

# JOHN CABRILLO E.S. TELE-CENTER UPGRADE PROJECT 1141 SEAMAS AVENUE, SACRAMENTO, CA. 95822 SACRAMENTO CITY UNIFIED SCHOOL DISTRICT PROJECT NUMBER: 0163-464

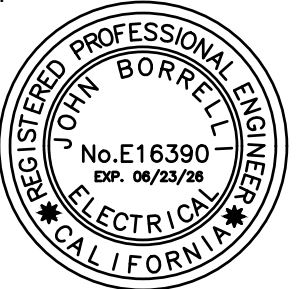
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Engineer:



BAI Project Number : 23117  
SCUSD Project Number : 0163-464

**PROJECT DIRECTORY:**

**OWNER**  
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT  
5735 47TH AVENUE, SACRAMENTO, CA. 95824  
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JOHN BORRELLI, PE

**3D VIEW**



**SCOPE OF WORK**

THE BASE BID CONSISTS OF REPLACING THE EXISTING CLOCK AND PUBLIC ADDRESS SYSTEMS WITH A NEW IP CLOCK AND PUBLIC ADDRESS SYSTEM.

**PROJECT SHEET LIST**

- G1.1 TITLE SHEET
- E1.1 SYMBOL LIST, NOTES, AND ABBREVIATIONS
- E1.2 DIAGRAMS AND RACK ELEVATIONS
- E2.1 ELECTRICAL SITE PLAN
- E3.1 BUILDINGS 'A' AND 'B' CLOCK AND PUBLIC ADDRESS FLOOR PLANS
- E3.2 BUILDING 'C' CLOCK AND PUBLIC ADDRESS FLOOR PLAN
- E3.3 BUILDING 'D' CLOCK AND PUBLIC ADDRESS FLOOR PLAN
- E3.4 BUILDINGS 'P02', 'P03', & 'P04' CLOCK AND PUBLIC ADDRESS FLOOR PLANS
- E3.5 BUILDINGS 'E' & 'P05'-P09' CLOCK AND PUBLIC ADDRESS FLOOR PLANS
- E4.1 TYPICAL ELECTRICAL DETAILS

**APPLICABLE CODES & REQUIREMENTS**

PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS - CALIFORNIA CODE OF REGULATIONS TITLE 19  
2022 CALIFORNIA ADMINISTRATIVE CODE - CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 1 (CAC)  
2022 CALIFORNIA BUILDING CODE - CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 2 (CBC)  
2022 CALIFORNIA ELECTRICAL CODE - CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 3 (CEC)  
2022 CALIFORNIA REFERENCED STANDARDS - CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 12

**ADMINISTRATIVE REQUIREMENTS**

1. A COPY OF THE CALIFORNIA CODE OF REGULATIONS TITLE 24, PARTS 1 AND 2 SHALL BE KEPT ON SITE FOR DURATION OF PROJECT.
2. THE INTENT OF THIS PLANS AND SPECIFICATIONS IS THAT ALL WORK SHALL COMPLY WITH APPLICABLE LAWS AND STANDARDS. IF THE CONTRACTOR SHALL DISCOVER EXISTING CONDITIONS THAT WILL CAUSE NEW WORK TO NOT COMPLY WITH ALL APPLICABLE LAWS AND STANDARDS, THE CONTRACTOR SHALL IMMEDIATELY STOP WORK AND NOTIFY THE ENGINEER OF THE CONDITIONS. DIRECTION WILL BE GIVEN BY THE ENGINEER.

**ALTERNATES**

NONE

**SPECIFICATIONS**

THIS PROJECT INCLUDES BOOK SPECIFICATIONS THAT, ALONG WITH THE PLANS, FORM THE CONSTRUCTION DOCUMENTS.  
SECTION 260000 GENERAL ELECTRICAL REQUIREMENTS  
SECTION 260500 BASIC ELECTRICAL MATERIALS AND METHODS  
SECTION 260529 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS  
SECTION 263410 STATIC UNINTERRUPTIBLE POWER SUPPLIES - BATTERY  
SECTION 271100 COMMUNICATIONS EQUIPMENT ROOM FITTINGS  
SECTION 271500 COMMUNICATIONS HORIZONTAL CABLING  
SECTION 272100 ACTIVE NETWORK EQUIPMENT  
SECTION 275116 PUBLIC ADDRESS AND MASS NOTIFICATION SYSTEMS

**AREA MAP - NOT TO SCALE**



**JOHN CABRILLO E.S.  
TELE-CENTER UPGRADE PROJECT  
1141 SEAMAS AVENUE, SACRAMENTO, CA 95822  
SACRAMENTO CITY UNIFIED SCHOOL DISTRICT**

Verify scale: Bar is one inch on original drawing

Rev.	Description	Date

Drawing Title:  
**TITLE SHEET**

Drawing No.:  
**G1.1**

### ABBREVIATIONS

A, AMP	AMPERES
A.C.	ACROSS
A.F.F.	ABOVE FINISHED FLOOR
AL	ALUMINUM CONDUCTOR OR BUS
BD	BOARD
C	CONDUIT
CAB	CABINET
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CC	CENTER TO CENTER
CKT	CIRCUIT
CO	CONDUIT ONLY (EMPTY CONDUIT)
CPB	WITH PULL WIRE
CU	COMMUNICATIONS PULL BOX
CU	COPPER CONDUCTOR OR BUS
DU	DISTRIBUTION PANEL
(E)	EXISTING
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
E.O.L.	END-OF-LINE
EPO	EMERGENCY POWER-OFF
EWC	ELECTRIC WATER COOLER
F	FUSE
F.A./FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
F.B.O.	FURNISHED BY OTHER/FURNISHED BY OWNER
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METALLIC CONDUIT
FS	FLOW SWITCH
G	GREEN GROUND WIRE
GFCI	GROUND FAULT CIRCUIT INTERRUPT
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HC	HORIZONTAL CROSSCONNECT
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
I.B.E.	INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR
IC	INTERCOM
IDF	INTERMEDIATE DISTRIBUTION FRAME (DATA)
IG	ISOLATED GROUND
INT	INTRUSION ALARM
J/B	JUNCTION BOX
KV	KILOVOLTS
KVA	KILOVOLTS-AMPERES
KW	KILOWATT
LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
LCP	LIGHTING CONTROL PANEL
LTGNC	LIGHTING NETWORK CONTROLLER
LTG	LIGHTING
LV	LOW VOLTAGE
MCC	MOTOR CONTROL CENTER
MTD	MOUNTED
MTS	MOUNTING
MLO	MAIN LUG ONLY
N	NEUTRAL
(N)	NEW
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C./OC	ON CENTER
OFOI	OWNER FURNISHED OWNER INSTALLED
Ø	POLE
P	PHASE
P.A./PA	PUBLIC ADDRESS SYSTEM
PB	PULL BOX
PNL	PANEL
PPB	POWER PULL BOX
REC/RECEPT.	RECEPTACLE
REF.	REFRIGERATOR
RELO	RELOCATABLE BUILDING/ PORTABLE BUILDING
RM	ROOM
RS	RAPID START
RU	RACK UNIT
SCE	SIGNAL CURRENT EXPANDER PANEL
S.L.	SECURITY LIGHT
SCTB	SIGNAL AND COMMUNICATION TERMINAL BACKBOARD
SPB	SIGNAL PULL BOX
SPD	SURGE SUPPRESSION DEVICE
STB	SIGNAL TERMINAL BOARD
STC	SIGNAL TERMINAL CABINET
SW	SWITCH
TPB	TELEPHONE PULL BOX
TS	TAMPER SWITCH
TEL	TELEPHONE
TERM	TERMINAL
TYP	TYPICAL
TTB	TELEPHONE TERMINAL BOARD
TTT	TELEPHONE TERMINAL CABINET
U.C.	UNDER COUNTER
UG	UNDERGROUND
UGPS	UNDERGROUND PULL SECTION
U.O.N.	UNLESS OTHERWISE NOTED
V	VOLTS/VOLTAGE
W	WATS
WP	WEATHERPROOF
WM	WIREMOLD

### GENERAL NOTES

- ALL WORK AND MATERIAL SHALL CONFORM TO LATEST CODES AND ORDINANCES. IT IS THE INTENTION OF THESE PLANS AND SPECIFICATIONS TO COVER ALL THINGS REQUIRED TO PROVIDE COMPLETE AND OPERATIVE SYSTEMS. THE CONTRACTOR SHALL FURNISH LABOR, MATERIAL, TRANSPORTATION, EQUIPMENT, MISCELLANEOUS SERVICES, ETC. REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION SHALL BE INCLUDED. NOTINGS IN THESE PLANS OR SPECIFICATIONS MAY BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO ANY CONSTRUCTION CODES.
- ALL EQUIPMENT SHALL HAVE TESTING LABORATORY LABEL ATTACHED (UL, C.S.A. ETC.) AS PER C.E.C. 110. PROOF OF TESTING LABELS REQUIRED WITH ALL SUBMITTALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THESE REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PURCHASING, IF ANY OF THE SPECIFIED MATERIAL FAILED THESE REQUIREMENTS. WHERE A FIELD CERTIFIED PRODUCT MAY BE REQUIRED FOR FIELD ASSEMBLED COMPONENT, PROVIDE CERTIFIED REPORT BY AN APPROVED TESTING AGENCY ACCEPTABLE TO THE AUTHORITIES HAVING JURISDICTION. INCLUDE ALL TESTING FEES IN BID.
- THE ENGINEERING SERVICE ARE LIMITED TO PREPARATION OF PLANS AND SPECIFICATIONS. THE PLANS AND SPECIFICATIONS ARE INTENDED TO BE USED AS CONSTRUCTION GUIDELINES ONLY AND NOT THE TOTAL INSTRUMENT OF CONTRACT DOCUMENTS. IT IS NOT THE INTENTION OF ANY CONSTRUCTION PLANS TO DIVIDE WORK AMONG DIFFERENT TRADES. VERIFY SCOPE OF WORK WITH GENERAL CONTRACTOR/OWNER SINCE THE ENGINEER IS NOT SUPERVISING THE JOB. THE ENGINEER WILL PROVIDE INTERPRETATION OF THE CONSTRUCTION DOCUMENTS, BUT SUPERVISION IS UNDER THE RESPONSIBILITY OF THE OWNER OR HIS APPOINTEE.
- WORKING CLEARANCE SHALL BE MAINTAINED AS PER C.E.C. FOR ALL PANEL(S). SERVICE EQUIPMENT, DISCONNECT SWITCH, ETC. LOCAL UTILITY COMPANY WORKING CLEARANCE REQUIREMENT SHALL ALSO BE OBSERVED. POWER EQUIPMENT MANUFACTURERS' PRODUCT MAY VARY IN DIMENSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORKING CLEARANCE REQUIREMENT WHEN LAYING OUT THE ELECTRICAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST SHOP DRAWINGS BEFORE STUBBING UP CONDUITS OR PENETRATING EXTERIOR WALL(S) OF BUILDING(S).
- IN CASE OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE PROCEEDING.
- ALL OUTDOOR DEVICES SHALL BE WEATHERPROOF.
- CONTRACTOR SHALL FURNISH ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND SUPERVISION INSTALLED TO COMPLETE INSTALLATION, CHECKOUT AND INITIAL OPERATION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GENERAL ARRANGEMENT OF EQUIPMENT SHOWN AND SHALL SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT PRIOR TO PURCHASE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING VISITED THE SITE AND SATISFIED HIMSELF AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL CHECK ALL OF THE CONDITIONS WHICH MAY AFFECT HIS WORK. THE SITE VISIT SHALL BE MADE PRIOR TO SUBMITTING THE BID. BIDDERS SHALL PREARRANGE A SITE VISIT WITH THE OWNER/ARCHITECT.
- THE CONTRACTOR SHALL OBTAIN A FULL SET OF PLANS WHEN BIDDING THE JOB.
- ALL NEW FACEPLATES SHALL BE FLUSH WITH THE WALL. PROVIDE EXTENSION RINGS WHERE NECESSARY.
- PATCH AND REPAIRED ALL REMOVED CONCRETE TO MATCH ADJACENT SURFACES.

### STANDARD SYMBOL LEGEND

	FIXTURE DESIGNATOR - 'W' INDICATES FIXTURE TYPE.		3/4" THICK X 96" TALL CLASS 'A' FIRE RETARDANT PLYWOOD BACKBOARD. PROVIDE QUANTITY OF PLYWOOD SHEETS TO ENCOMPASS ENTIRE LENGTH INDICATED ON PLANS. FIRE RATING SHALL BE VISIBLE ONCE INSTALLED.
	LIGHT FIXTURE - APPROXIMATELY TO SCALE		TERMINAL CABINET - SURFACE OR FLUSH MOUNTED WITH FLAME RETARDANT PLYWOOD BACKBOARD
	LIGHT FIXTURE - WALL OR CEILING MOUNTED. '3' INDICATES CIRCUIT, '3' INDICATES SWITCH CONTROL		PANELBOARD - SURFACE OR FLUSH MOUNTED
	EXIT LIGHTS- CEILING OR WALL MOUNTED, ARROW(S) INDICATES DIRECTION.		DISTRIBUTION OR SWITCHBOARD
	EXISTING POLE LIGHTING		NEUTRAL LINK
	WATTSTOPPER LMRc-101 ON/OFF, 1 SWITCH LEG LIGHTING CONTROLLER		TRANSFORMER
	WATTSTOPPER LMRc-102 ON/OFF, 2 SWITCH LEG LIGHTING CONTROLLER		TRANSFORMER
	WATTSTOPPER LMRc-212 DIMMING, 2 SWITCH LEG LIGHTING CONTROLLER		FUSED DISCONNECT - MOTOR RATED. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. DISCONNECTS TO BE FURNISHED WITH DUAL ELEMENT FUSES SIZED ACCORDING TO NAME PLATE DATA ON EQUIPMENT INSTALLED. SIZE AS: #A = AMPERE RATING OF DISCONNECT, #B = POLES, #C = FUSE SIZE REQUIRED. ALSO REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR DISCONNECT REQUIREMENTS. IF NO AMPERE RATING IS INDICATED ON PLAN SIZE DISCONNECT PER NAMEPLATE RATING AND CEC.
	WATTSTOPPER LMRc-213 DIMMING, 3 SWITCH LEG LIGHTING CONTROLLER		UNFUSED DISCONNECT - MOTOR RATED. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. #1 = AMPERE RATING OF DISCONNECT, #2 = POLES REQUIRED. ALSO REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR DISCONNECT REQUIREMENTS. IF NO AMPERE RATING IS INDICATED ON PLAN SIZE DISCONNECT PER NAMEPLATE RATING AND CEC.
	WATTSTOPPER LMDc-100 DUAL TECHNOLOGY MOTION SENSOR		MAGNETIC MOTOR STARTER FURNISHED, INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
	WATTSTOPPER LMDx-100 DUAL TECHNOLOGY OCCUPANCY SENSOR		MOTOR - FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AND CONNECTED BY ELECTRICAL CONTRACTOR.
	WATTSTOPPER LMSw-101 SWITCH, '3' INDICATES SWITCH LEG CONTROL, 2 LETTERS NEXT TO EACH OTHER WITHOUT A COMMA INDICATES 1 SWITCH LEG		METER
	WATTSTOPPER LMDM-101 DIMMER, '3' INDICATES SWITCH LEG CONTROL, 2 LETTERS NEXT TO EACH OTHER WITHOUT A COMMA INDICATES 1 SWITCH LEG		FIRE SPRINKLER HEAD, REFER TO OTHER DISCIPLINE PLANS.
	WATTSTOPPER LMLs-400 PHOTOSENSORS		INTRUSION ALARM DOOR CONTACT PROVISION, SEE TYPICAL DETAILS.
	WATTSTOPPER LMLP-201 RECEPTACLE CONTROLLER		INTRUSION ALARM KEYPAD
	PANEL IDENTIFICATION		INTRUSION ALARM MOTION DETECTOR, AIM AS INDICATED ON PLANS.
	SWITCH LEG IDENTIFICATION		GROUND
	LIGHTING AND RECEPTACLE ROOM CONTROLLERS SHALL BE LOCATED ABOVE THE T-BAR CEILING FOR THE ROOMS THEY ARE CONTROLLING. IF THE ROOM WITH THE CONTROLLED DEVICES HAS A HARD CEILING THEN LOCATE THE ROOM CONTROLLERS AT THE NEAREST ADJACENT ROOM WITH A T-BAR CEILING. IF NO T-BAR CEILING EXISTS LOCATE THE ROOM CONTROLLERS IN THE ELECTRICAL ROOM. LABEL ALL ROOM LIGHTING AND RECEPTACLE CONTROLLERS WITH THE ROOM NAME, ROOM NUMBER, AND CIRCUIT(S) THEY CONTROL.		CIRCUIT BREAKER
	SKYLIT OR PRIMARY SIDE DAYLIT ZONE		EXISTING ABOVE GROUND CONDUIT
	SECONDARY SIDE DAYLIT ZONE		EXISTING UNDERGROUND CONDUIT
	SPST TOGGLE WALL SWITCH - 20A, 120/277V, '3' INDICATES CONTROL		WIREMOLD 5400 SERIES DUAL CHANNEL IVORY RACEWAY. PROVIDE ALL ACCESSORIES, FITTINGS, DIVIDERS, ETC. FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
	OCCUPANCY SENSOR COMBO WALL SWITCH - 20A, 120/277V RATED		NEW ELECTRICAL EQUIPMENT
	CEILING OR WALL MOUNTED JUNCTION BOX		EXISTING ELECTRICAL EQUIPMENT TO REMAIN
	PULL BOX(S) - SIZE AND NUMBER AS INDICATED		EXISTING ELECTRICAL EQUIPMENT TO BE DEMOLISHED
	RECEPTACLE, DUPLEX - 20A, 120V & GROUND		GROUND WIRE WITH GREEN INSULATION SIZE PER N.E.C., U.O.N.
	RECEPTACLE, DUPLEX CEILING MOUNTED		CONDUIT CONCEALED IN WALL OR CEILING. PROVIDE NUMBER OF WIRES NECESSARY FOR BRANCH CIRCUIT, SWITCH LEGS, ETC. PROVIDE SEPARATE NEUTRALS FOR EACH PHASE WIRE. SIZE SHALL BE DETERMINED BY OCCP CONNECTED TO THE PHASE CONDUCTORS AND VOLTAGE DROP CONSIDERATIONS. ALL CONDUITS SHALL HAVE GROUND CONDUCTOR(S). SIZE CONDUIT PER NEC.
	RECEPTACLE, DUPLEX - WITH ONE-HALF SWITCHED/CONTROLLED		CONDUIT CONCEALED UNDERGROUND OR BELOW FLOOR, MINIMUM SIZE IS 3/4". PROVIDE NUMBER OF WIRES NECESSARY FOR BRANCH CIRCUIT, SWITCH LEGS, ETC. PROVIDE SEPARATE NEUTRALS FOR EACH PHASE WIRE. SIZE SHALL BE DETERMINED BY OCCP CONNECTED TO THE PHASE CONDUCTORS AND VOLTAGE DROP CONSIDERATIONS. ALL CONDUITS SHALL HAVE GROUND CONDUCTOR(S). SIZE CONDUIT PER NEC.
	RECEPTACLE, DUPLEX - WITH GFCI PROTECTION		CONDUIT-UP
	RECEPTACLE, DUPLEX - WITH TWO USB PORTS		CONDUIT-DOWN
	RECEPTACLE, DOUBLE DUPLEX - (2) 20A, 120V & GROUND		SHEET NOTE NUMBER - #, SEE NOTE DESCRIPTION ON SAME SHEET.
	RECEPTACLE, DOUBLE DUPLEX CEILING MOUNTED		GENERAL NOTE NUMBER - #, SEE NOTE DESCRIPTION ON SAME SHEET.
	RECEPTACLE, DOUBLE DUPLEX WITH GFCI PROTECTION		REFERENCE TO PLAN/DETAIL/DIAGRAM
	RECEPTACLE, DOUBLE DUPLEX - WITH ONE-HALF SWITCHED/CONTROLLED		DESIGNATES SIZE AND QUANTITY OF FEEDERS SEE FEEDER SCHEDULE
	RECEPTACLE, DOUBLE DUPLEX - WITH ONE-HALF SWITCHED/CONTROLLED, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.		PROVIDE AND INSTALL TWO MALE F-TYPE CONNECTORS AND TV FACEPLATE. PROVIDE AND INSTALL RG-6 COAXIAL CABLE FROM EACH CONNECTOR TO THE CABLE TV HEADEND & TERMINATE WITH A MALE F-TYPE CONNECTOR.
	RECEPTACLE, SPECIAL - REFER TO FLOOR PLAN FOR RECEPTACLE SIZE.		TELEVISION OUTLET IN FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED, SEE TELEVISION SYMBOL.
	TELEPHONE OUTLET: PROVIDE & INSTALL 2-GANG BOX WITH 1" CONDUIT STUB-UP INTO T-BAR CEILING. FOR HARD CEILINGS, RUN THE CONDUIT TO THE CABLE TERMINATION LOCATION INDICATED PER THE RISER DIAGRAM.		NUMBER IN PARENTHESIS INDICATES QUANTITY OF DEVICES. TYPICAL FOR ALL TYPES OF DEVICES.
	DATA OUTLET: PROVIDE & INSTALL 2-GANG BOX WITH 1" CONDUIT, STUB-UP INTO T-BAR CEILING. FOR HARD CEILINGS, RUN THE CONDUIT TO THE CABLE TERMINATION LOCATION INDICATED PER THE RISER DIAGRAM.		SPEAKER - WALL OR CEILING MOUNTED, QUANTITY TO RISER DIAGRAM AND/OR NOTES ON PLANS.
	RECEPTACLE, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.		CLOCK, REFER TO RISER DIAGRAM AND/OR NOTES ON PLANS.
	TELEPHONE OUTLET, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.		COMBINATION CLOCK & SPEAKER, SEE CLOCK & SPEAKER SYMBOLS.
	DATA OUTLET, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.		
	INTERCOM OUTLET, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.		
	FLUSH, FLOOR MOUNTED DUPLEX RECEPTACLE, DATA JACK, AND TELEPHONE JACK		
	DATA OUTLET, CEILING MOUNTED		
	CEILING OR WALL MOUNTED WIRELESS ACCESS POINT PROVISIONS. PROVIDE AND INSTALL ONE DATA CABLE FROM EACH ACCESS POINT TO IDF. FOR HARD CEILINGS TERMINATE THE CABLES INTO A CUBE CAT-6 PORT AND CURL UP THE CABLE WITH 10-FOOT OF SLACK. LEAVE ABOVE THE T-BAR CEILING. PROVIDE A LABEL BENEATH THE T-BAR CEILING TO INDICATE DATA PORTS ABOVE.		

### ELECTRICAL EQUIPMENT NOTES

- THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL EQUIPMENT, DEVICES AND WIRING. SEE SECTION 260000 OF THE SPECIFICATIONS.
- FOR THE EXACT LOCATION OF ELECTRICAL EQUIPMENT AND DEVICES SEE THE ARCHITECTURAL ELEVATIONS, DETAILS AND DIMENSIONS SHOWN ON THE DRAWINGS.

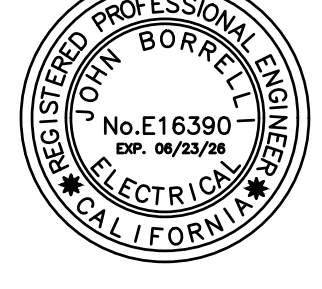
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Rev.	Description	Date

Drawing Title:  
**SYMBOL LIST, NOTES,  
AND ABBREVIATIONS**

Drawing No.:  
**E1.1**

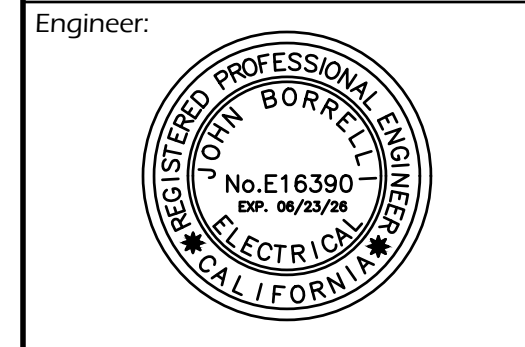


**GENERAL NOTES**

1. ROUTE NEW CABLES IN EXISTING CONDUITS.

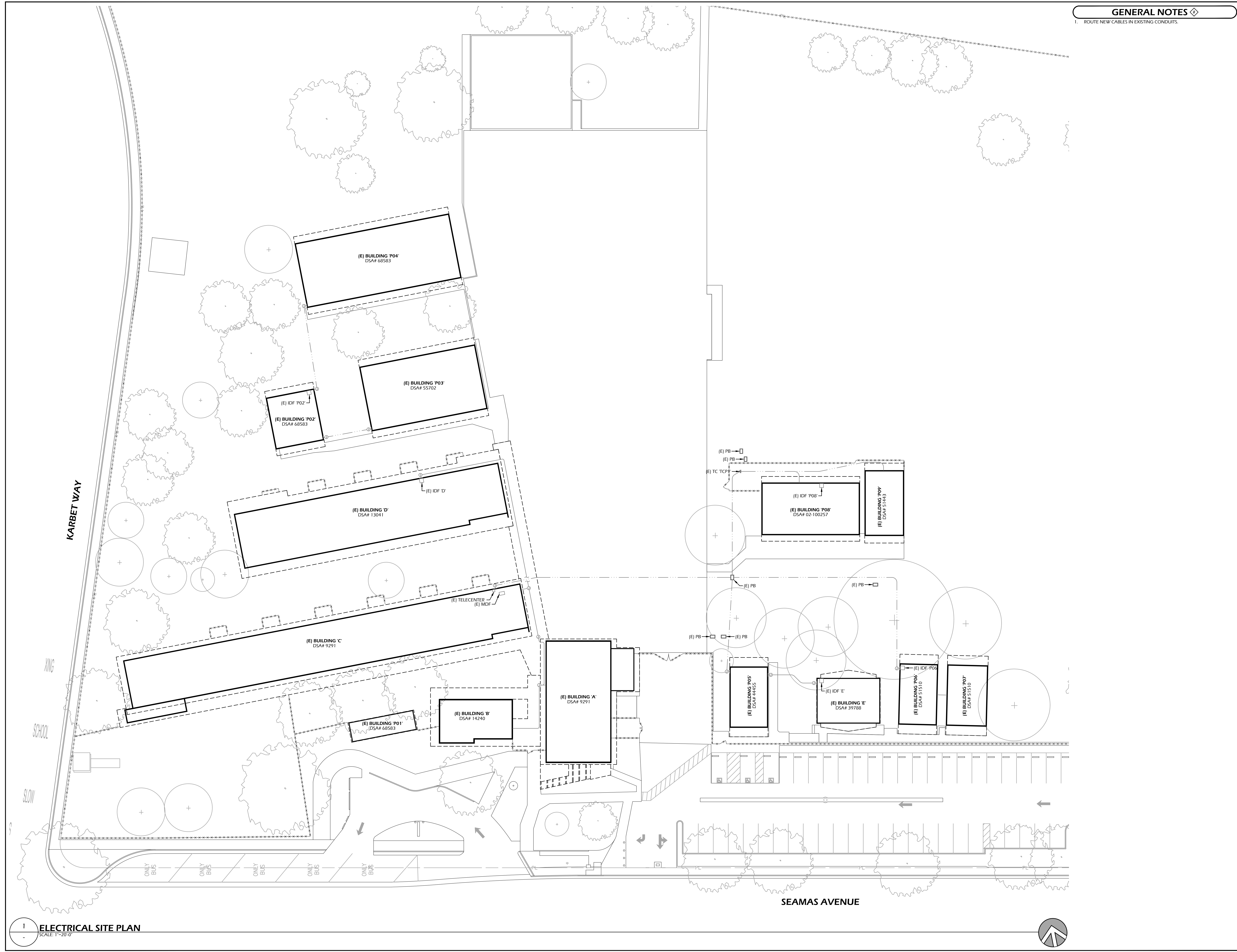
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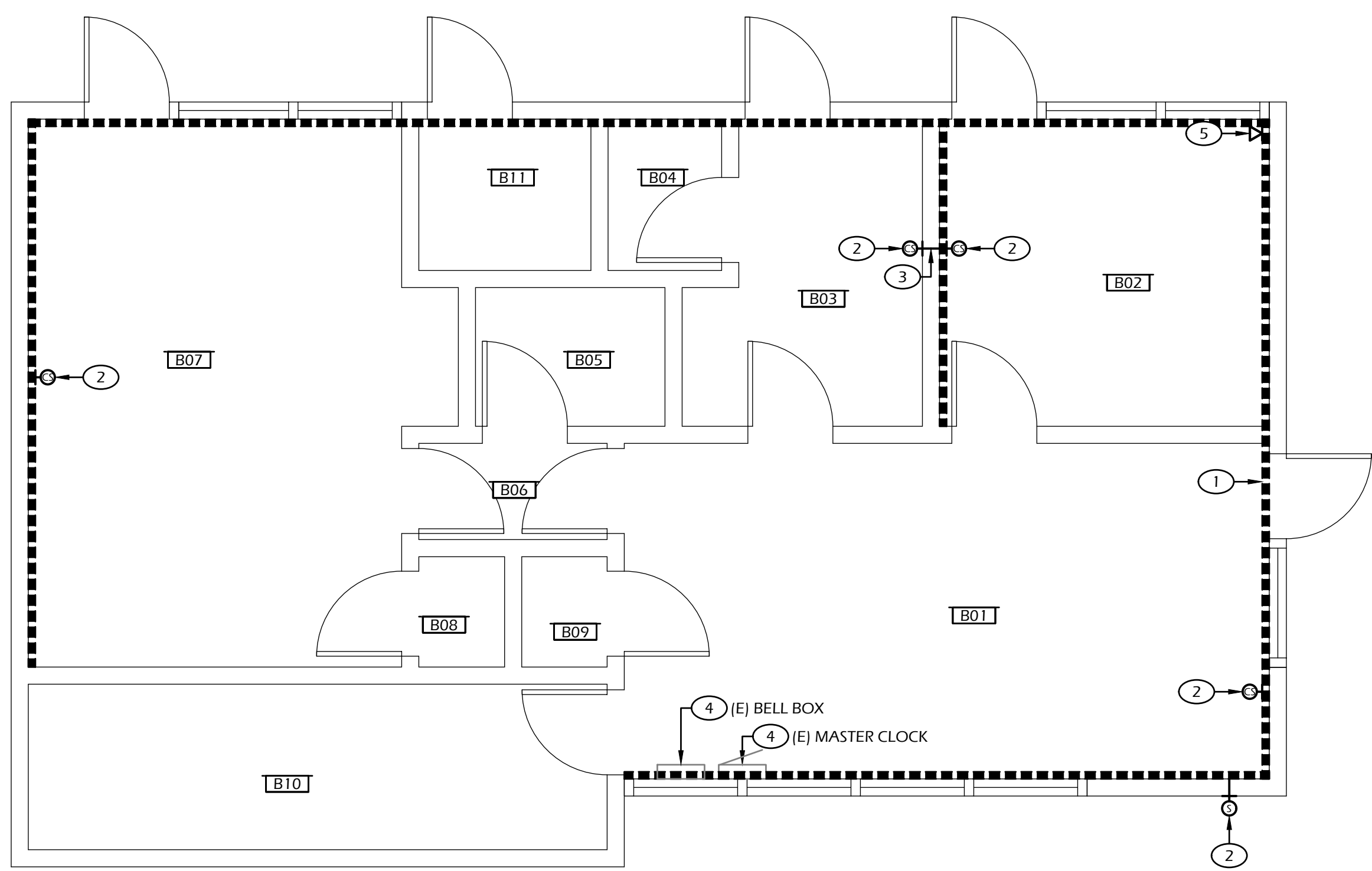
**1 ELECTRICAL SITE PLAN**  
 SCALE: 1"=20'-0"

Verify scale: Bar is one inch on original drawing

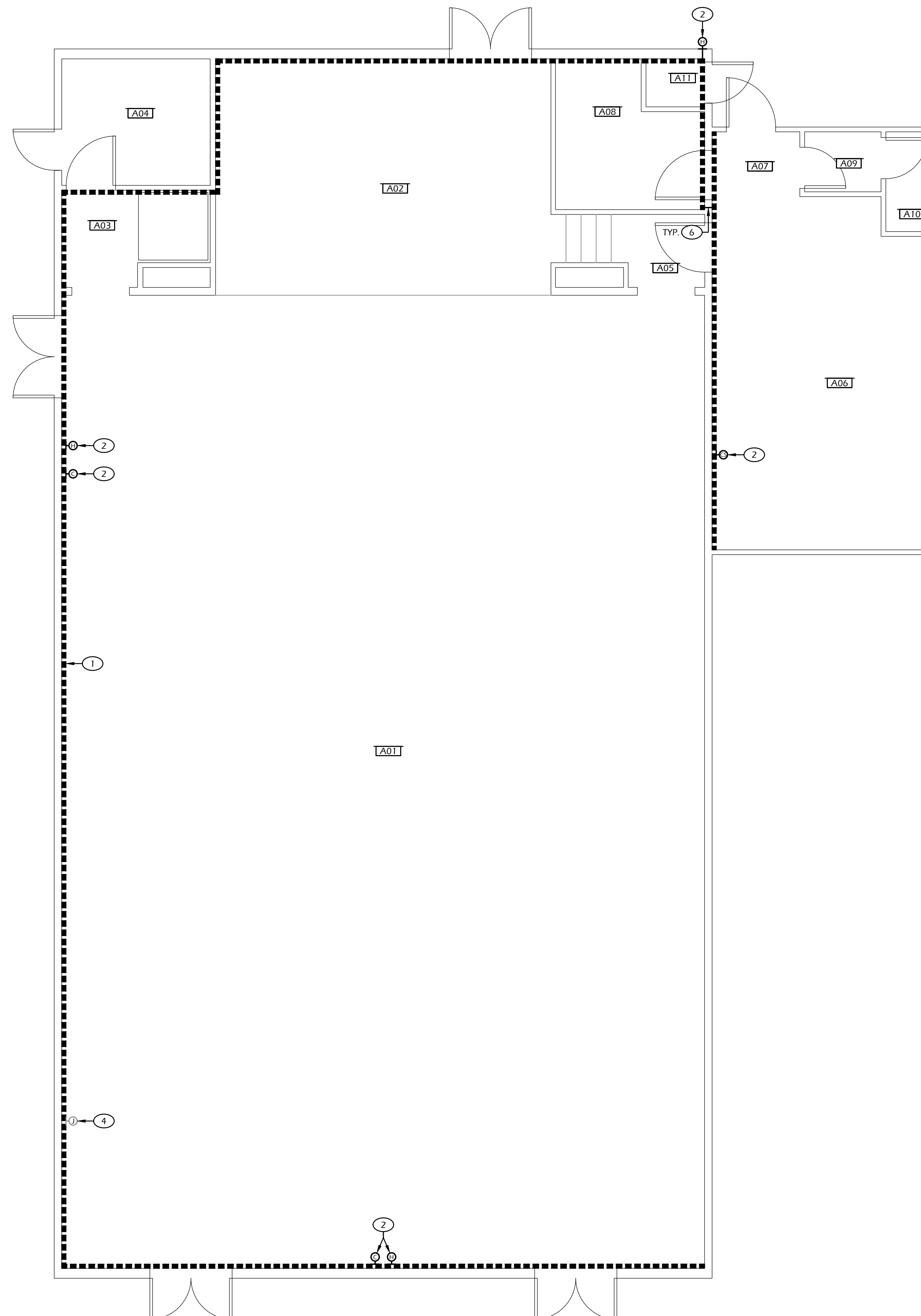
Rev.	Description	Date
1		
2		
3		
4		
5		

Drawing Title:  
**ELECTRICAL SITE PLAN**

Drawing No.:  
**E2.1**



2 BUILDING 'B' CLOCK AND PUBLIC ADDRESS FLOOR PLAN  
SCALE: 1/4"=1'-0"



1 BUILDING 'A' CLOCK AND PUBLIC ADDRESS FLOOR PLAN  
SCALE: 1/4"=1'-0"

**ROOM SCHEDULE**

BUILDING 'A'		BUILDING 'B'	
###	ROOM NAME	###	ROOM NAME
A01	MULTI-PURPOSE	A07	HALLWAY
A02	PLATFORM	A08	STORAGE
A03	HALLWAY	A09	STAFF RESTROOM
A04	OFFICE	A10	TOILET
A05	HALLWAY	A11	WATER HEATER CLOSET
A06	KITCHEN		

###	ROOM NAME	###	ROOM NAME
B01	OFFICE	B07	PRINCIPAL OFFICE
B02	TEACHER WORKROOM	B08	CLOSET
B03	NURSE	B09	CLOSET
B04	TOILET	B10	STORAGE
B05	WOMEN'S RESTROOM	B11	MEN'S RESTROOM
B06	HALLWAY		

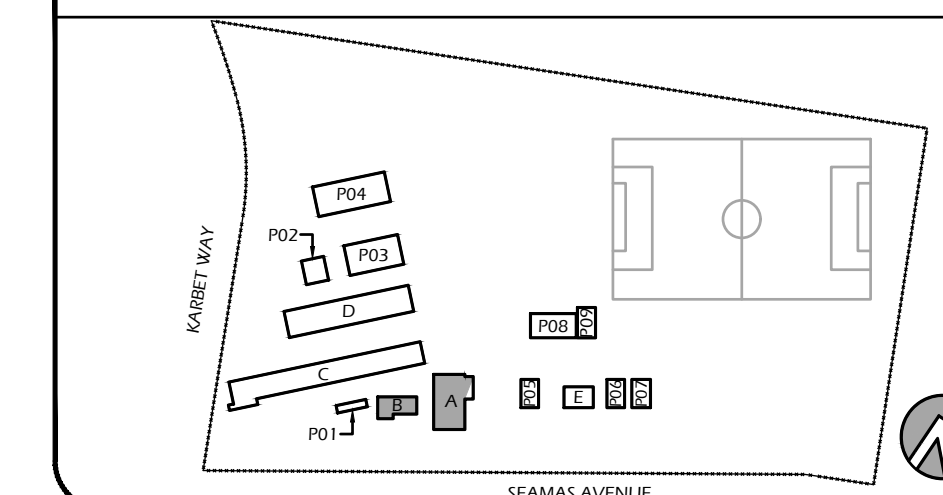
**SHEET NOTES**

1. PROVIDE AND INSTALL WIREMOLD 2300 SYSTEM RACEWAY MOUNTED TO CEILING AS CLOSE TO WALL AS POSSIBLE. PAINT TO MATCH SURROUNDINGS. PROVIDE AND INSTALL WIREMOLD 2300 FROM CEILING MOUNTED 2300 TO EACH CLOCK, SPEAKER, AND/OR HORN BACK BOX. FASTEN TO WOOD STUD USING #12 WOOD LAG SCREWS WITH MINIMUM 2-INCH PENETRATION.
2. DISCONNECT AND REMOVE EXISTING DEVICE. PROVIDE AND INSTALL NEW DEVICE INDICATED AT SAME LOCATION.
3. PROVIDE AND INSTALL 3/4-INCH CONDUIT BETWEEN BACK BOXES FOR DATA CABLE.
4. DISCONNECT AND REMOVE DEVICES AND REMOVE ALL WIRING. PROVIDE AND INSTALL NEW STEEL FACEPLATE WITH ROUNDED EDGES AND CORNERS. PAINT TO MATCH SURROUNDINGS.
5. PROVIDE AND INSTALL DATA PORT, PATCH CORD, & ADMINISTRATIVE CONSOLE.
6. PROVIDE AND INSTALL 1-INCH CONDUIT NIPPLE BETWEEN WIREMOLD.

**GENERAL NOTES**

1. ALL DATA CABLES FOR DEVICES IN BUILDINGS 'A' AND 'B' SHALL BE ROUTED TO THE MDF.

**KEYMAP**



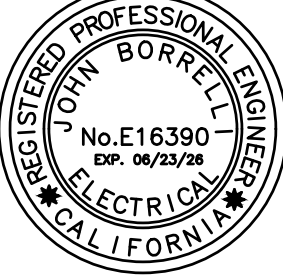
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Engineer:



BAI Project Number : 23117  
SCUSD Project Number : 0163-464

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**TELE-CENTER UPGRADE PROJECT**  
1141 SEAMAS AVENUE, SACRAMENTO, CA 95822  
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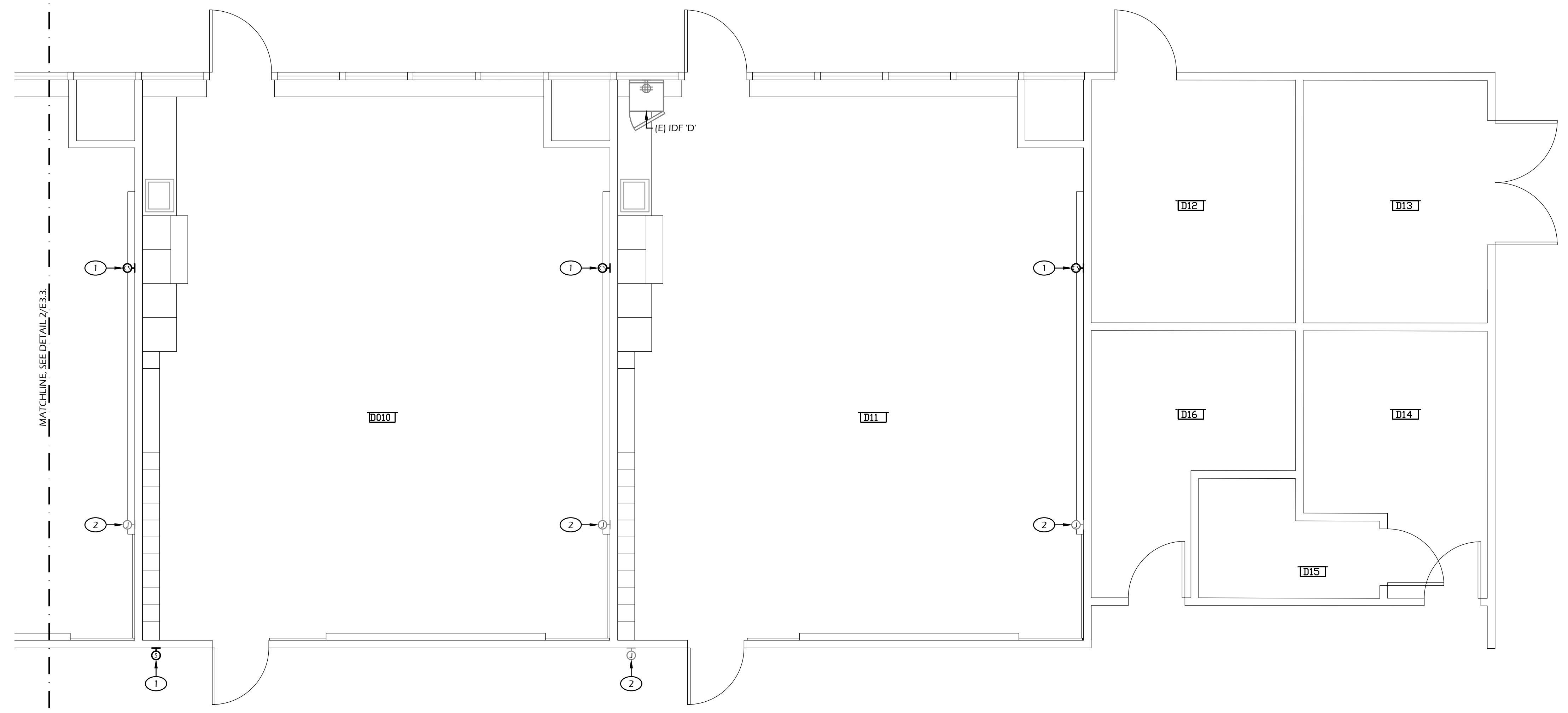
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Drawing Title:  
BUILDINGS 'A' AND 'B'  
CLOCK AND PUBLIC  
ADDRESS FLOOR PLANS

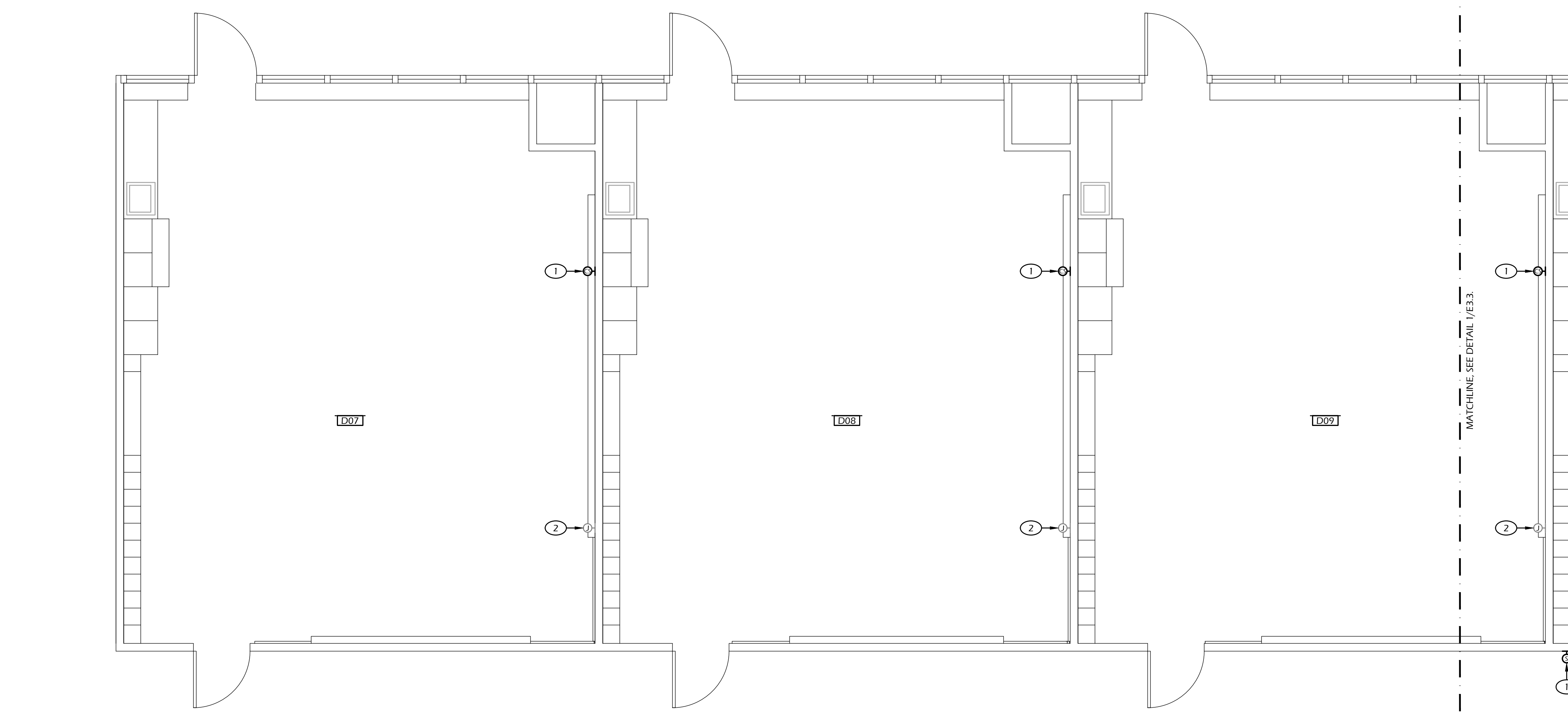
Drawing No.:

**E3.1**





**1 BUILDING 'D' PARTIAL CLOCK AND PUBLIC ADDRESS FLOOR PLAN**  
SCALE: 1/4"=1'-0"



**2 BUILDING 'D' PARTIAL CLOCK AND PUBLIC ADDRESS FLOOR PLAN**  
SCALE: 1/4"=1'-0"

ROOM SCHEDULE			
###	ROOM NAME	###	ROOM NAME
D07	CLASSROOM	D12	STORAGE
D08	CLASSROOM	D13	STORAGE
D09	CLASSROOM	D14	BOY'S RESTROOM
D10	CLASSROOM	D15	STORAGE
D11	CLASSROOM	D16	GIRL'S RESTROOM

- SHEET NOTES**
- DISCONNECT AND REMOVE EXISTING DEVICE. PROVIDE AND INSTALL NEW DEVICE INDICATED AT SAME LOCATION.
  - DISCONNECT AND REMOVE DEVICE EXCEPT ENCLOSURE. PROVIDE AND INSTALL NEW STEEL FACEPLATE WITH ROUNDED EDGES AND CORNERS. PAINT TO MATCH SURROUNDINGS.

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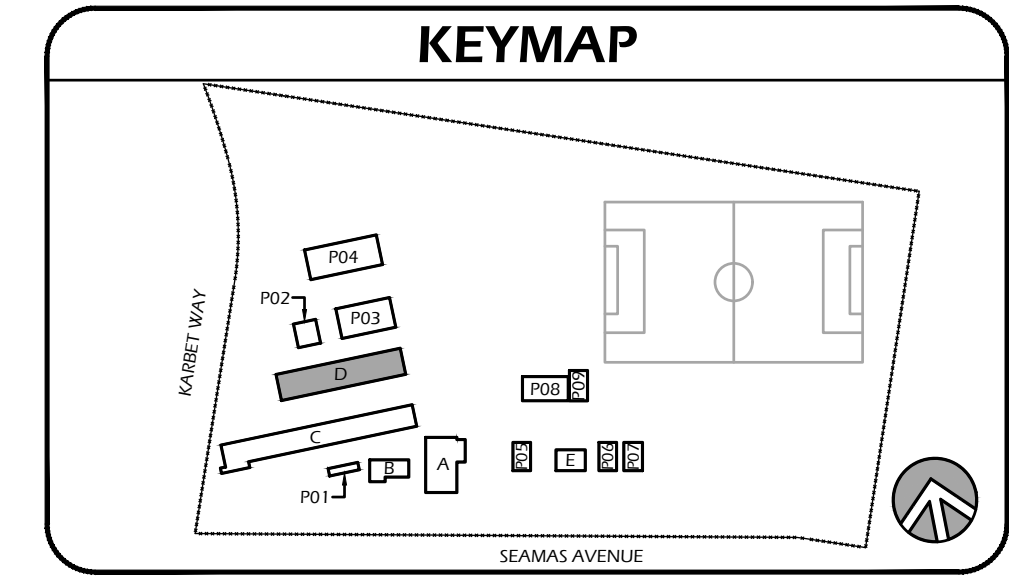
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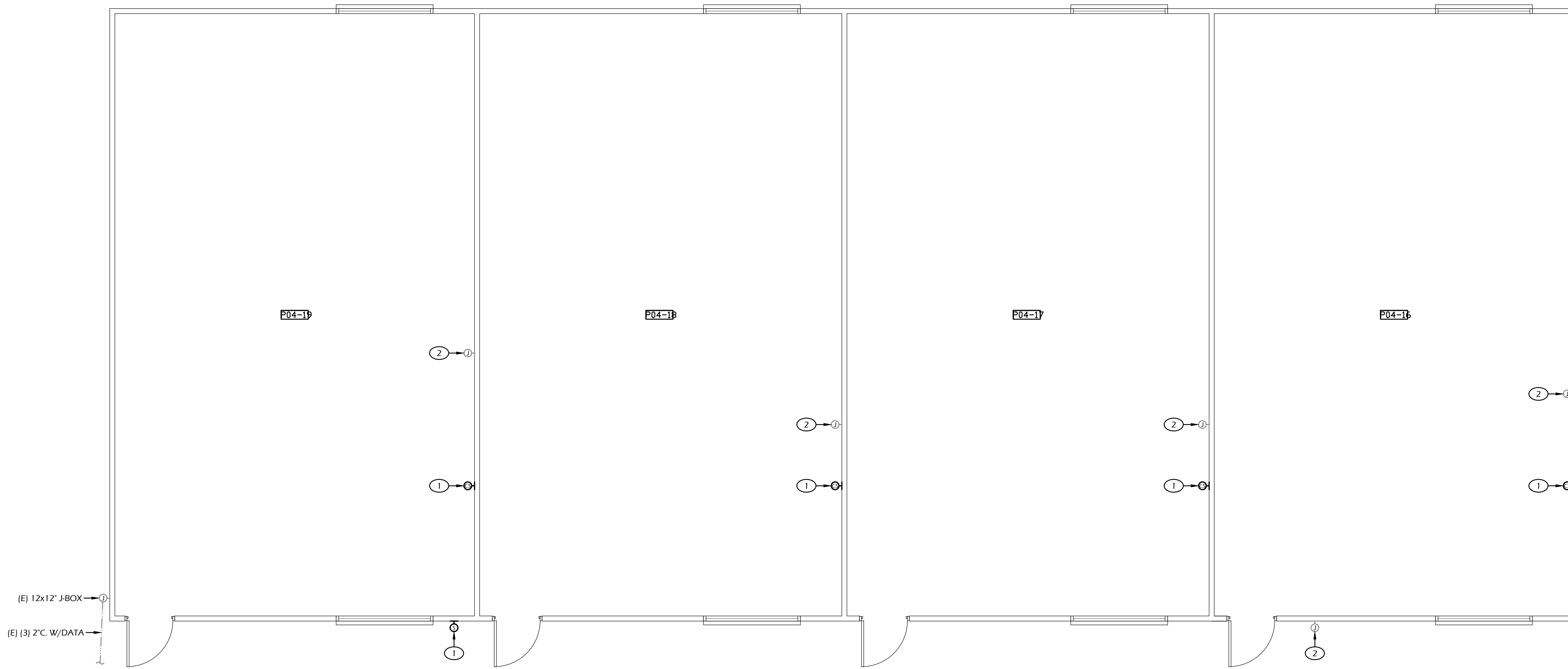
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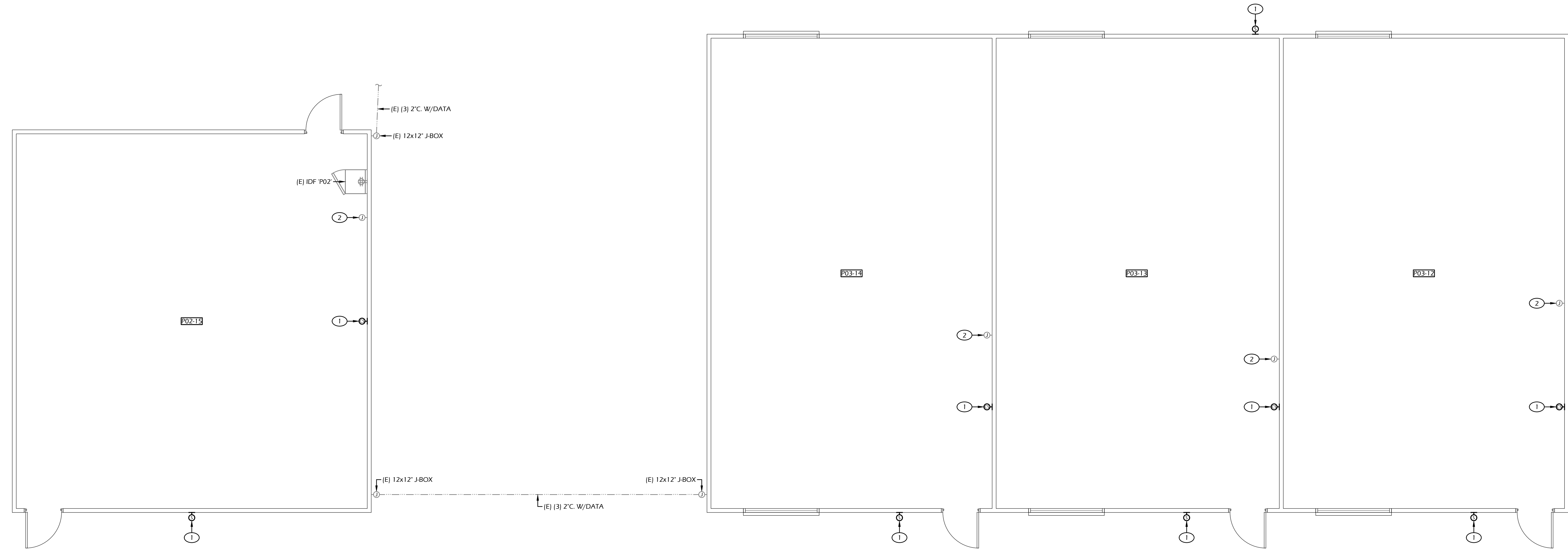
Drawing Title:  
**BUILDING 'D' CLOCK AND PUBLIC ADDRESS FLOOR PLAN**

Drawing No.:  
**E3.3**





**1 BUILDING 'P04' CLOCK AND PUBLIC ADDRESS FLOOR PLAN**  
SCALE: 1/4"=1'-0"



**2 BUILDINGS 'P02' & 'P03' CLOCK AND PUBLIC ADDRESS FLOOR PLAN**  
SCALE: 1/4"=1'-0"

ROOM SCHEDULE			
BUILDING 'P02'		BUILDING 'P03'	
###	ROOM NAME	###	ROOM NAME
P02-15	CLASSROOM		
P03-12	CLASSROOM	P03-14	CLASSROOM
P03-13	CLASSROOM		
BUILDING 'P04'			
###	ROOM NAME	###	ROOM NAME
P04-16	CLASSROOM	P04-18	CLASSROOM
P04-17	CLASSROOM	P04-19	CLASSROOM

**SHEET NOTES**

- DISCONNECT AND REMOVE EXISTING DEVICE. PROVIDE AND INSTALL NEW DEVICE INDICATED AT SAME LOCATION.
- DISCONNECT AND REMOVE DEVICE EXCEPT ENCLOSURE. PROVIDE AND INSTALL NEW STEEL FACEPLATE WITH ROUNDED EDGES AND CORNERS. PAINT TO MATCH SURROUNDINGS.

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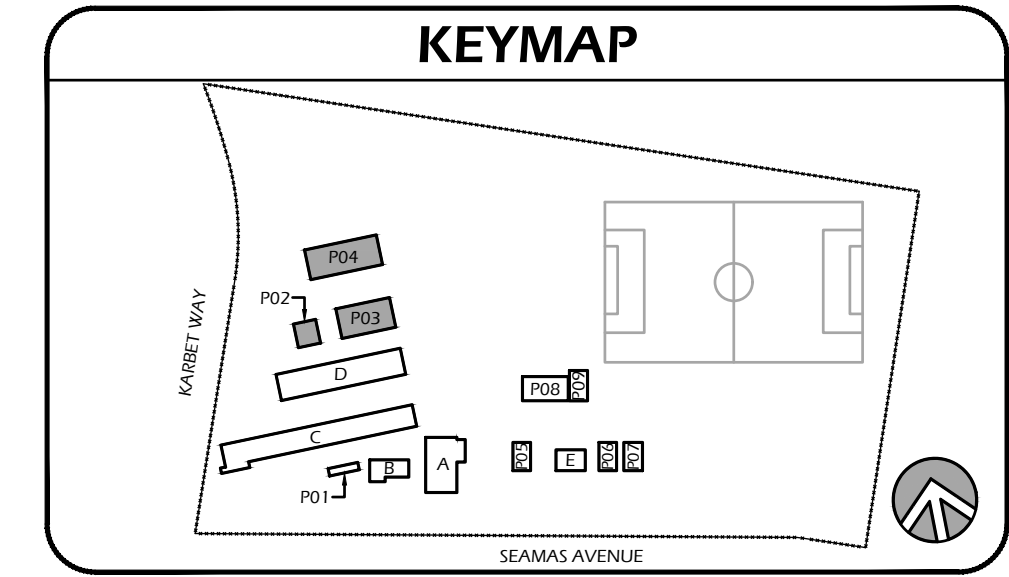
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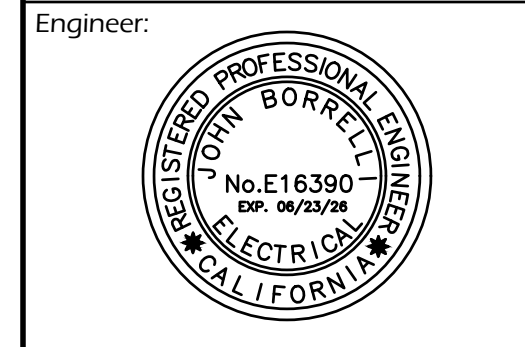
Rev.	Description	Date

Drawing Title:  
**BUILDINGS 'P02', 'P03', & 'P04' CLOCK AND PUBLIC ADDRESS FLOOR PLANS**

Drawing No.:  
**E3.4**







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Verify scale: Bar is one inch on original drawing

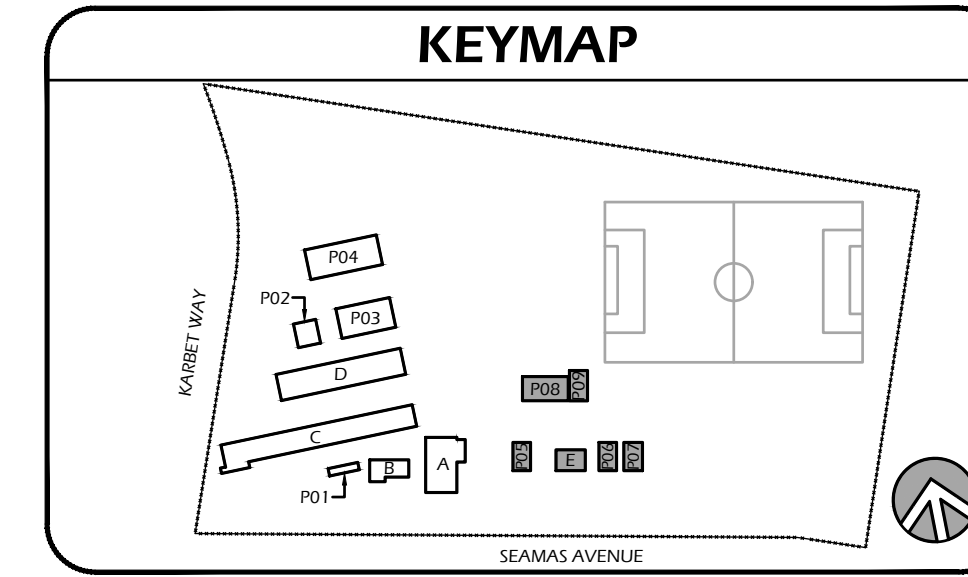
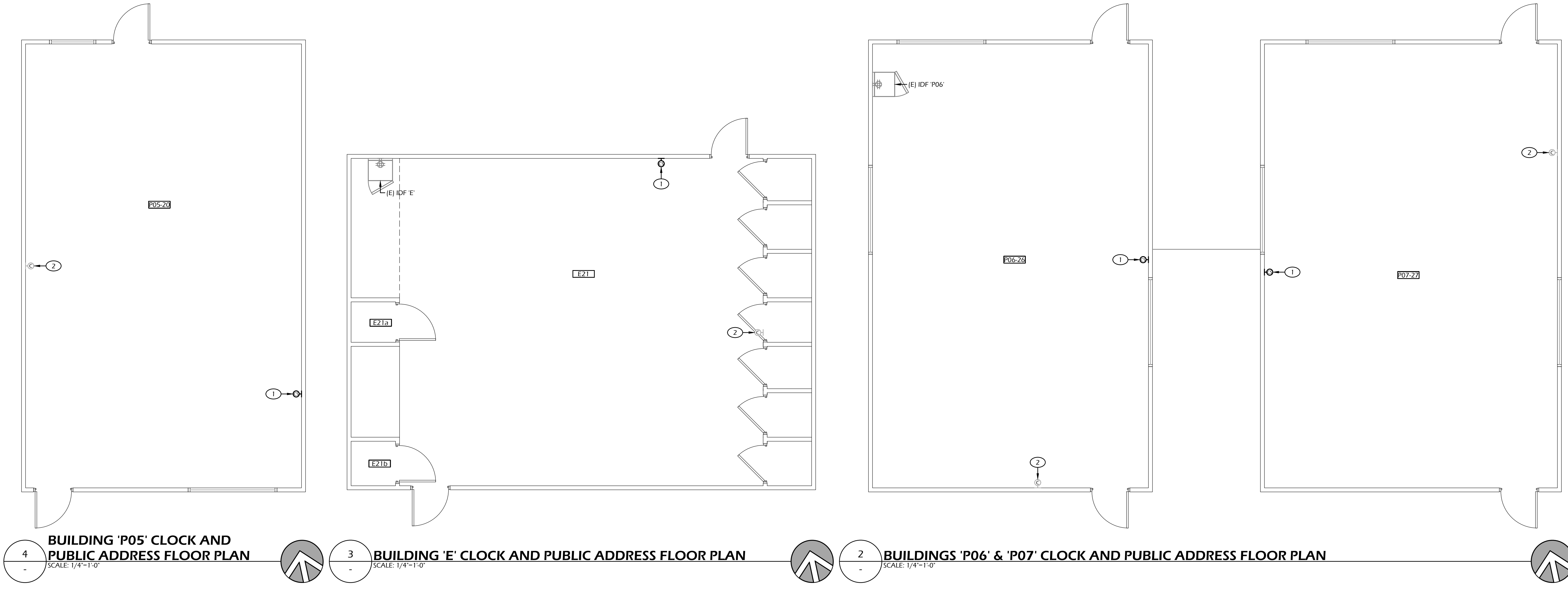
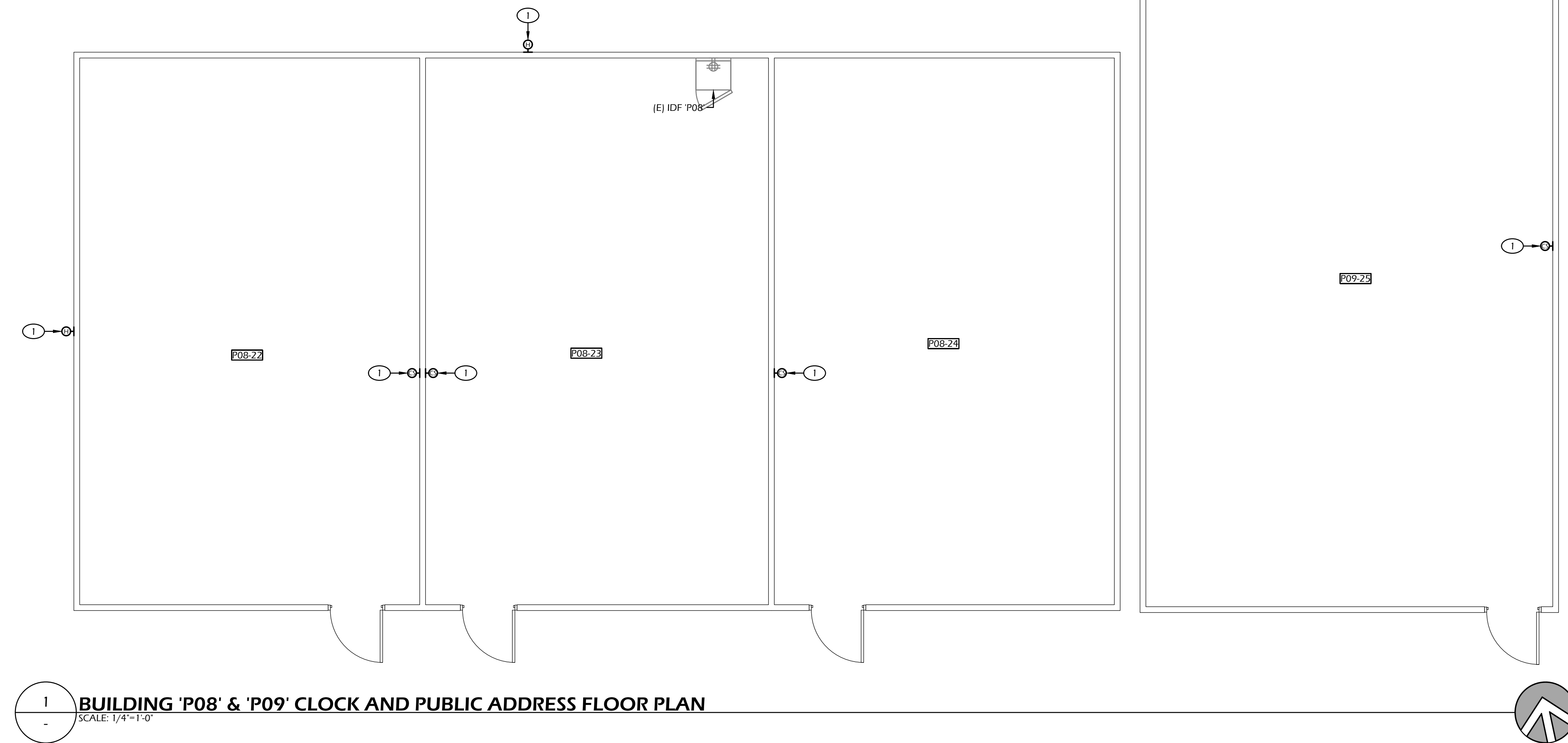
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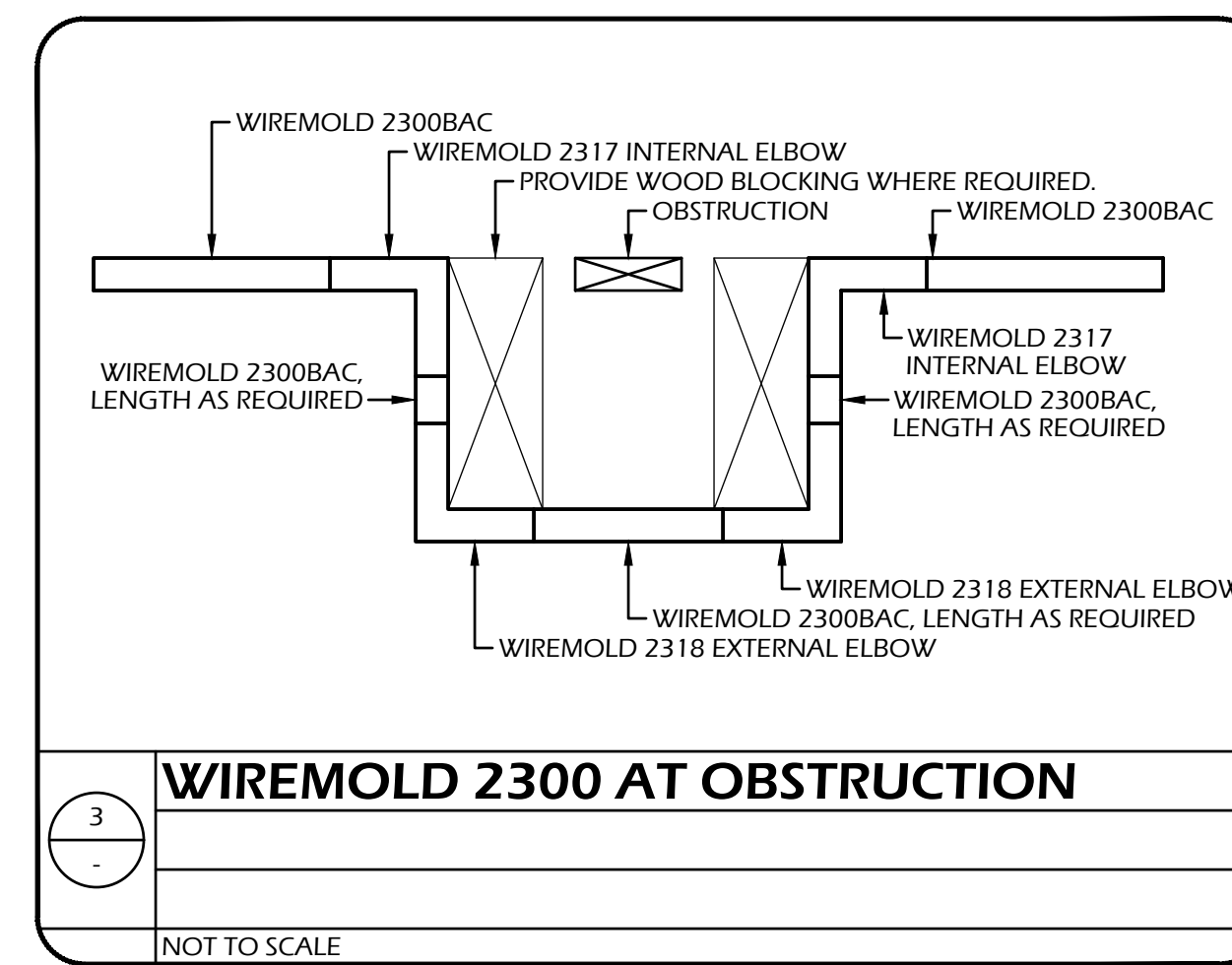
Drawing Title:  
**BUILDINGS 'E' & 'P05'-'P09' CLOCK AND PUBLIC ADDRESS FLOOR PLANS**

Drawing No.:  
**E3.5**

ROOM SCHEDULE		
BUILDING 'E'		
### ROOM NAME	### ROOM NAME	### ROOM NAME
E21 CLASSROOM	E21b STORAGE	
E21a FURNACE		
BUILDING 'P05'		
### ROOM NAME	### ROOM NAME	
P05-20 TEACHERS LOUNGE/WORK RM		
BUILDING 'P06'		
### ROOM NAME	### ROOM NAME	
P06-26 CLASSROOM 26		
BUILDING 'P07'		
### ROOM NAME	### ROOM NAME	
P07-27 CLASSROOM 27		
BUILDING 'P08'		
### ROOM NAME	### ROOM NAME	
P08-22 CLASSROOM 22	P08-24 CLASSROOM 24	
P08-23 CLASSROOM 23		
BUILDING 'P09'		
### ROOM NAME	### ROOM NAME	
P09-25 CLASSROOM 25		

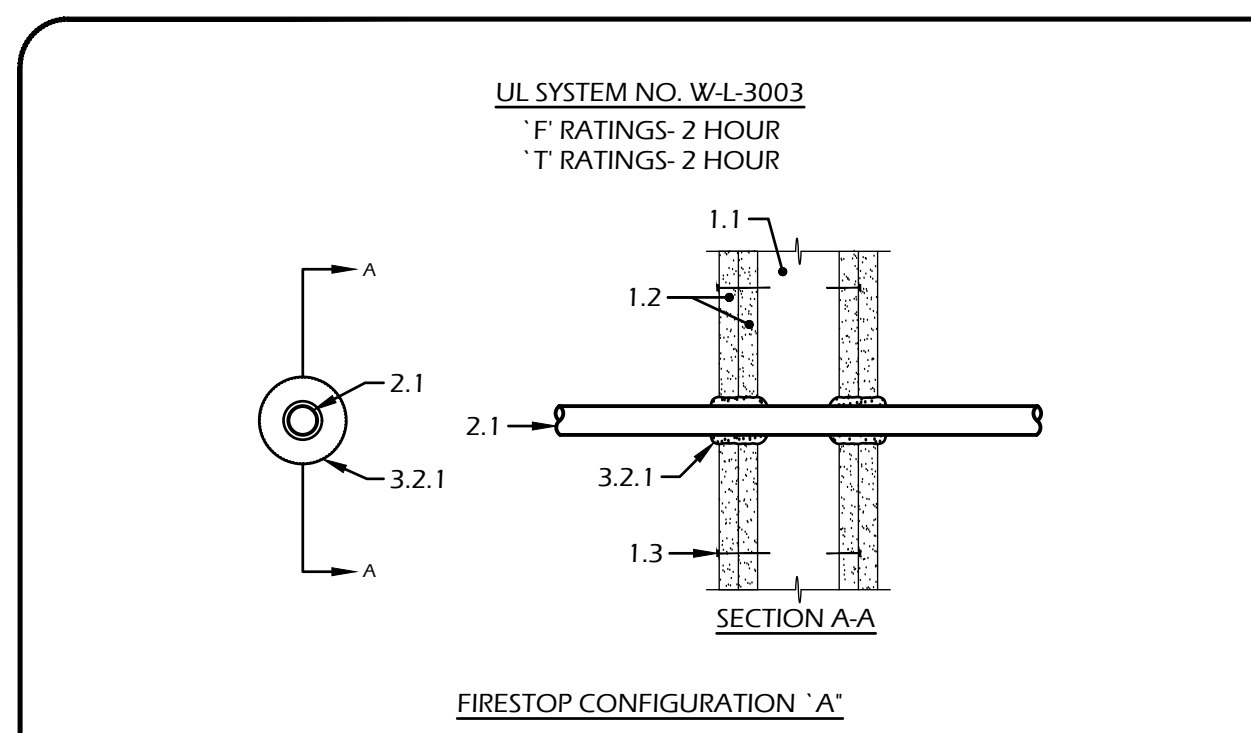
- SHEET NOTES**
- DISCONNECT AND REMOVE EXISTING DEVICE, PROVIDE AND INSTALL NEW DEVICE INDICATED AT SAME LOCATION.
  - REMOVE EXISTING BATTERY POWERED CLOCK AND RETURN TO OWNER.



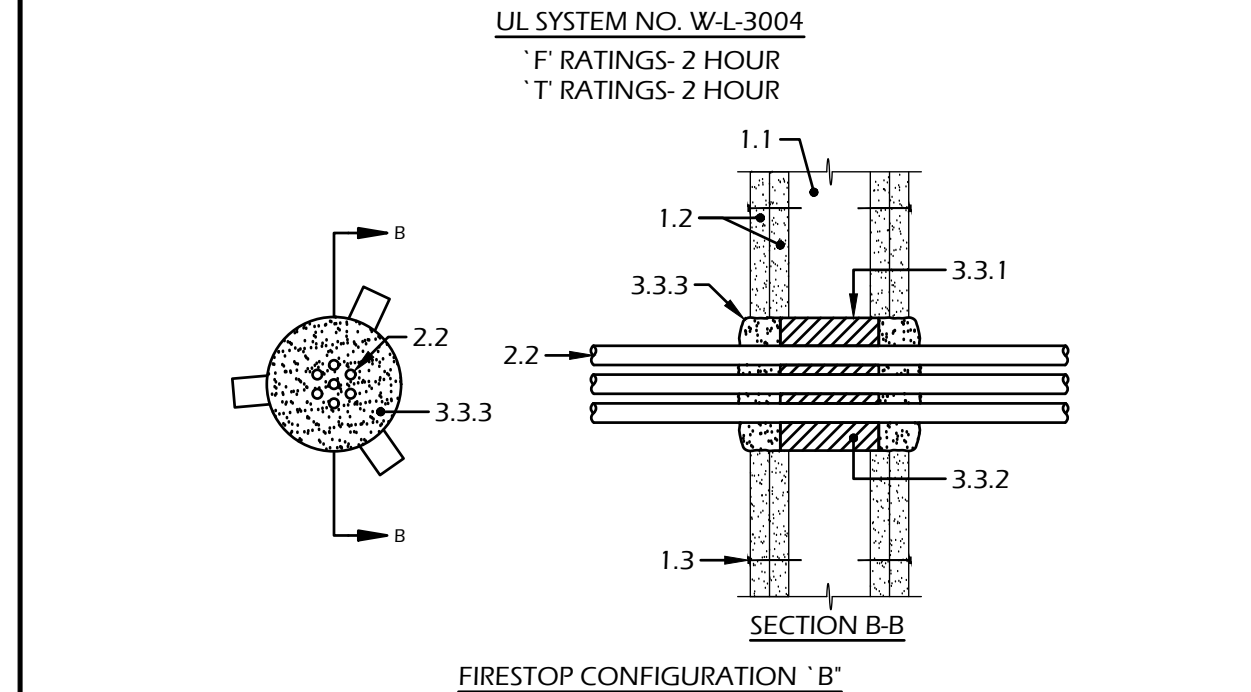


**WIREMOLD 2300 AT OBSTRUCTION**

3  
-  
NOT TO SCALE



**FIRESTOP CONFIGURATION 'A'**



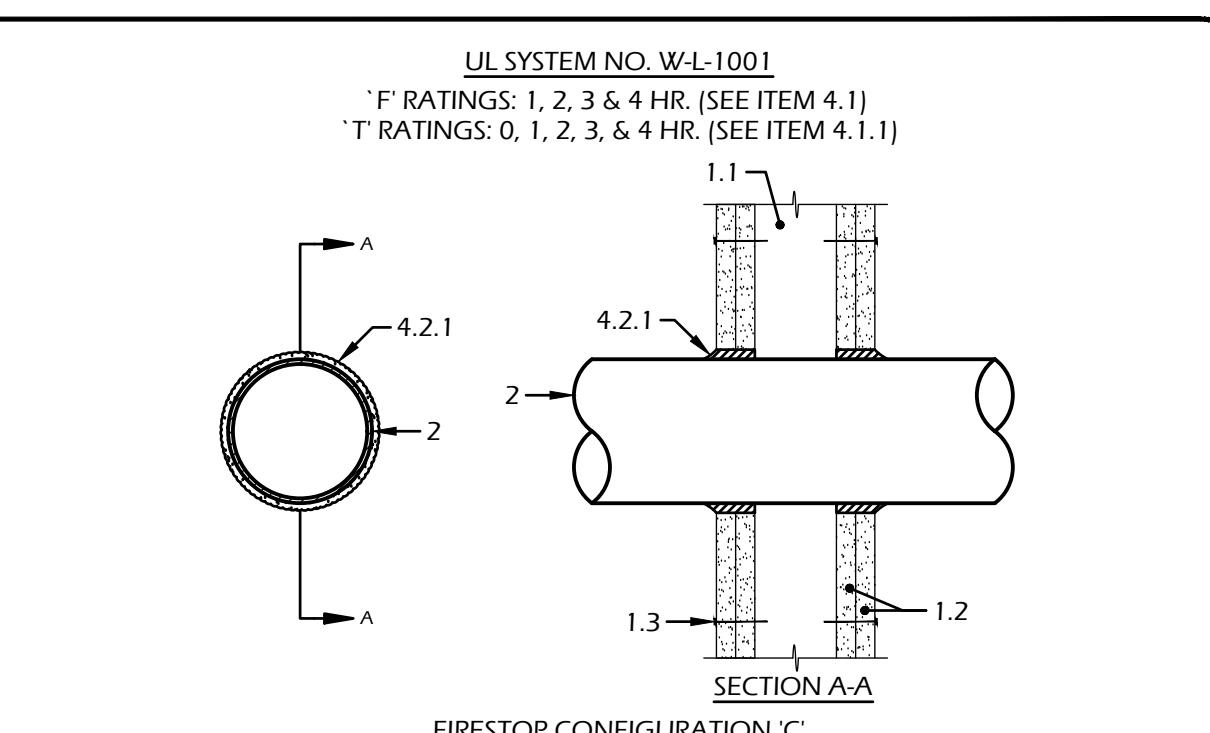
**FIRESTOP CONFIGURATION 'B'**

- WALL ASSEMBLY
  - STUDS-WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS.
  - WALLBOARD, GYPSUM- 5/8" THICK.
  - FASTENERS- 1-7/8" LONG 6D CEMENT COATED NAILS.
- CABLES
  - 50 PAIR (OR SMALLER) #24 AWG TELEPHONE CABLE WITH POLYVINYL CHLORIDE JACKET WITH POLYVINYL CHLORIDE INSULATION.
  - TWO CONDUCTOR #24 AWG (OR SMALLER) WITH POLYVINYL CHLORIDE JACKET WITH POLYETHYLENE INSULATION.
- FIRESTOP SYSTEM
  - INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE FIRESTOP CONFIGURATION (A' OR B') IS DEPENDENT UPON THE TYPE AND SIZE OF THE CABLE AND THE SIZE OF THE ANNULAR SPACE BETWEEN THE CABLE AND THE PERIMETER OF THE CIRCULAR THROUGH OPENING AS TABULATED BELOW.
    - ONE 50 PAIR, #24 AWG CABLE: 3/16" ANNULAR SPACE, FIRESTOP CONFIGURATION A.
    - UP TO SEVEN 2 CONDUCTOR, #20 AWG CABLES: 3/8" ANNULAR SPACE, FIRESTOP CONFIGURATION B.
  - FIRESTOP CONFIGURATION 'A'
    - FILL VOID OR CAVITY MATERIAL (PUTTY)- MIN. 1-1/2" THICK LAYER OF PUTTY FIRMLY PACKED WITHIN THE OPENING. ADDITIONAL PUTTY INSTALLED SUCH THAT A MIN. 1/8" CROWN IS FORMED AROUND THE CIRCUMFERENCE TYPE FSP.)
  - FIRESTOP CONFIGURATION 'B'
    - STEEL SLEEVE- NOMINAL 5" LONG CYLINDRICAL SLEEVE WITH NOMINAL 3/4" BY 3" LONG TABS TO RETAIN PUTTY IN POSITION. SLEEVE FORMED OF PRECUT 0.016" THICK (#30 GA.) GALVANIZED STEEL SHEET AVAILABLE FROM PUTTY MANUFACTURERS.
    - FORMING MATERIAL- MINERAL WOOL INSULATION HAVING A MIN. DENSITY OF 6 PCF, FIRMLY PACKED WITHIN THE SLEEVE TO A MIN. THICKNESS OF 4".
    - FILL VOID OR CAVITY MATERIAL (PUTTY)- MIN. 1" THICK LAYER OF PUTTY MATERIAL FIRMLY PACKED TO FILL THE ANNULAR SPACE BETWEEN THE CABLES, MINERAL WOOL AND PERIPHERY OF THE OPENING. ADDITIONAL PUTTY SHOULD BE INSTALLED SUCH THAT A MIN. 1/8" CROWN IS FORMED AROUND THE CABLES, (NELSON ELECTRIC, UNIT OF GENERAL SIGNAL CORP.- TYPE FSP.)

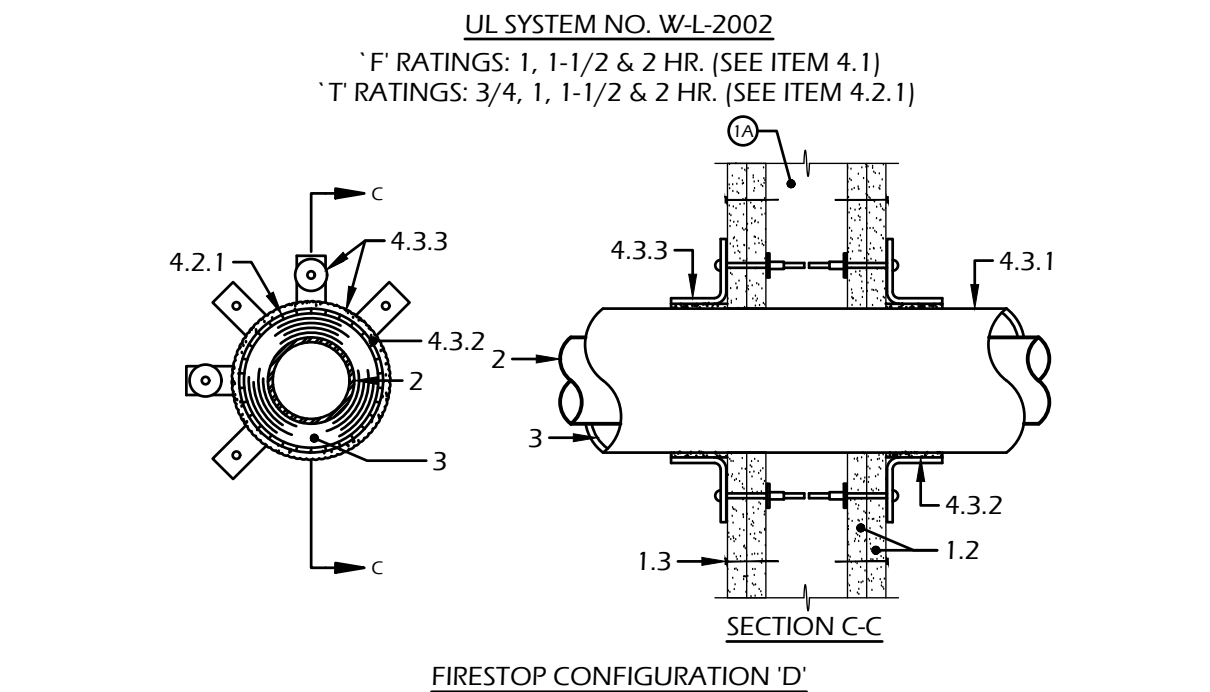
CABLES  
CONDUITS  
NOTE: FOR OTHER RATED ASSEMBLIES, REFER TO THE LATEST ISSUE OF "UNDERWRITERS LABORATORIES, INC., FIRE RESISTANCE DIRECTORY."

**CONDUIT/CABLE PENETRATIONS THRU RATED STUD/WALLBOARD ASSEMBLY DETAIL (TYPICAL)**

1  
-  
NOT TO SCALE



**FIRESTOP CONFIGURATION 'C'**



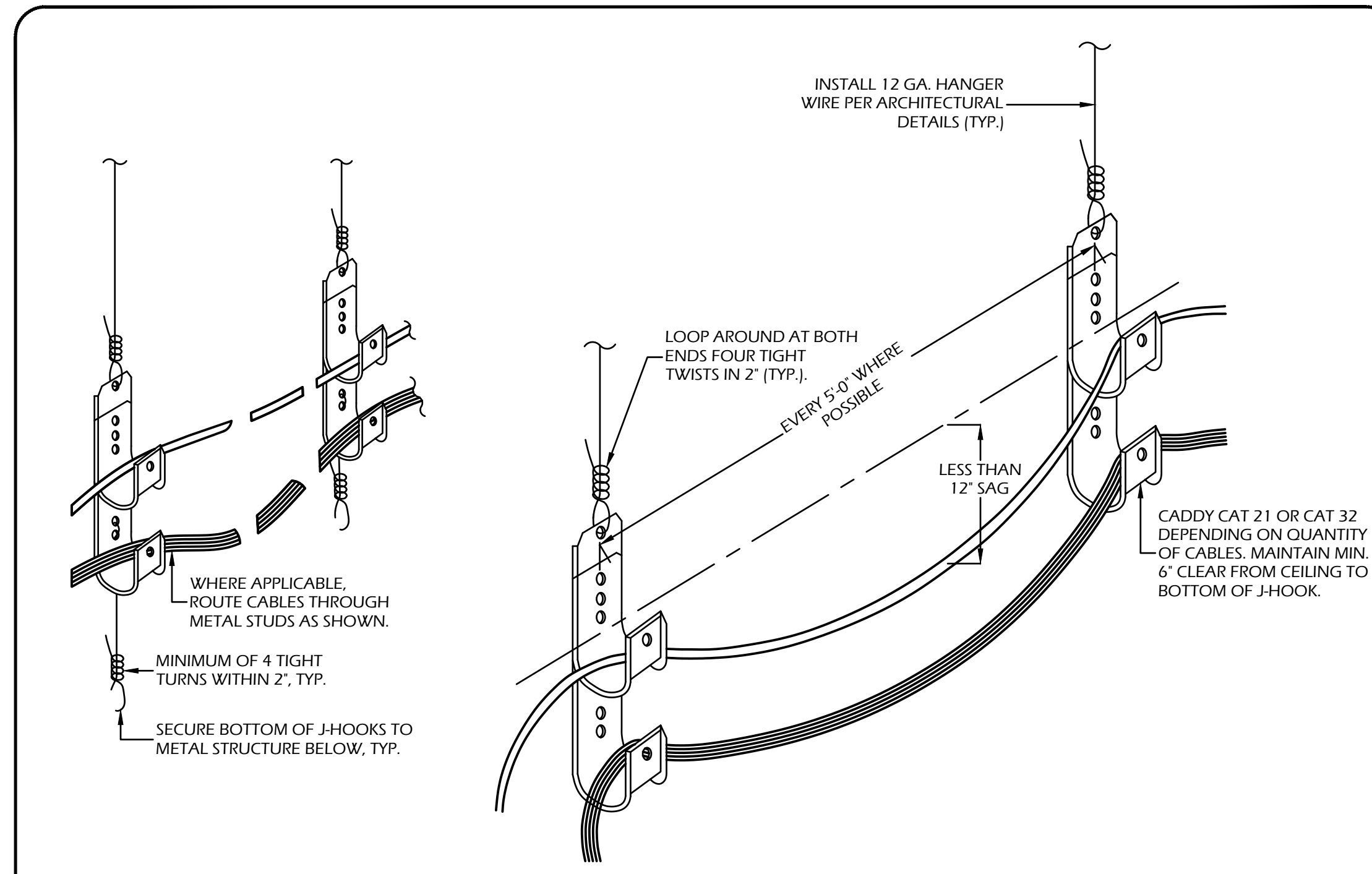
**FIRESTOP CONFIGURATION 'D'**

- WALL ASSEMBLY
  - STUDS-WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS.
  - WALLBOARD, GYPSUM- 5/8" THICK.
  - FASTENERS
- CONDUIT
- PIPE COVERING (OPTIONAL)- NOM. 1" OR 2" THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN. 3.5 PCF) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH FOIL-SCRIM-KRAFT.
- FIRESTOP SYSTEM
  - INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY 'F' RATING OF THE FIRESTOP SYSTEM IS EITHER (1) OR (2) HOUR DEPENDING UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. THE HOURLY 'T' RATINGS FOR THE FIRESTOP SYSTEM ARE DEPENDENT UPON THE SIZE OF THE STEEL PIPE OR CONDUIT, THE ABSENCE OR PRESENCE OF PIPE COVERING (ITEM 3), THE FIRESTOP CONFIGURATION AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.
    - MAXIMUM 1" O.D. CONDUIT: 3/16" ANNULAR SPACE, FIRESTOP CONFIGURATION C, 1 OR 2 HOUR 'T' RATING
    - MAXIMUM 4" O.D. CONDUIT AND 1" COVERING: 3/8" ANNULAR SPACE, FIRESTOP CONFIGURATION D, 1 OR 2 HOUR 'T' RATING
  - FIRESTOP CONFIGURATION 'C'
    - FILL VOID OR CAVITY MATERIAL- CAULK FILL MATERIAL FORCED INTO ANNULAR SPACE TO MAX. EXTENT POSSIBLE AND WITH A MIN. 1/4" DIAM. BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL.
  - FIRESTOP CONFIGURATION 'D'
    - FILL VOID OR CAVITY MATERIALS (WRAP STRIP)- NOMINAL 1/4" THICK INTUMESCENT ELASTOMERIC MATERIAL FACED ON ONE SIDE WITH ALUMINUM FOIL, SUPPLIED IN 2" WIDE STRIPS. NOMINAL 2" WIDE STRIP TIGHTLY WRAPPED AROUND PIPE COVERING (FOIL SIDE OUT) WITH SEAM BUTTED AND WITH EDGE OF WRAP STRIP ABUTTING WALL SURFACE. WRAP STRIP TEMPORARILY HELD IN POSITION WITH ALUMINUM FOIL TAPE, STEEL WIRE TIE OR EQUIVALENT.
    - FILL VOID OR CAVITY MATERIALS (CAULK)- GENEROUS BEAD OF CAULK TO OUTER PERIMETER OF WRAP STRIP AT INTERFACE WITH WALL SURFACE.
    - STEEL COLLAR- NOMINAL 2" DEEP COLLAR WITH 1-1/4" WIDE BY 2" LONG ANCHOR TABS AND MINIMUM 1/4" LONG TABS TO RETAIN WRAP STRIP LAYER. COILS OF PRECUT 0.016" THICK (NO. 30 GAUGE) GALVANIZED SHEET STEEL AVAILABLE FROM WRAP STRIP MANUFACTURER.

CONDUITS

**CONDUIT/CABLE PENETRATIONS THRU RATED STUD/WALLBOARD ASSEMBLY DETAIL (TYPICAL)**

2  
-  
NOT TO SCALE



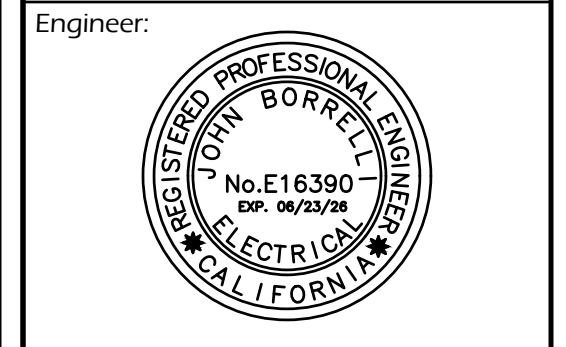
- NOTES:
- FREE AIR CABLING APPLIES TO ACCESSIBLE ATTIC SPACES ONLY. CABLING SHALL NOT BE INSTALLED EXPOSED TO VIEW.
  - ALL HARDWARE & SUSPENSION WIRES SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
  - IN EXPOSED AREAS, CABLING SHALL BE INSTALLED IN CONDUIT.

**J-HOOK CABLING SUPPORT DETAIL**

2  
-  
NOT TO SCALE

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Drawing Title:  
**TYPICAL ELECTRICAL DETAILS**

Drawing No.:  
**E4.1**