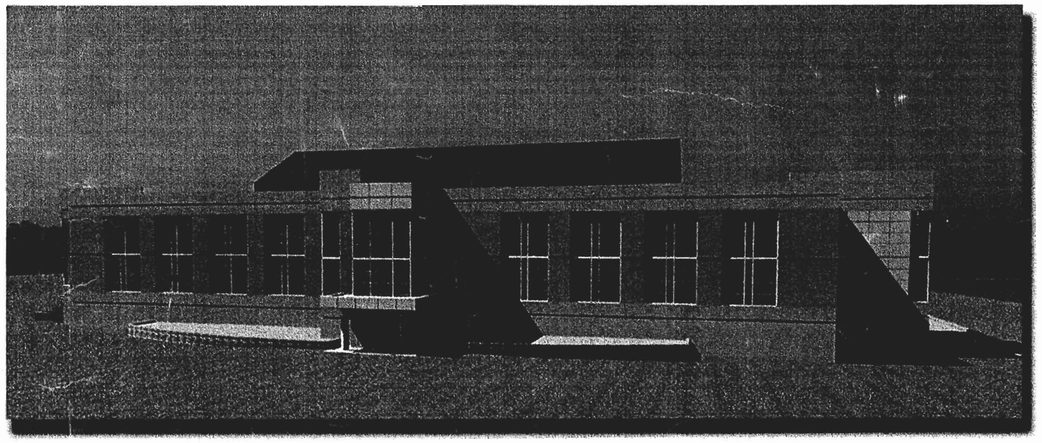
BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY



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Arkansas Governor

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SYMBOLS

SECTION — A / A500 — SECTION NUMBER / SHEET NUMBER

DETAIL — 1 / A001 — DETAIL NUMBER / SHEET NUMBER

DOOR — 1

ALUMINUM FRAME — AF-1

HOLLOW METAL FRAME — HM-1

CURTAIN WALL FRAME — CW -1

EXISTING CONTOUR LINE

NEW CONTOUR LINE

NEW SPOT ELEVATION — 259.67

FINISH ELEVATION — ELEV. = 100.00

ABBREVIATIONS

ABOVE FINISH FLOOR	A.F.F.	METAL THRESHOLD	M.T.
ALUMINUM	ALUM.	NOMINAL	NOM.
APPROXIMATE	APPROX.	NOT IN CONTRACT	N.I.C.
CEILING	CLG.	ON CENTER	O.C.
CENTER LINE	℄	PLATE	PL
EACH	EA.	REQUIRED	REQ.
ELECTRIC WATER COOLER	E.W.C.	SIMILAR	SIM.
FINISH	FIN.	SQUARE	SQ.
FIRE EXTINGUISHER	F.E.	SUSPENDED	SUSP.
FIRE EXTINGUISHER CABINET	F.E.C.	TACKBOARD	TB
FLOOR	FLR.	TOP OF CURB	T.O.C.
GENERAL CONTRACTOR	G.C.	TOP OF FOOTING	T.O.F.
INSULATION	INSUL.	TOP OF WALL/WALK	T.O.W.
JOINT	JNT.	TYPICAL	TYP.
MECHANICAL	MECH.	WITH	W/
MARKERBOARD	MB	MILLWORK	MW

MATERIALS

CONCRETE
STEEL
METAL STUDS
CONCRETE BLOCK
PLYWOOD
FINISH WOOD
WOOD FRAMING OR BLOCKING
GYPSUM BOARD
RIGID INSULATION
BATT INSULATION
BLOWN INSULATION
COMPACT FILL
GRAVEL FILL
ASPHALT PAVING

ARKANSAS FIRE PREVENTION CODE DATA
2000 INTERNATIONAL BUILDING CODE

OCCUPANCY CLASSIFICATION ..... Business Occupancy – Group B

BUILDING AREA: As Defined In Section (502.1)
- First Floor ..... 17,350 sq. ft.
- Second Floor ..... 27,517 sq. ft.
- Third Floor ..... 27,517 sq. ft.
- Fourth Floor/ Roof ..... 11,600 sq. ft.

TOTAL BUILDING AREA ..... **83,984 sq. ft.**

BUILDING HEIGHT ..... 60'-0"

NUMBER OF STORIES ..... Four (4) Stories

TYPE OF CONSTRUCTION ..... Type IIA, Sprinklered

ALLOWABLE AREA (TABLE 503) ..... 37,500 sq. ft. per floor *(without area modifications)*

MAXIMUM HEIGHT (TABLE 503) ..... 65'-0"

MAXIMUM NUMBER OF STORIES (TABLE 503) ..... Five (5)

BUILDING SETBACKS
All faces of building are in excess of 30'-0" to street, parking and adjacent buildings.

FIRE RESISTANCE RATINGS (Table 601)
Note "d" of table 601 will allow substitution of an automatic sprinkler system in accordance with 903.3.1.1 in lieu of 1-hour fire-resistance-rated construction.

INTERIOR EXIT ACCESS CORRIDORS (Table 1004.3.2.1) ..... 0 hr.

SHAFT ENCLOSURES (Sec. 707.4) ..... 2 hr. walls; 1 1/2 hr. openings

MAXIMUM TRAVEL DISTANCE TO EXIT (Table 1004.2.4) ..... 300'-0"

MAXIMUM DEAD END CORRIDOR (Sec. 1004.3.2.3) ..... 50'-0" *(where sprinklered)*

EGRESS WIDTH PER PERSON (Table 1003.2.3) ***(with sprinkler system)***
- Level ..... 0.15"
- Stairs ..... 0.2"

MINIMUM CORRIDOR WIDTH (Sec. 1004.3.2.2) ..... 44"

MINIMUM STAIR WIDTH (Sec. 1003.3.3.1) ..... 44"
Note: 48" for accessible means of egress (1003.2.13.2)

ACCESSIBLE ELEVATOR REQUIRED
For buildings four (4) or more stories as means of egress (Sec. 1003.3.13.1.1)

OCCUPANCY LOAD (Table 1003.2.2.2)
- First Floor ..... 17,350 ÷ 100 = 173
- Second Floor ..... 27,517 ÷ 100 = 275
- Third Floor ..... 27,517 ÷ 100 = 275
- Fourth Floor/ Roof ..... 11,600 ÷ 100 = 116

TOTAL BUILDING OCCUPANCY ..... 839 persons

HAZARDOUS STORAGE (Table 414.2.2)
- Room 1 hr. rated with 2o minutes doors
- 2 hr. floor separation

Hazardous material quantity can not exceed exempt quantities as listed in Tables 307.7 (1 and 2) and must meet requirements of section 414.

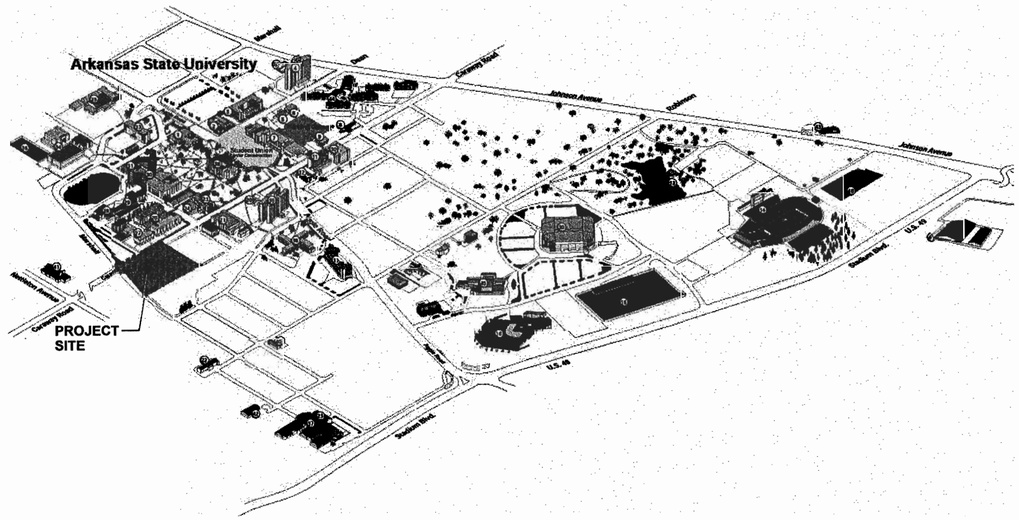
SEISMIC REQUIREMENTS ..... **(Zone 3) CATEGORY D**
Per requirements of Chapter 16

CERTIFICATION

I hereby certify that these plans and specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these plans and specifications are as required by law and in compliance with the Arkansas Fire Prevention Code for the State of Arkansas and the 2000 International Building Code.

Jerry W. Brackett
12/23/02

VICINITY MAP



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C003	SITE GRADING AND DRAINAGE PLAN
C003.5	SITE GRADING AND DRAINAGE PLAN
C004	EROSION CONTROL PLAN
C005	SITE DETAILS
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BRACKETT KRENNERICH architects
100 East Huntington, Suite 3 P.O. Box 1655 Jonesboro, Arkansas 72403-1655 870-932-0571 Fax 870-932-0576
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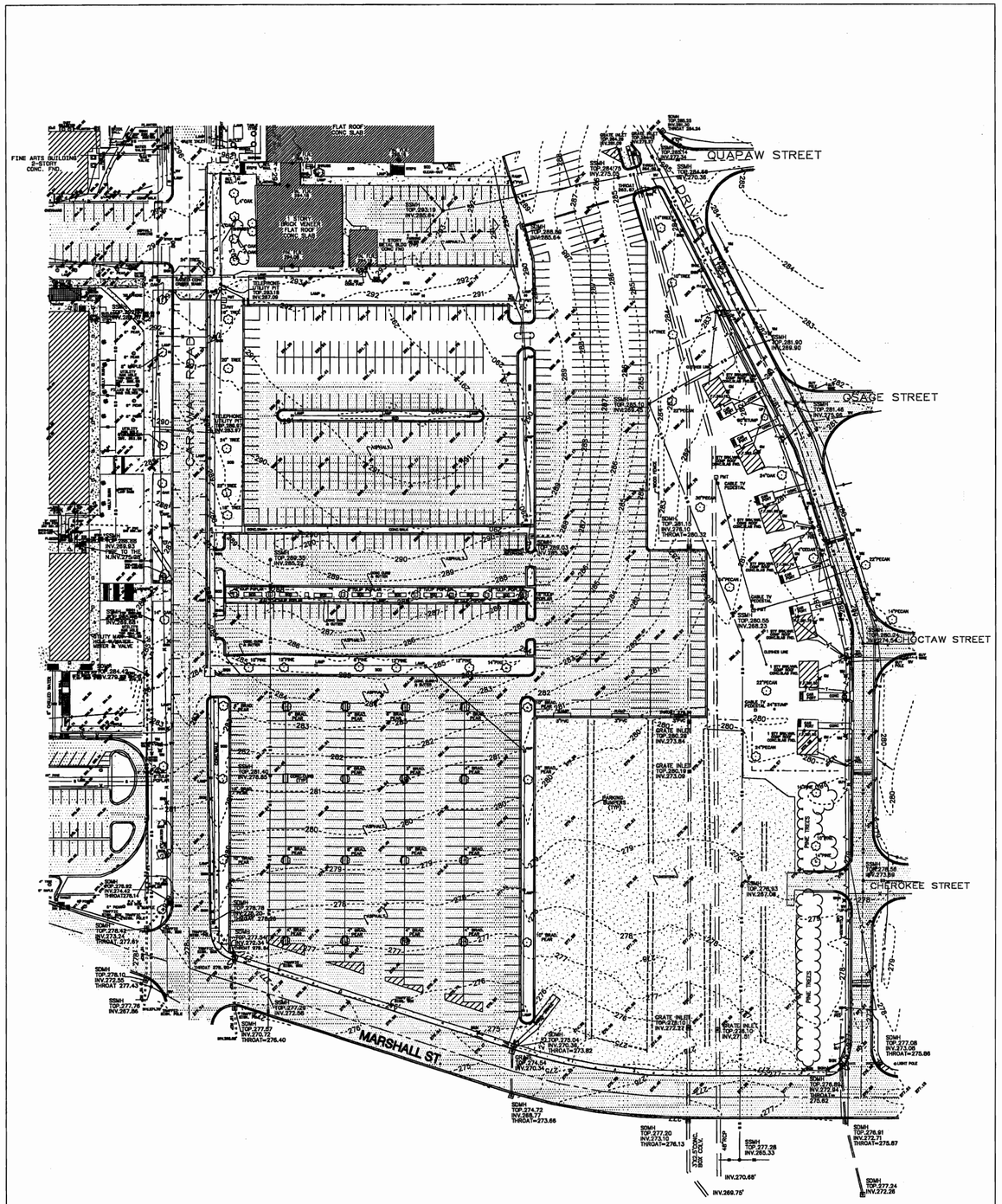
SET NO.



reference sheet only

SCALE: 1"=50'-0"

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REVISIONS		
DATE	BY	DESCRIPTION

CHECKED BY:	CHECKED BY:
DRAWN BY: R. MATTHEWS	SHEET NO. 1 OF 1
DATE: 03/09/01	SCALE: 1"=50'
JOB NO. 800055	DRAWING NO. 16-34

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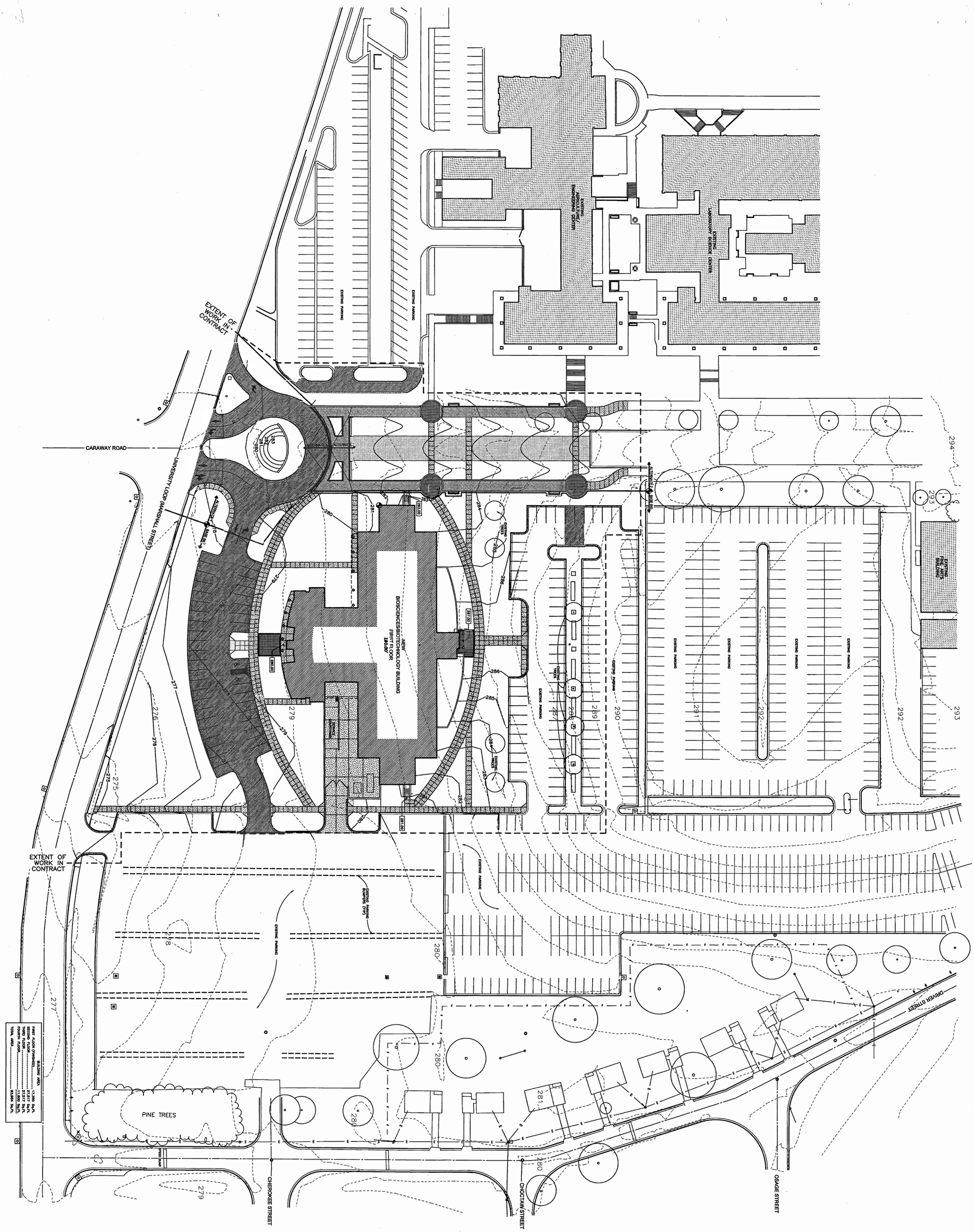
Email bkarch@arkansas.net

REFERENCE SHEET ONLY

Commission Number 10301

REF.

Date: October 25, 2002



site development plan

SCALE: 1" = 30'-0"

BRACKETT KRENNERICH architects

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SITE DEVELOPMENT PLAN

Commission Number 10301

C001

Date: October 25, 2002

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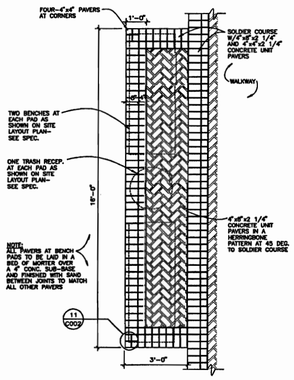

bench pad detail 10

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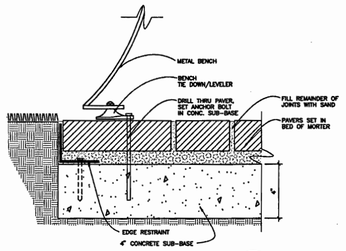
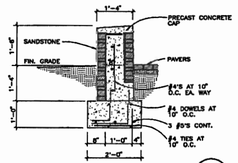


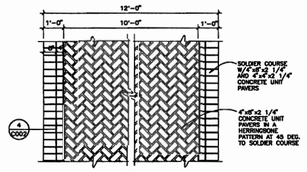
detail at tie down 11

SCALE: 3" = 1'-0"



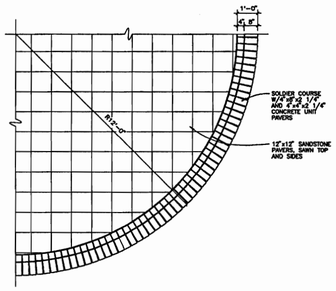
landscape wall detail 9

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



walk detail 8

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



walk detail 7

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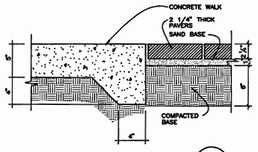

paver to walk 6

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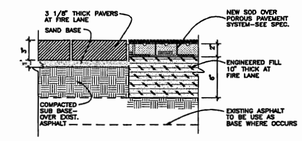

pavement system to pavers 5

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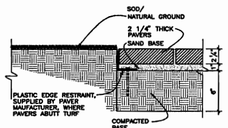

paver to grass 4

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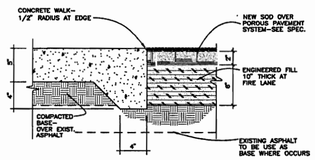
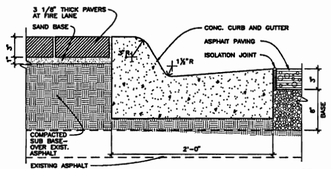


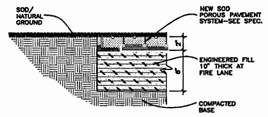
pavement system to walk 3

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



pavers to curb and gutter 2

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



pavement system to grass 1

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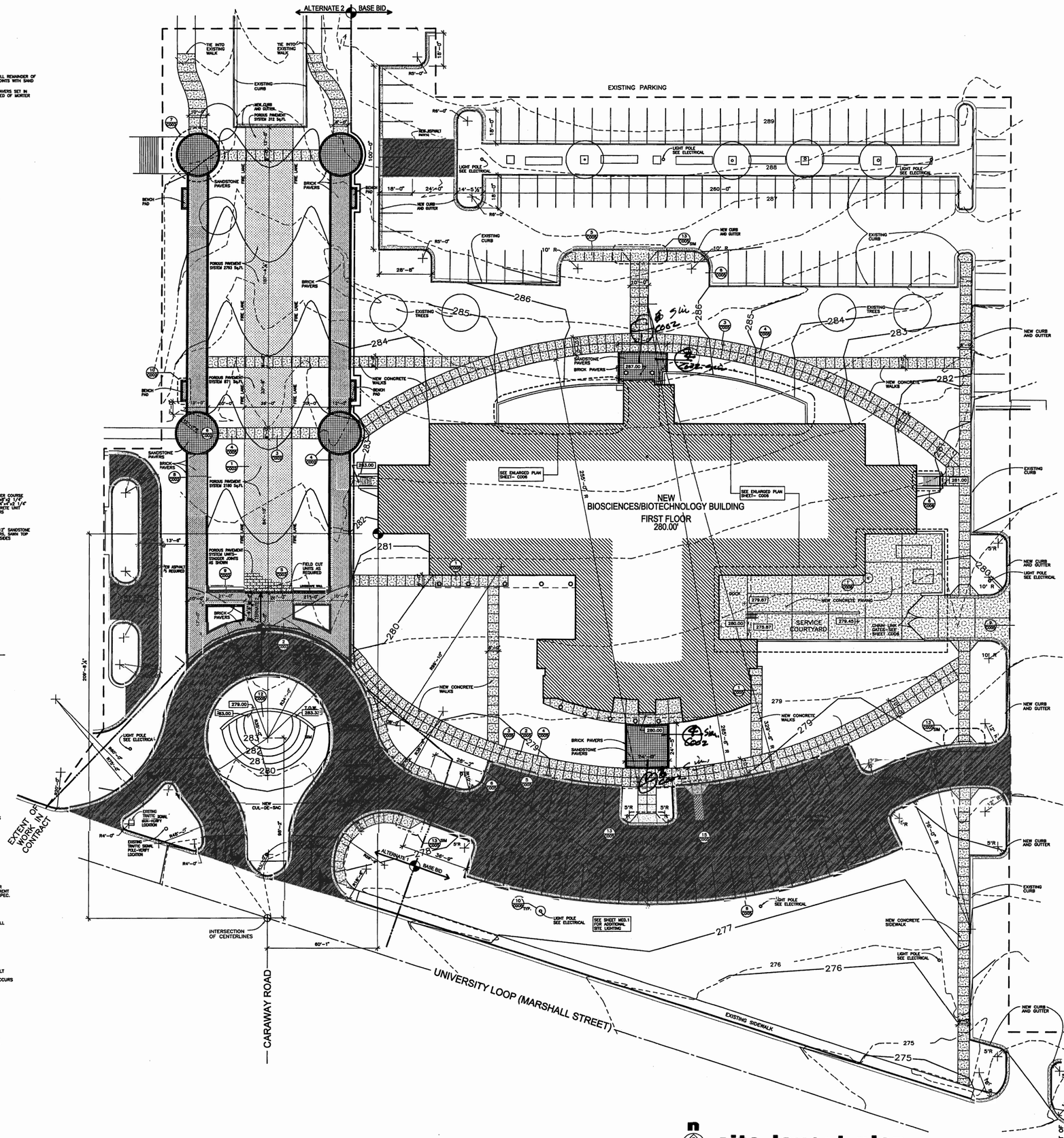


site layout plan

SCALE : 1" = 20'-0"

BRACKETT KRENNERICH architects

BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS 2/3/ 10/25/02 ARKANSAS

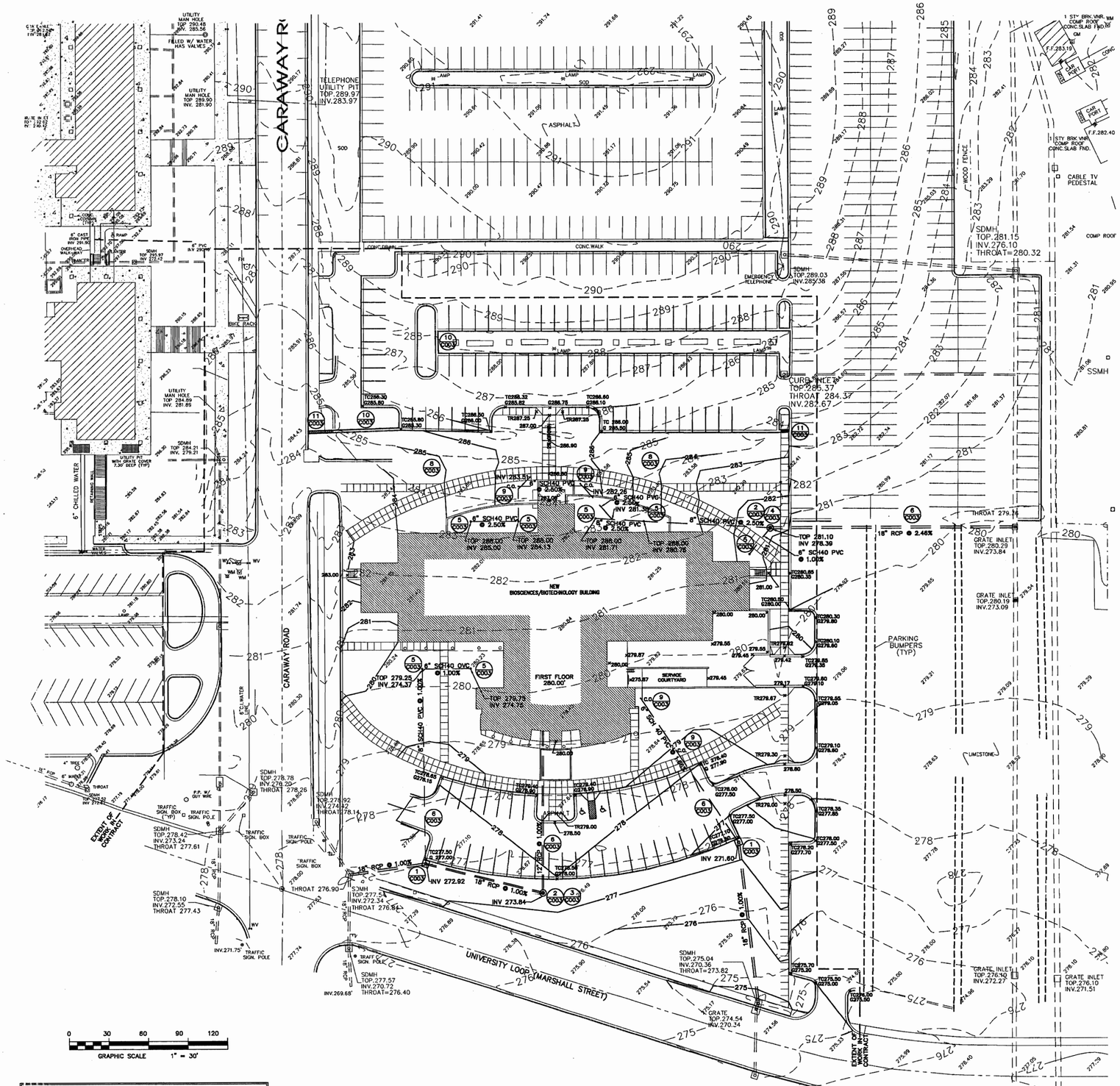
SITE LAYOUT PLAN
SITE DETAILS

Commission Number 10301

C002

Date: October 25, 2002

100 East Huntington, Suite 3 P.O. Box 6555 Jonesboro, Arkansas 72403-1865 870-932-0875 Fax 870-932-0876
Email brac@cablelink.com



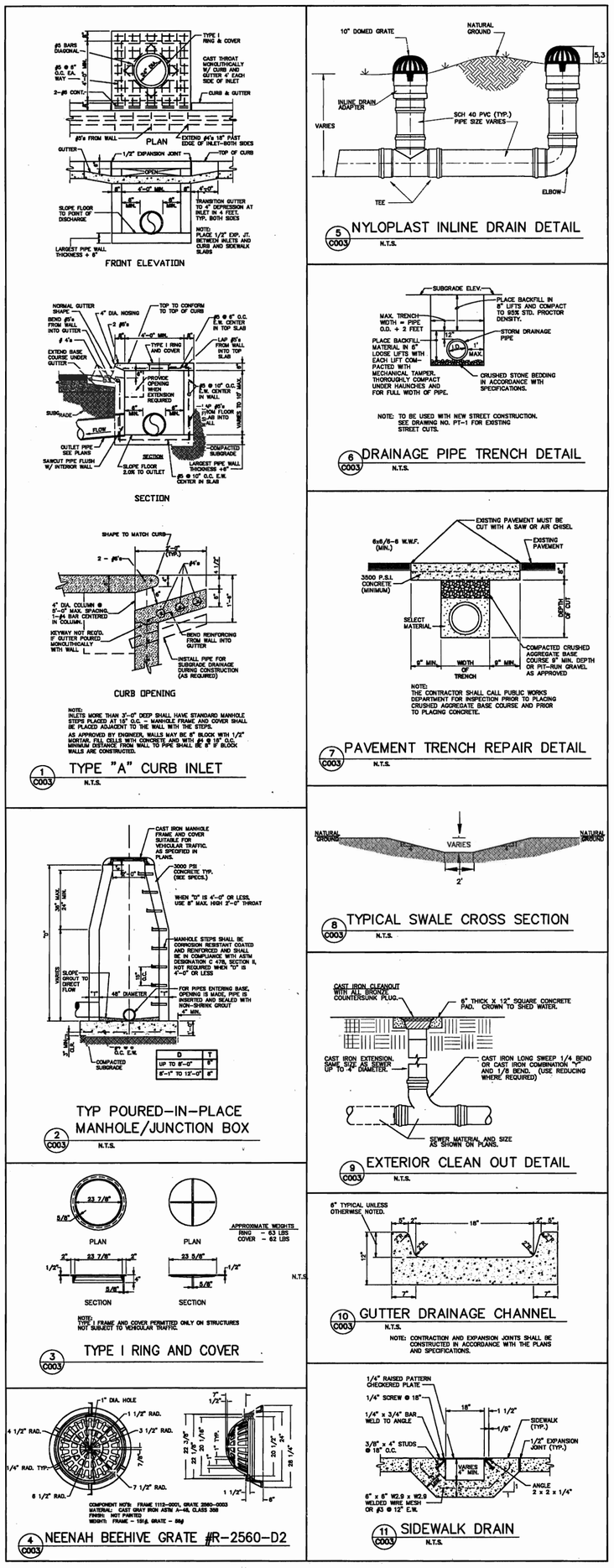
LEGEND:

- 276 — EXISTING CONTOURS
- 278 — PROPOSED CONTOURS
- EXISTING SPOT ELEVATIONS
- ×278.50 PROPOSED SPOT ELEVATIONS
- EXISTING STORM DRAIN PIPE
- PROPOSED STORM DRAIN PIPE
- PROPOSED ROUND INLET/JUNCTION BOX
- PROPOSED CLEAN OUT
- C.O. PROPOSED CURB INLET

NOTE:
1. CONTRACTOR TO NOTIFY ARKANSAS ONE-CALL 48 HOURS PRIOR TO BEGINNING CONSTRUCTION
2. ALL MANHOLES, JUNCTION BOXES, WATER VALVE BOX, ETC THAT LIE WITHIN THE CONSTRUCTION LIMITS ARE TO BE ADJUSTED TO PROPOSED FINISH GRADE.

site grading & drainage plan

SCALE: 1"=30'-0"



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HAYWOOD, KENNARD, BARE & ASSOCIATES, INC.

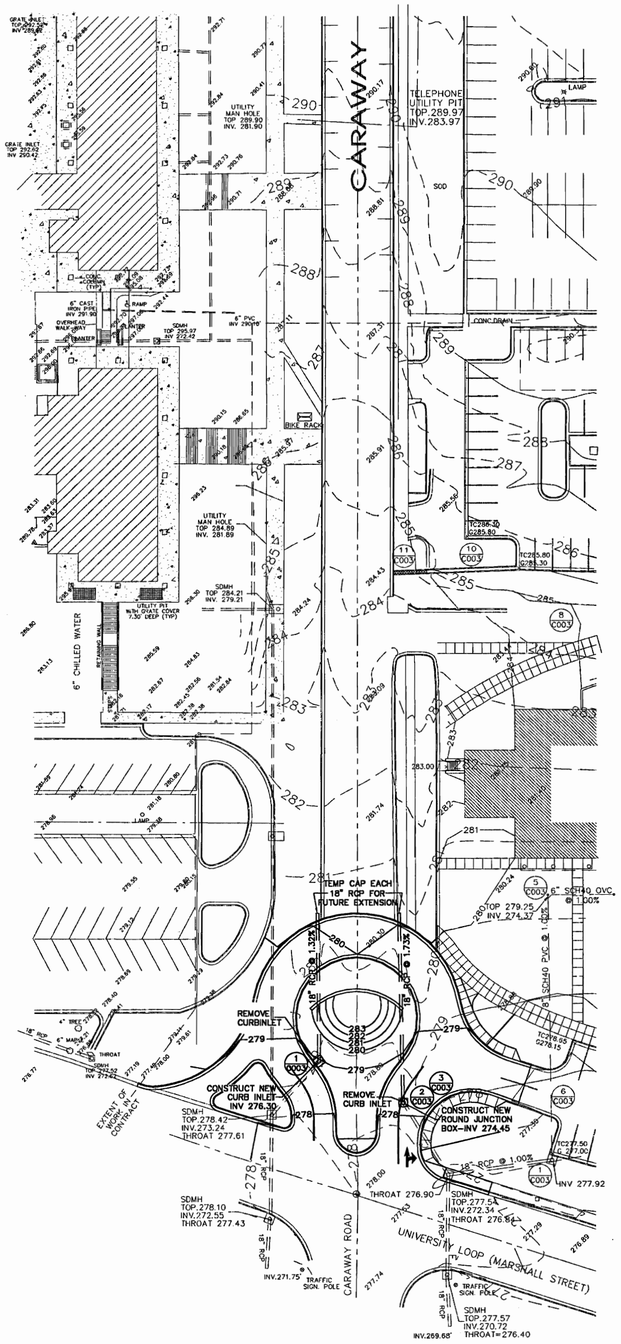
BRACKETT KRENNERICH architects

SITE GRADING & DRAINAGE PLAN

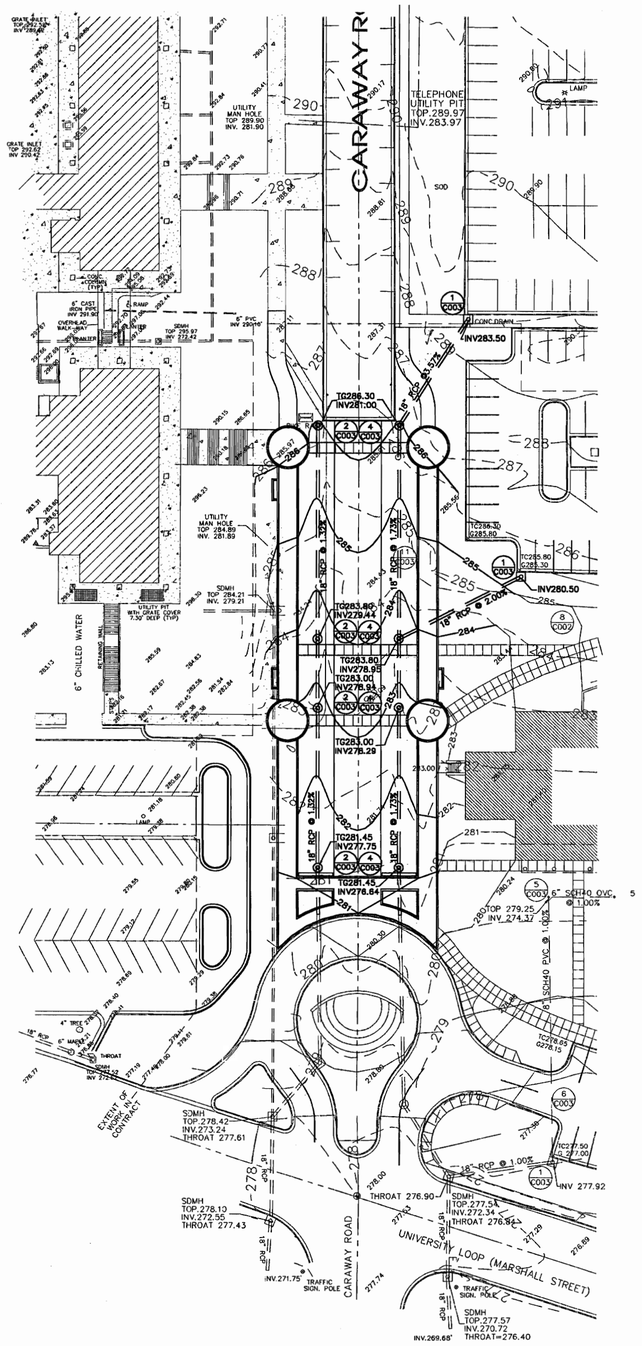
Commission Number 10301

C003

Date: October 25, 2007



alternate 1



alternate 2

NOTE:
1. CONTRACTOR TO NOTIFY ARKANSAS ONE-CALL 48 HOURS PRIOR TO BEGINNING CONSTRUCTION
2. ALL MANHOLES, JUNCTION BOXES, WATER VALVE BOX, ETC THAT LIE WITHIN THE CONSTRUCTION LIMITS ARE TO BE ADJUSTED TO PROPOSED FINISH GRADE.

0 30 60 90 120
GRAPHIC SCALE 1" = 30'

LEGEND:
- -276- - EXISTING CONTOURS
—276— PROPOSED CONTOURS
EXISTING SPOT ELEVATIONS
×278.50 PROPOSED SPOT ELEVATIONS
EXISTING STORM DRAIN PIPE
PROPOSED STORM DRAIN PIPE
PROPOSED ROUND INLET/JUNCTION BOX
PROPOSED CLEAN OUT
C.O. PROPOSED CURB INLET

site grading & drainage plan - alternate 1 & 2

SCALE 1"=30'

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Civil Engineering, Surveying & Planning Services
HKB
HAYWOOD, KENWARD, BARE & ASSOCIATES, INC.
JOHN E. HIGHLAND, P.E.
1400 S. HIGHLAND, SUITE 200
PH (870) 932-2019
FAX (870) 932-1076
E-MAIL: hkb@hkbinc.com

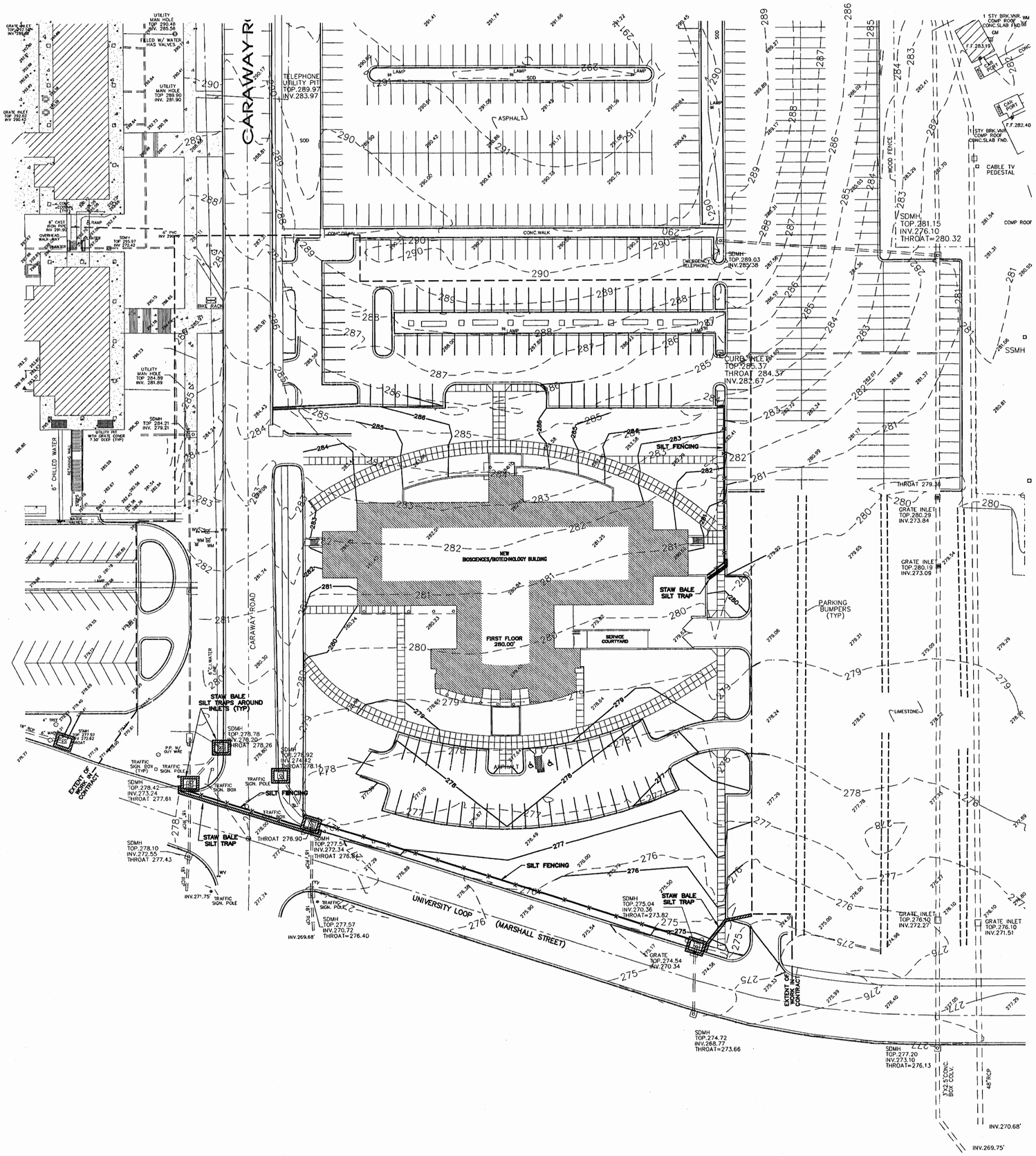
BRACKETT KRENNERICH architects
500 Tuck Huntington, Suite D P.O. Box 14655 Jonesboro, Arkansas 72403-1655
(870) 932-0575 Fax (870) 932-0571 Email brackett@arkansas

SITE GRADING & DRAINAGE PLAN ALTERNATE 1 & 2

Commission Number 10001

C003.5

Date: October 25, 2002



SILT FENCING

STRAW BALE SILT TRAP

0 30 60 90 120

GRAPHIC SCALE 1" = 30'

n

storm water pollution prevention plan

SCALE: 1"=30'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

Civil Engineering, Surveying & Planning Services

HKB

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1301 SOUTH BIRCH, PO BOX 1261
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100 East Huntington, Suite D P.O. Box 1665 Jonesboro, Arkansas 72403-1665

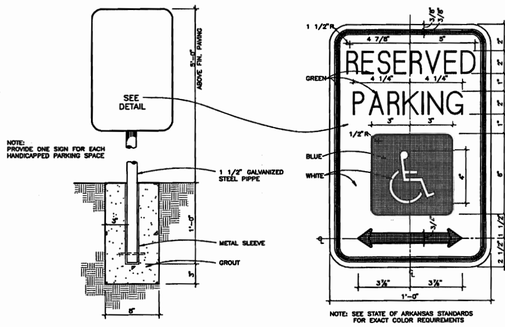
870-932-4071 fax: 870-935-8975 Email: brackett@brackett.com

STORM WATER POLLUTION PREVENTION PLAN

Commission Number 10301

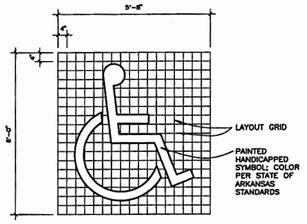
C004

Date: October 25, 2002

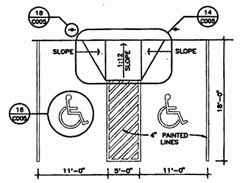


handicapped sign 18
SCALE : 1 1/2" = 1'-0"

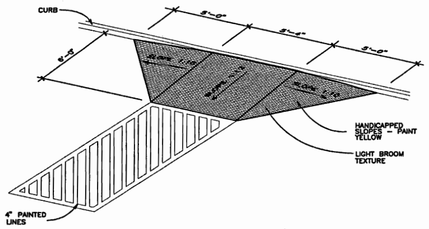
sign detail 17
SCALE: 3" = 1'-0"



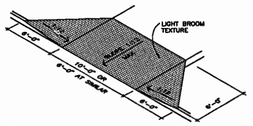
handicap symbol 16
SCALE: 1/2" = 1'-0"



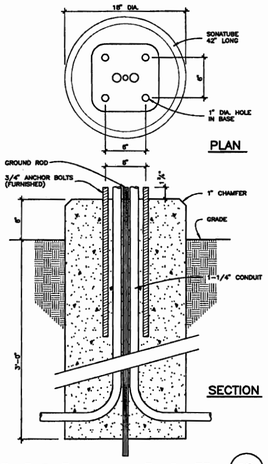
handicap parking detail 15
SCALE: 1/8" = 1'-0"



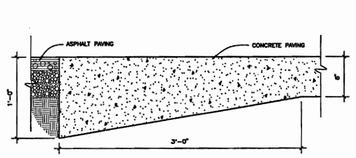
detail at ramp 14
NOT TO SCALE



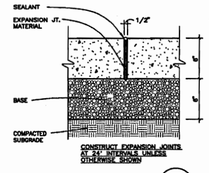
curb cut detail 13
NOT TO SCALE



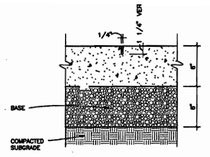
light base detail 10
SCALE : 1 1/2" = 1'-0"



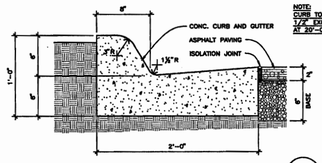
concrete to asphalt detail 9
SCALE: 1 1/2" = 1'-0"



exp. jt. 8
SCALE: 1 1/2" = 1'-0"

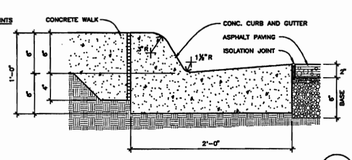


scored jt. 7
SCALE: 1 1/2" = 1'-0"



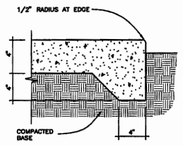
NOTE: CURB TO HAVE 1/2" EXPANSION JOINTS AT 20'-0" O.C.

curb and gutter detail 6
SCALE : 1 1/2" = 1'-0"

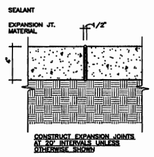


curb and gutter detail 5
SCALE : 1 1/2" = 1'-0"

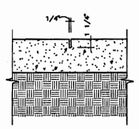
concrete paving details



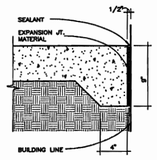
edge joint 4
SCALE: 1 1/2" = 1'-0"



exp. jt. 3
SCALE: 1 1/2" = 1'-0"

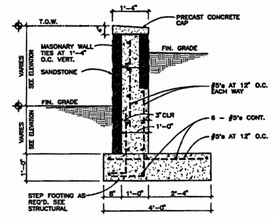


scored jt. 2
SCALE: 1 1/2" = 1'-0"

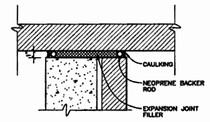


exp. joint 1
SCALE: 1 1/2" = 1'-0"

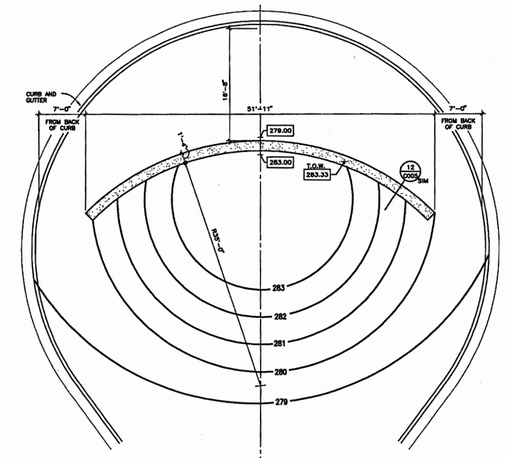
concrete walk details



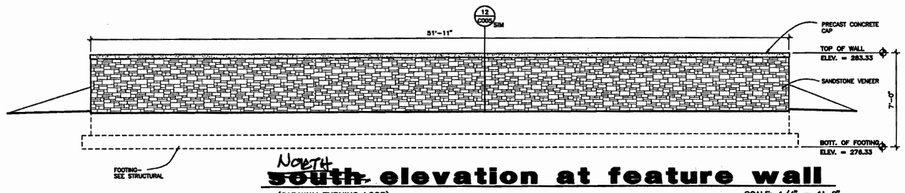
wall detail 12
SCALE: 1/2" = 1'-0"



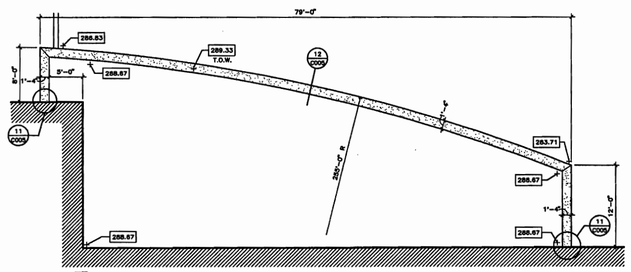
exp. joint detail 11
SCALE : 1 1/2" = 1'-0"



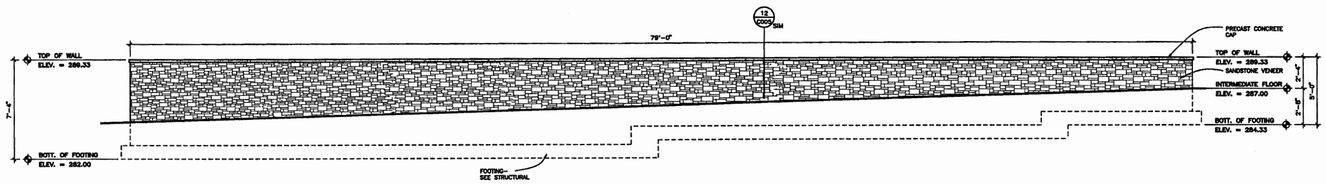
enlarged plan at landscape feature wall
SCALE: 1/8" = 1'-0"



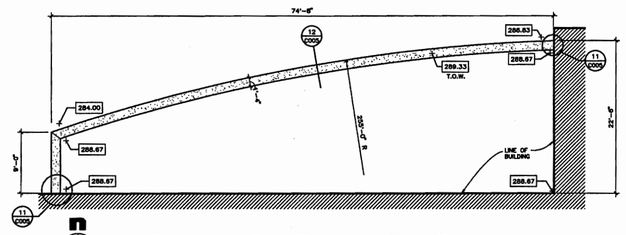
~~south~~ North elevation at feature wall
(CARAWAY TURNING LOOP)
SCALE: 1/4" = 1'-0"



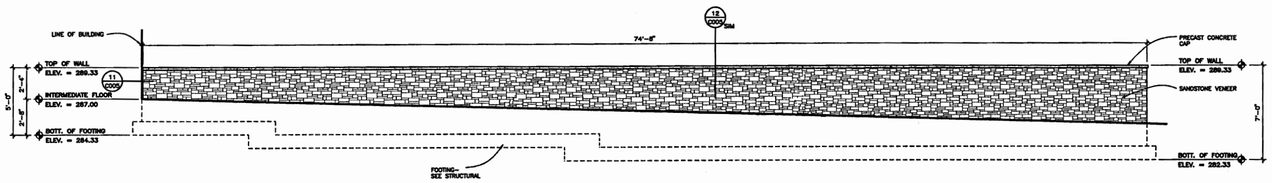
enlarged plan at planter
(EAST SIDE OF NORTH ENTRANCE)
SCALE: 1/8" = 1'-0"



elevation at planter
(EAST SIDE OF NORTH ENTRANCE)
SCALE: 1/4" = 1'-0"



enlarged plan at planter
(WEST SIDE OF NORTH ENTRANCE)
SCALE: 1/8" = 1'-0"



elevation at planter
(WEST SIDE OF NORTH ENTRANCE)
SCALE: 1/4" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects
100 East Huntington, Suite D P.O. Box 1806 Jonesboro, Arkansas 72403-1806 870-932-8671 Fax 870-932-8675

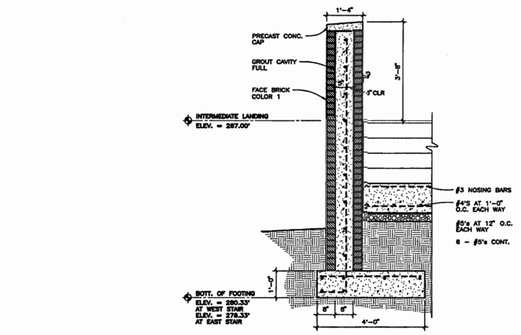
REGISTERED ARCHITECTS 1213 ARKANSAS

SITE DETAILS

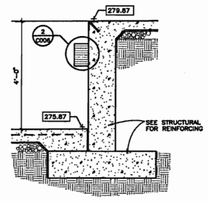
Commission Number 10301

C005

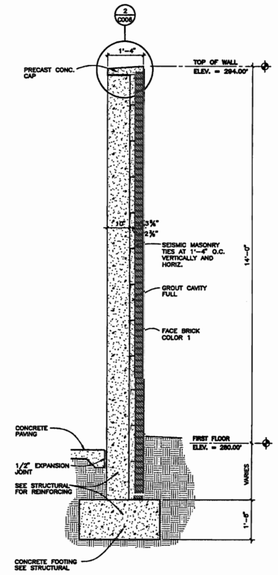
Date: October 25, 2



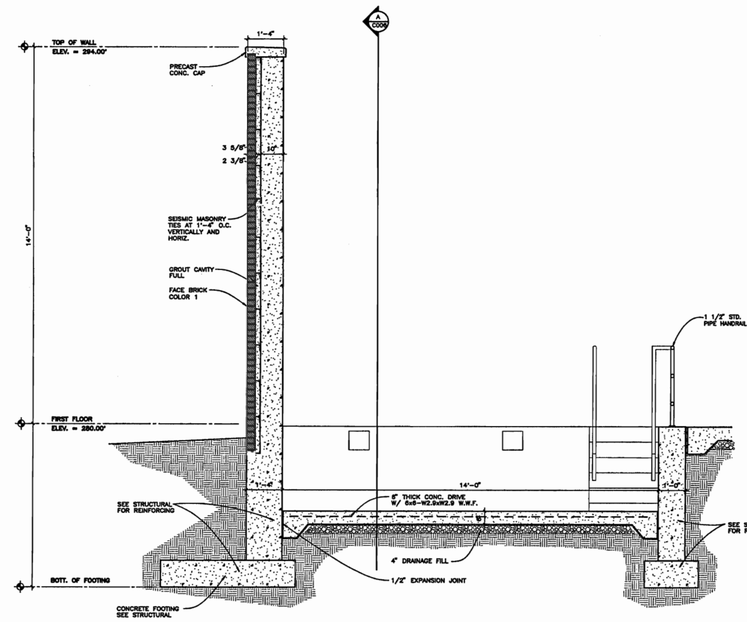
stair wall section (8)
SCALE: 1/2" = 1'-0"



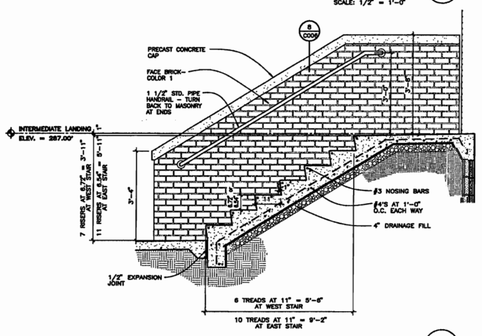
detail at loading dock (7)
SCALE: 1/2" = 1'-0"



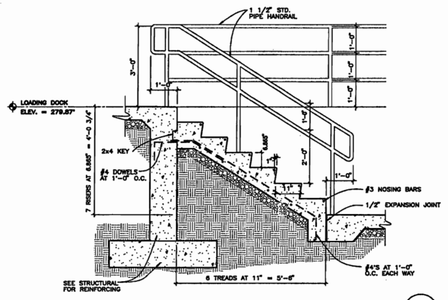
wall detail (4)
SCALE: 1/2" = 1'-0"



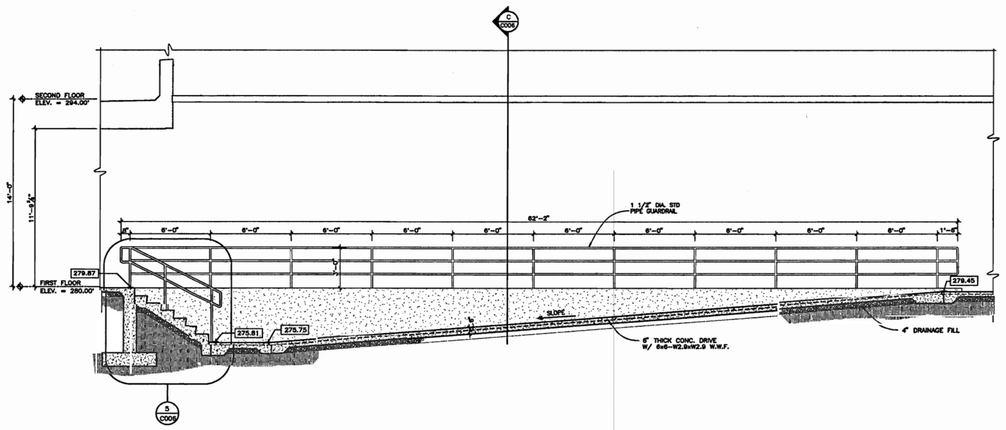
section at loading dock (C)
SCALE: 1/2" = 1'-0"



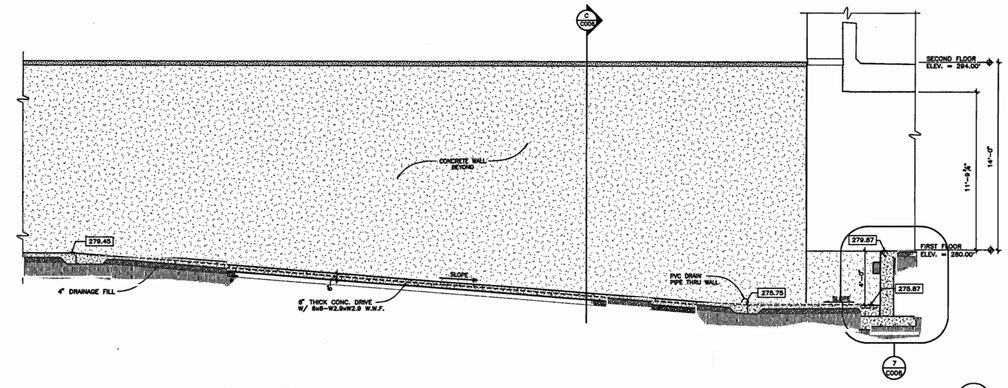
exterior stair section (6)
SCALE: 1/2" = 1'-0"



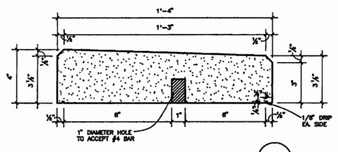
stair section at loading dock (5)
SCALE: 1/2" = 1'-0"



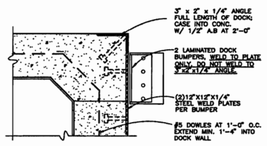
section at loading dock (B)
SCALE: 1/4" = 1'-0"



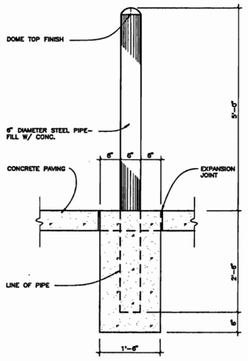
section at loading dock (A)
SCALE: 1/4" = 1'-0"



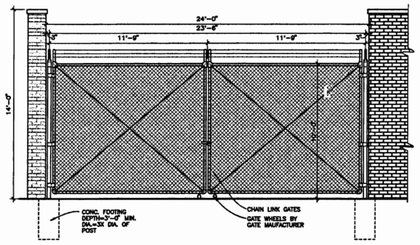
precast cap detail (3)
SCALE: 3" = 1'-0"



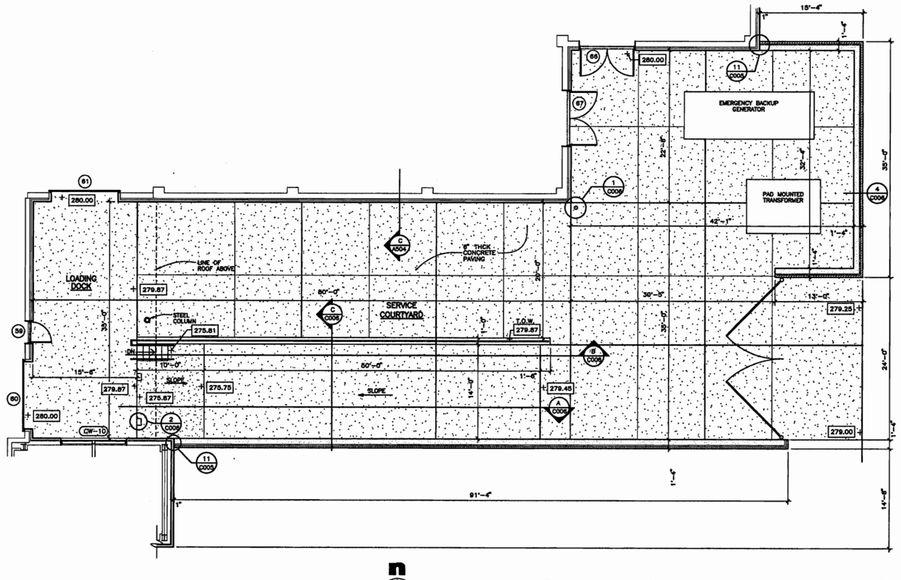
dock bumper detail (2)
SCALE: 1 1/2" = 1'-0"



bollard detail (1)
SCALE: 3/4" = 1'-0"



chain link gate elevation
SCALE: 1/4" = 1'-0"



plan at service courtyard
SCALE: 1/8" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

ARKANSAS

JONESBORO,

BRACKETT KRENNERICH architects

100 East Huntington, Suite D P.O. Box 1655 Jonesboro, Arkansas 72403-1655

Ph: 870 932-0671 Fax 870 932-0975

Email: brackett@brackett.net

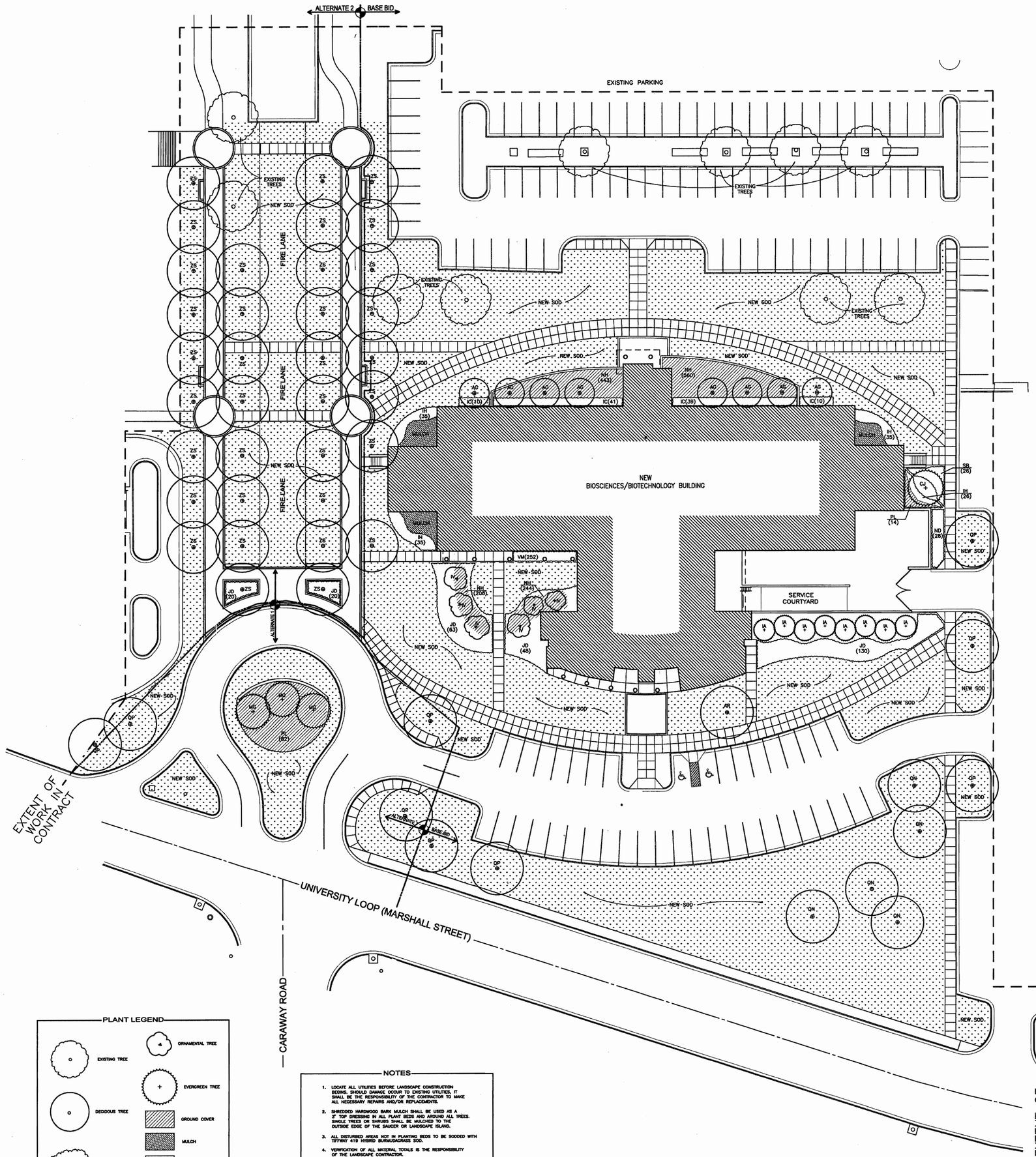
REGISTERED ARCHITECTS CIB ARKANSAS

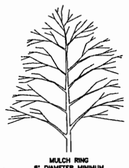
SITE DETAILS

Commission Number 10301

C006

Date: October 25, 2002



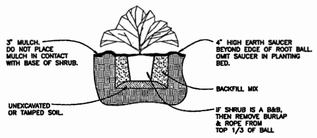


NOTES:

1. FOR DIMENSIONS OF PLANTING AREAS, TYPES OF SOIL AMENDMENTS, SOIL REPLACEMENT, OR TYPE OF MULCH SEE PLANS AND SPECIFICATIONS.
2. STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

tree planting detail
B&B trees in all soil types

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



shrub planting detail

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

PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	COMMENTS
AR	1	ACER RUBRUM 'OCTOBER GLORY	OCTOBER GLORY MAPLE	2" CAL.	B&B	AS SHOWN	STRONG CENTRAL LEADER
QN	5	QUERCUS NIGRA	WATER OAK	2" CAL.	B&B	AS SHOWN	STRONG CENTRAL LEADER
QP	9	QUERCUS PHELLOS	WILLOW OAK	2" CAL.	B&B	AS SHOWN	STRONG CENTRAL LEADER
ZS	35	ZELKOVA SERRATA	VILLAGE GREEN ZELKOVA	2" CAL.	B&B	AS SHOWN	STRONG CENTRAL LEADER
AG	8	ACER GINNALA	AMUR MAPLE	8'-9' HT.	CONT.	AS SHOWN	MULTI-STEM, MINIMUM 3 CANES
CJ	1	CRYPTOMERIA JAPONICA	CRYPTOMERIA	9'-10' HT.	CONT.	AS SHOWN	FULL, WELL-BRANCHED
IA	8	ILEX X ATTENUATA 'FOSTERI'	FOSTER'S HOLLY	8'-9' HT.	CONT.	AS SHOWN	FULL, WELL-BRANCHED
IV	6	ILEX VOMITORIA	YAUPON HOLLY	6'-7' HT.	CONT.	AS SHOWN	MULTI-STEM, MIN. 3 CANES, FEMAL PLANTS
MG	3	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM MAGNOLIA	12"-14' HT.	CONT.	AS SHOWN	FULL, WELL-BRANCHED
IC	100	ILEX CORNUTA 'CARISSA'	CARISSA HOLLY	3 GAL.	CONT.	3' O.C.	FULL, WELL-BRANCHED
IH	131	ILEX CRENATA 'HELLERI'	HELLER HOLLY	2 GAL.	CONT.	30" O.C.	FULL, WELL-BRANCHED
JD	281	JUNIPERUS DAVURICA	PARSON'S JUNIPER	2 GAL.	CONT.	3' O.C.	FULL, WELL-BRANCHED
ND	28	NANDINA DOMESTICA	NANDINA	3 GAL.	CONT.	3' O.C.	FULL, WELL-BRANCHED
NH	1423	NANDINA DOMESTICA 'HARBOR DWARF'	HARBOR DWAF NANDINA	1 GAL.	CONT.	18" O.C.	FULL, WELL-BRANCHED
PL	86	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	OTTO LUYKEN LAUREL	3 GAL.	CONT.	3' O.C.	FULL, WELL-BRANCHED
SB	26	SPIRAEA X BUMALDA 'ANTHONY WATERER'	ANTHONY WATERER SPIREA	2 GAL.	CONT.	30" O.C.	FULL, WELL-BRANCHED
VM	252	VINCA MINOR	PERIWINKLE	4" POT	CONT.	12" O.C.	

PLANT LEGEND

- EXISTING TREE
- DECIDOUS TREE
- SHRUB BED
- ORNAMENTAL TREE
- EVERGREEN TREE
- GROUND COVER
- MULCH
- SOD

NOTES

1. LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS. SHOULD DAMAGE OCCUR TO EXISTING UTILITIES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALL NECESSARY REPAIRS AND/OR REPLACEMENTS.
2. SHREDDED HARDWOOD BARK MULCH SHALL BE USED AS A 3" TOP DRESSING IN ALL PLANT BEDS AND AROUND ALL TREES. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF THE SAUCER OR LANDSCAPE ISLAND.
3. ALL DISTURBED AREAS NOT IN PLANTING BEDS TO BE SODDED WITH TIFWAY 419 HYBRID BURMUDAGRASS SOD.
4. VERIFICATION OF ALL MATERIAL TOTALS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
5. INSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND AIR CONDITIONING CONDENSER PADS.

landscape plan

SCALE : 1" = 20'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

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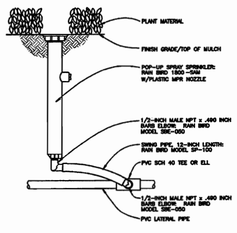
REGISTERED ARCHITECTS C13 ARKANSAS

LANDSCAPE PLAN

Commission Number 10301

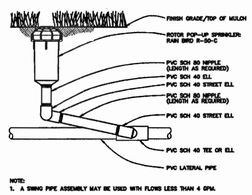
L100

Date: October 25, 2002



pop-up spray sprinkler

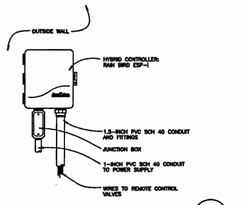
SCALE: 3/4" = 1'-0"



NOTE:
1. A SWING PIPE ASSEMBLY MAY BE USED WITH FLOWS LESS THAN 4 GPM.

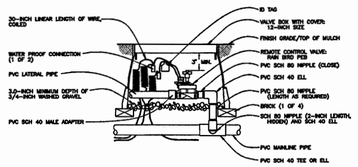
rotor pop-up sprinkler

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



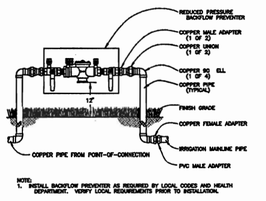
irrigation controller

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



remote control valve

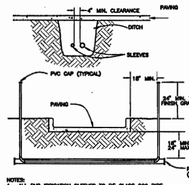
SCALE: 3/4" = 1'-0"



NOTE:
1. INSTALL BACKFLOW PREVENTER AS REQUIRED BY LOCAL CODES AND HEALTH DEPARTMENT. VERIFY LOCAL REQUIREMENTS PRIOR TO INSTALLATION.

backflow preventer

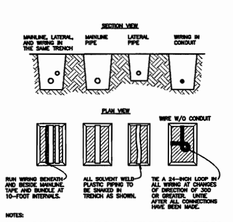
SCALE: 3/4" = 1'-0"



NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE CLASS 200 PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO THE LARGER SLEEVE AT 45 DEGREE ANGLE.
4. MECHANICALLY CAMP TO EDGE PROTECTION.

sleeving details

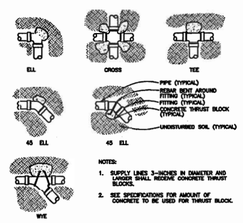
SCALE: 3/4" = 1'-0"



NOTES:
1. SLEEVE BELOW ALL LANDSCAPE ELEMENTS WITH CLASS 200 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.

pipe and wire trenching

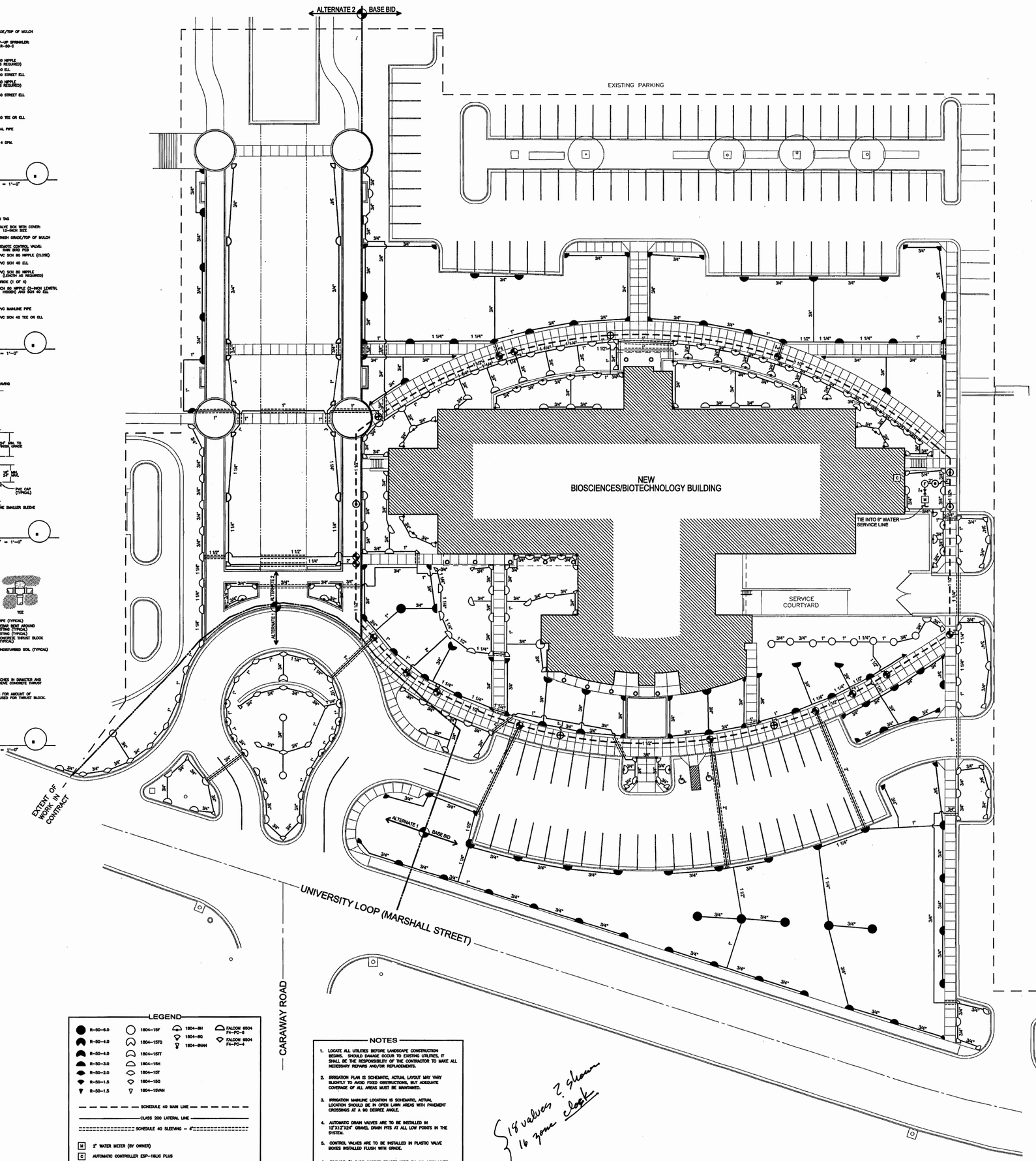
SCALE: 3/4" = 1'-0"



NOTES:
1. SUPPLY LINES 3-INCHES IN DIAMETER AND LARGER SHALL RECEIVE CONCRETE THRUST BLOCKS.
2. SEE SPECIFICATIONS FOR AMOUNT OF CONCRETE TO BE USED FOR THRUST BLOCK.

thrust block

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



LEGEND

R-50-6.0	1804-15F	1804-8H	FALCON 6504 F4-PC-8
R-50-4.0	1804-15TQ	1804-8Q	FALCON 6504 F4-PC-4
R-50-4.0	1804-15ST	1804-8NNH	
R-50-3.0	1804-15H		
R-50-2.0	1804-15T		
R-50-1.5	1804-15Q		
R-50-1.5	1804-15NN		

SCHEDULE 40 MAIN LINE

CLASS 200 LATERAL LINE

SCHEDULE 40 SLEEVING - 4"

M 2" WATER METER (BY OWNER)

C AUTOMATIC CONTROLLER ESP-16LXI PLUS

F RAINBIRD FS300F FLOW SENSOR W/FT332 PULSE TRANSMITTER AND MS1200 PULSE DECODER.

1 1/2" REMOTE CONTROL VALVE - 150-PEB

2" REMOTE CONTROL VALVE - 200-PEB

FEBCO 825Y 2" REDUCED PRESSURE BACKFLOW DEVICE

2" MANUAL CONTROL VALVE

NOTES

1. LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS. SHOULD DAMAGE OCCUR TO EXISTING UTILITIES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALL NECESSARY REPAIRS AND/OR REPLACEMENTS.
2. IRRIGATION PLAN IS SCHEMATIC, ACTUAL LAYOUT MAY VARY SLIGHTLY TO AVOID FIXED OBSTRUCTIONS, BUT ADEQUATE COVERAGE OF ALL AREAS MUST BE MAINTAINED.
3. IRRIGATION MAINLINE LOCATION IS SCHEMATIC, ACTUAL LOCATION SHOULD BE IN OPEN LAWN AREAS WITH PAVEMENT CROSSINGS AT A 90 DEGREE ANGLE.
4. AUTOMATIC DRAIN VALVES ARE TO BE INSTALLED IN 12"x12"x24" GRAVEL DRAIN PITS AT ALL LOW POINTS IN THE SYSTEM.
5. CONTROL VALVES ARE TO BE INSTALLED IN PLASTIC VALVE BOXES INSTALLED FLUSH WITH GRADE.
6. PROVIDE #8 BARE COPPER TRACER WIRE ON ALL MAIN LINES AND LATERALS. COIL WIRE AROUND PIPE ONE TURN PER 24", TAPE WIRE TO PIPE EVERY 24". USE COPPER SPLIT BOLTS TO MAKE ALL TRACER WIRE CONNECTIONS. PROVIDE 1' OF COILED WIRE IN EACH VALVE BOX. TERMINATE TRACER WIRE IN IRRIGATION METER BOX AND PROVIDE 10' OF COILED WIRE IN BOX.
7. INSTALL CONTROLLER IN MECHANICAL ROOM 145, COORDINATE LOCATION WITH ARCHITECT.

{ 18 valves ? shown
16 zone clock

irrigation plan

SCALE : 1" = 20'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects
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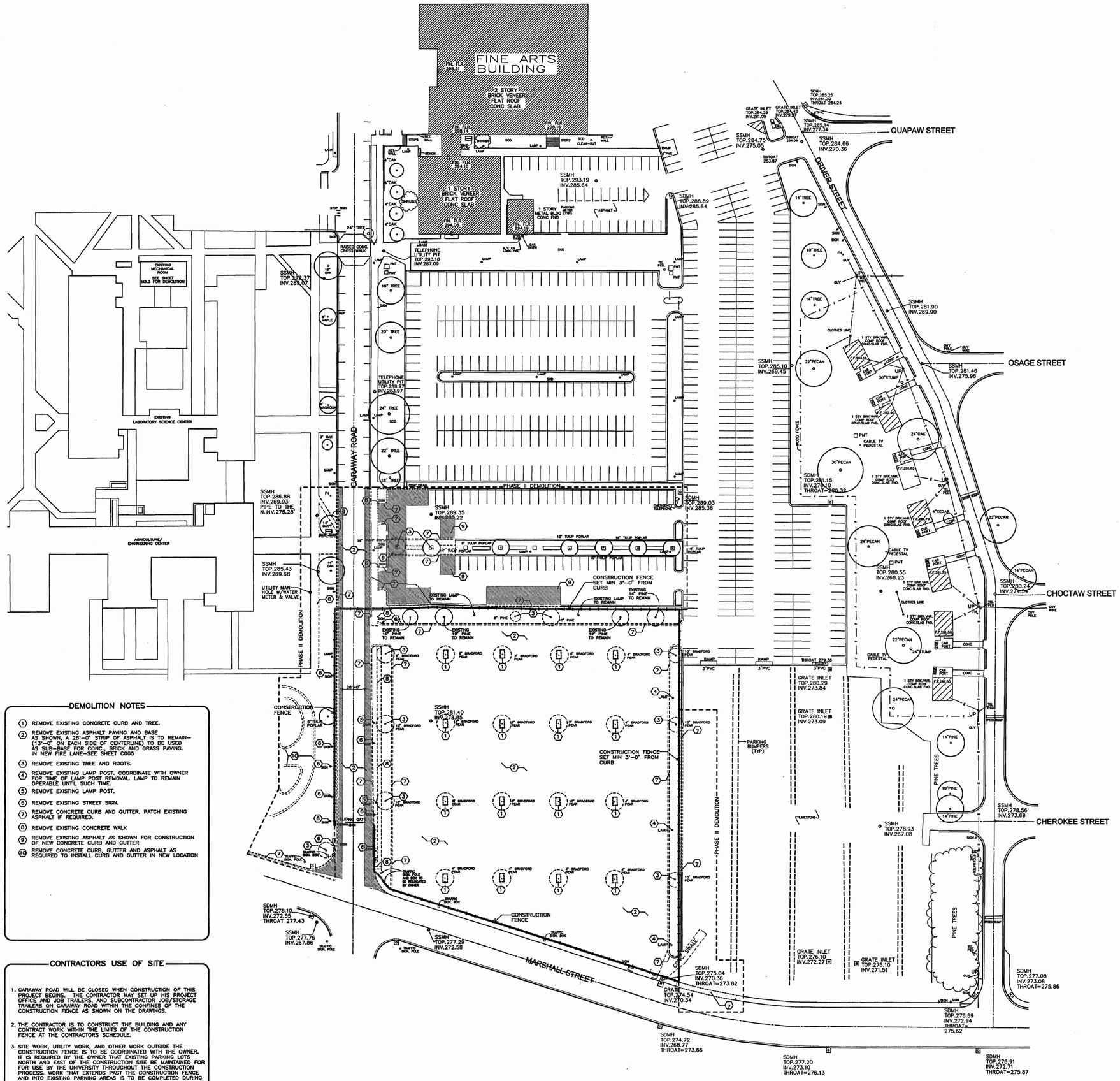
REGISTERED ARCHITECTS
10/25/02
ARKANSAS

IRRIGATION PLAN

Commission Number 10301

IR100

Date: October 25, 2002



DEMOLITION NOTES

1. REMOVE EXISTING CONCRETE CURB AND TREE.
2. REMOVE EXISTING ASPHALT PAVING AND BASE AS SHOWN. A 26'-0" STRIP OF ASPHALT IS TO REMAIN-(13'-0" ON EACH SIDE OF CENTERLINE) TO BE USED AS SUB-BASE FOR CONC., BRICK AND GRASS PAVING. IN NEW FIRE LANE-SEE SHEET C005
3. REMOVE EXISTING TREE AND ROOTS.
4. REMOVE EXISTING LAMP POST. COORDINATE WITH OWNER FOR TIME OF LAMP POST REMOVAL. LAMP TO REMAIN OPERABLE UNTIL SUCH TIME.
5. REMOVE EXISTING LAMP POST.
6. REMOVE EXISTING STREET SIGN.
7. REMOVE CONCRETE CURB AND GUTTER. PATCH EXISTING ASPHALT IF REQUIRED.
8. REMOVE EXISTING CONCRETE WALK
9. REMOVE EXISTING ASPHALT AS SHOWN FOR CONSTRUCTION OF NEW CONCRETE CURB AND GUTTER
10. REMOVE CONCRETE CURB, GUTTER AND ASPHALT AS REQUIRED TO INSTALL CURB AND GUTTER IN NEW LOCATION

CONTRACTORS USE OF SITE

1. CARAWAY ROAD WILL BE CLOSED WHEN CONSTRUCTION OF THIS PROJECT BEGINS. THE CONTRACTOR MAY SET UP HIS PROJECT OFFICE AND JOB TRAILERS, AND SUBCONTRACTOR JOB/STORAGE TRAILERS ON CARAWAY ROAD WITHIN THE CONFINES OF THE CONSTRUCTION FENCE AS SHOWN ON THE DRAWINGS.
2. THE CONTRACTOR IS TO CONSTRUCT THE BUILDING AND ANY CONTRACT WORK WITHIN THE LIMITS OF THE CONSTRUCTION FENCE AT THE CONTRACTORS SCHEDULE.
3. SITE WORK, UTILITY WORK, AND OTHER WORK OUTSIDE THE CONSTRUCTION FENCE IS TO BE COORDINATED WITH THE OWNER. IT IS REQUIRED BY THE OWNER THAT EXISTING PARKING LOTS NORTH AND EAST OF THE CONSTRUCTION SITE BE MAINTAINED FOR FOR USE BY THE UNIVERSITY THROUGHOUT THE CONSTRUCTION PROCESS. WORK THAT EXTENDS PAST THE CONSTRUCTION FENCE AND INTO EXISTING PARKING AREAS IS TO BE COMPLETED DURING THE SUMMER SCHOOL SESSION AND COMPLETED PRIOR TO THE BEGINNING OF THE FALL SCHOOL TERM.

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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BRACKETT KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS CB 14125 ARKANSAS

DEMOLITION AND SITE PREPARATION PLAN

Commission Number 10301

D100

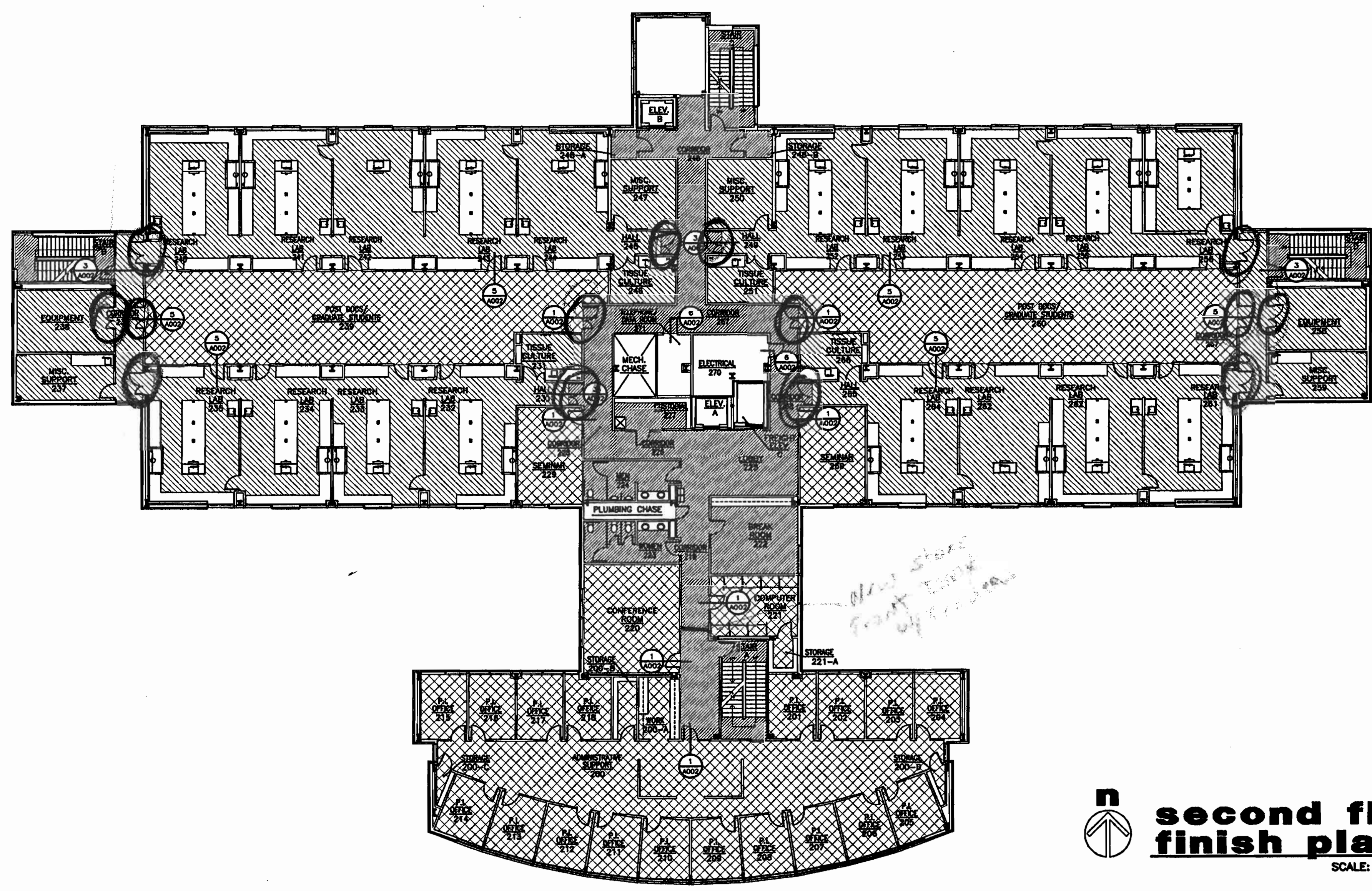
Date: October 25, 2002

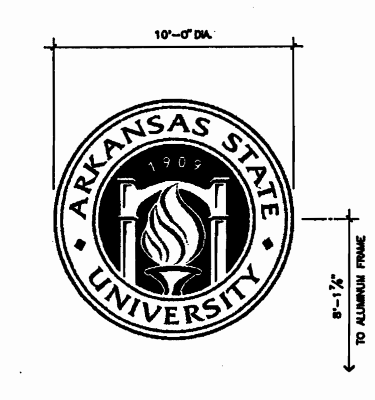
n site demolition and preparation plan

SCALE : 1" = 40'-0"

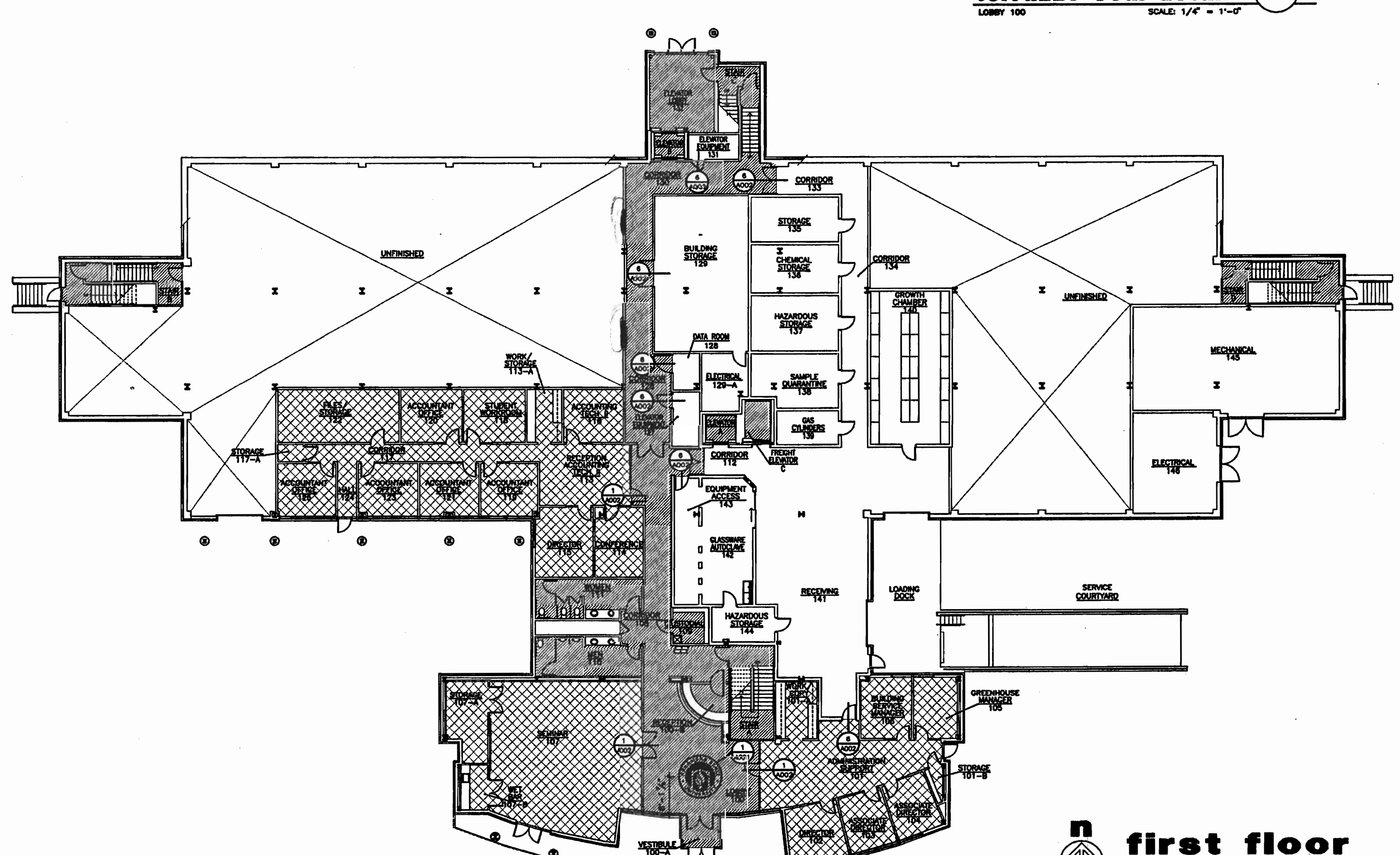
Ist - 2
2nd - 14
3rd - 14
4th - 1
31

Exp 258
238
358
338





terrazzo seal detail (1)
LOBBY 100 SCALE: 1/4" = 1'-0"



FINISH SCHEDULE • SECOND FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
200	ADMINISTRATIVE SUPPORT	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
200-A	WORK	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
200-B	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
200-C	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
200-D	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
201	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
202	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
203	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
204	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
205	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
206	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
207	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
208	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
209	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
210	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
211	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
212	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
213	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
214	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
215	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
216	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
217	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
218	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
219	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(1) DESCO GRANITE SERIES EPOXY FLOOR SYSTEM
220	CONFERENCE ROOM	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(4) EPOXY BASE INTEGRAL WITH FLOORING
221	COMPUTER ROOM	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
221-A	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
222	BREAK ROOM	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
223	WOMEN	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE (7)	(7) SEE FURR DOWN AT FIXTURE WALL AND OVER LAVATORIES
224	MEN	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE (7)	
225	LOBBY	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	VARIES (5)	SUSPENDED CURVED METAL CEILING SYSTEM, AND PAINTED GYP. BOARD FURR DOWNS	(5) SPRING LINE OF CURVED PANELS TO BE 10'-0"
226	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
227	CUSTODIAL	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND CERAMIC TILE (6)	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(6) 4'-0" WIDE x 4'-8" HIGH CERAMIC TILE WAINSCOT BEHIND SERVICE SINK ON TWO WALLS, SEE INTERIOR ELEVATIONS
228	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
229	SEMINAR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
230	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(12) MORRITEX BROADCAST EPOXY FLOORING SYSTEM
231	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
232	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
233	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
234	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
235	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
236	CORRIDOR	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
237	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
238	EQUIPMENT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
239	POST DOCS/GRAD STUDENTS	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	
240	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
241	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
242	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
243	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
244	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
245	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
246	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
247	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
248	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
248-A	STORAGE	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
248-B	STORAGE	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
249	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
250	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
251	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
252	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
253	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
254	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
255	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
256	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
257	CORRIDOR	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
258	EQUIPMENT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
259	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
260	POST DOCS/GRAD STUDENTS	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	
261	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
262	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
263	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
264	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
265	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
266	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
267	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
268	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
269	SEMINAR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
270	ELECTRICAL	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF STRUCTURE AND DECK	(9) EPOXY FLOORING AT LANDINGS ONLY; RUBBER STAIR TREADS AT ALL TREADS AND RISERS
271	TELEPHONE/DATA ROOM	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF STRUCTURE AND DECK	
A	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	(10) PAINT ALL EXPOSED METAL INCLUDING STRINGERS, RAILINGS AND UNDERSIDE OF STAIRS
B	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	
C	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	
D	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	

LEGEND

FLOORING
CARPET
DG EPOXY
MB EPOXY
SEALED EXPOSED CONCRETE
UNFINISHED

FINISH SCHEDULE • FIRST FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
100-A	VESTIBULE	DG EPOXY (1)	–	EXPOSED ALUMININUM CURTAIN WALL	9'-5 1/2"	PAINTED GYP. BOARD	(1) DESCO GRANITE SERIES EPOXY FLOOR SYSTEM
100	LOBBY	DG EPOXY (1) (3)	4" EPOXY (4)	PAINTED GYPSUM BOARD (2)	VARIES (5)	SUSPENDED CURVED METAL CEILING SYSTEM, AND PAINTED GYP. BOARD FURR DOWNS	(2) INSTALL METAL REVEALS AS SHOWN ON SHEET A800
100-B	RECEPTION	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD (2)	VARIES (5)	SUSPENDED CURVED METAL CEILING SYSTEM, AND PAINTED GYP. BOARD FURR DOWNS	(3) UNIVERSITY SEAL – TERRAZZO (4) EPOXY BASE INTEGRAL WITH FLOORING
101	ADMINISTRATION SUPPORT	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	(5) SPRING LINE OF CURVED PANELS TO BE 10'-0"
101-A	WORK/COPY	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
101-B	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
102	DIRECTOR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
103	ASSOCIATE DIRECTOR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
104	ASSOCIATE DIRECTOR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
105	GREENHOUSE MANAGER	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
106	BLDG SERVICE MANAGER	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
107	SEMINAR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	
107-A	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
107-B	WET BAR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
108	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD (2) (13)	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
109	CUSTODIAL	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND CERAMIC TILE (6)	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(6) 4'-0" WIDE x 4'-8" HIGH CERAMIC TILE WAINSCOT BEHIND SERVICE SINK ON TWO WALLS, SEE INTERIOR ELEVATIONS
110	MEN	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE (7)	
111	WOMEN	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE (7)	(7) SEE FURR DOWN AT FIXTURE WALL AND OVER LAVATORIES
112	CORRIDOR	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
113	RECEPTION/ACC. TECH II	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
113-A	WORK/STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(13) 1/2" GYPSUM BOARD OVER 3/4" FURRING CHANNELS
114	CONFERENCE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
115	DIRECTOR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	
116	ACCOUNTING TECH II	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
117	CORRIDOR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
117-A	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
118	STUDENT WORKROOM	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
119	ACCOUNTANT OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	
120	ACCOUNTANT OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
121	ACCOUNTANT OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	
122	FILES/STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
123	ACCOUNTANT OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	
124	HALL	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	
125	ACCOUNTANT OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	
126	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
127	ELEVATOR EQUIP.	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINTED EXPOSED STRUCTURE AND DECK	
128	TELEPHONE/DATA ROOM	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINTED EXPOSED STRUCTURE AND DECK	
129	BUILDING STORAGE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD AND PAINTED CONC. BLOCK	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
129-A	ELECTRICAL	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD AND PAINTED CONC. BLOCK	–	PAINTED EXPOSED STRUCTURE	
130	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
131	ELEVATOR EQUIPMENT	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINTED EXPOSED STRUCTURE AND DECK	
132	ELEVATOR LOBBY	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD (2)	36'-6" (8)	2x2 SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	(8) 36'-6" FROM LOBBY FLOOR TO CEILING TILE, (13'-6" ABOVE 3RD FLOOR) 11'-0" TO ENTRY CANOPY
133	CORRIDOR	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE, PAINTED GYPSUM BOARD AND PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
134	CORRIDOR	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE, PAINTED GYPSUM BOARD AND PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
135	STORAGE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
136	CHEMICAL STORAGE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
137	HAZARDOUS STORAGE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
138	SAMPLE QUARANTINE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
139	GAS CYLINDARS	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
140	GROWTH CHAMBERS	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
141	RECEIVING	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
142	GLASSWARE/AUTOCLAVE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
143	EQUIPMENT ACCESS	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
144	HAZARDOUS STORAGE	SEALED EXPOSED CONC.	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE AND DECK	
145	MECHANICAL	SEALED EXPOSED CONC.	NONE	EXPOSED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE	
146	ELECTRICAL	SEALED EXPOSED CONC.	NONE	EXPOSED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE	
A	STAIR	DG EPOXY (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	(9) EPOXY FLOORING AT LANDINGS ONLY; RUBBER STAIR TREADS AT ALL TREADS AND RISERS
B	STAIR	DG EPOXY (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	
C	STAIR	DG EPOXY (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	(10) PAINT ALL EXPOSED METAL INCLUDING STRINGERS, RAILINGS AND UNDERSIDE OF STAIRS
D	STAIR	DG EPOXY (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	
A	ELEVATOR	DG EPOXY (1)	(11)	(11)	–	(11)	
B	ELEVATOR	DG EPOXY (1)	(11)	(11)	–	(11)	(11) FINISHES BY ELEVATOR SUPPLIER
C	FREIGHT ELEVATOR	DG EPOXY (1)	(11)	(11)	–	(11)	

BIOSCIENCES / BIOTECHNOLOGY BUILDING
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JONESBORO, ARKANSAS

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100 East Huntington, Suite D P.O. Box 1555 Jonesboro, Arkansas 72403-1555

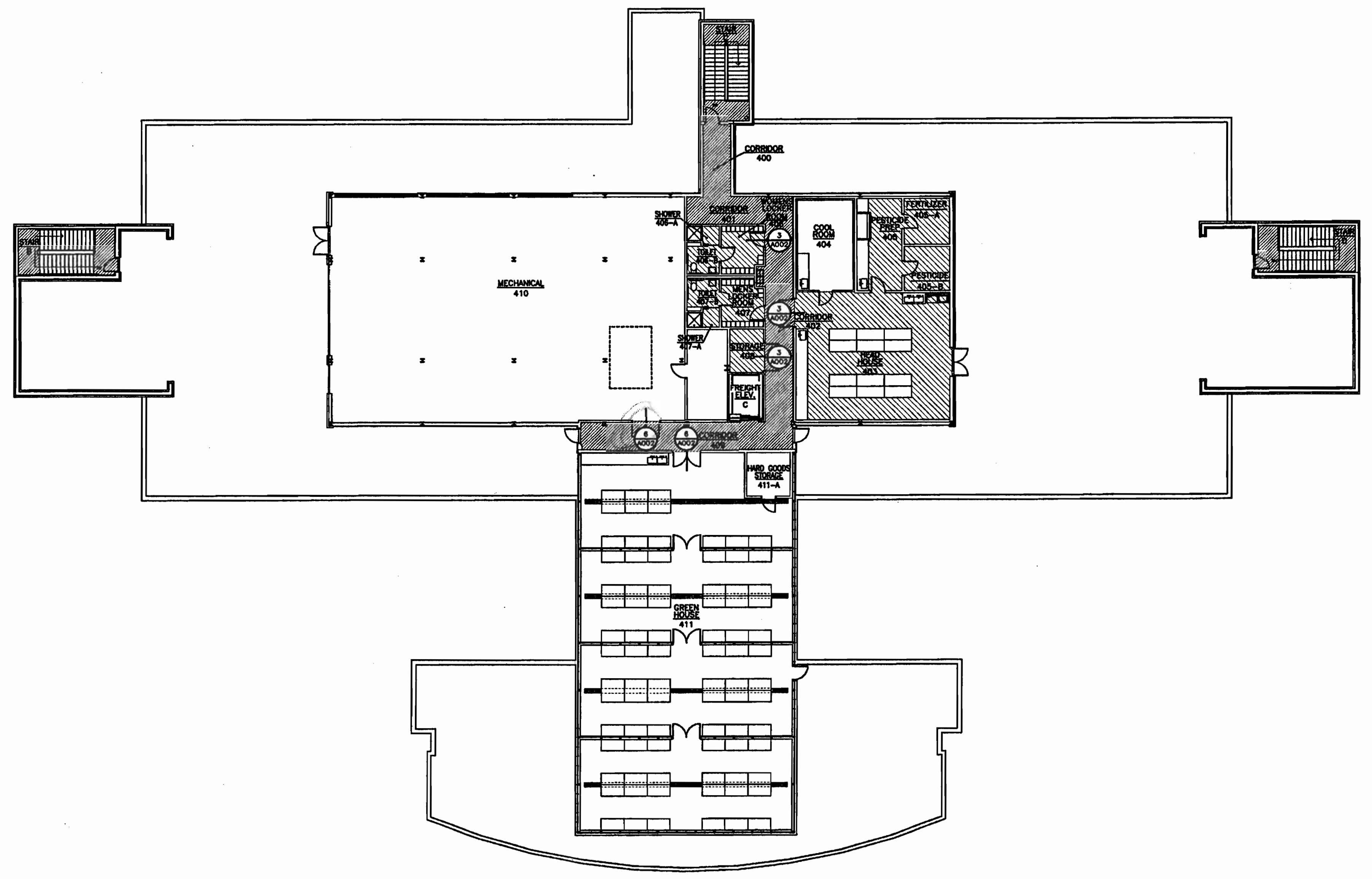
BRACKETT-KRENNERICH & ASSOCIATES, P.A.
REGISTERED ARCHITECTS
C13
10/25/02
ARKANSAS

1ST AND 2ND FLOOR
FINISH PLANS
FINISH SCHEDULES

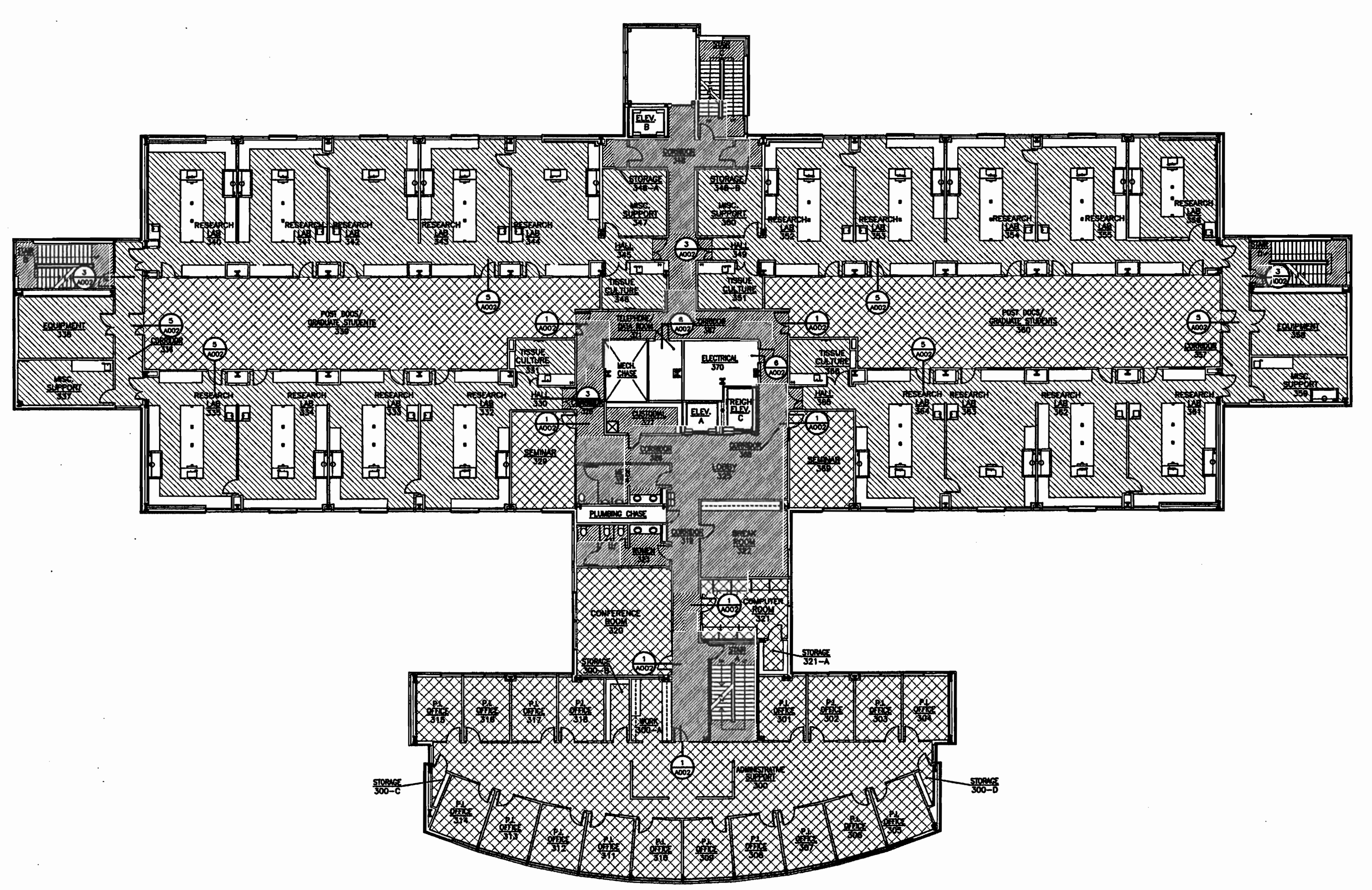
Commission Number
10301

A001

Date: October 25, 2002



n fourth floor finish plan
SCALE: 1/16" = 1'-0"



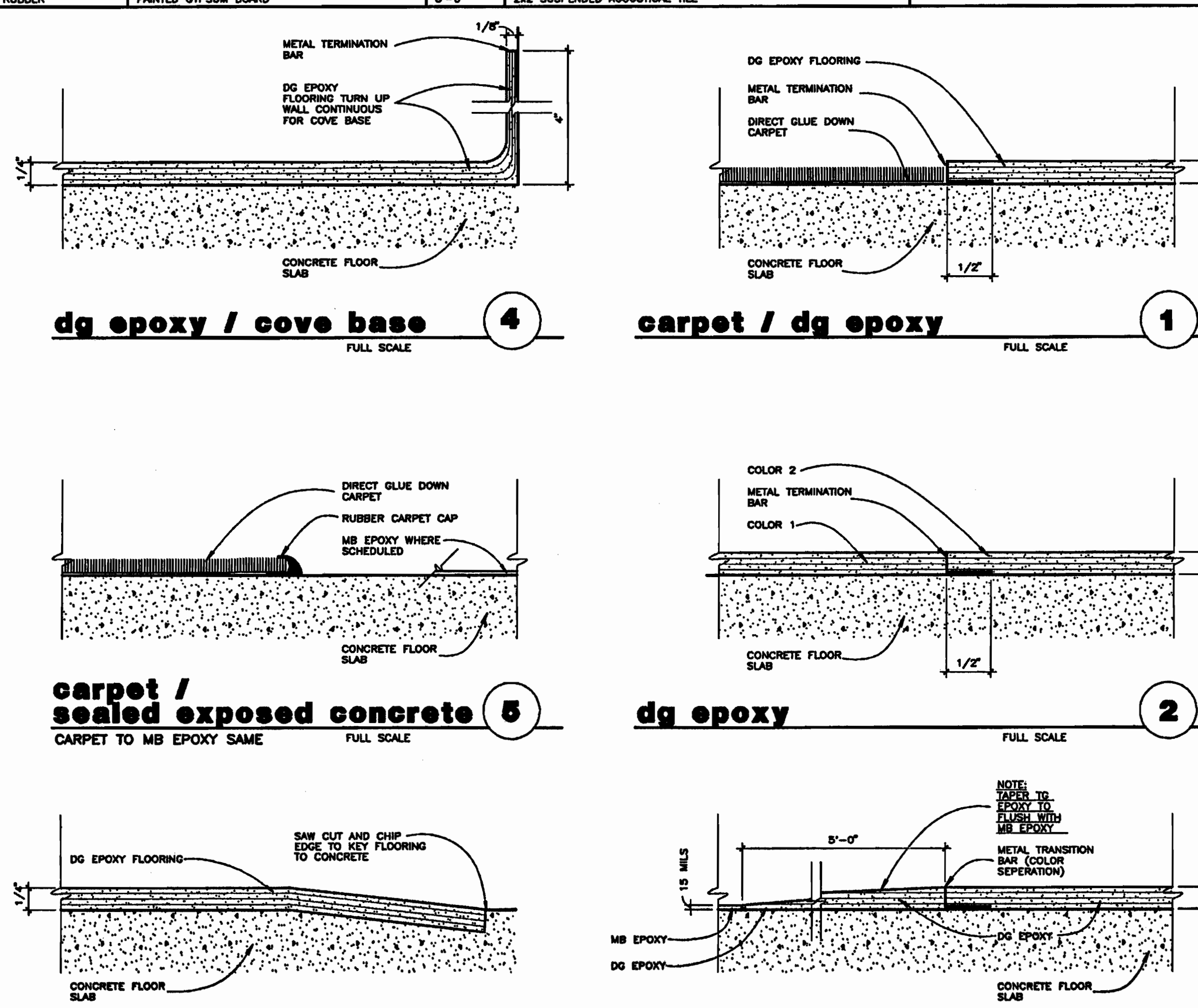
n third floor finish plan
SCALE: 1/16" = 1'-0"

FINISH SCHEDULE • FOURTH FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING HEIGHT	CEILING	REMARKS
400	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND PAINTED CONC. BLOCK	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(1) DESCO GRANITE SERIES EPOXY FLOOR SYSTEM
401	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND PAINTED CONC. BLOCK	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	(4) EPOXY BASE INTEGRAL WITH FLOORING
402	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND PAINTED CONC. BLOCK	9'-6"	2x2 SUSPENDED ACOUSTICAL TILE	(9) EPOXY FLOORING AT LANDINGS ONLY; RUBBER STAIR TREADS AT ALL TREADS AND RISERS
403	HEAD HOUSE	MB EPOXY (12)	4" RUBBER	PAINTED CONCRETE BLOCK	–	PAINTED EXPOSED STRUCTURE	
404	COOL ROOM	–	–	–	–	–	(12) MORRITEX BROADCAST EPOXY FLOORING SYSTEM
405	PESTICIDE PREP	MB EPOXY (12)	4" RUBBER	PAINTED CONCRETE BLOCK	9'-6"	PAINTED GYP. BOARD	
405-A	FERTILIZER	MB EPOXY (12)	4" RUBBER	PAINTED CONCRETE BLOCK	9'-6"	PAINTED GYP. BOARD	
405-B	PESTICIDE	MB EPOXY (12)	4" RUBBER	PAINTED CONCRETE BLOCK	9'-6"	PAINTED GYP. BOARD	
406	WOMENS LOCKER ROOM	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED VINYL COVERED GYPSUM PANELS	
406-A	SHOWER	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED VINYL COVERED GYPSUM PANELS	
406-B	TOILET	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED VINYL COVERED GYPSUM PANELS	
407	MENS LOCKER ROOM	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED VINYL COVERED GYPSUM PANELS	
407-A	SHOWER	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED VINYL COVERED GYPSUM PANELS	
407-B	TOILET	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED VINYL COVERED GYPSUM PANELS	
408	STORAGE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(13) METAL LINER PANEL TO 10'-0" ABOVE FINISHED FLOOR
409	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND PAINTED CONC. BLOCK	8'-11"	2x2 SUSPENDED ACOUSTICAL TILE	
410	MECHANICAL	EXPOSED SEALED CONC.	NONE	EXPOSED STRUCTURE AND METAL LINER PANEL (13)	–	EXPOSED STRUCTURE	
411	GREEN HOUSE	EXPOSED SEALED CONC.	NONE	EXPOSED STRUCTURE AND PAINTED CONC. BLOCK (14)	VARIES	EXPOSED GREEN HOUSE STRUCTURE	(14) PAINTED CONCRETE BLOCK AT NORTH WALL AND PAINTED CONCRETE BLOCK WAINSCOT AT REMAINING WALLS
411-A	HARD GOOD STORAGE	EXPOSED SEALED CONC.	NONE	PAINTED CONCRETE BLOCK	VARIES	EXPOSED GREEN HOUSE STRUCTURE	
412	ELECTRICAL	EXPOSED SEALED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	VARIES	PAINTED EXPOSED STRUCTURE	
B	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
C	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
D	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	

LEGEND

FLOORING
CARPET
DG EPOXY
MB EPOXY
SEALED EXPOSED CONCRETE
UNFINISHED



dg epoxy / cove base (4) FULL SCALE

carpet / dg epoxy (1) FULL SCALE

carpet / sealed exposed concrete (5) CARPET TO MB EPOXY SAME FULL SCALE

dg epoxy (2) FULL SCALE

dg epoxy / sealed exposed concrete (6) FULL SCALE

dg epoxy / mb epoxy (3) FULL SCALE

FINISH SCHEDULE • THIRD FLOOR

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING	CEILING	REMARKS
300	ADMINISTRATIVE SUPPORT	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
300-A	WORK	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
300-B	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
300-C	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
300-D	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	8'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
301	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
302	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
303	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
304	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
305	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
306	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
307	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
308	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
309	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
310	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
311	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
312	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
313	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
314	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
315	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
316	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
317	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
318	P.I. OFFICE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
319	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(1) DESCO GRANITE SERIES EPOXY FLOOR SYSTEM
320	CONFERENCE ROOM	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(4) EPOXY BASE INTEGRAL WITH FLOORING
321	COMPUTER ROOM	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
321-A	STORAGE	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
322	BREAK ROOM	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
323	WOMEN	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE (7)	
324	MEN	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE (7)	(7) SEE FURR DOWN AT FIXTURE WALL AND OVER LAVATORIES
325	LOBBY	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	VARIES (5)	SUSPENDED CURVED METAL CEILING SYSTEM, AND PAINTED GYP. BOARD FURR DOWNS	(5) SPRING LINE OF CURVED PANELS TO BE 10'-0"
326	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
327	CUSTODIAL	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD AND CERAMIC TILE (6)	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(6) 4'-0" WIDE x 4'-8" HIGH CERAMIC TILE WAINSCOT BEHIND SERVICE SINK ON TWO WALLS, SEE INTERIOR ELEVATIONS
328	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
329	SEMINAR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
330	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	(12) MORRITEX BROADCAST EPOXY FLOORING SYSTEM
331	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
332	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
333	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
334	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
335	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
336	CORRIDOR	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
337	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
338	EQUIPMENT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
339	POST DOCS/GRAD STUDENTS	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	
340	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
341	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
342	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
343	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
344	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
345	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
346	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
347	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
348	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
348-A	STORAGE	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
348-B	STORAGE	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	9'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
349	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
350	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
351	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
352	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
353	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
354	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
355	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
356	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
357	CORRIDOR	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
358	EQUIPMENT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
359	MISC. SUPPORT	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
360	POST DOCS/GRAD STUDENTS	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE AND PAINTED GYP. BOARD FURR DOWNS	
361	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
362	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
363	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
364	RESEARCH LAB	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
365	HALL	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
366	TISSUE CULTURE	MB EPOXY (12)	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
367	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
368	CORRIDOR	DG EPOXY (1)	4" EPOXY (4)	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
369	SEMINAR	CARPET	4" RUBBER	PAINTED GYPSUM BOARD	10'-0"	2x2 SUSPENDED ACOUSTICAL TILE	
370	ELECTRICAL	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINTED EXPOSED STRUCTURE AND DECK	(9) EPOXY FLOORING AT LANDINGS ONLY; RUBBER STAIR TREADS AT ALL TREADS AND RISERS
371	TELEPHONE/DATA ROOM	SEALED EXPOSED CONC.	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINTED EXPOSED STRUCTURE AND DECK	
A	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	(10) PAINT ALL EXPOSED METAL INCLUDING STRINGERS, RAILINGS AND UNDERSIDE OF STAIRS
B	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	
C	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	
D	STAIR	DG EPOXY AND RUBBER (9)	4" RUBBER	PAINTED GYPSUM BOARD	–	PAINT UNDERSIDE OF METAL STAIRS (10)	

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

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BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 10/25/02 ARKANSAS

3RD AND 4TH FLOOR FINISH PLANS FINISH SCHEDULES

Commission Number 10301

A002

Date: October 25, 2002

DOOR SCHEDULE • FIRST FLOOR

OPNG NMBR.	DOOR					DETAILS			LBL	HDWE	DOOR LOCATION ROOM NAMES
	TYPE	NUMBER	THRESH	FRAME	FRAME DEPTH	HEAD	JAMB	SILL			
1	A	PAIR	ALUM.	AF-1	4 1/2"	22/A006	–	24/A006	–	1	VESTIBULE 100-A
2	A	PAIR	–	AF-5	4 1/2"	26/A006	–	–	–	1	VESTIBULE 100-A
3	C	PAIR	–	HM-1	5 5/8"	31/A004 SIM.	31/A004	–	–	3	SEMINAR 107
4	C	PAIR	–	HM-1	6 1/8"	1/A004 SIM.	1/A004	–	–	4	STORAGE 107-A
5	C	PAIR	–	HM-1	6 1/8"	1/A004 SIM.	1/A004	–	–	4	WET BAR 107-B
6	A	PAIR	ALUM.	CW-7	6"	13/A006	3/A006 SIM.	24/A006	–	1	SEMINAR 107
7	B	SINGLE	–	AF-7	4 1/2"	26/A006	20/A006	–	–	1	ADMIN SUPPORT 101
8	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	DIRECTOR 102
9	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ASSOCIATE DIRECTOR 103
10	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ASSOCIATE DIRECTOR 104
11	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	23	STORAGE 101-B
12	B	SINGLE	ALUM.	CW-9	6"	16/A006	3/A006 SIM.	24/A006	–	2	ADMIN SUPPORT 101
13	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	GREEN HOUSE MGR. 105
14	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	BUILDING SERVICE MGR. 106
15	D	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004	–	–	10	ADMIN SUPPORT 101
16	GATE AT MILLWORK – SEE MILLWORK DETAILS ———						5/A004	–	–	42	RECEPTION 100-B
17	D	SINGLE	–	HM-3	5"	6/A004 SIM.	6/A004	–	1 1/2 HR	9	STAIR A
18	D	SINGLE	–	HM-3	5 5/8"	31/A004 SIM.	31/A004	–	–	24	CUSTODIAL 109
19	D	SINGLE	–	HM-3	5 5/8"	31/A004 SIM.	31/A004	–	–	25	MEN 110
20	D	SINGLE	–	HM-3	5 5/8"	31/A004 SIM.	31/A004	–	–	24	PLUMBING CHASE
21	D	SINGLE	–	HM-3	5 5/8"	31/A004 SIM.	31/A004	–	–	25	WOMEN 111
22	B	SINGLE	–	AF-8	4 1/2"	27/A006	27/A006 SIM.	–	–	1	RECEPTION ACCOUNTING 113
23	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	22	CONFERENCE 114
24	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	DIRECTOR 115
25	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ACCOUNTING TECH II 116
26	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ACCOUNTANT OFFICE 119
27	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	22	STUDENT WORKROOM 118
28	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ACCOUNTANT OFFICE 121
29	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ACCOUNTANT OFFICE 120
30	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	20	FILES/ STORAGE 122
31	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ACCOUNTANT OFFICE 123
32	B	SINGLE	ALUM.	CW-11	6"	2/A006	3/A006 SIM.	24/A006	–	2	HALL 124
33	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	ACCOUNTANT OFFICE 125
34	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	21	STORAGE 117-A
35	E	METAL COILING DOOR ———				9/A004	10/A004	–		44	UNFINISHED SPACE
36	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR B
37	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	11	STAIR B
38	L	SINGLE	ALUM.	HM-11	5 3/4"	11/A004	12/A004	13/A004	20 MIN	5	STAIR B
39	D	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004	–	–	18	EQUIPMENT ACCESS 143
40	C	PAIR	–	HM-1	5 5/8"	31/A004 SIM.	31/A004	–	–	7	CORRIDOR 126
41	D	SINGLE	–	HM-3	6 3/8"	14/A004 SIM.	14/A004	–	20 MIN	16	ELEVATOR EQUIPMENT 127
42	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	17	DATA ROOM 128
43	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	17	ELECTRICAL 129-A
44	C	PAIR	–	HM-1	6 1/8"	1/A004 SIM.	1/A004	–	–	15	BUILDING STORAGE 129
45	D	SINGLE	–	HM-3	6 3/8"	14/A004 SIM.	14/A004	–	20 MIN	16	ELEVATOR EQUIPMENT 131
46	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	12	STAIR C
47	D	SINGLE	–	HM-3	9"	15/A004 SIM.	15/A004	–	1 1/2 HR	11	STAIR C
48	A	PAIR	ALUM.	CW-13	6"	12/A006	29/A006	24/A006	–	6	ELEVATOR LOBBY 132
49	C	PAIR	–	HM-1	6 1/8"	1/A004 SIM.	16/A004	–	–	14	CORRIDOR 133
50	H	PAIR	–	HM-7	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	48	STORAGE 135
51	H	PAIR	–	HM-7	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	48	CHEMICAL STORAGE 136
52	H	PAIR	–	HM-7	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	48	HAZARDOUS STORAGE 137
53	H	PAIR	–	HM-7	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	48	SAMPLE QUARANTINE 138
54	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	18	GAS CYLINDERS 139
55	C	PAIR	–	HM-1	6 1/8"	1/A004 SIM.	16/A004	–	–	7	CORRIDOR 112
56	G	AUTOMATIC SLIDE DOOR ———			6"	17/A004	18/A004	19/A004		43	–
57	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	18	HAZARDOUS STORAGE 144
58	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004	–	20 MIN	18	HAZARDOUS STORAGE 144
59	F	SINGLE	ALUM.	HM-4	5 3/4"	4/A004 SIM.	4/A004	13/A004	–	8	RECEIVING 141
60	E	METAL COILING DOOR ———				20/A004	21/A004	–		44	RECEIVING 144
61	E	METAL COILING DOOR ———				20/A004	21/A004	–		44	RECEIVING 141
62	M	PAIR	–	HM-12	5 3/4"	4/A004 SIM.	4/A004	–	–	49	GROWTH CHAMBER 140
63	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR D
64	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	11	STAIR D
65	L	SINGLE	ALUM.	HM-11	5 3/4"	11/A004	12/A004	13/A004	–	5	STAIR D
66	H	PAIR	ALUM.	HM-7	5 3/4"	12/A004 SIM.	12/A004 SIM.	13/A004	–	13	MECHANICAL 145
67	H	PAIR	ALUM.	HM-7	5 3/4"	12/A004 SIM.	12/A004 SIM.	13/A004	–	13	ELECTRICAL 146

DOOR SCHEDULE • SECOND FLOOR

OPNG NMBR.	DOOR					DETAILS			LBL	HDWE	DOOR LOCATION ROOM NAMES
	TYPE	NUMBER	THRESH	FRAME	FRAME DEPTH	HEAD	JAMB	SILL			
68	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	28	ADMIN SUPPORT 200
69	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	20	STORAGE 200-B
70	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 218
71	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 217
72	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFIC E 216
73	D	SINGLE	– 2	HM-2	6 1/8"	1/A004 SIM.	1/A004	–	–	20	P.I. OFFICE 215
74	D	SINGLE	– 3	HM-3	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	23	STORAGE 200-C
75	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 214
76	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 213
77	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 212
78	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 211
79	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 210
80	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 209
81	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 208
82	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 207
83	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 206
84	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 205
85	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	23	STORAGE 200-D
86	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 204
87	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 203
88	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 202
89	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 201
90	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR A
91	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	22	CONFERENCE ROOM 220
92	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	COMPUTER ROOM 221
93	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	20	STORAGE 221-A
94	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	25	WOMEN 223
95	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	24	PLUMBING CHASE
96	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	22	BREAK ROOM 222
97	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	25	MEN 224
98	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	24	CUSTODIAL 227
99	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	SEMINAR 229
100	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 230
101	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 231
102	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 232
103	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 234
104	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 232
105	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 233
106	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 234
107	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 235
108	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 235
109	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 237
110	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	EQUIPMENT 238
111	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR B
112	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 239
113	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 240
114	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 242
115	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 244
116	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 240
117	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 241
118	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 242
119	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 243
120	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 244
121	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 239
122	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	17	TELEPHONE / DATA 271
123	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 245
124	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 246
125	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 247
126	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	21	STORAGE 248-A
127	D	SINGLE	– 3	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	12	STAIR C
128	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	21	STORAGE 248-B
129	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 249
130	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 250
131	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 251
132	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 252
133	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 254
134	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 252
135	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 253
136	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 254
137	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 255
138	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 256
139	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	31	RESEARCH LAB 256
140	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 256
141	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR D
142	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	EQUIPMENT 258
143	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 259
144	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 260
145	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 261
146	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 262
147	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 264
148	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 261
149	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 262
150	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 263
151	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 264
152	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 266
153	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 265
154	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	SEMINAR 269
155	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 260
156	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	17	ELECTRICAL 270

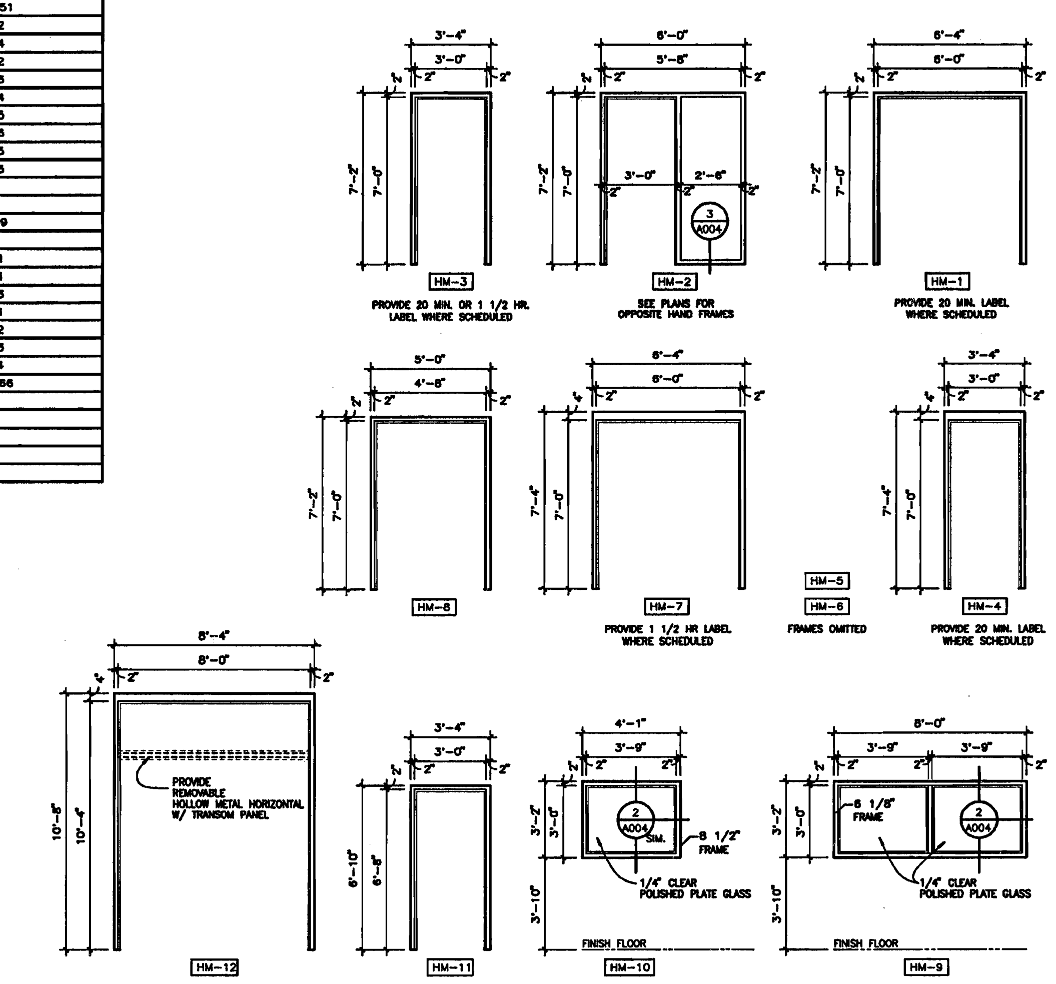
DOOR SCHEDULE • THIRD FLOOR

OPNG NMBR.	DOOR					DETAILS			LBL	HDWE	DOOR LOCATION ROOM NAMES
	TYPE	NUMBER	THRESH	FRAME	FRAME DEPTH	HEAD	JAMB	SILL			
157	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004		–	26	ADMIN SUPPORT 300
158	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	20	STORAGE 300-B
159	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 318
160	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 317
161	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFIC E 316
162	D	SINGLE	– 2	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	20	P.I. OFFICE 315
163	D	SINGLE	– 3	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	23	STORAGE 300-C
164	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 314
165	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 313
166	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 312
167	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 311
168	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 310
169	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 309
170	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 308
171	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 307
172	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 306
173	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 305
174	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	23	STORAGE 300-D
175	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 304
176	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 303
177	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 302
178	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	P.I. OFFICE 301
179	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR A
180	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	22	CONFERENCE ROOM 320
181	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	COMPUTER ROOM 321
182	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	20	STORAGE 321-A
183	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	25	WOMEN 323
184	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	24	PLUMBING CHASE
185	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	22	BREAK ROOM 322
186	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	25	MEN 324
187	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	24	CUSTODIAL 327
188	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	SEMINAR 329
189	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 330
190	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 331
191	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 332
192	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 334
193	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 332
194	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 333
195	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 334
196	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 335
197	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 335
198	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 337
199	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	EQUIPMENT 338
200	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR B
201	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 339
202	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 340
203	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 342
204	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 344
205	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 340
206	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 341
207	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 342
208	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 343
209	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 344
210	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 339
211	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	17	TELEPHONE / DATA 371
212	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 345
213	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 346
214	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 347
215	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	21	STORAGE 348-A
216	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	12	STAIR C
217	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	21	STORAGE 348-B
218	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 349
219	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 350
220	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 351
221	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 352
222	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 354
223	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 352
224	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 353
225	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 354
226	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 355
227	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 356
228	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	31	RESEARCH LAB 355
229	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 355
230	D	SINGLE	–	HM-3	5"	7/A004 SIM.	7/A004	–	1 1/2 HR	12	STAIR D
231	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	EQUIPMENT 358
232	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	30	MISC. SUPPORT 359
233	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 360
234	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	RESEARCH LAB 361
235	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 361
236	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	29	RESEARCH LAB 363
237	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 361
238	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 362
239	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 363
240	K	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	28	RESEARCH LAB 364
241	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	TISSUE CULTURE 366
242	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	30/A004	–	–	27	HALL 365
243	D	SINGLE	–	HM-2	6 1/8"	1&2/A004 SIM.	1&2/A004	–	–	20	SEMINAR 369
244	J	PAIR	–	HM-8	6 1/8"	1/A004 SIM.	1/A004	–	–	27	POST DOCS 360
245	D	SINGLE	–	HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	17	ELECTRICAL 370

DOOR SCHEDULE • FOURTH FLOOR

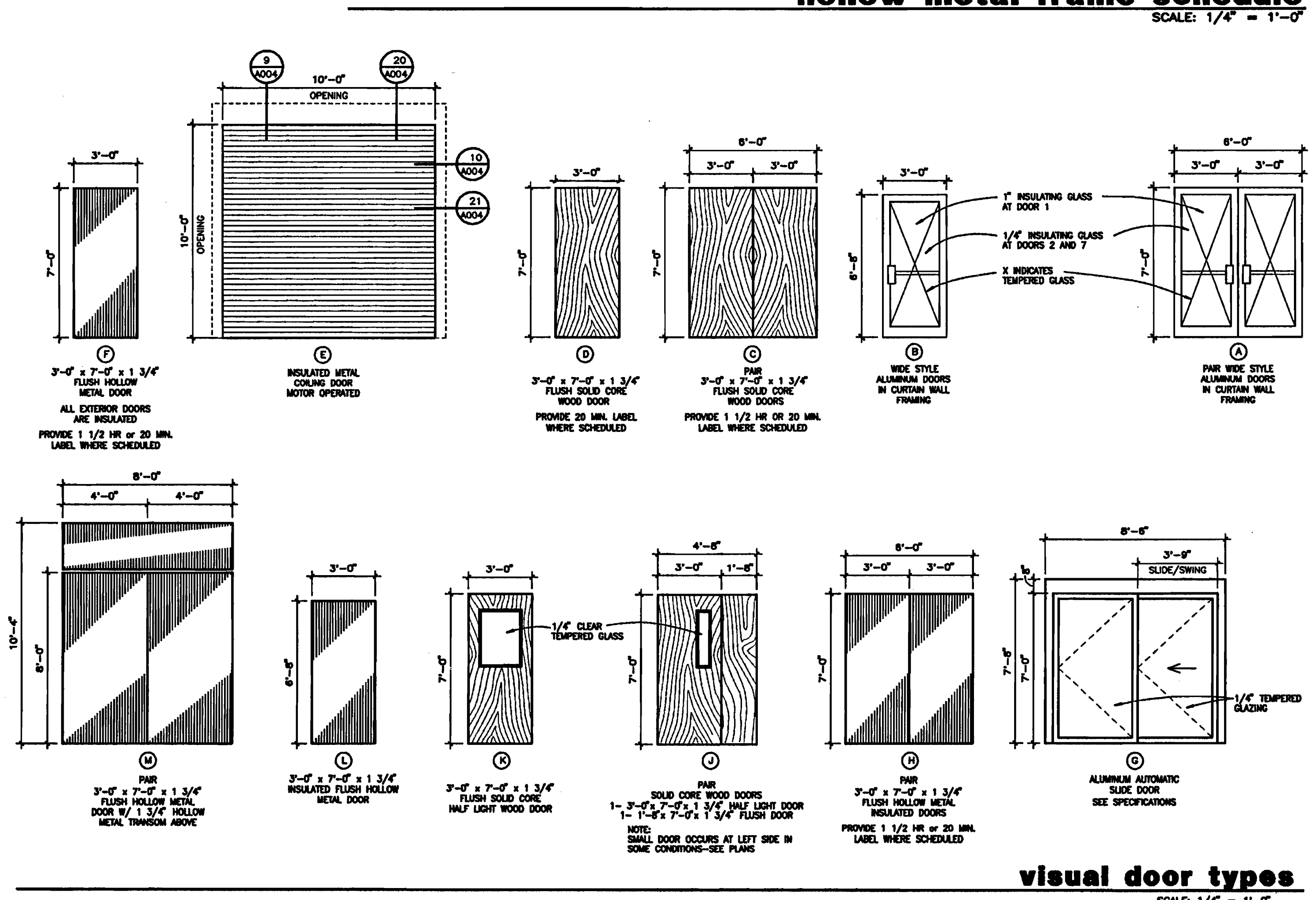
OPNG NMBR.	DOOR					DETAILS			LBL	HDWE	DOOR LOCATION ROOM NAMES
	TYPE	NUMBER	THRESH	FRAME	FRAME DEPTH	HEAD	JAMB	SILL			
246	BY SUPPLIER		ALUM. *	—— DOOR BY GREEN HOUSE SUPPLIER ——				25/A004	–	46	GREEN HOUSE 411
247	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004 SIM.	–	–	19	HARD GOOD STORAGE 411-A
248	H	PAIR	–	HM-7	5 3/4"	4/A004 SIM.	4/A004 SIM.	–	1 1/2 HR	38	CORRIDOR 409
249	F	SINGLE	ALUM.	HM-3	6 1/8"	28/A004	7/A105 SIM.	29/A003	–	40	CORRIDOR 409
250	C	PAIR	–	HM-1	6 3/8"	14/A004 SIM.	14/A004	–	20 MIN.	38	MECHANICAL 410
251	F	SINGLE	ALUM.	HM-3	6 1/8"	28/A004	7/A105	29/A003	–	40	CORRIDOR 409
252	C	PAIR	–	HM-1	6 1/8"	1/A004 SIM.	1/A004		–	37	STORAGE 408
253	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	32	MENS LOCKER 407
254	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	33	TOILET 407-B
255	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	33	TOILET 406-B
256	D	SINGLE	–	HM-3	6 1/8"	1/A004 SIM.	1/A004	–	–	32	WOMENS LOCKER 406
257	D	SINGLE	–	HM-3	9"	15/A004 SIM.	15/A004	–	1 1/2 HR	12	STAIR C
258	H	PAIR	–	HM-7	5 3/4"	4/A004 SIM.	4/A004 SIM.	–	–	36	HEAD HOUSE 403
259	DOOR BY COOLER SUPPLIER ———									45	COOL ROOM 404
260	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004 SIM.	–	–	34	PESTICIDE PREP 405
261	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004 SIM.	–	–	35	PESTICIDE 405-B
262	F	SINGLE	–	HM-4	5 3/4"	4/A004 SIM.	4/A004 SIM.	–	–	35	FERTILIZER 405-A
263	H	PAIR	ALUM. *	HM-7	5 3/4"	22/A004	23/A004	24/A004	–	39	HEAD HOUSE 403
264	F	SINGLE	ALUM. *	HM-4	5 3/4"	22/A004	23/A004	24/A004	–	41	STAIR D
265	F	SINGLE	ALUM. *	HM-4	5 3/4"	22/A004	23/A004	24/A004	–	41	STAIR B
266	H	PAIR	ALUM. *	HM-7	5 3/4"	26/A004 SIM.	26/A004	27/A004	–	47	MECHANICAL 410
267	——— DOOR BY GREENHOUSE SUPPLIER ———									45	GREENHOUSE 411
268	——— DOOR BY GREENHOUSE SUPPLIER ———									45	GREENHOUSE 411
269	——— DOOR BY GREENHOUSE SUPPLIER ———									45	GREENHOUSE 411
270	F	SINGLE		HM-3	6 5/8"	8/A004 SIM.	8/A004	–	1 1/2 HR	22	ELECTRICAL 412

29/A004



hollow metal frame schedule

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



visual door types

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH
architects

100 East Huntington, Suite D · P.O. Box 1656 · Jonesboro, Arkansas 72403-1656

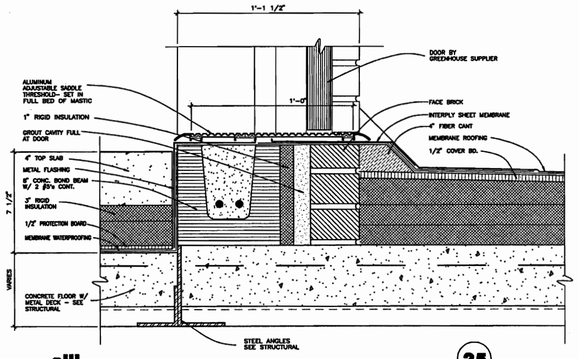
BRACKETT-KRENNERICH, & ASSOCIATES, P.A.
REGISTERED ARCHITECTS
C13
10/25/02
ARKANSAS

DOOR SCHEDULES
HOLLOW METAL FRAMES
VISUAL DOOR TYPES

Commission Number
10301

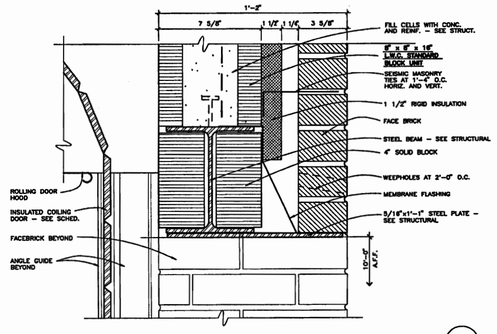
A003

Date: October 25, 2002



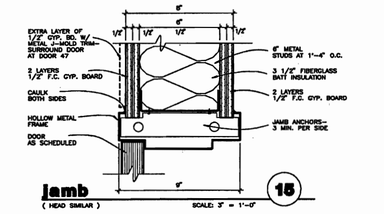
sill 25

SCALE: 3" = 1'-0"



head at coiling door 20

SCALE: 3" = 1'-0"



jamb 15

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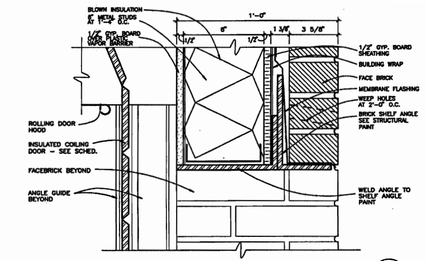
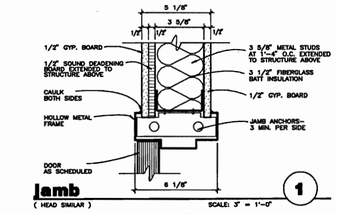


head at coiling door 9

SCALE: 3" = 1'-0"



jamb 1

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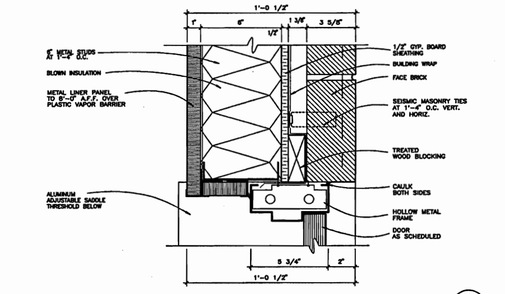

jamb 26

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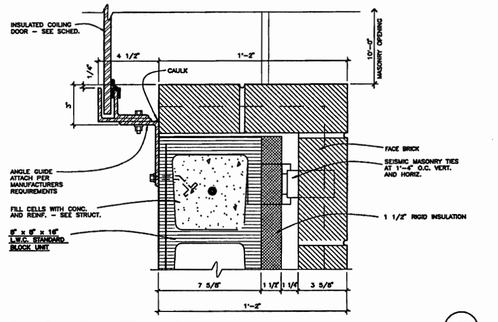

jamb at coiling door 21

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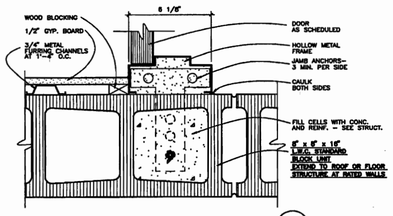

jamb 16

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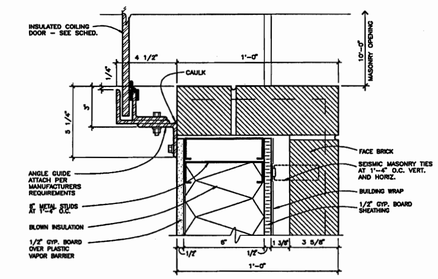
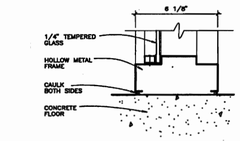


jamb at coiling door 10

SCALE: 3" = 1'-0"



jamb 3

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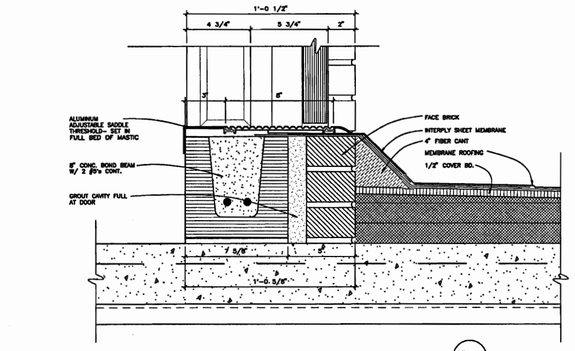

sill 27

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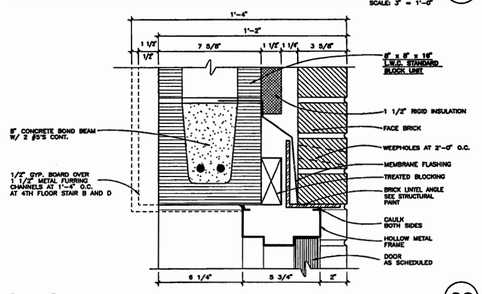

head 22

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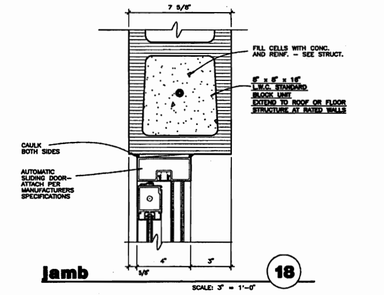

jamb 18

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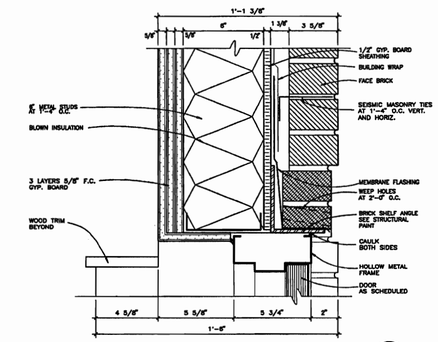

head 11

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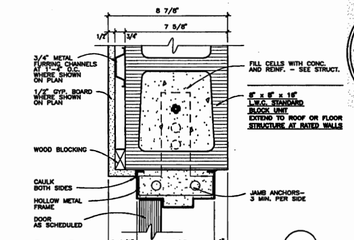
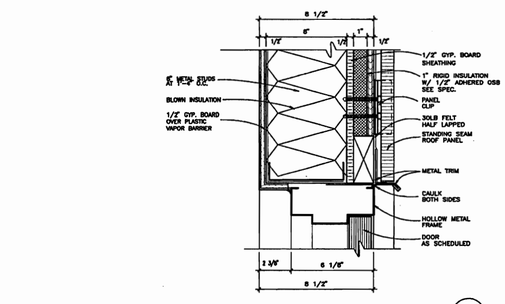


jamb 4

(HEAD SIMILAR) SCALE: 3" = 1'-0"



head 28

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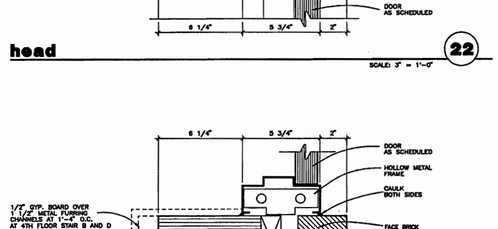

jamb 23

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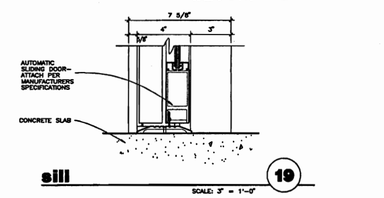

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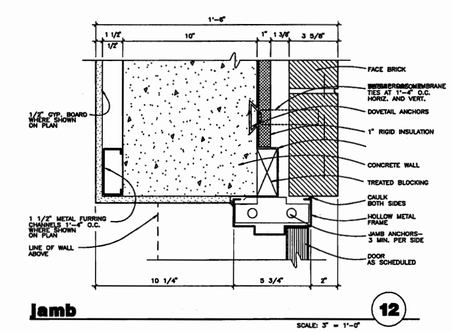

jamb 12

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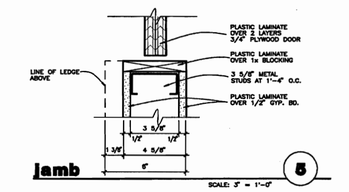

jamb 5

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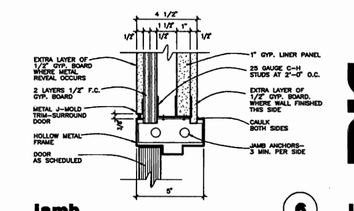

jamb 6

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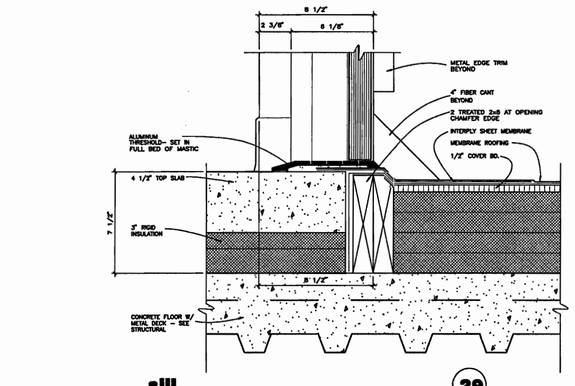

sill 29

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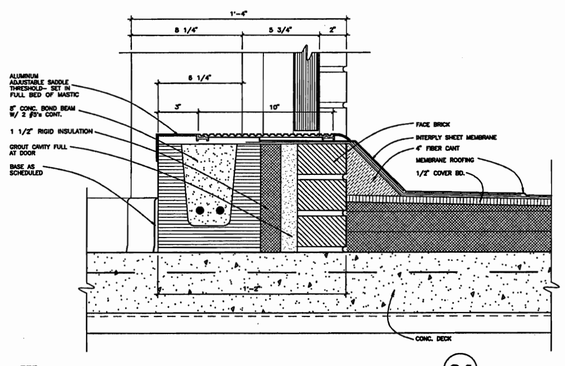

sill 24

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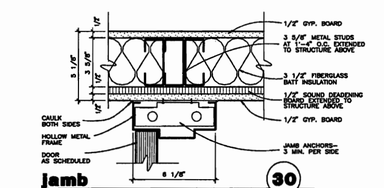

jamb 30

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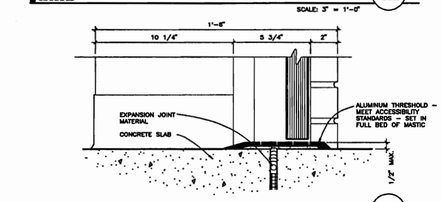

sill 13

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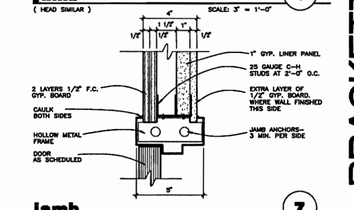

jamb 7

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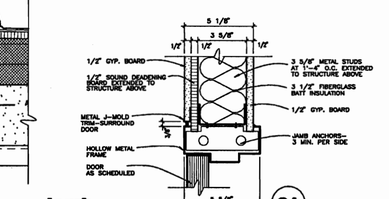

jamb 31

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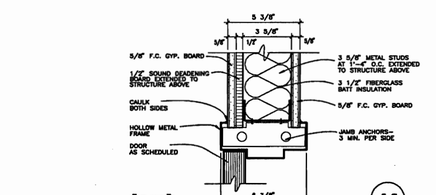

jamb 14

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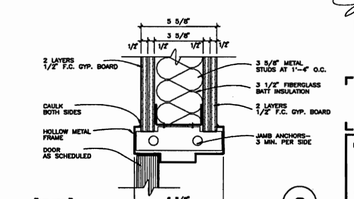


jamb 8

(HEAD SIMILAR) SCALE: 3" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS CO 15/25/02 ARKANSAS

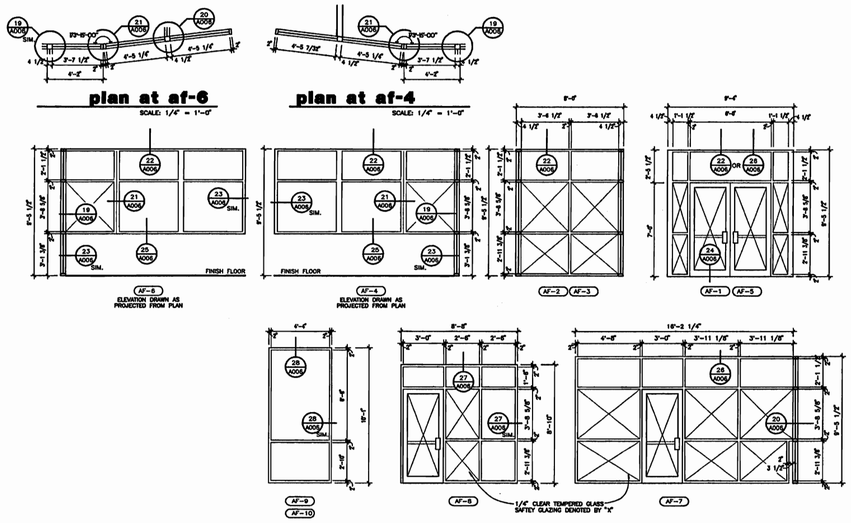
DOOR DETAILS

Commission Number 10301

A004

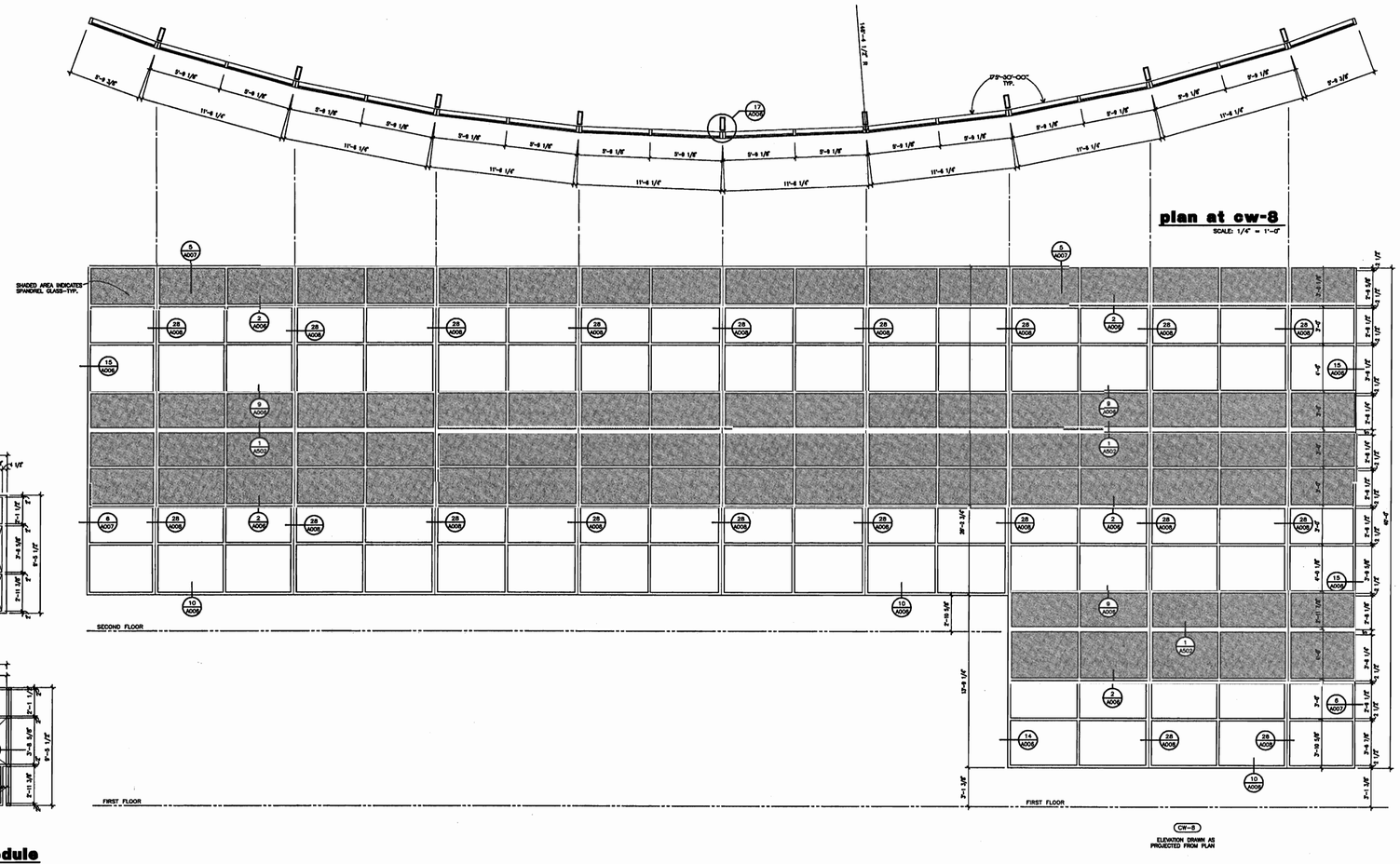
Date: October 25, 2002

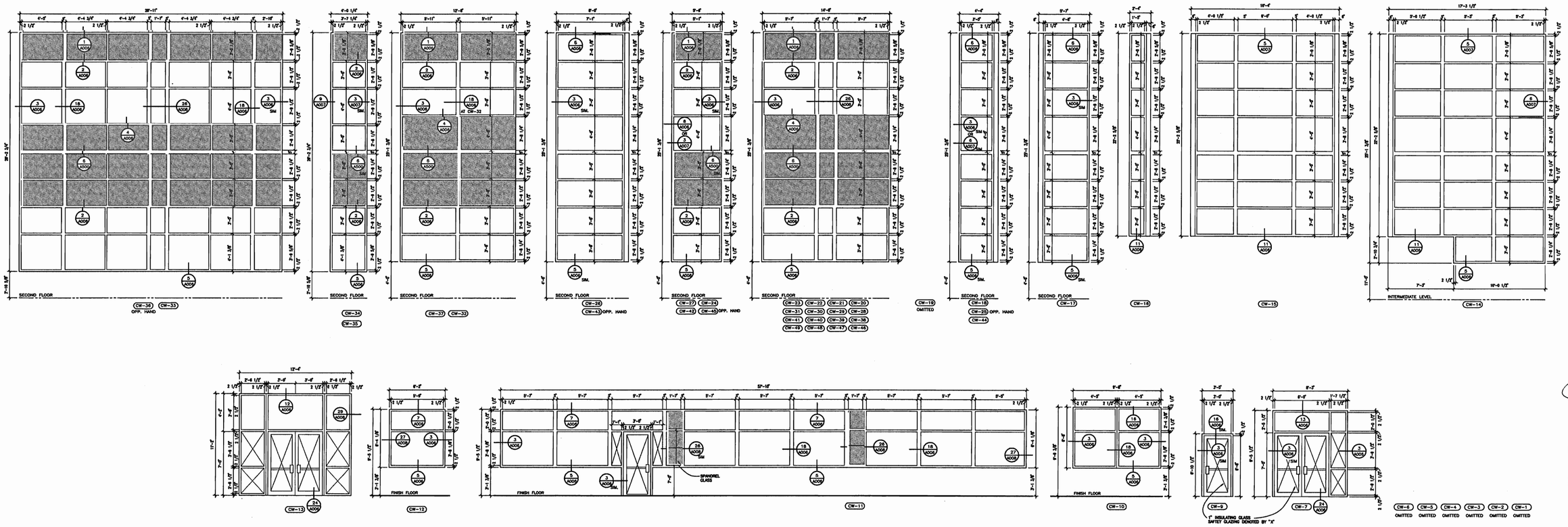
100 East Huntington, Suite B P.O. Box 1805 Jonesboro, Arkansas 72403-1805
Phone: 870-932-0276 Fax: 870-932-0276



aluminum frame schedule

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





curtain wall schedule

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects
100 East Huntington, Suite D P.O. Box 16595 Jonesboro, Arkansas 72402-1600 870-932-8076 Fax: 870-932-8076 Email: brackett@arkdata.net

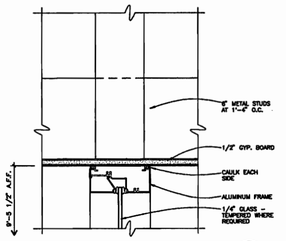
REGISTERED ARCHITECTS
BRACKETT-KRENNERICH & ASSOCIATES, P.A.
ARKANSAS

CURTAIN WALL SCHEDULE
ALUMINUM FRAME SCHEDULE

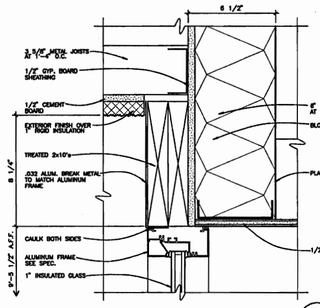
Commission Number
10301

A005

Date: October 25, 2002



head detail (26)
SCALE: 3" = 1'-0"



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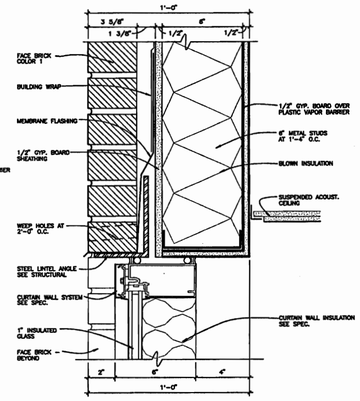

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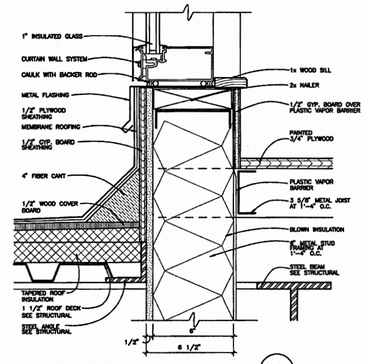
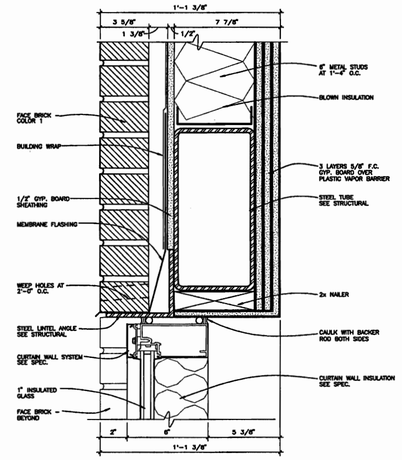


sill detail (11)
SCALE: 3" = 1'-0"



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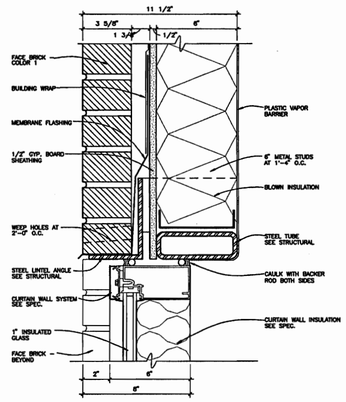
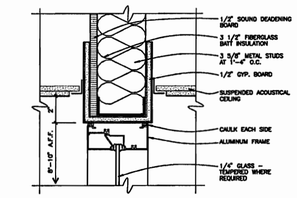
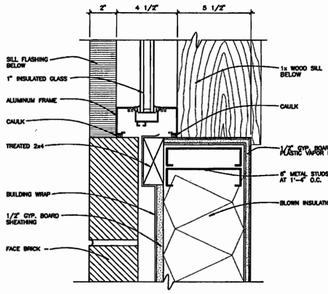
SCALE: 3" = 1'-0"



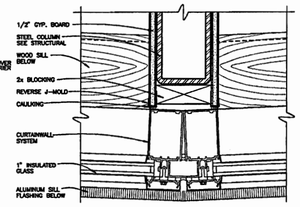
head detail (1)
SCALE: 3" = 1'-0"



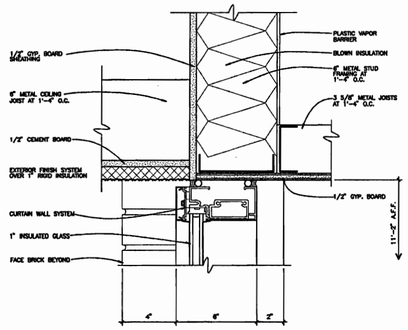
head detail (27)
JAMB SIMILAR
SCALE: 3" = 1'-0"



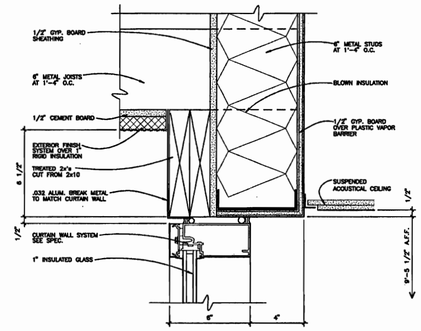
jamb detail (23)
SCALE: 3" = 1'-0"



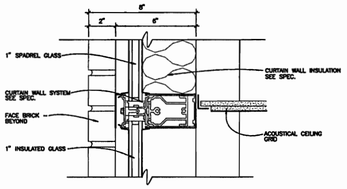
vertical mullion detail (17)
SCALE: 3" = 1'-0"



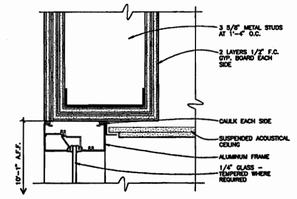
head detail (12)
SCALE: 3" = 1'-0"



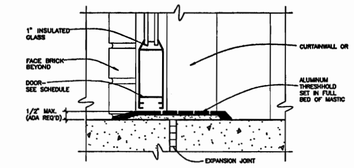
head detail (7)
SCALE: 3" = 1'-0"



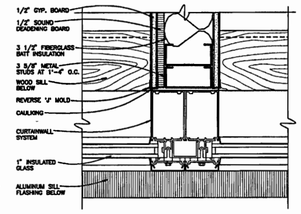
horizontal mull detail (2)
SCALE: 3" = 1'-0"



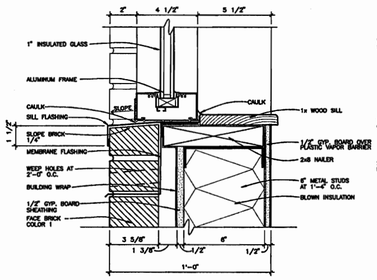
head detail (28)
JAMB SIMILAR
SCALE: 3" = 1'-0"



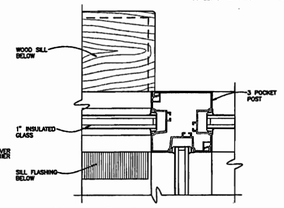
sill detail (24)
SCALE: 3" = 1'-0"



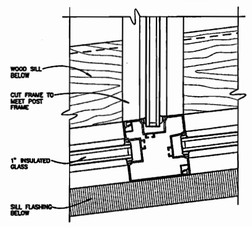
vertical mullion detail (18)
SCALE: 3" = 1'-0"



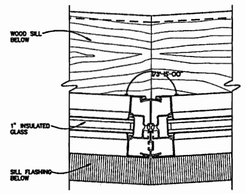
sill detail (25)
SCALE: 3" = 1'-0"



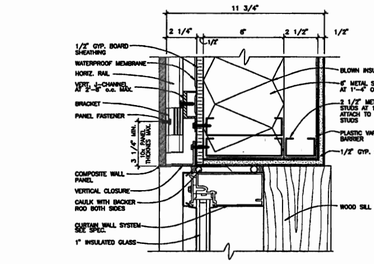
3 pocket post detail (19)
SCALE: 3" = 1'-0"



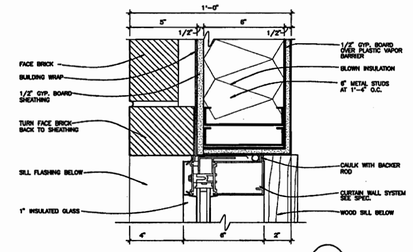
3 pocket post detail (20)
SCALE: 3" = 1'-0"



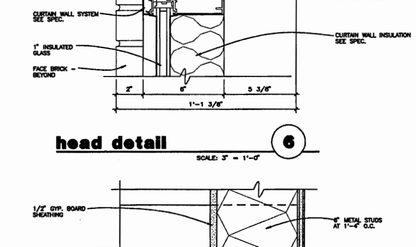
pivot mullion detail (21)
SCALE: 3" = 1'-0"



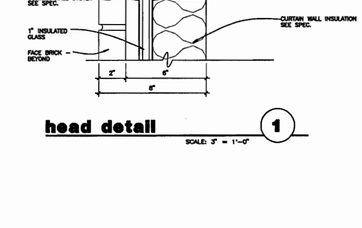
jamb detail (15)
SCALE: 3" = 1'-0"



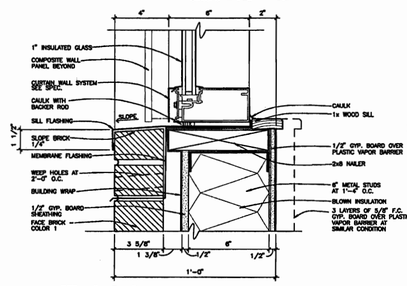
jamb detail (14)
SCALE: 3" = 1'-0"



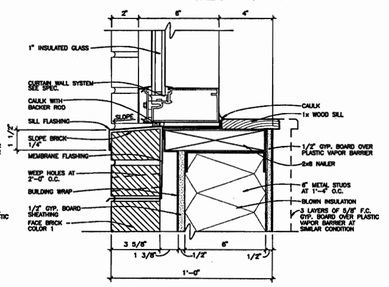
sill detail at composite panel (9)
SCALE: 3" = 1'-0"



sill detail (4)
SCALE: 3" = 1'-0"



sill detail at composite panel (10)
SCALE: 3" = 1'-0"



sill detail (5)
SCALE: 3" = 1'-0"

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BRACKETT KRENNERICH architects
100 East Huntington, Suite B — P.O. Box 4566 — Jonesboro, Arkansas 72403-1655
870-932-0671 Fax 870-932-0996
Email bmcdevitt@brackdnk.net

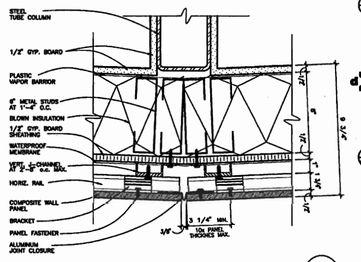
BRACKETT KRENNERICH & ASSOCIATES, P.A. — REGISTERED ARCHITECTS — CB — 10/18/02 — ARKANSAS

CURTAIN WALL DETAILS
ALUMINUM FRAME DETAILS

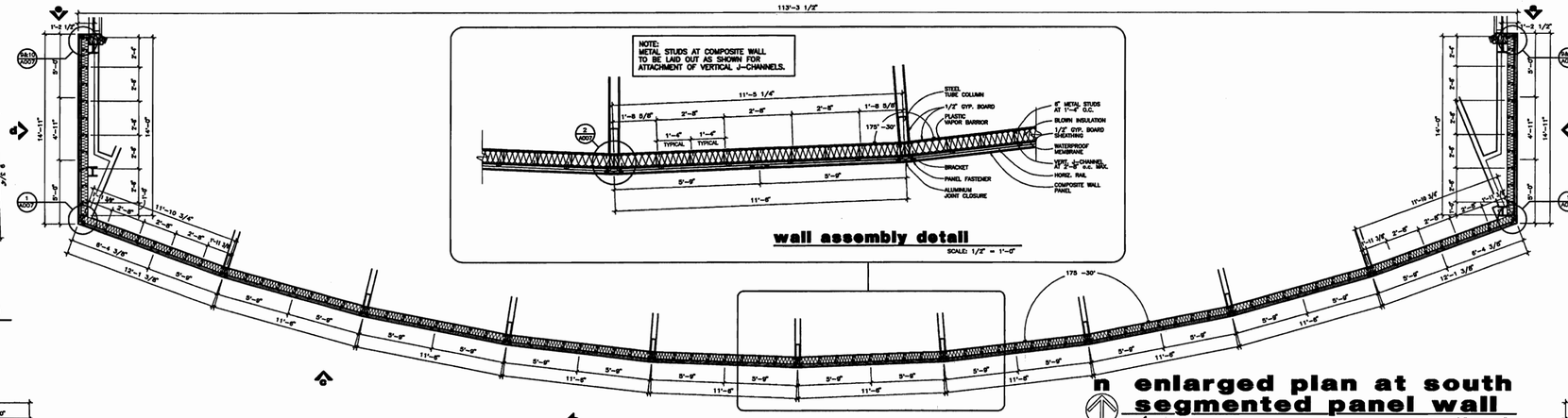
Commission Number 10001

A006

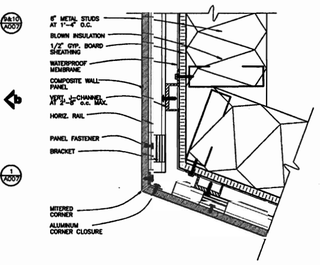
Date: October 25, 2002



joint det. at composite panel (2)
SCALE: 3" = 1'-0"

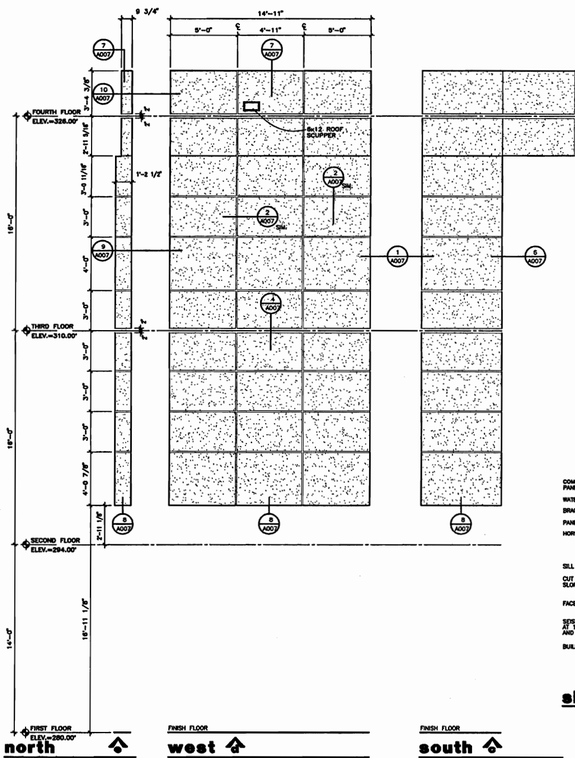


wall assembly detail
SCALE: 1/2" = 1'-0"



corner detail at composite panel (1)
SCALE: 3" = 1'-0"

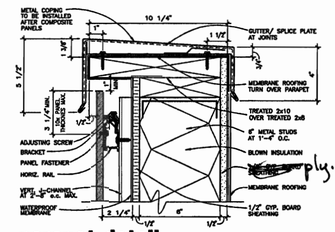
n enlarged plan at south segmented panel wall
SCALE: 1/4" = 1'-0"



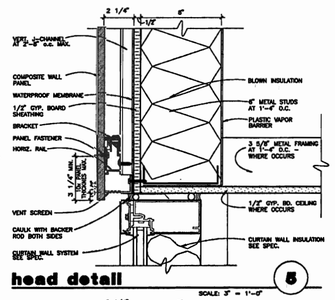
north
SCALE: 1/4" = 1'-0"

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

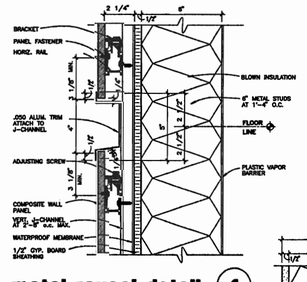
south
SCALE: 1/4" = 1'-0"



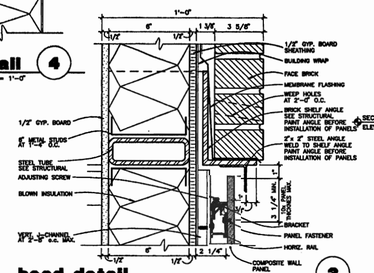
parapet detail at composite panel (7)
SCALE: 1 1/2" = 1'-0"



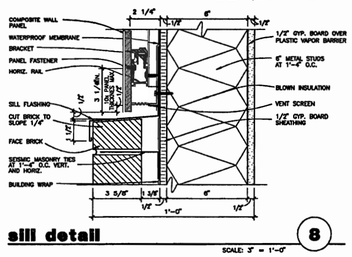
head detail (5)
SCALE: 3" = 1'-0"



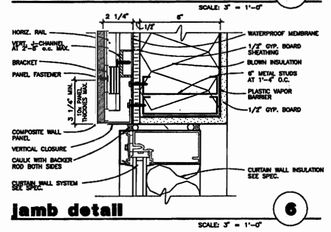
metal reveal detail (4)
SCALE: 3" = 1'-0"



head detail (3)
SCALE: 1 1/2" = 1'-0"

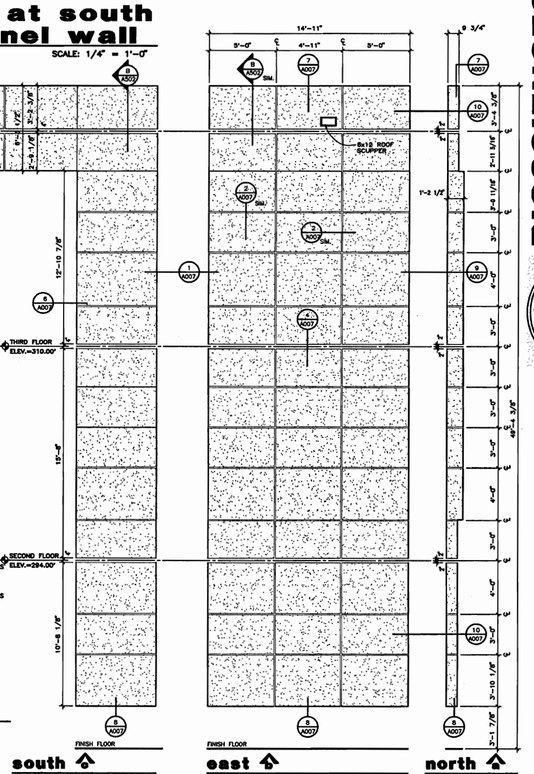


sill detail (8)
SCALE: 3" = 1'-0"



jamb detail (6)
SCALE: 3" = 1'-0"

composite panel wall elevations at south segmented entry

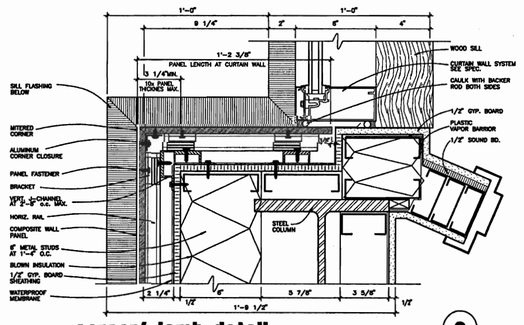


south
SCALE: 1/4" = 1'-0"

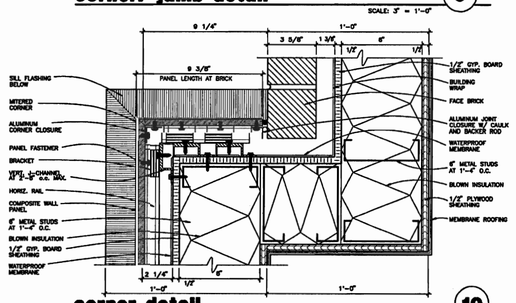
east
SCALE: 1/4" = 1'-0"

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

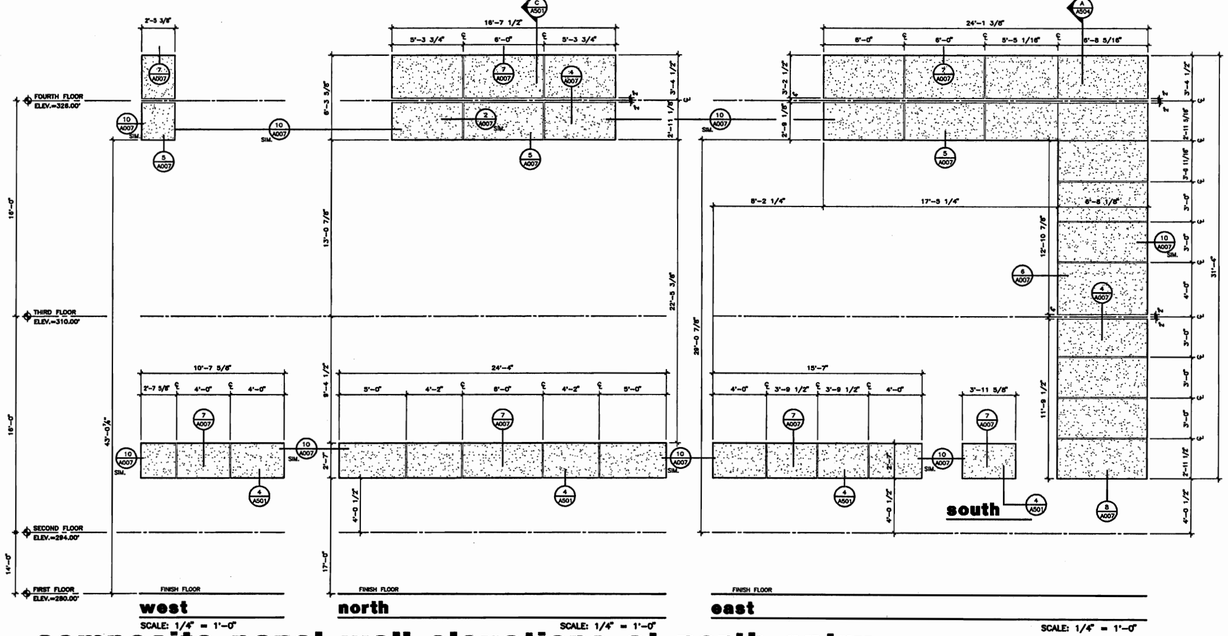
SCALE: 1/4" = 1'-0"



corner/ jamb detail (9)
SCALE: 3" = 1'-0"



corner detail (10)
SCALE: 3" = 1'-0"

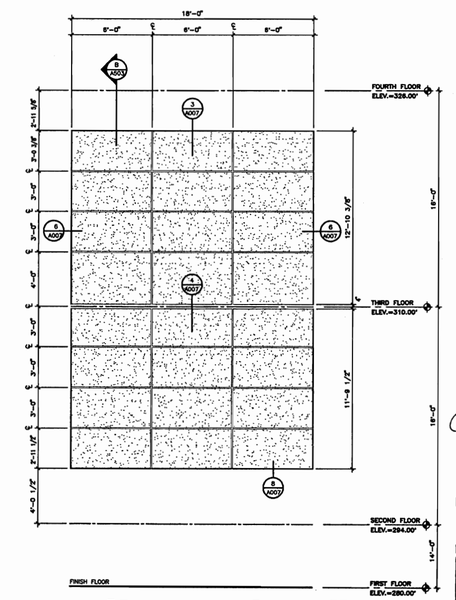


west
SCALE: 1/4" = 1'-0"

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

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

composite panel wall elevations at north entry



composite panel wall elev. at east and west stair
SCALE: 1/4" = 1'-0"

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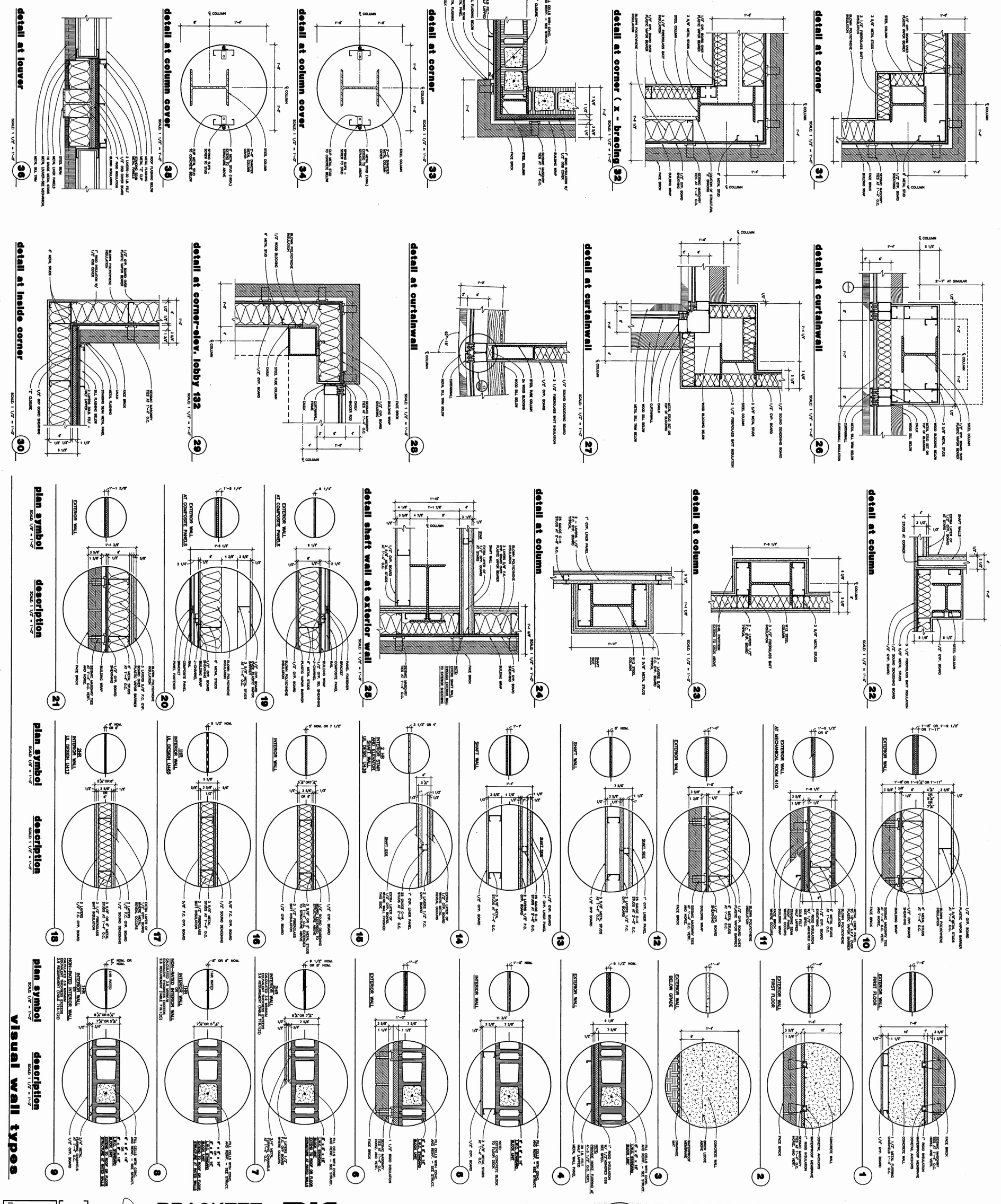
Suite B - P.O. Box 1606 Jonesboro, Arkansas 72403-1606 Fax 870-932-0671 Email
REGISTERED ARCHITECTS CB 10/25/96 ARKANSAS

COMPOSIT WALL PAN/

Commission 102
AC
Date: 0



BRACKETT KRENNERICH architects

ARKANSAS STATE UNIVERSITY 1909

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JONESBORO, ARKANSAS

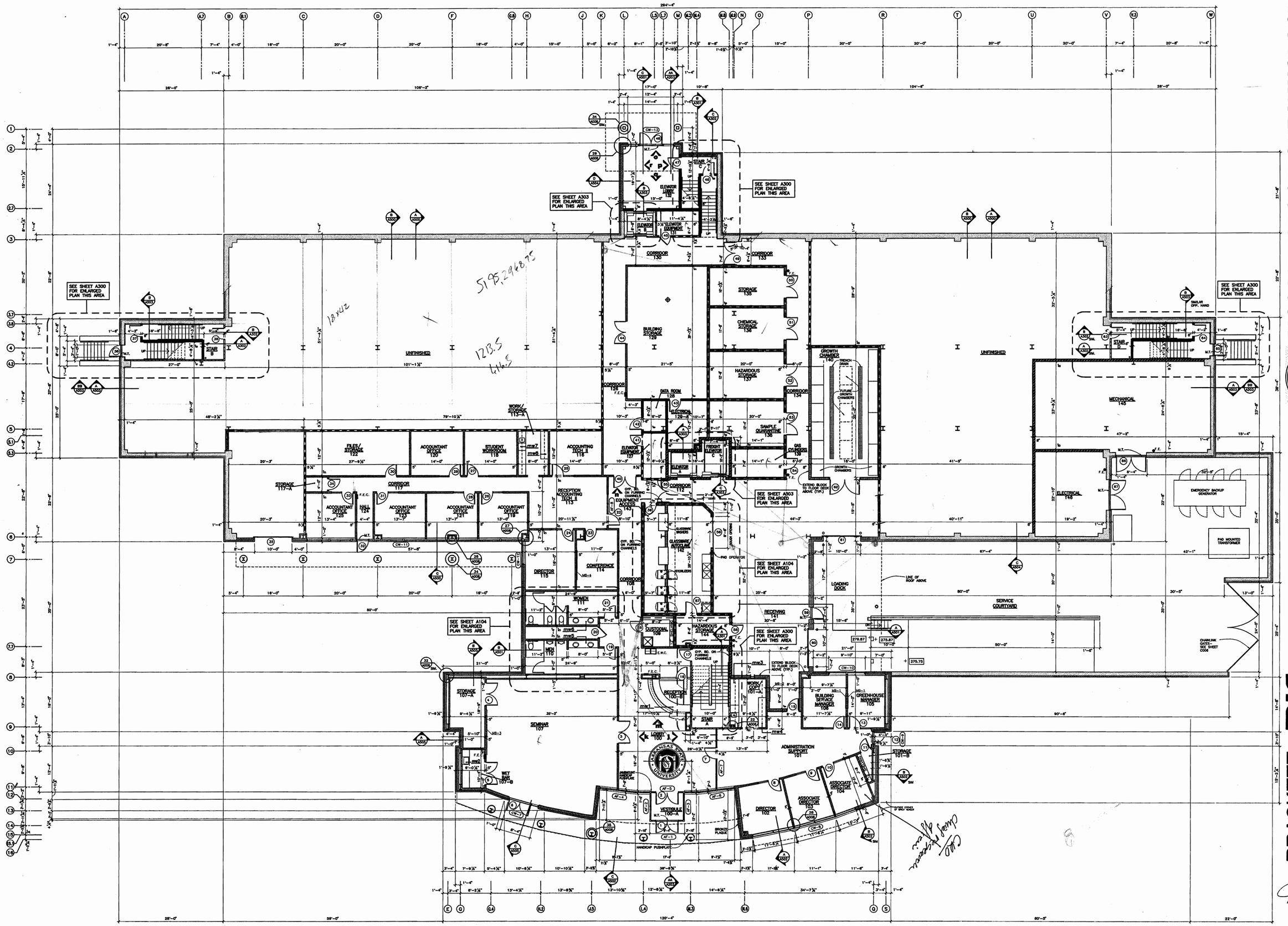
WALL TYPE PLAN DETAIL

Commission 109

A0

Date: Qr

Suite B P.O. Box 1665 Jonesboro, Arkansas 72403-1665 870-932-0571 Fax 870-932-0935 Email brackett@mailnet.net



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ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

FIRST FLOOR PLAN

Commission Number 10301

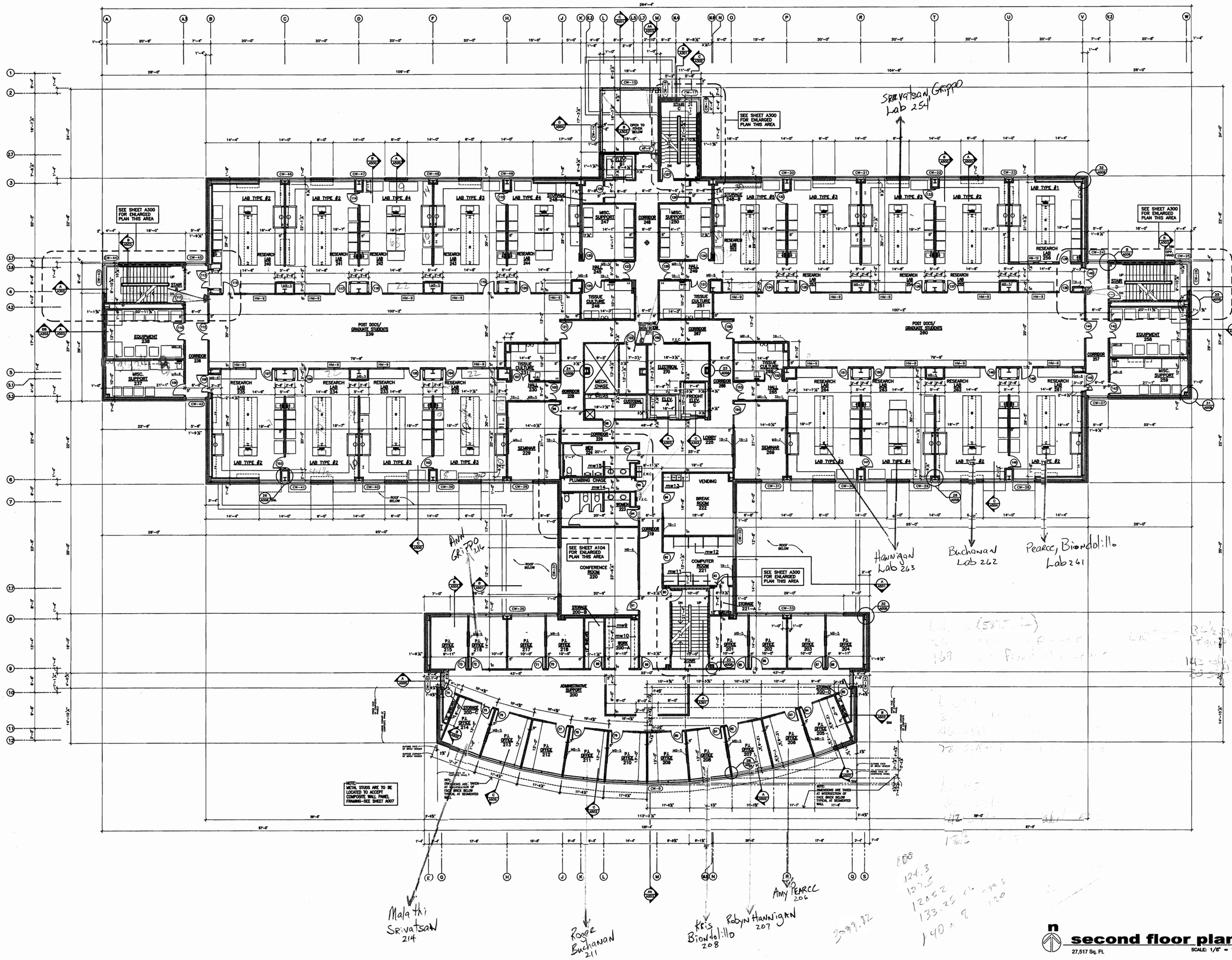
A100

Date: October 25, 2002

first floor plan

17,350 Sq.Ft. FINISHED SPACE
10,911 Sq.Ft. UNFINISHED SPACE

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



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ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS
10/25/02
ARKANSAS

SECOND FLOOR PLAN

Commission Number 10301

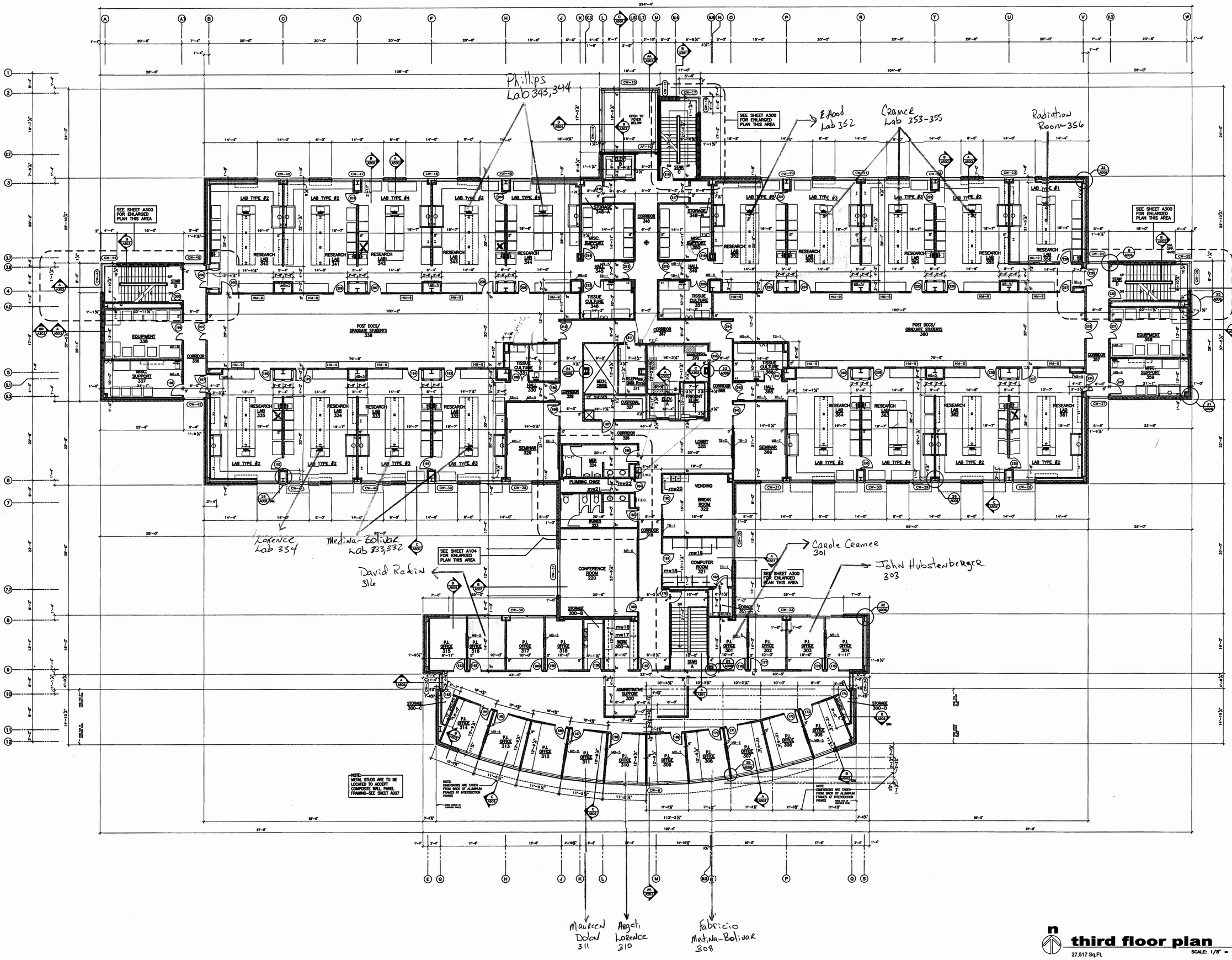
A101

Date: October 25, 2002

second floor plan

27,517 Sq. Ft.

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



BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS 12/25/02 ARKANSAS

THIRD FLOOR PLAN

Commission Number 10301

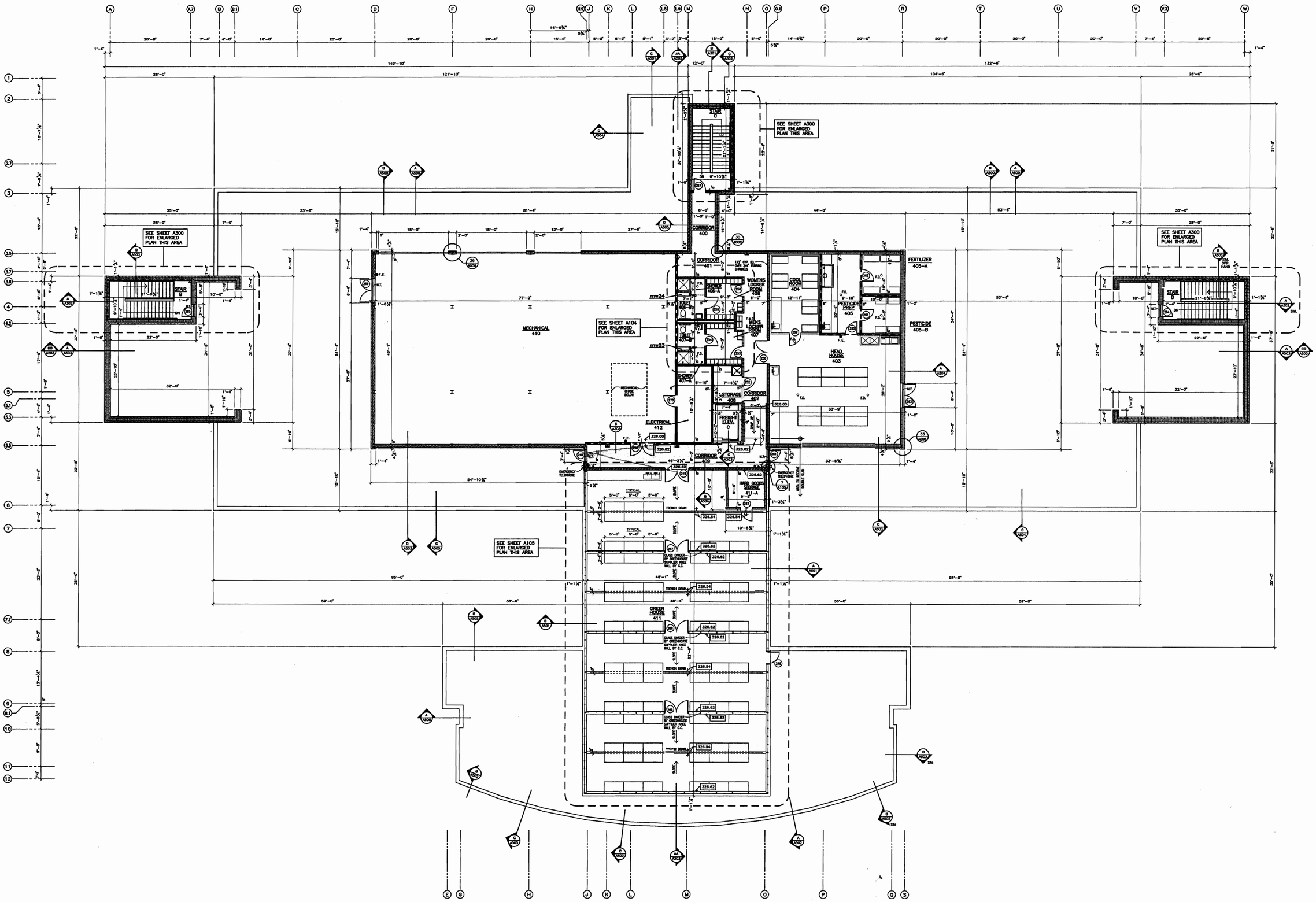
A102

Date: October 25, 2002

third floor plan

27,517 Sq.Ft.

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



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JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS C13 ARKANSAS

FOURTH FLOOR PLAN

Commission Number 10301

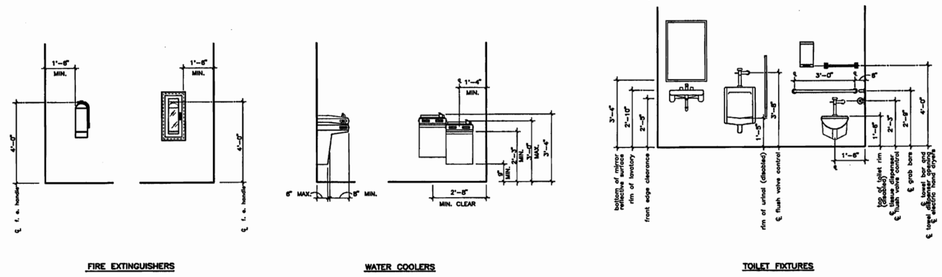
A103

Date: October 25, 2002

fourth floor plan

11,600 Sq.Ft.

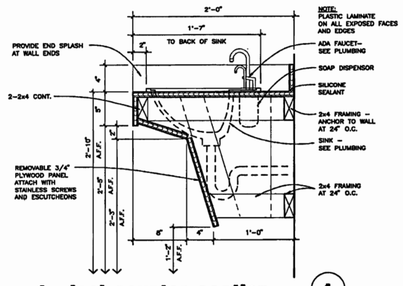
SCALE: 1/8" = 1'-0"



ada mounting heights

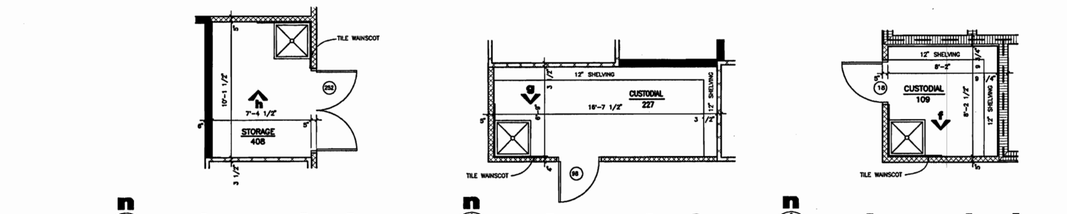
SCALE: 3/8" = 1'-0"

NOTE:
SEE SPECS. FOR ACCESSORIES PROVIDED UNDER CONTRACT. REMAINING ACCESSORIES TO BE PROVIDED BY OWNER. PROVIDE SOLID BLOCKING BEHIND ALL TOILET ACCESSORIES INCLUDING THOSE PROVIDED AND INSTALLED BY OWNER.



typical counter section (1)

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



n enlarged plan

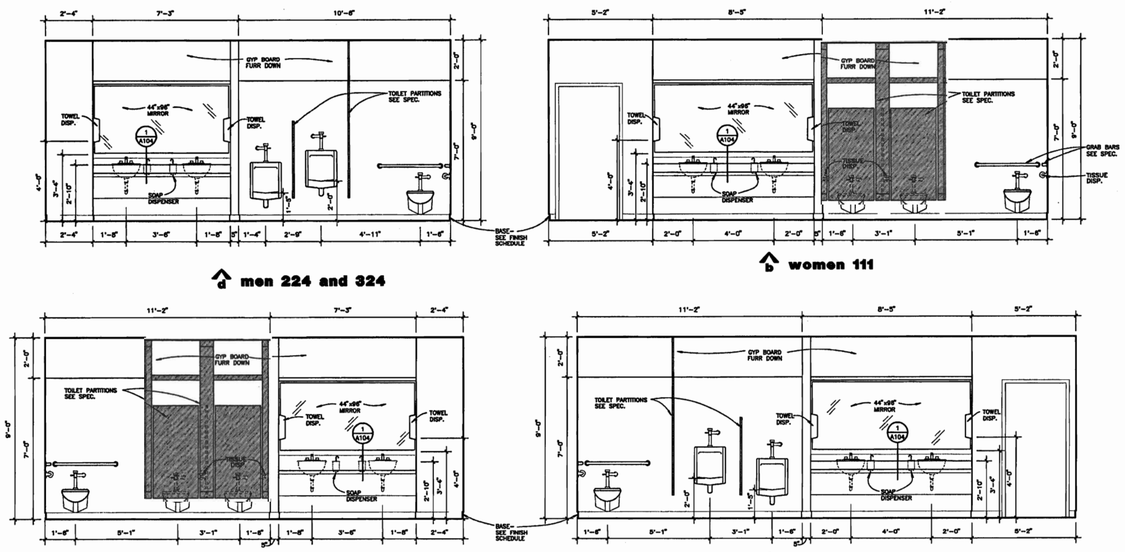
(AT FOURTH FLOOR) SCALE: 1/4" = 1'-0"

n enlarged plan

(AT SECOND AND THIRD FLOOR) SCALE: 1/4" = 1'-0"

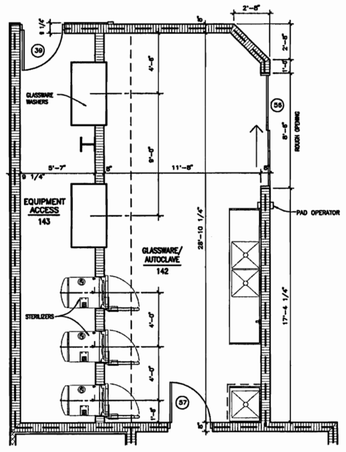
n enlarged plan

(AT FIRST FLOOR) SCALE: 1/4" = 1'-0"



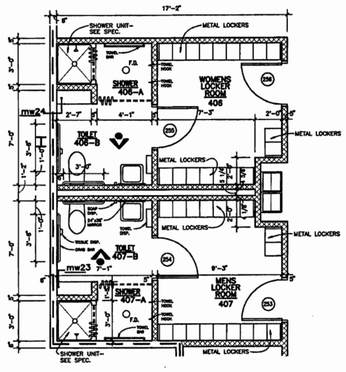
toilet elevations

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



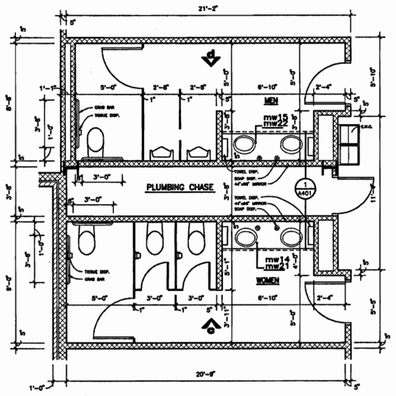
n enlarged autoclave plan

(AT FIRST FLOOR) SCALE: 1/4" = 1'-0"



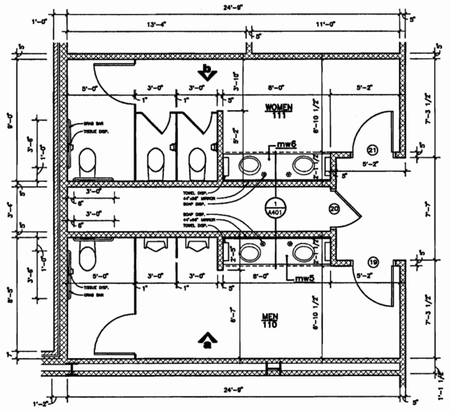
n enlarged toilet plan

(AT FOURTH FLOOR) SCALE: 1/4" = 1'-0"



n enlarged toilet plan

SECOND FLOOR (WOMEN 223-MEN 224)
THIRD FLOOR (WOMEN 323-MEN 324)
SCALE: 1/4" = 1'-0"



n enlarged toilet plan

(AT FIRST FLOOR) SCALE: 1/4" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects
100 East Huntington, Suite D - P.O. Box 1655 Jonesboro, Arkansas 72403-1655
(501) 932-0571 Fax 870-932-0975
Email brackett@mediacom.net

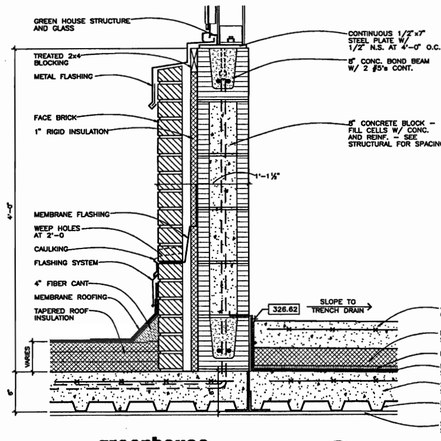
BRACKETT KRENNERICH & ASSOCIATES
REGISTERED ARCHITECTS 213
11/25/02
ARKANSAS

ENLARGED PLANS
TOILET ELEVATIONS
CUSTODIAL ELEVATIONS
ADA MOUNTING HEIGHTS

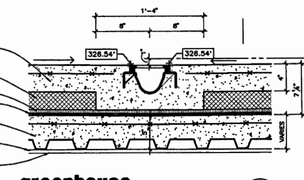
Commission Number 10301

A104

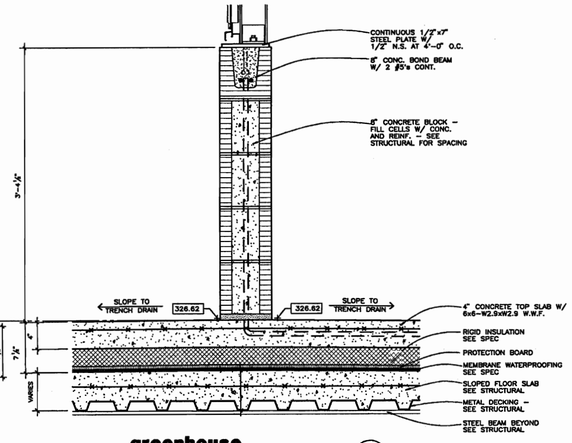
Date: October 25, 2002



greenhouse foundation wall detail 3
(EXTERIOR) SCALE: 1 1/2" = 1'-0"



greenhouse trench drain detail 2
SCALE: 1 1/2" = 1'-0"



greenhouse foundation wall detail 1
(INTERIOR) SCALE: 1 1/2" = 1'-0"

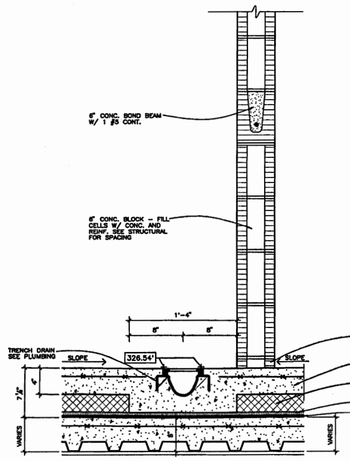
GREENHOUSE NOTES

1. CONTRACTOR TO VERIFY EXACT LOCATION OF FOUNDATION WALL AT GREEN HOUSE GLASS DIVIDER WALLS. LOCATE PER MANUFACTURERS RECOMMENDATIONS.
2. SEE MECHANICAL FOR VENTILATION, EXHAUST, HEATING, AND COOLING UNITS AT GREENHOUSE.

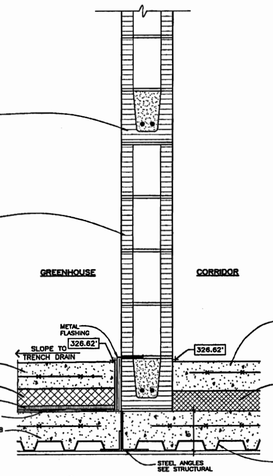
3444 sq/ft

840/ Greenhouse

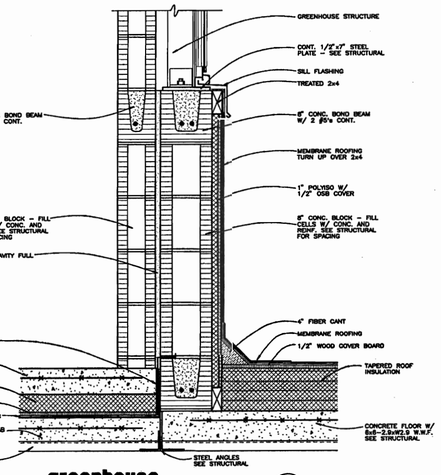
2½ 20x42



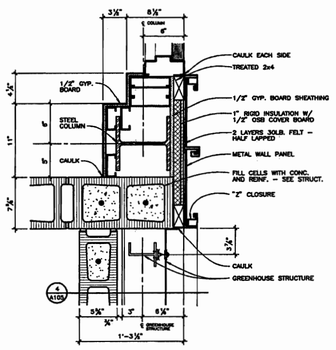
greenhouse trench drain detail 6
SCALE: 1 1/2" = 1'-0"



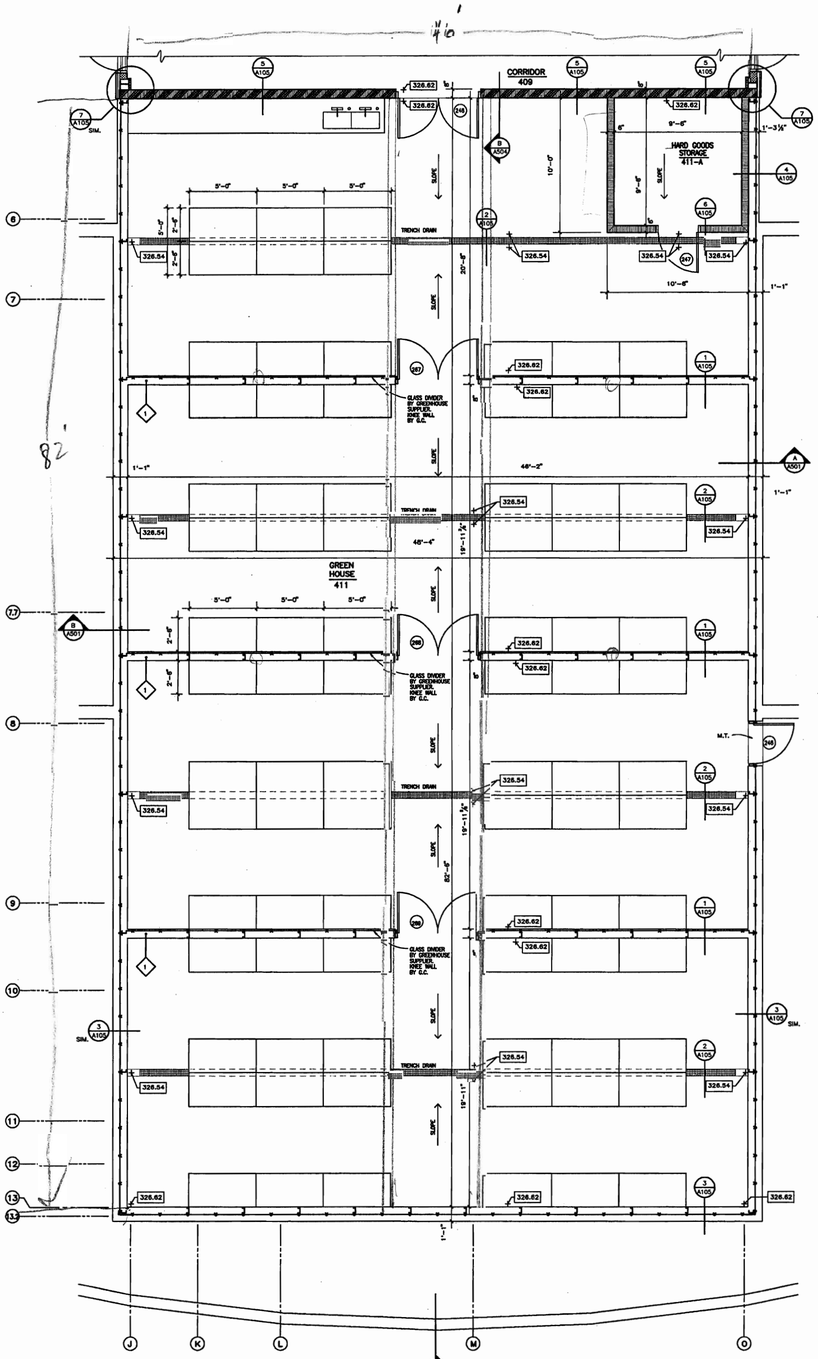
greenhouse trench drain detail 5
SCALE: 1 1/2" = 1'-0"



greenhouse foundation wall detail 4
(INTERIOR) SCALE: 1 1/2" = 1'-0"



plan detail 7
SCALE: 1 1/2" = 1'-0"



enlarged greenhouse plan
SCALE: 1/4" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
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REGISTERED ARCHITECTS
10/25/02
ARKANSAS

ENLARGED GREENHOUSE PLAN
GREENHOUSE DETAILS

Commission Number 10301

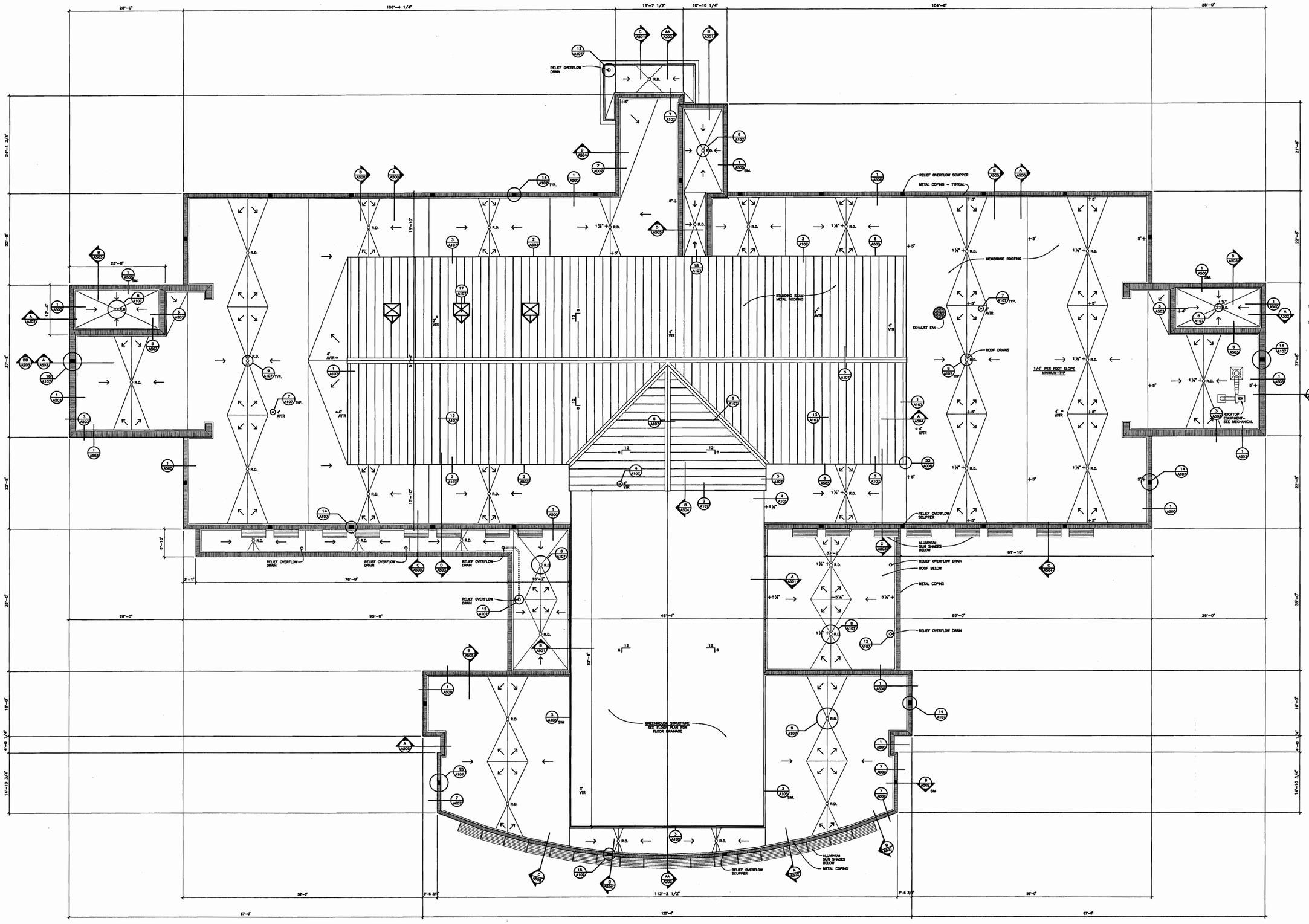
A105

Date: October 25, 2002

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS



NOTES:

1. POSITIVE SLOPE TO BE PROVIDED TO DRAINS IN ALL DIRECTION - ROOF SLOPE MINIMUM 1/4" PER FOOT. PROVIDE ALL CANTS, TAPERS TO DRAINS AND OTHER INSULATION AS REQUIRED TO PROVIDE 1/4" MINIMUM SLOPE AS SHOWN ON THE ROOF PLAN.
2. ROOF SLOPE IS ACHIEVED WITH TAPERED INSULATION OVER CONCRETE ROOF DECK.
3. MINIMUM ROOF INSULATION AT ROOF DRAINS TO BE 1 1/2" THICK MINIMUM-ROOF R-VALUE TO BE R-10 (AT ROOF DRAINS)
4. ROOF CANTS ARE TO BE 1/2" PER FOOT SLOPE

roof plan

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

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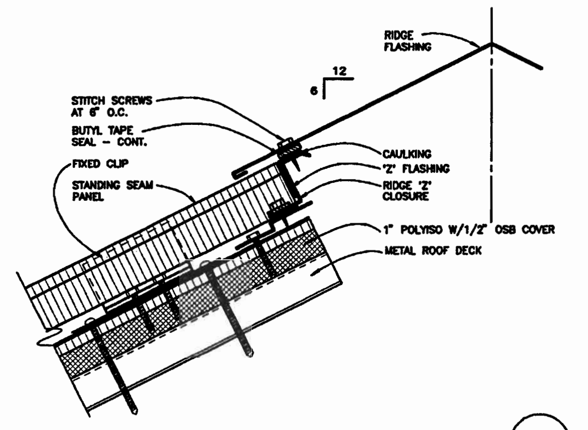
BRACKETT KRENNERICH & ASSOCIATES P.A. REGISTERED ARCHITECTS CIS 11/25/02 ARKANSAS

ROOF PLAN

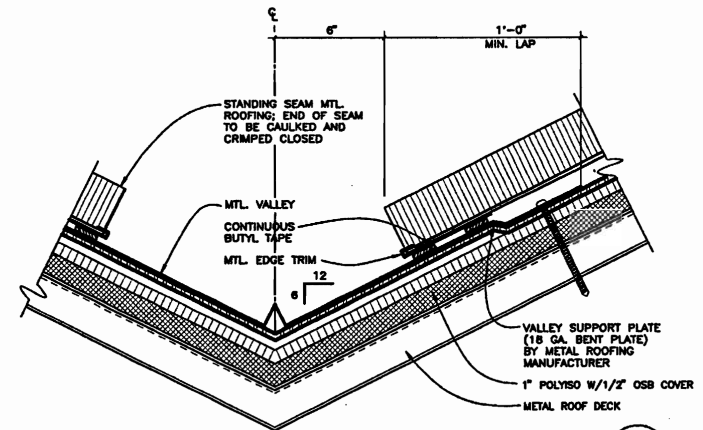
Commission Number 10301

A106

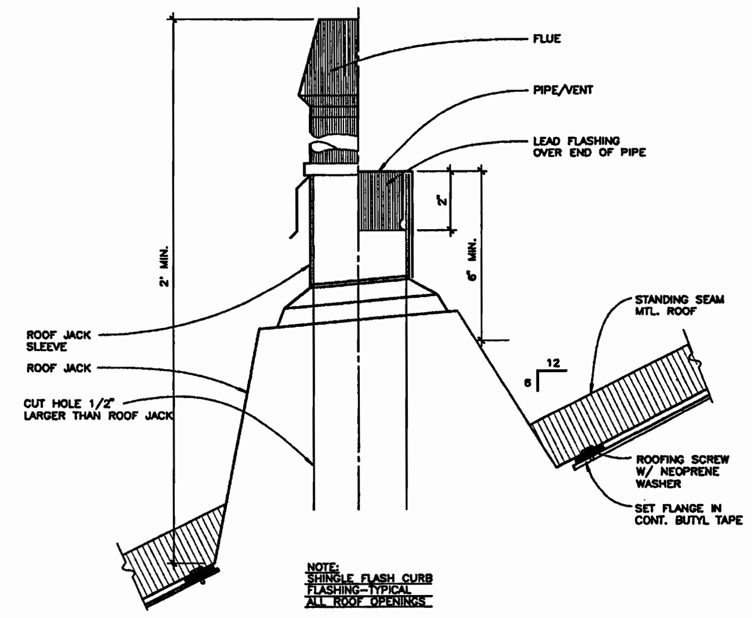
Date: October 25, 2002



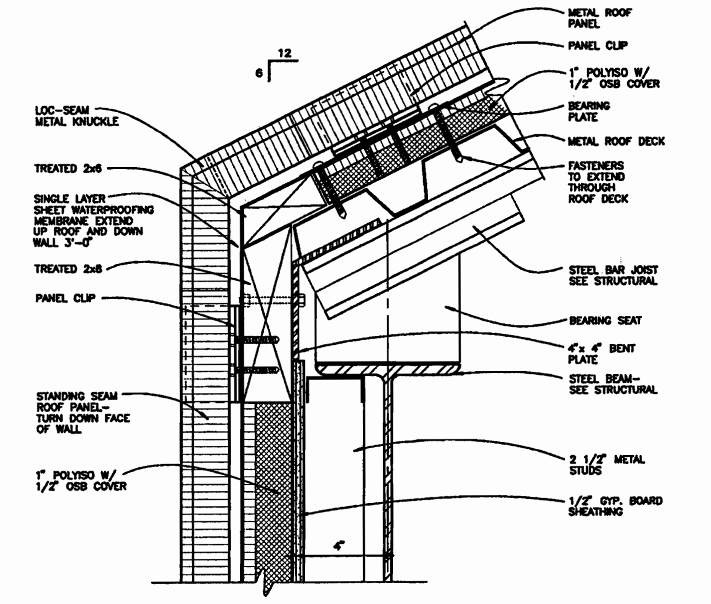
ridge detail (5)
SCALE: 3" = 1'-0"



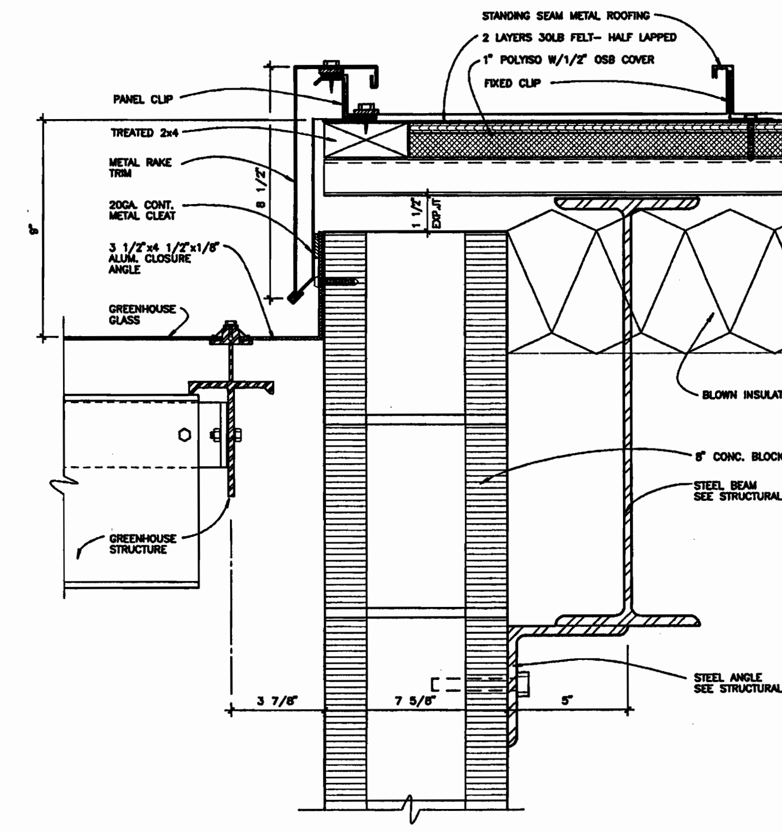
detail at valley flashing (6)
SCALE: 3" = 1'-0"



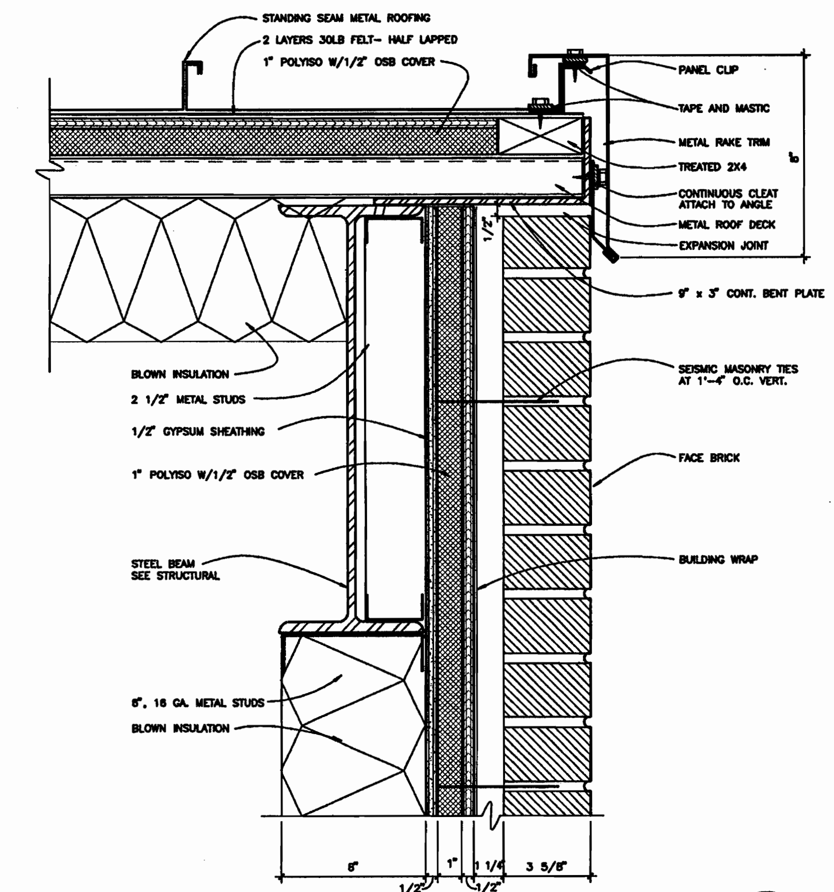
vent / flue detail (4)
SCALE: 3" = 1'-0"



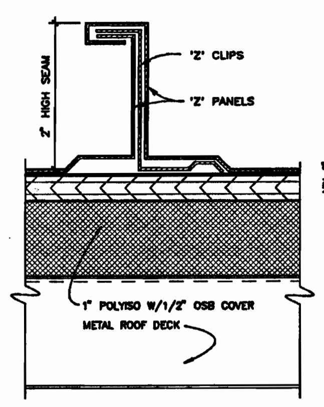
roof to wall transition (3)
SCALE: 3" = 1'-0"



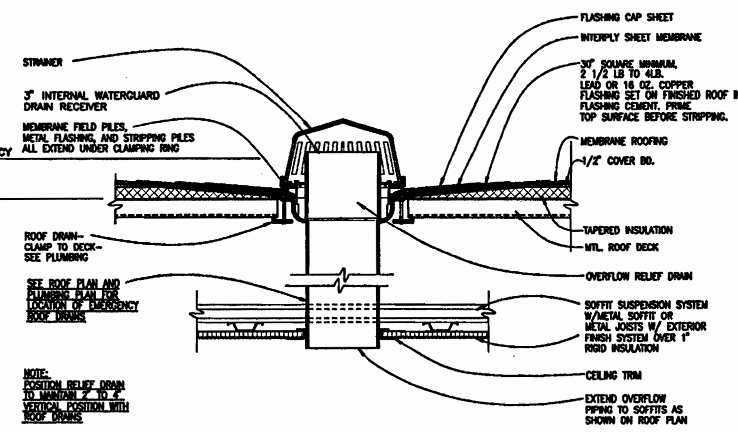
rake detail at greenhouse (2)
SCALE: 3" = 1'-0"



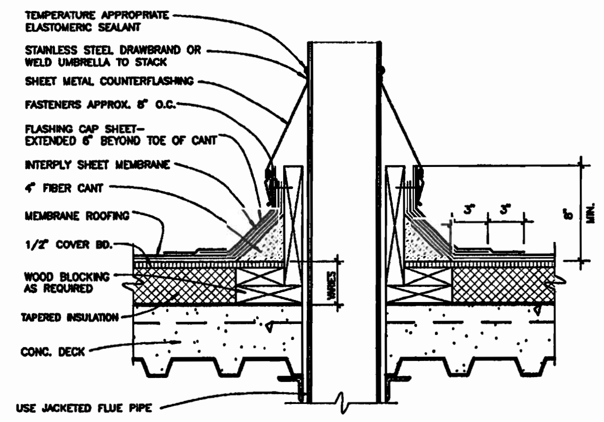
detail at rake (1)
SCALE: 3" = 1'-0"



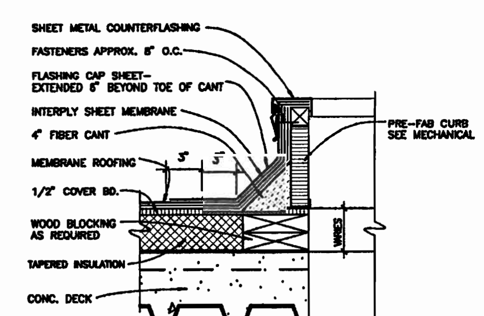
standing seam detail (13)
NOT TO SCALE



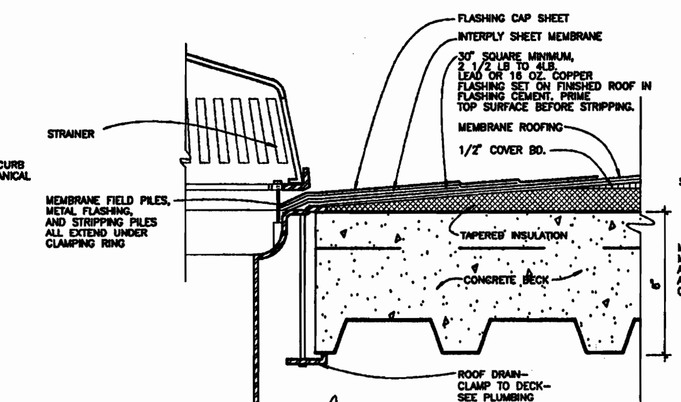
detail ar relief drain (12)
SCALE: 1 1/2" = 1'-0"



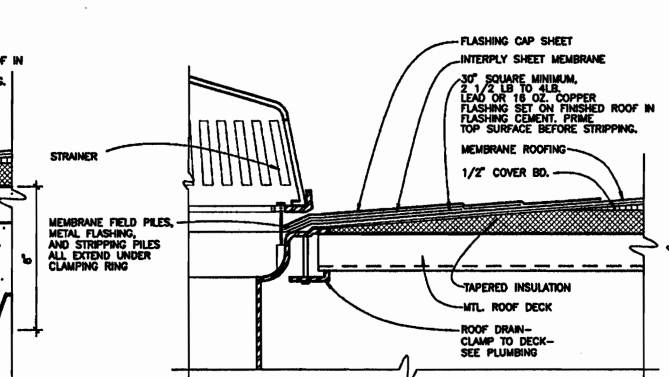
flue detail (11)
EQUAL TO FIRESTONE DETAIL MB-P-2 SCALE: 1 1/2" = 1'-0"



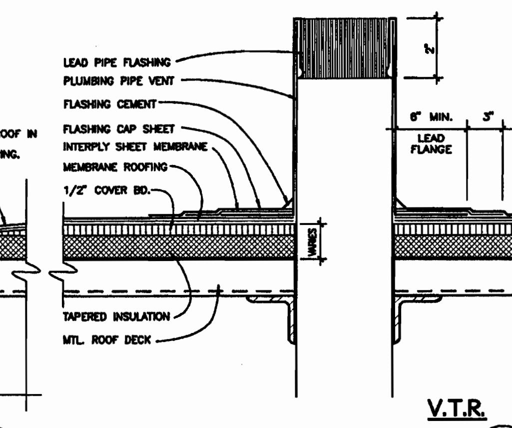
prefab curb detail (10)
EQUAL TO FIRESTONE DETAIL MB-P-2 SCALE: 1 1/2" = 1'-0"



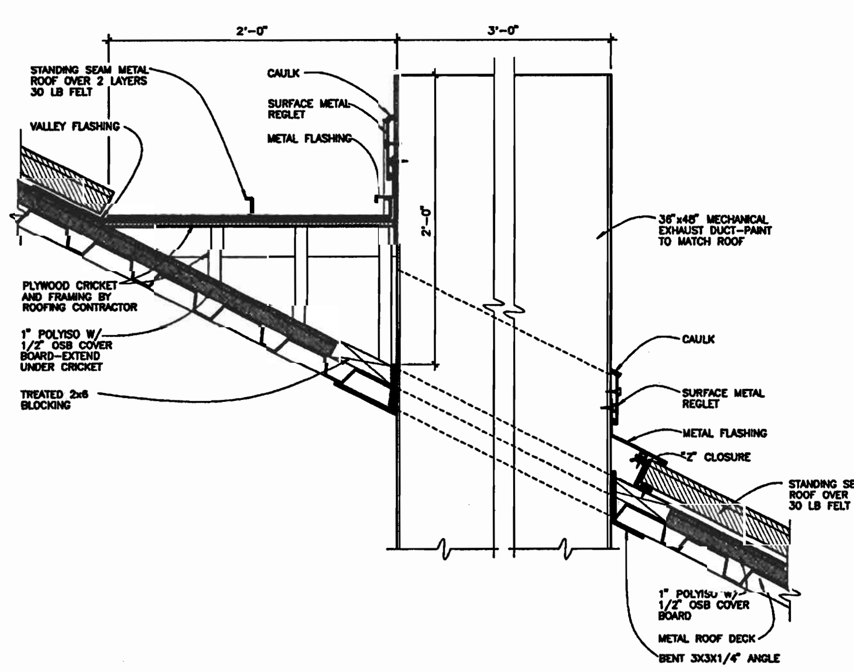
roof drain detail at conc. deck (9)
SIMILAR TO FIRESTONE DETAIL MB-D-1 SCALE: 3" = 1'-0"



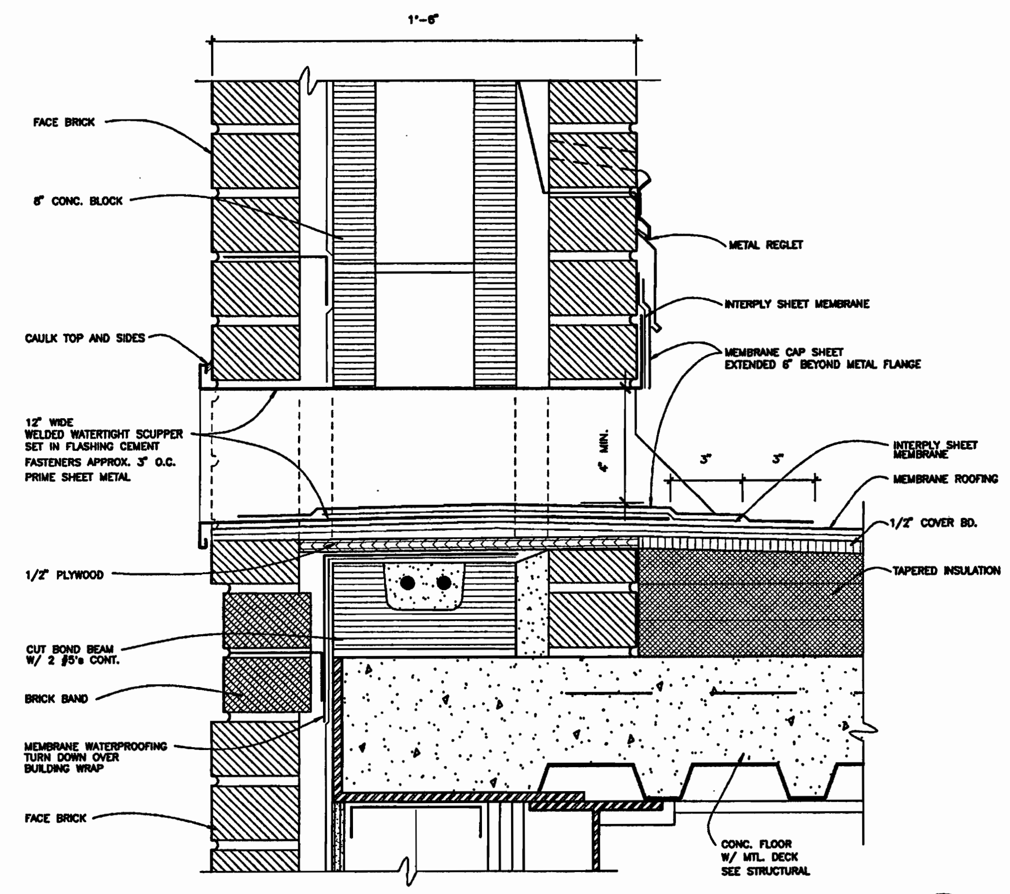
roof drain detail at metal deck (8)
SIMILAR TO FIRESTONE DETAIL MB-D-1 SCALE: 3" = 1'-0"



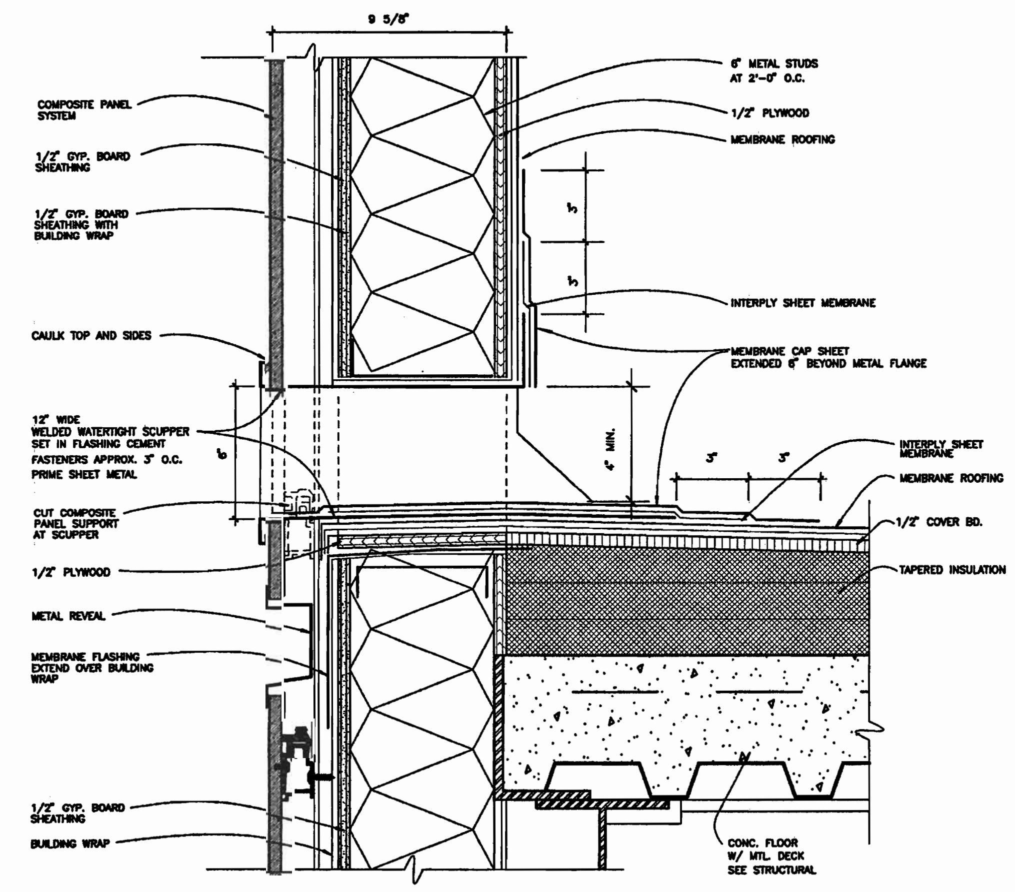
vent pipe detail (7)
EQUAL TO FIRESTONE DETAIL MB-P-5 SCALE: 3" = 1'-0"



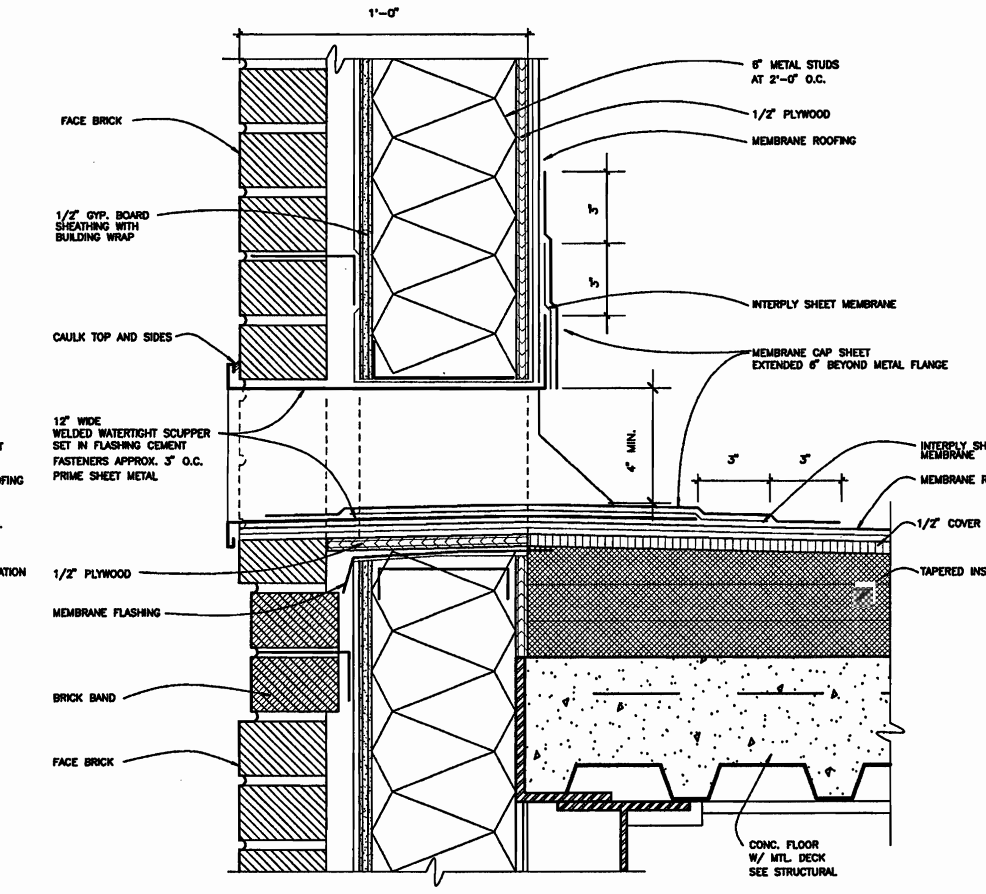
detail at mech. exhaust (17)
SCALE: 1 1/2" = 1'-0"



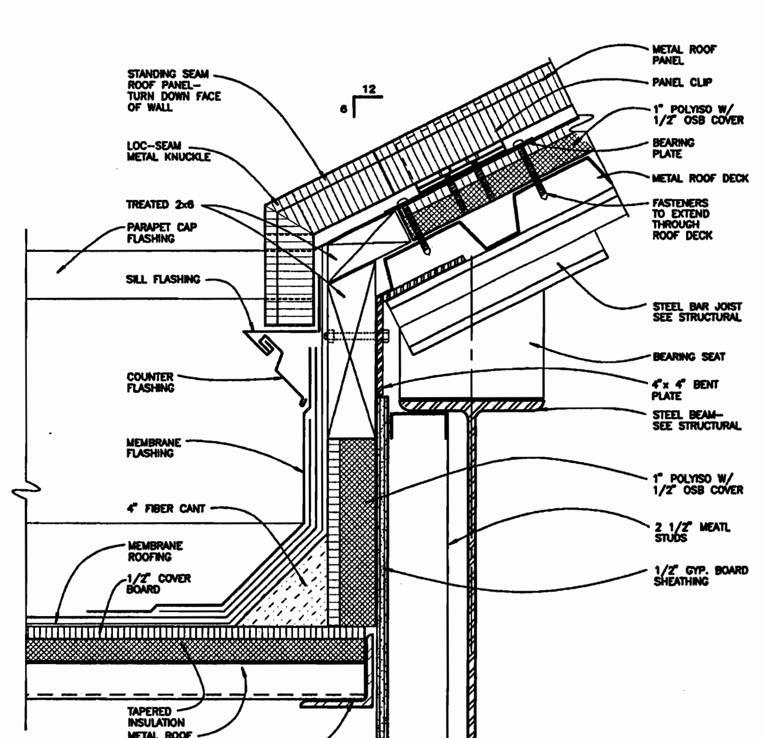
detail at scupper (16)
EQUAL TO FIRESTONE DETAIL MB-S-1 SCALE: 3" = 1'-0"



detail at scupper (15)
EQUAL TO FIRESTONE DETAIL MB-S-1 SCALE: 3" = 1'-0"



detail at scupper (14)
EQUAL TO FIRESTONE DETAIL MB-S-1 SCALE: 3" = 1'-0"



detail at parapet (18)
SCALE: 3" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH
architects

ROOF DETAILS

Commission Number
10301

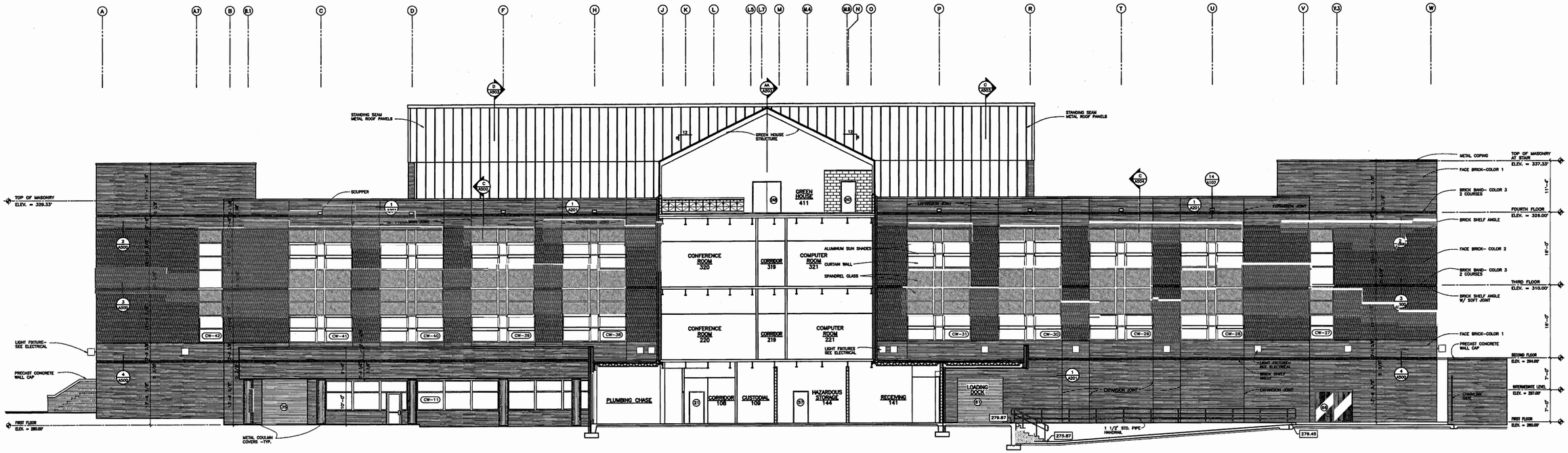
A107

Date: October 25, 2002

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

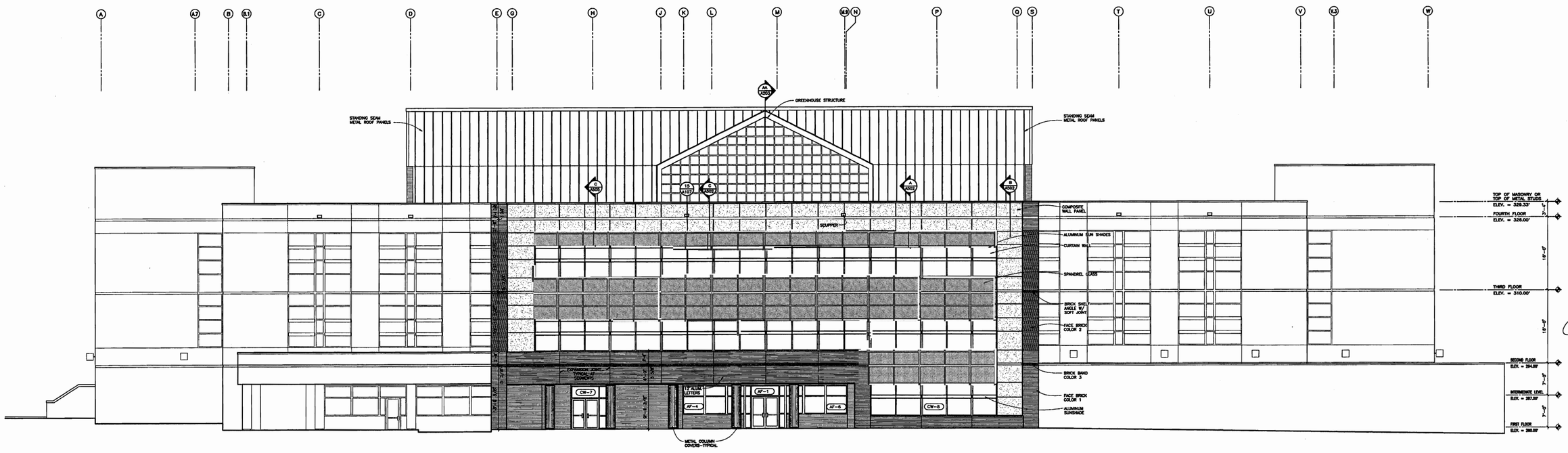
JONESBORO, ARKANSAS



south elevation

(AT LAB WING BEYOND)

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



south elevation

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

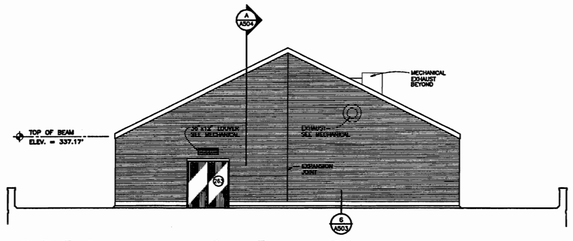
BRACKETT KRENNERICH architects

SOUTH ELEVATIONS

Commission Number 10301

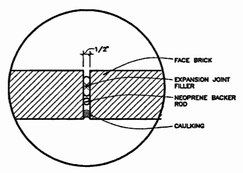
A200

Date: October 25, 2002

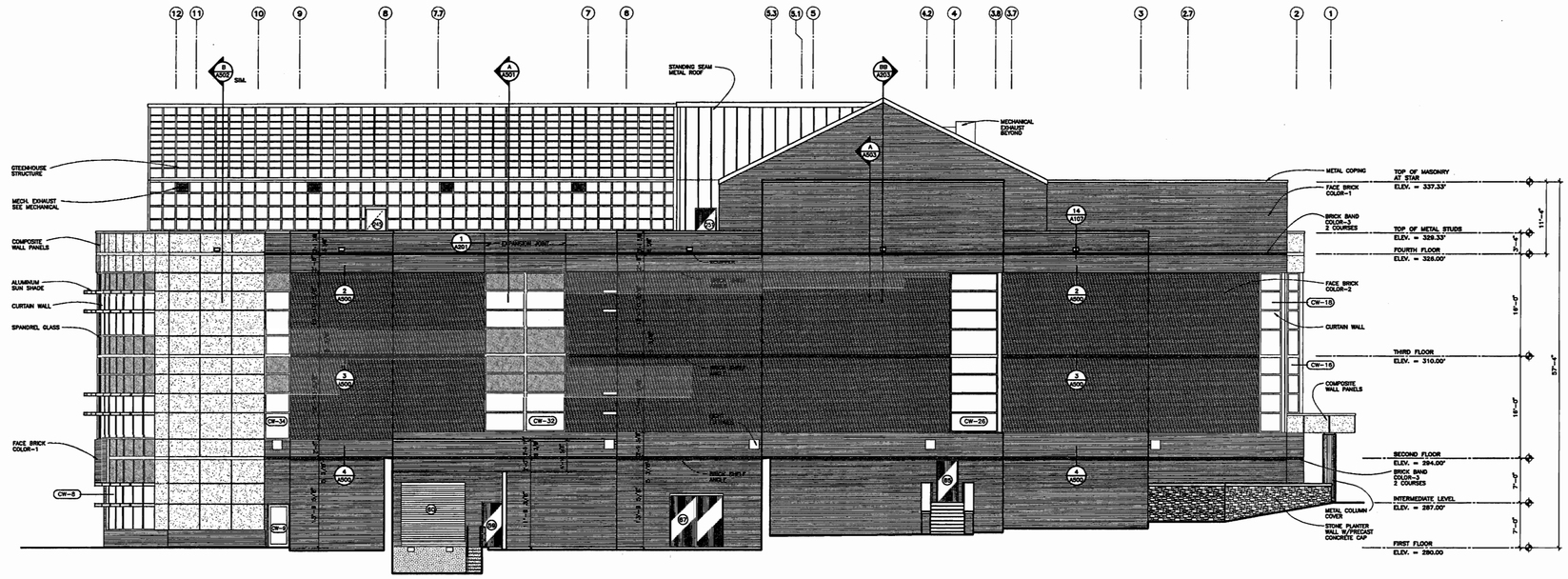


hidden east elevation
(at head house)

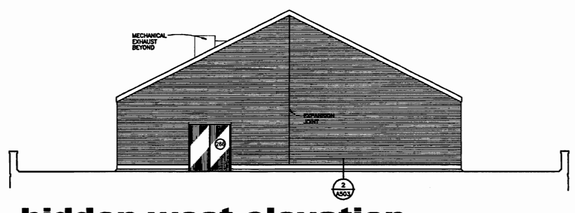
SCALE: 1/8" = 1'-0"



brick exp. joint detail (1)
SCALE: 3" = 1'-0"

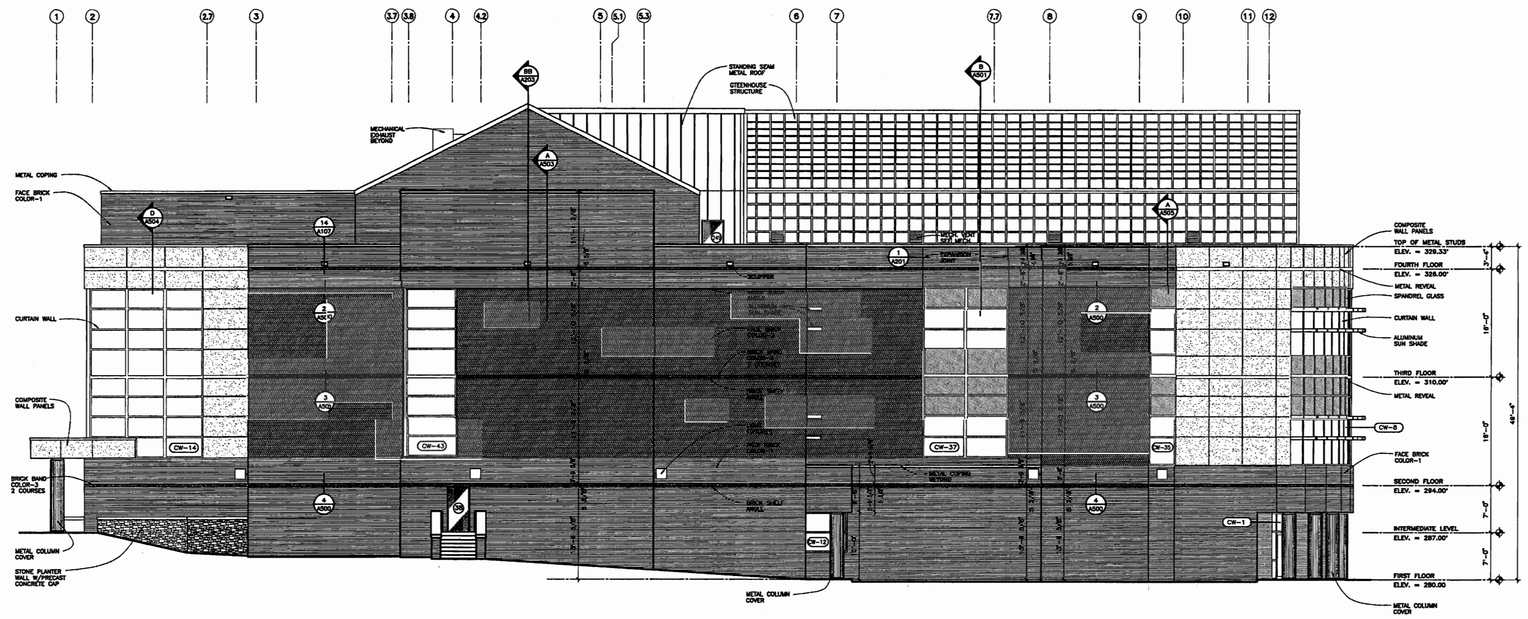


east elevation
SCALE: 1/8" = 1'-0"



hidden west elevation
(at mechanical room)

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



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

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ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS CIS 10/25/02 ARKANSAS

EAST ELEVATION
WEST ELEVATION

Commission Number 10301

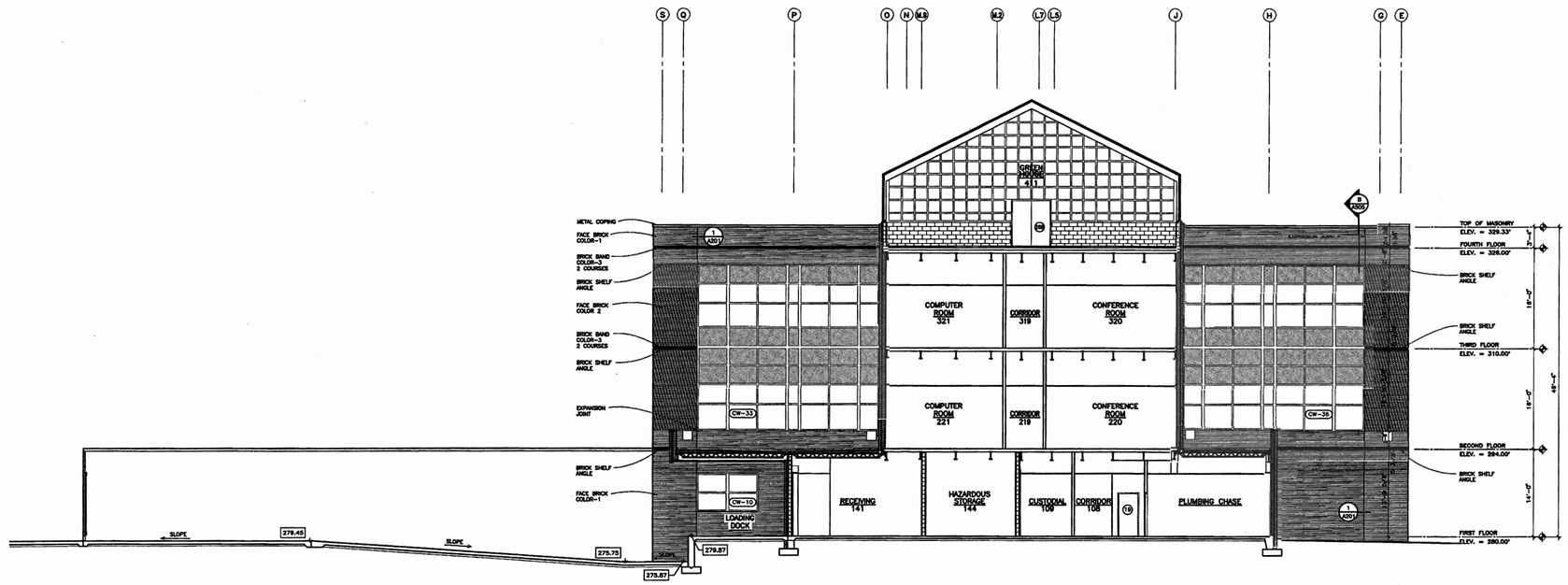
A201

Date: October 25, 2002

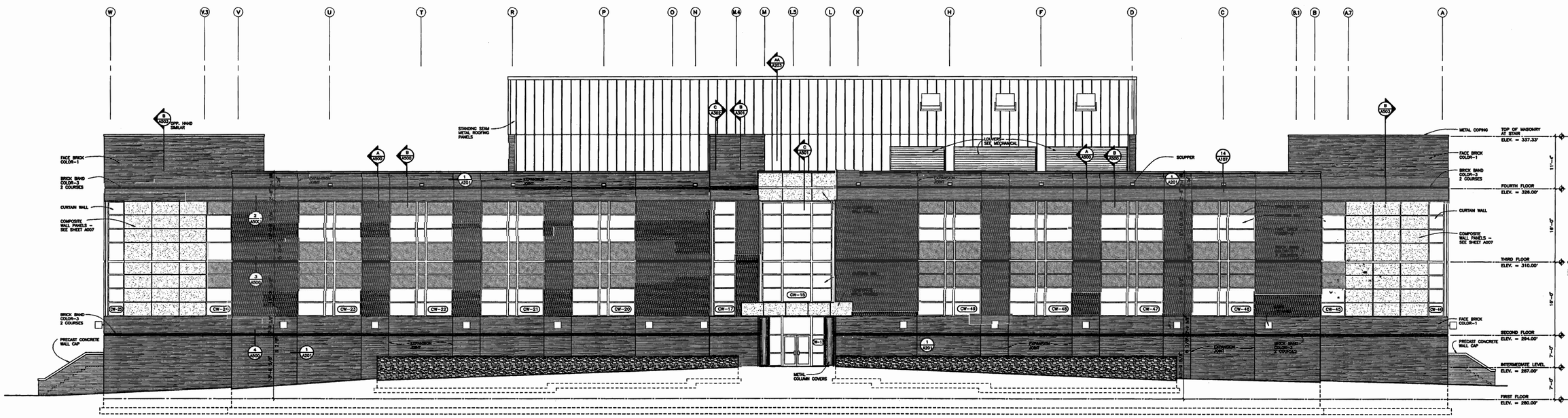
BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS



hidden north elevation
(at office wing)
SCALE: 1/8" = 1'-0"



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

BRACKETT KRENNERICH architects

NORTH ELEVATIONS

Commission Number 10301

A202

Date: October 25, 2002

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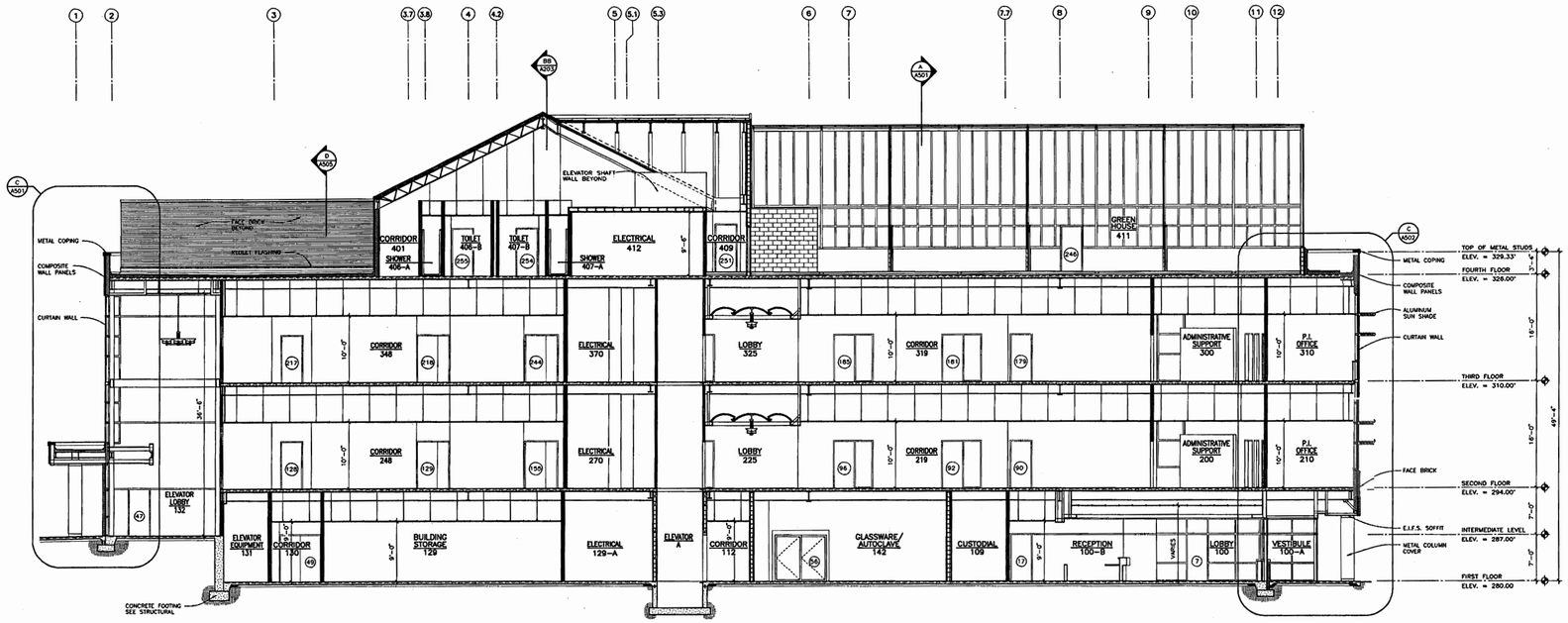
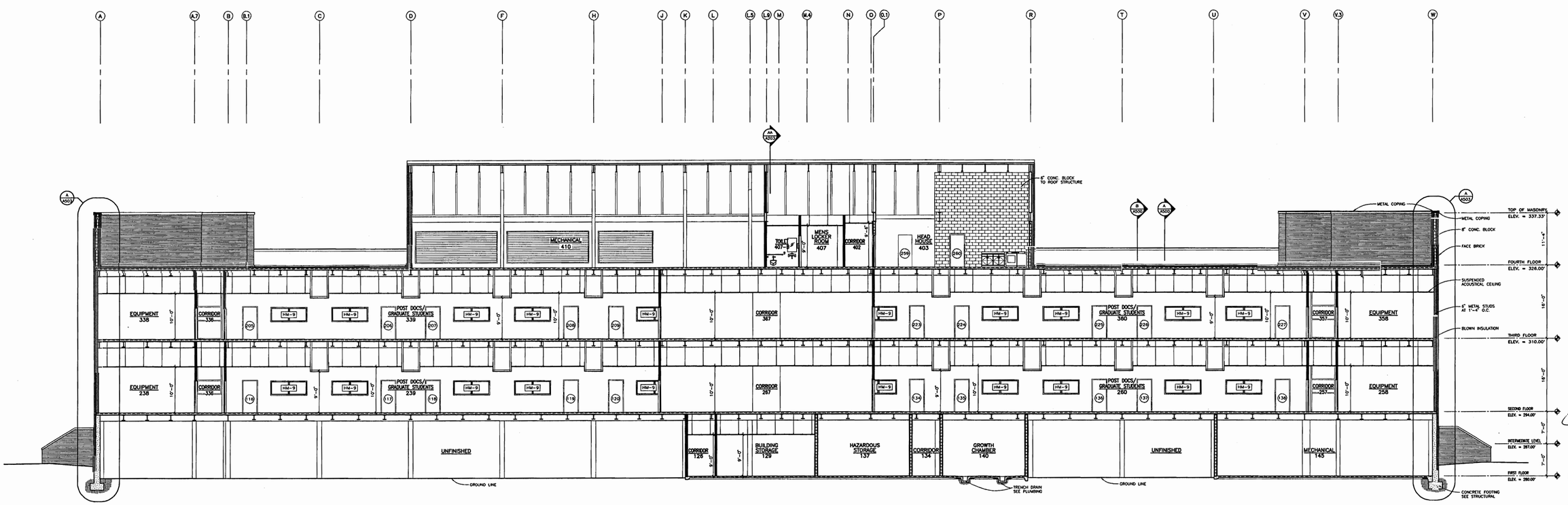
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS



building section - AA



building section - BB

BRACKETT KRENNERICH architects

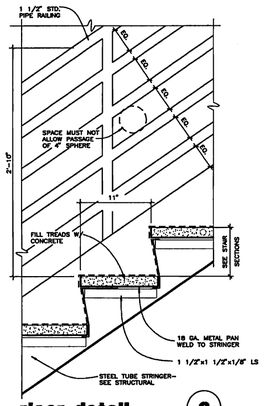
REGISTERED ARCHITECTS C13 ARKANSAS

BUILDING SECTION

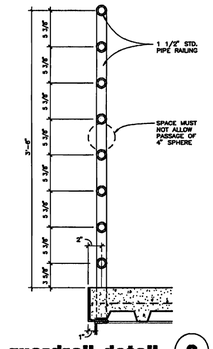
Commission Number 10301

A203

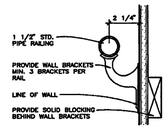
Date: October 25, 2002



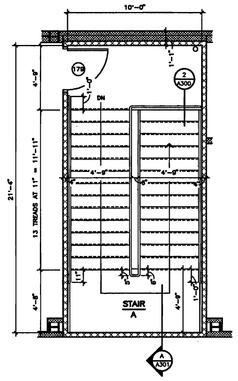
riser detail (3)
SCALE: 1 1/2" = 1'-0"



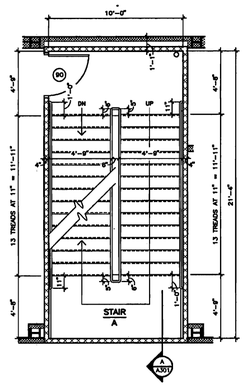
guardrail detail (2)
SCALE : 1 1/2" = 1'-0"



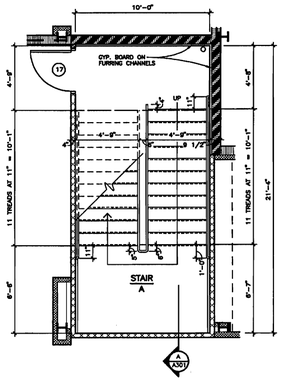
detail at rail (1)
SCALE: 3" = 1'-0"



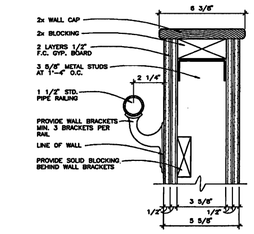
enlarged stair plan
(STAIR A – THIRD FLOOR) SCALE: 1/4" = 1'-0"



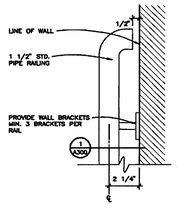
enlarged stair plan
(STAIR A – SECOND FLOOR) SCALE: 1/4" = 1'-0"



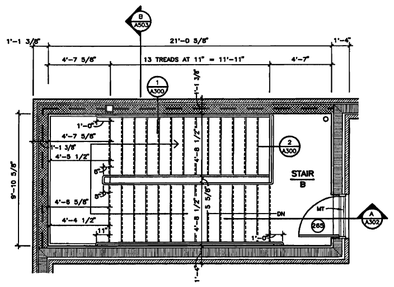
enlarged stair plan
(STAIR A – FIRST FLOOR) SCALE: 1/4" = 1'-0"



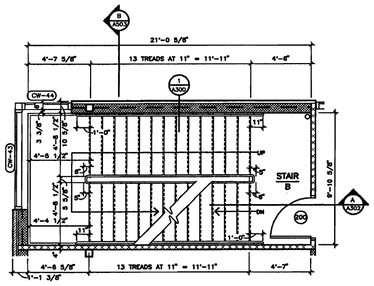
detail at rail (4)
SCALE: 3" = 1'-0"



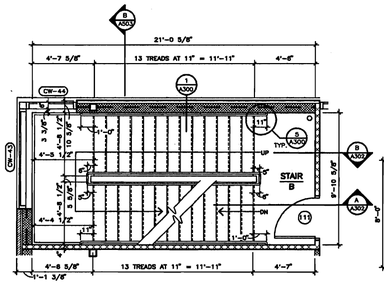
detail at rail (5)
SCALE: 3" = 1'-0"



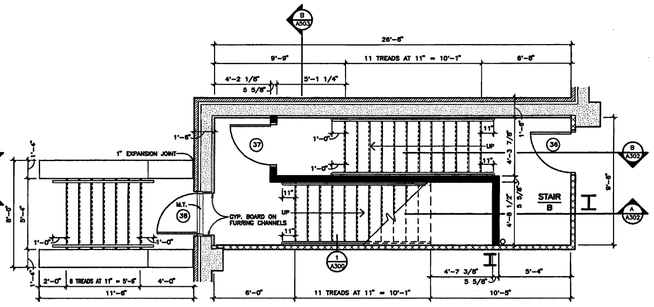
enlarged stair plan
(STAIR B – FOURTH FLOOR) SCALE: 1/4" = 1'-0"



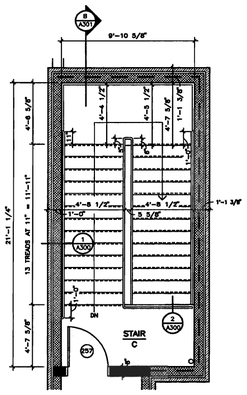
enlarged stair plan
(STAIR B – THIRD FLOOR) SCALE: 1/4" = 1'-0"



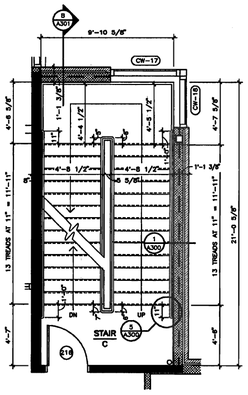
enlarged stair plan
(STAIR B – SECOND FLOOR) SCALE: 1/4" = 1'-0"



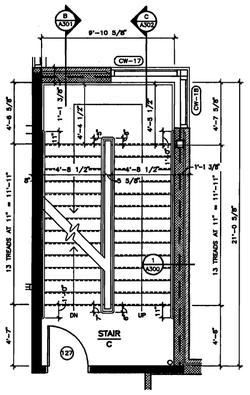
enlarged stair plan
(STAIR B – FIRST FLOOR) SCALE: 1/4" = 1'-0"



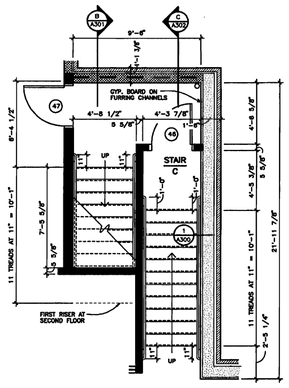
enlarged stair plan
(STAIR C – FOURTH FLOOR) SCALE: 1/4" = 1'-0"



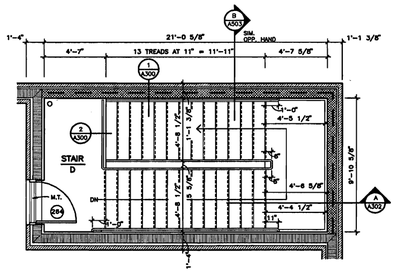
enlarged stair plan
(STAIR C – THIRD FLOOR) SCALE: 1/4" = 1'-0"



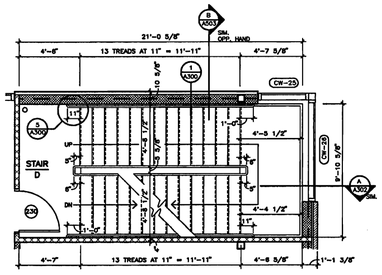
enlarged stair plan
(STAIR C – SECOND FLOOR) SCALE: 1/4" = 1'-0"



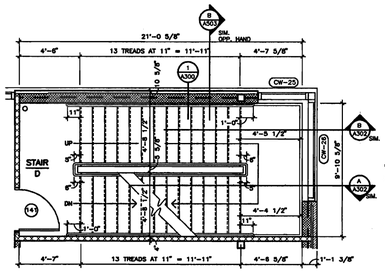
enlarged stair plan
(STAIR C – FIRST FLOOR) SCALE: 1/4" = 1'-0"



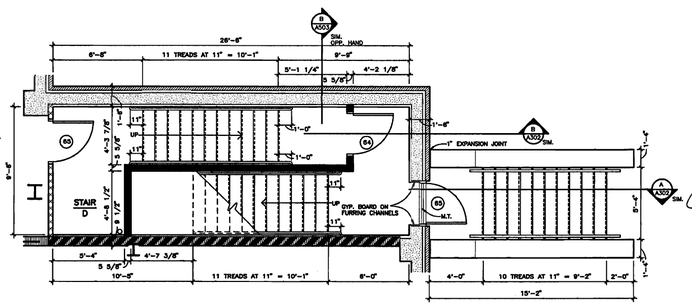
enlarged stair plan
(STAIR D – FOURTH FLOOR) SCALE: 1/4" = 1'-0"



enlarged stair plan
(STAIR D – THIRD FLOOR) SCALE: 1/4" = 1'-0"



enlarged stair plan
(STAIR D – SECOND FLOOR) SCALE: 1/4" = 1'-0"



enlarged stair plan
(STAIR D – FIRST FLOOR) SCALE: 1/4" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

100 East Huntington, Suite D P.O. Box 1605 Jonesboro, Arkansas 72403-1605 870-932-0571 Fax: 870-932-0572
Email: brackett@arcadia.net

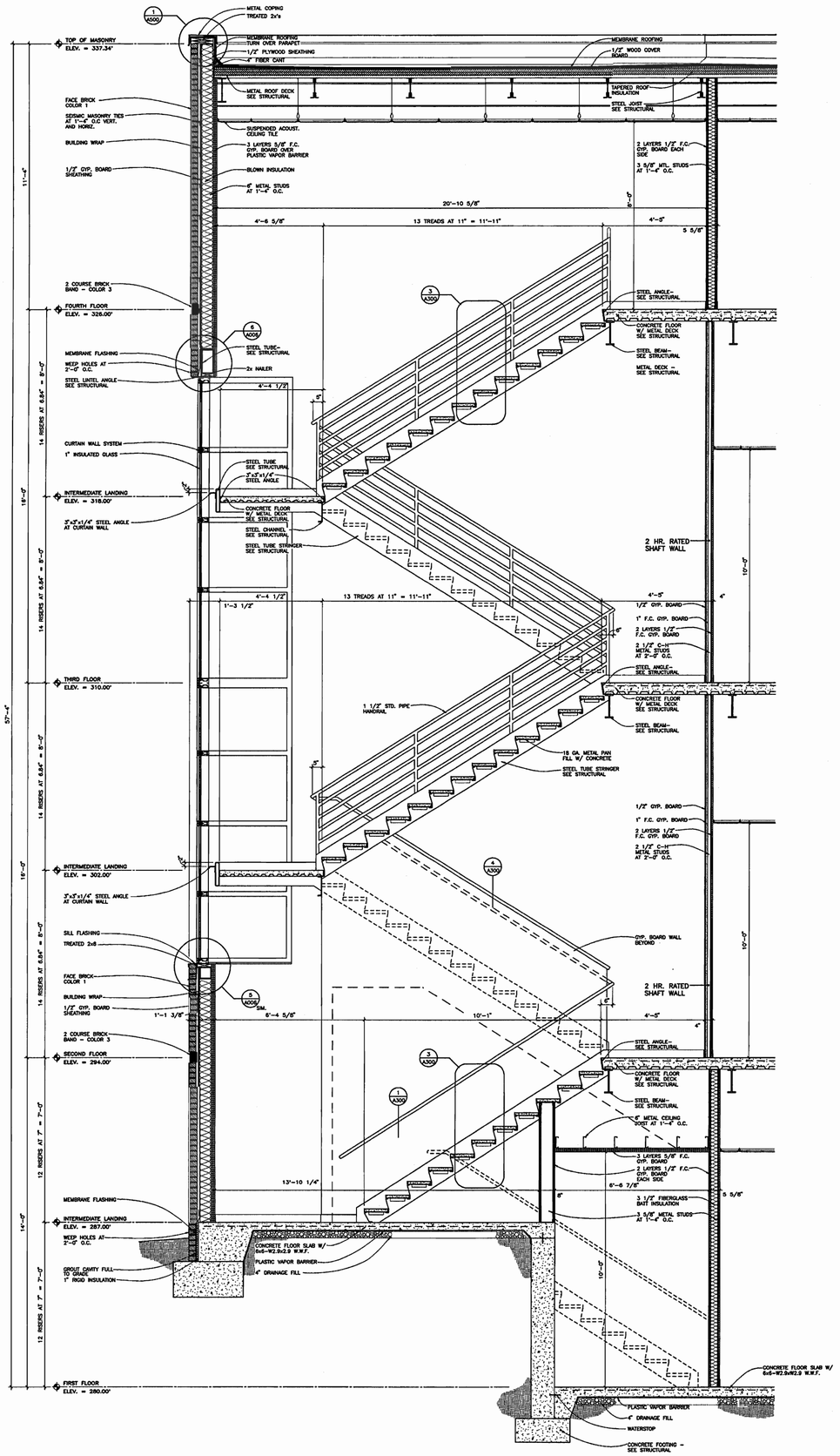
BRACKETT-KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS CIS 10/25/02 ARKANSAS

ENLARGED STAIR PLANS

Commission Number 10301

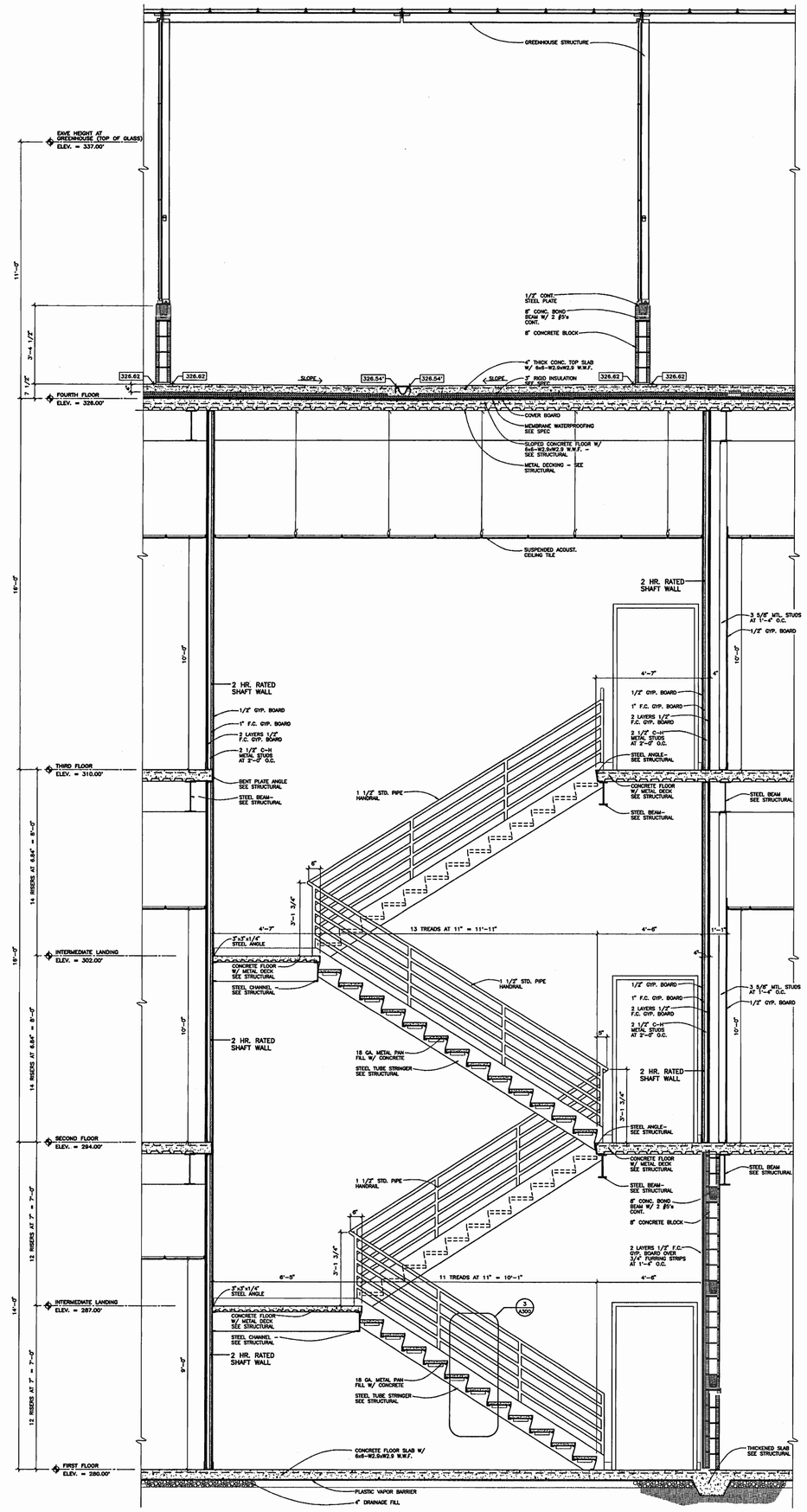
A300

Date: October 25, 2002



stair section (B)

STAIR C — SCALE: 1/2" = 1'-0"



stair section (A)

STAIR A — SCALE: 1/2" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

900 East Huntington, Suite D P.O. Box 1666 Jonesboro, Arkansas 72403-1666 870-932-9974 Fax: 870-932-8970

BRACKETT KRENNERICH & ASSOCIATES P.A. REGISTERED ARCHITECTS C13 10/25/02 ARKANSAS

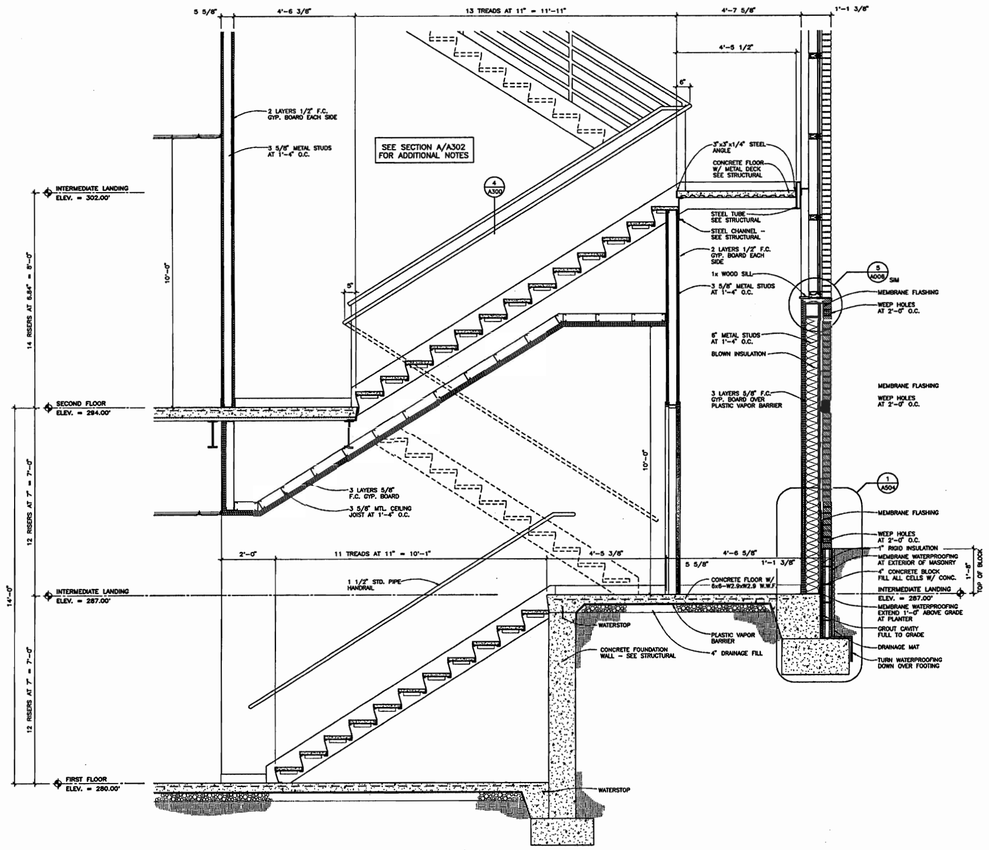
STAIR SECTIONS

Commission Number 10301

A301

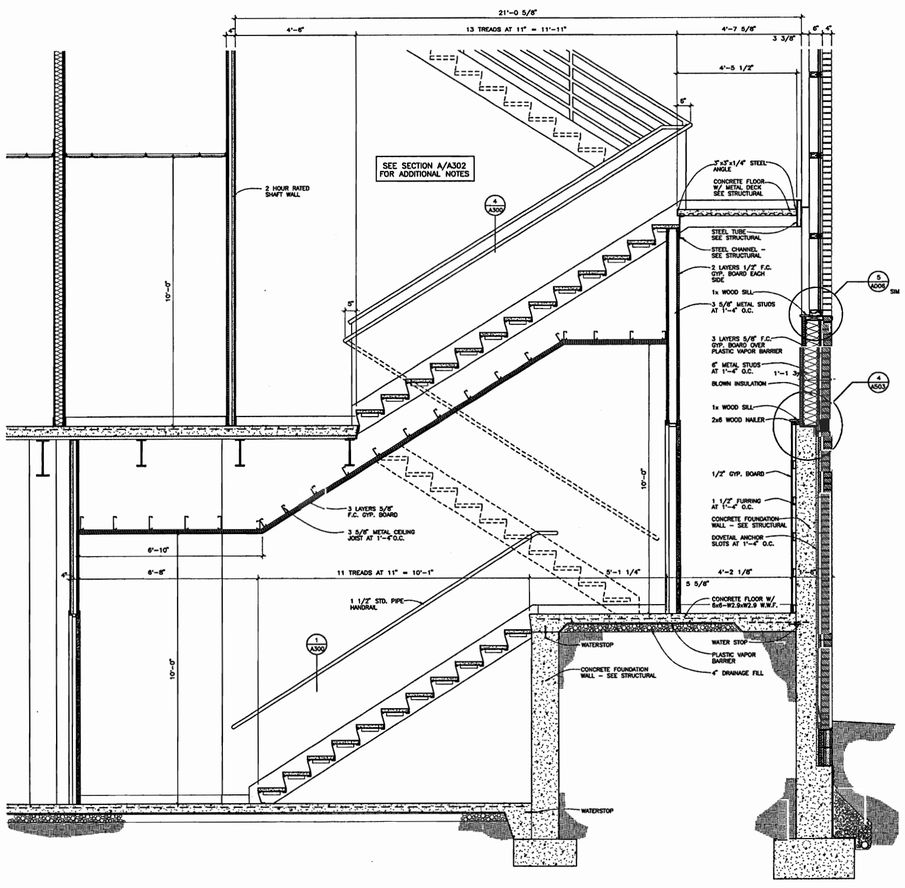
Date: October 25, 2002

Permit Set



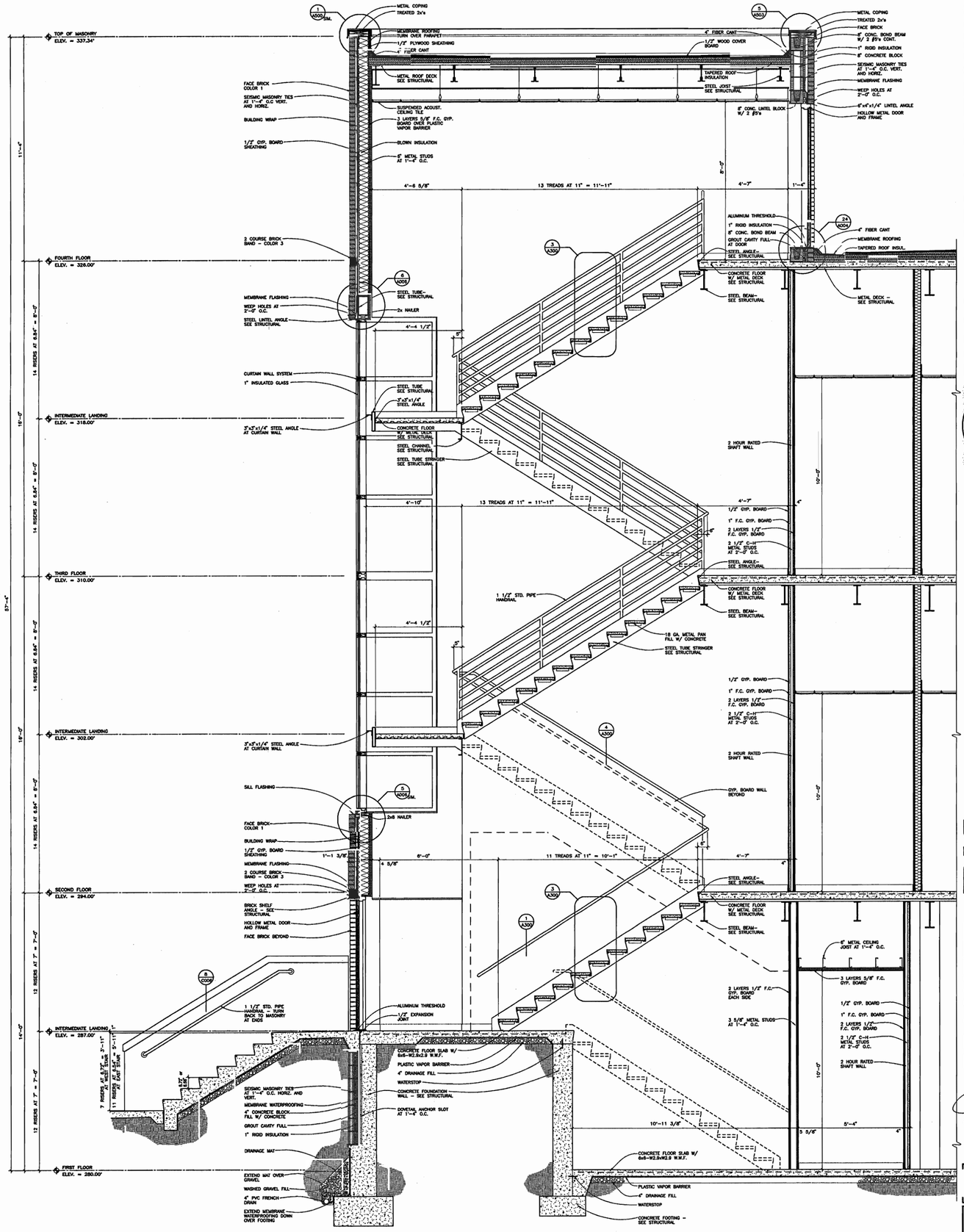
partial stair section (C)

STAIR C — SCALE: 1/2" = 1'-0"



partial stair section (B)

STAIR B, STAIR D(SIM.) — SCALE: 1/2" = 1'-0"



stair section (A)

STAIR B, STAIR D(SIM.) — SCALE: 1/2" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

100 East Huntington, Suite D - P.O. Box 1805 Jonesboro, Arkansas 72403-1805 870-932-0271 Fax: 870-932-0075 Email: brackett@arcinfo.net

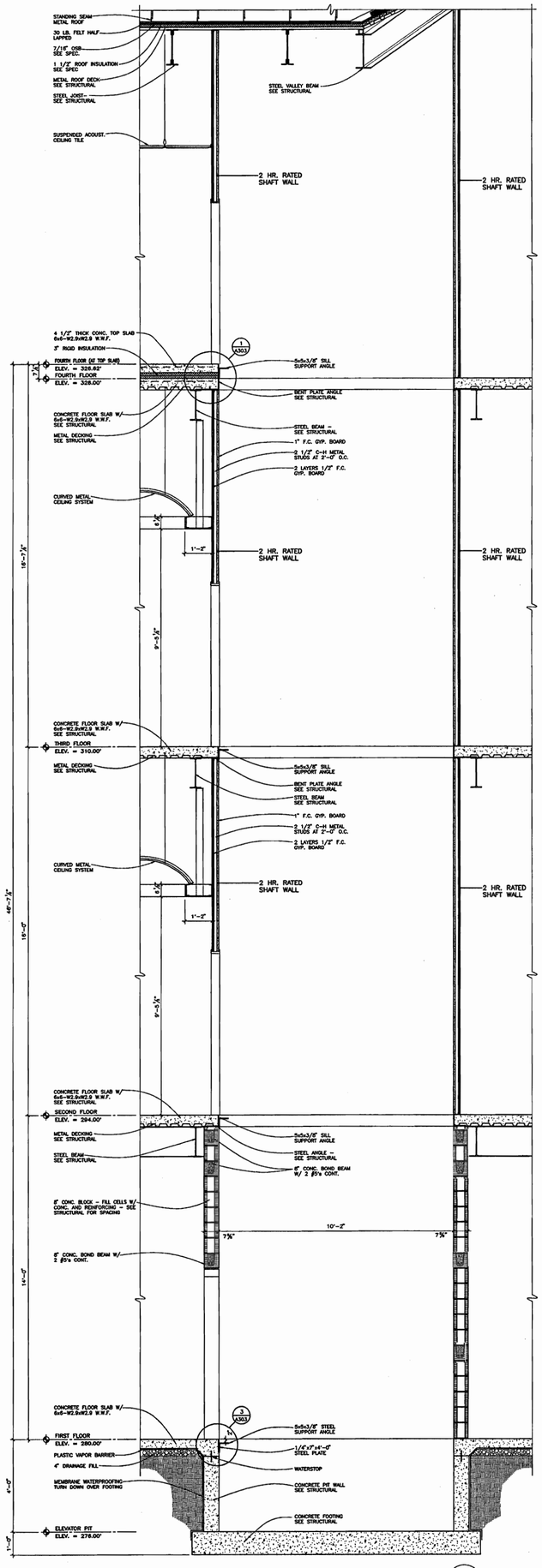
REGISTERED ARCHITECTS C13 ARKANSAS

STAIR SECTIONS

Commission Number 10301

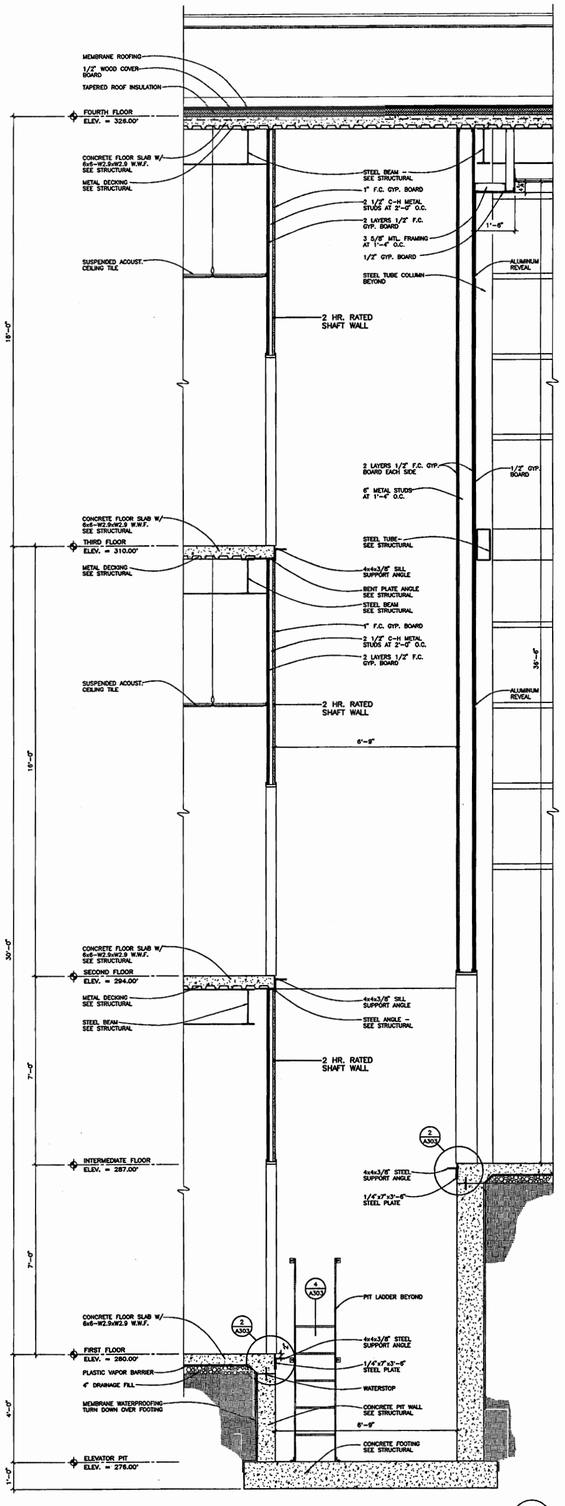
A302

Date: October 25, 2002



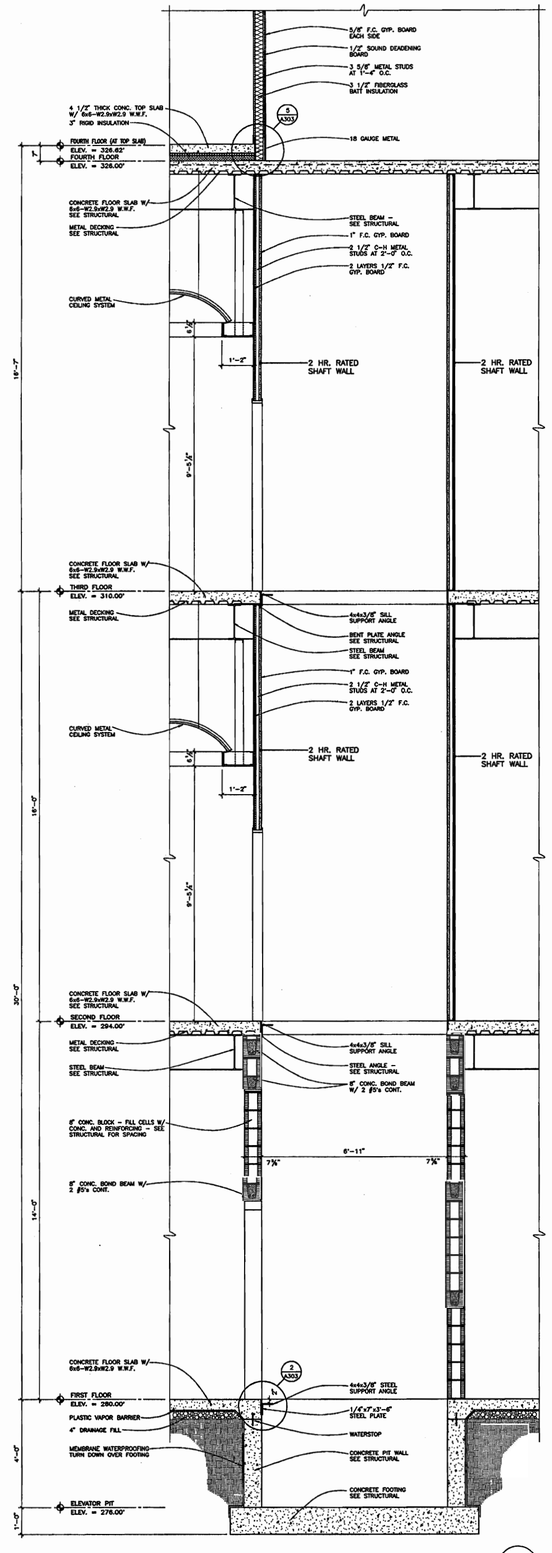
elevator shaft section C

FREIGHT ELEVATOR C — SCALE: 1/2" = 1'-0"



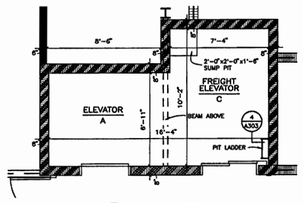
elevator shaft section B

ELEVATOR B — SCALE: 1/2" = 1'-0"



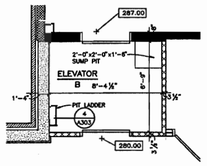
elevator shaft section A

ELEVATOR A — SCALE: 1/2" = 1'-0"



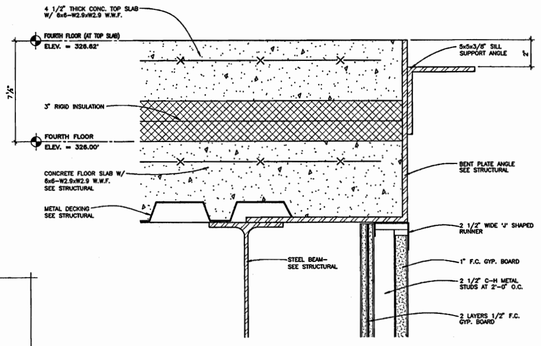
n elevator pit plan

(ELEVATOR A, FREIGHT ELEVATOR C) — SCALE: 1/4" = 1'-0"



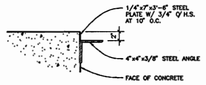
n elevator pit plan

(ELEVATOR B) — SCALE: 1/4" = 1'-0"



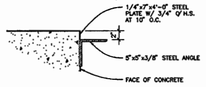
floor edge detail 1

SCALE: 3" = 1'-0"



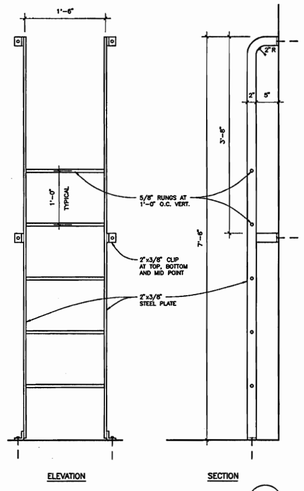
elevator sill detail 2

SCALE: 1" = 1'-0"



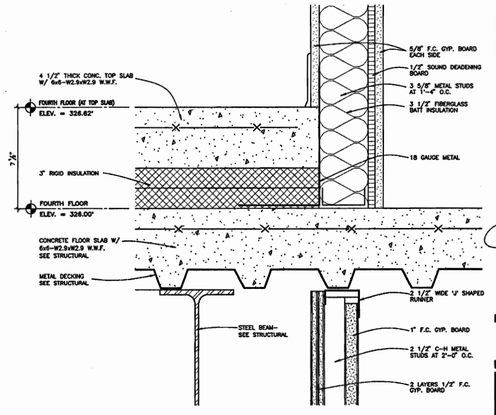
elevator sill detail 3

SCALE: 1" = 1'-0"



pit ladder detail 4

SCALE: 1" = 1'-0"



floor edge detail 5

SCALE: 3" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS
CIS
10/25/02
ARKANSAS

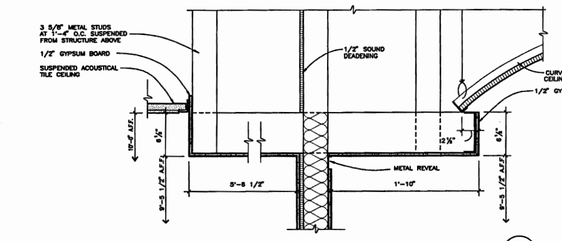
ELEVATOR PIT PLANS
ELEVATOR SECTIONS

Commission Number 10301

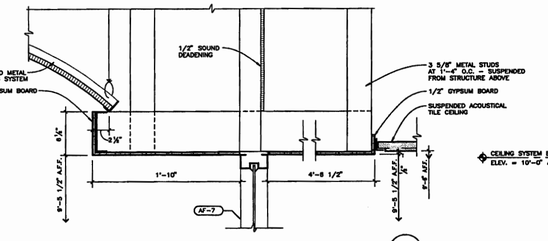
A303

Date: October 25, 2002

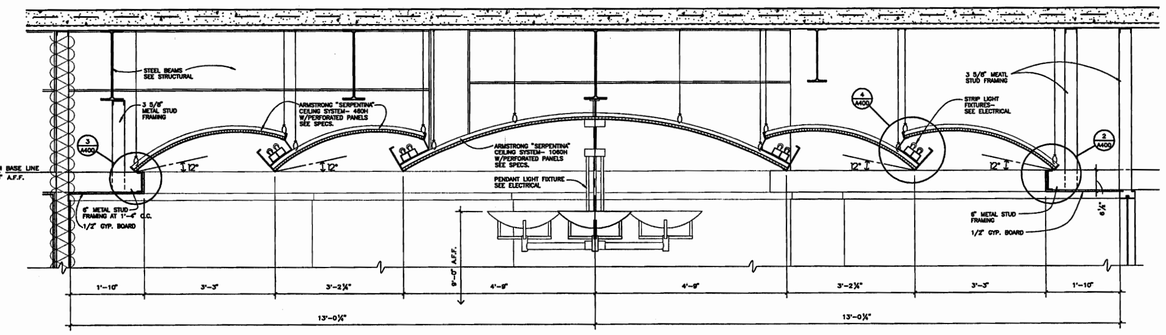
106 East Huntington, Suite 3 - P.O. Box 1506 - Jonesboro, Arkansas 72403-1506 870-932-8071 fax:870-932-8075 Email: brackett@brackett.net



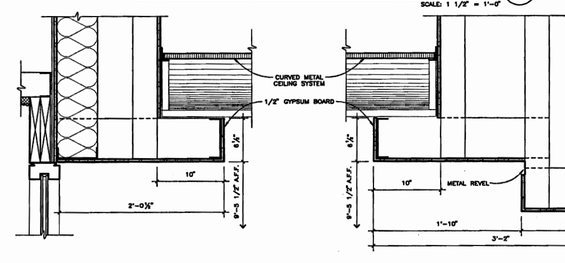
detail 3
SCALE: 1 1/2" = 1'-0"



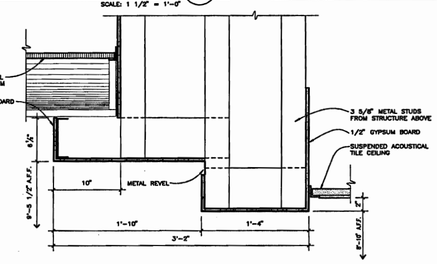
detail 2
SCALE: 1 1/2" = 1'-0"



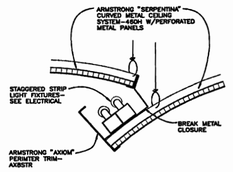
section at first floor lobby curved ceiling 1
SCALE: 3/4" = 1'-0"



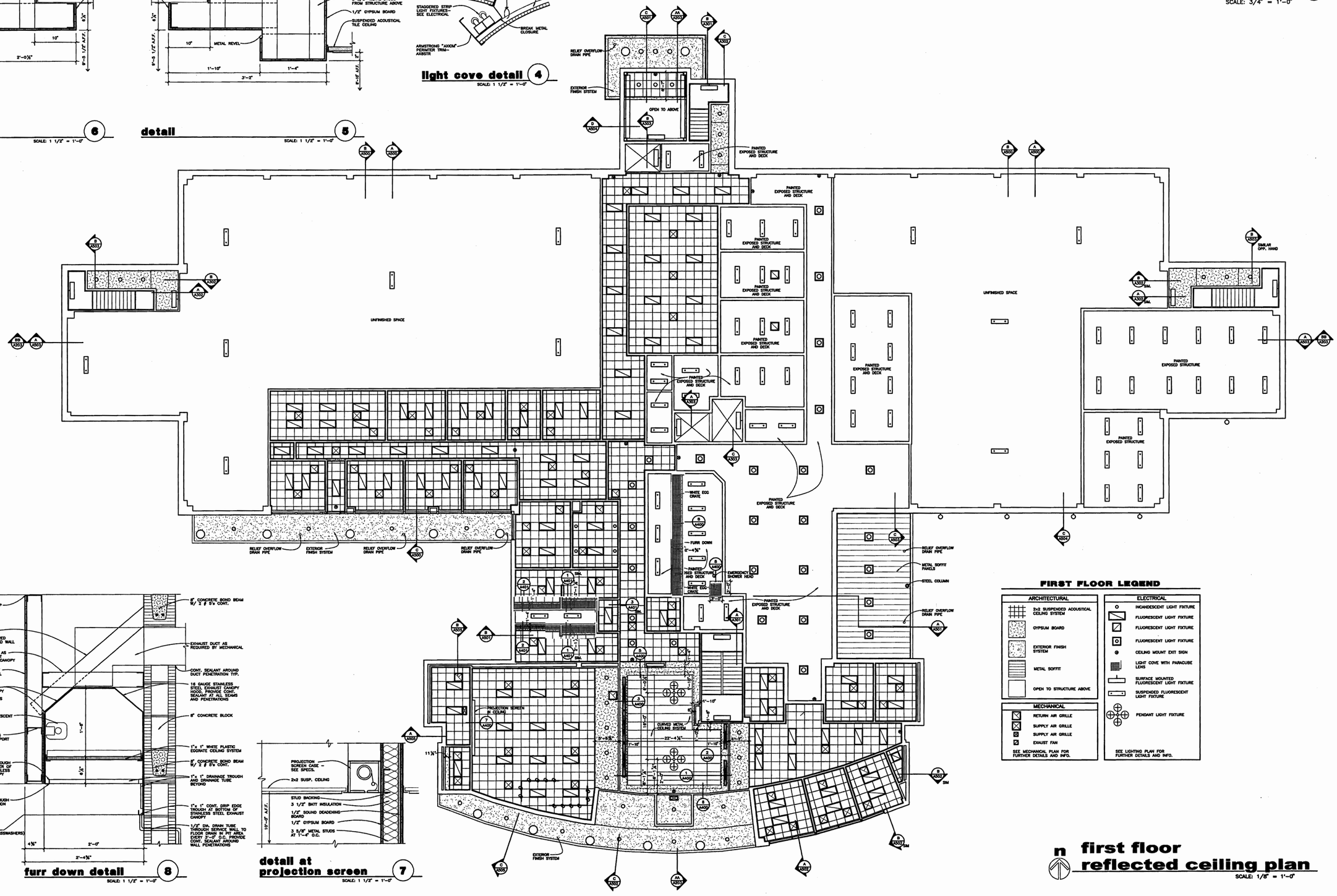
detail 6
SCALE: 1 1/2" = 1'-0"

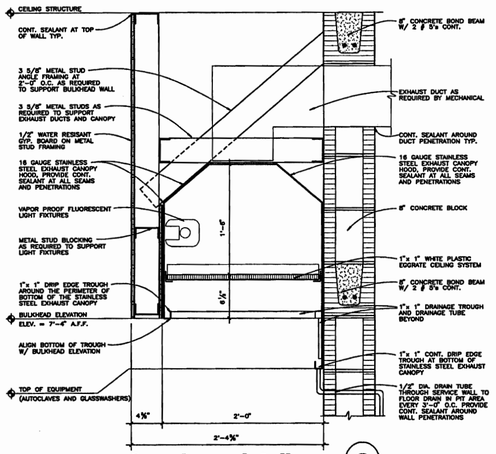


detail 5
SCALE: 1 1/2" = 1'-0"



light cove detail 4
SCALE: 1 1/2" = 1'-0"





furr down detail 8
SCALE: 1 1/2" = 1'-0"

detail at projection screen 7
SCALE: 1 1/2" = 1'-0"

FIRST FLOOR LEGEND

ARCHITECTURAL
- 2x2 SUSPENDED ACOUSTICAL CEILING SYSTEM
- GYPSUM BOARD
- EXTERIOR FINISH SYSTEM
- METAL SOFFIT
- OPEN TO STRUCTURE ABOVE

MECHANICAL
- RETURN AIR GRILLE
- SUPPLY AIR GRILLE
- SUPPLY AIR GRILLE
- EXAUST FAN

SEE MECHANICAL PLAN FOR FURTHER DETAILS AND INFO.

ELECTRICAL
- INCANDESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- CEILING MOUNT EXIT SIGN
- LIGHT COVE WITH PARACUBE LENS
- SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE
- SUSPENDED FLUORESCENT LIGHT FIXTURE
- PENDANT LIGHT FIXTURE

SEE LIGHTING PLAN FOR FURTHER DETAILS AND INFO.

n **first floor reflected ceiling plan**
SCALE: 1/8" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

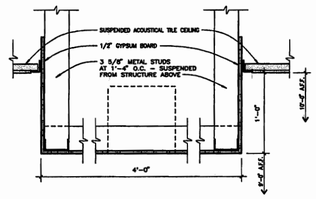
BRACKETT KRENNERICH architects
100 East Huntington, Suite D - P.O. Box 1505 - Jonesboro, Arkansas 72403-1505 - 870-932-0071 - Fax 870-932-0075
REGISTERED ARCHITECTS C13 ARKANSAS

FIRST FLOOR REFLECTED CEILING PLAN

Commission Number 10001

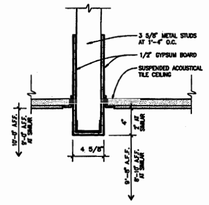
A400

Date: October 25, 2002



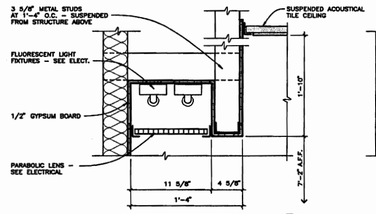
furr down detail 4

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



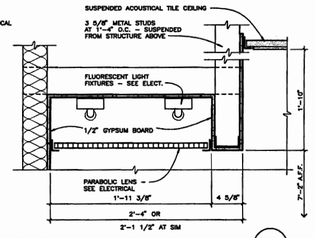
bulkhead detail 3

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



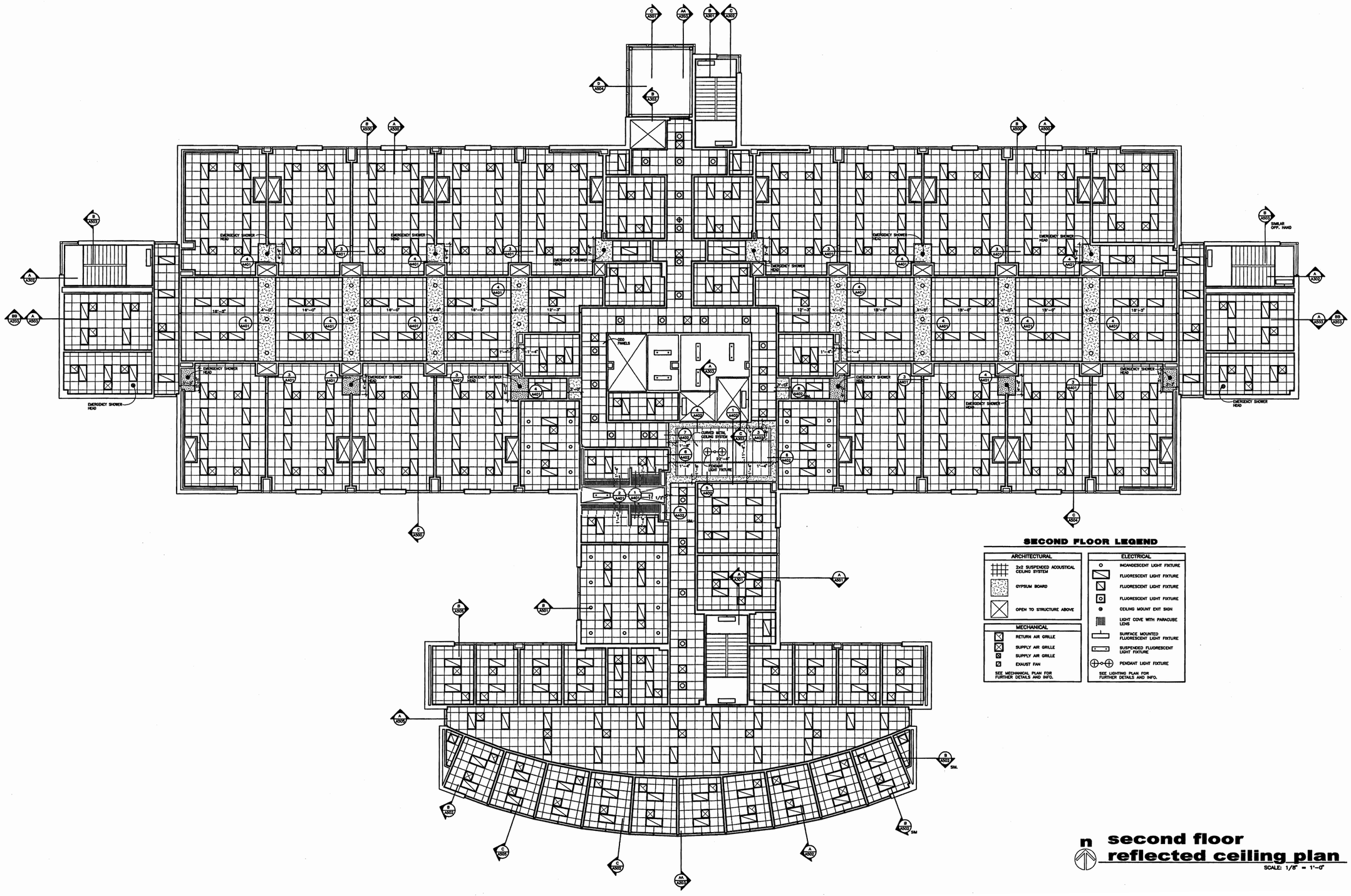
light cove detail 2

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



light cove detail 1

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



SECOND FLOOR LEGEND

ARCHITECTURAL	ELECTRICAL
2x2 SUSPENDED ACOUSTICAL CEILING SYSTEM	INCANDESCENT LIGHT FIXTURE
GYPSUM BOARD	FLUORESCENT LIGHT FIXTURE
OPEN TO STRUCTURE ABOVE	FLUORESCENT LIGHT FIXTURE
	FLUORESCENT LIGHT FIXTURE
	CEILING MOUNT EXIT SIGN
	LIGHT COVE WITH PARACUBE LENS
	SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE
	SUSPENDED FLUORESCENT LIGHT FIXTURE
	PENDANT LIGHT FIXTURE
MECHANICAL	
RETURN AIR GRILLE	
SUPPLY AIR GRILLE	
SUPPLY AIR GRILLE	
EXAUST FAN	
SEE MECHANICAL PLAN FOR FURTHER DETAILS AND INFO.	SEE LIGHTING PLAN FOR FURTHER DETAILS AND INFO.

n

second floor reflected ceiling plan

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

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Email brackett@brackett.net

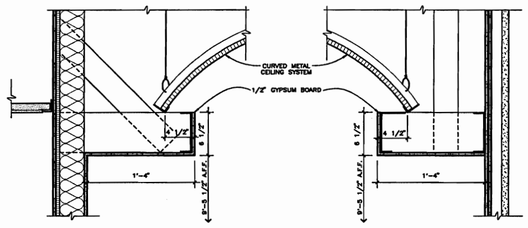
BRACKETT KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 ARKANSAS

SECOND FLOOR REFLECTED CEILING PLAN

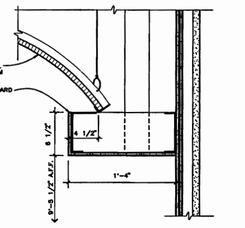
Commission Number 10001

A401

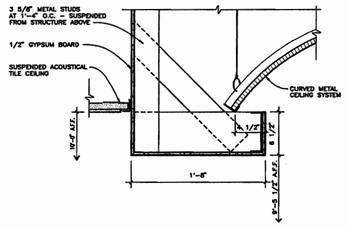
Date: October 25, 2002



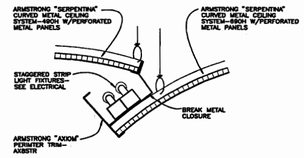
detail 5
SCALE: 1 1/2" = 1'-0"



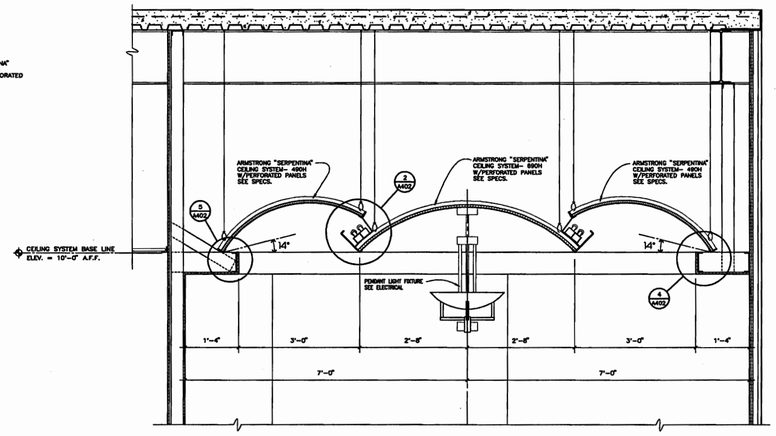
detail 4
SCALE: 1 1/2" = 1'-0"



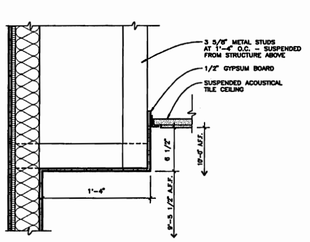
detail 3
SCALE: 1 1/2" = 1'-0"



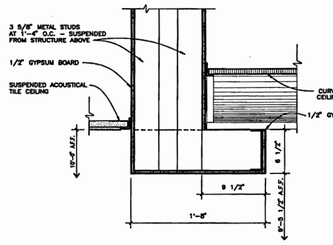
light cove detail 2
SCALE: 1 1/2" = 1'-0"



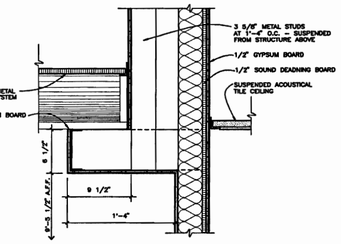
section at second and third floor elevator lobby 1
SCALE: 3/4" = 1'-0"



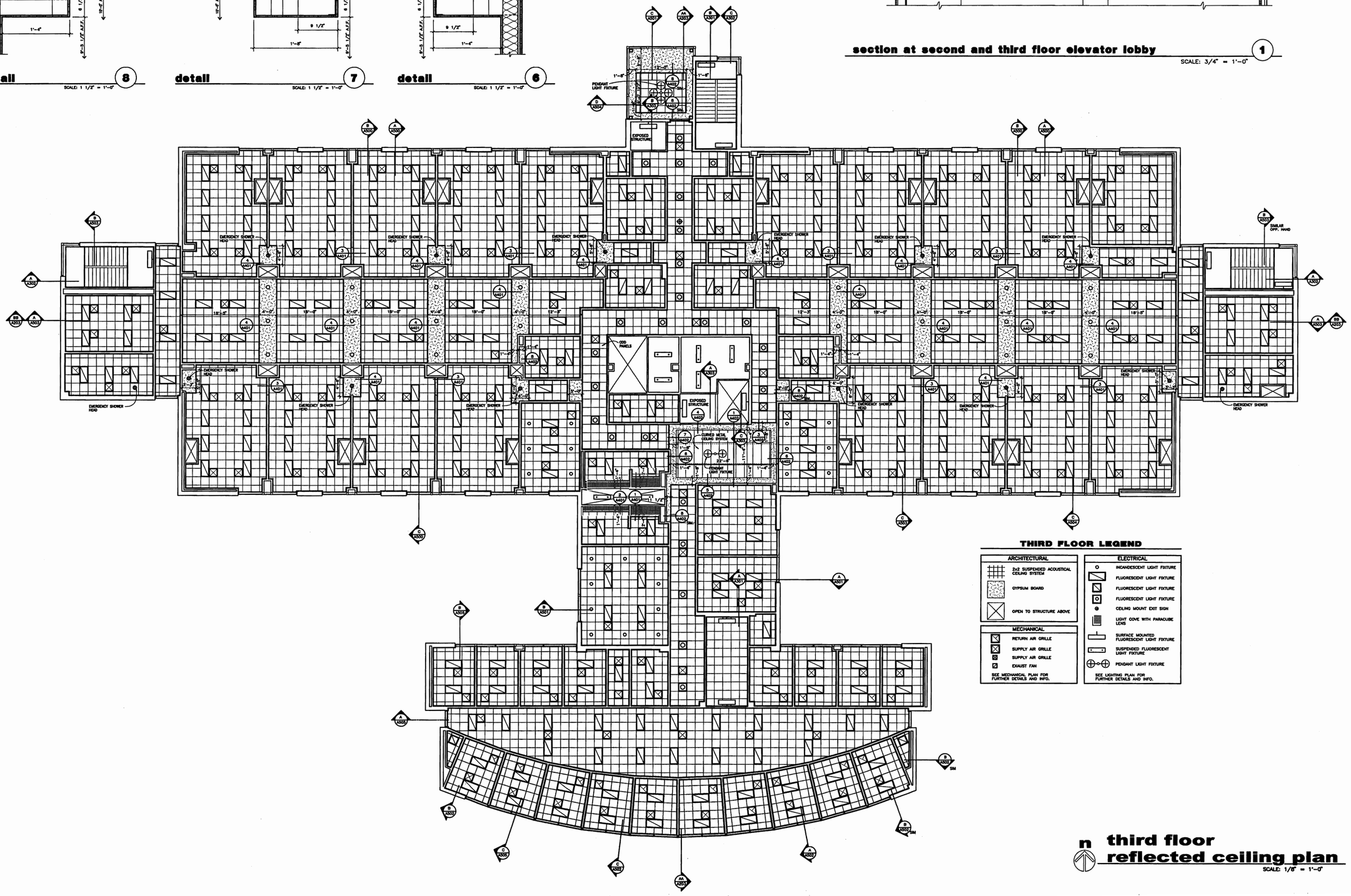
detail 8
SCALE: 1 1/2" = 1'-0"



detail 7
SCALE: 1 1/2" = 1'-0"



detail 6
SCALE: 1 1/2" = 1'-0"



THIRD FLOOR LEGEND

ARCHITECTURAL
- 2x2 SUSPENDED ACOUSTICAL CEILING SYSTEM
- GYPSUM BOARD
- OPEN TO STRUCTURE ABOVE

MECHANICAL
- RETURN AIR GRILLE
- SUPPLY AIR GRILLE
- SUPPLY AIR GRILLE
- EXAUST FAN

SEE MECHANICAL PLAN FOR FURTHER DETAILS AND INFO.

ELECTRICAL
- INCANDESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- CEILING MOUNT EXIT SIGN
- LIGHT COVE WITH PARACUBE LENS
- SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE
- SUSPENDED FLUORESCENT LIGHT FIXTURE
- PENDANT LIGHT FIXTURE

SEE LIGHTING PLAN FOR FURTHER DETAILS AND INFO.

n **third floor reflected ceiling plan**
SCALE: 1/8" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
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870-932-0671 FAX 870-932-0675
Email: brackett@kfarchitects.net

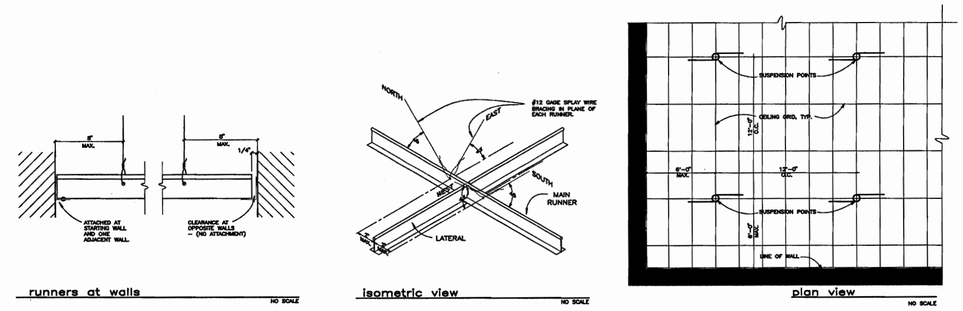
BRACKETT KRENNERICH & ASSOCIATES, P.A. REGISTERED ARCHITECTS C13 ARKANSAS 10/25/02

REFLECTED CEILING PLAN

Commission Number 10301

A402

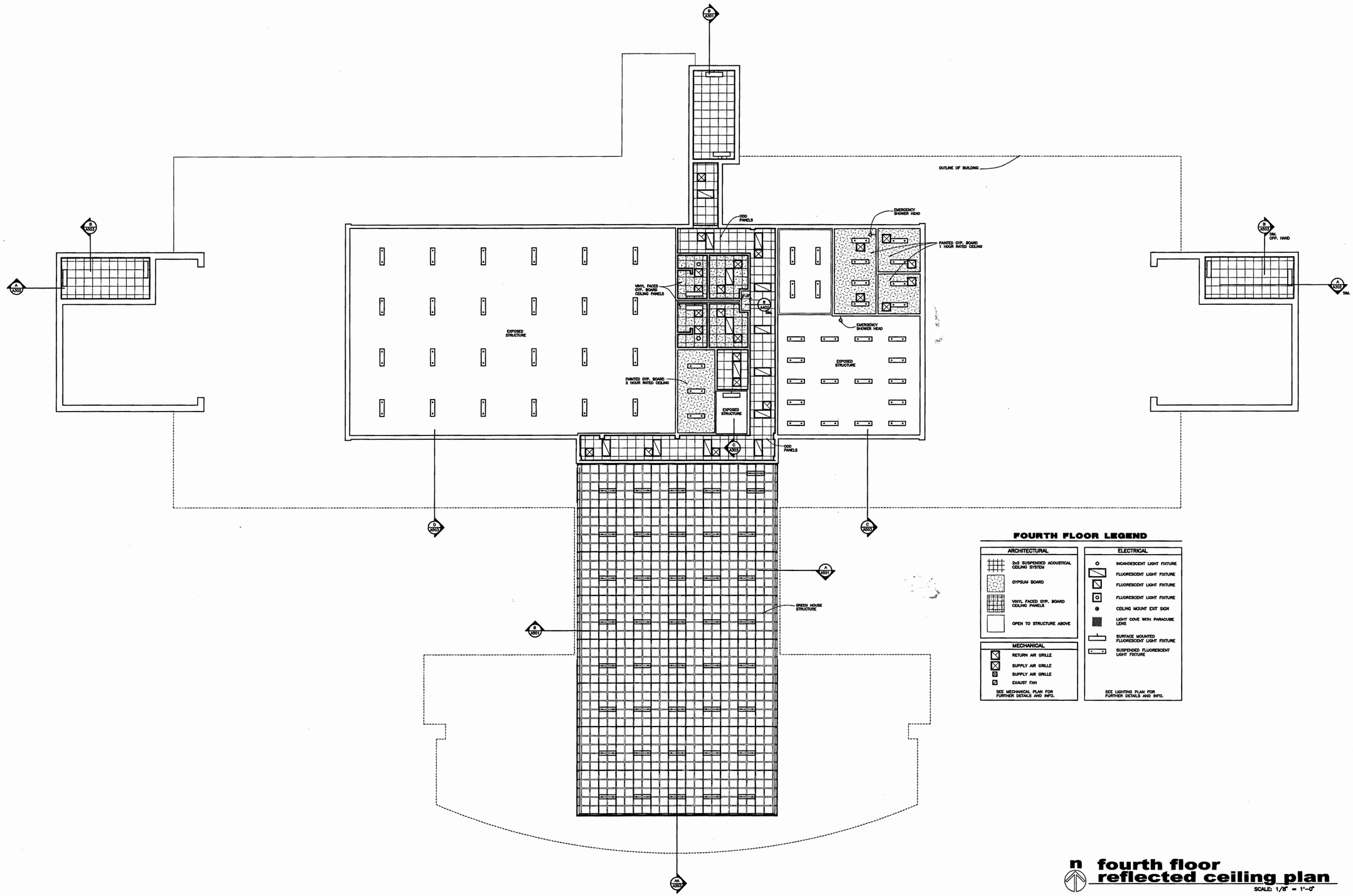
Date: October 25, 2002



NOTE: CEILINGS OF 144 SQ. FT. OR LESS, SURROUNDED BY WALLS THAT CONNECT DIRECTLY TO THE STRUCTURE ABOVE, ARE EXCLUDED FROM THIS RECOMMENDED PRACTICE.

detail at suspended ceilings

TYPICAL ALL 2'x2' SUSPENDED CEILINGS



FOURTH FLOOR LEGEND

ARCHITECTURAL

- 2x2 SUSPENDED ACOUSTICAL CEILING SYSTEM
- GYPSUM BOARD
- VINYL FACED GYP. BOARD CEILING PANELS
- OPEN TO STRUCTURE ABOVE

MECHANICAL

- RETURN AIR GRILLE
- SUPPLY AIR GRILLE
- SUPPLY AIR GRILLE
- EXAUST FAN

SEE MECHANICAL PLAN FOR FURTHER DETAILS AND INFO.

ELECTRICAL

- INCANDESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- CEILING MOUNT EXIT SIGN
- LIGHT COVE WITH PARACUBE LENS
- SURFACE MOUNTED FLUORESCENT LIGHT FIXTURE
- SUSPENDED FLUORESCENT LIGHT FIXTURE

SEE LIGHTING PLAN FOR FURTHER DETAILS AND INFO.

n fourth floor reflected ceiling plan

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

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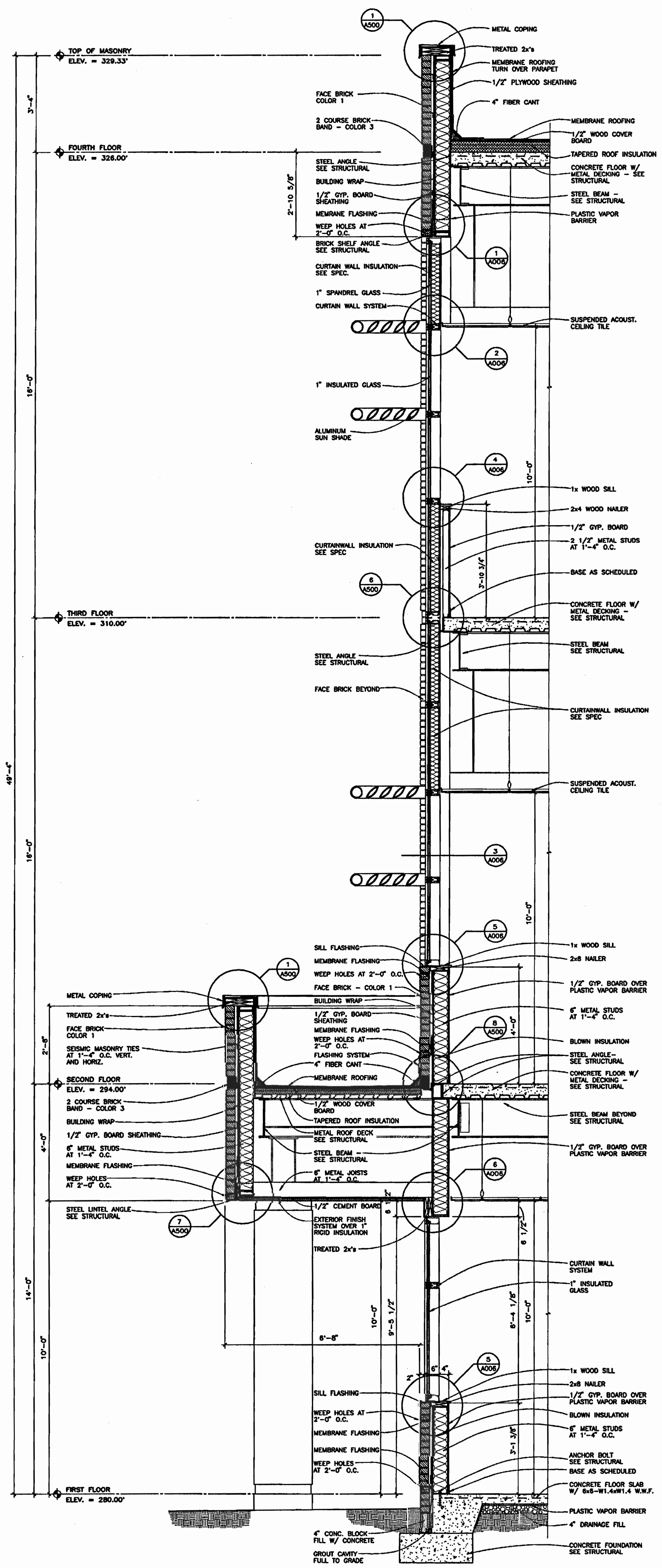
FOURTH FLOOR REFLECTED CEILING PLAN

Commission Number 10301

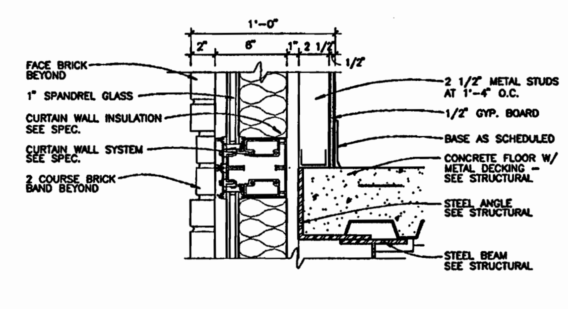
A403

Date: October 25, 2002



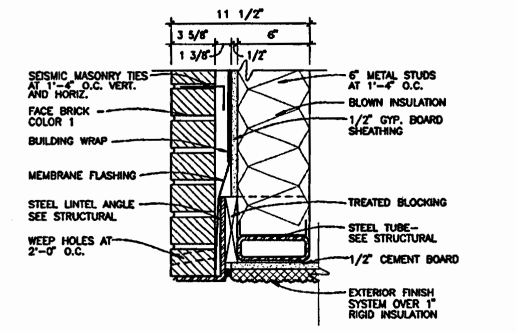
wall section (C)

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



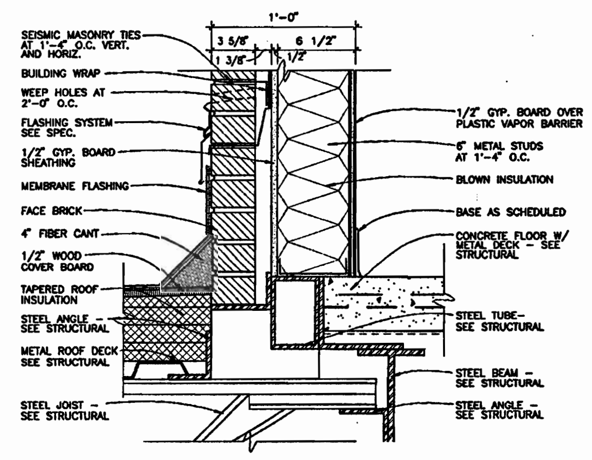
floor / wall detail at curtain wall (6)

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



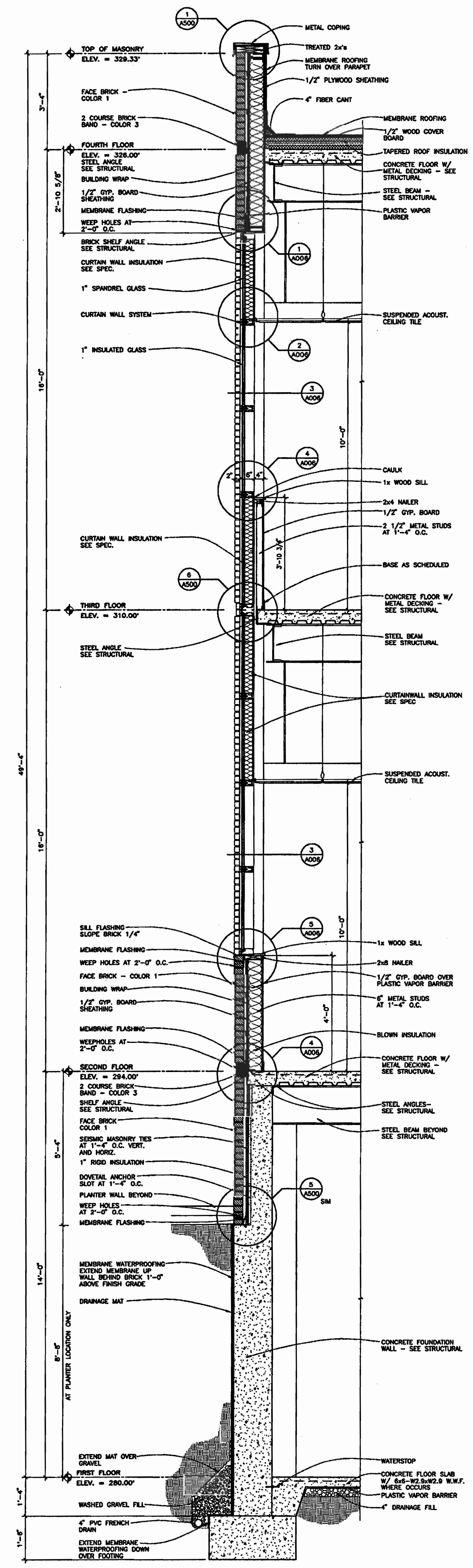
soffit edge detail (7)

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



flashing detail (8)

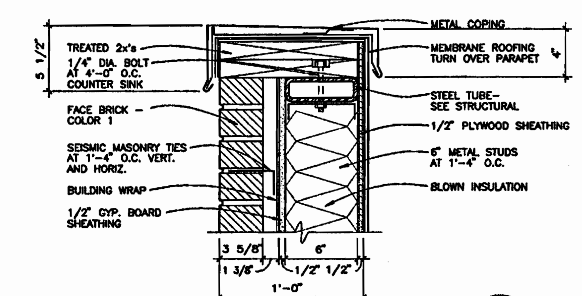
SCALE: 1 1/2" = 1'-0"



NOTE:
SECTION SHOWS CONDITION AT PLANTER LOCATIONS.
CONTRACTOR TO STEP BRICK LEDGE AS REQUIRED
TO KEEP LEDGE A MIN. OF 8" BELOW GRADE

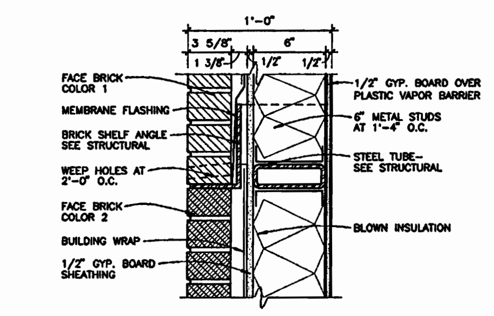
wall section (B)

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



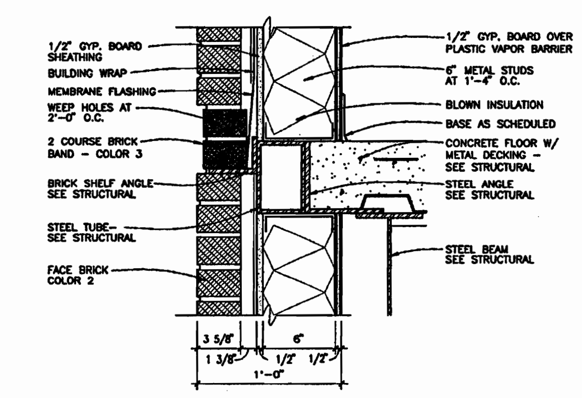
parapet detail (1)

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



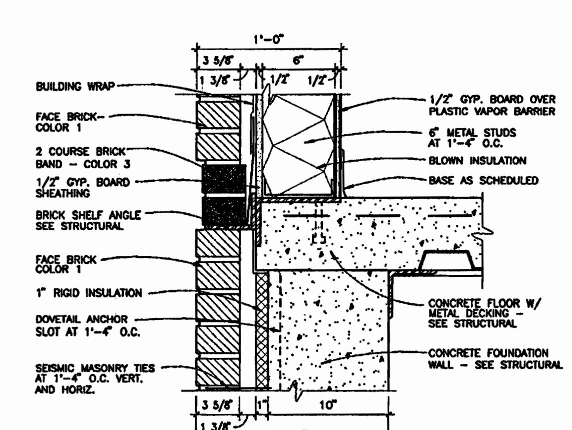
brick shelf detail (2)

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



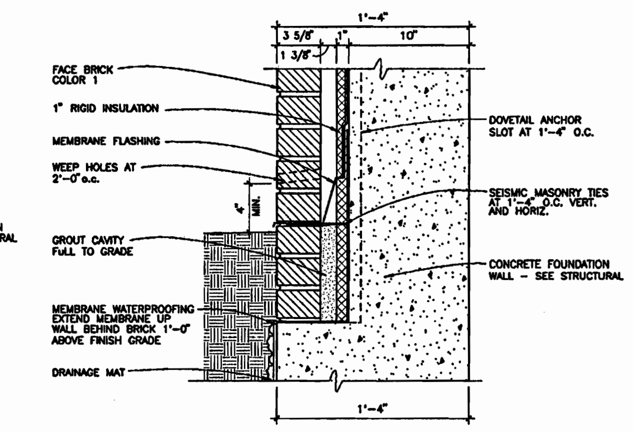
brick shelf detail (3)

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



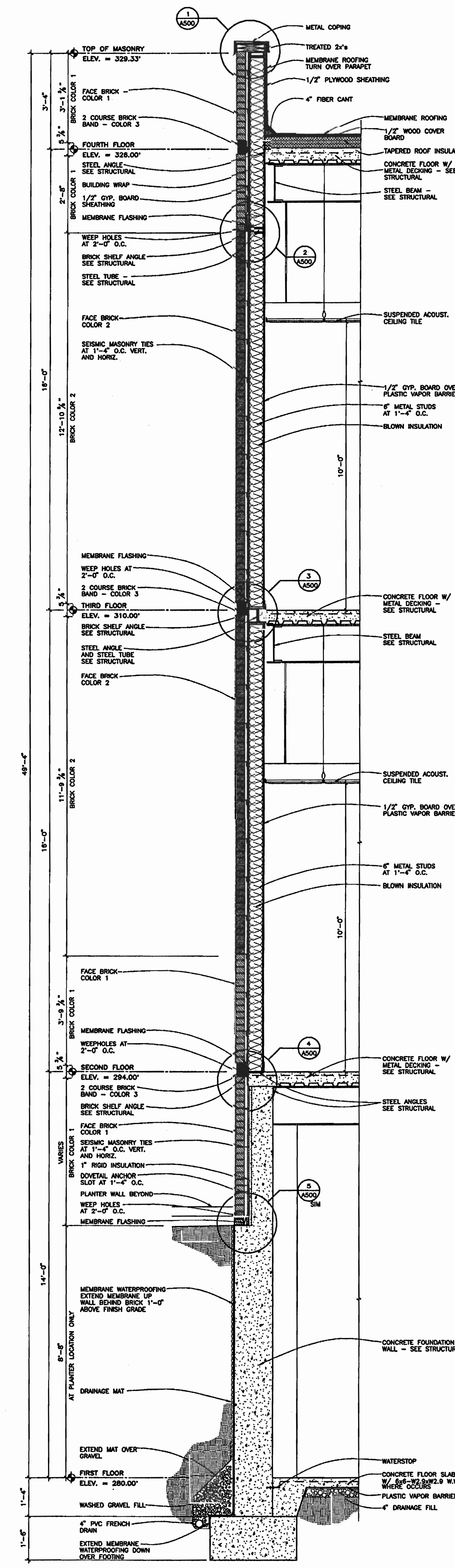
brick shelf detail (4)

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



flashing detail (5)

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



NOTE:
SECTION SHOWS CONDITION AT PLANTER LOCATIONS.
CONTRACTOR TO STEP BRICK LEDGE AS REQUIRED
TO KEEP LEDGE A MIN. OF 8" BELOW GRADE

wall section (A)

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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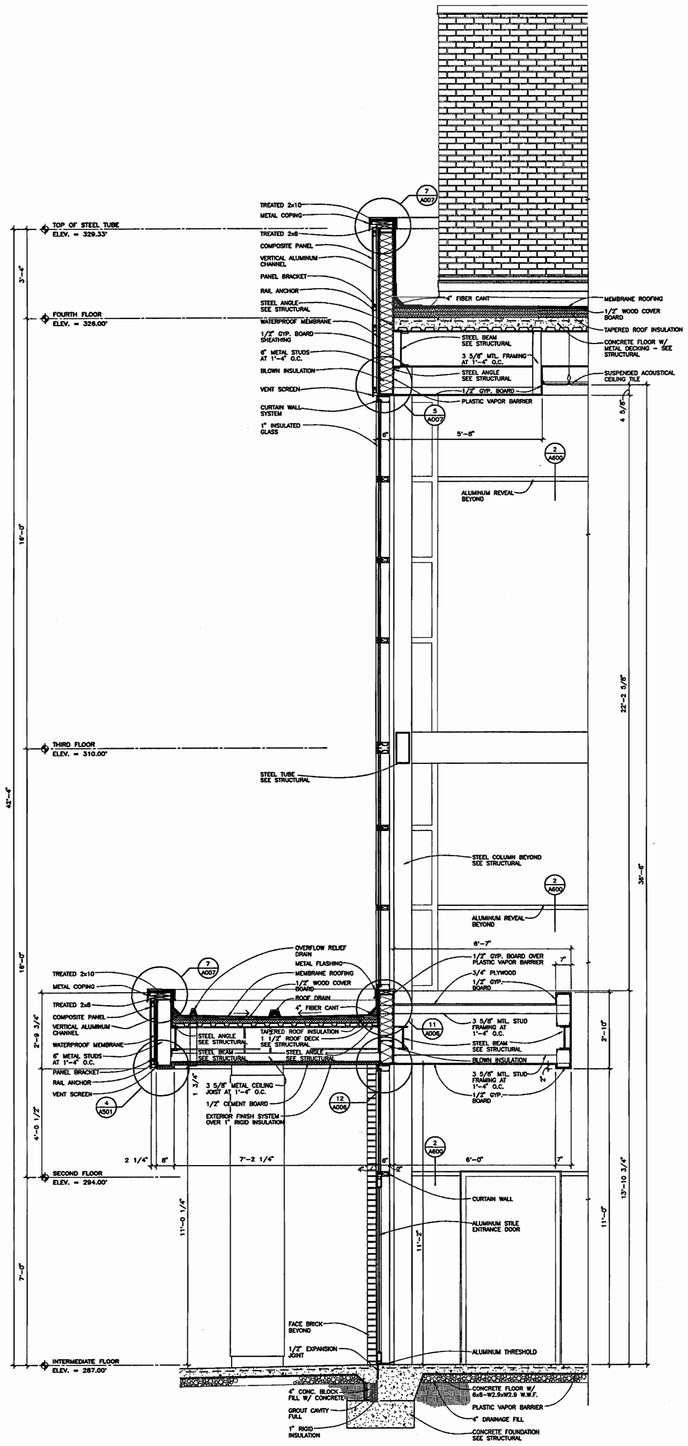
WALL SECTIONS DETAILS

Commission Number 10301

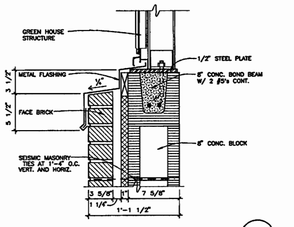
A500

Date: October 25, 2002



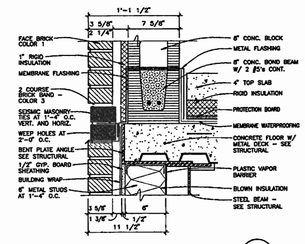
wall section (C)

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



flashing detail (1)

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



flashing detail (2)

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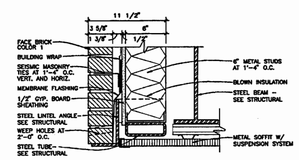
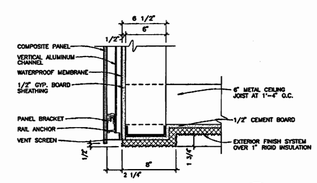


soffit edge detail (3)

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



soffit edge detail (4)

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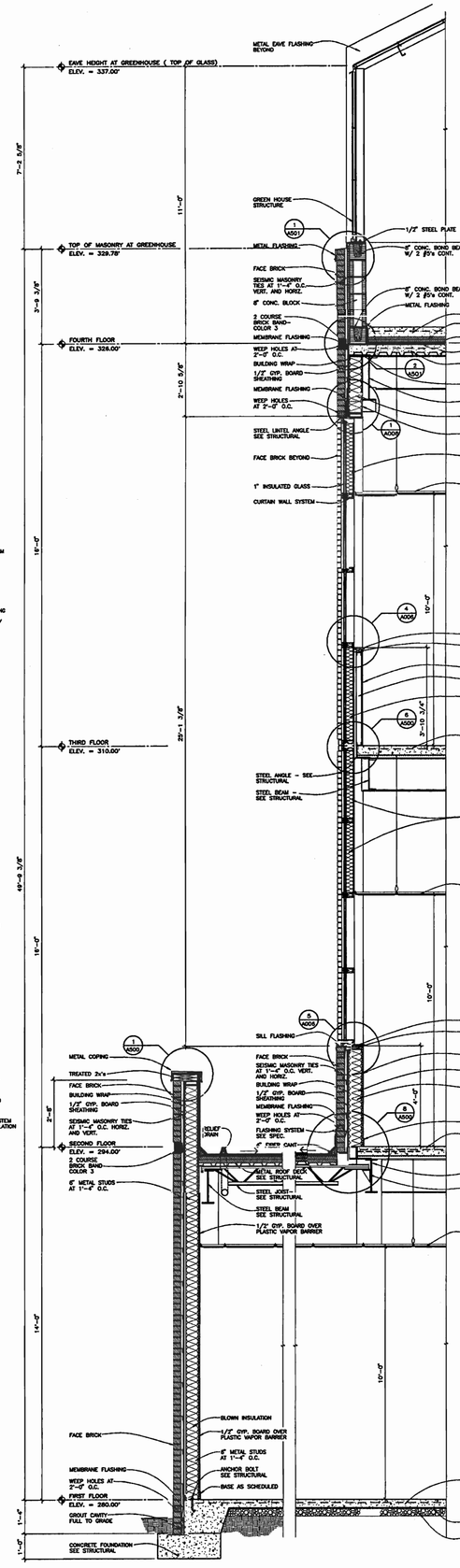
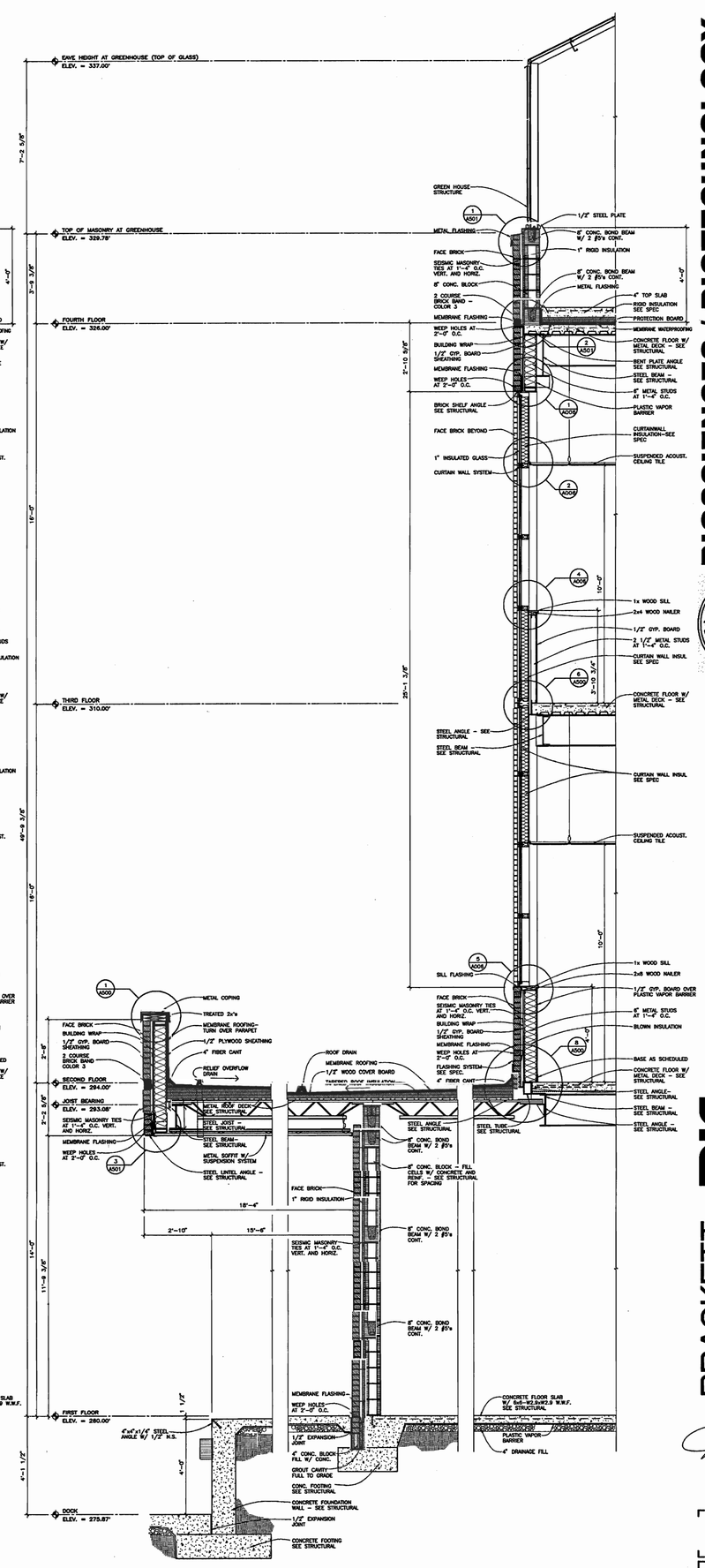


wall section (B)

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



wall section (A)

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

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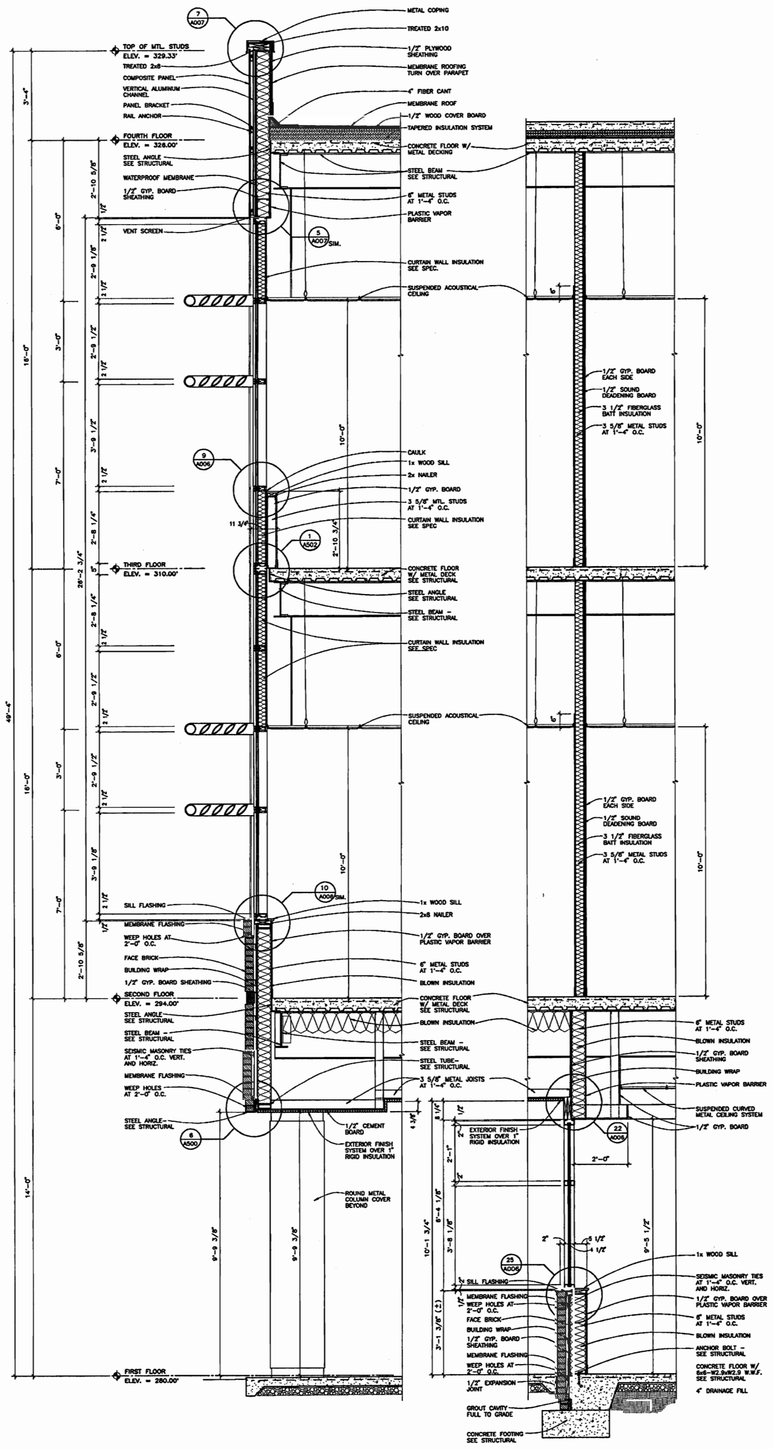
REGISTERED ARCHITECTS CB 10/25/02 ARKANSAS

WALL SECTIONS DETAILS

Commission Number 10001

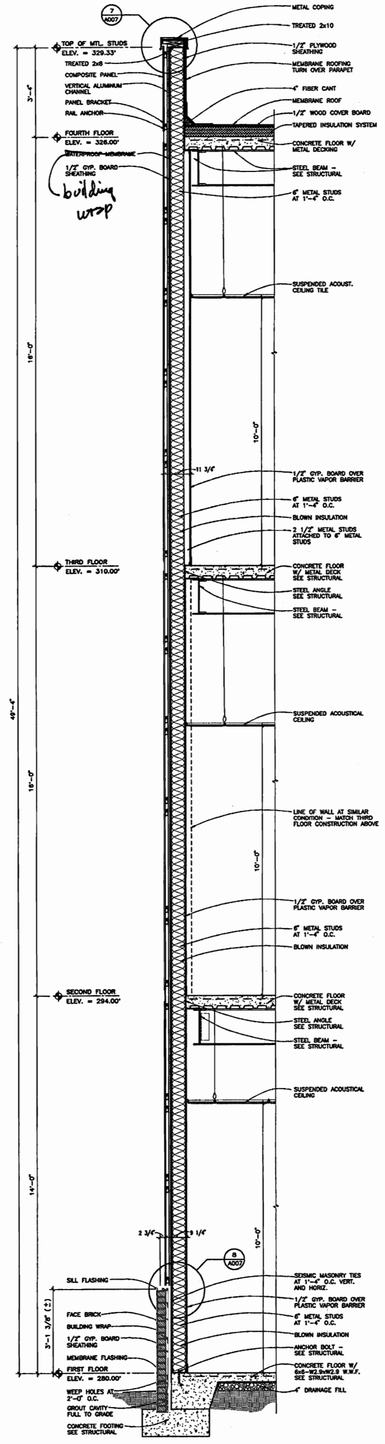
A501

Date: October 25, 2002



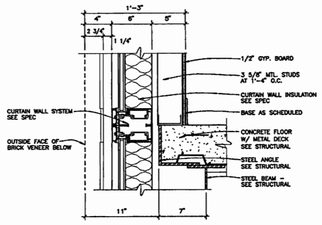
wall section (C)

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



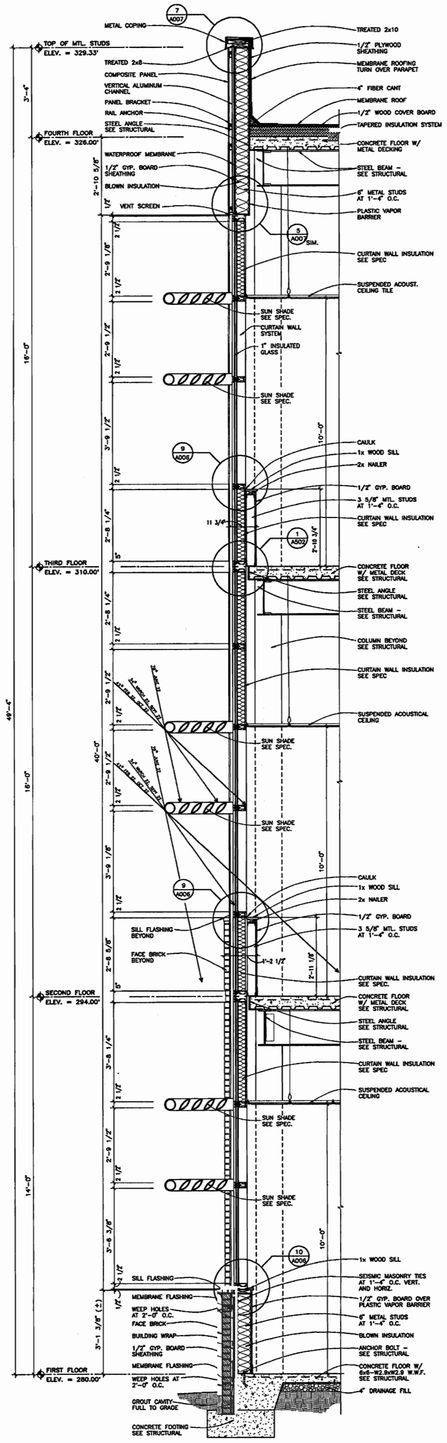
wall section (B)

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



detail at (1)

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



wall section (A)

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

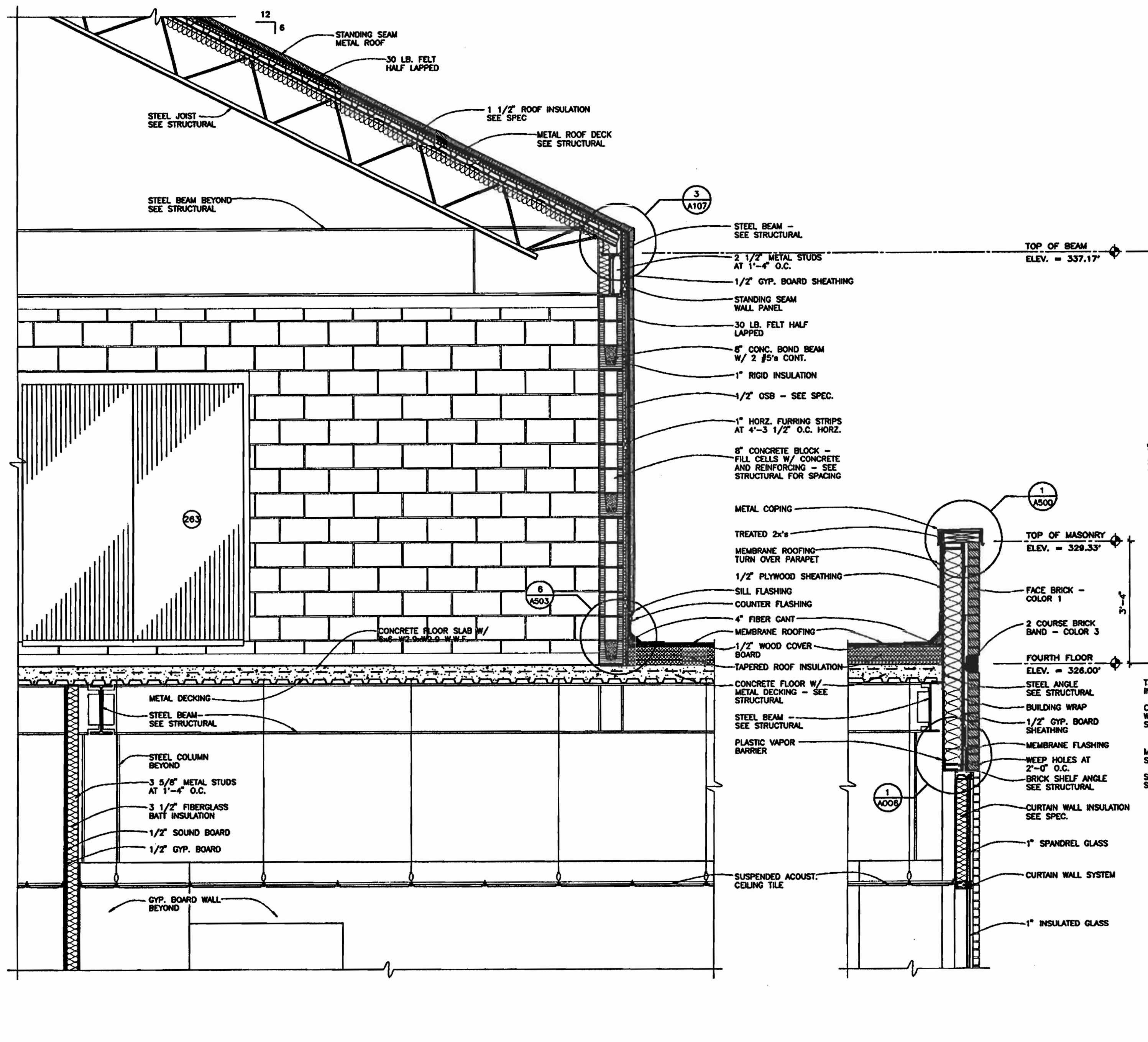
WALL SECTION

Commission Number 10301

A502

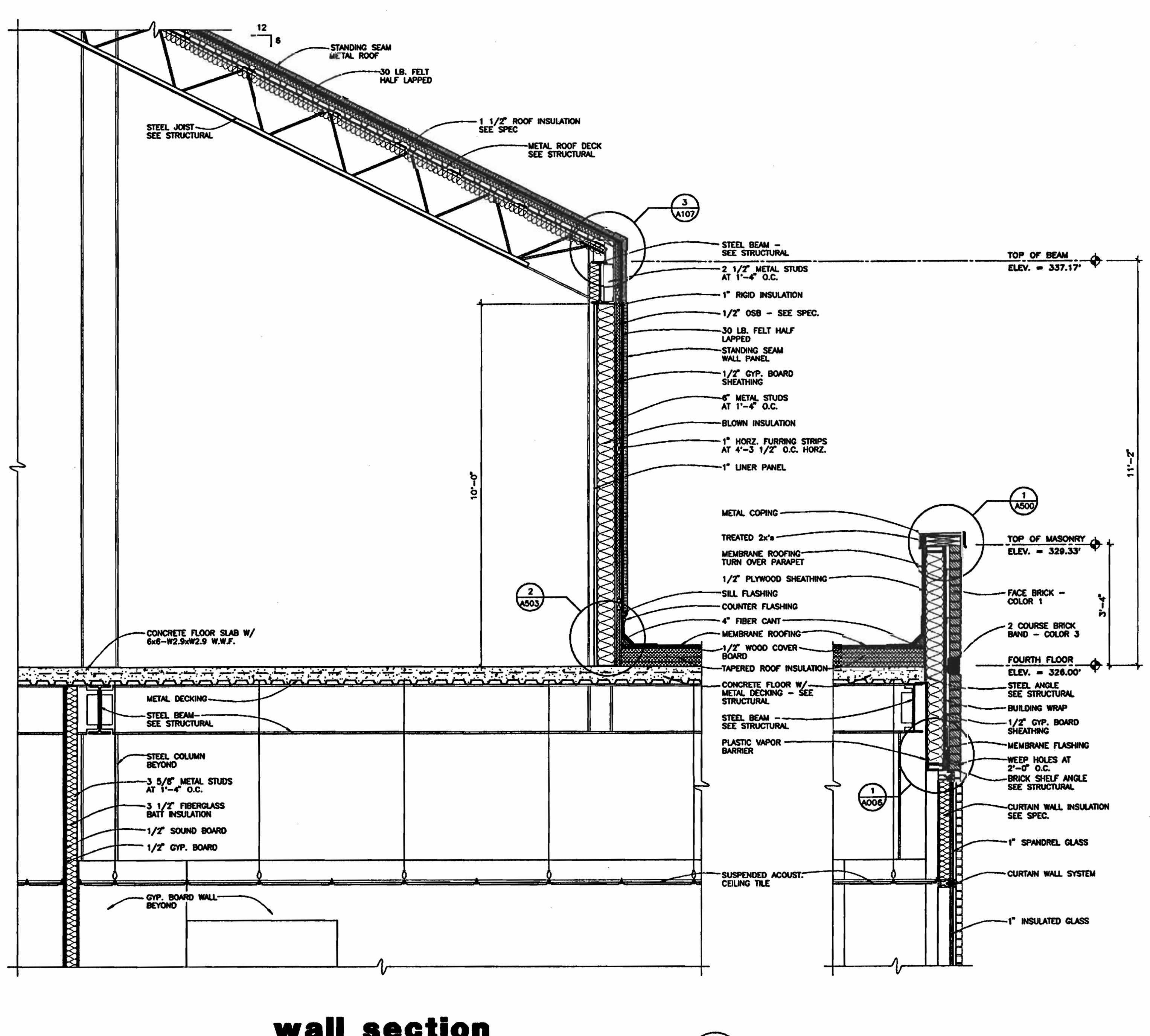
Date: October 25, 2002

100 East Huntington, Suite D - P.O. Box 1055 - Jonesboro, Arkansas 72403-1055 870-932-0071 Fax: 870-932-0076
Email: brackett@brackettarch.com



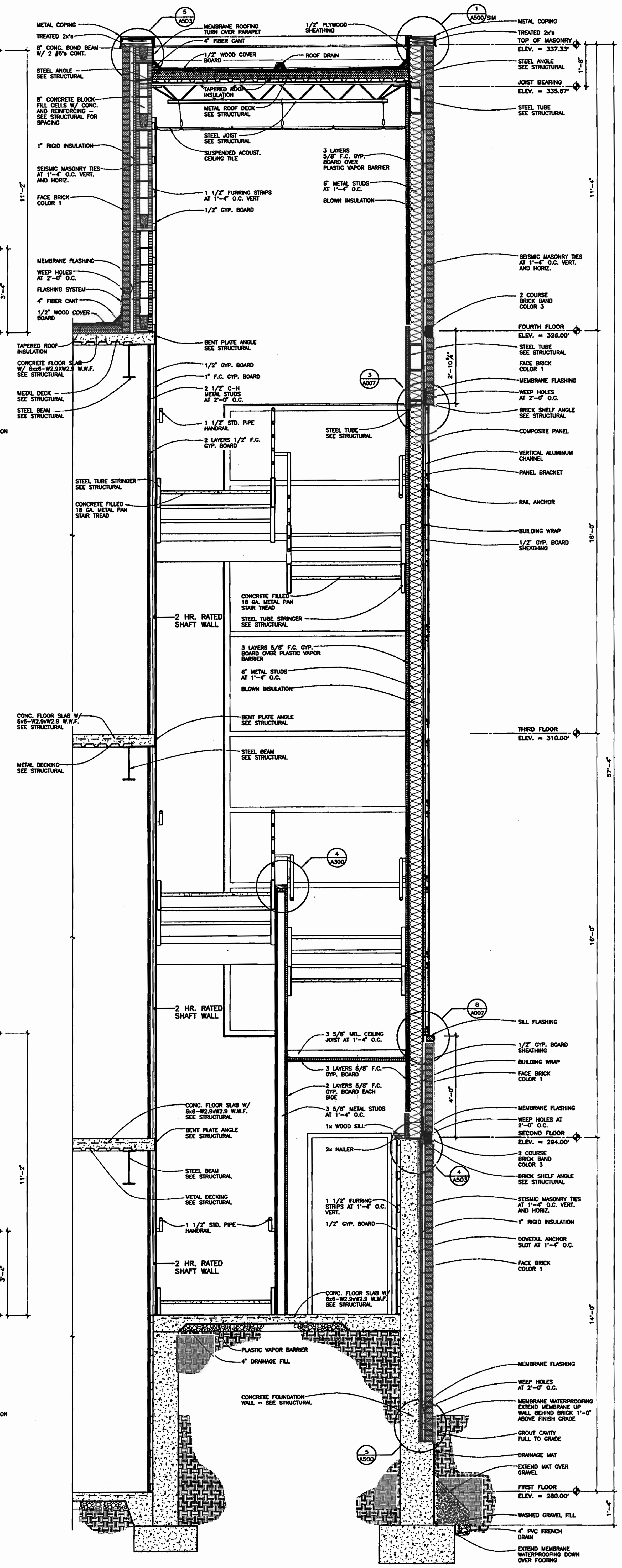
wall section at fourth floor (C)

(HEAD HOUSE) SCALE: 1/2" = 1'-0"



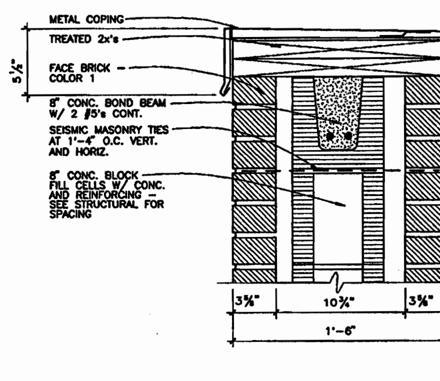
wall section at fourth floor (D)

(MECHANICAL ROOM) SCALE: 1/2" = 1'-0"



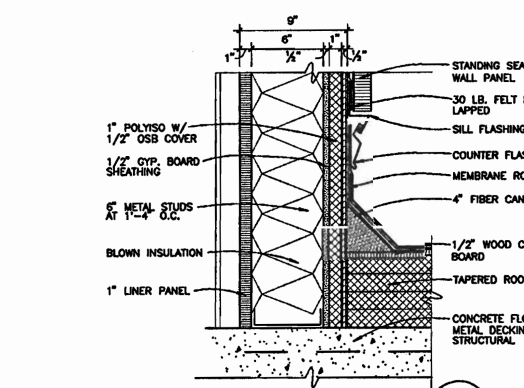
wall section (B)

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



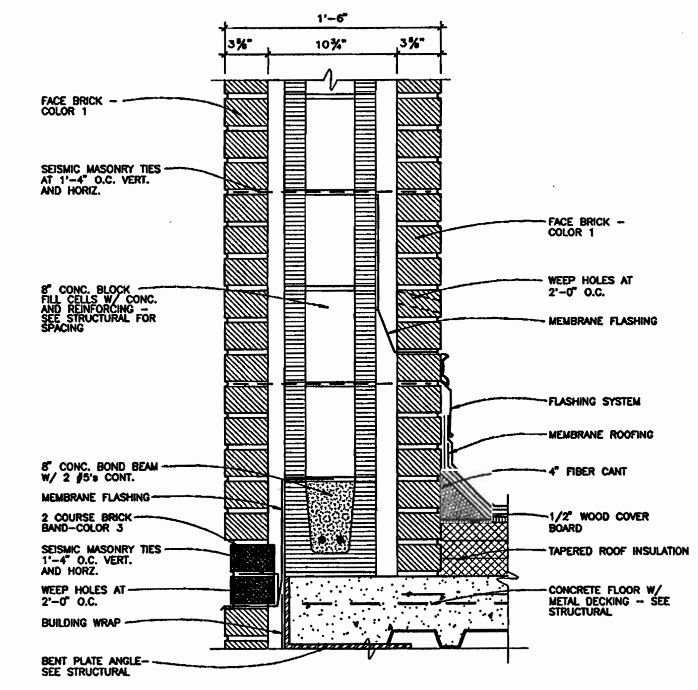
coping detail (1)

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



flashing detail (2)

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



flashing detail (3)

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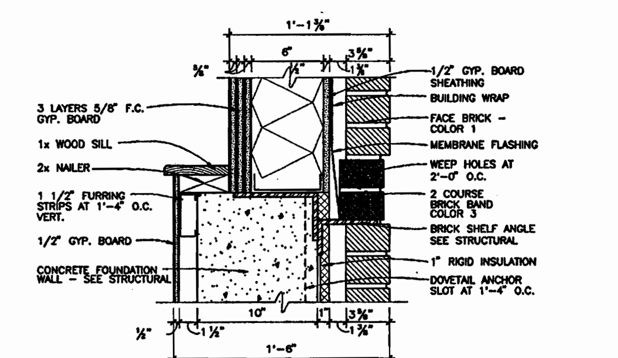
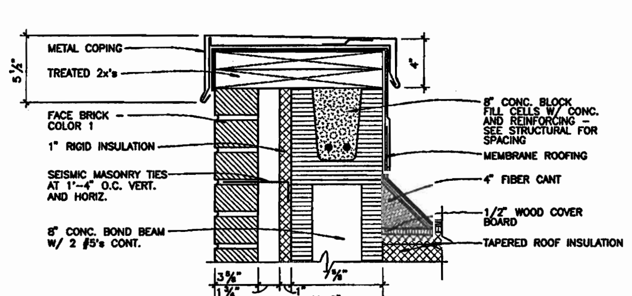


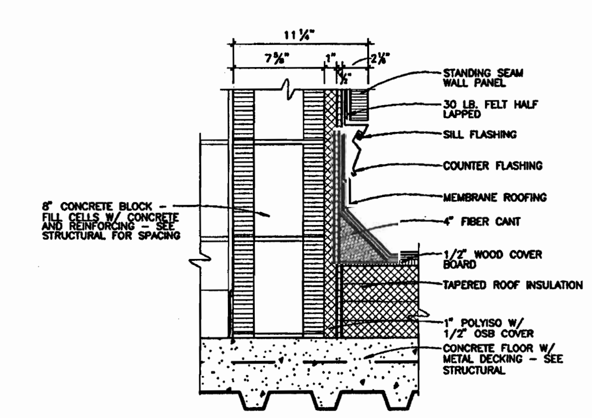
detail at shelf angle (4)

(SECOND FLOOR) SCALE: 1 1/2" = 1'-0"



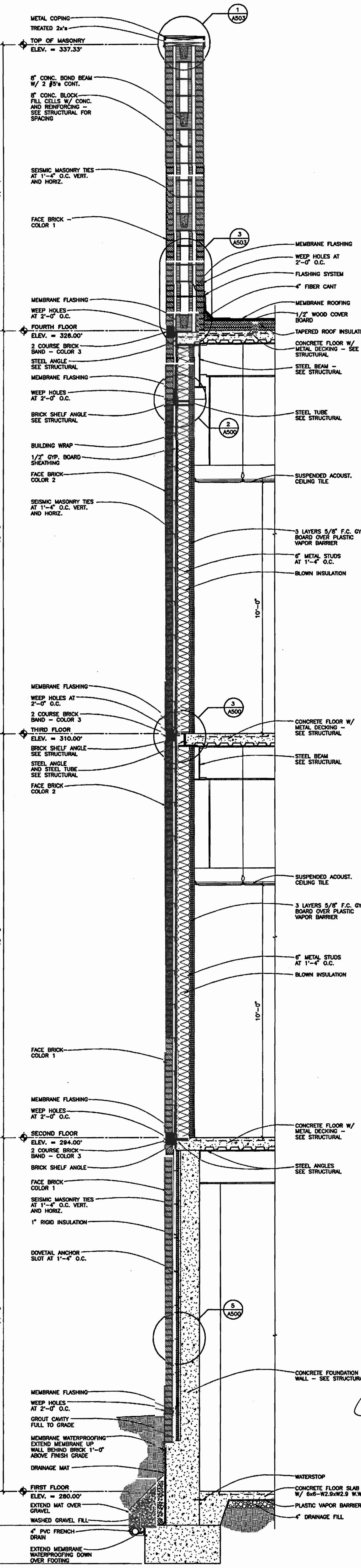
parapet detail (5)

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



flashing detail (6)

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



wall section (A)

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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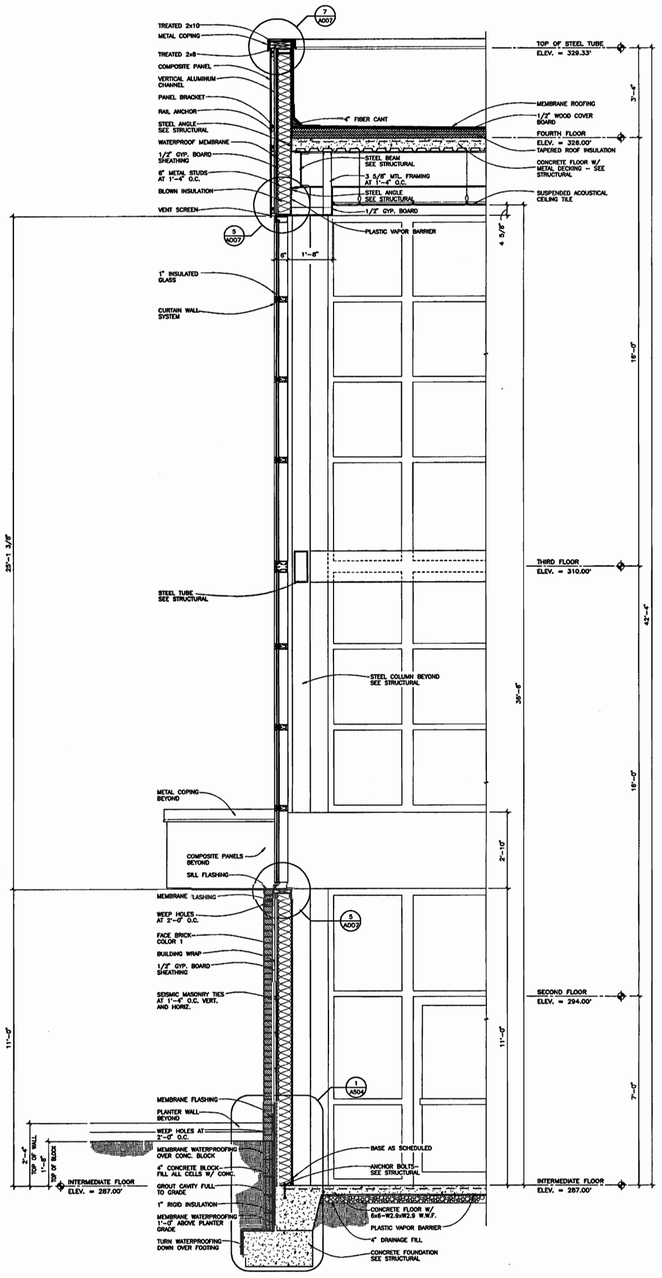
BRACKETT KRENNERICH architects

WALL SECTIONS DETAILS

Commission Number 10301

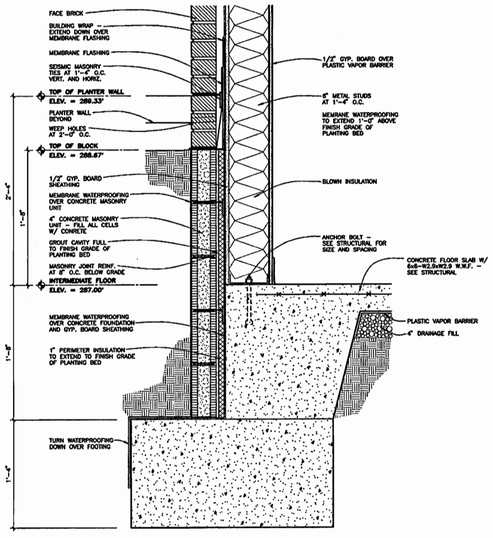
A503

Date: October 25, 2002



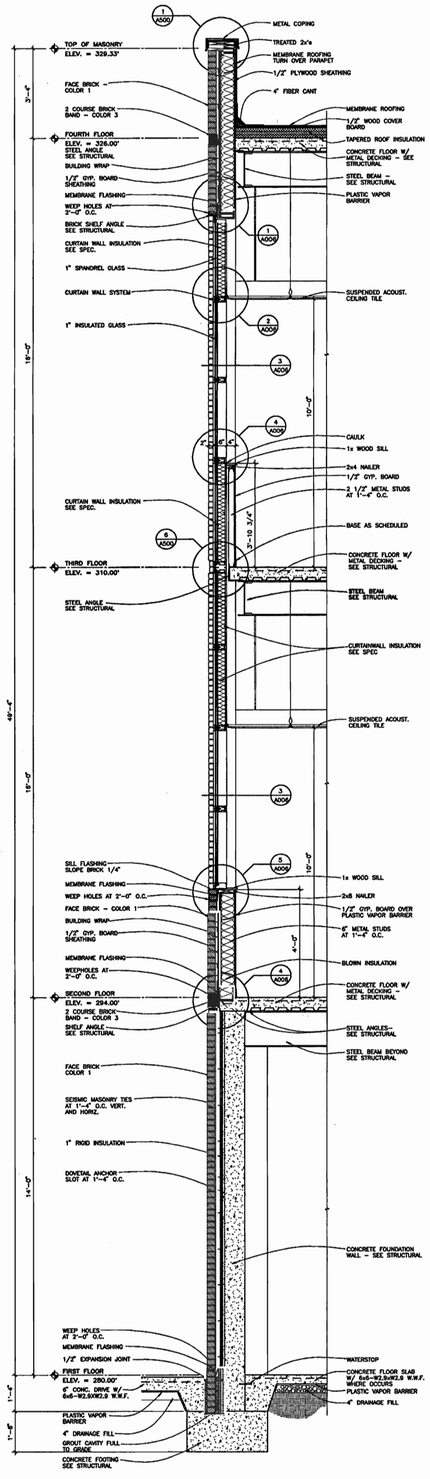
wall section (D)

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



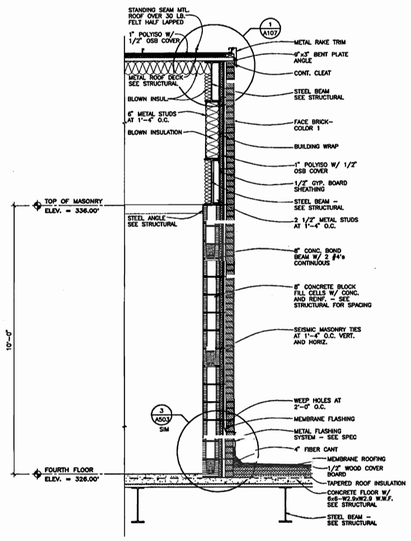
waterproofing detail (1)

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



wall section (C)

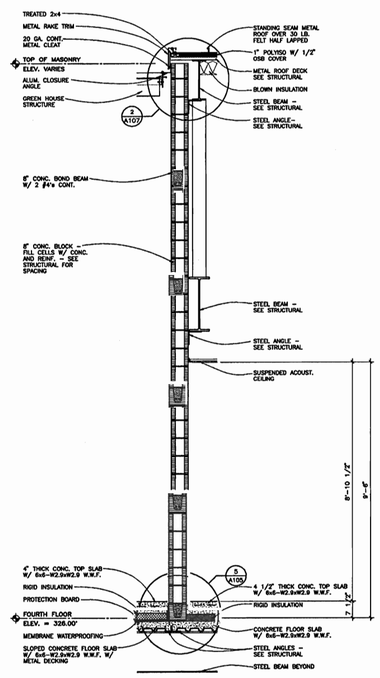
SCALE: 1/2" = 1'-0"



wall section (A)

(FOURTH FLOOR HEAD HOUSE)

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



wall section (B)

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

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BRACKETT KRENNERICH architects

100 East Huntington, Suite 8 P.O. Box 1655 Jonesboro, Arkansas 72401-1655
Email bmaj@brackettkrennerich.net 870-932-8895 Fax 870-932-8671

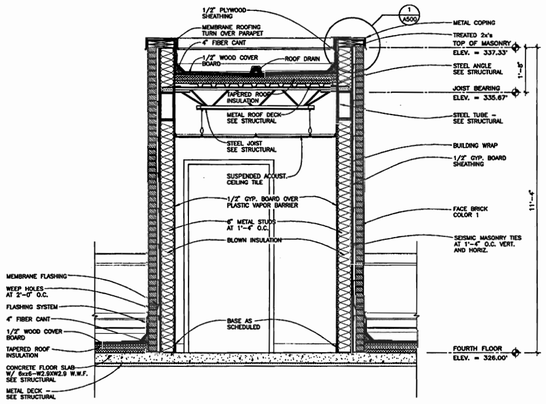
BRACKETT KRENNERICH & ASSOCIATES REGISTERED ARCHITECTS C13 10/25/02 ARKANSAS

WALL SECTIONS

Commission Number 10301

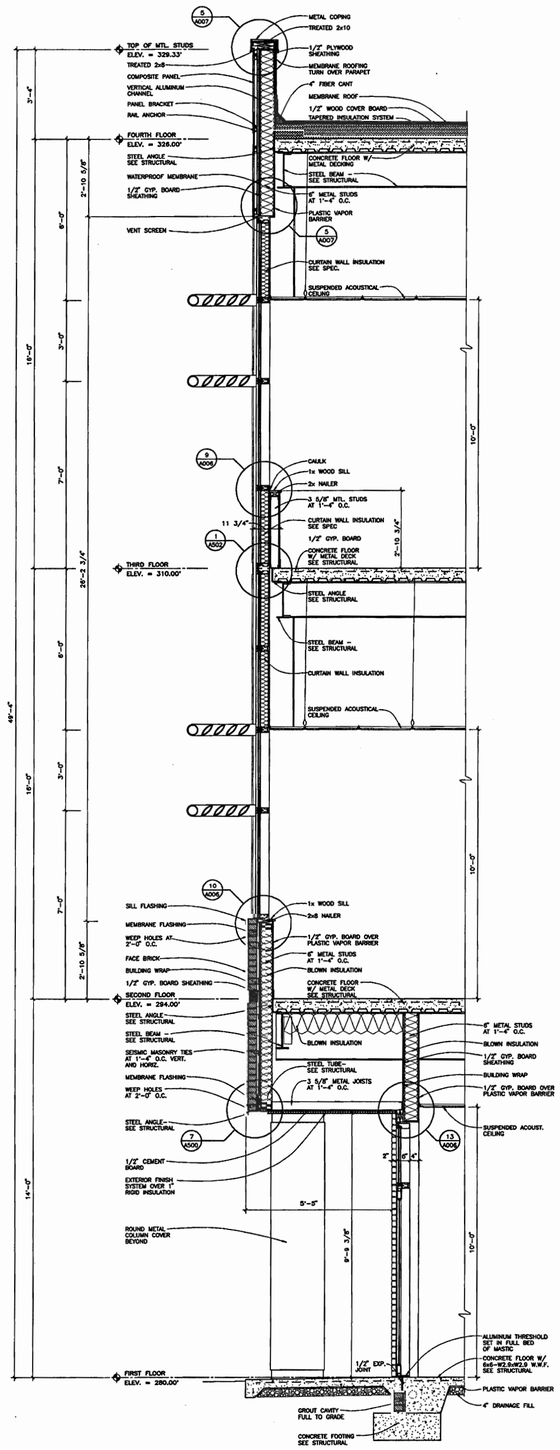
A504

Date: October 25, 2002



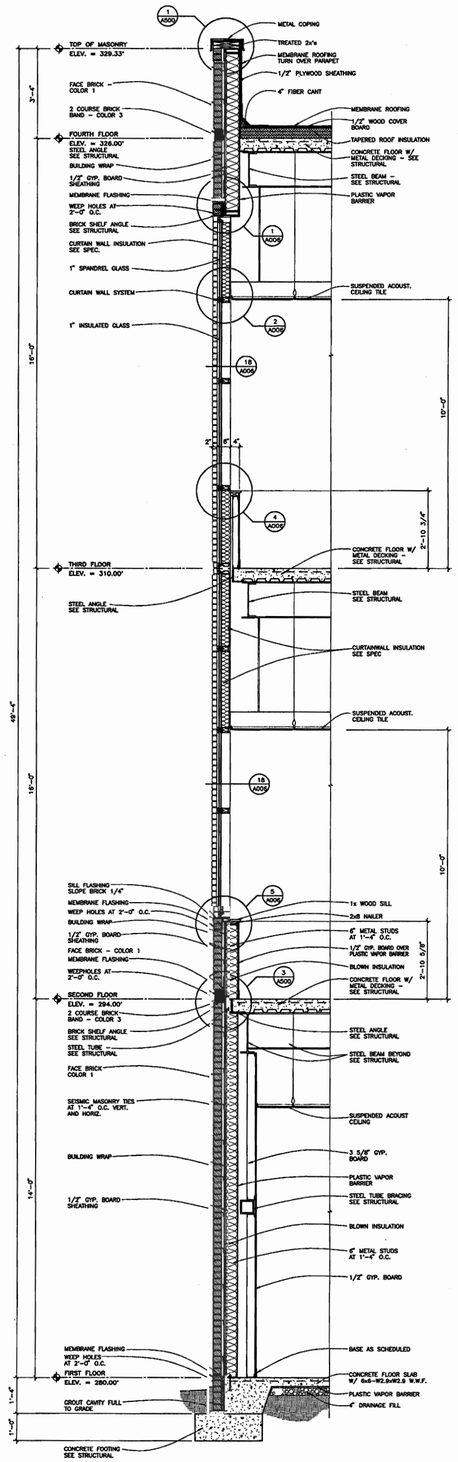
wall section D

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



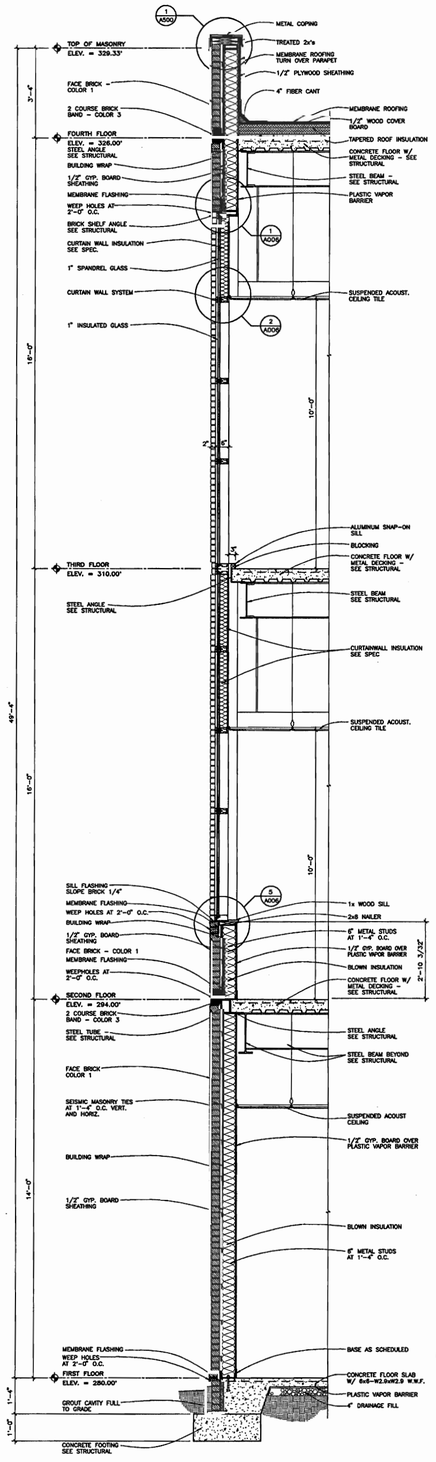
wall section C

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



wall section B

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



wall section A

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

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BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS 13 10/25/02 ARKANSAS

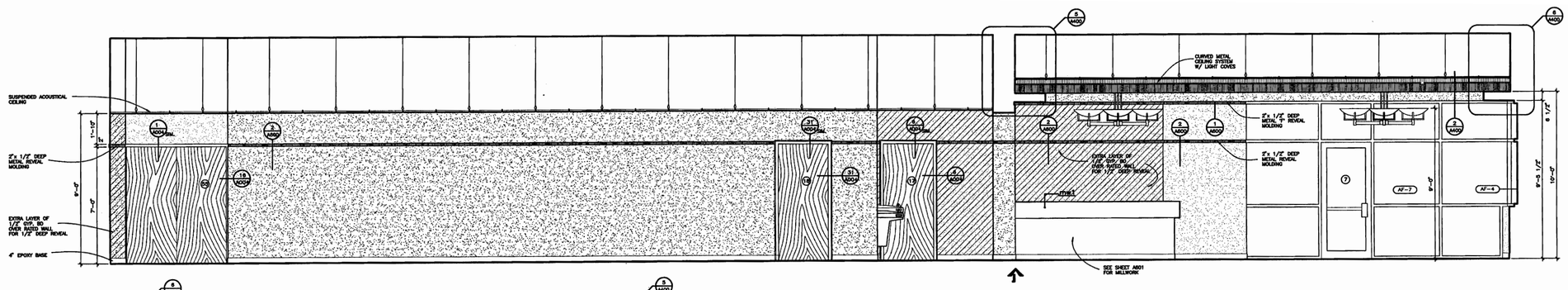
WALL SECTIONS

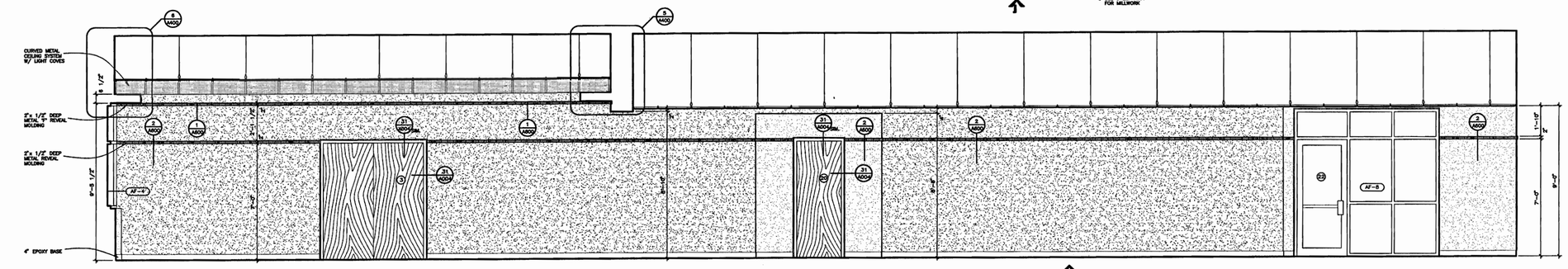
Commission Number 10301

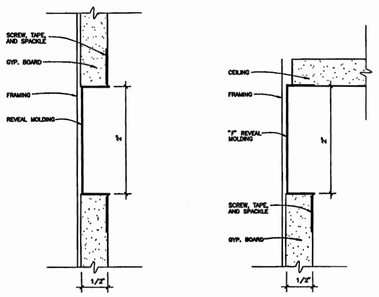
A505

Date: October 25, 2002

BRACKETT KRENNERICH & ASSOCIATES, P.A. 400 East Huntington Drive, Suite B P.O. Box 1684 Jonesboro, Arkansas 72401-1684 (870) 932-0671 FAX (870) 932-0673 Email brenkrich@brenkrich.net

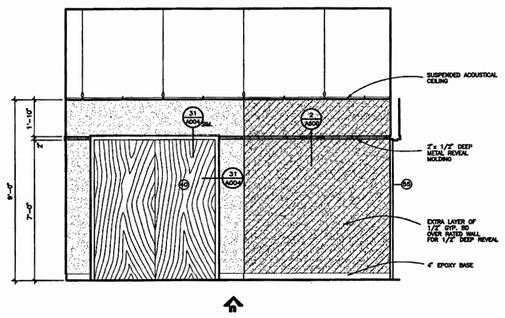


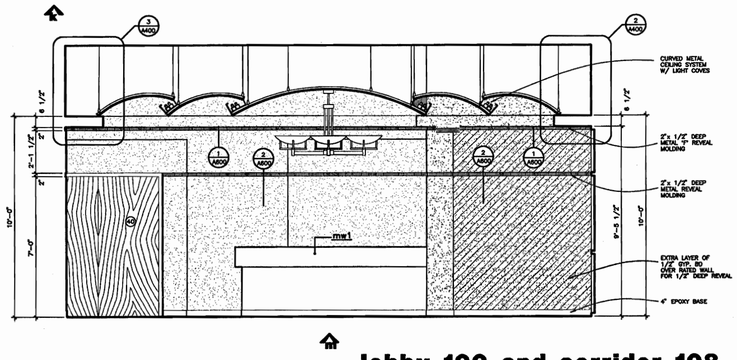




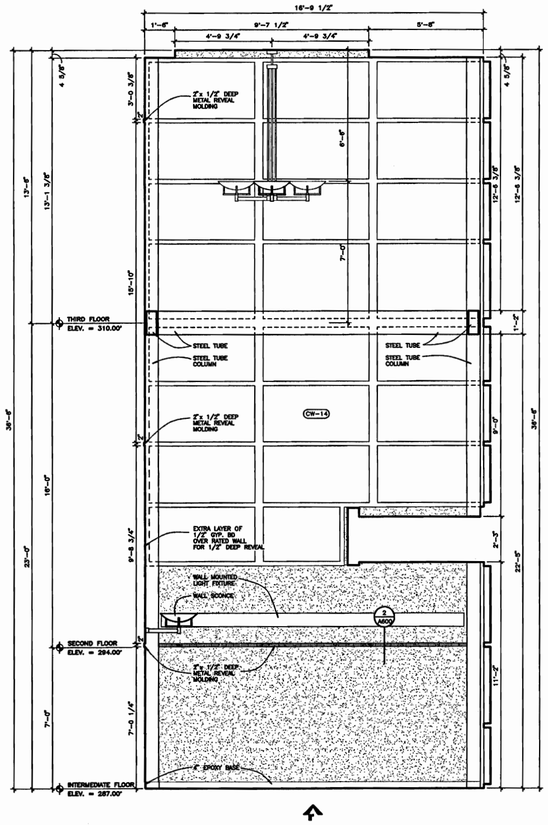
reveal molding detail (2)
SCALE: FULL

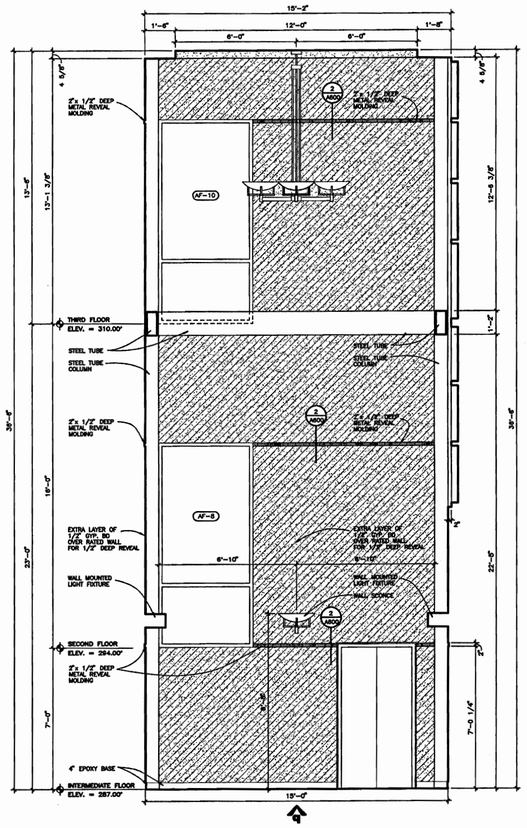
"I" reveal molding detail (1)
SCALE: FULL

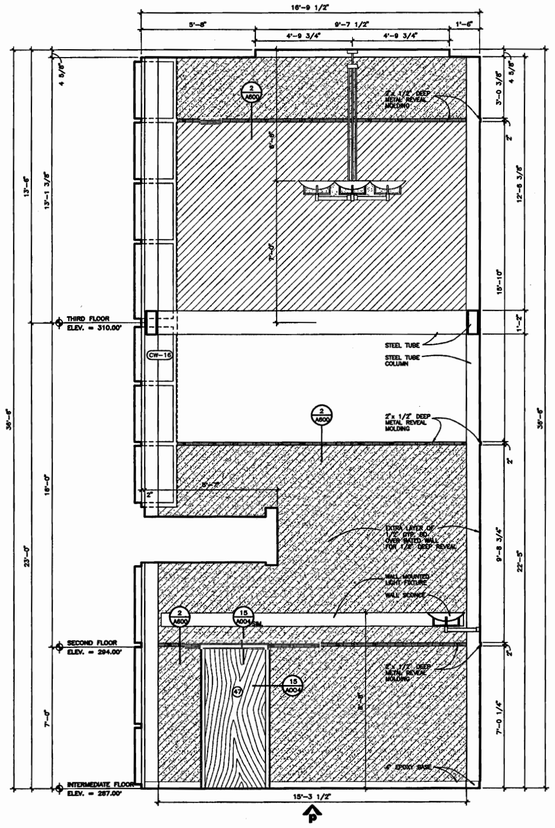


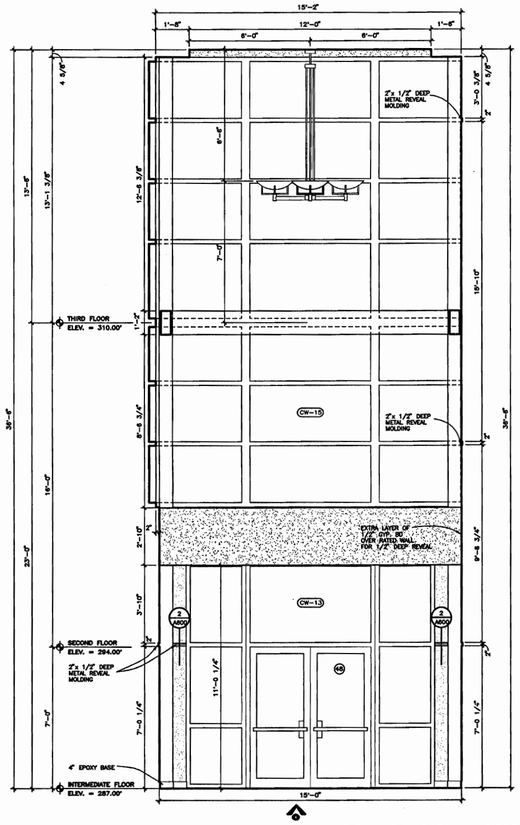


lobby 100 and corridor 108
SCALE: 3/8" = 1'-0"









elevator lobby 132
SCALE: 3/8" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

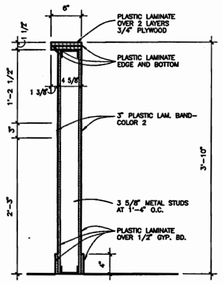
REGISTERED ARCHITECTS CIS 10/25/02 ARKANSAS

INTERIOR ELEVATIONS

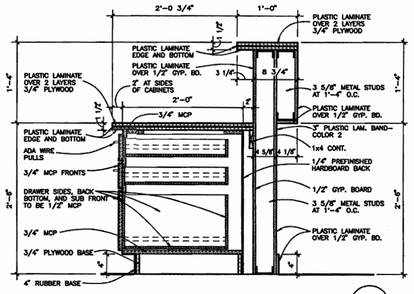
Commission Number 10301

A600

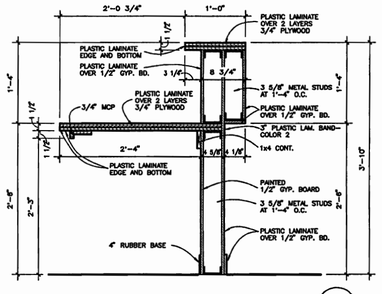
Date: October 25, 2002



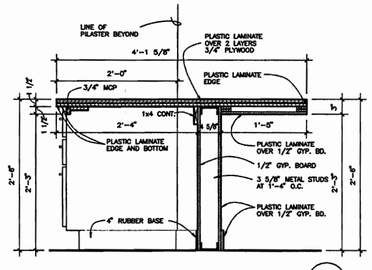
wall detail (4)
SCALE: 1" = 1'-0"



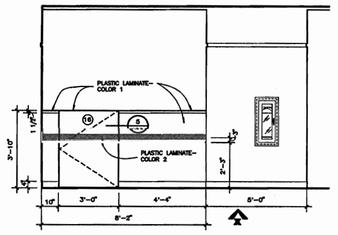
counter detail (3)
SCALE: 1" = 1'-0"

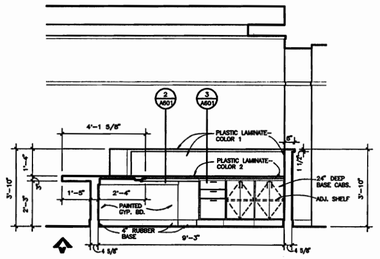


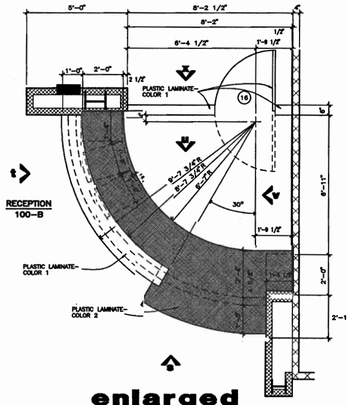
counter detail (2)
SCALE: 1" = 1'-0"



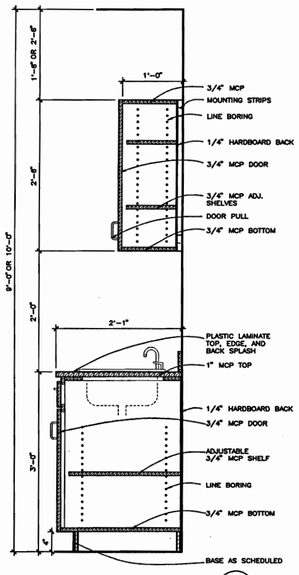
counter detail (1)
SCALE: 1" = 1'-0"



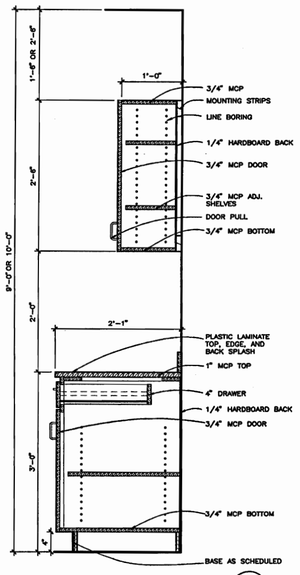




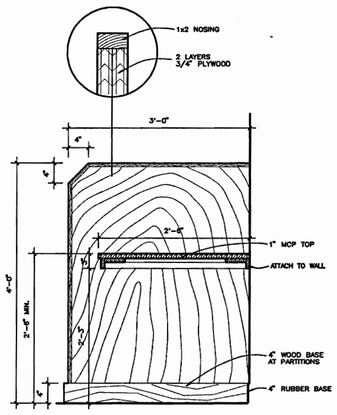
enlarged counter plan
SCALE: 3/8" = 1'-0"



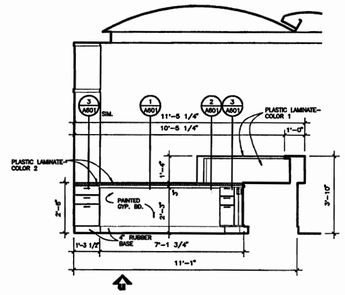
cabinet section (7)
SCALE: 1" = 1'-0"

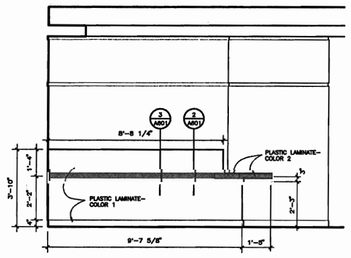


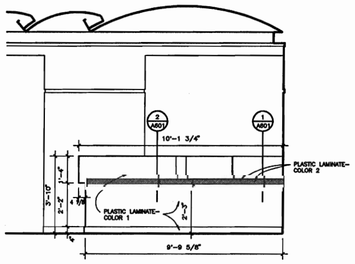
cabinet section (6)
SCALE: 1" = 1'-0"



desk section (5)
SCALE: 1" = 1'-0"

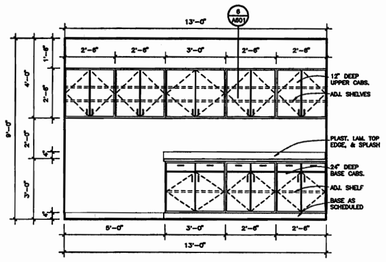






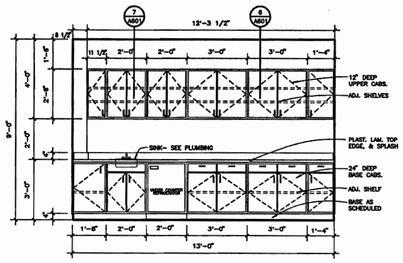
RECEPTION 100-B

millwork no.1



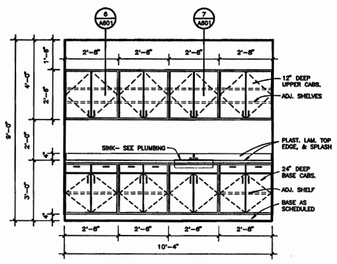
WORK COPY 101-A

millwork no.4



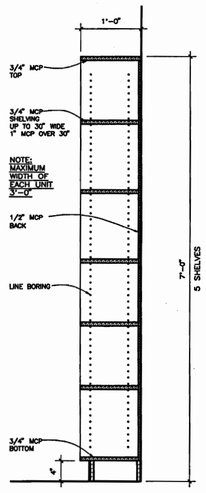
WORK COPY 101-A

millwork no.3

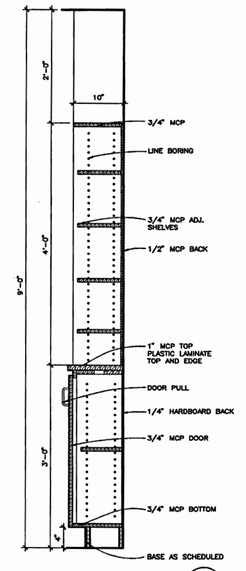


WET BAR 107-B

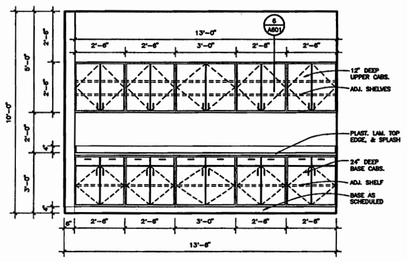
millwork no.2



shelving section (9)
SCALE: 1" = 1'-0"

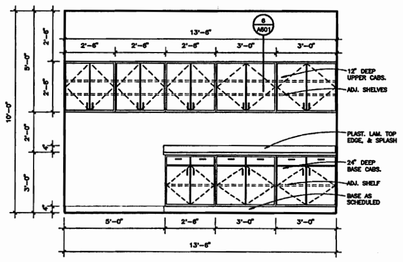


cabinet section (8)
SCALE: 1" = 1'-0"



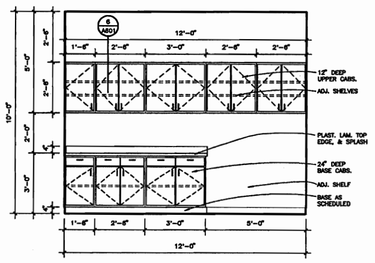
WORK 200-A, 300-A

millwork no.10, 17



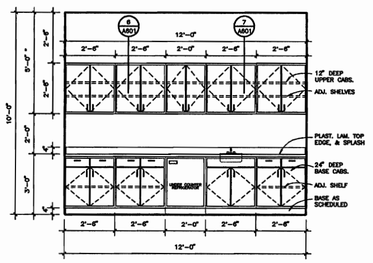
WORK 200-A, 300-A

millwork no.9, 16



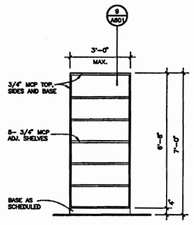
WORK STORAGE 113-A

millwork no.8

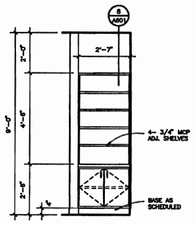


WORK STORAGE 113-A

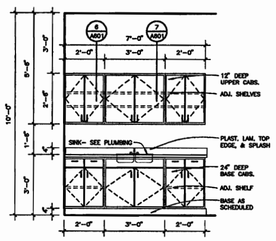
millwork no.7



shelving

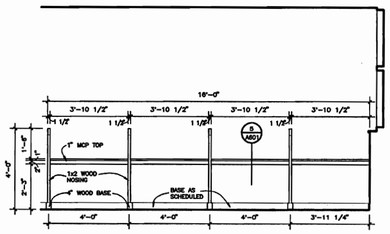


mw no.23, 24
LOCKER ROOM 406, 407



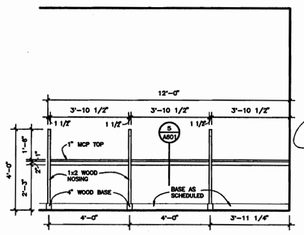
BREAK ROOM 222, 322

millwork no.13, 20



COMPUTER ROOM 221, 321

millwork no.12, 19



COMPUTER ROOM 221, 321

millwork no.11, 18

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

BRACKETT KRENNERICH architects

BRACKETT KRENNERICH & ASSOCIATES P.A. REGISTERED ARCHITECTS CIS 10/25/02 ARKANSAS

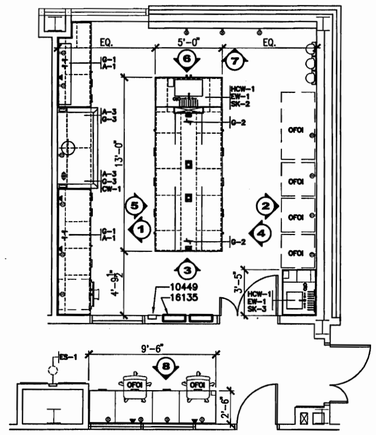
MILLWORK ELEVATIONS

Commission Number 10301

A601

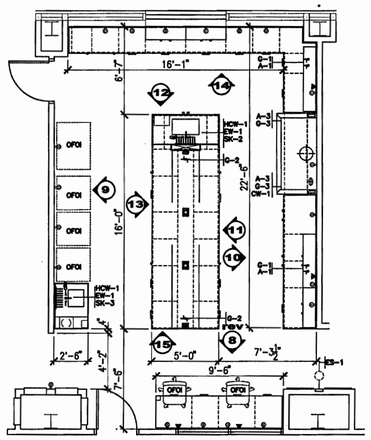
Date: October 25, 2002

100 West Huntington, Suite B - P.O. Box 1536 - Jonesboro, Arkansas 72403-1536 - 870-932-0571 - Fax 870-932-0075 - Email brackett@brackett.net



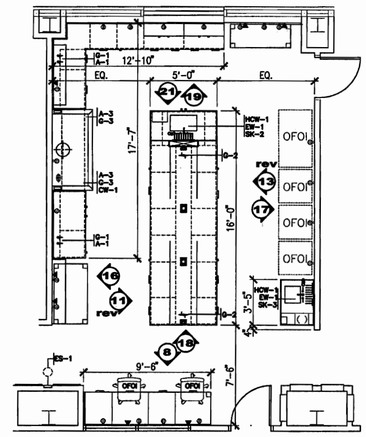
lab type 1

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



lab type 2

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



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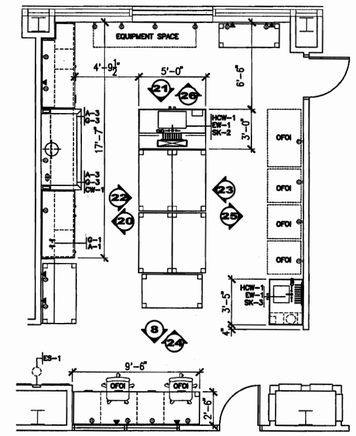

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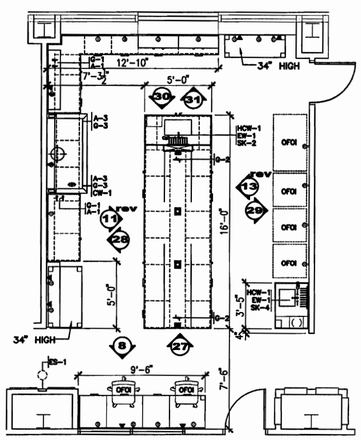

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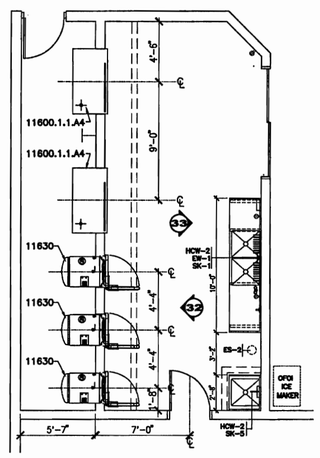
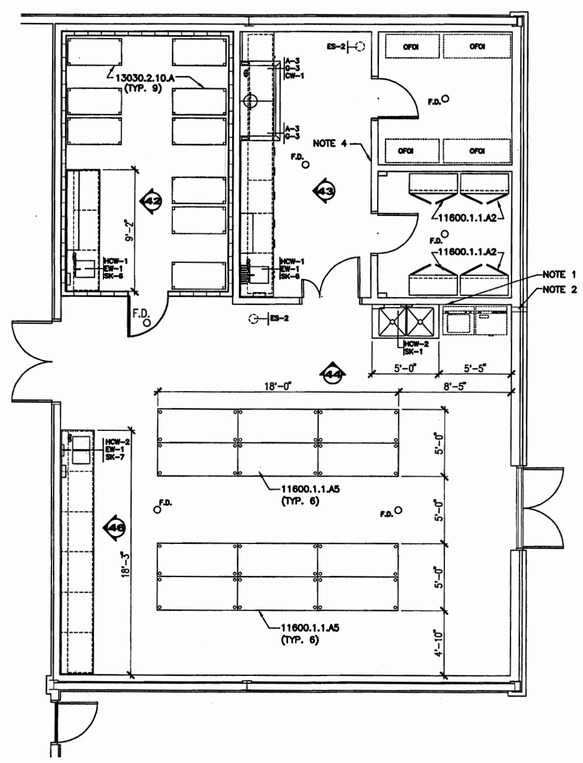


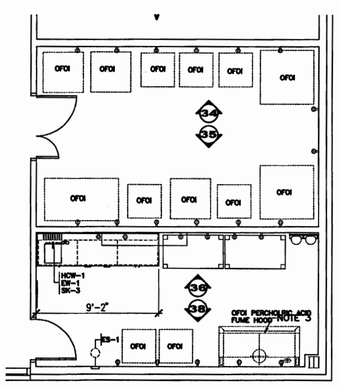
glassware/autoclave

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



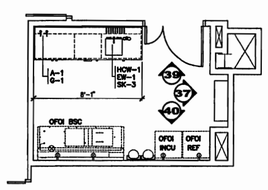
head house

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



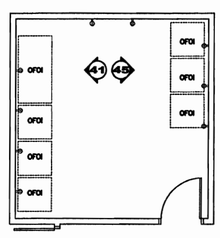
equipment & misc. support

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



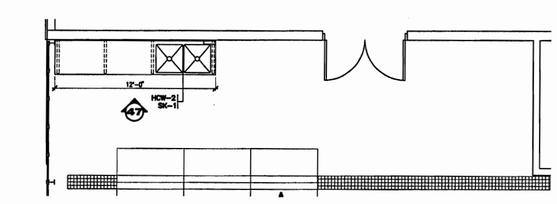
tissue culture

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



misc. support

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



partial green house

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

DRAWING KEYNOTING SYSTEM

A KEYNOTING SYSTEM IS USED ON THE DRAWING FOR MATERIAL REFERENCES AND NOTES. REFER TO THE KEYNOTE LEGEND ON THE DRAWING FOR THE INFORMATION WHICH RELATES TO EACH KEYNOTE SYMBOL ON THE RESPECTIVE DRAWING

EACH KEYNOTE SYMBOL CONSISTS OF A 5-DIGIT NUMBER FOLLOWED BY AN ALPH-NUMERIC SUFFIX. THE 5-DIGIT NUMBER RELATES TO THE SPECIFICATION SECTION WHICH GENERALLY COVERS THE ITEM THAT IS REFERENCED. THE SUFFIX COMBINED WITH THE 5-DIGIT NUMBER CREATES A KEYNOTE SYMBOL WHICH INDENTIFIES THE SPEGIFIC REFERENCE NOTATION USED ON THE DRAWING. THE SUFFIX DOES NOT RELATE TO ANY CORRESPONDING REFERENCE LETTER OR NUMBER IN THE SPECIFICATIONS.

THE ORGANIZATION OF THE KEYNOTING SYSTEM ON THE DRAWINGS WITH THE KEYNOTING SYSTEM REFERENCE NUMBER RELATED TO THE SPECIFICATION SECTION'S NUMBERING SYSTEM SHALL NOT CONTROL THE CONTRACTOR IN DIVIDING THE WORK AMONG SUBCONTRACTORS OR IN ESTABLISHING THE EXTENT OF WORK TO BE PERFORMED BY ANY TRADE (EXCEPT FOR SECTIONS 12350 AND 11610)

THE KEYNOTE LEGEND IS NOT A COMPLETE LIST OF THE CONTRACT SPECIFICATIONS NOR IS IT A COMPLETE LIST OF MATERIALS CALLED FOR IN THE PROJECTS.

keynote legend

DIV 5 METALS

05500

DIV 8 DOORS AND WINDOWS

08720 POWER DOOR OPERATORS

DIV 9 FINISHES

09667 RUBBER BASE

DIV 10 SPECIALTIES

10102 MARKERBOARDS/TACKBOARDS
10449 FIRE EXTINGUISHERS
10800 TOILET AND BATH ACCESSORIES

DIV 11 EQUIPMENT

11600 LABORATORY EQUIPMENT

11600.1.1.A1 SAFETY SUPPLY CABINET
11600.1.1.A2 PESTICIDE STORAGE CABINET
11600.1.1.A3 GAS CYLINDER WALL BRACKET
11600.1.1.A4 GLASSWARE WASHER/DRYER
11600.1.1.A5 STAINLESS STEEL WORK TABLE

11610 LABORATORY FUME HOODS

11630 AUTOCLAVES

DIV 12 FURNISHINGS

12350 LABORATORY CASEWORK

12350.2.2F FLAMMABLE LIQUID STORAGE CABINETS
12350.2.2G ACID STORAGE CABINETS
12350.2.3 WOOD LABORATORY CASEWORK
12350.2.3H BASE CABINETS
12350.2.3J WALL HUNG CASES
12350.2.3K FINISHED ENDS
12350.2.3L KNEESPACE PANELS
12350.2.3M PULL-OUT WORK SURFACE
12350.2.3N TRIM STRIPS
12350.2.3O PANELS
12350.2.4 CUSTOM CABINET (REFER TO DETAILS)
12350.2.5 TABLES
12350.2.6F LEG SHOES (FIX CASEWORK ONLY)
12350.2.6G ADJUSTABLE SHELF SUPPORT
12350.2.6H SUPPORT STRUTS
12350.2.6I PLASTIC GROMMETS
12350.2.8 TOPS
12350.2.8C CAST EPOXY RESIN TOP (1" OR 3/4")
12350.2.8D PLASTIC LAMINATE TOP
12350.2.8E STAINLESS STEEL TOP
12350.2.9 WALL MOUNTED SHELVES
12350.2.9A BRACKET & STANDARDS
12350.2.9B SHELVING SYSTEMS
12350.2.10 SINK & CUP SINKS
12350.2.11A REAGENT SHELF ASSEMBLY
12350.2.11B LABORATORY PEGBOARDS
12350.2.11C KNEESPACE APRON
12350.2.11D WOOD BACKING BOARDS
12350.2.12 MECHANICAL SERVICE FIXTURES
12350.2.13A ELECTRICAL RACEWAY

DIV 13 ENVIRONMENTAL ROOMS

13030 ENVIRONMENTAL ROOMS
13030.2.10.A SHELVING

DIV 15 MECHANICAL

15400 HOSE BIBS

DIV 16 ELECTRICAL

16112 SURFACE RACEWAYS
16135 ELECTRICAL BOXES AND FITTINGS
16160 PANELBOARDS

specific notes

NOTE 1 PROVIDE HOT & COLD WATER SERVICE & DRAIN AS REQUIRED FOR OFOI WASHER. REFER TO PLUMBING.

NOTE 2 ROUTE VENT DUCT THRU WALL FROM OFOI DRYER. REFER TO MECHANICAL.

NOTE 3 O.F.O.I. PERCHLORIC ACID HOOD IN ROOM 359. ALL OTHERS RECEIVE O.F.O.I. EQUIPMENT

NOTE 4 PROVIDE CONVENIENCE POWER OUTLETS ALONG WALL PER CODE AT 1'-6" A.F.F.

lab layout

LAB TYPE 1 APPLIES TO THE FOLLOWING ROOMS:
ROOM 256 & 356

LAB TYPE 2 APPLIES TO THE FOLLOWING ROOMS:
ROOM 261, 262, 234, 235, 240, 241, 255, 361, 362, 334, 335, 340, 341, 355

LAB TYPE 3 APPLIES TO THE FOLLOWING ROOMS:
ROOM 232, 233, 243, 253, 254, 264, 332, 333, 343, 353, 354, 364

LAB TYPE 4 APPLIES TO THE FOLLOWING ROOMS:
ROOM 242, 244, 263, 342, 344, 363

LAB TYPE 5 APPLIES TO THE FOLLOWING ROOMS:
ROOM 252, 352

general notes

1. PROVIDE FINISHED END WHERE CABINET SIDE IS EXPOSED.
2. LABORATORY COUNTERTOPS ADJACENT TO WALL SHALL BE 30" DEEP U.N.O. SEE DETAILS ON L105.
3. LABORATORY ISLAND COUNTERTOPS SHALL BE 60" DEEP U.N.O. SEE DETAILS ON SHEET L105.
4. LABORATORY COUNTERTOPS TO BE 1" THICK CAST EPOXY RESIN WITH 4" HIGH APPLIED BACKSPLASH, U.N.O.. WALL AND REAGENT SHELVING TO BE 3/4" THICK TRESPA, U.N.O.
5. MOUNT BOTTOM OF LABORATORY PEGBOARDS 50" A.F.F. AND CENTER ABOVE SINK, U.N.O.
6. WHERE WALL MOUNTED SHELVING OR CABINETS OCCUR ABOVE FLOOR MOUNTED CABINETS OR KNEESPACES, ALIGN UPPER UNITS WITH LOWER UNITS, U.N.O.
7. INSTALL ELECTRICAL DEVICES AT 44" A.F.F. TO TOP OF OUTLET AND AS LOCATED ON CASEWORK ELEVATIONS AND DETAILS. U.N.O.. CENTER DEVICES ON CENTER LINE OF CABINETS, KNEESPACES, AND SHELVING, U.N.O.. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ITEMS SHOWN.
8. PROVIDE STEEL ANGLE REINFORCING AT WORK SURFACES WITH APRON SPANNING 4'-0" OR GREATER. EDGE OF WORK SURFACE SHALL BE CAPABLE OF SUPPORTING A 200 POUND POINT LOAD.
9. SEE DETAILS ON SHEET L105 TYPICAL GROMMET PLACEMENT.
10. COORDINATE STERILIZER AND GLASS WASH EQUIPMENT SPACING AND WALL OPENINGS WITH EQUIPMENT SHOP DRAWINGS.
11. MOUNT SERVICE FIXTURES 4" OFF CABINET SIDE AND 4" OFF BACK OF COUNTERTOP U.N.O.. WHERE MULTIPLE SERVICE FIXTURES OCCUR, SPACE FIXTURES 6" APART, U.N.O.
12. PROVIDE CHEMICAL RESISTANT PLASTIC LAMINATE COUNTOPS AT DRY DESKS U.N.O.
13. PROVIDE 3/4" THICK WOOD VENEER REMOVABLE PANEL UMBILICALS WITH EXPOSED FASTENERS AS DETAILED.
14. PROVIDE THREE WALL SHELVING STANDARDS FOR SPANS GREATER THAN 52"
15. MOUNT TOP OF WALL/REAGENT SHELVING STANDARDS 7'-0" A.F.F., U.N.O.
16. PROVIDE METAL, SURFACES MOUNTED PAPER TOWEL DISPENSER, U.N.O., MOUNT BOTTOM AT 50" A.F.F.
17. PROVIDE STAINLESS STEEL TOPS WITH METAL CASEWORK IN HEADHOUSE, COLD ROOM, AND PESTICIDE PREP ROOM. ALL OTHER LABS TO RECEIVE WOOD CABINETS W/ EPOXY TOPS, U.N.O..

n lab equipment plans

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

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BRACKETT KRENNERICH architects

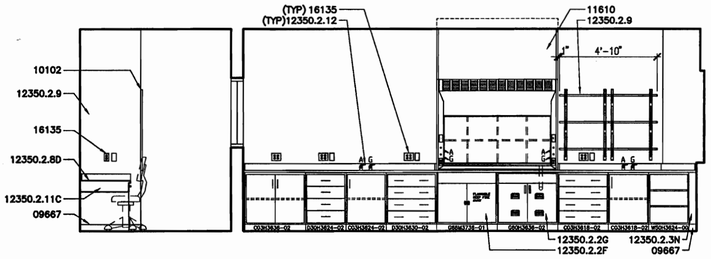
REGISTERED ARCHITECTS
C13
10/25/02
ARKANSAS

LAB EQUIPMENT LAYOUTS

Commission Number
10301

LC100

Date: October 25, 2002



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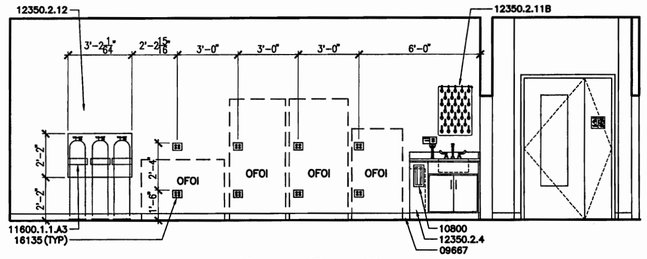

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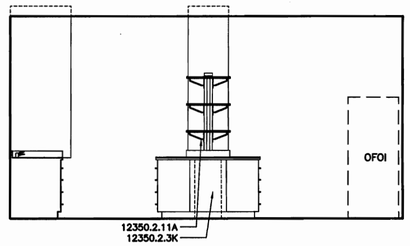
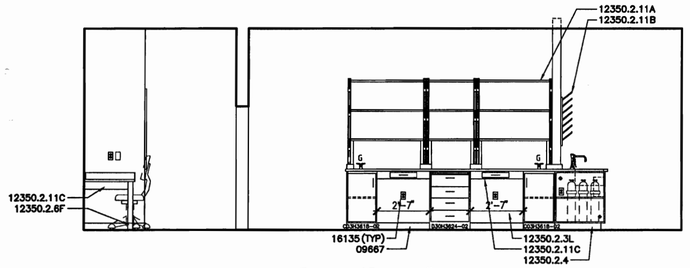
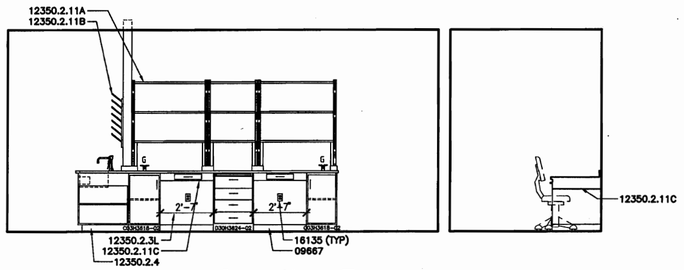


elevation 3



elevation 4



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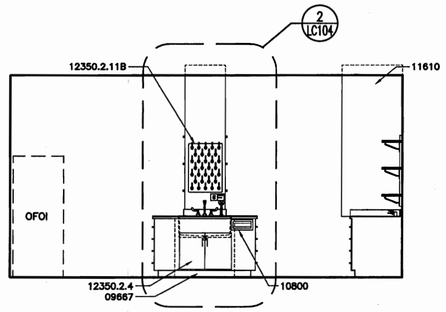

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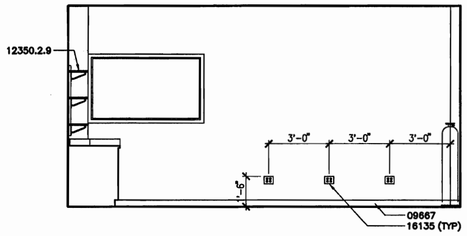

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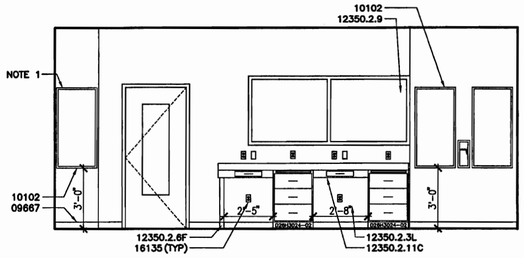
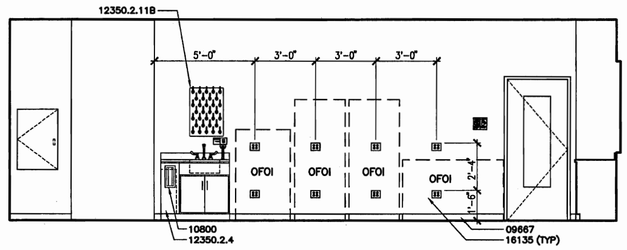


elevation 8



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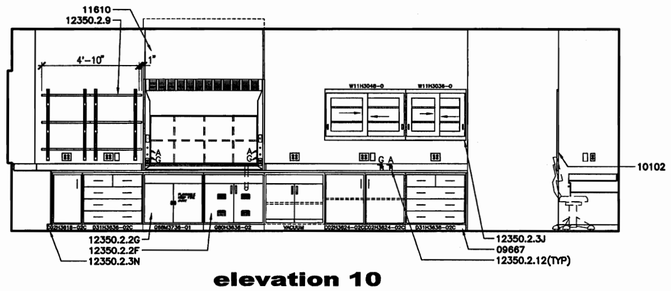
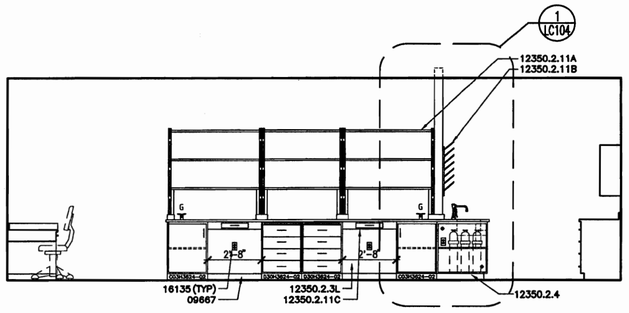
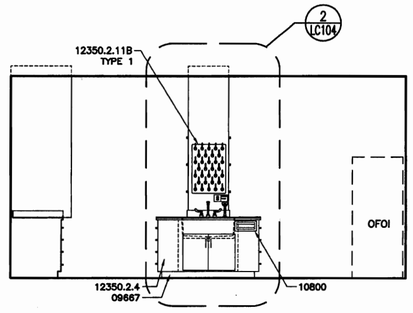


elevation 10



elevation 11



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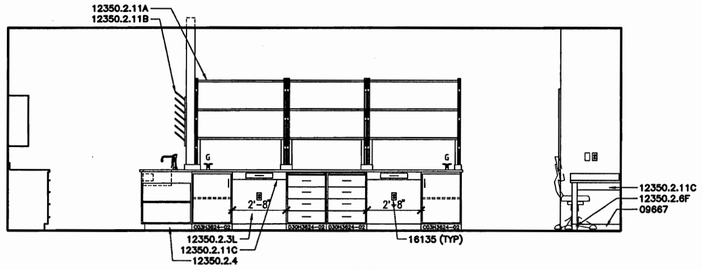

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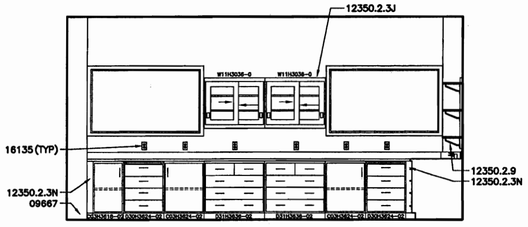
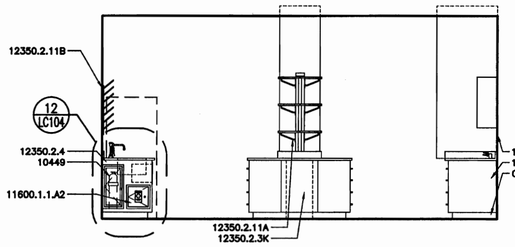


elevation 14



elevation 15

keynote legend

DIV 5 METALS

05500

DIV 8 DOORS AND WINDOWS

08720 POWER DOOR OPERATORS

DIV 9 FINISHES

09667 RUBBER BASE

DIV 10 SPECIALTIES

10102 MARKERBOARDS/TACKBOARDS
10449 FIRE EXTINGUISHERS
10800 TOILET AND BATH ACCESSORIES

DIV 11 EQUIPMENT

11600 LABORATORY EQUIPMENT

11600.1.1.A1	SAFETY SUPPLY CABINET
11600.1.1.A2	PESTICIDE STORAGE CABINET
11600.1.1.A3	GAS CYLINDER WALL BRACKET
11600.1.1.A4	GLASSWARE WASHER/DRYER
11600.1.1.A5	STAINLESS STEEL WORK TABLE

11610 LABORATORY FUME HOODS

11630 AUTOCLAVES

DIV 12 FURNISHINGS

12350	LABORATORY CASEWORK
12350.2.2F	FLAMMABLE LIQUID STORAGE CABINETS
12350.2.2G	ACID STORAGE CABINETS
12350.2.3	WOOD LABORATORY CASEWORK
12350.2.3H	BASE CABINETS
12350.2.3J	WALL HUNG CASES
12350.2.3K	FINISHED ENDS
12350.2.3L	KNEESPACE PANELS
12350.2.3M	PULL-OUT WORK SURFACE
12350.2.3N	TRIM STRIPS
12350.2.3O	PANELS
12350.2.4	CUSTOM CABINET (REFER TO DETAILS)
12350.2.5	TABLES
12350.2.6F	LEG SHOES (FIX CASEWORK ONLY)
12350.2.6G	ADJUSTABLE SHELF SUPPORT
12350.2.6H	SUPPORT STRUTS
12350.2.6I	PLASTIC GROMMETS
12350.2.8	TOPS
12350.2.8C	CAST EPOXY RESIN TOP (1" OR 3/4")
12350.2.8D	PLASTIC LAMINATE TOP
12350.2.8E	STAINLESS STEEL TOP
12350.2.9	WALL MOUNTED SHELVES
12350.2.9A	BRACKET & STANDARDS
12350.2.9B	SHELVING SYSTEMS
12350.2.10	SINK & CUP SINKS
12350.2.11A	REAGENT SHELF ASSEMBLY
12350.2.11B	LABORATORY PEGBOARDS
12350.2.11C	KNEESPACE APRON
12350.2.11D	WOOD BACKING BOARDS
12350.2.12	MECHANICAL SERVICE FIXTURES
12350.2.13A	ELECTRICAL RACEWAY

DIV 13 ENVIRONMENTAL ROOMS

13030 ENVIRONMENTAL ROOMS
13030.2.10.A SHELVING

DIV 15 MECHANICAL

15400 HOSE BIBS

DIV 16 ELECTRICAL

16112 SURFACE RACEWAYS
16135 ELECTRICAL BOXES AND FITTINGS
16160 PANELBOARDS

specific notes

NOTE 1 PROVIDE HOT & COLD WATER SERVICE & DRAIN AS REQUIRED FOR OFOI WASHER. REFER TO PLUMBING.

general notes

1. PROVIDE FINISHED END WHERE CABINET SIDE IS EXPOSED.
2. LABORATORY COUNTERTOPS ADJACENT TO WALL SHALL BE 30" DEEP U.N.O. SEE DETAILS ON L105.
3. LABORATORY ISLAND COUNTERTOPS SHALL BE 60" DEEP U.N.O. SEE DETAILS ON SHEET L105.
4. LABORATORY COUNTERTOPS TO BE 1" THICK CAST EPOXY RESIN WITH 4" HIGH APPLIED BACKSPLASH, U.N.O.. WALL AND REAGENT SHELVING TO BE 3/4" THICK TRESPA, U.N.O.
5. MOUNT BOTTOM OF LABORATORY PEGBOARDS 50" A.F.F. AND CENTER ABOVE SINK, U.N.O.
6. WHERE WALL MOUNTED SHELVING OR CABINETS OCCUR ABOVE FLOOR MOUNTED CABINETS OR KNEESPACES, ALIGN UPPER UNITS WITH LOWER UNITS, U.N.O.
7. INSTALL ELECTRICAL DEVICES AT 44" A.F.F. TO TOP OF OUTLET AND AS LOCATED ON CASEWORK ELEVATIONS AND DETAILS. U.N.O.. CENTER DEVICES ON CENTER LINE OF CABINETS, KNEESPACES, AND SHELVING, U.N.O.. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ITEMS SHOWN.
8. PROVIDE STEEL ANGLE REINFORCING AT WORK SURFACES WITH APRON SPANNING 4'-0" OR GREATER. EDGE OF WORK SURFACE SHALL BE CAPABLE OF SUPPORTING A 200 POUND POINT LOAD.
9. SEE DETAILS ON SHEET L105 TYPICAL GROMMET PLACEMENT.
10. COORDINATE STERILIZER AND GLASS WASH EQUIPMENT SPACING AND WALL OPENINGS WITH EQUIPMENT SHOP DRAWINGS.
11. MOUNT SERVICE FIXTURES 4" OFF CABINET SIDE AND 4" OFF BACK OF COUNTERTOP U.N.O.. WHERE MULTIPLE SERVICE FIXTURES OCCUR, SPACE FIXTURES 6" APART, U.N.O.
12. PROVIDE CHEMICAL RESISTANT PLASTIC LAMINATE COUNTERTOPS AT DRY DESKS U.N.O.
13. PROVIDE 3/4" THICK WOOD VENEER REMOVABLE PANEL UMBILICALS WITH EXPOSED FASTENERS AS DETAILED.
14. PROVIDE THREE WALL SHELVING STANDARDS FOR SPANS GREATER THAN 52"
15. MOUNT TOP OF WALL/REAGENT SHELVING STANDARDS 7'-0" A.F.F., U.N.O.
16. PROVIDE METAL, SURFACES MOUNTED PAPER TOWEL DISPENSER, U.N.O., MOUNT BOTTOM AT 50" A.F.F.
17. PROVIDE STAINLESS STEEL TOPS WITH METAL CASEWORK IN HEADHOUSE, COLD ROOM, AND PESTICIDE PREP ROOM. ALL OTHER LABS TO RECEIVE WOOD CABINETS W/ EPOXY TOPS, U.N.O..

lab equip. elevations

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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Tel 404.815.1212
Fax 404.815.3107
CUH2A

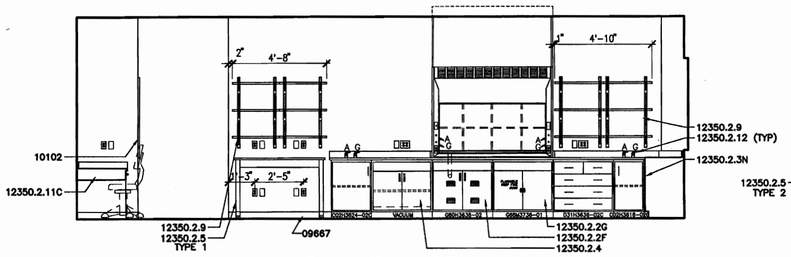
REGISTERED ARCHITECT C-13 ARKANSAS

LAB EQUIP. ELEVATIONS

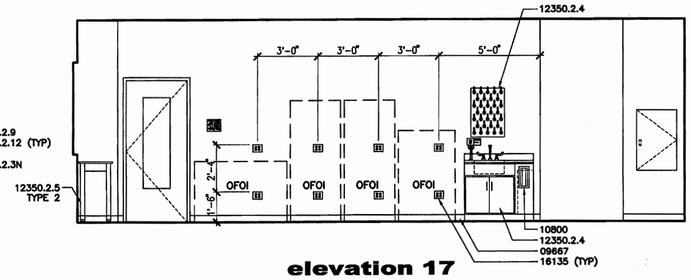
Commission Number 10301

LC101

Date: October 25, 2002



elevation 16



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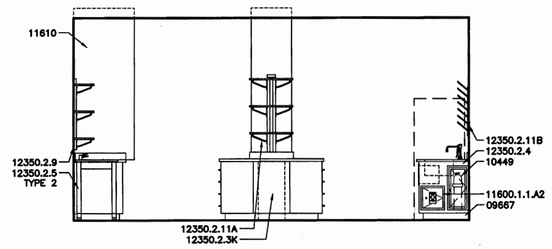

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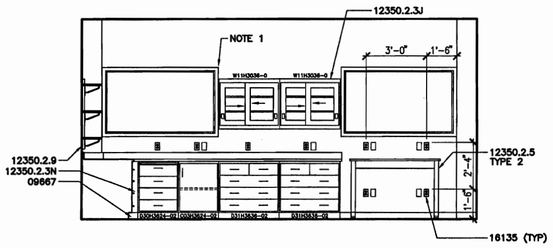

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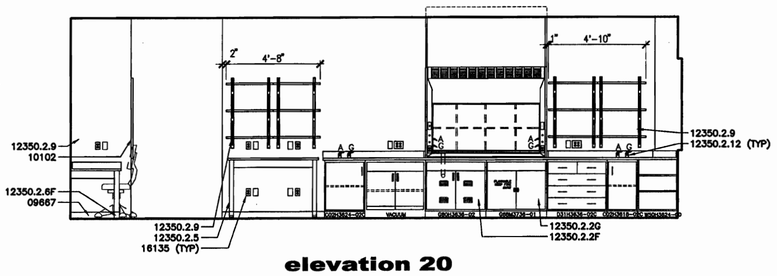

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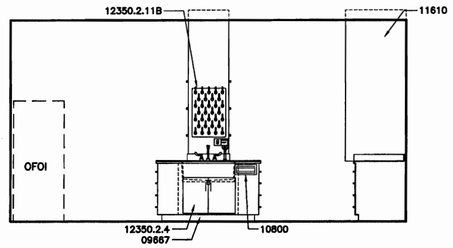

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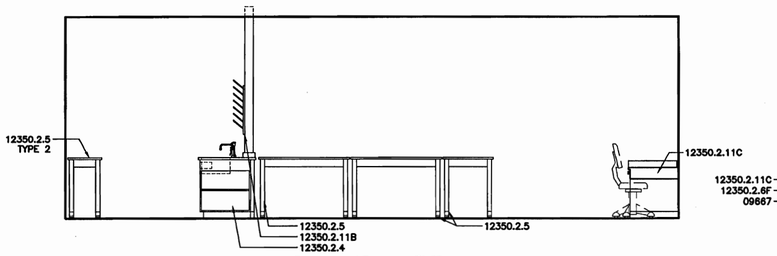

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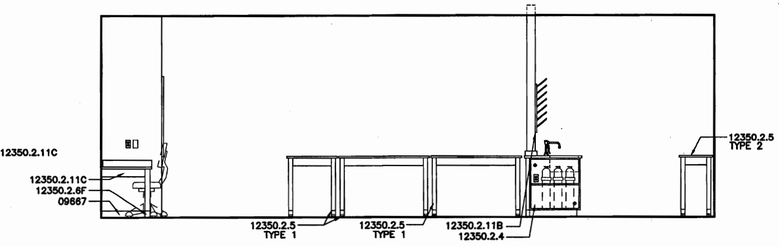

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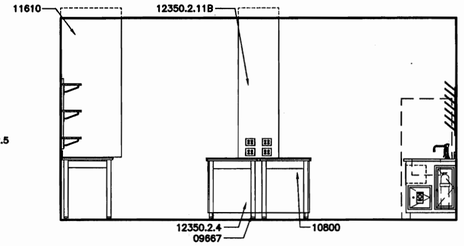

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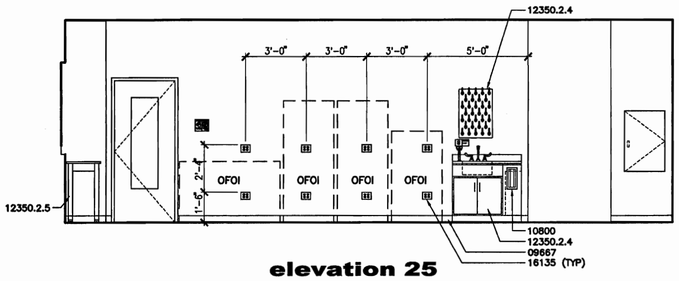

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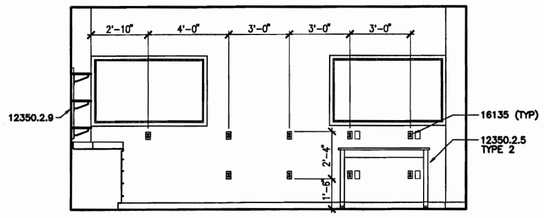

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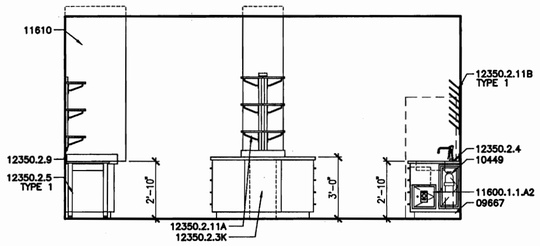

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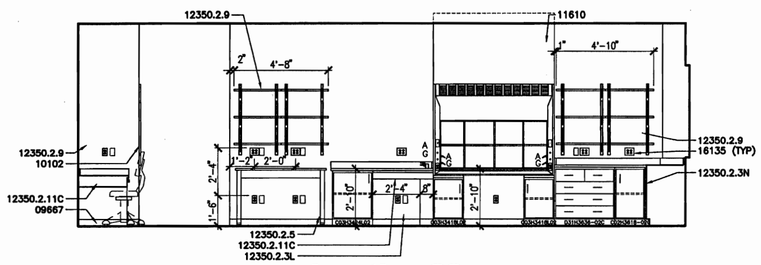

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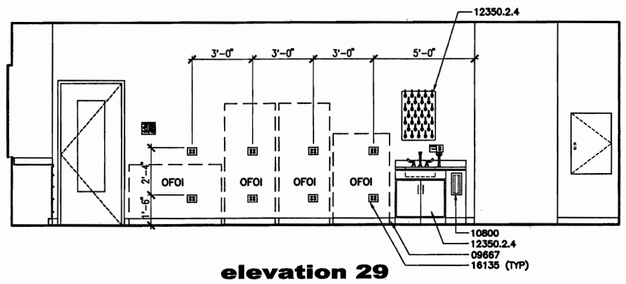
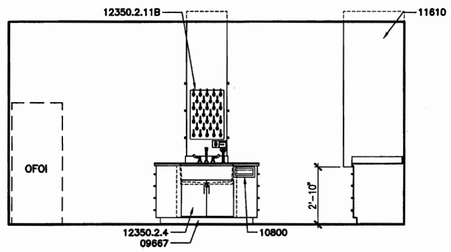


elevation 29



elevation 30

keynote legend

DIV 5 METALS

05500

DIV 8 DOORS AND WINDOWS

08720 POWER DOOR OPERATORS

DIV 9 FINISHES

09667 RUBBER BASE

DIV 10 SPECIALTIES

10102 MARKERBOARDS/TACKBOARDS
10449 FIRE EXTINGUISHERS
10800 TOILET AND BATH ACCESSORIES

DIV 11 EQUIPMENT

11600 LABORATORY EQUIPMENT

11600.1.1.A1	SAFETY SUPPLY CABINET
11600.1.1.A2	PESTICIDE STORAGE CABINET
11600.1.1.A3	GAS CYLINDER WALL BRACKET
11600.1.1.A4	GLASSWARE WASHER/DRYER
11600.1.1.A5	STAINLESS STEEL WORK TABLE

11610 LABORATORY FUME HOODS

11630 AUTOCLAVES

DIV 12 FURNISHINGS

12350	LABORATORY CASEWORK
12350.2.2F	FLAMMABLE LIQUID STORAGE CABINETS
12350.2.2G	ACID STORAGE CABINETS
12350.2.3	WOOD LABORATORY CASEWORK
12350.2.3H	BASE CABINETS
12350.2.3J	WALL HUNG CASES
12350.2.3K	FINISHED ENDS
12350.2.3L	KNEESPACE PANELS
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12350.2.3N	TRIM STRIPS
12350.2.3O	PANELS
12350.2.4	CUSTOM CABINET (REFER TO DETAILS)
12350.2.5	TABLES
12350.2.6F	LEG SHOES (FIX CASEWORK ONLY)
12350.2.6G	ADJUSTABLE SHELF SUPPORT
12350.2.6H	SUPPORT STRUTS
12350.2.6I	PLASTIC GROMMETS
12350.2.8	TOPS
12350.2.8C	CAST EPOXY RESIN TOP (1" OR 3/4")
12350.2.8D	PLASTIC LAMINATE TOP
12350.2.8E	STAINLESS STEEL TOP
12350.2.9	WALL MOUNTED SHELVES
12350.2.9A	BRACKET & STANDARDS
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12350.2.10	SINK & CUP SINKS
12350.2.11A	REAGENT SHELF ASSEMBLY
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12350.2.11C	KNEESPACE APRON
12350.2.11D	WOOD BACKING BOARDS
12350.2.12	MECHANICAL SERVICE FIXTURES
12350.2.13A	ELECTRICAL RACEWAY

DIV 13 ENVIRONMENTAL ROOMS

13030 ENVIRONMENTAL ROOMS
13030.2.10.A SHELVING

DIV 15 MECHANICAL

15400 HOSE BIBS

DIV 16 ELECTRICAL

16112 SURFACE RACEWAYS
16135 ELECTRICAL BOXES AND FITTINGS
16160 PANELBOARDS

specific notes

NOTE 1 ALIGN TOP OF CABINETRY TO TOP OF WINDOR FRAME, TYPICAL

general notes

1. PROVIDE FINISHED END WHERE CABINET SIDE IS EXPOSED.
2. LABORATORY COUNTERTOPS ADJACENT TO WALL SHALL BE 30" DEEP U.N.O. SEE DETAILS ON L105.
3. LABORATORY ISLAND COUNTERTOPS SHALL BE 60" DEEP U.N.O. SEE DETAILS ON SHEET L105.
4. LABORATORY COUNTERTOPS TO BE 1" THICK CAST EPOXY RESIN WITH 4" HIGH APPLIED BACKSPLASH, U.N.O.. WALL AND REAGENT SHELVING TO BE 3/4" THICK TRESPA, U.N.O.
5. MOUNT BOTTOM OF LABORATORY PEGBOARDS 50" A.F.F. AND CENTER ABOVE SINK, U.N.O.
6. WHERE WALL MOUNTED SHELVING OR CABINETS OCCUR ABOVE FLOOR MOUNTED CABINETS OR KNEESPACES, ALIGN UPPER UNITS WITH LOWER UNITS, U.N.O.
7. INSTALL ELECTRICAL DEVICES AT 44" A.F.F. TO TOP OF OUTLET AND AS LOCATED ON CASEWORK ELEVATIONS AND DETAILS. U.N.O.. CENTER DEVICES ON CENTER LINE OF CABINETS, KNEESPACES, AND SHELVING, U.N.O.. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ITEMS SHOWN.
8. PROVIDE STEEL ANGLE REINFORCING AT WORK SURFACES WITH APRON SPANNING 4'-0" OR GREATER. EDGE OF WORK SURFACE SHALL BE CAPABLE OF SUPPORTING A 200 POUND POINT LOAD.
9. SEE DETAILS ON SHEET L105 TYPICAL GROMMET PLACEMENT.
10. COORDINATE STERILIZER AND GLASS WASH EQUIPMENT SPACING AND WALL OPENINGS WITH EQUIPMENT SHOP DRAWINGS.
11. MOUNT SERVICE FIXTURES 4" OFF CABINET SIDE AND 4" OFF BACK OF COUNTERTOP U.N.O.. WHERE MULTIPLE SERVICE FIXTURES OCCUR, SPACE FIXTURES 8" APART, U.N.O.
12. PROVIDE CHEMICAL RESISTANT PLASTIC LAMINATE COUNTERTOPS AT DRY DESKS U.N.O.
13. PROVIDE 3/4" THICK WOOD VENEER REMOVABLE PANEL UMBILICALS WITH EXPOSED FASTENERS AS DETAILED.
14. PROVIDE THREE WALL SHELVING STANDARDS FOR SPANS GREATER THAN 52"
15. MOUNT TOP OF WALL/REAGENT SHELVING STANDARDS 7'-0" A.F.F., U.N.O.
16. PROVIDE METAL SURFACES MOUNTED PAPER TOWEL DISPENSER, U.N.O., MOUNT BOTTOM AT 50" A.F.F.
17. PROVIDE STAINLESS STEEL TOPS WITH METAL CASEWORK IN HEADHOUSE, COLD ROOM, AND PESTICIDE PREP ROOM. ALL OTHER LABS TO RECEIVE WOOD CABINETS W/ EPOXY TOPS, U.N.O..

lab equip. elevations

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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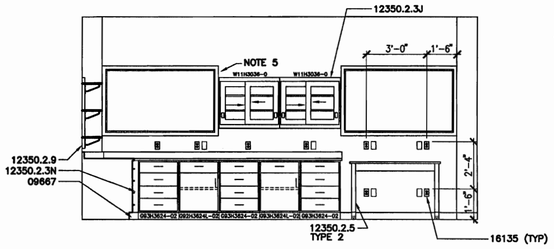
BRACKETT KRENNERICH architects

LAB EQUIP. ELEVATIONS

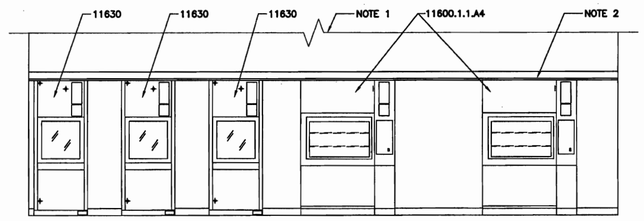
Commission Number 10301

LC102

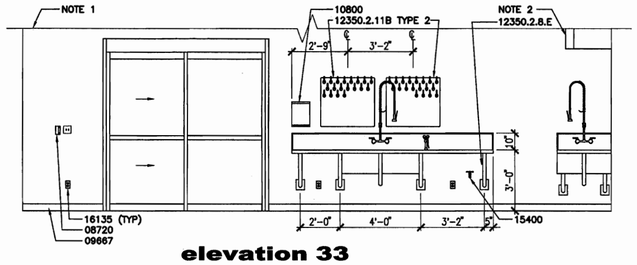
Date: October 25, 2002



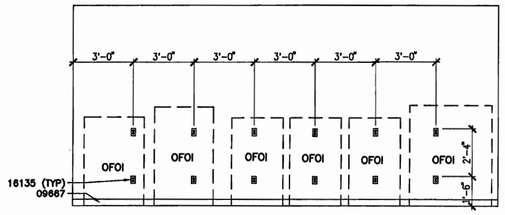
elevation 31



elevation 32



elevation 33



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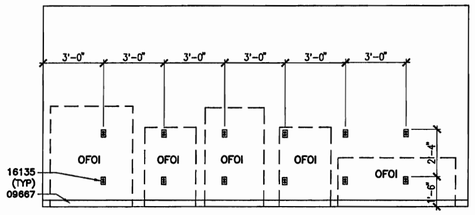

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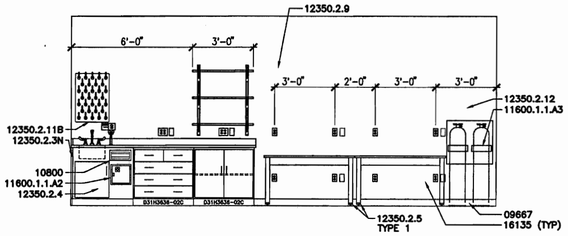

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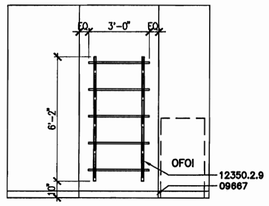

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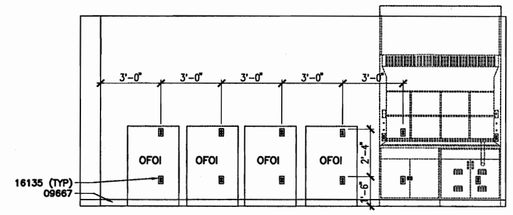

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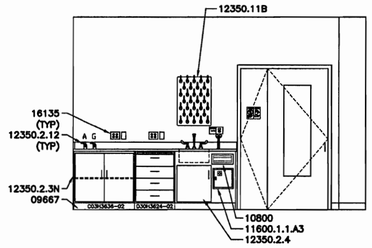

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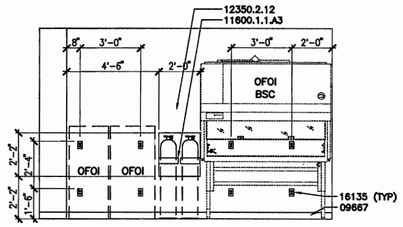

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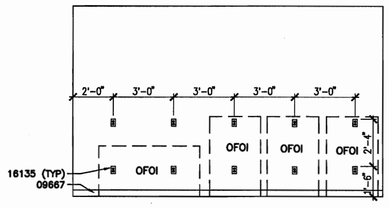

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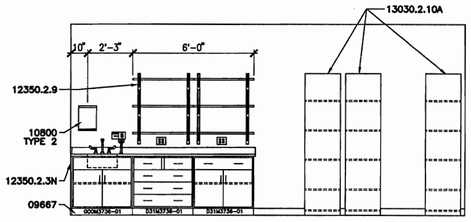

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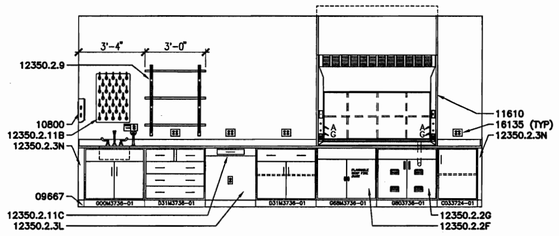

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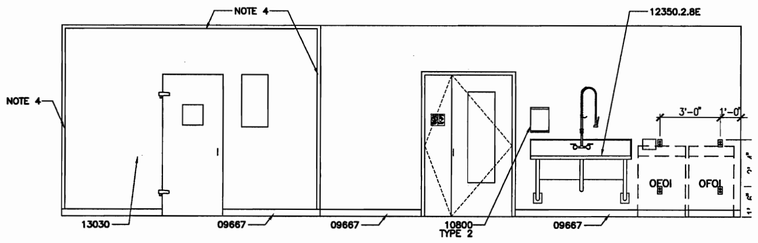
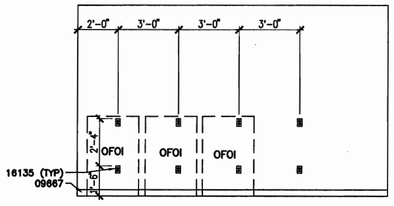
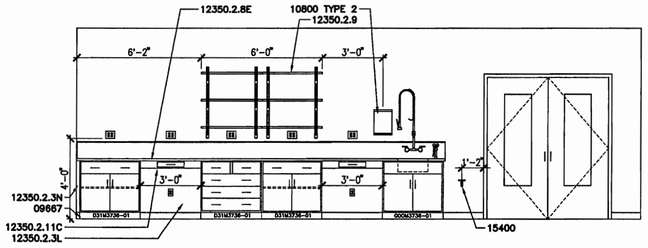


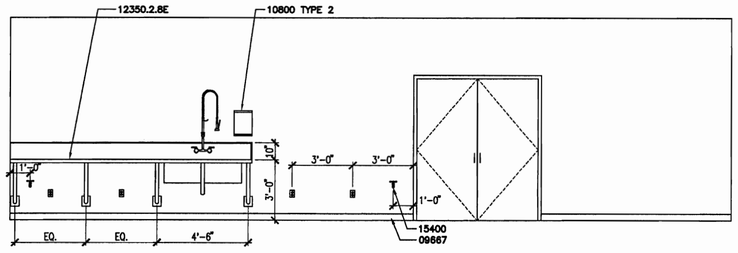
elevation 44



elevation 45



elevation 46



elevation 47

keynote legend

DIV 5 METALS

05500

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08720 POWER DOOR OPERATORS

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09667 RUBBER BASE

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12350.2.3O	PANELS
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12350.2.13A	ELECTRICAL RACEWAY

DIV 13 ENVIRONMENTAL ROOMS

13030 ENVIRONMENTAL ROOMS
13030.2.10.A SHELVING

DIV 15 MECHANICAL

15400 HOSE BIBS

DIV 16 ELECTRICAL

16112 SURFACE RACEWAYS
16135 ELECTRICAL BOXES AND FITTINGS
16160 PANELBOARD

specific notes

NOTE 1 EXPOSED TO STRUCTURE

NOTE 2 REFER TO CANOPY DETAIL 8/400.

NOTE 3 OWNER FUNISHED OWNER INSTALLED PERCHLORIC ACID FUME HOOD IN ROOM 359 ONLY. OWNER FUNISHED OWNER INSTALLED EQUIPMENT IN OTHERS.

NOTE 4 PROVIDE METAL TRIM AROUND FACE OF ENVIRONMENTAL ROOM SET IN CONTINOUS SEALANT

NOTE 5 ALIGN TOP OF CABINETRY TO TOP OF WINDOW FRAME, TYPICAL.

general notes

1. PROVIDE FINISHED END WHERE CABINET SIDE IS EXPOSED.
2. LABORATORY COUNTERTOPS ADJACENT TO WALL SHALL BE 30" DEEP U.N.O. SEE DETAILS ON L105.
3. LABORATORY ISLAND COUNTERTOPS SHALL BE 60" DEEP U.N.O. SEE DETAILS ON SHEET L105.
4. LABORATORY COUNTERTOPS TO BE 1" THICK CAST EPOXY RESIN WITH 4" HIGH APPLIED BACKSPLASH, U.N.O.. WALL AND REAGENT SHELVING TO BE 3/4" THICK TRESPA, U.N.O.
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6. WHERE WALL MOUNTED SHELVING OR CABINETS OCCUR ABOVE FLOOR MOUNTED CABINETS OR KNEESPACES, ALIGN UPPER UNITS WITH LOWER UNITS, U.N.O.
7. INSTALL ELECTRICAL DEVICES AT 44" A.F.F. TO TOP OF OUTLET AND AS LOCATED ON CASEWORK ELEVATIONS AND DETAILS. U.N.O.. CENTER DEVICES ON CENTER LINE OF CABINETS, KNEESPACES, AND SHELVING, U.N.O.. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ITEMS SHOWN.
8. PROVIDE STEEL ANGLE REINFORCING AT WORK SURFACES WITH APRON SPANNING 4'-0" OR GREATER. EDGE OF WORK SURFACE SHALL BE CAPABLE OF SUPPORTING A 200 POUND POINT LOAD.
9. SEE DETAILS ON SHEET L105 TYPICAL GROMMET PLACEMENT.
10. COORDINATE STERILIZER AND GLASS WASH EQUIPMENT SPACING AND WALL OPENINGS WITH EQUIPMENT SHOP DRAWINGS.
11. MOUNT SERVICE FIXTURES 4" OFF CABINET SIDE AND 4" OFF BACK OF COUNTERTOP U.N.O.. WHERE MULTIPLE SERVICE FIXTURES OCCUR, SPACE FIXTURES 6" APART, U.N.O.
12. PROVIDE CHEMICAL RESISTANT PLASTIC LAMINATE COUNTERTOPS AT DRY DESKS U.N.O.
13. PROVIDE 3/4" THICK WOOD VENEER REMOVABLE PANEL UMBILICALS WITH EXPOSED FASTENERS AS DETAILED.
14. PROVIDE THREE WALL SHELVING STANDARDS FOR SPANS GREATER THAN 52"
15. MOUNT TOP OF WALL/REAGENT SHELVING STANDARDS 7'-0" A.F.F., U.N.O.
16. PROVIDE METAL, SURFACES MOUNTED PAPER TOWEL DISPENSER, U.N.O., MOUNT BOTTOM AT 50" A.F.F.
17. PROVIDE STAINLESS STEEL TOPS WITH METAL CASEWORK IN HEADHOUSE, COLD ROOM, AND PESTICIDE PREP ROOM. ALL OTHER LABS TO RECEIVE WOOD CABINETS W/ EPOXY TOPS, U.N.O..

lab equip. elevations

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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Tel 404.815.1312
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CUH2A

BRACKETT KRENNERICH architects

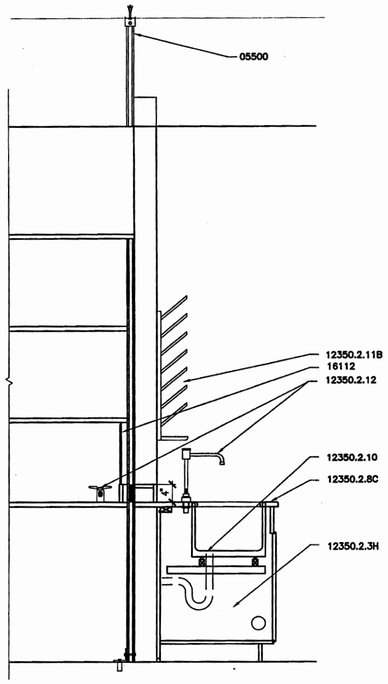
REGISTERED ARCHITECT C19 ARKANSAS

LAB ELEVATIONS

Commission Number 10301

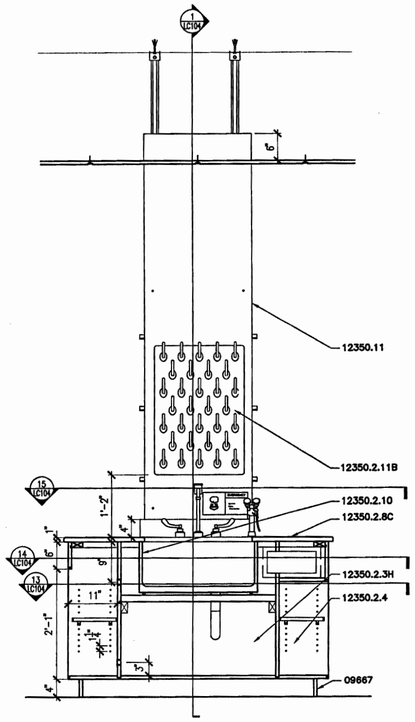
LC103

Date: October 25, 2002



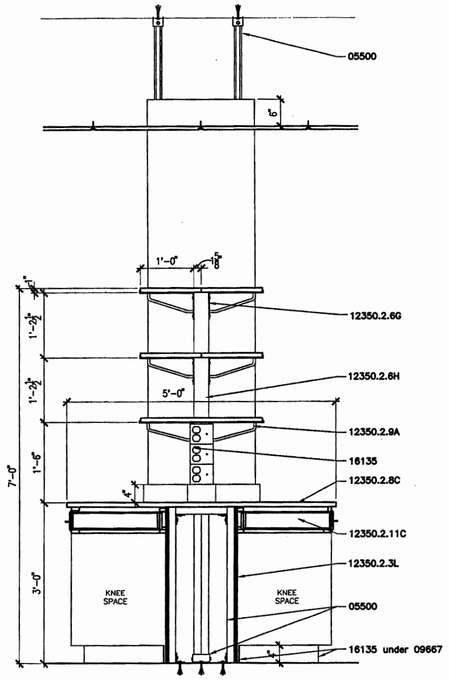
1 island bench section

SCALE: 1" = 1'-0"



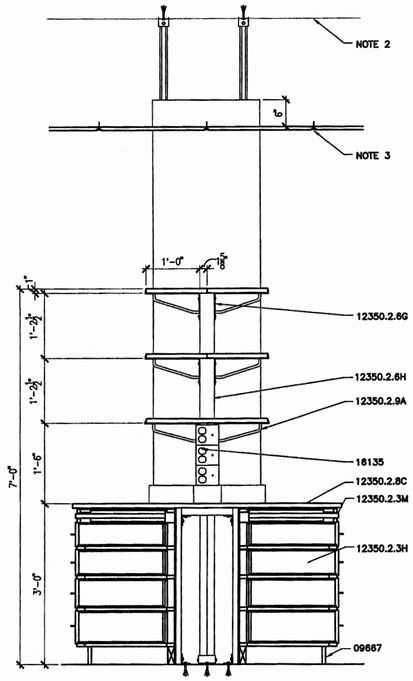
2 island bench section

SCALE: 1" = 1'-0"



3 island bench section

SCALE: 1" = 1'-0"



4 island bench section

SCALE: 1" = 1'-0"

keynote legend

DIV 5 METALS

05500

DIV 8 DOORS AND WINDOWS

08720 POWER DOOR OPERATORS

DIV 9 FINISHES

09667 RUBBER BASE

DIV 10 SPECIALTIES

10102 MARKERBOARDS/TACKBOARDS
10449 FIRE EXTINGUISHERS
10800 TOILET AND BATH ACCESSORIES

DIV 11 EQUIPMENT

11600 LABORATORY EQUIPMENT

11600.1.1.A1	SAFETY SUPPLY CABINET
11600.1.1.A2	PESTICIDE STORAGE CABINET
11600.1.1.A3	GAS CYLINDER WALL BRACKET
11600.1.1.A4	GLASSWARE WASHER/DRYER
11600.1.1.A5	STAINLESS STEEL WORK TABLE

11610 LABORATORY FUME HOODS

11630 AUTOCLAVES

DIV 12 FURNISHINGS

12350	LABORATORY CASEWORK
12350.2.2F	FLAMMABLE LIQUID STORAGE CABINETS
12350.2.2G	ACID STORAGE CABINETS
12350.2.3	WOOD LABORATORY CASEWORK
12350.2.3H	BASE CABINETS
12350.2.3J	WALL HUNG CASES
12350.2.3K	FINISHED ENDS
12350.2.3L	KNEESPACE PANELS
12350.2.3M	PULL-OUT WORK SURFACE
12350.2.3N	TRIM STRIPS
12350.2.3O	PANELS
12350.2.4	CUSTOM CABINET
12350.2.5	TABLES
12350.2.6F	LEG SHOES (FIX CASEWORK ONLY)
12350.2.6G	ADJUSTABLE SHELF SUPPORT
12350.2.6H	SUPPORT STRUTS
12350.2.6I	PLASTIC GROMMETS
12350.2.8	TOPS
12350.2.8C	CAST EPOXY RESIN TOP (1" OR 3/4")
12350.2.8D	PLASTIC LAMINATE TOP
12350.2.8E	STAINLESS STEEL TOP
12350.2.9	WALL MOUNTED SHELVES
12350.2.9A	BRACKET & STANDARDS
12350.2.9B	SHELVING SYSTEMS
12350.2.10	SINK & CUP SINKS
12350.2.11A	REAGENT SHELF ASSEMBLY
12350.2.11B	LABORATORY PEGBOARDS
12350.2.11C	KNEESPACE APRON
12350.2.11D	WOOD BACKING BOARDS
12350.2.12	MECHANICAL SERVICE FIXTURES
12350.2.13A	ELECTRICAL RACEWAY

DIV 13 ENVIRONMENTAL ROOMS

13030 ENVIRONMENTAL ROOMS
13030.2.10.A SHELVING

DIV 15 MECHANICAL

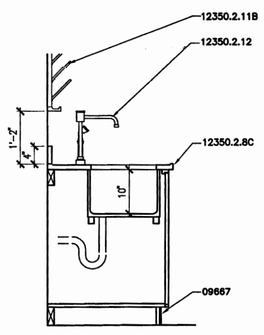
15400 HOSE BIBS

DIV 16 ELECTRICAL

16112 SURFACE RACEWAYS
16135 ELECTRICAL BOXES AND FITTINGS
16160 PANELBOARDS

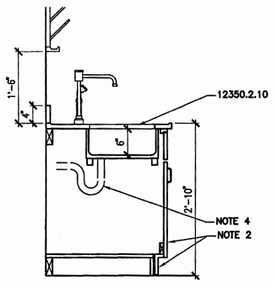
BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS



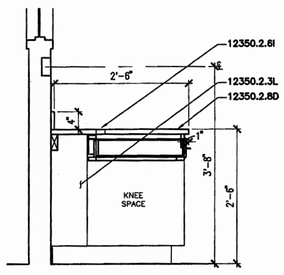
5 sect. @ wall sink

SCALE: 1" = 1'-0"



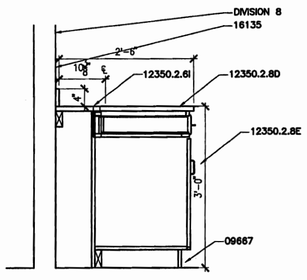
6 sect. @ ada sink

SCALE: 1" = 1'-0"



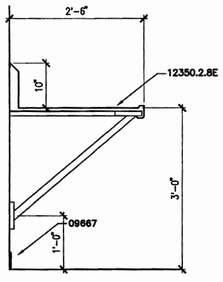
7 sect. @ wall bench

SCALE: 1" = 1'-0"



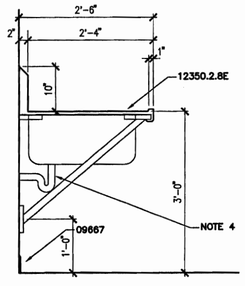
8 sect. @ wall bench

SCALE: 1" = 1'-0"



9 stainless stl. top

SCALE: 1" = 1'-0"



10 stainless stl. sink

SCALE: 1" = 1'-0"

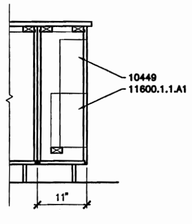
specific notes

NOTE 1 FLOOR STRUCTURE ABOVE

NOTE 2 DOOR AND TOE SPACE INTEGRAL AT ADA SINK STATION

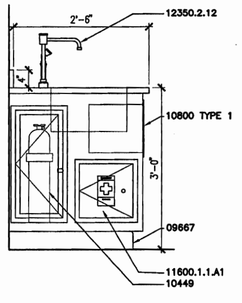
NOTE 3 SUSPENDED ACOUSTICAL CEILING, SEE REFLECTED CEILING PLAN

NOTE 4 PROVIDE INSULATED PLUMBING LINE SLEEVES PER ADA REQUIREMENTS



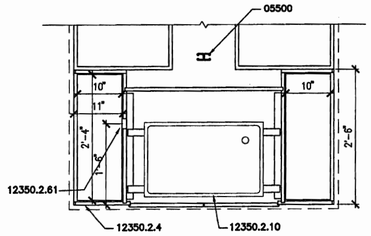
11 sect. @ safety cabinet

SCALE: 1" = 1'-0"



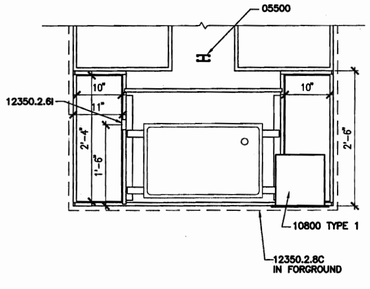
12 safety cabinet

SCALE: 1" = 1'-0"



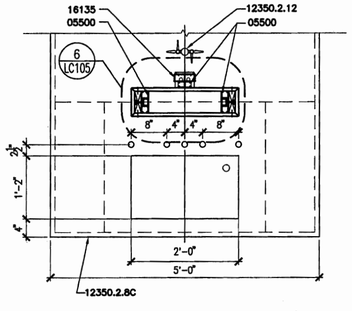
13 plan section @ sink

SCALE: 1" = 1'-0"



14 plan section @ sink

SCALE: 1" = 1'-0"



15 plan section @ sink

SCALE: 1" = 1'-0"

general notes

1. PROVIDE FINISHED END WHERE CABINET SIDE IS EXPOSED.
2. LABORATORY COUNTERTOPS ADJACENT TO WALL SHALL BE 30" DEEP U.N.O. SEE DETAILS ON L105.
3. LABORATORY ISLAND COUNTERTOPS SHALL BE 60" DEEP U.N.O. SEE DETALS ON SHEET L105.
4. LABORATORY COUNTERTOPS TO BE 1" THICK CAST EPOXY RESIN WITH 4" HIGH APPLIED BACKSPLASH, U.N.O.. WALL AND REAGENT SHELVING TO BE 3/4" THICK TRESPA, U.N.O.
5. MOUNT BOTTOM OF LABORATORY PEGBOARDS 50" A.F.F. AND CENTER ABOVE SINK, U.N.O.
6. WHERE WALL MOUNTED SHELVING OR CABINETS OCCUR ABOVE FLOOR MOUNTED CABINETS OR KNEESPACES, ALIGN UPPER UNITS WITH LOWER UNITS, U.N.O.
7. INSTALL ELECTRICAL DEVICES AT 44" A.F.F. TO TOP OF OUTLET AND AS LOCATED ON CASEWORK ELEVATIONS AND DETAILS. U.N.O.. CENTER DEVICES ON CENTER LINE OF CABINETS, KNEESPACES, AND SHELVING, U.N.O.. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ITEMS SHOWN.
8. PROVIDE STEEL ANGLE REINFORCING AT WORK SURFACES WITH APRON SPANNING 4'-0" OR GREATER. EDGE OF WORK SURFACE SHALL BE CAPABLE OF SUPPORTING A 200 POUND POINT LOAD.
9. SEE DETAILS ON SHEET L105 TYPICAL GROMMET PLACEMENT.
10. COORDINATE STERILIZER AND GLASS WASH EQUIPMENT SPACING AND WALL OPENINGS WITH EQUIPMENT SHOP DRAWINGS.
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14. PROVIDE THREE WALL SHELVING STANDARDS FOR SPANS GREATER THAN 52"
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16. PROVIDE METAL, SURFACES MOUNTED PAPER TOWEL DISPENSER, U.N.O., MOUNT BOTTOM AT 50" A.F.F.
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lab equip. sections & details

SCALE: 1" = 1'-0"

1201 Peachtree St., N.E.
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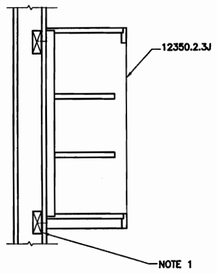
BRACKETT KRENNERICH architects

LAB EQUIP SECTIONS & DETAILS

Commission Number 10301

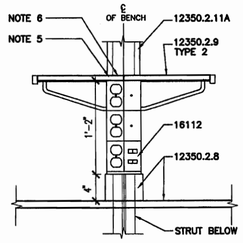
LC104

Date: October 25, 2002



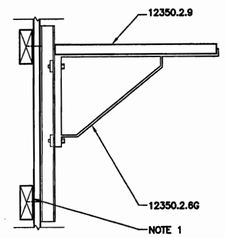
1 section @ wall cabinet

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



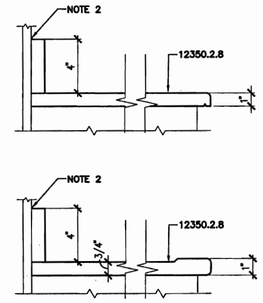
2 reagent shelf detail

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



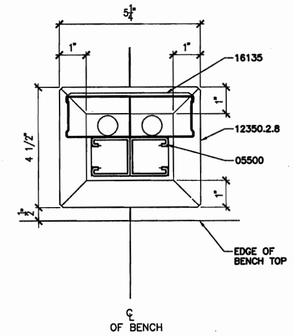
3 blocking detail

SCALE: 3" = 1'-0"



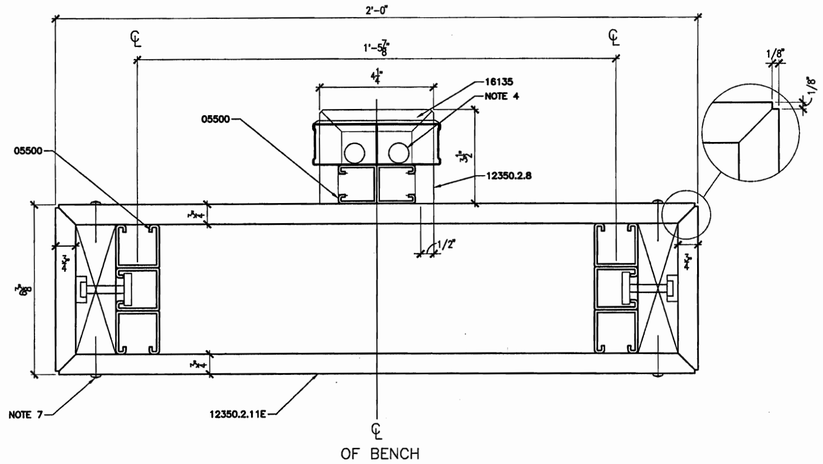
4 benchtop details

SCALE: 3" = 1'-0"



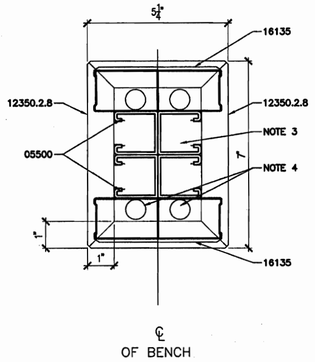
5 unitstrut detail

SCALE: 6" = 1'-0"



6 umbilical detail

SCALE: 6" = 1'-0"



7 unitstrut detail

SCALE: 6" = 1'-0"

keynote legend

DIV 5 METALS

05500

DIV 8 DOORS AND WINDOWS

08720 POWER DOOR OPERATORS

DIV 9 FINISHES

09667 RUBBER BASE

DIV 10 SPECIALTIES

10102 MARKERBOARDS/TACKBOARDS
10449 FIRE EXTINGUISHERS
10800 TOILET AND BATH ACCESSORIES

DIV 11 EQUIPMENT

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11600.1.1A2 PESTICIDE STORAGE CABINET
11600.1.1A3 GAS CYLINDER WALL BRACKET
11600.1.1A4 GLASSWARE WASHER/DRYER
11600.1.1A5 STAINLESS STEEL WORK TABLE

11610 LABORATORY FUME HOODS

11630 AUTOCLAVES

DIV 12 FURNISHINGS

12350 LABORATORY CASEWORK

12350.2.2F FLAMMABLE LIQUID STORAGE CABINETS
12350.2.2G ACID STORAGE CABINETS
12350.2.3 WOOD LABORATORY CASEWORK
12350.2.3H BASE CABINETS
12350.2.3J WALL HUNG CASES
12350.2.3K FINISHED ENDS
12350.2.3L KNEESPACE PANELS
12350.2.3M PULL-OUT WORK SURFACE
12350.2.3N TRIM STRIPS
12350.2.3O PANELS
12350.2.4 CUSTOM CABINET (REFER TO DETAILS)
12350.2.5 TABLES
12350.2.6F LEG SHOES (FIX CASEWORK ONLY)
12350.2.6G ADJUSTABLE SHELF SUPPORT
12350.2.6H SUPPORT STRUTS
12350.2.6I PLASTIC GROMMETS
12350.2.8 TOPS
12350.2.8C CAST EPOXY RESIN TOP (1" OR 3/4")
12350.2.8D PLASTIC LAMINATE TOP
12350.2.8E STAINLESS STEEL TOP
12350.2.9 WALL MOUNTED SHELVES
12350.2.9A BRACKET & STANDARDS
12350.2.9B SHELVING SYSTEMS
12350.2.10 SINK & CUP SINKS
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12350.2.11C KNEESPACE APRON
12350.2.11D WOOD BACKING BOARDS
12350.2.11E UMBILICAL
12350.2.12 MECHANICAL SERVICE FIXTURES
12350.2.13A ELECTRICAL RACEWAY

DIV 13 ENVIRONMENTAL ROOMS

13030 ENVIRONMENTAL ROOMS
13030.2.10.A SHELVING

DIV 15 MECHANICAL

15400 HOSE BIBS

DIV 16 ELECTRICAL

16112 SURFACE RACEWAYS
16135 ELECTRICAL BOXES AND FITTINGS

specific notes

NOTE 1 PROVIDE WOOD BLOCKING IN WALL AS REQUIRED TO SUPPORT SHELF SYSTEM

NOTE 2 PROVIDE CONTINOUS SEALANT ALONG TOP BACK EDGE OF BACKSPLASH AND WALL.

NOTE 3 PROVIDE RUBBER INSERT PLUG

NOTE 4 POWER AND CONDUIT FROM BELOW

NOTE 5 NOTCH SHELVING AROUND VERTICAL UPRIGHT (TYP.)

NOTE 6 PROVIDE WIREMOLD ENDCAP AT TOP OF ALL RACEWAY MOLDING IN REAGENT SHELVING SYSTEM

NOTE 7 REMOVABLE EXPOSED FASTENERS AS SPECIFIED

general notes

1. PROVIDE FINISHED END WHERE CABINET SIDE IS EXPOSED.
2. LABORATORY COUNTERTOPS ADJACENT TO WALL SHALL BE 30" DEEP U.N.O. SEE DETAILS ON L105.
3. LABORATORY ISLAND COUNTERTOPS SHALL BE 60" DEEP U.N.O. SEE DETAILS ON SHEET L105.
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lab equip sections & details

SCALE: VARIES

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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CUH2A

BRACKETT KRENNERICH architects

REGISTERED ARCHITECTS C13 ARKANSAS

LAB EQUIP SECTIONS & DETAILS

Commission Number 10301

LC105

Date: October 25, 2002

ABBREVIATION LEGEND

A.B.'s	ANCHOR BOLTS
ADD'L.	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
ARCH.	ARCHITECTURAL
B. PL	BASE PLATE
BF	BOTTOM OF FOOTINGS
BFF	BELOW FINISHED FLOOR
BLE	BRICK LEDGE ELEVATION
BLDG.	BUILDING
BOS	BOTTOM OF STEEL
BOT.	BOTTOM
BP	BOTTOM OF PIER
BRG.	BEARING
BTWN	BETWEEN
C	CHANNEL SHAPE
CJ	CONTROL JOINT (KEYED)
CL	CENTERLINE
CLG.	CEILING
CLR.	CLEAR
CMU	CONCRETE MANSONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
DBL.	DOUBLE
DEG.	DEGREES
DIA.	DIAMETER
DIM.	DIMENSION
DLH	DEEP LONGSPAN JOIST
DTL.	DETAIL
DWG's	DRAWINGS
DWL's	DOWELS
EA.	EACH
EBC	EXTENDED BOTTOM CHORD
EJ	EXPANSION JOINT
EL.	ELEVATION
EMBED.	EMBEDMENT LENGTH
EOS	EDGE OF SLAB
E.W.E.F.	EACH WAY, EACH FACE
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
F.D.	FLOOR DRAIN
F.F.	FINISHED FLOOR
F.V.	FIELD VERIFY
FFE	FINISHED FLOOR ELEVATION
FIN. FLR. EL.	FINISHED FLOOR ELEVATION
F.S.	FAR SIDE
FTG.	FOOTING
Fy	STEEL YIELD STRENGTH
G	JOIST GIRDER
GA.	GAUGE
G.B.	GRADE BEAM
H.S.	HEADED STUD
HORIZ.	HORIZONTAL
INFO.	INFORMATION
INT.	INTERIOR
JBE	JOIST BEARING ELEVATION
JT.	JOINT
k	K-JOIST (OR KIPS)
k/ft	KIPS PER FOOT
kcs	CONSTANT SHEAR K-JOIST
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
∠	ANGLE
LH	LONGSPAN JOIST
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
L.W.	LONG WAY
M.B.	METAL BUILDING
MAT'L.	MATERIAL
MAX.	MAXIMUM
MC	MISCELLANEOUS CHANNEL SHAPE
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MTL.	METAL
N	JOIST SPACES FOR GIRDER
NO.	NUMBER
N.S.	NON-SHRINK, NEAR SIDE
NTS	NOT TO SCALE
o.c.	ON CENTER
O/S	OUTSIDE
OPN'G.	OPENING
OPP.	OPPOSITE
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
R	RADIUS
RE:	REFERENCE
REINF.	REINFORCING
REQ'D.	REQUIRED
RTU	ROOF TOP UNIT
SJ	CONTROL JOINT (SAWN)
SCHED.	SCHEDULE
SECT.	SECTION
SIM.	SIMILAR
SQ.	SQUARE
STIFF	STIFFENER
S.W.	SHORT WAY
T&B	TOP AND BOTTOM
TEMP.	TEMPERATURE
TF	TOP OF FOOTING
TOC	TOP OF CONCRETE
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TP	TOP OF PIER
TS	TUBE STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VER.	VERIFY
VERT.	VERTICAL
VS	VS JOIST
W	WIDE FLANGE SHAPE
W/	WITH
WP	WORK POINT
W/O	WITHOUT
W.W.F.	WELDED WIRE FABRIC

GENERAL NOTES:

1. THE GENERAL CONTRACTOR SHALL VERIFY THE DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE ARCHITECT/ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCY.
2. THE CONTRACTOR SHALL NOTIFY IN WRITING, THE STRUCTURAL ENGINEER OF RECORD OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS.
3. FOR DIMENSIONS NOT SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS, SEE THE ARCHITECTURAL DRAWINGS.
4. CONCRETE SHALL HAVE AT LEAST THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
   - A) SLABS, BEAMS, CURBS 4,000 PSI
   - B) WALLS, PILASTERS, & SLAB-ON-GRADE 4,000 PSI
   - C) FOOTINGS, GRADE BEAMS 3,000 PSI
   - D) STAIR LANDINGS AND TREADS 3,000 PSI
   - E) REINFORCED BLOCK AND BOND BEAMS 3,000 PSI (GROUT)
   - F) PEDESTALS 3,000 PSI
5. ALL GROUT USED FOR REINFORCED BLOCK AND BOND BEAMS SHALL HAVE 100% OF COARSE AGGREGATE PASSING A ½" SIEVE.
6. ROUGHEN SURFACE OF CONSTRUCTION JOINTS SO THAT AGGREGATE SHALL BE EXPOSED UNIFORMLY, LEAVING NO LAITANCE, LOOSENED PARTICLES OR DAMAGED CONCRETE.
7. GENERAL CONTRACTOR SHALL VERIFY ALL CONCRETE DIMENSIONS, INSERTS, AND OPENINGS WITH ALL TRADES BEFORE PLACING CONCRETE. ALL SLEEVES FOR CONDUIT AND PIPE OR OTHER INSERTS SHALL BE PLACED PRIOR TO PLACING CONCRETE. NO CONCRETE SHALL BE BROKEN OUT TO PLACE ELECTRICAL, MECHANICAL, OR SIMILAR ITEMS WITHOUT PERMISSION OF THE ARCHITECT.
8. NO SLEEVES OR BLOCKOUTS IN CONCRETE BEAMS, GRADE BEAMS, OR COLUMNS WILL BE ALLOWED UNLESS SPECIFICALLY AUTHORIZED BY THE STRUCTURAL ENGINEER.
9. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND DETAILS OF DEPRESSED OR RAISED AREAS, EMBEDDED ITEMS, SLOPES, DRAINS, ETC. IN CONCRETE WORK.
10. CHAMFER ALL EXPOSED CONCRETE EDGES (SEE ARCHITECT).
11. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 5½%, ±1½% AIR ENTRAINMENT. AIR CONTENT OF CONCRETE RECEIVING A STEEL TROWEL FINISH SHALL NOT EXCEED 3%.
12. STRUCTURAL BOLTS SHALL BE ASTM A325-N. ANCHOR BOLTS SHALL BE ASTM A36 OR A307. EXPANSION BOLTS SHALL BE ASTM A307 UNLESS NOTED OTHERWISE OR A588 AS NOTED. MINIMUM EXPANSION BOLT EMBEDMENT SHALL BE 5". EXPANSION BOLTS SHALL BE HILTI KWIK BOLT II SYSTEM OR APPROVED EQUAL INSTALLED SO THAT THREADS ARE EXCLUDED FROM THE SHEAR PLANE.
13. ALL WIDE FLANGE STRUCTURAL STEEL SHALL BE ASTM A992. SQUARE TUBES SHALL BE ASTM A500, GRADE B, Fy=46 KSI, AND ROUND STEEL PIPE SHALL BE ASTM A501, Fy=36 KSI. ALL OTHER STRUCTURAL STEEL (CHANNELS, ANGLES, PLATES, ETC.) SHALL BE ASTM A36. ALL STEEL ANGLE LINTELS AND SHELF ANGLES SUPPORTING BRICK SHALL BE HOT DIPPED GALVANIZED.
14. CONTRACTOR SHALL PROVIDE TEMPORARY GUYS AND BRACING AS REQUIRED DURING CONSTRUCTION. STRUCTURE IS NOT STABLE UNTIL ALL STRUCTURAL MEMBERS, AND DECKING ARE IN PLACE AND PROPERLY FASTENED.
15. UNLESS DETAILED OTHERWISE, BOLTED CONNECTIONS SHALL BE BEARING TYPE SELECTED TO SUPPORT THREE-QUARTER (¾) THE TOTAL UNIFORM LOAD CAPACITY SHOWN IN THE TABLES OF UNIFORM LOAD CONSTANTS, PART 2 OF THE AISC MANUAL, 8th EDITION, FOR THE GIVEN BEAM, SPAN, AND GRADE OF STEEL SPECIFIED, UNLESS NOTED OTHERWISE, ALSO THE EFFECTS OF ANY CONCENTRATED LOADS MUST BE TAKEN INTO ACCOUNT. CONNECTIONS SHALL BE DESIGNED CONSIDERING THREADS IN THE PLANE OF SHEAR (A325-N). ALL BOLTING SHALL BE INSTALLED BY TURN-OF-NUT METHOD, REMOVABLE LOAD INDICATOR BOLTS, OR CALIBRATED WRENCH. SNUG TIGHT BOLTING WILL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON CONSTRUCTION DOCUMENTS.
16. FLOOR DECKING SHALL BE 1½", 20 GAUGE, GALVANIZED COMPOSITE STEEL FLOOR DECK (1.5VL20) EXCEPT FLOOR DECK @ STAIR LANDINGS SHALL BE 9/16", 28 GAUGE, GALVANIZED STEEL FLOOR DECK. ROOF DECK SHALL BE 1½", 20 GAUGE, TYPE B, GALVANIZED.
17. ACI, AISC, AND AWS SPECIFICATIONS SHALL GOVERN ALL PHASES OF FABRICATION AND CONSTRUCTION.
18. ALL STEEL CONNECTIONS, BOLTS, INSERTS, EMBEDS, ETC. USED TO CONNECT PRECAST TO STRUCTURE SHALL BE STAINLESS STEEL OR GALVANIZED.
19. REPRODUCTION OF CONTRACT DOCUMENTS FOR SHOP DRAWINGS WILL NOT BE PERMITTED.
20. REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER OF RECORD DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.
21. ALL WELDS SHALL BE PERFORMED BY AWS CERTIFIED WELDERS, CERTIFIED WITHIN THE PREVIOUS TWELVE (12) MONTHS.
22. CONTRACTOR SHALL THOROUGHLY REVIEW ALL DOCUMENTS AND INFORM THE ARCHITECT OF CONFLICTS PRIOR TO BIDDING, FABRICATION, OR CONSTRUCTION.
23. MIX DESIGN SHALL INCLUDE AT LEAST THE FOLLOWING AMOUNTS OF PORTLAND CEMENT MEETING ASTM C150 OR C595 PER CUBIC YARD OF CONCRETE.

28 DAY COMPRESSIVE STRENGTH	NON-AIR ENTRAINED: MIN. CEMENT CONTENT (lbs/yd³)	NON-AIR ENTRAINED: MAXIMUM PERMISSIBLE W/C RATIO	AIR ENTRAINED: MIN. CEMENT CONTENT (lbs/yd³)	AIR ENTRAINED: MAXIMUM PERMISSIBLE W/C RATIO
3000	470	.53	517	.46
4000	564	.44	611	.35
5000	611	.40	658	.35

24. PROPORTIONS OF CONCRETE MIX DESIGN SHALL BE DETERMINED BY THE PROCEDURES ESTABLISHED IN SECTION 5.3 OF ACI318-99.
25. MIX DESIGN MAY INCLUDE TYPE C FLYASH AS A ONE TO ONE REPLACEMENT FOR PORTLAND CEMENT UP TO A MAXIMUM OF 20% OF CEMENT WHEN WEATHER PERMITS. DO NOT USE FLYASH WHEN TEMPERATURE DURING PLACEMENT OR CURING IS BELOW 60° FAHERENHEIT.
26. STEEL JOIST SHALL BE DESIGNED, MANUFACTURED, AND BRIDGED TO CONFORM WITH "STEEL JOIST INSTITUTE" STANDARD SPECIFIATION. PROVIDE RECOMMENDED CAMBER FOR JOIST SPAN. DO NOT WELD EXTENDED BOTTOM CHORDS OF JOIST UNTIL ALL DEAD LOAD IS IN PLACE. PROVIDE SLOPED AND SKEWED SEATS ON ALL JOIST AS REQUIRED. PROVIDE UPLIFT BRIDGING AND DESIGN JOIST FOR A NET UPLIFT OF 10 PSF. ALL BRIDGING FOR JOIST SHALL BE DESIGNED AND SUPPLIED BY THE JOIST MANUFACTURER.
27. ALL FLOOR BEAMS ARE DESIGNED COMPOSITE WITH THE CONCRETE SLAB. <30> INDICATES THE TOTAL NUMBER OF ¾"Ø HEADED STUDS ALONG THE BEAM. WHERE STUDS EXCEED ONE PER CELL, PLACE EXCESS FROM EACH END AT A UNIFORM SPACING. AT GIRDERS, (14) INDICATES THE NUMBER OF STUDS BETWEEN BEAM SPACING AS SHOWN. ALL STUD WELDING AND INSPECTION SHALL CONFROM TO AWS D1.1-79, PART F "STUD WELDING", BY A QUALIFIED WELDER. PROVIDE 4" LONG STUDS AT FLOOR. ALL FIELD WELDING OF STUDS SHALL BE PERFORMED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT (STUD GUN) POWERED BY A PROPERLY SIZED GENERATOR. STICK WELDING STUDS WILL NOT BE PERMITTED. COMPLETELY REMOVE CERAMIC FERRULES PRIOR TO PLACING CONCRETE.
28. DO NOT PRIME PAINT STEEL THAT RECIEVES SPRAYED FIRE-PROOFING OR TOPS OF BEAMS AT COMPOSITE BEAMS, (COORDINATE WITH ARCHITECT).

REINFORCING NOTES:

1. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.
2. REINFORCEMENT SHALL BE SPLICED ONLY AS SHOWN OR NOTED IN THE STRUCTURAL CONTRACT DOCUMENTS. SPLICES AT OTHER LOCATIONS SHALL BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.
3. PROVIDE THE FOLLOWING PROTECTIVE COVERING FOR REINFORCING BARS: (UNLESS NOTED OR DETAILED OTHERWISE)
   - BELOW GRADE (UNFORMED) 3" CLEAR
   - BELOW GRADE (FORMED) 2" CLEAR
   - WALLS 2" CLEAR
   - COLUMNS 1½" CLEAR @ TIES
   - GRADE BEAMS (TO MAIN REINF.) 3½" CLEAR
   - GRADE BEAMS (TO STIRRUPS) 3" CLEAR
   - SLAB-ON-GRADE BARS (BOT.) 3" CLEAR
   - ELEVATED SLABS & JOIST ¾" CLEAR
   - BEAM STIRRUPS 1½" CLEAR
4. REINFORCING BARS MARKED CONTINUOUS TO BE SPLICED WITH CLASS "B" TENSION LAP SPLICE.
5. TENSION SPLICES SHALL BE CLASS "B" LAP SPLICES UNLESS NOTED OTHERWISE.
6. REBAR SHOP DRAWINGS SHALL BE PREPARED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ARKANSAS.
7. SUBMIT REINFORCING SHOP DRAWINGS COMPLETE FOR THE AREA BEING REVIEWED. REVIEW OF PARTIAL SUBMITTALS WILL NOT BE CONSIDERED UNLESS COMPLETE AREAS ARE INCLUDED.
8. ONCE SHOP DRAWINGS HAVE BEEN REVIEWED, DO NOT ADD REINFORCING OR INFORMATION TO PREVIOUSLY SUBMITTED SHEETS FOR SUBSEQUENT SUBMITTALS UNLESS SHOP DRAWINGS ARE BEING RESUBMITTED AFTER BEING RETURNED "NOT APPROVED".
9. DO NOT CUT TIES OR CONTINUOUS BARS TO PROVIDE CLEARANCE FOR EMBEDDED ITEMS, INDIVIDUAL BARS AND TIES MAY BE MOVED UP OR DOWN UP TO 1½" AS REQUIRED TO PROVIDE CLEARANCE FOR EMBEDS, HOOKS, ETC. DO NOT HEAT REINFORCING TO BEND.
10. IF DOWELS OR VERTICAL REINFORCING ARE CUT OR SEVERLY BENT, CONTRACTOR MAY BE REQUIRED TO REMOVE CONCRETE BACK TO PREVIOUS POUR JOINT AND REPLACE (INCLUDING NEW REBAR) AT CONTRACTOR'S EXPENSE.

FOUNDATION NOTES

1. BOTTOM OF FOOTING ELEVATIONS (BF) SHOWN ON PLAN ARE FOR ESTIMATING PURPOSES ONLY AND ARE NOT NECESSARILY TO BE USED FOR CONSTRUCTION. LOWER BOTTOM OF FOOTINGS AS REQUIRED BY SOILS ENGINEER OR GEOPIER (TM) FOUNDATION COMPANY TO PROVIDE THE REQUIRED ALLOWABLE BEARING CAPACITY. (REF.: GEOTECHNICAL INVESTIGATION, JOB NO. 02-253, DATED AUGUST 28, 2002 BY GRUBBS, HOSKYN, BARTON, & WYATT.)
2. ALL SPREAD FOOTINGS SHALL BE FOUNDED AT LEAST TWO FEET BELOW LOWEST ADJACENT GRADE ON RAMMED AGGREGATE PIERS WITH ALLOWABLE NET BEARING PRESSURE OF AT LEAST 7.0 KSF. LOWER BOTTOM OF FOOTING AS REQUIRED BY SOILS ENGINEER TO PROVIDE REQUIRED MINIMUM BEARING CAPACITY.
3. CONTRACTOR SHALL VERIFY LOCATION OF SITE IMPROVEMENTS AND PROVIDE PROTECTION AND SHORING AS REQUIRED PRIOR TO BEGINNING SITEWORK.
4. ALL FOOTING EXCAVATIONS SHALL BE INSPECTED BY THE SOILS ENGINEER OR HIS REPRESENTATIVE TO VERIFY THAT THE DESIGN NET BEARING CAPACITY IS ATTAINABLE.
5. PROVIDE ADDITIONAL SHORING FOR ALL FOUNDATION WALLS AS REQUIRED DURING CONSTRUCTION BACKFILLING AND COMPACTION OPERATIONS.
6. FINISH GRADE SHALL BE MAINTAINED TO PROVIDE AT LEAST 2'-0" COVER ABOVE BOTTOM OF ALL EXTERIOR FOOTINGS.
7. BACKFILL BOTH SIDES OF WALLS EQUALLY UNTIL LOW SIDE IS UP TO GRADE.
8. ALL UNDERCUTTING, SITE PREPARATION, FILL SELECTION, BACKFILLING AND COMPACTION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND SOILS ENGINEER'S RECOMMENDATIONS.
9. UPLIFT GEOPIER (TM) ELEMENTS SHALL BE DESIGNED ALONG WITH THE FOOTINGS THEY HOLD DOWN FOR THE LOADS GIVEN.

THE FOUNDATIONS AND STRUCTURAL FRAMING HAVE BEEN DESIGNED TO RESIST SEISMIC FORCES IN ACCORDANCE WITH THE REQUIREMENTS OF ACT 1100 OF THE 1991 ARKANSAS STATE LEGISLATURE AND THE 1997 ARKANSAS FIRE PREVENTION CODE.

PEAK VELOCITY RELATED ACCELERATION Av: 0.25
PEAK ACCELERATION Aa: 0.25
SEISMIC HAZARD EXPOSURE GROUP: II
SEISMIC PERFORMANCE CATAGORY: .... D
SOIL PROFILE TYPE: S2
BASIC STRUCTURAL SYSTEM: .... BUILDING FRAME SYSTEM
SEISMIC RESISTING SYSTEM: .... CONCENTRICALLY BRACED FRAMES
RESPONSE MODIFICATION FACTOR R: 5
DEFLECTION AMPLIFICATION FACTOR, Cd: 4½
ANALYSIS PROCEDURE UTILIZED: 1607.4

THE FOUNDATIONS AND STRUCTURAL FRAMING HAVE BEEN DESIGNED TO RESIST LOADS AND FORCES IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2000 INTERNATIONAL BUILDING CODE AND ACT 1100 OF THE 1991 ARKANSAS STATE LEGISLATURE:

FLOOR LIVE LOAD: .... 100 PSF
ROOF LIVE LOAD: .... 40 PSF

GROUND SNOW LOAD: .... 10 PSF
FLAT ROOF SNOW LOAD: .... 10 PSF
SNOW EXPOSURE FACTOR: 1.0
SNOW IMPORTANCE FACTOR: 1.0
THERMAL FACTOR: 1.0

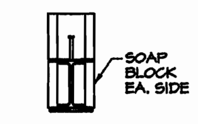
BASIC WIND SPEED (3-SECOND GUST): .... 90 MPH
WIND IMPORTANCE FACTOR: 1.0
WIND EXPOSURE: .... B
INTERNAL PRESSURE COEFFICIENT: 0.18
COMPONENT & CLADDING WIND PRESSURE: .... 21.7 PSF

SEISMIC USE GROUP: I
SPECTRAL RESPONSE COEFFICIENT- S_{DS}: 1.33
S_{D1}: 0.6

SITE CLASS: .... D
BASIC SEISMIC-FORCE-RESISTING SYSTEM: ORDINARY STEEL CONCENTRICALLY BRACED FRAMES
DESIGN BASE SHEAR: 0.266W
ANALYSIS PROCEDURE: .... EQUIVALENT LATERAL FORCE PROCEDURE (1617.4)

LINTEL SCHEDULE

WALL TYPE	UP TO 4'-0" OPENING	4'-1" TO 6'-0" OPENING	6'-1" TO 8'-0" OPENING	8'-1" TO 10'-0" OPENING
4" VENEER	∠3½x3½x¼	∠5x3½x5/16 (LLV)	∠6x3½x5/16 (LLV)	∠7x4x3/8 (LLV)
4" INTERIOR BLOCK	2-∠1½x1½x3/16	————	————	
6" BLOCK	6" WIDE x 8" HIGH LINTEL BLK. W/ 2-#5	2-∠3½x2½x3/8	————	
8" BLOCK	8"x8" LINTEL BLK. W/ 2-#5	2-∠5x3½x5/16 (LLV)	2-∠6x3½x5/16 (LLV)	W8x10 W/ PL¼x7 & ½"Øx4" H.S. @ 24"o.c.
8" BRICK	2-∠3½x3½x¼	2-∠5x3½x5/16 (LLV)	2-∠6x3½x5/16 (LLV)	
12" (8" BLK. & 4" BRICK)	8"x8" LINTEL BLK. W/ 2-#5 & ∠3½x3½x¼	3-∠5x3½x5/16 (LLV)	3-∠6x3½x5/16 (LLV)	



1. LINTEL SCHEDULE APPLIES UNLESS NOTED OR DETAILED OTHERWISE.
2. WHERE ANGLES ARE BACK TO BACK, WELD TOGETHER WITH LONG LEGS VERTICAL (LLV), @ 12" INTERVALS.
3. 8" BEARING @ EA. END, MINIMUM.
4. USE 3,000 PSI CONCRETE IN LINTEL BLOCKS.
5. FILL CELLS BELOW LINTEL BEARING W/ CONCRETE FULL HEIGHT, (PROVIDE 1-#4 VERTICAL BAR IN EACH CELL).

PAD FOOTING SCHEDULE

MARK	PAD SIZE "W"	PAD SIZE "L"	PAD SIZE "t"	REINFORCING	REMARKS
PF300	3'-0"	3'-0"	1'-6"	4-#5 EA. WAY (TOP & BOT.)	
PF500	5'-0"	5'-0"	1'-6"	8-#6 EA. WAY (TOP) 8-#6 EA. WAY (BOT.)	NOTES 1 & 2
PF700	7'-0"	7'-0"	2'-0"	8-#6 EA. WAY (TOP) 10-#8 EA. WAY (BOT.)	NOTE 3
PF-BGP				PAD FOOTING BY GEOPIER (TM)	NOTE 4

1. 2-#6 TOP IN ONE DIRECTION ARE FROM TIE BEAM.
2. 4-#6 TOP & BOTTOM IN ONE DIRECTION ARE FROM CONTINUOUS FOOTING.
3. 2-#6 TOP IN EACH DIRECTION ARE FROM TIE BEAMS.
4. PAD FOOTING SIZE, THICKNESS, AND REINFORCING SHALL BE DESIGNED BY GEOPIER FOR THE UNFACTORED FOOTING LOADS GIVEN BELOW.

UNFACTORED LOADS IN KIPS*

FOOTING	DEAD LOAD	LIVE LOAD	EQ. VERTICAL	EQ. HORIZONTAL
A/3.8 W/3.8	72	23	±168	±168
A/4.2 W/4.2	85	42	±273	±147
A/5.3 W/5.3	90	39	±170	±147
A.7/4.2 V.3/4.2	74	74	±342	±145
B/3 B/6 V/3 V/6	92	47	±574	±147
B/3.8 V/3.8	85	33	±254	±168
B/5.3 V/5.3	75	29	±466	±147
E/8	53	21	±419	±84
E/9 S/9 Q/10 Q/12	24	9	±384	±74
G/10 G/11	19	2	±195	±28
J/6	155	129	±377	±120
J/8	163	151	±221	±225
K/3.7 M/3.7	26	28	±315	±145
L.5/6	231	231	±377	±160
L.5/8	173	173	±378	±141
S/8	53	21	±384	±74

* LOADS GIVEN ARE FOR THE DESIGN OF THE FOOTINGS BY GEOPIER(TM). THE LOADS ARE UNFACTORED LOADS AND SHALL BE USED IN COMBINATION PER APPLICABLE CODES. ALL APPLICABLE CODE SAFETY FACTORS SHALL BE USED. "DL" DESIGNATES DEAD LOADS, "LL" DESIGNATES LIVE LOADS, "EQ(V)" DESIGNATES VERTICAL SEISMIC LOADS (COLUMN AXIAL), AND "EQ(H)" DESIGNATES SEISMIC LATERAL LOADS (COLUMN SHEAR) "+" AND "-" DESIGNATE UP AND DOWN OR RIGHT AND LEFT RESPECTIVELY. (IN THE PLANE OF THE SHEAR WALL.)
THE FOOTINGS TO BE DESIGNED ARE DESIGNATED AS "PF-BPG" ON THE PLANS. THE TOP OF THE FOOTINGS SHALL MATCH THE SURROUNDING FOOTINGS AND THE BOTTOM OF THE FOOTING SHALL BE DESINATED BY GEOPIER(TM) BASED ON THE REQUIRED FOOTING THICKNESS. THE REQUIRED THICKNESS SHALL ALSO BE COORDINATED WITH THE COLUMN ANCHOR BOLT REQUIREMENTS.
(THE DEAD LOADS GIVEN INCLUDE THE WEIGHT OF THE CONCRETE WALLS BUT NOT THE WEIGHT OF THE REQUIRED FOOTINGS.)

(3) 3000 PSI CONCRETE LAP SPLICE SCHEDULE

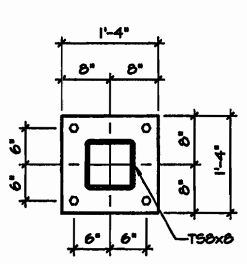
BAR SIZE	BASIC (1) TENSION LAP SPLICE: CLASS A	BASIC (1) TENSION LAP SPLICE: CLASS B	TOP BAR (2) TENSION LAP SPLICE: CLASS A	TOP BAR (2) TENSION LAP SPLICE: CLASS B
3	14	18	18	22
4	18	24	24	28
5	22	28	28	36
6	26	34	34	42
7	38	48	48	62
8	42	54	54	72
9	48	62	62	80
10	54	70	70	90
11	60	78	78	100
14-18	(4)	(4)	(4)	(4)

1. BARS OTHER THAN TOP BARS
2. HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE BELOW REINFORCEMENT
3. ALL SPLICES SHALL BE CLASS B UNLESS NOTED OTHERWISE. LAP SPLICE SCHEDULE APPLIES TO ALL REINFORCING UNLESS NOTED OTHERWISE
4. #14 BARS AND LARGER SHALL BE SPLICED WITH 125% MECHANICAL COUPLERS ONLY. (COUPLERS MAY BE USED FOR SPLICES OF OTHER BAR SIZES AS NEEDED FOR EASE OF PLACEMENT AND/OR TO ELIMINATE CONGESTION AT BEAM/COLUMN JOINTS.
5. WHERE BARS THAT LAP ARE DIFFERENT SIZES, USE THE LAP LENGTH FOR THE SMALLER BAR.

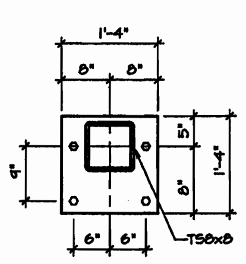
(3) 4000 PSI CONCRETE LAP SPLICE SCHEDULE

BAR SIZE	BASIC (1) TENSION LAP SPLICE: CLASS A	BASIC (1) TENSION LAP SPLICE: CLASS B	TOP BAR (2) TENSION LAP SPLICE: CLASS A	TOP BAR (2) TENSION LAP SPLICE: CLASS B
3	16	20	20	24
4	20	26	26	32
5	24	32	32	40
6	30	38	38	48
7	42	54	54	70
8	48	62	62	82
9	54	70	70	92
10	62	80	80	104
11	68	88	88	114
14-18	(4)	(4)	(4)	(4)

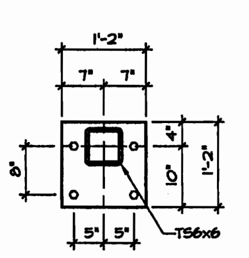
1. BARS OTHER THAN TOP BARS
2. HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE BELOW REINFORCEMENT
3. ALL SPLICES SHALL BE CLASS B UNLESS NOTED OTHERWISE. LAP SPLICE SCHEDULE APPLIES TO ALL REINFORCING UNLESS NOTED OTHERWISE
4. #14 BARS AND LARGER SHALL BE SPLICED WITH 125% MECHANICAL COUPLERS ONLY. (COUPLERS MAY BE USED FOR SPLICES OF OTHER BAR SIZES AS NEEDED FOR EASE OF PLACEMENT AND/OR TO ELIMINATE CONGESTION AT BEAM/COLUMN JOINTS.
5. WHERE BARS THAT LAP ARE DIFFERENT SIZES, USE THE LAP LENGTH FOR THE SMALLER BAR.



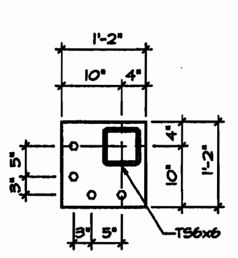
BASE PL-1
¾"=1'-0"



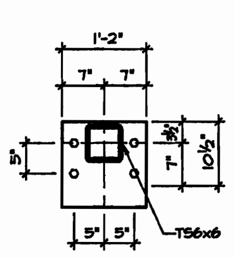
BASE PL-2
¾"=1'-0"



BASE PL-3
¾"=1'-0"



BASE PL-4
¾"=1'-0"



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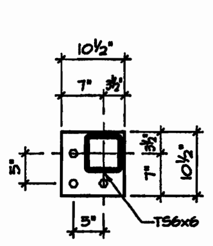
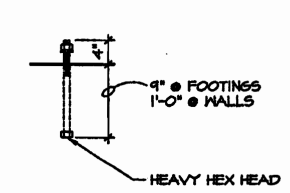
¾"=1'-0"



BASE PL-6
¾"=1'-0"



1"Ø ANCHOR BOLT
¾"=1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Engineering Consultants, Inc.
Structural Engineers
401 W. Capitol Ave, Suite 305 Little Rock, AR 72201-3401
Telephone Number: 501-376-3752 Fax Number: 501-376-7314

BRACKETT KRENNERICH
architects
100 East Huntington, Suite D P.O. Box 1650 Jonesboro, Arkansas 72403-1650 870 932 0571 Fax 870 932 0975 Email brackett@

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 5920 FRANK M. ALLISON 10/28/02

CERTIFICATE OF AUTHORIZATION ENGINEERING CONSULTANTS, INC. No. 26 ARKANSAS ENGINEERS

NOTES & SCHEDULES

Commission Number 10301

S1.0

Date: October 25, 2002

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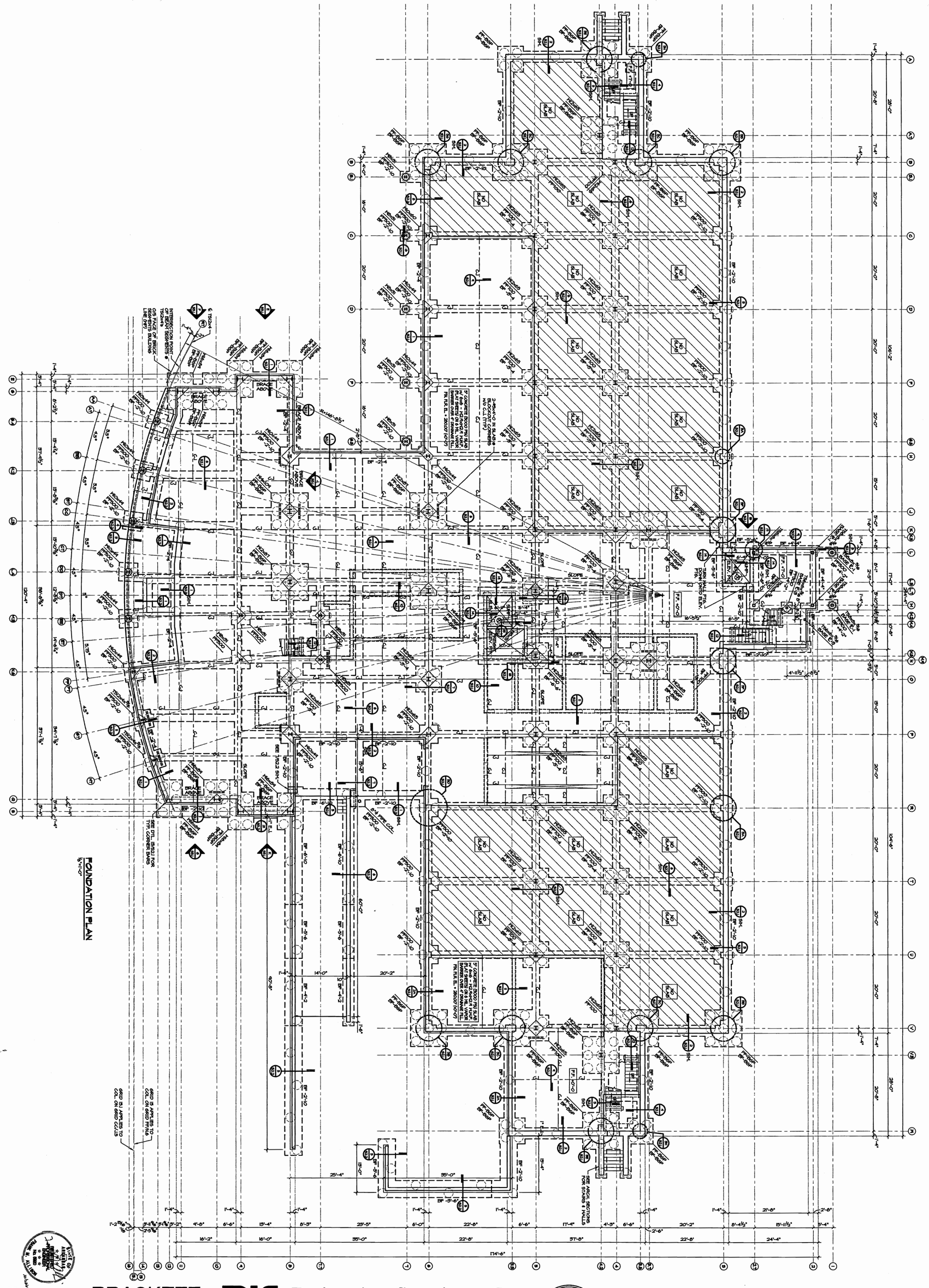

BRACKETT KRENNERICH
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Structural Engineers
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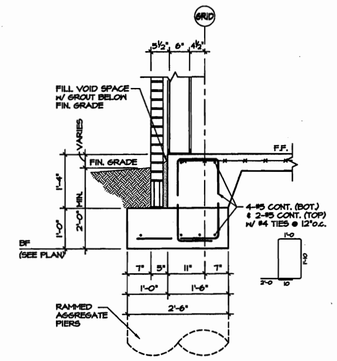
Little Rock, AR 72201-3401
Fax Number: 501-376-7314

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

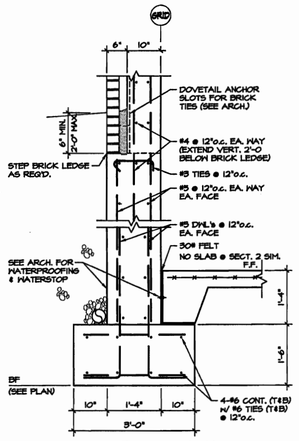
FOUNDATION PLAN

Commission Number 1030.1
S1.1
Date: October 28, 2002

100 East Huntington, Suite D P.O. Box 1655 Jonesboro, Arkansas 72403-1655 870-932-0671 Fax 870-932-0975 Email brackett@mediata.net



1 SECTION 3/4"=1'-0"



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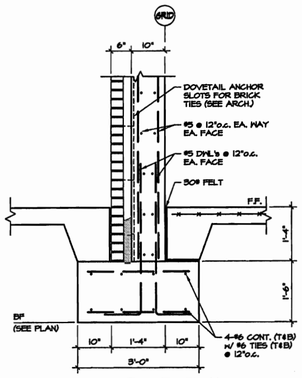

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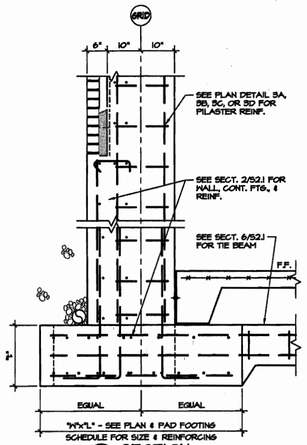

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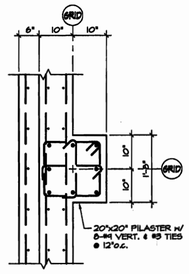
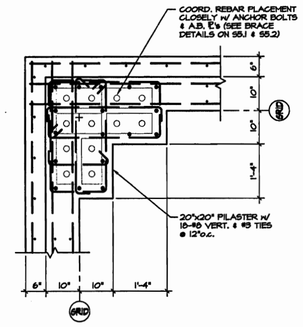


3A PLAN DETAIL 3/4"=1'-0"



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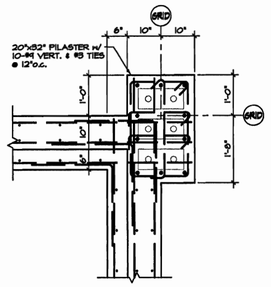

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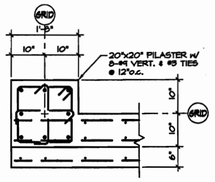

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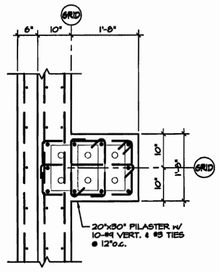
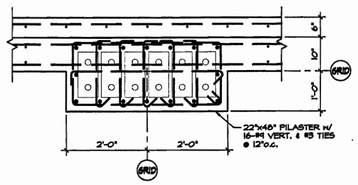


3E PLAN DETAIL 3/4"=1'-0"



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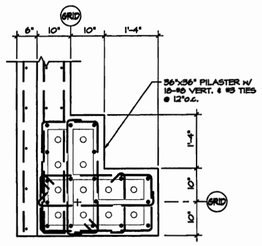
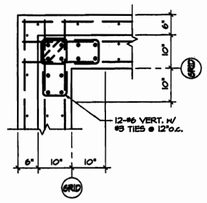


3G PLAN DETAIL 3/4"=1'-0"



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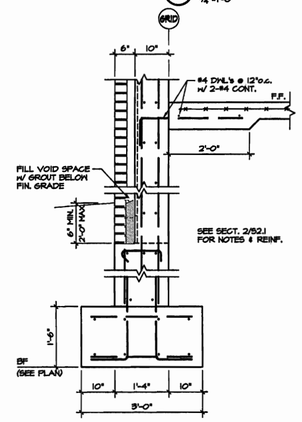
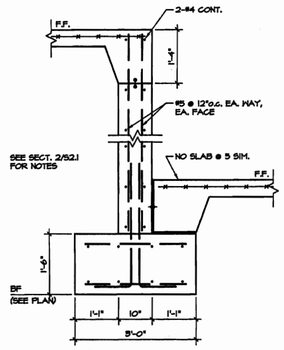
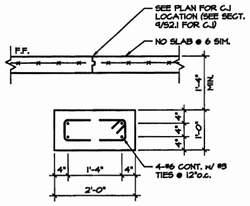


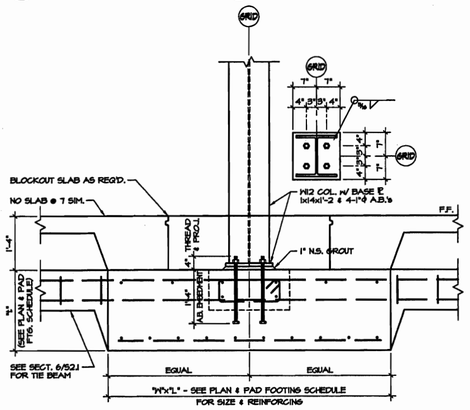
4 SECTION 3/4"=1'-0"



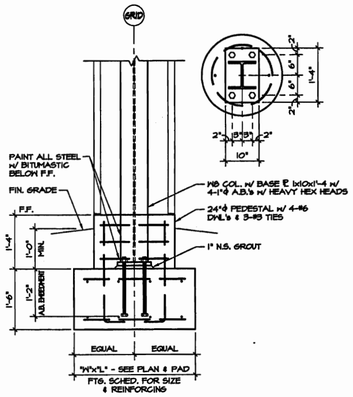
5 SECTION 3/4"=1'-0"



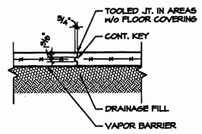
6 SECTION 3/4"=1'-0"



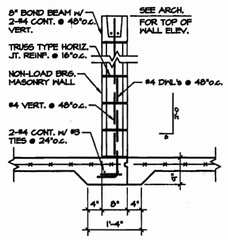
7 SECTION 3/4"=1'-0"



8 SECTION 3/4"=1'-0"



9 CONTROL JOINT DETAIL 3/4"=1'-0"



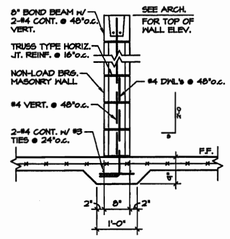
NOTE:

TYPICAL @ ALL WALLS 8" OR GREATER IN THICKNESS.

FILL BOND BEAM & REINFORCED CELLS W/ 3000 PSI GROUT OR CONCRETE.

SEE ARCH. FOR EXACT LOCATION OF WALLS.

10 THICKENED SLAB W/ C.J. DETAIL 3/4"=1'-0"



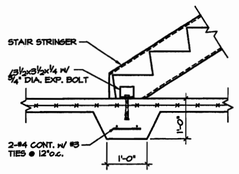
NOTE:

TYPICAL @ ALL WALLS 8" OR GREATER IN THICKNESS.

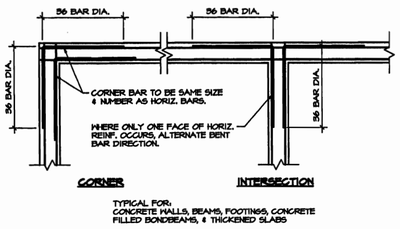
FILL BOND BEAM & REINFORCED CELLS W/ 3000 PSI GROUT OR CONCRETE.

SEE ARCH. FOR EXACT LOCATION OF WALLS.

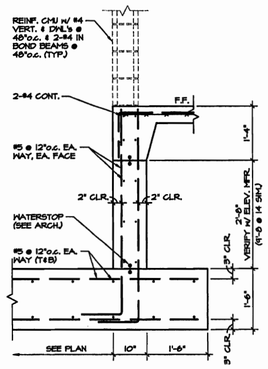
11 THICKENED SLAB DETAIL 3/4"=1'-0"



12 STRINGER BEARING DETAIL 3/4"=1'-0"



13 TYPICAL CORNER BAR DETAIL NOT TO SCALE



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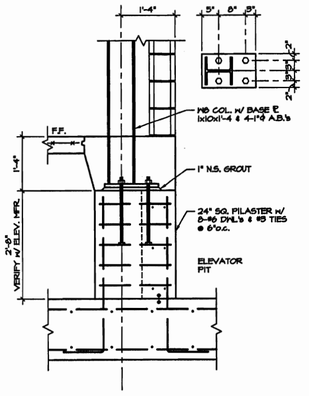

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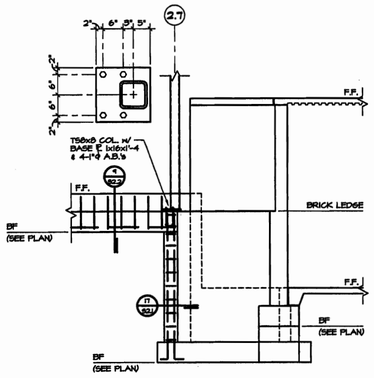
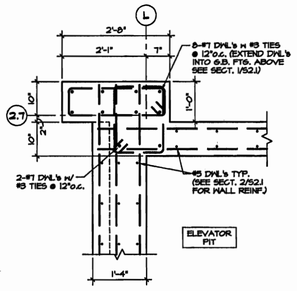
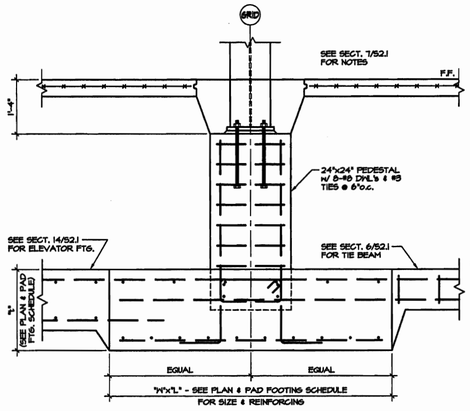


16 ELEVATION 1/4"=1'-0"



17 PLAN DETAIL 3/4"=1'-0"



18 SECTION 3/4"=1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Engineering Consultants, Inc.
Structural Engineers
401 W. Capitol Ave, Suite 305 Little Rock, AR 72201-3401
Telephone Number: 501-376-3752 Fax Number: 501-376-7314

BRACKETT KRENNERICH architects
100 East Huntington, Suite 1 P.O. Box 1665 Jonesboro, Arkansas 72402-1665 (870) 932-5671 Fax (870) 932-0076

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8820 JAMES M. ALLEN 10/25/02

CERTIFICATE OF AUTHORIZATION ENGINEERING CONSULTANTS INC. No. 25 ARKANSAS-ENGINEER.NET

FOUNDATION DETAILS

Commission Number 10901

S2.1

Date: October 25, 2002

Bonnie Brackett@FirstCallAbsent
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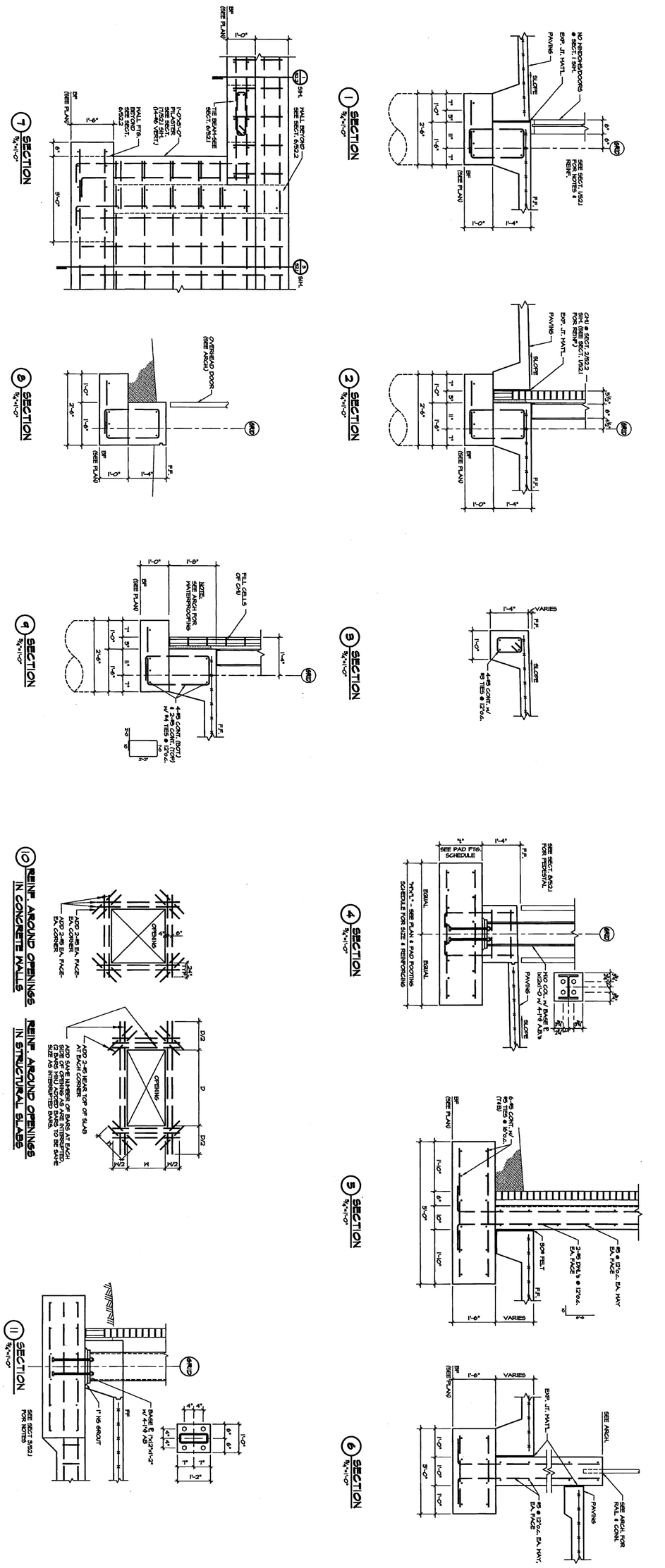

FOUNDATION DETAILS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8001 "NO ALL ALLOWS"

CERTIFICATE OF AUTHORIZATION ARKANSAS ENGINEERING CONSULTANTS, INC. No. 26

Commission Number 10201

S2.2

Date: October 25, 2002

BRACKETT KRENNERICH architects

Engineering Consultants, Inc.
Structural Engineers
401 W. Capitol Ave, Suite 305
Telephone Number: 501-376-3752
Little Rock, AR 72201-3401
Fax Number: 501-376-7314

100 East Huntington, Suite D P.O. Box 1955 Jonesboro, Arkansas 72403-1955 870 932-0571 Fax 870 932-0970 Email brackett@fasldata.net

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

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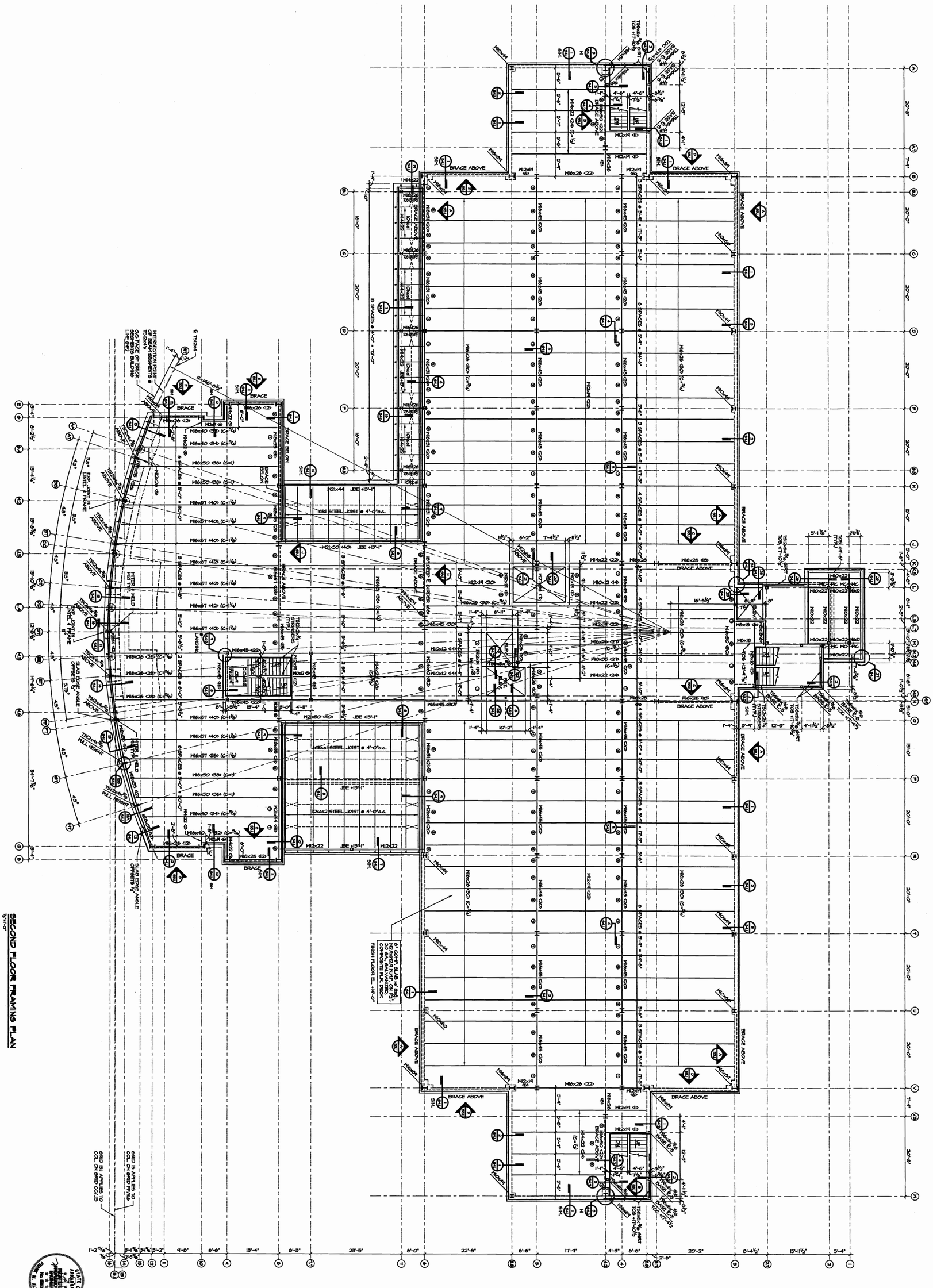


STATE OF ARKANSAS REGISTERED ENGINEER No. 8800 M. ALLEN

CERTIFICATE OF AUTHORIZATION CONSULTING ENGINEERS No. 26

BRACKETT KRENNERICH architects

Engineering Consultants, Inc.
Structural Engineers

401 W. Capitol Ave, Suite 305
Telephone Number: 501-376-3752

Little Rock, AR 72201-3401
Fax Number: 501-376-7314

ARKANSAS STATE UNIVERSITY 1909

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

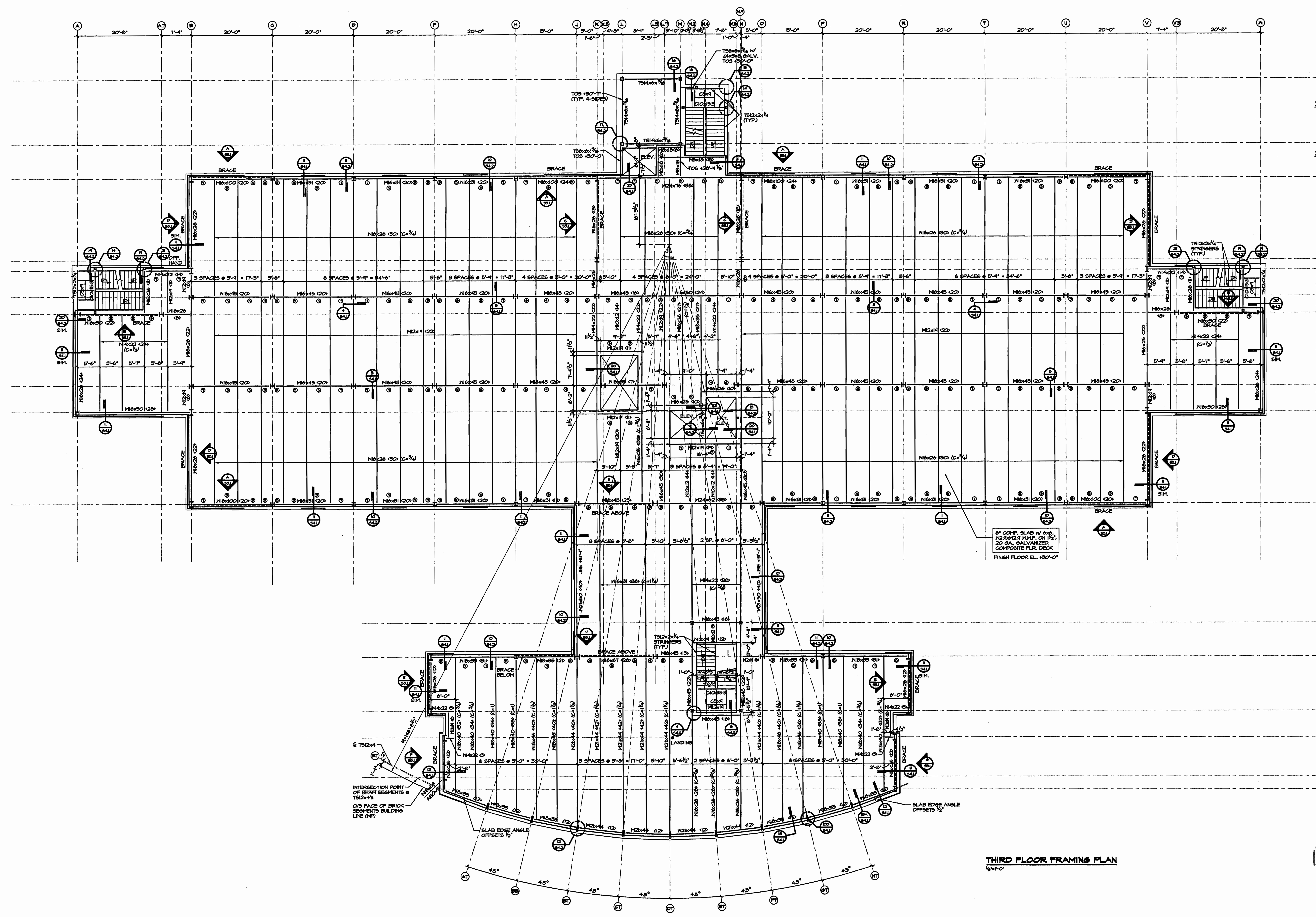
SECOND FLOOR FRAMING PLAN

Commission Number 10301

S3.1

Date: October 25, 2002

100 East Huntington, Suite D P.O. Box 1655 Jonesboro, Arkansas 72403-1655 870 932 0571 Fax 870 932 0976 Email brackett@mindata.net



THIRD FLOOR FRAMING PLAN
1/8"=1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Engineering Consultants, Inc.
Structural Engineers
401 W. Capitol Ave, Suite 305, Little Rock, AR 72201-3401
Telephone Number: 501-376-3752 Fax Number: 501-376-7314

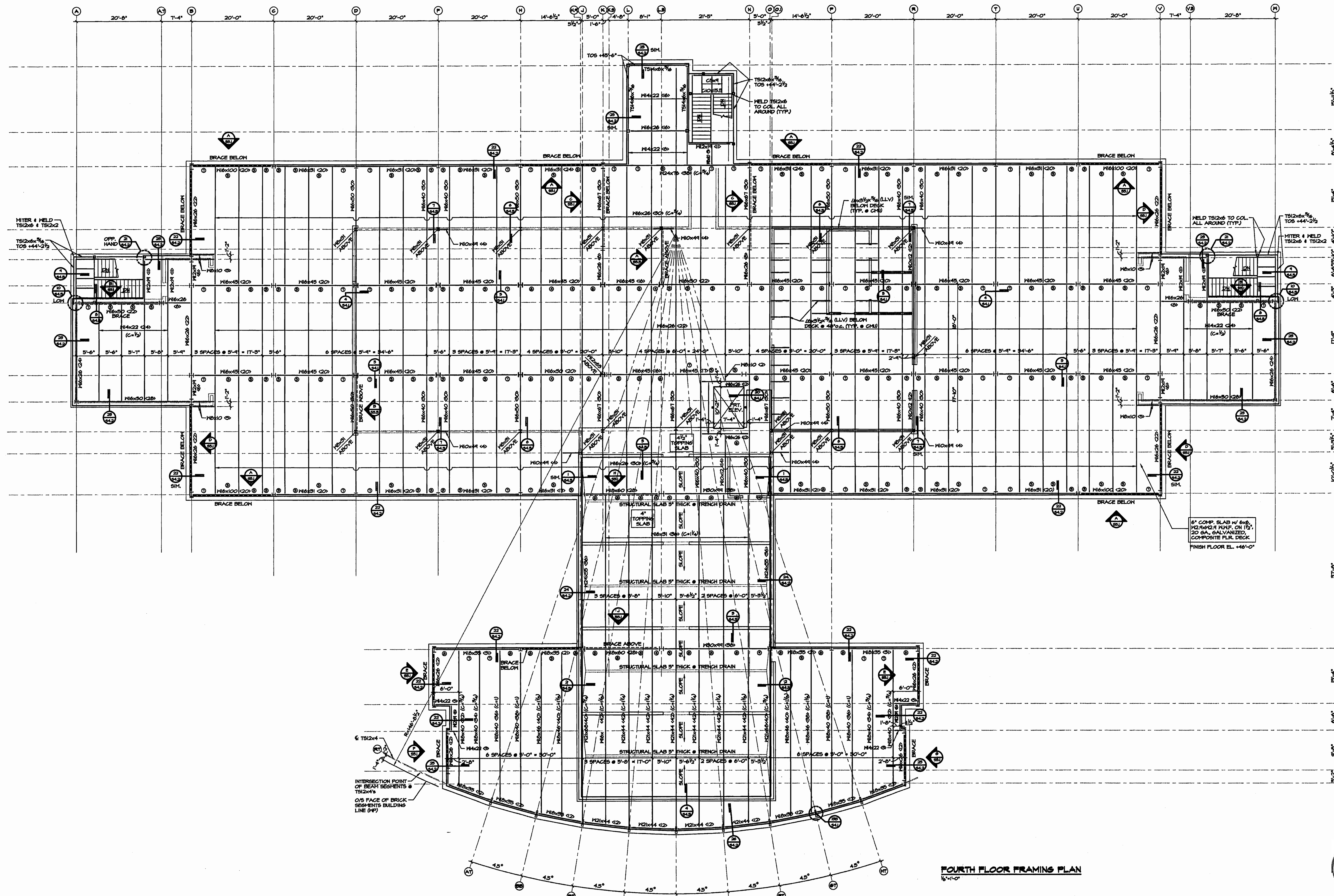
BRACKETT KRENNERICH architects

THIRD FLOOR FRAMING PLAN

Commission Number 10301

S3.2

Date: October 25, 2002



BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Engineering Consultants, Inc.
Structural Engineers
401 W. Capitol Ave, Suite 305
Little Rock, AR 72201-3401
Telephone Number: 501-376-3752
Fax Number: 501-376-7314

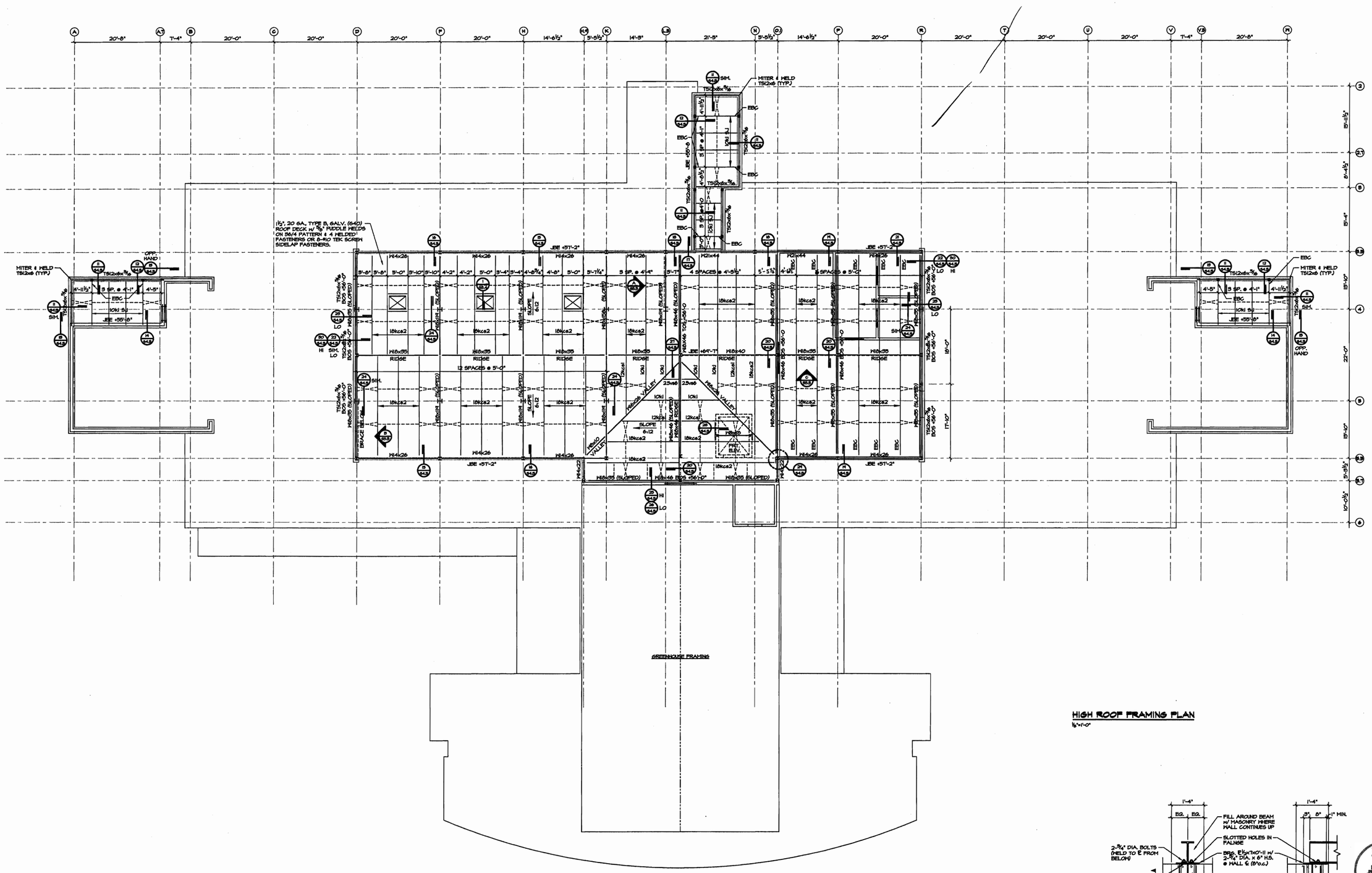
BRACKETT KRENNERICH architects

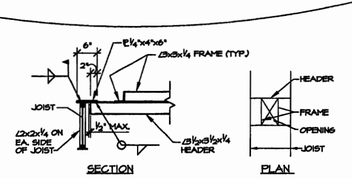
FOURTH FLOOR FRAMING PLAN

Commission Number 10301

S3.3

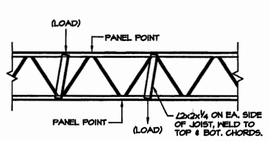
Date: October 25, 2002





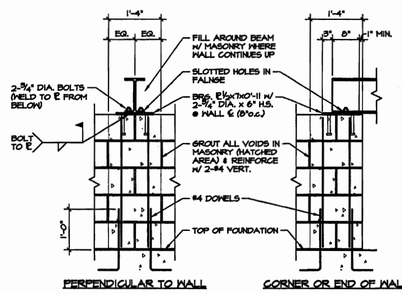
NOTE: VERIFY EXACT NUMBER, SIZE & LOCATION OF OPENINGS W/ ARCH. & MECH.

1 OPENING IN ROOF DETAIL
N. T. S.



NOTE:
UNLESS OTHERWISE NOTED, ALL CONCENTRATED LOADS OCCURING @ PLACES OTHER THAN JOIST PANEL POINTS SHALL BE SUPPORTED AS SHOWN

2 CONCENTRATED LOAD ON JOIST DETAIL
NOT TO SCALE



3 TYP. BEAM BEARING ON MASONRY WALL DETAIL
NOT TO SCALE

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
ARKANSAS
JONESBORO,

Engineering Consultants, Inc.
Structural Engineers
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architects
HOT Suite 1 Jonesboro, Suite 3 P.O. Box 1505 Jonesboro, Arkansas 72403-1505 870-932-0971 Fax: 870-932-0972

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 10320 FRANK M. ALLISON 10/24/02

CERTIFICATE OF AUTHORIZATION ENGINEERING CONSULTANTS, INC. No. 28 ARKANSAS ENGINEERS

HIGH ROOF FRAMING PLAN

Commission Number 10301

S3.4

Date: October 25, 2002

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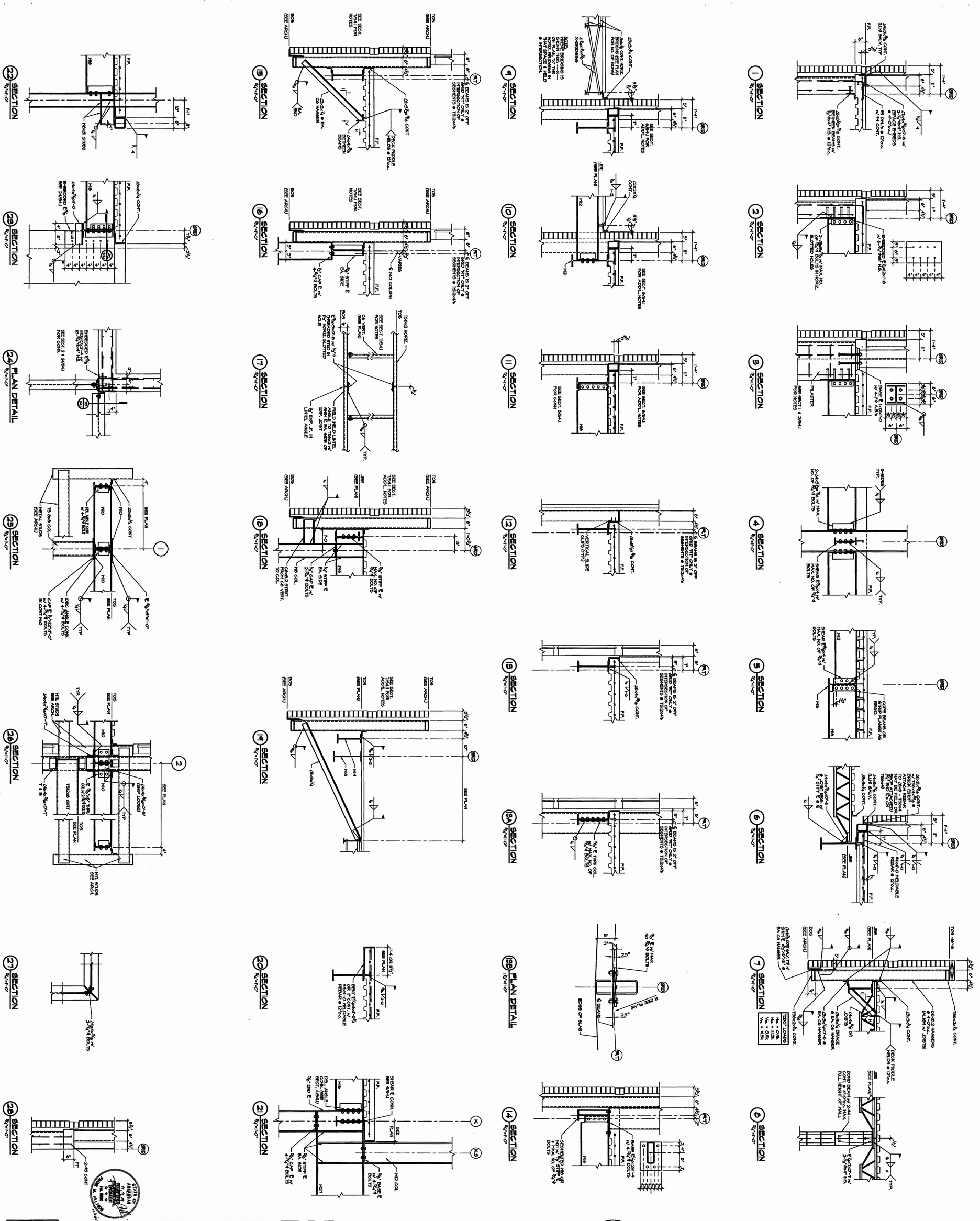

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architects

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Little Rock, AR 72201-3401
Fax Number: 501-376-7314

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100 East Huntington, Suite D P.O. Box 1655 Jonesboro, Arkansas 72403-1655 870-932-0671 Fax 870-932-0976 Email brackett@swbell.net

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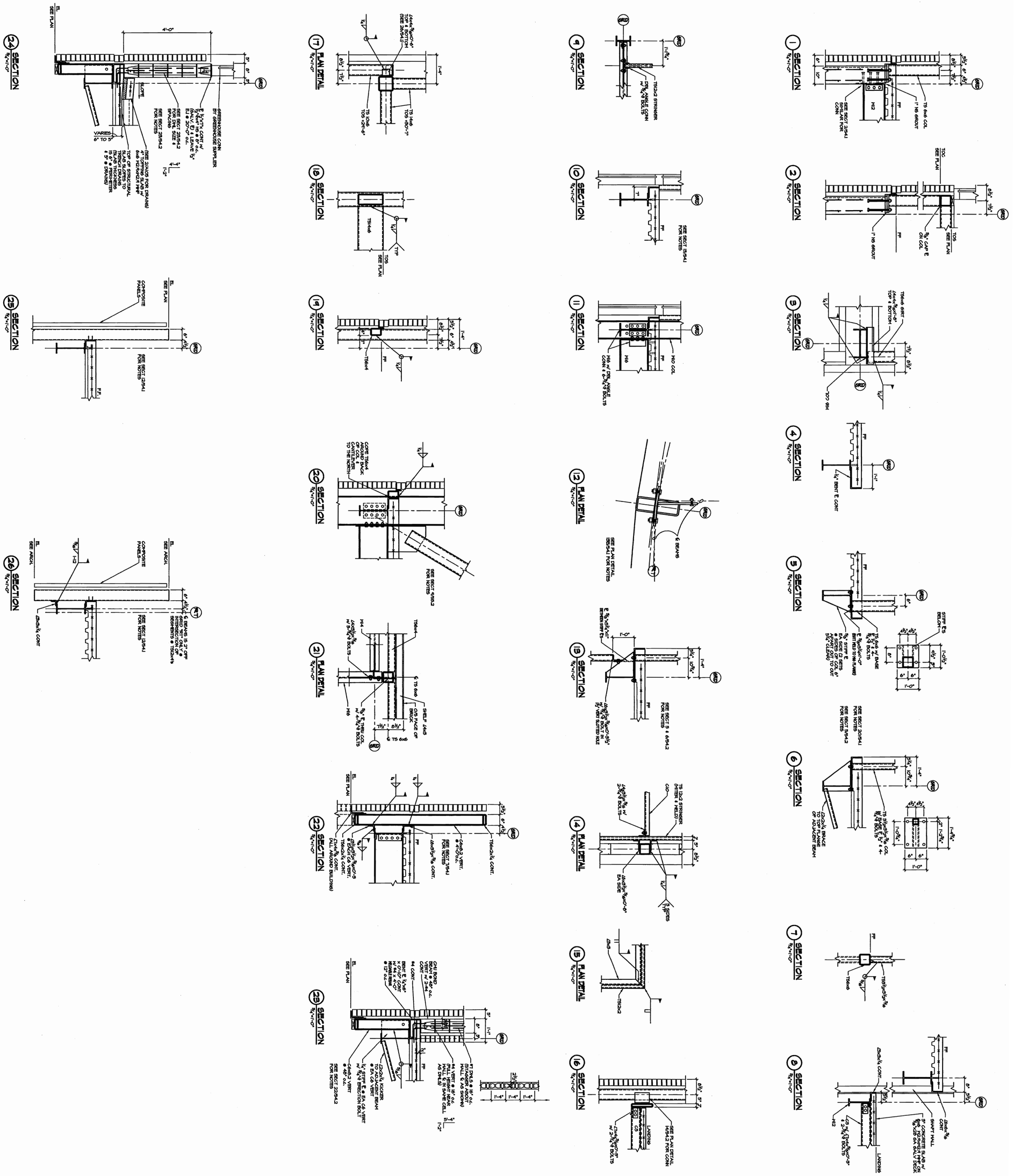

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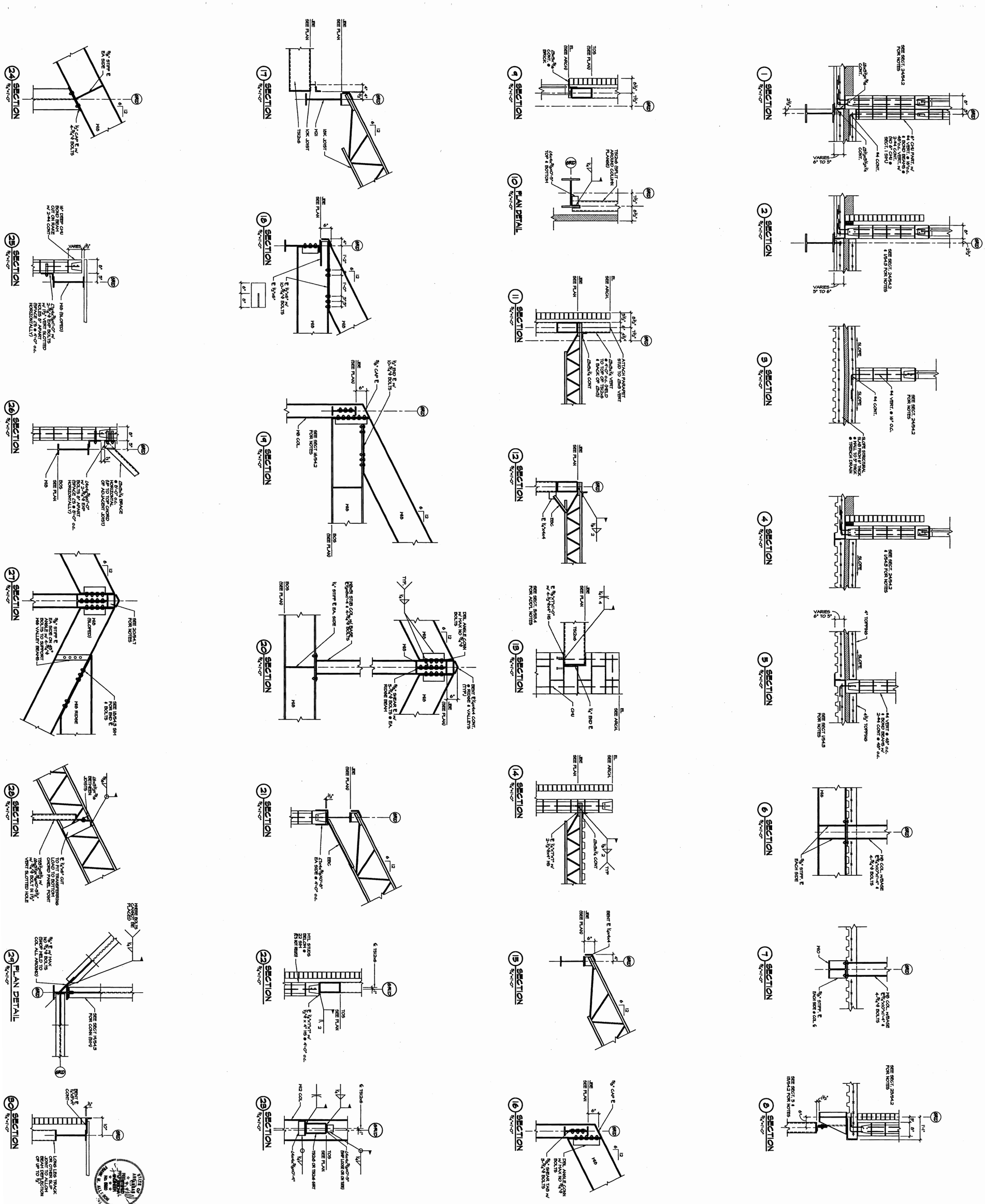
BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

FRAMING DETAILS

Commission Number 1002
S4.2
Date: October 25, 2002

100 East Huntington, Suite B P.O. Box 1656 Jonesboro, Arkansas 72403-1656 870-932-0571 Fax 870-932-0976 Email brackett@fastdata.net



FRAMING DETAILS

Commission Number 1002

S4.3

Date: October 25, 2002

BRACKETT KRENNERICH architects

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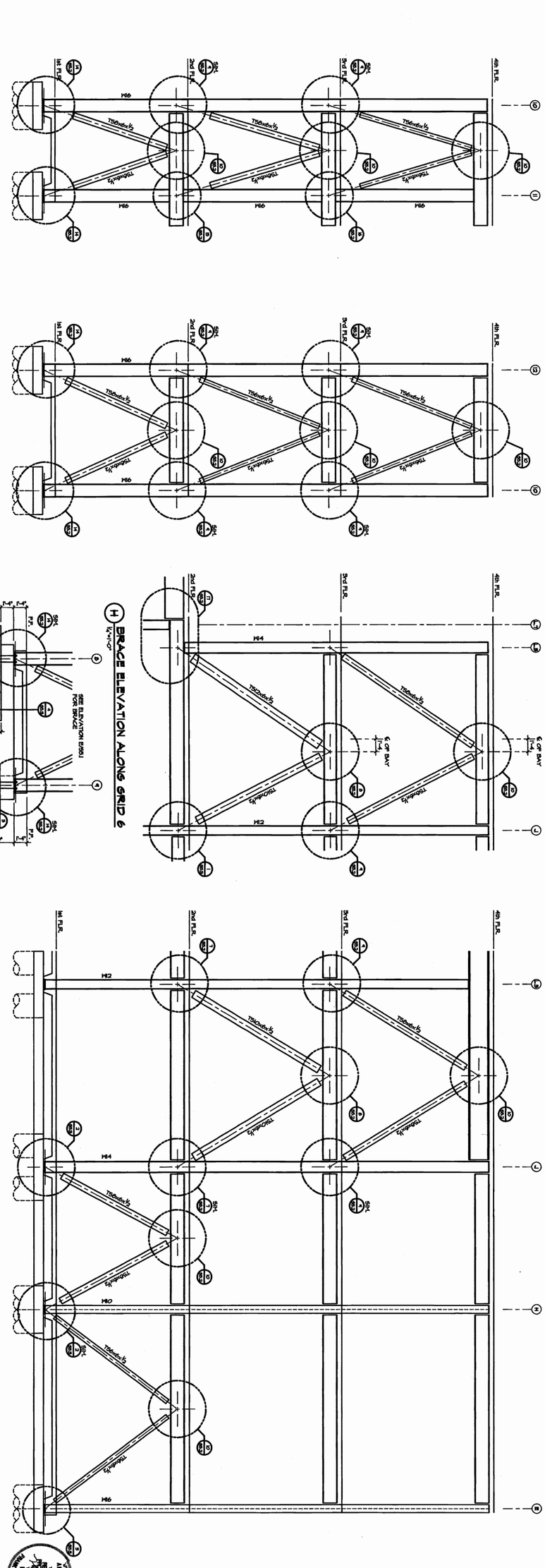
BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS



(A) BRACE ELEVATION ALONG GRIDS 3 & 6
1/4"=1'-0"

(B) BRACE ELEVATION ALONG GRID 4.2
1/4"=1'-0"

(C) BRACE ELEVATION ALONG GRIDS N & K
1/4"=1'-0"

(D) BRACE ELEVATION ALONG GRIDS V & B
1/4"=1'-0"

(E) BRACE ELEVATION ALONG GRID E
1/4"=1'-0"

(F) BRACE ELEVATION ALONG GRID 6
1/4"=1'-0"

(G) BRACE ELEVATION ALONG GRID 9
1/4"=1'-0"

(H) BRACE ELEVATION ALONG GRID 6
1/4"=1'-0"

(J) BRACE ELEVATION ALONG GRID 8
1/4"=1'-0"

(K) BRACE ELEVATION ALONG GRID 9
1/4"=1'-0"

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 8000 W. ALLEN

CERTIFICATE OF AUTHORIZATION ENGINEERING BUSINESS CONSULTANTS No. 28

BRACE ELEVATIONS

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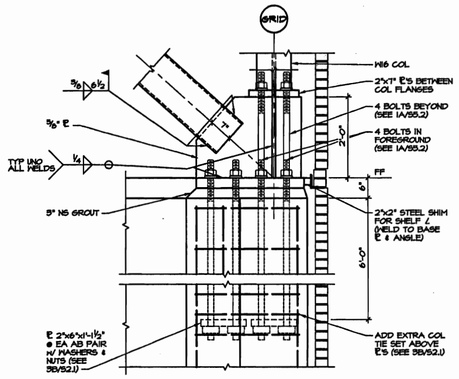
ARKANSAS STATE UNIVERSITY 1909

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

Commission Number 2001
S5.1
Date: October 25, 2002

100 East Huntington, Suite D P.O. Box 1655 Jonesboro, Arkansas 72403-1655 870 932-0071 Fax 870-932-0076 Email brackett@fastdata.net



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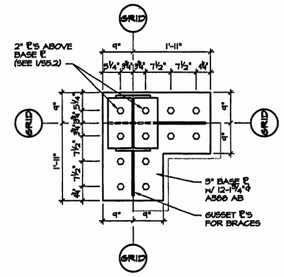

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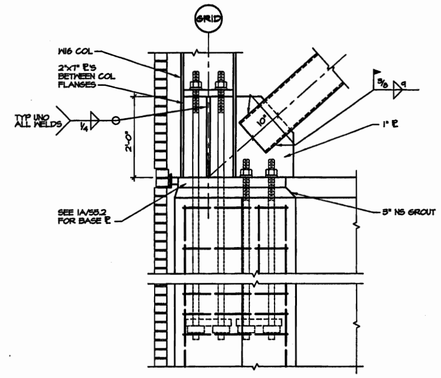

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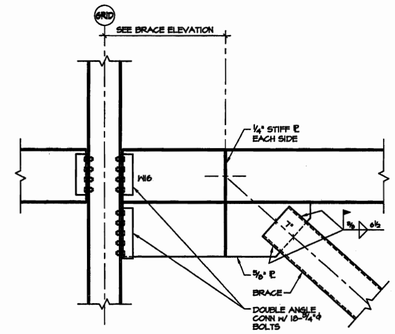

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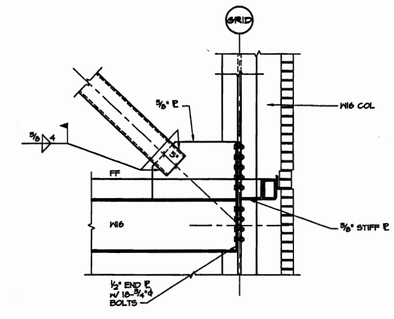

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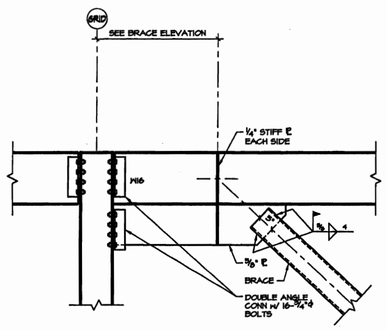

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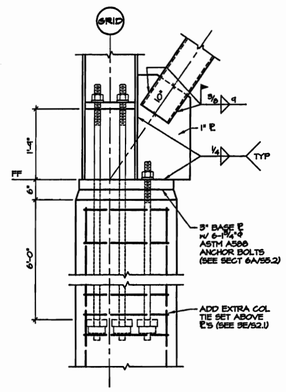

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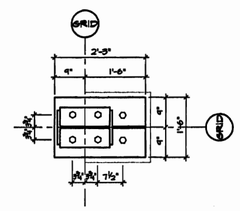

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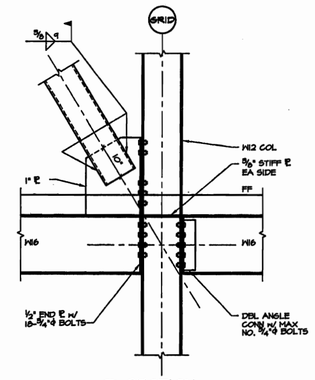

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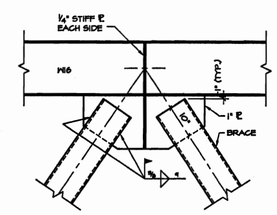

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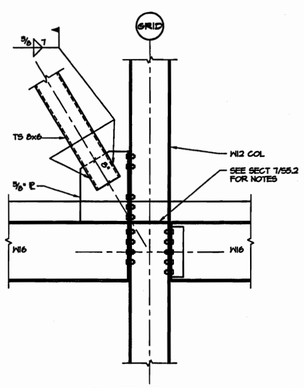

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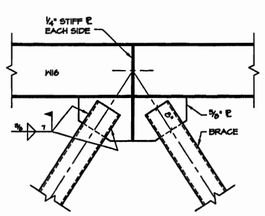

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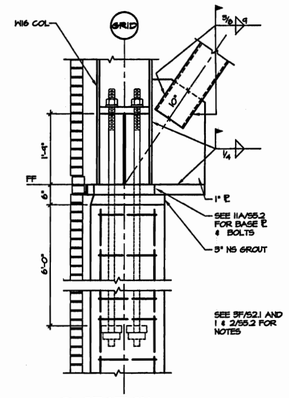

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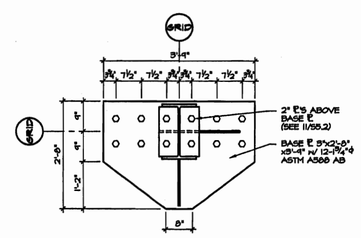

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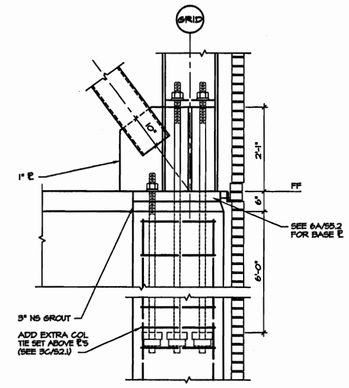

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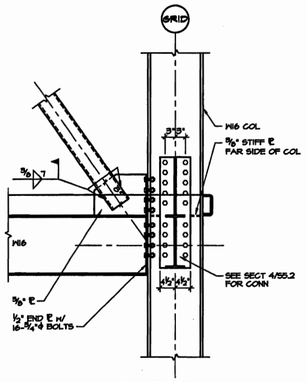

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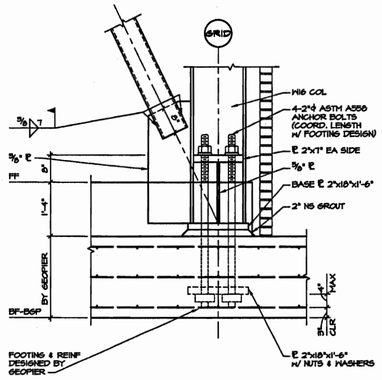

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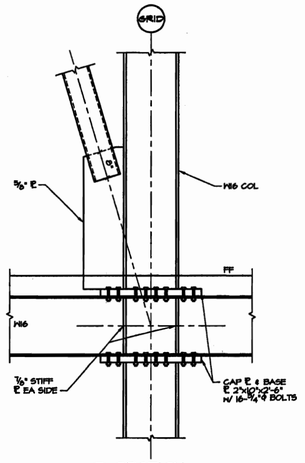

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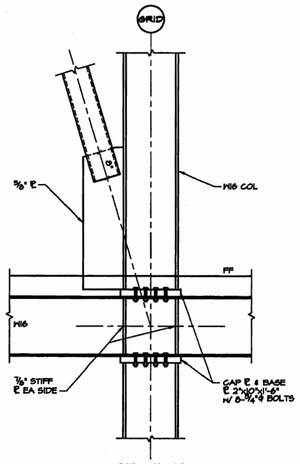

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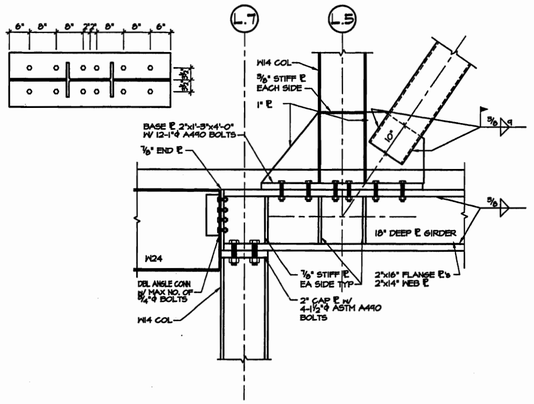

17 SECTION 3/4"=1'-0"

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BRACKETT KRENNERICH architects

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER FRANK M. ALL JR. No. 8680

CERTIFICATE OF AUTHORIZATION ENGINEERING CONSULTANTS, INC. No. 28 ARKANSAS ENGINEERS

BRACE DETAILS

Commission Number 10001

S5.2

Date: October 25, 2002

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(09) 366 0991

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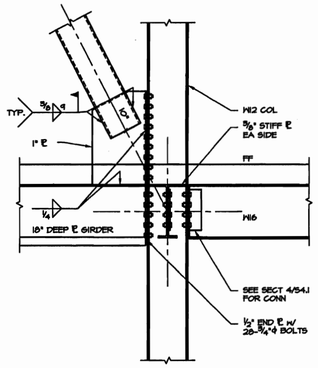

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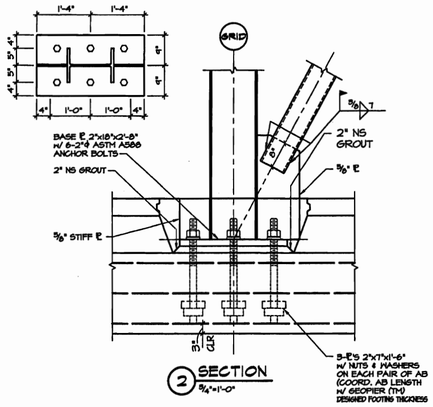

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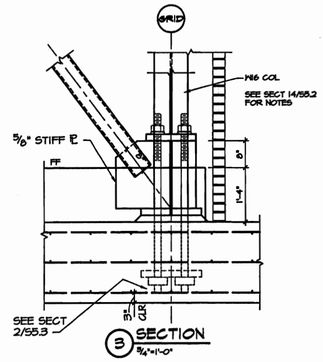

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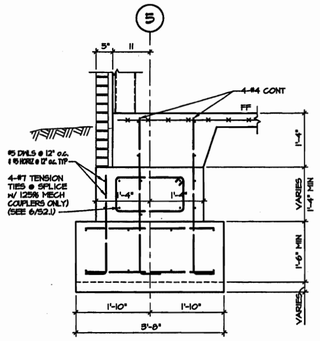

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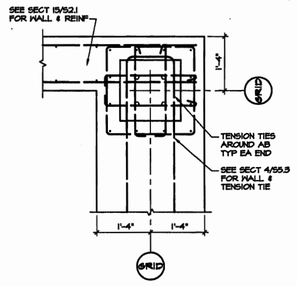

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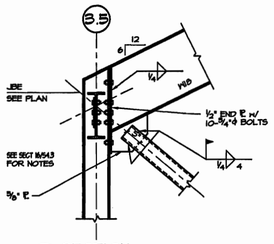

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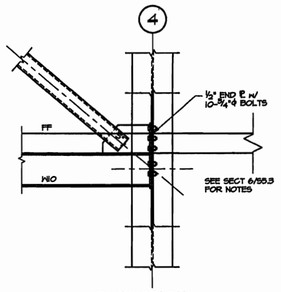

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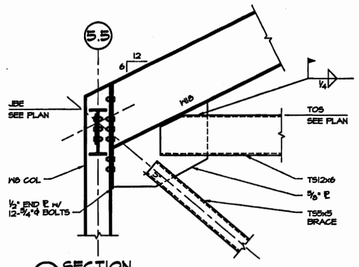

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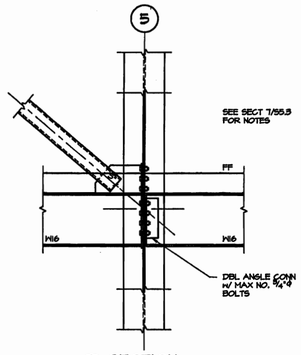

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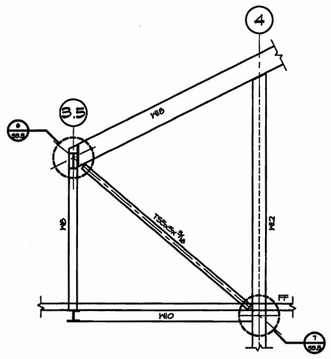

A BRACE ELEVATION @ GRID 15
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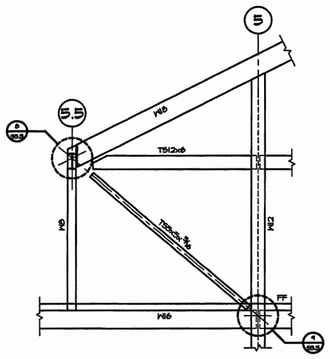

B BRACE ELEVATION @ GRID 15
1/4"=1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 2980 FRANK M. ALLEN

CERTIFICATE OF AUTHORIZATION ENGINEERING CONSULTANTS, INC. No. 28 ARKANSAS ENGINEER

BRACE DETAILS

Commission Number 10301

S5.3

Date: October 25, 2002

Email: brackett@brackett.net

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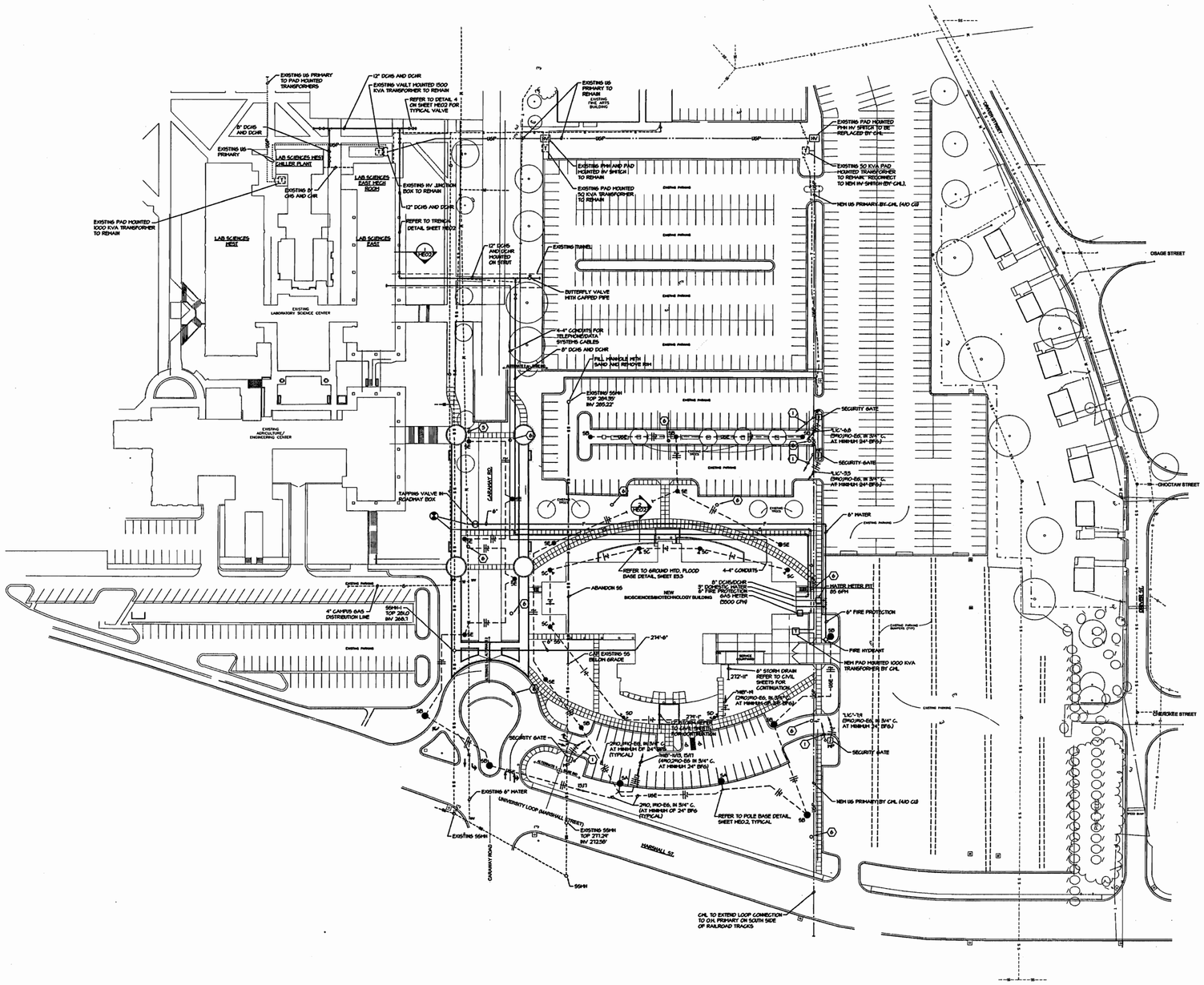

ALTERNATE 1 AND 2

1. ALTERNATE 1 AND 2 DOES NOT INCLUDE DISTRICT CHILLED WATER PIPING, COMMUNICATION CONDUITS, WATER SERVICE, GAS SERVICE AND SANITARY SEWER SERVICE TO THE BIOSCIENCES/BIOTECHNOLOGY BUILDING.
2. ALTERNATE #1 INCLUDES ONLY (2) TYPE #SB LIGHTING POLES, FIXTURES, CONCRETE BASES, AND ELECTRICAL CIRCUITS.
3. ALTERNATE #2 INCLUDES ONLY (5) TYPE #SE LIGHTING POLES, FIXTURES, CONCRETE BASES, AND ELECTRICAL CIRCUIT.

LIGHT FIXTURE SCHEDULE

	TYPE	MANUFACTURER CAT. NO.	LAMP	REMARKS
1 2	SA	KIM RIA-CC2UA4-400HM180-PSP-A346,TRA25-B56-A-PSP	1-400H MH ED28 CLEAR	25' DIAMETER TYPE IV DISTRIBUTION FIXTURE WITH 25'-0" TAPER ROUND ALUMINUM POLE
3	SB	AMERICAN ELECTRIC F245-0-46-4-5-0-A-0-A-0 AND RDE480-2.5-T-H	1-400H MH ED28 CLEAR	SINGLE ASU STANDARD PARKING LOT LIGHT FIXTURE WITH 30'-0" POLE, HAPCO #18-005-PIO
4	SC	KIM RAFL22-250HM271-PSP-A319	1-250H MH ED28 CLEAR	GROUND MOUNTED ON #SHQ/BL-P
4	SD	(2) KIM RAFL22-250HM271-PSP-A319	2-250H MH ED28 CLEAR	GROUND MOUNTED ON #HTH-2B/PS-P AND #SHQ/BL-P
5	SE	AMERICAN ELECTRIC F245-0-46-4-5-0-A-0-A-0 AND RDE480-2.5-T-H	1-400H MH ED28 CLEAR	SINGLE ASU STANDARD HALIGHAY LIGHT FIXTURE WITH 10'-0" POLE, HAPCO #18-012-PIO

KEYED ELECTRICAL NOTES

1. ROUTE 1" CONDIT AT MINIMUM OF 24" BELOW FINISHED GRADE FROM SECURITY GATE CONTROLLER TO CONTROL PANEL ON FIRST FLOOR.
2. TYPE "SA" PARKING LOT POLE FIXTURE REQUIRES (1) PHOTO-CELL. (1) NEMA RECEPTACLE PROVIDED WITH FIXTURE ONLY.
3. REFER TO POLE BASE DETAIL, SHEET ME0.2.
4. REFER TO GROUND MOUNTED FLOOD LIGHT BASE DETAIL, SHEET ME0.2.
5. STUB OUT AND CAP 3/4" CONDUIT FOR FUTURE EXTENSION.
6. REMOVE EXISTING PARKING LOT POLE, BASE, FIXTURE, AND TURN OVER TO OWNER. REMOVE LIGHTING CIRCUIT BACK TO NEAREST POLE LIGHT.

1-800-482-8888

CAUTION !!!

CONTRACTOR MUST HAVE ONE CALL LOCATE AND MARK ALL EXISTING UTILITIES PRIOR TO TRENCHING OR BORING. ELECTRIC CONTRACTOR MUST LOCATE AND MARK ALL EXISTING CONDUITS AND PIPES OWNED BY PROPERTY OWNER PRIOR TO TRENCHING OR BORING.

NOTE:

ELECTRIC CONTRACTOR TO PAY ALL COSTS INCURRED BY SERVING UTILITIES FOR ALL NEW AND RELOCATED UTILITY SERVICES TO EACH BUILDING AND ON SITE.

BIOSCIENCES / BIOTECHNOLOGY BUILDING

ARKANSAS STATE UNIVERSITY

JONESBORO, ARKANSAS

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ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 7561 BRANDON K. TINSLEY

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 1994 WILLIAM E. TINSLEY

CORPORATE REGISTRATION TINSLEY-MULLER ENGINEERS, INC. No. 178 ARKANSAS ENGINEER

SITE PLAN
MECHANICAL
AND ELECTRICAL

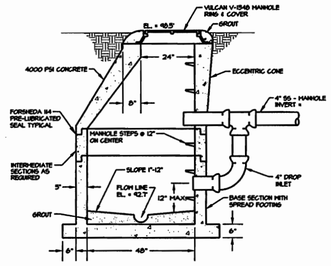
Commission Number 10301

ME0.1

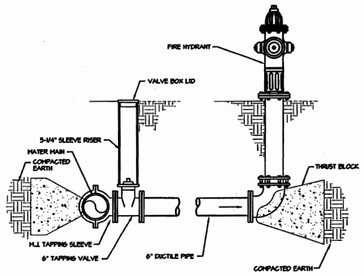
Date: October 25, 2002

site plan - mechanical and electrical

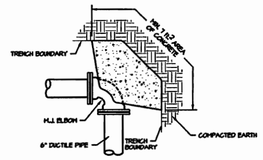
SCALE: 1" = 50'-0"



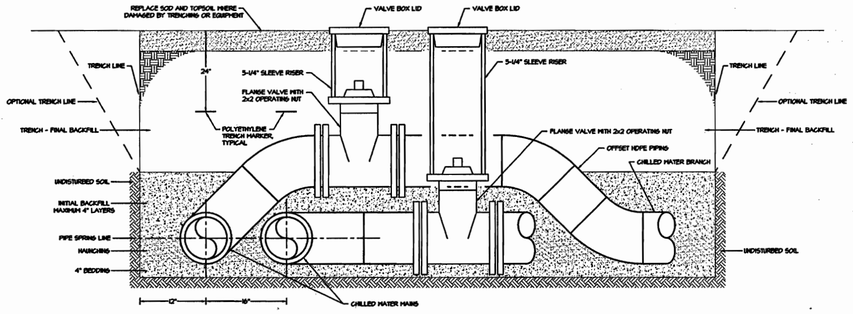
1 MANHOLE DETAIL
NOT TO SCALE



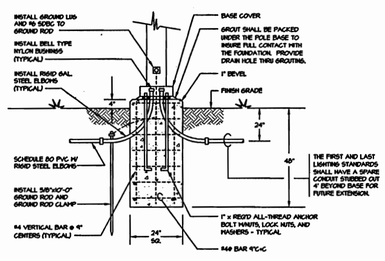
2 FIRE HYDRANT DETAIL
NOT TO SCALE



3 TYPICAL THRUST BLOCK DETAIL
NOT TO SCALE



4 BELOW GRADE VALVE DETAIL
NOT TO SCALE

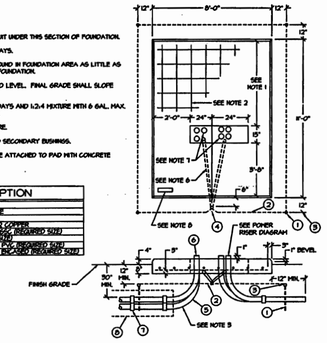


5 LIGHT POLE BASE DETAIL
NOT TO SCALE

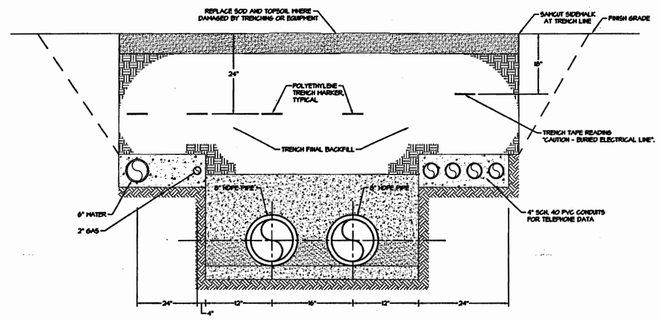
NOTE:

1. WHERE POSSIBLE, DO NOT PLACE CONDUIT UNDER THIS SECTION OF FOUNDATION.
2. REINFORCING: #4 BARS 12" C.C. BOTH WAYS.
3. WHEN INSTALLING CONDUIT, DISTURB GROUND IN FOUNDATION AREA AS LITTLE AS POSSIBLE. EXTEND CONDUIT 1' ABOVE FOUNDATION.
4. TOP OF FOUNDATION TO BE SMOOTH AND LEVEL. FINAL GRADE SHALL SLOPE AWAY FROM PAD.
5. CONCRETE SHALL BE 3500 PSI AT 28 DAYS AND 1-3-4 MIXTURE WITH 6 GAL. MAX. WATER CONTENT PER SACK OF CEMENT.
6. 1" CONDUIT UNDER PAD FOR GROUND WIRE.
7. LOCATE CONDUITS UNDER PRIMARY AND SECONDARY BUSHINGS.
8. TRANSFORMER LOCATION TAB SHALL BE ATTACHED TO PAD WITH CONCRETE NAILS OR SHEET METAL SCREWS.

ITEM	DESCRIPTION
1.	3/0 - 5/8" - 8' GROUND ROD
2.	CONDUCTOR, COPPER, BARE
3.	3/0 - 5/8" - 8' GROUND ROD
4.	CONNECTOR, COMPRESSION, 90 COPPER
5.	CONDUIT, 90 DEGREE ELBOW, RIGID (REQUIRED SIZE)
6.	CONDUIT, RIGID (REQUIRED SIZE)
7.	ADAPTER, CONDUIT, MALE, TAP BOX (REQUIRED SIZE)
8.	CONDUIT, PVC, SCH. 40, SOLID (REQUIRED SIZE)

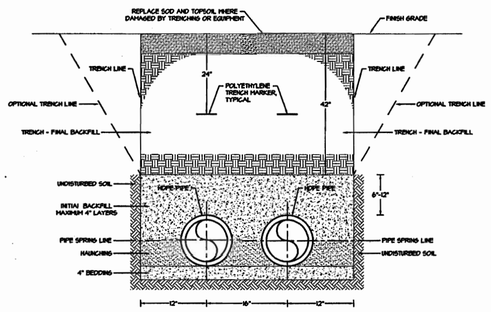


6 TRANSFORMER PAD DETAIL
NOT TO SCALE



NOTE:
TRENCH AND PIPE PLACEMENT DIMENSIONS SIMILAR TO SECTION 5.
TRENCH AND CONDUIT PLACEMENT DIMENSIONS SIMILAR TO SECTION 3.

52 / ME1.0 PIPE TRENCH DETAIL
NOT TO SCALE



BEDDING - CRUSHED STONE OR FINE GRAVEL
- USE FOR LEVELING PIPE, UNSUITABLE SOIL OR ROCKY CONDITIONS.
HAUNCHING - CRUSHED STONE OR FINE GRAVEL.
- APPLIED IN MAXIMUM OF 6" LAYERS, AND EACH LAYER TAMPED INTO PLACE REMOVING ALL VOIDS BELOW PIPE.
INITIAL BACKFILL - CRUSHED STONE OR FINE GRAVEL - LAY IN 4"-6" LIFTS AND TAMPED SIMULTANEOUSLY.

51 / ME1.0 PIPE TRENCH DETAIL
NOT TO SCALE

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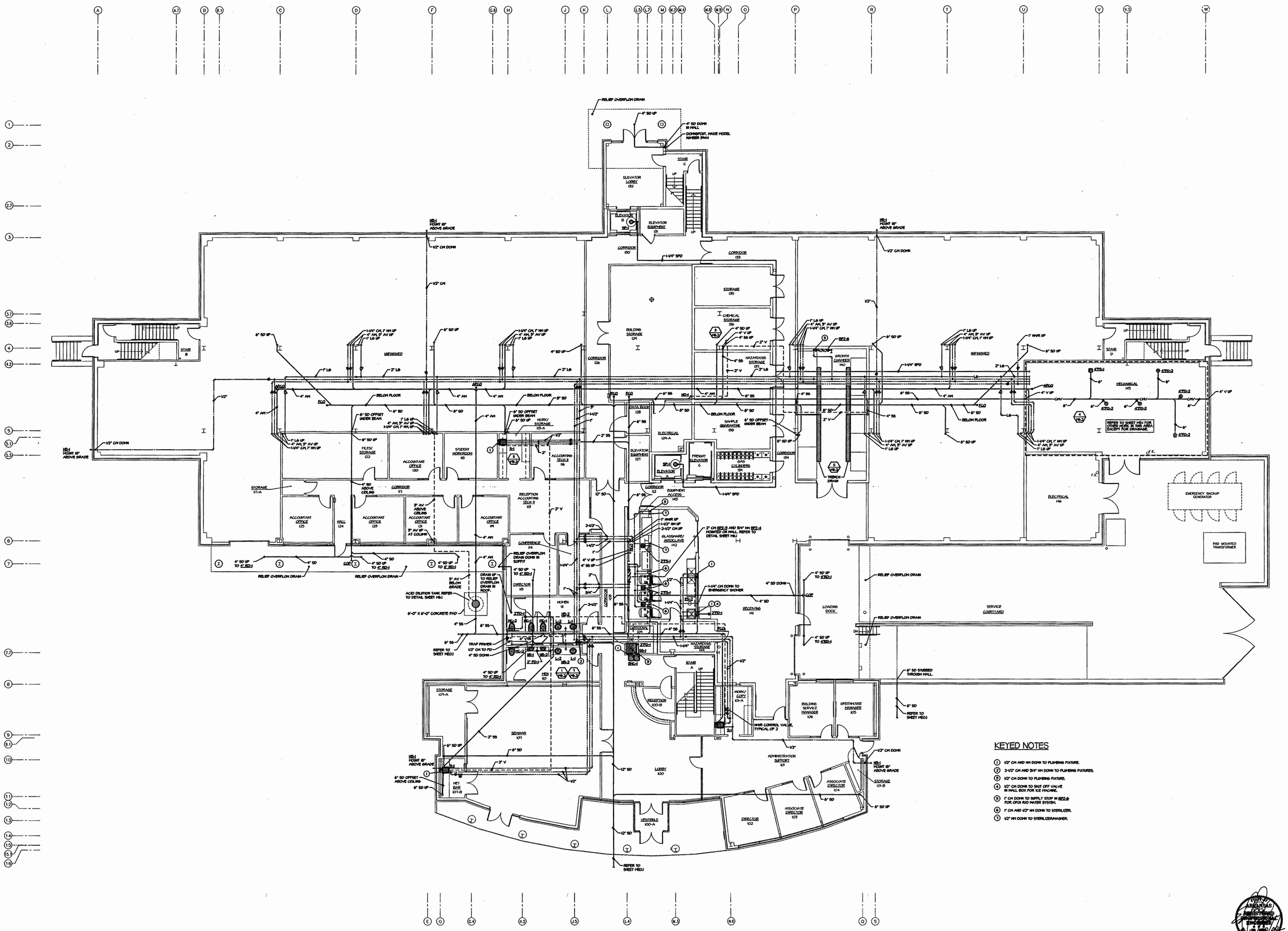
SITE PLAN DETAILS

Commission Number 10301

ME0.2

Date: October 25, 2002



KEYED NOTES

1. 1/2" CH AND HH DOWN TO PLUMBING FIXTURE.
2. 2-1/2" CH AND 3/4" HH DOWN TO PLUMBING FIXTURES.
3. 1/2" CH DOWN TO PLUMBING FIXTURE.
4. 1/2" CH DOWN TO SHUT OFF VALVE IN WALL BOX FOR ICE MACHINE.
5. 1" CH DOWN TO SUPPLY STOP IN RPZ-5 FOR OPGI R/O WATER SYSTEM.
6. 1" CH AND 1/2" HH DOWN TO STERILIZER.
7. 1/2" HH DOWN TO STERILIZER/WASHER.

first floor plan - plumbing

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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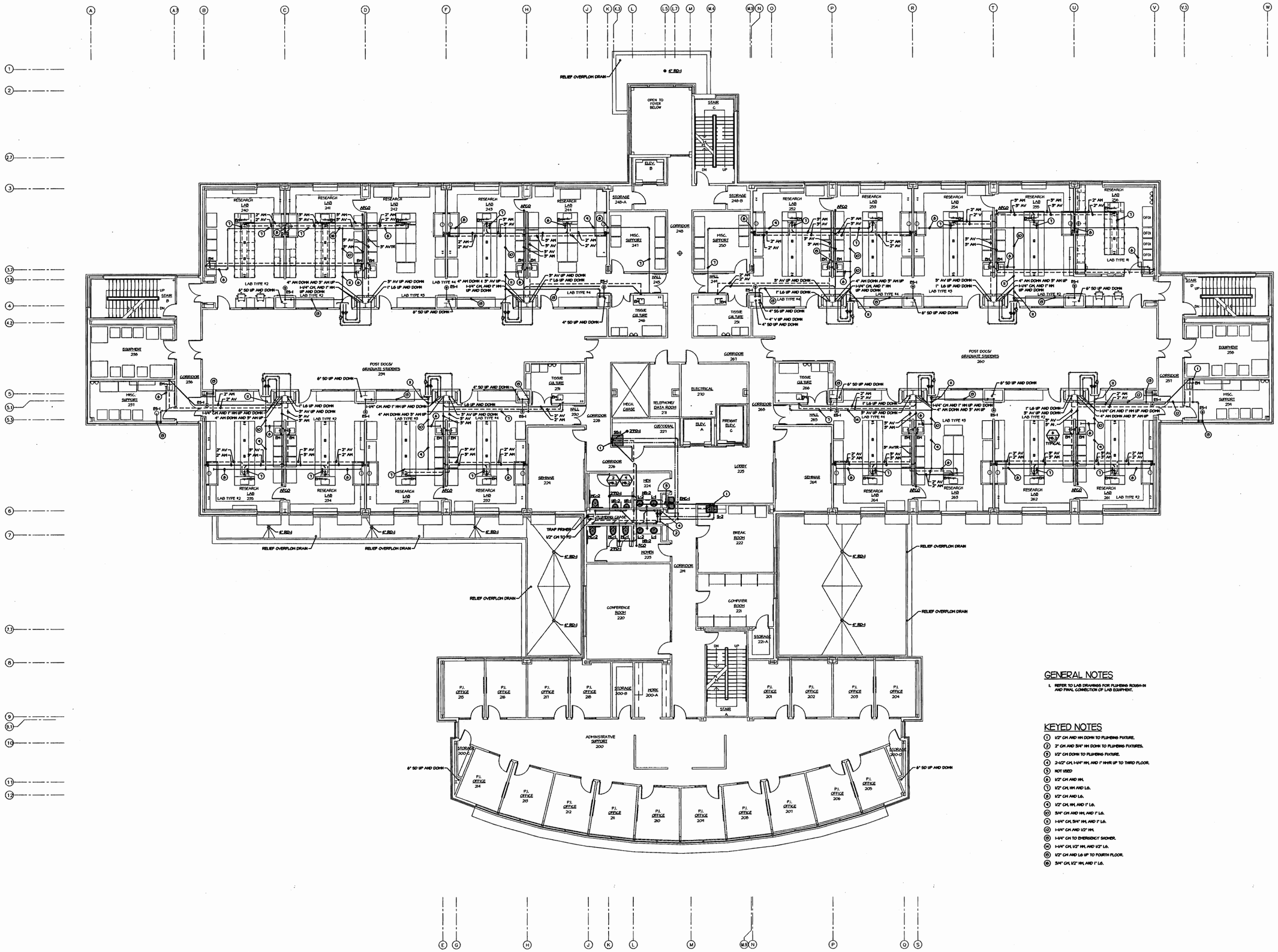
FIRST FLOOR PLAN PLUMBING

Commission Number 10301

M2.1

Date: October 25, 2002



GENERAL NOTES

1. REFER TO LAB DRAWINGS FOR PLUMBING ROUGH-IN AND FINAL CONNECTION OF LAB EQUIPMENT.

KEYED NOTES

1. 1/2" CH AND HH DOWN TO PLUMBING FIXTURE.
2. 2" CH AND 3/4" HH DOWN TO PLUMBING FIXTURES.
3. 1/2" CH DOWN TO PLUMBING FIXTURE.
4. 2-1/2" CH, 1-1/4" HH, AND 1" HHR UP TO THIRD FLOOR.
5. NOT USED
6. 1/2" CH AND HH.
7. 1/2" CH, HH AND L6.
8. 1/2" CH AND L6.
9. 1/2" CH, HH, AND 1" L6.
10. 3/4" CH AND HH, AND 1" L6.
11. 1-1/4" CH, 3/4" HH, AND 1" L6.
12. 1-1/4" CH AND 1/2" HH.
13. 1-1/4" CH TO EMERGENCY SHOWER.
14. 1-1/4" CH, 1/2" HH, AND 1/2" L6.
15. 1/2" CH AND L6 UP TO FOURTH FLOOR.
16. 3/4" CH, 1/2" HH, AND 1" L6.

second floor plan - plumbing

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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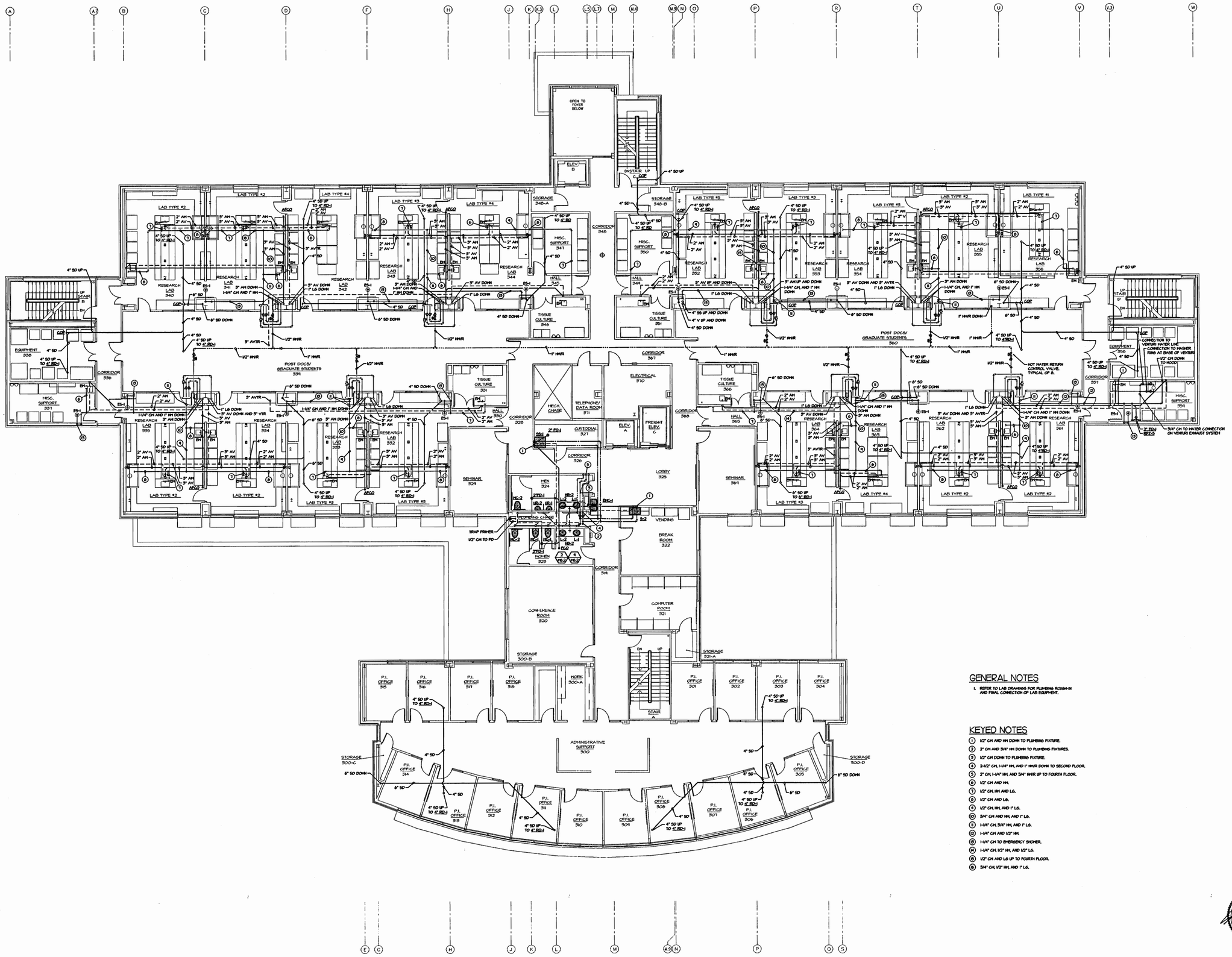
SECOND FLOOR PLAN PLUMBING

Commission Number 10301

M2.2

Date: October 25, 2002



GENERAL NOTES

1. REFER TO LAB DRAWINGS FOR PLUMBING ROUGH-IN AND FINAL CONNECTION OF LAB EQUIPMENT.

KEYED NOTES

1. 1/2" CH AND HH DOWN TO PLUMBING FIXTURE.
2. 2" CH AND 3/4" HH DOWN TO PLUMBING FIXTURES.
3. 1/2" CH DOWN TO PLUMBING FIXTURE.
4. 2-1/2" CH, 1-1/4" HH, AND 1" HWR DOWN TO SECOND FLOOR.
5. 2" CH, 1-1/4" HH, AND 3/4" HWR UP TO FOURTH FLOOR.
6. 1/2" CH AND HH.
7. 1/2" CH, HH AND LG.
8. 1/2" CH AND LG.
9. 1/2" CH, HH, AND 1" LG.
10. 3/4" CH AND HH, AND 1" LG.
11. 1-1/4" CH, 3/4" HH, AND 1" LG.
12. 1-1/4" CH AND 1/2" HH.
13. 1-1/4" CH TO EMERGENCY SHOWER.
14. 1-1/4" CH, 1/2" HH, AND 1/2" LG.
15. 1/2" CH AND LG UP TO FOURTH FLOOR.
16. 3/4" CH, 1/2" HH, AND 1" LG.

third floor plan - plumbing

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

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER

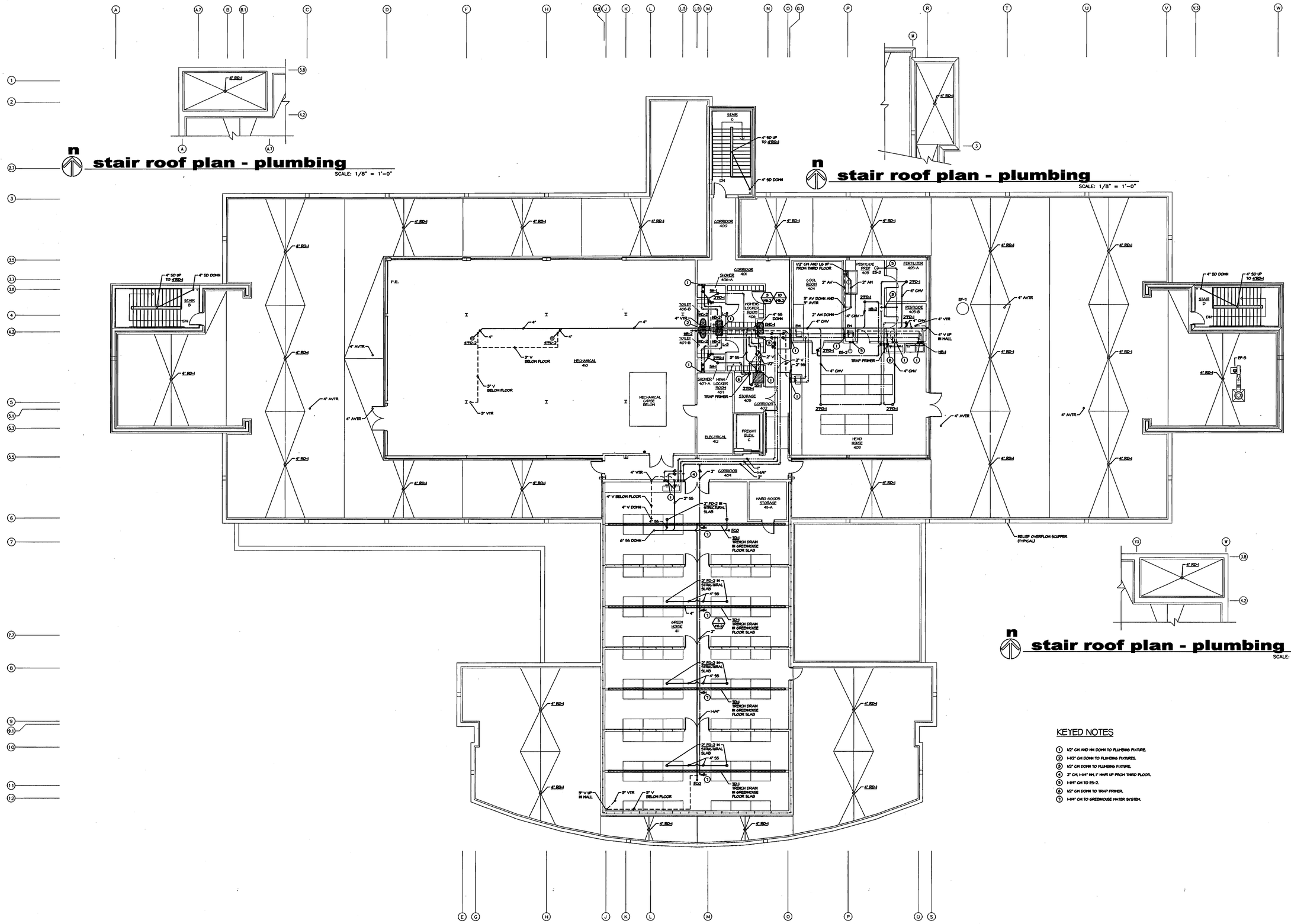
CORPORATE REGISTRATION TOWSLEY-HULLIN ENGINEERS, INC. No. 178 ARKANSAS ENGINEER

THIRD FLOOR PLAN PLUMBING

Commission Number 10301

M2.3

Date: October 25, 2002



KEYED NOTES

1. 1/2" CH AND HH DOWN TO PLUMBING FIXTURE.
2. 1-1/2" CH DOWN TO PLUMBING FIXTURES.
3. 1/2" CH DOWN TO PLUMBING FIXTURE.
4. 2" CH, 1-1/4" HH, 1" HWR UP FROM THIRD FLOOR.
5. 1-1/4" CH TO ES-2.
6. 1/2" CH DOWN TO TRAP PRIMER.
7. 1-1/4" CH TO GREENHOUSE WATER SYSTEM.

fourth floor plan - plumbing
SCALE: 1/8" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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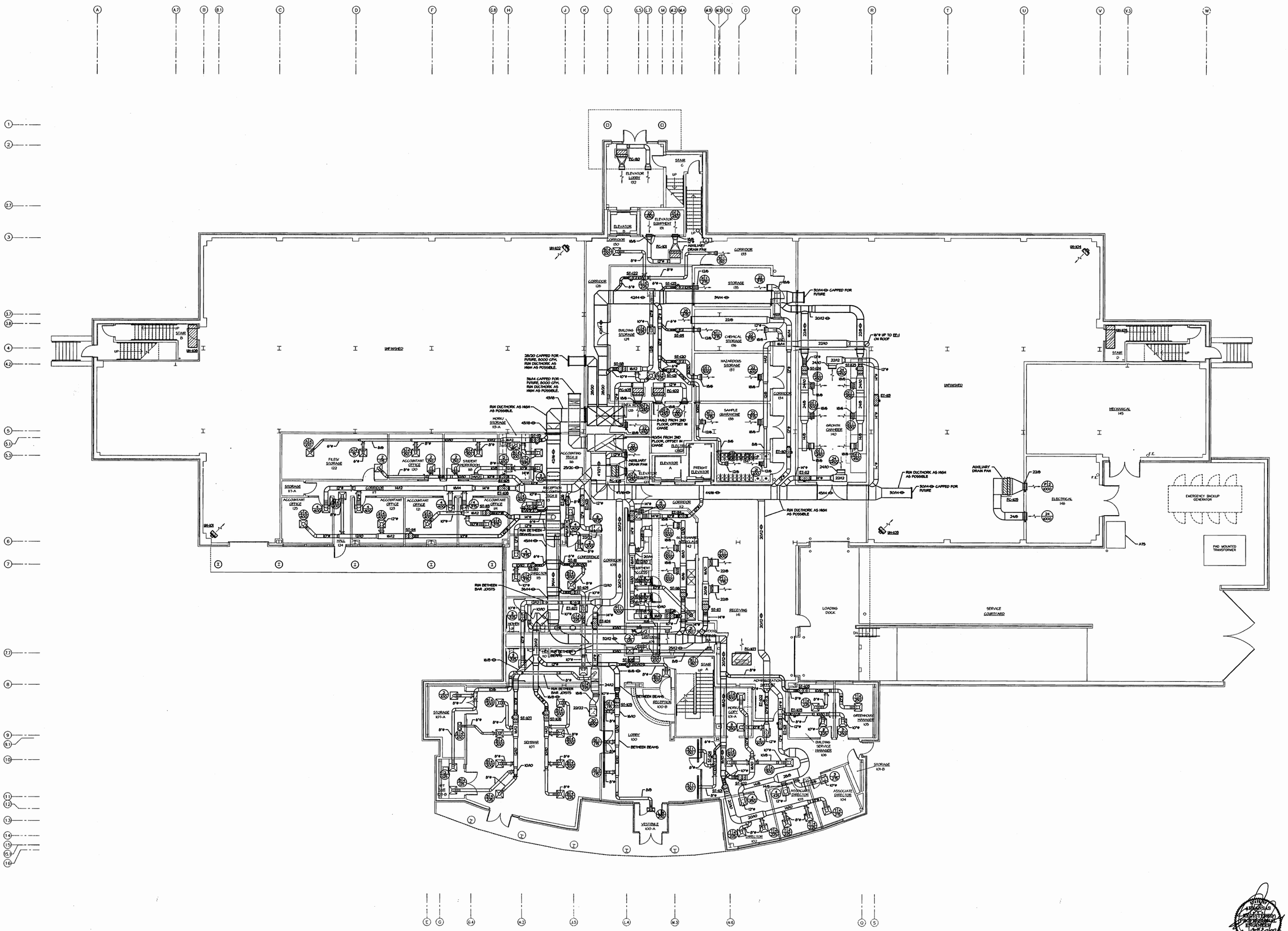
FOURTH FLOOR PLAN PLUMBING

Commission Number 10301

M2.4

Date: October 25, 2002



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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER WILLIAM E. TIMSLEY

CORPORATE REGISTRATION TIMSLEY-MULLEN ENGINEERS, INC. No. 178 ARKANSAS ENGINEER

FIRST FLOOR PLAN
HVAC DUCTWORK

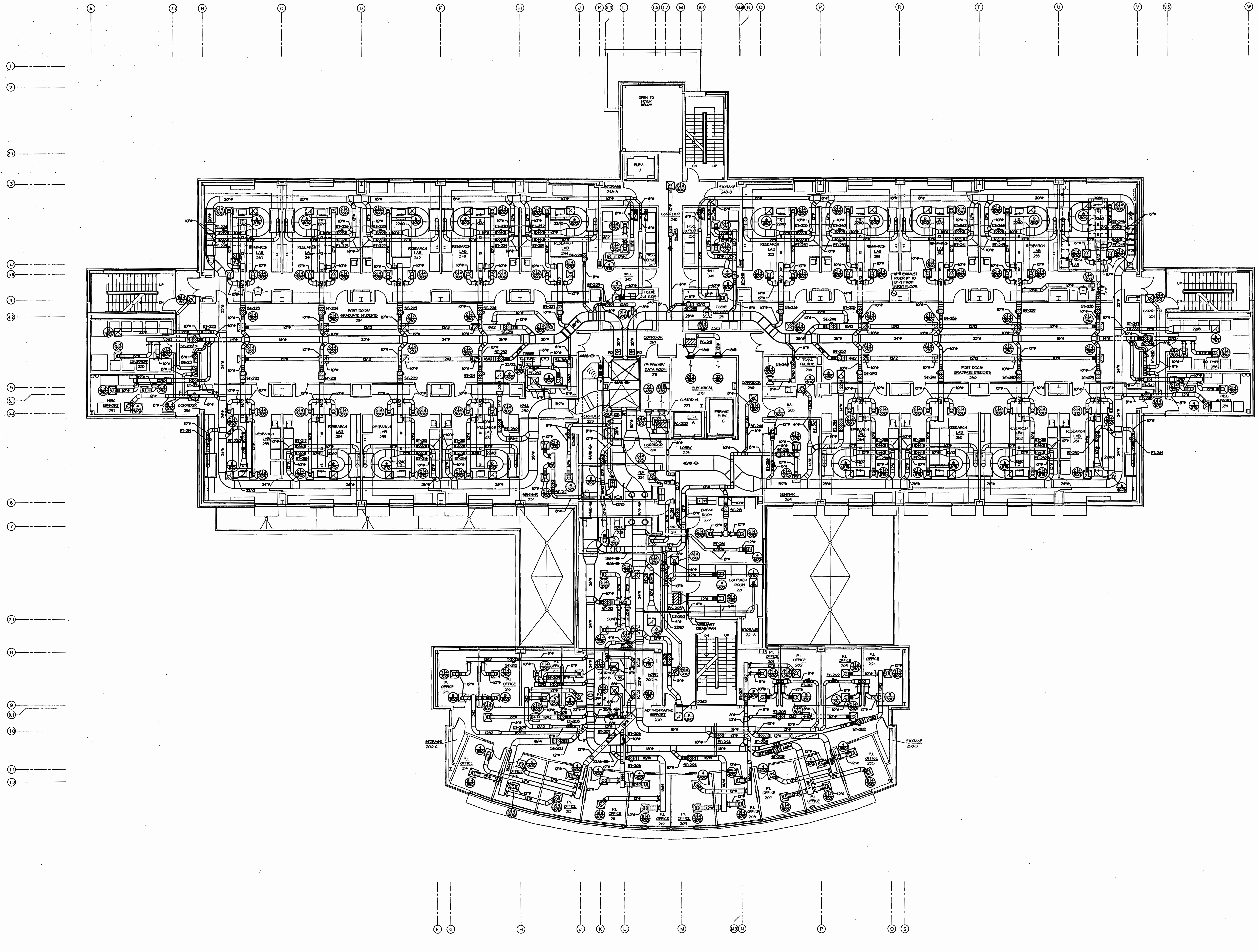
Commission Number
10301

M2.5

Date: October 25, 2002

first floor plan - HVAC ductwork

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



n **second floor plan - HVAC ductwork**

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

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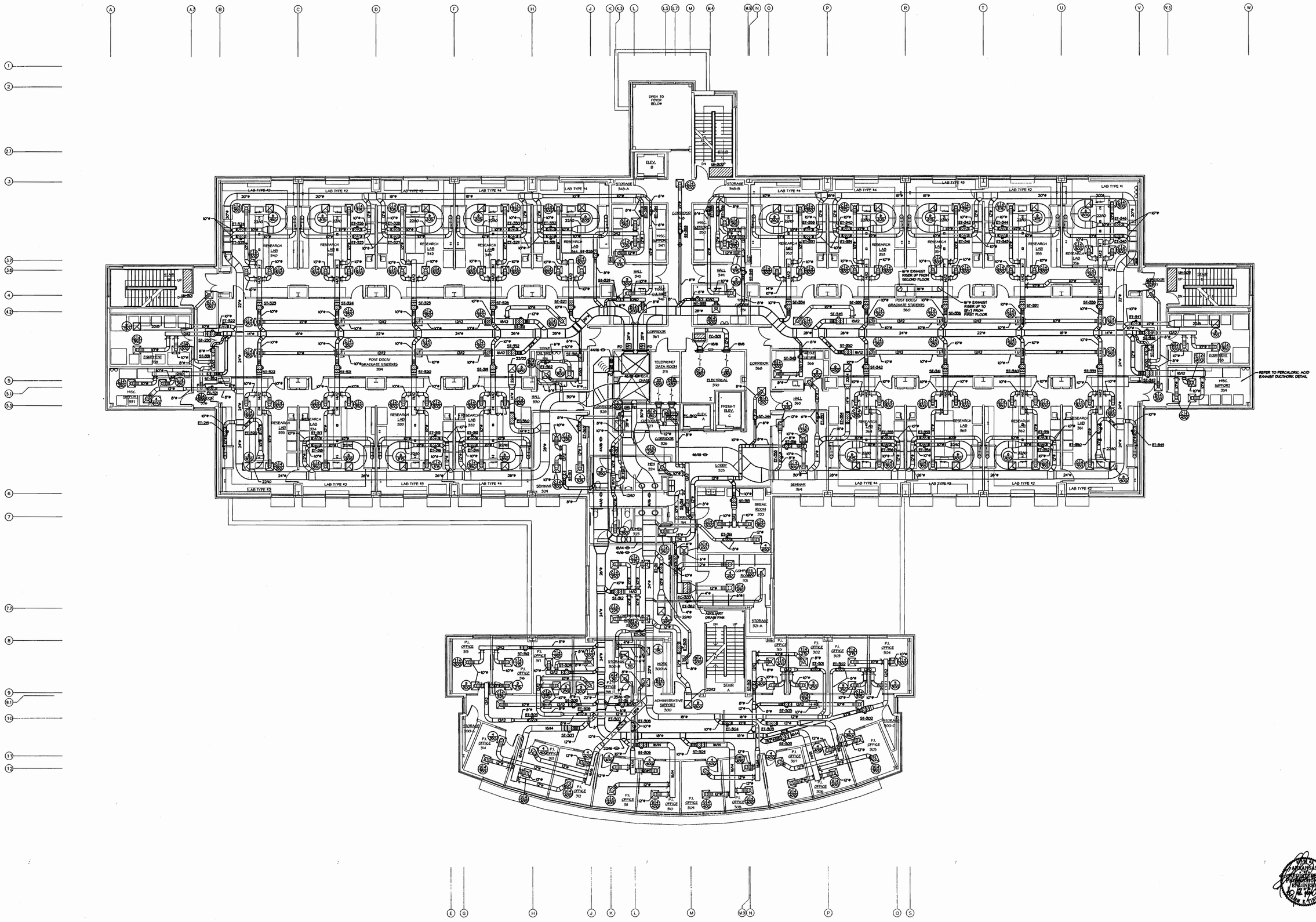
BRACKETT KRENNERICH
architects

SECOND FLOOR PLAN
HVAC DUCTWORK

Commission Number
10301

M2.6

Date: October 25, 2002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ELEV. B
STORAGE 340-A
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LAB TYPE #2
LAB TYPE #3
LAB TYPE #4
LAB TYPE #1
RESEARCH LAB 340
RESEARCH LAB 342
RESEARCH LAB 344
RESEARCH LAB 355
RESEARCH LAB 356
RESEARCH LAB 333
RESEARCH LAB 334
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RESEARCH LAB 362
RESEARCH LAB 363
RESEARCH LAB 364
HALL 340
HALL 341
HALL 350
HALL 360
CORRIDOR 367
CORRIDOR 368
CORRIDOR 326
CORRIDOR 321
POST DOCS/ GRADUATE STUDENTS 334
POST DOCS/ GRADUATE STUDENTS 360
TELEPHONE/ DATA ROOM 311
ELECTRICAL 310
FREIGHT ELEV. C
ELEV. A
LOBBY 325
SEMINAR 324
SEMINAR 364
BREAK ROOM 322
COMPUTER ROOM 301
AUXILIARY DRAIN PAN
STORAGE 321-A
STAIR A
ADMINISTRATIVE SUPPORT 300
P.I. OFFICE 301
P.I. OFFICE 302
P.I. OFFICE 303
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P.I. OFFICE 305
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P.I. OFFICE 312
P.I. OFFICE 313
P.I. OFFICE 314
P.I. OFFICE 315
P.I. OFFICE 316
16"ø EXHAUST RISER UP FROM SECOND FLOOR
16"ø EXHAUST RISER UP TO EF-1 FROM FIRST FLOOR
REFER TO PERCLORIC ACID EXHAUST DUCTWORK DETAIL
EQUIPMENT 315
EQUIPMENT 316
MISC. SUPPORT 331
MISC. SUPPORT 351
MISC. SUPPORT 352
MISC. SUPPORT 353
MISC. SUPPORT 354
MISC. SUPPORT 300-A
MISC. SUPPORT 300-B
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STORAGE 300-UD
STORAGE 300-UE
STORAGE 300-UF
STORAGE 300-UG
STORAGE 300-UH
STORAGE 300-UI
STORAGE 300-UJ
STORAGE 300-UK
STORAGE 300-UL
STORAGE 300-UM
STORAGE 300-UN
STORAGE 300-UO
STORAGE 300-UP
STORAGE 300-UQ
STORAGE 300-UR
STORAGE 300-US
STORAGE 300-UT
STORAGE 300-UU
STORAGE 300-UV
STORAGE 300-UW
STORAGE 300-UX
STORAGE 300-UY
STORAGE 300-UZ
STORAGE 300-VA
STORAGE 300-VB
STORAGE 300-VC
STORAGE 300-VD
STORAGE 300-VE
STORAGE 300-VF
STORAGE 300-VG
STORAGE 300-VH
STORAGE 300-VI
STORAGE 300-VJ
STORAGE 300-VK
STORAGE 300-VL
STORAGE 300-VM
STORAGE 300-VN
STORAGE 300-VO
STORAGE 300-VP
STORAGE 300-VQ
STORAGE 300-VR
STORAGE 300-VS
STORAGE 300-VT
STORAGE 300-VU
STORAGE 300-VV
STORAGE 300-VW
STORAGE 300-VX
STORAGE 300-VY
STORAGE 300-VZ
STORAGE 300-WA
STORAGE 300-WB
STORAGE 300-WC
STORAGE 300-WD
STORAGE 300-WE
STORAGE 300-WF
STORAGE 300-WG
STORAGE 300-WH
STORAGE 300-WI
STORAGE 300-WJ
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STORAGE 300-WT
STORAGE 300-WU
STORAGE 300-WV
STORAGE 300-WW
STORAGE 300-WX
STORAGE 300-WY
STORAGE 300-WZ
STORAGE 300-XA
STORAGE 300-XB
STORAGE 300-XC
STORAGE 300-XD
STORAGE 300-XE
STORAGE 300-XF
STORAGE 300-XG
STORAGE 300-XH
STORAGE 300-XI
STORAGE 300-XJ
STORAGE 300-XK
STORAGE 300-XL
STORAGE 300-XM
STORAGE 300-XN
STORAGE 300-XO
STORAGE 300-XP
STORAGE 300-XQ
STORAGE 300-XR
STORAGE 300-XS
STORAGE 300-XT
STORAGE 300-XU
STORAGE 300-XV
STORAGE 300-XW
STORAGE 300-XX
STORAGE 300-XY
STORAGE 300-XZ
STORAGE 300-YA
STORAGE 300-YB
STORAGE 300-YC
STORAGE 300-YD
STORAGE 300-YE
STORAGE 300-YF
STORAGE 300-YG
STORAGE 300-YH
STORAGE 300-YI
STORAGE 300-YJ
STORAGE 300-YK
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STORAGE 300-YV
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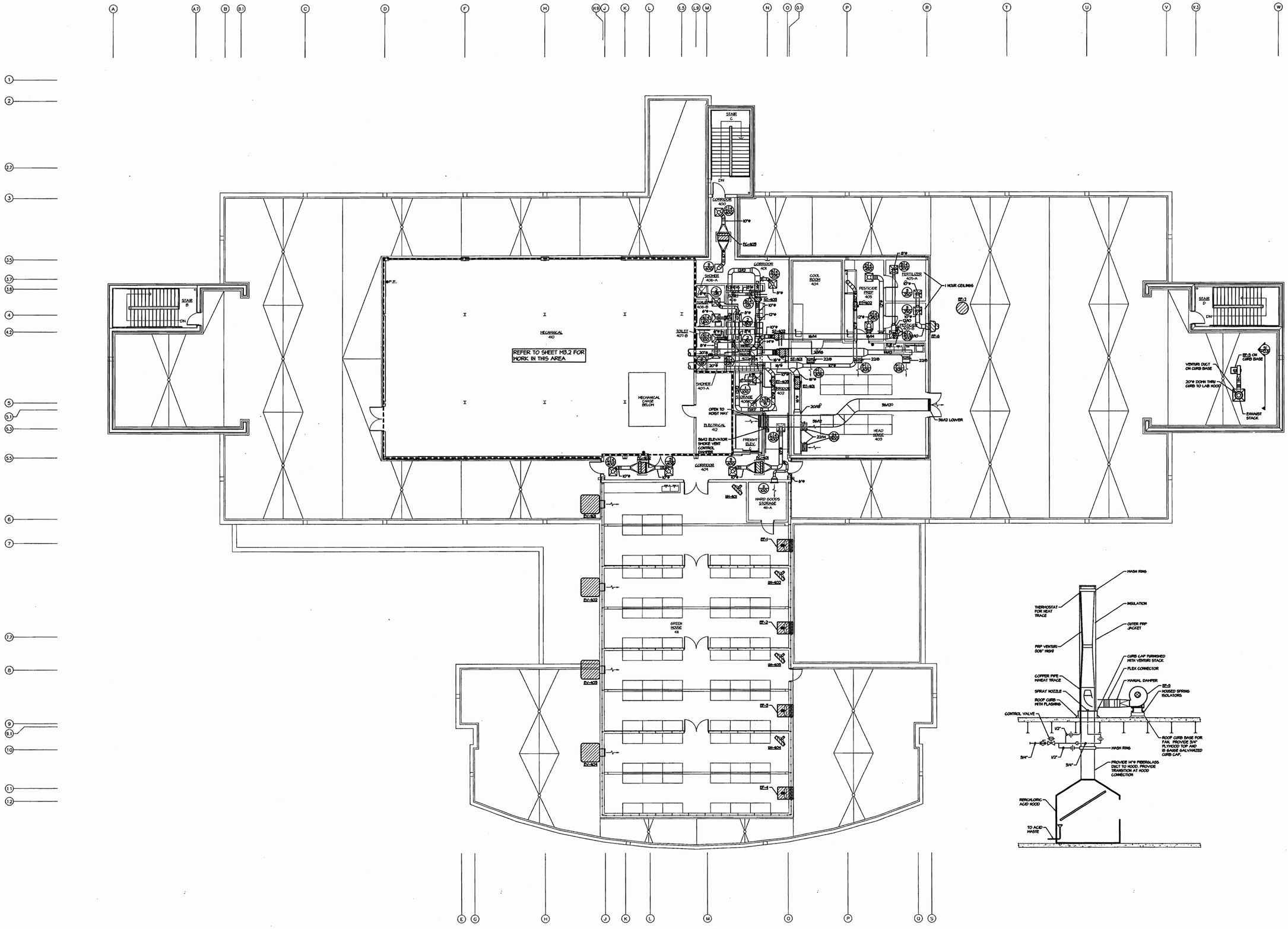

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205 East Pennington, Suite D P.O. Box 1665 Jonesboro, Arkansas 72403

FOURTH FLOOR PLAN
HVAC DUCTWORK

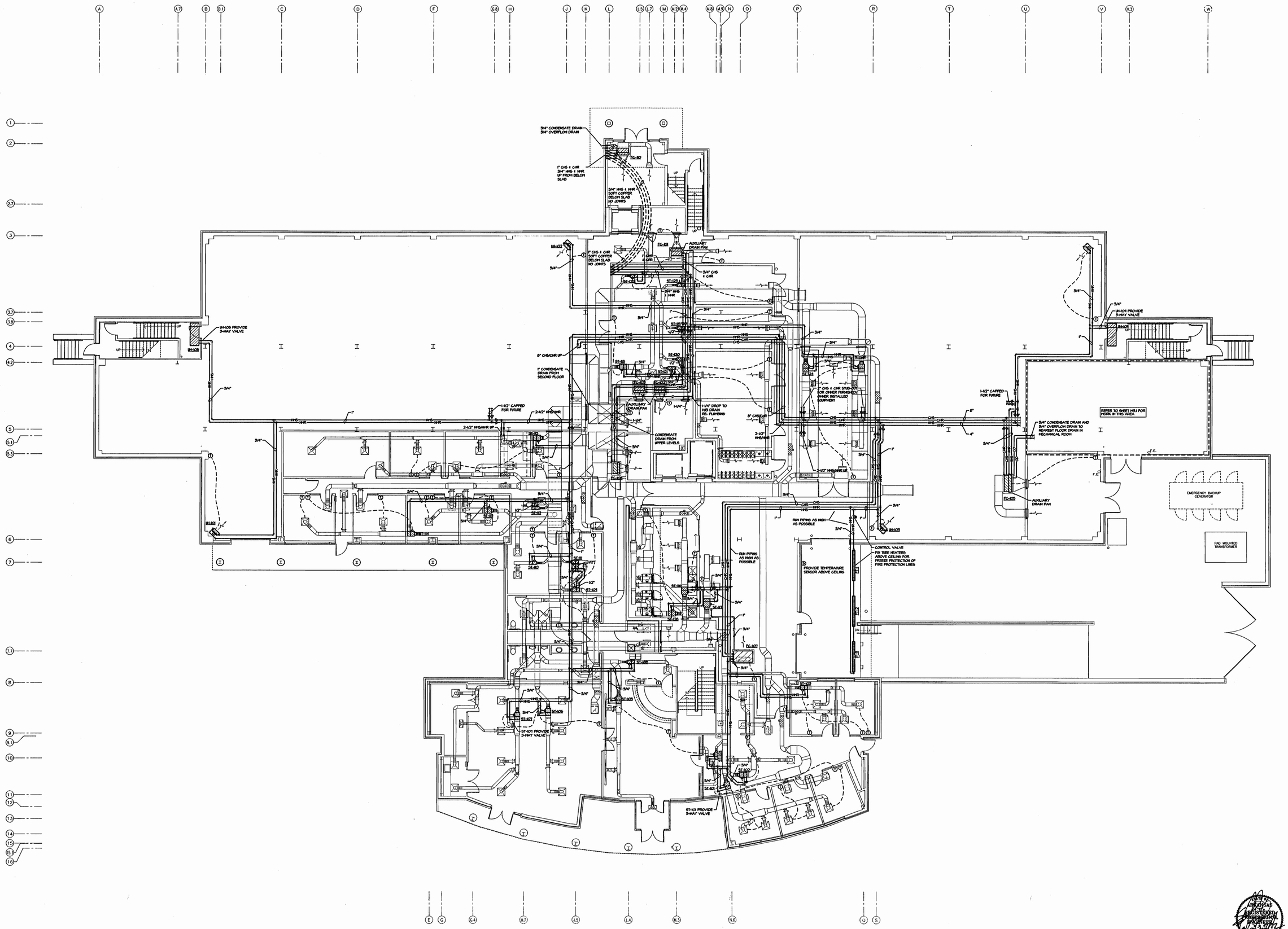
Commission Number
10301

M2.8

Date: October 25, 2002

fourth floor plan - HVAC ductwork

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



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FIRST FLOOR PLAN
HVAC PIPING

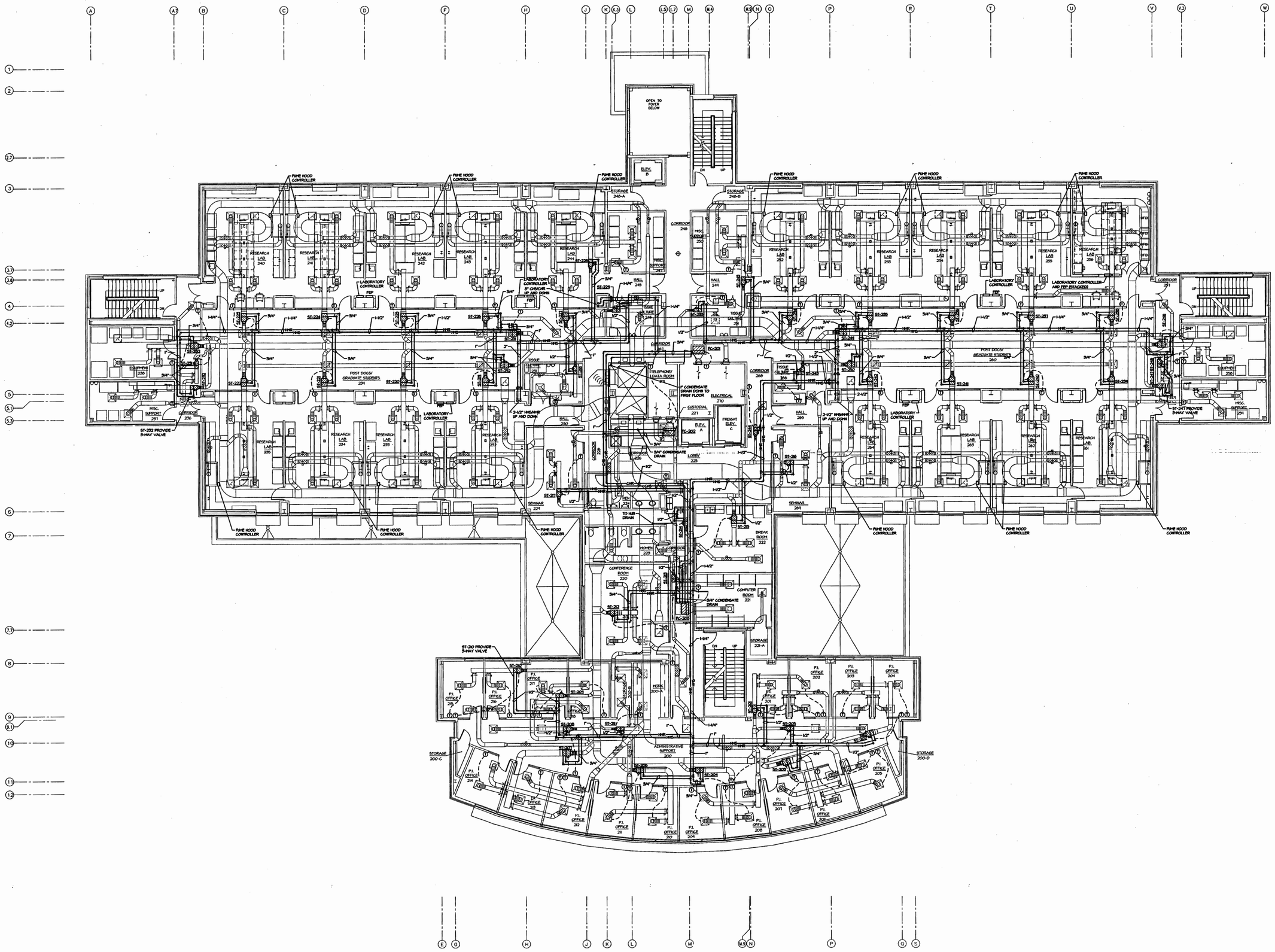
Commission Number
10301

M2.9

Date: October 25, 2002

first floor plan - HVAC piping

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



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BRACKETT KRENNERICH architects

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SECOND FLOOR PLAN
HVAC PIPING

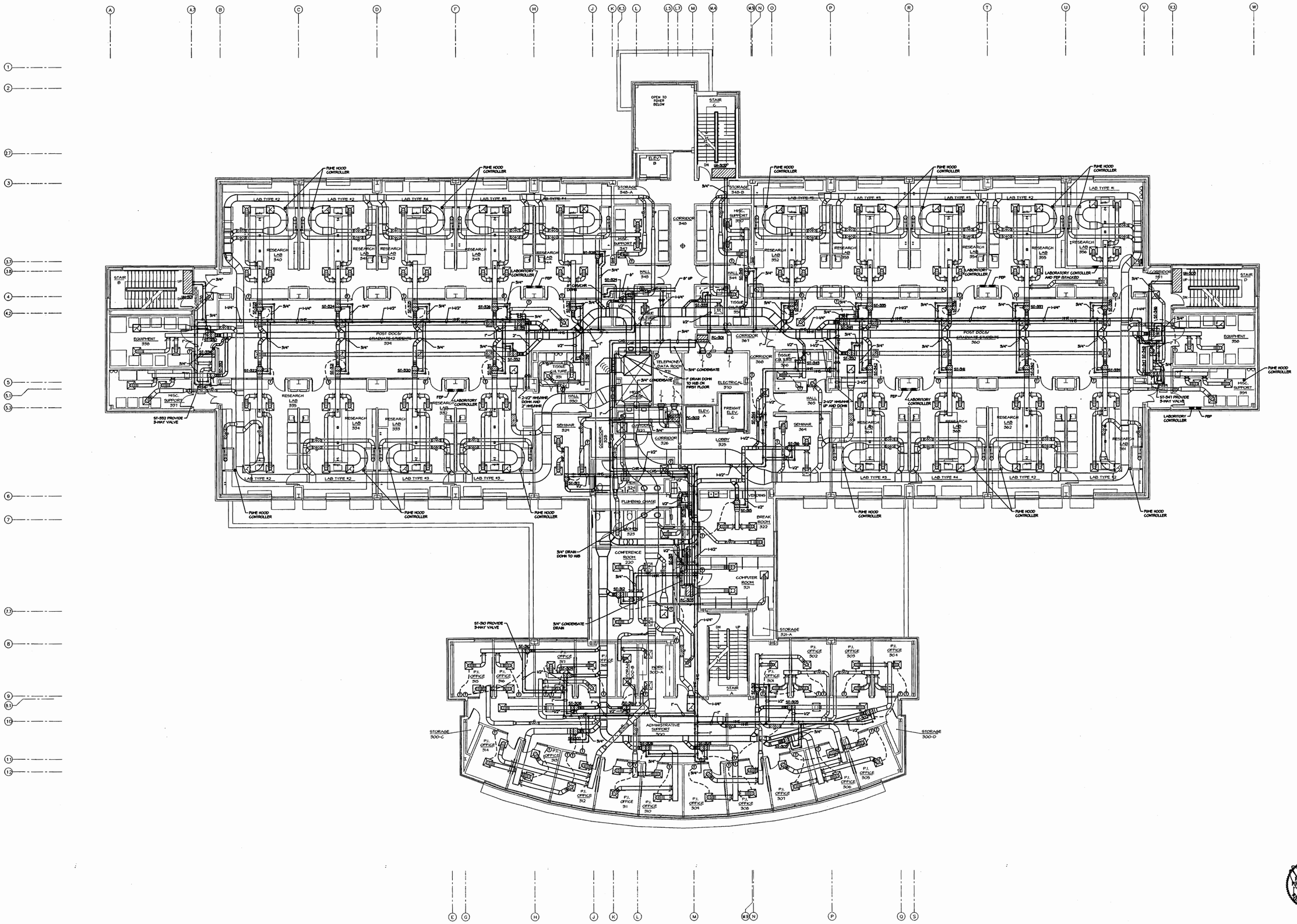
Commission Number
10301

M2.10

Date: October 25, 2002

second floor plan - HVAC piping

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



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THIRD FLOOR PLAN
HVAC PIPING

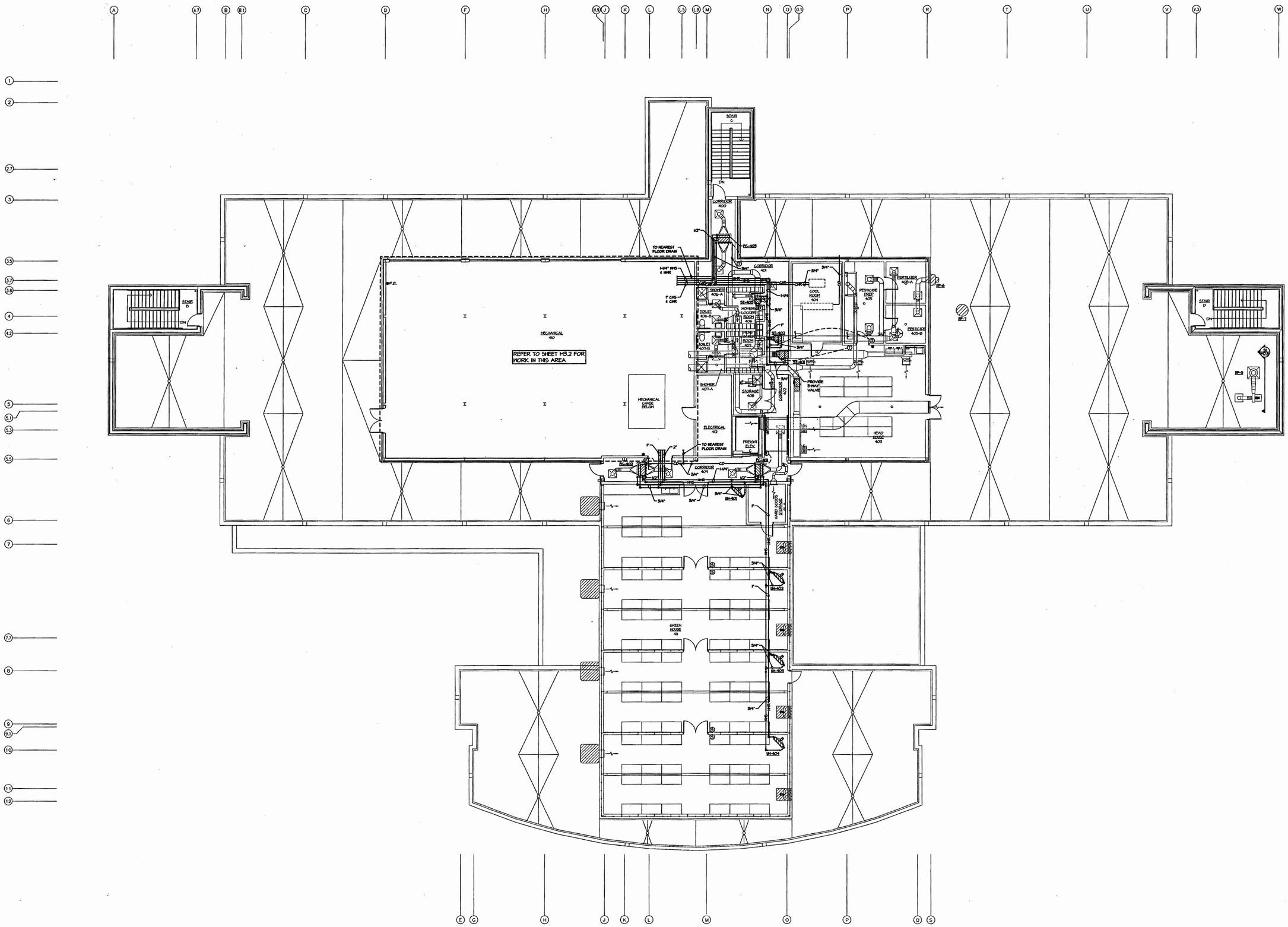
Commission Number
10301

M2.11

Date: October 25, 2002

third floor plan - HVAC piping

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



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FOURTH FLOOR PLAN
HVAC PIPING

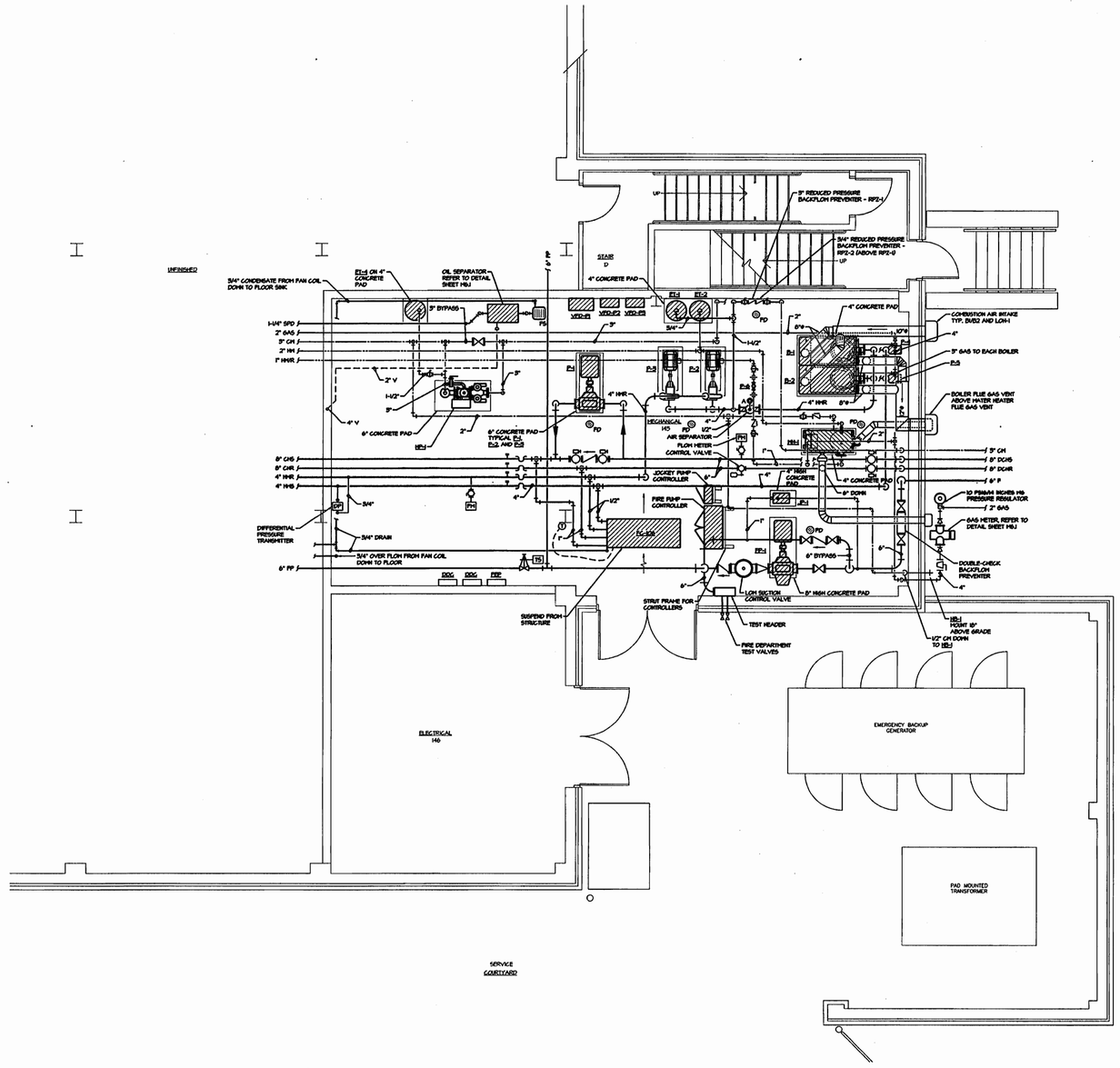
Commission Number
10301

M2.12

Date: October 25, 2002

fourth floor plan - HVAC piping

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



1 FIRST FLOOR MECHANICAL ROOM PLAN
SCALE: 1/4"=1'-0"

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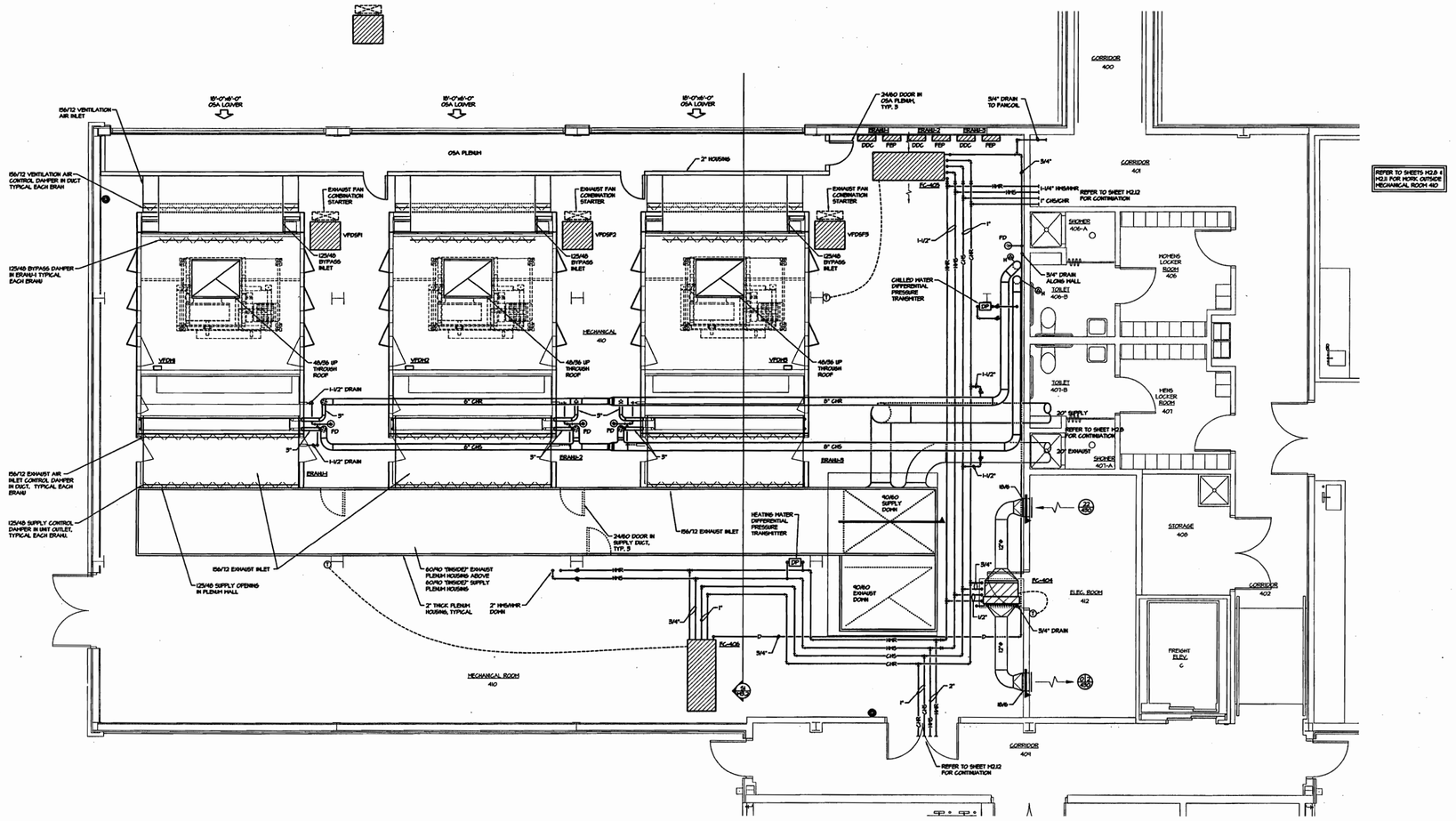
BRACKETT KRENNERICH architects

FIRST FLOOR MECHANICAL ROOM PLAN

Commission Number 10301

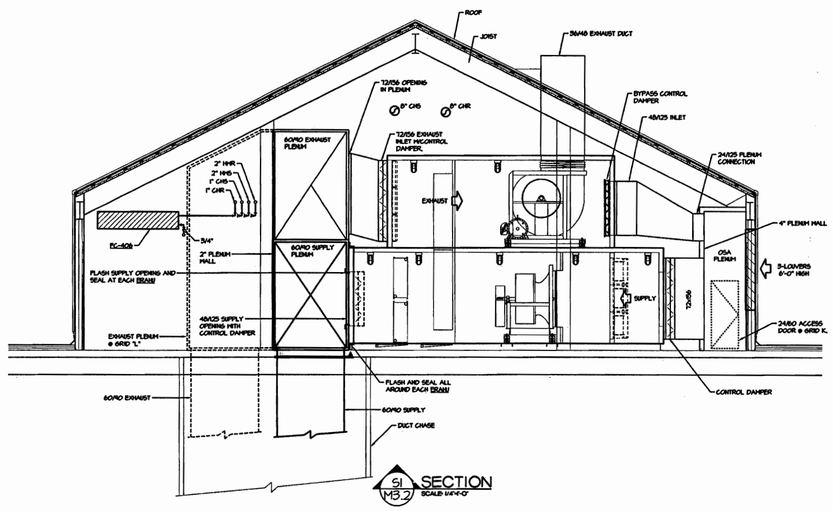
M3.1

Date: October 25, 2002



fourth floor mechanical room plan

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



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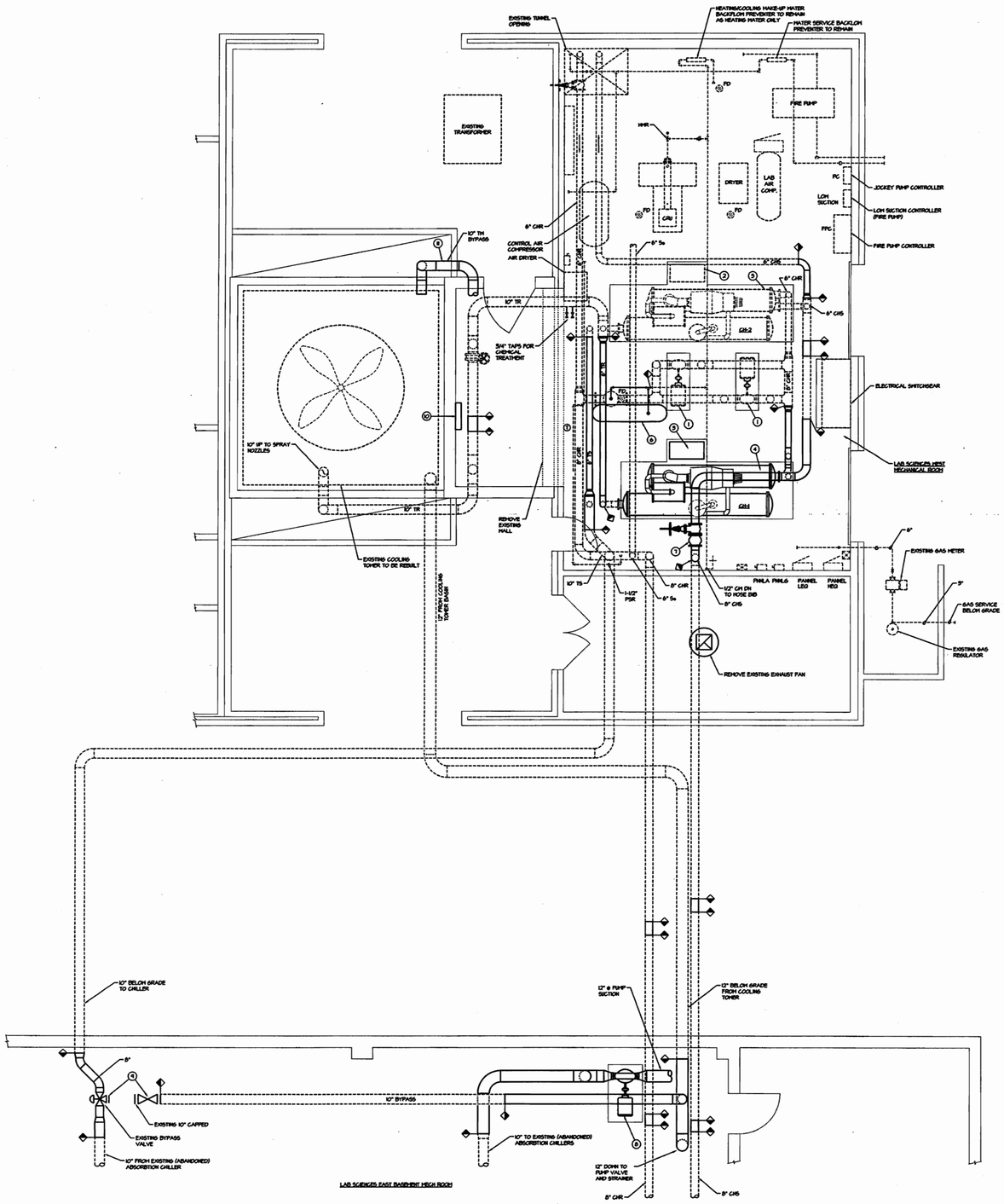
FOURTH FLOOR MECHANICAL ROOM PLAN

Commission Number 10301

M3.2

Date: October 25, 2002



DEMOLITION LEGEND

- EXISTING EQUIPMENT TO REMAIN
- EXISTING TO REMAIN
- EXISTING EQUIPMENT TO BE REMOVED
- EXISTING TO BE REMOVED

DEMOLITION NOTES:

1. EXISTING CHILLED WATER PUMPS TO REMAIN.
2. EXISTING GA-2 STARTER TO REMAIN.
3. REMOVE EXISTING GA-1 STARTER, INCLUDING CONDUIT AND CONDUCTORS BACK TO SWITCHGEAR.
4. REMOVE EXISTING GA-1 AND ASSOCIATED PIPE, INCLUDING CONDUIT AND CONDUCTORS BACK TO STARTER.
5. EXISTING CHILLER GA-2 TO REMAIN.
6. REMOVE EXISTING SUSPENDED EXPANSION TANK AND ASSOCIATED PIPING AS INDICATED.
7. REMOVE 8" CHS FROM DROP TO VERTICAL PIPE UP TO POINT INDICATED.
8. REMOVE TOWER WATER PUMP AND ASSOCIATED PIPING AS INDICATED.
9. REMOVE VALVE, CONTROL VALVE AND PIPING AS INDICATED.
10. REMOVE EXISTING ELECTRIC HEATER.
11. REMOVE 10" TOWER WATER BYPASS. CAP PIPING AT 10" TEE INSIDE MECHANICAL ROOM. REMOVE BYPASS VALVE (ON BYPASS PIPE ONLY).

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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LAB SCIENCES WEST MECHANICAL ROOM DEMOLITION PLAN

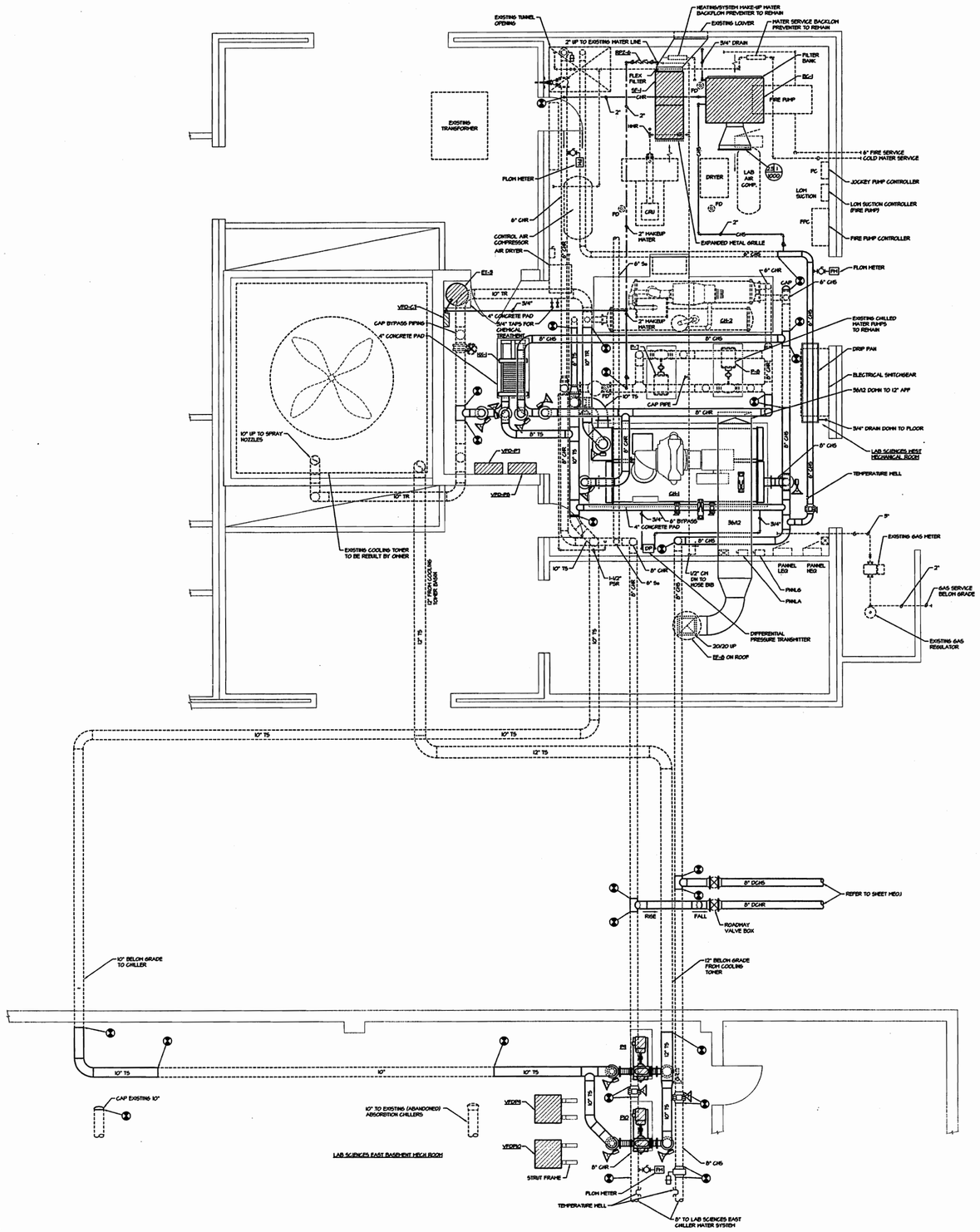
Commission Number 10301

M3.3

Date: October 25, 2002

lab sciences west and east mechanical room - demolition plans

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



lab sciences west mechanical room - HVAC plan

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

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JOHN R. TINSLEY

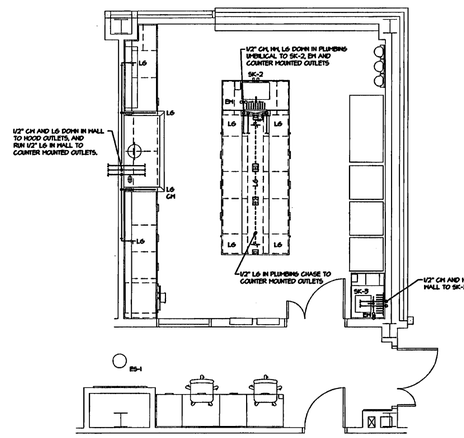
CORPORATE REGISTRATION TINSLEY-MULLEN ENGINEERS, INC. No. 178 ARKANSAS ENGINEERS

LAB SCIENCES WEST MECHANICAL ROOM HVAC PLAN

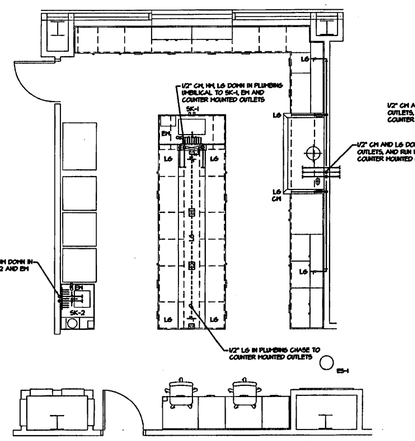
Commission Number 10301

M3.4

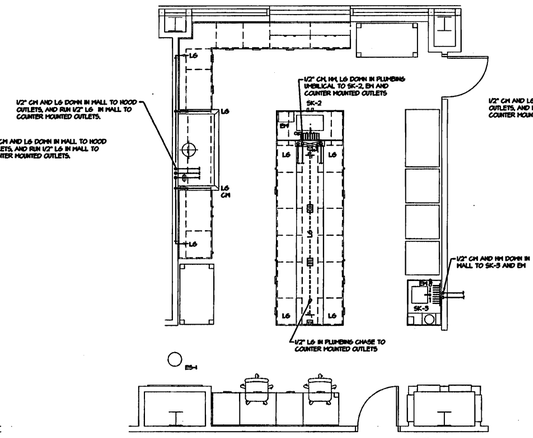
Date: October 25, 2002



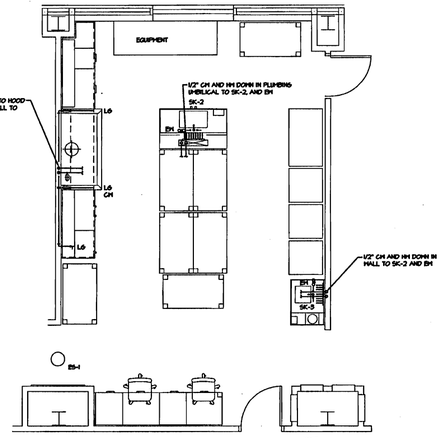
1 LAB TYPE 1
SCALE: 1/4" = 1'-0"



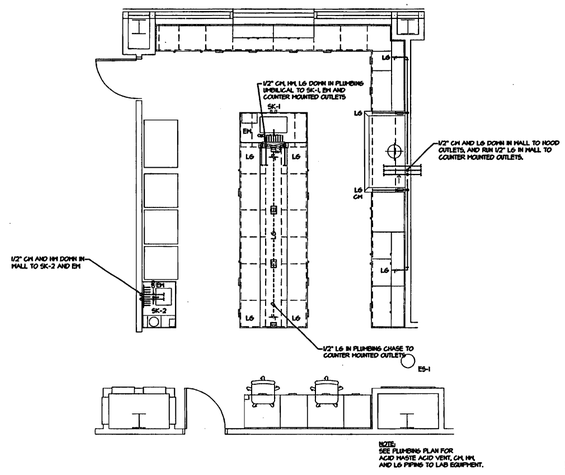
2 LAB TYPE 2
SCALE: 1/4" = 1'-0"



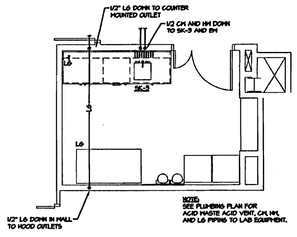
3 LAB TYPE 3
SCALE: 1/4" = 1'-0"



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



5 LAB TYPE 5
SCALE: 1/4" = 1'-0"



6 CULTURE TISSUE
SCALE: 1/4" = 1'-0"

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER

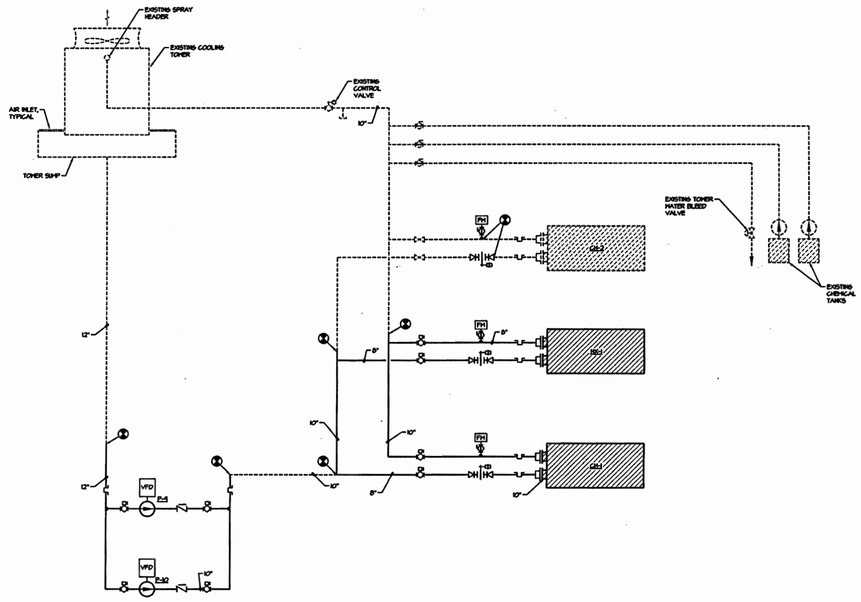
CORPORATE REGISTRATION TWISLEY-MULLEN ENGINEERING INC. No. 178 ARKANSAS

ENLARGED SCALE PLANS – LABS AND CULTURE TISSUE

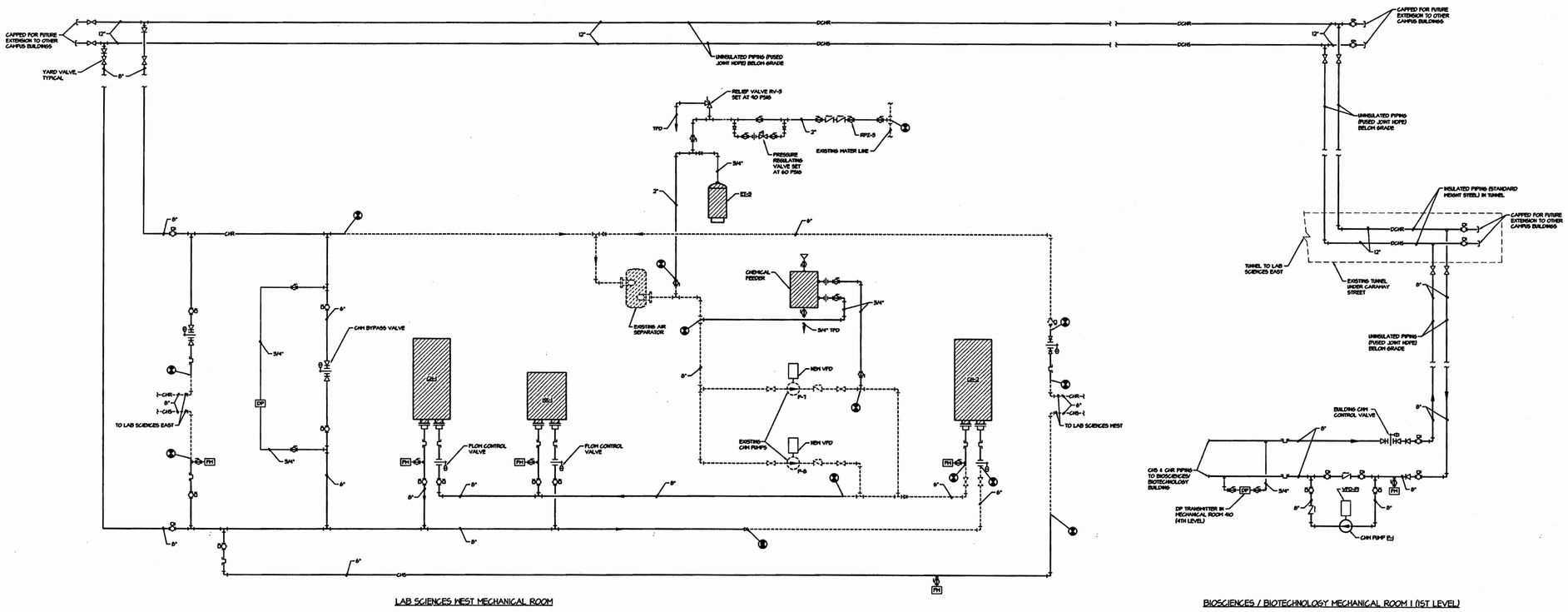
Commission Number 10301

M3.5

Date: October 25, 2002



① TOWER WATER PIPING DIAGRAM
SCALE: NOT TO SCALE



LAB SCIENCES WEST MECHANICAL ROOM

BIOSCIENCES / BIOTECHNOLOGY MECHANICAL ROOM 1 (1ST LEVEL)

② CHILLED WATER PIPING DIAGRAM
SCALE: NOT TO SCALE

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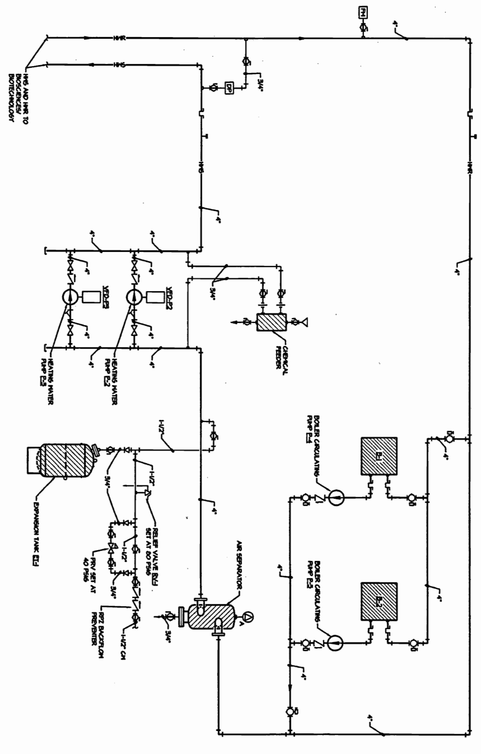
HVAC PIPING DIAGRAMS – 1

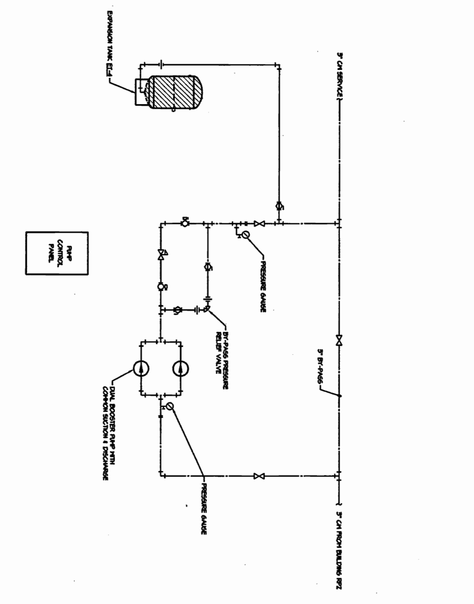
Commission Number 10301

M4.1

Date: October 25, 2002



1 HEATING WATER PIPING DIAGRAM
SCALE: NOT TO SCALE



2 HOUSE PUMP PIPING DIAGRAM
SCALE: NOT TO SCALE

HVAC PIPING DIAGRAMS – 2

Commission Number 10301

M4.2

Date: October 25, 2002

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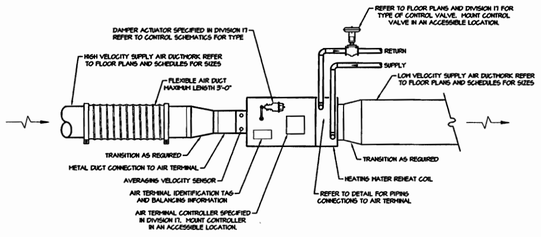
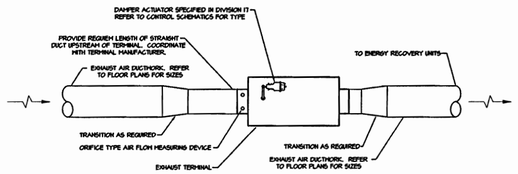
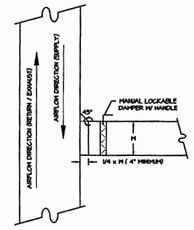


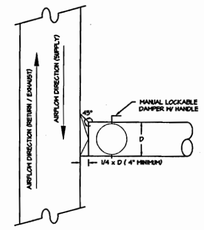
1 TYPICAL SUPPLY AIR TERMINAL DETAIL
NOT TO SCALE



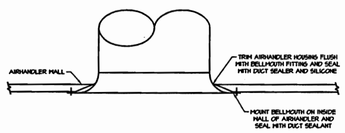
2 TYPICAL EXHAUST TERMINAL DETAIL
NOT TO SCALE



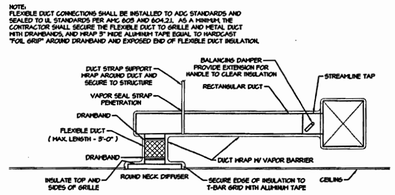
3 RECTANGULAR BRANCH DUCT CONNECTION
NOT TO SCALE



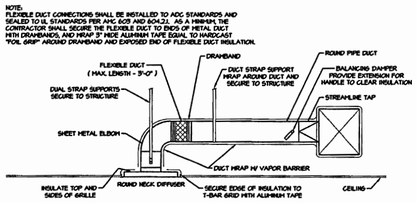
4 ROUND BRANCH DUCT CONNECTION
NOT TO SCALE



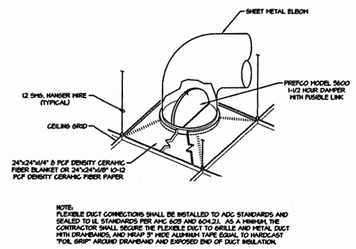
5 BELLMOUTH OPENING DETAIL
NOT TO SCALE



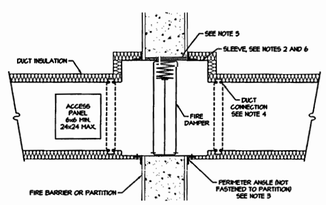
6 DIFFUSER CONNECTION TO RECTANGULAR DUCT
NOT TO SCALE



7 DIFFUSER CONNECTION TO ROUND DUCT
NOT TO SCALE

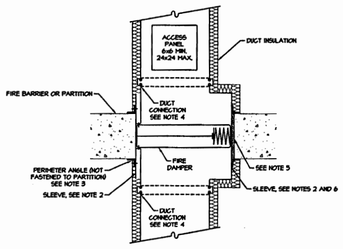


8 DIFFUSER CONNECTION W/ FIRE DAMPER
NOT TO SCALE



NOTES:
1. COMPLY W/ SMACNA "FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC "SYSTEMS" AND NFPA 90A "INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS".
2. GALVANIZED SLEEVE GAGE SHALL NOT BE LESS THAN CONNECTING DUCT FOR BREAKAWAY CONNECTED DUCT. BREAKAWAY DUCT CONNECTION MAY BE OMITTED IF SLEEVE IS 16 GA. MINIMUM.
3. GALVANIZED STEEL PERIMETER ANGLE NOT LESS THAN 1-1/2x1-1/2x14 GAGE WITH 1" MINIMUM OVERLAP ON ON ALL SIDES.
4. BREAKAWAY DUCT CONNECTION. REFER TO SMACNA FIGURE 2-2 "IL ACCEPTED DUCT-SLEEVE CONNECTIONS" OF FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE. UL TESTED DUCT SEALANT MAY BE USED. BREAKAWAY DUCT CONNECTION MAY BE OMITTED IF SLEEVE IS 16 GA. MINIMUM.
5. PROVIDE 1/4" TO 1/2" CLEARANCE ON HEIGHT AND WIDTH. FILL OPEN SPACE WITH FIRE STOPPING MATERIAL.
6. FIRE DAMPER SLEEVE TO EXTEND 6" MINIMUM ON EACH SIDE.

9 VERTICAL FIRE DAMPER DETAIL
NOT TO SCALE



NOTES:
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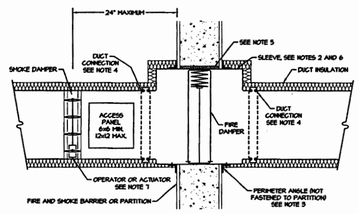
4. BREAKAWAY DUCT CONNECTION. REFER TO SMACNA FIGURE 2-2 "IL ACCEPTED DUCT-SLEEVE CONNECTIONS" OF FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE. UL TESTED DUCT SEALANT MAY BE USED. BREAKAWAY DUCT CONNECTION MAY BE OMITTED IF SLEEVE IS 16 GA. MINIMUM.
5. PROVIDE 1/4" TO 1/2" CLEARANCE ON HEIGHT AND WIDTH. FILL OPEN SPACE WITH FIRE STOPPING MATERIAL.
6. FIRE DAMPER SLEEVE TO EXTEND 6" MINIMUM ON EACH SIDE.

10 HORIZONTAL FIRE DAMPER DETAIL
NOT TO SCALE



NOTES:
1. COMPLY W/ SMACNA "FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC "SYSTEMS" AND NFPA 90A "INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS".
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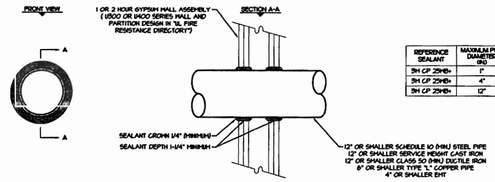
3. GALVANIZED STEEL PERIMETER ANGLE NOT LESS THAN 1-1/2x1-1/2x14 GAGE WITH 1" MINIMUM OVERLAP ON ON ALL SIDES.
4. BREAKAWAY DUCT CONNECTION. REFER TO SMACNA FIGURE 2-2 "IL ACCEPTED DUCT-SLEEVE CONNECTIONS" OF FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE. UL TESTED DUCT SEALANT MAY BE USED. BREAKAWAY DUCT CONNECTION MAY BE OMITTED IF SLEEVE IS 16 GA. MINIMUM.
5. PROVIDE 1/4" TO 1/2" CLEARANCE ON HEIGHT AND WIDTH. FILL OPEN SPACE WITH FIRE STOPPING MATERIAL.
6. FIRE DAMPER SLEEVE TO EXTEND 6" MINIMUM ON EACH SIDE.
REFER TO CONTROL SCHEMATIC FOR APPLICABLE OPERATOR OR ACTUATOR

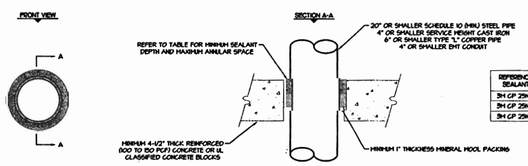
11 VERTICAL FIRE AND SMOKE DAMPER DETAIL
NOT TO SCALE



REFERENCE SEALANT	MAXIMUM PIPE DIAMETER (IN)	ANNULAR SPACE (IN)	FIRE RATING (HRS)
3M CP 25WB+	1"	0" TO 3/16"	2
3M CP 25WB+	4"	0" TO 1/2"	2
3M CP 25WB+	12"	3/16" TO 3/8"	2

NOTE: THIS DETAIL REPRESENTS ONE MANUFACTURER'S RECOMMENDATION FOR A WALL TYPE. THE CONTRACTOR SHALL CONSULT THE FIRE STOPPING MATERIALS MANUFACTURER FOR SPECIFIC INFORMATION AND SPECIFIC INSTALLATION INSTRUCTIONS FOR THE WALLS AND PARTITIONS APPLICABLE TO THIS PROJECT.

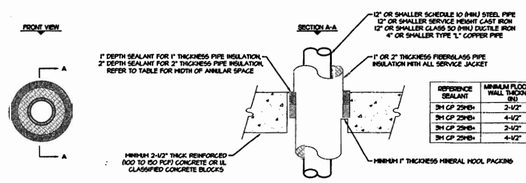
12 METAL PIPE PENETRATION THRU RATED GYPSUM WALL
NOT TO SCALE



REFERENCE SEALANT	MAXIMUM PIPE DIAMETER (IN)	MAX. ANNULAR SPACE (IN)	FIRE RATING (HRS)
3M CP 25WS	10"	1"	2
3M CP 25WS	10"	1"	2
3M CP 25WS	30"	2-1/2"	2

NOTE: THIS DETAIL REPRESENTS ONE MANUFACTURER'S RECOMMENDATION FOR A WALL TYPE. THE CONTRACTOR SHALL CONSULT THE FIRE STOPPING MATERIALS MANUFACTURER FOR SPECIFIC INFORMATION AND SPECIFIC INSTALLATION INSTRUCTIONS FOR THE WALLS AND PARTITIONS

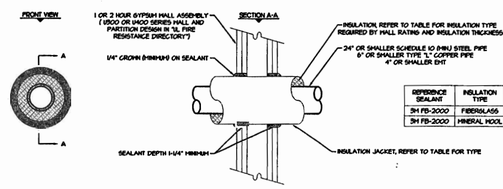
13 METAL PIPE PENETRATION THRU RATED CONCRETE FLOOR OR WALL
NOT TO SCALE



REFERENCE SEALANT	MINIMUM FLOOD OR WALL THICKNESS (IN)	MAXIMUM PIPE DIAMETER (IN)	MAX. INSULATION THICKNESS (IN)	ANNULAR SPACE (IN)	FIRE RATING (HRS)
3M CP 25WB+	2-1/2"	4"	1"	1/2" TO 2-3/8"	2
3M CP 25WB+	4-1/2"	4"	2"	1/2" TO 3-5/8"	2
3M CP 25WB+	2-1/2"	12"	1"	1/2" TO 1-1/2"	2
3M CP 25WB+	4-1/2"	12"	1"	1/2" TO 2-3/8"	2

NOTE: THIS DETAIL REPRESENTS ONE MANUFACTURER'S RECOMMENDATION FOR A WALL TYPE. THE CONTRACTOR SHALL CONSULT THE FIRE STOPPING MATERIALS MANUFACTURER FOR SPECIFIC INFORMATION AND SPECIFIC INSTALLATION INSTRUCTIONS FOR THE WALLS AND PARTITIONS

14 INSULATED METAL PIPE PENETRATION THRU RATED CONCRETE FLOOR OR WALL
NOT TO SCALE



REFERENCE SEALANT	INSULATION TYPE	MAX. INSULATION THICKNESS (IN)	FIRE RATING (HRS)	INSULATION SHEATHING MATERIAL
3M FB-2000	FIBERGLASS	1"	1	ASJ
3M FB-2000	MINERAL WOOL	3"	2	ASJ

NOTE: THIS DETAIL REPRESENTS ONE MANUFACTURER'S RECOMMENDATION FOR A WALL TYPE. THE CONTRACTOR SHALL CONSULT THE FIRE STOPPING MATERIALS MANUFACTURER FOR SPECIFIC INFORMATION AND SPECIFIC INSTALLATION INSTRUCTIONS FOR THE WALLS AND PARTITIONS APPLICABLE TO THIS PROJECT.

15 INSULATED METAL PIPE PENETRATION THRU RATED GYPSUM WALL
NOT TO SCALE

BIOSCIENCES / BIOTECHNOLOGY BUILDING
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870-932-0973 Fax: 870-932-8976

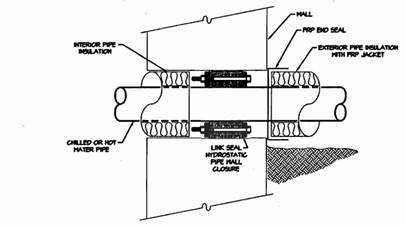
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER
CORPORATE REGISTRATION TURNLEY-MILLER ENGINEERS, INC. No. 178 ARKANSAS ENGINEER

HVAC DETAILS – 1

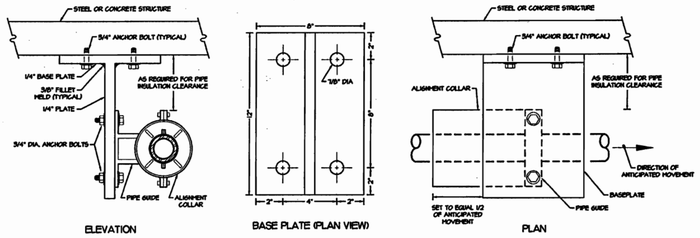
Commission Number 10301

M5.1

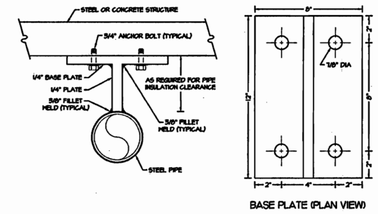
Date: October 25, 2002



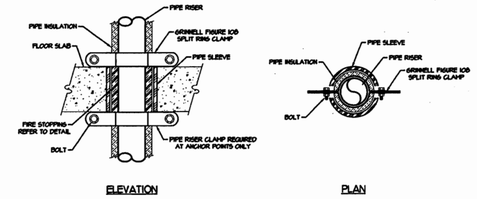
1 LINK SEAL DETAIL
NOT TO SCALE



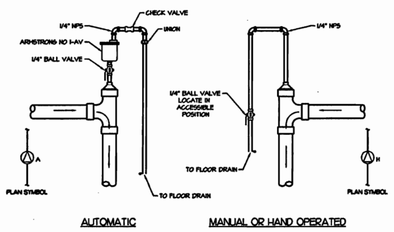
2 PIPE GUIDE DETAIL
NOT TO SCALE



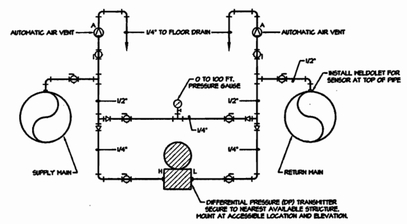
3 PIPE ANCHOR DETAIL
NOT TO SCALE



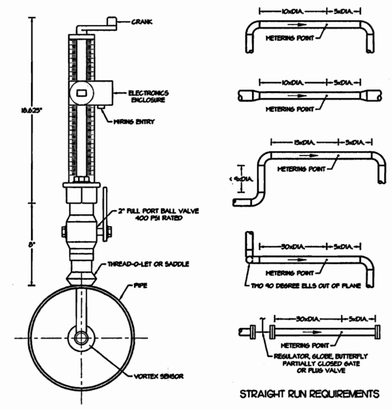
4 PIPE RISER SUPPORT/ANCHOR DETAIL
NOT TO SCALE



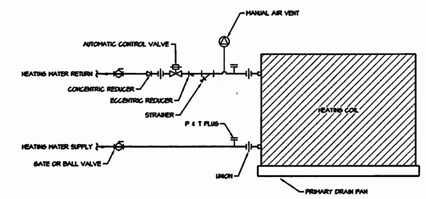
5 AIR ELIMINATOR DETAIL
NOT TO SCALE



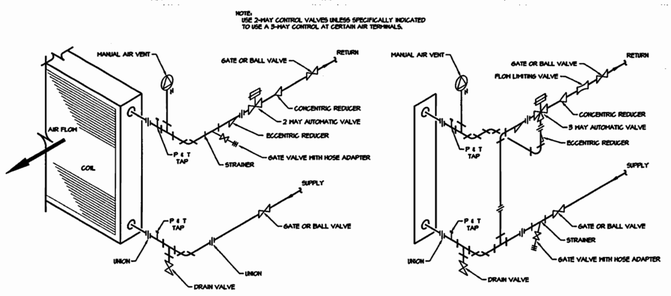
6 DIFFERENTIAL PRESSURE TRANSMITTER DETAIL
NOT TO SCALE



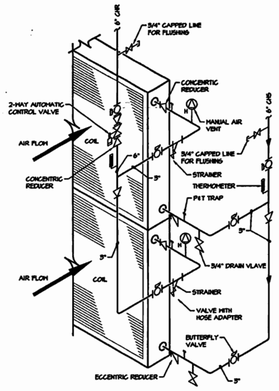
7 VORTEX INSERTION FLOW METER DETAIL
NOT TO SCALE



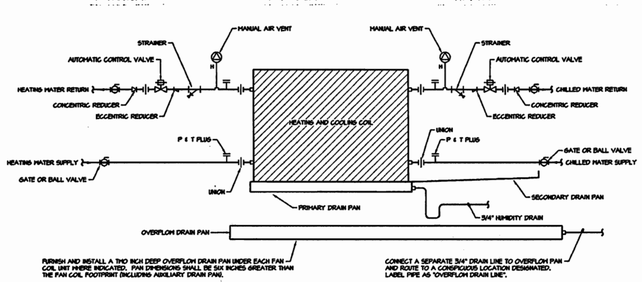
8 UNIT HEATER & HEATING ONLY FAN COIL PIPING DETAIL
NOT TO SCALE



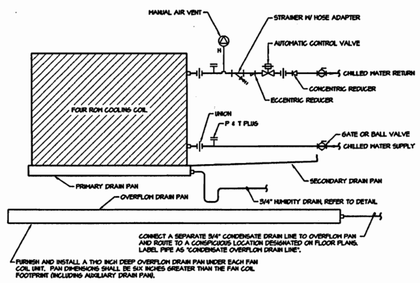
9 TYPICAL AIR TERMINAL PIPING DETAIL
NOT TO SCALE



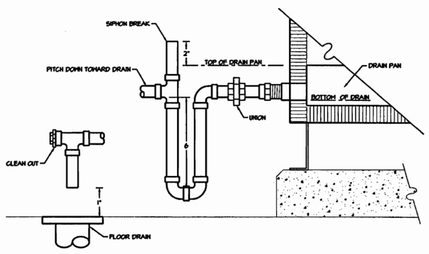
10 ERAHU CHILLED WATER COIL PIPING DETAIL
NOT TO SCALE



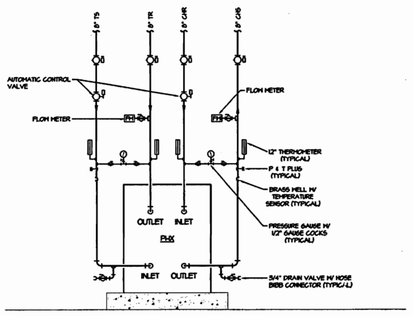
11 4 PIPE FAN COIL UNIT PIPING DETAIL
NOT TO SCALE



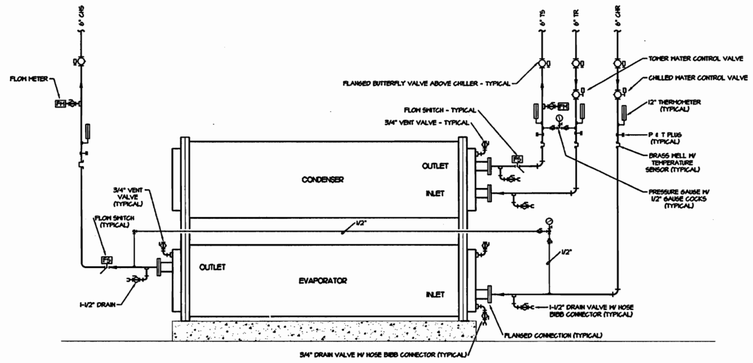
12 COOLING ONLY FAN COIL UNIT PIPING DETAIL
NOT TO SCALE



13 ERAHU CONDENSATE DRAIN PIPING DETAIL
NOT TO SCALE



14 PLATE & FRAME HEAT EXCHANGER PIPING DETAIL
NOT TO SCALE



15 WATER CHILLER PIPING DETAIL
NOT TO SCALE

BIOSCIENCES / BIOTECHNOLOGY BUILDING
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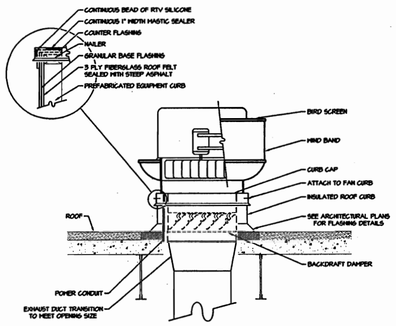
Email: brackett@brackett-net

HVAC DETAILS – 2

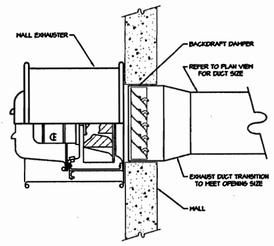
Commission Number 10301

M5.2

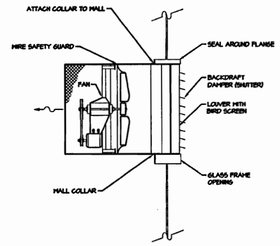
Date: October 25, 2002



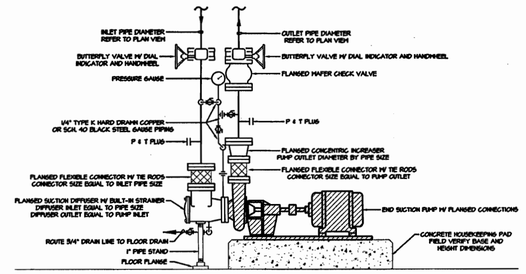
1 EF-7 EXHAUST FAN DETAIL
NOT TO SCALE



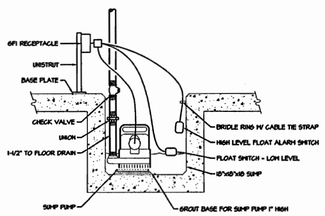
2 EF-6 EXHAUST FAN DETAIL
NOT TO SCALE



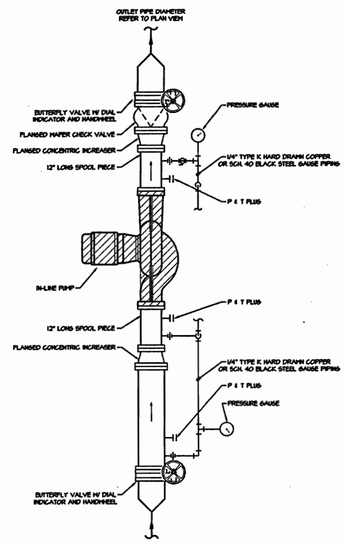
3 EF-1 THRU EF-4 EXHAUST FAN DETAIL
NOT TO SCALE



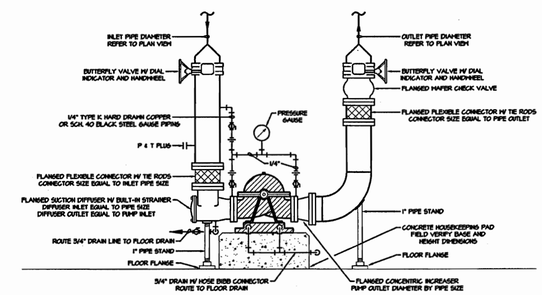
4 P-1, P-2 PUMP PIPING DETAIL
NOT TO SCALE



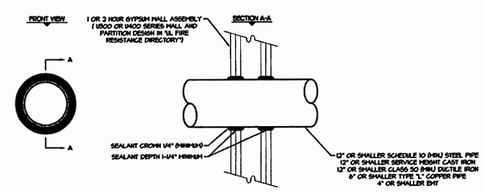
5 SUBMERSIBLE SUMP PUMP DETAIL
NOT TO SCALE



6 IN-LINE PUMP PIPING DETAIL
NOT TO SCALE



7 P-3, P-9, P-10 - PUMP PIPING DETAIL
NOT TO SCALE



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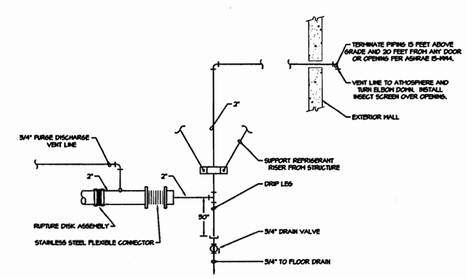
REFERENCE SEALANT	MAXIMUM PIPE DIAMETER (IN)	ANNULAR SPACE (IN)	FIRE RATING (HRS)
3M CP 25WB+	1"	0" TO 3/16"	2
3M CP 25WB+	4"	0" TO 1/2"	2
3M CP 25WB+	12"	3/16" TO 3/8"	2

8 METAL PIPE PENETRATION THRU RATED GYPSUM WALL
NOT TO SCALE



9 CH-1 REFRIGERANT VENT PIPING DETAIL
NOT TO SCALE

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER

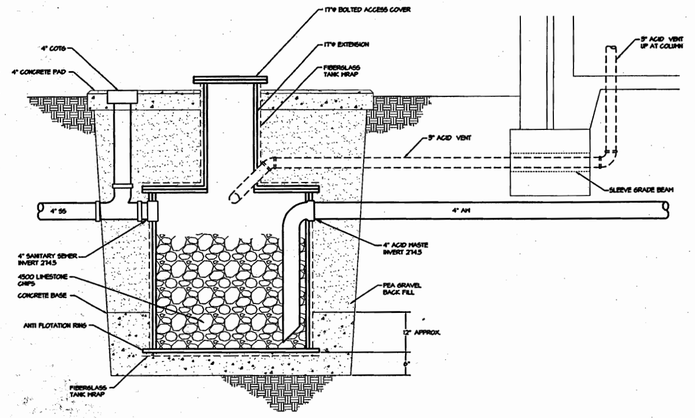
CORPORATE REGISTRATION NO. 170

HVAC DETAILS - 3

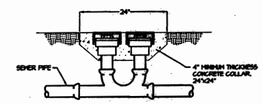
Commission Number
10301

M5.3

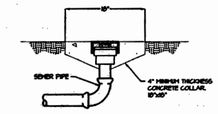
Date: October 25, 2002



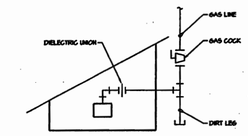
1 ACID DILUTION TANK DETAIL
NOT TO SCALE



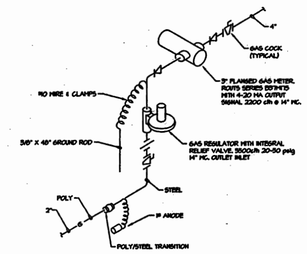
2 TWO-WAY CLEAN OUT TO GRADE DETAIL
NOT TO SCALE



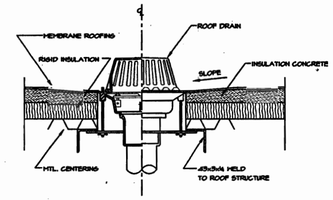
3 CLEAN OUT TO GRADE DETAIL
NOT TO SCALE



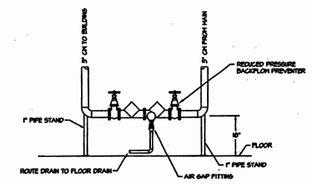
4 BOILER GAS CONNECTION
NOT TO SCALE



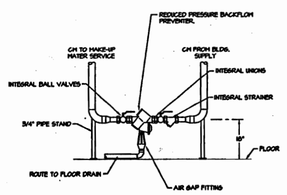
5 GAS ENTRANCE RISER
SCALE: NONE



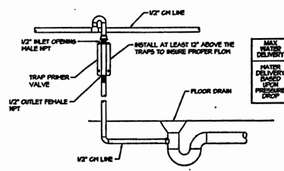
6 ROOF DRAIN DETAIL
NOT TO SCALE



7 DOMESTIC WATER RPZ DETAIL
SCALE: NONE

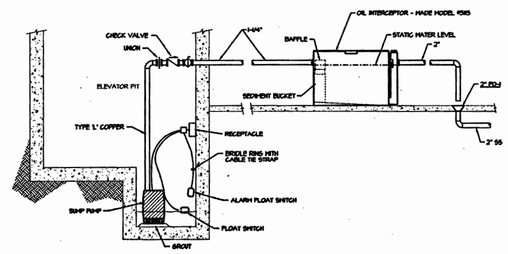


8 HEATING MAKE-UP WATER RPZ DETAIL
NOT TO SCALE

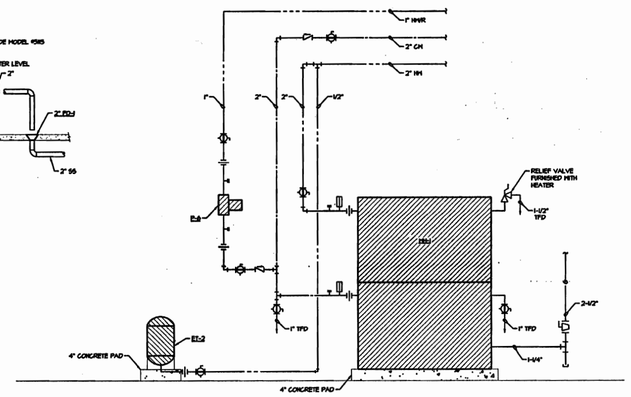


MAX WATER DELIVERY	PRIMER MODEL	NO. OF DRAINS	SUPPLY TUBE	DISTRIBUTION UNITS
MAXIMUM DELIVERY 20 GPM UPON PRESSURE DROP	PR-500 PRIME-RITE	1	N/A	N/A
		2	N/A	DU-2
		3	N/A	DU-3
		4	N/A	DU-4

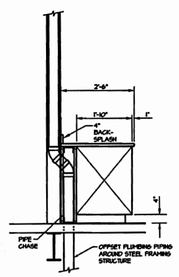
9 TRAP-PRIMER DETAIL
SCALE: NONE



10 SUMP PUMP & OIL INTERCEPTOR DETAIL
SCALE: NONE



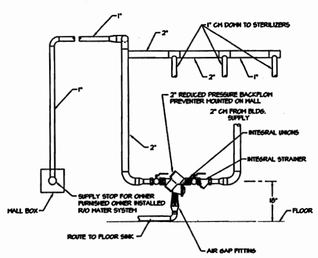
11 WATER HEATER PIPING DETAIL
NOT TO SCALE



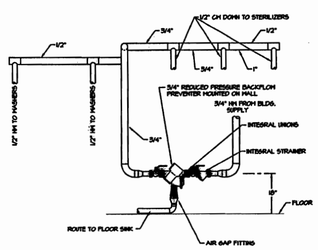
12 TYPICAL PLUMBING RISER DETAIL
NOT TO SCALE

FIXTURE CONNECTION SCHEDULE

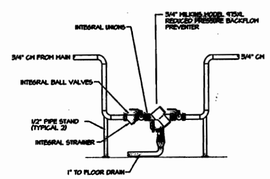
DESIGNATION	DESCRIPTION	MOUNTING	WATER COLD	WATER HOT	VENT	WASTE	TRAP	REMARKS
WC-1	WATER CLOSET	WALL	1"	N/A	2"	4"	INTEGRAL	
WC-2	WATER CLOSET	WALL/ADA	1"	N/A	2"	4"	INTEGRAL	
UR-1	URINAL	WALL	3/4"	N/A	2"	2"	INTEGRAL	
UR-2	URINAL	WALL/ADA	3/4"	N/A	2"	2"	INTEGRAL	
L-1	LAVATORY	COUNTERTOP	1/2"	1/2"	2"	2"	1-1/4"	
L-2	LAVATORY	COUNTERTOP (ADA)	1/2"	1/2"	2"	2"	1-1/4"	
L-3	LAVATORY	WALL (ADA)	1/2"	1/2"	2"	2"	1-1/4"	
S-1	SINK	COUNTERTOP	1/2"	1/2"	2"	2"	1-1/2"	
SS-1	SERVICE SINK	FLOOR/SQUARE	1/2"	1/2"	2"	3"	3"	
EWC-1	ELECTRIC WATER COOLER	WALL/ADA	1/2"	N/A	2"	2"	1-1/4"	
HB-1	HOSE BIBB	EXTERIOR WALL	1/2"	N/A	N/A	N/A	N/A	
HB-2	HOSE BIBB	INTERIOR WALL	1/2"	N/A	N/A	N/A	N/A	
SK-1	LAB SINK	COUNTERTOP	1/2"	1/2"	2"	2"	1-1/4"	SPECIFIED IN DIVISION II
SK-2	LAB SINK	COUNTERTOP	1/2"	1/2"	2"	2"	1-1/4"	SPECIFIED IN DIVISION II
SK-3	LAB SINK	COUNTERTOP	1/2"	1/2"	2"	2"	1-1/4"	SPECIFIED IN DIVISION II
CS-1	CUP SINK	FUME HOOD	1/2"	N/A	2"	2"	1-1/4"	SPECIFIED IN DIVISION II
EH-1	EMERGENCY EYEWASH	COUNTERTOP	1/2"	N/A	2"	2"	1-1/4"	SPECIFIED IN DIVISION II
ESH-1	EMERGENCY SHOWER	CEILING	1"	N/A	N/A	N/A	N/A	SPECIFIED IN DIVISION II
ESH-2	EMERGENCY SHOWER	WALL	1"	N/A	N/A	N/A	N/A	SPECIFIED IN DIVISION II



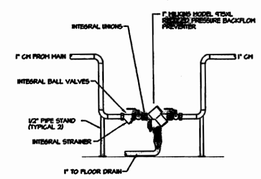
13 WATER RPZ-3 DETAIL
NOT TO SCALE



14 WATER RPZ-4 DETAIL
NOT TO SCALE



15 WATER RPZ-5 DETAIL
NOT TO SCALE



16 WATER RPZ-6 DETAIL
NOT TO SCALE

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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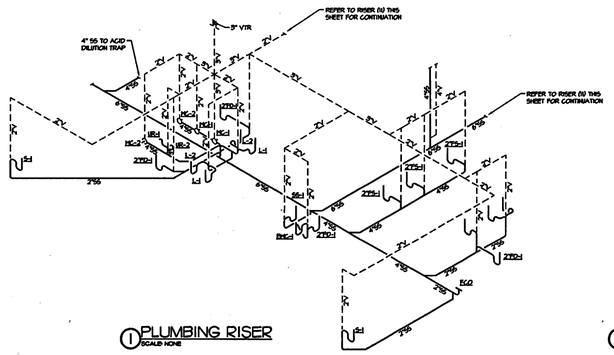
BRACKETT KRENNERICH architects

PLUMBING DETAILS

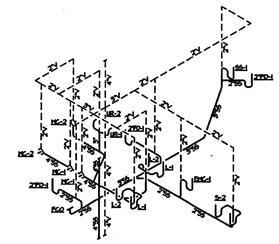
Commission Number 10301

M6.1

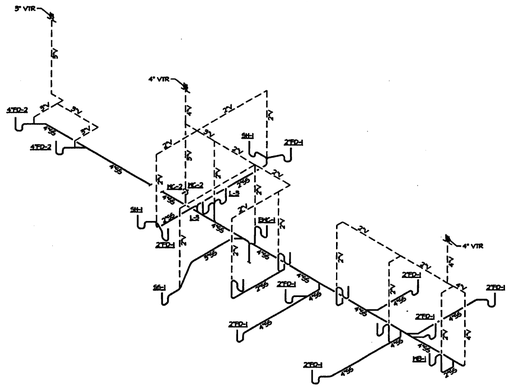
Date: October 25, 2002



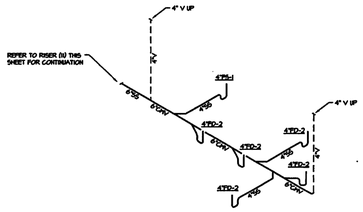
1 PLUMBING RISER
SCALE: NONE



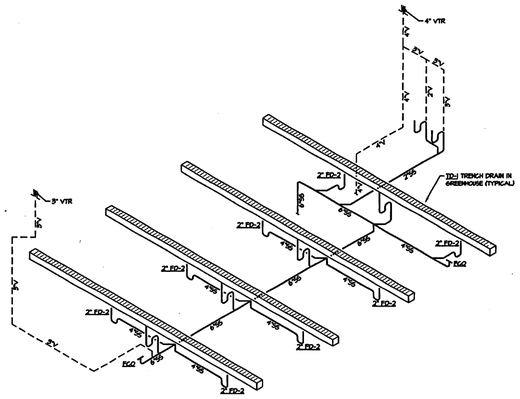
2 PLUMBING RISER• SECOND & THIRD FLOOR
SCALE: NONE



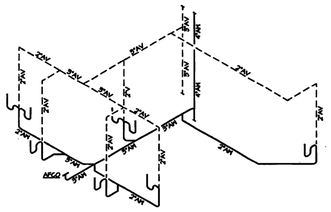
3 PLUMBING RISER
SCALE: NONE



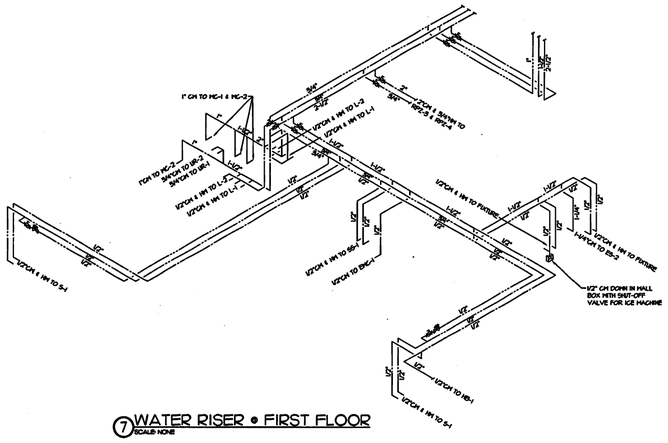
4 PLUMBING RISER
SCALE: NONE



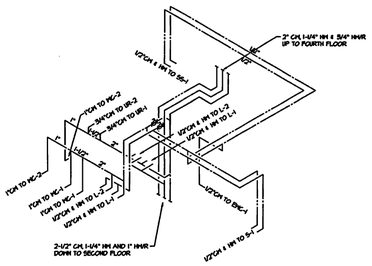
5 PLUMBING RISER
SCALE: NONE



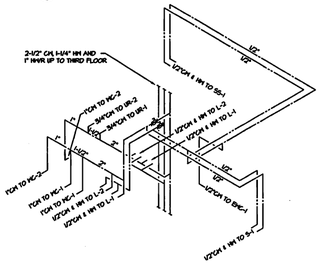
6 TYPICAL PLUMBING RISER • LABS
SCALE: NONE



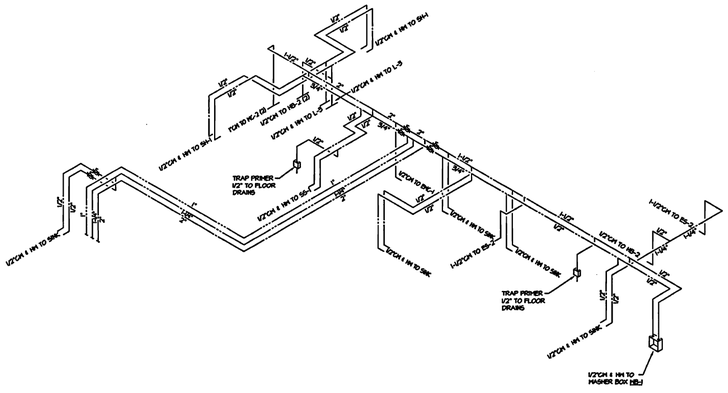
7 WATER RISER • FIRST FLOOR
SCALE: NONE



8 WATER RISER • THIRD FLOOR
SCALE: NONE



9 WATER RISER • SECOND FLOOR
SCALE: NONE



10 WATER RISER • FOURTH FLOOR
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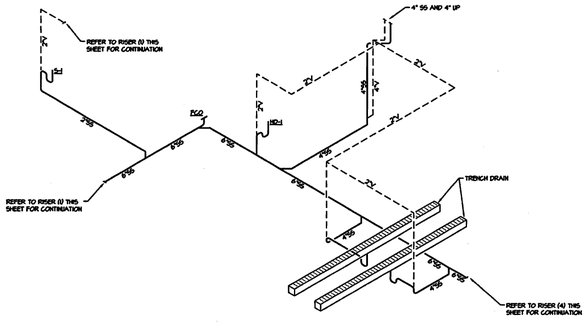

11 PLUMBING RISER
SCALE: NONE

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER

CORPORATE REGISTRATION THISLEY-MULLER ENGINEERING, INC. No. 178 ARKANSAS ENGINEER

PLUMBING RISERS

Commission Number 10301

M6.2

Date: October 25, 2002

ENERGY RECOVERY AIR HANDLING UNITS

		ERAHU-1	ERAHU-2	ERAHU-3
DESIGNATION		ERAHU-1	ERAHU-2	ERAHU-3
MANUFACTURER/MODEL		TRANE	TRANE	TRANE
CASING INSULATION		SOLID LINER/2" RIGID	SOLID LINER/2" RIGID	SOLID LINER/2" RIGID
TYPE		ENERGY RECOVERY	ENERGY RECOVERY	ENERGY RECOVERY
MAXIMUM UNIT LENGTH		23	23	23
MAXIMUM UNIT WIDTH		14	14	14
MAXIMUM UNIT HEIGHT (INCLUDES BASE RAIL)		14.4	14.4	14.4
SERVES		BIOSCIENCE/BIOTECH	BIOSCIENCE/BIOTECH	BIOSCIENCE/BIOTECH
SHIPPING SECTIONS		2	2	2
SHIPPING WEIGHT (LBS)		31,000	31,000	31,000
OPERATING WEIGHT (LBS)		32,000	32,000	32,000
OUTSIDE AIR FLOW (SCFM)		38,344	38,344	38,344
SUPPLY AIR FLOW (SCFM)		36,518	36,518	36,518
PURGE AIR FLOW (SCFM)		1,826	1,826	1,826
BUILDING EXHAUST AIR FLOW (SCFM)		33,439	33,439	33,439
TOTAL EXHAUST AIR FLOW (SCFM)		35,265	35,265	35,265
SUMMER OSA DB/WB		99 / 78	99 / 78	99 / 78
SUMMER INDOOR AIR DB/WB		72 / 60.1	72 / 60.1	72 / 60.1
WINTER OSA DB/WB		12 / 10	12 / 10	12 / 10
WINTER INDOOR AIR DB/WB		70 / 54.4	70 / 54.4	70 / 54.4
EXHAUST AIR FILTERS	AIR FLOW (CFM)	33,439	33,439	33,439
	FACE VELOCITY (FPM)	408	408	408
	FILTER DEPTH (INCHES)	4	4	4
	FILTER EFFICIENCY (%)	30	30	30
	INITIAL AIR PRESSURE DROP (INCHES WG)	0.24	0.24	0.24
	FINAL AIR PRESSURE DROP (INCHES W.G.)	0.74	0.74	0.74
	ACCESS DOORS	BOTH SIDES	BOTH SIDES	BOTH SIDES
EXHAUST FAN SOUND POWER LEVELS	63 (DB 10⁻¹² WATTS)	101	101	101
	125 (DB 10 WATTS)	104	104	104
	250 (DB 10 WATTS)	100	100	100
	500 (DB 10 WATTS)	94	94	94
	1000 (DB 10 WATTS)	89	89	89
	2000 (DB 10 WATTS)	82	82	82
	4000 (DB 10 WATTS)	78	78	78
	8000 (DB 10 WATTS)	72	72	72
EXHAUST FAN	AIR FLOW (CFM)	35,265	35,265	35,265
	QUANTITY	1	1	1
	FAN SIZE / CLASS	36.5	36.5	36.5
	FAN TYPE	DWDI AF	DWDI AF	DWDI AF
	TOTAL STATIC PRESSURE (INCHES WG)	5.8	5.8	5.8
	EXTERNAL STATIC PRESSURE (INCHES WG)	4.0	4.0	4.0
	FAN RPM	1418	1418	1418
	FAN BHP	41.31	41.31	41.31
	MOTOR HP	50	50	50
	MOTOR EFFICIENCY	PREMIUM	PREMIUM	PREMIUM
	MOTOR VOLTAGE / PHASE	460 / 3	460 / 3	460 / 3
	ACCESS DOORS	-	-	-
	VIBRATION ISOLATION TYPE / DEFLECTION	SPRING / 2"	SPRING / 2"	SPRING / 2"
SUPPLY FAN SOUND POWER LEVELS	63 (DB 10⁻¹² WATTS)	101	101	101
	125 (DB 10 WATTS)	106	106	106
	250 (DB 10 WATTS)	105	105	105
	500 (DB 10 WATTS)	97	97	97
	1000 (DB 10 WATTS)	95	95	95
	2000 (DB 10 WATTS)	91	91	91
	4000 (DB 10 WATTS)	87	87	87
	8000 (DB 10 WATTS)	83	83	83
SUPPLY FAN	AIR FLOW (CFM)	38,344	38,344	38,344
	QUANTITY	1	1	1
	FAN SIZE / CLASS	344 / III	344 / III	344 / III
	FAN TYPE	PLENUM AF	PLENUM AF	PLENUM AF
	TOTAL STATIC PRESSURE (INCHES WG)	8.0	8.0	8.0
	EXTERNAL STATIC PRESSURE (INCHES WG)	4.0	4.0	4.0
	FAN RPM	1238	1238	1238
	FAN BHP	68	68	68
	MOTOR HP	75	75	75
	MOTOR EFFICIENCY	PREMIUM	PREMIUM	PREMIUM
	MOTOR VOLTAGE / PHASE	460 / 3	460 / 3	460 / 3
	ACCESS DOORS	BOTH SIDES	BOTH SIDES	BOTH SIDES
	VIBRATION ISOLATION TYPE / DEFLECTION	SPRING / 2"	SPRING / 2"	SPRING / 2"
OUTSIDE AIR FILTERS (FILTER A)	AIR FLOW (CFM)	38,344	38,344	38,344
	FACE VELOCITY (FPM)	492	492	492
	FILTER DEPTH (INCHES)	4	4	4
	FILTER EFFICIENCY (%)	30	30	30
	INITIAL AIR PRESSURE DROP (INCHES W.G.)	0.27	0.27	0.27
	FINAL AIR PRESSURE DROP (INCHES W.G.)	0.77	0.77	0.77
	ACCESS DOORS	BOTH SIDES	BOTH SIDES	BOTH SIDES
OUTSIDE AIR FILTERS (FILTER B)	AIR FLOW (CFM)	36,518	36,518	36,518
	FILTER DEPTH (INCHES)	12	12	12
	FILTER EFFICIENCY (%)	90	90	90
	INITIAL AIR PRESSURE DROP (INCHES W.G.)	0.75	0.75	0.75
	FINAL AIR PRESSURE DROP (INCHES W.G.)	1.50	1.50	1.50
	ACCESS DOORS	BOTH SIDES	BOTH SIDES	BOTH SIDES
ENERGY WHEEL SUMMER CONDITIONS	ENTERING OSA DB TEMPERATURE (DEG. F) (SEE NOTE #1)	103.7	103.7	103.7
	ENTERING OSA SH (GR/LB)	111.3	111.3	111.3
	LEAVING OSA DB TEMPERATURE (DEG. F)	82.0	82.0	82.0
	LEAVING OSA SH (GR/LB)	78.1	78.1	78.1
	ENTERING EXHAUST AIR DB TEMPERATURE (DEG. F)	72.0	72.0	72.0
	ENTERING EXHAUST AIR SH (GR/LB)	58.6	58.6	58.6
	SENSIBLE HEAT (MBH)	900.1	900.1	900.1
	TOTAL HEAT (MBH)	1824.5	1824.5	1824.5
	SENSIBLE EFFECTIVENESS (%)	78.6	78.6	78.6
	LATENT EFFECTIVENESS (%)	72.2	72.2	72.2
ENERGY WHEEL WINTER CONDITIONS	ENTERING OSA DB TEMPERATURE (DEG. F) (SEE NOTE #1)	16.7	16.7	16.7
	ENTERING OSA SH (GR/LB)	6.1	6.1	6.1
	LEAVING OSA DB TEMPERATURE (DEG. F)	53.2	53.2	53.2
	LEAVING OSA SH (GR/LB)	26.3	26.3	26.3
	ENTERING EXHAUST AIR DB TEMPERATURE (DEG. F)	70.0	70.0	70.0
	ENTERING EXHAUST AIR SH (GR/LB)	38.1	38.1	38.1
	SENSIBLE HEAT (MBH)	1513.4	1513.4	1513.4
	TOTAL HEAT (MBH)	2054.8	2054.8	2054.8
	SENSIBLE EFFECTIVENESS (%)	78.6	78.6	78.6
	LATENT EFFECTIVENESS (%)	72.2	72.2	72.2
ENERGY WHEEL	AIR PRESSURE DROP-SUPPLY (INCHES WG)	0.92	0.92	0.92
	AIR PRESSURE DROP-EXHAUST (INCHES WG)	0.91	0.91	0.91
	FACE VELOCITY-SUPPLY (FPM)	991	991	991
	FACE VELOCITY-EXHAUST (FPM)	889	889	889
	DIAMETER (INCHES)	120	120	120
	DEPTH (INCHES)	12	12	12
CHILLED WATER COIL	AIR FLOW (CFM)	36,518	36,518	36,518
	COIL FACE VELOCITY (FPM)	507	507	507
	ROWS	6	6	6
	FIN SPACING (FINS PER FOOT)	110	110	110
	ENTERING AIR TEMPERATURE (DB/WB DEG. F.)	80.5 / 66.59	80.5 / 66.59	80.5 / 66.59
	LEAVING AIR TEMPERATURE (DB/WB DEG. F.)	53.2 / 52.71	53.2 / 52.71	53.2 / 52.71
	COIL APD (INCHES W.G., MAX. 1.0)	0.70	0.70	0.70
	ENTERING CHILLED WATER TEMPERATURE (DEG. F.)	45.0	45.0	45.0
	LEAVING CHILLED WATER TEMPERATURE (DEG. F.)	55.0	55.0	55.0
	CHILLED WATER FLOW (GPM)	-	-	-
	COIL WPD (FEET W.G., MAX. 12)	35.43	35.43	35.43
	SENSIBLE HEAT (MBH)	1076.7	1076.7	1076.7
	TOTAL HEAT (MBH)	1533.2	1533.2	1533.2
	DRAIN PAN	STAINLESS STEEL SLOPED IAQ	STAINLESS STEEL SLOPED IAQ	STAINLESS STEEL SLOPED IAQ
ACCESSORIES	LIGHTS AT FAN, WHEEL, AND ACCESS SECTIONS.			
	BYPASS INLET DAMPER IN EXHAUST FAN HOUSING.			

NOTE 1: INCLUDES SUPPLY FAN HEAT

VARIABLE FREQUENCY DRIVES

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	APPLICATION	RATED HORSEPOWER	EFFICIENCY (%)	VOLTS	PHASE	MAX. OUTPUT CURRENT (AMPS)	REMARKS
VFD-SF1	ABB ACH 400	MECH. ROOM 410	ERAHU-1 SUPPLY FAN	PULSE WIDTH MODULATED	VARIABLE TORQUE	75	-	460	3	-	FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-W1	ABB	MECH. ROOM 410	ERAHU-1 ENERGY WHEEL	PULSE WIDTH MODULATED	VARIABLE TORQUE	3/4		460	3		FURNISHED WITH ERAHU-1
VFD-SF2	ABB ACH 400	MECH. ROOM 410	ERAHU-2 SUPPLY FAN	PULSE WIDTH MODULATED	VARIABLE TORQUE	75		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-W2	ABB	MECH. ROOM 410	ERAHU-2 ENERGY WHEEL	PULSE WIDTH MODULATED	VARIABLE TORQUE	3/4		460	3		FURNISHED WITH ERAHU-2
VFD-SF3	ABB ACH 400	MECH. ROOM 410	ERAHU-3 SUPPLY FAN	PULSE WIDTH MODULATED	VARIABLE TORQUE	75		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-W3	ABB	MECH. ROOM 410	ERAHU-3 ENERGY WHEEL	PULSE WIDTH MODULATED	VARIABLE TORQUE	3/4		460	3		FURNISHED WITH ERAHU-3
VFD-P1	ABB ACH 400	MECH. ROOM 145	PUMP P-1	PULSE WIDTH MODULATED	VARIABLE TORQUE	20		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-P2	ABB ACH 400	MECH. ROOM 145	PUMP P-2	PULSE WIDTH MODULATED	VARIABLE TORQUE	7.5		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-P3	ABB ACH 400	MECH. ROOM 145	PUMP P-3	PULSE WIDTH MODULATED	VARIABLE TORQUE	7.5		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-CT1	ABB ACH 400	LAB SCIENCES WEST	COOLING TOWER CT-1	PULSE WIDTH MODULATED	VARIABLE TORQUE	25		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-P7	ABB ACH 400	LAB SCIENCES WEST	PUMP P-7	PULSE WIDTH MODULATED	VARIABLE TORQUE	75		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-P8	ABB ACH 400	LAB SCIENCES WEST	PUMP P-8	PULSE WIDTH MODULATED	VARIABLE TORQUE	75		460	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-P9	ABB ACH 400	LAB SCIENCES EAST	PUMP P-9	PULSE WIDTH MODULATED	VARIABLE TORQUE	40		208	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS
VFD-P10	ABB ACH 400	LAB SCIENCES EAST	PUMP P-10	PULSE WIDTH MODULATED	VARIABLE TORQUE	40		208	3		FURNISH WITH MANUAL BYPASS, INPUT DISCONNECT SWITCH, AND INPUT LINE REACTORS

EXHAUST FANS

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	TYPE	SERVES	AIR FLOW RATE (CFM)	TOTAL STATIC PRESSURE (IN. WATER)	ROTATION (RPM)	DRIVE	dB'A (10 FEET)	MOTOR SIZE BHP	MOTOR SIZE WHP	ELECTRICAL VOLTS	ELECTRICAL PHASE	REMARKS
EF-1	ACME FQ30K8	WALL MOUNTED PROPELLER	GREENHOUSE	10,000	0.375	860	DIRECT	65	1.34	1-1/2	460	3	FURNISH WITH WALL SLEEVE, GRAVITY SHUTTER, INLET SCREEN
EF-2	ACME FQ30K8	WALL MOUNTED PROPELLER	GREENHOUSE	10,000	0.375	860	DIRECT	65	1.34	1-1/2	460	3	
EF-3	ACME FQ30K8	WALL MOUNTED PROPELLER	GREENHOUSE	10,000	0.375	860	DIRECT	65	1.34	1-1/2	460	3	
EF-4	ACME FQ30K8	WALL MOUNTED PROPELLER	GREENHOUSE	10,000	0.375	860	DIRECT	65	1.34	1-1/2	460	3	
EF-5	MK PLASTICS 4314	VENTURI UTILITY VENT SET	PERCHLORIC ACID FUME HOOD	1230*	1.75	3385	DIRECT	81	8.87	3.0	460	3	* INDUCED CFM, FIBERGLASS REINFORCED PLASTIC CORROSION FAN W/FAN OUT OF AIRSTREAM - DESIGNED FOR PERCHLORIC ACID
EF-7	ACME PNU135RFH2	CENTRIFUGAL UP BLAST	CHEM STOR. HAZ. STOR.	1,500	1.5	1749	BELT	66	0.61	3/4	460	3	
EF-6	ACME PNUHP100RFF	CENTRIFUGAL WALL MOUNTED	FERTILIZER PESTICIDE	500	1.0	1633	BELT	55	0.19	1/3	120	1	
EF-8	ACME PV220L	CENTRIFUGAL DOWN BLAST	LAB SCIENCES WEST	3,500	1.5	983	BELT	66	1.6	2	460	3	
SF-1	ACME XB200K	INLINE	LAB SCIENCES WEST	3,500	1.5	1250	BELT	68	1.7	2	460	3	FURNISH WITH IN-LINE V-BANK FILTER PLENUM, FILTERS AND MAGNEHELIC GAUGE

HYDRONIC UNIT HEATERS

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	TYPE	SERVES	AIR FLOW RATE (CFM)	EXTERNAL PRESSURE (IN. WATER)	FILTER TYPE	HEATING: TOTAL CAPACITY (MBH)	HEATING COIL ROWS	AIR EDB (°F)	AIR LDB (°F)	WATER FLOW RATE (GPM)	WATER EWT / LWT (°F)	WATER PRESSURE DROP (FT. WATER)	ELECTRICAL: MOTOR HP	VOLTS / PHASE	WATTS / AMPS	REMARKS
UH-101	REZNOR HH 250	HORIZONTAL DISCHARGE	UNFINISHED AREA	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-102	REZNOR HH 250	HORIZONTAL DISCHARGE	UNFINISHED AREA	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-103	REZNOR HH 250	HORIZONTAL DISCHARGE	UNFINISHED AREA	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-104	REZNOR HH 250	HORIZONTAL DISCHARGE	UNFINISHED AREA	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-108	INTERNATIONAL CXB04	HORIZONTAL EXPOSED	STAIRWELL	420	0.10	1" PLEATED THROW-AWAY	26.1	2	70	127	1.8	180/150	5.0	1/12	277 / 1	146 / 0.55	
UH-109	INTERNATIONAL CXB04	HORIZONTAL EXPOSED	STAIRWELL	420	0.10	1" PLEATED THROW-AWAY	26.1	2	70	127	1.8	180/150	5.0	1/12	277 / 1	146 / 0.55	
UH-301	INTERNATIONAL CXB04	HORIZONTAL EXPOSED	STAIRWELL	420	0.10	1" PLEATED THROW-AWAY	26.1	2	70	127	1.8	180/150	5.0	1/12	277 / 1	146 / 0.55	
UH-302	INTERNATIONAL CXB04	HORIZONTAL EXPOSED	STAIRWELL	420	0.10	1" PLEATED THROW-AWAY	26.1	2	70	127	1.8	180/150	5.0	1/12	277 / 1	146 / 0.55	
UH-303	INTERNATIONAL CXB04	HORIZONTAL EXPOSED	STAIRWELL	420	0.10	1" PLEATED THROW-AWAY	26.1	2	70	127	1.8	180/150	5.0	1/12	277 / 1	146 / 0.55	
UH-401	REZNOR HH 250	HORIZONTAL DISCHARGE	GREENHOUSE	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-402	REZNOR HH 250	HORIZONTAL DISCHARGE	GREENHOUSE	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-403	REZNOR HH 250	HORIZONTAL DISCHARGE	GREENHOUSE	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	
UH-404	REZNOR HH 250	HORIZONTAL DISCHARGE	GREENHOUSE	960	0.0	NONE	38.3	---	60	99	2.5	180/150	0.21	1/20	120 / 1	--- / ---	

FAN COIL UNITS - FOUR PIPE

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	TYPE	SERVES	AIR FLOW RATE (CFM)	EXTERNAL PRESSURE (IN. WATER)	FILTER TYPE	COOLING: SENSIBLE/TOTAL CAPACITY (MBH)	COOLING COIL ROWS	AIR EDB / EWB (°F)	WATER FLOW RATE (GPM)	WATER EWT / LWT (°F)	WATER PRESSURE DROP (FT. WATER)	HEATING: TOTAL CAPACITY (MBH)	HEATING COIL ROWS	AIR EDB (°F)	WATER FLOW RATE (GPM)	WATER EWT / LWT (°F)	WATER PRESSURE DROP (FT. WATER)	ELECTRICAL: VOLTS / PHASE	WATTS / AMPS	REMARKS
FC-106	INTERNATIONAL CXB10	HORIZONTAL CABINET	MECH. RM. 145	915	0.10	1" PLEATED THROW-AWAY	18.8/23.8	3	80/67	4.8	45/55	4.8	33.5	1	70	2.3	180/147	7.2	277 / 1	292 / 1.10	
FC-107	INTERNATIONAL CXB10	HORIZONTAL CABINET	RECEIVING 141	915	0.10	1" PLEATED THROW-AWAY	18.8/23.8	3	80/67	4.8	45/55	4.8	33.5	1	70	2.0	180/147	5.5	277 / 1	292 / 1.10	
FC-110	INTERNATIONAL BPY10	HORIZONTAL DUCTED	LOBBY 132	810	0.25	1" PLEATED THROW-AWAY	17.2/21.7	3	80/67	4.4	45/55	4.0	30.6	1	70	2.5	180/147	5.5	277 / 1	310 / 1.2	
FC-203	INTERNATIONAL BPY06	HORIZONTAL DUCTED	COMP. RM. 221	430	0.25	1" PLEATED THROW-AWAY	9.4/12.0	3	80/67	2.4	45/55	2.3	15.9	1	70	2.1	180/150	5.8	277 / 1	151 / 0.57	
FC-303	INTERNATIONAL BPY06	HORIZONTAL DUCTED	COMP. RM. 321	430	0.25	1" PLEATED THROW-AWAY	9.4/12.0	3	80/67	2.4	45/55	2.3	15.9	1	70	1.1	180/150	1.2	277 / 1	151 / 0.57	
FC-401	INTERNATIONAL BPY06	HORIZONTAL DUCTED	CORRIDOR 400	430	0.25	1" PLEATED THROW-AWAY	9.4/12.0	3	80/67	2.4	45/55	2.3	15.9	1	70	0.5	180/150	1.2	277 / 1	151 / 0.57	
FC-402	INTERNATIONAL BPY06	HORIZONTAL DUCTED	CORRIDOR 402	430	0.25	1" PLEATED THROW-AWAY	9.4/12.0	3	80/67	2.4	45/55	2.3	15.9	1	70	0.5	180/150	1.2	277 / 1	151 / 0.57	
FC-403	INTERNATIONAL BPY06	HORIZONTAL DUCTED	CORRIDOR 409	430	0.25	1" PLEATED THROW-AWAY	9.4/12.0	3	80/67	2.4	45/55	2.3	15.9	1	70	0.5	180/150	1.2	277 / 1	151 / 0.57	
FC-404	INTERNATIONAL BPY06	HORIZONTAL DUCTED	ELECTRICAL RM.	430	0.25	1" PLEATED THROW-AWAY	9.4/12.0	3	80/67	2.4	45/55	2.3	15.9	1	70	0.5	180/150	1.2	277 / 1	151 / 0.57	
FC-405	INTERNATIONAL CXB10	HORIZONTAL CABINET	MECH. RM. 410	915	0.10	1" PLEATED THROW-AWAY	18.8/23.8	3	80/67	4.8	45/55	4.8	33.5	1	70	2.3	180/147	7.2	277 / 1	292 / 1.10	
FC-406	INTERNATIONAL CXB10	HORIZONTAL CABINET	MECH. RM. 410	915	0.10	1" PLEATED THROW-AWAY	18.8/23.8	3	80/67	4.8	45/55	4.8	33.5	1	70	2.3	180/147	7.2	277 / 1	292 / 1.10	

FAN COIL UNITS - TWO PIPE

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	TYPE	SERVES	AIR FLOW RATE (CFM)	EXTERNAL PRESSURE (IN. WATER)	FILTER TYPE	COOLING: SENSIBLE/TOTAL CAPACITY (MBH)	COOLING COIL ROWS	AIR EDB / EWB (°F)	WATER FLOW RATE (GPM)	WATER EWT / LWT (°F)	WATER PRESSURE DROP (FT. WATER)	ELECTRICAL: VOLTS / PHASE	WATTS / AMPS	REMARKS
FC-101	INTERNATIONAL BPY06	HORIZONTAL DUCTED	ELEV. EQUIP. 131	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-102	INTERNATIONAL BPY06	HORIZONTAL DUCTED	ELEC. 124-A	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-103	INTERNATIONAL BPY06	HORIZONTAL DUCTED	DATA RM. 128	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-104	INTERNATIONAL BPY06	HORIZONTAL DUCTED	ELEV. EQUIP. 127	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-105	INTERNATIONAL BPY10	HORIZONTAL DUCTED	ELEC. RM. 147	865	0.25	1" PLEATED THROW-AWAY	18.0/22.9	3	80/67	4.6	45/55	4.5	277 / 1	310 / 0.57	COOLING ONLY
FC-201	INTERNATIONAL BPY06	HORIZONTAL DUCTED	ELEC. RM. 270	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-202	INTERNATIONAL BPY06	HORIZONTAL DUCTED	TELE/DATA 271	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-301	INTERNATIONAL BPY06	HORIZONTAL DUCTED	ELEC. RM. 370	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY
FC-302	INTERNATIONAL BPY06	HORIZONTAL DUCTED	TELE/DATA 371	460	0.25	1" PLEATED THROW-AWAY	9.95/12.8	3	80/67	2.6	45/55	2.6	277 / 1	151 / 0.57	COOLING ONLY

BLOWER COILS - FOUR PIPE

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	TYPE	LOCATION	AIR FLOW RATE (CFM)	ROTATION (RPM)	EXTERNAL PRESSURE (IN. WATER)	TOTAL STATIC PRESSURE (IN. WATER)	FILTER TYPE	COOLING: SENSIBLE/TOTAL CAPACITY (MBH)	AIR EDB / EWB (°F)	AIR LDB / LWB (°F)	WATER FLOW RATE (GPM)	WATER EWT / LWT (°F)	COOLING COIL ROWS	AIR PRESSURE DROP (IN. WATER)	WATER PRESSURE DROP (FT. WATER)	ELECTRICAL: MOTOR SIZE BHP	MOTOR SIZE WHP	VOLTS	PHASE	REMARKS
BCU-1	INTERNATIONAL MODEL HBC40	HORIZONTAL BLOWER COIL	LAB SCIENCE, WEST MECHANICAL ROOM	4,000	911	0.5	1.5	2" THICK 30% PLEATED	146.9 / 246.0	85/71	51.0	41.0	45/57	8	0.66	48	1.88	2	460	3	FURNISH WITH FAN CONNECTOR & DISCONNECT SWITCH

BOILERS - HEATING WATER

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	LOCATION	TYPE	FUEL	NAT. GAS INPUT (MBH)	HEATING OUTPUT (MBH)	RATED PRESSURE (PSIG)	FLUE DIAMETER (IN.)	OPERATING WEIGHT (LBS)	ELECTRICAL: VOLTS / PHASE	FULL LOAD AMPS	REMARKS
B-1	AERCO BMK - 2.0 GWB	MECHANICAL ROOM #145	HIGH EFFIC. HYDRONIC	NATURAL GAS	2,000	1,720	150	8	1,785	208 / 3	6	FURNISH WITH MASTER BOILER CONTROL PANEL
B-2	AERCO BMK - 2.0 GWB	MECHANICAL ROOM #145	HIGH EFFIC. HYDRONIC	NATURAL GAS	2,000	1,720	150	8	1,785	208 / 3	6	

PUMPS

SPECIFIED IN SECTION 15400

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	WATER FLOW RATE (GPM)	TOTAL HEAD (FT. WATER)	ROTATION (RPM)	EFFICIENCY (%)	MOTOR SIZE BHP	MOTOR SIZE WHP	ELECTRICAL VOLTS	ELECTRICAL PHASE	REMARKS
P-1	PACO KP 5012-8	MECH. RM. #145	BIOSCIENCES CHILLED WATER	DOUBLE SUCTION SPLIT-CASE	920	50	1150	85	13.7	20	460	3	
P-2	PACO LF 2595-7	MECH. RM. #145	BIOSCIENCES HEATING WATER	FLEX COUPLED END SUCTION	240	75	1750	77	6.2	7.5	460	3	
P-3	PACO LF 2595-7	MECH. RM. #145	BIOSCIENCES HEATING WATER	FLEX COUPLED END SUCTION	240	75	1750	77	6.2	7.5	460	3	
P-4	GRUNDFOS HPS 80 - 160	MECH. RM. #145	BOILER B-1	IN-LINE	120	30				3	460	3	
P-5	GRUNDFOS HPS 80 - 160	MECH. RM. #145	BOILER B-2	IN-LINE	120	30				3	460	3	
P-6	GRUNDFOS HPS 32 - 80B	MECH. RM. #145	DOMESTIC HOT WATER RETURN	IN-LINE	15	23	-	-	-	1/2	120	1	BRONZE HOUSING CONSTRUCTION
P-7	PACO KP 6012	LAB SCIENCES WEST MECH. RM.	DISTRICT CHILLED WATER	DOUBLE SUCTION SPLIT-CASE	1,700	120	1750	-	-	75	460	3	EXISTING PUMP SHOWN FOR REFERENCE ONLY
P-8	PACO KP 6012	LAB SCIENCES WEST MECH. RM.	DISTRICT CHILLED WATER	DOUBLE SUCTION SPLIT-CASE	1,700	120	1750	-	-	75	460	3	EXISTING PUMP SHOWN FOR REFERENCE ONLY
P-9	PACO KP 6012	LAB SCIENCES EAST MECH. RM.	CHILLERS CH-1 & CH-2	DOUBLE SUCTION SPLIT-CASE	1,700	75	1750	85	38	40	208	3	
P-10	PACO KP 6012	LAB SCIENCES EAST MECH. RM.	CHILLERS CH-1 & CH-2	DOUBLE SUCTION SPLIT-CASE	1,700	75	1750	85	38	40	208	3	
SP-1	GRUNDFOS KP 250	ELEVATOR SUMP	ELEVATOR SUMP DRAIN	SUBMERSIBLE SUMP PUMP	10	25	-	-	-	1/3	120	1	FURNISH WITH EXTERNAL FLOAT AND ALARM FLOAT WITH AUXILIARY CONTACTS.
SP-2	GRUNDFOS KP 250	ELEVATOR SUMP	ELEVATOR SUMP DRAIN	SUBMERSIBLE SUMP PUMP	10	25	-	-	-	1/3	120	1	FURNISH WITH EXTERNAL FLOAT AND ALARM FLOAT WITH AUXILIARY CONTACTS.
HP-1	ARMSTRONG SERIES 4382 3x3x6	MECH. RM. #145	BIOSCIENCES/BIOTECH. DOMESTIC WATER	DUAL INLINE	80	81	3600			5	460	3	HP 1 & 2 PART OF FACTORY DUAL INLINE PUMP SYSTEM
HP-2	ARMSTRONG SERIES 4382 3x3x6	MECH. RM. #145	BIOSCIENCES/BIOTECH. DOMESTIC WATER	DUAL INLINE	80	81	3600			5	460	3	
FP-1	ALLIS CHAMLERS 6x6x11FS	MECH. RM. #145	FIRE PROTECTION SYSTEM	DOUBLE SUCTION SPLIT-CASE	500	92	1780	-	-	25	460	3	
JP-1	GOULD 15V-3	MECH. RM. #145	FP-1	VERTICAL MULTI-STAGE	14	104	3450	-	-	3/4	460	3	

COOLING TOWERS

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	SERVES	OUTSIDE AIR AMBIENT WET-BULB (°F)	TYPE	FLOW RATE (GPM)	OPERATING WEIGHT (LBS)	EWT (°F)	LWT (°F)	AIR FLOW (CFM)	FAN MOTOR ELECTRICAL: BHP	HP	VOLTS/PHASE	REMARKS
CT-1	-	CH-1 & CH-2	80.0	COUNTERFLOW MASONRY	1700	-	97.0	85.0	-	-	25	460 / 3	RE-USE EXISTING MASONRY TOWER

FINNED TUBE RADIATION - HOT WATER

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	SERVES	HEATING CAPACITY (BTUH)	PIPE DIAMETER (IN.)	FINS PER FOOT	FINNED LENGTH (FT.)	WATER FLOW RATE (GPM)	WATER PRESSURE DROP (FT. WATER)	EWT / LWT (°F)	REMARKS
FT-1	STERLING C3/4-34	LOADING DOCK FREEZE PROT.	3,200	3/4	40	8	1.0	---	180 / 150	FURNISH WITH THERMOSTAT, WALL MOUNTING BRACKETS, FINNED TUBE TO BE BARE AND FINS NO ENCLOSURE.
FT-1	STERLING C3/4-34	LOADING DOCK FREEZE PROT.	3,200	3/4	40	8	1.0	---	180 / 150	FURNISH WITH THERMOSTAT, WALL MOUNTING BRACKETS, FINNED TUBE TO BE BARE AND FINS NO ENCLOSURE.
FT-1	STERLING C3/4-34	LOADING DOCK FREEZE PROT.	3,200	3/4	40	8	1.0	---	180 / 150	FURNISH WITH THERMOSTAT, WALL MOUNTING BRACKETS, FINNED TUBE TO BE BARE AND FINS NO ENCLOSURE.

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 6881 WILLIAM E. TINSLEY

CORPORATE REGISTRATION TINSLEY-MULLEN ENGINEERS, INC. No. 176 ARKANSAS ENGINEER

MECHANICAL SCHEDULES – 1

Commission Number 10301

M8.1

Date: October 25, 2002

SINGLE DUCT SUPPLY AIR TERMINALS WITH HOT WATER REHEAT COILS (FIRST FLOOR)

DESIGNATION	SERVES	REFERENCE PRODUCT	INLET SIZE (INCHES)	OCCUPIED MAX. AIRFLOW (CFM)	OCCUPIED MIN. AIRFLOW (CFM)	UNOCCUPIED AIRFLOW (CFM)	TERMINAL[1] PRESSURE DROP (INCHES w.g.)	HEATING COIL[2] PRESSURE DROP (INCHES w.g.)	TOTAL[3] PRESSURE DROP (INCHES w.g.)	HEATING WATER COIL: AIR FLOW (CFM)	ROWS	EAT °F.	LAT °F.	HEATING COIL[4] PRESSURE DROP (INCHES w.g.)	EWT °F.	LWT °F.	GPM	WPD (FEET)	MBH	REMARKS
ST-101	ASSOCIATE DIRECTOR 102, 103, 104	TUTTLE & BAILEY SDV	10"ø	1150	75	0	0.04	0.35	0.39	600	2	55	104	0.11	160	127	2	0.69	31.9	
ST-102	ADMINISTRATION SUPPORT 101, 101A	TUTTLE & BAILEY SDV	10"ø	850	150	0	0.02	0.20	0.22	425	2	55	112	0.06	160	133	2	0.69	26.2	
ST-103	GREENHOUSE MANAGER 105, 106	TUTTLE & BAILEY SDV	8"ø	475	50	0	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-104	LOBBY 100	TUTTLE & BAILEY SDV	6"ø	300	50	0	0.08	0.11	0.19	175	2	55	113	0.04	160	137	1	0.12	10.9	
ST-105	LOBBY 100, 100A	TUTTLE & BAILEY SDV	10"ø	775	50	0	0.02	0.17	0.19	350	2	55	117	0.04	160	136	2	0.69	23.3	
ST-106	SEMINAR 107	TUTTLE & BAILEY SDV	10"ø	825	225	0	0.02	0.19	0.21	425	2	55	112	0.06	160	133	2	0.69	26.2	
ST-107	SEMINAR 107	TUTTLE & BAILEY SDV	10"ø	1050	225	0	0.03	0.30	0.33	550	2	55	106	0.09	160	128	2	0.69	30.4	
ST-108	RECEPTION 100B, 108	TUTTLE & BAILEY SDV	6"ø	200	75	0	0.04	0.05	0.09	100	2	55	125	0.02	160	144	1	0.12	7.6	
ST-109	WOMEN 111, 110	TUTTLE & BAILEY SDV	8"ø	700	700	250	0.05	0.36	0.41	700	2	55	97	0.36	160	138	3	0.94	31.7	
ST-110	DIRECTOR 115	TUTTLE & BAILEY SDV	6"ø	375	50	0	0.13	0.16	0.29	200	2	55	110	0.05	160	135	1	0.12	11.8	
ST-111	CONFERENCE 114	TUTTLE & BAILEY SDV	6"ø	200	125	0	0.04	0.05	0.09	125	2	55	121	0.02	160	141	1	0.12	8.9	
ST-112	RECEPTION 113	TUTTLE & BAILEY SDV	6"ø	400	100	0	0.15	0.18	0.33	200	2	55	110	0.05	160	135	1	0.12	11.8	
ST-113	ACCOUNTANT 119, 121	TUTTLE & BAILEY SDV	10"ø	775	50	0	0.02	0.17	0.19	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-114	ACCOUNTANT 123, 124, 125	TUTTLE & BAILEY SDV	10"ø	1000	75	0	0.03	0.27	0.30	500	2	55	108	0.08	160	130	2	0.69	28.9	
ST-115	ACCOUNTING TECH. 116, 118, 120, 122	TUTTLE & BAILEY SDV	10"ø	675	150	0	0.01	0.14	0.15	350	2	55	117	0.04	160	136	2	0.69	23.3	
ST-116	AUTOCLAVE 142	TUTTLE & BAILEY SDV	12"ø	1500	800	0	0.01	0.33	0.34	800	2	55	105	0.11	160	130	3	0.60	43.5	
ST-117	RECEIVING 141	TUTTLE & BAILEY SDV	12"ø	1575	0	0	0.01	0.36	0.37	1575	2	55	98	0.36	160	135	6	2.03	72.6	
ST-118	STORAGE 129	TUTTLE & BAILEY SDV	10"ø	675	0	0	0.01	0.14	0.15	350	2	55	117	0.04	160	136	2	0.69	23.3	
ST-119	CHEMICAL STORAGE 136	TUTTLE & BAILEY SDV	6"ø	275	250	50	0.07	0.09	0.16	250	2	55	105	0.08	160	132	1	0.12	13.4	
ST-120	HAZARDOUS STORAGE 137	TUTTLE & BAILEY SDV	6"ø	300	300	75	0.08	0.11	0.19	300	2	55	100	0.11	160	130	1	0.12	14.7	
ST-121	SAMPLE QUARANTINE 138	TUTTLE & BAILEY SDV	6"ø	300	250	50	0.08	0.11	0.19	250	2	55	105	0.08	160	132	1	0.12	13.4	
ST-122	CORRIDOR 130	TUTTLE & BAILEY SDV	6"ø	300	75	0	0.08	0.11	0.19	250	2	55	105	0.08	160	132	1	0.12	13.4	
ST-123	STORAGE 135	TUTTLE & BAILEY SDV	6"ø	275	0	0	0.07	0.09	0.16	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-124	GROWTH CHAMBER 140	TUTTLE & BAILEY SDV	14"ø	1400	700	150	0.01	0.18	0.19	700	2	55	111	0.05	160	131	3	0.34	42.4	
ST-125	GROWTH CHAMBER 140	TUTTLE & BAILEY SDV	14"ø	1400	700	150	0.01	0.18	0.19	700	2	55	111	0.05	160	131	3	0.34	42.4	
ST-126	AUTOCLAVE 142	TUTTLE & BAILEY SDV	10"ø	1000	700	150	0.03	0.27	0.30											

1 DIFFERENCE IN STATIC PRESSURE FROM INLET TO DISCHARGE AT COOLING MAXIMUM AIR FLOW. DOES NOT INCLUDE HEATING COIL.
2 AIR PRESSURE DROP AT COOLING MAXIMUM FLOW.
3 TOTAL AIR PRESSURE LOSS THRU UNIT AT COOLING MAXIMUM AIR FLOW.
4 AIR PRESSURE DROP AT HEATING AIR FLOW.

WATER CHILLERS

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	TOTAL CAPACITY (TONS)	OPERATING WEIGHT (LBS)	REFRIGERANT TYPE	EFFICIENCY NPLV	EFFICIENCY KW/TON	EVAPORATOR: WATER FLOW RATE (GPM)	EWT / LWT (°F)	EVAPORATOR PRESSURE DROP (FT. WATER)	No. OF PASSES	FOULING FACTOR	CONDENSER: WATER (GPM)	WATER EWT / LWT (°F)	CONDENSER PRESSURE DROP (FT. WATER)	No. OF PASSES	FOULING FACTOR	ELECTRICAL: MAXIMUM MOTOR CURENT (FLA)	TOTAL ENERGY (KW)	OIL PUMP (FLA)	MIN. CKT AMPS	MAX OVER-CURRENT AMPS	VOLTS / PHASE	REMARKS
CH-1	EXISTING	250	-	HCFC-123			394	56.0 / 42.0	-	2	-	750	85.0 / 93.8	-	2	-	214	155				460 / 3	EXISTING
CH-2	YORK YTKICIE2-CRJ	500	26000	HCFC-123	0.530	0.616	860	56.0 / 42.0	18.4	3	0.00010	1175	85.0 / 97.0	13.4	2	0.00025	418	308	2	527	800	460 / 3	FURNISH WITH UNIT-MOUNTED SOLID STATE STARTER

PRESSURE RELIEF VALVES

SPECIFIED IN SECTION 15100

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	CAPACITY (LBS/HR)	CAPACITY (MBH)	ORIFICE AREA (SQ. IN.)	PRESSURE RELIEF SETTING (PSIG)	VALVE SIZE (INLETxOUTLET) (IN.)	REMARKS
RV-1	WHEATLEY RV0150	MECHANICAL ROOM 145	BIOSCIENCES HEATING WATER	-	4,249	-	75	1-1/2" - 1-1/2"	-
RV-2	-	MECHANICAL ROOM 145	BIOSCIENCES DOMESTIC HOT WATER	-	1,000	-	125	1-1/2" - 1-1/2"	PRESSURE AND TEMPERATURE RELIEF VALVE FURNISHED WITH WATER HEATER
RV-3	SPIRAX SARCO 6010FF	LAB SCIENCES WEST MECHANICAL ROOM	DISTRICT CHILLED WATER	-	-	0.338	90	1-1/4" - 1-1/4"	-

EXPANSION TANKS

SPECIFIED IN SECTION 15100

DESIGNATION	REFERENCE PRODUCT	SERVES	TYPE	SYSTEM VOLUME (GAL)	MINIMUM TEMPERATURE (°F)	MAXIMUM TEMPERATURE (°F)	INITIAL TANK AIR PRESSURE (PSIG)	MAXIMUM PRESSURE (PSIG)	MINIMUM TANK SIZE (GAL)	MINIMUM ACCEPTANCE (GAL)	TANK DIAMETER (IN.)	TANK LENGTH (IN.)	REMARKS
ET-1	WHEATLEY WFA215	BIOSCIENCES HEATING WATER	FULL ACCEPTANCE BLADDER	800	40	200	30	75	57	57	20	54	
ET-2	AMTROL ST-30V	BIOSCIENCES DOMESTIC HOT WATER	PARTIAL ACCEPTANCE BLADDER	300	40	140	60	125	14	11	16	39	
ET-3	WHEATLEY WFA300	DISTRICT CHILLED WATER	FULL ACCEPTANCE BLADDER	11,750	40	60	60	90	82	82	24	57	
ET-4	WESSELECT FX200V	HOUSE PUMP	PARTIAL ACCEPTANCE BLADDER	---	40	80	75	125	52	30	22	49	

GAS FIRED DOMESTIC WATER HEATER

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	LOCATION	TYPE	FUEL	OPERATING WEIGHT (LBS)	NAT. GAS INPUT (MBH)	HEATING OUTPUT (MBH)	EWT / LWT (°F)	RECOVERY RATE (GPH)	FLUE DIAMETER (IN.)	RATED PRESSURE (PSIG)	ELECTRICAL VOLTS/PHASE/AMPS	REMARKS
WH-1	AERCO KC-1000	MECHANICAL ROOM #145	HIGH EFFIC. WATER HEATER	NAT. GAS	1400	1000	930	40/120	1395	6	160	120/1/6	-

EXHAUST AIR TERMINALS (FIRST FLOOR)

DESIGNATION	SERVES	ASSOCIATED SUPPLY AIR TERMINAL	REFERENCE PRODUCT	INLET SIZE (INCHES)	MAX. OCCUPIED AIRFLOW (CFM)	MIN. OCCUPIED AIRFLOW (CFM)	UNOCCUPIED AIRFLOW (CFM)	PRESSURE[1] DROP (INCHES w.g.)	MATERIAL TYPE	APPLICATION	REFERENCE CONTROL DIAGRAM
ET-101	ASSOCIATE DIRECTOR 104	ST-101	TUTTLE & BAILEY RRV	12"ø	1150	600	0	0.157	---	---	---
ET-102	ADMINISTRATION SUPPORT 101	ST-102	TUTTLE & BAILEY RRV	8"ø	850	425	0	0.212	---	---	---
ET-103	GREENHOUSE MANAGER 105	ST-103	TUTTLE & BAILEY RRV	8"ø	475	250	0	0.066	---	---	---
ET-104	SEMINAR 107	ST-106, 107	TUTTLE & BAILEY RRV	14"ø	1875	950	0	0.111	---	---	---
ET-105	LOBBY	ST-104, 105, 108	TUTTLE & BAILEY RRV	12"ø	1025	600	0	0.064	---	---	---
ET-106	DIRECTOR 115	ST-110, 111	TUTTLE & BAILEY RRV	8"ø	575	325	0	0.097	---	---	---
ET-107	RESTROOMS 109, 110, 111	ST-109	TUTTLE & BAILEY RRV	10"ø	775	775	300	0.071	---	---	---
ET-108	ACCOUNTING 119	ST-113, 114	TUTTLE & BAILEY RRV	14"ø	1575	80	0	0.078	---	---	---
ET-109	113A, 116, 118, 120, 122	ST-115	TUTTLE & BAILEY RRV	10"ø	800	350	0	0.076	---	---	---
ET-110	STORAGE 129	ST-118, 123	TUTTLE & BAILEY RRV	12"ø	1050	600	100	0.067	---	---	---
ET-111	AUTOCLARE 142	ST-116	TUTTLE & BAILEY RRV	14"ø	1600	900	100	0.080	---	---	---
ET-112	GROWTH CHAMBER	ST-124	TUTTLE & BAILEY RRV	14"ø	1450	750	200	0.066	---	---	---
ET-113	GROWTH CHAMBER	ST-125	TUTTLE & BAILEY RRV	14"ø	1450	750	200	0.066	---	---	---
ET-114	AUTOCLARE 142	ST-126	TUTTLE & BAILEY RRV	12"ø	1000	600	100	0.067	---	---	---

PLATE AND FRAME HEAT EXCHANGER

SPECIFIED IN SECTION 15600

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	COOLING CAPACITY (MBH)	TOWER WATER: WATER FLOW RATE (GPM)	EWT / LWT (°F)	WATER PRESSURE DROP (FT. WATER)	FOULING FACTOR	CHILLED WATER: WATER FLOW RATE (GPM)	EWT / LWT (°F)	WATER PRESSURE DROP (FT. WATER)	FOULING FACTOR	REMARKS
HX-1	WHEATLEY S10617S0L135	LAB SCIENCES WEST MECHANICAL ROOM	DISTRICT COOLING SYSTEM	4200	1400	45/55	24.3	0.0001	1400	53/47	24.4	0.0001	

EVAPORATIVE FLUID COOLERS

DESIGNATION	REFERENCE PRODUCT	TYPE	AIR FLOW RATE (CFM)	ENTERING AIR TEMP. DB/WB (°F)	EXTERNAL PRESSURE (IN. WATER)	DRIVE	MOTOR HP	ELECTRICAL: VOLTS	PHASE	OPERATING WEIGHT (LBS)	REMARKS
EV-401	ESSICKAIR CS15000	GREENHOUSE	10,185	98/77	0.2	BELT	2	460	3	1,030	---
EV-402	ESSICKAIR CS15000	GREENHOUSE	10,185	98/77	0.2	BELT	2	460	3	1,030	
EV-403	ESSICKAIR CS15000	GREENHOUSE	10,185	98/77	0.2	BELT	2	460	3	1,030	
EV-404	ESSICKAIR CS15000	GREENHOUSE	10,185	98/77	0.2	BELT	2	460	3	1,030	

AIR DISTRIBUTION DEVICES

DESIGNATION SUPPLY — THROW — CFM; RETURN OR EXHAUST — DESIGNATION — CFM

SPECIFIED IN SECTION 15800

DESIGNATION	REFERENCE PRODUCT	TYPE	MAXIMUM AIR FLOW (CFM)	TOTAL PRESSURE (IN. WATER)	NECK SIZE (IN.)	PANEL SIZE (IN x IN)	MAX N.C.	FINISH	REMARKS
A	TUTTLE & BAILEY PBRLV	SUPPLY LAY-IN MOUNT	100	0.02	6"ø	24"x24"	30	OFF-WHITE	FURNISH W/OBD
B			220	0.06	8"ø				
C			400	0.08	10"ø				
D			550	0.08	12"ø				
E	PCBL		100	0.02	6"x6"	24"x12"			FURNISH OBD AND 6"ø ADAPTER
F	PCBL		220	0.08	8"x8"	24"x12"			FURNISH OBD AND 8"ø ADAPTER
G	PBRSV	SUPPLY SURFACE MOUNT	100	0.03	6"ø	12"x12"			FURNISH W/OBD AND CEILING GASKET
H			220	0.06	8"ø	16"x16"			
I			400	0.08	10"ø	20"x20"			
J			550	0.08	12"ø	24"x24"			
K	PCBS		125	0.08	6"x6"	12"x24"			FURNISH OBD, CEILING GASKET AND 6"ø ADAPTER
L	PCBS		220	0.08	8"x8"	12"x24"			FURNISH OBD, CEILING GASKET AND 8"ø ADAPTER
M	RC40	SUPPLY LAY-IN	1125	0.10	18"x18"	24"x24"			FURNISH W/OBD, 18"ø ADAPTER AND CEILING GASKET
N	VF-57	SUPPLY SIDEWALL	275	0.12	12"x6"	14"x8"			FURNISH W/OBD
O	VF-57		700	0.12	18"x6"	20"x8"			FURNISH W/OBD
P	VF-57		1050	0.12	22"x8"	24"x10"			FURNISH W/OBD
Q	TBAV	SUPPLY LINEAR BAR	800	0.05	4"x96"	-		SATIN	FURNISH W/FLANGED FRAME. ADD CORNER DIMENSION.
R	TBAV		450	0.05	4"x54"	-		SATIN	FURNISH W/FLANGED FRAME. ADD CORNER DIMENSION.
S	ACCUTHERM TF-HC-A THERMA-FUSER	SUPPLY LAY-IN	175	0.15	6"ø	24"x24"	30	OFF-WHITE	FURNISH W/ WALL MOUNTED REMOTE HEATING / COOLING ADJUSTER
T	ACCUTHERM TF-HC-A THERMA-FUSER	SUPPLY LAY-IN	320	0.20	8"ø	24"x24"	30	OFF-WHITE	FURNISH W/ WALL MOUNTED REMOTE HEATING / COOLING ADJUSTER
U	ACCUTHERM TF-HC-A THERMA-FUSER	SUPPLY LAY-IN	450	0.15	10"ø	24"x24"	30	OFF-WHITE	FURNISH W/ WALL MOUNTED REMOTE HEATING / COOLING ADJUSTER
1	TUTTLE & BAILEY PRRLV	RET/EXH LAY-IN MOUNT	100	0.02	6"ø	24"x24"	30	OFF-WHITE	FURNISH W/OBD
2			200	0.03	8"ø				
3			350	0.05	10"ø				
4			700	0.05	12"ø				
5			1000	0.08	14"ø				
6			1400	0.08	22"x22"				
7	PCLR		100	0.02	6"x6"	24"x12"			FURNISH OBD AND 6"ø ADAPTER
8	PCLR		200	0.03	8"x8"	24"x12"			FURNISH OBD AND 8"ø ADAPTER
9	PCLR		750	0.03	22"x10"	24"x12"			FURNISH OBD
10	CRE500		3250	0.03	22"x22"	24"x24"			FURNISH OBD
11	PRRSV	RET/EXH SURFACE MOUNT	100	0.02	6"ø	12"x12"			FURNISH W/OBD AND CEILING GASKET
12			200	0.01	8"ø	16"x16"			
13			350	0.06	10"ø	20"x20"			
14			700	0.06	12"ø	24"x24"			
15			1000	0.08	14"ø				
16			1400	0.08	22"x22"				
17	PCRS		100	0.02	6"x6"	24"x12"			FURNISH OBD, CEILING GASKET AND 6"ø ADAPTER
18	PCRS		200	0.03	8"x8"	24"x12"			FURNISH OBD, CEILING GASKET AND 8"ø ADAPTER
19	PCRS		750	0.03	22"x10"	24"x12"			FURNISH W/OBD AND CEILING GASKET
20	CRE500		3250	0.03	22"x22"	24"x24"			FURNISH W/OBD AND CEILING GASKET
21	VF-57	RET/EXH SIDEWALL	325	0.10	12"x6"	14"x8"			FURNISH W/OBD 42 ° HORIZONTAL DEFLECTION
22	VF-57		425	0.10	18"x6"	20"x8"			
23	VF-57		800	0.10	22"x8"	24"x10"			
24	VF-57		1600	0.10	22"x16"	24"x18"			
25	VF-57		4000	0.40	40/18	42/12			

MECHANICAL LEGEND

- —TS— SUPPLY FROM TOWER
- —TR— RETURN TO TOWER
- —HWS— HEATING WATER SUPPLY
- —HWR— HEATING WATER RETURN
- —CHS— BUILDING CHILLED WATER SUPPLY
- —CHR— BUILDING CHILLED WATER RETURN
- —DCHS— DISTRICT CHILLED WATER SUPPLY
- —DCHR— DISTRICT CHILLED WATER RETURN
- —D— CONDENSATE DRAIN
- BALL VALVE
- BUTTERFLY VALVE (LEVER HANDLE)
- BUTTERFLY VALVE (GEAR OPERATOR)
- GATE VALVE
- GLOBE VALVE
- CHECK VALVE (SWING CHECK)
- CHECK VALVE (BUTTERFLY CHECK)
- PRESSURE REDUCING VALVE
- VALVE AT RISER
- STRAINER W/ DRAIN VALVE
- UNION
- CONTROL VALVE (2-WAY) ELECTRIC OR ELECTRONIC
- CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC
- CONTROL VALVE (2-WAY) PNEUMATIC
- CONTROL VALVE (3-WAY) PNEUMATIC
- FLEXIBLE PIPE CONNECTOR
- METAL BELLOWS PUMP CONNECTOR
- AIR VENT (A - AUTO, H - HAND)
- PRESSURE AND TEMPERATURE TAP
- PRESSURE GAUGE
- THERMOMETER W/ SEP. WELL
- ANCHOR
- PIPE GUIDE
- FLANGE
- ELBOW, TURNED UP
- ELBOW, TURNED DOWN
- RISE OR DROP IN PIPE
- TEE, SIDE CONNECTION
- TEE, OUTLET UP
- TEE, OUTLET DOWN
- CAPPED OUTLET
- CAPPED PIPE
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- —TFD PIPE TO FLOOR DRAIN

- (T) THERMOSTAT
- THERMOSTAT WIRING
- FM GPM FLUID FLOW METER
- SA SUPPLY AIR DUCT
- RA RETURN AIR DUCT
- EXH. EXHAUST AIR DUCT
- CFM CUBIC FEET PER MINUTE
- ø ROUND DIAMETER
- FLAT OVAL (MAJOR/MINOR)
- LOW PRESSURE RADIUS ELL (RECTANGULAR OR ROUND)
- HIGH PRESSURE RADIUS ELL (ROUND OR OVAL)
- ELL WITH TURNING VANES
- STREAMLINE TAP (RECTANGULAR)
- STREAMLINE TAP (ROUND)
- CONICAL TAP
- MANUAL VOLUME DAMPER
- MOTORIZED VOLUME DAMPER
- FIRE DAMPER (FD)
- SMOKE DAMPER
- 20/12 RECTANGULAR DUCT (WIDTH/DEPTH)
- ROUND DUCT OFFSET
- R CHANGE IN ELEVATION (R - RISE, F - FALL)
- FLEXIBLE DUCT
- SUPPLY DUCT UP
- RETURN DUCT UP
- EXHAUST DUCT UP
- SUPPLY DUCT DOWN
- RETURN DUCT DOWN
- EXHAUST DUCT DOWN
- CEILING DIFFUSER
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE
- AP ACCESS PANEL
- AP ACCESS PANEL IN ROUND OR OVAL DUCT
- TYPE - THROW / CFM | SUPPLY AIR DEVICE
- TYPE / CFM | RETURN/EXHAUST AIR DEVICE

- NEW EQUIPMENT
- SANITARY SEWER (SS)
- SANITARY VENT (V)
- —SD— STORM DRAIN
- —AW— ACID WASTE
- - -AV- - ACID VENT
- COLD WATER (CW)
- HOT WATER (HW)
- HOT WATER RETURN (HWR)
- —G— EQUIPMENT NATURAL GAS
- —LA— LAB AIR
- —LV— LAB VACUUM
- —LG— LAB NATURAL GAS
- —F— FIRE PROTECTION PIPING
- FIRE PROTECTION DRAIN
- TS OS & Y GATE VALVE
- TS TAMPER SWITCH
- FD FLOOR DRAIN
- RD ROOF DRAIN
- VTR VENT THRU ROOF
- CO CLEANOUT PLUG
- FCO FLOOR CLEANOUT
- WCO WALL CLEANOUT
- COTG CLEANOUT TO GRADE
- POINT OF CONNECTION TO EXISTING
- TERMINATION OF DEMOLITION
- 1 / M3.1 RISER NUMBER / SHEET NUMBER | RISER DESIGNATION

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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CORPORATE REGISTRATION TINSLEY-MULLEN ENGINEERS, INC. No. 178 ARKANSAS ENGINEER

MECHANICAL SCHEDULES - 2

Commission Number 10301

M8.2

Date: October 25, 2002

SINGLE DUCT SUPPLY AIR TERMINALS WITH HOT WATER REHEAT COILS

DESIGNATION	SERVES	REFERENCE PRODUCT	INLET SIZE (INCHES)	OCCUPIED MAX. AIRFLOW (CFM)	OCCUPIED MIN. AIRFLOW (CFM)	UNOCCUPIED AIRFLOW (CFM)	TERMINAL[1] PRESSURE DROP (INCHES w.g.)	HEATING COIL[2] PRESSURE DROP (INCHES w.g.)	TOTAL[3] PRESSURE DROP (INCHES w.g.)	HEATING WATER COIL AIR FLOW (CFM)	ROWS	EAT °F.	LAT °F.	HEATING COIL[4] PRESSURE DROP (INCHES w.g.)	EWT °F.	LWT °F.	GPM	WPD (FEET)	MBH	REMARKS
ST-201	P. I. OFFICE 201,202	TUTTLE & BAILEY SDV	8"Ø	425	50	0	0.02	0.15	0.17	225	2	55	110	0.05	160	132	1	0.13	13.4	
ST-202	P. I. OFFICE 203,204	TUTTLE & BAILEY SDV	10"Ø	500	50	0	0.01	0.08	0.09	250	2	55	116	0.02	160	126	1	0.20	16.4	
ST-203	P. I. OFFICE 205,206,207	TUTTLE & BAILEY SDV	12"Ø	1100	75	0	0.01	0.19	0.20	575	2	55	108	0.06	160	126	2	0.29	32.8	
ST-204	P. I. OFFICE 208,209	TUTTLE & BAILEY SDV	10"Ø	750	50	0	0.02	0.16	0.18	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-205	ADMINISTRATIVE SUPPORT 200	TUTTLE & BAILEY SDV	8"Ø	600	100	0	0.04	0.27	0.31	300	2	55	103	0.08	160	128	1	0.13	15.6	
ST-206	P. I. OFFICE 210,211	TUTTLE & BAILEY SDV	10"Ø	750	50	0	0.02	0.16	0.18	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-207	P. I. OFFICE 212,213,214	TUTTLE & BAILEY SDV	12"Ø	1025	75	0	0.01	0.17	0.18	550	2	55	109	0.06	160	127	2	0.29	32.0	
ST-208	ADMINISTRATIVE SUPPORT 200	TUTTLE & BAILEY SDV	8"Ø	600	100	0	0.04	0.27	0.31	300	2	55	103	0.08	160	128	1	0.13	15.6	
ST-209	P. I. OFFICE 217,218	TUTTLE & BAILEY SDV	8"Ø	425	50	0	0.02	0.15	0.17	225	2	55	110	0.05	160	132	1	0.13	13.4	
ST-210	P. I. OFFICE 215,216	TUTTLE & BAILEY SDV	8"Ø	475	50	0	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-211	WORK 200A, STORAGE 200B	TUTTLE & BAILEY SDV	6"Ø	200	25	0	0.04	0.05	0.09	125	2	55	121	0.02	160	141	1	0.12	8.9	
ST-212	CONFERENCE ROOM 220	TUTTLE & BAILEY SDV	10"Ø	925	250	0	0.03	0.24	0.27	475	2	55	110	0.07	160	131	2	0.69	28.0	
ST-213	CORRIDOR 219	TUTTLE & BAILEY SDV	6"Ø	125	50	100	0.01	0.02	0.03	100	2	55	125	0.02	160	144	1	0.12	7.6	
ST-214	WOMEN 223, MEN 224, CUST. 221	TUTTLE & BAILEY SDV	8"Ø	500	500	50	0.02	0.20	0.22	500	2	55	100	0.20	160	135	2	0.46	24.4	
ST-215	BREAK ROOM 222	TUTTLE & BAILEY SDV	10"Ø	650	0	0	0.01	0.13	0.14	325	2	55	118	0.04	160	137	2	0.69	22.2	
ST-216	SEMINAR 269	TUTTLE & BAILEY SDV	8"Ø	500	125	0	0.02	0.20	0.22	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-217	SEMINAR 229	TUTTLE & BAILEY SDV	8"Ø	525	125	0	0.03	0.21	0.24	275	2	55	105	0.07	160	129	1	0.13	15.0	
ST-218	TISSUE CULTURE 231	TUTTLE & BAILEY SDV	6"Ø	325	0	0	0.10	0.13	0.23	175	2	55	113	0.04	160	137	1	0.12	10.9	
ST-219	RESEARCH LAB 232	TUTTLE & BAILEY SDV	10"Ø	950	950	325	0.03	0.25	0.28	950	2	55	101	0.25	160	135	4	2.37	47.7	
ST-220	RESEARCH LAB 233	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-221	RESEARCH LAB 234	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-222	RESEARCH LAB 235	TUTTLE & BAILEY SDV	10"Ø	875	850	250	0.02	0.21	0.23	850	2	55	101	0.20	160	131	3	1.42	42.3	
ST-223	RESEARCH LAB 240	TUTTLE & BAILEY SDV	10"Ø	875	800	200	0.02	0.21	0.23	800	2	55	102	0.18	160	132	3	1.42	40.9	
ST-224	RESEARCH LAB 241	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-225	RESEARCH LAB 242	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-226	RESEARCH LAB 243	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-227	RESEARCH LAB 244	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-228	MISC. SUPPORT 247	TUTTLE & BAILEY SDV	8"Ø	475	250	50	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-229	TISSUE CULTURE 246	TUTTLE & BAILEY SDV	6"Ø	150	150	0	0.02	0.03	0.05	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-230	EQUIPMENT 238	TUTTLE & BAILEY SDV	10"Ø	650	400	100	0.01	0.13	0.14	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-231	CORRIDOR 236	TUTTLE & BAILEY SDV	6"Ø	350	25	350	0.11	0.14	0.25	350	2	55	105	0.14	160	140	2	0.41	18.8	
ST-232	MISC. SUPPORT 237	TUTTLE & BAILEY SDV	8"Ø	500	250	50	0.02	0.20	0.22	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-233	TISSUE CULTURE 251	TUTTLE & BAILEY SDV	6"Ø	200	150	0	0.04	0.05	0.09	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-234	RESEARCH LAB 252	TUTTLE & BAILEY SDV	10"Ø	950	950	325	0.03	0.25	0.28	950	2	55	101	0.25	160	135	4	2.37	47.7	
ST-235	RESEARCH LAB 253	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-236	RESEARCH LAB 254	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-237	RESEARCH LAB 255	TUTTLE & BAILEY SDV	10"Ø	900	800	200	0.02	0.23	0.25	800	2	55	102	0.18	160	132	3	1.42	40.9	
ST-238	RESEARCH LAB 256	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-239	RESEARCH LAB 261	TUTTLE & BAILEY SDV	10"Ø	875	850	250	0.02	0.21	0.23	850	2	55	101	0.20	160	131	3	1.42	42.3	
ST-240	RESEARCH LAB 262	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-241	RESEARCH LAB 263	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-242	RESEARCH LAB 264	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-243	TISSUE CULTURE 266	TUTTLE & BAILEY SDV	6"Ø	150	150	0	0.02	0.03	0.05	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-244	CORRIDOR 268	TUTTLE & BAILEY SDV	6"Ø	150	150	150	0.02	0.03	0.05	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-245	MISCELLANEOUS SUPPORT 250	TUTTLE & BAILEY SDV	8"Ø	475	250	50	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-246	EQUIPMENT 258	TUTTLE & BAILEY SDV	10"Ø	625	400	100	0.01	0.12	0.13	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-247	MISC. SUPPORT 259	TUTTLE & BAILEY SDV	8"Ø	475	250	50	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-248	CORRIDOR 257	TUTTLE & BAILEY SDV	6"Ø	350	25	350	0.11	0.14	0.25	350	2	55	105	0.14	160	140	2	0.41	18.8	
ST-249	POST DOCS/GRAD. STUDENTS 260	TUTTLE & BAILEY SDV	12"Ø	1150	150	450	0.01	0.20	0.21	575	2	55	108	0.06	160	126	2	0.29	32.8	
ST-250	POST DOCS/GRAD. STUDENTS 260	TUTTLE & BAILEY SDV	10"Ø	1150	150	450	0.04	0.35	0.39	575	2	55	105	0.10	160	128	2	0.69	31.2	
ST-251	POST DOCS/GRAD. STUDENTS 259	TUTTLE & BAILEY SDV	12"Ø	1150	150	450	0.01	0.20	0.21	575	2	55	108	0.06	160	126	2	0.29	32.8	
ST-252	POST DOCS/GRAD. STUDENTS 259	TUTTLE & BAILEY SDV	10"Ø	1150	150	450	0.04	0.35	0.39	575	2	55	105	0.10	160	128	2	0.69	31.2	
ST-301	P. I. OFFICE 301,302	TUTTLE & BAILEY SDV	8"Ø	425	50	0	0.02	0.15	0.17	225	2	55	110	0.05	160	132	1	0.13	13.4	
ST-302	P. I. OFFICE 303,304	TUTTLE & BAILEY SDV	10"Ø	500	50	0	0.01	0.08	0.09	250	2	55	116	0.02	160	126	1	0.20	16.4	
ST-303	P. I. OFFICE 305,306,307	TUTTLE & BAILEY SDV	12"Ø	1100	75	0	0.01	0.19	0.20	575	2	55	108	0.06	160	126	2	0.29	32.8	
ST-304	P. I. OFFICE 308,309	TUTTLE & BAILEY SDV	10"Ø	750	50	0	0.02	0.16	0.18	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-305	ADMINISTRATIVE SUPPORT 300	TUTTLE & BAILEY SDV	8"Ø	600	100	0	0.04	0.27	0.31	300	2	55	103	0.08	160	128	1	0.13	15.6	
ST-306	P. I. OFFICE 310,311	TUTTLE & BAILEY SDV	10"Ø	750	50	0	0.02	0.16	0.18	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-307	P. I. OFFICE 312,313,314	TUTTLE & BAILEY SDV	12"Ø	1025	75	0	0.01	0.17	0.18	550	2	55	109	0.06	160	127	2	0.29	32.0	
ST-308	ADMINISTRATIVE SUPPORT 300	TUTTLE & BAILEY SDV	8"Ø	600	100	0	0.04	0.27	0.31	300	2	55	103	0.08	160	128	1	0.13	15.6	
ST-309	P. I. OFFICE 317,318	TUTTLE & BAILEY SDV	8"Ø	425	50	0	0.02	0.15	0.17	225	2	55	110	0.05	160	132	1	0.13	13.4	
ST-310	P. I. OFFICE 315,316	TUTTLE & BAILEY SDV	8"Ø	475	50	0	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-311	WORK 300A, STORAGE 300B	TUTTLE & BAILEY SDV	6"Ø	200	25	0	0.04	0.05	0.09	125	2	55	121	0.02	160	141	1	0.12	8.9	
ST-312	CONFERENCE ROOM 320	TUTTLE & BAILEY SDV	10"Ø	925	250	0	0.03	0.24	0.27	475	2	55	110	0.07	160	131	2	0.69	28.0	
ST-313	CORRIDOR 319	TUTTLE & BAILEY SDV	6"Ø	125	50	100	0.01	0.02	0.03	100	2	55	125	0.02	160	144	1	0.12	7.6	
ST-314	WOMEN 323, MEN 324, CUST. 327	TUTTLE & BAILEY SDV	8"Ø	500	500	50	0.02	0.20	0.22	500	2	55	100	0.20	160	135	2	0.46	24.4	
ST-315	BREAK ROOM 322	TUTTLE & BAILEY SDV	10"Ø	650	0	0	0.01	0.13	0.14	325	2	55	118	0.04	160	137	2	0.69	22.2	
ST-316	SEMINAR 369	TUTTLE & BAILEY SDV	8"Ø	500	125	0	0.02	0.20	0.22	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-317	SEMINAR 329	TUTTLE & BAILEY SDV	8"Ø	525	125	0	0.03	0.21	0.24	275	2	55	105	0.07	160	129	1	0.13	15.0	
ST-318	TISSUE CULTURE 331	TUTTLE & BAILEY SDV	6"Ø	325	0	0	0.10	0.13	0.23	175	2	55	113	0.04	160	137	1	0.12	10.9	
ST-319	RESEARCH LAB 332	TUTTLE & BAILEY SDV	10"Ø	950	950	325	0.03	0.25	0.28	950	2	55	101	0.25	160	135	4	2.37	47.7	
ST-320	RESEARCH LAB 333	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-321	RESEARCH LAB 334	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-322	RESEARCH LAB 335	TUTTLE & BAILEY SDV	10"Ø	875	850	250	0.02	0.21	0.23	850	2	55	101	0.20	160	131	3	1.42	42.3	
ST-323	RESEARCH LAB 340	TUTTLE & BAILEY SDV	10"Ø	875	800	200	0.02	0.21	0.23	800	2	55	102	0.18	160	132	3	1.42	40.9	
ST-324	RESEARCH LAB 341	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-325	RESEARCH LAB 342	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-326	RESEARCH LAB 343	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-327	RESEARCH LAB 344	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-328	MISC. SUPPORT 347	TUTTLE & BAILEY SDV	8"Ø	475	250	50	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-329	TISSUE CULTURE 346	TUTTLE & BAILEY SDV	6"Ø	150	150	0	0.02	0.03	0.05	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-330	EQUIPMENT 338	TUTTLE & BAILEY SDV	10"Ø	650	400	100	0.01	0.13	0.14	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-331	CORRIDOR 336	TUTTLE & BAILEY SDV	6"Ø	350	25	350	0.11	0.14	0.25	350	2	55	105	0.14	160	140	2	0.41	18.8	
ST-332	MISC. SUPPORT 337	TUTTLE & BAILEY SDV	8"Ø	500	250	50	0.02	0.20	0.22	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-333	TISSUE CULTURE 351	TUTTLE & BAILEY SDV	6"Ø	200	150	0	0.04	0.05	0.09	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-334	RESEARCH LAB 352	TUTTLE & BAILEY SDV	10"Ø	950	950	325	0.03	0.25	0.28	950	2	55	101	0.25	160	135	4	2.37	47.7	
ST-335	RESEARCH LAB 353	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-336	RESEARCH LAB 354	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-337	RESEARCH LAB 355	TUTTLE & BAILEY SDV	10"Ø	900	800	200	0.02	0.23	0.25	800	2	55	102	0.18	160	132	3	1.42	40.9	
ST-338	RESEARCH LAB 356	TUTTLE & BAILEY SDV	10"Ø	900	900	300	0.02	0.23	0.25	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-339	RESEARCH LAB 361	TUTTLE & BAILEY SDV	10"Ø	875	850	250	0.02	0.21	0.23	850	2	55	101	0.20	160	131	3	1.42	42.3	
ST-340	RESEARCH LAB 362	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-341	RESEARCH LAB 363	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-342	RESEARCH LAB 364	TUTTLE & BAILEY SDV	10"Ø	975	900	300	0.03	0.26	0.29	900	2	55	100	0.23	160	130	3	1.42	43.5	
ST-343	TISSUE CULTURE 366	TUTTLE & BAILEY SDV	6"Ø	150	150	0	0.02	0.03	0.05	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-344	CORRIDOR 368	TUTTLE & BAILEY SDV	6"Ø	150	150	150	0.02	0.03	0.05	150	2	55	116	0.03	160	139	1	0.12	10.0	
ST-345	MISCELLANEOUS SUPPORT 350	TUTTLE & BAILEY SDV	8"Ø	475	250	50	0.02	0.18	0.20	250	2	55	108	0.06	160	130	1	0.13	14.2	
ST-346	EQUIPMENT 358	TUTTLE & BAILEY SDV	10"Ø	625	400	100	0.01	0.12	0.13	400	2	55	114	0.05	160	134	2	0.69	25.3	
ST-347	MISC. SUPPORT 359	TUTTLE & BAILEY SDV	12"Ø	1200	1200	1200	-	-	-	-	-	-	-	-	-	-	-	-	-	
ST-348	CORRIDOR 357	TUTTLE & BAILEY SDV	6"Ø	350	25	350	0.11	0.14	0.25	350	2	55	105	0.14	160	140	2	0.41	18.8	
ST-349	POST DOCS/GRAD. STUDENTS 360	TUTTLE & BAILEY SDV	12"Ø	1150	150	450	0.01	0.20	0.21	575	2	55	108	0.06	160	126	2	0.29	32.8	
ST-350	POST DOCS/GRAD. STUDENTS 360	TUTTLE & BAILEY SDV	10"Ø	1150	150	450	0.04	0.35	0.39	575	2	55	105	0.10	160	128	2	0.69	31.2	
ST-351	POST DOCS/GRAD. STUDENTS 359	TUTTLE & BAILEY SDV	12"Ø	1150	150	450	0.01	0.20	0.21	575	2	55	108	0.06	160	126	2	0.29	32.8	
ST-352	POST DOCS/GRAD. STUDENTS 359	TUTTLE & BAILEY SDV	10"Ø	1150	150	450	0.04	0.35	0.39	575	2	55	105	0.10	160	128	2	0.69	31.2	
ST-401	HEAD HOUSE 405	TUTTLE & BAILEY SDV	16"Ø	2675	2675	925	0.02	0.42	0.44	2675	2	55	96	0.42	160	133	9	2.69	118.8	
ST402	PESTICIDE PREP 405, 405A, 405B	TUTTLE & BAILEY SDV	10"Ø	885	450	100	0.02	0.21	0.23	450	2	55	111	0.07	160	132	2	0.69	27.2	
ST-403	TOILETS/LOCKERS 401, 406, 406B, 407, 407B, 408	TUTTLE & BAILEY SDV	10"Ø	675	675	50	0.01	0.14	0.15	675	2	55	106	0.14	160	134	3	1.42	37.3	

1 DIFFERENCE IN STATIC PRESSURE FROM INLET TO DISCHARGE AT COOLING MAXIMUM AIR FLOW. DOES NOT INCLUDE HEATING COIL.
2 AIR PRESSURE DROP AT COOLING MAXIMUM FLOW.
3 TOTAL AIR PRESSURE LOSS THRU UNIT AT COOLING MAXIMUM AIR FLOW.
4 AIR PRESSURE DROP AT HEATING AIR FLOW.

EXHAUST AIR TERMINALS

DESIGNATION	SERVES	ASSOCIATED SUPPLY AIR TERMINAL	REFERENCE PRODUCT	INLET SIZE (INCHES)	MAX. OCCUPIED AIRFLOW (CFM)	MIN. OCCUPIED AIRFLOW (CFM)	UNOCCUPIED AIRFLOW (CFM)	PRESSURE[1] DROP (INCHES w.g.)	MATERIAL TYPE	APPLICATION	REFERENCE CONTROL DIAGRAM
ET-201	P. I. OFFICE 201, 202	ST-201	TUTTLE & BAILEY RRV	8"Ø	425	225	0	0.058	GALV.	ROOM EXHAUST	---
ET-202	P. I. OFFICE 203, 204	ST-202	TUTTLE & BAILEY RRV	8"Ø	500	250	0	0.073	GALV.	ROOM EXHAUST	---
ET-203	P. I. OFFICE 205, 206, 207	ST-203	TUTTLE & BAILEY RRV	12"Ø	1100	575	0	0.073	GALV.	ROOM EXHAUST	---
ET-204	P. I. OFFICE 208, 209	ST-204	TUTTLE & BAILEY RRV	10"Ø	750	400	0	0.067	GALV.	ROOM EXHAUST	---
ET-205	ADMINISTRATIVE SUPPORT 200	ST-205, 208	TUTTLE & BAILEY RRV	12"Ø	1175	600	0	0.084	GALV.	ROOM EXHAUST	---
ET-206	P. I. OFFICE 210, 211	ST-206	TUTTLE & BAILEY RRV	10"Ø	750	400	0	0.067	GALV.	ROOM EXHAUST	---
ET-207	P. I. OFFICE 212, 213, 214	ST-207	TUTTLE & BAILEY RRV	12"Ø	1025	550	0	0.064	GALV.	ROOM EXHAUST	---
ET-208	P. I. OFFICE 217, 218	ST-209	TUTTLE & BAILEY RRV	8"Ø	425	225	0	0.058	GALV.	ROOM EXHAUST	---
ET-209	P. I. OFFICE 215, 216	ST-210	TUTTLE & BAILEY RRV	8"Ø	475	250	0	0.066	GALV.	ROOM EXHAUST	---
ET-210	WORK 200A, STORAGE 200B	ST-211	TUTTLE & BAILEY RRV	4"Ø	200	125	0	0.198	GALV.	ROOM EXHAUST	---
ET-211	CONFERENCE ROOM 220	ST-212	TUTTLE & BAILEY RRV	10"Ø	925	475	0	0.102	GALV.	ROOM EXHAUST	---
ET-212	WOMEN 223, MEN 224, CUSTODIAL 221	ST-214	TUTTLE & BAILEY RRV	10"Ø	800	800	350	0.076	GALV.	ROOM EXHAUST	---
ET-213	RESEARCH LAB 232	ST-219	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-214	RESEARCH LAB 232	ST-219	TUTTLE & BAILEY RRV	10"Ø	850	265	225	0.086	GALV.	ROOM EXHAUST	---
ET-215	RESEARCH LAB 233	ST-220	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-216	RESEARCH LAB 233	ST-220	TUTTLE & BAILEY RRV	10"Ø	875	290	200	0.091	GALV.	ROOM EXHAUST	---
ET-217	RESEARCH LAB 234	ST-221	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-218	RESEARCH LAB 234	ST-221	TUTTLE & BAILEY RRV	10"Ø	875	290	200	0.091	GALV.	ROOM EXHAUST	---
ET-219	RESEARCH LAB 235	ST-222	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-220	RESEARCH LAB 235	ST-222	TUTTLE & BAILEY RRV	10"Ø	825	240	200	0.081	GALV.	ROOM EXHAUST	---
ET-221	MISCELLANEOUS SUPPORT 237	ST-232	TUTTLE & BAILEY RRV	8"Ø	600	350	150	0.106	GALV.	ROOM EXHAUST	---
ET-222	EQUIPMENT 238	ST-230	TUTTLE & BAILEY RRV	10"Ø	650	400	100	0.050	GALV.	ROOM EXHAUST	---
ET-223	RESEARCH LAB 240	ST-223	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-224	RESEARCH LAB 240	ST-223	TUTTLE & BAILEY RRV	10"Ø	875	290	200	0.091	GALV.	ROOM EXHAUST	---
ET-225	RESEARCH LAB 241	ST-224	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-226	RESEARCH LAB 241	ST-224	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-227	RESEARCH LAB 242	ST-225	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-228	RESEARCH LAB 242	ST-225	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-229	RESEARCH LAB 243	ST-226	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-230	RESEARCH LAB 243	ST-226	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-231	RESEARCH LAB 244	ST-227	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-232	RESEARCH LAB 244	ST-227	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-233	MISCELLANEOUS SUPPORT 247	ST-228	TUTTLE & BAILEY RRV	8"Ø	575	350	150	0.097	GALV.	ROOM EXHAUST	---
ET-234	TISSUE CULTURE 246	ST-229	TUTTLE & BAILEY RRV	6"Ø	250	250	100	0.056	GALV.	ROOM EXHAUST	---
ET-235	TISSUE CULTURE 251	ST-233	TUTTLE & BAILEY RRV	6"Ø	300	250	100	0.081	GALV.	ROOM EXHAUST	---
ET-236	MISCELLANEOUS SUPPORT 250	ST-245	TUTTLE & BAILEY RRV	8"Ø	575	350	150	0.097	GALV.	ROOM EXHAUST	---
ET-237	RESEARCH LAB 252	ST-234	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-238	RESEARCH LAB 252	ST-234	TUTTLE & BAILEY RRV	10"Ø	850	265	225	0.086	GALV.	ROOM EXHAUST	---
ET-239	RESEARCH LAB 253	ST-235	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-240	RESEARCH LAB 253	ST-235	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-241	RESEARCH LAB 254	ST-236	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-242	RESEARCH LAB 254	ST-236	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-243	RESEARCH LAB 255	ST-237	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-244	RESEARCH LAB 255	ST-237	TUTTLE & BAILEY RRV	10"Ø	900	315	200	0.096	GALV.	ROOM EXHAUST	---
ET-245	RESEARCH LAB 256	ST-238	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-246	RESEARCH LAB 256	ST-238	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-247	EQUIPMENT 258	ST-246	TUTTLE & BAILEY RRV	10"Ø	725	500	200	0.063	GALV.	ROOM EXHAUST	---
ET-248	MISCELLANEOUS SUPPORT 259	ST-247	TUTTLE & BAILEY RRV	8"Ø	575	350	150	0.097	GALV.	ROOM EXHAUST	---
ET-249	RESEARCH LAB 261	ST-239	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-250	RESEARCH LAB 261	ST-239	TUTTLE & BAILEY RRV	10"Ø	825	215	200	0.081	GALV.	ROOM EXHAUST	---
ET-251	RESEARCH LAB 262	ST-240	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-252	RESEARCH LAB 262	ST-240	TUTTLE & BAILEY RRV	10"Ø	875	215	200	0.091	GALV.	ROOM EXHAUST	---
ET-253	RESEARCH LAB 263	ST-241	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-254	RESEARCH LAB 263	ST-241	TUTTLE & BAILEY RRV	10"Ø	875	215	200	0.091	GALV.	ROOM EXHAUST	---
ET-255	RESEARCH LAB 264	ST-242	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-256	RESEARCH LAB 264	ST-242	TUTTLE & BAILEY RRV	10"Ø	875	215	200	0.091	GALV.	ROOM EXHAUST	---
ET-257	TISSUE CULTURE 266	ST-243	TUTTLE & BAILEY RRV	6"Ø	250	250	100	0.056	GALV.	ROOM EXHAUST	---
ET-258	SEMINAR 269	ST-216	TUTTLE & BAILEY RRV	8"Ø	500	125	0	0.073	GALV.	ROOM EXHAUST	---
ET-259	POST DOCS/GRAD. STUDENTS 260	ST-249, 250	TUTTLE & BAILEY RRV	14"Ø	1400	250	0	0.062	GALV.	ROOM EXHAUST	---
ET-260	POST DOCS/GRAD. STUDENTS 259	ST-251, 252	TUTTLE & BAILEY RRV	14"Ø	1400	250	0	0.062	GALV.	ROOM EXHAUST	---
ET-261	BREAKROOM 222	ST-215	TUTTLE & BAILEY RRV	8"Ø	650	325	0	0.124	GALV.	ROOM EXHAUST	---
ET-262	TISSUE CULTURE 231	ST-218	TUTTLE & BAILEY RRV	6"Ø	425	275	100	0.163	GALV.	ROOM EXHAUST	---
ET-263	SEMINAR 229	ST-217	TUTTLE & BAILEY RRV	8"Ø	525	275	0	0.081	GALV.	ROOM EXHAUST	---
ET-301	P. I. OFFICE 301, 302	ST-301	TUTTLE & BAILEY RRV	8"Ø	425	225	0	0.058	GALV.	ROOM EXHAUST	---
ET-302	P. I. OFFICE 303, 304	ST-302	TUTTLE & BAILEY RRV	8"Ø	500	250	0	0.073	GALV.	ROOM EXHAUST	---
ET-303	P. I. OFFICE 305, 306, 307	ST-303	TUTTLE & BAILEY RRV	12"Ø	1100	575	0	0.073	GALV.	ROOM EXHAUST	---
ET-304	P. I. OFFICE 308, 309	ST-304	TUTTLE & BAILEY RRV	10"Ø	750	400	0	0.067	GALV.	ROOM EXHAUST	---
ET-305	ADMINISTRATIVE SUPPORT 300	ST-305, 308	TUTTLE & BAILEY RRV	12"Ø	1175	600	0	0.084	GALV.	ROOM EXHAUST	---
ET-306	P. I. OFFICE 310, 311	ST-306	TUTTLE & BAILEY RRV	10"Ø	750	400	0	0.067	GALV.	ROOM EXHAUST	---
ET-307	P. I. OFFICE 312, 313, 314	ST-307	TUTTLE & BAILEY RRV	12"Ø	1025	550	0	0.064	GALV.	ROOM EXHAUST	---
ET-308	P. I. OFFICE 317, 318	ST-309	TUTTLE & BAILEY RRV	8"Ø	425	225	0	0.058	GALV.	ROOM EXHAUST	---
ET-309	P. I. OFFICE 315, 316	ST-310	TUTTLE & BAILEY RRV	8"Ø	475	250	0	0.066	GALV.	ROOM EXHAUST	---
ET-310	WORK 300A, STORAGE 300B	ST-311	TUTTLE & BAILEY RRV	4"Ø	200	125	0	0.198	GALV.	ROOM EXHAUST	---
ET-311	CONFERENCE ROOM 320	ST-312	TUTTLE & BAILEY RRV	10"Ø	925	475	0	0.102	GALV.	ROOM EXHAUST	---
ET-312	WOMEN 323, MEN 324, CUSTODIAL 327	ST-314	TUTTLE & BAILEY RRV	10"Ø	800	800	350	0.076	GALV.	ROOM EXHAUST	---
ET-313	RESEARCH LAB 332	ST-319	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-314	RESEARCH LAB 332	ST-319	TUTTLE & BAILEY RRV	10"Ø	850	265	225	0.086	GALV.	ROOM EXHAUST	---
ET-315	RESEARCH LAB 333	ST-320	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-316	RESEARCH LAB 333	ST-320	TUTTLE & BAILEY RRV	10"Ø	875	290	200	0.091	GALV.	ROOM EXHAUST	---
ET-317	RESEARCH LAB 334	ST-321	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-318	RESEARCH LAB 334	ST-321	TUTTLE & BAILEY RRV	10"Ø	875	290	200	0.091	GALV.	ROOM EXHAUST	---
ET-319	RESEARCH LAB 335	ST-322	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-320	RESEARCH LAB 335	ST-322	TUTTLE & BAILEY RRV	10"Ø	825	240	200	0.081	GALV.	ROOM EXHAUST	---
ET-321	MISCELLANEOUS SUPPORT 337	ST-332	TUTTLE & BAILEY RRV	8"Ø	600	350	150	0.106	GALV.	ROOM EXHAUST	---
ET-322	EQUIPMENT 338	ST-330	TUTTLE & BAILEY RRV	10"Ø	650	400	100	0.050	GALV.	ROOM EXHAUST	---
ET-323	RESEARCH LAB 340	ST-323	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-324	RESEARCH LAB 340	ST-323	TUTTLE & BAILEY RRV	10"Ø	875	290	200	0.091	GALV.	ROOM EXHAUST	---
ET-325	RESEARCH LAB 341	ST-324	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-326	RESEARCH LAB 341	ST-324	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-327	RESEARCH LAB 342	ST-325	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-328	RESEARCH LAB 342	ST-325	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-329	RESEARCH LAB 343	ST-326	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-330	RESEARCH LAB 343	ST-326	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-331	RESEARCH LAB 344	ST-327	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-332	RESEARCH LAB 344	ST-327	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-333	MISCELLANEOUS SUPPORT 347	ST-328	TUTTLE & BAILEY RRV	8"Ø	575	350	150	0.097	GALV.	ROOM EXHAUST	---
ET-334	TISSUE CULTURE 346	ST-329	TUTTLE & BAILEY RRV	6"Ø	250	250	100	0.056	GALV.	ROOM EXHAUST	---
ET-335	TISSUE CULTURE 351	ST-333	TUTTLE & BAILEY RRV	6"Ø	300	250	100	0.081	GALV.	ROOM EXHAUST	---
ET-336	MISCELLANEOUS SUPPORT 350	ST-345	TUTTLE & BAILEY RRV	8"Ø	575	350	150	0.097	GALV.	ROOM EXHAUST	---
ET-337	RESEARCH LAB 352	ST-334	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-338	RESEARCH LAB 352	ST-334	TUTTLE & BAILEY RRV	10"Ø	850	265	225	0.086	GALV.	ROOM EXHAUST	---
ET-339	RESEARCH LAB 353	ST-335	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-340	RESEARCH LAB 353	ST-335	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-341	RESEARCH LAB 354	ST-336	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-342	RESEARCH LAB 354	ST-336	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-343	RESEARCH LAB 355	ST-337	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-344	RESEARCH LAB 355	ST-337	TUTTLE & BAILEY RRV	10"Ø	900	315	200	0.096	GALV.	ROOM EXHAUST	---
ET-345	RESEARCH LAB 356	ST-338	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-346	RESEARCH LAB 356	ST-338	TUTTLE & BAILEY RRV	10"Ø	800	215	200	0.076	GALV.	ROOM EXHAUST	---
ET-347	EQUIPMENT 358	ST-346	TUTTLE & BAILEY RRV	10"Ø	725	500	200	0.063	GALV.	ROOM EXHAUST	---
ET-348	MISCELLANEOUS SUPPORT 359	ST-347	TUTTLE & BAILEY RRV	8"Ø	575	350	150	0.097	GALV.	ROOM EXHAUST	---
ET-349	RESEARCH LAB 361	ST-339	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-350	RESEARCH LAB 361	ST-339	TUTTLE & BAILEY RRV	10"Ø	825	215	200	0.081	GALV.	ROOM EXHAUST	---
ET-351	RESEARCH LAB 362	ST-340	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-352	RESEARCH LAB 362	ST-340	TUTTLE & BAILEY RRV	10"Ø	875	215	200	0.091	GALV.	ROOM EXHAUST	---
ET-353	RESEARCH LAB 363	ST-341	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-354	RESEARCH LAB 363	ST-341	TUTTLE & BAILEY RRV	10"Ø	875	215	200	0.091	GALV.	ROOM EXHAUST	---
ET-355	RESEARCH LAB 364	ST-342	TUTTLE & BAILEY RRV	10"Ø	785	200	200	0.073	316 SS	HOOD EXHAUST	---
ET-356	RESEARCH LAB 364	ST-342	TUTTLE & BAILEY RRV	10"Ø	875	215	200	0.091	GALV.	ROOM EXHAUST	---
ET-357	TISSUE CULTURE 366	ST-343	TUTTLE & BAILEY RRV	6"Ø	250	250	100	0.056	GALV.	ROOM EXHAUST	---
ET-358	SEMINAR 369	ST-316	TUTTLE & BAILEY RRV	8"Ø	500	125	0	0.073	GALV.	ROOM EXHAUST	---
ET-359	POST DOCS/GRAD. STUDENTS 360	ST-349, 350	TUTTLE & BAILEY RRV	14"Ø	1400	250	0	0.062	GALV.	ROOM EXHAUST	---
ET-360	POST DOCS/GRAD. STUDENTS 359	ST-351, 352	TUTTLE & BAILEY RRV	14"Ø	1400	250	0	0.062	GALV.	ROOM EXHAUST	---
ET-361	BREAKROOM 322	ST-315	TUTTLE & BAILEY RRV	8"Ø	650	325	0	0.124	GALV.	ROOM EXHAUST	---
ET-362	TISSUE CULTURE 331	ST-318	TUTTLE & BAILEY RRV	6"Ø	425	275	100	0.163	GALV.	ROOM EXHAUST	---
ET-363	SEMINAR 329	ST-317	TUTTLE & BAILEY RRV	8"Ø	525	275	0	0.081	GALV.	ROOM EXHAUST	---
ET-401	HEAD HOUSE 405	ST-401	TUTTLE & BAILEY RRV	16"Ø	2925	2925	1175	0.157	GALV.	ROOM EXHAUST	---
ET-402	PESTICIDE PREP 405, 405A, 405B	ST-402	TUTTLE & BAILEY RRV	10"Ø	785	350	200	0.073	316 SS	HOOD EXHAUST	---
ET-403	TOILETS/LOCKERS 401, 406, 406B, 407, 407B, 408	ST-403	TUTTLE & BAILEY RRV	10"Ø	800	800	175	0.076	GALV.	ROOM EXHAUST	---

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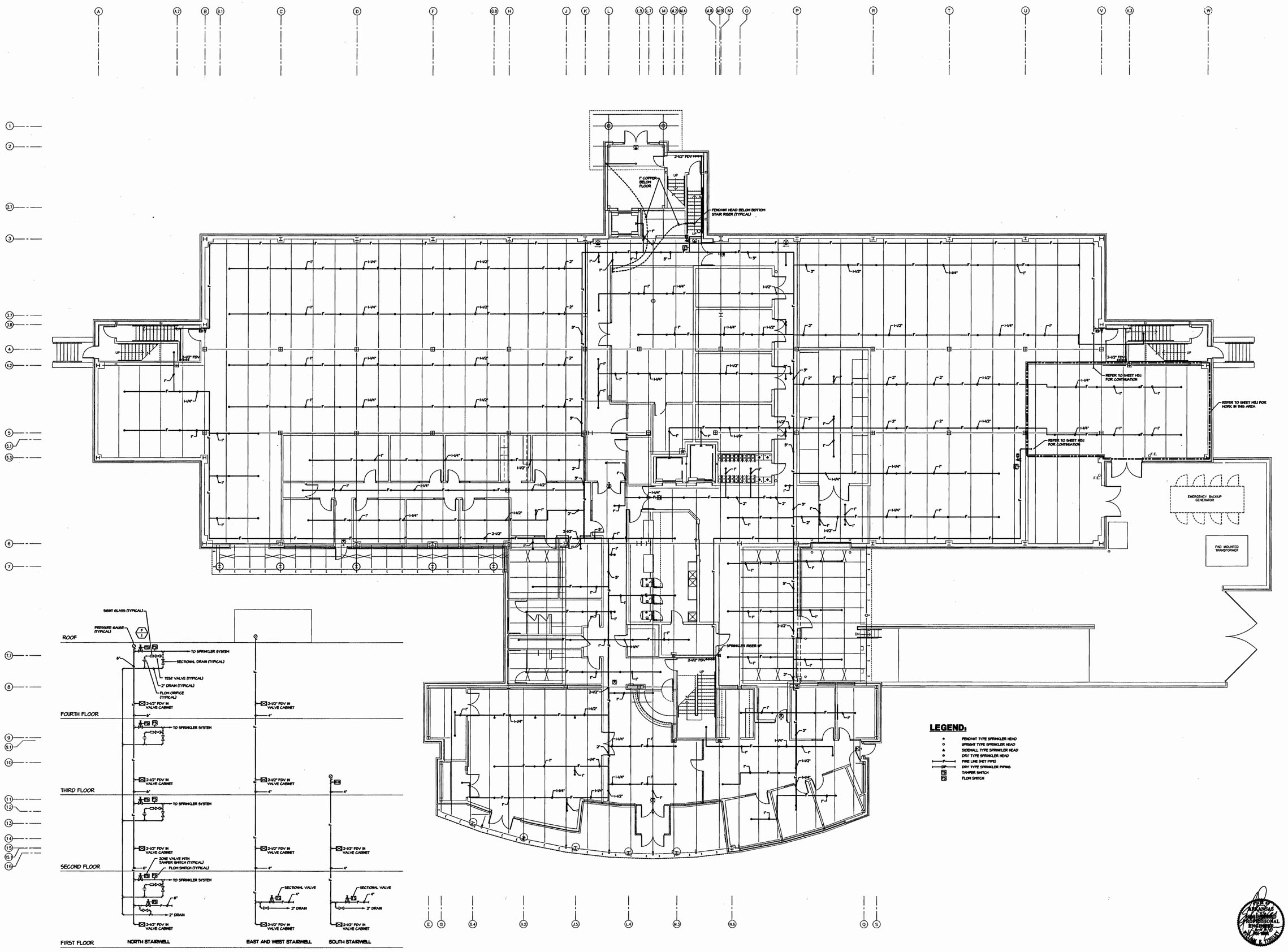
BRACKETT KRENNERICH architects

MECHANICAL SCHEDULES - 3

Commission Number 10301

M8.3

Date: October 25, 2002



1 FIRE SPRINKLER RISER
NOT TO SCALE

first floor plan - fire protection

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

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER

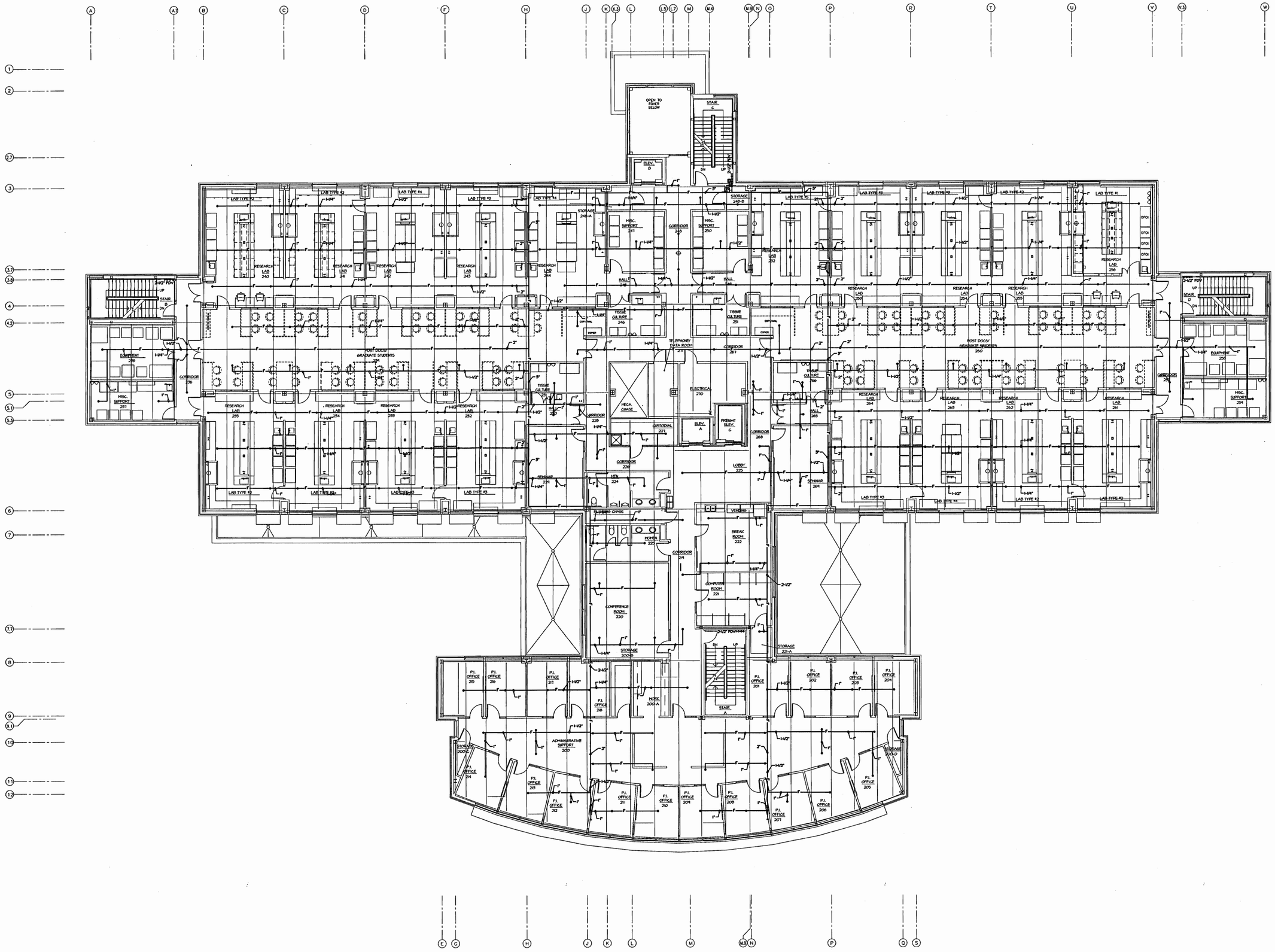
CORPORATE REGISTRATION NO. 178

FIRST FLOOR PLAN
FIRE PROTECTION

Commission Number 10301

FP2.1

Date: October 25, 2002



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SECOND FLOOR PLAN
FIRE PROTECTION

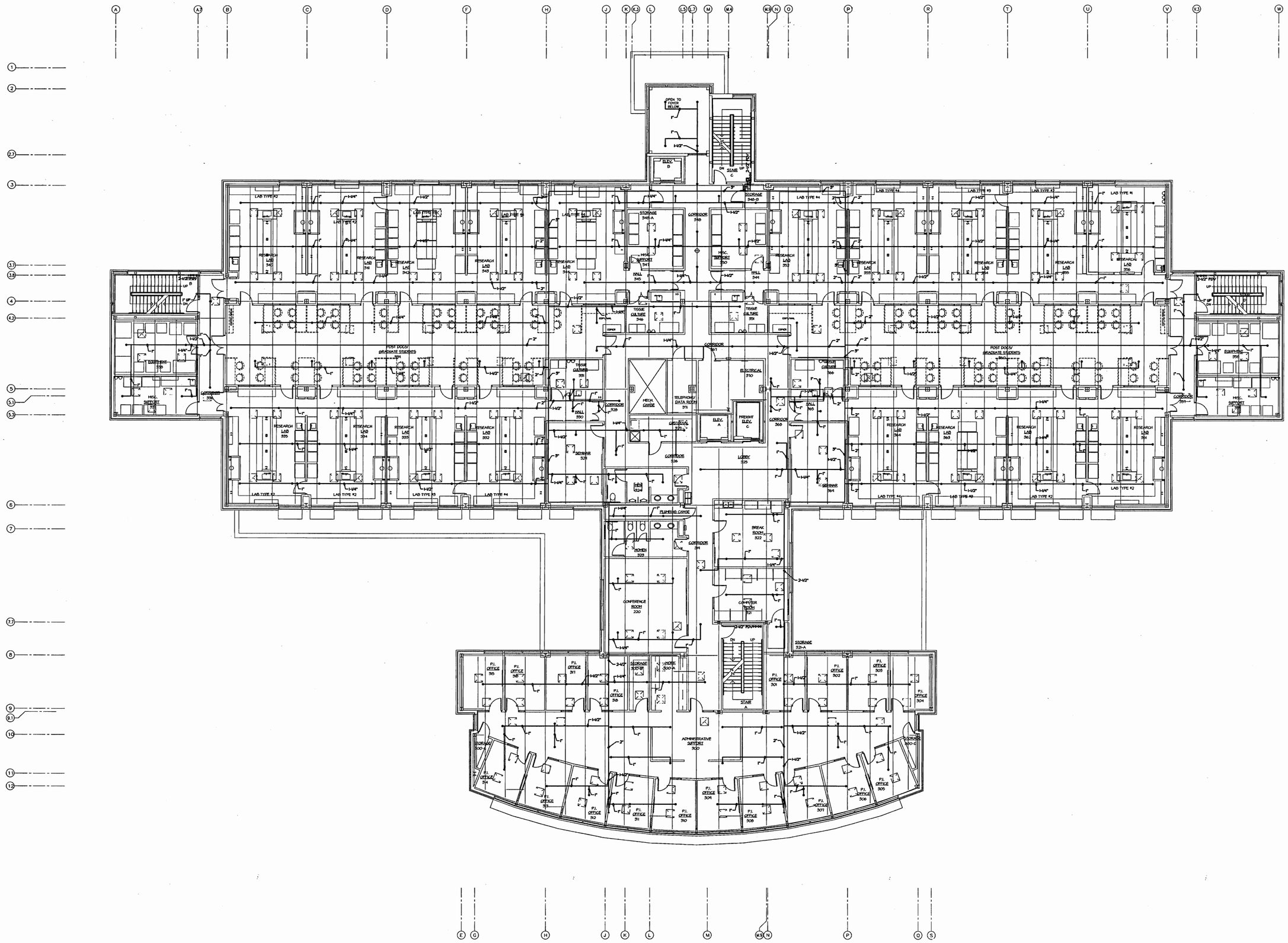
Commission Number
10301

FP2.2

Date: October 25, 2002

second floor plan - fire protection

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



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THIRD FLOOR PLAN
FIRE PROTECTION

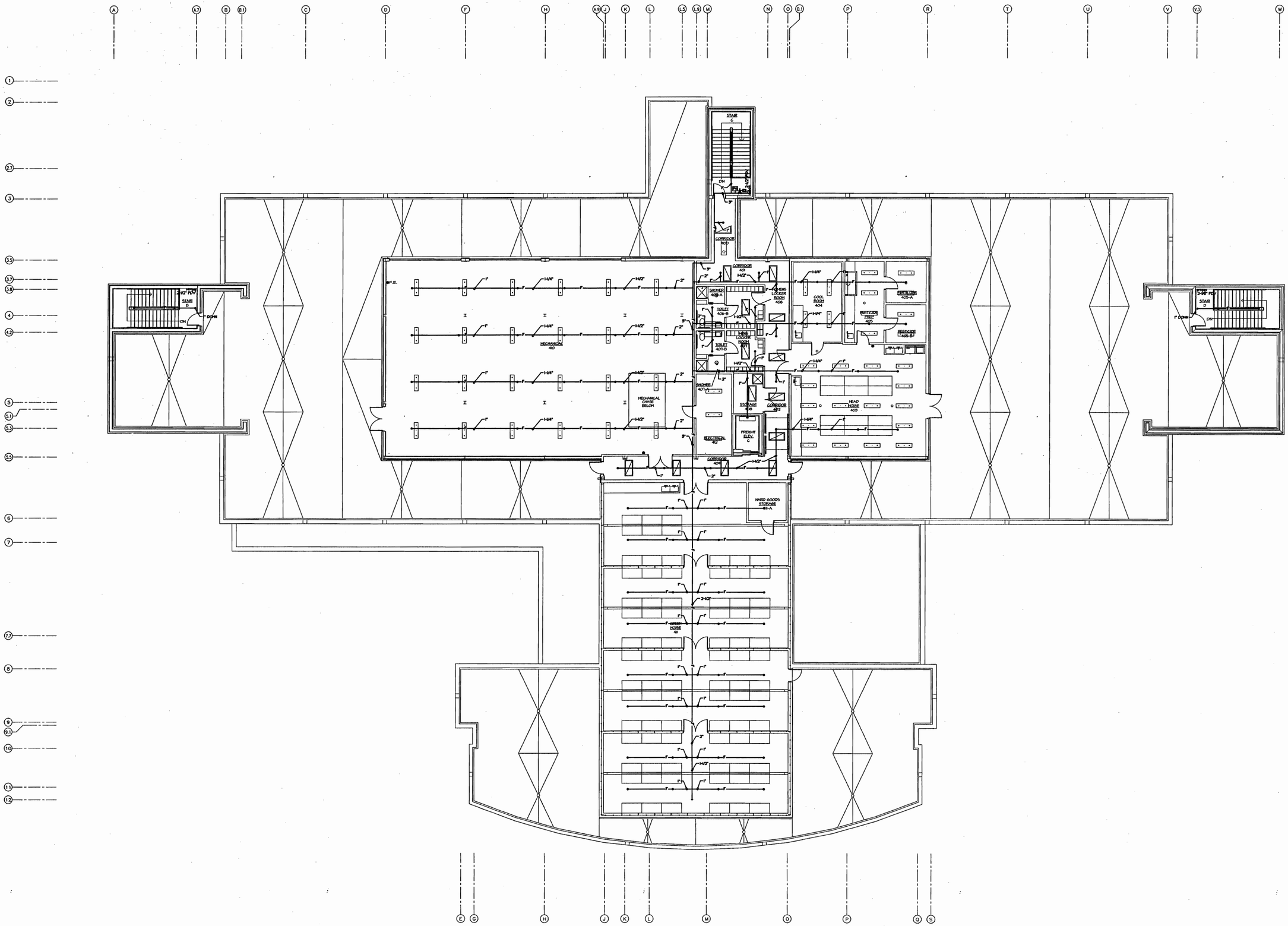
Commission Number
10301

FP2.3

Date: October 25, 2002

third floor plan - fire protection

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



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FOURTH FLOOR PLAN
FIRE PROTECTION

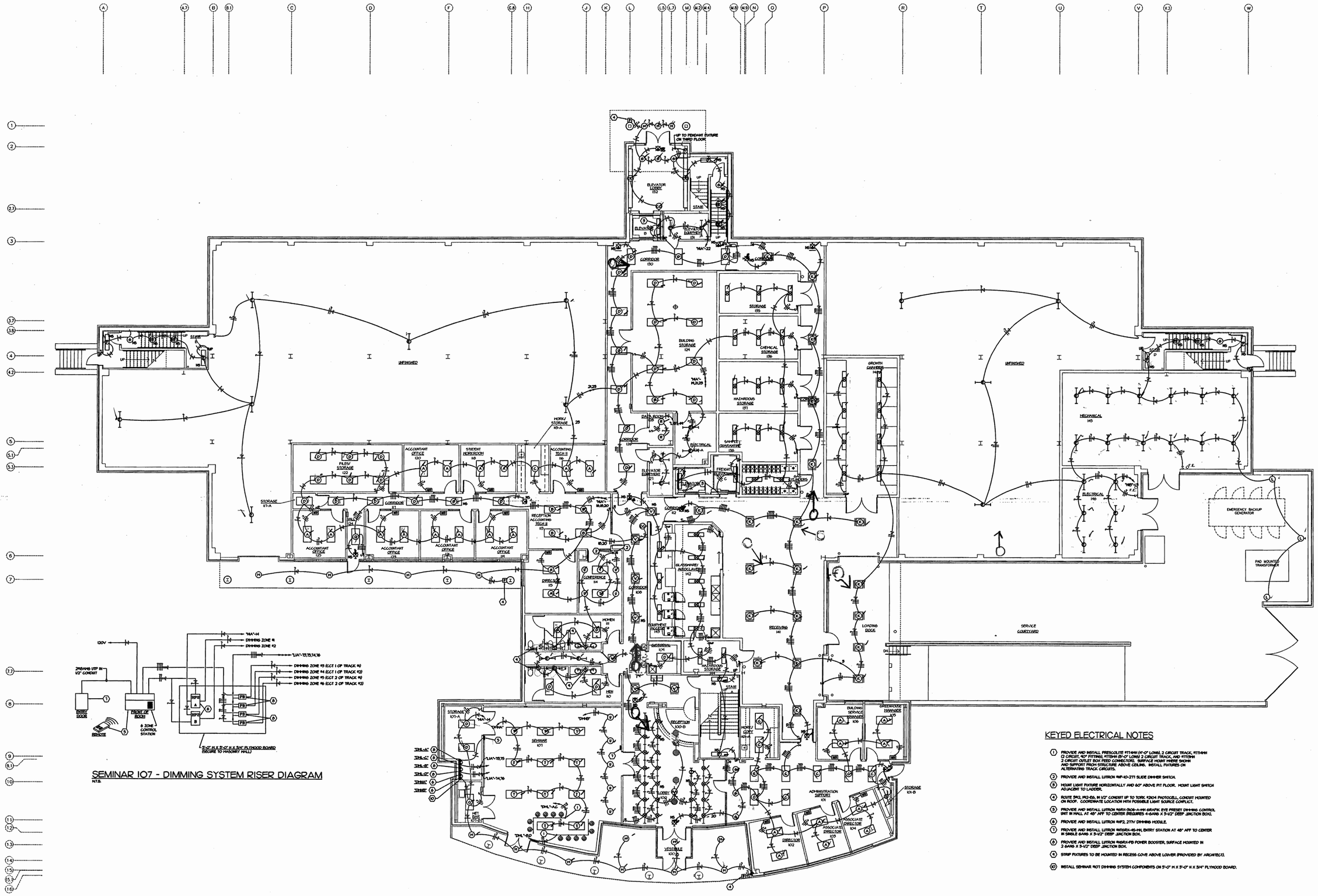
Commission Number 10301

FP2.4

Date: October 25, 2002

fourth floor plan - fire protection

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



SEMINAR 107 - DIMMING SYSTEM RISER DIAGRAM
N.T.S.

KEYED ELECTRICAL NOTES

1. PROVIDE AND INSTALL PRESCOLITE #T14HH (4'-0" LONG), 2 CIRCUIT TRACK, #T14HH (2 CIRCUIT, 90° FITTING), #T10HH (8'-0" LONG) 2 CIRCUIT TRACK, AND #T13HH 2 CIRCUIT OUTLET BOX FEED CONNECTORS. SURFACE MOUNT WHITE SHOWN AND SUPPORT FROM STRUCTURE ABOVE CEILING. INSTALL FIXTURES ON ALTERNATING TRACK CIRCUITS.
2. PROVIDE AND INSTALL LUTRON #AF-10-277 SLIDE DIMMER SWITCH.
3. MOUNT LIGHT FIXTURE HORIZONTALLY AND 60" ABOVE PIT FLOOR. MOUNT LIGHT SWITCH ADJACENT TO LADDER.
4. ROUTE 3#12, #12-GS, IN 1/2" CONDUIT UP TO TORK #2804 PHOTOCELL. CONDUIT MOUNTED ON ROOF. COORDINATE LOCATION WITH POSSIBLE LIGHT SOURCE CONFLICT.
5. PROVIDE AND INSTALL LUTRON #SRX-3GB-A-WH GRAFIK EYE PRESET DIMMING CONTROL UNIT IN WALL AT 48" AFF TO CENTER (REQUIRES 4-GANG X 3-1/2" DEEP JUNCTION BOX).
6. PROVIDE AND INSTALL LUTRON #HP2, 277V DIMMING MODULE.
7. PROVIDE AND INSTALL LUTRON #HTERX-4S-WH, ENTRY STATION AT 48" AFF TO CENTER IN SINGLE GANG X 3-1/2" DEEP JUNCTION BOX.
8. PROVIDE AND INSTALL LUTRON #NRX-PB POWER BOOSTER, SURFACE MOUNTED IN 2 GANG X 3-1/2" DEEP JUNCTION BOX.
9. STRIP FIXTURES TO BE MOUNTED IN RECESS COVE ABOVE LOWER (PROVIDED BY ARCHITECT).
10. INSTALL SEMINAR #107 DIMMING SYSTEM COMPONENTS ON 5'-0" H X 3'-0" W X 3/4" PLYWOOD BOARD.

first floor plan - lighting

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

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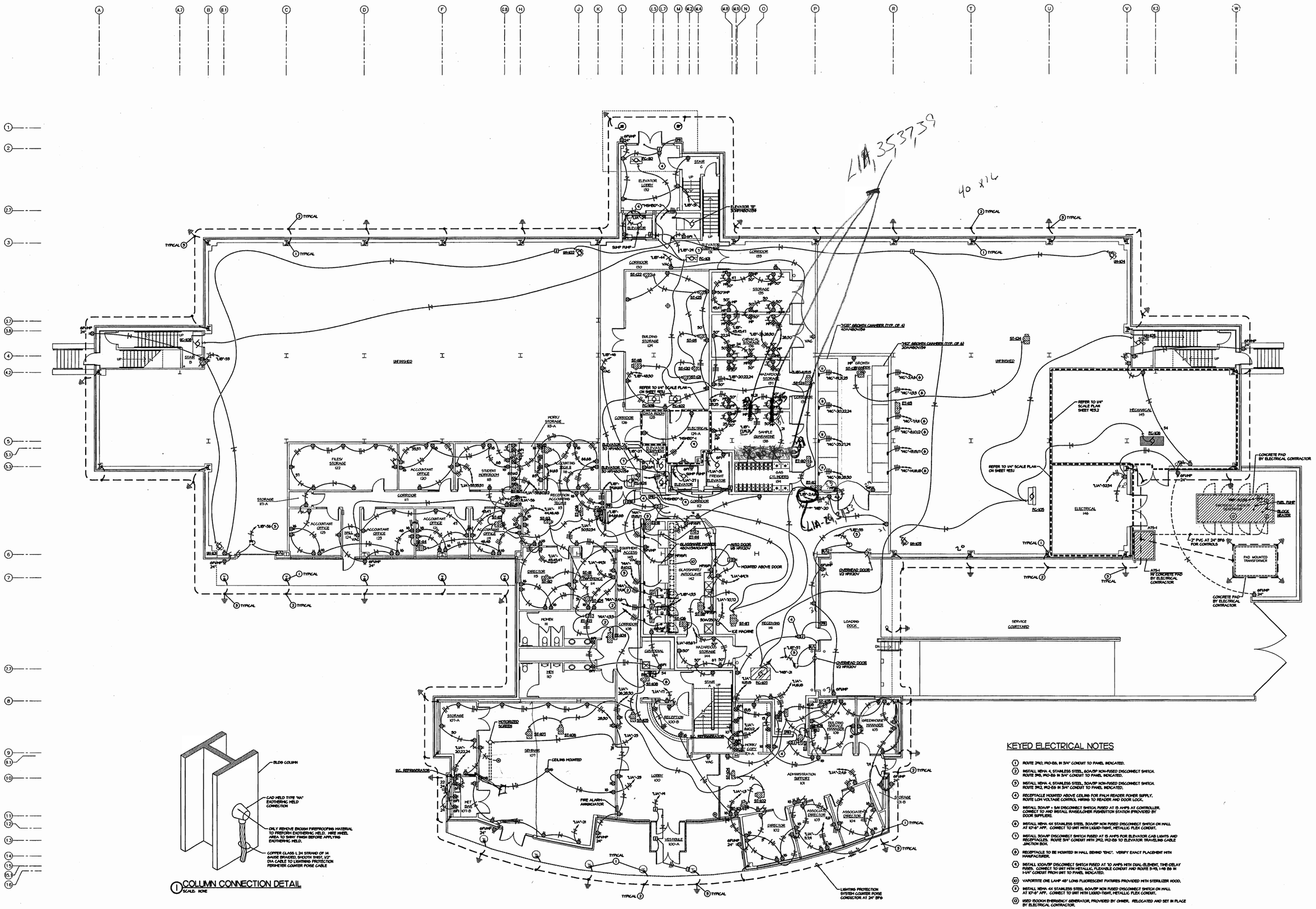
FIRST FLOOR PLAN LIGHTING

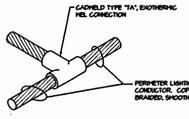
Commission Number 10301

E2.1

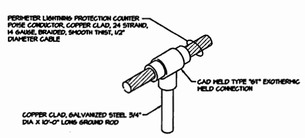
Date: October 25, 2002



1 COLUMN CONNECTION DETAIL
SCALE: NONE



2 COUNTER POISE TYPE "TA" CONNECTION
SCALE: NONE



3 COUNTER POISE GROUND ROD CONNECTION
SCALE: NONE

KEYED ELECTRICAL NOTES

1. ROUTE 2#10, 1#10-EG, IN 3/4" CONDUIT TO PANEL INDICATED.
2. INSTALL NEMA 4, STAINLESS STEEL, 60A/3P NON-FUSED DISCONNECT SWITCH. ROUTE 3#8, 1#10-EG IN 3/4" CONDUIT TO PANEL INDICATED.
3. INSTALL NEMA 4, STAINLESS STEEL, 30A/3P NON-FUSED DISCONNECT SWITCH. ROUTE 3#12, 1#12-EG IN 3/4" CONDUIT TO PANEL INDICATED.
4. RECEPTACLE MOUNTED ABOVE CEILING FOR PALM READER POWER SUPPLY. ROUTE LOW VOLTAGE CONTROL WIRING TO READER AND DOOR LOCK.
5. INSTALL 30A/1P + 5/N DISCONNECT SWITCH, FUSED AT 15 AMPS AT CONTROLLER. CONNECT TO AND INSTALL RAISE/LOWER PUSHBUTTON STATION (PROVIDED BY DOOR SUPPLIER).
6. INSTALL NEMA 4X STAINLESS STEEL 30A/3P NON FUSED DISCONNECT SWITCH ON WALL AT 10'-0" AFF. CONNECT TO UNIT WITH LIQUID-TIGHT, METALLIC FLEX CONDUIT.
7. INSTALL 30A/1P DISCONNECT SWITCH FUSED AT 15 AMPS FOR ELEVATOR CAB LIGHTS AND RECEPTACLES. ROUTE 3/4" CONDUIT WITH 2#12, 1#12-EG TO ELEVATOR TRAVELING CABLE JUNCTION BOX.
8. RECEPTACLE TO BE MOUNTED IN WALL BEHIND "EHC". VERIFY EXACT PLACEMENT WITH MANUFACTURER.
9. INSTALL 100A/2P DISCONNECT SWITCH FUSED AT 70 AMPS WITH DUAL-ELEMENT, TIME-DELAY FUSES. CONNECT TO UNIT WITH METALLIC, FLEXIBLE CONDUIT AND ROUTE 3-#8, 1-#8 EG IN 1-1/4" CONDUIT FROM UNIT TO PANEL INDICATED.
10. VAPORITE ONE LAMP 48" LONG FLUORESCENT FIXTURES PROVIDED WITH STERILIZER HOOD.
11. INSTALL NEMA 4X STAINLESS STEEL 60A/3P NON FUSED DISCONNECT SWITCH ON WALL AT 10'-0" AFF. CONNECT TO UNIT WITH LIQUID-TIGHT, METALLIC FLEX CONDUIT.
12. USED 20,000W EMERGENCY GENERATOR, PROVIDED BY OWNER. RELOCATED AND SET IN PLACE BY ELECTRICAL CONTRACTOR.

first floor plan - power

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

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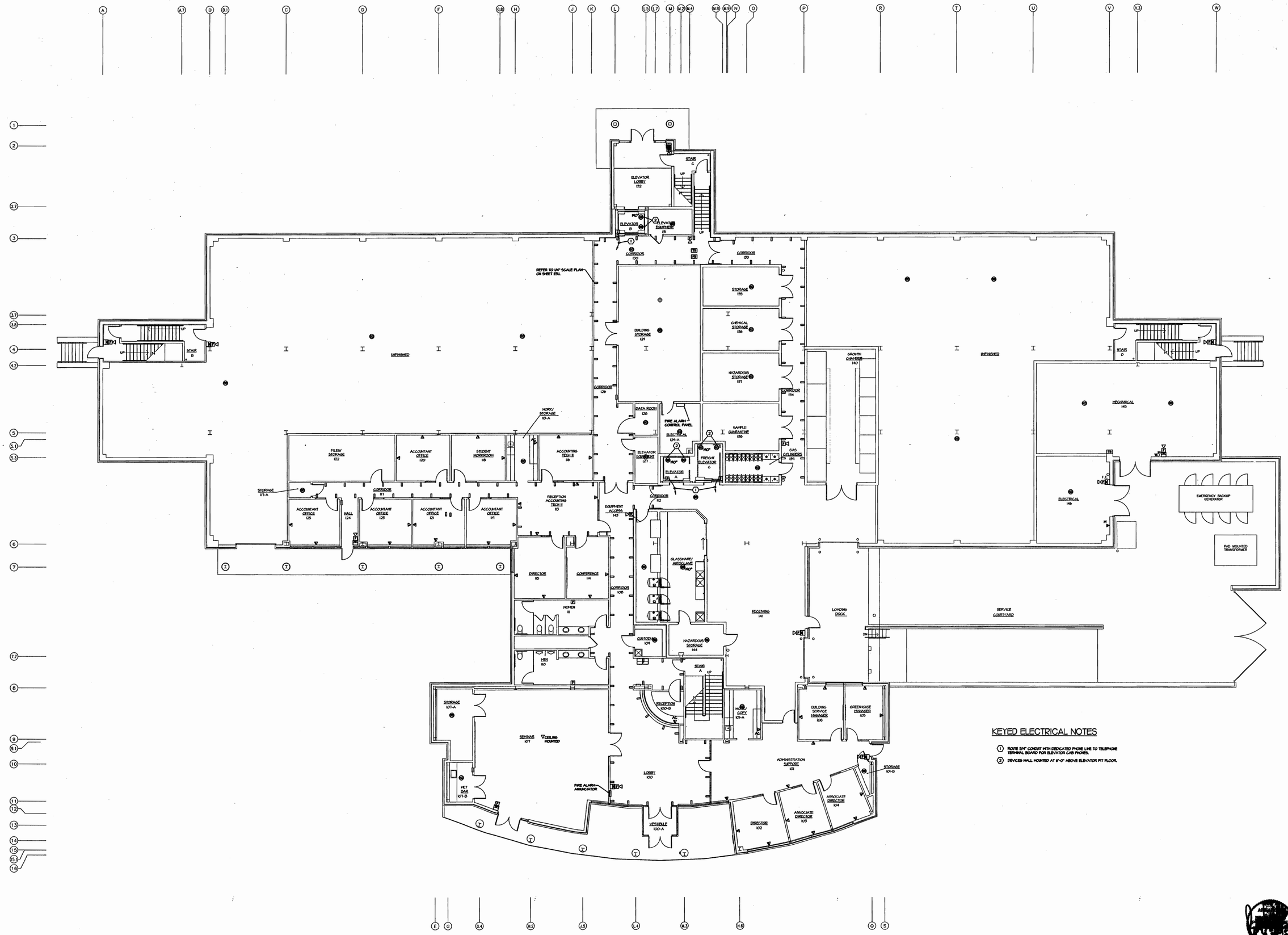
FIRST FLOOR PLAN POWER

Commission Number 10301

E2.2

Date: October 25, 2002



KEYED ELECTRICAL NOTES

1. ROUTE 3/4" CONDUIT WITH DEDICATED PHONE LINE TO TELEPHONE TERMINAL BOARD FOR ELEVATOR CAB PHONES.
2. DEVICES WALL MOUNTED AT 6'-0" ABOVE ELEVATOR PIT FLOOR.

first floor plan - systems

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

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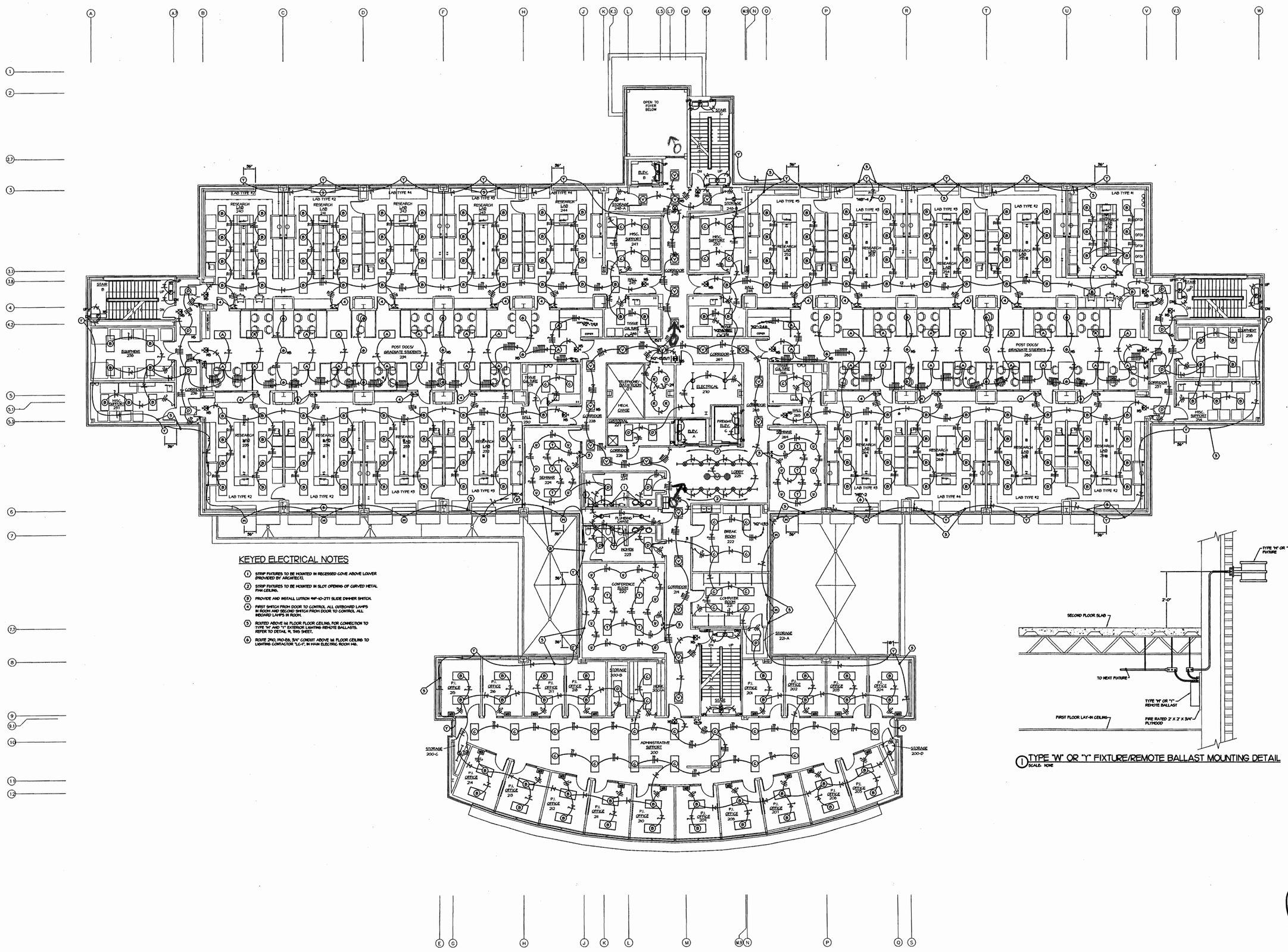
FIRST FLOOR PLAN SYSTEMS

Commission Number 10301

E2.3

Date: October 25, 2002

220 lamps



KEYED ELECTRICAL NOTES

1. STRIP FIXTURES TO BE MOUNTED IN RECESSED COVE ABOVE LOUVER (PROVIDED BY ARCHITECT).
2. STRIP FIXTURES TO BE MOUNTED IN SLOT OPENING OF CURVED METAL PAN CEILING.
3. PROVIDE AND INSTALL LUTRON NHP-10-277 SLIDE DIMMER SWITCH.
4. FIRST SWITCH FROM DOOR TO CONTROL ALL OUTBOARD LAMPS IN ROOM AND SECOND SWITCH FROM DOOR TO CONTROL ALL INBOARD LAMPS IN ROOM.
5. ROUTED ABOVE 1st FLOOR FLOOR CEILING, FOR CONNECTION TO TYPE "H" AND "I" EXTERIOR LIGHTING REMOTE BALLASTS. REFER TO DETAIL 1, THIS SHEET.
6. ROUTE 2#10, #10-EG, 3/4" CONDUIT ABOVE 1st FLOOR CEILING TO LIGHTING CONTACTOR "LC-1", IN MAIN ELECTRIC ROOM 146.

1 TYPE "W" OR "Y" FIXTURE/REMOTE BALLAST MOUNTING DETAIL
SCALE: NONE

second floor plan - lighting

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

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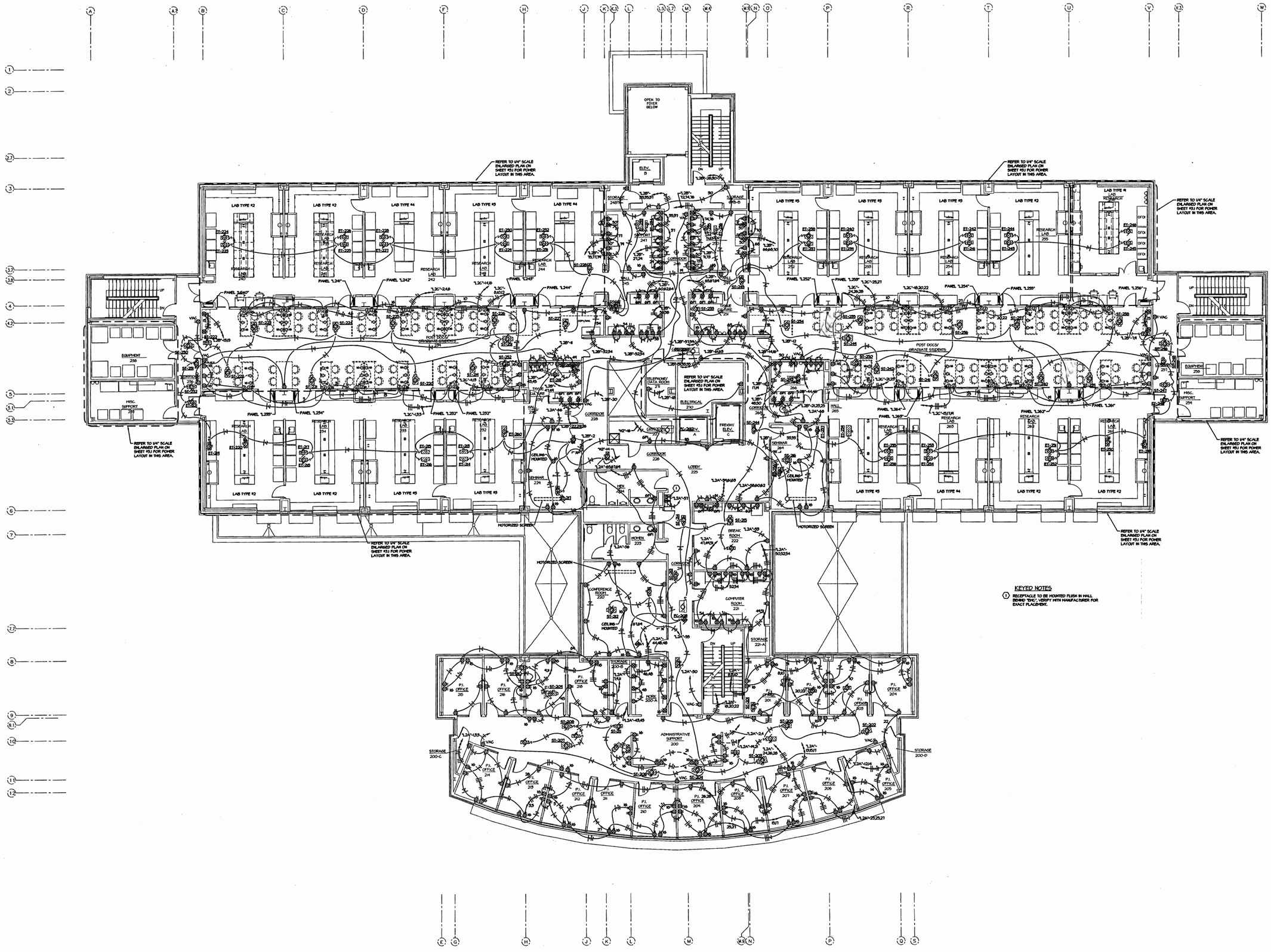
SECOND FLOOR PLAN LIGHTING

Commission Number 10301

E2.4

Date: October 25, 2002



KEYED NOTES

1. RECEPTACLE TO BE MOUNTED FLUSH IN WALL BEHIND "DAC". VERIFY WITH MANUFACTURER FOR EXACT PLACEMENT.

second floor plan - power

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

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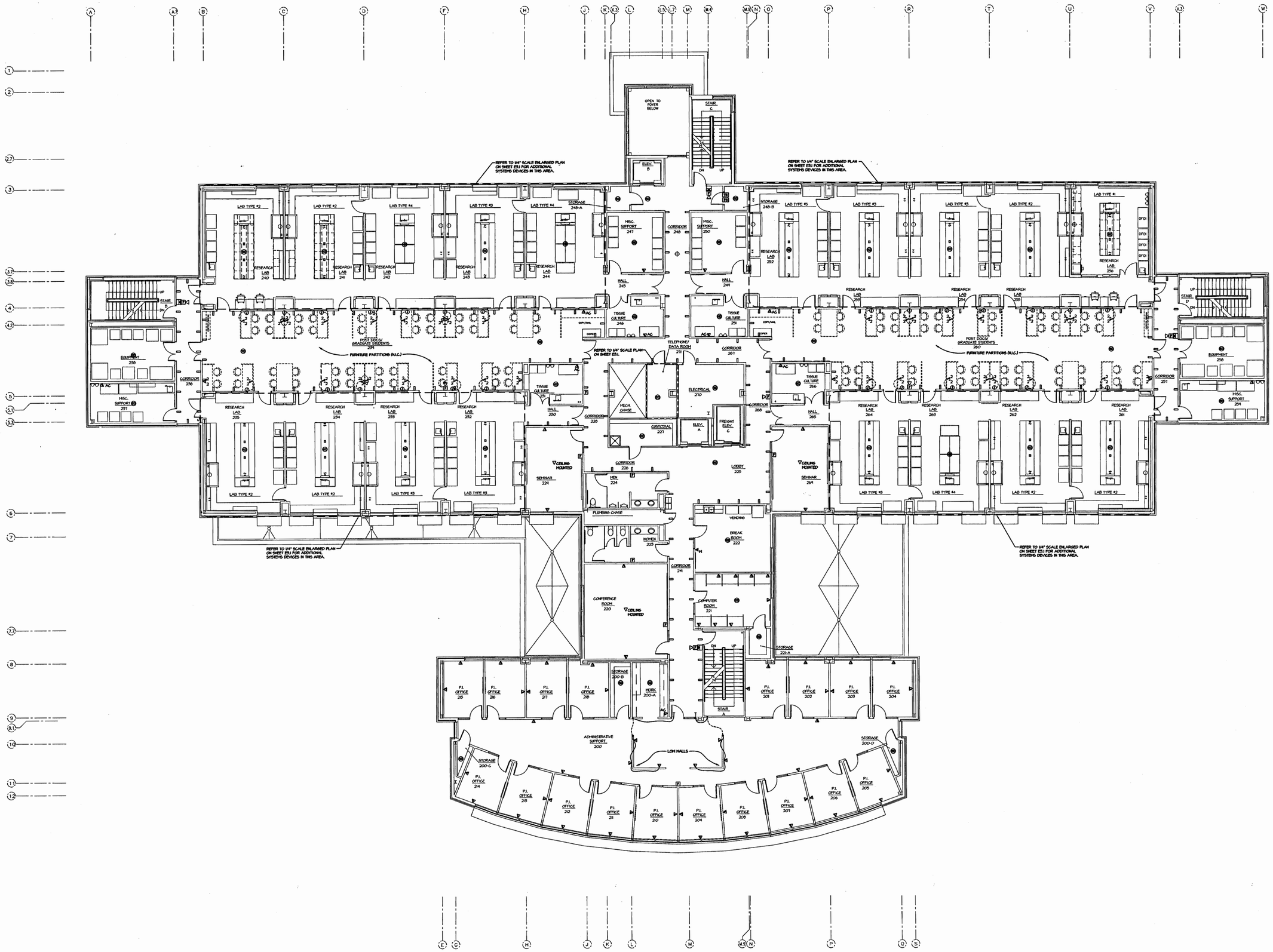
SECOND FLOOR PLAN POWER

Commission Number 10301

E2.5

Date: October 25, 2002



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SECOND FLOOR PLAN SYSTEMS

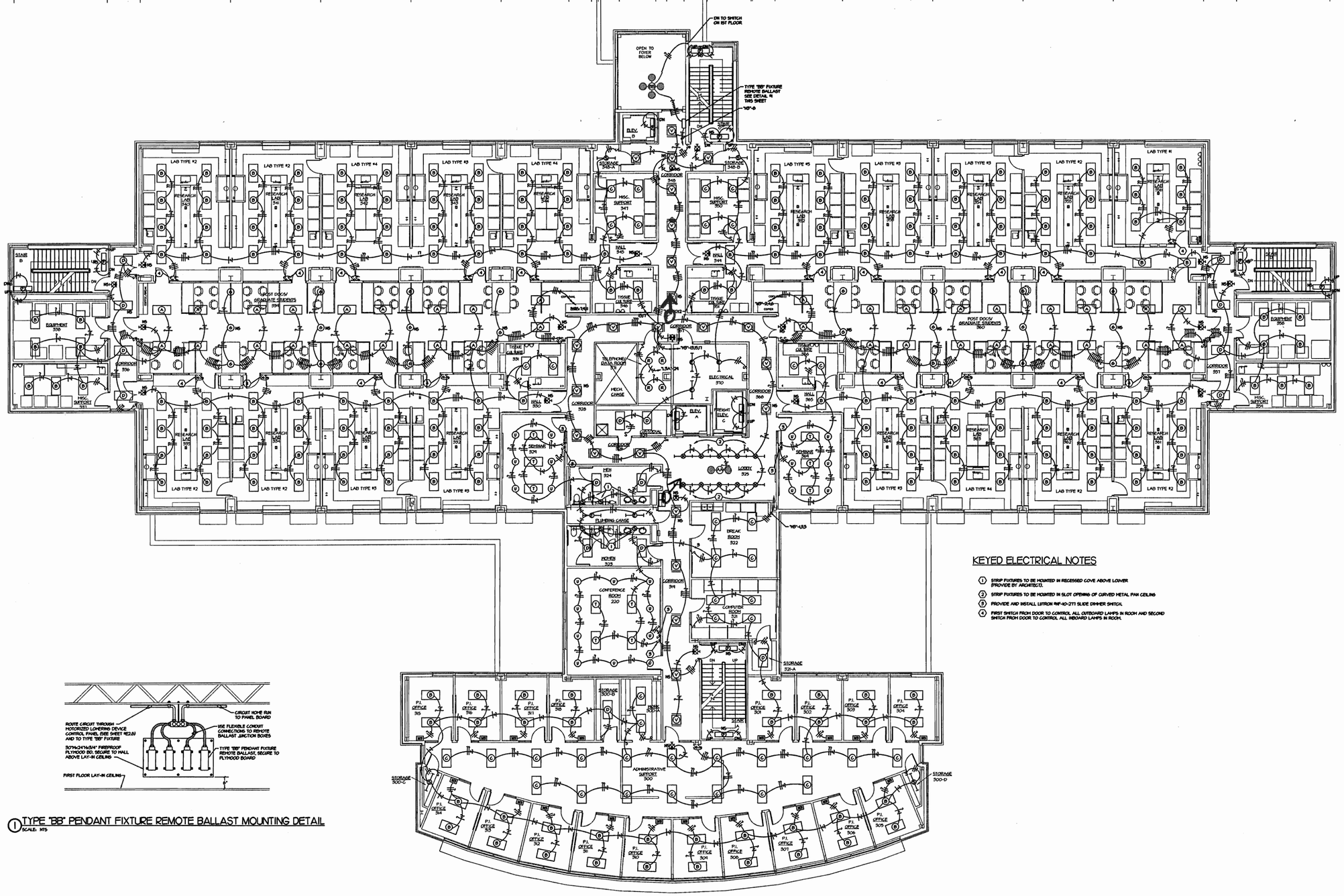
Commission Number 10301

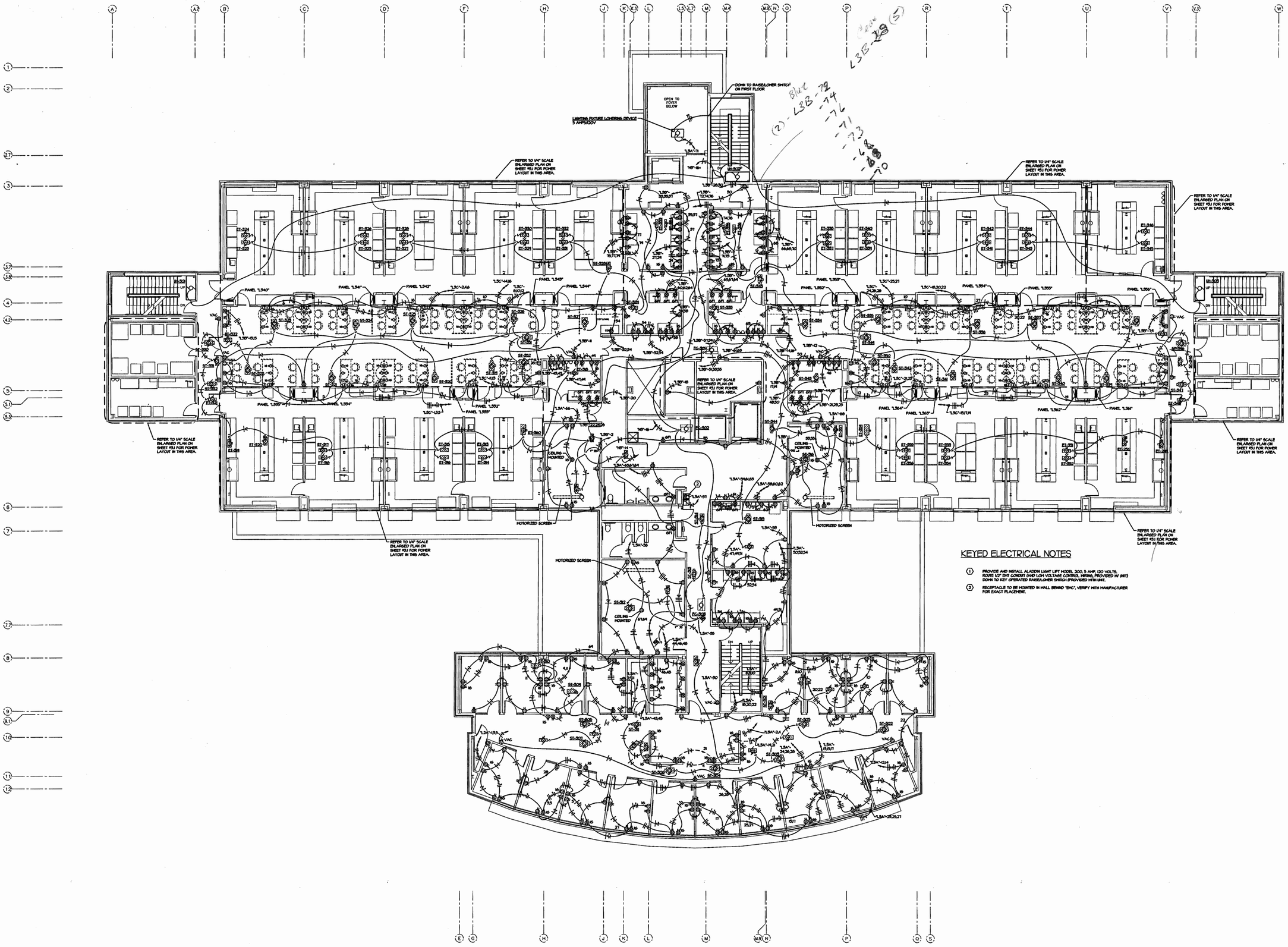
E2.6

Date: October 25, 2002

second floor plan - systems

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


OPEN TO FOYER BELOW
TYPE "BB" FIXTURE REMOTE BALLAST SEE DETAIL IN THIS SHEET
LAB TYPE #2
LAB TYPE #3
LAB TYPE #4
LAB TYPE #5
LAB TYPE #1
RESEARCH LAB 341
RESEARCH LAB 342
RESEARCH LAB 343
RESEARCH LAB 344
RESEARCH LAB 345
RESEARCH LAB 346
RESEARCH LAB 347
RESEARCH LAB 348
RESEARCH LAB 349
RESEARCH LAB 350
RESEARCH LAB 351
RESEARCH LAB 352
RESEARCH LAB 353
RESEARCH LAB



KEYED ELECTRICAL NOTES

1. PROVIDE AND INSTALL ALADDIN LIGHT LIFT MODEL 200.5 AMP, 120 VOLTS, ROTE 1/2" EMT CONDUIT (AND LOW VOLTAGE CONTROL WIRING, PROVIDED W/ UNIT) DOWN TO KEY OPERATED RAISELOWER SWITCH (PROVIDED WITH UNIT.
2. RECEPTACLE TO BE MOUNTED IN WALL BEHIND "BHC", VERIFY WITH MANUFACTURER FOR EXACT PLACEMENT.

third floor plan - power

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

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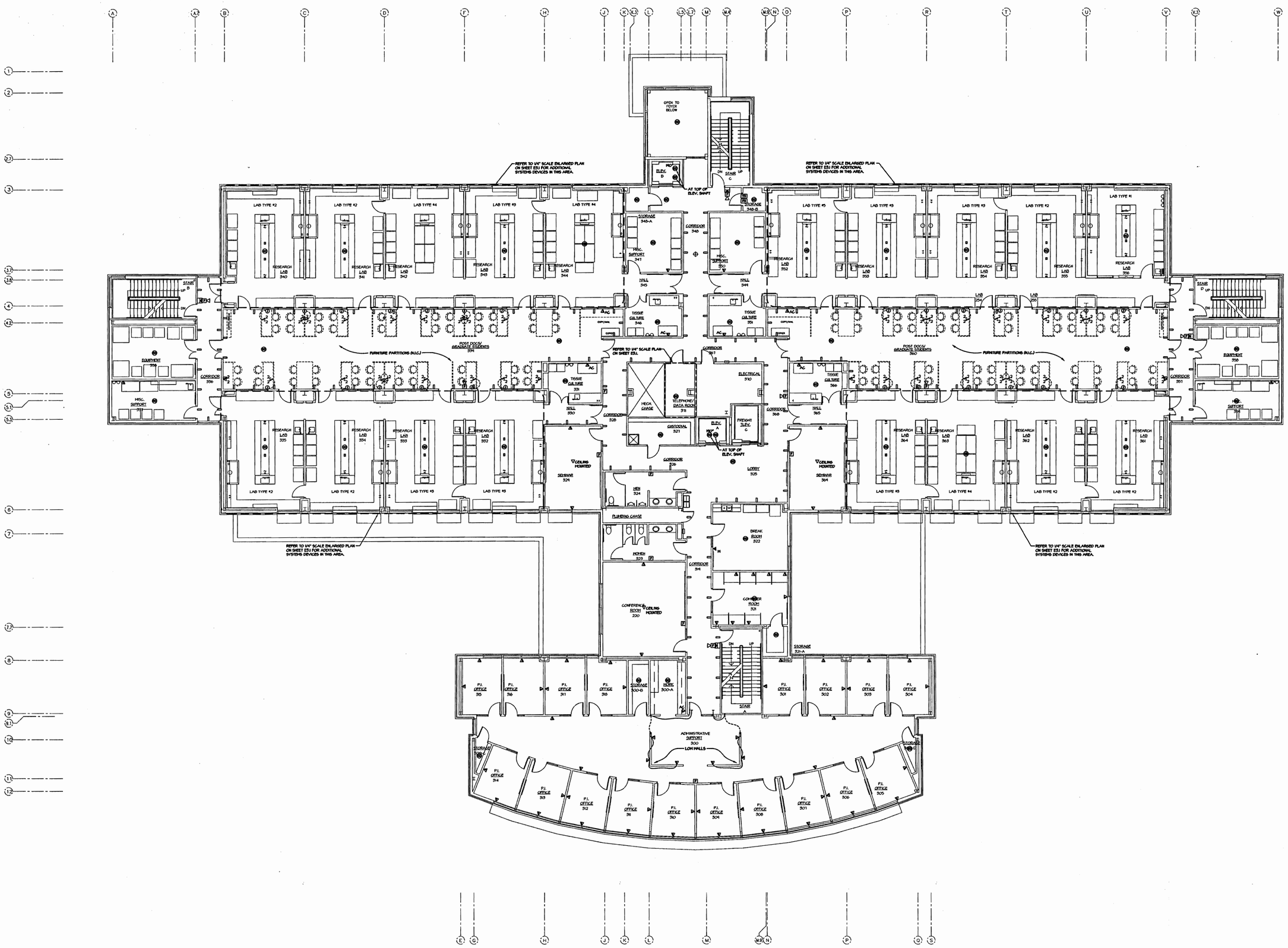
THIRD FLOOR PLAN POWER

Commission Number 10301

E2.8

Date: October 25, 2002



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THIRD FLOOR PLAN SYSTEMS

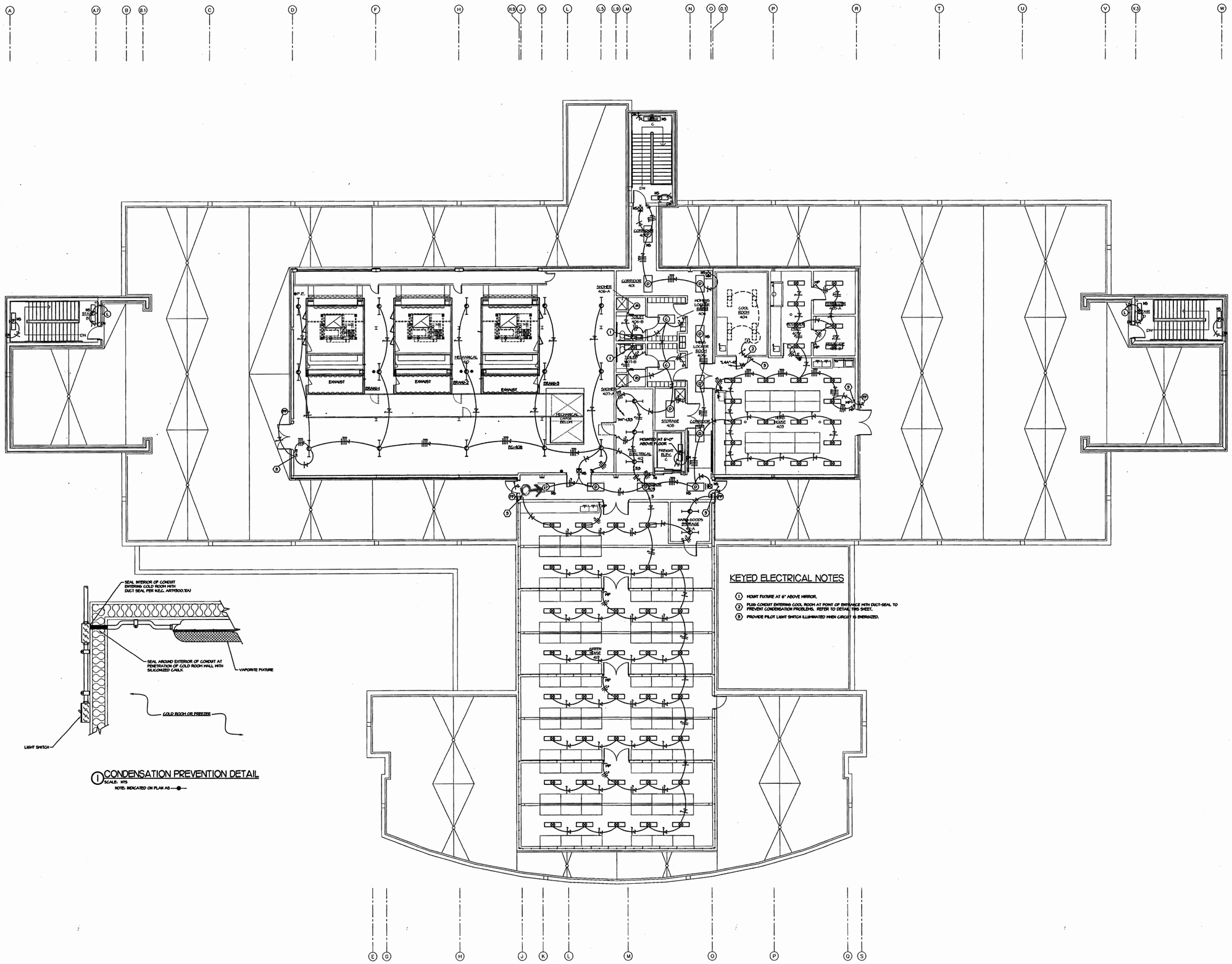
Commission Number 10301

E2.9

Date: October 25, 2002

third floor plan - systems

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



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FOURTH FLOOR PLAN LIGHTING

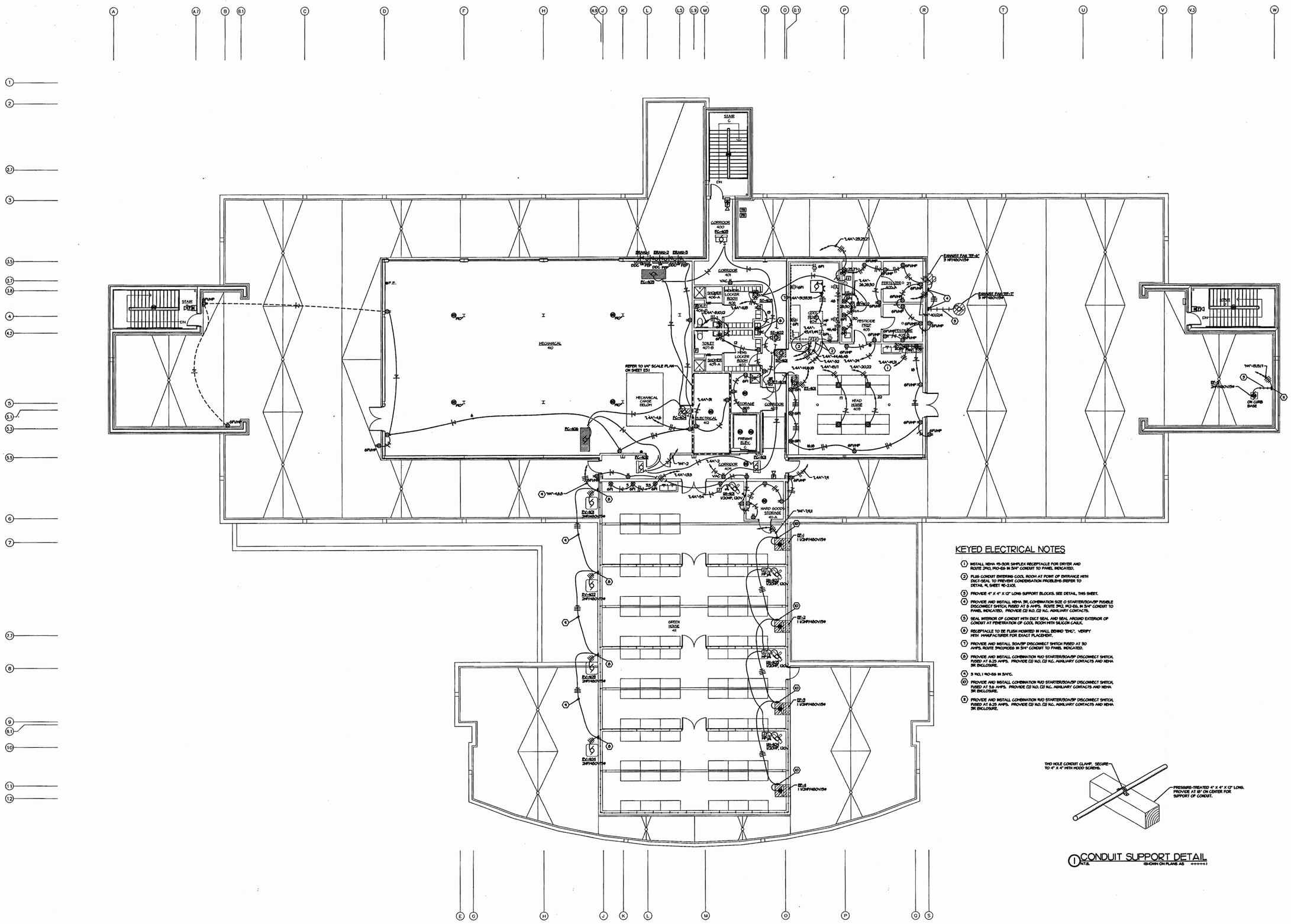
Commission Number 10301

E2.10

Date: October 25, 2002

fourth floor plan - lighting

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



KEYED ELECTRICAL NOTES

1. INSTALL NEMA 10-30R SIMPLEX RECEPTACLE FOR DRYER AND ROUTE 2#10, #10-EG IN 3/4" CONDUIT TO PANEL INDICATED.
2. PLUG CONDUIT ENTERING COOL ROOM AT POINT OF ENTRANCE WITH DUCT-SEAL TO PREVENT CONDENSATION PROBLEMS (REFER TO DETAIL #1, SHEET 1E-2.10).
3. PROVIDE 4" X 4" X 12" LONG SUPPORT BLOCKS. SEE DETAIL, THIS SHEET.
4. PROVIDE AND INSTALL NEMA 3R, COMBINATION SIZE 0 STARTER/30A/3P FUSIBLE DISCONNECT SWITCH, FUSED AT 8 AMPS. ROUTE 3#12, #12-EG, IN 3/4" CONDUIT TO PANEL INDICATED. PROVIDE (2) N.O. (2) N.C. AUXILIARY CONTACTS.
5. SEAL INTERIOR OF CONDUIT WITH DUCT SEAL AND SEAL AROUND EXTERIOR OF CONDUIT AT PENETRATION OF COOL ROOM WITH SILICON CAULK.
6. RECEPTACLE TO BE FLUSH MOUNTED IN WALL BEHIND "EMC". VERIFY WITH MANUFACTURER FOR EXACT PLACEMENT.
7. PROVIDE AND INSTALL 30A/3P DISCONNECT SWITCH FUSED AT 30 AMPS. ROUTE 3#30/#10EG IN 3/4" CONDUIT TO PANEL INDICATED.
8. PROVIDE AND INSTALL COMBINATION N/O STARTER/30A/3P DISCONNECT SWITCH, FUSED AT 6.25 AMPS. PROVIDE (2) N.O. (2) N.C. AUXILIARY CONTACTS AND NEMA 3R ENCLOSURE.
9. 3 #10, 1 #10-EG IN 3/4"C.
10. PROVIDE AND INSTALL COMBINATION N/O STARTER/30A/3P DISCONNECT SWITCH, FUSED AT 3.6 AMPS. PROVIDE (2) N.O. (2) N.C. AUXILIARY CONTACTS AND NEMA 3R ENCLOSURE.
11. PROVIDE AND INSTALL COMBINATION N/O STARTER/30A/3P DISCONNECT SWITCH, FUSED AT 6.25 AMPS. PROVIDE (2) N.O. (2) N.C. AUXILIARY CONTACTS AND NEMA 3R ENCLOSURE.

1 CONDUIT SUPPORT DETAIL
NTS SHOWN ON PLANS AS

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FOURTH FLOOR PLAN
POWER AND SYSTEMS

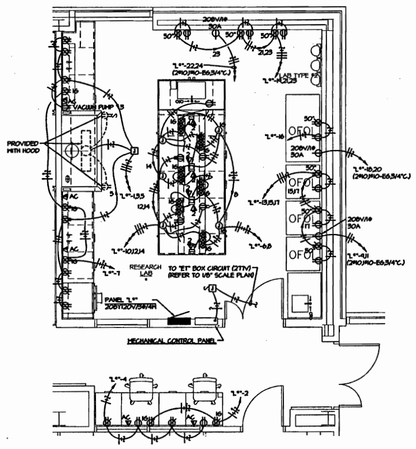
Commission Number
10301

E2.11

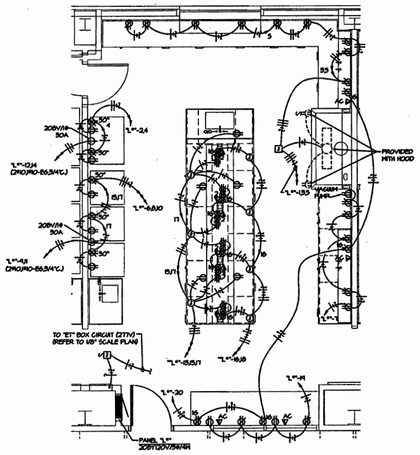
Date: October 25, 2002

fourth floor plan - power and systems

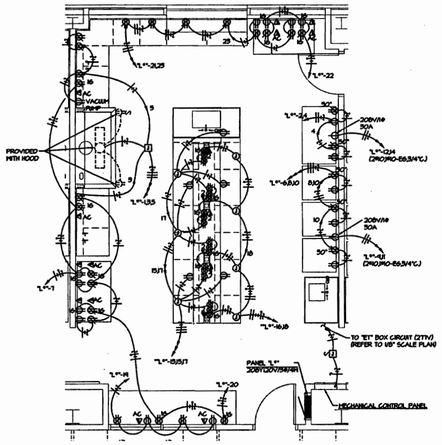
SCALE: 1/8" = 1'-0"



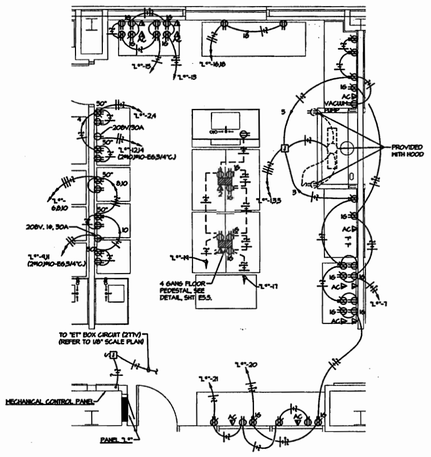
1 LAB TYPE 1 - POWER AND SYSTEMS PLAN
SCALE: 1/4"=1'-0"
(+ DENOTES '256' ON 2ND FLOOR)
(+ DENOTES '356' ON 3RD FLOOR)



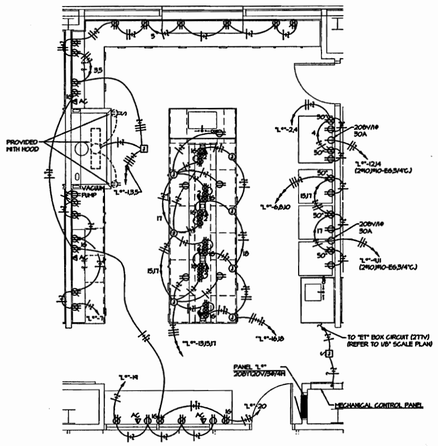
2 LAB TYPE 2 - POWER AND SYSTEMS PLAN
SCALE: 1/4"=1'-0"
(+ DENOTES 234, 235, 240, 241, 255, 261, 262 ON 2ND FLOOR)
(+ DENOTES 334, 335, 340, 341, 355, 361, 362 ON 3RD FLOOR)



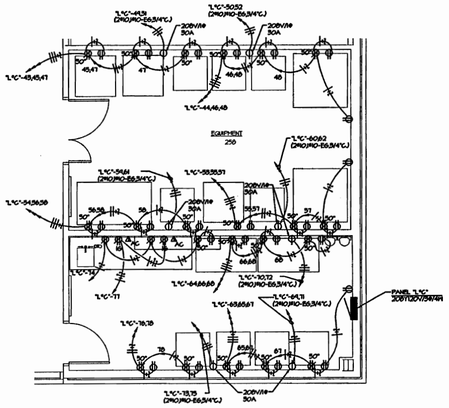
3 LAB TYPE 3 - POWER AND SYSTEMS PLAN
SCALE: 1/4"=1'-0"
(+ DENOTES 232, 233, 243, 253, 254, 264 ON 2ND FLOOR)
(+ DENOTES 332, 333, 343, 353, 354, 364 ON 3RD FLOOR)



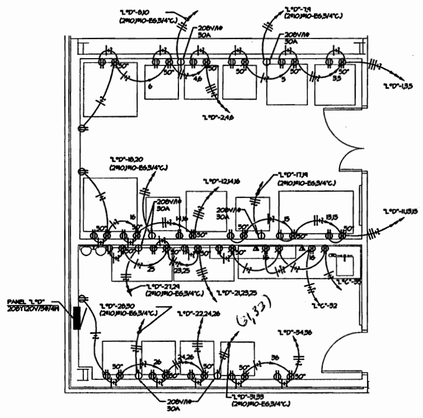
4 LAB TYPE 4 - POWER AND SYSTEMS PLAN
SCALE: 1/4"=1'-0"
(+ DENOTES 242, 244, 263, ON 2ND FLOOR)
(+ DENOTES 342, 344, 363, ON 3RD FLOOR)



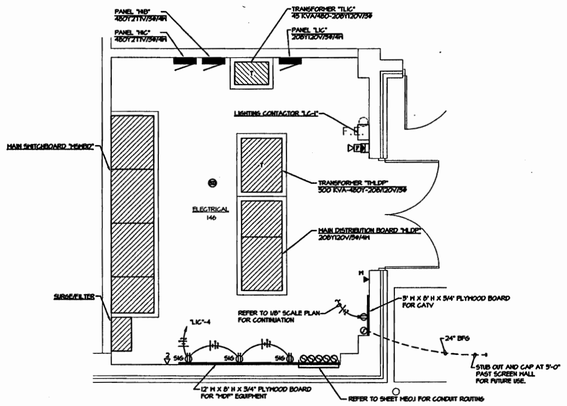
5 LAB TYPE 5 - POWER AND SYSTEMS
SCALE: 1/4"=1'-0"
(+ DENOTES '252' ON 2ND FLOOR)
(+ DENOTES '352' ON 3RD FLOOR)



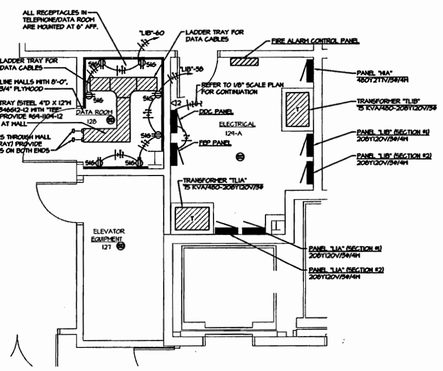
6 EQUIPMENT/SUPPORT ROOM POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"
(+ DENOTES 2 ON 2ND FLOOR)
(+ DENOTES 3 ON 3RD FLOOR)



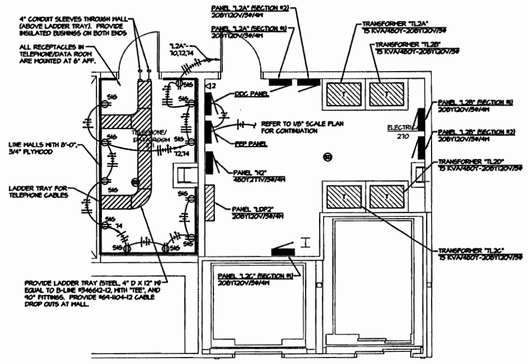
7 EQUIPMENT/SUPPORT ROOM POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"
(+ DENOTES 237 ON 2ND FLOOR)
(+ DENOTES 337 ON 3RD FLOOR)



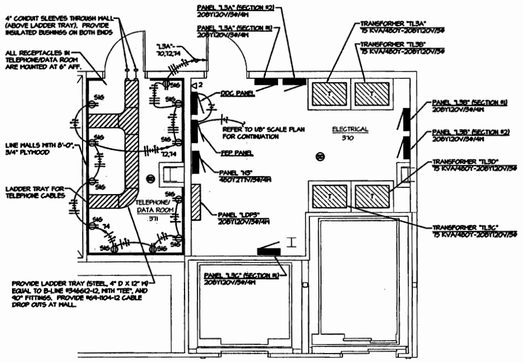
8 1ST FLOOR ELECTRIC ROOM 146 POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"



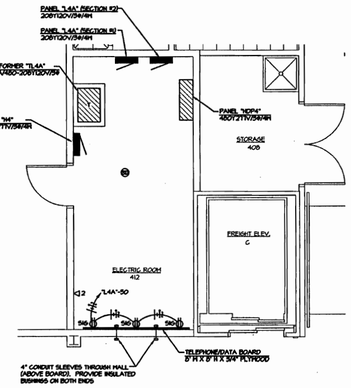
9 1ST FLOOR ELEC. ROOM 129-A POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"



10 2ND FLOOR ELEC/TELE/DATA ROOMS POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"



11 3RD FLOOR ELEC/TELE/DATA ROOMS POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"



12 4TH FLOOR ELEC. ROOM POWER/SYSTEMS PLAN
SCALE: 1/4"=1'-0"

enlarged scale plans - electric rooms

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ENLARGED SCALE PLANS ELECTRIC ROOMS

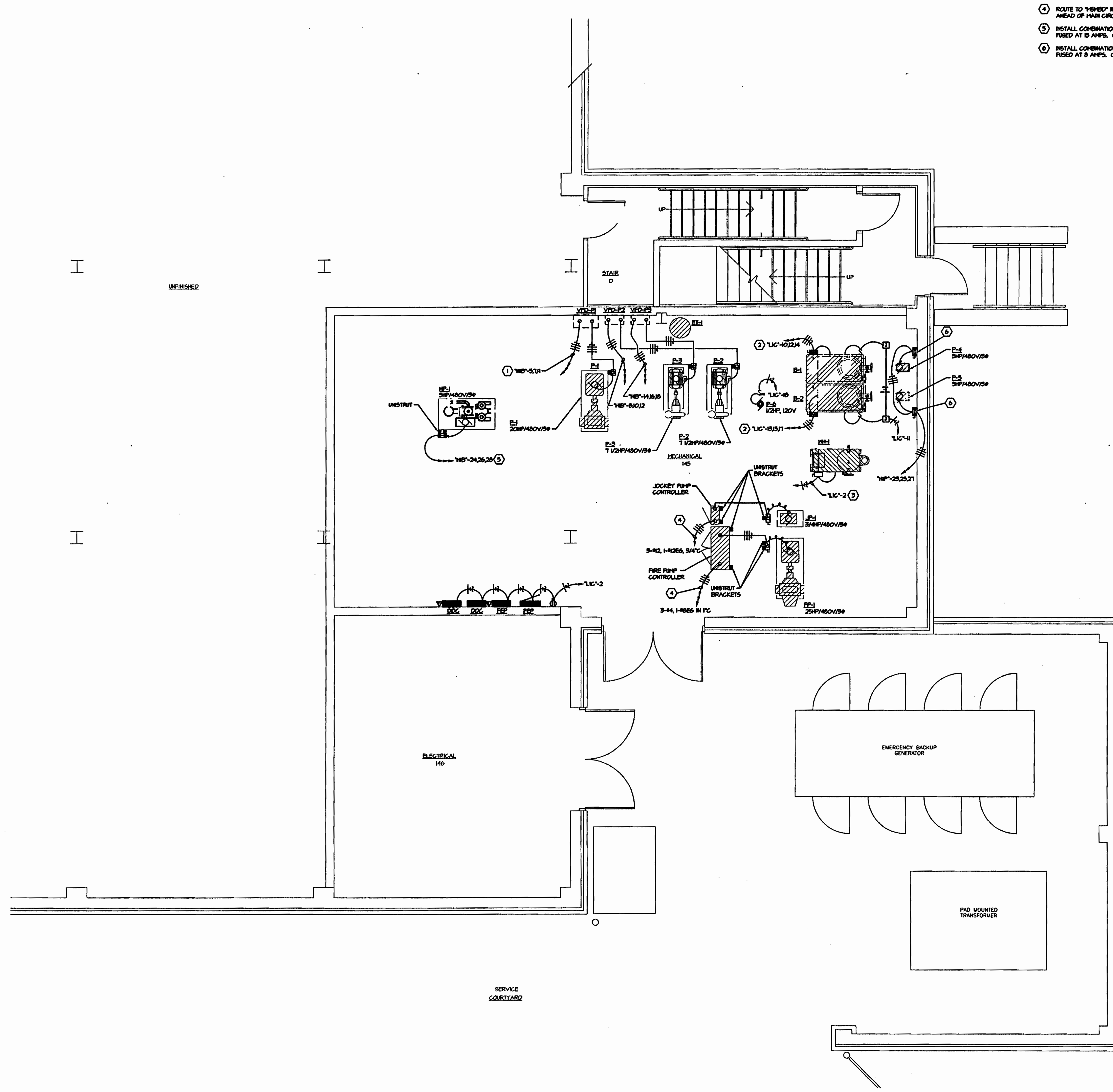
Commission Number 10301

E3.1

Date: October 25, 2002

KEYED ELECTRICAL NOTES

1. ROUTE 3-#6, 1-#10EG IN 3/4" CONDUIT TO PANEL INDICATED.
2. INSTALL COMBINATION W/O STARTER/30A/3P DISCONNECT FUSED AT 11 AMPS. CONNECT TO UNIT WITH METALLIC FLEX.
3. INSTALL 30 AMP/3P DISCONNECT SWITCH FUSED AT 11 AMPS. CONNECT UNIT WITH METALLIC FLEX.
4. ROUTE TO "MSWBD" IN ELECTRICAL ROOM #146 AND CONNECT AHEAD OF MAIN CIRCUIT BREAKER.
5. INSTALL COMBINATION W/O STARTER/30A/3P DISCONNECT SWITCH FUSED AT 15 AMPS. CONNECT TO UNIT WITH METALLIC FLEX.
6. INSTALL COMBINATION W/O STARTER/30A/3P DISCONNECT SWITCH FUSED AT 8 AMPS. CONNECT TO UNIT WITH METALLIC FLEX.



first floor mechanical room plan - electrical

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

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FIRST FLOOR MECHANICAL ROOM ELECTRICAL

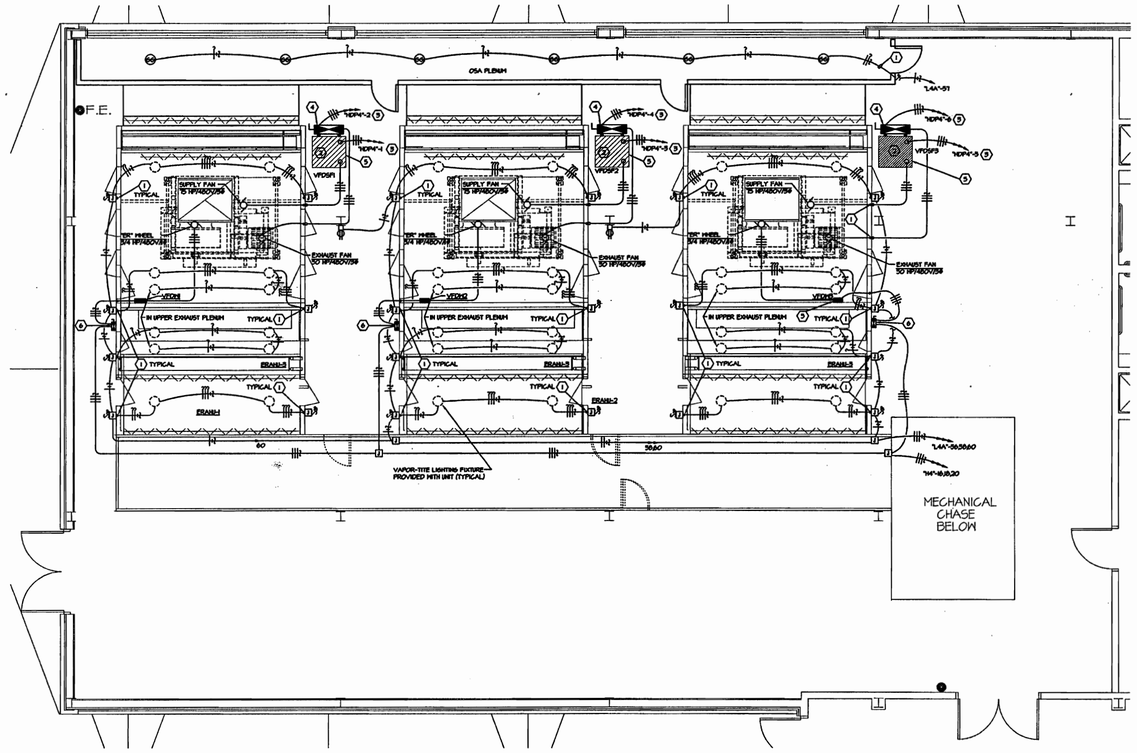
Commission Number 10301

E3.2

Date: October 25, 2002

KEYED ELECTRICAL NOTES

1. PLUG CONDENSATE EVAPORATOR UNIT WITH "DICT SEAL" AT POINT OF ENTRANCE TO PREVENT CONDENSATION PROBLEMS. REFER TO DETAILS, SHEET E2.0
2. "VFD" (VARIABLE FREQUENCY DRIVE) PROVIDED BY MECHANICAL, INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
3. ROUTE 3#4D, #6-8G, IN 1-1/2" CONDUIT, FROM MOTOR TO PANEL INDICATED.
4. PROVIDE AND INSTALL COMBINATION NEMA SIZE 4 STARTER/200A/4P NON-FUSED DISCONNECT SWITCH WITH "HOA" SWITCH, RUN/STOP PUSH BUTTONS, RED/GREEN PILOT LIGHTS, (2) N.O., (2) N.C. AUXILIARY CONTACTS AND NEMA 1 ENCLOSURE.
5. PROVIDE AND INSTALL UNISTRUT DOUBLE CHANNEL BRACKET FRAME FOR INSTALLATION OF "VFD" AND COMBINATION STARTER.
6. PROVIDE AND INSTALL 30A/3P FUSED DISCONNECT SWITCH FUSED AT 3.2 AMPS.



REFER TO 1/8" SCALE PLAN FOR ADDITIONAL REQUIREMENTS

fourth floor mechanical room plan - electrical

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

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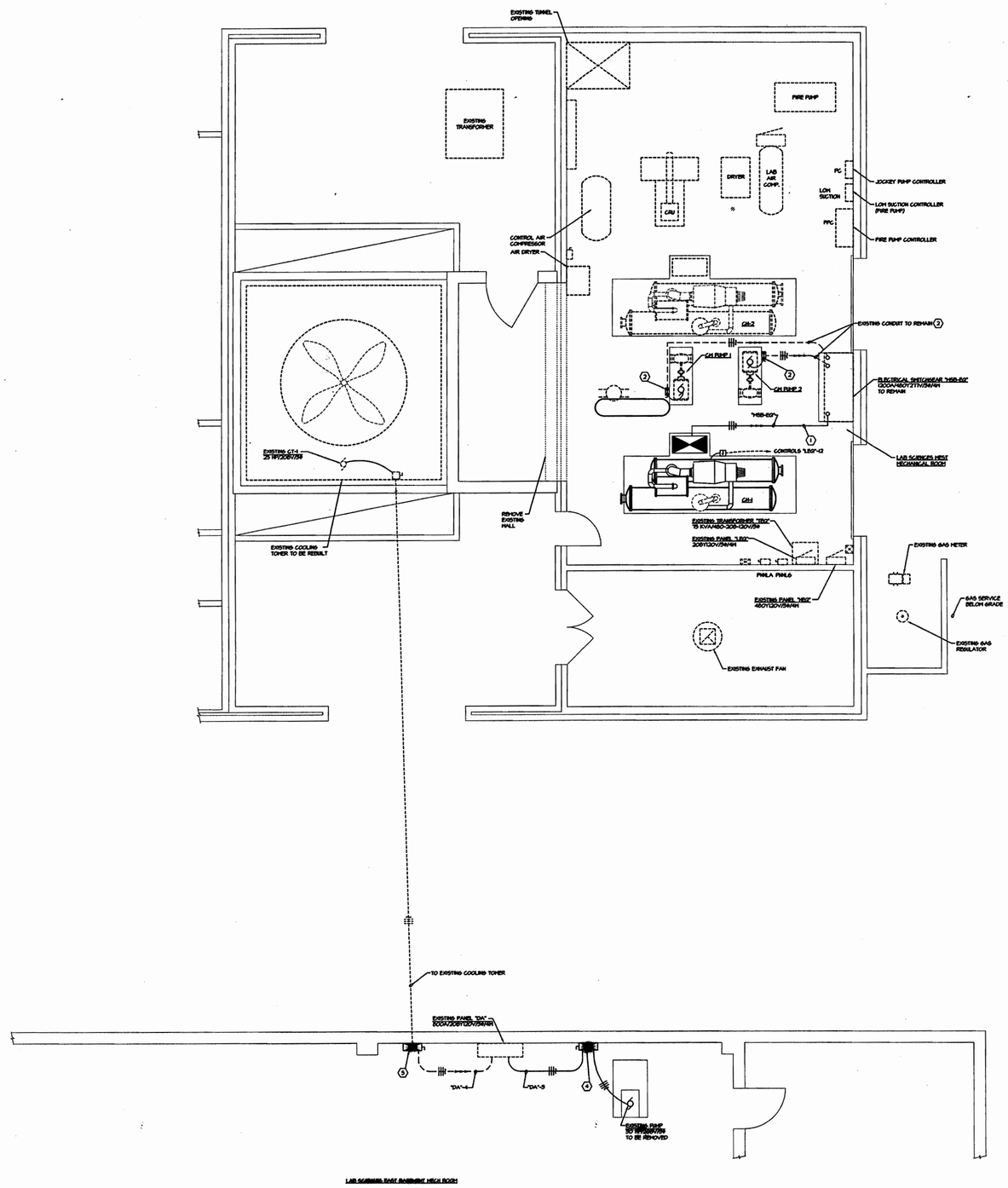
FOURTH FLOOR MECHANICAL ROOM PLAN-ELECTRICAL

Commission Number 10301

E3.3

Date: October 25, 2002



KEYED ELECTRICAL NOTES

1. REMOVE EXISTING 300 AMP CIRCUIT. MARK SWITCH AS SPARE.
2. REMOVE EXISTING #4 STARTER. CIRCUIT TO BE EXTENDED TO NEW "VFD5". REFER TO SHEET E3.5.
3. REMOVE EXISTING CONDUCTORS FROM EXISTING CONDUIT.
4. REMOVE EXISTING #4 STARTER, WIRE AND CONDUIT FOR CIRCUIT. MARK SWITCH AS SPARE.
5. REMOVE EXISTING #9 STARTER, EXISTING CIRCUIT TO REMAIN.

lab sciences west and east mechanical room - demolition plans

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

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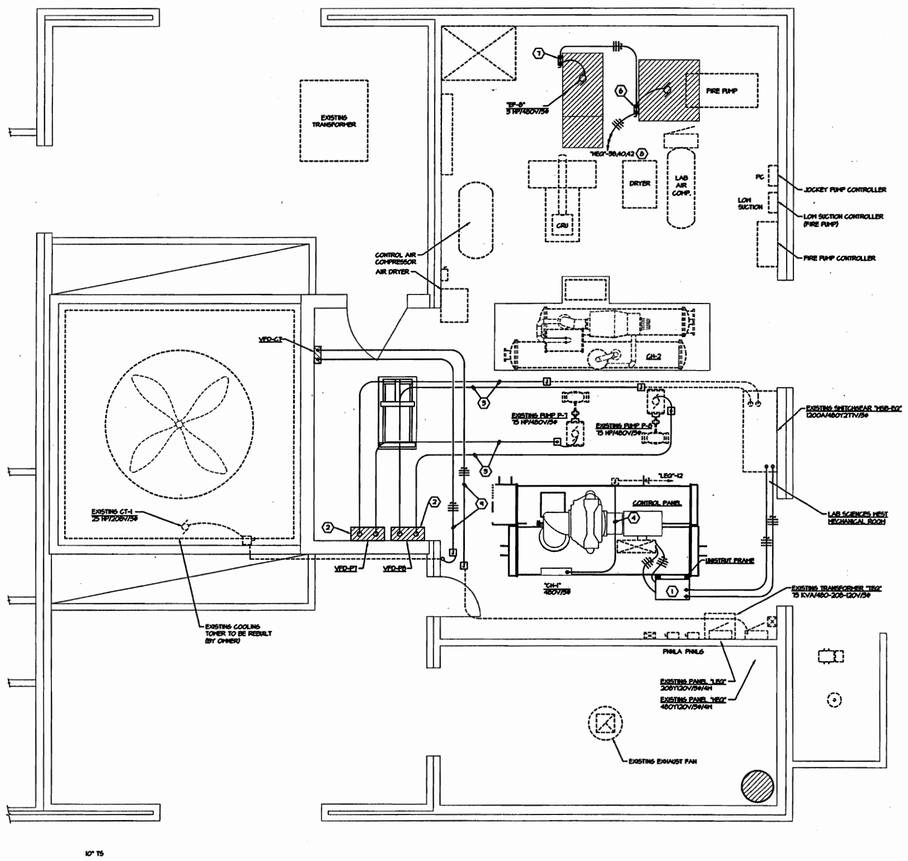
LAB SCIENCES WEST MECHANICAL ROOM DEMOLITION PLAN

Commission Number 10301

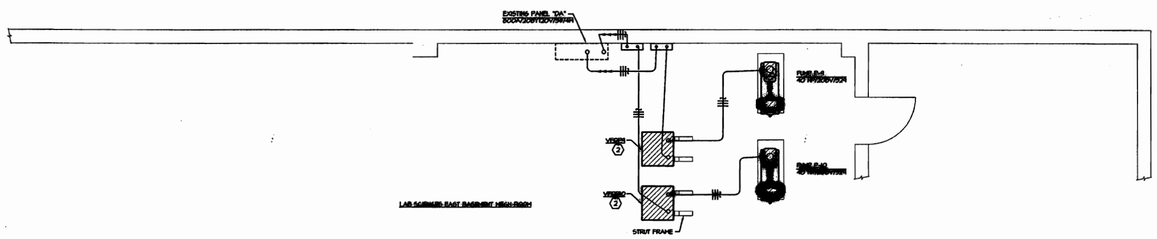
E3.4

Date: October 25, 2002



KEYED ELECTRICAL NOTES

1. PROVIDE AND INSTALL 80OA/3P CIRCUIT BREAKER IN NEMA 1 ENCLOSURE. SECURE TO UNISTRUT FRAME. CONNECT TO SOLID STATE STARTER (PROVIDED WITH UNIT) WITH METALLIC FLEX CONDUIT. ROUTE 2 SETS OF (3#750-KCMIL, #3/0 ALUMINUM IN 3-1/2" C.) TO EXISTING SWITCHBOARD AND TAP BUSS.
2. "VFD" PROVIDED BY MECHANICAL AND INSTALLED/CONNECTED BY ELECTRICAL CONTRACTOR.
3. ROUTE 3#4/0, #4-6G (COPPER CONDUCTORS) IN 1-1/2" CONDUIT (EXTEND EXISTING 1-1/2" C. AS SHOWN FROM EXISTING "HSD-E2" TO EXISTING PUMPS.
4. EXTEND 2#12, #12G(G) IN 3/4" CONDUIT FROM JUNCTION BOX TO NEW "CH-1" CONTROL PANEL AS INDICATED.
5. INSTALL 175 AMP/3P CIRCUIT BREAKER WITH NEMA 1 ENCLOSURE. ROUTE 3#2/0, #4-6G (COPPER CONDUCTORS) IN 2" CONDUIT FROM PUMP TO EXISTING PANEL "DA". TAP BUSS.
6. PROVIDE AND INSTALL COMBINATION N/O STARTER/30A/3P DISCONNECT SWITCH FUSED AT 8.25 AMPS. PROVIDE (2) N.O./2N.C. AUXILIARY CONTACTS.
7. PROVIDE AND INSTALL COMBINATION N/O STARTER/30A/3P DISCONNECT SWITCH FUSED AT 8 AMPS. PROVIDE (2) N.O./2N.C. AUXILIARY CONTACTS.
8. ROUTE 2#12, #12-6G, IN 3/4" CONDUIT TO EXISTING PANEL. INSTALL (1) 20A/3P BREAKER IN SPACE INDICATED.
9. EXTEND NEW 3/4" CONDUIT TO NEW "VFD-CT1" AS INDICATED AND ROUTE NEW CONDUCTORS FROM "HSD" TO EXISTING TOWER FAN (P3), #12-6G) IN 3/4" CONDUIT.



lab sciences west mechanical room - ELECTRICAL plan

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

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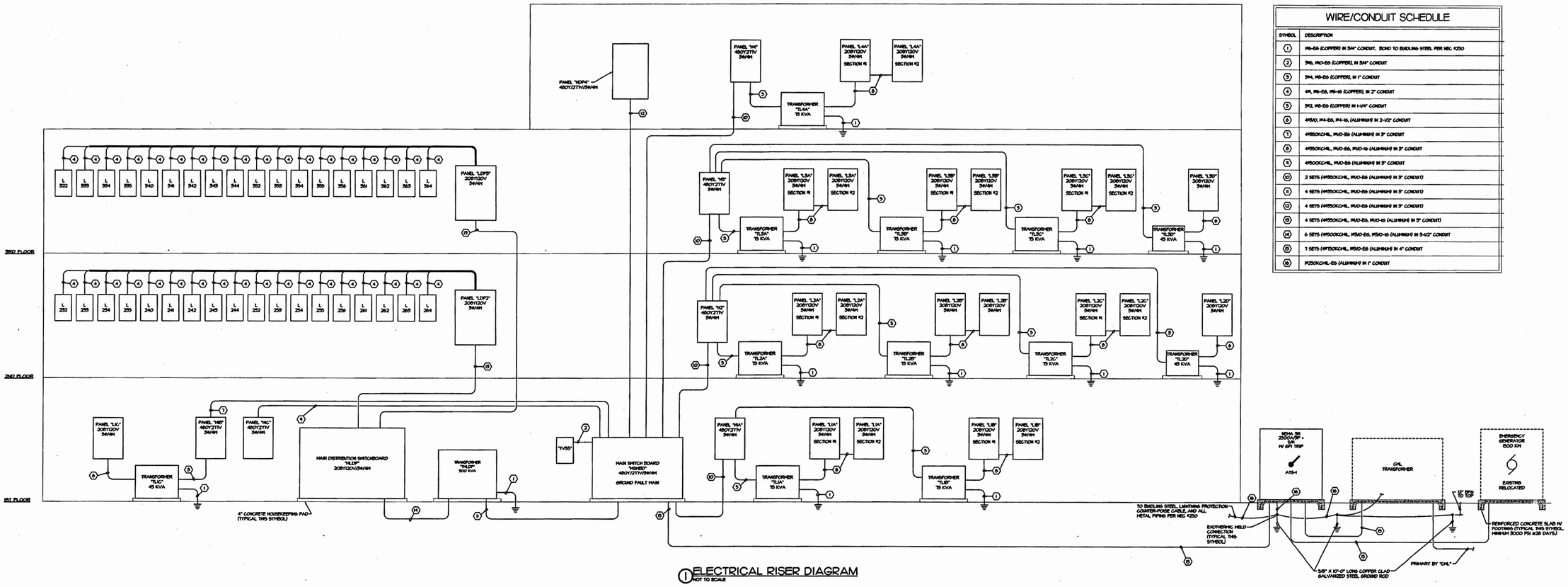
LAB SCIENCES WEST MECHANICAL ROOM ELECTRICAL PLAN

Commission Number 10301

E3.5

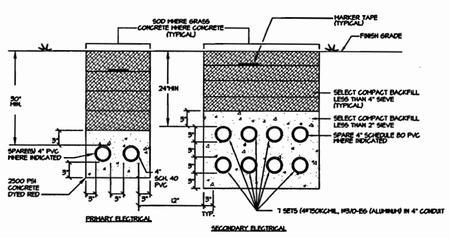
Date: October 25, 2002



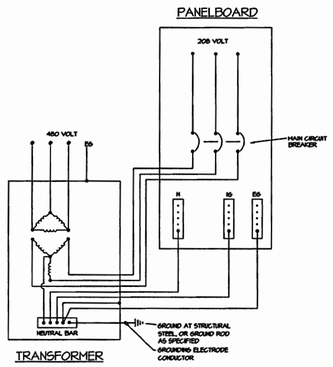
1 ELECTRICAL RISER DIAGRAM
NOT TO SCALE

WIRE/CONDUIT SCHEDULE

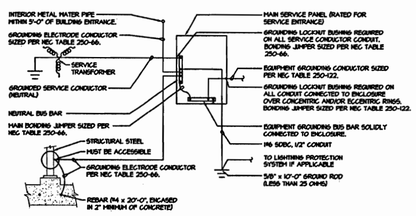
SYMBOL	DESCRIPTION
1	1#6-E6 (COPPER) IN 3/4" CONDUIT. BOND TO BUILDING STEEL PER NEC 250
2	3#6, 1#10-E6 (COPPER), IN 3/4" CONDUIT
3	3#4, 1#8-E6 (COPPER), IN 1" CONDUIT
4	4#1, 1#6-E6, 1#6-16 (COPPER), IN 2" CONDUIT
5	3#2, 1#8-E6 (COPPER) IN 1-1/4" CONDUIT
6	4#3/0, 1#4-E6, 1#4-16, (ALUMINUM) IN 2-1/2" CONDUIT
7	4#350KCMIL, 1#1/0-E6 (ALUMINUM) IN 3" CONDUIT
8	4#350KCMIL, 1#1/0-E6, 1#1/0-16 (ALUMINUM) IN 3" CONDUIT
9	4#500KCMIL, 1#1/0-E6 (ALUMINUM) IN 3" CONDUIT
10	2 SETS (4#350KCMIL, 1#1/0-E6 (ALUMINUM) IN 3" CONDUIT)
11	4 SETS (4#350KCMIL, 1#1/0-E6 (ALUMINUM) IN 3" CONDUIT)
12	4 SETS (4#350KCMIL, 1#1/0-E6 (ALUMINUM) IN 3" CONDUIT)
13	4 SETS (4#350KCMIL, 1#1/0-E6, 1#1/0-16 (ALUMINUM) IN 3" CONDUIT)
14	6 SETS (4#500KCMIL, 1#3/0-E6, 1#3/0-16 (ALUMINUM) IN 3-1/2" CONDUIT
15	1 SETS (4#750KCMIL, 1#3/0-E6 (ALUMINUM) IN 4" CONDUIT
16	1#2/0KCMIL-E6 (ALUMINUM) IN 1" CONDUIT



1 UNDERGROUND DUCT DETAIL
SCALE: NONE

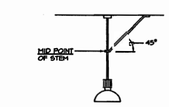


2 GROUNDING AT TRANSFORMER/ PANELBOARD DETAIL
SCALE: NONE

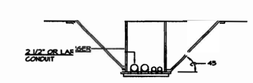


3 ELECTRICAL SERVICE GROUNDING AND BONDING DETAIL
SCALE: NONE

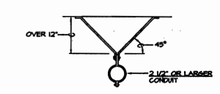
NOTE: ALL SERVICE GROUNDING/BONDING SHALL COMPLY WITH ARTICLE 250 OF THE NEC 2002 EDITION.



6 TRAPEZE HANGER 2-1/2" OR LARGER CONDUIT
SCALE: NONE



5 PENDANT MOUNTED FIXTURE
SCALE: NONE



4 CONDUIT HANGER 2-1/2" OR LARGER CONDUIT
SCALE: NONE

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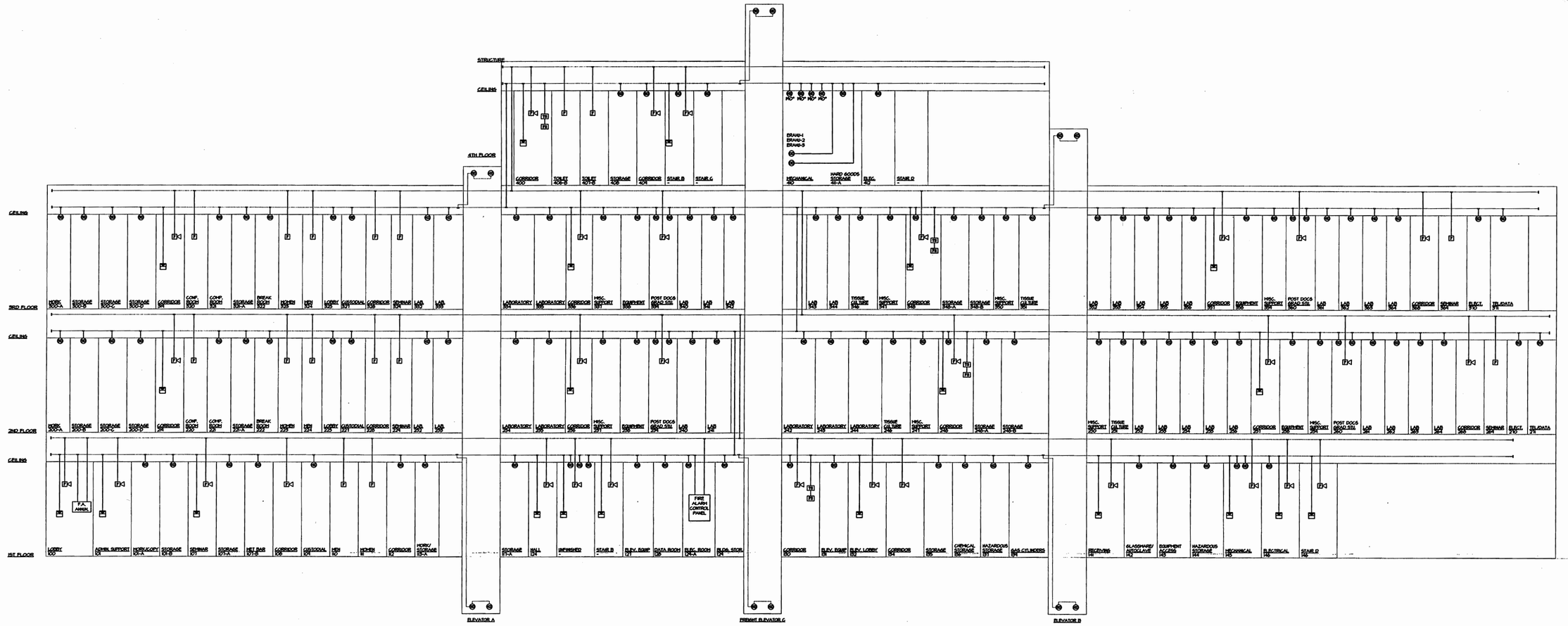
POWER RISER DIAGRAM

Commission Number 10301

E4.1

Date: October 25, 2002

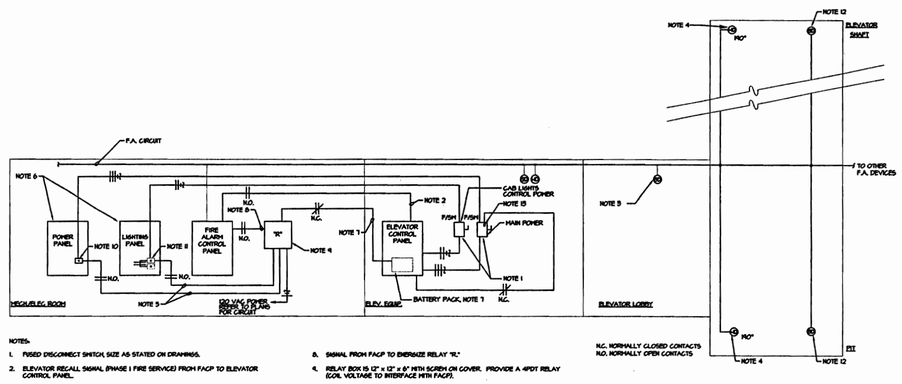


1 FIRE ALARM SYSTEM RISER DIAGRAM

NTS.

RISER NOTES:

1. SYSTEM CABLES TO BE INSTALLED ON SYSTEM CABLE SUPPORTS AS DETAILED.
2. SYSTEM CONDUITS ARE TO BE INSTALLED AS HIGH AS POSSIBLE ABOVE CORRIDOR CEILINGS AND TO EITHER SIDE OF CORRIDOR. SIGB TO WITHIN 2 FT. OF A CABLE SUPPORT.
3. PROVIDE PLASTIC BUSHING ON EACH CONDUIT TERMINATION.
4. PROVIDE PULLCORD IN EACH EMPTY CONDUIT.
5. ALL CABLING SHALL BE PLENUM RATED CABLE.



NOTES:

1. FUSED DISCONNECT SWITCH, SIZE AS STATED ON DRAWINGS.
2. ELEVATOR RECALL SIGNAL (PHASE I FIRE SERVICE) FROM FACP TO ELEVATOR CONTROL PANEL.
3. EACH ELEVATOR LOBBY SMOKE DETECTOR PROGRAMMED IN THE FACP TO RETURN THE CAB TO ALTERNATE DESIGNATED FLOOR IF DETECTOR IS ACTIVATED.
4. TEMPERATURE SETTING OF HEAT DETECTOR TO BE SET LOWER THAN SPRINKLER HEAD. ACTIVATION OF THE SHAFT MOUNTED HEAT DETECTOR SHALL INITIATE GENERAL BUILDING ALARM, ELEVATOR RECALL FUNCTION, AND SHUNT TRIP POWER FEEDERS AFTER ELEVATOR CAB IS STOPPED AT DESIGNATED FLOOR AND DOORS ARE LOCKED OPEN.
5. SHUNT TRIP SIGNAL (120 VAC) FROM RELAY BOX "R" TO CIRCUIT BREAKER PANEL.
6. REFER TO PLAN SHEETS FOR PANEL DESIGNATIONS. CIRCUITS, WIRE, AND CONDUIT SIZES.
7. CIRCUIT DISCONNECT FOR ELEVATOR BATTERY PACK WHERE PROVIDED. CONNECT AS DIRECTED BY THE ELEVATOR INSTALLER.
8. SIGNAL FROM FACP TO ENERGIZE RELAY "R."
9. RELAY BOX IS 12" x 12" x 6" WITH SCREW ON COVER. PROVIDE A 4PDT RELAY (COIL VOLTAGE TO INTERFACE WITH FACP).
10. 3 POLE SHUNT TRIP CIRCUIT BREAKER FOR ELEVATOR MOTOR.
11. 1 POLE SHUNT TRIP CIRCUIT BREAKER FOR ELEVATOR CONTROL CIRCUIT AND ELEVATOR LIGHTS.
12. SHAFT MOUNTED SMOKE DETECTORS, WHEN ACTIVATED, SHALL INITIATE THE ELEVATOR RECALL FUNCTION AND SOUND THE GENERAL BUILDING ALARM.
13. PROVIDE ONE FORM "C" INTERLOCK ON MAIN POWER DISCONNECT. UNDER SERVICE CONDITIONS, INTERLOCK TELLS ELEVATOR CONTROL NOT TO LOWER CAB.

N.C. NORMALLY CLOSED CONTACTS
N.O. NORMALLY OPEN CONTACTS

2 FIRE ALARM SYSTEM INTERFACE TO ELEVATOR

SCALE: NONE

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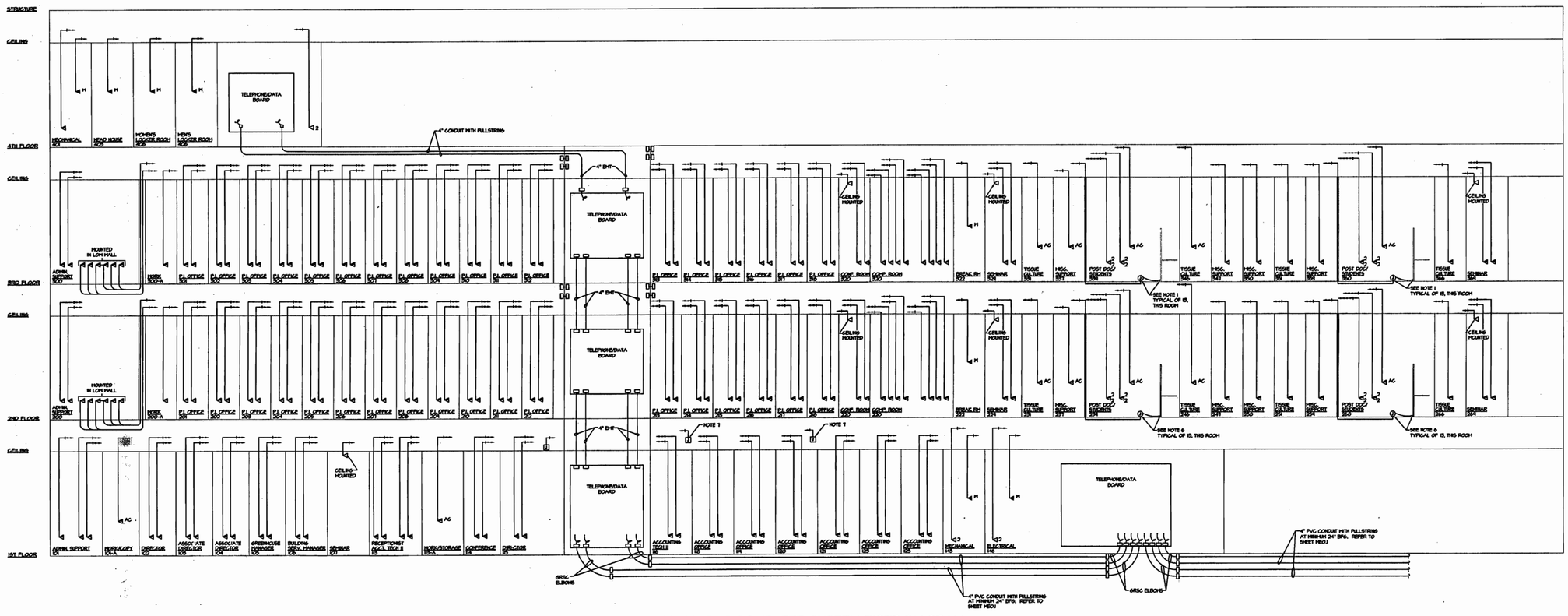
FIRE ALARM SYSTEM RISER DIAGRAM

Commission Number 10301

E4.2

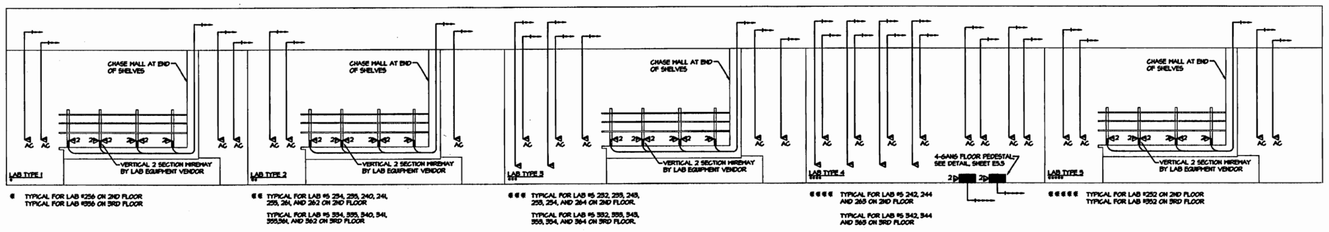
Date: October 25, 2002



1 TELEPHONE/COMPUTER SYSTEM RISER DIAGRAM
N.T.S.

RISER NOTES:

1. SYSTEM CABLES TO BE INSTALLED ON SYSTEM CABLE SUPPORTS AS DETAILED.
2. SYSTEM CONDUITS ARE TO BE INSTALLED AS HIGH AS POSSIBLE ABOVE CORRIDOR CEILINGS AND TO EITHER SIDE OF CORRIDOR. STUB TO WITHIN 2 FT. OF A CABLE SUPPORT.
3. PROVIDE PLASTIC BUSHING ON EACH CONDUIT TERMINATION.
4. PROVIDE PULLCORD IN EACH EMPTY CONDUIT.
5. ALL CABLING SHALL BE PLENUM RATED CABLE.
6. DOUBLE GANG JUNCTION BOX FLUSH MOUNTED IN WALL FOR CONNECTION TO OWNER PROVIDED POWERED FURNITURE.
7. ROUTE 3/4" CONDUIT WITH DEDICATED PHONE LINE TO TELEPHONE TERMINAL BOARD FOR ELEVATOR CAB PHONES.



2 PARTIAL TELEPHONE/COMPUTER SYSTEM RISER DIAGRAM - RESEARCH LABS
N.T.S.

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TELEPHONE/ COMPUTER SYSTEM RISER DIAGRAM

Commission Number 10301

E4.3

Date: October 25, 2002

2896.77 AMPS

PANELBOARD: "MSWBD"	VOLTAGE: 480Y277V	CU BUS RATING: 2500A	MAIN: 2500A/3P MCB GROUND FAULT	TOTAL CONNECTED VA: 2,408,334
LOCATION: 1ST FLOOR ELEC. ROOM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 823,888
				TOTAL BØ: 792,549
MOUNTING: FREE STANDING	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 65,000	FED FROM: ATS-1	TOTAL CØ: 791,897

CIRCUIT	BREAKER FRAME	BREAKER TRIP	LOAD DESCRIPTION	LOAD (VA) AØ	LOAD (VA) BØ	LOAD (VA) CØ
1	100	3/100	ELEVATOR "A"	16,073	16,073	16,073
2	100	3/100	ELEVATOR "B"	16,073	16,073	16,073
3	100	3/100	ELEVATOR "C" (FREIGHT)	16,073	16,073	16,073
4	400	3/400	PANEL "H1A"	95,472	92,126	93,108
5	400	3/225	PANEL "H1B"	45,021	41,188	40,558
6	400	3/300	PANEL "H1C"	62,076	62,076	62,076
7	400	3/400	PANEL "H2"	106,997	105,175	105,380
8	400	3/400	PANEL "H3"	106,997	105,175	105,380
9	400	3/400	PANEL "H4"	38,588	38,074	36,658
10	800	3/800	TRANSFORMER "TMLDP"/PANEL "MLDP"	166,667	166,667	166,667
11	800	3/800	PANEL "HDP4"	133,851	133,851	133,851
12	400	-	SPACE			
13	400	-				
14	200	-				
15	200	-				
16	100	-	↓			
17	100	3/60	TVSS			

1118 AMPS

PANELBOARD: "MLDP"	VOLTAGE: 208Y120V	CU BUS RATING: 1600A	MAIN: 1600A/3P MCB	TOTAL CONNECTED VA: 929,240
LOCATION: 1ST FLOOR ELEC. ROOM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 335,400
				TOTAL BØ: 294,400
MOUNTING: FREE STANDING	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 65,000	FED FROM: PANEL "MSWBD" XMFR/"TMLDP"	TOTAL CØ: 299,440

CIRCUIT	BREAKER FRAME	BREAKER TRIP	LOAD DESCRIPTION	LOAD (VA) AØ	LOAD (VA) BØ	LOAD (VA) CØ
1	800	800	PNL "LDP2"	167,700	147,200	149,720
2	800	800	PNL "LDP3"	167,700	147,200	149,720
3	800		SPACE			
4	400					
5	200					
6						
7						
8	↓	↓	↓			

338AMPS

PANELBOARD: "H1A"	VOLTAGE: 480Y277V	CU BUS RATING: 400A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 280,706
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 95,472
				TOTAL BØ: 92,126
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 42,000	FED FROM: MSWBD	TOTAL CØ: 93,108

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
10,253			STERILIZER - 142	3	1	2	3	STERILIZER - 142	10,253		
	10,253		-		3	4		-		10,253	
		10,253	-	50	5	6	50	-			10,253
10,253			STERILIZER - 142	3	7	8	3	GLASSWASHER - 142	2771		
	10,253		-		9	10		-		2771	
		10,253	-	50	11	12	20	-			2771
2771			GLASSWASHER - 142	3	13	14	1/20	LTS-100A,107,107A,107B	3397		
	2771		-		15	16	1/20	LTS-110,111,113,114,115,124		3100	
		2771	-	20	17	18	1/20	LTS-100,100B,108,109,142-144			3112
2644			LTS-ELEV SHAFT,126,128,129,135-139	1/20	19	20	1/20	LTS-101,101A,101B,102-106	3130		
	930		LTS-STAIR B, UNFINISHED	1/20	21	22	1/20	LTS-STAIR C, ELEV B SHAFT,131,132		1795	
		3695	LTS-113A,117A,116,118-121,123,125	1/20	23	24	1/20	SPARE			
			SPARE	1/20	25	26	1/20				
				1/20	27	28	1/20				
				1/20	29	30	1/20				
				1/20	31	32	1/20				
				1/20	33	34	1/20				
			↓	1/20	35	36	1/20	↓			
25000			TRANSFORMER "TL1A"	3	37	38	3	TRANSFORMER "TL1B"	25000		
	25000		-		39	40		-		25000	
		25000	-	110	41	42	110	-			25000

149AMPS

PANELBOARD: "H1B"	VOLTAGE: 480Y277V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 126,767
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 45,021
				TOTAL BØ: 41,188
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 42,000	FED FROM: MSWBD	TOTAL CØ: 40,558

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
3330			LTS-140,145,146,DOCK,UNFINISHED	1/20	1	2	1/20	LTS-SOUTHEAST FACADE	2310		
	3360		LTS-141,134,133	1/20	3	4	1/20	LTS-NORTHWEST/NORTHEAST FACADE		2592	
		7482	PUMP "P-1" - 145	3	5	6	1/20	LTS-SOUTHEAST FACADE			2310
7482			-		7	8	3	PUMP "P-2" - 145	3048		
	7482		-	60	9	10		-		3048	
		3120	PARKING LOT LTS	2	11	12	20	-			3048
3120			" " "	20	13	14	3	PUMP "P-3" - 145	3048		
	1680		PARKING LOT LTS	2	15	16		-		3048	
		1680	" " "	20	17	18	20	-			3048
2813			BLDG FLOODS	1/20	19	20	1/20	ST BOXES	1000		
	1808		FC-101,102,103,104,105,106,107,110	1/20	21	22	1/20	LIGHTING CONTACTOR LC - 1		300	
		2660	P4, P5 - 145	3	23	24	1/20	HP-1 - 145			210
2660			" " "		25	26	1/20	" "	210		
	2660		" " "	20	27	28	1/20	" "		210	
			SPARE	1/20	29	30	1/20	GENERATOR BLOCK HTR			2000
				1/20	31	32	1/20	GENERATOR CONTROL/FUEL PUMP	1000		
				1/20	33	34	1/20	SPARE			
			↓	1/20	35	36	1/20				
15000			TRANSFORMER "TL1C"	3	37	38	1/20				
	15000		" " " "		39	40	1/20				
		15000	" " " "	70	41	42	1/20	↓			

224AMPS

PANELBOARD: "H1C"	VOLTAGE: 480Y277V3ø4W	CU BUS RATING: 400A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 186,228
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 62,076
				TOTAL BØ: 62,076
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 65,000	FED FROM: MSWBD	TOTAL CØ: 62,076

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
4434			"M12" - 140	3	1	2	3	"M12" - 140	4434		
	4434		" "		3	4		" "		4434	
		4434	" "	20	5	6	20	" "			4434
4434			"M12" - 140	3	7	8	3	"M12" - 140	4434		
	4434		" "		9	10		" "		4434	
		4434	" "	20	11	12	20	" "			4434
4434			"M12" - 140	3	13	14	3	"M12" - 140	4434		
	4434		" "		15	16		" "		4434	
		4434	" "	20	17	18	20	" "			4434
8868			"M28" - 140	3	19	20	3	"M28" - 140	8868		
	8868		" "		21	22		" "		8868	
		8868	" "	40	23	24	40	" "			8868
8868			"M28" - 140	3	25	26	3	"M28" - 140	8868		
	8868		" "		27	28		" "		8868	
		8868	" "	40	29	30	40	" "			8868
			SPACE W/ BUSS		31	32		SPACE W/ BUSS			
					33	34					
					35	36					
					37	38					
					39	40					
			↓		41	42		↓			

189AMPS

PANELBOARD: "L1A" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 30,892 - SECTION #1; 37,020 - SECTION #2
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 11,104
				TOTAL BØ: 10,224
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H1A"/ XMFR "TL1A"	TOTAL CØ: 9,564

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
900			RECEPTS-100B,101,102	1/20	1	2	1/20	RECEPTS-101,103,104	1080		
	900		RECEPTS-101,102,103	1/20	3	4	1/20	RECEPTS-101,102,103		1080	
		900	RECEPTS-103,104	1/20	5	6	1/20	RECEPTS-100,101,102			1080
900			RECEPTS-105,106	1/20	7	8	1/20	RECEPTS-101A	1200		
	900		RECEPTS-101,101A,106	1/20	9	10	1/20	RECEPTS-101A		1200	
		1200	RECEPTS-101A	1/20	11	12	1/20	RECEPTS-101A			1200
1200			RECEPTS-101A	1/20	13	14	1/20	RECEPTS-101,101A,141	1080		
	1200		RECEPTS-101A	1/20	15	16	1/20	RECEPTS-105,106,101		1080	
		720	RECEPTS-100B	1/20	17	18	1/20	RECEPTS-101B,105			900
600			ELECTRIC DOORS-100, 100A	1/20	19	20	1/20	RECEPTS-107B	1200		
	900		RECEPTS-107,107B	1/20	21	22	1/20	RECEPTS-107B		1200	
		600	RECEPTS-	1/20	23	24	1/20	RECEPTS-107B			1200
1000			MOTORIZED SCREEN-107	1/20	25	26	1/20	RECEPTS-100,107,017A	1080		
	864		SUMP PUMP - ELEV "A"	1/20	27	28	1/20	RECEPTS-107,107A		900	
		864	SUMP PUMP - ELEV "B"	1/20	29	30	1/20	RECEPTS-107,107A			900
864			SUMP PUMP - ELEV "C"	1/20	31	32	1/20	SPARE			
			SPARE	1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
			↓	1/20	41	42	1/20	↓			

103AMPS

PANELBOARD: "L1A" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 37,020
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 12,640
				TOTAL BØ: 12,860
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: "L1A" SECTION #1	TOTAL CØ: 11,520

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1080			RECEPTS-113,115,118,119	1/20	43	44	1/20	RECEPTS-113,119	900		
	1080		RECEPTS-119,121,123	1/20	45	46	1/20	RECEPTS-121,123		900	
		1080	RECEPTS-121,123,125	1/20	47	48	1/20	RECEPTS-123,125			900
600			RECEPTS-114	1/20	49	50	1/20	RECEPTS-114,115,113	1080		
	900		RECEPTS-113,115	1/20	51	52	1/20	RECEPTS-109-111,114,143		1080	
		1080	RECEPTS-120,118	1/20	53	54	1/20	RECEPT-EWC 108			1000
1080			RECEPTS-120,122	1/20	55	56	1/20	RECEPTS-117	1600		
	1080		RECEPTS-117A-122,125	1/20	57	58	1/20	RECEPTS-113A		1200	
		1080	RECEPTS-113A,116,111	1/20	59	60	1/20	RECEPTS-113A			1200
1000			RECEPTS-113A	1/20	61	62	1/20	RECEPTS-113A	1200		
	1000		RECEPTS-113A	1/20	63	64	1/20	RECEPTS-113,116		900	
		1200	RECEPTS-144,141	1/20	65	66	1/20	RECEPTS-113A,118,116			900
1200			RECEPTS-144	1/20	67	68	1/20	RECEPTS-118,120	900		
	720		RECEPTS-	1/20	69	70	2	ICE MACHINE-141		2000	
		1080	RECEPTS-	1/20	71	72	30	-			2000
1000			TRACK LIGHTS #1-(CKT 1)-107	1/20	73	74	1/20	TRACK LIGHTS #2-(CKT 1)-107	1000		
	1000		TRACK LIGHTS #1-(CKT 2)-107	1/20	75	76	1/20	TRACK LIGHTS #2-(CKT 2)-107		1000	
			SPARE	1/20	77	78	1/20	SPARE			
				1/20	79	80	1/20				
				1/20	81	82	1/20				
			↓	1/20	83	84	1/20	↓			

143AMPS

PANELBOARD: "L1B" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 34,620 - SECTION #1; 16,868 - SECTION #2
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 11,340
				TOTAL BØ: 11,940
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H1A"/ XMFR "TL1B"	TOTAL CØ: 11,340

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
	1140			STERILIZER CONTROLS-143	1/20	1	2	1/20	RECEPTS-140,141	1200			*
		1140		STERILIZER CONTROLS-143	1/20	3	4	1/20	RECEPTS-140		1200		*
			1140	STERILIZER CONTROLS-143	1/20	5	6	1/20	RECEPTS-140			1200	*
*	1200			RECEPTS-140	1/20	7	8	1/20	RECEPTS-140	1200			*
*		1200		RECEPTS-140	1/20	9	10	1/20	RECEPTS-140		1200		*
*			1200	RECEPTS-140	1/20	11	12	1/20	RECEPTS-140			1200	*
*	1200			RECEPTS-140	1/20	13	14	1/20	RECEPTS-140	1200			*
*		1200		RECEPTS-140	1/20	15	16	1/20	RECEPTS-140		1200		*
*			1200	RECEPTS-137,138	1/20	17	18	1/20	RECEPTS-140			1200	*
*	1200			RECEPTS-137,138	1/20	19	20	1/20	RECEPTS-136,137	1200			*
*		1200		RECEPTS-134,138	1/20	21	22	1/20	RECEPTS-136,137		1200		*
*			1200	RECEPTS-137,138	1/20	23	24	1/20	RECEPTS-136,137			1200	*
*	600			RECEPTS-138	1/20	25	26	1/20	RECEPTS-136,137	1200			*
		1200		ELEV CAB LTS & RECEPTS- "A" & "C"	1/20	27	28	1/20	RECEPTS-135,136		1200		*
			600	ELEV CAB LTS & RECEPTS- "B"	1/20	29	30	1/20	RECEPTS-135,136			1200	*
				SPARE	1/20	31	32	1/20	SPARE				
					1/20	33	34	1/20					
					1/20	35	36	1/20					
					1/20	37	38	1/20					
					1/20	39	40	1/20					
				↓	1/20	41	42	1/20	↓				

* PROVIDE GROUND FAULT INTERRUPTING CURCUIT BREAKERS ON CIRCUIT

46.82AMPS

PANELBOARD: "L1B" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 16,868
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 6,292
				TOTAL BØ: 6,316
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: "L1B" SECTION #1	TOTAL CØ: 4,260

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
*	1200			RECEPTS-135,136	1/20	43	44	1/20	RECEPTS-130,134	1600		
*		1200		RECEPTS-135	1/20	45	46	1/20	RECEPTS-126		1600	
*			1200	RECEPTS-135	1/20	47	48	1/20	RECEPTS-129			720
	600			RECEPTS-128,129A, LTS 128	1/20	49	50	1/20	RECEPTS-129	540		
		900		RECEPTS-132	1/20	51	52	1/20	RECEPTS-145,146		540	
			900	RECEPTS-STAIR B	1/20	53	54	1/20	RECEPTS-145 STAIR D			540
	1176			OVERHEAD DOOR-141	1/20	55	56	1/20	OVERHEAD DOOR-UNFINISHED	1176		
		1176		OVERHEAD DOOR-141	1/20	57	58	1/20	RECEPTS-128		900	
				SPARE	1/20	59	60	1/20	RECEPTS-128			900
					1/20	61	62	1/20	SPARE			
					1/20	63	64	1/20				
					1/20	65	66	1/20				
					1/20	67	68	1/20				
					1/20	69	70	1/20				
					1/20	71	72	1/20				
					1/20	73	74	1/20				
					1/20	75	76	1/20				
					1/20	77	78	1/20				
					1/20	79	80	1/20				
					1/20	81	82	1/20				
				↓	1/20	83	84	1/20	↓			

* PROVIDE GROUND FAULT INTERRUPTING CURCUIT BREAKERS ON CIRCUIT

39AMPS

PANELBOARD: "L1C" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225	MAIN: 150A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 13,976
LOCATION: 1ST FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 4,660
				TOTAL BØ: 4,500
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H1B" XFMR/"TL1C"	TOTAL CØ: 4,816

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
900			RECEPTS-146	1/20	1	2	1/20	"WH-1" - 145	720		
	800		SECURITY GATE	1/20	3	4	1/20	RECEPTS - 146		900	
		800	" " " "	1/20	5	6	1/20	SECURITY GATE			800
800			SECURITY GATE	1/20	7	8	1/20	" " " "	800		
	800		" " " "	1/20	9	10	3	B-1 - 145		720	
		600	BOILER CONTROLS	1/20	11	12		" " " "			720
720			B-2 - 145	3	13	14	20	" " " "	720		
	720		" " " "		15	16	1/20	UH - 101,102,103,104		560	
		720	" " " "	20	17	18	1/20	P6 - 145			1176
			SPARE	1/20	19	20	1/20	SPARE			
				1/20	21	22	1/20				
				1/20	23	24	1/20				
				1/20	25	26	1/20				
				1/20	27	28	1/20				
				1/20	29	30	1/20				
			↓	1/20	31	32	1/20	↓			
			SPACE	1/20	33	34	1/20	SPACE			
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
			↓	1/20	41	42	1/20	↓			

383 AMPS

PANELBOARD: "H2"	VOLTAGE: 480Y277V	CU BUS RATING: 400A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 318,017
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 106,997
				TOTAL BØ: 105,601
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 42,000	FED FROM: MSWBD	TOTAL CØ: 105,380

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
3500			LTS - 201-204, 221, 222	1/20	1	2	1/20	LTS - 260, 263-266	3654		
	2948		LTS - 220, 223, 224, 229	1/20	3	4	1/20	LTS - 257-260		2980	
		3764	LTS - 200A, 205-218	1/20	5	6	1/20	LTS - 261-263			2904
2995			LTS - 230-232, 239	1/20	7	8	1/20	SPARE	-		
	2980		LTS - 236-239	1/20	9	10	1/20	LTS - 227, 248, 250-253		3051	
		2904	LTS - 233-235	1/20	11	12	1/20	LTS - 254-256			2904
3098			LTS - 219, 226, 228, 267, 268	1/20	13	14	1/20	ST/ET BOXES	2000		
	2751		LTS - 243-247, 248A	1/20	15	16	1/20	FC - 301,302,303, UH-301,302,303		891	
		2904	LTS - 240-242	1/20	17	18	1/20	SPARE			
			SPARE	1/20	19	20	1/20				
				1/20	21	22	1/20				
				1/20	23	24	1/20				
				1/20	25	26	1/20				
				1/20	27	28	1/20				
			↓	1/20	29	30	1/20	↓			
25000			TRANSFORMER "TL2A"	3	31	32	3	TRANSFORMER "TL2B"	25000		
	25000		" " " "		33	34		" " " "		25000	
		25000	" " " "	110	35	36	110	" " " "			25000
25000			TRANSFORMER "TL2C"	3	37	38	3	TRANSFORMER "TL2D"	15000		
	25000		" " " "		39	40		" " " "		15000	
		25000	" " " "	110	41	42	70	" " " "			15000

166AMPS

PANELBOARD: "L2A" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 28,520 - SECTION #1; 31,156 - SECTION #2
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,540
				TOTAL BØ: 10,240
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H2" XFMR/"TL2A"	TOTAL CØ: 8,740

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
900			RECEPTS - 213, 214	1/20	1	2	1/20	RECEPTS - 200	900		
	900		RECEPTS - 212, 213	1/20	3	4	1/20	RECEPTS - 200		900	
		900	RECEPTS - 211, 212	1/20	5	6	1/20	RECEPTS - 201, 202			900
900			RECEPTS - 217, 218	1/20	7	8	1/20	RECEPTS - 202, 203	900		
	900		RECEPTS - 216, 217	1/20	9	10	1/20	RECEPTS - 203, 204		900	
		900	RECEPTS - 215, 216	1/20	11	12	1/20	RECEPTS -			600
900			RECEPTS - 200, 207	1/20	13	14	1/20	RECEPTS - 205, 206	900		
	900		RECEPTS - 208, 209	1/20	15	16	1/20	RECEPTS - 200		1600	
		900	RECEPTS - 209, 210	1/20	17	18	1/20	RECEPTS - 200-202			1080
900			RECEPTS - 200	1/20	19	20	1/20	RECEPTS - 200, 202-204	1080		
	900		RECEPTS - 200	1/20	21	22	1/20	RECEPTS - 2000, 205, 206		1080	
		1080	RECEPTS - 206-208	1/20	23	24	1/20	RECEPTS - 200, 207-209			1080
1080			RECEPTS - 209-211	1/20	25	26	1/20	RECEPTS - 200, 209-212	1080		
	1080		RECEPTS - 211-213	1/20	27	28	1/20	RECEPTS - 200C, 213, 214		1080	
		400	LTS - 271	1/20	29	30	1/20	RECEPTS - 219			900
			SPARE	1/20	31	32	1/20	SPARE			
				1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
			↓	1/20	41	42	1/20	↓			

86AMPS

PANELBOARD: "L2A" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 31,156
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 10,656
				TOTAL BØ: 11,040
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: "L2A"- SECTION #1	TOTAL CØ: 9,460

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
900			RECEPTS - 200, 200B	1/20	43	44	1/20	RECEPTS - 200A	900		
	1080		RECEPTS - 200, 215-217	1/20	45	46	1/20	RECEPTS - 200A		900	
		900	RECEPTS - 221	1/20	47	48	1/20	RECEPTS - 200A			1000
1080			RECEPTS - 201, 221, 221A	1/20	49	50	1/20	RECEPTS - 221	600		
	1080		RECEPTS - 202-204	1/20	51	52	1/20	RECEPTS - 221		900	
		1080	RECEPTS - 222	1/20	53	54	1/20	RECEPTS - 221			900
696			MOTORIZED SCREEN - 220	1/20	55	56	1/20	RECEPTS - 200A, 220	900		
	800		EWC - 219	1/20	57	58	1/20	RECEPTS - 222		1200	
		1200	RECEPTS - 222	1/20	59	60	1/20	RECEPTS - 222			1200
1200			RECEPTS - 222	1/20	61	62	1/20	RECEPTS - 222	1200		
	1200		RECEPTS - 222	1/20	63	64	1/20	RECEPTS - 219, 225		1600	
		1080	RECEPTS - 220, 223, 224, 226	1/20	65	66	1/20	RECEPTS - 229			900
1080			RECEPTS - 220	1/20	67	68	1/20	RECEPTS - 269	900		
	1080		RECEPTS - 215-217	1/20	69	70	1/20	RECEPTS - 271		1200	
			SPARE	1/20	71	72	1/20	RECEPTS - 271			1200
				1/20	73	74	1/20	RECEPTS - 271	1200		
				1/20	75	76	1/20	SPARE			
				1/20	77	78	1/20				
				1/20	79	80	1/20				
				1/20	81	82	1/20				
			↓	1/20	83	84	1/20	↓			

179AMPS

PANELBOARD: "L2B" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 38,732 - SECTION #1; 35,700 - SECTION #2
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 10,372
				TOTAL BØ: 8,380
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H2" XFMR/"TL2B"	TOTAL CØ: 9,980

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
696			MOTORIZED SCREEN - 269	1/20	1	2	1/20	MOTORIZED SCREEN - 229	696		
	-		SPARE	1/20	3	4	1/20	SPARE		-	
		-		1/20	5	6	1/20				-
-				1/20	7	8	1/20		-		
	-		↓	1/20	9	10	1/20	↓		-	
		1600	RECEPTS - 236, 239	1/20	11	12	1/20	RECEPTS - 257, 260			1600
1200			RECEPTS - 239, COFFEE	1/20	13	14	1/20	RECEPTS - 260 COPIER	1200		
	1200		RECEPTS - 239, COFFEE	1/20	15	16	1/20	RECEPTS - 257, 260		1080	
		900	RECEPTS - 250, 251, 266	1/20	17	18	1/20	RECEPTS - 270, 271			800
900			RECEPTS - 231, 246, 247	1/20	19	20	1/20	RECEPTS - 228, 248	1600		
	1000		RECEPTS - 266	1/20	21	22	1/20	RECEPTS - 231		1000	
		1000	RECEPTS - 266	1/20	23	24	1/20	RECEPTS - 231			1000
1000			RECEPTS - 266	1/20	25	26	1/20	RECEPTS - 231	1000		
	1000		RECEPTS - 247	1/20	27	28	1/20	RECEPTS - 248B, 249, 250		900	
		1000	RECEPTS - 247	1/20	29	30	1/20	RECEPTS - 245, 247, 248A			1080
1000			RECEPTS - 247	1/20	31	32	1/20	RECEPTS - COPY, 239, 246	1080		
	1000		RECEPTS - 247	1/20	33	34	1/20	RECEPTS - COPIER 239		1200	
		1000	RECEPTS - 247	1/20	35	36	1/20	SPARE			
			SPARE	1/20	37	38	1/20				
				1/20	39	40	1/20				
				1/20	41	42	1/20				

99AMPS

PANELBOARD: "L2B" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 35,700
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 13,080
				TOTAL BØ: 11,720
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: "L2B" SECTION 1	TOTAL CØ: 10,900

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1000			RECEPTS - 231	1/20	43	44	1/20	RECEPTS - 266	1000		
	1000		RECEPTS - 231	1/20	45	46	1/20	RECEPTS - 266		1000	
		1000	RECEPTS - 231	1/20	47	48	1/20	RECEPTS - 266			1000
1000			RECEPTS - 231	1/20	49	50	1/20	RECEPTS - 266	1000		
	720		RECEPTS - 265, 267-269	1/20	51	52	1/20	RECEPTS - 246		1000	
		900	RECEPTS - 225, 269	1/20	53	54	1/20	RECEPTS - 246			1000
1080			RECEPTS - 227, 229, 230	1/20	55	56	1/20	RECEPTS - 246	1000		
	1000		RECEPTS - 251	1/20	57	58	1/20	RECEPTS - 246		1000	
		1000	RECEPTS - 251	1/20	59	60	1/20	RECEPTS - 246			1000
1000			RECEPTS - 251	1/20	61	62	1/20	RECEPTS - 246	1000		
	1000		RECEPTS - 251	1/20	63	64	1/20	RECEPTS - 246		1000	
		1000	RECEPTS - 251	1/20	65	66	1/20	RECEPTS - 250			1000
1000			RECEPTS - 251	1/20	67	68	1/20	RECEPTS - 250	1000		
	1000		RECEPTS - 251	1/20	69	70	1/20	RECEPTS - 250		1000	
		1000	RECEPTS - 250	1/20	71	72	1/20	RECEPTS - 250			1000
1000			RECEPTS - 250	1/20	73	74	1/20	RECEPTS - 250	1000		
	1000		RECEPTS - 247	1/20	75	76	1/20	RECEPTS - 250		1000	
		1000	RECEPTS - 247	1/20	77	78	1/20	SPARE			
1000			RECEPTS - 247	1/20	79	80	1/20				
			SPARE	1/20	81	82	1/20				
				1/20	83	84	1/20				

230AMPS

PANELBOARD: "L2C" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 30,480 - SECTION #1; 52,480 - SECTION #2
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 10,740
				TOTAL BØ: 10,920
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H3" XFMR/"TL2C"	TOTAL CØ: 8,820

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1200			RECEPTS - 239	1/20	1	2	1/20	RECEPTS - 239	1200		
	1200		RECEPTS - 239	1/20	3	4	1/20	RECEPTS - 239		1200	
		1200	RECEPTS - 239	1/20	5	6	1/20	RECEPTS - 239			1200
1200			RECEPTS - 260 COFFEE	1/20	7	8	1/20	RECEPTS - 239	1200		
	1200		RECEPTS - 260 COFFEE	1/20	9	10	1/20	RECEPTS - 239		1200	
		720	RECEPTS - 239	1/20	11	12	1/20	RECEPTS - 239			1200
900			RECEPTS - 239	1/20	13	14	1/20	RECEPTS - 239	720		
	1200		RECEPTS - 260	1/20	15	16	1/20	RECEPTS - 239		900	
		1200	RECEPTS - 260	1/20	17	18	1/20	RECEPTS - 260			1200
1200			RECEPTS - 260	1/20	19	20	1/20	RECEPTS - 260	1200		
	720		RECEPTS - 260	1/20	21	22	1/20	RECEPTS - 260		1200	
		900	RECEPTS - 260	1/20	23	24	1/20	RECEPTS - 260			1200
720			RECEPTS - 260	1/20	25	26	1/20	RECEPTS - 260	1200		
	900		RECEPTS - 260	1/20	27	28	1/20	RECEPTS - 260		1200	
			SPARE	1/20	29	30	1/20	SPARE			
				1/20	31	32	1/20				
				1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
				1/20	41	42	1/20				

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PANEL SCHEDULES

Commission Number 10301

E5.1

Date: October 25, 2002

146AMPS

PANELBOARD: "L2C" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 52,480
LOCATION: 2ND FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 17,560
				TOTAL BØ: 17,320
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: "L2C" SECTION 1	TOTAL CØ: 17,600

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1200			RECEPTS - 258	1/20	43	44	1/20	RECEPTS - 258	1200		
	1200		RECEPTS - 258	1/20	45	46	1/20	RECEPTS - 258		1200	
		1200	RECEPTS - 258	1/20	47	48	1/20	RECEPTS - 258			1200
2000			RECEPTS - 258	2/	49	50	2/	RECEPTS - 258	2000		
	2000		-	/30	51	52	/30	-		2000	
		1200	RECEPTS - 258	1/20	53	54	1/20	RECEPTS - 258			1200
1200			RECEPTS - 258	1/20	55	56	1/20	RECEPTS - 258	1200		
	1200		RECEPTS - 258	1/20	57	58	1/20	RECEPTS - 258		1200	
		2000	RECEPTS - 258	2/	59	60	2/	RECEPTS - 258			2000
2000			-	/30	61	62	/30	-	2000		
	1200		RECEPTS - 259	1/20	63	64	1/20	RECEPTS - 259		1200	
		1200	RECEPTS - 259	1/20	65	66	1/20	RECEPTS - 259			1200
1200			RECEPTS - 259	1/20	67	68	1/20	RECEPTS - 259	1200		
	2000		RECEPTS - 259	2/	69	70	2/	RECEPTS - 259		2000	
		2000	-	/30	71	72	/30	-			2000
2000			RECEPTS - 259	2/	73	74	1/20	RECEPTS - 259	360		
	2000		-	/30	75	76	1/20	RECEPTS - 259		1200	
		1200	• RECEPTS - 259	1/20	77	78	1/20	RECEPTS - 259			1200
			SPARE	1/20	79	80	1/20	SPARE			
				1/20	81	82	1/20				
				1/20	83	84	1/20				

• PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

149AMPS

PANELBOARD: "L20"	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 150 A/3P MCB	TOTAL CONNECTED VA: 53,800
LOCATION: 2ND FLOOR ROOM 237	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 17,800
				TOTAL BØ: 18,400
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: PANEL "H2" XFMR/"TL2O"	TOTAL CØ: 17,600

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1200			RECEPTS - 238	1/20	1	2	1/20	RECEPTS - 238	1200		
	1200		RECEPTS - 238	1/20	3	4	1/20	RECEPTS - 238		1200	
		1200	RECEPTS - 238	1/20	5	6	1/20	RECEPTS - 238			1200
2000			RECEPTS - 238	2/	7	8	2/	RECEPTS - 238	2000		
	2000		-	/30	9	10	/30	-		2000	
		1200	RECEPTS - 238	1/20	11	12	1/20	RECEPTS - 238			1200
1200			RECEPTS - 238	1/20	13	14	1/20	RECEPTS - 238	1200		
	1200		RECEPTS - 238	1/20	15	16	1/20	RECEPTS - 238		1200	
		2000	RECEPTS - 238	2/	17	18	2/	RECEPTS - 238			2000
2000			-	/30	19	20	/30	-	2000		
	1200		RECEPTS - 237	1/20	21	22	1/20	RECEPTS - 237		1200	
		1200	RECEPTS - 237	1/20	23	24	1/20	RECEPTS - 237			1200
1200			RECEPTS - 237	1/20	25	26	1/20	RECEPTS - 237	1200		
	2000		RECEPTS - 237	2/	27	28	2/	RECEPTS - 237		2000	
		2000	-	/30	29	30	/30	-			2000
2000			RECEPTS - 237	2/	31	32	1/20	RECEPTS - 237 •	600		
	2000		-	/30	33	34	1/20	RECEPTS - 237		1200	
		1200	RECEPTS - 237	1/20	35	36	1/20	RECEPTS - 237			1200
			SPARE	1/20	37	38	1/20	SPARE			
				1/20	39	40	1/20				
				1/20	41	42	1/20				

• PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

(1289.68A)

PANELBOARD: "LDP2"	VOLTAGE: 208Y120V	CU BUS RATING: 800A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 464,620
LOCATION: 2ND FLOOR ELEC. ROOM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 167,700
				TOTAL BØ: 147,200
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 22,000	FED FROM: MLDP	TOTAL CØ: 149,720

CIRCUIT	BREAKER FRAME	BREAKER TRIP	LOAD DESCRIPTION	LOAD (VA) AØ	BØ	CØ
1	100	100A	PANEL "L232"	9500	9440	8440
2	100	100A	PANEL "L233"	9500	9440	8440
3	100	100A	PANEL "L234"	9200	6920	7900
4	100	100A	PANEL "L235"	9200	6920	7900
5	100	100A	PANEL "L240"	9200	6920	7900
6	100	100A	PANEL "L241"	9200	6920	7900
7	100	100A	PANEL "L242"	9440	8420	8320
8	100	100A	PANEL "L243"	9500	9440	8440
9	100	100A	PANEL "L244"	9440	8420	8320
10	100	100A	PANEL "L252"	9200	6920	7900
11	100	100A	PANEL "L253"	9500	9440	8440
12	100	100A	PANEL "L254"	9500	9440	8440
13	100	100A	PANEL "L255"	9200	6920	7900
14	100	100A	PANEL "L256"	8780	9940	10920
15	100	100A	PANEL "L261"	9200	6920	7900
16	100	100A	PANEL "L262"	9200	6920	7900
17	100	100A	PANEL "L263"	9440	8420	8320
18	100	100A	PANEL "L264"	9500	9440	8440
19	100		SPACE			
20	100		SPARE			

382AMPS

PANELBOARD: "H3"	VOLTAGE: 480Y277V	CU BUS RATING: 400A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 317,552
LOCATION: 3RD FLOOR ELEC. ROOM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 106,997
				TOTAL BØ: 105,175
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 42,000	FED FROM: MSWBD	TOTAL CØ: 105,380

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
3500			LTS - 301-304, 321, 322	1/20	1	2	1/20	LTS - 360, 363, 364-366	3654		
	2948		LTS - 320, 323, 324, 329	1/20	3	4	1/20	LTS - 357-360		2980	
		3764	LTS - 300A-300D, 305-318	1/20	5	6	1/20	LTS - 361-363			2904
2995			LTS - 330-332, 339	1/20	7	8	1/20	LTS - 132	1250		
	2980		LTS - 336-339	1/20	9	10	1/20	LTS - 327, 348B, 350-353		3051	
		2904	LTS - 333-335	1/20	11	12	1/20	LTS - 354-356			2904
3098			LTS - 319, 326, 328, 367, 368	1/20	13	14	1/20	ST/ET BOXES	2500		
	2751		LTS - 343-347, 348A	1/20	15	16	1/20	FC - 301,302,303		465	
		2904	LTS - 340-342	1/20	17	18	1/20	SPARE			
			SPARE	1/20	19	20	1/20				
				1/20	21	22	1/20				
				1/20	23	24	1/20				
				1/20	25	26	1/20				
				1/20	27	28	1/20				
				1/20	29	30	1/20				
25000			TRANSFORMER "TL3A"	3/	31	32	3/	TRANSFORMER "TL3B"	25000		
	25000		" " " "		33	34		" " " "		25000	
		25000	" " " "	/110	35	36	/110	" " " "			25000
25000			TRANSFORMER "TL3C"	3/	37	38	3/	TRANSFORMER "TL3D"	15000		
	25000		" " " "		39	40		" " " "		15000	
		25000	" " " "	/110	41	42	/70	" " " "			15000

167AMPS

PANELBOARD: "L3A" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 28,520 - SECTION #1; 31,756 - SECTION #2
LOCATION: 3RD FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,540
				TOTAL BØ: 10,240
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: PANEL "H3" XFMR/"TL3A"	TOTAL CØ: 8,740

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
900			RECEPTS - 313, 314	1/20	1	2	1/20	RECEPTS - 300	900		
	900		RECEPTS - 312, 313	1/20	3	4	1/20	RECEPTS - 300		900	
		900	RECEPTS - 311, 312	1/20	5	6	1/20	RECEPTS - 301, 302			900
900			RECEPTS - 317, 318	1/20	7	8	1/20	RECEPTS - 302, 303	900		
	900		RECEPTS - 316, 317	1/20	9	10	1/20	RECEPTS - 303, 304		900	
		900	RECEPTS - 315, 316	1/20	11	12	1/20	RECEPTS -			600
900			RECEPTS - 300, 307	1/20	13	14	1/20	RECEPTS - 305, 306	900		
	900		RECEPTS - 308, 309	1/20	15	16	1/20	RECEPTS - 300		1600	
		900	RECEPTS - 309, 310	1/20	17	18	1/20	RECEPTS - 300-302			1080
900			RECEPTS - 300	1/20	19	20	1/20	RECEPTS - 300, 302-304	1080		
	900		RECEPTS - 300	1/20	21	22	1/20	RECEPTS - 300D, 305, 306		1080	
		1080	RECEPTS - 306-308	1/20	23	24	1/20	RECEPTS - 300, 307-309			1080
1080			RECEPTS - 309-311	1/20	25	26	1/20	RECEPTS - 300, 309-312	1080		
	1080		RECEPTS - 311-313	1/20	27	28	1/20	RECEPTS - 300C, 313, 314		1080	
		400	LTS - 371	1/20	29	30	1/20	RECEPTS - 319			900
			SPARE	1/20	31	32	1/20	SPARE			
				1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
				1/20	41	42	1/20				

88 AMPS

PANELBOARD: "L3A" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 31,756
LOCATION: 3RD FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 10,656
				TOTAL BØ: 11,040
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: "L3A" - SECTION #1	TOTAL CØ: 10,060

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
900			RECEPTS - 300, 300B	1/20	43	44	1/20	RECEPTS - 300A	900		
	1080		RECEPTS - 300, 315-317	1/20	45	46	1/20	RECEPTS - 300A		900	
		900	RECEPTS - 321	1/20	47	48	1/20	RECEPTS - 300A			1000
1080			RECEPTS - 301, 321, 321A	1/20	49	50	1/20	RECEPTS - 321	600		
	1080		RECEPTS - 302-304	1/20	51	52	1/20	RECEPTS - 321		900	
		1080	RECEPTS - 322	1/20	53	54	1/20	RECEPTS - 321			900
696			MOTORIZED SCREEN - 320	1/20	55	56	1/20	RECEPTS - 300A, 320	900		
	800		EWC - 319	1/20	57	58	1/20	RECEPTS - 322		1200	
		1200	RECEPTS - 322	1/20	59	60	1/20	RECEPTS - 322			1200
1200			RECEPTS - 322	1/20	61	62	1/20	RECEPTS - 322	1200		
	1200		RECEPTS - 322	1/20	63	64	1/20	RECEPTS - 319, 325		1600	
		1080	RECEPTS - 320, 323, 324, 326	1/20	65	66	1/20	RECEPTS - 329			900
1080			RECEPTS - 320	1/20	67	68	1/20	RECEPTS - 369	900		
	1080		RECEPTS - 315-317	1/20	69	70	1/20	RECEPTS - 371		1200	
		600	LTG LOWERING DEVICE	1/20	71	72	1/20	RECEPTS - 371			1200
			SPARE	1/20	73	74	1/20	RECEPTS - 371	1200		
				1/20	75	76	1/20	SPARE			
				1/20	77	78	1/20				
				1/20	79	80	1/20				
				1/20	81	82	1/20				
				1/20	83	84	1/20				

179AMPS

PANELBOARD: "L3B" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 28,732 - SECTION #1; 35,700 - SECTION #2
LOCATION: 3RD FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 10,372
				TOTAL BØ: 8,380
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: PANEL "H3" XFMR/"TL3B"	TOTAL CØ: 9,980

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
696			MOTORIZED SCREEN - 369	1/20	1	2	1/20	MOTORIZED SCREEN - 329	696		
	-		SPARE	1/20	3	4	1/20	SPARE		-	
		-		1/20	5	6	1/20				-
-				1/20	7	8	1/20		-		
	-			1/20	9	10	1/20			-	
		1600	RECEPTS - 336, 339	1/20	11	12	1/20	RECEPTS - 357, 360			1600
1200			RECEPTS - 339, COFFEE	1/20	13	14	1/20	RECEPTS - 360 COPIER	1200		
	1200		RECEPTS - 339, COFFEE	1/20	15	16	1/20	RECEPTS - 357, 360		1080	
		900	RECEPTS - 350, 351, 366	1/20	17	18	1/20	RECEPTS - 370, 371			800
900			RECEPTS - 331, 346, 347	1/20	19	20	1/20	RECEPTS - 328, 348	1600		
	1000		RECEPTS - 366	1/20	21	22	1/20	RECEPTS - 331		1000	
		1000	RECEPTS - 366	1/20	23	24	1/20	RECEPTS - 331			1000
1000			RECEPTS - 366	1/20	25	26	1/20	RECEPTS - 331	1000		
	1000		RECEPTS - 347	1/20	27	28	1/20	RECEPTS - 348B, 349, 350		900	
		1000	RECEPTS - 347	1/20	29	30	1/20	RECEPTS - 345, 347, 348A			1080
1000			RECEPTS - 347	1/20	31	32	1/20	RECEPTS - COPY, 339, 346	1080		
	1000		RECEPTS - 347	1/20	33	34	1/20	RECEPTS - COPIER 339		1200	
		1000	RECEPTS - 347	1/20	35	36	1/20	SPARE			
			SPARE	1/20	37	38	1/20				
				1/20	39	40	1/20				
				1/20	41	42	1/20				

99AMPS

PANELBOARD: "L3B" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 35,700
LOCATION: 3RD FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 13,080
				TOTAL BØ: 11,720
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: "L3B" SECTION 1	TOTAL CØ: 10,900

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1000			RECEPTS - 331	1/20	43	44	1/20	RECEPTS - 366	1000		
	1000		RECEPTS - 331	1/20	45	46	1/20	RECEPTS - 366		1000	
		1000	RECEPTS - 331	1/20	47	48	1/20	RECEPTS - 366			1000
1000			RECEPTS - 331	1/20	49	50	1/20	RECEPTS - 366	1000		
	720		RECEPTS - 365, 367-369	1/20	51	52	1/20	RECEPTS - 346		1000	
		900	RECEPTS - 325, 369	1/20	53	54	1/20	RECEPTS - 346			1000
1080			RECEPTS - 327, 329, 330	1/20	55	56	1/20	RECEPTS - 346	1000		
	1000		RECEPTS - 351	1/20	57	58	1/20	RECEPTS - 346		1000	
		1000	RECEPTS - 351	1/20	59	60	1/20	RECEPTS - 346			1000
1000			RECEPTS - 351	1/20	61	62	1/20	RECEPTS - 346	1000		
	1000		RECEPTS - 351	1/20	63	64	1/20	RECEPTS - 346		1000	
		1000	RECEPTS - 351	1/20	65	66	1/20	RECEPTS - 350			1000
1000			RECEPTS - 351	1/20	67	68	1/20	RECEPTS - 350	1000		
	1000		RECEPTS - 351	1/20	69	70	1/20	RECEPTS - 350		1000	
		1000	RECEPTS - 350	1/20	71	72	1/20	RECEPTS - 350			1000
1000			RECEPTS - 350	1/20	73	74	1/20	RECEPTS - 350	1000		
	1000		RECEPTS - 347	1/20	75	76	1/20	RECEPTS - 350		1000	
		1000	RECEPTS - 347	1/20	77	78	1/20	SPARE			
1000			RECEPTS - 347	1/20	79	80	1/20				
			SPARE	1/20	81	82	1/20				
				1/20	83	84	1/20				

230AMPS

PANELBOARD: "L3C" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 225 A/3P MCB FEED THRU LUGS	TOTAL CONNECTED VA: 30,480 - SECTION #1; 52,480 - SECTION #2
LOCATION: 3RD FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 10,740
				TOTAL BØ: 10,920
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: PANEL "H3" XFMR/"TL3C"	TOTAL CØ: 8,820

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1200			RECEPTS - 339	1/20	1	2	1/20	RECEPTS - 339	1200		
	1200		RECEPTS - 339	1/20	3	4	1/20	RECEPTS - 339		1200	
		1200	RECEPTS - 339	1/20	5	6	1/20	RECEPTS - 339			1200
1200			RECEPTS - 360 COFFEE	1/20	7	8	1/20	RECEPTS - 339	1200		
	1200		RECEPTS - 360 COFFEE	1/20	9	10	1/20	RECEPTS - 339		1200	
		720	RECEPTS - 339	1/20	11	12	1/20	RECEPTS - 339			1200
900			RECEPTS - 339	1/20	13	14	1/20	RECEPTS - 339	720		
	1200		RECEPTS - 360	1/20	15	16	1/20	RECEPTS - 339		900	
		1200	RECEPTS - 360	1/20	17	18	1/20	RECEPTS - 360			1200
1200			RECEPTS - 360	1/20	19	20	1/20	RECEPTS - 360	1200		
	720		RECEPTS - 360	1/20	21	22	1/20	RECEPTS - 360		1200	
		900	RECEPTS - 360	1/20	23	24	1/20	RECEPTS - 360			1200
720			RECEPTS - 360	1/20	25	26	1/20	RECEPTS - 360	1200		
	900		RECEPTS - 360	1/20	27	28	1/20	RECEPTS - 360		1200	
			SPARE	1/20	29	30	1/20	SPARE			
				1/20	31	32	1/20				
				1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
				1/20	41	42	1/20				

146AMPS

PANELBOARD: "L3C" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 52,480
LOCATION: 3RD FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 17,560
				TOTAL BØ: 17,320
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: "L3C" SECTION 1	TOTAL CØ: 17,600

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1200			RECEPTS - 358	1/20	43	44	1/20	RECEPTS - 358	1200		
	1200		RECEPTS - 358	1/20	45	46	1/20	RECEPTS - 358		1200	
		1200	RECEPTS - 358	1/20	47	48	1/20	RECEPTS - 358			1200
2000			RECEPTS - 358	2/	49	50	2/	RECEPTS - 358	2000		
	2000		-	/30	51	52	/30	-		2000	
		1200	RECEPTS - 358	1/20	53	54	1/20	RECEPTS - 358			1200
1200			RECEPTS - 358	1/20	55	56	1/20	RECEPTS - 358	1200		
	1200		RECEPTS - 358	1/20	57	58	1/20	RECEPTS - 358		1200	
		2000	RECEPTS - 358	2/	59	60	2/	RECEPTS - 358			2000
2000			-	/30	61	62	/30	-	2000		
	1200		RECEPTS - 359	1/20	63	64	1/20	RECEPTS - 359		1200	
		1200	RECEPTS - 359	1/20	65	66	1/20	RECEPTS - 359			1200
1200			RECEPTS - 359	1/20	67	68	1/20	RECEPTS - 359	1200		
	2000		RECEPTS - 359	2/	69	70	2/	RECEPTS - 359		2000	
		2000	-	/30	71	72	/30	-			2000
2000			RECEPTS - 359	2/	73	74	1/20	RECEPTS - 359	360		
	2000		-	/30	75	76	1/20	RECEPTS - 359		1200	
		1200	• RECEPTS - 359	1/20	77	78	1/20	RECEPTS - 359			1200
			SPARE	1/20	79	80	1/20	SPARE			
				1/20	81	82	1/20				
				1/20	83	84	1/20				

• PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

149AMPS

PANELBOARD: "L3D"	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: 150 A/3P MCB	TOTAL CONNECTED VA: 53,800
LOCATION: 3RD FLOOR ROOM 337	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 17,800
				TOTAL BØ: 18,400
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: PANEL "H3" XFMR/"TL3D"	TOTAL CØ: 17,600

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1200			RECEPTS - 338	1/20	1	2	1/20	RECEPTS - 338	1200		
	1200		RECEPTS - 338	1/20	3	4	1/20	RECEPTS - 338		1200	
		1200	RECEPTS - 338	1/20	5	6	1/20	RECEPTS - 338			1200
2000			RECEPTS - 338	2/	7	8	2/	RECEPTS - 338	2000		
	2000		-	/30	9	10	/30	-		2000	
		1200	RECEPTS - 338	1/20	11	12	1/20	RECEPTS - 338			1200
1200			RECEPTS - 338	1/20	13	14	1/20	RECEPTS - 338	1200		
	1200		RECEPTS - 338	1/20	15	16	1/20	RECEPTS - 338		1200	
		2000	RECEPTS - 338	2/	17	18	2/	RECEPTS - 338			2000
2000			-	/30	19	20	/30	-	2000		
	1200		RECEPTS - 337	1/20	21	22	1/20	RECEPTS - 337		1200	
		1200	RECEPTS - 337	1/20	23	24	1/20	RECEPTS - 337			1200
1200			RECEPTS - 337	1/20	25	26	1/20	RECEPTS - 337	1200		
	2000		RECEPTS - 337	2/	27	28	2/	RECEPTS - 337		2000	
		2000	-	/30	29	30	/30	-			2000
2000			RECEPTS - 337	2/	31	32	1/20	RECEPTS - 337 •	600		
	2000		-	/30	33	34	1/20	RECEPTS - 337		1200	
		1200	RECEPTS - 337	1/20	35	36	1/20	RECEPTS - 337			1200
			SPARE	1/20	37	38	1/20	SPARE			
				1/20	39	40	1/20				
				1/20	41	42	1/20				

• PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

(1289.68A)

PANELBOARD: "LDP3"	VOLTAGE: 208Y120V	CU BUS RATING: 800A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 464,620
LOCATION: 3RD FLOOR ELEC. ROOM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 167,700
				TOTAL BØ: 147,200
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: MLDP	TOTAL CØ: 149,720

CIRCUIT	BREAKER FRAME	BREAKER TRIP	LOAD DESCRIPTION	LOAD (VA) AØ	BØ	CØ
1	100	100A	PANEL "L332"	9500	9440	8440
2	100	100A	PANEL "L333"	9500	9440	8440
3	100	100A	PANEL "L334"	9200	6920	7900
4	100	100A	PANEL "L335"	9200	6920	7900
5	100	100A	PANEL "L340"	9200	6920	7900
6	100	100A	PANEL "L341"	9200	6920	7900
7	100	100A	PANEL "L342"	9440	8420	8320
8	100	100A	PANEL "L343"	9500	9440	8440
9	100	100A	PANEL "L344"	9440	8420	8320
10	100	100A	PANEL "L352"	9200	6920	7900
11	100	100A	PANEL "L353"	9500	9440	8440
12	100	100A	PANEL "L354"	9500	9440	8440
13	100	100A	PANEL "L355"	9200	6920	7900
14	100	100A	PANEL "L356"	8780	9940	10920
15	100	100A	PANEL "L361"	9200	6920	7900
16	100	100A	PANEL "L362"	9200	6920	7900
17	100	100A	PANEL "L363"	9440	8420	8320
18	100	100A	PANEL "L364"	9500	9440	8440
19	100		SPACE			
20	100		SPARE			

138.71

PANELBOARD: "H4"	VOLTAGE: 480Y277V	CU BUS RATING: 400A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 115,320
LOCATION: 4TH FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 38,588
				TOTAL BØ: 38,074
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 42,000	FED FROM: MSWBD	TOTAL CØ: 38,658

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1892			LTS-410, 406, 406A, 407, 407A, 408	1/20	1	2	1/20	FC 401,402,403,ST/ET	1000		
	2378		LTS-401-403, 405, 405A, 405B, 409	1/20	3	4	3/	EV 401,402,403,404		3769	
		2962	LTS-411, 411A	1/20	5	6		" " " "			3769
3325			EF - 1,2,3,4 - 411	3/	7	8	/30	" " " "	3769		
	3325		" " " "		9	10	3/	EF - 6,7		2660	
		3325	" " " "	/20	11	12		" " " "			2660
942			EF - 5 - ROOF	3/	13	14	/20	" " " "	2660		
	942		" " " "		15	16	1/20	SPARE			
		942	" " " "	/20	17	18	1/20				
			SPARE	1/20	19	20	1/20				
				1/20	21	22	1/20				
				1/20	23	24	1/20				
				1/20	25	26	1/20				
			SPACE	1/20	27	28	1/20	SPACE			
				1/20	29	30	1/20				
				1/20	31	32	1/20				
				1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	3/	TRANSFORMER "TL4A"	25000		
				1/20	39	40		" " " "		25000	
				1/20	41	42	/110	" " " "			25000

146AMPS

PANELBOARD: "L4A" SECTION #1	VOLTAGE: 208Y120V	CU BUS RATING: 225	MAIN: 225A BREAKER FEED THRU LUGS	TOTAL CONNECTED VA: 32,060 - SECTION #1; 20,460 - SECTION #2
LOCATION: 4TH FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 12,020
				TOTAL BØ: 11,060
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: PANEL "H4" XFMR/"TL4A"	TOTAL CØ: 8,980

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
1000			RECEPTS - 411	1/20	1	2	1/20	RECEPTS - 402, 409	1600		
	1000		RECEPTS - 411	1/20	3	4	1/20	RECEPTS - 410		1080	
		1000	RECEPTS - 411	1/20	5	6	1/20	RECEPTS - 410			1080
720			RECEPTS - 411A	1/20	7	8	1/20	RECEPTS - 406B	1000		
	900		RECEPTS - 411, 411A	1/20	9	10	1/20	RECEPTS - 407B		1000	
		1000	RECEPTS - 406	1/20	11	12	1/20	RECEPTS - 402, 407			900
1000			EWC - 402	1/20	13	14	1/20	RECEPTS - 403	1200		
	1000		• RECEPTS - 403	1/20	15	16	1/20	RECEPTS - 403		1000	
		1000	• RECEPTS - 403	1/20	17	18	1/20	WASHER - 403			1000
2000			DRYER - 403	2/	19	20	1/20	RECEPTS - 403 *	1000		
	2000		-	/30	21	22	1/20	RECEPTS - 403 *		1000	
		1000	RECEPTS - 404	1/20	23	24	1/20	SPARE			-
900			RECEPTS - 404, 405A	1/20	25	26	1/20	RECEPTS - 405	1000		
	1080		RECEPTS - 405A, 405B	1/20	27	28	1/20	RECEPTS - 405		1000	
		1000	RECEPTS - 405	1/20	29	30	1/20	RECEPTS - 405			1000
600			RECEPTS - ELEC. ROOM	1/20	31	32	1/20	SPARE			
			SPARE	1/20	33	34	1/20				
				1/20	35	36	1/20				
				1/20	37	38	1/20				
				1/20	39	40	1/20				
				1/20	41	42	1/20				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

57AMPS

PANELBOARD: "L4A" SECTION #2	VOLTAGE: 208Y120V	CU BUS RATING: 225A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 20460
LOCATION: FOURTH FLOOR ELEC RM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 7500
				TOTAL BØ: 6600
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: "L4A" SECT. #1	TOTAL CØ: 6300

LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ
800			LTS - 404	1/20	43	44	1/20	RECEPTS - 404	1000		
	1000		RECEPTS - 404	1/20	45	46	1/20	RECEPTS - 404		1000	
		1000	RECEPTS - 404	1/20	47	48	1/20	RECEPTS - 404			1000
1000			RECEPTS - 404	1/20	49	50	1/20	RECEPTS - 412	900		
	2400		COOL RM COND UNIT	3/	51	52	1/20	COOL RM FAN DOOR HTR		1200	
		2400	" " " "		53	54	1/20	UH - 401,402,403,404			560
2400			" " " "	/30	55	56	1/20	LTS/RECPTS - ERAHU - 3	1400		
	600		LTS - ERAHU-1,2,3 PLENUM	1/20	57	58	1/20	" " " " - ERAHU - 2		1400	
			SPARE	1/20	59	60	1/20	" " " " - ERAHU - 1			1400
			SPARE	1/20	61	62	1/20	SPARE			
			SPARE	1/20	63	64	1/20	SPARE			
			SPARE	1/20	65	66	1/20	SPARE			
			SPARE	1/20	67	68	1/20	SPARE			
			SPARE	1/20	69	70	1/20	SPARE			
			SPARE	1/20	71	72	1/20	SPARE			
			SPACE		73	74		SPACE			
					75	76					
					77	78					
					79	80					
					81	82					
					83	84					

483 AMPS

PANELBOARD: "HDP4"	VOLTAGE: 480Y277V3Ø4W	CU BUS RATING: 800A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 401,553
LOCATION: 4TH FLOOR ELEC. ROOM	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: NO	TOTAL AØ: 133,851
				TOTAL BØ: 133,851
MOUNTING: SURFACE	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 42,000	FED FROM: MSWBD	TOTAL CØ: 133,851

CIRCUIT	BREAKER FRAME	BREAKER TRIP	LOAD DESCRIPTION	LOAD (VA) AØ	BØ	CØ
1	200	150	ERAHU-1 (SUPPLY FAN)	26604	26604	26604
2	100	100	" " (EXHAUST FAN)	18013	18013	18013
3	200	150	ERAHU-2 (SUPPLY FAN)	26604	26604	26604
4	100	100	" " (EXHAUST FAN)	18013	18013	18013
5	200	150	ERAHU-3 (SUPPLY FAN)	26604	26604	26604
6	100	100	" " (EXHAUST FAN)	18013	18013	18013
7	200		SPACE W/BUSSING			
8	200		" "			
9	200		" "			
10	200		" "			

BIOSCIENCES / BIOTECHNOLOGY BUILDING

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PANEL SCHEDULES

Commission Number 10301

E5.2

Date: October 25, 2002

BIOSCIENCES / BIOTECHNOLOGY BUILDING
ARKANSAS STATE UNIVERSITY
JONESBORO, ARKANSAS

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L232"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 232	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,440
				TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 232	1/20	1	2	1/20	RECEPTS - 232	1200			•
•		900		RECEPTS - 232	1/20	3	4	1/20	RECEPTS - 232		1200		•
•			540	RECEPTS - 232	1/20	5	6	1/20	RECEPTS - 232			1200	•
•	1200			RECEPTS - 232	1/20	7	8	1/20	RECEPTS - 232	1200			•
•		2000		RECEPTS - 232	2/	9	10	1/20	RECEPTS - 232		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 232			2000	•
•	1080			RECEPTS - 232	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 232	1/20	15	16	1/20	RECEPTS - 232		900		•
•			1080	RECEPTS - 232	1/20	17	18	1/20	RECEPTS - 232			900	•
•	720			RECEPTS - 232	1/20	19	20	1/20	RECEPTS - 232	1200			•
•		720		RECEPTS - 232	1/20	21	22	1/20	RECEPTS - 232		720		•
•			720	RECEPTS - 232	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L233"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 233	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,440
				TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 233	1/20	1	2	1/20	RECEPTS - 233	1200			•
•		900		RECEPTS - 233	1/20	3	4	1/20	RECEPTS - 233		1200		•
•			540	RECEPTS - 233	1/20	5	6	1/20	RECEPTS - 233			1200	•
•	1200			RECEPTS - 233	1/20	7	8	1/20	RECEPTS - 233	1200			•
•		2000		RECEPTS - 233	2/	9	10	1/20	RECEPTS - 233		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 233			2000	•
•	1080			RECEPTS - 233	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 233	1/20	15	16	1/20	RECEPTS - 233		900		•
•			1080	RECEPTS - 233	1/20	17	18	1/20	RECEPTS - 233			900	•
•	720			RECEPTS - 233	1/20	19	20	1/20	RECEPTS - 233	1200			•
•		720		RECEPTS - 233	1/20	21	22	1/20	RECEPTS - 233		720		•
•			720	RECEPTS - 233	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L234"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 234	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 234	1/20	1	2	1/20	RECEPTS - 234	1200			•
•		720		RECEPTS - 234	1/20	3	4	1/20	RECEPTS - 234		1200		•
•			720	RECEPTS - 234	1/20	5	6	1/20	RECEPTS - 234			1200	•
•	900			RECEPTS - 234	1/20	7	8	1/20	RECEPTS - 234	1200			•
•		2000		RECEPTS - 234	2/	9	10	1/20	RECEPTS - 234		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 234			2000	•
•	1080			RECEPTS - 234	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 234	1/20	15	16	1/20	RECEPTS - 234		900		•
•			1080	RECEPTS - 234	1/20	17	18	1/20	RECEPTS - 234			900	•
•	720			RECEPTS - 234	1/20	19	20	1/20	RECEPTS - 234	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L235"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 235	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 235	1/20	1	2	1/20	RECEPTS - 235	1200			•
•		720		RECEPTS - 235	1/20	3	4	1/20	RECEPTS - 235		1200		•
•			720	RECEPTS - 235	1/20	5	6	1/20	RECEPTS - 235			1200	•
•	900			RECEPTS - 235	1/20	7	8	1/20	RECEPTS - 235	1200			•
•		2000		RECEPTS - 235	2/	9	10	1/20	RECEPTS - 235		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 235			2000	•
•	1080			RECEPTS - 235	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 235	1/20	15	16	1/20	RECEPTS - 235		900		•
•			1080	RECEPTS - 235	1/20	17	18	1/20	RECEPTS - 235			900	•
•	720			RECEPTS - 235	1/20	19	20	1/20	RECEPTS - 235	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L240"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 240	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 240	1/20	1	2	1/20	RECEPTS - 240	1200			•
•		720		RECEPTS - 240	1/20	3	4	1/20	RECEPTS - 240		1200		•
•			720	RECEPTS - 240	1/20	5	6	1/20	RECEPTS - 240			1200	•
•	900			RECEPTS - 240	1/20	7	8	1/20	RECEPTS - 240	1200			•
•		2000		RECEPTS - 240	2/	9	10	1/20	RECEPTS - 240		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 240			2000	•
•	1080			RECEPTS - 240	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 240	1/20	15	16	1/20	RECEPTS - 240		900		•
•			1080	RECEPTS - 240	1/20	17	18	1/20	RECEPTS - 240			900	•
•	720			RECEPTS - 240	1/20	19	20	1/20	RECEPTS - 240	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L241"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 241	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 241	1/20	1	2	1/20	RECEPTS - 241	1200			•
•		720		RECEPTS - 241	1/20	3	4	1/20	RECEPTS - 241		1200		•
•			720	RECEPTS - 241	1/20	5	6	1/20	RECEPTS - 241			1200	•
•	900			RECEPTS - 241	1/20	7	8	1/20	RECEPTS - 241	1200			•
•		2000		RECEPTS - 241	2/	9	10	1/20	RECEPTS - 241		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 241			2000	•
•	1080			RECEPTS - 241	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 241	1/20	15	16	1/20	RECEPTS - 241		900		•
•			1080	RECEPTS - 241	1/20	17	18	1/20	RECEPTS - 241			900	•
•	720			RECEPTS - 241	1/20	19	20	1/20	RECEPTS - 241	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #4 — 73 AMPS

PANELBOARD: "L242"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 26,180
LOCATION: 2ND FLOOR ROOM 242	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 8,420
				TOTAL CØ: 8,320

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 242	1/20	1	2	1/20	RECEPTS - 242	1200			•
•		900		RECEPTS - 242	1/20	3	4	1/20	RECEPTS - 242		1200		•
•			720	RECEPTS - 242	1/20	5	6	1/20	RECEPTS - 242			1200	•
•	1200			RECEPTS - 242	1/20	7	8	1/20	RECEPTS - 242	1200			•
•		2000		RECEPTS - 242	2/	9	10	1/20	RECEPTS - 242		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 242			2000	•
•	1200			RECEPTS - 242	1/20	13	14	/30	-	2000			•
•		1200		RECEPTS - 242	1/20	15	16	1/20	RECEPTS - 242		1200		•
•			1200	RECEPTS - 242	1/20	17	18	1/20	RECEPTS - 242			1200	•
•	540			RECEPTS - 242	1/20	19	20	1/20	RECEPTS - 242	1200			•
•		720		RECEPTS - 242	1/20	21	22	1/20					
					1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L243"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 243	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,440
				TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 243	1/20	1	2	1/20	RECEPTS - 243	1200			•
•		900		RECEPTS - 243	1/20	3	4	1/20	RECEPTS - 243		1200		•
•			540	RECEPTS - 243	1/20	5	6	1/20	RECEPTS - 243			1200	•
•	1200			RECEPTS - 243	1/20	7	8	1/20	RECEPTS - 243	1200			•
•		2000		RECEPTS - 243	2/	9	10	1/20	RECEPTS - 243		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 243			2000	•
•	1080			RECEPTS - 243	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 243	1/20	15	16	1/20	RECEPTS - 243		900		•
•			1080	RECEPTS - 243	1/20	17	18	1/20	RECEPTS - 243			900	•
•	720			RECEPTS - 243	1/20	19	20	1/20	RECEPTS - 243	1200			•
•		720		RECEPTS - 243	1/20	21	22	1/20	RECEPTS - 243		720		•
•			720	RECEPTS - 243	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #4 — 73 AMPS

PANELBOARD: "L244"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 26,180
LOCATION: 2ND FLOOR ROOM 244	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 8,420
				TOTAL CØ: 8,320

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 244	1/20	1	2	1/20	RECEPTS - 244	1200			•
•		900		RECEPTS - 244	1/20	3	4	1/20	RECEPTS - 244		1200		•
•			720	RECEPTS - 244	1/20	5	6	1/20	RECEPTS - 244			1200	•
•	1200			RECEPTS - 244	1/20	7	8	1/20	RECEPTS - 244	1200			•
•		2000		RECEPTS - 244	2/	9	10	1/20	RECEPTS - 244		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 244			2000	•
•	1200			RECEPTS - 244	1/20	13	14	/30	-	2000			•
•		1200		RECEPTS - 244	1/20	15	16	1/20	RECEPTS - 244		1200		•
•			1200	RECEPTS - 244	1/20	17	18	1/20	RECEPTS - 244			1200	•
•	540			RECEPTS - 244	1/20	19	20	1/20	RECEPTS - 244	1200			•
•		720		RECEPTS - 244	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #5 — 67 AMPS

PANELBOARD: "L252"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 252	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 252	1/20	1	2	1/20	RECEPTS - 252	1200			•
•		720		RECEPTS - 252	1/20	3	4	1/20	RECEPTS - 252		1200		•
•			720	RECEPTS - 252	1/20	5	6	1/20	RECEPTS - 252			1200	•
•	900			RECEPTS - 252	1/20	7	8	1/20	RECEPTS - 252	1200			•
•		2000		RECEPTS - 252	2/	9	10	1/20	RECEPTS - 252		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 252			2000	•
•	1080			RECEPTS - 252	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 252	1/20	15	16	1/20	RECEPTS - 252		900		•
•			1080	RECEPTS - 252	1/20	17	18	1/20	RECEPTS - 252			900	•
•	720			RECEPTS - 252	1/20	19	20	1/20	RECEPTS - 252	1200			•
•				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L253"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 253	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,440
				TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 253	1/20	1	2	1/20	RECEPTS - 253	1200			•
•		900		RECEPTS - 253	1/20	3	4	1/20	RECEPTS - 253		1200		•
•			540	RECEPTS - 253	1/20	5	6	1/20	RECEPTS - 253			1200	•
•	1200			RECEPTS - 253	1/20	7	8	1/20	RECEPTS - 253	1200			•
•		2000		RECEPTS - 253	2/	9	10	1/20	RECEPTS - 253		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 253			2000	•
•	1080			RECEPTS - 253	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 253	1/20	15	16	1/20	RECEPTS - 253		900		•
•			1080	RECEPTS - 253	1/20	17	18	1/20	RECEPTS - 253			900	•
•	720			RECEPTS - 253	1/20	19	20	1/20	RECEPTS - 253	1200			•
•		720		RECEPTS - 253	1/20	21	22	1/20	RECEPTS - 253		720		•
•			720	RECEPTS - 253	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L254"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 254	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,440
				TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 254	1/20	1	2	1/20	RECEPTS - 254	1200			•
•		900		RECEPTS - 254	1/20	3	4	1/20	RECEPTS - 254		1200		•
•			540	RECEPTS - 254	1/20	5	6	1/20	RECEPTS - 254			1200	•
•	1200			RECEPTS - 254	1/20	7	8	1/20	RECEPTS - 254	1200			•
•		2000		RECEPTS - 254	2/	9	10	1/20	RECEPTS - 254		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 254			2000	•
•	1080			RECEPTS - 254	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 254	1/20	15	16	1/20	RECEPTS - 254		900		•
•			1080	RECEPTS - 254	1/20	17	18	1/20	RECEPTS - 254			900	•
•	720			RECEPTS - 254	1/20	19	20	1/20	RECEPTS - 254	1200			•
•		720		RECEPTS - 254	1/20	21	22	1/20	RECEPTS - 254		720		•
•			720	RECEPTS - 254	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L255"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 255	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 255	1/20	1	2	1/20	RECEPTS - 255	1200			•
•		720		RECEPTS - 255	1/20	3	4	1/20	RECEPTS - 255		1200		•
•			720	RECEPTS - 255	1/20	5	6	1/20	RECEPTS - 255			1200	•
•	900			RECEPTS - 255	1/20	7	8	1/20	RECEPTS - 255	1200			•
•		2000		RECEPTS - 255	2/	9	10	1/20	RECEPTS - 255		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 255			2000	•
•	1080			RECEPTS - 255	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 255	1/20	15	16	1/20	RECEPTS - 255		900		•
•			1080	RECEPTS - 255	1/20	17	18	1/20	RECEPTS - 255			900	•
•	720			RECEPTS - 255	1/20	19	20	1/20	RECEPTS - 255	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #1 — 82 AMPS

PANELBOARD: "L256"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 29,640
LOCATION: 2ND FLOOR ROOM 256	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 8780
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,940
				TOTAL CØ: 10,920

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 256	1/20	1	2	1/20	RECEPTS - 256	600			•
•		540		RECEPTS - 256	1/20	3	4	1/20	RECEPTS - 256		720		•
•			720	RECEPTS - 256	1/20	5	6	1/20	RECEPTS - 256			900	•
•	900			RECEPTS - 256	1/20	7	8	1/20	RECEPTS - 256	900			•
•		2000		RECEPTS - 256	2/	9	10	1/20	RECEPTS - 256		1080		•
•			2000	-	/30	11	12	1/20	RECEPTS - 256			900	•
•	1200			RECEPTS - 256	1/20	13	14	1/20	RECEPTS - 256	1080			•
•		1200		RECEPTS - 256	1/20	15	16	1/20	RECEPTS - 256		1200		•
•			1200	RECEPTS - 256	1/20	17	18	2/	RECEPTS - 256			2000	•
•	1200			RECEPTS - 256	1/20	19	20	/30	-	2000			•
•		1200		RECEPTS - 256	1/20	21	22	2/	RECEPTS - 256		2000		•
•			1200	RECEPTS - 256	1/20	23	24	/30	-			2000	•
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L261"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 261	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 261	1/20	1	2	1/20	RECEPTS - 261	1200			•
•		720		RECEPTS - 261	1/20	3	4	1/20	RECEPTS - 261		1200		•
•			720	RECEPTS - 261	1/20	5	6	1/20	RECEPTS - 261			1200	•
•	900			RECEPTS - 261	1/20	7	8	1/20	RECEPTS - 261	1200			•
•		2000		RECEPTS - 261	2/	9	10	1/20	RECEPTS - 261		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 261			2000	•
•	1080			RECEPTS - 261	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 261	1/20	15	16	1/20	RECEPTS - 261		900		•
•			1080	RECEPTS - 261	1/20	17	18	1/20	RECEPTS - 261			900	•
•	720			RECEPTS - 261	1/20	19	20	1/20	RECEPTS - 261	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L262"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 262	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 6,920
				TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 262	1/20	1	2	1/20	RECEPTS - 262	1200			•
•		720		RECEPTS - 262	1/20	3	4	1/20	RECEPTS - 262		1200		•
•			720	RECEPTS - 262	1/20	5	6	1/20	RECEPTS - 262			1200	•
•	900			RECEPTS - 262	1/20	7	8	1/20	RECEPTS - 262	1200			•
•		2000		RECEPTS - 262	2/	9	10	1/20	RECEPTS - 262		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 262			2000	•
•	1080			RECEPTS - 262	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 262	1/20	15	16	1/20	RECEPTS - 262		900		•
•			1080	RECEPTS - 262	1/20	17	18	1/20	RECEPTS - 262			900	•
•	720			RECEPTS - 262	1/20	19	20	1/20	RECEPTS - 262	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #4 — 73 AMPS

PANELBOARD: "L263"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 26,180
LOCATION: 2ND FLOOR ROOM 263	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 8,420
				TOTAL CØ: 8,320

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 263	1/20	1	2	1/20	RECEPTS - 263	1200			•
•		900		RECEPTS - 263	1/20	3	4	1/20	RECEPTS - 263		1200		•
•			720	RECEPTS - 263	1/20	5	6	1/20	RECEPTS - 263			1200	•
•	1200			RECEPTS - 263	1/20	7	8	1/20	RECEPTS - 263	1200			•
•		2000		RECEPTS - 263	2/	9	10	1/20	RECEPTS - 263		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 263			2000	•
•	1200			RECEPTS - 263	1/20	13	14	/30	-	2000			•
•		1200		RECEPTS - 263	1/20	15	16	1/20	RECEPTS - 263		1200		•
•			1200	RECEPTS - 263	1/20	17	18	1/20	RECEPTS - 263			1200	•
•	540			RECEPTS - 263	1/20	19	20	1/20	RECEPTS - 263	1200			•
•		720		RECEPTS - 263	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L264"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 264	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP2	TOTAL BØ: 9,440
				TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 264	1/20	1	2	1/20	RECEPTS - 264	1200			•
•		900		RECEPTS - 264	1/20	3	4	1/20	RECEPTS - 264		1200		•
•			540	RECEPTS - 264	1/20	5	6	1/20	RECEPTS - 264			1200	•
•	1200			RECEPTS - 264	1/20	7	8	1/20	RECEPTS - 264	1200			•
•		2000		RECEPTS - 264	2/	9	10	1/20	RECEPTS - 264		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 264			2000	•
•	1080			RECEPTS - 264	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 264	1/20	15	16	1/20	RECEPTS - 264		900		•
•			1080	RECEPTS - 264	1/20	17	18	1/20	RECEPTS - 264			900	•
•	720			RECEPTS - 264	1/20	19	20	1/20	RECEPTS - 264	1200			•
•		720		RECEPTS - 264	1/20	21	22	1/20	RECEPTS - 264		720		•
•			720	RECEPTS - 264	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

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LABORATORY PANEL SCHEDULES

Commission Number 10301

E5.3

Date: October 25, 2002

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L332"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 232	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
				TOTAL BØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 232	1/20	1	2	1/20	RECEPTS - 232	1200			•
•		900		RECEPTS - 232	1/20	3	4	1/20	RECEPTS - 232		1200		•
•			540	RECEPTS - 232	1/20	5	6	1/20	RECEPTS - 232			1200	•
•	1200			RECEPTS - 232	1/20	7	8	1/20	RECEPTS - 232	1200			•
•		2000		RECEPTS - 232	2/	9	10	1/20	RECEPTS - 232		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 232			2000	•
•	1080			RECEPTS - 232	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 232	1/20	15	16	1/20	RECEPTS - 232		900		•
•			1080	RECEPTS - 232	1/20	17	18	1/20	RECEPTS - 232			900	•
•	720			RECEPTS - 232	1/20	19	20	1/20	RECEPTS - 232	1200			•
•		720		RECEPTS - 232	1/20	21	22	1/20	RECEPTS - 232		720		•
•			720	RECEPTS - 232	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L333"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 233	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
				TOTAL BØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 233	1/20	1	2	1/20	RECEPTS - 233	1200			•
•		900		RECEPTS - 233	1/20	3	4	1/20	RECEPTS - 233		1200		•
•			540	RECEPTS - 233	1/20	5	6	1/20	RECEPTS - 233			1200	•
•	1200			RECEPTS - 233	1/20	7	8	1/20	RECEPTS - 233	1200			•
•		2000		RECEPTS - 233	2/	9	10	1/20	RECEPTS - 233		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 233			2000	•
•	1080			RECEPTS - 233	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 233	1/20	15	16	1/20	RECEPTS - 233		900		•
•			1080	RECEPTS - 233	1/20	17	18	1/20	RECEPTS - 233			900	•
•	720			RECEPTS - 233	1/20	19	20	1/20	RECEPTS - 233	1200			•
•		720		RECEPTS - 233	1/20	21	22	1/20	RECEPTS - 233		720		•
•			720	RECEPTS - 233	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L334"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 234	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 234	1/20	1	2	1/20	RECEPTS - 234	1200			•
•		720		RECEPTS - 234	1/20	3	4	1/20	RECEPTS - 234		1200		•
•			720	RECEPTS - 234	1/20	5	6	1/20	RECEPTS - 234			1200	•
•	900			RECEPTS - 234	1/20	7	8	1/20	RECEPTS - 234	1200			•
•		2000		RECEPTS - 234	2/	9	10	1/20	RECEPTS - 234		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 234			2000	•
•	1080			RECEPTS - 234	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 234	1/20	15	16	1/20	RECEPTS - 234		900		•
•			1080	RECEPTS - 234	1/20	17	18	1/20	RECEPTS - 234			900	•
•	720			RECEPTS - 234	1/20	19	20	1/20	RECEPTS - 234	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L335"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 235	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 235	1/20	1	2	1/20	RECEPTS - 235	1200			•
•		720		RECEPTS - 235	1/20	3	4	1/20	RECEPTS - 235		1200		•
•			720	RECEPTS - 235	1/20	5	6	1/20	RECEPTS - 235			1200	•
•	900			RECEPTS - 235	1/20	7	8	1/20	RECEPTS - 235	1200			•
•		2000		RECEPTS - 235	2/	9	10	1/20	RECEPTS - 235		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 235			2000	•
•	1080			RECEPTS - 235	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 235	1/20	15	16	1/20	RECEPTS - 235		900		•
•			1080	RECEPTS - 235	1/20	17	18	1/20	RECEPTS - 235			900	•
•	720			RECEPTS - 235	1/20	19	20	1/20	RECEPTS - 235	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L340"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 240	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 240	1/20	1	2	1/20	RECEPTS - 240	1200			•
•		720		RECEPTS - 240	1/20	3	4	1/20	RECEPTS - 240		1200		•
•			720	RECEPTS - 240	1/20	5	6	1/20	RECEPTS - 240			1200	•
•	900			RECEPTS - 240	1/20	7	8	1/20	RECEPTS - 240	1200			•
•		2000		RECEPTS - 240	2/	9	10	1/20	RECEPTS - 240		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 240			2000	•
•	1080			RECEPTS - 240	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 240	1/20	15	16	1/20	RECEPTS - 240		900		•
•			1080	RECEPTS - 240	1/20	17	18	1/20	RECEPTS - 240			900	•
•	720			RECEPTS - 240	1/20	19	20	1/20	RECEPTS - 240	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L341"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 241	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 241	1/20	1	2	1/20	RECEPTS - 241	1200			•
•		720		RECEPTS - 241	1/20	3	4	1/20	RECEPTS - 241		1200		•
•			720	RECEPTS - 241	1/20	5	6	1/20	RECEPTS - 241			1200	•
•	900			RECEPTS - 241	1/20	7	8	1/20	RECEPTS - 241	1200			•
•		2000		RECEPTS - 241	2/	9	10	1/20	RECEPTS - 241		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 241			2000	•
•	1080			RECEPTS - 241	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 241	1/20	15	16	1/20	RECEPTS - 241		900		•
•			1080	RECEPTS - 241	1/20	17	18	1/20	RECEPTS - 241			900	•
•	720			RECEPTS - 241	1/20	19	20	1/20	RECEPTS - 241	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #4 — 73 AMPS

PANELBOARD: "L342"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 26,180
LOCATION: 2ND FLOOR ROOM 242	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,440
				TOTAL BØ: 8,420
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,320

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 242	1/20	1	2	1/20	RECEPTS - 242	1200			•
•		900		RECEPTS - 242	1/20	3	4	1/20	RECEPTS - 242		1200		•
•			720	RECEPTS - 242	1/20	5	6	1/20	RECEPTS - 242			1200	•
•	1200			RECEPTS - 242	1/20	7	8	1/20	RECEPTS - 242	1200			•
•		2000		RECEPTS - 242	2/	9	10	1/20	RECEPTS - 242		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 242			2000	•
•	1200			RECEPTS - 242	1/20	13	14	/30	-	2000			•
•		1200		RECEPTS - 242	1/20	15	16	1/20	RECEPTS - 242		1200		•
•			1200	RECEPTS - 242	1/20	17	18	1/20	RECEPTS - 242			1200	•
•	540			RECEPTS - 242	1/20	19	20	1/20	RECEPTS - 242	1200			•
•		720		RECEPTS - 242	1/20	21	22	1/20					
					1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L343"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 243	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
				TOTAL BØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 243	1/20	1	2	1/20	RECEPTS - 243	1200			•
•		900		RECEPTS - 243	1/20	3	4	1/20	RECEPTS - 243		1200		•
•			540	RECEPTS - 243	1/20	5	6	1/20	RECEPTS - 243			1200	•
•	1200			RECEPTS - 243	1/20	7	8	1/20	RECEPTS - 243	1200			•
•		2000		RECEPTS - 243	2/	9	10	1/20	RECEPTS - 243		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 243			2000	•
•	1080			RECEPTS - 243	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 243	1/20	15	16	1/20	RECEPTS - 243		900		•
•			1080	RECEPTS - 243	1/20	17	18	1/20	RECEPTS - 243			900	•
•	720			RECEPTS - 243	1/20	19	20	1/20	RECEPTS - 243	1200			•
•		720		RECEPTS - 243	1/20	21	22	1/20	RECEPTS - 243		720		•
•			720	RECEPTS - 243	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #4 — 73 AMPS

PANELBOARD: "L344"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 26,180
LOCATION: 2ND FLOOR ROOM 244	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,440
				TOTAL BØ: 8,420
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,320

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 244	1/20	1	2	1/20	RECEPTS - 244	1200			•
•		900		RECEPTS - 244	1/20	3	4	1/20	RECEPTS - 244		1200		•
•			720	RECEPTS - 244	1/20	5	6	1/20	RECEPTS - 244			1200	•
•	1200			RECEPTS - 244	1/20	7	8	1/20	RECEPTS - 244	1200			•
•		2000		RECEPTS - 244	2/	9	10	1/20	RECEPTS - 244		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 244			2000	•
•	1200			RECEPTS - 244	1/20	13	14	/30	-	2000			•
•		1200		RECEPTS - 244	1/20	15	16	1/20	RECEPTS - 244		1200		•
•			1200	RECEPTS - 244	1/20	17	18	1/20	RECEPTS - 244			1200	•
•	540			RECEPTS - 244	1/20	19	20	1/20	RECEPTS - 244	1200			•
•		720		RECEPTS - 244	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #5 — 67 AMPS

PANELBOARD: "L352"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 252	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 252	1/20	1	2	1/20	RECEPTS - 252	1200			•
•		720		RECEPTS - 252	1/20	3	4	1/20	RECEPTS - 252		1200		•
•			720	RECEPTS - 252	1/20	5	6	1/20	RECEPTS - 252			1200	•
•	900			RECEPTS - 252	1/20	7	8	1/20	RECEPTS - 252	1200			•
•		2000		RECEPTS - 252	2/	9	10	1/20	RECEPTS - 252		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 252			2000	•
•	1080			RECEPTS - 252	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 252	1/20	15	16	1/20	RECEPTS - 252		900		•
•			1080	RECEPTS - 252	1/20	17	18	1/20	RECEPTS - 252			900	•
•	720			RECEPTS - 252	1/20	19	20	1/20	RECEPTS - 252	1200			•
•				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L353"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 253	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
				TOTAL BØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 253	1/20	1	2	1/20	RECEPTS - 253	1200			•
•		900		RECEPTS - 253	1/20	3	4	1/20	RECEPTS - 253		1200		•
•			540	RECEPTS - 253	1/20	5	6	1/20	RECEPTS - 253			1200	•
•	1200			RECEPTS - 253	1/20	7	8	1/20	RECEPTS - 253	1200			•
•		2000		RECEPTS - 253	2/	9	10	1/20	RECEPTS - 253		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 253			2000	•
•	1080			RECEPTS - 253	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 253	1/20	15	16	1/20	RECEPTS - 253		900		•
•			1080	RECEPTS - 253	1/20	17	18	1/20	RECEPTS - 253			900	•
•	720			RECEPTS - 253	1/20	19	20	1/20	RECEPTS - 253	1200			•
•		720		RECEPTS - 253	1/20	21	22	1/20	RECEPTS - 253		720		•
•			720	RECEPTS - 253	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L354"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 254	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
				TOTAL BØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 254	1/20	1	2	1/20	RECEPTS - 254	1200			•
•		900		RECEPTS - 254	1/20	3	4	1/20	RECEPTS - 254		1200		•
•			540	RECEPTS - 254	1/20	5	6	1/20	RECEPTS - 254			1200	•
•	1200			RECEPTS - 254	1/20	7	8	1/20	RECEPTS - 254	1200			•
•		2000		RECEPTS - 254	2/	9	10	1/20	RECEPTS - 254		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 254			2000	•
•	1080			RECEPTS - 254	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 254	1/20	15	16	1/20	RECEPTS - 254		900		•
•			1080	RECEPTS - 254	1/20	17	18	1/20	RECEPTS - 254			900	•
•	720			RECEPTS - 254	1/20	19	20	1/20	RECEPTS - 254	1200			•
•		720		RECEPTS - 254	1/20	21	22	1/20	RECEPTS - 254		720		•
•			720	RECEPTS - 254	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L355"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 255	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 255	1/20	1	2	1/20	RECEPTS - 255	1200			•
•		720		RECEPTS - 255	1/20	3	4	1/20	RECEPTS - 255		1200		•
•			720	RECEPTS - 255	1/20	5	6	1/20	RECEPTS - 255			1200	•
•	900			RECEPTS - 255	1/20	7	8	1/20	RECEPTS - 255	1200			•
•		2000		RECEPTS - 255	2/	9	10	1/20	RECEPTS - 255		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 255			2000	•
•	1080			RECEPTS - 255	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 255	1/20	15	16	1/20	RECEPTS - 255		900		•
•			1080	RECEPTS - 255	1/20	17	18	1/20	RECEPTS - 255			900	•
•	720			RECEPTS - 255	1/20	19	20	1/20	RECEPTS - 255	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #1 — 82 AMPS

PANELBOARD: "L356"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 29,640
LOCATION: 2ND FLOOR ROOM 256	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 8780
				TOTAL BØ: 9,940
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 10,920

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 256	1/20	1	2	1/20	RECEPTS - 256	600			•
•		540		RECEPTS - 256	1/20	3	4	1/20	RECEPTS - 256		720		•
•			720	RECEPTS - 256	1/20	5	6	1/20	RECEPTS - 256			900	•
•	900			RECEPTS - 256	1/20	7	8	1/20	RECEPTS - 256	900			•
•		2000		RECEPTS - 256	2/	9	10	1/20	RECEPTS - 256		1080		•
•			2000	-	/30	11	12	1/20	RECEPTS - 256			900	•
•	1200			RECEPTS - 256	1/20	13	14	1/20	RECEPTS - 256	1080			•
•		1200		RECEPTS - 256	1/20	15	16	1/20	RECEPTS - 256		1200		•
•			1200	RECEPTS - 256	1/20	17	18	2/	RECEPTS - 256			2000	•
•	1200			RECEPTS - 256	1/20	19	20	/30	-	2000			•
•		1200		RECEPTS - 256	1/20	21	22	2/	RECEPTS - 256		2000		•
•			1200	RECEPTS - 256	1/20	23	24	/30	-			2000	•
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L361"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 261	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 261	1/20	1	2	1/20	RECEPTS - 261	1200			•
•		720		RECEPTS - 261	1/20	3	4	1/20	RECEPTS - 261		1200		•
•			720	RECEPTS - 261	1/20	5	6	1/20	RECEPTS - 261			1200	•
•	900			RECEPTS - 261	1/20	7	8	1/20	RECEPTS - 261	1200			•
•		2000		RECEPTS - 261	2/	9	10	1/20	RECEPTS - 261		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 261			2000	•
•	1080			RECEPTS - 261	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 261	1/20	15	16	1/20	RECEPTS - 261		900		•
•			1080	RECEPTS - 261	1/20	17	18	1/20	RECEPTS - 261			900	•
•	720			RECEPTS - 261	1/20	19	20	1/20	RECEPTS - 261	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #2 — 67 AMPS

PANELBOARD: "L362"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 24,020
LOCATION: 2ND FLOOR ROOM 262	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,200
				TOTAL BØ: 6,920
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 7,900

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 262	1/20	1	2	1/20	RECEPTS - 262	1200			•
•		720		RECEPTS - 262	1/20	3	4	1/20	RECEPTS - 262		1200		•
•			720	RECEPTS - 262	1/20	5	6	1/20	RECEPTS - 262			1200	•
•	900			RECEPTS - 262	1/20	7	8	1/20	RECEPTS - 262	1200			•
•		2000		RECEPTS - 262	2/	9	10	1/20	RECEPTS - 262		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 262			2000	•
•	1080			RECEPTS - 262	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 262	1/20	15	16	1/20	RECEPTS - 262		900		•
•			1080	RECEPTS - 262	1/20	17	18	1/20	RECEPTS - 262			900	•
•	720			RECEPTS - 262	1/20	19	20	1/20	RECEPTS - 262	1200			•
				SPARE	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #4 — 73 AMPS

PANELBOARD: "L363"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 26,180
LOCATION: 2ND FLOOR ROOM 263	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,440
				TOTAL BØ: 8,420
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,320

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 263	1/20	1	2	1/20	RECEPTS - 263	1200			•
•		900		RECEPTS - 263	1/20	3	4	1/20	RECEPTS - 263		1200		•
•			720	RECEPTS - 263	1/20	5	6	1/20	RECEPTS - 263			1200	•
•	1200			RECEPTS - 263	1/20	7	8	1/20	RECEPTS - 263	1200			•
•		2000		RECEPTS - 263	2/	9	10	1/20	RECEPTS - 263		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 263			2000	•
•	1200			RECEPTS - 263	1/20	13	14	/30	-	2000			•
•		1200		RECEPTS - 263	1/20	15	16	1/20	RECEPTS - 263		1200		•
•			1200	RECEPTS - 263	1/20	17	18	1/20	RECEPTS - 263			1200	•
•	540			RECEPTS - 263	1/20	19	20	1/20	RECEPTS - 263	1200			•
•		720		RECEPTS - 263	1/20	21	22	1/20	SPARE				
				SPARE	1/20	23	24	1/20	SPARE				
				SPACE W/ BUSS		25	26		SPACE W/ BUSS				
						27	28						
				↓		29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

LAB TYPE #3 — 76 AMPS

PANELBOARD: "L364"	VOLTAGE: 208Y120V	CU BUS RATING: 100A	MAIN: LUGS ONLY	TOTAL CONNECTED VA: 27,380
LOCATION: 2ND FLOOR ROOM 264	MFG AND TYPE: SQUARE D	EQUIP. GRD. CU BUS: YES	ISOL. GRD. CU BUS: YES	TOTAL AØ: 9,500
				TOTAL BØ: 9,440
MOUNTING: FLUSH	ENCLOSURE: NEMA 1	MINIMUM A.I.C. RATING: 10,000	FED FROM: LDP3	TOTAL CØ: 8,440

	LOAD (VA) AØ	BØ	CØ	SERVES	P/T	CIR. NO.	CIR. NO.	P/T	SERVES	LOAD (VA) AØ	BØ	CØ	
•	900			LAB HOOD - 264	1/20	1	2	1/20	RECEPTS - 264	1200			•
•		900		RECEPTS - 264	1/20	3	4	1/20	RECEPTS - 264		1200		•
•			540	RECEPTS - 264	1/20	5	6	1/20	RECEPTS - 264			1200	•
•	1200			RECEPTS - 264	1/20	7	8	1/20	RECEPTS - 264	1200			•
•		2000		RECEPTS - 264	2/	9	10	1/20	RECEPTS - 264		1200		•
•			2000	-	/30	11	12	2/	RECEPTS - 264			2000	•
•	1080			RECEPTS - 264	1/20	13	14	/30	-	2000			•
•		900		RECEPTS - 264	1/20	15	16	1/20	RECEPTS - 264		900		•
•			1080	RECEPTS - 264	1/20	17	18	1/20	RECEPTS - 264			900	•
•	720			RECEPTS - 264	1/20	19	20	1/20	RECEPTS - 264	1200			•
•		720		RECEPTS - 264	1/20	21	22	1/20	RECEPTS - 264		720		•
•			720	RECEPTS - 264	1/20	23	24	1/20	SPARE				
				SPARE	1/20	25	26		SPACE W/ BUSS				
				SPARE	1/20	27	28						
				SPARE	1/20	29	30		↓				

* PROVIDE GROUND FAULT INTERRUPTING CIRCUIT BREAKER

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LABORATORY PANEL SCHEDULES

Commission Number 10301

E5.4

Date: October 25, 2002

SYMBOLS SCHEDULE

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FLUORESCENT LIGHTING OUTLET - CEILING MOUNTED		DUPLEX RECEPTACLE	FA	FIRE ALARM AUDIO/VISUAL DEVICE
	EMERGENCY LIGHTING OUTLET - CEILING MOUNTED	E	DUPLEX RECEPTACLE - EMERGENCY POWER	FA	FIRE ALARM AUDIO DEVICE
	EMERGENCY LIGHTING: 2 LAMPS ON EMERGENCY CIRCUIT & 2 LAMPS ON NORMAL POWER LIGHTING CIRCUIT	IG	DUPLEX RECEPTACLE WITH ISOLATED GROUND	F	FIRE ALARM VISUAL DEVICE
	UNDER CABINET FLUORESCENT LIGHTING OUTLET	SIG	DUPLEX SURGE PROTECTED ISOLATED GROUND RECEPTACLE		FIRE ALARM PULL STATION
	INCANDESCENT, COMPACT FLUORESCENT, OR HID LIGHTING OUTLET - CEILING MOUNTED	GFI/WP	DUPLEX RECEPTACLE - GROUND FAULT INTERRUPTING AND WEATHER-PROOF COVER TYPES AS INDICATED ON PLANS	H	HEAT DETECTOR
	INCANDESCENT, COMPACT FLUORESCENT, OR HID LIGHTING OUTLET - WALL MOUNTED		DUPLEX RECEPTACLE MOUNTED 6" ABOVE COUNTER TOP UNLESS OTHERWISE NOTED ON PLANS - VERIFY EXACT MOUNTING HEIGHT WITH ARCHITECT	SD	SMOKE DETECTOR
	FLUORESCENT STRIP FIXTURE		QUADRAPLEX RECEPTACLE	DD	DUCT SMOKE DETECTOR
	FLUORESCENT STRIP FIXTURE - EMERGENCY		DUPLEX RECEPTACLE - IN FLUSH MOUNTED CAST FLOOR BOX	TS	TAMPER SWITCH
	EXIT SIGN		DUPLEX RECEPTACLE - FLUSH MOUNTED IN CEILING	FS	FLOW SWITCH
	EXIT SIGN - WALL MOUNTED		SPECIAL PURPOSE OUTLET - NEMA CONFIGURATION (VOLTAGE, AMPACITY) INDICATED	DH	DOOR HOLDER
	BATTERY-POWERED EMERGENCY LIGHT		CEILING MOUNTED CORD REEL WITH #14-3 "SJOW" CORD WITH (2) DUPLEX RECEPTACLES EQUAL TO APPLETON #RL5340 CORD REEL, #RE-PBS-2 BALL STOP, AND #RE-PRB POWER OUTLET	MC	MAGNETIC CONTACT
LC	LIGHTING CONTACTOR		FLOOR MOUNTED JUNCTION BOX	K	KEYPAD
S	SINGLE-POLE SWITCH	J	CEILING MOUNTED JUNCTION BOX	CR	CARD READER - ACCESS CONTROL
S_3	THREE-WAY SWITCH		NONFUSED DISCONNECT SWITCH - SIZE NOTED ON PLAN	EM	ELECTROMAGNETIC LOCK - ACCESS CONTROL
S_4	FOUR-WAY SWITCH		COMBINATION MOTOR STARTER AND DISCONNECT SWITCH	EX	EXIT REQUEST BUTTON - ACCESS CONTROL
S_{WP}	SINGLE-POLE SWITCH W/ WATER-PROOF COVER		FUSED DISCONNECT	MD	MOTION DETECTOR
S_D	DIMMER CONTROL SWITCH		ELECTRIC MOTOR	VM	VIDEO MONITOR - CCTV
S_M	MANUAL MOTOR STARTER WITH OVERLOADS, TOGGLE OPERATED		SURFACE MOUNTED PANEL BOARD		VIDEO CAMERA - CCTV
S_P	SINGLE-POLE SWITCH WITH PILOT LIGHT (PILOT LIGHT OPERATION AS DESCRIBED ON PLANS)		FLUSH MOUNTED PANEL BOARD	S	PUBLIC ADDRESS/INTERCOM SYSTEM SPEAKER
S_T	SINGLE-POLE SWITCH WITH TIMER		TELEPHONE TERMINAL BOARD	IC	INTERCOM OUTLET
$S_a S_b$	MULTI-LEVEL SWITCHES: Sa - SWITCHES 2 OUTBOARD LAMPS & Sb - SWITCHES INBOARD LAMPS		TELEPHONE OUTLET	IC_M	MICROPHONE OUTLET
$S_{3a} S_{3b}$	THREE-WAY MULTI-LEVEL SWITCHING	W	TELEPHONE OUTLET - WALL MOUNTED	# ER	DASHED INDICATES EXISTING EXISTING RELOCATED
	PUSHBUTTON	HC/P	TELEPHONE OUTLET - ADA ACCESSIBLE PAY PHONE	AC NS	ABOVE COUNTER NON-SWITCHED
MS	MOTION SENSOR SWITCH AT 48" AFF EQUAL TO LEVITON #ODS10-ID		TELEPHONE OUTLET - FLUSH MOUNTED TYPE IN FLOOR SLAB	AFF AFG	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE
	BRANCH CIRCUIT IN CONDUIT - HOT LEG, SWITCH LEG, NEUTRAL, AND EQUIPMENT GROUND		COMPUTER OUTLET - "C" DENOTES CEILING MOUNTED		
	BRANCH CIRCUIT HOMERUN - PANEL & CIRCUIT NUMBER INDICATED		COMPUTER OUTLET - FLUSH MOUNTED TYPE IN FLOOR SLAB		
	CONDUIT CONCEALED IN OR BELOW FLOOR SLAB		COMBINATION TELEPHONE/COMPUTER OUTLET		
——E——	EMERGENCY CIRCUIT IN CONDUIT		COMBINATION TELEPHONE/COMPUTER OUTLET - FLUSH MOUNTED TYPE IN FLOOR SLAB		
	FLEXIBLE CONDUIT	TV	COMBINATION TELEVISION OUTLET/DUPLEX RECEPTACLE MOUNTED AT SPECIFIED HEIGHT		
			CLOCK OUTLET		

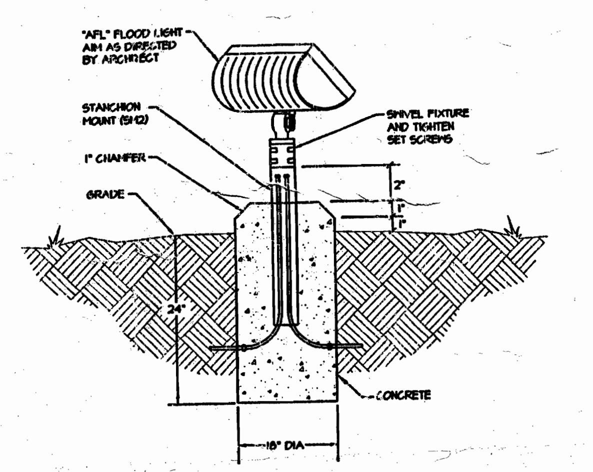
LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER CAT. NO.	VOLT	LAMP	REMARKS
A	COLUMBIA #STR-24-2-50TT-6-MPO-EBTT-277V	277	4-F50BX/SPX41/RS	2' X 4' RECESSED INDIRECT FLUORESCENT FIXTURE
B	COLUMBIA #4PS-24-432-6-FS-A12.125-2EBLH-277	277	4-F32T8/SPX41	2' X 4' FLUORESCENT LAY-IN, PRISMATIC LENS, 4 LAMP
C	COLUMBIA #4PS-24-332-6-FS-A12.125-2EBLH-277	277	3-F32T8/SPX41	2' X 4' FLUORESCENT LAY-IN, PRISMATIC LENS, 3 LAMP
D	COLUMBIA #4PS-24-232-6-FS-A12.125-2EBLH-277	277	2-F32T8/SPX41	2' X 4' FLUORESCENT LAY-IN, PRISMATIC LENS, 2 LAMP
E	COLUMBIA #CS4-232-EB8LH-277-CSW64-KHC	277	2-F32T8/SPX41/RS	4' FLUORESCENT STRIP FIXTURE W/ WIREGUARD, CHAIN HUNG AT 10'-0" AFF
F	COLUMBIA #W4-232-EB8LH-277-LSW-LCO	277	2-F32T8/SPX41	4' WALL MOUNTED FLUORESCENT FIXTURE (MOUNTING HEIGHT AS NOTED ON PLANS)
G	PRESCOLITE #CFR826UEB-ST442-277	277	2-F26DBX/T4/SPX41	8" DIA. OPEN RECESSED COMPACT FLUORESCENT CAN FIXTURE
H	COLUMBIA #4TS-4-232-EBTLH-277-DWR	277	2-F32T8/SPX41	SURFACE MOUNTED FLUORESCENT FIXTURE, GASKETTED
K	SPAULDING #HTI-CM-MH75-DA-MT-PLS-QZ	277	1-175W ED28 MH 1-150W QT4	SURFACE OR CONDUIT MOUNTED AT 12'-0" AFF 8"W X 14"L PRISMATIC LENS
L	SPAULDING #W65I-MH75-MT-PE-PLS	277	1-175W ED 17 MH COATED	EXTERIOR WALL PACK MOUNTED AT 12'-0" AFG W/ "PE" CELL
M	PRESCOLITE #RND801-70MHFE-STH802-277V	277	1-70W ED 17 MH COATED	8" DIA. OPEN RECESSED EXTERIOR SOFFIT LIGHT
N	COLUMBIA #SS4-132-EB8LH-277V	277	1-F32T8/SPX41	4' STAGGERED STRIP FIXTURE MOUNTED IN METAL CEILING RECESSED COVE
P	PRESCOLITE #CF1026RDEB-F8-277V- W/ TRG-TL6 AND #261 KIT	277	2-F26DBX/T4/SPX41	10" DIA. RECESSED LENSED GASKETED PRISMATIC FLUORESCENT CAN FIXTURE
Q	PRESCOLITE #T508WH	120	1-150W PAR 38 SP	TRACK MOUNTED GIMBAL FIXTURE
R	PRESCOLITE #4468-60	120	2-75W A19	SURFACE MOUNTED INCANDESCENT FIXTURE
S	COLUMBIA #CS4-232-EB8LH-277-CS4	277	2-F32T8/SPX41	SURFACE MOUNTED STRIP FIXTURE W/ 1-1/2" SPACER
T	COLUMBIA #STR-24-2-50TT-6-MPO-277- DIMMING BALLASTS	277	4-F50BX/SPX41/RS	2' X 4' RECESSED INDIRECT FLUORESCENT FIXTURE WITH 2 LUTRON #FDB-2243-277-2 (DIMMING BALLAST)
U	PRESCOLITE #CFR826EBDM-ST442A-277V	277	2-F26DBXT4/SPX41/RS	8" DIA. RECESSED COMPACT FLUORESCENT CAN W/ DIMMING BALLASTS
V	COLUMBIA #STR-22-250TT-6-MPO-EBTT-277V	277	4-F50BX/SPX41/RS	2' X 2' RECESSED INDIRECT FLUORESCENT FIXTURE
W	VISA #OW4410-WH75(277V)-BA (UP LIGHT ONLY)	277	1-175W ED17 MH	WALL MOUNTED AT 24" ABOVE 2ND FLOOR LINE (BALLAST ABOVE 1ST FLOOR CEILING)
Y	VISA #OW4474-WH75(277V)-BA (UP AND DOWN LIGHT)	277	1-175W ED17 MH	WALL MOUNTED AT 24" ABOVE 2ND FLOOR LINE (BALLAST ABOVE 1ST FLOOR CEILING)
Z	COLUMBIA #SS2-217-EB8LH-277	277	2-F17T8/SPX41	STAGGERED STRIP FIXTURE MOUNTED IN METAL CEILING RECESS
AA	VISA #CC801-4F54-277V-BA-SBC (36" OVERALL HEIGHT)	277	4-F54/36BX/SPX41	PENDANT MOUNTED 2 ARM, 2 BOWL INDIRECT (MODIFIED PENDANT)
BB	VISA #CC802-4H250-277V-BA-SBC (84" OVERALL HEIGHT)	277	4-250W MH	PENDANT MOUNTED 4 ARM, 4 BOWL INDIRECT (MODIFIED PENDANT) W/ LOWERING DEVICE
CC	VISA #CB2790-2GF26-277V-BA	277	2-F26DBX/T4/SPX41/RS	WALL MOUNTED SCONCE, MOUNTED @ 7'-6" AFF
DD	ALS #V524-141-277-E10%-O-D-I-V5F-1801P CENTARE FINISH	277	6-F32T8/SPX41/RS 2-F17T8/SPX41/RS	COVE LIGHT MOUNTED AT 7'-2" AFF TO BOTTOM (15'-0"L X 8"H) FACIA.
EE	PRESCOLITE #CFR826UEB-ST442-277V-SCA32	277	2-F26DBX/T4/SPX41	RECESSED 8" DIAMETER COMPACT FLUORESCENT WITH 32 DEGREE SLOPE ADAPTER
FF	SPAULDING #W65I-MH75-MT-PLS	277	1-175W ED-17 MH COATED	EXTERIOR WALL PACK MOUNTED AT 12'-0" AFF
GG	APPLETON #VX10156	120V	1 - 60W A19F	SURFACE MOUNTED INSIDE MECH DUCT. ENCLOSED AND GASKETED
	PRESCOLITE #DMX1REW	277	LED W/ UNIT	SINGLE FACE EXIT SIGN
	PRESCOLITE #DMX2REW	277	LED W/ UNIT	DOUBLE FACE EXIT SIGN

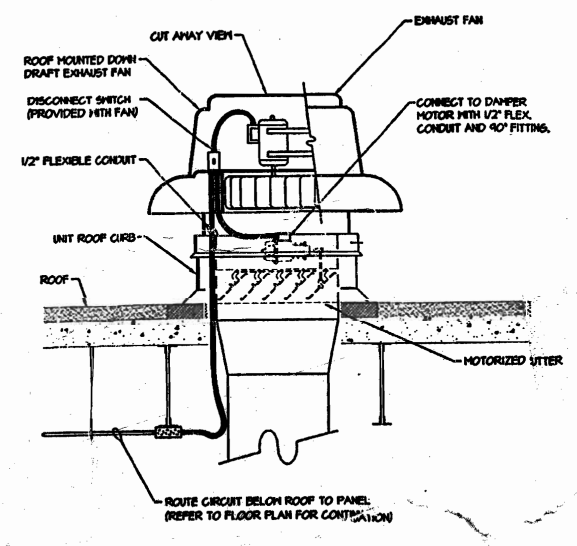
GENERAL NOTES

1. EACH CIRCUIT SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR, AND MULTI-WIRE CIRCUITS OF DIFFERENT PHASES MAY SHARE EQUIPMENT GROUND CONDUCTOR. EQUIPMENT GROUND CONDUCTOR SIZE SHALL NOT BE LESS THAN #12 AWG OR AS INDICATED ON THE DRAWINGS.
2. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID COPPER, AND ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER USING BOLTED LUGS AT TERMINALS.
3. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED.
4. ALL WIRING DEVICES SHALL BE INSTALLED PLUMB, SQUARE, AND TRUE; AND ALL DEVICES INSTALLED AT A SINGLE LOCATION SHALL BE ALIGNED.
5. MINIMUM WIRE SIZE SHALL BE #12 AWG UNLESS OTHERWISE SPECIFIED.
6. ALL WORK SHALL COMPLY WITH THE 2002 EDITION OF THE NATIONAL ELECTRICAL CODE.
7. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL ELEVATIONS AND MILLWORK DETAILS FOR EXACT LOCATIONS OF ALL WIRING DEVICES.
8. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LAY-IN LIGHT FIXTURES.
9. ALL EXISTING BRANCH CIRCUITS NOT USED SHALL BE REMOVED BACK TO PANEL. THE CIRCUIT BREAKERS SHALL BE LABELED AS SPARE, AND EXISTING CONDUIT SHALL REMAIN FROM PANEL TO ABOVE ACCESSIBLE CEILING SPACE.
10. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION IN AREAS OF RENOVATION. ALL WIRING DEVICES, LIGHT FIXTURES, WIRE, AND CONDUIT THAT IS TO BE REMOVED SHALL BE STORED, AS DIRECTED BY THE OWNER, OR RELOCATED, AS SHOWN ON THE NEW FLOOR PLANS. APPROPRIATE MEASURES SHALL BE TAKEN TO ASSURE CONTINUITY OF EXISTING CIRCUITS WHERE REQUIRED. ALL OUTAGES WHICH MAY RESULT SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE WORK.
11. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING SCHEDULES IN ALL ELECTRICAL PANELS THAT ARE AFFECTED BY THIS WORK. UPDATED SCHEDULES ARE TO BE TYPEWRITTEN.
12. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING ALL SWITCHES, RECEPTACLES, AND FIXED EQUIPMENT WITH THE BRANCH CIRCUIT PANEL NAME AND NUMBER SERVING EACH DEVICE.
13. ALL CONDUIT SHALL BE INSTALLED AS HIGH AS POSSIBLE (MOUNT TO BOTTOM OF STRUCTURE) TO AVOID CONFLICTS WITH DUCTWORK AND PIPING. THE ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION WITH THE MECHANICAL CONTRACTOR.
14. ON THREE PHASE, FOUR WIRE SYSTEMS, DO NOT USE A COMMON NEUTRAL FOR MORE THAN THREE CIRCUITS. MORE THAN THREE CIRCUITS IN ANY ONE CONDUIT IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
15. ON SINGLE PHASE, THREE WIRE SYSTEMS, DO NOT USE A COMMON NEUTRAL FOR MORE THAN TWO CIRCUITS. MORE THAN TWO CIRCUITS IN ANY ONE CONDUIT IS NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

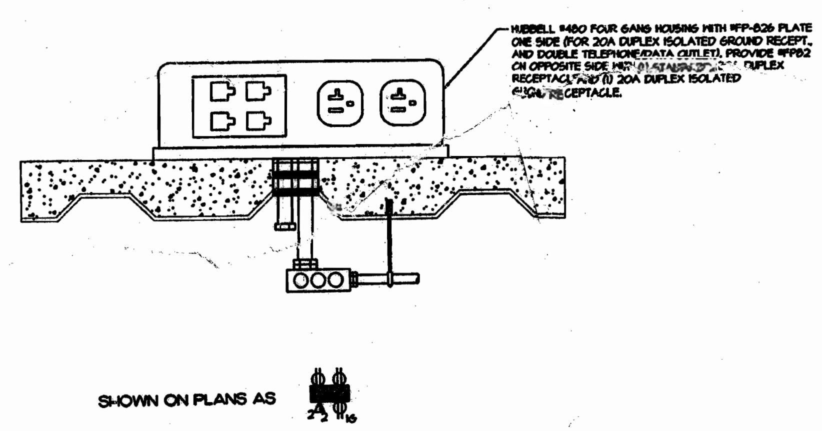
FDB-2243-277-2
2-F50BX/SPX41/RS
BC3T550G4210



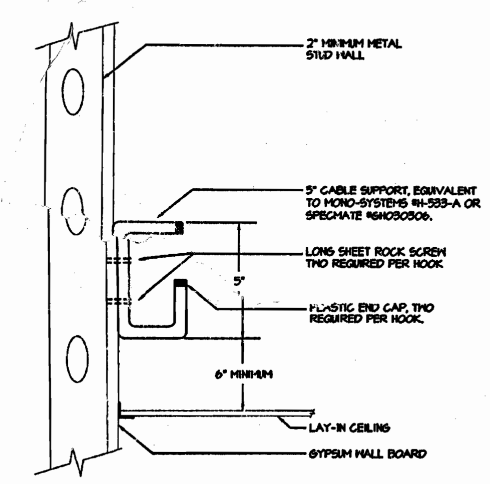
1 GROUND MOUNTED FLOOD LIGHT DETAIL
SCALE: NONE



2 ROOF MOUNTED EXHAUST FAN DETAIL
NOT TO SCALE

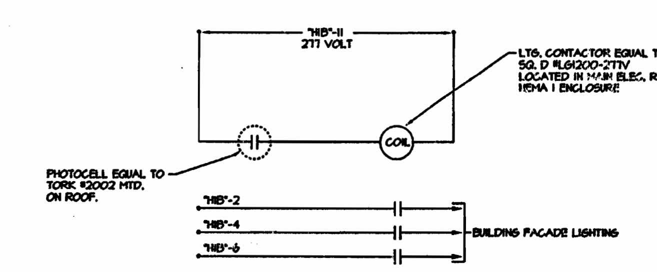


3 LAB FLOOR RECEPTACLE/DATA/TELEPHONE PEDESTAL DETAIL
NOT TO SCALE

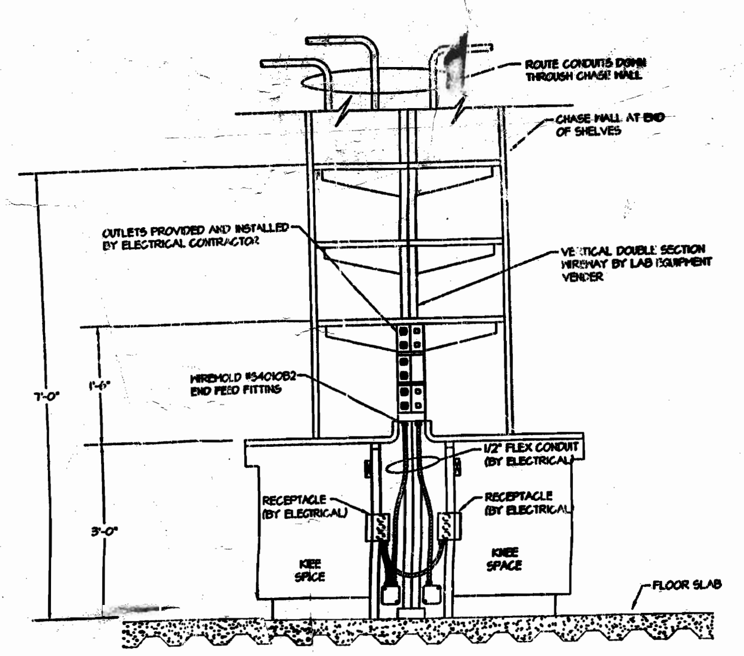


4 SYSTEM CABLE SUPPORT DETAIL
SCALE: NONE

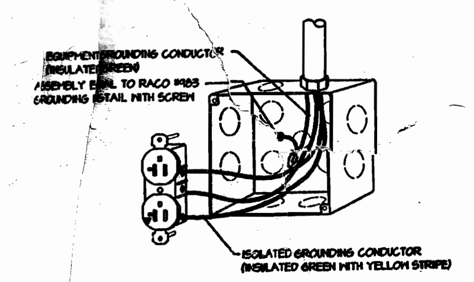
NOTE: MOUNT CABLE SUPPORTS ABOVE ACCESSIBLE CORRIDOR CEILING AT 5'-0" ON CENTER ON BOTH SIDES OF CORRIDOR.



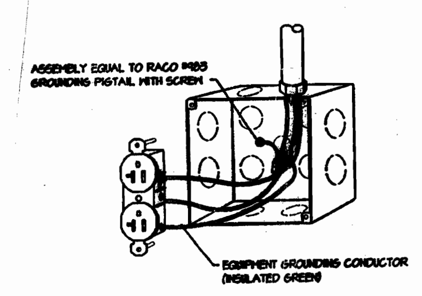
5 LIGHTING CONTROL DIAGRAM "LC-1"
SCALE: NONE



6 TYPICAL VERTICAL WIREWAY CONNECTION DETAIL
SCALE: NONE

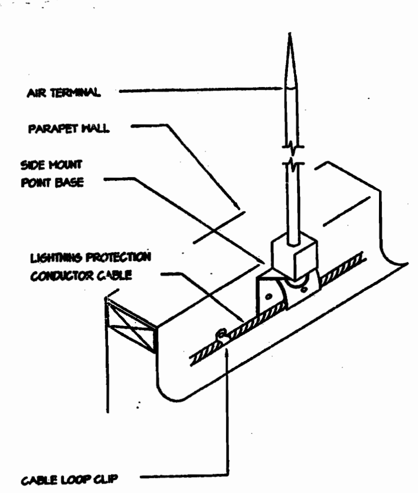


7 ISOLATION GROUND RECEPTACLE DETAIL
SCALE: NONE

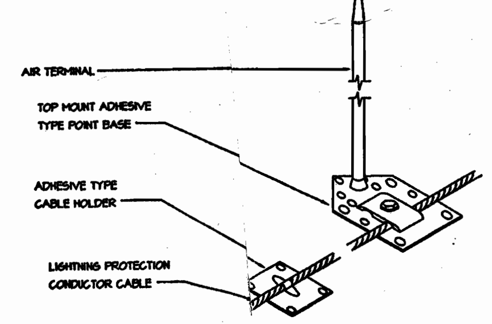


8 DEVICE/JUNCTION BOX GROUNDING DETAIL
SCALE: NONE

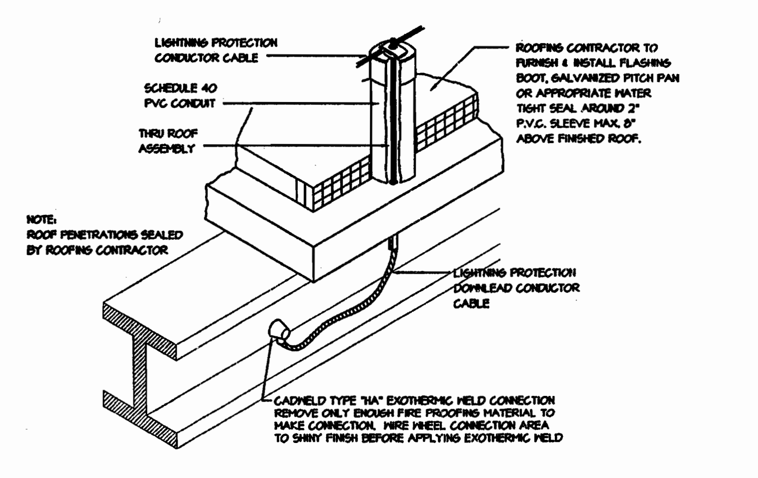
UTILIZE SAME GROUNDING METHOD FOR SWITCHES



9 SIDE MOUNT BASE DETAIL
SCALE: NONE



10 ADHESIVE BASE DETAIL
SCALE: NONE



11 THRU-ROOF ASSEMBLY DETAIL
SCALE: NONE

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ELECTRICAL LEGEND, SCHEDULES, AND DETAILS

Commission Number

E5.5

Date: October 25, 2002