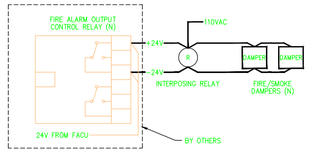
LEGEND:

- EXISTING RADIONICS 9112 FIRE ALARM CONTROL UNIT
- NEW COMBINATION FIRE/SMOKE DAMPER
- NEW VESDA LASER COMPACT DETECTOR (VLC-500)
- NEW VESDA POWER SUPPLY PANEL
- EXISTING NOTIFICATION APPLIANCE
- EXISTING RACEWAY JUNCTION BOX
- NEW RACEWAY JUNCTION BOX
- VESDA SAMPLE PORT
- VESDA SAMPLE PIPING DROP/RISE
- VESDA SAMPLE PIPING (1/4 INCH OR 3/8 INCH COPPER)
- EXISTING FIRE ALARM CONDUIT RACEWAY
- NEW 3/4 INCH CONDUIT FIRE ALARM RACEWAY



NOTES:

1. THE FIRE/SMOKE DAMPERS (N) SHALL BE POWERED BY 110 VAC. AN INTERPOSING RELAY SHALL BE PROVIDED SUCH THAT THE FIRE ALARM CONTROL UNIT (RELAY) POWERS THE FIRE/SMOKE DAMPERS (N) OPEN. UPON THE APPROPRIATE FIRE ALARM SIGNAL, THE FIRE ALARM CONTROL UNIT (RELAY) SHALL CAUSE, FOR THE CLOSURE ALL OF THE APPROPRIATE FIRE/SMOKE DAMPERS.
2. THE SUBCONTRACTOR SHALL PROVIDE AND INSTALL ALL NEW 110 VAC CONDUCTORS AND RACEWAY FOR EACH FIRE/SMOKE DAMPER. THE SUBCONTRACTOR SHALL ALSO PROVIDE AND INSTALL ALL NECESSARY 24 VDC CONDUCTORS FROM THE INTERPOSING RELAY TO THE LOCATION OF THE NEW CONTROL MODULE. THE CONTROL MODULE WIRING WILL BE BY OTHERS.

1 Damper Relay Wiring
SCALE: None

NIC

GENERAL NOTES:

IN GENERAL, WORK SHALL INCLUDE, BUT NOT BE LIMITED TO:

1) THE DETAILED DESIGN, FABRICATION, PROCUREMENT, AND INSTALLATION OF THE COMPLETE VESDA FIRE PROTECTION SYSTEMS AS INDICATED ON THE CONTRACT DRAWINGS. THESE DRAWINGS SHOW THE VESDA SYSTEMS ONLY. MODIFICATIONS, ADDITIONS, AND DELETIONS TO THE EXISTING FIRE ALARM SYSTEM WILL BE PERFORMED BY OTHERS. THE SUBCONTRACTOR SHALL INSTALL THE VESDA DETECTORS AND VESDA POWER SUPPLY AS SHOWN.

2) INSTALLATION OF NEW CONDUIT, RACEWAY SYSTEM MODIFICATIONS (ONLY TO THE EXTENT SHOWN FOR NEW COMBINATION FIRE/SMOKE DAMPERS) FOR THE FIRE ALARM SYSTEM INSTALLATION. THE SUBCONTRACTOR SHALL PROVIDE A CONDUCTOR PULL IN THE NEW CONDUIT SYSTEMS FOR OTHERS TO PULL THE NECESSARY AND REQUIRED SIGNALING, POWER AND/OR CONTROL CIRCUITS.

3) ALL PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS NECESSARY FOR THE INSTALLATION OF THE FIRE PROTECTION SYSTEMS INCLUDING THE INSTALLATION OF APPROVED FIRESTOP ASSEMBLIES NECESSARY TO MAINTAIN THE DESIGNED FIRE RESISTANCE RATING OF THE WALL, CEILING, OR FLOOR ASSEMBLY.

4) DELETIONS, MODIFICATIONS, AND ADDITIONS TO THE EXISTING FIRE ALARM SYSTEM WILL BE PERFORMED BY OTHERS.

5) SYSTEMS AND DEVICE TESTING.

6) ALL NECESSARY PERMITS AND FEES.

7) THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND IMPLEMENTING ALL SAFETY PROGRAMS AND PROCEDURES FOR THIS PROJECT AND SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY AND HEALTH REGULATIONS.

8) THE CONTRACT DRAWINGS ARE DIAGRAMMATIC ONLY. SUBCONTRACTOR SHALL DETERMINE THE ACTUAL MEASUREMENTS AND MAKE ANY AND ALL SUCH LENGTH AND OFFSET ADJUSTMENTS AND FIRE ALARM CONTROL UNIT PROGRAMMING AS MAY BE NECESSARY TO COMPLETE THE INSTALLATION AT NO CHANGE IN THE CONTRACT PRICE. THE DRAWINGS ARE NOT INTENDED TO RELIEVE THE SUBCONTRACTOR OF ANY RESPONSIBILITY FOR AVOIDING CONFLICTS OR OBSTRUCTIONS, OR FOR INSTALLING THE FIRE ALARM DEVICES AND EQUIPMENT AS REQUIRED TO PROVIDE COMPLETE PROTECTION OF THE DESIGNATED AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF THE REFERENCED STANDARDS AND THE SPECIFICATIONS. WRITTEN APPROVAL SHALL BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO MAKING ANY MAJOR DEVIATIONS FROM THE ARRANGEMENT AND LAYOUT SHOWN ON THE DRAWINGS.

9) ALL EQUIPMENT SHALL BE NEW, AND APPROVED AND/OR LISTED BY UNDERWRITERS' LABORATORIES OR FACTORY MUTUAL.

10) SYSTEM, EQUIPMENT, INSTALLATION, AND MATERIALS AND METHODS USED SHALL COMPLY WITH THE FOLLOWING:

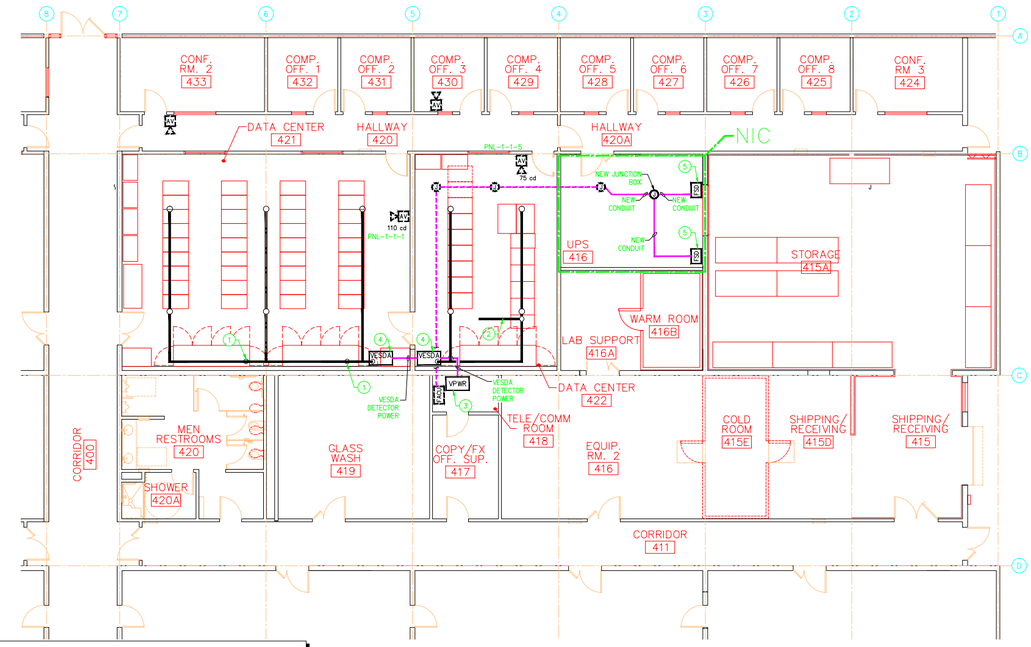
a) THE REQUIREMENTS OF THE LAWRENCE BERKELEY NATIONAL LABORATORY.

b) THE REQUIREMENTS OF THE CONTRA COSTA COUNTY CONSOLIDATED FIRE PROTECTION DISTRICT.

c) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 72 NATIONAL FIRE ALARM CODE.

d) CALIFORNIA BUILDING AND FIRE CODES.

e) MANUFACTURER'S RECOMMENDATIONS AND GUIDELINES.



SPECIAL NOTE:

PROVIDE A RED PHENOLIC SIGN WITH WHITE LETTERS, MINIMUM 1-INCH HIGH AT EACH VESDA DETECTOR TO STATE:

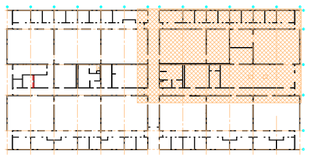
CAUTION – AREA PROTECTED BY HIGH SENSITIVE AIR SAMPLING SMOKE DETECTION. OPERATION OF THE PRE-ALARM RESULTS IN CRAC UNIT SHUT DOWN FOR 90 SECONDS. OPERATION OF THE DETECTOR FIRE ALARM RESULTS IN OPERATION OF THE EPO SYSTEM. THE EPO SYSTEM OPERATION MAY BE OVERRIDDEN USING THE KEY SWITCH IF NO FIRE CONDITIONS ARE PRESENT DURING THE PRE-ALARM OR FIRE ALARM."

2 JGI Building 400 – Fire Alarm Modifications Partial Plan
SCALE: 1/8"=1'-0"

0 8 FT 16 FT 24 FT
SCALE: 1/8"=1'-0" UNO

SHEET NOTES

1. VESDA SAMPLE PIPING NETWORK DROP TO CRAC UNIT RETURN AIR PLENUM (CRAC UNITS 1 AND 2). PROVIDE SAMPLE PIPING IN FRONT OF FILTER IN ENCLOSURE. PROVIDE SAMPLE PORTS ON 0'-4" INTERVAL SPACING.
2. VESDA SAMPLE PIPING IN CRAC UNIT #3 RETURN AIR PLENUM. PROVIDE SAMPLE PORTS ON 0'-4" INTERVAL SPACING.
3. VESDA DETECTOR POWER SUPPLY. CONNECT AC POWER TO AC POWER SUPPLYING EXISTING CONTROL UNIT AND PROVIDE POWER TO EACH VESDA DETECTOR.
4. VESDA LASER COMPACT DETECTOR. MOUNT DETECTOR SO BOTTOM OF DETECTOR IS 8'-3" AFF.
5. NEW COMBINATION FIRE SMOKE DAMPER.



KEY PLAN

HYT Corporation
Fire Protection Engineers and Consultants
3498 Clayton Road - Suite 101 Concord, California 94519
Phone: (925) 681-2731 FAX: (925) 681-2733
CONSULTING FIRM

Eichleay Engineers Inc. of California
1390 Willow Pass Road, Suite 600, Concord, Ca. 94520
(925) 689-7000 •FAX (925) 689-7006
EEI JOB NO: 30782
CONSULTING A/E FIRM (PRIME)

PROFESSIONAL SEAL (IF REVISION, APPLIES ONLY TO REVISED WORK)

RECORD DRAWING
7/27/06

REVISION NUMBER	DRAWN BY	CHECKED BY	APPR'D BY	DATE	REMARKS
C	HYT	HYT		1/31/05	ISSUE PER COMMENTS

ISSUE (PROGRESS, ESTIMATE, BID, CONSTRUCTION, CONFORMED, REVISION, AS-BUILT)

JGI–BUILDING NO. 400
DATA CENTER EXPANSION
VESDA DETECTION PLAN–ZONE2

UNIVERSITY OF CALIFORNIA
LAWRENCE BERKELEY NATIONAL LABORATORY
FACILITIES DEPARTMENT

DRAWN BY	DWH
DATE	10/31/05
CHECKED BY	
APPROVED BY	
CAD FILE PATH	00018941
SCALE	1/8" = 1'-0"
DRAWING NO.	4B400E075C
SHEET	FA82
PROJECT NO.	WJ9178
	1 OF 1