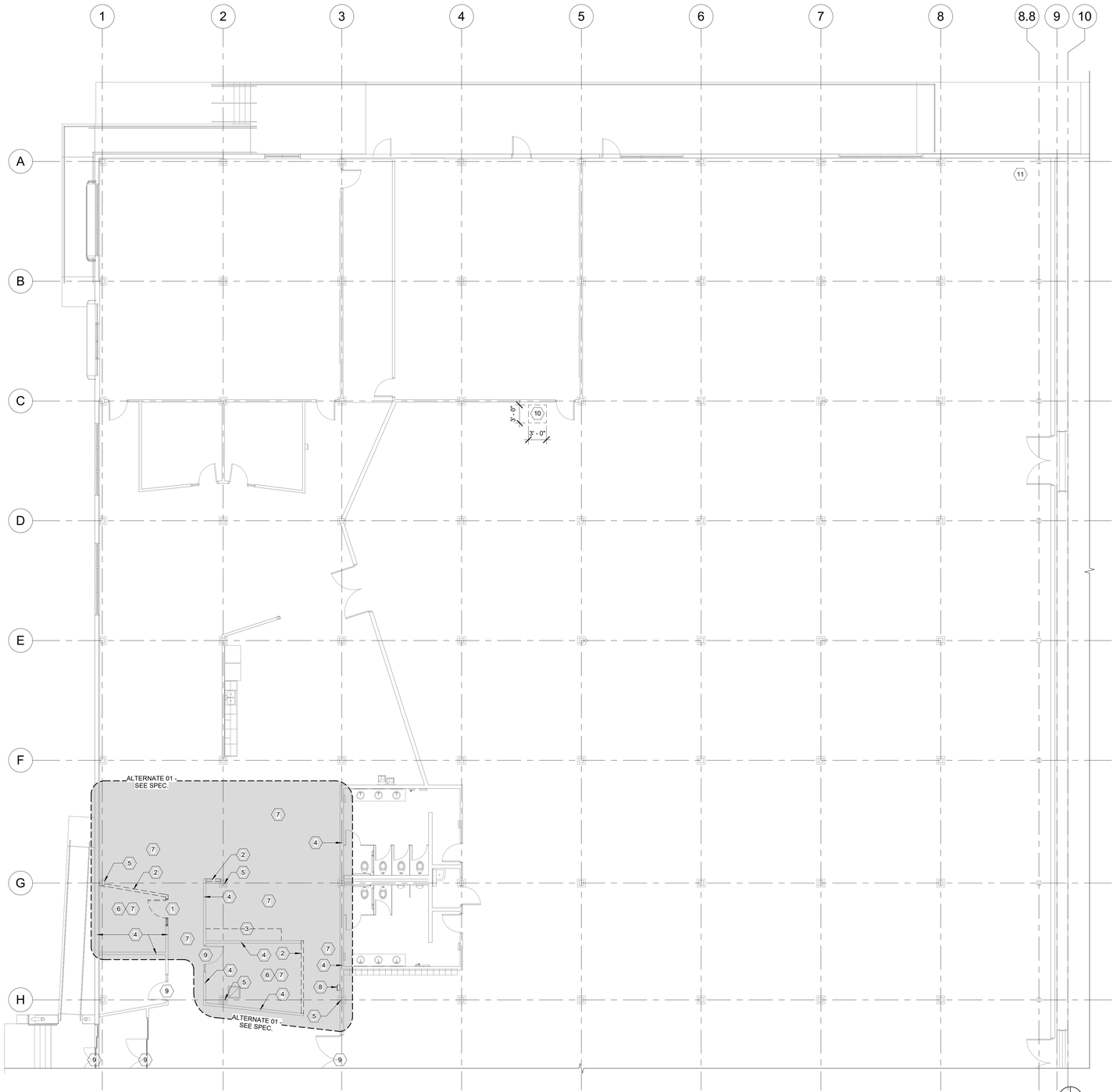
OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:

ADA GENERAL REQUIREMENTS

SHEET NUMBER:

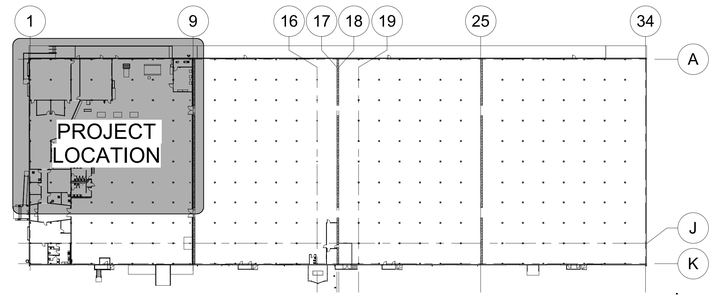
GI-005



A1 LEVEL 01 - DEMOLITION PLAN
1/8" = 1'-0"

KEYED NOTES

#	
1.	REMOVE EXTG. DOOR & ALL RELATED MATERIALS.
2.	REMOVE EXTG. WALL & ALL RELATED MATERIALS - REFER TO ELECTRICAL DRAWINGS.
3.	REMOVE EXTG. COUNTERTOP.
4.	EXTG. GYP. BD. WALL TO REMAIN PROTECT FROM DAMAGE - REFER TO AE-101 & WALL TYPES FOR ANY NEW WORK.
5.	EXTG. WOOD COLUMN TO REMAIN PROTECT FROM DAMAGE.
6.	REMOVE / MODIFY EXTG. CEILING SYSTEM IN THIS ROOM - REFER TO AE-102 FOR NEW WORK.
7.	EXTG. CARPET FLOORING IN THIS ROOM TO REMAIN OR BE MODIFIED AS REQUIRED - PATCH WITH NEW AS REQUIRED - REFER TO AE-101 FOR NEW WORK.
8.	REMOVE EXTG. FIRE EXTINGUISHER CABINET - PATCH WALL AS REQUIRED - PAINT.
9.	EXTG. DOOR SYSTEM TO REMAIN - PROTECT FROM DAMAGE.
10.	SAWCUT & REMOVE EXTG. CONCRETE SLAB, GRAVEL & EARTH - REFER TO AE-101 FOR NEW WORK.
11.	SAWCUT & REMOVE EXTG. CONCRETE SLAB AS REQUIRED TO INSTALL NEW FLOOR DRAIN - REFER TO AE-101 & PLUMBING DRAWINGS.



A5 KEY PLAN
1" = 60'-0"

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT
& ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
STATE OF UTAH
SCOTT P. EVANS
NO. 118114
REGISTERED PROFESSIONAL ARCHITECT
12/19/2019

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL
FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:
NO.	DATE	DESCRIPTION

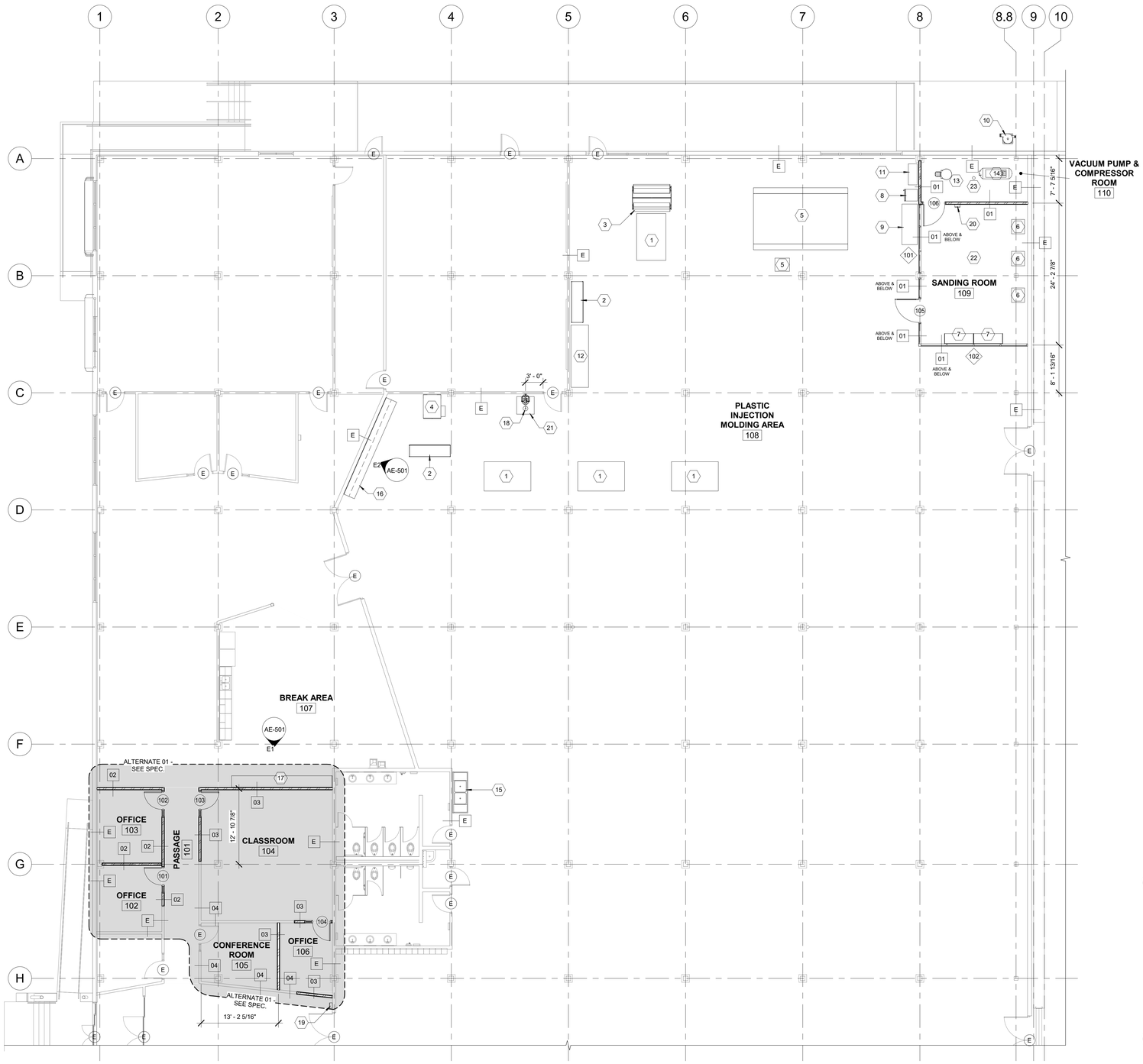
ISSUED:
NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:
DEMOLITION PLAN

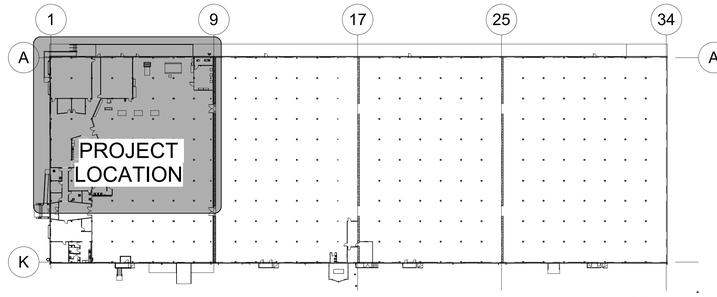
SHEET NUMBER:
AD-101

Last Plotted: 12/19/2019 1:56:53 PM



A1 LEVEL 01 - FLOOR PLAN

1/8" = 1'-0"



A5 KEY PLAN

1" = 60'-0"

WALL TYPES LEGEND

MARK	DESIGNATION	DESCRIPTION	SOUND RATING	FIRE RATING	ACTUAL WIDTH
01		3-5/8" 20 ga. metal studs at 16" O.C. with 5/8" type "X" gypsum board each side - Provide 3" sound attenuation blankets between studs - run wall roof deck above - work around extg. duct work as required - refer to detail D1/AE-501	Yes	None	4 7/8"
02		362S162-43 metal studs at 16" O.C. with 5/8" type "X" gypsum board each side - Provide 3" sound attenuation blankets between studs - run walls to 9'-0" high - refer to detail C2/AE-501.	Yes	None	4 7/8"
03		362S162-43 metal studs at 16" O.C. with 5/8" type "X" gypsum board each side - Provide 3" sound attenuation blankets between studs - run walls to 10'-0" high - refer to detail C2/AE-501.	Yes	None	4 7/8"
04		Extg. metal stud wall up to 9'-0" to remain protect from damage - build new wall (from top of extg. wall up to 10'-0") w/ 362S162-43 metal studs at 16" O.C. with 5/8" type "X" gypsum board each side - Provide 3" sound attenuation blankets between studs - refer to detail C3/AE-501.	Yes	None	4 7/8"
E	varies	extg. wall type to remain - refer to finish schedule for any work.	n/a	n/a	varies

KEYED NOTES

#	
1.	8'x5' WORK TABLE - BY OWNER - PROVIDE & INSTALL NEW DROP DOWN POWER - REFER TO ELECTRICAL DRAWINGS.
2.	STORAGE SHELVES - BY OWNER.
3.	SIX ROLL FABRIC RACK SYSTEM - BY OWNER.
4.	INSTALL OWNER PROVIDED BENCH OVEN - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
5.	INSTALL OWNER PROVIDED CUTTER MACHINE - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
6.	INSTALL OWNER PROVIDED STANDING DISC SANDER - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
7.	INSTALL OWNER PROVIDED DOWNDRAFT TABLE - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
8.	UPRIGHT FREEZER - BY OWNER - REFER TO ELECTRICAL DRAWINGS.
9.	CHEST FREEZER - BY OWNER - REFER TO ELECTRICAL DRAWINGS.
10.	INSTALL OWNER PROVIDED HIGH VACUUM CYCLONE DUST COLLECTOR - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
11.	FLAMMABLE STORAGE CABINET - BY OWNER - REFER TO MECHANICAL DRAWINGS..
12.	ROLLING WORKBENCH WITH TOOLS - BY OWNER - REFER & ELECTRICAL DRAWINGS.
13.	INSTALL OWNER PROVIDED AIR COMPRESSOR - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
14.	INSTALL OWNER PROVIDED VACUUM PUMP - REFER TO MECHANICAL & ELECTRICAL DRAWINGS.
15.	PROVIDE & INSTALL NEW 2-BAY SINK - SAWCUT & REMOVE EXTG. CONCRETE SLAB AS REQUIRED TO INSTALL NEW PLUMBING - PATCH WITH NEW CONCRETE (MATCH EXTG. FINISH AS REQUIRED) REFER TO PLUMBING DRAWINGS.
16.	PROVIDE & INSTALL NEW 24" DEEP STAINLESS WORKBENCH WITH 16" DEEP SHELF ABOVE - REFER TO MECHANICAL & ELECTRICAL DRAWINGS - REFER TO ELEVATION INDICATED.
17.	PROVIDE & INSTALL NEW 24" DEEP COUNTERTOP - REFER TO ELEVATION INDICATED.
18.	PROVIDE & INSTALL NEW EYE WASH STATION - REFER TO PLUMBING DRAWINGS.
19.	PROVIDE & INSTALL NEW FIRE EXTINGUISHER CABINET IN EXTG. WALL - SEE SPEC.
20.	PROVIDE & INSTALL NEW FIRE EXTINGUISHER CABINET IN NEW WALL - SEE SPEC.
21.	PROVIDE & INSTALL NEW GRAVEL SUMP, FLOOR DRAIN & NEW CONCRETE SLAB (SLOPE NEW TO DRAIN) - REFER TO DETAIL C5/AE-501 - REFER TO PLUMBING DRAWING - SEE SPEC.
22.	PROVIDE & INSTALL NEW ROOF TOP EXHAUST FAN - REFER TO MECHANICAL DRAWINGS - PATCH EXTG. SINGLE PLY ROOFING SYSTEM AS REQUIRED TO MAINTAIN WARRANTY.
23.	PROVIDE & INSTALL NEW FLOOR DRAIN - REFER TO PLUMBING DRAWINGS - PATCH EXTG. CONCRETE SLAB AS REQUIRED.

ALL OWNER PROVIDED, CONTRACTOR INSTALLED EQUIPMENT NEEDS TO BE INSTALLED PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS. COORDINATE WITH OWNER AND PRODUCT CUTSHEETS.

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

STATE OF UTAH — SCOTT P. EVANS — NO. 118114 — 12/19/2019 — REGISTERED PROFESSIONAL ARCHITECT

CODE OFFICIAL STAMP:

DEPARTMENT OF COMMUNITY DEVELOPMENT — CONSTRUCTION CODE ADMINISTRATION — REVIEWED FOR CODE COMPLIANCE — SIGNATURE — DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE FREEPORT CENTER BUILDING D5 COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:

FLOOR PLAN

SHEET NUMBER:

AE-101

Last Plotted: 12/19/2019 1:57:01 PM

CEILING TYPE LEGEND

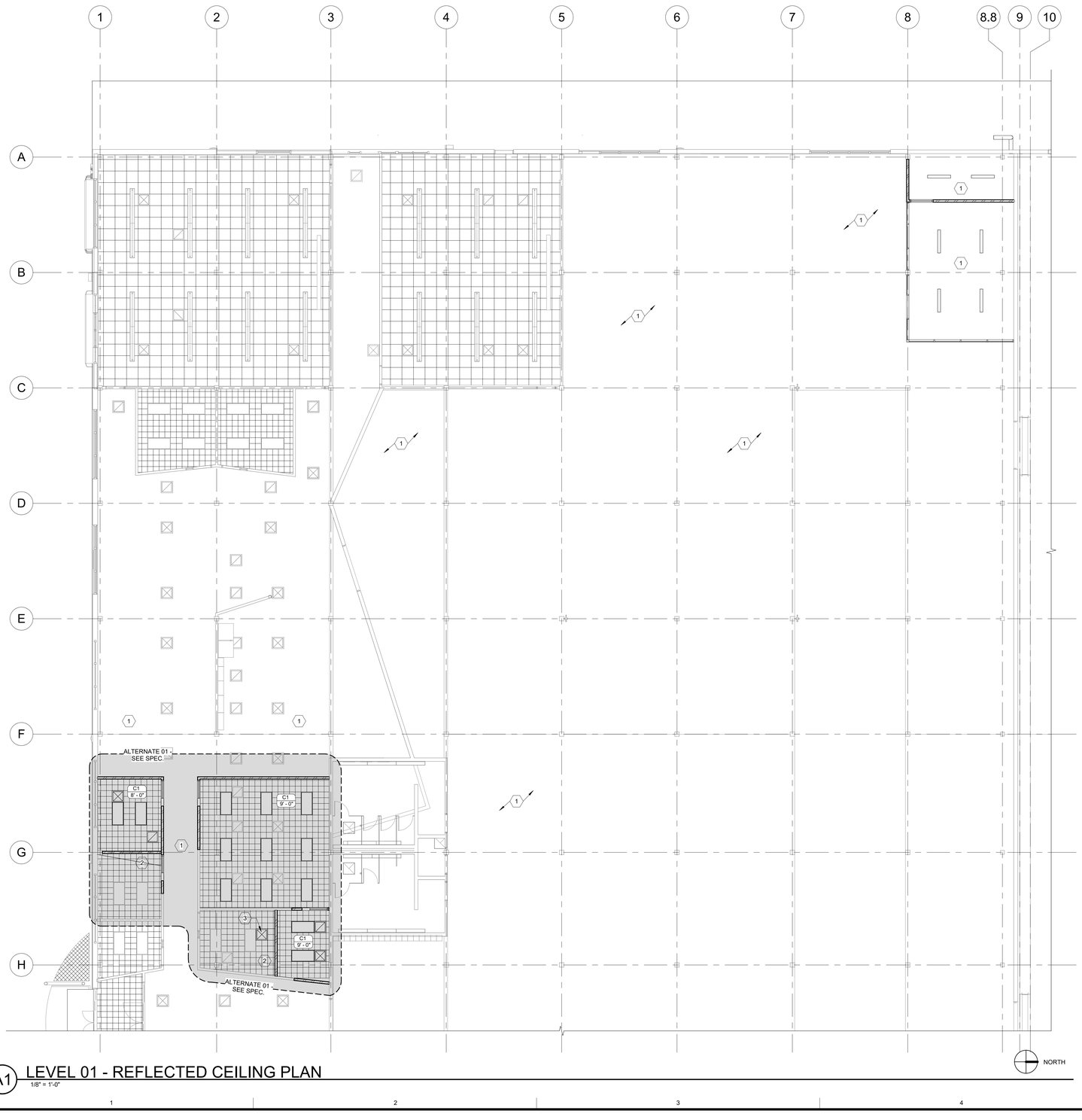
TYPE HEIGHT C1 SEE PLAN — 12"x12" ACOUSTICAL TILE APPLIED TO FRAMED GYP. BD. CEILING SYSTEM - SEE SPEC. - REFER TO DETAIL C2&C3/AE-501.

KEYED NOTES

1. OPEN TO STRUCTURE ABOVE.
2. MODIFY/ADD TO EXTG. CEILING SYSTEM AS REQUIRED TO PERFORM NEW WORK - REBUILT CEILING STRUCTURE AS REQUIRED - MATCH EXTG.
3. EXTG. HVAC GRILLE TO BE RELOCATED - SEE MECHANICAL DRAWINGS.

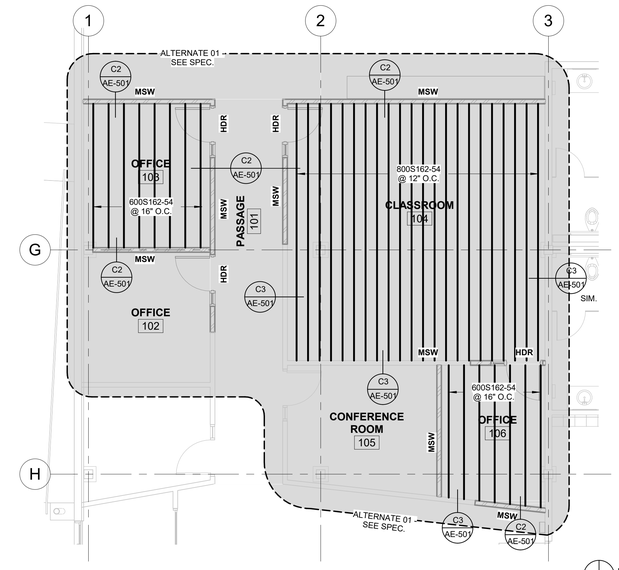
CEILING LEGEND

- SUSPENDED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- 2x4 TROFFER LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- RETURN AIR DIFFUSER - SEE MECHANICAL DRAWINGS
- SUPPLY AIR DIFFUSER - SEE MECHANICAL DRAWINGS

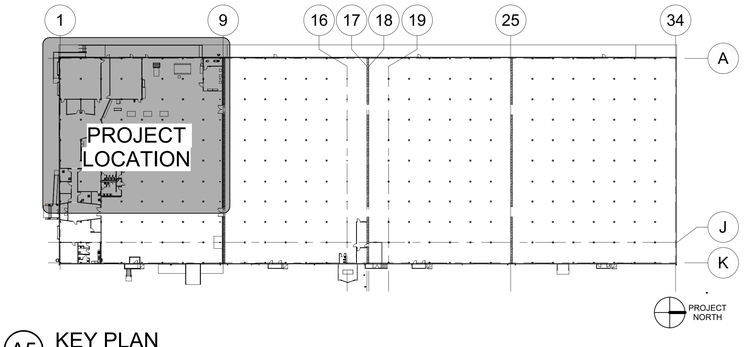


A1 LEVEL 01 - REFLECTED CEILING PLAN
1/8" = 1'-0"

MSW - INDICATES 362S162-43 WALL STUDS AT 16" O.C.
HDR - INDICATES (2)600S162-54 BOXED HEADER, SEE DETAIL D5/AE-501



B5 LEVEL 01 - NEW CEILING FRAMING PLAN
3/16" = 1'-0"



A5 KEY PLAN
1" = 60'-0"

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
STATE OF UTAH — SCOTT P. EVANS — NO. 118114 — 12/19/2019 — LICENSED PROFESSIONAL ARCHITECT

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT — REVIEWED FOR CODE COMPLIANCE — SIGNATURE — DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL
FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:
NO.	DATE	DESCRIPTION

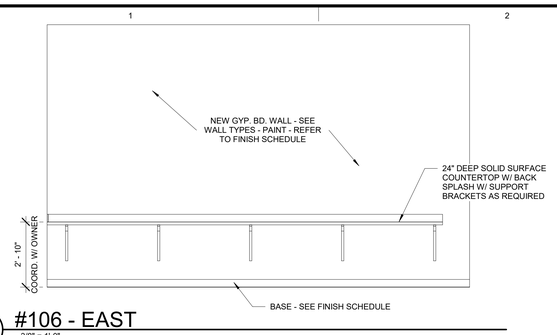
ISSUED:
NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

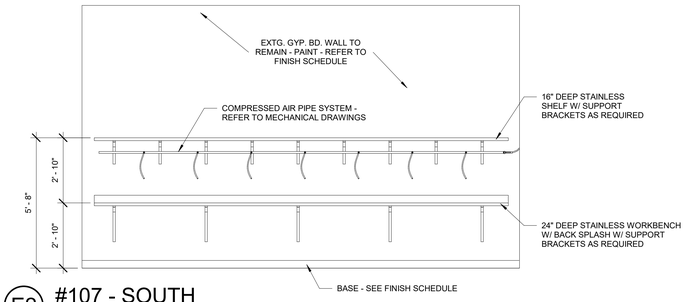
SHEET TITLE:
REFLECTED CEILING PLAN

SHEET NUMBER:
AE-102

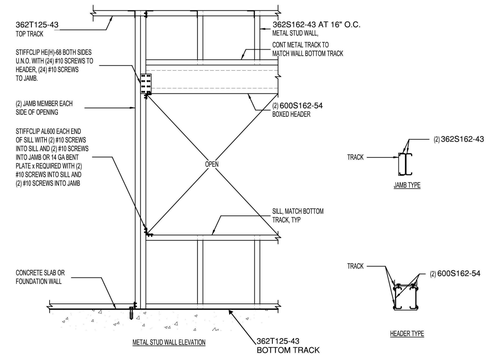
Last Plotted: 12/19/2019 1:57:08 PM



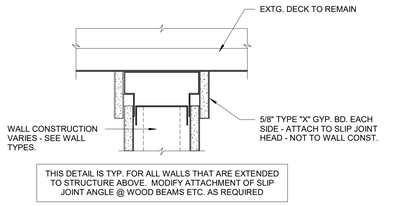
E1 #106 - EAST
3/8" = 1'-0"



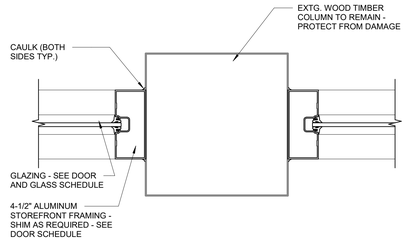
E2 #107 - SOUTH
3/8" = 1'-0"



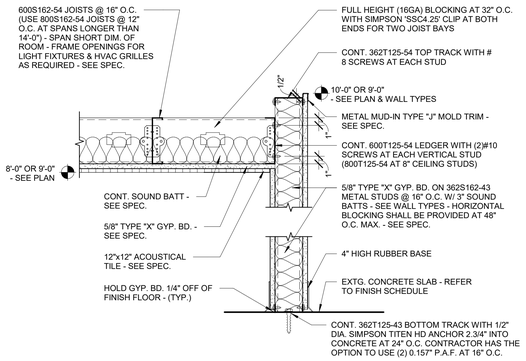
D5 HEADER DETAIL
12" = 1'-0"



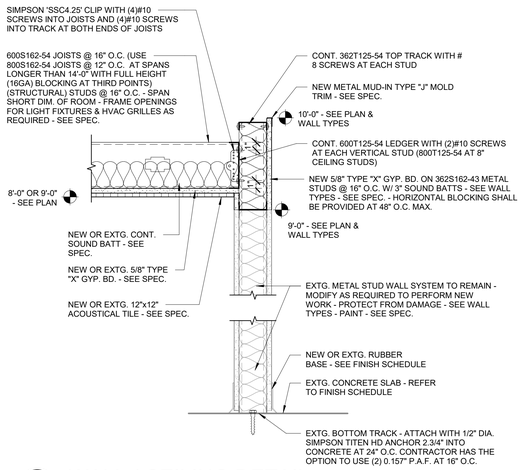
D1 TYP. - WALL SLIP JOINT DETAIL
3" = 1'-0"



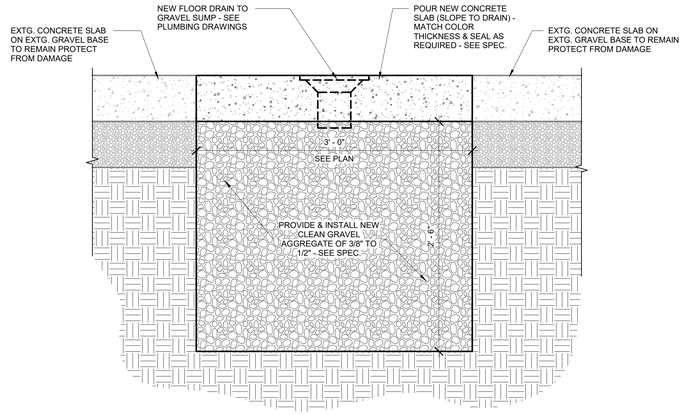
C1 ALUM. JAMB DETAIL
3" = 1'-0"



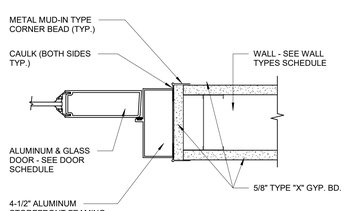
C2 WALL / CEILING DETAIL
1 1/2" = 1'-0"



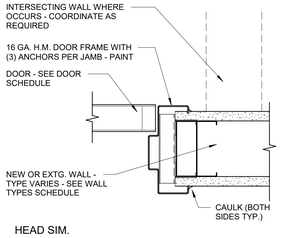
C3 WALL / CEILING DETAIL
1 1/2" = 1'-0"



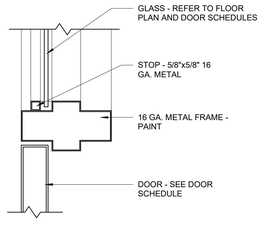
C5 GRAVEL SUMP DETAIL
1 1/2" = 1'-0"



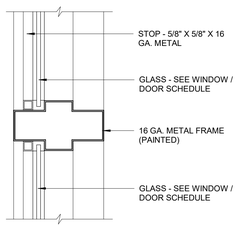
B1 ALUM. DOOR JAMB
3" = 1'-0"



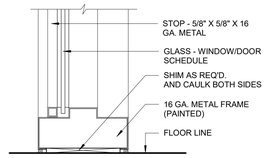
B2 H.M. INT. DOOR DETAIL
3" = 1'-0"



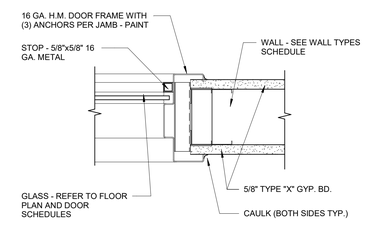
B3 DOOR JAMB DETAIL
3" = 1'-0"



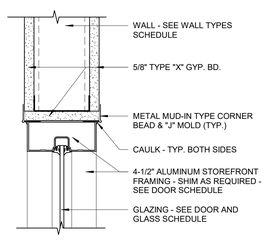
B4 WINDOW MULLION DETAIL
3" = 1'-0"



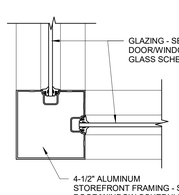
B5 DOOR SILL DETAIL
3" = 1'-0"



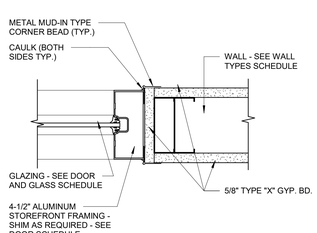
B6 H.M. INT. WINDOW DETAIL
3" = 1'-0"



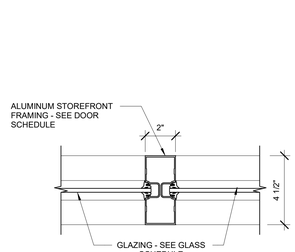
A1 ALUM. DOOR HEAD SILL SIM.
3" = 1'-0"



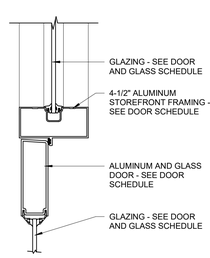
A2 ALUM. JAMB DETAIL
3" = 1'-0"



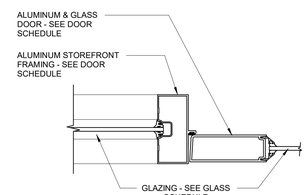
A3 ALUM. JAMB DETAIL
3" = 1'-0"



A4 ALUM. MULLION DETAIL
3" = 1'-0"



A5 ALUM. DOOR HEAD
3" = 1'-0"



A6 ALUM. DOOR JAMB
3" = 1'-0"

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
STATE OF UTAH SCOTT P. EVANS NO. 118114 REGISTERED PROFESSIONAL ARCHITECT 12/19/2019

CODE OFFICIAL STAMP:
REVIEWED FOR CODE COMPLIANCE SIGNATURE DATE

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE FREEPORT CENTER BUILDING D5 COMPOSITES REMODEL
FREEPORT CENTER CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:
DETAILS

SHEET NUMBER:
AE-501

Last Plotted: 12/19/2019 1:57:12 PM

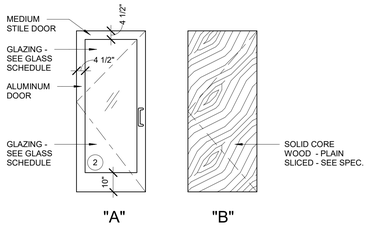
ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR FINISH	BASE	NORTH WALL MATERIAL	NORTH WALL FINISH	EAST WALL MATERIAL	EAST WALL FINISH	SOUTH WALL MATERIAL	SOUTH WALL FINISH	WEST WALL MATERIAL	WEST WALL FINISH	CEILING MATERIAL	CEILING FINISH	CEILING HEIGHT	COMMENTS
101	PASSAGE	EXTG. CARPET PATCH AS REQUIRED	RUBBER	NEW / EXTG. GYP. BD.	PAINT	OPEN	NONE	NEW / EXTG. GYP. BD.	PAINT	OPEN	NONE	OPEN TO STRUCTURE	NONE		
102	OFFICE	EXTG. CARPET PATCH AS REQUIRED	RUBBER	NEW / EXTG. GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	NEW GYP. BD.	PAINT	*12"x12" AC TILE	NONE	SEE PLAN	*MODIFY EXTG. CEILING SYSTEM AS REQUIRED
103	OFFICE	EXTG. CARPET PATCH AS REQUIRED	RUBBER	NEW GYP. BD.	PAINT	NEW GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	NEW GYP. BD.	PAINT	12"x12" AC TILE	NONE		
104	CLASSROOM	EXTG. CARPET PATCH AS REQUIRED	RUBBER	NEW / EXTG. GYP. BD.	PAINT	NEW / EXTG. GYP. BD.	PAINT	NEW / EXTG. GYP. BD.	PAINT	NEW GYP. BD.	PAINT	12"x12" AC TILE	NONE		
105	CONFERENCE ROOM	EXTG. CARPET PATCH AS REQUIRED	RUBBER	NEW GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	*12"x12" AC TILE	NONE		*MODIFY EXTG. CEILING SYSTEM AS REQUIRED
106	OFFICE	EXTG. CARPET PATCH AS REQUIRED	RUBBER	EXTG. GYP. BD.	PAINT	NEW GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	NEW GYP. BD.	PAINT	12"x12" AC TILE	NONE		
107	BREAK AREA	EXTG. CARPET PATCH AS REQUIRED	RUBBER	EXTG. GYP. BD.	NONE	NEW / EXTG. GYP. BD.	PAINT	EXTG. GYP. BD.	NONE	EXTG. GYP. BD.	NONE	OPEN TO STRUCTURE / EXTG. GYP. BD.	NONE / NONE		
108	PLASTIC INJECTION MOLDING AREA	EXTG. CONCRETE	RUBBER	NEW / EXTG. GYP. BD.	PAINT	OPEN	NONE	EXTG. GYP. BD.	NONE	EXTG. GYP. BD.	NONE	OPEN TO STRUCTURE	NONE		
109	SANDING ROOM	EXTG. CONCRETE	RUBBER	EXTG. GYP. BD.	PAINT	NEW GYP. BD. / GLASS	PAINT / NONE	NEW GYP. BD. / GLASS	PAINT / NONE	NEW GYP. BD.	PAINT	OPEN TO STRUCTURE	NONE		
110	VACUUM PUMP & COMPRESSOR ROOM	EXTG. CONCRETE	RUBBER	EXTG. GYP. BD.	PAINT	NEW GYP. BD.	PAINT	NEW GYP. BD.	PAINT	EXTG. GYP. BD.	PAINT	OPEN TO STRUCTURE	NONE		

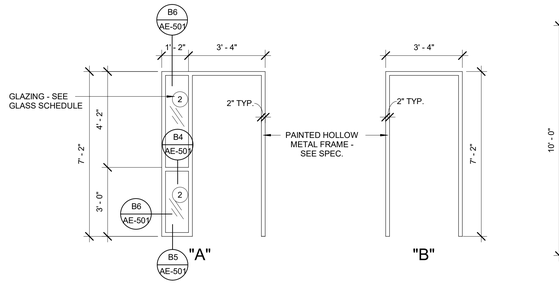
DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	FIRE RATING	HARDWARE	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FRAME (L) JAMB DETAIL	FRAME (R) JAMB DETAIL	FRAME HEAD DETAIL	THRESHOLD DETAIL	COMMENTS
101	3' - 0"	7' - 0"	A	1 3/4"	S.C. WOOD	TRANSPARENT	NONE	3.0	A	HOLLOW METAL	PAINT	B3/AE-501	B2/AE-501	B2/AE-501 SIM.	NONE	
102	3' - 0"	7' - 0"	A	1 3/4"	S.C. WOOD	TRANSPARENT	NONE	3.0	A	HOLLOW METAL	PAINT	B3/AE-501	B2/AE-501	B2/AE-501 SIM.	NONE	
103	3' - 0"	7' - 0"	A	1 3/4"	S.C. WOOD	TRANSPARENT	NONE	4.0	A	HOLLOW METAL	PAINT	B2/AE-501	B3/AE-501	B2/AE-501 SIM.	NONE	
104	3' - 0"	7' - 0"	A	1 3/4"	S.C. WOOD	TRANSPARENT	NONE	3.0	A	HOLLOW METAL	PAINT	B2/AE-501	B3/AE-501	B2/AE-501 SIM.	NONE	
105	4' - 0"	8' - 0"	B	1 3/4"	ALUMINUM	ANODIZED	NONE	1.0	C	ALUMINUM	ANODIZED	SEE FRAME TYPE	SEE FRAME TYPE	SEE FRAME TYPE	NONE	
106	3' - 8"	7' - 0"	A	1 3/4"	S.C. WOOD	TRANSPARENT	NONE	2.0	B	HOLLOW METAL	PAINT	B2/AE-501	B2/AE-501	B2/AE-501 SIM.	NONE	

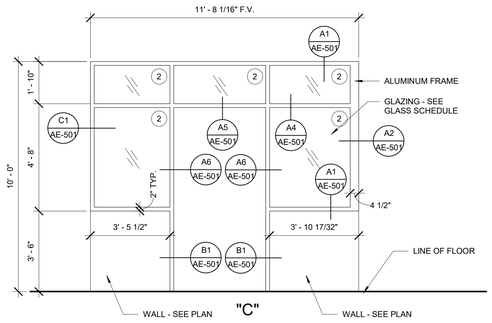
PROVIDE NEW SIGNAGE AT NEW DOORS MATCHING OWNER'S EXISTING SIGNAGE STANDARD. PROVIDE A SUBMITTAL FOR ARCHITECTURAL AND OWNER REVIEW. EXACT WORDING WILL BE PROVIDED DURING THE SUBMITTAL PHASE.



C1 DOOR TYPES
3/8" = 1'-0"



C2 DOOR FRAME TYPE
3/8" = 1'-0"



GLASS SCHEDULE

(#)

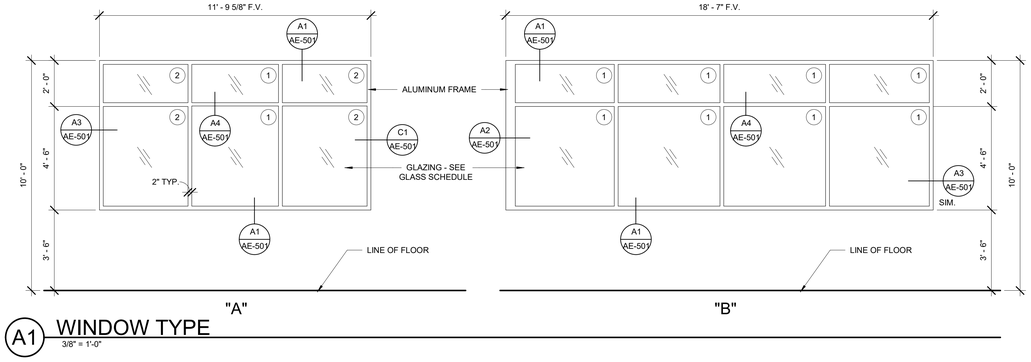
TYPE 1: 1/4" CLEAR FLOAT GLASS

TYPE 2: 1/4" CLEAR FLOAT GLASS TEMPERED

WINDOW SCHEDULE

* FIELD VERIFY ALL DIMENSIONS *

MARK #	WINDOW FRAME SIZE (R.O.) WIDTH	HGT	THK	TYPE	MATERIAL	FINISH	HEAD DETAIL	JAMB(R) DETAIL	JAMB(L) DETAIL	SILL DETAIL	GLAZING	OPERABLE	REMARKS
101	SEE WINDOW TYPES		4-1/2"	A	ALUMINUM	ANODIZED	SEE WINDOW TYPES		SEE WINDOW TYPES		SEE TYPES	NO	
102	SEE WINDOW TYPES		4-1/2"	A	ALUMINUM	ANODIZED	SEE WINDOW TYPES		SEE WINDOW TYPES		SEE TYPES	NO	



A1 WINDOW TYPE
3/8" = 1'-0"

Last Plotted: 12/19/2019 1:57:15 PM

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

STATE OF UTAH — SCOTT P. EVANS — NO. 118114 — REGISTERED ARCHITECT — PROFESSIONAL — 12/19/2019

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT — REVIEWED FOR CODE COMPLIANCE — SIGNATURE — DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-45
DRAWN BY:	JBE
CHECKED BY:	SPE
DESIGNED BY:	SPE

SHEET TITLE:

SCHEDULES

SHEET NUMBER:

AE-601

MECHANICAL LEGEND

SYMBOL	ABR,	DESCRIPTION
GENERAL TERMINOLOGY		
A / ME101		SECTION LETTER DESIGNATION / SECTION DRAWN ON THIS SHEET
A2		DETAIL NUMBER DESIGNATION CORRESPONDING WITH GRID LOCATION
AH / 1		MECHANICAL EQUIPMENT DESIGNATION / EQUIPMENT ITEM DESIGNATION
D-1 / CFM		REGISTER, GRILLE OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW
R-1		GRILLE OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRED
1		REVISION DESIGNATOR AND NUMBER
1		KEY NOTE DESIGNATOR AND NUMBER
	POC	POINT OF CONNECTION
	POR	POINT OF REMOVAL
AFF		ABOVE FINISHED FLOOR
AP		ACCESS PANEL
C EL.		CENTERLINE ELEVATION
GC		GENERAL CONTRACTOR
MC		MECHANICAL CONTRACTOR
ATC		CONTROLS CONTRACTOR
EC		ELECTRICAL CONTRACTOR
FPC		FIRE PROTECTION CONTRACTOR
NIC		NOT IN CONTRACT
NTS		NOT TO SCALE
VCP		VITRIFIED CLAY PIPE
C		COMMON
NC		NORMALLY CLOSED
NO		NORMALLY OPEN

SYMBOL	ABR,	DESCRIPTION
AIR SIDE		
		EXISTING AIR DUCT TO BE REMOVED
		EXISTING AIR DUCT TO REMAIN
		NEW AIR DUCT
		RECT TO RECT AIR DUCT TAKE-OFF
		RECT TO RND AIR DUCT TAKE-OFF
		RND TO RND AIR DUCT TAKE-OFF
		MEDIUM PRESSURE TAKE-OFF
		FLEXIBLE AIR DUCT
		LINED DUCT
		RADIUS ELBOW
		ECCENTRIC DUCT TRANSITION
		CONCENTRIC DUCT TRANSITION
		VOLUME DAMPER
		SUPPLY AIR DIFFUSER
		RETURN & TRANSFER AIR GRILLE
		EXHAUST GRILLE OR CEILING EXH. FAN
		RETURN & OUTSIDE AIR DUCT UP/DN
		RETURN & OA ROUND DUCT UP/DN
		SUPPLY AIR DUCT UP/DN
		SUPPLY AIR ROUND DUCT UP/DN
		EXHAUST AIR DUCT UP/DN
		EXHAUST AIR ROUND DUCT UP/DN
	AP	ACCESS PANEL
		EXISTING EQUIPMENT TO BE REMOVED
		EXISTING EQUIPMENT TO REMAIN
		NEW EQUIPMENT
SA		SUPPLY AIR
RA		RETURN AIR
EA		EXHAUST AIR
OA		OUTSIDE AIR
MA		MIXED AIR
RF		RELIEF AIR
FO		FLAT OVAL
M	MVD	MOTORIZED VOLUME DAMPER
BD	BD	BACKDRAFT DAMPER
F	FD	FIRE DAMPER
S	SD	SMOKE DAMPER
FS	FS	FIRE & SMOKE DAMPER
T	T-STAT	WALL MOUNTED THERMOSTAT
S		WALL MOUNTED TEMP. SENSOR
H	H-STAT	WALL MOUNTED HUMIDISTAT
F	F-STAT	WALL MOUNTED FIRESTAT

SYMBOL	ABR,	DESCRIPTION
WET SIDE		
		PUMP
R		REGULATOR
		UNION
		MANUAL ACTUATOR
		PNUEMATIC DIAPHRAM ACTUATOR
M		ELECTRIC MOTOR ACTUATOR
S		SOLENOID ACTUATOR
		BUTTERFLY VALVE
		GATE VALVE
		GLOBE VALVE - STRAIGHT PATTERN
		GLOBE VALVE - ANGLE PATTERN
M		MOTORIZED 2-WAY CONTROL VALVE
M		MOTORIZED 3-WAY CONTROL VALVE
	PRV	PRESSURE REDUCING VALVE
		CHECK VALVE
		CIRCUIT BALANCING VALVE
		BALL VALVE
P		PRESSURE RELIEF VALVE
T		THERMAL RELIEF VALVE
S		SAFETY RELIEF VALVE
		PLUG VALVE
		NEEDLE VALVE
		TRIPLE DUTY VALVE
		AUTOMATIC AIR VENT
		MANUAL AIR VENT
		STRAINER
		STRAINER W/ PLUG BLOW OFF
		VENTURI
		PRESSURE GAUGE W/ COCK - WATER
		PRESSURE GAUGE W/ COCK - STEAM
		THERMOMETER & THERMOWELL
S		WATER TEMP SENSOR & THERMOWELL
F		FLOW SWITCH
PS		PRESSURE SWITCH
		THERMOWELL
T		PRESSURE & TEMP TAP
T / IBT		INVERTED BUCKET STEAM TRAP
T / TT		THERMOSTATIC STEAM TRAP
F&T		FLOAT & THERMOSTATIC STEAM TRAP
		DIRECTION OF FLOW
		BACKFLOW PREVENTING VALVE

SYMBOL	ABR,	DESCRIPTION
WET SIDE		
		PITCH DOWN
		ELBOW UP/DN
		TEE UP/DN
		EXISTING PIPING TO BE REMOVED
		EXISTING PIPING TO REMAIN
		NEW PIPING
		PIPE CAP OR PLUG
		REDUCER - CONCENTRIC / ECCENTRIC
		EXPANSION JOINT
		FLEXIBLE CONNECTION
		ANCHOR POINT
	CD	CONDENSATE DRAIN
	G	NATURAL GAS PIPING
	CF	CHEMICAL FEED LINE
	GF	GLYCOL FILL LINE
	MU	MAKE-UP WATER LINE
	CW	CULINARY COLD WATER
	HW	CULINARY HOT WATER
	HWREC	CULINARY HOT WATER RECIRC
	HWS	HEATING WATER SUPPLY
	HWR	HEATING WATER RETURN
	CHWS	CHILLED WATER SUPPLY
	CHWR	CHILLED WATER RETURN
	HTWS	HIGH TEMP HEATING WATER SUPPLY
	HTWR	HIGH TEMP HEATING WATER RETURN
	LPS	LOW PRESSURE STEAM
	LPR	LOW PRESSURE STEAM RETURN
	HPS	HIGH PRESSURE STEAM
	HPR	HIGH PRESSURE STEAM RETURN
	CS	CONDENSER SUPPLY
	CR	CONDENSER RETURN
	PC	PUMPED CONDENSATE
	L	REFRIGERANT LIQUID
	S	REFRIGERANT SUCTION
	HG	REFRIGERANT HOT GAS
	FOS	FUEL OIL SUPPLY
	FOR	FUEL OIL RETURN
	FOV	FUEL OIL VENT

GENERAL NOTES

G-1 - MECHANICAL INFORMATION IS NOT LIMITED TO THE MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION OF THE EXISTING BUILDING AND SITE CONDITIONS, EXISTING PIPING, EXISTING ELECTRICAL, AND EXISTING SUPPORTS.

A - EACH DRAWING SHEET AND THE SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN AND NOTED ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN ALL PLACES. ITEMS IN SPECIFICATIONS OR DRAWINGS LISTED WHICH ARE DIFFERING IN EFFICIENCY OR QUALITY SHALL BE HELD TO THE GREATEST OF: EFFICIENCY, QUALITY OR GOVERNING CODE.

B - THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE INSTALLATION OF THE SYSTEMS ACCORDING TO THE TRUE INTENT AND MEANING OF THE CONTRACT DOCUMENTS.

C - THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT WITH PROPER SERVICE ACCESS AND CLEARANCES ACCORDING TO MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW SUPPLIERS BID PACKAGES FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS, SCHEDULES, AND DESIGN INTENT (ALL EQUIPMENT AND METHODS). THE CONTRACTOR SHALL REMOVE AND REINSTALL CORRECTLY AT HIS OWN EXPENSE ANY EQUIPMENT NOT IN COMPLIANCE.

D - THE CONTRACTOR SHALL CONSULT MANUFACTURERS INSTALLATION INSTRUCTIONS FOR SIZES, METHODS, ACCESSORIES, AND CLEARANCES IN SPACE AVAILABLE PRIOR TO BIDDING PROJECT.

E - ANYTHING NOT CLEAR OR IN CONFLICT WILL BE EXPLAINED BY MAKING APPLICATION TO THE ENGINEER IN WRITING.

G-2 - ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO CHANGES FOR APPROVAL. CONTRACTOR SHALL NOT START ANY CHANGES UNTIL NOTIFIED IN WRITING. IF CHANGES ARE MADE PRIOR TO APPROVAL CONTRACTOR SHALL TAKE ALL RESPONSIBILITY FOR THE CHANGES MADE AND ALL COSTS RELATING TO FAILURE OR REPLACEMENT OF ALTERATIONS.

G-3 - CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS.

G-4 - THE WORKING DRAWINGS ARE DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR MECHANICAL EQUIPMENT SHALL BE FIELD VERIFIED AND COORDINATED WITH ALL DRAWINGS. THE CONTRACTOR SHALL PROVIDE OR COORDINATE WITH THE GENERAL CONTRACTOR PROVISIONS FOR BLOCKOUTS OR CORE DRILLS THROUGH STRUCTURE.

G-5 - THE INSTRUCTION TO "PROVIDE" ALSO INCLUDES INSTALLATION.

G-6 - MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL SMOKE AND FIRE DAMPERS AS REQUIRED BY LOCAL CODES AND AUTHORITIES.

G-7 - SHEET METAL DUCT SIZES SHOWN ON DRAWINGS ARE FREE AREA DIMENSIONS.

G-8 - PROVIDE AND INSTALL BALANCING DAMPERS IN ALL SUPPLY AND EXHAUST AIR BRANCH DUCTS. BALANCE TO CFM SHOWN ON PLAN.

G-9 - SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF DIFFUSERS AND GRILLES.

G-10 - PROVIDE TURNING VANES IN ALL ELBOWS OF RECTANGULAR DUCT.

G-11 - THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANTS, OILS, ETC. ALL SUCH MATERIALS SHALL BE HANDLED, DISPOSED, AND USED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.

G-12 - THE MECHANICAL CONTRACTOR SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWING BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.

G-13 - C.F.M. LISTED IS ACTUAL AIR.

G-14 - SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.

G-15 - CONTRACTOR SHALL THOROUGHLY REVIEW AND SIGN SUBMITTALS FOR COMPLETENESS AND COMPLIANCE TO THE SPECIFICATIONS PRIOR TO ENGINEERS REVIEW. SUPPLIERS SHALL HIGHLIGHT OR MARK ALL INFORMATION REQUIRED TO SHOW COMPLIANCE TO THE SPECIFICATIONS. ALL REQUESTED EXCEPTIONS TO THE SPECIFICATIONS, OR SCHEDULES SHALL BE CLEARLY NOTED AND EXPLAINED. SUBMITTAL REVIEW AND ACCEPTANCE IS FOR DESIGN CONCEPT ONLY, AND DOES NOT AT ANY TIME RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO MEET SPECIFICATIONS, CAPACITIES, OR DESIGN INTENT.

G-16 - ALL MECHANICAL SHALL BE INSTALLED AND CONFORM TO THE 2018 EDITION OF THE IMC AND IPC WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.

G-17 - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE DRAINING DOWN AND RE-FILLING OF ALL SYSTEMS NECESSARY TO COMPLETE THE WORK OUTLINED BY THIS PROJECT. THIS INCLUDES PROVIDING THE REQUIRED CHEMICAL TREATMENT WHEN RE-FILLING THE SYSTEM.

G-18 - ALL PIPING, MATERIALS, ETC. SHALL BE NEW AND DOMESTIC MADE UNLESS SPECIFICALLY AUTHORIZED IN WRITING PRIOR TO BID.

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

PROFESSIONAL ENGINEER
12-19-19
WINWARD M. PACKER
No. 375080
STATE OF UTAH

CODE OFFICIAL STAMP:

REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12-19-19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	DJB
CHECKED BY:	WMP
DESIGNED BY:	DJB

SHEET TITLE:

MECHANICAL GENERAL NOTES & LEGEND

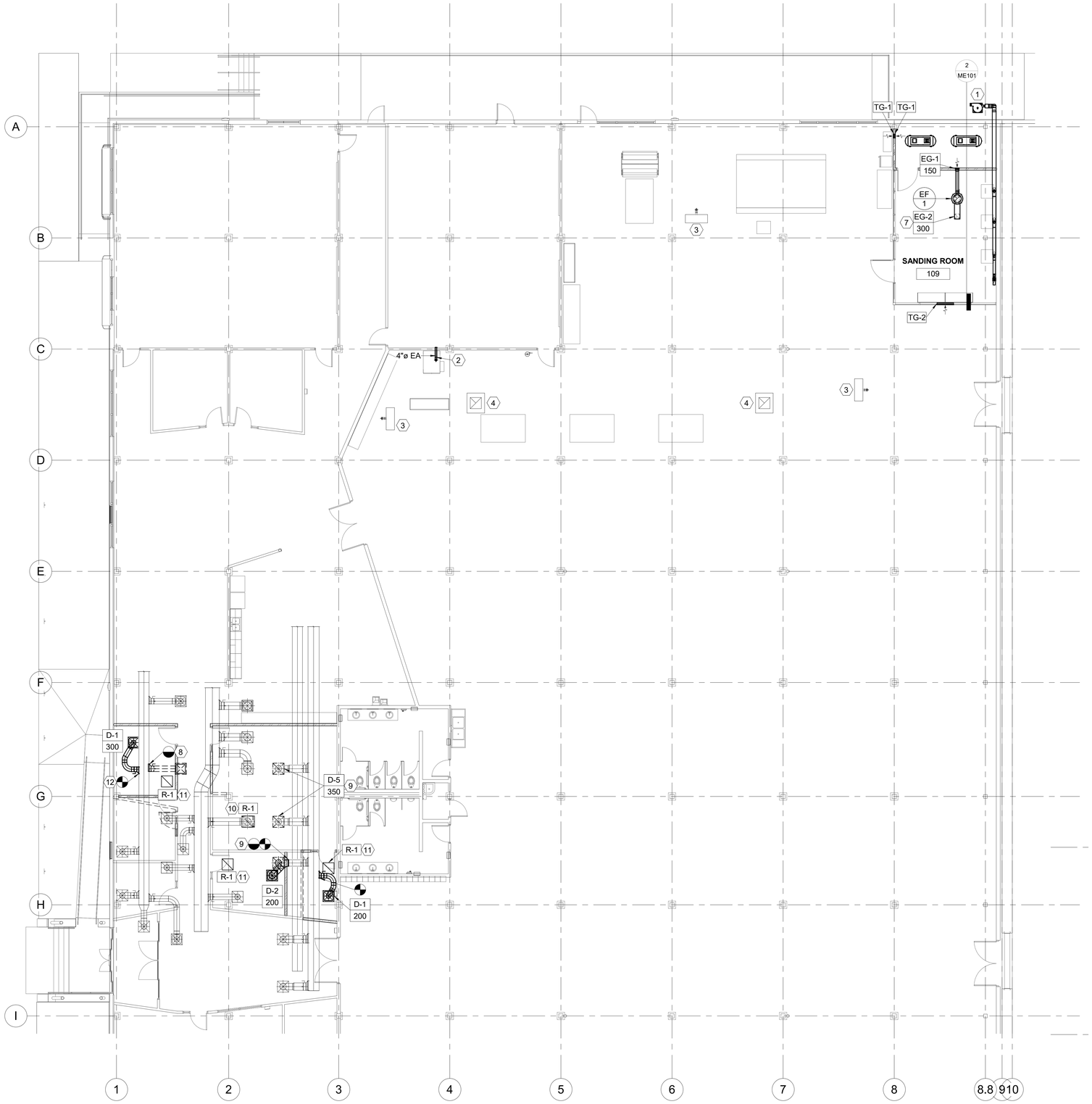
SHEET NUMBER:

MG001

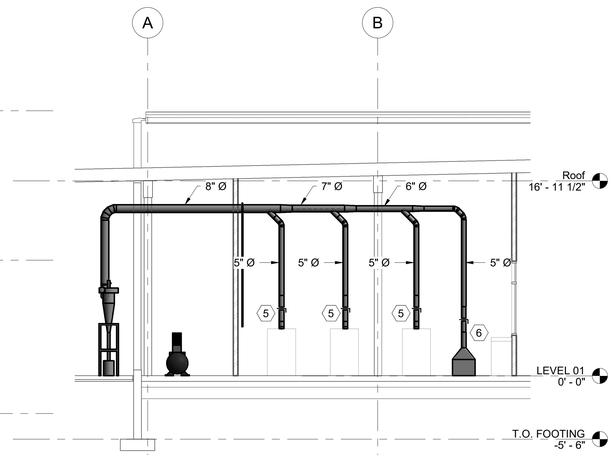
Last Plotted: 12/19/2019 10:17:30 AM

SHEET NOTES

1. DUST COLLECTOR SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR. ONEDIA XXK05 DUST COLLECTOR.
2. PROVIDE EXHAUST STACK FROM OVEN UP TO ROOF.
3. EXISTING UNIT HEATER TO REMAIN AND BE REUSED.
4. EXISTING EVAPORATIVE COOLER TO REMAIN AND BE REUSED.
5. PROVIDE DUST COLLECTION DUCTWORK DOWN TO SANDERS.
6. PROVIDE DUST COLLECTION BOX FOR GENERAL CLEANUP.
7. PROVIDE EXHAUST GRILLE MOUNTED ON UNDERSIDE OF DUCT.
8. ADD ALT #1: REMOVE EXISTING SUPPLY DIFFUSER AND BRANCH DUCT BACK TO MAIN AND CAP.
9. ADD ALT #1: REMOVE EXISTING DUCT MOUNTED SUPPLY DIFFUSER. PROVIDE NEW CEILING MOUNTED SUPPLY DIFFUSER. EXTEND EXISTING DUCTWORK AND PROVIDE TRANSITIONS AS REQUIRED.
10. ADD ALT #1: REMOVE EXISTING DUCT MOUNTED RETURN GRILLE. PROVIDE NEW CEILING MOUNTED RETURN GRILLE. EXTEND EXISTING DUCTWORK AND PROVIDE TRANSITIONS AS REQUIRED.
11. ADD ALT #1: PROVIDE RETURN GRILLE WITH SOUND BOOT.
12. ADD ALT #1: PROVIDE SUPPLY DIFFUSER AND BRANCH DUCTWORK. BALANCE TO LISTED CFM.



1 MECHANICAL PLAN
1/8" = 1'-0"



2 DUST COLLECTION SECTION VIEW
3/16" = 1'-0"

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

PROFESSIONAL ENGINEER
12-19-19
WINWARD M. PACKER
No. 375080
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO	DATE	DESCRIPTION

ISSUED:

NO	DATE	DESCRIPTION
1	12-19-19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	DJB
CHECKED BY:	WMP
DESIGNED BY:	DJB

SHEET TITLE:

MECHANICAL FLOORPLAN

SHEET NUMBER:

ME101

Last Plotted: 12/19/2019 10:17:30 AM

EXHAUST FAN SCHEDULE

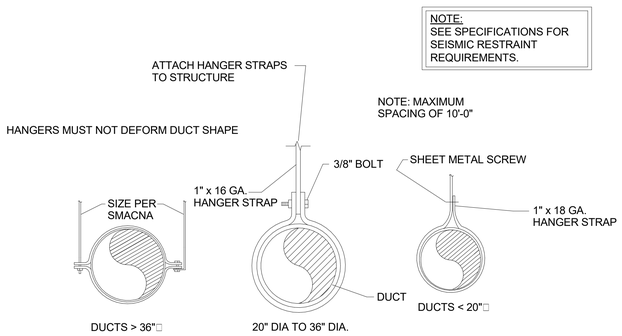
TAG		AREA			ELECTRICAL								
TYPE	#	SERVED	CFM	ESP	VOLTAGE	PHASE	FREQUENCY	RPM	HP	SONES	OPERATING WEIGHT	MANUF & MODEL	SCHEDULE NOTES
EF	1	SANDING	450 CFM	0.50 in-wg	115 V	1	60 Hz	1366	0.17 hp	7.5	51 lb	GREENHECK GB-081	1,2

1. SEE SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS.
2. RUN CONTINUOUSLY DURING OCCUPIED HOURS.

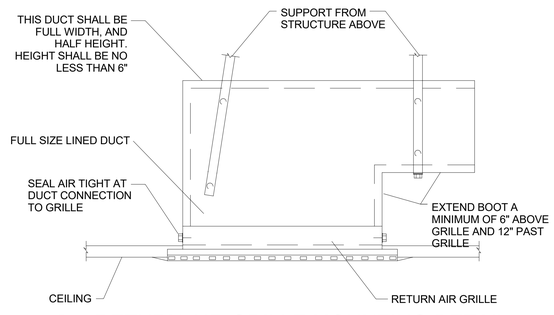
DIFFUSER AND GRILLE SCHEDULE

TAG	MAX FLOW	FACE SIZE		NECK SIZE		CEILING TYPE	BLOW PATTERN	THROW @ 50 FPM	MAX NC	MANUF & MODEL	SCHEDULE NOTES
		LENGTH	WIDTH	LENGTH/ DIAMETER	WIDTH						
D-1	450 CFM	24"	24"	10"	0"	HARD	4 WAY	11'	25	PRICE SPD	1,3,5
D-2	600 CFM	24"	24"	12"	0"	HARD	4 WAY	13'	25	PRICE SPD	1,3,4
EG-1	200 CFM	8"	8"	8"	8"	SIDEWALL	N/A	0'	30	PRICE 535	2,3,4
EG-2	300 CFM	10"	10"	10"	10"	DUCT	N/A	0'	30	PRICE 535	2,3,4
R-1	1,200 CFM	24"	24"	24"	24"	LAY-IN	N/A	0'	25	PRICE 535	2,3,4
TG-1	200 CFM	8"	8"	8"	8"	SIDEWALL	N/A	0'	30	PRICE 535	2,3,4
TG-2	2,300 CFM	24"	36"	24"	36"	SIDEWALL	N/A	0'	30	PRICE 535	2,3,4

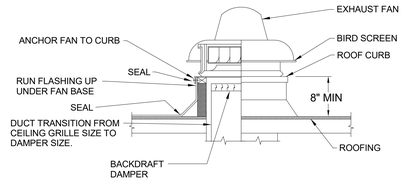
1. SHALL BE PRICE SPD OR APPROVED EQUAL.
2. SHALL BE PRICE 535 OR APPROVED EQUAL.
3. SEE SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS.
4. FINISH SHALL BE SPECIFIED BY ARCHITECT.



A2 ROUND DUCT SUPPORT DETAIL
SCALE: NONE



A4 RETURN AIR GRILLE MOUNTING DETAIL
SCALE: NONE



A6 ROOF MOUNTED EXHAUST FAN DETAIL
SCALE: NONE

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
PROFESSIONAL ENGINEER
12-19-19
WINWARD M. PACKER
No. 375080
STATE OF UTAH

CODE OFFICIAL STAMP:
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL
FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:
NO	DATE	DESCRIPTION

ISSUED:
NO.	DATE	DESCRIPTION
1	12-19-19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	DJB
CHECKED BY:	WMP
DESIGNED BY:	DJB

SHEET TITLE:
MECHANICAL SCHEDULES

SHEET NUMBER:
ME601

Last Plotted: 12/19/2019 10:17:30 AM

PLUMBING LEGEND

MEANING	SYMBOL OR ABBREVIATION	MEANING	SYMBOL OR ABBREVIATION
HOT WATER LINE	HW	WALL CLEANOUT	WCO
COLD WATER LINE	CW	CLEANOUT	CO
HOT WATER RECIRCULATING LINE	HWREC	CLEANOUT TO GRADE	COTG
VENT LINE	V	FLOOR CLEANOUT	FCO
WASTE LINE	SS	BALL VALVE	ϕ
GAS LINE	G	UNION	
VENT THRU ROOF	VTR	CONNECTION TO EXISTING PIPING	⊕
UNDER FLOOR	UF	REGULATOR	Ⓡ
SANITARY SEWER	SS	SOFT WATER	SW
PRIMARY ROOF DRAIN	PRD	SECONDARY ROOF DRAIN	SRD

PLUMBING GENERAL NOTES

G-1 - ALL PLUMBING SHALL BE INSTALLED AND CONFORM TO THE 2018 EDITION OF THE INTERNATIONAL PLUMBING CODE (IPC) WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.

G-2 - ALL PIPING MATERIALS SHALL MEET ALL REQUIREMENTS OF IPC AND LOCAL AUTHORITY. PLASTIC PIPING SHALL BE ALLOWED ONLY WHERE ALLOWED BY CODE. PLASTIC PIPING SHALL NOT BE ROUTED THROUGH RETURN AIR PLENUMS OR OTHER AREAS PROHIBITED BY THE IMC, IPC, OR NFPA CODES OR BY LOCAL AUTHORITY.

G-3 - GAS PIPING INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH GAS COMPANY REGULATIONS, NFPA CODE REQUIREMENTS, AND LOCAL AUTHORITY.

G-4 - ALL MATERIALS SHALL BE NEW AND SHALL BE DOMESTIC MADE UNLESS SPECIFICALLY APPROVED OTHERWISE IN WRITING BY ARCHITECT OR OWNER.

G-5 - PROVIDE VACUUM BREAKERS AND BACK FLOW PREVENTERS WHERE REQUIRED BY CODE OR WHERE THERE MAY BE ANY POSSIBLE CHANCE FOR CROSS CONTAMINATION. PREVENTERS SHALL BE INSTALLED IN ACCORDANCE WITH UTAH CODE.

G-6 - ALL PLUMBING INFORMATION IS NOT LIMITED TO THE PLUMBING DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING SPECIFICATIONS, ARCHITECTURAL DRAWING, STRUCTURAL DRAWINGS, MECHANICAL DRAWINGS, AND ELECTRICAL DRAWINGS.

G-7 - THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWING, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL PIPING SHALL BE CHECKED AND COORDINATED WITH THE SPECIFICATIONS, ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS.

G-8 - COORDINATE ALL PIPING AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AND/OR CONTRACTORS PRIOR TO INSTALLATION.

G-9 - ANY AND ALL ALTERATIONS TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.

G-10 - GAS LINE FITTINGS SHALL BE STANDARD WELD FITTINGS WITH TAPERED REDUCERS. DO NOT USE VALVES, UNIONS, OR AUTO CONTROLS IN GAS LINES ROUTED IN INACCESSIBLE CONCEALED SPACES.

G-11 - ALL WATER SYSTEMS SHALL MEET THE REQUIREMENTS OF ANSI/NSF STANDARD 61 SECTION 9 (1998), CONCERNING METAL CONTAMINANTS IN THE WATER SYSTEM.

G-12 - WATER PIPING SHALL NOT BE ROUTED IN OUTSIDE WALLS OR ON EXTERIOR SIDE OF BUILDING INSULATION ENVELOPE.

G-13 - WATER HAMMER ARRESTORS SHALL BE INSTALLED IN ALL WATER LINES WITH QUICK OPEN OR QUICK CLOSE VALVES.

WATER HAMMER ARRESTOR SCHEDULE:

TYPE A	1-11 FIXTURE UNITS
TYPE B	12-32 FIXTURE UNITS
TYPE C	33-60 FIXTURE UNITS
TYPE D	61-113 FIXTURE UNITS

G-14 - ALL PIPING, MATERIALS, ETC. SHALL BE NEW AND DOMESTIC MADE UNLESS SPECIFICALLY AUTHORIZED IN WRITING PRIOR TO BID.

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

PROFESSIONAL ENGINEER
12-19-19
WINWARD M. PACKER
No. 375080
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 01/07/2020

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE FREEPORT CENTER BUILDING D5 COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12-19-19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	DJB
CHECKED BY:	WMP
DESIGNED BY:	DJB

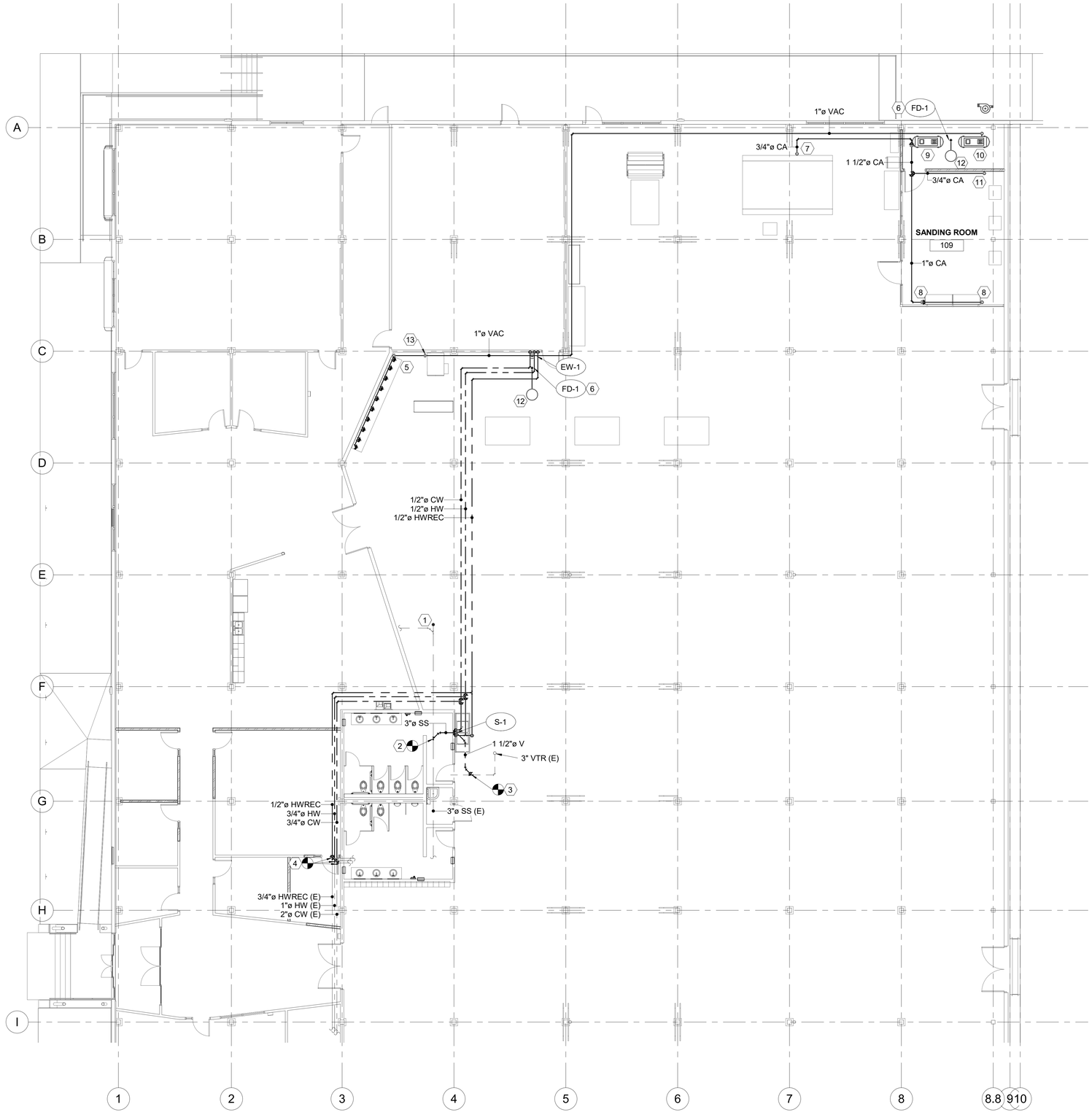
SHEET TITLE:

PLUMBING GENERAL NOTES & LEGEND

SHEET NUMBER:

PG001

Last Plotted: 12/19/2019 10:17:32 AM



1 PLUMBING FLOORPLAN
1/8" = 1'-0"

SHEET NOTES

1. EXISTING FLOOR CLEANOUT AND SANITARY SEWER PLUMBING TO REMAIN.
2. TIE INTO EXISTING SANITARY SEWER. SAW CUT FLOOR AS REQUIRED.
3. TIE INTO EXISTING VENT PIPING.
4. TIE INTO EXISTING DOMESTIC WATER PIPING AT THIS APPROXIMATE LOCATION.
5. PROVIDE 1" VACUUM DROP. ROUTE VACUUM ALONG WALL AND PROVIDE QUICK CONNECT FITTINGS BETWEEN THE WORK SHELVES.
6. PROVIDE FLOOR DRAIN FOR EYEWASH STATION AND DRAIN INTO FRENCH DRAIN. PROVIDE FLOOR DRAIN WITH HINGED COVER TO PREVENT UNNECESSARY USAGE.
7. PROVIDE 3/4" COMPRESSED AIR DROP TO CUTTER. COORDINATE LOCATION OF DROP WITH EQUIPMENT.
8. PROVIDE 3/4" COMPRESSED AIR DROP TO DOWNDRAFT SANDING TABLE. PROVIDE TWO QUICK CONNECT COUPLERS ON EACH DROP FOR USE OF HAND SANDERS. COORDINATE DROP LOCATION WITH SANDING TABLE.
9. INSTALL OWNER PROVIDED AIR COMPRESSOR PER MANUFACTURER'S RECOMMENDATIONS. QUINCY QT-7.5 RECIPROCATING AIR COMPRESSOR.
10. INSTALL OWNER PROVIDED VACUUM PUMP PER MANUFACTURER'S RECOMMENDATIONS. BECKER MODEL DT 4.25D DUPLEX.
11. PROVIDE 3/4" COMPRESSED AIR DROP ALONG WALL. PROVIDE MANIFOLD WITH 4 QUICK CONNECT FITTINGS.
12. FIELD VERIFY BEST LOCATION FOR FRENCH DRAIN.
13. PROVIDE 3/4" VACUUM DROP TO OVEN.

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

PROFESSIONAL ENGINEER
12-19-19
WINWARD M. PACKER
No. 375080
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12-19-19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	DJB
CHECKED BY:	WMP
DESIGNED BY:	DJB

SHEET TITLE:

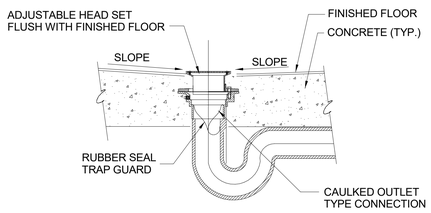
PLUMBING FLOORPLAN

SHEET NUMBER:

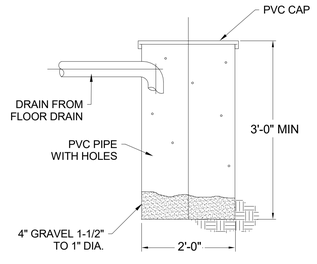
PE101

Last Plotted: 12/19/2019 10:17:31 AM

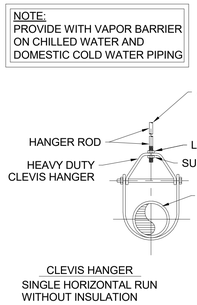
PLUMBING FIXTURE SCHEDULE							TAG
FIXTURE NUMBER	FIXTURE	PLUMBING PIPE SIZES					REMARKS
		TRAP	WASTE	VENT	COLD WATER	HOT WATER	
EW-1	EMERGENCY EYE WASH	1 1/4"	1 1/2"	1 1/4"	1/2"	1/2"	PROVIDE SELF SUPPORTING EMERGENCY EYEWASH. BRADLEY S19-210Y OR EQUAL. PROVIDE WITH THERMOSTATIC AND PRESSURE MIXING VALVE
FD-1	FLOOR DRAIN	4"	4"	2"	0"	0"	FLOOR DRAIN WITH HINGED COVER. WATTS FD-100-VS OR EQUAL.
S-1	2 COMP SINK	1 1/2"	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER MOUNTED 2 COMPARTMENT STAINLESS STEEL SINK. PROVIDE WITH THERMOSTATIC AND PRESSURE MIXING VALVE. JUST 18 GAUGE OR EQUAL.

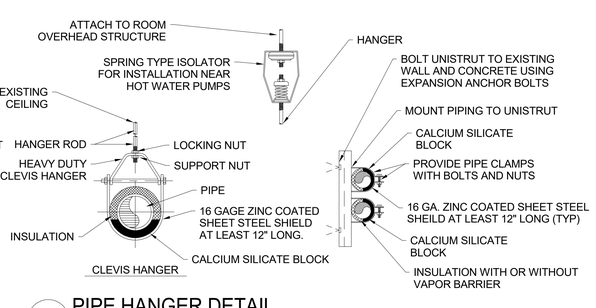


A1 FLOOR DRAIN DETAIL
SCALE: NONE

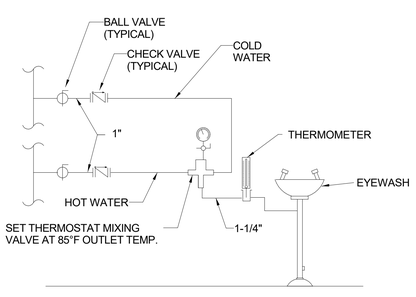


A2 DETAIL OF FRENCH DRAIN
SCALE: NONE





A4 PIPE HANGER DETAIL



A6 EMERGENCY EYE WASH DETAIL
SCALE: NONE

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

PROFESSIONAL ENGINEER
12-19-19
WINWARD M. PACKER
No. 375080
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

FREEPORT CENTER
CLEARFIELD, UTAH

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12-19-19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	DJB
CHECKED BY:	WMP
DESIGNED BY:	DJB

SHEET TITLE:

PLUMBING SCHEDULES

SHEET NUMBER:

PE601

Last Plotted: 12/19/2019 10:17:31 AM

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

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

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...

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.

   A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.

   B. 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.

   C. 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 ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. 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.

6. ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

7 TAKE OFF QUANTITIES SHOWN IN SCHEDULE(S) ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OF THE DEVICES, FIXTURES, EQUIPMENT, RACEWAYS, CONDUCTORS, CABLING, ETC. SHOWN AND SPECIFIED IN THE CONTRACT DOCUMENTS INCLUDING THE EXTRA MATERIAL SPECIFIED.

ELECTRICAL SHEET INDEX

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:

SHEET INDEX AND GENERAL NOTES

SHEET NUMBER:

EE001

Last Plotted: 12/19/2019 12:21:27 PM

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
ELECTRICAL POWER AND DISTRIBUTION	
	TRANSFER SWITCH (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.
	STARTER, COMBINATION WITH DISCONNECT SWITCH.
	PUSHBUTTON.
	PANELBOARD CABINET, FLUSH MOUNTED.
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.
DP#	DISTRIBUTION PANEL OR SWITCHBOARD.
$ST	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.
75	TRANSFORMER: NUMBER INDICATES kVA.
LIGHTING CONTROL	
	OCCUPANCY SENSOR, DUAL TECHNOLOGY, OMNI-DIRECTIONAL, CEILING.
R	OCCUPANCY SENSOR CONTROL RELAY.
	VACANCY SENSOR, DUAL TECHNOLOGY, OMNI-DIRECTIONAL, CEILING.
P	PHOTOCELL.
TC	TIME CLOCK.
EL	EMERGENCY LIGHTING CONTROL UNIT. WATTSTOPPER (ELCU-200)
	CEILING FAN.
SP	OCCUPANCY SENSOR, SWITCH PACK.
	SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
	SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
LC	DIGITAL PLUG LOAD CONTROLLER
LS	LIGHTING NETWORK SWITCH.
NR	LIGHTING NETWORK ROUTER.
SM	LIGHTING NETWORK SEGMENT MANAGER
LT X	LIGHTING SPACE CONTROL TYPE. X INDICATES TYPE. SEE SCHEDULE / DIAGRAM.
1C1 DC	DIGITAL LIGHTING DIMMING CONTROLLER, "1C1" IS A UNIQUE CONTROLLER IDENTIFICATION TAG
1C2 RC	DIGITAL LIGHTING ROOM CONTROLLER, "1C2" IS A UNIQUE CONTROLLER IDENTIFICATION TAG
z1,z2	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "z1,z2" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS)
LIGHTING (REFER TO FIXTURE SCHEDULE FOR SYMBOLS)	
EM	EMERGENCY.
↑	EGRESS DIRECTION ARROW (EXIT SIGNS).
LV	LOW VOLTAGE LIGHTING TRANSFORMER.
	EXIT SIGN: SINGLE FACE; CEILING MOUNTED
	EXIT SIGN: DOUBLE FACE; CEILING MOUNTED
	EXIT SIGN: DOUBLE FACE; WALL MOUNTED
(D420) 1C1 z1	FIXTURE ID:(D420) INDICATES FIXTURE TYPE AS SCHEDULED "1C1" INDICATES ROOM/DIMMING CONTROLLER CIRCUITING "z1" INDICATES ZONE CIRCUITING.
(D420) 1C1e z1	FIXTURE ID:(D420) INDICATES FIXTURE TYPE AS SCHEDULED "1C1e" INDICATES ROOM/DIMMING CONTROLLER CIRCUITING "z1" INDICATES ZONE CIRCUITING. EMERGENCY WITH BATTERY PACK, CONNECTED TO GENERATOR AS INDICATED

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
ELECTRICAL POWER AND DISTRIBUTION	
	FUSE WITH RATING (ONE-LINE DIAGRAM).
	DISCONNECT, FUSED (ONE-LINE DIAGRAM).
	DISCONNECT, NONFUSED (ONE-LINE DIAGRAM).
	OVERLOAD RELAY (ONE-LINE DIAGRAM).
	STARTER (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOLDED CASE WITH SHUNT TRIP (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).
	MOTOR.
L	COMBINATION RESIDENTIAL EXHAUST FAN/LIGHT.
	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).
225/3 *1H* 60/3	PANELBOARD WITH MAIN AND SUB FEED CIRCUIT BREAKER (ONE-LINE DIAGRAM).
225/3 *1H* 25/3	PANELBOARD WITH MAIN LUGS ONLY AND SURGE PROTECTION WITH CIRCUIT BREAKER (ONE-LINE DIAGRAM).
SITE ELECTRICAL AND COMMUNICATIONS UTILITIES	
—3ØUP—	ELECTRIC LINE: THIN LINE. 1Ø = SINGLE PHASE, 2Ø = 2-PHASE, 3Ø = 3-PHASE, O = OVERHEAD, U = UNDERGROUND, P = PRIMARY, S = SECONDARY
	LIGHTNING ARRESTOR.
	UTILITY POLE.
	UTILITY, DISTRIBUTION SWITCH OR SWITCHING STATION.
E	UTILITY, PRIMARY ELECTRICAL GROUND SLEEVE.
M	UTILITY SERVICES, MANHOLE.
C	UTILITY, COMMUNICATIONS MANHOLE.
E	UTILITY, ELECTRICAL MANHOLE.
T	UTILITY, TELEPHONE MANHOLE.
TM	PRECAST CONCRETE, MANHOLE, TRANSFORMER VAULT.
TP	PRECAST CONCRETE, TRANSFORMER PAD.
S	SUBSTATION.
T	TRANSFORMER.

SYMBOLS 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.
ROOM NAME 100	ROOM IDENTIFIER WITH ROOM NAME AND NUMBER.
1	KEYNOTE INDICATOR.
1	REVISION INDICATOR.
X-X XMDP	MECHANICAL EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XMDP" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
	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
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE.
X-X XKP	KITCHEN EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XKP" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
STRUCTURED CABLING	
X	TELEPHONE, WALL MOUNTED ("X" INDICATES QUANTITY OF CABLES).
	DATA CONNECTION: WIRELESS ACCESS POINT (WAP). REQUIRES (2) DATA DROPS PER DEVICE
W	TELEPHONE, WALL MOUNTED: WALL PHONE.
X	OUTLET, DATA COMMUNICATION ("X" INDICATES QUANTITY OF CABLES).
	OUTLET, BUILDING STANDARD COMBINATION TELEPHONE/ DATA COMMUNICATION
	TWO-WAY EMERGENCY COMMUNICATION DEVICE PER IBC, WALL MOUNTED IN RECESSED BOX.
	TELEPHONE TERMINAL BOARD, FIRE TREATED PLYWOOD PAINTED.
	LAN RACK, FLOOR STANDING.
—D—	DATA CABLE, CATEGORY 5 (ONE-LINE DIAGRAM).
—V—	VOICE CABLE, CATEGORY 3 (ONE-LINE DIAGRAM).
WIRING METHODS	
	WIRING.
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 THE ELECTRICAL SPECIFICATIONS.
	LOW VOLTAGE WIRING: DIVIDE, MEDIUM LINE.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
1	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE-LINE DIAGRAM.
	JUNCTION BOX.
SC	JUNCTION BOX, SYSTEMS FURNITURE COMMUNICATION CONNECTION.
SE	JUNCTION BOX, SECURITY SYSTEM. PROVIDE CONDUIT AND ROUGH-IN PER SECURITY DRAWINGS.
C C	CABLE TRAY ABOVE ACCESSIBLE CEILING.
	EARTH GROUND (ONE-LINE DIAGRAM).
C	JUNCTION BOX, CEILING.
	LADDER RACK.
	MECHANICAL EQUIPMENT CONNECTION. REFER TO EQUIPMENT SCHEDULE FOR REQUIREMENTS.

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
WIRING DEVICES	
	RECEPTACLE, DUPLEX: NEMA 5-20R.
A	RECEPTACLE, DUPLEX, ABOVE COUNTER: NEMA 5-20R.
C	RECEPTACLE, DUPLEX, CEILING: NEMA 5-20R.
DF	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, DRINKING FOUNTAIN: CONCEAL WATER COOLER RECEPTACLE BEHIND WATER COOLER. SEE MECHANICAL/PLUMBING SHOP DRAWINGS FOR INSTALLATION REQUIREMENTS.
W	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WET LABEL, "WEATHERPROOF IN USE": NEMA 5-20R.
	RECEPTACLE, DUPLEX ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
WP	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WEATHERPROOF: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
	RECEPTACLE, SPECIAL PURPOSE ON EMERGENCY POWER. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
D	RECEPTACLE, DRYER: NEMA 14-30R.
R	RECEPTACLE, RANGE: NEMA 14-50R.
	MULTI-OUTLET ASSEMBLY: NEMA 5-20R.
D	DROP CORD. SEE DETAIL.
FB#	FLUSH FLOOR BOX. "#" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
PT#	FLUSH FIRE RATED POKE THRU. "#" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
X $	SWITCH, SINGLE POLE ("x" INDICATES FIXTURES CONTROLLED).
$DS	SWITCH, DOOR.
$K	SWITCH, KEY OPERATED.
$WP	SWITCH, WEATHERPROOF.
T	RECEPTACLE, DUPLEX, TAMPER RESISTANT: NEMA 5-20R.
	RECEPTACLE, SINGLE PLEX, WITH USB OUTLET
	RECEPTACLE, DULEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)
	RECEPTACLE, QUADRAPLEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)
	INDICATES A RECEPTACLE IS AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)
CCTV	
	CCTV CAMERA/ENCLOSURE WITH LENS, TYPICAL. SEE SCHEDULE.
SECURITY	
CR	CARD READER.
TV DISTRIBUTION	
	TV OUTLET.

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

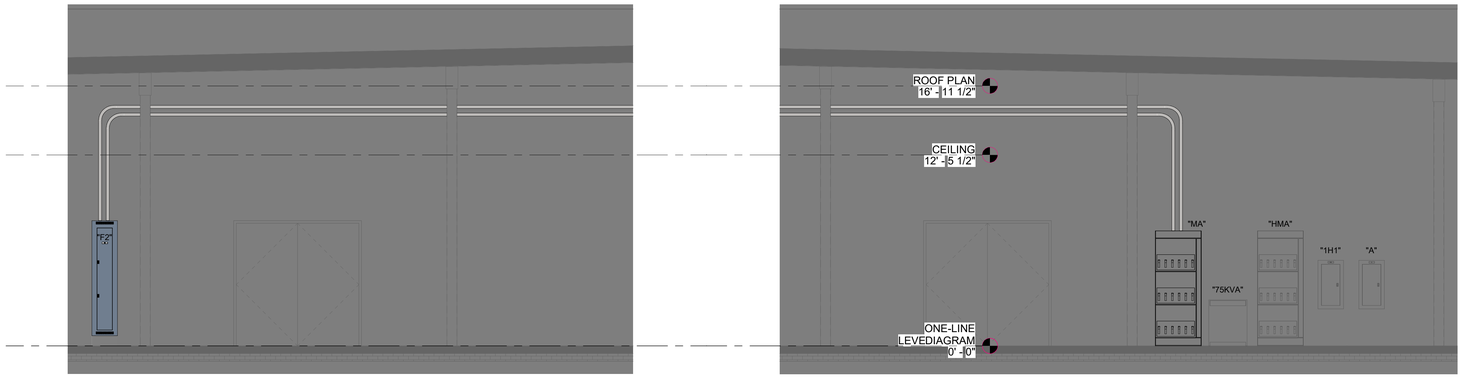
SHEET TITLE:

SYMBOLS LEGEND

SHEET NUMBER:

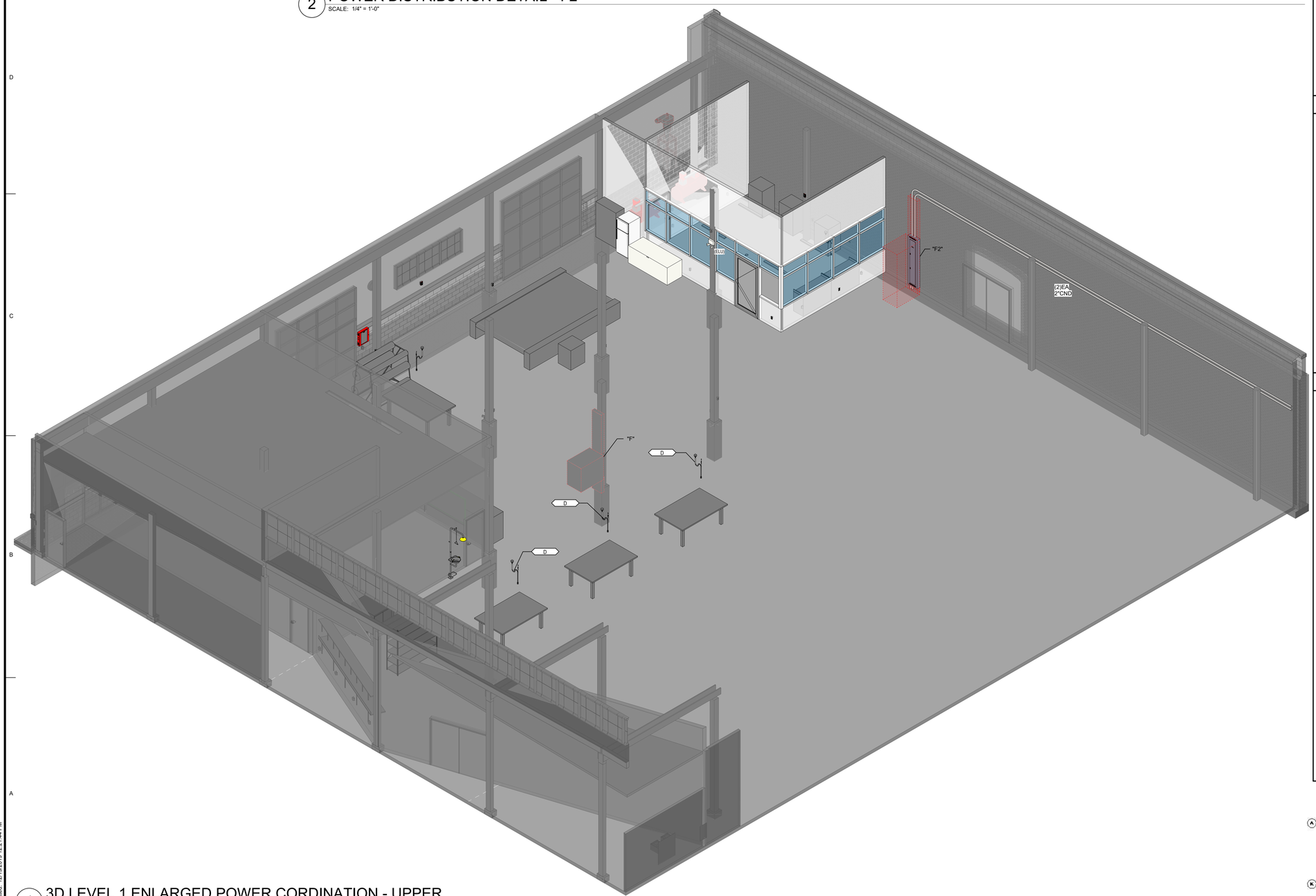
EE002

Last Plotted: 12/19/2019 12:21:29 PM



2 POWER DISTRIBUTION DETAIL - F2

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



1 3D LEVEL 1 ENLARGED POWER CORDINATION - UPPER

SCALE:

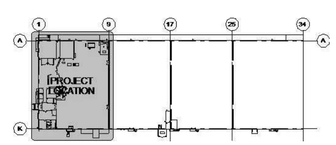
GENERAL SHEET NOTES

1. CENTER ALL CEILING MOUNTED LIGHT FIXTURES AND DEVICES SHALL BE CENTERED IN CEILING TILE, UNLESS OTHERWISE NOTED.
2. CIRCUIT ALL EXIT SIGNS TO NEAREST UNSWITCHED LEG OF EMERGENCY LIGHTING CIRCUIT.
3. ALL ENCLOSED SPACES SHALL HAVE MANUAL ON LIGHTING CONTROL WITH AUTOMATIC OFF VIA DUAL TECHNOLOGY SENSOR OR TIME CLOCK. SENSOR(S) SHALL PROVIDE A MINIMUM OF 90 PERCENT COVERAGE IN SPACE. PROVIDE ADDITIONAL SENSORS AS REQUIRED. COMPLY WITH 2015 IECC SECTION C405.
4. PROVIDE DAYLIGHTING CONTROL FOR ALL LIGHTING WITH IN DAYLIGHT ZONE AS DEFINED BY THE 2015IECC. PROVIDE DIMMING LIGHTING FIXTURES AND DAYLIGHT SENSOR PHOTOCELL.
5. INSTALL LIGHT FIXTURES INLINE AND CENTERED.
6. COORDINATE ALL LIGHT FIXTURE MOUNTING HEIGHTS WITH ARCHITECT.
7. ARCHITECT TO SELECT ALL LIGHT FIXTURE FINISHES.
8. COVE/CLOUD LIGHTING SHALL HAVE EVEN ILLUMINATION THE ENTIRE LENGTH OF THE COVE/CLOUD. PROVIDE THE NUMBER OF FIXTURES REQUIRED TO EVENLY ILLUMINATE THE COVE/CLOUD. STAGGER COVE/CLOUD LIGHTING OR PROVIDE DIFFERENT LENGTHS OF THE FIXTURE TO ILLUMINATE THE ENTIRE COVE/CLOUD.
9. LOCATE ALL VACANCY/OCCUPANCY SENSORS MINIMUM OF 6 FEET FROM SUPPLY AIR DIFFUSERS AND 3 FEET FROM RETURN AIR DIFFUSERS.
10. ALL CEILING AND WALL MOUNTED SENSORS SHALL BE DUAL TECHNOLOGY WITH BUILT IN LIGHT LEVEL SENSOR AND BAS/HVAC ISOLATED RELAY.
11. ALL LIGHT FIXTURES THAT PENITRATE FIRE RATED SURFACE SHALL BE IN A FIRE RATED ASSEMBLE OR BE PROVIDED WITH A FIRE RATED ASSEMBLE TO MAINTAIN A FIRE RATE SURFACE.
12. LOCATE ALL ROOM CONTROLLER IN ACCESSIBLE CEILINGS OR IN THE ELECTRICAL ROOM.

COMMISIONING NOTES

1. THE CONTRACTOR SHALL PERFORM OR SHALL ENGAGE A PARTY TO PERFORM THE FOLLOWING TESTS AND INSPECTIONS WITH THE ASSISTANCE OF A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE.
2. ENSURE THAT THE LIGHTING CONTROLS FOR AUTOMATIC LIGHTING SYSTEMS COMPLY WITH 2015 IECC SECTION C408.3.
3. ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. WHERE REQUIRED BY THE CODE OFFICIAL, AN APPROVED PARTY INDEPENDENT FORM THE DESIGN OR CONSTRUCTION OF THE PROJECT SHALL BE RESPONSIBLE FOR THE FUNCTIONAL TESTING AND SHALL PROVIDE DOCUMENTATION TO THE CODE OFFICIAL CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET THE PROVISIONS OF 2015 IECC SECTION C405.
5. PROVIDE THE FOLLOWING PROCEDURES FOR EACH; OCCUPANT SENSOR, TIME SWITCH, PROGRAMMABLE SCHEDULE CONTROL, PHOTOSENSOR, AND DAYLIGHTING CONTROL.
6. CONFIRM THAT THE PLACEMENT, SENSITIVITY, AND TIME-OUT ADJUSTMENTS FOR THE OCCUPANT SENSOR S YIELD ACCEPTABLE PERFORMANCES.
7. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
8. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR THE PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

SHEET KEYNOTES



ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5/12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DEPARTMENT OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE:
DATE: 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

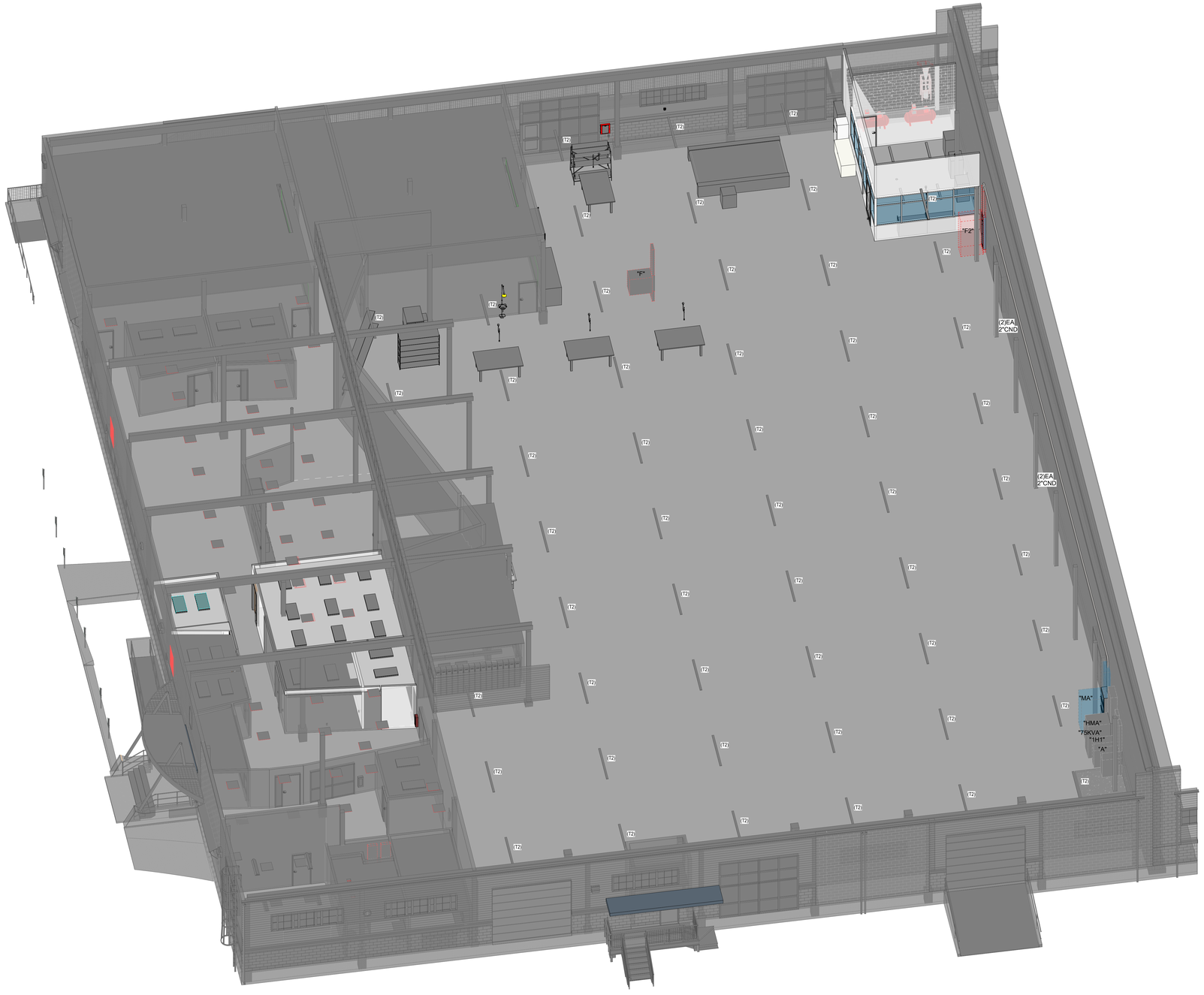
SHEET TITLE:

3D PLAN ENLARGED

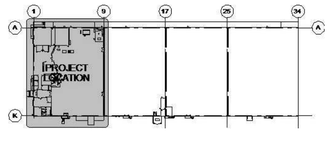
SHEET NUMBER:

EE401

Last Plotted: 12/19/2019 12:21:44 PM



1 3D LEVEL 1 POWER COORDINATION - OVERALL
SCALE: NTS



ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT
& ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
No. 7258090
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE:
DATE: 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:
NO.	DATE	DESCRIPTION

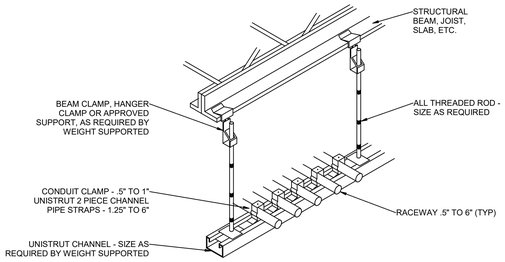
ISSUED:
NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:
3D PLAN OVERALL

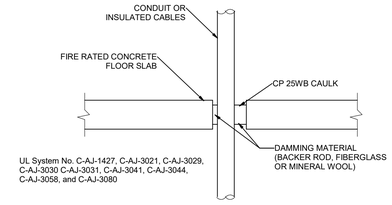
SHEET NUMBER:
EE402

Last Plotted: 12/19/2019 12:22:14 PM



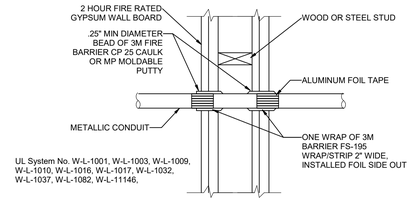
9 TYPICAL CONDUIT RACK DETAIL

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



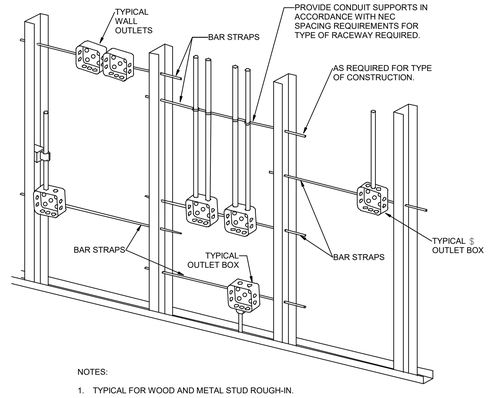
8 TYPICAL FIRE STOP FOR CABLES/CONDUIT THROUGH CONCRETE FLOORING

SCALE: NTS



6 FIRE STOP FOR METAL CONDUIT THROUGH GYPSUM WALL BOARD

SCALE: NTS



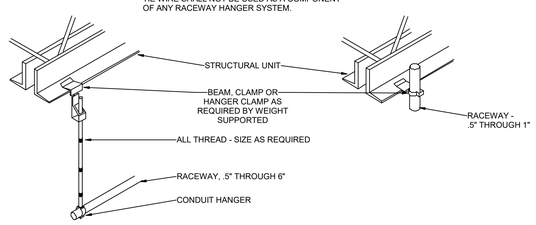
NOTES:

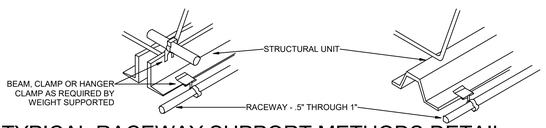
1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
2. PLASTER RINGS NOT SHOWN.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND WITH ALL APPLICABLE SHOP DRAWINGS.
4. IN ACCORDANCE WITH IBC 714.3.2 EXCEPTION 1, OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE IN A RATED FIRE SEPARATION WALL MUST BE SEPARATED BY A MINIMUM OF 24" HORIZONTAL DISTANCE.
5. IN NON-RATED WALLS, OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY 16" FOR SOUND ATTENUATION.

3 TYPICAL ROUGH-IN REQUIREMENTS DETAIL

SCALE: NTS

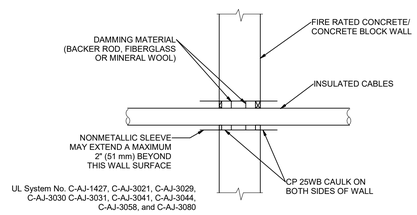
NOTE:
TIE WIRE SHALL NOT BE USED AS A COMPONENT OF ANY RACEWAY HANGER SYSTEM.





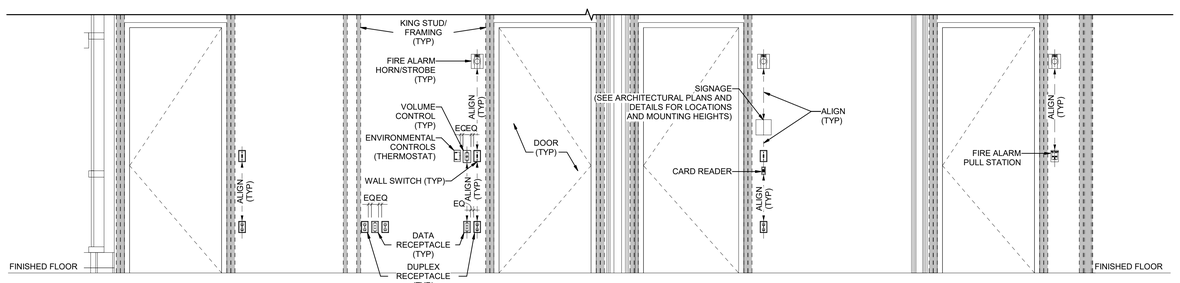
5 TYPICAL RACEWAY SUPPORT METHODS DETAIL

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



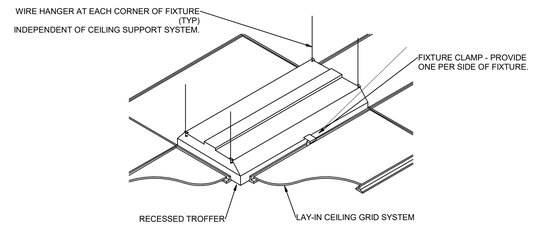
4 TYPICAL FIRE STOP FOR CABLES/CONDUIT THROUGH CONCRETE WALLS

SCALE: NTS



2 TYPICAL WALL MOUNTED DEVICES ALIGNMENT DETAIL

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



1 RECESSED FIXTURE MOUNTING DETAIL

SCALE: NTS

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE FREEPORT CENTER BUILDING D5 COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

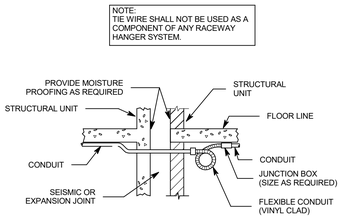
SHEET TITLE:

ELECTRICAL DETAILS

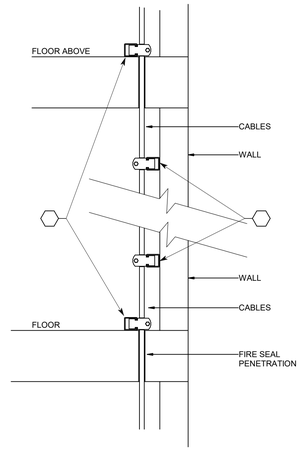
SHEET NUMBER:

EE501

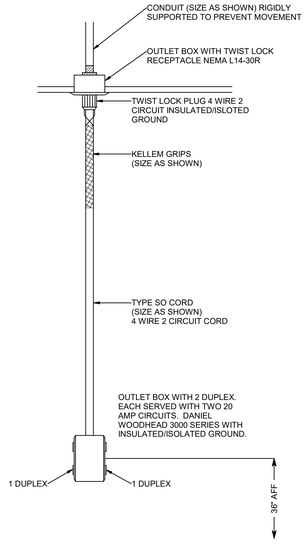
Last Plotted: 12/19/2019 12:22:16 PM



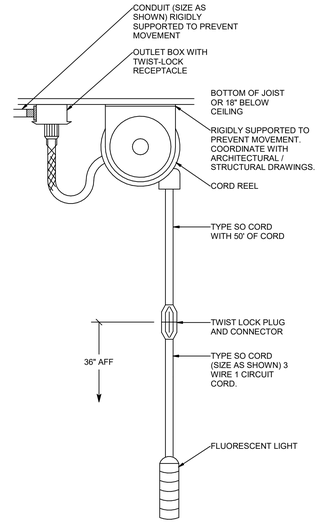
5 CONDUIT EXPANSION JOINT DETAIL
SCALE: NTS



6 CABLE SUPPORT DETAIL
SCALE: NTS

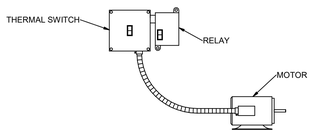


DROP CORD DETAIL
(WITH OUTLET BOX)
2 SCALE: NTS

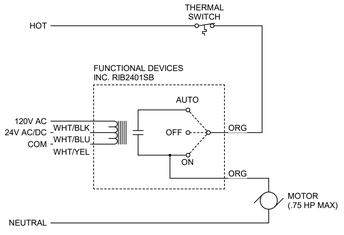


3 CORD REEL DETAIL
SCALE: NTS

NOTE: THERMAL SWITCH AND RELAY MUST BE MOUNTED WITHIN SIGHT OF MOTOR BEING CONTROLLED.



LAYOUT DIAGRAM

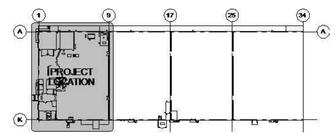


SCHEMATIC DIAGRAM

1 120V FRACTIONAL MOTOR CONTROL
SCALE: NTS

BOXES ON OPPOSITE SIDES OF WALL

4 BOX MOUNTING DETAILS
SCALE: NTS



ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE:
DATE: 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:
NO.	DATE	DESCRIPTION

ISSUED:
NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER:
EE502

Last Plotted: 12/19/2019 12:22:18 PM

COM*check* Software Version 4.1.1.0

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	DTC D5 COMPOSITE REMODEL
Location:	Clearfield, Utah
Climate Zone:	5b
Project Type:	Alteration

Construction Site:
CLEARFIELD, UT

Owner/Agent:

Designer/Contractor:
Spencer Little
Spectrum Engineers
324 State St
Suite 400
84101, UT 84111
801 4018495
scl@spectrum-engineers.com

Building Area	Floor Area
1-School/University : Nonresidential	13542

Envelope Assemblies

Envelope TBD: No envelope assemblies specified

COM*check* Software Version 4.1.1.0

Interior Lighting Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	DTC D5 COMPOSITE REMODEL
Project Type:	Alteration

Construction Site:
CLEARFIELD, UT

Owner/Agent:

Designer/Contractor:
Spencer Little
Spectrum Engineers
324 State St
Suite 400
84101, UT 84111
801 4018495
scl@spectrum-engineers.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-School/University	13542	0.81	10969
		Total Allowed Watts =	10969

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
School/University (13542 sq ft.)				
LED 1: G24: High Bay Light: Other:	1	12	39	468
LED 1 copy 1: S1: Strip Light: Other:	1	6	35	210
LED 1 copy 2: T2: Strip Light: Other:	1	24	35	840
			Total Proposed Watts =	1518

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

COM*check* Software Version 4.1.1.0

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL26][2]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27][2]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.3 [EL6][1]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.6 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.9 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18][3]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C408.1.1 [FI57][3]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33][3]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

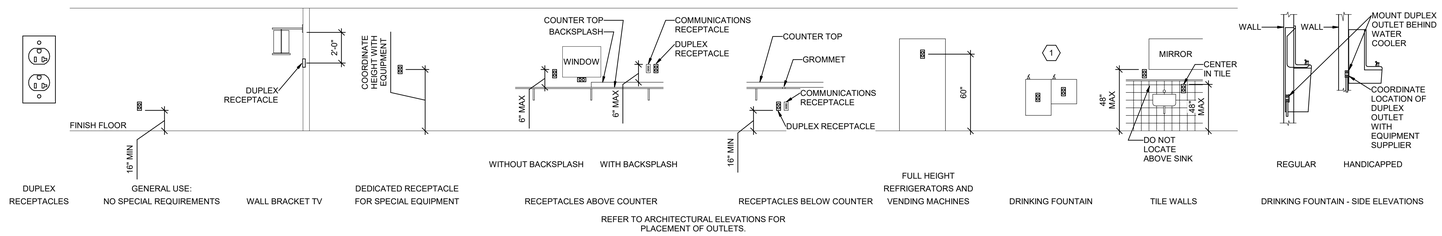
SHEET TITLE:

LIGHTING COMCHECK

SHEET NUMBER:

EE601

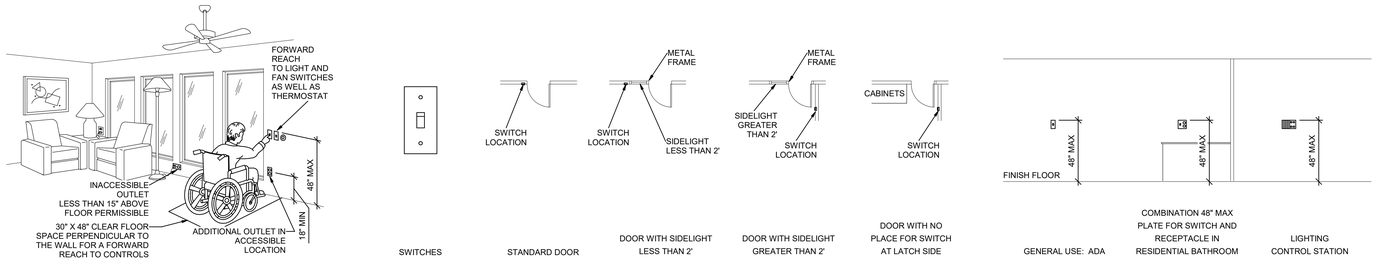
Last Plotted: 12/19/2019 12:22:21 PM



REFER TO ARCHITECTURAL ELEVATIONS FOR PLACEMENT OF OUTLETS.

E2 RECEPTACLE MOUNTING DETAILS

SCALE: NTS

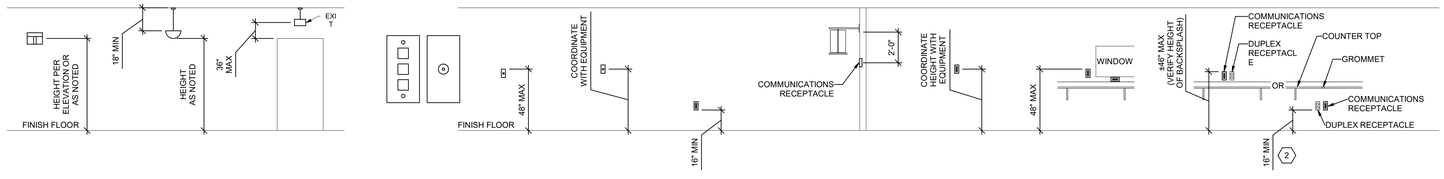


D2 ADA DETAIL

SCALE: NTS

D3 SWITCH MOUNTING DETAILS

SCALE: NTS



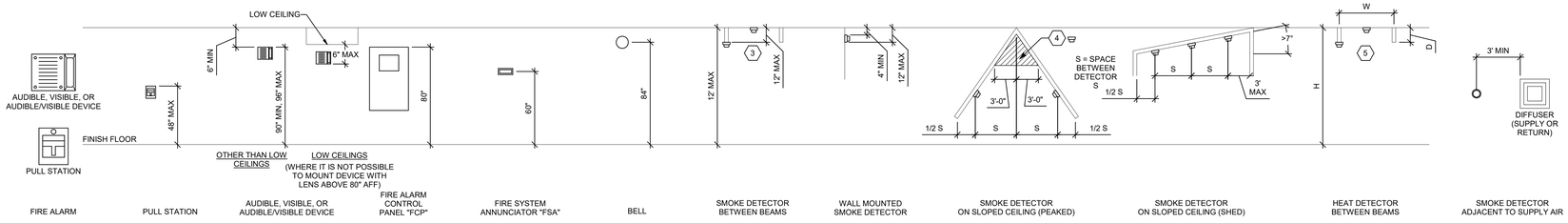
WALL MOUNTED LIGHT FIXTURE | PENDANT LIGHT FIXTURE | PENDANT EXIT SIGNS | COMMUNICATION RECEPTACLES | WALL PHONE | PAY PHONE | GENERAL USE: NO SPECIAL REQUIREMENTS | WALL BRACKET TV | DEDICATED RECEPTACLE FOR SPECIAL EQUIPMENT | ABOVE COUNTER - TYPICAL | RECEPTACLES ABOVE OR BELOW COUNTER

C2 LIGHTING MOUNTING DETAILS

SCALE: NTS

C3 COMMUNICATIONS MOUNTING DETAILS

SCALE: NTS



FIRE ALARM | PULL STATION | AUDIBLE, VISIBLE, OR AUDIBLE/VISIBLE DEVICE | FIRE ALARM CONTROL PANEL "FCP" | FIRE SYSTEM ANNUNCIATOR "FSA" | BELL | SMOKE DETECTOR BETWEEN BEAMS | WALL MOUNTED SMOKE DETECTOR | SMOKE DETECTOR ON SLOPED CEILING (PEAKED) | SMOKE DETECTOR ON SLOPED CEILING (SHED) | HEAT DETECTOR BETWEEN BEAMS | SMOKE DETECTOR ADJACENT TO SUPPLY AIR

B1 FIRE ALARM MOUNTING DETAILS

SCALE: NTS

GENERAL SHEET NOTES

1. DETERMINE MOUNTING HEIGHTS OF ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE FOLLOWING ORDER OF PRIORITY:

   1 - ELEVATIONS (ARCHITECTURAL, ELECTRICAL, MECHANICAL, ETC).

   2 - EQUIPMENT SHOP DRAWINGS.

   3 - FIELD INSTRUCTIONS.

2. LOCATE RECEPTACLES SERVING THE SAME TYPE OF USE AT A UNIFORM HEIGHT UNLESS DIRECTED OTHERWISE.
3. MECHANICAL, ELECTRICAL, AND COMMUNICATION ROOMS: COORDINATE LOCATION OF LIGHTING AND POWER RECEPTACLES WITH EQUIPMENT, PIPING, AND DUCTWORK. DO NOT INSTALL RECEPTACLES BEHIND EQUIPMENT OR WHERE OTHERWISE INACCESSIBLE. POSITION LIGHTING REGARDLESS OF WHERE SHOWN ON DRAWING TO PROVIDE PROPER ILLUMINATION.
4. MOUNT RECEPTACLE BOXES FOR SWITCHES AND RECEPTACLES WITH LONG AXIS OF THE DEVICE VERTICAL UNLESS OTHERWISE INDICATED.
5. SET BOXES WITH PLASTER RINGS FLUSH WITH FINISHED SURFACE.
6. LOCATE BOX COVERS OR DEVICE PLATES SO THEY WILL NOT SPAN DIFFERENT TYPES OF BUILDING FINISHES EITHER VERTICALLY OR HORIZONTALLY.
7. VERIFY ALL DOOR CONDITIONS ON ARCHITECTURAL DRAWINGS PRIOR TO INSTALLING SWITCHES.
8. LOCATE WIREING DEVICES WHICH ARE ADJACENT AND ARE COMPATIBLE VOLTAGES IN ONE PLATE.
9. WHERE DEVICES ARE LOCATED IN CLOSE PROXIMITY OF THE SAME VERTICAL PLANE, ALIGN DEVICES VERTICALLY PER THE TYPICAL WALL MOUNTED DEVICES ALIGNMENT DETAIL, UNLESS OTHERWISE INDICATED.

SHEET KEYNOTES

1. LOCATE RECEPTACLES BEHIND DRINKING FOUNTAINS.
2. REFER TO ARCHITECTURAL ELEVATIONS FOR PLACEMENT OF OUTLETS.
3. LOCATE AT BOTTOM OF BEAMS (OR JOISTS) OR AT CEILING. (REDUCE SPACING BY .5 PERPENDICULAR TO BEAM OR JOIST DIRECTION.) FOR OTHER CONDITIONS, REFER TO NFPA 72.
4. LOCATE DETECTOR ANYWHERE IN SHADED AREA BUT NOT IN TOP 4" OF PEAK.
5. LOCATE AT BOTTOM OF BEAMS IF D/H < .1 OR W/H < .4; OTHERWISE, LOCATE IN BEAM POCKET. FOR D > 4 REDUCE SPACING .33 PERPENDICULAR TO BEAMS.

ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

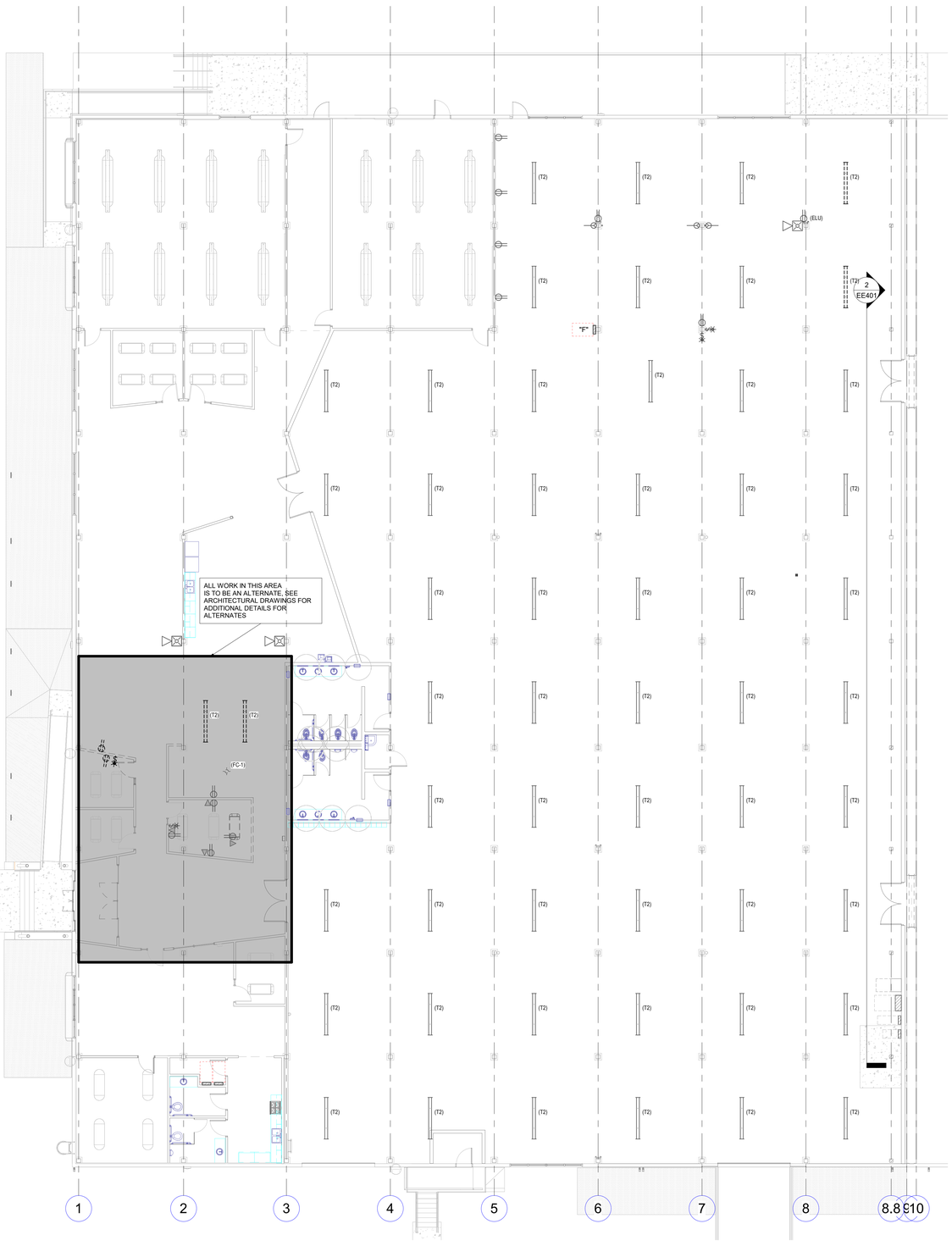
SHEET TITLE:

TYPICAL MOUNTING HEIGHT DETAILS

SHEET NUMBER:

EE701

Last Plotted: 12/19/2019 12:22:24 PM



1 LEVEL 1 ELECTRICAL DEMOLITION PLAN
SCALE: 1" = 10'-0"

GENERAL SHEET NOTES

1 LINE TYPES: THIN LINE HALF TONE IS EXISTING TO REMAIN; MEDIUM LINE DASHED IS TO BE DEMOLISHED OR REMOVED AND RELOCATED.

2 DISCONNECT ALL LINE VOLTAGE TO EQUIPMENT TO BE DEMOLISHED OR RELOCATED. FIELD VERIFY EXISTING CONDITIONS.

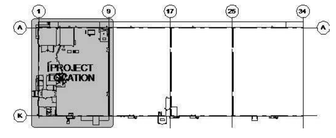
3 REMOVE ANY AND ALL ABANDONED RACEWAYS, CABLE, AND CONDUCTORS. REMOVE ANY AND ALL RACEWAYS, CABLE, AND CONDUCTORS THAT BECOME ABANDONED AS A RESULT OF THIS PROJECT.

4 REMOVE ALL ELECTRICAL IN WALLS, CEILINGS, AND FLOORS TO BE DEMOLISHED. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.

5 EXTEND AND MODIFY ALL EXISTING ELECTRICAL CONDUIT AND CONDUCTORS AS REQUIRED FOR ALL DEVICES, FIXTURES, AND EQUIPMENT THAT ARE TO REMAIN.

6 ALL EXISTING ELECTRICAL RACEWAYS, CONDUCTORS, AND CABLES IN WALLS, ABOVE CEILINGS, AND BELOW FLOORS THAT NEED TO BE MODIFIED, REMOVED, AND OR RELOCATED AS A RESULT OF THIS PROJECT SHALL BE MODIFY ACCORDINGLY AS REQUIRED FOR THE FINISHED CONDITIONS OF THE PROJECT.

SHEET KEYNOTES



ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:
NO	DATE	DESCRIPTION

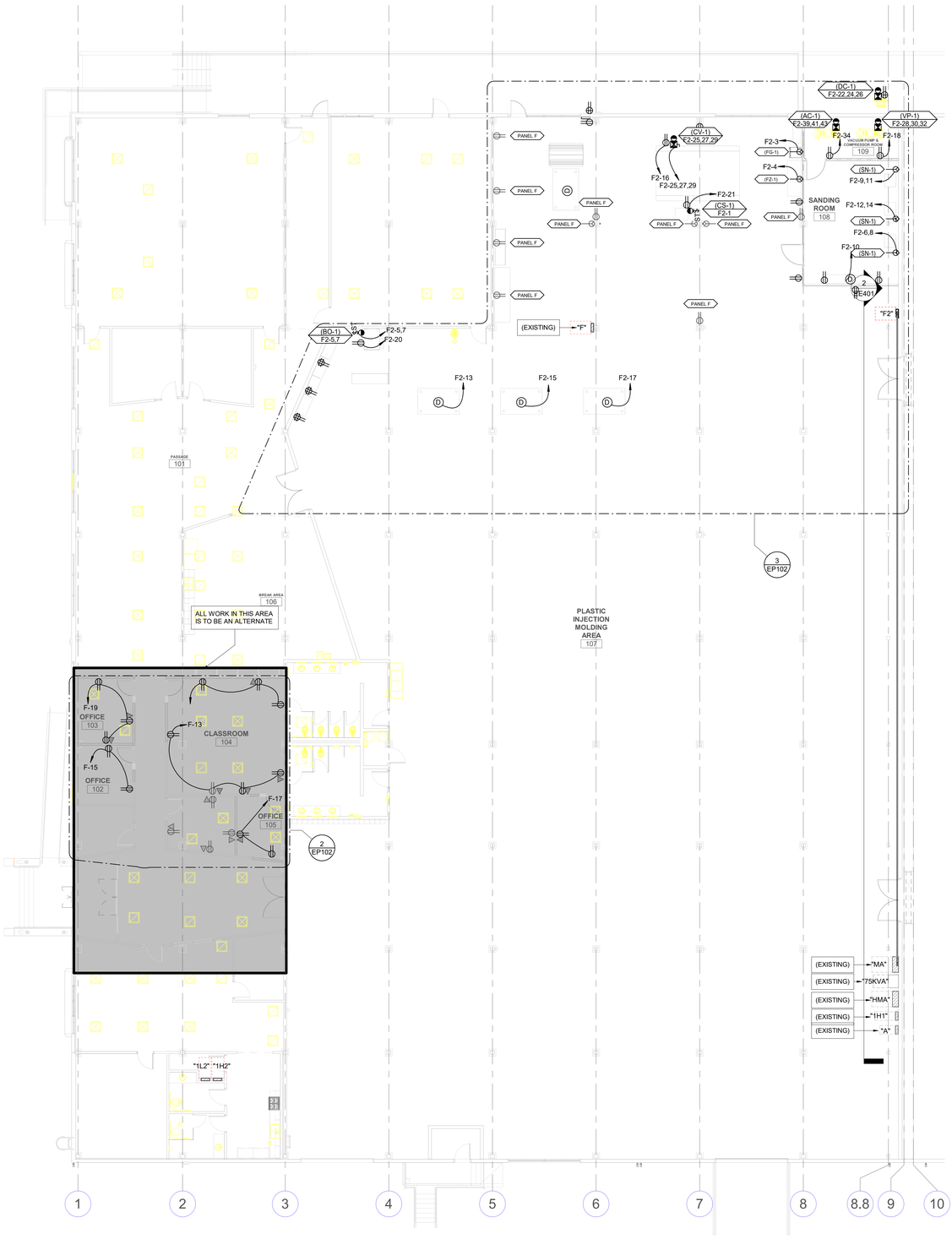
ISSUED:
NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:
LEVEL 1
ELECTRICAL
DEMOLITION PLAN

SHEET NUMBER:
ED101

Last Plotted: 12/19/2019 12:21:27 PM



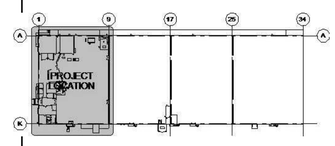
1 LEVEL 1 POWER PLAN

SCALE: 1" = 10'-0"

GENERAL SHEET NOTES

1. CONTRACTOR IS RESPONSIBLE FOR ALL LINE VOLTAGE AS PART OF THIS PROJECT. PROVIDE LINE VOLTAGE REQUIRED TO ALL SYSTEMS PROVIDED AS PART OF THIS PROJECT. COORDINATE WITH ALL OTHER DISCIPLINES AND DRAWINGS.
2. CONTRACTOR IS RESPONSIBLE FOR ALL DEVICES, GEAR, CABLE, CONDUCTORS, TERMINATIONS, OVERCURRENT PROTECTION DEVICES, AND HEAD END EQUIPMENT AS PART OF THIS PROJECT.
3. CORE DRILL THE FLOOR FOR POKE THROUGHS. COORDINATE EXACT LOCATION WITH ARCHITECT.
4. VERIFY FLOOR BOX, POWER POLE, AND POKE-THROUGH DEVICE LOCATIONS WITH ARCHITECT/OWNER PRIOR TO ROUGH IN OR INSTALLATION.
5. ALL RACEWAYS SHALL BE CONCEALED IN WALLS, FLOORS, AND CEILING UNLESS OTHERWISE NOTED. INSTANCES WHERE EXPOSED OR SURFACE MOUNTED RACEWAYS IS REQUIRED A ROUTING SKETCH SHALL BE PROVIDED TO ARCHITECT AND ENGINEER. RACEWAY TYPE SHALL BE SELECTED BY ENGINEER. FINISH OF RACEWAY SHALL BE SELECTED BY ARCHITECT.
6. PROVIDE ELECTRICAL CONNECTIONS TO SYSTEMS FURNITURE. DESIGN IS BASED ON 1 CIRCUIT WIRE SYSTEM. VERIFY WIRING CONFIGURATION AND FEED POINT WITH SYSTEMS FURNITURE INSTALLER PRIOR TO INSTALLATION. COORDINATE WITH FURNITURE INSTALLER SUCH THAT CIRCUITS ARE UNIFORMLY DISTRIBUTED TO NO MORE THAN 2 WORKSTATIONS PER CIRCUIT AND EACH WORKSTATION ONLY HAVING AVAILABLE ITS ASSIGNED CIRCUIT. COPIERS OR PRINTERS LOCATED IN A GROUP OF WORKSTATIONS SHALL RECEIVE A DEDICATED CIRCUIT.
7. EACH WORK STATION IN THE SYSTEMS FURNITURE SHALL HAVE A MINIMUM OR 2 EACH POWER OUTLETS AND 1 EACH VOICE/DATA OUTLET. ADDITIONAL POWER AND VOICE/DATA OUTLETS SHALL BE COORDINATED PRIOR TO ROUGH-IN WITH OWNER.
8. PROVIDE NEW CIRCUIT BREAKERS IN EXISTING PANEL FOR ALL NEW CIRCUITS. FIELD VERIFY PANELBOARD TYPE AND BREAKER TYPE.
9. COORDINATE EXACT LOCATION OF ELECTRICAL CONNECTION POINT TO ROOF TOP UNITS AND ALL OTHER MECHANICAL EQUIPMENT TO ENSURE APPROPRIATE ROOF PENETRATION LOCATIONS.
10. PROVIDE ELECTRICAL CONNECTION TO MOTORIZED DOORS WITH ALL POWER AND CONTROL WIRING PER MANUFACTURES WRITTEN INSTRUCTIONS. COORDINATE OPERATION OF DOORS WITH SECURITY, FIRE, AND SMOKE CONTROL SEQUENCES OF OPERATION.

SHEET KEYNOTES



ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:

LEVEL 1 POWER PLAN

SHEET NUMBER:

EP101

Last Plotted: 12/19/2019 12:22:41 PM

GENERAL SHEET NOTES

1 CONTRACTOR IS RESPONSIBLE FOR ALL LINE VOLTAGE AS PART OF THIS PROJECT. PROVIDE LINE VOLTAGE REQUIRED TO ALL SYSTEMS PROVIDED AS PART OF THIS PROJECT. COORDINATE WITH ALL OTHER DISCIPLINES AND DRAWINGS.

2 CONTRACTOR IS RESPONSIBLE FOR ALL DEVICES, GEAR, CABLE, CONDUCTORS, TERMINATIONS, OVERCURRENT PROTECTION DEVICES, AND HEAD END EQUIPMENT AS PART OF THIS PROJECT.

3 CORE DRILL THE FLOOR FOR POKE THROUGHS. COORDINATE EXACT LOCATION WITH ARCHITECT.

4 VERIFY FLOOR BOX, POWER POLE, AND POKE-THROUGH DEVICE LOCATIONS WITH ARCHITECT/OWNER PRIOR TO ROUGH IN OR INSTALLATION.

5 ALL RACEWAYS SHALL BE CONCEALED IN WALLS, FLOORS, AND CEILING UNLESS OTHERWISE NOTED. INSTANCES WHERE EXPOSED OR SURFACE MOUNTED RACEWAYS IS REQUIRED A ROUTING SKETCH SHALL BE PROVIDED TO ARCHITECT AND ENGINEER. RACEWAY TYPE SHALL BE SELECTED BY ENGINEER. FINISH OF RACEWAY SHALL BE SELECTED BY ARCHITECT.

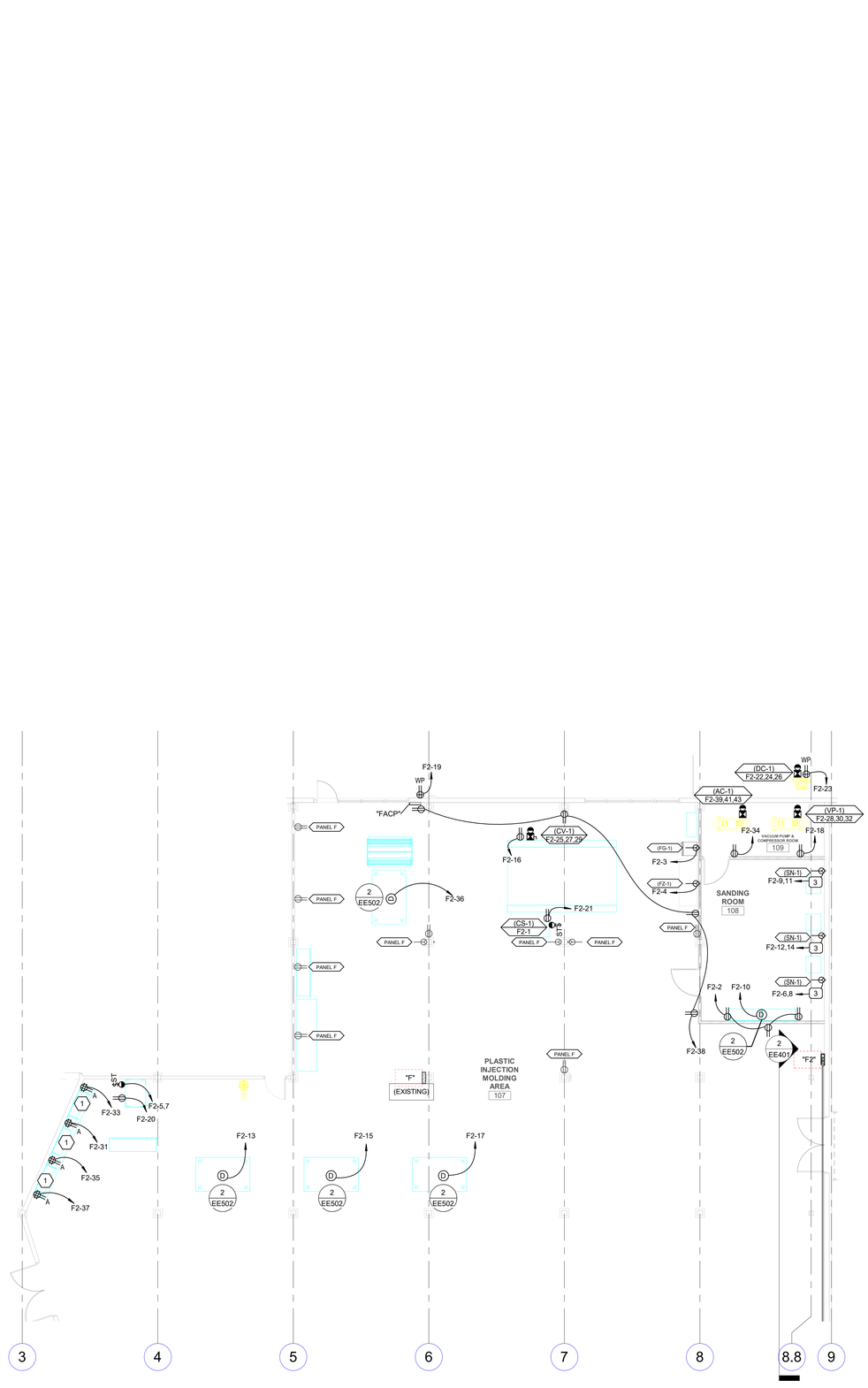
6 PROVIDE ELECTRICAL CONNECTIONS TO SYSTEMS FURNITURE. DESIGN IS BASED ON 1 CIRCUIT WIRE SYSTEM. VERIFY WIRING CONFIGURATION AND FEED POINT WITH SYSTEMS FURNITURE INSTALLER PRIOR TO INSTALLATION. COORDINATE WITH FURNITURE INSTALLER SUCH THAT CIRCUITS ARE UNIFORMLY DISTRIBUTED TO NO MORE THAN 2 WORKSTATIONS PER CIRCUIT AND EACH WORKSTATION ONLY HAVING AVAILABLE ITS ASSIGNED CIRCUIT. COPIERS OR PRINTERS LOCATED IN A GROUP OF WORKSTATIONS SHALL RECEIVE A DEDICATED CIRCUIT.

7 EACH WORK STATION IN THE SYSTEMS FURNITURE SHALL HAVE A MINIMUM OR 2 EACH POWER OUTLETS AND 1 EACH VOICE/DATA OUTLET. ADDITIONAL POWER AND VOICE/DATA OUTLETS SHALL BE COORDINATED PRIOR TO ROUGH-IN WITH OWNER.

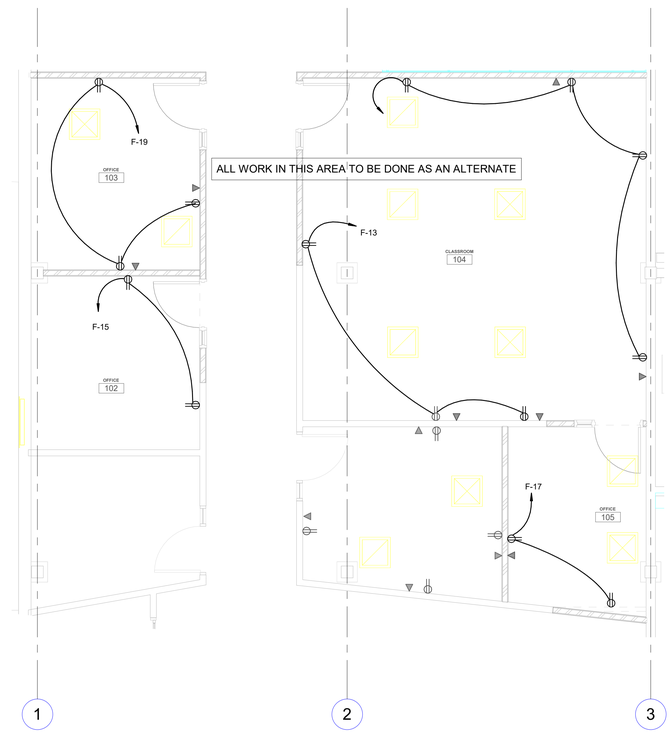
8 PROVIDE NEW CIRCUIT BREAKERS IN EXISTING PANEL FOR ALL NEW CIRCUITS. FIELD VERIFY PANELBOARD TYPE AND BREAKER TYPE.

9 COORDINATE EXACT LOCATION OF ELECTRICAL CONNECTION POINT TO ROOF TOP UNITS AND ALL OTHER MECHANICAL EQUIPMENT TO ENSURE APPROPRIATE ROOF PENETRATION LOCATIONS.

10 PROVIDE ELECTRICAL CONNECTION TO MOTORIZED DOORS WITH ALL POWER AND CONTROL WIRING PER MANUFACTURES WRITTEN INSTRUCTIONS. COORDINATE OPERATION OF DOORS WITH SECURITY, FIRE, AND SMOKE CONTROL SEQUENCES OF OPERATION.



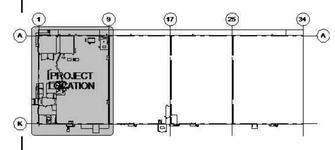
3 LEVEL 1 POWER ENLARGED - UPPER
SCALE: 1/8" = 1'-0"



2 CLASSROOM 108 & OFFICE 107 POWER ENLARGED
SCALE: 1/4" = 1'-0"

SHEET KEYNOTES

1 INSTALL RECEPTACLES ABOVE COUNTER- TYPICAL.



ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:

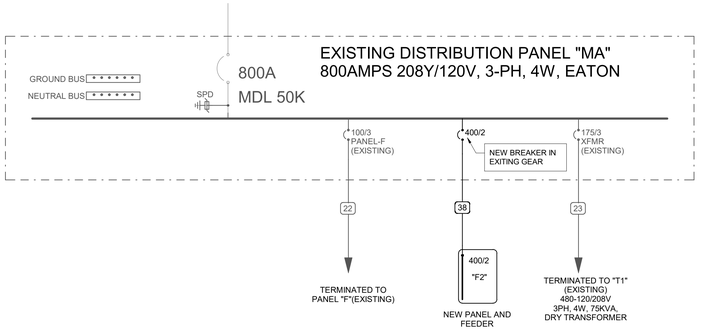
LEVEL 1 ENLARGED POWER PLAN

SHEET NUMBER:

EP102

Last Plotted: 12/19/2019 12:22:45 PM

PANEL SUBMITTAL SCHEDULE														
PANEL NAME	MAINS RATING	MLO / MCB	MAIN BREAKER RATING	CONNECTED AMPs	AIC RATING	AIC CALCULATED	VOLTAGE	PHASE	ENCLOSURE	MOUNTING	MAX #1 POLE BREAKERS	SINGLE SECTION TALL	MANUFACTURER	COST	NOTES
F2	400	MAIN LUGS	1	301	10000	8738	208 V	3	Type 1	SURFACE	60	Yes	SIEMENS		



1 ONE LINE DIAGRAM
SCALE: NTS

MAIN GEAR LOAD SUMMARY					
DISTRIBUTION BUS (BY LEVEL)	MAINS RATING	LOAD			
		CONNECTED		DIVERSIFIED	
		KVA	AMPS	KVA	AMPS
FLOOR PLAN					
MA	800	137.4	381	145.0	403

FAULT CURRENT TABLE			
BUS	FAULT CURRENT	CALCULATED	CABLE LENGTH
F	10000	8941	125' - 0"
F2	10000	8738	65' - 0"
HMA	65000	65000	163' - 1"
MA	10000	8941	6' - 0"

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. THE CONTRACTOR SHALL PROVIDE THE AIC RATINGS REQUIRED BASED ON ACTUAL CONDITIONS, CABLE LENGTHS, TRANSFORMER IMPEDANCE, AND CONTRACTOR PROVIDED FAULT CURRENT CALCULATIONS. IF DEVICE OR EQUIPMENT FAULT CURRENT RATING IS NOT SHOWN, ASSUME 100,000 AIC.

PANEL LOAD SUMMARY						
PANEL (BY LEVEL)	MAINS RATING	LOAD				
		CONNECTED		DIVERSIFIED		
		AMPS	KVA	AMPS	KVA	
FLOOR PLAN						
F	100	27	9.7	29	10.3	
F2	400	301	108.6	323	116.2	

EQUIPMENT NAMEPLATE SCHEDULE

EQUIPMENT ID SCHEME	FIRST DIGIT - BUILDING LEVEL (0, 1, 2, ETC) SECOND DIGIT - PANEL TYPE M - MECHANICAL H - (277/480) L - (120/208) E - EMERGENCY S - STANDBY Q - EQUIPMENT U - UPS K - KITCHEN (120/208) THIRD DIGIT - BUILDING AREA (A, B, C, ETC) FOURTH DIGIT - SEQUENCE # (1,2,3,...)
LABEL FORMAT	[NAME] [SYSTEM] [VOLTAGE] [FED FROM] [SOURSE(S)]
LABEL EXAMPLE	PANEL "4LA1" STANDBY POWER 120/208V FED FROM BUS-A / XFMR 4TA
BUSWAY	LABEL BUSWAY EVERY 6' WHERE EXPOSED TO VIEW AND EVERY 15' WHERE NOT EXPOSED TO VIEW
OTHER	

COLOR SCHEME

SYSTEM	EQUIPMENT	NAMEPLATE COLOR	
		TEXT	BACKGROUND
NORMAL POWER	ALL GEAR NOT INCLUDED BELOW	WHITE	BLACK
STANDBY POWER	MDPS1 AND ALL DOWNSTREAM GEAR, EXCEPT UPS GEAR AS NOTED	WHITE	ORANGE
EMERGENCY POWER	GDP1, GDP2, ATS-E AND ALL DOWNSTREAM GEAR	WHITE	RED
LEGALLY-REQUIRED STANDBY POWER	ATS-S AND ALL DOWNSTREAM GEAR	RED	WHITE
UPS "A" POWER	UPSA AND ALL DOWNSTREAM GEAR	WHITE	BLUE
UPS "B" POWER	UPSB AND ALL DOWNSTREAM GEAR	BLACK	YELLOW

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. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.

4 PROVIDE PERFORMANCE TESTING FOR GROUND-FAULT PROTECTION SYSTEMS ON SITE WITH A WRITTEN RECORD OF THIS TEST SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PER 2017 NEC 230.95(C).

5 SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. VERIFY OR RE-CALCULATE THE AVAILABLE FAULT CURRENT AT THE SERVICE WHERE MODIFICATIONS TO THE ELECTRICAL INSTALLATION OCCUR. PLEASE INCLUDE NOTES IN THE ELECTRICAL DRAWINGS OR SUPPLY CALCULATIONS WHERE APPLICABLE. SEE NEC 110.24 (A), (B)

6 THE OVERCURRENT PROTECTION DEVICES SHALL BE RATED THE SAME FAULT CURRENT RATING AS THE RATING OF THE PANEL OR SWITCHGEAR THEY ARE LOCATED WITHIN.

7 SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. VERIFY OR RE-CALCULATE THE AVAILABLE FAULT CURRENT AT THE SERVICE WHERE MODIFICATIONS TO THE ELECTRICAL INSTALLATION OCCUR. PLEASE INCLUDE NOTES IN THE ELECTRICAL DRAWINGS OR SUPPLY CALCULATIONS WHERE APPLICABLE. SEE NEC 110.24. (B)

8 CIRCUIT BREAKERS RATED 1200 AMPS OR MORE SHALL BE PROVIDED WITH ARC ENERGY REDUCTION, COMPLY WITH NEC 240.87.

9 PROVIDE GROUNDING AND BONDING PER NEC 250.

10 PROVIDE FULLY RATED CIRCUIT BREAKERS IN ALL ELECTRICAL GEAR BASED ON ACTUAL CONDITIONS, CABLE LENGTHS, TRANSFORMERS IMPEDANCE, AND CONTRACTOR PROVIDED FAULT CURRENT CALCULATIONS.

11 PROVIDE A COORDINATED OVER-CURRENT PROTECTION ELECTRICAL SYSTEM TO 1.0 SECOND ON THE NORMAL POWER DISTRIBUTION SYSTEM AND TO 0.3 SECONDS ON EMERGENCY DISTRIBUTION SYSTEMS.

PANEL F (EXISTING)
SCALE: NTS

PANEL F (EXISTING) DETAILS
SCALE: NTS

PANEL MA (EXISTING)
SCALE: NTS

COPPER CONDUCTOR AND CONDUIT SCHEDULE

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

SYM	AMP	HH AMPS	CONDUIT SIZE	CONDUCTOR (NOTE 1) QTY	SIZE	G	IG/HH	SE	NOTES
1	20	-	.75	2	12	12	12	8	2
2	20	-	.75	3	12	12	12	8	2,3
3	20	24	.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	32	.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	44	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	60	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	76	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	92	1.25	4	3	8	3	2	2
19	95	-	1.25	3	2	8	2	2	2
20	95	104	1.50	4	2	8	2	2	2
21	130	-	1.50	3	1	6	2	2	2
22	130	116	1.50	4	1	6	2	2	2
23	150	-	2	3	1/0	6	2	1/0	2
24	150	136	2	4	1/0	6	2	1/0	2
25	175	-	2	3	2/0	6	2	2/0	2
26	175	156	2	4	2/0	6	2	2/0	2
27	200	-	2	3	3/0	6	2	2/0	2
28	200	180	2.50	4	3/0	6	2	2/0	2
29	230	-	2.50	3	4/0	4	2	2/0	2
30	230	208	2.50	4	4/0	4	2	2/0	2
31	255	-	2.50	3	250	4	1	2/0	2
32	255	232	2.50	4	250	4	1	2/0	2
33	310	-	3	3	350	3	1/0	3/0	2
34	310	280	3	4	350	3	1/0	3/0	2
35	380	-	3.50	3	500	3	3/0	3/0	2
36	380	344	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	360	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	464	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	560	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	688	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	768	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	912	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	1032	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	1120	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	1520	5 EA 4	4	400	4/0	4/0	4/0	4
54	2010	1824	6 EA 4	4	400	250	250	250	4
55	2660	2408	7 EA 4	4	500	350	350	350	4
56	3040	2752	8 EA 4	4	500	500	500	500	4
57	4180	3784	11 EA 4	4	500	500	500	500	4
58	-	-	5 EA 4	-	-	-	-	-	6
59	-	-	5	-	-	-	-	-	6
60	-	-	10 EA 4	-	-	-	-	-	6

CONDUIT AND CONDUCTOR 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. SYMBOL SUBSCRIPTS:

"2N": INCLUDE TWO NEUTRAL CONDUCTORS, SIZED AS SCHEDULED FOR PHASED AND NEUTRAL CONDUCTORS.

"EG": FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.

"HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IG/HH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.

"IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.

"SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.

6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
STATE OF UTAH
5-12-19-2019

CODE OFFICIAL STAMP:
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:
NO	DATE	DESCRIPTION

ISSUED:
NO	DATE	DESCRIPTION
01	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:
ONE-LINE DIAGRAM

SHEET NUMBER:
EP601

Last Plotted: 12/19/2019 12:22:56 PM

EQUIPMENT SCHEDULE

EQUIPMENT SCHEDULE KEY
E - DIVISION 26
Q - FURNISHED WITH EQUIPMENT
* - COORDINATE WITH THE DIVISION 23 TEMPERATURE CONTROL INSTALLER
** - AUTOMATIC CONTROL WIRING BY DIVISION 23

NOTES:
1. NEMA 3R
2. TOGGLE SWITCH W/ THERMAL OVERLOAD
3. PROVIDE FUSED DISCONNECT ELEVATOR POWER MODULE WITH SHUNT TRIP
4. CONTRACTOR TO PERFOM FINAL CONNECTION TO LINE VOLTAGE THERMOSTATS
5. TOGGLE SWITCH W/BACNET INTERFACE.
6. INDOOR UNITS FED FROM OUTDOOR UNIT. PROVIDE DISCONNECTS FOR BOTH.
7. PROVIDE SWITCH WITH BACNET MS/TP CAPABILITY.
8. PROVIDE LABEL ON DISCONNECT "DISCONNECT OUTDOOR UNIT PRIOR TO INDOOR."
9. LINE VOLTAGE THERMOSTAT ON WALL.
10. PROVIDE EXPLOSION PROOF DEVICES AND WIRING METHODS.
11. PROVIDE DUAL-REDUNDANT 100% RATED VFD'S FOR AIR HANLDER.
12. PROVIDE MANUAL STARTER WITH THERMAL OVERLOAD AND RELAY FOR ATC/BAS CONTROL.

GENERAL NOTES:
1. WHERE DISCONNECTS, STARTERS, OR VFCs ARE BEING PROVIDED BY ELECTRICAL CONTRACTOR, LOCATE EQUIPMENT IN ACCESSIBLE LOCATION, SUCH THAT IT IS WITHIN SITE OF THE MECHANICAL EQUIPMENT IT IS SERVING, AND COMPLIES WITH N.E.C. REQUIRED CLEARANCES.

			LOAD DATA							OVERCURRENT PROTECTION			DISCONNECT			STARTER									
MARK	QTY	ITEM DESCRIPTION	HP	kW	MCA	FLA	VOLT	PH	Hz	WIRE AND CONDUIT SIZE	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	SIZES	SELECTOR SWITCH	PILOT LAMP	NORMALLY OPEN CONTACT	NORMALLY CLOSED CONTACT	PHASE FAILURE RELAY	MARK	Comments
(AC-1)	1	POWER: CONNECTION FOR AIR COMPRESSOR	3	-	30	10.8	208	3	60	3 #6, #10 GR 1.25" CND	E	60/3 CB	F2	E		F2	Q	FVNR	0	HOA	R,G	2	2	YES	(AC-1)	MECH EQUIP
(BO-1)	1	POWER: CONNECTION FOR BENCH OVEN	1/2	-	-	5.4	208	1	60	2 #8, 10 GR 1" CND	E	50/2 CB	F2	E	TOGGLE SWITCH	F2	Q	-	-	-	-	-	-	-	(BO-1)	MECH EQUIP
(CS-1)	1	POWER: CONNECTION FOR CUTTER TABLE CONTROL/SYSTEM	-	-	-	3.8	120	1	60	2 #12, 12 GR 0.75" CND	E	20/3 CB	F2	E	TOGGLE SWITCH	F2	Q	-	-	-	-	-	-	-	(CS-1)	MECH EQUIP
(CV-1)	1	POWER: CONNECTION FOR CUTTER TABLE CONNECTION	3	-	-	10.8	208	3	60	3 #6, #10 GR 1.25" CND	E	60/3 CB	F2	E		F2	Q	FVNR	0	HOA	R,G	2	2	YES	(CV-1)	MECH EQUIP
(DC-1)	1	POWER: CONNECTION FOR DUST COLLECTOR	-	-	-	11.8	208	3	60	4 #10, #10 GR 0.75" CND	E	30/3 CB	F2	E		F2	Q	FVNR	0	HOA	R,G	2	2	YES	(DC-1)	MECH EQUIP
(FG-1)	1	POWER: CONNECTION FOR FRIDGE	-	-	12	12	208	1	60	2 #12, 12 GR 0.75" CND	E	20/2 CB		E			Q	FVNR	0	HOA	R,G	2	2	YES	(FG-1)	MECH EQUIP
(FZ-1)	1	POWER: CONNECTION FOR FREEZER	-	-	12	12	208	1	60	2 #12, 12 GR 0.75" CND	E	20/2 CB		E			Q	FVNR	0	HOA	R,G	2	2	YES	(FZ-1)	MECH EQUIP
(SN-1)	1	POWER: CONNECTION FOR AIR COMPRESSOR	-	-	9.8	9.8	208	1	60	2 #10, 10 GR 0.75" CND	E	20/2 CB		E			Q	FVNR	0	HOA	R,G	2	2	YES	(SN-1)	MECH EQUIP
(SN-1)	1	POWER: CONNECTION FOR AIR COMPRESSOR	-	-	9.8	9.8	208	1	60	2 #10, 10 GR 0.75" CND	E	20/2 CB		E			Q	FVNR	0	HOA	R,G	2	2	YES	(SN-1)	MECH EQUIP
(SN-1)	1	POWER: CONNECTION FOR AIR COMPRESSOR	-	-	9.8	9.8	208	1	60	2 #12, 12 GR 0.75" CND	E	20/2 CB		E			Q	FVNR	0	HOA	R,G	2	2	YES	(SN-1)	MECH EQUIP
(VP-1)	1	POWER: CONNECTION FOR VACUUM PUMP	3	-	30	10.8	208	3	60	3 #6, #10 GR 1.25" CND	E	60/3 CB	F2	E		F2	Q	FVNR	0	HOA	R,G	2	2	YES	(VP-1)	MECH EQUIP

PANEL: "F"

VOLTS/PHASE/WIRE:	PANEL SIZE & TYPE:	MAIN SIZE AND TYPE:	FED FROM:	CABINET:	LOCATION:	NOTES:
120/208V, 3 PH 4 WIRE	22" W x 6" D, BOLT-ON	100 AMPERE MAIN LUGS		SURFACE	PLASTIC INJECTION...	

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR — AIC RATING: 10000

CKT NO	OCP AMP	OCP POLE	OCP BKR	LOAD (kVA) LTG	LOAD (kVA) PWR	LOAD (kVA) CO	DESCRIPTION	PHASE LOAD A	PHASE LOAD B	PHASE LOAD C	DESCRIPTION	LOAD (kVA) CO	LOAD (kVA) PWR	LOAD (kVA) LTG	OCP BKR	OCP POLE	OCP AMP	CKT NO
1	20	1		--	--	--	ROLLER OUTLETS (D-8)	0.0	0.0		SWAMP COOLER	--	--	--		2	20	2
3	20	1		--	--	--	C-7 OUTLETS		0.0	0.0	--	--	--	--		--	--	4
5	20	1		--	--	--	N.W. PILLER OUTLETS / B-8...			0.0	C-S OUTLET	--	--	--		1	20	6
7	20	1		--	--	--	A-7 OUTLET	0.0	0.0		WEST UNIT HEATER	--	--	--		1	20	8
9	20	1		--	--	--	SPARE		0.0	0.0	N.W. UNIT HEATER	--	--	--		1	20	10
11	20	1		--	--	--	SERVER OUTLETS			0.0	S.W. UNIT HEATER	--	--	--		1	20	12
13	20	1		0.0	0.0	1.3	CLASSROOM 108 OUTLETS 1A	1.3	0.0		N.W. EXHAUST FAN	--	--	--		1	20	14
15	20	1		0.0	0.0	0.4	CO OFFICE 102			0.4	S.W. EXHAUST FAN	--	--	--		1	20	16
17	20	1		0.0	0.0	0.4	OFFICE 107 OUTLETS 2A			0.4	SPARE	--	--	--		1	20	18
19	20	1		0.0	0.0	0.5	OFFICE 105 OUTLETS 3A	0.5	0.0		N. SWAP COOLER	--	--	--		2	20	20
21	20	1		0.0	2.4	0.0	-			2.4	--	--	--	--		--	--	22
23	20	1		0.0	2.4	0.0	-			2.4	N. COOLER	--	--	--		1	20	24
25	20	1		0.0	2.4	0.0	-	2.4	0.0		SPARE	--	--	--		1	20	26
27	20	1		--	--	--	SPARE			0.0	SPARE	--	--	--		1	20	28
29	20	1		--	--	--	SPARE			0.0	SPARE	--	--	--		1	20	30
31	20	1		--	--	--	SPARE	0.0	0.0		SPARE	--	--	--		1	20	32
33	20	1		--	--	--	SPARE		0.0	0.0	SPARE	--	--	--		1	20	34
35	20	1		--	--	--	SPARE			0.0	SPARE	--	--	--		1	20	36
37	20	1		--	--	--	SPARE	0.0	0.0		SPARE	--	--	--		1	20	38
39	20	1		--	--	--	SPARE		0.0	0.0	SPARE	--	--	--		1	20	40
41	20	1		--	--	--	SPARE			0.0	SPARE	--	--	--		1	20	42
TOTALS:							CONNECTED kVA PER PHASE	**4**	**3**	**3**	CONNECTED TOTAL kVA =					**10**		
							CONNECTED AMPS PER PHASE	**35**	**23**	**23**	AVERAGE CONNECTED AMPS PER PHASE =					**27**		

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING & CONTINUOUS LOADS:
RECEPTACLES: **2.5 kVA @ 100% = 2.5 kVA**
ALL OTHER LOADS @ 100% : **7.8 kVA**

- 100% CONNECTED LOAD PLUS 25%
- FIRST 10kVA @ 100%, REMAINDER @ 50%
- MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

DIVERSIFIED TOTAL kVA = **10**
AVERAGE AMPS PER PHASE = **29**

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCAKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI

PANEL: "F2"

VOLTS/PHASE/WIRE:	PANEL SIZE & TYPE:	MAIN SIZE AND TYPE:	FED FROM:	CABINET:	LOCATION:	NOTES:
120/208V, 3 PH 4 WIRE	22" W x 6" D, BOLT-ON	400 AMPERE MAIN LUGS	MA	SURFACE	PLASTIC INJECTION...	

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR — AIC RATING: 10000

CKT NO	OCP AMP	OCP POLE	OCP BKR	LOAD (kVA) LTG	LOAD (kVA) PWR	LOAD (kVA) CO	DESCRIPTION	PHASE LOAD A	PHASE LOAD B	PHASE LOAD C	DESCRIPTION	LOAD (kVA) CO	LOAD (kVA) PWR	LOAD (kVA) LTG	OCP BKR	OCP POLE	OCP AMP	CKT NO
1	20	1	-	0.0	0.2	0.0	CUTTING TABLE CNTRL SYS	0.2	0.5		RM 110: GENERAL USE DUPLEX'S	0.5	0.0	0.0	-	1	20	2
3	20	1	-	0.0	1.2	0.0	FREEZER DUPLEX		1.2	1.2	FRIDGE DUPLEX	0.0	1.2	0.0	-	1	20	4
5	50	2	-	0.0	1.1	0.0	RM 109 OVEN			0.6	1.0	RM 110: SANDER 1B	0.0	2.1	0.0	-	2	40	6
7	--	--	-	--	--	--	--	0.6	1.0		--	--	--	--	-	--	--	8
9	40	2	-	0.0	2.1	0.0	RM 110: SANDER 1A		1.0	0.0		RM 111: DROP DOWN DUPLEX #4	0.0	0.0	0.0	-	1	20	10
11	--	--	-	--	--	--	--			1.0	1.0	RM 110: SANDER 1C	0.0	2.1	0.0	--	2	40	12
13	20	1	-	0.0	0.0	0.0	RM 110: DROP DOWN DUPLEX #1	0.0	1.0			--	--	--	--	--	--	14
15	20	1	-	0.0	0.0	0.0	RM109: DROP DOWN DUPLEX #2			0.0	0.2	CUTTING TABLE RM-109 DUPLEX	0.2	0.0	0.0	-	1	20	16
17	20	1	-	0.0	0.0	0.0	RM109: DROP DOWN DUPLEX #3				0.0	0.2	RM 111 DUPLEX 4B	0.2	0.0	0.0	--	1	20	18
19	20	1	-	0.0	0.0	0.2	EXTERIOR DUPLEX - NEAR DR.	0.2	0.2			(BO-1) DUPLEX	0.2	0.0	0.0	-	1	20	20
21	20	1	GF	0.0	0.0	0.2	CUTTING TABLE CNTRL SYS...			0.2	1.4	DUST COLLECTOR: EXTERIOR CON.	0.0	4.2	0.0	GF	3	20	22
23	20	1	-	0.0	0.0	0.2	DUST COLLECTOR DUPLEX EXT.				0.2	1.4	--	--	--	-	--	--	24
25	60	3	-	0.0	30.0	0.0	CUTTING TABLE VACUUM SYS	10.0	1.4			--	--	--	--	-	--	--	26
27	--	--	--	--	--	--	--			10.0	10.0	RM: 111 VACUUM PUMP	0.0	30.0	0.0	-	3	60	28
29	--	--	-	--	--	--	--				10.0	10.0	--	--	--	--	-	--	30
31	20	1	-	0.0	0.0	0.4	RM 107: WRKSTATION QUADPLE...	0.4	10.0			--	--	--	--	--	--	--	32
33	20	1	-	0.0	0.0	0.4	RM 107: WRKSTATION QUADPLE...			0.4	0.2	RM 111: DROP DOWN DUPLEX #5	0.2	0.0	0.0	-	1	20	34
35	20	1	-	0.0	0.0	0.4	RM 107: WRKSTATION QUADPLE...				0.4	0.0	POWER	0.0	0.0	0.0	-	1	20	36
37	20	1	-	0.0	0.0	0.4	RM 107: WRKSTATION QUADPLE...	0.4	0.7			RM 107: DROP DOWN DUPLEX #6	0.7	0.0	0.0	-	1	20	38
39	20	3	-	0.0	30.0	0.0	MOTOR VACUUM PUMP &...			10.0	0.0		XCX	0.0	0.0	0.0	-	1	20	40
41	--	--	-	--	--	--	--				0.0	0.4	XCX	0.0	0.0	0.4	-	1	20	42
43	--	--		--	--	--	--	10.0	0.0				XCX	0.0	0.0	0.0		1	20	44
45	20	1		--	--	--	SPARE			0.0	0.0		XCX	0.0	0.0	0.0		1	20	46
47	20	1		--	--	--	SPARE				0.0	0.2	XCX	0.0	0.0	0.2		1	20	48
49	20	1		--	--	--	SPARE	0.0	0.0				SPARE	--	--	--		1	20	50
51	20	1		--	--	--	SPARE			0.0	0.0		SPARE	--	--	--		1	20	52
53	20	1		--	--	--	SPARE				0.0	0.0	SPARE	--	--	--		1	20	54
55	20	1		--	--	--	SPARE	0.0	0.0				SPARE	--	--	--		1	20	56
57	20	1		--	--	--	SPARE			0.0	0.0		SPARE	--	--	--		1	20	58
59	20	1		--	--	--	SPARE				0.0	0.0	SPARE	--	--	--		1	20	60
TOTALS:							CONNECTED kVA PER PHASE	**37**	**36**	**36**	CONNECTED TOTAL kVA =					**109**		
							CONNECTED AMPS PER PHASE	**306**	**298**	**303**	AVERAGE CONNECTED AMPS PER PHASE =					**301**		

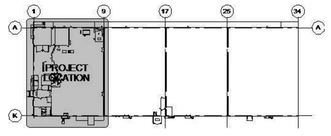
NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING & CONTINUOUS LOADS: **0.5 kVA @ 125% = 0.6 kVA**
RECEPTACLES: **4.0 kVA @ 100% = 4.0 kVA**
ALL OTHER LOADS @ 100% : **111.7 kVA**

- 100% CONNECTED LOAD PLUS 25%
- FIRST 10kVA @ 100%, REMAINDER @ 50%
- MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

DIVERSIFIED TOTAL kVA = **116**
AVERAGE AMPS PER PHASE = **323**

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCAKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI



ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:
DEPARTMENT OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:
NO	DATE	DESCRIPTION

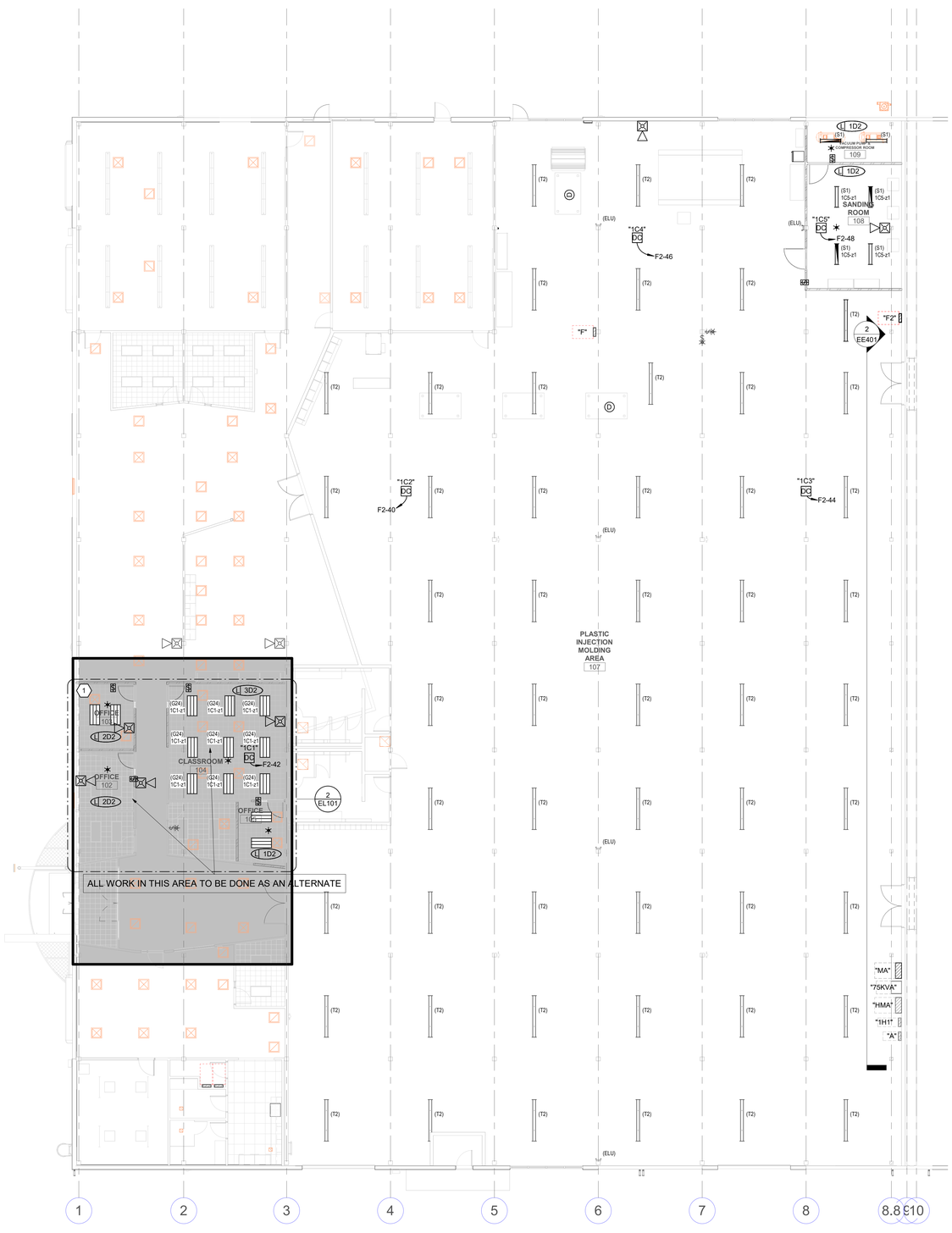
ISSUED:
NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

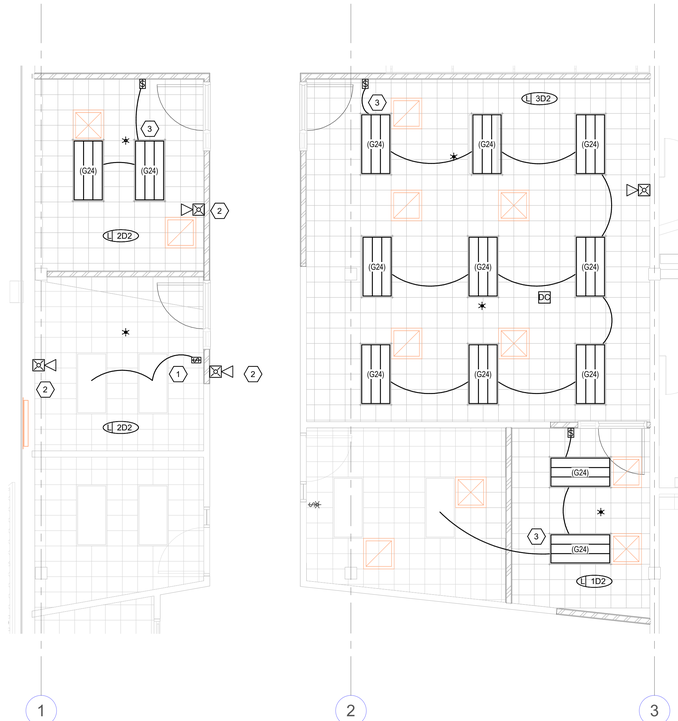
SHEET TITLE:
EQUIPMENT & PANEL SCHEDULES

SHEET NUMBER:
EP602

Last Plotted: 12/19/2019 12:22:59 PM



1 LEVEL 1 LIGHTING PLAN
SCALE: 1" = 10'-0"



2 CLASSROOM 108 & OFFICE 107 LIGHTING ENLARGED
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES

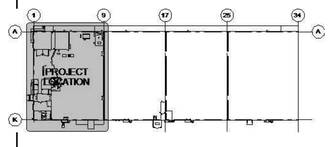
1. CENTER ALL CEILING MOUNTED LIGHT FIXTURES AND DEVICES SHALL BE CENTERED IN CEILING TILE, UNLESS OTHERWISE NOTED.
2. CIRCUIT ALL EXIT SIGNS TO NEAREST UNSWITCHED LEG OF EMERGENCY LIGHTING CIRCUIT.
3. ALL ENCLOSED SPACES SHALL HAVE MANUAL ON LIGHTING CONTROL WITH AUTOMATIC OFF VIA DUAL TECHNOLOGY SENSOR OR TIME CLOCK. SENSOR(S) SHALL PROVIDE A MINIMUM OF 90 PERCENT COVERAGE IN SPACE. PROVIDE ADDITIONAL SENSORS AS REQUIRED. COMPLY WITH 2015 IECC SECTION C405.
4. PROVIDE DAYLIGHTING CONTROL FOR ALL LIGHTING WITH IN DAYLIGHT ZONE AS DEFINED BY THE 2015IECC. PROVIDE DIMMING LIGHTING FIXTURES AND DAYLIGHT SENSOR PHOTOCELL.
5. INSTALL LIGHT FIXTURES INLINE AND CENTERED.
6. COORDINATE ALL LIGHT FIXTURE MOUNTING HEIGHTS WITH ARCHITECT.
7. ARCHITECT TO SELECT ALL LIGHT FIXTURE FINISHES.
8. COVE/CLOUD LIGHTING SHALL HAVE EVEN ILLUMINATION THE ENTIRE LENGTH OF THE COVE/CLOUD. PROVIDE THE NUMBER OF FIXTURES REQUIRED TO EVENLY ILLUMINATE THE COVE/CLOUD. STAGGER COVE/CLOUD LIGHTING OR PROVIDE DIFFERENT LENGTHS OF THE FIXTURE TO ILLUMINATE THE ENTIRE COVE/CLOUD.
9. LOCATE ALL VACANCY/OCCUPANCY SENSORS MINIMUM OF 6 FEET FROM SUPPLY AIR DIFFUSERS AND 3 FEET FROM RETURN AIR DIFFUSERS.
10. ALL CEILING AND WALL MOUNTED SENSORS SHALL BE DUAL TECHNOLOGY WITH BUILT IN LIGHT LEVEL SENSOR AND BAS/HVAC ISOLATED RELAY.
11. ALL LIGHT FIXTURES THAT PENITRATE FIRE RATED SURFACE SHALL BE IN A FIRE RATED ASSEMBLE OR BE PROVIDED WITH A FIRE RATED ASSEMBLE TO MAINTAIN A FIRE RATE SURFACE.
12. LOCATE ALL ROOM CONTROLLER IN ACCESSIBLE CEILINGS OR IN THE ELECTRICAL ROOM.

COMMISIONING NOTES

1. THE CONTRACTOR SHALL PERFORM OR SHALL ENGAGE A PARTY TO PERFORM THE FOLLOWING TESTS AND INSPECTIONS WITH THE ASSISTANCE OF A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE.
2. ENSURE THAT THE LIGHTING CONTROLS FOR AUTOMATIC LIGHTING SYSTEMS COMPLY WITH 2015 IECC SECTION C408.3.
3. ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. WHERE REQUIRED BY THE CODE OFFICIAL, AN APPROVED PARTY INDEPENDENT FORM THE DESIGN OR CONSTRUCTION OF THE PROJECT SHALL BE RESPONSIBLE FOR THE FUNCTIONAL TESTING AND SHALL PROVIDE DOCUMENTATION TO THE CODE OFFICIAL CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET THE PROVISIONS OF 2015 IECC SECTION C405.
5. PROVIDE THE FOLLOWING PROCEDURES FOR EACH; OCCUPANT SENSOR, TIME SWITCH, PROGRAMMABLE SCHEDULE CONTROL, PHOTOSENSOR, AND DAYLIGHTING CONTROL.
6. CONFIRM THAT THE PLACEMENT, SENSITIVITY, AND TIME-OUT ADJUSTMENTS FOR THE OCCUPANT SENSOR S YIELD ACCEPTABLE PERFORMANCES.
7. CONFIRM THAT THE TIME SWITCHES AND PROGRAMMABLE SCHEDULE CONTROLS ARE PROGRAMMED TO TURN THE LIGHTS OFF.
8. CONFIRM THAT THE PLACEMENT AND SENSITIVITY ADJUSTMENTS FOR THE PHOTOSENSOR CONTROLS REDUCE ELECTRIC LIGHT BASED ON THE AMOUNT OF USABLE DAYLIGHT IN THE SPACE AS SPECIFIED.

SHEET KEYNOTES

1. CIRCUIT EXISTING LIGHTS TO NEW LIGHTING CONTROL AS SHOWN.
2. CIRCUIT NEW FIRE ALARM DEVICE TO EXISTING INDICATING (NOTIFICATION) LOOP WITH CAPACITY. FIELD VERIFY EXISTING CONDITIONS. PROVIDE ADDITIONAL BATTERY AND POWER SUPPLIES AS REQUIRED FOR THE ADDITION OF NEW DEVICE INTO THE CIRCUIT.
3. CIRCUIT NEW LIGHT TO EXISTING CIRCUIT. USE SWITCH LEG TO ISOLATE LIGHTS IN SPACE. FROM OTHER SPACE.



ARCHITECT'S INFORMATION:
ARCHITECT
SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.
108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:
LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:
2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:
NO	DATE	DESCRIPTION

ISSUED:
NO	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:
LEVEL 1 LIGHTING PLAN

SHEET NUMBER:
EL101

Last Plotted: 12/19/2019 12:22:31 PM

INTERIOR LIGHTING FIXTURE SCHEDULE

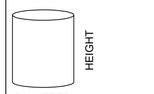
ABBREVIATIONS

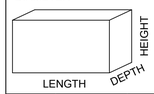
MOUNTING

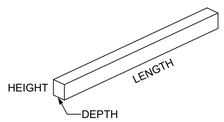
- B - BASE
- C - CEILING
- F - FLANGE
- G - GRID
- P - PENDANT
- PL - POLE
- R - RECESSED
- S - SURFACE
- W - WALL

LUMINAIRE OPTIONS

- ARHR - AIR RETURN AND HEAT REJECTION
- DL - DAMP LOCATION
- EQC - EARTHQUAKE CLIPS
- F - FUSING
- HLD - HINGED AND LATCHED DOOR
- HS - HOUSE SIDE SHIELD
- PS - PHOTOCELL SWITCH
- QRS - QUARTZ RESTRIKE
- ST - STATIC
- WG - WIRE GUARD
- WL - WET LOCATION







FINISH

- MW - MATTE WHITE
- BL - BLACK
- SL - SILVER
- GL - GOLD
- CL - CLEAR
- PW - PAINTED WHITE
- EA - EXTRUDED ALUMINUM
- S - STEEL
- GS - GALVANIZED STEEL
- C - CAST
- CBA - COLOR BY ARCHITECT
- SCBA - STANDARD COLOR BY ARCHITECT
- CCA - CUSTOM COLOR BY ARCHITECT
- FS 209D - MEETS FEDERAL STANDARD 209D
- TP - THERMALLY PROTECTED
- FL - FLUSH
- R - REGRESS
- M - MITERED

DIFFUSER/LENS

- #A - ACRYLIC #THICK
- #OA - ACRYLIC #THICK (OPAL)
- GC - GLASS (CLEAR)
- GO - GLASS (OPAL)
- GF - GLASS (FROSTED)
- SGL - SOFT GLOW LENS
- HPL - HIGH PERFORMANCE LENS
- DO - DROP OPAL
- CGL - CONVEX GLASS LENS
- S - SATIN LENS

REFLECTOR

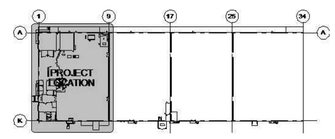
- OP - NONE/OPEN
- SP - SPECULAR
- SS - SEMI-SPECULAR
- D - DIFFUSE (WHITE ENAMEL)
- SC - SPECULAR (COLORED)
- PR - PRISMATIC
- FDR - FULL DEPTH REFLECTOR
- DS - DIFFUSE (SEMI SPECULAR) SILVER
- LI - LOW IRIDESCENT
- IR - IRIDESCENT
- SL - SILVER
- GL - GOLD
- CA - CLEAR ALZAK

NOTES

GENERAL NOTES

1. PROVIDE UNIT PRICES AND FIXTURE BRAND SELECTED FOR ADD/DELETE CHANGES FOR EACH FIXTURE TYPES SHOWN WITHIN 48 BUSINESS HOURS OF THE BID DATE. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY DISQUALIFY THE PRODUCTS AND EMPOWER THE ENGINEER TO DETERMINE FAIR VALUE FOR FIXTURE AND INSTALLATION CHANGES, WITHOUT FURTHER INPUT FROM THE CONTRACTOR OR INSTALLER.
2. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.
3. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.
4. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.
5. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION.
6. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.
7. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.
8. REFER TO SPECIFICATIONS FOR IMPORTANT TECHNICAL REQUIREMENTS FOR LIGHTING FIXTURES, DRIVERS, AND LAMPS.
9. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER.

ID	IMAGE	DESCRIPTION	NOMINAL SIZE				MOUNTING	TYPE	COLOR TEMP	CRI	DRIVER CONFIGURATION	VOLTAGE	WATTS	FINISH	FIXTURE LUMENS	DIFFUSER/LENS	REFLECTOR	OPTIONS	NOTES	MANUFACTURER (CATALOG SERIES)			
			LENGTH	DEPTH	HEIGHT	DIAMETER/ APERTURE														BASIS OF DESIGN	OPTION 2	OPTION 3	OPTION 4
(ELU)		EMERGENCY LIGHITNG UNIT: WALL/CEILING MOUNTED DUAL HEAD, ADJUSTABLE, LED, 90 MINUTES OF ILLUMINATION VIA BATTERY	12"	5"	3"	4"	WS	LED	4100K	80	LED DRIVER (0-10V DIMMING) 10%	120/277	10	SCBA	500	HPL	SS	-		LITHONIA (ELM2 LED SD FIDO)	DUAL-LITE (LZ 20 N I 03L)	COOPER LIGHITNG (CU2)	THOMAS&BETTS (IC-2)
(G24)		2X4 VOLUMETRIC TROFFER HIGH PERFORMANCE; LAY IN, LED	48"	24"	4"	-	CR	LED	4100K	80	LED DRIVER (0-10V DIMMING)	120/277	39	SCBA	4000	HPL	PR	-		LITHONIA (2VTL)	PINNACALE (AD24A-4034-G1-U NV-1D-W)	METALUX (24CZ-LD4-34-UN V-L840-CD1-U)	COLUMBIA (LTRE24-40HLG-R FA-U)
(S1)		STRIP LIGHT; LED; LENS; LOW PROFILE	48"	3"	3"	-	C/P	LED	4100K	80	LED DRIVER (0-10V DIMMING)	120/277	35	SCBA	3000	HPL	LENS	-		LITHONIA (ZL1D)	DAYBRITE (LF 4 EZ)	METALUX (SNLED)	COLUMBIA (LCL)



ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DEPARTMENT OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:

INTERIOR LIGHTING FIXTURE SCHEDULE

SHEET NUMBER:

EL601

Last Plotted: 12/19/2019 12:22:35 PM

LIGHTING/SPACE CONTROL TYPE SCHEDULE

WIRING LEGEND

- LINE VOLTAGE WIRING
- 0-10V WIRING
- CAT5E CABLING
- WIRING BY OTHERS
- TMP SEGMENT NETWORK CABLING

APPROVED MANUFACTURERS

1. WATTSTOPPER (BASIS OF DESIGN)
2. HUBBEL BUILDING AUTOMATION
3. EATON LIGHTING CONTROLS
4. nLIGHT
5. LUTRON

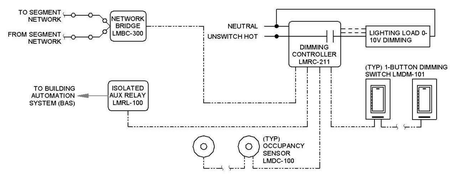
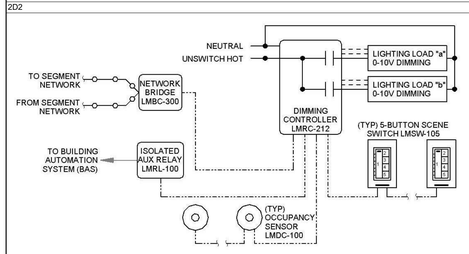
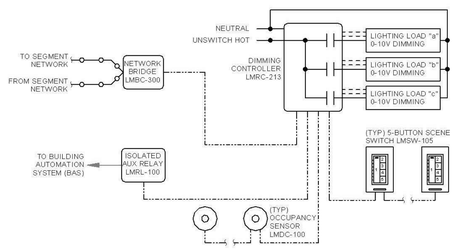
LIGHTING CONTROL ID

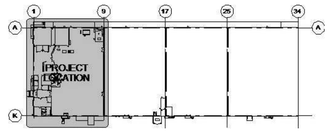
1. # = NUMBER OF ZONES
2. D = DIMMING, S = SWITCHING
3. P = DAYLIGHT PHOTOCELL
4. L = PLUG LOAD CONTROLLER
5. # = INSTANCE

GENERAL NOTES

1. COORDINATE INITIAL PROGRAMMING WITH OWNER AND MODIFY CONTROL TIMES AND OPERATION AS REQUESTED BY OWNER.
2. PROVIDE FINE TUNING PROGRAMMING AND ADJUSTMENTS UPON REQUEST BY OWNER WITHIN FIRST 6 MONTHS AFTER SUBSTANTIAL COMPLETION.
3. PROVIDE CUSTOMIZED ENGRAVED PERMANENT BUTTON LABELS ON EACH SWITCH, LABEL TO MATCH BUTTON LABEL ID OR AS DIRECTED BY OWNER.
4. PART NUMBERS SHOWN ARE BASED ON WATTSTOPPER AS THE BASIS OF DESIGN. ALL APPROVED MANUFACTURERS ARE SUBJECT TO MEETING ALL FUNCTIONS AND CAPABILITIES OF THE BASIS OF DESIGN SYSTEM AND PRODUCTS. FAILURE TO MEET THESE SHALL REQUIRE THE CONTRACTOR TO PROVIDE A SYSTEM THAT DOES AT NOT ADDITIONAL COST.
5. REFER TO PLANS FOR LOCATIONS AND QUANTITIES OF DEVICES.
6. INSTALL ONE OF EACH CONTROL TYPE WITH PROGRAMMING, ADJUST, AND OBTAIN OWNERS APPROVAL PRIOR TO PROGRAMMING THE REMAINING CONTROLS

PROJECT NOTES

ID	DETAIL	LIGHTS ON CONTROL	LIGHTS OFF CONTROL	LIGHTING CONTROL TYPE	DAYLIGHT SENSOR SETTING (FC)	TIME DELAY TO OFF (MIN.)	BAS AUX RELAY SIGNAL	PLUG LOAD CONTROLLER	NETWORKED CONTROLS	BUTTON_1	BUTTON_2	BUTTON_3	BUTTON_4	BUTTON_5	BUTTON_6	BUTTON_7	BUTTON_8	BUTTON_9	NOTES
1D2		TIME ON AT 6AM MON-SAT, CAN MANUAL OVER-RIDE ON FOR 2HRS	TIME OFF AT 1AM DAILY, BLINK LIGHTS 10 MIN WARNING	DIMMING 0-10V	-	15	RELAY CLOSED ON OCCUPANCY	-	YES	FUNCTION: PRESS TOP-ON, HOLD TOP-RAISE LABEL ID: TOP-"ON/RAISE" BOTTOM-"OFF/ LOWER"	-	-	-	-	-	-	-	-	-	
2D2		MANUAL OR TIMECLOCK AT 6AM MON-SAT	TIME OFF AT 1AM DAILY, BLINK LIGHTS 10 MIN WARNING	DIMMING 0-10V	-	15	RELAY CLOSED ON OCCUPANCY	-	YES	FUNCTION: PRESS TOP-ON, HOLD TOP-RAISE PRESS BOTTOM-OFF, HOLD BOTTOM-LOWER LABEL ID: TOP-"ON/RAISE" BOTTOM-"OFF/ LOWER"	FUNCTION: PRESS-PRESET SCENE #01 ZONE "a" 0% ZONE "b" 50% ZONE "c" 100% LABEL ID: "PRE #1"	FUNCTION: PRESS-PRESET SCENE #02 ZONE "a" 0% ZONE "b" 50% LABEL ID: "PRE #2"	FUNCTION: PRESS-SELECT ZONE "a" FOR DIMMING LABEL ID: "ZONE a"	FUNCTION: PRESS-SELECT ZONE "b" FOR DIMMING LABEL ID: "ZONE b"	-	-	-	-	
3D2		TIME ON AT 6AM MON-SAT, CAN MANUAL OVER-RIDE ON FOR 2HRS	TIME OFF AT 6PM DAILY, BLINK LIGHTS 10 MIN WARNING	DIMMING 0-10V	-	15	RELAY CLOSED ON OCCUPANCY	-	YES	FUNCTION: PRESS TOP-ON, HOLD TOP-RAISE PRESS BOTTOM-OFF, HOLD BOTTOM-LOWER LABEL ID: TOP-"ON/RAISE" BOTTOM-"OFF/ LOWER"	FUNCTION: PRESS-PRESET SCENE #01 ZONE "a" 0% ZONE "b" 50% ZONE "c" 100% LABEL ID: "PRE #1"	FUNCTION: PRESS-SELECT ZONE "a" FOR DIMMING LABEL ID: "ZONE a"	FUNCTION: PRESS-SELECT ZONE "b" FOR DIMMING LABEL ID: "ZONE b"	FUNCTION: PRESS-SELECT ZONE "c" FOR DIMMING LABEL ID: "ZONE c"	-	-	-	-	



ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258090
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DEPARTMENT OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE
DATE 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:

LIGHTING CONTROL DETAILS

SHEET NUMBER:

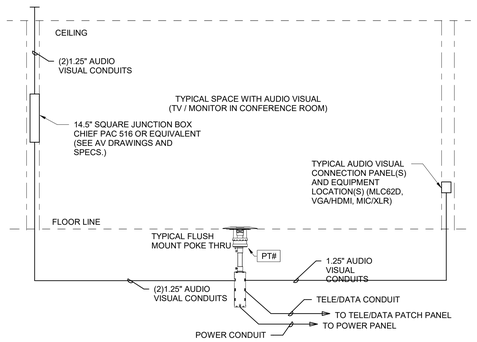
EL603

Last Plotted: 12/19/2019 12:22:36 PM

VOICE-DATA ROUGH-IN SCHEDULE

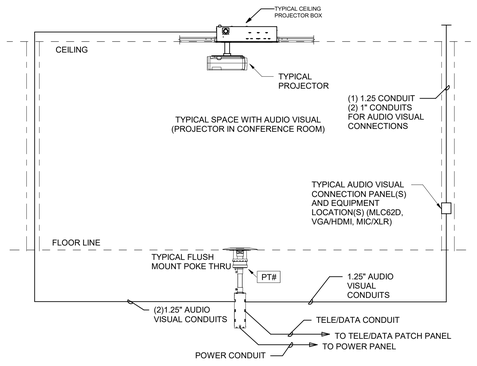
ELECTRONIC SYSTEMS:		REFER TO DIVISION 26 SPECIFICATIONS AND WIRING DEVICE SCHEDULES FOR INSTALLATION REQUIREMENTS. MOUNTING HEIGHTS SHOWN ARE TYPICAL HEIGHTS. REFER TO DRAWINGS, ARCHITECTURAL ELEVATIONS, DRAWINGS AND SPECIFICATIONS FOR ACTUAL MOUNTING HEIGHTS.	
SYMBOL	MOUNTING	DESCRIPTION	ROUGH-IN MATERIALS
▽E	WALL, VERIFY EXACT MOUNTING LOCATION WITH ARCHITECT	EMERGENCY PHONE OUTLET	4-11/16" SQUARE, DEEP JUNCTION BOX WITH SINGLE GANG MUD RING. MOUNT AT ELECTRICAL SWITCH HEIGHT, OR AS NOTED. VERIFY ROUGH-IN PRIOR TO INSTALLATION. PROVIDE VIKING MODEL 1600-02A.
▼(#) ▼(A) ▼	WALL	DATA OUTLET	4-11/16" SQUARE, DEEP JUNCTION BOX WITH SINGLE GANG MUD RING. MOUNT AT ELECTRICAL OUTLET HEIGHT, OR AS NOTED. (A) INDICATES 'ABOVE COUNTER'.
▼6	WALL/RACK	AV RACK OUTLET	4-11/16" SQUARE, DEEP JUNCTION BOX WITH DOUBLE GANG MUD RING.
▼F	FURNITURE	FURNITURE OUTLET	COORDINATE WITH FURNITURE PROVIDED
▼C	ON CEILING DECK IN ACCESSIBLE CEILING AREAS, AND FLUSH IN CEILIN IN HARD-LID CEILING AREAS	DATA OUTLET, WIRELESS	4-11/16" SQUARE, DEEP JUNCTION BOX WITH SINGLE GANG MUD RING.
▽W	WALL AT ELECTRICAL SWITCH HEIGHT	WALL PHONE OUTLET	4-11/16" SQUARE, DEEP JUNCTION BOX WITH SINGLE GANG MUD RING.
	FLOOR	OPEN RAIL DATA EQUIPMENT RACK	FURNISHED AND INSTALLED BY DATA INSTALLER
S	FLOOR	SERVER OR AV RACK	FURNISHED AND INSTALLED AS NOTED
	WALL	TELEPHONE BOARD	SEE ARCHITECTURAL ELEVATIONS
	FLOOR/CEILING	CABLE TRAY	PROVIDE SIZE AS NOTED AND DIMENSIONED, TRAPEZE HUNG
	CEILING	LADDER RUNWAY	FURNISHED AND INSTALLED BY DATA INSTALLER
FB#	FLOOR	FLOOR BOX	SEE 'EP' SHEETS
PT#	FLOOR	POKE THRU	SEE 'EP' SHEETS

"A" INDICATES ABOVE COUNTER MOUNTING



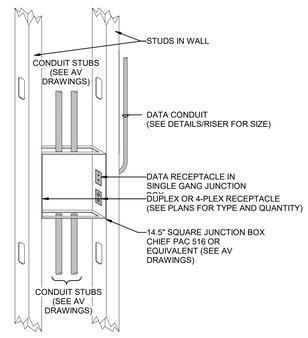
4 AUDIO VISUAL CONDUIT RISER DIAGRAM (MONITOR ON WALL)

SCALE: NTS



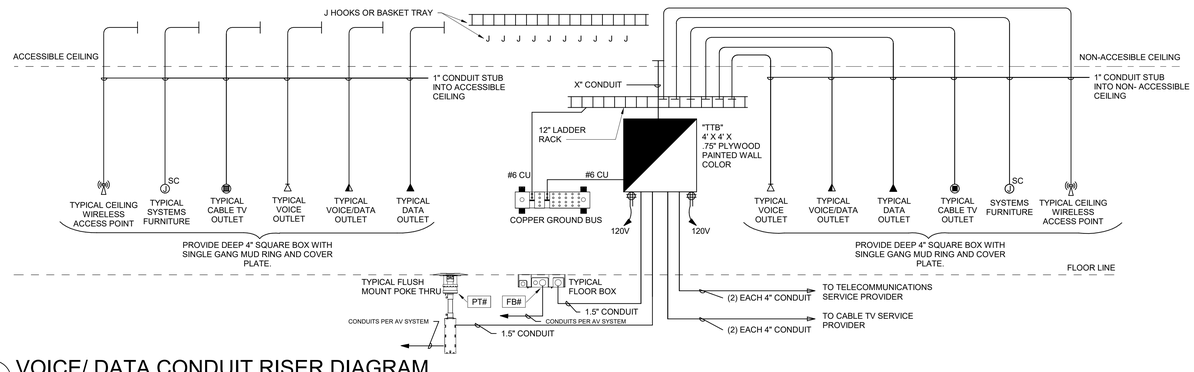
3 AUDIO VISUAL CONDUIT RISER DIAGRAM (PROJECTOR)

SCALE: NTS



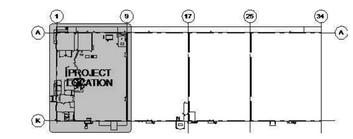
1 TYPICAL FLAT PANEL RECEPTACLE ROUGH-IN DETAIL

SCALE: NTS



2 VOICE/ DATA CONDUIT RISER DIAGRAM

SCALE: NTS



ARCHITECT'S INFORMATION:

ARCHITECT

SCOTT P. EVANS ARCHITECT & ASSOCIATES P.C.

108 West Center Street
Bountiful, Utah 84010
t.801.298.1368 - f.801.298.2192
info@spe-architect.com
www.spe-architect.com

PROFESSIONAL STAMP:

LICENSED PROFESSIONAL ENGINEER
No. 7258080
SPENCER C. LITTLE
5-12-19-2019
STATE OF UTAH

CODE OFFICIAL STAMP:

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
REVIEWED FOR CODE COMPLIANCE
SIGNATURE:
DATE: 12/20/2019

PROJECT NAME:

2019 DAVIS TECHNICAL COLLEGE
FREEPORT CENTER BUILDING D5
COMPOSITES REMODEL

REVISIONS:

NO.	DATE	DESCRIPTION

ISSUED:

NO.	DATE	DESCRIPTION
1	12/19/19	CONSTRUCTION BID SET

OWNER PROJECT #:	20073220
SPE PROJECT #:	19-47
DRAWN BY:	BRE
CHECKED BY:	SCL
DESIGNED BY:	SCL

SHEET TITLE:

TELECOM DETAILS

SHEET NUMBER:

ET501

Last Plotted: 12/19/2019 12:23:01 PM