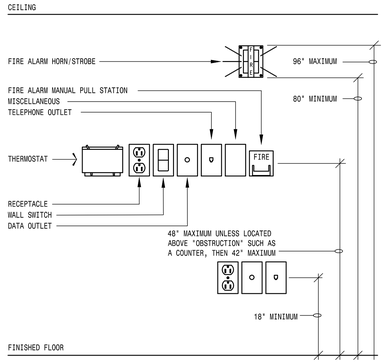
ABBREVIATIONS

A	AMP, AMPERES
ADA	AMERICANS WITH DISABILITIES ACT
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANSI	AMERICAN NAT'L STANDARDS INSTITUTE
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILARY
AWG	AMERICAN WIRE GAUGE
A/V	AUDIO/VISUAL
BAS	BUILDING AUTOMATION SYSTEM
BKR	BREAKER
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CATV	CABLE TELEVISION SYSTEM
C/B	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CFM	CUBIC FEET PER MINUTE
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CLG	CEILING
CW	COLD WATER
D	DEEP, DEPTH
dB	DECIBEL
DDC	DIRECT DIGITAL CONTROL
Δ	DELTA
DIA	DIAMETER
DISC	DISCONNECT
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ETR	EXISTING TO REMAIN
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRICAL WATER COOLER
EXH	EXHAUST
EX, EXIST	EXISTING
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FARA	FIRE ALARM REMOTE ANNUNCIATOR
FLA	FULL LOAD AMPS
FPC	FIRE PROTECTION CONTRACTOR
FT	FOOT, FEET
G,GRD	GROUND
GC	GENERAL CONTRACTOR
GFI, GFIC	GROUND FAULT INTERRUPTER
HID	HIGH INTENSITY DISCHARGE
HTR	HEATER
HVAC	HEATING, VENTILATING & A/C
IBC	INTERNATIONAL BUILDING CODE
IN	INCH, INCHES
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
L	LENGTH
LED	LIGHT EMITTING DIODE
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MH	METAL HALIDE
MIN	MINIMUM
MOCP	MAXIMUM OVER CURRENT PROTECTION
MUA	MAKE UP AIR
MTD	MOUNTED
N/A	NOT APPLICABLE
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFR'S ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
O/H	OVERHEAD
OSHA	OCCUPATIONAL SAFETY &HEALTH ADMIN.
P	POLE
PB	PUSH BUTTON
PC	PLUMBING CONTRACTOR
PF	POWER FACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
RCP	REFLECTED CEILING PLAN
REV	REVISION
REX	REMOVE EXISTING
RGS	RIGID GALVANIZED STEEL
RLA	RUNNING LOAD AMPS
RM	ROOM
RR	REMOVE AND RELOCATE
RTU	ROOF TOP UNIT
SE	SERVICE ENTRANCE
SF	SQUARE FEET, SQUARE FOOT
THRU	THROUGH
TRANS	TRANSFOMER
TYP	TYPICAL
T/C	TIME CLOCK
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES, INC.
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTABLE POWER SUPPLY
V	VOLT
VA	VOLT-AMPERE
W	WATT, WIDTH
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER
Y	WYE

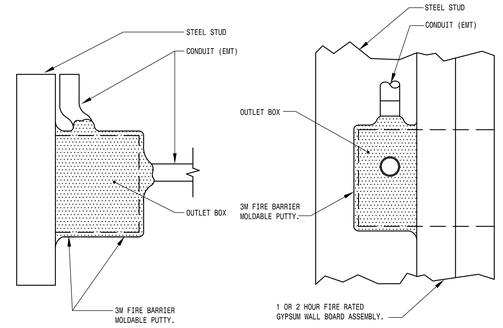
ELECTRICAL SYMBOLS

(ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)

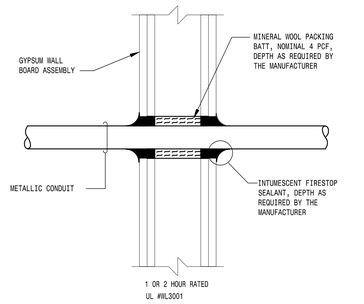
- 1,3,5 / A — HOMERUN TO PANEL 'A', CIRCUIT #1,3,5 (VIA 20A-1P CIRCUIT BREAKERS), TWO #12 CONDUCTORS (MINIMUM SIZE), UON. A GROUNDING CONDUCTOR SHALL BE PROVIDED IN ALL CONDUITS. REFER TO SPECIFICATIONS FOR ADDITIONAL GROUNDING REQUIREMENTS.
- INFLOOR/UNDERFLOOR CONDUIT/WIRE
- CIRCUITRY TURNING UP
- PANELBOARD - 208Y/120 VOLT, 3Ø, 4 WIRE
- PANELBOARD - 480Y/277 VOLT, 3Ø, 4 WIRE
- TELEPHONE FIRE RATED PLYWOOD BACKBOARD - SIZE INDICATED ON PLAN
- (J) JUNCTION BOX
- DISCONNECT SWITCH - UNFUSED
- DISCONNECT SWITCH - FUSED: 'AS' - INDICATES AMPERE SWITCH SIZE; 'AF' - INDICATES AMPERE FUSE SIZE
- DRY TYPE TRANSFORMER
- DUPLEX RECEPTACLE - 125 VOLT, 2 POLE, 3 WIRE, GROUNDING TYPE, 20 AMPERE, MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED:
  - '2' INDICATES CIRCUIT NUMBER
  - 'C' INDICATES MOUNTED 8" ABOVE COUNTER
  - '+42' INDICATES +42" AFF
  - 'WP' INDICATES WEATHERPROOF COVER
  - 'IG' INDICATES ISOLATED GROUND TYPE
  - 'GFI' INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE
- DOUBLE DUPLEX RECEPTACLE - 125 VOLT, 2 POLE, 3 WIRE, GROUNDING TYPE, 20 AMPERE, MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED.
- SINGLE (SIMPLEX) RECEPTACLE, TYPE AND MOUNTING AS INDICATED ON THE DRAWINGS.
- DUPLEX RECEPTACLE - 125 VOLT, 2 POLE, 3 WIRE, 20 AMPERE, MOUNTED IN FLOOR BOX.
- DUPLEX RECEPTACLE - 125 VOLT, 2 POLE, 3 WIRE, 20 AMPERE, MOUNTED IN CEILING.
- DOUBLE DUPLEX RECEPTACLE - 125 VOLT, 2 POLE, 3 WIRE, 20 AMPERE, MOUNTED IN CEILING.
- COMBINATION DUPLEX RECEPTACLE AND VOICE/DATA OUTLET MOUNTED IN FLOOR BOX.
- FIRE RATED POKE-THROUGH DEVICE
  - 'P' INDICATES DUPLEX RECEPTACLE - 125 VOLT, 2 POLE, 3 WIRE, 20 AMPERE
  - 'T' INDICATES TELEPHONE/DATA
- $ — SWITCH - SINGLE POLE TOGGLE TYPE - 120/277 VOLT, 1-HP RATED, 20 AMPERE, MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED:
  - '3' INDICATES THREE WAY SWITCH
  - '4' INDICATES FOUR WAY SWITCH
  - 'C' INDICATES SWITCH MOUNTED 8" ABOVE COUNTER
  - 'a' INDICATES SWITCHED FIXTURE CONTROL
  - 'OS' INDICATES DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH
  - 'D' INDICATES DIMMER SWITCH - WATTAGE AS INDICATED ON PANEL SCHEDULE. EACH BRANCH CIRCUIT SHALL INCLUDE A SEPARATE NEUTRAL CONDUCTOR
  - 'DF' INDICATES FLUORESCENT DIMMER SWITCH - WATTAGE AS INDICATED ON PANEL SCHEDULE. EACH BRANCH CIRCUIT SHALL INCLUDE A SEPARATE NEUTRAL CONDUCTOR
- (OS) — SWITCH - DUAL TECHNOLOGY, CEILING MOUNTED - SINGLE POLE, TOGGLE TYPE - 120/277 VOLT, 20 AMPERE
  - '3' INDICATES THREE WAY SWITCH
  - '4' INDICATES FOUR WAY SWITCH
- AA / L-3 — LIGHT FIXTURE - REFER TO LUMINAIRE SCHEDULE FOR DESCRIPTION.
  - 'AA' INDICATES FIXTURE TYPE
  - 'L' INDICATES PANEL
  - '3' INDICATES SWITCHED CIRCUIT NUMBER
- AAE / NL / L-2,4 — LIGHT FIXTURE - REFER TO LUMINAIRE SCHEDULE FOR DESCRIPTION. CONNECT LIGHT FIXTURE EMERGENCY BALLAST TO UN-SWITCHED CIRCUIT TO MAINTAIN CONSTANT POWER AND CONNECT NORMAL BALLAST TO SWITCHED CIRCUIT FOR ON/OFF CONTROL.
  - 'AA' INDICATES FIXTURE TYPE
  - 'E' INDICATES FIXTURE WITH BATTERY
  - 'L' INDICATES PANEL
  - '2' INDICATES UN-SWITCHED CIRCUIT NUMBER
  - '+' INDICATES SWITCHED CIRCUIT
  - 'NL' INDICATES FIXTURE CONNECT UN-SWITCHED CIRCUIT AND ALWAYS ON.
- FAN/LIGHT COMBINATION FIXTURE - PROVIDED AND INSTALLED BY MC, WIRED BY EC. REFER TO LUMINAIRE SCHEDULE FOR DESCRIPTION.
- ILLUMINATED 'EXIT' SIGN LIGHTING FIXTURE - CEILING MOUNTED OR WALL MOUNTED. REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION.
- ILLUMINATED 'EXIT' SIGN LIGHTING FIXTURE - CEILING MOUNTED OR WALL MOUNTED. PROVIDE FACES DIRECTIONAL ARROWS AS INDICATED ON FLOOR PLANS. REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION.
- REMOTE EMERGENCY WEATHERPROOF LIGHTING HEAD - SUPPLIED FROM REMOTE BATTERY UNIT.
- WALL MOUNTED EMERGENCY LIGHTING BATTERY UNIT WITH HEADS AS INDICATED.
- CEILING MOUNTED EMERGENCY LIGHTING BATTERY UNIT WITH HEADS AS INDICATED.
- TC — TIME CLOCK
- COMBINATION VOICE/DATA OUTLET - MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED. PROVIDE SINGLE GANG BOX WITH PLASTER RING AND 3/4" CONDUIT TO ABOVE THE ACCESSIBLE CEILING. "W" INDICATES WALL MOUNTED AT 54" AFF, "C" INDICATES MOUNTED 8" ABOVE COUNTER.
- V — DATA OUTLET - MOUNTED IN FLOOR BOX
- B — DOOR BELL
- PUSHBUTTON
- SD — FIRE ALARM DUCT MOUNTED SMOKE DETECTOR - PROVIDED AND WIRED BY EC, INSTALLED BY MC
- L — REMOTE ANNUNCIATOR LIGHT FOR DUCT SMOKE DETECTOR
- FAAP — FIRE ALARM ANNUNCIATOR PANEL
- FACP — FIRE ALARM CONTROL PANEL
- FAEP — FIRE ALARM EXTENDER PANEL
- F — FIRE ALARM MANUAL PULL STATION - MOUNTED AT 48" AFF.
- F — FIRE ALARM AUDIO/VISUAL ALARM SIGNAL - WALL MOUNTED AT 80" AFF.
- V — FIRE ALARM VISUAL ONLY ALARM SIGNAL - WALL MOUNTED AT 80" AFF.
- SD — FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR
- HD — FIRE ALARM HEAT DETECTOR



1	TYPICAL MOUNTING HEIGHTS (UON)
E0.0.0	SCALE: NONE



2	OUTLET BOX IN FIRE RATED WALL
E0.0.0	SCALE: NONE



3	FIRESTOP FOR METALLIC CONDUIT-GYPSUM WALL
E0.0.0	SCALE: NONE

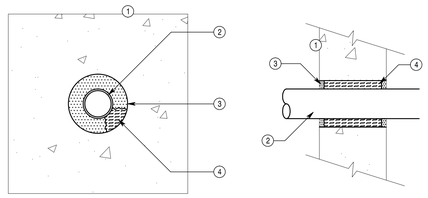


FIGURE 1

FIGURE 2

PENETRATE	MAX. SIZE	DEPTH REQ'D	NOMINAL ANNULUS	UL SYS. NO.
STEEL PIPE OR CONDUIT	6"	1"	11/16"	CAJ1090
IRON, STEEL PIPE OR CONDUIT, EMT, OR COPPER PIPE OR TUBING	4"	3/4"	3/4"	WJ1025

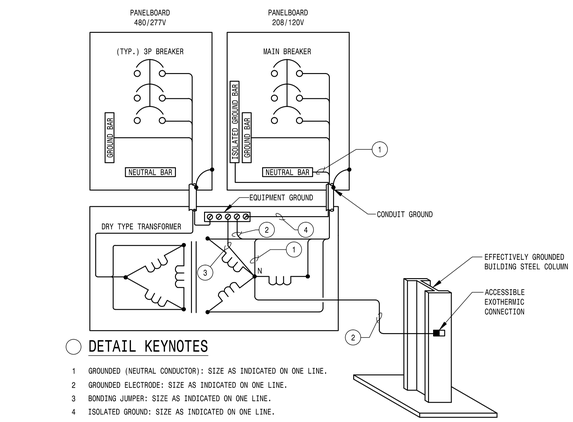
FIGURE 3

1. CONCRETE OR CONCRETE BLOCK WALL.
2. METALLIC PIPE, CONDUIT OR TUBING (SEE FIG. 3)
3. SPECSEAL® PUTTY. SEE FIGURE 3 FOR MORE INFORMATION.
4. FIBERGLASS FORMING MATERIAL PACKED INTO WALL CAVITY.

ALL PRODUCTS AND INSTALLATION SHALL MEET:

- ASTM E814 (UL1479). REFER TO SYSTEM NUMBERS CAJ-1900 & WJ-1025
- ASTM E119 (TIME/TEMPERATURE EXPOSURE) (COTTON WASTE IGNITION)
- ANNULAR SPACE REQUIREMENTS.

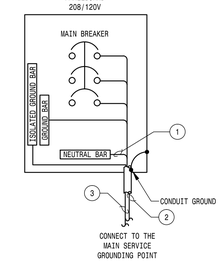
4	2 HOUR FIRESTOP FOR METALLIC PIPING CONCRETE WALL
E0.0.0	SCALE: NONE



DETAIL KEYNOTES

1. GROUNDED (NEUTRAL CONDUCTOR): SIZE AS INDICATED ON ONE LINE.
2. GROUNDED ELECTRODE: SIZE AS INDICATED ON ONE LINE.
3. BONDING JUMPER: SIZE AS INDICATED ON ONE LINE.
4. ISOLATED GROUND: SIZE AS INDICATED ON ONE LINE.

5	DRY TYPE TRANSFORMER GROUNDING AND ISOLATED GROUND DETAIL
E0.0.0	SCALE: NONE



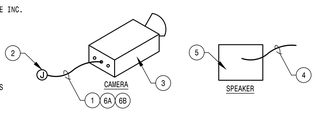
DETAIL KEYNOTES

1. GROUNDED (NEUTRAL CONDUCTOR): SIZE AS INDICATED ON ONE LINE.
2. GROUNDED ELECTRODE: SIZE AS INDICATED ON ONE LINE.
3. ISOLATED GROUND: SIZE AS INDICATED ON ONE LINE.

6	ISOLATED GROUND DETAIL
E0.0.0	SCALE: NONE

SOURCE: TAPPAN WIRE & CABLE INC.
BEACH WIRE & CABLE
15881 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
CONTACT: JUSTIN PHELPS
(800) 309-2322

PART NO.: P20RG59FM+ 18/2
DESC: PLENUM COAXIAL CABLES
CCTV 95% BC BRAID
COLOR: NAT



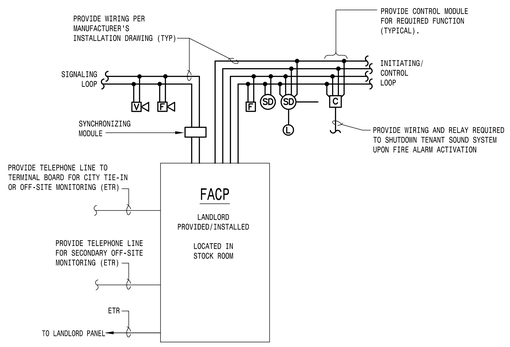
DETAIL GENERAL NOTES

1. QC TO RUN CAT5E PLENUM RATED WIRE FROM WIRELESS ACCESS POINT TO IT SERVER RACK.
2. CONTRACTOR TO LABEL CONDUITS INTO THE STOCKROOM (SPD1, SPD2, WAP1, WAP2, ETC.).

DETAIL KEYNOTES

1. CABLE LINE AND LOW VOLTAGE WIRE #SW14 TO J-BOX AT TELEPHONE BACKBOARD. REFER TO POWER PLANS FOR LOCATION. PROVIDE CONDUIT, 3/4" MINIMUM.
2. J-BOX BY ELECTRICAL CONTRACTOR.
3. CAMERA - SUPPLIED BY FOREVER 21.
4. PROVIDE LOW VOLTAGE SPEAKER WIRE #SW14 FROM EACH SPEAKER TO J-BOX LOCATED AT TELEPHONE BACKBOARD. REFER TO POWER PLANS FOR LOCATION. COORDINATE WITH FOREVER 21.
5. SPEAKERS PROVIDED BY FOREVER 21, EC TO COORDINATE WITH FOREVER 21 FOR SPEAKER/CAMERA WIRING AND LOCATIONS.
6A. FIXED DOME CAMERAS: QC TO RUN SIAMESE WIRE (RG 59 COAX/18GA-2 CONDUCTOR LOW VOLTAGE POWER) FROM CAMERA TO DVR. ALL WIRES SHALL BE PLENUM RATED.
6B. SPEED DOME CAMERAS: QC TO RUN SIAMESE WIRE (RG 59 COAX/18GA-2 CONDUCTOR LOW VOLTAGE POWER) WITH ADDITIONAL CAT5E FROM CAMERA TO DVR. ALL WIRES SHALL BE PLENUM RATED. CONTACT: BRIAN CHUNG - (213) 741-5109

7	CAMERA AND SPEAKER DETAIL
E0.0.0	SCALE: NONE



FIRE ALARM SYSTEM NOTES

1. THIS DIAGRAM REPRESENTS A TYPICAL SYSTEM AND IS NOT INTENDED FOR INSTALLATION. SYSTEM SUPPLIER SHALL PROVIDE INSTALLATION DRAWINGS AND SCHEMATIC WIRING DIAGRAMS. EXACT SYSTEM REQUIREMENTS SHALL BE COORDINATED WITH THE SYSTEM SUPPLIER. SYSTEM INSTALLER SHALL BE NICET CERTIFIED, IF REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
2. SYSTEM SUPPLIER SHALL SUPERVISE INSTALLATION, PROGRAM AND TEST SYSTEM AND INSTRUCT OWNER ON SYSTEM OPERATION.
3. ALL FIRE ALARM WIRING SHALL BE PLENUM RATED. EXPOSED FIRE ALARM WIRING, 10'-0" AFF AND BELOW, SHALL BE INSTALLED IN CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE OR STRUCTURE.
4. ALL CONTROL CABINETS SHALL BE GROUNDED PER NEC REQUIREMENTS AND PER SPECIFICATIONS.
5. COORDINATE CITY TIE-IN REQUIREMENTS WITH LOCAL AUTHORITY.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. REFER TO DRAWINGS FOR DEVICE QUANTITY AND LOCATIONS.
7. FIRE ALARM SYSTEM SHALL MATCH LANDLORD'S EXISTING SYSTEM.

8	ADDRESSABLE FIRE ALARM SYSTEM TYPICAL WIRING DIAGRAM
E0.0.0	SCALE: NONE

FOREVER 21, INC.
3880 N. MISSION ROAD
LOS ANGELES, CA 90031
213.747.5100 TEL
213.741.5111 FAX

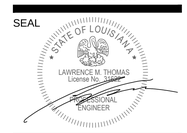
NOTES:THE DESIGNS SHOWN AND DESCRIBED HEREIN INCLUDING ALL TECHNICAL DRAWINGS, GRAPHICS AND MODELS THEREOF, ARE PROPRIETARY AND CANNOT BE COPIED OR COMMERCIALLY EXPLOITED, IN WHOLE OR IN PART, WITHOUT EXPRESS WRITTEN PERMISSION OF THE FOREVER 21. THESE ARE AVAILABLE FOR LIMITED REVIEW AND EVALUATION BY CLIENTS, CONSULTANTS, CONTRACTORS, GOVERNMENT AGENCIES, VENDORS AND OTHER PERSONNEL ONLY IN ACCORDANCE WITH THIS NOTICE.
COPYRIGHT © FOREVER 21
2014 ALL RIGHTS RESERVED.

START DATE: DECEMBER, 2014
F21 JOB NO: 3K-083
STORE NO: 0618
DRAWN: SJD

CHECKED: MAR

CM CORTLAND MORGAN ARCHITECT
711 N. FIELDER RD.
ARLINGTON, TX 76012
PH: (817) 635-5696
FAX: (817) 635-5699

SEAL



ENGR

T/E/S ENGINEERING
25760 First Street
Cleveland, OH 44145
P 440 871 2410
F 440 871 7954

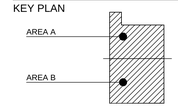
FOREVER 21 F21
TENANT IMPROVEMENT
FREMAUX TOWN CENTER
1900 FREMAUX AVE.
SLIDELL, LA 70458

SUBMITTALS:
01.20.2015
LANDLORD PRELIM SUBMITTAL
03.05.2015
BID SET

REVISIONS

NO	DATE	DESCRIPTION

KEY PLAN



SHEET NAME
ELECTRICAL LEGEND & DETAILS

SHEET NUMBER
E0.0.0

SCALE: NONE

BID_SET_20150305