City of Aurora
Building Codes Division
15151 E Alameda Pkwy
Aurora, CO 80012
(303) 739-7420

# Notice

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# Medical Center of Aurora
## South Campus - CATH LAB ADDITION

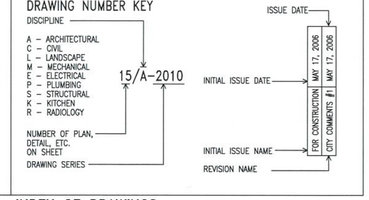
1501 SOUTH POTOMAC STREET
AURORA, CO 80012

**JULY 02, 2009**
PWCRA PROJECT # 142542.000
HCA #306660005

**CHANGE DIRECTIVE #2**
**ISSUE FOR CONSTRUCTION**

SYMBOLS KEY

DRAWING NUMBER KEY




INDEX OF DRAWINGS

### GENERAL

| | | ISSUE | DATE |
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| | | CHANGE DIRECTIVE #1 | 05-18-09 |
| | | CHANGE DIRECTIVE #2 | 07-22-09 |
| G-0000 | COVER SHEET | ● | |
| G-0001 | INDEX OF DRAWINGS | ● ● ● ● ● ● | |

### STRUCTURAL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S-1 | ~~CATH LAB EQUIPMENT BRACING AND SECTIONS~~ | ● | | | ● | | |
| S-2 | NEW ROOF RTU BRACING | ● | | | ● | ● | |

### ARCHITECTURAL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| D-2001 | DEMOLITION PLAN – PARTIAL FIRST FLOOR | ● | | | ● | | ● |
| A-0000 | ~~GENERAL NOTES, ABBREVIATIONS, CODE SUMMERY AND SYMBOLS~~ | ● | | | | | |
| A-0101 | ~~CODE COMPLIANCE DETAILS~~ | ● | | | | | |
| A-0102 | ~~CODE COMPLIANCE DETAILS~~ | ● | | | | | |
| A-0111 | CODE COMPLIANCE PLAN – PARTIAL FIRST FLOOR | ● | | | ● | | ● |
| A-1000 | ARCHITECTURAL ROOF PLAN | ● | | | ● | ● | |
| A-2001 | ARCHITECTURAL NEW CONSTRUCTION PLAN – PARTIAL FIRST FLOOR | ● | | | ● | | ● |
| A-2101 | EQUIPMENT AND WOODWORK PLAN – PARTIAL FIRST FLOOR | ● | | | ● | | ● |
| A-2201 | INTERIOR FINISH PLAN – PARTIAL FIRST FLOOR | ● | | | ● | | ● |
| A-2401 | ARCHITECTURAL REFLECTED CEILING PLAN – PARTIAL FIRST FLOOR | ● | | | ● | | ● |
| A-5200 | ARCHITECTURAL INTERIOR ELEVATIONS | ● | | | ● | | ● |
| A-5201 | ARCHITECTURAL INTERIOR ELEVATIONS | ● | | | ● | | ● |
| A-5400 | ~~ARCHITECTURAL CASEWORK SECTIONS~~ | ● | | | | | |
| A-5401 | ~~ARCHITECTURAL WOODWORK SECTIONS~~ | ● | | | ● | | |
| A-5500 | INTERIOR RCP DETAILS | ● | | | | | |
| A-5600 | ~~TOILET ACCESSORIES & MISCELLANEOUS INTERIOR DETAILS~~ | ● | | | ● | | |
| A-8000 | ~~INTERIOR FINISH LEGEND~~ | ● | | | ● | | |
| A-8100 | ~~PARTITION DETAILS~~ | ● | | | | | |
| A-8101 | PARTITION TYPE SCHEDULE | ● | | | | | ● |
| A-8200 | DOOR/WINDOW SCHEDULE & DETAILS | ● | | | ● | | ● |

### MECHANICAL ELECTRICAL AND PLUMBING

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| E-0001 | ~~ELECTRICAL LEGENDS & NOTES~~ | ● | |
| ED-2001 | ~~POWER DEMOLITION PLAN – FIRST FLOOR~~ | ● | |
| ED-3001 | ~~LIGHTING DEMOLITION PLAN – FIRST FLOOR~~ | ● | ● |
| ED-4001 | ~~FIRE ALARM DEMOLITION PLAN – FIRST FLOOR~~ NOT INC | ● | |
| E-2000 | ~~POWER OVERALL PLAN – FIRST FLOOR~~ | ● | |
| E-2001 | POWER PLAN – FIRST FLOOR | ● ● ● ● | ● |
| E-2002 | ~~POWER PLAN – FIRST FLOOR~~ | ● ● ● | |
| E-200R | POWER PLAN – ROOF | ● ● | ● |
| E-3001 | LIGHTING PLAN – FIRST FLOOR | ● ● ● | ● |
| E-4001 | ~~FIRE ALARM PLAN – FIRST FLOOR~~ SEPARATE SUBMITTAL | ● | ● |
| E-5001 | ~~ELECTRICAL ONE-LINE DIAGRAM~~ | ● | |
| E-5002 | ~~ELECTRICAL ONE-LINE DIAGRAM~~ | ● | |
| E-5003 | ~~ELECTRICAL ONE-LINE DIAGRAM~~ | ● ● ● | ● |
| E-6001 | ~~ELECTRICAL DETAILS~~ | ● | |
| E-7001 | ~~ELECTRICAL SCHEDULES~~ | ● | |
| E-7002 | ~~ELECTRICAL SCHEDULES~~ | ● | ● ● |
| E-7003 | ELECTRICAL SCHEDULES | ● | ● ● |
| M-0001 | GENERAL INFORMATION – MECHANICAL | ● | ● |
| M-0002 | ~~CONTROL DIAGRAMS – MECHANICAL~~ | ● | |
| MD-2001 | ~~DUCTWORK DEMOLITION PLAN – FIRST FLOOR~~ | ● | |
| MD-2002 | ~~DUCTWORK DEMOLITION PLAN – ROOF~~ | ● | |
| MD-3001 | ~~PIPING DEMOLITION PLAN – FIRST FLOOR~~ | ● | |
| M-2001 | DUCTWORK PLAN – FIRST FLOOR | ● | ● ● ● |
| M-2002 | DUCTWORK PLAN – ROOF | ● | ● ● ● |
| M-3001 | PIPING PLAN – FIRST FLOOR | ● | ● ● ● |
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| P-0001 | ~~PLUMBING LEGENDS & NOTES~~ | ● | |
| P-1001 | PLUMBING PLAN – UNDERFLOOR | ● | ● ● |
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| P-5001 | ~~PLUMBING RISER DIAGRAMS~~ | ● | |
| CM-0001 | ~~NOTES AND LEGENDS~~ | ● | ● |
| CM-2001 | COMMUNICATIONS PLAN – FIRST FLOOR | ● | ● ● |
| CM-3001 | LOW VOLTAGE PLAN – FIRST FLOOR | ● | ● ● |
| CM-6001 | ~~COMMUNICATIONS RISERS AND DETAILS~~ | ● | |
| CM-6002 | ~~COMMUNICATIONS RISERS AND DETAILS~~ | ● | ● |

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### PHILIPS CATH LAB VENDOR DRAWINGS

**N-WES090034 C**

| | | ISSUE | DATE |
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| AD4 | EQUIPMENT DETAILS | ● | ● |
| AD5 | EQUIPMENT DETAILS | ● | ● |
| AD6 | EQUIPMENT DETAILS | ● | ● |
| AD7 | EQUIPMENT DETAILS | ● | ● |
| AD8 | TRANSPORT DETAILS | ● | ● |
| SN | SUPPORT NOTES | ● | ● |
| SL | SUPPORT LEGENDS | ● | ● |
| S1 | SUPPORT PLAN – FLOOR & WALL | ● | ● |
| S2 | SUPPORT PLAN – CEILING | ● | ● |
| SD1 | SUPPORT DETAILS | ● | ● |
| SD2 | SUPPORT DETAILS | ● | ● |
| SD3 | SUPPORT DETAILS | ● | ● |
| EN | ELECTRICAL NOTES | ● | ● |
| EL | ELECTRICAL LEGEND | ● | ● |
| E1 | ELECTRICAL PLAN | ● | ● |
| E2 | RACEWAY & CONDUIT INFORMATION | ● | ● |
| E3 | RACEWAY & CONDUIT INFORMATION | ● | ● |
| E4 | RACEWAY & CONDUIT INFORMATION | ● | ● |
| ED1 | ELECTRICAL DETAILS | ● | ● |
| ED2 | ELECTRICAL DETAILS | ● | ● |
| ED3 | ELECTRICAL DETAILS | ● | ● |
| ED4 | ELECTRICAL DETAILS | ● | ● |
| N1 | REMOTE SERVICE NETWORK | ● | ● |
| CHK | CHECK LIST | ● | ● |

**N-WES090035 C**

| | | | |
|---|---|---|---|
| C1 | TABLE OF CONTENTS | ● | ● |
| AN | GENERAL NOTES | ● | ● |
| AL | EQUIPMENT LEGEND | ● | ● |
| A1 | EQUIPMENT PLAN | ● | ● |
| AD1 | EQUIPMENT DETAILS | ● | ● |
| AD2 | EQUIPMENT DETAILS | ● | ● |
| AD3 | EQUIPMENT DETAILS | ● | ● |
| AD4 | EQUIPMENT DETAILS | ● | ● |
| AD5 | EQUIPMENT DETAILS | ● | ● |
| AD6 | EQUIPMENT DETAILS | ● | ● |
| AD7 | EQUIPMENT DETAILS | ● | ● |
| AD8 | TRANSPORT DETAILS | ● | ● |
| SN | SUPPORT NOTES | ● | ● |
| SL | SUPPORT LEGENDS | ● | ● |
| S1 | SUPPORT PLAN – FLOOR & WALL | ● | ● |
| S2 | SUPPORT PLAN – CEILING | ● | ● |
| SD1 | SUPPORT DETAILS | ● | ● |
| SD2 | SUPPORT DETAILS | ● | ● |
| SD3 | SUPPORT DETAILS | ● | ● |
| EN | ELECTRICAL NOTES | ● | ● |
| EL | ELECTRICAL LEGEND | ● | ● |
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| E2 | RACEWAY & CONDUIT INFORMATION | ● | ● |
| E3 | RACEWAY & CONDUIT INFORMATION | ● | ● |
| E4 | RACEWAY & CONDUIT INFORMATION | ● | ● |
| ED1 | ELECTRICAL DETAILS | ● | ● |
| ED2 | ELECTRICAL DETAILS | ● | ● |
| ED3 | ELECTRICAL DETAILS | ● | ● |
| ED4 | ELECTRICAL DETAILS | ● | ● |
| N1 | REMOTE SERVICE NETWORK | ● | ● |
| CHK | CHECK LIST | ● | ● |

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### PHILIPS PATIENT MONITORING VENDOR DRAWINGS

| | | ISSUE | DATE |
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| 1 | INDEX | ● | |
| 2 | 1ST FLOOR MONITORING PLAN | | |
| 3 | EQUIPMENT ELEVATIONS | ● | |

### NURSE CALL VENDOR DRAWINGS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NC01 | NURSE CALL LAYOUT | ● | | | | | |

### TELEHEALTH SERVICES VENDOR DRAWINGS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 of 2 | LEGENDS, NOTES AND DETAILS | ● | | | | | |
| 2 of 2 | EQUIPMENT FLOOR PLAN | ● | | | | | |

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

09-411001
RSN 480593

John C
CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED JC
DATE 7/31/09


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HCA
Project # 306660005

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F: 303.694.5125

STATE OF COLORADO
TIMOTHY J. MCDOUGAL
203601
LICENSED ARCHITECT
7.1.09

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| | | |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

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**Sheet**

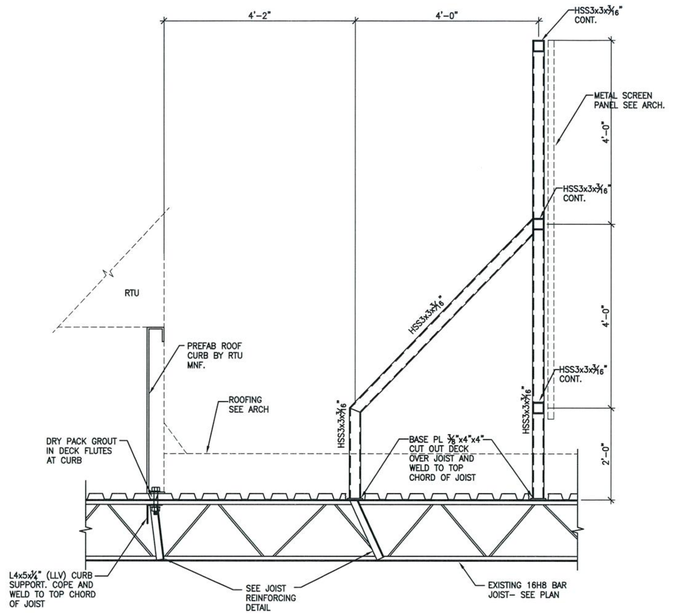
**G-0001**

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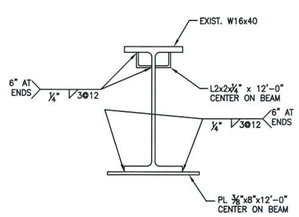

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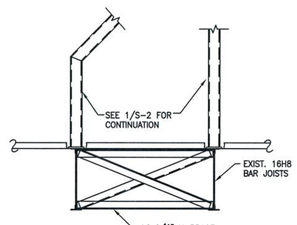

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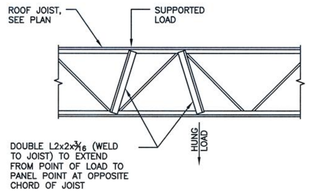

1 S-2 **SECTION**
SCALE: 3/4"=1'-0"




2 S-2 **SECTION**
SCALE: 1½"=1'-0"




1A S-2 **SECTION**
SCALE: 3/4"=1'-0"

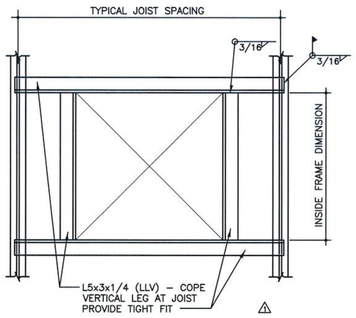



NOTES:

1. PROVIDE REINFORCEMENT AT SUPPORTED OR HUNG LOADS > 300#.
2. DETAIL NOT REQD. IF LOAD IS APPLIED DIRECTLY TO JOIST PANEL POINT.

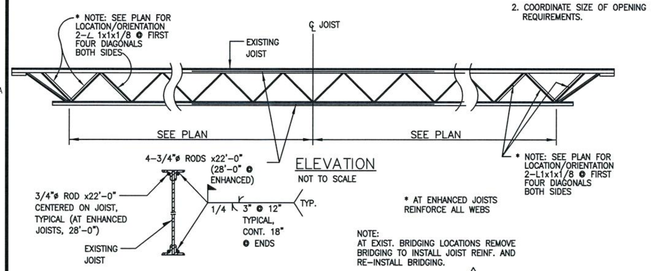
## JOIST REINFORCING DETAILS AT POINT LOADS

SCALE 3/4"=1'-0"




## TYPICAL ROOF OPENING REINFORCING DETAIL

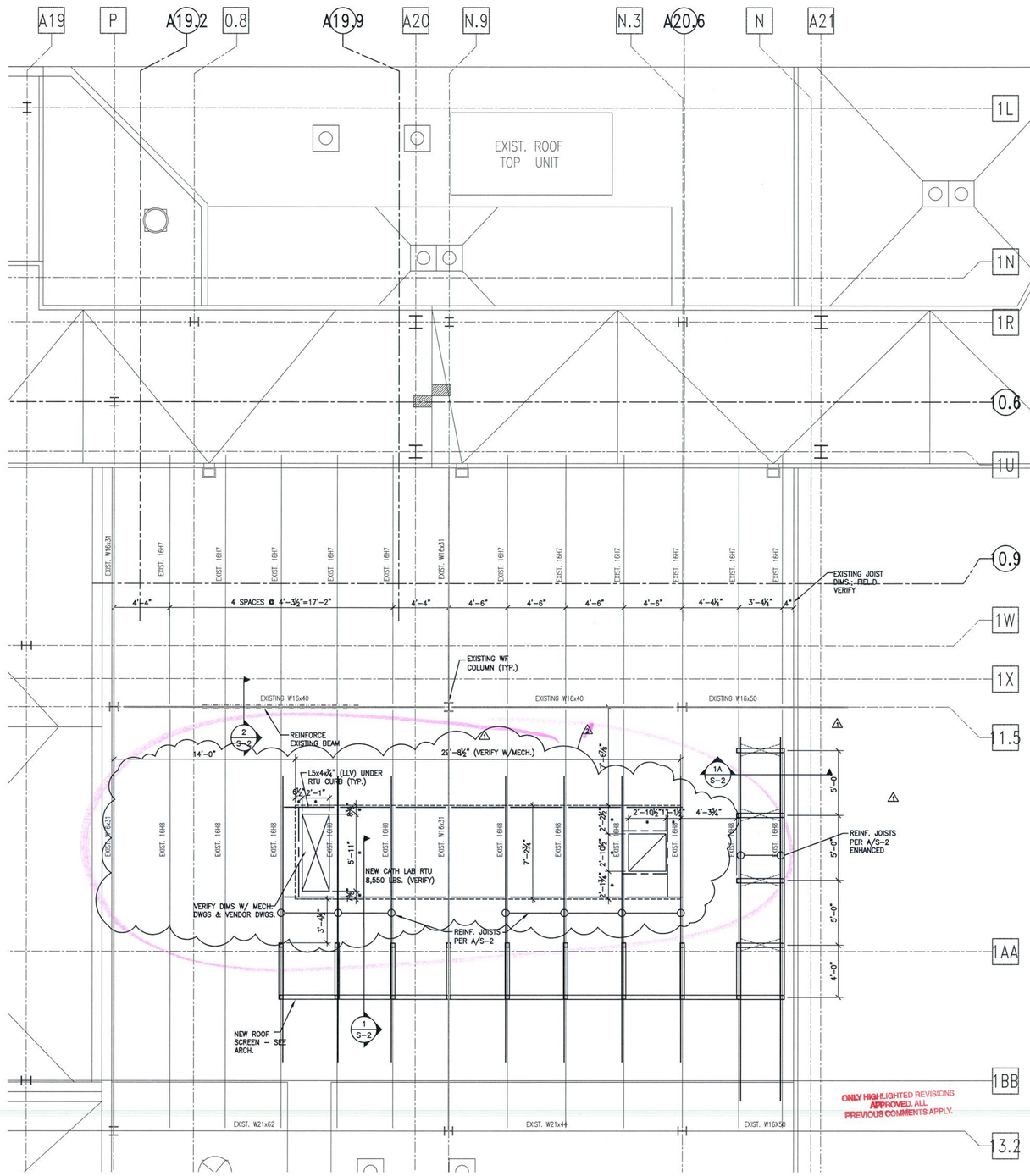
1. SEE PLANS FOR LOCATIONS REQUIRED.
2. COORDINATE SIZE OF OPENING WITH MECHANICAL REQUIREMENTS.




## JOIST REPAIR DETAIL

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

A S-2




ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

09-411001-

## PARTIAL ROOF PLAN AT NEW RTU

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

1. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION.
2. VERIFY EQUIPMENT AND SCREEN LOCATIONS WITH ARCHITECT AND MEP DRAWINGS.
3. ALL EXPOSED MISC. METAL TO BE HOT DIPPED GALVANIZED.

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 5/31/09

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10100 North Central Expressway, Suite 300
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South Campus
Cath Labs
Aurora, Colorado

**HCA**
Project # 306660005

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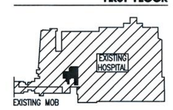
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TO THE BEST OF MY KNOWLEDGE AND ABILITY, THE COMPLETED STRUCTURE DEPICTED ON THESE PLANS COMPLIES WITH THE APPLICABLE MINIMUM BUILDING CODES.
FILE No. 05BRW099

## KEY PLAN
FIRST FLOOR




COLORADO REGISTERED SUSHOMA RAMANNA 30354 PROFESSIONAL ENGINEER

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 2 | CHANGE DIRECTIVE NO.1 | 5/18/09 |
| 1 | ADDENDUM #2 | 4/6/09 |

**Sheet Information**

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| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | DAB |
| Checked | JDM |
| Approved | JDM |

**Title**

PARTIAL ROOF PLAN AT NEW RTU & SECTIONS & DETAILS

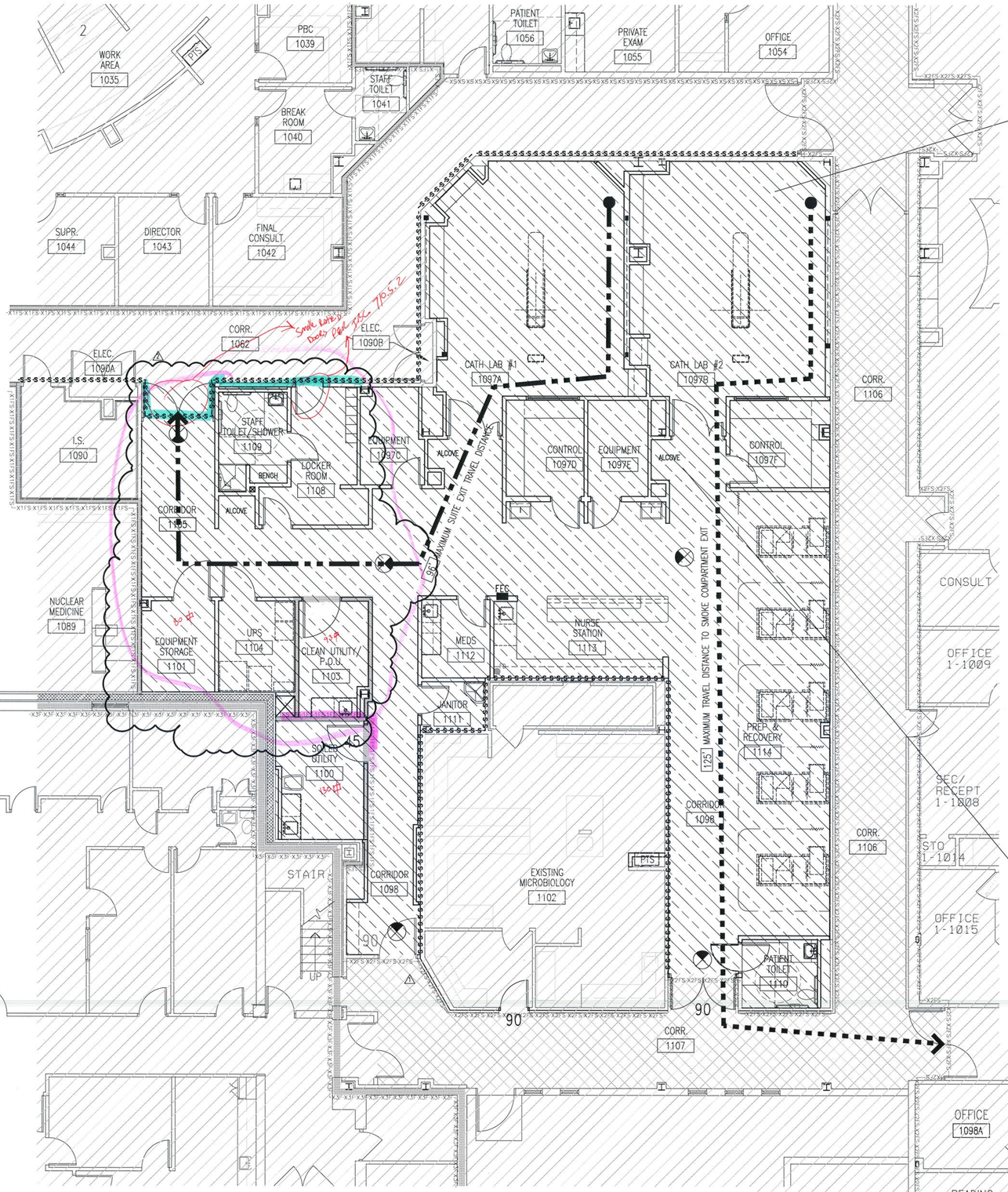
**Sheet**

S-2

**Issued for Construction**

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K:\projects\2009\05BRW099 MCOA Cath Lab\CAD\STRUCT\05BRW099-S1 .dwg, 5/28/2009 9:00:00 AM, Acrobat Distiller,ps:3, 1:1
May 28, 2009 - 9:00am
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## SUITE DATA:

- EXITING NOT ALLOWED THROUGH SUITE
- 4,535 SF SHOWN, 10,000 SF ALLOWED
- 3 EXITS SHOWN, 2 EXITS REQUIRED
- ± 96' MAXIMUM EXIT TRAVEL DISTANCE SHOWN
  100' MAXIMUM EXIT TRAVEL DISTANCE ALLOWED W/ ONE INTERVENING ROOM
- 19 OCCUPANTS (4,535 SF/ 1 OCCUPANT/ 240 SF), DOORS ARE NOT REQUIRED TO SWING OUTWARD

## SMOKE COMPARTMENT DATA: AREA 1D

TOTAL SMOKE COMPARTMENT SQUARE FOOTAGE:
10,835 SQ FT (22,500 SQ FT MAXIMUM ALLOWED)

TRAVEL DISTANCE TO A SMOKE BARRIER DOOR:
LONGEST LENGTH = 138'-7" (200' MAXIMUM ALLOWED)

AREA OF REFUGE REQUIRED FOR THIS ZONE:
31 OCCUPANTS X 6 SQ FT/OCCUPANT = 186 SQ FT

ADJACENT SMOKE COMPARTMENT A
655 OCCUPANTS X 6 SQ FT/OCCUPANT = 3,930 SQ FT

ADJACENT SMOKE COMPARTMENT C
156 OCCUPANTS X 6 SQ FT/ OCCUPANT = 936 SQ FT
TOTAL AREA OF REFUGE REQUIRED: 5,112 SQ FT

SQUARE FOOTAGE OF LOW HAZARD AREA = 6400 SQ FT

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

09-411001-

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/3/09

## 01 CODE COMPLIANCE PLAN – PARTIAL FIRST FLOOR

3/16" = 1'-0"

## LIFE SAFETY GENERAL NOTES

1. EXISTING WALLS SHOWN WITH NEW LIFE SAFETY RATINGS ARE TO BE UPGRADED TO THE NEW RATING. THE UPGRADING INCLUDES PROTECTING ALL OPENINGS IN THE PARTITION.
2. WALL RATINGS IN EXISTING HOSPITAL ARE BASED UPON OWNER FURNISHED DRAWINGS. THE CONTRACTOR SHALL BRING DISCREPANCIES BETWEEN THE OWNER FURNISHED INFORMATION & THE AS-BUILT CONDITION TO THE ARCHITECTS ATTENTION.
3. REFER TO ELECTRICAL DRAWINGS FOR LOCATION AND QUANTITY OF SMOKE DETECTORS.
4. DOORS IN CORRIDOR PARTITIONS SHALL BE INSTALLED TO RESIST THE PASSAGE OF SMOKE, U.N.O.
5. REFER TO B1/A-0102 FOR FIRE EXTINGUISHER CABINET DETAIL.
6. CONTRACTOR TO VERIFY THAT ALL EXISTING DOORS IN A RATED WALL ARE LABELED WITH THE APPROPRIATE RATING WITHIN THE SMOKE COMPARTMENTS THAT ARE WITHIN THE SCOPE OF THIS WORK. CONTRACTOR ALSO TO VERIFY THAT ALL EXISTING WALLS WITHIN MODIFIED SMOKE COMPARTMENTS THAT ARE LABELED AS FIRE RATED OR SMOKE TIGHT MEET THE REQUIREMENTS OF THE LABELING.
7. AREAS OUTSIDE OF PROJECT SCOPE'S SMOKE COMPARTMENTS ARE SHOWN FOR REFERENCE ONLY.

## LIFE SAFETY LEGEND

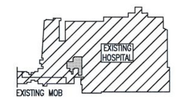
- -6X6X-6X-6X-6X- EXISTING SMOKE PARTITION
- -S-S-S-S-S-S- NEW SMOKE PARTITION
- -X1FX1FX1FX1F- EXISTING 1 HOUR FIRE BARRIER
- -1F-1F-1F-1F-1F- NEW 1 HOUR FIRE BARRIER
- -X1FS-X1FS-X1FS- EXISTING 1 HOUR FIRE BARRIER TO RESIST THE PASSAGE OF SMOKE
- -1FS-1FS-1FS-1FS- NEW 1 HOUR FIRE BARRIER TO RESIST THE PASSAGE OF SMOKE
- -2F-2F-2F-2F-2F- NEW 2 HOUR FIRE BARRIER
- -2FS-2FS-2FS-2FS- NEW 2 HOUR FIRE BARRIER TO RESIST THE PASSAGE OF SMOKE
- -X2FS-X2FS-X2FS- EXISTING 2 HOUR FIRE BARRIER TO RESIST THE PASSAGE OF SMOKE
- -X1FS-X1FS-X1FS- SMOKE BARRIER WITH FIRE RATING AS SHOWN ON PLAN FOR COMPARTMENTATION.
- -3F-3F-3F-3F-3F- NEW 3 HOUR FIRE BARRIER
- -3FS-3FS-3FS-3FS- NEW 3 HOUR FIRE BARRIER TO RESIST THE PASSAGE OF SMOKE
- NEW PARTITION
- EXISTING PARTITION
- FEC FIRE EXTINGUISHER & CABINET (SCREENED IF EXISTING)
- 72 EXIT LOCATION AND WIDTH (IN INCHES) (SCREENED IF EXISTING)
- 20 FIRE RATING OF DOOR IN MINUTES (SCREENED IF EXISTING)
- EXIT LIGHT FIXTURE W/ DIRECTION (SCREENED IF EXISTING)
- SOLID FILL DENOTES FACE OF EXIT FIXTURE
- ARROW DENOTES FACE OF EXIT FIXTURE W/ DIRECTIONAL ARROW
- FE FIRE EXTINGUISHER SURFACE MOUNTED (SCREENED IF EXISTING)
- EXISTING EXIT PASSAGEWAY
- OUT OF SCOPE
- EXTENT OF SUITE
- X LONGEST ROUTE TO AN ADJACENT SMOKE COMPARTMENT
- LONGEST ROUTE TO AN EXIT


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Project # 306660005


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## KEY PLAN
FIRST FLOOR




STATE OF COLORADO
RUBY J. McDOUGAL
203604
LICENSED ARCHITECT
7.1.09

**Revisions**

| | | |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | HA |
| Checked | JMN |
| Approved | CG |

**Title**

CODE COMPLIANCE PLAN – PARTIAL FIRST FLOOR

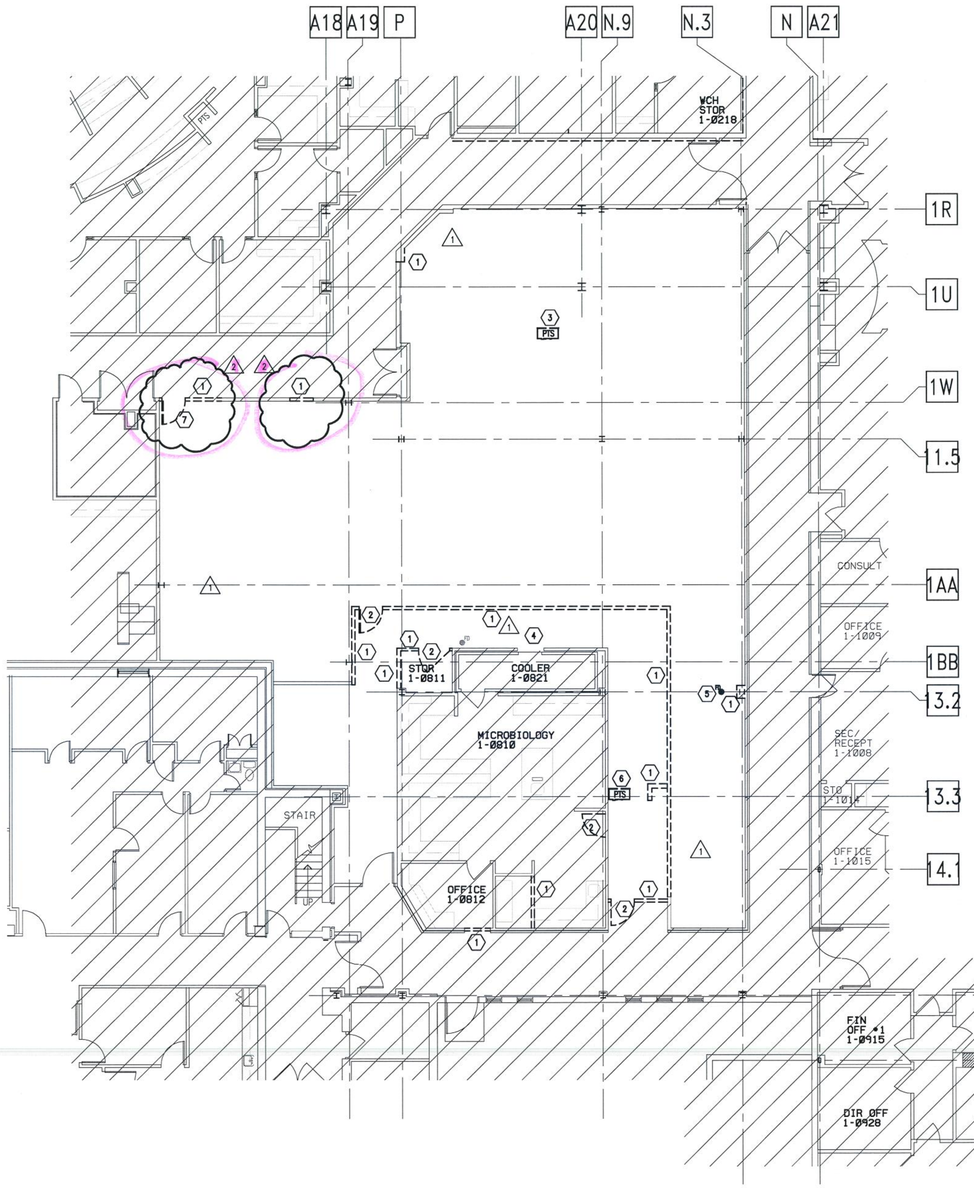
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## 01 DEMOLITION PLAN – FIRST FLOOR

1/8" = 1'-0"

## DEMOLITION GENERAL NOTES

1. REFER TO SPECIFICATIONS FOR INTERIM LIFE SAFETY MEASURES.
2. CONSTRUCT TEMPORARY PARTITIONS AS REQUIRED BY PHASING TO MINIMIZE THE SPREAD OF DUST AND NOISE.
3. THESE DRAWINGS HAVE BEEN DEVELOPED FROM EXISTING DRAWINGS WHICH MAY NOT REFLECT ACTUAL FIELD CONDITIONS. VERIFY THESE DRAWINGS WITH EXISTING FIELD CONDITIONS AND NOTIFY THE ARCHITECT IMMEDIATELY OF INCONSISTENCIES BETWEEN THEM AND ACTUAL CONDITIONS BEFORE PROCEEDING WITH CONSTRUCTION.
4. REPAIR ANY DAMAGED FIRE RATED ASSEMBLIES TO THEIR ORIGINAL SPECIFICATION.
5. REMOVE EXISTING CONSTRUCTION AS INDICATED. TYPICAL WALL REMOVAL INCLUDES FINISHES AND MECHANICAL PLUMBING AND ELECTRICAL SYSTEMS CONTAINED THEREIN. REMOVE DOORS, CASEWORK, WINDOWS, FRAMES, AND OTHER FIXTURES AS REQUIRED. AFTER REMOVAL OF PIPE CHASES, PATCH HOLES IN EXISTING FLOORS OR WALLS TO REMAIN, TO MEET ORIGINAL FIRE PROTECTION AND STRUCTURAL REQUIREMENTS. PATCH ADJOINING WALLS, FLOORS AND DECK, AND PREPARE SURFACES TO RECEIVE NEW FINISHES PER FINISH SCHEDULE OR PER INTERIOR FINISH PLANS.
6. WHERE NEW FINISHES ARE TO BE INSTALLED ON EXISTING SURFACES, REMOVE THE EXISTING FINISH AND PREPARE SURFACE TO RECEIVE THE NEW FINISH.
7. COORDINATE WITH THE OWNER ANY ITEMS TO BE STORED AND/OR RELOCATED.
8. SEE CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWING FOR DEMOLITION OF UTILITIES.
9. FOR EXTENT AND LOCATION OF CHANNELING OF EXISTING FLOOR SLABS REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. IF EXISTING PIPING OR CONDUIT WORK (OTHER THAN THE DESIRED CONNECTION) IS ENCOUNTERED WHILE CHANNELING, NOTIFY THE ARCHITECT BEFORE CONTINUING.
10. VERIFY THAT CONSTRUCTION OF EXISTING WALLS WITHIN THE AREA OF RENOVATION (SMOKE COMPARTMENT) MEETS THE FIRE PROTECTION RATINGS DESIGNATED ON THE LIFE SAFETY PLANS. MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO BRING EXISTING WALLS, DOORS, DUCTS, ETC. UP TO THE PROPER FIRE PROTECTION RATING. DOORS AND/OR FRAMES SHALL HAVE THE PROPER LABELING.
11. VERIFY THAT EXIT EGRESS IS MAINTAINED FOR ALL OCCUPIED AREAS OF THE BUILDING THROUGHOUT CONSTRUCTION.
12. DEMOLITION WORK SHALL BE EXECUTED IN CONFORMANCE WITH ALL CODES AND AS SET FORTH BY ALL GOVERNING AUTHORITIES.
13. BRACE ALL EXISTING STRUCTURES OR STRUCTURAL ELEMENTS AS NECESSARY DURING DEMOLITION.
14. DO NOT CUT ANY STRUCTURAL WORK WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.
15. THE EXISTING BUILDING ENVELOPE SHALL BE MAINTAINED IN A WATER TIGHT CONDITION AT ALL TIMES.
16. REPLACE OR REPAIR ANY EXISTING TO REMAIN FINISHES WHICH ARE DAMAGED DURING DEMOLITION (I.E. – CEILING GRID, CEILING TILE, WALL COVERING, FLOOR COVERINGS, ETC.)
17. WHEREVER POSSIBLE, RETAIN REMOVED BRICK, TO BE USED TO FILL EXTERIOR WALL OPENINGS.
18. NOTIFY THE ARCHITECT IMMEDIATELY IF THE REMOVAL OF MECHANICAL, ELECTRICAL, PLUMBING SYSTEMS OR COMPONENTS WILL ADVERSELY AFFECT THE OPERATION OF MEP SYSTEMS OUTSIDE THE LIMIT OF DEMOLITION.
19. SCHEDULE ALL DEMOLITION WITH THE OWNER.

## DEMOLITION LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
  RE: NOTE 5 OF DEMOLITION GENERAL NOTES
- AREA OUT OF SCOPE
- EXISTING COLUMN TO REMAIN

## DEMOLITION NOTES BY NUMBER

1. REMOVE EXISTING WALL.
2. REMOVE EXISTING DOOR & FRAME.
3. REMOVE EXISTING PNEUMATIC TUBE STATION AND TUBE. UNIT TO BE GIVEN TO HOSPITAL ENGINEERING DEPARTMENT FOR POSSIBLE FUTURE REUSE. CAP TUBE LINES AS REQUIRED.
4. REMOVE EXISTING OPENING FRAME AT COOLER.
5. CAP EXISTING FLOOR DRAIN.
6. RELOCATE EXISTING PNEUMATIC TUBE.
7. REMOVE EXISTING DOOR AND FRAME. SALVAGE FOR REINSTALLATION IN NEW LOCATION.

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

09-411001-

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/31/09


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**HCA**

**Project # 306660005**

in association with:


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## KEY PLAN
**FIRST FLOOR**




STATE OF COLORADO
JAMES M. MCDOUGAL
203601
LICENSED ARCHITECT
7-1-09

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

DEMOLITION PLAN
FIRST FLOOR

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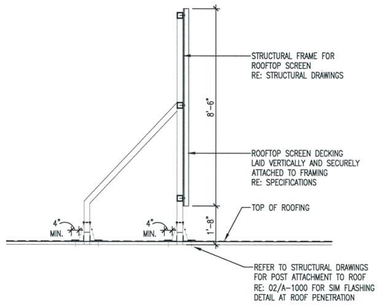
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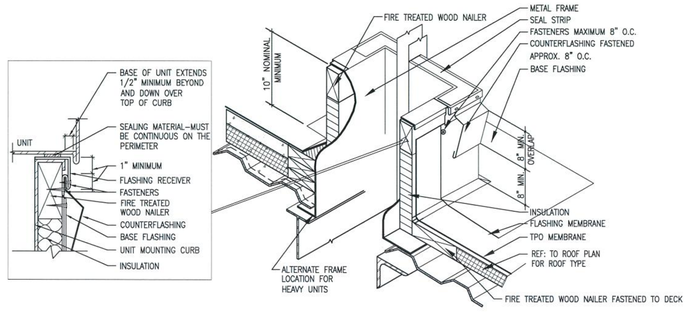


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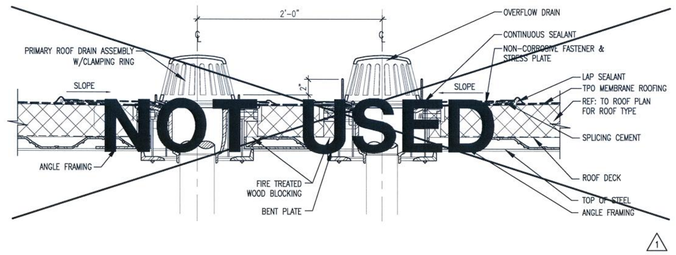

## 05 SECTION @ ROOF SCREEN

3/8" = 1'-0"



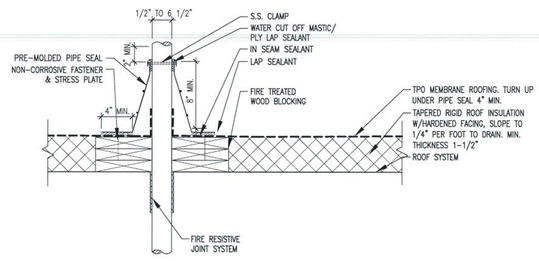

## 04 DETAIL @ ROOF CURB FLASHING

1 1/2" = 1'-0"



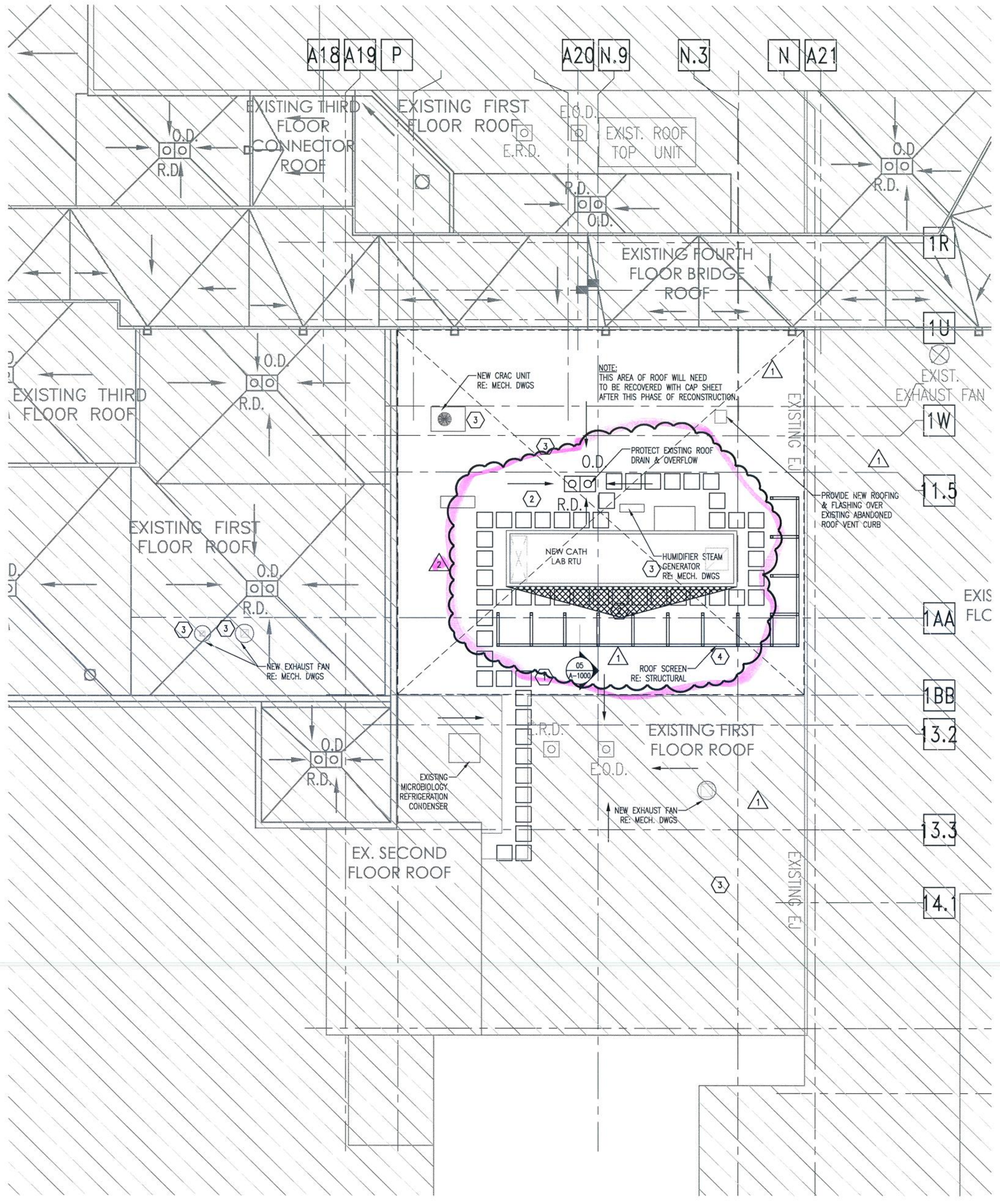

## 03 DETAIL @ ROOF AND OVERFLOW DRAINS

1 1/2" = 1'-0"




## 02 DETAIL @ ROOF PENTRATION

1 1/2" = 1'-0"




## 01 ARCHITECTURAL ROOF PLAN

1/8" = 1'-0"

## ROOF PLAN GENERAL NOTES

1. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL FOR LOCATIONS OF PIPING, CURBS, VENTS, DUCTS, FANS, AND OTHER ITEMS ON THE ROOF SURFACE.
2. PAINT EXPOSED ROOF MOUNTED EQUIPMENT, PIPING, ETC., EXCEPT THOSE ITEMS WHICH ARE ALUMINUM OR STAINLESS STEEL. COLOR AS SELECTED BY ARCHITECT.
3. CUT EXISTING ROOF AS REQUIRED FOR EQUIPMENT INSTALLATION AND NEW ROOF. FLASH IN WITH NEW ROOFING MATERIAL TO MATCH EXISTING. COMPLY WITH ALL REQUIREMENTS OF MANUFACTURER OF EXISTING ROOF TO MAINTAIN CURRENT WARRANTY.
4. ALL ROOF FLASHING TO BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
5. PROVIDE CRICKETS AT NEW ROOF EQUIPMENT AND OTHER OBSTRUCTIONS TO
6. PROVIDE $\frac{1}{4}$"/FT MIN SLOPE TO DRAIN.
7. OVERFLOW ROOF DRAIN INLETS SHALL BE 2" ABOVE THE PRIMARY DRAIN INLETS.
8. RE: A-1000 FOR TYPICAL ROOF DETAILS.

## ROOF PLAN LEGEND

| | |
|---|---|
| E.O.D. / E.R.D. | EXISTING ROOF DRAIN AND OVERFLOW TO REMAIN |
| O.D. / R.D. | PRIMARY ROOF DRAIN (2'-0" FROM BEAM CENTERLINE TYP.) ROOF DRAIN SHALL BE AT THE LOW POINT OF THE ROOF. RE: A-1000 FOR OVERFLOW DRAIN (INLET TO BE SET AT 2" ABOVE THE PRIMARY ROOF DRAIN WITH A STANDARD 2" DAM). RE: A-1000 |
| | ROOF WALK PADS |
| SLOPE | SLOPE FOR 1/4" PER FOOT MINIMUM FLOW TO DRAIN |

## ROOF PLAN NOTES BY NUMBER

1. PROVIDE NEW WALKWAY PADS TO CLOSEST EXISTING ACCESS ROUTE.
2. PROVIDE NEW INSULATION BOARD TO RE-SLOPE ROOF TO EXISTING DRAINS AROUND NEW HVAC UNIT.
3. MECHANICAL EQUIPMENT – RE: MEP DRAWINGS FOR SIZE AND TYPE OF ROOF CURB.
4. ROOF SCREEN – PROVIDE LOUVERED METAL PANEL SYSTEM PER SPEC. SECTION 07 42 14. ROOF SCREEN TO MATCH STYLE AND FINISH OF EXISTING SCREEN USED ON THE TOWER EXPANSION PROJECT.

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

09-411001-

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/1/09

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# Medical Center of Aurora

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Project # 306660005

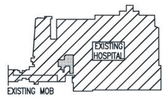
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## KEY PLAN

FIRST FLOOR









**Revisions**

| | | |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #1 | 05-18-09 |

| NO. | ISSUE | DATE |
|---|---|---|

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

ARCHITECTURAL ROOF PLAN

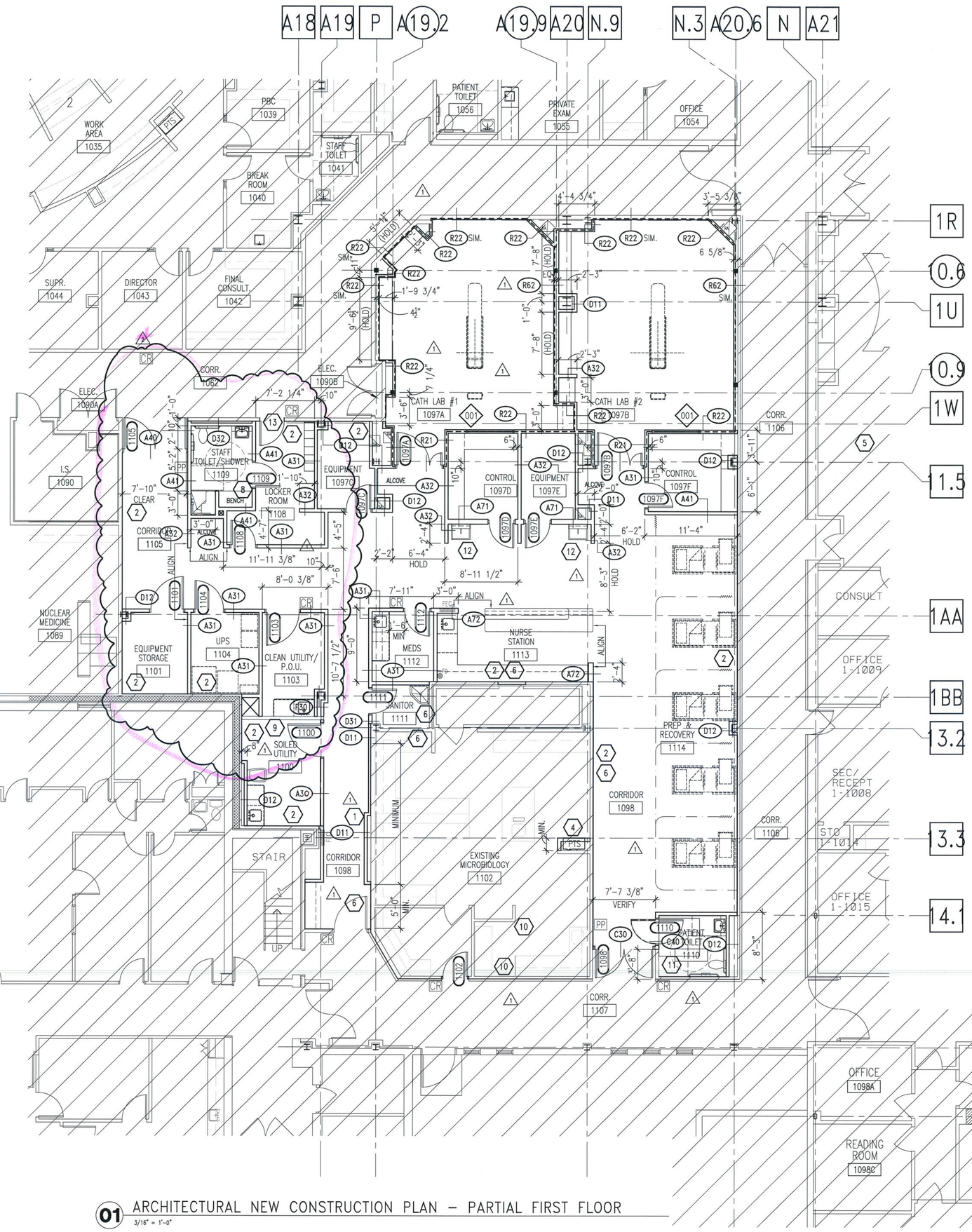
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01 ARCHITECTURAL NEW CONSTRUCTION PLAN – PARTIAL FIRST FLOOR
3/16" = 1'-0"

## FLOOR PLAN GENERAL NOTES

1. PARTITION TYPES ARE SCHEDULED IN THE A-81 SERIES. RE: A-0101 SHEET FOR GRAPHIC EXTENT OF FIRE RATED PARTITIONS. REFER TO PARTITION TYPE LEGENDS FOR LOCATION OF SOUND ATTENUATION BLANKETS.
2. REFER TO SHEET G-0001 FOR ADDITIONAL GENERAL NOTES.
3. ALL PARTITIONS ARE TYPE "A41" UNLESS OTHERWISE NOTED.
4. DIMENSIONS SHOWN ON THE FLOOR PLANS FOR NEW CONSTRUCTION ARE TO THE FACE OF FINISH OF INTERIOR WALLS, TO CENTER LINE OF COLUMNS AND TO FACE OF CONCRETE OR MASONRY WALLS, UNLESS OTHERWISE INDICATED. DIMENSIONS IN RENOVATED AREAS ARE FROM FINISH FACE OF EXISTING WALLS AND TO FINISH FACE OF NEW STUD WALLS, UNLESS OTHERWISE INDICATED.
5. WHERE NEW GYPSUM BOARD PARTITIONS ARE A CONTINUATION OF AN EXISTING PARTITION OR COLUMN ENCASEMENT, THE FACE OF THE NEW GYPSUM BOARD SHALL BE ALIGNED WITH THE FACE OF THE EXISTING SURFACE. WHERE A ONE HOUR PARTITION IS SHOWN AS A CONTINUATION OF A TWO-HOUR PARTITION OR COLUMN ENCASEMENT, THE FACE OF THE GYPSUM BOARD SHALL BE ALIGNED. STUDS SHALL BE OFFSET AND ADDITIONAL LAYERS OF GYPSUM BOARD SHALL BE PROVIDED AS REQUIRED TO PROVIDE FACE ALIGNMENT OF GYPSUM BOARD.
6. CLINICAL SINKS SHALL BE MOUNTED SO THAT THE CENTERLINE OF THE SINK IS 1'-6" MINIMUM TO THE FACE OF THE ADJACENT FIXED EQUIPMENT, SIDE WALL, CASEWORK, ETC.
7. ALL PATIENT CORRIDORS AND PASSAGEWAYS SHALL BE 8'-0" MINIMUM CLEAR WIDTH.
8. SEE SHEET A-5600 FOR TYPICAL MOUNTING HEIGHTS OF PLUMBING FIXTURES AND TOILET ACCESSORIES.
9. LAVATORIES AND SINKS SHALL BE ACCOMPANIED BY A PAPER TOWEL DISPENSER "TA2" AND SOAP DISPENSER "TA8" UNLESS OTHERWISE NOTED ON ENLARGED FLOOR PLANS.
10. REFER TO SHEET A-5500 FOR MISCELLANEOUS DETAILS.
11. PROVIDE 1'-0" CLEAR FLOOR SPACE AT THE PUSH SIDE OF EVERY DOOR WITH A CLOSER. PROVIDE 1'-6" CLEAR AT THE PULL SIDE OF EVERY DOOR (EXCLUDING PATIENT BEDROOMS), UNLESS SPECIFICALLY DIMENSIONED OTHERWISE.
12. PROVIDE 1'-4" CHASE BEHIND SINGLE SIDED TOILETS, AND 1'-8" CHASE BETWEEN BACK TO BACK TOILETS, FOR WALL HUNG FIXTURES.
13. ALL LAVATORIES AND SINKS SHALL BE MOUNTED A MINIMUM OF 1'-3" FROM THE CENTERLINE OF THE FIXTURE TO THE FINISHED FACE OF THE ADJACENT PARTITION.
14. SEE OWNER FURNISHED CATH LAB VENDOR DRAWINGS FOR CRITICAL DIMENSIONS IN THESE AREAS.
15. REFER TO SHEET A-2101, "EQUIPMENT AND MILLWORK PLANS" FOR WALL PROTECTION LOCATIONS.
16. REFER TO SHEET A-5600 FOR ALL TOILET ACCESSORY SPECIFICATIONS AND HEIGHTS.
17. PROVIDE ROOM IDENTIFICATION SIGNAGE TO MATCH THE ROOM IDENTIFICATION SIGNAGE PROVIDED ON THE ADJACENT AURORA BED TOWER ADDITION PROJECT.

## FLOOR PLAN LEGEND

- EXISTING PARTITION TO REMAIN
- NEW PARTITION
- EXISTING COLUMN
- F.V. FIELD VERIFY
- 1 / A-4100 SECTION TAG
- 001 INTERIOR WINDOW IDENTIFICATION RE: SHEET A-8200
- 1103 DOOR IDENTIFICATION RE: SHEET A-8200 FOR HEAD, JAMB & SILL DETAILS
- A31 WALL PARTITION TAG RE: SHEET A-8101
- C.T. CURTAIN TRACK RE: 02/A5500
- LEAD LINED WALL
- 01 / A-2000 ENLARGED FLOOR PLAN BUBBLE
- NOT IN SCOPE OF WORK
- CR CARD READER, FIXTURE AND FINAL CONNECTION BY SECURITY VENDOR. CONTRACTOR TO PROVIDE/INSTALL CONDUIT AND CABLE.
- KP KEYPAD BY DOOR HARDWARE SUPPLIER
- PP PUSH PAD DOOR ACTIVATOR BY DOOR HARDWARE SUPPLIER

## FLOOR PLAN KEYNOTES

1. CONSTRUCT NEW WALL TO ALIGN W/FACE OF EXISTING WALL ELECTRIC MOUNTED PANELS.
2. ADD NEW LAYER OF ½" GYP. BD. TO FACE OF EXISTING WALL TO LIMIT OF 6" ABOVE CEILING. PATCH EXISTING GYP. BD. ABOVE THIS LOCATION.
3. NOT USED.
4. RELOCATE EXISTING PNEAUMATIC TUBE SYSTEM INTO EXISTING MICROBIOLOGY AREA AS SHOW. CONSTRUCT NEW TYPE A31 WALL AROUND RELOCATED TUBE SYSTEM.
5. EXISTING WAITING ROOM TO SERVICE AREA OF NEW CONSTRUCTION.
6. EXTEND EXTERIOR WALL SURFACE OF MICROBIOLOGY AREA TO DECK AND SEAL WITH SMOKE SEAL TO EXISTING STRUCTURE ABOVE.
7. NOT USED
8. PROVIDE NEW 18" HI, 24" DEEP ADA COMPLIANT FIXED BENCH. BENCH TO BE PLASTIC LAMINATE CLAD ON ALL EXPOSED VERTICAL SURFACES WITH SOLID SURFACE SEAT.
9. GENERAL CONTRACTOR TO MAINTAIN 1 HOUR RATING OF THIS WALL.
10. PATCH, REPAIR AND PAINT EXPOSED FRAMING.
11. ENSURE EXISTING 2 HOUR RATING.
12. HOLD SINK EDGE MINIMUM OF 4" FROM WALL
13. NEW LOCATION FOR EXISTING RELOCATED DOOR AND FRAME.

**NOTE:**
**REVISED AND ADDED NUMEROUS WALL TYPE TAGS THROUGHOUT THE PLAN.**


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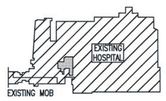

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**KEY PLAN**
**FIRST FLOOR**




STATE OF COLORADO
CRUBY J. McDOUGAL
203601
LICENSED ARCHITECT
7.1.09

**Revisions**

| | | |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

**Sheet Information**

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|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

ARCHITECTURAL NEW CONSTRUCTION PLAN PARTIAL FIRST FLOOR

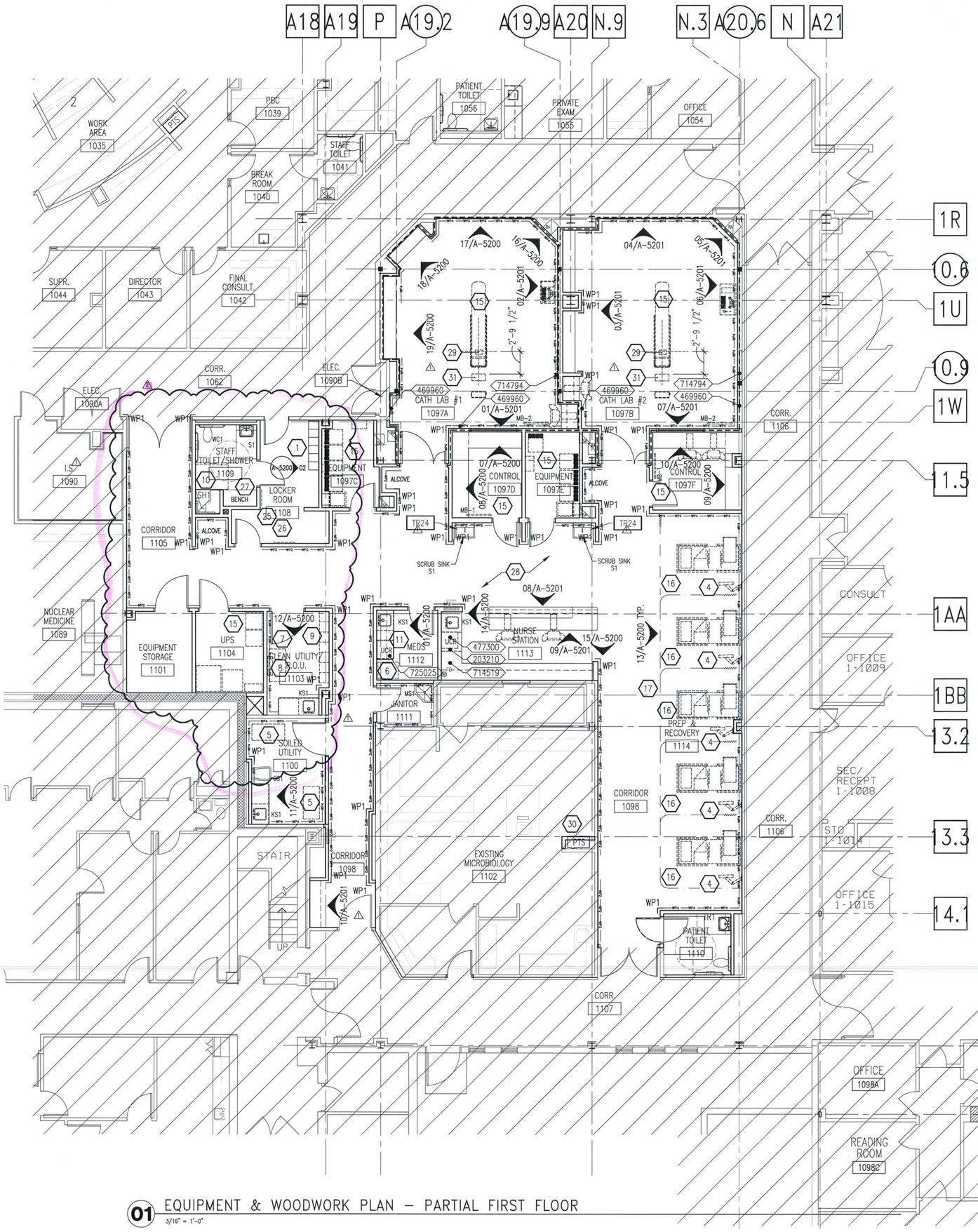
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## 01 EQUIPMENT & WOODWORK PLAN – PARTIAL FIRST FLOOR

3/16" = 1'-0"

## EQUIPMENT PLAN GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND COORDINATE CLEAR DIMENSIONS REQUIRED FOR OWNER FURNISHED EQUIPMENT THAT ARE LOCATED WITHIN OR ADJACENT TO ANY PIECE OF ARCHITECTURAL WOODWORK.
2. REFER TO FLOOR PLAN FOR WALL PROTECTION LOCATIONS.
3. ALL GLOVE DISPENSERS AND SHARPS CONTAINERS TO BE OWNER FURNISHED, OWNER INSTALLED.
4. CONTRACTOR SHALL SUPPLY BLOCKING FOR MOUNTING OF EQUIPMENT UNLESS MOUNTING SUPPORT IS OTHERWISE FURNISHED AS PART OF THE EQUIPMENT.
5. RE: SHEET A-5600 FOR TOILET ACCESSORY LEGEND.
6. RE: SHEET A-5400 FOR TYPICAL ARCHITECTURAL WOODWORK SECTIONS.
7. ALL SINKS TO RECEIVE A TA3 PAPER TOWEL DISPENSER (C.F.C.I.), AND A TA8 SOAP DISPENSER (O.F.O.I.), U.N.O.
8. FOR ENLARGED TOILET ROOMS, AND RELATED TOILET ACCESSORIES, RE: SHEET A-5600.
9. ALL CEILING/AND OR WALL MOUNTED EQUIPMENT I.E.– TV'S, PROJECTOR'S ETC., SHALL BE MOUNTED AT 80" CLEAR ABOVE FINISHED FLOOR.
10. CONTRACTOR SHALL COORDINATE WITH OWNER ON DELIVERY AND INSTALLATION OF OWNER FURNISHED EQUIPMENT.
11. ALL KEYBOARD TRAYS SHALL BE C.F.C.I.
12. REFER TO EQUIPMENT RESPONSIBILITY MATRIX IN THE PROJECT MANUAL FOR CLARIFICATION OF RESPONSIBLE PARTY.
13. REFER TO SHEET A-5600 FOR MISCELLANEOUS EQUIPMENT MOUNTING HEIGHTS.
14. ALL CABINETS DRAWN IN PLAN AND SHOWN WITH AN ELEVATION MARK IN THE A-2101 ARE ARCHITECTURAL MILLWORK, EXCEPT FOR CATH LABS. U.N.O.
15. ALL FURNITURE SHOWN IN THESE PLANS IS FOR REFERENCE ONLY. FURNITURE SHALL BE PROVIDED BY END USER.

## EQUIPMENT PLAN LEGEND

- XXXX — OWNER FURNISHED EQUIPMENT DESIGNATION. REFER TO OWNER EQUIPMENT MANUAL FOR SPECIFICATION AND SHEET A-2101.
- TA-X — TOILET ACCESSORY RE: SHEET A-5600 FOR LEGEND
- CONTRACTOR FURNISHED EQUIPMENT/ITEM
- OWNER FURNISHED OWNER INSTALLED EQUIPMENT/ITEM
- OWNER FURNISHED CONTRACTOR INSTALLED EQUIPMENT/ITEM
- NO GROMMETS ARE ALLOWED IN THIS COUNTERTOP SECTION (SHADED)
- 1/A-5200 — INTERIOR ELEVATION TAG
- WP1 — WALL PROTECTION STYLE 1 – RE: SHEET A-5600
- WP2 — WALL PROTECTION STYLE 2 – RE: SHEET A-5600
- WP4 — WALL PROTECTION STYLE 4 – RE: SHEET A-5600
- ST1 — STANDARD TOILET CONFIGURATION RE: SHEET A-5600
- MB — MARKERBOARD

## EQUIP. PLAN NOTES BY NUMBER

1. EMPLOYEE LOCKERS – RE: SPECIFICATIONS.
2. NOT USED
3. LOCKER ROOM BENCH – RE: SPECIFICATIONS.
4. TV & BRACKET – OWNER FURNISHED/CONTRACTOR INSTALLED (O.F.C.I.).
5. LINEN CART (O.F.O.I.)
6. MEDICINES DISPENSER (O.F.O.I.).
7. CRASH CART (O.F.O.I.).
8. SCANNER (O.F.O.I.).
9. BINS (O.F.O.I.).
10. SHOWER CURTAIN (O.F.O.I.) AND ROD (C.F.C.I.).
11. NOT USED
12. NOT USED
13. NOT USED
14. GC TO PROVIDE WATER LINE W/SHUTOFF VALVE AND CHROME ESCUTCHION AT WALL FOR COFFEE MAKER.
15. CATH LAB EQUIPMENT, REFER TO VENDOR DRAWINGS.
16. BEDS (O.F.O.I.).
17. CURTAINS (O.F.O.I.).
18. NOT USED
19. NOT USED
20. NOT USED
21. NOT USED
22. NOT USED
23. NOT USED
24. NOT USED
25. PROVIDE NEW 6'-0" HIGH x 24" WIDE TEMPERED PLATE GLASS BODY MIRROR (C.F.C.I.) W/ALUMINUM TRIM, MOUNTED SECURELY TO WALL IN LOCKER ROOM #1108.
26. PROVIDE NEW 4 HOOK COAT RACK (C.F.C.I.) AT 48" A.F.F.
27. REFER TO KEYNOTE #8 ON SHEET A-2001.
28. PROVIDE NEW ROOM IDENTIFICATION SIGNAGE TO MATCH THE ROOM IDENTIFACTION SIGNAGE PROVIDED ON THE ADJACENT AURORA BED TOWER ADDITION PROJECT FOR ENTIRE SUITE.
29. PROVIDE NEW MEDICAL GAS PEDESTAL. PROVIDE (2) 2" BUSHINGS BELOW OUTLETS ON SOUTH SIDE OF PEDESTAL TO PROVIDE CABLE PULL FOR VENDOR/FACILITY EQUIPMENT. COORDINATE EXACT LOCATION WITH VENDOR DRAWINGS.
30. NEW LOCATION FOR EXISTING RELOCATED PNEUMATIC TUBE SYSTEM.
31. NEW LOCATION FOR MEDICAL GAS PEDESTAL. RE: MEP.

09-411001-

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/31/09

NOTE:
REWORKED KEYNOTES TO INCORPORATE EQUIPMENT TAGS.


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# Medical Center of Aurora

**1501 S. Potomac**
**South Campus**
**Cath Lab**
**Aurora, Colorado 80012**
**HCA**

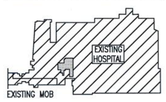
**Project # 306660005**

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## KEY PLAN
FIRST FLOOR




STATE OF COLORADO
TRUDY J. McDOUGAL
203601
LICENSED ARCHITECT
7.1.09

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

EQUIPMENT AND WOODWORK PLAN PARTIAL FIRST FLOOR

**Sheet**

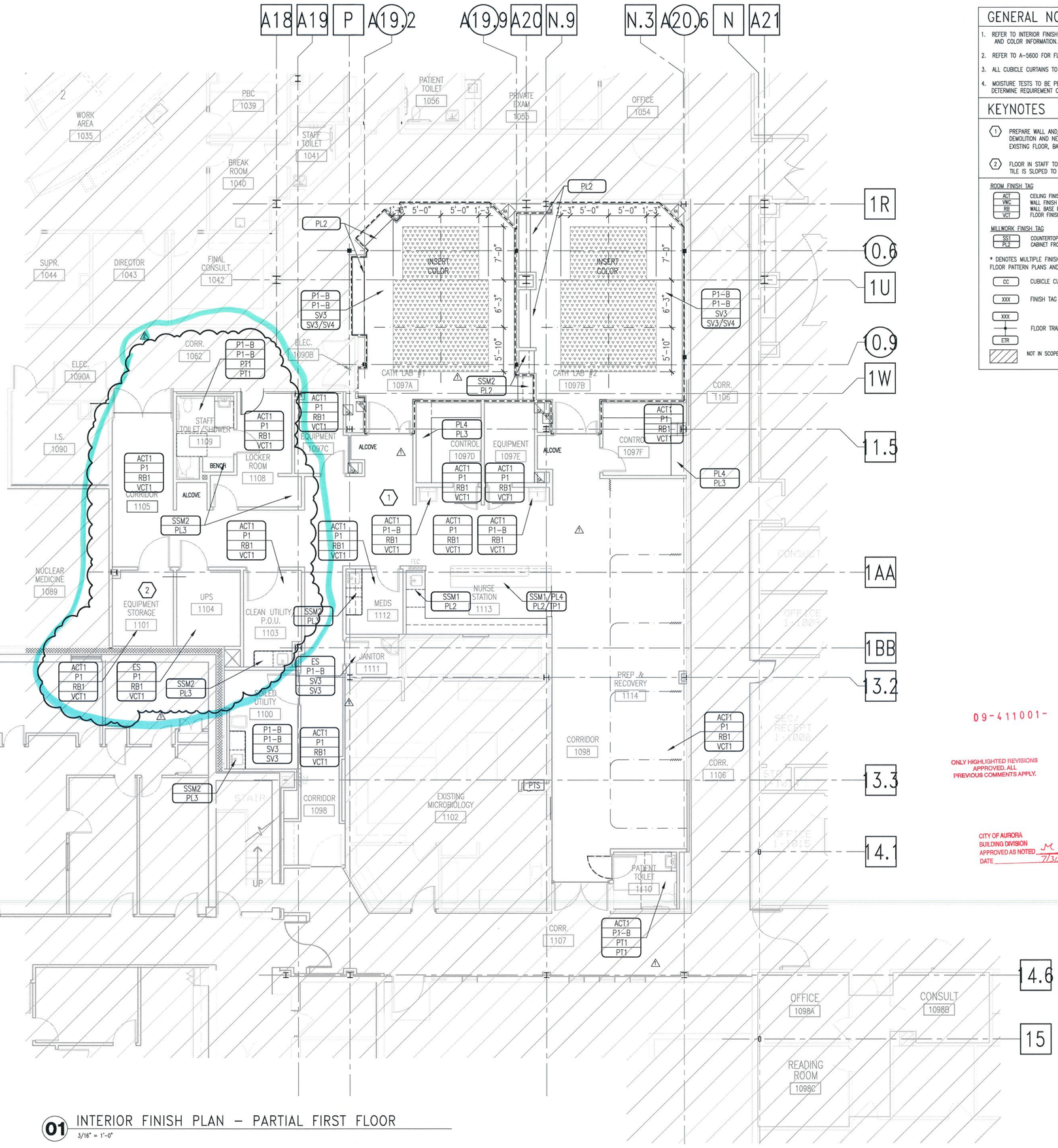
# A-2101

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**01** INTERIOR FINISH PLAN – PARTIAL FIRST FLOOR
3/16" = 1'-0"

## GENERAL NOTES

1. REFER TO INTERIOR FINISH LEGEND A-8000 FOR FINISH MANUFACTURER AND COLOR INFORMATION.
2. REFER TO A-5600 FOR FLOOR TRANSITION DETAILS.
3. ALL CUBICLE CURTAINS TO BE CC1.
4. MOISTURE TESTS TO BE PERFORMED BELOW ALL NEW FLOOR FINISHES TO DETERMINE REQUIREMENT OF WATER VAPOR OMISSION CONTROL SYSTEM.

## KEYNOTES

1. PREPARE WALL AND/OR FLOOR TO RECEIVE NEW FINISHES PER DEMOLITION AND NEW CONSTRUCTION PLANS. PATCH TO MATCH EXISTING FLOOR, BASE, WALL AND/OR CEILING FINISHES
2. FLOOR IN STAFF TOILET/SHOWER TO BE FLOATED TO ENSURE THAT TILE IS SLOPED TO FLOOR DRAIN.

ROOM FINISH TAG
- ACT — CEILING FINISH
- VWC — WALL FINISH
- RB — WALL BASE FINISH
- VCT — FLOOR FINISH

MILLWORK FINISH TAG
- SS1 — COUNTERTOP
- PL2 — CABINET FRONT/ VERTICAL SURFACE

* DENOTES MULTIPLE FINISHES. PLEASE REFER TO ENLARGED PLANS, FLOOR PATTERN PLANS AND/OR ELEVATIONS FOR INFORMATION.

- CC — CUBICLE CURTAIN
- ETR — EXISTING TO REMAIN
- XXX — FINISH TAG
- WT — WINDOW TREATMENT
- XXX / ETR — FLOOR TRANSITION TAG
- (X) — KEYNOTE
- NOT IN SCOPE OF WORK

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CITY OF AURORA
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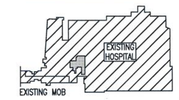
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## KEY PLAN
FIRST FLOOR




STATE OF COLORADO
RUBY J. McDOUGAL
203601
LICENSED ARCHITECT
7.1.09

**Revisions**

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|---|---|---|
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| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | CR/JB |
| Checked | JMN |
| Approved | CG |

**Title**

INTERIOR FINISH PLAN PARTIAL FIRST FLOOR

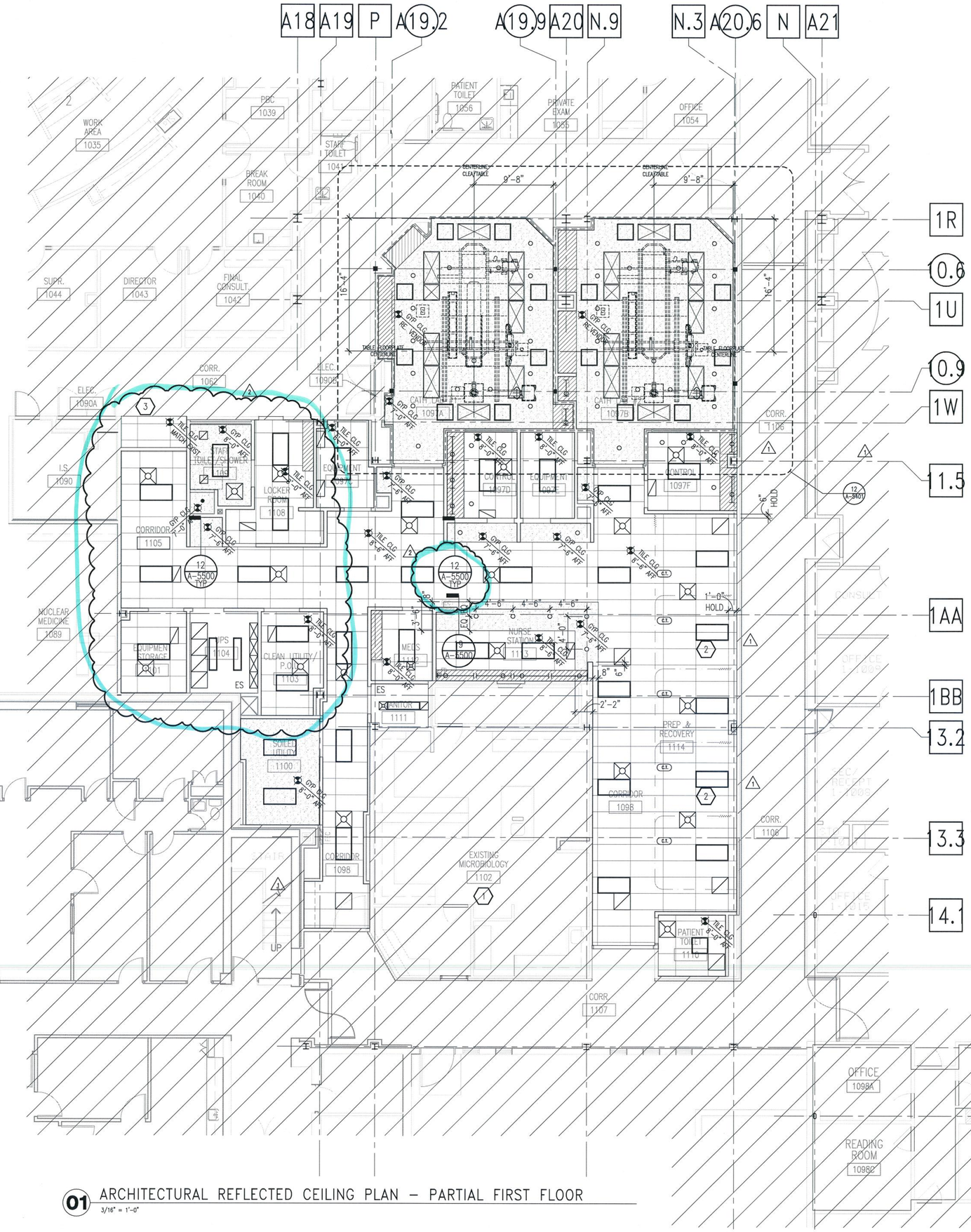
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# A-2201

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## 01 ARCHITECTURAL REFLECTED CEILING PLAN – PARTIAL FIRST FLOOR

3/16" = 1'-0"

## RCP PLAN GENERAL NOTES

1. THE CONTRACTOR SHALL COMPARE THIS REFLECTED CEILING PLAN WITH ELECTRICAL LIGHTING PLANS, MECHANICAL SUPPLY, RETURN, AND EXHAUST PLANS. THE CONTRACTOR SHALL REPORT ANY OMISSIONS OR INCONSISTENCIES TO THE ARCHITECT.
2. SEE ELECTRICAL DRAWINGS FOR THE LOCATIONS OF CEILING MOUNTED SMOKE DETECTORS, SPEAKERS, NURSE CALL DOME LIGHTS, EXIT SIGNAGE, FIRE ALARM DEVICES, ETC. ALSO SEE ELECTRICAL FOR LOCATIONS OF WALL MOUNTED EXIT LIGHTS.
3. FOR FURTHER DIMENSIONS SEE LARGE SCALE PLANS, SECTIONS, ELEVATIONS, AND DETAILS.
4. SPRINKLER HEAD LOCATIONS ARE NOT SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS. CONTRACTOR TO INSTALL SUFFICIENT HEADS IN ALL SPACES TO PROVIDE 100% COVERAGE AS REQUIRED UNDER NFPA 13 AND OWNERS INSURANCE COMPANIES' REQUIREMENTS. HEADS SHALL BE LOCATED IN THE CENTER OF CEILING TILES, U.N.O.
5. THE CONTRACTOR SHALL VERIFY THAT ACCESS PANELS OF TYPE SPECIFIED ARE INSTALLED IN NON-ACCESSIBLE TYPE CEILINGS WHERE SERVICE OR ADJUSTMENT TO MECHANICAL, PLUMBING, OR ELECTRICAL ITEMS MAY BE REQUIRED. ACCESS PANELS SHALL BE THE FIRE RATED TYPE EQUAL TO THE RATING OF THE WALL OR CEILING IN WHICH THEY OCCUR.
6. 18" MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE BOTTOM OF THE EXTENDED SPRINKLER HEADS AND THE TOP OF ANY FILES, SHELVING, LOCKERS, ETC.
7. RELOCATE SUPPLY DRAIN AND VENT PIPES TO MAINTAIN SCHEDULED CEILING HEIGHTS. COORDINATE RELOCATIONS WITH MEP ENGINEERS.
8. WHERE EXISTING LAY-IN CEILINGS ARE TO REMAIN, THE CONTRACTOR SHALL REPLACE ANY TILE THAT HAS BEEN DAMAGED WITH MATERIALS THAT MATCH THE EXISTING FOR COLOR, TEXTURE, PATTERN, ETC. IF UNIFORMITY CANNOT BE ACHIEVED, THE CONTRACTOR SHALL REPLACE THE ENTIRE CEILING WITHIN THE SPACE WITH NEW MATERIAL. GENERAL CONTRACTOR SHALL PROVIDE ENOUGH NEW CEILING TILE TO REPLACE 50% OF TILE TO MATCH EXISTING IN THE MICROBIOLOGY AREA ROOM #1102.

## RCP LEGEND

- SUSPENDED 2' X 4' ACOUSTICAL CEILING SYSTEM
- SUPPLY AIR GRILLE RE: MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- RETURN AIR GRILLE RE: MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- EXHAUST AIR GRILLE RE: MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- SUPPLY STRIP DIFFUSER RE: MECHANICAL
- CJ SOFFIT/GYP. BD./PLASTER CONTROL JOINT
- 1 / A-5000 DETAIL TAG
- MATL 8'-0" AFF CEILING HEIGHT DESIGNATION PER AREA IN PUBLIC AND STAFF TOILETS WHERE NO HEIGHT IS DESIGNATED, 8'-0".
- C.T. CUBICLE CURTAIN TRACK
- GYP. BD. FURRDOWN @ CASEWORK (RE: 01/A-5500 TYP.)
- SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- SHOWER DOME LIGHT (BY SHOWER MANUFACTURER).
- UNDER CABINET TASK LIGHTING
- GYP. BD. CEILING OR SUSPENDED CEMENT PLASTER SOFFIT
- ES EXPOSED STRUCTURE
- MS MEDICAL SUPPORT SYSTEM. COORDINATE WITH VENDOR. RE. SPECS.

## RCP NOTES BY NUMBER

1. GENERAL CONTRACTOR TO PROVIDE ENOUGH CEILING TILE TO MATCH EXISTING, FOR 50% REPLACEMENT OF TILE IN MICROBIOLOGY ROOM #1102.
2. CUT CEILING GRID MAIN TEE TO ALLOW LIGHT FIXTURE TO BE CENTERED OVER BED.
3. EXTEND EXISTING CEILING TILE AND GRID INTO NEWLY CREATED NICHE. HEIGHT TO MATCH EXISTING.


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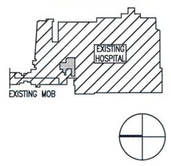
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## KEY PLAN
FIRST FLOOR




STATE OF COLORADO
TRUDY McDOUGAL
203601
LICENSED ARCHITECT
7.1.09

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CITY OF AURORA
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**Sheet Information**

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|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

ARCHITECTURAL REFLECTED CEILING PLAN PARTIAL FIRST FLOOR

**Sheet**

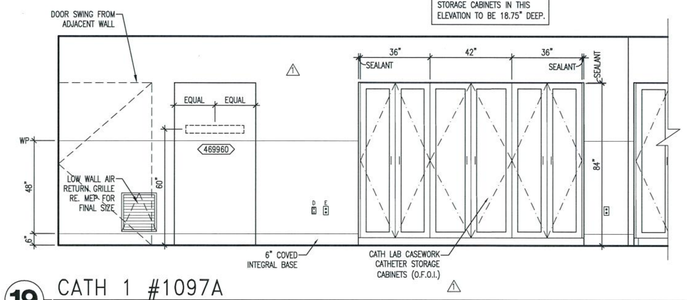
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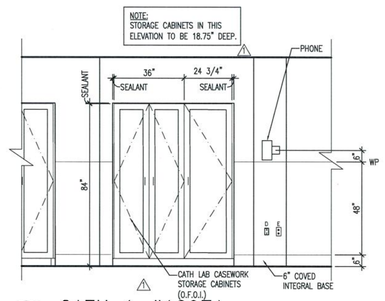

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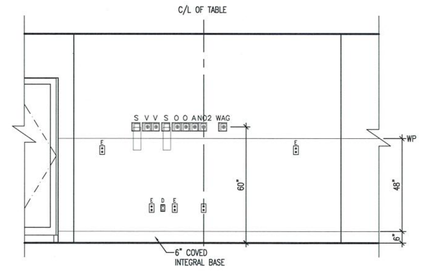
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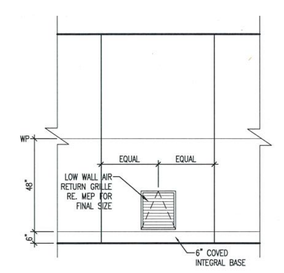

**19** CATH 1 #1097A
3/8" = 1'-0"
CATH LAB



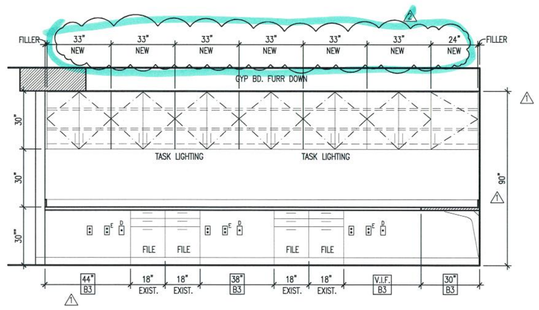

**18** CATH 1 #1097A
3/8" = 1'-0"
CATH LAB



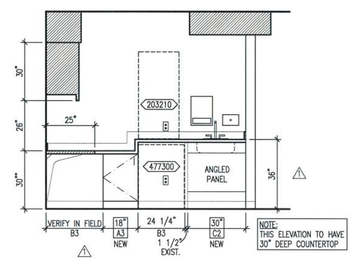

**17** CATH 1 #1097A
3/8" = 1'-0"
CATH LAB



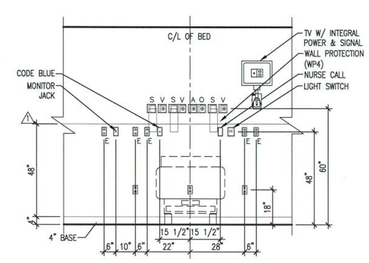

**16** CATH 1 #1097A
3/8" = 1'-0"
CATH LAB



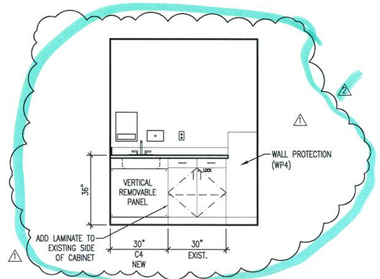

**15** NURSE STATION BACK COUNTER #1113
3/8" = 1'-0"



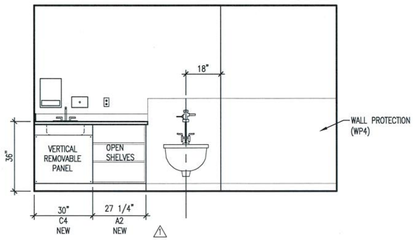

**14** N. S. BACK COUNTER #1113
3/8" = 1'-0"



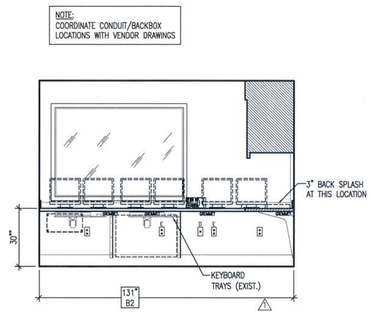

**13** RECOVERY ROOM #1098
3/8" = 1'-0"



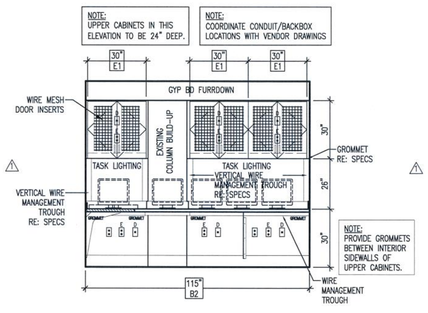

**12** POINT OF USE #1103
3/8" = 1'-0"



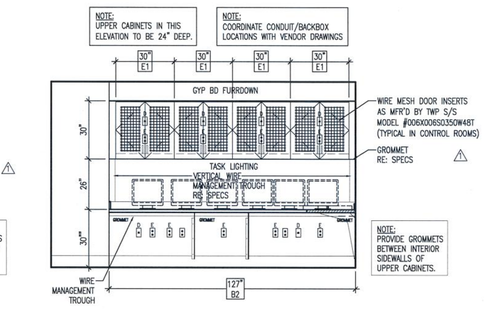

**11** SOILED UTILITY #1100
3/8" = 1'-0"



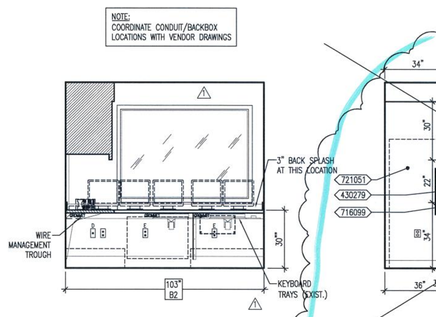

**10** CONTROL ROOM #1097F
3/8" = 1'-0"



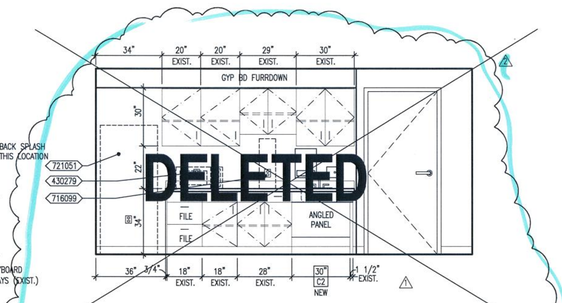

**09** CONTROL ROOM #1097F
3/8" = 1'-0"



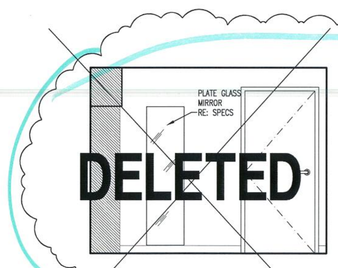

**08** CONTROL ROOM #1097D
3/8" = 1'-0"



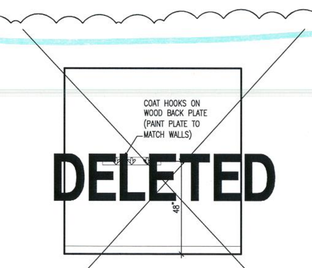

**07** CONTROL ROOM #1097D
3/8" = 1'-0"




**06** STAFF LOUNGE #1105
3/8" = 1'-0"



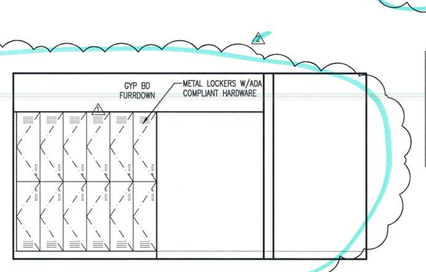

**05** LOCKER ROOM #1108
3/8" = 1'-0"




**04** LOCKER ROOM #1108
3/8" = 1'-0"

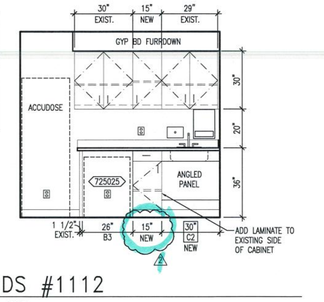



**03** LOCKER ROOM #1108
3/8" = 1'-0"




**02** LOCKER ROOM #1108
3/8" = 1'-0"

NOTE:
CABINETRY NOTED AS EXISTING SHALL BE PULLED FROM OWNER'S INVENTORY OF STORED CASEWORK AND REWORKED AS NOTED PRIOR TO FINAL INSTALLATION. FABRICATE NEW TOPS AND SPLASHES AS REQUIRED FOR THIS PROJECT. CABINETRY NOT NOTED AS EXISTING SHALL BE FABRICATED OF MATCHING LAMINATE TO MATCH EXISTING CASEWORK.




**01** MEDS #1112
3/8" = 1'-0"

09-411001-

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED JM
DATE 7/31/09

PERKINS & WILL
10100 North Central Expressway, Suite 300
Dallas, Texas 75231, USA
214.283.8700 Fax: 214.283.8701
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# Medical Center of Aurora

**1501 S. Potomac**
**South Campus**
**Cath Lab**
**Aurora, Colorado 80012**
**HCA**

**Project # 306660005**

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STATE OF COLORADO
TRUDY L. MCDOUGAL
203601
LICENSED ARCHITECT
7-1-09

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

ARCHITECTURAL INTERIOR ELEVATIONS

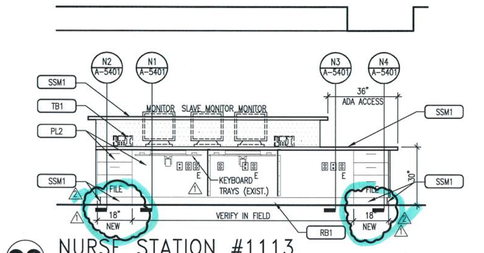
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**A-5200**

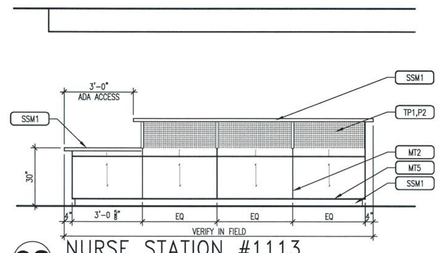
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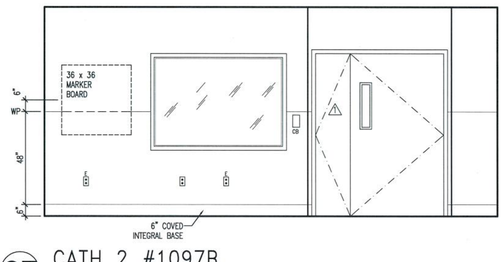
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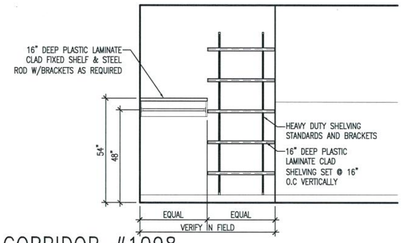

09 NURSE STATION #1113
3/8" = 1'-0"



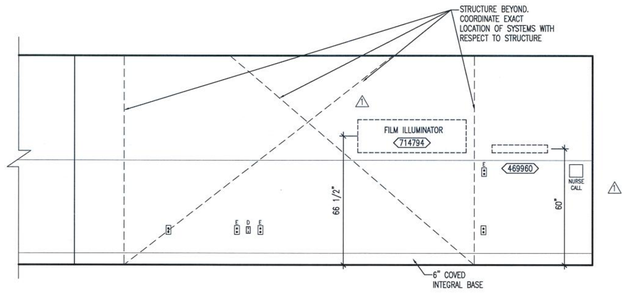

08 NURSE STATION #1113
3/8" = 1'-0"



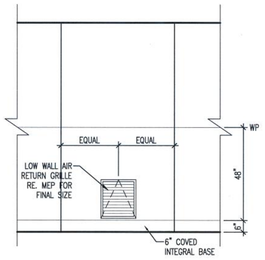

07 CATH 2 #1097B
3/8" = 1'-0"
CATH LAB




10 CORRIDOR #1098
3/8" = 1'-0"




06 CATH 2 #1097B
3/8" = 1'-0"
CATH LAB

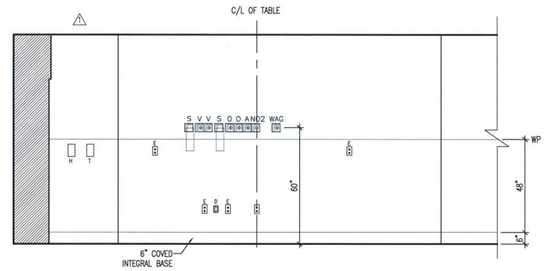



05 CATH 2 #1097B
3/8" = 1'-0"
CATH LAB

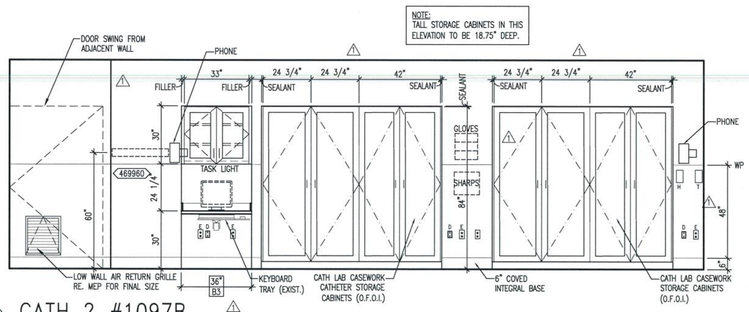
09-411001-

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

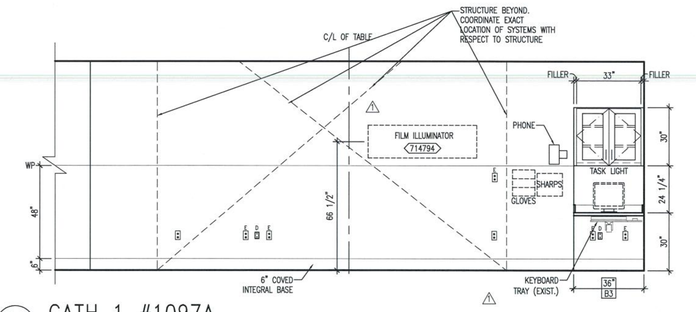
CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/1/09



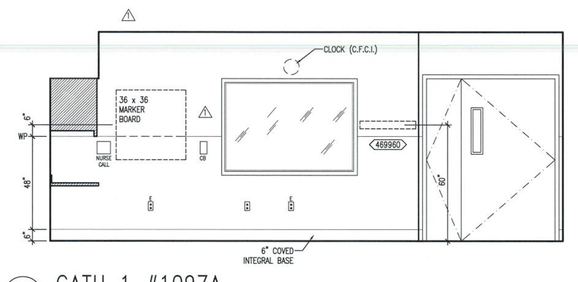

04 CATH 2 #1097B
3/8" = 1'-0"
CATH LAB




03 CATH 2 #1097B
3/8" = 1'-0"
CATH LAB




02 CATH 1 #1097A
3/8" = 1'-0"
CATH LAB




01 CATH 1 #1097A
3/8" = 1'-0"
CATH LAB

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# Medical Center of Aurora
**1501 S. Potomac**
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**Project # 306660005**

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STATE OF COLORADO
TRUDY J. McDOUGAL
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| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

ARCHITECTURAL INTERIOR ELEVATIONS

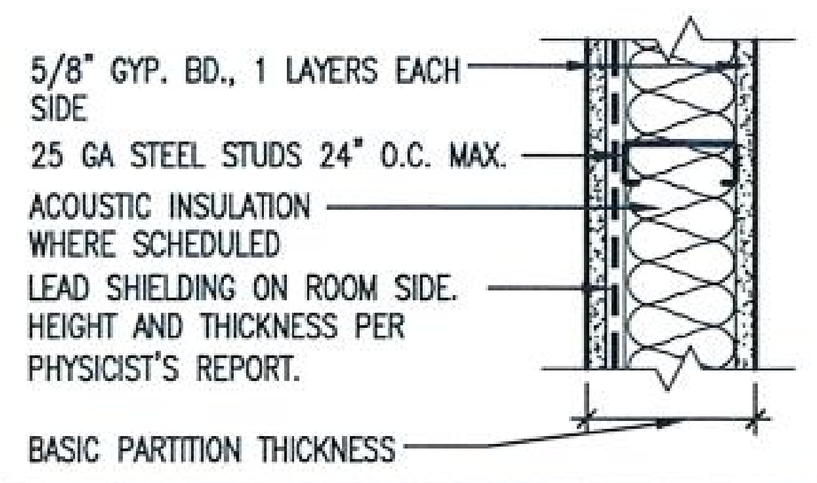
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# A-5201

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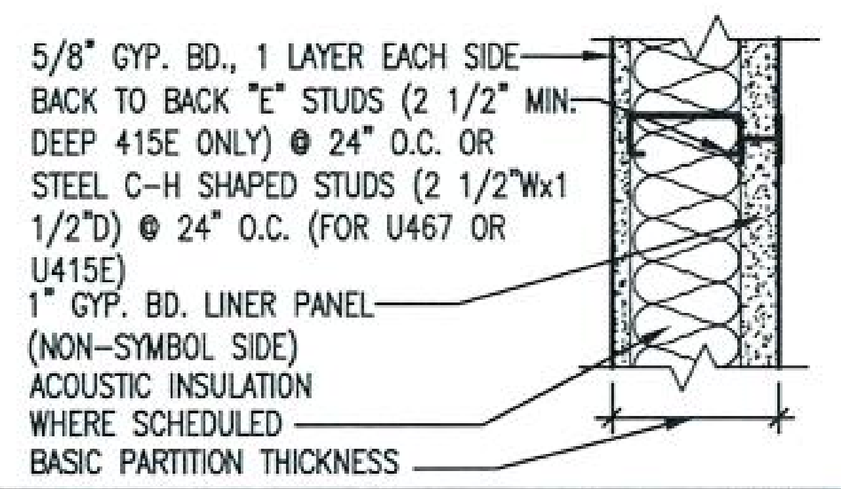
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# R

| | R1_ | STC | R2_ | STC | R3_ | STC | R4_ | STC | R5_ | STC | R6_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | R10 | 39 | R20 | 47 | R30 | 39 | R40 | 47 | R50 | 40 | R60 | 48 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE (SMOKE RESIST) | R11 | 39 | R21 | 47 | R31 | 39 | R41 | 47 | R51 | 40 | R61 | 48 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | R12 | | R22 | | R32 | | R42 | | R52 | | R62 | | | 2/A-8102 SIM |
| NON RATED WITH STUDS AND GYP. BD. TO FINISHED CEILING | R13 | | R23 | | R33 | | R43 | | R53 | | R63 | | | 2/A-8102 SIM |
| STUD SIZE | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 4 7/8" | | 4 7/8" | | 5 1/4" | | 5 1/4" | | 7 1/4" | | 7 1/4" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 3" | | — | | 3" | | — | | 5 1/2" | | | |
| ACOUSTICAL TEST NUMBER | USG 860808 | | USG 87017 | | USG 860808 | | USG 87017 | | USG 860808 NOTE 2 | | USG 870717 NOTE 3 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | UL DES U465 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | | |

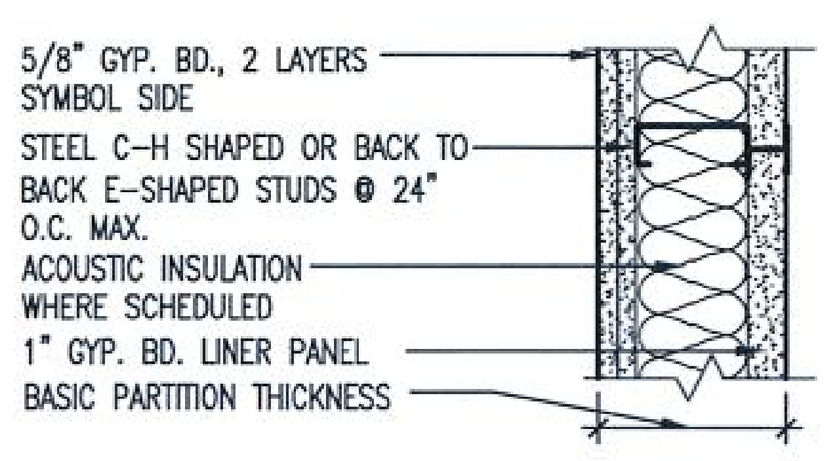
NOTES:
1. REFER TO SIMILAR FLOOR DETAIL 14/A-8102.
2. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
3. THE STC WAS MODIFIED FROM THE REFERENCE.
4. THE USE OF 20 GA STUDS WILL LOWER THE STC AS SHOWN.




# L

| | L1_ | STC | L2_ | STC | L3_ | STC | L4_ | STC | L5_ | STC | L6_ | STC | L7_ | STC | L8_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-HR RATED SHAFT WALL | L10 | 41 | L20 | 50 | L30 | 43 | L40 | 51 | L50 | 45 | L60 | 52 | L70 | 45 | L80 | 52 | | 06/A-8102 |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 4" | | 4" | | 6" (C-H) | | 6" (C-H) | | 6" (2XE) | | 6" (2XE) | | | |
| BASIC PARTITION THICKNESS | 3 3/4" | | 3 3/4" | | 5 1/4" | | 5 1/4" | | 7 1/4" | | 7 1/4" | | 7 1/4" | | 7 1/4" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 1" NOTE 3 | | — | | 2 1/2" | | — | | 4 1/2" | | — | | 4 1/2" | | | |
| ACOUSTICAL TEST NUMBER | BISN 750704 NOTE 4 | | BISN 750704 NOTE 4 | | NOTE 4 | | NOTE 4 | | NOTE 4 | | NOTE 4 | | NOTE 4 | | NOTE 4 | | | |
| FIRE TEST NUMBER | UL DES U467 OR U415(E) | | UL DES U467 OR U415(E) | | UL DES U415(E) | | UL DES U415(E) | | UL DES U415(E) | | UL DES U415(E) | | UL DES U415(E) | | UL DES U415(E) | | | |

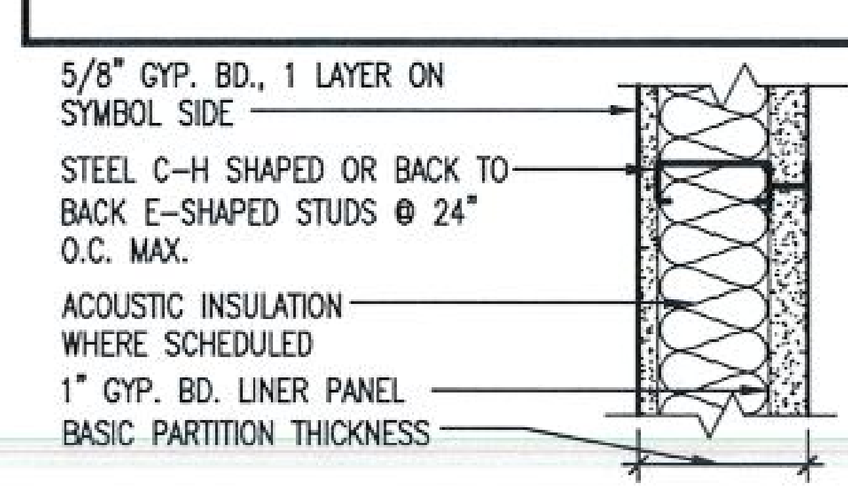
NOTES:
1. SEE 5/A-8102 FOR DETAIL AT THE FLOOR.
2. USE MINERAL BATTS ONLY AT U467.
3. WHEN USING DESIGN U415(E), EITHER MINERAL WOOL OR GLASS FIBER BATTS ARE ACCEPTABLE.
4. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.




# K

| | K1_ | STC | K2_ | STC | K3_ | STC | K4_ | STC | K5_ | STC | K6_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-HR RATED SHAFT WALL | K10 | 41 | K20 | 50 | K30 | 43 | K40 | 50 | K50 | 45 | K60 | 51 | | 06/A-8102 |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 3 3/4" | | 3 3/4" | | 5 1/4" | | 5 1/4" | | 7 1/4" | | 7 1/4" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 1" | | — | | 2 1/2" | | — | | 4 1/2" | | | |
| ACOUSTICAL TEST NUMBER | USG 750302 NOTE 3 | | USG 750302 NOTE 3 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | | |
| FIRE TEST NUMBER | UL DES U415(B) | | UL DES U415(B) | | UL DES U415(B) | | UL DES U415(B) | | UL DES U415(B) | | UL DES U415(B) | | | |

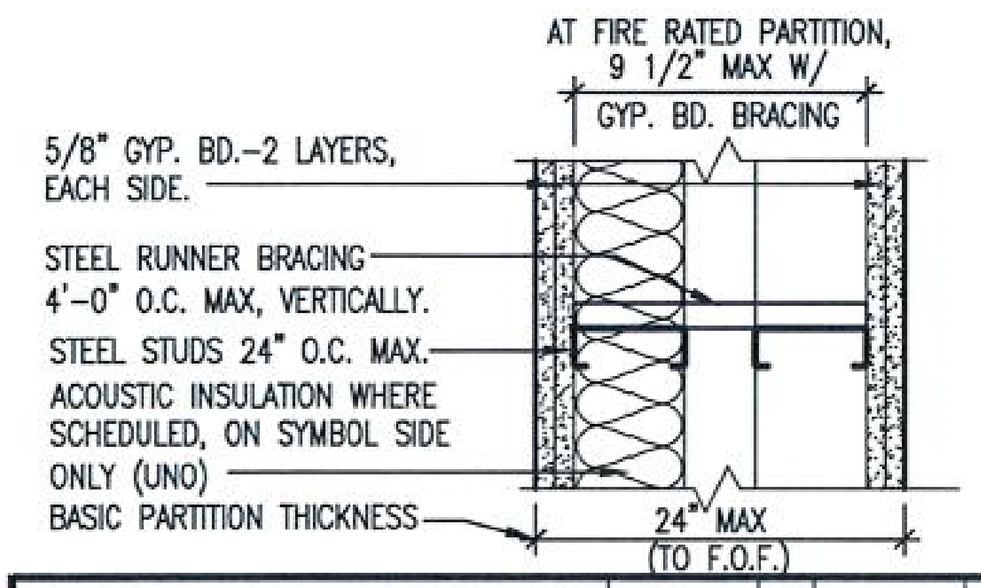
NOTES:
1. SEE 5/A-8102 FOR DETAIL AT THE FLOOR.
2. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
3. DENOTES STC MODIFIED FROM REFERENCE.




# J

| | J1_ | STC | J2_ | STC | J3_ | STC | J4_ | STC | J5_ | STC | J6_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED SHAFT WALL | J10 | 36 | J20 | 45 | J30 | 38 | J40 | 47 | J50 | 40 | J60 | 48 | | 06/A-8102 |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 3 1/8" | | 3 1/8" | | 4 5/8" | | 4 5/8" | | 6 5/8" | | 6 5/8" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 1" | | — | | 2 1/2" | | — | | 4 1/2" | | | |
| ACOUSTICAL TEST NUMBER | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | | |
| FIRE TEST NUMBER | UL DES U415(A) | | UL DES U415(A) | | UL DES U415(A) | | UL DES U415(A) | | UL DES U415(A) | | UL DES U415(A) | | | |

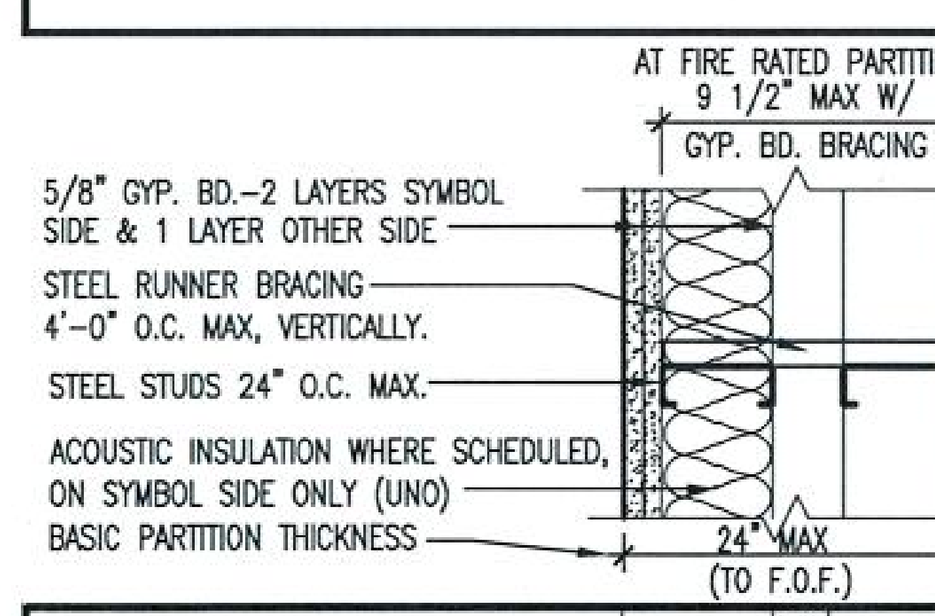
NOTES:
1. SEE 5/A-8102 FOR DETAIL AT THE FLOOR.
2. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.




# H

| | H1_ | STC | H2_ | STC | H3_ | STC | H4_ | STC | H5_ | STC | H6_ | STC | H7_ | STC | H8_ | STC | H9_ | STC | H10_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | H10 | 45 | H20 | 50 | X | | X | | X | | X | | X | | X | | X | | X | | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | H11 | 45 | H21 | 50 | H31 | 53 | H41 | 64 | H51 | 54 | H61 | 63 | H71 | 54 | H81 | 63 | H91 | 55 | H101 | 64 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | H12 | | H22 | | H32 | | H42 | | H52 | | H62 | | H72 | | H82 | | H92 | | H102 | | | 2/A-8102 SIM |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING | H13 | | H23 | | H33 | | H43 | | H53 | | H63 | | H73 | | H83 | | H93 | | H103 | | | 3/A-8102 SIM |
| STUD SIZE | 1 5/8" | | 1 5/8" | | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 2 1/2" | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | | |
| ACOUSTICAL TEST NUMBER | TL 76-162 SIM. | | TL 76-156 SIM. | | TL 76-162 SIM. | | TL 76-156 SIM. | | NOTE 3 | | — | | NOTE 3 | | — | | NOTE 3 | | NOTE 3 | | | |
| FIRE TEST NUMBER | UL DES U420 OR U436 NOTE4 | | UL DES U420 OR U436 NOTE4 | | — | | — | | — | | — | | — | | — | | — | | — | | | |

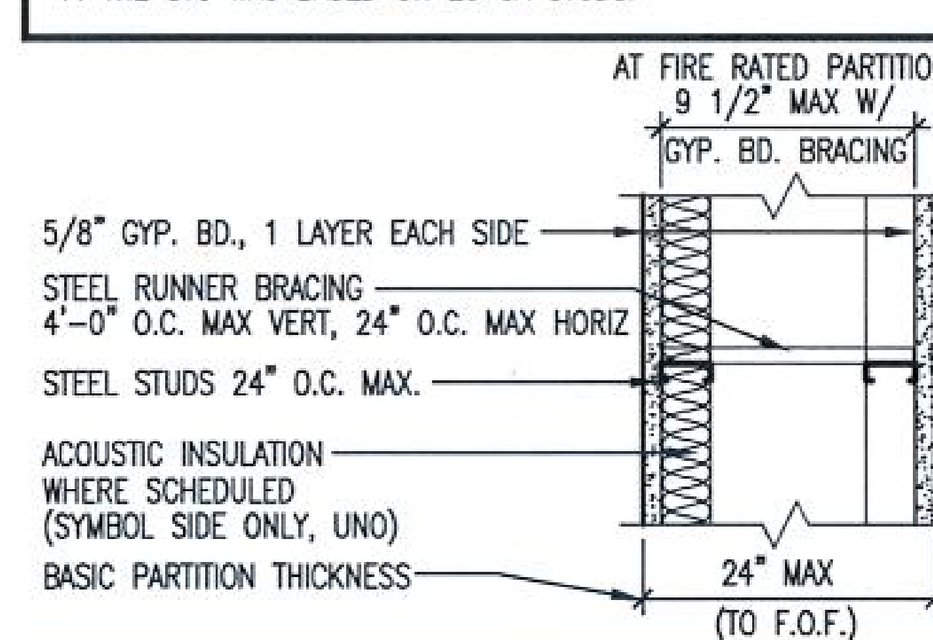
NOTES:
1. STEEL RUNNER BRACING SHALL BE A MIN. OF 4 1/2" LONG.
2. USE OF GYP. BD. BRACINGAT RATED WALLS, LIMITS THE STUD CAVITY DEPTH TO 9 1/2".
3. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
4. UL DESIGN INCLUDES A FIRE PROOFED STEEL TRUSS WITHIN THE CAVITY OF THE WALL.
5. ACOUSTICAL INSULATION IS IN ONE SIDE ONLY.
6. THE STC WAS BASED ON 25 GA STUDS.




# G

| | G1_ | STC | G2_ | STC | G3_ | STC | G4_ | STC | G5_ | STC | G6_ | STC | G7_ | STC | G8_ | STC | G9_ | STC | G10_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | G10 | 45 | G20 | 55 | G30 | 51 | G40 | 59 | X | | X | | X | | X | | X | | X | | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | G11 | 45 | G21 | 55 | G31 | 51 | G41 | 59 | G51 | 52 | G61 | 62 | G71 | 52 | G81 | 62 | G91 | 52 | G101 | 62 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | G12 | | G22 | | G32 | | G42 | | G52 | | G62 | | G72 | | G82 | | G92 | | G102 | | | 2/A-8102 SIM |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING | G13 | | G23 | | G33 | | G43 | | G53 | | G63 | | G73 | | G83 | | G93 | | G103 | | | 3/A-8102 SIM |
| PARTIAL HEIGHT PARTITION. SEE FLOOR PLANS FOR HEIGHTS. | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | | |
| STUD SIZE | 1 5/8" | | 1 5/8" | | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 3 1/2" | | — | | 3 1/2" | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | | |
| ACOUSTICAL TEST NUMBER | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | UL DES U420 | | UL DES U420 | | UL DES U805-NOTE4 | | UL DES U805-NOTE4 | | — | | — | | — | | — | | — | | — | | | |

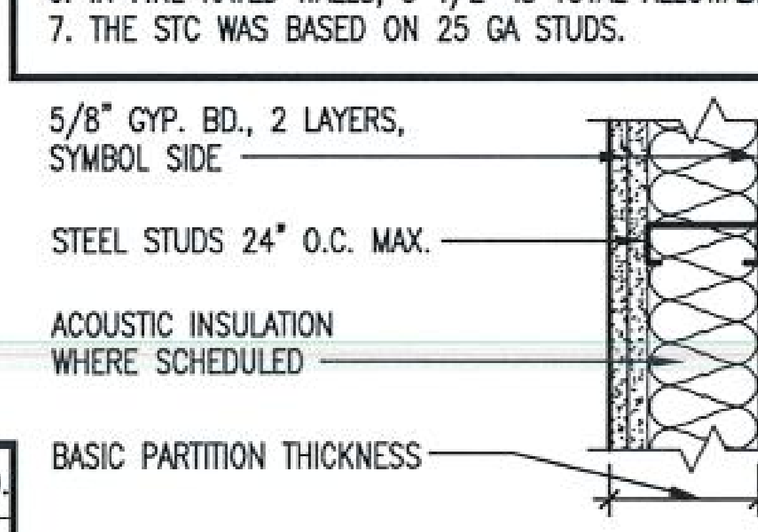
NOTES:
1. STEEL RUNNER BRACING SHALL BE A MIN. OF 4 1/2" LONG.
2. IF USE GYP. BD. BRACING AT RATED WALLS, IT LIMITS THE STUD CAVITY DEPTH TO 9 1/2".
3. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
4. UL DESIGN INCLUDES A FIRE PROOFED STEEL TRUSS WITHIN THE CAVITY WALL.
5. ACOUSTICAL INSULATION IS IN ONE SIDE ONLY.
6. REVEALS ARE ACCEPTABLE IN OUTER LAYER OF GYPSUM BOARD AND STILL MAINTAIN 1-HOUR FIRE RATING.
7. THE STC WAS BASED ON 25 GA STUDS.




# F

| | F1_ | STC | F2_ | STC | F3_ | STC | F4_ | STC | F5_ | STC | F6_ | STC | F7_ | STC | F8_ | STC | F9_ | STC | F10_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | F10 | 42 | F20 | 50 | F30 | 44 | F40 | 53 | X | | X | | X | | X | | X | | X | | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | F11 | 42 | F21 | 50 | F31 | 44 | F41 | 53 | F51 | 45 | F61 | 57 | F71 | 45 | F81 | 57 | F91 | 45 | F101 | 57 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | F12 | | F22 | | F32 | | F42 | | F52 | | F62 | | F72 | | F82 | | F92 | | F102 | | | 2/A-8102 SIM |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING | F13 | | F23 | | F33 | | F43 | | F53 | | F63 | | F73 | | F83 | | F93 | | F103 | | | 3/A-8102 SIM |
| PARTIAL HEIGHT PARTITION. SEE FLOOR PLANS FOR HEIGHTS. | F14 | | F24 | | F34 | | F44 | | F54 | | F64 | | F74 | | F84 | | F94 | | F104 | | | 13/A-8102 SIM |
| STUD SIZE | 1 5/8" | | 1 5/8" | | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | SEE PLAN | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 3 1/2" | | — | | 3 1/2" | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | — | | 3 1/2" NOTE 5 | | | |
| ACOUSTICAL TEST NUMBER | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | NOTE 3 | | TL-76-155 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | UL DES U420 | | UL DES U420 | | UL DES U805-NOTE4 | | UL DES U805-NOTE4 | | — | | — | | — | | — | | — | | — | | | |

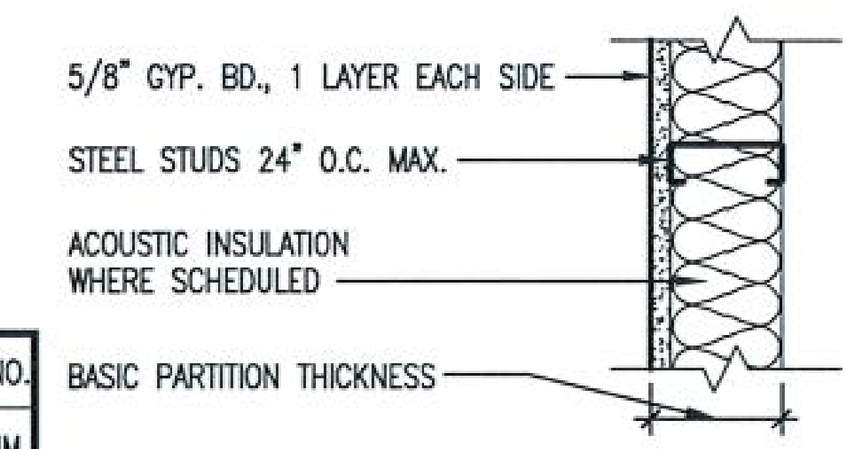
NOTES:
1. STEEL RUNNER BRACING SHALL BE A MIN. OF 4 1/2" LONG.
2. USE OF GYP. BD. BRACING @ RATED WALLS, LIMITS THE STUD CAVITY DEPTH TO 9 1/2".
3. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
4. UL DESIGN INCLUDES A FIRE PROOFED STEEL TRUSS WITHIN THE CAVITY OF THE WALL.
5. ACOUSTICAL INSULATION IS RATED IN ONE SIDE ONLY.
6. IN FIRE RATED WALLS, 3 1/2" IS TOTAL ALLOWABLE ACOUSTICAL INSULATION THICKNESS.
7. THE STC WAS BASED ON 25 GA STUDS.




# E

| | E1_ | STC | E2_ | STC | E3_ | STC | E4_ | STC | E5_ | STC | E6_ | STC | E7_ | STC | E8_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | X | | X | | X | | X | | X | | X | | X | | X | | | |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | E11 | 33 | E21 | 34 | E31 | 33 | E41 | 35 | E51 | 33 | E61 | 35 | E71 | 33 | E81 | 36 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | E12 | | E22 | | E32 | | E42 | | E52 | | E62 | | E72 | | E82 | | | 2/A-8102 SIM |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING | E13 | | E23 | | E33 | | E43 | | E53 | | E63 | | E73 | | E83 | | | 3/A-8102 SIM |
| PARTIAL HEIGHT PARTITION. SEE FLOOR PLANS FOR HEIGHTS. | X | | X | | X | | X | | X | | X | | X | | X | | | |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 3 3/4" | | 3 3/4" | | 4 7/8" | | 4 7/8" | | 5 1/4" | | 5 1/4" | | 7 1/4" | | 7 1/4" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 2" | | — | | 3" | | — | | 3" | | — | | 5 1/2" | | | |
| ACOUSTICAL TEST NUMBER | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | "X" | | "X" | | "X" | | "X" | | "X" | | "X" | | "X" | | "X" | | | |

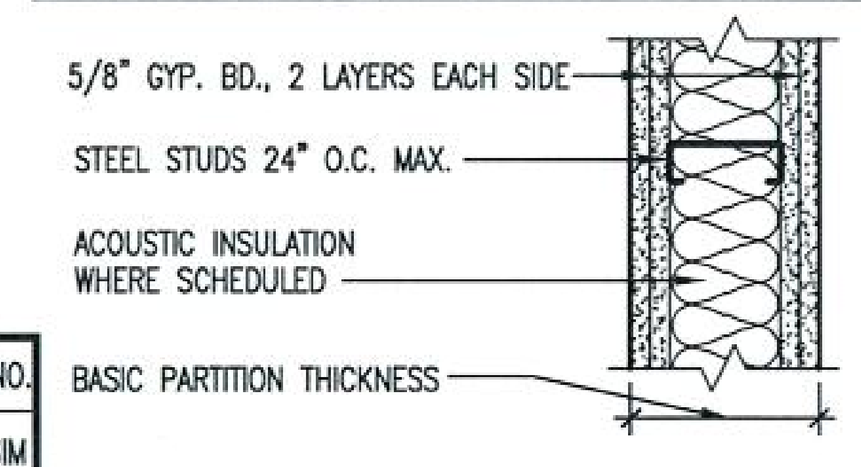
NOTES:
1. IF THIS PARTITION TYPE IS ADDED TO AN EXISTING PARTITION, STC'S CAN NOT SIMPLY BE ADDED TOGETHER TO IMPROVE THE STC VALUE.
2. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
3. THE STC WAS BASED ON 25 GA STUDS.




# D

| | D1_ | STC | D2_ | STC | D3_ | STC | D4_ | STC | D5_ | STC | D6_ | STC | D7_ | STC | D8_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIRE RATED WITH GYP. BD. TO STRUCTURE ABOVE | X | | X | | X | | X | | X | | X | | X | | X | | | |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | D11 | 27 | D21 | 29 | D31 | 27 | D41 | 30 | D51 | 27 | D61 | 30 | D71 | 27 | D81 | 31 | | 1/A-8102 SIM |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | D12 | | D22 | | D32 | | D42 | | D52 | | D62 | | D72 | | D82 | | | 2/A-8102 SIM |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING | D13 | | D23 | | D33 | | D43 | | D53 | | D63 | | D73 | | D83 | | | 3/A-8102 SIM |
| PARTIAL HEIGHT PARTITION. SEE FLOOR PLANS FOR HEIGHTS. | X | | X | | X | | X | | X | | X | | X | | X | | | |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" 1 | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 3 1/8" | | 3 1/8" | | 4 1/4" | | 4 1/4" | | 4 5/8" | | 4 5/8" | | 6 5/8" | | 6 5/8" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 2" | | — | | 3" | | — | | 3" | | — | | 5 1/2" | | | |
| ACOUSTICAL TEST NUMBER | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | NOTE 2 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | "X" | | "X" | | "X" | | "X" | | "X" | | "X" | | "X" | | "X" | | | |

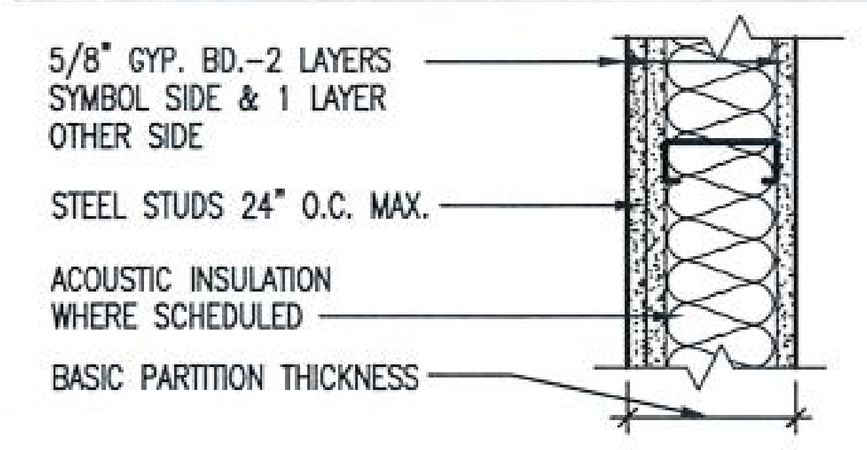
NOTES:
1. IF THIS PARTITION TYPE IS ADDED TO AN EXISTING PARTITION, STC'S CAN NOT SIMPLY BE ADDED TOGETHER TO IMPROVE THE STC VALUE.
2. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
3. THE STC WAS BASED ON 25 GA STUDS.
4. REFER TO 21/A-8102 FOR BRACING.




# C

| | C1_ | STC | C2_ | STC | C3_ | STC | C4_ | STC | C5_ | STC | C6_ | STC | C7_ | STC | C8_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | C10 | 49 | C20 | 55 | C30 | 48 | C40 | 57 | C50 | 48 | C60 | 57 | C70 | 50 | C80 | 58 | | 01/A-8102 |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | C11 | 49 | C21 | 55 | C31 | 48 | C41 | 57 | C51 | 48 | C61 | 57 | C71 | 50 | C81 | 58 | | 01/A-8102 |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 5" | | 5" | | 6 1/8" | | 6 1/8" | | 6 1/2" | | 6 1/2" | | 8 1/2" | | 8 1/2" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 2" | | — | | 3" | | — | | 3" | | — | | 5 1/2" | | | |
| ACOUSTICAL TEST NUMBER | SIM. BBN 770408 | | SIM. USG 840818-NOTE2 | | SIM. BBN 770408 | | SIM. USG 840818 | | SIM. BBN 770408 | | SIM. USG 840818 | | SIM. BBN 770408-NOTE3 | | SIM. USG 840818-NOTE3 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | UL DES U411 | | UL DES U411 | | UL DES U411 | | UL DES U411 | | UL DES U411 | | UL DES U411 | | UL DES U411 | | UL DES U411 | | | |

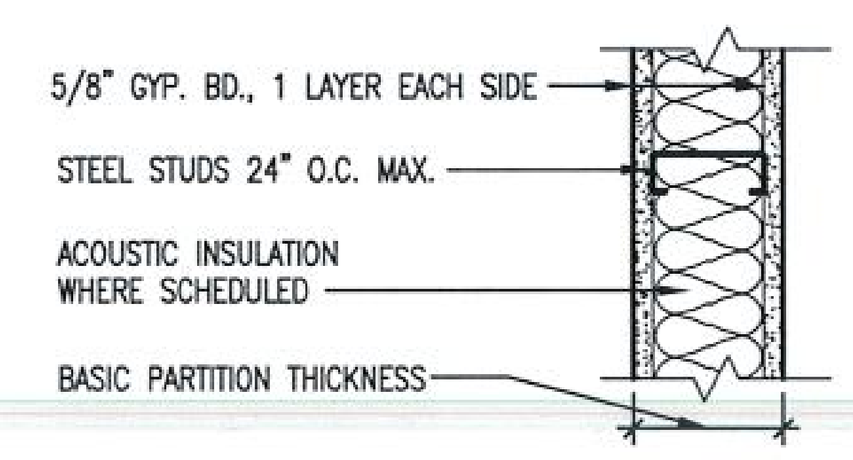
NOTES:
1. SEE 14/A-8102 FOR FOR PLACEMENT OF ACOUSTICAL SEALANT AT FLOOR IN A 4-LAYERED PARTITION.
2. THE STC WAS MODIFIED FROM THE REFERENCE.
3. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
4. THE STC WAS BASED ON 25 GA STUDS.




# B

| | B1_ | STC | B2_ | STC | B3_ | STC | B4_ | STC | B5_ | STC | B6_ | STC | B7_ | STC | B8_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | X | | B20 | 46 | B30 | 42 | B40 | 53 | B50 | 42 | B60 | 53 | B70 | 44 | B80 | 54 | | 01/A-8102 |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE | B11 | 44 | B21 | 51 | B31 | 42 | B41 | 53 | B51 | 42 | B61 | 53 | B71 | 44 | B81 | 54 | | 01/A-8102 |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | B12 | | B22 | | B32 | | B42 | | B52 | | B62 | | B72 | | B82 | | | 02/A-8102 |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING (SEE DETAILS) * | B13 | | B23 | | B33 | | B43 | | B53 | | B63 | | B73 | | B83 | | | 03/A-8102 |
| PARTIAL HEIGHT PARTITION. SEE FLOOR PLANS FOR HEIGHTS. | B14 | | B24 | | B34 | | B44 | | B54 | | B64 | | B74 | | B84 | | | 13/A-8102 |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 4 3/8" | | 4 3/8" | | 5 1/2" | | 5 1/2" | | 5 7/8" | | 5 7/8" | | 7 7/8" | | 7 7/8" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 2" | | — | | 3" | | — | | 3" | | — | | 5 1/2" | | | |
| ACOUSTICAL TEST NUMBER | SIM. TL 69-148 | | SIM. SA 800504 | | SIM. TL 69-148 | | SIM. SA 800504 | | SIM. TL 69-148 | | SIM. SA 800504 | | SIM. TL 69-148 NOTE5 | | SIM. SA 800504 NOTE5 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | "X" | | UL DES U419, U448 | | UL DES U419 | | UL DES U419 | | UL DES U419 | | UL DES U419 | | UL DES U419 | | UL DES U419 | | | |

NOTES:
1. SEE 13/A-8102 FOR PARTIAL HEIGHT PARTITION.
2. REFER TO FLOOR DETAIL 4/A-8102.
3. REFER TO 14/A-8102 FOR SIMILIAR PLACEMENT OF ACOUSTICAL SEALANT IN A RATED WALL.
4. REVEALS ARE ACCEPTABLE IN THE OUTER LAYER OF GYPSUM BOARD AND STILL MAINTAIN THE 1-HR RATING.
5. THE STC WAS PREDICTED USING "INSUL" COMPUTER PROGRAM.
6. THE STC WAS BASED ON 25 GA STUDS.




# A

| | A1_ | STC | A2_ | STC | A3_ | STC | A4_ | STC | A5_ | STC | A6_ | STC | A7_ | STC | A8_ | STC | HEAD | DETAIL NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-HR RATED WITH GYP. BD. TO STRUCTURE ABOVE | X | | A20 | 46 | A30 NO.6 | 39 | A40 NO.6 | 47 | A50 | 39 | A60 | 47 | A70 | 40 | A80 | 48 | | 01/A-8102 |
| NON RATED WITH GYP. BD. TO STRUCTURE ABOVE (SMOKE RESIST) | A11 | 39 | A21 | 46 | A31 | 39 | A41 | 47 | A51 | 39 | A61 | 47 | A71 | 40 | A81 | 48 | | 01/A-8102 SIM. |
| NON RATED WITH GYP. BD. TO 6" ABOVE CEILING | A12 | | A22 | | A32 | | A42 | | A52 | | A62 | | A72 | | A82 | | | 02/A-8102 |
| NON RATED WITH STUDS & GYP. BD. TO FINISHED CEILING | A13 | | A23 | | A33 | | A43 | | A53 | | A63 | | A73 | | A83 | | | 03/A-8102 |
| PARTIAL HEIGHT PARTITION. SEE FLOOR PLANS FOR HEIGHTS. | A14 | | A24 | | A34 | | A44 | | A54 | | A64 | | A74 | | A84 | | | 13/A-8102 |
| STUD SIZE | 2 1/2" | | 2 1/2" | | 3 5/8" | | 3 5/8" | | 4" | | 4" | | 6" | | 6" | | | |
| BASIC PARTITION THICKNESS | 3 3/4" | | 3 3/4" | | 4 7/8" | | 4 7/8" | | 5 1/4" | | 5 1/4" | | 7 1/4" | | 7 1/4" | | | |
| ACOUSTICAL INSULATION THICKNESS | — | | 2" | | — | | 3" | | — | | 3" | | — | | 5 1/2" | | | |
| ACOUSTICAL TEST NUMBER | SIM. USG 860808 | | SIM. SA 831001 | | SIM. USG 860808 | | SIM. USG 870717 | | SIM. USG 860808 | | SIM. SA 870717 | | SIM. USG 860808-NOTE3 | | SIM. USG 870717-NOTE4 | | | |
| FIRE TEST NUMBER (WHERE APPLICABLE) | "X" | | UL DES U419 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | UL DES U465 | | | |

NOTES:
1. SEE 13/A-8102 FOR PARTIAL HEIGHT PARTITION.
2. REFER TO FLOOR DETAIL 4/A-8102.
3. THE STC WAS PREDICTED USING THE "INSUL" COMPUTER PROGRAM.
4. THE STC WAS MODIFIED FROM THE REFERENCE.
5. THE STC WAS BASED ON 25 GA STUDS.
6. WHERE AN * NEXT TO THE PARTITION TAG, PROVIDE 1/16" LEAD LINED GYP. BD. ON GYP. BD LAYER FACING PROCEDURE ROOM.

# PARTITION TYPE GENERAL NOTES

1. REFER TO FLOOR PLAN SERIES A-2001 FOR LOCATION OF WALL TYPES. ALL WALLS ARE TYPE "A41" UNLESS NOTED OTHERWISE.
2. REFER TO A-2201 SERIES FOR FINAL FINISHES ON PARTITIONS. PARTITION TYPES IN CHARTS REFER TO BASE WALL ONLY.
3. ALL GYPSUM BOARD SHALL BE TYPE "X", UNLESS NOTED OTHERWISE.
4. PROVIDE ONE LAYER OF 5/8" MOISTURE RESISTANT GYPSUM BOARD AT WALLS BEHIND SINKS AND LAVATORIES WITHOUT TILE. MOISTURE RESISTANT GYPSUM BOARD SHALL BE INSTALLED WITHIN 2' OF ALL URINALS AND WATER CLOSETS, TO A HEIGHT OF 4' AFF.
5. PROVIDE WATER RESISTANT GYPSUM TILE BACKER BOARD BEHIND ALL TILE AND/OR WALL PANELS AT SHOWERS.
6. PENETRATIONS IN LEAD-LINED WALLS SHALL BE SEALED TO MEET LEAD SHIELDING REQUIREMENTS.
7. ALL LOAD BEARING WALLS SHALL BE CONSTRUCTED PER STRUCTURAL DRAWINGS AND SPECIFICATIONS.
8. PROVIDE FIRE TREATED WOOD BLOCKING, SHEET METAL OR STEEL BACKING IN PARTITIONS TO SUPPORT WALL MOUNTED ITEMS AND EQUIPMENT, ETC.
9. "LINE OF STRUCTURE" AS SHOWN AT THE HEAD CONDITIONS OF THE PARTITION DETAIL DOES NOT INDICATE THE EXACT CONSTRUCTION CONDITION REFER TO SHEET A-0101 & A-0102 "LIFE SAFETY DETAILS" FOR ADDITIONAL INFORMATION ON RATED WALLS.
10. SPACING OF THE METAL STUDS HAS NOT BEEN INDICATED ON THE WALL TYPES. STUD SPACING IS TO BE DETERMINED BY THE HEIGHT OF THE WALL AS SHOWN IN THE TABLE BELOW. EACH STUD GOING TO STRUCTURE AND EXCEEDING ALLOWABLE HEIGHTS SHALL BE BRACED 45 DEGREES DIAGONALLY 12" ABOVE CEILING WITH EQUAL SIZE 25 GA. METAL STUDS. THIS TABLE IS TO BE USED FOR THE INTERIOR WALLS ONLY, AND DOES NOT APPLY TO EXTERIOR STUDS.

| FACING ON SIDES OF 25 GA. STUDS | STUD SPACING ON CENTER | STUD DEPTH 2 1/2" MAX. HEIGHT | STUD DEPTH 3 5/8" MAX. HEIGHT | STUD DEPTH 6" MAX. HEIGHT |
|---|---|---|---|---|
| 1 LAYER 5/8" GYP. BOARD-1 SIDE ONLY | 16<br>24 | 11'-0"<br>9'-9" | 14'-6"<br>12'-9" | 14'-6"<br>12'-9" |
| 1 LAYER 5/8" GYP. BOARD-EACH SIDE | 16<br>24 | 12'-6"<br>10'-9" | 16'-0"<br>13'-6" | 16'-0"<br>13'-6" |
| 2 LAYER 5/8" GYP. BOARD-EACH SIDE | 16<br>24 | | 16'-9"<br>13'-6" | 20'-0"<br>15'-0" |

11. ISOLATE NON-LOAD BEARING FRAMING FROM STRUCTURAL ELEMENTS TO PREVENT THE TRANSFER OF LOAD TO PARTITION FRAMING. STOP STUDS 1/2" BELOW METAL RUNNER (TOP TRACK) TO ALLOW FOR VERTICAL EXPANSION. SET TOP TRACK 1" BELOW DEFLECTION TRACK. DO NOT ATTACH STUDS TO TOP TRACK. DO NOT ATTACH GYPSUM BOARD TO TOP TRACK. THIS MAY ALSO BE ACHIEVED, AT THE CONTRACTOR OPTION, BY UTILIZING THE PROPRIETARY SYSTEM DESCRIBED IN THE SPECIFICATIONS. RE:
12. PROVIDE DOUBLE STUDS AT ALL JAMBS OF OPENINGS OR, PROVIDE STEEL CHANNEL WHERE NOTED ELSEWHERE IN THE SET.

FIRE RATED PARTITIONS

1. REFER TO A-0101 & A-0102 "LIFE SAFETY DETAILS" FOR ADDITIONAL INFORMATION ON PENETRATIONS THRU RATED WALLS, FIRE RESISTANT JOINT SYSTEMS AND SLIP TRACKS AT NON-BEARING WALLS CONNECTION TO STRUCTURE AND WALL PRIORITY.
2. U.L. DESIGN REFERS TO FIRE RESISTANT DIRECTORY'S MOST RECENT ISSUE.

ACOUSTICAL

1. ALL ACOUSTICALLY CLASSED PARTITIONS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE TO THE REFERENCED TEST.
2. STAGGER AND SEAL ALL JOINTS ON MULTIPLE GYPSUM BOARD LAYER PARTITIONS.
3. SEAL ALL PERIMETER GAPS, AIR TIGHT, AT THE FLOORS, HEAD, ADJACENT CONSTRUCTION AND AROUND ANY PENETRATING ELEMENTS WITH INTERIOR GRADE ACOUSTICAL SEALANT.
4. ALL BATTS AND BLANKETS IN RATED WALLS MUST BEAR THE REQUIRED U.L. CLASSIFICATION MARKING AS TO FIRE-RESISTANCE. ALSO REFER TO LIFE SAFETY DETAILS IN SHEETS A-0101 & A-0102.
5. AT ACOUSTICALLY RATED PARTITIONS, DO NOT FILL THE STUD CAVITY (DEPTH) FULLY WITH SOUND BATTS. THE WIDTH OF THE SOUND BATTS SHOULD BE SLIGHTLY SMALLER THAN CAVITY TO AVOID BATTS COMPRESSION. HOWEVER, THE ENTIRE LENGTH AND HEIGHT OF THE WALL SHOULD HAVE CONTINUOUS AND UNINTERRUPTED SOUND ATTENUATION BATTS.
6. REFER TO DETAILS 09, 10, 11 AND 12 ON SHEET A-8100 FOR PARTITION TYPES WITH A DESIGNATED STC RATING.
7. SEAL ALL WALL INTERSECTIONS AND CONTROL JOINTS AT ACOUSTICALLY CLASSED PARTITIONS IN ACCORDANCE TO DETAIL 12/ A-8100.
8. SEAL ALL CONDUIT, STRUCTURAL, DUCT AND LARGE PIPE PENETRATIONS ACCORDING TO 09/A-8100 UNLESS THE PARTITION IS ALSO FIRE RATED WHERE THE LIFE SAFETY DETAILS ON SHEETS A-0101 & A-0102 SHOULD BE REFERENCED.
9. OUTLETS ON OPPOSITE SIDES OF ACOUSTICALLY CLASSED PARTITIONS .

(XX) — PARTITION TYPE (AS SHOWN ON PLANS IN A-2001)

09-411001-

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED M
DATE 7/31/09


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Project # 306660005


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STATE OF COLORADO
TRUBY L. McDOUGAL
203601
LICENSED ARCHITECT
7.1.09

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

PARTITION TYPE SCHEDULE

**Sheet**

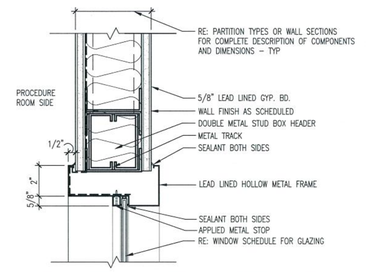
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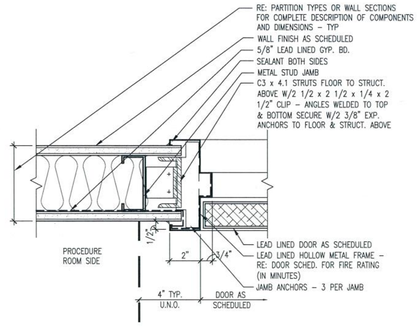


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schmidt



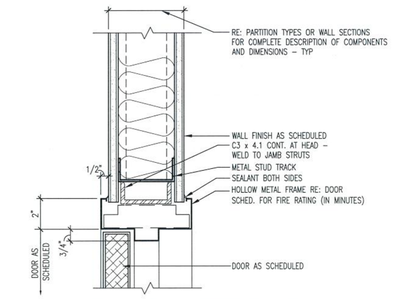

## 10 HEAD DETAIL–LEAD LINED–HM

3" = 1'-0"



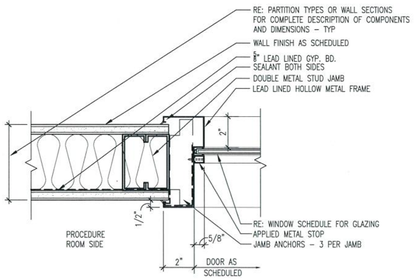

## 07 JAMB DETAIL–LEAD LINED–HM

3" = 1'-0"



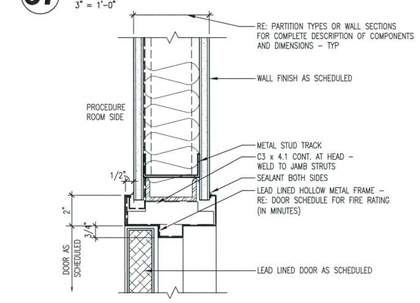

## 04 HEAD DETAIL–DOUBLE DOOR–HM

3" = 1'-0"



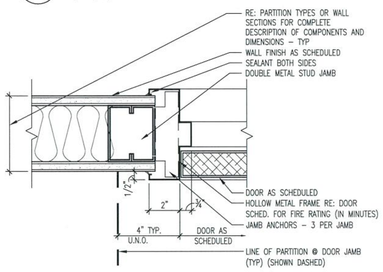

## 09 JAMB DETAIL–LEAD LINED–HM

3" = 1'-0"




## 06 HEAD DETAIL–LEAD LINED–HM

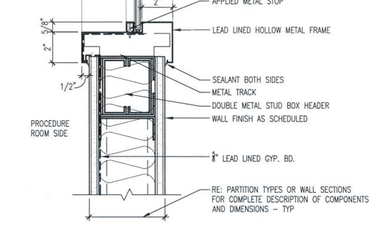
3" = 1'-0"




@ TYP. RATED/NON-RATED DOORS

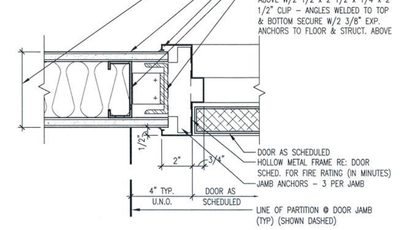
## 03 JAMB DETAIL–STANDARD–HM

3" = 1'-0"



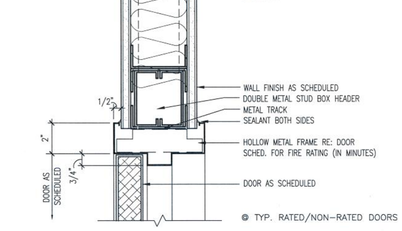

## 08 SILL DETAIL–LEAD LINED–HM

3" = 1'-0"




## 05 JAMB DETAIL–DOUBLE DOOR–HM

3" = 1'-0"




@ TYP. RATED/NON-RATED DOORS

## 02 HEAD DETAIL–STANDARD–HM

3" = 1'-0"

## DOOR SCHEDULE

| Room Number | DOOR NUMBER | ROOM NAME | SIZE WIDTH | SIZE HEIGHT | TYPE | MATL | FINISH | FRAME TYPE | FRAME MAT. | DETAIL HEAD | DETAIL JAMB | DETAIL SILL | RATING | REMARKS | Frame Finish | Hardware Set No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1097A | 1097A | CATH LAB #1 | 5'-6" | 7'-0" | NV | WD | WD2 | D | HM | 06/A-8200 | 07/A-8200 | -- | | 1,9,17 | PT | 6.01 |
| 1097B | 1097B | CATH LAB #2 | 5'-6" | 7'-0" | NV | WD | WD2 | D | HM | 06/A-8200 | 07/A-8200 | -- | | 1,9,17 | PT | 6.01 |
| 1097C | 1097C | EQUIPMENT | 3'-0" | 7'-0" | F | ⚠ WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | ⚠ | -- | PT | 2.04 |
| 1097D | 1097D | CONTROL | 3'-0" | 7'-0" | NV | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | | -- | PT | 5.01 |
| 1097E | 1097E | EQUIPMENT | 3'-0" | 7'-0" | F | ⚠ WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | | -- | PT | 2.04 |
| 1097F | 1097F | CONTROL | 3'-0" | 7'-0" | NV | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | | -- | PT | 5.01 |
| 1098 | 1098 | CORRIDOR | 7'-0" | 7'-0" | NV | WD | WD2 | C | HM | 04/A-8200 | 03/A-8200 | -- | 90/SR | 4, 12 | PT | 7.01 |
| 1100 | 1100 | SOILED UTILITY | 4'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | 45/SR | 14 | PT | 9.01 |
| 1101 | 1101 | EQUIPMENT STORAGE | 4'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | 45/SR | -- | PT | 2.01 |
| 1102 | 1102 | MICROBIOLOGY | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | 90/SR | 4 | PT | 2.02 |
| 1103 | 1103 | CLEAN UTILITY/P.O.U. | 4'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | 45/SR | 4 | PT | 2.02 |
| ⚠ 1104 | 1104 | UPS | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | -- | -- | PT | 2.05 |
| 1105 | 1105 | CORRIDOR | 7'-8" | 7'-0" | NV | WD | WD2 | C | HM | 04/A-8200 | 05/A-8200 | -- | SR ⚠ | 4, 12 | PT | 7.01 |
| 1108 | 1108 | LOCKER ROOM | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | -- | -- | PT | 8.01 |
| 1109 | 1109 | STAFF TOILET/SHOWER | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | -- ⚠ | -- | PT | 3.01 |
| 1110 | 1110 | PATIENT TOILET | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | | 3,7 | PT | 3.02 |
| 1111 | 1111 | JANITOR | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | | -- | PT | 2.04 |
| ⚠ 1112 | 1112 | MEDS | 3'-0" | 7'-0" | F | WD | WD2 | A | HM | 02/A-8200 | 03/A-8200 | -- | | 4 | PT | 2.03 |

Door 1105 Shall be smoke extra Pass 7.0. 5.2

## 01 FIRST FLOOR DOOR SCHEDULE

NTS

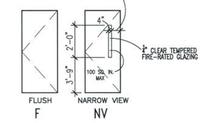
## DOOR SCHEDULE GENERAL NOTES

1. REFER TO SPECIFICATIONS FOR DESCRIPTIONS OF THE HARDWARE SETS.
2. PROVIDE A PAIR OF 14 GAGE STUDS AT THE SIDE OF AND HEAD OF ALL DOORS (U.N.O.).
3. ALL DOORS IN SMOKE RESISTANT PARTITIONS TO HAVE POSITIVE LATCHING (U.N.O.).
4. FIRE-RATING GLAZING IN DOORS SHALL MATCH THE FIRE-RATING OF THE DOORS TO WHICH THEY ARE INSTALLED.
5. "SWING CLEAR" HINGES SHALL BE PROVIDED AT ALL CATH PROCEDURE ROOM DOORS.

## DOOR TYPES

Scale: NTS

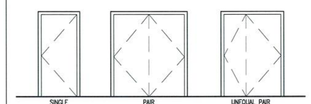
NOTE:
9" @ EACH SIDE OF DOOR W/A HOSPITAL LATCH OR PANIC HARDWARE.
9" @ EACH SIDE OF 4'-0" DOORS OR WIDER.
6" @ EACH SIDE OF ALL OTHER DOORS.




FLUSH F — NARROW VIEW NV

## FRAME TYPES

Scale: NTS



SINGLE A — PAIR C — UNEQUAL PAIR D

## DOOR SCHEDULE REMARKS

1. PROVIDE WITH MECHANICAL HOLD OPEN ON EACH LEAF
2. VIEW WINDOWS IN LARGER LEAF ONLY
3. DOUBLE ACTING DOOR – OMIT FRAME STOPS
4. AUTOMATIC CARD SWIPE DOOR
5. NOT USED
6. NOT USED
7. DOOR SWINGS BOTH WAYS
8. NOT USED
9. LEAD LINED DOOR
10. NOT USED
11. NOT USED
12. POWER ASSISTED DOOR
13. NOT USED
14. 5-BUTTON COMBINATION LOCK
15. NOT USED
16. NOT USED ⚠
17. UNEQUAL DOOR PAIR (4'-0" & 1'-6")
18. NOT USED

## DOOR SCHEDULE LEGEND

+– REFER TO MANUFACTURER
WD – SOLID CORE WOOD WITH STAINED FINISH
PL – SOLID CORE WOOD WITH PLASTIC LAMINATE FINISH
HM – STEEL
Sr – SMOKE RESISTANT
ALUM – ANODIZED ALUMINUM
ALUM1– CUSTOM ALUMINUM COLOR

## GLAZING LEGEND

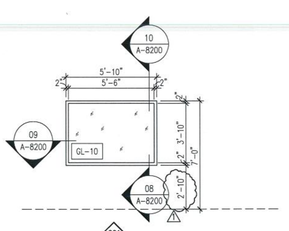
| TYPE | GLAZING |
|---|---|
| GL–10 | LEAD GLASS |

NOTES:
1. CONFIRM ALL WINDOW SIZES IN FIELD

09-411001-

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED JC
DATE 7/31/09




INTERIOR HOLLOW METAL W/SHIELDED GLAZING

## 1A WINDOW SCHEDULE

1/4"=1'-0"


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**South Campus**
**Cath Lab**
**Aurora, Colorado 80012**
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**Project # 306660005**

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STATE OF COLORADO TRUBY, MICHAEL 203601 LICENSED ARCHITECT 7.1.09

**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | LTS |
| Checked | JMN |
| Approved | CG |

**Title**

DOOR/WINDOW SCHEDULE AND DETAILS

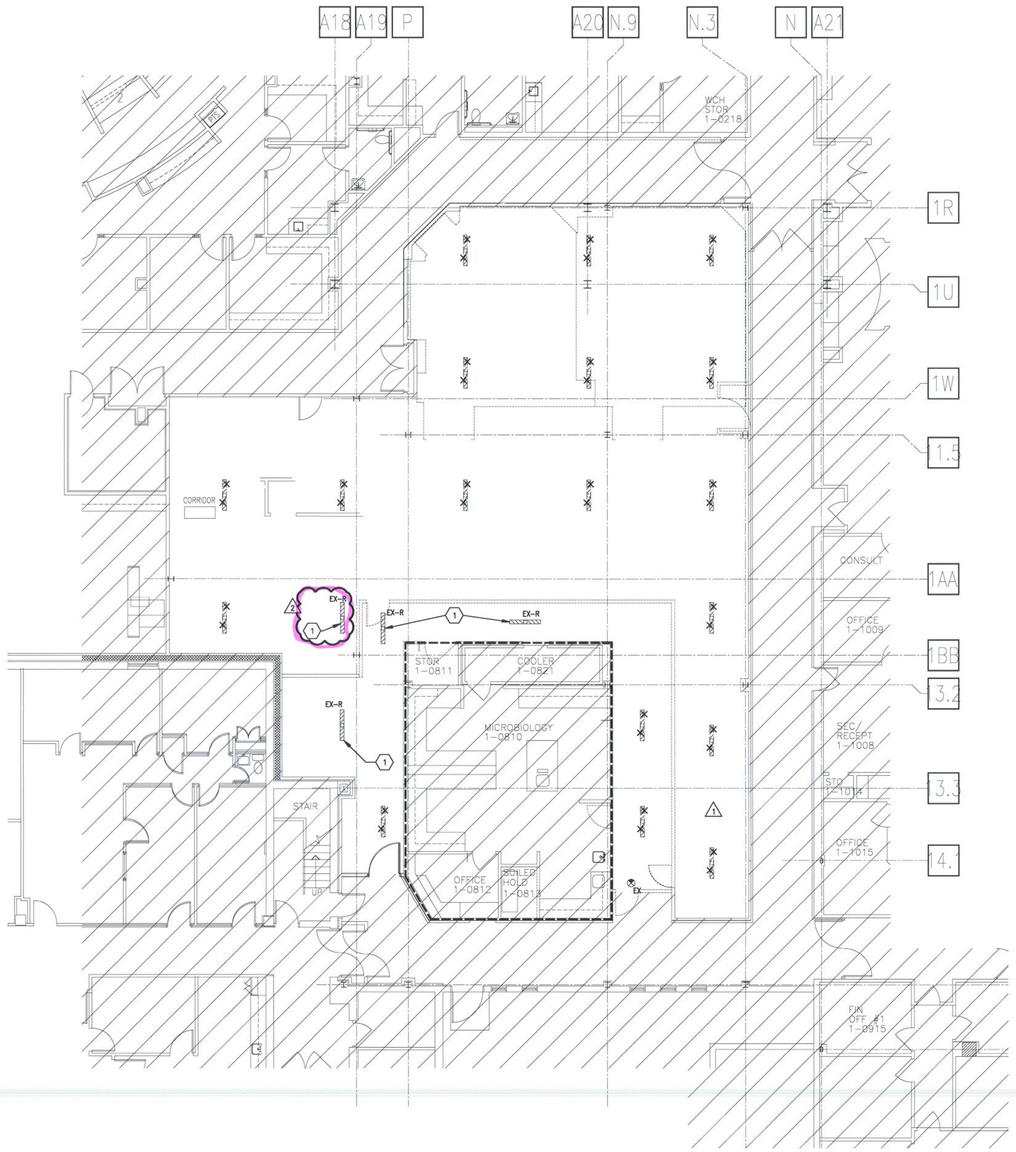
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**A-8200**

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schmidtt




## GENERAL NOTES

A. ALL DEMO'ED LIGHT FIXTURES SHALL BE RETURNED TO FACILITY.

## LEGEND NOTES

(1) RELOCATE EXISTING LIGHT FIXTURE. THOROUGHLY CLEAN AND RELAMP PRIOR TO RE-INSALLATION.

## 01 PARTIAL FIRST FLOOR DEMOLITION PLAN - LIGHTING

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

HIGHLIGHTED ONLY,
ALL PREVIOUS COMMENTS APPLY

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# Medical Center of Aurora

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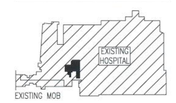
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## KEY PLAN
FIRST FLOOR




COLORADO LICENSED
41486
PROFESSIONAL ENGINEER

| Revisions | | |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | TF |
| Checked | MM |
| Approved | MM |

Title

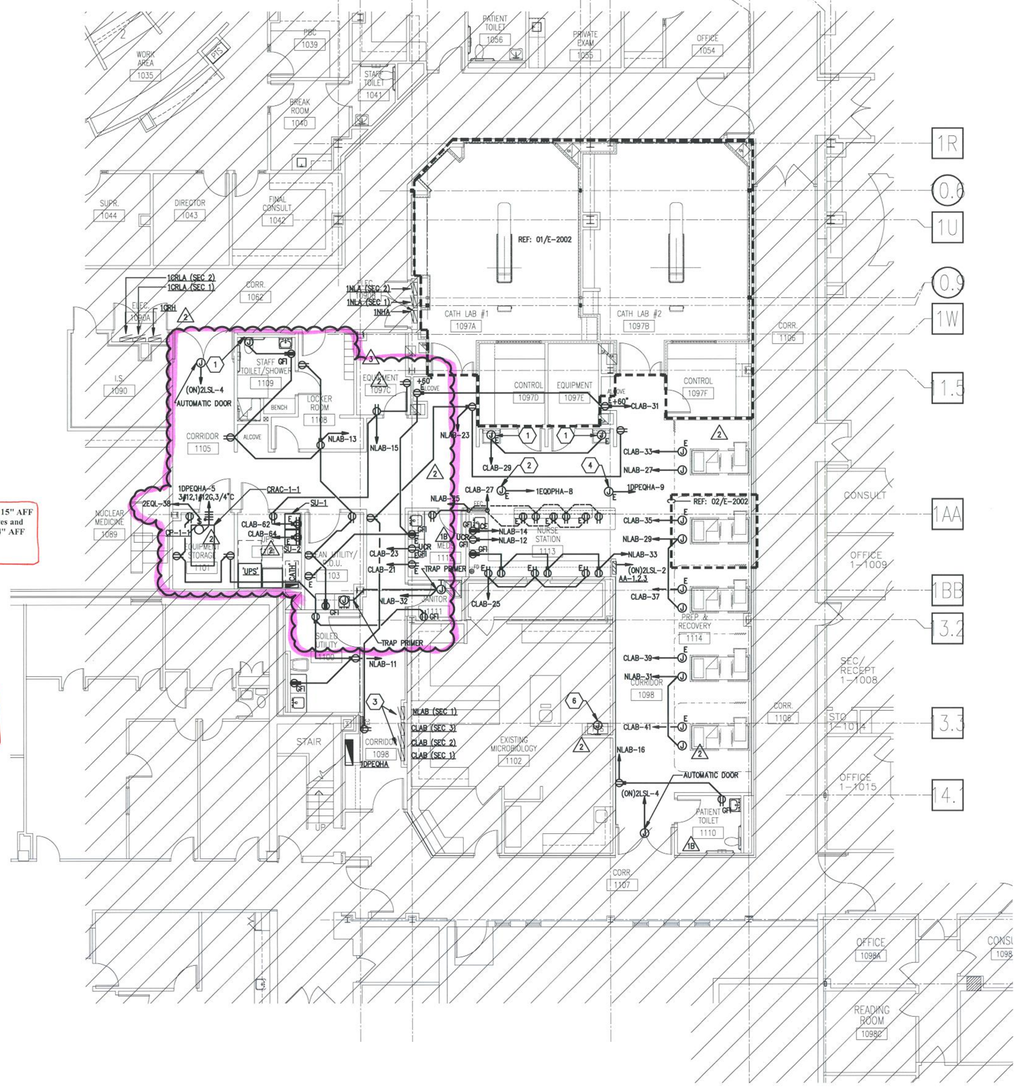
LIGHTING
DEMOLITION PLAN
FIRST FLOOR

Sheet

# ED-3001

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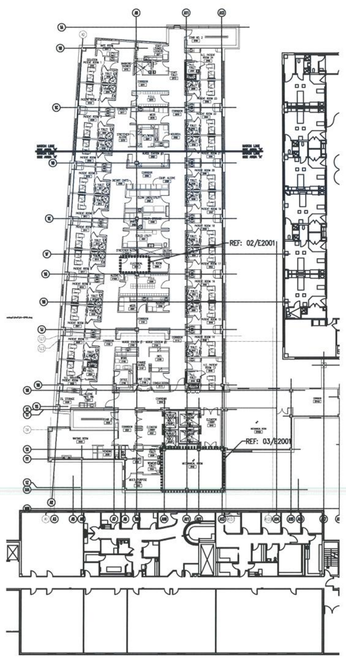

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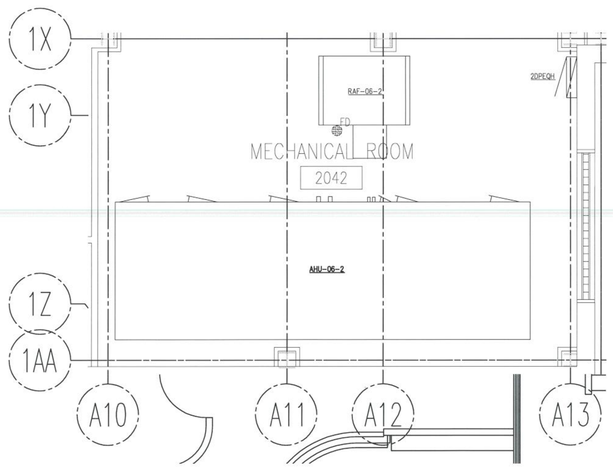

Locate receptacles a minimum of 15" AFF and locate light switches, pull boxes and thermostats etc. a maximum of 44" AFF per 2003 ANSI A117.1 308.

Install electrical connections per 2008 NEC 110-14, identify disconnects per 2008 NEC 110-22 and provide working space around electrical equipment per 2008 NEC 110-26.

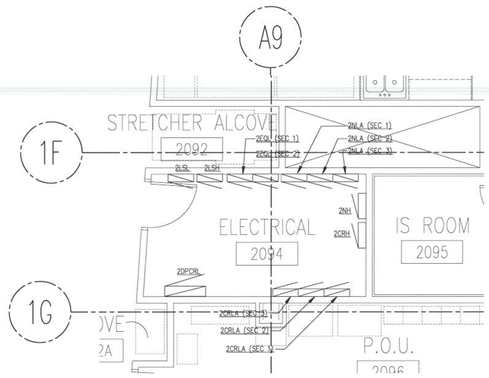
## 01 PARTIAL FIRST FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"




## 04 2ND FLOOR OVERALL PLAN
SCALE: 1/32" = 1'-0"




## 03 ENLARGED 2ND FLOOR MECHANICAL ROOM
SCALE: 1/4" = 1'-0"




## 02 ENLARGED 2ND FLOOR ELECTRICAL ROOM
SCALE: 1/4" = 1'-0"

## GENERAL NOTES

A. COORDINATE ALL DEVICE ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
B. ALL CONDUIT AND FITTINGS SHALL BE SUITABLE FOR USE AS A GROUND PATH. ADDITIONALLY, A GROUND CONDUCTOR SHALL BE SUPPLIED WITHIN ALL CONDUIT SYSTEMS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

HIGHLIGHTED ONLY, ALL PREVIOUS COMMENTS APPLY

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DATE APPROVED JUL 2 2 2009

## LEGEND NOTES

1. PROVIDE 120V CONNECTION TO I.R. CONTROLS.
2. FOR CONNECTION TO VAV CONTROLS. PROVIDE 277V CONNECTION TO EACH VAV BOX. REFER TO MECHANICAL DRAWINGS FOR EXACT BOX LOCATIONS.
3. PROVIDE #10G CONNECTION BETWEEN THESE PANELS, REF: 08/E6001.
4. PROVIDE 277V CONNECTION TO FIRE/SMOKE DAMPERS. PROVIDE 277V/CONTROL VOLTAGE TRANSFORMER EQUAL TO SQUARE D T-TYPE. COORDINATE CONTROL VOLTAGE AND (VA) REQUIREMENTS WITH CONTROLS CONTRACTOR.
5. NOT USED
6. RELOCATE EXIST CIRCUIT PREVIOUSLY FEEDING PTS STATION.


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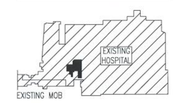

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## KEY PLAN
FIRST FLOOR




COLORADO LICENSED 41486 PROFESSIONAL ENGINEER

| | Revisions | |
|---|---|---|
| 1R | ADDENDUM #1 | 04-29-09 |
| 2 | ADDENDUM #2 | 04-22-09 |
| 3 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | MM |
| Checked | MM |
| Approved | MM |

Title

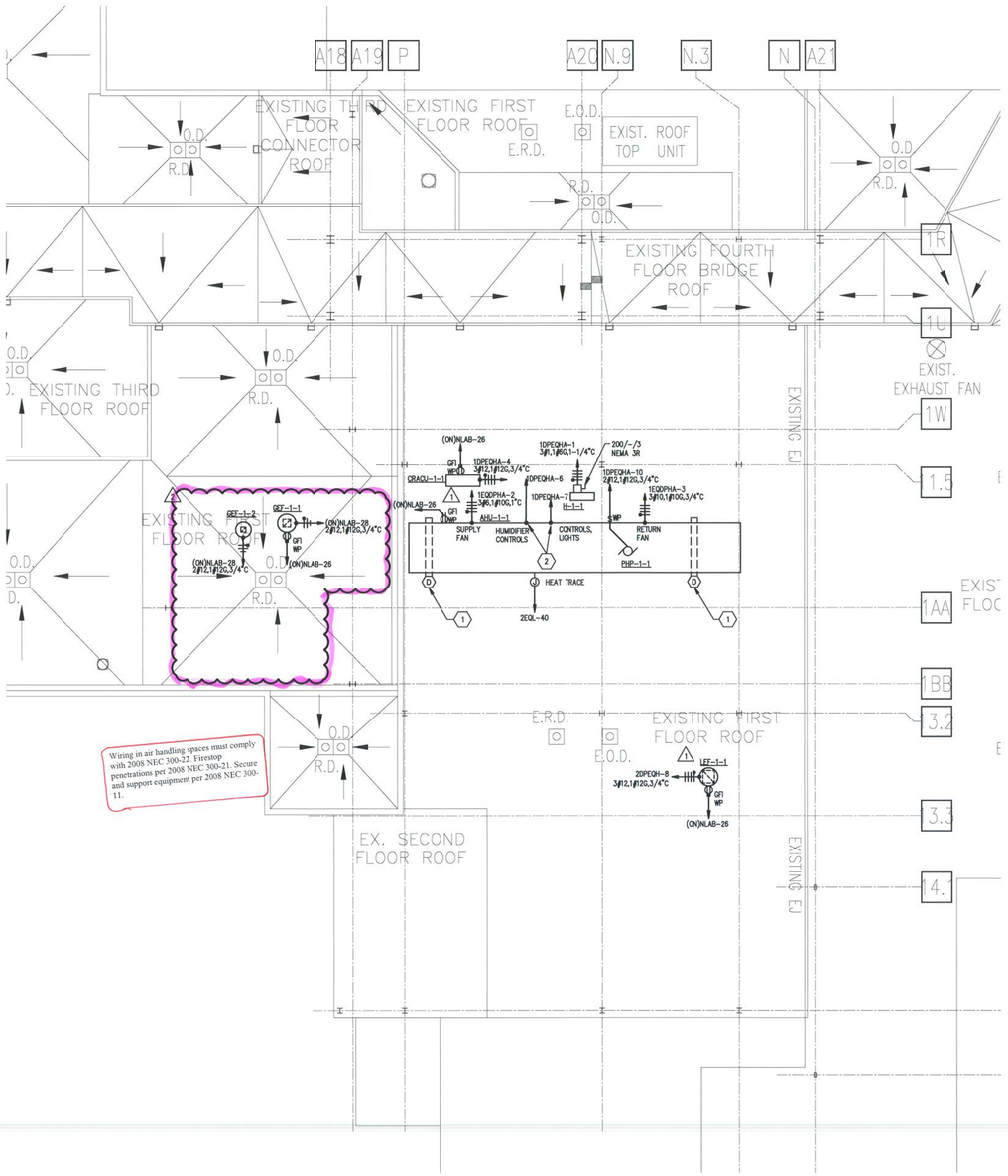
POWER PLAN FIRST FLOOR

Sheet

# E-2001

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## LEGEND NOTES

1. PROVIDE CONNECTION TO FIRE ALARM SYSTEM.
2. PROVIDE 277V/CONTROL VOLTAGE TRANSFORMER EQUAL TO SQUA-T-TYPE. COORDINATE CONTROL VOLTAGE AND (VA) REQUIREMENT WITH CONTROLS CONTRACTOR.

## 01 PARTIAL ROOF PLAN - POWER

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

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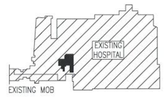
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**KEY PLAN**
FIRST FLOOR




COLORADO LICENSED 41486 PROFESSIONAL ENGINEER

**Revisions**

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|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

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**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | MM |
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**Title**

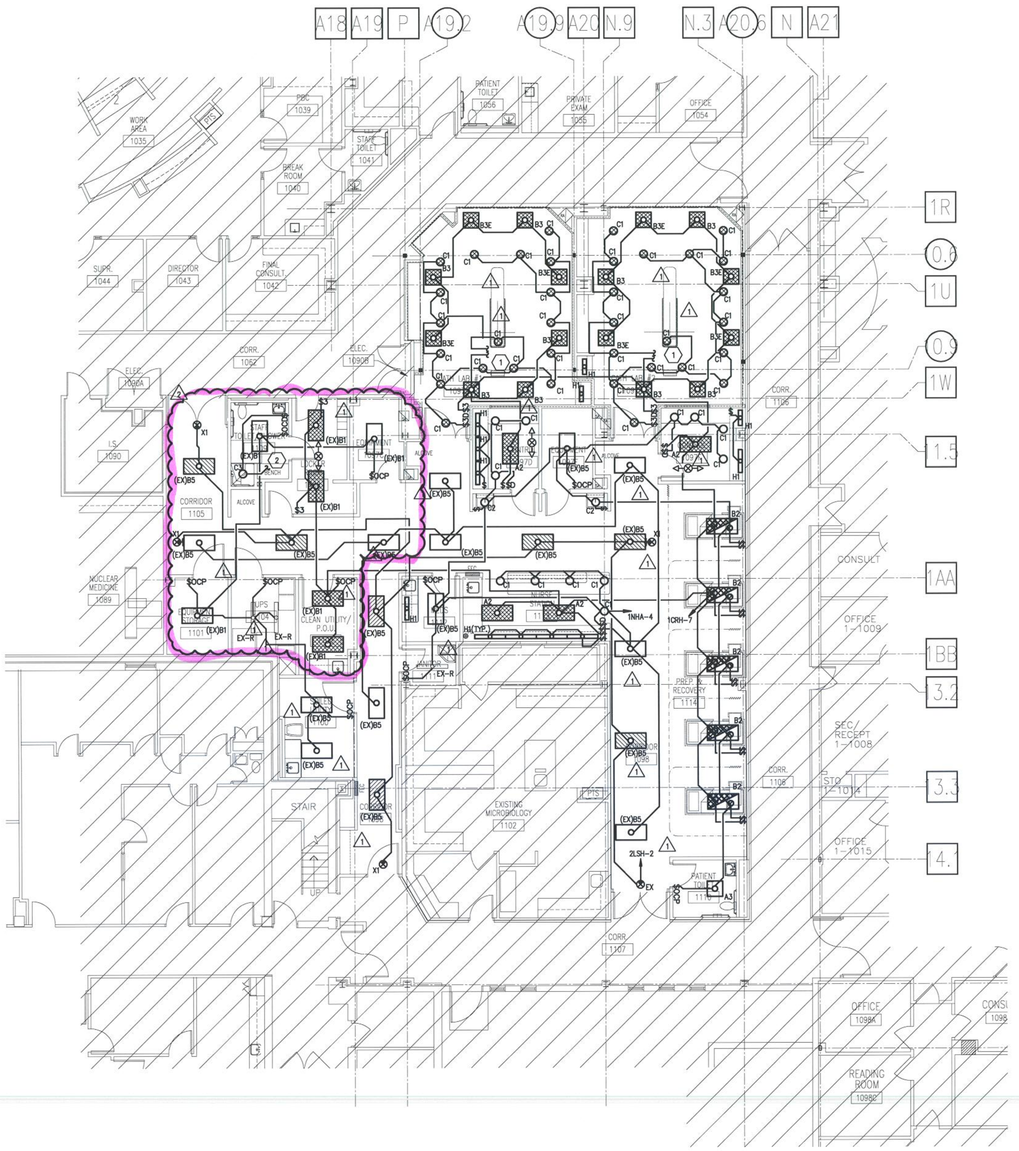
POWER PLAN ROOF

**Sheet**

**E-200R**

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01 PARTIAL FIRST FLOOR PLAN - LIGHTING
SCALE: 1/8" = 1'-0"

## GENERAL NOTES

A. PROVIDE INSTANT START, ELECTRONIC BALLASTS FOR FIXTURES ON LIFE-SAFETY CIRCUITS.

B. CONNECT ALL TYPE 'H1' FIXTURES TO NEAREST 120V NORMAL RECEPTACLE CIRCUIT.

C. ALL CONDUIT AND FITTINGS SHALL BE SUITABLE FOR USE AS A GROUND PATH. ADDITIONALLY, A GROUND CONDUCTOR SHALL BE SUPPLIED WITHIN ALL CONDUIT SYSTEMS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. 1B

## LEGEND NOTES

1. TO FOOT SWITCH. REFER TO PHILIPS DRAWING 'ED2' FOR ROOM LIGHTING CONNECTION AND CONTROL DETAIL. PROVIDE ALL NECESSARY RELAYS, CONTROL, ETC FOR CONNECTION AND CONTROL WITH PHILIPS CATH EQUIPMENT.
2. CONNECT TO 120V NORMAL RECEPTACLE SERVING TOILET ROOM.

HIGHLIGHTED ONLY.
ALL PREVIOUS COMMENTS APPLY

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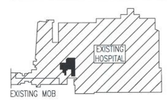

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## KEY PLAN
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| Revisions | | |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 1B | ADDENDUM #1B | 04-29-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | MM |
| Checked | MM |
| Approved | MM |

Title
LIGHTING PLAN FIRST FLOOR

Sheet
E-3001

Issued for Construction

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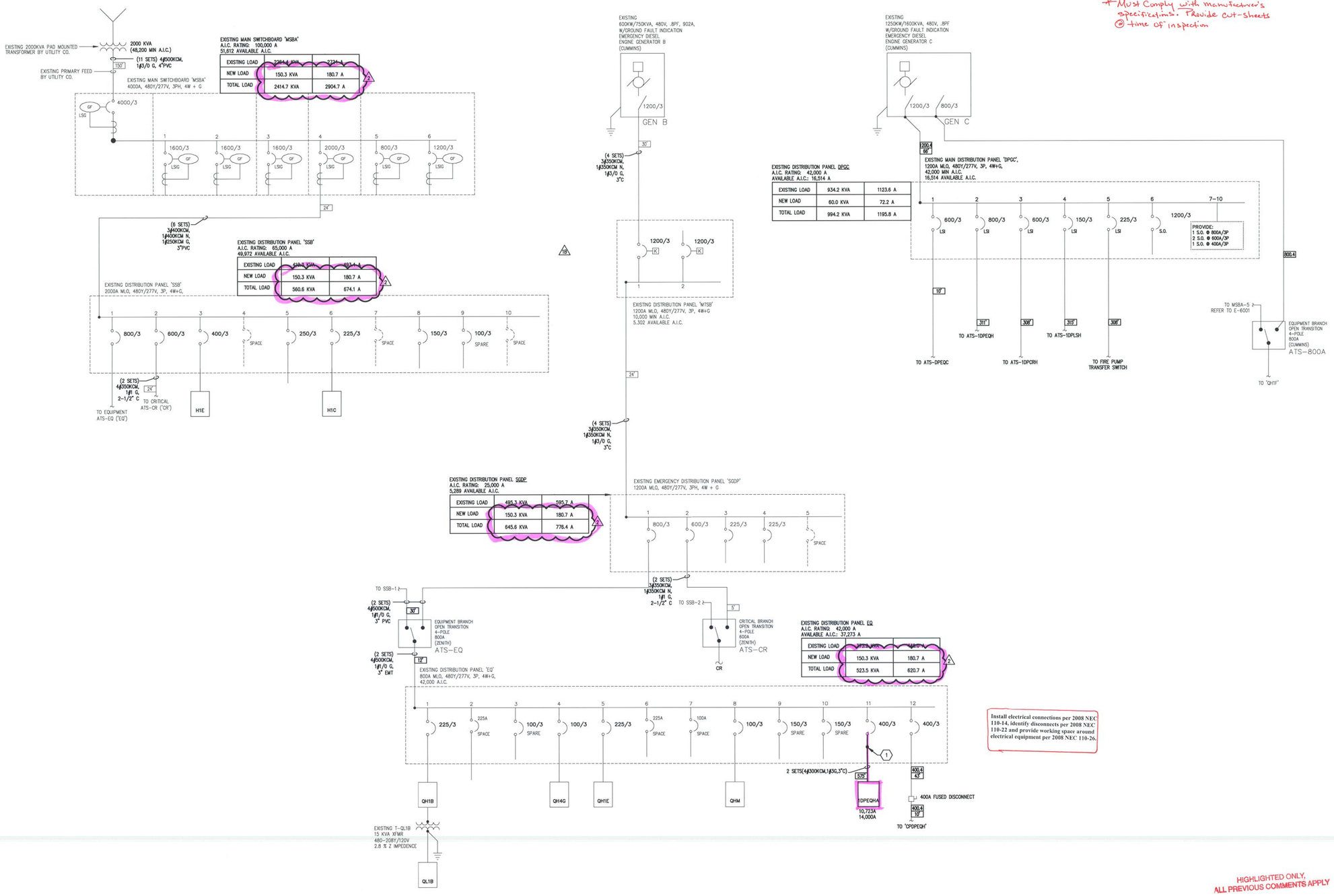
## GENERAL NOTES:

A. REFER TO E-7001 FOR CONDUIT/CONDUCTOR SIZING SCHEDULES.

## LEGEND NOTES:

1. PROVIDE NEW LUG KIT CAPABLE OF ACCEPTING LARGER CONDUCTOR SIZE (#300KCM)

+ Must Comply with manufacturer's specifications. Provide cut-sheets @ time of inspection




Install electrical connections per 2008 NEC 110-14, identify disconnects per 2008 NEC 110-22 and provide working space around electrical equipment per 2008 NEC 110-26.

HIGHLIGHTED ONLY, ALL PREVIOUS COMMENTS APPLY

AURORA BUILDING INSPECTION
ELECTRICAL SECTION
APPROVED
SUBJECT TO COMMENTS AS NOTED AND FIELD INSPECTIONS

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE APPROVED JUL 22 2009

## 01 EXISTING EMERGENCY POWER ONE-LINE DIAGRAM

NO SCALE


PERKINS & WILL

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# Medical Center of Aurora

1501 S. Potomac
South Campus
Cath Lab
Aurora, Colorado 80012
HCA

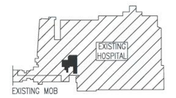
Project # 306660005


In association with:

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## KEY PLAN
FIRST FLOOR




COLORADO LICENSED 41486 PROFESSIONAL ENGINEER

**Revisions**

| | | |
|---|---|---|
| 1B | ADDENDUM #1B | 04-29-09 |
| 2 | CHANGE DIRECTIVE #01 | 05-18-09 |

| NO. | ISSUE | DATE |
|---|---|---|

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | MM |
| Checked | MM |
| Approved | MM |

**Title**

ELECTRICAL ONE-LINE DIAGRAM

**Sheet**

# E-5003

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## DISTRIBUTION PANEL: 1DPEQHA — EQUIPMENT

FED FROM: EQ
LOCATION: CORRIDOR 1098
MAIN BUS: 400A
MCB: N/A
VOLTAGE: 480/277
AIC: 14,000A

WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Recessed
PANEL LUGS: Main Lugs Only

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | LOAD (VA) LTS | RCPTS | MTRS | HEAT | MISC | CIRCUIT BREAKER AMPS | POLES | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | H-1-1 | 72000 | | | | 72000 | | 125 | 3 | |
| 2 | AHU-1-1 SF | 35533 | | | 35533 | | | 90 | 3 | 60 HP |
| 3 | AHU-1-1 RF | 17500 | | | 17500 | | | 45 | 3 | 15 HP |
| 4 | CPAC-1 COMPRSNG UNIT | 6340 | | | 4150 | | | 20 | 3 | |
| 5 | CRAC-1 | 10968 | | | 10968 | | | 20 | 3 | |
| 6 | HUMIDIFIER CONTROLS | 500 | | | | | 500 | 20 | 1 | |
| 7 | AHU CONTROLS | 500 | | | | | 500 | 20 | 1 | |
| 8 | VAV CONTROLS | 500 | | | | | 500 | 20 | 1 | |
| 9 | F/S DAMPERS | 500 | | | | | 500 | 20 | 1 | |
| 10 | PHP-1-1 | 500 | | | 500 | | | 20 | 1 | |
| 11 | SPARE | – | | | | | | – | 3 | |
| 12 | SPARE | – | | | | | | – | 3 | |
| 13 | SPARE | – | | | | | | – | 3 | |
| 14 | SPARE | – | | | | | | – | 3 | |
| 15 | SPARE | – | | | | | | – | 3 | |

NOTES:

1 2

'1DPEQHA' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HEAT | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.0 | 0.0 | 68.5 | 72.0 | 2.0 | 142.5 | 171.3 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 0.0 | 76.3 | 72.0 | 2.0 | 150.3 | 180.7 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 0.0 | 76.3 | 72.0 | 2.0 | 150.3 | 180.7 |

## PANEL: CATH — CRITICAL

LOCATION: UPS 1104
MAIN BUS: 100A
MCB: N/A
VOLTAGE: 480/277
AIC: 14,000A

FED FROM: UPS
WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Lugs Only

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No
FEED THROUGH LUGS: Yes

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | POLES | PHASE | CIRCUIT BREAKER AMPS | POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CATH #1 | – | 50 | 3 | A | 50 | 3 | – | CATH #3 | 2 |
| 3 | | – | | | B | | | – | | 4 |
| 5 | | – | | | C | | | – | | 6 |
| 7 | CATH #2 | – | 50 | 3 | A | | 3 | – | S.O. | 8 |
| 9 | | – | | | B | | | – | | 10 |
| 11 | | – | | | C | | | – | | 12 |

NOTES:
REFER TO 07/E6001 FOR ADDITIONAL PANEL INFORMATION.

'CATH' LOAD SUMMARY

| | LTS | RCPTS | X-RAY | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## EXISTING PANEL: 2LSH — LIFE SAFETY

LOCATION: ELEC. 2094
MAIN BUS: 100A
MCB: N/A
VOLTAGE: 480/277
AIC: 14,000A

FED FROM: 1DPLSH
WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Lugs Only

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No
FEED THROUGH LUGS: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | POLES | PHASE | CIRCUIT BREAKER AMPS | POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LTG. CORRIDORS 2ND FL. | 3036 | 20 | 1 | A | 20 | 1 | 470 | LTG. CATH LAB | 2 |
| 3 | LTG. CORRIDORS 3RD FL. | 2400 | 20 | 1 | B | 20 | 1 | – | SPARE | 4 |
| 5 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 6 |
| 7 | LTG. CORRIDORS 1ST FL. | 3200 | 20 | 1 | A | 20 | 1 | – | SPARE | 8 |
| 9 | LTG. CORRIDORS 1ST FL. | 1400 | 20 | 1 | B | 20 | 1 | – | SPARE | 10 |
| 11 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 12 |
| 13 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 14 |
| 15 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 16 |
| 17 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 18 |
| 19 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 20 |
| 21 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 22 |
| 23 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 24 |
| 25 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 26 |
| 27 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 28 |
| 29 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 30 |
| 31 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 32 |
| 33 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 34 |
| 35 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 36 |
| 37 | SPARE | – | 20 | 1 | A | 25 | 3 | 2700 | PANEL '2LSL' | 38 |
| 39 | SPARE | – | 20 | 1 | B | | | 1700 | VIA XFMR | 40 |
| 41 | SPARE | – | 20 | 1 | C | | | 1700 | " | 42 |

NOTES:

'2LSH' LOAD SUMMARY

| | LTS | RCPTS | HSPTL | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 10.5 | 0.0 | 1.2 | 4.9 | 16.6 | 20.0 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | |
| TOTAL DEMAND LOAD | 11.0 | 0.0 | 0.4 | 5.0 | 16.4 | 19.7 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 13.8 | 0.0 | 0.4 | 5.0 | 19.2 | 23.0 |

Legibly identify each breaker or switch for it's use or purpose on the circuit directory in the panel/switchboard per 2008 NEC 408.4

## EXISTING PANEL: 2SL — LIFE SAFETY

LOCATION: ELEC. 2094
MAIN BUS: 100A
MCB: N/A
VOLTAGE: 208/120
AIC: 10,000A

FED FROM: 2LSH
WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Lugs Only

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No
FEED THROUGH LUGS: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | POLES | PHASE | CIRCUIT BREAKER AMPS | POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | J-BOX AUTO DOOR 1ST FL. | 1000 | 20 | 1 | A | 20 | 1 | 500 | MGAA – CATH SUITE | 2 |
| 3 | MGAP RM'S 2097-2083 | 400 | 20 | 1 | B | 20 | 1 | 500 | AUTO DOORS – CATH SUITE | 4 |
| 5 | MGAP RM 3060 | 400 | 20 | 1 | C | 20 | 1 | – | SPARE | 6 |
| 7 | MGAP RM. 1022A | 400 | 20 | 1 | A | 20 | 1 | – | SPARE | 8 |
| 9 | J-BOX AUTO DOOR 2ND FL. | 400 | 20 | 1 | B | 20 | 1 | – | SPARE | 10 |
| 11 | J-BOX AUTO DOOR 3RD FL. | 400 | 20 | 1 | C | 20 | 1 | – | SPARE | 12 |
| 13 | 3RD FLOOR FIRE ALARM NAC | 400 | 20 | 1 | A | 20 | 1 | – | SPARE | 14 |
| 15 | 2ND FLOOR FIRE ALARM NAC | 400 | 20 | 1 | B | 20 | 1 | – | SPARE | 16 |
| 17 | 1ST FLOOR FIRE ALARM NAC | 400 | 20 | 1 | C | 20 | 1 | – | SPARE | 18 |
| 19 | 1ST FLOOR FIRE ALARM NAC | 400 | 20 | 1 | A | 20 | 1 | – | SPARE | 20 |
| 21 | FACP1 | 500 | 20 | 1 | B | 20 | 1 | – | SPARE | 22 |
| 23 | FACP2 | 500 | 20 | 1 | C | 20 | 1 | – | SPARE | 24 |
| 25 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 26 |
| 27 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 28 |
| 29 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 30 |
| 31 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 32 |
| 33 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 34 |
| 35 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 36 |
| 37 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 38 |
| 39 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 40 |
| 41 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 42 |

NOTES:

'2LSL' LOAD SUMMARY

| | LTS | RCPTS | HSPTL | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.0 | 0.0 | 1.2 | 5.4 | 6.6 | 18.3 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 0.0 | 0.4 | 5.0 | 5.4 | 15.0 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 0.0 | 0.4 | 5.0 | 5.4 | 15.0 |

## EXISTING DISTRIBUTION PANEL: 1DPCRH — CRITICAL

FED FROM: DPGC
LOCATION: MAIN ELEC. 1133
MAIN BUS: 600A
MCB: 500A
VOLTAGE: 480/277
AIC: 65,000A

WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Circuit Breaker

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | LOAD (VA) LTS | RCPTS | MTRS | HSPTL | X-RAY | MISC | CIRCUIT BREAKER AMPS | POLES | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PANEL '1CRH' | 13500 | 2040 | | | 11460 | | | 100 | 3 | |
| 2 | PANEL '2DPCRL' VIA XFMR | 268540 | | 22120 | | 243076 | | 3344 | 225 | 3 | |
| 3 | PANEL '2CRH' | 13442 | | | | 13442 | | | 100 | 3 | |
| 4 | PANEL '3CRH' | 5500 | | | | 5500 | | | 100 | 3 | |
| 5 | PANEL '4CRH' | 13226 | | | | 13226 | | | 100 | 3 | |
| 6 | PANEL '4DPCRL' VIA XFMR | 136130 | 734 | 22560 | | 112336 | | 500 | 225 | 3 | |
| 7 | PANEL '5CRH' | 69496 | | | 55770 | 13726 | | | 100 | 3 | |
| 8 | SPARE | – | | | | | | | – | 3 | FUTURE 6TH FLOOR |
| 9 | SPARE | – | | | | | | | – | 3 | FUTURE 7TH FLOOR |
| 10 | CATH #1 | 49860 | | | | | 49860 | | 125 | 3 | |
| 11 | CATH #2 | 49860 | | | | | 49860 | | 125 | 3 | |
| 12 | FUTURE CATH #3 | 49860 | | | | | 49860 | | 125 | 3 | |
| 13 | UPS | 12465 | | | | | | 12465 | 80 | 3 | |
| 14 | SPACE | – | | | | | | | – | 3 | 100A FRAME |

NOTES:
3

'1DPCRH' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HSPTL | X-RAY | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 2.8 | 44.7 | 55.8 | 412.8 | 149.6 | 16.3 | 681.9 | 820.2 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | | |
| TOTAL DEMAND LOAD | 3.0 | 27.5 | 64.3 | 92.6 | 42.5 | 16.0 | 245.8 | 295.7 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| TOTAL DESIGN LOAD | 3.8 | 27.5 | 64.3 | 92.6 | 42.5 | 16.0 | 246.6 | 296.6 |

## EXISTING DISTRIBUTION PANEL: 2DPEQH — EQUIPMENT

FED FROM: 1DPEQH
LOCATION: MECH. 2042
MAIN BUS: 400A
MCB: N/A
VOLTAGE: 480/277
AIC: 65,000A

WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Lugs Only

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | LOAD (VA) LTS | RCPTS | MTRS | HSPTL | HEAT | MISC | CIRCUIT BREAKER AMPS | POLES | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CRU-06-02 | 1329 | | | 1329 | | | | 15 | 3 | .75 HP |
| 2 | AHU-06-1 | 43233 | | | 43233 | | | | 100 | 3 | 40 HP |
| 3 | RAF-06-1 | 17460 | | | 17460 | | | | 40 | 3 | 15 HP |
| 4 | AHU-06-2 | 43233 | | | 43233 | | | | 100 | 3 | 40 HP |
| 5 | RAF-06-2 | 11640 | | | 11640 | | | | 25 | 3 | 10 HP |
| 6 | AHU-06-3 | 54042 | | | 54042 | | | | 125 | 3 | 50 HP |
| 7 | RAF-06-3 | 17460 | | | 17460 | | | | 40 | 3 | 15 HP |
| 8 | LEF-1-1 | 1332 | | | 1332 | | | | 20 | 3 | |
| 9 | S.O. | – | | | | | | | – | 3 | |
| 10 | S.O. | – | | | | | | | – | 3 | |
| 11 | S.O. | – | | | | | | | – | 3 | |
| 12 | S.O. | – | | | | | | | – | 3 | |

NOTES:

'2DPEQH' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HSPTL | HEAT | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.0 | 0.0 | 189.7 | 0.0 | 0.0 | 0.0 | 189.7 | 228.2 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 0.0 | 203.5 | 0.0 | 0.0 | 0.0 | 203.5 | 244.8 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 0.0 | 203.5 | 0.0 | 0.0 | 0.0 | 203.5 | 244.8 |

## EXISTING PANEL: 2EQL — EQUIPMENT

LOCATION: ELEC. 2094
MAIN BUS: 225A
MCB: 150A
VOLTAGE: 208/120
AIC: 10,000A

FED FROM: 1DPEQH
WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Circuit Breaker

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No
FEED THROUGH LUGS: Yes

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | POLES | PHASE | CIRCUIT BREAKER AMPS | POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SPARE | 500 | 20 | 1 | A | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 1ST FL. | 2 |
| 3 | SPARE | 500 | 20 | 1 | B | 20 | 1 | 500 | J-BOX VAV BOXES 1ST FL | 4 |
| 5 | J-BOX FIRE SM. DAM. 3RD FL. | 500 | 20 | 1 | C | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 1ST FL. | 6 |
| 7 | J-BOX VAV BOXES 3RD FL | 500 | 20 | 1 | A | 20 | 1 | 500 | J-BOX VAV BOXES 1ST FL | 8 |
| 9 | SUMP PUMP ELEV #1 | 400 | 20 | 1 | B | 20 | 1 | 400 | J-BOX COIL SMK DOOR 1ST FL. | 10 |
| 11 | SUMP PUMP ELEV #2 | 400 | 20 | 1 | C | 20 | 1 | 600 | J-BOX COIL SMK DOOR 2ND FL. | 12 |
| 13 | SUMP PUMP ELEV #3 | 400 | 20 | 1 | A | 20 | 1 | 600 | J-BOX COIL SMK DOOR 3RD FL. | 14 |
| 15 | SUMP PUMP ELEV #4 | 400 | 20 | 1 | B | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 1ST FL. | 16 |
| 17 | J-BOX FIRE SM. DAM. 1ST FL. | 500 | 20 | 1 | C | 20 | 1 | 500 | J-BOX VAV BOXES 1ST FL | 18 |
| 19 | J-BOX VAV BOXES 1ST FL | 500 | 20 | 1 | A | 20 | 1 | 500 | 3RD FLOOR DDC CONTROLS | 20 |
| 21 | J-BOX FIRE SM. DAM. 1ST FL. | 500 | 20 | 1 | B | 20 | 1 | 500 | 2ND FLOOR DDC CONTROLS | 22 |
| 23 | J-BOX VAV BOXES 1ST FL | 500 | 20 | 1 | C | 20 | 1 | 500 | 2ND FLOOR DDC CONTROLS | 24 |
| 25 | J-BOX PTS | 500 | 20 | 1 | A | 20 | 1 | 1000 | J-BOX PTS | 26 |
| 27 | J-BOX PTS | 500 | 20 | 1 | B | 20 | 1 | 500 | J-BOX PTS TRANSFER | 28 |
| 29 | J-BOX PTS | 500 | 20 | 1 | C | 20 | 1 | 500 | J-BOX PTS TRANSFER | 30 |
| 31 | J-BOX PTS | 500 | 20 | 1 | A | 20 | 1 | 500 | J-BOX PTS TRANSFER | 32 |
| 33 | J-BOX PTS TRANSFER | 500 | 20 | 1 | B | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 1ST FL. | 34 |
| 35 | 1ST FLOOR DDC CONTROLS | 500 | 20 | 1 | C | 20 | 1 | – | SPARE | 36 |
| 37 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 38 |
| 39 | SPARE | – | 20 | 1 | B | 20 | 1 | 750 | HEAT TRACE | 40 |
| 41 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 42 |

NOTES:

## EXISTING PANEL: 2EQL (SECTION 2) — EQUIPMENT

LOCATION: ELEC. 2094
MAIN BUS: 225A
MCB: N/A
VOLTAGE: 208/120
AIC: 10,000A

WIRES: 4W + G
ENCLOSURE: NEMA 1
BUS TYPE: Copper
MOUNTING: Surface
PANEL LUGS: Main Lugs Only

NEUTRAL BUS: Yes
GROUND BUS: Yes
ISOLATED GROUND BUS: No
200% NEUTRAL: No
FEED THROUGH LUGS: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | POLES | PHASE | CIRCUIT BREAKER AMPS | POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 43 | GEF-06-3 1/4 HP | 667 | 15 | 1 | A | 20 | 1 | 1127 | GEF-06-4 1/2 HP | 44 |
| 45 | GEF-06-5 1/3 HP | 828 | 15 | 1 | B | 20 | 1 | – | SPARE | 46 |
| 47 | PHP-06-1 1/4 HP | 667 | 15 | 1 | C | 15 | 1 | 667 | PHP-06-2 1/4 HP | 48 |
| 49 | PHP-06-3 1/4 HP | 667 | 15 | 1 | A | 20 | 1 | 500 | PRE-ACTION CNTRL PANEL | 50 |
| 51 | DRY PIPE COMPRESSOR | 1127 | 20 | 1 | B | 20 | 1 | 1627 | PRE-ACTION COMPRESSOR | 52 |
| 53 | J-BOX COILING FIRE DOOR 2ND | 500 | 20 | 1 | C | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 2ND FL. | 54 |
| 55 | J-BOX FIRE SM. DAM. 2ND FL. | 500 | 20 | 1 | A | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 2ND FL. | 56 |
| 57 | J-BOX FIRE SM. DAM. 2ND FL. | 500 | 20 | 1 | B | 20 | 1 | 500 | J-BOX FIRE SM. DAM. 2ND FL. | 58 |
| 59 | J-BOX FIRE SM. DAM. 2ND FL. | 500 | 20 | 1 | C | 20 | 1 | 500 | J-BOX VAV BOXES 2ND FL | 60 |
| 61 | J-BOX VAV BOXES 2ND FL | 500 | 20 | 1 | A | 20 | 1 | 500 | J-BOX VAV BOXES 2ND FL | 62 |
| 63 | J-BOX VAV BOXES 2ND FL | 500 | 20 | 1 | B | 20 | 1 | 500 | J-BOX VAV BOXES 2ND FL | 64 |
| 65 | J-BOX VAV BOXES 2ND FL | 500 | 20 | 1 | C | 20 | 1 | – | SPARE | 66 |
| 67 | GEN QUICK CONNECT HEAT | 500 | 20 | 1 | A | 20 | 1 | – | SPARE | 68 |
| 69 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 70 |
| 71 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 72 |
| 73 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 74 |
| 75 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 76 |
| 77 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 78 |
| 79 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 80 |
| 81 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 82 |
| 83 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 84 |

NOTES:

'2EQL' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HSPTL | HEAT | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.0 | 0.0 | 6.9 | 0.8 | 0.8 | 24.9 | 33.3 | 92.5 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 0.0 | 7.3 | 0.4 | 1.0 | 25.0 | 33.7 | 93.4 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 0.0 | 7.3 | 0.4 | 1.0 | 25.0 | 33.7 | 93.4 |

HIGHLIGHTED ONLY, ALL PREVIOUS COMMENTS APPLY

AURORA BUILDING INSPECTION ELECTRICAL SECTION APPROVED SUBJECT TO COMMENTS AS NOTED AND FIELD INSPECTIONS

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE APPROVED JUL 22 2009

| | 1EQDPHA | 1DPCRH1 |
|---|---|---|
| | CATH | 2DPEQH |
| | 2LSH | 2EQL SEC 1 |
| | 2LSL | 2EQL SEC 2 |


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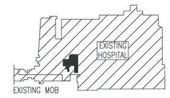

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## KEY PLAN
FIRST FLOOR




COLORADO LICENSED 41486 PROFESSIONAL ENGINEER

Revisions

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #01 | 05-18-09 |

Sheet Information

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | MM |
| Checked | MM |
| Approved | MM |

Title

ELECTRICAL SCHEDULES

Sheet

E-7002

Issued for Construction

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## EXISTING PANEL: CLAB — CRITICAL

LOCATION: LAB 1097 | MAIN BUS: 225A | MCB: N/A | VOLTAGE: 208/120 | AIC: 10,000A
FED FROM: 2DPCRL | WIRES: 4W + G | ENCLOSURE: NEMA 1 | BUS TYPE: Copper | MOUNTING: Surface | PANEL LUGS: Main Lugs Only
NEUTRAL BUS: Yes | GROUND BUS: Yes | ISOLATED GROUND BUS: No | 200% NEUTRAL: No | FEED THROUGH LUGS: Yes

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | PHASE | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LAB PLUG MOLD | 540 | 20 | 1 | A | 20 | 1 | 500 | FAX-COPIER | 2 |
| 3 | LAB PLUG MOLD | 540 | 20 | 1 | B | 20 | 1 | 540 | MICRO-PLUG MOLD | 4 |
| 5 | HALL | 360 | 20 | 1 | C | 20 | 1 | 360 | STORAGE LAB | 6 |
| 7 | SMOKE DAMPER | 150 | 20 | 1 | A | 20 | 1 | 540 | MICRO-PLUG MOLD | 8 |
| 9 | WALK-IN COMPRESSOR | 750 | 20 | 2 | B | 20 | 1 | 360 | MICRO RCPT | 10 |
| 11 | | 750 | | | C | 20 | 1 | 540 | MICRO-PLUG MOLD | 12 |
| 13 | WALK-IN LTS/FAN | 1000 | 20 | 1 | A | 20 | 1 | 360 | MICRO RCPT | 14 |
| 15 | SECURITY CAMERA | 250 | 20 | 1 | B | 20 | 1 | 360 | MICRO RCPT | 16 |
| 17 | SECURITY CAMERA | 250 | 20 | 1 | C | 20 | 1 | 360 | MICRO OFFICE | 18 |
| 19 | LAB FRIDGE | 500 | 20 | 1 | A | 20 | 1 | 540 | MICRO RCPT | 20 |
| **21** | **MEDS/PICK** | **720** | **20** | **1** | B | 20 | 1 | 1200 | EX. LOAD (VERIFY AND RENAME) | 22 |
| **23** | **UCR/MEDS** | **900** | **20** | **1** | C | 20 | 1 | 1200 | EX. LOAD (VERIFY AND RENAME) | 24 |
| **25** | **R-NURSE STATION** | **540** | **20** | **1** | A | 20 | 1 | 360 | MICRO RCPT | 26 |
| **27** | **R-NURSE STATION** | **540** | **20** | **1** | B | 20 | 1 | 540 | MICRO-PLUG MOLD | 28 |
| **29** | **R-CORRIDOR** | **360** | **20** | **1** | C | 20 | 1 | 360 | MICRO RCPT | 30 |
| **31** | **R- ALCOVE** | **720** | **20** | **1** | A | **20** | **1** | **720** | **R-CATH CONTROL** | **32** |
| **33** | **R- RECOVER** | **1080** | **20** | **1** | B | **20** | **1** | **720** | **R-CATH CONTROL** | **34** |
| **35** | **R-RECOVER** | **1080** | **20** | **1** | C | 20 | 1 | – | SPARE | 36 |
| **37** | **R-RECOVER** | **1080** | **20** | **1** | A | 20 | 1 | 200 | J-BOX PT.S RM. 1102 | 38 |
| **39** | **R-RECOVER** | **1080** | **20** | **1** | B | **20** | **1** | **600** | **CATH #1 S.T./DS/W.L.** | **40** |
| **41** | **R-RECOVER** | **1080** | **20** | **1** | C | **20** | **1** | **600** | **CATH #2 S.T./DS/W.L.** | **42** |

NOTES:

## EXISTING PANEL: CLAB (SECTION 2) — CRITICAL

LOCATION: LAB 1097 | MAIN BUS: 225A | MCB: N/A | VOLTAGE: 208/120 | AIC: 10,000A
WIRES: 4W + G | ENCLOSURE: NEMA 1 | BUS TYPE: Copper | MOUNTING: Surface | PANEL LUGS: Main Lugs Only
NEUTRAL BUS: Yes | GROUND BUS: Yes | ISOLATED GROUND BUS: No | 200% NEUTRAL: No | FEED THROUGH LUGS: Yes

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | PHASE | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 43 | SAFETY HOOD "M1" RM. 1102 | 1920 | 20 | 1 | A | **20** | **1** | **720** | **R- CATH #1** | **44** |
| 45 | INCUBATOR "M2" RM. 1102 | 840 | 20 | 1 | B | **20** | **1** | **720** | **R- CATH #2** | **46** |
| 47 | BACTEC 9240 "M3" RM. 1102 | 1068 | 20 | 1 | C | 20 | 1 | 1800 | MEDIA REFG. "M10" RM. 1102 | 48 |
| 49 | BACTEC 9240 "M4" RM. 1102 | 1068 | 20 | 1 | A | **20** | **1** | **720** | **R- CATH #1** | **50** |
| 51 | MICROSCAN "M5" RM. 1102 | 1200 | 20 | 1 | B | **20** | **1** | **720** | **R- CATH #2** | **52** |
| 53 | SPARE | – | 20 | 1 | C | **20** | **1** | **360** | **R- CATH #1** | **54** |
| 55 | REFRIG/FREZ "M7" RM. 1102 | 1200 | 20 | 1 | A | **20** | **1** | **360** | **R- CATH #2** | **56** |
| **57** | **CATH #1 BOOM** | **720** | **20** | **1** | B | **20** | **1** | **720** | **R – CATH CONTROL** | **58** |
| **59** | **CATH#2 BOOM** | **720** | **20** | **1** | C | **20** | **1** | **540** | **R – CATH CONTROL** | **60** |
| 61 | SPARE | – | 20 | 1 | A | **20** | **1** | **360** | **R – UPS** | **62** |
| 63 | RCPT'S RM. 1102 | 540 | 20 | 1 | B | **20** | **1** | **360** | **R – UPS** | **64** |
| 65 | RCPT'S RM. 1102 | 540 | 20 | 1 | C | 20 | 1 | – | SPARE | 66 |
| **67** | **R – CATH CONTROL** | **720** | **20** | **1** | A | 20 | 1 | – | SPARE | 68 |
| **69** | **R – CATH CONTROL** | **360** | **20** | **1** | B | 20 | 1 | – | SPARE | 70 |
| **71** | **R- CATH #1** | **640** | **20** | **1** | C | 20 | 1 | – | SPARE | 72 |
| **73** | **R- CATH #2** | **640** | **20** | **1** | A | 20 | 1 | – | SPARE | 74 |
| **75** | **R – CATH #1** | **–** | **20** | **1** | B | 20 | 1 | – | SPARE | 76 |
| **77** | **R – CATH #2** | **540** | **20** | **1** | C | 20 | 1 | – | SPARE | 78 |
| **79** | **R- CATH #1** | **360** | **20** | **1** | A | 20 | 1 | – | SPARE | 80 |
| **81** | **R – CATH #2** | **360** | **20** | **1** | B | 20 | 1 | – | SPARE | 82 |
| 83 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 84 |

NOTES:

## EXISTING PANEL: CLAB (SECTION 3) — CRITICAL

LOCATION: LAB 1097 | MAIN BUS: 225A | MCB: N/A | VOLTAGE: 208/120 | AIC: 10,000A
WIRES: 4W + G | ENCLOSURE: NEMA 1 | BUS TYPE: Copper | MOUNTING: Surface | PANEL LUGS: Main Lugs Only
NEUTRAL BUS: Yes | GROUND BUS: Yes | ISOLATED GROUND BUS: No | 200% NEUTRAL: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | PHASE | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 85 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 86 |
| 87 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 88 |
| 89 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 90 |
| 91 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 92 |
| 93 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 94 |
| 95 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 96 |
| 97 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 98 |
| 99 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 100 |
| 101 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 102 |
| 103 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 104 |
| 105 | SPARE | – | 20 | 1 | B | 20 | 2 | – | SPARE | 106 |
| 107 | SPARE | – | 20 | 1 | C | | | --- | | 108 |
| 109 | SPARE | – | 20 | 1 | A | 20 | 2 | – | SPARE | 110 |
| 111 | SPARE | – | 20 | 1 | B | | | --- | | 112 |
| 113 | SPARE | – | 20 | 1 | C | 20 | 2 | – | SPARE | 114 |
| 115 | SPARE | – | 20 | 1 | A | | | --- | | 116 |
| 117 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 118 |
| 119 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 120 |
| 121 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 122 |
| 123 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 124 |
| 125 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 126 |

NOTES:

'CLAB' LOAD SUMMARY

| | LTS | RCPTS | HSPTL | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.4 | 21.5 | 14.9 | 9.2 | 46.0 | 127.8 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 16.0 | 6.0 | 9.0 | 31.0 | 86.0 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 16.0 | 6.0 | 9.0 | 31.0 | 86.0 |

## EXISTING PANEL: 1CRH — CRITICAL

LOCATION: ELEC. CLOSET 1090A | MAIN BUS: 100A | MCB: N/A | VOLTAGE: 480/277 | AIC: 10,000A
FED FROM: 1DPCRH | WIRES: 4W + G | ENCLOSURE: NEMA 1 | BUS TYPE: Copper | MOUNTING: Surface | PANEL LUGS: Main Lugs Only
NEUTRAL BUS: Yes | GROUND BUS: Yes | ISOLATED GROUND BUS: No | 200% NEUTRAL: No | FEED THROUGH LUGS: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | PHASE | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LTG. RM'S 1133A-1138 | 2400 | 20 | 1 | A | 20 | 1 | 1500 | LTG. RM'S 1039-1055 | 2 |
| 3 | LTG. RM'S 1005-1009 | 1060 | 20 | 1 | B | 20 | 1 | 3500 | LTG. LAB RM. 1097 | 4 |
| 5 | LTG. RM'S 1067-1090A | 2400 | 20 | 1 | C | 20 | 1 | 600 | LTG. RM'S 1018-1022 | 6 |
| **7** | **LTG. CATH SUITE** | **3320** | **20** | **1** | A | 20 | 1 | – | SPARE | 8 |
| 9 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 10 |
| 11 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 12 |
| 13 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 14 |
| 15 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 16 |
| 17 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 18 |
| 19 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 20 |
| 21 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 22 |
| 23 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 24 |
| 25 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 26 |
| 27 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 28 |
| 29 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 30 |
| 31 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 32 |
| 33 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 34 |
| 35 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 36 |
| 37 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 38 |
| 39 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 40 |
| 41 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 42 |

NOTES:

'1CRH' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HSPTL | HEAT | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 3.3 | 0.0 | 0.0 | 11.5 | 0.0 | 0.0 | 14.8 | 17.8 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | | |
| TOTAL DEMAND LOAD | 3.0 | 0.0 | 0.0 | 4.4 | 0.0 | 0.0 | 7.4 | 8.9 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 3.8 | 0.0 | 0.0 | 4.4 | 0.0 | 0.0 | 8.2 | 9.8 |

## EXISTING PANEL: 1NHA — NORMAL

LOCATION: CORR. 1062 | MAIN BUS: 100A | MCB: N/A | VOLTAGE: 480/277 | AIC: 10,000A
FED FROM: 1DPNH | WIRES: 4W + G | ENCLOSURE: NEMA 1 | BUS TYPE: Copper | MOUNTING: Recessed | PANEL LUGS: Main Lugs Only
NEUTRAL BUS: Yes | GROUND BUS: Yes | ISOLATED GROUND BUS: No | 200% NEUTRAL: No | FEED THROUGH LUGS: No

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | PHASE | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LTG. LAB RM. 1097 | 1700 | 20 | 1 | A | 20 | 1 | 800 | LTG. RM'S 1018-1022 | 2 |
| 3 | LTG. LAB RM. 1097 | 3800 | 20 | 1 | B | **20** | **1** | **2850** | **LTG – CATH SUITE** | **4** |
| 5 | LTG. RM'S 1135-1146A | – | 20 | 1 | C | 20 | 1 | – | SPARE | 6 |
| 7 | AIR COMPRESSOR | 2106 | 15 | 3 | A | 20 | 1 | – | SPARE | 8 |
| 9 | – | 2106 | | | B | 20 | 1 | – | SPARE | 10 |
| 11 | – | 2106 | | | C | 20 | 1 | – | SPARE | 12 |
| 13 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 14 |
| 15 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 16 |
| 17 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 18 |
| 19 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 20 |
| 21 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 22 |
| 23 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 24 |
| 25 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 26 |
| 27 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 28 |
| 29 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 30 |
| 31 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 32 |
| 33 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 34 |
| 35 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 36 |
| 37 | SPARE | – | 20 | 1 | A | 20 | 1 | – | SPARE | 38 |
| 39 | SPARE | – | 20 | 1 | B | 20 | 1 | – | SPARE | 40 |
| 41 | SPARE | – | 20 | 1 | C | 20 | 1 | – | SPARE | 42 |

NOTES:

'1NHA' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HSPTL | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 2.9 | 0.0 | 6.3 | 6.3 | 0.0 | 15.5 | 18.6 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | |
| TOTAL DEMAND LOAD | 3.0 | 0.0 | 7.5 | 12.4 | 0.0 | 12.9 | 15.5 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 3.8 | 0.0 | 7.5 | 2.4 | 0.0 | 13.7 | 16.4 |

## EXISTING PANEL: NLAB — NORMAL

LOCATION: LAB 1097 | MAIN BUS: 100A | MCB: N/A | VOLTAGE: 208/120 | AIC: 10,000A
FED FROM: 1DPNL | WIRES: 4W + G | ENCLOSURE: NEMA 1 | BUS TYPE: Copper | MOUNTING: Surface | PANEL LUGS: Main Lugs Only
NEUTRAL BUS: Yes | GROUND BUS: Yes | ISOLATED GROUND BUS: No | 200% NEUTRAL: No | FEED THROUGH LUGS: Yes

| CKT NO. | DESCRIPTION | TOTAL LOAD (VA) | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | PHASE | CIRCUIT BREAKER AMPS | CIRCUIT BREAKER POLES | TOTAL LOAD (VA) | DESCRIPTION | CKT NO |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MECH. RM RCPTS | 540 | 20 | 1 | A | 20 | 1 | 360 | LAB RCPT | 2 |
| 3 | MECH. RM PUMPS | 500 | 20 | 1 | B | 20 | 1 | 540 | HALL RCPT | 4 |
| 5 | MECH RM PUMPS | 500 | 20 | 1 | C | 20 | 1 | 540 | HALL RCPT | 6 |
| 7 | CHEM. FUME HOOD | 750 | 20 | 1 | A | 20 | 1 | 540 | LAB PLUGMOLD | 8 |
| 9 | HALL RCPTS | 540 | 20 | 1 | B | 20 | 1 | 540 | LAB PLUGMOLD | 10 |
| **11** | **R-EQUIP./POWER** | **1280** | **20** | **1** | C | **20** | **1** | **900** | **UCR/NURSE STATION** | **12** |
| **13** | **R-TOILET/UTILITY** | **1280** | **20** | **1** | A | **20** | **1** | **1200** | **ICE MAKER** | **14** |
| **15** | **R-UPS/EQUIPMENT** | **540** | **20** | **1** | B | **20** | **1** | **1080** | **R – CATH CONTROL** | **16** |
| **17** | **SPARE** | **–** | **20** | **1** | C | **20** | **1** | **720** | **CATH #1 BOOM** | **18** |
| **19** | **SPARE** | **–** | **20** | **1** | A | **20** | **1** | **720** | **CATH #2 BOOM** | **20** |
| **21** | **SPARE** | **–** | **20** | **1** | B | **20** | **1** | **900** | **R – CATH CONTROL** | **22** |
| **23** | **R-CORRIDOR** | **720** | **20** | **1** | C | **20** | **1** | **900** | **R – CATH #1** | **24** |
| **25** | **R-NURSE STATION/MEDS** | **900** | **20** | **1** | A | **20** | **1** | **540** | **R – CATH ROOF** | **26** |
| **27** | **R-RECOVERY** | **540** | **20** | **1** | B | **20** | **1** | **1330** | **GEF-1-(1,2)** | **28** |
| **29** | **R- RECOVERY** | **1440** | **20** | **1** | C | **20** | **1** | **900** | **R – CATH #2** | **30** |
| **31** | **R- RECOVERY** | **1080** | **20** | **1** | A | **20** | **1** | **500** | **TRAP PRIMER** | **32** |
| **33** | **R-NURSE STATION** | **720** | **20** | **1** | B | 20 | 1 | – | SPARE | 34 |
| 35 | RCPT'S. RM. 1103 | 360 | 20 | 1 | C | 20 | 1 | – | SPARE | 36 |
| 37 | * PANEL 'LPQA' | 4693 | **60 | 3 | A | 20 | 1 | – | SPARE | 38 |
| 39 | --- | 4693 | | | B | 20 | 1 | – | SPARE | 40 |
| 41 | --- | 4693 | | | C | 20 | 1 | – | SPARE | 42 |

NOTES:

'NLAB' LOAD SUMMARY

| | LTS | RCPTS | MTRS | HSPTL | MISC | TOTAL (KVA) | TOTAL (AMPS) |
|---|---|---|---|---|---|---|---|
| TOTAL CONNECTED LOAD | 0.0 | 5.6 | 1.3 | 12.6 | 18.4 | 37.9 | 105.3 |
| DEMAND FACTOR | SEE DEMAND FACTOR TABLE | | | | | | |
| TOTAL DEMAND LOAD | 0.0 | 6.0 | 1.3 | 5.2 | 18.0 | 30.4 | 84.5 |
| CONTINUOUS (DESIGN) FACTOR | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| TOTAL DESIGN LOAD | 0.0 | 6.0 | 1.3 | 5.2 | 18.0 | 30.4 | 84.5 |

HIGHLIGHTED ONLY, ALL PREVIOUS COMMENTS APPLY

AURORA BUILDING INSPECTION
ELECTRICAL SECTION
APPROVED
SUBJECT TO COMMENTS AS NOTED
AND FIELD INSPECTIONS

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE APPROVED JUL 22 2009

| | | |
|---|---|---|
| | CLAB SEC. 1 | 1CRH |
| | CLAB SEC. 2 | 1NHA |
| | CLAB SEC. 3 | NLAB |


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# Medical Center of Aurora

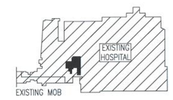
1501 S. Potomac
South Campus
Cath Lab
Aurora, Colorado 80012
HCA
Project # 306660005

In association with:

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## KEY PLAN
FIRST FLOOR




COLORADO LICENSED
41486
PROFESSIONAL ENGINEER

| Revisions | |
|---|---|
| 1 ADDENDUM #2 | 04-22-09 |
| 2 CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | MM |
| Checked | MM |
| Approved | MM |

Title

ELECTRICAL SCHEDULES

Sheet

E-7003

Issued for Construction

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# GENERAL NOTES - ALL HVAC SHEETS

A. ALL MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL COMPLY WITH ALL APPLICABLE STATE AND LOCAL BUILDING CODES. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS FOR MECHANICAL AND PLUMBING CONSTRUCTION.

B. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES, AND COMPLY WITH ALL NATIONAL, STATE, AND MUNICIPAL LAWS, CODES, AND ORDINANCES RELATING TO BUILDING AND PUBLIC SAFETY.

C. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR REQUIRED FOR A COMPLETE WORKING AND COORDINATED SYSTEM.

D. COORDINATE THE EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT WITH THE LOCATIONS OF LIGHT FIXTURES, PIPING CONDUIT, AND OTHER CONSTRUCTION. TO ALLOW FOR PROPER ACCESS TO SERVICE EQUIPMENT.

E. COORDINATE THE LOCATION OF DUCTWORK AND PIPING WITH OTHER TRADES AND PROVIDE OFFSETS IN DUCTWORK AND PIPING AS REQUIRED.

F. IT IS THE INTENT OF THESE DOCUMENTS TO ALLOW ALL CEILING CONSTRUCTION AND HEIGHTS TO BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS. COORDINATE THE LOCATION OF DUCTWORK AND PIPING AND PROVIDE OFFSETS IN DUCTWORK AND PIPING AS REQUIRED TO MEET THIS INTENT.

G. CONDUIT, PIPING, AND DUCTWORK SHALL BE INDEPENDENTLY SUPPORTED, AND EACH SUPPORT SHALL BE INDEPENDENT OF PARTITION AND CEILING SYSTEM SUPPORTS. WHERE INDEPENDENT SUPPORT IS NOT POSSIBLE AN ENGINEERED SUPPORT SYSTEM SHALL BE UTILIZED.

H. INSTALL ALL FLOOR MOUNTED EQUIPMENT ON PADS AS SPECIFIED. PAD BY GENERAL CONTRACTOR. COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR.

I. ALL WORK SHALL BE SCHEDULED AND PERFORMED IN STRICT COORDINATION WITH ARCHITECTURAL PHASING PLANS AND WITH HOSPITAL SCHEDULES, OCCUPANCIES, AND WORK.

J. PROTECT EQUIPMENT AND WORK FORM DAMAGE DURING HANDLING AND INSTALLATION UNTIL COMPLETION OF CONSTRUCTION.

K. REMOVE ALL EXCESS MATERIAL AND DEBRIS AND CLEAN ALL EQUIPMENT UPON COMPLETION OF WORK. TOUCH UP WITH PAINT WHERE REQUIRED.

L. CONTRACTOR SHALL VISIT JOBSITE AND VERIFY SIZE AND LOCATION OF ALL EXISTING ITEMS AND CONDITIONS.

M. ALL CONNECTION BETWEEN PIPES OF DISSIMILAR MATERIALS SHALL BE MADE WITH DIELECTRIC UNIONS.

N. CONTRACTOR SHALL COORDINATE ALL WORK CLOSELY WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES.

O. ALL EXISTING FACILITES SHALL BE PROTECTED DURING THE CONSTRUCTION ACTIVITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE AND STORE ITEMS WICH ARE SUBJECT TO DAMAGE.

P. ARCHITECT SHALL HAVE FINAL APPROVAL OF ALL GRILLE, DIFFUSER, AND THERMOSTAT LOCATIONS.

Q. COORDINATE ALL AIR DEVICE LOCATIONS AND MOUNTING FRAME STYLES WITH LIGHTING PLANS AND ARCHITECTURAL REFLECTED CEILING PLANS.

R. COORDINATE ALL WALL MOUNTED DEVICE LOCATIONS WITH ARCHITECTURAL INTERIOR ELEVATIONS.

V. DEMOLITION OF EACH PHASE SHALL OCCUR AS PART OF THE WORK FOR THAT PHASE. REMOVE ONLYTHE WORK THAT SERVES THE AREA OF DEMOLITION.

W. PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO PREVENT DISRUPTING ADJACENT AREAS OF THE PHASE IN WHICH WORK IS BEING PERFORMED.

X. PROVIDE ADDITIONAL VALVES, TAPS, TEMPORARY DUCTWORK, ETC. AS NECESSARY TO PROVIDE UNINTERRUPTED SERVICE TO AREAS OUTSIDE OF THE PHASE IN WHICH WORK IS BEING PERFORMED.

Y. ALL NECESSARY SHUTDOWNS OR OUT OF PHASE WORK SHALL BE COORDINATED WITH THE HOSPITAL REPRESENTATIVE.

Z. DUCT SIZES ARE NET FREE AREA.

AA. PROVIDE ROUND DUCTS TO ALL AIR DEVICES UNLESS NOTED OTHERWISE. DUCT SIZE SHALL MATCH AIR DEVICE NECK SIZE OR THE TABLE IN AIR DEVICE SCHEDULE, WHICHEVER IS LARGER. FLEXIBLE DUCTS SHALL BE SIZED SIMILARLY. DO NOT USE FLEXIBLE DUCTS ABOVE NON-LAYIN CEILINGS.

BB. TERMINAL BOX INLET DUCTS: SIZE THE RUNOUT DUCT AND ITS TAP AT MAIN TRUCK PER VAV BOX SCHEDULE.

CC. PROVIDE FRAMED 0.5" BY 0.5" BIRD SCREEN (GALVANIZED STEEL ASSEMBLY) AT ALL DUCTS TERMINATING WITHOUT AN AIR DEVICE, AT INDOOR FACE OF LOUVERS, AND AT UNDUCTED AIR FLOW OPENINGS AT EQUIPMENT.

DD. PROVIDE MANUAL VOLUME DAMPER IN EACH AIR DEVICE RUNOUT DUCT AS FAR FROM AIR DEVICE AS POSSIBLE.

EE. INSTALL SPACE THERMOSTAT ADJACENT TO LATCH SIDE OF DOOR IN SPACE INDICATED. INDICATED LOCATIONS ARE APPROXIMATE. AVOID HEAT PRODUCING EQUIPMENT. FINAL SPACE THERMOSTAT/SENSOR LOCATIONS SHALL BE AS DIRECTED BY THE ARCHITECT. INSTALL HUMIDISTATS IN SIMILAR FASHION.

FF. INSTALL TURNING VANES IN ALL 90 DEGREE SQUARE ELLS IN SUPPLY, RETURN, AND EXHAUST DUCTS. (NONE ALLOWED IN COMBUSTION AIR DUCTS).

GG. FURTURE SPACE THERMOSTATS AND HUMIDISTATS: INSTALL 2"x4" BOX WITH STAINLESS STEEL COVER PLATE AND WITH 1/2" CONDUIT UP TO CEILING SPACE.

HH. LOCATE ISOLATION VALVES FOR EQUIPMENT AS CLOSE TO THE MAIN AS POSSIBLE.

II. PROVIDE CONDENSATE DRAIN PIPING FROM ALL COOLING COILS TO DRAIN.

JJ. MULTI-BLADE DAMPERS OF ANY TYPE INSTALLED WITHIN 36" OF AN ELL OR OTHER FITTING SHALL BE INSTALLED WITH THE DAMPER BLADE SHAFTS PARALLEL TO THE AIRSTREAM FLOW DIRECTION UPSTREAM OF THE FITTING.

KK. PROVIDE DRAIN PAN UNDER PIPES INSIDE ELECTRICAL AND COMMUNICATION ROOMS.

LL. ROUTE EMERGENCY CONDENSATE LINES FROM FAN COIL UNITS AS INDICATED TO OPEN SITE ABOVE PLUMBING FIXTURE WHERE INDICATED.

MM. COORDINATE LOCATION OF ALL DISCONNECTS, CONTROL PANELS AND ELECTRICAL CONNECTIONS FOR MECHANICAL AND PLUMBING EQUIPMENT TO MAINTAIN NEC REQUIRED CLEARANCES OF 42" DEEP AND 30" WIDE IN FRONT OF EQUIPMENT.

NN. ALL FIRE AND COMBINATION FIRE/SMOKE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION DETAILS AND BE U.L. TESTED AND LISTED.

# GENERAL PIPING NOTES

A. REFER TO THE ARCHITECTURAL PHASING PLAN FOR THE AREAS SHOWN ON THIS SET OF PLANS. WORK SHALL BE SCHEDULED AND PERFORMED IN SEQUENCE WITH THE PHASING PLAN.

B. DEMOLITION OF EACH PHASE SHALL OCCUR AS PART OF THE WORK FOR THAT PHASE. REMOVE ONLY THE WORK THAT SERVES THE AREA OF DEMOLITION.

C. PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO PREVENT DISRUPTING ADJACENT AREAS OF THE PHASE IN WHICH WORK IS BEING PERFORMED.

D. PROVIDE ADDITIONAL VALVES, TAPS, TEMPORARY DUCTWORK AND/OR PIPING AS NECESSARY TO PROVIDE UNINTERRUPTED SERVICE TO AREAS OUTSIDE OF THE PHASE IN WHICH WORK IS BEING PERFORMED.

E. ALL WORK SHALL BE PERFORMED IN STRICT COORDINATION WITH HOSPITAL SCHEDULES, OCCUPANCIES AND WORK. CONTRACTOR SHALL COORDINATE WITH HOSPITAL REPRESENTATIVE.

F. ALL NECESSARY SHUTDOWNS OR OUT OF PHASE WORK SHALL BE SCHEDULED WITH THE HOSPITAL REPRESENTATIVE.

G. ARCHITECT SHALL HAVE FINAL APPROVAL OF ALL THERMOSTAT LOCATIONS.

H. G.C. TO PROVIDE ACCESS DOORS IF REQUIRED FOR ACCESS TO VAV'S AND ANY VALVES THAT ARE NOT ACCESSIBLE. VERIFY SIZE AND LOCATIONS WITH MECHANICAL CONTRACTOR.

# GENERAL DEMOLITION NOTES:

A. ALL CAPPED DUCT TAPS AND CONNECTING DUCTS THAT ARE NOT BEING USED ARE TO BE REMOVED BACK TO THE MAIN DUCT AND PATCHED AS PER ITEM B BELOW.

B. SEAL AIR TIGHT AND PATCH OPENINGS IN EXISTING DUCTWORK THAT IS TO REMAIN INCLUDING OPENINGS WHERE TAPS OR DUCTWORK ARE TO BE REMOVED, THE FOLLOWING SHALL OCCOR:

- OPENINGS IN THE MAIN DUCTS ARE TO BE COVERED WITH A SHEET METAL PATCH. THE PATCH IS TO BE LARGER THAN THE EXISTING OPENING AND IS TO BE SECURED WITH SHEET METAL SCREWS FOUR INCHES ON CENTERS.
- A LIBERAL QUANTITY OF FIRE RESISTANT ADHESIVE IS TO BE APPLIED UNDER THE EDGES OF THE METAL PATCH AND THE ASSEMBLY SCREWED IN PLACE.

C. REFER TO THE ARCHITECTURAL PHASING PLAN FOR THE AREAS SHOWN ON THIS PLAN. WORK SHALL BE SCHEDULED AND PERFORMED IN SEQUENCE WITH THE PHASING PLAN.

D. DEMOLITION OF EACH PHASE SHALL OCCUR AS PART OF THE WORK FOR THAT PHASE. REMOVE ONLY THE WORK THAT SERVES THE AREA OF DEMOLITION.

E. PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO PREVENT DISRUPTING ADJACENT AREAS OF THE PHASE IN WHICH WORK IS BEING PERFORMED.

F. PROVIDE ADDITIONAL VALVES, TAPS, TEMPORARY DUCTWORK AND/OR PIPING AS NECESSARY TO PROVIDE UNINTERRUPTED SERVICE TO AREAS OUTSIDE OF THE PHASE IN WHICH WORK IS BEING PERFORMED.

G. ALL WORK SHALL BE PERFORMED IN STRICT COORDINATION WITH HOSPITAL SCHEDULES, OCCUPANCIES AND WORK. CONTRACTOR SHALL COORDINATE WITH HOSPITAL REPRESENTATIVE.

H. ALL NECESSARY SHUTDOWNS OR OUT OF PHASE WORK SHALL BE SCHEDULED WITH THE HOSPITAL REPRESENTATIVE.

## PROJECT DESIGN CRITERIA

| | |
|---|---|
| LOCATION: | |
| CITY/STATE | AURORA, COLORADO |
| APPLICABLE CODES: | |
| BUILDING | 2006 IBC |
| MECHANICAL | 2006 IMC |
| PLUMBING | 2006 IPC |
| ENERGY | 2006 IECC |
| ELECTRICAL | 2005 NEC |
| LATITUDE: | |
| DEG. N. LAT. | 39.75 |
| ELEVATION: | |
| FT. ABOVE SEA LEVEL | 5331 |

09-411001-

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 11/5/09

## MECHANICAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| AC | ABOVE CEILING | FCU | FAN COIL UNIT |
| AFF | ABOVE FINISHED FLOOR | FPB | FAN POWERED BOX |
| AI | ANALOG INPUT | FPI | FINS PER INCH |
| AO | ANALOG OUTPUT | GC | GENERAL CONTRACTOR |
| BFC | BELOW FINISHED CEILING | GEF | GENERAL EXHAUST FAN |
| BF | BELOW FLOOR, BLIND FLANGE | GSF | GENERAL SUPPLY FAN |
| BG | BELOW GRADE | MVD | MANUAL VOLUME DAMPER |
| BV | BUTTERFLY VALVE | N | NEW |
| CRU | COMPUTER ROOM UNIT | OBD | OPPOSED BLADE DAMPER |
| CRU | CONDENSATE RETURN UNIT | R | RELOCATED |
| CU | CONDENSING UNIT | RA | RETURN AIR |
| DI | DIGITAL INPUT | RCA | RECIRCULATED (RETURN) AIR |
| DO | DIGITAL OUTPUT | RLA | RELIEF AIR |
| DS | DISCONNECT SWITCH | SA | SUPPLY AIR |
| E | EXISTING | UH | UNIT HEATER |
| EDH | ELECTRIC DUCT HEATER | VAV | VARIABLE AIR VOLUME |
| EUH | ELECTRIC UNIT HEATER | WH | WATER HEATER |
| EF | EXHAUST FAN | WHP | WATER-SOURCE HEAT PUMP |
| SF | SUPPLY FAN | FMB | FILTER MIXING BOX |
| EA | EXHAUST AIR | IN HG | INCHES MERCURY (PRESSURE) |
| OA | OUTSIDE AIR | IN WC | INCHES WATER COLUMN (PRESSURE) |
| CHW | CHILLED WATER | IBT | INVERTED BUCKET TRAP |
| UNO | UNLESS NOTED OTHERWISE | TAV | THERMOSTATIC AIR VENT (STEAM SYSTEM) |
| PRV | PRESSURE RELIEF VALVE | MA | MIXED AIR |
| SV | SAFETY VALVE | LE | LAUNDRY EQUIPMENT |

## CONTROL DIAGRAM SYMBOLS

| SYMBOL | DESCRIPTION |
|---|---|
| (AI) | ANALOG INPUT |
| (AO) | ANALOG OUTPUT |
| (DI) | DIGITAL INPUT |
| (DO) | DIGITAL OUTPUT |
| TT-X | TEMPERATURE TRANSMITTER #X |
| HT-X | RELATIVE HUMIDITY TRANSMITTER #X |
| V-X | CONTROL VALVE #X |
| SPT-X | STATIC PRESSURE TRANSMITTER #X |
| ESC-X | END SWITCH, NORMALLY CLOSED #X |
| ESO-X | END SWITCH, NORMALLY OPEN #X |
| TS-X | TEMPERATURE SENSOR #X |
| SD-X | SMOKE DETECTOR #X |
| OL | OVERLOAD RELAY #X |
| DPS-X | DIFFERENTIAL PRESSURE SENSOR #X |
| CSR-X | CURRENT SENSING RELAY #X |
| FM-X | FLOW METER #X |
| FS-X | FLOW SWITCH #X |
| EAS-X | EMERGENCY AIR HANDLER SHUTDOWN BUTTON - AHU-#X |

## MECHANICAL SYMBOLS

ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

| SYMBOL | DESCRIPTION |
|---|---|
| (A/#) | NEW EQUIPMENT DESIGNATION (TOP - EQUIP. ABBREV., BOTTOM - MARK) |
| (A/#) | NEW DIFFUSER DESIGNATION (TOP - SCHEDULE DESIG., BOTTOM - CFM) |
| | NEW EQUIPMENT |
| | EXISTING EQUIPMENT |
| | EXISTING EQUIPMENT TO BE REMOVED OR RELOCATED |
| | NEW PIPING |
| | EXISTING PIPING |
| | EXISTING PIPING TO BE REMOVED OR RELOCATED |
| | NEW DUCT |
| | EXISTING DUCT |
| | EXISTING DUCT TO BE REMOVED OR RELOCATED |
| | NEW DUCT PROVIDED AS NOTED |
| | NEW SUPPLY DIFFUSER |
| | EXISTING SUPPLY DIFFUSER |
| | EXISTING SUPPLY DIFFUSER TO BE REMOVED OR RELOCATED |
| | NEW R/A OR EXHAUST GRILLE |
| | EXISTING R/A OR EXHAUST GRILLE |
| | EXISTING R/A OR EXHAUST GRILLE TO BE REMOVED OR RELOCATED |
| | FLEXIBLE DUCT |
| (T) | THERMOSTAT |
| (T) | EXISTING THERMOSTAT TO BE REMOVED OR RELOCATED |
| | 45° PRESSURE TAP W/ VOLUME DAMPER |
| | CONICAL TAP WITH VOLUME DAMPER |
| | CONICAL TAP W/O VOLUME DAMPER |
| | MANUAL VOLUME DAMPER |
| | FIRE DAMPER |
| | SMOKE DAMPER |
| | FIRE/SMOKE DAMPER |
| M | MOTORIZED DAMPER |
| B | BAROMETRIC DAMPER |
| CHS | CHILLED WATER SUPPLY PIPE |
| CHR | CHILLED WATER RETURN PIPE |
| CS | CONDENSER WATER SUPPLY PIPE |
| CR | CONDENSER WATER RETURN PIPE |
| HS | HEATING WATER SUPPLY |
| HR | HEATING WATER RETURN |
| HPS | HIGH PRESSURE STEAM |
| HPR | HIGH PRESSURE CONDENSATE RETURN |
| LPS | LOW PRESSURE STEAM |
| LPR | LOW PRESSURE CONDENSATE RETURN |
| PCR | PUMPED CONDENSATE RETURN |
| PCHS | PRIMARY CHILLED WATER SUPPLY |
| PCHR | PRIMARY CHILLED WATER RETURN |
| SCHS | SECONDARY CHILLED WATER SUPPLY |
| SCHR | SECONDARY CHILLED WATER RETURN |
| MW | MAKE-UP WATER |
| CD | CONDENSATE DRAIN |
| | DIRECTION OF SLOPE |
| | DIRECTION OF FLOW |
| | EXPANSION LOOP |
| | GATE VALVE |
| | BUTTERFLY VALVE |
| | BALL VALVE |
| | GLOBE VALVE |
| | TEMPERATURE AND PRESSURE RELIEF VALVE |
| | AUTOMATIC 2-WAY CONTROL VALVE |
| | AUTOMATIC 3-WAY CONTROL VALVE |
| | PLUG VALVE/BALANCING COCK |
| | SOLENOID VALVE |
| | CHECK VALVE |
| | VALVE IN VERTICAL |
| | UNION |
| | PETE'S PLUG |
| | GAUGE COCK |
| | THERMOMETER |
| | THERMOMETER WELL |
| | STRAINER WITH BLOW-OFF VALVE |
| | F & T STEAM TRAP |
| | STEAM BUCKET TRAP |
| | CONNECT TO EXISTING |
| EP | ELECTRIC PNEUMATIC SWITCH |
| | ECCENTRIC REDUCER (TOP SIDE) |
| | ECCENTRIC REDUCER (BOTTOM SIDE) |
| | CONCENTRIC REDUCER |
| V | VENT (FROM STEAM SYSTEM) |
| BD | BLOWDOWN (STEAM SYSTEM) |
| | CONTROL SIGNAL |
| D | DRAIN LINE (FROM EQUIPMENT) |
| | DUCT FLEXIBLE CONNECTION |
| 30# | STEAM LINE (30 PSIG SHOWN) |
| OF | OVERFLOW LINE (FROM EQUIPMENT) |

## CATH LAB AIR BALANCE SCHEDULE

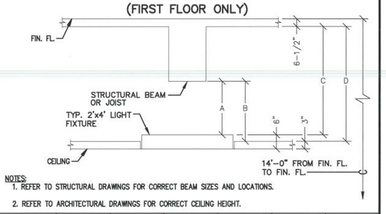
| ROOM | ROOM NAME | SQUARE FEET | CEILING HEIGHT (FEET) | PRESSURE | OUTSIDE AIR AIR CHANGES | MINIMUM OUTSIDE AIR REQUIRED | OUTSIDE AIR PROVIDED | SUPPLY AIR AIR CHANGES | COOLING CFM REQUIRED | SUPPLY CFM PROVIDED | EXHAUST AIR CHANGES | EXHAUST CFM REQUIRED | EXHAUST CFM PROVIDED | RETURN CFM PROVIDED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1098 | CORRIDOR | 1364 | 8.5 | NEUTRAL | 0 | 0 | 240 | 2 | 386 | 1200 | | 0 | | 1200 |
| 1097A | CATH LAB 1 | 548 | 9 | POSITIVE | 3 | 247 | 434 | 25 | 2055 | 2170 | | 0 | | 2040 |
| 1097B | CATH LAB 2 | 565 | 9 | POSITIVE | 3 | 254 | 448 | 25 | 2119 | 2240 | | 0 | | 2090 |
| 1097C | EQUIPMENT | 80 | 8 | NEUTRAL | 0 | 0 | 200 | 4 | 43 | 1000 | | 0 | | 1000 |
| 1097D | CONTROL | 103 | 8 | NEUTRAL | 2 | 27 | 50 | 6 | 82 | 250 | | 0 | | 250 |
| 1097E | EQUIPMENT | 84 | 8 | NEUTRAL | 0 | 0 | 200 | 4 | 45 | 1000 | | 0 | | 1000 |
| 1097F | CONTROL | 103 | 8 | NEUTRAL | 2 | 27 | 50 | 6 | 82 | 250 | | 0 | | 250 |
| | | | | | | | | | | | | | | |
| 1100 | SOILED UTILITY | 120 | 8 | NEGATIVE | 0 | 0 | 36 | 0 | 0 | 180 | 10 | 160 | 300 | 0 |
| 1101 | EQUIPMENT STORAGE | 79 | 8 | POSITIVE | 0 | 0 | 15 | 4 | 42 | 75 | | 0 | | 50 |
| 1102 | EXISTING MICROBIOLOGY AND OFFICE | 891 | 8 | NEGATIVE | 0 | 0 | 398 | 6 | 713 | 1990 | | 0 | 2000 | 190 - FOR OFFICE |
| 1103 | CLEAN UTILITY/POU | 93 | 8 | POSITIVE | 0 | 0 | 40 | 4 | 50 | 200 | | 0 | | 190 |
| 1104 | UPS | 90 | 12 | NEUTRAL | 0 | 0 | 0 | 0 | 0 | 1260 | | 0 | | 1260 |
| 1108 | LOCKER ROOM | 128 | 8 | NEUTRAL | 0 | 0 | 40 | 8 | 137 | 200 | | 0 | 200 | 0 |
| 1109 | STAFF TOILET/SHOWER | 78 | 8 | NEGATIVE | 0 | 0 | 15 | 0 | 0 | 75 | 10 | 104 | 150 | 0 |
| 1110 | PATIENT TOILET | 74 | 8 | NEGATIVE | 0 | 0 | 22 | 0 | 0 | 110 | 10 | 99 | 150 | 0 |
| 1111 | JANITOR | 37 | 12 | NEUTRAL | 0 | 0 | 15 | 0 | 0 | 75 | 10 | 74 | 75 | 0 |
| 1112 | MEDS | 64 | 8 | POSITIVE | 0 | 0 | 15 | 4 | 34 | 75 | | 0 | | 50 |
| 1113 | NURSE STATION | 171 | 8.5 | NEUTRAL | 2 | 48 | 55 | 6 | 145 | 275 | | 0 | | 275 |
| 1114 | PREP AND RECOVERY | 460 | 8.5 | NEUTRAL | 2 | 130 | 138 | 6 | 391 | 690 | | 0 | | 690 |

## MEP SYSTEM COORDINATION SCHEDULE

| SYSTEM | FURNISHED BY | INSTALLED BY | POWER WIRING BY | CONTROL OR SUPERVISION WIRING BY |
|---|---|---|---|---|
| LIFE SAFETY SYSTEM | DIV 27 | DIV 27 | DIV 26 | DIV 27 |
| SMOKE DAMPER/ACTUATOR | DIV 23 | DIV 23 | DIV 26 | DIV 27 |
| FIRE/SMOKE DAMPER/ ACTUATOR | DIV 23 | DIV 23 | DIV 26 | DIV 27 |
| DUCT SMOKE DETECTOR | DIV 27 | DIV 26 | --- | DIV 27 |
| NURSE CALL/ FIRE ALARM INTERFACE | DIV 27 | DIV 27 | --- | DIV 27 |
| MEDICAL GAS ALARM | DIV 22 | DIV 22 | DIV 26 | DIV 22 |
| MOTOR STARTERS (INTEGRAL TO EQUIP.) | DIV 23 | N/A | DIV 26 | DIV 23 |
| MOTOR STARTERS (NON-INTEGRAL) | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| COMB. MOTOR STARTER/DISCONNECT (INTEGRAL TO EQUIP.) | DIV 23 | N/A | DIV 26 | DIV 23 |
| COMB. MOTOR STARTER/DISCONNECT (NON-INTEGRAL) | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| PUMPS | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| AIR HANDLERS | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| FANS | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| FAN POWERED BOXES | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| MISC. MOTORS | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| VARIABLE FREQUENCY DRIVES (VFD'S) | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| AIR HANDLING SYSTEMS | DIV 23 | DIV 26 | DIV 26 | DIV 23 |
| DISCONNECT SWITCHES (NON-INTEGRAL) | DIV 26 | DIV 26 | DIV 26 | --- |
| THIS TABLE IS PROVIDED AS A GUIDE TO THE DOCUMENT PREPARATION AND IN NO WAY INDICATES CONTRACTOR MEANS AND METHODS | | | | |

## CLEARANCE SCHEDULE

(FIRST FLOOR ONLY)




NOTES:
1. REFER TO STRUCTURAL DRAWINGS FOR CORRECT BEAM SIZES AND LOCATIONS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR CORRECT CEILING HEIGHT.

| CEILING HEIGHT | 18" BEAM | | 16" BEAM | | 14" BEAM | | 12" BEAM | | 10" BEAM | | NO BEAM | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | A | B | A | B | C | D |
| 8'-0" | 41.5" | 44.5" | 43.5" | 46.5" | 45.5" | 48.5" | 47.5" | 50.5" | 49.5" | 52.5" | 59.5" | 62.5" |
| 8'-6" | 35.5" | 38.5" | 37.5" | 40.5" | 39.5" | 42.5" | 41.5" | 44.5" | 43.5" | 46.5" | 53.5" | 56.5" |
| 9'-0" | 29.5" | 32.5" | 31.5" | 34.5" | 33.5" | 36.5" | 35.5" | 38.5" | 37.5" | 40.5" | 47.5" | 50.5" |
| 10'-0" | 17.5" | 20.5" | 19.5" | 22.5" | 21.5" | 24.5" | 23.5" | 26.5" | 25.5" | 28.5" | 35.5" | 38.5" |
| 10'-6" | 11.5" | 14.5" | 13.5" | 16.5" | 15.5" | 18.5" | 17.5" | 20.5" | 19.5" | 22.5" | 29.5" | 32.5" |

NOTE: DEDUCT 6" FROM COLUMNS A & C WHEN CAN LIGHTS OCCUR.


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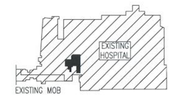

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KEY PLAN
FIRST FLOOR




COLORADO LICENSED PROFESSIONAL ENGINEER 43077

Revisions

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

Sheet Information

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | AB |
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| Approved | MM |

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GENERAL INFORMATION MECHANICAL

Sheet

M-0001

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## GENERAL NOTES

A. REFER TO SHEET M-0000 FOR GENERAL NOTES.

B. REBALANCE ALL EXISTING AIR OUTLETS, AIR HANDLING UNITS AND TERMINAL BOXES AFFECTED BY SCOPE OF RENOVATION AND NEW CONSTRUCTION.

## LEGEND NOTES

1. PROVIDE AUXILIARY DRIP PAN WITH LEAK DETECTOR FOR COMPUTER ROOM AIR HANDLER. TIE LEAK DETECTOR INTO FMS AND LIEBERT UNIT CONTROL PANEL.
2. CONNECT TO EXISTING DUCTWORK AT LOCATION SHOWN. NEW DUCTWORK TO MATCH DUCTWORK SIZE AT POINT OF CONNECTION.
3. PROVIDE DUCT SMOKE DETECTORS ON AHU SUPPLY AND RETURN AIR HANDLING UNIT OUTLETS.
4. PROVIDE VAV BOX WITH TERMINAL BOX MANUFACTURER'S SOUND ATTENUATOR.

18x8 SUPPLY DUCTWORK DOWN TO FLOOR LEVEL SUPPLY GRILLE. TYPICAL FOR 4.

18x18 RETURN DUCTWORK DOWN TO FLOOR LEVEL RETURN GRILLE. TYPICAL FOR 4.

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09-411001-

CITY OF AURORA
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DATE 12/31/09

01 DUCTWORK PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"


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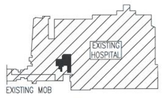
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## KEY PLAN
FIRST FLOOR




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|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #1 | 05-18-09 |
| 3 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | AB |
| Checked | MM |
| Approved | MM |

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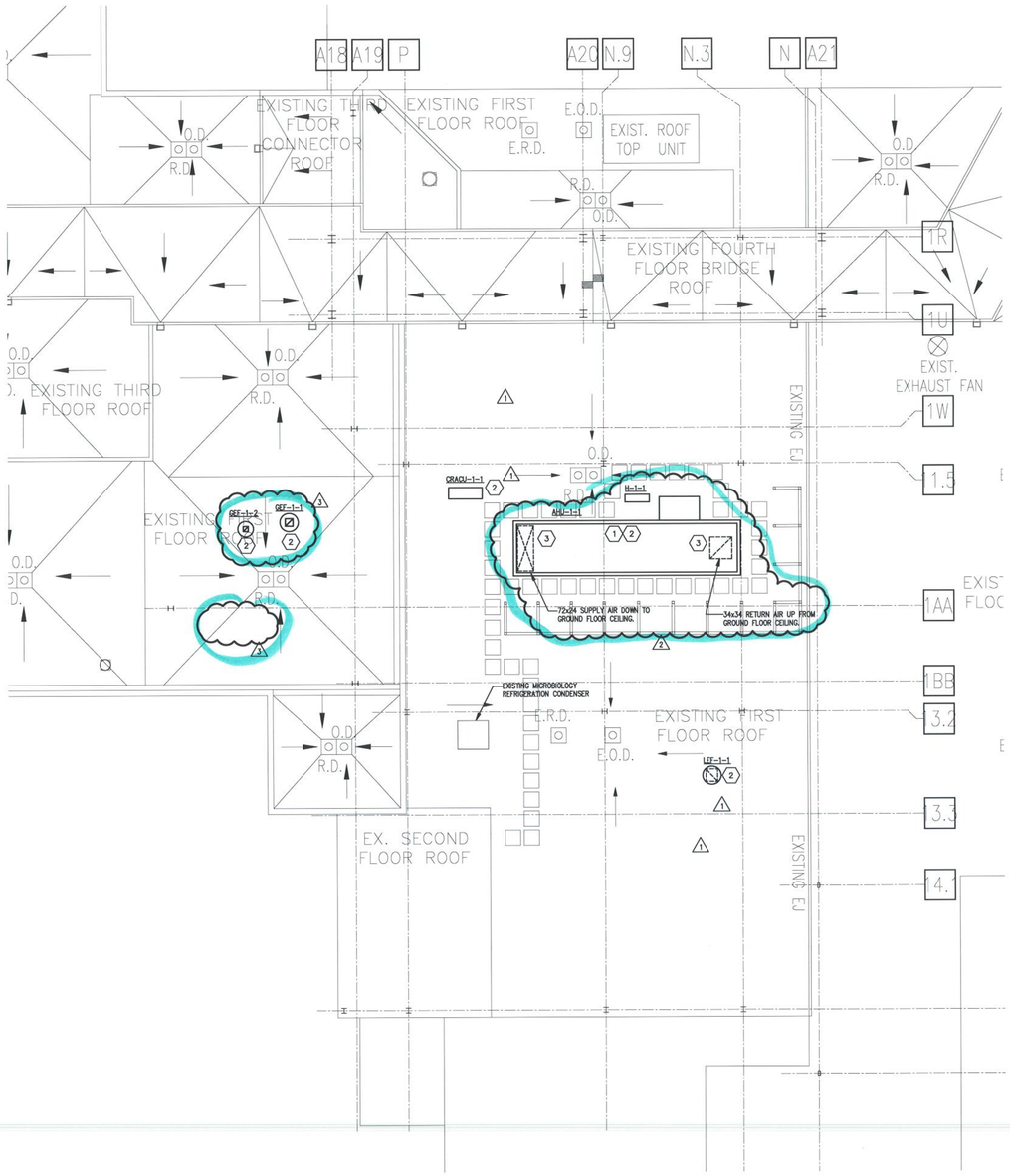
DUCTWORK PLAN FIRST FLOOR

Sheet

M-2001

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01 **DUCTWORK PLAN - ROOF**
SCALE: 1/8" = 1'-0"

## GENERAL NOTES

A. REFER TO SHEET M-0000 FOR GENERAL NOTES.

B. REBALANCE ALL EXISTING AIR OUTLETS, AIR HANDLING UNITS AND TERMINAL BOXES AFFECTED BY SCOPE OF RENOVATION AND NEW CONSTRUCTION.

## LEGEND NOTES

1. ROUTE CONDENSATE FROM COOLING COIL TO NEAREST ROOF DRAIN.
2. PROVIDE INSULATED ROOF CURB FOR EQUIPMENT. COORDINATE REQUIREMENTS WITH MANUFACTURER AND STRUCTURAL ENGINEER.
3. PROVIDE DUCT SMOKE DETECTORS ON AHU SUPPLY AND RETURN UNIT OUTLETS.

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COLORADO REGISTERED PROFESSIONAL ENGINEER

| Revisions | | |
|---|---|---|
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| 2 | CHANGE DIRECTIVE #1 | 05-18-09 |
| 3 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
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| Drawn | AB |
| Checked | MM |
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Title

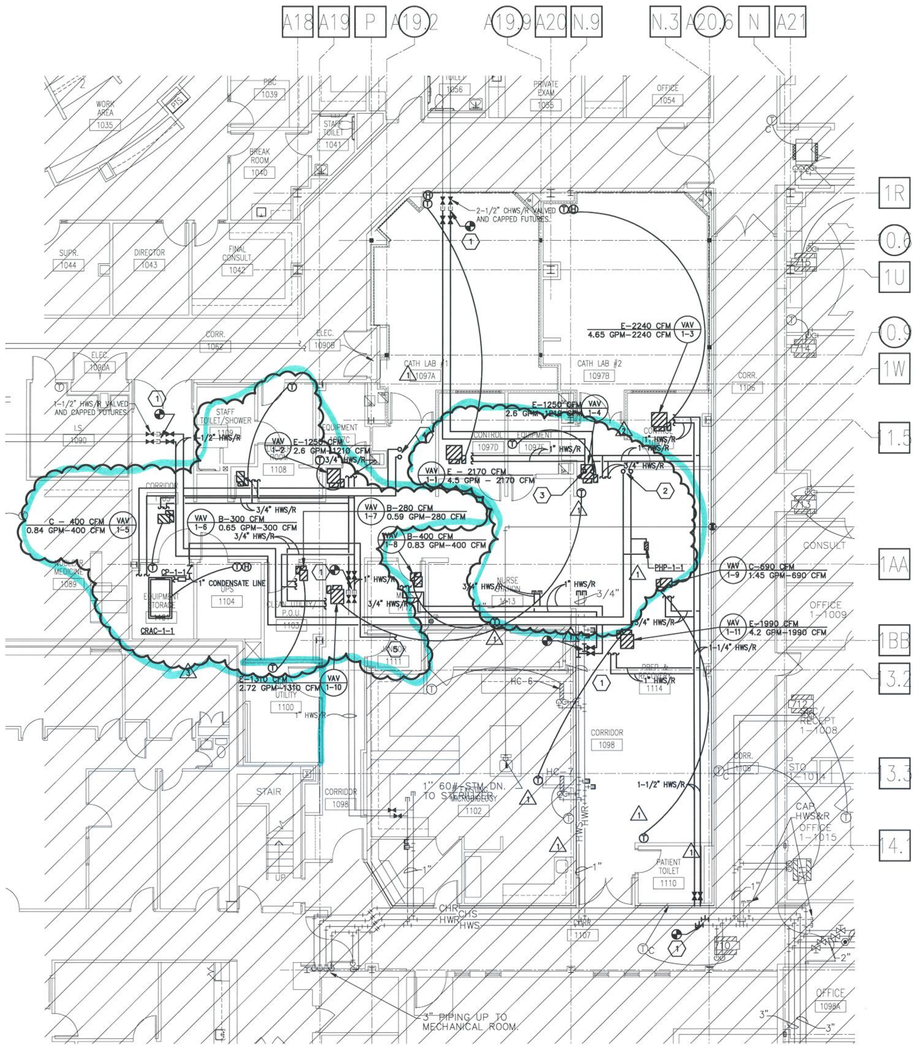
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**M-2002**

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

## GENERAL NOTES

A. REFER TO SHEET M-0000 FOR GENERAL NOTES.

B. PROVIDE BACKFLOW PREVENTER FOR ALL DOMESTIC WATER PIPING LINES ROUTED TO HVAC EQUIPMENT.

## LEGEND NOTES

1. CONNECT TO EXISTING PIPING AT LOCATION SHOWN. PROVIDE MANUAL SHUT-OFF VALVES AT EACH CONNECTION POINT.
2. 1-1/2" HWS/R UP TO ROOF. EXTERIOR PIPING TO BE HEAT TRACED. PROVIDE MANUAL SHUT OFF VALVE IN CEILING AT ROOF PENETRATION.
3. 2-1/2" CHWS/R UP TO ROOF. EXTERIOR PIPING TO BE HEAT TRACED. PROVIDE MANUAL SHUT OFF VALVE IN CEILING AT ROOF PENETRATION.
4. REFRIGERANT PIPING DOWN FROM ROOF TO CEILING. COORDINATE EXACT SIZE AND ROUTING REQUIREMENTS WITH MANUFACTURER.
5. ROUTE CONDENSATE TO MOP SINK LOCATED IN JANITOR CLOSET.

09-411001-

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## KEY PLAN
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| 3 | CHANGE DIRECTIVE #2 | 07-02-09 |

| NO. | ISSUE | DATE |
|---|---|---|

| Sheet Information | |
|---|---|
| Date | 03-06-2009 |
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| Drawn | AB |
| Checked | MM |
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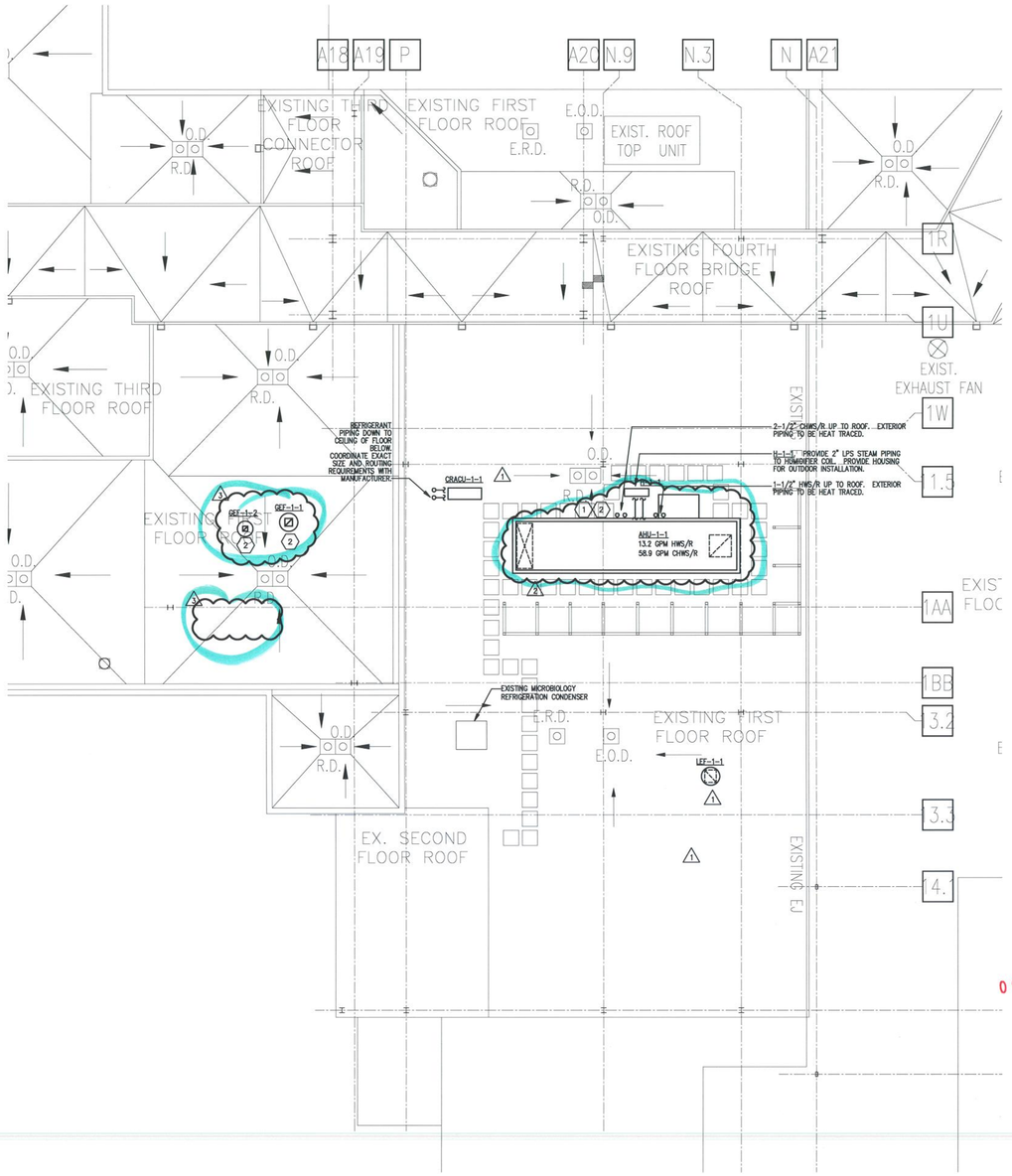
PIPING PLAN FIRST FLOOR

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# M-3001

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## GENERAL NOTES

A. REFER TO SHEET M-0000 FOR GENERAL NOTES.

B. PROVIDE HEAT TRACING FOR ALL EXTERIOR CHILLED WATER, HOT WATER, AND DOMESTIC COLD WATER PIPING.

C. PROVIDE BACKFLOW PREVENTER FOR ALL DOMESTIC WATER PIPING LINES ROUTED TO HVAC EQUIPMENT.

## LEGEND NOTES

1. ROUTE CONDENSATE FROM COOLING COIL TO NEAREST ROOF DRAIN.
2. ROUTE 2" CONDENSATE FROM HUMIDIFIER TO MOP SINK LOCATED IN THE JANITOR CLOSET AT THE FLOOR BELOW. PROVIDE DRAIN COOLER FOR HUMIDIFIER CONDENSATE.

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## 01 PIPING PLAN - ROOF

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


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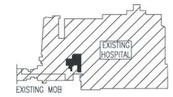
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## KEY PLAN

FIRST FLOOR




COLORADO LICENSED PROFESSIONAL ENGINEER

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| 2 | CHANGE DIRECTIVE #1 | 05-18-09 |
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| NO. | ISSUE | DATE |
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PIPING PLAN ROOF

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M-3002

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# AIR HANDLING UNIT SCHEDULE

| DESIGNATION | | AHU-1-1 |
|---|---|---|
| LOCATION | | CATH LAB ROOF |
| SERVICE | | CATH LAB AND MICROBIOLOGY |
| SUPPLY FAN | CFM (MAX) | 14,800 |
| | ESP / TSP ("WG) | 2.25 (2) |
| | FAN MOTOR HP (MIN) | 30 |
| | POWER (VOLTS / PH) | 460 / 3 |
| | FAN WHEEL DIAMETER (IN) | 22 |
| | FAN WHEEL TYPE | AF |
| | DRIVE | VFD |
| | FAN RPM | 2244 |
| RETURN FAN | CFM (MAX / MIN) | 14,800 |
| | ESP / TSP ("WG) | 2.0 (2) |
| | FAN MOTOR HP (MIN) | 15 |
| | POWER (VOLTS / PH) | 460/3 |
| | FAN WHEEL DIAMETER (IN) | 25 |
| | FAN WHEEL TYPE | FC |
| | DRIVE | VFD |
| | FAN RPM | 678 |
| COOLING COIL DATA | TYPE / SQ FT (MIN) | CHW / 31.1 |
| | CFM | 14,800 |
| | MAX FACE VEL (FPM) | 475 (1) |
| | MAX AIR P.D. ("WG) | 3.0 |
| | TOTAL / SENS / LAT (MBH) (MIN) / SHR | 414.14 / 414.13 / 0.01 / 1.0 |
| | EAT °F DB/WB | 79 / 58 |
| | LAT °F DB/WB | 48 / 46 |
| | EWT °F/ LWT °F | 42 / 56 |
| | GPM (MAX) | 58.95 |
| | WATER P.D. (FT) | 12.0 |
| | MIN ROWS / MAX FINS PER FOOT | 8 / 122 |
| GLYCOL COIL DATA | TYPE / SQ FT (MIN) | NONE |
| | CFM | |
| | MAX FACE VEL (FPM) | |
| | MAX AIR P.D. ("WG) | |
| | TOTAL / SENS / LAT (MBH) (MIN) / SHR | |
| | EAT °F DB/WB | |
| | LAT °F DB/WB | |
| | EWT °F/ LWT °F | |
| | GPM (MAX) | |
| | WATER P.D. (FT) | |
| | MIN ROWS / MAX FINS PER FOOT | |
| HEATING COIL DATA | TYPE / POSITION | HW / PREHEAT |
| | CFM | 14,800 |
| | MAX FACE VEL (FPM) | 475 (1) |
| | MAX AIR P.D. ("WG) | 0.16 |
| | SENS (MBH) | 198 |
| | EAT °F DB | 40 |
| | LAT °F DB | 55 |
| | EWT °F/ LWT °F | 180 / 150 |
| | GPM (MAX) | 13.2 |
| | WATER P.D. (FT) | 0.22 |
| | MIN ROWS / MAX FINS PER FOOT | 2 / 82 |
| HUMIDIFICATION MODULE DATA | CFM | 14,800 |
| | STEAM (LBS/HR) | 189.5 |
| | ERH/LRH | 26/41.5 |
| | EWB/LWB | 58/64 |
| | CONTROL TYPE | ELECTRONIC |
| OUTSIDE AIR CFM (MIN) (AT FULL COOLING) | | 2,960 |
| FIRST FILTER DATA | CFM | 14,800 |
| | TYPE | SNAP-IN (1) |
| | EFFICIENCY (%) (ASHRAE 52) | MERV 11 (65%) |
| | MAX. VELOCITY (FPM) | 450 |
| | P.D. (DIRTY / CLEAN) | 1.0 / 0.3 |
| FINAL FILTER DATA | CFM | 14,800 |
| | TYPE | HEPA |
| | EFFICIENCY (%) (ASHRAE 52) | 99.75% |
| | MAX. VELOCITY (FPM) | 450 |
| | P.D. (DIRTY / CLEAN) | 1.5 / 0.5 |
| BASED ON (MANUF / MODEL NO.) | | HAAKON (2) |
| WEIGHTS (INCLUDING PLENUMS) | | 8490 |
| REMARKS / NOTES | | 1 - 18 |

NOTES:

1. CLEAN FILTERS. ISP EQUALS AHU SP LOSS WITH CLEAN FILTERS. TSP EQUALS ESP + ISP. TSP LISTED IS FOR REFERENCE ONLY.
2. FAN MOTOR NAMEPLATE HP SHALL NOT BE EXCEEDED AT SCHEDULED CFM AND TSP
3. IF MANUFACTURERE'S COOLING COIL PROMOTES MOISTURE CARRYOVER AT THE ALLOWABLE MAX FACE VELOCITY, THEY SHALL OVERSIZE THE COIL FACE AREA TO PREVENT MOISTURE CARRYOVER AT THESE CONDITIONS.
4. COILS SHALL NOT BE COATED UNLESS OTHERWISE INDICATED.
5. COOLING COIL SENSIBLE HEAT RATIO (SHR) TOLERANCE EQUALS PLUS OR MINUS 0.3. EXAMPLE: CSHR = 0.79 MAX = 0.76 MIN=0.82
6. 5/8" OD TUBES
7. PROVIDE VAPOR-TIGHT FLUORESCENT LIGHT FIXTURE IN EACH ACCESSIBLE SECTION. PROVIDE ONE 3-WAY SWITCH WITH PILOT LIGHT ON EACH SIDE OF AHU TO ENERGIZE ALL LIGHTS. FACTORY WIRE ALL FIXTURES AND SWITCHES TO EXTERNAL JUNCTION BOX FOR FIELD CONNECTION TO A 277V CIRCUIT
8. HEATING COIL SHALL BE SAME SIZE AS CHW COIL UNLESS OTHERWISE INDICATED.
9. PRE-FILTERS SHALL BE SNAP-IN TYPE WITH SUPPORTS ON ALL FOUR SIDES. FILTER BANK SHALL BE FULL-SIZE. BLANK-OFF PLATES SHALL NOT BE USED. FILTERS AS MFG BY 3M/FILTRETE 800 ES PREMIUM.
10. REFER TO HUMIDIFIER SCHEDULE FOR HUMIDFICATION SECTION.
11. HORIZONTAL DRAW-THRU
12. DOUBLE WALL CONSTRUCTION: 2" THICK, 3# INSULATION.
13. INTERNALLY ISOLATED FAN, DRIVE, AND MOTOR.
14. VARIABLE FREQUENCY DRIVES FOR EACH FAN MOTOR.
15. AHU SECTION WITH HUMIDIFIERS
    (2) RETURN FAN SECTION
    -
    -
    -
    AIR MIXING/SMOKE PURGE/RELIEF AIR
    AIR MIXING / FILTER SECTION
    AIR BLENDER SECTION
    HEATING COIL SECTION
    ACCESS SECTION
    HUMIDIFICATION SECTION
    COOLING COIL SECTION
    ACCESS SECTION
    MOISTURE ELIMINATOR SECTION
    SUPPLY FAN SECTION
    DIFFUSER SECTION
    FINAL FILTER SECTION
    DISCHARGE PLENUM
16. OUTSIDE AIR INTAKE SHALL BE 3'-0" MINIMUM ABOVE ADJACENT ROOF LEVEL.
17. FURNISH MOTORIZED CONTROL DAMPERS FOR SA, RA, SMOKE PURGE, RELIEF AIR AND OA WITH UNIT.
18. PROVIDE SUPPLY FAN WITH FACTORY INSTALLED AIR FLOW MEASURING PORTS.
19. PROVIDE PARAGON CONTROLS PIEZOMETER RINGS CERTIFIED TO MEASURE AIR FLOW WITHIN +/- 3.0% ACCURACY FOR SUPPLY AND RETURN FAN AIRFLOW MEASUREMENTS. (3)

# PUMP SCHEDULE

| DESIGNATION | SERVES | LOCATION | TYPE | MIN EFF % | GPM | TDH FT | ELECTRICAL HP | ELECTRICAL BHP | ELECTRICAL RPM | ELECTRICAL VOLT / PH | MANUFACTURER MODEL # | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHP-1-1 | AHU-REHEAT PUMP | CATH LAB EXPANSION | IN-LINE | 70 | 15 | 45 | 0.75 | – | 1750 | 277/1 | B&G SERIES 60 (1X1X5 1/2") | 1 |
| CP-1-1 | CRAC-1-1 CONDENSATE PUMP | CATH LAB EXPANSION | IN-LINE | – | 1.1 | 5 | 1/30 | – | 1750 | 115/1 | LITTLE GIANT VCC-20ULS | 4 |

NOTES: (3)

1. VARIABLE FREQUENCY DRIVE WITH INVERTER DUTY RATED MOTOR AND BYPASS SWITCH.
2. BASE MOUNTED.
3. STEEL OR CAST IRON BASE WITH DRAIN PAN AND DRAIN PIPE CONNECTION.
4. CONSTANT SPEED PUMP
5. ONE AS STANDBY

GENERAL NOTES:

A. NAMEPLATE HORSEPOWER SHALL BE NON-OVERLOADING ON CURVE.
B. PROVIDE 1750 RPM MOTORS UNLESS OTHERWISE INDICATED.
C. OUTDOOR MOTORS SHALL BE TEFC PER DIV 23 SPECS.

# ELECTRIC STEAM GENERATION HUMIDIFIER SCHEDULE

| MARK | EQUIPMENT SERVED | CFM | MINIMUM HUMIDIFIER OUTPUT (LBS / HR) | MINIMUM NO. OF TUBES | MAX. ABSORPTION DISTANCE | MANUF. / MODEL | NOTES | ELECTRICAL DATA |
|---|---|---|---|---|---|---|---|---|
| H-1-1 | AHU-1-1 | 14,800 | 188.0 | 6" SPACING | 24", NO EXCEPTIONS | ARMSTRONG/HC-6500 | ALL | 480/3/60, 72kW |

NOTES:

1. MULTI-TUBE DISPERSION. FOR UNITS IN AHU'S, REFER TO SCHEDULE FOR AVAILABLE COIL AREA. ALLOW 18" HEIGHT ALONG BOTTOM OF COIL FACE AREA FOR GRIC CONDENSATE DRAINAGE. HUMIDIFIER GRIDS SHALL BE INSTALLED AT AHU FACTORY, COMPLETE WITH PIPING.
2. 15 PSIG STEAM INLET PRESSURE.
3. ARMSTRONG ULTASORB GRID.
4. OTHER REQUIRED COMPONENTS:
   STEAM TRAPS.
   ELECTRIC MODULATING STEAM VALVES.
   STRAINERS.
   DUCT HIGH LIMIT HUMIDISTAT.
   AIR FLOW SWITCH.
   DRAIN COOLER, HORIZONTAL STYLE.
5. PROVIDE HOUSING FOR HUMIDIFIER FOR OUTDOOR INSTALLATION.

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09-411001-

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/31/09

## GENERAL NOTES

A. SELECT ALL EQUIPMENT FOR 5331 FEET ABOVE SEA LEVEL.
B. MOTORS FOR USE WITH A VFD SHALL BE INVERTER DUTY RATED AND NAMEPLATED.
C. 480/3 PHASE POWER FOR ALL MOTORS 3/4 HP AND LARGER.
D. BELT DRIVES SHALL BE RATED 1.5 TIMES MOTOR H.P.
E. PROVIDE MAGNETIC MOTOR STARTER FOR ALL NON-VFD MOTORS.


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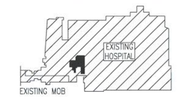

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## KEY PLAN
FIRST FLOOR







**Revisions**

| | | |
|---|---|---|
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| 2 | CHANGE DIRECTIVE #1 | 05-18-09 |
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| NO. | ISSUE | DATE |
|---|---|---|

**Sheet Information**

| | |
|---|---|
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| Job Number | 142542.000 |
| Drawn | AB |
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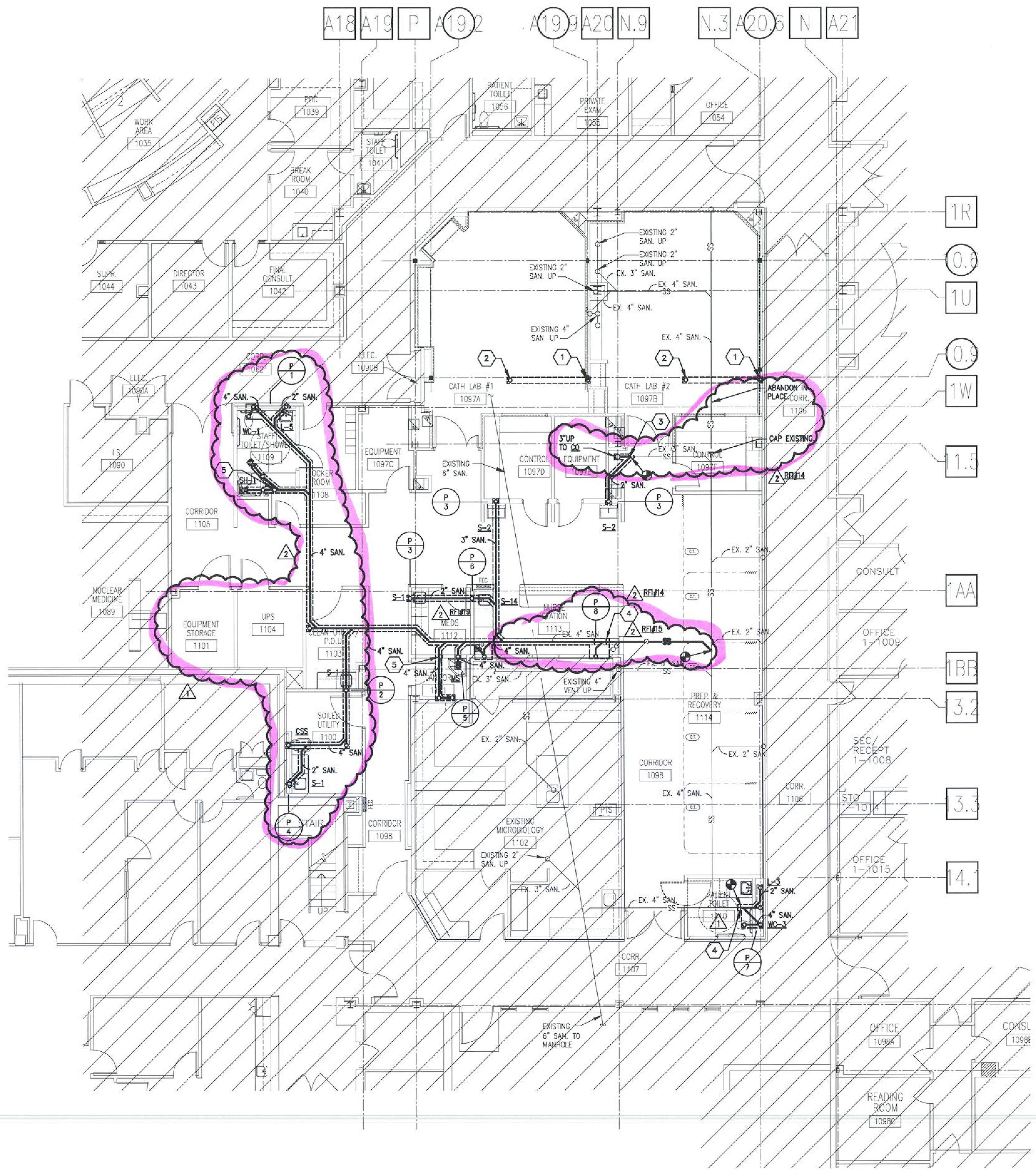
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Sheet

**M-5002**

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## 01 PLUMBING PLAN - UNDERFLOOR

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

## GENERAL NOTES

A. VERIFY EXACT LOCATION & SIZE OF EXISTING SANITARY LINES AT NEW CONNECTION POINTS.

B. COORDINATE WITH OTHER TRADES FOR EXACT LOCATION OF GAS PIPING SLEEVE.

## KEYED NOTES

1. 1/2" OXYGEN, 1/2" MEDICAL AIR, 3/4" MEDICAL VACUUM FROM ABOVE. SEE P-2001 FOR CONT.
2. 1/2" OXYGEN, 1/2" MEDICAL AIR, 3/4" MEDICAL VACUUM UP TO AMICO 12" FLOOR PEDESTAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SEE P-2001 FOR CONT. COORDINATE WITH PHILLIPS EQUIPMENT AND ARCHITECTURAL PLANS FOR EXACT LOCATION..
3. CONNECT TO EXISTING 3" SANITARY. VERIFY LOCATION, SIZE, AND INVERT ELEVATION BEFORE INSTALLATION OF NEW PIPING.
4. CONNECT TO EXISTING 4" SANITARY. VERIFY LOCATION, SIZE, AND INVERT ELEVATION BEFORE INSTALLATION OF NEW PIPING.
5. 1/2" CW UP TO TRAP PRIMER.

ONLY HIGHLIGHTED REVISIONS APPROVED. ALL PREVIOUS COMMENTS APPLY.

09-411001-

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE 7/31/09


PERKINS & WILL

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Dallas, Texas 75231, USA
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**Medical Center of Aurora**
1501 S. Potomac
South Campus
Cath Lab
Aurora, Colorado 80012
**HCA**
Project # 306660005

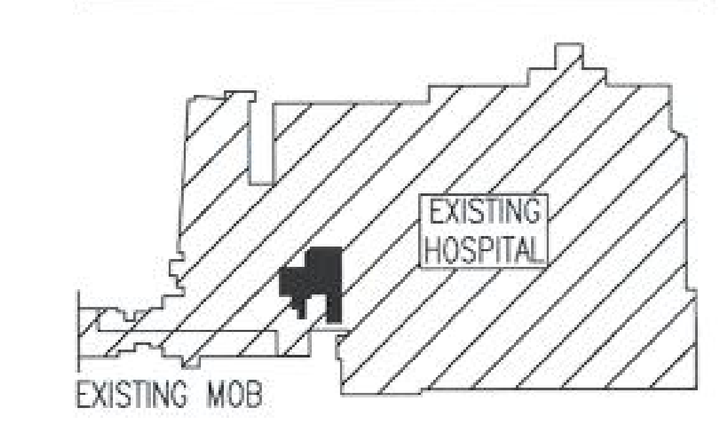

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## KEY PLAN

FIRST FLOOR




**Revisions**

| NO. | ISSUE | DATE |
|---|---|---|
| 1 | ADDENDUM #2 | 04-22-09 |
| 2 | CHANGE DIRECTIVE #2 | 07-02-09 |

**Sheet Information**

| | |
|---|---|
| Date | 03-06-2009 |
| Job Number | 142542.000 |
| Drawn | AB |
| Checked | MM |
| Approved | MM |

**Title**

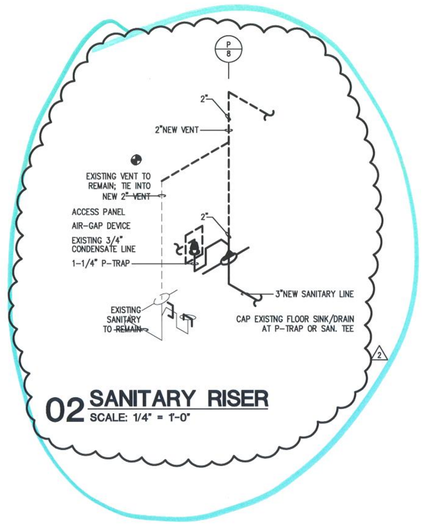
PLUMBING PLAN UNDERFLOOR

**Sheet**

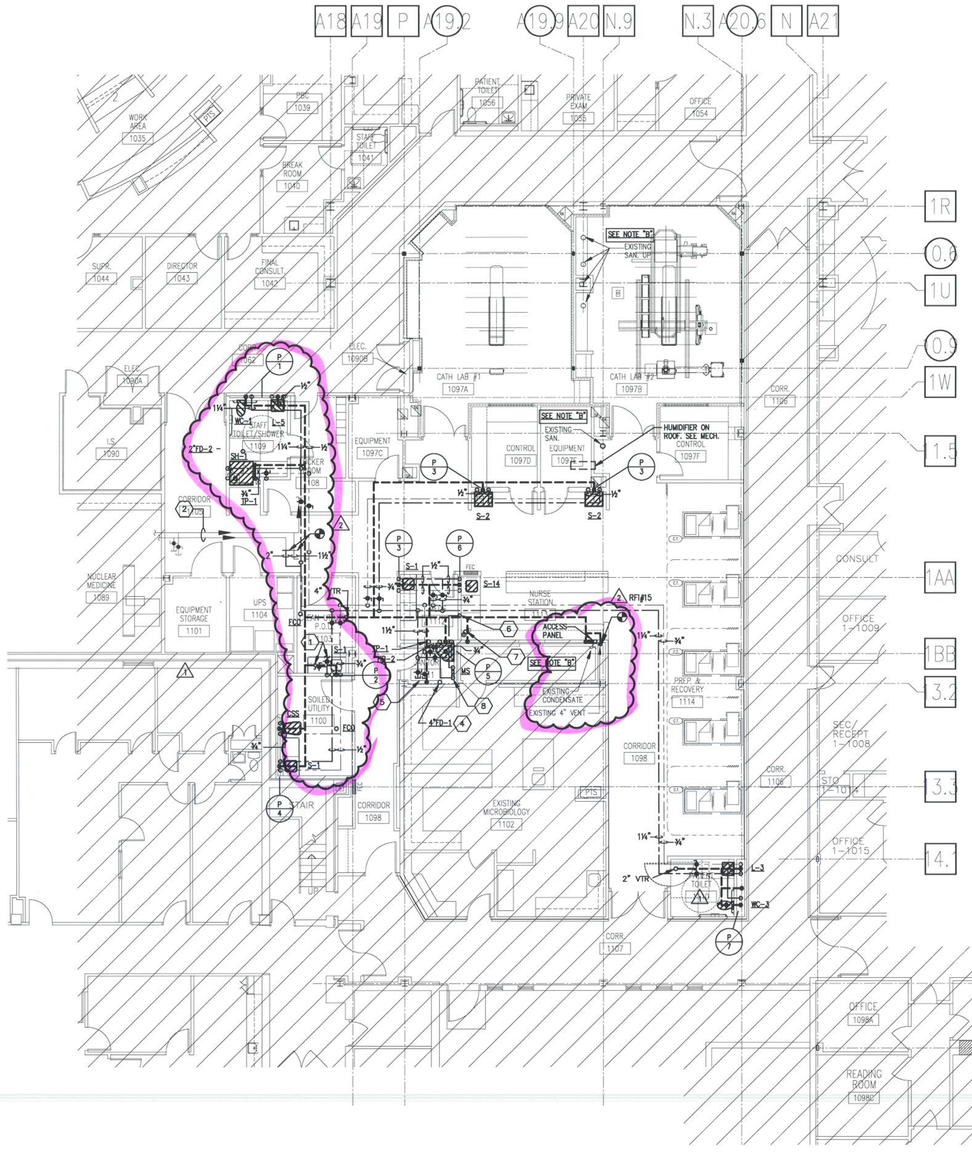
# P-1001

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## 02 SANITARY RISER
SCALE: 1/4" = 1'-0"




## 01 PLUMBING PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

## GENERAL NOTES

A. ROUTE ALL PLUMBING PIPING AS TIGHT AS POSSIBLE TO BOTTOM OF FLOOR STRUCTURE AND FLOOR JOISTS.

B. VERIFY ALL EXISTING SANITARY PIPING ARE CAPPED. VERIFY ALL EXISTING VENTS ARE CAPPED IN CEILING FOR CONNECTION TO NEW VENT.

## KEYED NOTES

1. 1/2" COLD DOWN UP FROM RPBP UNDER SINK. 1/2" COLD WATER UP TO LIEBERT UNIT AND HUMIDIFIER UNIT, SEE MECH. PLANS.
2. EXISTING HW & CW MAINS.
3. 2" HUB DRAIN WITH FUNNEL ABOVE CASEWORK OF CABINET. SEE DETAIL SHT. P-4001.
4. 4" FD-2 FOR FUTURE RPBP LOCATION FOR MICROBIOLOGY LAB.
5. 1-1/2" HW & CW VALVED AND CAPPED FOR FUTURE CONNECTION.
6. 1/2" CW DOWN TO RPBP FOR ICE MAKER. SEE DETAIL SHEET P-4001.
7. ADD FUNNEL TO EXISTING FD. SEE DETAIL SHEET P-4001.
8. FILTERED WATER SYSTEM FOR ICE MACHINE AT N.S. 1113. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

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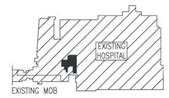
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## KEY PLAN
FIRST FLOOR







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PLUMBING PLAN FIRST FLOOR

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# P-2001

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