



McKAY-DEE LIVE WELL CENTER

4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2015	National Electrical Code	2014
International Mechanical Code	2015	Uniform Code for Building Conservation	N.A.
International Plumbing Code	2015	ADA Accessibility Guidelines-ANSI A117.1	2010
International Fire Code	2015		
International Energy Conservation Code	2015		

- A. Occupancy and Group: B
- Change in Use: Yes No X Mixed Occupancy: Yes No X
Special Use and Occupancy (e.g. High Rise, Covered Mall): N.A.
- B. Seismic Design Category: Design Wind Speed: MPH
- C. Type of Construction (circle one):
I I II II III III IV V V
A B A B A B HT A B
- D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):
North: 0 South: 0 East: 0 West: 0
- E. Mixed Occupancies: Nonseparated Uses:
- F. Sprinklers Required: Provided: Type of Sprinkler System: N/A
- G. Number of Stories: 1 Building Height: EXISTING
- H. Actual Area per Floor (square feet): 3098 SF
- I. Tabular Area (Table 506): 9000 SF
- J. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0	N.A.	Floors - Ceiling Floors	0	N.A.
Interior Bearing Walls	0	N.A.	Roofs - Ceiling Roofs	0	N.A.
Exterior Non-Bearing Walls	0	N.A.	Exterior Doors and Windows	0	N.A.
Structural Frame	0	N.A.	Shaft Enclosures	0	N.A.
Partitions - Permanent	0	N.A.	Fire Walls	0	N.A.
Fire Barriers	0	N.A.	Fire Partitions	0	N.A.
			Smoke Partitions		

- K. Design Occupant Load: 49
Exit Width Required: 32" Exit Width Provided: 64"
- L. Minimum Number of Required Plumbing Facilities:
- a) Water Closets - Required (m) 2 (f) 2 Provided (m) 2 (f) 2
b) Lavatories - Required (m) 2 (f) 2 Provided (m) 2 (f) 2
c) Bath Tubs or Showers: 2
d) Drinking Fountains: 1 Service Sinks: 1

PROJECT DIRECTORY

OWNER: INTERMOUNTAIN HEALTHCARE
4400 HARRISON BLVD.
OGDEN, UTAH 84401

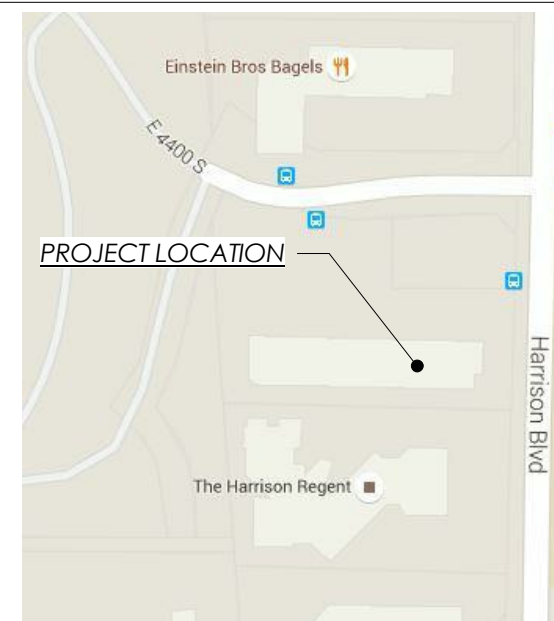
ARCHITECT: BERTOLDI ARCHITECTS
2726 HARRISON BLVD.
OGDEN, UTAH 84403
801.476.4330

MECHANICAL: SPECTRUM ENGINEERS
354 S. STATE STREET
SUITE 400
SALT LAKE CITY, UTAH 84111

PLUMBING: SPECTRUM ENGINEERS
354 S. STATE STREET
SUITE 400
SALT LAKE CITY, UTAH 84111

ELECTRICAL: SPECTRUM ENGINEERS
354 S. STATE STREET
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VICINITY MAP



STANDARD ABBREVIATIONS

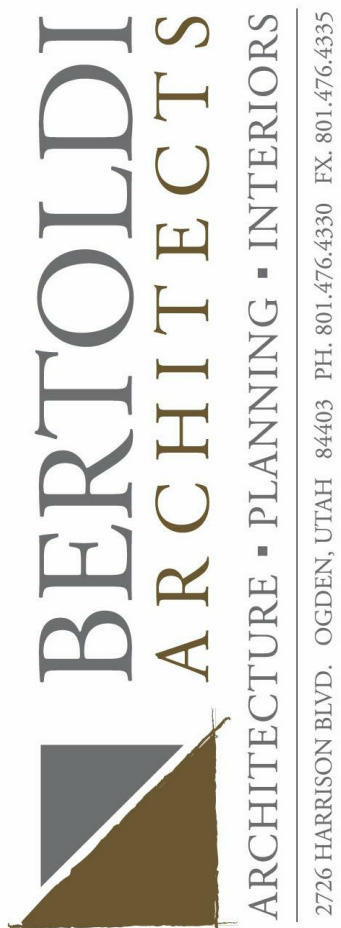
# NUMBER	MECH. MECHANICAL
@ AT	MFR. MANUFACTURER
A.F.F. ABOVE FINISHED FLOOR	MIN. MINIMUM
ALUM. ALUMINUM	MISC. MISCELLANEOUS
APPROX. APPROXIMATELY	MTL. METAL
ARCH. ARCHITECT/ARCHITECTURAL	N.I.C. NOT IN CONTRACT
BLDG. BUILDING	O.C. ON CENTER
B.O. BOTTOM OF	O.H. OVERHEAD
COL. COLUMN	OPP. OPPOSITE
CONC. CONCRETE	PNT. PAINT
CONST. CONSTRUCTION	PRE-FIN. PRE-FINISHED
CONT. CONTINUOUS	PROJ. PROJECT
COORD.COORDINATE	QTY. QUANTITY
DET. DETAIL	RAD. RADIUS
D.F. DRINKING FOUNTAIN	REQ. REQUIRED
DIA. DIAMETER	RM. ROOM
DWGS. DRAWINGS	SCHED. SCHEDULE
ELECT. ELECTRICAL	SHT. SHEET
EQ. EQUAL	SIM. SIMILAR
EXIST. EXISTING	SPEC. SPECIFICATIONS
EXT. EXTERIOR	STRUCT. STRUCTURAL
FDN. FOUNDATION	S.F. SQUARE FEET
F.F. FINISH FLOOR	SQ. FT. SQUARE FEET
F.V. FIELD VERIFY	T.O. TOP OF
GW.B. GYPSUM WALL BOARD	T.O.F. TOP OF FOOTING
H.M. HOLLOW METAL	T.O.S. TOP OF SLAB
HT. HEIGHT	T.O.W. TOP OF WALL
HVAC HEATING/VENTILATION/AIR CONDITIONING	TYP. TYPICAL
INSUL. INSULATE	TFM. THERMOFUSED MELAMINE
INT. INTERIOR	U.N.O. UNLESS NOTED OTHERWISE
IBC INTERNATIONAL BUILDING CODE	VCT. VINYL COMPOSITION TILE
LT. WT. LIGHT WEIGHT	VEST. VESTIBULE
MAINT. MAINTENANCE	W/ WITH
MAX. MAXIMUM	WD. WOOD
MAT. MATERIAL	

STANDARD SYMBOLS

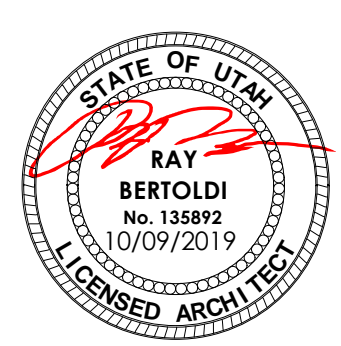
ELEVATION MARKER	NAME ELEVATION	DETAIL MARKER	1 A101	SIM
EXTERIOR ELEVATION	A101	CEILING MARKER	11	1'-0" AFF
ROOM MARKER	Room name 101 150 SF	DOOR MARKER	101	
INTERIOR ELEVATION	1 Ref A101 1 Ref	WINDOW MARKER	11	
SECTION MARKER	1 A101	WALL TYPE MARKER	1A	
		KEYNOTE MARKER	?	

SHEET INDEX

GENERAL	
AG-001	COVER SHEET
AG-002	EGRESS PLAN
AG-003	TYPICAL ACCESSIBLE DETAILS
ARCHITECTURE	
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AE-300	BUILDING SECTIONS
AEP-102	EAST UNIT EXISTING PHOTOS
AEP-103	WEST UNIT EXISTING PHOTOS
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AI-101	FINISH FLOOR PLAN
AI-401	RECEPTION/DRINKING FOUNTAIN ENLARGED PLAN/ELEVATIONS
AI-402	FITNESS GYM ENLARGED PLAN/ELEVATIONS
AI-403	MEN'S RESTROOM ENLARGED PLANS/ELEVATIONS
AI-404	WOMEN'S RESTROOM ENLARGED PLANS/ELEVATIONS
MECHANICAL	
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M-100	MECHANICAL DEMO PLAN
M-101	LEVEL 1 MECHANICAL PLAN
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M-501	MECHANICAL DETAILS
M-601	MECHANICAL SCHEDULES
PLUMBING	
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P-101	LEVEL 1 PLUMBING PLAN-DWW
P-102	LEVEL 1 PLUMBING PLAN-WATER
P-501	PLUMBING DETAILS
P-601	PLUMBING SCHEDULES
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EE-001	SHEET INDEX, ABBREVIATIONS, AND GENERAL NOTES
EE-701	TYPICAL MOUNTING HEIGHT DETAILS
ED-101	POWER AND LIGHTING DEMOLITION PLANS
EP-140	MAIN FLOOR POWER AND LIGHTING PLANS
EP-601	PANEL AND & EQUIPMENT SCHEDULES
EP-602	LIGHTING FIXTURE SCHEDULE



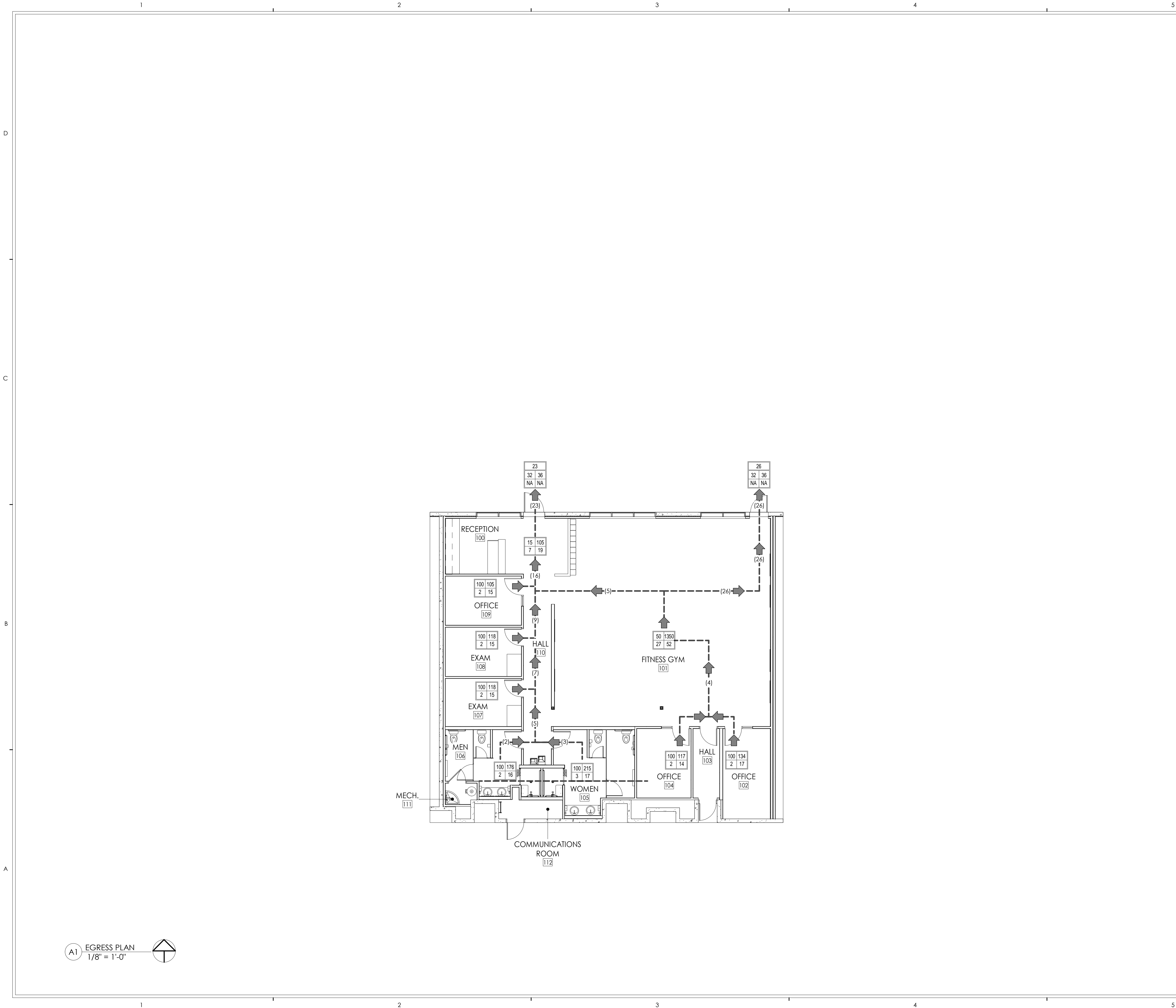
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4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403



REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	COVER SHEET

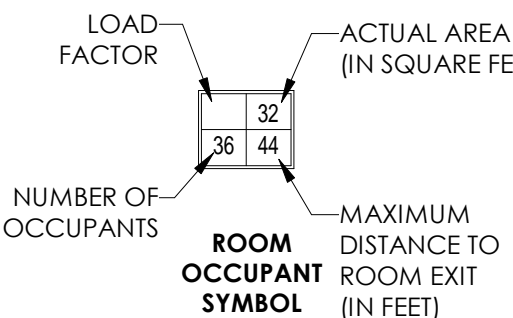
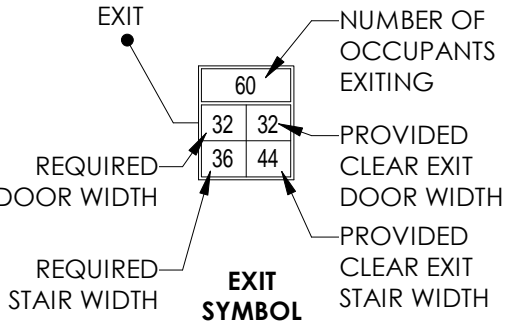
SHEET:

AG-001



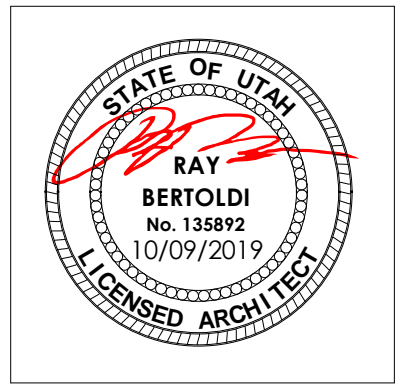
EGRESS LEGEND

- (2) COMBINED OCCUPANT LOAD ALONG PATH OF EGRESS
- PATH OF EGRESS
- ACCESSIBLE ROUTE; SHALL NOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE EXCEPT AT CURB RAMPS



BERTOLDI ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2726 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

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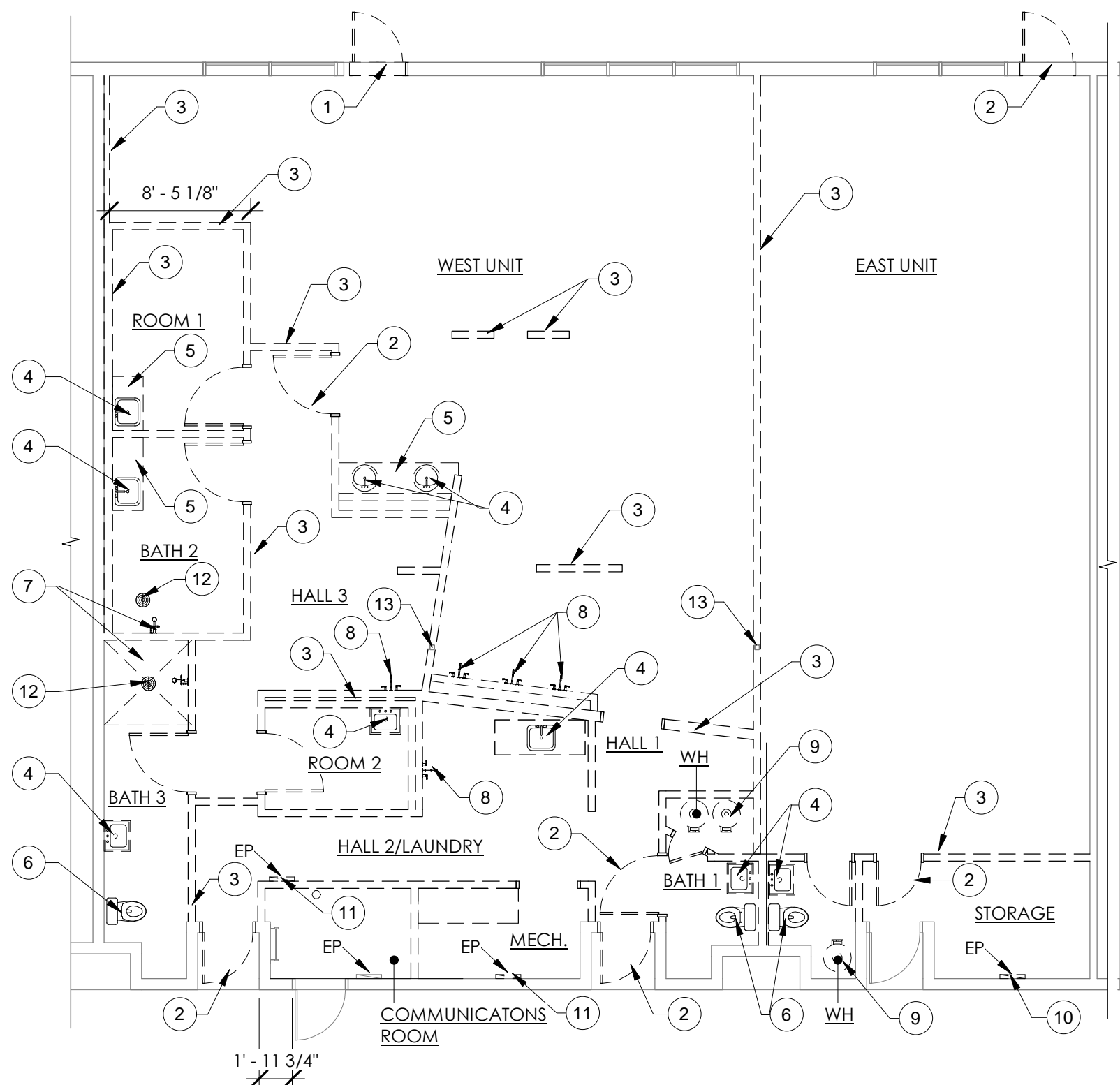
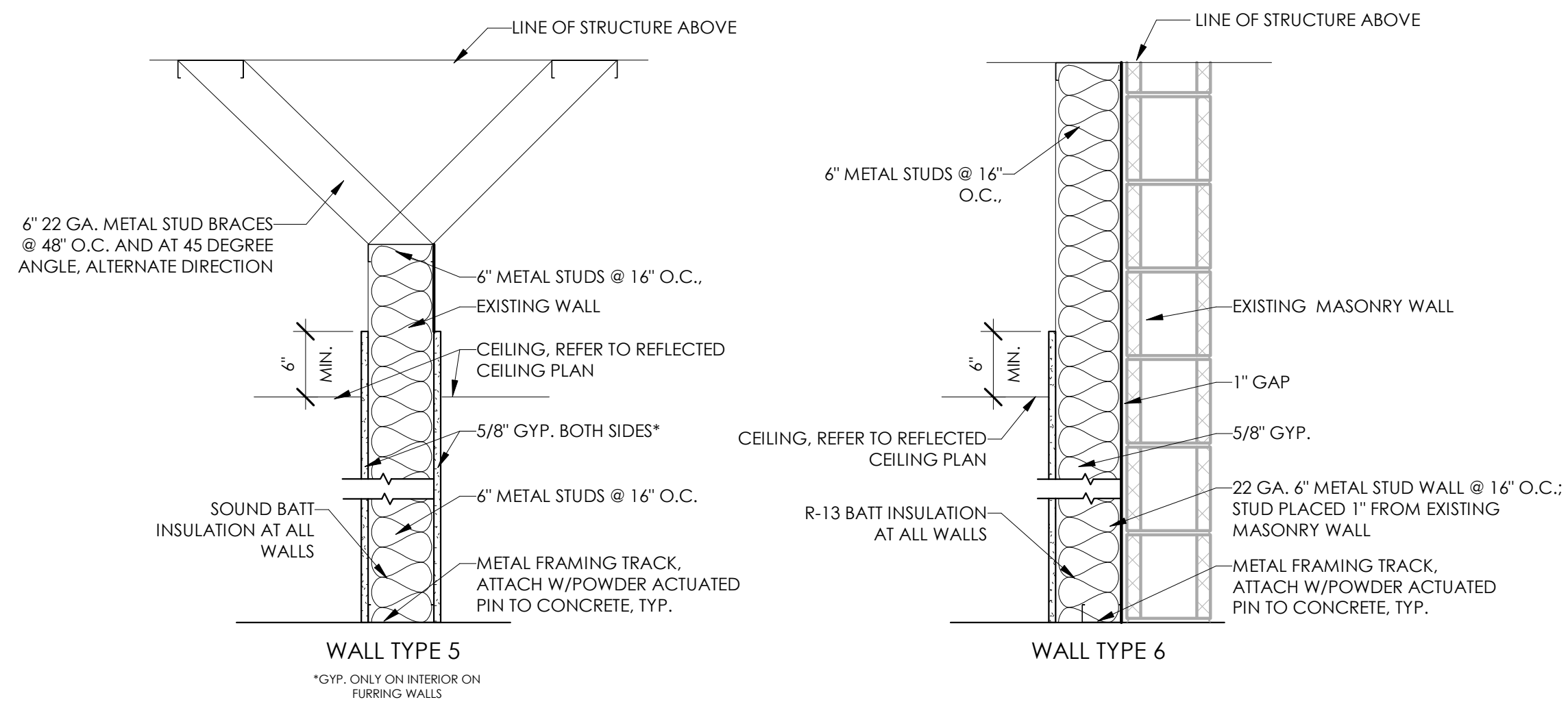
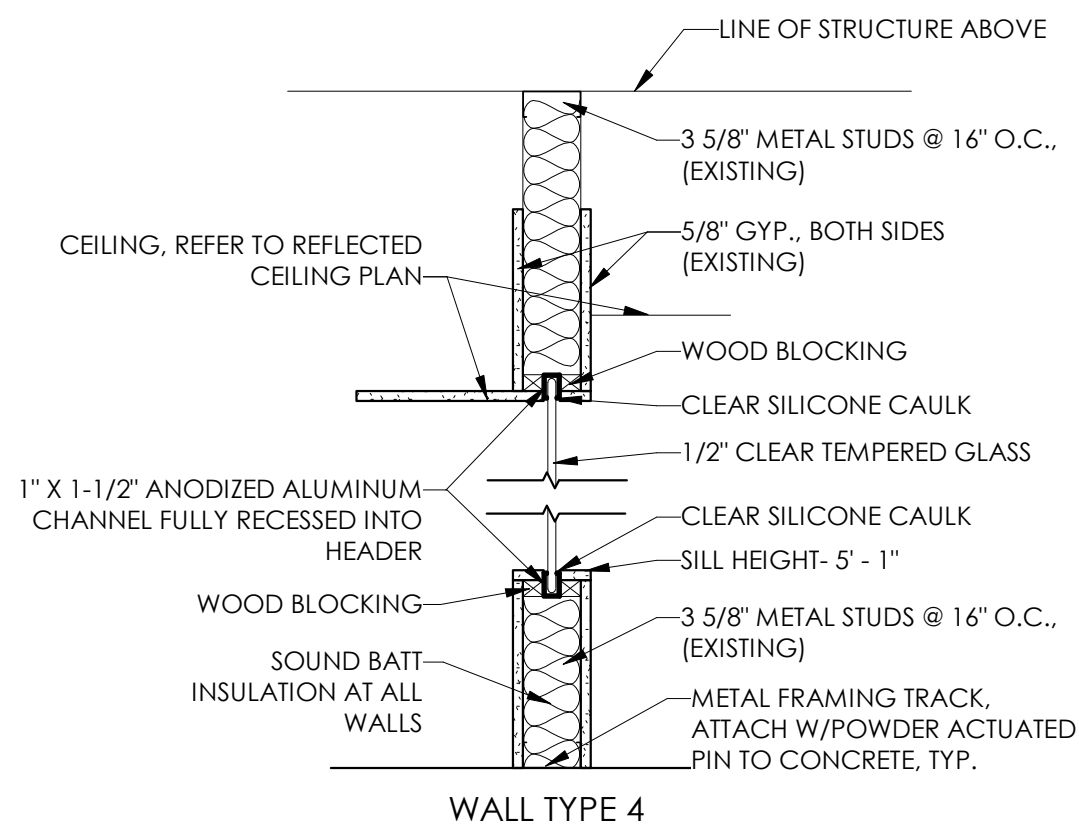
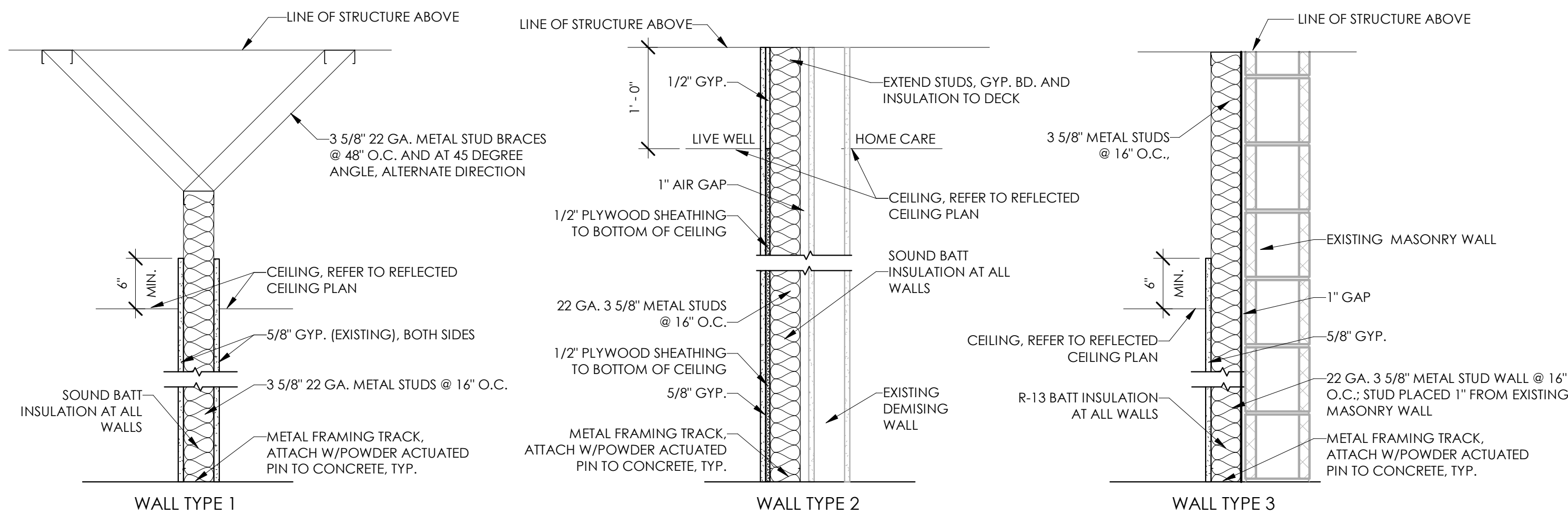


REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	EGRESS PLAN

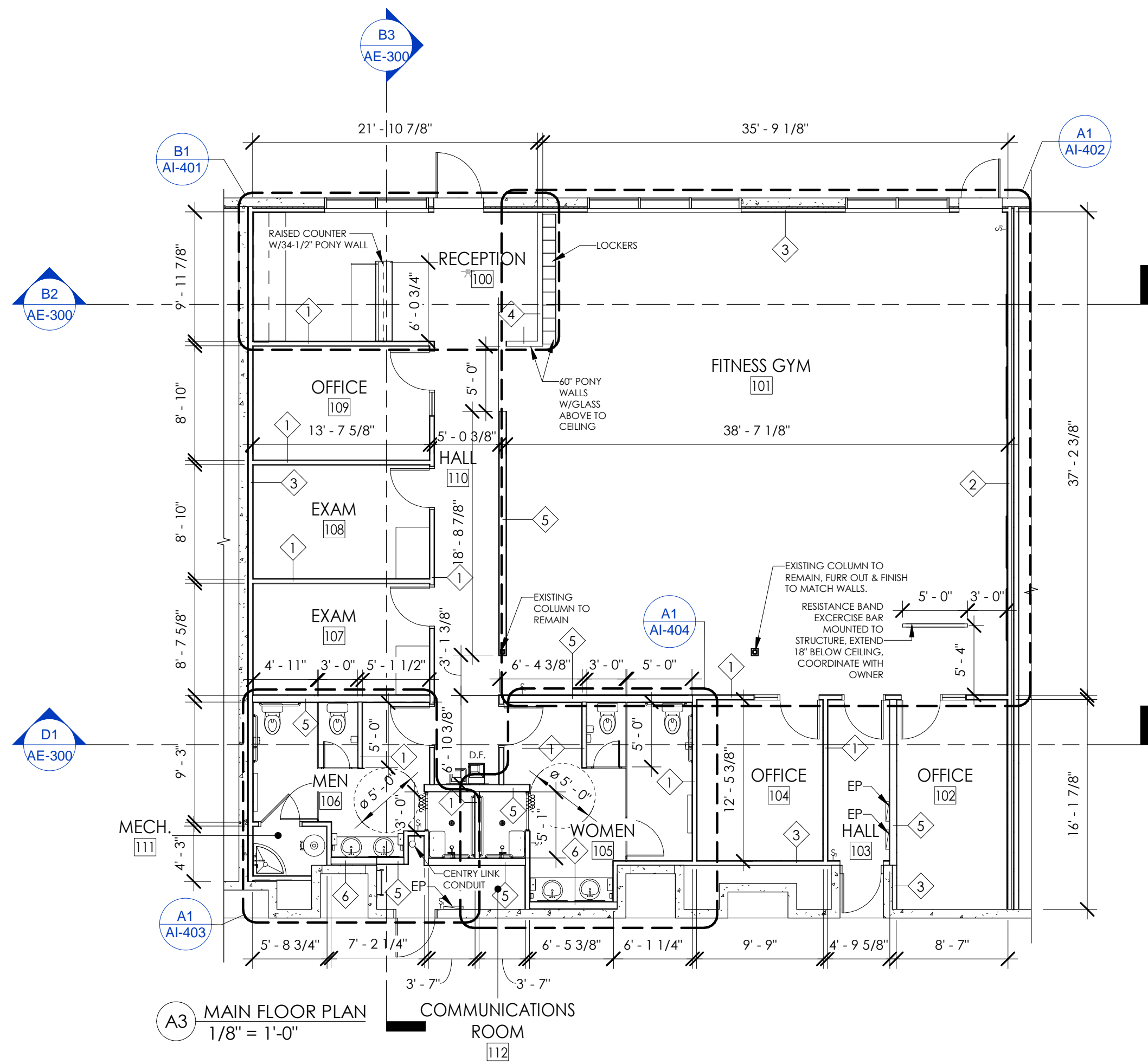
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SHEET:
AG-002





A1 DEMOLITION PLAN
1/8" = 1'-0"



A3 MAIN FLOOR PLAN
1/8" = 1'-0"

DEMOLITION NOTES

- 1 REMOVE EXISTING DOOR, FRAME, AND TRANSOM
- 2 REMOVE EXISTING DOORS & FRAMES, RETURN TO OWNER
- 3 REMOVE EXISTING WALL
- 4 REMOVE EXISTING SINK & FAUCET AND CAP DCW, DHW, SANITARY, AND VENT PIPES
- 5 REMOVE EXISTING COUNTER & SHELVING
- 6 REMOVE EXISTING TOILET AND CAP DCW, SANITARY, AND VENT PIPES
- 7 REMOVE EXISTING SHOWER TRIM KIT, SHOWER SURROUND, AND ALL BATH ACCESSORIES
- 8 REMOVE EXISTING WATER AND DRAIN STUB OUTS
- 9 REMOVE EXISTING WATER HEATER
- 10 REMOVE AND RE-LOCATE EXISTING POWER PANEL
- 11 REMOVE EXISTING POWER PANEL
- 12 REMOVE EXISTING DRAIN
- 13 EXISTING COLUMN TO REMAIN

GENERAL NOTES

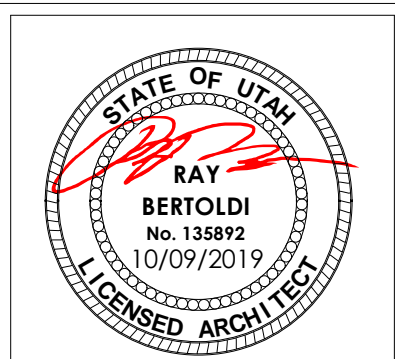
- A. ALL DIMENSIONS ARE TO ROUGH FRAMING, UNLESS OTHERWISE NOTED (U.N.O.)
- B. ALL INTERIOR WALLS TO BE 20 GA. 3-5/8" METAL STUDS @ 16" O.C., U.O.N. WITH 5/8" GWB BOTH SIDES U.O.N. W/SOUND BATT INSULATION
- C. PROVIDE FIBER-CEMENT OR GLASS-MAT BOARD AT TILE AREAS OF SHOWER GREEN BOARD IS NOT PERMITTED.
- D. PROVIDE SOLID BLOCKING AS REQ'D FOR CABINETS, FIXTURES, EQUIPMENT AND ACCESSORIES AS REQ'D BY EACH COMPONENTS MANUFACTURER, INCLUDING OWNERS ACCESSORIES AND EQUIPMENT.
- E. ALL DOORS SHALL BE INSTALLED 4" FROM WALL, U.N.O.
- F. REFER TO ENLARGED PLANS FOR INTERIOR ELEVATION REFERENCES.
- G. ALL LIGHT FIXTURES IN WET AREAS TO BE PROTECTED PER IRC 3903.10
- H. FIRE EXTINGUISHERS TO BE PROVIDED PER

FLOOR PLAN LEGEND

- WALL TYPE MARKER, REFER TO SHEET AE-101 FOR WALL TYPES
- DETAIL MARKER
- DOOR MARKER
- EXTERIOR ELEVATION MARKER
- ROOM MARKER



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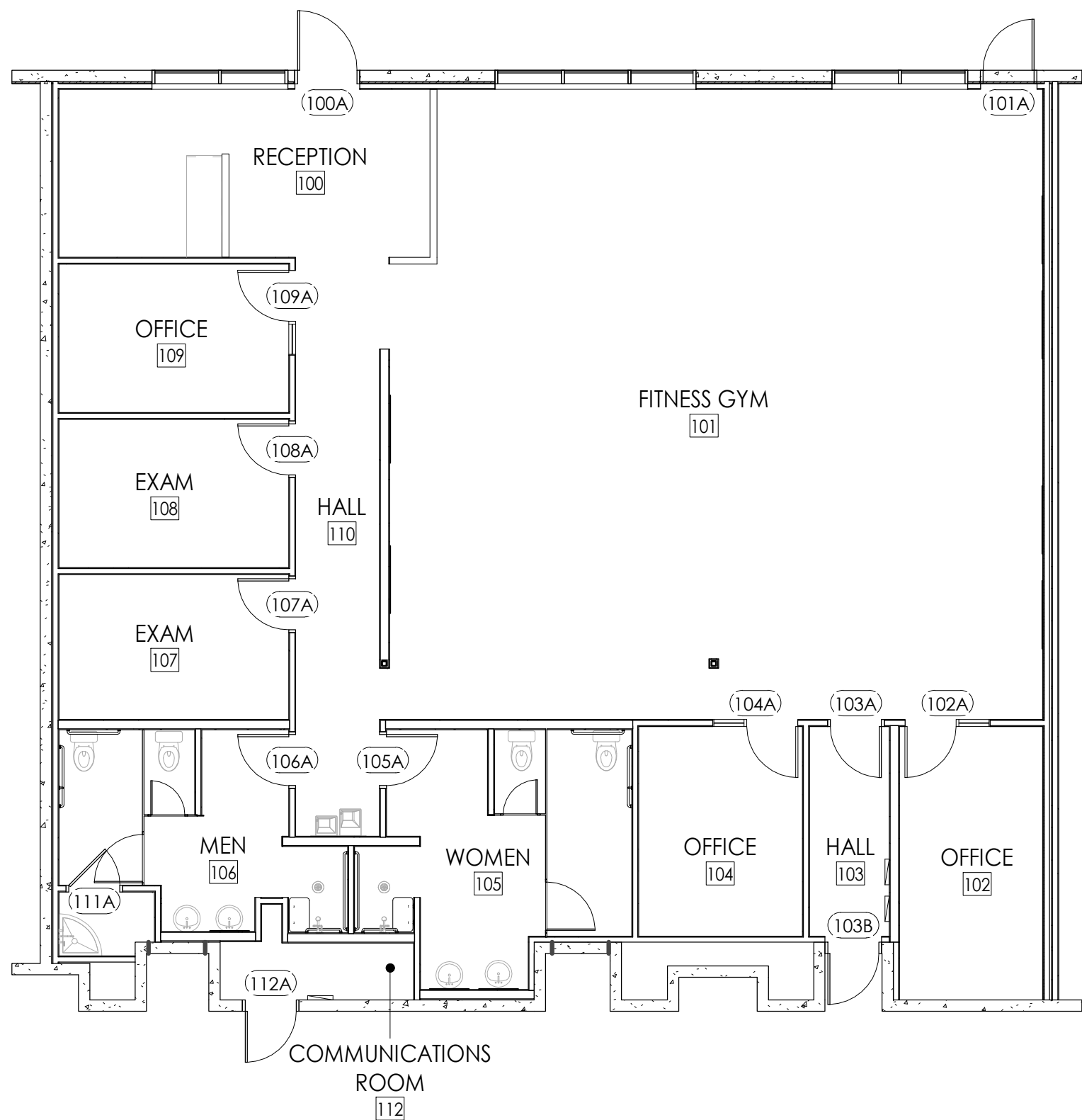
REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	DEMOLITION PLAN, MAIN FLOOR PLAN, WALL TYPES

SHEET:

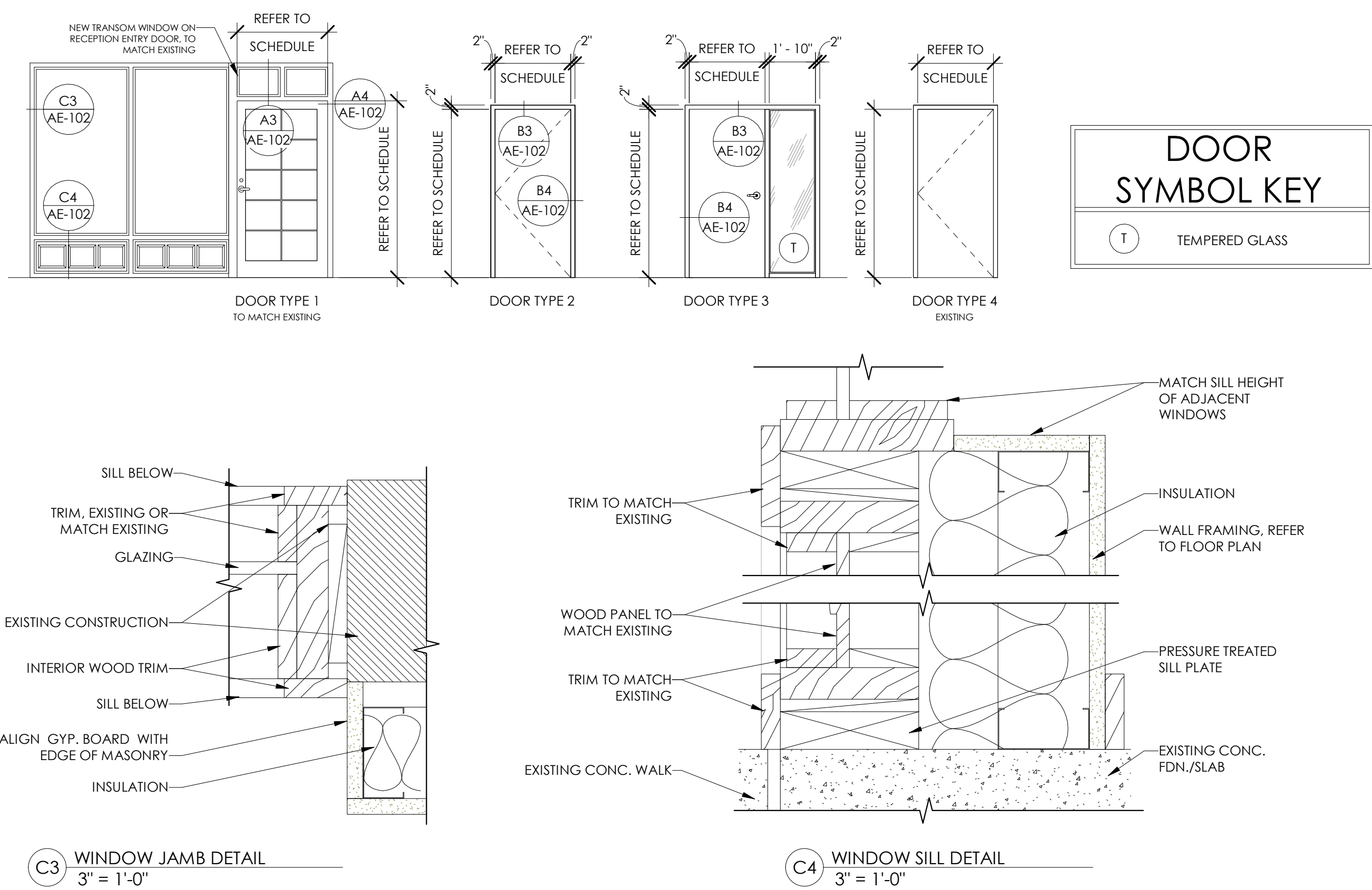
AE-101

DOOR SCHEDULE										
DOOR TAG	DOOR TYPE	ROOM	WIDTH	HEIGHT	DOOR		FRAME		HARDWARE GROUP	REMARKS
					MATERIAL	FINISH	MATERIAL	FINISH		
100A	1	RECEPTION	3' - 6"	7' - 0"	WOOD	STAIN	WOOD	STAIN	5	DOOR TO MATCH EXISTING EXTERIOR. CARD ACCESS & PANIC HARDWARE
101A	1	FITNESS GYM	3' - 0"	7' - 0"	WOOD	STAIN	WOOD	STAIN	6	DOOR TO MATCH EXISTING EXTERIOR, PANIC HARDWARE
102A	3	OFFICE	5' - 4"	7' - 0"	WOOD	STAIN	HM	PAINT	2	LOCKSET
103A	2	HALL	3' - 0"	7' - 0"	WOOD	STAIN	HM	PAINT	1	LOCKSET
103B	4	HALL	3' - 0"	7' - 0"	METAL	EXISTING	EXISTING	EXISTING	EXISTING	MAY HAVE TO CHANGE KEY FUNCTION/COORDINATE WITH OWNER
104A	3	OFFICE	5' - 4"	7' - 0"	WOOD	STAIN	HM	PAINT	2	LOCKSET
105A	2	WOMEN	3' - 0"	7' - 0"	WOOD	STAIN	HM	PAINT	3	PUSH PULL HARDWARE
106A	2	MEN	3' - 0"	7' - 0"	WOOD	STAIN	HM	PAINT	3	PUSH PULL HARDWARE
107A	2	EXAM	3' - 0"	7' - 0"	WOOD	STAIN	HM	PAINT	4	PASSAGE
108A	2	EXAM	3' - 0"	7' - 0"	WOOD	STAIN	HM	PAINT	4	PASSAGE
109A	3	OFFICE	5' - 4"	7' - 0"	WOOD	STAIN	HM	PAINT	2	LOCKSET
111A	2	MECH.	3' - 0"	7' - 0"	WOOD	STAIN	HM	PAINT	1	LOCKSET
112A	4	COMMUNICATION S ROOM	3' - 0"	7' - 0"	METAL	EXISTING	EXISTING	EXISTING	EXISTING	EXISITNG

*REFER TO DOORS & FRAME NOTES ON THIS PAGE FOR MANUFACTURER'S REQUIREMENTS.



A1 MAIN FLOOR PLAN OPENING PLAN
1/8" = 1'-0"



DOOR NOTES

1. REFER TO DEMOLITION PLAN FOR EXISTING DOORS & WINDOWS THAT ARE TO BE REMOVED/SALVAGED.
2. NEW WINDOWS ARE TO MATCH ADJACENT WINDOWS IN STYLE, HEIGHT AND COLOR.
3. CARD ACCESS BY OWNER.

DOOR & FRAMES

1. HOLLOW METAL FRAMES: STEEL CRAFT 16 GA. WITH WELDED CORNERS.
2. DOORS: MARSHFIELD; ROTARY CUT NATURAL BIRCH SPLY PARTICLE CORE DOORS STAINED FACTORY FINISH.
3. THRESHOLD: WHERE APPLIES

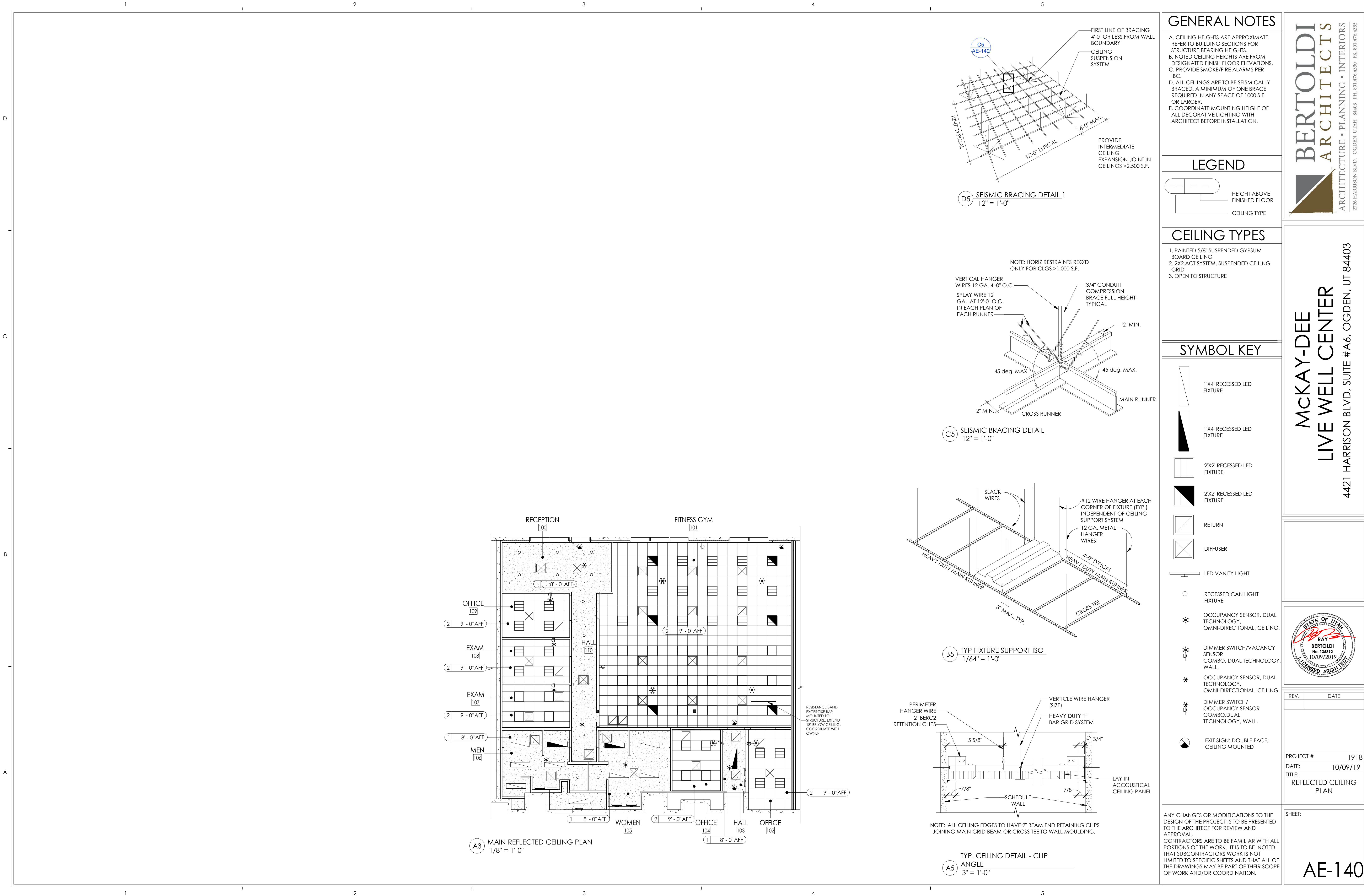
HARDWARE SCHEDULE

The following schedule is furnished for whatever assistance it may afford the Contractor; do not consider it as entirely inclusive. Should any particular door or item be omitted in any scheduled hardware heading, provide door or item with hardware same as required for similar purposes. Hardware supplier is responsible for handling and sizing all products as listed in the hardware heading. Quantities listed are for each pair of doors, or for each single door.

Contractor to provide submittals in electronic format for Architect's review.

Manufacturer's Abbreviations:

1. Storeroom L9080R 17B C125 Keyway, 626
 2. Office L9050R 17B C125 Keyway, 626
 3. Restroom Pull Handle and Pull Plate- Hager 33G 3.5"x15" US32D, Restroom Push Plate- Hager 30S 3.5"x15" US32D.
 4. Passage L9010 17B 626
 5. Lockset L9453R 17B C125 Keyway with Card Access and Panic Hardware
 6. Lockset L9453R 17B C125 Keyway and Panic Hardware
- Locksets - Schlage Mortise
Hinges - McKinney TA2714 26D
Wall Stop - Hager 236W US26D
Electric Strike - SDC 55-CU 630
Overhead Stop - Glynn-Johnson 450 series
Silencers - No preference
Closers - LCN 4010 Pull side 4111 EDA Push side AL
Kick plates - No preference
Smoke Seal - Pemko S88D





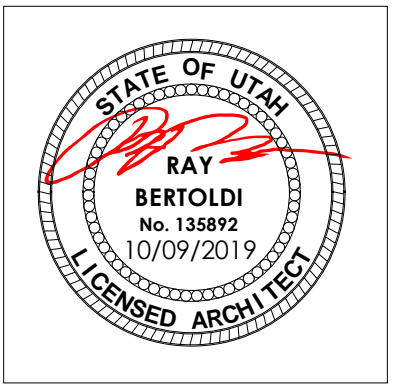
GENERAL NOTES

- A. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION SIZES.
- B. PROVIDE FLASHING AND COUNTERFLASHING FOR ALL WINDOWS, DOORS, AND PENETRATIONS TO ROOF AND WALLS.
- C. FIELD VERIFY ALL WINDOW AND DOOR OPENINGS.
- D. PROVIDE FOUNDATION WATERPROOFING AT ALL CONCRETE BELOW GRADE.
- E. REFER TO OPENING SCHEDULE FOR DOOR AND WINDOW REQUIREMENTS.
- F. REFER TO GRADING PLAN FOR FINISH GRADE ELEVATION.
- G. PROVIDE MOCK-UP OF ALL EXTERIOR FINISHES PRIOR TO INSTALLATIONS FOR ARCHITECTS APPROVAL. FINISHES ARE NOT TO BE INSTALLED WITHOUT APPROVAL.

KEYED NOTES -...

BERTOLDI ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2726 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

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REV.	DATE
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DATE:	10/09/19
TITLE:	BUILDING SECTIONS

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SHEET:
AE-300

12345

D

C

B

A



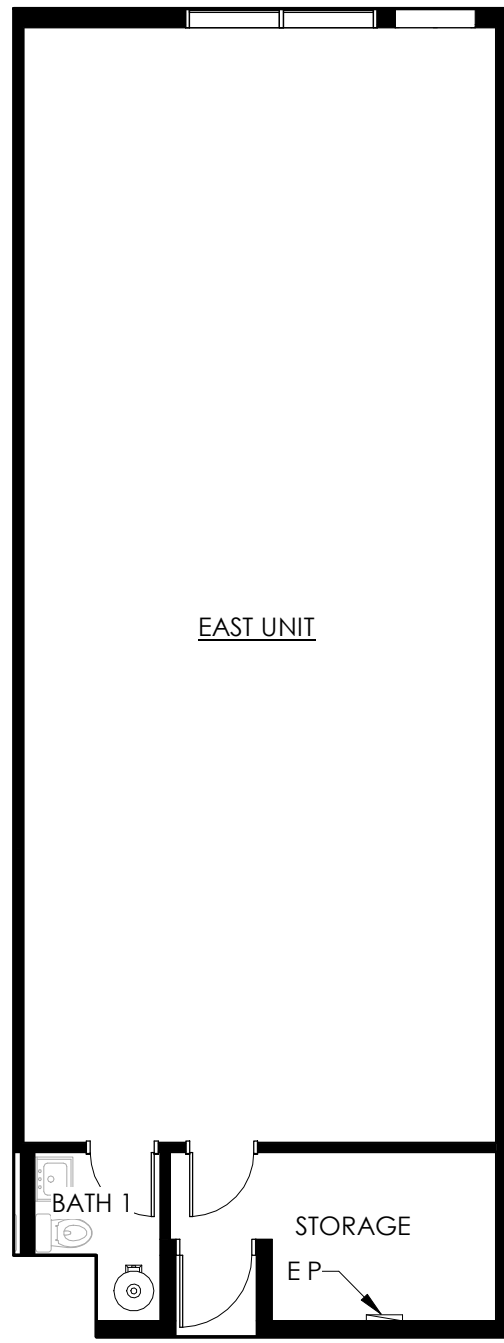
EAST UNIT-MAIN ROOM



EAST UNIT-BATH 1

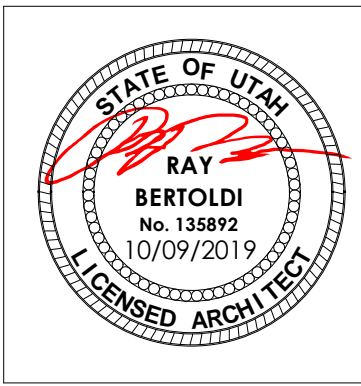


EAST UNIT-STORAGE



EXISTING FLOOR PLAN -EAST UNIT

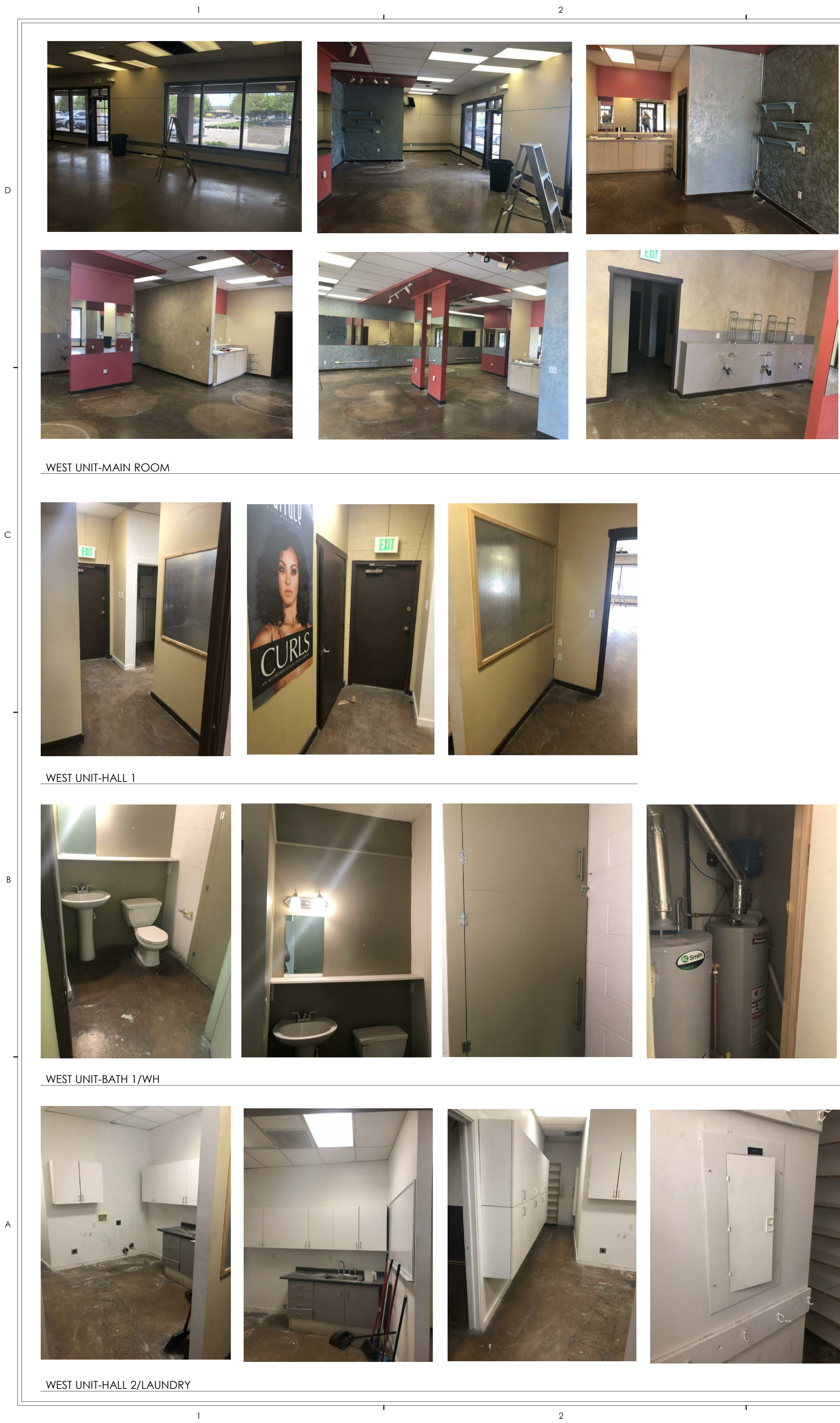
*THIS SHEET FOR REFERENCE ONLY



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PROJECT #	1918
DATE:	10/09/19
TITLE:	EAST UNIT EXISTING PHOTOS

SHEET:

12345



WEST UNIT-MAIN ROOM

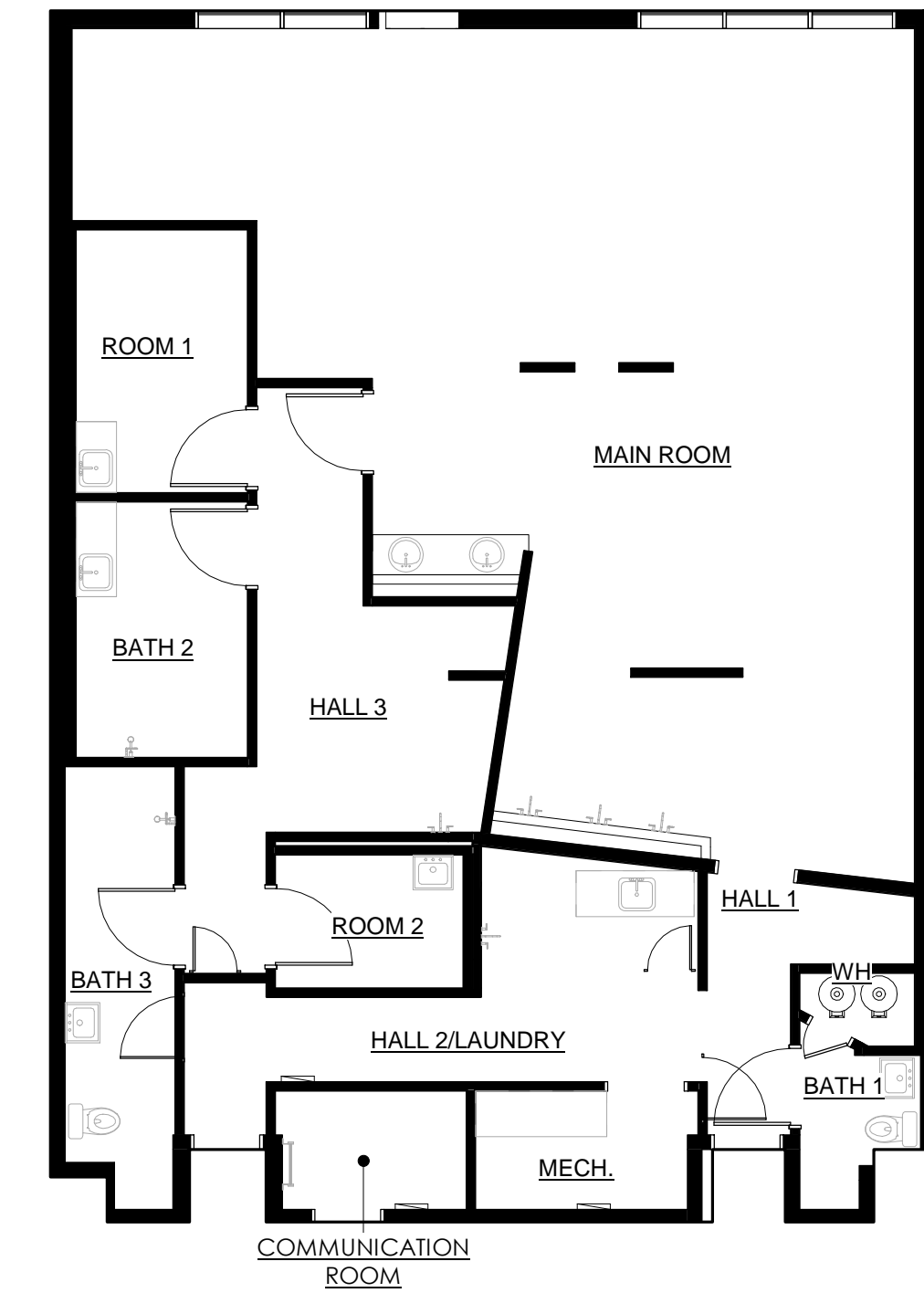
WEST UNIT-HALL 1

WEST UNIT-BATH 1/WH

WEST UNIT-HALL 2/LAUNDRY

WEST UNIT-HALL 2/LAUNDRY

WEST UNIT-MECH.

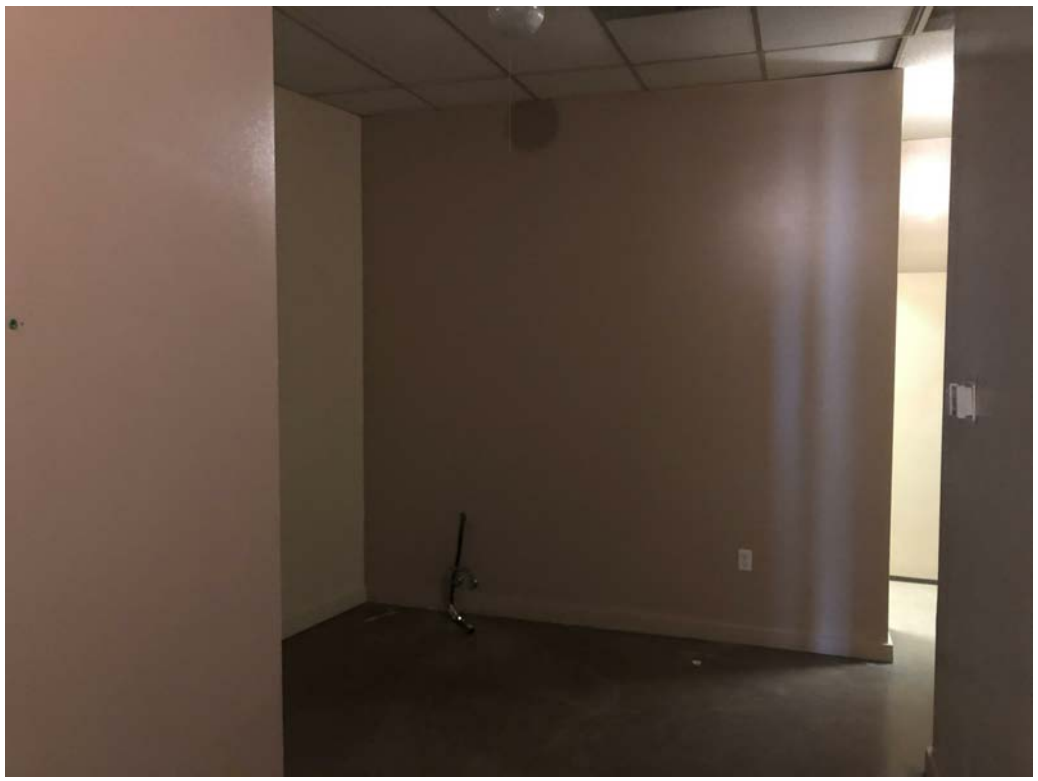


EXISTING FLOOR PLAN - WEST UNIT

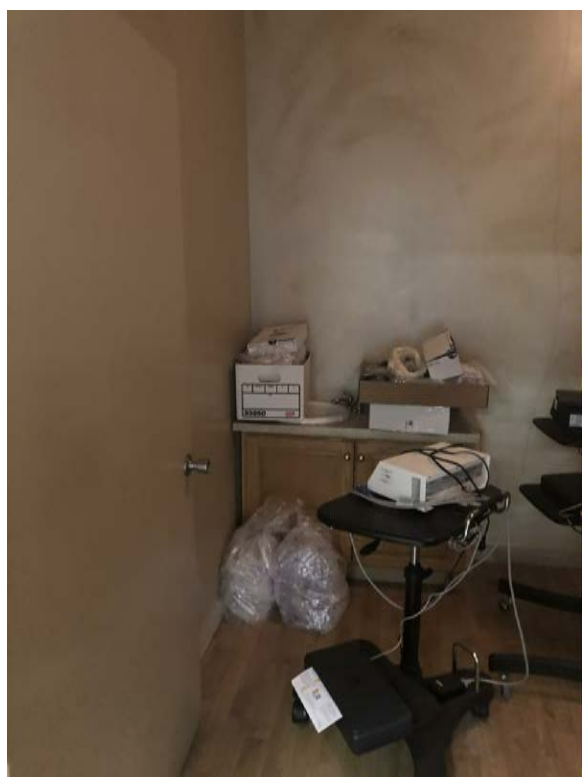
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1 2 3 4 5



WEST UNIT-HALL 1



WEST UNIT-ROOM 1



WEST UNIT-ROOM 2



WEST UNIT-BATH 2



WEST UNIT-BATH 3



WEST UNIT-COMMUNICATION ROOM



CENTRY LINK CONDUIT TO STAY

D

C

B

A

1 2 3 4 5

D
C
B
A

MAIN FLOOR FINISH KEY																
MARK	IMG	DESCRIPTION	MANUFACTURER	SPECIFICATION	NOTES	RECEPTION 100	FITNESS GYM 101	OFFICE 102	HALL 103	OFFICE 104	WOMEN 105	MEN 106	EXAM 107	EXAM 108	OFFICE 109	HALL 110
CEILING																
C1		2'X4' GRID			COORDINATE W/ARCHITECT		X	X		X			X	X	X	
C2		PAINTED GYP	SHERWIN WILLIAMS	SW7005 PURE WHITE	REFER TO REFLECTED CEILING PLAN	X			X		X	X				X
COUNTERTOP																
CT1		QUARTZ COUNTERTOP	CAMBRIA	QUARTZ DESERT COLLECTION, COLOR: WHITE CLIFF		X										
CT2		SOLID SURFACE COUNTERTOP	DUPONT	CORIAN, NEUTRAL CONCRETE							X	X				
CT3		SOLID SURFACE COUNTERTOP	DUPONT	CORIAN, WHITE JASMINE W/EASED EDGE									X	X		
FLOORING																
B1		RUBBER BASE	ROPPE	ROPPE, BLACK 4" STANDARD TOE BASE, COLOR: BLACK		X	X	X	X	X			X	X	X	X
F1		LUXURY VINYL TILE	MANNINGTON COMMERCIAL	WALKWAY 20 W116 COLOR: TOBACCO IPE 20 MIL LVT		X		X	X	X			X	X	X	X
F2		RUBBER FLOORING	MANNINGTON COMMERCIAL	COLLECTION: RESET, COLOR: BEIGE TONES 824 18X18 SQUARE EDGE TILES			X									
F3		FLOOR TILE	CROSSVILLE	NOTORIOUS FEMME FATAL NTR01 W/HON FINISH, SIZE: 12X24, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"							X	X				
F4		SHOWER FLOOR TILE		CROSSVILLE NOTORIOUS FEMME FATALE NTR01 W/HON FINISH, SIZE: 12X12 MOSIAC, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"							X	X				
F5		SCHLUTER REDUCER	SCHLUTER	AU100ATGB RENO-U REDUCER 3/8" ALUM BRUSH NICKEL			X									
MILLWORK																
CAB1		BUILT-IN CABINETS	INTERIOR ENVIRONMENTS	PLAIN SLICED MAPLE, FINISH: BECKER ACROMA, DMS315-00XX, UNICLEAR SP/SATIN FINISH	REFER TO INTERIOR ELEVATIONS	X										
WALL																
W1		PAINTED GYP.	SHERWIN WILLIAMS	SW7005 PURE WHITE	REFER TO PAINT PLAN	X	X	X	X	X	X	X	X	X	X	X
W2		PAINTED GYP.	SHERWIN WILLIAMS	SW6230 RAINSTORM	REFER TO PAINT PLAN	X	X									X
W3		ACCENT PAINT	SHERWIN WILLIAMS	SW 6243 DISTANCE				X		X			X	X	X	X
W4		WALL TILE	CROSSVILLE	NOTORIOUS FEMME FATAL NTR01 W/HON FINISH, SIZE: 12X24, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	REFER TO INTERIOR ELEVATIONS						X	X				
W5		ACCENT TILE	CROSSVILLE	NOTORIOUS FILM NOIR NTR06 W/HON FINISH, SIZE: 12X12 MOSIAC, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	REFER TO INTERIOR ELEVATIONS						X	X				
W6		WALL TILE	CROSSVILLE	NOTORIOUS FEMME FATALE NTR01 W/HON FINISH, SIZE: 6X12 COVE BASE, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	REFER TO INTERIOR ELEVATIONS						X	X				
W7		WALL TILE	CROSSVILLE	SCHLUTER QUADREC - EDGING PROFILE - FOR 1/2" THICK TILE - 8' 2-1/2" LENGTH - SATIN NICKEL ANODIZED ALUMINUM	REFER TO INTERIOR ELEVATIONS						X	X				
W8		WALL MOUNTED MIRROR			SEE ELEVATIONS FOR LOCATIONS AND DIMENSIONS.		X				X	X				

GENERAL NOTES

- A. ALL DIMENSIONS ARE TO ROUGH FRAMING UNLESS OTHERWISE NOTED (U.N.O.)
- B. VERIFY ALL FINISHES, FIXTURES AND EQUIPMENT WITH ARCHITECT.
- C. PROVIDE FIBER-CEMENT OR GLASS-MAT BOARD AT WET LOCATIONS. GREEN BOARD IS NOT PERMITTED.
- D. PROVIDE SOLID BLOCKING AS REQUIRED FOR CABINETS, FIXTURES EQUIPMENT AND ACCESSORIES AS REQUIRED BY EACH COMPONENT'S MANUFACTURER, INCLUDING OWNER'S ACCESSORIES AND EQUIPMENT.
- E. ALL INTERIOR WALLS TO BE 3-5/8" METAL STUDS U.O.N. WITH 5/8" GWB ON BOTH SIDES U.O.N.
- F. ALL INTERIOR DOORS TO BE INSTALLED 4" FROM WALLS U.O.N.
- G. CONTRACTOR TO COORDINATE PAINT COLOR AND LOCATIONS WITH OWNER AND ARCHITECT.
- H. REFER TO AG-003 FOR TYPICAL MOUNTING HEIGHTS.

SYMBOL KEY

- F1-LUXURY VINYL TILE
- F2-RUBBER FLOORING
- <By Category>
- F3-FLOOR TILE
- F4-SHOWER FLOOR TILE

BERTOLDI ARCHITECTS

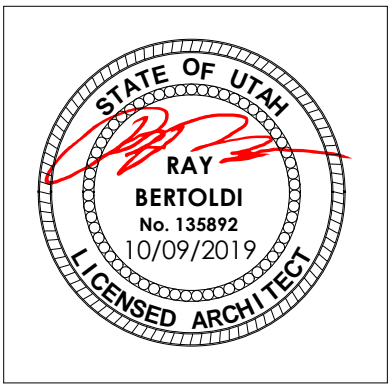
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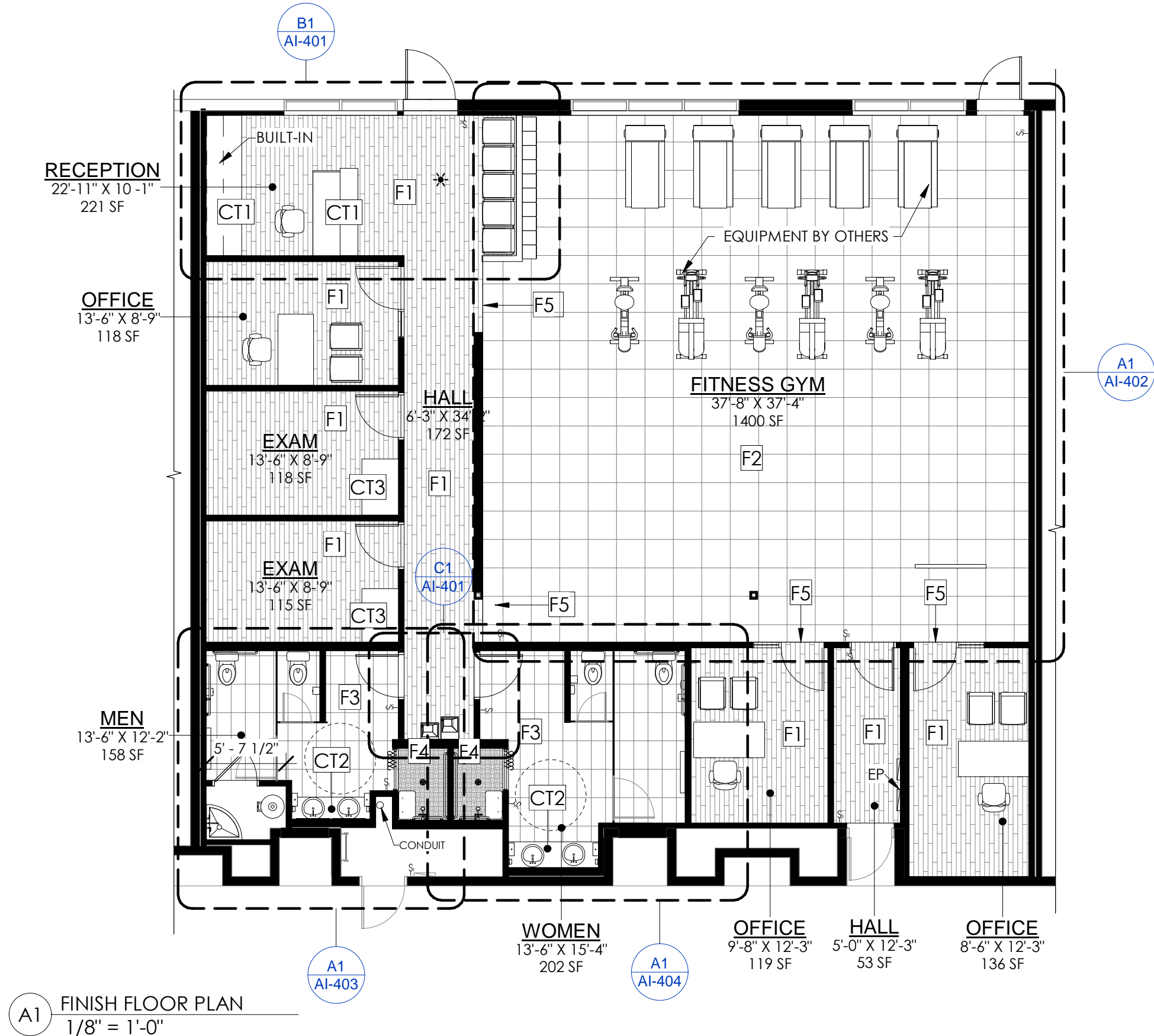


REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	FINISH FLOOR PLAN

SHEET:

AI-101

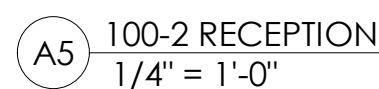
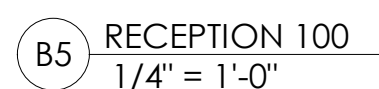
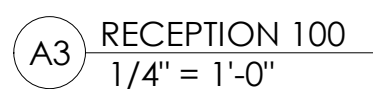
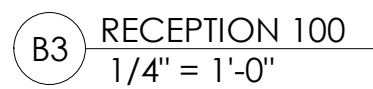
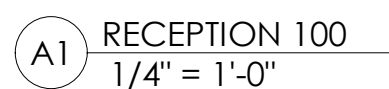
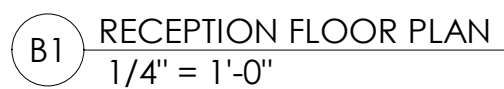
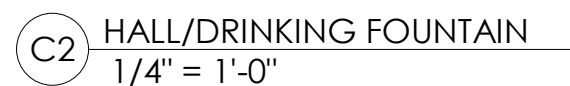
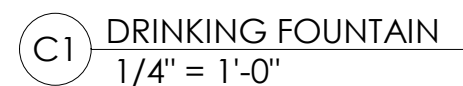
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A1 FINISH FLOOR PLAN
1/8" = 1'-0"



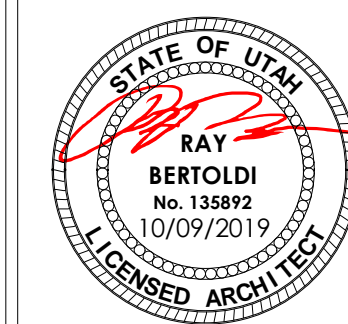
A3 PAINT PLAN
1/8" = 1'-0"



RECEPTION FINISH KEY					
MARK	IMG	DESCRIPTION	MANUFACTURER	SPECIFICATION	NOTES
CEILING					
C2		PAINTED GYP	SHERWIN WILLIAMS	SW7005 PURE WHITE	REFER TO REFLECTED CEILING PLAN
COUNTERTOP					
CT1		QUARTZ COUNTERTOP	CAMBRIA	QUARTZ DESERT COLLECTION, COLOR: WHITE CLIFF	
FLOORING					
B1		RUBBER BASE	ROPPE	ROPPE, BLACK 4" STANDARD TOE BASE, COLOR: BLACK	
F1		LUXURY VINYL TILE	MANNINGTON COMMERCIAL	WALKWAY 20 W116 COLOR: TOBACCO IPE 20 MIL LVT	
MILLWORK					
CAB1		BUILT-IN CABINETS	INTERIOR ENVIRONMENTS	PLAIN SLICED MAPLE, FINISH: BECKER ACROMA, DM5315-00XX, UNICLEAR SP/SATIN FINISH	REFER TO INTERIOR ELEVATIONS
WALL					
W1		PAINTED GYP.	SHERWIN WILLIAMS	SW7005 PURE WHITE	REFER TO PAINT PLAN
W2		PAINTED GYP.	SHERWIN WILLIAMS	SW6230 RAINSTORM	REFER TO PAINT PLAN

- A. ALL DIMENSIONS ARE TO ROUGH FRAMING UNLESS OTHERWISE NOTED (U.O.N.)
- B. VERIFY ALL FINISHES, FIXTURES AND EQUIPMENT WITH ARCHITECT
- C. PROVIDE FIBER-CEMENT OR GLASS-MAT BOARD AT WET LOCATIONS. GREEN BOARD IS NOT PERMITTED.
- D. PROVIDE SOLID BLOCKING AS REQUIRED FOR SHELVES, FIXTURES EQUIPMENT AND ACCESSORIES ACQUIRED BY EACH COMPONENT'S MANUFACTURER, INCLUDING OWNER'S ACCESSORIES AND EQUIPMENT.
- E. ALL INTERIOR WALLS TO BE 3/8" METAL STUD U.O.N. WITH 5/8" GWB ON BOTH SIDES U.O.N.
- F. ALL INTERIOR DOORS TO BE INSTALLED 4" FROM WALLS U.O.N.
- G. CONTRACTOR TO COORDINATE PAINT COLOUR AND LOCATIONS WITH OWNER AND ARCHITECT
- H. REFLECT TO AG-003 FOR TYPICAL MOUNTING HEIGHTS.

**McKAY-DEE
LIVE WELL CENTER**
4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403



REV.	DATE

PROJECT #	1918
DATE:	10/09/19
TITLE:	RECEPTION/DRINKING FOUNTAIN ENLARGED PLAN/ELEVATIONS





SHEET:

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL.

CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

AI-401

	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473
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FITNESS/GYM FINISH KEY				
MARK	IMG	DESCRIPTION	MANUFACTURER	SPECIFICATION
NOTES				
CEILING				
C1		2'X4' GRID		COORDINATE W/ARCHITECT
FLOORING				
B1		RUBBER BASE	ROPPE	ROPPE, BLACK 4" STANDARD TOE BASE, COLOR: BLACK
F2		RUBBER FLOORING	MANNINGTON COMMERCIAL	COLLECTION: RESET, COLOR: BEIGE TONES 824 18X18 SQUARE EDGE TILES
F5		SCHLUTER REDUCER	SCHLUTER	AU100ATGB RENO-U REDUCER 3/8" ALUM BRUSH NICKEL
WALL				
W1		PAINTED GYP.	SHERWIN WILLIAMS	SW7005 PURE WHITE
W2		PAINTED GYP.	SHERWIN WILLIAMS	SW6230 RAINSTORM
W8		WALL MOUNTED MIRROR		SEE ELEVATIONS FOR LOCATIONS AND DIMENSIONS.

GENERAL NOTES

- A. ALL DIMENSIONS ARE TO ROUGH FRAMING UNLESS OTHERWISE NOTED (U.N.O.)
B. VERIFY ALL FINISHES, FIXTURES AND EQUIPMENT WITH ARCHITECT.
C. PROVIDE FIBER-CEMENT OR GLASS-MAT BOARD AT WET LOCATIONS. GREEN BOARD IS NOT PERMITTED.
D. PROVIDE SOLID BLOCKING AS REQUIRED FOR CABINETS, FIXTURES EQUIPMENT AND ACCESSORIES AS REQUIRED BY EACH COMPONENT'S MANUFACTURER, INCLUDING OWNER'S ACCESSORIES AND EQUIPMENT.
E. ALL INTERIOR WALLS TO BE 3-5/8" METAL STUDS U.O.N. WITH 5/8" GWB ON BOTH SIDES U.O.N.
F. ALL INTERIOR DOORS TO BE INSTALLED 4" FROM WALLS U.O.N.
G. CONTRACTOR TO COORDINATE PAINT COLOR AND LOCATIONS WITH OWNER AND ARCHITECT.
H. REFER TO AG-003 FOR TYPICAL MOUNTING HEIGHTS.

BERTOLDI

ARCHITECTS

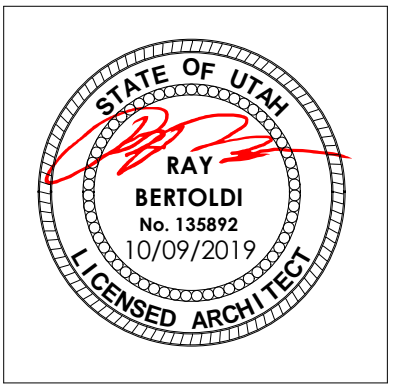
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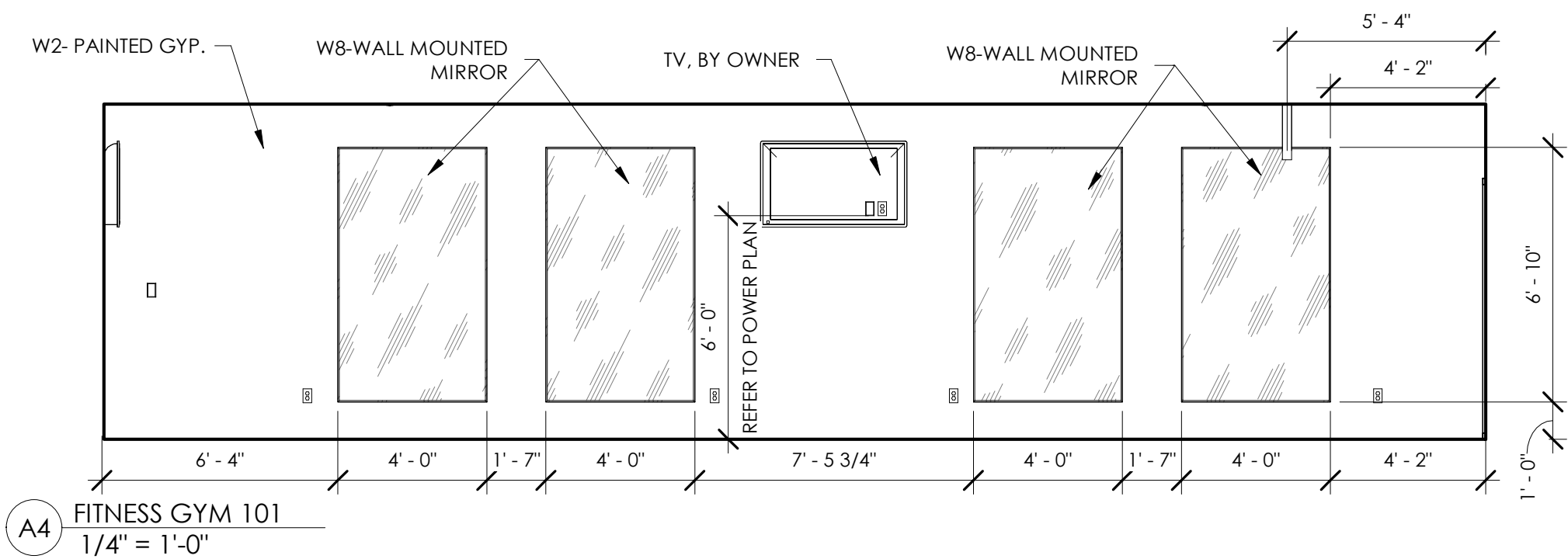
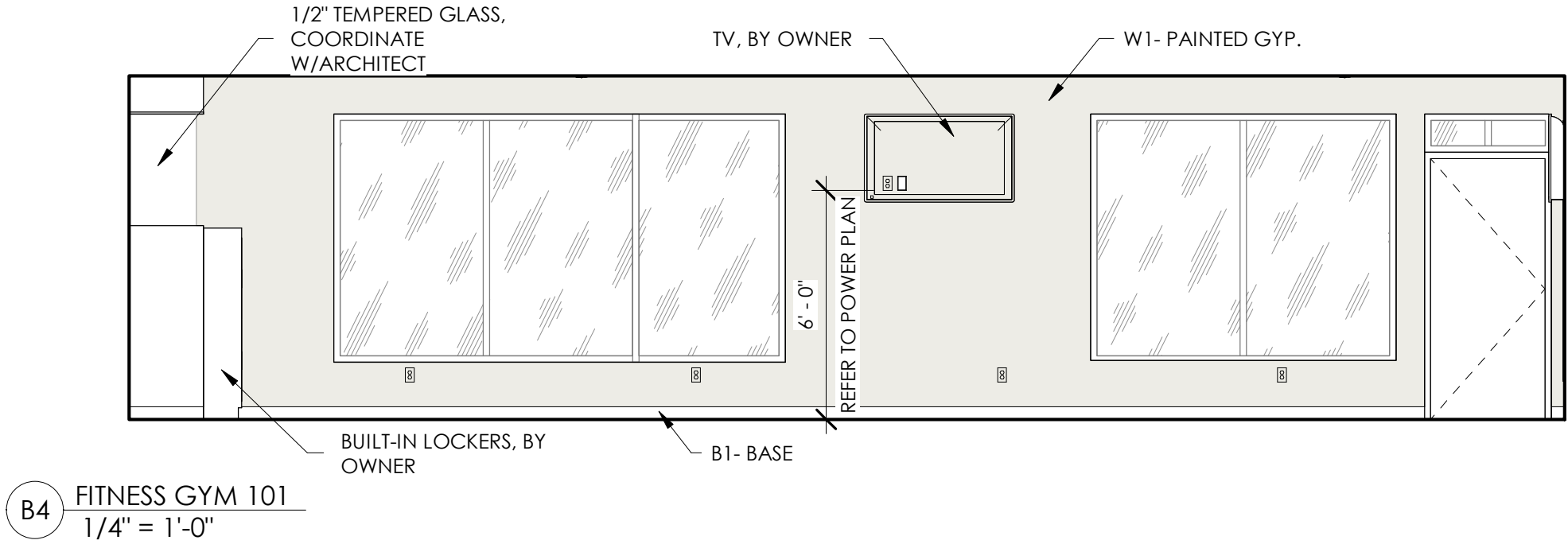
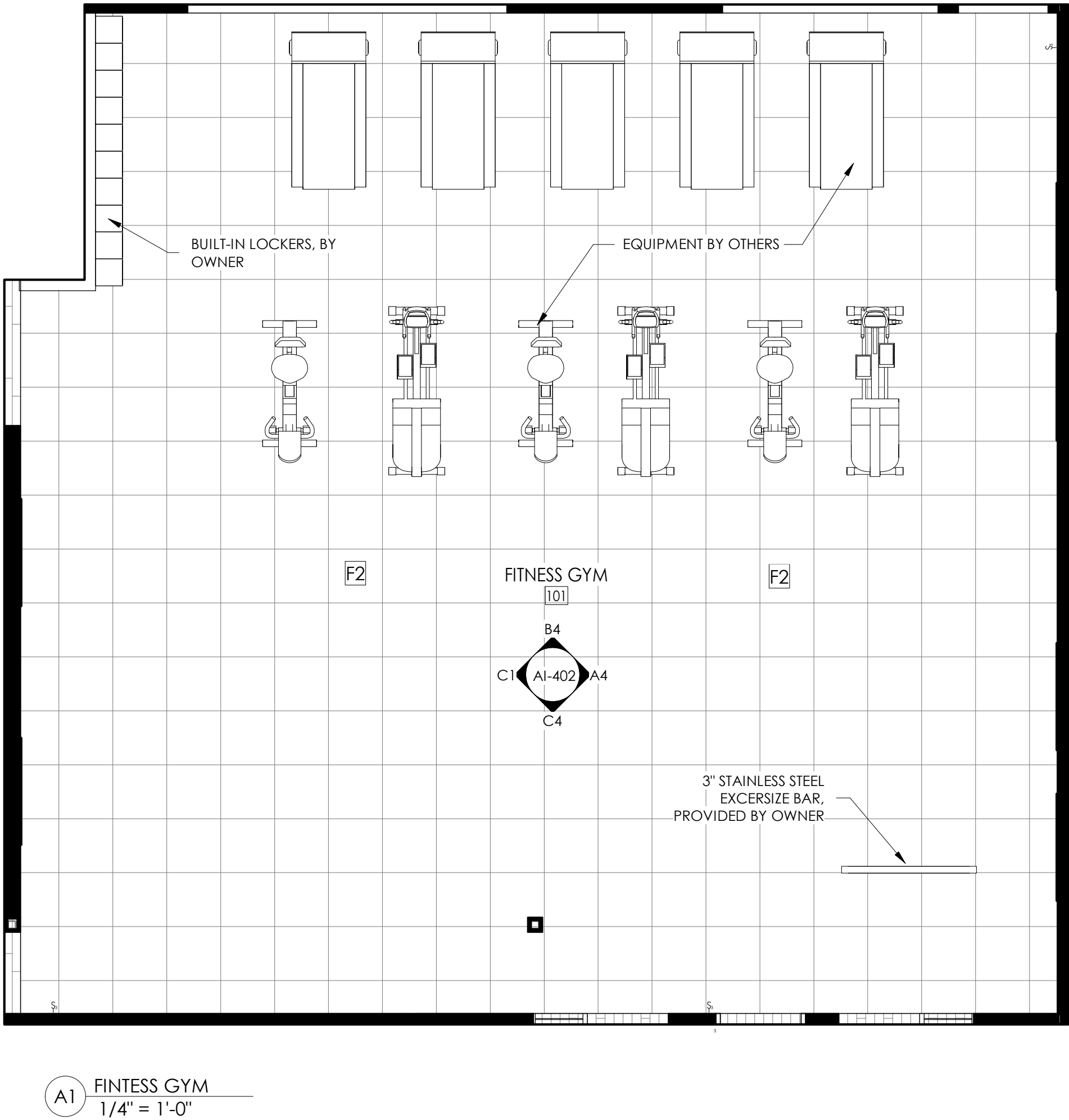
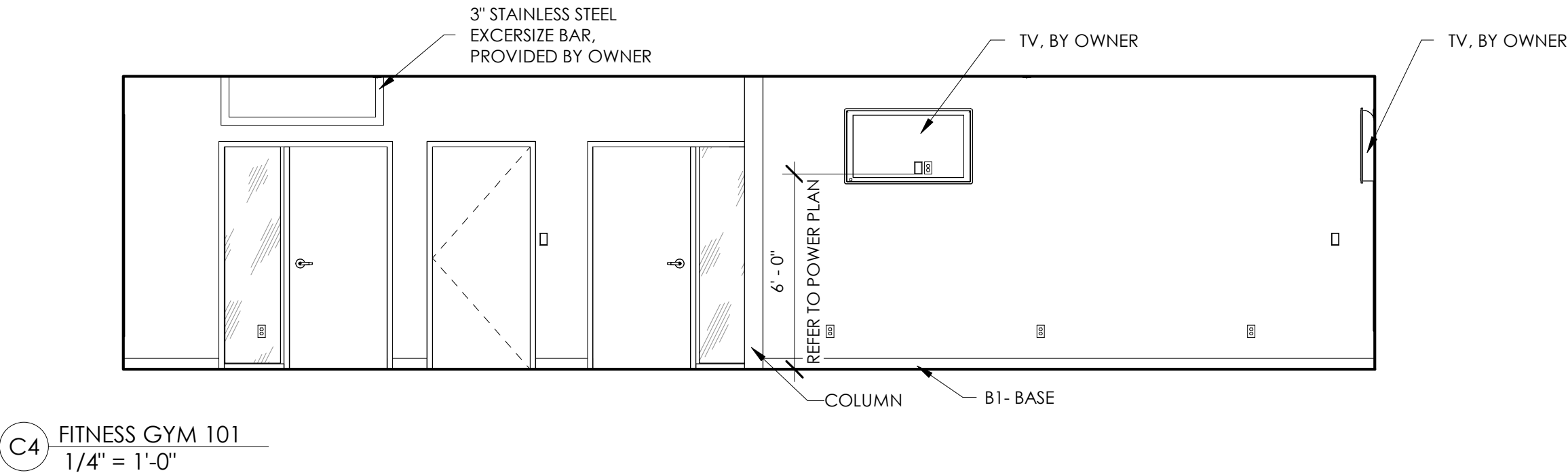
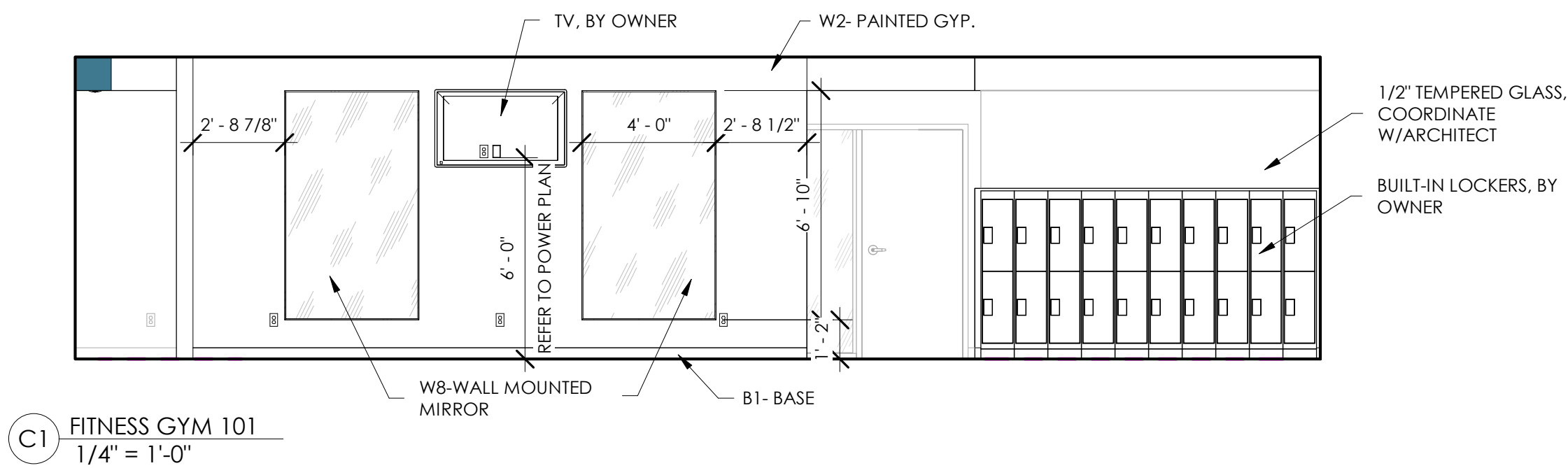


REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	FITNESS GYM ENLARGED PLAN/ELEVATIONS

SHEET:

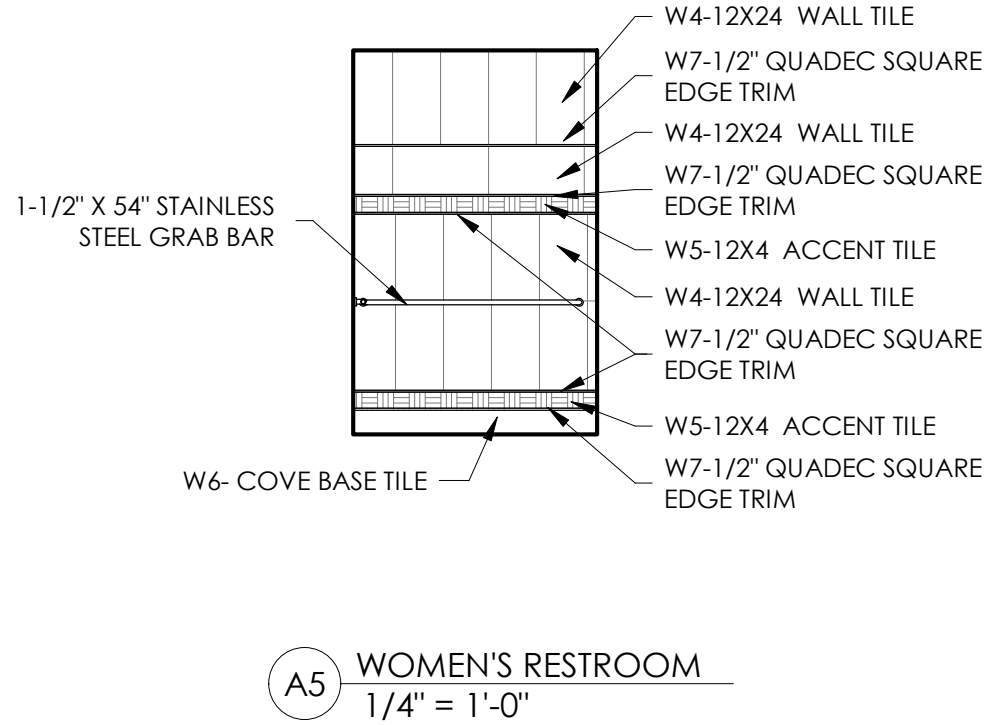
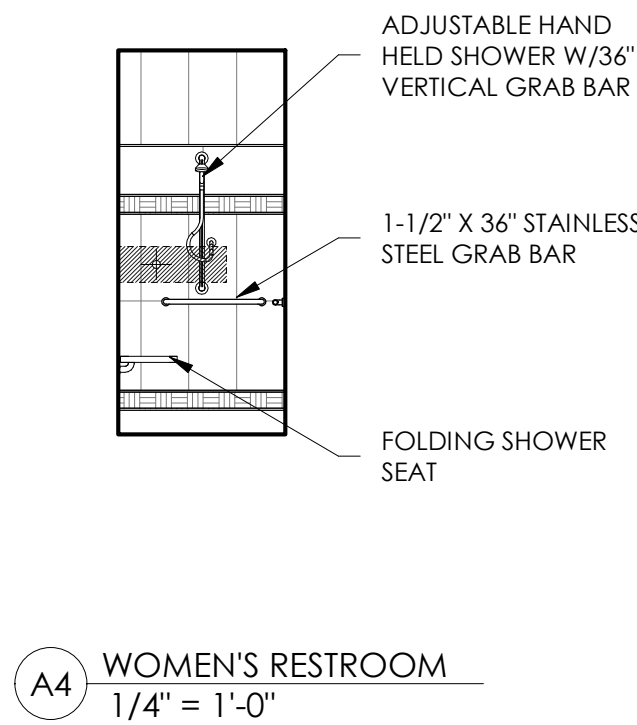
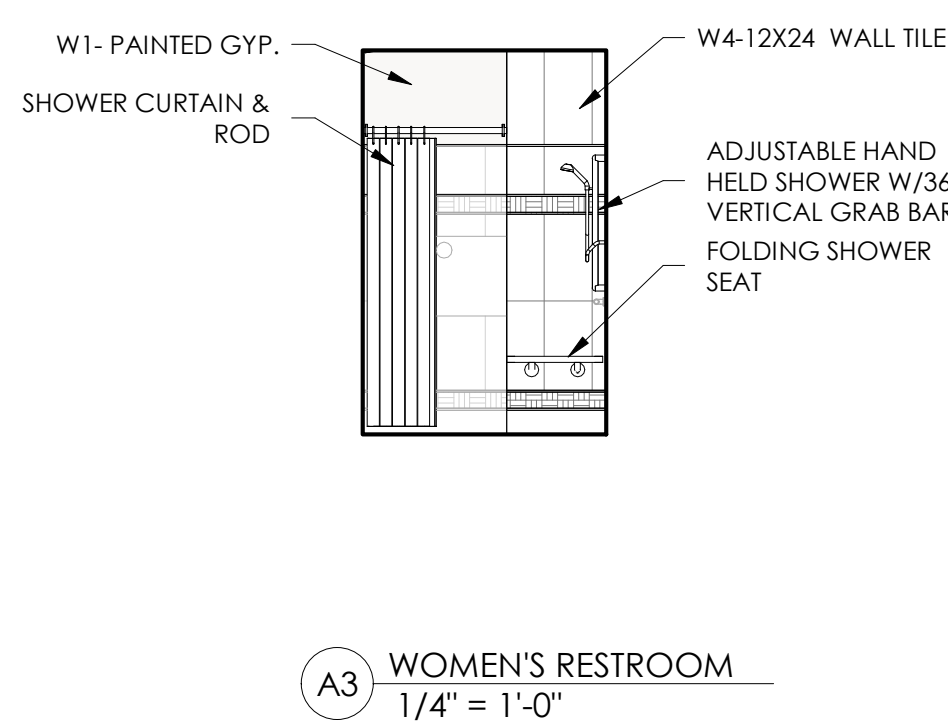
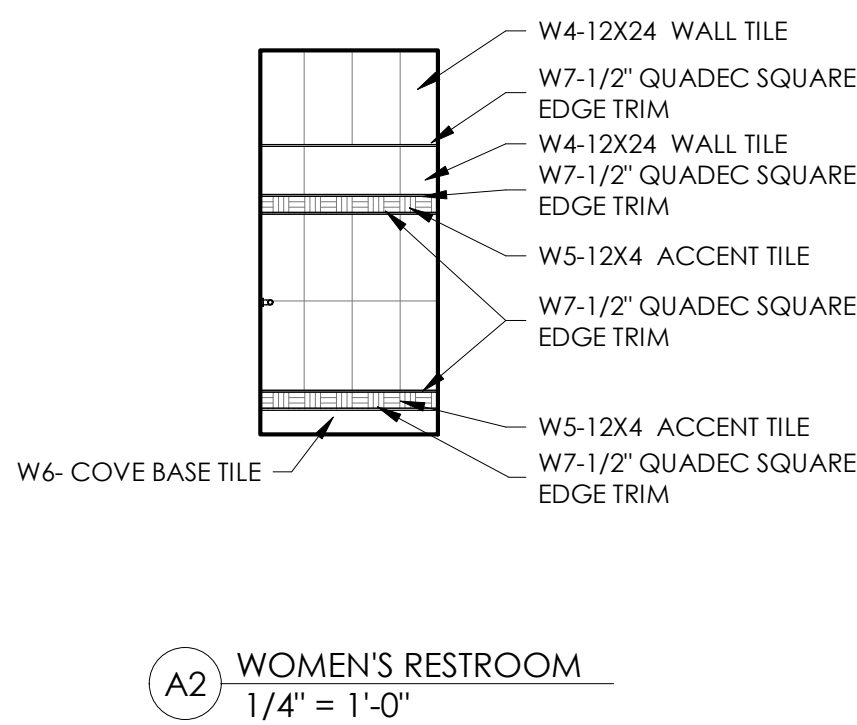
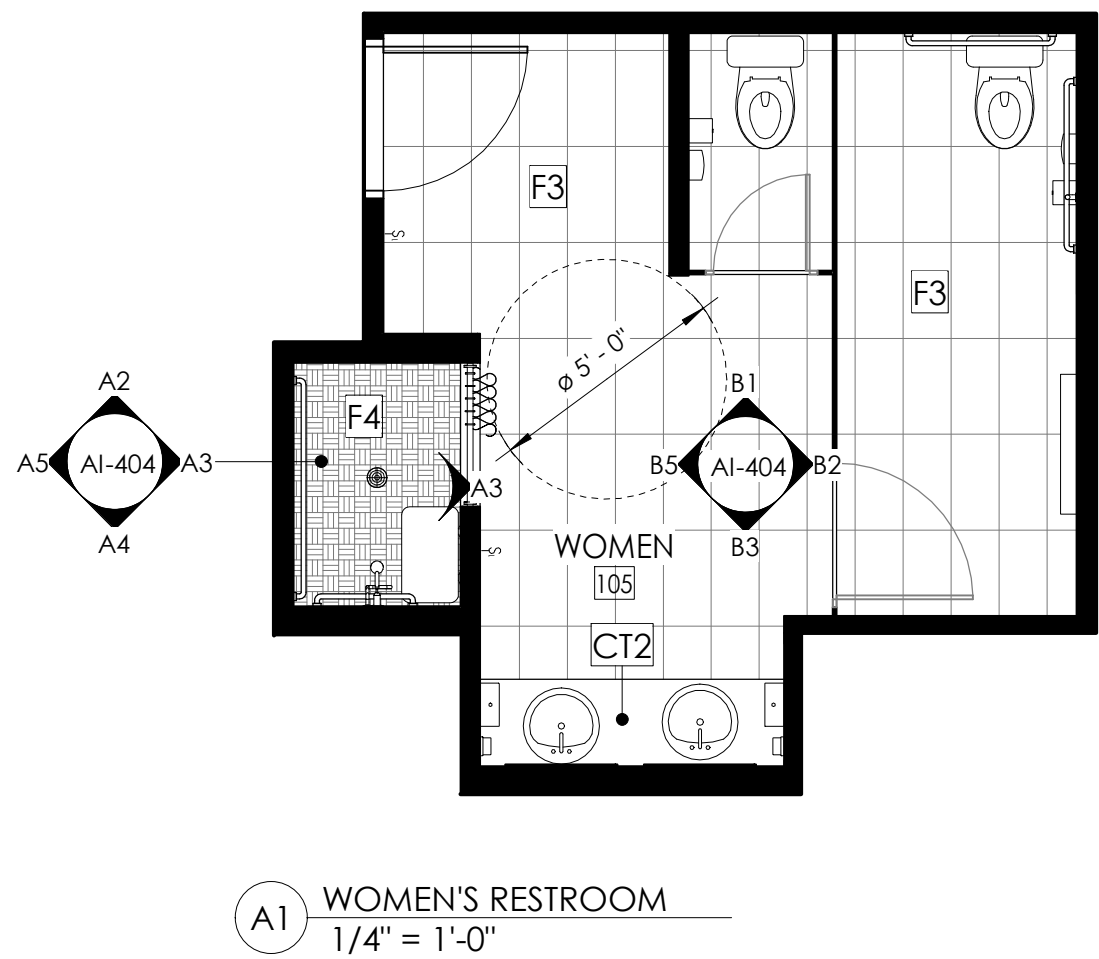
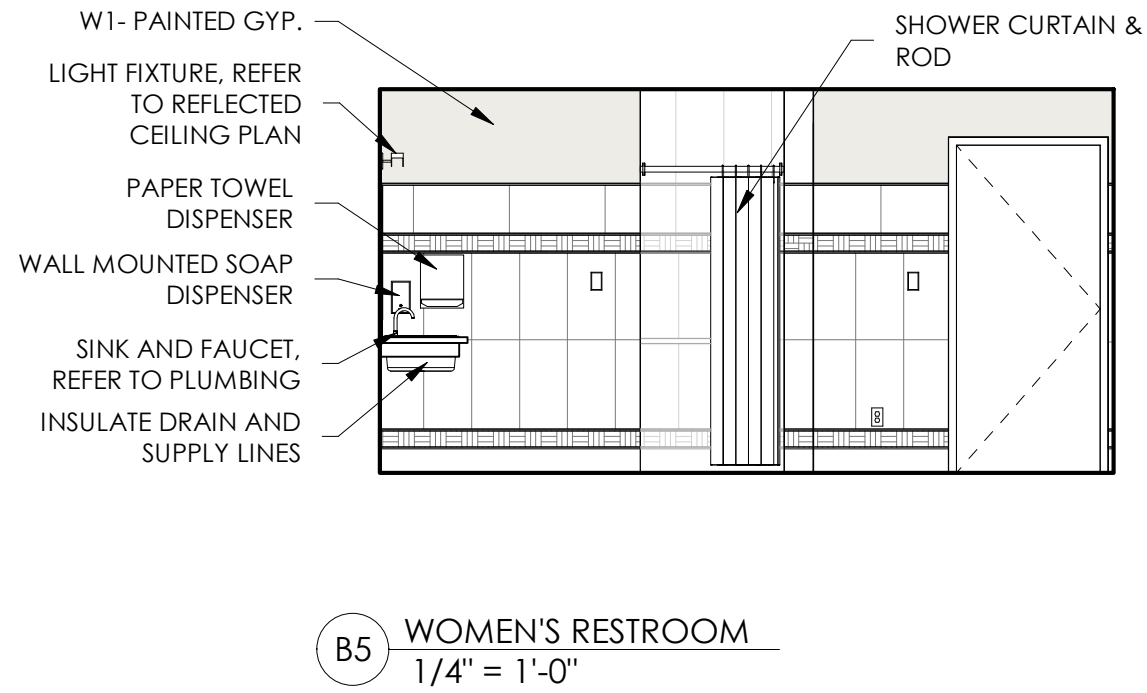
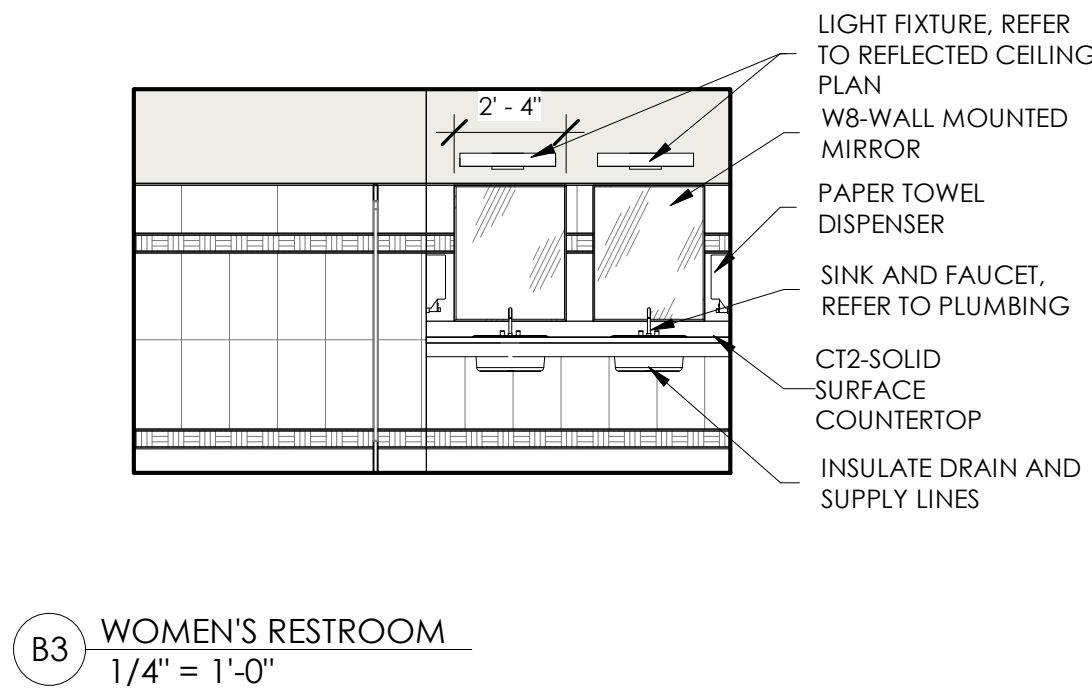
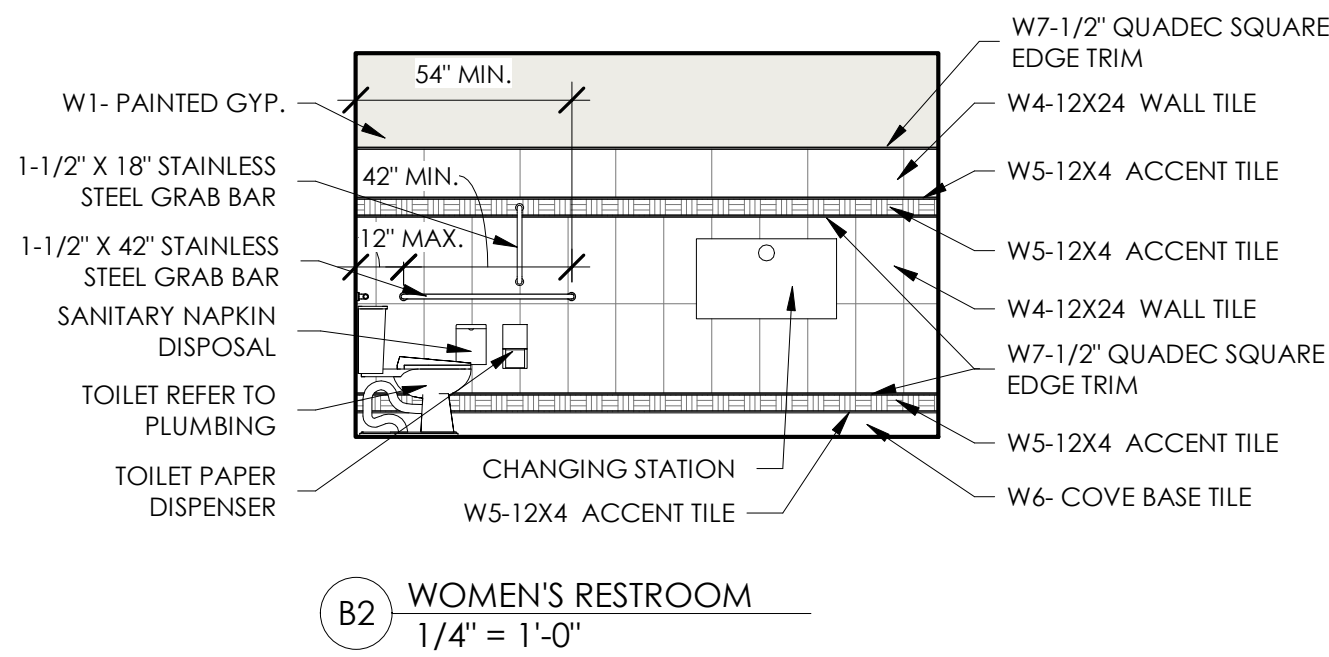
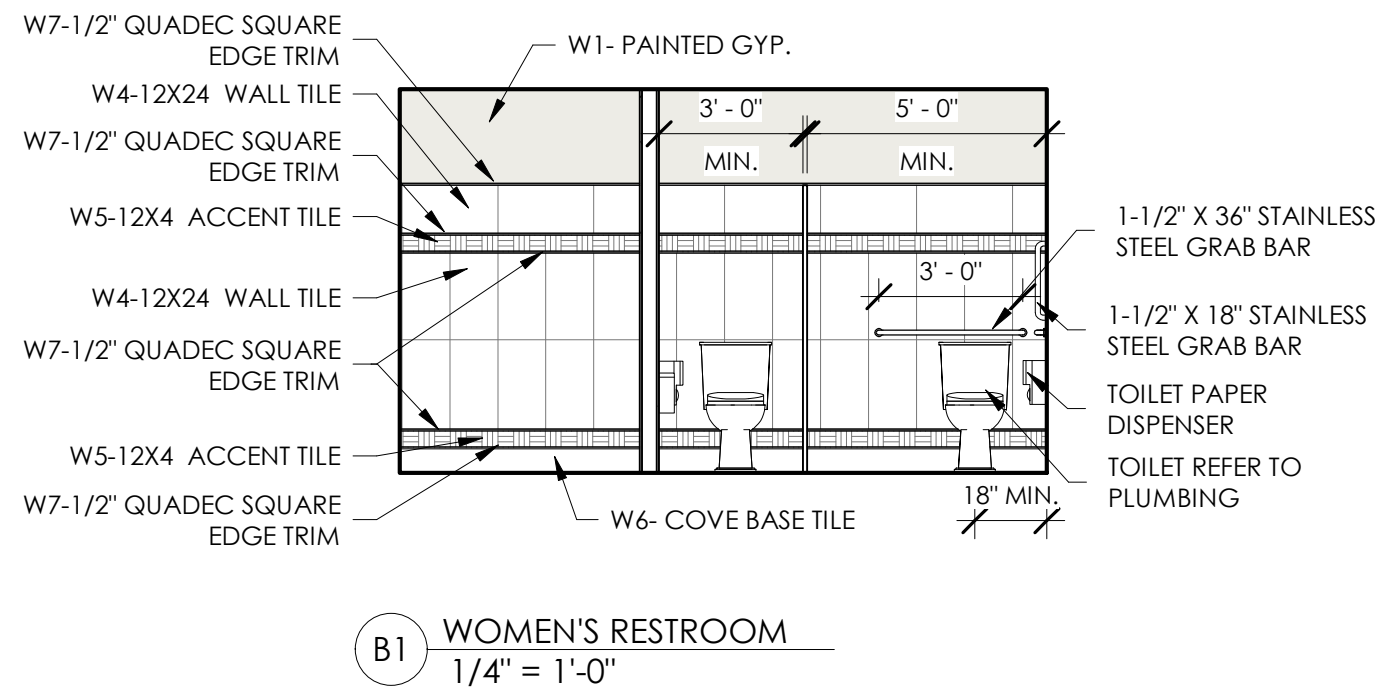
AI-402

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D
C
B
A

A



RESTROOM FINISH KEY					
MARK	DESCRIPTION	IMG	MANUFACTURER	SPECIFICATION	NOTES
CEILING					
C2	PAINTED GYP		SHERWIN WILLIAMS	SW7005 PURE WHITE	REFER TO REFLECTED CEILING PLAN
COUNTERTOP					
CT2	SOLID SURFACE COUNTERTOP		DUPONT	CORIAN, NEUTRAL CONCRETE	
FLOORING					
F3	FLOOR TILE		CROSSVILLE	NOTORIOUS FEMME FATAL NTR01 W/HON FINISH, SIZE: 12X24, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	
F4	SHOWER FLOOR TILE			CROSSVILLE NOTORIOUS FEMME FATALE NTR01 W/HON FINISH, SIZE: 12X12 MOSIAC, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	
WALL					
W1	PAINTED GYP.		SHERWIN WILLIAMS	SW7005 PURE WHITE	REFER TO PAINT PLAN
W4	WALL TILE		CROSSVILLE	NOTORIOUS FEMME FATAL NTR01 W/HON FINISH, SIZE: 12X24, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	REFER TO INTERIOR ELEVATIONS
W5	ACCENT TILE		CROSSVILLE	NOTORIOUS FILM NOIR NTR04 W/HON FINISH, SIZE: 12X12 MOSIAC, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	REFER TO INTERIOR ELEVATIONS
W6	WALL TILE		CROSSVILLE	NOTORIOUS FEMME FATALE NTR01 W/HON FINISH, SIZE: 6X12 COVE BASE, GROUT: MAPEI 01 ALABASTER GROUT WIDTH: 1/8"	REFER TO INTERIOR ELEVATIONS
W7	WALL TILE		CROSSVILLE	SCHLUTER QUADEC - EDGING PROFILE - FOR 1/2" THICK TILE - 8' 2-1/2" LENGTH - SATIN NICKEL ANODIZED ALUMINUM	REFER TO INTERIOR ELEVATIONS
W8	WALL MOUNTED MIRROR				SEE ELEVATIONS FOR LOCATIONS AND DIMENSIONS.

GENERAL NOTES

- A. ALL DIMENSIONS ARE TO ROUGH FRAMING UNLESS OTHERWISE NOTED (U.N.O.)
- B. VERIFY ALL FINISHES, FIXTURES AND EQUIPMENT WITH ARCHITECT.
- C. PROVIDE FIBER-CEMENT OR GLASS-MAT BOARD AT WET LOCATIONS. GREEN BOARD IS NOT PERMITTED.
- D. PROVIDE SOLID BLOCKING AS REQUIRED FOR CABINETS, FIXTURES EQUIPMENT AND ACCESSORIES AS REQUIRED BY EACH COMPONENT'S MANUFACTURER, INCLUDING OWNER'S ACCESSORIES AND EQUIPMENT.
- E. ALL INTERIOR WALLS TO BE 3-5/8" METAL STUDS U.O.N. WITH 5/8" GWB ON BOTH SIDES U.O.N.
- F. ALL INTERIOR DOORS TO BE INSTALLED 4" FROM WALLS U.O.N.
- G. CONTRACTOR TO COORDINATE PAINT COLOR AND LOCATIONS WITH OWNER AND ARCHITECT.
- H. REFER TO AG-003 FOR TYPICAL MOUNTING HEIGHTS.

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
VALVES, METERS, AND GAUGES	
	SHUT OFF VALVE
	GATE VALVE
	CHECK VALVE
	AUTO 2-WAY VALVE
	AUTO 3-WAY VALVE
	GLOBE VALVE
	BALL VALVE
	RELIEF VALVE
	CHAIN OPERATED GATE VALVE
	PRESSURE REDUCING VALVE
	BUTTERFLY VALVE
	SOLENOID VALVE
	ANGLE VALVE
	VENTURI
	BALANCING OR PLUG COCK
	FLOW SETTER
	EXPANSION VALVE (REFRIG.)
	GAS COCK
	MANUAL AIR VENT
	STRAINER
	GAUGE COCK
	FLEXIBLE CONNECTION
	PRESSURE GAUGE
	THERMOMETER
	VICTUALIC COUPLING
	REDUCER CONCENTRIC
	REDUCER ECCENTRIC
	REFRIGERANT SITE GLASS
	REFRIGERANT STRAINER
	REFRIGERANT FILTER DRIER
	90 DEG ELBOW UP
	90 DEG ELBOW DOWN
	90 DEG TEE UP
	90 DEG TEE DOWN
	UNION
	CAPPED PIPE
	ANCHOR
	FLOAT AND THERMOSTATIC TRAP
HVAC SYMBOLS	
	THERMOSTAT
	TEMPERATURE SENSOR
	HUMIDISTAT

SYMBOL LEGEND		
SYMBOL	DESCRIPTION	
DUCT WORK		
SINGLE LINE	DOUBLE LINE	DESCRIPTION
		RECTANGULAR SUPPLY DUCT UP
		RECTANGULAR SUPPLY DUCT DOWN
		RECTANGULAR RETURN DUCT UP
		RECTANGULAR RETURN DUCT DOWN
		RECTANGULAR EXHAUST DUCT UP
		RECTANGULAR EXHAUST DUCT DOWN
		ROUND DUCT UP
		ROUND DUCT DOWN
		ACCOUSTICALLY LINED RECTANGULAR DUCT
		90° RECTANGULAR ELBOW WITH TURNING VANES
		90° RADIUS ELBOW R=1.5
		DUCT SIZE OR SHAPE TRANSITION
		OPPOSED BLADE BALANCING DAMPER (O.B.D.) IN RECT DUCT
		BUTTERFLY BALANCING DAMPER IN ROUND DUCTS
		COMBINATION TEE
		SPLITTER DAMPER
		SQUARE OR RECTANGULAR CEILING DIFFUSER
		ROUND CEILING DIFFUSER
		SIDEWALL REGISTER SUPPLY OR RETURN
		ROUND FLEXIBLE DUCT
		RETURN GRILLE
		EXHAUST GRILLE
		FIRE SMOKE DAMPER
		FIRE DAMPER
		SMOKE DAMPER
		FLEXIBLE CONNECTION
		FLEXIBLE CONNECTION
		FLEXIBLE CONNECTION

PIPING LEGEND	
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.	
	HIGH PRESSURE STEAM
	MEDIUM PRESSURE STEAM
	LOW PRESSURE STEAM
	HIGH PRESSURE CONDENSATE RETURN
	MEDIUM PRESSURE CONDENSATE RETURN
	LOW PRESSURE CONDENSATE RETURN
	PUMP DISCHARGE
	TEMPERED WATER SUPPLY
	CHILLED WATER SUPPLY
	CHILLED WATER RETURN
	HEATING HOT WATER SUPPLY
	HEATING HOT WATER RETURN
	REFRIGERANT LIQUID
	REFRIGERANT SUPPLY
	CONDENSER WATER SUPPLY
	CONDENSER WATER RETURN
	DRAIN LINE
	HOT GAS BYPASS
	GLYCOL SUPPLY
	GLYCOL RETURN
	FUEL OIL SUPPLY
	FUEL OIL VENT

DEFINITIONS	
NOTE: ALL DEFINITIONS MAY NOT BE USED.	
INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.	
DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.	
APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.	
FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."	
INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."	
PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."	
INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.	

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
REFERENCE LINES AND SYMBOLS	
	DETAIL INDICATOR: # INDICATES DETAIL NUMBER, SHEET INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
	ELEVATION OR SECTION INDICATOR, EXTERIOR: # INDICATES ELEVATION OR SECTION NUMBER, SHEET INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
	ELEVATION OR SECTION INDICATOR, INTERIOR: # INDICATES ELEVATION OR SECTION NUMBER, SHEET INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
	SPACE NUMBER
	KEYNOTE INDICATOR
	REVISION INDICATOR
	EQUIPMENT INDICATOR
	PLUMBING FIXTURE INDICATOR
	DIFFUSER/GRILLE INDICATOR
	DIFFUSER/GRILLE INDICATOR
	BREAK, STRAIGHT
	BREAK, ROUND
	MATCHLINE INDICATOR
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE
	NEW CONNECTION TO EXISTING
	POINT OF DEMOLITION

ABBREVIATIONS	
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.	
(E)	EXISTING
(F)	FUTURE
AD	ACCESS DOOR
AIR COND	AIR CONDITION(-ING,-ED)
APD	AIR PRESSURE DROP
BD	BALANCING DAMPER
BHP	BRAKE HORSE POWER
BTU	BRITISH THERMAL UNIT
BTU/HOUR	BTU/HOUR
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
COND	CONDENS(-ER, -ING, -ATION)
CV	CONTROL VALVE
DB	DRY BULB TEMPERATURE
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRC
DP	DEPTH OR DEEP
EA	EXHAUST AIR
EER	ENERGY EFFICIENCY RATIO
EFF	EFFICIENCY
ELEC	ELECTRIC
ELEV	ELEVATION
ENTER	ENTERING
EVAP	EVAPORAT(-E, -ING, -ED, -OR)
EWT	ENTERING WATER TEMPERATURE
EXT	EXTERNAL
FC	FLEXIBLE CONNECT(-OR, -ION)
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FSD	FIRE SMOKE DAMPER
GE	GREASE EXHAUST
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	HEAD
HG	MERCURY
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HTG	HEATING
HZ	HERTZ (FREQUENCY)
ID	INSIDE DIAMETER
IN	INCH
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LG	LENGTH
LH	LATENT HEAT
LRA	LOCKED ROTOR AMPS
LVS	LEAVING
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MFR	MANUFACTUR(-ER, -ED)
NC	NORMALLY CLOSED
NO	NOISE CRITERIA
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
OZ	OUNCE
PD	PRESSURE DROP OR DIFFERENCE
PG	PROPYLENE GLYCOL
PH	PHASE
PPM	PARTS PER MILLION
PRESS	PRESSURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAUGE
R	THERMAL RESISTANCE
RA	RETURN AIR
RECIRC	RECIRCULATE
REFR	REFRIGERATION
REQD	REQUIRED
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SC	SHADING COEFFICIENT
SCFM	STANDARD CUBIC FEET PER MINUTE
SCW	SOFT COLD WATER
SF	SAFETY FACTOR
SH	SENSIBLE HEAT
SL	SEA LEVEL
SP	STATIC PRESSURE
SPEC(S)	SPECIFICATION(S)
SQ	SQUARE
STD	STANDARD
SW	SOIL, WASTE
TA(R)	TRANSFER AIR (RETURN)
TA(S)	TRANSFER AIR (SUPPLY)
TD	TEMP. DROP OR DIFF.
TEMP	TEMPERATURE
THERM	THERMAL
TOT	TOTAL
TSTAT	THERMOSTAT
V	VOLT
VENT	VENT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY TEMPERATURE
VEL	VELOCITY
VENT	VENT, VENTILATION
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
WB	WET BULB TEMP
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DROP
WT	WEIGHT
WTR	WATER

MECHANICAL GENERAL NOTES	
1	THE MECHANICAL DRAWINGS SHOW THE GENERAL DESIGN, ARRANGEMENT & EXTENT OF THE MECHANICAL SYSTEM. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THESE DRAWINGS DO NOT SHOW ALL OFFSETS, BENDS OR ELBOWS NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. CONTRACTOR SHALL MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE THE SYSTEM COMPLETE & OPERATIONAL IN ACCORDANCE WITH THE DESIGN INTENT.
	MAJOR DEVIATIONS SUCH AS CHANGES IN COMPONENT SIZES, WEIGHTS, QUANTITIES OR MATERIAL REQUIRE PRIOR APPROVAL BY THE DESIGN ENGINEER.
2	THE DRAWINGS & SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER & SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH THE ITEMS SHOWN ON ONE & NOT THE OTHER BEING FURNISHED & INSTALLED AS THOUGH SHOWN & CALLED OUT IN BOTH.
3	THE ENTIRE MECHANICAL INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY ADOPTED BUILDING CODES, MECHANICAL CODE, PLUMBING CODE, ELECTRICAL CODE, & ALL OTHER APPLICABLE CITY, COUNTY, STATE, & FEDERAL CODES & REGULATIONS IN EFFECT.
4	THE ENTIRE MECHANICAL INSTALLATION SHALL CONFORM TO ANY CODES, RULES, REGULATIONS & REQUIREMENTS OF THE BUILDING OWNER.
5	PRIOR TO FABRICATION & INSTALLATION OF ANY MECHANICAL COMPONENT THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL WORK WITH ALL OTHER BUILDING TRADES, INCLUDING BUILDING TRADES HIRED DIRECTLY BY THE OWNER. WHERE CONFLICTS MAY OCCUR, THEY SHALL BE RESOLVED PRIOR TO INSTALLATION.
6	THE SPACE ABOVE ALL CEILINGS IS LIMITED. CAREFUL COORDINATION IS REQUIRED WITH ALL TRADES BEFORE ANY PIPE, DUCT, OR EQUIPMENT IS ORDERED & OR INSTALLED. ANY CONFLICTS &/OR CHANGES FOUND DURING INSTALLATION THAT RESULTS FROM THE LACK OF COORDINATION BY THE CONTRACTORS DURING THE SHOP DRAWING PROCESS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
7	ALL MECHANICAL INFORMATION IS NOT SHOWN ON THE MECHANICAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENT.
8	THE CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW & USE, WHERE APPROPRIATE, ALL THE MECHANICAL DETAILS SHOWN ON THE DRAWINGS. DETAILS MAY OR MAY NOT BE CALLED OUT ON THE DRAWINGS WITH SYMBOLS OR KEYED NOTES. ANY CHANGES RESULTING FROM FAILURE TO INSTALL THE MECHANICAL SYSTEM WITHOUT USING THE INCLUDED DETAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9	THE STRUCTURE SHOWN ON ALL DETAILS MAY OR MAY NOT PERTAIN TO A PORTION OR ANY PORTION OF THE BUILDING. COORDINATE ALL MOUNTING REQUIREMENTS WITH ARCHITECTURAL & STRUCTURAL DRAWINGS.
10	ANY PART OF THE MECHANICAL INSTALLATION THAT FAILS, IS UNFIT, OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
11	SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING DIFFUSERS & GRILLES.
12	CONTRACTOR SHALL OPERATE THE SYSTEM & DEMONSTRATE ALL ASPECTS OF THE SYSTEM TO THE ENGINEER &/OR OWNER TO PROVE ALL SYSTEMS ARE OPERATIONAL.
13	DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A SET OF AS-BUILT REDLINED RECORD DRAINING AT THE PROJECT SITE. ALL CHANGES IN LAYOUT, ROUTING, EQUIPMENT, COMPONENTS, & ACCESSORIES SHALL BE RECORDED. THESE REDLINED DRAWINGS SHALL BE GIVEN TO THE ARCHITECT/ENGINEER AFTER THE FINAL INSPECTION IN ACCORDANCE WITH SPECIFICATIONS.

GENERAL EQUIPMENT NOTES	
1	ALL CAPACITIES ARE AT JOB SITE CONDITIONS & ARE MINIMUM CAPACITY.
2	ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED TO CONFORM WITH LOCAL SEISMIC REQUIREMENTS & THE REQUIREMENTS OF THESE CONSTRUCTION DOCUMENTS.
3	VERIFY ALL REQUIRED SERVICE CONNECTIONS, INCLUDING ELECTRICAL CHARACTERISTICS FOR ALL EQUIPMENT PRIOR TO ORDERING EQUIPMENT.
4	ALL EQUIPMENT SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURAL MEMBERS.
5	ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
6	ALL SIMILAR EQUIPMENT SHALL BE OF THE SAME MANUFACTURER.
7	AIR INLETS & OUTLETS SHALL BE OF THE SAME MANUFACTURER.
8	THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE HVAC EQUIPMENT CHECK-IN, SAFEKEEPING, & DAMAGE.

MECHANICAL SHEET INDEX	
M-001	MECHANICAL COVER SHEET
M-100	MECHANICAL DEMO PLAN
M-101	LEVEL 1 MECHANICAL PLAN
M-102	ROOF MECHANICAL PLAN
M-501	MECHANICAL DETAILS
M-601	MECHANICAL SCHEDULES

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

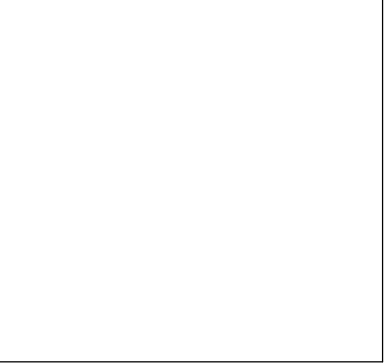
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ARCHITECTURE • PLANNING • INTERIORS

2726 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

MCKAY-DEE

4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403



REV.

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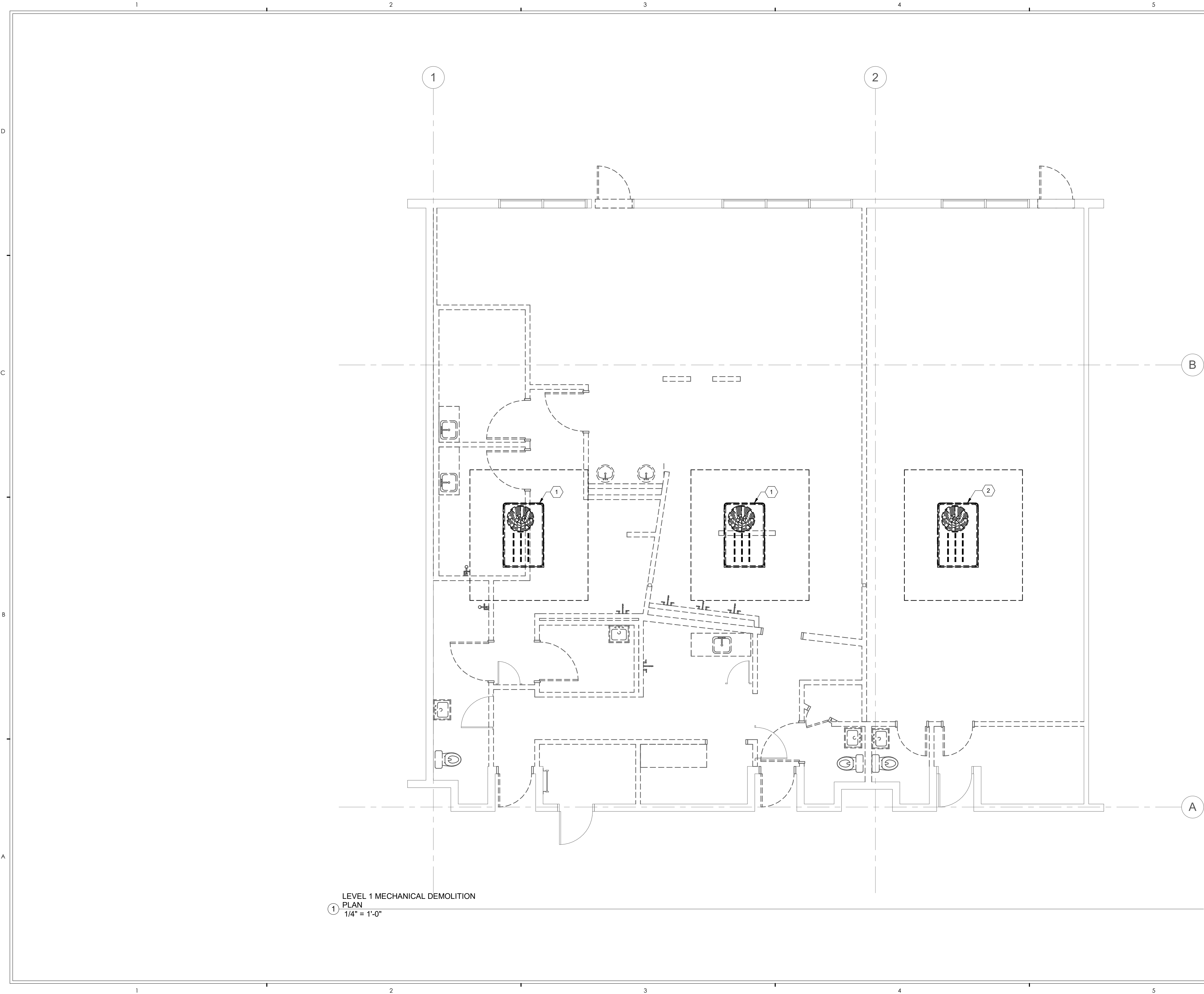
10/09/19

TITLE:

MECHANICAL COVER SHEET

SHEET:

M-001



GENERAL
SHEET NOTES

1. NOT ALL EXISTING CONDITIONS SHOWN. CONTRACTOR TO VERIFY ALL LOCATIONS OF DUCT, DIFFUSERS, ETC. IN FIELD AND REMOVE AS NECESSARY.

SHEET
KEYNOTES

- 1 REMOVE RTU AND ALL ASSOCIATED DUCT, DIFFUSERS, AND ACCESSORIES. REUSE CURB AND PENETRATIONS THROUGH ROOF FOR NEW RTU IF POSSIBLE.
- 2 REMOVE RTU AND ALL ASSOCIATED DUCT, DIFFUSERS, AND ACCESSORIES. PATCH ROOF PENETRATIONS.

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.



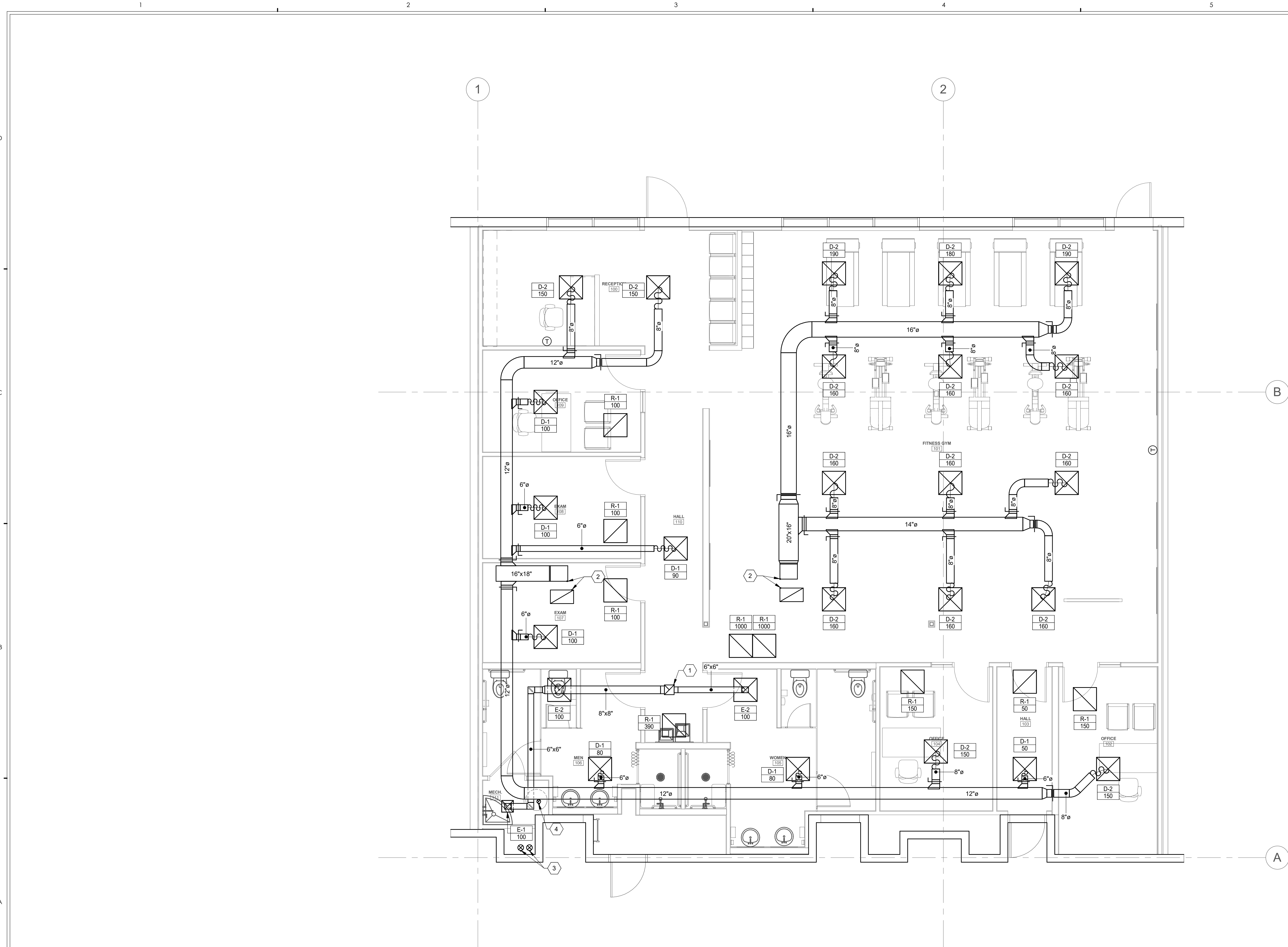
MCKAY-DEE
4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403



REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	MECHANICAL DEMO PLAN

SHEET:

M-100



① LEVEL 1 MECHANICAL PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND MAKE MINOR CHANGES TO LAYOUT AS NECESSARY TO AVOID CONFLICT.

SHEET KEYNOTES

- 10X10 EA DUCT UP TO FAN ON ROOF.
- SUPPLY AND RETURN DUCTS UP TO RTU ON ROOF. MAKE TRANSITIONS AS NECESSARY.
- 6" COMBUSTION AIR DUCTS FOR WATER HEATER. TERMINATE ONE WITHIN 12" OF CEILING AND THE OTHER 12" ABOVE FINISHED FLOOR.
- 4" WATER HEATER FLUE THROUGH ROOF.

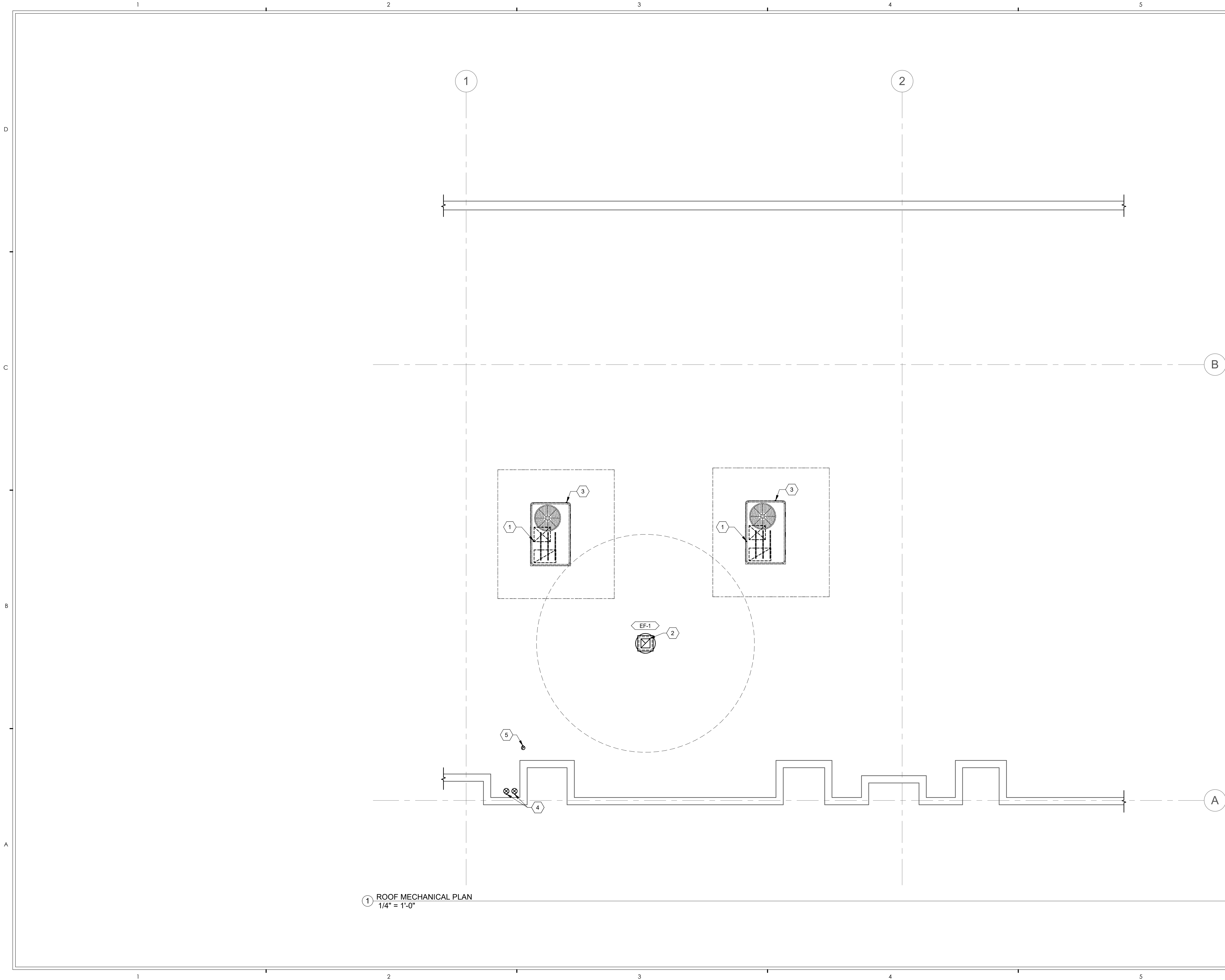
ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.



REV.	DATE
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PROJECT #	1918
DATE:	10/09/19
TITLE:	LEVEL 1 MECHANICAL PLAN

SHEET:



1 ROOF MECHANICAL PLAN
1/4" = 1'-0"

GENERAL
SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND MAKE MINOR ADJUSTMENTS TO LAYOUT AS NECESSARY TO AVOID CONFLICT.

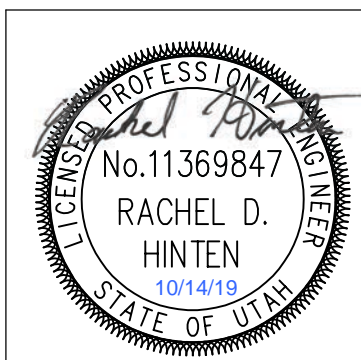
SHEET
KEYNOTES

- 1 SUPPLY AND RETURN DUCTS DOWN TO SPACE. REUSE EXISTING PENETRATIONS IF POSSIBLE.
- 2 10X10 EA DUCT DOWN TO SPACE.
- 3 CONNECT RTU TO EXISTING GAS LINES WHERE THEY EXIST IN FIELD.
- 4 6" COMBUSTION AIR DUCTS FOR WATER HEATER. TERMINATE WITH ROOF CAP.
- 5 4" WATER HEATER FLUE THROUGH ROOF. TERMINATE PER MANUFACTURER'S INSTRUCTION.

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.



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REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	ROOF MECHANICAL PLAN

SHEET:

M-102



ROOFTOP UNIT SCHEDULE

TRANE CARRIER DAIKIN		(1) ALL CAPACITIES ARE RATED AT SITE ELEVATION AND AMBIENT TEMPERATURE OF 117, AND EDB OF 98, EWB 63 (2) PROVIDE ECOBEE3 THERMOSTAT WITH REMOTE TEMPERATURE SENSOR (3) 100% ECONOMIZER WITH DRY BULB CONTROL WITH LOW LEAK DAMPERS AND FAULT DETECTION DIAGNOSTICS. (4) 100% MODULATING POWERED EXHAUST FOR UNITS OVER 4 TONS (5) FOR ALL UNITS OVER 7.5 TONS PROVIDE MODULATING SUPPLY FAN MOTOR AND TWO STAGE HEATING AND COOLING.				(6) SMOKE DETECTORS IN THE RETURN DUCT OF ALL UNITS OVER 2000 CFM. UNIT TO SHUTDOWN UPON SENSING SMOKE. (COORDINATE WITH AHJ PRIOR TO INSTALLATION TO CONFIRM IF NEEDED IN SUPPLY OR RETURN) - MANUFACTURER DEFAULTS TO RETURN) (7) PROVIDE WITH 14" SEISMICALLY CALCULATED SLOPED ROOF CURB WITH HOLD DOWN CLIPS. (8) PROVIDE WITH FACTORY MOUNTED CIRCUIT BREAKER SIZED IN ACCORDANCE WITH CURRENT NEC. (9) CONTRACTOR TO PROVIDE CONDENSATE DRAIN TRAP PER MANUFACTURER'S RECOMMENDATIONS.				(10) PROVIDE CONDENSER COIL HAIL GUARD GRILLE. (11) ACCEPTABLE MANUFACTURERS: TRANE, CARRIER, DAIKIN OR PRIOR APPROVED EQUAL. (12) PROVIDE WITH MERV 8 FILTERS. (13) PROVIDE CO2 SENSOR TO ALLOW OUTSIDE AIR DAMPER TO SHUT WHEN READINGS INDICATE ROOM IS UNOCCUPIED. (14) STAINLESS STEEL HEAT EXCHANGER FOR UNITS OVER 50% OUTSIDE AIR					
LABEL	TOTAL CFM	EXT. S.P. (WC)	O. A. CFM	COOLING CAPACITY (BTUH) TOTAL	HEATING CAPACITY (BTUH) INPUT OUTPUT		WEIGHT	MCA	VOLTAGE	PHASE	Hz	MOCP	MANUFACTURER	MODEL	REMARKS
RTU-1	2000	1.00	360	60000.0	130000.0	104000.0	841	32.2	208	3	60	45	TRANE	YSC060	ALL
RTU-2	1200	1.00	165	36000.0	100000.0	80000.0	614	23.3	208	3	60	30	TRANE	YSC036	ALL

REGISTER - GRILLE- DIFFUSER SCHEDULE

RUDEGGER TUTTLE & BAILEY TITUS PRICE			(1) REGISTERS AND GRILLES SHALL BE TESTED IN ACCORDANCE WITH ANSI/ASHRAE STD 70. (2) NC VALUES ARE BASED ON OCTAVE BAND SOUND POWER LEVELS MINUS A ROOM ABSORPTION OF 10 dB, RE 10(-12) WATTS. (3) COORDINATE EXACT COLOR SELECTION WITH OWNER AND ARCHITECT.									
LABEL	COUNT	TYPE	BLOW PATTERN	MAX AIR FLOW (CFM)	FACE SIZE	NECK SIZE	MAX NC	PRESSURE DROP (in-wg)	THROW	MANUFACTURER	MODEL	REMARKS
D-1	7	SQUARE PLAQUE	4 WAY	235	24x24	06	28	0.099	11	TITUS	OMNI	ALL
D-2	16	SQUARE PLAQUE	4 WAY	349	24x24	08	25	0.112	13	TITUS	OMNI	ALL
E-1	1	EXHAUST	-	700	12x12	-	30	0.130	-	TITUS	350RL	ALL
E-2	2	EXHAUST	-	2250	24x24	-	25	0.073	-	TITUS	350RL	ALL
R-1	9	EGGCRATE	-	3000	24x24	-	26	0.096	-	TITUS	50F	ALL

EXHAUST FAN SCHEDULE	
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100	100

PENN BARRY LOREN COOK TWIN CITY GREENHECK BROAN			(1) ALL ALUMINUM CONSTRUCTION (2) BACKDRAFT DAMPER (3) INTEGRAL THERMAL OVERLOAD PROTECTION (4) 14" ROOF CURB (5) DISCONNECT SWITCH					(6) CAPACITY AT JOB SITE ELEVATION (7) CEILING RADIATION DAMPER (8) CONTROLLED BY WALL SWITCH (9) INTERLOCK WITH LIGHTS					
LABEL	AREA SERVED	CFM	STATIC PRESSURE	FAN RPM	SOUND RATING	WEIGHT	HP	VOLTAGE	PHASE	Hz	MANUFACTURER	MODEL	REMARKS
EF-1	RESTROOMS	300	0.30 in-wg	1490	6.9	26	1/10	120	1	60	Greenheck	G-80-VG	(1)(2)(3)(4)(5)(6)(9)

DUCT INSULATION REQUIREMENTS

DUCT SYSTEM	DUCT LOCATION	INSULATION MATERIALS	RESISTANCE ("R")	FIELD APPLIED JACKET
SUPPLY AIR	BUILDING INTERIOR, CONCEALED	MINERAL-FIBER BLANKET	6.0	NONE
	BUILDING INTERIOR, EXPOSED, OUTSIDE CONDITIONED SPACE	MINERAL-FIBER BLANKET	6.0	NONE
	BUILDING EXTERIOR (OUTSIDE BUILDING INSULATION)	MINERAL-FIBER BLANKET	12.0	ALUMINUM
RETURN AIR	BUILDING INTERIOR, CONCEALED	MINERAL-FIBER BLANKET	6.0	NONE
	BUILDING INTERIOR, EXPOSED, OUTSIDE CONDITIONED SPACE	MINERAL-FIBER BLANKET	6.0	NONE
	BUILDING EXTERIOR (OUTSIDE BUILDING INSULATION)	MINERAL-FIBER BLANKET	12.0	ALUMINUM
EXHAUST AIR	ALL	NONE	—	—
OUTSIDE AIR	BUILDING INTERIOR, CONCEALED OR EXPOSED	MINERAL-FIBER BLANKET	6.0	NONE
FLEXIBLE DUCT	BUILDING INTERIOR	MINERAL-FIBER BLANKET POLYETHYLENE INNER AND OUTER JACKET	6.0	NONE

2. DUCT INSULATION SHALL BE MECHANICALLY FASTENED TO DUCTS WIDER THAN 24" AND SHALL BE AFFIXED TO BOTTOM OF DUCT WITH WELDED METAL PINS AND 2" WASHERS AT 18" MAXIMUM SPACING.

3. DUCT LINER, WHERE SHOWN ON DRAWINGS, SHALL BE A MINIMUM OF 1" THICK AND SHALL HAVE A MINIMUM "R" VALUE OF 3.8.

4. DUCT LINER SHALL NOT BE SUBSTITUTED FOR DUCT WRAFF UNLESS THE MINIMUM "R" VALUE OF THE DUCT LINER IS INCREASED TO 5.0.

5. DUCT LINER SHALL BE SHOWN ON DRAWINGS AS NET FREE AREA, WHERE DUCT LINER IS SHOWN, INCREASE THE MINIMUM DUCT SIZE TO ALLOW FOR THICKNESS OF DUCT LINER.

6. TOTAL LENGTH OF FLEXIBLE DUCT RUN SHALL NOT EXCEED 3'-0". EXTEND SHEET METAL DUCT OUT WITHIN 3'-0" OF THE AIR INLET OR AIR OUTLET DEVICE.

7. OFFSET OF FLEXIBLE DUCT SHALL NOT EXCEED ONE HALF OF THE DUCT DIAMETER.

8. DUCT CHANGES IN DIRECTION SHALL BE MADE WITH RIGID ELBOWS OR OTHER RIGID METAL FITTINGS.

9. INDOOR DUCT INSULATION AND RELATED MATERIALS SHALL HAVE A FLAME-SPREAD INDEX OF 25 OR LESS, AND SMOKE-DEVELOPED INDEX OF 50 OR LESS WHEN TESTED TO ASTM 84.

10. OUTDOOR DUCT INSULATION AND RELATED MATERIALS SHALL HAVE A FLAME-SPREAD INDEX OF 75 OR LESS, AND SMOKE-DEVELOPED INDEX OF 150 OR LESS WHEN TESTED TO ASTM 84.

11. ALL MATERIALS USED AS INSULATION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84, AND SHALL BE CLASSIFIED AS "SMOLDERING" OR "NON-SPREADING".

12. ALL MATERIALS USED AS INTERNAL INSULATION AND EXPOSED TO THE AIR STREAM IN DUCTS SHALL BE SHOWN TO BE DURABLE WHEN TESTED IN ACCORDANCE WITH UL 181.



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REV.	DATE

PROJECT #	191
DATE:	10/09/19
TITLE:	MECHANICAL SCHEDULES


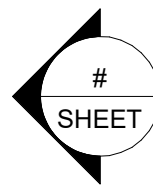



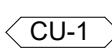







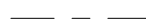

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


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MISC. SYMBOL LEGEND

SYMBOL	DESCRIPTION
	DETAIL INDICATOR: # INDICATES DETAIL NUMBER, SHEET INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
	ELEVATION OR SECTION INDICATOR, EXTERIOR: # INDICATES ELEVATION OR SECTION NUMBER, SHEET INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
	ROOM OR SPACE NUMBER.
	KEYNOTE INDICATOR.
	REVISION INDICATOR.
	EQUIPMENT INDICATOR.
	PLUMBING FIXTURE INDICATOR.
	DIFFUSER/GRILLE INDICATOR.
	DIFFUSER/GRILLE INDICATOR.
	BREAK, STRAIGHT
	BREAK, ROUND.
	MATCH LINE INDICATOR
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE.
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE.
	NEW CONNECTION POINT TO EXISTING

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
 C.B.	CATCH BASIN
M.H.	MANHOLE
 W.H.	WALL HYDRANT
 H.B.	HOSE BIBB
	CLEANOUT TO GRADE
	FLOOR CLEANOUT
	WALL CLEANOUT
	1/2 GRATE
	3/4 GRATE
	FULL GRATE

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN," "NOTED," "SCHEDULED," AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", "AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."







































PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

PLUMBING PIPING LEGEND

SYMBOL	DESCRIPTION
— — — — —	SANITARY SEWER (SS)
— — — — —	GREASE WASTE (GW)
— — — — —	VENT (V)
— — — — — AV — — — — —	ACID VENT
— — — — — AW — — — — —	ACID WASTE
— — — — —	DOMESTIC COLD WATER (DCW)
— — — — —	DOMESTIC HOT WATER (DHW)
— — — — —	DOMESTIC HOT WATER RECIRC (DHWR)
— — — — — 180 — — — — —	180°F HOT WATER
— — — — — 180R — — — — —	180° HOT WATER RETURN
— — — — — 160 — — — — —	160° HOT WATER
— — — — — 160R — — — — —	160° HOT WATER RETURN
— — — — — RW — — — — —	RAINWATER
— — — — — SRW — — — — —	SECONDARY RAINWATER
— — — — — SD — — — — —	STORM DRAIN
— — — — — VTR — — — — —	VENT THRU ROOF
— — — — — / — — — — —	NON POTABLE WATER
— — — — — (E) — — — — —	EXISTING PIPE
— — — — — (E) — — — — —	EXISTING PIPE TO BE REMOVED
— — — — — IW — — — — —	IRRIGATION WATER
— — — — — SS — — — — —	SANITARY SEWER
— — — — — LPS — — — — —	LOW PRESSURE STEAM
— — — — — CHWS — — — — —	CHILLED WATER SUPPLY
— — — — — CHWR — — — — —	CHILLED WATER RETURN
— — — — — HHWS — — — — —	HEATING HOT WATER SUPPLY
— — — — — HHWR — — — — —	HEATING HOT WATER RETURN
— — — — — CWS — — — — —	CONDENSER WATER SUPPLY
— — — — — CWR — — — — —	CONDENSER WATER RETURN
— — — — — GS — — — — —	GLYCOL SUPPLY
— — — — — GR — — — — —	GLYCOL RETURN
— — — — — G — — — — —	GAS
— — — — — FP — — — — —	FIRE PROTECTION
— — — — — LPG — — — — —	PROPANE
— — — — — VAC — — — — —	VACUUM
— — — — — CA — — — — —	COMPRESSED AIR
— — — — — MA — — — — —	MEDICAL AIR
— — — — — O — — — — —	OXYGEN
— — — — — NO — — — — —	NITROUS OXIDE
— — — — — N — — — — —	NITROGEN
— — — — — CO2 — — — — —	CARBON DIOXIDE
— — — — — EVAC — — — — —	EVACUATION

SYMBOL LEGEND

SYMBOL	DESCRIPTION
VALVES, METERS, AND GAUGES	
	SHUT OFF VALVE
	GATE VALVE
	CHECK VALVE
	AUTO 2-WAY VALVE
	AUTO 3-WAY VALVE
	GLOBE VALVE
	BALL VALVE
	RELIEF VALVE
	CHAIN OPERATED GATE VALVE
	PRESSURE REDUCING VALVE
	BUTTERFLY VALVE
	SOLENOID VALVE
	ANGLE VALVE
	VENTURI
	BALANCING OR PLUG COCK
	FLOW SETTER
	EXPANSION VALVE (REFRIG.)
	GAS COCK
	MANUAL AIR VENT
	STRAINER
	GAUGE COCK
	FLEXIBLE CONNECTION
	PRESSURE GAUGE
	THERMOMETER
	VICTUALIC COUPLING
	REDUCER CONCENTRIC
	REDUCER ECCENTRIC
	REFRIGERANT SITE GLASS
	REFRIGERANT STRAINER
	REFRIGERANT FILTER DRIER
	90 DEG ELBOW UP
	90 DEG ELBOW DOWN
	90 DEG TEE UP
	90 DEG TEE DOWN
	UNION
	CAPPED PIPE
	ANCHOR
	FLOAT AND THERMOSTATIC TRAP

PLUMBING SHEET INDEX

P-001	PLUMBING COVER SHEET
P-100	PLUMBING DEMOLITION PLAN
P-101	LEVEL 1 PLUMBING PLAN - DWV
P-102	LEVEL 1 PLUMBING PLAN - WATER
P-501	PLUMBING DETAILS
P-601	PLUMBING SCHEDULES

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

E	EXISTING
F	FUTURE
AD	ACCESS DOOR
AIR COND	AIR CONDITION(-ING,-ED)
APD	AIR PRESSURE DROP
BD	BALANCING DAMPER
BHP	BRAKE HORSE POWER
BTU	BRITISH THERMAL UNIT
BTU/H	BTU/HOUR
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
COND	CONDENS(-ER,-ING,-ATION)
CV	CONTROL VALVE
DB	DRY BULB TEMPERATURE
DCW	DROSTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHW/R	DOMESTIC HOT WATER RECIRC
DE	DEPTH OR DEEP
EA	EXHAUST AIR
EER	ENERGY EFFICIENCY RATIO
EFF	EFFICIENCY
ELEC	ELECTRIC
ELEV	ELEVATION
ENT	ENTERING
EVAP	EVAPORATE(-E,-ING,-ED,-OR)
EWT	ENTERING WATER TEMPERATURE
EXT	EXTERNAL
FC	FLEXIBLE CONNECT(-OR,-ION)
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FSD	FIRE SMOKE DAMPER
GE	GREASE EXHAUST
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	HEAD
HG	MERCURY
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HTG	HEATING
HZ	HERTZ (FREQUENCY)
ID	INSIDE DIAMETER
IN	INCH
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LG	LENGTH
LH	LATENT HEAT
LRA	LOCKED ROTOR AMPS
LVG	LEAVING
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MFR	MANUFACTUR(-ER,-ED)
NC	NORMALLY CLOSED
NC	NOISE CRITERIA
NO	NOT IN CONTRACT
NO	NORMALLY OPEN
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
OZ	OUNCE
PD	PRESSURE DROP OR DIFFERENCE
PG	PROPYLENE GLYCOL
PH	PHASE
PPM	PARTS PER MILLION
PRESS	PRESSURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PSIG	PSI GAUGE
R	THERMAL RESISTANCE
RA	RETURN AIR
RECIRC	RECIRCULATE
REFR	REFRIGERATION
REQD	REQUIRED
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SC	SHADING COEFFICIENT
SCFM	STANDARD CUBIC FEET PER MINUTE
SCW	SOFT COLD WATER
SF	SAFETY FACTOR
SH	SENSIBLE HEAT
SL	SEA LEVEL
SP	STATIC PRESSURE
SPEC(S)	SPECIFICATION(S)
SQ	SQUARE
STD	STANDARD
SW	SOIL, WASTE
TA(R)	TRANSFER AIR (RETURN)
TA(S)	TRANSFER AIR (SUPPLY)
TD	TEMP. DROP OR DIFF.
TEMP	TEMPERATURE
THERM	THERMAL
TOT	TOTAL
TSTAT	THERMOSTAT
V	VOLT
V	VENT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY TEMPERATURE
VEL	VELOCITY
VENT	VENTILATION
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
WB	WET BULB TEMP
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DROP
WT	WEIGHT
WTR	WATER

PLUMBING GENERAL NOTES

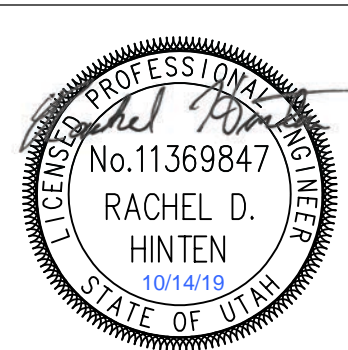
- 1 THE PLUMBING DRAWINGS SHOW THE GENERAL DESIGN, ARRANGEMENT AND EXTENT OF THE PLUMBING SYSTEM. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THESE DRAWINGS DO NOT SHOW ALL OFFSETS, BENDS OR ELBOWS NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. THE CONTRACTOR SHALL MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL IN ACCORDANCE WITH THE DESIGN INTENT. MAJOR DEVIATIONS SUCH AS CHANGES IN COMPONENT SIZES, WEIGHTS, QUANTITIES OR MATERIAL REQUIRE PRIOR APPROVAL BY THE DESIGN ENGINEER.
- 2 THE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH THE ITEMS SHOWN ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN BOTH.
- 3 THE ENTIRE PLUMBING INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY ADOPTED BUILDING CODES, MECHANICAL CODE, PLUMBING CODE, ELECTRICAL CODE, AND ALL OTHER APPLICABLE CITY, COUNTY, STATE, AND FEDERAL CODES AND REGULATIONS IN EFFECT.
- 4 THE ENTIRE PLUMBING INSTALLATION SHALL CONFORM TO ANY CODES, RULES, REGULATIONS AND REQUIREMENTS OF THE BUILDING OWNER.
- 5 PRIOR TO FABRICATION AND INSTALLATION OF ANY PLUMBING COMPONENT THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL PLUMBING WORK WITH ALL OTHER BUILDING TRADES. INCLUDING BUILDING TRADES HIRED DIRECTLY BY THE OWNER. WHERE CONFLICTS MAY OCCUR, THEY SHALL BE RESOLVED PRIOR TO INSTALLATION.
- 6 ALL PLUMBING INFORMATION IS NOT SHOWN ON THE PLUMBING DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS.
- 7 THE CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW AND USE, WHERE APPROPRIATE, ALL THE PLUMBING DETAILS SHOWN ON THE DRAWINGS. DETAILS MAY OR MAY NOT BE CALLED OUT ON THE DRAWINGS WITH SYMBOLS OR KEYED NOTES. ANY CHANGES RESULTING FROM FAILURE TO INSTALL THE PLUMBING SYSTEM WITHOUT USING THE INCLUDED DETAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 8 ANY PART OF THE PLUMBING INSTALLATION THAT FAILS, IS UNFIT, OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 9 PROVIDE PROPER PROVISIONS FOR EXPANSION, CONTRACTION, OR MOVEMENT OF ALL PIPING.
- 10 PROVIDE LARGE ENOUGH PIPE SLEEVES THROUGH WALL OR FLOOR TO ALLOW FOR ANTICIPATED DIFFERENTIAL MOVEMENT.
- 11 ALL PIPING SHALL BE SUPPORT WITH CLEVIS HANGERS (MSS TYPE 1). PERFORATED METAL STRAPS OR PLASTIC STRAPPING (MECHANICAL TAPE) SHALL NOT BE USED TO SUPPORT OR BRACE ANY PIPE.
- 12 PROVIDE PIPE HANGERS WITHIN 18-INCHES OF ALL CHANGES OF DIRECTION.
- 13 PROVIDE SWAY BRACING FOR ALL PIPING 4" AND LARGER AT ALL CHANGES IN DIRECTION GREATER THAN 45-DEGREES.
- 14 ALL STEEL CLEVIS HANGERS USED TO SUPPORT COPPER PIPING SHALL BE COPPER OR PLASTIC COATED.
- 15 COPPER PIPING SHALL NOT COME IN CONTACT WITH FIRE TREATED LUMBER. PROVIDE 1/2" THICK SLIP-ON CLOSED CELL INSULATION WHERE COPPER PIPING IS ADJACENT TO FIRE TREATED LUMBER. CLOSED CELL INSULATION SHALL EXTEND A MINIMUM OF 1'-1/2" PAST LUMBER.
- 16 ALL EXPOSED PIPING SHALL BE INSTALLED IN A NEATLY ARRANGED MANNER PARALLEL TO THE BUILDING STRUCTURE.
- 17 ALL EXPOSED DOMESTIC WATER PIPE IN OCCUPIED SPACES SHALL BE POLISHED CHROME PLATED.
- 18 ALL EXPOSED DRAINAGE PIPING IN OCCUPIED SPACES INCLUDING TRAPS UNDER SINKS SHALL BE POLISHED CHROME PLATED.
- 19 DRAWINGS SHOW GENERAL ARRANGEMENT OF THE DRAIN WASTE AND VENT SYSTEM WITH THE REQUIRED CLEANOUTS. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL CLEANOUTS AS REQUIRED BY THE PLUMBING CODE.
- 20 ALL SANITARY DRAINAGE SYSTEM PIPING 3" AND LARGER SHALL BE SLOPED IN DIRECTION OF FLOW AT A MINIMUM OF 1/8" PER FOOT.
- 21 ALL SANITARY DRAINAGE SYSTEM PIPING SMALLER THAN 3" SHALL BE SLOPED IN DIRECTION OF FLOW AT A MINIMUM OF 1/4" PER FOOT.
- 22 SLOPE VENT SYSTEM TOWARDS DRAINAGE SYSTEM.
- 23 SIMILAR EQUIPMENT SHALL BE OF THE SAME MANUFACTURER.
- 24 ALL EQUIPMENT SHALL PROVIDE THE SCHEDULED PERFORMANCE AT THE JOB SITE ELEVATION.
- 25 FIXTURE AND EQUIPMENT MODEL NUMBERS SHOWN IN PLUMBING FIXTURE SCHEDULE AND PLUMBING EQUIPMENT SCHEDULE ARE SHOWN TO ESTABLISH THE TYPE OF PRODUCT THAT SHALL BE USED. THE SELECTED PRODUCT SHALL MEET THE SCHEDULED PERFORMANCE AS SHOWN ON THE SCHEDULE EVEN IF A DIFFERENT MODEL IS SUPPLIED THAT IS DIFFERENT THAN THAT SCHEDULED.
- 26 ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE ALL NECESSARY FITTINGS, TRANSITIONS, VALVES AND OTHER DEVICES AND ACCESSORIES REQUIRED FOR A COMPLETE, WORKABLE INSTALLATION.
- 27 SEE "PLUMBING FIXTURE SCHEDULE" FOR INDIVIDUAL TRAPS, WASTE, VENT, AND DOMESTIC WATER PIPING FOR INDIVIDUAL FIXTURES.
- 28 ALL PLUMBING EQUIPMENT SHALL BE LISTED AND LABELED BY AN APPROVED TESTING AGENCY.
- 29 FIXTURES, EQUIPMENT AND PIPING INSTALLATION SHALL MEET NSF STANDARDS

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BERTOLDI
ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2726 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 EX. 801.476.4335

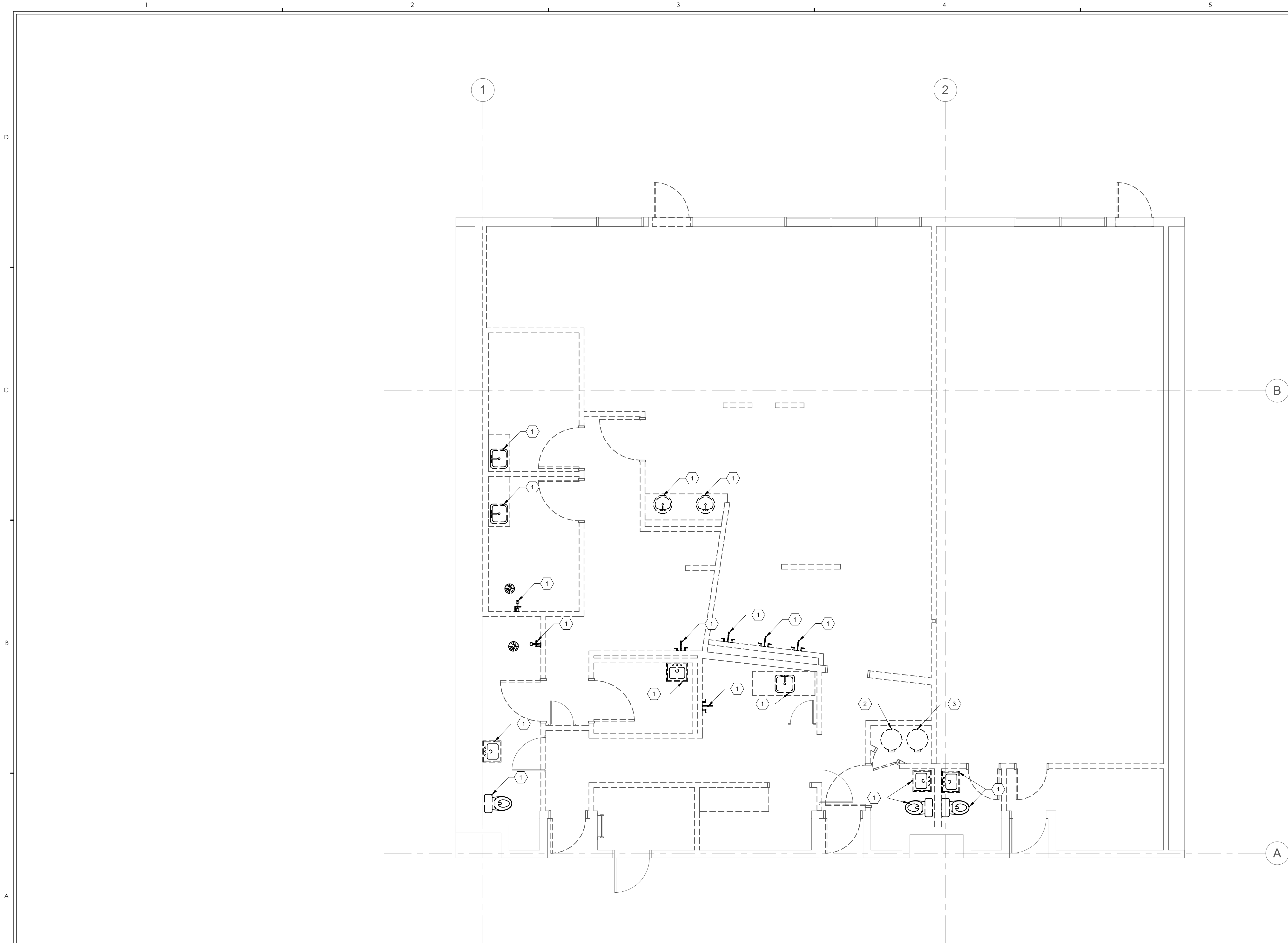
MCKAY-DEE
4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403



REV.	DATE
PROJECT # 1918	
DATE: 10/09/19	
TITLE:	
PLUMBING COVER SHEET	

SHEET:

P-001



① LEVEL 1 PLUMBING DEMOLITION PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

1. NOT ALL EXISTING CONDITIONS SHOW. CONTRACTOR TO VERIFY ALL LOCATIONS OF FIXTURES, PIPE, ACCESSORIES, ETC. IN FIELD AND REMOVE AS NECESSARY.

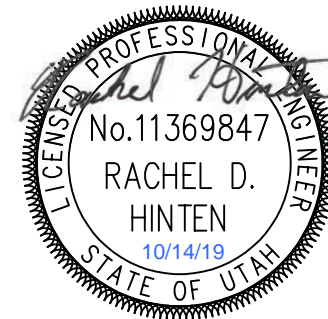
SHEET KEYNOTES

- 1 REMOVE EXISTING FIXTURE AND CAP PIPES AT NEAREST MAIN. CONTRACTOR TO VERIFY LOCATION.
- 2 MOVE EXISTING WATER HEATER TO NEW LOCATION.
- 3 REMOVE WATER HEATER AND ALL ACCESSORIES AND VENTS.

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

BERTOLDI
ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2726 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

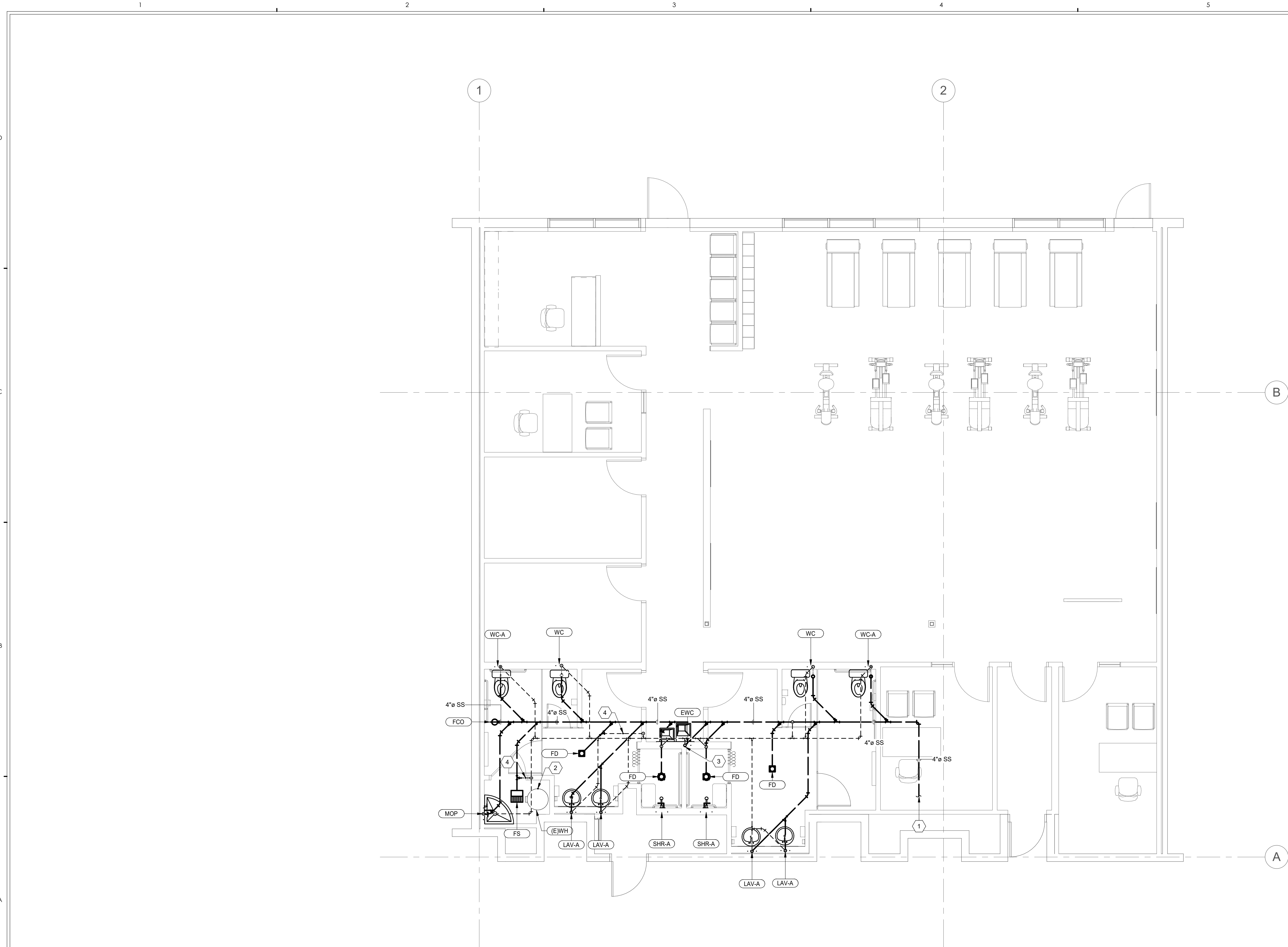
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REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	PLUMBING DEMOLITION PLAN

SHEET:

P-100



1 LEVEL 1 PLUMBING PLAN - DWV
1/4" = 1'-0"

GENERAL SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND MAKE MINOR ADJUSTMENTS AS NECESSARY TO AVOID CONFLICT.

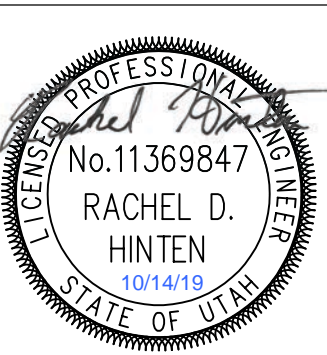
SHEET KEYNOTES

1. CONNECT SANITARY TO NEAREST MAIN WHERE IT EXISTS IN THE FIELD. CONTRACTOR TO VERIFY LOCATION.
2. EXISTING WATER HEATER MOVED TO NEW LOCATION. RECONNECT TO NEAREST GAS LINE WITH NEW PRESSURE REGULATOR.
3. 2" VENT THROUGH ROOF.
4. RUN VENT FROM FLOOR DRAIN UNDERGROUND TO NEAREST WALL THEN RISE TO JOIN VENT MAIN.

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

BERTOLDI
ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2725 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

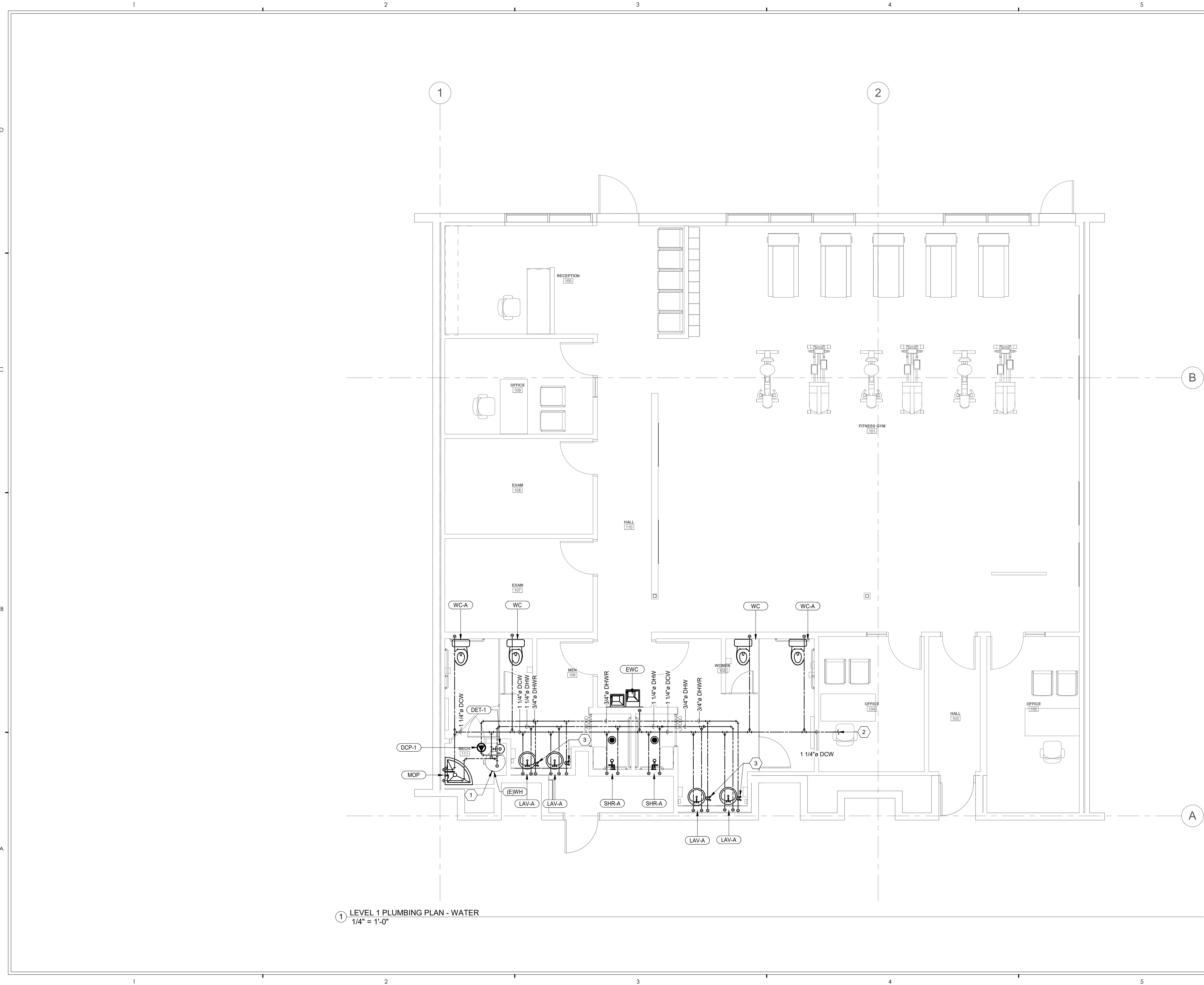
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REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	LEVEL 1 PLUMBING PLAN - DWV

SHEET:

P-101



1 LEVEL 1 PLUMBING PLAN - WATER
1/4" = 1'-0"

GENERAL SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND MAKE MINOR ADJUSTMENTS AS NECESSARY TO AVOID CONFLICT.

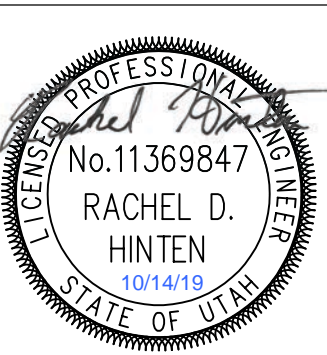
SHEET KEYNOTES

- EXISTING WATER HEATER MOVED TO NEW LOCATION. RECONNECT TO NEAREST GAS LINE WITH NEW PRESSURE REGULATOR.
- CONNECT DCW TO NEAREST MAIN WHERE IT EXISTS IN THE FIELD. CONTRACTOR TO VERIFY LOCATION.
- CIRCUIT SETTER TO BE BELL AND GOSSETT CB MODEL. BALANCE TO 0.5 GPM. INSTALL PER DETAIL 8 ON P-501.

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

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ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2725 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335
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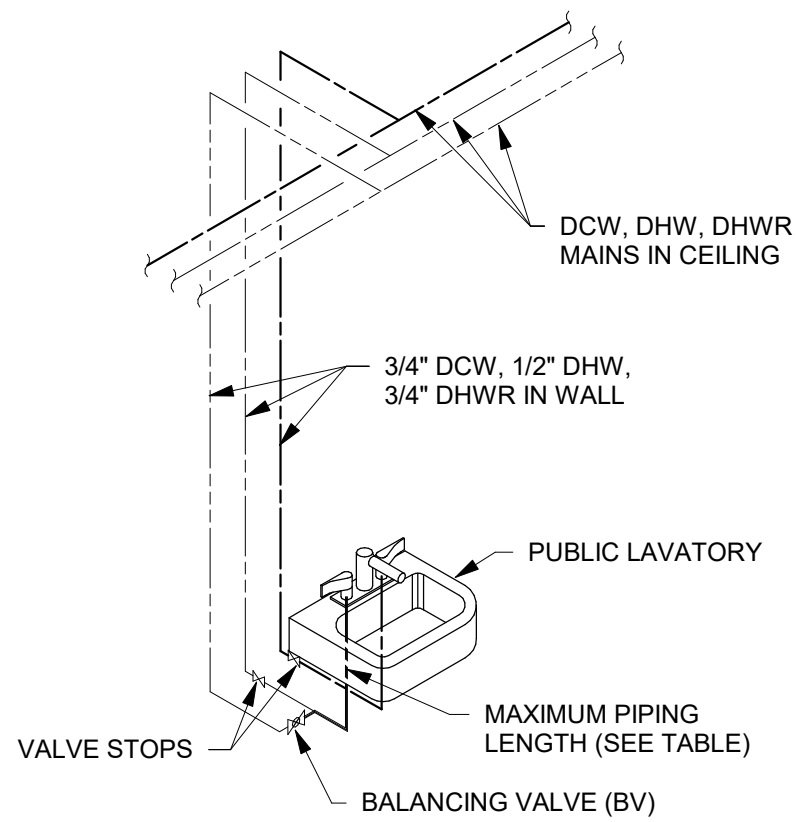
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REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	LEVEL 1 PLUMBING PLAN - WATER

SHEET:

P-102

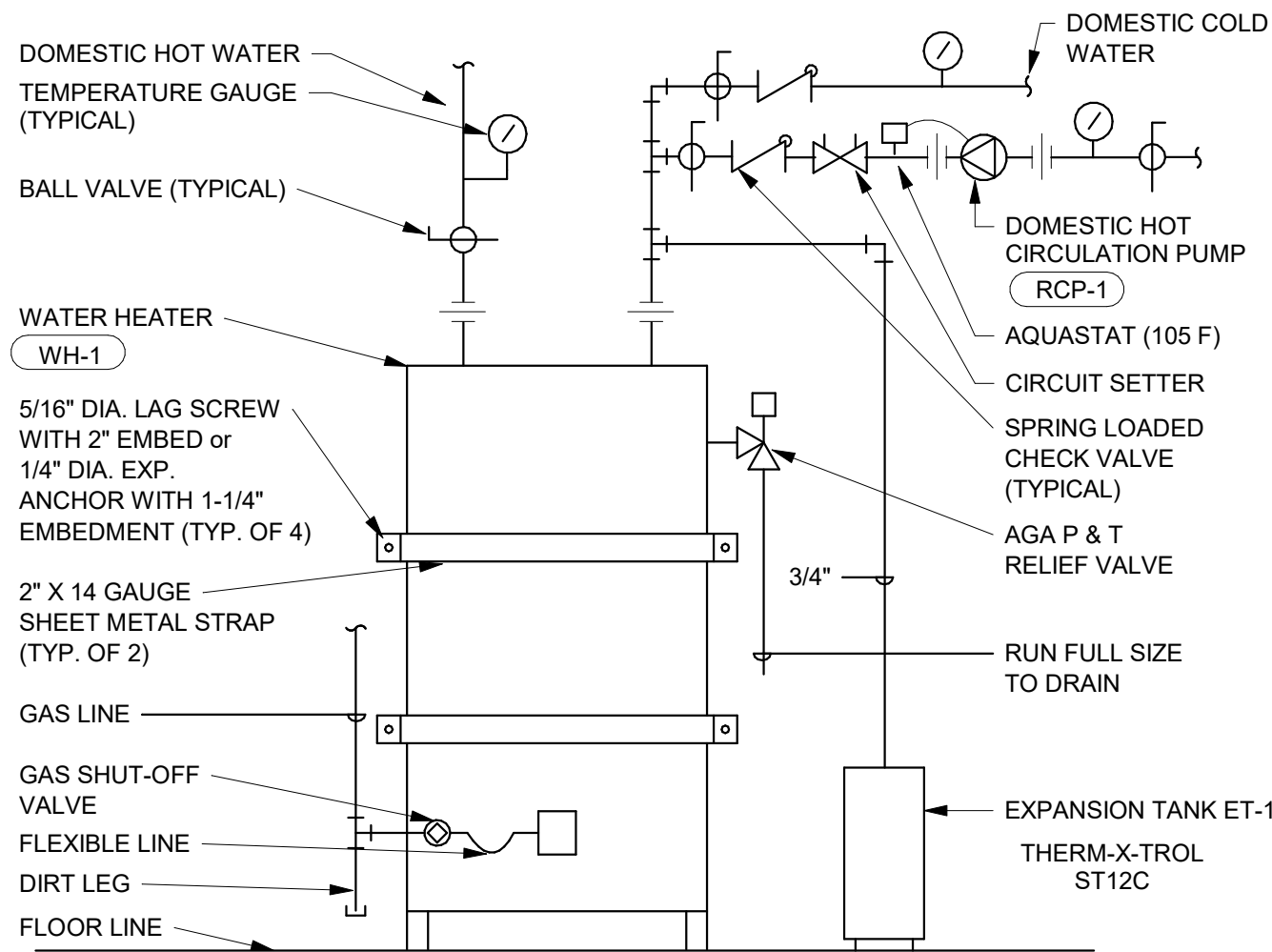


PIPING VOLUME AND MAXIMUM PIPING LENGTHS (IECC TABLE C404.5.1)			
NOMINAL PIPE SIZE (INCHES)	VOLUME (LIQUID OUNCES PER FOOT LENGTH)	MAXIMUM PIPING LENGTH (FEET)	
		PUBLIC LAVATORY FAUCETS	OTHER FIXTURES AND APPLIANCES
1/4	0.33	6	50
3/8	0.75	3	50
1/2	1.5	2	43
3/4	3	0.5	21
1	5	0.5	13
1 1/4	8	0.5	8
1 1/2	11	0.5	6
2 OR LARGER	18	0.5	4

BALANCING VALVE TO BE PROVIDED WITH TAMPER-PROOF ADJUSTMENT.
ALL EXPOSED VALVES AND PIPING TO BE INSULATED

8 PIPING VOLUME AND MAXIMUM PIPING LENGTHS

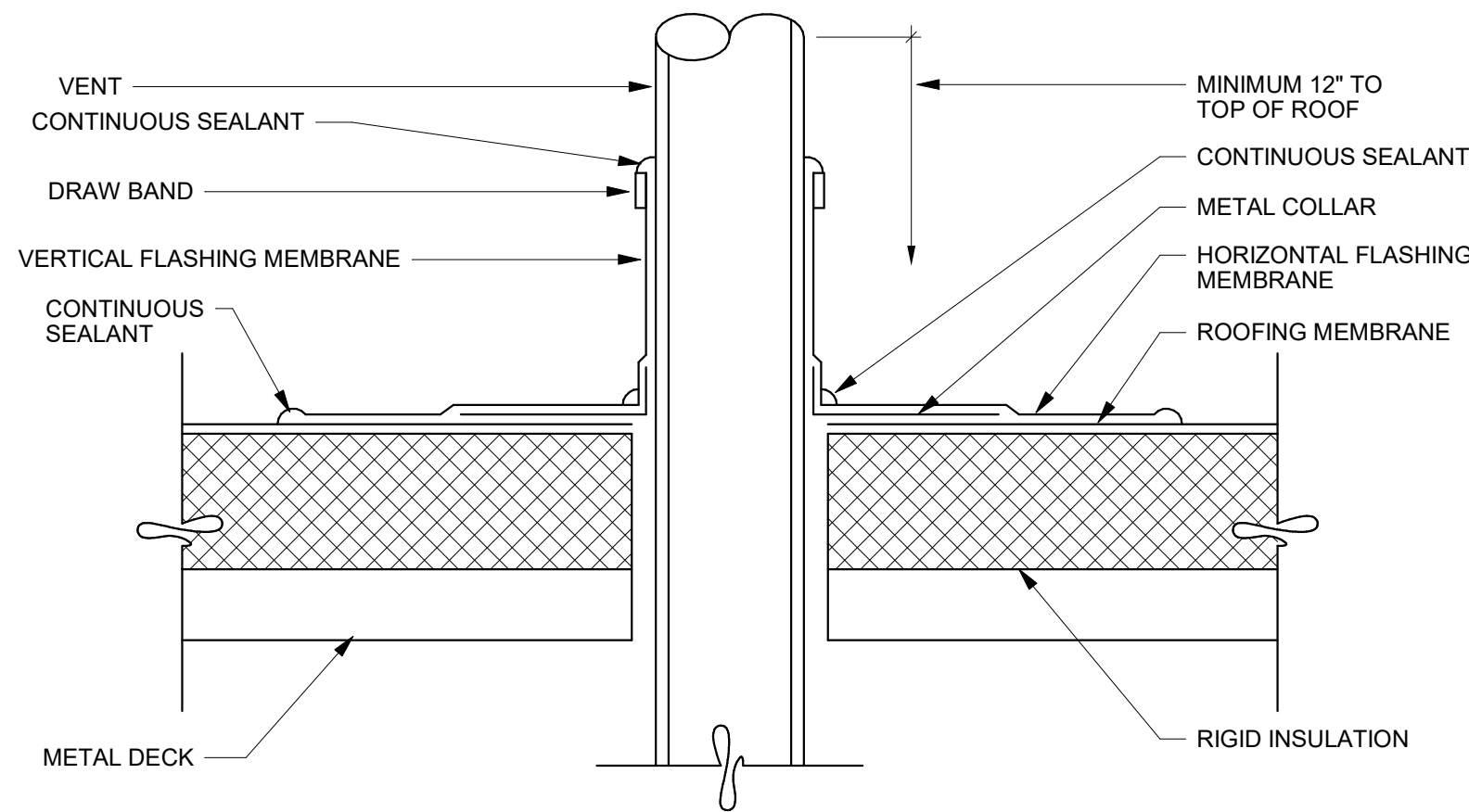
SCALE: NTS



NOTE: STORE WATER AT 140 F
NOTE: PROVIDE MIXING VALVES AT ALL HAND WASHING FIXTURES

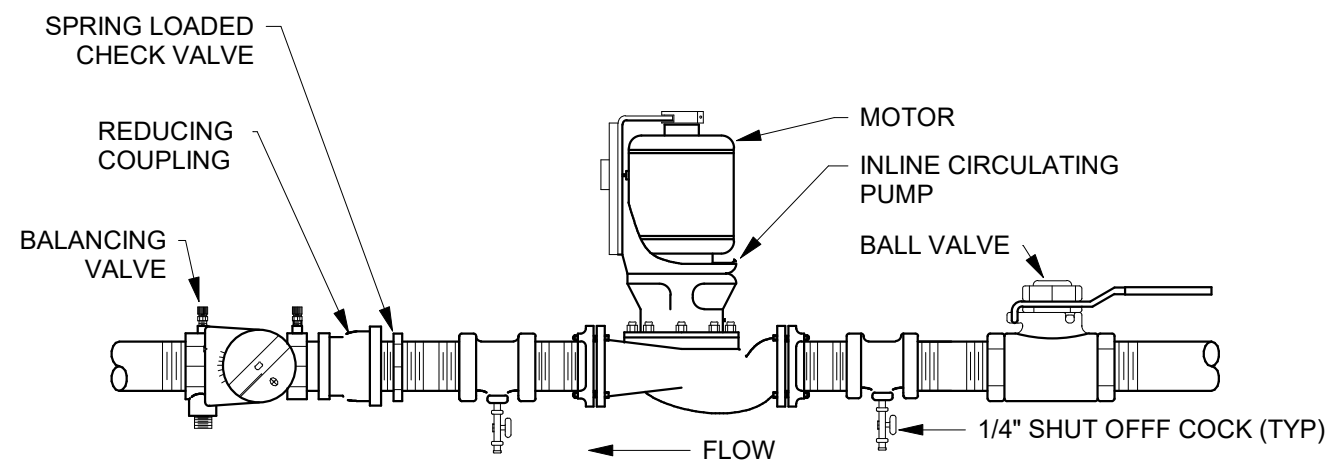
7 WATER HEATER w RECIRC

SCALE: NTS



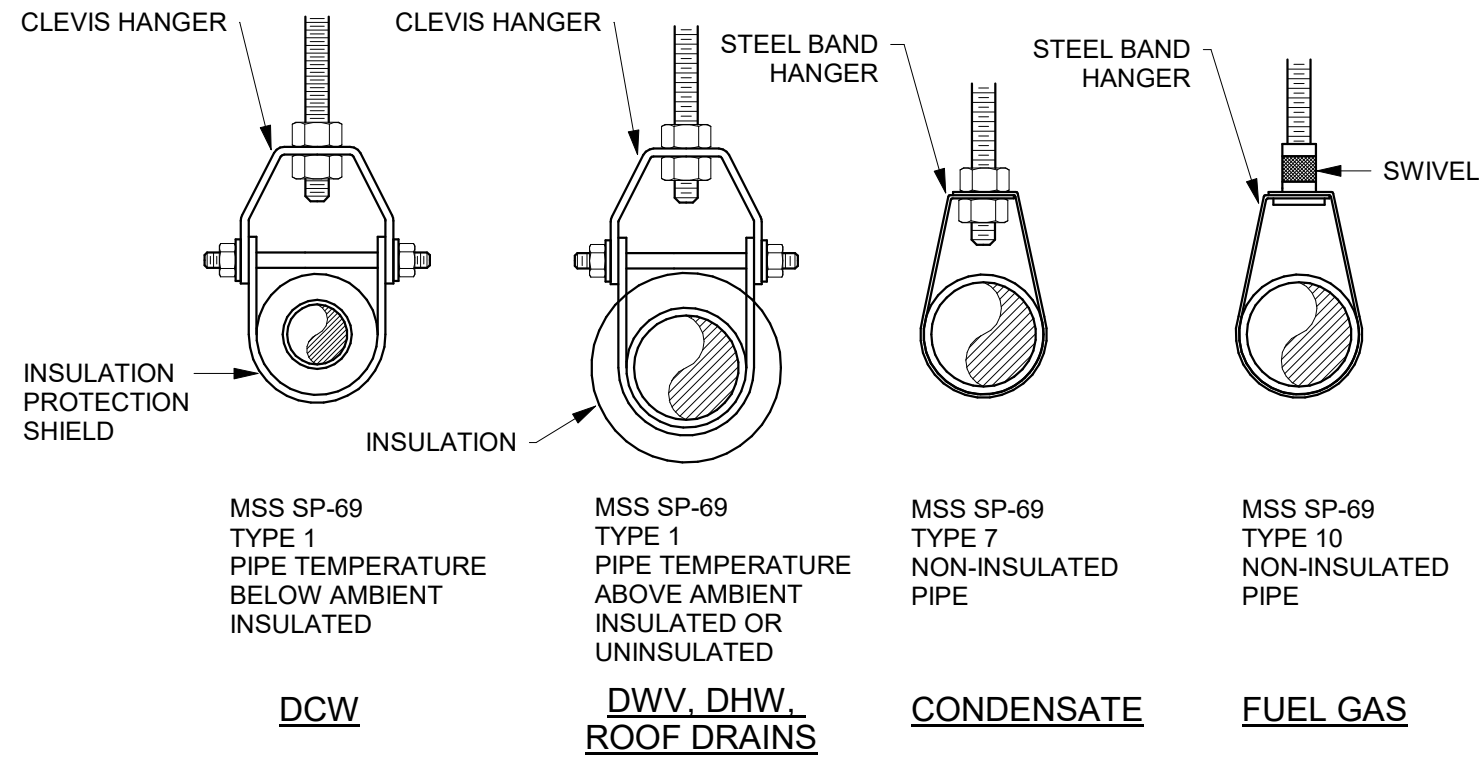
6 VENT THRU ROOF

SCALE: NTS



5 PIPE MOUNTED CIRCULATING PUMP

SCALE: NTS



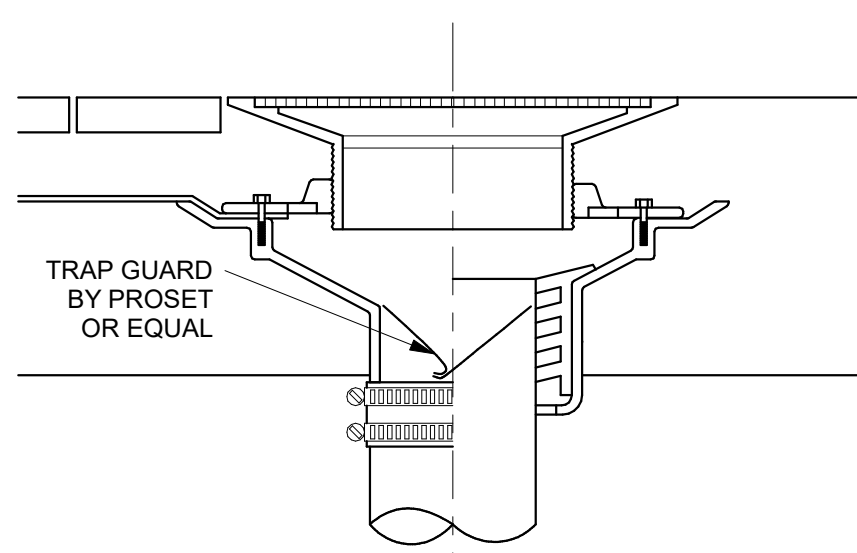
4 PIPE HANGERS x4

SCALE: NTS

MINIMUM CENTERLINE SPACING				
NOMINAL PIPE SIZE	DIM A	DIM B	DIM D	DIM E
1/2"-3/4"	5"	6"	3 1/2"	3"
1"-1 1/4"-1 1/2"	6"	8"	4"	4"
2"-2 1/2"	7"	10"	4 1/2"	5"
3"-3 1/2"	7 1/2"	11"	5"	6"
4"	8"	12"	5 1/2"	7"
5"	8 1/2"	13"	6"	8"
6"	9"	14"	6 1/2"	9"
8"	10"	16"	7 1/2"	11"

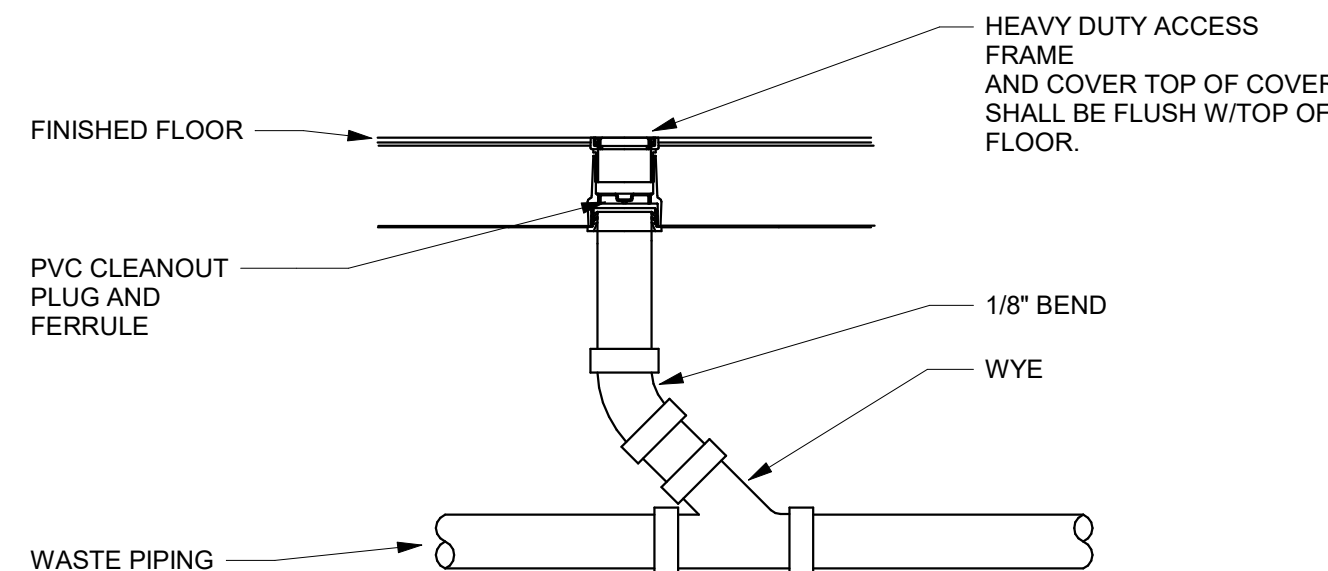
3 PIPE CLEARANCES

SCALE: NTS



2 FLOOR DRAIN

SCALE: NTS



1 FLOOR CLEANOUT

SCALE: NTS

VALVE SCHEDULE			
SERVICE	VALVE TYPE	PIPE SIZE	DESCRIPTION
DOMESTIC WATER SERVICE	BALL VALVE	2" & SMALLER	COPPER ALLOY, 2-PIECE, STANDARD PORT, CHROME PLATED BALL, TFE SEAT, LEVER HANDLE, 400 PSIG WOG, MSS SP-110, SOLDERED OR THREADED END
	CHECK VALVE	2" & SMALLER	BRONZE BODY, SPRING TYPE, TFE SEAT, BRONZE DISC, SOLDERED OR THREADED ENDS, MSS SP-80
	UNION	2" & SMALLER	ASTM B16.39, CLASS 150, MALLEABLE IRON, HEXAGONAL STOCK BODY, BRONZE-TO-BRONZE SEAT
NATURAL GAS	BALL VALVE	2" & SMALLER	COPPER ALLOY, 2-PIECE, STANDARD PORT, CHROME PLATED BALL, TFE SEAT, LEVER HANDLE, 400 PSIG WOG, MSS SP-110, AGA APPROVED, ASME B26.33, THREADED END
	UNION	2" & SMALLER	ASTM B16.39, CLASS 150, MALLEABLE IRON, HEXAGONAL STOCK BODY, BRONZE-TO-BRONZE SEAT

PLUMBING FIXTURE SCHEDULE										
REFERENCE TO PLUMBING SPECIFICATIONS FOR COMPLETE FIXTURE COMPONENTS										
LABEL	DESCRIPTION	WASTE	TRAP	VENT	CW	HW	MANUFACTURER	MODEL	REMARKS	
EWC	BI-LEVEL ELECTRIC WATER COOLER	1 1/2"	1 1/2"	1 1/2"	1/2"	0"	ELKAY	EZSTL8	ELECTRICAL DATA: 120/1, 4 FLA, 370 WATTS	
FCO	FLOOR CLEANOUT	0"	---	0"	0"	0"	ZURN	Z1400 SERIES	SIZE TO MATCH PIPE BEING SERVED	
FD	FLOOR DRAIN	2"	2"	2"	0"	0"	FIXTURE: ZURN TRAP SEAL: RECTORSEAL	FIXTURE: Z415-BZ1 TRAP SEAL: SURESEAL	TRAP SEAL TO MATCH FD SIZE	
FS	FLOOR SINK	3"	3"	2"	0"	0"	ZURN	Z1900-2	PROVIDE HALF GRATE	
LAV-A	COUNTERTOP LAVATORY (ACCESSIBLE)	1 1/4"	1 1/4"	1 1/2"	1/2"	1/2"	FIXTURE: KOHLER FAUCET: KOHLER INSULATION: TRUEBRO TMV: WEBSTONE	FIXTURE: K-2839-1 FAUCET: K-13461 INSULATION: LAV GAURD 2 TMV: H-77211W-TG	SET TMV AT 110 DEG. F.	
MOP	SERVICE SINK	3"	3"	2"	3/4"	3/4"	FIXTURE: MUSTEE FAUCET: KOHLER	FIXTURE: 63M FAUCET: K-8907	PROVIDE HOSE AND HOSE HOLDER, MOP HANGER, BUMPER AND WALL GUARDS	
SHR-A	SHOWER (ACCESSIBLE)	0"	"FD"	0"	1/2"	1/2"	KOHLER	K-10827-4	MOUNT FOR ADA REQUIREMENTS	
WC	FLOOR MOUNT TANK WATER CLOSET	3"	INT.	2"	3/4"	0"	FIXTURE: KOHLER SEAT: BEMIS	FIXTURE: K-3519 SEAT: 1955CTJ		
WC-A	FLOOR MOUNT TANK WATER CLOSET (ACCESSIBLE)	3"	INT.	2"	1"	0"	FIXTURE: KOHLER SEAT: BEMIS	FIXTURE: K-3519 SEAT: 1955CTJ		

DOMESTIC EXPANSION TANK SCHEDULE						
ACCEPTABLE MANUFACTURERS:				NOTES:		
WATTS DET AMTROL ST BEWLL & GOSSETT PT				(1) BUTYL DIAPHRAGM (2) RIDGE POLYPROPYLENE LINER		
SYMBOL	MANUFACTURER	MODEL	TANK VOLUME (GALLONS)	MINIMUM ACCEPTANCE VOLUME (GALLONS)	INITIAL FILL PRESSURE (PSIG)	COMMENTS
DET-1	AMTROL	ST-5	2	.45	50	ALL

DOMESTIC RECIRC PUMP SCHEDULE											
APPROVED EQUALS:				REMARKS:							
GRUNDFOS BELL & GOSSETT				(1) BASIS OF DESIGN - GRUNDFOS (2) ALL PARTS SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS (3) ALL CONTROLS PROVIDED BY MANUFACTURER AND INCLUSIVE TO PUMP							
LABEL	PUMP HEAD (FT)	PUMP GPM	FLA	kW	VOLT	PH	Hz	MANUFACTURER	MODEL	REMARKS	
DCP-1	5.00 psi	10 GPM	1 A	.125	120 V	1	60 Hz	BELL & GOSSETT	NBF-25	ALL	

ACCEPTABLE MANUFACTURERS:				NOTES:		
PIETRO FIORENTINI MAXITROL				(1) 2.0 PSIG INLET PRESSURE, 850 BTU PER C.F. (2) 4 OZ (7" W.C.) OUTLET PRESSURE (3) DIE CAST ALUMINUM BODY, NITRILE DIAPHRAGM (4) NPT THREADED INLET & OUTLET (5) BALL CHECK AUTOMATIC VENT LIMITING DEVICE		
SYMBOL	LOCATION	MANUFACTURER	MODEL NUMBER	REGULATOR SIZE (INCHES)	CAPACITY (CFH)	NOTES
GPR	INDOOR / OUTDOOR	PF REGULATOR	F30051	1/2	928	ALL
			F30052	3/4	1155	
			F30053	1	1501	
			F3013	1-1/4	7894	

SERVICE	PIPE MATERIAL	FITTINGS	JOINTS	NOTES
DOMESTIC WATER DISTRIBUTION	ASTM B88 TYPE "L" COPPER TUBING	ASTM B16.18 CAST COPPER-ALLOY SOLDER JOINT OR ASTM B16.22 WROUGHT COPPER SOLDER JOINT	ASTM B32 LEAD FREE SOLDER	FITTING AND JOINING METHOD APPROVED BY PIPE MANUFACTURER PROVIDE A 2-FT x 3-FT THERMAL EXPANSION LOOP FOR EVERY 60 FT OF LINEAR HOT WATER PIPE SECTION
	ASTM F876 AND/OR F877 CROSS-LINKED POLYETHYLENE (PEX) SDR 9	ASTM F877 LEAD FREE BRASS INSERT OR ASTM F 1960 ENG. PLASTIC INSERT	ASTM F877 COPPER CRIMP RING OR ASTM F 1960 COLD EXPANSION	
DRAIN WASTE AND VENT (BELOW GRADE)	ASTM F 891 SCHEDULE 40 CELLULAR CORE PVC	ASTM AD 2665 DRAINAGE PATTERN	ASTM D 2564 SOLVENT CEMENT	
DRAIN WASTE AND VENT (ABOVE GRADE)	ASTM F 891 SCHEDULE 40 CELLULAR CORE PVC	ASTM AD 2665 DRAINAGE PATTERN	ASTM D 2564 SOLVENT CEMENT	
NATURAL GAS	ASTM A53 SCHEDULE 40 BLACK STEEL	ASTM B16.3 CLASS 150 MALLEABLE IRON OR ASTM B16.9 BUTT WELDED STEEL	THREADED TEFLON TAPE	
CONDENSATE DRAIN	ASTM D 1785 SCHEDULE 40 POLYVINYL CHLORIDE (PVC)	ASTM D 2466 PVC SOCKET JOINT	ASTM F 656 PURPLE PRIMER ASTM D 2864 SOLVENT CEMENT	

<h1 style="text-align: center;">SANITARY SEWER DEMAND</h1>			
BASIS FOR DESIGN			
2015 INTERNATIONAL PLUMBING CODE - MINIMUM SLOPE = 1/8" PER FOOT			4"
CHAPTER 7 - SANITARY DRAINAGE- REQUIRED PIPE SIZE =			
TABLE 710.1(1)-BUILDING DRAINS AND SEWERS - 180 DFU'S PERMITTED ON MAIN			
EQUIPMENT	QUANTITY	INDIVIDUAL DRAINAGE FIXTURE UNIT	TOTAL DRAINAGE FIXTURE UNITS
DRINKING FOUNTAIN	1	1	1
FLOOR DRAINS	4	2	8
FLOOR SINKS	1	2	2
LAVATORY	4	1	4
SERVICE SINK	1	2	2
SHOWER HEAD	2	0	0
WATER CLOSET, FLUSHOMETER TANK, PUBLIC OR PRIVATE	4	3	12
TOTAL	17		29

FLUID OPERATING TEMPERATURE RANGE AND USAGE (F)	INSULATION CONDUCTIVITY		NOMINAL PIPE SIZE (Inches)				
	CONDUCTIVITY Y (BTU / IN.)	MEAN RATING TEMPERATURE (F)	< 1	1 to < 1 1/2	1 1/2 to < 4	4 to < 8	> 8
251 - 350	0.29 - 0.32	200	3.0	4.0	4.5	4.5	4.5
201 - 250	0.27 - 0.30	150	2.5	2.5	2.5	3.0	3.0
141 - 200	0.25 - 0.29	125	1.5	1.5	2.0	2.0	2.0
105 - 140	0.21 - 0.28	100	1.0	1.0	1.5	1.5	1.5
40 - 60	0.21 - 0.27	75	0.5	0.5	1.0	1.0	1.0
< 40	0.20 - 0.26	50	0.5	1.0	1.0	1.0	1.5

NOTES:

1. FOR PIPING SMALLER THAN 1 1/2" INCHES AND LOCATED IN PARTITIONS WITHIN CONDITIONED SPACES, REDUCTION OF THESE THICKNESS BY 1" SHALL BE PERMITTED, BUT NOT TO A THICKNESS LESS THAN 1 INCH.
2. FOR DIRECT-BURIED HEATING AND HOT WATER PIPING, REDUCTION OF THICKNESSES BY 1 1/2" SHALL BE PERMITTED, BUT NOT LESS THAN 1 INCH

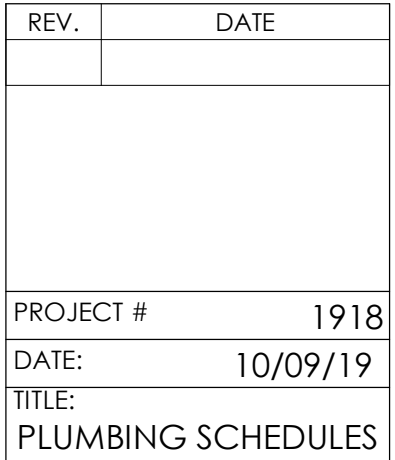
DOMESTIC COLD WATER DEMAND					
2015 INTERNATIONAL PLUMBING CODE - TABLE E103.3(3) ESTIMATED DEMAND (GPM):					21.0
PIPE SIZE (WATER SUPPLY TO BUILDING):					1 1/4"
2015 INTERNATIONAL PLUMBING CODE - FIGURE E103.3(5) PIPE FRICTION (PSI / 100 FT):					3.9
PIPE VELOCITY (FEET / SECOND):					5.0
EQUIPMENT	OCCUPANCY	TYPE OF SUPPLY CONTROL	QUANTITY	COMBINED WATER SUPPLY FIXTURE UNITS (WSFU)	TOTAL WATER SUPPLY FIXTURE UNITS (WSFU)
DRINKING FOUNTAIN	OFFICES, ETC.	3/8" VALVE	1	1	1
LAVATORY	PUBLIC	FAUCET	4	2	8
SERVICE SINK	OFFICES, ETC.	FAUCET	1	3	3
SHOWER HEAD	PRIVATE	MIXING VALVE	2	1.4	2.8
WATER CLOSET, FLUSHOMETER TANK, PUBLIC OR PRIVATE	PUBLIC	FLUSH TANK	4	2.2	8.8
TOTAL			12		23.6

DOMESTIC HOT WATER DEMAND					
2015 INTERNATIONAL PLUMBING CODE - TABLE E103.3(3) ESTIMATED DEMAND (GPM):					14.8
PIPE SIZE (WATER SUPPLY TO BUILDING):					1 1/4"
2015 INTERNATIONAL PLUMBING CODE - FIGURE E103.3(5) PIPE FRICTION (PSI / 100 FT):					3.0
PIPE VELOCITY (FEET / SECOND):					2.8
EQUIPMENT	OCCUPANCY	TYPE OF SUPPLY CONTROL	QUANTITY	COMBINED WATER SUPPLY FIXTURE UNITS (WSFU)	TOTAL WATER SUPPLY FIXTURE UNITS (WSFU)
SHOWER HEAD	PRIVATE	MIXING VALVE	2	1	2
LAVATORY	PUBLIC	FAUCET	4	1.5	6
SERVICE SINK	OFFICES, ETC.	FAUCET	1	2.25	2.25
TOTAL			7		10.25

SHEET:

P-601

MCKAY-DEE
4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403



P-601

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
REFERENCE AND LINE SYMBOLS	
	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
	ROOM IDENTIFIER WITH ROOM NAME AND NUMBER.
	KEYNOTE INDICATOR.
	REVISION INDICATOR.
	EQUIPMENT INDICATOR.
	MECHANICAL EQUIPMENT INDICATOR. "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XMPD" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING
	BREAK, ROUND
	MATCH LINE INDICATOR: CENTER, EXTRA WIDE LINE.
	NEW LINE: MEDIUM LINE.
	EXISTING TO REMAIN LINE: THIN LINE.
	DEMOLITION LINE: DASHED, MEDIUM LINE
WIRING METHODS	
	WIRING.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN THE ELECTRICAL SPECIFICATIONS.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT SCHEDULE. FOR BRANCH WIRING USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN THE ELECTRICAL SPECIFICATIONS.
	LOW VOLTAGE WIRING: DIVIDE, MEDIUM LINE.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE-LINE DIAGRAM.
	ADA ACCESS PUSH PLATE
	JUNCTION BOX.
	EARTH GROUND (ONE-LINE DIAGRAM).
	JUNCTION BOX, CEILING.
	MECHANICAL EQUIPMENT CONNECTION. REFER TO EQUIPMENT SCHEDULE FOR REQUIREMENTS.
SITE ELECTRICAL AND COMMUNICATIONS UTILITIES	
	UTILITY POLE.
	UTILITY, DISTRIBUTION SWITCH OR SWITCHING STATION.
	UTILITY, COMMUNICATIONS MANHOLE.
	UTILITY, ELECTRICAL MANHOLE.
	UTILITY, TELEPHONE MANHOLE.
	TRANSFORMER.
STRUCTURED CABLING	
	TELEPHONE, WALL MOUNTED ("X" INDICATES QUANTITY OF CABLES).
	DATA CONNECTION: WIRELESS ACCESS POINT (WAP). REQUIRES (2) DATA DROPS PER DEVICE
	TELEPHONE, WALL MOUNTED: WALL PHONE.
	OUTLET, DATA COMMUNICATION ("X" INDICATES QUANTITY OF CABLES).
	OUTLET, BUILDING STANDARD COMBINATION TELEPHONE/ DATA COMMUNICATION.
	TWO-WAY EMERGENCY COMMUNICATION DEVICE PER IBC, WALL MOUNTED IN RECESSED BOX.
	TELEPHONE TERMINAL BOARD, FIRE TREATED PLYWOOD PAINTED.
SECURITY	
	INTRUSION DETECTION HEADEND EQUIPMENT.
	CARD READER.
TV DISTRIBUTION	
	TV OUTLET.

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
WIRING DEVICES	
	RECEPTACLE, DUPLEX: NEMA 5-20R.
	RECEPTACLE, DUPLEX, ABOVE COUNTER: NEMA 5-20R.
	RECEPTACLE, DUPLEX, CEILING: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, DRINKING FOUNTAIN: CONCEAL WATER COOLER RECEPTACLE BEHIND WATER COOLER. SEE MECHANICAL/PLUMBING SHOP DRAWINGS FOR INSTALLATION REQUIREMENTS.
	RECEPTACLE, DUPLEX, SWITCHED: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WET LABEL, "WEATHERPROOF IN USE": NEMA 5-20R.
	RECEPTACLE, DUPLEX, WEATHERPROOF: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WEATHERPROOF: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
	RECEPTACLE, DRYER: NEMA 14-30R.
	RECEPTACLE, RANGE: NEMA 14-50R.
	FLUSH FLOOR BOX. "F" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
	SWITCH, DIMMER.
	SWITCH, SINGLE POLE ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, DOUBLE POLE ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, THREE-WAY ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, FOUR-WAY ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, KEY OPERATED.
	SWITCH, TIMER OPERATED.
	RECEPTACLE, DUPLEX, TAMPER RESISTANT: NEMA 5-20R.
	RECEPTACLE, SINGLE PLEX, WITH USB OUTLET
LIGHTING (REFER TO FIXTURE SCHEDULE FOR SYMBOLS)	
	FIXTURE IDENTIFICATION: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
	FIXTURE IDENTIFICATION, EMERGENCY WITH BATTERY PACK, CONNECTED TO GENERATOR AS INDICATED: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
	EMERGENCY.
	NIGHT LIGHT: DO NOT SWITCH.
	EGRESS DIRECTION ARROW (EXIT SIGNS).
	EXIT SIGN: SINGLE FACE: CEILING MOUNTED
	EXIT SIGN: SINGLE FACE: WALL MOUNTED
	EXIT SIGN: DOUBLE FACE: CEILING MOUNTED
	EXIT SIGN: DOUBLE FACE: WALL MOUNTED
LIGHTING CONTROL	
	OCCUPANCY SENSOR, DUAL TECHNOLOGY, CEILING.
	OCCUPANCY SENSOR, DUAL TECHNOLOGY, WALL.
	OCCUPANCY SENSOR, DUAL TECHNOLOGY, DIRECTIONAL.
	VACANCY SENSOR, DUAL TECHNOLOGY, CEILING.
	VACANCY SENSOR, DUAL TECHNOLOGY, WALL.
	PHOTOCELL.
	CEILING FAN.
	SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
	SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
	DIMMER SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
	DIMMER SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
	DIGITAL LIGHTING ROOM CONTROLLER

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
ELECTRICAL POWER AND DISTRIBUTION	
	DISCONNECT, FUSED (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
	MOTOR.
	TRANSFORMER (ONE-LINE DIAGRAM).
	PANELBOARD (ONE-LINE DIAGRAM).
	PANELBOARD WITH MAIN LUGS ONLY. BUS SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).
	METER.
	DISCONNECT SWITCH, FUSED.
	DISCONNECT SWITCH, UNFUSED.
	PUSHBUTTON.
	PUSHBUTTONS, MOTOR CONTROL.
	PANELBOARD CABINET, FLUSH MOUNTED.
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.
	DISTRIBUTION PANEL OR SWITCHBOARD.
	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.
	ACCESSIBLE DOOR ENTRY PUSH PLATE OPERATOR.
FIRE ALARM	
	FIRE SYSTEM ANNUNCIATOR.
	FIRE ALARM CONTROL PANEL, SEMI-RECESSED.
	CONTROL MODULE.
	MONITOR MODULE.
	FIRE ALARM MANUAL PULL STATION.
	SHUT DOWN RELAY: INSTALL RELAY IN CONTROL CIRCUIT OF EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A FIRE.
	MAGNETIC DOOR HOLDER.
	DETECTOR, SMOKE.
	DETECTOR, SMOKE, DUCT WITH HOUSING AND SAMPLING TUBE.
	DETECTOR, HEAT.
	ALARM, HORN/SPEAKER, WEATHERPROOF.
	ALARM, HORN/STROBE, ONE ASSEMBLY. SUBSCRIPT INDICATES CANDELA RATING.
	FIRE AND SMOKE DAMPER.
	DETECTOR, CARBON MONOXIDE.
	ALARM, HORN/STROBE, ONE ASSEMBLY, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
	ALARM, HORN, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
	ALARM, STROBE, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.

ABBREVIATIONS	
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.	
1P SINGLE POLE	KV KILOVOLT
1PH SINGLE-PHASE	KVA KILOVOLT AMPERE
1WAY ONE-WAY	KVAR KILOVOLT AMPERE REACTIVE
2/C TWO-CONDUCTOR	KW KILOWATT
2WAY TWO-WAY	KWh KILOWATT HOUR
3/C THREE-CONDUCTOR	LED LIGHT EMITTING DIODE
3WAY THREE-WAY	LFMC LIQUID TIGHT FLEXIBLE METAL CONDUIT
4OUT QUADRUPL RECEPTACLE	LFNC LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
4PST FOUR-POLE DOUBLE THROW	LPS LOW PRESSURE SODIUM
4PTST FOUR-POLE SINGLE THROW	LRA LOCKED ROTOR AMPS
4W FOUR-WIRE	LTG LIGHTING
4WAY FOUR-WAY	LV LOW VOLTAGE
A ABOVE COUNTER	MATV MASTER ANTENNA TELEVISION SYSTEM
AC ARMORED CABLE	MAX MAXIMUM
ADA AMERICANS WITH DISABILITIES ACT	MC METAL CLAD
ADJ ADJACENT	MCA MINIMUM CIRCUIT AMPS
AFF ABOVE FINISHED FLOOR	MCB MAIN CIRCUIT BREAKER
AFG ABOVE FINISHED GRADE	MCC MOTOR CONTROL CENTER
AIC AMPERE INTERRUPTING CAPACITY	MCP MOTOR CIRCUIT PROTECTION
ALUM ALUMINUM	MDP MAIN DISTRIBUTION PANEL
AMP AMPERE	MG MOTOR GENERATOR
ANN ANNUNCIATOR	MH MANHOLE
AP ACCESS POINT (WIRELESS DATA)	MIN MINIMUM
AR AS REQUIRED	MLO MAIN LUGS ONLY
ASC AMPS SHORT CIRCUIT PROTECTION	MOCP MAXIMUM OVERCURRENT
ATS AUTOMATIC TRANSFER SWITCH	NA NOT APPLICABLE
AV AUDIO VISUAL	NC NORMALLY CLOSED
AWG AMERICAN WIRE GAGE	NEC NATIONAL ELECTRICAL CODE
BB BUCK-BOOST TRANSFORMER	NEMA NATIOANL ELECTRICAL MANUFACTURERS ASSOCIATION
KV KILOVOLT	NFC NATIONAL FIRE CODE
KVA KILOVOLT AMPERE	NFPA NATIONAL FIRE PROTECTION ASSOCIATION
KVAR KILOVOLT AMPERE REACTIVE	NIC NOT IN CONTRACT
KW KILOWATT	NL NIGHT LIGHT
KWh KILOWATT HOUR	NO NORMALLY OPEN
LED LIGHT EMITTING DIODE	NTS NOT TO SCALE
LFMC LIQUID TIGHT FLEXIBLE METAL CONDUIT	OC ON CENTER
LFNC LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT	OCF OVER CURRENT PROTECTION
LPS LOW PRESSURE SODIUM	OCF/CI OWNER FURNISHED/ CONTRACTOR INSTALLED
LRA LOCKED ROTOR AMPS	OF/OI OWNER FURNISHED/ OWNER INSTALLED
LTG LIGHTING	OPF OBTAIN FROM PLANS
LV LOW VOLTAGE	OH DR OVERHEAD (COILING) DOOR
MATV MASTER ANTENNA TELEVISION SYSTEM	OL OVERLOAD
MAX MAXIMUM	PB PUSHBUTTON
MC METAL CLAD	PF POWER FACTOR
MCA MINIMUM CIRCUIT AMPS	PH PHASE
MCB MAIN CIRCUIT BREAKER	PNL PANEL
MCC MOTOR CONTROL CENTER	PT POTENTIAL TRANSFORMER
MCP MOTOR CIRCUIT PROTECTION	PTZ PANTILT/ZOOM
MDP MAIN DISTRIBUTION PANEL	QTY QUANTITY
MG MOTOR GENERATOR	R REMOVE
MH MANHOLE	RCP REFLECTED CEILING PLAN
MIN MINIMUM	RMC RIGID METAL CONDUIT
MLO MAIN LUGS ONLY	RNC RIGID NONMETAL CONDUIT
MOCP MAXIMUM OVERCURRENT	RPM REVOLUTIONS PER MINUTE
NA NOT APPLICABLE	RR REMOVE AND RELOCATE
NC NORMALLY CLOSED	S/S START/STOP
NEC NATIONAL ELECTRICAL CODE	SCA SHORT CIRCUIT AMPS
NEMA NATIOANL ELECTRICAL MANUFACTURERS ASSOCIATION	SCBA STANDARD COLOR AS SELECTED BY ARCHITECT
NFC NATIONAL FIRE CODE	SF SQUARE FOOT (FEET)
NFPA NATIONAL FIRE PROTECTION ASSOCIATION	SFBA STANDARD FINISH AS SELECTED BY ARCHITECT
NIC NOT IN CONTRACT	SPD SURGE PROTECTIVE DEVICE
NL NIGHT LIGHT	SPDT SINGLE POLE, DOUBLE THROW
NO NORMALLY OPEN	SPEC SPECIFICATION
NTS NOT TO SCALE	SPST SINGLE POLE, SINGLE THROW
OC ON CENTER	ST SINGLE THROW
OCF OVER CURRENT PROTECTION	SWBD SWITCHBOARD
OCF/CI OWNER FURNISHED/ CONTRACTOR INSTALLED	SWGR SWITCHGEAR
OF/OI OWNER FURNISHED/ OWNER INSTALLED	TL TWIST LOCK
OPF OBTAIN FROM PLANS	TP TELEPHONE POLE
OH DR OVERHEAD (COILING) DOOR	TPB TWISTED PAIR
OL OVERLOAD	TT TELEPHONE TERMINAL BOARD
PB PUSHBUTTON	TV TELEVISION
PF POWER FACTOR	TVSS TRANSIENT VOLTAGE SURGE SUPPRESSER
PH PHASE	TYP TYPICAL
PNL PANEL	UF UNDERFLOOR
PT POTENTIAL TRANSFORMER	UGND UNDERGROUND
PTZ PANTILT/ZOOM	UPS UNINTERRUPTIBLE POWER SUPPLY
QTY QUANTITY	V VOLTS
R REMOVE	VA VOLT AMPERE
RCP REFLECTED CEILING PLAN	VFC/VF VARIABLE FREQUENCY MOTOR CONTROLLER
RMC RIGID METAL CONDUIT	W/ WITH
RNC RIGID NONMETAL CONDUIT	W/O WITHOUT
RPM REVOLUTIONS PER MINUTE	WP WEATHERPROOF
RR REMOVE AND RELOCATE	XFMR TRANSFORMER
S/S START/STOP	
SCA SHORT CIRCUIT AMPS	
SCBA STANDARD COLOR AS SELECTED BY ARCHITECT	
SF SQUARE FOOT (FEET)	
SFBA STANDARD FINISH AS SELECTED BY ARCHITECT	
SPD SURGE PROTECTIVE DEVICE	
SPDT SINGLE POLE, DOUBLE THROW	
SPEC SPECIFICATION	
SPST SINGLE POLE, SINGLE THROW	
ST SINGLE THROW	
SWBD SWITCHBOARD	
SWGR SWITCHGEAR	
TL TWIST LOCK	
TP TELEPHONE POLE	
TPB TWISTED PAIR	
TT TELEPHONE TERMINAL BOARD	
TV TELEVISION	
TVSS TRANSIENT VOLTAGE SURGE SUPPRESSER	
TYP TYPICAL	
UF UNDERFLOOR	
UGND UNDERGROUND	
UPS UNINTERRUPTIBLE POWER SUPPLY	
V VOLTS	
VA VOLT AMPERE	
VFC/VF VARIABLE FREQUENCY MOTOR CONTROLLER	
W/ WITH	
W/O WITHOUT	
WP WEATHERPROOF	
XFMR TRANSFORMER	

ELECTRICAL SHEET INDEX	
EE-001	SHEET INDEX, SYMBOL LEGEND, AND GENERAL NOTES
EE-701	TYPICAL MOUNTING HEIGHT DETAILS
ED-101	POWER & LIGHTING DEMOLITION PLANS
EP-140	MAIN FLOOR POWER & LIGHTING PLANS
EP-601	PANEL & EQUIPMENT SCHEDULES
EP-602	LIGHTING FIXTURE SCHEDULE

DEFINITIONS	
NOTE: ALL DEFINITIONS MAY NOT BE USED.	
INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.	
DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.	
APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.	
FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."	
INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."	
PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."	
INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.	
TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...	

GENERAL ELECTRICAL NOTES	
1. CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.	
2. OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.	
A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.	
B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.	
C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.	
3. EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.	
4. SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.	
5. REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.	
6. ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.	
ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.	

REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	SHEET INDEX, SYMBOL LEGEND, AND GENERAL NOTES

SHEET:	EE-001
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BERTOLDI ARCHITECTS

ARCHITECTURE • PLANNING • INTERIORS

2726 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

MCKAY-DEE

4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403

SPECTRUM ENGINEERS

324 S. State St., Suite 400

Salt Lake City, UT 84111

800-678-7077

801-328-5151

fax: 801-328-5155

www.spectrum-engineers.com

LICENSED PROFESSIONAL ENGINEER

No. 5148728

DAVID G. HINCKLEY

10/09/19

STATE OF UTAH

REV.

DATE

PROJECT #

1918

DATE:

10/09/19

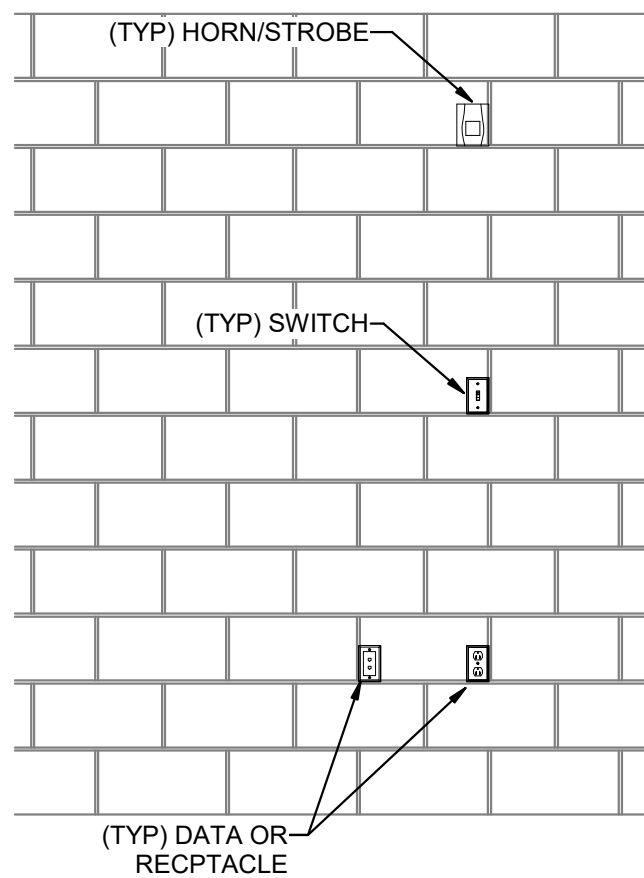
TITLE:

SHEET INDEX, SYMBOL LEGEND, AND GENERAL NOTES

SHEET:

EE-001

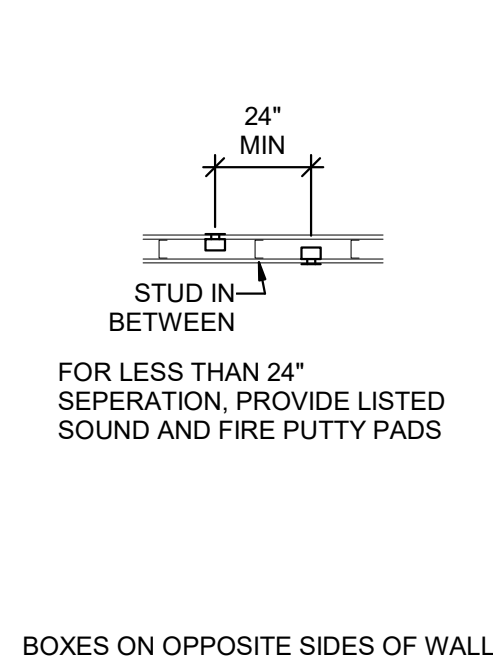
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NOTE: ALL DEVICES SHALL BE INSTALLED AND LOCATED IN THE BLOCK CONSISTENTLY THROUGH OUT THE BUILDING.

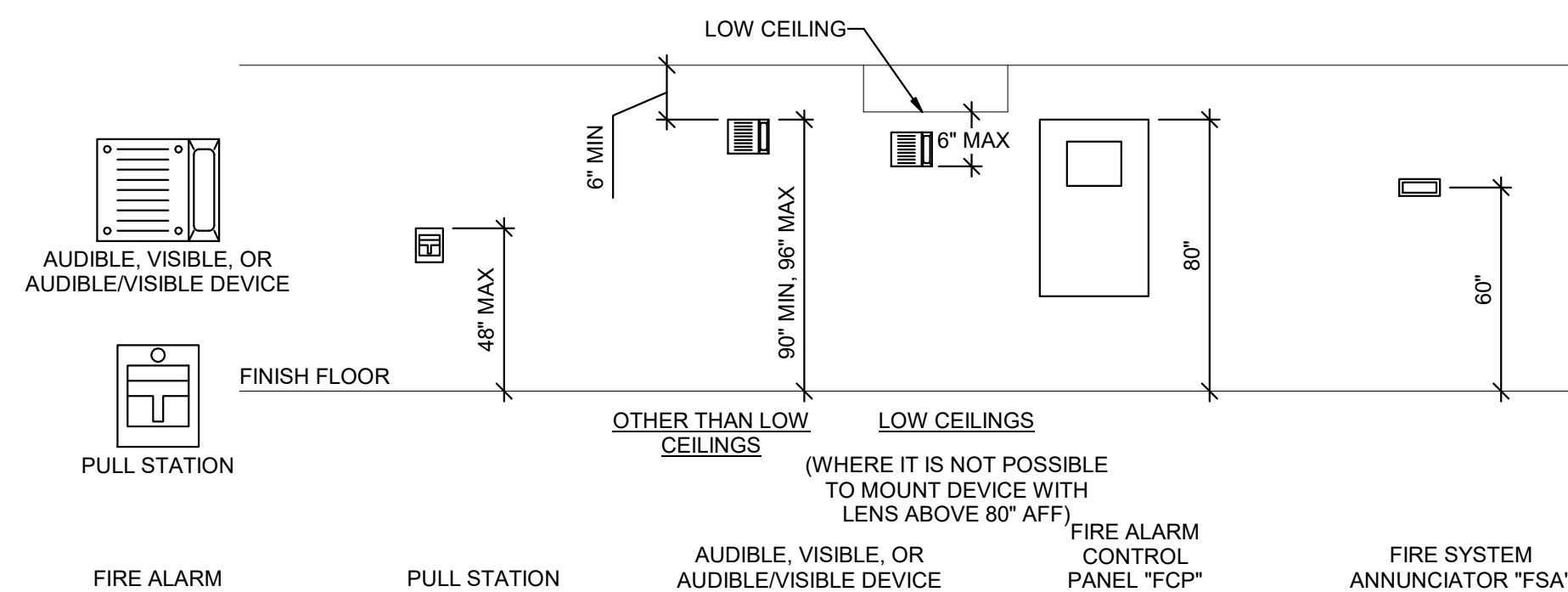
C1 CMU DEVICE MOUNTING ALIGNMENT DETAIL

SCALE: NTS



B1 BOX MOUNTING DETAILS

SCALE: NTS

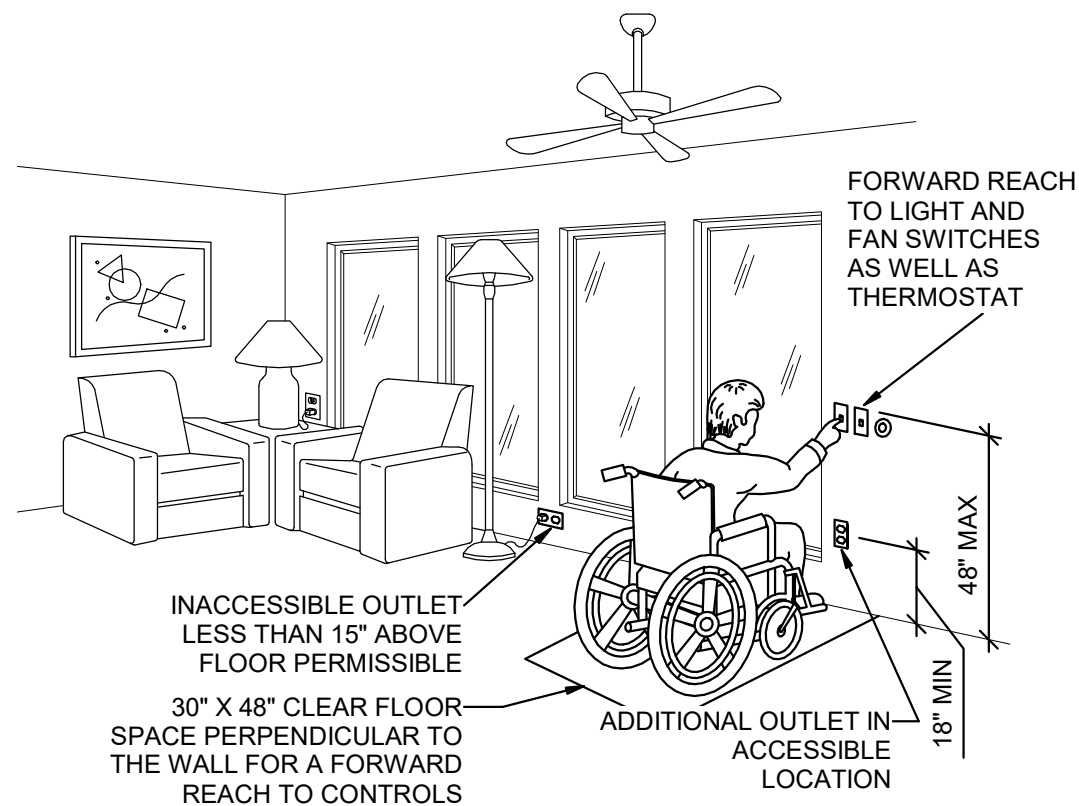


A1 FIRE ALARM MOUNTING DETAILS

SCALE: NTS

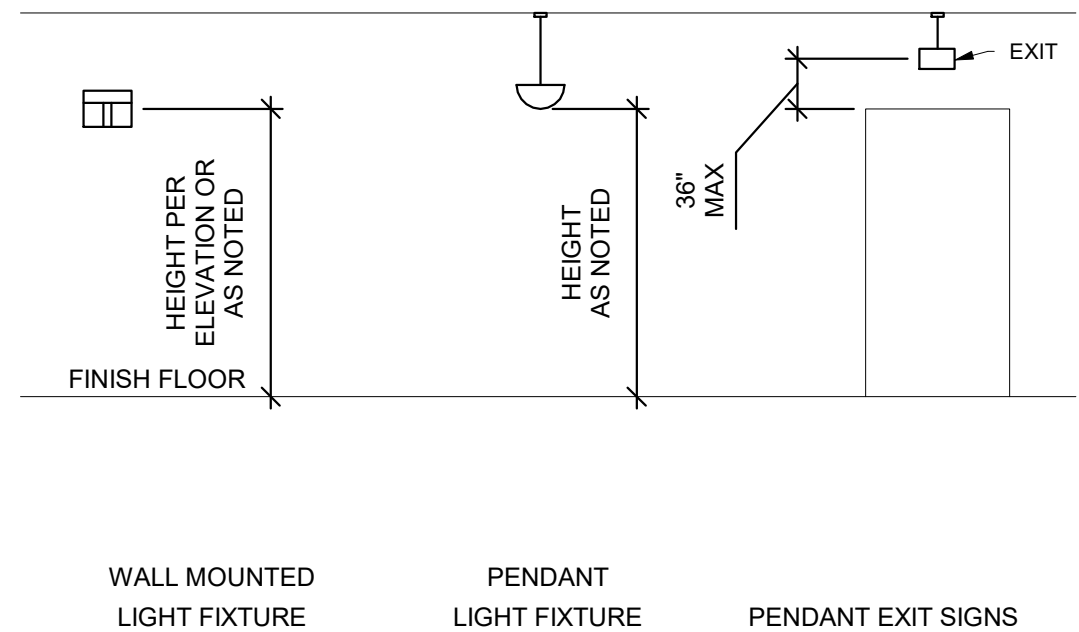
D2 RECEPTACLE MOUNTING DETAILS

SCALE: NTS



C2 ADA DETAIL

SCALE: NTS

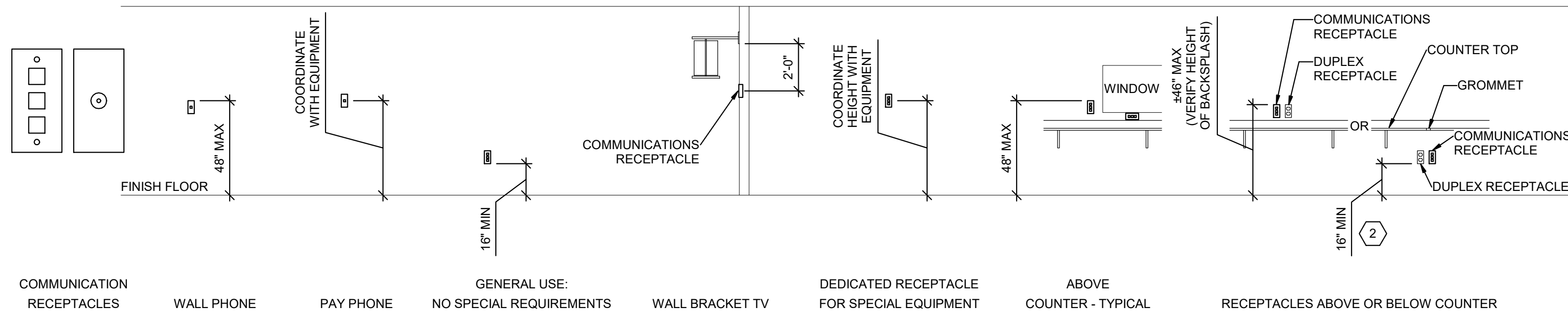


B2 LIGHTING MOUNTING DETAILS

SCALE: NTS

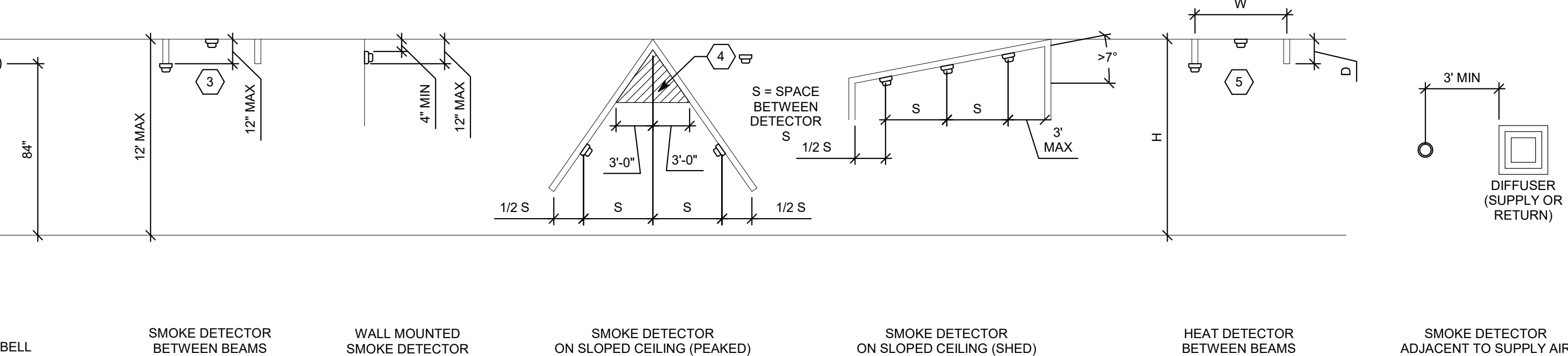
C3 SWITCH MOUNTING DETAILS

SCALE: NTS



B3 COMMUNICATIONS MOUNTING DETAILS

SCALE: NTS



GENERAL SHEET NOTES

- DETERMINE MOUNTING HEIGHTS OF ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE FOLLOWING ORDER OF PRIORITY:
A - ELEVATIONS (ARCHITECTURAL, ELECTRICAL, MECHANICAL, ETC).
B - EQUIPMENT SHOP DRAWINGS.
C - FIELD INSTRUCTIONS.
- LOCATE RECEPTACLES SERVING THE SAME TYPE OF USE AT A UNIFORM HEIGHT UNLESS DIRECTED OTHERWISE.
- MECHANICAL, ELECTRICAL, AND COMMUNICATION ROOMS: COORDINATE LOCATION OF LIGHTING AND POWER RECEPTACLES WITH EQUIPMENT, PIPING, AND DUCTWORK. DO NOT INSTALL RECEPTACLES BEHIND EQUIPMENT OR WHERE OTHERWISE INACCESSIBLE. POSITION LIGHTING REGARDLESS OF WHERE SHOWN ON DRAWING TO PROVIDE PROPER ILLUMINATION.
- MOUNT RECEPTACLE BOXES FOR SWITCHES AND RECEPTACLES WITH LONG AXIS OF THE DEVICE VERTICAL UNLESS OTHERWISE INDICATED.
- SET BOXES WITH PLASTER RINGS FLUSH WITH FINISHED SURFACE.
- LOCATE BOX COVERS OR DEVICE PLATES SO THEY WILL NOT SPAN DIFFERENT TYPES OF BUILDING FINISHES EITHER VERTICALLY OR HORIZONTALLY.
- VERIFY ALL DOOR CONDITIONS ON ARCHITECTURAL DRAWINGS PRIOR TO INSTALLING SWITCHES.
- LOCATE WIRING DEVICES WHICH ARE ADJACENT AND ARE COMPATIBLE VOLTAGES IN ONE PLATE.
- WHERE DEVICES ARE LOCATED IN CLOSE PROXIMITY OF THE SAME VERTICAL PLANE, ALIGN DEVICES VERTICALLY PER THE TYPICAL WALL MOUNTED DEVICES ALIGNMENT DETAIL, UNLESS OTHERWISE INDICATED.

SHEET KEYNOTES

- LOCATE RECEPTACLES BEHIND DRINKING FOUNTAINS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR PLACEMENT OF OUTLETS.
- LOCATE AT BOTTOM OF BEAMS (OR JOISTS) OR AT CEILING. (REDUCE SPACING BY .5 PERPENDICULAR TO BEAM OR JOIST DIRECTION.) FOR OTHER CONDITIONS, REFER TO NFPA 72.
- LOCATE DETECTOR ANYWHERE IN SHADED AREA BUT NOT IN TOP 4" OF PEAK.
- LOCATE AT BOTTOM OF BEAMS IF DH < 1 OR WH < 4. OTHERWISE, LOCATE IN BEAM POCKET. FOR D > 4 REDUCE SPACING .33 PERPENDICULAR TO BEAMS.

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BERTOLDI ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2725 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335
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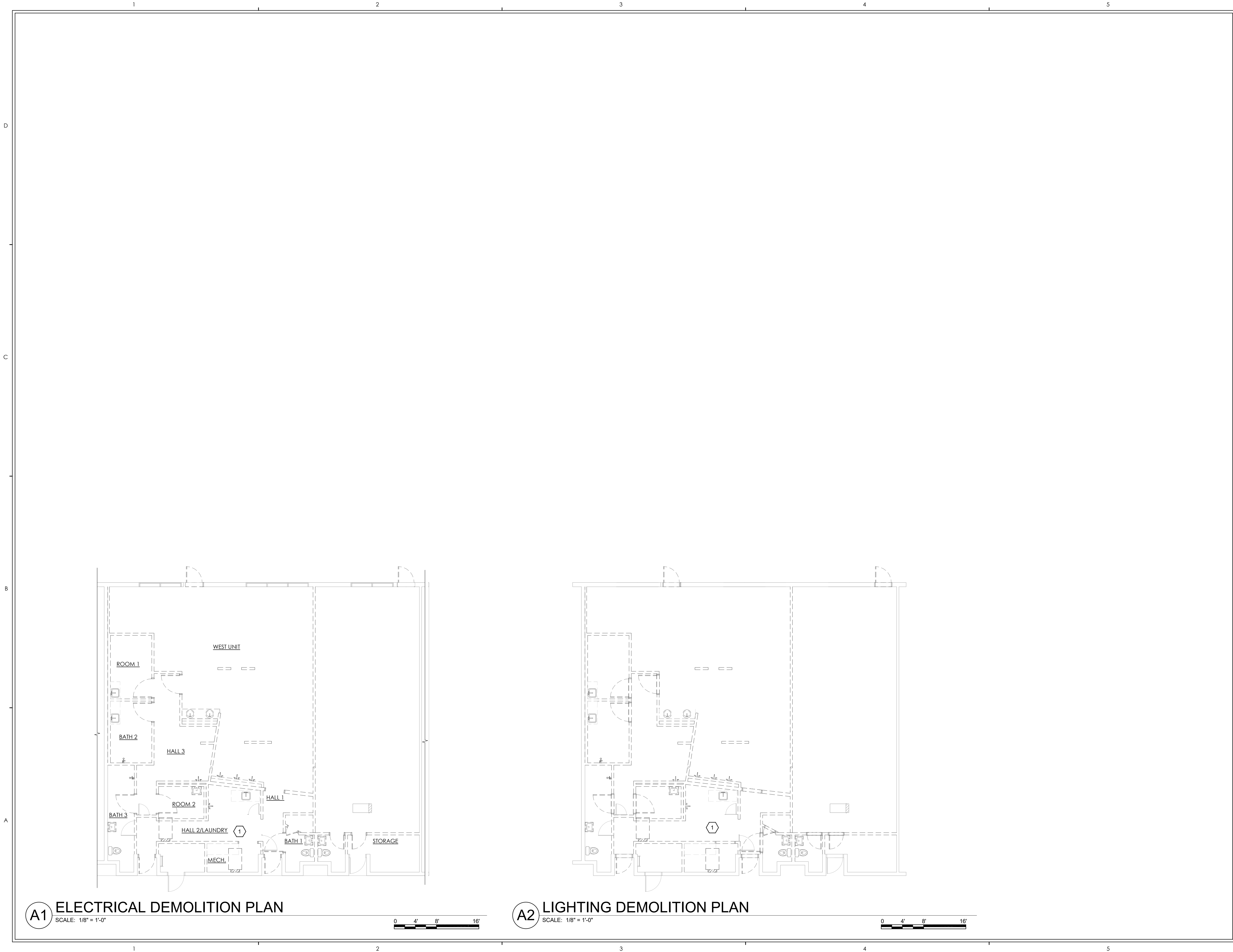
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4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403

SPECTRUM ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

REGISTERED PROFESSIONAL ENGINEER
No. 5148728
DAVID G. HINCKLEY
10/15/19
STATE OF UTAH

REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	TYPICAL MOUNTING HEIGHT DETAILS

SHEET:
EE-701



GENERAL
SHEET NOTES

SHEET
KEYNOTES

- 1 REMOVE ALL EXISTING ELECTRICAL IN REMODELED AREAS. PULL BACK WIRING TO PANEL. PANELS IN SPACE ARE LIKEWISE TO BE REMOVED. REMOVE ASSOCIATED FEEDERS UNLESS THEY CAN BE USED FOR NEW PANELS.

BERTOLDI
ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2725 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

MCKAY-DEE
4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403

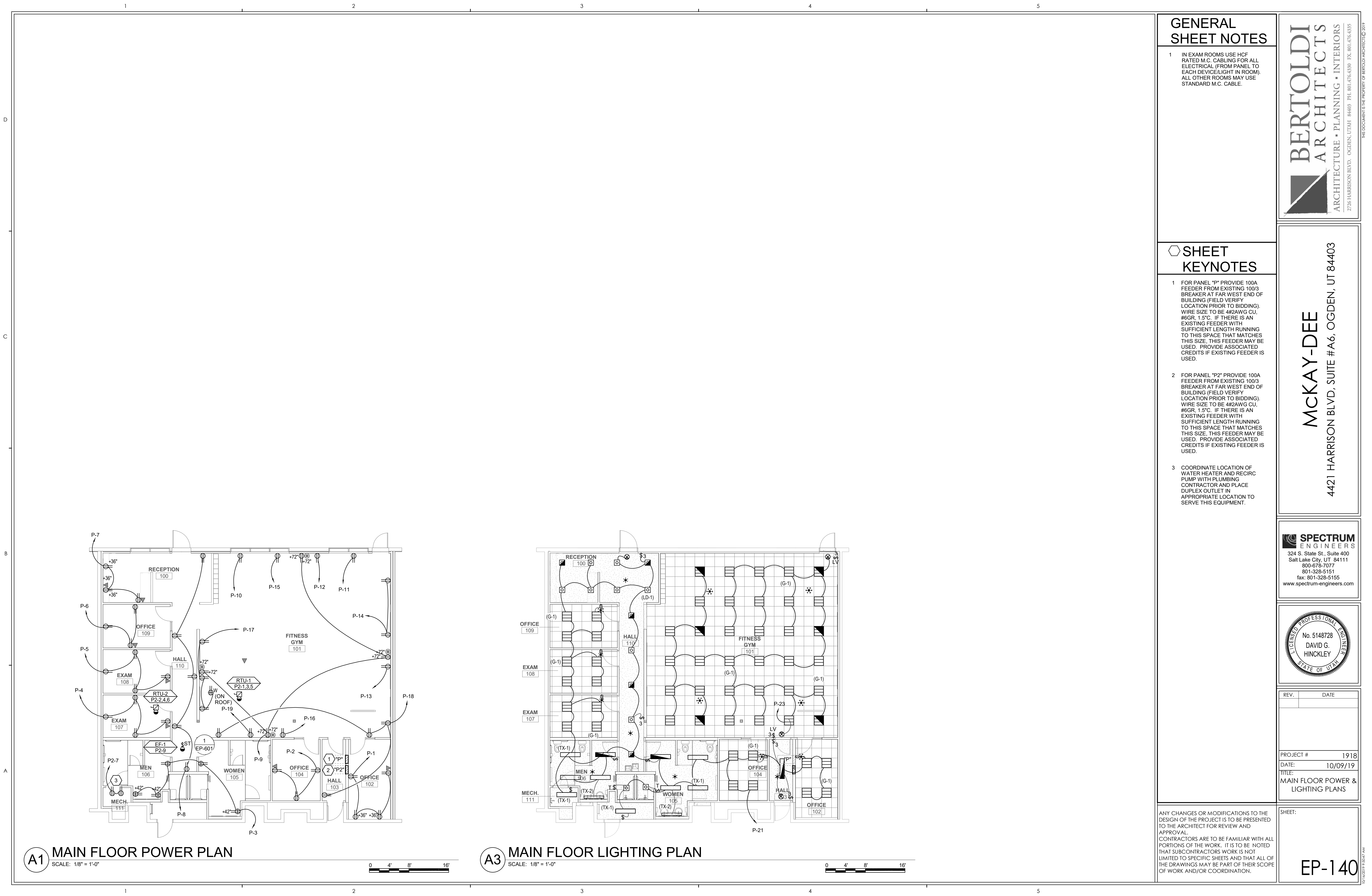
SPECTRUM
ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

LICENSED PROFESSIONAL ENGINEER
No. 5148728
DAVID G. HINCKLEY
10/09
STATE OF UTAH

REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	POWER & LIGHTING DEMOLITION PLANS

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

SHEET:
ED-101



GENERAL
SHEET NOTES

- 1 IN EXAM ROOMS USE HCF RATED M.C. CABLING FOR ALL ELECTRICAL (FROM PANEL TO EACH DEVICE/LIGHT IN ROOM). ALL OTHER ROOMS MAY USE STANDARD M.C. CABLE.

SHEET
KEYNOTES

- 1 FOR PANEL "P1" PROVIDE 100A FEEDER FROM EXISTING 100/3 BREAKER AT FAR WEST END OF BUILDING (FIELD VERIFY LOCATION PRIOR TO BIDDING). WIRE SIZE TO BE #2AWG CU, #6GR, 1.5" C. IF THERE IS AN EXISTING FEEDER WITH SUFFICIENT LENGTH RUNNING TO THIS SPACE THAT MATCHES THIS SIZE, THIS FEEDER MAY BE USED. PROVIDE ASSOCIATED CREDITS IF EXISTING FEEDER IS USED.
- 2 FOR PANEL "P2" PROVIDE 100A FEEDER FROM EXISTING 100/3 BREAKER AT FAR WEST END OF BUILDING (FIELD VERIFY LOCATION PRIOR TO BIDDING). WIRE SIZE TO BE #2AWG CU, #6GR, 1.5" C. IF THERE IS AN EXISTING FEEDER WITH SUFFICIENT LENGTH RUNNING TO THIS SPACE THAT MATCHES THIS SIZE, THIS FEEDER MAY BE USED. PROVIDE ASSOCIATED CREDITS IF EXISTING FEEDER IS USED.
- 3 COORDINATE LOCATION OF WATER HEATER AND RECIRC PUMP WITH PLUMBING CONTRACTOR AND PLACE DUPLEX OUTLET IN APPROPRIATE LOCATION TO SERVE THIS EQUIPMENT.

BERTOLDI ARCHITECTS
ARCHITECTURE • PLANNING • INTERIORS
2725 HARRISON BLVD. OGDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335

MCKAY-DEE
4421 HARRISON BLVD, SUITE #A6, OGDEN, UT 84403

SPECTRUM ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

LICENSED PROFESSIONAL ENGINEER
No. 5148728
DAVID G. HINCKLEY
STATE OF UTAH

REV.	DATE
PROJECT #	1918
DATE:	10/09/19
TITLE:	MAIN FLOOR POWER & LIGHTING PLANS

ANY CHANGES OR MODIFICATIONS TO THE DESIGN OF THE PROJECT IS TO BE PRESENTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTORS WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT ALL OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.

SHEET:
EP-140

EQUIPMENT SCHEDULE

EQUIPMENT SCHEDULE KEY

E - DIVISION 26
Q - FURNISHED WITH EQUIPMENT
* - COORDINATE WITH THE DIVISION 23 TEMPERATURE CONTROL INSTALLER
** - AUTOMATIC CONTROL WIRING BY DIVISION 23

NOTES:

1. NEMA 3R
2. TOGGLE SWITCH W/ THERMAL OVERLOAD
3. PROVIDE FUSED DISCONNECT ELEVATOR POWER MODULE WITH SHUNT TRIP
4. CONTRACTOR TO PERFORM FINAL CONNECTION TO LINE VOLTAGE THERMOSTATS
5. TOGGLE SWITCH W/BACNET INTERFACE
6. INDOOR UNITS FED FROM OUTDOOR UNIT. PROVIDE DISCONNECTS FOR BOTH.

7. PROVIDE SWITCH WITH BACNET MS/TP CAPABILITY.
8. PROVIDE LABEL ON DISCONNECT "DISCONNECT OUTDOOR UNIT PRIOR TO INDOOR."
9. LINE VOLTAGE THERMOSTAT ON WALL
10. PROVIDE EXPLOSION PROOF DEVICES AND WIRING METHODS.
11. PROVIDE DUAL-REDUNDANT 100% RATED VFD'S FOR AIR HANDLER.
12. PROVIDE MANUAL STARTER WITH THERMAL OVERLOAD AND RELAY FOR ATC/BAS CONTROL.

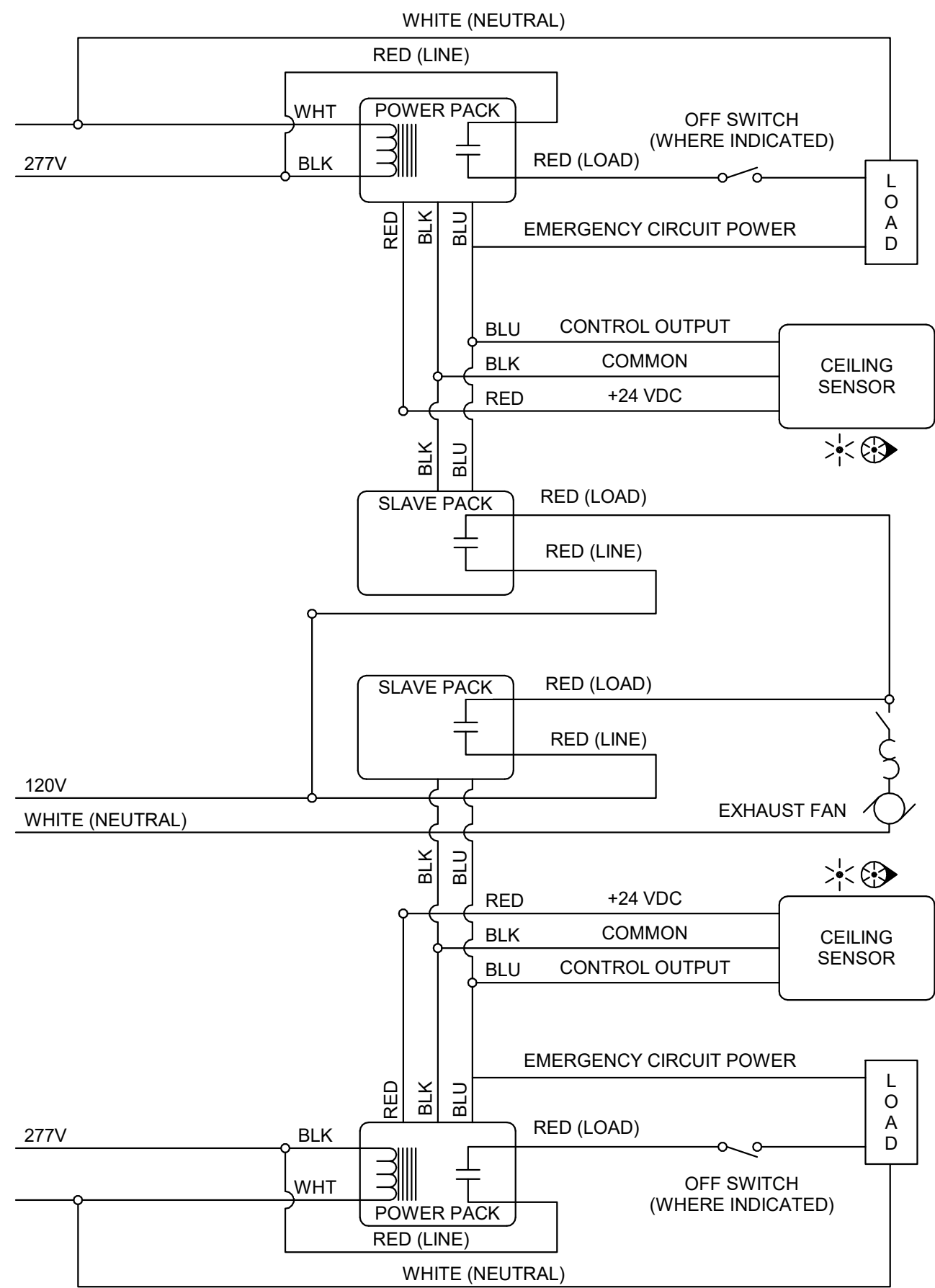
MARK	QTY	ITEM DESCRIPTION	LOAD DATA							WIRE AND CONDUIT SIZE	OVERCURRENT PROTECTION			DISCONNECT			STARTER								NOTES	MARK		
			HP	KW	MCA	FLA	VOL T	PH	Hz		FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	LOCATION	FURN BY	DEVICE	SIZES	SELECTOR SWITCH	PILOT LAMP	NORMALLY OPEN CONTACT	NORMALLY CLOSED CONTACT	PHASE FAILURE RELAY				
EF-1	1	EXHAUST FAN		-	-	2	120	1	60	2 #12, 12 GR 0.75" CND	E	15/1 CB	P2	E	TOGGLE SWITCH	P2	Q	-	-	-	-	-	-	-	-	-		EF-1
RTU-1	1	ROOF TOP UNIT		-	-	32.2	208	3	60	3 #6, #10 GR 1" CND	E	50/3 CB	P2	E	60A/3P FRN-40	P2	Q	-	-	-	-	-	-	-	-	-		RTU-1
RTU-2	1	ROOF TOP UNIT		-	-	23.3	208	3	60	3 #8, #10 GR 1" CND	E	40/3 CB	P2	E	60A/3P FRN-35	P2	Q	-	-	-	-	-	-	-	-	-		RTU-2

PANEL: "P2"

VOLTS/PHASE/WIRE:				PANEL SIZE & TYPE:				MAIN SIZE AND TYPE:				FED FROM:		CABINET:		LOCATION:				NOTES:																	
120/208V, 3 PH 4 WIRE				22" W x 6" D, BOLT-ON				100 AMPERE MAIN LUGS						FLUSH		HALL 103																					
ACCESSORIES:										PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR										AIC RATING: 10000																	
CKT NO		OCP		LOAD (kVA)				PHASE LOAD								LOAD (kVA)				OCP		CKT NO															
		AMP	POLE	BKR	LTG	PWR	CO	DESCRIPTION								A		B		C																	
1		50	3		0.0	11.6	0.0	RTU-1						3.9		2.8						RTU-2		0.0		8.4		0.0		3		40		2			
3		--	--		--	--	--	--										3.9		2.8				--		--		--		--		4					
5		--	--		--	--	--	--												3.9		2.8		--		--		--		--		6					
7		20	1		0.0	0.0	0.4	CO MECH. 111						0.4		0.0								SPARE		--		--		1		20		8			
9		15	1		0.0	0.2	0.0	EXHAUST FAN										0.2		0.0				SPARE		--		--		1		20		10			
11		20	1		--	--	--	SPARE														0.0		0.0		SPARE		--		--		1		20		12	
13		20	1		--	--	--	SPARE						0.0		0.0								SPARE		--		--		--		14					
15		20	1		--	--	--	SPARE								0.0		0.0						SPACE		--		--		--		16					
17		20	1		--	--	--	SPARE										0.0		0.0				SPACE		--		--		--		18					
TOTALS:					CONNECTED KVA PER PHASE										7		7		7		CONNECTED TOTAL KVA =										21						
					CONNECTED AMPS PER PHASE										59		58		56		AVERAGE CONNECTED AMPS PER PHASE =										57						
NEC DIVERSIFIED LOAD CALCULATIONS																																					
LIGHTING & CONTINUOUS LOADS:										- 100% CONNECTED LOAD PLUS 25%										DIVERSIFIED TOTAL KVA =		23															
RECEPTACLES: 0.4 kVA @ 100% = 0.4 kVA										- FIRST 10kVA @ 100%, REMAINDER @ 50%										AVERAGE AMPS PER PHASE =		65															
ALL OTHER LOADS @ 100%: 23.1 kVA										- MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC																											
BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCATED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI																																					

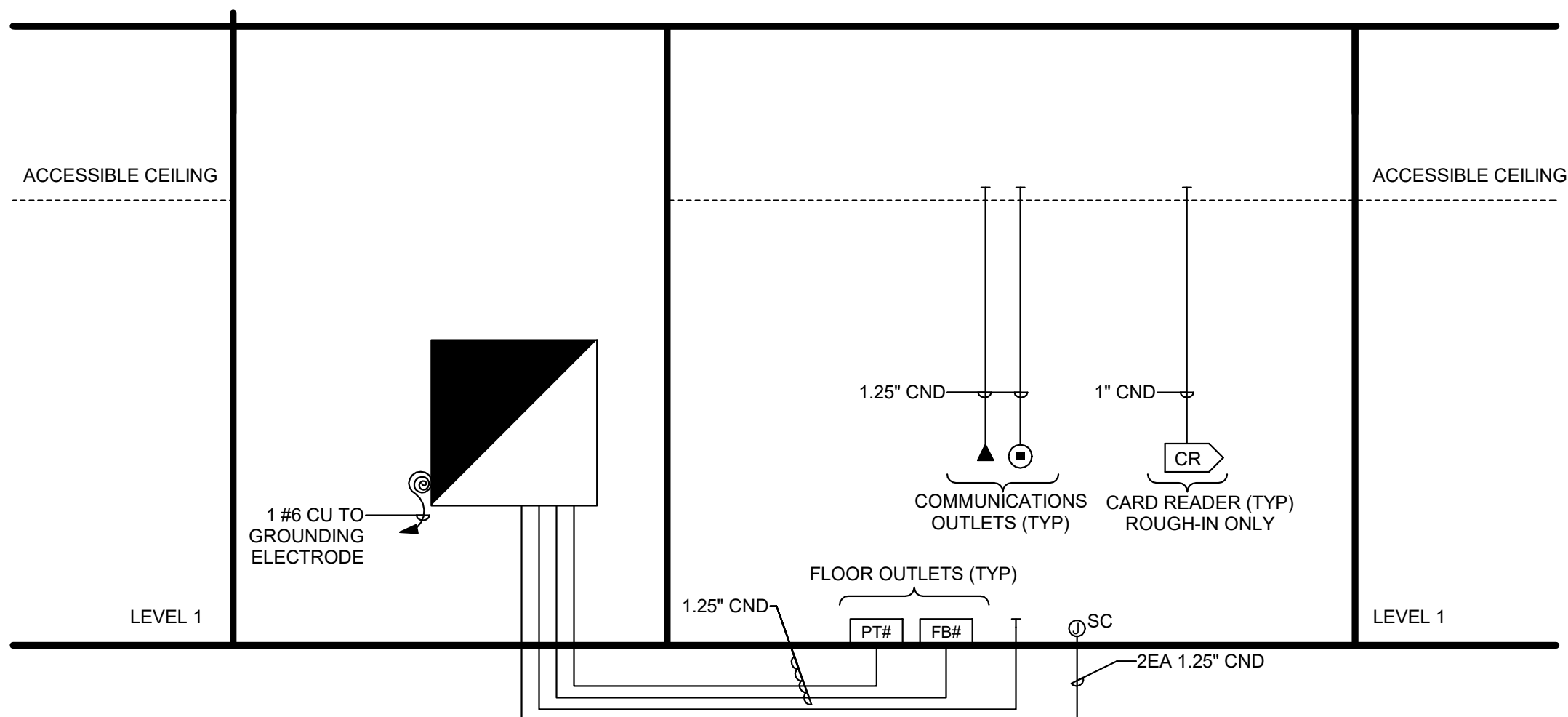
PANEL: "P"

VOLTS/PHASE/WIRE:			PANEL SIZE & TYPE:			MAIN SIZE AND TYPE:			FED FROM:		CABINET:		LOCATION:		NOTES:				
120/208V, 3 PH 4 WIRE			22" W x 6" D, BOLT-ON			100 AMPERE MAIN LUGS					FLUSH		HALL 103						
ACCESSORIES:															AIC RATING: 10000				
PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR																			
CKT NO		OCP		LOAD (kVA)		PHASE LOAD						LOAD (kVA)		OCP		CKT NO			
		AMP		LTG PWR CO		DESCRIPTION						CO PWR LTG		BKR		AMP			
1		20 1		0.0 0.0 0.7		CO OFFICE 102						0.5 0.0 0.0				1 20 2			
3		20 1		0.0 0.0 0.9		CO ROOM 105, 106						0.7 0.0 0.0				1 20 4			
5		20 1		0.0 0.0 0.7		CO EXAM 108						0.5 0.0 0.0				1 20 6			
7		20 1		0.0 0.0 0.5		CO RECEPTION 100						0.9 0.0 0.0				1 20 8			
9		20 1		0.0 0.0 0.7		CO FITNESS GYM 101						0.0 1.0 0.0				1 20 10			
11		20 1		0.0 1.0 0.0		POWER FITNESS GYM 101						0.2 0.0 0.0				1 20 12			
13		20 1		0.0 1.0 0.0		POWER FITNESS GYM 101						0.2 1.0 0.0				1 20 14			
15		20 1		0.0 0.0 0.2		CO FITNESS GYM 101						0.0 1.0 0.0				1 20 16			
17		20 1		0.0 1.0 0.5		CO FITNESS GYM 101						0.7 0.0 0.0				1 20 18			
19		20 1		0.0 0.0 0.2		CO FITNESS GYM 101						-- -- --				1 20 20			
21		20 1		1.8 0.0 0.0		OFFICE/EXAM/RESTRM LTG						-- -- --				1 20 22			
23		20 1		1.7 0.0 0.0		FITNESS GYM LIGHTING						-- -- --				1 20 24			
25		20 1		-- -- --		SPARE						-- -- --				1 20 26			
27		20 1		-- -- --		SPARE						-- -- --				1 20 28			
29		20 1		-- -- --		SPARE						-- -- --				1 20 30			
31		20 1		-- -- --		SPARE						-- -- --				-- -- 32			
33		20 1		-- -- --		SPARE						-- -- --				-- -- 34			
35		20 1		-- -- --		SPARE						-- -- --				-- -- 36			
37		-- -- --		-- -- --		SPACE						-- -- --				-- -- 38			
39		-- -- --		-- -- --		SPACE						-- -- --				-- -- 40			
41		-- -- --		-- -- --		SPACE						-- -- --				-- -- 42			
TOTALS:						CONNECTED KVA PER PHASE			5			6			CONNECTED TOTAL KVA =			18	
						CONNECTED AMPS PER PHASE			42			54			AVERAGE CONNECTED AMPS PER PHASE =			49	
NEC DIVERSIFIED LOAD CALCULATIONS																			
LIGHTING & CONTINUOUS LOADS: 3.5 kVA @ 125% = 4.4 kVA - 100% CONNECTED LOAD PLUS 25% DIVERSIFIED TOTAL KVA = 19																			
RECEPTACLES: 8.3 kVA @ 100% = 8.3 kVA - FIRST 10kVA @ 100%, REMAINDER @ 50% AVERAGE AMPS PER PHASE = 52																			
ALL OTHER LOADS @ 100%: 6.0 kVA																			
MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC																			
BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCATED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI																			



1 TWO RESTROOM SENSORS CONTROLLING A COMMON EXHAUST FAN

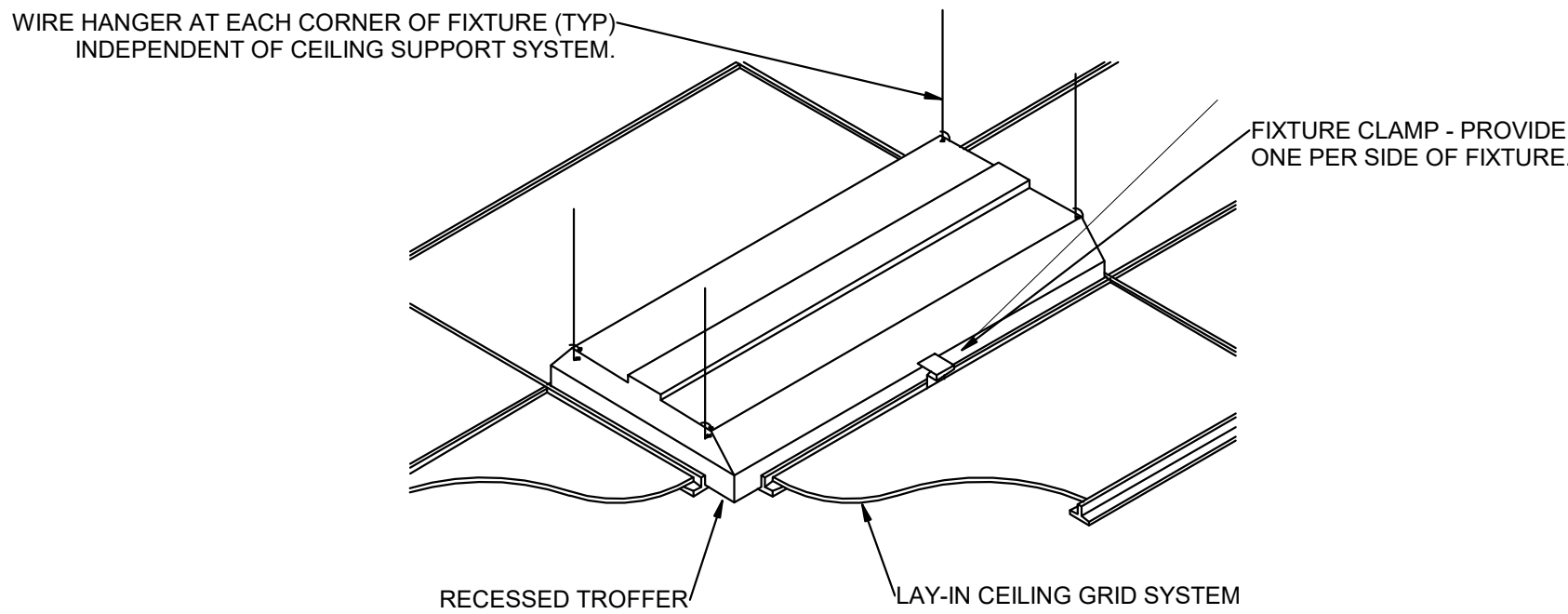
SCALE: 1/8" = 1'-0"



2 VOICE/ DATA CONDUIT RISER DIAGRAM

SCALE: 1/8" = 1'-0"

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2 RECESSED FIXTURE MOUNTING DETAIL

SCALE: 1/8" = 1'-0"

LIGHTING FIXTURE SCHEDULE							
FIXTURE CHARACTERISTICS							
SYMBOL	MARK	BODY / AIR / MOUNTING / DOOR	LAMP	WATTS	VOLTS	MANUFACTURER	CATALOG NUMBER
E9		EXIT SIGN: EDGE LIT; UNIVERSAL MOUNTING; UNIVERSAL ARROWS PER PLANS; EMERGENCY BATTERY PACK WITH 10 YEAR PRO-RATA WARRANTY; LED, DIFFUSE LENS PANEL; GREEN LETTERS ON WHITE BACKGROUND. MUST MEET NFPA ILLUMINATION STANDARDS.					
E9-1		SINGLE FACE:	LED	1W	120/277V	COMPASS ISOLITE EVENLITE	CELR1GNE ELT EM G 1C WH RC UC SOV-EM-G-1C-WH-RC-UC
DX		LED DOWNLIGHT					
DX-1		6" LED DOWNLIGHT WET LOCATION	LED	18W	120/277V	LITHONIA LIGHTOLIER HALO PRESCOLITE	LDN6-35-15-L06-AR-LSS-MVOLT-GZ10-WET 6RN/Z6RDL15835WOSCDZ10U HC6-15-D010-XX-HM6-12-835-61-MD-H LF66SL-DIM1-6LFSL-20L-35K-8-FL35-SS
G		INDIRECT TROFFERS: RECESSED FOR LAY-IN GRID; HINGED FLUSH STEEL DOOR WITH LATCH; EARTHQUAKE CLIPS, PROGRAM START ELECTRONIC BALLASTS; LONG COMPACT FLUORESCENT LAMPS; ONE BALLAST PER FIXTURE, 100-10% DIMMING BALLAST WHERE SHOWN.					
G-1		LED CENTER BASKET 4000 LUMENS	LED 835	40W	277/120V	COLUMBIA LITHONIA DAYBRITE METALUX	LCAT-22-35-ML-G-UNV-0-10V DIM 2BLT2-33L-ADSM-MVOLT-EZ1-LP835 2EVG-30L-835-2-D-UNV-DIM 22CZ-LD5-32SE-S-UNV-L835-CD1
TX		SPECIALTY FIXTURE					
TX-1		SURFACE FLAT PANEL	LED 835	40W	277/120V	COLUMBIA LITHONIA DAYBRITE METALUX	CFP14-4035/CFPSMK-14 EPANL 1x4 4000LM 80CRI 35K MIN10 ZT MVOLT /1x4SMKSH 1FXP38B835-4-DS-UNV-DIM /FSF14 14FP4235C/FPSURF14
TX-2		WALL VANITY LIGHT	LED 835	20W	120V	AYRE MODERN FORMS WAC	AXIS36 WS-3436 WS-77636-35-AL

1 LIGHT FIXTURE SCHEDULE

SCALE: NTS