State of Utah–Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION
AND MANAGEMENT

4110 State Office Building/Salt Lake City, Utah 84114/538–3018

STATE OF UTAH

DEQ SOUTH BUILDING REMODEL AND TENANT FINISH

150 NORTH 1950 WEST, SALT LAKE CITY, UTAH

DFCM PROJECT NO. 09254310

JUNE 2010

CONSTRUCTION DRAWINGS

SYMBOLS AND MATERIAL LEGEND

PLAN AND SECTION INDICATIONS

EARTH
ASPHALT
BATT INSULATION
GRAVEL FILL
METAL STUD
RIGID INSULATION
CONCRETE SECTION
ALUMINUM
PLASTIC LAMINATE
C.M.U.
GYPSUM BOARD
CERAMIC TILE
BRICK
FINISH LUMBER
ACOUSTIC TILE
CONCRETE PLAN
WOOD FRAMING
CARPET & PAD
MARBLE
PLYWOOD
GLASS
PARTICLE BOARD
PLYWOOD LARGE SCALE
GLASS SMALL SCALE
FENCE
4812.0' EXISTING CONTOUR
4812.0' FINISH CONTOUR

SHEET TAGS

ROOM NAME 000
00 WINDOW NUMBER
00 DOOR NUMBER
ELEVATION MARKER
FINISH SPOT ELEV.
00 WALL TYPE
00 KEYED NOTE
00 GLASS TYPE

00 A-0 DETAIL NUMBER / SHEET ON WHICH DETAIL APPEARS — DETAIL

A, B, C, D — INTERIOR DIRECTION; 00 A-0 ELEVATION NUMBER / SHEET ON WHICH ELEVATION APPEARS — INTERIOR ELEVATION

00 A-0 SECTION NUMBER / SHEET ON WHICH SECTION APPEARS — SECTION

00 A-0 ELEVATION NUMBER / SHEET ON WHICH ELEVATION APPEARS — EXTERIOR ELEVATION

DFCM STANDARDS

DFCM STANDARDS: TO THE BEST OF OUR KNOWLEDGE, THE ARCHITECTURAL DOCUMENTS COMPLY WITH DCFM STANDARDS EXCEPT AS LISTED BELOW WHICH HAVE BEEN WAIVED:
1. AUTOMATIC DOOR OPENERS HAVE NOT BEEN PROVIDED AT THE REST ROOM DOORS.
2. A BUILDING PLAQUE HAS NOT BEEN PROVIDED.

ABBREVIATIONS

@	AT	JAN	JANITOR
ADJ.	ADJUSTABLE	JT.	JOINT
ADJ.	ADJACENT	LAM	LAMINATE
A.B.	ANCHOR BOLT	MAS.	MASONRY
A.F.F.	ABOVE FINISHED FLOOR	MAX.	MAXIMUM
ALT.	ALTERNATE	MECH.	MECHANICAL
ALUM./AL.	ALUMINUM	MFR.	MANUFACTURER
BRD./BD.	BOARD	MANUF.	MANUFACTURER
BLDG.	BUILDING	MIN.	MINIMUM
BLK.	BLOCK (BLOCKING)	M.O.	MASONRY OPENING
B.M.	BENCH MARK	MTL.	METAL
BOT./BTTM.	BOTTOM	N.I.C.	NOT IN CONTRACT
CAB.	CABINET	NO.	NUMBER
C.O.	CLEAN OUT	O.C.	ON CENTER
C.J.	CONTROL JOINT	O.D.	OUTSIDE DIAMETER
CL	CENTER LINE	O.H.	OVER HEAD
CLG.	CEILING	OPNG.	OPENING
C.M.U.	CONCRETE MASONRY UNIT	OPP.	OPPOSITE
COL.	COLUMN	OV.	OVER
CONC.	CONCRETE	P.LAM	PLASTIC LAMINATE
CONTD.	CONTINUED	P.L.	PROPERTY LINE
CONST.	CONSTRUCTION	PL.	PLATE
CONT.	CONTINUOUS	PLYWD.	PLYWOOD
CONTR.	CONTRACTOR	PLY.	PLYWOOD
COTG	CLEAN OUT TO GRADE	PNTD.	PAINTED
Ø/DIA.	DIAMETER	PTD.	PAINTED
DET.	DETAIL	PVMT.	PAVEMENT
D.F.	DRINKING FOUNTAIN	Q.T.	QUARRY TILE
DN.	DOWN	R./R	RADIUS
DWGS.	DRAWINGS	RCP	REINFORCED CONCRETE PIPE
DRAWGS	DRAWINGS	R.D.	ROOF DRAIN
EA.	EACH	REINF.	REINFORCEMENT
E.J.	EXPANSION JOINT	REQ.	REQUIRED
ELEV./EL.	ELEVATION	RM.	ROOM
ELEV.	ELEVATOR	R.O.	ROUGH OPENING
E.J.	EXPANSION JOINT	SECT.	SECTION
ENL.	ENLARGED	SEC.	SECTION
EQ.	EQUAL	SHT.	SHEET
EQUIP.	EQUIPMENT	SIM.	SIMILAR
EWC.	ELECTRIC WATER COOLER	SQ./SQ	SQUARE
EXIST.	EXISTING	SPEC.	SPECIFICATION
EXTG.	EXISTING	S.S.	STAINLESS STEEL
EXP.	EXPANSION	S.T.D.	STANDARD
EXT.	EXTERIOR	STL.	STEEL
F.D.	FLOOR DRAIN	STOR.	STORAGE
F.E.C.	FIRE EXTINGUISHER CABINET	STRUCT.	STRUCTURAL
F.E.	FIRE EXTINGUISHER	STRUC.	STRUCTURAL
FIN.	FINISH	SUSP.	SUSPENDED
F.F.	FINISH FLOOR	T.B.	TACK BOARD
F.H.	FIRE HYDRANT	T.O.	TOP OF
FL.	FLOOR	T.O.A.	TOP OF ASPHALT
FT.	FOOT	T.O.B.	TOP OF BEAM
F.V.	FIELD VERIFY	T.O.C.	TOP OF CONCRETE
GA.	GAUGE	T.O.C.	TOP OF CURB
GALV.	GALVANIZED	T.O.M.	TOP OF MASONRY
G.I./GALV.	GALVANIZED IRON	T.O.S.	TOP OF SLAB
G.B.	GYPSUM BOARD	T.O.W.	TOP OF WALL
GYP. BRD.	GYPSUM BOARD	TYP.	TYPICAL
H.B.	HOSE BIBB	U.N.O.	UNLESS NOTED OTHERWISE
H.C.	HANDICAPPED	V.C.T.	VINYL COMPOSITION TILE
HD.	HEAD	V.T.	VINYL TILE
H.M.	HOLLOW METAL	W/	WITH
HOL.MTL.	HOLLOW METAL	W.W.M.	WELDED WIRE MESH
HR.	HOUR	W.W.F.	WELDED WIRE FABRIC
HT.	HEIGHT	WD.	WOOD
I.D.	INSIDE DIAMETER	WIN.	WINDOW
IN.	INCH	VEST.	VESTIBULE
INCMG	INCOMING	VDT.	VIDEO DISPLAY TERMINAL
INFO.	INFORMATION		
INSUL.	INSULATION		
INT.	INTERIOR		
INV.	INVERT		

CODE CRITERIA

CODE ANALYSIS

APPLICABLE CODES @ TIME OF CONSTRUCTION

	Year		Year
Uniform Building Code	1984	National Electrical Code	1984
Uniform Mechanical Code	1984	Uniform Code for Building Conservation	NA
Uniform Plumbing Code	1984	ADA Accessibility Guidelines	CURRENT
Uniform Fire Code	1984		
International Energy Conservation Code	NA		

A. Occupancy and Group: B

Change in Use: Yes ____ No X Mixed Occupancy: Yes ____ No X
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: NA South: NA East: NA West: NA

E. Mixed Occupancies: ____ Nonseparated Uses: X

F: Sprinklers:
Required: NO Provided: ____ Type of Sprinkler System: AUTOMATIC
INSTALLED PER/ NFPA 13: Standard for the Installation of Sprinkler Systems

G: Number of Stories: 2 Building Height: 28'

H: Actual Area per Floor (square feet): 30,220 SQ FT

I: Tabular Area: 12000 SQ FT

J: Area Modifications:
1984 UBC - Separation on 4 sides exceeding 60' = 100% increase = 24,000 sq ft. x 2 levels = 48,000 sq ft

A) Total Allowable Area for:
1) One Story: >24,000
2) Two Story: $A_a(2)$ >48,000
3) Three Story: $A_a(3)$ ____

B) Unlimited Area Building: Yes ____ No ____ Code Section: ____

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

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

L. Design Occupant Load: 302
Exit Width Required: 2 DOORS @ 36 = 72 Exit Width Provided: 108

M. Minimum Number of Required Plumbing Facilities:
a) Water Closets - Required (m) 4 (f) 4 Provided (m) 10 (f) 10
b) Lavatories - Required (m) 4 (f) 4 Provided (m) 5 (f) 8
c) Bath Tube or Showers: 0
d) 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.

DEFERRED SUBMITTALS

1. CONCRETE MIX DESIGN — DUE WITHIN 15 DAYS OF CONTRACT AWARD
2. AUTOMATIC FIRE SPRINKLING SYSTEM — DUE WITHIN 15 DAYS OF CONTRACT AWARD

SCHEDULE OF DRAWINGS

COVER SHEETS
G001 COVER SHEET
G002 SCHEDULE OF DRAWINGS, MOUNTING STANDARDS, CODE REVIEW

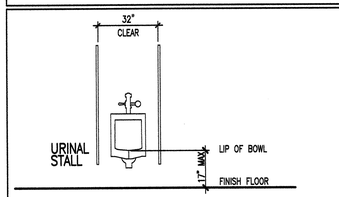
ARCHITECTURAL
A101 MAIN LEVEL CONCEPT FLOOR PLAN & DEMOLITION FLOOR PLAN
A102 UPPER LEVEL CONCEPT FLOOR PLAN & DEMOLITION FLOOR PLAN
A103 MAIN AND UPPER LEVEL CEILINMG PLANS
A301 WALL SECTIONS AND DETAILS
A302 WALL SECTIONS AND DETAILS
A401 ENLARGED PLANS AND INTERIOR ELEVATIONS
A402 ENLARGED PLANS AND INTERIOR ELEVATIONS
A601 DOOR AND WINDOW SCHEDULES AND DETAILS
A602 ROOM FINISH SCHEDULES

MECHANICAL
MG001 MECHANICAL GENERAL NOTES AND LEGEND
MD101 SOUTH BUILDING MAIN LEVEL MECHANICAL DEMOLITION FLOOR PLAN
MD102 SOUTH BUILDING UPPER LEVEL MECHANICAL DEMOLITION FLOOR PLAN
ME101 SOUTH BUILDING MAIN LEVEL MECHANICAL FLOOR PLAN
ME102 SOUTH BUILDING UPPER LEVEL MECHANICAL FLOOR PLAN
ME401 ENLARGED MECHANICAL PLANS
ME501 MECHANICAL DETAILS
ME502 MECHANICAL DETAILS
ME601 MECHANICAL SCHEDULES
ME701 MECHANICAL FLOW SHEET

PLUMBING
PG001 PLUMBING GENERAL NOTES AND LEGEND
PD101 SOUTH BUILDING PLUMBING DEMOLITION PLANS
PE101 SOUTH BUILDING WASTE AND VENT PLANS
PE102 SOUTH BUILDING DOMESTIC WATER PIPING PLANS
PE501 PLUMBING DETAILS
PE502 PLUMBING DETAILS
PE601 PLUMBING SCHEDULES

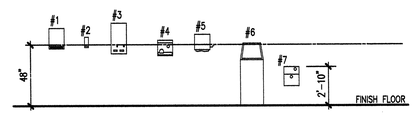
ELECTRICAL
E001 NOTES, SYMBOLS, ABBREVIATIONS, SHEET INDEX
E201 MAIN LEVEL POWER PLAN
E202 UPPER LEVEL POWER PLAN
E301 MAIN LEVEL LIGHTING PLAN
E302 UPPER LEVEL LIGHTING PLAN
E401 ONE-LINE DIAGRAM, PANEL SCHEDULES
E501 ELECTRICAL DETAILS

TYPICAL HANDICAP TOILET ROOM MOUNTING STANDARDS

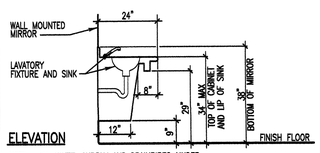


TYPICAL HANDICAP URINAL CLEARANCES

1. PAPER TOWELS
2. SOAP DISPENSER
3. SANITARY NAPKIN DISPENSER
4. HAND DRYER
5. ROLL TOWEL
6. TRASH RECEPTACLE
7. NAPKIN DISPOSAL

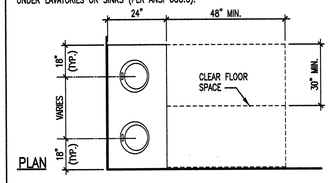


MISCELLANEOUS MOUNTING HEIGHTS



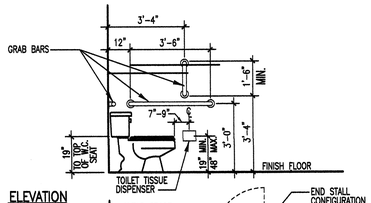
ELEVATION

NOTE: ALL WATER SUPPLY AND DRAINPIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES OR SINKS (PER ANSI 606.6).

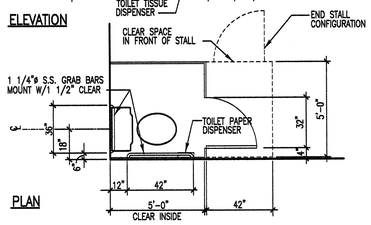


PLAN

TYPICAL HANDICAP LAVATORY CLEARANCES



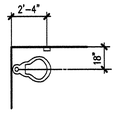
ELEVATION



PLAN

TYPICAL HANDICAP TOILET ROOM CLEARANCES

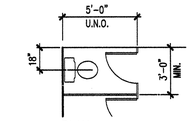
TYPICAL (NON-HANDICAPPED) TOILET ROOM MOUNTING STANDARDS



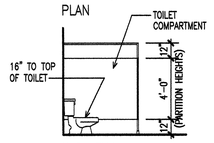
PLAN

ELEVATION

WALL MOUNTED W.C.

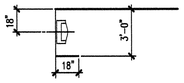


PLAN

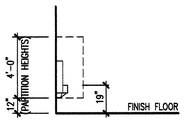


ELEVATION

FLOOR MOUNTED WITH COMPARTMENT

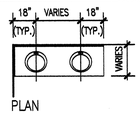


PLAN

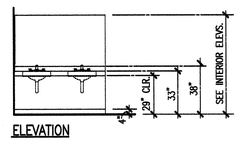


ELEVATION

URINAL STALL

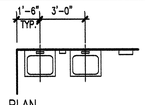


PLAN

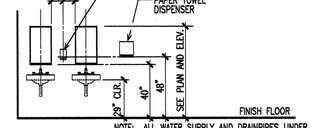


ELEVATION

COUNTERTOP LAV



PLAN

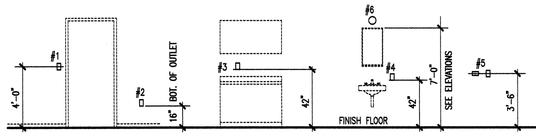


ELEVATION

WALL MTD LAV

NOTE: ALL WATER SUPPLY AND DRAINPIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES OR SINKS (PER ANSI 606.6)

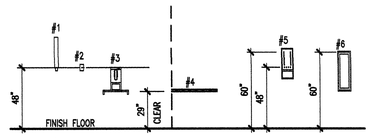
TYPICAL MISCELLANEOUS MOUNTING STANDARDS



ELECTRICAL OUTLETS AND SWITCHES

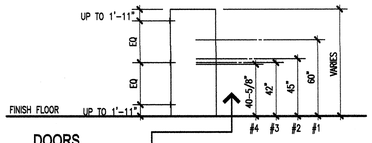
ITEM DESIGNATION
1. TYPICAL SWITCH HEIGHT
2. TYPICAL OUTLET HEIGHT
3. TYPICAL OUTLET HEIGHT AT COUNTERTOP
4. TYPICAL G.F.I. OUTLET HEIGHT AT LAVATORY
5. TYPICAL OUTLET HEIGHT FOR LAUNDRY ROOM AND UTILITY ROOM
6. TYPICAL BATH LIGHT FIXTURE HEIGHT

ITEM DESIGNATION
1. PAPER CUP DISPENSER
2. ELECTRIC SWITCH/THERMOSTAT/FIRE ALARM
3. TELEPHONE
4. COUNTER TOP/DESK
5. ELEVATOR CONTROLS
6. FIRE EXTINGUISHER

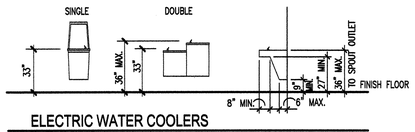


MISCELLANEOUS MOUNTING HEIGHTS

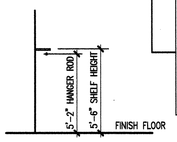
ITEM DESIGNATION
1. DEADLOCK AND STRIKE
2. PUSH AND PULL LATCHES, ARM PULL, (LOWER BASE), PULL PLATE CENTER LINE
3. BAR AND PULL CENTER LINE
4. CENTER LINE STRIKE, KNOB, LOCKS, HANDLE SETS, ROLLER LATCHES, EXIT BOLTS LOCKS



DOORS



ELECTRIC WATER COOLERS



CLOSETS

24" CLEARANCE
PROVIDE 24" MINIMUM CLEARANCE FROM EDGE OF DOOR (@ LATCH SIDE) TO ADJACENT WALL WHEN DOOR PULLS TOWARDS YOU.

18" CLEARANCE
PROVIDE 18" MINIMUM CLEARANCE FROM EDGE OF DOOR (@ LATCH SIDE) TO ADJACENT WALL WHEN DOOR PUSHES AWAY FROM YOU.

SCHEDULE OF DRAWINGS, MOUNTING STANDARDS, CODE REVIEW

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH
FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH — FRANK N. MURDOCK — 124498 — LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.: 09254310
CONSTR. DOC.
FILE NAME: DEQS-G002
PLOT SCALE: 1:1
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

G 002

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				
Veneer				
Penthouses	X			
Ceilings *(i.e. suspended grid or hard-lid)*		X		
Cabinets *(i.e. storage cabinets, equip, etc.)*		X		
Access Floors				
Storage Racks	X			
Appendages & Ornamentations	X			
Signs & Billboards	X			
Other:				
Other:	X			
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:	X			

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. If seismic restraints of non-structural components are installed prior to receiving DFCM approval they 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.

Revised: 02/15/2010

NON STRUCTURAL COMPONENT CHECKLIST

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 N 1950 W, SALT LAKE CITY, UT

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH
FRANK N. MURDOCK
124498-2
LICENSED ARCHITECT

REVISION # DATE:

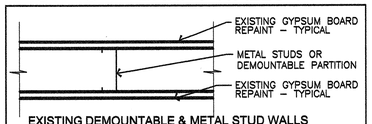
DFCM PROJECT NO.:
09254310
CONST DOC
FILE NAME: WFS-REC 101
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

G
003

GENERAL NOTES

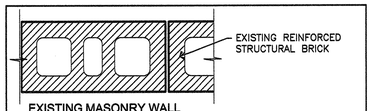
1. ALL WORK IS TO BE ACCOMPLISHED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
2. MAINTAIN AND PROTECT ALL EXISTING STRUCTURAL ELEMENTS.
3. MAINTAIN AND PROTECT ALL EXISTING FIRE EXTINGUISHER CABINETS
4. ALL WALLS ARE AT 90 OR 45 DEGREES UNLESS NOTED OTHERWISE.
5. WHERE NEW WALLS MEET EXISTING WALLS, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND JOINTS WHERE NEW MEETS OLD.
   PAINT WALL FROM CORNER TO CORNER. TYPICAL.
6. SEE SHEETS A601 & A602 FOR DOOR AND WINDOW DETAILS AND SCHEDULE. SEE SHEETS A603 & A604 FOR ROOM FINISHES.
7. WHERE EXISTING WALLS HAVE BEEN REMOVED PERPENDICULAR TO WALLS WHICH ARE TO REMAIN, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND AREAS DAMAGED BY DEMOLITION. PAINT WALL FROM CORNER TO CORNER. TYPICAL BOTH FLOORS ALL AREAS.

EXISTING INTERIOR WALLS TYPES



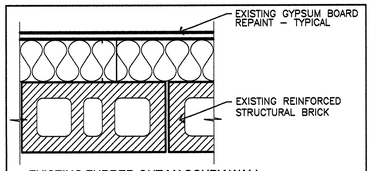
EXISTING DEMOUNTABLE & METAL STUD WALLS
MAINTAIN & PROTECT EXISTING WALL ASSEMBLIES
REPAIR OR REPLACE ANY DAMAGED WALL ELEMENTS

WALL TYPE "E" - EXISTING —(E)



EXISTING MASONRY WALL
MAINTAIN & PROTECT EXISTING WALL ASSEMBLIES

WALL TYPE "EM" - EXISTING MASONRY —(EM)

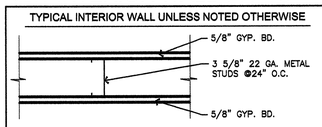


EXISTING FURRED OUT MASONRY WALL
MAINTAIN & PROTECT EXISTING WALL ASSEMBLIES
REPAIR OR REPLACE ANY DAMAGED WALL ELEMENTS

WALL TYPE "E1"
EXISTING FURRED OUT MASONRY WALL —(E1)

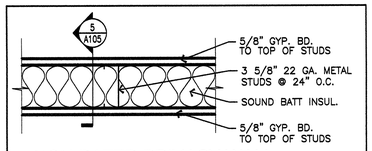
NEW INTERIOR WALL TYPES

TYPICAL INTERIOR WALL UNLESS NOTED OTHERWISE



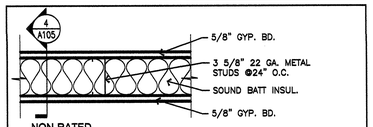
NON-RATED
EXTEND TO 3" MINIMUM ABOVE CEILING

WALL TYPE 1 —(1)



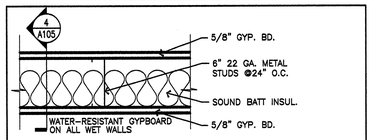
NON-RATED PRIVACY WALL
EXTEND TO 3" MAX BELOW STEEL DECK

WALL TYPE 3 —(3)



NON-RATED
EXTEND TO 3" ABOVE CEILING

WALL TYPE 5 —(5)



NON-RATED PLUMBING WALL
EXTEND TO 3" MINIMUM ABOVE CEILING

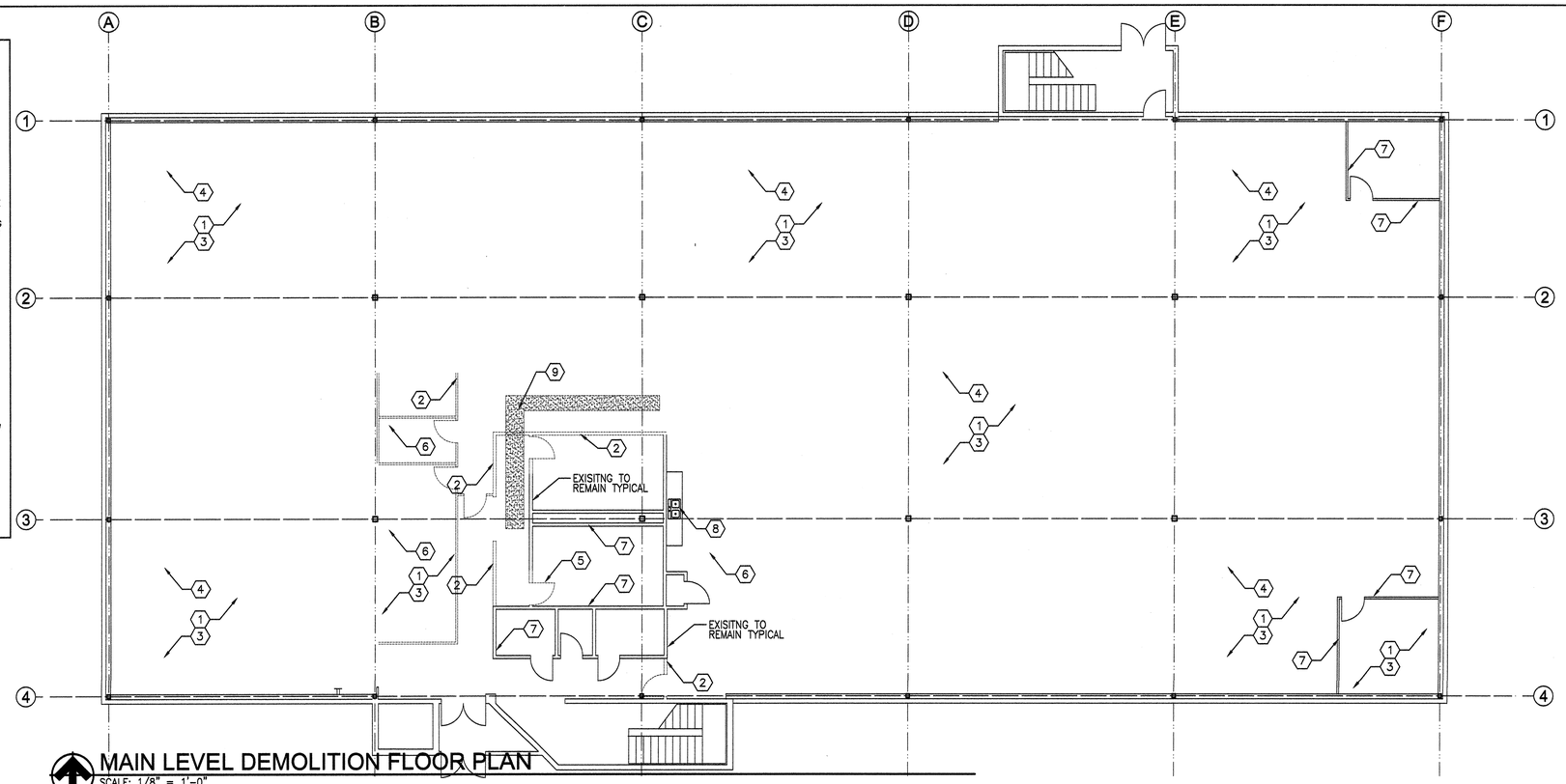
WALL TYPE 6 —(6)

DEMOLITION NOTES

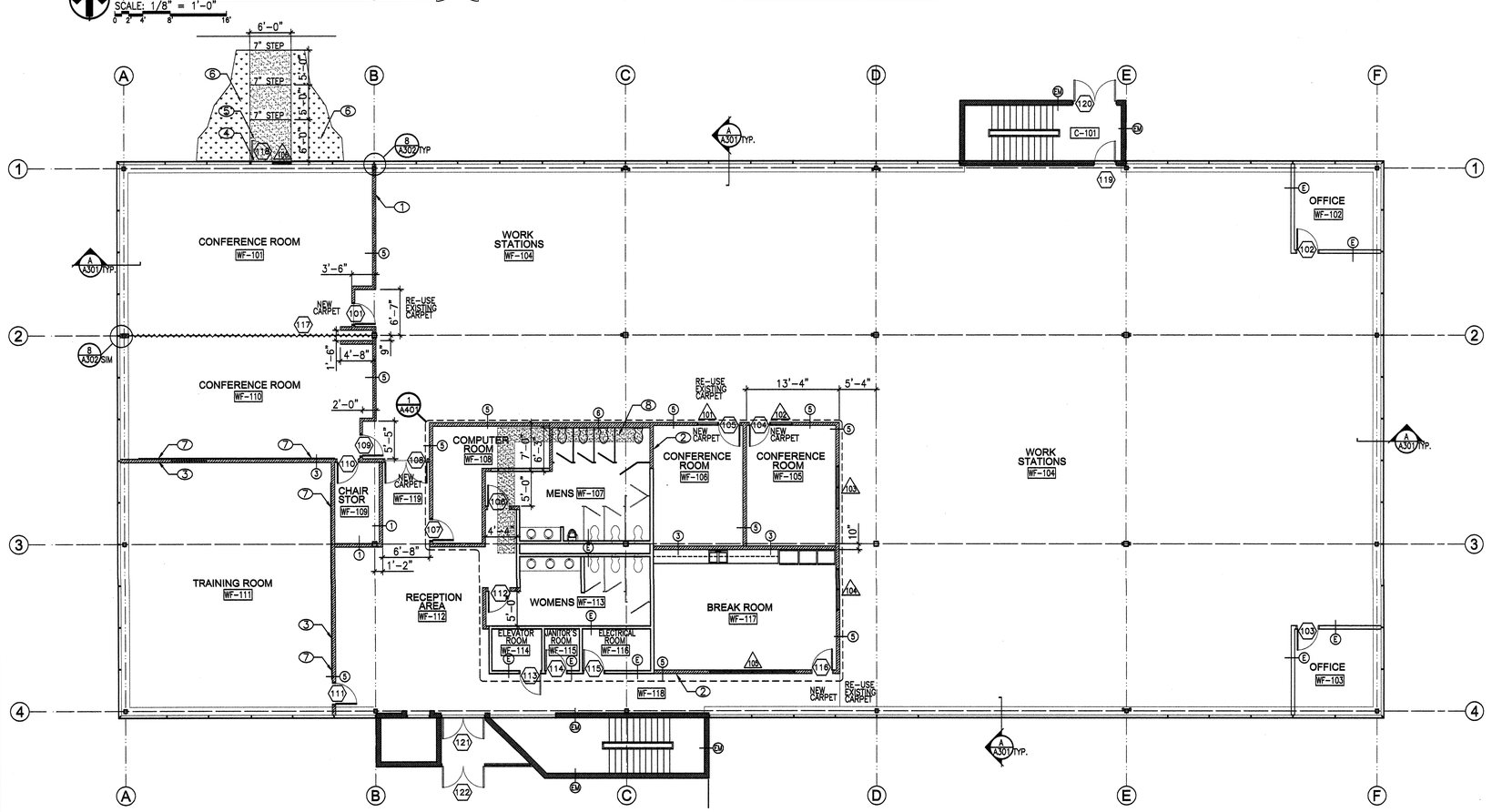
1. WORK COMPLETED BY OTHERS
   REMOVE AND PROPERLY DISPOSE OF EXISTING CEILING TILES TYPICAL AT ALL SUSPENDED 2X4 LAY-IN ACOUSTIC CEILINGS. MAINTAIN AND PROTECT EXISTING CEILING GRID, MECHANICAL EQUIPEMENT AND LIGHT FIXTURES. EXISTING LIGHT FIXTURES ARE TO BE LEFT IN PLACE ON EXISTING TIE WIRES FOR REUSE. TYPICAL.
2. REMOVE AND DISPOSE OF EXISTING WALL. SEE ENLARGED FLOOR PLANS FOR DIMENSIONS.
3. MAINTAIN AND PROTECT EXISTING CEILING GRID. TYPICAL
4. THE FLOORING SUBCONTRACTOR IS TO REMOVE ALL OF THE EXISTING CARPET TILES DISCARDING THOSE TILES WHICH CANNOT BE REUSED AND STORE FOR FUTURE USE EXISTING CARPET TILES WHICH ARE ACCEPTABLE FOR REUSE. CARPET TILES ARE TO BE STORED FACE TO FACE AND STORED ON SHRINK WRAPPED PALLETS IN LOCATION CHOSEN BY CONTRACTOR AND ARCHITECT.
5. WORK COMPLETED BY OTHERS
   REMOVE AND SET ASIDE FOR SURPLUS ALL EXISTING INTERIOR DOORS. TYPICAL.
6. REMOVE AND DISPOSE OF EXISTING HARD SURFACE FLOORING IN THIS AREA.
7. EXISTING WALLS. MAINTAIN AND PROTECT.
8. REMOVE EXISTING CABINET AND PLUMBING FIXTURES.
9. SAW CUT AND REMOVE EXISTING CONCRETE SLAB TO ALLOW FOR INSTALLATION OF NEW PLUMBING FIXTURES. COORDINATED EXACT SIZE AND LOCATION OF CUT WITH PLUMBING CONTRACTOR.

KEYED NOTES

1. CENTER WALL ON COLUMN
2. ALIGN WITH EXISTING WALLS
3. CENTER WALL ON MULLION
4. REMOVE EXISTING GLASS PANEL AND SAW CUT OPENING IN EXISTING FOUNDATION WALL. INSTALL NEW ANODIZED ALUMINUM STOREFRONT DOOR AND WINDOW IN NEW OPENING IN EXISTING CURTAIN WALL. SEE SHEET A601, FOR DOOR SIZES. INSTALL NEW STEEL TUBE HEADER AND JAMBS PER DETAILS SHEET A301. ALL GLASS TO BE TEMPERED GLASS AND TO MATCH TINT OF EXISTING CURTAIN WALL GLASS. ALL EXPOSED STEEL TUBES TO BE SHEATHED WITH PREFINISHED BREAK METAL TO MATCH STOREFRONT SYSTEM.
5. NEW CONCRETE 4" THICK SIDEWALK OVER 4" GRAVEL BASE OVER COMPACTED SUBGRADE. SLOPE AWAY FROM BUILDING @ 1/4"/FT
6. NEW SOD OVER DISTURBED LANDSCAPE AREAS TYPICAL. REPAIR DAMAGE TO EXISTING AUTOMATIC LANDSCAPE SPRINKLING SYSTEM WHERE DISTURBED OR DAMAGED BY NEW CONSTRRUCTION TYPICAL.
7. INSTALL BACKING IN THIS WALL FOR WHITE BOARDS TO BE PROVIDED AND INSTALLED BY OTHERS.
8. INSTALL NEW CONCRETE SLAB IN AREAS REMOVED TO ALLOW FOR INSTALLATION OF NEW PLUMBING FIXTURES. SEE DEMOLITION NOTE #9.



MAIN LEVEL DEMOLITION FLOOR PLAN
SCALE: 1/8" = 1'-0"



MAIN LEVEL FLOOR PLAN
SCALE: 1/8" = 1'-0"

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 N 1950 W, SALT LAKE CITY, UT

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH — FRANK N. MURDOCK — 124498 — LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.: 09254310
CONST DOC
FILE NAME: WFS-REC 101
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

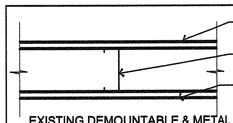
MAIN LEVEL FLOOR PLAN & DEMOLITION FLOOR PLAN

A 101

GENERAL NOTES

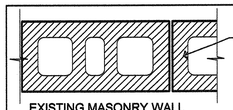
1. ALL WORK IS TO BE ACCOMPLISHED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
2. MAINTAIN AND PROTECT ALL EXISTING STRUCTURAL ELEMENTS.
3. MAINTAIN AND PROTECT ALL EXISTING FIRE EXTINGUISHER CABINETS
4. ALL WALLS ARE AT 90 OR 45 DEGREES UNLESS NOTED OTHERWISE.
5. WHERE NEW WALLS MEET EXISTING WALLS, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND JOINTS WHERE NEW MEETS OLD.
   PAINT WALL FROM CORNER TO CORNER. TYPICAL.
6. SEE SHEETS A601 & A602 FOR DOOR AND WINDOW DETAILS AND SCHEDULE. SEE SHEETS A603 & A604 FOR ROOM FINISHES.
7. WHERE EXISTING WALLS HAVE BEEN REMOVED PERPENDICULAR TO WALLS WHICH ARE TO REMAIN, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND AREAS DAMAGED BY DEMOLITION. PAINT WALL FROM CORNER TO CORNER. TYPICAL BOTH FLOORS ALL AREAS.

EXISTING INTERIOR WALLS TYPES



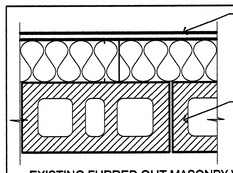
EXISTING DEMOUNTABLE & METAL STUD WALLS
MAINTAIN & PROTECT EXISTING WALL ASSEMBLIES
REPAIR OR REPLACE ANY DAMAGED WALL ELEMENTS

WALL TYPE "E" - EXISTING —(E)



EXISTING MASONRY WALL
MAINTAIN & PROTECT EXISTING WALL ASSEMBLIES

WALL TYPE "EM" - EXISTING MASONRY —(EM)

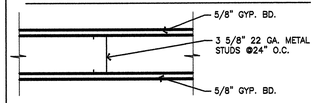


EXISTING FURRED OUT MASONRY WALL
MAINTAIN & PROTECT EXISTING WALL ASSEMBLIES
REPAIR OR REPLACE ANY DAMAGED WALL ELEMENTS

WALL TYPE "E1"
EXISTING FURRED OUT MASONRY WALL —(E1)

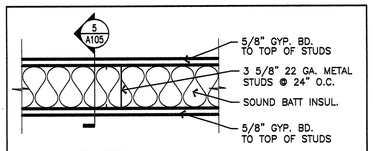
NEW INTERIOR WALL TYPES

TYPICAL INTERIOR WALL UNLESS NOTED OTHERWISE



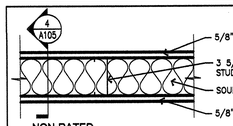
NON-RATED
EXTEND TO 3" MINIMUM ABOVE CEILING

WALL TYPE 1 —(1)



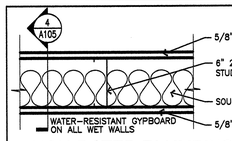
NON-RATED PRIVACY WALL
EXTEND TO 3" MAX BELOW STEEL DECK

WALL TYPE 3 —(3)



NON-RATED
EXTEND TO 3" ABOVE CEILING

WALL TYPE 5 —(5)



NON-RATED PLUMBING WALL
EXTEND TO 3" MINIMUM ABOVE CEILING

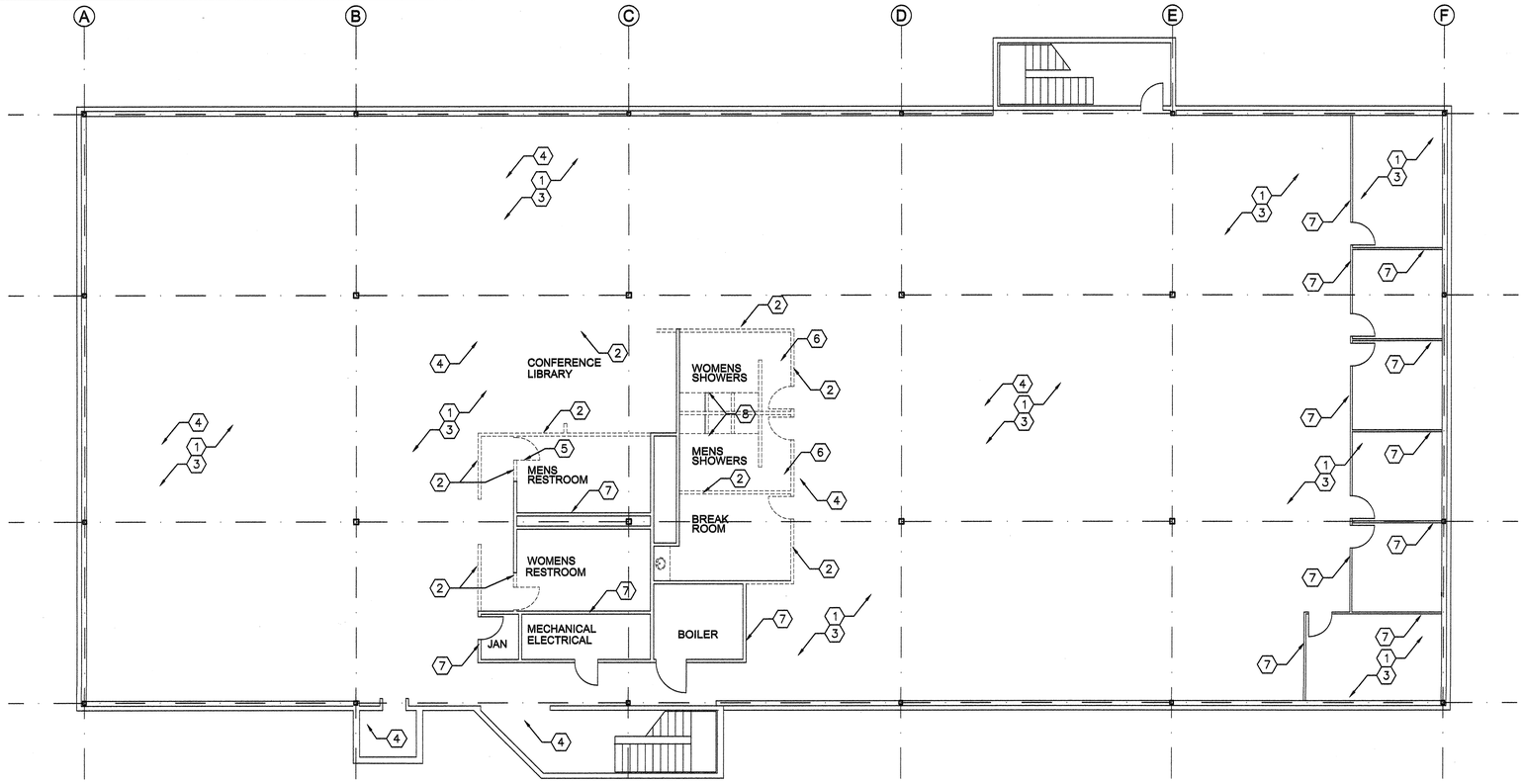
WALL TYPE 6 —(6)

DEMOLITION NOTES

1. WORK COMPLETED BY OTHERS
   REMOVE AND PROPERLY DISPOSE OF EXISTING CEILING TILES TYPICAL AT ALL SUSPENDED 2X4 LAY-IN ACOUSTIC CEILINGS. MAINTAIN AND PROTECT EXISTING CEILING GRID, MECHANICAL EQUIPEMENT AND LIGHT FIXTURES. EXISTING LIGHT FIXTURES ARE TO BE LEFT IN PLACE ON EXISTING TIE WIRES FOR REUSE. TYPICAL.
2. REMOVE AND DISPOSE OF EXISTING WALL. SEE ENLARGED FLOOR PLANS FOR DIMENSIONS.
3. MAINTAIN AND PROTECT EXISTING CEILING GRID. TYPICAL
4. THE FLOORING SUBCONTRACTOR IS TO REMOVE ALL OF THE EXISTING CARPET TILES DISCARDING THOSE TILES WHICH CANNOT BE REUSED AND STORE FOR FUTURE USE EXISTING CARPET TILES WHICH ARE ACCEPTABLE FOR REUSE. CARPET TILES ARE TO BE STORED FACE TO FACE AND STORED ON SHRINK WRAPPED PALLETS IN LOCATION CHOSEN BY CONTRACTOR AND ARCHITECT.
5. WORK COMPLETED BY OTHERS
   REMOVE AND SET ASIDE FOR SURPLUS ALL EXISTING INTERIOR DOORS. TYPICAL.
6. REMOVE AND DISPOSE OF EXISTING HARD SURFACE FLOORING IN THIS AREA.
7. EXISTING WALLS. MAINTAIN AND PROTECT.
8. CAP EXISTING PLUMBING FIXTURES AND DRAINS TO BE REMOVED ABOVE CEILING OR BELOW FLOOR LINE. PATCH & REPAIR HOLES WHERE PIPES HAVE BEEN REMOVED IN PREPARATION FOR NEW FLOOR FINISHES. TYPICAL.

KEYED NOTES

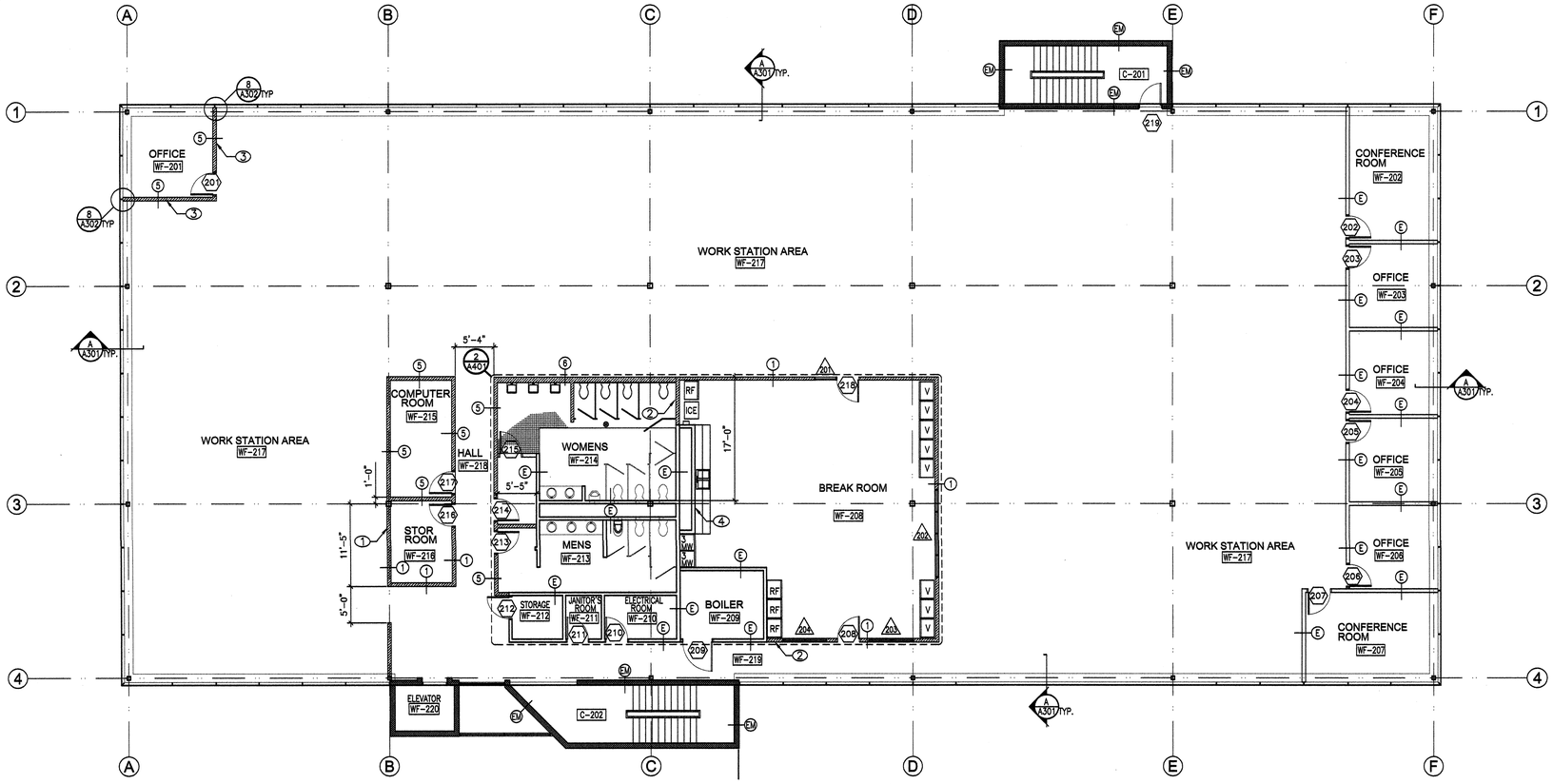
1. CENTER WALL ON COLUMN
2. ALIGN WITH EXISTING WALLS
3. CENTER WALL ON MULLION
4. WHERE EXISTING WALLS HAVE BEEN REMOVED PERPENDICULAR TO WALLS WHICH ARE TO REMAIN, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND AREAS DAMAGED BY DEMOLITION.
   PAINT WALL FROM CORNER TO CORNER. TYPICAL BOTH FLOORS ALL AREAS.



UPPER LEVEL DEMOLITION FLOOR PLAN

SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'

MAY 9, 2010



WORKFORCE SERVICES - REDWOOD ELEGIBILITY CENTER
UPPER LEVEL CONCEPT FLOOR PLAN

SCALE: 1/8" = 1'-0"
0' 2' 4' 8' 16'

MAY 9, 2010

UPPER LEVEL FLOOR PLAN & DEMOLITION FLOOR PLAN

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 N 1950 W, SALT LAKE CITY, UT

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH FRANK N. MURDOCK 124498-5 LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.: 09254310
CONST DOC
FILE NAME: WFS-REC 102
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

A 102

GENERAL NOTES

1. ALL WORK IS TO BE ACCOMPLISHED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
2. MAINTAIN AND PROTECT ALL EXISTING STRUCTURAL ELEMENTS.
3. MAINTAIN AND PROTECT ALL EXISTING FIRE EXTINGUISHER CABINETS
4. ALL WALLS ARE AT 90 OR 45 DEGREES UNLESS NOTED OTHERWISE.
5. WHERE NEW WALLS MEET EXISTING WALLS, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND JOINTS WHERE NEW MEETS OLD.
   PAINT WALL FROM CORNER TO CORNER. TYPICAL.
6. SEE SHEETS A601 & A602 FOR DOOR AND WINDOW DETAILS AND SCHEDULE. SEE SHEETS A603 & A604 FOR ROOM FINISHES.
7. WHERE EXISTING WALLS HAVE BEEN REMOVED PERPENDICULAR TO WALLS WHICH ARE TO REMAIN, PATCH AND REPAIR EXISTING WALLS. TAPE, MUD AND SAND AREAS DAMAGED BY DEMOLITION. PAINT WALL FROM CORNER TO CORNER. TYPICAL BOTH FLOORS ALL AREAS.

DEMOLITION NOTES

1. WORK COMPLETED BY OTHERS
   REMOVE AND PROPERLY DISPOSE OF EXISTING CEILING TILES TYPICAL AT ALL SUSPENDED 2X4 LAY-IN ACOUSTIC CEILINGS. MAINTAIN AND PROTECT EXISTING CEILING GRID, MECHANICAL EQUIPEMENT AND LIGHT FIXTURES. EXISTING LIGHT FIXTURES ARE TO BE LEFT IN PLACE ON EXISTING TIE WIRES FOR REUSE. TYPICAL.
2. REMOVE EXISTING CEILING GRID IN THIS AREA TO ALLOW FOR INSTALLATION OF NEW WALLS.
3. MAINTAIN AND PROTECT EXISTING CEILING GRID. TYPICAL

LIGHTING NOTE

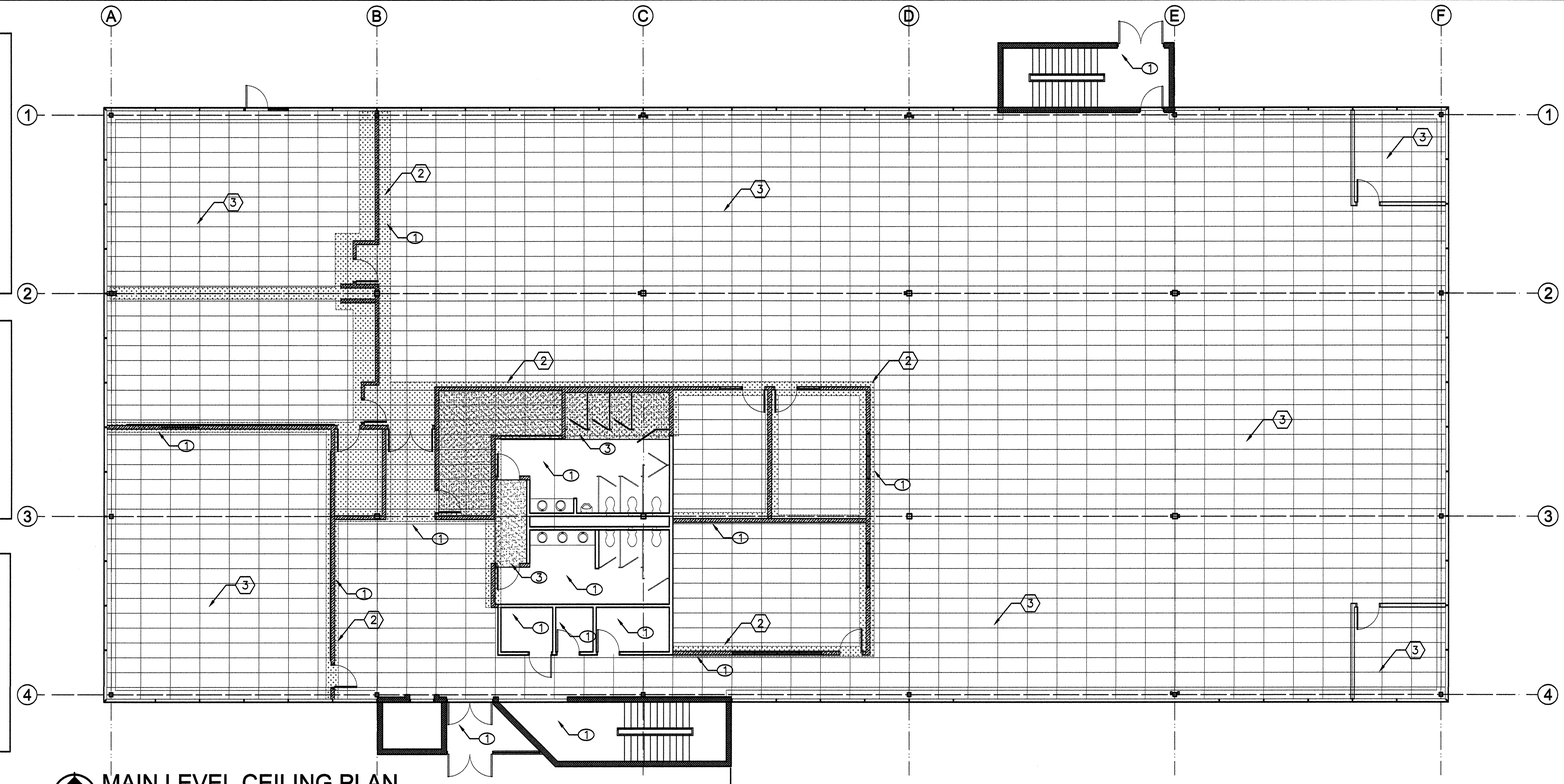
NOTE:
THE EXISTING 2X4 LIGHT FIXTURES ARE TO BE REUSED IN APPROXIMATELY THEIR CURRENT LOCATION. EXISTING 2X4 LIGHTS WILL BE ADJUSTED TO COORDINATE WITH NEW WALL LOCATIONS. IN ADDITION, THE LIGHTING ALLOWANCE INDICATED IN THE SPECIFICATION ALLOWS FOR NEW FIXTURES TO REPLACE EXISTING DAMAGED FIXTURES OR TO ALLOW FOR ADDITIONAL FIXTURES IF NEEDED. SEE ELECTRICAL DRAWING FOR NEW FIXTURES AND REVISED SWITCHING.

KEYED NOTES

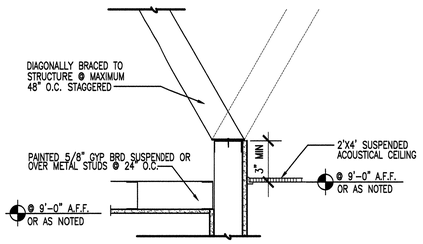
1. INSTALL NEW CEILING TILES AND CEILING GRID TO MATCH AND ALIGN WITH EXISTING IN AREAS DISTURBED BY INSTALLATION OF NEW WALLS. TYPICAL.
2. REMOVE DAMAGED OR OUT OF PLUMB CEILING GRID AND REPLACE WITH NEW CEILING GRID TO MATCH EXISTING. REPLACEMENT OF DAMAGED CEILING GRID IS TO BE PROVIDED AS PART OF THE NEW CEILING GRID ALLOWANCE. SEE SPECICICATION FOR ALLOWANCE QUANTITY. TYPICAL.
3. NEW PAINTED GYP BRD CEILING IN EXPANDED REST ROOM AREAS TYPICAL. MATCH EXISTING CEILING ELEVATION.
4. EXISTING CEILING TO REMAIN. MAINTAIN AND PROTECT.

SEISMIC BRACING CODE REQUIREMENT

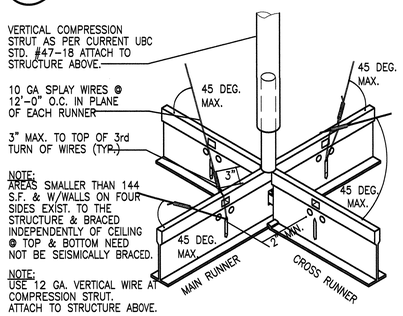
NOTE: NEW OR MODIFIED AREAS OF THE CEILING ARE TO BE INSTALLED PER 2006 IBC OR BRACED PER 1997 UBC STANDARDS, SECTION 25-2..
THE PREFERRED METHOD OF INSTALLATION IS THE 1997 UBC STANDARDS, SECTION 25-2..
THE CEILING EXPANSION JOINT IS NOT REQUIRED IF INSTALLED PER THE 1997 UBC STANDARDS



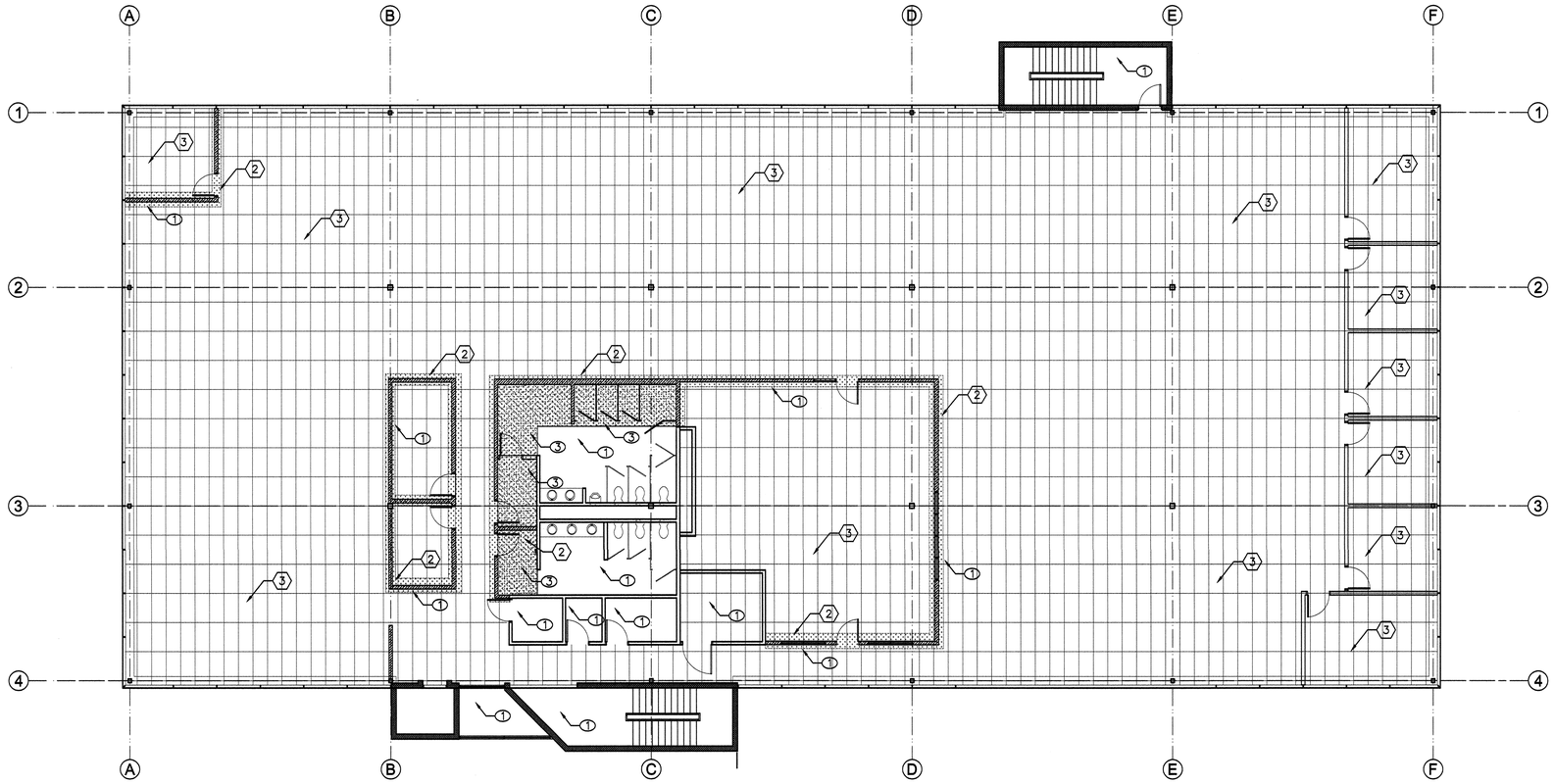
MAIN LEVEL CEILING PLAN
SCALE: 1/8" = 1'-0"



4 A105 INTERIOR WALL BRACING
SCALE: NOT NOT SCALE



1 A105 SEISMIC BRACING DETAIL
SCALE: NOT OT SCALE



UPPER LEVEL CEILING PLAN
SCALE: 1/8" = 1'-0"

MAIN LEVEL & UPPER LEVEL CEILING PLANS

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 N 1950 W, SALT LAKE CITY, UT

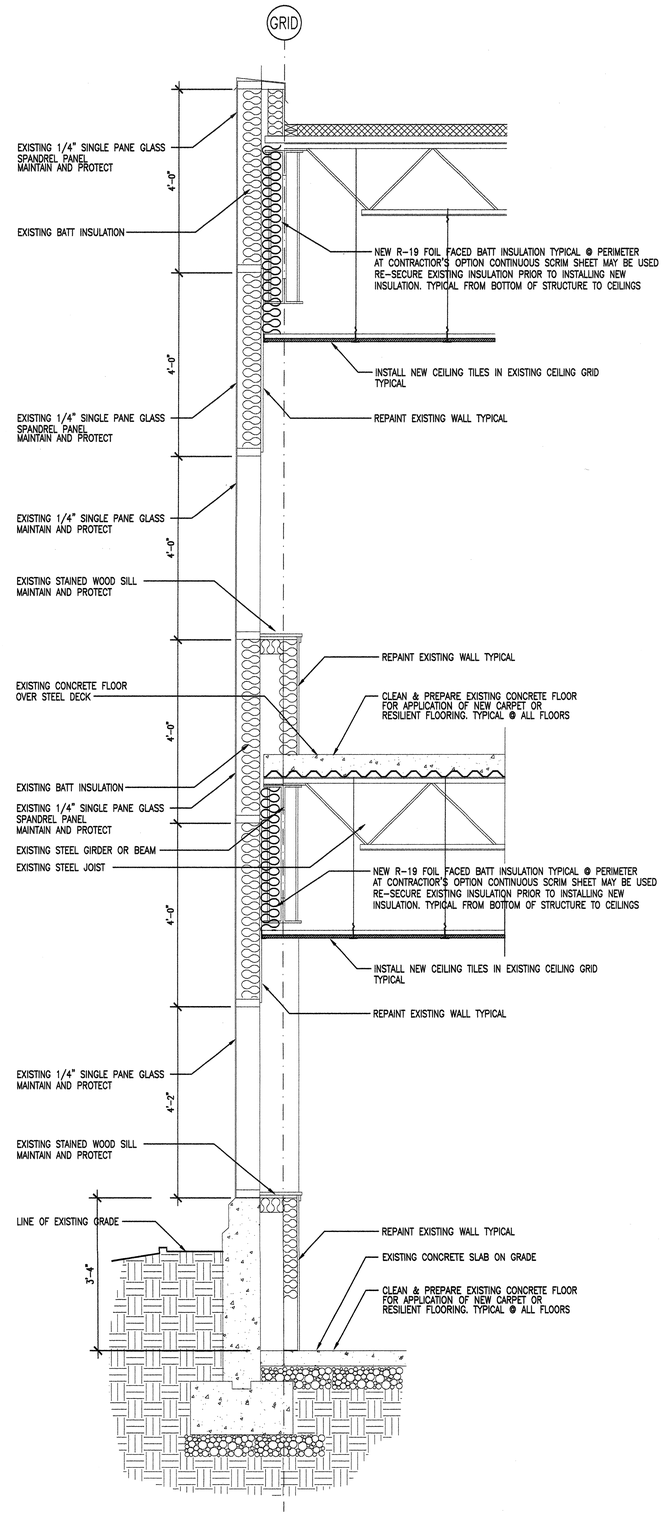
FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH FRANK N. MURDOCK 334498 LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONST DOC
FILE NAME: WFS-REC 103
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

A
103



A / A301 TYPICAL WALL SECTION @ CURTAIN WALL

SCALE: 3/4" = 1'-0"

0 1' 2'

WALL SECTIONS AND DETAILS

WORKFORCE SERVICES

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH

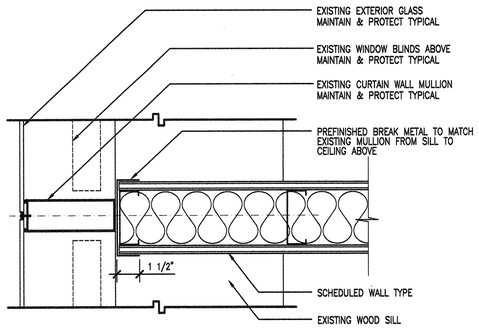
FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH
FRANK N. MURDOCK JR.
124498
LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONST. DOC.
FILE NAME: DEQS-A301
PLOT SCALE: 1:16
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

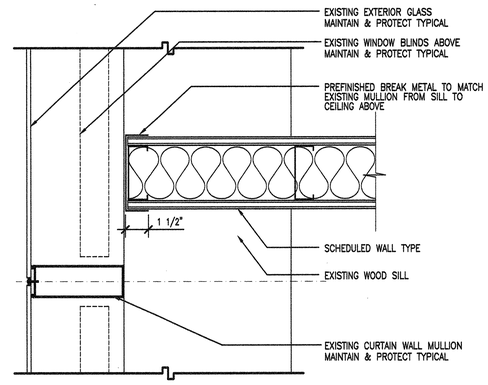
A
301



8 / A302 NEW WALL TO EXISTING EXTERIOR WINDOW MULLION DETAIL

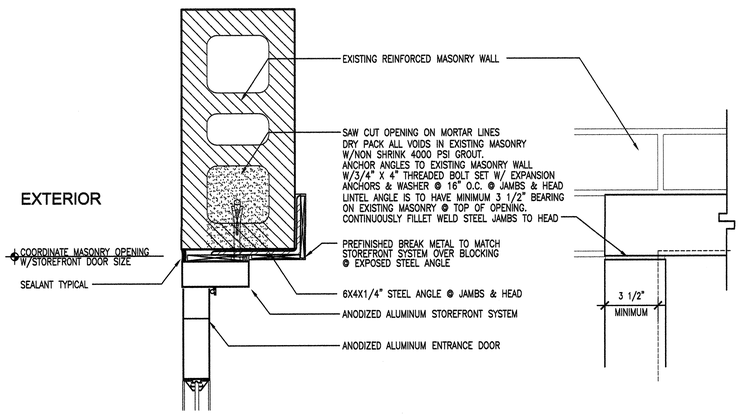
SCALE: NONE

0 3" 6" 9" 12"



7 / A302 NEW WALL TO EXISTING EXTERIOR WINDOW DETAIL

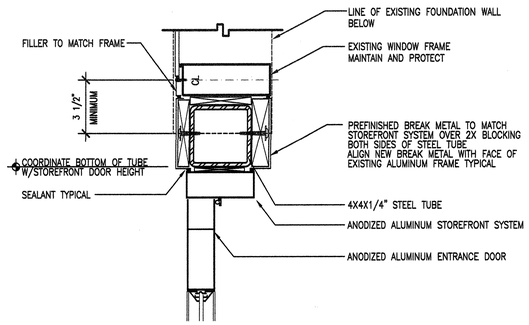
SCALE: NONE



6 / A302 HEAD & JAMB @ NEW EXTERIOR DOOR IN EXISTING MASONRY WALL

SCALE: 3" = 1'-0"

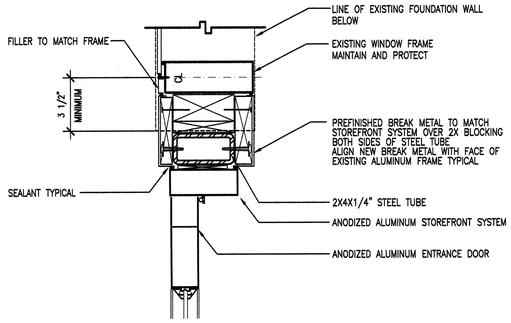
0 3" 6" 9" 12"



5 / A302 HEAD @ NEW EXTERIOR ALUMINUM ENTRANCE DOOR

SCALE: 3" = 1'-0"

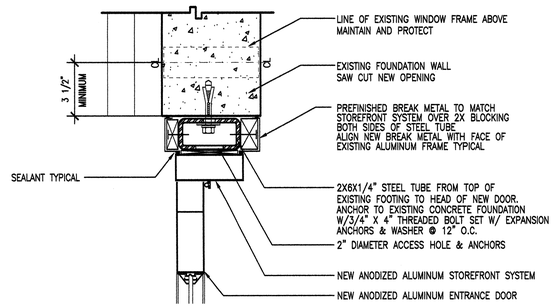
0 3" 6" 9" 12"



4 / A302 JAMB ABOVE WINDOW FRAME @ NEW EXTERIOR DOOR

SCALE: 3" = 1'-0"

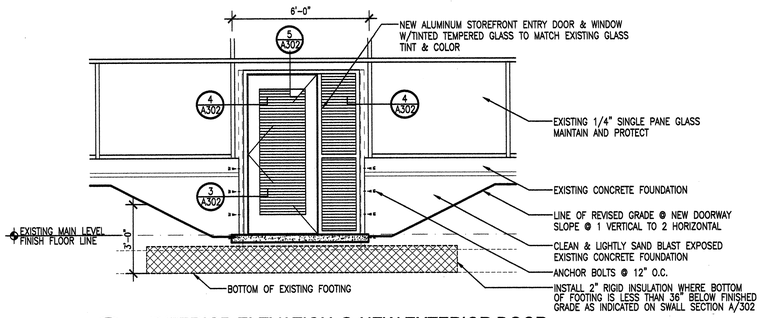
0 3" 6" 9" 12"



3 / A302 JAMB BELOW WINDOW FRAME @ NEW EXTERIOR DOOR

SCALE: 3" = 1'-0"

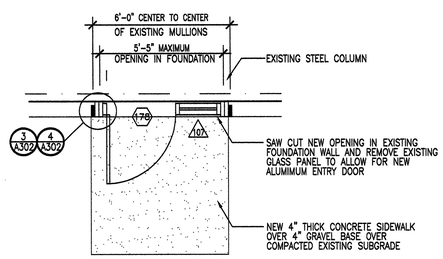
0 3" 6" 9" 12"



2 / A302 EXTERIOR ELEVATION @ NEW EXTERIOR DOOR

SCALE: 3/4" = 1'-0"

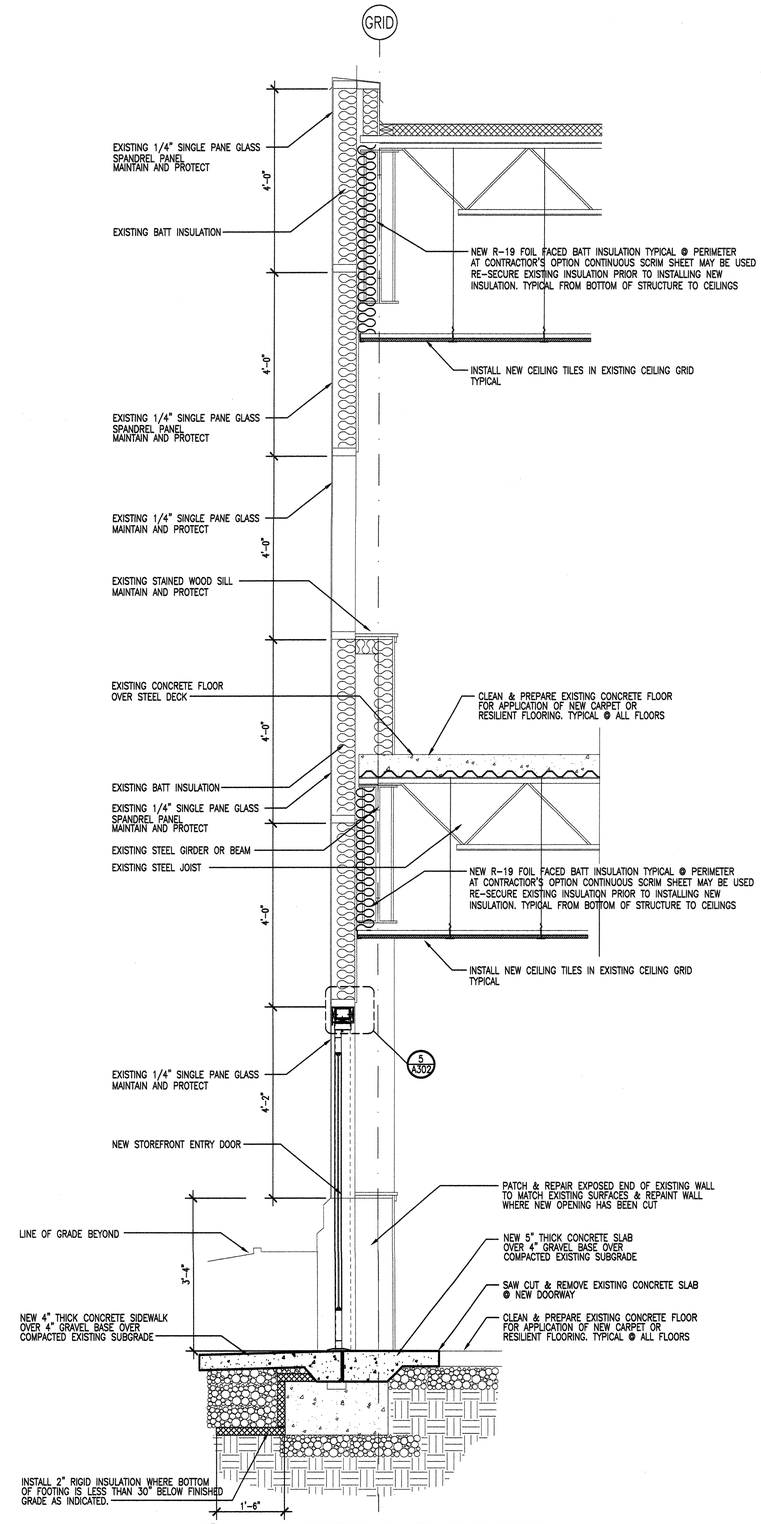
0 1' 2'



1 / A302 ENLARGED FLOOR PLAN @ NEW EXTERIOR DOOR

SCALE: 3/8" = 1'-0"

0 2' 4'



A / A302 WALL SECTION @ NEW EXIT DOOR

SCALE: 3/4" = 1'-0"

0 1' 2'

WALL SECTIONS AND DETAILS

WORKFORCE SERVICES

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH

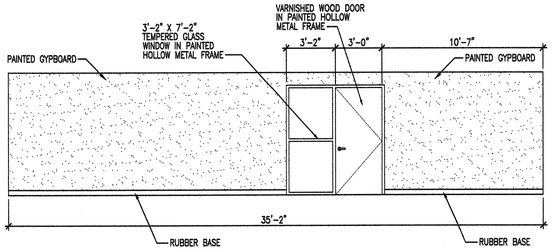
FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH
FRANK N. MURDOCK
124498
6/8/10
REGISTERED ARCHITECT

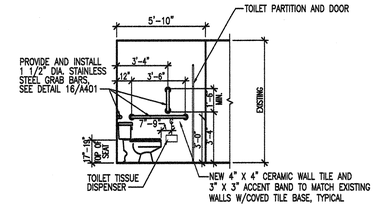
REVISION #	DATE:

DFCM PROJECT NO.:
09254310
CONST. DOC.
FILE NAME: DEQS-A302
PLOT SCALE: 1:16
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

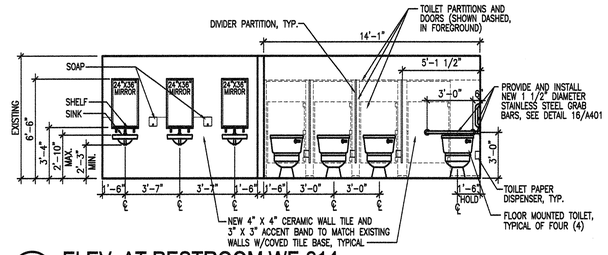
A
302



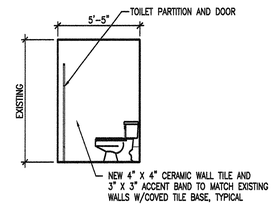
12 A402 ELEV. AT BREAKROOM WF-208
SCALE: 1/4" = 1'-0"



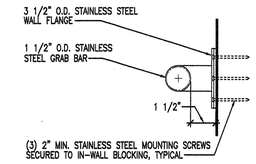
13 A401 ELEV. AT RESTROOM WF-214
SCALE: 1/4" = 1'-0"



14 A401 ELEV. AT RESTROOM WF-214
SCALE: 1/4" = 1'-0"

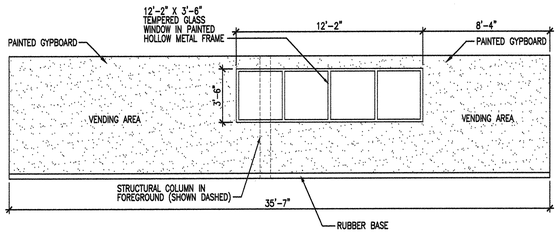


15 A401 ELEV. AT RESTROOM WF-214
SCALE: 1/4" = 1'-0"

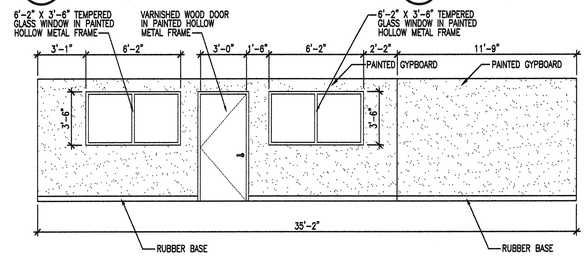


NOTE: INSTALLATION MUST WITHSTAND 250 LB. FORCE IN ANY DIRECTION.

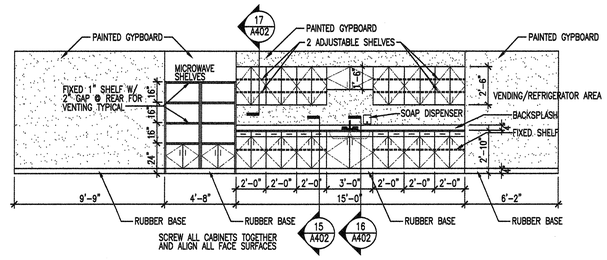
16 A401 GRAB BAR DETAIL
SCALE: NONE



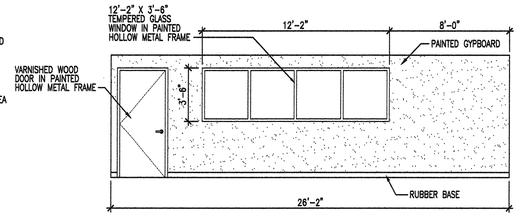
11 A402 ELEV. AT BREAKROOM WF-208
SCALE: 1/4" = 1'-0"



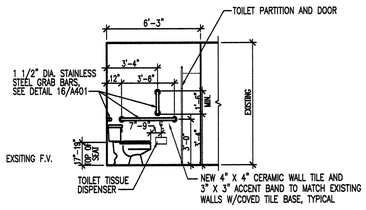
10 A402 ELEV. AT BREAKROOM WF-208
SCALE: 1/4" = 1'-0"



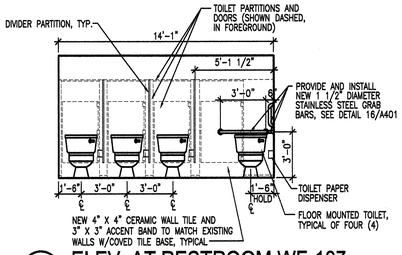
9 A402 ELEV. AT BREAKROOM WF-208
SCALE: 1/4" = 1'-0"



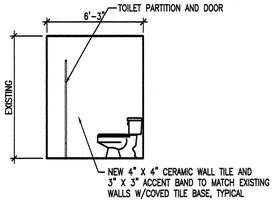
8 A402 ELEV. AT BREAKROOM WF-117
SCALE: 1/4" = 1'-0"



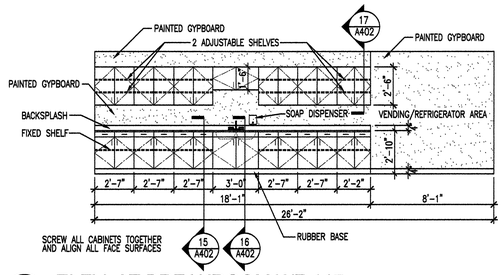
3 A401 ELEV. AT RESTROOM WF-107
SCALE: 1/4" = 1'-0"



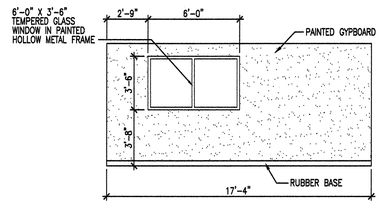
4 A401 ELEV. AT RESTROOM WF-107
SCALE: 1/4" = 1'-0"



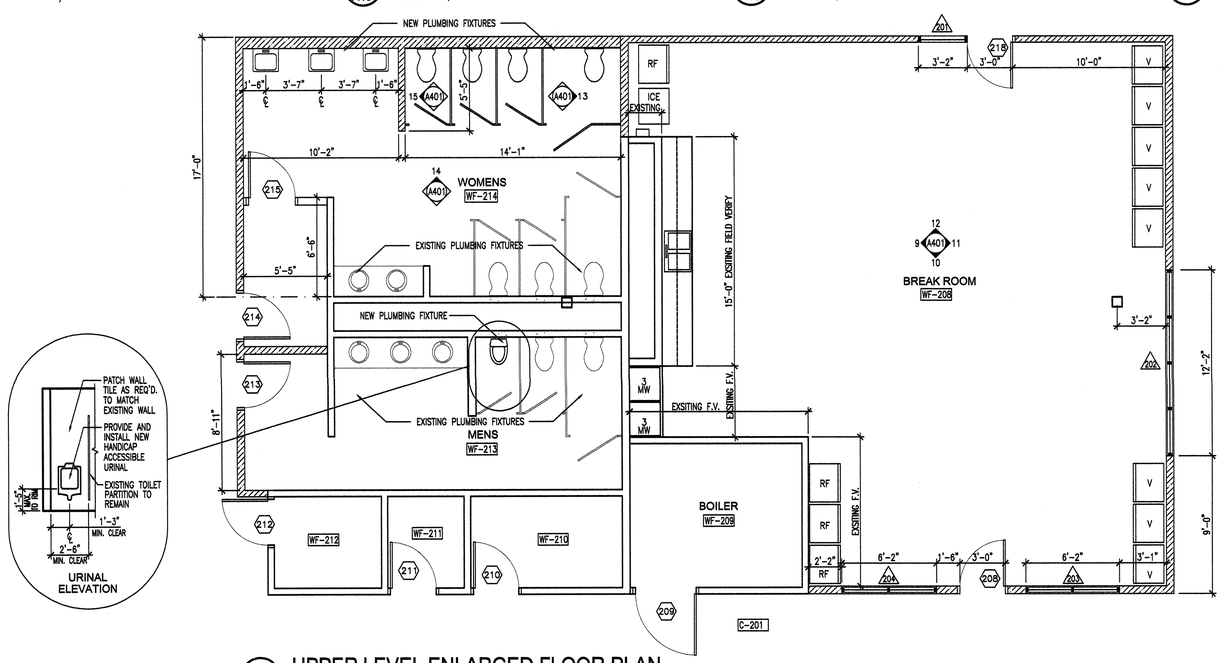
5 A401 ELEV. AT RESTROOM WF-107
SCALE: 1/4" = 1'-0"



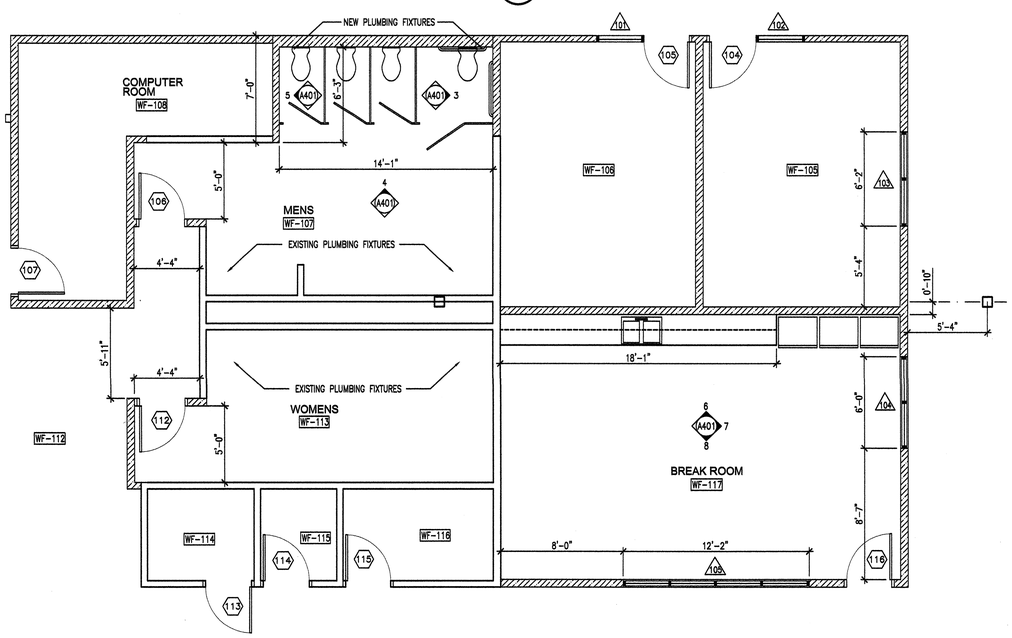
6 A402 ELEV. AT BREAKROOM WF-117
SCALE: 1/4" = 1'-0"



7 A402 ELEV. AT BREAKROOM WF-117
SCALE: 1/4" = 1'-0"



2 A401 UPPER LEVEL ENLARGED FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 A401 MAIN LEVEL ENLARGED FLOOR PLAN
SCALE: 1/4" = 1'-0"

ENLARGED PLANS AND INTERIOR ELEVATIONS

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH

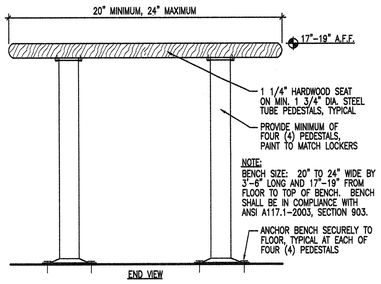
FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH
FRANK N. MURDOCK
124493
LICENSED ARCHITECT

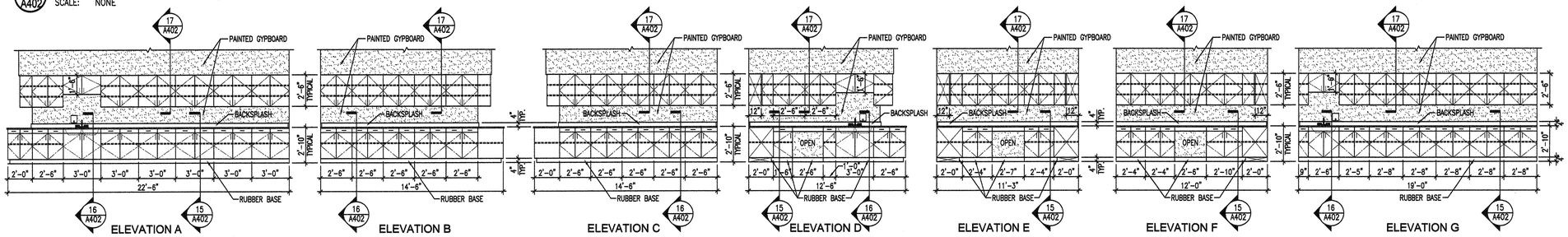
REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONST. DOC.
FILE NAME: DEQS-A401
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

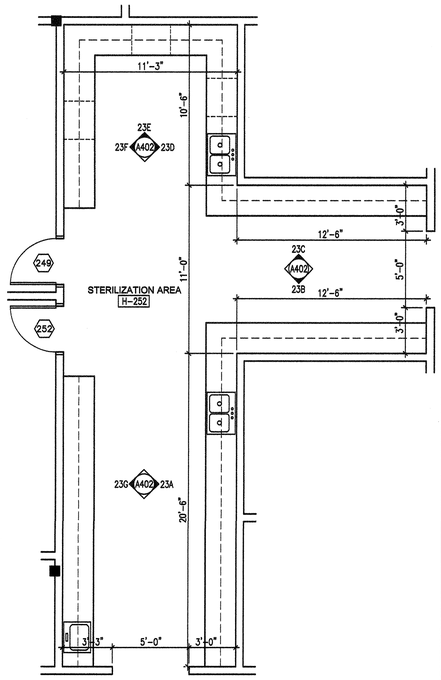
A
401



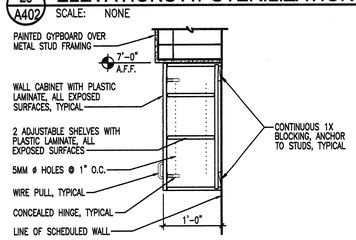
24 A402 BENCH AT LOCKER AREA
SCALE: NONE



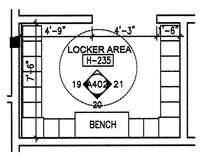
23 A402 ELEVATIONS AT STERILIZATION AREA H-252
SCALE: NONE



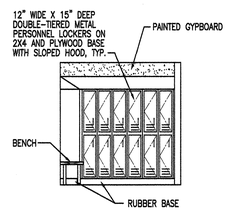
ENLARGED PLAN
22 A402 STERILIZATION AREA H-252
SCALE: 1/4" = 1'-0"



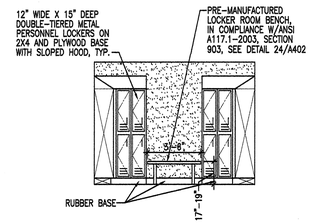
17 A402 UPPER CABINET SECTION
SCALE: NONE



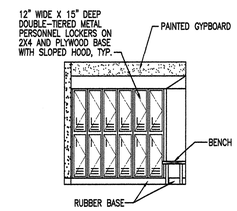
18 A402 ENLARGED PLAN-LOCKER AREA H-235
SCALE: 1/4" = 1'-0"



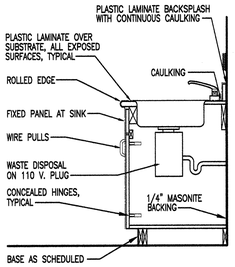
19 A402 ELEV. AT LOCKER AREA H-235
SCALE: NONE



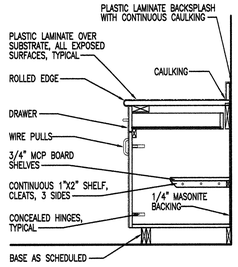
20 A402 ELEV. AT LOCKER AREA H-235
SCALE: NONE



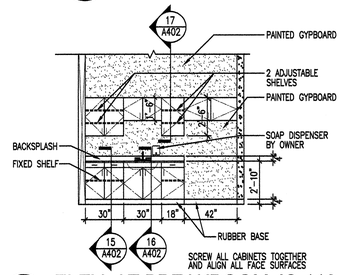
21 A402 ELEV. AT LOCKER AREA H-235
SCALE: NONE



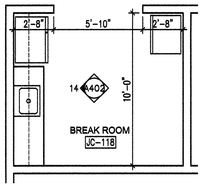
16 A402 SINK CABINET SECTION
SCALE: NONE



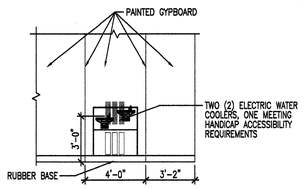
15 A402 BASE CABINET SECTION
SCALE: NONE



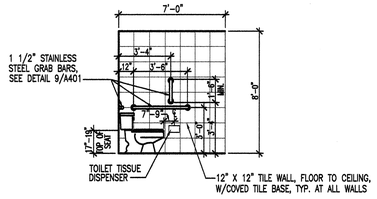
14 A402 ELEV. AT BREAKROOM JC-118
SCALE: 1/4" = 1'-0"



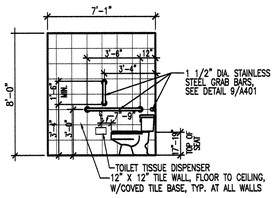
13 A402 ENLARGED PLAN-BREAKROOM JC-115
SCALE: 1/4" = 1'-0"



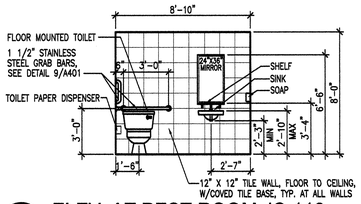
12 A402 ELEV. AT WATER COOLERS
SCALE: 1/4" = 1'-0"



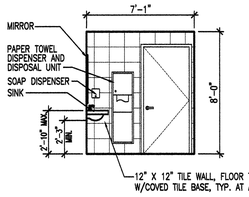
11 A402 ELEV. AT RESTROOM JC-117
SCALE: 1/4" = 1'-0"



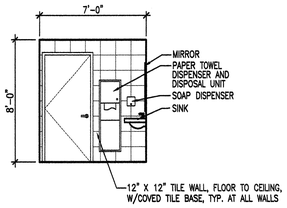
6 A402 ELEV. AT RESTROOM JC-116
SCALE: 1/4" = 1'-0"



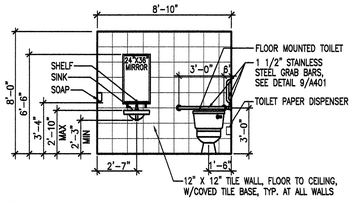
7 A402 ELEV. AT REST ROOM JC-116
SCALE: 1/4" = 1'-0"



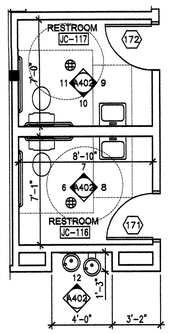
8 A402 ELEV. AT RESTROOM JC-116
SCALE: 1/4" = 1'-0"



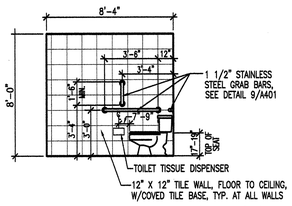
9 A402 ELEV. AT RESTROOM JC-117
SCALE: 1/4" = 1'-0"



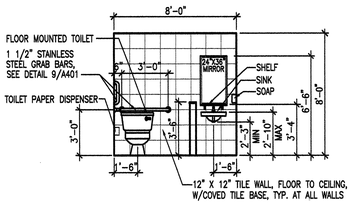
10 A402 ELEV. AT RESTROOM JC-117
SCALE: 1/4" = 1'-0"



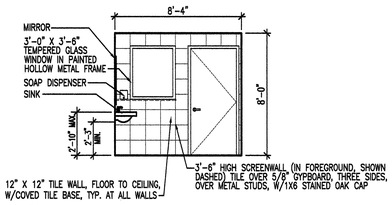
5 A402 ENLARGED PLAN-RESTROOMS JC-116 AND JC-117
SCALE: 1/4" = 1'-0"



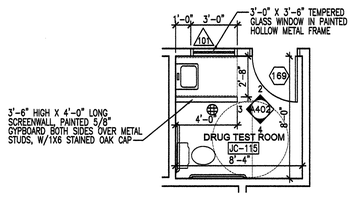
4 A402 ELEV. AT DRUG TEST ROOM JC-115
SCALE: 1/4" = 1'-0"



3 A402 ELEV. AT DRUG TEST ROOM JC-115
SCALE: 1/4" = 1'-0"



2 A402 ELEV. AT DRUG TEST ROOM JC-115
SCALE: 1/4" = 1'-0"



1 A402 ENLARGED PLAN-DRUG TEST ROOM JC-115
SCALE: 1/4" = 1'-0"

ENLARGED PLANS AND INTERIOR ELEVATIONS

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH
FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH
FRANK N. MURDOCK JR.
124498
LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONST. DOC.
FILE NAME: DEQS-A402
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

A
402

DOOR SCHEDULE - MAIN LEVEL

NO.	DOOR SIZE WIDTH	HEIGHT	THICK.	DOOR TYPE	DOOR MAT.	DOOR FINISH	OPENING DETAILS HEAD	LEFT JAMB	RIGHT JAMB	SILL THRESH.	FRAME TYPE	FRAME MAT.	FRAME FINISH	RATING	HRDW. GROUP	REMARKS	NO.
101	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	1/A601	---	W-1	HOL. METAL	PAINTED	NONE	1	---	101
102	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	6	NOTE 1.	102
103	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	6	NOTE 1.	103
104	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	8/A601	1/A601	---	W-2	HOL. METAL	PAINTED	NONE	2	INTEGRAL WITH WINDOW FRAME	104
105	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	1/A601	8/A601	---	W-2	HOL. METAL	PAINTED	NONE	2	INTEGRAL WITH WINDOW FRAME	105
106	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	106
107	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	1/A601	4/A601	---	W-1	HOL. METAL	PAINTED	NONE	4	---	107
108	PR. 3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	7/A601	---	W-7	HOL. METAL	PAINTED	NONE	2	---	108
109	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	1/A601	---	W-1	HOL. METAL	PAINTED	NONE	1	---	109
110	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	1/A601	1/A601	---	W-1	HOL. METAL	PAINTED	NONE	1	---	110
111	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	4/A601	---	W-1	HOL. METAL	PAINTED	NONE	1	---	111
112	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	112
113	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	113
114	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	114
115	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	115
116	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	1/A601	4/A601	---	W-1	HOL. METAL	PAINTED	NONE	1	---	116
117	35'-0"	9'-0"	----	D-4	BY MANUF.	BY. MANUF.	9/A601	----	----	---	BY MANUF.	BY MANUF.	BY MANUF.	NONE	---	FOLDING ACCORDION DOOR AND TRACK	117
118	3'-0"	7'-0"	1 3/4"	D-3	ALUM.	BY MANUF.	5/A302	3&4/A302	3&4/A302	6/A601	W-8	ALUM.	BY MANUF.	NONE	4	STOREFRONT DOOR/WINDOW SYSTEM	118
119	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	119
120	PR. 3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	120
121	PR. 3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	121
122	PR. 3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	122

DOOR SCHEDULE - UPPER LEVEL

201	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	6	NOTE 1.	201
202	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	202
203	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	203
204	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	204
205	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	205
206	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	206
207	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	207
208	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	4/A601	---	W-1	HOL. METAL	PAINTED	NONE	1	---	208
209	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	209
210	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	210
211	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	211
212	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	212
213	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	7/A601	---	W-1	HOL. METAL	PAINTED	NONE	2	---	213
214	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	7/A601	4/A601	---	W-1	HOL. METAL	PAINTED	NONE	2	---	214
215	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	1/A601	---	W-1	HOL. METAL	PAINTED	NONE	2	---	215
216	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	7/A601	4/A601	---	W-1	HOL. METAL	PAINTED	NONE	6	---	216
217	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	7/A601	---	W-1	HOL. METAL	PAINTED	NONE	4	INTEGRAL WITH WINDOW FRAME	217
218	3'-0"	7'-0"	1 3/4"	D-1	WOOD	STAINED	10/A601	4/A601	8/A601	---	W-2	HOL. METAL	PAINTED	NONE	1	INTEGRAL WITH WINDOW FRAME	218
219	3'-0"	7'-0"	1 3/4"	EXISTING	---	---	---	---	---	---	---	EXISTING	---	NONE	EXISTING	NOTE 1.	219

GLASS TYPES

BT 1/4" CLEAR FLOAT TEMPERED GLASS

TT 1/4" TINTED TEMPERED FLOAT GLASS

FT FIRE RATED WIRE GLASS

GENERAL GLASS NOTE: PROVIDE FIRE RATED WIRE GLASS AT ALL LOCATIONS WHERE GLASS IS CALLED FOR IN RATED WALLS.

DOOR AND WINDOW NOTES

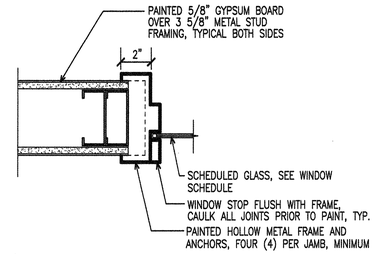
1. IF EXISTING DOOR FRAME IS FACTORY FINISH, MAINTAIN AND PROTECT THE FRAME. IF THE FRAME IS HOLLOW METAL, PROPERLY PREPARE AND RE-PAINT THE FRAME TO MATCH ADJACENT PAINTED WALLS.
2. NO PAINTING OR REFINISHING OF EXISTING FRAME IS REQUIRED.

WINDOW SCHEDULE - MAIN LEVEL

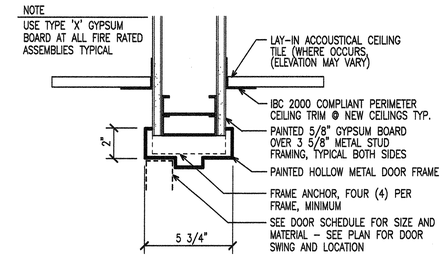
NO.	WINDOW SIZE WIDTH	HEIGHT	FRAME MATERIAL	FRAME TYPE	GLASS TYPE	FRAME FINISH	OPENING DETAILS HEAD	LEFT JAMB	RIGHT JAMB	SILL	REMARKS CONTRACTOR TO COORDINATE ALL ALL WINDOW DIMENSIONS WITH MANUFACTURER
101	3'-2"	7'-2"	HOL. MTL.	W-2	BT	PAINTED	11/A601	11/A601	11/A601	3/A601	INTEGRAL WITH DOOR FRAME
102	3'-2"	7'-2"	HOL. MTL.	W-2	BT	PAINTED	11/A601	11/A601	11/A601	3/A601	INTEGRAL WITH DOOR FRAME
103	6'-2"	3'-6"	HOL. MTL.	W-5	BT	PAINTED	11/A601	11/A601	11/A601	11/A601	
104	6'-0"	3'-6"	HOL. MTL.	W-4	BT	PAINTED	11/A601	11/A601	11/A601	11/A601	
105	12'-2"	3'-6"	HOL. MTL.	W-6	BT	PAINTED	11/A601	11/A601	11/A601	11/A601	
106	2'-8"	7'-2"	ALUM.	W-8	BT	BY MANUF.	11/A601	----	----	3/A601	INTEGRAL WITH DOOR FRAME

WINDOW SCHEDULE - UPPER LEVEL

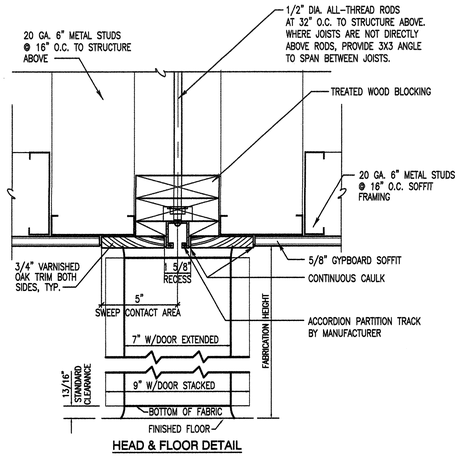
201	3'-2"	7'-2"	HOL. MTL.	W-2	BT	PAINTED	11/A601	11/A601	11/A601	3/A601	INTEGRAL WITH DOOR FRAME
202	12'-2"	3'-6"	HOL. MTL.	W-6	BT	PAINTED	11/A601	11/A601	11/A601	11/A601	
203	6'-2"	3'-6"	HOL. MTL.	W-5	BT	PAINTED	11/A601	11/A601	11/A601	11/A601	
204	6'-2"	3'-6"	HOL. MTL.	W-5	BT	PAINTED	11/A601	11/A601	11/A601	11/A601	



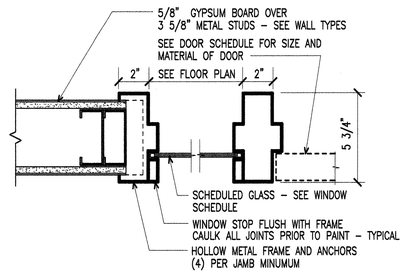
11 A601 WINDOW HEAD, JAMB AND SILL
SCALE: NONE



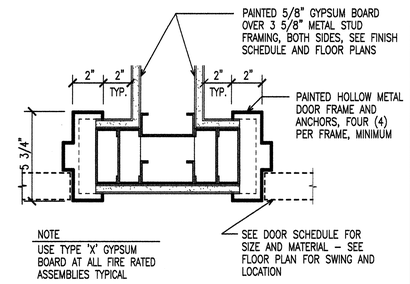
10 A601 DOOR HEAD DETAIL
SCALE: NONE



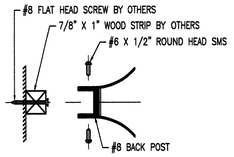
9 A601 ACCORDION DOOR HEAD DETAIL
SCALE: NONE



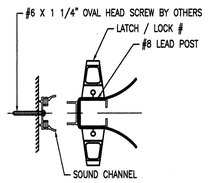
8 A601 DOOR/WINDOW JAMB DETAIL
SCALE: NONE



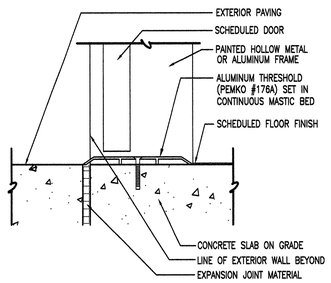
7 A601 DOOR JAMB DETAIL
SCALE: NONE



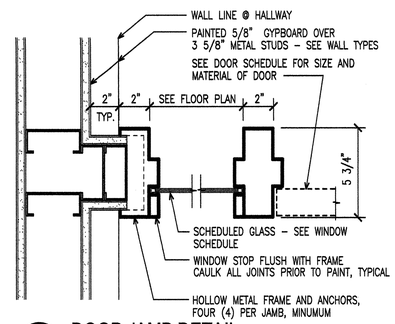
13 A601 ACCORDION DOOR FIXED JAMB DETAIL
SCALE: NONE



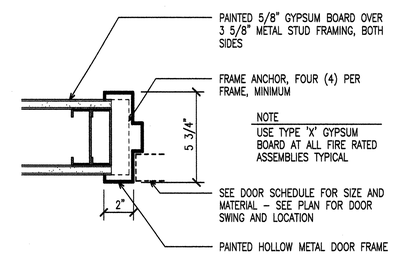
12 A601 ACCORDION DOOR MEETING JAMB DETAIL
SCALE: NONE



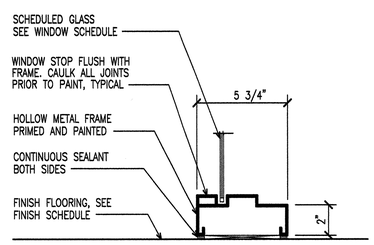
6 A601 DOOR THRESHOLD
SCALE: NONE



5 A601 DOOR JAMB DETAIL
SCALE: NONE

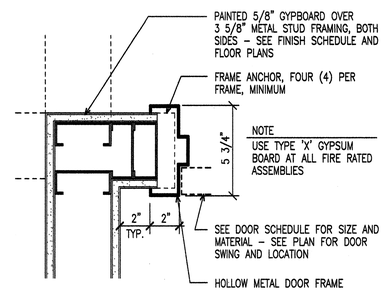


4 A601 DOOR JAMB DETAIL
SCALE: NONE



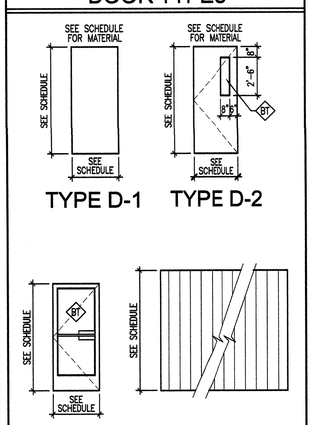
3 A601 WINDOW SILL DETAIL
SCALE: NONE

2 A601 DOOR JAMB DETAIL
SCALE: NONE



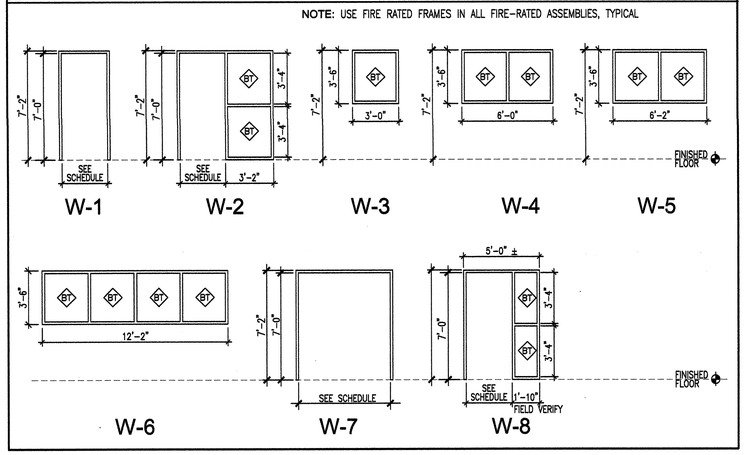
1 A601 DOOR JAMB DETAIL
SCALE: NONE

DOOR TYPES



FRAME TYPES

NOTE: USE FIRE RATED FRAMES IN ALL FIRE-RATED ASSEMBLIES, TYPICAL



WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH FRANK N. MURDOCK 124499 LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.: 09254310
CONST. DOC.
FILE NAME: DEQS-A601
PLOT SCALE: 1:48
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

A 601

DOOR AND WINDOW SCHEDULES AND DETAILS

ROOM FINISH SCHEDULE - MAIN LEVEL

ROOM NUMBER 0-000	ROOM NAME	FLOOR	WALLS AND BASES								CEILING		REMARKS
			NORTH		EAST		SOUTH		WEST				
			WALL	BASE	WALL	BASE	WALL	BASE	WALL	BASE	TYPE	HEIGHT	
WF-101	CONFERENCE ROOM	NEW CARPET	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	LAY-IN	9'-0"	---
WF-102	OFFICE	NEW CARPET	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	LAY-IN	9'-0"	---
WF-103	OFFICE	NEW CARPET	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	LAY-IN	9'-0"	---
WF-104	WORK STATIONS	---	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	LAY-IN	9'-0"	---
WF-105	CONFERENCE ROOM	NEW CARPET	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	LAY-IN	9'-0"	---
WF-106	CONFERENCE ROOM	NEW CARPET	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	NEW WALL PAINTED	NEW RUBBER	LAY-IN	9'-0"	---
WF-107	MEN'S RESTROOM	EXISTING	EXISTING AND NEW WALL TILE	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	8'-0"	NOTE 3.
WF-108	COMPUTER ROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-109	CHAIR STORAGE	NEW CARPET	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-110	CONFERENCE ROOM	NEW CARPET	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-111	TRAINING ROOM	NEW CARPET	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-112	RECEPTION AREA	NEW CARPET	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-113	WOMEN'S RESTROOM	EXISTING	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	8'-0"	NOTE 3.
WF-114	---	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-115	---	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-116	---	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-117	BREAK ROOM	NEW CARPET	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-118	HALLWAY	NEW CARPET											
WF-119	HALLWAY	NEW CARPET											
C-101	STAIRWAY	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NOTE 1.
C-102	STAIRWAY	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	NOTE 1.

ROOM FINISH SCHEDULE - UPPER LEVEL

WF-201	OFFICE	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-202	CONFERENCE ROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-203	OFFICE	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-204	OFFICE	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-205	OFFICE	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-206	OFFICE	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-207	CONFERENCE ROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-208	BREAK ROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-209	BOILER	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-210	---	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-211	---	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-212	---	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-213	MEN'S RESTROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	8'-0"	---
WF-214	WOMEN'S RESTROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	8'-0"	---
WF-215	COMPUTER ROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-216	STORAGE ROOM	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
WF-217	WORK STATION AREA	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
C-201	CORRIDOR	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---
C-202	CORRIDOR	---	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	PAINTED GYPBOARD	RUBBER	LAY-IN	---	---

NOTES

1. NO NEW PAINTING OR NEW FINISHES REQUIRED.
2. PAINT ALL EXISTING EXPOSED GYPBOARD.
3. RESTROOM WILL BE REMODELED, SEE ENLARGED FLOOR PLAN 2/A401 AS WELL AS INTERIOR ELEVATIONS FOR THIS RESTROOM ON SHEET A401. REPAIR AS NECESSARY AND PAINT ALL PREVIOUSLY PAINTED GYPBOARD SURFACES.

ROOM FINISH SCHEDULES

WORKFORCE SERVICES
DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
150 NORTH 1950 WEST, SALT LAKE CITY, UTAH

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

STATE OF UTAH
FRANK N. MURDOCK JR.
LICENSED ARCHITECT

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONST. DOC.
FILE NAME: DEQS-A602
PLOT SCALE: 1:48
DRAWN BY: STAFF
CHECKED BY: FNM
DATE: JUNE 2010

A
602

MECHANICAL LEGEND

SYMBOL	ABR.	DESCRIPTION
		GENERAL TERMINOLOGY
A / ME-101		SECTION LETTER DESIGNATION
		SECTION DRAWN ON THIS SHEET
A2		DETAIL NUMBER DESIGNATION CORRESPONDING WITH GRID LOCATION
1 / AH		MECHANICAL EQUIPMENT DESIGNATION
		EQUIPMENT ITEM DESIGNATION
CFM / D-1		REGISTER, GRILL 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
℄ EL.		CENTER LINE ELEVATION
INV. ELEV.		INVERT ELEVATION
GC		GENERAL CONTRACTOR
MC		MECHANICAL CONTRACTOR
ATC		CONTROL CONTRACTOR
EC		ELECTRICAL CONTRACTOR
FPC		FIRE PROTECTION CONTROL
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
		NEW SPIRAL DUCT
		NEW MEDIUM PRESSURE DUCT
		RECT. TO RECT. AIR DUCT TAKE-OFF
		RECT. TO RND. AIR DUCT TAKE-OFF
		RND. TO RND. AIR DUCT TAKE-OFF
		RECT. TAKE-OFF AT END OF MAIN
		MEDIUM PRESSURE TAKE-OFF
		MEDIUM PRESSURE HIGH EFFICIENCY TAKEOFF
		BURIED OR UNDER FLOOR DUCT
		FLEXIBLE AIR DUCT
		LINED DUCT
		VANED ELBOW
		RADIUS ELBOW
		CONCENTRIC DUCT TRANSITION
		ECCENTRIC DUCT TRANSITION
		FLEXIBLE AIR DUCT CONNECTION
VD		VOLUME DAMPER
		SUPPLY AIR DIFFUSER
		RETURN AIR, FRESH AIR, AND TRANSFER AIR
		CEILING MOUNTED EXHAUST FAN OR EXHAUST GRILLE
		RETURN OR OUTSIDE AIR DUCT UP
		SUPPLY DUCT UP
		EXHAUST AIR INTAKE UP
		RETURN OR OUTSIDE AIR DUCT DOWN
		SUPPLY DUCT DOWN
		EXHAUST DUCT DOWN
		ROUND DUCT UP
		LOWER DUCT DOWN
R		RAISE DUCT UP
D		LOWER DUCT DOWN
		FLEXIBLE DUCT CONNECTION
		PARALLEL BLADE DAMPER
		OPPOSED BLADE DAMPER
H		HUMIDIFIER
		AIRFLOW MEASURING STATION
		FILTER BANK
		COIL
	AP	ACCESS PANEL
		EXISTING EQUIPMENT TO BE REMOVED
		EXISTING EQUIPMENT TO REMAIN
		NEW EQUIPMENT
M	MVD	MOTORIZED VOLUME DAMPER
BD	BD	BACKDRAFT DAMPER
F	FD	FIRE DAMPER
R	RD	RADIATION TYPE FIRE DAMPER
S	SD	SMOKE DAMPER
FS	FS	FIRE & SMOKE DAMPER
T RTU-1	T-STAT	WALL MOUNTED THERMOSTAT MECHANICAL EQUIPMENT CONTROLLED
S		WALL MOUNTED TEMP. SENSOR
H	H-STAT	WALL MOUNTED HUMIDISTAT
F	F-STAT	WALL MOUNTED FIRESTAT
SA		SUPPLY AIR
RA		RETURN AIR
EA		EXHAUST AIR
OA		OUTSIDE AIR
MA		MIXED AIR
FA		FRESH AIR
RF		RELIEF AIR

SYMBOL	ABR.	DESCRIPTION
		WET SIDE
		PUMP
®		REGULATOR
		UNION
		MANUAL ACTUATOR (BALL, BUTTERFLY, NEEDLE, ETC. VALVES)
		MANUAL ACTUATOR (GATE, GLOBE, S&D, OS&Y, ETC. VALVES)
		PNEUMATIC DIAPHRAGM ACTUATOR
M		ELECTRIC MOTOR ACTUATOR
S		SOLENOID ACTUATOR
		THREADED OR SWEAT VALVE CONNECTION
		FLANGED VALVE CONNECTION
		BUTTERFLY VALVE
		GATE VALVE
		GLOBE VALVE - STRAIGHT PATTERN
		GLOBE VALVE - ANGLE PATTERN
M		MOTORIZED 2-WAY CONTROL VALVE
M		MOTORIZED 3-WAY CONTROL VALVE
		CHECK VALVE
	PRV	PRESSURE REDUCING VALVE
	PRV	PRESSURE REDUCING VALVE W/ CHECK
	CBV	CIRCUIT BALANCING VALVE
	BV	BALL VALVE
P	PRV	PRESSURE RELIEF VALVE
T	TRV	THERMAL RELIEF VALVE
S	SRV	SAFETY RELIEF VALE
		PLUG VALVE
		NEEDLE VALVE
	TDV	TRIPLE DUTY VALVE
		AUTOMATIC AIR VENT
		MANUAL AIR VENT
		STRAINER
		STRAINER W/ PLUGGED BLOW OFF
	VTI	VENTURI
		PRESSURE GAUGE AND GAUGE COCK - WATER
		PRESSURE GAUGE AND GAUGE COCK - STEAM
		THERMOMETER AND THERMOWELL
S		WATER TEMPERATURE SENSOR AND THERMOWELL
F		FLOW SWITCH
PS	PS	PRESSURE SWITCH
	TW	THERMOWELL
		PRESSURE AND TEMPERATURE TAP
T IBT		INVERTED BUCKET STEAM TRAP
TT		THERMOSTATIC STEAM TRAP
F&T		FLOAT & THERMOSTATIC STEAM TRAP
		DIRECTION OF FLOW
		BACKFLOW PREVENTING VALVE

SYMBOL	ABR.	DESCRIPTION
		WET SIDE CONT
		PITCH DOWN
		ELBOW UP
		ELBOW DOWN
		TEE UP
		TEE DOWN
-----		EXISTING PIPING TO BE REMOVED
		EXISTING PIPING TO REMAIN
		NEW PIPING
		PIPE CAP OR PLUG
		CONCENTRIC REDUCER
		ECCENTRIC REDUCER
		EXPANSION JOINT
		FLEXIBLE CONNECTION
		ANCHOR POINT
—CD—		CONDENSATE DRAIN
—G—		NATURAL GAS PIPING
—CF—		CHEMICAL FEED LINE
—MU—		MAKE-UP WATER LINE
	CW	CULINARY COLD WATER
	HW	CULINARY HOT WATER
		RECIRCULATED CULINARY HOT WATER
—DR—		EQUIPMENT DRAIN
—HWS—		HEATING WATER SUPPLY
—HWR—		HEATING WATER RETURN
—CHWS—		CHILLED WATER SUPPLY
—CHWR—		CHILLED WATER RETURN
—HTWS—		HIGH TEMPERATURE HEATING WATER SUPPLY
—HTWR—		HIGH TEMPERATURE HEATING WATER RETURN
—LPS—		LOW PRESSURE STEAM
—LPR—		LOW PRESSURE STEAM RETURN
—MPS—		MEDIUM PRESSURE STEAM
—MPR—		MEDIUM 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 2006 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 THIS CONTRACTOR SHALL CONTRACT WITH A DESIGN BUILD ELECTRICAL CONTRACTOR FOR THE DESIGN AND CONSTRUCTION OF THE ELECTRICAL PORTION OF THIS PROJECT. ELECTRICAL INSTALLATION AND DESIGN SHALL BE PER 2008 NEC.

G-19 ALL PIPING, MATERIALS, ETC. SHALL BE NEW AND DOMESTIC MADE UNLESS SPECIFICALLY AUTHORIZED IN WRITING PRIOR TO BID.

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

MECHANICAL GENERAL NOTES AND LEGEND

PROFESSIONAL ENGINEER 6-8-10 WINWARD M. PACKER No. 375080 STATE OF UTAH

REVISION # DATE:

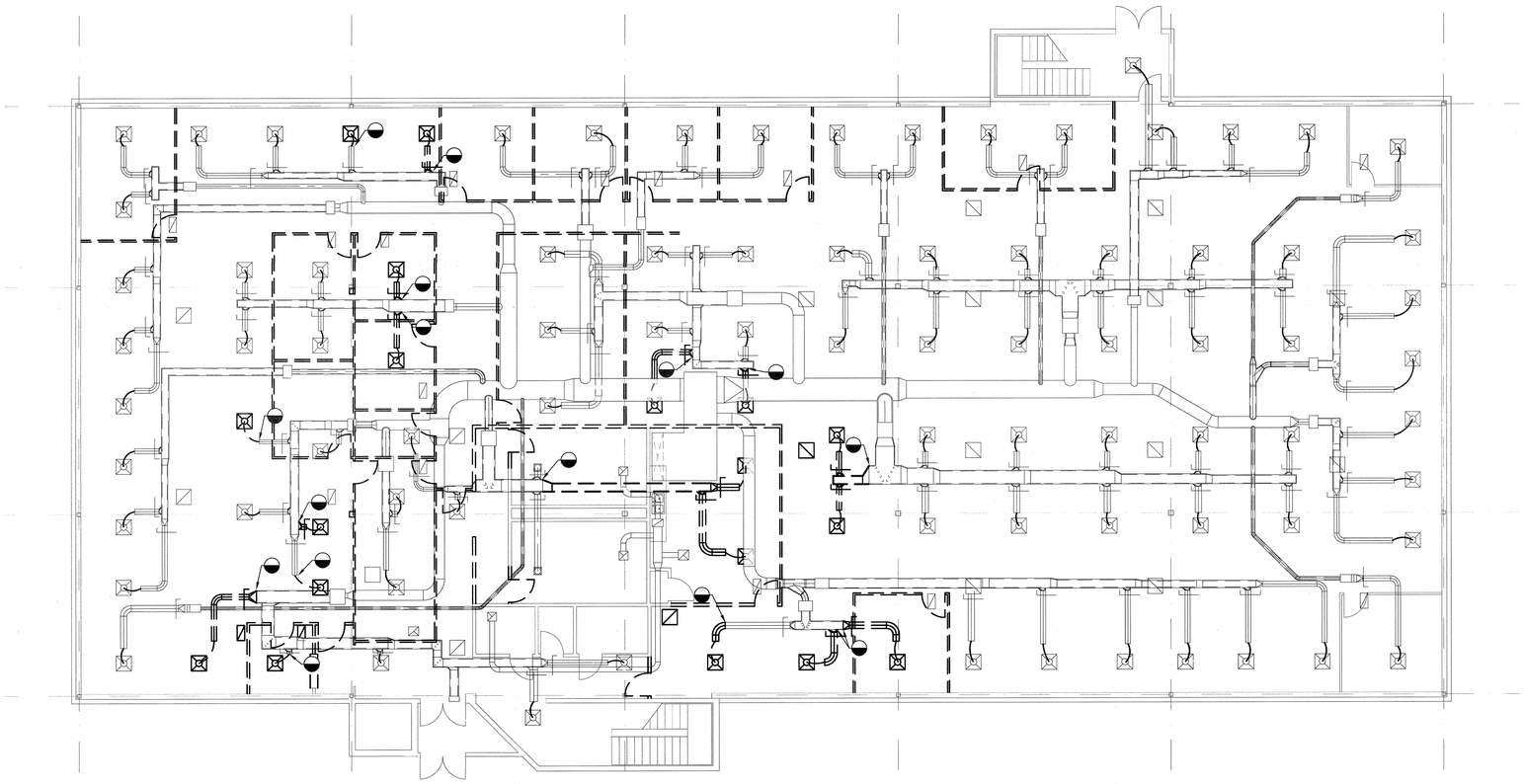
DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: APRIL 2010

MG
001

SHEET NOTES:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15



SOUTH BLDG. MAIN LEVEL MECHANICAL DEMOLITION FLOOR PLAN

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

0 2' 4' 8' 16'

WORKFORCE SERVICES REDWOOD ELIGIBILITY CENTER

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH

168 N 1950 W, SALT LAKE CITY, UT

SOUTH BLDG. MAIN LEVEL MECHANICAL DEMOLITION FLOOR PLAN

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL (801) 532-4441 FAX (801) 532-4220

PROFESSIONAL ENGINEER
6-9-10
WINWARD M. PACKER
NO. 375080
STATE OF UTAH

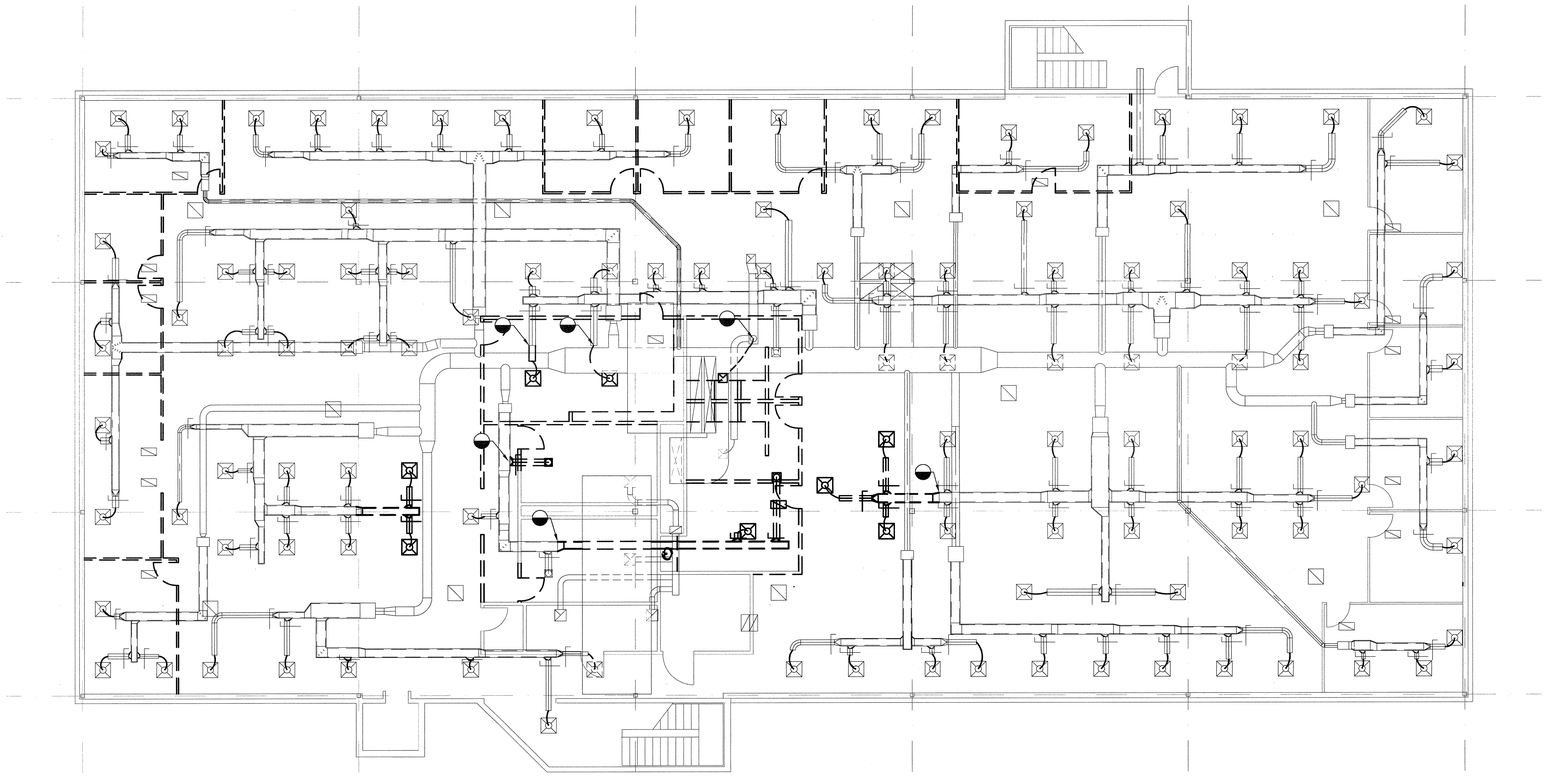
REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONCEPT
FILE NAME: WFS-REC 10
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: MAY 10 2010

MD
101

SHEET NOTES:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15



SOUTH BLDG. UPPER LEVEL MECHANICAL DEMOLITION FLOOR PLAN

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

0' 2' 4' 8' 16'

WORKFORCE SERVICES REDWOOD ELIGIBILITY CENTER

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
168 N 1950 W, SALT LAKE CITY, UT

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

SOUTH BLDG. UPPER LEVEL MECHANICAL DEMOLITION FLOOR PLAN

PROFESSIONAL ENGINEER
6-8-10
WINWARD M. PACKER
375597
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONCEPT
FILE NAME: WFS-REC 10
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: MAY 10 2010

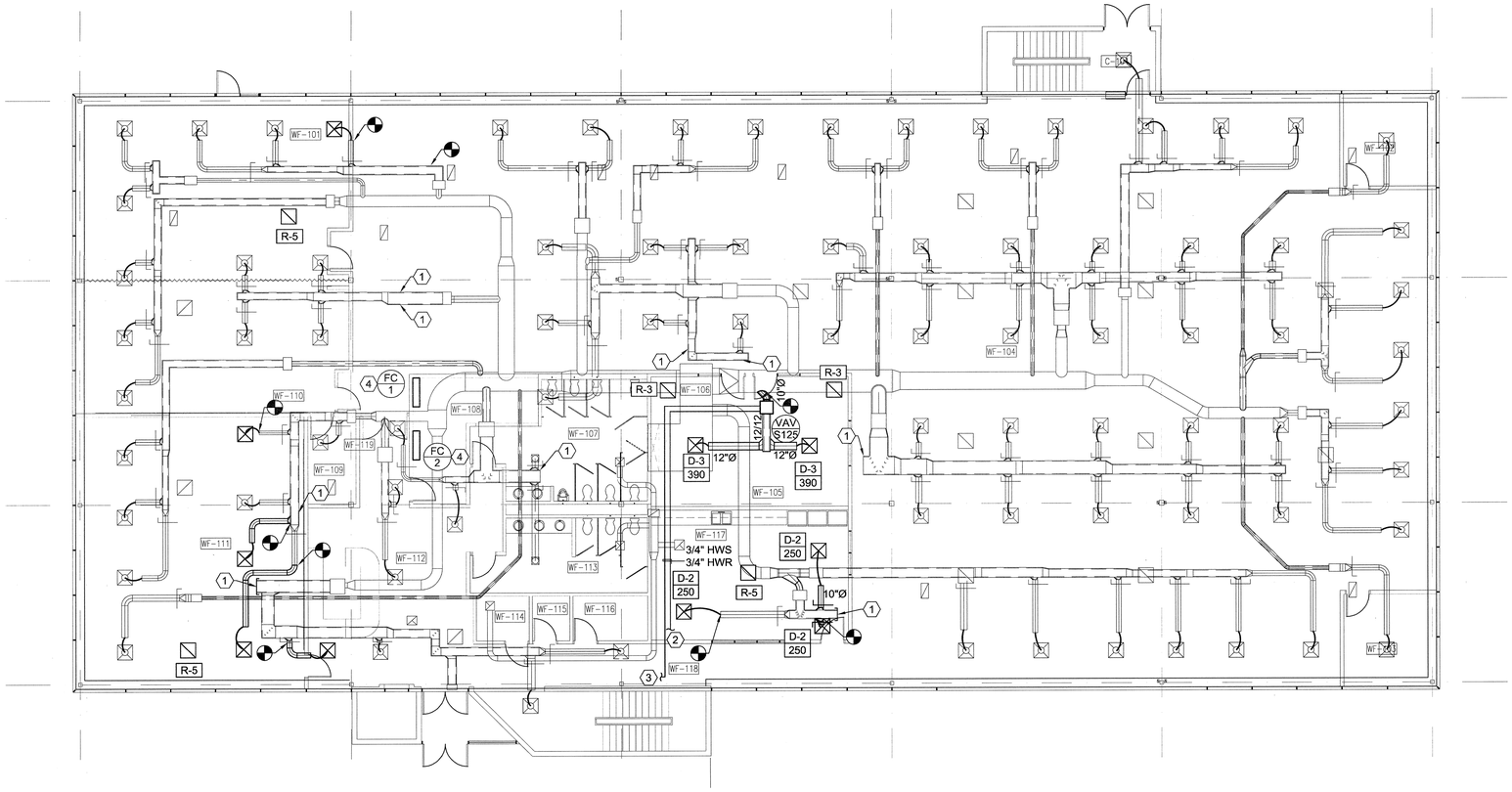
MD
102

SHEET NOTES:

1. CAP EXISTING DUCT WORK AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
2. CONNECT TO EXISTING 2" HWS LINE. FIELD VERIFY EXACT LOCATION.
3. CONNECT TO EXISTING 2" HWR LINE. FIELD VERIFY EXACT LOCATION.
4. ROUTE REFRIGERANT FROM SPLIT SYSTEM INDOOR UNIT TO CONDENSING UNITS ON THE ROOF. COORDINATE ROUTE WITH EXISTING CONDITIONS.

GENERAL NOTES:

1. PROVIDE SOUND BOOT FOR ALL NEW RETURN GRILLES. SEE DETAIL.
2. LOCATE ALL SENSORS & THERMOSTATS IN THE SPACE WHICH THEY SERVE. RELOCATE EXISTING SENSORS & THERMOSTATS AS NECESSARY.
3. RE-ALIGN EXISTING GRILLES IN NEW CEILING GRID.



SOUTH BLDG. MAIN LEVEL MECHANICAL FLOOR PLAN

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

0 2' 4' 8' 16'

WORKFORCE SERVICES REDWOOD ELIGIBILITY CENTER

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
168 N 1950 W, SALT LAKE CITY, UT

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX: (801) 532-4220

SOUTH BLDG. MAIN LEVEL MECHANICAL FLOOR PLAN

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONCEPT
FILE NAME: WFS-REC 10
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: MAY 10 2010

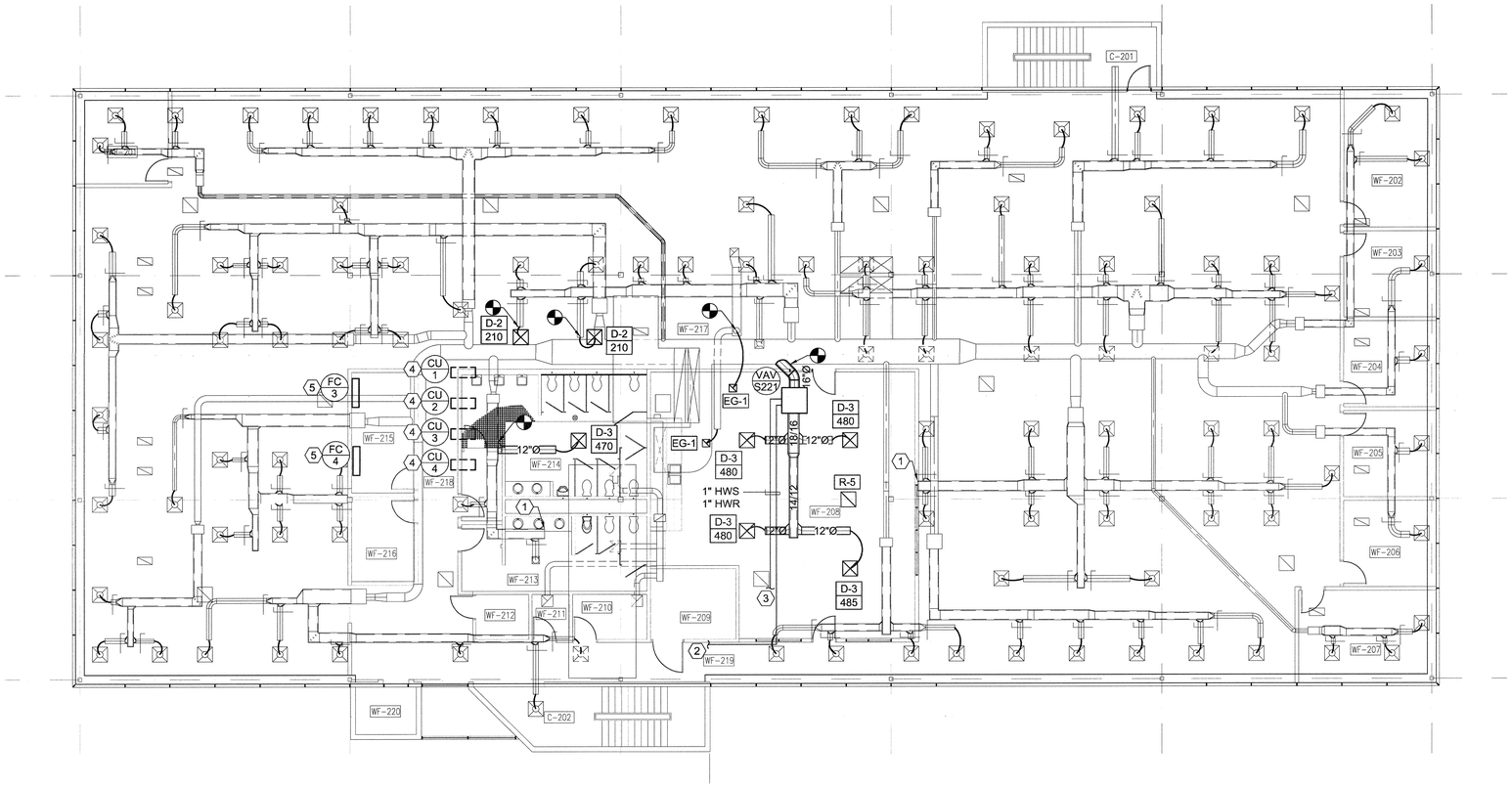
ME 101

SHEET NOTES:

1. CAP EXISTING DUCT WORK AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
2. CONNECT TO EXISTING 2" HWS LINE. FIELD VERIFY EXACT LOCATION.
3. CONNECT TO EXISTING 2" HWR LINE. FIELD VERIFY EXACT LOCATION.
4. CONDENSING UNITS LOCATED ON ROOF. COORDINATE REFRIGERANT PIPING WITH MANUFACTURER'S RECOMMENDATIONS. PATCH AND SEAL ROOF WATER TIGHT.
5. ROUTE REFRIGERANT FROM SPLIT SYSTEM INDOOR UNIT TO CONDENSING UNITS ON THE ROOF. COORDINATE ROUTE WITH EXISTING CONDITIONS.

GENERAL NOTES:

1. PROVIDE SOUND BOOT FOR ALL NEW RETURN GRILLES. SEE DETAIL.
2. LOCATE ALL SENSORS & THERMOSTATS IN THE SPACE WHICH THEY SERVE. RELOCATE EXISTING SENSORS & THERMOSTATS AS NECESSARY.
3. RE-ALIGN EXISTING GRILLES IN NEW CEILING GRID.



SOUTH BLDG. UPPER LEVEL MECHANICAL FLOOR PLAN

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

0' 2' 4' 8' 16'

WORKFORCE SERVICES REDWOOD ELIGIBILITY CENTER

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH

168 N 1950 W, SALT LAKE CITY, UT

FRANK N MURDOCK JR ■ Architect & Associates

975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

SOUTH BLDG. UPPER LEVEL MECHANICAL FLOOR PLAN

PROFESSIONAL ENGINEER
6-8-10
WINWARD M. PACKER
No. 375080
STATE OF UTAH

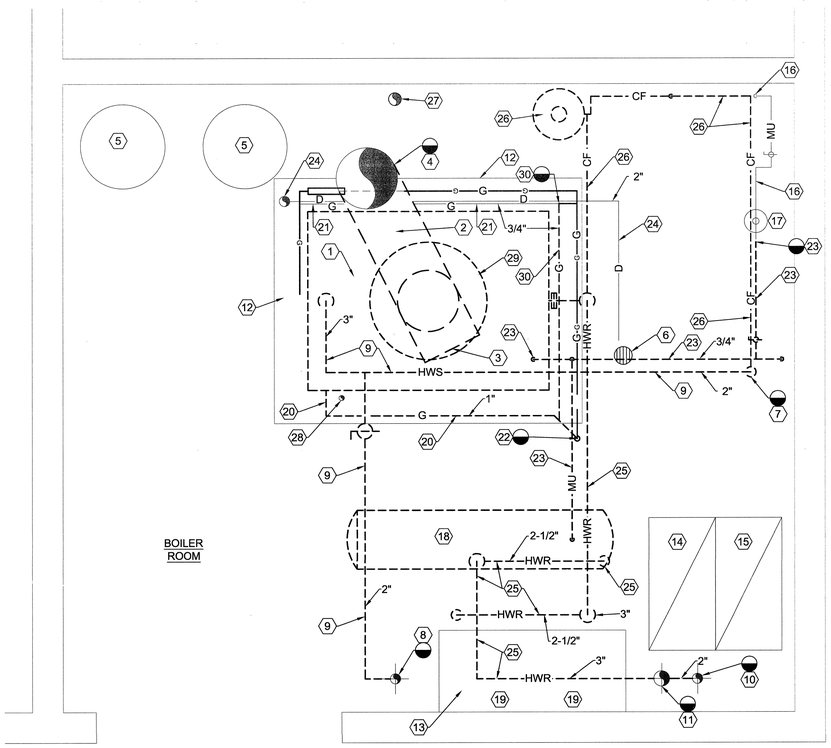
REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONCEPT
FILE NAME: WFS-REC 10
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: MAY 10 2010

ME
102

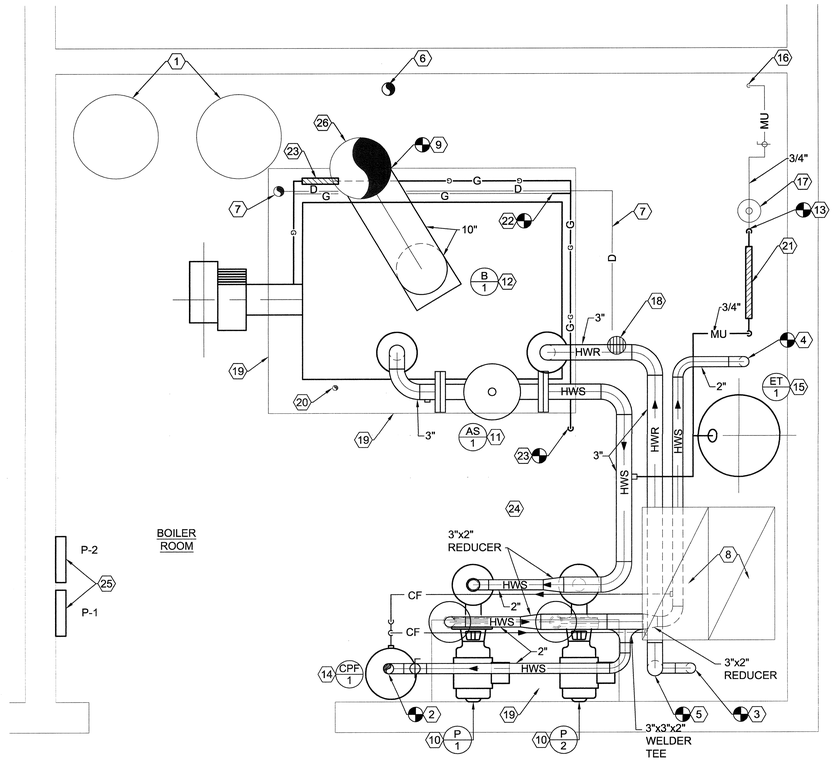
BOILER DEMOLITION SHEET NOTES:

1. REMOVE EXISTING BOILER AND ALL ASSOCIATED PIPING, VALVES, CONTROLS, ELECTRICAL ETC.
2. REMOVE EXISTING BOILER STACK, HANGERS, ETC.
3. REMOVE STACK END CAP.
4. EXISTING 12" STACK THROUGH ROOF SHALL REMAIN.
5. EXISTING CULINARY HOT WATER HEATERS, PIPING, FLUES, EXPANSION TANK ETC. SHALL REMAIN.
6. EXISTING FLOOR DRAIN SHALL REMAIN.
7. REMOVE HWS TO 3'-0" ABOVE FLOOR.
8. REMOVE HWS TO WITHIN 2'-0" OF CEILING.
9. REMOVE HWS PIPING, HANGERS, VALVES ETC.
10. REMOVE HWR TO WITHIN 2'-0" OF CEILING.
11. REMOVE HWR TO 3'-0" ABOVE FLOOR.
12. EXISTING BOILER CONCRETE PAD SHALL REMAIN.
13. EXISTING PUMP CONCRETE PAD SHALL REMAIN.
14. EXISTING COMBUSTION AIR DUCT 1'-0" FROM CEILING SHALL REMAIN.
15. EXISTING COMBUSTION AIR DUCT TO WITHIN 1'-6" OF FLOOR SHALL REMAIN.
16. EXISTING 3/4" MAKE-UP WATER FROM BELOW SHALL REMAIN.
17. EXISTING BACKFLOW PREVENTER SHALL REMAIN.
18. REMOVE EXISTING COMPRESSION TANK, HANGERS, SUPPORTS, PIPING ETC.
19. REMOVE EXISTING HOT WATER PUMPS. ALL PIPING SHALL BE REMOVED.
20. REMOVE EXISTING GAS PIPING, SUPPORTS, VALVES ETC. TO BOILER.
21. EXISTING 3/4" GAS TO HOT WATER HEATERS SHALL REMAIN.
22. GAS SUPPLY FROM BELOW SHALL REMAIN.
23. REMOVE FEED WATER FROM THIS POINT TO BOILER CONNECTION AND COMPRESSION TANK.
24. EXISTING 2" PLASTIC DRAIN SHALL REMAIN.
25. REMOVE EXISTING HWR PIPING, VALVES, HANGER ETC.
26. REMOVE EXISTING CHEMICAL POT FEEDER, PIPING, SUPPORTS, HANGERS, VALVES, ETC.
27. 2" SEWER VENT SHALL REMAIN.
28. REMOVE EXISTING GAS VENT UP TO WITHIN 2'-0" OF CEILING.
29. REMOVE EXISTING DRAFT DIVERTOR.
30. REMOVE THIS SECTION OF GAS PIPING TO THIS POINT.



BOILER ROOM DEMOLITION PLAN

SCALE: 1" = 1'-0"



BOILER ROOM PLAN

SCALE: 1" = 1'-0"

NEW BOILER SHEET NOTES:

1. EXISTING HOT WATER HEATERS SHALL REMAIN.
2. CONNECT TO EXISTING 2" HWS TO 2ND FLOOR CEILING SPACE. PIPE LENGTH REMAINING AFTER DEMOLITION IS 2'-0" BELOW CEILING.
3. CONNECT TO EXISTING 2" HWR FROM 2ND FLOOR CEILING SPACE. PIPE LENGTH REMAINING AFTER DEMOLITION IS 2'-0" BELOW CEILING.
4. CONNECT TO EXISTING 2" HWS TO 1ST FLOOR CEILING SPACE. SEE DEMOLITION SHEET MD---. PIPE LENGTH REMAINING AFTER DEMOLITION IS 3'-0" ABOVE FLOOR.
5. CONNECT TO EXISTING 2" HWR TO 1ST FLOOR CEILING SPACE. SEE DEMOLITION SHEET MD---. PIPE LENGTH REMAINING AFTER DEMOLITION IS 3'-0" ABOVE FLOOR.
6. 2" SEWER VENT PIPING SHALL REMAIN.
7. 2" PLASTIC DRAIN SHALL REMAIN.
8. EXISTING COMBUSTION AIR DUCTS - HIGH AND LOW SHALL REMAIN.
9. CONNECT NEW 10" STACK FROM NEW BOILER INTO EXISTING STACK STACK RISER.
10. NEW HOT WATER PUMPS. SEE DETAIL C/ME502.
11. NEW AIR SEPARATOR. SEE DETAIL A/ME502.
12. NEW GAS FIRED HOT WATER BOILER COMPLETE WITH ELECTRICAL, CONTROLS PIPING ETC. SEE FLOW SHEET ME701. INSTALL BOILER PER MANUFACTURERS INSTRUCTIONS.
13. CONNECT TO EXISTING MAKE-UP WATER IN THIS APPROXIMATE LOCATION. FIELD VERIFY EXACT LOCATION.
14. NEW CHEMICAL POT FEEDER. SEE DETAIL D/ME502.
15. NEW FLOOR MOUNTED EXPANSION TANK. BOLT TO FLOOR OR STRAP TO WALL. SEE DETAIL F/ME502.
16. EXISTING 3/4" MAKE-UP WATER SUPPLY FROM BELOW SHALL REMAIN.
17. EXISTING BACK FLOW PREVENTER SHALL REMAIN.
18. EXISTING FLOOR DRAIN SHALL REMAIN.
19. EXISTING CONCRETE PADS. CLEAN AND MODIFY EXISTING PADS TO FIT NEW PUMPS AND BOILER.
20. EXISTING GAS RISER VENT THROUGH ROOF. CONNECT NEW VENT WITHIN 2'-0" OF CEILING.
21. NEW MAKE-UP WATER PRV STATION. SEE FLOW SHEET ME701 FOR DETAIL.
22. CONNECT NEW 3/4" GAS PIPING INTO EXISTING AT THIS APPROXIMATE LOCATION.
23. PROVIDE NEW GAS SUPPLY PIPE TO GAS TRAIN PROVIDED WITH BOILER. SEE DETAIL B/ME502. COORDINATE WITH BOILER MANUFACTURER FOR GAS TRAIN.
24. SEE BOILER-HOT WATER FLOW SHEET ME701.
25. VFD DRIVES WALL MOUNTED. PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR FOR SIZE OF PUMPS.
26. MECHANICAL CONTRACTOR SHALL VERIFY THAT THE STACK RISER IS NOT A TYPE B VENT. REPLACE IF THE STACK IS A TYPE B VENT. BOILER REPLACEMENT IS A FORCED DRAFT NOT AN ATMOSPHERIC AS NOW INSTALLED

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

FRANK N MURDOCK, JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

ENLARGED MECHANICAL PLANS

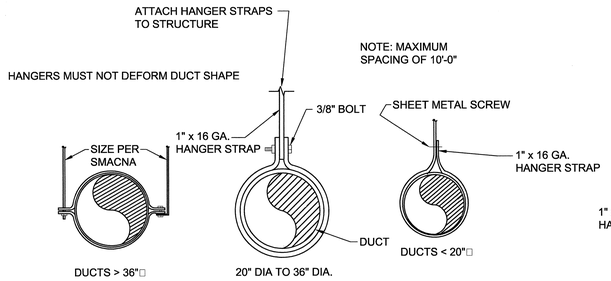
PROFESSIONAL ENGINEER
6-8-16
WINWARD M. PACKER
NO. 375099
STATE OF UTAH

REVISION # DATE:

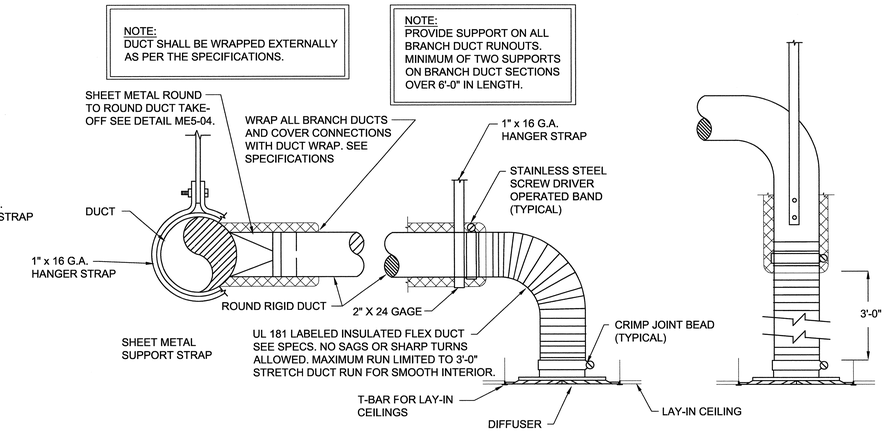
DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: APRIL 2010

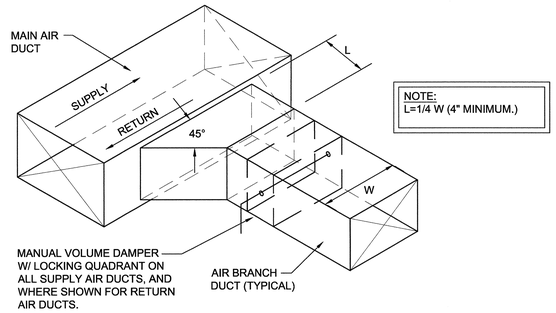
ME 401



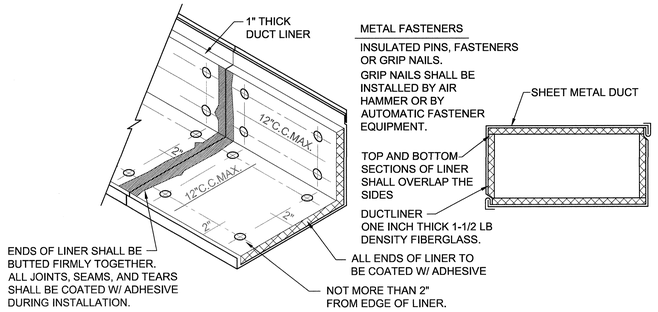
1 ROUND DUCT SUPPORT DETAIL
SCALE: NONE



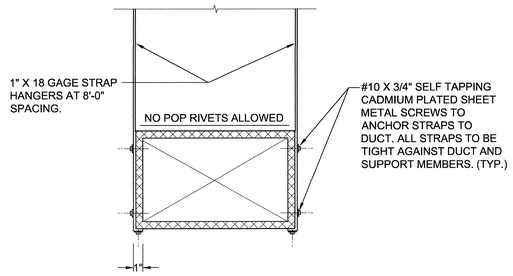
2 TYPICAL DIFFUSER CONNECTION DETAIL
SCALE: NONE



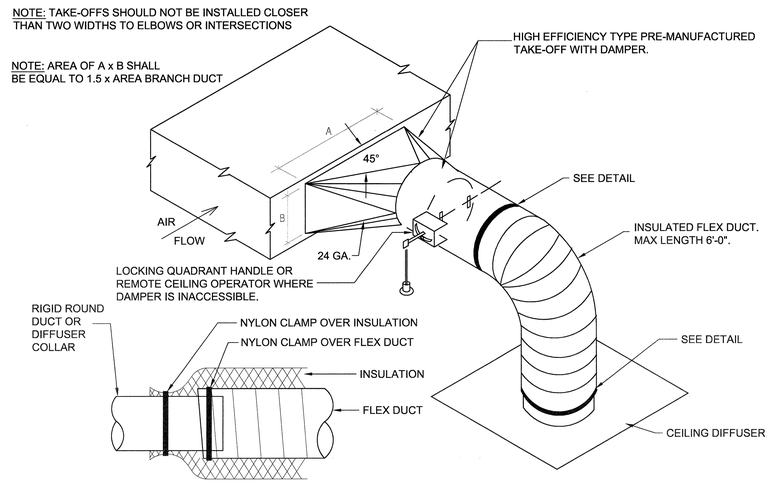
3 BRANCH DUCT TAKE-OFF & DAMPER DETAIL
SCALE: NONE



4 DUCT LINER DETAIL
SCALE: NONE



5 DUCT STRAP HANGER DETAIL
SCALE: NONE



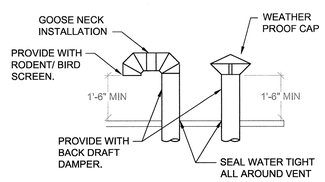
DETAIL
SCALE: NONE

6 SQUARE-TO-ROUND TAKE-OFF DETAIL
SCALE: NONE

DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE (ALL FOUR SIDES)	TRANSVERSE REINFORCING (1)					
		MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	AT JOINTS				
			MIN. H. IN.	DRIVE SLIP / PLAIN S SLIP	HEMMED S SLIP	ALTER'NT BAR SLIP	REIN-FORCED BAR SLIP
				RECOM-MENDED GAGE	RECOM-MENDED GAGE	RECOM-MENDED GAGE	RECOM-MENDED GAGE
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24
13 - 18	24	NONE REQUIRED	1	24	24	24	24
19 - 30	24	1"X1"X1/8" @ 60 IN	1	-	24	24	24
31 - 36	22	1"X1"X1/8" @ 60 IN	1	-	-	22	22

1. TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

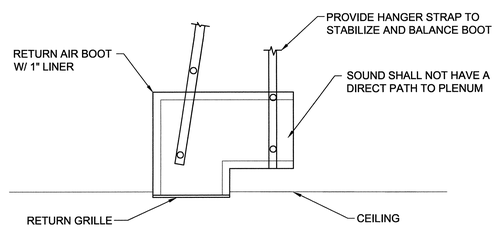
7 DUCT CONSTRUCTION DETAIL
SCALE: NONE



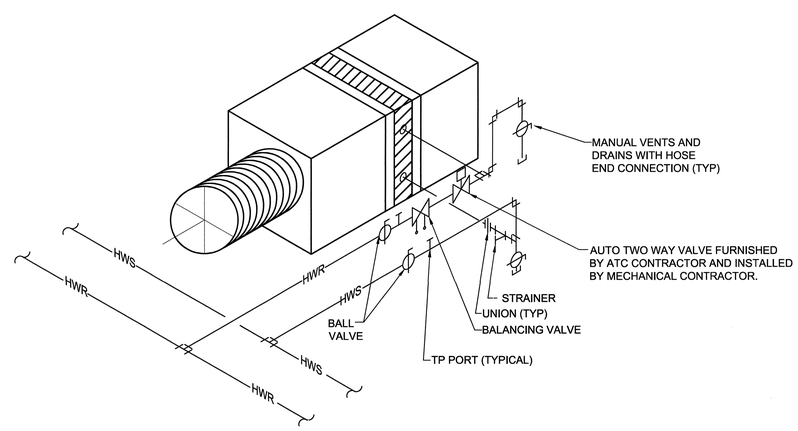
8 FLUE DETAIL
SCALE: NONE

LOW PRESSURE ROUND DUCT CONSTRUCTION SCHEDULE				
DUCT DIAMETER IN INCHES	MAXIMUM 2" W.G. STATIC POSITIVE		MAXIMUM 2" W.G. STATIC NEGATIVE	
	SPIRAL SEAM GAUGE	LONGITUDINAL SEAM GAUGE	SPIRAL SEAM GAUGE	LONGITUDINAL SEAM GAUGE
3 thru 8	28	28	28	24
9 thru 14	28	26	26	24
15 thru 26	26	24	24	22
27 thru 36	24	22	22	20
37 thru 50	22	20	20	18

9 LOW PRESSURE ROUND DUCT CONSTRUCTION DETAIL
SCALE: NONE



10 TYPICAL RETURN AIR BOOT DETAIL
SCALE: NONE



11 VAV BOX (W/ RE-HEATING COIL) HOT WATER PIPING DETAIL
SCALE: NONE

DEQ BUILDING REMODEL AND TENANT FINISH
168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL (801) 532-4441 FAX (801) 532-4220

MECHANICAL DETAILS

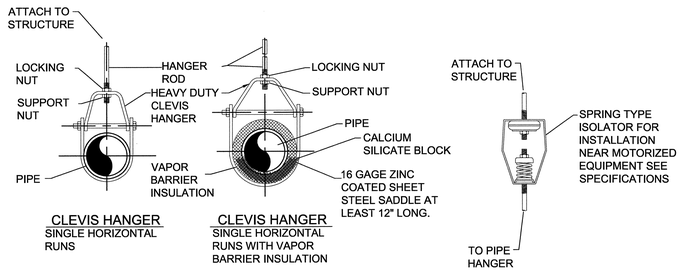
PROFESSIONAL ENGINEER
4-8-16
WINWARD M. PACKER
No. 375080
STATE OF UTAH

REVISION # DATE:

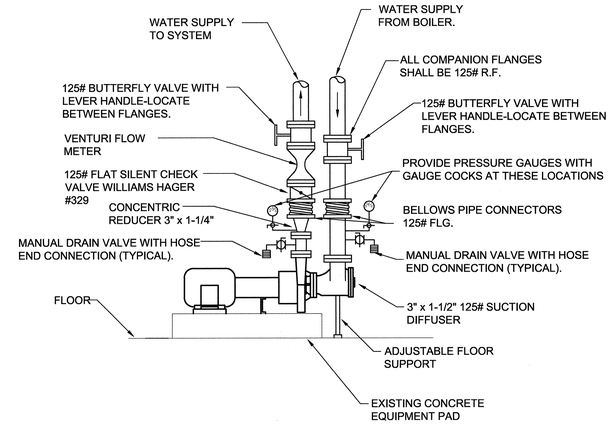
DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: APRIL 2010

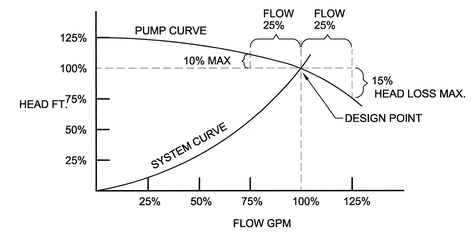
ME 501



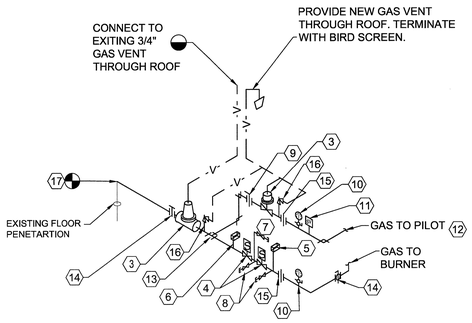
1 PIPE HANGER DETAIL
SCALE: NONE



2 PUMP PIPING DETAIL
SCALE: NONE



3 PUMP CURVE DETAIL
SCALE: NONE

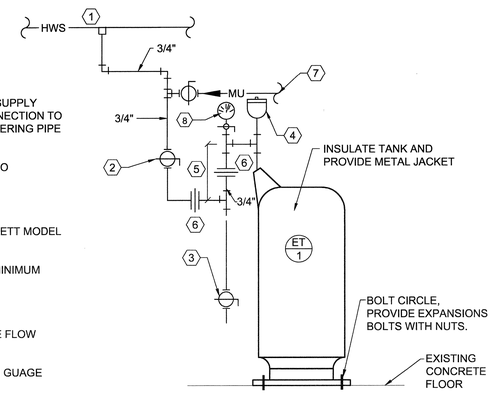


LEGEND	
NO.	ITEM
1	GAS INLET
2	SUPPORT GAS TRAIN FROM PAD OR FLOOR
3	GAS PRESSURE REGULATOR
4	MOTORIZED SAFETY VALVE
5	HIGH PRESSURE SWITCH
6	LOW PRESSURE SWITCH
7	VENT VALVE AND VENT
8	TEST COCK
9	SHUT-OFF COCK
10	PRESSURE GUAGE
11	SOLENOID VALVE
12	GAS TO PILOT
13	GAS TAKE-OFF TO PILOT
14	SHUT-OFF VALVE
15	UNION
16	RELIEF VALVE-VENT TO ATMOSPHERE
17	CONNECT TO EXISTING GAS LINE THIS LOCATION. FIELD VERIFY EXACT LOCATION.

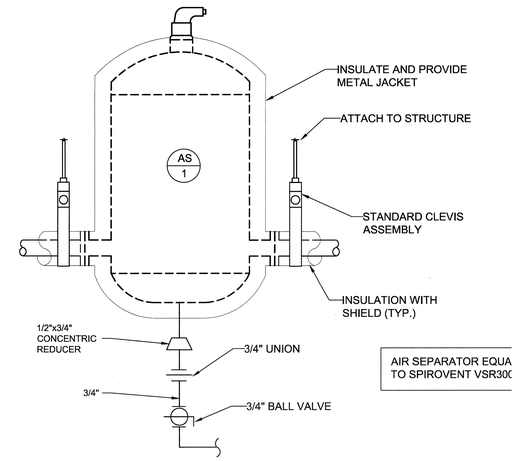
4 CSD-1 AUTO-IGNITION GAS TRAIN DETAIL
SCALE: NONE

DETAIL NOTES:

1. CONNECT TO SIDE OF HOT WATER SUPPLY MAIN. AVOID TOP OR BOTTOM CONNECTION TO PREVENT AIR OR DEBRIS FROM ENTERING PIPE TO TANK. USE 3/4" THRED-O-LET
2. SHUT OFF BALL VALVE. REQUIRED TO PROPERLY PRECHARGE TANK.
3. DRAIN VALVE.
4. AUTOMATIC AIR VENT. BELL & GOSSETT MODEL #7 OR #87.
5. ANTI-THERMO-SYPHON LOOP. 12" MINIMUM DROP.
6. UNION.
7. NEW 3/4" MAKE-UP WATER LINE. SEE FLOW SHEET ME701.
8. PRESSURE GAUGE -O- 60 PSIG WITH GUAGE COCK.



5 EXPANSION TANK DETAIL
SCALE: NONE

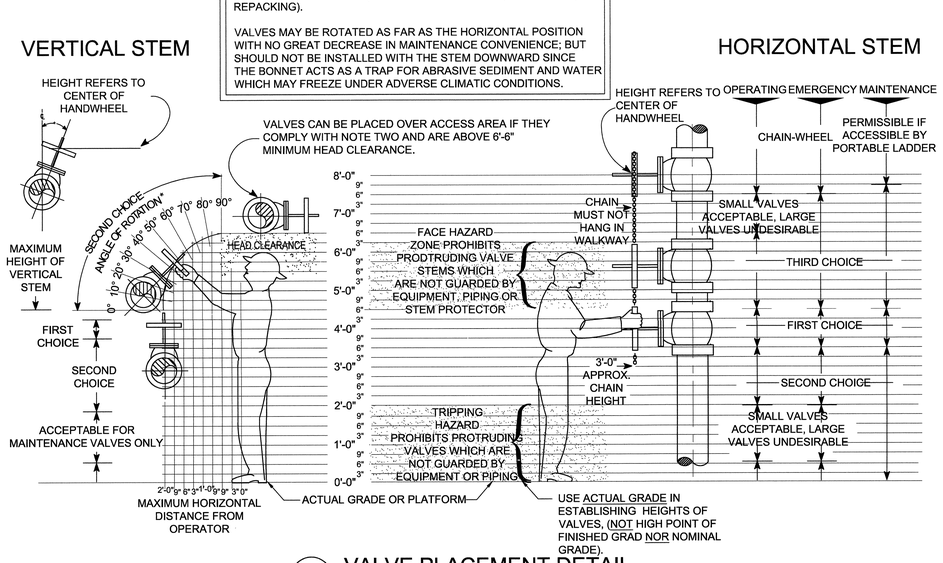


6 AIR SEPARATOR DETAIL
SCALE: NONE

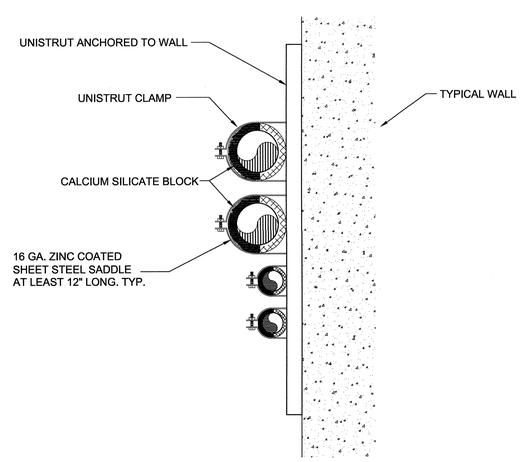
NOTE:

WHENEVER OTHER DESIGN CONSIDERATIONS PERMIT, VALVES ARE BEST INSTALLED WITH THE STEM POINTING STRAIGHT UP (VERTICAL STEM). SINCE THIS POSITION GREATLY FACILITATES IN-PLACE MAINTENANCE (LUBRICATION OF SCREW, INSPECTION, REPACKING).

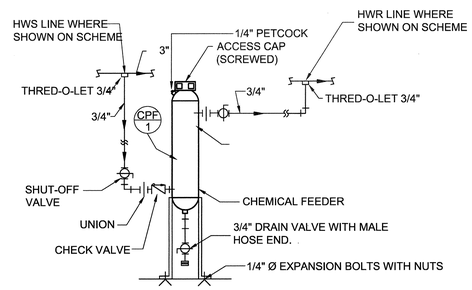
VALVES MAY BE ROTATED AS FAR AS THE HORIZONTAL POSITION WITH NO GREAT DECREASE IN MAINTENANCE CONVENIENCE; BUT SHOULD NOT BE INSTALLED WITH THE STEM DOWNWARD SINCE THE BONNET ACTS AS A TRAP FOR ABRASIVE SEDIMENT AND WATER WHICH MAY FREEZE UNDER ADVERSE CLIMATIC CONDITIONS.



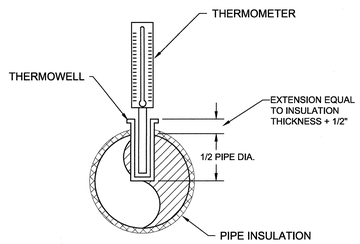
7 VALVE PLACEMENT DETAIL
SCALE: NONE



8 PIPE WALL ANCHOR DETAIL
SCALE: NONE



9 CHEMICAL TREATMENT SCHEME
SCALE: NONE



10 THERMOWELL DETAIL
SCALE: NONE

DEQ BUILDING REMODEL AND TENANT FINISH
168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

MECHANICAL DETAILS

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South, Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

PROFESSIONAL ENGINEER
6-8-10
WINWARD M. PACKER
No. 376090
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: APRIL 2010

ME 502

BOILER SCHEDULE

SYMBOL	MBH INPUT	MBH OUTPUT	WATER TEMP		GPM	FLUE SIZE	OPERATION WEIGHT LBS	MAKE AND MODEL #	SCHEDULE NOTES
			IN	OUT					
B 1	1200	978	140 °F	180 °F	50	10" Ø	3000	BRYAN MODEL CLM 120	1,2,3,4,5

1. BOILER RATINGS ARE FOR SEA LEVEL. FORCED DRAFT
2. SEE SPECIFICATION FOR OTHER APPROVED MANUFACTURERS.
3. VERIFY FLUE SIZING AND MATERIAL WITH EACH BOILER MANUFACTURER AND INSTALL ACCORDINGLY.
4. PROVIDE 120V CIRCUIT. FOR CONTROLS AND FAN MOTOR.
5. BOILER IS REVERSE CONSTRUCTION

CHEMICAL POT FEEDER

SYMBOL	TYPE	MAX PRESSURE	CAPACITY GALLONS	SHIPPING WEIGHT	DIAMETER	HEIGHT WITH LEGS	MAKE AND MODEL #
CPF 1	VERTICAL	300 PSI	5	38 LBS	10"	29 ¾"	NEPTUNE DBF - 5HP

AIR SEPARATOR SCHEDULE

SYMBOL	CAPACITY GPM	MAX PRESSURE DROP FT.	INLET / OUTLET SIZE	SHIPPING WEIGHT LBS	MAKE & MODEL	SCHEDULE NOTES
AS 1	50	0.84	3"	95	SPIRAVENT VSR300	1

1. FOR OTHER APPROVED MANUFACTURERS SEE SPECIFICATIONS.

EXPANSION TANK SCHEDULE

SYMBOL	ACCEPTANCE VOLUME/ TANK VOLUME GAL.	HEIGHT	DIAMETER	OPERATION WEIGHT/ FLOOD WEIGHT (LBS)	MANUFACTURER AND MODELING	SCHEDULE NOTES
ET 1	44.4	56 ⅞"	16 ¼"	516	BELL & GOSSETT D - 80V	1

1. FOR OTHER APPROVED MANUFACTURERS SEE SPECIFICATIONS.

AIR COOLED CONDENSING UNIT SCHEDULE

SYMBOL	AREA SERVED	MIN SIZE (TONS)	COMPRESSOR MOTOR			MOCP	MANUF. & MODEL #	SCHEDULE NOTES
			No.	RLA (EACH)	LRA (EACH)			
FC 1	MAIN LEVEL COMPUTER ROOM	3	1	19	27	30	FUJITSU 36RSLX	1,2,3,4,5
FC 2	MAIN LEVEL COMPUTER ROOM	3	1	19	27	30	FUJITSU 36RSLX	1,2,3,4,5
FC 3	UPPER LEVEL COMPUTER ROOM	3	1	19	27	30	FUJITSU 36RSLX	1,2,3,4,5
FC 4	UPPER LEVEL COMPUTER ROOM	3	1	19	27	30	FUJITSU 36RSLX	1,2,3,4,5

1. REFRIGERANT R-410A.
2. AT DESIGN CONDITIONS AND 95° F EAT.
3. COORDINATE REFRIGERANT CHARGE WITH MANUFACTURERS RECOMMENDATIONS. FIELD VERIFY EXACT LENGTH.
4. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
5. ELECTRIC SERVICE: 208/1Ø/60HZ
6. PROVIDE WITH LOW AMBIENT WIND BAFFLE.

EXHAUST FAN SCHEDULE

SYMBOL	MANUFACTURER & MODEL No.	SERVES	C.F.M.	STATIC PRESSURE IN. WG.	MAX NOISE SONES	MOTOR			OPER. WT. (LBS)	SCHEDULE NOTES
						V - Ø - Hz	WATTS	RPM		
EF 1	COOK GEMINI GC-320	JC-117	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 2	COOK GEMINI GC-320	JC-116	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 3	COOK GEMINI GC-320	JC-115	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 4	COOK GEMINI GC-320	H-240	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 5	COOK GEMINI GC-320	H-239	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 6	COOK GEMINI GC-320	H-207	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 7	COOK GEMINI GC-320	H-206	130	.3	3.3	120/1/60	54	1365	25	1,2
EF 8	COOK GEMINI GC-320	H-206	130	.3	3.3	120/1/60	54	1365	25	1,2

1. PROVIDE WITH INTEGRAL BACK DRAFT DAMPER.
2. INTERLOCK WITH LIGHT SWITCH FOR SPACE WITH TIME DELAY.

VAV BOX SCHEDULE

SYMBOL	INLET DIA. (INCHES)	COOLING			HEATING (40° DELTA T WATER)								NC LEVEL	MANUF. MODEL #	SCHEDULE NOTES
		MAX CFM	MIN CFM	MX APD (IN)	COIL EAT	COIL LAT	MAX CFM	COIL MBH	FLOW GPM	EWT	(FT) PD	ROWS			
VAV 212	10	900	270	.38	55	105	900	48.8	4.77	180	4.74	2 HC	25	PRICE SDV	1
VAV 226	10	760	240	.29	55	105	760	41.21	2.92	180	1.84	2 HC	25	PRICE SDV	1
VAV S125	10	790	240	.31	55	105	790	42.84	3.24	180	2.24	2 HC	25	PRICE SDV	1
VAV S221	16	1925	580	.32	55	105	1925	104.39	6.86	180	8.14	2 HC	25	PRICE SDV	1

1. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.

DIFFUSER SCHEDULE

SYMBOL	TYPE	MAX CFM	FACE SIZE	NECK SIZE	CEILING TYPE	BLOW	PATTERN	SCHEDULE NOTES
D-1 CFM	CEILING	150	6X6	6"Ø	LAY-IN	4--WAY		1,2,3,4,5
D-2 CFM	CEILING	300	9X9	8"Ø	LAY-IN	4--WAY		1,2,3,4,5
D-3 CFM	CEILING	500	12X12	10"Ø	LAY-IN	4--WAY		1,2,3,4,5
D-4 CFM	CEILING	750	15X15	14"Ø	LAY-IN	4--WAY		1,2,3,4,5
D-5 CFM	CEILING	150	6X6	6"Ø	HARD	4--WAY		1,2,3,4,5
D-6 CFM	CEILING	300	9X9	8"Ø	HARD	4--WAY		1,2,3,4,5
D-7 CFM	CEILING	500	12X12	10"Ø	HARD	4--WAY		1,2,3,4,5
D-8 CFM	CEILING	750	15X15	14"Ø	HARD	4--WAY		1,2,3,4,5

1. PROVIDE LAY-IN CEILING AND BORDER / MODULE AS REQUIRED. SEE ARCHITECTURAL CEILING PLANS.
2. MAXIMUM NC 25 AT CFM LISTED.
3. PROVIDE TRANSITION TO DIFFUSER NECK SIZE AS REQUIRED TO DUCT WORK SHOWN ON PLAN.
4. DIFFUSER SHALL BE PRICE MODEL SMD OR EQUAL BY APPROVED MANUFACTURER IN SPECIFICATIONS.
5. FINISH SHALL BE STANDARD WHITE.

REGISTER, LOUVER & GRILLE SCHEDULE

SYMBOL	TYPE	SERVICE	MAX CFM	NOMINAL SIZE	THROAT SIZE	CEILING TYPE	SCHEDULE NOTES
R-1	CEILING	RETURN	180	8/8	8/8	LAY-IN	1,2,3,4
R-2	CEILING	RETURN	250	10/10	10/10	LAY-IN	1,2,3,4
R-3	CEILING	RETURN	375	12/12	12/12	LAY-IN	1,2,3,4
R-4	CEILING	RETURN	600	16/16	16/16	LAY-IN	1,2,3,4
R-5	CEILING	RETURN	1200	22/22	22/22	LAY-IN	1,2,3,4
EG-1	CEILING	EXHAUST	375	12/12	12/12	LAY-IN	1,2,3,4

REGISTER, LOUVER AND DIFFUSER SCHEDULE NOTES:

1. MAXIMUM NC = 25 @ MAXIMUM CFM NOTED.
2. SHALL BE PRICE 535 OR EQUAL BY OTHER APPROVED MANUFACTURERS.
3. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
4. FINISH SHALL BE STANDARD WHITE.
5. FINISH TO BE SPECIFIED BY ARCH

SPLIT SYSTEM INDOOR UNIT SCHEDULE

SYMBOL	ROOMS SERVED	COOLING CAPACITY (BTU/H)	WEIGHT (LBS)	VOLTAGE-PHASE-HZ	MANUF. & MODEL #	SCHEDULE NOTES
FC 1	MAIN LEVEL COMPUTER ROOM	34,100	110	230/1/60	FUJITSU 36RSLX	1,2,3
FC 2	MAIN LEVEL COMPUTER ROOM	34,100	110	230/1/60	FUJITSU 36RSLX	1,2,3
FC 3	UPPER LEVEL COMPUTER ROOM	34,100	110	230/1/60	FUJITSU 36RSLX	1,2,3
FC 4	UPPER LEVEL COMPUTER ROOM	34,100	110	230/1/60	FUJITSU 36RSLX	1,2,3

1. R410A REFRIGERANT
2. PROVIDE CONDENSATE PUMP. ROUTE CONDENSATE LINE TO MECHANICAL ROOM.
3. PROVIDE POWER FOR INDOOR FROM OUTDOOR UNIT.

PUMP SCHEDULE

SYMBOL	TYPE	GPM	FT. HEAD	RPM	SUCTION SIZE	DISCHARGE SIZE	MOTOR		SIZE	SERVICE	MANUFACTURER	SCHEDULE NOTES
							V - Ø - Hz	HP				
P 1	BASE MOUNTED END SUCTION	50	50	1750	1 ½"	1 ¼"	460 / 3 / 60	2	1-1/4 AC	BUILDING HEATING HOT WATER	BELL & GOSSETT	1,2,3
P 2	BASE MOUNTED END SUCTION	50	50	1750	1 ½"	1 ¼"	460 / 3 / 60	2	1-1/4 AC	BUILDING HEATING HOT WATER	BELL & GOSSETT	1,2,3

1. ALL PUMPS SHALL BE SIZED IN THE FLAT PART OF THE CURVE. SEE DETAIL.
2. SEE SPECIFICATIONS FOR OTHER APPROVED MANUFACTURERS.
3. COORDINATE WITH DIVISION 16 TO PROVIDE VFD.

DEQ BUILDING REMODEL AND TENANT FINISH
168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

MECHANICAL SCHEDULES

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX: (801) 532-4220

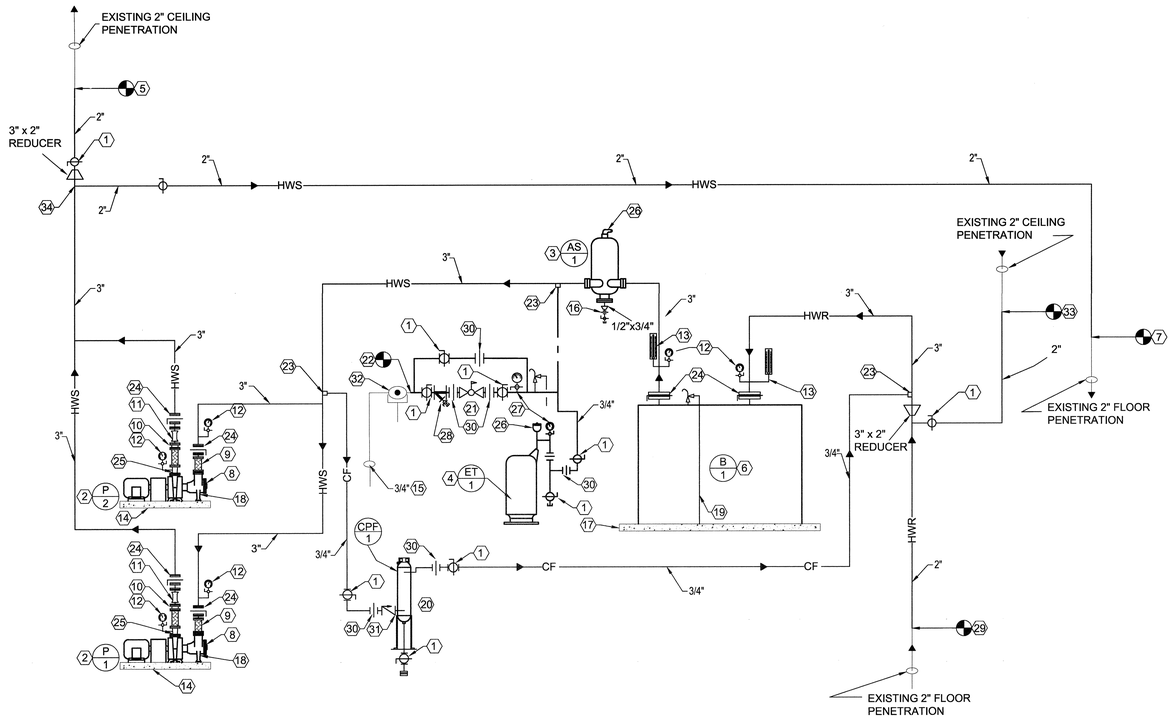
PROFESSIONAL ENGINEER
6-9-16
WINWARD M. PACKER
No. 375080
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: APRIL 2010

ME 601



NEW HOT WATER FLOW SHEET
NO SCALE

SHEET NOTES:

1 PROVIDE LINE SIZE BALL VALVE.
2 NEW BASE MOUNTED CLOSE COUPLED END SUCTION HOT WATER PUMPS. SEE DETAIL C/ME502. POSITION PUMP SO PUMP EXTENDS OVER EDGE OF PAD
3 NEW AIR SEPARATOR. SEE DETAIL A/ME502.
4 NEW FLOOR MOUNTED EXPANSION TANK. SEE DETAIL F/ME502.
5 CONNECT TO EXISTING HWS PIPING SERVING THE 2ND FLOOR VAV REHEAT COILS.
6 NEW HOT WATER STEEL BENT FLEX TUBE BOILER.
7 CONNECT TO EXISTING HWS PIPING SERVING 1ST FLOOR VAV REHEAT COILS.
8 NEW 3" x 1 ½" PUMP SUCTION DIFFUSER WITH FLOOR SUPPORT.
9 NEW FLEX PUMP CONNECTORS. TYPICAL OF 4.
10 NEW 3" WAFER TYPE CHECK VALVE. TYPICAL OF 2.
11 NEW 3" VENTURI BALANCING VALVES. TYPICAL OF 2.
12 NEW PRESSURE GAUGE WITH SNUBBER AND SHUT-OFF VALVE 0 TO 100 PSIG.
13 NEW THERMOMETERS 0° TO 250°F.
14 EXISTING 3" HIGH CONCRETE PAD. MODIFY IF REQUIRED.
15 EXISTING 3/4" WATER MAKE-UP FROM FLOOR BELOW SHALL REMAIN.
16 3/4" DRAIN FROM AIR SEPARATOR. COMPLETE WITH CONBRACO SHUT-OFF VALVE AND HOSE CONNECTION OR EQUAL.
17 EXISTING 3" CONCRETE HOUSE KEEPING PAD FOR NEW BOILER. MODIFY IF REQUIRED.
18 ADJUSTABLE FLOOR SUPPORTS.
19 PROVIDE BOILER SAFETY RELIEF VALVE AND DISCHARGE PIPING SO IT ONLY CONTAINS ONE 90° ELL. SIZE PIPING FULL LINE SIZE TO EXISTING FLOOR DRAIN.
20 NEW CHEMICAL POT FEEDER. ANCHOR TO FLOOR AND TIE INTO HWS AND HWR PIPING AS SHOWN. SEE DETAIL D/ME502.
21 NEW PRV STATION FOR MAKE-UP WATER TO HOT WATER SYSTEM.
22 NEW CONNECTION TO EXISTING CW LINE. FIELD VERIFY EXACT LOCATION OF EXISTING LINE AND CONNECTION POINT.
23 3/4" THRED-O-LET.
24 FLANGED BUTTERFLY VALVES.
25 3"x1-1/4" CONCENTRIC REDUCER.
26 AUTOMATIC AIR VENT. PROVIDE WITH AIR SEPARATOR
27 PRESSURE GAUGE WITH SNUBBER AND SHUT-OFF VALVE 0 TO 60 PSIG.
28 Y-TYPE STRAINER.
29 CONNECT TO EXISTING 2" HWR FROM 1ST FLOOR.
30 UNION.
31 CHECK VALVE.
32 RE-USE EXISTING BACKFLOW PREVENTER WITH FUNNEL AND DRAIN.
33 CONNECT TO EXISTING 2" HWR FROM 2ND FLOOR CEILING.
34 3" x 3" x 2" REDUCING WELDED TEE

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

MECHANICAL FLOW SHEET

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL (801) 532-4441 FAX (801) 532-4220

PROFESSIONAL ENGINEER
6-9-10
WINWARD M. PACKER
No. 375090
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: APRIL 2010

ME 701

PLUMBING LEGEND

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

PLUMBING CONSTRUCTION NOTES:

G-1 ALL PLUMBING SHALL BE INSTALLED AND CONFORM TO THE 2006 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 HOT AND COLD WATER PIPE SHALL BE TYPE L HARD DRAWN COPPER PIPING WITH WROUGHT COPPER FITTINGS. OUTSIDE PIPING MAY BE COPPER OR PVC PLASTIC CONFORMING TO AWWA STANDARDS WHERE ALLOWED BY LOCAL CODE. TYPE K UNDERGROUND WITH NO JOINTS WITHIN BUILDING. METER SHALL BE AS REQUIRED BY LOCAL UTILITY CO. ALL PIPING AND FITTINGS SHALL BE DOMESTIC MADE. PIPING SHALL BE TESTED AT 125 PSI MINIMUM FOR 6 HOURS AND SHOW NO LEAKS.

G-6 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-7 SOIL, WASTE AND VENT PIPING SHALL BE CAST IRON SERVICE WEIGHT HUB AND SPIGOT CONFORMING TO FEDERAL SPECIFICATION WW-P-401, ASTM A-74, OR ANSI A112.5-1 VENT PIPING AND ABOVE GRADE WASTE PIPING 2-1/2" OR LESS MAY BE GALVANIZED STEEL WITH SCREWED DURHAM TARRED DRAINAGE FITTINGS, HOWEVER, GALVANIZED STEEL VENT PIPES SHALL NOT BE USED FOR UNDER OR WITHIN 6" OF THE GROUND AS PER CODE. JOINTS FOR CAST IRON PIPE SHALL BE TYSEAL, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. ABOVE GRADE CAST IRON PIPING SHALL BE SERVICE WEIGHT NO-HUB WITH STAINLESS STEEL CINCH BANDS. ALL PIPING AND FITTINGS SHALL BE DOMESTIC MADE. ALL WASTE AND VENT PIPING SHALL BE TESTED BY FILLING SYSTEM TO TOP OF THE VENT PIPE (20 FEET OF HEAD MINIMUM) AND SHOW NO LEAKS FOR 6 HOURS.

G-8 GAS PIPING FROM METER TO EQUIPMENT SHALL BE ASTM A 120-79 SCHEDULE 40 BLACK CARBON STEEL. FITTINGS SHALL BE ASTM A 234-79 WELDED STEEL FITTINGS OR STANDARD WEIGHT MALLEABLE IRON SCREWED FITTINGS. DO NOT USE FLEX PIPING UNLESS REQUIRED BY LOCAL CODE, THEN USE GAS COMPANY APPROVED PIPING INSTALLED BY GAS COMPANY APPROVED INSTALLERS. PIPING CONCEALED IN WALLS OR LARGER THAN 2-1/2" SHALL BE WELDED. ALL PIPING SHALL BE TESTED TO MINIMUM OF 60 PSI AS PER CODE. GAS VALVES SHALL BE UL LISTED BALL VALVES. PIPING AND FITTING MATERIALS SHALL BE AS RECOMMENDED AND ALLOWED BY LOCAL AUTHORITY AND CODES. GAS PIPING WITHIN THE BUILDING SHALL NOT BE ROUTED UNDER FLOOR SLAB. ALL PIPING AND FITTINGS SHALL BE DOMESTIC MADE.

G-9 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-10 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-11 COORDINATE ALL PIPING AND PLUMBING EQUIPMENT WITH ALL OTHER TRADES AND/OR CONTRACTORS PRIOR TO INSTALLATION.

G-12 ANY AND ALL ALTERATION TO THE SYSTEM SHOWN SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR AND ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CHANGES.

G-13 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.

PLUMBING CONSTRUCTION NOTES CONTINUED:

G-14 CLEANING AND DISINFECTING: ALL PIPING SHALL BE FLUSHED CLEAN BEFORE CONNECTION TO EQUIPMENT. DOMESTIC WATER LINES SHALL BE THOROUGHLY FLUSHED OUT WITH AN ALKALINE DETERGENT SOLUTION TO REMOVE PIPE DOPE, OIL, LOOSE MILL SCALE, AND OTHER EXTRANEOUS MATERIALS. AFTER THE WATER SYSTEM HAS BEEN FLUSHED CLEAN, THE SHUTOFF VALVE TO THE WATER MAIN SHALL BE CLOSED. ALL FIXTURE OUTLETS SHALL BE OPENED SLIGHTLY. A SOLUTION OF SODIUM HYPO CHLORITE AND CLEAN WATER SHALL BE INTRODUCED AT THE NEW TIE-IN TO THE EXISTING WATER PIPES DOWNSTREAM OF NEW VALVE, UNTIL RESIDUAL CHLORINE IS DETECTED AT ALL WATER FAUCETS, OUTLETS, ETC. THE SOLUTION SHALL CONSIST OF 1 GALLON OF 5% SODIUM HYPO CHLORITE (CLOROX OR PUREX) TO 200 GALLONS OF WATER. THE SOLUTION SHALL BE FLUSHED AND ALL AERATORS AND STRAINERS SHALL BE REMOVED, CLEANED AND REPLACED. CARE SHALL BE TAKEN TO NOT ALLOW SOLUTION TO ENTER EXISTING PIPING. AFTER STERILIZATION, FLUSH SOLUTION FROM SYSTEM WITH CLEAN WATER UNTIL RESIDUAL CHLORINE CONTENT IS LESS THAN 0.2 PARTS PER MILLION. WATER SYSTEM WILL NOT BE ACCEPTED UNTIL A NEGATIVE BACTERIOLOGICAL TEST IS MADE ON WATER TAKEN FROM SYSTEM. CHLORINE DOSING SHALL BE REPEATED AS NECESSARY UNTIL SUCH NEGATIVE TEST IS ACCOMPLISHED WHEN CONNECTION INTO EXISTING WATER LINES, CONTRACTOR SHALL PROPERLY PROTECT AND CAP THE EXISTING PIPING OR CONTRACTOR SHALL STAND THE COST OF CLEANING AND DISINFECTING THE EXISTING PIPING SYSTEM TO OWNER'S SATISFACTION. CONTRACTOR SHALL FURNISH TO OWNER AND ARCHITECT A WRITTEN REPORT CERTIFYING THAT PIPE CLEANING AND DISINFECTION HAS BEEN COMPETED AND ACCEPTED.

G-15 ALL WATER SYSTEMS SHALL MEET THE REQUIREMENTS OF ANSI/NSF STANDARD 61 SECTION 9 (1998), CONCERNING METAL CONTAMINANTS IN THE WATER SYSTEM.

G-16 WATER PIPING SHALL NOT BE ROUTED IN OUTSIDE WALLS OR ON EXTERIOR SIDE OF BUILDING INSULATION ENVELOPE.

G-17 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

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

PLUMBING GENERAL NOTES AND LEGEND

PROFESSIONAL ENGINEER
6-9-10
WINWARD M. PACKER
No. 375080
STATE OF UTAH

REVISION # DATE:

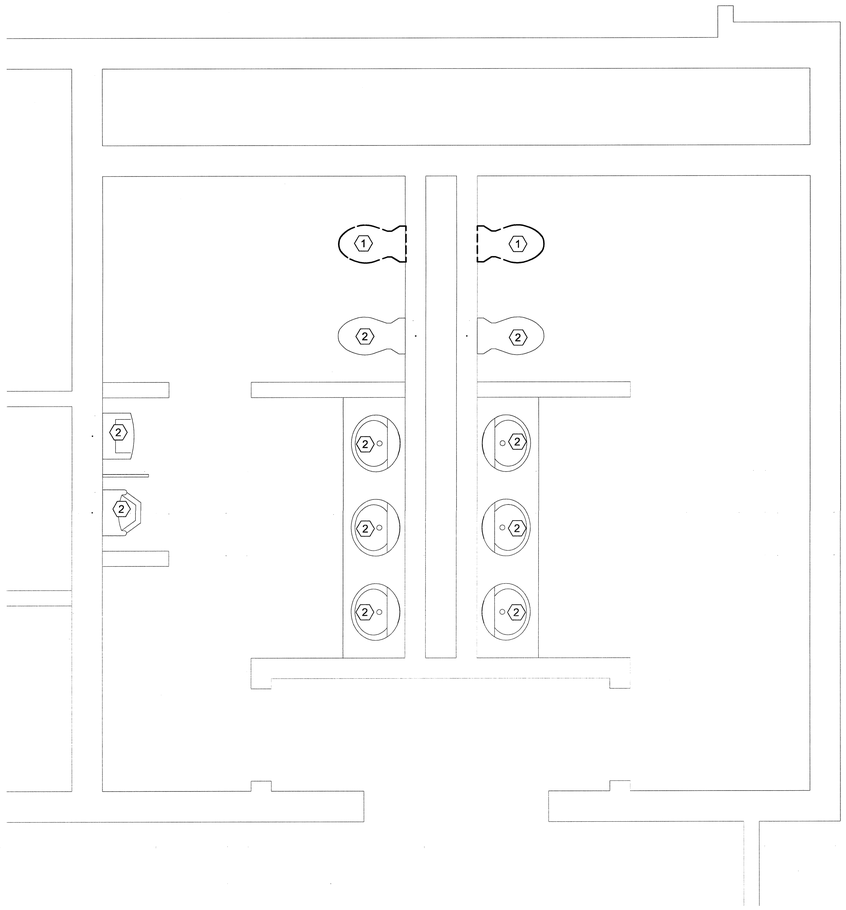
DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: APRIL 2010

PG 001

SHEET NOTES:

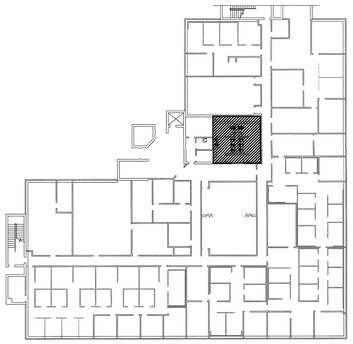
1. REMOVE EXISTING WATER CLOSET AND ALL ASSOCIATED PLUMBING CONNECTIONS INCLUDING VENT, WATER SUPPLY, AND WASTE. PATCH AND REPAIR FLOOR AND WALLS TO MATCH EXISTING. PROTECT WATER CLOSET FOR REINSTALLATION. SEE PE SHEETS FOR DETAILS.
2. EXISTING FIXTURE SHALL REMAIN.



NORTH BLDG. UPPER LEVEL PLUMBING DEMOLITION FLOOR PLAN

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

0 1' 2' 4'



KEY PLAN

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

FRANKIN MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

NORTH BLDG. PLUMBING DEMOLITION PLAN

PROFESSIONAL ENGINEER
4-9-10
WINWARD M. PACKER
No. 375080
STATE OF UTAH

REVISION # DATE:

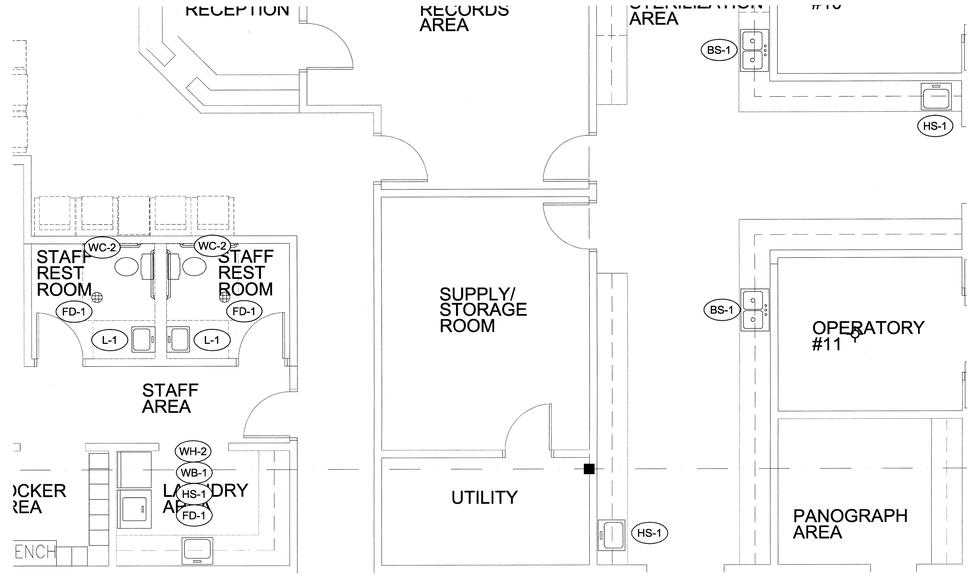
DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: APRIL 2010

PD
101

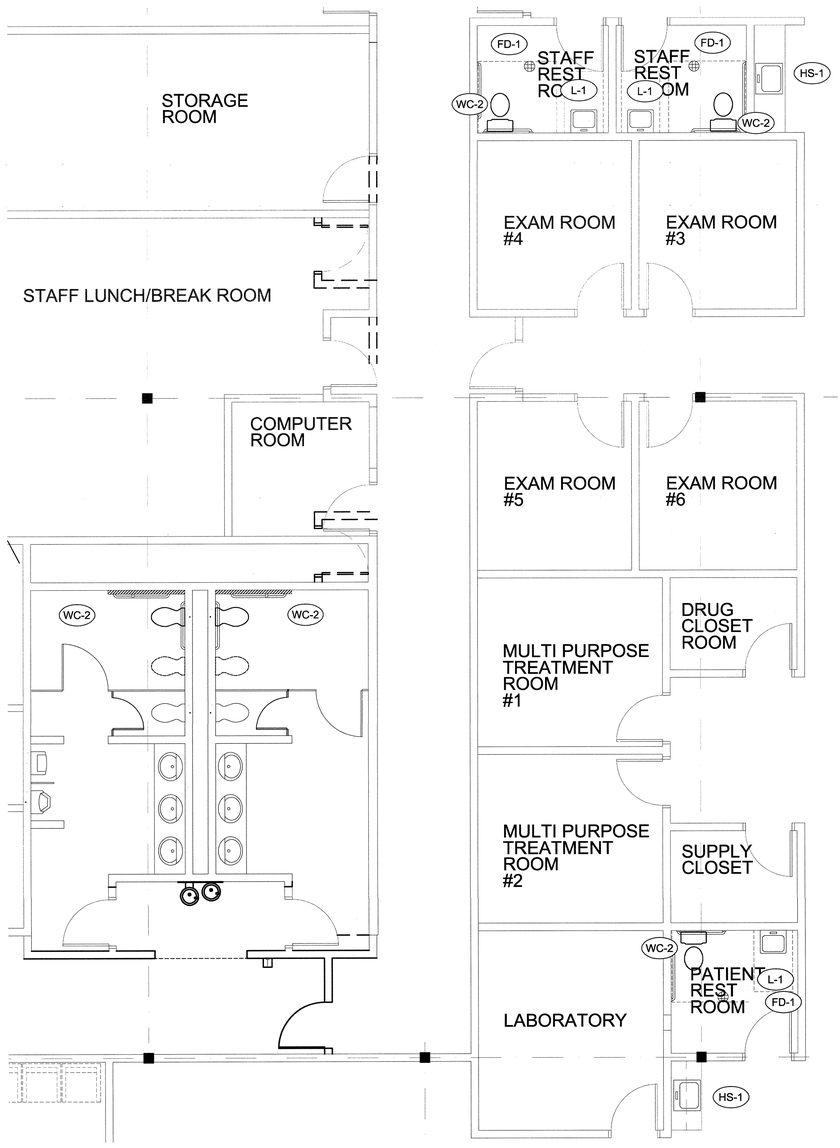
SHEET NOTES:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15



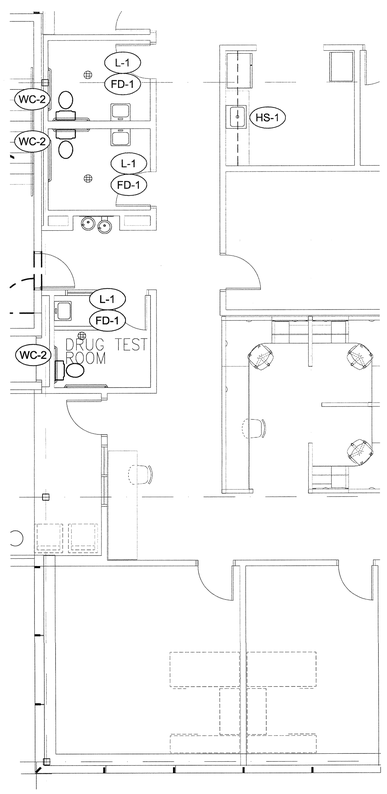
NORTH BLDG. PLUMBING REMODEL PLAN AREA "B"

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



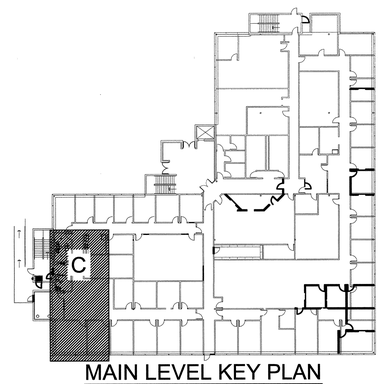
NORTH BLDG. PLUMBING REMODEL PLAN AREA "A"

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

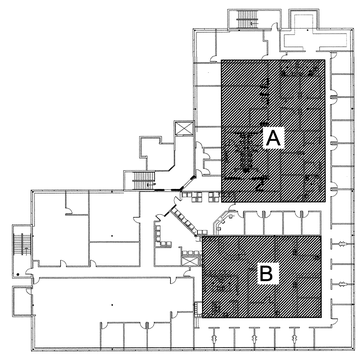


NORTH BLDG. PLUMBING REMODEL PLAN AREA "C"

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



MAIN LEVEL KEY PLAN



UPPER LEVEL KEY PLAN

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

NORTH BLDG. PLUMBING WASTE AND VENT PLANS

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

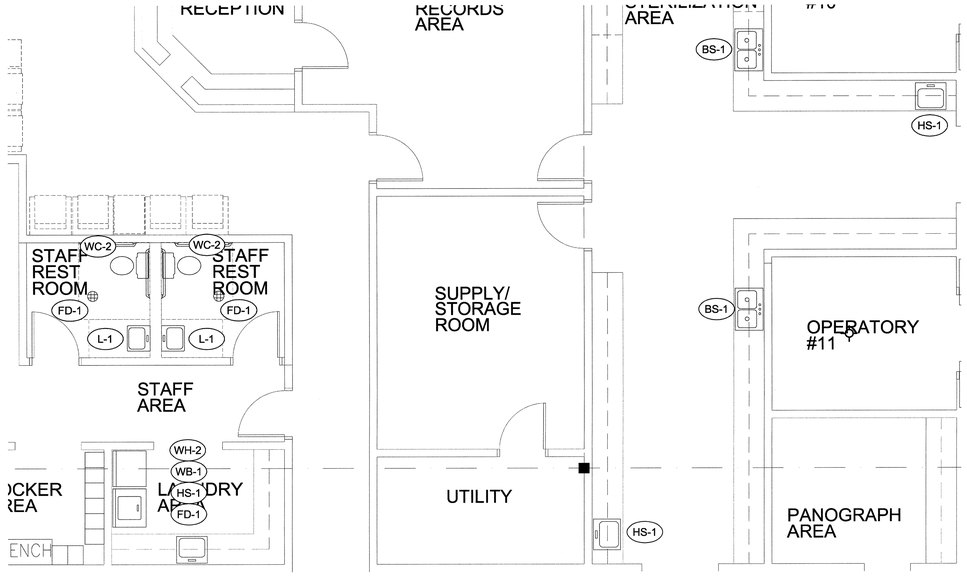
PROFESSIONAL ENGINEER
6-16
WINWARD M. PACKER
No. 375092
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:

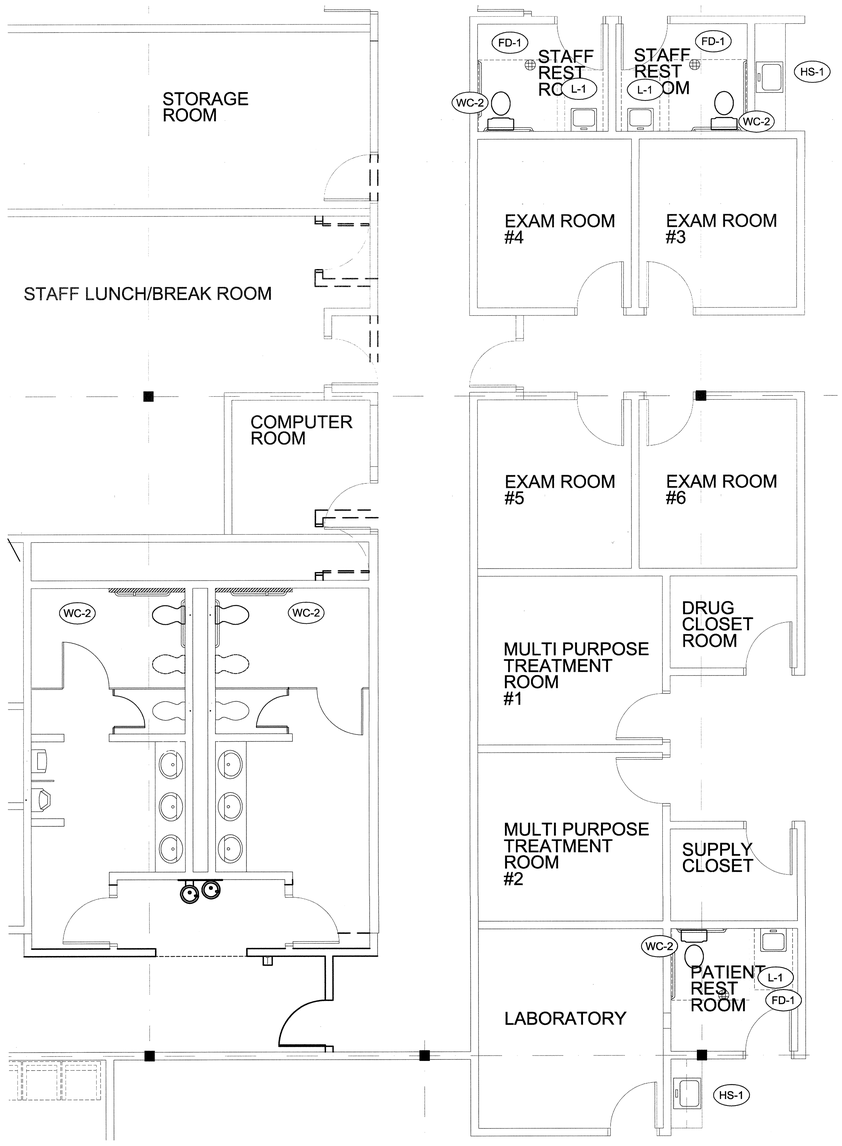
CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: APRIL 2010

PE 101



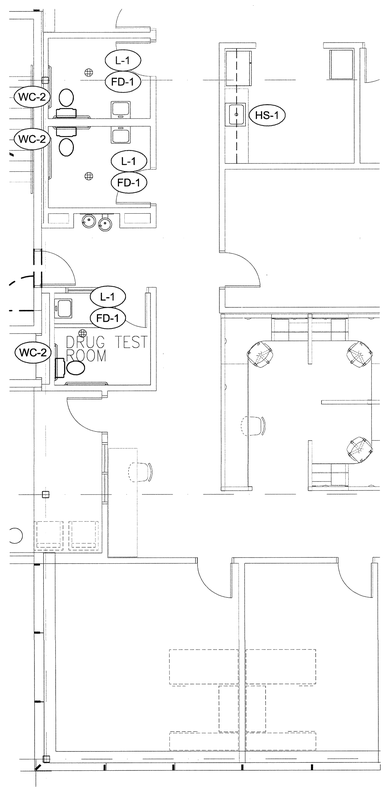
NORTH BLDG. PLUMBING REMODEL PLAN AREA "A"

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



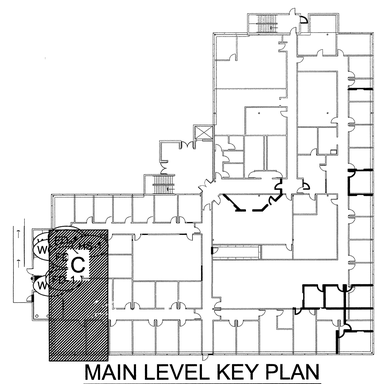
NORTH BLDG. PLUMBING REMODEL PLAN AREA "A"

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

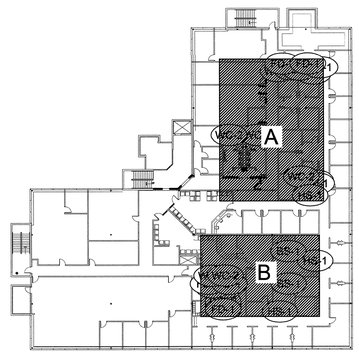


NORTH BLDG. PLUMBING REMODEL PLAN AREA "C"

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



MAIN LEVEL KEY PLAN



UPPER LEVEL KEY PLAN

SHEET NOTES:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

NORTH BLDG. PLUMBING DOMESTIC WATER PIPING PLANS

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX: (801) 532-4220

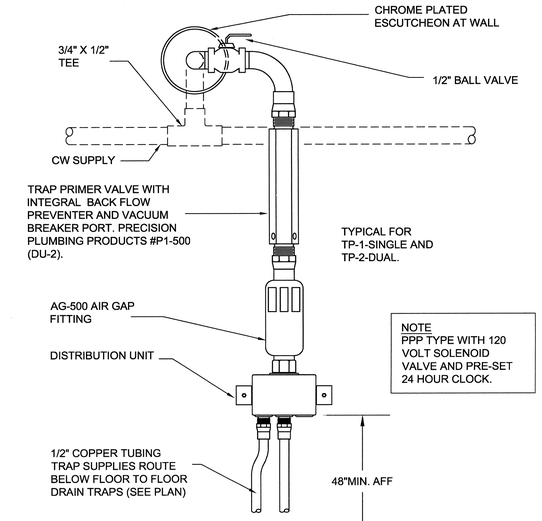
PROFESSIONAL ENGINEER
6-8-10
WINWARD M. PACKER
No. 375080
STATE OF UTAH

REVISION # DATE:

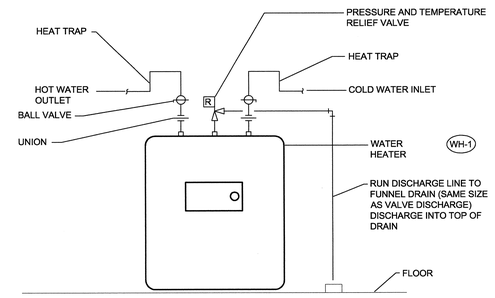
DFCM PROJECT NO.:

CONST. DOC.:
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: APRIL 2010

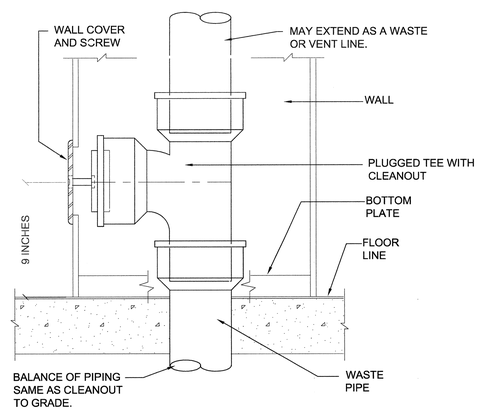
PE 102



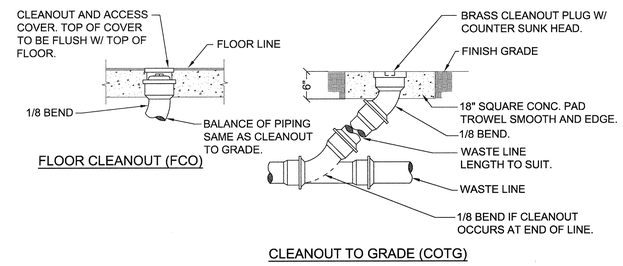
2 TRAP PRIMER DETAIL
SCALE: NONE



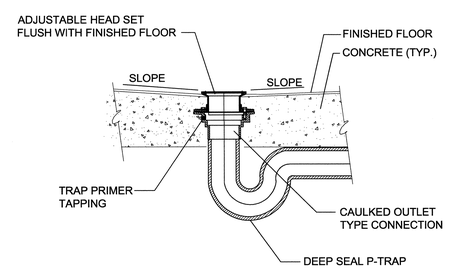
1 POINT OF USE ELECTRIC WATER HEATER DETAIL
SCALE: NONE



4 WALL CLEAN-OUT DETAIL
SCALE: NONE



3 CLEAN-OUT DETAILS
SCALE: NONE



5 FLOOR DRAIN DETAIL
SCALE: NONE

WORKFORCE SERVICES REDWOOD ELIGIBILITY CENTER

DEQ SOUTH BUILDING - REMODEL AND TENANT FINISH
168 N 1950 W, SALT LAKE CITY, UT

PLUMBING DETAILS

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

PROFESSIONAL ENGINEER
4-9-10
WINWARD M. PACKER
No. 375080
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:
09254310
CONCEPT
FILE NAME: WFS-REC 10
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY:WP
DATE: MAY 10 2010

PE 501

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	INDIVIDUAL LINE SIZES					REMARKS
		TRAP	WASTE	VENT	COLD WATER	HOT WATER	
BS-1	BREAK SINK	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT PROVIDE WITH THERMOSTATIC AND PRESSURE MIXING VALVE
FD-1	FLOOR DRAIN	3"	3"	2"	-	-	PROVIDE WITH TRAP PRIMER
L-1	LAVATORY	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	SELF SUPPORTING PROVIDE WITH THERMOSTATIC AND PRESSURE MIXING VALVE.
U-1	URINAL	3"	3"	2"	3/4"	-	WALL MOUNTED, FLUSH VALVE
WC-1	WATER CLOSET	INT	4"	2"	1"	-	WALL MOUNTED, FLUSH VALVE
WC-2	WATER CLOSET	INT	4"	2"	1"	-	WALL MOUNTED, FLUSH VALVE, ADA COMPLIANT

DEQ BUILDING REMODEL AND TENANT FINISH

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX: (801) 532-4220

PLUMBING SCHEDULES

PROFESSIONAL ENGINEER
6-9-10
WINWARD M. PACKER
No. 375590
STATE OF UTAH

REVISION # DATE:

DFCM PROJECT NO.:

CONST. DOC.
FILE NAME: DEQ2
PLOT SCALE: 1:96
DRAWN BY: STAFF
CHECKED BY: WP
DATE: APRIL 2010

PE
601

ELECTRICAL SYMBOLS

NOTE. SYMBOLS SHOWN IN THIS SCHEDULE ARE TYPICAL. NOT ALL ARE USED IN THIS PROJECT. DASHED SYMBOLS INDICATE EXISTING FIXTURE, EQUIPMENT, ETC.

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	ELECTRICAL WIRING	
	CROSS LINES INDICATE NUMBER OF CONDUCTORS GROUNDING CONDUCTORS NOT INCLUDED.	N/A
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL	N/A
	BRANCH CIRCUIT CONCEALED IN GROUND OR FLOOR	N/A
A-13	BRANCH CIRCUIT HOMERUNS TO PANEL W/PANEL & CIRCUIT NUMBER DESIGNATIONS.	N/A
	CONDUIT RISER UP	N/A
	CONDUIT RISER DOWN	N/A
	CONDUIT STUB (CAP CONDUIT)	AS NOTED
CT	CABLE TRAY	AS NOTED
BT	BUS DUCT	AS NOTED
	ELECTRICAL POWER	
J	JUNCTION BOX	AS NOTED
	DUPLEX RECEPTACLE	+16"
	QUAD RECEPTACLE	+16"
	SPLIT WIRED DUPLEX RECEPTACLE	+16"
WP	DUPLEX RECEPTACLE WEATHERPROOF AND GFCI	+16"
	DUPLEX RECEPTACLE OUTLET WITH GROUND FAULT CIRCUIT INTERRUPTION PROTECTION	+16"
EWC	RECEPTACLE ELECTRIC WATER COOLER (EWC) WITH GROUND FAULT CIRCUIT INTERRUPTION PROTECTION	+16"
	EQUIPMENT RECEPTACLE	+16"
	SPECIAL PURPOSE RECEPTACLE	+16"
	DUPLEX RECEPTACLE FLOOR	FLOOR
	QUAD RECEPTACLE FLOOR	FLOOR
	POWER/TELEPHONE POLE	FLOOR
	SNOW MELT CABLE	+48"
	ELECTRICAL CONNECTIONS	
	NON-FUSED DISCONNECT SWITCH	TOP AT 6'-0"
	FUSED DISCONNECT SWITCH	TOP AT 6'-0"
	MOTOR STARTER/DISCONNECT SWITCH COMBINATION NON-FUSED	TOP AT 6'-0"
	MOTOR STARTER/DISCONNECT SWITCH COMBINATION FUSED	TOP AT 6'-0"
	MOTOR STARTER ONLY	TOP AT 6'-0"
VFD	VARIABLE FREQUENCY DRIVE	+78"
	MOTOR CONNECTION	AS NOTED
	ELECTRICAL DISTRIBUTION	
T	TELEPHONE COMPANY PEDESTAL	AS NOTED
GS	POWER COMPANY GROUND SLEEVE	AS NOTED
	POWER COMPANY SITE TRANSFORMER	AS NOTED
	HIGH VOLTAGE (277/480 VOLT) PANELBOARD	TOP AT 6'-0"
	LOW VOLTAGE (120/208 VOLT) PANELBOARD	TOP AT 6'-0"
	DRY TYPE TRANSFORMER	AS NOTED
	DISTRIBUTION SWITCHBOARD	AS NOTED
	TELEPHONE AND/OR DATA TERMINAL BOARD	AS NOTED
	ELECTRICAL DEVICES	
	PUSHBUTTON	+48"
	STOP/START STATION	+48"
EPO	"EMERGENCY POWER OFF" MUSHROOM TYPE BUTTON	+48"
T	LINE VOLTAGE THERMOSTAT	+48"
	CLOCK	AS NOTED
N_3	NURSE CALL BED/BATH STATION	+48"
N	NURSE CALL LIGHT	+84"
NURS	NURSE CALL STATION PANEL	TOP AT 6'-0"

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	LIGHTING CONTROL	
S	SINGLE POLE SWITCH	+48"
S_3	3-WAY SWITCH	+48"
S_4	4-WAY SWITCH	+48"
S_P	SWITCH WITH PILOT LIGHT	+48"
S_D	DIMMER SWITCH	+48"
S_K	KEYED SWITCH	+48"
S_{TM}	TIMER SWITCH (SPRING WOUND)	+48"
S_T	MANUAL STARTER WITH THERMAL OVERLOAD	AS NOTED
S_L	LOW VOLTAGE SWITCH	+48"
S^O	CONTROLLING SWITCH (LETTER INDICATES CONTROL CIRCUIT)	+48"
	SINGLE POLE SWITCH/OCCUPANCY SENSOR COMBINATION. MANUAL ON/AUTO OFF (WALL MOUNTED) DUAL TECHNOLOGY	+48"
	OCCUPANCY SENSOR DUAL TECHNOLOGY	CEILING
TS	TIME SWITCH	+60"
	LIGHTING CONTACTOR	+60"
P	PHOTOCELL	AS NOTED
	LIGHTING	
	FLUORESCENT FIXTURE (TYPICAL)	CEILING
EM	FLUORESCENT EMERGENCY FIXTURE (TYPICAL)	CEILING
	SURFACE MOUNTED FIXTURE	CEILING
	RECESSED FIXTURE	CEILING
	WALL MOUNTED FIXTURE	AS NOTED
	WALL MOUNTED EMERGENCY EGRESS FIXTURE	AS NOTED
	FLUORESCENT STRIP	CEILING
	TRACK LIGHTING	CEILING
	EMERGENCY LIGHTING UNIT	+84"
/XX	FIXTURE TYPE SYMBOL (ATTACHED TO FIXTURE SYMBOL)	N/A
	POST TOP AREA LIGHT POLE & FIXTURE	AS NOTED
	AREA LIGHT POLE AND FIXTURE (HEAD QTY AS SHOWN ON PLAN)	AS NOTED
	BOLLARD FIXTURE	GROUND
	FLOOD OR SPOT FIXTURE	AS NOTED
	WALL MOUNTED EXIT LIGHT (SINGLE FACE)	+84"
	WALL MOUNTED EXIT LIGHT (DOUBLE FACE)	+84"
	CEILING MOUNTED EXIT LIGHT (SINGLE FACE)	CEILING
	CEILING MOUNTED EXIT LIGHT (DOUBLE FACE)	CEILING
	TELECOMMUNICATIONS	
	TELEPHONE OUTLET	+16"
	COMPUTER DATA OUTLET	+16"
	VOICE / DATA OUTLET	+16"
	TELEPHONE OUTLET FLOOR	FLOOR
	COMPUTER DATA OUTLET FLOOR	FLOOR
	NETWORK AND VOICE OUTLET FLOOR	FLOOR
	REFERENCE SYMBOLS	
XX X	FEEDER TAG (ONE LINE DIAGRAM)	N/A
X	REVISION TAG INDICATOR	N/A
X EX	DETAIL INDICATOR; TOP DETAIL IDENTIFICATION BOTTOM INDICATES SHEET WHERE DETAIL IS LOCATED.	N/A
X-XX	MECHANICAL EQUIPMENT SYMBOL	N/A
X	KEYED NOTE REFERENCE	N/A

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	AUDIO / VIDEO	
TV	TELEVISION OUTLET	AS NOTED
V	VOLUME CONTROL	+48"
S	SPEAKER	CEILING
M	MICROPHONE JACK	+16"
A	AUXILIARY JACK	+16"
IC	INTERCOM STATION	+48"
	BELL	+84"
H	CHIME	+84"
	FIRE ALARM	
F	FIRE ALARM MANUAL PULL STATION	SEE DETAIL
	FIRE ALARM HORN/STROBE	SEE DETAIL
	FIRE ALARM HORN/STROBE WITH GUARD	SEE DETAIL
WP	FIRE ALARM HORN/STROBE WATERPROOF	SEE DETAIL
	FIRE ALARM STROBE	SEE DETAIL
	SMOKE DETECTOR	CEILING
S_B	SMOKE DETECTOR BATTERY-BACKED	CEILING
S_D	DUCT SMOKE DETECTOR	IN DUCT
S_E	SMOKE DETECTOR (ELEVATOR RECALL)	CEILING
	HEAT DETECTOR	CEILING
	GAS DETECTOR	+16"
	DOOR HOLDER	AS NOTED
	PRESSURE SWITCH	AS NOTED
	FIRE ALARM FLOW SWITCH	AS NOTED
	FIRE ALARM TAMPER SWITCH	AS NOTED
	FIRE ALARM FIREFIGHTER PHONE	+48"
CM	CONTROL MODULE	AS NOTED
MM	MONITOR MODULE	AS NOTED
FSD	FIRE/SMOKE DAMPER	AS NOTED
R	FIRE ALARM RELAY	AS NOTED
GAA	FIRE ALARM GENERATOR ANNUNCIATOR	TOP AT 6'-0"
FST	FIRE ALARM TRANSMISSION (MONITORING) DEVICE	AS NOTED
FACP	FIRE ALARM CONTROL PANEL	TOP AT 6'-0"
FAA	FIRE ALARM REMOTE ANNUNCIATOR PANEL	TOP AT 6'-0"
	SECURITY	
D_1	SECURITY SYSTEM DOOR CONTACT	DOOR JAMB
D_2	SECURITY SYSTEM OVERHEAD DOOR CONTACT	AS NOTED
KP	SECURITY SYSTEM KEYPAD ARM/DISARM	+48"
	SECURITY SYSTEM DOOR ELECTRIC STRIKE	AS NOTED
	SECURITY SYSTEM MAGNETIC DOOR LOCK	AS NOTED
REX	REQUEST TO EXIT MOTION DETECTOR	AS NOTED
	SECURITY SYSTEM AREA MOTION SENSOR	AS NOTED
	SECURITY SYSTEM GLASS BREAK SENSOR	AS NOTED
CR	SECURITY SYSTEM CARD READER	+48"
AK	SECURITY SYSTEM DOOR ACCESS KEYPAD	+48"
	SECURITY SYSTEM CCTV CAMERA	AS NOTED
DVR	DIGITAL VIDEO RECORDER	AS NOTED
MON	SECURITY SYSTEM CCTV MONITOR	AS NOTED
SPNT	SECURITY SYSTEM PANEL	TOP AT 6'-0"
PS	POWER SUPPLY LOW VOLTAGE	AS NOTED

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	EWC	ELECTRIC WATER COOLER	(N)	NEW
AFP	ARC FAULT PROTECTOR	EWH	ELECTRIC WATER HEATER	NIC	NOT IN CONTRACT
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)	(F)	FUTURE	NL	NIGHT LIGHT
AL	ALUMINUM	FA	FIRE ALARM	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
BG	BELOW GRADE	FLA	FULL LOAD AMPS	OFOI	OWNER FURNISHED OWNER INSTALLED
C	CONDUIT	GFI	GROUND FAULT INTERRUPTER	PNL	PANEL
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	GFP	GROUND FAULT PROTECTOR	(R)	RELOCATE
CKT	CIRCUIT	GRC	GALVANIZED RIGID CONDUIT	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
CO	CONDUIT ONLY	GRND	GROUND	TYP	TYPICAL
CU	COPPER	IG	ISOLATED GROUND	UNO	UNLESS NOTED OTHERWISE
C/W	COMPLETE WITH	MCB	MAIN CIRCUIT BREAKER	WP	WEATHER PROOF
E	EMERGENCY	MCC	MOTOR CONTROL CENTER	(X)	DEMOLISH/DELETE
(E)	EXISTING	MH	MANHOLE	XFMR	TRANSFORMER
EPO	EMERGENCY POWER OFF	MLO	MAIN LUGS ONLY		

* THIS IS A TYPICAL ABBREVIATION LIST. NOT ALL ABBREVIATIONS AE USED ON THIS PROJECT.

GENERAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING AND OTHER DRAWINGS PRIOR TO BID.
2. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE SPECIFICATIONS BOUND IN A THREE RING BINDER, INDEXED IN A NEAT AND ORDERLY MANNER WITH TYPE AND MODEL NUMBERS INDICATED. SUBMITTALS SHALL INCLUDE BUT NOT LIMITED TO: LIGHTING FIXTURES, LAMPS, WIRING DEVICES, OCCUPANCY SENSORS, CONTACTORS, TIME CLOCKS, PHOTOCELLS, RELAYS, SWITCHBOARDS, PANELBOARDS, MOTOR CONTROL CENTERS, SAFETY SWITCHES, MOTOR STARTERS, OVERCURRENT PROTECTION DEVICES, TRANSFORMERS, CONDUCTORS OVER 600 VOLTS AND ALL SPECIAL SYSTEMS SUCH AS FIRE ALARM, LIGHTING CONTROLS, SECURITY SYSTEMS, SOUND SYSTEMS ETC.
3. IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. MANUFACTURES CATALOG NUMBERS ARE LISTED AS A BASIS OF DESIGN. ELECTRICAL CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION THAT DEVIATES FROM ORIGINAL DESIGN INTENT AND SPECIFICATION.
4. CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY BUILDING PERMITS AND INSPECTION FEES.
5. ALL IMPACT FEES ASSOCIATED WITH CITY, UTILITY OR SERVICE COMPANIES FOR BUT NOT LIMITED TO POWER, TELEPHONE, FIBER OPTIC & INTERNET SHALL BE THE RESPONSIBILITY OF THE OWNER.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE AND INSTALL TEMPORARY POWER FOR PROJECT CONSTRUCTION AS REQUIRED. ALL ENERGY COSTS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
7. THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO DUCTS, PIPING, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER, OR PASS THROUGH ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE MOST RECENT VERSION OF THE NATIONAL ELECTRICAL CODE REGARDING CLEARANCES REQUIRED AROUND THE PANELBOARD(S).
8. DO NOT SCALE DRAWINGS VERIFY DIMENSIONS IN FIELD PRIOR TO MAKING ANY ROUGH-INS.
9. ELECTRICAL CONTRACTOR SHALL REVIEW ALL ARCHITECTS ELEVATIONS, SECTIONS AND FLOOR PLANS PRIOR TO ROUGH IN OF ELECTRICAL DEVICE JUNCTION BOXES.
10. CONSULT ARCHITECTS REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF LIGHTING FIXTURES, SPEAKERS, SMOKE DETECTORS ETC.
11. ELECTRICAL CONTRACTOR SHALL MEET WITH THE CEILING AND MECHANICAL CONTRACTORS TO COORDINATE LOCATIONS, CLEARANCES, CEILING TYPES AND ROUGH-IN REQUIREMENTS OF ALL LIGHTING FIXTURES PRIOR TO DUCT, PIPING AND CEILING INSTALLATIONS.
12. VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
13. ELECTRICAL CONTRACTOR SHALL VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH-INS. CONSULT CONTRACT DOCUMENT DRAWINGS AND SHOP DRAWINGS TO VERIFY AND MAINTAIN REQUIRED CLEARANCES.
14. ELECTRICAL ROOM DRAWINGS ARE FOR REFERENCE ONLY OF EQUIPMENT QUANTITIES. ELECTRICAL CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ELECTRICAL ROOM SHOWING DIMENSIONS AND CLEARANCES OF ALL EQUIPMENT AND ELECTRICAL GEAR PROVIDED. COORDINATE LAYOUT WITH ONE-LINE DRAWINGS.
15. CONTRACTOR SHALL VERIFY ACTUAL ELECTRICAL LOADS FROM NAMEPLATE RATINGS OF EACH PIECE OF EQUIPMENT REQUIRING POWER, BRING ANY DISCREPANCIES TO THE ATTENTION OF THE PROJECT ENGINEER.
16. WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER, PER INDUSTRY STANDARD AND TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.
17. WORK, MATERIALS AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE AND NATIONAL CODES, STANDARDS AND ORDINANCES.
18. FINAL CONNECTIONS TO EQUIPMENT SHALL BE MADE AS PER MANUFACTURERS WRITTEN INSTRUCTIONS AND APPROVED WIRING DIAGRAMS AND DETAILS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ALL MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
19. ALL EMPTY RACEWAY SYSTEMS SHALL HAVE A 200LB RATED PULL CORD INSTALLED AND SHALL BE IDENTIFIED AT EACH JUNCTION PULL AND TERMINATION POINT USING PERMANENT MARKER IN THE BOX. ID SHALL INDICATE INTENDED USE OF CONDUIT, ORIGINATION AND TERMINATION POINTS OF EACH INDIVIDUAL CONDUIT.
20. ALL PENETRATIONS OF FIRE RATED FLOORS, CEILINGS AND WALLS SHALL BE SEALED WITH UL LISTED AND RATED FIRE STOP MATERIAL TO MAINTAIN FIRE RATING OF ASSEMBLY.
21. ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY OR CONCRETE COLUMNS, BOND BEAMS OR GROUTED CELLS OF MASONRY WALLS ADJACENT TO OPENINGS WITHOUT COORDINATION WITH THE MASONRY CONTRACTOR.
22. WIRE FOR GENERAL USE SHALL BE COPPER 75% C RATED . WIRING FOR HID FIXTURES WITHIN 3' OF FLUORESCENT BALLAST SHALL BE COPPER, MINIMUM 90% C RATED . CONDUCTOR SIZES INDICATED ARE FOR INSTALLATION IN A MAXIMUM 30% C AMBIENT TEMPERATURE ENVIRONMENT. CONDUCTOR AMPACITY SHALL BE DERATED FOR HIGHER AMBIENT INSTALLATIONS.
23. CONDUCTORS HAVE BEEN SIZED FOR VOLTAGE DROP AS PER PLANS AND DIRECT ROUTING . ANY DEVIATION IN CONDUIT ROUTING MAY INCREASE THE WIRE AND CONDUIT SIZE. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO INSURE PROPER OPERATING VOLTAGE ON ALL CIRCUITS BOTH INTERIOR AND EXTERIOR. THE VOLTAGE DROP SHALL NOT EXCEED 3% FOR BRANCH CIRCUITS AND 2% FOR FEEDERS FOR A TOTAL OF 5% COMBINED TOGETHER OF BRANCH AND FEEDER CIRCUITS TO THE FARTHEST OUTLET.
24. ALL WIRING SHALL BE ENCLOSED IN METAL RACEWAYS. ALL RECEPTACLES, LIGHTING FIXTURES, ETC. SHALL HAVE A SEPARATE INSULATED GROUNDING CONDUCTOR FROM EACH DEVICE TO THE BRANCH PANEL.
25. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL UTILITY METERING EQUIPMENT TO COMPLY WITH THE STANDARDS OF THE LOCAL OR PROJECT SPECIFIC POWER COMPANY.
26. VERIFY EXACT LOCATIONS OF ALL NEW AND EXISTING UNDERGROUND SITE UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING. A UTILITY LOCATING COMPANY SUCH AS "BLUE STAKES" OR EQUAL SHALL BE USED TO VERIFY AND MARK UTILITIES BEFORE TRENCHING . PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION, SUPPORTS, SERVICE FEEDERS, (CONDUIT AND/OR WIRE), PULL BOXES, TRANSFORMER PADS, SAW CUTTING AND PATCHING, CONCRETE PAVING ETC. REQUIRED. BACKFILL TRENCHES TO 90% COMPACTION. PATCHING SHALL MATCH EXISTING SURROUNDING SURFACES. CONTRACTOR SHALL OBTAIN AND VERIFY UTILITY COMPANY DRAWINGS AND REQUIREMENTS FOR ALL SITE UTILITIES. ELECTRICAL CONTRACTOR SHALL ALSO COORDINATE ELECTRICAL RELATED UTILITIES WITH THE CIVIL, MECHANICAL, AND SITE EXCAVATION CONTRACTORS.
27. PULLBOXES, CABINETS, ETC. MOUNTED ON THE EXTERIOR OF THE BUILDING SHALL BE WEATHERPROOF TYPE WITH HINGED GASKETED LOCKABLE COVERS SECURED WITH TAMPERPROOF SCREWS.
28. SPLICES IN EXTERIOR PULLBOXES AND MANHOLES SHALL BE MADE WATERPROOF USING "SCOTCAST" SPLICE KIT OR APPROVED EQUAL. SEAL ENDS OF CONDUITS AND DUCTS ENTERING BOXES WITH "DUCTSEAL" OR EQUAL.
29. ELECTRICAL CONTRACTOR SHALL TEST AND VERIFY ALL SYSTEMS WITH PROJECT ENGINEER DURING FINAL INSPECTION TO INSURE PROPER OPERATION. IF TESTS RESULT IN DEFECT THE CONTRACTOR SHALL MAKE ANY CORRECTIONS NECESSARY AT NO ADDITIONAL COSTS TO THE OWNER.
30. PROVIDE RECORD DRAWINGS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
31. THE CONTRACTOR SHALL GUARANTEE THE INSTALLATION AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP, WHICH MAY OCCUR UNDER NORMAL USAGE FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION. DEFECTS SHALL BE PROMPTLY CORRECTED.
32. ALL CABLES AND RACEWAYS INSTALLED UNDER METAL CORRUGATED ROOF DECK SHALL BE INSTALLED AND SUPPORTED NOT LESS THAN 1½" FROM THE NEAREST SURFACE OF THE ROOF DECKING IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 300.4(E).

LIGHTING CONTROL PANEL NOTES:

1. SYSTEM DESCRIPTION FOR LIGHTING INTEGRATOR PANEL SYSTEM WITH AUTOMATION CARD (NON-PC CONTROL)
2. THE LIGHTING CONTROL SYSTEM SHALL CONSIST OF ANY OF THE FOLLOWING COMPONENTS: RELAY PANELS, DATALINE WIRING, SWITCHES, SENSORS AND REMOTE OVERRIDE DEVICES. ALL EQUIPMENT TO BE UL/CUL CERTIFIED TO MEET UL 916.
3. THE RELAY PANELS SHALL BE SUITABLE FOR MOUNTING IN ELECTRICAL CLOSETS AND MOUNTED IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES. THE RELAYS WILL CONTROL INDIVIDUAL CIRCUITS OR BRANCH CIRCUITS AS INDICATED IN THE RELAY PANEL SCHEDULES. ALL POWER WIRING WILL BE IDENTIFIED AT THE RELAY BY ITS CONTROLLING CIRCUIT BREAKER AND BRANCH LETTER.
4. LOW VOLTAGE SWITCHES, OCCUPANCY SENSORS, AND/OR PHOTOCELLS SHALL BE MOUNTED IN THE SPACES AS INDICATED ON THE REFLECTED CEILING PLANS. LOW VOLTAGE WIRING FROM THE SWITCHES AND SENSORS TO THE RELAY PANEL SHALL BE CLASS 2 OR CLASS 2P (PLENUM RATED) AS REQUIRED BY THE NATIONAL ELECTRICAL CODE AND LOCAL STANDARDS. USE ONLY PROPERLY COLOR-CODED, STRANDED #20 AWG (OR LARGER) WIRE AS INDICATED ON THE DRAWINGS.
5. PANEL COMPONENTS TO INCLUDE: ENCLOSURE AND COVER, POWER SUPPLY, AND PANEL INTERIOR ASSEMBLY WITH MOTHERBOARD, AND CONTROL ELECTRONICS. PANELS ARE TO BE SHIPPED FULLY ASSEMBLED YET DESIGNED FOR DISASSEMBLY FOR MOUNTING THE ENCLOSURE FIRST, AND REASSEMBLY AFTER CONDUIT ROUGH-IN. THE PANEL SHALL INCLUDE VISUAL LED STATUS AND MANUAL OVERRIDE FOR EACH RELAY. TERMINALS FOR EACH RELAY FOR DIRECT-WIRED DEVICES SUCH AS SENSORS AND SWITCHES, SYSTEM DATALINE TERMINALS, AND PROGRAMMABLE SYSTEM SWITCHES.
6. EACH RELAY PANEL SHALL USE 30A BALLAST RATED, 120/277VAC, MECHANICALLY LATCHING RELAYS AS REQUIRED . RELAYS SHALL HAVE A MINIMUM 10,000 AMP SHORT CIRCUIT CURRENT RATING. ELECTRICALLY HELD RELAYS WILL NOT BE ACCEPTABLE. PANELS SHALL BE SIZED TO MAXIMUM 8, 24, OR 48 RELAYS. EACH RELAY SHALL PROVIDE PILOT OUTPUT CONTACTS, RATED AT 1AMPS AC/DC.
7. AN OPTIONAL GROUP SWITCHING (GS) CARD SHALL BE PROVIDED FOR CONTROLLING 8 GROUPS OF LIGHTING, PLUS PATTERN CONTROL FOR EACH GROUP. EACH GS CARD SHALL PROVIDE 8 TERMINALS FOR CONNECTION TO DIRECT WIRED SWITCHES, OVERRIDE DEVICES AND OCCUPANCY SENSORS. EACH GROUP SHALL HAVE AN LED ASSOCIATED TO INDICATE ITS STATUS AND A MANUAL OVERRIDE PUSHBUTTON.
8. PANEL INTELLIGENCE CARD FOR AUTOMATION FUNCTIONS SHALL BE PROVIDED VIA A PLUG-IN CARD SLOT ON THE PANEL MOTHERBOARD. THE INTELLIGENCE BOARD SHALL BE A DISTRIBUTED INTELLIGENCE COMPONENT, CAPABLE OF EXECUTING ALL SCHEDULES, PROGRAMMABLE SWITCHES, AND OCCUPANT OVERRIDES WITHOUT RELYING ON ANY OTHER COMPONENT IN THE SYSTEM.

   AUTOMATION INTELLIGENCE CARD SHALL SPORT TWO DATALINE COMMUNICATIONS PORTS FOR PROGRAMMING, MONITORING, AND CONTROL, AND THE OTHER PORT FOR CONNECTION TO DIGITAL SIGNALING DATALINE SWITCHES. THE DATALINE SHALL ALLOW COMMUNICATIONS OVER UNSHIELDED TWISTED PAIR WIRING FOR NETWORKING UP TO 10 PANELS AND FOR DISTANCES UP TO 1000 FEET BETWEEN PANELS, AND FOR CONNECTING UP TO 63 DATALINE SWITCHES PER PANEL.

   THE AUTOMATION INTELLIGENCE CARD SHALL PROVIDE CONNECTION TO OPTIONAL MODULES THAT PROVIDE CLOCK SCHEDULING, OR TO A BUILDING MANAGEMENT SYSTEM VIA DRY CONTACTS, OR A TELEPHONE CONTROL MODULE, OR A PHOTOSENSOR CONTROL MODULE FOR EXTERIOR LIGHTING CONTROL.
9. A PROGRAMMABLE NETWORK CLOCK WITH AN 8 LINE LCD DISPLAY SHALL BE INSTALLED IN THE PANEL. THE CLOCK SHALL PROVIDE MENU DRIVEN CONTROL FOR 8 DIFFERENT LIGHTING GROUPS, WITH 7 DAY REPEATING SCHEDULES AND PROVISION FOR HOLIDAYS. THE CLOCK SHALL PROVIDE USER SELECTABLE PRE-PROGRAMMED SCENARIOS FOR: SCHEDULED ON/OFF, MANUAL ON/ SWEEP WITH AUTOMATIC CONTROL SWITCH, ASTRO ON/OFF, ASTRO ON/SCHEDULED OFF, AND DARK ON/OFF WHEN USED WITH THE PHOTOSENSOR CONTROL MODULE.
10. AN PHOTOSENSOR CONTROL (PC) MODULE WITH COMPATIBLE OUTDOOR PHOTOCELL SHALL BE PROVIDED FOR EXTERIOR LIGHTING CONTROL. THE PC MODULE SHALL PROVIDE 8 AUTOMATION CHANNELS WITH USER PROGRAMMABLE SET POINTS FOR EACH CHANNEL. THE PROGRAMMABLE RANGE FOR EACH CHANNEL SHALL BE 0-200 FOOTCANDLES. A TWO-LINE LCD WINDOW SHALL DISPLAY REAL-TIME LIGHT LEVELS FOR EACH CHANNEL AND USER PROGRAMMED SETPOINTS.
11. RELAY PANELS WILL BE CAPABLE OF FOLLOWING STANDARD FEATURES: SCHEDULED ON/OFF, ASTRONOMICAL TIME OF DAY, BLINK WARNING, TRUE AFTER HOURS TIME DELAY, JANITOR SCENARIO SWITCHES, TELEPHONE OVERRIDES, PULSE ON/OFF.
12. COLOR CODED WIRE SHALL BE PROVIDED FOR NETWORKING PANELS TOGETHER AND FOR CONNECTION TO DIGITAL SIGNALING DATALINE SWITCHES.
13. WIRE CONNECTING PANELS TOGETHER SHALL BE DUAL 18/2 TWISTED PAIR, UNSHIELDED, DATALINE WIRE (4 CONDUCTOR) TO PROVIDE A ROBUST, HIGH-SPEED COMMUNICATIONS PATH. DATALINE CAN BE RUN IN ANY CONVENIENT TOPOLOGY SERIES AS BENEFITS THE INSTALLATION, I.E. T-TAP, STAR, OR LOOP. USE ONE PAIR ONLY FOR NETWORKING PANELS TOGETHER. WIRE SHALL BE THE WATT STOPPER HOLM4 DATALINE WIRE. USE ONE PAIR FOR CONNECTING PANELS TOGETHER. USE PLENUM RATED WIRE WHEN APPLICABLE.
14. WIRE CONNECTING DIGITAL SIGNALING DATALINE SWITCHES TO PANELS SHALL BE DUAL 18/2 TWISTED PAIR, UNSHIELDED, DATALINE WIRE (4 CONDUCTOR) TO PROVIDE A ROBUST, HIGH-SPEED COMMUNICATIONS PATH. DATALINE CAN BE RUN IN ANY CONVENIENT TOPOLOGY SERIES AS BENEFITS THE INSTALLATION, I.E. T-TAP, STAR, OR LOOP. WIRE SHALL BE THE WATT STOPPER HOLM4 DATALINE WIRE. USE BOTH PAIRS FOR CONNECTING PANELS TO DATALINE SWITCHES. USE PLENUM RATED WIRE WHEN APPLICABLE.
15. MANUFACTURER SHALL PROVIDE A FACTORY AUTHORIZED TECHNICIAN TO CONFIRM PROPER INSTALLATION AND OPERATION OF ALL SYSTEM COMPONENTS INCLUDING OCCUPANCY SENSORS AND DAYLIGHTING CONTROLS.
16. MANUFACTURER SHALL PROVIDE FACTORY AUTHORIZED APPLICATION ENGINEER TO TRAIN OWNER PERSONNEL IN THE OPERATION AND PROGRAMMING OF THE LIGHTING CONTROL SYSTEM.
17. MANUFACTURER SHALL PROVIDE SYSTEM DOCUMENTATION INCLUDING:
    A. SYSTEM 1-LINE SHOWING ALL PANELS, NUMBER AND TYPE OF SWITCHES AND SENSORS, DATALINE, FRONT END MATERIAL.
    B. DRAWINGS FOR EACH PANEL SHOWING HARDWARE CONFIGURATION AND NUMBERING.
    C. PANEL WIRING SCHEDULES.
    D. TYPICAL WIRING DIAGRAMS FOR EACH COMPONENT.

SOUTH BUILDING SHEET INDEX

E001	NOTES, SYMBOLS, ABBREVIATIONS, SHEET INDEX
E201	SOUTH BUILDING MAIN LEVEL POWER PLAN
E202	SOUTH BUILDING UPPER LEVEL POWER PLAN
E301	SOUTH BUILDING MAIN LEVEL LIGHTING PLAN
E302	SOUTH BUILDING UPPER LEVEL LIGHTING PLAN
E401	ONE-LINE DIAGRAM, PANEL SCHEDULES, RISER
E501	ELECTRICAL DETAILS

DEQ BUILDING REMODEL AND TENANT FINISH - SOUTH BUILDING

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

NOTES, SCHEDULES, SYMBOLS, SHEET INDEX

FRANK N MURDOCK JR ■ Architect & Associates
915 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX: (801) 532-4220

STATE OF UTAH LICENSED PROFESSIONAL ENGINEER No. 194867 DEAN P. LEVORSEN 8/6/10

REVISION # DATE:

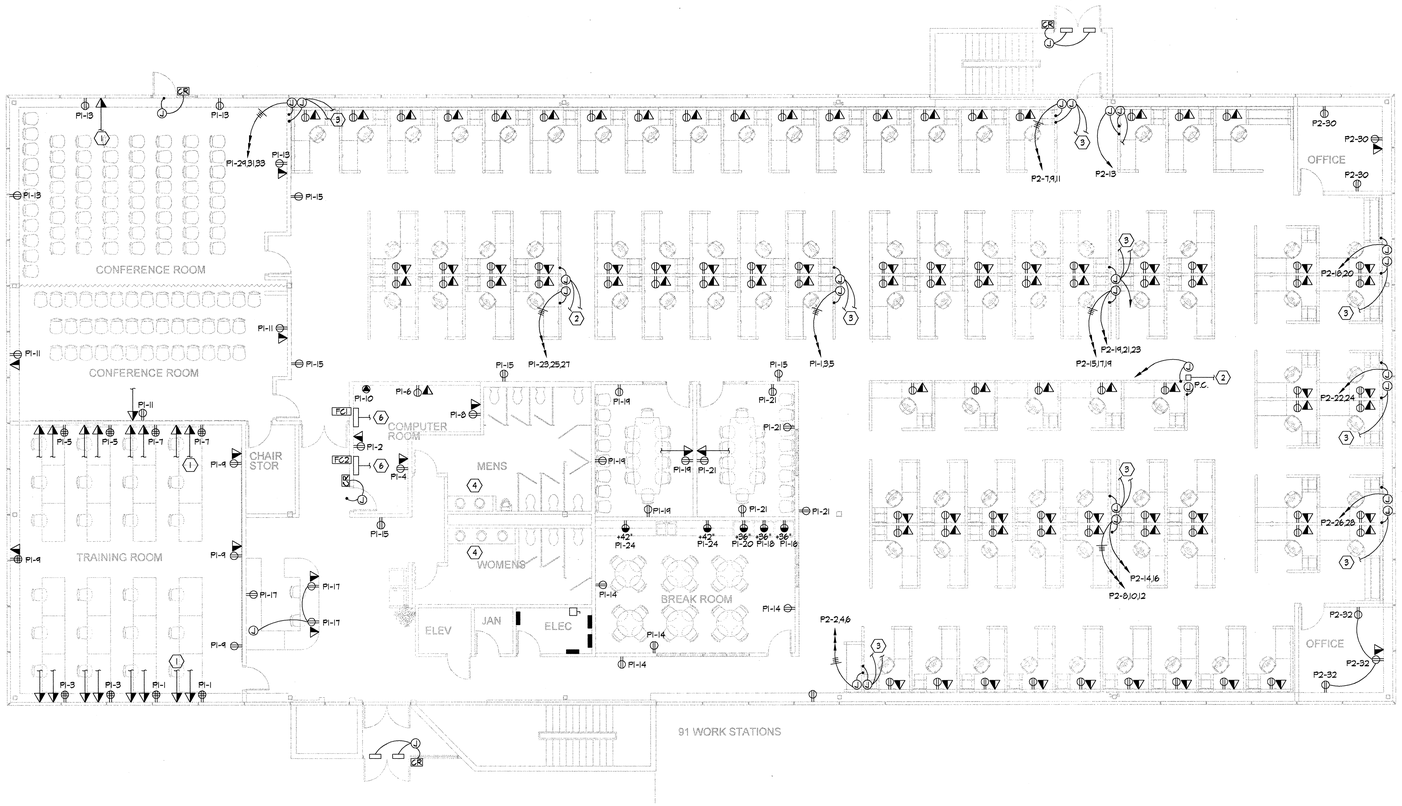
DFCM PROJECT NO.: 10071.01

CONST. DOC.
FILE NAME: DEQTI-A101
PLOT SCALE: N.T.S.
DRAWN BY: BJW
CHECKED BY: RKR
DATE: JUNE 8, 2010

E 001

KEYED NOTES:

1. 3/4" CONDUIT WITH PULL STRING STUBBED-UP TO ACCESSIBLE CEILING SPACE.
2. 1" CONDUIT WITH PULL STRING STUBBED-UP TO ACCESSIBLE CEILING SPACE.
3. 1-1/4" CONDUIT WITH PULL STRING STUBBED-UP TO ACCESSIBLE CEILING SPACE.
4. EXISTING ELECTRICAL TO REMAIN.
5. MAKE CONNECTIONS TO SYSTEMS FURNITURE.
6. WIRE TO OUTDOOR CONDENSING UNIT ON ROOF.



SOUTH BUILDING MAIN LEVEL POWER PLAN

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

0' 2' 4' 8' 16'

DEQ BUILDING REMODEL AND TENANT FINISH - SOUTH BUILDING

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

MAIN LEVEL POWER PLAN

FRANK N MURDOCK JR ■ Architect & Associates
975 East 1700 South - Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

REVISION # DATE:

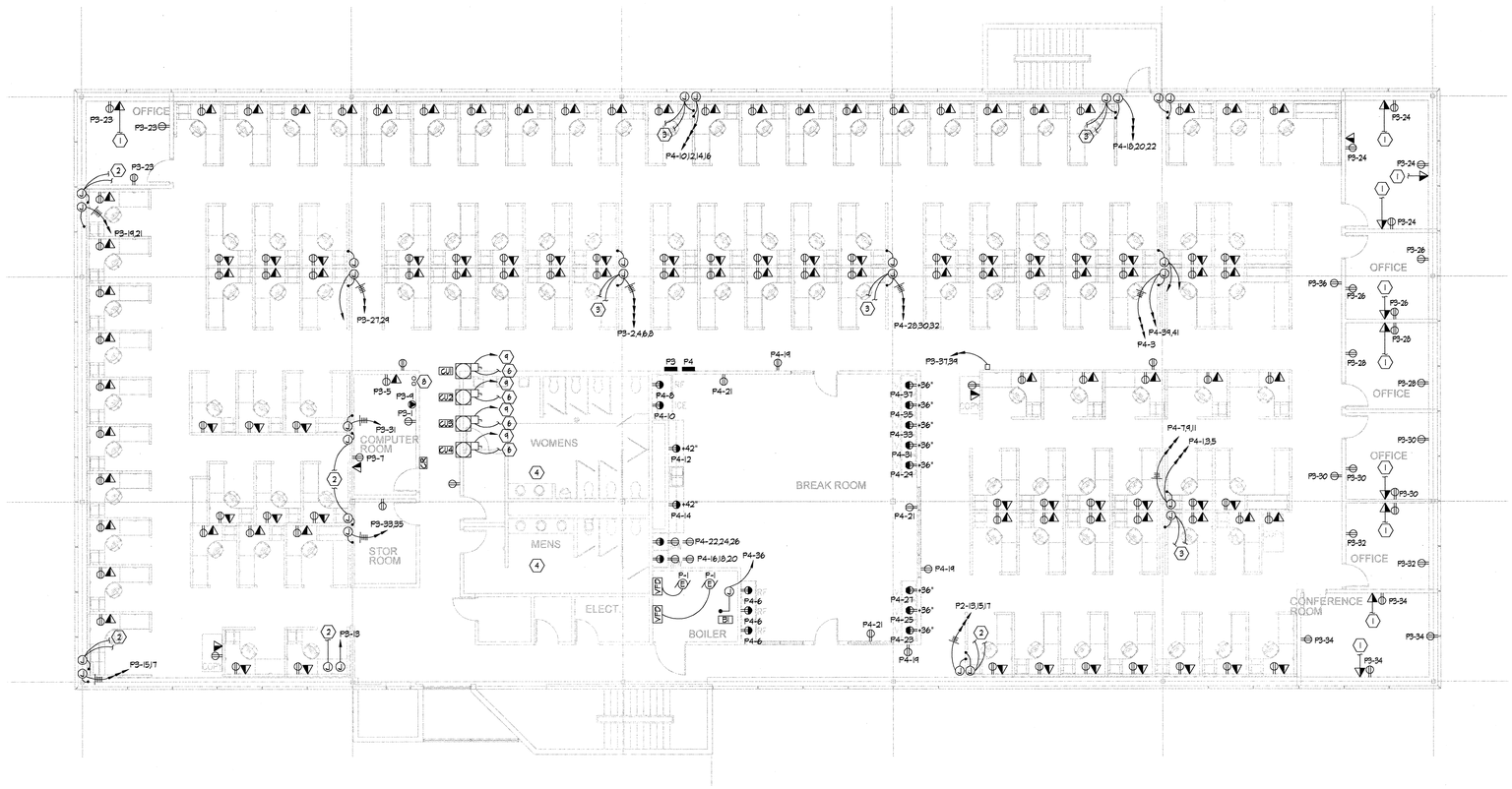
DFCM PROJECT NO.: 10071.01

CONST. DOC.
FILE NAME: DEQTI-A101
PLOT SCALE: 1/8"=1'-0"
DRAWN BY: BJW
CHECKED BY: RKR
DATE: JUNE 8, 2010

E 201

KEYED NOTES:

1. 3/4" CONDUIT WITH PULL STRING STUBBED-UP TO ACCESSIBLE CEILING SPACE.
2. 1" CONDUIT WITH PULL STRING STUBBED-UP TO ACCESSIBLE CEILING SPACE.
3. 1-1/4" CONDUIT WITH PULL STRING STUBBED-UP TO ACCESSIBLE CEILING SPACE.
4. EXISTING ELECTRICAL TO REMAIN.
5. MAKE CONNECTIONS TO SYSTEMS FURNITURE.
6. WIRE TO INDOOR FAN UNIT.
7. WIRE NEW PUMP TO NEW 3P-15A BREAKER IN PANEL "L" 480V, 3P, PROVIDE STARTER/DISCONNECT FOR 2HP PUMP.
8. (1) 4" CONDUIT SLEEVES TO COMPUTER ROOM BELOW.
9. WIRE NEW CONDENSING UNIT TO CDI-4 TO NEW 2P-30A BREAKERS IN EXISTING PANEL "D" WITH #10 WIRE IN MC CABLE.



SOUTH BUILDING UPPER LEVEL POWER PLAN

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

0 2 4' 8' 16'

DEQ BUILDING REMODEL AND TENANT FINISH - SOUTH BUILDING

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

UPPER LEVEL POWER PLAN

FRANK N MURDOCK JR ■ Architect & Associates
975 East 1100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

REGISTERED PROFESSIONAL ENGINEER No. 154867 DEAN P. LEVGREN STATE OF UTAH
6/8/10

REVISION #	DATE:

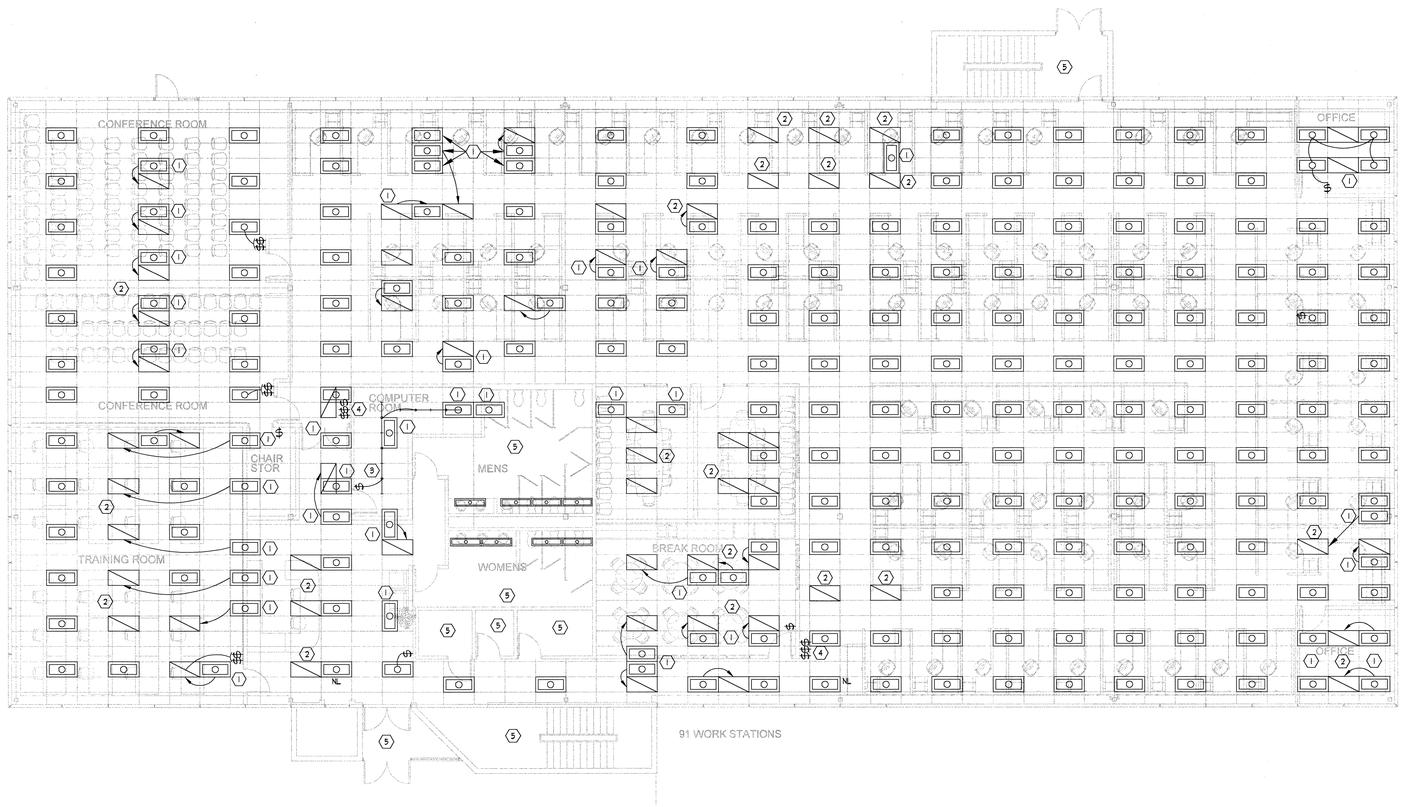
DFCM PROJECT NO.: 10071.01

CONST. DOC.
FILE NAME: DEQTI-A101
PLOT SCALE: 1/8"=1'-0"
DRAWN BY: BJW
CHECKED BY: RKR
DATE: JUNE 8, 2010

E 202

KEYED NOTES:

1. ENTER TEXT HERE.



KEYED NOTES (⟨5⟩):

1. RELOCATE EXISTING LAY-IN LIGHTING FIXTURE TO NEW LOCATION EXTEND CIRCUIT WHIP AS REQUIRED.
2. NEW LOCATION OF EXISTING LIGHT FIXTURE.
3. NEW 2 LAMP FLUORESCENT TO EXISTING CEILING OR STRUCTURE. WIRE TO EXISTING CIRCUIT.
4. VERIFY 277 VOLT LIGHTING CIRCUIT AND PROVIDE NEW SWITCHING AT AREA ENTRY.
5. EXISTING LIGHTING TO REMAIN IN RESTROOMS, STORAGE, JANITOR, ELECTRICAL AND STAIRWAYS.

SOUTH BUILDING MAIN LEVEL LIGHTING PLAN

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

0 2' 4' 8' 16'

DEQ BUILDING REMODEL AND TENANT FINISH - SOUTH BUILDING

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

MAIN LEVEL LIGHTING PLAN

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

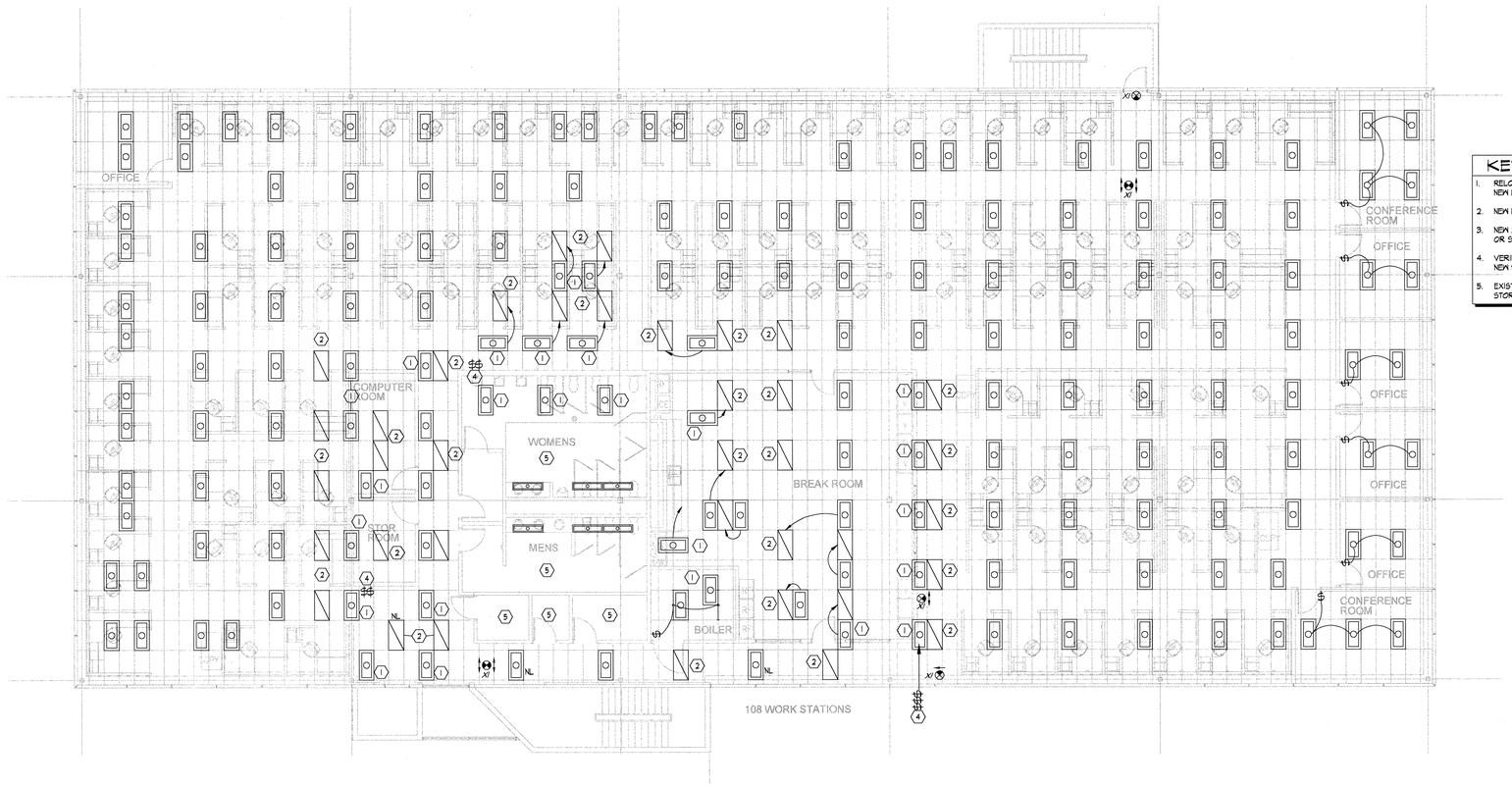
REGISTERED PROFESSIONAL ENGINEER No. 154867 DEAN P. LEVOSSEN STATE OF UTAH
6/9/10

REVISION # DATE:

DFCM PROJECT NO.: 10071.01

CONST. DOC.
FILE NAME: DEQTI-A101
PLOT SCALE: 1/8"=1'-0"
DRAWN BY: BJW
CHECKED BY: RKR
DATE: JUNE 8, 2010

E
301



KEYED NOTES (#):

1. RELOCATE EXISTING LAY-IN LIGHTING FIXTURE TO NEW LOCATION EXTEND CIRCUIT WHIP AS REQUIRED.
2. NEW LOCATION OF EXISTING LIGHT FIXTURE.
3. NEW 2 LAMP FLUORESCENT TO EXISTING CEILING OR STRUCTURE. WIRE TO EXISTING CIRCUIT.
4. VERIFY 277 VOLT LIGHTING CIRCUIT AND PROVIDE NEW SWITCHING AT AREA ENTRY.
5. EXISTING LIGHTING TO REMAIN IN RESTROOMS, STORAGE, JANITOR, ELECTRICAL AND STAIRWAYS.

SOUTH BUILDING UPPER LEVEL LIGHTING PLAN

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

0 2 4 8 16'

DEQ BUILDING REMODEL AND TENANT FINISH - SOUTH BUILDING

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

UPPER LEVEL LIGHTING PLAN

FRANK N MURDOCK JR ■ Architect & Associates
975 East 1100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

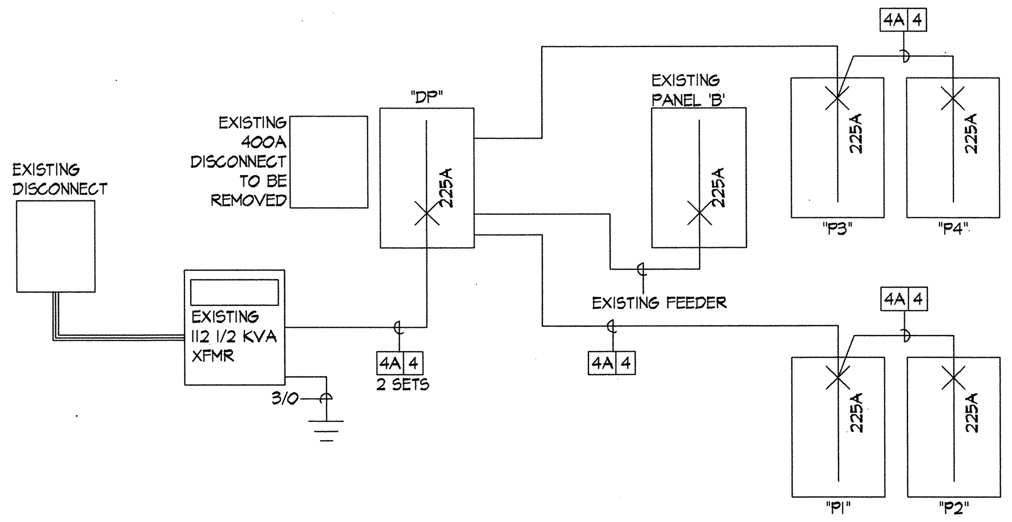
REGISTERED PROFESSIONAL ENGINEER
No. 154667
DEAN P. LEVGREEN
STATE OF UTAH
6/8/10

REVISION # DATE:

DFCM PROJECT NO.: 10071.01

CONST. DOC.
FILE NAME: DEQTI-A101
PLOT SCALE: 1/8"=1'-0"
DRAWN BY: BJW
CHECKED BY: RKR
DATE: JUNE 8, 2010

E
302



ONE LINE DIAGRAM

NOT TO SCALE

CONDUIT & WIRE SCHEDULE

SYMBOL SIZE	SYMBOL QTY	CONDUIT	WIRE SIZE & TYPE	GROUND	AMPS	REMARKS
12	2	3/4"	#12 THHN CU	#12 THHN CU	25	
	3	3/4"				
	4	3/4"				
10	2	3/4"	#10 THHN CU	#10 THHN CU	30	
	3	3/4"				
	4	3/4"				
8	2	3/4"	#8 THHN CU	#8 THHN CU	40	
	3	3/4"				
	4	3/4"				
6	2	3/4"	#6 THHN CU	#8 THHN CU	55	
	3	3/4"				
	4	3/4"				
4	2	3/4"	#4 THHN CU	#8 THHN CU	70	
	3	1"				
	4	1 1/4"				
3	2	1"	#3 THHN CU	#8 THHN CU	100	
	3	1"				
	4	1 1/4"				
2	2	1 1/4"	#2 THHN CU	#8 THHN CU	115	
	3	1 1/4"				
	4	1 1/4"				
1	2	1 1/2"	#1 THHN CU	#6 THHN CU	130	
	3	1 1/2"				
	4	1 1/2"				
1A	2	1 1/2"	#1/0 THHN CU	#6 THHN CU	150	
	3	1 1/2"				
	4	1 1/2"				
2A	2	1 1/2"	#2/0 THHN CU	#6 THHN CU	175	
	3	1 1/2"				
	4	2"				
3A	2	1 1/2"	#3/0 THHN CU	#4 THHN CU	200	
	3	2"				
	4	2"				
4A	2	2"	#4/0 THHN CU	#2 THHN CU	230	
	3	2"				
	4	2 1/2"				
25	2	2"	#250 KCMIL THHN CU	#2 THHN CU	255	
	3	2"				
	4	2 1/2"				
30	2	2"	#300 KCMIL THHN CU	#2 THHN CU	285	
	3	3"				
	4	3"				
35	2	2"	#350 KCMIL THHN CU	#2 THHN CU	310	
	3	3"				
	4	3"				
40	2	2 1/2"	#400 KCMIL THHN CU	#1/0 THHN CU	335	
	3	3"				
	4	3"				
50	2	3"	#500 KCMIL THHN CU	#1/0 THHN CU	380	
	3	4"				
	4	4"				
60	2	3"	#600 KCMIL THHN CU	#1/0 THHN CU	420	
	3	4"				
	4	4"				
75	2	3"	#750 KCMIL THHN CU	#2/0 THHN CU	475	
	3	4"				
	4	4"				

EXAMPLE:

3A 4 =(4)-#3/0 AWG THHN/THWN + (1)-#6 THHN/THWN GND, 2"CONDUIT

50 4 = (4)-#500kCMILTHHN/THWN CU + (1)-#1/0 AWG THHN/THWN CU GND, 4"CONDUIT, 2 SETS, PARALLEL FEEDERS
2 SETS
1/A GND.

NOTES :

1. PARALLEL RUNS REQUIRE A LARGER GROUND WIRE PER CONDUIT - SEE NATIONAL ELECTRICAL CODE.
2. WHERE THHN CONDUCTORS SHALL BE RUN UNDERGROUND, PROVIDE THHW INSULATION IN LIEU OF THHN INSULATION ON ALL UNDERGROUND CONDUCTORS.

ROCKY MOUNTAIN POWER SERVICE ENTRANCE SCHEDULE

(SCHEDULE IS SHOWN HERE FOR REFERENCE ONLY, VERIFY LATEST VERSION WITH POWER COMPANY PRIOR TO ROUGH-IN. SEE POWER COMPANY FORM GS 031 TABLE 3)

SERVICE ENTRANCE MAX. RATING (AMPS)	SERVICE ENTRANCE CONTINUOUS DUTY (AMPS)	AVAILABLE CONDUIT RUNS	SERVICE SIZE 75% LOAD FACTOR PHASE	75% LOAD FACTOR NEUTRAL	100% LOAD FACTOR PHASE	100% LOAD FACTOR NEUTRAL
200	160	(1)-3"	(1)-4/0	(1)-2/0	(1)-4/0	(1)-2/0
400	320	(1)-4"	(1)-350	(1)-4/0	(1)-500	(1)-350
600	480	(2)-4"	(2)-350	(2)-4/0	(2)-350	(2)-4/0
800	640	(3)-4"	(3)-350	(3)-4/0	(3)-350	(3)-4/0
1,000	800	(4)-4"	(3)-350	(3)-4/0	(4)-350	(4)-4/0
1,200	960	(4)-4"	(3)-500	(3)-350	(4)-500	(4)-350
1,600	1,280	(6)-4"	(5)-500	(5)-350	(6)-500	(6)-350
2,000	1,600	(8)-4"	(6)-500	(6)-350	(8)-500	(8)-350
2,400	1,920	(9)-4"	(8)-500	(8)-350	(7)-500 CU	(7)-500 CU
3,000	2,400	(9)-5"	(SEE NOTE #4)			
4,000	3,200	(9)-5"	(SEE NOTE #4)			

NOTES:

1. ABOVE CONDUCTORS ARE CROSS-LINKED POLYETHYLENE (XLPE) INSULATED 600 VOLT ALUMINUM CABLES UNLESS OTHERS SPECIFIED.
2. SERVICE SIZES GIVEN ABOVE CAN CARRY CONTINUOUSLY (THREE HOURS OR MORE) THE SERVICE ENTRANCE LIMIT AMPERAGES GIVEN IN THE SECOND COLUMN/ IF THE ACTUAL LOAD IS ESTIMATED TO BE LESS THAN THESE VALUES, THE SERVICE SIZE MAY BE REDUCED ACCORDINGLY.
3. AFTER SELECTING SERVICE CABLES, USE CONSTRUCTION STANDARD GS 051 TO DETERMINE THE VOLTAGE DROP. IF THE VOLTAGE DROP IS GREATER THAN 3 PERCENT INSTALL THE NEXT LARGER SIZE SERVICE.
4. REFER TO TABLE 2 FOR 1,500 kVA OR 2500 kVA TRANSFORMER.

PANEL SCHEDULE

PANEL: DP1
VOLTAGE: 208 / 120 PHASE: 3
MOUNTING: SURFACE WIRE: 4
ENCLOSURE: NEMA 1
REMARKS:

BUS AMPS: 400
MAIN OVERCURRENT DEVICE: LUGS
MAIN OVERCURRENT AMPS: 800 MB
MINIMUM EQUIPMENT RATING: 22,000 AMPS (RMS-SYM)

USE
E = Equipment Load M = Motor Load
L = Lighting Load K = Kitchen Equipment
R = Receptacle Load

No.	BREAKER AMPS	BREAKER POLE	KEYED NOTE	CIRCUIT NAME	FEEDER C	FEEDER WIRE	FEEDER GRD	CKT. LOAD USE	CKT. LOAD WATTS	LOAD/PHASE (VA) ΦA	ΦB	ΦC	CKT. LOAD WATTS	CKT. LOAD USE	FEEDER GRD	FEEDER WIRE	FEEDER C	CIRCUIT NAME	KEYED NOTE	BREAKER POLE	BREAKER AMPS	No.
1	#N/A	3		PANEL B				E	15,000	34,600			19,600	E	4	#4/0		PANEL P3/P4		3	100	2
3	---	---		EXISTING				E	15,000		36,500		21,500	E	---	#4/0		---		---	---	4
5	---	---		---				E	15,000			45,500	30,500	E	---	#4/0		---		---	---	6
7	225	3		PANEL P1/P2		#4/0	4	E	14,900	14,900								SPARE		3	100	8
9	---	---		---		#4/0	---	E	16,900		16,900							---		---	---	10
11	---	---		---		#4/0	---	E	14,400			14,400						---		---	---	12
13	50	3		SPARE														SPACE				14
15	---	---		---														SPACE				16
17	---	---		---														SPACE				18
19				SPACE														SPACE				20
21				SPACE														SPACE				22
23				SPACE														SPACE				24
25				SPACE														SPACE				26
27				SPACE														SPACE				28
29				SPACE														SPACE				30
31																						32
33																						34
35																						36
37																						38
39																						40
41																						42

	ΦA	ΦB	ΦC	DEMAND
LIGHTING LOAD (VA)	0	0	0	0
LIGHTING CONTINUOUS LOAD PER NEC 210.20(A) (VA)				0
RECEPTACLE LOAD PER NEC 220.44 (VA)	0	0	0	0
EQUIPMENT LOAD (VA)	44,500	53,400	54,900	162,800
25% LARGEST MOTOR (VA)				0
KITCHEN EQUIPMENT LOAD (VA) 0 UNITS @ 100%	0	0	0	0
TOTAL LOAD (VA)	44,500	53,400	54,900	162,800
TOTAL LOAD (AMPS):	413	445	499	452

GENERAL NOTES:
1. ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND CONDUCTORS SHALL BE THHN.
2. RECEPTACLE LOAD CALCULATED AS PER SECTION 220 OF THE NATIONAL ELECTRICAL CODE.
3. PANEL COVER SHALL BE FIELD MARKED FOR FLASH PROTECTION WITH A PERMANENT LABEL AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 110. LABEL SHALL READ AS FOLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD".

KEYED NOTES:
A. LOCK-ON BREAKER.
B. PROVIDE ARC FAULT (AFCI) PROTECTION.
C. PROVIDE GFCI PROTECTION.

PANEL SCHEDULE

PANEL: P1
VOLTAGE: 208 / 120 PHASE: 3
MOUNTING: SURFACE WIRE: 4
ENCLOSURE: NEMA 1
REMARKS:

BUS AMPS: 225
MAIN OVERCURRENT DEVICE: LUGS
MAIN OVERCURRENT AMPS: N/A
MINIMUM EQUIPMENT RATING: 22,000 AMPS (RMS-SYM)

USE
E = Equipment Load M = Motor Load
L = Lighting Load K = Kitchen Equipment
R = Receptacle Load

No.	BREAKER AMPS	BREAKER POLE	KEYED NOTE	CIRCUIT NAME	FEEDER C	FEEDER WIRE	FEEDER GRD	CKT. LOAD USE	CKT. LOAD WATTS	LOAD/PHASE (VA) ΦA	ΦB	ΦC	CKT. LOAD WATTS	CKT. LOAD USE	FEEDER GRD	FEEDER WIRE	FEEDER C	CIRCUIT NAME	KEYED NOTE	BREAKER POLE	BREAKER AMPS	No.
1	20	1		RECEPTACLES		#12	#12	R	800	1,400			600	R	#12	#12		RECEPTACLES		1	20	2
3	20	1		RECEPTACLES		#12	#12	R	800		1,400		600	R	#12	#12		RECEPTACLES		1	20	4
5	20	1		RECEPTACLES		#12	#12	R	800			1,400	600	R	#12	#12		RECEPTACLES		1	20	6
7	20	1		RECEPTACLES		#12	#12	R	800	1,400			600	R	#12	#12		RECEPTACLES		1	20	8
9	20	1		RECEPTACLES		#12	#12	R	800		2,800		2,000	E	#10	#10		SERVER		1	30	10
11	20	1		RECEPTACLES		#12	#12	R	600			2,600	2,000	E	#10	#10		--		1	30	12
13	20	1		RECEPTACLES		#12	#12	R	800	1,400			600	R	#12	#12		RECEPTACLES		1	20	14
15	20	1		RECEPTACLES		#12	#12	R	800		1,400		600	R	#12	#12		RECEPTACLES		1	20	16
17	20	1		RECEPTACLES		#12	#12	R	800			1,400	600	R	#12	#12		RECEPTACLES		1	20	18
19	20	1		RECEPTACLES		#12	#12	R	800	1,400			600	R	#12	#12		RECEPTACLES		1	20	20
21	20	1		RECEPTACLES		#12	#12	R	800		2,000		1,200	R	#12	#12		RECEPTACLES		1	20	22
23	20	1		RECEPTACLES		#12	#12	R	900			2,100	1,200	R	#12	#12		RECEPTACLES		1	20	24
25	20	1		RECEPTACLES		#12	#12	R	900	900								SPARE		1	20	26
27	20	1		RECEPTACLES		#12	#12	R	600		600							SPARE		1	20	28
29	20	1		RECEPTACLES		#12	#12	R	900			900						SPARE		1	20	30
31	20	1		RECEPTACLES		#12	#12	R	900	900								SPARE		1	20	32
33	20	1		RECEPTACLES		#12	#12	R	600		600							SPARE		1	20	34
35	20	1		SPARE														SPARE		1	20	36
37	20	1		SPARE														SPARE		1	20	38
39	20	1		SPARE														SPARE		1	20	40
41	20	1		SPARE														SPARE		1	20	42

	ΦA	ΦB	ΦC	DEMAND
LIGHTING LOAD (VA)	0	0	0	0
LIGHTING CONTINUOUS LOAD PER NEC 210.20(A) (VA)				0
RECEPTACLE LOAD PER NEC 220.44 (VA)	7,400	6,800	6,400	15,300
EQUIPMENT LOAD (VA)	0	2,000	2,000	4,000
25% LARGEST MOTOR (VA)				0
KITCHEN EQUIPMENT LOAD (VA) 0 UNITS @ 100%	0	0	0	0
TOTAL LOAD (VA)	7,400	8,800	8,400	19,300
TOTAL LOAD (AMPS):	62	73	70	54

GENERAL NOTES:
1. ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND CONDUCTORS SHALL BE THHN.
2. RECEPTACLE LOAD CALCULATED AS PER SECTION 220 OF THE NATIONAL ELECTRICAL CODE.
3. PANEL COVER SHALL BE FIELD MARKED FOR FLASH PROTECTION WITH A PERMANENT LABEL AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 110. LABEL SHALL READ AS FOLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD".

KEYED NOTES:
A. LOCK-ON BREAKER.
B. PROVIDE ARC FAULT (AFCI) PROTECTION.
C. PROVIDE GFCI PROTECTION.

PANEL SCHEDULE

PANEL: P2
VOLTAGE: 208 / 120 PHASE: 3
MOUNTING: SURFACE WIRE: 4
ENCLOSURE: NEMA 1
REMARKS:

BUS AMPS: 225
MAIN OVERCURRENT DEVICE: LUGS
MAIN OVERCURRENT AMPS: N/A
MINIMUM EQUIPMENT RATING: 22,000 AMPS (RMS-SYM)

USE
E = Equipment Load M = Motor Load
L = Lighting Load K = Kitchen Equipment
R = Receptacle Load

No.	BREAKER AMPS	BREAKER POLE	KEYED NOTE	CIRCUIT NAME	FEEDER C	FEEDER WIRE	FEEDER GRD	CKT. LOAD USE	CKT. LOAD WATTS	LOAD/PHASE (VA) ΦA	ΦB	ΦC	CKT. LOAD WATTS	CKT. LOAD USE	FEEDER GRD	FEEDER WIRE	FEEDER C	CIRCUIT NAME	KEYED NOTE	BREAKER POLE	BREAKER AMPS	No.
1	20	1		RECEPTACLES		#12	#12	R	900	1,800			900	R	#12	#12		RECEPTACLES		1	20	2
3	20	1		RECEPTACLES		#12	#12	R	900		1,800		900	R	#12	#12		RECEPTACLES		1	20	4
5	20	1		RECEPTACLES		#12	#12	R	1,200			2,100	900	R	#12	#12		RECEPTACLES		1	20	6
7	20	1		RECEPTACLES		#12	#12	R	900	1,800			900	R	#12	#12		RECEPTACLES		1	20	8
9	20	1		RECEPTACLES		#12	#12	R	900		1,800		900	R	#12	#12		RECEPTACLES		1	20	10
11	20	1		RECEPTACLES		#12	#12	R	600			1,500	900	R	#12	#12		RECEPTACLES		1	20	12
13	20	1		RECEPTACLES		#12	#12	R	900	1,800			900	R	#12	#12		RECEPTACLES		1	20	14
15	20	1		RECEPTACLES		#12	#12	R	900		1,500		600	R	#12	#12		RECEPTACLES		1	20	16
17	20	1		RECEPTACLES		#12	#12	R	900			1,500	600	R	#12	#12		RECEPTACLES		1	20	18
19	20	1		RECEPTACLES		#12	#12	R	900	1,500			600	R	#12	#12		RECEPTACLES		1	20	20
21	20	1		RECEPTACLES		#12	#12	R	900		1,500		600	R	#12	#12		RECEPTACLES		1	20	22
23	20	1		RECEPTACLES		#12	#12	R	600			1,200	600	R	#12	#12		RECEPTACLES		1	20	24
25	20	1		SPARE						600			600	R	#12	#12		RECEPTACLES		1	20	26
27	20	1		SPARE							600		600	R	#12	#12		RECEPTACLES		1	20	28
29	20	1		SPARE								600	600	R	#12	#12		RECEPTACLES		1	20	30
31	20	1		SPARE						600			600	R	#12	#12		RECEPTACLES		1	20	32
33	20	1		SPARE											#N/A	#N/A		SPARE		1	20	34
35	20	1		SPARE											#N/A	#N/A		SPARE		1	20	36
37	20	1		SPARE											#N/A	#N/A		SPARE		1	20	38
39	20	1		SPARE											#N/A	#N/A		SPARE		1	20	40
41	20	1		SPARE											#N/A	#N/A		SPARE		1	20	42

	ΦA	ΦB	ΦC	DEMAND
LIGHTING LOAD (VA)	0	0	0	0
LIGHTING CONTINUOUS LOAD PER NEC 210.20(A) (VA)				0
RECEPTACLE LOAD PER NEC 220.44 (VA)	8,100	7,200	6,900	16,100
EQUIPMENT LOAD (VA)	0	0	0	0
25% LARGEST MOTOR (VA)				0
KITCHEN EQUIPMENT LOAD (VA) 0 UNITS @ 100%	0	0	0	0
TOTAL LOAD (VA)	8,100	7,200	6,900	16,100
TOTAL LOAD (AMPS):	68	60	58	45

GENERAL NOTES:
1. ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND CONDUCTORS SHALL BE THHN.
2. RECEPTACLE LOAD CALCULATED AS PER SECTION 220 OF THE NATIONAL ELECTRICAL CODE.
3. PANEL COVER SHALL BE FIELD MARKED FOR FLASH PROTECTION WITH A PERMANENT LABEL AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 110. LABEL SHALL READ AS FOLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD".

KEYED NOTES:
A. LOCK-ON BREAKER.
B. PROVIDE ARC FAULT (AFCI) PROTECTION.
C. PROVIDE GFCI PROTECTION.

PANEL SCHEDULE

PANEL: P3
VOLTAGE: 208 / 120 PHASE: 3
MOUNTING: SURFACE WIRE: 4
ENCLOSURE: NEMA 1
REMARKS:

BUS AMPS: 100
MAIN OVERCURRENT DEVICE: LUGS (SUB FEED)
MAIN OVERCURRENT AMPS: N/A
MINIMUM EQUIPMENT RATING: 22,000 AMPS (RMS-SYM)

USE
E = Equipment Load M = Motor Load
L = Lighting Load K = Kitchen Equipment
R = Receptacle Load

No.	BREAKER AMPS	BREAKER POLE	KEYED NOTE	CIRCUIT NAME	FEEDER C	FEEDER WIRE	FEEDER GRD	CKT. LOAD USE	CKT. LOAD WATTS	LOAD/PHASE (VA) ΦA	ΦB	ΦC	CKT. LOAD WATTS	CKT. LOAD USE	FEEDER GRD	FEEDER WIRE	FEEDER C	CIRCUIT NAME	KEYED NOTE	BREAKER POLE	BREAKER AMPS	No.
1	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,200			600	R	#12	#12	3/4"	RECEPTACLES		1	20	2
3	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,200		600	R	#12	#12	3/4"	RECEPTACLES		1	20	4
5	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,200	600	R	#12	#12	3/4"	RECEPTACLES		1	20	6
7	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,200			600	R	#12	#12	3/4"	RECEPTACLES		1	20	8
9	30	2		SERVER	3/4"	#10	#10	R	2,000		3,000		1,000	R	#12	#12	3/4"	RECEPTACLES		1	20	10
11	--	--		--	3/4"	#10	--	R	2,000			3,200	1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	12
13	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,800			1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	14
15	20	1		RECEPTACLES	3/4"	#12	#12	R	900		2,100		1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	16
17	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,800	1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	18
19	20	1		RECEPTACLES	3/4"	#12	#12	R	900	2,100			1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	20
21	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,800		1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	22
23	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,800	1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	24
25	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,800			1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	26
27	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,500		900	R	#12	#12	3/4"	RECEPTACLES		1	20	28
29	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,500	900	R	#12	#12	3/4"	RECEPTACLES		1	20	30
31	20	1		RECEPTACLES	3/4"	#12	#12	R	900	1,800			900	R	#12	#12	3/4"	RECEPTACLES		1	20	32
33	20	1		RECEPTACLES	3/4"	#12	#12	R	900		1,800		900	R	#12	#12	3/4"	RECEPTACLES		1	20	34
35	20	1		RECEPTACLES	3/4"	#12	#12	R	900			1,800	900	R	#12	#12	3/4"	RECEPTACLES		1	20	36
37	20	1		RECEPTACLES	3/4"	#12	#12	R	900	1,400			500	R	#12	#12	3/4"	BOILER		1	20	38
39	20	1		RECEPTACLES	3/4"	#12	#12	R	900		900							SPARE		1	20	40
41	20	1		SPARE														SPARE		1	20	42

	ΦA	ΦB	ΦC	DEMAND
LIGHTING LOAD (VA)	0	0	0	0
LIGHTING CONTINUOUS LOAD PER NEC 210.20(A) (VA)				0
RECEPTACLE LOAD PER NEC 220.44 (VA)	11,300	12,300	11,300	22,450
EQUIPMENT LOAD (VA)	0	0	0	0
25% LARGEST MOTOR (VA)				0
KITCHEN EQUIPMENT LOAD (VA) 0 UNITS @ 100%	0	0	0	0
TOTAL LOAD (VA)	11,300	12,300	11,300	22,450
TOTAL LOAD (AMPS):	94	103	94	62

GENERAL NOTES:
1. ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND CONDUCTORS SHALL BE THHN.
2. RECEPTACLE LOAD CALCULATED AS PER SECTION 220 OF THE NATIONAL ELECTRICAL CODE.
3. PANEL COVER SHALL BE FIELD MARKED FOR FLASH PROTECTION WITH A PERMANENT LABEL AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 110. LABEL SHALL READ AS FOLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD".

KEYED NOTES:
A. LOCK-ON BREAKER.
B. PROVIDE ARC FAULT (AFCI) PROTECTION.
C. PROVIDE GFCI PROTECTION.

PANEL SCHEDULE

PANEL: P4
VOLTAGE: 208 / 120 PHASE: 3
MOUNTING: SURFACE WIRE: 4
ENCLOSURE: NEMA 1
REMARKS:

BUS AMPS: 100
MAIN OVERCURRENT DEVICE: LUGS
MAIN OVERCURRENT AMPS: N/A
MINIMUM EQUIPMENT RATING: 22,000 AMPS (RMS-SYM)

USE
E = Equipment Load M = Motor Load
L = Lighting Load K = Kitchen Equipment
R = Receptacle Load

No.	BREAKER AMPS	BREAKER POLE	KEYED NOTE	CIRCUIT NAME	FEEDER C	FEEDER WIRE	FEEDER GRD	CKT. LOAD USE	CKT. LOAD WATTS	LOAD/PHASE (VA) ΦA	ΦB	ΦC	CKT. LOAD WATTS	CKT. LOAD USE	FEEDER GRD	FEEDER WIRE	FEEDER C	CIRCUIT NAME	KEYED NOTE	BREAKER POLE	BREAKER AMPS	No.
1	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,200			600	R	#12	#12	3/4"	RECEPTACLES		1	20	2
3	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,200		600	R	#12	#12	3/4"	RECEPTACLES		1	20	4
5	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,200	600	R	#12	#12	3/4"	RECEPTACLES		1	20	6
7	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,200			600	R	#12	#12	3/4"	RECEPTACLES		1	20	8
9	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,600		1,000	R	#12	#12	3/4"	RECEPTACLES		1	20	10
11	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,800	1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	12
13	20	1		RECEPTACLES	3/4"	#12	#12	R	900	2,100			1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	14
15	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,800		1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	16
17	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,800	1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	18
19	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,800			1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	20
21	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,800		1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	22
23	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,800	1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	24
25	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,800			1,200	R	#12	#12	3/4"	RECEPTACLES		1	20	26
27	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,500		900	R	#12	#12	3/4"	RECEPTACLES		1	20	28
29	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,500	900	R	#12	#12	3/4"	RECEPTACLES		1	20	30
31	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,500			900	R	#12	#12	3/4"	RECEPTACLES		1	20	32
33	20	1		RECEPTACLES	3/4"	#12	#12	R	600		1,500		900	R	#12	#12	3/4"	RECEPTACLES		1	20	34
35	20	1		RECEPTACLES	3/4"	#12	#12	R	600			1,500	900	R	#12	#12	3/4"	RECEPTACLES		1	20	36
37	20	1		RECEPTACLES	3/4"	#12	#12	R	600	1,500			900	R	#12	#12	3/4"	RECEPTACLES		1	20	38
39	20	1		RECEPTACLES	3/4"	#12	#12	R	900		900							SPARE		1	20	40
41	20	1		RECEPTACLES	3/4"	#12	#12	R	600			600						SPARE		1	20	42

	ΦA	ΦB	ΦC	DEMAND
LIGHTING LOAD (VA)	0	0	0	0
LIGHTING CONTINUOUS LOAD PER NEC 210.20(A) (VA)				0
RECEPTACLE LOAD PER NEC 220.44 (VA)	11,100	10,300	10,200	20,800
EQUIPMENT LOAD (VA)	0	0	0	0
25% LARGEST MOTOR (VA)				0
KITCHEN EQUIPMENT LOAD (VA) 0 UNITS @ 100%	0	0	0	0
TOTAL LOAD (VA)	11,100	10,300	10,200	20,800
TOTAL LOAD (AMPS):	93	86	85	58

GENERAL NOTES:
1. ALL INSULATION ON CONDUCTORS TO BE THHN UNLESS NOTED OTHERWISE. INSULATION ON ALL UNDERGROUND CONDUCTORS SHALL BE THHN.
2. RECEPTACLE LOAD CALCULATED AS PER SECTION 220 OF THE NATIONAL ELECTRICAL CODE.
3. PANEL COVER SHALL BE FIELD MARKED FOR FLASH PROTECTION WITH A PERMANENT LABEL AS REQUIRED BY THE NATIONAL ELECTRICAL CODE SECTION 110. LABEL SHALL READ AS FOLLOWS: "DANGER: POTENTIAL ARC FLASH HAZARD".

KEYED NOTES:
A. LOCK-ON BREAKER.
B. PROVIDE ARC FAULT (AFCI) PROTECTION.
C. PROVIDE GFCI PROTECTION.

DEQ BUILDING REMODEL AND TENANT FINISH - SOUTH BUILDING

168 NORTH 1950 WEST
SALT LAKE CITY, UTAH

ONE-LINE DIAGRAM,PANEL SCHEDULES, RISER

FRANK N MURDOCK JR ■ Architect & Associates
975 East 100 South Suite 100, Salt Lake City, Utah 84102 TEL: (801) 532-4441 FAX (801) 532-4220

REGISTERED PROFESSIONAL ENGINEER No. 154867 DEAN P. LEVORSEN STATE OF UTAH 6/8/10

REVISION # DATE:

DFCM PROJECT NO.: 10071.01

CONST. DOC.
FILE NAME: DEQTI-A101
PLOT SCALE: N.T.S.
DRAWN BY: BJW
CHECKED BY: RKR
DATE: JUNE 8, 2010

E 401