DNR ADMINISTRATION BUILDING HVAC SYSTEM RENOVATION

DERPARTMENT OF NATURAL RESOURCES
1594 WEST NORTH TEMPLE
SALT LAKE CITY, UTAH 84114

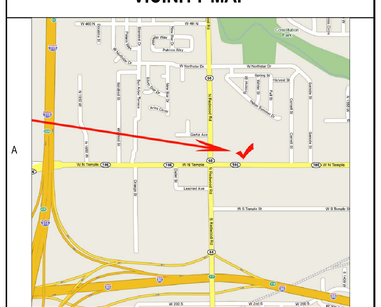
State of Utah–Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
4110 State Office Building/Salt Lake City, Utah 84114/538–3018

DRAWING INDEX

ARCHITECTURAL DRAWINGS	
GI100	COVER SHEET, GENERAL INFO, & SHEET INDEX
AD101	FIRST LEVEL DEMOLITION PLAN
AD102	SECOND LEVEL DEMOLITION PLAN
AD103	THIRD LEVEL DEMOLITION PLAN
AD111	FIRST LEVEL REFLECTED CEILING DEMOLITION PLAN
AD112	SECOND LEVEL REFLECTED CEILING DEMOLITION PLAN
AD113	THIRD LEVEL REFLECTED CEILING DEMOLITION PLAN
AE101	FIRST LEVEL FLOOR PLAN
AE102	SECOND LEVEL FLOOR PLAN
AE103	THIRD LEVEL FLOOR PLAN
AE111	FIRST LEVEL REFLECTED CEILING PLAN
AE112	SECOND LEVEL REFLECTED CEILING PLAN
AE113	THIRD LEVEL REFLECTED CEILING PLAN
AE501	CEILING & MISCELLANEOUS DETAILS
MECHANICAL DRAWINGS	
MG001	MECHANICAL GENERAL NOTES AND LEGEND
MD101	FIRST FLOOR MECHANICAL DEMOLITION PLAN
MD102	SECOND FLOOR MECHANICAL DEMOLITION PLAN
MD103	THIRD FLOOR MECHANICAL DEMOLITION PLAN
ME101	FIRST FLOOR MECHANICAL PLAN
ME102	SECOND FLOOR MECHANICAL PLAN
ME103	THIRD FLOOR MECHANICAL PLAN
ME104	FIRST FLOOR PIPING PLAN
ME105	SECOND FLOOR PIPING PLAN
ME106	THIRD FLOOR PIPING PLAN
ME501	MECHANICAL DETAILS
ME601	MECHANICAL SCHEDULES
ME602	MECHANICAL SCHEDULES
ELECTRICAL DRAWINGS	
ED101	1ST FLOOR ELECTRICAL DEMOLITION PLAN
ED102	2ND FLOOR ELECTRICAL DEMOLITION PLAN
ED103	3RD FLOOR ELECTRICAL DEMOLITION PLAN
EL101	1ST FLOOR LIGHTING PLAN
EL102	2ND FLOOR LIGHTING PLAN
EL103	3RD FLOOR LIGHTING PLAN
EP101	1ST FLOOR EQUIPMENT PLAN
EP102	2ND FLOOR EQUIPMENT PLAN
EP103	3RD FLOOR EQUIPMENT PLAN
E-601	FIXTURE SCHEDULE SYMBOL LIST FIXTURE DETAIL

VICINITY MAP



CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2006	National Electrical Code	2005
International Mechanical Code	2006	Uniform Code for Building Conservation	2006
International Plumbing Code	2006	ADA Accessibility Guidelines	2006
International Fire Code	2006		
International Energy Conservation Code	2006		

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): N/A

B. Seismic Design Category: EXISTING Design Wind Speed: EXISTING 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: 0 South: 0 East: 0 West: 0

E. Mixed Occupancies: NO Nonseparated Uses: NO

F. Sprinklers:

Required: ____ Provided: YES Type of Sprinkler System: WET

G. Number of Stories: N/A Building Height: N/A

H. Actual Area per Floor (square feet): N/A

I. Tabular Area: N/A

J. Area Modifications:

a) $A_a = A_t + \left[\frac{A_t\, I_f}{100}\right] + \left[\frac{A_t\, I_s}{100}\right]$ $I_f = 100\left[\frac{F}{P} - 0.25\right]\frac{W}{30}$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$

c) Total Allowable Area for:

1) One Story: N/A
2) Two Story: $A_a(2)$ N/A
3) Three Story: $A_a(3)$ N/A

d) Unlimited Area Building: Yes N/A No ____ Code Section: ____

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

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

L. Design Occupant Load: N/A

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

M. Minimum Number of Required Plumbing Facilities:

a) Water Closets - Required (m) N/A (f) N/A Provided (m) N/A (f) N/A
b) Lavatories - Required (m) N/A (f) N/A Provided (m) N/A (f) N/A
c) Bath Tubs or Showers: N/A
d) Drinking Fountains: N/A Service Sinks: N/A

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - 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.

GENERAL ABBREVIATIONS

ACT.	ACCOUSTIC CEILING TILE
ALT.	ALTERNATE
ALUM.	ALUMINUM
A.B.	ANCHOR BOLT
&	AND
ARCH.	ARCHITECTURAL
@	AT OR AT THE
BM.	BEAM
BLK.	BLOCK
BLKG.	BLOCKING
BD.	BOARD
BOT.	BOTTOM
BLDG.	BUILDING
CPT.	CARPET
CLKG.	CAULKING
C.I.	CAST IRON
CLG.	CEILING
CEM.	CEMENT
CTR.	CENTER
CL	CENTER LINE
CER.	CERAMIC
C.T.	CERAMIC TILE
CLR.	CLEAR (ANCE)
CLO.	CLOSET
COL.	COLUMN
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
CMP	CORRUGATED METAL PIPE
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUE/CONTINUOUS
CONTR.	CONTRACTOR
C.J.	CONTROL JOINT
CORR.	CORRIDOR
CNTR.	COUNTER
CTSK.	COUNTERSUNK
DET.	DETAIL
DEPT.	DEPARTMENT
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
D.S.	DOWNSPOUT
DWG.	DRAWING
D.F.	DRINKING FOUNTAIN
E.	EAST
EA.	EACH
ELEC.	ELECTRIC (AL)
ELEV./EL.	

EXIST.	EXISTING
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
FIN.	FINISH
F.A.	FIRE ALARM
F.E.	FIRE EXTINGUISER
F.E.C.	F.E. CABINET
FLR./FL.	FLOOR
F.D.	FLOOR DRAIN
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
FTG.	FOOTING
FDN.	FOUNDATION
F.F.	FINISH FLOOR
GALV	GALVANIZED
G.I.	GALVANZED IRON
GA.	GAUGE
GL.	GLASS
GR.	GRADE
GND.	GROUND
GYP. BD.	GYPSUM BOARD
GWB	GYPSUM WATERPROOF BOARD
H.D.P.E.	HIGH DENSITY POLYETHYLENE
HG#	HARDWARE GROUP #
HDWD.	HARDWOOD
HT.	HEIGHT
H.P.	HIGH POINT
HORIZ.	HORIZONTAL
H.B.	HOSE BIBB
H.M.	HOLLOW METAL
HR.	HOURS (FIRE RATING)
IN.	INCH
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
INT.	INTERIOR
I.E.	INVERT ELEVATION
INV.	
JAN.	JANITOR
JT.	JOINT
J-BOX	JUNCTION BOX
KIT.	KITCHEN
LAM.	LAMINATE
LAV.	LAVATORY
LT.	LIGHT
L.P.	LOW POINT

MATL.	MATERIAL
MAS.	MASONRY
MAINT.	MAINTENANCE
MFR.	MANUFACTURER
M.H.	MANHOLE
M.O.	MASONRY OPENING
MAX.	MAXIMUM
MECH.	MECHANICAL
MEMB.	MEMBRANE
MEN	MEN'S TOILET
MTL./MET.	METAL
MIN.	MINIMUM
MIR.	MIRROR
MISC.	MISCELLANEOUS
MTD.	MOUNTED
MUL.	MULLION
NOM.	NOMINAL
N.	NORTH
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO.	NUMBER
OR #	ORDINATE NUMBER
OFF.	OFFICE
O.C.	ON CENTER
OPNG.	OPENING
OPP.	OPPOSITE
OPP. H.	OPPOSITE HAND
O.D.	OUTSIDE DIAMETER
O.R.D.	OVERFLOW ROOF DRAIN
PTD.-E	PAINTED EPOXY
PTD.	PAINTED
PR.	PAIR
PART.	PARTITION
PED.	PEDESTRIAN
PLAS.	PLASTER
P. LAM.	PLASTIC LAMINATE
PL	PLATE
PLYWD.	PLYWOOD
PT.	POINT
Q.T.	QUARRY TILE
RAD.	RADIUS
R.B.	RUBBER BASE
R.W.L.	RAIN WATER LEADER
R.F.F.	REFERENCE FINISH FLOOR
REFL.	REFLECTED
REINF.	REINFORCING
REQ.	REQUIRED

RET.	RETAINING
REV.	REVISED
R.	RISER
R.D.	ROOF DRAIN
RM.	ROOM
R.O.	ROUGH OPENING
SCHED.	SCHEDULE
SEAL.	SEALANT
SECT.	SECTION
S.SK.	SERVICE SINK
SHT.	SHEET
SIM.	SIMILAR
SL./SLP.	SLOPE
S.C.	SOLID CORE
SPEC.	SPECIFICATIONS
SQ.	SQUARE
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUCT	STRUCTURAL/STRUCTURE
SYM.	SYMMETRICAL
T.B.R.	TO BE REMOVED
TEL.	TELEPHONE
TEMP.	TEMPORARY / TEMPERED
THK.	THICK (NESS)
T & G	TONGUE AND GROOVE
T/CONC	TOP OF CONCRETE
T/CURB	TOP OF CURB
T.O. FTG.	TOP OF FOOTING
T.O.P.	TOP OF PLATE
T/WALL	TOP OF WALL
T.	TREAD
TYP.	TYPICAL
UNF.	UNFINISHED
U.N.O.	UNLESS NOTED OTHERWISE
VAR.	VARY OR VARIES
VERT.	VERTICAL
V.T.R.	VENT THROUGH ROOF
VCT	VINYL COMPOSITION TILE
W/	WITH
W.A.S.	WELDED ANCHOR STUD
WD.	WOOD
WP.	WATERPROOF
WSCT.	WAINSCOT
W/O	WITHOUT
W.P.	WORKING POINT
W.R.	WATER RESISTANT
W.I.	WROUGHT IRON

MATERIALS LEGEND

EARTH, GRAVEL, SAND, CONCRETE, CONCRETE W/ ARCH. FINISH, CAST STONE, CMU, MARBLE, BRICK, GRANITE, LIMESTONE, STONE, WOOD (BLOCKING), PLYWOOD, WOOD FRAMING, WOOD FINISH, STEEL, ALUMINUM, RIGID INSULATION, BATT INSULATION, PLASTER, ACOUSTICAL TILE, COMPRESSIBLE FILLER, BACKER ROD AND FILLER, METAL LATH, GYPSUM BOARD, FENCE, TO REMOVE

GRAPHIC SYMBOLS

DTL# SHT# — BLDG. ELEV. SYMB.
DTL# SHT# — BLDG. SECT. SYMB.
DTL# SHT# — WALL SECT. SYMB.
— KEYEDNOTE SYMB.
F.O. ELEV — DATUM PT. SYMB.
ELEV — SPOT ELEV. SYMB.
RM NAME / RM# / F/S N/W — RM. NAME/NUMB RM. FINISH SYMB.
ELEV — CEIL. FINISH/ELEV. SYMB.
DTL# SHT# — DETAIL REF. SYMB.
DTL# SHT# — INTR. ELEV. SYMB.
DR# / WN# — DOOR/HDWR. SYMB.
— WINDOW SYMB.

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CHECKED BY:	BWS
DESIGNED BY:	RLS
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ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

COVER SHEET, SHEET INDEX, & GENERAL INFO

GI100

SHEET 1 OF 37

A3 FIRST LEVEL DEMOLITION PLAN
1/8"=1'-0"

GENERAL NOTES

1. ALL DIMENSIONS & EXISTING CONDITIONS IN AREAS OF WORK ARE TO BE FIELD VERIFIED PRIOR TO COMMENCING WORK. - ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

2. PROTECT ALL AREAS & SURFACES ADJACENT TO DEMOLITION & CONSTRUCTION. PATCH & REPAIR ANY DAMAGE OR HOLES IN WALLS, CEILINGS & FLOORS RESULTING FROM THE DEMOLTION OF EXISTING ITEMS OR THE CONSTRUCTION OF NEW ITEMS.

3. NOTED AREAS INDICATED THE GENERAL EXTENT OF DEMOLITON. THE CONTRACTOR'S CHOICE OF MEANS & METHODS OF CONSTRUCTION MAY REQUIRE MORE OR LESS DEMOLITION. THE MEANS & METHODS OF DEMOLITION & CONSTRUCTION MUST BE ACCOUNTED FOR IN THE CONTRACTORS BID. ANY DEMOLITION & REPAIR TO ADJACENT SURFACES BEYOND THE AREAS INDICATED IN THE CONTRACT DOCUMENTS WILL NOT BE COMPENSATED FOR AFTER THE BID OPENING.

4. PRIOR TO THE START OF DEMOLITION, THE CONTRACTOR IS TO MEET WITH THE OWNER & ARCHITECT TO IDENTIFY ALL ITEMS TO BE DEMOLISHED & REMOVED FROM SITE, ITEMS TO BE REMOVED & RETURNED TO THE OWNER, OR ITEMS TO BE REMOVED & REINSTALLED.

5. 72-HOUR NOTICE IS REQUIRED FOR ANY UTILITY SHUT DOWN.

6. ANY REPAINTING OF SURFACES REQUIRED DUE TO DAMAGE TO FINISHES DURING DEMOLITION AND CONSTRUCTION MUST BE COMPLETE FROM CORNER TO CORNER.

7. PRIOR TO BIDDING, THE CONTRACTOR IS TO SURVEY THE EXISTING WALL CONDITIONS. ALL EXISTING NAILS, SCREWS, ABANDONED FASTENERS & HARDWARE IN THE WALLS INDICATED TO REMAIN ARE TO BE REMOVED & THE HOLES PATCHED.

PLAN DEMOLITION LEGEND

- EXISTING WOOD DOOR & H.M. FRAME TO BE DEMOLISHED, TYPICAL
- REMOVE FLOOR FINISH AND BASE (WHERE OCCURS) COMPLETE.
- REMOVE VCT AND BASE (WHERE OCCURS) COMPLETE.
- REMOVE CARPET AND BASE (WHERE OCCURS) COMPLETE.
- REMOVE WALLPAPER (WHERE OCCURS) COMPLETE. PREP WALL TO RECEIVE PAINT

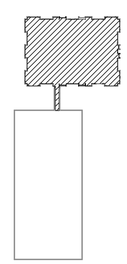
DEMOLITION KEYED NOTES

1. REMOVE EXISTING GYPSUM BOARD WALLS COMPLETE, INCLUDING DOOR SYSTEMS WHERE OCCURS.
2. REMOVE EXISTING CEILING SYSTEM COMPLETE.
3. REMOVE EXISTING DOOR SYSTEM COMPLETE.
4. REMOVE EXISTING CARPET & BASE COMPLETE.
5. REMOVE EXISTING VCT COMPLETE.
6. REMOVE EXISTING WALLPAPER COMPLETE.

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
- EXISTING BRICK WALL
- EXISTING VINYL COVERED DEMOUNTABLE WALL
- EXISTING STUD WALL TO BE DEMOLISHED, TYPICAL
- EXISTING DEMOUNTABLE WALL SYSTEM TO BE DEMOLISHED, TYPICAL
- NEW 3 5/8" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES TO 6" ABOVE FINISH CEILING, BRACED TO STRUCTURE ABOVE @ 4'-0" O.C. TYPICAL

KEY PLAN



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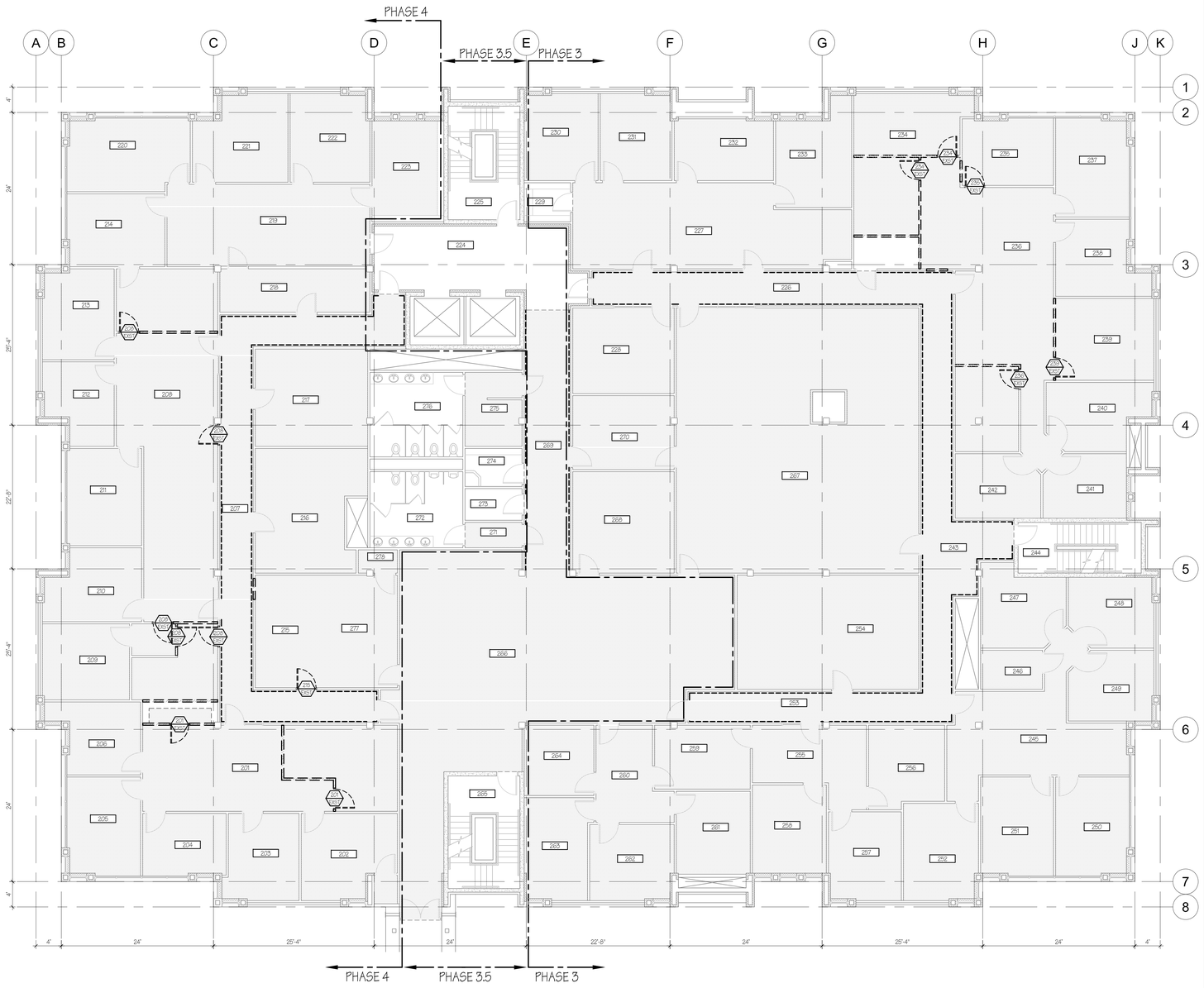
SHEET TITLE

FIRST LEVEL DEMOLITION PLAN

AD101

SHEET 2 OF 37



A3 SECOND LEVEL DEMOLITION PLAN
1/8"=1'-0"

GENERAL NOTES

1. ALL DIMENSIONS & EXISTING CONDITIONS IN AREAS OF WORK ARE TO BE FIELD VERIFIED PRIOR TO COMMENCING WORK. - ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

2. PROTECT ALL AREAS & SURFACES ADJACENT TO DEMOLITION & CONSTRUCTION. PATCH & REPAIR ANY DAMAGE OR HOLES IN WALLS, CEILINGS & FLOORS RESULTING FROM THE DEMOLITION OF EXISTING ITEMS OR THE CONSTRUCTION OF NEW ITEMS.

3. NOTED AREAS INDICATED THE GENERAL EXTENT OF DEMOLITON. THE CONTRACTOR'S CHOICE OF MEANS & METHODS OF CONSTRUCTION MAY REQUIRE MORE OR LESS DEMOLITION. THE MEANS & METHODS OF DEMOLITION & CONSTRUCTION MUST BE ACCOUNTED FOR IN THE CONTRACTORS BID. ANY DEMOLITION & REPAIR TO ADJACENT SURFACES BEYOND THE AREAS INDICATED IN THE CONTRACT DOCUMENTS WILL NOT BE COMPENSATED FOR AFTER THE BID OPENING.

4. PRIOR TO THE START OF DEMOLITION, THE CONTRACTOR IS TO MEET WITH THE OWNER & ARCHITECT TO IDENTIFY ALL ITEMS TO BE DEMOLISHED & REMOVED FROM SITE, ITEMS TO BE REMOVED & RETURNED TO THE OWNER, OR ITEMS TO BE REMOVED & REINSTALLED.

5. 72-HOUR NOTICE IS REQUIRED FOR ANY UTILITY SHUT DOWN.

6. ANY REPAINTING OF SURFACES REQUIRED DUE TO DAMAGE TO FINISHES DURING DEMOLITION AND CONSTRUCTION MUST BE COMPLETE FROM CORNER TO CORNER.

7. PRIOR TO BIDDING, THE CONTRACTOR IS TO SURVEY THE EXISTING WALL CONDITIONS. ALL EXISTING NAILS, SCREWS, ABANDONED FASTENERS & HARDWARE IN THE WALLS INDICATED TO REMAIN ARE TO BE REMOVED & THE HOLES PATCHED.

PLAN DEMOLITION LEGEND

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- REMOVE FLOOR FINISH AND BASE (WHERE OCCURS) COMPLETE.
- REMOVE VCT AND BASE (WHERE OCCURS) COMPLETE.
- REMOVE CARPET AND BASE (WHERE OCCURS) COMPLETE.
- REMOVE WALLPAPER (WHERE OCCURS) COMPLETE. PREP WALL TO RECEIVE PAINT

DEMOLITION KEYED NOTES

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PARTITION LEGEND

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- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
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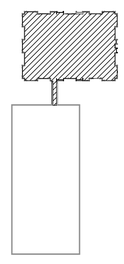

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SHEET TITLE

SECOND LEVEL DEMOLITION PLAN

AD102

SHEET 3 OF 37

A3 THIRD LEVEL DEMOLITION PLAN
1/8"=1'-0"

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PLAN DEMOLITION LEGEND

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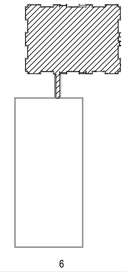
DEMOLITION KEYED NOTES

1. REMOVE EXISTING GYPSUM BOARD WALLS COMPLETE, INCLUDING DOOR SYSTEMS WHERE OCCURS.
2. REMOVE EXISTING CEILING SYSTEM COMPLETE.
3. REMOVE EXISTING DOOR SYSTEM COMPLETE.
4. REMOVE EXISTING CARPET & BASE COMPLETE.
5. REMOVE EXISTING VCT COMPLETE.
6. REMOVE EXISTING WALLPAPER COMPLETE.

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
- EXISTING BRICK WALL
- EXISTING VINYL COVERED DEMOUNTABLE WALL
- EXISTING STUD WALL TO BE DEMOLISHED, TYPICAL
- EXISTING DEMOUNTABLE WALL SYSTEM TO BE DEMOLISHED, TYPICAL
- NEW 3 5/8" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES TO 6" ABOVE FINISH CEILING, BRACED TO STRUCTURE ABOVE @ 4'-0" O.C. TYPICAL

KEY PLAN



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DNR ADMINISTRATION BUILDING
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Department of Natural Resources
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Salt Lake City, Utah 84114

MARK	DATE	DESCRIPTION

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DRAWN BY:	MN
CHECKED BY:	BWS
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

THIRD LEVEL DEMOLITION PLAN

AD103

SHEET 4 OF 37

GENERAL NOTES

1. ALL DIMENSIONS & EXISTING CONDITIONS IN AREAS OF WORK ARE TO BE FIELD VERIFIED PRIOR TO COMMENCING WORK - ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

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5. 72-HOUR NOTICE IS REQUIRED FOR ANY UTILITY SHUT DOWN.

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CEILING DEMOLITION LEGEND

- EXISTING SUSPENDED 2X4 LAY-IN CEILING PANELS & GRID TO BE DEMOLISHED, TYPICAL
- EXISTING SUSPENDED 2X2 LAY-IN CEILING PANELS & GRID TO BE DEMOLISHED, TYPICAL
- EXISTING GYP BOARD CEILING TO BE DEMOLISHED, TYPICAL
- EXISTING 2X4 LIGHT FIXTURE TO BE REMOVED SEE ELECTRICAL DRAWINGS, TYPICAL
- EXISTING 2X2 LIGHT FIXTURE TO BE REMOVED SEE ELECTRICAL DRAWINGS, TYPICAL
- EXISTING PENDANT LIGHT FIXTURE TO BE SALVAGED FOR REINSTALLATION SEE ELECTRICAL DRAWINGS. TYPICAL
- EXISTING 8 X 1 LIGHT FIXTURE TO BE REMOVED, SEE ELECTRICAL DRAWINGS, TYPICAL
- EXISTING 96" X 8" LIGHT FIXTURE TO BE REMOVED, SEE ELECTRICAL DRAWINGS, TYPICAL
- EXISTING 4 X 1 LIGHT FIXTURE TO BE REMOVED, SEE ELECTRICAL DRAWINGS, TYPICAL
- EXISTING 48" X 10" LIGHT FIXTURE TO BE REMOVED, SEE ELECTRICAL DRAWINGS, TYPICAL
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- EXISTING 48" X 6" LIGHT FIXTURE TO BE REMOVED, SEE ELECTRICAL DRAWINGS, TYPICAL
- EXISTING 1'X1' LIGHT FIXTURE TO BE SALVAGED FOR REINSTALLATION SEE ELECTRICAL DRAWINGS. TYPICAL
- EXISTING MECHANICAL GRILLE TO BE REMOVED, SEE MECHANICAL DRAWINGS FOR FURTHER INSTRUCTIONS, TYPICAL
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A3 FIRST LEVEL CEILING DEMOLITION PLAN
1/8"=1'-0"

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
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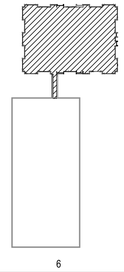

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SHEET TITLE

FIRST LEVEL REFLECTED CEILING DEMOLITION PLAN

AD111

SHEET 5 OF 37

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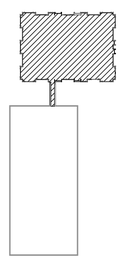

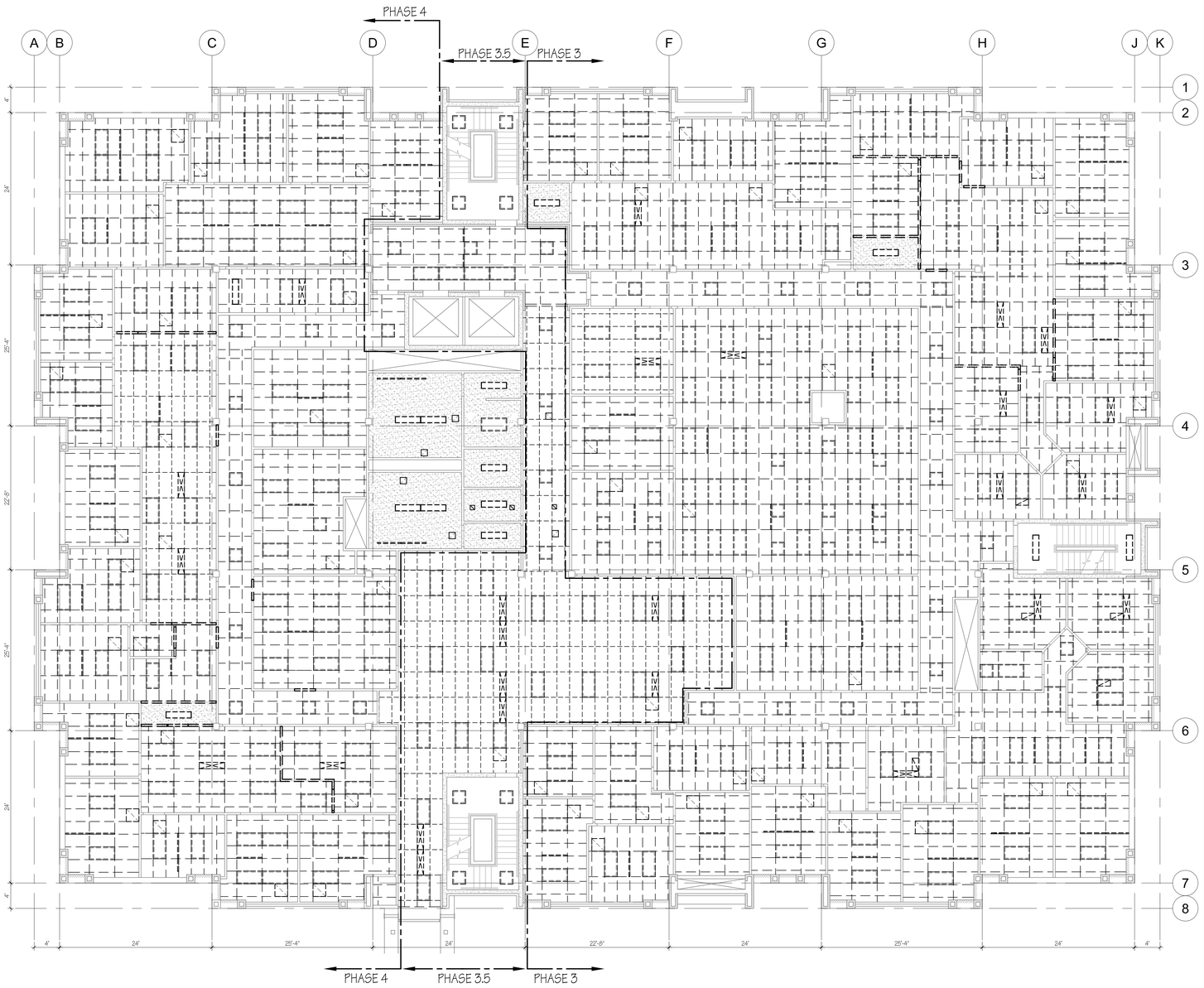

A3 SECOND LEVEL CEILING DEMO PLAN
1/8"=1'-0"

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SHEET TITLE

SECOND LEVEL REFLECTED CEILING DEMOLITION PLAN

AD112

SHEET 6 OF 37

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PARTITION LEGEND

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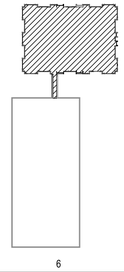
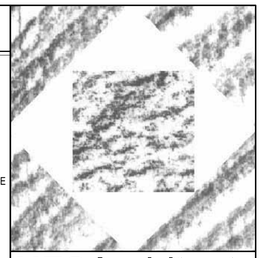
KEY PLAN



A3 THIRD LEVEL CEILING DEMOLITION PLAN
1/8"=1'-0"



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ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

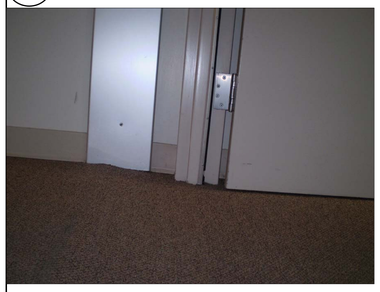
SHEET TITLE

THIRD LEVEL REFLECTED CEILING DEMOLITION PLAN

AD113

SHEET 7 OF 37

E1 PHOTO OF EXISTING CONDITIONS
N.T.S.



D1 PHOTO OF EXISTING CONDITIONS
N.T.S.

C1 PHOTO OF EXISTING CONDITIONS
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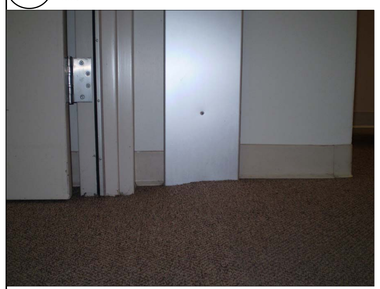

B1 PHOTO OF EXISTING CONDITIONS
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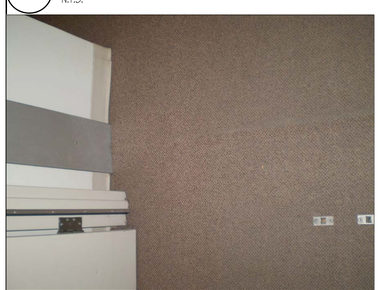

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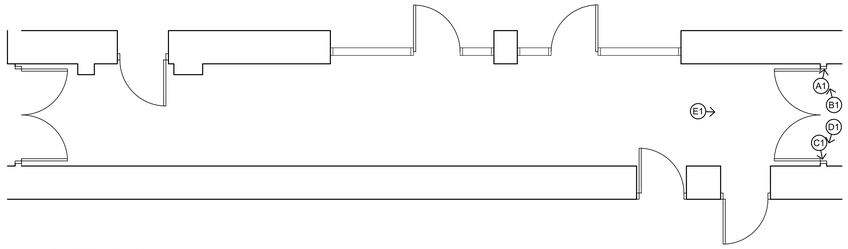
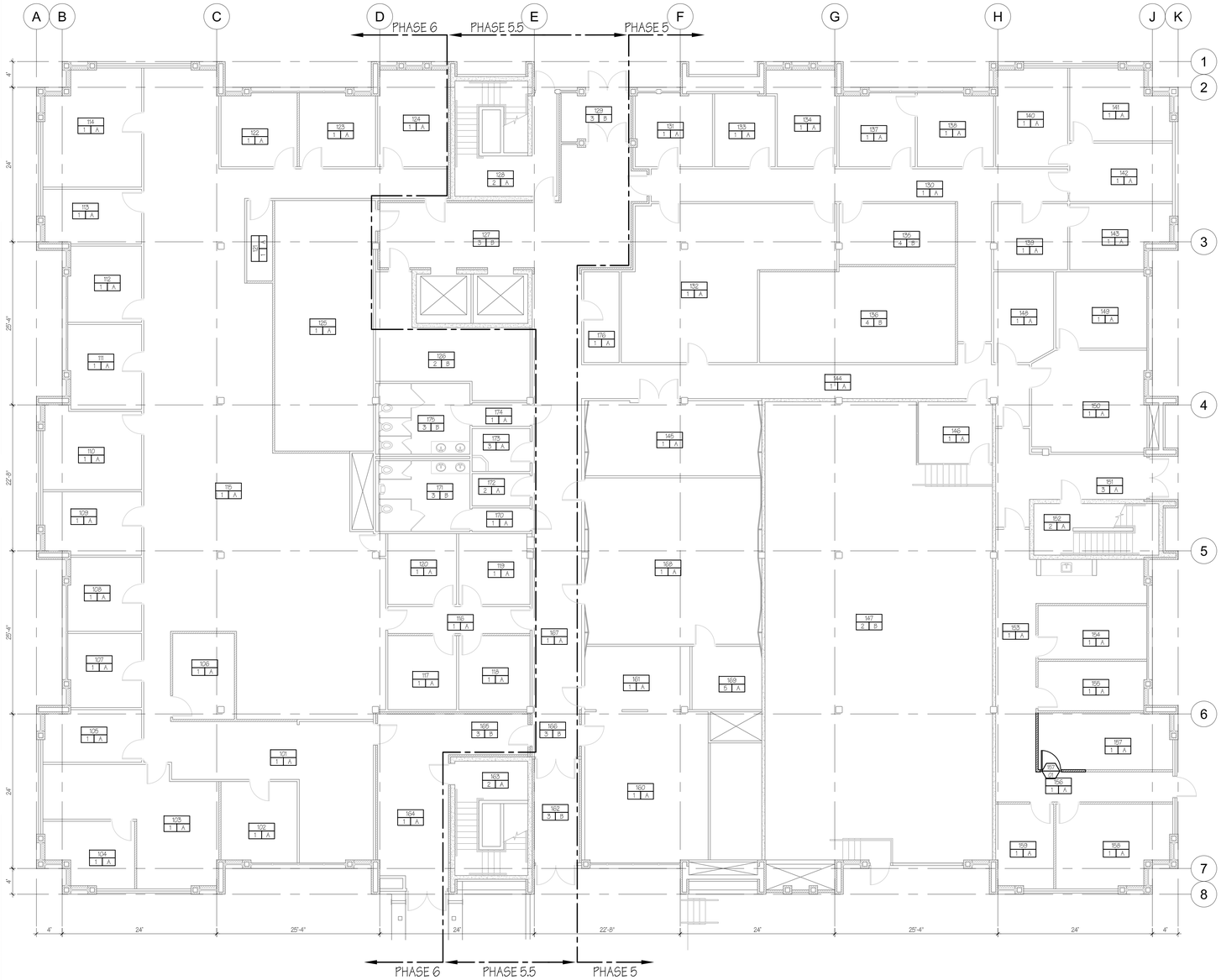


E3 BREEZEWAY DETAIL
1/4"=1'-0"



A3 FIRST LEVEL FLOOR PLAN
1/8"=1'-0"

FINISH LEGEND

ROOM NAME
FLOOR / BASE — RM NUM — WALL / WAINSCOT

1. NEW CARPET & 4" RUBBER BASE
2. EXISTING CONCRETE FLOOR
3. EXISTING CERAMIC TILE TO BE CLEANED
4. EXISTING RAISED FLOOR
5. NEW VCT AND 4" BASE
6. EXISTING TERRAZZO TO BE CLEANED

A. PATCH ALL WALLS, HOLLOW METAL DOOR, AND WINDOW FRAMES. SEE PARTITION LEGEND FOR WALL TYPES.
B. EXISTING FINISH.

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
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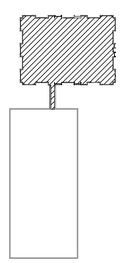

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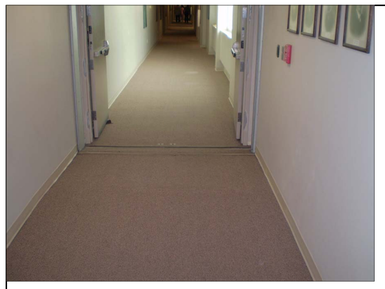
FIRST LEVEL FLOOR PLAN

AE101

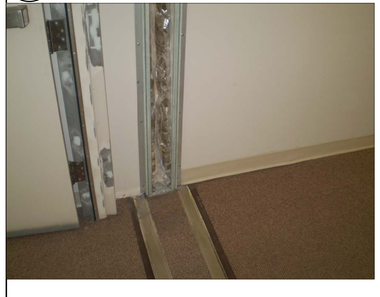
SHEET 8 OF 37



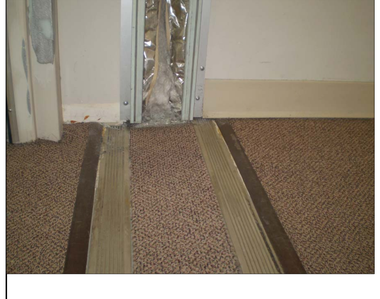
E1 PHOTO OF EXISTING CONDITIONS
N.T.S.

D1 PHOTO OF EXISTING CONDITIONS
N.T.S.

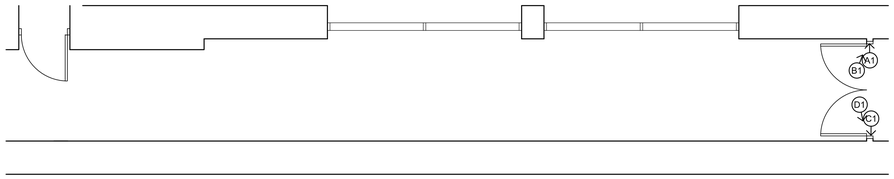
C1 PHOTO OF EXISTING CONDITIONS
N.T.S.



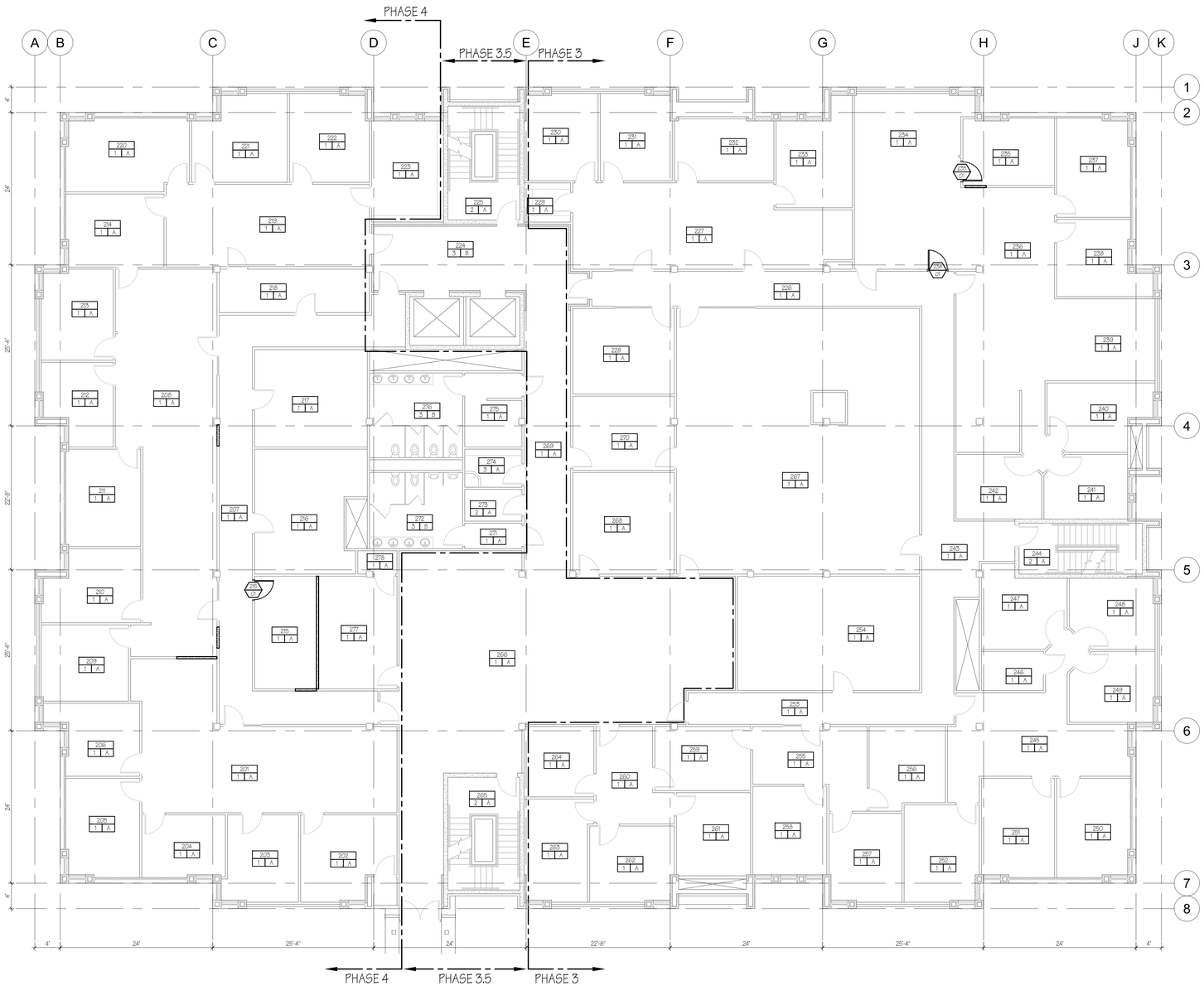
B1 PHOTO OF EXISTING CONDITIONS
N.T.S.



A1 PHOTO OF EXISTING CONDITIONS
N.T.S.



E3 BREEZEWAY DETAIL
1/4"=1'-0"



A3 SECOND LEVEL FLOOR PLAN
1/8"=1'-0"

FINISH LEGEND

ROOM NAME
FLOOR / BASE — RM NUM — WALL / WAINSCOT

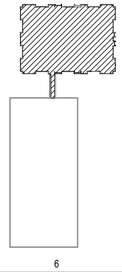
1. NEW CARPET & 4" RUBBER BASE
2. EXISTING CONCRETE FLOOR
3. EXISTING CERAMIC TILE TO BE CLEANED
4. EXISTING RAISED FLOOR
5. NEW VCT AND 4" BASE
6. EXISTING TERRAZZO TO BE CLEANED

A. PATCH ALL WALLS, HOLLOW METAL DOOR, AND WINDOW FRAMES. SEE PARTITION LEGEND FOR WALL TYPES.
B. EXISTING FINISH.

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
- EXISTING BRICK WALL
- EXISTING VINYL COVERED DEMOUNTABLE WALL
- EXISTING STUD WALL TO BE DEMOLISHED, TYPICAL
- EXISTING DEMOUNTABLE WALL SYSTEM TO BE DEMOLISHED, TYPICAL
- NEW 3 5/8" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES TO 6" ABOVE FINISH CEILING, BRACED TO STRUCTURE ABOVE @ 4'-0" O.C. TYPICAL

KEY PLAN



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DNR ADMINISTRATION BUILDING HVAC SYSTEM RENOVATION

Department of Natural Resources
1594 West North Temple
Salt Lake City, Utah 84114

MARK	DATE	DESCRIPTION

DATE:	03 SEPTEMBER 2008
DFCM PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	
DRAWN BY:	MN
CHECKED BY:	BWS
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

SECOND LEVEL FLOOR PLAN

AE102

SHEET 9 OF 37

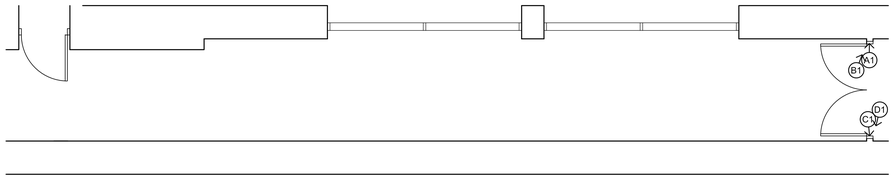
E1 PHOTO OF EXISTING CONDITIONS
N.T.S.

D1 PHOTO OF EXISTING CONDITIONS
N.T.S.

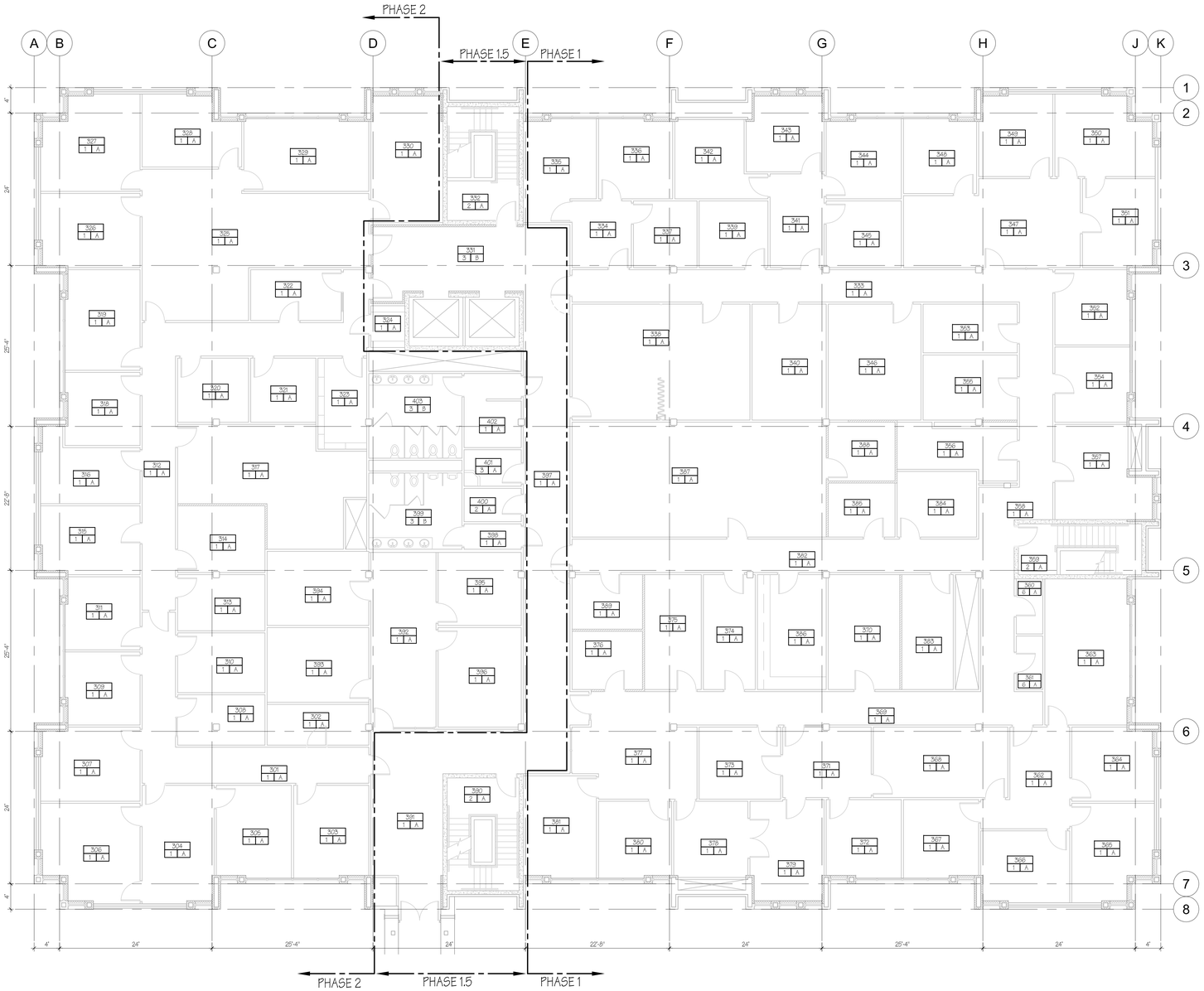
C1 PHOTO OF EXISTING CONDITIONS
N.T.S.

B1 PHOTO OF EXISTING CONDITIONS
N.T.S.

A1 PHOTO OF EXISTING CONDITIONS
N.T.S.



E3 BREEZEWAY DETAIL
1/4"=1'-0"



A3 THIRD LEVEL FLOOR PLAN
1/8"=1'-0"

FINISH LEGEND

ROOM NAME
FLOOR / BASE — TRM NUM — WALL / WAINSCOT

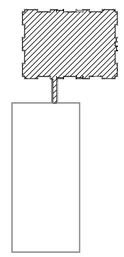
1. NEW CARPET & 4" RUBBER BASE
2. EXISTING CONCRETE FLOOR
3. EXISTING CERAMIC TILE TO BE CLEANED
4. EXISTING RAISED FLOOR
5. NEW VCT AND 4" BASE
6. EXISTING TERRAZZO TO BE CLEANED

A. PATCH ALL WALLS, HOLLOW METAL DOOR, AND WINDOW FRAMES. SEE PARTITION LEGEND FOR WALL TYPES.
B. EXISTING FINISH.

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
- EXISTING BRICK WALL
- EXISTING VINYL COVERED DEMOUNTABLE WALL
- EXISTING STUD WALL TO BE DEMOLISHED, TYPICAL
- EXISTING DEMOUNTABLE WALL SYSTEM TO BE DEMOLISHED, TYPICAL
- NEW 3 5/8" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES TO 6" ABOVE FINISH CEILING, BRACED TO STRUCTURE ABOVE @ 4'-0" O.C. TYPICAL

KEY PLAN



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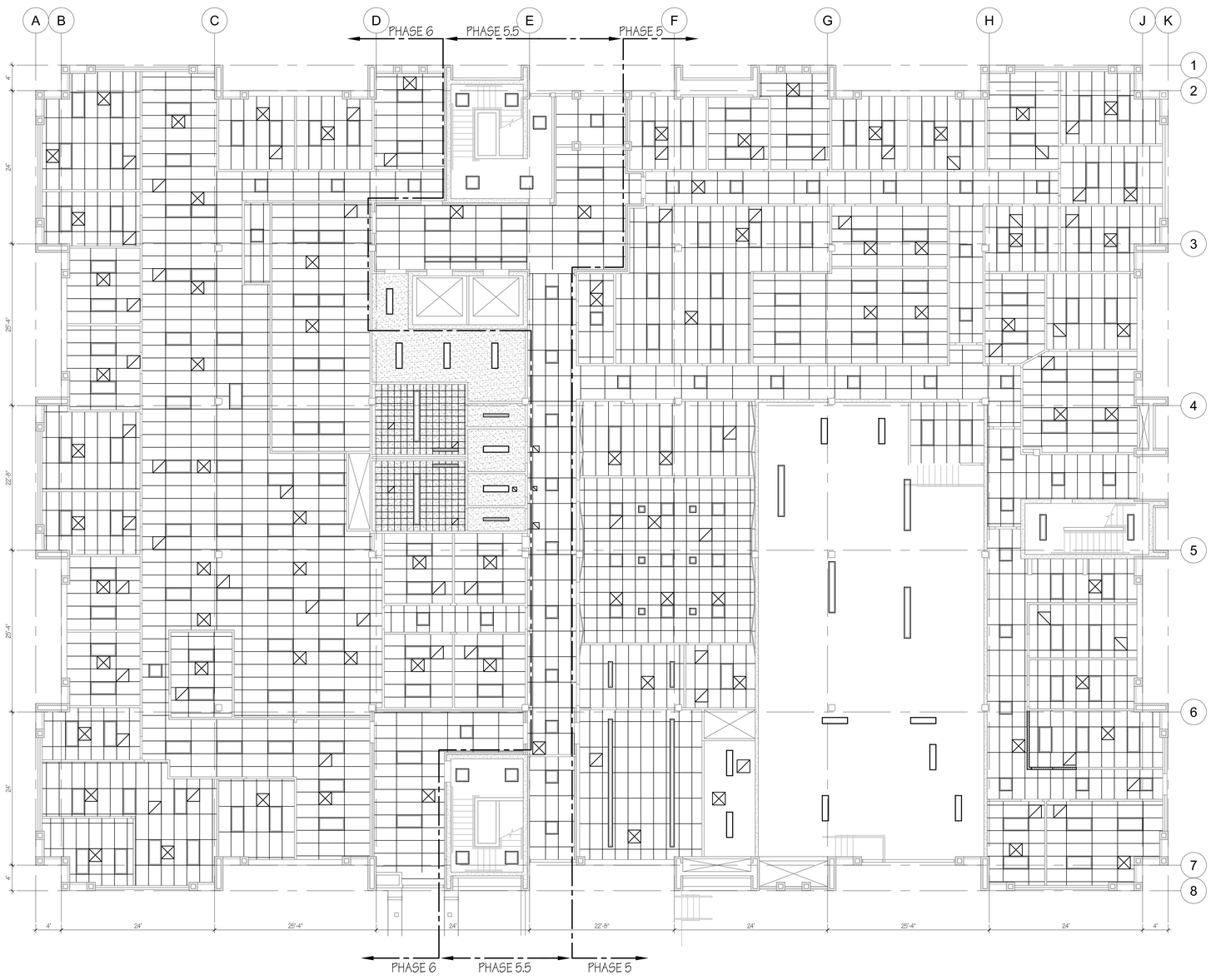
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

THIRD LEVEL FLOOR PLAN

AE103

SHEET 10 OF 37



A3 FIRST LEVEL REFLECTED CEILING PLAN
1/8"=1'-0"

N

CEILING PLAN LEGEND

- NEW SUSPENDED 2X4 LAY-IN CEILING PANELS & GRID, TYPICAL
- NEW SUSPENDED 2X2 LAY-IN CEILING PANELS & GRID, TYPICAL
- NEW GYP BOARD CEILING, TYPICAL
- NEW ACOUSTIC 12X12 GLUE UP
- INSTALL NEW 2X4 LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW 2X2 LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- REINSTALL SALVAGED 240" X 10" LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW 8 X 1 LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW 96" X 8" LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW 4 X 1 LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW 48" X 10" LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW AND/OR SALVAGED 48" X 8" LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- INSTALL NEW 48" X 6" LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- REINSTALL SALVAGED 1X 1' LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
- NEW AND/OR SALVAGED MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS FOR FURTHER INSTRUCTIONS, TYPICAL
- NEW AND/OR SALVAGED MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS FOR FURTHER INSTRUCTIONS, TYPICAL
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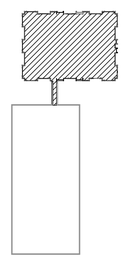
- NEW AND/OR SALVAGED MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS FOR FURTHER INSTRUCTIONS, TYPICAL

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
- EXISTING BRICK WALL
- EXISTING VINYL COVERED DEMOUNTABLE WALL
- EXISTING STUD WALL TO BE DEMOLISHED, TYPICAL
- EXISTING DEMOUNTABLE WALL SYSTEM TO BE DEMOLISHED, TYPICAL
- NEW 3 5/8" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES TO 6" ABOVE FINISH CEILING, BRACED TO STRUCTURE ABOVE @ 4'-0" O.C. TYPICAL

KEY PLAN



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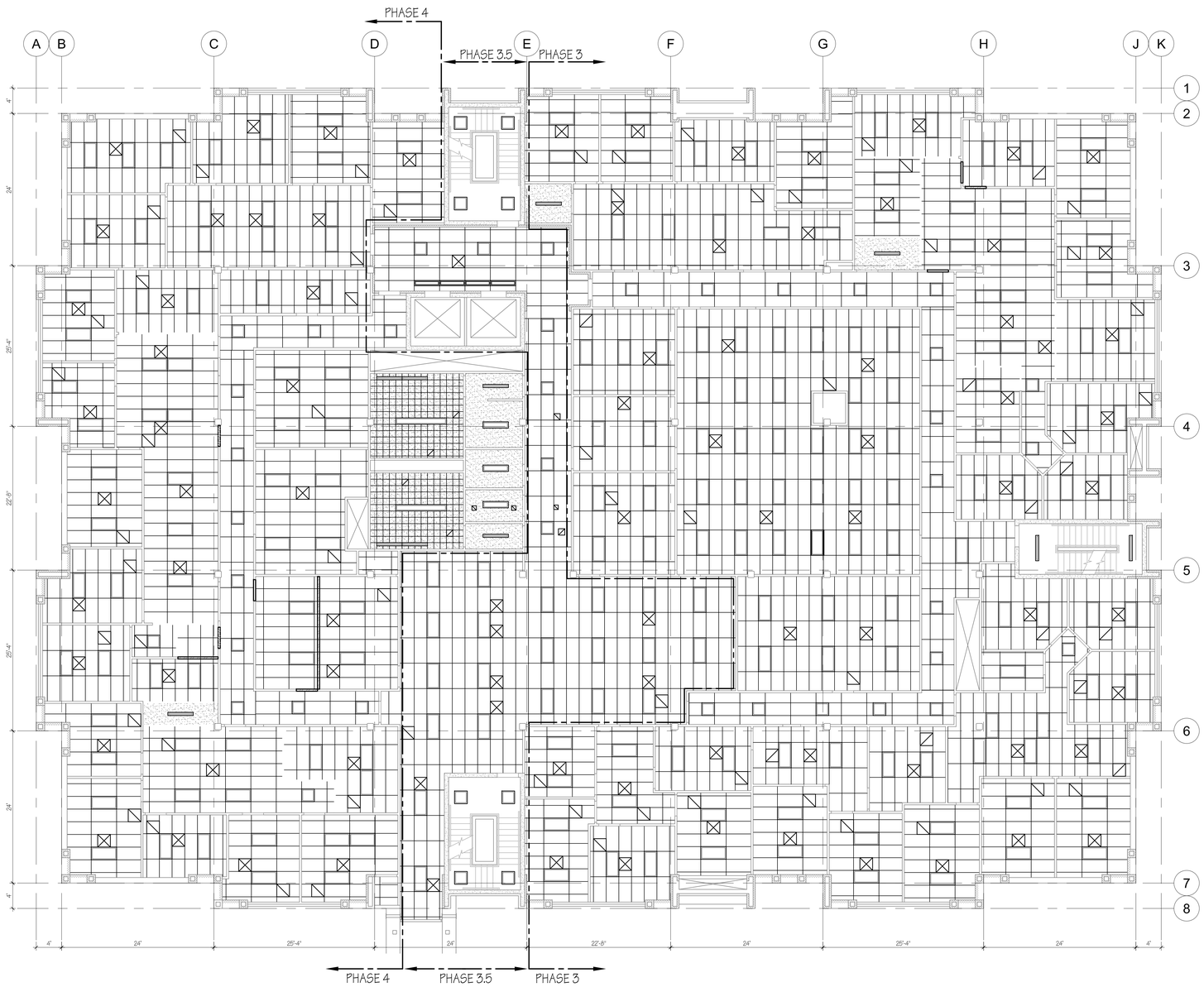
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

FIRST LEVEL REFLECTED CEILING PLAN

AE111

SHEET 11 OF 37



A3 SECOND LEVEL REFLECTED CEILING PLAN
1/8"=1'-0"

CEILING PLAN LEGEND

- NEW SUSPENDED 2X4 LAY-IN CEILING PANELS & GRID, TYPICAL
- NEW SUSPENDED 2X2 LAY-IN CEILING PANELS & GRID, TYPICAL
- NEW GYP BOARD CEILING, TYPICAL
- NEW ACOUSTIC 12X12 GLUE UP
- INSTALL NEW 2X4 LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
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- NEW AND/OR SALVAGED MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS FOR FURTHER INSTRUCTIONS, TYPICAL

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
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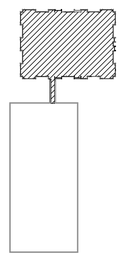
KEY PLAN



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DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

SECOND LEVEL REFLECTED CEILING PLAN

AE112

SHEET 12 OF 37

A3 THIRD LEVEL REFLECTED CEILING PLAN
1/8"=1'-0"

CEILING PLAN LEGEND

- NEW SUSPENDED 2X4 LAY-IN CEILING PANELS & GRID, TYPICAL
- NEW SUSPENDED 2X2 LAY-IN CEILING PANELS & GRID, TYPICAL
- NEW GYP BOARD CEILING, TYPICAL
- NEW ACOUSTIC 12X12 GLUE UP
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- INSTALL NEW AND/OR SALVAGED 48" X 8" LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
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- REINSTALL SALVAGED 1X 1' LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS, TYPICAL
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- NEW AND/OR SALVAGED MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS FOR FURTHER INSTRUCTIONS, TYPICAL

PARTITION LEGEND

- EXISTING EXTERIOR WALL TO REMAIN, TYPICAL
- EXISTING INTERIOR WALL TO REMAIN, TYPICAL
- EXISTING CONCRETE WALL
- EXISTING BRICK WALL
- EXISTING VINYL COVERED DEMOUNTABLE WALL
- EXISTING STUD WALL TO BE DEMOLISHED, TYPICAL
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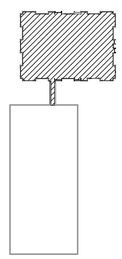
KEY PLAN



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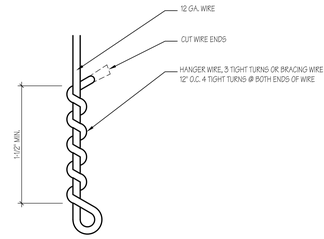
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

THIRD LEVEL REFLECTED CEILING PLAN

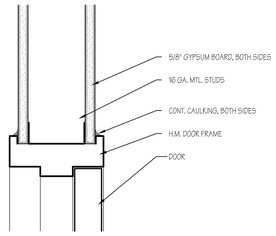
AE113

SHEET 13 OF 37

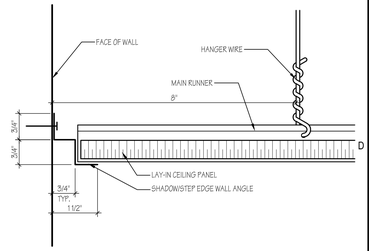


SUSPENDED ACOUSTICAL CEILING HANGER OR BRACE WIRE

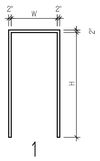
E6 TYPICAL CEILING DETAIL
N.T.S.



D5 DOOR HEAD DETAIL
3"=1'-0"

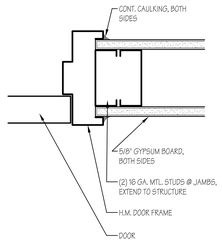


D6 TYPICAL CEILING DETAIL
6"=1'-0"

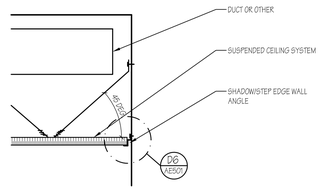


1

C4 DOOR FRAME TYPE
1/4" = 1'-0"



C5 DOOR JAMB DETAIL
3"=1'-0"

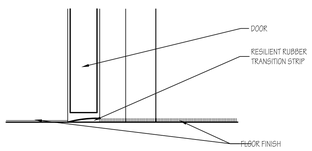


NOTE: WHEN DUCT OR OTHER OBSTRUCTION PREVENTS SPLAY WIRE ATTACHED AT CEILING, OR IF 45° CANNOT BE ACHIEVED THE USE OF SIDEWALL MAY BE USED.

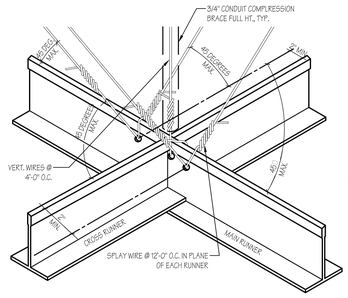
C6 TYPICAL CEILING DETAIL
2"=1'-0"

A

B4 DOOR TYPE
1/4" = 1'-0"



B5 TRANSITION STRIP DETAIL
3"=1'-0"

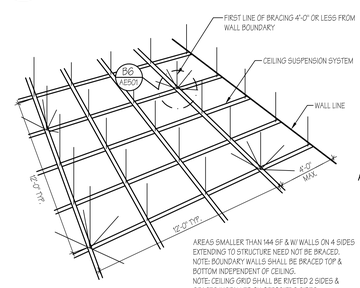


B6 TYPICAL CEILING DETAIL
N.T.S.

DOOR SCHEDULE

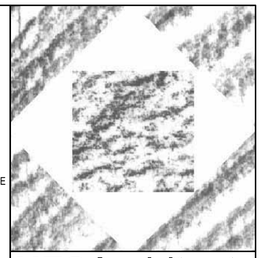
DOOR NUMB.	DOOR						FRAME						
	TYPE	MATERIAL	FIINISH	DOOR SIZE			TYPE	MATERIAL	FINISH	UL LABEL	DETAILS		
				W	H	T					H	J	T
157D	EXISTING TO BE SALVAGED AND RE-INSTALLED												
157N	EXISTING DOOR 157D TO BE RE-INSTALLED												
215	A	SCW	PRE. FIN.	3'-0"	7'-2"	1-3/4"	1	HM	PAINT	--	D5/AE501	C5/AE501	
254	A	SCW	PRE. FIN.	3'-0"	7'-2"	1-3/4"	1	HM	PAINT	--	D5/AE501	C5/AE501	
235	A	SCW	PRE. FIN.	3'-0"	7'-2"	1-3/4"	1	HM	PAINT	--	D5/AE501	C5/AE501	

A4 DOOR SCHEDULE



AREAS SMALLER THAN 144 SF & W/ WALLS ON 4 SIDES EXTENDING TO STRUCTURE NEED NOT BE BRACED.
NOTE: BOUNDARY WALLS SHALL BE BRACED TOP & BOTTOM INDEPENDENT OF CEILING.
NOTE: CEILING GRID SHALL BE RIVETED 2 SIDES & SPACES INSTALLED ON OPPOSITE 2 SIDES.

A6 TYPICAL CEILING DETAIL
N.T.S



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DNR ADMINISTRATION BUILDING
HVAC SYSTEM RENOVATION

Department of Natural Resources
1594 West North Temple
Salt Lake City, Utah 84114

MARK	DATE	DESCRIPTION

DATE:	03 SEPTEMBER 2008
DFCM PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	
DRAWN BY:	MN
CHECKED BY:	BWS
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

CEILING & MISCELLANEOUS DETAILS

AE501

SHEET 14 OF 37

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
AH-1		MECHANICAL EQUIPMENT DESIGNATION
		EQUIPMENT ITEM DESIGNATION
D-1 CFM		REGISTER, GRILL OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW
R-1		GRILLE, OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRE
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
C		COMMON
NC		NORMALLY CLOSED
NO		NORMALLY OPEN

SYMBOL	ABR.	DESCRIPTION
AIR SIDE		
		EXISTING AIR DUCT TO BE REMOVED
		EXISTING AIR DUCT TO REMAIN
		NEW AIR DUCT
		RECT. TO RECT. AIR DUCT TAKE-OFF
		RECT. TO RND. AIR DUCT TAKE-OFF
		RND. TO RND. AIR DUCT TAKE-OFF
		RECT. TAKE-OFF AT END OF MAIN
		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
		FLEXIBLE DUCT CONNECTION
		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
FS	FS	FIRE & SMOKE DAMPER
S		WALL MOUNTED TEMP. SENSOR
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
		UNION
		MANUAL ACTUATOR (BALL, BUTTERFLY, NEEDLE, ETC. VALVES)
		MANUAL ACTUATOR (GATE, GLOBE, S&D, OS&Y, ETC. VALVES)
M		ELECTRIC MOTOR ACTUATOR
S		SOLENOID ACTUATOR
		THREADED OR SWEAT VALVE CONNECTION
		FLANGED VALVE CONNECTION
		BUTTERFLY VALVE
		GATE VALVE
M		MOTORIZED 2-WAY CONTROL VALVE
M		MOTORIZED 3-WAY CONTROL VALVE
		CHECK VALVE
	BV	BALL VALVE
		MANUAL AIR VENT
		STRAINER
		STRAINER W/ PLUGGED BLOW OFF
	VTI	VENTURI
		PRESSURE GAUGE AND GAUGE COCK - WATER
		THERMOMETER AND THERMOWELL
S		WATER TEMPERATURE SENSOR AND THERMOWELL
	TW	THERMOWELL
		PRESSURE AND TEMPERATURE TAP
		DIRECTION OF FLOW

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
		FLEXIBLE CONNECTION
CD		CONDENSATE DRAIN
DR		EQUIPMENT DRAIN
HWS		HEATING WATER SUPPLY
HWR		HEATING WATER RETURN

GENERAL NOTES:

G-1 MECHANICAL INFORMATION IS NOT LIMITED TO THE MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING DRAWINGS BY OTHER DISCIPLINES AND SPECIFICATIONS.

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

G-12 C.F.M. LISTED IS ACTUAL AIR.

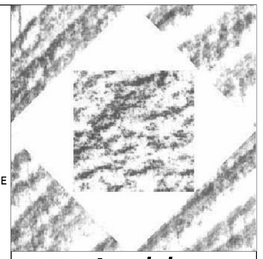
G-13 SUPPLIERS SHALL REVIEW ALL DRAWINGS AND THE SPECIFICATIONS PRIOR TO SUBMITTING PRICES TO THE CONTRACTOR. ALL QUESTIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO BIDDING.

G-14 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-15 ALL MECHANICAL AND PLUMBING SHALL BE INSTALLED AND CONFORM TO THE 2006 EDITION OF THE IMC AND IPC WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.

G-16 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-17 ALL PIPING, MATERIALS, ETC. SHALL BE NEW AND DOMESTIC MADE.



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10/06/08
WINWARD M. PACKER
No. 375080
STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES HVAC REPLACEMENT

MARK	DATE	DESCRIPTION
	10-6-2008	CITY COMMENTS

DATE:	9-3-2008
PROJECT NO:	-
HFSA PROJECT NO:	-
CAD DWG FILE NO:	
DRAWN BY:	
CHECKED BY:	SW
DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

MECHANICAL GENERAL NOTES AND LEGEND

MG001

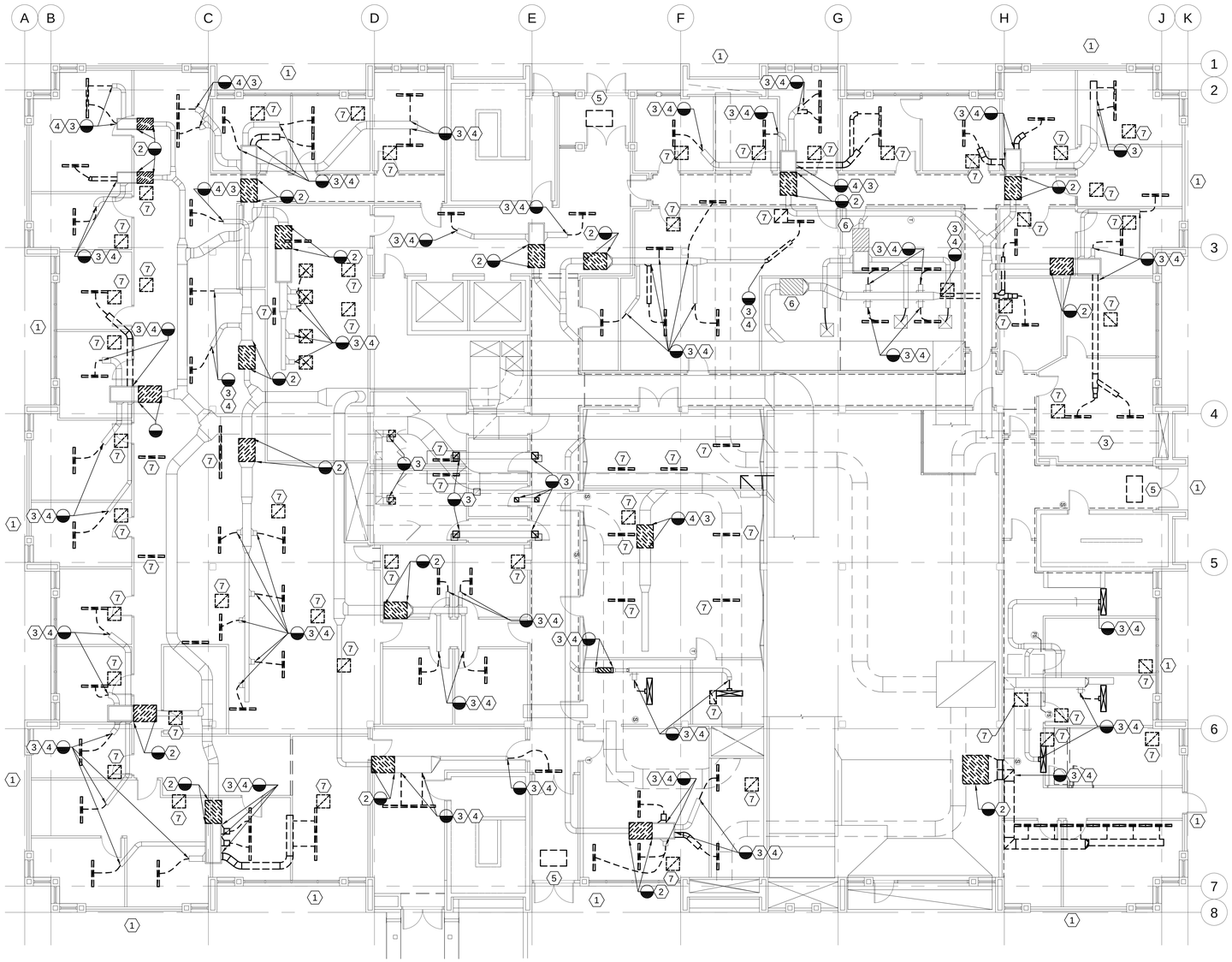
SHEET - OF -

SHEET NOTES:

1. EXISTING PERIMETER HEAT TO REMAIN.
2. REMOVE EXISTING VAV BOX, CONTROLS, ACCESSORIES, ETC.
3. REMOVE ALL EXISTING DIFFUSERS/GRILLES IN THIS AREA.
4. REMOVE EXISTING DUCTWORK AS SHOWN. FIELD VERIFY EXACT LOCATION.
5. REMOVE EXISTING CABINET UNIT HEATER.
6. EXISTING COOLING ONLY VAV TO REMAIN.
7. REMOVE EXISTING RETURN GRILLE.

GENERAL NOTES:

1. INTENT IS TO REMOVE ALL VAV BOXES EXCEPT AS NOTED. REMOVE ALL DIFFUSERS/GRILLES EXCEPT AS NOTED.



FIRST FLOOR MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

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CHECKED BY:	SW
DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

FIRST FLOOR MECHANICAL DEMOLITION PLAN

MD101

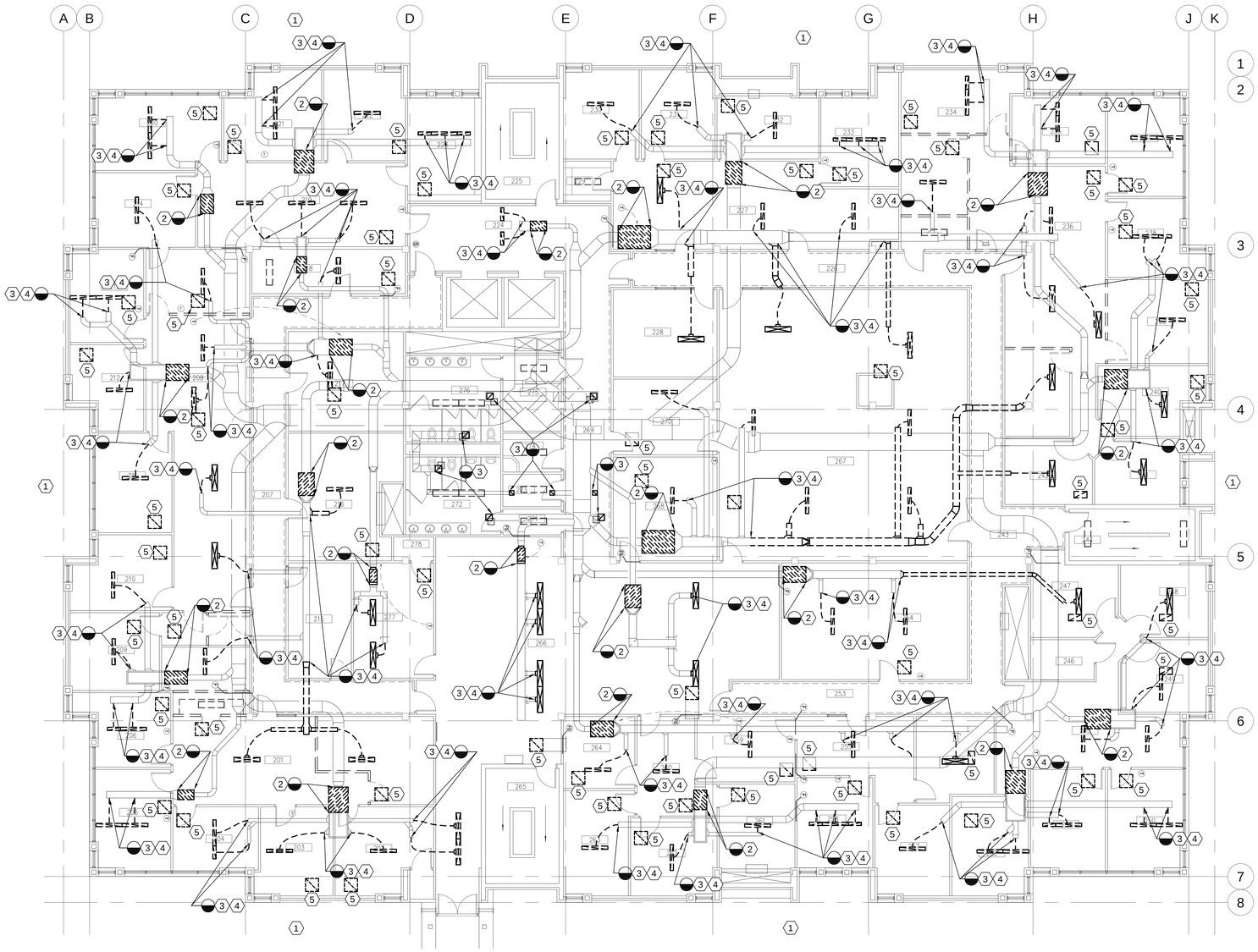
SHEET - OF -

SHEET NOTES:

1. EXISTING PERIMETER HEAT TO REMAIN.
2. REMOVE EXISTING VAV BOX, CONTROLS, ACCESSORIES, ETC.
3. REMOVE ALL EXISTING DIFFUSERS/GRILLES IN THIS AREA.
4. REMOVE EXISTING DUCTWORK AS SHOWN. FIELD VERIFY EXACT LOCATION.
5. REMOVE EXISTING RETURN GRILLE.

GENERAL NOTES:

1. INTENT IS TO REMOVE ALL VAV BOXES EXCEPT AS NOTED. REMOVE ALL DIFFUSERS/GRILLES EXCEPT AS NOTED.



SECOND FLOOR MECHANICAL DEMOLITION PLAN

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CAD DWG FILE NO:	
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DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

SECOND FLOOR MECHANICAL DEMOLITION PLAN

MD102

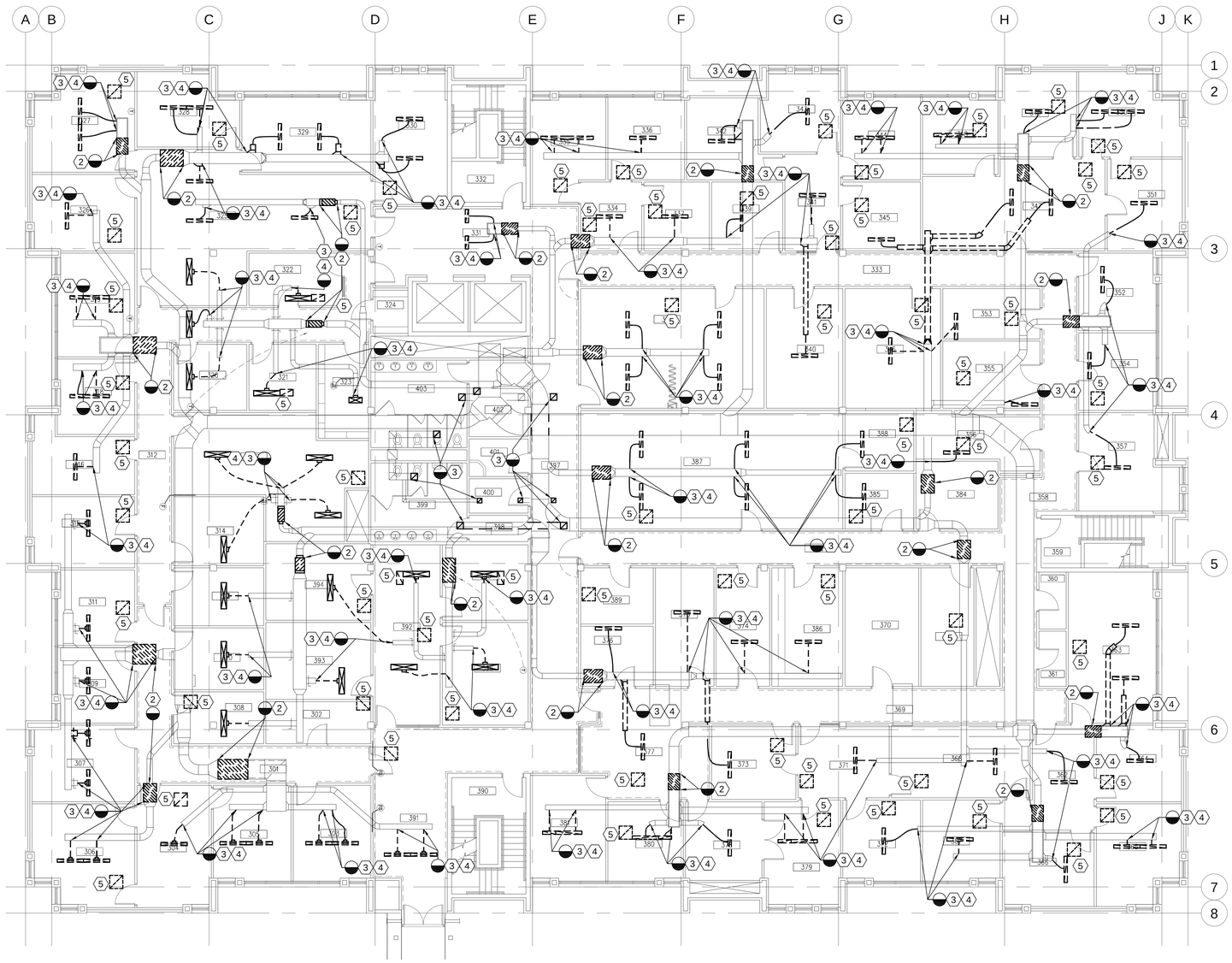
SHEET - OF -

SHEET NOTES:

1. EXISTING PERIMETER HEAT TO REMAIN.
2. REMOVE EXISTING VAV BOX, CONTROLS, ACCESSORIES, ETC.
3. REMOVE ALL EXISTING DIFFUSERS/GRILLES IN THIS AREA.
4. REMOVE EXISTING DUCTWORK AS SHOWN. FIELD VERIFY EXACT LOCATION.
5. REMOVE EXISTING RETURN GRILLE.

GENERAL NOTES:

1. INTENT IS TO REMOVE ALL VAV BOXES EXCEPT AS NOTED. REMOVE ALL DIFFUSERS/GRILLES EXCEPT AS NOTED.



THIRD FLOOR MECHANICAL DEMOLITION PLAN

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

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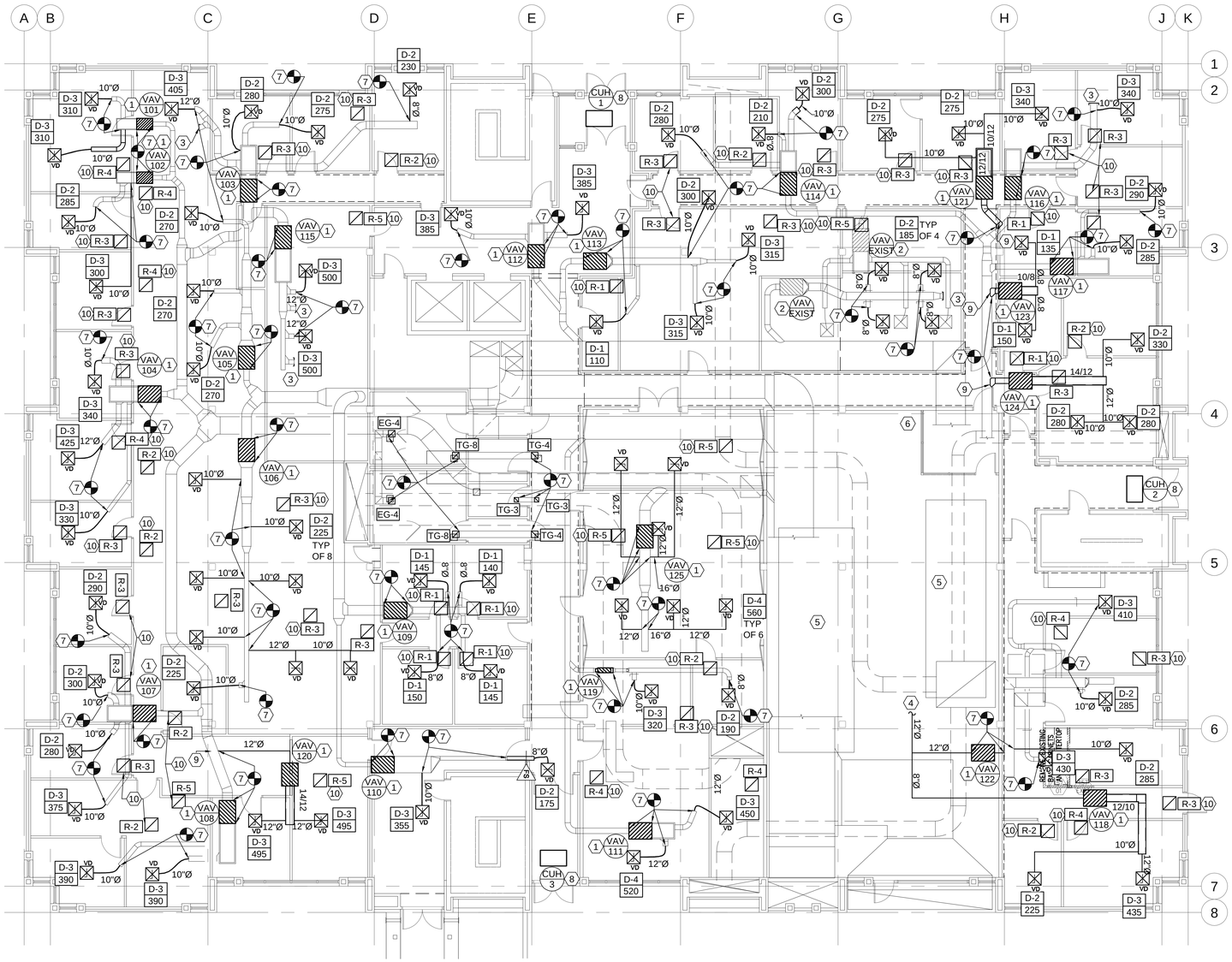
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

THIRD FLOOR MECHANICAL DEMOLITION PLAN

MD103

SHEET - OF -



FIRST FLOOR MECHANICAL PLAN
SCALE: 1/8" = 1'-0"

SHEET NOTES:

1. PROVIDE NEW VAV BOX WITH REHEAT. SEE ME104 FOR PIPING.
2. PROVIDE EXISTING COOLING ONLY VAV BOX WITH NEW CONTROLS.
3. CAP EXISTING DUCT AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
4. ROUTE NEW MEDIUM PRESSURE DUCTWORK BACK TO AHU-2.
5. EXISTING AIR HANDLER 1, AND AIR HANDLER 2 TO REMAIN.
6. EXISTING BOILER TO REMAIN.
7. CONNECT TO EXISTING DUCT WORK. FIELD VERIFY EXACT LOCATION.
8. PROVIDE NEW CABINET HEATER IN VESTIBULE.
9. TIE INTO EXISTING MEDIUM PRESSURE DUCTWORK. FIELD VERIFY EXACT SIZE AND LOCATION.
10. PROVIDE NEW RETURN GRILLE AND SOUND BOOT. SEE DETAIL A5 / ME501.
11. PROVIDE FIRE SMOKE DAMPER WHERE NEW DUCTS SERVING CORRIDOR PENETRATE CORRIDOR WALLS.

GENERAL NOTES:

1. SEE PIPING PLAN FOR THERMOSTAT OR SENSOR LOCATIONS.
2. ALL DIFFUSERS TO AND GRILLES SHALL BE NEW.
3. PROVIDE NEW FLEX DUCT FROM NEW DIFFUSER TO EXISTING DUCT WORK. SEE SPECIFICATIONS.
4. PROVIDE VOLUME DAMPER AT EACH BRANCH TAKE-OFF TO NEW DIFFUSERS. EXISTING VOLUME DAMPERS SHALL REMAIN.
5. EXISTING MEDIUM PRESSURE DUCTWORK TO REMAIN.
6. SEPERATE DIFFUSERS AND GRILLES AS FAR APART AS POSSIBLE WITHIN ROOMS. DRAWINGS ARE DIAGRAMATIC ONLY.
7. PROVIDE TRANSITION FROM EXISTING DUCTWORK TO NEW AS REQUIRED. FIELD VERIFY EXACT SIZE OF EXISTING.

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DEPARTMENT OF NATURAL RESOURCES HVAC REPLACEMENT

MARK	DATE	DESCRIPTION
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DATE:	9-3-2008
PROJECT NO:	-
HFSA PROJECT NO:	-
CAD DWG FILE NO:	
DRAWN BY:	
CHECKED BY:	SW
DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

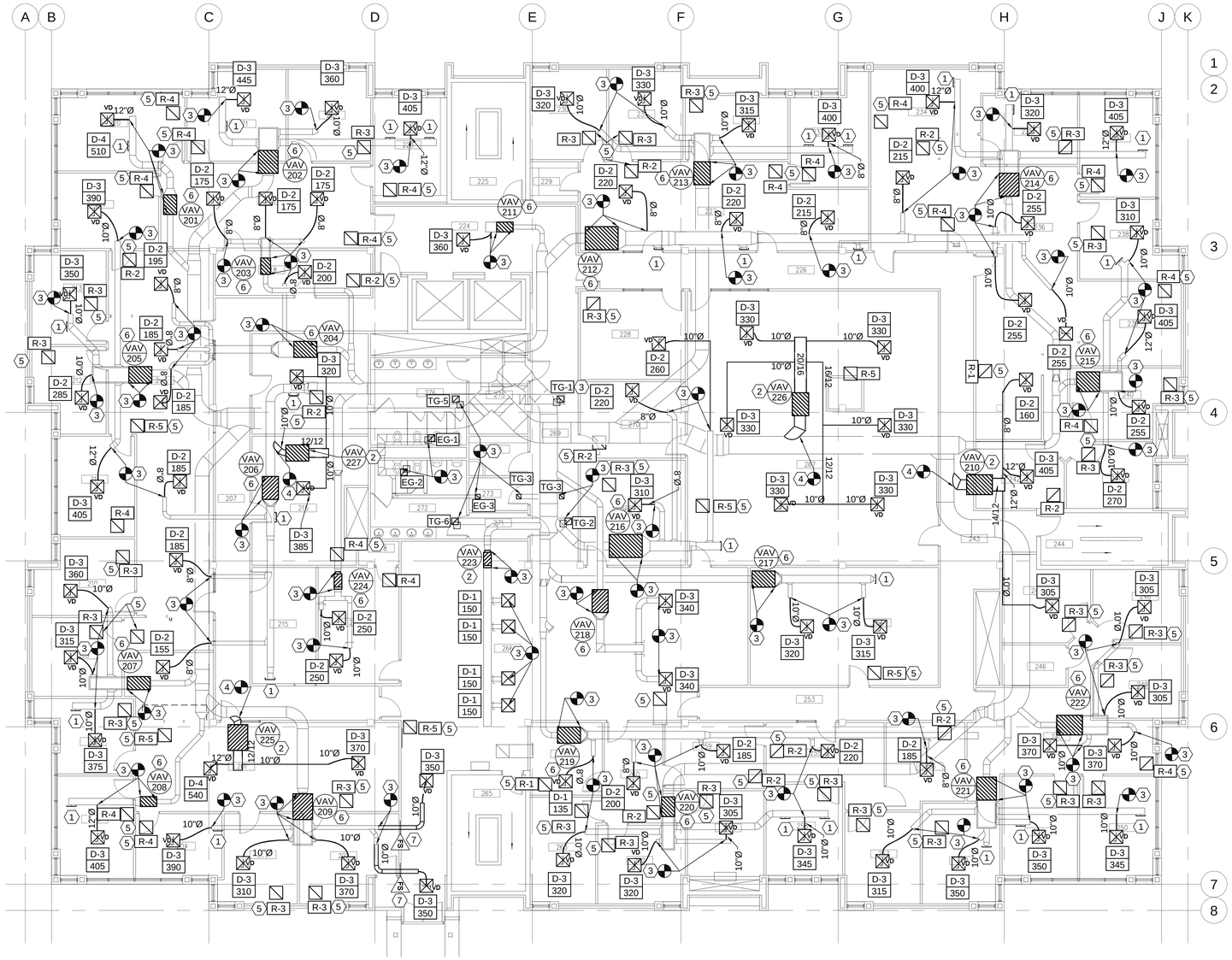
FIRST FLOOR MECHANICAL PLAN

ME101

SHEET - OF -

SHEET NOTES:

1. CAP EXISTING DUCT AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
2. PROVIDE NEW VAV BOX WITH REHEAT. SEE ME105 FOR PIPING.
3. CONNECT TO EXISTING DUCT WORK. FIELD VERIFY EXACT LOCATION.
4. TIE INTO EXISTING MEDIUM PRESSURE DUCT. USE SAME MATERIALS AS EXISTING DUCT. FIELD VERIFY.
5. NEW RETURN AIR GRILLE AND SOUND BOOT. SEE DETAIL ME501.
6. PROVIDE NEW REPLACEMENT VAV BOXES WITH REHEAT. SEE ME501 FOR PIPING.
7. PROVIDE FIRE SMOKE DAMPER WHERE NEW DUCTS SERVING CORRIDOR PENETRATE CORRIDOR WALLS.



GENERAL NOTES:

1. SEE PIPING PLAN FOR THERMOSTAT OR SENSOR LOCATIONS.
2. ALL DIFFUSERS TO AND GRILLES SHALL BE NEW.
3. PROVIDE NEW FLEX DUCT FROM NEW DIFFUSER TO EXISTING DUCT WORK. SEE SPECIFICATIONS.
4. PROVIDE VOLUME DAMPER AT EACH BRANCH TAKE-OFF TO NEW DIFFUSERS. EXISTING VOLUME DAMPERS SHALL REMAIN.
5. EXISTING MEDIUM PRESSURE DUCTWORK TO REMAIN.
6. SEPERATE DIFFUSERS AND GRILLES AS FAR APART AS POSSIBLE WITHIN ROOMS. DRAWINGS ARE DIAGRAMATIC ONLY.
7. PROVIDE TRANSITION FROM EXISTING DUCTWORK TO NEW AS REQUIRED. FIELD VERIFY EXACT SIZE OF EXISTING.

SECOND FLOOR MECHANICAL PLAN

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

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DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

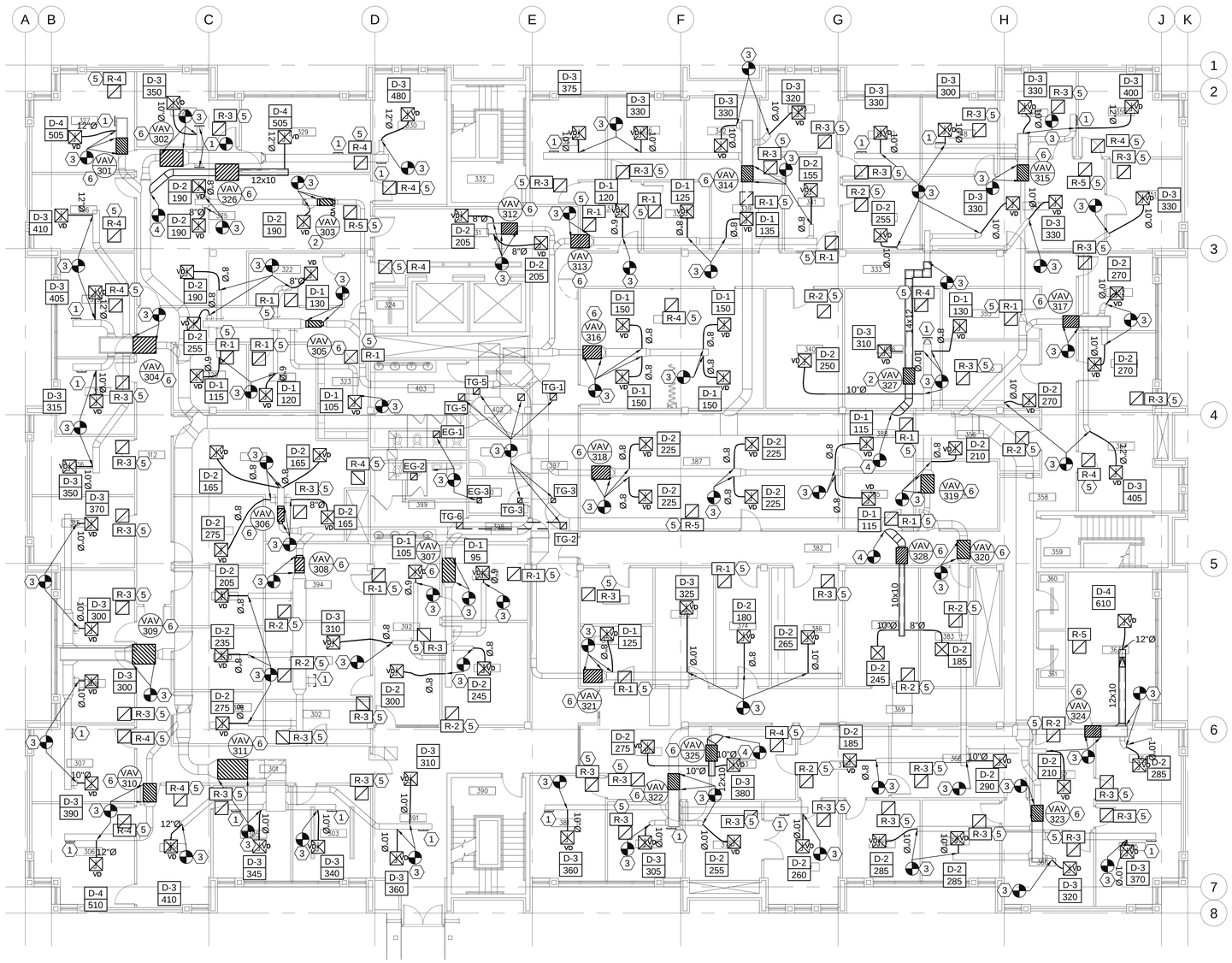
SECOND FLOOR MECHANICAL PLAN

ME102

SHEET - OF -

SHEET NOTES:

1. CAP EXISTING DUCT AT THIS APPROXIMATE LOCATION. FIELD VERIFY.
2. PROVIDE NEW VAV BOX WITH REHEAT. SEE ME106 FOR PIPING.
3. CONNECT TO EXISTING DUCT WORK. FIELD VERIFY EXACT LOCATION.
4. TIE INTO EXISTING MEDIUM PRESSURE DUCT. USE SAME MATERIALS AS EXISTING DUCT. FIELD VERIFY.
5. NEW RETURN AIR GRILLE AND SOUND BOOT. SEE DETAIL A5/ME501.
6. PROVIDE NEW REPLACEMENT VAV BOXES WITH REHEAT. SEE ME106 FOR PIPING.



THIRD FLOOR MECHANICAL PLAN

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

GENERAL NOTES:

1. SEE PIPING PLAN FOR THERMOSTAT OR SENSOR LOCATIONS.
2. ALL DIFFUSERS AND GRILLES SHALL BE NEW.
3. PROVIDE NEW FLEX DUCT FROM NEW DIFFUSER TO EXISTING DUCT WORK. SEE SPECIFICATIONS.
4. PROVIDE VOLUME DAMPER AT EACH BRANCH TAKE-OFF TO NEW DIFFUSERS. EXISTING VOLUME DAMPERS SHALL REMAIN.
5. EXISTING MEDIUM PRESSURE DUCTWORK SHALL REMAIN. EXISTING VD'S SHALL REMAIN.
6. SEPARATE SUPPLY DIFFUSERS AND GRILLES AS FAR APART AS POSSIBLE WITHIN ROOMS. DRAWINGS ARE DIAGRAMMATIC ONLY.
7. PROVIDE TRANSITION FROM EXISTING DUCTWORK TO NEW AS REQUIRED. FIELD VERIFY EXACT SIZE OF EXISTING.

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PROFESSIONAL ENGINEER
10/06/08
WINWARD M. PACKER
No. 375080
STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES HVAC REPLACEMENT

MARK	DATE	DESCRIPTION
	10-6-2008	CITY COMMENTS

DATE:	9-3-2008
PROJECT NO:	-
HFSA PROJECT NO:	-
CAD DWG FILE NO:	
DRAWN BY:	
CHECKED BY:	SW
DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

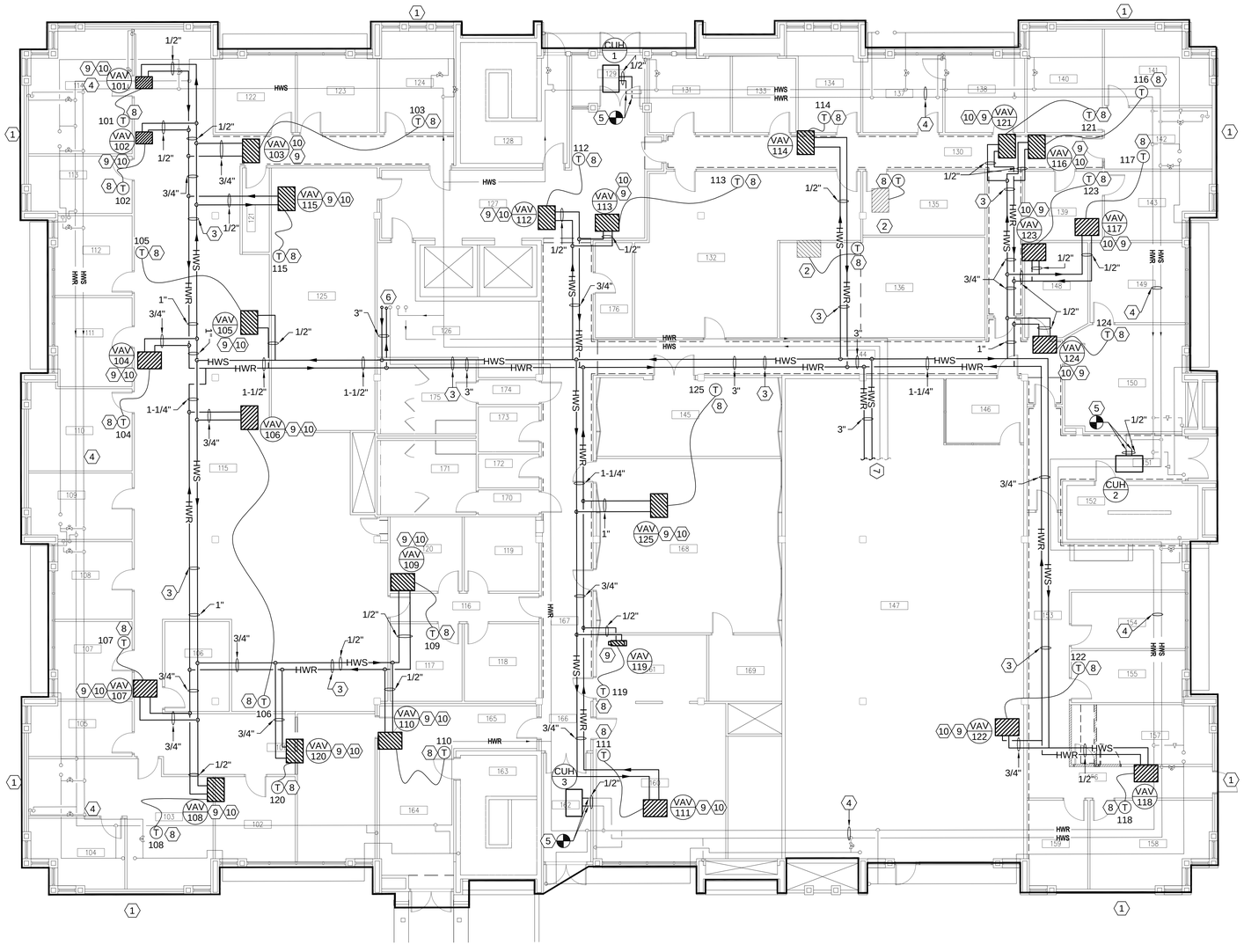
THIRD FLOOR MECHANICAL PLAN

ME103

SHEET - OF -

SHEET NOTES:

1. EXISTING PERIMETER HEAT TO REMAIN AND BE USED AS THE SECOND STAGE HEATING.
2. EXISTING COOLING ONLY VAV BOX SHALL REMAIN.
3. ROUTE NEW HWS/HWR SERVING THIS FLOOR IN CEILING SPACE. FIELD VERIFY ROUTING OF PIPING TO MISS EXISTING PIPING, HANGERS, ELECTRICAL, LIGHTS, EQUIPMENT, ETC.
4. EXISTING HWS/HWR PIPING TO PERIMETER HEATING AND CABINET UNIT HEATERS SHALL REMAIN. FIELD VERIFY EXACT LOCATION.
5. CONNECT NEW CABINET UNIT HEATER TO EXISTING PIPING IN THIS LOCATION.
6. 3" HWS/HWR FROM 2ND AND 3RD FLOORS. SEE SHEET ME105 AND ME106 FOR CONTINUATION.
7. TIE NEW HWS/HWR INTO EXISTING 4" HWS AND HWR IN EQUIPMENT ROOM. CONTRACTOR SHALL FIELD VERIFY THE BEST LOCATION FOR TIE-IN.
8. PROVIDE NEW THERMOSTAT OR SENSOR. FIELD VERIFY EXACT LOCATION. USE EXISTING THERMOSTAT LOCATIONS WHERE POSSIBLE. IF EXISTING THERMOSTAT LOCATIONS CANNOT BE USED, CONTRACTOR SHALL PATCH WALL OPENINGS WITH SAME MATERIAL AS EXISTING WALL AND PAINT TO MATCH EXISTING WALL.
9. SUPPORT VAV BOXES FROM RODS ATTACHED TO EXISTING STRUCTURE.
10. SEE DETAIL D5/ME501 FOR VAV BOX PIPING.



FIRST FLOOR PIPING PLAN

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

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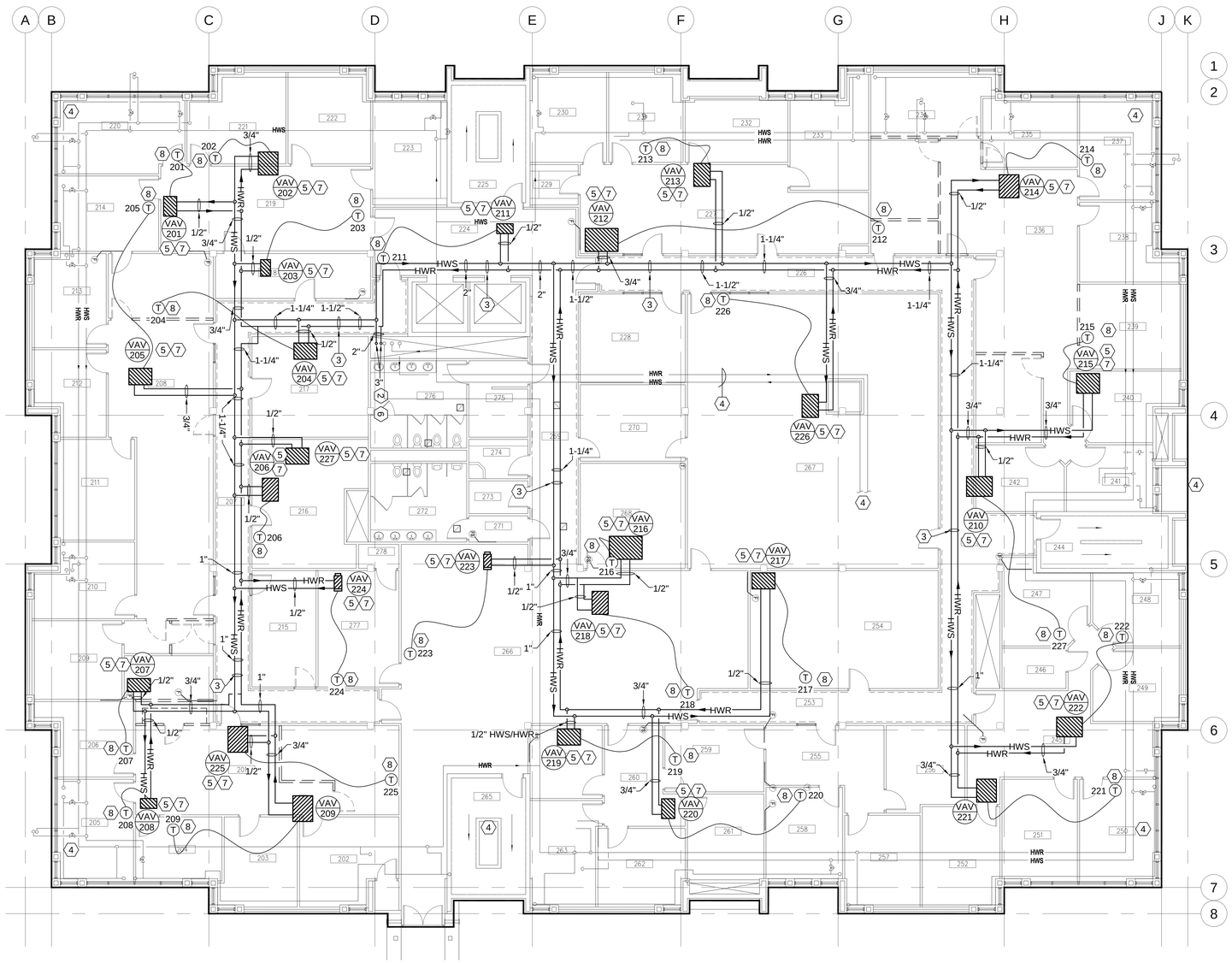
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

FIRST FLOOR PIPING PLAN

ME104

SHEET - OF -



SECOND FLOOR PIPING PLAN

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

SHEET NOTES:

1. EXISTING PERIMETER HEAT TO REMAIN AND BE USED AS THE SECOND STAGE HEATING.
2. 2" HWS/HWR FROM 3RD FLOOR. 3" HWS/HWR DOWN TO 1ST FLOOR. SEE SHEET ME106 FOR CONTINUATION.
3. ROUTE NEW HWS/HWR SERVING THIS FLOOR IN CEILING SPACE. FIELD VERIFY ROUTING OF PIPING TO MISS EXISTING PIPING, HANGERS, ELECTRICAL, LIGHTS, EQUIPMENT, ETC.
4. EXISTING HWS/HWR PIPING SERVING PERIMETER HEATING AND CABINET UNIT HEATERS SHALL REMAIN. FIELD VERIFY EXACT LOCATION.
5. SUPPORT VAV BOXES FROM RODS ATTACHED TO EXISTING STRUCTURE.
6. ROUTE NEW 2" HWS/HWR PIPING TO 3RD FLOOR ABOVE. FIELD VERIFY EXACT LOCATION. SEE SHEET ME106 FOR CONTINUATION.
7. SEE DETAIL D5/ME501 FOR VAV BOX PIPING.
8. PROVIDE NEW THERMOSTAT OR SENSOR. FIELD VERIFY EXACT LOCATION. USE EXISTING THERMOSTAT LOCATIONS WHERE POSSIBLE. IF EXISTING THERMOSTAT LOCATIONS CANNOT BE USED, CONTRACTOR SHALL PATCH WALL OPENINGS WITH SAME MATERIAL AS EXISTING WALL AND PAINT TO MATCH EXISTING WALL.

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DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

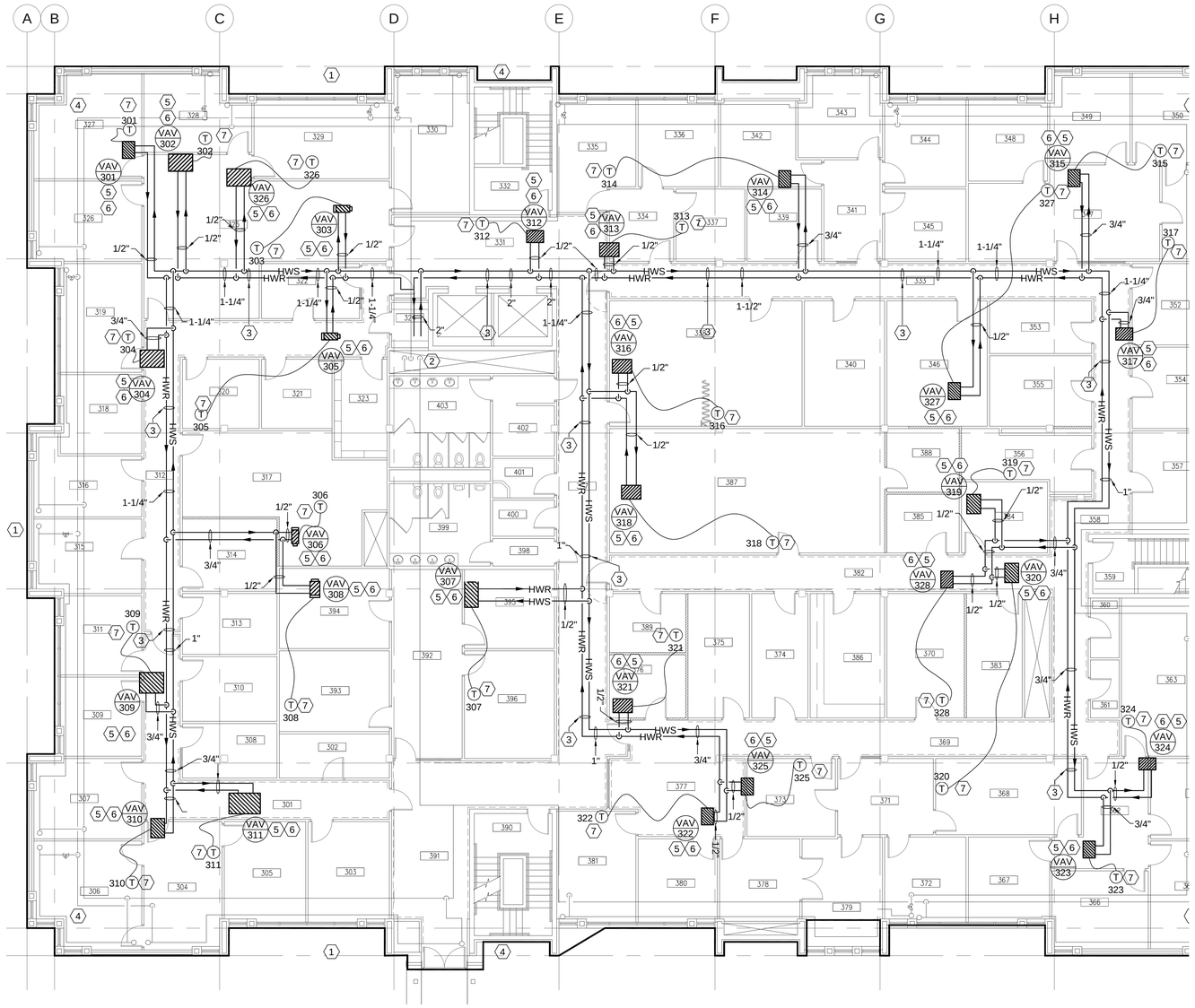
SECOND FLOOR PIPING PLAN

ME105

SHEET - OF -

SHEET NOTES:

1. EXISTING PERIMETER HEAT TO REMAIN AND BE USED AS THE SECOND STAGE HEATING.
2. 2" HWS/HWR DOWN. SEE SHEET ME105 FOR CONTINUATION.
3. ROUTE NEW HWS/HWR SERVING THIS FLOOR IN CEILING SPACE. FIELD VERIFY ROUTING OF PIPING TO MISS EXISTING PIPING, HANGERS, ELECTRICAL, LIGHTS, EQUIPMENT, ETC.
4. EXISTING HWS/HWR PIPING SERVING PERIMETER HEATING SHALL REMAIN.
5. SUPPORT VAV BOXES FROM RODS ATTACHED TO EXISTING STRUCTURE.
6. SEE DETAIL D5/ME501 FOR VAV BOX PIPING.
7. PROVIDE NEW THERMOSTAT OR SENSOR. FIELD VERIFY EXACT LOCATION. USE EXISTING THERMOSTAT LOCATIONS WHERE POSSIBLE. IF EXISTING THERMOSTAT LOCATIONS CANNOT BE USED, CONTRACTOR SHALL PATCH WALL OPENING WITH SAME MATERIALS EXISTING WALL AND PAINT TO MATCH EXISTING WALL.



THIRD FLOOR PIPING PLAN

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

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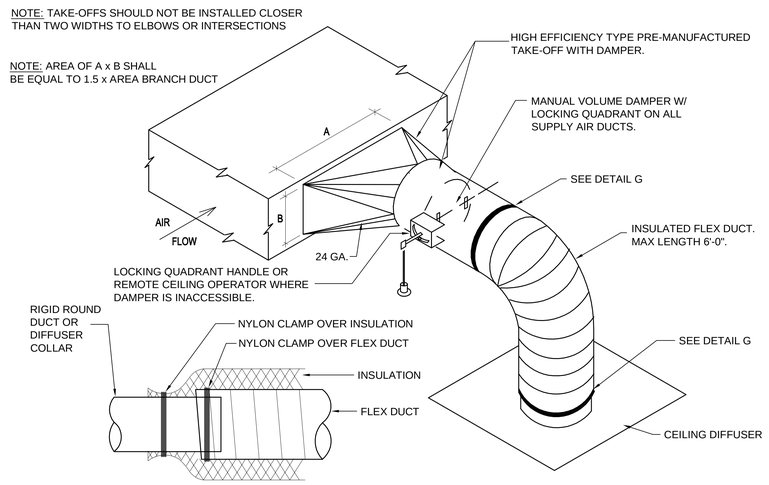
SHEET TITLE

THIRD FLOOR PIPING PLAN

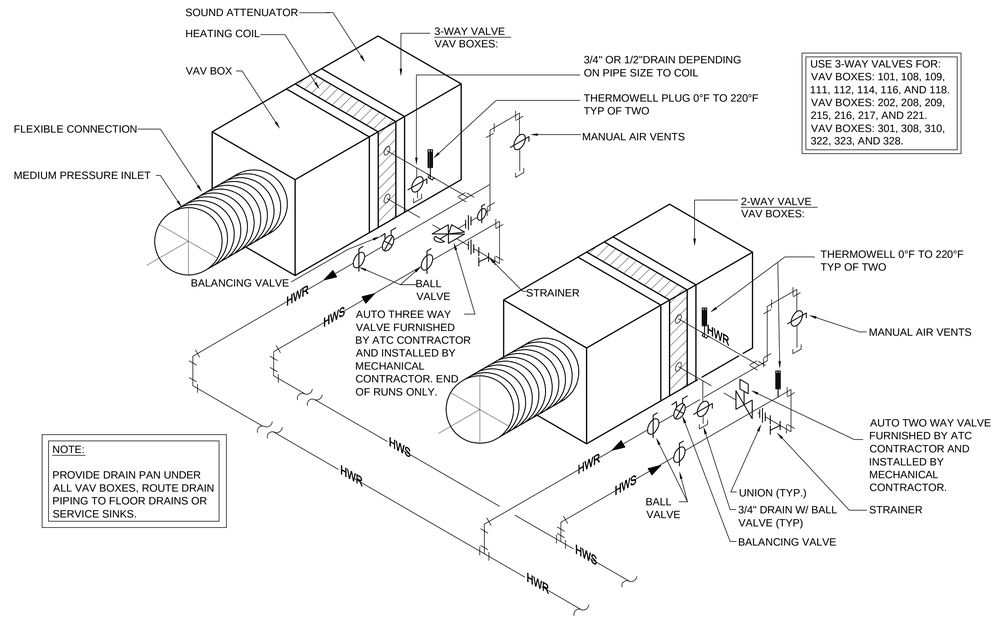
ME106

SHEET - OF -

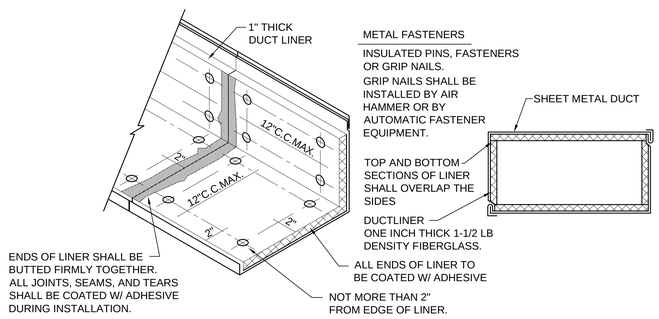


DETAIL G
SCALE: NONE

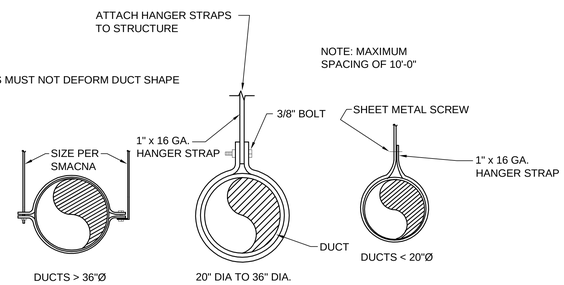
D1 SQUARE-TO-ROUND TAKE-OFF DETAIL
SCALE: NONE



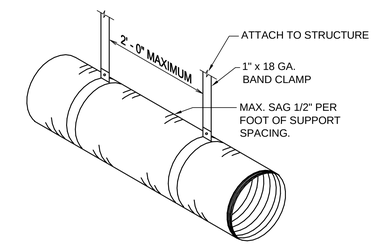
D5 VAV BOX (W/ HEATING COIL) HOT WATER PIPING DETAIL
SCALE: NONE



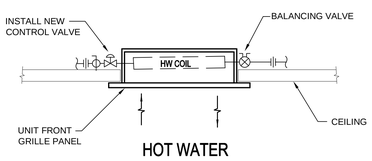
B1 DUCT LINER DETAIL
SCALE: NONE



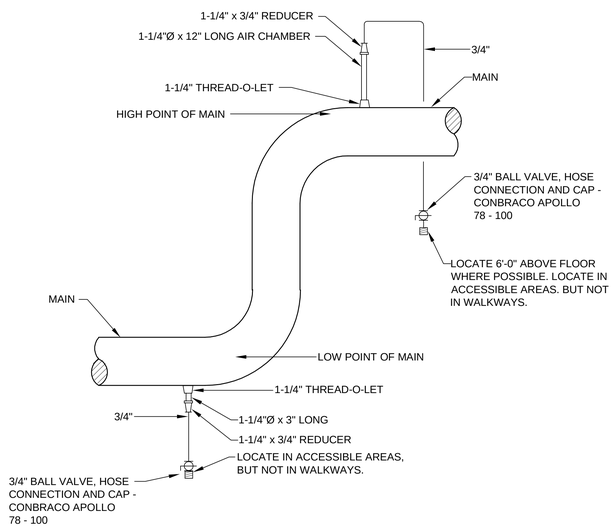
C3 ROUND DUCT SUPPORT DETAIL
SCALE: NONE



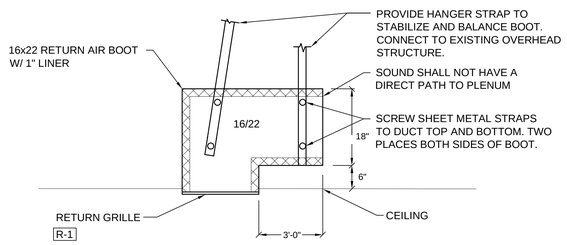
C5 FLEXIBLE DUCT SUPPORT DETAIL
SCALE: NONE



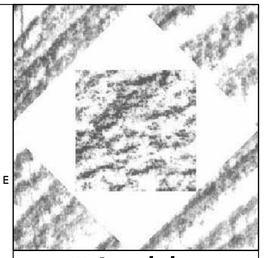
A1 CEILING MTD CABINET UNIT HEATER PIPING DETAIL
SCALE: NONE



A2 MANUAL AIR VENT AND DRAIN DETAIL
SCALE: NONE



A5 RETURN AIR BOOT DETAIL
SCALE: NONE



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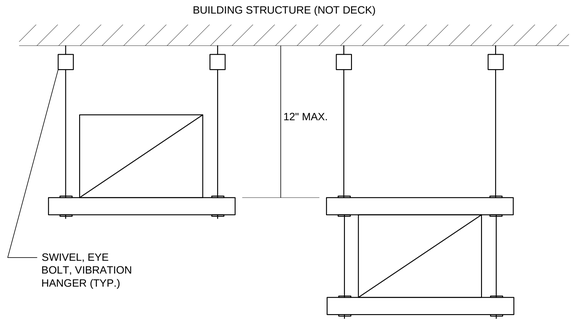
SHEET TITLE

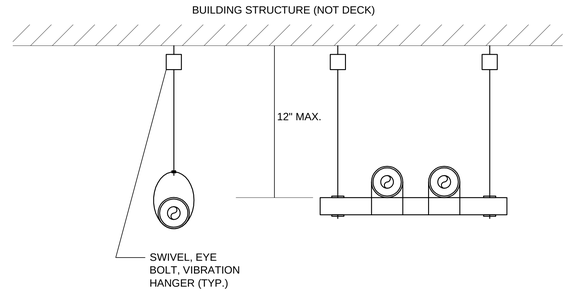
MECHANICAL DETAILS

ME501

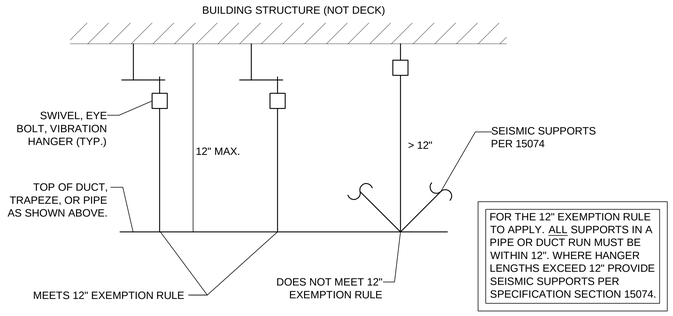
SHEET - OF -



D3 SEISMIC DUCT HANGERS
SCALE: NONE

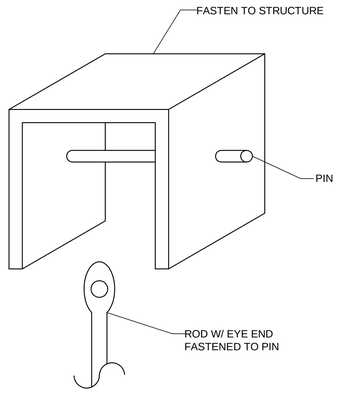


D5 SEISMIC PIPING HANGERS
SCALE: NONE



FOR THE 12" EXEMPTION RULE TO APPLY. ALL SUPPORTS IN A PIPE OR DUCT RUN MUST BE WITHIN 12". WHERE HANGER LENGTHS EXCEED 12" PROVIDE SEISMIC SUPPORTS PER SPECIFICATION SECTION 15074.

C3 SEISMIC HANGERS 12" EXEMPTIONS
SCALE: NONE



C5 SWIVEL BOLT DETAIL
SCALE: NONE

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SHEET TITLE

MECHANICAL DETAILS

ME502

SHEET - OF -

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
TG-1	CEILING	TRANSFER	625	18/12	18/12	LAY-IN	1,2,3,4
TG-2	CEILING	TRANSFER	470	16/12	16/12	LAY-IN	1,2,3,4
TG-3	CEILING	TRANSFER	180	8/8	8/8	LAY-IN	1,2,3,4
TG-4	CEILING	TRANSFER	375	12/12	12/12	LAY-IN	1,2,3,4
TG-5	CEILING	TRANSFER	625	18/12	18/12	HARD	1,2,3,4
TG-6	CEILING	TRANSFER	470	16/12	16/12	HARD	1,2,3,4
TG-7	CEILING	TRANSFER	180	8/8	8/8	HARD	1,2,3,4
TG-8	CEILING	TRANSFER	375	12/12	12/12	HARD	1,2,3,4
EG-1	CEILING	EXHAUST	470	14/14	14/14	HARD	1,2,3,4
EG-2	CEILING	EXHAUST	375	12/12	12/12	HARD	1,2,3,4
EG-3	CEILING	EXHAUST	150	8/6	8/6	HARD	1,2,3,4
EG-4	CEILING	EXHAUST	375	12/12	12/12	HARD	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

DIFFUSER SCHEDULE

SYMBOL	TYPE	MAX CFM	FACE SIZE	NCK 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	1000	18X18	16"Ø	LAY-IN	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.

VAV BOX SCHEDULE

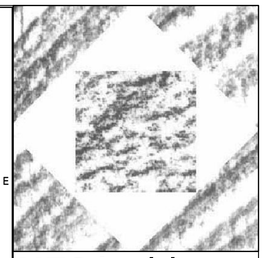
SYMBOL	AHU	INLET DIA. (INCHES)	COOLING			HEATING (40° DELTA T WATER)								NC LEVEL	MANUF. MODEL #	SCHEDULE NOTES
			MAX CFM	MIN CFM	MX APD (IN)	COIL EAT	COIL LAT	MAX CFM	COIL MBH	FLOW GPM	EWT	(FT) PD	ROWS			
VAV 101	1	8"Ø	620	185	.27	65	101	600	19.1	.9	180°	.2	2	25	KRUEGER LMHS	2
VAV 102	1	8"Ø	585	175	.26	65	100	585	18.6	.9	180°	.3	2	25	KRUEGER LMHS	2
VAV 103	1	8"Ø	960	290	.62	65	100	960	30.6	1.6	180°	1.1	2	25	KRUEGER LMHS	2
VAV 104	1	10"Ø	1,095	330	.41	65	100	1,095	34.9	2.0	180°	.5	2	25	KRUEGER LMHS	2
VAV 105	2	8"Ø	810	245	.47	65	100	810	25.8	1.4	180°	.6	2	25	KRUEGER LMHS	2
VAV 106	2	12"Ø	1,800	540	.56	65	100	1,800	57.3	3.0	180°	1.7	2	25	KRUEGER LMHS	2
VAV 107	1	10"Ø	1245	375	.51	65	100	1245	39.6	2.2	180°	.8	2	25	KRUEGER LMHS	2
VAV 108	1	8"Ø	780	235	.44	65	100	780	24.8	1.3	180°	.5	2	25	KRUEGER LMHS	2
VAV 109	2	8"Ø	580	175	.26	65	100	580	18.5	.9	180°	.2	2	25	KRUEGER LMHS	2
VAV 110	2	8"Ø	530	160	.22	65	100	530	16.9	.85	180°	.2	2	25	KRUEGER LMHS	2
VAV 111	1	8"Ø	970	290	.64	65	100	970	30.9	2.0	180°	1.2	2	25	KRUEGER LMHS	2
VAV 112	2	8"Ø	770	230	.43	65	100	770	24.5	1.2	180°	.5	2	25	KRUEGER LMHS	2
VAV 113	2	10"Ø	1,040	310	.37	65	100	1,040	33.1	1.6	180°	.5	2	25	KRUEGER LMHS	2
VAV 114	2	8"Ø	790	240	.45	65	100	790	25.2	1.3	180°	1.3	2	25	KRUEGER LMHS	2
VAV 115	1	10"Ø	1000	305	.35	65	100	1000	31.8	1.5	180°	.4	2	25	KRUEGER LMHS	2
VAV 116	2	6"Ø	340	100	.09	65	99	340	10.6	.53	180°	12.5	1	25	KRUEGER LMHS	2
VAV 117	2	8"Ø	575	175	.25	65	100	575	18.3	.9	180°	.2	2	25	KRUEGER LMHS	2
VAV 118	1	8"Ø	660	200	.32	65	100	660	21.0	1.0	180°	.3	2	25	KRUEGER LMHS	1
VAV 119	1	8"Ø	510	155	.21	65	99	510	16.2	.8	180°	.1	2	25	KRUEGER LMHS	2
VAV 120	1	8"Ø	990	300	.67	65	100	990	31.5	2.1	180°	1.3	2	25	KRUEGER LMHS	1
VAV 121	2	8"Ø	890	270	.55	65	100	890	28.3	1.7	180°	.9	2	25	KRUEGER LMHS	1
VAV 122	1	12"Ø	1,410	425	.36	65	100	1,410	44.9	2.2	180°	.7	2	25	KRUEGER LMHS	1
VAV 123	2	6"Ø	285	85	.06	65	100	285	9.0	2.2	180°	2.1	1	25	KRUEGER LMHS	1
VAV 124	2	8"Ø	890	265	.55	65	100	890	28.3	1.7	180°	.9	2	25	KRUEGER LMHS	1
VAV 125	1	16"Ø	3360	1010	0.63	65	100	3360	107.0	6.3	180°	1.9	2	26	KRUEGER LMHS	2

1. VAV BOXES AND DUCTWORK ARE NEW.
2. VAV BOXES WITH REHEAT HOT WATER COIL ARE NEW AND ARE REPLACING EXISTING.

CABINET FAN UNIT SCHEDULE

SYMBOL	CFM	MOTOR HP	AMPS	HEATING CAPACITY		WEIGHT LBS	COMMENTS
				MBH	GPM		
CUH 1	185/230	1/15	0.8	12.9	1.5	100	1,2,3
CUH 2	185/230	1/15	0.8	12.9	1.5	100	1,2,3
CUH 3	185/230	1/15	0.8	12.9	1.5	100	1,2,3

1. TWO SPEED MOTOR.
2. 60° EAT, 180° EWT, 20° ΔT WATER.
3. AIRTHERM RC-1200-02 OR EQUAL.



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EMAIL: excellence@whw-engineering.com

PROFESSIONAL ENGINEER 10/06/08 WINWARD M. PACKER No. 375080 STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES HVAC REPLACEMENT

MARK	DATE	DESCRIPTION
	10-6-2008	CITY COMMENTS

DATE:	9-3-2008
PROJECT NO:	-
HFSA PROJECT NO:	-
CAD DWG FILE NO:	
DRAWN BY:	
CHECKED BY:	SW
DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

MECHANICAL SCHEDULES

ME601

SHEET - OF -

VAV BOX SCHEDULE

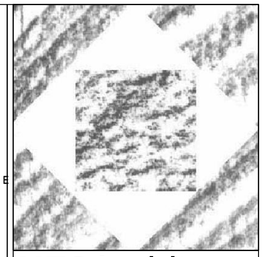
SYMBOL	AHU	INLET DIA. (INCHES)	COOLING			HEATING (40° DELTA T WATER)								NC LEVEL	MANUF. MODEL #	SCHEDULE NOTES
			MAX CFM	MIN CFM	MX APD (IN)	COIL EAT	COIL LAT	MAX CFM	COIL MBH	FLOW GPM	EWT	(FT) PD	ROWS			
VAV 201	1	8"Ø	510	155	.21	65	100	510	16.2	.8	180°	.1	2	25	KRUEGER LMHS	2
VAV 202	1	10"Ø	1,210	365	.49	65	100	1,210	38.5	2.1	180°	.8	2	25	KRUEGER LMHS	2
VAV 203	2	8"Ø	525	160	.22	65	99	525	16.7	.8	180°	.2	2	25	KRUEGER LMHS	2
VAV 204	2	8"Ø	765	230	.42	65	100	765	24.4	1.2	180°	.5	2	25	KRUEGER LMHS	2
VAV 205	1	12"Ø	1430	430	.37	65	100	1430	45.5	2.3	180°	.8	2	25	KRUEGER LMHS	2
VAV 206	2	8"Ø	525	160	.22	65	100	525	16.7	.8	180°	.2	2	25	KRUEGER LMHS	2
VAV 207	1	10"Ø	1,050	315	.38	65	100	1,050	33.4	1.6	180°	.5	2	25	KRUEGER LMHS	2
VAV 208	1	6"Ø	405	125	.23	65	100	405	13.2	.6	180°	.1	2	25	KRUEGER LMHS	2
VAV 209	1	12"Ø	1,770	530	.55	65	100	1,770	56.4	2.9	180°	1.6	2	25	KRUEGER LMHS	2
VAV 210	1	8"Ø	870	260	.53	65	100	870	27.7	1.6	180°	.8	2	25	KRUEGER LMHS	1
VAV 211	2	8"Ø	360	110	.06	65	100	360	11.4	.57	180°	2.3	2	25	KRUEGER LMHS	2
VAV 212	2	12"Ø	1635	490	.47	65	100	1635	52.1	2.4	180°	1.2	2	25	KRUEGER LMHS	2
VAV 213	1	12"Ø	1,365	410	.34	65	100	1,365	43.5	2.7	180°	.7	2	25	KRUEGER LMHS	2
VAV 214	1	10"Ø	1,125	340	.43	65	100	1,125	35.8	1.8	180°	.6	2	25	KRUEGER LMHS	2
VAV 215	1	10"Ø	1,240	375	.51	65	100	1,240	39.5	2.2	180°	.8	2	25	KRUEGER LMHS	2
VAV 216	2	8"Ø	790	240	.45	65	100	790	25.2	1.3	180°	.6	2	25	KRUEGER LMHS	2
VAV 217	2	8"Ø	635	190	.3	65	100	635	20.2	1.0	180°	.3	2	25	KRUEGER LMHS	2
VAV 218	2	8"Ø	680	205	.34	65	100	680	21.7	1.0	180°	.3	2	25	KRUEGER LMHS	2
VAV 219	2	8"Ø	925	280	.59	65	100	925	29.4	1.8	180°	1	2	25	KRUEGER LMHS	2
VAV 220	1	10"Ø	1,290	385	.55	65	100	1,290	41.1	2.4	180°	.9	2	25	KRUEGER LMHS	2
VAV 221	1	12"Ø	1,360	410	.34	65	100	1,360	43.3	1.7	180°	.7	2	25	KRUEGER LMHS	2
VAV 222	1	10"Ø	1,350	405	.59	65	100	1,350	43.0	2.7	180°	1.1	2	26	KRUEGER LMHS	2
VAV 223	2	8"Ø	600	180	.27	65	100	600	19.1	.9	180°	.2	2	25	KRUEGER LMHS	2
VAV 224	2	8"Ø	500	150	.2	65	100	500	16.1	.8	180°	.1	2	25	KRUEGER LMHS	2
VAV 225	1	8"Ø	910	275	.57	65	100	910	29.0	1.7	180°	.9	2	25	KRUEGER LMHS	1
VAV 226	1	12"Ø	1,980	600	.66	65	100	1,980	63.0	3.6	180°	2.5	2	25	KRUEGER LMHS	1
VAV 227	2	8"Ø	705	210	.37	65	100	705	22.4	1.1	180°	.4	2	25	KRUEGER LMHS	1

1. VAV BOXES AND DUCTWORK ARE NEW.
2. VAV BOXES WITH REHEAT HOT WATER COIL ARE NEW AND ARE REPLACING EXISTING.

VAV BOX SCHEDULE

SYMBOL	AHU	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 301	1	8"Ø	505	150	.2	65	100	505	16.2	.8	180°	.1	2	25	KRUEGER LMHS	2
VAV 302	1	8"Ø	830	250	.49	65	100	830	26.4	1.4	180°	.7	2	25	KRUEGER LMHS	2
VAV 303	2	8"Ø	570	175	.25	65	100	570	18.1	.9	180°	.2	2	25	KRUEGER LMHS	2
VAV 304	1	12"Ø	1480	445	.4	65	100	1480	47.1	2.4	180°	.9	2	25	KRUEGER LMHS	2
VAV 305	2	8"Ø	915	275	.58	65	100	915	29.1	1.8	180°	1	2	25	KRUEGER LMHS	2
VAV 306	2	8"Ø	770	230	.43	65	100	770	24.5	1.2	180°	.5	2	25	KRUEGER LMHS	2
VAV 307	2	10"Ø	1,055	320	.38	65	100	1,055	33.6	1.6	180°	.5	2	25	KRUEGER LMHS	2
VAV 308	2	8"Ø	715	215	.37	65	100	715	22.8	1.1	180°	.4	2	25	KRUEGER LMHS	2
VAV 309	1	10"Ø	1365	410	.6	65	100	1365	43.5	2.7	180°	1.2	2	26	KRUEGER LMHS	2
VAV 310	1	8"Ø	510	155	.21	65	100	510	16.2	.8	180°	.1	2	25	KRUEGER LMHS	2
VAV 311	1	12"Ø	1,765	530	.54	65	100	1,765	56.2	2.8	180°	1.6	2	25	KRUEGER LMHS	2
VAV 312	2	6"Ø	410	125	.23	65	101	410	13.3	.6	180°	.1	2	25	KRUEGER LMHS	2
VAV 313	2	8"Ø	535	160	.22	65	100	535	17.0	.85	180°	.2	2	25	KRUEGER LMHS	2
VAV 314	1	10"Ø	1,355	410	.59	65	100	1355	43.1	2.7	180°	1.1	2	26	KRUEGER LMHS	2
VAV 315	1	10"Ø	1,360	410	.6	65	100	1,360	43.3	2.7	180°	1.2	2	26	KRUEGER LMHS	2
VAV 316	2	8"Ø	600	180	.27	65	100	600	19.1	.9	180°	.2	2	25	KRUEGER LMHS	2
VAV 317	1	10"Ø	1,275	380	.53	65	100	1,275	40.6	2.4	180°	.9	2	25	KRUEGER LMHS	2
VAV 318	2	10"Ø	1130	340	.43	65	100	1130	36.0	1.9	180°	.6	2	25	KRUEGER LMHS	2
VAV 319	2	10"Ø	1,170	350	.46	65	100	1,170	37.3	2.0	180°	.7	2	25	KRUEGER LMHS	2
VAV 320	2	8"Ø	685	205	.35	65	100	685	21.8	1.0	180°	.4	2	25	KRUEGER LMHS	2
VAV 321	2	8"Ø	895	270	.56	65	100	895	28.5	1.7	180°	.9	2	25	KRUEGER LMHS	2
VAV 322	1	10"Ø	1,180	355	.47	65	100	1,180	37.6	2	180°	.7	2	25	KRUEGER LMHS	2
VAV 323	1	10"Ø	1260	380	.52	65	100	1260	40.1	2.3	180°	.9	2	25	KRUEGER LMHS	2
VAV 324	1	8"Ø	895	270	.56	65	100	895	28.5	1.7	180°	.9	2	25	KRUEGER LMHS	2
VAV 325	1	8"Ø	655	200	.32	65	100	655	20.9	.9	180°	.3	2	25	KRUEGER LMHS	1
VAV 326	1	8"Ø	505	155	.2	65	100	505	16.2	.6	180°	.1	2	25	KRUEGER LMHS	1
VAV 327	1	8"Ø	915	275	.58	65	100	915	29.1	1.8	180°	1.0	2	25	KRUEGER LMHS	1
VAV 328	2	6"Ø	430	130	.25	65	100	430	13.7	0.6	180°	.1	2	25	KRUEGER LMHS	1

1. VAV BOXES AND DUCTWORK ARE NEW.
2. VAV BOXES WITH REHEAT HOT WATER COIL ARE NEW AND ARE REPLACING EXISTING.



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PROFESSIONAL ENGINEER
10/06/08
WINWARD M. PACKER
No. 375080
STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES HVAC REPLACEMENT

MARK	DATE	DESCRIPTION
	10-6-2008	CITY COMMENTS

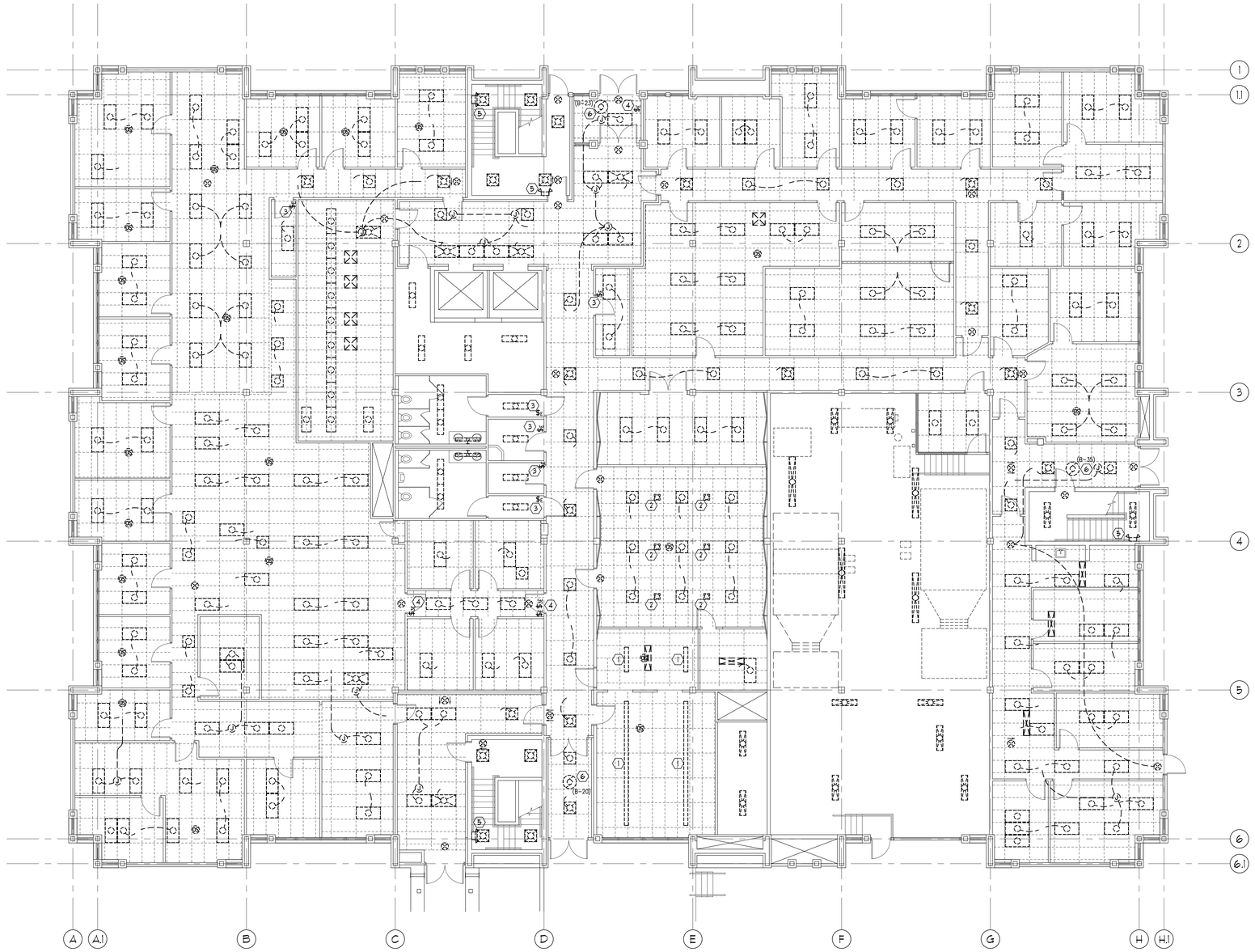
DATE:	9-3-2008
PROJECT NO:	-
HFSA PROJECT NO:	-
CAD DWG FILE NO:	
DRAWN BY:	
CHECKED BY:	SW
DESIGNED BY:	WP
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	CONSTRUCTION DOCUMENTS

SHEET TITLE

MECHANICAL SCHEDULES

ME602

SHEET - OF -



A1 1ST FLOOR ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

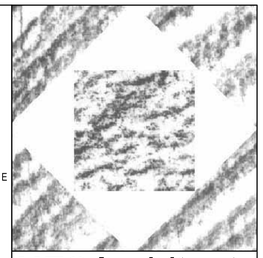
NORTH

GENERAL NOTES:

1. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
2. DEMOLITION PLAN IS SHOWN FOR CONTRACTORS REFERENCE ONLY. FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL EXISTING MATERIAL AND EQUIPMENT TO BE REMOVED. REMOVE ALL ABANDONED WIRING, CONDUIT, BOXES, OUTLETS, FIXTURES, EQUIPMENT, ETC., WHETHER SPECIFICALLY SHOWN OR NOT.
3. REMOVE ALL EXISTING FIXTURES, OUTLETS, SWITCHES, ETC., SHOWN ON THE DEMOLITION PLAN, EXCEPT WHERE SPECIFICALLY NOTED TO REMAIN OR BE RELOCATED.
4. CONTRACTOR MAY USE EXISTING BRANCH CIRCUIT WIRING AND RACEWAYS WHERE CONVENIENT TO CONNECT TO NEW ELECTRICAL DEVICES ONLY IF THE EXISTING WIRING AND RACEWAYS ARE IN GOOD CONDITION AND MEET DIVISION 16 SPECIFICATION REQUIREMENTS FOR NEW WIRING AND RACEWAYS.
5. WHERE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT INTERRUPTS EXISTING BRANCH CIRCUITS OR FEEDERS TO EXISTING EQUIPMENT TO REMAIN, PROVIDE NEW CONDUIT AND WIRING AS REQUIRED TO RECONNECT THE EXISTING EQUIPMENT.
6. ALL MATERIALS AND EQUIPMENT REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE TURNED OVER TO THE OWNER FOR STORAGE OR BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE OWNER.
7. TAE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. REMOVE/RELOCATE INDIRECT LINEAR FLUORESCENT FIXTURE INCLUDING MOUNTING HARDWARE, STORE AND RE-INSTALL IN ROOM, SEE SHEET EL101. FIXTURE SHALL BE WRAPPED IN PROTECTIVE BUBBLE WRAP AND PAPER. FIXTURE SHALL BE STORED IN SAFE LOCATION. CONTRACTOR SHALL DOCUMENT IN WRITING ANY EXISTING DAMAGE, MARKS OR DEFECTS AND SUBMIT LETTER TO OWNER AND GENERAL CONTRACTOR PRIOR TO PROCEEDING WITH WORK.
2. REMOVE/RELOCATE COMPACT FLUORESCENT DOWNLIGHT FIXTURE, STORE AND RE-INSTALL IN ROOM, SEE SHEET EL101. FIXTURE SHALL BE STORED IN SAFE LOCATION. CONTRACTOR SHALL DOCUMENT IN WRITING ANY EXISTING DAMAGE, MARKS OR DEFECTS AND SUBMIT LETTER TO OWNER AND GENERAL CONTRACTOR PRIOR TO PROCEEDING WITH WORK.
3. REPLACE MANUAL SWITCH WITH NEW OCCUPANCY SENSOR SWITCH, SEE SHEET EL101.
4. REMOVE SWITCH AND WIRING. PROVIDE BLANK COVERPLATE ON EXISTING OUTLET BOX.
5. REMOVE EMERGENCY BATTERY FIXTURE AND SURFACE RACEWAY.
6. EXISTING CEILING CABINET HEATER TO BE REPLACED. DISCONNECT ELECTRICAL SERVICE TO UNIT TO BE REMOVED.



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801-484-8161/ F. 484-3538

REGISTERED PROFESSIONAL ENGINEER
RAYMOND G. KOLKMAN
175780
9/2/08
STATE OF UTAH

ADMINISTRATION BUILDING HVAC UPGRADE

Department of Natural Resources
1600 W North Temple
Salt Lake City, Utah

MARK	DATE	DESCRIPTION

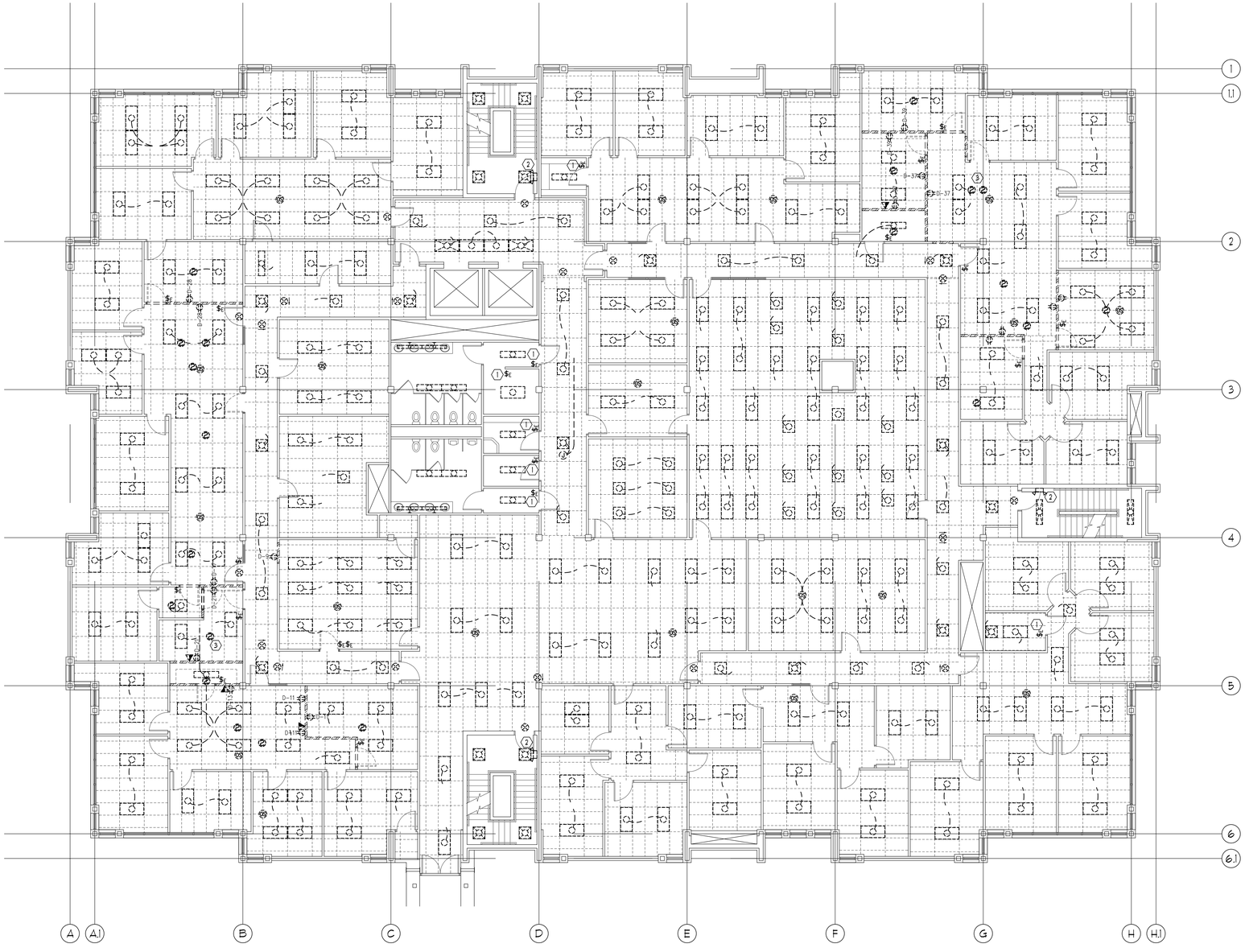
DATE:	SEPTEMBER 2, 2008
AGENCY PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	0758 E-101.dwg
DRAWN BY:	W.B.G.
CHECKED BY:	R.G.K.
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

1ST FLOOR ELECTRICAL DEMOLITION PLAN

ED101

SHEET 1 OF (10 ELECT)



A1 2ND FLOOR ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
2. DEMOLITION PLAN IS SHOWN FOR CONTRACTORS REFERENCE ONLY. FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL EXISTING MATERIAL AND EQUIPMENT TO BE REMOVED. REMOVE ALL ABANDONED WIRING, CONDUIT, BOXES, OUTLETS, FIXTURES, EQUIPMENT, ETC., WHETHER SPECIFICALLY SHOWN OR NOT.
3. REMOVE ALL EXISTING FIXTURES, OUTLETS, SWITCHES, ETC., SHOWN ON THE DEMOLITION PLAN, EXCEPT WHERE SPECIFICALLY NOTED TO REMAIN OR BE RELOCATED.
4. CONTRACTOR MAY USE EXISTING BRANCH CIRCUIT WIRING AND RACEWAYS WHERE CONVENIENT TO CONNECT TO NEW ELECTRICAL DEVICES ONLY IF THE EXISTING WIRING AND RACEWAYS ARE IN GOOD CONDITION AND MEET DIVISION 16 SPECIFICATION REQUIREMENTS FOR NEW WIRING AND RACEWAYS.
5. WHERE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT INTERRUPTS EXISTING BRANCH CIRCUITS OR FEEDERS TO EXISTING EQUIPMENT TO REMAIN, PROVIDE NEW CONDUIT AND WIRING AS REQUIRED TO RECONNECT THE EXISTING EQUIPMENT.
6. ALL MATERIALS AND EQUIPMENT REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE TURNED OVER TO THE OWNER FOR STORAGE OR BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE OWNER.
7. TAE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. REPLACE MANUAL SWITCH WITH NEW OCCUPANCY SENSOR SWITCH, SEE SHEET EL101
2. REMOVE EMERGENCY BATTERY FIXTURE AND SURFACE RACEWAY.
3. SALVAGE HEAT DETECTORS, SEE SHEETS EP101 AND EP103.

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REGISTERED PROFESSIONAL ENGINEER
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STATE OF UTAH

ADMINISTRATION BUILDING HVAC UPGRADE

Department of Natural Resources
1600 W North Temple
Salt Lake City, Utah

MARK	DATE	DESCRIPTION

DATE:	SEPTEMBER 2, 2008
AGENCY PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	0758 E-101.dwg
DRAWN BY:	W.B.G.
CHECKED BY:	R.G.K.
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

2nd FLOOR ELECTRICAL DEMOLITION PLAN

ED102

SHEET 2 OF (10 ELECT)

A1 3RD FLOOR ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

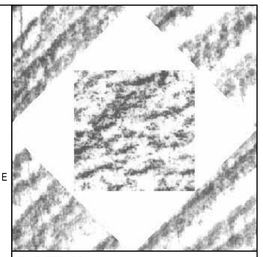
NORTH

GENERAL NOTES:

1. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
2. DEMOLITION PLAN IS SHOWN FOR CONTRACTORS REFERENCE ONLY. FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL EXISTING MATERIAL AND EQUIPMENT TO BE REMOVED. REMOVE ALL ABANDONED WIRING, CONDUIT, BOXES, OUTLETS, FIXTURES, EQUIPMENT, ETC., WHETHER SPECIFICALLY SHOWN OR NOT.
3. REMOVE ALL EXISTING FIXTURES, OUTLETS, SWITCHES, ETC., SHOWN ON THE DEMOLITION PLAN, EXCEPT WHERE SPECIFICALLY NOTED TO REMAIN OR BE RELOCATED.
4. CONTRACTOR MAY USE EXISTING BRANCH CIRCUIT WIRING AND RACEWAYS WHERE CONVENIENT TO CONNECT TO NEW ELECTRICAL DEVICES ONLY IF THE EXISTING WIRING AND RACEWAYS ARE IN GOOD CONDITION AND MEET DIVISION 16 SPECIFICATION REQUIREMENTS FOR NEW WIRING AND RACEWAYS.
5. WHERE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT INTERRUPTS EXISTING BRANCH CIRCUITS OR FEEDERS TO EXISTING EQUIPMENT TO REMAIN, PROVIDE NEW CONDUIT AND WIRING AS REQUIRED TO RECONNECT THE EXISTING EQUIPMENT.
6. ALL MATERIALS AND EQUIPMENT REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE TURNED OVER TO THE OWNER FOR STORAGE OR BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE OWNER.
7. TAE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. REMOVE/RELOCATE INDIRECT LINEAR FLUORESCENT FIXTURE INCLUDING MOUNTING HARDWARE, STORE AND RE-INSTALL IN ROOM, SEE SHEET EL103. FIXTURE SHALL BE WRAPPED IN PROTECTIVE BUBBLE WRAP AND PAPER. FIXTURE SHALL BE STORED IN SAFE LOCATION. CONTRACTOR SHALL DOCUMENT IN WRITING ANY EXISTING DAMAGE, MARKS OR DEFECTS AND SUBMIT LETTER TO OWNER AND GENERAL CONTRACTOR PRIOR TO PROCEEDING WITH WORK.
2. REPLACE MANUAL SWITCH WITH NEW OCCUPANCY SENSOR SWITCH, SEE SHEET EL103
3. REMOVE EMERGENCY BATTERY FIXTURE AND SURFACE RACEWAY.



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REGISTERED PROFESSIONAL ENGINEER
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175780
9/2/08
STATE OF UTAH

ADMINISTRATION BUILDING HVAC UPGRADE

Department of Natural Resources
1600 W North Temple
Salt Lake City, Utah

MARK	DATE	DESCRIPTION

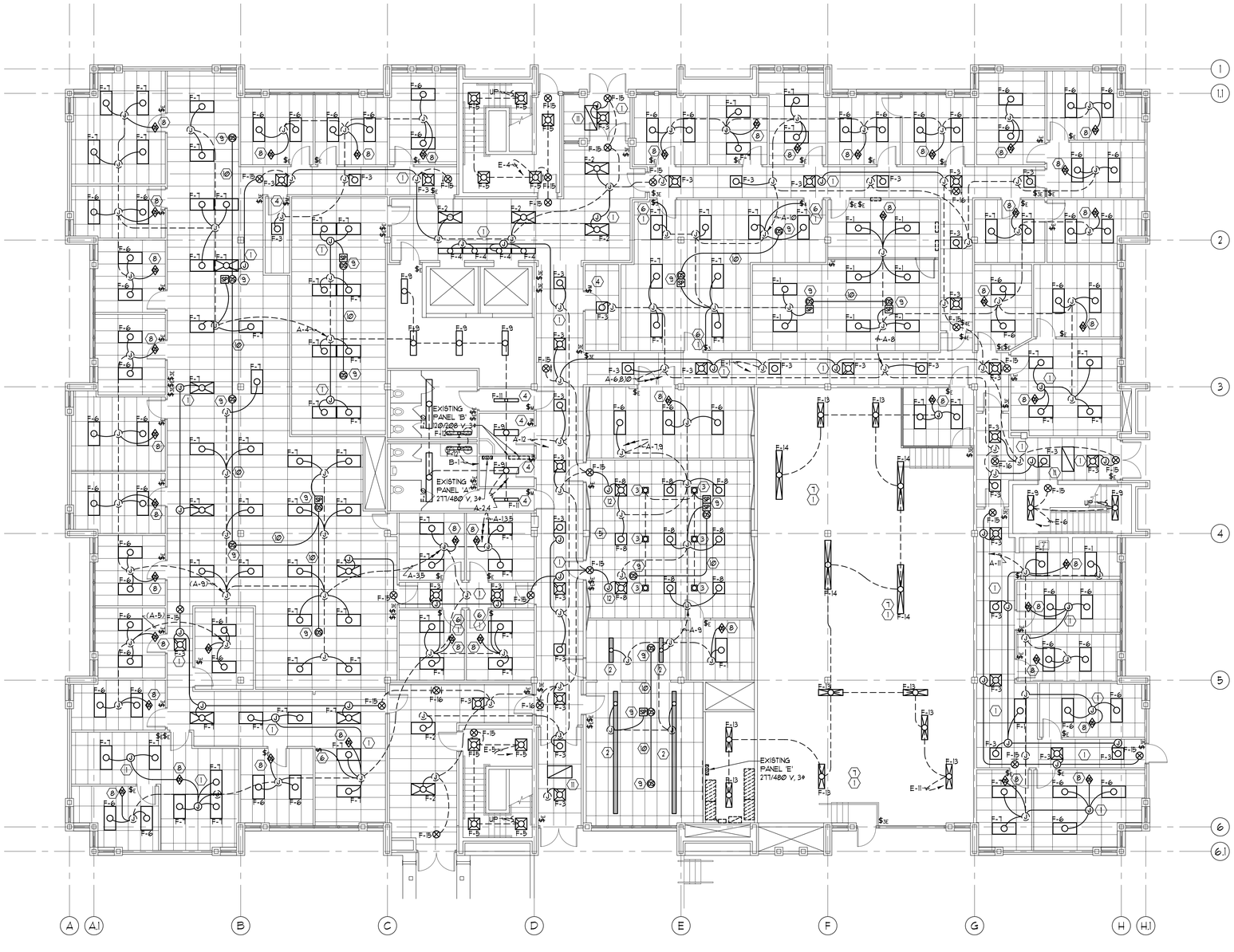
DATE:	SEPTEMBER 2, 2008
AGENCY PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	0758 E-101.dwg
DRAWN BY:	W.B.G.
CHECKED BY:	R.G.K.
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

3rd FLOOR ELECTRICAL DEMOLITION PLAN

ED103

SHEET 3 OF (10 ELECT)



A1 1ST FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

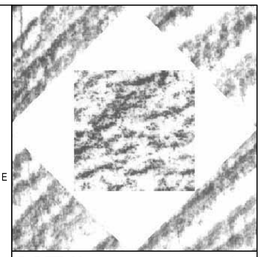
NORTH

GENERAL NOTES:

1. ALL LIGHT FIXTURES ARE NEW, REPLACING EXISTING LIGHT FIXTURES. CONNECT TO EXISTING BRANCH CIRCUIT(S) AND SWITCH(ES). MODIFY EXISTING BRANCH CIRCUITS AS NECESSARY.
2. COORDINATE FIXTURE LOCATIONS WITH ARCHITECT'S REFLECTED CEILING PLAN, CEILING CONTRACTOR, BUILDING STRUCTURE, MECHANICAL EQUIPMENT & DUCTWORK LOCATIONS, ETC.
3. WHERE EXISTING SWITCHING IS CIRCUITED FOR DUAL LEVEL CONTROL, CONNECT FIXTURES WITH TWO OUTSIDE LAMPS CONTROLLED BY ONE SWITCH AND INSIDE LAMP(S) CONTROLLED BY SECOND SWITCH.
4. WHERE SURFACE MOUNTED FIXTURES ARE REPLACED, AND NEW FIXTURE IS SMALLER OR OF DIFFERENT SHAPE THAN EXISTING , LEAVING DISCOLORED OUTLINE. REPAIR/PAINT EXISTING CEILING AS REQUIRED TO MATCH SURROUNDING SURFACES.
5. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
6. TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. PROVIDE NEW/MODIFY BRANCH CIRCUIT WIRING AS REQUIRED. INTERCEPT/EXTEND CONDUCTORS AND RACEWAYS. FIELD VERIFY REQUIREMENTS.
2. INSTALL INDIRECT LINEAR FLUORESCENT FIXTURE SALVAGED DURING DEMOLITION. CLEAN, RELAMP, AND LEAVE FIXTURE IN PROPER WORKING ORDER.
3. INSTALL COMPACT FLUORESCENT DOWNLIGHT FIXTURE SALVAGED DURING DEMOLITION. CLEAN, RELAMP, AND LEAVE FIXTURE IN PROPER WORKING ORDER.
4. PROVIDE NEW OCCUPANCY SENSOR SWITCH, REPLACE EXISTING MANUAL SWITCH.
5. RECONNECT LIGHTING AND CONTROLS IN CONFERENCE ROOM, FIELD VERIFY EXISTING SWITCHING, DIMMING, ETC. REQUIREMENTS. COORDINATE WITH OWNER AND GENERAL CONTRACTOR.
6. PROVIDE NEW MANUAL SWITCH TO CONTROL ROOM LIGHTING. INSTALL NEW SWITCH IN EXISTING WALL. PATCH AND REPAIR AS REQUIRED TO MATCH SURROUNDING SURFACES. COORDINATE WITH OWNER AND GENERAL CONTRACTOR. FIELD VERIFY REQUIREMENTS.
7. COORDINATE NEW FIXTURE LOCATION WITH EQUIPMENT, PIPING, ETC. IN MECHANICAL ROOM. COORDINATE WITH OWNER AND GENERAL CONTRACTOR.
8. PROVIDE INDIVIDUAL OFFICE/SPACE WITH LINE VOLTAGE CEILING OCCUPANCY SENSOR. MODIFY BRANCH CIRCUIT SUCH THAT LIGHTING AND MANUAL SWITCH ARE ON LOAD SIDE OF OCCUPANCY SENSOR.
9. PROVIDE OPEN OFFICE/SPACE WITH LOW VOLTAGE CEILING OCCUPANCY SENSOR AND SWITCH PACK(S). MODIFY BRANCH CIRCUIT SUCH THAT LIGHTING, MANUAL SWITCH(ES), CIRCUIT(S) ARE ON LOAD SIDE OF OCCUPANCY SENSOR. OCCUPANCY SENSORS IN SAME SPACE SHALL BE INTERLOCKED SUCH THAT THERE IS COMPLETE COVERAGE OF THE SPACE. CONTRACTOR SHALL VERIFY EXISTING CIRCUITING AND SWITCHING AND PROVIDE NECESSARY SWITCH PACKS AND CONNECTIONS AS REQUIRED.
10. INSTALL CLASS 2 LOW VOLTAGE WIRING FOR OCCUPANCY SENSORS IN MINIMUM ½" CONDUIT. VERIFY CONDUCTOR SIZE AND QUANTITY WITH OCCUPANCY SENSOR MANUFACTURER.
11. NEW VESTIBULE LIGHTING SHALL BE COORDINATED WITH NEW CEILING CABINET HEATER. COORDINATED REQUIREMENTS WITH MECHANICAL CONTRACTOR, CEILING CONTRACTOR, GENERAL CONTRACTOR, ARCHITECT AND OWNER.
12. CONNECT FIXTURE TO EMERGENCY GENERATOR CIRCUIT AND NORMAL SWITCHED POWER WITH EMERGENCY LIGHTING RELAY CONTROL DEVICE. FIXTURE SHALL OPERATE NORMALLY INCLUDING WITH SWITCHING AND TURN ON WITH EMERGENCY CIRCUIT WITH LOSS OF NORMAL POWER REGARDLESS OF SWITCHING. INSTALL RELAY CONTROL DEVICE PER MANUFACTURER'S WRITTEN SPECIFICATIONS AND INSTRUCTIONS. PROVIDE EMERGENCY LIGHTING RELAY CONTROL DEVICE BODINE TYPE 'GTD20A' OF APPROVED EQUAL IN ACCESSIBLE CEILING SPACE.



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DESIGNED BY:	W.B.G.
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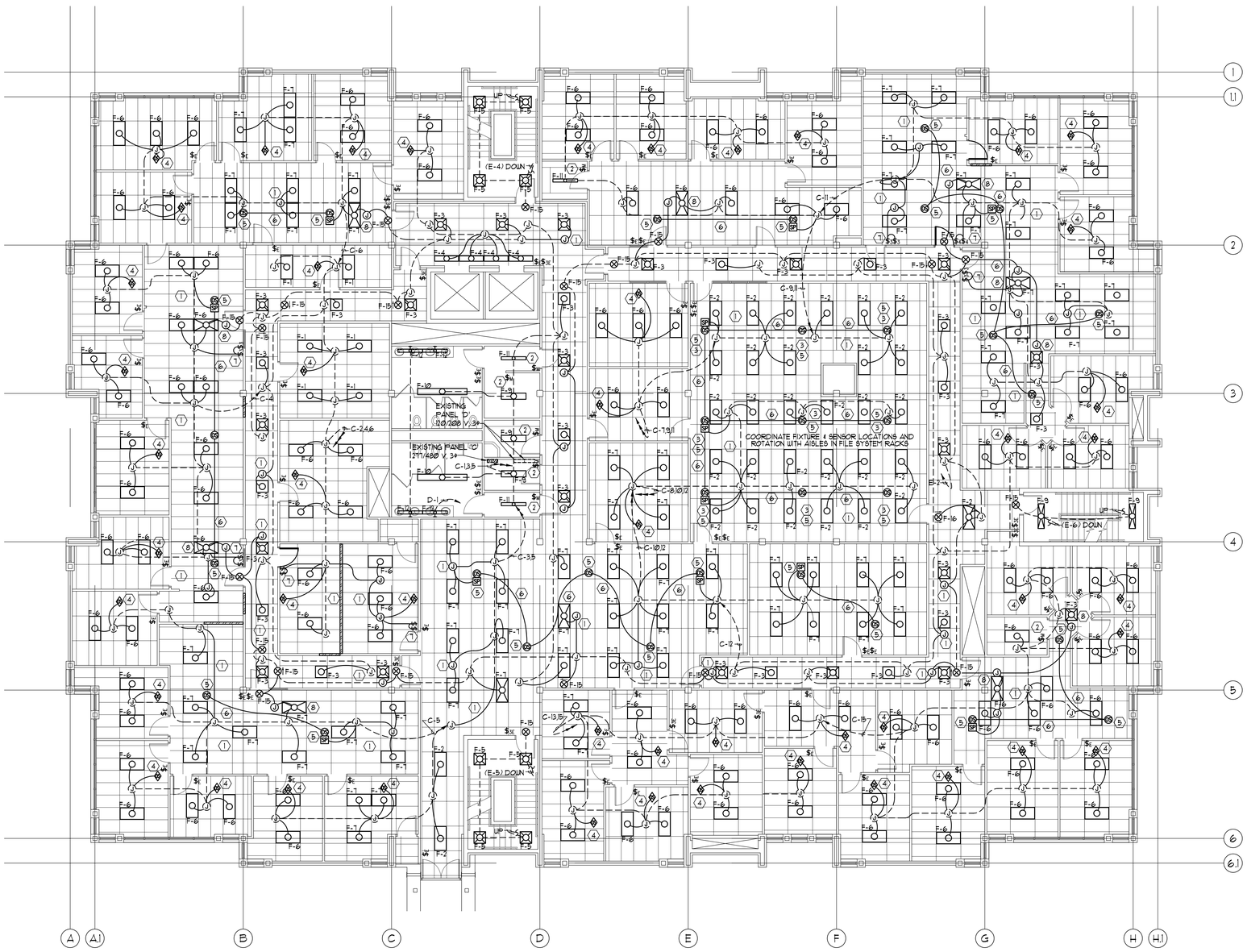
SHEET TITLE

1ST FLOOR LIGHTING PLAN

EL101

SHEET 4 OF (10 ELECT)



A1 2ND FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. ALL LIGHT FIXTURES ARE NEW, REPLACING EXISTING LIGHT FIXTURES. CONNECT TO EXISTING BRANCH CIRCUIT(S) AND SWITCH(ES). MODIFY EXISTING BRANCH CIRCUITS AS NECESSARY.
2. COORDINATE FIXTURE LOCATIONS WITH ARCHITECT'S REFLECTED CEILING PLAN, CEILING CONTRACTOR, BUILDING STRUCTURE, MECHANICAL EQUIPMENT & DUCTWORK LOCATIONS, ETC.
3. WHERE EXISTING SWITCHING IS CIRCUITED FOR DUAL LEVEL CONTROL, CONNECT FIXTURES WITH TWO OUTSIDE LAMPS CONTROLLED BY ONE SWITCH AND INSIDE LAMP(S) CONTROLLED BY SECOND SWITCH.
4. WHERE SURFACE MOUNTED FIXTURES ARE REPLACED, AND NEW FIXTURE IS SMALLER OR OF DIFFERENT SHAPE THAN EXISTING , LEAVING DISCOLORED OUTLINE. REPAIR/PAINT EXISTING CEILING AS REQUIRED TO MATCH SURROUNDING SURFACES.
5. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
6. TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. PROVIDE NEW/MODIFY BRANCH CIRCUIT WIRING AS REQUIRED. INTERCEPT/EXTEND CONDUCTORS AND RACEWAYS. FIELD VERIFY REQUIREMENTS.
2. PROVIDE NEW OCCUPANCY SENSOR SWITCH, REPLACE EXISTING MANUAL SWITCH.
3. PROVIDE OCCUPANCY SENSORS AT INTERSECTIONS AND AISLES OF RACK SYSTEM AS NECESSARY TO PROVIDE COMPLETE COVERAGE. DEVICES ARE SHOWN FOR REFERENCE ONLY. PROVIDE OCCUPANCY SENSORS AND SWITCH PACKS AS REQUIRED. COORDINATE ROOM EQUIPMENT PLAN WITH OWNER AND GENERAL CONTRACTOR PRIOR TO BEGINNING WORK.
4. PROVIDE INDIVIDUAL OFFICE/SPACE WITH LINE VOLTAGE CEILING OCCUPANCY SENSOR. MODIFY BRANCH CIRCUIT SUCH THAT LIGHTING AND MANUAL SWITCH ARE ON LOAD SIDE OF OCCUPANCY SENSOR.
5. PROVIDE OPEN OFFICE/SPACE WITH LOW VOLTAGE CEILING OCCUPANCY SENSOR AND SWITCH PACK(S). MODIFY BRANCH CIRCUIT SUCH THAT LIGHTING, MANUAL SWITCH(ES), CIRCUIT(S) ARE ON LOAD SIDE OF OCCUPANCY SENSOR. OCCUPANCY SENSORS IN SAME SPACE SHALL BE INTERLOCKED SUCH THAT THERE IS COMPLETE COVERAGE OF THE SPACE. CONTRACTOR SHALL VERIFY EXISTING CIRCUITING AND SWITCHING AND PROVIDE NECESSARY SWITCH PACKS AND CONNECTIONS AS REQUIRED.
6. INSTALL CLASS 2 LOW VOLTAGE WIRING FOR OCCUPANCY SENSORS IN MINIMUM ½" CONDUIT. VERIFY CONDUCTOR SIZE AND QUANTITY WITH OCCUPANCY SENSOR MANUFACTURER.
7. PROVIDE NEW MANUAL SWITCH TO CONTROL ROOM LIGHTING. MODIFY BRANCH CIRCUIT AS REQUIRED FOR NEW SWITCH(ES), INCLUDING INBOARD / OUTBOARD LAMP OPERATION. INSTALL NEW SWITCH IN EXISTING WALL. PATCH AND REPAIR AS REQUIRED TO MATCH SURROUNDING SURFACES. COORDINATE WITH OWNER AND GENERAL CONTRACTOR. FIELD VERIFY REQUIREMENTS.
8. CONNECT FIXTURE TO EMERGENCY GENERATOR CIRCUIT AND NORMAL SWITCHED POWER WITH EMERGENCY LIGHTING RELAY CONTROL DEVICE. FIXTURE SHALL OPERATE NORMALLY INCLUDING WITH SWITCHING AND TURN ON WITH EMERGENCY CIRCUIT WITH LOSS OF NORMAL POWER REGARDLESS OF SWITCHING. INSTALL RELAY CONTROL DEVICE PER MANUFACTURER'S WRITTEN SPECIFICATIONS AND INSTRUCTIONS. PROVIDE EMERGENCY LIGHTING RELAY CONTROL DEVICE BODINE TYPE 'GTD' OF APPROVED EQUAL.

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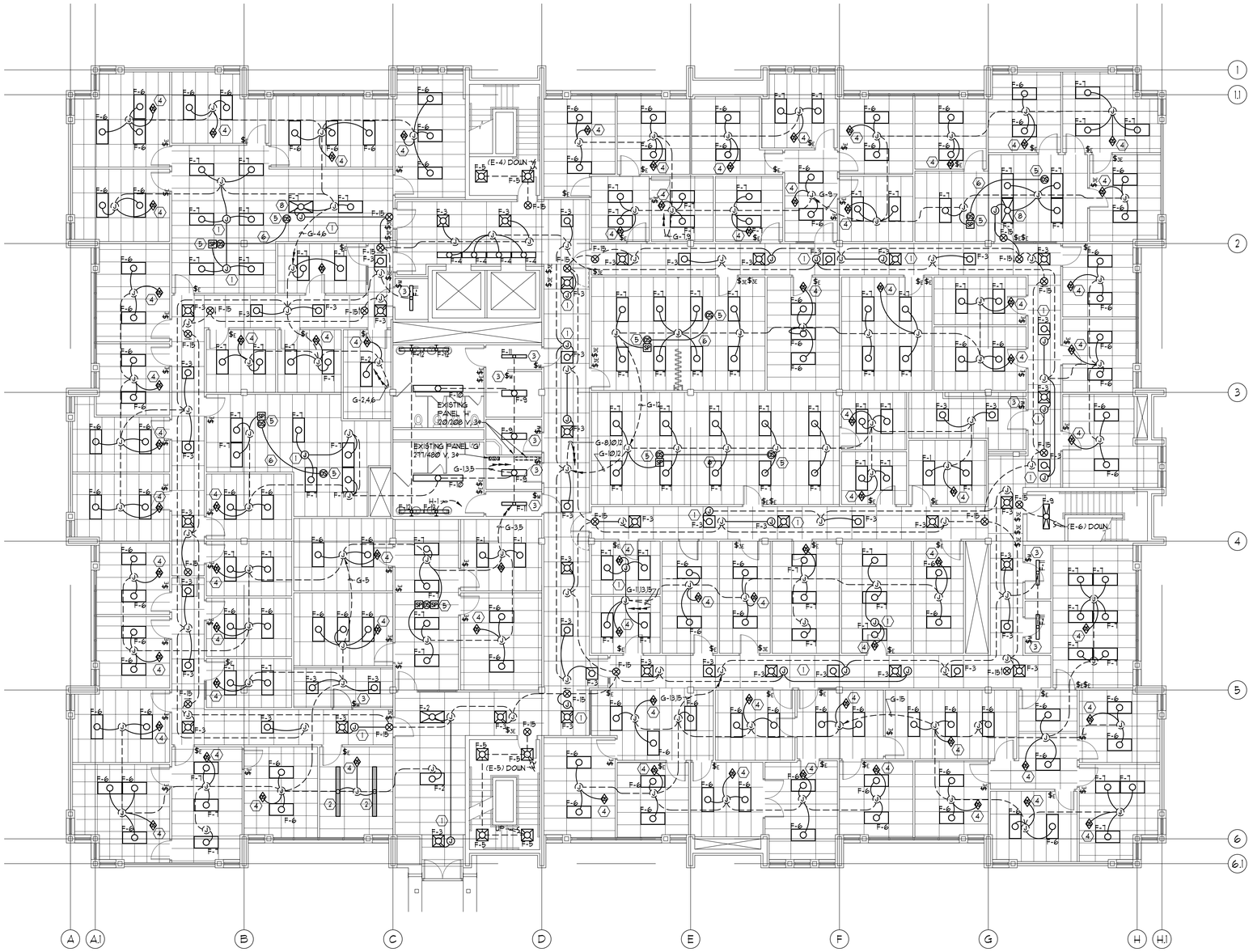
CHECKED BY:	R.G.K.
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

2ND FLOOR LIGHTING PLAN

EL102

SHEET 5 OF (10 ELECT)



GENERAL NOTES:

1. ALL LIGHT FIXTURES ARE NEW, REPLACING EXISTING LIGHT FIXTURES. CONNECT TO EXISTING BRANCH CIRCUIT(S) AND SWITCH(ES). MODIFY EXISTING BRANCH CIRCUITS AS NECESSARY.
2. COORDINATE FIXTURE LOCATIONS WITH ARCHITECT'S REFLECTED CEILING PLAN, CEILING CONTRACTOR, BUILDING STRUCTURE, MECHANICAL EQUIPMENT & DUCTWORK LOCATIONS, ETC.
3. WHERE EXISTING SWITCHING IS CIRCUITED FOR DUAL LEVEL CONTROL, CONNECT FIXTURES WITH TWO OUTSIDE LAMPS CONTROLLED BY ONE SWITCH AND INSIDE LAMP(S) CONTROLLED BY SECOND SWITCH.
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6. TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. PROVIDE NEW/MODIFY BRANCH CIRCUIT WIRING AS REQUIRED. INTERCEPT/EXTEND CONDUCTORS AND RACEWAYS. FIELD VERIFY REQUIREMENTS.
2. INSTALL INDIRECT LINEAR FLUORESCENT FIXTURE SALVAGED DURING DEMOLITION. CLEAN, RELAMP, AND LEAVE FIXTURE IN PROPER WORKING ORDER.
3. PROVIDE NEW OCCUPANCY SENSOR SWITCH, REPLACE EXISTING MANUAL SWITCH.
4. PROVIDE INDIVIDUAL OFFICE/SPACE WITH LINE VOLTAGE CEILING OCCUPANCY SENSOR. MODIFY BRANCH CIRCUIT SUCH THAT LIGHTING AND MANUAL SWITCH ARE ON LOAD SIDE OF OCCUPANCY SENSOR.
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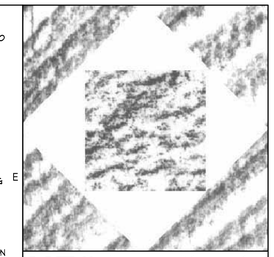
6. INSTALL CLASS 2 LOW VOLTAGE WIRING FOR OCCUPANCY SENSORS IN MINIMUM ½" CONDUIT. VERIFY CONDUCTOR SIZE AND QUANTITY WITH OCCUPANCY SENSOR MANUFACTURER.
7. CONNECT FIXTURE TO EMERGENCY GENERATOR CIRCUIT AND NORMAL SWITCHED POWER WITH EMERGENCY LIGHTING RELAY CONTROL DEVICE. FIXTURE SHALL OPERATE NORMALLY INCLUDING WITH SWITCHING AND TURN ON WITH EMERGENCY CIRCUIT WITH LOSS OF NORMAL POWER REGARDLESS OF SWITCHING. INSTALL RELAY CONTROL DEVICE PER MANUFACTURER'S WRITTEN SPECIFICATIONS AND INSTRUCTIONS. PROVIDE EMERGENCY LIGHTING RELAY CONTROL DEVICE BODINE TYPE 'GTD' OF APPROVED EQUAL.



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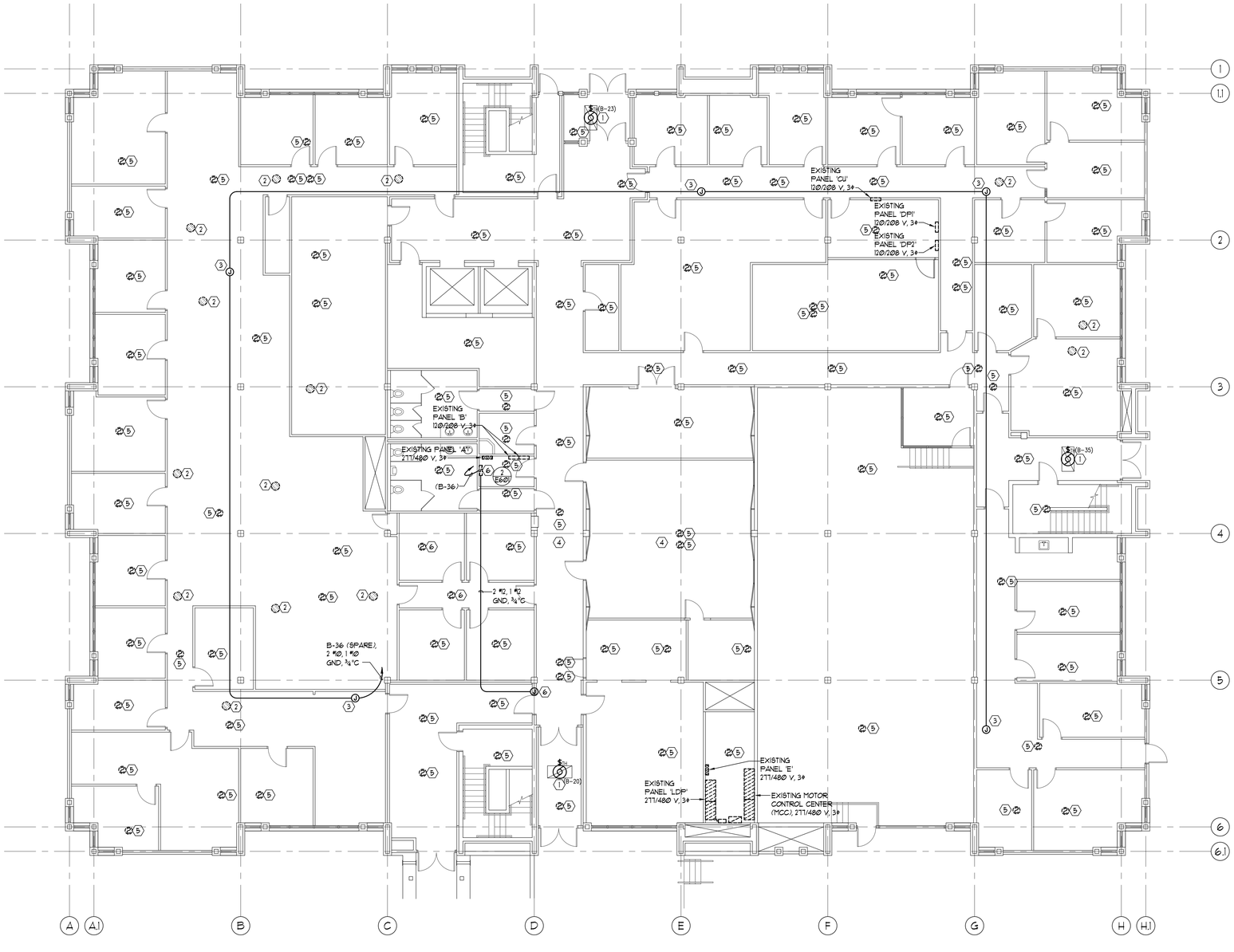
SHEET TITLE

3RD FLOOR LIGHTING PLAN

EL103

SHEET 6 OF (10 ELECT)



A1 1ST FLOOR EQUIPMENT PLAN
SCALE: 1/8" = 1'-0"

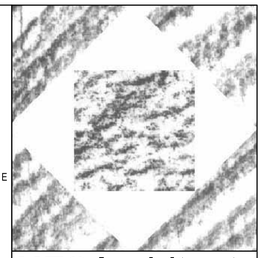
NORTH

GENERAL NOTES:

1. THE EXISTING BUILDING IS PROTECTED THROUGHOUT BY AN AUTOMATIC FIRE ALARM SYSTEM WHICH IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION PERIOD.
2. SUBMIT REQUESTS FOR FIRE ALARM OUTAGES TO THE OWNER'S PROJECT MANAGER NOT LESS THAN 7 DAY PRIOR TO ANY PROPOSED FIRE ALARM OUTAGES.
3. IMMEDIATELY NOTIFY THE OWNER'S PROJECT MANAGER IF THE FIRE ALARM IS UNINTENTIONALLY DISABLED AND IMMEDIATELY MAKE REPAIRS TO RESTORE THE SYSTEM TO AN OPERATIONAL CONDITION.
4. THE CONTRACTOR SHALL MAINTAIN A FIRE WATCH DURING ALL FIRE ALARM SYSTEM OUTAGES IN ACCORDANCE WITH IFC SECTION 901.7.
5. ANY WORK PERFORMED ON THE FIRE ALARM SYSTEM SHALL BE APPROVED IN ADVANCE BY THE FIRE ALARM SYSTEM FACTORY REPRESENTATIVE. ALL NEW DEVICES SHALL BE COMPATIBLE WITH EXISTING SYSTEM AND APPROVED BY THE MANUFACTURER. CERBERUS - CONTACT: ALARM CONTROLS COMPANY (801) 486-8731.
6. PROTECT EXISTING SMOKE AND HEAT DETECTORS IN AREAS OF CONSTRUCTION FROM EXCESSIVE DUST ACCUMULATION BY MEANS OF TEMPORARY DUCT COVERS DURING DUST PRODUCING WORK OPERATIONS. REMOVE DUST COVERS IMMEDIATELY UPON COMPLETION OF DUST PRODUCING WORK.
7. CLEAN ALL EXISTING AND RELOCATED SMOKE AND HEAT DETECTORS AFFECTED BY CONSTRUCTION I ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTION UPON COMPLETION OF WORK PRIOR TO SUBSTANTIAL COMPLETION.
8. TEST ALL SMOKE AND HEAT DETECTORS AFTER CLEANING AND PRIOR TO SUBSTANTIAL COMPLETION. TESTING SHALL BE PERFORMED BY A FACTORY AUTHORIZED AND TRAINED TECHNICIAN OF THE FIRE ALARM SYSTEM MANUFACTURER. CERBERUS - CONTACT: ALARM CONTROLS COMPANY (801) 486-8731.
9. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
10. TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. NEW CEILING CABINET HEATER 120V, 1/15 HP (REPLACES EXISTING UNIT). DISCONNECT ELECTRICAL SERVICE TO UNIT TO BE REMOVED AND CONNECT NEW UNIT. COORDINATE LIGHTING LAYOUT AND REQUIREMENTS WITH NEW UNIT. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR, GENERAL CONTRACTOR AND OWNER.
2. RELOCATE SPEAKERS FROM EXISTING CEILING TO NEW CEILING AND RECONNECT TO EXISTING SOUND/PA SYSTEM CIRCUIT(S). PROVIDE TEMPORARY SUPPORT AND CONNECTIONS AS REQUIRED TO KEEP EXISTING SPEAKERS OPERATIONAL THROUGHOUT DEMOLITION AND CONSTRUCTION. SOUND SYSTEM WORK SHALL BE PERFORMED BY QUALIFIED PERSONNEL WITH SOUND SYSTEM EXPERIENCE. SPEAKERS SHOWN ARE FOR REFERENCE. FIELD VERIFY QUANTITIES AND REQUIREMENTS. COORDINATE WITH OWNER PROJECT MANAGER AND GENERAL CONTRACTOR PRIOR TO BEGINNING WORK.
3. PROVIDE JUNCTION BOX WITH 120 VOLT CIRCUIT FOR VAV BOX CONTROL POWER/TRANSFORMER BY OTHERS. INSTALL JUNCTION BOX IN ACCESSIBLE LOCATION ABOVE CEILING. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.
4. RELOCATE EXISTING CEILING MOUNTED EQUIPMENT (WIRELESS NETWORK ANTENNAS, PROJECTORS, MONITORS, SPEAKERS, ETC.) FROM EXISTING CEILING TO NEW CEILING AND RECONNECT TO EXISTING CIRCUIT. PROVIDE TEMPORARY SUPPORT AND CONNECTIONS AS REQUIRED TO KEEP EXISTING EQUIPMENT OPERATIONAL THROUGHOUT DEMOLITION AND CONSTRUCTION AS REQUIRED. FIELD VERIFY QUANTITIES AND REQUIREMENTS. COORDINATE WITH OWNER PROJECT MANAGER AND GENERAL CONTRACTOR PRIOR TO BEGINNING WORK.
5. RELOCATE EXISTING SMOKE AND HEAT DETECTORS FROM EXISTING CEILING TO NEW CEILING AND RECONNECT TO EXISTING INITIATING DEVICE CIRCUIT. PROVIDE TEMPORARY SUPPORT AND CONNECTIONS AS REQUIRED TO KEEP EXISTING DETECTORS AND CIRCUITS OPERATIONAL THROUGHOUT DEMOLITION AND CONSTRUCTION. SEE GENERAL NOTES, THIS SHEET.
6. PROVIDE POWER AND CONTROL CONNECTIONS TO DUCT FIRE/SMOKE DAMPER, SEE TYPICAL FIRE SAFETY FUNCTION DEVICE CONTROL WIRING DIAGRAM SHEET E601. PROVIDE LINE VOLTAGE WIRING TO DUCT FIRE/SMOKE DAMPER FROM FIRE ALARM CABINET IN ELECTRICAL ROOM. PROVIDE ADDRESSABLE CONTROL RELAY AND POWER RELAY AT EXISTING FIRE ALARM CABINET AND INTERLOCK DEVICES WITH FIRE ALARM SYSTEM: POWER SUPPLY, INITIATING DEVICE CIRCUIT, SIGNAL LINE LOOP, ETC. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR AND FIRE ALARM SYSTEM MANUFACTURE REPRESENTATIVE.



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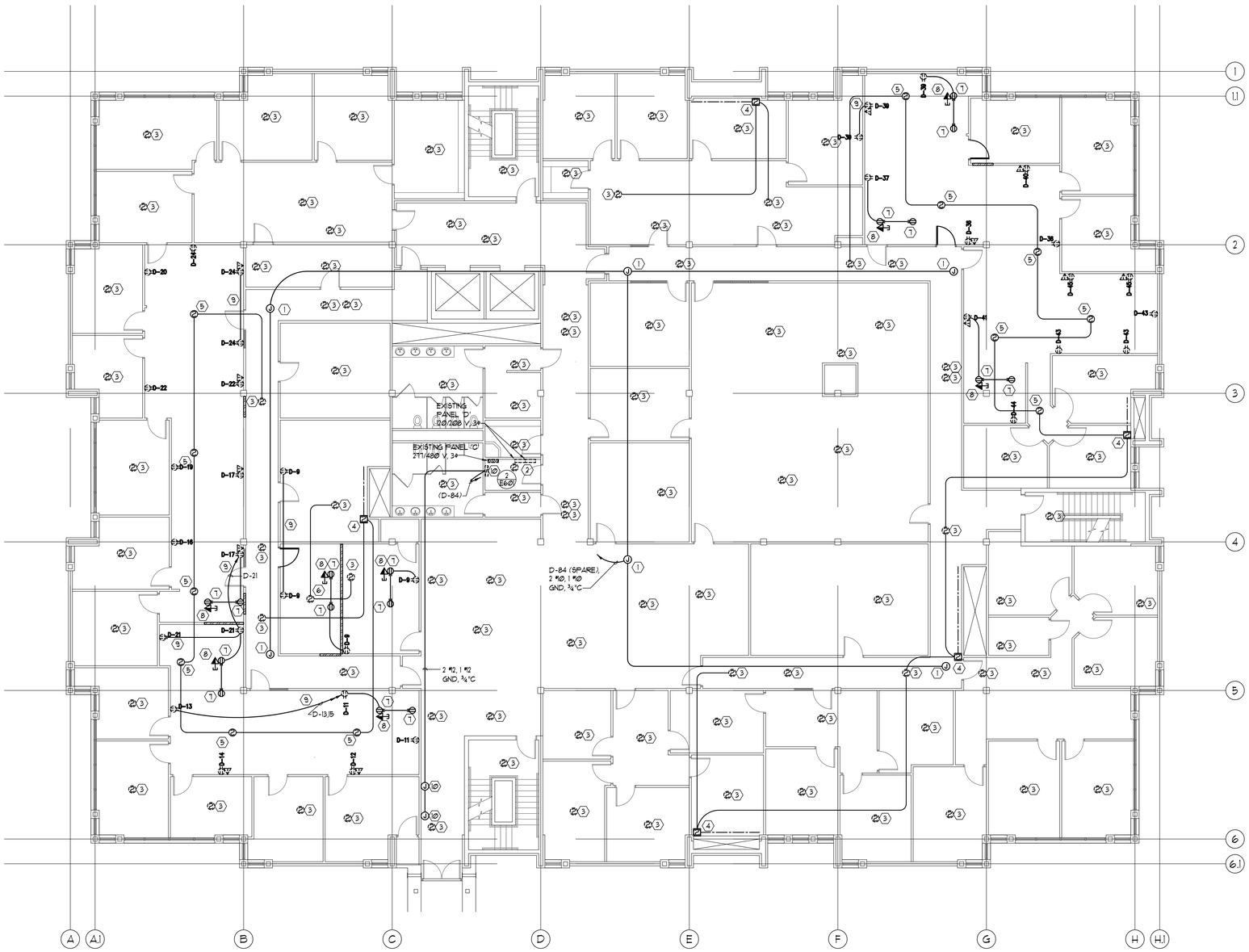
SHEET TITLE

1ST FLOOR EQUIPMENT PLAN

EP101

SHEET 7 OF (10 ELECT)



A1 2ND FLOOR EQUIPMENT PLAN
SCALE: 1/8" = 1'-0"

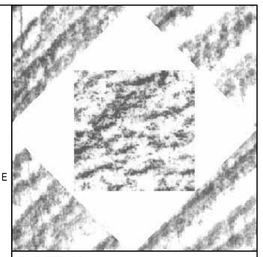
NORTH

GENERAL NOTES:

1. THE EXISTING BUILDING IS PROTECTED THROUGHOUT BY AN AUTOMATIC FIRE ALARM SYSTEM WHICH IS TO REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION PERIOD.
2. SUBMIT REQUESTS FOR FIRE ALARM OUTAGES TO THE OWNER'S PROJECT MANAGER NOT LESS THAN 7 DAY PRIOR TO ANY PROPOSED FIRE ALARM OUTAGES.
3. IMMEDIATELY NOTIFY THE OWNER'S PROJECT MANAGER IF THE FIRE ALARM IS UNINTENTIONALLY DISABLED AND IMMEDIATELY MAKE REPAIRS TO RESTORE THE SYSTEM TO AN OPERATIONAL CONDITION.
4. THE CONTRACTOR SHALL MAINTAIN A FIRE WATCH DURING ALL FIRE ALARM SYSTEM OUTAGES IN ACCORDANCE WITH IFC SECTION 901.7.
5. ANY WORK PERFORMED ON THE FIRE ALARM SYSTEM SHALL BE APPROVED IN ADVANCE BY THE FIRE ALARM SYSTEM FACTORY REPRESENTATIVE. ALL NEW DEVICES SHALL BE COMPATIBLE WITH EXISTING SYSTEM AND APPROVED BY THE MANUFACTURER. CERBERUS - CONTACT: ALARM CONTROLS COMPANY (801) 486-8731.
6. PROTECT EXISTING SMOKE AND HEAT DETECTORS IN AREAS OF CONSTRUCTION FROM EXCESSIVE DUST ACCUMULATION BY MEANS OF TEMPORARY DUCT COVERS DURING DUST PRODUCING WORK OPERATIONS. REMOVE DUST COVERS IMMEDIATELY UPON COMPLETION OF DUST PRODUCING WORK.
7. CLEAN ALL EXISTING AND RELOCATED SMOKE AND HEAT DETECTORS AFFECTED BY CONSTRUCTION I ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTION UPON COMPLETION OF WORK PRIOR TO SUBSTANTIAL COMPLETION.
8. TEST ALL SMOKE AND HEAT DETECTORS AFTER CLEANING AND PRIOR TO SUBSTANTIAL COMPLETION. TESTING SHALL BE PERFORMED BY A FACTORY AUTHORIZED AND TRAINED TECHNICIAN OF THE FIRE ALARM SYSTEM MANUFACTURER. CERBERUS - CONTACT: ALARM CONTROLS COMPANY (801) 486-8731.
9. LOCATIONS OF EXISTING ELECTRICAL EQUIPMENT, LIGHTING, SWITCHES, OUTLETS, BRANCH CIRCUIT WIRING, ETC., ARE BASED ON EXISTING BUILDING ELECTRICAL DRAWINGS AND FIELD OBSERVATION OF EXISTING SURFACE CONDITIONS. FIELD VERIFY EXISTING LOCATIONS AND CIRCUITING AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WHICH MAY ADVERSELY AFFECT COMPLETION OF THE WORK.
10. TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO THE EXISTING BUILDING. REPAIR ALL DAMAGE INCURRED BY DEMOLITION AND NEW CONSTRUCTION TO EXACTLY MATCH SURROUNDING SURFACES AND/OR CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER. COORDINATE REPAIRS WITH THE GENERAL CONTRACTOR.

KEYED NOTES:

1. PROVIDE JUNCTION BOX WITH 120 VOLT CIRCUIT FOR VAV BOX CONTROL POWER/TRANSFORMER BY OTHERS. INSTALL JUNCTION BOX IN ACCESSIBLE LOCATION ABOVE CEILING. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.
2. PROVIDE 1P-20A BRANCH BREAKER IN EXISTING GTE/SYLVANIA PANELBOARD INCLUDING ALL NECESSARY HARDWARE AND ACCESSORIES.
3. RELOCATE EXISTING SMOKE AND HEAT DETECTORS FROM EXISTING CEILING TO NEW CEILING AND RECONNECT TO EXISTING INITIATING DEVICE CIRCUIT. PROVIDE TEMPORARY SUPPORT AND CONNECTIONS AS REQUIRED TO KEEP EXISTING DETECTORS AND CIRCUITS OPERATIONAL THROUGHOUT DEMOLITION AND CONSTRUCTION. SEE GENERAL NOTES, THIS SHEET.
4. PROVIDE NEW DUCT SMOKE DETECTOR WITH SAMPLING TUBE. INSTALL IN RETURN AIR DUCT PER NFPA REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS. CONNECT DETECTOR TO EXISTING SIGNAL LINE CIRCUIT. EXTEND EXISTING SIGNAL LINE CIRCUIT TO NEW DUCT SMOKE DETECTORS. INTERCEPT SIGNAL LINE CIRCUIT AT EXISTING SMOKE DETECTORS IN CORRIDOR. PROVIDE CONDUCTORS/CABLES PER MANUFACTURERS REQUIREMENTS IN RACEWAY(S). FIELD VERIFY REQUIREMENTS.
5. PROVIDE NEW SMOKE DETECTOR. CONNECT DETECTOR TO EXISTING SIGNAL LINE CIRCUIT. EXTEND EXISTING SIGNAL LINE CIRCUIT TO NEW DUCT SMOKE DETECTORS. INTERCEPT SIGNAL LINE CIRCUIT AT EXISTING SMOKE DETECTORS IN CORRIDOR. PROVIDE CONDUCTORS/CABLES PER MANUFACTURERS REQUIREMENTS IN RACEWAY(S). FIELD VERIFY REQUIREMENTS.
6. INSTALL HEAT DETECTORS SALVAGED DURING DEMOLITION TO NEW OFFICE CEILING AND CONNECT TO EXISTING FIRE ALARM INITIATING LOOP INCLUDING RACEWAY WITH CABLE/CONDUCTORS. COORDINATE REQUIREMENTS WITH FIRE ALARM SYSTEM REPRESENTATIVE AND EXISTING CONDITIONS.
7. PROVIDE NEW DUPLEX RECEPTACLE IN EXISTING WALL. CONNECT TO EXISTING OUTLET BRANCH CIRCUIT. PATCH, PAINT AND REPAIR WALL AS NECESSARY TO MATCH SURROUNDING SURFACE(S). COORDINATE WORK WITH GENERAL CONTRACTOR. COORDINATE OUTLET LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO BEGINNING WORK (OUTLET SHOWN FLOATING IN ROOM FOR REFERENCE ONLY.).
8. PROVIDE NEW TELE/DATA OUTLET IN EXISTING WALL. EXTEND 1" FROM OUTLET TO TELEPHONE TERMINAL BOARD IN ELECTRICAL ROOM. PATCH, PAINT AND REPAIR WALL AS NECESSARY TO MATCH SURROUNDING SURFACE(S). COORDINATE WORK WITH GENERAL CONTRACTOR. COORDINATE OUTLET LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO BEGINNING WORK (OUTLET SHOWN FLOATING IN ROOM FOR REFERENCE ONLY.).
9. WHERE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT INTERRUPTS EXISTING BRANCH CIRCUITS TO EXISTING EQUIPMENT TO REMAIN, PROVIDE NEW CONDUIT AND WIRING AS REQUIRED TO RECONNECT THE EXISTING EQUIPMENT.
10. PROVIDE POWER AND CONTROL CONNECTIONS TO DUCT FIRE/SMOKE DAMPER, SEE TYPICAL FIRE SAFETY FUNCTION DEVICE CONTROL WIRING DIAGRAM SHEET E601. PROVIDE LINE VOLTAGE WIRING TO DUCT FIRE/SMOKE DAMPER FROM FIRE ALARM CABINET IN ELECTRICAL ROOM. PROVIDE ADDRESSABLE CONTROL RELAY AND POWER RELAY AT EXISTING FIRE ALARM CABINET AND INTERLOCK DEVICES WITH FIRE ALARM SYSTEM'S POWER SUPPLY, INITIATING DEVICE CIRCUIT, SIGNAL LINE LOOP, ETC. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR AND FIRE ALARM SYSTEM MANUFACTURE REPRESENTATIVE.



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REGISTERED PROFESSIONAL ENGINEER
RAYMOND KOLKMAN
175780
09/09/08
STATE OF UTAH

ADMINISTRATION BUILDING HVAC UPGRADE

Department of Natural Resources
1600 W North Temple
Salt Lake City, Utah

MARK	DATE	DESCRIPTION

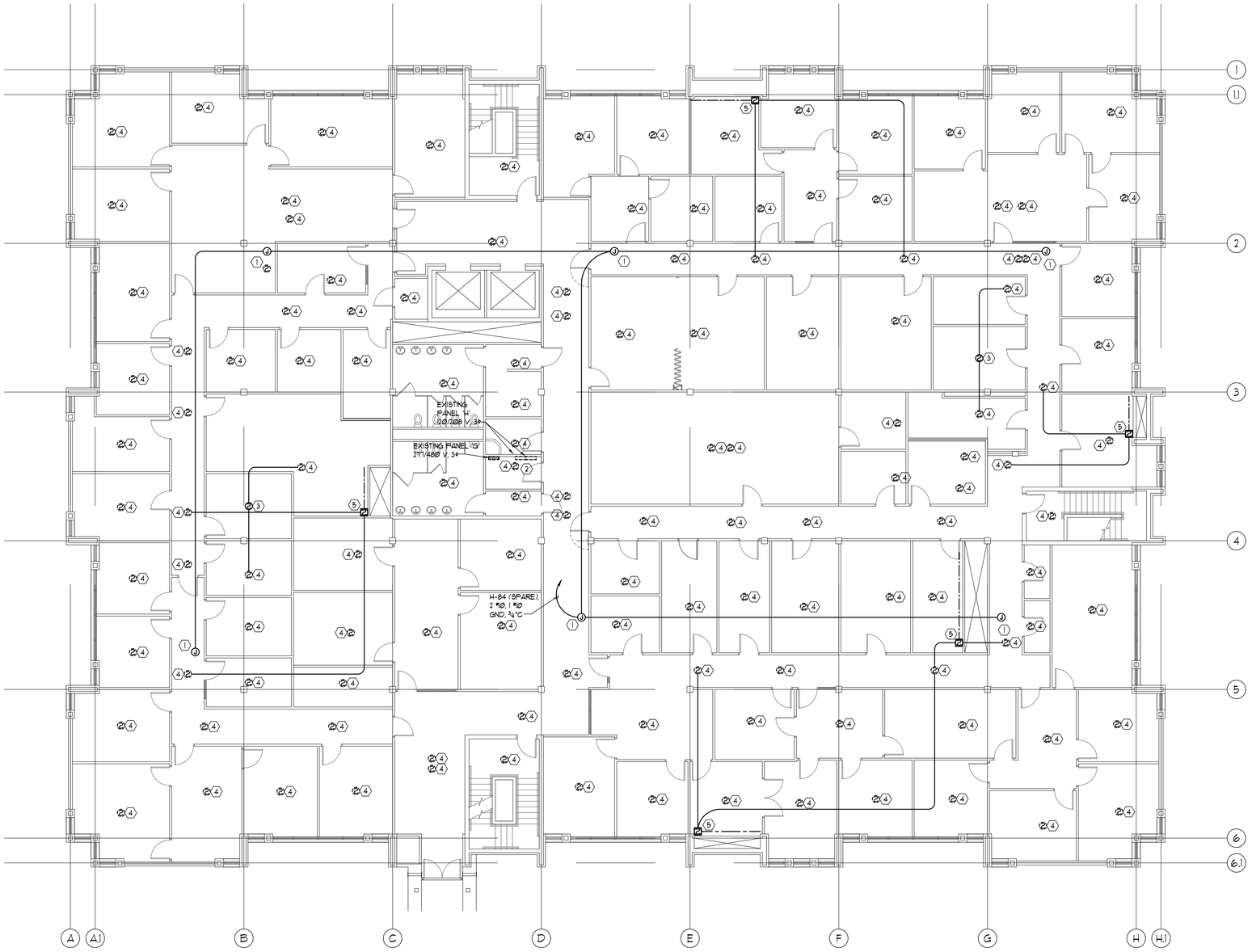
DATE:	SEPTEMBER 2, 2008
AGENCY PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	0758 EP101.dwg
DRAWN BY:	W.B.G.
CHECKED BY:	R.G.K.
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

2ND FLOOR EQUIPMENT PLAN

EP102

SHEET 8 OF (10 ELECT)



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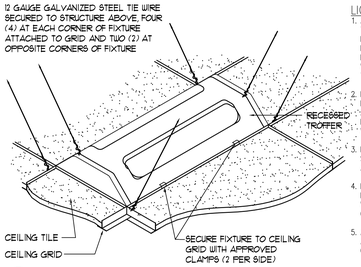
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

3RD FLOOR EQUIPMENT PLAN

EP103

SHEET 9 OF (10 ELECT)

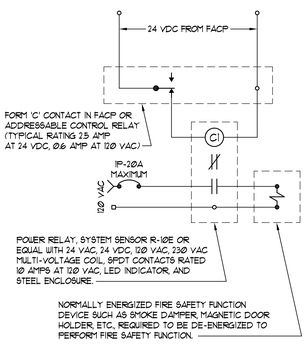


LIGHT FIXTURE NOTES

1. ALL LIGHTING FIXTURES SHALL BE POSITIVELY ATTACHED TO THE SUSPENDED CEILING SYSTEM. THE ATTACHMENT DEVICE SHALL HAVE A CAPACITY OF 100% OF THE LIGHTING FIXTURE WEIGHT ACTING ANY DIRECTION. 12 GA. HANGERS SHALL BE ATTACHED TO THE GRID MEMBERS WITHIN THREE INCHES OF EACH CORNER OF EACH FIXTURE. TANDEM FIXTURES MAY UTILIZE COMMON WIRES.
2. LIGHTING FIXTURES WEIGHING LESS THAN 56 LBS. SHALL HAVE IN ADDITION TO THE REQUIREMENTS OUTLINED ABOVE, TWO NO. 12 GA. HANGERS CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. THESE WIRES MAY BE SLACK.
3. LIGHTING FIXTURES WEIGHING 56 LBS. OR MORE SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY APPROVED HANGERS.
4. PENDANT HUNG LIGHTING FIXTURES SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE USING NO. 9 GA. WIRES OR APPROVED ALTERNATE SUPPORT WITHOUT USING CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT.
5. ABOVE REQUIREMENTS ARE A MINIMUM, PROVIDE SUPPORTS AS REQUIRED BY AUTHORITY HAVING JURISDICTION (AHJ), COORDINATE WITH AHJ PRIOR TO BEGINNING WORK.

1 / E601 TYPICAL LAY-IN FIXTURE SUPPORT DETAIL

SCALE: NOT TO SCALE



2 / E601 TYPICAL FIRE SAFETY FUNCTION DEVICE CONTROL WIRING DIAGRAM

SCALE: NOT TO SCALE

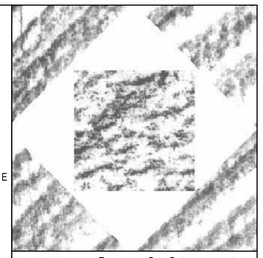
SYMBOL LIST

SYMBOL	DESCRIPTION
	NEW CEILING MOUNTED FIXTURE
	NEW WALL MOUNTED FIXTURE
	NEW RECESSED FIXTURE
	NEW FLUORESCENT FIXTURE
	NEW EXIT LIGHT WITH ARROW INDICATING DIRECTION OF EXIT
	EXISTING CEILING MOUNTED FIXTURE
	EXISTING WALL MOUNTED FIXTURE
	EXISTING RECESSED FIXTURE
	EXISTING FLUORESCENT FIXTURE
	EXISTING EXIT LIGHT
a	FIXTURE WITH LETTER INDICATING CONTROLLING SWITCH
	FIXTURE CONNECTED TO EMERGENCY GENERATOR BRANCH CIRCUIT
$	NEW SINGLE POLE SWITCH
$3	NEW THREE WAY SWITCH
$4	NEW FOUR WAY SWITCH
$M	NEW OCCUPANCY SENSOR WALL SWITCH
	NEW CEILING MOUNTED OCCUPANCY SENSOR (LINE VOLTAGE)
	NEW OCCUPANCY SENSOR
SP	NEW OCCUPANCY SENSOR SWITCHPACK
$E	EXISTING SINGLE POLE SWITCH
$3E	EXISTING THREE WAY SWITCH
$a	SWITCH WITH LETTER INDICATING CONTROLLED FIXTURES
J	NEW JUNCTION BOX
J	EXISTING JUNCTION BOX
	NEW DUPLEX CONVENIENCE OUTLET
	EXISTING DUPLEX CONVENIENCE OUTLET
	NEW TELEPHONE/DATA OUTLET
	EXISTING TELEPHONE/DATA OUTLET
	EXISTING POWER PANELBOARD, 120/208 VOLT, 3 PHASE
	EXISTING POWER PANELBOARD, 277/480 VOLT, 3 PHASE
A-13 3/4"	NEW 3 PHASE, 4 WIRE HOMERUN INDICATING PANEL AND CIRCUIT NUMBERS
	NEW BRANCH CIRCUIT CONCEALED IN WALL OR CEILING
	EXISTING BRANCH CIRCUIT
	NEW MOTOR
$TH	NEW MANUAL MOTOR STARTING SWITCH W/ THERMAL OVERLOAD PROTECTION
	EXISTING MOTOR
F-1	FIXTURE SCHEDULE SYMBOL
1	REFERENCE NOTE SYMBOL
102	ROOM NUMBER
2 / E-3	DETAIL NUMBER OR SECTION LETTER SHEET ON WHICH DETAIL OR SECTION IS SHOWN
WP	INDICATES ITEM IN WEATHERPROOF (NEMA 3R MINIMUM) ENCLOSURE

FIXTURE SCHEDULE

SYMBOL	MANUFACTURER	CATALOG NO.	DESCRIPTION	LAMP
F-1	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	4PS24-332G-FA12.125-2EB8LW-U 2DPG332-FS21-UNV-1/21-EB101(LW) SPS2GFSV1332-UNV-HI(LW) 2SP8G32-A12125-MVOLT-GEB101S(LW) L-A125-332-SD-SSD2(LW)-UE 2GC332-A125-UNV-EB82(LW)	2' X 4', 3 LAMP, LAY-IN FLUORESCENT FIXTURE WITH FLUSH STEEL DOOR, 0.125" THICK ACRYLIC PRISMATIC LENS, AND ONE (1) 1 LAMP / ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLASTS.	3F3218/ADV835/ALTO 1 / E601
F-2	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	4PS24-232G-FA12.125-EB8LW-U 2DPG232-FS21-UNV-EB101(LW) SPS2GFSV1332-UNV-HI(LW) 2SP8G232-A12125-MVOLT-GEB101S(LW) L-A125-232-SD-SSD(LW)-UE 2GC232-A125-UNV-EB81(LW)	2' X 4', 2 LAMP, LAY-IN FLUORESCENT FIXTURE WITH FLUSH STEEL DOOR, 0.125" THICK ACRYLIC PRISMATIC LENS, AND ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATTT BALLAST.	2F3218/ADV835/ALTO 1 / E601
F-3	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	4PS22-317G-FA-A12.125-EB8LW-U 2DPG317-FS21-UNV-1/2-EB101(LW) SPS2GFSV1317-UNV-HI(LW) 2SP8G317-A12125-MVOLT-GEB101S(LW) L-A125-317-SD-SSD(LW)-UE 2GC317-A125-UNV-EB81(LW)	2' X 2', 3 LAMP, LAY-IN FLUORESCENT FIXTURE WITH FLUSH STEEL DOOR, 0.125" THICK ACRYLIC PRISMATIC LENS, AND ONE (1) 3 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	3F1778/ADV835/ALTO 1 / E601
F-4	COLUMBIA LIGHTOLIER ENGINEERED LIGHTING LSI METALUX PMC LIGHTING	PW104-232G-LS-EB8LW-U 232 T-8WW-AKTB-UNV-10THD(LW) WWW-232-SSD(LW)-UE RWW-232-MI-UNV-EB81(LW) SLC-D-T-2T8-WHT-UNV(ISLW)	4', 2 LAMP, LAY-IN FLUORESCENT WALLWASH FIXTURE WITH PARABOLIC ANODIZED LOW IRIDESCENT ALUMINUM REFLECTOR AND ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	2F3218/ADV835/ALTO 1 / E601
F-5	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	SM22-317G-FA-A12.125-EB8LW-U 2SM-317-FS21-UNV-EB101(LW) 2M-317-A12125-MVOLT-GEB101S(LW) 2S-PA125X-317-SD-SSD(LW)-UE 2M317-A125-UNV-EB81(LW)	2' X 2', 3 LAMP, SURFACE FLUORESCENT FIXTURE WITH WHITE STEEL HOUSING, FLUSH STEEL DOOR, 0.125" THICK ACRYLIC PRISMATIC LENS, AND ONE (1) 3 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	3F1778/ADV835/ALTO
F-6	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	P424-432G-LD4X6-S-2EB8LW-U 2P3GS-432-24FL-UNV-2/2-EB101(LW) PLA2G24L5432-UNV-HI(LW) 2PM3NGB432-24LS-MVOLT-GEB101S(LW) N2P-G-24-432-FD-SSD2(LW)-UE 2EP3G432-46-UNV-EB82(LW)	2' X 4', 34 LAMP, LAY-IN FLUORESCENT FIXTURE WITH 3" PARABOLIC 24 CELL LOW IRIDESCENT SPECULAR LOUVER, FLUSH STEEL DOOR, AND TWO (2) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLASTS.	4F3218/ADV835/ALTO 1 / E601
F-7	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	P424-332G-LD3X6-S-2EB8LW-U 2P3GS-332-18FL-UNV-1/21-EB101(LW) PLA2G18L5332-UNV-P2 2PM3NGB332-18LS-MVOLT-GEB101S(LW) N2P-G-18-332-FD-SSD2(LW)-UE 2EP3G332-36-UNV-EB82(LW)	2' X 4', 3 LAMP, LAY-IN FLUORESCENT FIXTURE WITH 3" PARABOLIC 18 CELL LOW IRIDESCENT SPECULAR LOUVER, FLUSH STEEL DOOR, AND ONE (1) 1 LAMP / ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLASTS.	3F3218/ADV835/ALTO 1 / E601
F-8	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	P422-340TTG-LD3X3-S-2EB8LW-U 2P3GS-3CF40-33FL-UNV-1/21-EB101(LW) PLA2G9LP3FT-UNV-HI(LW) 2PM3NGB3CF40-9LS-MVOLT-GEB101S(LW) N2P-G-9-340BX-FD-SSD2(LW)-UE 2EP3G3BX40-33-UNV-TEB52(LW)	2' X 2', 3 LAMP, LAY-IN FLUORESCENT FIXTURE WITH 3" PARABOLIC 18 CELL LOW IRIDESCENT SPECULAR LOUVER, FLUSH STEEL DOOR, AND ONE (1) 1 LAMP / ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLASTS.	3FT40/2GII/RS/835 1 / E601
F-9	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	WC4-232-EB8LW-U CAN-232-UNV-EB101(LW) JS4A-232-UNV-HI(LW) LB-232-MVOLT-GEB101S(LW) IM6-232-SSD(LW)-UE W-232-UNV-EB81(LW)	4', 2 LAMP, SURFACE WRAP-AROUND FLUORESCENT FIXTURE WITH PRISMATIC LENS, WHITE STEEL HOUSING AND ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	2F3218/ADV835/ALTO
F-10	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	WCB-232-EB8LW-U TCAN-232-UNV-EB101(LW) JS8A-232-UNV-HI(LW) TLB-232-MVOLT-GEB101S(LW) IM6-2-232-SSD(LW)-UE 8T-W-232-UNV-EB81(LW)	8', TANDEM 2 LAMP, SURFACE WRAP-AROUND FLUORESCENT FIXTURE WITH PRISMATIC LENS, WHITE STEEL HOUSING AND ONE (1) 4 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	4F3218/ADV835/ALTO
F-11	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	PT4-132-EB8LW-U SJ-132-UNV-EB101(LW) JSC4-132-UNV-HI(LW) CB-132-MVOLT-GEB101S(LW) IM6-132-SSD(LW)-UE CR-132-UNV-ER81	4', 1 LAMP, SURFACE WRAP-AROUND FLUORESCENT FIXTURE WITH PRISMATIC LENS, WHITE STEEL HOUSING AND ONE (1) 1 LAMP <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	1F3218/ADV835/ALTO
F-12	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	WPM4-232-EB8LW-U CD-232-W-UNV-EB101(LW) CVBU-232-UNV-HI(LW) WP-232-MVOLT-GEB101S(LW) WB-232-WHT-SSD(LW)-UE B1-232-UNV-ER81	4', 2 LAMP, WALL MOUNTED FLUORESCENT FIXTURE WITH PRISMATIC LENS, WHITE FINISH AND ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	2F3218/ADV835/ALTO
F-13	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	CSR4-232-EB8LW-U IA-232-UNV-EB101(LW) KW4S-232-UNV-HI(LW) EJSA-232-MVOLT-GEB101S(LW) F20-232-SSD(LW)-UE IA-232-UNV-EB81(LW)	4', 2 LAMP, SURFACE INDUSTRIAL FLUORESCENT FIXTURE WITH WHITE STEEL HOUSING/REFLECTOR, 5-10% UPLIGHT AND ONE (1) 2 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	2F3218/ADV835/ALTO
F-14	COLUMBIA DAY-BRITE LIGHTOLIER LITHONIA LSI METALUX	CSR8-232-EB8LW-U TIA-232-UNV-EB101(LW) KW8S-232-UNV-HI(LW) TEJSA-232-MVOLT-GEB101S(LW) F20-2-232-SSD2(LW)-UE 8TIA-232-UNV-EB81(LW)	8', TANDEM 2 LAMP, SURFACE INDUSTRIAL FLUORESCENT FIXTURE WITH WHITE STEEL HOUSING/REFLECTOR, 5-10% UPLIGHT AND ONE (1) 4 LAMP, <10% THD UNIVERSAL ELECTRONIC INSTANT START LOW WATT BALLAST.	4F3218/ADV835/ALTO
F-15	DUAL-LITE LGHTGUARD LIGHTOLIER LITHONIA MCPHILBEN SURE-LITES	SE-S-G-W-E DX-L-N-1-G-W LD-N-1-G-W LE-S-W-1-G-120/277-ELN ER3OVL-1-W-G CX7-1-70-G-W	UNIVERSAL MOUNTED, SINGLE FACE, LIGHT EMITTING DIODE (LED) EXIT LIGHT WITH DIE CAST ALUMINUM HOUSING, WHITE FINISH, GREEN LETTERS ON STENCIL FACE, UNIVERSAL KNOCKOUT CHEVRON ARROWS, NICKEL CADMIUM BATTERY PACK WITH CHARGER & TEST SWITCH, AND 120/277 VOLT DUAL VOLTAGE INPUT.	FURNISHED W/ FIXTURE
F-16	DUAL-LITE LGHTGUARD LIGHTOLIER LITHONIA MCPHILBEN SURE-LITES	SE-D-G-W-E DX-L-N-2-G-W LD-N-2-G-W LE-S-W-2-G-120/277-ELN ER3OVL-2-W-G CX7-2-70-G-W	UNIVERSAL MOUNTED, DOUBLE FACE, LIGHT EMITTING DIODE (LED) EXIT LIGHT WITH DIE CAST ALUMINUM HOUSING, WHITE FINISH, GREEN LETTERS ON STENCIL FACE, UNIVERSAL KNOCKOUT CHEVRON ARROWS, NICKEL CADMIUM BATTERY PACK WITH CHARGER & TEST SWITCH, AND 120/277 VOLT DUAL VOLTAGE INPUT.	FURNISHED W/ FIXTURE

SEE SPEDCIFCATION FOR COMPLETE LAMP AND BALLAST REQUIREMENTS



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9/16/08
STATE OF UTAH

ADMINISTRATION BUILDING HVAC UPGRADE

Department of Natural Resources
1600 W North Temple
Salt Lake City, Utah

MARK	DATE	DESCRIPTION

DATE:	SEPTEMBER 2, 2008
AGENCY PROJECT NO:	07183500
HFSA PROJECT NO:	0758.01
CAD DWG FILE NO:	0758 E-601.dwg
DRAWN BY:	W.B.G.
CHECKED BY:	R.G.K.
DESIGNED BY:	W.B.G.
DWG TYPE:	ELECTRICAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

FIXTURE SCHEDULE SYMBOL LIST AND DETAILS

E-601

SHEET 10 OF (10 ELECT)