State of Utah

GARY R. HERBERT
Governor

GREGORY S. BELL
Lt. Governor

Department of Administrative Services
KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management
DAVID G. BUXTON
Director

ADDENDUM NO. 1

Date: May 25, 2011

To: Contractors

From: Bob Anderson - Project Manager

Reference: Fume Hood Upgrades – Print Studio – Humanities Building
Snow College – Ephraim, Utah
DFCM Project No. 10153700

Subject: **Addendum No. 1**

Pages	Addendum Cover Sheet	1	page
	Engineer's Addendum No. 1	6	pages
	As-Built Drawings	5	pages
	Total	12	pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

1.1 SCHEDULE CHANGES: There are no Project Schedule changes.

1.2 GENERAL ITEMS:

1.2.1 See attached Engineer's Addendum No. 1 dated May 23, 2011
1.2.2 See attached As-Built Drawings.

ADDENDUM

Project Name: Snow College Humanities Print Studio Fume Hood Upgrades Addendum No.: 1

DFCM Project # 10153700 Date: 05-23-11

From: WHW Engineering Inc
8619 South Sandy Parkway
Sandy, Utah 84070
Phone (80) 466-4021 Fax (801) 466-8536

To: All Bidders

This Addendum forms and becomes a part of the Contract Documents and modifies the original Bidding Documents dated December 2010 as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of 6 pages, and 5 electrical record drawings.

I - CHANGES TO PRIOR ADDENDA: NA

II - CHANGES/CLARIFICATIONS TO SPECIFICATIONS:

Item II-1. Insert attached specification section 16051 Common Work Results for Electrical.

III - CHANGES/CLARIFICATIONS TO DRAWINGS:

Item III-1. Replace detail B3/ME501 with attached detail. There is no circulating pump at the make-up unit coils.

Item III-2. Detail sheet note 1/ME102, detail B4/ME501: All new controls components being replaced on this project, such as control valves, shall replace pneumatic equipment with electronic.

Item III-3. Design Build Electrician shall disconnect and re-connect power at replacement equipment, and shall provide new power to new exhaust fans. It is anticipated that the new equipment shall be fed from the existing electrical room that is approximately 120' south of the print studio. All electrical work shall comply with the project specifications, as well as the DFCM and Snow College Standards. Attached are the pertinent electrical as-built drawings for the facility; however, the electrician shall be responsible to field verify all existing conditions, and provide as-built documentation of all additions and modifications made as part of this project.

PRIOR APPROVALS

THE FOLLOWING ITEMS, AS SUBMITTED, ARE CONSIDERED, IN GENERAL AND IN NAME ONLY, AS EQUAL TO THOSE ITEMS SPECIFIED. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR OR SUPPLIER OF THE RESPONSIBILITY OF CONFORMING TO THE DRAWINGS AND SPECIFICATIONS, NOR DOES IT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS FOR COORDINATION WITH OTHER TRADES. ALL DIMENSIONS SHALL BE CONFIRMED AND CORRELATED AT THE JOBSITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND THE SUITABILITY OF “EQUAL” PRODUCTS FOR THE SPECIFIED APPLICATION.

Description	**Manufacturer**
15181 – Hydronic Piping Balancing Valves	Danfoss
15181– Hydronic Piping Auto Air Vents	IFC, American Wheatley
15181– Hydronic Piping Safety Valves	Conbraco
15181– Hydronic Piping Strainers	IFC
15181– Hydronic Piping Check Valves	IFC
15181– Hydronic Piping Meters and Gauges	Miljoco, Trerice, Weksler
15732 – Packaged Outdoor Make-up Air Units	Greenheck
15763 – Fan Coil Units	Williams, IEC
15807 – Paint Spray Hood	BBF
15818 – Flexible Extraction Arms	Ventaire, AQC
15820 – Duct Accessories	Greenheck, Pottorff

End of Addendum

SECTION 16051 - COMMON WORK RESULTS FOR ELECTRICAL PERFORMANCE SPECIFICATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Electrical equipment coordination and installation.
2. Sleeves for raceways and cables.
3. Sleeve seals.
4. Grout.
5. Common electrical installation requirements.

B. Provide design build electrical portion of work. Electrician shall be a licensed design build electrical contractor. All electrical work shall comply with current codes, and DFCM standards. Provide all electrical work required for a fully functional system upon completion. DFCM Standards are available for download at: http://dfcm.utah.gov/downloads/design_manual/design_requirements.pdf

1.3 DEFINITIONS

A. EPDM: Ethylene-propylene-diene terpolymer rubber.

B. NBR: Acrylonitrile-butadiene rubber.

1.4 SUBMITTALS

A. Product Data: All electrical components.

B. Electrical design, including preliminary redline drawings indicating proposed panels, breakers, conduit, wire size, routing, etc.

C. Contractor as-built record drawings upon completion.

1.5 COORDINATION

A. Coordinate arrangement, mounting, and support of electrical equipment:

1. To allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
2. To provide for ease of disconnecting the equipment with minimum interference to other installations.
3. To allow right of way for piping and conduit installed at required slope.
4. Install so connecting raceways, cables, wireways, cable trays, and busways will be clear of obstructions and of the working and access space of other equipment.

B. Coordinate with all other trades.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

A. Comply with NECA 1.

B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.

C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.

D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.

E. Right of Way: Give to piping systems installed at a required slope.

3.2 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Electrical penetrations occur when raceways, cables, wireways, cable trays, or busways penetrate concrete slabs, concrete or masonry walls, or fire-rated floor and wall assemblies.

B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.

C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.

D. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.

E. Cut sleeves to length for mounting flush with both surfaces of walls.

F. Extend sleeves installed in floors 2 inches above finished floor level.

G. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable, unless indicated otherwise.

H. Seal space outside of sleeves with grout for penetrations of concrete and masonry

1. Promptly pack grout solidly between sleeve and wall so no voids remain. Tool exposed surfaces smooth; protect grout while curing.

I. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint. Comply with requirements in Division 7 Section "Joint Sealants."

J. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at raceway and cable penetrations. Install sleeves and seal raceway and cable penetration sleeves with firestop materials. Comply with requirements in Division 7 Section "Through-Penetration Firestop Systems."

K. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flexible boot-type flashing units applied in coordination with roofing work.

L. Aboveground, Exterior-Wall Penetrations: Seal penetrations using cast-iron pipe sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.

M. Underground, Exterior-Wall Penetrations: Install cast-iron pipe sleeves. Size sleeves to allow for 1-inch annular clear space between raceway or cable and sleeve for installing mechanical sleeve seals.

3.3 SLEEVE-SEAL INSTALLATION

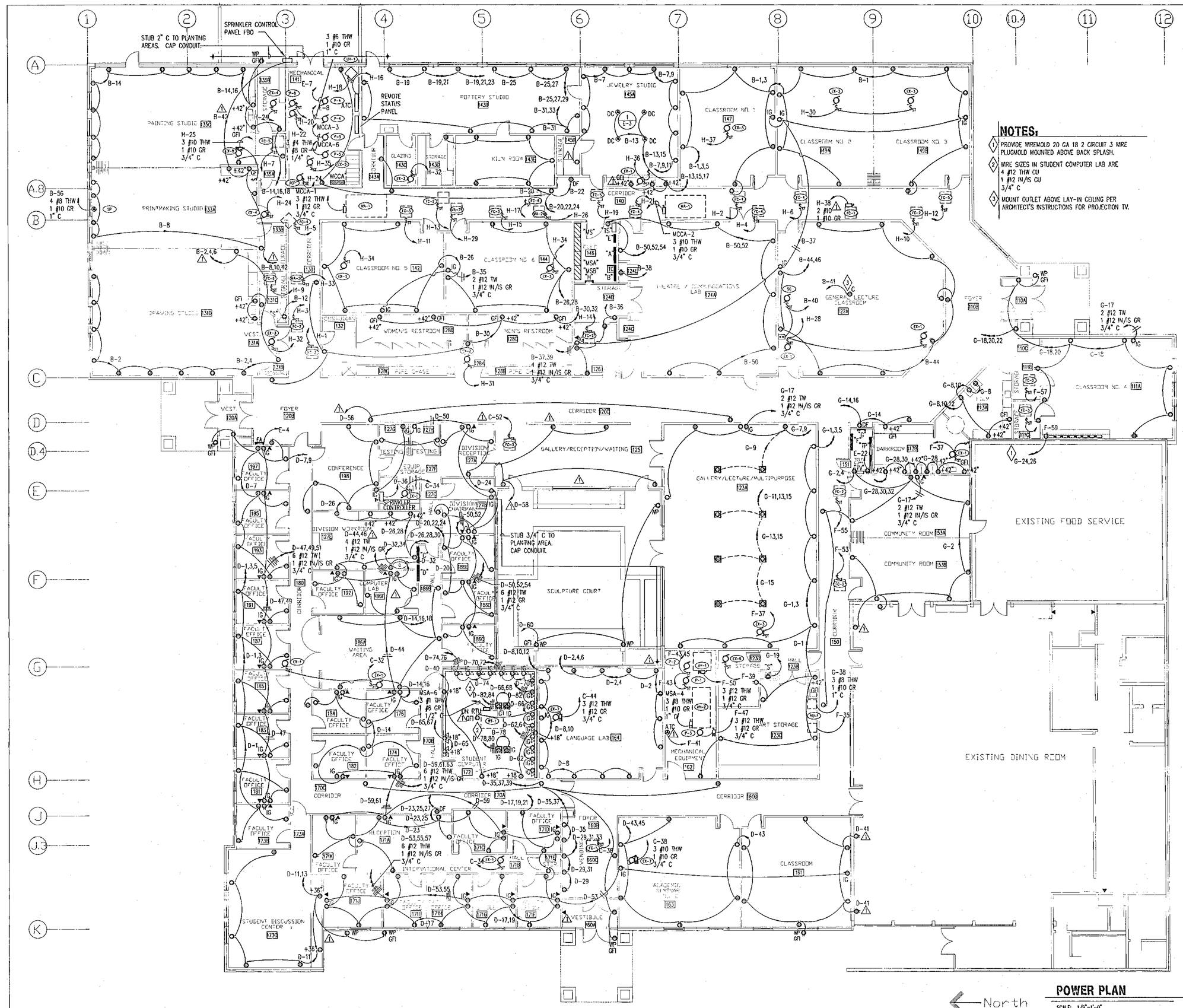
A. Install to seal exterior wall penetrations.

B. Use type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.4 FIRESTOPPING

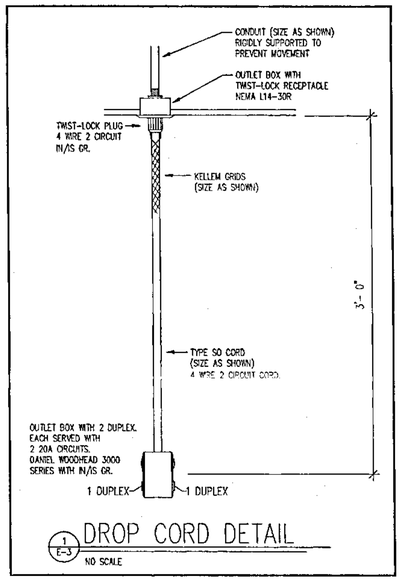
A. Apply firestopping to penetrations of fire-rated floor and wall assemblies for electrical installations to restore original fire-resistance rating of assembly. Firestopping materials and installation requirements are specified in Division 7 Section "Through-Penetration Firestop Systems."

END OF SECTION 16051



NOTES:

1. PROVIDE WIREMOLD 20 GA 18 2 CIRCUIT 3 WIRE PLUGMOLD MOUNTED ABOVE BACK SPLASH.
2. WIRE SIZES IN STUDENT COMPUTER LAB ARE 4 #12 THW CU 1 #12 IN/IS CU 3/4" C
3. MOUNT OUTLET ABOVE LAY-IN CEILING PER ARCHITECT'S INSTRUCTIONS FOR PROJECTION TV.



1 / E-3 DROP CORD DETAIL
NO SCALE

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

SCAN #0002N5E3

THOMAS PETERSEN HAMMOND AND ASSOCIATES
ARCHITECTURE
PLANNING
INTERIOR DESIGN
350 EAST 2100 SOUTH
SALT LAKE CITY, UTAH 84115
801-485-9661 FAX 801-485-9665

PROJECT TITLE

SNOW COLLEGE HUMANITIES AND ARTS BUILDING

⚠ AS-BUILTS JANUARY 8, 1993

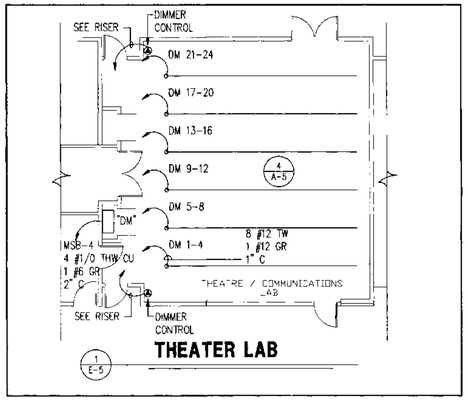
PROJECT NO. 901085.BEF (01085_1P)
DRAWN BY RR
CHECKED BY EF
DATE APRIL 19, 1991

DRAWING TITLE

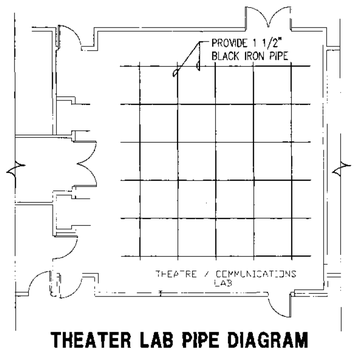
POWER PLAN

DRAWING NUMBER

E-3



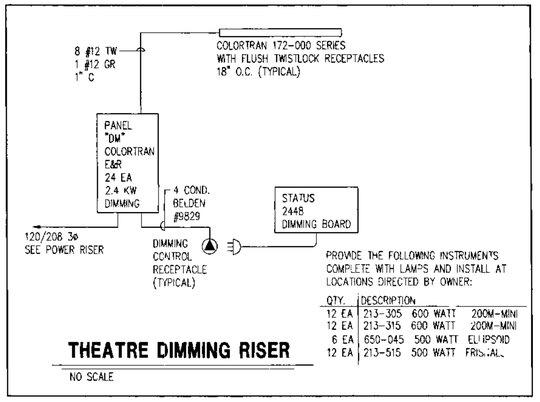
THEATER LAB



THEATER LAB PIPE DIAGRAM

NOTE:

SUPPORT BATTENS AND IRON PIPE TO STRUCTURE. DIMMING SYSTEM SHOP DRAWINGS SHALL INVOLVE FULL SUPPORT LAYOUT AND ALL CONNECTIONS REQUIRED TO CONTRACTOR TO HANDLE ALL WEIGHT OF INSTRUMENTS AND STRUCTURE. INCLUDE ALL COSTS IN DIMMING SYSTEM /DO ALTERNATE.



PROVIDE THE FOLLOWING INSTRUMENTS COMPLETE WITH LAMPS AND INSTALL AT LOCATIONS DIRECTED BY OWNER:

QTY.	DESCRIPTION		
12 EA	213-305	600 WATT	200M-MINI
12 EA	213-315	600 WATT	200M-MINI
6 EA	650-045	500 WATT	ELIPSOID
12 EA	213-515	500 WATT	FRESNEL

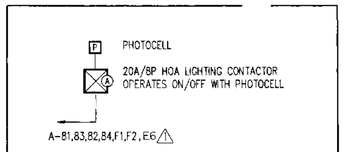
THEATRE DIMMING RISER

NO SCALE

ADD ALTERNATE: REFER TO SECTION 010"J(ALT.) FOR REQUIREMENTS PERTAINING TO BIDDING WORK OF THIS SECTION.

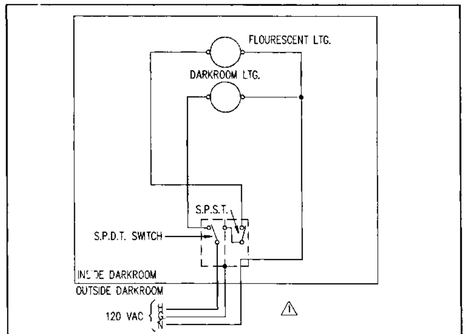
NOTE:

PROVIDE TEMPORARY SERVICE TO KITCHEN PANEL AS SHOWN. MAXIMUM OUTAGE TIME SHALL BE 24 HOURS. PROVIDE 10 DAY WRITTEN NOTICE AND COORDINATE OUTAGE TIME WITH OWNER. PROVIDE TRANSFORMER PAD AT NEW LOCATION; EXTEND PRIMARY SERVICE TO NEW TRANSFORMER PAD; SET TEMPORARY DISCONNECT AT FUTURE PANEL "MS" LOCATION; RUN CONDUCTORS FROM TRANSFORMER PAD TO TEMPORARY DISCONNECT AND FROM TEMPORARY DISCONNECT TO KITCHEN PANEL PRIOR TO DISCONNECTING EXISTING PANEL "K" AND RELOCATING EXISTING TRANSFORMER.



LIGHTING CONTROL DIAGRAM

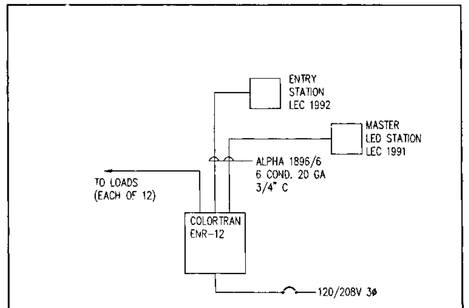
NO SCALE



DARKROOM SWITCHING DETAIL

3 E-6

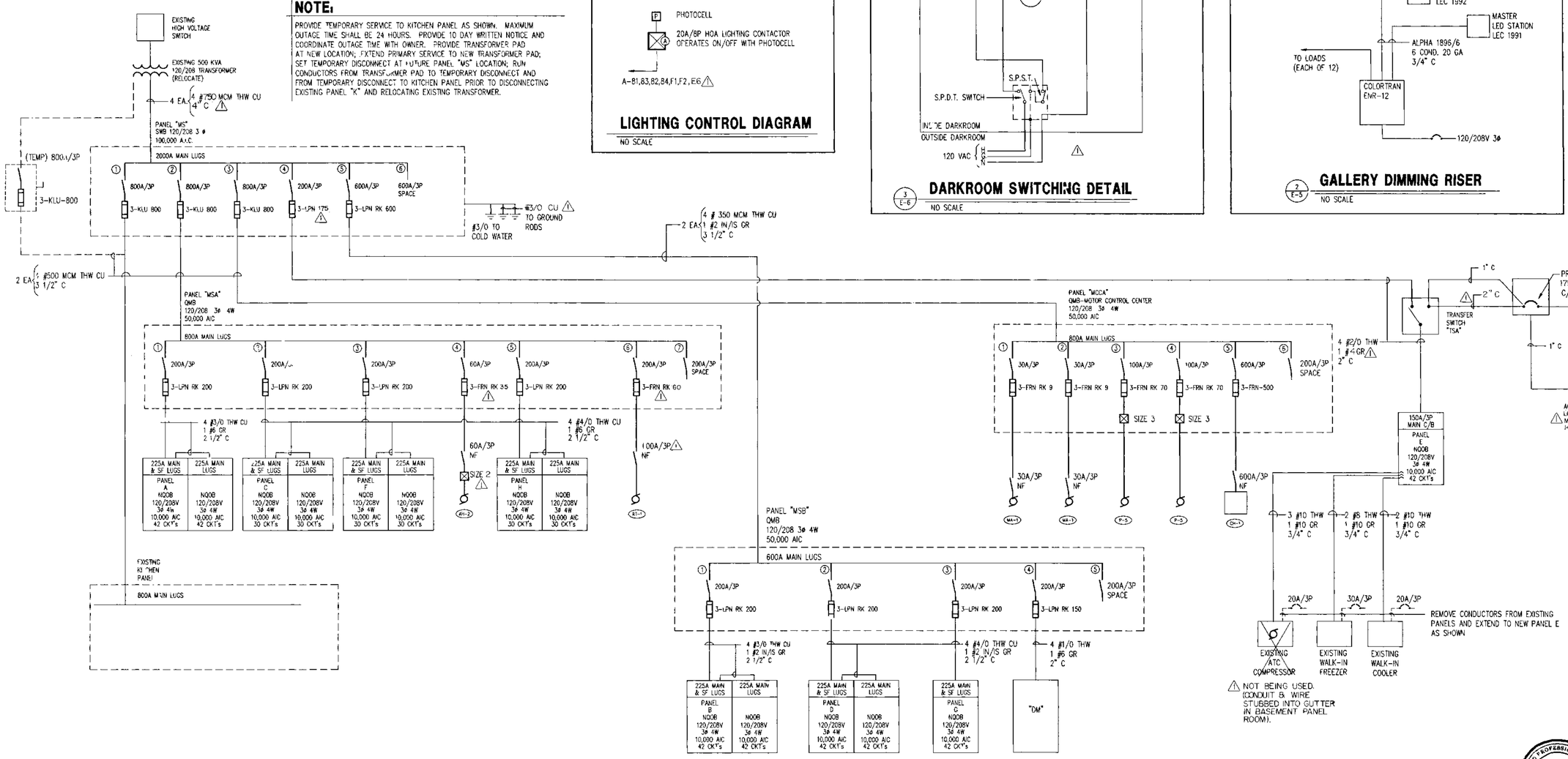
NO SCALE



GALLERY DIMMING RISER

2 E-5

NO SCALE



POWER RISER DIAGRAM

NO SCALE

SCAN #0002N5E5

THOMAS PETERSEN HAMMOND AND ASSOCIATES

ARCHITECTURE
PLANNING
INTERIOR DESIGN

350 EAST 2100 SOUTH
SALT LAKE CITY, UTAH 84115
801-485-9661 FAX 801-485-9665

PROJECT TITLE

SNOW COLLEGE HUMANITIES AND ARTS BUILDING

AS-BUILTS JANUARY 8, 1993

PROJECT NO 901085.BEF (01085RSR)

DRAWN BY RR

CHECKED BY EF

DATE APRIL 19, 1991

DRAWING TITLE

POWER RISER AND DETAILS

DRAWING NUMBER

E-5

LIGHTING FIXTURE SCHEDULE SNOW COLLEGE ARTS & HUMANITIES BLDG.

NOTE TO BIDDERS: Comply with Section 16510, Section 16520, and Section 16551 of the Specifications. The catalog numbers listed below have been carefully prepared to assist the bidders, but may not be complete or accurate. Each Manufacturer prior to bidding shall compare the catalog numbers shown with the description and shall notify the Architect/Engineer of any discrepancies. In addition, the Manufacturer and the Installer shall compare the fixture types with the conditions shown on the drawings and notify the Architect/Engineer of any discrepancies. Bear all costs if these requirements are not complied with. A unit price for each fixture type shall be available to bidders prior to bidding and shall be submitted with the Contractor's proposal. Failure to comply with this requirement may disqualify any manufacturer unless notification is provided in a submittal prior to bidding and accepted by the Architect/Engineer.

D	Thermally protected housing: to acconodate multiple aluminum trims and reflector assemblies as listed below; max 7 1/2" deep.				
D-7	Recessed down light specular clear alzak with black baffle max 150	150W A21	120V	150	Prescolite PBX-to_78S Lithonia LP-RB3 8" deep Omega BY4000LHTW Halo H600T-1603BA Juno TC908-654 Lightolier 7054-MG-B600 Capri TD41AL
DD	Thermally protected housing with trims and reflectors as listed below				
DD-1	Recessed 250W Quartz open alzak cone. No access from above	1-250W QTZ	120V		Prescolite 1[illegible]-746 Marco D23327 Lithonia EQ[illegible]B-AC Dme[illegible] C3543TW Ha[illegible] [illegible]7682T-1650C Cole [illegible]275 Ligh[illegible]lier 7082/782CL
DW	Rectangular extruded aluminum housing; semi-gloss white enamel finish				
DW-1	Semi Recessed 250W Quartz wall washer. UV filters	1-250W QTZ DC	120V		Elliptipar T201-0250-T-02 A-00
EN	Tritium powered EXIT sign. Minimum initial brightnes at time of manufacrure of 0.15 foot lambert. Immediately and under all light conditions visible at 225 feet and ledgible at 140 feet. Cased in high impact 1/8" ABS plastic and must meet ANSI Standard N.510,1968. Universal mounting. Minimum 20 year life.				
EN-1	Single face Exit Green face w/ aluminum frame	Tritium	N/A		SRDI 421 SPL Everglo 700C-20-GRN Isolite 2040-01-G-20 Brandhurst B-100U-20-GN-AF
EN-2	Double face Exit Green face w/ aluminum frame	Tritium	N/A		SRDI 521 SPL Everglo 700C-20-GRN Isolite 2-2040-01-G-20 Brandhurst B-100U-20 D-GN-AF
F	Flange mounted recessed troffers; hinged door and latched flush steel; minimum .125 lens; energy saving ballasts and lamps;				
F-3	2X4 2-lamp; 120V	2-F40LW RS/SS	120ESB	100	Lithonia SPF240A12.125 Columbia 4PS2F-52-242-ESB Metalux 2FS-240A-120V-LE3 Daybrite SF242-SFS21A-ESB Hubbell RD2FNA02E1A9A Keene NRTX-2F-VB-240
GS	Troffers: recessed for lay-in grid; static; hinged and latched door; acrylic prismatic lens, minimun 1/8"; earthquake clips; specification grade.				
GS-5	2 x 4, energy saving ballasts and lamps, 2-lamp, 120V 5" deep max flush steel door.	2-F40 LW/ RS/SS	120V ESB	100	Lithonia SPG 240A12.125-120ES-HTC Metalux 2GS-240A.125-120-LE3-EQ Daybrite CG242C12D-120-ES3 Benjamin AGR-7224-4.125 120 ESB Hubbell RD2GNA02D1A9A Keene XT2GVB240-120 Columbia 4PS2G-52-242-
GS-7	2 x 4, energy saving ballasts and lamps, 4-lamp, 120V 5" deep max flush steel door.	4-F40 LW/ RS/SS	120V ESB	200	Lithonia 2SPG440A12.125-120ES-HTC Metalux 2GS-440A.125-120-LE3-EQ Daybrite CG244C12D-120-ESB Benjamin AGR-7244-4.125 120 ESB Hubbell RD4GNA02E1A9A Keene XT2GVB440-120 Columbia 4PS-2G-52-244-
HD	HID Wall Lights; wall bracket mounting as indicated; high power factor ballasts provide tempered glass shields for 175W and 250W Metal Halide and other lamps requiring end of life protection; finish as specified by Architect.				
HD-1	Wall mount 10-1/4" dia aluminum housing 120V 50W High pressure sodium	50W E-17 E-23 1/2	120V	55	Bega 2557S
IK	Porcelain socket				
IK-1	Keyless, ceiling or wall mounted 60W max.	1-60A			Leviton 9875
IK-2	Ceiling or wall mounted; pull chain; 60W max.	1-60A			Leviton 9816-C2
DC	Wall Pack: adjustable cut off; full perimeter gasketing: wet location; stainless steel hinges and latches; projecting lens; HPF ballast, fused; see elevation for mounting heigfht.				
DC-5	150HPS; 120v;dark bronze; recessed J box;	1-150HPS	120v		Motdcast PCL-1-02-15-12 BZ-1FU
DP	Light poles: totally enclosed raintight, dust-tight and corrosion resistant; pole as shown in detail with handhole, cover, bolt cover, and base; painted (color to be selected by Architect Engineer which may differ from catalog number shown).				
DP-1	Decorative metal halide post top mounting to concrete	1-175 MH	120	300	Sterner KT-S-15-R-1A-175H--120-XX
DP-2	Decorative high pressure sodium single head, 120v ballast;	1-150 HPS	120	180	Valmont D5200-4.68 A-120-FBC w/W.J. Whatley pole E-3115
P3	Parabolic louver fixtures with 3" louvers in plastic protectors and full depth reflector: size as noted; energy saving lamps and ballasts; air return and heat removal; earthquake clips installed on grid fixtures; hinged and latched door				
P3-11	2X4 18 cell lay-in;120V; semi specular silver 3-lamp;provide master/slave fixtures when within 8 feet	3-F40RS/ LW/SS	120V ESB	150	Lithonia 2PM3GC340-18-S 120-ES-LATC-EQ Wright Light PLHI-243G 39 S2-ESB-EQ Daybrite PGC324-P18S24120-ESB-EQ Metalux HR2P3GAX-340S36H -120-LE3-EQ Columbia P4-243-G-43-36[illegible]120 Hubbell RD3GCZDFE1AMS9-S[illegible] [illegible]ghtolier 81673-UU-A1
PF	Parabolic louver fixtures with 3" louvers in plastic protectors and full depth reflector: size as noted; energy saving lamps and ballasts; air return and heat removal; flange mounted fixtures; hinged and latche[illegible] door.				
PF-1	1 x 4 flange 2-lamps semi-specular silver 9 cell parabolic	2-F40/RS LW/SS	120V ESB	100	Columbia P4-142F-43193-1-120 Lithonia PM3FC-240-9-120 ES
S	Strip light: energy saving ballast; steel strip; emergency saving lamnps; suitable for mounting on low density ceilings;				
S-3	2-lamp 8 foot rapid start	2-F40 LW/SS	120ESB	70	Lithonia 8TC140HRS-120ESB Keene CS-140-RST-HPF120ES Metalux 8TSS140-LE3-120 Daybrite 8TC140HRS120ESB Hubbell SW82R-E1 Keystone CS-140-8-LE-120ES
S-5	2-lamp 4 foot rapid start	2-F40 LW/SS	120ESB	70	Lithonia C240HRS-120ESB Keene CS-240-RS-HPF120ES Metalux SS240-LE3-120 Daybrite C240HRS120ESB Hubbell SD42R-E1 Keystone CS240-RS-120ESB
S-7	2-lamp 8 foot HO 120V	2-F96T12 LW	120	220	Lithonia UN-296HO-120 Keene CD-296-HO-120 Metalux STN296HO-120 Daybrite C-296HO-120 Hubbell SD82H-E1 Keystone K-296HO-LE-120
SC	Staggered strip light: energy saving ballast; steel strip; energy saving lamps; suitable for mounting on low density ceilings; prior to ordering fixtures verify cove or valence dimensions for suitable shielding and size.				
SC-3	2-lamp 4 foot rapid start 120V	2-F40RS/SS LW	120ESB	70	Lithonia SS240-RS-120ES Keene STG-240-RS-120ESB Metalux SL-140-LE3-120 Neoray 57/2-4-120ESB Duray SS-240-120-ESB
SC-5	2-lamp 2 foot rapid start 120V	2-F20T12 LW	120ESB	50	Lithonia SS220-RS-120ES Keene STG-220-RS-120ESB Metalux SL-220-LE3-120 Neoray [illegible]7/2-2-120ESB Duray SS-220-120-ESB
SS	General purpose industrial: white enamel aperatured reflector; energy saving ballasts stem mounted with tong hangers				
SS-1	4' 2 lamp rapid start 120V	2-F40RS/SS LW	120ESB	70	Lithonia PV240-120-ES-102B
TH	Track and track lights: length of track and number of fixtures and related fittings as shown on drawings.				
TH-6	Track light: 2 circuit track length of track as shown.	MR16-75W		75	Halo L640P series 2 circuit track w/48ea L2775P Heads and 24ea L1760P heads; provide 6ea 1955, 6ea L200; 6ea L111 and 6ea L115 accessories
TH-7	Track light: 1 circuit track length of track and number of fixtures as shown.	150W PAR38FL			Halo L650P Series Track L1543P heads
W	Low profile wraparound: surface mounted suitable for mounting on low density ceilings wraparound acrylic prismatic diffuser; white enamel endplates; minimum CU of 70 @ 80/50/20 and RCR=1; energy saving lamps and energy saving ballasts.				
W-3	Narrow body wraparound, 2-lamp approx; 3" x 10"x 48" 120V	2-F40RS/SS LW	120ESB	70	Lithonia LB240A-120ES Daybrite WA142-120-ESB Metalux WS-240A-120LE3 Keene KBT-240-120-LE

SYMBOL SCHEDULE

SYMBOLS	MOUNTING	DESCRIPTION
GRAPHIC SYMBOLS:		COMPARE WITH SYMBOLS SHOWN ON ARCHITECTURAL DRAWINGS: IF SYMBOLS VARY CONTACT ARCHITECT/ENGINEER FOR CLARIFICATION.
5 / E-1		DETAIL REFERENCE: 5 INDICATES DETAIL NUMBER. E-1 INDICATES DRAWING SHEET WHICH DETAIL IS SHOWN.
E-1		ROOM OR SPACE NUMBER.
CU-1		EQUIPMENT NUMBER
		ELECTRICAL NOTE
		REVISION
		BREAK LINE: TO BREAK OFF PARTS OF DRAWING.
		WIRING CONCEALED IN CEILING OR WALL
		WIRING CONCEALED IN FLOOR.
A1,3,5		BRANCH CIRCUIT HOME RUN TO PANEL BOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATION IDENTIFY PANEL AND CIRCUIT NUMBERS. CROSS LINES INDICATE NUMBER OF CONDUCTORS OR CABLES. FOR BRANCH WIRING CROSS LINES INDICATE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
P / TV / S / FA		WIRING AND/OR RACEWAY: P FOR POWER, T FOR TELEPHONE, TV FOR TELEVISION, S FOR SOUND, FA FOR FIRE ALARM, I FOR INTERCOM AND OTHERS AS NOTED IN OTHER SCHEDULES. RACEWAYS AND WIRING SHALL BE SIZED AS SHOWN AND/OR SPECIFIED.
LIGHTING OUTLETS:		REFER TO THE LIGHTING FIXTURE SCHEDULE FOR FIXTURE SELECTIONS, VOLTAGE OF FIXTURE CONNECTION, LAMP AND BALLAST TYPES, AND MOUNTING CONDITION. REFER TO SHOP DRAWINGS AND PRODUCT DATA FOR INSTALLATION REQUIREMENTS. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS OF FIXTURE OUTLETS AND PENDANT LENGTHS. WHERE THE INFORMATION IS NOT SHOWN VERIFY THE REQUIREMENTS WITH THE ARCHITECT/ENGINEER. REFER TO THE ARCHITECTURAL, STRUCTURAL MECHANICAL, FIRE SPRINKLER, AND OTHER DRAWINGS FOR COORDINATING RECESSED DEPTH OF FIXTURES AS SHOWN IN THE SUBMITTALS. PRIOR TO ORDERING FIXTURES VERIFY EACH OF THE ABOVE AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
1-3 / 100		FIXTURE IDENTIFICATION: 1-3 INDICATES FIXTURE TYPE AS SCHEDULED; 100 INDICATES ALLOWABLE WATTAGE.
	CEILING	SURFACE OR PENDENT FIXTURE: POINT SOURCE
	WALL	SURFACE OR BRACKET FIXTURE: POINT SOURCE
	CEILING	SURFACE OR PENDENT FIXTURE: LINEAR SOURCE
	CEILING	RECESSED FIXTURE: POINT SOURCE
G	GROUND	RECESSED FIXTURE: GROUND
	CEILING	RECESSED FIXTURE: LINEAR SOURCE
OP	POLE	POLE LIGHTING FIXTURE: SEE DETAIL
	CEILING,WALL	TRACK LIGHT
	AS NOTED	FLOODLIGHT OR TRACK LIGHT
	CEILING,WALL	SURFACE OR PENDENT LIGHT: ARROWS INDICATE DIRECTION OF EGRESS.
NL		NIGHT LIGHT: DO NOT SWITCH
EM		EMERGENCY LIGHT
B		BOLLARD
PANELBOARDS, SWITCHBOARDS & RELATED EQUIPMENT:		REFER TO THE POWER RISER AND PANEL SCHEDULES FOR CONNECTION, OVERCURRENT AND RELATED DATA. REFER TO SHOP DRAWINGS AND PRODUCT DATA FOR INSTALLATION REQUIREMENTS. REFER TO THE ARCHITECTRUAL STRUCTURAL MECHANICAL, FIRE SPRINKLER AND OTHER DRAWINGS FOR COORDINATING LOCATION OF PANELBOARDS WITHIN THE REQUIREMENTS OF NEC 384-2. COORDINATE WALL DEPTHS PRIOR TO ORDERING EQUIPMENT.
	TOP @ 80"	FLUSH PANELBOARD WITH CABINET
	TOP @ 80"	SURFACE PANELBOARD WITH CABINET
	CONCRETE CURB	MAIN DISTRIBUTION PANEL OR SWITCHBOARD
	AS NOTED	DISCONNECT SWITCH: "F" INDICATES FUSED DISCONNECT
	AS NOTED	MOTOR OR OTHER POWER CONTROLLER
	AS NOTED	COMBINATION SWITCH AND CONTROLLER
$ST	AS NOTED	TOGGLE MOTOR STARTER SWITCH WITH OVERLOAD PROTECTION
M	AS REQUIRED	METER
WIRING DEVICES		REFER TO SECTION 16140 AND WIRING DEVICE SCHEDULES FOR WIRING DEVICE SELECTION AND INSTALLATION REQUIREMENTS. MOUNTING HEIGHTS SHOWN ARE TYPICAL HEIGHTS. REFER TO SECTION 16140, DIVISION 16 DRAWINGS, ARCHITECTURAL ELEVATIONS, DRAWINGS AND SPECIFICATIONS, FOR ACTUAL MOUNTING HEIGHTS. SUPERSCRIPT INDICATES OUTLET CONTROLLED.
		JUNCTION BOX
	18"	DUPLEX RECEPTACLE OUTLET: SEE SPEC
	18"	FOURPLEX RECEPTACLE OUTLET: SEE SPEC.
WP	18"	DUPLEX RECEPTACLE OUTLET, WEATHERPROOF: NEMA 5-20R
IG	18"	DUPLEX RECEPTACLE OUTLET, ISOLATED GROUND: NEMA 5-20R
GFI	18"	DUPLEX RECEPTACLE OUTLET, GFI: NEMA 5-20R
	FLOOR	FLOOR DUPLEX OUTLET: NEMA 5-20R
W	AS NOTED	WET LABEL OUTLET: NEMA 5-20R
DF	WALL	DRINKING FOUNTAIN OUTLET: CONCEAL WATER COOLER OUTLET BEHIND WATER COOLER. SEE DIVISION 15 SHOP DRAWINGS FOR INSTALLATION REQUIREMENTS
	AS NOTED	MULTI-OUTLET ASSEMBLY: NEMA5-15R
PP	FLOOR/CEILING	TELEPHONE/POWER POLE: SEE SPECIFICATION
$	48"	SINGLE POLE SWITCH
$3	48"	THREE WAY SWITCH
$4	48"	FOUR WAY SWITCH
$P	48"	SWITCH WITH PILOT LIGHT
$T	48"	TIMER SWITCH
$D	48"	DIMMER SWITCH

SYMBOLS	MOUNTING	DESCRIPTION
SPECIAL OUTLETS:		REFER TO SECTION 16070 AND EQUIPMENT SCHEDULES FOR DESIGN CAPACITIES AND REQUIREMENTS PERTAINING TO CONNECTION WORK. PRIOR TO PURCHASING OR INSTALLING ELECTRICAL WORK, REFER TO EQUIPMENT SHOP DRAWINGS FOR MANUFACTURER'S INSTALLATION INSTRUCTIONS INCLUDING CONTROL WIRING, MOUNTING HEIGHTS AND PLUG CONFIGURATIONS. MOUNTING HEIGHTS INDICATED IN THIS SCHEDULE ARE TYPICAL HEIGHTS. COORDINATE SHOP DRAWINGS WITH ARCHITECTURAL ELEVATIONS, ARCHITECTURAL DRAWINGS AND SPECIFICATIONS, DIVISION 15 DRAWINGS AND SPECIFICATIONS.
	AS REQUIRED	MOTOR OUTLET
F	AS REQUIRED	EXHAUST FAN OUTLET
T	48"	THERMOSTAT
	AS NOTED	SPECIAL PURPOSE OUTLET
	FLOOR	SPECIAL PURPOSE FLOOR OUTLET
P	AS NOTED	PHOTOCELL
		TELEVISION
CLOCK SYSTEMS WIRING DEVICES:		MOUNTING HEIGHTS SHOWN ARE TYPICAL HEIGHTS. REFER TO RELATED SPECIFICATIONS, DIVISION 16 DRAWINGS, ARCHITECTURAL ELEVATIONS, DRAWINGS AND SPECIFICATIONS FOR ACTUAL MOUNTING HEIGHTS.
C	96"	12" ROUND WALL CLOCK
TELEPHONE/DATA SYSTEMS WIRING DEVICES:		MOUNTING HEIGHTS SHOWN ARE TYPICAL HEIGHTS. REFER TO RELATED SPECIFICATIONS, DIVISION 16 DRAWINGS, ARCHITECTURAL ELEVATIONS, DRAWINGS AND SPECIFICATIONS FOR ACTUAL MOUNTING HEIGHTS.
	18"	TELEPHONE OUTLET
W	48"	TELEPHONE OUTLET: WALL PHONE
	FLOOR	TELEPHONE OUTLET
	18"	DATA OUTLET
	WALL	TELEPHONE TERMINAL BOARD
FIRE ALARM SYSTEM:		REFER TO SECTION 16721 FOR DEVICE SELECTION AND INSTALLATION REQUIREMENTS. REFER TO SHOP DRAWINGS FOR ROUGH-IN AND WIRING DIAGRAMS. MOUNTING HEIGHTS SHOWN ARE TYPICAL HEIGHTS. REFER TO SECTION 16721, DIVISION 16 DRAWINGS ARCHITECTURAL ELEVATIONS, DRAWINGS AND SPECIFICATIONS, FOR ACTUAL MOUNTING HEIGHTS. LOCATION OF SMOKE DETECTORS SHALL BE SELECTED ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND NFPA STANDARDS.
"FA"	TOP @ 80"	FIRE ALARM PANEL, SEMI-RECESSED
F	48"	MANUAL PULL STATION
S	CEILING/WALL	SMOKE DETECTOR: "I" INDICATES IONIZATION, "P" INDICATES PHOTOELECTRIC
S A	CEILING/WALL	SMOKE DETECTOR: WITH AUXILIARY CONTACT
DS	DUCT	DUCT DETECTOR: "I" INDICATES IONIZATION, "P" INDICATES PHOTOELECTRIC
D	CEILING/WALL	HEAT DETECTOR: COMBINATION FIXED AND RATE OF RISE
FS	PIPE	WATER FLOW SWITCH: FLOW SWITCHES SHALL BE PROVIDED AND INSTALLED WITH FIRE SPRINKLER SYSTEM AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS
TS	PIPE	TAMPER SWITCH: TAMPER SWITCHES SHALL BE PROVIDED AND INSTALLED WITH THE FIRE SPRINKLER SYSTEM AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS
H	+84"	ALARM HORNS, WITH PROJECTORS AS SHOWN
B	+84"	ALARM BELL
M	AS NOTED	MAGNETIC DOOR HOLDERS
C	AS NOTED	AUTOMATIC DOOR CLOSERS: DOOR CLOSERS SHALL BE FURNISHED WITH DOOR HARDWARE AND CONNECTED TO BY DIV-16 INSTALLERS. VERIFY THAT THE DOOR CLOSER SHALL OPERATE AT 24VDC
A	+60"	ANNUNCIATOR: MULTIZONE
A R	+60"	ANNUNCIATOR: FOUR ZONE
R	AS NOTED	SHUT DOWN RELAYS: INSTALL RELAY IN CONTROL CIRCUIT OF EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A FIRE

THOMAS PETERSEN HAMMOND AND ASSOCIATES

ARCHITECTURE
PLANNING
INTERIOR DESIGN

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PROJECT TITLE

SNOW COLLEGE HUMANITIES AND ARTS BUILDING

PROJECT NO. 901085.BEF (01085SYM)
DRAWN BY RR
CHECKED BY EF
DATE APRIL 19, 1991

DRAWING TITLE

SYMBOL AND FIXTURE SCHEDULES

REGISTERED PROFESSIONAL ENGINEER 7523 STEWART EDWARD GREENE STATE OF UTAH

SCAN #0002N5E6

DRAWING NUMBER

E-6

AH-1 EQUIPMENT DESCRIPTION: AIR HANDLER UNIT
EQUIPMENT ID AH-1 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1 1/2 5.7 208 3/3 3 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 3 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 30 AMPS 3 POLE 3-FRN RK 7 LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER SIZE: 0 TYPE: FVNR
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN
2 NO/2 NO CONTACTS, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

AH-2 EQUIPMENT DESCRIPTION: AIR HANDLER UNIT
EQUIPMENT ID AH-2 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
7 1/2 30 24.2 208 3/3 3 #8 THW, 1 #10 GR, 1' C
NAMEPLATE DATA( )( ))( )( )( )( )( )
OVERCURRENT PROTECTION: 60 AMPS 3 POLE 3-FRN RK 30 LOCATION: PANEL MSA
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 60 AMPS 3 POLE NF LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
⚠1 STARTER SIZE: 2 TYPE: FVNR
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN
2 NO/2 NO CONTACTS, PHASE FAILURE RELAY, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

EX-1 EX-3 EQUIPMENT DESCRIPTION: EXHAUST FAN
EQUIPMENT ID EX-1,EX-3 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
⚠1 1/4 4.4 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER: PROVIDED BY DIVISION 15 EXCEPT WHERE WALL SWITCH IS SHOWN ON PLANS
CONTROL WIRING: BY DIVISION 15

EX-2 EX-5 EX-6 EQUIPMENT DESCRIPTION: EXHAUST FAN
EQUIPMENT ID SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
⚠1 3/4 9.8 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER: FURNISHED BY DIVISION 15
CONTROL WIRING: BY DIVISION 15 INSTALLER

EX-7 EX-8 EQUIPMENT DESCRIPTION: EXHAUST FAN
EQUIPMENT ID EX-7,EX-8 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1 1/2 5.7 208 3/3 3 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 3 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 30 AMPS 3 POLE 3-FRN RK 7 LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER SIZE: 0 TYPE: FVNR
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN
2 NO/2 NO CONTACTS, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

FC-1 EQUIPMENT DESCRIPTION: FAN COIL UNIT
EQUIPMENT ID FC-1 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
.08 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER: BY DIVISION 15 INSTALLER
CONTROL WIRING: BY DIVISION 15 INSTALLER

FC-2 FC-3 EQUIPMENT DESCRIPTION: FAN COIL UNIT
EQUIPMENT ID FC-2,FC-3 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MC. FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1/3 7.2 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER BY DIVISION 15 INSTALLER
CONTROL WIRING: BY DIVISION 15 INSTALLER

FC-4 FC-5 EQUIPMENT DESCRIPTION: FAN COIL UNIT
EQUIPMENT ID FC-4,FC-5 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1/2 9.8 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER BY DIVISION 15 INSTALLER
CONTROL WIRING: BY DIVISION 15 INSTALLER

FC-6 FC-7 EQUIPMENT DESCRIPTION: FAN COIL UNIT
EQUIPMENT ID FC-6,FC-7 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
3/4 13.8 120 1/2 2 #10 THW, 1 #10 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 30 AMPS 1 POLE C/B LOCATION: PANEL
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH * LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER BY DIVISION 15 INSTALLER
CONTROL WIRING: BY DIVISION 15 INSTALLER
⚠1 *FC-7 30A/2P FRN RK 12 DISCONNECT

MA-1 EQUIPMENT DESCRIPTION: MAKE-UP AIR UNIT
EQUIPMENT ID MA-1 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
2 7.5 208 3/3 3 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 30 AMPS 3 POLE 3-FRN RK 9 LOCATION: PANEL MCCA
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 30 AMPS 3 POLE NF LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER SIZE: FURNISHED BY DIVISION 15
CONTROL WIRING: BY DIVISION 15 INSTALLER

MA-2 EQUIPMENT DESCRIPTION: MAKE-UP AIR UNIT
EQUIPMENT ID MA-2 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1/4 5.8 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL A
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER: FURNISHED BY DIVISION 15
CONTROL WIRING: BY DIVISION 15 INSTALLER

P-1 P-2 EQUIPMENT DESCRIPTION: PUMP
EQUIPMENT ID P-1,P-2 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1/3 7.2 120 1/2 2 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 1 POLE C/B LOCATION: PANEL F
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: THERMAL SWITCH LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER: SAME AS O.C. PROTECTION

P-3 EQUIPMENT DESCRIPTION: PUMP
EQUIPMENT ID P-3 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
2 7.5 208 3/3 3 #12 THW, 1 #12 GR, 3/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 20 AMPS 3 POLE C/B LOCATION: PANEL F
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 30 AMPS 3 POLE 3-FRS RK 7 LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER SIZE: 0 TYPE: FVNR
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN
2 NO/2 NO CONTACTS, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

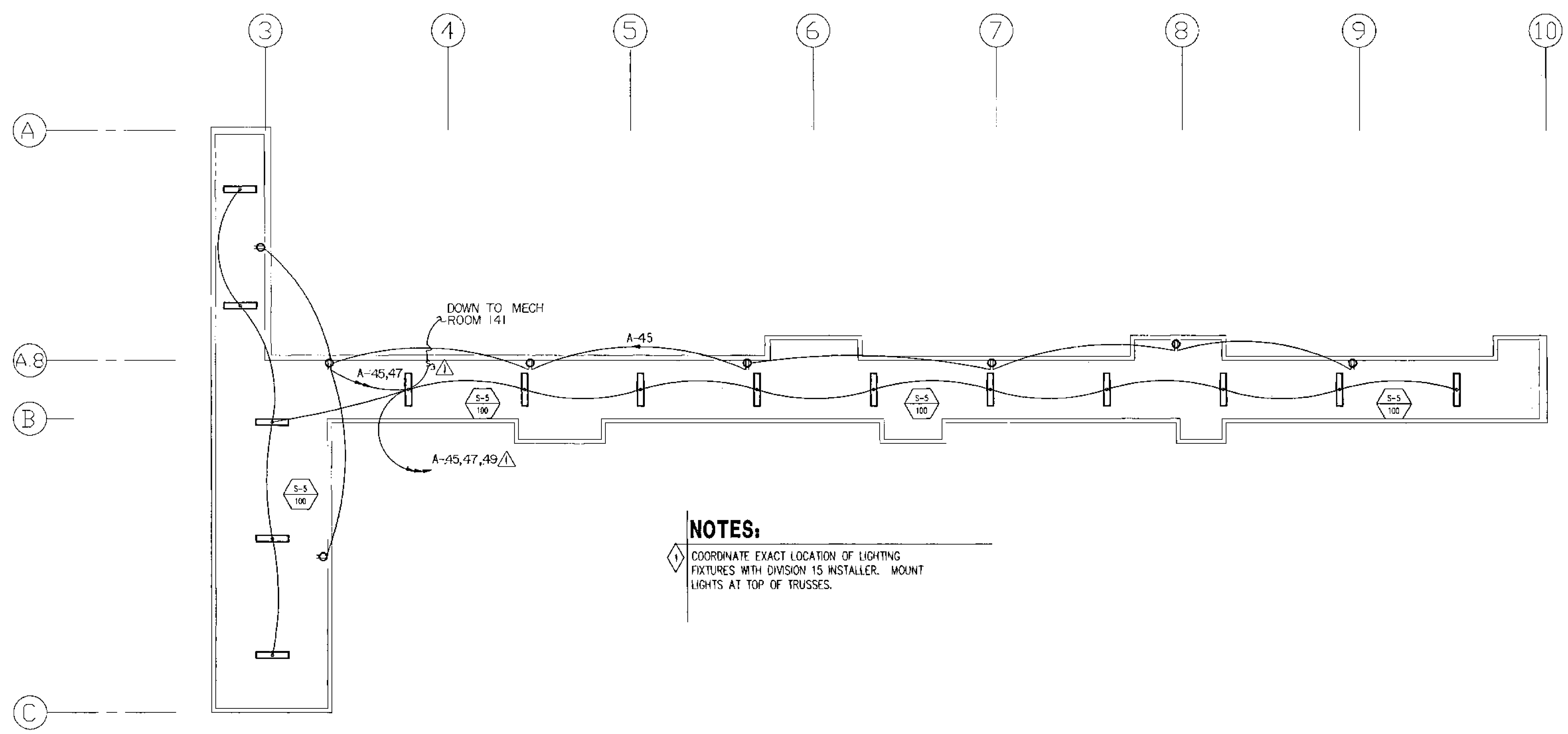
P-4 EQUIPMENT DESCRIPTION: PUMP (2 EA)
EQUIPMENT ID P-4 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
15 57.8 46.2 208 3/3 3 #6 THW, 1 #10 GR, 1' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 100 AMPS 3 POLE C/B LOCATION: PANEL E
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 60 AMPS 3 POLE 3-FRN RK 50 LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER SIZE: 3 TYPE: FVNR
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN
2 NO/2 NO CONTACTS, PHASE FAILURE RELAY, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

P-5 EQUIPMENT DESCRIPTION: PUMP (2 EA)
EQUIPMENT ID F-5 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
20 74.2 59.4 208 3/3 3 #4 THW, 1 #8 GR, 1 1/4' C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 100 AMPS 3 POLE 3-FRN RK 70 LOCATION: PANEL MCCA
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: O.C. PROTECTION LOCATION: PANEL MCCA
INSTALLED: AMPS POLE REMARKS:
STARTER SIZE: 3 TYPE: FVNR IN MCC
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN
2 NO/2 NO CONTACTS, PHASE FAILURE RELAY, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

RT-1 EQUIPMENT DESCRIPTION: ROOF TOP UNIT
EQUIPMENT ID RT-1 SYSTEM: HVAC LOCATION? SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
1 1/2 100 208 3/3 3 #1 THW, 1 #6 GR, 1 1/2' C
NAMEPLATE DATA( )( ))( )( )( )( )( )
OVERCURRENT PROTECTION: 200 AMPS 3 POLE 3-FRN RK 90 LOCATION: PANEL MSA
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 200 AMPS 3 POLE NF LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER : FURNISHED BY DIVISION 15 INSTALLER
CONTROL WIRING: BY DIVISION 15 INSTALLER

HU-1 EQUIPMENT DESCRIPTION: HUMIDIFICATION UNIT
EQUIPMENT ID HU-1 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
35 208 3/3 3 #8 THW, 1 #10 GR, 1'C
NAMEPLATE DATA( )( )( )( )( )( )( )( )
OVERCURRENT PROTECTION: 40 AMPS 3 POLE C/B LOCATION: PANEL G
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: AMPS POLE LOCATION:
INSTALLED: AMPS POLE REMARKS:
CONTROL WIRING: BY DIVISION 15 INSTALLER
VOLT CONTROL WITH HOA, RED PILOT INDICATING RUN, START/STOP PUSHBUTTON
2 NO/2 NO CONTACTS, CONTROL TRANSFORMER. SEE SCHEMATIC
INSTALLED: MFG PART NO. OL HEATERS
SIZED A TO A. SPECIAL INSTRUCTIONS:

CH-1 EQUIPMENT DESCRIPTION: CHILLER
EQUIPMENT ID CH-1 SYSTEM: HVAC LOCATION: SEE PLANS
DESIGN ELECTRICAL DATA (NAMEPLATE DATA TO BE COMPLETED BY INSTALLER)
N.F.C. SECTION HP KW MCA FLA VOLTAGE PH/W WIRE/CONDUIT SIZE
140 490 457 208 3/3 2 EA 3 #250 MCM THW CU
NAMEPLATE DATA( )( ))( )( )( )( )( )
OVERCURRENT PROTECTION: 600 AMPS 3 POLE 3-FRN RK 500 LOCATION: PANEL MCCA
INSTALLED: AMPS POLE REMARKS:
DISCONNECT SWITCH: 600 AMPS 3 POLE NF LOCATION: ADJACENT EQUIPMENT
INSTALLED: AMPS POLE REMARKS:
STARTER: FURNISHED WITH EQUIPMENT
CONTROL WIRING: BY DIVISION 15 INSTALLER



NOTES:

1. COORDINATE EXACT LOCATION OF LIGHTING FIXTURES WITH DIVISION 15 INSTALLER. MOUNT LIGHTS AT TOP OF TRUSSES.

North

MECHANICAL SPACE ELECTRICAL PLAN

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

SCAN #0002N5E7

REGISTERED PROFESSIONAL ENGINEER 7523 STEWART EDWARD GREENE STATE OF UTAH

THOMAS PETERSEN HAMMOND AND ASSOCIATES
ARCHITECTURE
PLANNING
INTERIOR DESIGN
350 EAST 2100 SOUTH
SALT LAKE CITY, UTAH 84115
801-485-9661 FAX 801-485-9665

PROJECT TITLE
SNOW COLLEGE HUMANITIES AND ARTS BUILDING

⚠1 AS-BUILTS JANUARY 8, 1993
PROJECT NO. 901085.BEF (01085SCH)
DRAWN BY RR
CHECKED BY EF
DATE APRIL 19, 1991
DRAWING TITLE
EQUIPMENT SCEDULES AND MECHANICAL SPACE ELECTRICAL PLAN
DRAWING NUMBER
E-7

1/6/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085A
△1 PANEL IDENT: A TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: SURFACE 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, SUBFEED LUGS

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1	9			RM 149B	1.8	3			1.2	RM 131D	12			20	1	2
3	20	1	9			RM 149A	1.8		3		1.2	RM 131D	12			20	1	4
5	20	1	9			RM 147	1.8			3.1	1.3	RM 131D	13			20	1	6
7	20	1	15			RM 145A	1.5	3.3			1.8	RM 131D			1	20	1	8
9	20	1	12			RM 143B	1.2		1.7		0.5	131BC,133B	5			20	1	10
11	20	1	12			RM 143B	1.2			2.4	1.2	HALL	12			20	1	12
13	20	1			1	RM 135C	1.8	3.6			1.8	RM 142	9			20	1	14
15	20	1	15			RM 135C	1.5		3.3		1.8	RM 144	9			20	1	16
17	20	1	18			RM 135C	1.8			3	1.2	RM 128,132	12			20	1	18
19	20	1	12			RM 133A	1.2	2.8			1.6	128C,126,124D	14			20	1	20
21	20	1	12			RM 133A	1.2		2.6		1.4	RM 124A	14			20	1	22
23	20	1	15			141,143D,E	1.5			2.9	1.4	RM 124A	14			20	1	24
25	20	1				SPARE		0.9			0.9	RM 124A	9			20	1	26
27	20	1	16			RM 122A	1.6		1.6			SPARE				20	1	28
29	20	1	16			RM 122A	1.6			1.6		SPARE				20	1	30
31	20	1	8			RM 122A	1.2	1.2				SPARE				20	1	32
33	20	1	8			RM 122A	1.2		1.2			SPARE				20	1	34
35	20	1				SPARE				0		SPARE				20	1	36
37	20	1				SPARE		0				SPARE				20	1	38
39	20	1				SPARE			0			SPARE				20	1	40
41	20	1				SPARE				0		SPARE				20	1	42
43	20	1				SPARE		0				SPACE				20	1	44
45	20	1		4		MEZZ CO'S	0.8		0.8			SPACE				20	1	46
47	20	1		4		MEZZ CO'S	0.8			0.8		SPACE				20	1	48
49	20	1	15			MEZZ LTG	1.5	1.5				SPACE				20	1	50
51	20	1	2			POLE LTG	0.4		1		0.6	POLE LTG	3			20	1	52
53	20	1	5			POLE LTG	1			1.6	0.6	POLE LTG	3			20	1	54
55	20	1				SPACE		0				SPACE				20	1	56
57	20	1				SPACE			0			SPACE				20	1	58
59	20	1				SPACE				0		SPACE				20	1	60
61	20	1				SPACE		0				SPACE				20	1	62
63	20	1				SPACE			0			SPACE				20	1	64
65	20	1				SPACE				0		SPACE				20	1	66
67	20	1				SPACE		0				SPACE				20	1	68
69	20	1				SPACE			0			SPACE				20	1	70
71	20	1				SPACE				0		SPACE				20	1	72
73	20	1				SPACE		0				SPACE				20	1	74
75	20	1				SPACE			0			SPACE				20	1	76
77	20	1				SPACE				0		SPACE				20	1	78
79	20	1				SPACE		0				SPACE				20	1	80
81	20	1				SPACE			0			SPACE				20	1	82
83	20	1				SPACE				0		SPACE				20	1	84

TOTALS: KVA PER PHASE 16 15 15 TOTAL KVA 46
AMPS PER PHASE 135 126 128 AVG AMP PER PHASE 130

WIRING: 4#3/0 THW CU, 1 #6 GR, 2 1/2 INCH CONDUIT

1/6/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085B
△1 PANEL IDENT: B TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: SURFACE 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1		6		RM 149B	1.1	1.9			0.8	RM 131D		4		20	1	2
3	20	1		5		RM 149A	0.9		1.8		0.9	RM 131D		5		20	1	4
5	20	1		7		RM 147	1.3			2.2	0.9	RM 131D		5		20	1	6
7	20	1		4		RM 145A	0.8	1.6			0.8	RM 133A		4		20	1	8
9	20	1		3		RM 145A	0		0.8		0.8	RM 133A		4		20	1	10
11	20	1		4		RM 145A	0.8			1.2	0.4	SOUND CAB		2		20	1	12
13	20	1			2	RM 145A	0.2	1			0.8	RM 135C		4		20	1	14
15	20	1			2	RM 145A	0.2		1.1		0.9	RM 135C		5		20	1	16
17	20	1		3		RM 145A	0.6			1.7	1.1	RM 135C		6		20	1	18
19	20	1		1		RM 143B	0.2	1.3			1.1	RM 143DE		6		20	1	20
21	20	1		1		RM 143B	0.2		0.7		0.5	DRINK FTN		1		20	1	22
23	20	1		1		RM 143B	0.2			1.1	0.9	RM 141,HALL		5		20	1	24
25	20	1		1		RM 143B	0.2	1.3			1.1	RM 142		6		20	1	26
27	20	1		1		RM 143B	0.2		1.3		1.1	RM 144		6		20	1	28
29	20	1		1		RM 143B	0.2			1	0.8	HALL,RM 132		4		20	1	30
31	20	1		4		RM 143B	0.8	1.6			0.8	RM 128CD		4		20	1	32
33	20	1		2		RM 143B	0.4		0.4			SPARE				20	1	34
35	20	1		2		142,144 COMP	0.4			0.8	0.4	126,124D,COR		2		20	1	36
37	20	1		3		147,149AB COMP	0.6	1			0.4	VIDEO CAB		2		20	1	38
39	20	1		2		122A,126 COMP	0.4		0.9		0.5	SCREEN			1	20	1	40
41	20	1		1		122A TV	0.2			1.4	1.2	SPRINK CONTR			1	20	1	42
43	20	1				SPARE		1.1			1.1	RM 122A		6		20	1	44
45	20	1				SPARE			0.8		0.8	RM 122A		4		20	1	46
47	20	1				SPARE				0		SPARE				20	1	48
49	20	1			1	TANK HEATER	1.8	2.2			0.4	RM 124A		2		20	1	50
51	20	1			1	BATTERY CHARG	1.8		2.4		0.6	RM 124A		3		20	1	52
53	20	1			1	COOLANT HEATER	1.8			2.6	0.8	RM 124A		4		20	1	54
55	20	1				SPARE		2			2	SCREEN PRINT			1	30	2	56
57	20	1				SPARE			2		2	---				--	-	58
59	20	1				SPARE				0		SPACE				20	1	60
61	20	1				SPACE		0				SPACE				20	1	62
63	20	1				SPACE			0			SPACE				20	1	64
65	20	1				SPACE				0		SPACE				20	1	66
67	20	1				SPACE		0				SPACE				20	1	68
69	20	1				SPACE			0			SPACE				20	1	70
71	20	1				SPACE				0		SPACE				20	1	72
73	20	1				SPACE		0				SPACE				20	1	74
75	20	1				SPACE			0			SPACE				20	1	76
77	20	1				SPACE				0		SPACE				20	1	78
79	20	1				SPACE		0				SPACE				20	1	80
81	20	1				SPACE			0			SPACE				20	1	82
83	20	1				SPACE				0		SPACE				20	1	84

TOTALS: KVA PER PHASE 15 12 12 TOTAL KVA 39
AMPS PER PHASE 125 102 100 AVG AMP PER PHASE 109

WIRING: 4#3/0 THW CU, 1#2 IN/IS GR, 2 1/2 INCH CONDUIT

1/6/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085C
△1 PANEL IDENT: C TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: FLUSH 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1	9			RM 164	1.8	3.4			1.6	RM 173G	11			20	1	2
3	20	1	9			RM 172	1.4		2.9		1.5	173B,181-83,85,87	10			20	1	4
5	20	1	8			174,176,182,184.2				2.4	1.2	191,193,195,197	8			20	1	6
7	20	1	12			RM 171 F-J	1.8	3.3			1.5	HALL	13			20	1	8
9	20	1	6			RM 171 CDK	0.9		2.7		1.8	HALL, 186A	15			20	1	10
11	20	1	7			RM 171 A	1.1			2.1	1	RM 125	4			20	1	12
13	20	1	10			126CDE, 127D	1.5	2.5			1	RM 125	4			20	1	14
15	20	1	11			198, 127G,127H	1.6		1.6			SPACE				20	1	16
17	20	1	10			127E,192,186F	1.5			1.5		SPACE				20	1	18
19	20	1				SPARE		0				SPACE				20	1	20
21	20	1				SPARE			0			SPACE				20	1	22
23	20	1				SPARE				0		SPACE				20	1	24
25	20	1				SPARE		0				SPACE				20	1	26
27	20	1				SPARE			0			SPACE				20	1	28
29	20	1				SPARE				0		SPACE				20	1	30
31	20	1				SPARE		1			1	EX-1			2	20	1	32
33	20	1				SPARE			1		1	EX-1			2	20	1	34
35	20	1				SPARE				0.2	0.2	FC-1			1	20	1	36
37	20	1				SPARE		0.7			0.7	EX-7			1	20	3	38
39	20	1				SPARE			0.7		0.7	-				--	-	40
41	20	1				SPARE				0.7	0.7	-				--	-	42
43	20	1				SPACE		0.7			0.7	EX-7			1	20	3	44
45	20	1				SPACE			0.7		0.7	-				--	-	46
47	20	1				SPACE				0.7	0.7	-				--	-	48
49	20	1				SPACE		0				SPARE				20	1	50
51	20	1				SPACE			0			FC-3				20	1	52
53	20	1				SPACE				0		SPACE				20	1	54
55	20	1				SPACE		0				SPACE				20	1	56
57	20	1				SPACE			0			SPACE				20	1	58
59	20	1				SPACE				0		SPACE				20	1	60

TOTALS: KVA PER PHASE 11 9.6 7.6 TOTAL KVA 28
AMPS PER PHASE 96 80 63 AVG AMP PER PHASE 80

WIRING: 4# 4/0 THW CU, 1 #6 GR, 2 1/2 INCH CONDUIT

1/6/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085D
△1 PANEL IDENT: D TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: FLUSH 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1		6		RM 173B,181	1.1	1.7			0.6	RM 164		3		20	1	2
3	20	1		6		RM 183,185	1.1		1.5		0.4	RM 164		2		20	1	4
5	20	1		6		RM 187, 191	1.1			1.5	0.4	RM 164		2		20	1	6
7	20	1		6		RM 193, 195	1.1	1.7			0.6	RM 164		3		20	1	8
9	20	1		6		RM 197, FOYER	1.1		1.7		0.6	RM 164		3		20	1	10
11	20	1		5		RM 173C	0.9			1.5	0.6	RM 164		3		20	1	12
13	20	1		4		RM 173C, EXT.	0.8	1.9			1.1	RM 174, 182		6		20	1	14
15	20	1				SPARE			1.3		1.3	RM 176, 184		7		20	1	16
17	20	1		6		RM 171J, 8	1.1			2.2	1.1	RM 186A		6		20	1	18
19	20	1		6		RM 171H, G	1.1	2.2			1.1	RM 186CD		6		20	1	20
21	20	1		7		RM 171D-F	1.3		2.6		1.3	RM 127D,186E		7		20	1	22
23	20	1		6		RM 171K,171A	1.1			2.2	1.1	RM 127A,G,H		6		20	1	24
25	20	1		5		RM 171A,171C	0.9	2			1.1	RM 198		6		20	1	26
27	20	1		1		DRINK FTN	0.5		1.3		0.8	RM 127E		4		20	1	28
29	20	1		1		VEND 160C	0.5			1.6	1.1	RM 127E,192		6		20	1	30
31	20	1		1		VEND 160C	0.5	1.3			0.8	RM 186F		4		20	1	32
33	20	1		1		VEND 160C	0.5		1		0.5	COPY MACHINE		1		20	1	34
35	20	1		1		VEND 160C	0.5			1	0.5	SPRINKLER CNTR			1	20	1	36
37	20	1		1		VEND 160C	0.5	0.5				SPARE				20	1	38
39	20	1		6		HALL 170A	1.1		2		0.9	RM 172		5		20	1	40
41	20	1				NO.WALL DINING				0		SPARE				20	1	42
43	20	1		6		RM 161	1.1	1.5			0.4	RM 186F		2		20	1	44
45	20	1		6		RM 163	1.1		1.5		0.4	RM 176,184		2		20	1	46
47	20	1		3		173B,181,183	0.6			1.2	0.6	RM 186F,192		3		20	1	48
49	20	1		3		185,187,191	0.6	1.2			0.6	RM 198,127GH		3		20	1	50
51	20	1		3		193,195,197	0.6		1.2		0.6	127AD,186E		3		20	1	52
53	20	1		2		RM 161,163	0.4			1	0.6	RM 186CDE		3		20	1	54
55	20	1		3		RM 171 FGH	0.6	1.2			0.6	HALL 120C		3		20	1	56
57	20	1		2		RM 171 I,J	0.4		1.2		0.8	RM 125		4		20	1	58
59	20	1		2		RM 171 C,D	0.4			1	0.6	ATRIUM COURT		3		20	1	60
61	20	1		2		RM 171A,K	0.4	1.2			0.8	RM 172		4		20	1	62
63	20	1		2		RM 182,174	0.4		1.2		0.8	RM 172		4		20	1	64
65	20	1				SPARE				0.8	0.8	RM 172		4		20	1	66
67	20	1				SPARE		0.8			0.8	RM 172		4		20	1	68
69	20	1				SPARE			0.8		0.8	RM 172		4		20	1	70
71	20	1				SPARE				0.8	0.8	RM 172		4		20	1	72
73	20	1				SPARE		0.8			0.8	RM 172		4		20	1	74
75	20	1				SPARE			0.8		0.8	RM 172		4		20	1	76
77	20	1				SPARE				0.8	0.8	RM 172		4		20	1	78
79	20	1				SPARE		0.8			0.8	RM 172		4		20	1	80
81	20	1				SPARE			0.8		0.8	RM 172		4		20	1	82
83	20	1				SPARE				0.8	0.8	RM 172		4		20	1	84

TOTALS: KVA PER PHASE 18 18 16 TOTAL KVA 54
AMPS PER PHASE 156 157 136 AVG AMP PER PHASE 150

WIRING: 4#4/0 THW CU, 1#2 IN/IS GR, 2 1/2 INCH CONDUIT

1/6/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085E
△1 PANEL IDENT: E TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: SURFACE 22' WIDE 6' DEEP 150 AMPERE MAIN C/B
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1	14			HALL	1.4	3			1.6	HALL	14			20	1	2
3	20	1	2			RESTROOMS	0.2		1.7		1.5	FIRE ALRM PNL			1	20	1	4
5	20	1	4			MECH, ELEC	0.4			0.6	0.2	EXTERIOR LTG	1			20	1	6
7	100	3				P-4	5.5	5.5				* P-4			1	100	3	8
9	--	-				---	5.5		5.5			* ---				--	-	10
11	--	-				---	5.5			5.5		* ---				--	-	12
13	20	2				WALK-IN COOL	1.2	2.4			1.2	SUMP PUMP				20	1	14
15	--	-				---	1.2		1.2			SPARE				20	1	16
17	20	1				SPARE				1.8	1.8	EXIST FREEZR				30	2	18
19	20	1	7			HALL 140	0.7	2.5			1.8	---				--	-	20
21	20	1	16			CLASSRMS	0.6		1		0.4	TELEPHONE		2		20	1	22
23	20	1				SPARE				0		SPACE				20	1	24
25	20	1				SPARE		0				SPACE				20	1	26
27	20	1				SPARE			0			SPACE				20	1	28
29	20	1				SPARE				0		SPACE				20	1	30

TOTALS: KVA PER PHASE 13 9.4 7.9 TOTAL KVA 30
AMPS PER PHASE 111 78 65 AVG AMP PER PHASE 85

WIRING: 4 #1/0 THW CU, 1 #6 GR, 2 INCH CONDUIT
* ONLY ONE PUMP MAY OPERATE AT A TIME

1/8/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085F
PANEL IDENT: F TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
△1 MOUNT: SURFACE 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1	4			ENTRY LTG	0.3	0.9			0.6	ENTRY LTG	8			20	1	2
3	20	1	15			HALL LTG	1.5		2.7		1.2	HALL LTG	12			20	1	4
5	20	1	13			HALL LTG	1.3			2.8	1.5	HALL LTG	15			20	1	6
7	20	1	9			HALL LTG	0.9	2			1.1	HALL LTG	11			20	1	8
9	20	1	12			HALL LTG	1.2		3		1.8	RM 163	9			20	1	10
11	20	1	14			HALL LTG	1.4			3.2	1.8	RM 161	9			20	1	12
13	20	1	12			RM 111A	1.2	1.7			0.5	162,123D	5			20	1	14
15	20	1	12			RM 111A	1.2		2.4		1.2	RM 123C	12			20	1	16
17	20	1	8	2		111BC,113AB	1.7			2.5	0.8	ATRIUM COURT	4			20	1	18
19	20	1	7			RM 153B	1.1	1.4			0.3	SERVICE LTG	4			20	1	20
21	20	1	6			RM 153B	1.2		1.2			CENTER REC LTG				20	1	22
23	20	1	7			RM 153A	1.1			1.1		SO ROW REC LTG				20	1	24
25	20	1	6			RM,153A	1.2	1.2				NO ROW REC LTG				20	1	26
27	20	1				SPARE			0			PERIMETER LTG				20	1	28
29	20	1				SPARE				0		PERIMETER LTG				20	1	30
31	20	2			1	HU-1	1.2	1.2				PERIMETER LTG				20	1	32
33	--	-				---			0			TRACK LTG CENT				20	1	34
35	20	1				SPARE				0		TRACK LTG W				20	1	36
37	20	1			2	EX-1	1	1				TRACK LTG E				20	1	38
39	20	1			1	EX-6	1.2		1.2			TRACK LTG E				20	1	40
41	20	1				ATC PANEL				0		TRACK LTG CENT				20	1	42
43	20	1			1	P-1	0.9	0.9				TRACK LTG W				20	1	44
45	20	1			1	P-2	0.9		0.9			SPACE				20	1	46
47	20	3			1	P-3	0.9			0.9		SPACE				20	1	48
49	--	-				---	0.9	0.9				---				--	-	50
51	--	-				---	0.9		0.9			AH-1				20	3	52
53	20	1			1	FC-2	0.9			0.9		---				--	-	54
55	20	1			1	FC-2	0.9	0.9				SPACE				20	1	56
57	20	1			1	FC-2	0.9		0.9			SPACE				20	1	58
59	20	1			1	FC-3	0.9			0.9		SPACE				20	1	60

TOTALS: KVA PER PHASE 12 13 12 TOTAL KVA 37
AMPS PER PHASE 100 110 102 AVG AMP PER PHASE 104

WIRING: 4 #3/0 THW CU, 1 #6 GR, 2 1/2 INCH CONDUIT

4/17/91 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085G
PANEL IDENT: G TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: SURFACE 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1		6		RM 123CD,162	1.1	1.9			0.8	RM 153B		5		20	1	2
3	20	1		4		RM 123A	0.8		1.7		0.9	RM 153A		6		20	1	4
5	20	1		4		RM 123A	0.8			0.8		SPARE				20	1	6
7	20	1		4		RM 123A	0.8	1.3			0.5	DRY CAB		1		20	1	8
9	20	1		2		FLR BOX,123A	0.4		0.9		0.5	DRY CAB		1		20	1	10
11	20	1		2		FLR BOX,123A	0.4			1	0.6	RM 113A		3		20	1	12
13	20	1		2		FLR BOX,123A	0.4	0.8			0.4	RM 113B		2		20	1	14
15	20	1		2		FLR BOX,123A	0.4		0.9		0.5	DRINK FTN		1		20	1	16
17	20	1		3		123A,153A,111A.6				1.5	0.9	RM 111A		5		20	1	18
19	20	1		2		SOUND CAB	0.4	1.2			0.8	RM 111A		4		20	1	20
21	20	1				SPARE			0.6		0.6	FOYER, 110B		3		20	1	22
23	20	1				SPARE				0.4	0.4	PLUGMLD RM111A			1	20	1	24
25	20	1				SPARE		0.4			0.4	PLUGMLD RM111A			1	20	1	26
27	20	1				SPARE			0.4		0.4	RM 138B		2		20	1	28
29	20	1				SPARE				0.4	0.4	RM 138B		2		20	1	30
31	20	1				SPACE		0.4			0.4	RM 138B		2		20	1	32
33	20	1				SPACE			0			SPARE				20	1	34
35	20	1				SPACE				0		SPARE				20	1	36
37	20	1				SPACE		4.2			4.2	HU-1			1	40	3	38
39	20	1				SPACE			4.2		4.2	---				--	-	40
41	20	1				SPACE				4.2	4.2	---				--	-	42

TOTALS: KVA PER PHASE 10 8.7 8.3 TOTAL KVA 27
AMPS PER PHASE 85 72 69 AVG AMP PER PHASE 75

WIRING: 4#4/0 THW, 1#2 IN/IS GR, 2 1/2 INCH CONDUIT

1/8/93 CLIENT: TPH JOB: SNOW COLLEGE FILE: 01085H
△1 PANEL IDENT: H TYPE: BOLT-ON 120/208 VOLT 3 PHASE 4 WIRE 10,000 A.I.C.
MOUNT: SURFACE 22' WIDE 6' DEEP 225 AMPERE MAIN LUGS
ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, SUBFEED LUGS

CIR NO.	O/C AMP	PROT. POLE	OUTLETS LTG	CO's	PWR	DESCRIPTION	LCL KW	PH. LOAD A	B	C	LCL KW	DESCRIPTION	OUTLETS LTG	CO's	PWR	O/C AMP	PROT. POLE	CIR NO.
1	20	1			1	FC-3	0.9	2.1			1.2	FC-4			1	20	1	2
3	20	1			1	FC-4	0.9		2.1		1.2	FC-4			1	20	1	4
5	20	1			1	FC-2	1.2			2.4	1.2	FC-4			1	20	1	6
7	20	1			1	FC-5	1.2	1.2				SPARE				20	1	8
9	30	1			1	FC-6	1.6		2.5		0.9	FC-2			1	20	1	10
11	20	1			1	FC-3	0.9			2.1	1.2	FC-5			1	20	1	12
13	20	1			1	FC-2	0.9	1.8			0.9	FC-2			1	20	1	14
15	20	1			1	FC-3	0.9		2.1		1.2	ATC PANEL			1	20	1	16
17	30	1			1	FC-6	1.6			1.8	0.2	UH-1			1	20	1	18
19	20	1			1	FC-5	1.2	2.8			1.6	P-6			1	20	1	20
21	20	1			1	FC-4	1.2		2.8		1.6	P-6			1	20	1	22
23	--	-				---	0.7			1.3	0.6	RCP,EX-4			3	20	1	24
25	20	3			1	EX-8	0.7	0.7				SPARE				20	1	26
27	--	-				---	0.7		1.7		1	EX-1			2	20	1	28
29	20	1			1	MA-2B	0.7			1.7	1	EX-3			2	20	1	30
31	20	1			1	EX-2	1.2	2.2			1	EX-3			2	20	1	32
33	20	1			1	MA-2C	0.7		1.7		1	EX-3			2	20	1	34
35	20	1			1	EX-5	1.2			2.2	1	EX-1			2	20	1	36
37	20	1			1	EX-3	0.5	0.5				FC-7				20	2	38
39	20	1				SPARE			0			---				--	-	40
41	20	1				SPARE				0		SPARE				20	1	42

TOTALS: KVA PER PHASE 11 12 11 TOTAL KVA 35
AMPS PER PHASE 94 107 95 AVG AMP PER PHASE 99

WIRING: 4 #4/0 THW CU, 1 #6 GR, 2 1/2' C

SCAN #0002N5E8

THOMAS PETERSEN HAMMOND AND ASSOCIATES

ARCHITECTURE
PLANNING
INTERIOR DESIGN

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PROJECT TITLE

SNOW COLLEGE HUMANITIES AND ARTS BUILDING

△1 AS-BUILTS JANUARY 8, 1993

PROJECT NO. 90'085.BEF (01085PNL)
DRAWN BY RR
CHECKED BY EF
DATE APRIL 19, 1991

DRAWING TITLE

PANEL SCHEDULES

DRAWING NUMBER

E-8