NOTIFICATION APPLIANCE CIRCUIT POWER REQUIREMENTS – 2ND FLOOR

DESCRIPTION	CURRENT PER APPLIANCE	# OF APPLIANCES CIRCUIT AV4	CIRCUIT AV5	CIRCUIT AV6
WHEELOCK, HORN/STROBE 15 cd	0.066	6	7	2
WHEELOCK, HORN/STROBE 30 cd	0.101	0	1	3
WHEELOCK, HORN/STROBE 75 cd	0.177	1	1	1
WHEELOCK, HORN/STROBE 110 cd	0.232	0	0	0
WHEELOCK, STROBE 15 cd	0.060	2	0	2
TOTAL CIRCUIT CURRENT		0.674	0.740	0.732

NOTES:

THE FOLLOWING NOTIFICATION APPLIANCES AND THEIR POWER DEMANDS WERE USED IN THE DESIGN:

1. WHEELOCK INC. HS4-24MCW, 15CD WALL MOUNTED HORN/STROBE; 0.066 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP
2. WHEELOCK INC. SERIES HS4-24MCW, 30CD WALL MOUNTED HORN/STROBE; 0.101 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP
3. WHEELOCK INC. SERIES HS4-24MCW, 75CD WALL MOUNTED HORN/STROBE; 0.177 AMP MAX UL POWER REMAND; RATED 16 TO 33 AMP
4. WHEELOCK INC. SERIES HS4-24MCW, 110CD WALL MOUNTED HORN/STROBE; 0.232 AMP MAX UL POWER REMAND; RATED 16 TO 33 AMP
5. WHEELOCK INC. SERIES HS4-24MCW, 15CD WALL MOUNTED STROBE; 0.060 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP

VOLTAGE DROP CALCULATIONS

[(I) (D) (21.6)]/CM
WHERE: I = CIRCUIT POWER LOAD
D = CONDUCTOR ONE WAY DISTANCE
21.6 = CONSTANT
CM = CROSS SECTION AREA OF WIRE (4110 FOR AWG#14)

NAC AV4
[(0.674 AMP) (600 FT) (21.64)]/4110 VOLTAGE DROP: 2.129 VOLTS AVAILABLE VOLTAGE: 21.871 VOLTS

NAC AV5
[(0.740 AMP) (600 FT) (21.64)]/4110 VOLTAGE DROP: 2.338 VOLTS AVAILABLE VOLTAGE: 21.662 VOLTS

NAC AV6
[(0.732 AMP) (600 FT) (21.64)]/4110 VOLTAGE DROP: 2.312 VOLTS AVAILABLE VOLTAGE: 21.688 VOLTS

THE CIRCUIT'S AVAILABLE VOLTAGE IS ABOVE THE MINIMUM LISTED VOLTAGE FOR THE APPLIANCES.

OBSOLETE. REFER TO VOLTAGE DROP CALCULATIONS SHOWN ON SIEMENS DRAWING FA-03.

NOTIFICATION APPLIANCE CIRCUIT POWER REQUIREMENTS – 2ND FLOOR FROM SIEMENS DRAWING FA-03

CIRCUIT	DISTANCE FT	ORIGONAL LOAD (AMPS)	ORIGONAL VOLTAGE DROP (VOLTS)	ORIGONAL AVAILABLE VOLTAGE (VOLTS)	NEW LOAD (AMPS)	NEW VOLTAGE DROP (VOLTS)	NEW AVAILABLE VOLTAGE (VOLTS)
AV4	600	0.744	2.441	21.559	0.874	2.761	21.339
AV5	600	0.737	2.324	21.676	0.862	2.723	21.227
AV6	600	0.676	2.123	21.868	0.726	2.294	21.706

NOTES:

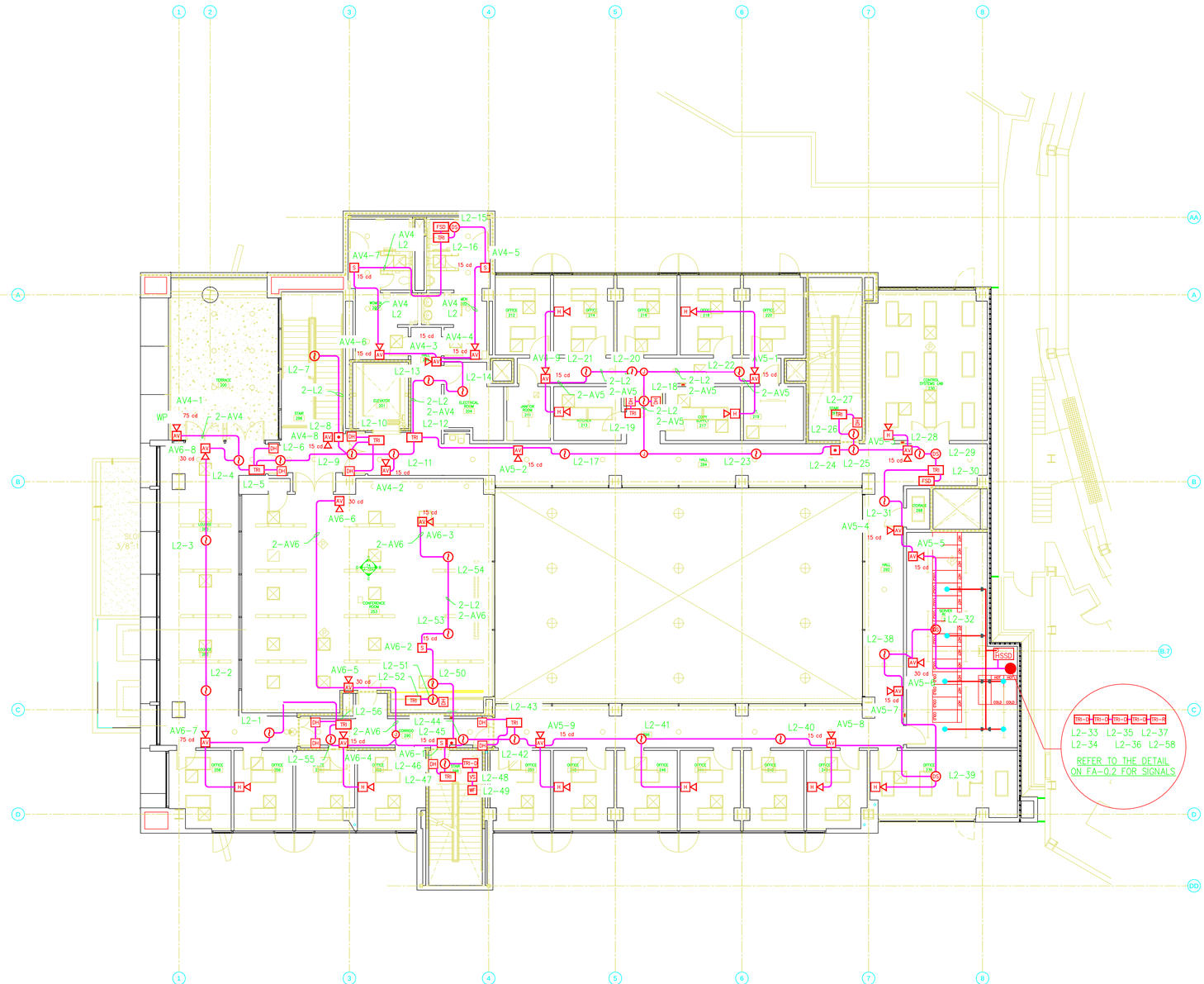
THE FOLLOWING SIEMENS HORNS AND ASSOCIATED LOADS WERE USED FOR THESE CALCULATIONS. OTHER HORNS MAY BE USED PROVIDED THEIR CURRENT DRAW DOES NOT EXCEED THOSE SHOWN FOR THESE CALCULATIONS.

1. SIEMENS SERIES AH, WALL MOUNTED HORN; 0.025 AMP MAX UL POWER DEMAND (MODLES SETTING FOR 84 DBA); RATED 16 TO 33 AMP

THE CIRCUIT'S AVAILABLE VOLTAGE IS ABOVE THE MINIMUM LISTED VOLTAGE FOR THE APPLIANCES.

RACEWAY NOTES:

1. UNLESS NOTED OTHERWISE, THE RACEWAYS SHOWN ON THIS SHEET CONTAIN CIRCUITS L2, AV4, AV5 & AV6.



1 FA2.2 SECOND FLOOR FIRE ALARM
SCALE: 1/8"=1'-0"

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

WRNS STUDIO LLP
501 SECOND STREET
4TH FLOOR, STE. 402
SAN FRANCISCO
CALIFORNIA 94107
415.489.2224 TEL
415.358.9100 FAX
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Missing or invalid reference
File: .\Tresidder 2012 PE Stamp
Sheet: 1

HYT Corporation
Fire Protection Engineers
and Consultants
3498 Clayton Road - Suite 101
Concord, California 94519
Phone: (925) 681-2731
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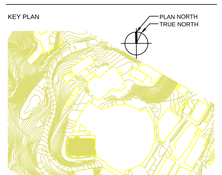
NO.	ISSUES/REVISONS	DATE
	FINAL AS-BUILTS RECORD DRAWINGS	02-18-11

RECORD DRAWING NOTE: SEE ALSO SIEMENS INDUSTRY, INC. "AS BUILT" PLANS (JOB 440P-065295) FOR ADDITIONAL INFORMATION AND CONTRACTOR DETAILS.

LBNL ADVANCED
LIGHT SOURCE USER
SUPPORT BUILDING 15
BERKELEY, CA

KEY PLAN



PROJECT NO.: 07004.00 DRAWN BY: DWH
DATE: 2/18/2011 CHECKED BY: BBT
SCALE: 1/8" = 1'-0"

SHEET TITLE:

SECOND FLOOR PLAN
FIRE ALARM

5N15E043

SHEET NO:
FN1421 FA-2.2

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If this drawing is not 30"x42", then the drawing has been revised from its original size. Noted scales must be adjusted. This line should be equal to one inch