

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Chief Executive Office

BOARD AGENDA # *B-3

Urgent

Routine

AGENDA DATE December 14, 2010

CEO Concurs with Recommendation YES NO
(Information Attached)

4/5 Vote Required YES NO

SUBJECT:

Approval of Plans and Specifications for Minor Renovations at the Health Services Agency Public Health Laboratory

STAFF RECOMMENDATIONS:

1. Approve the plans and specification for minor renovations at the Health Services Agency Public Health Laboratory prepared by Pacific Design Associates, Inc. of Modesto, California.
2. Authorize the Project Manager to issue a notice inviting bids on December 15, 2010 for the construction phase of the project, and for the Project Manager to modify the bid date if necessary.
3. Authorize the Project Manager to accept and open bids on January 19, 2011, at 2:00 p.m.; and return to the Board to recommend a contract award to the lowest responsible bidder.

FISCAL IMPACT:

The total estimated cost of the Polymerase Chain Reaction (PCR) Project previously approved by the Board was \$376,585, which included equipment costs of \$281,585, and construction costs estimated not to exceed \$95,000. Homeland Security Grant funding of \$281,585 previously approved by the Board on November 3, 2009 will fund equipment costs, while Public Facility Fees (PFF) of \$66,431 and Health Services Agency Public Health laboratory fund balance of \$28,569 will fund construction costs associated with the minor renovations required at the Health Services Agency Public Health Laboratory for the PCR Project.
(Continued on Page 2)

BOARD ACTION AS FOLLOWS:

No. 2010-748

On motion of Supervisor O'Brien, Seconded by Supervisor Monteith
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Monteith, DeMartini, and Chairman Grover

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

2) _____ Denied

3) _____ Approved as amended

4) _____ Other:

MOTION:



ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

FISCAL IMPACT (Continued):

On September 21, 2010, the Board of Supervisors approved a contract for professional architectural design services for the development of plans and specifications for the minor renovations at the Health Services Agency Public Health Laboratory to Pacific Design Associates, Inc. of Modesto, California, for the lump sum amount not to exceed \$9,950.

At this time, the Chief Executive Office is returning to the Board for approval of the plans and specifications for the minor renovations at the Health Services Agency Public Health Laboratory.

Staff is also requesting approval to issue a notice inviting bids on December 15, 2010 for the construction phase of the project, and to modify the bid date if necessary. Staff is also requesting approval to open and evaluate bids on January 19, 2011, immediately after 2:00 p.m., and return to the Board to recommend an award to the lowest responsible bidder.

The Chief Executive Office will return to the Board to recommend a construction contract award to the lowest responsible bidder prior to beginning the construction phase of the project.

There is no additional impact to the General Fund associated with this item.

DISCUSSION:

The construction of the Stanislaus County Health Services Agency Public Health Laboratory was completed in 1962. The public's health depends upon the rapid, reliable transmission of test results and other vital health data. Elected officials, policy makers, public health, clinicians and emergency responders rely on this data to diagnose, treat and control health threats. Public health laboratories play an essential role in public health and safety. They function to generate critical data used to make informed decisions regarding the implementation of preventative measures and development of effective policies that protect the public from unforeseen conditions, hazards, and threats.

The Health Services Agency's Public Health Department identified the need for a polymerase chain reaction (PCR) system as a critical piece of laboratory infrastructure that will be key in the surveillance and monitoring activities of the County Health Department. Laboratory applications for this equipment include confirmation of bioterrorism, the H1N1 virus and norovirus.

On December 22, 2009, the Board approved minor renovations needed at the Public Health Laboratory to create an environment where staff can operate most efficiently and effectively and space where the new PCR equipment could be accommodated.

Recommended modifications to the existing space to support the PCR system were approved by the Board as follows:

- Removal of the existing door from the hall into the new lab space. The existing door into the lab will remain;
- Remove the carpet and replace with sheet vinyl with coved base;
- Remove the existing acoustical ceiling and replace with new gypsum board ceiling;
- Re-paint the room;
- Install new electrical receptacles to accommodate the new equipment;
- Modify the existing heating and air conditioning system to tie into the existing lab system;
- Provide new cabinetry and counter tops; and
- Install a new sink with eye-wash capability.

At that time, the Board also authorized the Project Manager to issue an RFP for licensed contractors for minor renovations.

In the Spring of 2010, Capital Projects staff reviewed the project and the complex requirements of the equipment and recommended a change to the project delivery method. Capital Projects staff believed by enlisting professional architectural design services, to control the cost and the quality of the project, and to ensure the bids the County receives from Licensed Contractors are comparable.

On June 29, 2010, the Board approved a recommended change to the project delivery method which included issuing a RFP for architectural design services for the development of plans and specifications for the minor renovations at the Health Services Agency Public Health Laboratory, and authorized the Project Manager to open and evaluate proposals on July 21, 2010 immediately after 4:00 p.m., and return to the Board to recommend an award.

At this time, the Chief Executive Office is returning to the Board for approval of the plans and specifications for the minor renovations at the Health Services Agency Public Health Laboratory.

The Chief Executive Office will return to the Board to recommend a construction contract award to the lowest responsible bidder prior to beginning the construction phase of the project.

It is anticipated that when the project is completed, the new PCR equipment will enable the Health Services Agency Public Health Laboratory's capability in identifying viral diseases inclusive of bioterrorism, influenza, and norovirus. This is extremely important as longer wait times reduce Public Health's ability to respond to and mitigate H1N1 infections. As longer turnaround times occur due to an ever increasing number of

sick people emerging, the ever-widening sphere of infection could ultimately result in an "outbreak".

Attachment 1 is the Floor Plan Diagram which shows the area recommended for minor renovation as included in the recommended design. A set of Plans and Specifications are available from the Clerk of the Board of Supervisors detailing the entire minor renovation project.

POLICY ISSUES:

Approval of this matter supports the Board priorities of A Safe Community, A Healthy Community, and Efficient Delivery of Public Services.

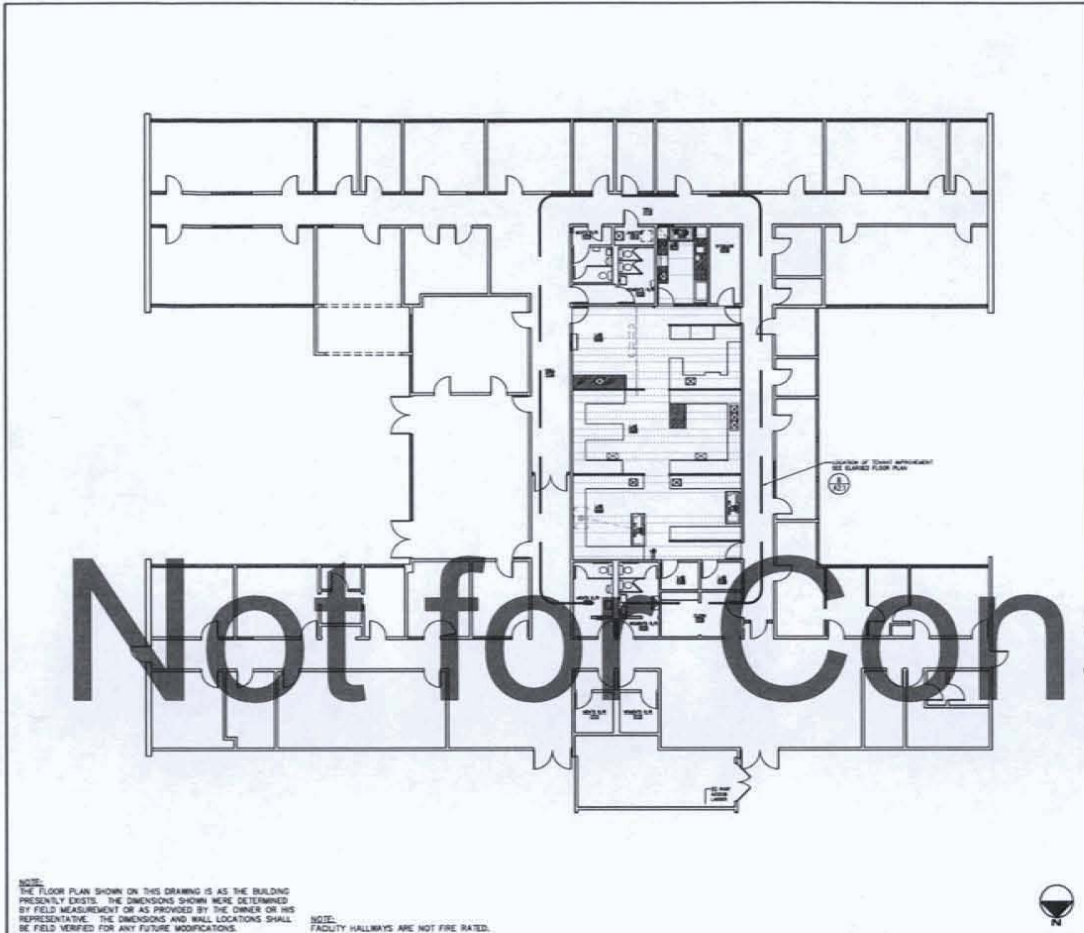
STAFFING IMPACT:

Chief Executive Office Capital Projects, Health Services Agency Public Health, and Office of Emergency Services staff will collaborate to ensure the project is implemented.

CONTACT PERSON:

Patricia Hill Thomas, Chief Operations Officer. Telephone: 209-525-6333

**ATTACHMENTS AVAILABLE
FROM YOUR CLERK**



NOTE: THE FLOOR PLAN SHOWN ON THIS DRAWING IS AS THE BUILDING PRESENTLY EXISTS. THE DIMENSIONS SHOWN WERE DETERMINED BY FIELD MEASUREMENT OR AS PROVIDED BY THE OWNER OR HIS REPRESENTATIVE. THE DIMENSIONS AND WALL LOCATIONS SHALL BE FIELD VERIFIED FOR ANY FUTURE MODIFICATIONS.

NOTE: FACILITY HALLWAYS ARE NOT FIRE RATED.

19 BUILDING FLOOR PLAN

1/32"=1'-0"

DOOR & HARDWARE SCHEDULE	
TYPE / DESCRIPTION	
A	NEW BUILDING STANDARD INTERIOR DOOR AND FRAME, 2'-0" x 7'-0"
B	EXISTING DOOR TO REMAIN, PROTECT FROM DAMAGE
HARDWARE SCHEDULE	
TYPE / DESCRIPTION	
1	BUILDING INTERIOR STANDARD LOCKSET, BUTTE LEVER HARDWARE, FINISH LAM. DESCRIBED LOCKETS, EXISTING SOLID CORE WOOD DOOR TO HAVE EXISTING ELECTRONIC JACK REMOVED TO THE DOOR.
2	BUILDING INTERIOR STANDARD LOCKSET, BUTTE LEVER HARDWARE, GLASS, SOUND/SMOKE SEALS.
3	BUILDING INTERIOR STANDARD LOCKSET, BUTTE LEVER HARDWARE, GLASS, SOUND/SMOKE SEALS.
4	BUILDING INTERIOR STANDARD LOCKSET, BUTTE LEVER HARDWARE, GLASS, SOUND/SMOKE SEALS.

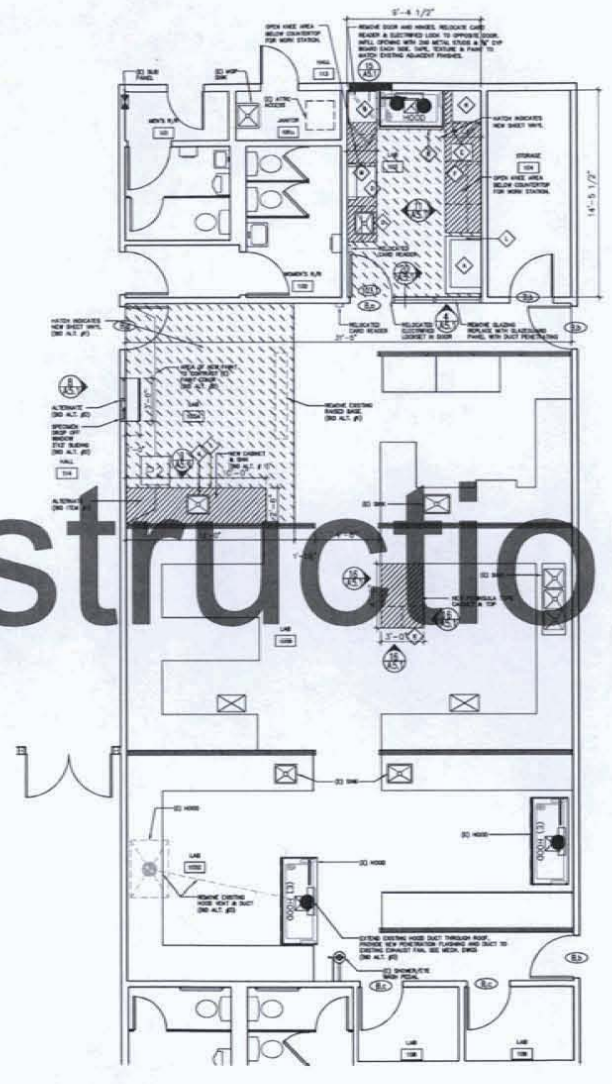
SYM	DESCRIPTION	MAKE/MODEL	DIMENSIONS	REMARKS
A	PCR SYSTEM DUPLICATION AMPLIFICATION MODULE**	ROCHE APPLIED SCIENCE/MAGNA PURE LC 2.0	W:40" D:28" H:30"	291.6 LBS
B	BIOSAFETY CABINET**	MUNIR/435-450	W:53.5" D:33.7" H:61"	
C	SINK WITH DRAIN PUMP**		W:30"	
D	AIR CLEAN FOR WORKSTATION**	DAIGEN/20A CUBE	W:25.8" D:24.4" H:22.4"	155.1 LBS
E	CENTRIFUGE**	APPLIED BIOSYSTEMS/7500 FAST SW	W:14" D:17.7" H:19.7"	
F	BENCH WORKSTATION**		W:8' 11.1/2" D:27.8" H:27"	
G	REFRIGERATOR**	REVCO/RES-400A	W:24" D:28" H:33.4"	
H	FREEZER**	REVCO/ULI-430A	W:24" D:28" H:33.4"	
I	COUNTER**			
J	SINK**			
K	PENINSULA ISLAND**			
L	STEEL TABLE**	LIBERTY INDUSTRIES INC/7-750-304 H	W:48" D:30" H:30"	
M	WATER PURIFICATION SYSTEM**	FORELAB/ELSA DPHON-07	W:27.7" D:15.8" H:18.1"	44 LBS

* OWNER PROVIDED
** GENERAL CONTRACTOR PROVIDED

20 DOOR/HARDWARE SCHEDULE

19 EQUIPMENT SCHEDULE

N



SEE EQUIPMENT SCHEDULE DETAIL 18/A2.1 FOR SPECIFIC INFORMATION

8 ENLARGED FLOOR PLAN

1026-A201

REVISIONS	BY

PACIFIC DESIGN ASSOCIATES, INC.
ARCHITECTS
1000 W. BROADWAY, SUITE 1000
MADERA, CA 95350
TEL: (415) 351-1111
WWW.PACIFICDESIGNASSOCIATES.COM

FLOOR PLAN,
ENLARGED R/R PLAN,
& DETAILS

Public Health Lab Renovations
for
**STANISLAUS COUNTY
HEALTH SERVICES AGENCY**
830 SCIENCE DRIVE
MADERA, CA 95350

DATE	10-15-10
SCALE	AS NOTED
DRAWN	MDN
JOB	10.09026
SHEET	A2.1

Table of abbreviations and symbols used in the drawing, including codes for materials, construction, and equipment.

BID SET

TENANT IMPROVEMENTS

FOR

STANISLAUS COUNTY

HEALTH SERVICES AGENCY

820 SCENIC DRIVE

MODESTO, CALIFORNIA 95350

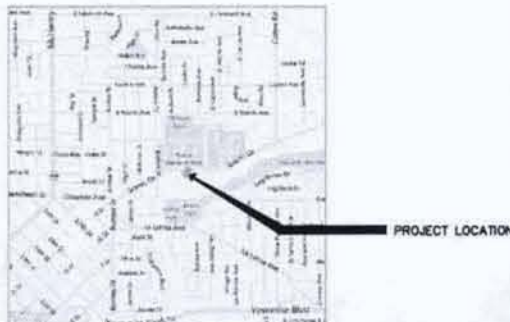
APN # 111-048-001

Table of drawing sheets and their titles, including: A0.1 TITLE SHEET, BUILDING DATA, SHEET INDEX, NOTES, SYMBOLS...; A1.1 OVERALL SITE PLAN; A2.1 FLOOR PLAN, ENLARGED FP, EQUIPMENT SCHEDULE...; A3.1 INTERIOR ELEVATIONS, SPECIFICATIONS...; A6.1 REFLECTED CEILING PLAN, ROOF PLAN & INTERIOR DETAILS...; M2.0 MECHANICAL SCHEDULES, LEGEND, NOTES, DETAILS; M2.1 MECHANICAL FLOOR PLAN & SECTIONS; M3.1 HVAC ROOF PLAN & SECTIONS; P1.1 PLUMBING SCHEDULES, LEGEND, NOTES & FLOOR PLAN; E1.0 DEMO & ROOF CONDUIT PLAN, LEGEND, SYMBOLS, NOTES...; E2.0 LIGHT, POWER AND SIGNAL PLAN, LIGHTING PLAN, SCHEDULES; E3.0 TITLE 24 ENERGY LIGHTING COMPLIANCE FORMS.

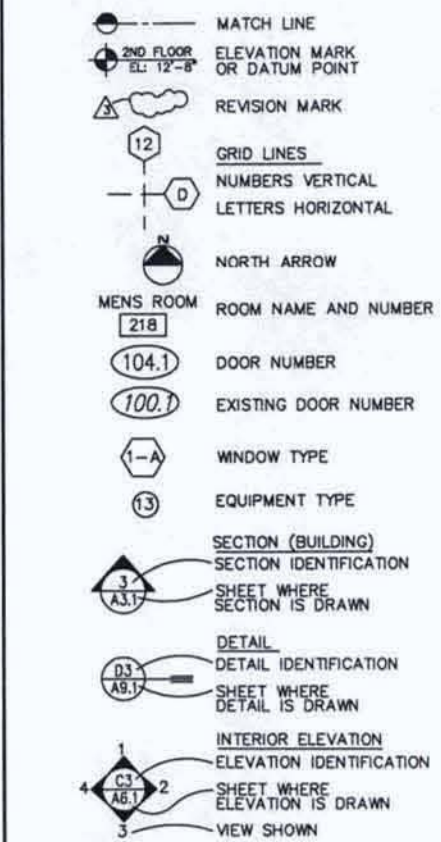
1026-A001 REVISIONS BY table with a grid for tracking changes to the drawing.

1 SHEET INDEX

NTS



18 ABBREVIATIONS



14 PROJECT DATA

PROJECT LOCATION: 820 SCENIC DRIVE, MODESTO, CALIFORNIA

ZONING: C-2

SITE AREA: 1.22 ± ACRES

OCCUPANCY: B - LABORATORIES & MEDICAL OFFICES

TYPE OF CONSTRUCTION: V B

NO. OF STORIES: ONE

AREA, TOTAL: BUILDING: ±15,130 SF; REMODEL LAB: 136 SF

TENANT SPACES: EXISTING LAB SUITE: 1,909 SF; REMODEL LAB: 136 SF

TOTAL AREA IMPROVED: 2,045 SF

FIRE SPRINKLERS: NONE

ALLOWABLE AREA: 9,000 SF (TABLE 503)

ALLOWABLE AREA INCREASES: SEPARATION ON FOUR SIDES. MINIMUM OPEN YARD WIDTH = 38'-0" PER 506.1 & 506.2 CBC. P = 752' W = 38'. L₁ = (752/752 - 0.25) 38/30. L₂ = .75 X 1.26 = .95. A = (A₁ + (A₁ x L₁) / W) + (A₂ x L₂) / W. A = (9000 + (9000x.95) / 38) + (9000x0.95) / 38. A = 9000 + 8550. A = 17,550 SF. 15,130 SF < 17,550 SF; THEREFORE OK.

OCCUPANT LOAD: LABORATORY: 2,045 / 200 = 10; OFFICES: 13,085 / 100 = 131. TOTAL OCCUPANTS: 141

PARKING REQUIREMENTS: 15,130 SF / 300 SF/SPACE = 51

PARKING PROVIDED: STANDARD: 182; ACCESSIBLE: 10; TOTAL: 192

PLANS ARE COMPLETE & CONFORM WITH CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, PART 2 (2007 CALIFORNIA BUILDING CODE), PART 3 (2007 CALIFORNIA ELECTRICAL CODE), PART 4 (2007 CALIFORNIA MECHANICAL CODE), PART 5 (2007 CALIFORNIA PLUMBING CODE) 2008 CALIFORNIA ENERGY CODE, AND STANISLAUS COUNTY CODE.

ALL WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA).

FIRE EXTINGUISHER LOCATIONS AND TYPE SHALL BE PROVIDED FOR BUILDINGS UNDER CONSTRUCTION FOR THE TYPE OF HAZARD3 PRESENT DURING CONSTRUCTION AS REQUIRED BY THE FIRE MARSHAL.

WHERE PLAN & DETAILS SHOW WOOD MEMBERS, CONTRACTOR MAY SUBSTITUTE LIGHT GAUGE METAL FRAMING OF THE SAME DEPTH, STUD GAUGE, LIMITING HEIGHTS AND SPANS ARE TO BE AS REQUIRED BY THE STUD MANUFACTURER'S SPECIFICATIONS.

- DEMOLISH WALLS AND DOORS AS SHOWN ON DRAWINGS
- INSTALL NEW WALLS AND CEILING AS SHOWN ON DRAWINGS
- INSTALL NEW HVAC DUCTWORK & GRILLES AS SHOWN ON DWGS.
- INSTALL NEW ELECTRICAL LIGHTING, POWER & SERVICE AS SHOWN ON DWGS.
- INSTALL NEW FINISHES AS SHOWN ON DWGS.
- INSTALL NEW DOORS & HARDWARE AS SHOWN ON DWGS.
- INSTALL NEW COUNTERTOPS & CABINETS AS SHOWN ON DWGS.
- INSTALL NEW PLUMBING FIXTURES AND SUPPLY LINES AS SHOWN ON DWGS.
- INSTALL NEW LABORATORY EQUIPMENT AS SHOWN ON DWGS.
- OWNER SHALL PROVIDE EQUIPMENT AS NOTED ON A2.1 DET 16 FOR CONTRACTOR INSTALLATION AND FINAL HOOKUP.

2 VICINITY MAP

NTS

OWNER: STANISLAUS COUNTY, 1010 TENTH STREET SUITE 6800, MODESTO, CALIFORNIA 95354, 209 325-6333

TENANT: SC HEALTH SERVICES, 820 SCENIC DRIVE, MODESTO, CA 95350

ARCHITECTURAL: AND INTERIOR DESIGN: PACIFIC DESIGN ASSOCIATES, INC., 1218 K STREET, SUITE 100, MODESTO, CA 95354, 209 577-2286, FAX 209 577-5726, pdad@pacdesign.com

ENGINEER MECHANICAL: LICENSE NO.: GOMO ENGINEERING, 2723 TEJON STREET, Lodi, CA 95242, 209-367-0899 FAX 367-0898

ENGINEER PLUMBING: LICENSE NO.: GOMO ENGINEERING, 2723 TEJON STREET, Lodi, CA 95242, 209-367-0899 FAX 367-0898

ENGINEER ELECTRICAL: LICENSE NO.: EJO ENGINEERING, 5445 CONVEY CREEK CIRCLE, STOCKTON, CA 95207, 209-473-4187, ejoengr@ebogood.net

TITLE 24: GOMO ENGINEERING, 2723 TEJON STREET, Lodi, CA 95242, 209-367-0899 FAX 367-0898

GOVERNING AGENCIES: STANISLAUS CO. DEPT. OF PLANNING AND COMMUNITY DEVELOPMENT, 1010 10th STREET, SUITE 3400, MODESTO, CA 95354

20 SYMBOLS

16 PROJECT DATA

12 GENERAL NOTES

8 PROJECT SCOPE

4 PROJECT CONTACTS

COVER SHEET

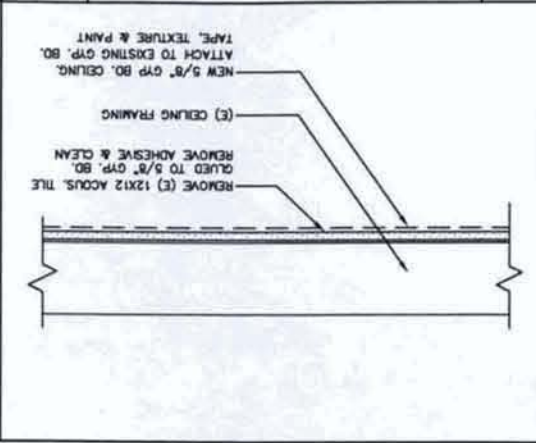
Public Health Lab Renovations for: STANISLAUS COUNTY HEALTH SERVICES AGENCY, 820 SCENIC DRIVE, Modesto, CA 95350

DATE: 10-15-10; SCALE: AS NOTED; DRAWN: MDN; JOB: 10.09026; SHEET: A0.1

20

18

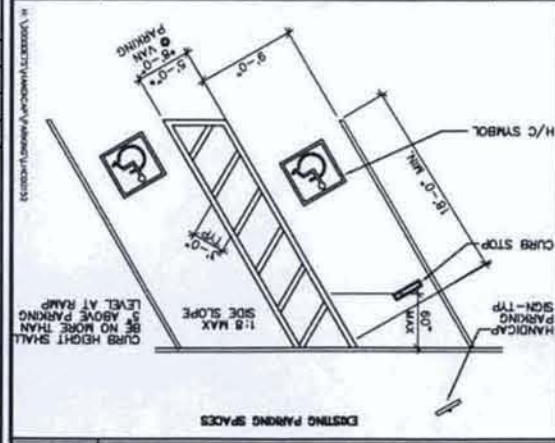
12 GYP. BD. CEILING



8 GENERAL NOTES

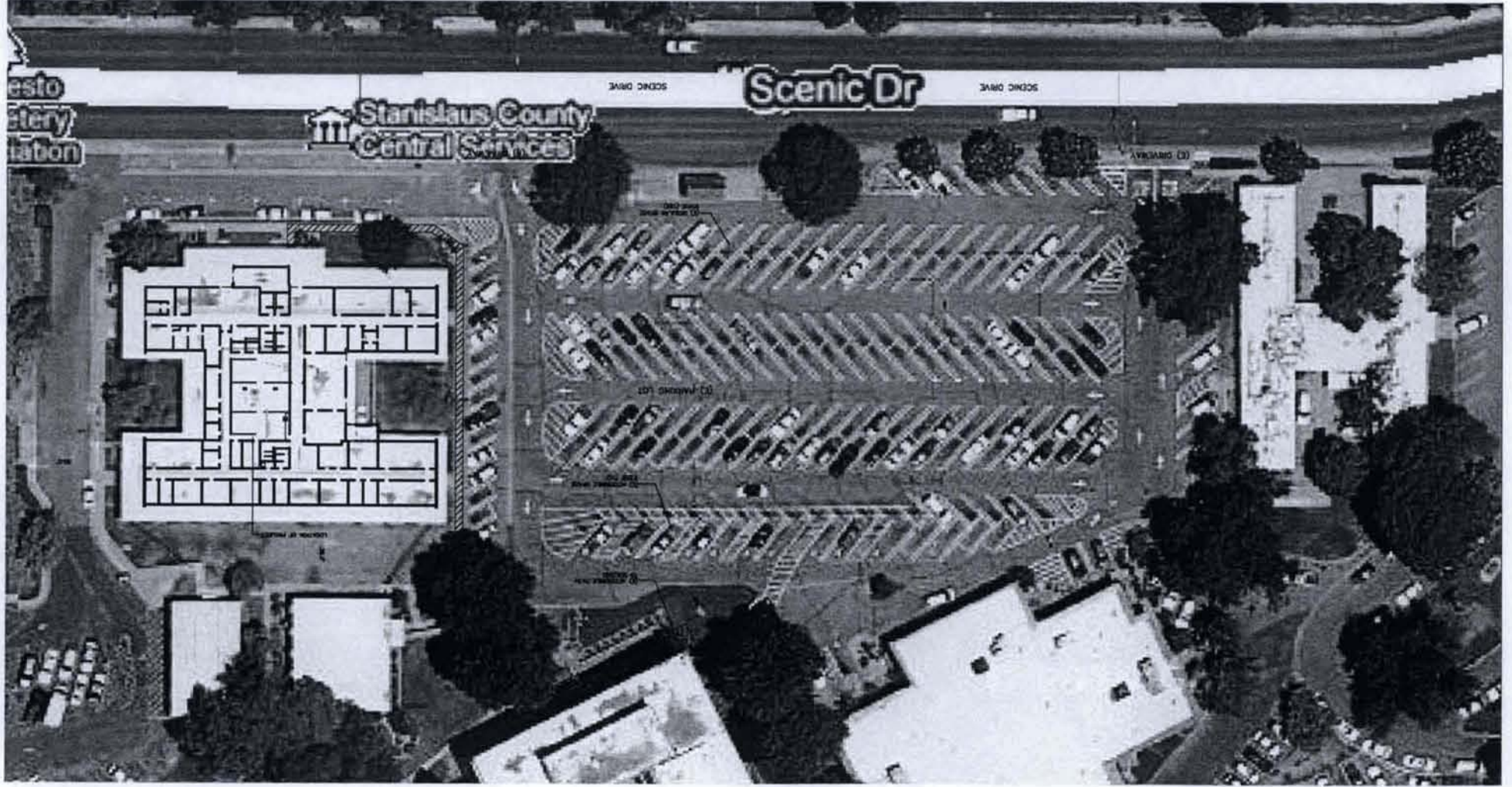
THE CONTRACTOR SHALL VISIT PROJECT SITE PRIOR TO BOOKING, VERIFY ALL EXISTING CONDITIONS AT THE PROJECT SITE FIELD VERIFY ALL DIMENSIONS FROM TO FABRICATION OR ORDERING OF ANY ITEMS, VERIFY ALL WORK TO BE DONE WITH THE OWNER, VERIFY EACH PLACEMENT OF ITEMS WITH OWNER.
 THE CONTRACTOR SHALL TAKE CARE DURING DEMOLITION AND CONSTRUCTION NOT TO DAMAGE ANY EXISTING CONSTRUCTION AND/OR PLUMBING WHICH IS TO REMAIN, ANY DAMAGE SHALL BE REPAIRED OR REPLACED AT NO COST TO THE OWNER.
 PROVIDE ALL NECESSARY TEMPORARY SUPPORTS, SHORING & BRACING REQUIRED DURING CONSTRUCTION.
 PATCH ALL FLOORS, WALLS & CEILINGS AS REQUIRED IN AREAS WHERE REMOVAL IS DONE. MATCH ALL EXISTING FINISH MATERIALS, TEXTURES AND FINISHES UNLESS OTHERWISE NOTED. FLUSH, CLEAN & LEVEL TO ADJACENT SURFACES.
 NEW WALLS, CEILINGS, FLOORS, ROOFS, ETC. TO INTERSECT EXISTING WALLS, CEILINGS, FLOORS, ROOFS, ETC. SHALL BE FLUSH, CLEAN AND LEVEL. ALL RE-FINISH TO BE ACCURATELY SCHEDULED FOR STRUCTURAL INTEGRITY & SAFETY.
 ALL NEW WORK SHALL BE COMPLETE WITH MAINT. FRAME, HANDRAILS, ETC. FIELD VERIFY MAINT. THICKNESS AND ACTUAL DOOR SIZE. INTERIOR DOORS WHICH ARE REMOVED, SALVAGE FOR REUSE IF DOORS ARE IN GOOD CONDITION AND APPROXIMATE SIZE AS INDICATED ON DRAWINGS. DEMOLITION AND CONSTRUCTION.
 REPAIR AND/OR REPLACE ELECTRICAL SWITCHES, SWITCH PLATES, OUTLETS, OUTLET PLATES, ETC. WHICH ARE LOOSE, BROKEN OR MISSING. CONTRACTOR IS RESPONSIBLE FOR DESIGNING ALL REPAIRS IN LAB AREAS WHICH SHOWN ON PLANS OR NOT.
 ALL DETAILS, NOTES AND REFERENCES ARE TYPICAL AND APPLY IN SIMILAR CONDITIONS. METHODS NOTED ON PLANS OR NOT.
 PROVIDE CASING BEADS AT ALL EXPOSED DRYWALL JOINTS, PROVIDE ALL OTHER MISCELLANEOUS METL. TRIM AS REQUIRED FOR A COMPLETE AND PROPER INSTALLATION.

4 ANGLED PARKING STALL



19

15 OVERALL SITE PLAN



18

17

1026-A101
 REVISIONS
 BY

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PACIFIC DESIGN ASSOCIATES, INC.
 1001 S. 10TH ST. SUITE 200
 OAKLAND, CA 94612
 DONALD W. HESTER, AIA

OVERALL SITE PLAN
 ENLARGED SITE PLAN
 DETAILS

Public Health Lab Renovations
 for:
**STANISLAUS COUNTY
 HEALTH SERVICES AGENCY**
 820 SCENIC DRIVE
 Modesto, CA 95350

DATE: 10-15-10
 SCALE: AS NOTED
 DRAWN: MDM
 JOB: 10.09026
 SHEET: A.1.1

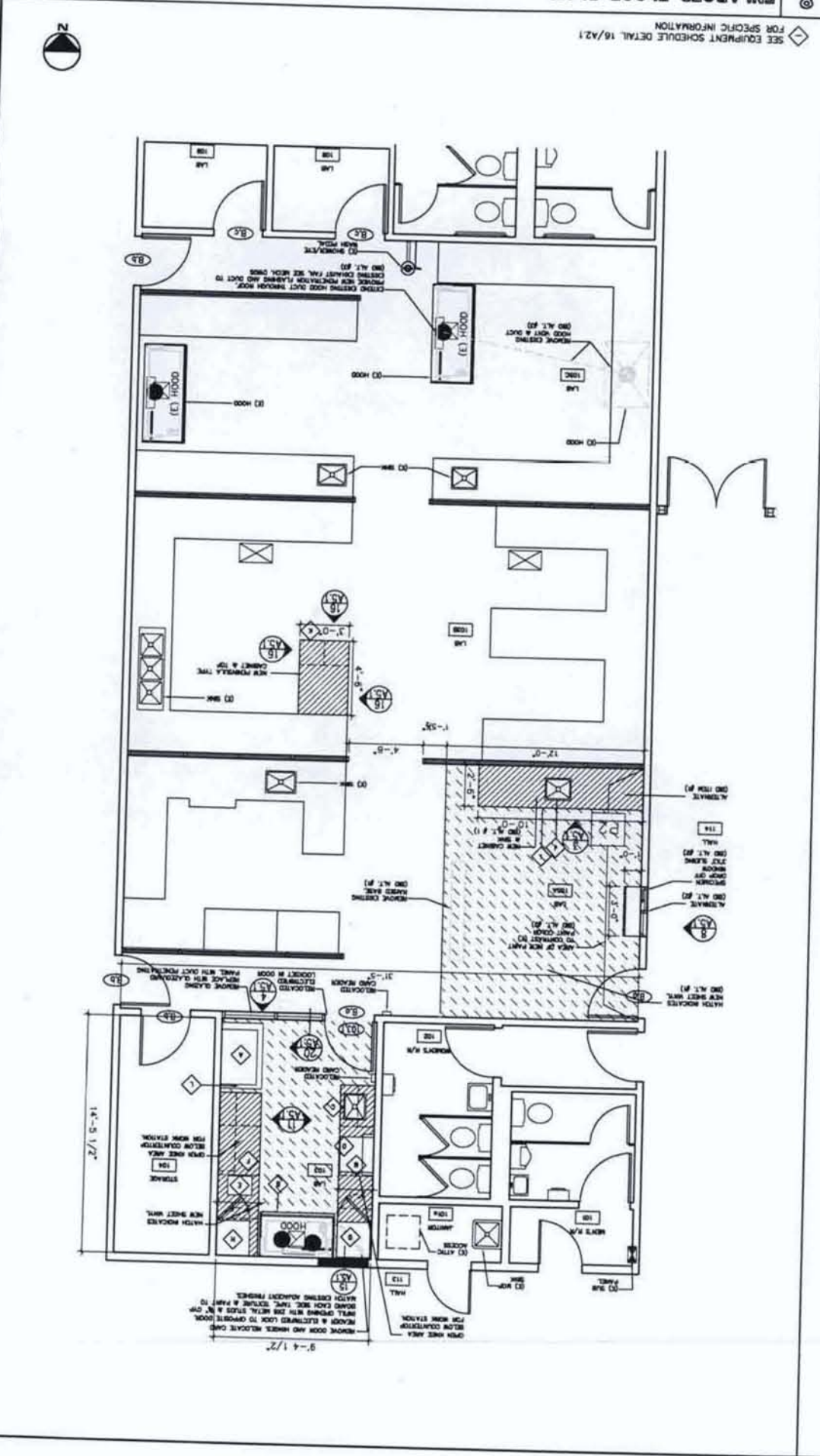
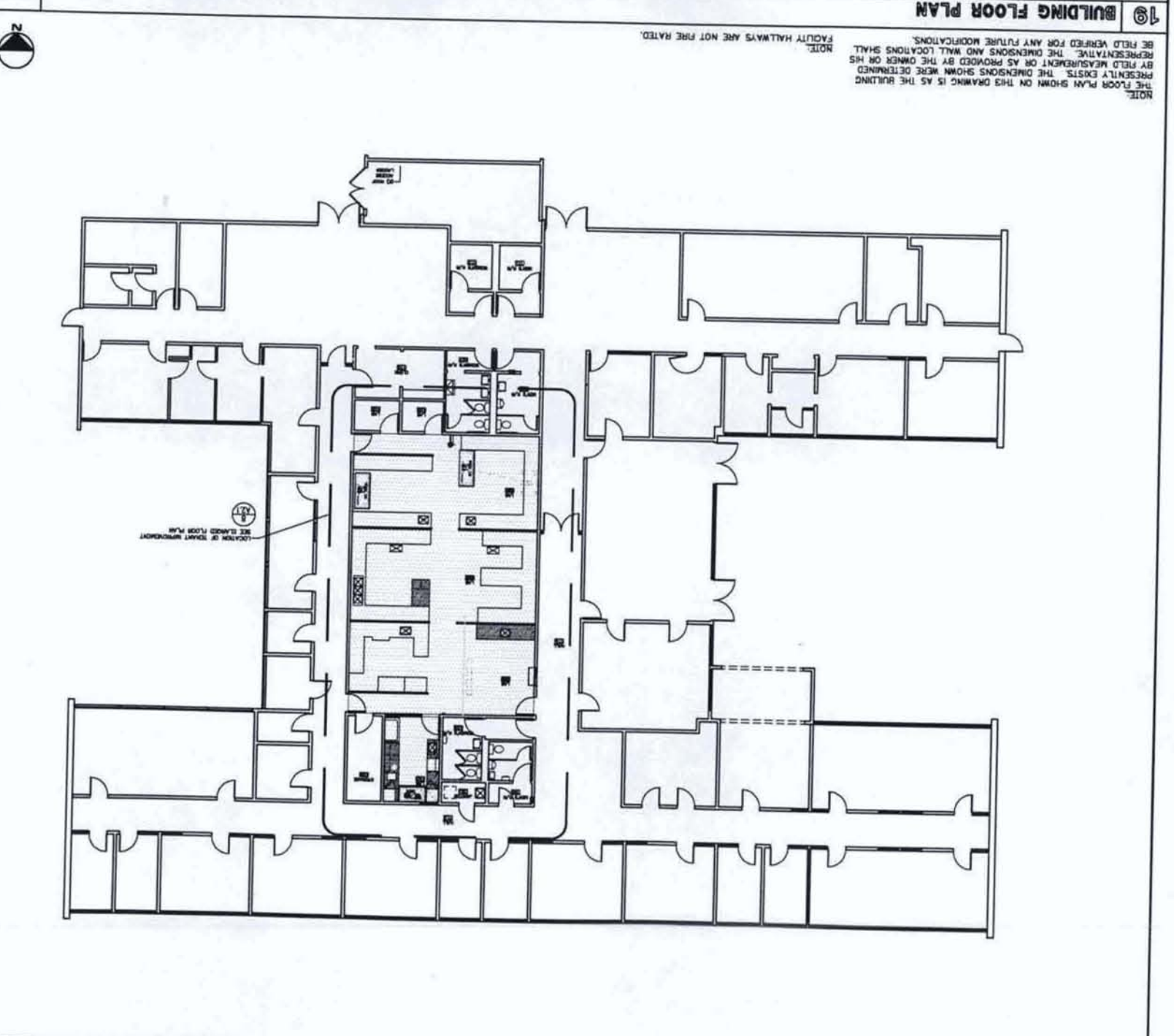
20 DOOR/HARDWARE SCHEDULE

TYPE / DESCRIPTION	DOOR & HARDWARE SCHEDULE
A NEW BUILDING STANDARD INTERIOR DOOR AND FRAME, 3'-0" x 7'-0"	
B EXISTING DOOR TO REMAIN, PROTECT FROM DAMAGE	
HARDWARE SCHEDULE	
TYPE / DESCRIPTION	
1 BUILDING INTERIOR STANDARD LOCKSET, BUTTS, LEVER HARDWARE, CLOSURE, SOUND/SMOKE SEALS	
2 BUILDING INTERIOR STANDARD LOCKSET, BUTTS, LEVER HARDWARE, CLOSURE, SOUND/SMOKE SEALS	
3 BUILDING INTERIOR STANDARD LOCKSET, BUTTS, LEVER HARDWARE, CLOSURE, SOUND/SMOKE SEALS	
4 BUILDING INTERIOR STANDARD LOCKSET, BUTTS, LEVER HARDWARE, CLOSURE, SOUND/SMOKE SEALS	

19 EQUIPMENT SCHEDULE

** OWNER PROVIDED
** GENERAL CONTRACTOR PROVIDED

SYM	DESCRIPTION	MAKE/MODEL	DIMENSIONS	REMARKS
A	PUR SYSTEM-DUPLICATION APPLICATION MODULE*	ROCHE APPLIED SCIENCE/MAGNA PURE LC 2.0	W:40" D:28" H:35"	381.8 LBS
B	BIOSAFETY CABINET*	WHAIR/435-400	W:33" D:32" H:78" H:61"	307.8 LBS
C	SINK WITH DRAIN PUMP**		W:30"	
D	AIR CLEAN FOR WORKSTATION*		W:23.6" D:24.4" H:22.4"	155.1 LBS
E	CENTRIFUGE*	QUAD/DNA CUBE	W:25.6" D:24.4" H:22.4"	
F	BENCH WORKSTATION*	APPLIED BIOSYSTEMS/7500 FAST DX	W:14" D:17" H:19.3"	
G	REFRIGERATOR*	REVO/REB-40HA	W:9" H:11 1/2" D:2' 6" H:2'	
H	FREEZER*	REVO/ALT-430A	W:24" D:28" H:33.4"	
I	COUNTER**		W:24" D:28" H:33.4"	
J	SINK**		W:24" D:28" H:33.4"	
K	PENINSULA ISLAND**		W:48" D:30" H:30"	
L	STEEL TABLE**	LIBERTY INDUSTRIES INC./7-750-304 H	W:27.1" D:10.6" H:18.1"	44 LBS
M	WATER PURIFICATION SYSTEM**	PURELAB/ELGA OPTION-07		
SEE PLUMBING				
BD ALT. #1				



Public Health Lab Renovations
for:
STANISLAUS COUNTY HEALTH SERVICES AGENCY
820 SCENIC DRIVE
Modesto, CA 95350

FLOOR PLAN,
ENLARGED R/R PLAN,
& DETAILS

PACIFIC DESIGN ASSOCIATES, INC.
1026-A201

DATE: 10-15-10
SCALE: AS NOTED
DRAWN: MGN
JOB: 10.09026
SHEET: A2.1

REVISIONS BY

FLOOR	RM. NO.	ROOM NAME	FLOORS	BASE	NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING	MISC.	RM. NO.	NOTES
					SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH				
						SHEET VINYL, MEDICAL QUALITY (E) SHEET VINYL TO REMAIN BID ALTERNATE #1										
						6" SHEET VINYL COVERED (E) 6" SHEET VINYL COVERED, DETAIL 19/A2.2 BID ALTERNATE #1										
						5/8" GYP. BD. TYPE "X" TAPE & TEXTURE (SMOOTH) & PAINT (E) TO REMAIN										
						NEW PAINT - (P-1) EGGSHELL										
						5/8" GYP. BD. TYPE "X" TAPE & TEXTURE (SMOOTH) & PAINT (E) TO REMAIN										
						BID ALTERNATE #2										
						NEW PAINT - (P-1) EGGSHELL										
						5/8" GYP. BD. TYPE "X" TAPE & TEXTURE (SMOOTH) & PAINT (E) TO REMAIN										
						BID ALTERNATE #2										
						NEW PAINT - (P-1) EGGSHELL										
						12x12 CEILING TILE TO BE REMOVED. 5/8" GYP. BD. TAPE & TEXTURE (SMOOTH) & PAINT (E) 12x12 CEILING TILE TO REMAIN										
						CHEMICAL RESISTANT COUNTERTOPS PLASTIC LAMINATE CABINET FACES MELAMINE SHELVES AND DRAWER INT										
	103	LAB													103	SEE FLOOR PLAN FOR EXTENT OF 5/8" TYPE X GYP. BD. WALLS
	105A	LAB													105A	
	105B	LAB													105B	
	105C	LAB													105C	
	113	HALL													113	SEE FLOOR PLAN FOR EXTENT OF 5/8" TYPE X GYP. BD. WALLS
	114	HALL													114	ALTERNATE BID ITEM #1 & #2

1025-A501
REVISIONS BY
PACIFIC DESIGN ASSOCIATES, INC.
DONALD W. PEASE, P.E.
PACIFIC DESIGN ASSOCIATES, INC.
1511 F STREET, SUITE 100, COSTA MESA, CA 92626
TEL: 714.440.2211
WWW.PDASSOCIATES.COM
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18 FINISH SCHEDULE

NOTE: REFER TO SPECIFICATION DIVISIONS 15 AND 16 FOR HVAC, PLUMBING AND ELECTRICAL PENETRATIONS OF WALLS

ADDITIONAL LAYER OF 5/8" TYPE "X" GYP. BD AT SOUND WALLS, INDICATED BY THE LETTER "S" IN THE WALL TYPE SYMBOL, SEE PLANS FOR LOCATION.

FACE OF STUD DIM. PT. ON PLAN U.N.O.

5/8" GYP. BD. EACH SIDE, TYPE "X" AT FIRE WALL TYPE 2 ONLY

WALL TYPE PER PLANS

SOUND INSULATION AT WALLS INDICATED BY THE LETTER "S" IN THE WALL TYPE SYMBOL

INTERIOR FINISH AS OCCURS PER INT. ELEVATIONS

GA File No. WP-1200
GYPSUM WALLBOARD, SHEET METAL STUDS

- One layer type X gypsum wallboard or veneer base applied at right angles or parallel to each side of 3-5/8" metal studs with 1" Type S drywall 8" o.c. at vertical edges and 12" o.c. at top & bottom runners and intermediate studs. Stagger all vertical and horizontal joints 24" o.c. each side and opposite sides. (NLS)

THICKNESS: 4 7/8" FIRE TEST: DESIGN #415
APPROX. WEIGHT: 6 PPF SOUND TEST: STC 49

WALL SYMBOL	STUD SIZE	STUD SPACING	STUD GAUGE
2 - 1 HR RATED	3 5/8"	16" O.C.	20
8 - NON-RATED	5 5/8"	16" O.C.	20
14 - NON-RATED	3 5/8"	16" O.C.	20

(E) RIGID INSUL. W/TAPERED PERLITE BD.
(E) CLASS A ROFFING
(E) WOOD PLYWOOD PANEL PAINTED.
(E) PLYWOOD PANEL, PAINTED
(E) SOUND INSULATION TYP. U.N.O.
NEW DUCT EXTENDING FROM EXISTING (SEE MECHANICAL)
REMOVE GLAZING, REPLACE WITH GLAZEQUARD 1000 PANEL. PROVIDE CIRCULAR OPENING FOR DUCT, PROVIDE AIRTIGHT SEAL.
(E) STEEL STOP
(E) GLAZING
(E) STEEL FRAME
(E) 6" COVERED SHEET VINYL

NEW ELECTRICAL SUB PANEL
WATER PURIFICATION SYSTEM BY OWNER
ADJ. SHELVES
CARD READER
AIR CLEAN POR BY OWNER
REFRIGERATOR BY OWNER
12" BACKSLASH
CHEMICAL RESISTANT COUNTER
OPEN BELOW COUNTER
CLEAR SPACE UNDER SINK FOR ADA ACCESS
6" COVERED SHEET VINYL
DRAIN PUMP (SEE MECHANICAL)
INSULATE DRAIN AND HOT WATER LINE
FREEZER BY OWNER
CENTRIFUGE BY OWNER
PCR SYSTEM BY OWNER
STEEL TABLE BY OWNER
PAPER TOWEL DISP. SOAP DISP.

EAST WEST

(E) STEEL WALL WITH ALUM. & GLASS ABOVE
12" BACKSLASH
CHEMICAL RESISTANT COUNTER
CLEAR SPACE UNDER SINK FOR ADA ACCESS
6" COVERED SHEET VINYL
INSULATE DRAIN AND HOT WATER LINE
PAPER TOWEL DISP. SOAP DISP.

EAST SOUTH WEST

EAST SOUTH

DRAWERS ON BOTH SIDES
CHEMICAL RESISTANT COUNTER
OPEN BELOW COUNTER
(E) CABINET
6" RUBBER BASE

DRAWERS ON BOTH SIDES
CHEMICAL RESISTANT COUNTER
OPEN BELOW COUNTER
(E) CABINET
6" RUBBER BASE

SPECIMEN DROP OFF WINDOW "QUICKSERV" SELF CLOSING MANUAL SLIDING SERVICE WINDOW
(E) 6" COVERED SHEET VINYL

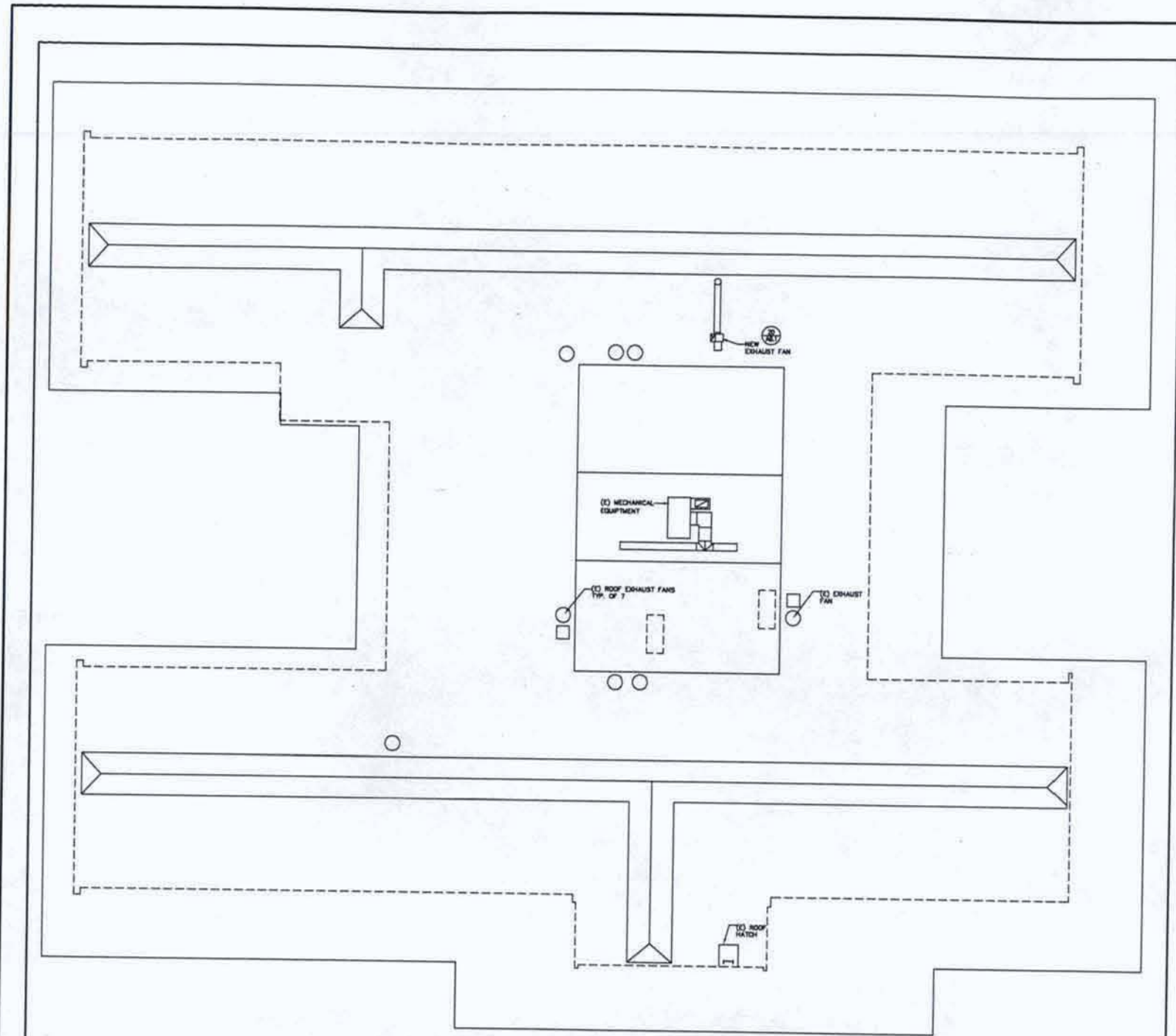
(E) WINDOW MULLION
(E) WOOD PANEL TO ROOF
NEW DUCT (SEE MECHANICAL)
(E) GYP. BOARD
(E) WOOD PANEL
LOUVER (SEE MECHANICAL)
REMOVE GLAZING REPLACE W/ GLAZEQUARD 1000 PANEL PROVIDE AIRTIGHT SEAL
2" COLLAR
(E) STEEL FRAMING
(E) GLAZING
(E) 6" COVERED SHEET VINYL

20 PANEL • GLASS WALL 1/2"=1'-0"
16 INTERIOR ELEVATION - PENINSULA CABINET 1/4"=1'-0"
8 DROP OFF WINDOW 1/4"=1'-0"
4 INT. ELEVATION- LAB WALL 1/4"=1'-0"

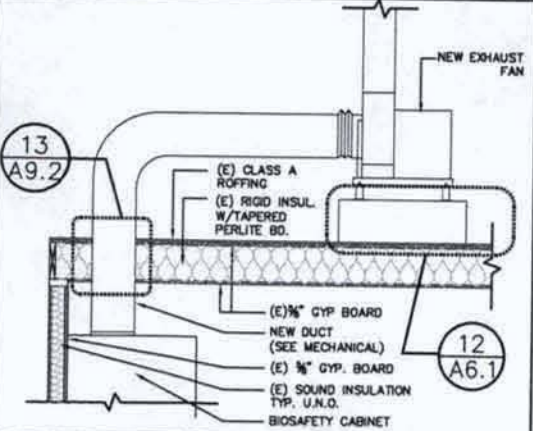
INTERIOR ELEVATIONS SPECIFICATIONS & DETAILS

Public Health Lab Renovations for:
STANISLAUS COUNTY HEALTH SERVICES AGENCY
820 SCENIC DRIVE
Modesto, CA 95350

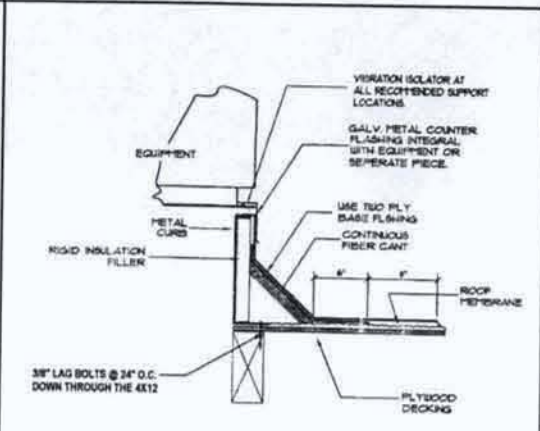
DATE: 10-15-10
SCALE: AS NOTED
DRAWN: MDN
JOB: 10.09026
SHEET: **A5.1**



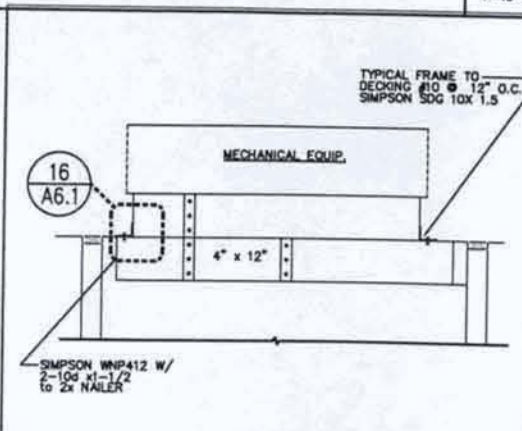
19 ROOF PLAN 1"=10'-0"



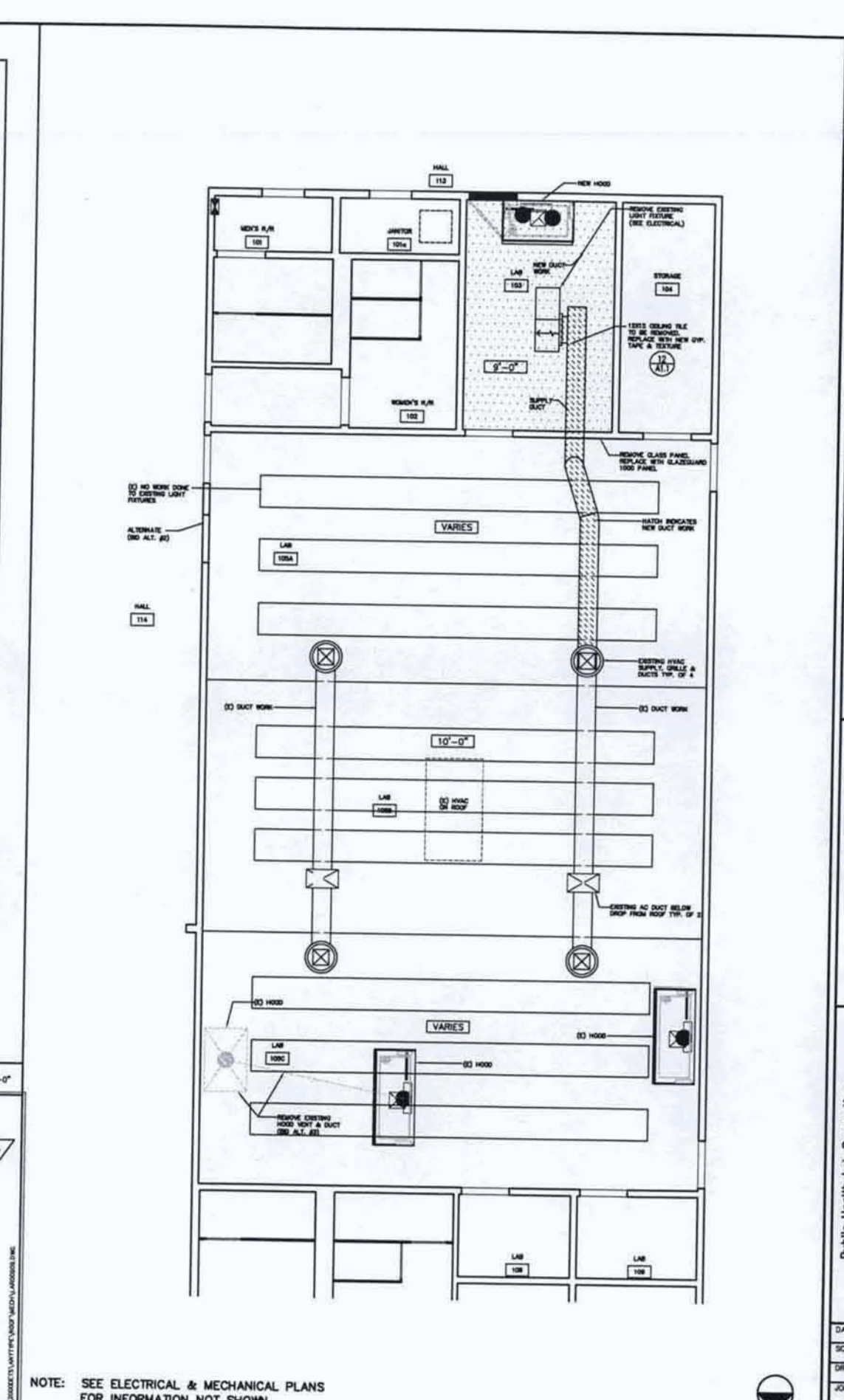
20 EXHAUST FAN TERMINATION 1/4"=1'-0"



16 ROOF CURB FLASHING NTS



12 EQUIP. ROOF CURB 1"=1'-0"



8 REFLECTED CEILING PLAN 1/4"=1'-0"

1026-A601

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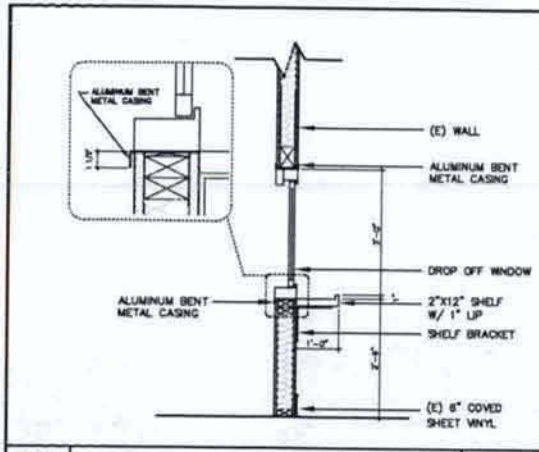
PACIFIC DESIGN ASSOCIATES, INC.
 1000 N. GARDEN ST. SUITE 200
 ANAHEIM, CA 92810
 DONALD W. PHELPS, AIA

REFLECTED
 CEILING PLAN
 & DETAILS

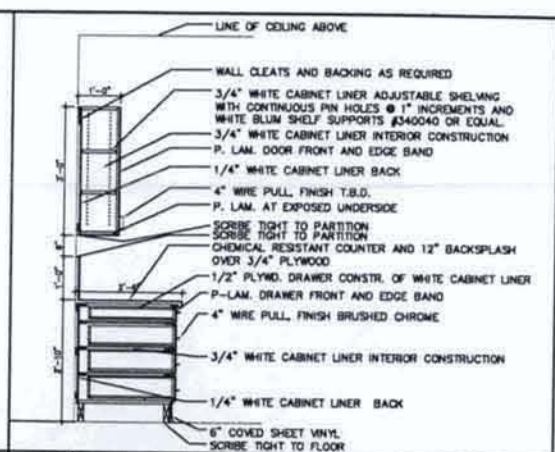
Public Health Lab Renovations
 for:
**STANISLAUS COUNTY
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 Modesto, CA 95350

DATE 10-15-10
 SCALE AS NOTED
 DRAWN MDN
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 SHEET

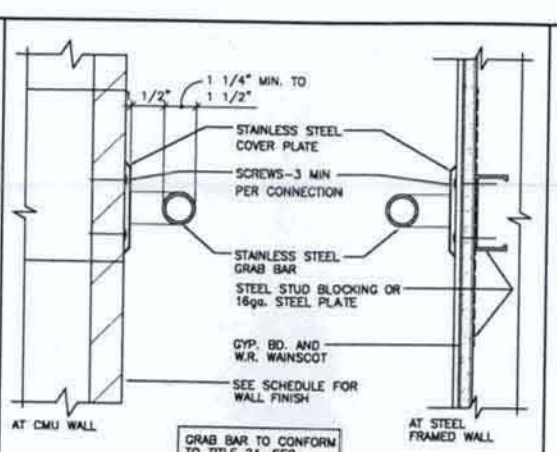
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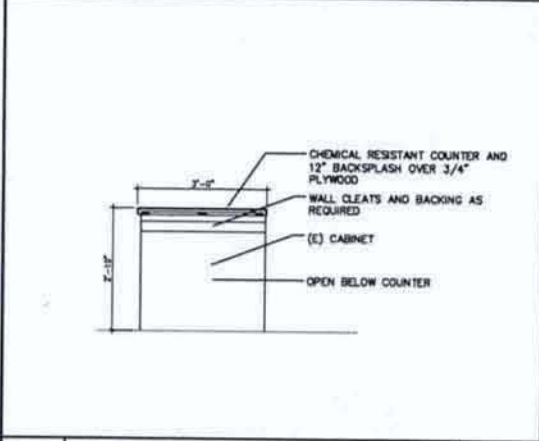
17 DROP OFF WINDOW 1/2"x1'-0"



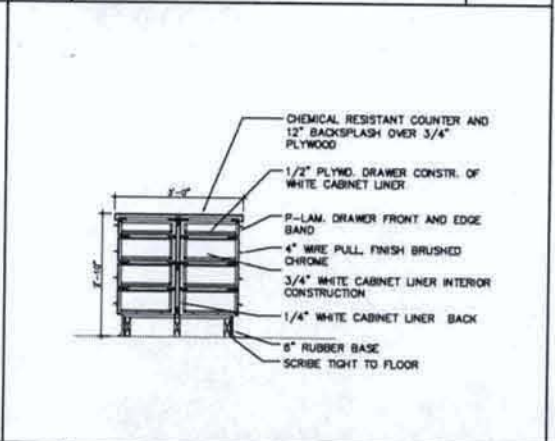
13 CABINET DETAIL 1/2"x1'-0"



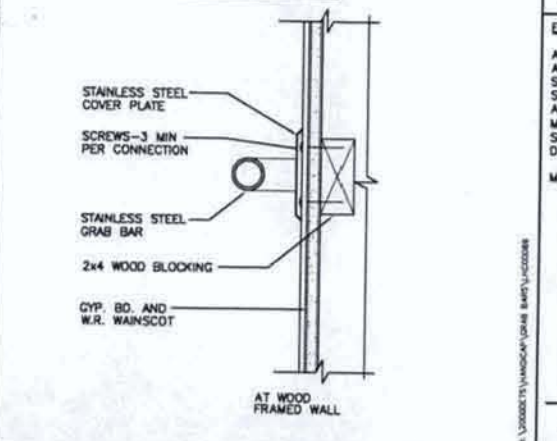
5 DOOR NOTES



18 PENINSULA CABT. • OPENING 1/2"x1'-0"



14 PENINSULA CABT. • DRAWER 1/2"x1'-0"



10 GRAB BAR MOUNTING 3"x1'-0"

LEVER HANDLES NOT REQUIRING TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST REQUIRED TO MEET HANDICAP ACCESS CODES, MOUNT @ 30"-44" AFF

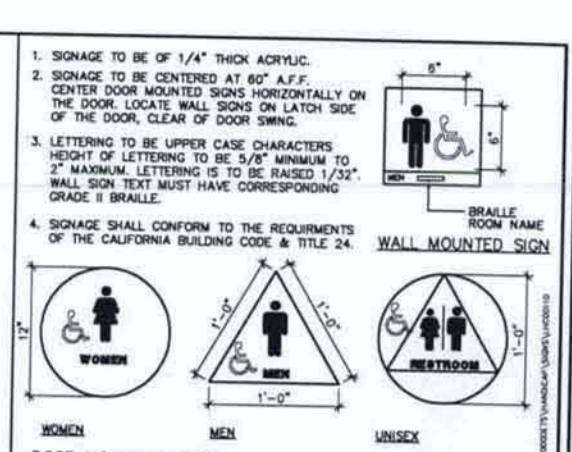
ALL EXIT DOORS SHALL HAVE LATCHING HARDWARE THAT IS OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED. THE UNLATCHING OF ANY LEAF SHALL NOT REQUIRE MORE THAN ONE MOTION. AT MAIN ENTRY DOOR, WHERE KEY-LOCKING HARDWARE IS USED, PROVIDE A SIGN ABOVE THOSE DOORS THAT STATES "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS" OR PROVIDE APPROVED PANIC HARDWARE.

THE BOTTOM 10" OF ALL DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.

DOORS WITH CLOSERS SHALL HAVE MAXIMUM OPENING EFFORT OF 5 POUNDS. THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70° THE DOOR WILL TAKE AT LEAST 3" FROM THE LATCH, MEASURED TO THE LANDING EDGE OF THE DOOR PER CBC SECTION 11338.2.5.1

MAXIMUM DOOR OPENING EFFORTS SHALL BE 5 LBS AT EXTERIOR & INTERIOR DOORS AND 15 LBS AT FIRE DOORS PER CBC SECTION 11338.2.5

1 RESTROOM ACCESS SIGNS 1 1/2"x1'-0"



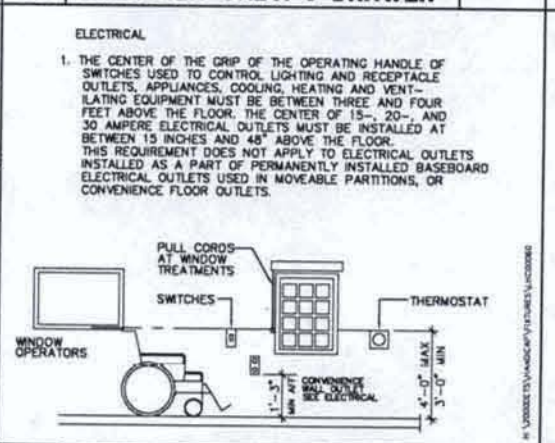
1 RESTROOM ACCESS SIGNS 1 1/2"x1'-0"

19 SANITARY ACCESS. NOTES

NOTES

ALL EXPOSED HOT WATER, COLD WATER AND DRAIN PIPING SHALL BE INSULATED OR ENCLOSED.

FAUCET CONTROL SHALL BE BLADE TYPE HANDLES AND SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. OPERATING FORCE SHALL NOT BE GREATER THAN 5 LBS.



15 MISC. MOUNTING HEIGHTS 1/2"x1'-0"

11 GRAB BAR NOTES

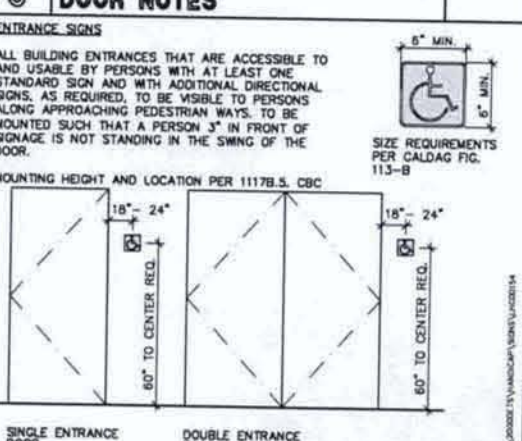
1. LOCATION, GRAB BARS LOCATED ON EACH SIDE, OR ONE SIDE AND THE BACK OF THE PHYSICALLY HANDICAPPED/ACCESSIBLE TOILET STALL OR COMPARTMENT, SHALL BE SECURELY ATTACHED 33 INCHES ABOVE AND PARALLEL TO THE FLOOR. GRAB BARS AT THE SIDE SHALL BE 42 INCHES LONG WITH THE FRONT END POSITIONED 24 INCHES IN FRONT OF THE WATER CLOSET STOOL. GRAB BARS AT THE BACK SHALL BE NO LESS THAN 36 INCHES LONG.

2. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1-1/4 INCH TO 1-1/2 INCH OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF GRAB BARS ARE MOUNTED ADJACENT TO THE WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2 INCHES.

3. THE STRUCTURAL STRENGTH OF GRAB BARS, TUB, AND SHOWER SEATS, FASTENERS AND MOUNTING DEVICES MUST WITHSTAND ALL THE APPLICABLE LOADS INTRODUCED BY A MINIMUM 250 POUND POINT LOAD.

4. GRAB BARS CANNOT ROTATE WITHIN THEIR FITTINGS.

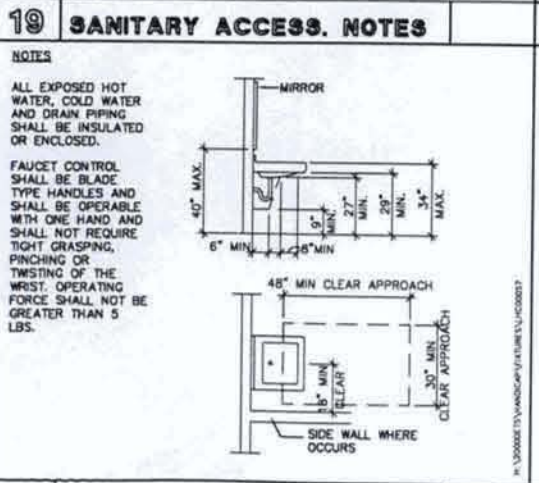
5. SURFACE OF GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.



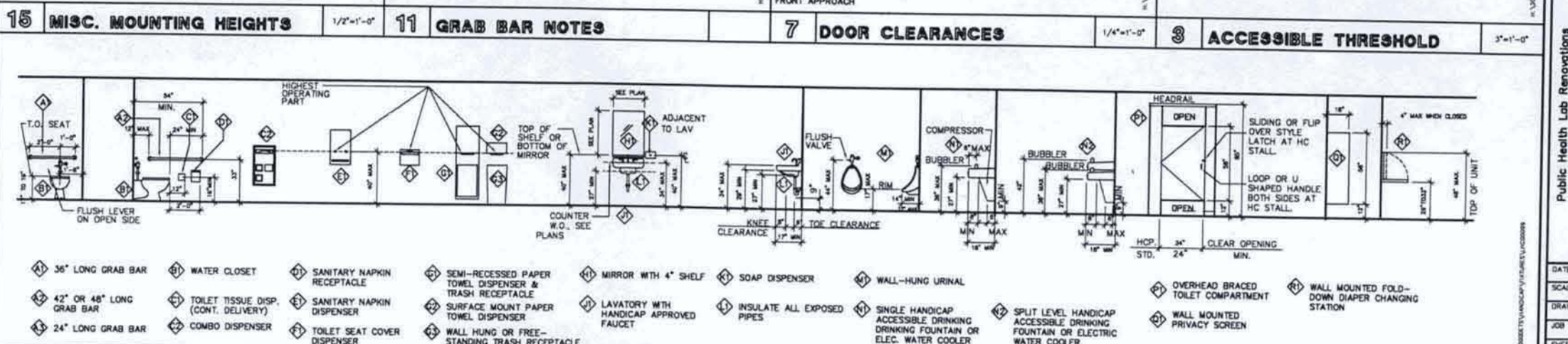
6 ACC. SIGNS AT ENTRANCES 3/8"x1'-0"



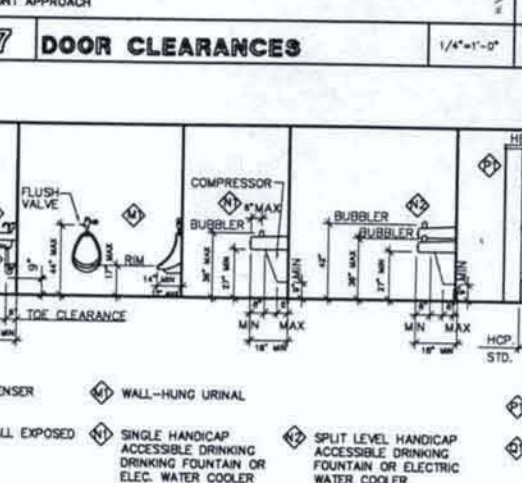
2 ROOM IDENTIFICATION 1/2"x1'-0"



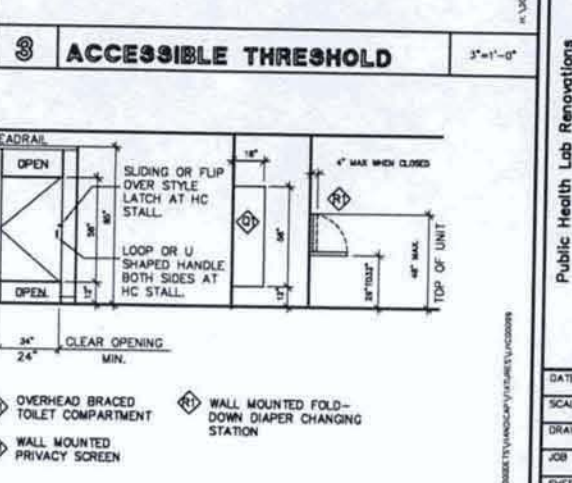
20 LAVATORIES 3/4"x1'-0"



16 TYPICAL MOUNTING HEIGHTS FOR HANDICAP ACCESSIBILITY 1/4"x1'-0"



7 DOOR CLEARANCES 1/4"x1'-0"



3 ACCESSIBLE THRESHOLD 3"x1'-0"

1026-A901

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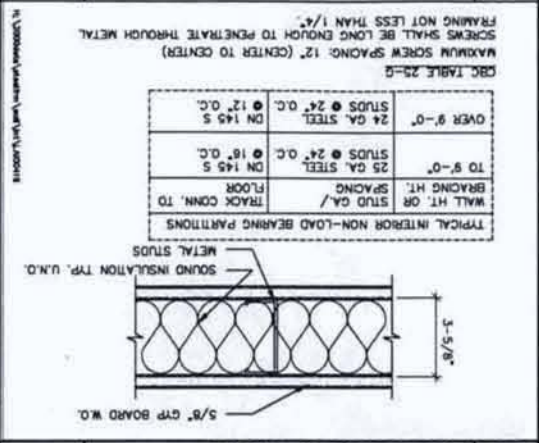
PACIFIC DESIGN ASSOCIATES, INC.

ARCHITECTURAL ACCESSIBILITY DETAILS

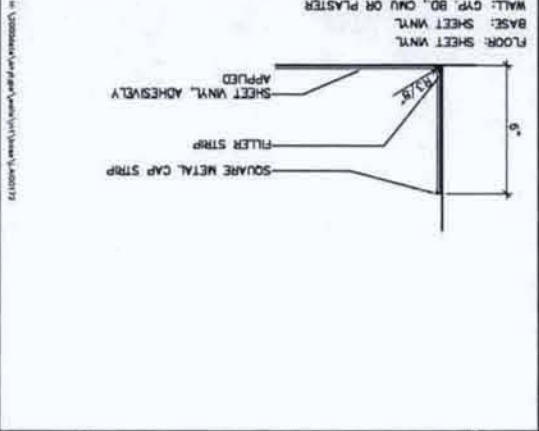
Public Health Lab Renovations for: STANISLAUS COUNTY HEALTH SERVICES AGENCY 820 SCENIC DRIVE Modesto, CA 95350

DATE 10-15-10
SCALE AS NOTED
DRAWN MDN
JOB 10.09026
SHEET A9.1

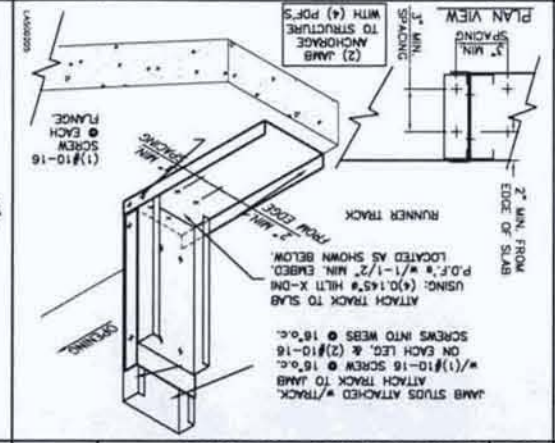
20 STANDARD INT. PARTITION



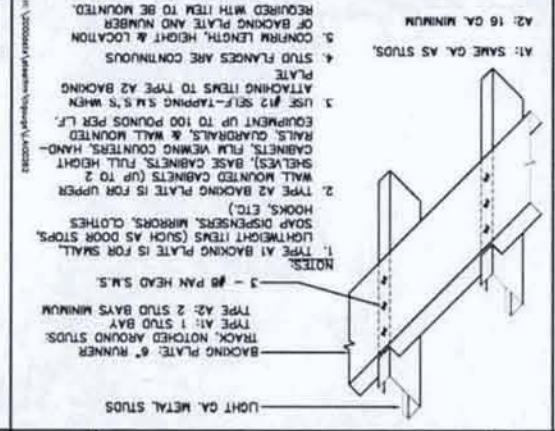
19 BASE-SHEET VINYL



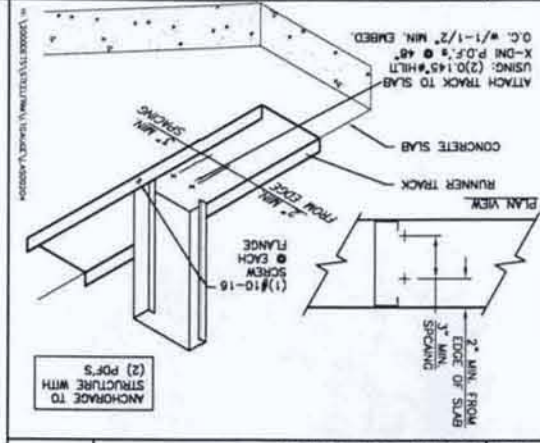
18 DOOR JAMB ANCHORAGE



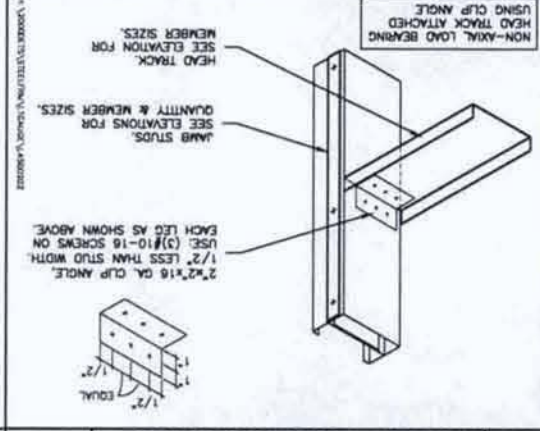
15 LIGHTWEIGHT BACKING



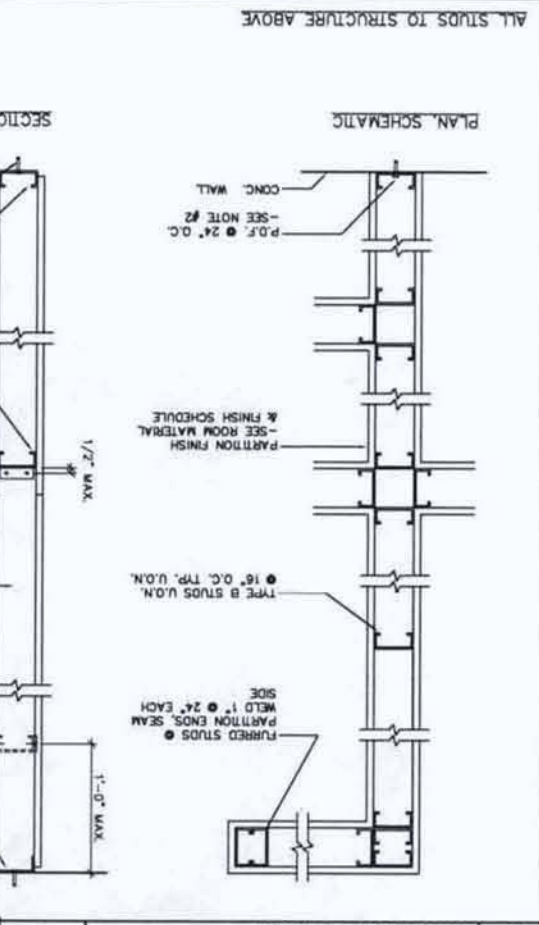
12 STUD TO FLOOR TRACK



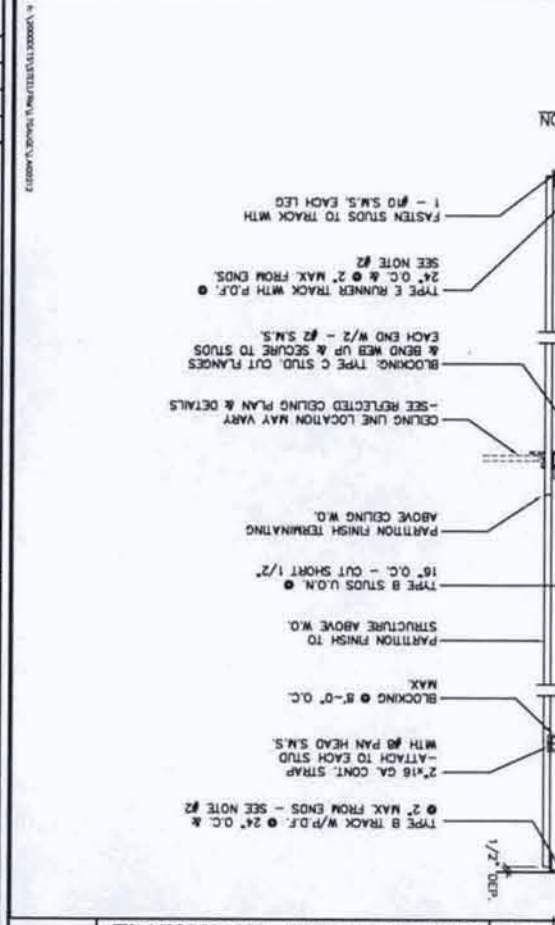
11 JAMB TO HEAD



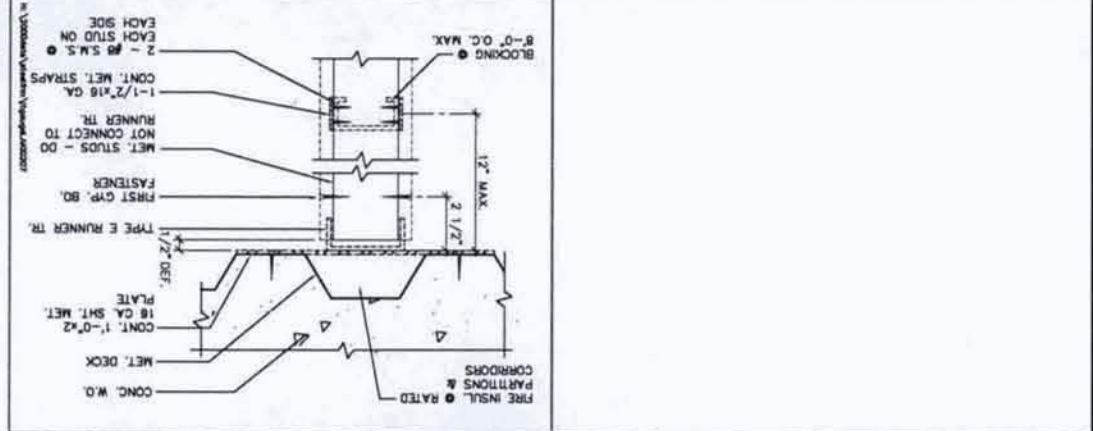
8 TYPICAL PARTITION FRAMING



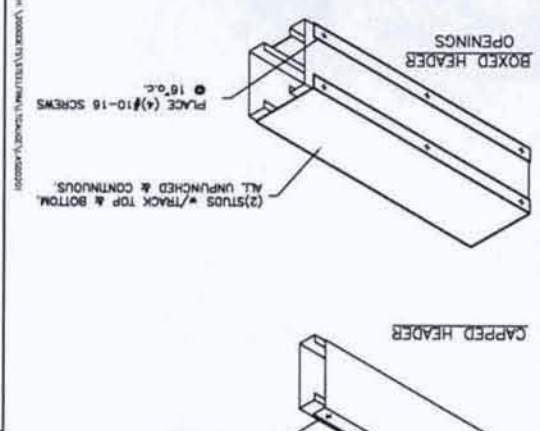
2 WINDOW JAMB ANCHORAGE



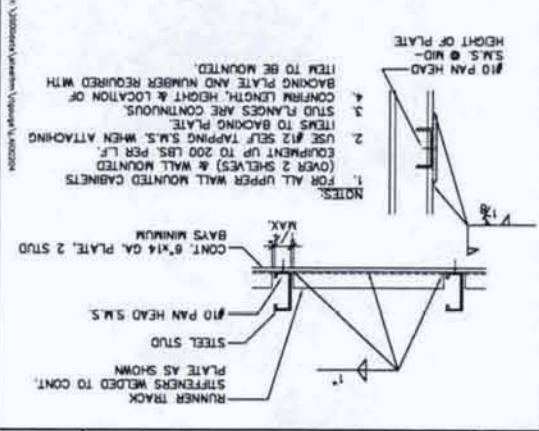
14 STUDS TO METAL DECK



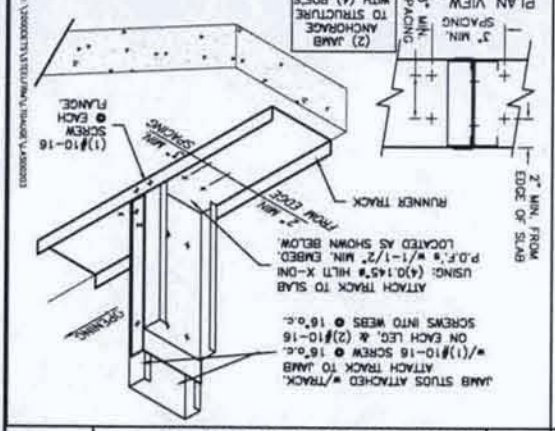
10 HEADER CONFIGURATIONS



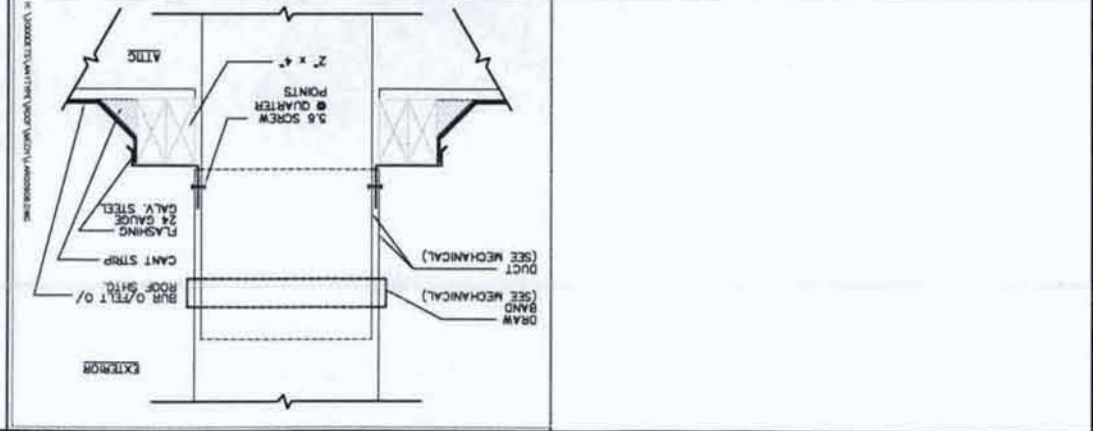
9 BACKING PLATE



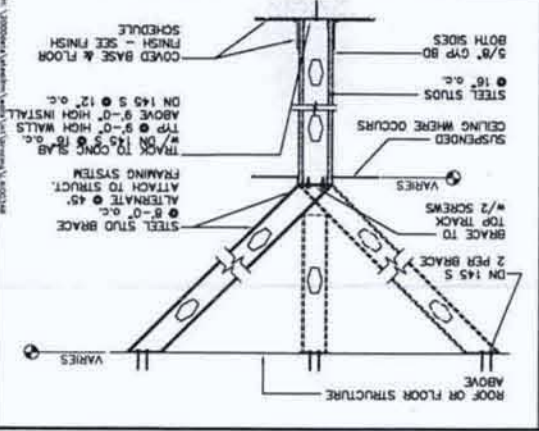
7 HEAVYWEIGHT BACKING



13 PIPE PENETRATION - ROOF



5 WALL BRACING



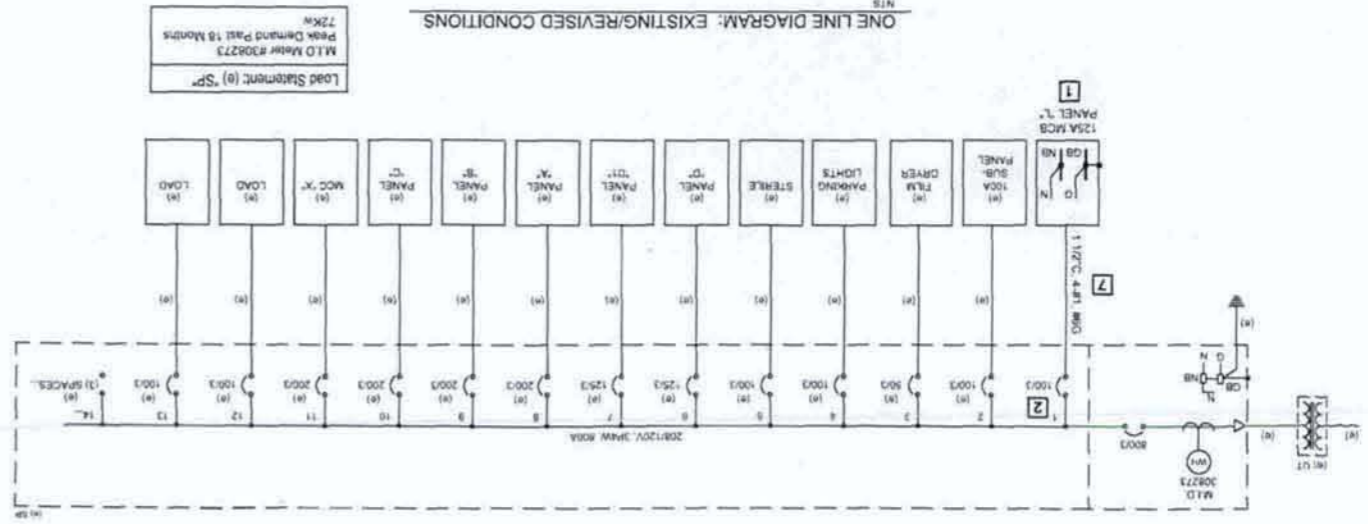
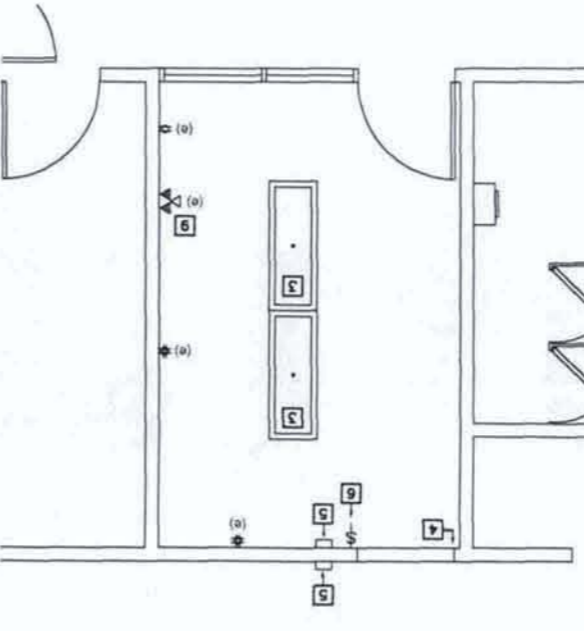
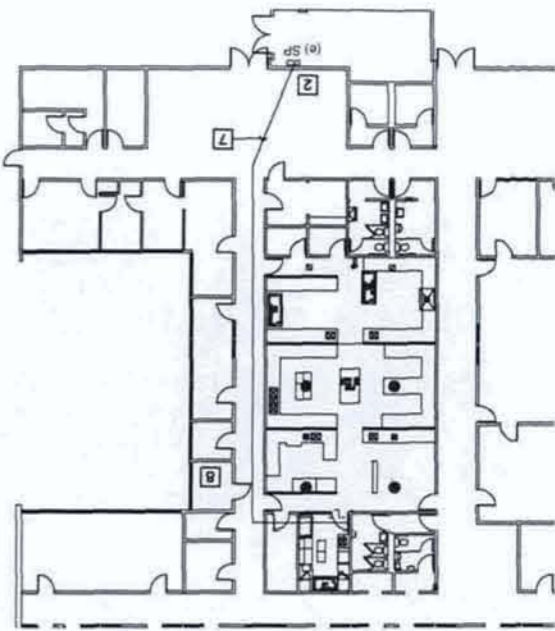
A9.2

DATE 10-15-10
 SCALE AS NOTED
 DRAWN MDM
 JOB 10.09026
 SHEET A9.2

Public Health Lab Renovations
 for
STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 Modesto, CA 95350

PACIFIC DESIGN ASSOCIATES, INC.
 1000 R STREET, SUITE 100
 SACRAMENTO, CA 95811
 916.441.1111
 WWW.PACIFICDESIGNASSOCIATES.COM

REVISIONS BY
 1026-A902



ABBREVIATIONS

AU	AUTHORITY HAVING JURISDICTION
UB	NEUTRAL BUS
UL	UNDERWRITERS LABORATORY
TRP	TYPICAL
GB	GROUND BUS
C	CONDUIT w/ CLEANS
N	NEUTRAL
CU	COPPER
GR	GROUND FAULT INTERRUPTER
MLO	MAIN LUGS ONLY
MCB	MAIN CIRCUIT BREAKER
NEC	NATIONAL ELECTRIC CODE
MR	MOUNTING HEIGHT
BL	LOW VOLTAGE
TELE	SPEC TELEPHONE WIRE CABINET
FC	FOOTCANDLE
TBO	TO BE DETERMINED
(R)	EXISTING TO REMAIN
NIS	NOT TO SCALE
AFR	CENTRLINE ABOVE FINISHED GRADE
AFG	CENTRLINE ABOVE FINISHED FLOOR
UON	LINETS OTHERWISE NOTED
WP	WEATHERPROOF
G	GROUND
WM	WATTOUR METER
UT	UTILITY TRANSFORMER
EB	EMERGENCY BALLAST
F	FUTURE
FR	FIELD VERIFY
DEM	DEMOLISH
(M)	RELOCATED
(M)	SUPPLIED BY OTHERS

SYMBOLS

(S)	EXISTING SERVER ROOM
(R)	EXISTING SERVER ROOM
(M)	SEE WIRING SPECIFICATIONS
(L)	RUN 1/2" C-44T OVER TO PANEL 7, LOCATION
(N)	CALIFORNIA FIREWORKS (CFC) 2007 CALIFORNIA ELECTRICAL CODE (CEC) 2007
(C)	CALIFORNIA BUILDING CODE (CBC) 2007 CALIFORNIA MECHANICAL CODE (CMC) 2007
(A)	USE ONLY UL LISTED MATERIALS. ELECTRICAL INSTALLATION SHALL CONFORM WITH 2007
(B)	COMPLETED WORK SHALL MEET OR EXCEED ALL LEGAL REQUIREMENTS AND SHALL
(C)	UPGRADE TO OWNER.
(D)	EQUIPMENT FOR OPERATIONAL INTEGRITY AND RECOMMEND ANY EQUIPMENT
(E)	VERIFY THIS INFORMATION AT THE SITE. FIELD VERIFY ALL AFFECTED ELECTRICAL
(F)	CONTRACTOR SHALL MAKE USE OF ALL DATA AND CONTACT DOCUMENTS AND
(G)	AND LOCATIONS OF EQUIPMENT TO OBTAIN WHOLESALE PRICES. THE
(H)	AND HAS NOT BEEN VERIFIED WITH ALL EXISTING EQUIPMENT. THE SIZE
(I)	AND MAKEUP ARE ESSENTIAL BUT ARE ESSENTIALLY DIAGRAMATIC
(J)	DRAWINGS AS SHOWN AND AS REPLICATED. CONTRACTOR IS HEREBY
(K)	RECOGNIZED AS A PROFESSIONAL CONTRACTOR AND THAT THESE
(L)	ELECTRICAL SYSTEMS AS SHOWN AND AS REPLICATED. CONTRACTOR IS HEREBY

ELECTRICAL SHEET KEYPED NOTES

1. PROVIDE FINISH AND INSTALL WORK TO MAKE COMPLETE OPERABLE

2. DEMO EXISTING SECURITY DOOR HARDWARE AND EXTEND

3. REMOVE EXISTING LIGHT FIXTURE, CONDUIT AND WIRE.

4. POWER TO NEW LOCATION. SEE E2.0

5. REMOVE ROOM LIGHT SWITCH. SEE E2.0

6. CAPS READERS TO BE RELOCATED. SEE E2.0

7. CONDUIT READERS TO BE RELOCATED. SEE E2.0

8. REMOVE ROOM LIGHT SWITCH. SEE E2.0

9. MAINTAIN TELCO OUTLET ACCESSIBILITY.

GENERAL NOTES

1. PROVIDE FINISH AND INSTALL WORK TO MAKE COMPLETE OPERABLE

2. DEMO EXISTING SECURITY DOOR HARDWARE AND EXTEND

3. REMOVE EXISTING LIGHT FIXTURE, CONDUIT AND WIRE.

4. POWER TO NEW LOCATION. SEE E2.0

5. REMOVE ROOM LIGHT SWITCH. SEE E2.0

6. CAPS READERS TO BE RELOCATED. SEE E2.0

7. CONDUIT READERS TO BE RELOCATED. SEE E2.0

8. REMOVE ROOM LIGHT SWITCH. SEE E2.0

9. MAINTAIN TELCO OUTLET ACCESSIBILITY.

SCOPE OF WORK

1. DEMONSTRATE TO THE OWNER THAT THE ENTIRE INSTALLATION COMPLETE IN PROPER OPERATING CONDITION AND THAT THE CONTRACT HAS BEEN PROPERLY AND FULLY EXECUTED. PROVIDE A SET OF AS-BUILT DRAWINGS TO THE OWNER.

2. DEMONSTRATE TO THE OWNER THAT THE ENTIRE INSTALLATION COMPLETE IN PROPER OPERATING CONDITION AND THAT THE CONTRACT HAS BEEN PROPERLY AND FULLY EXECUTED. PROVIDE A SET OF AS-BUILT DRAWINGS TO THE OWNER.

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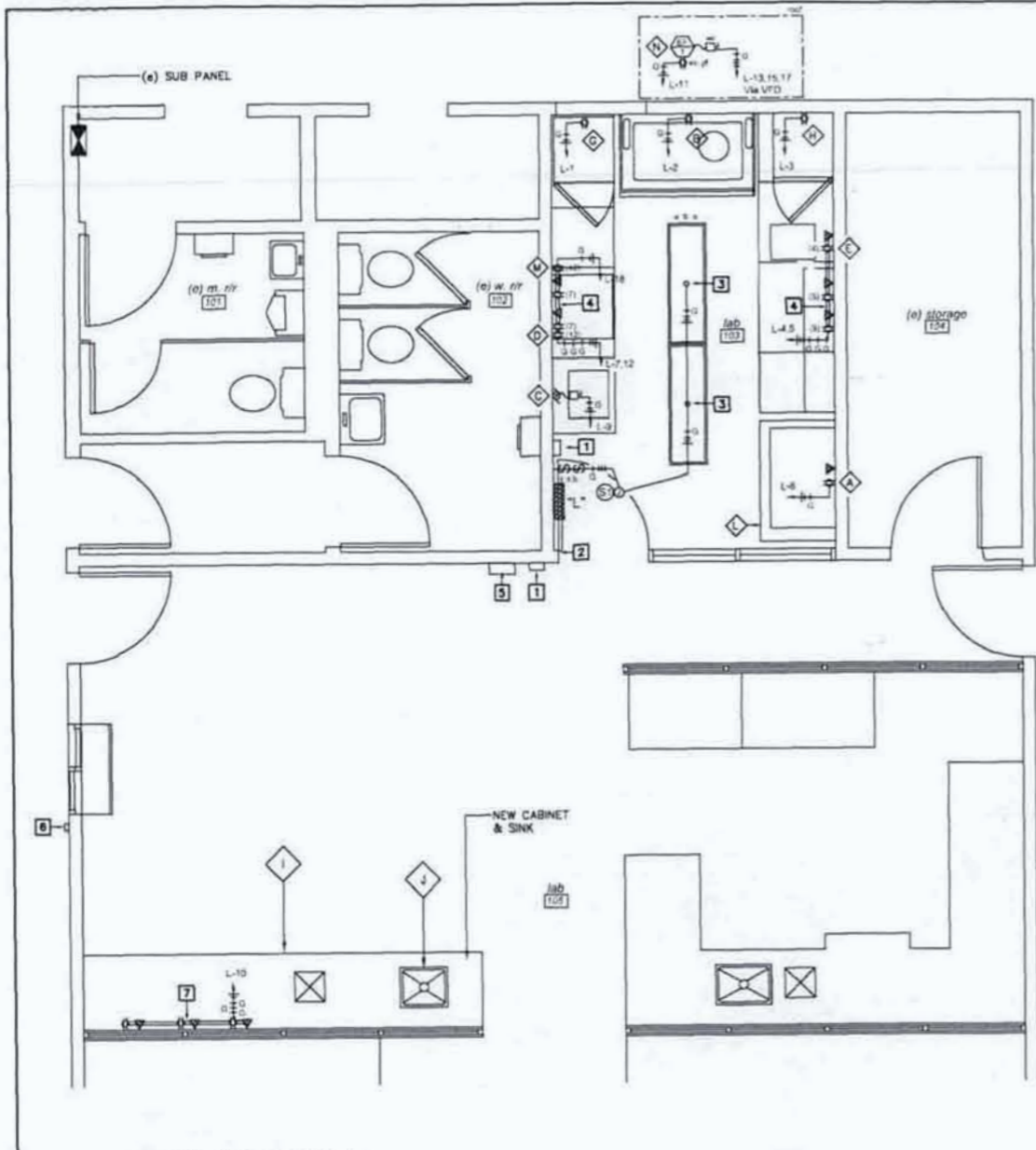


ELECTRICAL SPECIFICATIONS

Public Health Lab Renovations
for:
STANISLAUS COUNTY HEALTH SERVICES AGENCY
820 SCENIC DRIVE
Modesto, California 95350



10.03010
REVISIONS BY



LAB POWER, LIGHT & SIGNAL PLAN
SCALE: 3/8" = 1'

EQUIPMENT SCHEDULE

SYM	DESCRIPTION	MAKE/MODEL	LOAD	REMARKS
A	PCR SYSTEM: DUPL. AMP MODULE*	ROCHE APPLIED SCIENCE/MAGNA PURE LC 2.0	10A, 110VAC	NEMA 5-15, MH=45"; DATA
B	BIOSAFETY CABINET*	NUAIRE/435-400	8A, 110VAC	NEMA 5-15, MH=45"
C	SINK WITH DRAIN PUMP**	STARITE DP2, 1/3HP, 110V	7A, 110VAC	1 HP DISCONNECT
D	AIR CLEAN PCR WORKSTATION*	QIAGEN/QIA CUBE	6A, 110VAC	NEMA 5-15, MH=45"
E	CENTRIFUGE*	APPLIED BIOSYSTEMS/7500 FAST DX	8A, 110VAC	NEMA 5-15, MH=45"; DATA
F	BENCH WORKSTATION*			
G	REFRIGERATOR*	REVCO/REB-404A	8A, 110VAC	NEMA 5-15, MH=45"; 15A CB
H	FREEZER*	REVCO/ULT-430A	8A, 110VAC	NEMA 5-15, MH=45"; 15A CB
I	COUNTER**			
J	SINK**			BID ALT. #1
K	PENNINSULA ISLAND**			
L	STEEL TABLE**	LIBERTY INDUSTRIES INC./7-750-304 H		
M	WATER PURIFICATION SYSTEM*	PURELAB/ELGA OPTION-Q7	4.0A, 110VAC	NEMA 5-15, MH=45"
N	EF-1 (ROOF EXHAUST FAN)**	GREENECK 115 SWB; 2HP, 208V, 3PH	7.5A, 208VAC	3 HP DISCONNECT

- NOTES:
- COORDINATE OUTLET MOUNTING LOCATIONS WITH EQUIPMENT INSTRUCTIONS AND FIELD CONDITIONS; GET LOCATION APPROVAL FROM ARCHITECT BEFORE ROUGH-IN.
 - EF-1 SHALL BE CONTROLLED BY VFD; SEE MECHANICAL DRAWINGS FOR INTER-CONNECTIONS.
 - SUPPLY GST-1 CIRCUIT; COORDINATE WITH MECHANICAL.
 - * - OWNER PROVIDED; ** - GENERAL CONTRACTOR PROVIDED.

COMMUNICATIONS NOTES:

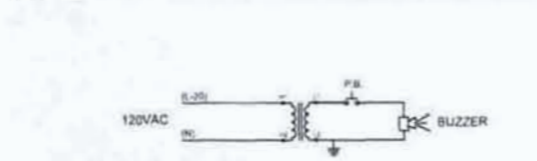
- DATA AND TELCO SHALL INCLUDE RJ45 AND RJ11 CONNECTIONS AND CAT5E CABLES (CABLE IS 0.275 INCHES IN DIAMETER). PROVIDE CONDUIT IN INACCESSIBLE SPACE AND HANGERS ABOVE CEILING IN ACCESSIBLE SPACE. PROPERLY SEAL ALL FIRE-WALL PENETRATIONS.
- RUN DATA AND TELCO CABLES TO DATA/TELCO ROOM (SEE E1.0). LEAVE 20FT OF COILED CABLE ON FLOOR FOR IT PERSONNEL TO MAKE TERMINATIONS IN DATA/TELCO ROOM.
- IN LAB: PROVIDE CONDUIT, BOX, 110 TERMINATIONS AND COVER PLATE: LABEL BOTH ENDS OF CABLE "DP" FOR DATA, "TF" FOR TELCO. ALL CONDUIT RUNS IN LAB SHALL BE SURFACE MOUNTED. VERIFY EXACT OUTLET LOCATIONS WITH ARCHITECT BEFORE WORK BEGINS.
- FOLLOW MANUFACTURER'S GUIDELINES DURING INSTALLATION OF CAT5E SYSTEM, INCLUDING THE USE OF PROPER CONNECTORS AND FITTINGS. THE MAXIMUM LENGTH OF ANY CABLE RUN SHALL BE 300 FEET.
- DO NOT EXCEED A PULLING TENSION OF 20% OF THE ULTIMATE BREAKING STRENGTH RATING OF CABLE.
- DO NOT BEND, INSTALL, OR RACK ANY CABLE IN AN ARC LESS THAN 12 TIMES (12X) THE CABLE DIAMETER. TERMINATE CABLES WITH APPROPRIATE CONNECTORS.
- ALL INSTALLATION AND ROUTING SHALL CONFORM TO EIA/TIA 568. THE TWISTED PAIR WIRES SHALL BE TWISTED ALL THE WAY TO THE CONNECTORS TO HELP ELIMINATE CROSSTALK BETWEEN LINES.
- A CABLE TESTING DEVICE SHALL BE USED ON ALL CABLES TO CHECK FOR ANY DEFECTS IN CABLES OR INSTALLATION PROCEDURES. CABLE IMPEDANCE, OPENS, SHORTS, CROSSTALK AND NOISE INTERFERENCE SHALL BE INCLUDED IN THE TESTING PROCEDURES.

TERMINAL:

- ▼ RJ45 DATA SINGLE-GANG WALL OUTLET, BOX AND FLUSH COVER PLATE: 110 STYLE PUNCHDOWN TERMINAL; LABEL COVER PLATE AND CABLE (BOTH ENDS) WITH PORT #: MH=45" AFF.
- ▼ RJ11 TELCO SINGLE-GANG WALL OUTLET, BOX AND FLUSH COVER PLATE: 110 STYLE PUNCHDOWN TERMINAL; LABEL COVER PLATE AND CABLE (BOTH ENDS) WITH TR #: MH=45" AFF.

AMP	DESCRIPTION	DESCRIPTION	AMP
0.5	WATER PURIFICATION	BIO CABINET RM 103	0.7
0.7	FREEZER RM 103	GENEPOOL RM 103	0.7
4.0	WIREMOLD OUTLETS RM 103	PCR SYSTEM RM 103	10.0
4.0	WIREMOLD OUTLETS RM 103	SPACE	
7.5	EF-1	WIREMOLD OUTLETS TO RM 103 (AL) 103	4.0
	ROOF EXHAUST FAN	AIR CLEAN PCR WORKSTATION RM 103	5.0
15	EF-1	SPACE	
	SPACE	CARD READER (RELOCATED) RM 103	0.7
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	

LOAD TYPE	WATT	VA	AMP	%
WATER PURIFICATION	400	400	1.8	0.5
BIO CABINET	50	50	0.2	0.5
GENEPOOL	50	50	0.2	0.5
PCR SYSTEM	1000	1000	4.5	12.5
WIREMOLD OUTLETS	400	400	1.8	4.5
EF-1	7500	7500	33.0	82.5
ROOF EXHAUST FAN	15000	15000	67.5	168.75
TOTAL	20000	20000	88.8	222.5



- NOTES:
- LOCATE PUSHBUTTON (P.B.) AND BUZZER PER ARCHITECT'S INSTRUCTIONS.

LIGHTING NOTES:

- PROVIDE LIGHT FIXTURES WIRED AS SHOWN AND PER RESPECTIVE SHEET KEYED NOTES WITH ARCHITECT'S APPROVAL. COMPLETE WITH ALL REQUIRED LAMPS AND ACCESSORIES. INSTALL FIXTURES IN LOCATIONS PER ARCHITECTURAL DRAWING LOCATIONS AND PER ARCHITECTURAL DETAILS. IF REQUIRED, LOAD TEST ALL LIGHTS TO ASSURE CONFORMANCE TO ITS CIRCUIT RATING. UTILIZE A-B SWITCHING PATTERN AS SHOWN AND CONTROLS PER CA TITLE-24 REQUIREMENTS.
- FLUORESCENT BALLASTS SHALL BE PARALLEL INSTANT START ELECTRONIC TYPE UNLESS OTHERWISE NOTED. CLASS-P THERMALLY PROTECTED. SHALL HAVE CLASS A SOUND RATING, AND SHALL COMPLY WITH 1992 FEDERAL ENERGY POLICY ACT. FLUORESCENT BALLASTS SHALL BE HIGH-FREQUENCY ELECTRONIC, MINIMUM 90% BALLAST FACTOR, MAXIMUM 20% TOTAL HARMONIC DISTORTION (THD). INSTRUCT OWNER ON CLEANING OF LIGHT LENSES AND REFLECTORS ON REGULAR SCHEDULE TO MAINTAIN LIGHT QUALITY OUTPUT.
- CEILING OR WALL SUSPENDED FIXTURES OR LIGHTING SYSTEMS SHALL BE INSTALLED BY CONTRACTOR ACCORDING TO WRITTEN MANUFACTURER'S INSTRUCTIONS AND BY FOLLOWING THE NEC CODE.
- PLACE CEILING OCCUPANCY SENSOR FOR BEST PERFORMANCE. PROGRAM OCCUPANCY SENSORS TO BEST SUIT THE ROOM APPLICATION AND OCCUPANTS NEEDS.
- DEMONSTRATE PROPER INTERIOR NIGHT-TIME BACK-UP SHUT-OFF, EMERGENCY LIGHT TEST, AND ANY FIRE ALARM EXIT LIGHT STRATEGY TO OWNER AND A.H.I. INSTRUCT OWNERS DESIGNATED REPRESENTATIVE REGARDING SYSTEM TESTING AND OPERATION.

POWER NOTES:

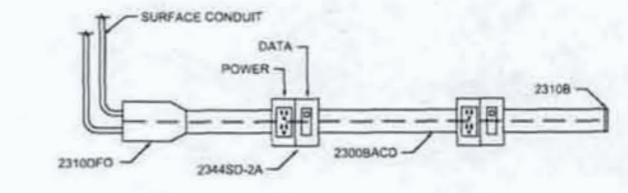
- EQUIP AND WIRE PANELS AS SHOWN, EXCEPT FOR UNAVOIDABLE CHANGES. PROVIDE PANEL WITH TYPED DIRECTORY PER PANEL DIAGRAMS. INSIDE PANELS, BUNDLE WIRES NEATLY. FIELD VERIFY ALL PANEL SCHEDULE LOAD VALUES. PROPERLY SEAL ALL FIRE-WALL PENETRATIONS.
- WHEN FIELD VERIFYING EQUIPMENT, CHECK EQUIPMENT RATING, EQUIPMENT INTEGRITY AND FUNCTIONALITY, INCLUDING ASSOCIATED HARDWARE AND WIRE, CIRCUIT LOAD, AND RECOMMEND TO THE OWNER ANY NECESSARY EQUIPMENT UPGRADES.
- ALL NEW WIRING SHALL BE SURFACE MOUNTED; RUN ISOLATED GROUNDS TO EACH OUTLET.
- VERIFY J-BOX LOCATIONS SHOWN ON DRAWINGS WITH EQUIPMENT INSTRUCTIONS JUST PRIOR TO ROUGH-IN. BOND EACH BOX TO GROUND USING A GROUND WIRE RUN WITH CIRCUIT CONDUCTORS.
- LABEL EACH BOX COVER PLATE WITH CIRCUIT NUMBER: POWER, LIGHTING AND COMMUNICATIONS WIRING AND/OR CONDUIT RUNS SHALL MAINTAIN A 1FT MINIMUM SEPARATION.
- IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL, MECHANICAL, PLUMBING AND GENERAL CONTRACTOR TO EXAMINE THESE DRAWINGS AND CORRESPONDING SPECIFICATIONS SECTIONS FOR WORK TO BE PERFORMED BY OTHER TRADES SHOWN ON THESE DRAWINGS.

ELECTRICAL SHEET KEYED NOTES:

- RELOCATED CARD READER: SECURITY COMPANY TO MOVE READER. COORDINATE RELOCATION OF POWER WITH SECURITY COMPANY.
- ELECTRIC SECURITY DOOR HARDWARE: COORDINATE INSTALLATION OF POWER WITH SECURITY COMPANY.
- REPLACE EXISTING FIXTURE WITH NEW SURFACE MODULAR COMMERCIALS: (1) 32W T8, 125" ACRYLIC DIFFUSER; FLUSH STEEL GASKETED DOOR; (2) 120-277V PARALLEL INSTANT START BALLAST; UL, MH=9; EQUAL TO LITHONIA 2M332A12125MVOLTGEB10IS.
- WIREMOLD 2300BACD, 20A GFI DUPLEX AND RJ45 DATA OUTLETS RUN TO SERVER ROOM: +45" AFF; VERIFY EXACT LOCATION WITH ARCHITECT.
- VFD LOCATION: SEE MECHANICALS FOR SPECIFICATIONS AND INTERCONNECT.
- BID ALT #2 DROP-OFF WINDOW: PROVIDE BUZZER CIRCUIT WITH PUSHBUTTON AS DIRECTED BY ARCHITECT.
- BID ALT #1 COUNTER: WIREMOLD 2300BACD, 20A GFI DUPLEX AND RJ45 DATA OUTLETS RUN TO SERVER ROOM: +45" AFF; VERIFY EXACT LOCATION WITH ARCHITECT.

LIGHTING CONTROLS:

- § SENTRY TOGGLE WALL SWITCH, 0.5 AMP TO 5 AMP LOAD, MECHANICAL RESET TO OFF AUTOMATICALLY WHEN INPUT POWER IS INTERRUPTED FOR 5 SECONDS, MINI NEON LIGHT LOCATOR, SINGLE GANG, WALL PLATE NOT INCLUDED; 120/277V RATED, CALIFORNIA TITLE 24 COMPLIANT, UL: MH=45" AFF. (SENTRY LLC - SS05277)
- Ⓢ DUAL TECHNOLOGY LINE VOLTAGE CEILING OCCUPANCY SENSOR; 120/277V; WHITE; 5 YEAR WARRANTY; CA TITLE 24 COMPLIANT, UL (EQUAL TO WATTSTOPPER MDT-355)



- NOTES:
- WIREMOLD SHALL BE SCREWED TO WALL ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
 - SUPPLY WIRE AND COVER CLIPS AS NEEDED.



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10.03010

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PACIFIC DESIGN ASSOCIATE, INC.
1718 N STREET, STOCKTON, CA 95210 (209) 977-2286
DONALD W. PHILLIPS, P.E.

P

LIGHT, POWER & SIGNAL PLAN

Public Health Lab Renovations
for:
STANISLAUS COUNTY HEALTH SERVICES AGENCY
820 SCENIC DRIVE
Modesto, California 95350

DATE: 12-02-10
SCALE: AS NOTED
DRAWN: EJO
JOB: 10.09026
SHEET: E2.0

CERTIFICATE OF COMPLIANCE (Page 1 of 4) LTG-1C

STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 MODESTO, CA 95350

PROJECT NO: 12
 DATE: 12/02/10

DESIGNED BY: EDWARD J. QUINN
 DRAWN BY: EDWARD J. QUINN

PROJECT LOCATION: STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 MODESTO, CA 95350

DATE OF INSPECTION: 12/02/10

INSPECTOR: EDWARD J. QUINN

PROJECT NO: 12
 DATE: 12/02/10

CERTIFICATE OF COMPLIANCE (Page 2 of 4) LTG-1C

STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 MODESTO, CA 95350

PROJECT NO: 12
 DATE: 12/02/10

DESIGNED BY: EDWARD J. QUINN
 DRAWN BY: EDWARD J. QUINN

PROJECT LOCATION: STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 MODESTO, CA 95350

DATE OF INSPECTION: 12/02/10

INSPECTOR: EDWARD J. QUINN

PROJECT NO: 12
 DATE: 12/02/10

CERTIFICATE OF COMPLIANCE (Page 3 of 4) LTG-1C

STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 MODESTO, CA 95350

PROJECT NO: 12
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 820 SCENIC DRIVE
 MODESTO, CA 95350

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INDOOR LIGHTING POWER ALLOWANCE LTG-3C

STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 MODESTO, CA 95350

PROJECT NO: 12
 DATE: 12/02/10

DESIGNED BY: EDWARD J. QUINN
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 820 SCENIC DRIVE
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DATE OF INSPECTION: 12/02/10

INSPECTOR: EDWARD J. QUINN

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MANDATORY MEASURES (INDOOR)

1. BUILDING LIGHTING SHUT-OFF:
 THE BUILDING LIGHTING SHUT-OFF SYSTEM CONSISTS OF OCCUPANCY SENSORS OR TIME CLOCK PER SECTIONS 119 & 131(a) OF THE 2008 NON-RESIDENTIAL COMPLIANCE MANUAL.

2. OVERRIDE FOR BUILDING LIGHTING SHUT-OFF:
 IF TIME CLOCK IS USED, THE AUTOMATIC BUILDING SHUT-OFF SYSTEM IS PROVIDED WITH A MANUAL ACCESSIBLE OVERRIDE SWITCH IN SIGHT OF THE LIGHTS. THE AREA OF OVERRIDE IS NOT TO EXCEED 5,000 SQFT OR 20,000 SQFT FOR MALL, AUDITORIUM, RETAIL SPACE, INDUSTRIAL SPACE, CONVENTION CENTER OR ARENA.

3. LIGHTING EQUIPMENT DEVICES CERTIFIED:
 ALL DEVICES USED SHALL BE CERTIFIED AND COMPLY WITH SECTIONS 111 & 119 OF THE 2008 NON-RESIDENTIAL COMPLIANCE MANUAL; ALL ALTERNATE EQUIPMENT SHALL BE CERTIFIED AND INSTALLED AS DIRECTED BY THE MANUFACTURER.

4. INDIVIDUAL ROOM/AREA CONTROLS:
 EACH ROOM AND AREA IN THIS BUILDING IS EQUIPPED WITH A SEPARATE SWITCH OR OCCUPANCY SENSOR DEVICE FOR EACH AREA WITH FLOOR-TO-CEILING WALLS.

5. UNIFORM REDUCTION FOR INDIVIDUAL ROOMS:
 ALL ROOMS AND AREAS GREATER THAN 100 SQUARE FEET AND MORE THAN 0.8 WATTS PER SQUARE FOOT OF LIGHTING LOAD SHALL BE CONTROLLED WITH MULTILEVEL SWITCHING FOR UNIFORM REDUCTION OF LIGHTING WITHIN THE ROOM; ALSO IF A SINGLE LUMINAIRE HAS MORE THAN TWO LAMPS.

6. DAYLIT AREA CONTROL:
 ALL ROOMS THAT ARE GREATER THAN 250 SQUARE FEET AND CONTAIN WINDOWS AND SKYLIGHTS, THAT ALLOW FOR THE EFFECTIVE USE OF DAYLIGHT IN THE AREA SHALL HAVE 50% OF THE LIGHTING POWER IN EACH DAYLIT AREA CONTROLLED BY A SEPARATE SWITCH; OR THE EFFECTIVE USE OF DAYLIGHT THROUGHOUT CANNOT BE ACCOMPLISHED BECAUSE THE WINDOWS ARE CONTINUOUSLY SHADED BY A BUILDING ON THE ADJACENT LOT, DIAGRAM OF SHADING DURING DIFFERENT TIMES OF YEAR IS INCLUDED ON PLANS, IF APPLICABLE.

10.03010	
REVISIONS	BY
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2	
3	
4	



CA TITLE-24
 ELECTRICAL
 APPLICATIONS

Public Health Lab Renovations
 for:
 STANISLAUS COUNTY
 HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 Modesto, California 95350

DATE	12-02-10
SCALE	AS NOTED
DRAWN	EJO
JOB	10.09026
SHEET	E3.0



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 OAKLAND, CALIFORNIA 94612
 DONALD W. FREEMAN, P.E.

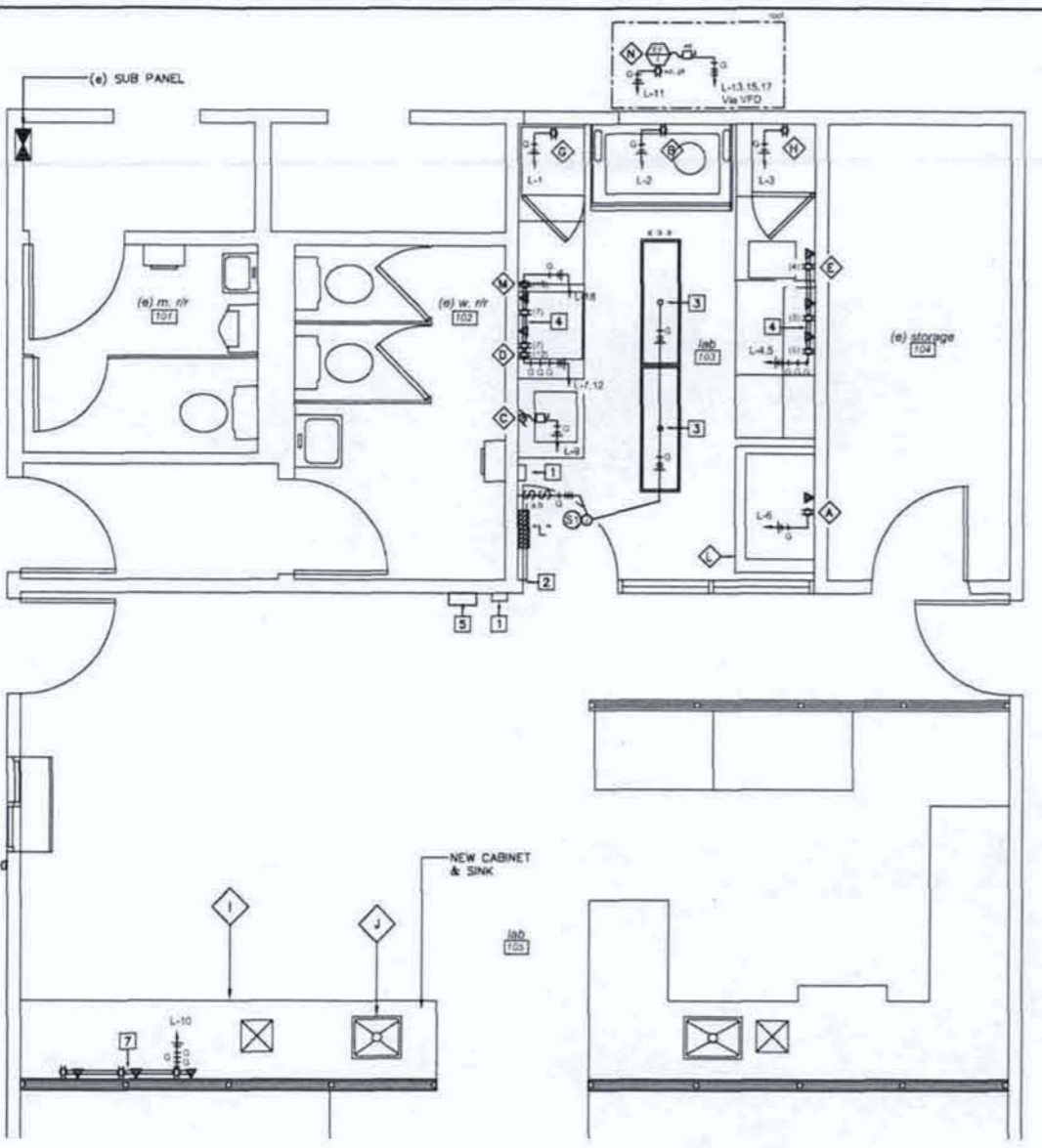
PACIFIC DESIGN ASSOCIATES, INC.
 1000 W. 14TH STREET, SUITE 100
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 DONALD W. FREEMAN, P.E.



LIGHT, POWER & SIGNAL PLAN

Public Health Lab Renovations
 for:
**STANISLAUS COUNTY
 HEALTH SERVICES AGENCY**
 820 SCENIC DRIVE
 Modesto, California 95350

DATE	12-02-10
SCALE	AS NOTED
DRAWN	EJQ
JOB	10.09026
SHEET	E2.0



LAB POWER, LIGHT & SIGNAL PLAN
 SCALE: 3/8" = 1'

SYM	DESCRIPTION	MAKE/MODEL	LOAD	REMARKS
A	PCR SYSTEM: DUPL AMP MODULE*	ROCHE APPLIED SCIENCE/MAGNA PURE LC 2.0	10A, 110VAC	NEMA 5-15, MH=45"; DATA
B	BIOSAFETY CABINET*	NUAIRE/435-400	8A, 110VAC	NEMA 5-15, MH=45"
C	SINK WITH DRAIN PUMP**	STARITE DP2, 1/3HP, 110V	7A, 110VAC	1 HP DISCONNECT
D	AIR CLEAN PCR WORKSTATION*	QIAGEN/QIA CUBE	6A, 110VAC	NEMA 5-15, MH=45"
E	CENTRIFUGE*	APPLIED BIOSYSTEMS/7500 FAST DX	8A, 110VAC	NEMA 5-15, MH=45"; DATA
F	BENCH WORKSTATION*			
G	REFRIGERATOR*	REVCO/REB-404A	8A, 110VAC	NEMA 5-15, MH=45"; 15A CB
H	FREEZER*	REVCO/ULT-430A	8A, 110VAC	NEMA 5-15, MH=45"; 15A CB
I	COUNTER**			
J	SINK**			BID ALT. #1
K	PENNSULA ISLAND**			
L	STEEL TABLE**	LIBERTY INDUSTRIES INC./7-750-304 H		
M	WATER PURIFICATION SYSTEM*	PURELAB/ELGA OPTION-Q7	4.0A, 110VAC	NEMA 5-15, MH=45"
N	EF-1 (ROOF EXHAUST FAN)**	GREENECK 115 SWB; 2HP, 208V, 3PH	7.5A, 208VAC	3 HP DISCONNECT

- NOTES:
 1. COORDINATE OUTLET MOUNTING LOCATIONS WITH EQUIPMENT INSTRUCTIONS AND FIELD CONDITIONS; GET LOCATION APPROVAL FROM ARCHITECT BEFORE ROUGH-IN.
 2. EF-1 SHALL BE CONTROLLED BY VFD; SEE MECHANICAL DRAWINGS FOR INTER-CONNECTIONS.
 3. SUPPLY GST-1 CIRCUIT; COORDINATE WITH MECHANICAL.
 4. * - OWNER PROVIDED; ** - GENERAL CONTRACTOR PROVIDED.

- COMMUNICATIONS NOTES:**
- DATA AND TELCO SHALL INCLUDE RJ45 AND RJ11 CONNECTIONS AND CAT5E CABLES (CABLE IS 0.275 INCHES IN DIAMETER). PROVIDE CONDUIT IN INACCESSIBLE SPACE AND HANGERS ABOVE CEILING IN ACCESSIBLE SPACE. PROPERLY SEAL ALL FIRE-WALL PENETRATIONS.
 - RUN DATA AND TELCO CABLES TO DATA/TELCO ROOM (SEE E1.0). LEAVE 20FT OF COILED CABLE ON FLOOR FOR IT PERSONNEL TO MAKE TERMINATIONS IN DATA/TELCO ROOM.
 - IN LAB: PROVIDE CONDUIT, BOX, 110 TERMINATIONS AND COVER PLATE; LABEL BOTH ENDS OF CABLE "DI" FOR DATA, "TI" FOR TELCO. ALL CONDUIT RUNS IN LAB SHALL BE SURFACE MOUNTED. VERIFY EXACT OUTLET LOCATIONS WITH ARCHITECT BEFORE WORK BEGINS.
 - FOLLOW MANUFACTURER'S GUIDELINES DURING INSTALLATION OF CAT5E SYSTEM, INCLUDING THE USE OF PROPER CONNECTORS AND FITTINGS. THE MAXIMUM LENGTH OF ANY CABLE RUN SHALL BE 300 FEET.
 - DO NOT EXCEED A PULLING TENSION OF 20% OF THE ULTIMATE BREAKING STRENGTH RATING OF CABLE.
 - DO NOT BEND, INSTALL, OR RACK ANY CABLE IN AN ARC LESS THAN 12 TIMES (12X) THE CABLE DIAMETER. TERMINATE CABLES WITH APPROPRIATE CONNECTORS.
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 - A CABLE TESTING DEVICE SHALL BE USED ON ALL CABLES TO CHECK FOR ANY DEFECTS IN CABLES OR INSTALLATION PROCEDURES. CABLE IMPEDANCE, OPENS, SHORTS, CROSSTALK AND NOISE INTERFERENCE SHALL BE INCLUDED IN THE TESTING PROCEDURES.

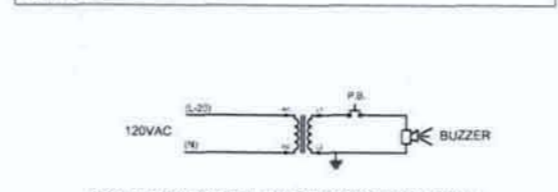
- TERMINAL:**
- ▼ RJ45 DATA SINGLE-GANG WALL OUTLET, BOX AND FLUSH COVER PLATE: 110 STYLE PUNCH-DOWN TERMINAL, LABEL COVERPLATE AND CABLE (BOTH ENDS) WITH PORT #: MH=45" AFF.
 - ▼ RJ11 TELCO SINGLE-GANG WALL OUTLET, BOX AND FLUSH COVER PLATE: 110 STYLE PUNCH-DOWN TERMINAL, LABEL COVERPLATE AND CABLE (BOTH ENDS) WITH TI: MH=45" AFF.

PANEL "L" SCHEDULE

AMP	DESCRIPTION	DESCRIPTION	AMP
8.0	BIOSAFETY CABINET	BIO CABINET RM 103	8.0
8.0	FREEZER	CENTRIFUGE RM 103	8.0
4.0	ARMEMOLD OUTLETS RM 103	PCR SYSTEM RM 103	10.0
4.0	ARMEMOLD OUTLETS RM 103	SPACE	
12.0	ROOF EXH FAN	ARMEMOLD OUTLETS RM 103 ALT #1	8.0
7.5	EF-1	AIR CLEAN PCR WORKSTATION RM 103	6.0
	SPACE	UL-1	
	SPACE	SPACE	
	SPACE	ELCA-Q7	4.0
	SPACE	CARD READER BUZZER (ALT #2)	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	
	SPACE	SPACE	

PANEL "L" LOAD CALCULATIONS

DESCRIPTION	VA	W	FLA	PH
BIOSAFETY CABINET	880	880	8	1
FREEZER	880	880	8	1
ARMEMOLD OUTLETS	440	440	4	1
ROOF EXH FAN	1320	1320	12	1
EF-1	1050	1050	10	1
AIR CLEAN PCR WORKSTATION	660	660	6	1
UL-1	0	0	0	0
ELCA-Q7	440	440	4	1
CARD READER BUZZER	0	0	0	0
TOTALS	5240	5240	52	2.0

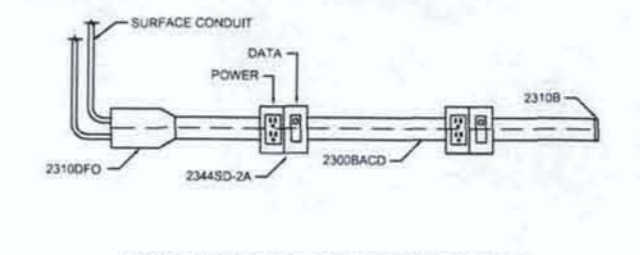


(BID ALT #2) TYPICAL BUZZER CIRCUIT DIAGRAM
 NOTES:
 1. LOCATE PUSHBUTTON (P.B.) AND BUZZER PER ARCHITECTS INSTRUCTIONS.

- LIGHTING NOTES:**
- PROVIDE LIGHT FIXTURES WIRED AS SHOWN AND PER RESPECTIVE SHEET KEYED NOTES WITH ARCHITECTS APPROVAL. COMPLETE WITH ALL REQUIRED LAMPS AND ACCESSORIES. INSTALL FIXTURES IN LOCATIONS PER ARCHITECTURAL DRAWING LOCATIONS AND PER ARCHITECTURAL DETAILS. IF REQUIRED, LOAD TEST ALL LIGHTS TO ASSURE CONFORMANCE TO ITS CIRCUIT RATING. UTILIZE 0-0 SWITCHING PATTERN AS SHOWN AND CONTROLS PER CA TITLE-24 REQUIREMENTS.
 - FLUORESCENT BALLASTS SHALL BE PARALLEL INSTANT START ELECTRONIC TYPE UNLESS OTHERWISE NOTED. CLASS-P THERMALLY PROTECTED. SHALL HAVE CLASS A SOUND RATING, AND SHALL COMPLY WITH 1992 FEDERAL ENERGY POLICY ACT. FLUORESCENT BALLASTS SHALL BE HIGH-FREQUENCY ELECTRONIC. MINIMUM 90% BALLAST FACTOR, MAXIMUM 20% TOTAL HARMONIC DISTORTION (THD). INSTRUCT OWNER ON CLEANING OF LIGHT LENSES AND REFLECTORS ON REGULAR SCHEDULE TO MAINTAIN LIGHT QUALITY OUTPUT.
 - CEILING OR WALL SUSPENDED FIXTURES OR LIGHTING SYSTEMS SHALL BE INSTALLED BY CONTRACTOR ACCORDING TO WRITTEN MANUFACTURER'S INSTRUCTIONS AND BY FOLLOWING THE NEC CODE.
 - PLACE CEILING OCCUPANCY SENSOR FOR BEST PERFORMANCE. PROGRAM OCCUPANCY SENSORS TO BEST SUIT THE ROOM APPLICATION AND OCCUPANTS NEEDS.
 - DEMONSTRATE PROPER INTERIOR NIGHT-TIME BACK-UP SHUT-OFF, EMERGENCY LIGHT TEST, AND ANY FIRE ALARM EXIT LIGHT STRATEGY TO OWNER AND A/E. INSTRUCT OWNERS DESIGNATED REPRESENTATIVE REGARDING SYSTEM TESTING AND OPERATION.

- POWER NOTES:**
- EQUIP AND WIRE PANELS AS SHOWN, EXCEPT FOR UNAVOIDABLE CHANGES. PROVIDE PANEL WITH TYPED DIRECTORY PER PANEL DIAGRAMS. INSIDE PANELS, BUNDLE WIRES NEATLY. FIELD VERIFY ALL PANEL SCHEDULE LOAD VALUES. PROPERLY SEAL ALL FIRE-WALL PENETRATIONS.
 - WHEN FIELD VERIFYING EQUIPMENT, CHECK EQUIPMENT RATING, EQUIPMENT INTEGRITY AND FUNCTIONALITY, INCLUDING ASSOCIATED HARDWARE AND WIRE, CIRCUIT LOAD, AND RECOMMEND TO THE OWNER ANY NECESSARY EQUIPMENT UPGRADES.
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 - VERIFY J-BOX LOCATIONS SHOWN ON DRAWINGS WITH EQUIPMENT INSTRUCTIONS JUST PRIOR TO ROUGH-IN. BOND EACH BOX TO GROUND USING A GROUND WIRE RUN WITH CIRCUIT CONDUCTORS.
 - LABEL EACH BOX COVER PLATE WITH CIRCUIT NUMBER; POWER, LIGHTING AND COMMUNICATIONS WIRING AND/OR CONDUIT RUNS SHALL MAINTAIN A 1FT MINIMUM SEPARATION.
 - IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL, MECHANICAL, PLUMBING AND GENERAL CONTRACTOR TO EXAMINE THESE DRAWINGS AND CORRESPONDING SPECIFICATIONS SECTIONS FOR WORK TO BE PERFORMED BY OTHER TRADES SHOWN ON THESE DRAWINGS.

- ELECTRICAL SHEET KEYED NOTES:**
- RELOCATED CARD READER: SECURITY COMPANY TO MOVE READER. COORDINATE RELOCATION OF POWER WITH SECURITY COMPANY.
 - ELECTRIC SECURITY DOOR HARDWARE: COORDINATE INSTALLATION OF POWER WITH SECURITY COMPANY.
 - REPLACE EXISTING FIXTURE WITH NEW SURFACE MODULAR COMMERCIALS: (2) 4" (3) 32W T8; (2) 12" ACRYLIC DIFFUSER; FLUSH STEEL GASKETED DOOR; (2) 120-277V PARALLEL INSTANT START BALLAST; UL: MH=9; EQUAL TO LITHONIA 2M332A12125MVOLTGE1010S.
 - WIREFOLD 2300BACD, 20A GFI DUPLEX AND RJ45 DATA OUTLETS RUN TO SERVER ROOM: +45" AFF; VERIFY EXACT LOCATION WITH ARCHITECT.
 - VFD LOCATION: SEE MECHANICALS FOR SPECIFICATIONS AND INTERCONNECT.
 - BID ALT #2 DROP-OFF WINDOW: PROVIDE BUZZER CIRCUIT WITH PUSHBUTTON AS DIRECTED BY ARCHITECT.
 - BID ALT #1 COUNTER: WIREFOLD 2300BACD, 20A GFI DUPLEX AND RJ45 DATA OUTLETS RUN TO SERVER ROOM: +45" AFF; VERIFY EXACT LOCATION WITH ARCHITECT.
- LIGHTING CONTROLS:**
- \$ SENTRY TOGGLE WALL SWITCH, 0.5 AMP TO 5 AMP LOAD, MECHANICAL RESET TO OFF AUTOMATICALLY WHEN INPUT POWER IS INTERRUPTED FOR 5 SECONDS. MINI NEON LIGHT LOCATOR, SINGLE GANG, WALL PLATE NOT INCLUDED; 120/277V RATED, CALIFORNIA TITLE 24 COMPLIANT, UL: MH=45" AFF. (SENTRY LLC - SS05277)
 - Ⓞ DUAL TECHNOLOGY LINE VOLTAGE CEILING OCCUPANCY SENSOR: 120/277V; WHITE; 5 YEAR WARRANTY; CA TITLE 24 COMPLIANT, UL: (EQUAL TO WATTSTOPPER #DT-355)



TYPICAL WIREFOLD 2300BACD SYSTEM DIAGRAM
 NOTES:
 1. WIREFOLD SHALL BE SCREWED TO WALL ACCORDING TO MANUFACTURERS INSTRUCTIONS.
 2. SUPPLY WIRE AND COVER CLIPS AS NEEDED.

EJO ENGINEERING
 Electrical Engineering Consulting

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 Stockton, California 95207
 E: ejsengr@sjocglobal.net
 T: (209) 473-4167 Ed Quisiro, P.E., LEED AP

CERTIFICATE OF COMPLIANCE (Page 1 of 4) LTG-1C

Project Name: STANBLAUS COUNTY HEALTH SERVICES AGENCY
 Project No: 120210
 Project Address: 820 SCENIC DRIVE, MODESTO, CA 95350

Building Type: Commercial Single-Family Residential Institutional
 Office Retail Educational Governmental
 Multi-Family Industrial Other

Project of Compliance: Commercial Institutional Other

Design/Construction Authority: Licensed Professional Engineer Licensed Professional Architect Licensed Professional Designer Other

Design/Construction Authority Name: EDWARD J. QUERRO, License No. 120210

Design/Construction Authority Address: 545 COWY CREEK CIRCLE, STOCKTON, CA 95207

Design/Construction Authority Phone: (209) 473-4197

Design/Construction Authority Email: edj@ejq.com

Design/Construction Authority License: 120210

Design/Construction Authority State: CA

Design/Construction Authority Title: Electrical Engineer

Design/Construction Authority Signature: [Signature]

Design/Construction Authority Date: 12/02/10

Design/Construction Authority Seal: [Seal]

Design/Construction Authority Stamp: [Stamp]

Design/Construction Authority License: 120210

Design/Construction Authority State: CA

Design/Construction Authority Title: Electrical Engineer

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MANDATORY MEASURES (INDOOR)

1. BUILDING LIGHTING SHUT-OFF
 THE BUILDING LIGHTING SHUT-OFF SYSTEM CONSISTS OF OCCUPANCY SENSORS OR TIME CLOCK PER SECTIONS 119 & 131(a) OF THE 2008 NON-RESIDENTIAL COMPLIANCE MANUAL.

2. OVERRIDE FOR BUILDING LIGHTING SHUT-OFF
 IF TIME CLOCK IS USED, THE AUTOMATIC BUILDING SHUT-OFF SYSTEM IS PROVIDED WITH A MANUAL ACCESSIBLE OVERRIDE SWITCH IN SIGHT OF THE LIGHTS. THE AREA OF OVERRIDE IS NOT TO EXCEED 5,000 SQFT OR 20,000 SQFT FOR MALL, AUDITORIUM, RETAIL SPACE, INDUSTRIAL SPACE, CONVENTION CENTER OR ARENA.

3. LIGHTING EQUIPMENT DEVICES CERTIFIED
 ALL DEVICES USED SHALL BE CERTIFIED AND COMPLY WITH SECTIONS 111 & 118 OF THE 2008 NON-RESIDENTIAL COMPLIANCE MANUAL. ALL ALTERNATE EQUIPMENT SHALL BE CERTIFIED AND INSTALLED AS DIRECTED BY THE MANUFACTURER.

4. INDIVIDUAL ROOM/AREA CONTROLS
 EACH ROOM AND AREA IN THIS BUILDING IS EQUIPPED WITH A SEPARATE SWITCH OR OCCUPANCY SENSOR DEVICE FOR EACH AREA WITH FLOOR-TO-CEILING WALLS.

5. UNIFORM REDUCTION FOR INDIVIDUAL ROOMS
 ALL ROOMS AND AREAS GREATER THAN 100 SQUARE FEET AND MORE THAN 0.8 WATTS PER SQUARE FOOT OF LIGHTING LOAD SHALL BE CONTROLLED WITH MULTILEVEL SWITCHING FOR UNIFORM REDUCTION OF LIGHTING WITHIN THE ROOM. ALSO IF A SINGLE LUMINAIRE HAS MORE THAN TWO LAMPS.

6. DAYLIT AREA CONTROL
 ALL ROOMS THAT ARE GREATER THAN 250 SQUARE FEET AND CONTAIN WINDOWS AND SKYLIGHTS THAT ALLOW FOR THE EFFECTIVE USE OF DAYLIGHT IN THE AREA SHALL HAVE 50% OF THE LIGHTING POWER IN EACH DAYLIT AREA CONTROLLED BY A SEPARATE SWITCH OR THE EFFECTIVE USE OF DAYLIGHT THROUGHOUT CANNOT BE ACCOMPLISHED BECAUSE THE WINDOWS ARE CONTINUOUSLY SHADED BY A BUILDING ON THE ADJACENT LOT, DIAGRAM OF SHADING DURING DIFFERENT TIMES OF YEAR IS INCLUDED ON PLANS, IF APPLICABLE.

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REVISIONS	BY
1	
2	
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CA TITLE-24
 ELECTRICAL
 APPLICATIONS

Public Health Lab Renovations
 for:
**STANBLAUS COUNTY
 HEALTH SERVICES AGENCY**
 820 SCENIC DRIVE
 Modesto, California 95350

DATE	12-02-10
SCALE	AS NOTED
DRAWN	EJQ
JOB	10.09026
SHEET	3



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LAB HOOD CONTROLLERS						
MARK	MAKE	DESCRIPTION	DAMPER TYPE/SIZE	CONTROLS	COLOR	REMARKS/OP-VT.
GST-1	PHOENIX SV400MAL02	GENERAL SUP TERMINAL	VENTURI 12"Ø	PHOENIX V/ RPM-1	NA	NO COATINGS 15#

1. GST-1 - FURNISH WITH SETRA/VERIS ROOM PRESSURE MONITOR(RPM-1), PHOENIX VSET10 SASH SENSOR AND DIV100 CONTROLLER. RUN ALL CABLING AND CONTROL WIRING IN CONDUIT/WIREMOLD IN SPACE. CONDUIT ON ROOF. NO EXPOSED WIRING PERMITTED. LOCATE DEVICES WHERE SHOWN AND PER THE ELECTRICAL DRAWINGS FOR CLEARANCES. PROGRAM GST-1 TO KEEP ROOM NEGATIVE.

EXHAUST FAN SCHEDULE						
MARK	MAKE	DESC.	CAPACITY	ELECTRICAL CHARACTERISTIC	ACCESSORIES/CONTROLS	OP-VT.
	MODEL		CFM	HP		
EF-3	GREENHECK 115 SVB	ROOF EXHAUST FAN	1800	3Ø 1680 33 HP 2.0 208V 3Ø	VFD W/ BYPASS STATIC PRESS CONTROL	150#

1. EF-3 - VFD AND BYPASS TO BE MOUNTED IN LAB NEAR HOOD. STATIC PRESSURE SENSOR ASSEMBLY IN ROOM WITH HI PRESSURE SENSOR LEAD IN LAB. SENSOR SHALL HAVE DISPLAY AND SETPOINT. SEE ELECTRICAL DRAWINGS FOR LOCATIONS. THE FAN PRESSURE CONTROLLER INTO GST-1 CONTROLLER FOR EF-1 VFD CONTROL. MOTOR LEADS TO BE RUN IN SEPARATE CONDUIT TO FAN.

HVAC Notes

- Furnish and install all ductwork in accordance with the latest editions of SMACNA duct construction standards.
- All pipe, ductwork and conduit shall be installed and securely braced per SMACNA's Seismic Restraint Guidelines, DSHPS preapproval #R0010.
- All contractor furnished equipment installation and start-up instructions shall be kept with the piece of equipment in weatherproof pouches until final inspection. After final inspection, three sets of operation, installation, maintenance and start-up instructions shall be given to the Owner for each piece of equipment.
- Fire damper installation instructions shall be made available to the inspecting authority for their review.
- All penetrations through fire rated assemblies shall be firestopped and sealed with a material that meets or exceeds the 'T' rating of the assembly penetrated. Material to be used for sealing shall be coordinated with the General Contractor.
- Install all pipe and duct insulation materials per T-24 requirements. All material to be installed shall meet USC flame and smoke requirements.
- All work on this project shall conform to the following codes:

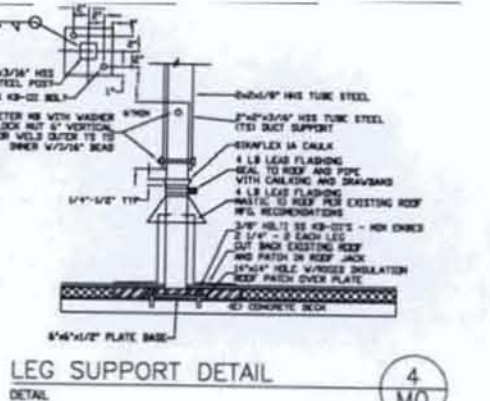
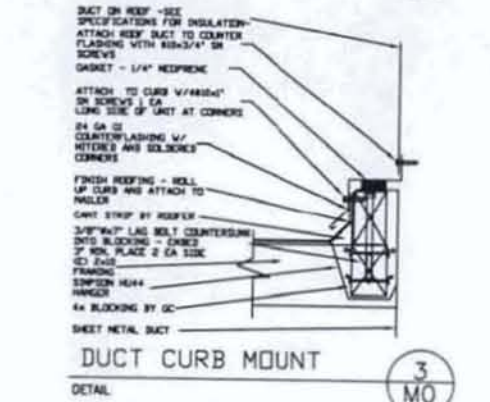
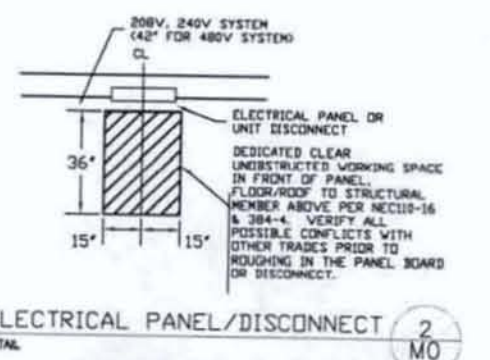
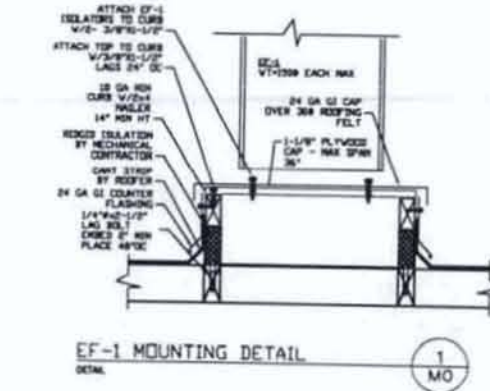
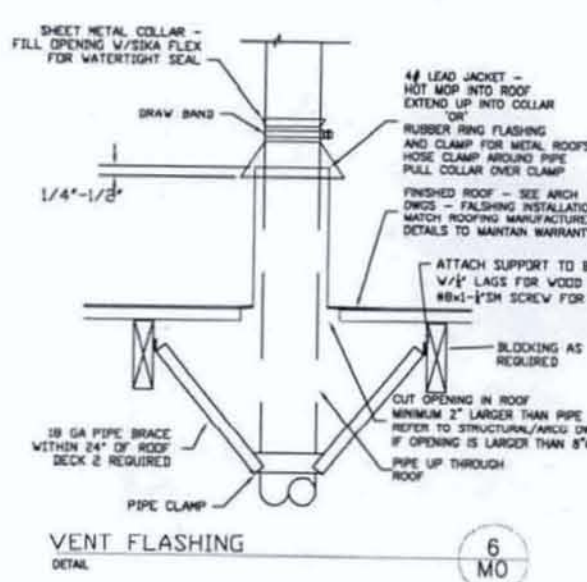
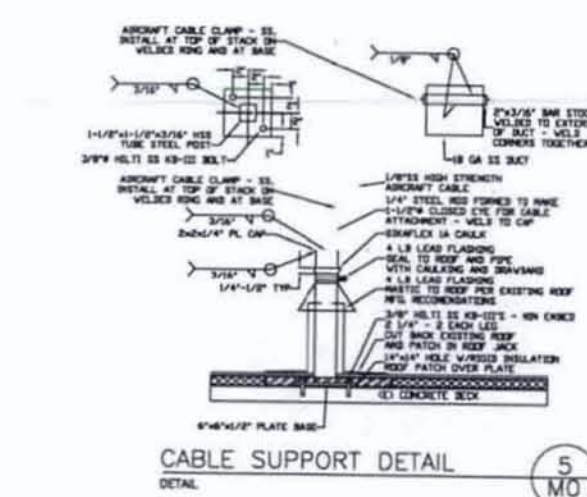
- 2007 CBC
- 2007 CPC
- 2007 CMC
- 2007 CCC

- All eye branches connected to a diffuser, grille or register shall have a manual volume damper installed in the eye branch. DSD's shall only be used when eye branches will be installed over inaccessible ceiling areas or in the slab of the building. Dampers shall be fabricated of the same gauge as the duct with 1" standoff, locking quadrant, and handle. Fasten red ribbon to handle to mark location.
- All gas pipe to be schedule 40 with screwed fittings. All condensate drain lines shall be schedule 40 PVC run to the gutters. Set pipe on redwood blocks with 24 ga GI cover.
- Provide smoke detectors in the supply air duct on all units over 2000 cfm serving more than one room.
- All exposed ductwork shall be GI pipe and fittings. Line all rectangular duct with insulation materials with a flame spread of 25 and smoke of 0.
- It is the responsibility of the Mechanical Contractor to coordinate the installation of his work including equipment substitutions with the other trades including but not limited to electrical, fire sprinkler, framing and plumbing.
- Insulate all ductwork per the T-24 energy requirements found on the MECH-1 forms. Ductwork shall be tested for leaks with a maximum static pressure in the duct of 1.5".
- Contractor shall label all equipment with unique identification using plastic engraved plates with 1/2" tall lettering indicating the equipment number and state the area served by the equipment.
- Submit on NABC forms an independent certified air balance showing system has been balanced and OSA quantities set to that shown on drawings.
- All flex duct will be stretched as tight as possible and as per manufacturers listing to avoid all kinks and sagging.
- All smoke detectors shall be tested as required with an approved smoke system per the City of Stockton standards in the presence of the inspector or fire marshal.
- All systems shall require an air balance report upon final inspection.
- Condensate drain lines shall be UV resistant CPVC or PVC pipe shall be painted to protect from UV radiation.

T-24 MANDATORY FEATURES

EQUIPMENT CERTIFIED TO MINIMUM EFFICIENCY M-0
 CONTROL EQUIPMENT CERTIFIED TO 119.d AND 121.c.1 N/A
 PILOT LIGHTS PROHIBITED PER 115 N/A
 VENTILATION REQUIREMENTS PER 121.b.2.4d M-1 AIR BALANCE
 NATURAL VENTILATION PER 121.b.1 N/A
 CONTROLS MEET REQUIREMENTS 122 M-0. See Notes.
 SHUT DOWN AND BACKDRAFT DAMPERS PER 122.f See schedules on M-0
 ISOLATION AREA DEVICES PER 122.g N/A
 PIPE INSULATION PER 122.h N/A
 REQUIREMENTS FOR DUCTS AND PLENUMS PER 124 M-0. SPECIFICATIONS

SYMBOL LEGEND		
SYMBOL	ITEM	ABBREV.
	RECTANGULAR DUCT SIZE 12"Ø	
	ROUND DUCT SIZE 12"Ø	
	DAMPER	
	FIRE DAMPER	
	FIRE STOP	
	FIRE STOP DAMPER	
	MOTORIZED DAMPER	
	TURNING VANES	
	FIRST LETTER LOCATION	CEILING FLOOR WALL
	SECOND LETTER LOCATION	SUPPLY RETURN EXHAUST
	NUMBER-TYPE	SEE SCHED.
	300 - CFM CUBIC FEET PER MINUTE	
	12x12 - GRILLE NECK SIZE IN INCHES	
	THERMOSTAT UNIT NO.	
	BYPASS THERMOSTAT, CLOAK	
	GALVANIZED SHEET METAL	GM
	ABOVE FINISHED FLOOR	AFT
	DUCTWORK - NEW	(N)
	DUCTWORK TO BE REMOVED	
	DUCTWORK EXISTING	(E)
	POINT OF CONNECTION	POC
	CUT OFF POINT	COP
	UP THROUGH ROOF	UTR
	CONDENSATE OVERFLOW	C, OF
	HEATING WATER SUPPLY, RETURN	HWS, HWR
	CHILLED WATER SUPPLY, RETURN	CWS, CWR
	MACHINE BOLT	MB
	ALL THREAD ROD	ATR
	OUTSIDE AIR	OSA
	FEET PER MINUTE	FFM
	DUCT TEMPERATURE SENSOR	DTS
	FLEX CONNECTOR	FC
	FLEX DUCT	
	STEAM PIPE	S
	STEAM CONDENSATE	SC
	WASTEWATER	WW
	SHUT OFF/BALL VALVE	SV
	DUCT SMOKE DETECTOR	OSD



2010-065 HVAC

REVISIONS	BY
NA	
NA	
NA	
NA	

PACIFIC DESIGN ASSOCIATES, INC.
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 WWW.PACIFICDESIGNASSOCIATES.COM

HVAC SCHEDULES AND DETAILS

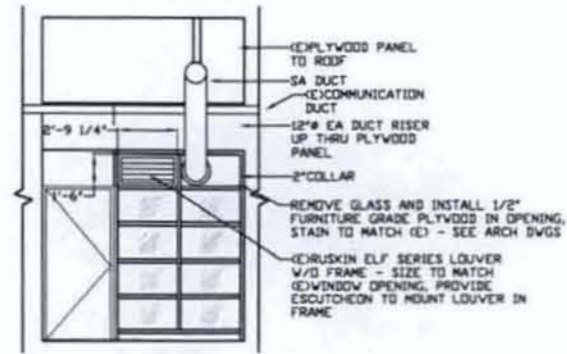
Public Health Lab Renovations
 for:
STANISLAUS COUNTY HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 Modesto, California

DATE: 10-25-2010
 SCALE: AS NOTED
 DRAWN: GD
 JOB: 10.09026
 SHEET: MO.0

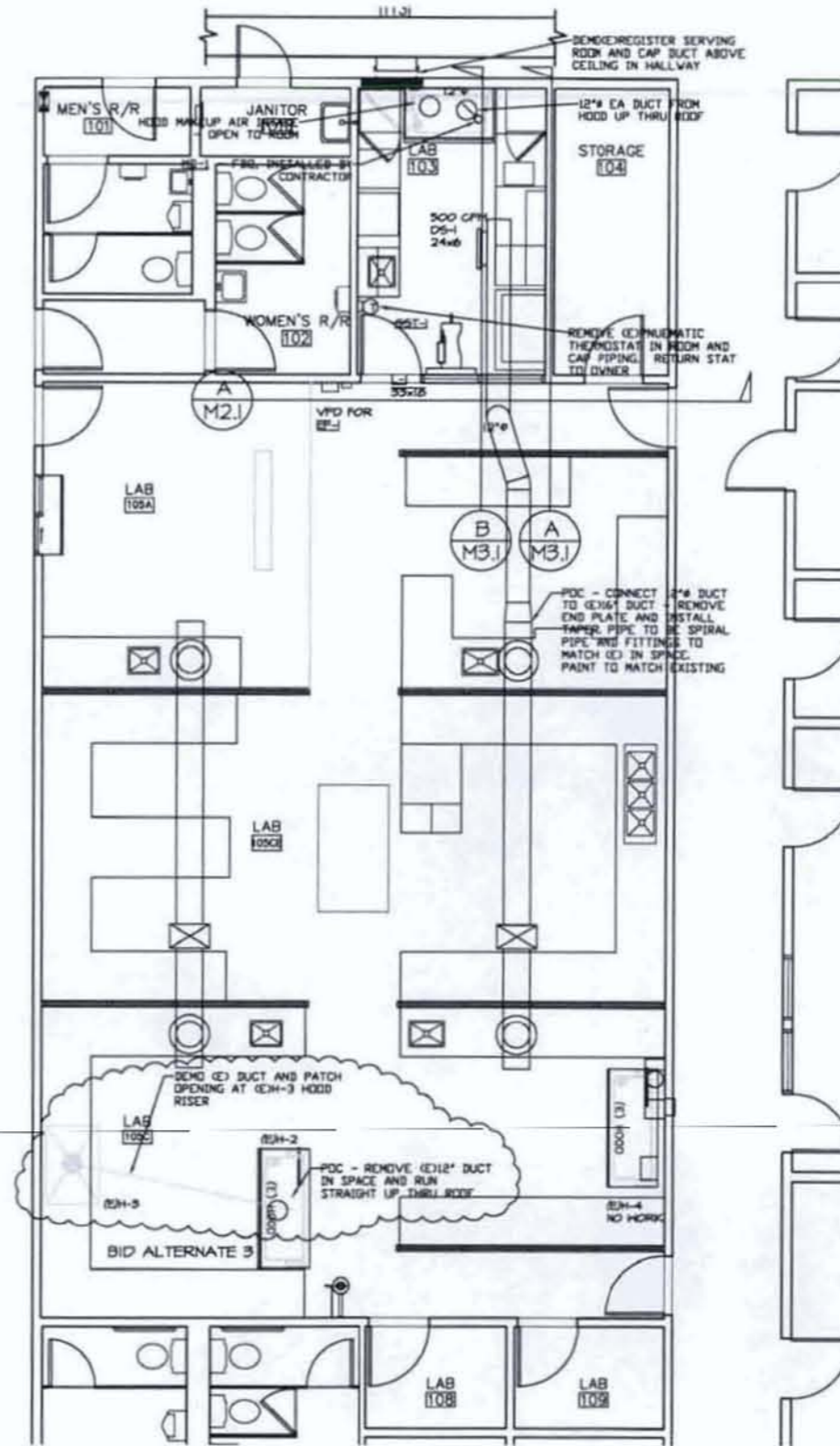
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PROFESSIONAL ENGINEER
 ERIC G. DAVIS
 No. 44578
 Exp. 6-30-13
 STATE OF CALIFORNIA

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 Mechanical and Safety Engineers
 2723 Tejon St
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 Ph 209-367-0899
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 E-mail: gdmengrinc@sbcglobal.net



A SECTION LOOKING SOUTH FROM LAB INTO ROOM
1" = 14" = 10'

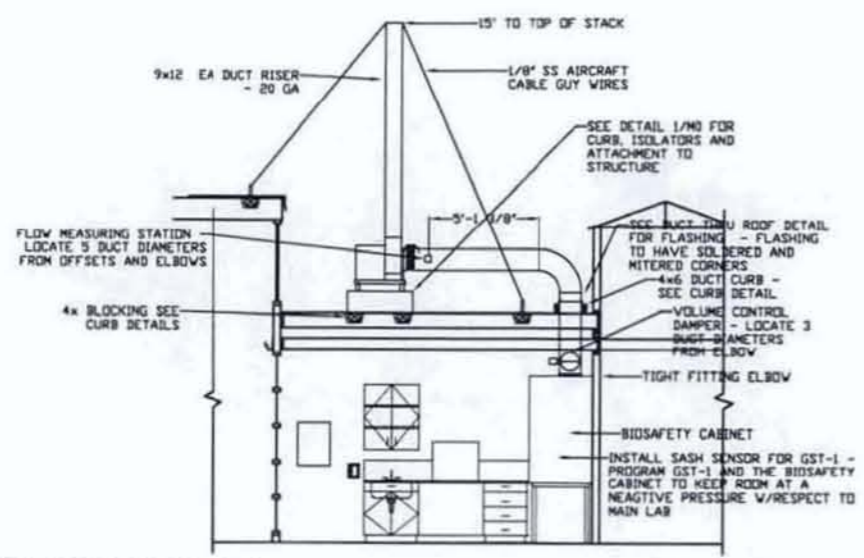


1 PARTIAL HVAC FLOOR PLAN
1" = 14" = 10'

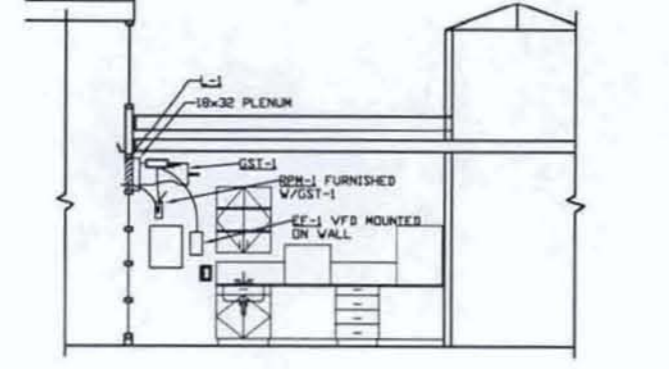


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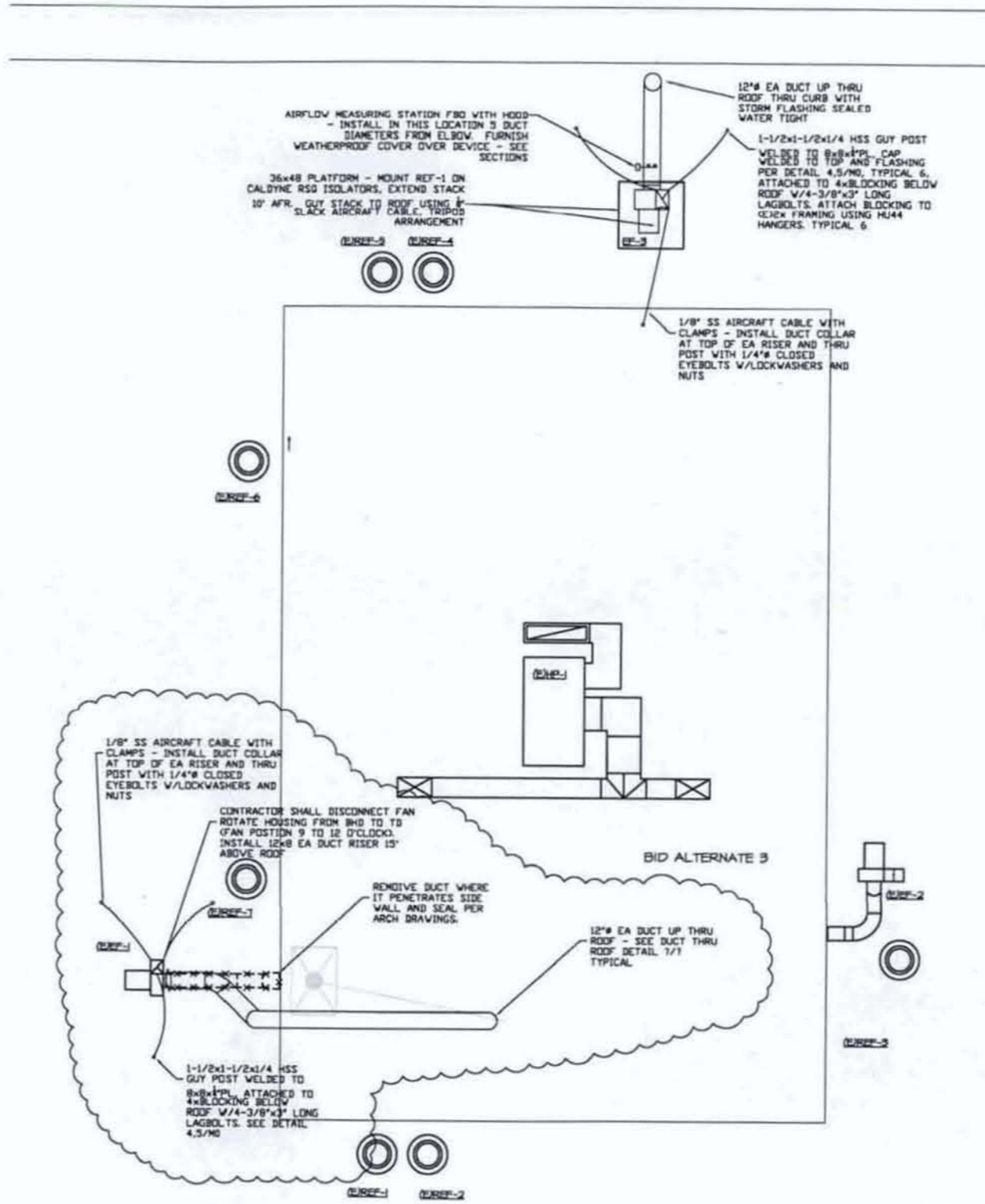
2010-065 HVAC	
REVISIONS	BY
1	NA
2	NA
3	NA
4	NA
5	NA
6	NA
7	NA
8	NA
9	NA
10	NA
PACIFIC DESIGN ASSOCIATES, INC. 1000 N. G ST. SUITE 100 MADERA, CA 95361 TEL: 510.781.1111 WWW.PDA-CA.COM	
HVAC FLOOR PLAN AND SECTIONS	
Public Health Lab Renovations for: STANISLAUS COUNTY HEALTH SERVICES AGENCY 820 SCENIC DRIVE Modesto, California	
DATE	10-25-2010
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SHEET	M2.1



A SECTION LOOKING EAST THRU EA DUCT
1" = 1/4" x 10'



B SECTION LOOKING EAST THRU L-1
1" = 1/4" x 10'



1 PARTIAL HVAC ROOF PLAN
1" = 1/4" x 10'



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2010-065 HVAC	
REVISIONS	BY
NA	



HVAC ROOF PLAN AND SECTIONS

Public Health Lab Renovations
for:
STANISLAUS COUNTY HEALTH SERVICES AGENCY
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M3.1

Mark	Make	Size	Annotation
DB-1	STARTER CPV	3 GALLON SELF CONTAINED DRAIN SYSTEM TEST BRASS BRACKET HEAVY W/CH 1/2" CPV MOTOR WITH CONTROLS, BRASS PART NUMBER 81004.	
S-1	WIKER 3/8"-1/2" GAIT	TURN 2-3/8" CW DOOSE NECK FAUCET WITH OUT HENCKELS SUPPL 2-BESED FOOT PEDAL - CLEAR 1/4-1/8 CHROME FINISH - DIMENSION 1/4-1/8 P-TAP - BRASS/STAINL STEEL 1/4" ANGLE STOP WITH SEA 3/8" SUPPLY	
WST-1	PURELAB OPTION-02	CONTRACTOR SHALL FURNISH AND INSTALL 3/8" PURE WATER TUBING AND FITTINGS FROM CABINET TO HOOD AS MADE BY HANNE, LIST ULTRA PURE WATER PIPING OR EQUAL.	1/2" CPV LINE DOOSING VESSEL, 1/2" CPV CONNECTION, 3/4" DRAIN CABINET MOUNTED ON WALL, BALL VALVES SHALL BE 1/2" UNION TYPE.

PLUMBING NOTES:
 ALL WORK SHALL CONFORM TO THE FOLLOWINGS CODES:
 2007 CBC
 2007 CPC
 2007 CMC
 2007 CEC

CONTRACTOR SHALL KEEP ALL INSTALLATION INSTRUCTIONS FOR PLUMBING FIXTURES, ACCESS DOORS, SEALING MATERIAL, FIRE STOPPING, ETC. ON SITE IN WATERPROOF POUCHES FOR THE INSPECTING AUTHORITY FOR THEIR REVIEW.

PLUMBING CONTRACTOR SHALL SUBMIT 7 SETS OF SUBMITTALS FOR REVIEW AND COMMENT BY THE ENGINEER AND ARCHITECT OF RECORD FOR THE FIXTURES LISTED AND THE MATERIAL TO BE USED AND INSTALLED ON THIS PROJECT AND SHALL MAKE THE APPROPRIATE CHANGES AS DIRECTED BY THE ENGINEER AND ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

MATERIALS:
COLD AND HOT WATER
 TYPE 1/2" COPPER ABOVE GROUND AND TYPE K' BELOW. FURNISH SHUTOFF VALVES WHERE SHOWN. SHUT OFF VALVES SHALL BE BALL TYPE WITH TEFLON SEATS, STAINLESS STEEL BALL, AND DOUBLE O-RING STEEL 1/4" TURN. VALVES TO BE RATED FOR VEG SERVICE. PROVIDE DIELECTRIC UNIONS AT ALL DISSIMILAR METAL CONNECTIONS. INSULATE HOT WATER SUPPLY AND RETURN LINES 1/2" FIBERGLASS ASJ MEETING THE REQUIREMENTS OF 1-24 MANDATORY FEATURES.

SCH 40 CPVC BELOW GRADE OUTSIDE, SIZE AS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES. CONTRACTOR SHALL DISINFECT WATER LINES PER AWA GUIDELINES AND PROVIDE THREE COPIES FROM AN INDEPENDENT TEST LAB. WATER SHALL BE TESTED FOR WATER BORNE BACTERIUM, SPORIDIUM AND OTHER PATHOGENS AT THE TIME OF OCCUPANCY AND CERTIFY THE SYSTEM PASSED THESE TESTS.

SEWER - ABS PIPE AND FITTINGS ABOVE AND BELOW GRADE, CI PIPE WITH ESCUTCHEONS WHERE PROHIBITED BY CODE AND THE LOCAL JURISDICTION. CLEANOUTS SHALL BE PROVIDED EVERY 100 FT AND AT EACH CHANGE OF DIRECTION GREATER THAN 90°. USE OF ABS PIPE IS LIMITED TO BUILDINGS 2 OR LESS STORIES IN HEIGHT AND CANNOT BE USED WITHIN FIRE RATED ASSEMBLIES.

VENT LINES - SEE SEWER LINES.

HVAC CONDENSATE DRAIN LINES - TYPE M' COPPER PIPE AND FITTINGS INSIDE BUILDING AND SCH 40 PVC PIPE OUTSIDE BUILDING. PROVIDE CLEANOUT AT EACH CHANGE OF DIRECTION AND AT COIL CONNECTION.

GAS
 3 PSI SERVICE - 2-1/2" AND SMALLER SHALL BE SCH 40 GI SCREWED PIPE AND FITTINGS. 3" AND LARGER SHALL BE SCH 40 WELDED PIPE AND FITTINGS. EXPOSED PIPE SHALL BE GALVANIZED. BURIED PIPE SHALL BE COVERED WITH X-TRU COAT. ALL PIPE INSIDE BUILDING SHALL BE WELDED.
 7" VC SERVICE - SCH 40 GALVANIZED IRON PIPE AND FITTINGS OUTSIDE BUILDING AND SCH 40 BLACK IRON PIPE INSIDE BUILDING. PAINT WHERE EXPOSED TO INTERIOR FINISHES.

FIXTURES
 ROUGH IN ALL HANDICAP FIXTURES PER THE DETAILS FOUND IN UBC CHAPTER 11, THE ARCHITECTURAL DRAWINGS AND LOCAL CODE REQUIREMENTS. NOTIFY ARCHITECT IN WRITING OF CONFLICTS.

SUBMITTALS
 PROVIDE SEVEN SETS OF SUBMITTALS FOR REVIEW.

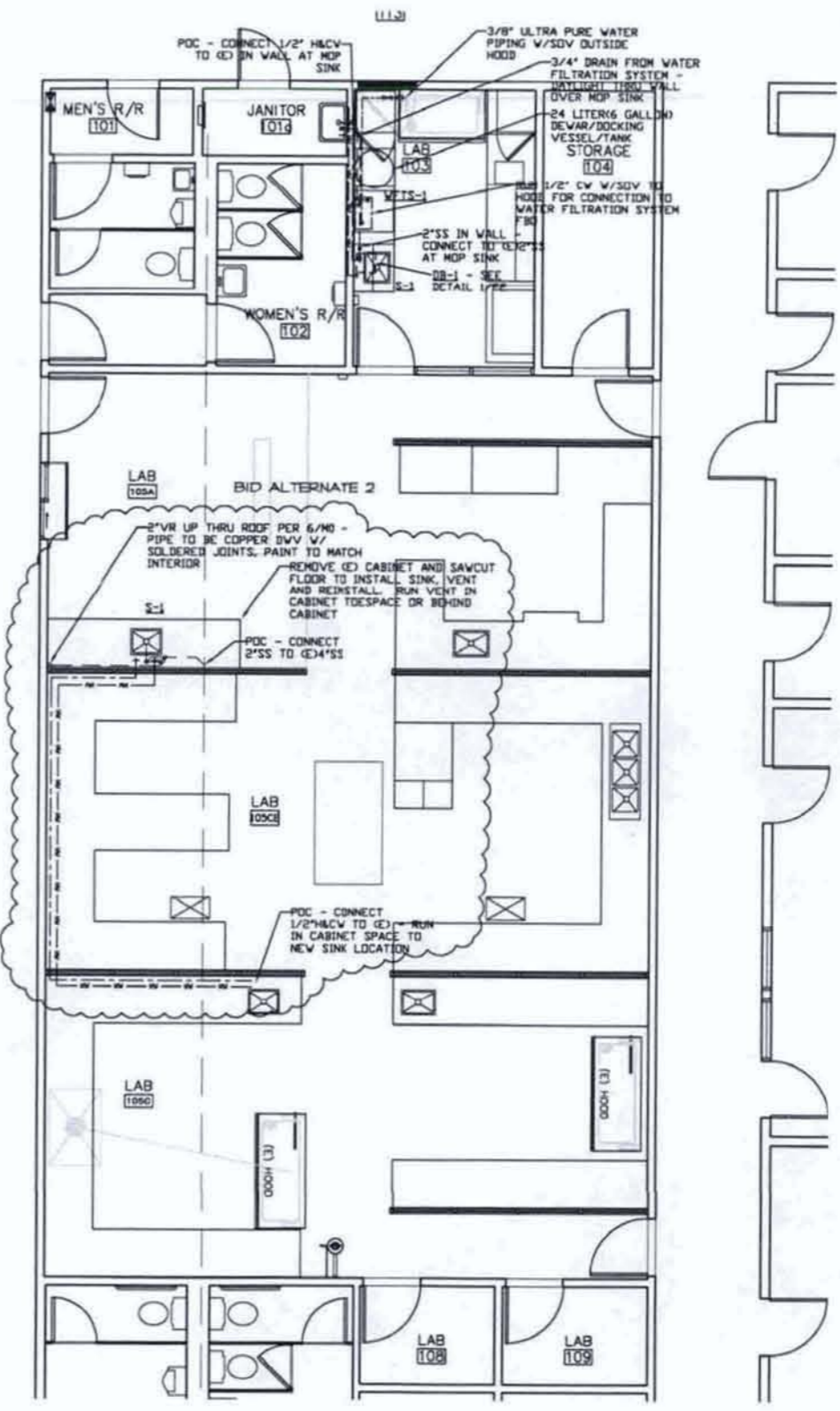
INSTALLATION
 BRACE ALL PIPE AND DUCT SYSTEMS PER SMACHA SEISMIC RESTRAINT GUIDELINES INCLUDING CHANGES OF DIRECTION AND CHANGES IN ELEVATION OF MORE THAN 10".

CPVC INSTALLATION
 INSTALLATION OF CPVC FOR NEW AND REPLACEMENT SYSTEMS MUST COMPLY WITH THE REQUIREMENTS AS STATED IN CHAPTER 6 AND INSTALLATION STANDARDS IAPMO 15-20-2005. ALL PROCEDURES MUST BE FOLLOWED FOR FLUSHING AND WORKER SAFETY MEASURES. INCLUDED ARE THE PENALTIES AS STATED ON CHAPTER 6 (g). ANY CONTRACTOR OR SUBCONTRACTOR FOUND TO HAVE FAILED TO COMPLY WITH THE VENTILATION GLOVE OR FLUSHING REQUIREMENTS OF SECTION 1.2.2 OF APPENDIX I OF THIS CODE, INSTALLATION STANDARDS FOR CPVC SOLVENT CEMENT HOT AND COLD WATER DISTRIBUTION SYSTEMS - IAPMO 15-20-2005 SHALL BE SUBJECT TO THE PENALTIES ON HEALTH AND SAFETY CODE, DIVISION 13, PART 15 CHAPTER 6 SECTION 17995.

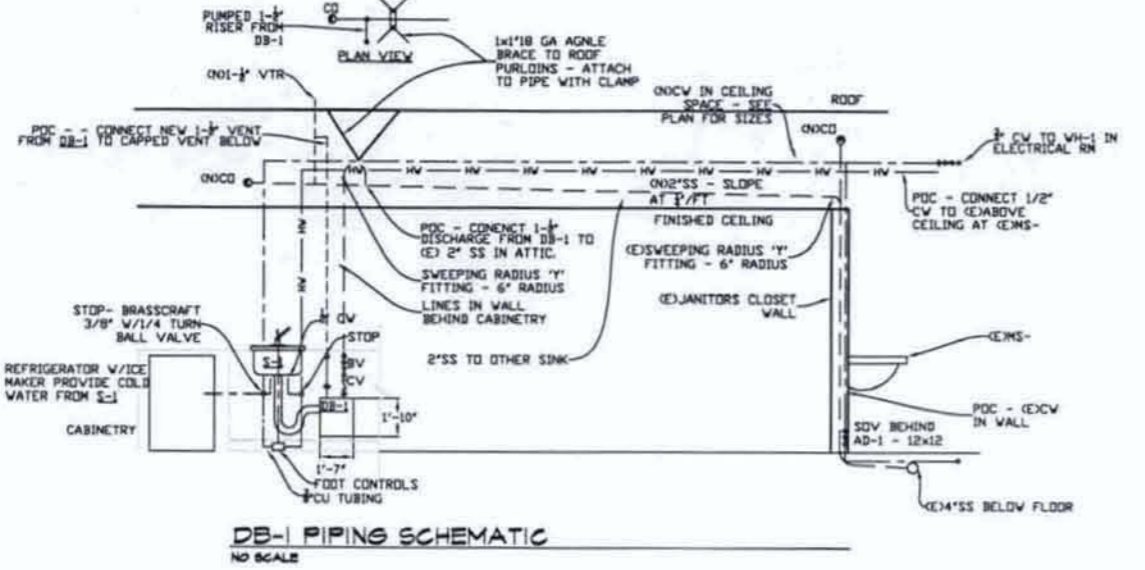
IN ADDITION IF DURING THE CONDUCT OF ANY BUILDING INSPECTION, THE BUILDING OFFICIAL FINDS THAT THE VENTILATION AND GLOVE REQUIREMENTS OF SECTION 1.2.2 OF APPENDIX I OF THIS CODE, SPECIAL REQUIREMENTS FOR CPVC INSTALLATION WITHIN RESIDENTIAL BUILDINGS ARE BEING VIOLATED, BUILDING OFFICIAL SHALL CITE THE CONTRACTOR OR SUBCONTRACTOR FOR THE VIOLATION UNDER THE CALIFORNIA PLUMBING CODE.

PLUMBING LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---CV	COLD WATER LINE	---HV	HOT WATER LINE
---SV	SEWER LINE	---V	VENT LINE
---	CONDENSATE DRAIN	---	TRAP
---	RAIN WATER LEADER	---	AREA DRAIN
---	CATCH BASIN (DRAIN INLET)	---	CLEAN OUT
---	WALL CLEAN OUT	---	FLOOR CLEAN OUT
---	FLOOR CLEAN OUT	---	FLOOR DRAIN
---	FLOOR DRAIN	---	TRAP PRIMER VALVE
---	TRAP PRIMER VALVE	---	COLD WATER (DRAIN) RISER
---	HV SUPPLY (DRAIN) RETURN	---	TEMPERED HOT WATER (DRAIN)
---	NATURAL GAS (PROPANE/CPVC)	---	HIGH PRESSURE GAS (PROPANE/CPVC)
---	COMPRESSED AIR	---	SOFT COLD WATER LINE
---	SOFT HOT WATER LINE	---	SOFT HOT WATER LINE
---	SHUT OFF VALVE	---	

FIXTURE CONNECTION SCHEDULE				
PLUMBING FIXTURE	SANITARY		WATER	
	SEWER	VENT	COLD	HOT
WATER CLOSET FV	3"	2"	1"	-
WATER CLOSET FT	3"	2"	1/2"	-
URINAL FV	2"	1-1/2"	3/4"	-
URINAL FT	2"	1-1/2"	1/2"	-
LAV	2"	1-1/2"	1/2"	1/2"
BAR SINK	2"	1-1/2"	1/2"	1/2"
CLASSROOM SINK	2"	1-1/2"	1/2"	1/2"
KITCHEN SINK	2"	1-1/2"	1/2"	1/2"
MCP SINK	3"	2"	3/4"	3/4"
TRAP PRIMER	-	-	1/2"	-
FD - 2"	3"	2"	-	-
FD - 3"	3"	2"	-	-
FLOOR SINK 3"	3"	1-1/2"	-	-
FLOOR SINK 3"	3"	1-1/2"	-	-
SHOWER - RES.	2"	1-1/2"	1/2"	1/2"
EYEWASH	2"	1-1/2"	1/2"	-



1 PARTIAL PLUMBING FLOOR PLAN
 1" = 1/4"=10"



DB-1 PIPING SCHEMATIC
 NO SCALE

2010-065 HVAC

REVISIONS	BY

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PLUMBING FLOOR PLAN
 AND SECTIONS

Public Health Lab Renovations
 for:
STANISLAUS COUNTY
HEALTH SERVICES AGENCY
 820 SCENIC DRIVE
 Modesto, California

DATE	10-25-2010
SCALE	AS NOTED
DRAWN	CD
JOB	10.09026
SHEET	P1.0

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