



City of San Antonio
Fire Station No. 18
1410 S. W.W. White Rd.
San Antonio, Texas 78220

REVISIONS
A Revision 1/12/22/16

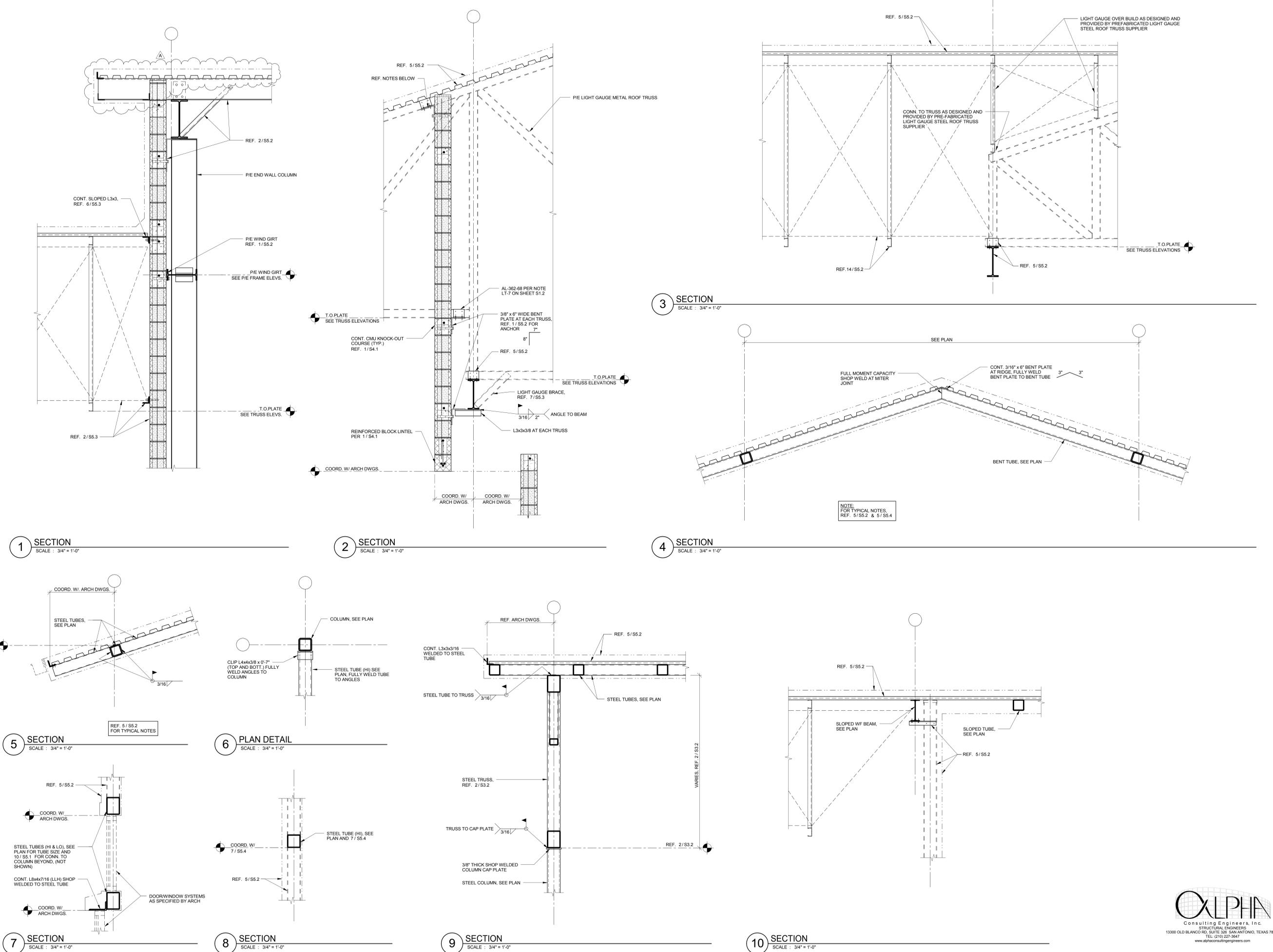
PHASE
100%
CONSTRUCTION
DOCUMENTS
DESCRIPTION
ROOF FRAMING
SECTIONS &
DETAILS



16719 Huebner Rd
Bldg. 3, Suite 301
San Antonio, TX 78248
(210) 408-7553 Voice
(210) 408-7543 Fax
www.msaofsa.com

11/19/15

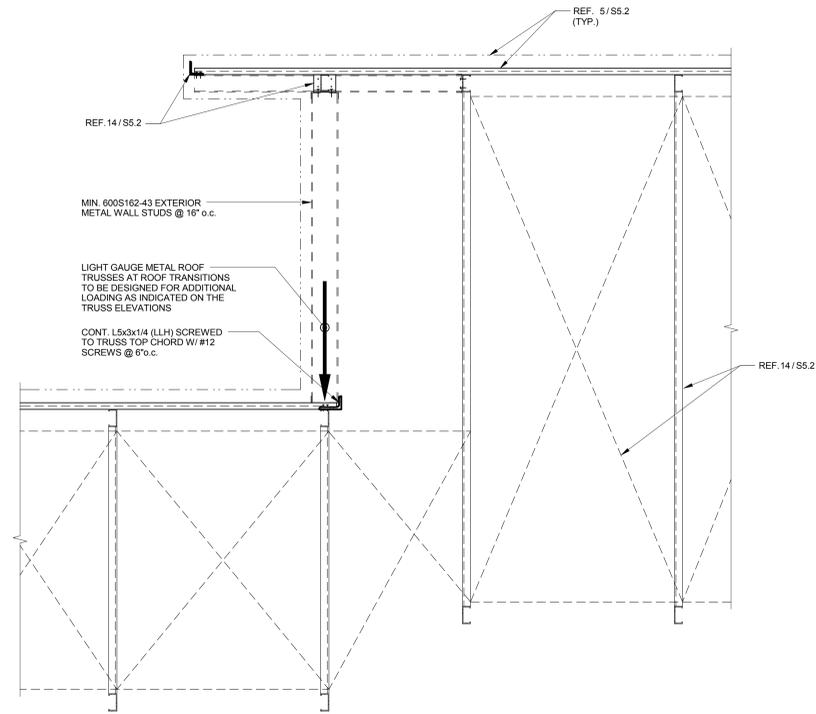
S5.4



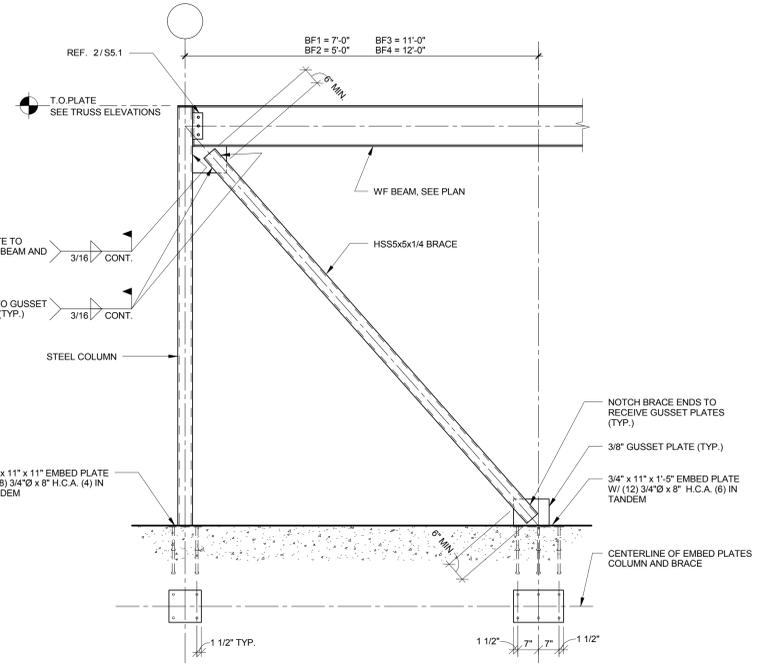
11/19/15 10:47 AM C:\Users\ADMIN\Documents\14012 - FIRE STATION NO. 18\STRUCTURE\REV. ARCH. FRAMES.DWG



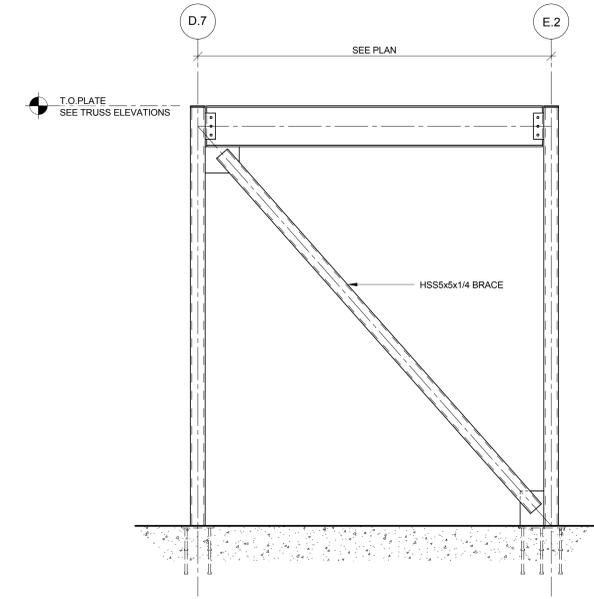
13300 OLD BLAND RD., SUITE 300, SAN ANTONIO, TEXAS 78216
TEL: (210) 227-3847
www.alphaconsultingengineers.com



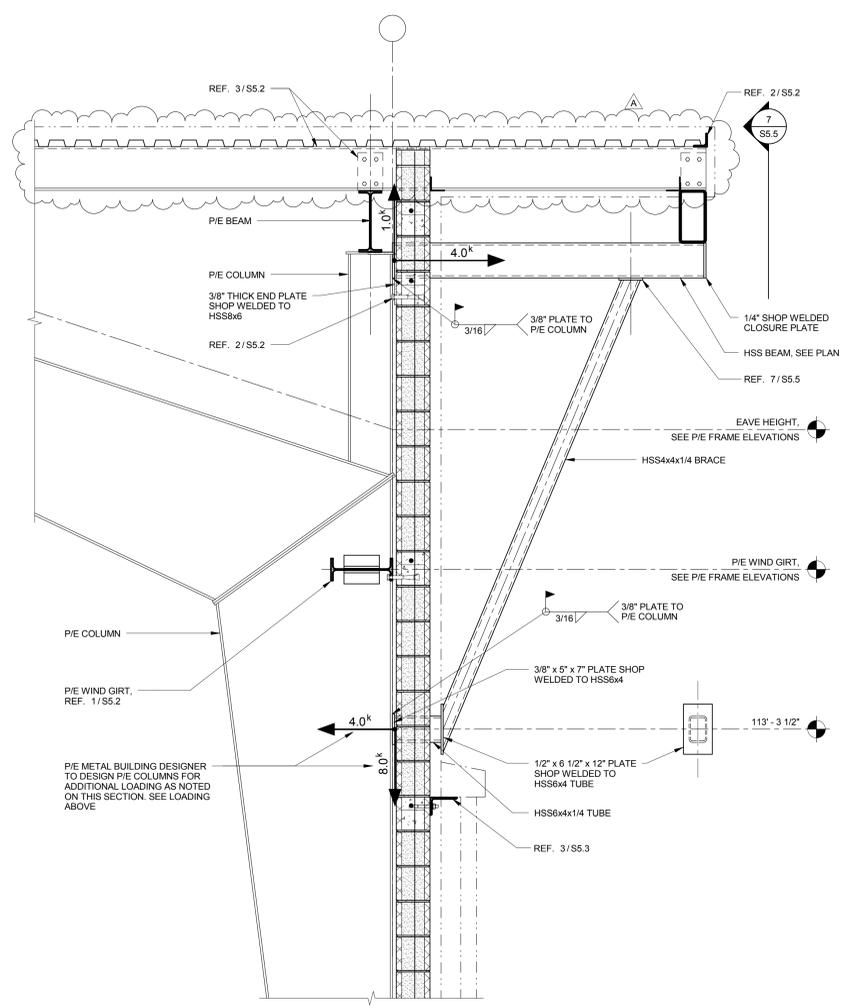
1 SECTION
SCALE: 3/4" = 1'-0"



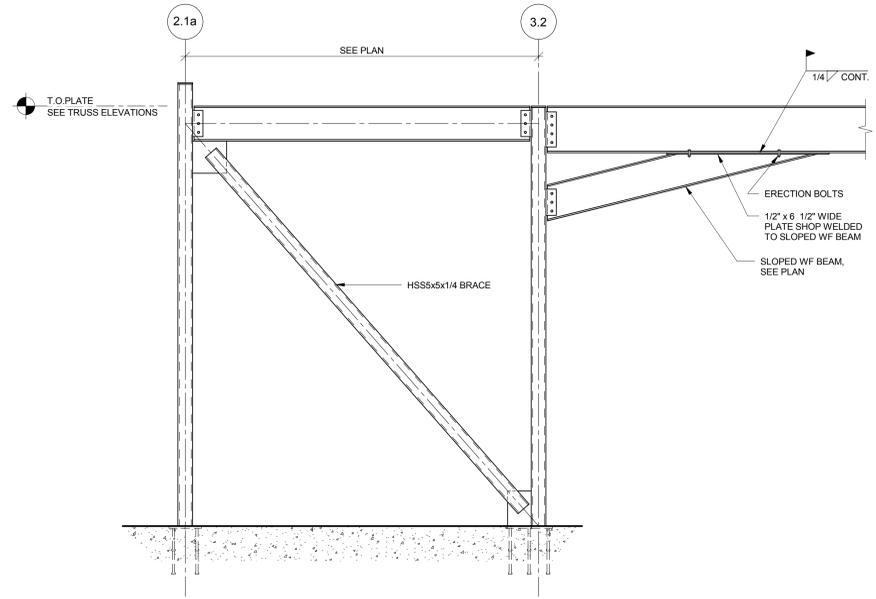
2 BRACE FRAME ELEVATIONS - BF1, BF2, BF3, AND BF4
SCALE: 1/2" = 1'-0"



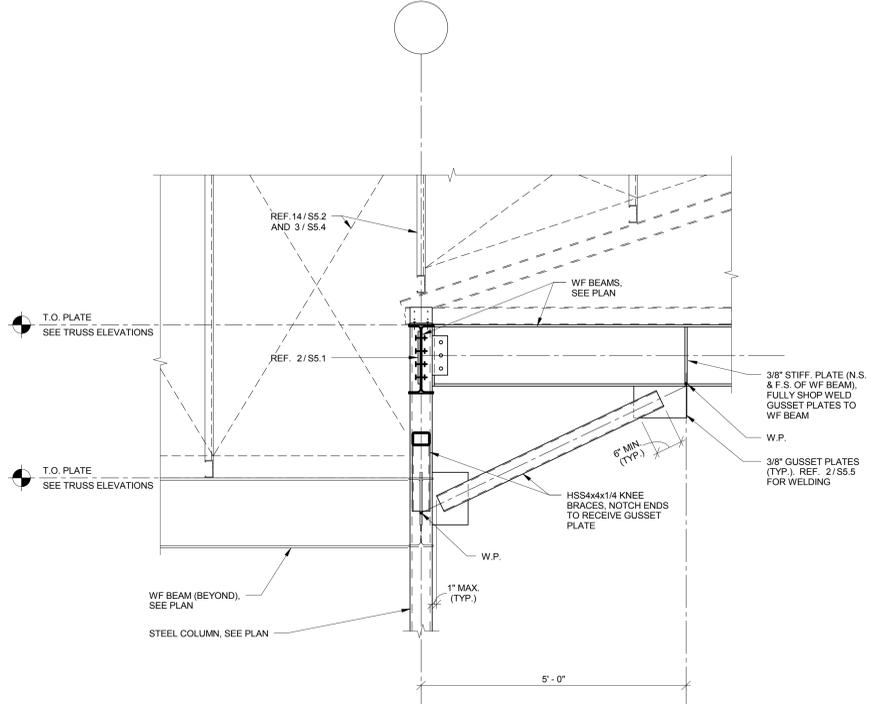
3 BRACE FRAME ELEVATION BF5
SCALE: 1/2" = 1'-0"



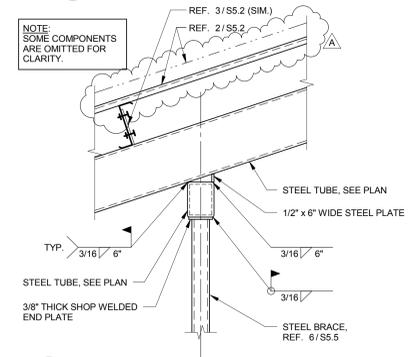
4 SECTION
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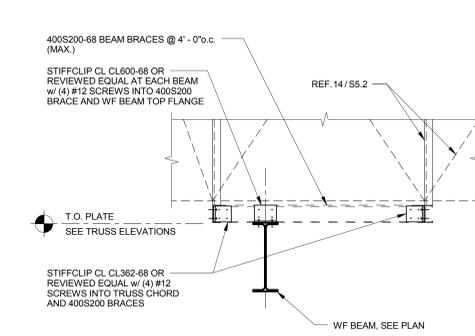
4 BRACE FRAME ELEVATION BF6
SCALE: 1/2" = 1'-0"



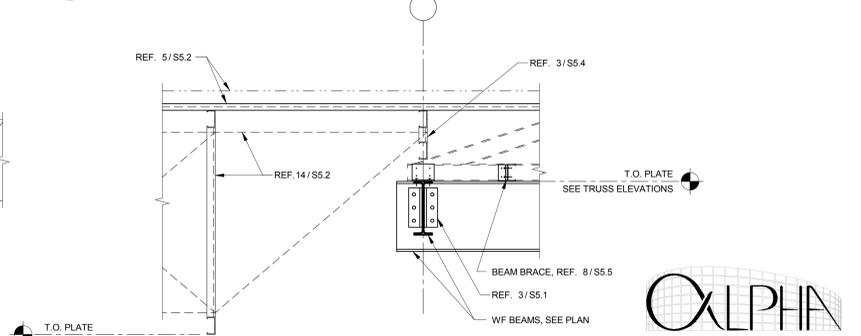
5 SECTION
SCALE: 3/4" = 1'-0"



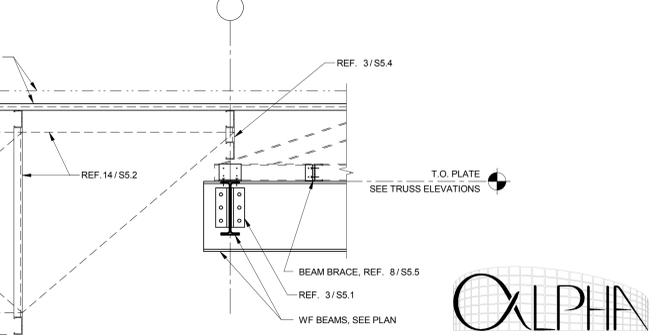
6 SECTION
SCALE: 3/4" = 1'-0"



7 SECTION
SCALE: 3/4" = 1'-0"



8 SECTION
SCALE: 3/4" = 1'-0"



9 SECTION
SCALE: 3/4" = 1'-0"



11/19/15 10:42 AM C:\USER\ADMIN\DOCS\14012\FRAME SECTION 14/S5.2.DWG REF. 14/S5.2.HRZ.DWG

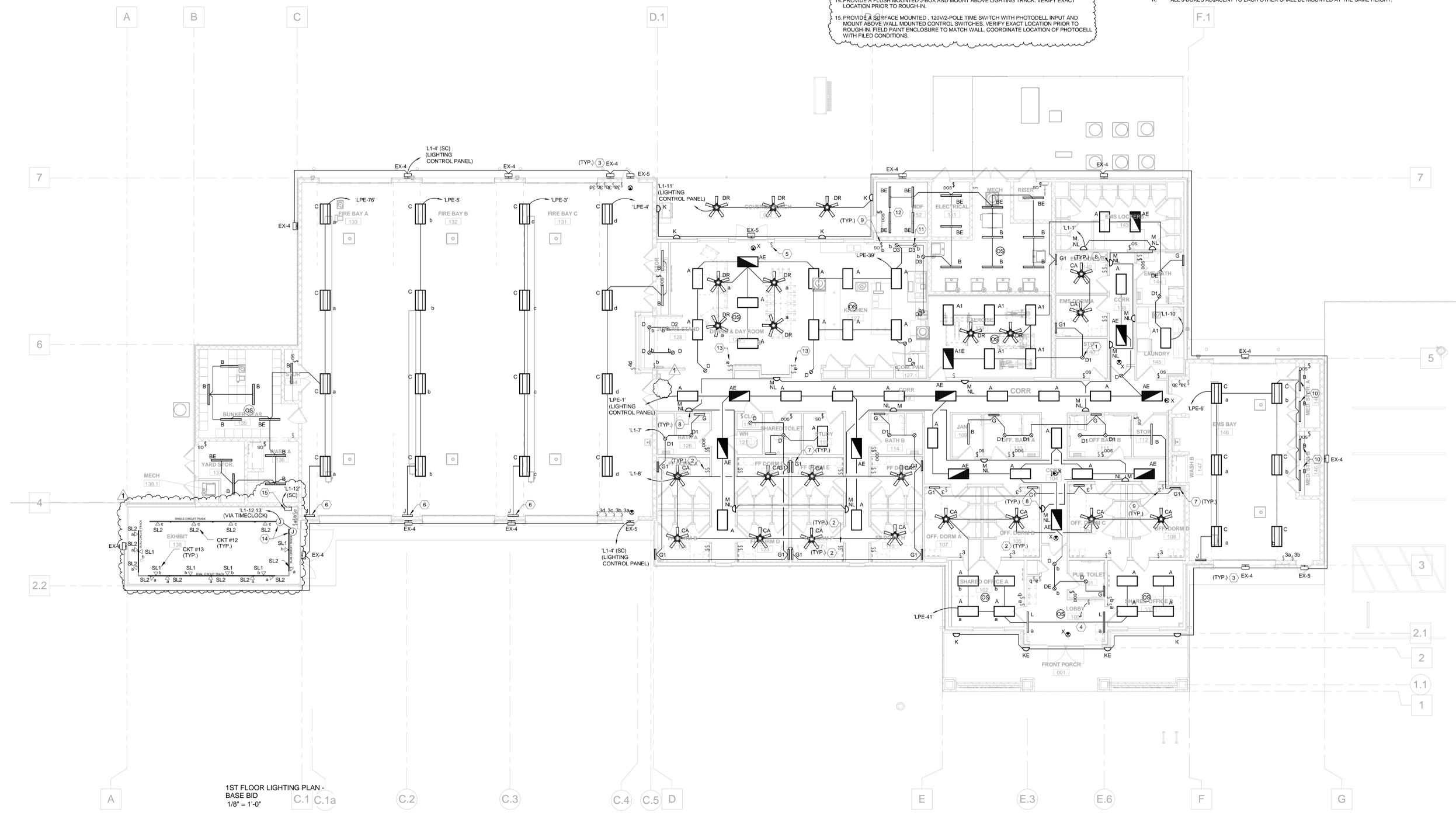


LIGHTING KEYED NOTES:

1. PROVIDE A CEILING MOUNTED J-BOX WITH CEILING FAN SUPPORT BRACKET ABOVE CEILING FOR FUTURE FAN. INSTALL LIGHT FIXTURE AS SHOWN ON PLAN FOR TEMPORARY USE.
2. CIRCUIT SWITCHES IN DORM ROOMS AS FOLLOWS:
SWITCH NEAREST DOOR - CEILING FAN LIGHT.
CENTER SWITCH - CEILING FAN.
3. RE: ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF TYPE 'EX-4' LIGHT FIXTURES.
4. MOUNT A SINGLE POLE SWITCH AT APPROXIMATELY THIS LOCATION FOR CONTROL OF SOFFIT MOUNTED RECEPTACLES. CONTROL SWITCH SHALL BE USED AS A MEANS OF OVERRIDE TYPE OF CONTROL. RE: 1E3.1 FOR RECEPTACLE LOCATIONS.
5. PROVIDE 1 HOUR DIAL TIMER SWITCH FOR CONTROL OF UNDER CANOPY CEILING FANS.
6. ROUTE 3/4" CONDUIT WITH PULL CORD TO JOCKERS STAND FOR CONTROL WIRING TO INDOOR TRAFFIC LIGHT. COORDINATE ROUTING AND MOUNTING LOCATION ON JOB SITE PRIOR TO ROUGH-IN.
7. ABOVE BED LIGHT FIXTURE SHALL BE MOUNTED 72" AFF.
8. TYPE 'M' LIGHT FIXTURES SHALL BE ON UNSWITCHED CIRCUIT.
9. MOUNT CONTROLS IN DRY WALL PARTITION. TYPICAL FOR ALL WALL MOUNTED DEVICES.
10. MOUNT LIGHT FIXTURE ON WALL ABOVE DOOR.
11. MOUNT TRANSFORMER IN CABINET FOR UNDERCABINET LED TYPE LIGHTING. VERIFY CONCEALED LOCATION OF TRANSFORMER PRIOR TO ROUGH-IN. PROVIDE A 120V CIRCUIT TO TRANSFORMER FOR UNDERCABINET LIGHTING.
12. MOUNT LIGHTING FIXTURES IN THIS ROOM AT 24" ABOVE DATA RACK.
13. CIRCUIT SWITCHES IN DAYROOM AS FOLLOWS:
a. SWITCH DESIGNATED WITH 'a' TO SWITCH CEILING FANS.
b. OUTER SWITCH TO OVERRIDE OCCUPANCY SENSORS IN DAYROOM AND KITCHEN.
14. PROVIDE A FLUSH MOUNTED J-BOX AND MOUNT ABOVE LIGHTING TRACK. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
15. PROVIDE A SURFACE MOUNTED, 120V/2-POLE TIME SWITCH WITH PHOTODELL INPUT AND MOUNT ABOVE WALL MOUNTED CONTROL SWITCHES. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN. FIELD PAINT ENCLOSURE TO MATCH WALL. COORDINATE LOCATION OF PHOTOCELL WITH FIELD CONDITIONS.

GENERAL NOTES (THIS SHEET ONLY)

- A. CONDUIT LINES SHOWN ON DRAWING ARE DIAGRAMMATIC. VERIFY FIELD CONDITIONS AND CHOOSE APPROPRIATE CONDUIT ROUTING. IN THE EVENT THAT APPROXIMATE CONDUIT ROUTING SHOWN ON PLANS IS NOT FEASIBLE, NOTIFY ARCHITECT/ENGINEER.
- B. LOCATIONS OF DEVICES ARE DIAGRAMMATIC. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
- C. CONNECT EXITS SIGNS TO NEAREST UNSWITCHED GENERATOR LIGHTING CIRCUIT.
- D. DRAWINGS SHOW GENERAL LOCATION OF LIGHTING FIXTURES. FOR EXACT LOCATIONS AND SPACING, SEE ARCHITECTURAL DRAWINGS. IF CONTRACTOR DETERMINES THAT THERE IS A DIFFERENCE IN QUANTITY OF FIXTURES SHOWN ON THE ARCHITECTURAL AND ELECTRICAL DRAWINGS, HE SHALL USE THE HIGHER NUMBER OF THE TWO QUANTITIES FOR BIDDING. THEN CONTACT THE DESIGN TEAM FOR FINAL RESOLUTION.
- E. ADJUST LIGHTING FIXTURE LOCATIONS IN MECHANICAL, ELECTRICAL AND DATA ROOMS BASED ON ACTUAL EQUIPMENT LAYOUT. COORDINATE WITH MECHANICAL AND DATA CONTRACTORS PRIOR TO ROUGH-IN.
- F. PROVIDE LIGHTING CONTROL SYSTEM WITH ALL NECESSARY ACCESSORIES FOR A COMPLETE INSTALLATION. LIGHTING CONTROL SYSTEM SHALL INCLUDE ASTRONOMICAL TIMECLOCK SYSTEM, HOUSEKEEPING OVERRIDE 'ON' SWITCH CONTROL, AND EMCS CONNECTIVITY. PROVIDE THE FOLLOWING LIGHTING CONTROL SCHEME:
- G. EXTERIOR LIGHTING WILL BE CONTROLLED BY A LIGHTING CONTROL PANEL CONNECTED TO THE BUILDING MANAGEMENT SYSTEM.
- H. POWER SUPPLY FOR CEILING MOTION SENSORS SHOULD BE INSTALLED ADJACENT TO ENTRANCE DOOR.
- I. PROVIDE FIRE-RATED MATERIAL AROUND ALL PENETRATIONS CREATED BY CONDUITS, CABLE TRAYS, ETC. IN FIRE RATED PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS FOR DESIGNATED AREAS.
- J. CONNECT BATTERY BALLAST TO UNSWITCHED HOT SERVING THE FIXTURE.
- K. ALL J-BOXES ADJACENT TO EACH OTHER SHALL BE MOUNTED AT THE SAME HEIGHT.



1ST FLOOR LIGHTING PLAN -
BASE BID
1/8" = 1'-0"

City of San Antonio
Fire Station #18
W.W. White & Rice Rd.,
San Antonio, TX 78220

REVISIONS
1. Addendum 2 1/22/16

PHASE
100% CD
SUBMITTAL

DESCRIPTION
Electrical Lighting
Plan - Base Bid



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01/07/16

E2.1



1917 N. New Braunfels Ave., Ste. 201
San Antonio, Texas 78208
(210) 224-8841, (210) 224-8824 FAX
Firm #: F-7964



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Fire Station #18
W.W. White & Rice Rd.,
San Antonio, TX 78220

REVISIONS
1. Addendum 2 1/22/16

PHASE
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DESCRIPTION
Electrical Power
Plan - Base Bid



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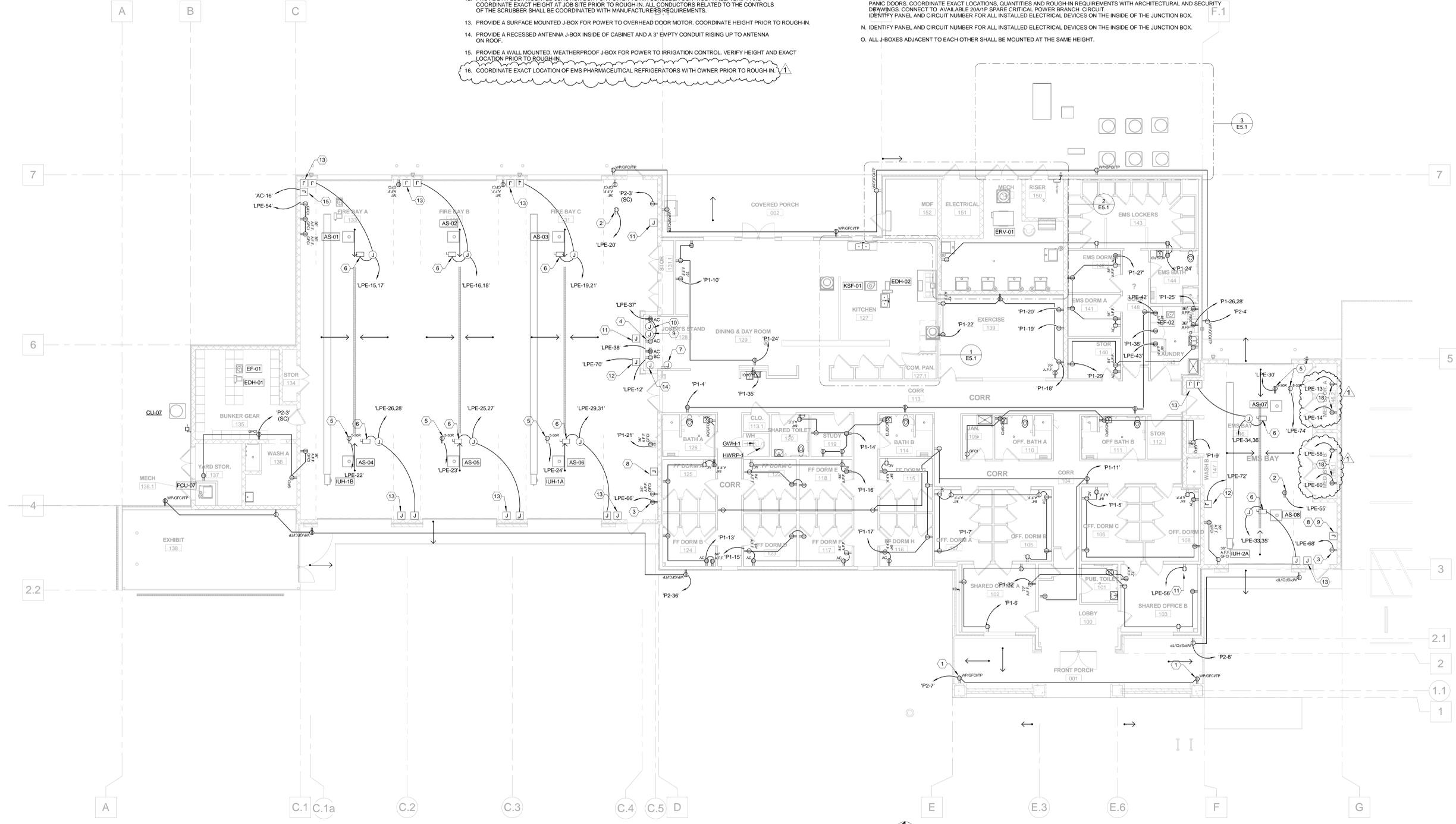
E3.1

POWER KEYED NOTES:

- RECEPTACLE AT SOFFIT FOR SEASONAL LIGHTING. COORDINATE EXACT LOCATION OF RECEPTACLES PRIOR TO ROUGH-IN.
- PROVIDE STRUCTURE MOUNTED RECEPTACLE FOR THE GPS SIGNAL BOOSTER. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
- PROVIDE A WALL MOUNTED RECEPTACLE @ 7'-6" AFF FOR POWER TO THE PHOENIX TIMER. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
- JOKER STAND RECEPTACLES MOUNTED ABOVE COUNTER. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATIONS. TYPICAL FOR EACH RECEPTACLE.
- PROVIDE NEMA 5-30R RECEPTACLE. MOUNT ON #10-SJO CORD WITH STRAIN RELIEF ("KELLEMS-GRIP") FROM BOTTOM OF JOISTS. SUSPEND CORD 36" AFF. PLUG AN 18" PIGTAIL TYPE CORD AT THE END OF SUSPENDED CORD, LEAVING A CLEARANCE OF 18" AFF. PROVIDE STEEL SUPPORTS AS REQUIRED. MOUNT FACE OF OUTLET VERTICAL, NOT FACING DOWNWARD. LOCATE BEHIND DRIVERS DOOR.
- PROVIDE 30A/2P FUSED DISCONNECT SWITCH AND MOUNT ADJACENT TO DOOR LIFT MOTOR.
- PROVIDE A FLUSH MOUNT J-BOX FOR POWER TO THE PHOENIX ATX PANEL. VERIFY AND COORDINATE HEIGHT AND LOCATION PRIOR TO ROUGH-IN.
- PROVIDE A JUNCTION BOX. FLUSH MOUNT WITH WALL FOR PUSH BUTTON INSTALLATION. PUSH BUTTON SHALL CONTROL PEDESTRIAN WARNING SIGNS, TRAFFIC WARNING SIGNS AND FLASHER BEACON LIGHT. RE: 1/E101 FOR LOCATIONS OF WARNING SIGNS. COORDINATE EXACT LOCATION AND HEIGHT OF PUSH BUTTON PRIOR TO ROUGH-IN.
- PROVIDE FIVE (5) JUNCTION BOXES ABOVE CABINET AND MOUNT FLUSH WITH WALL FOR FIRE BAY OVERHEAD DOOR CONTROLS.
- PROVIDE A JUNCTION BOX ABOVE COUNTER AND MOUNT FLUSH WITH WALL FOR EXTERIOR MOTORIZED GATE CONTROLS. JUNCTION BOX SHALL INCLUDE EXTERIOR GATE "OPEN" ACTIVATION CONTROL WIRING AND INTERCOM WIRING. COORDINATE EXACT LOCATION AND HEIGHT OF PUSH BUTTON DEVICE. RE: SHEET E101 FOR GATE LOCATION.
- PROVIDE A 120V BRANCH CIRCUIT, HARDWARE POINT OF CONNECTION FOR FIRE ALARM CONTROL PANEL.
- PROVIDE A FLUSH MOUNTED JUNCTION BOX FOR POWER TO AIR SCRUBBER CONTROL PANEL. VERIFY AND COORDINATE EXACT HEIGHT AT JOB SITE PRIOR TO ROUGH-IN. ALL CONDUCTORS RELATED TO THE CONTROLS OF THE SCRUBBER SHALL BE COORDINATED WITH MANUFACTURER'S REQUIREMENTS.
- PROVIDE A SURFACE MOUNTED J-BOX FOR POWER TO OVERHEAD DOOR MOTOR. COORDINATE HEIGHT PRIOR TO ROUGH-IN.
- PROVIDE A RECESSED ANTENNA J-BOX INSIDE OF CABINET AND A 3" EMPTY CONDUIT RISING UP TO ANTENNA ON ROOF.
- PROVIDE A WALL MOUNTED, WEATHERPROOF J-BOX FOR POWER TO IRRIGATION CONTROL. VERIFY HEIGHT AND EXACT LOCATION PRIOR TO ROUGH-IN.
- COORDINATE EXACT LOCATION OF EMS PHARMACEUTICAL REFRIGERATORS WITH OWNER PRIOR TO ROUGH-IN.

GENERAL NOTES: THIS SHEET ONLY

- PROVIDE 120V EMERGENCY CIRCUIT TO ALL FIRE/SMOKE DAMPERS. CONNECT NO MORE THAN FOUR(4) DAMPERS TO CIRCUITS INDICATED IN PANEL SCHEDULE. DAMPERS ON DIFFERENT FLOORS SHALL NOT BE CONNECTED TOGETHER. DAMPER CONTROL SHALL BE COORDINATED WITH MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS AND QUANTITIES OF ALL FIRE/SMOKE DAMPERS.
- PROVIDE 120V POWER FOR ALL ADA DOOR OPENINGS, SLIDING DOORS AND OVERHEAD COILING DOORS. COORDINATE EXACT LOCATIONS AND QUANTITIES WITH ARCHITECTURAL AND SECURITY DRAWINGS. CONNECT TO AVAILABLE 20A/1P SPARE CRITICAL POWER BRANCH CIRCUIT.
- PROVIDE 120V POWER TO EACH HVAC DDC CONTROL PANEL. COORDINATE EXACT LOCATIONS AND QUANTITIES WITH MECHANICAL DRAWINGS. CONNECT TO AVAILABLE 20A/1P SPARE CRITICAL BRANCH POWER CIRCUIT.
- PROVIDE LISTED FIRE-STOP AND CALLING TO MAINTAIN INTEGRITY OF RATED WALLS AT ALL RACEWAY AND CABLE TRAY PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RATED WALLS.
- REFERENCE EQUIPMENT CONNECTION SCHEDULE, SHEET E8.06, FOR REQUIREMENTS AND ADDITIONAL INFORMATION OF TAGGED EQUIPMENT SHOWN ON PLAN DRAWING.
- CONDUIT LINES SHOWN ON DRAWING ARE DIAGRAMMATIC. CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND CHOOSE APPROPRIATE CONDUIT ROUTING. IN THE EVENT THAT THE APPROXIMATE CONDUIT ROUTING SHOWN ON PLANS IS NOT FEASIBLE CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER.
- LOCATIONS OF DEVICES ARE DIAGRAMMATIC. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
- COORDINATE ALL RECEPTACLE LOCATIONS WITH ARCHITECTURAL INTERIOR ELEVATIONS.
- PROVIDE 120V CIRCUIT FOR CONTROL POWER TO VAV BOXES. CIRCUIT 6 OR LESS BOXES TO A CIRCUIT. PROVIDE 20-AMP TOGGLE SWITCH ADJACENT TO EACH VAV BOX. MOUNTED INDEPENDENTLY OF EQUIPMENT. PROVIDE A MAXIMUM OF 3' LENGTH OF FLEXIBLE CONDUIT CONNECTION FROM TOGGLE SWITCH TO VAV BOX.
- RECEPTACLES CONNECTED TO AN EMERGENCY POWER CIRCUIT SHALL BE RED IN COLOR.
- ALL RECEPTACLES SHALL BE COMMERCIAL, SPECIFICATION GRADE UNLESS NOTED OTHERWISE.
- RECEPTACLES LOCATED WITHIN 6' OF ANY PLUMBING FIXTURE, AT BREAKROOM COUNTERTOPS, AT THE EXTERIOR, OR OTHERWISE EXPOSED TO WATER SHALL BE TYPE GFCI, PROVIDE IN-USE, CAST ALUMINUM COVERS FOR EXTERIOR RECEPTACLES.
- PROVIDE 120V EMERGENCY POWER FOR ALL DOOR OPERATORS, CARD READERS, MAG LOCKS, ELECTRIC STRIKES AND EMERGENCY PANIC DOORS. COORDINATE EXACT LOCATIONS, QUANTITIES AND ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL AND SECURITY DRAWINGS. CONNECT TO AVAILABLE 20A/1P SPARE CRITICAL POWER BRANCH CIRCUIT. IDENTIFY PANEL AND CIRCUIT NUMBER FOR ALL INSTALLED ELECTRICAL DEVICES ON THE INSIDE OF THE JUNCTION BOX.
- IDENTIFY PANEL AND CIRCUIT NUMBER FOR ALL INSTALLED ELECTRICAL DEVICES ON THE INSIDE OF THE JUNCTION BOX.
- ALL J-BOXES ADJACENT TO EACH OTHER SHALL BE MOUNTED AT THE SAME HEIGHT.



Electrical Power Plan
1/8" = 1'-0"



1917 N. New Braunfels Ave., Ste. 201
San Antonio, Texas 78208
(210) 224-8841, (210) 224-8824 FAX
Firm #: F-7964



LIGHTING FIXTURE SCHEDULE									
TYPE	LAMPS	MOUNTING	MOUNT HEIGHT	VOLTS	WATTS	DESCRIPTION	MANUFACTURER/CATALOG NO.		
A	1-42W LED	RECESSED GRID	CEILING	120	42	2'X4' LED TYPE RECESSED LIGHT FIXTURE, LED DRIVER.	MERCURY LIGHTING - LFR-24G-42/4100/40K-UNI-ZK1 SERIE		
AE	1-42W LED	RECESSED GRID	CEILING	120	42	SAME AS TYPE 'A' EXCEPT WITH BATTERY BACKUP BALLAST.	MERCURY LIGHTING - LFR-24G-42/4100/40K-UNI-ZK1 SERIE		
A1	1-42W LED	RECESSED GRID	CEILING	120	42	SAME AS TYPE 'A' FIXTURE EXCEPT WITH OVERLAPPING FLANGE TRIM.	MERCURY LIGHTING - LFR-FK24-42/4100/40K-UNI-ZK1 SERIE		
A1E	1-42W LED	RECESSED GRID	CEILING	120	42	SAME AS TYPE 'A' FIXTURE EXCEPT WITH EMERGENCY BATTERY BACKUP BALLAST.	MERCURY LIGHTING - LFR-FK24-42/4100/40K-UNI-ZK1 SERIE		
B	1-21 LED 4100K	CHAIN HUNG	9' A.F.F.	120	21	4' NARROW STRIP FIXTURE ELECTRONIC INSTANT START BALLAST AND WIREGUARD OPTION.	MERCURY LIGHTING - LW3-4-2100-40K		
BE	1-21 LED 4100K	CHAIN HUNG	9' A.F.F.	120	21	SAME AS TYPE 'B' EXCEPT WITH A BATTERY BACKUP BALLAST.	MERCURY LIGHTING - LW3-4-2100-40K		
C	149W LED 4100K	SURFACE	CEILING	120	149	24" LENGTH HIGH BAY LINEAR LED INDUSTRIAL LUMINAIRE, LED DRIVER.	MERCURY LIGHTING - LHB5-2-16000-40K-UNI		
CA	2-26W CFL	SURFACE	CEILING	120	143	24" - 3 BLADE FAN WITH LIGHT KIT.	EMERSON TILO CF130WV00		
D	1-26W TRT	RECESSED	CEILING	120	26	7" OPEN COMPACT FLUORESCENT DOWNLIGHT WITH SPECULAR CLEAR "ALZAK" FINISH, POLISHED FLANGED.	VANTAGE LIGHTING - A7HF		
DE	1-26W TRT	RECESSED	CEILING	120	26	SAME AS TYPE 'D' EXCEPT WITH EMERGENCY BATTERY BACKUP BALLAST	VANTAGE LIGHTING - A7HF		
DR	1-26W CFL	PENDANT	CEILING	120	120	52" - 3 BLADE FAN WITH LIGHT KIT	THE MODERN FAN COMPANY - NIMBUS		
D1	1-26W TRT	RECESSED	CEILING	120	26	7" TEMPERED CLEAR LENSED COMPACT FLUORESCENT DOWNLIGHT WITH SPECULAR CLEAR "ALZAK" FINISH AND POLISHED FLANGED. U.L. WET LOCATION.	VANTAGE LIGHTING - A7HF		
D2	1-26W TRT	RECESSED	CEILING	120	26	7" OPEN COMPACT FLUORESCENT WALLWASH DOWNLIGHT WITH SPECULAR CLEAR "ALZAK" FINISH, POLISHED FLANGED.	VANTAGE LIGHTING - A7HF		
D3	1-4.3W LED	SURFACE	UNDERCABINET	120	4.3	UNDERCABINET LED TYPE, SURFACE MOUNTED LIGHT FIXTURE. 24VDC, POWERED BY TRANSFORMER.	FLX SPOT DVS DVS4A		
G	1-14W T5	WALL	84" A.F.F.	120	14	30" LUMINAIRE, OPAL WHITE ACRYLIC DIFFUSER PANELS, EXTRUDED ALUMINUM CORNER TRIM BARS, LIGHT SILVER HOUSING, INTEGRAL ELECTRONIC BALLAST.	MANNING LIGHTING - LB-555		
G1	1-14W T5	WALL	84" A.F.F.	120	14	30" LUMINAIRE, OPAL WHITE ACRYLIC DIFFUSER PANELS, EXTRUDED ALUMINUM CORNER TRIM BARS, LIGHT SILVER HOUSING, INTEGRAL ELECTRONIC BALLAST, WALL SWITCH CONTROLLED, PROVIDE PULL CHAIN RED, GREEN TRAFFIC LIGHT FIXTURE, INCLUDE ALL MTG. HARDWARE FOR WALL MOUNTING, TRAFFIC SIGNAL BULBS BY MANUFACTURER.	MANNING LIGHTING - LB-555		
J	2-60W CFL	WALL	SEE ARCHITECTURAL	120	60	LIGHTS TO GO PSRG	LIGHTS TO GO PSRG		
K	1-8W LED	SURFACE	SEE ARCHITECTURAL	120	8W	EXTERIOR WALL MOUNTED SCONCE LIGHT FIXTURE, SUITABLE FOR WET LOCATIONS, UP/DOWN LIGHT, COLOR BY ARCHITECT.	DELTA LIGHT TGA LED 3024		
KE	1-8W LED	SURFACE	SEE ARCHITECTURAL	120	8W	SAME AS TYPE 'K' EXCEPT WITH A EMERGENCY BATTERY BACKUP, COLOR BY ARCHITECT.	DELTA LIGHT TGA LED 3024		
L	2-TSHO 4100K	WALL	10' A.F.F.	120	56	4" WALL MOUNT INDIRECT UPLIGHT.	DAY-O-LITE AD-FOB-1-2-TSHO-WM-V-UNV		
M	1-18W TT	RECESSED		120	18	RECESSED HOLE IN THE WALL LIGHT NICHE, COLOR BY ARCHITECT.	ELP - HITW SERIES		
X1	RED LED	CANOPY MOUNTING KIT		120		SINGLE FACE, DIE-CAST ALUMINUM EXIT SIGN WITH UNIVERSAL FACEPLATES, WHITE STENCIL FACE, RED LETTER COLOR, AND WHITE HOUSING. 90-MINUTE NICKEL-CADMIUM BATTERY.	EMERGI-LITE WW-P-1-R		
X2	RED LED - (2) 12W	WALL MOUNTED		120	24W	SINGLE FACE, DIE-CAST ALUMINUM EXIT SIGN, WHITE FACE, RED LETTER COLOR, AND WHITE HOUSING. 90-MINUTE NICKEL-CADMIUM BATTERY. TWO HEAD 12W MR16 LIGHTS	EMERGI-LITE W-PR-1224M-1-R-2-MK		
EX-1	1-200W LED	POLE RE: 2EB01	30'	120	200	DIE-CAST ALUMINUM ROADWAY MULTI-PURPOSE LUMINAIRE, TYPE 3 DISTRIBUTION, 12" ARM MOUNT, MOUNT ON A 25'-0" SQUARE POLE, COLOR BY ARCHITECT.	L'THONIA LIGHTING - D-SERIES DSX2LED-100C-1000-40K-T4M-MVOLT		
EX2	1-75W LED	GROUND		120	75	DIE-CAST AND EXTRUDED ALUMINUM LINEAR WALL WASH FOR SIGN, COLOR BY ARCHITECT.	CORONA CX-1-48-B-BW-6-75-U		
EX3	1-52W LED	GROUND MOUNT		120	52	FLAG POLE FLOODLIGHT WITH NARROW BEAM DISTRIBUTION, DIE-CAST ALUMINUM HOUSING, VISOR SHIELD FOR NARROW BEAM PROJECTION, COLOR BY ARCHITECT.	L'YTESCAPER LSP2-52-CW-N11-U-DM-V		
EX-4	1-71W LED	WALL		120	71	WALL MOUNT HEAVY DUTY CAST ALUMINUM FIXTURE, TYPE 4 DISTRIBUTION, TEMPERED GLASS LENS, WET LOCATION RATED, COLOR BY ARCHITECT.	L'THONIA LIGHTING - D-SERIES DSXW2LED-1000-40K-T4M-MVOLT		
EX-5	1-40W	WALL	ABOVE DOOR	120	40	EXTERIOR WALL MOUNTED EMERGENCY LIGHTING FIXTURE, PROVIDE EMERGENCY BACKUP BALLAST ELCOV, COLOR BY ARCHITECT.	L'THONIA LIGHTING - D-SERIES DSXW1LED-10C-1000-40K-T4M-MVOLT		
SL1	1-31W LED	TRACK MOUNTED	CEILING	120	31	TRACK MOUNTED LED TYPE LIGHTING FIXTURE, FIXED WIDE BEAM ANGLE. 4M SERIES LIGHT FIXTURE.	ETC LIGHTING 4M50L-1-T		
						CEILING APPLICATION/HORIZONTAL MOUNT ONLY TYPE TRACK, PROVIDE TRACK IN WHITE COLOR.	LIGHTING SERVICES INC.; SURFACE TRACK SINGLE TRACK: 313XO SERIES DUAL TRACK: 323XO SERIES ETC LIGHTING 4M26L-1-T		
SL2	1-31W LED	TRACK MOUNTED	CEILING	120	31	TRACK MOUNTED LED TYPE LIGHTING FIXTURE, FIXED NARROW BEAM ANGLE. 4M SERIES LIGHT FIXTURE.	ETC LIGHTING 4M26L-1-T		

NOTES:
1. PROVIDE ALL TRACK ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. REFER TO DRAWINGS FOR THE PROPOSED CONFIGURATION REQUIREMENTS.

EQUIPMENT CONNECTION SCHEDULE												
EQUIPMENT TAG	VOLTAGE / PHASE	KW HEAT	VOLTAGE / PHASE	MOTOR (HP)	EQUIPMENT (FLA)	EQUIPMENT (MCA)	OCB	DISCONNECTING MEANS	ENCLOSURE NEMA RATING	WIRE & CONDUIT	CIRCUIT NUMBER	NOTES
FAN COIL UNITS												
FCU-1	208/3	14.4	208/1	1	76.8	96	100	240V, 30A, NF, HD	N1	2#2, 1#8GND, IN 3/4"	'AC-18,20,22'	3,5,7
FCU-2	---	---	120/1	1/2	9	11	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-31'	3,5,7
FCU-3	208/3	14.4	208/1	1	76.8	96	100	240V, 30A, NF, HD	N1	2#2, 1#8GND, IN 1 1/4"	'AC-21,23,25'	3,5,7
FCU-4	---	---	120/1	1/2	9	11	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-35'	3,5,7
FCU-5	---	---	120/1	3/4	11	14	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-37'	3,5,7
FCU-6	---	---	120/1	1/2	9	11	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-39'	3,5,7
FCU-7	---	---	120/1	1/2	9	11	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-27'	3,5,7
CONDENSING UNITS												
CU-1	---	---	208/1		33	41	60	240V, 60A, NF, HD	N3R	2#8, 1#10GND, IN 3/4"	'AC-2,4'	3,5
CU-2	---	---	208/1		19	24	35	240V, 60A, NF, HD	N3R	2#10, 1#10GND, IN 3/4"	'AC-6,8'	3,5
CU-3	---	---	208/1		33	41	60	240V, 60A, NF, HD	N3R	2#8, 1#10GND, IN 1"	'AC-5,7'	3,5
CU-4	---	---	208/1		19	24	35	240V, 60A, NF, HD	N3R	2#10, 1#10GND, IN 3/4"	'AC-9,11'	3,5
CU-5	---	---	208/1		22	38	45	240V, 60A, NF, HD	N3R	2#8, 1#10GND, IN 3/4"	'AC-10,12'	3,5
CU-6	---	---	208/1		19	24	35	240V, 60A, NF, HD	N3R	2#10, 1#10GND, IN 3/4"	'AC-13,15'	3,5
CU-7	---	---	208/2		19	24	35	240V, 60A, NF, HD	N3R	2#10, 1#10GND, IN 3/4"	'AC-17,19'	3,5
MINI SPLIT SYSTEMS												
MSCU-1 / MSCU-2	---	---	208/1		12	15	20	20A MOTOR RATED SWITCH	N3R	2#10, 1#10GND, IN 3/4"	'LPE-51,53'	3,5
VENTILATION FANS												
VF-1	---	---	120/1	1/6	1	1.3	20	20A RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-23'	3,5
MUA-1	---	---	120/1	1/2	9.8	12.3	20	20A RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-25'	3,5
EXHAUST FANS												
EF-1	---	---	120/1	1/6	1	1.3	20	20A MOTOR RATED SWITCH	N3R	2#10, 1#10GND, IN 3/4"	'P2-14'	3,5
DBF-1	---	---	120/1	---	2	3	20	20A MOTOR RATED SWITCH	N3R	2#10, 1#10GND, IN 3/4"	'P2-16'	3,5
KEF-1	---	---	120/1	3/4	13.8	17.2	20	20A MOTOR RATED SWITCH	N3R	2#10, 1#10GND, IN 3/4"	'P2-30'	3,5
ENERGY RECOVERY UNIT												
ERV-1	---	---	208/1	(2) 1	18.0	22.5	25	240V, 30A, NF, HD	N3R	2#8, 1#10GND, IN 3/4"	'P2-26,28'	3
GAS UNIT HEATERS												
IUH-1A	---	---	120/1		1	1	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-17'	3
IUH-1B	---	---	120/1		1	1	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-19'	3
IUH-2A	---	---	120/1		1	1	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-21'	3
ELECTRIC UNIT HEATERS												
EUH-1	208/1	3	---	---	14	18	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-10,12'	3
ELECTRIC HEATING COILS												
EDH-01	208/3	2	---	---	5.5	6.9	20	20A MOTOR RATED SWITCH	N1	3#10, 1#10GND, IN 3/4"	'P2-32,34,36'	3
EDH-02	208/3	13.7	---	---	38.0	47.5	50	240V, 60A, NF, HD	N1	SEE ONE LINE DIAGRAM	'MDP-7'	3
ELECTRIC WATER HEATERS												
EWH-1	208/1	1.5	---	---	11.5	14.5	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P2-18,20'	3
RECIRCULATING PUMPS												
HWRP-1	-	-	120/1		1.7	2.1	20	20A MOTOR RATED SWITCH	N3R	2#10, 1#10GND, IN 3/4"	'P2-13'	3
HWRP-2	-	-	120/1		1.7	2.1	20	20A MOTOR RATED SWITCH	N3R	2#10, 1#10GND, IN 3/4"	'P2-15'	3
GAS FIRED WATER HEATERS												
GWH-1	120/1	-	---	---	1	1	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P1-39'	3
GWH-2	120/1	-	---	---	1	1	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'P1-41'	3
AIR SCRUBBERS												
AS-01	---	---	120/1		8	10	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-45'	3
AS-02	---	---	120/1		8	10	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-44'	3
AS-03	---	---	120/1		8	10	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-46'	3
AS-04	---	---	120/1		8	10	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-47'	3
AS-05	---	---	120/1		8	10	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-48'	3
AS-06	---	---	120/1		8	10	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-49'	3
AS-07	---	---	120/1		8.0	10.0	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-67'	3
AS-08	---	---	120/1		8.0	10.0	20	20A MOTOR RATED SWITCH	N1	2#10, 1#10GND, IN 3/4"	'LPE-69'	3
NOTES:												22-Jan
1. STARTER PROVIDED. INSTALLED AND WIRED THROUGH DIVISION 26.												
2. VFD PROVIDED BY DIVISION 25. INSTALL AND WIRE THROUGH DIVISION 26.												
3. DISCONNECT SWITCH PROVIDED. INSTALLED, AND WIRED THROUGH DIVISION 26.												
4. CONTROL PANEL PROVIDED BY DIVISION 25. INSTALL AND WIRE THROUGH DIVISION 26.												
5. CONTROLS PROVIDED BY DIVISION 25. INSTALL AND WIRE THROUGH DIVISION 26.												
6. PROVIDE POWER CONNECTION BETWEEN INDOOR AND OUTDOOR UNIT PER MECHANICAL DRAWINGS/EQUIPMENT CONNECTION SCHEDULE.												
7. INSTALL SMOKE DETECTORS AS REQUIRED BY MECHANICAL. COORDINATE CONTROLS WITH FIRE ALARM FOR FUNCTIONALITY.												
GENERAL NOTES:												
1. VERIFY ELECTRICAL REQUIREMENTS WITH MECHANICAL / PLUMBING EQUIPMENT SUBMITTALS PRIOR TO ELECTRICAL ROUGH-IN.												

REVISIONS
Addendum 2 1/22/16

PHASE
100% CD SUBMITTAL

DESCRIPTION
ELECTRICAL SCHEDULES



16719 Huebner Rd
Bldg. 3, Suite 301
San Antonio, TX 78248
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TBPE REGISTRATION NO.: F-7964



City of San Antonio
Fire Station #18
W.W. White & Rice Rd., San Antonio, TX 78220

REVISIONS
Addendum 2 1/22/16

PHASE
100% CD SUBMITTAL

DESCRIPTION
ELECTRICAL
SCHEDULES



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11/19/15

E8.1

PANEL 'AC'

PROJECT: Fire Station no. 18 MAIN CIRCUIT BREAKER: -- ENCLOSURE: NEMA 3R
 PROJECT #: 0031-14 MAIN LUGS ONLY: 225A MOUNTING: SURFACE
 LOCATION: EQUIPMENT YARD BUSSING: 225A CB TYPE: BOLT-ON
 NOTES: VOLTAGE: 208/120V, 3PH, 4W PROVIDE: NEUTRAL BUS
 INTERRUPTING: 18KAIC GROUND BUS

CKT	AMPS	POLE	CIRCUIT DESCRIPTION	LOAD	TYPE	PH	TYPE	LOAD	CIRCUIT DESCRIPTION	AMPS	POLE	CKT
1	20	1	SPARE	1,560	6	A	6	2,288	CU-1	60	2	2
3	20	1	SPARE	1,560	6	B	6	2,288				4
5	60	2	CU-3	1,976	6	C	6	1,456	CU-2	35	2	6
7	20	1	SPARE	1,976	6	A	6	1,456				8
9	35	2	CU-4	3,432	6	B	6	1,456	CU-5	45	2	10
11	35	2	CU-5	3,432	6	C	6	1,456				12
13	35	2	CU-6	1,456	6	A	3	200	IRRIGATION CONTROLLER	20	1	14
15	35	2	CU-7	1,456	6	B	0	180	GFCI RECEPTACLE	20	1	16
17	35	2	CU-8	1,976	6	C	5	7,200				18
19	35	2	CU-9	1,976	6	A	5	7,200	FCU-1	100	3	20
21	100	3	FCU-3	7,200	5	B	5	7,200				22
23	100	3	FCU-4	7,200	5	C						24
25	20	1	SPARE	7,200	5	A			SPARE			26
27	20	1	SPARE			B			SPARE			28
29	20	1	RECEPTACLE	360	0	C			SPARE	20	1	30
				PANEL VA	SUB FEED	FEED THRU	TOTAL CONN	TOTAL DEMAND	NOTES: 1. PROVIDE FEED THRU LUGS			
				25,312	-	-	25,312	14,802				
PHASE A				25,312	-	-	25,312	14,802				
PHASE B				24,772	-	-	24,772	14,486				
PHASE C				25,056	-	-	25,056	14,652				
TOTAL				75,140	-	-	75,140	43,940	REVISIONS: CNG ENGINEERING, PLLC R3.0			

PANEL 'L1'

PROJECT: Fire Station no. 18 MAIN CIRCUIT BREAKER: -- ENCLOSURE: NEMA 1
 PROJECT #: 0031-14 MAIN LUGS ONLY: 100A MOUNTING: SURFACE
 LOCATION: ELECT. RM BUSSING: 225A CB TYPE: BOLT-ON
 NOTES: VOLTAGE: 208/120V, 3PH, 4W PROVIDE: NEUTRAL BUS
 INTERRUPTING: 18KAIC GROUND BUS

CKT	AMPS	POLE	CIRCUIT DESCRIPTION	LOAD	TYPE	PH	TYPE	LOAD	CIRCUIT DESCRIPTION	AMPS	POLE	CKT
1	20	1	CORRIDOR LED SCOMCES	120	1	A			SPARE	20	1	2
3	20	1	SPARE			B	2	577	FIRE APPARATUS BAY EXT. WALL	20	1	4
5	20	1	POLE MOUNTED RECEPTACLES	360	2	C	2	902	EXTERIOR SITE LTG.	20	1	6
7	20	1	FC DORM LIGHTING	292	1	A	1	1,144	FC DORM CEILING FANS	20	1	8
9	20	1	SPARE			B			EXERCISE MECHANICAL LIGHTING	20	1	10
13	20	1	COVERED PORCH LIGHTING	799	1	A	3	200	SCULPTURE LIGHTING	20	1	14
15	20	1	SPARE			B			TIMECLOCK	20	1	16
17	20	1	SPARE			C			SPARE	20	1	18
19	20	1	SPARE			A			SPARE	20	1	20
21	20	1	SPARE			B			SPARE	20	1	22
23	20	1	SPARE			C			SPARE	20	1	24
25	20	1	SPARE			A			SPARE	20	1	26
27	20	1	SPARE			B			SPARE	20	1	28
29	20	1	SPARE			C			SPARE	20	1	30
31	20	1	SPARE			A			SPARE	20	1	32
33	20	1	SPARE			B			SPARE	20	1	34
35	20	1	SPARE			C			SPARE	20	1	36
37	20	1	SPARE			A			SPARE	20	1	38
39	20	1	SPARE			B			SPARE	20	1	40
41	20	1	SPARE			C			SPARE	20	1	42
				PANEL VA	SUB FEED	FEED THRU	TOTAL CONN	TOTAL DEMAND	NOTES: 1. PROVIDE FEED THRU LUGS			
				1,948	-	-	1,948	2,420				
PHASE A				1,948	-	-	1,948	2,420				
PHASE B				2,177	-	-	2,177	2,705				
PHASE C				2,477	-	-	2,477	3,077				
TOTAL				6,602	-	-	6,602	8,203	REVISIONS: CNG ENGINEERING, PLLC R3.0			

PANEL 'LPE'

PROJECT: Fire Station no. 18 MAIN CIRCUIT BREAKER: -- ENCLOSURE: NEMA 1
 PROJECT #: 0031-14 MAIN LUGS ONLY: 225A MOUNTING: SURFACE
 LOCATION: ELECT. RM BUSSING: 225A CB TYPE: BOLT-ON
 NOTES: VOLTAGE: 208/120V, 3PH, 4W PROVIDE: NEUTRAL BUS
 INTERRUPTING: 18KAIC GROUND BUS

CKT	AMPS	POLE	CIRCUIT DESCRIPTION	LOAD	TYPE	PH	TYPE	LOAD	CIRCUIT DESCRIPTION	AMPS	POLE	CKT
1	20	1	CORRIDOR EMERGENCY LTG.	882	1	A	1	642	FIRE APPARATUS BAY LTG.	20	1	2
3	20	1	FIRE APPARATUS BAY LTG.	642	1	B	1	708	FIRE APPARATUS BAY LTG.	20	1	4
5	20	1	FIRE APPARATUS BAY LTG.	1,454	1	C	1	938	EMS BAY LTG.	20	1	6
7	20	1	DATA ROOM RECEPTACLE	1,080	0	A	0	720	DATA ROOM RECEPTACLES	20	1	8
9	20	1	DATA ROOM RECEPTACLE	1,080	0	B	3	1,200	EXTERIOR GATE DOOR	20	1	10
11	20	1	KITCHEN RECEPTACLES	540	0	C	0	180	APUQUES RECEPTACLE	30	1	12
13	20	1	MED. STOR. A RECEPTACLE	1,200	0	A	0	1,200	MED. S TOR. A RECEPTACLE	30	1	14
15	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	B	0	1,250	FIRE APPARATUS DOOR LIFT DISC.	30	2	16
17	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	C	0	1,250				18
19	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	A	0	200	GPS SIGNAL BOOSTER	20	1	20
21	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	B	0	2,500	FIRE APPARATUS BAY POWER CORD	30	1	22
23	30	2	FIRE APPARATUS DOOR LIFT DISC.	2,500	0	C	0	2,500	FIRE APPARATUS BAY POWER CORD	30	1	24
25	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	A	0	1,250	FIRE APPARATUS DOOR LIFT DISC.	30	2	26
27	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	B	0	1,250				28
29	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	C	0	2,500	EMS BAY CLG.MTD. PWR CORD	20	1	30
31	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	A	0	1,200	REFRIGERATOR	20	1	32
33	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	B	0	1,250	FIRE APPARATUS DOOR LIFT DISC.	30	2	34
35	30	2	FIRE APPARATUS DOOR LIFT DISC.	1,250	0	C	0	1,250				36
37	20	1	JOKER STAND RECEPTACLES	540	0	A	0	360	JOKER STAND RECEPTACLES	20	1	38
39	20	1	DAYROOM/DINING LIGHTING	1,306	1	B	1	896	FD DORM CLG FANS	20	1	40
41	20	1	OFFICES LIGHTING	1,000	1	C	3	1,200	REFRIGERATOR	20	1	42
43	20	1	FREEZER	1,200	3	A	3	960	AS-02	20	1	44
45	20	1	AS-01	960	3	B	3	960	AS-03	20	1	46
47	20	1	AS-04	960	3	C	3	960	AS-05	20	1	48
49	20	1	AS-06	960	3	A	3	200				50
51	20	2	MSCU-1/MSLU-1	1,248	6	B	3	200	GENERATOR CONTROL PANEL (NOTE 1)	60	2	52
53	20	2	MSCU-1/MSLU-1	1,248	6	C	0	540	BENCH RECEPTACLES	20	1	54
55	20	1	GPS SIGNAL BOOSTER	600	0	A	0	200	AS-06	20	1	56
57	20	1	DATA ROOM RECEPTACLE	360	0	B	0	1,200	MED. STOR. B RECEPTACLE	20	1	58
59	20	2	SPARE	0	0	C	0	1,200	MED. STOR. B RECEPTACLE	20	1	60
61	20	2	SPARE	0	0	A	0	1,250	DATA ROOM RECEPTACLE	20	2	62
63	20	2	DATA ROOM RECEPTACLE	1,250	0	B	0	1,250				64
65	20	1	AS-07	1,250	0	C	0	180	PHOENIX ALERTING RECEPTACLE	20	1	66
67	20	1	AS-08	960	3	A	0	180	PHOENIX ALERTING RECEPTACLE	20	1	68
69	20	1	AS-09	960	3	B	3	200	AIR SCRUBBER CONTROL PANEL	20	1	70
71	20	1	SPARE	960	3	C	3	200	AIR SCRUBBER CONTROL PANEL	20	1	72
73	20	1	REFRIGERATOR	1,200	0	A	0	2,500	FIRE APPARATUS BAY POWER CORD	20	1	74
75	20	1	SPARE			B			SPARE	20	1	76
77	20	1	SPARE			C			SPARE	20	1	78
79	20	1	SPARE			A			SPARE	20	1	80
				PANEL VA	SUB FEED	FEED THRU	TOTAL CONN	TOTAL DEMAND	NOTES: 1. LOAD NOTED IS LOAD WHILE GENSET OPERATING			
				17,144	-	-	17,144	13,319				
PHASE A				17,144	-	-	17,144	13,319				
PHASE B				22,010	-	-	22,010	17,100				
PHASE C				23,970	-	-	23,970	18,622				
TOTAL				63,124	-	-	63,124	49,041	REVISIONS: CNG ENGINEERING, PLLC R3.0			

PANEL 'P1'

PROJECT: Fire Station no. 18 MAIN CIRCUIT BREAKER: -- ENCLOSURE: NEMA 1
 PROJECT #: 0031-14 MAIN LUGS ONLY: 150A MOUNTING: SURFACE
 LOCATION: ELECT. RM BUSSING: 225A CB TYPE: BOLT-ON
 NOTES: VOLTAGE: 208/120V, 3PH, 4W PROVIDE: NEUTRAL BUS
 INTERRUPTING: 18KAIC GROUND BUS

CKT	AMPS	POLE	CIRCUIT DESCRIPTION	LOAD	TYPE	PH	TYPE	LOAD	CIRCUIT DESCRIPTION	AMPS	POLE	CKT
1	20	1	KITCHEN RECEPTACLES	900	0	A			SPARE	20	1	2
3	20	1	OFFICE RECEPTACLES	900	0	B	0	900	CORRIDOR RECEPTACLES	20	1	4
5	20	1	OFFICER DORMS RECEPTACLES	900	0	C	0	900	OFFICER RECEPTACLES	20	1	6
7	20	1	OFFICERS DORMS RECEPTACLES	900	0	A	0	180	SPARE	20	1	8
9	20	1	OFFICER BATHS RECEPTACLES	900	0	B	0	180	DAYROOM TV	20	1	10
11	20	1	CORRIDOR RECEPTACLES	900	0	C	7	600	KITCHEN DISPOSAL	20	1	12
13	20	1	FD DORMS RECEPTACLES	1,260	0	A	0	900	FD DORMS RECEPTACLES	20	1	14
15	20	1	FD DORMS RECEPTACLES	900	0	B	0	900	FD DORMS RECEPTACLES	20	1	16
17	20	1	FD DORMS RECEPTACLES	1,260	0	C	0	1,200	EXERCISE ROOM TREADMILL	20	1	18
19	20	1	EXERCISE ROOM TREADMILL	1,200	3	A	0	1,200	EXERCISE ROOM TREADMILL	20	1	20
21	20	1	APPARATUS BAY FOUNTAIN	300	0	B	0	540	EXERCISE ROOM TREADMILL	20	1	22
23	20	1	EMS QUARTERS RECEPTACLES	1,080	0	C	0	540	DAYROOM RECEPTACLES	20	1	24
25	20	1	LAUNDRY WASHER	1,200	3	A	3	2,200	LAUNDRY DRYER	30	2	26
27	20	1	EMS DORMS RECEPTACLES	1,080	0	B	3	2,200	KITCHEN DISPOSAL	20	1	28
29	20	1	EMS DORMS RECEPTACLES	1,080	0	C	7	600	KITCHEN DISPOSAL	20	1	30
31	20	1	KITCHEN GRILLE	1,600	7	A	0	360	OFFICE TVS	20	1	32
33	20	1	SPARE			B		540	DINING AREA RECEPTACLES	20	1	34
35	20	1	ELECTRICAL DRINKING FOUNTAIN	300	3	C	0	300	ELECTRICAL DRINKING FOUNTAIN	20	1	36
37	20	1	ELECTRICAL ROOM RECEPTACLES	540	0	A	3	1,200	LAUNDRY RM VENDING MACHINE	20	1	38
39	20	1	GW-1	120	3	B			SPARE	20	1	40
41	20	1	GW-2	120	3	C			SPARE	20	1	42
43	20	1	SPARE			A			SPARE	20	1	44
45	20	1	SPARE			B			SPARE	20	1	46
47	20											

KEYED NOTES: (THIS SHEET ONLY)

- 1 PROVIDE 1" CONDUIT FROM ROUGH OPENING TO 6" ABOVE NEAREST ACCESSIBLE CEILING. REFER TO US DIGITAL DESIGN INSTALLATION DRAWINGS FOR JUNCTION BOX ROUGH OPENING HEIGHT REQUIREMENTS.
- 2 PROVIDE RECESSED 4" SQUARE METAL JUNCTION BOX WITH DUPLEX MUD RING AS INDICATED FOR EACH ASSOCIATED MESSAGE SIGN AT 7'6" AFF. COORDINATE LOCATION OF JUNCTION BOX WITH US DIGITAL DESIGN INSTALLATION DRAWINGS. ORIENT MUD RING OPENING HORIZONTALLY. PROVIDE DUPLEX STAINLESS STEEL JUNCTION BOX COVERS WITH 3/4" DIAMETER HOLE CENTERED IN THE COVER WITH A HEYCO #2840 BUSHING FOR ALL JUNCTION BOXES. COORDINATE LOCATION OF SIGN REMOTE WITH US DIGITAL DESIGN INSTALLATION DRAWINGS. EXTEND A 1" CONDUIT BETWEEN MESSAGE SIGN JUNCTION BOX AND ASSOCIATED SIGN REMOTE JUNCTION BOX.
- 3 PROVIDE 4" SQUARE BACK BOX MOUNTED AT 90" AFF. PROVIDE 1" FROM JUNCTION BOX TO MESSAGE REMOTE. PROVIDE ACCESS PANEL FOR MESSAGE REMOTE SERVICE. COORDINATE LOCATION OF MESSAGE REMOTE WITH US DIGITAL DESIGN INSTALLATION DRAWINGS.
- 4 PROVIDE 1" CONDUIT FROM MESSAGE REMOTE TO NEAREST ACCESSIBLE CEILING.
- 5 US DIGITAL DESIGN EMERGENCY CALL PUSH BUTTON. PROVIDE 1" CONDUIT TO MESSAGE REMOTE. OWNER TO PROVIDE PUSH BUTTON LABELS FOR CONTRACTOR INSTALLATION. PROVIDE JUNCTION BOXES AS REQUIRED.
- 6 US DIGITAL DESIGN NON-EMERGENCY CALL PUSH BUTTON. PROVIDE 1" CONDUIT TO MESSAGE REMOTE. OWNER TO PROVIDE PUSH BUTTON LABELS FOR CONTRACTOR INSTALLATION. PROVIDE JUNCTION BOXES AS REQUIRED.
- 7 PROVIDE SURFACE MOUNTED 4" SQUARE JUNCTION BOX WITH 2" MUD RING AND COVER. PROVIDE 1" CONDUIT TO MESSAGE REMOTE OR OTHER LOCATION AS INDICATED ON US DIGITAL DESIGN INSTALLATION DRAWINGS. PROVIDE A 3/4" DIAMETER HOLE CENTERED IN THE JUNCTION BOX COVER WITH A HEYCO #2840 BUSHING. MOUNT APPARATUS BAY JUNCTION BOX SPEAKERS AT 13" AFF AND OUTSIDE SPEAKER JUNCTION BOXES AT 11" AFF. EXTERIOR SPEAKER JUNCTION BOXES SHALL BE RECESSED.
- 8 INSTALL SPEAKER VOLUME CONTROL PROVISION FOR EXTERIOR SPEAKER AT 48" A.F.F. INSTALL 4" X 4" JUNCTION BOX WITH SINGLE GANG PLASTER RING AND 1" CONDUIT TO SPEAKER.
- 9 PROVIDE 4" SQUARE METAL JUNCTION BOX WITH DUPLEX MUD RING AS INDICATED FOR EACH ASSOCIATED MESSAGE SIGN AT 7'6" AFF TYPICAL (13' AFF FOR APPARATUS BAY). COORDINATE LOCATION OF JUNCTION BOX WITH US DIGITAL DESIGN INSTALLATION DRAWINGS. ORIENT MUD RING OPENING HORIZONTALLY. PROVIDE 1" EMPTY CONDUIT BETWEEN THE MESSAGE REMOTE JUNCTION BOX AND EACH OF THE ASSOCIATED MESSAGE SIGN JUNCTION BOXES (MAXIMUM OF TWO) AND A 1" CONDUIT TO NEAREST INDOOR ACCESSIBLE CEILING. PROVIDE DUPLEX STAINLESS STEEL JUNCTION BOX COVERS WITH 3/4" DIAMETER HOLE CENTERED IN THE COVER WITH A HEYCO #2840 BUSHING FOR ALL JUNCTION BOXES.
- 10 PROVIDE 4" SQUARE METAL JUNCTION BOX WITH DUPLEX MUD RING AS INDICATED FOR EACH ASSOCIATED SIGN REMOTE ABOVE ACCESSIBLE CEILING. PROVIDE 1" EMPTY CONDUIT FROM JUNCTION BOX TO NEAREST ACCESSIBLE CEILING AS REQUIRED. PROVIDE JUNCTION BOX AT NEAREST ACCESSIBLE CEILING LOCATION WHERE SIGN REMOTE IS INSTALLED AT HARD CEILING LOCATION AND PROVIDE ACCESS PANEL FOR SIGN REMOTE SERVICE.
- 11 CEILING SPEAKERS (HARD CEILING) - PROVIDE BOGEN RB84 CEILING SPEAKER ENCLOSURES IN ALL HARD CEILING APPLICATIONS. PROVIDE 1" EMPTY CONDUIT TO ENCLOSURE AND RUN TO NEAREST ACCESSIBLE CEILING LOCATION EQUIPMENT OR AS NOTED ON US DIGITAL DESIGN INSTALLATION DRAWINGS.
- CEILING SPEAKERS (SUSPENDED CEILING) - PROVIDE BOGEN T88 AS APPROPRIATE FOR SPECIFIED SPEAKERS. PROVIDE RB84 CEILING SPEAKER ENCLOSURES OR AS NOTED BY US DIGITAL DESIGN.
- 12 FURNISH AND INSTALL AN APHONE MASTER INTERCOM STATION WITH DOOR RELEASE BUTTON. WIRE INTERCOM STATION AT ENTRY GATE (SEE SITE PLAN) AND PROVIDE CONTROL WIRING TO GATE CONTROLLER TO OPEN AND CLOSE GATES. PROVIDE POWER TRANSFORMER MOUNTED CONCEALED BELOW JOCKER STAND. INSTALL STATION ON FLUSH WALL BOX DIRECTED AT SITE. PROVIDE COMPLETE SUBMITTAL INCLUDING COMPLETE WIRING, ROUTING AND CONNECTIONS. INSTALL ALL WIRING IN CONDUIT. PROVIDE CONTROL RELAY AT GATE OPERATOR AS REQUIRED. EXTEND 1" CONDUIT TO 6" ABOVE NEAREST ACCESSIBLE CEILING.
- 13 DUAL BEAM PHOTOELECTRIC SENSOR EQUAL TO OPTEX AX-70N. PROVIDE REQUIRED POWER SUPPLY AND ACCESSORIES FOR A COMPLETE INSTALLATION. CONNECT TO INTRUSION ALARM BELL/CHIME. PROVIDE WITH OPTEX TC-10U WIRELESS TRANSMITTER.
- 14 4"x4"x4" FLUSH JUNCTION BOX WITH SINGLE GANG PLASTER RING MOUNTED ABOVE COUNTER WITH FINISHED COVERPLATE. ROUTE 2" CONDUIT TO ACCESSIBLE CEILING.
- 15 PROVIDE 4" SQUARE RECESSED WALL JUNCTION BOX WITH 1" C. STUBBED 6" ABOVE NEAREST ACCESSIBLE CEILING FOR NOTIFICATION CONTROLLER. COORDINATE MOUNTING HEIGHT WITH NOTIFICATION SYSTEMS MANUFACTURER PRIOR TO ROUGH-IN.
- 16 REMOTE GENERATOR STATUS ANNUNCIATOR. RECESSED MOUNTED. PROVIDE 1" CONDUIT TO GENERATOR.
- 17 PROVIDE TWO 4" CONDUITS SLEEVES FOR COMMUNICATIONS CABLING.
- 18 PROVIDE ONE 4" CONDUIT SLEEVES FOR CABLE TV CABLING.
- 19 PROVIDE ONE 4" CONDUIT SLEEVES FOR ALERTING SYSTEM CABLING.
- 20 NOT USED
- 21 EXTEND CONDUIT TO HIGHEST POINT OF BUILDING FACIA AND PROVIDE A 8"x8" NEMA 3R JUNCTION BOX WITH COVER PLATE FOR CABLE INSTALLATION OF ANTENNA CABLE.
- 22 INTRUSION ALARM BELL/CHIME. PROVIDE EQUAL TO OPTEX RC-20U. PROVIDE 120V POWER RECEPTACLE FOR AC ADAPTOR.
- 23 ALERTING SYSTEM VOLUME CONTROL PUSHBUTTON. PROVIDE SINGLE GANG JUNCTION BOX WITH 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. PUSH BUTTON AND WIRING TO BE PROVIDED AND INSTALLED BY OWNER.
- 24 PROVIDE TWO NETWORK DROPS TO FACP.
- 25 4"x4"x4" FLUSH JUNCTION BOX WITH COVERPLATE BELOW COUNTER. TERMINATE 3" ANTENNA CONDUIT IN JUNCTION BOX.

GENERAL NOTES: (THIS SHEET ONLY)

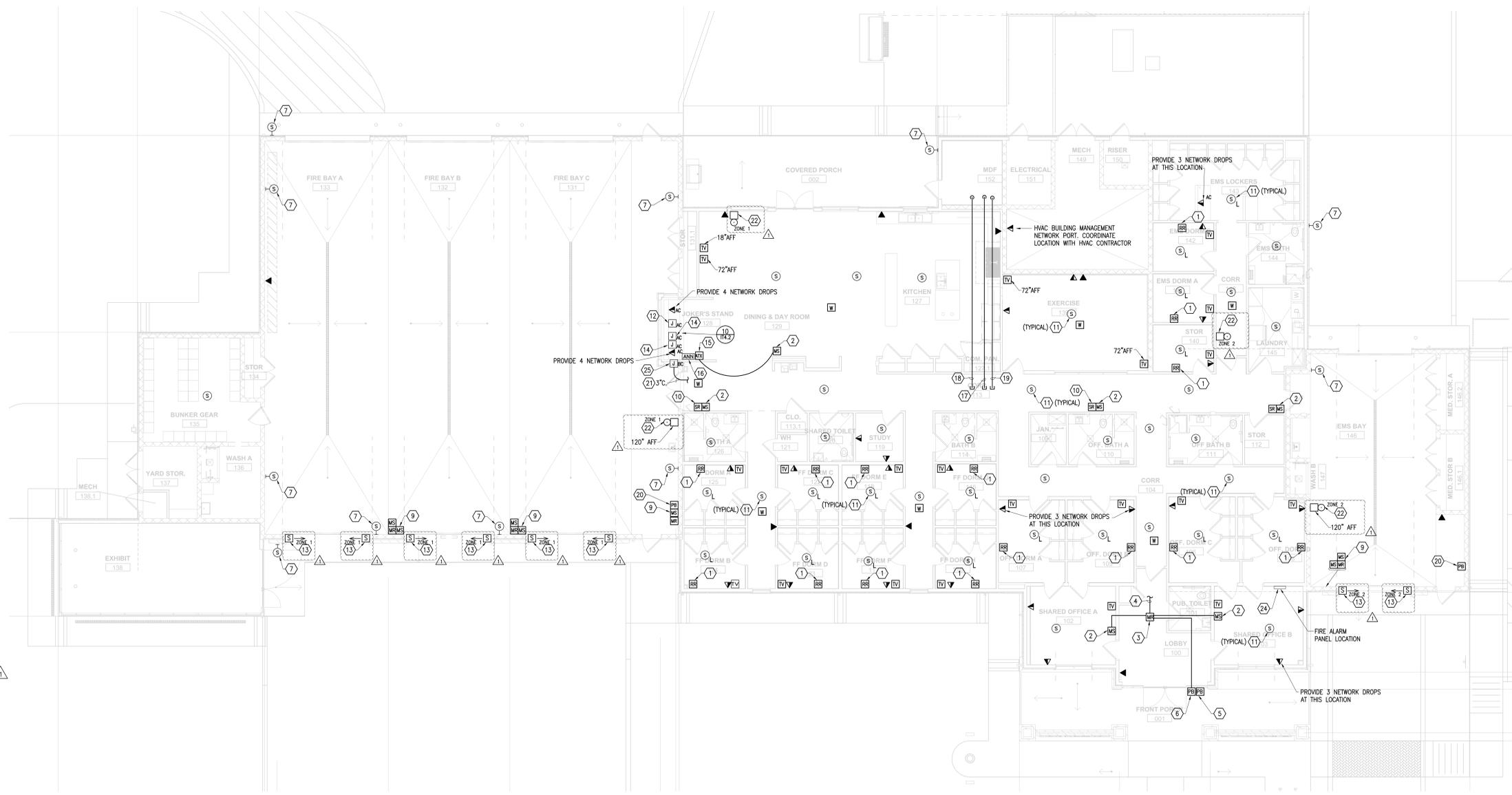
1. CONDUIT LINES SHOWN ON DRAWING ARE DIAGRAMMATIC. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND CHOOSE APPROPRIATE CONDUIT ROUTING. IN THE EVENT THAT APPROXIMATE CONDUIT ROUTING SHOWN ON PLANS IS NOT FEASIBLE, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER.
2. LOCATIONS OF DEVICES ARE DIAGRAMMATIC. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
3. REFER TO KEYED NOTES FOR ADDITIONAL CONDUIT AND JUNCTION BOX REQUIREMENTS.
4. COORDINATE ADDITIONAL CONDUIT AND JUNCTION BOX REQUIREMENTS WITH US DIGITAL DESIGN (USDD) INSTALLATION DRAWINGS PRIOR TO ROUGH-IN.
5. PROVIDE ALL EMPTY CONDUITS WITH NYLON PULLSTRING AND PLASTIC BUSHINGS AT EACH END.
6. FIRE ALARM DEVICES SHOWN MOUNTED ON CONCRETE TILT WALLS SHALL BE COORDINATED WITH ARCHITECT ON WHETHER DEVICES SHALL BE FLUSH MOUNTED OR SURFACE MOUNTED.
7. ALL COMMUNICATIONS JUNCTION BOXES SHALL BE AT MINIMUM 4 1/16" X 4 1/16" X 2 1/8" SIZE.
8. ALL COMMUNICATIONS CABLING REQUIRED FOR USDD SYSTEM TO BE PROVIDED BY USDD SYSTEM INSTALLER UNDER THIS CONTRACT.
9. REFER TO USDD SYSTEM INSTALLATION DRAWINGS FOR FINAL CONDUIT AND CABLING REQUIREMENTS. COMPLETE USDD PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED. CONTRACTOR TO INSTALL ALL NECESSARY RACEWAYS AND BACK BOXES REQUIRED FOR COMPLETE INSTALLATION UNDER BASE CONTRACT. RACEWAYS AND BOXES SERVING THE US DIGITAL DESIGN (USDD) PHOENIX ALERTING SYSTEM SHOWN ON THIS DRAWING ARE SHOWN FOR DESIGN INTENT. CONFIRM AND COORDINATE LOCATIONS AND REQUIREMENTS WITH VENDOR (USDD) PRIOR TO ROUGH-IN.
10. UNLESS OTHERWISE NOTED, EXTEND ALL DATA OUTLET CONDUITS FROM JOCKER'S STAND TO NEAREST ACCESSIBLE CEILING.
11. ALL NETWORK CABLING IS TO BE INSTALLED AS PART OF THIS CONTRACT.

COMMUNICATIONS LEGEND

SI	PHOENIX G2 SIGN REMOTE (USDD)
RS	PHOENIX G2 ROOM REMOTE (USDD)
BS	BETA BRITE (USDD)
MS	PHOENIX G2 MESSAGE SIGN (USDD)
MR	PHOENIX G2 MESSAGE REMOTE (USDD)
PB	PUSH BUTTON
ATX	PHOENIX G2 ATX STATION CONTROLLER (USDD)
S	PHOENIX ALERTING SYSTEM SPEAKER (USDD) RECESSED MOUNT
S ₁	PHOENIX ALERTING SYSTEM SPEAKER (USDD) WITH LED LIGHT - SURFACE MOUNT
S-S	PHOENIX ALERTING SYSTEM SPEAKER (USDD) SURFACE MOUNT
TV	TELEVISION OUTLET - PROVIDE RG6 CABLE FROM JUNCTION BOX TO MDF ROOM. TERMINATE BOTH ENDS AND PROVIDE FINISHED COVER PLATE. INSTALL AT 84" U.L.O. REFER TO DETAIL 6, SHEET IT4.3 FOR ROUGH-IN REQUIREMENTS.
ND	NETWORK DROP LOCATION. PROVIDE TWO TERMINATED NETWORK CABLES PER DROP LOCATION. EXTEND TO PATCH PANEL AT MDF NETWORK RACK. REFER TO DETAIL 5, SHEET IT4.2 FOR ROUGH-IN REQUIREMENTS.
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WAP	WIRELESS ACCESS POINT. PROVIDE ONE TERMINATED NETWORK CABLE PER DROP LOCATION. EXTEND TO PATCH PANEL AT MDF NETWORK RACK. REFER TO DETAIL 7 & 8, SHEET IT4.2 FOR ROUGH-IN AND DETAIL 5, SHEET IT4.3 FOR ROUGH-IN REQUIREMENTS.

1 FLOOR PLAN - IT
SCALE: 1/8"=1'-0"

COMPLETE PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED.



REVISIONS

1	Addendum 2	1/22/16
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PHASE
100% CD SUBMITTAL

DESCRIPTION
IT-FLOORPLAN



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Bldg. 3, Suite 301
San Antonio, TX 78248
(210) 408-7553 Voice
(210) 408-7543 Fax
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San Antonio, Texas 78208
(210) 224-9861 FAX (210) 224-8048
TBPE REGISTRATION NO.:
F-7964

11/19/15
IT4.1

KEYED NOTES: (THIS SHEET ONLY)

- 1 PROVIDE 1" CONDUIT FROM ROUGH OPENING TO 6" ABOVE NEAREST ACCESSIBLE CEILING. REFER TO US DIGITAL DESIGN INSTALLATION DRAWINGS FOR JUNCTION BOX ROUGH OPENING HEIGHT INSTALLATION REQUIREMENTS.
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GENERAL NOTES: (THIS SHEET ONLY)

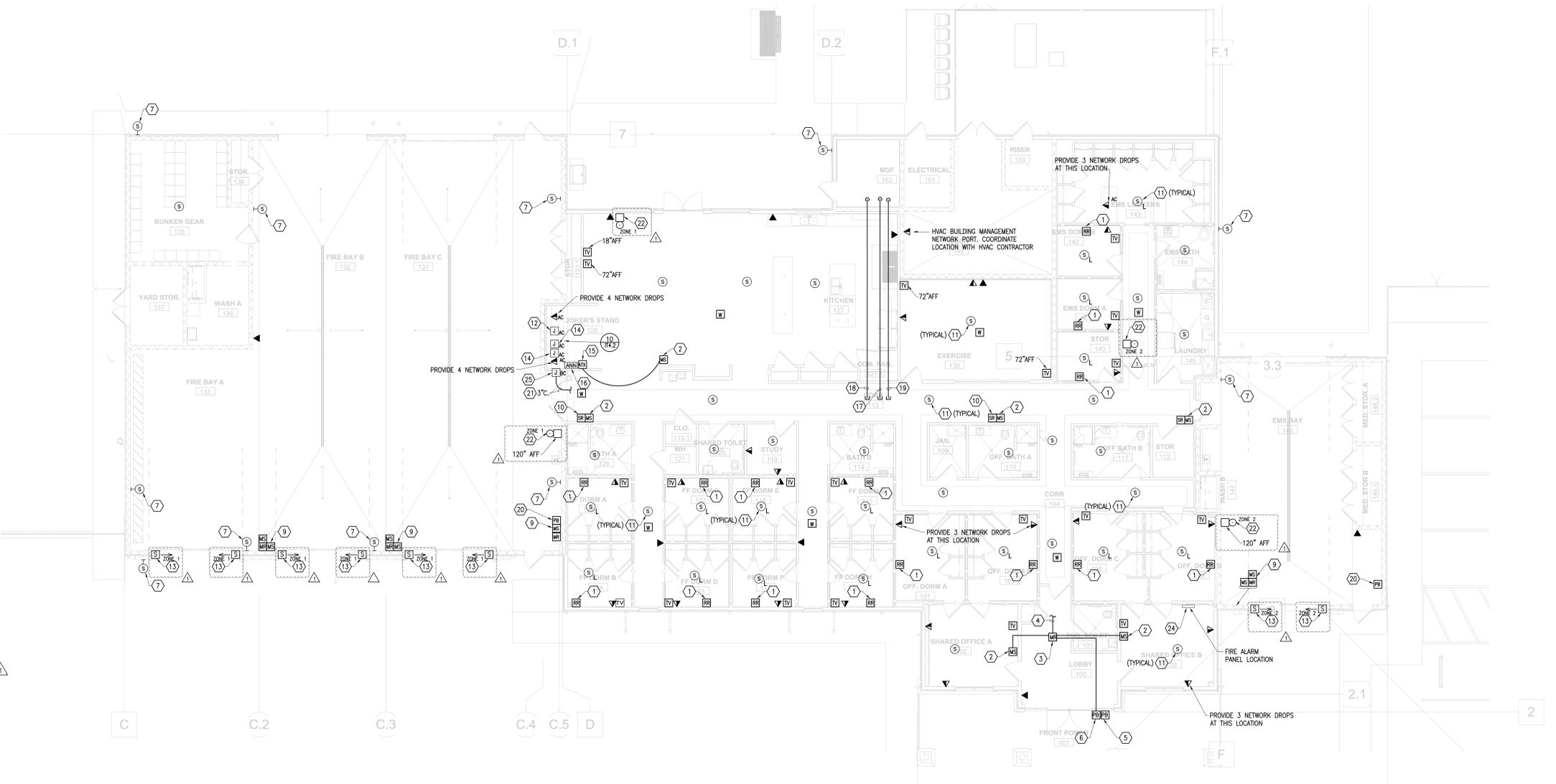
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9. REFER TO USDD SYSTEM INSTALLATION DRAWINGS FOR FINAL CONDUIT AND CABLING REQUIREMENTS. COMPLETE USDD PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED. CONTRACTOR TO INSTALL ALL NECESSARY RACEWAYS AND BACK BOXES REQUIRED FOR COMPLETE INSTALLATION UNDER BASE CONTRACT. RACEWAYS AND BOXES SERVING THE US DIGITAL DESIGN (USDD) PHOENIX ALERTING SYSTEM SHOWN ON THIS DRAWING ARE SHOWN FOR DESIGN INTENT. CONFIRM AND COORDINATE LOCATIONS AND REQUIREMENTS WITH VENDOR (USDD) PRIOR TO ROUGH-IN.
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COMMUNICATIONS LEGEND

SR	PHOENIX G2 SIGN REMOTE (USDD)
RR	PHOENIX G2 ROOM REMOTE (USDD)
BB	BETA BRITTE (USDD)
MS	PHOENIX G2 MESSAGE SIGN (USDD)
MR	PHOENIX G2 MESSAGE REMOTE (USDD)
PB	PUSH BUTTON
ATX	PHOENIX G2 ATX STATION CONTROLLER (USDD)
S	PHOENIX ALERTING SYSTEM SPEAKER (USDD) RECESSED MOUNT
S	PHOENIX ALERTING SYSTEM SPEAKER (USDD) WITH LED LIGHT - SURFACE MOUNT
S	PHOENIX ALERTING SYSTEM SPEAKER (USDD) SURFACE MOUNT
T	TELEVISION OUTLET - PROVIDE RG6 CABLE FROM JUNCTION BOX TO MDF ROOM. TERMINATE BOTH ENDS AND PROVIDE FINISHED COVER PLATE. INSTALL AT 84" U.L.O. REFER TO DETAIL 6, SHEET IT4.3 FOR ROUGH-IN REQUIREMENTS
N	NETWORK DROP LOCATION. PROVIDE TWO TERMINATED NETWORK CABLES PER DROP LOCATION. EXTEND TO PATCH PANEL AT MDF NETWORK RACK. REFER TO DETAIL 5, SHEET IT4.2 FOR ROUGH-IN REQUIREMENTS
W	WALL MOUNTED TELEPHONE DROP LOCATION. PROVIDE ONE TERMINATED NETWORK CABLE PER DROP LOCATION. EXTEND TO PATCH PANEL AT MDF NETWORK RACK. REFER TO DETAIL 6, SHEET IT4.2 FOR ROUGH-IN REQUIREMENTS
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1 FLOOR PLAN - IT
SCALE: 1/8"=1'-0" ALTERNATE PLAN

COMPLETE PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED.



REVISIONS

1	Addendum 2	1/22/16
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PHASE
100% CD SUBMITTAL

DESCRIPTION
IT- FLOORPLAN
ALTERNATE 1-A



16719 Huebner Rd
Bldg. 3, Suite 301
San Antonio, TX 78248
(210) 408-7553 Voice
(210) 408-7543 Fax
www.msafsa.com



1917 N. New Braunfels Ave. Ste. 201
San Antonio, Texas 78208
(210) 281-9841 FAX (210) 281-4040
TBPE REGISTRATION No.:
F-7964

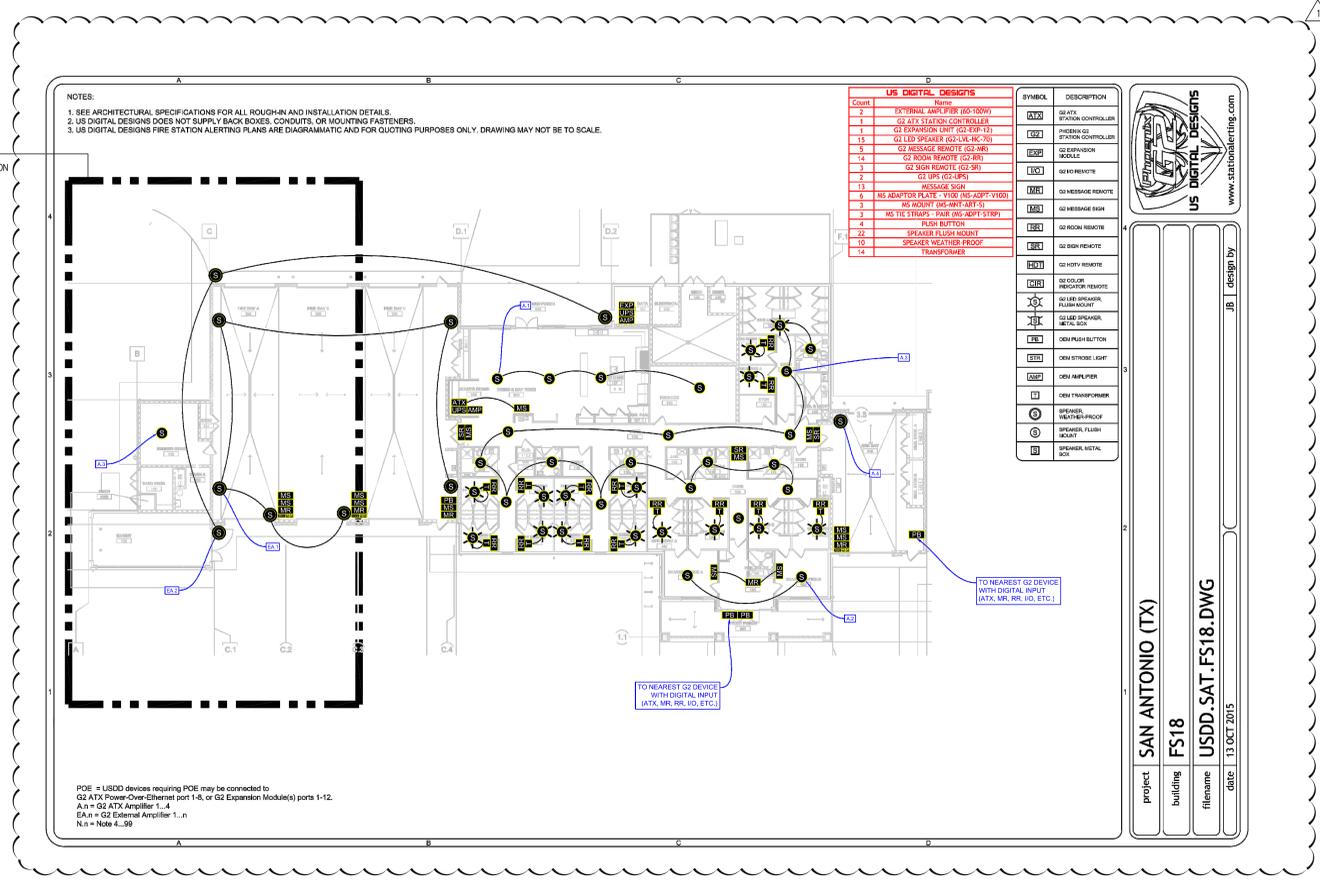
11/19/15
IT4.1A

COMPLETE PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED.

GENERAL NOTES: (THIS SHEET ONLY)

- FIRE STATION ALERTING SYSTEM (PHOENIX SYSTEM) IS DESIGNED BY US DIGITAL DESIGN (USDD). COMPLETE PHOENIX ALERTING SYSTEM EQUIPMENT IS CONTRACTOR PROVIDED AND CONTRACTOR INSTALLED. VENDOR OF PHOENIX ALERTING SYSTEM EQUIPMENT SHALL BE US DIGITAL DESIGN. INSTALLATION OF SYSTEM SHALL BE PERFORMED BY US DIGITAL DESIGN (USDD) APPROVED INSTALLER ONLY. CONTACT USDD REPRESENTATIVE ERICK HANSON AT 877-551-8733 FOR COORDINATION.
- USDD PHOENIX FIRE ALERTING SYSTEM IS SHOWN FOR DESIGN INTENT. ALERTING SYSTEM SHALL BE DESIGNED, AND FULLY COMMISSIONED BY USDD TO BE INCLUDED UNDER THIS CONTRACT.
- COMPLETE INSTALLATION OF FIRE ALERTING SYSTEM INCLUDING BUT NOT LIMITED TO WIRING, CONDUIT, BOXES, SUPPORT, PHOENIX EQUIPMENT DEVICES, AND PROGRAMMING SHALL BE INCLUDED IN THIS CONTRACT. COORDINATE SYSTEM INSTALLATION WITH USDD APPROVED INSTALLER PRIOR TO ROUGH-IN.
- USDD DRAWING IS INCLUDED FOR REFERENCE PURPOSES ONLY. OBTAIN FINAL INSTALLATION DRAWING FROM US DIGITAL DESIGN.
- LOCATIONS OF DEVICES ARE DIAGRAMMATICAL. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO ROUGH-IN.
- COORDINATE ADDITIONAL CONDUIT AND JUNCTION BOX REQUIREMENTS WITH US DIGITAL DESIGN INSTALLATION DRAWINGS PRIOR TO ROUGH-IN.
- REFER TO FINAL USDD SYSTEM INSTALLATION DRAWINGS FOR FINAL CONDUIT AND CABLING REQUIREMENTS.
- CONTRACTOR TO SUBMIT USDD INSTALLATION SHOP DRAWINGS BASED ON FINAL CONTRACT DOCUMENTS FOR REVIEW PRIOR TO ROUGH-IN.
- CONTRACTOR TO INCLUDE ONE YEAR SUPPORT ON SYSTEM.
- CONTRACTOR TO INCLUDE ONE YEAR PARTS AND LABOR ON SYSTEM INSTALLATION.
- CONDUIT, RACEWAYS, SUPPORT, JUNCTION BOXES AND BACKBOXES ARE TO BE PROVIDED AND INSTALLED BY THE GENERAL CONTRACTOR AND ARE NOT INCLUDED IN THE USDD ALLOWANCE AMOUNT.

REFER TO SHEET IT4-1A FOR ALTERNATE FLOOR PLAN CONFIGURATION. CONTRACTOR TO SUBMIT FINAL SHOP DRAWINGS FOR REVIEW PRIOR TO INSTALLATION BASED ON FINAL PLAN SELECTION.



City of San Antonio
Fire Station #18
W.W. White & Rice Rd., San Antonio, TX 78220

REVISIONS
Addendum 2 1/22/16

PHASE
100% CD SUBMITTAL

DESCRIPTION
USDD DRAWING



16719 Huebner Rd
Bldg. 3, Suite 301
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(210) 408-7543 Fax
www.msafsa.com



1917 N. New Braunfels Ave. Ste. 201
San Antonio, Texas 78208
(210) 228-9861 FAX (210) 224-8034
TBPE REGISTRATION No.: F-7964

11/19/15
IT4.5

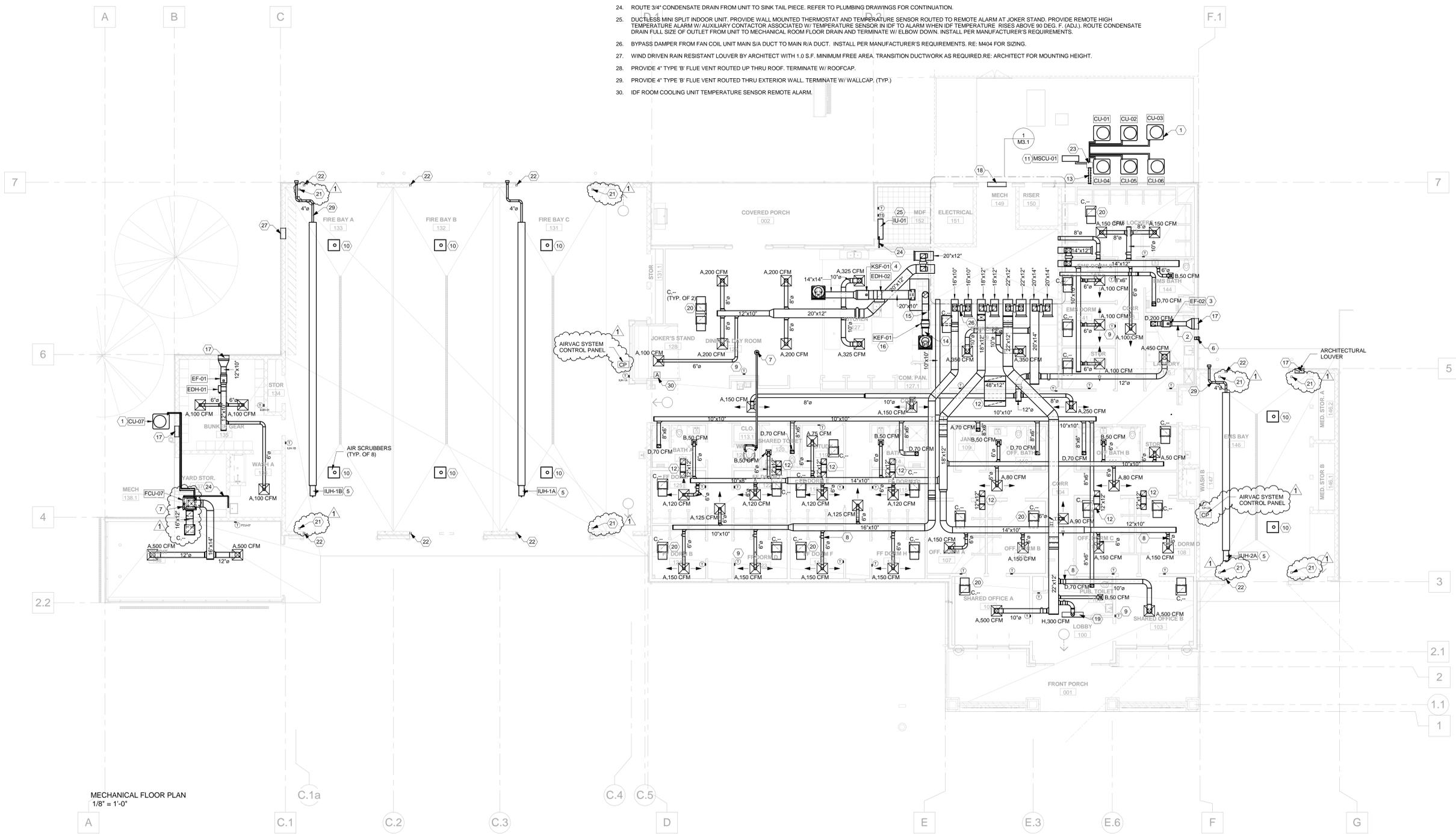


MECHANICAL KEYED NOTES:

1. AIR COOLED CONDENSING UNIT AS SCHEDULED. MOUNT UNIT ON A 4" HOUSEKEEPING PAD AS RECOMMENDED BY THE MANUFACTURER. PROVIDE NEOPRENE PADS UNDERNEATH BASERAIL OF UNIT (TYPICAL).
2. 10"X 10" DUCT TO EXHAUST FAN EF-02. PROVIDE TOGGLE TYPE SWITCH ADJACENT TO ROOM LIGHT SWITCH. INSTALL PER MANUFACTURER'S REQUIREMENTS.
3. INLINE EXHAUST FAN AS INDICATED ON SCHEDULE. SUSPEND FROM STRUCTURE ABOVE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE A 24"X24" ACCESS PANEL IN CEILING FOR SERVICE.
4. INLINE MAKE UP AIR SUPPLY FAN W/ ELECTRIC DUCT MOUNTED HEATER, LOCATED ABOVE CEILING IN DINING AREA. TERMINATE WITH ROOFTOP VENTILATOR. INSTALL PER MANUFACTURER'S REQUIREMENTS.
5. GAS-FIRED INFRARED HEATER. SUSPEND FAN FROM STRUCTURE ABOVE PER MANUFACTURER'S REQUIREMENTS. ROUTE FULL SIZED STAINLESS STEEL TYPE 'B' FLUE VENT THRU WALL AND TERMINATE WITH A WALL CAP. COORDINATE MOUNTING HEIGHT WITH ARCHITECTURAL. STRUCTURAL AND FIRE DEPARTMENT EQUIPMENT.
6. ROUTE 6" DRYER EXHAUST THRU WALL AND TERMINATE W/ WALL CAP.
7. 6" CONCENTRIC VENT UP TO ROOF. TERMINATE ABOVE ROOF WITH A CONCENTRIC ROOFCAP. INSTALL PER MANUFACTURER'S REQUIREMENTS.
8. ZONE DAMPER AS SHOWN. INSTALL PER MANUFACTURER'S REQUIREMENTS. (TYP.) FOR SIZING RE: M404.
9. MOUNT THERMOSTAT ON WALL AT APPROXIMATELY 48" A.F.F. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION. (TYP.)
10. AIRVAC 911 EXHAUST REMOVAL SYSTEM W/ CONTROL PANEL. SUSPEND 18" BELOW STRUCTURE. INSTALL PER MANUFACTURER'S REQUIREMENTS. (TYP.)
11. AIR COOLED CONDENSING UNIT FOR DUCTLESS MINI-SPLIT. INSTALL PER MANUFACTURER'S REQUIREMENTS.
12. TRANSFER AIR DUCT. SIZE AS INDICATED.
13. INSTALL 3" CONDUIT UNDER SLAB. ROUTE REFRIGERANT PIPING WITHIN CONDUIT TO BUILDING AS INDICATED. (TYP. OF 6)
14. 14" DIA. GREASE DUCT ROUTED FROM KEF-1 UP THRU ROOF MOUNTED VENTILATOR HOOD SIMILAR TO GREENHECK MODEL FGR WITH 1.0 S.F. MINIMUM FREE AREA. INSTALL PER MANUFACTURER'S REQUIREMENTS.
15. SLOPE GREASE DUCT TOWARD THE KITCHEN HOOD AT A MINIMUM OF 1/4" PER FOOT. INSTALL DUCT IN ACCORDANCE WITH SMACNA STANDARDS.
16. INLINE KITCHEN EXHAUST FAN AS SCHEDULED. INSTALL PER MANUFACTURER'S REQUIREMENTS.
17. WIND DRIVEN RAIN RESISTANT LOUVER BY ARCHITECT WITH 0.5 S.F. MINIMUM FREE AREA. TRANSITION DUCTWORK AS REQUIRED. RE: ARCHITECT FOR MOUNTING HEIGHT.
18. WIND DRIVEN RAIN RESISTANT LOUVER BY ARCHITECT WITH 1.2 S.F. MINIMUM FREE AREA. TRANSITION DUCTWORK AS REQUIRED. RE: ARCHITECT FOR MOUNTING HEIGHT.
19. MOUNT AIR DEVICE 10' A.F.F. TO CENTERLINE.
20. PROVIDE ROOFTOP RETURN AIR DEVICE FOR SOUND ATTENUATION. RE: ARCHITECT (TYP.)
21. INFRARED DOUBLE BEAM PHOTO EYE SENSOR TRANSMITTER OR RECEIVER FOR EXHAUST REMOVAL SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS. (TYP.)
22. TRACK MOUNTED MAGNETIC SWITCH FOR EXHAUST REMOVAL SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS. (TYP.)
23. VAULT PENETRATION HOUSING MODEL AL201412. INSTALL PER MANUFACTURER'S REQUIREMENTS.
24. ROUTE 3/4" CONDENSATE DRAIN FROM UNIT TO SINK TAIL PIECE. REFER TO PLUMBING DRAWINGS FOR CONTINUATION.
25. DUCTLESS MINI SPLIT INDOOR UNIT. PROVIDE WALL MOUNTED THERMOSTAT AND TEMPERATURE SENSOR ROUTED TO REMOTE ALARM AT JOKER STAND. PROVIDE REMOTE HIGH TEMPERATURE ALARM W/ AUXILIARY CONTACTOR ASSOCIATED W/ TEMPERATURE SENSOR IN IDF TO ALARM WHEN IDF TEMPERATURE RISES ABOVE 90 DEG. F. (ADJ.). ROUTE CONDENSATE DRAIN FULL SIZE OF OUTLET FROM UNIT TO MECHANICAL ROOM FLOOR DRAIN AND TERMINATE W/ ELBOW DOWN. INSTALL PER MANUFACTURER'S REQUIREMENTS.
26. BYPASS DAMPER FROM FAN COIL UNIT MAIN S/A DUCT TO MAIN R/A DUCT. INSTALL PER MANUFACTURER'S REQUIREMENTS. RE: M404 FOR SIZING.
27. WIND DRIVEN RAIN RESISTANT LOUVER BY ARCHITECT WITH 1.0 S.F. MINIMUM FREE AREA. TRANSITION DUCTWORK AS REQUIRED. RE: ARCHITECT FOR MOUNTING HEIGHT.
28. PROVIDE 4" TYPE 'B' FLUE VENT ROUTED UP THRU ROOF. TERMINATE W/ ROOFCAP.
29. PROVIDE 4" TYPE 'B' FLUE VENT ROUTED THRU EXTERIOR WALL. TERMINATE W/ WALLCAP. (TYP.)
30. IDF ROOM COOLING UNIT TEMPERATURE SENSOR REMOTE ALARM.

MECHANICAL GENERAL NOTES

1. OUTSIDE AIR INTAKE OPENINGS SHALL BE A MINIMUM OF 15 FEET FROM ANY HAZARDOUS OR NOXIOUS CONTAMINANT SOURCE.
2. ALL SUPPLY AIR DUCT SHALL HAVE 2" EXTERNAL INSULATION.
3. DUCTS SHALL BE GALVANIZED STEEL. EXCEPT WHERE NOTED. SUBSTITUTIONS OF ROUND OR RECTANGULAR SHALL BE OF EQUAL OR LESS AIR RESISTANCE PER ASHRAE TABLES. CONNECT TO ALL SUPPLY AIR DIFFUSERS WITH FLEXIBLE DUCT. LENGTH NOT TO EXCEED 6 FEET.
4. INTERNAL LINING OF DUCT SHALL NOT BE USED, EXCEPT WHERE NOTED. INSULATED FLEXIBLE DUCTS SHALL HAVE INNER SURFACES OF MYLAR OR FOIL.
5. DUCTS MAY BE LARGER THAN SIZE INDICATED, AS CONVENIENT, EXCEPT WHERE INTERFERENCES RESULT FROM OVER SIZING DUCT.
6. PROVIDE VANDAL-PROOF, CLEAR, LOCKABLE ENCLOSURES FOR ALL THERMOSTATS. IN PUBLIC AREAS.
7. DUCT RUN SECTIONS NOT LABELED FOR SIZE SHALL BE THE SAME SIZE AS NEAREST SIZE LABEL UPSTREAM.
8. ALL FIELD CONTROL WIRING AND INTERLOCK WIRING SHALL BE FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
9. THE INSTALLATION SHALL BE IN STRICT COMPLIANCE WITH APPLICABLE NATIONAL, AND LOCAL CODES AND REGULATIONS AND TO THE SATISFACTION OF ALL AUTHORITIES HAVING JURISDICTION.
10. PROVIDE MANUAL DAMPERS TO SUPPLY DIFFUSERS AND EXHAUST GRILLES. PROVIDE ROTO-TWIST DAMPERS FOR SUPPLY DIFFUSERS AND EXHAUST GRILLES IN INACCESSIBLE CEILINGS.
11. PROVIDE ACCESS HATCHES FOR EQUIPMENT IN SPACES THAT ARE NOT ACCESSIBLE.
12. THE CONTRACTOR IS TO KEEP THE JOB SITE NEAT AND ORDERLY. DO NOT STORE ANY EQUIPMENT ON THE FLOOR OF THE JOB SITE.
13. PROVIDE A 2-HOUR RATED FOIL-FACED DUCT WRAP INSULATION FOR GREASE DUCTS RATED FOR A MINIMUM OF 2000 DEG F AND ZERO CLEARANCE TO COMBUSTIBLES.
14. CONDENSATE PIPING SHALL BE COPPER.
15. SUPPORT CONDENSATE PIPING TO PREVENT ANY SAG GREATER THAN 1/2" WHEN FULL OF WATER. CONDENSATE PIPING SHALL BE LEVEL OR SLOPE TOWARD DRAIN, WITH NO SECTIONS THAT DO NOT DRAIN.
16. CONDENSATE PIPING SHALL BE INSULATED 1" MINIMUM, SEALED VAPOR TIGHT WITH NO EXPOSED CREVICES. PAINT EXPOSED INSULATION PER ARCHITECT'S DIRECTION.



MECHANICAL FLOOR PLAN
1/8" = 1'-0"

City of San Antonio
Fire Station #18
W.W. White & Rice Rd.,
San Antonio, TX 78220

REVISIONS
1. Addendum 2 1/22/16

PHASE
100% CD
SUBMITTAL

DESCRIPTION
MECHANICAL
FLOOR PLAN



16719 Huebner Rd
Bldg. 3, Suite 301
San Antonio, TX 78248
(210) 408-7553 Voice
(210) 408-7543 Fax
www.msafsa.com



1917 N. New Braunfels Ave. Ste. 201
San Antonio, Texas 78208
(210) 224-8841, (210) 224-8824 FAX
Firm #: F-7964

01/07/16

M2.1

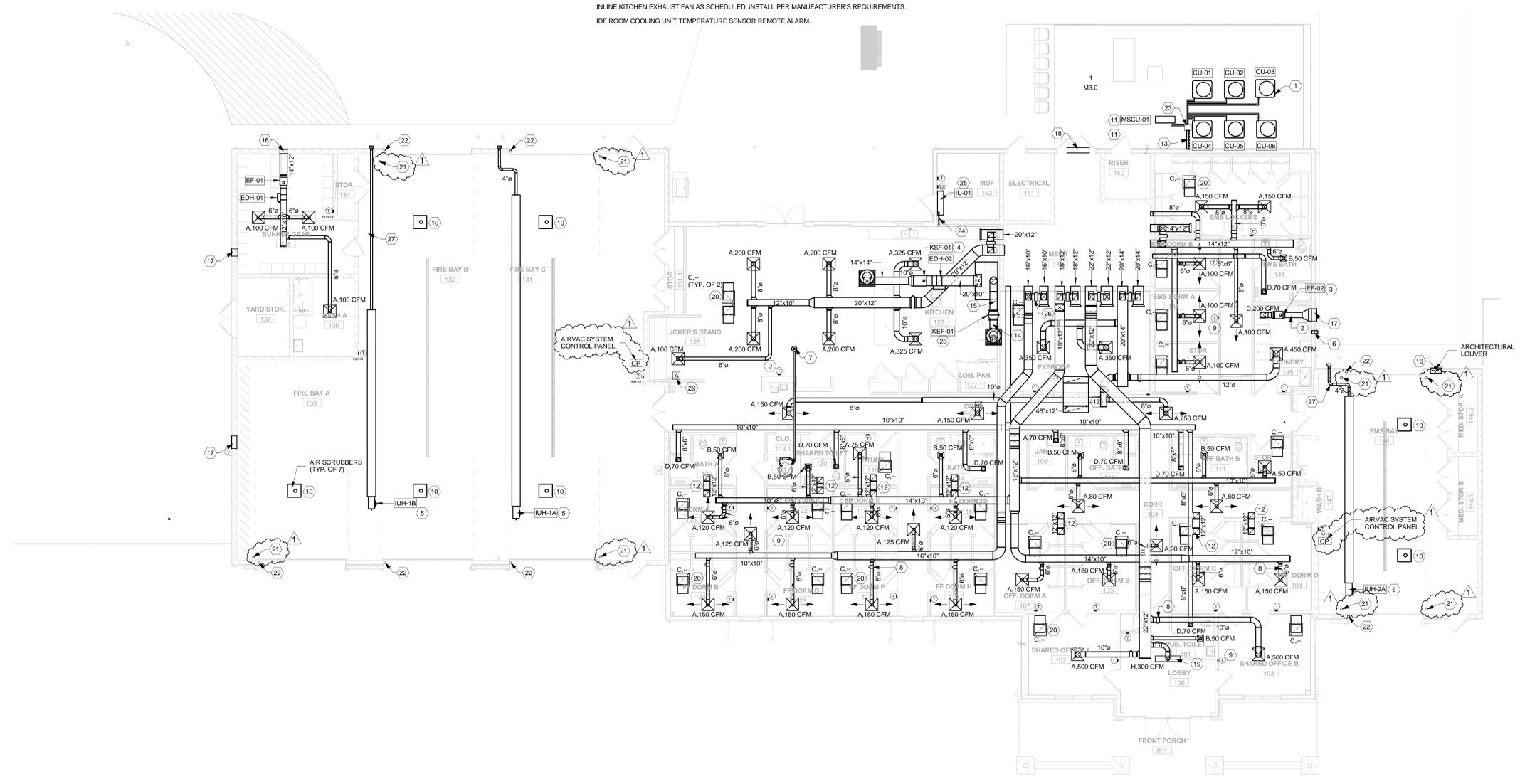


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6. DRYER EXHAUST, FULL SIZE OF DRYER VENT, ROUTE THRU WALL AND PROVIDE WALL CAP TERMINATION.
7. ROUTE 6" CONCENTRIC VENT UP THRU ROOF. TERMINATE WITH A CONCENTRIC ROOFCAP. INSTALL PER MANUFACTURER'S REQUIREMENTS.
8. ZONE DAMPER AS SHOWN. INSTALL PER MANUFACTURER'S REQUIREMENTS. (TYP.) FOR SIZING RE: I404.
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13. 1 1/2" DIA. GREASE DUCT ROUTED FROM KEF-1 UP THRU ROOF MOUNTED VENTILATOR HOOD SIMILAR TO GREENHECK MODEL FGR WITH 1.0 S.F. MINIMUM FREE AREA. INSTALL PER MANUFACTURER'S REQUIREMENTS.
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18. MOUNT 10' A.F.F. TO CENTERLINE OF AIR DEVICE.
19. BODY OF EXHAUST AIR DEVICE FOR SOUND ATTENUATION RE: I402 (TYP.)
20. INFRARED DOUBLE BEAM PHOTO EYE SENSOR TRANSMITTER OR RECEIVER FOR EXHAUST REMOVAL SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS.
21. REAR MOUNTED MAGNETIC DOOR SWITCH FOR EXHAUST REMOVAL SYSTEM. INSTALL PER MANUFACTURER'S REQUIREMENTS.
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MECHANICAL FLOOR PLAN
1/8" = 1'-0"

City of San Antonio
Fire Station #18
W.W. White & Rice Rd.,
San Antonio, TX 78220

REVISIONS
1. Addendum 2 1/22/16

PHASE
100% CD
SUBMITTAL

DESCRIPTION
MECHANICAL
FLOOR PLAN
ALT. 1A



16719 Huebner Rd
Bldg. 3, Suite 301
San Antonio, TX 78248
(210) 408-7553 Voice
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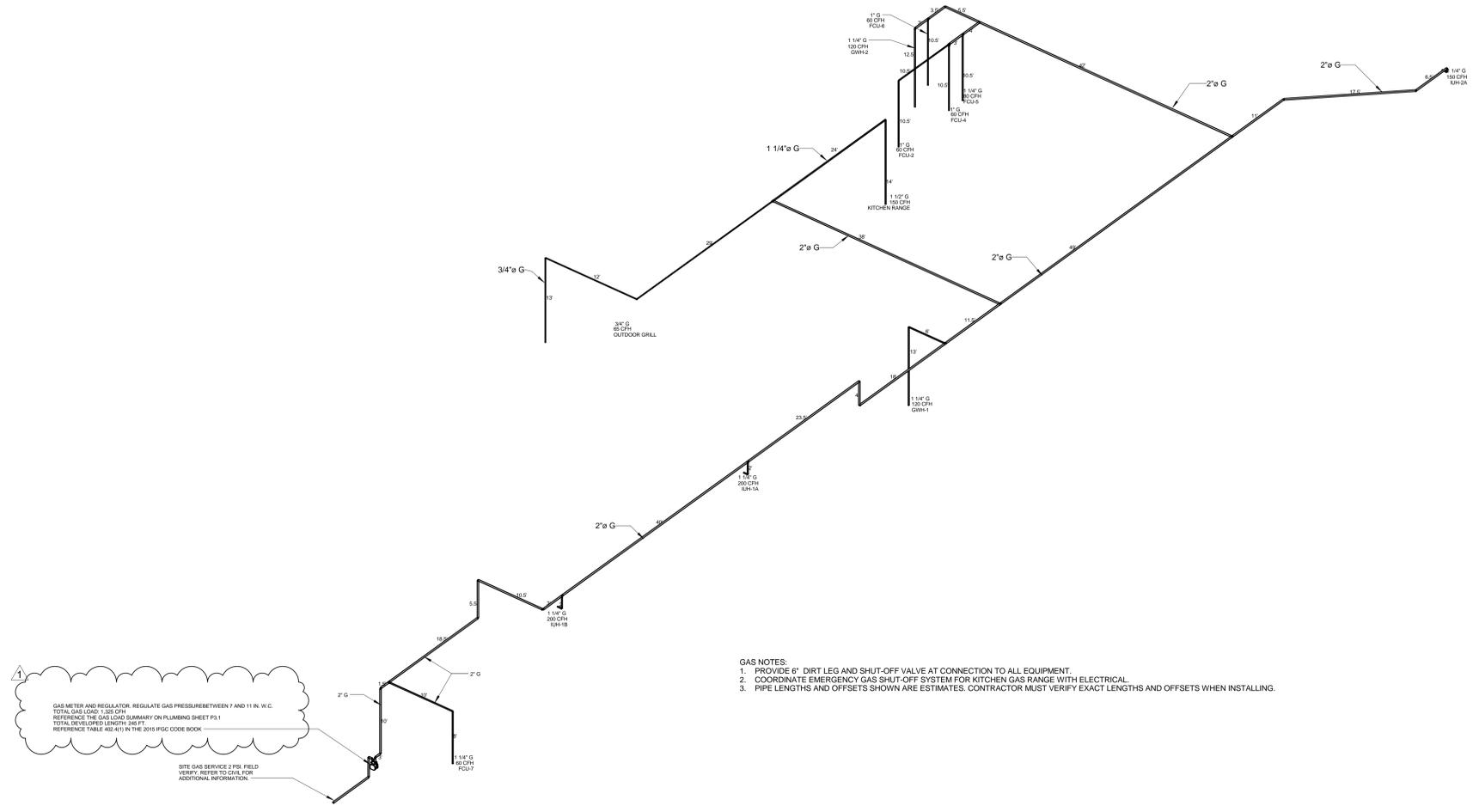


1917 N. New Braunfels Ave. Ste. 201
San Antonio, Texas 78208
(210) 224-8841, (210) 224-8824 FAX
Firm #: F-7964

M2.1A



City of San Antonio
Fire Station #18
W.W. White & Rice Rd.,
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GAS METER AND REGULATOR: REGULATE GAS PRESSURE BETWEEN 7 AND 11 IN. W.C.
TOTAL GAS LOAD: 1,350 CFH
REFERENCE THE GAS LOAD SUMMARY ON PLUMBING SHEET P3.1
TOTAL DEVELOPED LENGTH: 246 FT
REFERENCE TABLE 400.4 IN THE 2015 IFGC CODE BOOK

SITE GAS SERVICE 2 P.S. FIELD
VERIFY, REFER TO CIVIL FOR
ADDITIONAL INFORMATION

- GAS NOTES:
1. PROVIDE R" DIRT LEG AND SHUT-OFF VALVE AT CONNECTION TO ALL EQUIPMENT.
 2. COORDINATE EMERGENCY GAS SHUT-OFF SYSTEM FOR KITCHEN GAS RANGE WITH ELECTRICAL.
 3. PIPE LENGTHS AND OFFSETS SHOWN ARE ESTIMATES. CONTRACTOR MUST VERIFY EXACT LENGTHS AND OFFSETS WHEN INSTALLING.

GAS RISER - NTS

REVISIONS
1. Addendum 2 1/22/16

PHASE
100% CD
SUBMITTAL

DESCRIPTION
GAS RISER



16719 Huebner Rd
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01/07/16

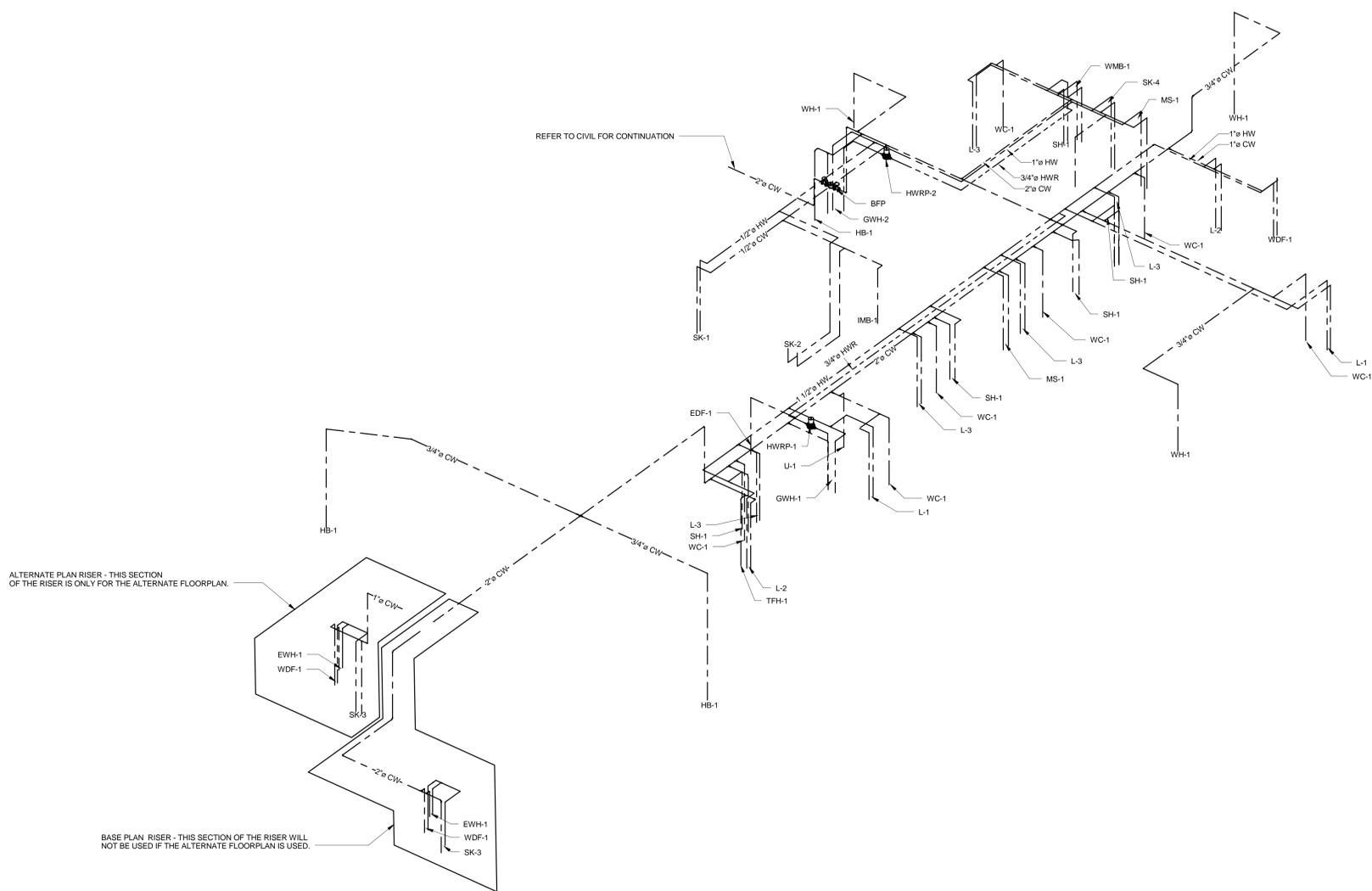
P3.3



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Firm #: F-7964



City of San Antonio
Fire Station #18
W.W. White & Rice Rd.,
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REVISIONS
1. Addendum 2 1/22/16

PHASE
100% CD
SUBMITTAL

DESCRIPTION
DOMESTIC WATER
RISER



16719 Huebner Rd
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www.msaofsa.com

01/07/16

P3.5



1917 N. New Braunfels Ave, Ste. 201
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Firm #: F-7964