CODE ANALYSIS

APPLICABLE CODES

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

A. Occupancy and Group: _____ _____ _____ _____ _____

Change in Use: Yes _____ No __X__ Mixed Occupancy: Yes _____ No _____
Special Use and Occupancy (e.g. High Rise, Covered Mall): _____

B. Seismic Design Category: _____ Design Wind Speed: _____ 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: _____ South: _____ East: _____ West: _____

E. Mixed Occupancies: _____ Nonseparated Uses: _____

F: Sprinklers:

Required: _____ Provided: _____ Type of Sprinkler System: _____

G: Number of Stories: _____ Building Height: _____

H: Actual Area per Floor (square feet): _____

I: Tabular Area: _____

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: _____
2) Two Story: $A_a(2)$_____
3) Three Story: $A_a(3)$_____

d) Unlimited Area Building: Yes _____ No _____ Code Section: _____

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

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

L. Design Occupant Load: _____

Exit Width Required: _____ Exit Width Provided: _____

M. Minimum Number of Required Plumbing Facilities:

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

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.

OFFICE OF EDUCATION
UORS ALTERNATE
DATA CENTER UPGRADE
DFCM 08230200

1595 W 500 S
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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:

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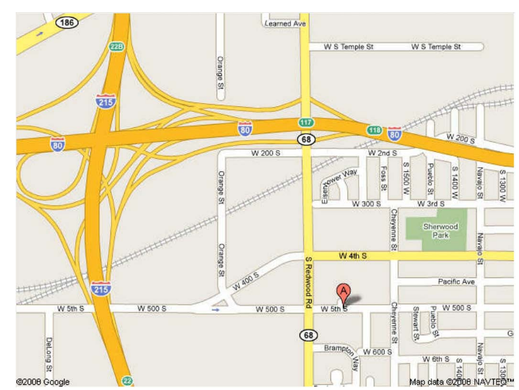
S1.2	STRUCTURAL SCHEDULES AND DETAILS
AD101	DEMOLITION PLAN
AE101	REMODEL PLANS
AE201	ELEVATIONS & DETAILS
AE501	DEMOLITION/REMODEL CEILING PLAN, DETAILS, FINISH SCHEDULE
MG001	MECHANICAL GENERAL NOTES AND LEGEND
MD101	COMPUTER ROOM DEMOLITION PLAN
ME101	COMPUTER ROOM MECHANICAL PLAN
ME102	MECHANICAL ROOF PLAN
ME601	MECHANICAL SCHEDULES AND DETAILS
EG001	SYMBOLS, ABBREVIATIONS AND INDEX
ES101	ELECTRICAL SITE PLAN
EP101	POWER PLAN
EL101	LIGHTING PLAN
EX501	ENLARGED ELECTRICAL PLANS
EX600	EXISTING ONE-LINE DIAGRAM
EX601	NEW ONE-LINE DIAGRAM
EX602	ELECTRICAL SCHEDULES



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STATE OF UTAH

GENERAL STRUCTURAL NOTES:

I. GENERAL:

A. THE STRUCTURAL DRAWINGS SHOW THE COMPLETED PROJECT. DETAILS, SECTIONS, AND NOTES SHOWN ON THE DRAWINGS SHALL BE TYPICAL AND APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS NOTED OR SHOWN OTHERWISE.

B. CONTRACTOR SHALL COMPARE ALL DIMENSIONS AND CONDITIONS ON CONTRACT DOCUMENTS AND AT THE SITE. ANY OMISSION OR CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. IN CASE OF ANY CONFLICT FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY ARCHITECT/ENGINEER.

C. SEE THE ARCHITECTURAL DRAWINGS FOR DOORS, WINDOWS, NON-BEARING INTERIOR AND EXTERIOR WALLS, RECESSES, DEPRESSIONS, ETC.

D. CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ALL PORTIONS OF THE BUILDING UNTIL THE ENTIRE STRUCTURE OF THE BUILDING IS COMPLETE.

E. OBSERVATION VISITS TO THE SITE BY STRUCTURAL ENGINEER'S FIELD REPRESENTATIVES SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION.

F. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN UTAH.

II. DESIGN CRITERIA:

A. BUILDING CODE: 2006 INTERNATIONAL BUILDING CODE (IBC) W/ AMENDMENTS

B. LOADINGS:

1. WIND LOAD - 90 MPH ZONE - EXPOSURE C
2. SEISMIC DESIGN CATEGORY: E

C. FOUNDATION:

1. ALL EXTERIOR FOOTINGS ARE TO BE FOUNDED AT NOT LESS THAN 30" BELOW LOWEST ADJACENT FINISH FLOOR OR FINISH GRADE ONTO UNDISTURBED EXISTING SUBSOILS HAVING A MINIMUM NET BEARING CAPACITY OF 1500 PSF. ALL INTERIOR FOOTINGS ARE TO BE FOUNDED AT NOT LESS THAN 1'-3" BELOW LOWEST ADJACENT FINISH FLOOR ONTO SUBSOILS.

III. CONCRETE:

A. ALL MATERIALS SHALL COMPLY WITH ACI 318 AND ACI 347 PUBLICATIONS AND APPLICABLE ASTM PUBLICATIONS.

B. CONCRETE MATERIAL PROPERTIES: 28-DAY COMPRESSIVE STRENGTHS ARE TO BE 3000 PSI TYPICAL UNLESS NOTED OTHERWISE. DESIGN BASED ON 2500 PSI.

C. CAST IN PLACE CONCRETE:

1. SPACING OF CONSTRUCTION JOINTS OR CONTROL JOINTS IN WALLS EXPOSED TO VIEW SHALL NOT EXCEED 40 FEET UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.
2. PROVIDE EXTRA REINFORCING AROUND ALL OPENINGS EXCEEDING 24 INCHES SQUARE OR ROUND IN ALL SLABS AND WALLS EQUAL TO TWO #5 BARS ON FOUR SIDES AND EXTEND TWO FEET BEYOND THE OPENING.
3. PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CORNERS OF CONCRETE UNLESS NOTED OTHERWISE.
4. PROVIDE CLASS B LAP SPLICES FOR ALL REINFORCING UNLESS NOTED OTHERWISE.
5. PROVIDE ISOLATION JOINTS AROUND ALL COLUMNS AT ALL EXPOSED SLAB ON GRADE AREAS.

IV. REINFORCING STEEL:

A. ALL BARS #4 AND LARGER TO BE ASTM A 615, GRADE 60. ALL #2 AND #3 BARS TO BE ASTM A 615, GRADE 40. DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH ACI-318, LATEST ADOPTION.

B. ALL REINFORCING STEEL SHALL BE BENT, DETAILED AND CHAIRED AS PER "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES".

C. WELDED WIRE FABRIC TO BE IN ACCORDANCE WITH ASTM A 185.

D. ALL BARS INDICATED ON THE PLANS TO BE WELDED SHALL CONFORM TO ASTM A706 (GRADE 60).

E. CONCRETE COVER REQUIREMENTS FOR DEFORMED BAR REINFORCING STEEL SHALL COMPLY WITH ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCING CONCRETE".

1. CAST-IN-PLACE CONCRETE:

a) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"

b) FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:

#6 BARS AND LARGER: 2"
#5 BARS AND SMALLER: 1-1/2"

c) CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS JOISTS: #11 BARS OR SMALLER: 3/4"
BEAMS, COLUMNS: PRIMARY REINFORCING, TIES, STIRRUPS, SPIRALS: 1-1/2"

F. DETAILING: SUBMIT PLACING DRAWINGS PER ACI DETAILING MANUAL ACI SP-66. FABRICATE ONLY AFTER REVIEW AND APPROVAL. REINFORCING BARS SHALL NOT BE WELDED UNLESS SPECIFICALLY SHOWN ON DRAWINGS.

1. LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:
30 BAR DIAMETER FOR #3 AND #4 BARS
40 BAR DIAMETER FOR #5 THROUGH #8 BARS
DO NOT SPLICE STIRRUPS AND TIES
DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN.

2. ALL EMBEDMENTS AND DOWELS SHALL BE SECURELY TIED TO FORMWORK OR TO ADJACENT REINFORCING PRIOR TO THE PLACEMENT OF CONCRETE.

V. SPECIAL INSPECTION: SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH IBC SECTION 1704.

A. CMU UNITS AND REINFORCING W/LEVEL II INSPECTION.

VI. MASONRY:

A. GENERAL:

1. LIGHTWEIGHT HOLLOW CONCRETE MASONRY UNIT TO BE ASTM C 90, GRADE N-1 AND HAVE A MINIMUM UNIT STRENGTH OF 2800 PSI AND f'm OF 2000 PSI. MORTAR TO BE TYPE "S". GROUT FILL TO BE 2000 PSI AT 28 DAYS.
2. MASONRY DESIGN IS BASED ON VALUES WITH LEVEL 2 INSPECTION.
3. SEE CONCRETE FOR REQUIREMENTS FOR REINFORCING.

B. MASONRY REINFORCING:

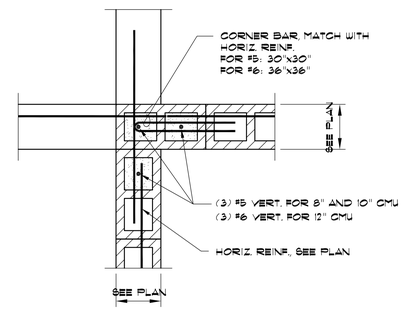
1. MINIMUM REINFORCING OF CONCRETE MASONRY UNIT WALLS:
ALL MASONRY WALLS SHALL BE REINFORCING AS FOLLOWS, UNLESS SHOWN OTHERWISE ON THE DRAWINGS
2. CMU WALLS ARE TO HAVE #5 VERTICALS AT ALL CORNERS, ENDS, JAMBS, INTERSECTIONS AND BOTH SIDES OF CONTROL JOINTS, TYPICAL UNLESS NOTED OTHERWISE.
3. ADDITIONAL VERTICAL REINFORCING SHOWN ON PLAN IS IN LIEU OF TYPICAL REINFORCING. PLACE ONE BAR PER CELL IN SOLID GROUT. EXTEND BARS A MINIMUM OF 30 BAR DIAMETERS BEYOND THE ROOF LEVEL ABOVE.
4. BUILDING WALLS ARE TO HAVE 2 #5 BARS CONTINUOUS IN A MINIMUM 8" DEEP BOND BEAM AT ALL ROOF LEVELS UNLESS NOTED OTHERWISE.
5. BUILDING WALLS ARE TO HAVE 1 #5 BAR CONTINUOUS IN A MINIMUM 8" DEEP BOND BEAM AT THE TOP OF ALL PARAPETS UNLESS NOTED OTHERWISE.
6. PROVIDE A MINIMUM OF 2 #5 BARS X (THE WIDTH OF THE OPENING PLUS 4'-0") IN A MINIMUM 8" DEEP BOND BEAM BELOW ALL WINDOW AND MECHANICAL OPENINGS UNLESS NOTED OTHERWISE.

C. MASONRY LINTELS:

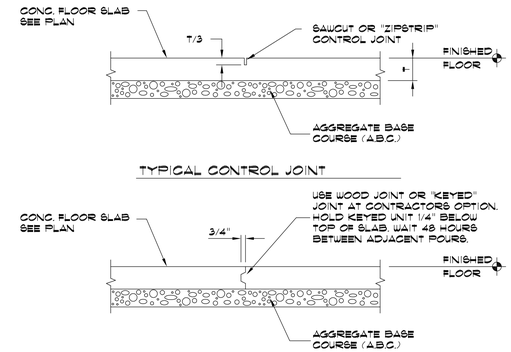
1. ALL REINFORCING IS TO EXTEND A MINIMUM OF 2'-0" BEYOND THE JAMB AND TO BE GROUTED SOLID FOR THE ENTIRE DEPTH INDICATED.
2. ALL CONCRETE MASONRY UNITS USED IN THE LENGTH ARE TO BE "OPEN-END" TYPE, TO INSURE FULLY GROUTED HEAD JOINTS.
3. ALL LINTELS ARE TO BE PROPERLY SHORED FOR THEIR WEIGHT PLUS ANY CONSTRUCTION LOADS AND LATERALLY BRACED TO PREVENT ANY LATERAL MOVEMENT FOR A MINIMUM OF 7 DAYS AFTER GROUTING, UNLESS NOTED OTHERWISE.

D. MASONRY GROUTING PROCEDURES:

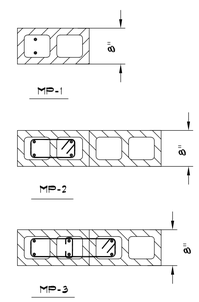
1. GROUTED MASONRY SHALL BE CONSTRUCTED IN SUCH A MANNER THAT ALL ELEMENTS OF THE MASONRY ACT TOGETHER AS A STRUCTURAL ELEMENT.
2. PRIOR TO GROUTING, THE GROUT SPACE SHALL BE CLEANED SO THAT ALL SPACES TO BE FILLED WITH GROUT DO NOT CONTAIN MORTAR PROJECTIONS GREATER THAN 1/2", MORTAR DROPPINGS OR OTHER FOREIGN MATERIAL.
3. GROUT MATERIALS AND WATER CONTENT SHALL BE CONTROLLED TO PROVIDE ADEQUATE FLUIDITY FOR PLACEMENT, WITHOUT SEGREGATION OF THE CONSTITUENTS AND SHALL BE MIXED THOROUGHLY. SEGREGATION OF THE GROUT MATERIALS AND DAMAGE TO THE MASONRY SHALL BE AVOIDED DURING THE GROUTING PROCESS.
4. THE GROUTING OF ANY SECTION OF WALL SHALL BE COMPLETED IN ONE DAY WITH NO INTERRUPTIONS GREATER THAN ONE HOUR.
5. BETWEEN GROUT POURS, A HORIZONTAL CONSTRUCTION JOINT SHALL BE FORMED BY STOPPING ALL WYTHES AT THE SAME ELEVATION AND WITH THE GROUT STOPPING A MINIMUM OF 1 1/2 INCHES BELOW A MORTAR JOINT. EXCEPT AT THE TOP OF THE WALL, WHERE BOND BEAMS OCCUR, STOP GROUT POUR A MINIMUM OF 1/2 INCH BELOW THE TOP OF THE MASONRY.
6. ALL CELLS AND SPACES CONTAINING REINFORCING BARS SHALL BE FILLED WITH GROUT. GROUT SHALL BE PLACED SO THAT ALL SPACES TO BE GROUTED DO NOT CONTAIN VOIDS.
7. GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING BEFORE LOSS OF PLASTICITY IN A MANNER TO FILL THE GROUT SPACE. GROUT POURS GREATER THAN 12 INCHES SHALL BE RECONSOLIDATED BY MECHANICAL VIBRATION TO MINIMIZE VOIDS DUE TO WATER LOSS. GROUT POURS 12 INCHES OR LESS IN HEIGHT SHALL BE MECHANICALLY VIBRATED, OR PUDDLED.
8. WHERE GROUT POURS EXCEED 5 FEET, CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE AT EVERY VERTICAL BAR LOCATION BUT SHALL NOT BE SPACED MORE THAN 32 INCHES ON CENTER FOR SOLID GROUTED MASONRY. GROUT SHALL BE PLACED IN A CONTINUOUS POUR NOT TO EXCEED 16 FEET IN HEIGHT, AND IN GROUT LIFTS NOT TO EXCEED 6 FEET.
9. REINFORCING SHALL BE CONTINUOUS THE FULL HEIGHT OF THE GROUT POUR PLUS ANY REQUIRED LAP ABOVE. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACE MENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS NOR 10 FEET.
10. TOLERANCE FOR THE PLACEMENT OF STEEL IN WALLS AND FLEXURAL ELEMENTS SHALL BE PLUS OR MINUS 1/2 INCH FOR "D" EQUAL TO 8 INCHES OR LESS, PLUS OR MINUS ONE INCH FOR "D" EQUAL TO 24 INCHES OR LESS BUT GREATER THAN 8 INCHES, AND PLUS OR MINUS 1 1/4 INCH FOR "D" GREATER THAN 24 INCHES.



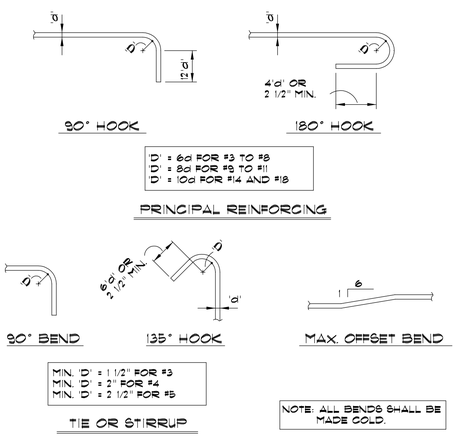
4 TYP. REINF. @ CORNER OR INTERSECTION OF WALLS



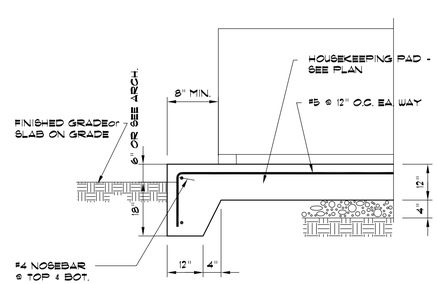
1 TYPICAL CONCRETE FLOOR JOINTS



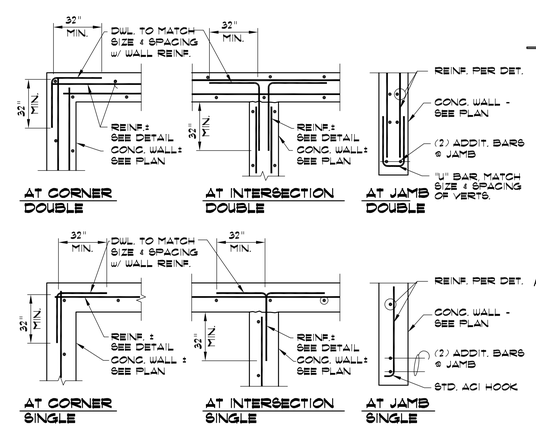
5 MASONRY PIER CONFIGURATION



2 TYPICAL REINFORCING BAR BENDS



6 CONCRETE PAD FOR GENERATOR



3 TYPICAL CONC. WALL REINF.

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PROJECT NAME & ADDRESS

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SLC, UT 84104

MARK	DATE	REVISION
CD	6/17	CONSTRUCTION DOCUMENTS

PROJECT MANAGER: WP
DRAWN BY: STAFF
CHECKED BY: SLW
DATE: 06/17/08
WHW JOB NO.: 08008
SHEET TITLE: 06/17/08

LICENSED STRUCTURAL ENGINEER No. 260129 HUA SHEN STATE OF UTAH

SHEET NO. S1.1

AutoCAD Version: 14.0
Last Saved: 6/16/2008 9:59 a.m.
Drawing: 0S11.DWG.DWG
Xrefs: TITLE.DWG

FOUNDATION PLAN NOTES:

1. SEE GENERAL STRUCTURAL NOTES SHEET AND STANDARD CONCRETE DETAIL SHEET FOR
   A. GENERAL STRUCTURAL NOTES
   B. TYPICAL EXCAVATION ADJACENT TO FOOTING
   C. TYPICAL SLAB JOINT DETAILS
   D. TYPICAL STEPPED FOOTING
2. U.S. - DENOTES CONCRETE WALL STEP.
3. F-1 - DENOTES FOOTING MARK - SEE FOOTING SCHEDULE
4. K.C.J. - DENOTES KEYED CONSTR. JOINT - SEE STANDARD DETAIL.
5. C.J. - DENOTES CONTROL JOINT - SEE STANDARD DETAIL.
6. F-----S - DENOTES FOOTING STEP. SEE DETAIL TYPICAL.
7. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. SEE ARCHITECTURAL FOR ALL DIMENSIONS. SLAB SLOPES & DEPRESSIONS NOT NOTED.
8. ALL SLABS ON GRADE ARE TO BE JOINTED AT NO MORE THAN 8'-0" EACH WAY USING JOINTS PER STANDARD DETAIL. IN ADDITION, NO SECTION OF CONCRETE SHALL HAVE AN ASPECT RATIO OF GREATER THAN 1 1/2:1. PROVIDE (2) #4 x 4'-0" MID-HEIGHT SLAB BARS ADJACENT TO ALL DISCONTINUOUS JOINT LOCATIONS. ALL COLUMN ISOLATION JOINT CORNERS ARE TO BE INTERSECTED BY A SLAB JOINT OR REINFORCED WITH SLAB BARS PER ABOVE. SUBMIT COMPLETE JOINT LAYOUT PLAN TO THE ARCHITECT FOR PRIOR REVIEW.
9. ALL WOOD TO CONTACT W/ CONC. OR MASONRY TO BE P.T. OR REDWOOD TYP.
10. ALL FOUNDATION PL. ANCHOR BOLTS TO USE A MIN. 3x3x1/4 PL. WASHERS TYP.

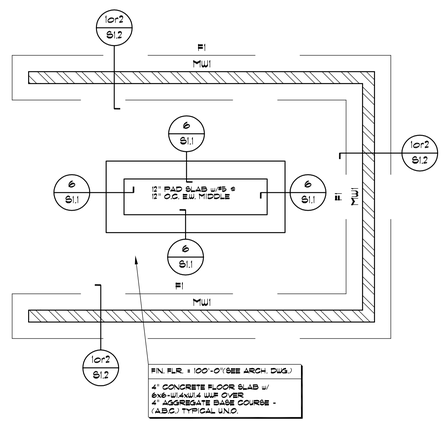
CONCRETE POUR NOTES:

1. VERIFY FTG STEP LOCATIONS AND HEIGHT IN FIELD PRIOR TO FORMING FOOTINGS. MAKE FTG REBAR CONTINUOUS THROUGH FTGS WITH BENT BARS AT CORNERS. LAP BARS 40 BAR DIAMETERS AT SPLICES AND TIE.
2. ACCURATELY LOCATE ANCHOR BOLTS AND HOLDDOWNS FROM THE PLAN AND VERIFY PRIOR TO PLACING CONCRETE.
3. DO NOT POUR ANY CONCRETE UNTIL THE FORMS ARE ADEQUATELY BOLSTERED AND SUPPORTED AND ALL REBAR IS IN PLACE AND SECURED.
4. DO NOT PERMIT FIN. GRADE TO COME CLOSER THAN 6" TO TOP OF CONCRETE.

MASONRY PIER SCHEDULE

MARK	SIZE	REINF.	TIES	REMARKS
MP-1	8" x 8"	(2) #5	NONE	
MP-2	8" x 16"	(4) #5	#2 @ 8" O.C.	
MP-3	8" x 24"	(6) #5	#2 @ 8" O.C.	

NOTE: SEE DETAIL FOR CMU PIER REINFORCEMENT CONFIGURATION TYPICAL.
MP1 IS TO BE APPLIED @ EA END OF OPENINGS MIN. TYP. U.N.O.



FOOTING & FOUNDATION PLAN
SCALE 1/4" = 1'-0"

MASONRY WALL SCHEDULE

LEVEL II SPECIAL INSPECTION ON CMU TYP.
F'm=2000 PSI

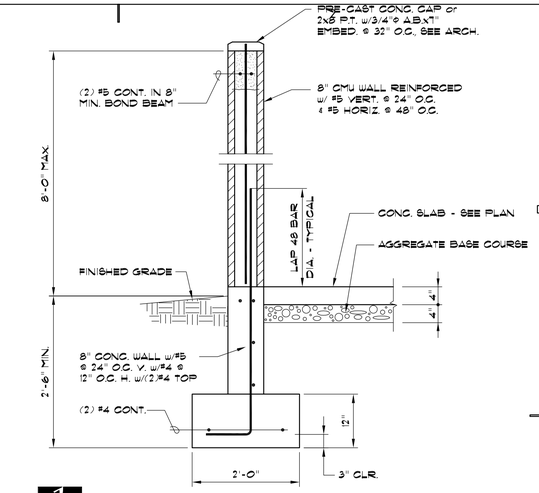
MARK	WALL THICKNESS	VERT. REINF.	HORIZ. REINF.	BOND BM. @ ROOF LVL.	REMARKS
MW1	8"	#5 @ 24" O.C.	#5 @ 48" O.C.	8"x16" MIN. w/ (4)#5 HORIZ.	GROUT CELLS w/REBARS TYP. FOR 8" CMU WALLS U.N.O.

1. TERMINATE HORIZ. REBARS AT WALL JOINTS TYP.
2. CONTINUE HORIZ. REBARS FOR BOND BEAM AT WALL JOINTS TYP.
3. SOLID GROUT ALL CELLS FOR WALLS UNDER FINISHED GRADE TYP.

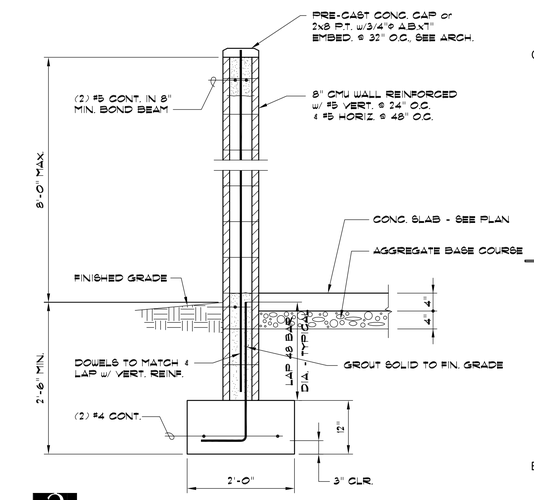
FOOTING SCHEDULE

BASED ON SOIL BEARING = 1500 PSF
ARCH/CONTRACTOR VERIFY IT

MARK	SIZE	REINFORCING	REMARKS
F1	2'-0" x CONT. x 12"	(2) #4 CONT.	



1 TYPICAL MASONRY SCREEN WALL



2 TYPICAL MASONRY SCREEN WALL

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PROJECT NAME & ADDRESS

OFFICE OF EDUCATION UORS ALTERNATE DATA CENTER UPGRADE
DFCM No. 08230200
1595 W 500 S
SLC, UT 84104

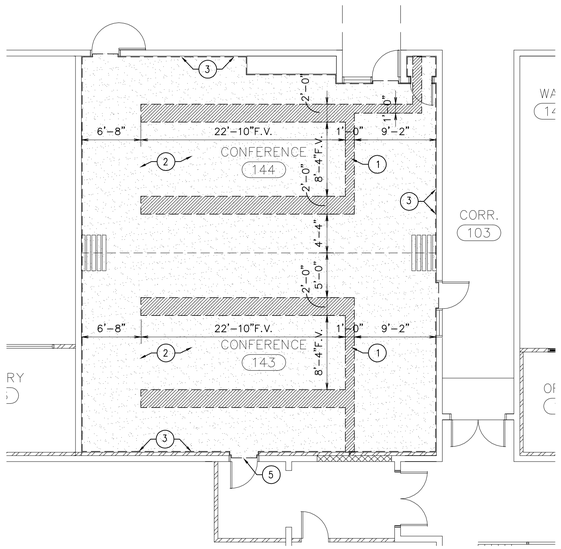
MARK	DATE	REVISION
CD	6/17	CONSTRUCTION DOCUMENTS

PROJECT MANAGER: WP
DRAWN BY: STAFF
CHECKED BY: SLW
DATE: 06/17/08
WHW JOB NO.: 08008

LICENSED STRUCTURAL ENGINEER No. 260129 HUA SHEN STATE OF UTAH

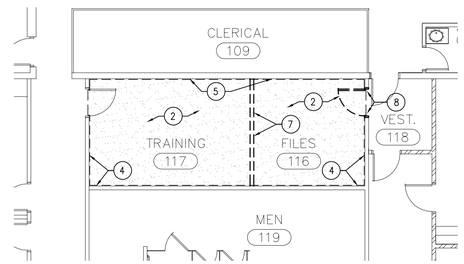
SHEET TITLE 06/17/08

SHEET NO. **S1.2**



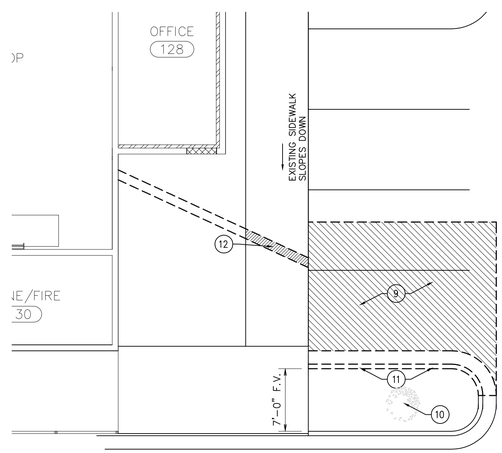
FIRST FLOOR DEMOLITION PLAN 143 & 144 **C2**

1/8" = 1'-0"



FIRST FLOOR DEMOLITION PLAN 116 & 117 **C4**

1/8" = 1'-0"



FIRST FLOOR DEMOLITION PLAN GENERATOR **A4**

1/8" = 1'-0"

SHEET NOTES

General Notes:

1. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION.

2. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.

3. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.

Demolition Keyed Plan Notes:

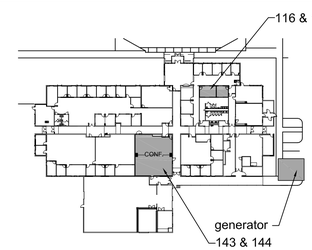
1. SAWCUT, REMOVE/DISPOSE OF EXISTING CONCRETE SLAB FOR NEW DATA/POWER LOCATIONS. COORDINATE WITH ELECTRICAL DRAWINGS. PATCH/REPAIR CONCRETE SLAB WHEN WORK IS COMPLETE WITH 4" CONCRETE INFILL ON 4" COMPACTED GRAVEL BACKFILL AS NECESSARY.
2. REMOVE CARPET THIS ROOM.
3. REMOVE RUBBER BASE THIS ROOM.
4. REMOVE RUBBER BASE THIS WALL.
5. EXISTING BASE TO REMAIN, THIS WALL.
6. NOT USED
7. REMOVE/DISPOSE OF EXISTING STUD WALL.
8. REMOVE EXISTING DOOR AND FRAME. DISPOSE OF FRAME & SALVAGE DOOR TO OWNER.
9. SAWCUT & REMOVE ASPHALT THIS AREA AS NECESSARY TO INSTALL NEW GENERATOR PAD, FOOTINGS, & ENCLOSURE WALLS.
10. EXISTING SHRUB TO REMAIN. PROTECT FROM DAMAGE.
11. REMOVE EXISTING CURB & GUTTER.
12. SAWCUT SIDEWALK AND REMOVE CONCRETE SLAB AS NECESSARY TO RUN LINE TO GENERATOR. SEE ALSO ELECTRICAL DRAWINGS.

Legend:

- SAWCUT AND REMOVE CONCRETE SLAB THIS AREA.
- REMOVE FINISH FLOORING THIS AREA.
- REMOVE ASPHALT THIS AREA.

NOTE: AT WALL TRANSITIONS FROM NEW TO EXISTING WALLS, PATCH, REPAIR AND/OR REPLACE GYP. BD. AS REQUIRED TO PROVIDE FLUSH TRANSITIONS BETWEEN NEW AND EXISTING WALL SURFACES. PATCH/REPAIR/PAINT WALLS AS NECESSARY AT LOCATIONS WHERE EQUIPMENT WAS REMOVED.

KEY PLAN



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CHECKED BY: JS
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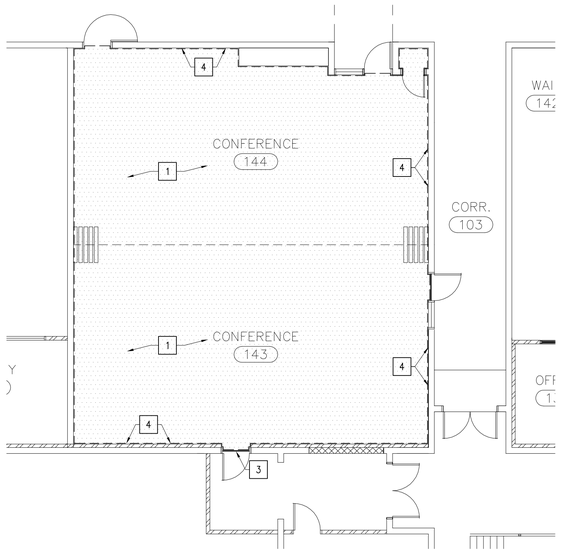
06/17/08

SHEET TITLE

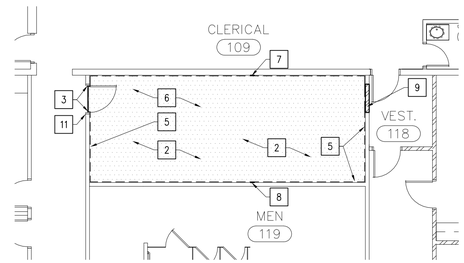
DEMOLITION PLAN

SHEET NO. **AD101**



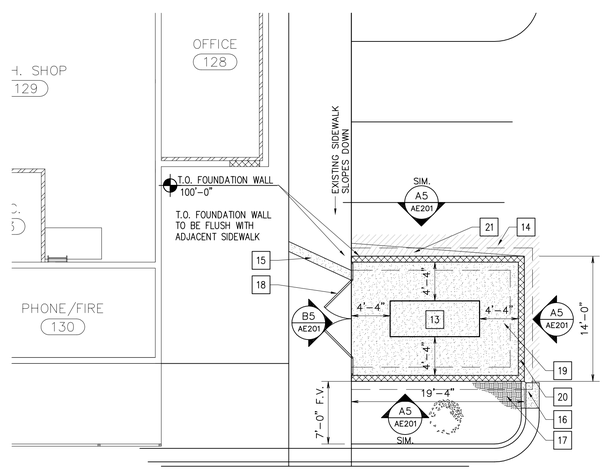
FIRST FLOOR REMODEL PLAN 143 & 144 **C2**

1/8" = 1'-0"



FIRST FLOOR REMODEL PLAN 116 & 117 **C4**

1/8" = 1'-0"



FIRST FLOOR REMODEL PLAN GENERATOR **C4**

1/8" = 1'-0"

SHEET NOTES

General Notes:

1. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION.

2. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.

3. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.

Remodel Keyed Plan Notes:

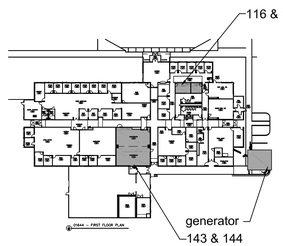
1. NEW CARPET THIS ROOM (CPT1). SEE FINISH SCHEDULE.
2. NEW VCT THIS ROOM (VCT1). SEE FINISH SCHEDULE.
3. NEW RUBBER TRANSITION STRIP (RT1). SEE FINISH SCHEDULE.
4. NEW RUBBER BASE THIS ROOM (RB2). SEE FINISH SCHEDULE.
5. NEW RUBBER BASE THIS WALL (RB1). SEE FINISH SCHEDULE.
6. PAINT GYP. WALLS THIS ROOM (PT1). SEE FINISH SCHEDULE.
7. PATCH/REPAIR BRICK WALL WHERE STUD WALL WAS REMOVED. CLEAN FACE OF BRICK TO REMOVE DEBRIS, PAINT, & OLD FASTENERS TO PROVIDE SMOOTH WALL SURFACE FREE OF PROTRUSIONS
8. PATCH, REPAIR AND/OR REPLACE GYP. BD. AS REQUIRED TO PROVIDE FLUSH TRANSITIONS BETWEEN NEW AND EXISTING WALL SURFACES. PAINT GYP. BOARD (PT1).
9. INFILL VOID WITH 5½" METAL STUDS (FIELD VERIFY STUD SIZE) & 1 LAYER OF ⅝" GYP BOARD ON EACH SIDE. PROVIDE SMOOTH TRANSITION BETWEEN EXISTING WALL AND NEW INFILL. PAINT CORRIDOR SIDE (PT2) TO MATCH EXISTING PAINT COLOR OF VESTIBULE 118. REQUEST RUBBER BASE REMNANTS FROM OWNER TO MATCH EXISTING BASE USED IN ROOM 118 (RB3) – INSTALL ALONG BASE OF NEW WALL.
10. NOT USED
11. INSTALL NEW CARD READER AT EXISTING DOOR – SEE ALSO ELECTRICAL. RETROFIT EXISITING DOOR AND FRAME WITH VON DUPRIN 5100 24VDC HARDWARE OR EQUAL.
12. NOT USED
13. NEW GENERATOR, RE: ELECTRICAL.
14. PATCH/REPAIR ASPHALT TO CREATE FLUSH TRANSITION BETWEEN NEW & OLD ASPHALT SURFACES. PROVIDE NEW GRAVEL BASE AS NECESSARY. SEE ALSO DETAILS SHEET AE201.
15. PATCH/REPAIR EXISTING CONCRETE SIDEWALK ONCE GENERATOR HAS BEEN INSTALLED. PROVIDE 5" CONCRETE INFILL ON 4" COMPACTED GRAVEL BACKFILL AS NECESSARY. SEE ALSO DETAILS SHEET AE201.
16. PATCH/REPAIR EXISTING CURB AND GUTTER AS NECESSARY TO MATCH EXISTING. SEE ALSO DETAILS SHEET AE201.
17. INFILL PLANTER WITH SOIL TO MATCH EXISTING
18. NEW CHAIN LINK GATE & FENCE WITH WHITE PRIVACY SLATS.
19. NEW CONCRETE GENERATOR PAD – SEE STRUCTURAL.
20. NEW CMU WALL ENCLOSURE – SEE ALSO STRUCTURAL.
21. BUILD UP ASPHALT TO DIVERT WATER RUNOFF AWAY FROM GENERATOR.

Legend:

- INSTALL NEW CARPET THIS AREA. RE: FINISH SCHEDULE
- NEW CONCRETE SURFACE
- NEW ASPHALT SURFACE.

NOTE: AT WALL TRANSITIONS FROM NEW TO EXISTING WALLS, PATCH, REPAIR AND/OR REPLACE GYP. BD. AS REQUIRED TO PROVIDE FLUSH TRANSITIONS BETWEEN NEW AND EXISTING WALL SURFACES. PATCH/REPAIR/PAINT WALLS AS NECESSARY AT LOCATIONS WHERE EQUIPMENT WAS REMOVED.

KEY PLAN



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PROJECT NAME & ADDRESS

OFFICE OF EDUCATION UORS ALTERNATE DATA CENTER UPGRADE

DFCM No. 08230200

1595 W 500 S
SLC, UT 84104

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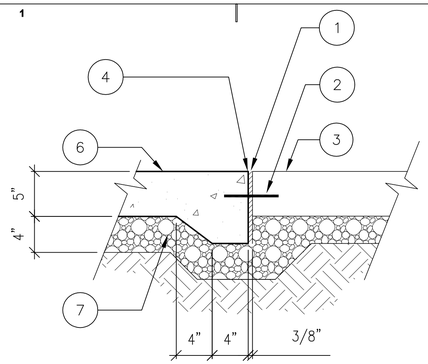
SHEET TITLE

REMODEL PLANS

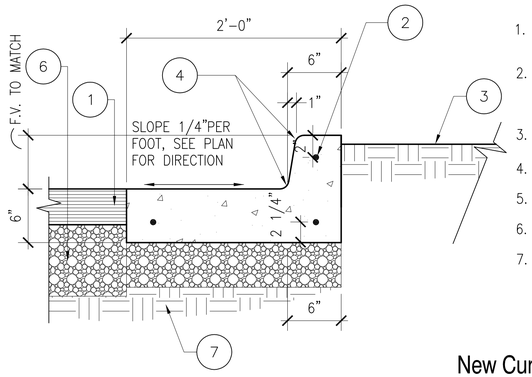
SHEET NO. **AE101**



1. 3/8" EXP. JOINT MATERIAL w/POLYURETHANE SEALANT (TYP.)
2. #4 SMOOTH DOWEL W/EXPANSION CAP, 12" L. AT 4' O.C.
3. EXISTING CONC.
4. TOOLED EDGE
5. NOT USED
6. 5" THICK CONC. WALK WITH 1.5 LBS. PER CUBIC FOOT OF FIBER MESH
7. 4" COMPACTED GRAVEL SUBBASE

New Sidewalk vs. Existing Sidewalk Detail **D2**

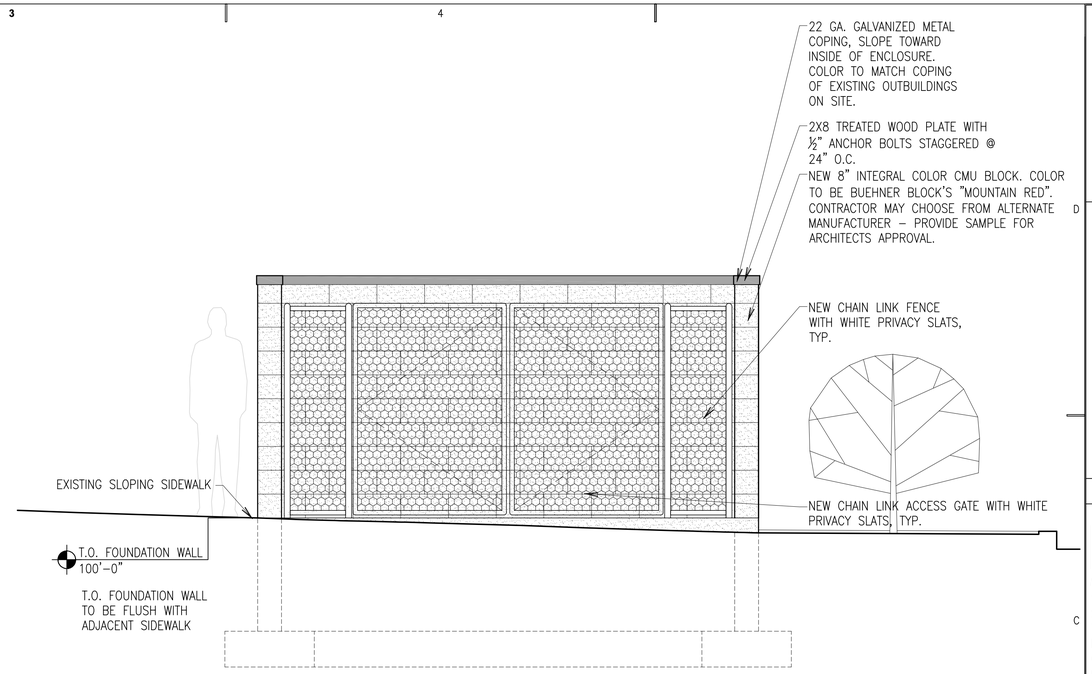
1-1/2"=1'-0"



1. 3" ASPHALTIC CONCRETE PAVING
2. 3– #3 DIA. REIN. BARS CONT. (TYP) CONC.
3. PLANTER SOIL
4. 1" RADIUS
5. NOT USED
6. 8" AGGREGATE BASE
7. COMPACTED SUBGRADE

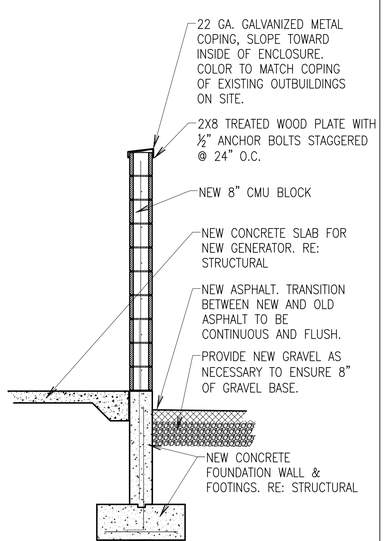
New Curb & Gutter Detail **C2**

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



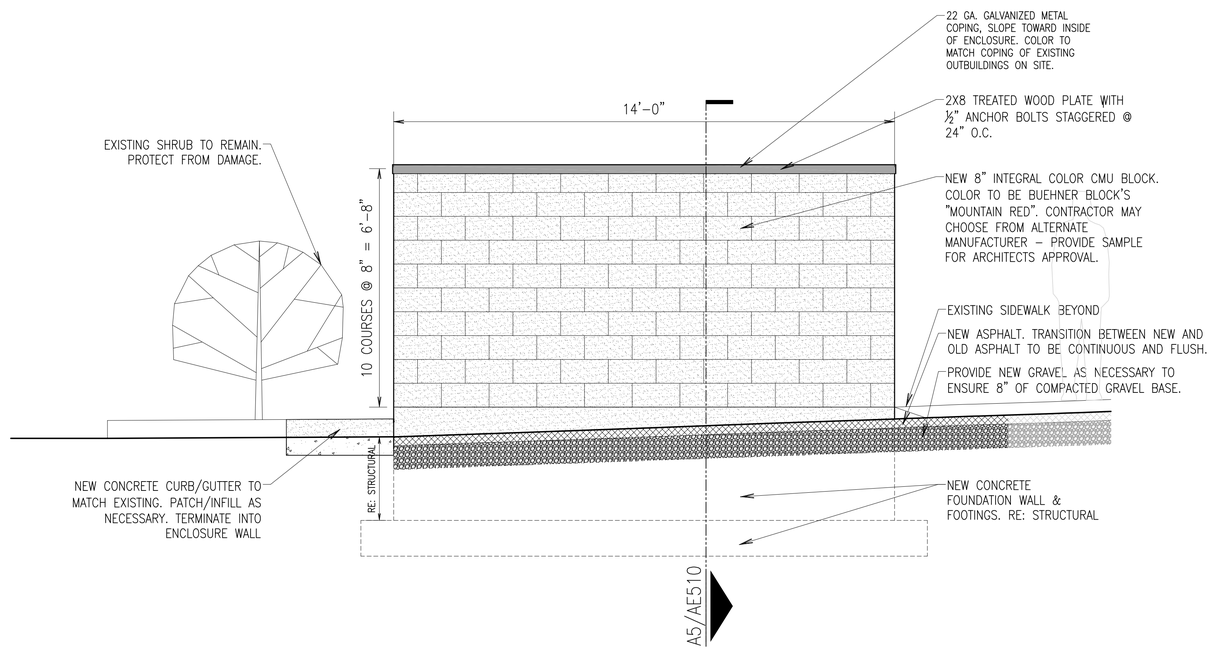
Generator Enclosure Elevation **B5**

1/2" = 1'-0"



Enclosure Section, Typ. **A2**

1/2" = 1'-0"



Generator Enclosure Elevation **A5**

1/2" = 1'-0"

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SHEET TITLE

ELEVATIONS, DETAILS

SHEET NO.

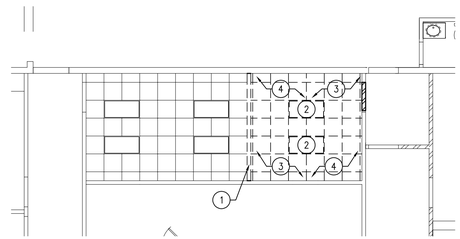
AE201

INTERIOR MATERIAL SCHEDULE

MATERIAL		DESCRIPTION	MANUFACTURER/REMARKS
FLOOR	CPT1	CARPET	SHAW: "THAT'S THE TICKET", COLOR: 88402 Number One
	VCT1	VINYL COMPOSITE TILE	MANNINGTON COMMERCIAL 1/8" THICK, 12" X 12" TILE. COLOR: 161 STEEL WHITE
BASE	RB1	RUBBER BASE	JOHNSONITE WALL BASE, 1/8" X 4" RUBBER, COLOR: 40 BLACK
	RB2	RUBBER BASE	JOHNSONITE WALL BASE, 1/8" X 4" RUBBER, COLOR: 72 HARBOR
	RB3	RUBBER BASE	REQUEST RUBBER BASE REMNANTS FROM OWNER TO MATCH EXISTING USED IN RM 118
WALLS	PT1	PAINT	SHERWIN WILLIAMS, PAINT COLOR TO MATCH EXISTING COLOR OF CONFERENCE ROOMS 143 & 144.
	PT2	PAINT	SHERWIN WILLIAMS, PAINT COLOR TO MATCH EXISTING COLOR OF ROOM 118
CEILING	ACT1	ACOUSTICAL TILE	SIZE 2' X 2', WHITE. COLOR/FINISH/TEXTURE TO MATCH EXISTING TILE. COLOR OF NEW SUSPENSION GRID SYSTEM TO MATCH EXISTING.
	GYP1	GYPSUM BOARD	GYPSUM BOARD, PAINTED (PT1)
MISC.	RT1	RUBBER TRANS. STRIP	ROPPE #177 CARPET/TILE JOINER. COLOR: BLACK

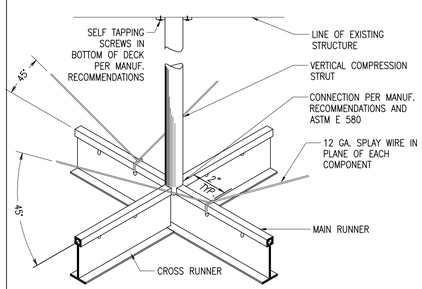
ROOM FINISH SCHEDULE

ROOMS		FLOORS		WALLS				CEILINGS	
RM#	ROOM NAME	FLOOR	BASE	NORTH	EAST	SOUTH	WEST	TYPE	NOTES
116	FILES	VCT1	RB1	EXISTING	PT1	PT1	PT1	ACT1/EXST.	
117	TRAINING	VCT1	RB1	EXISTING	PT1	PT1	PT1	EXST.	
143	CONFERENCE	CPT1	RB2	–	–	–	–	–	
144	CONFERENCE	CPT1	RB2	–	–	–	–	–	



FIRST FLOOR DEMOLITION CEILING PLAN 116 & 117 **C4**

1/8" = 1'- 0"

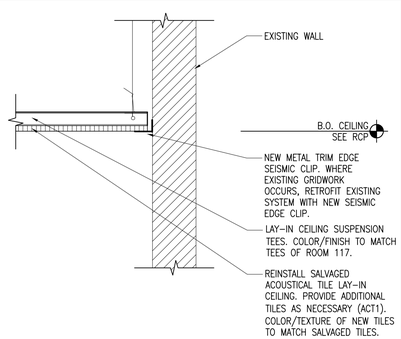


NOTE: SPLAY WIRES WITH STRUT TO BE 12"–0" O.C. EACH DIRECTION – THE FIRST POINT OF BRACING TO BE WITHIN 6"–0" FROM EACH WALL.

NOTE: INSTALLATION OF CEILING SYSTEM AND SEISMIC REQUIREMENTS PER ASTM E 580

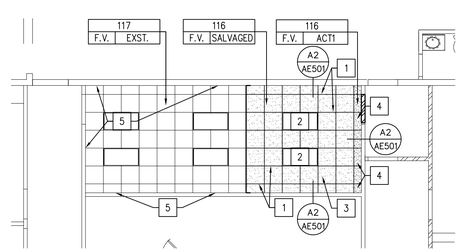
Seismic Bracing Detail **B2**

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



Ceiling Detail **A2**

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



FIRST FLOOR REMODEL CEILING PLAN 116 & 117 **A4**

1/8" = 1'- 0"

SHEET NOTES

General Notes:

1. GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION.

2. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.

3. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.

Reflected Ceiling General Notes:

1. THIS PLAN SHALL BE USED TO COORDINATE THE CEILING LAYOUT WITH MECHANICAL AND ELECTRICAL. REFER TO MECHANICAL DRAWINGS FOR SIZES AND TYPES OF CEILING DIFFUSERS AND GRILLES. REFER TO ELECTRICAL DRAWINGS FOR SIZES AND TYPES OF LIGHTING FIXTURES.
2. COORDINATE THE LOCATIONS OF STRUCTURAL SUPPORTS FOR EXHAUST, DUCTS, ETC. WITH MECHANICAL DUCTWORK, LIGHTING FIXTURES AND ALL CONDUIT.
3. ALL CEILING HEIGHTS INDICATED ARE RELATIVE TO THE FLOOR LINE AT WHICH THEY OCCUR.
4. ALL LAY-IN CEILING GRIDS TO BE CENTERED AND EQUALLY SPACED IN THE ROOM UNLESS SHOWN OTHERWISE
5. SPRINKLER PIPING TO BE HELD TIGHT TO THE BOTTOM OF BEAMS OR JOIST WHERE POSSIBLE. HEADS TO BE DIRECTED UP IN EXPOSED CONDITIONS AND DIRECTED DOWN AT CEILING LOCATIONS.
6. FIRE SPRINKLER HEADS TO BE LOCATED IN THE CENTER OF ACOUSTIC LAY-IN PANELS OR 12" FROM THE END OF A 24" X 48" PANEL.
7. ALL CEILING HEIGHTS ARE FROM FINISHED FLOOR OF ROOM (U.N.O.)
8. VERIFY ALL LIGHTS, SMOKE DETECTORS, EXIT SIGNS, WITH ELECTRICAL DRAWINGS.
9. VERIFY ALL MECHANICAL DUCTS, GRILLES, DIFFUSERS, & VENTS WITH MECHANICAL DRAWINGS.
10. VERIFY ALL SPRINKLER LINES, SPRINKLER HEADS, & PIPING, WITH PLUMBING DRWG'S.
11. ATTIC ACCESS HATCHES TO BE MINIMUM 22 1/2" X 30".
12. PROVIDE ACCESS DOORS IN GYPSUM BOARD CEILINGS WHERE REQUIRED FOR DAMPER LOCATIONS. SEE MECH DRAWINGS.

Demolition Ceiling Plan Keyed Notes

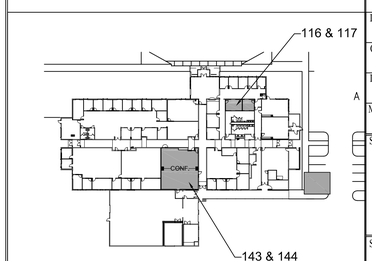
1. REMOVE EXISTING WALL & BRACING TO ROOF DECK.
2. PROTECT EXISTING LIGHT FIXTURES FROM DAMAGE.
3. REMOVE EXISTING LAY-IN CEILING TILES THIS ROOM AND SALVAGE FOR REUSE.
4. REMOVE AND DISPOSE OF CEILING GRID THIS ROOM.

Remodel Ceiling Plan Keyed Notes

1. INSTALL NEW LAY-IN CEILING "T" GRIDWORK TO ALIGN WITH GRID OF ROOM 117.
2. RELOCATE SALVAGED LIGHTS TO THE LOCATIONS SHOWN. COORDINATE WITH ELECTRICAL DRAWINGS.
3. REINSTALL SALVAGED CEILING TILES FROM ROOM 116.
4. INSTALL NEW LAY-IN CEILING TILES (ACT1) AS NECESSARY.
5. RETROFIT EXISTING GRID SYSTEM ALONG PERIMITER OF ROOM WITH SEISMIC TRIM PEICE.

Ceiling Legend:

- 1000 / 0'-0" ACT — ROOM NUMBER / CEILING FINISH (SEE FINISH SCHEDULE)
- CEILING ELEVATION ABOVE FINISH FLOOR (U.N.O.)
- PROTECT EXISTING LIGHT FIXTURE FROM DAMAGE. LIGHT TO BE SALVAGED AND REINSTALLED
- EXISTING LAY IN FLUORESCENT LIGHT
- SALVAGED LIGHT FIXTURE TO BE REINSTALLED IN LOCATION SHOWN
- CEILING DIFFUSER
- RETURN AIR GRILLE
- EXISTING 2' X 2' CEILING TILE TO BE REMOVED & & SALVAGED FOR REINSTALLATION SEE ALSO KEYED NOTES.
- EXISTING 2' X 2' LAY-IN CEILING
- SALVAGED 2' X 2' LAY-IN CEILING TILE IN A NEW LAY-IN GRID
- NEW ACOUSTICAL LAY-IN CEILING TILE (ACT1) IN A NEW LAY-IN GRID



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PROJECT NAME & ADDRESS

OFFICE OF EDUCATION UORS ALTERNATE DATA CENTER UPGRADE

DFCM No. 08230200

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PROJECT MANAGER: SD
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CHECKED BY: JS
DATE: 06/17/08
MS JOB NO.: 08.0180

06/17/08

SHEET TITLE
DEMOLITION/REMODEL CEILING PLAN, DETAILS, FINISH SCHEDULE

SHEET NO.
AE501

MECHANICAL LEGEND

SYMBOL	ABR.	DESCRIPTION
GENERAL TERMINOLOGY		
A2		DETAIL NUMBER DESIGNATION CORRESPONDING WITH GRID LOCATION
MA 1		MECHANICAL EQUIPMENT DESIGNATION
		EQUIPMENT ITEM DESIGNATION
CFM D-1		REGISTER, GRILL OR DIFFUSER DESIGNATION WITH BALANCING CFM LISTED BELOW
R-1		GRILLE, OR LOUVER DESIGNATION WHERE BALANCING NOT REQUIRE
1		REVISION DESIGNATOR AND NUMBER
1		KEY NOTE DESIGNATOR AND NUMBER
	POC	POINT OF CONNECTION
	POR	POINT OF REMOVAL
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
		BURIED OR UNDER FLOOR DUCT
		FLEXIBLE AIR DUCT
		LINED DUCT
		VANED ELBOW
		RADIUS ELBOW
		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
		ROUND DUCT DOWN
	AP	ACCESS PANEL
		EXISTING EQUIPMENT TO BE REMOVED
		EXISTING EQUIPMENT TO REMAIN
		NEW EQUIPMENT
T RTU-1	T-STAT	WALL MOUNTED THERMOSTAT MECHANICAL EQUIPMENT CONTROLLED
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
		BUTTERFLY VALVE
		GATE VALVE
	CBV	CIRCUIT BALANCING VALVE
	BV	BALL VALVE
		PRESSURE GAUGE AND GAUGE COCK - WATER
		PRESSURE GAUGE AND GAUGE COCK - STEAM
		THERMOMETER AND THERMOWELL
		DIRECTION OF FLOW
		ELBOW UP
		ELBOW DOWN
		TEE UP
		TEE DOWN
		EXISTING PIPING TO BE REMOVED
		EXISTING PIPING TO REMAIN
		NEW PIPING
		PIPE CAP OR PLUG
		FLEXIBLE CONNECTION
	CW	CULINARY COLD WATER
	HW	CULINARY HOT WATER
		RECIRCULATED CULINARY HOT WATER
HWS		HEATING WATER SUPPLY
HWR		HEATING WATER RETURN
CHWS		CHILLED WATER SUPPLY
CHWR		CHILLED 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 CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY IN HANDLING AND DISPOSING OF REFRIGERANTS, OILS, ETC. ALL SUCH MATERIALS SHALL BE HANDLED, DISPOSED, AND USED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS.

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

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

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

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

G-16 ALL MECHANICAL SHALL BE INSTALLED AND CONFORM TO THE 2006 EDITION OF THE IMC WITH UTAH ANNOTATIONS AND LOCAL AUTHORITY REQUIREMENTS.

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

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

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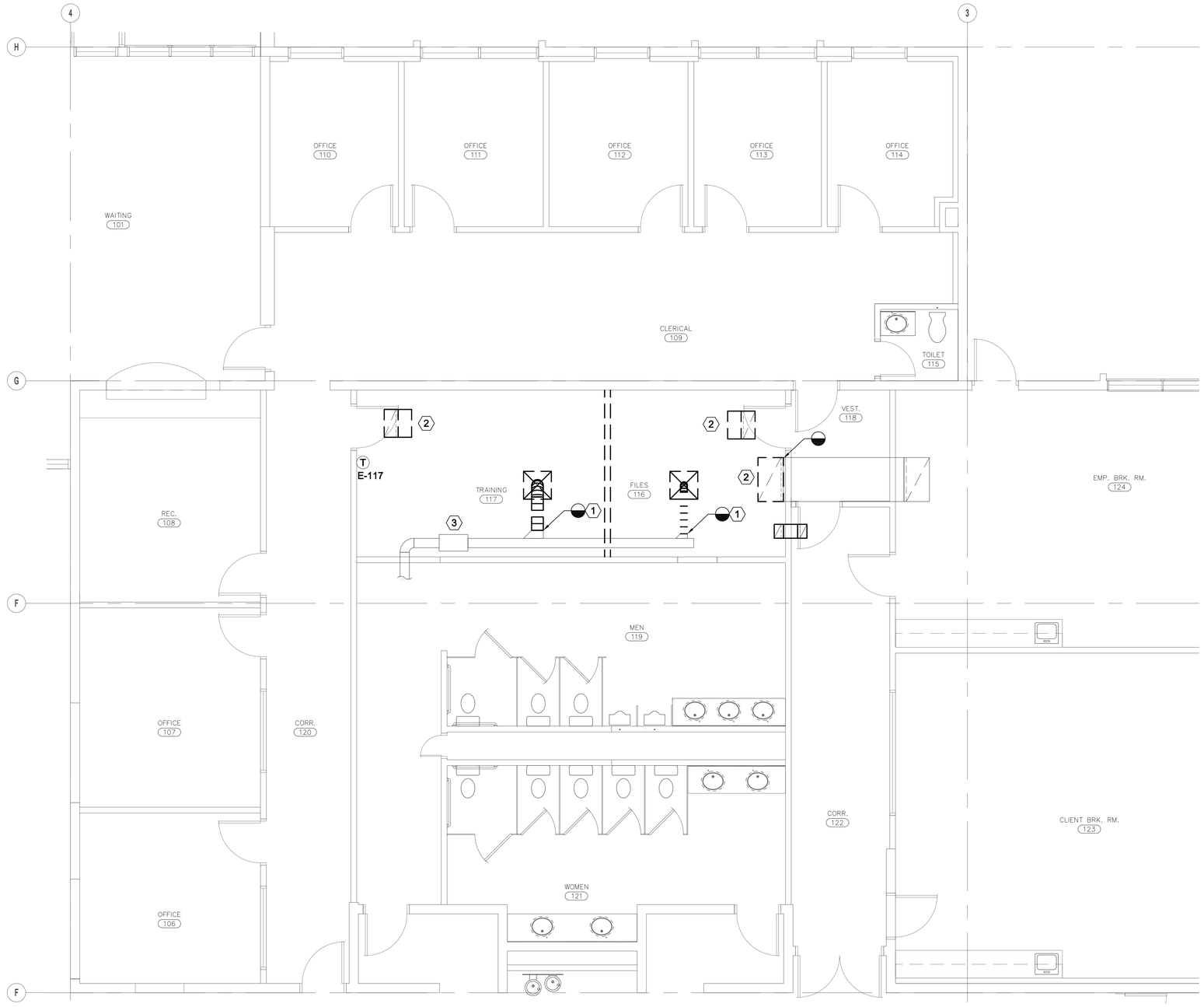
PROFESSIONAL ENGINEER 06/17/08 WINWARD M. PACKER No. 375080 STATE OF UTAH

SHEET TITLE
MECHANICAL GENERAL NOTES AND LEGEND

SHEET NO.
MG001

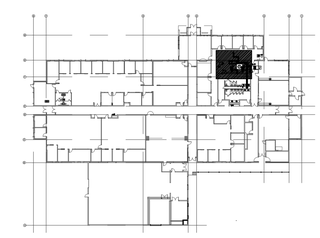
SHEET NOTES

1. REMOVE EXISTING DIFFUSER AND DUCT TO THIS APPROXIMATE LOCATION.
2. REMOVE EXISTING RETURN AND TRANSFER GRILLES AS SHOWN.
3. EXISTING VAV BOX SHALL REMAIN.



COMPUTER ROOM DEMOLITION PLAN

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



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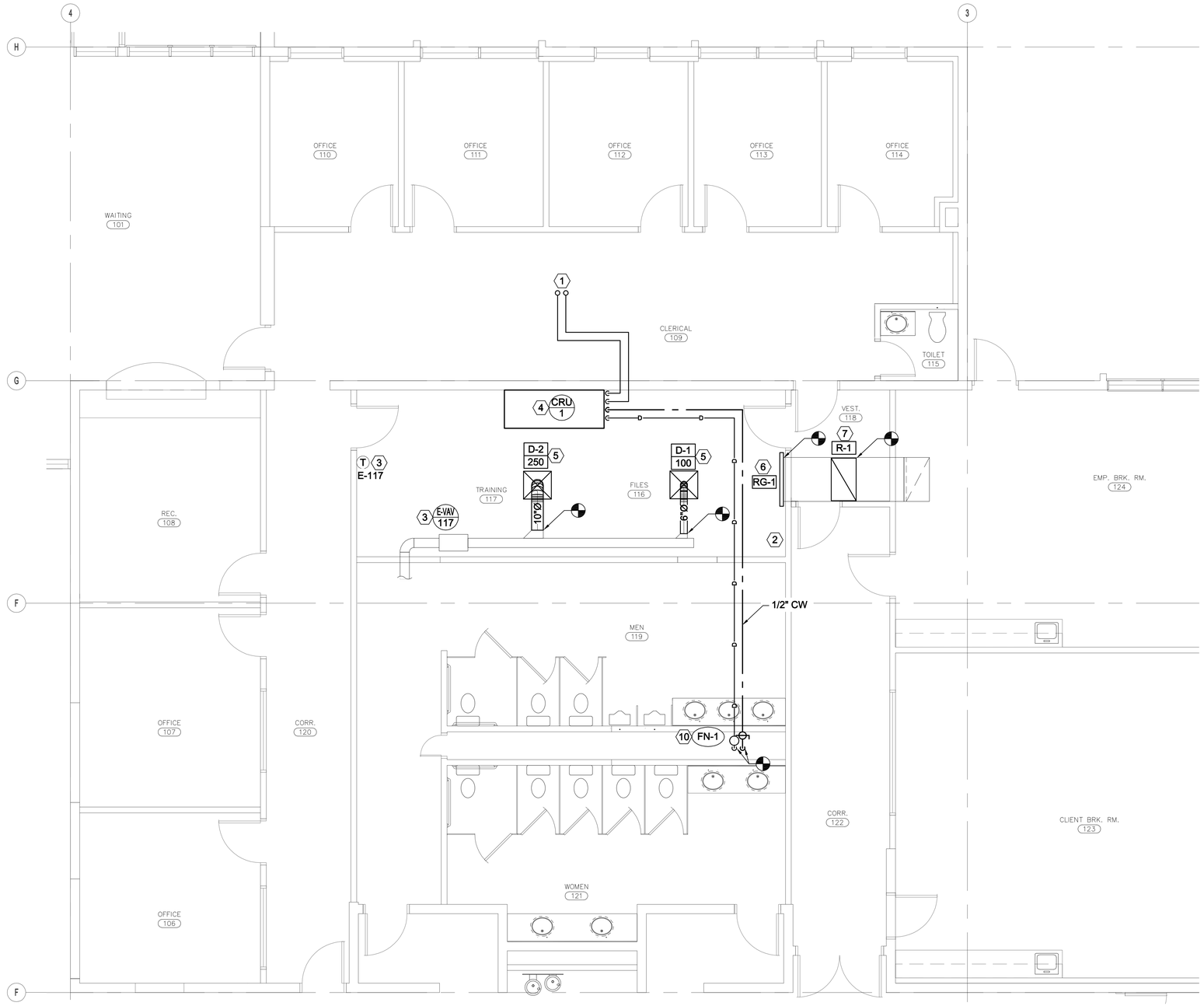
SHEET TITLE

COMPUTER ROOM DEMOLITION PLAN

SHEET NO. MD101

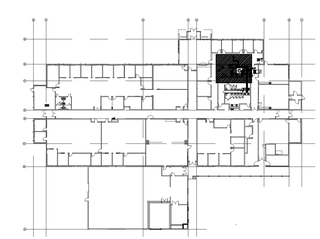


COMPUTER ROOM MECHANICAL PLAN

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

SHEET NOTES

1. ROOF PENETRATION FOR REFRIGERANT PIPING. SEE SHEET ME102.
2. COORDINATE WITH G.C. TO PATCH EXISTING WALL PENETRATION.
3. ADJUST EXISTING CONTROLS IN ORDER TO MODIFY EXISTING VAV BOX TO OPERATE FOR BACK-UP COOLING ONLY.
4. PROVIDE NEW FLOOR MOUNTED COMPUTER ROOM COOLING UNIT IN THIS APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH OWNER, USERS, AND EXISTING CONDITIONS.
5. PROVIDE NEW DUCT BRANCHES AND DUCT MOUNTED EXPOSED DIFFUSERS. RE-BALANCE TO CFM SHOWN.
6. PROVIDE NEW SIDEWALL TRANSFER GRILLE AT EXISTING DUCT. FIELD VERIFY EXACT SIZE AND LOCATIONS.
7. PROVIDE NEW CEILING RETURN/TRANSFER IN VESTIBULE. CONNECT TO EXISTING DUCT. FIELD VERIFY EXACT SIZE AND LOCATION.
8. PROVIDE 1/2" COLD WATER LINE TO NEW HUMIDIFIER AT COMPUTER ROOM UNIT. TIE INTO EXISTING COLD WATER LINE AT PLUMBING CHASE. FIELD VERIFY EXACT LOCATION.
9. PROVIDE 3/4" DRAIN FROM NEW COMPUTER ROOM UNIT TO NEW FUNNEL DRAIN.
10. PROVIDE NEW 2" FUNNEL DRAIN AND TRAP IN PLUMBING CHASE. TIE INTO EXISTING WASTE PIPING FIELD VERIFY EXACT LOCATION.



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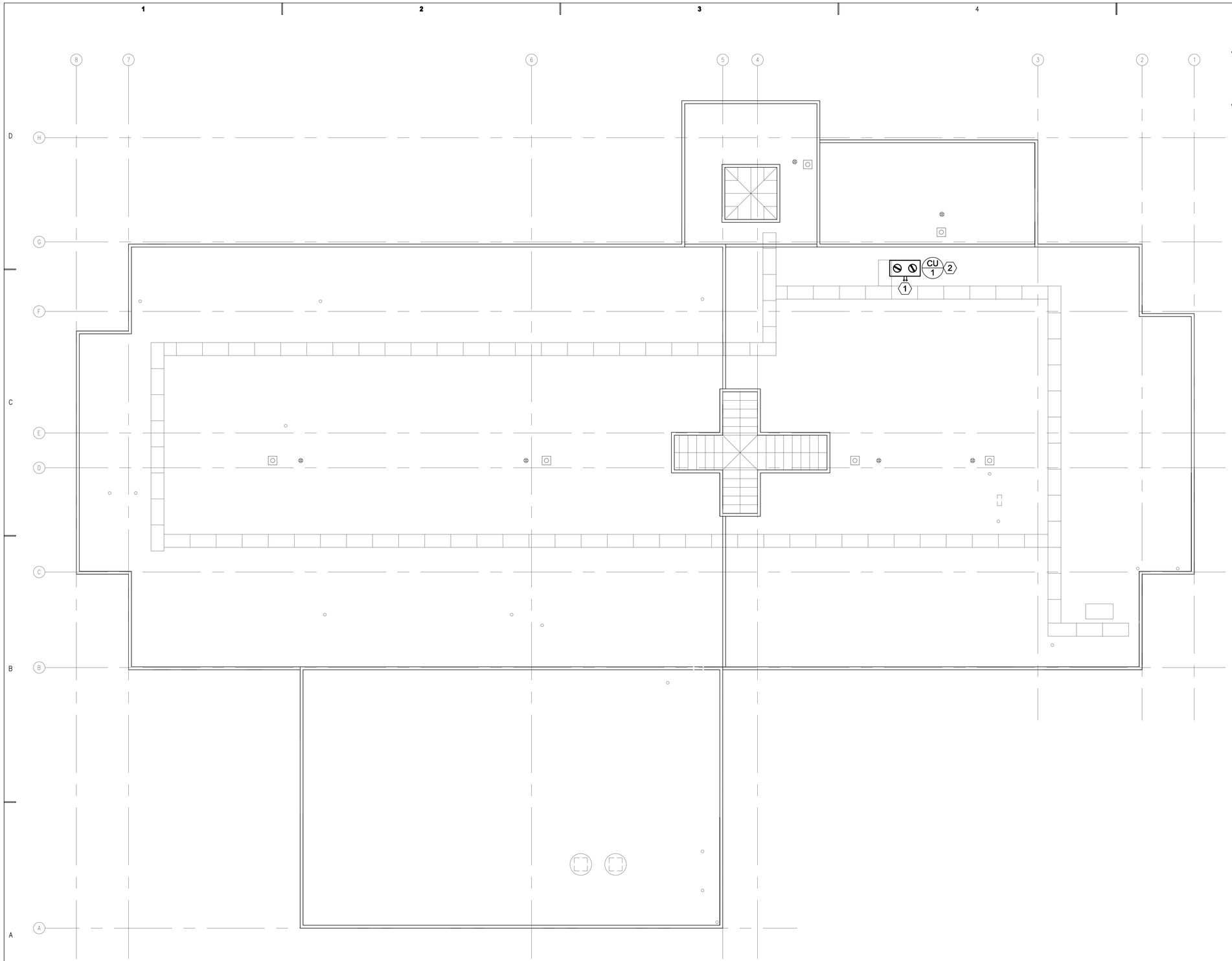
SHEET TITLE
COMPUTER ROOM MECHANICAL PLAN

SHEET NO.
ME101



MECHANICAL ROOF PLAN

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

SHEET NOTES

1. REFRIGERANT PIPING SIZED PER MANUFACTURERS RECOMMENDATIONS. SEE ME101 FOR PIPING CONTINUATION BELOW.
2. PROVIDE NEW ROOF MOUNTED CONDENSING UNIT. COORDINATE EXACT LOCATION ON ROOF WITH EXISTING CONDITIONS.

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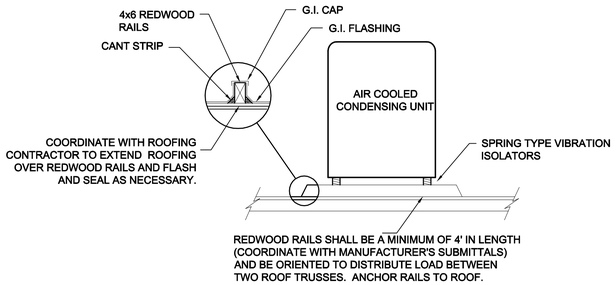
SHEET TITLE

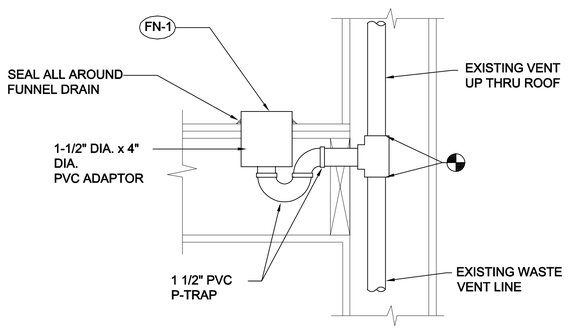
MECHANICAL ROOF PLAN

SHEET NO. **ME102**



D1 ROOFTOP AIR COOLED CONDENSER DETAIL

SCALE: NONE



C1 FUNNEL DRAIN DETAIL

SCALE: NONE

COMPUTER ROOM INDOOR UNIT SCHEDULE

SYMBOL	CAPACITY		EVAPORATOR FAN			EVAPORATOR COIL		ELECTRICAL							MANUFACTURER AND MODEL #
	TOTAL MBH	SENSIBLE MBH	CFM	ESP	HP	AREA SQ. FT.	ROWS	VOLTS	Ø	HZ	FLA	MCA	MOCP	NOTES	
CRU 1	114.6	114.6	5,500	.2"	3	17.1	3	208	3	60	65.3	70.5	90	1,2,3,4,5,6,7	LIEBERT DS035ADC000

1. COND. ENTERING EVAPORATOR 75 EDB & 45% RH AT 4200' ELEVATION.
2. PROVIDE WITH UPFLOW DISCHARGE PLENUM, AND ABOVE FLOOR RETURN AIR GRILLE.
3. PROVIDE WITH SINGLE POINT POWER CONNECTION, AND FACTORY DISCONNECT.
4. PROVIDE WITH DIGITAL SCROLL COMPRESSORS WITH CYLINDER UNLOADERS.
5. PROVIDE WITH NETWORK INTERFACE CARD TO COMMUNICATE WITH EXISTING BUILDING CSI CONTROL SYSTEM BY UTAH CONTROLS.
6. PROVIDE WITH INTERNAL CONDENSATE PUMP.
7. PROVIDE WITH STEAM GENERATING CANISTER HUMIDIFIER.

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	INDIVIDUAL LINE SIZES		
		TRAP	WASTE	VENT
FN-1	FUNNEL DRAIN	1-1/2"	2"	EXISTING

COMPUTER ROOM OUTDOOR UNIT SCHEDULE

SYMBOL	NO. OF FANS	AREA SERVED	MIN SIZE (TONS)	ELECTRICAL				MAKE & MODEL	WEIGHT (LBS)	REMARKS
				SERVICE	FLA	MCA	MOCP			
CU 1	2	COMPUTER ROOM	10	208/3/60	7.0	7.9	15	LIEBERT CD-205	500	

1. PROVIDE WITH FAN SPEED CONTROL FOR -20 LOW AMBIENT.
2. AT DESIGN CONDITIONS AND 100° ENTERING AIR TEMPERATURE TO CONDENSER.
3. PROVIDE WITH SINGLE POINT POWER CONNECTION AND FACTORY DISCONNECT.

DIFFUSER SCHEDULE

SYMBOL	TYPE	MAX CFM	FACE SIZE	NECK SIZE	CEILING TYPE	BLOW	PATTERN	SCHEDULE NOTES
D-1 CFM	CEILING MOUNTED	150	6X6	6"Ø	LAY-IN	4--WAY		1,2,3,4,5
D-2 CFM	CEILING MOUNTED	300	9X9	8"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.

REGISTER, LOUVER & GRILLE SCHEDULE

SYMBOL	TYPE	SERVICE	MAX CFM	NOMINAL SIZE	THROAT SIZE	CEILING TYPE	SCHEDULE NOTES
R-1	CEILING	RETURN	1200	36/14	36/14	LAY-IN	1,2,3,4,5
RG-1	SIDEWALL	RETURN	1200	36/14	36/14	N/A	1,2,3,4,5

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. FIELD VERIFY EXACT SIZE REQUIRED PRIOR TO ORDERING. SEE PLAN ME101.

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PROJECT MANAGER: WP
DRAWN BY: STAFF
CHECKED BY: SLW
DATE: 06/17/08
WHW JOB NO.: 08008

PROFESSIONAL ENGINEER 06/17/08 WINWARD M. PACKER No. 375080 STATE OF UTAH

SHEET TITLE
MECHANICAL SCHEDULES AND DETAILS

SHEET NO.
ME601

ELECTRICAL SYMBOLS LIST

- RECESSED LIGHT FIXTURE
- EXIT LIGHT
- SURFACE FLUORESCENT LIGHT FIXTURE
- SURFACE FLUORESCENT LIGHT FIXTURE ON EMERGENCY
- RECESSED FLUORESCENT LIGHT FIXTURE
- RECESSED FLUORESCENT LIGHT FIXTURE ON EMERGENCY
- $ SINGLE POLE SWITCH
- $3 3 - WAY SWITCH
- TS ELECTRONIC TIME SWITCH
- PP POWER PACK
- OS OCCUPANCY SENSOR/LIGHTING CONTROL, CEILING
- OSH OCCUPANCY SENSOR/LIGHTING CONTROL, WALL
- DATA OUTLET
- DATA OUTLET ABOVE COUNTER
- V3 VOICE/DATA OUTLET:
  # INDICATES QUANTITY OF THE CABLES (VOICE AND DATA JACKS). FOR EXAMPLE: NUMBER 3 REPRESENTS (1) VOICE AND (2) DATA. NUMBER 4 REPRESENTS (1) VOICE AND (3) DATA.
- VOICE/DATA OUTLET - ABOVE COUNTER
- WIRELESS
- FOUR PLEX RECEPTACLE
- DUPLEX RECEPTACLE ABOVE COUNTER
- DUPLEX RECEPTACLE
- SPECIAL PURPOSE NEMA OUTLET
- J JUNCTION BOX WITH COVER PLATE
- MULTI OUTLET PLUGMOLD ASSEMBLY
- SURFACE ELECTRICAL PANELBOARD
- RECESSED ELECTRICAL PANELBOARD
- R RELAY
- F FUSED DISCONNECT SWITCH
- MOTOR CONNECTION

- WALL MOUNTED CLOCK
- FACP FIRE ALARM CONTROL PANEL
- FV FIRE ALARM VISUAL SIGNAL WITH HORN
- F FIRE ALARM CALL STATION
- FV FIRE ALARM VISUAL SIGNAL
- R FIRE ALARM RELAY
- MM FIRE ALARM MONITOR MODULE
- CM FIRE ALARM CONTROL MODULE
- P PHOTO ELECTRIC SMOKE DETECTOR
- a b M MULTI-OUTLET RECESSED FLOORBOX W:POWER, PHONE/DATA AND MICROPHONE JACKS; a= # OF DATA OUTLETS, b= # OF MICROPHONE JACKS
- H HEAT DETECTOR
- # DRAWING NOTE DESIGNATION
- # LIGHT FIXTURE TYPE
- FLEXIBLE CONDUIT
- CONDUIT CONCEALED IN WALLS, CEILING OR FLOOR
- CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDERFLOOR
- EXISTING CONDUIT
- GROUND WIRE
- STUB UP
- STUB DOWN
- STUB OUT
- ISOLATED GROUND CONDUCTOR
- EQUIPMENT GROUND CONDUCTOR
- PHASE CONDUCTOR
- NEUTRAL CONDUCTOR
- AHU-1 MECHANICAL EQUIPMENT DESIGNATION
  STARTER & DISCONNECT PER SPECIFICATIONS.
  SEE EQUIPMENT LIST

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)
ATS	AUTOMATIC TRANSFER SWITCH
C	CONDUIT
CKT	CIRCUIT
CU	COPPER
EM	EMERGANCY
(E)	EXISTING
FA	FIRE ALARM
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER
GRD	GROUND
IG	ISOLATED GROUND
(N)	NEW
NL	NIGHT LIGHT
PNL	PANEL
RMP	ROCKY MOUNTAIN POWER
TYP	TYPICAL
WP	WEATHER PROOF

DRAWING INDEX

EG001	SYMBOLS, ABBREVIATIONS AND INDEX
ES101	ELECTRICAL SITE PLAN
EP101	POWER PLAN
EL101	LIGHTING PLAN
EX501	ENLARGED ELECTRICAL PLANS
EX600	EXISTING ONE-LINE DIAGRAM
EX601	NEW ONE-LINE DIAGRAM
EX602	ELECTRICAL SCHEDULES

SHEET NOTES

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SHEET TITLE
SYMBOLS, ABBREVIATIONS & INDEX

SHEET NO.
EG001

By: dcontreras; Jun 16, 2008 - 10:10am
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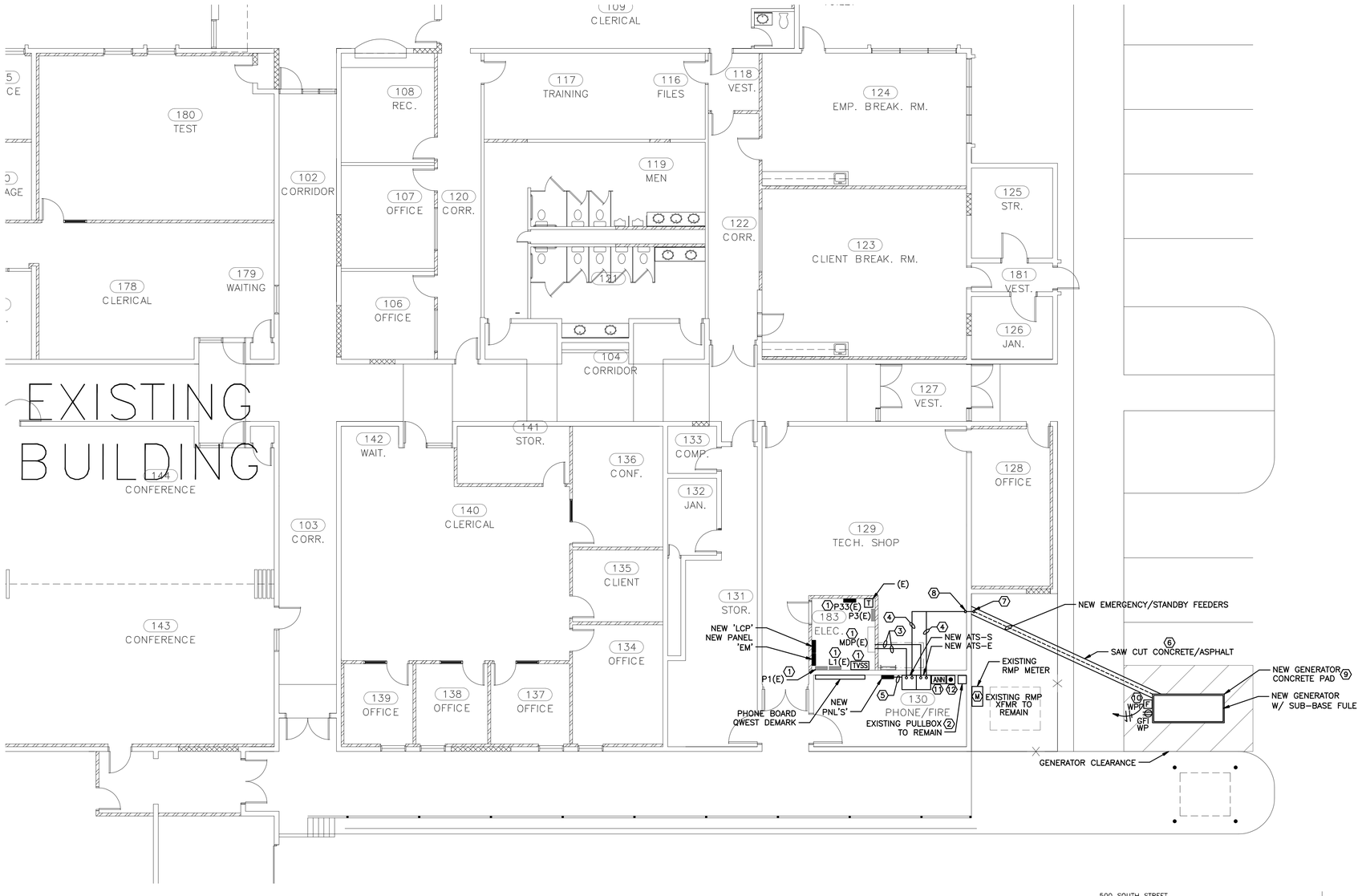

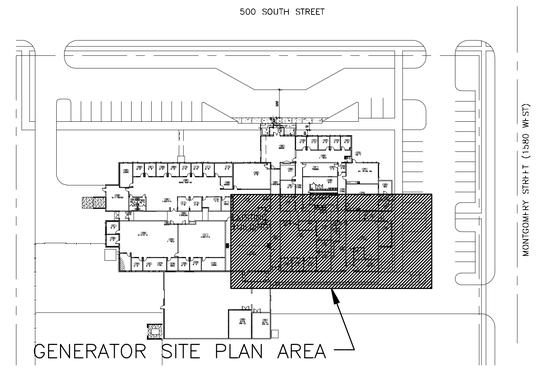

1 ES101 **GENERATOR SITE PLAN**
SCALE: 1/8" = 1'-0"

N

SHEET NOTES

KEYED NOTES - SHEET ES101

1. EXISTING PANEL TO REMAIN.
2. EXISTING PULLBOX TO REMAIN, PROVIDE NEW SPLICE IN PULLBOX FOR NEW FEED TO TRANSFER SWITCH.
3. NORMAL POWER FEED TO TRANSFER SWITCH.
4. GENERATOR POWER FEED TO TRANSFER SWITCH.
5. TRANSFER SWITCH SECONDARY OUTPUT FEEDER.
6. SAWCUT 12" WIDE, TRENCH 36" BELOW GRADE INSTALL FEEDERS, REFILL, COMPACT AND REPAIR CONCRETE/ASPHALT. PROVIDE DETECTABLE YELLOW MAGNETIC RIBBON AT 12" BELOW GRADE.
7. RISE TO 24" ABOVE FINISHED EXTERIOR CONCRETE PAD AND PENETRATE EXTERIOR WALL AT 24" ABOVE CONCRETE PAD.
8. RISE TO STRUCTURE AND INSTALL CONDUIT AS TIGHT TO DECK AS POSSIBLE.
9. FIELD LOCATE THE EXISTING BURIED ELECTRICAL SERVICE PRIOR TO BEGINNING WORK. ENSURE NEW GENERATOR CONCRETE PAD IS A MINIMUM OF 3'-6" CLEAR IN ALL DIRECTIONS FROM THE BURIED ELECTRICAL SERVICE FEEDER(S).
10. FUSED DISCONNECT FOR GENERATOR BLOCK HEATER POWER, COORDINATE LOCATION AND PROVIDE PROPER BREAKER, WIRING, CONDUIT ETC; RECOMMENDED BY MANUFACTURER REGARDLESS OF WHAT IS SHOWN ON THE DRAWINGS.
11. GENERATOR REMOTE ANNUNCIATOR.
12. GENERATOR EMERGENCY STOP PUSH-BUTTON.

GENERAL NOTES - SHEET ES101

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION
B. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.
C. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.

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SHEET TITLE
ELECTRICAL SITE PLAN

SHEET NO.
ES101

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1 EP101 **POWER PLAN**
SCALE: 3/32" = 1'-0"

SHEET NOTES

KEYED NOTES - SHEET EP101

1. PROVIDE (2)4" CONDUITS ROUTED ABOVE CEILING WITH PULLSTRINGS.
2. EXISTING FIRE ALARM TO REMAIN. DISCONNECT PANEL HOMERUN FROM EXISTING POWER SUPPLY AT PANELBOARD CIRCUIT P22-1; SPLICE AND EXTEND CONDUIT/WIRING TO NEW STANDBY POWER SUPPLY AT PANELBOARD CIRCUIT S-15.
3. PROVIDE (9) NEW 20A, 120V BREAKERS IN SPACES # 13, 15, 17, 19, 21, 23, 25, 27, & 29 OF EXISTING 250A, 120/208V, 3, 4W SIEMENS PANELBOARD.
4. DISCONNECT RECEPTACLE HOMERUN FROM EXISTING NORMAL POWER SUPPLY AT PANELBOARD; SPLICE AND EXTEND CONDUIT/WIRING TO NEW STANDBY POWER PANELBOARD 'S' AND CIRCUIT AS INDICATED. CIRCUIT NUMBER IN PARENTHESIS INDICATES AS-BUILT EXISTING POWER CIRCUIT #.
5. EXISTING SECURITY PANEL TO REMAIN. DISCONNECT PANEL HOMERUN FROM EXISTING POWER SUPPLY AT PANELBOARD CIRCUIT P22-2; SPLICE AND EXTEND CONDUIT/WIRING TO NEW STANDBY POWER SUPPLY AT PANELBOARD CIRCUIT S-17.

GENERAL NOTES - SHEET EP101

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION AND CONSTRUCTION.
B. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.
C. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.
D. ALL FIRE ALARM SYSTEM EQUIPMENT FED WITH 120V POWER SHALL BE RE-FED WITH A NEW STANDBY CIRCUIT FROM NEW PANEL 'S'. THIS INCLUDES ALL FIRE ALARM CONTROL PANELS, HORN/STROBE POWER SUPPLIES, RELAYS, ETC. EVEN IF NOT SPECIFICALLY SHOWN ON DRAWINGS.
E. ALL SECURITY SYSTEM EQUIPMENT FED WITH 120V POWER SHALL BE RE-FED WITH A NEW STANDBY CIRCUIT FROM NEW PANEL 'S'. THIS INCLUDES ALL INTRUSION DETECTION SYSTEMS, CATV SYSTEMS AND CARD ACCESS SYSTEMS.

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SHEET TITLE
POWER PLAN I

SHEET NO.
EP101

By: dcontreras; Jun 16, 2008 - 10:10am
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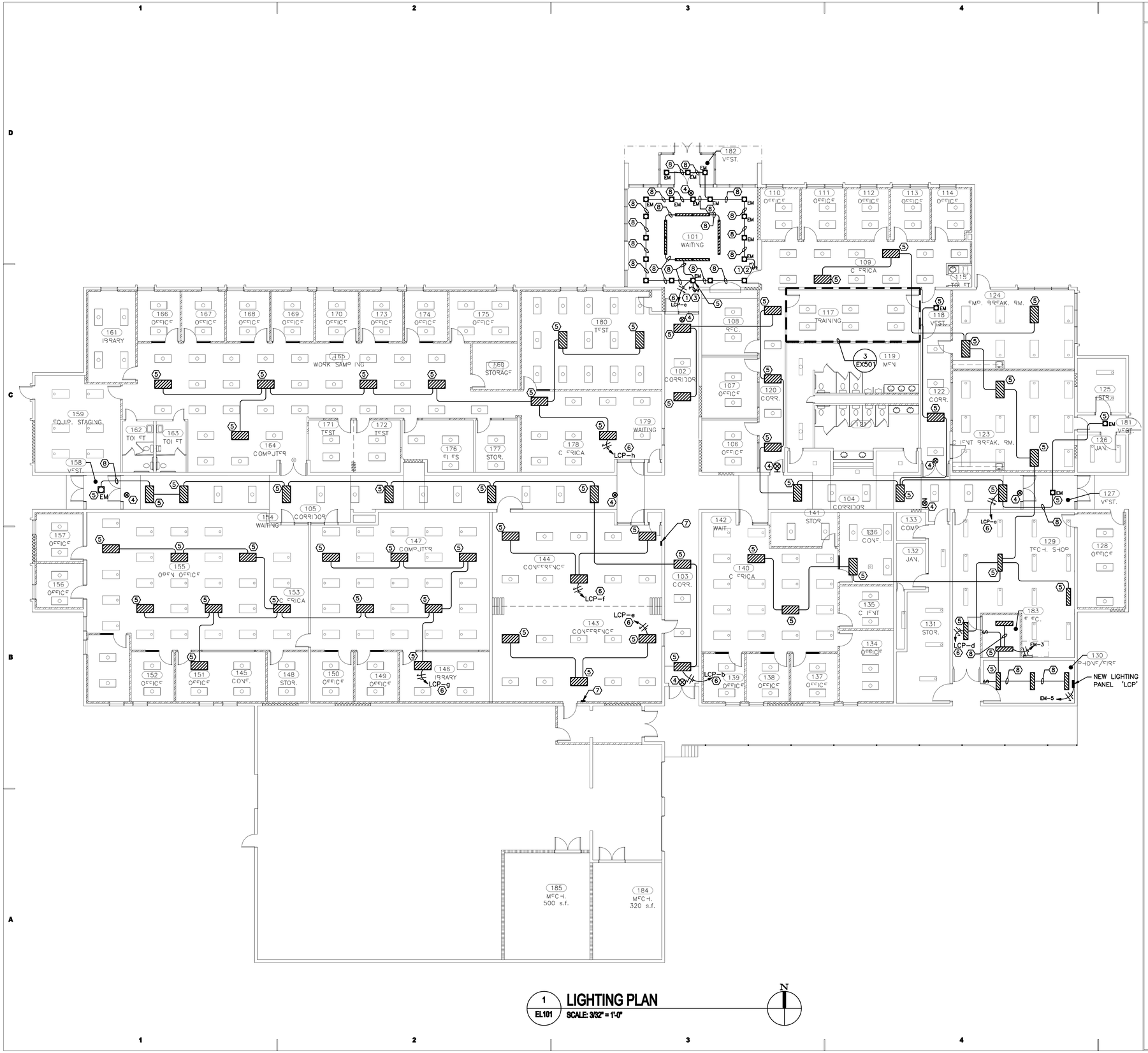

1 EL101 **LIGHTING PLAN**
SCALE: 3/32" = 1'-0"

SHEET NOTES

KEYED NOTES - SHEET EL101

1. DEMOLISH EXISTING SWITCH AND WIRING TO NEAREST FIXTURE. MAINTAIN CONDUIT.
2. PROVIDE STAINLESS STEEL BLANK COVERPLATE FOR SWITCH.
3. PROVIDE NEW LOW VOLTAGE 4-BUTTON MANUAL OVERRIDE SWITCH TIED TO LIGHTING CONTROL PANEL.
4. EXIT LIGHTS ARE TO BE TIED TO NEW EMERGENCY POWER PANEL CIRCUIT EM-1. EXTEND EXISTING EXIT CIRCUIT HOMERUN FROM EXISTING PANEL TO NEW EMERGENCY PANEL.
5. PROVIDE NEW CONDUIT AND WIRING TO EXISTING LIGHTING FIXTURE FOR NEW EMERGENCY LIGHTING. EXTEND CONDUIT AND WIRE AS REQUIRED TO MAINTAIN EXISTING LIGHTING CIRCUIT.
6. ROUTE THROUGH LIGHTING CONTROL PANEL.
7. PROVIDE NEW LOW VOLTAGE 2-BUTTON MANUAL OVERRIDE SWITCH TIED TO LIGHTING CONTROL PANEL FOR OVERRIDE OF LIGHTING WITHIN THIS ROOM.
8. RE-USE EXISTING CONDUIT AND WIRE.

GENERAL NOTES - SHEET EL101

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE AND AFTER DEMOLITION AND CONSTRUCTION.
B. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.
C. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.
D. ALL LIGHT FIXTURES AND EXIT SIGNS ARE EXISTING AND SHALL BE PROTECTED AND MAINTAINED.
E. DIVISION 16 SHALL BE RESPONSIBLE FOR ALL CONDUIT, WIRE, LABOR, ETC; REQUIRED TO EXTEND AND MAINTAIN ALL EXISTING LIGHTING CIRCUITS

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SHEET TITLE
LIGHTING PLAN

SHEET NO.
EL101

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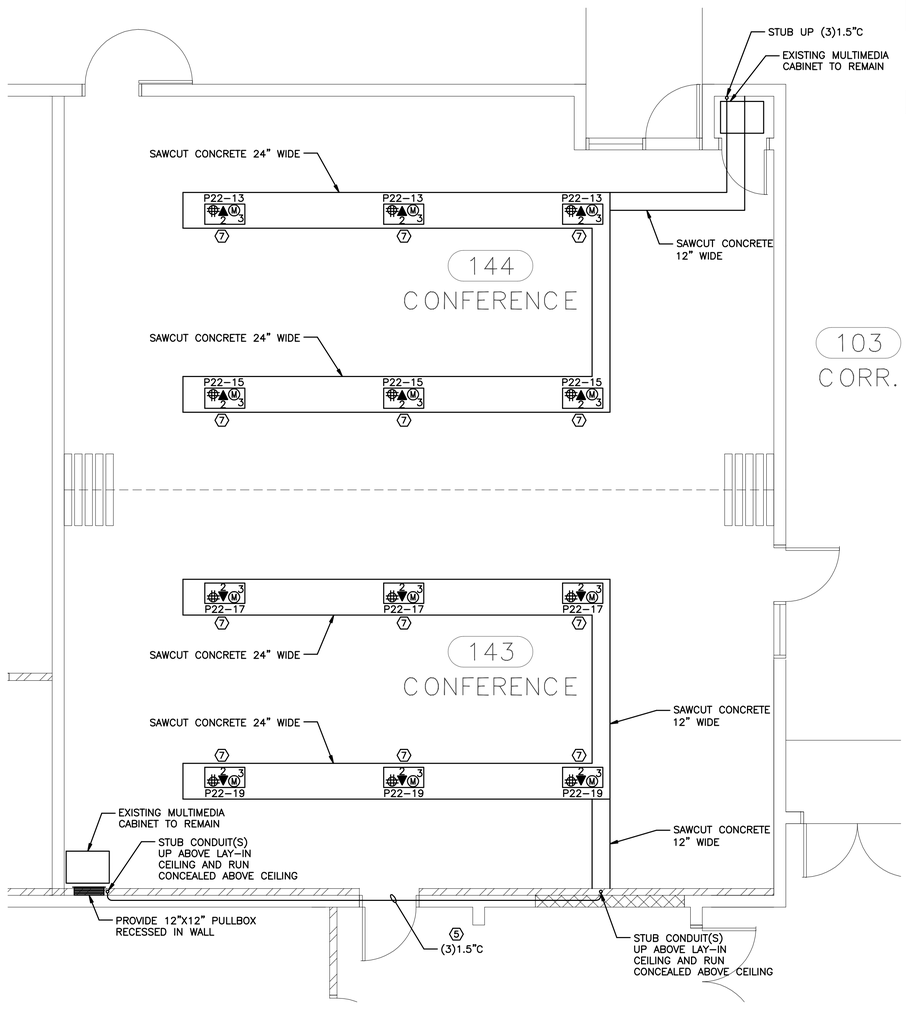
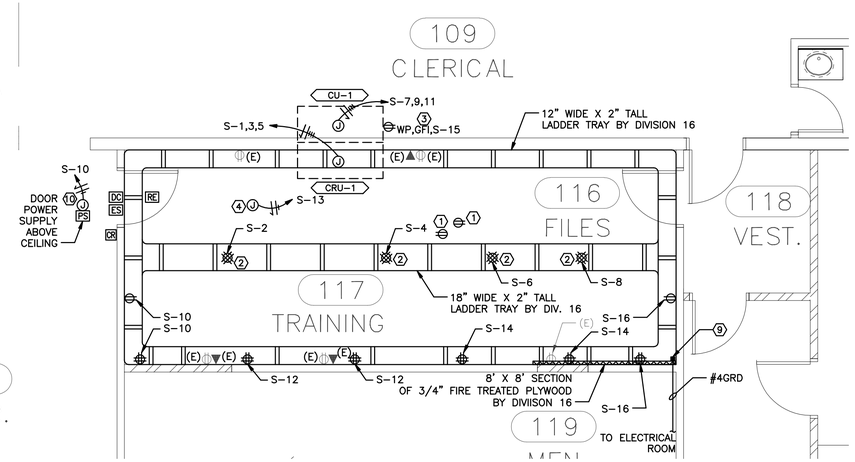
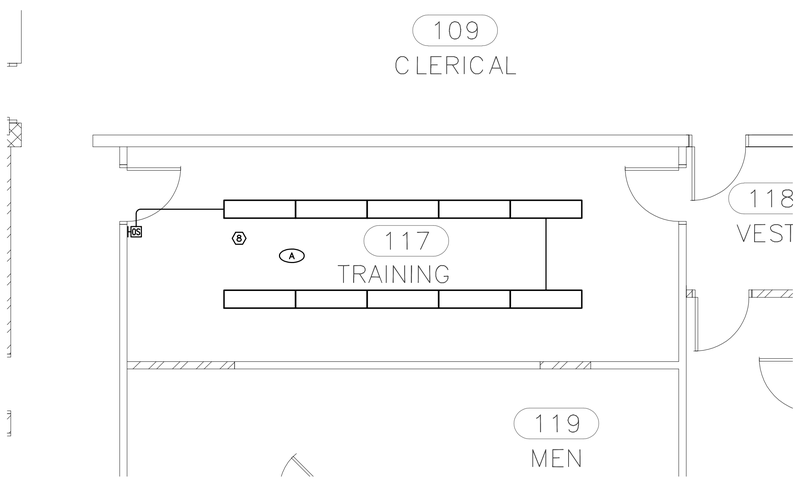


1 EX501 **ENLARGED CONFERENCE ROOMS POWER PLAN**
SCALE: 1/4" = 1'-0"



2 EX501 **ENLARGED SERVER ROOM POWER PLAN**
SCALE: 1/4" = 1'-0"



3 EX501 **ENLARGED SERVER ROOM LIGHTING PLAN**
SCALE: 1/4" = 1'-0"

SHEET NOTES

KEYED NOTES - SHEET EX501

1. DEMOLISH EXISTING RECEPTACLE WIRE AND CONDUIT IN WALL TO BE DEMOLISHED.
2. RECEPTACLE LOCATED AT CEILING.
3. NEW CONDESING UNIT LOCATED ON ROOF, PROVIDE NEW WEATHERPROOF JUNCTION BOX AND WEATHERPROOF RECEPTACLE MOUNTED TO SIDE OF CONDENSING UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH IN. PROVIDE WATERPROOFING AT ALL ELECTRICAL PENETRATIONS THROUGH ROOF.
4. J-BOX FOR MECHANICAL CONTROLS POWER LOCATED ALONG CEILING.
5. PROVIDE (3) 1.5" CONDUITS ROUTED ABOVE CEILING FOR MICROPHONE CABLING FROM CABINET TO FLOORBOXES.
6. (3) 1.5" CONDUITS STUBBED UP BEHIND CABINET FOR MICROPHONE CABLING TO FLOORBOXES.
7. PROVIDE FLOORBOX EQUIVALENT TO WIREMOLD RFB6 WITH STAINLESS STEEL COVERPLATE. PROVIDE (1) 1-1/4" SPARE CONDUIT WITH PULLSTRING FROM EACH BOX TO THE MULTIMEDIA CABINET LOCATION.
8. DEMOLISH EXISTING LIGHTS WITHIN THIS ROOM; MAINTAIN CIRCUIT; PROVIDE NEW LIGHTS AS SHOWN AND CIRCUIT TO EXISTING LIGHTING POWER FROM DEMOLISHED LIGHTS.
9. PROVIDE WALL MOUNT BUS BAR AND ROUTE & BOND #4 GROUND WIRE BACK TO MAIN ELECTRICAL ROOM GROUNDING ELECTRODE SYSTEM.
10. J-BOX ABOVE CEILING FOR POWER TO DOOR POWER SUPPLY.

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SHEET TITLE
ENLARGED ELECTRICAL PLANS

SHEET NO.
EX501

By: dcontreras; Jun 16, 2008 - 10:11am
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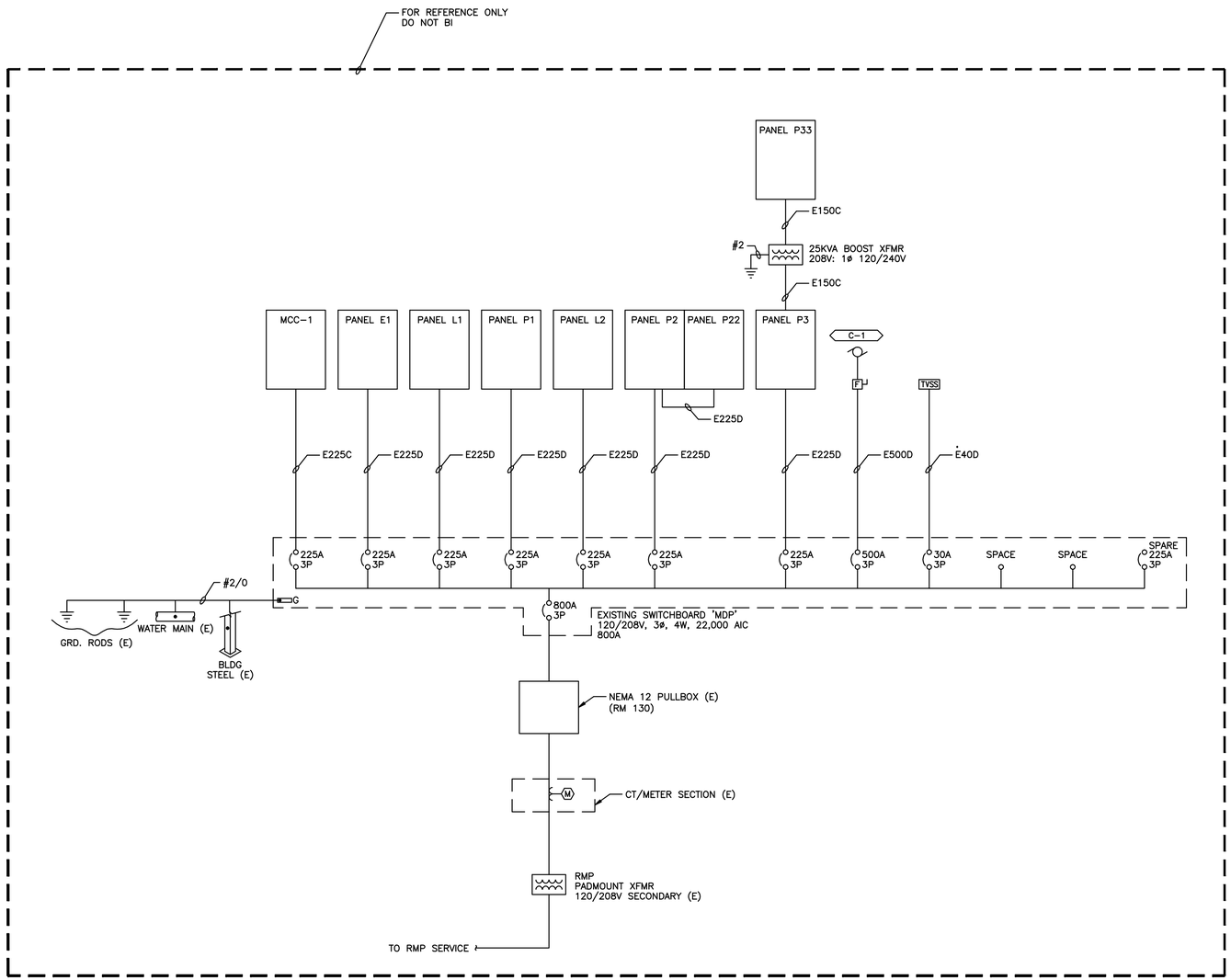
FEEDER SCHEDULE

SYMBOL	CONDUIT + WIRE SIZE	NOTES
E40D	0.75" 4#8, 1#10 GRD	EXISTING FEEDER
100D	1.25" 4#2, 1#8 GRD	
E150C	1.5" 3#1/0, 1#6 GRD	EXISTING FEEDER
225D	2.5" 4#4/0, 1#4 GRD	
E225C	2" 3#4/0, 1#4 GRD	EXISTING FEEDER
E225D	2.5" 4#4/0, 1#4 GRD	EXISTING FEEDER
E250C	2" 3#250KCM, 1#4 GRD	EXISTING FEEDER
E500D	(2) SETS E250D	EXISTING FEEDER



1 EX600 **EXISTING ONE-LINE DIAGRAM**
SCALE: NTS

SHEET NOTES

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EXISTING ONE LINE DIAGRAM

SHEET NO. **EX600**

By: dcontreras; Jun 16, 2008 - 10:11am
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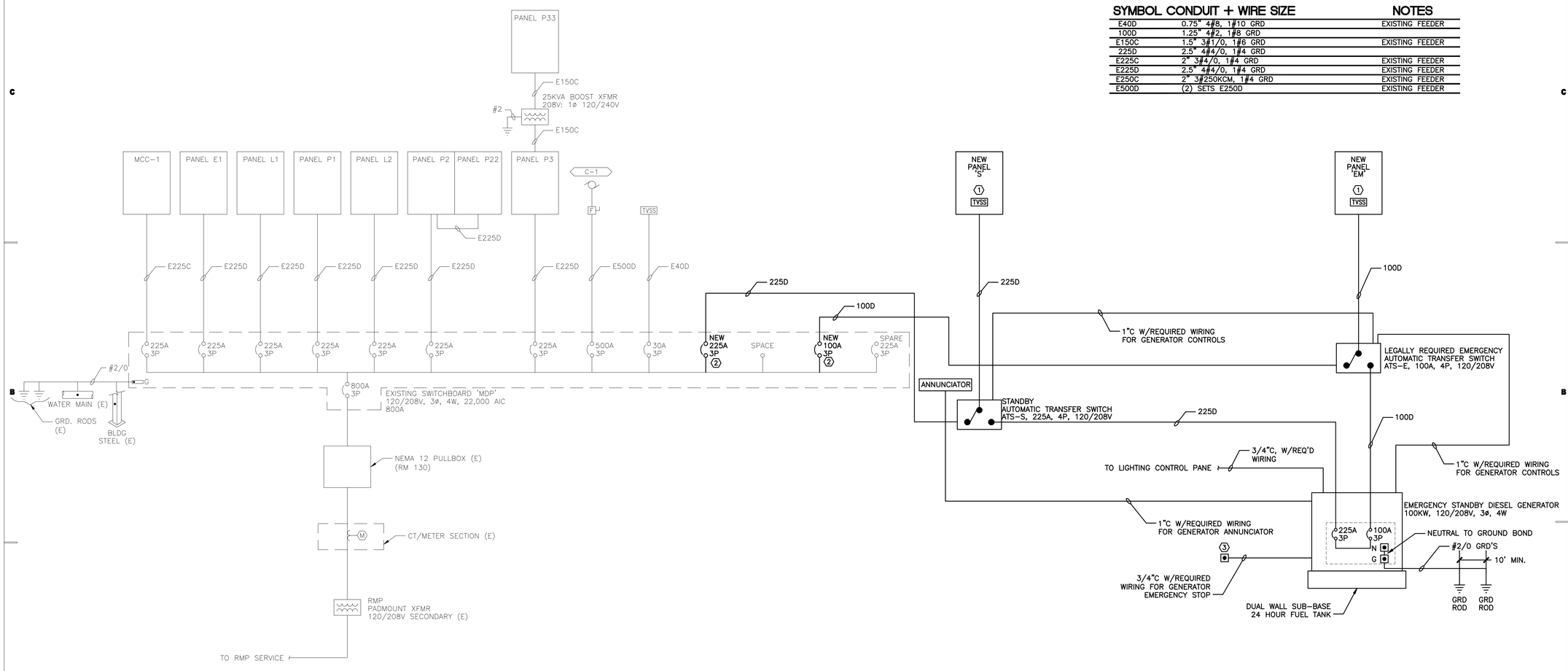
KEYED NOTES - SHEET EX601

1. PROVIDE INTEGRAL TVSS.
2. PROVIDE NEW BREAKER IN EXISTING SPACE OF SWITCH-BOARD.
3. GENERATOR EMERGENCY STOP PUSH-BUTTON LOCATED IN TRANSFER SWITCH ROOM 130.

FEEDER SCHEDULE

SYMBOL	CONDUIT + WIRE SIZE	NOTES
E40D	0.75" 4#8, 1#10 GRD	EXISTING FEEDER
100D	1.25" 4#2, 1#8 GRD	
E150C	1.5" 3#1/0, 1#6 GRD	EXISTING FEEDER
225D	2.5" 4#4/0, 1#4 GRD	
E225C	2" 3#4/0, 1#4 GRD	EXISTING FEEDER
E225D	2.5" 4#4/0, 1#4 GRD	EXISTING FEEDER
E250C	2" 3#250KCM, 1#4 GRD	EXISTING FEEDER
E500D	(2) SETS E250D	EXISTING FEEDER



1 EX601 **NEW EMERGENCY/STANDBY ONE-LINE DIAGRAM**

SCALE: NTS

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DFCM No. 08230200
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SLC, UT 84104

MARK	DATE	REVISION
CD	6/17	CONSTRUCTION DOCUMENTS

PROJECT MANAGER: CK
DRAWN BY: KGE
CHECKED BY: KGE
DATE: 06/17/08
WHW JOB NO.: 08008

SHEET TITLE
NEW ONE LINE DIAGRAM

SHEET NO.
EX601

By: dcontreras; Jun 16, 2008 - 10:11am
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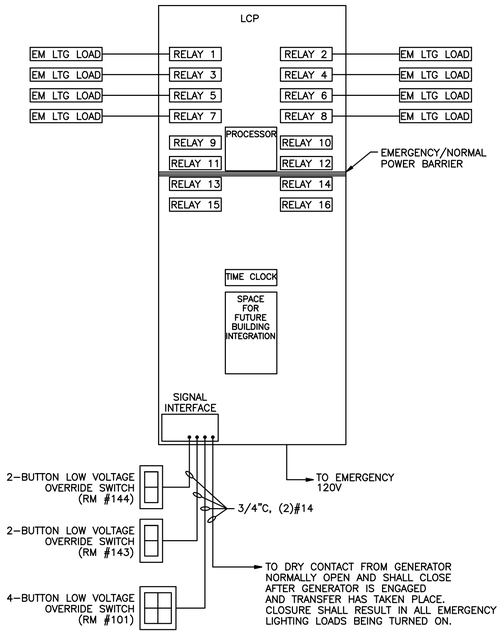

1 EX602 **LIGHTING CONTROL PANEL RISER DIAGRAM**
SCALE: NTS

MECHANICAL EQUIPMENT LIST

	DESCRIPTION	V	PH	FLA	DISCONNECT SIZE	DISCONNECT FUSED	STARTER	FEEDER	LOCATION	NOTES
CRU-1	COMPUTER ROOM UNIT	208	3	65	W/EQUIP		W/EQUIP	1-1/4" C; (4)#2, (1)#8 GRD	SEE PLANS	1
CU-1	CONDENSING UNIT	208	3	7	W/EQUIP		W/EQUIP	3/4" C; (5) #12	SEE PLANS	1

NOTES
1. PROVIDE GENERATOR BACKED UP STANDBY POWER FOR MECHANICAL EQUIPMENT.

PANEL:EM — 120 208 3 PH 4 W 100 A BUS 22,000 AIC FULLY RATED

		LOAD	BKR	P				BKR	P		LOAD	DESCRIPTION
DESCRIPTION												
EM EXIT LIGHTING	L	600	20	1	1	A	2	20	1	L	873	EM LTG N.E. CORRIDORS
EM ELEC/PHONE ROOMS	L	325	20	1	3	B	4	20	1	L	631	EM LTG S.W. CORRIDORS
SPARE			20	1	5	C	6	20	1	L	1004	EM LTG N. ENTRANCE/LOBBY
SPARE			20	1	7	A	8	20	1	L	1020	EM LTG EAST COMMON AREAS
SPARE			20	1	9	B	10	20	1	L	255	EM LTG CONFERENCE RM 143
SPARE			20	1	11	C	12	20	1	L	255	EM LTG CONFERENCE RM 144
SPARE			20	1	13	A	14	20	1	L	1105	EM LTG S.W. COMMON AREAS
SPARE			20	1	15	B	16	20	1	L	765	EM LTG N.W. COMMON AREAS
SPARE			20	1	17	C	18	20	1			SPARE
SPARE			20	1	19	A	20	20	1			SPARE
SPARE			20	1	21	B	22	20	1			SPARE
SPARE			20	1	23	C	24	20	1			SPARE
SPARE			20	1	25	A	26	20	1			SPARE
SPARE			20	1	27	B	28	20	1			SPARE
SPARE			20	1	29	C	30	20	1			SPARE
CONNECTED LOAD		6.8 KVA			19	AMPS						
NEC DEMAND LOAD		8.5 KVA			24	AMPS						

PANEL:S — 120 208 3 PH 4 W 225 A BUS 22,000 AIC FULLY RATED

		LOAD	BKR	P				BKR	P		LOAD	DESCRIPTION
DESCRIPTION												
CRU-1 COMPUTER UNIT	M	7836	80	3	1	A	2	20	1	R	360	REC CLG SERVER ROOM
–	M	7836	–	–	3	B	4	20	1	R	360	REC CLG SERVER ROOM
–	M	7836	–	–	5	C	6	20	1	R	360	REC CLG SERVER ROOM
CU-1 CONDENSING UNIT	M	840	20	3	7	A	8	20	1	R	360	REC CLG SERVER ROOM
–	M	840	–	–	9	B	10	20	1	R	540	REC WALL SERVER ROOM
–	M	840	–	–	11	C	12	20	1	R	720	REC WALL SERVER ROOM
J-BOX MECH CTRLS SVR RM	M	600	20	1	13	A	14	20	1	R	720	REC WALL SERVER ROOM
FIRE PANEL	E	600	20	1	15	B	16	20	1	R	540	REC WALL SERVER ROOM
SECURITY PANEL	E	600	20	1	17	C	18	20	1	R	360	REC IDF RM 133
SPARE			20	1	19	A	20	20	1	R	180	REC IDF RM 130
SPARE			20	1	21	B	22	20	1	R	360	REC IDF RM 130
SPARE			20	1	23	C	24	20	1	R	180	REC RM 160
SPARE			80	3	25	A	26	20	1	R	360	REC RM 160
–			–	–	27	B	28	20	1			SPARE
–			–	–	29	C	30	20	1			SPARE
SPARE			20	3	31	A	32	20	1			SPARE
–			–	–	33	B	34	20	1			SPARE
–			–	–	35	C	36	20	1			SPARE
SPACE ONLY			20	1	37	A	38	20	1			SPARE
SPACE ONLY			20	1	39	B	40	20	1			SPARE
SPACE ONLY			20	1	41	C	42	20	1			SPARE
CONNECTED LOAD		33.2 KVA			92	AMPS						
NEC DEMAND LOAD		33.2 KVA			92	AMPS						

LIGHTING CONTROL PANEL RELAY SCHEDULE

LOCATION: SEE PLANS — PANEL: LCP
MOUNTING: SURFACE MOUNTED

RELAY	DESCRIPTION	CIRCUIT	CONTROL
a	EM LTG N.E. CORRIDORS	EM-2	TIME ON (6AM)/TIME OFF (8PM)
b	EM LTG S.W. CORRIDORS	EM-4	TIME ON (6AM)/TIME OFF (8PM)
c	EM LTG N. ENTRANCE/LOBBY	EM-6	TIME ON (6AM)/TIME OFF (8PM)
d	EM LTG EAST COMMON AREAS	EM-8	TIME ON (6AM)/TIME OFF (8PM)
e	EM LTG CONFERENCE RM 143	EM-10	TIME ON (6AM)/TIME OFF (8PM)
f	EM LTG CONFERENCE RM 144	EM-12	TIME ON (6AM)/TIME OFF (8PM)
g	EM LTG S.W. COMMON AREAS	EM-14	TIME ON (6AM)/TIME OFF (8PM)
h	EM LTG N.W. COMMON AREAS	EM-16	TIME ON (6AM)/TIME OFF (8PM)
i	SPARE		
j	SPARE		
k	SPARE		
l	SPARE		
**********NORMAL/EMERGENCY POWER BARRIER**********			
m	SPARE		
n	SPARE		
o	SPARE		
p	SPARE		

GENERAL NOTES:
A. LIGHTING CONTROL PANEL SHALL MONITOR THE STATUS OF NORMAL/EMERGENCY POWER AND SHALL DEFAULT TO ALL EMERGENCY RELAYS BEING TURNED ON IN THE EVENT OF A LOSS OF NORMAL POWER AFTER THE GENERATOR IS UP AND RUNNING.
B. LIGHTING CONTROL PANEL TO HAVE ASTRONOMICAL TIMECLOCK FOR TIME ON/OFF OPERATION.
C. LIGHTING CONTROL PANEL SCHEDULE IS FOR MON-FRI OPERATION, ALL RELAYS SHALL BE SET TO OFF ON SAT-SUN.
D. DIVISION 16 SHALL COORDINATE ALL LIGHTING RELAY SCHEDULE TIMES WITH OWNER PRIOR TO PROGRAMMING AND SHALL MAKE ALL ADJUSTMENT TO THE SCHEDULE AS REQUESTED BY THE OWNER UP TO FINAL ACCEPTANCE OF ALL ELECTRICAL WORK.

LUMINAIRE SCHEDULE - SHEET EX602

TYPE	DESCRIPTION		LAMP(S) AND BALLASTS	INPUT (VA)	MANUFACTURER(S)
A	DESCRIPTION:	SUSPENDED FLUORESCENT INDUSTRIAL	(2)F32T8/ADV835/ALTO	48	COLUMBIA
	SIZE:	48 IN. LENGTH	(1) 2-LAMP ADVANCE		CSR4-232-EU-ADVANCE OPTANIUM-LW-SC-GLR-CSHC
	PENDANT:	BAKED WHITE ENAMEL	ROP-2P32-LW-SC		LITHONIA
	BALLAST:	WIRE GUARD	PREMIUM ELECTRONIC		L 2 32 MVOLT ADOP GLR HC
	MOUNTING:	CHAIN HUNG, 9FT ABOVE FINISHED FLOOR	120 VOLT		
	OTHER:	FUSED			

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EX602

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