

SOUTH DAKOTA DEPARTMENT OF THE MILITARY RENOVATE GENERALS QUARTERS

BUILDING 250

RC CAMP RAPID

100% CONSTRUCTION DOCUMENTS

08/31/2023

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













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






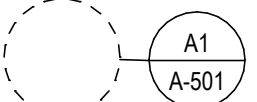



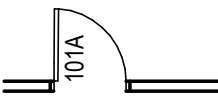


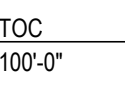


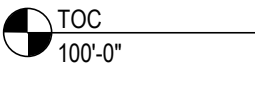



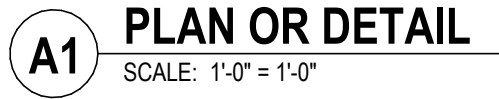

MOST COMMONLY USED ABBREVIATIONS

ABBREVIATIONS:		D	DEPTH	FR	FIRE RESISTANT/FRA	MC	MEDICINE CABINET	RFI	REQUEST FOR INFORMATION	UG	UNDERGROUND
AB	ANCHOR BOLT/ROD	DBL	DOUBLE	FRP	FIBERGLASS REINFORCED PANEL	MECH	MECHANICAL	RFP	REQUEST FOR PROPOSAL	UH	UNIT HEATER
ABV	ABOVE	DEMO	DEMOLITION, DEMOLISH	FS	FLOOR SINK	MEMB	MEMBRANE	RH	RIGHT HAND	UNFIN	UNFINISHED
AC	ASPHALTIC CONCRETE/AIR	DEPT	DEPARTMENT	FTG	FOOT, FEET/FIRE TREATED	MEZZ	MEZZANINE	RL	RIDGE LINE	UNO	UNLESS NOTED OTHERWISE
	CONDITIONER	DET	DETAIL	FTG	FOOTING	MFR	MANUFACTURE (R)	RM	ROOM	UTIL	UTILITY
ACC	ACCESSIBLE	DF	DRINKING FOUNTAIN	FURR	FURRING	MIN	MINIMUM	RO	ROUGH OPENING		
ACM	ALUMINUM COMPOSITE MATERIAL	DIA	DIAMETER	FUT	FUTURE	MISC	MISCELLANEOUS	ROW	RIGHT OF WAY	V	SHEAR
ACOUS	ACOUSTICAL	DIAG	DIAGONAL			MO	MASONRY OPENING	RWL	RAIN WATER LEADER	VAR	VARIES
ACOUS	ACOUSTICAL	DIM	DIMENSION	GB	GAGE, GAUGE	MR	MIRROR			VB	VAPOR BARRIER / VINYL BASE
ADD	ADDENDUM	DIV	DIVIDE, DIVISION	GC	GRAB BAR	MTL	METAL	S	SOUTH	VCT	VINYL COMPOSITION TILE
ADJ	ADHESIVE	DISP	DISPENSER	GC	GENERAL CONTRACTOR			SB	SPLASH BLOCK	VERT	VERTICAL
ADJ	ADJUSTABLE, ADJACENT, ADJOINING	DN	DOWN	GALV	GALVANIZED	N	NORTH	SC	SOLID CORE	VEST	VESTIBULE
AFF	ABOVE FINISH FLOOR	DR	DOOR	GL	GLASS	NA	NOT APPLICABLE	SCHED	SCHEDULE	VIF	VERIFY IN FIELD
AFG	ABOVE FINISH GRADE	DS	DOWNSPOUT	GLU LAM	GLUE LAMINATED (BEAM)	NIC	NOT IN CONTRACT	SCR	SHOWER CURTAIN ROD	VR	VAPOR RETARDER
ALT	ALTERNATE	DW	DISHWASHER	GWB	GYPSPUM WALL BOARD	NO	NUMBER	SC	SECTION	VWB	VINYL WALL BASE
ALUM	ALUMINUM	DWG	DRAWING (S)	GYP	GYPSPUM	NOM	NOMINAL	SD	SOAP DISPENSER	VWC	VINYL WALL COVERING
APC	ACOUSTICAL PANEL CEILING	DWR	DRAWER			NTS	NOT TO SCALE	SF	SQUARE FOOT		
ARCH	ARCHITECT (URAL)	DWTR	DUMBWAITER	HB	HOSE BIB			SHT	SHEET	W	WEST/WIDTH
ASI	ARCHITECTURAL SUPPLEMENTAL INFORMATION	(E)	EXISTING	HC	HANDICAP / HOLLOW CORE	OC	ON CENTER	SHTG	SHEATHING	W	WITH
		EA	EAST	HD	HEAVY DUTY	OD	OUTSIDE DIAMETER	SIM	SIMILAR	W/O	WITHOUT
AWP	ACOUSTICAL WALL PANEL	E	EAST	HDBD	HARDBOARD	OCFI	OWNER FURNISHED / CONTRACTOR	SLDG	SLIDING	WM	WEDGE ANCHOR
		EA	EACH	HDR	HEADER		INSTALLED	SLNT	SEALANT	WB	WOOD BASE
BD	BOARD	EF	EACH FACE	HDWD	HARDWOOD	OF	OWNER FURNISHED / OWNER	SND	SANITARY NAPKIN DISPENSER	WC	WATER CLOSET
BEV	BEVELED	EJ	EXPANSION JOINT	HDWR	HARDWARE		INSTALLED	SNDU	SANITARY NAPKIN DISPOSAL UNIT	WD	WOOD/WOODWORK
BFF	BELOW FINISH FLOOR	EL	ELEVATION	HM	HOLLOW METAL	OH	OVERHEAD	SOG	SLAB ON GRADE	WDW	WINDOW
BL	BRICK LEDGE	ELEC	ELECTRICAL	HORIZ	HORIZONTAL	OPP	OPPOSITE	SPEC	SPECIFICATION (S)	WF (W)	WIDE FLANGE
BLDG	BUILDING	ELEV	ELEVATOR	HR	HOUR	OPG	OPENING	SQ	SQUARE	WG	WALL GUARD
BLKG	BLOCK (ING)	ENL	ENLARGED	HT	HEIGHT	ORIG	ORIGINAL	SSM	SOLID SURFACE MATERIAL	WH	WATER HEATER
BM	BEAM	EMER	EMERGENCY	HSS	HOLLOW STRUCTURAL STEEL	ORD	OVERFLOW ROOF DRAIN	SST	STAINLESS STEEL	WI	WROUGHT IRON
BOT	BOTTOM	ENGR	ENGINEER	HVAC	HEATING, VENTILATION, AIR-CONDITIONING	OZ	OUNCE	ST	STREET	WL	WIND LOAD
BO	BOTTOM OF	EOP	EDGE OF PAVEMENT					STC	SOUND TRANSMISSION CLASS	WP	WATERPROOF (ING)
BOC	BOTTOM OF CONCRETE	EPDM	ETHYLENE PROPYLENE DIENE MONOMER	IBC	INTERNATIONAL BUILDING CODE	PAR	PARALLEL	STD	STANDARD	WR	WATER RESISTANT
BRG	BEARING					PCF	POUNDS PER CUBIC FOOT	STL	STEEL	WCS	WAINSCOT
BRK	BRICK	EPS	EXPANDED POLYSTYRENE BOARD	ID	INSIDE DIAMETER/DIMENSION	PED	PEDESTAL	STOR	STORAGE	WT	WEIGHT/WINDOW TREATMENT
BST	BASEMENT	EPT	EPOXY PAINT	IN	INCHES	PERF	PERFORATED	STRUCT	STRUCTURAL	WWF	WELED WIRE FABRIC
BTWN	BETWEEN	EQ	EQUAL	INCL	INCLUDE (D), INCLUDING	PERP	PERPENDICULAR	SUSP	SUSPENDED		
		EQUIP	EQUIPMENT	INFO	INFORMATION	PL	PLATE	SV	SHEET VINYL		
		ES	EACH SIDE	INSP	INSPECTION	PLM	PLASTIC LAMINATE	SW	SHEARWALL		
C	CHANNEL/CELSIUS	EST	ESTIMATE	INSTR	INSTRUCTION(S)	PLYWD	PLYWOOD	SYM	SYMMETRICAL	&	AND
CAB	CABINET	ETC	ETCETERA	INSUL	INSULATE (D), INSULATION	PNL	PANEL			L	ANGLE
CB	CERAMIC BASE	ETR	EXISTING TO REMAIN	INT	INTERIOR	PR	PAIR/PROPOSAL REQUEST	T	TREAD	LL	DOUBLE ANGLE
CD	CONSTRUCTION DOCUMENTS	EW	EACH WAY			PRCST	PRECAST CONCRETE	T&B	TOP AND BOTTOM	@	AT
CEM	CEMENT	EXIST	EXISTING	JAN	JANITOR	PREFAB	PREFABRICATE	T&G	TONGUE AND GROOVE	d	PENNEY
CF	CUBIC FEET OR FOOT	EXC	EXCAVATE/EXCAVATION	JST	JOIST	PSI	POUNDS PER SQUARE INCH	TB	TOWEL BAR	#	POUND OR NUMBER
CG	CORNER GUARD	EXH	EXHAUST	JT	JOINT	PSF	POUNDS PER SQUARE FOOT	TD	TO BE DETERMINED	Ø	ROUND OR DIAMETER
CIPC	C&T-IN-PLACE CONCRETE	EXP	EXPANSION/EXPOSED			PTD	PAPER TOWEL DISPENSER	TEMP	TEMPERARY/TEMPERED		
CL	CENTER LINE	EXT	EXTERIOR	KCJ	KEYED CONSTRUCTION JOINT	PTN	PARTITION	TER	TERAZZO		
CLG	CEILING	EW	ELECTRIC WATER COOLER	KO	KNOCK OUT	PTR	PAPER TOWEL RECEPTACLE	THD	THREAD (ED) (S)		
CLKG	CAULKING	EWS	EYE WASH AND SHOWER			PTR	PAPER TOWEL RECEPTACLE	THK	THICKNESS		
CLR	CLEAR, CLEARANCE			L	LENGTH / ANGLE	PVC	POLYVINYL CHLORIDE	THRU	THROUGH		
CMU	CONCRETE MASONRY UNIT	FA	FIRE ALARM	LAB	LABORATORY			TBDD	TACKBOARD		
CO	CHANGE ORDER/CLEAN OUT	FAB	FABRICATE/FABRICATION	LAM	LAMINATE (ED)	QT	QUARRY TILE	TL	TILE		
COL	COLUMN	FD	FLOOR DRAIN	LAV	LAVATORY			TO	TOP OF		
COMB	COMBINATION	FDC	FIRE DEPRATMENT CONNECTION	LB	LOAD	R	RADIURISER	TOB	TOP OF BEAM		
COMP	COMPOSITE/COMPOSITION	FDTN	FOUNDATION	LF	LINEAR FEET	RB	RUBBER BASE	TOD	TOP OF CONCRETE/CURB		
CONC	CONCRETE	FE	FIRE EXTINGUISHER	LH	LEFT HAND	RBR	RUBBER	TOC	TOP OF DECK		
CONN	CONNECT (ION)	FEC	FIRE EXTINGUISHER CABINET	LKR	LOCKER	RCP	REFLECTED CEILING PLAN	TOF	TOP OF FOOTING (FOUNDATION)		
CONST	CONSTRUCTION	FF	FINISHED FLOOR	LOC	LOCATION	RO	ROOF DRAIN	TOP	TOP OF PIER		
CONT	CONTINUOUS, CONTINUE	FFE	FINISH FLOOR ELEVATION	LONG	LONGITUDINAL	REBAR	REINFORCING BAR	TOJ	TOP OF JOIST		
CONTR	CONTRACT (OR)	FIN	FINISH (ED)	LT	LIGHT	REC	RECESSED	TOS	TOP OF SLAB/STEEL		
COORD	COORDINATE	FLUR	FLUORESCENT	LVR	LOUVER	REF	REFERENCE/REFRIGERATOR	TOW	TOP OF WALL		
CORR	CORRUGATED/CORRIDOR	FLR	FLOOR (ING)	LVT	LUXURY VINYL TILE	REINF	REINFORCE (D), (ING), (MENT)	TPD	TOILET PAPER DISPENSER		
CPT	CARPET	FO	FACE OF			REQ	REQUIRED	TRQ	THERMOPLASTIC POLYOLEFIN		
CSMT	CASEMENT	FOC	FACE OF CONCRETE	MBC	MINNESOTA BUILDING CODE	REQD	REQUIRED	TPTN	TOILET PARTITION		
CT	CERAMIC TILE	FOM	FACE OF MASONRY	MAS	MASONRY	RES	RESILIENT FLOORING	TRANS	TRANSVERSE		
CTB	CARPET TILE BASE	FOS	FACE OF STUD	MATL	MATERIAL	RET	RETURN	TS	TUBE STEEL		
CTR	CENTER	FOF	FACE OF FINISH	MAX	MAXIMUM	REV	REVISION (S), REVISED	TYP	TYPICAL		

MATERIAL LEGEND

	EXISTING AREAS / ELEMENTS
	EARTH / RECOMPACT SOIL
	GRANULAR FILL / DRAINAGE COURSE
	CONCRETE
	BRICK
	CONCRETE MASONRY UNIT
	METAL/STEEL
	RIGID INSULATION
	GROUT
	WOOD WALL / FINISH
	MORTAR
	PLYWOOD / OSB / PARTICLE BOARD
	WOOD-GLUED / LAMINATED
	WOOD - BLOCKING OR SHIM
	WOOD - CONTINUOUS FRAMING
	BATT OR BLANKET INSULATION/FIRE SAFING

SYMBOLS LEGEND

	ROOM TAG
	REVISION TAG
	REFERENCE KEYNOTE TAG
	KEYNOTE TAG (STRUCT, MECH, ELEC)
	WINDOW TAG
	EQUIPMENT TAG
	SECTION TAG
	DETAIL TAG
	EXTERIOR ELEVATION TAG
	INTERIOR ELEVATION TAG
	EXISTING ITEMS TO REMAIN
	EXISTING ITEMS TO BE REMOVED
	NEW WORK / DOOR TAG
	NORTH ARROW
	PLAN NORTH
	GRID
	COLUMN/FND GRID INDICATOR
	ELEVATION TAG
	CONSTRUCTION LIMITS
	MATCH LINE
	MATCH LINE INDICATOR
	PLAN OR DETAIL
	VIEW TITLE

DESIGN TEAM

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ELECTRICAL ENGINEER	JACOB FLECK	TSP, Inc.	605.343.6102	fleckjg@teamtsp.com

LOCATION MAP

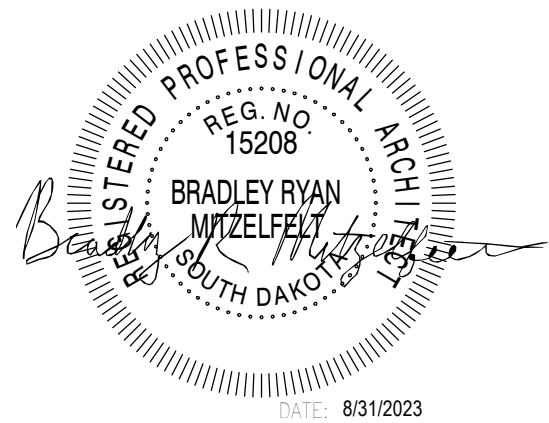


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Rapid City, SD 57701

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Architecture
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PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE		DRAWN BY
08/31/2023		BRM
PROJECT #		CHECKED BY
03221580		BRM

SHEET TITLE

COVER SHEET

SHEET NUMBER

G-001

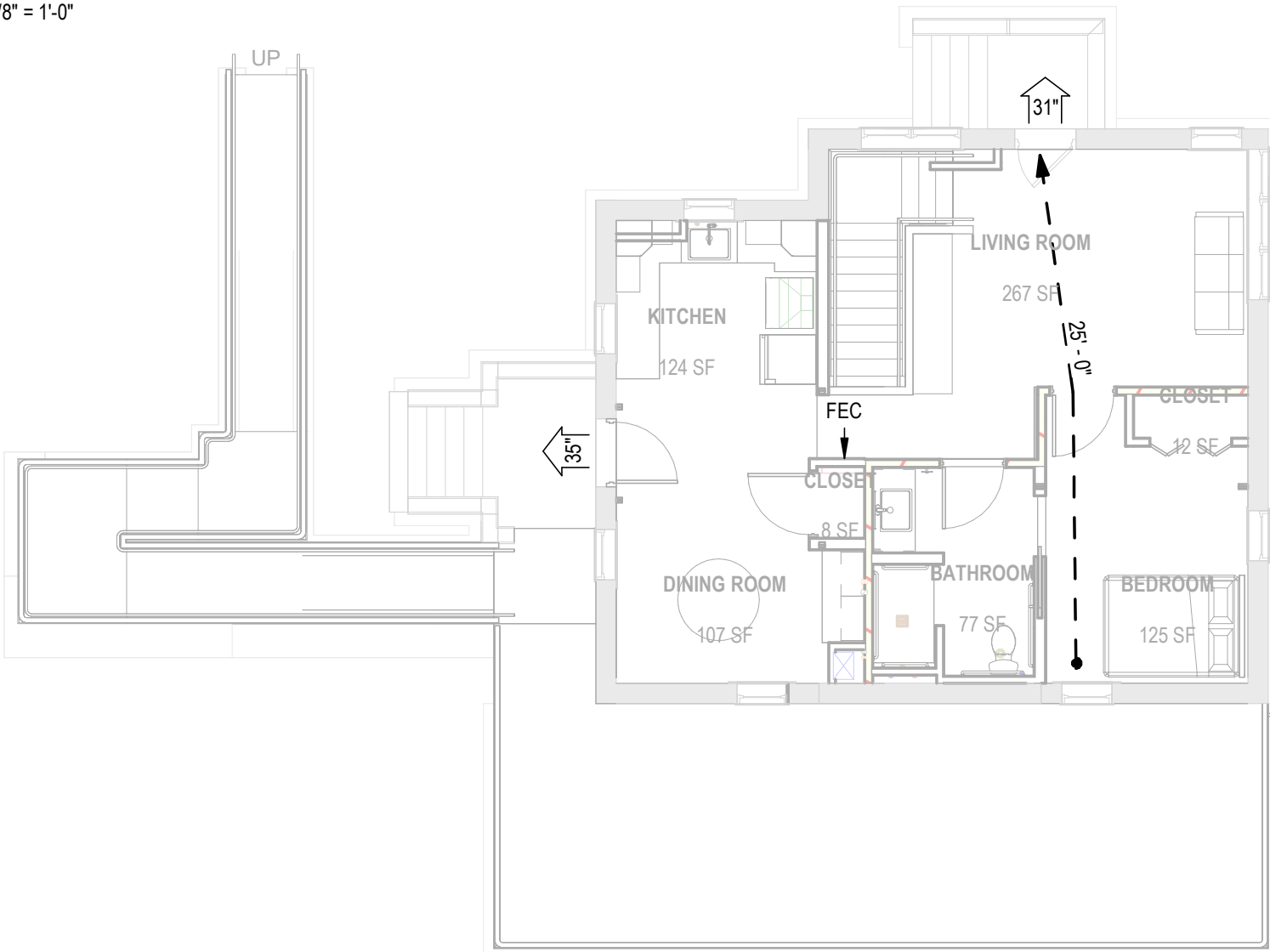
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100% CONSTRUCTION DOCUMENTS

LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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B1 LOWER LEVEL CODE PLAN
SCALE: 1/8" = 1'-0"



A1 FIRST LEVEL CODE PLAN
SCALE: 1/8" = 1'-0"

CODE SUMMARY

PROJECT: SDARNG General's Quarters Renovation
Rapid City, South Dakota

- A. Summary:**
The project includes the renovation of the existing General's Quarters building.
- B. Adopted Codes:**
Building/Dwelling Code International Building Code (IBC) 2021 w/ Amendments
Structural Code IBC 2021
Mechanical Code International Mechanical Code (IMC) 2021
Plumbing Code 2021 Uniform Plumbing Code
Electrical Code National Electrical Code (NEC) 2020
Accessibility Code ICC A117.1 per Chapter 11 of the IBC
2010 ADA Standards for Accessible Design
- C. Use and Occupancy:**
1. RESIDENTIAL GROUP (R-3) Boarding House (Transient, Less than 10 occupants)
a. A sprinkler system is required.
b. Gross Square Footage: 1,788 sf
- D. Allowable Areas and Number of Stories:**
1. RESIDENTIAL GROUP (R-3)
a. IBC Table 504.3
i. Allowable height 60 FT
ii. Actual Less than 60 FT
b. IBC Table 504.4
i. Allowable stories 4
ii. Actual 2
c. IBC Table 508.2
i. Allowable area Unlimited
ii. Actual 1,788 sf
- E. Building Elements:**
1. Fire Resistive Requirements Type V-B IBC Table 601
a. Structural frame 0
b. Bearing walls - Exterior 0
c. Bearing walls - Interior 0
d. Non-bearing walls - Exterior 0
e. Non-bearing walls - Interior 0
f. Floor 0
g. Roof 0
- F. Fire Resistance Rated Construction:**
1. FIRE WALLS IBC Sec. 706
a. Not required.
2. FIRE BARRIERS. IBC Sec. 707
a. Not required.
3. FIRE PARTITIONS IBC Sec. 708
a. Sleeping units to be min 1/2 hour rated due to sprinkler system. Wall construction is 1 hour rated, but only 1/2 hour required. Ceilings also to be 1/2 hour rated.
- G. Fire Protection Systems:** IBC Ch. 9
1. Automatic Sprinkler System will be provided.
2. Portable Fire Extinguishers (2-A) provided per IBC 906.1 and located per 906.3.1 (within 75 ft).
3. Manual fire alarm system will be provided per IBC 907.
- H. Means of Egress:**
1. Floor Area per Occupant IBC Table 1004.5
a. Residential (R-3) 15 Persons
2. Egress Width. IBC Sec. 1005
a. Minimum Required Provided
OL x .2 15 x .2 = 3" 204"
b. Minimum Stair Width
OL x .3 15 x .3 = 4.5" 36"
3. Doors IBC Sec. 1010
a. Minimum Clear Width 32"
4. Common Path of Travel IBC Table 1006.2.1
a. R-3 125 ft (w/o sprinkler system)
5. Egress from Spaces IBC Sec. 1006
a. One exit required per table 1006.2.1 as occupant load is less than 20
6. Exit Arrangement IBC Sec. 1007.1.1
a. The distance between Exits or Exit Access Doors is a minimum of 1/2 the length of the maximum overall diagonal dimension of the building.
7. Exit access travel distance IBC Table 1017.2
a. R-3 250 FT with fire sprinkler system
8. Corridors IBC Sec. 1020
a. Rating Non-rated
b. Width IBC Table 1020.2 36 inches minimum where serving occupant load < 50
c. Dead-End Not to exceed 20 feet in length.
- I. Exterior Insulation Requirements:**
1. Per ASHRAE, Rapid City is in Climate Zone 6. For Commercial projects, Building Envelope requirements are as follows:
a. Entry Doors .63U
b. Opaque Doors .37U.
- J. Plumbing Fixture Count Requirements:**
1. Per IBC Table 2902.1:
a. B-3 OCCUPANCY M/F WCs Urinals M/F Lav. Bath/Shwr DF Other
Req'd. 1 per 10/1 per 8 0 Req'd 1 per 12/1 per 12 1 per 8 1 per 150 1 Kitchen Sink and 1 W/D hookup
15 Persons (3 Unisex) (3 Unisex) (3 Provided) * (Both Provided)
*Kitchen sink provided to fulfill drinking water requirements.
- K. Accessibility:**
Per 2017 ICC A117.1 section 304.3.1.2, existing buildings only require an ADA turning radius of 60 inches.
Per 1107.1, Buildings and facilities shall be designed and constructed to be accessible in accordance with this IBC 2021 and ICC A117.1.
Per the IBC, 1 unit should be Type A, as outlined in 1003 of 2017 ICC A117.1.

THIS SHEET CONTAINS COLOR-CODED INFORMATION. THIS SHEET SHOULD BE PRINTED IN COLOR. TSP LOGO TO THE RIGHT SHOULD BE RED.

LIFE SAFETY LEGEND

- NON RATED STUD WALL
1 HOUR RATED FIRE PARTITION
- FEC FIRE EXTINGUISHER CABINET
- 25'-0" TRAVEL DISTANCE
- EGRESS WIDTH

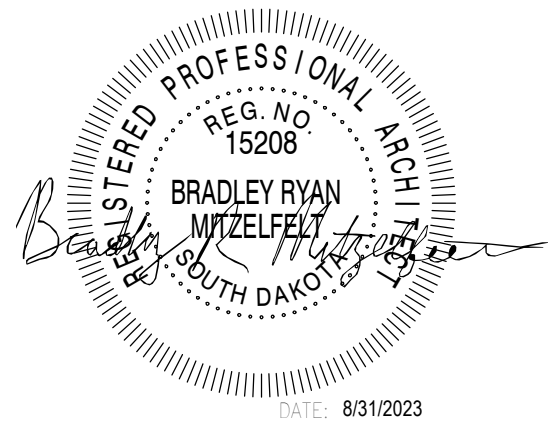


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250**

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ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	DRAWN BY	
08/31/2023	BRM	
PROJECT #	CHECKED BY	
03221580	BRM	

SHEET TITLE

LIFE SAFETY PLAN

SHEET NUMBER

G-101

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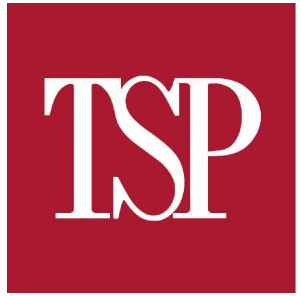
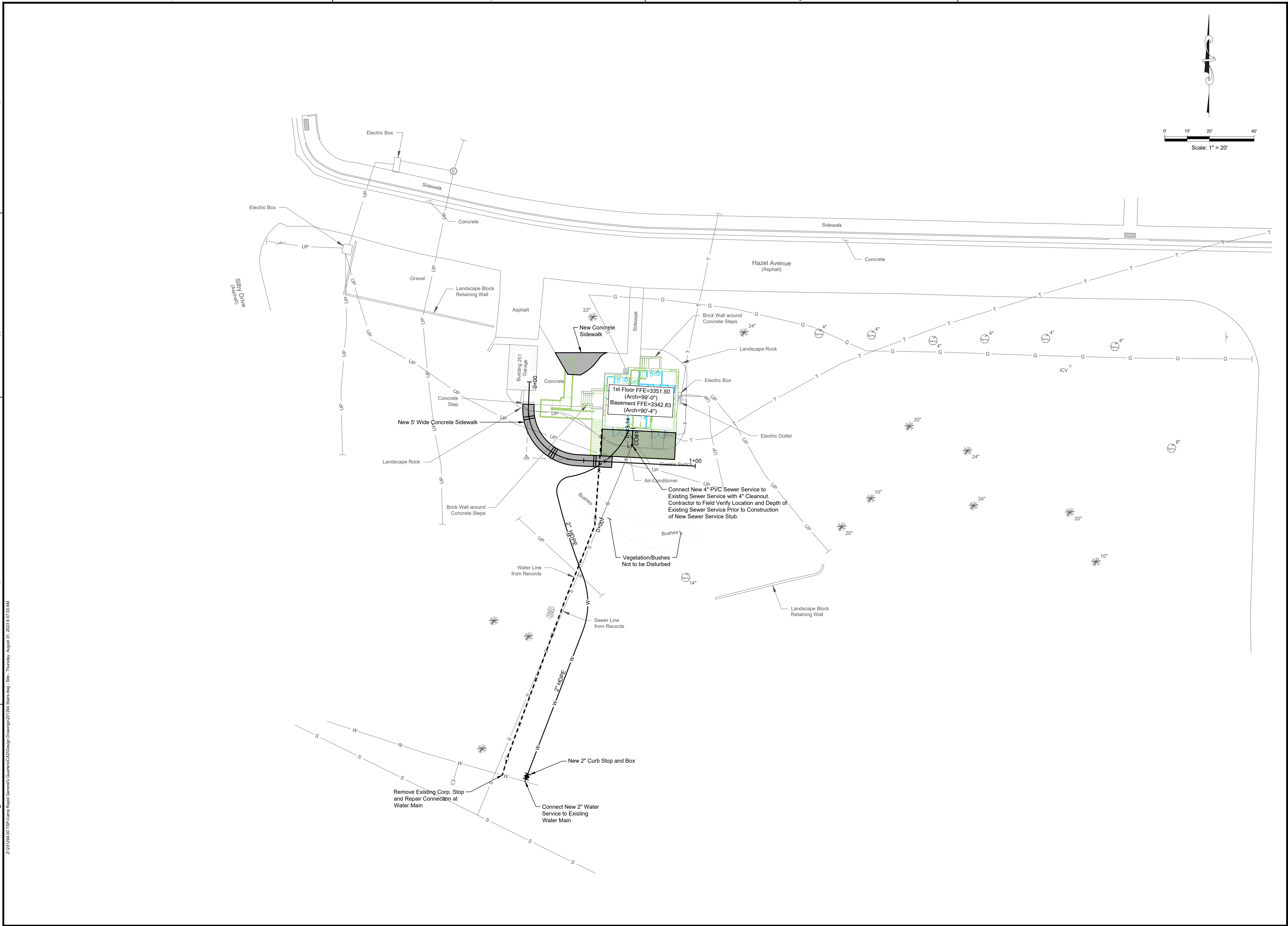
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LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

C

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2:23:26.00 TSP-Camp Rapid General's Quarters/CAO Design Drawings/231294_Site.dwg - Site - Thursday, August 31, 2023 9:27:53 AM
2:23:26.00 TSP-Camp Rapid General's Quarters/CAO Design Drawings/231294_Site.dwg - Site - Thursday, August 31, 2023 9:27:53 AM

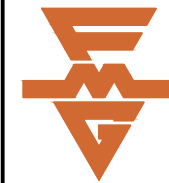


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PROJECT TITLE



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RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	DRAWN BY	
08/31/2023	MDS	
PROJECT #	CHECKED BY	
03221580	JAP	

SHEET TITLE

Site and Utility Plan

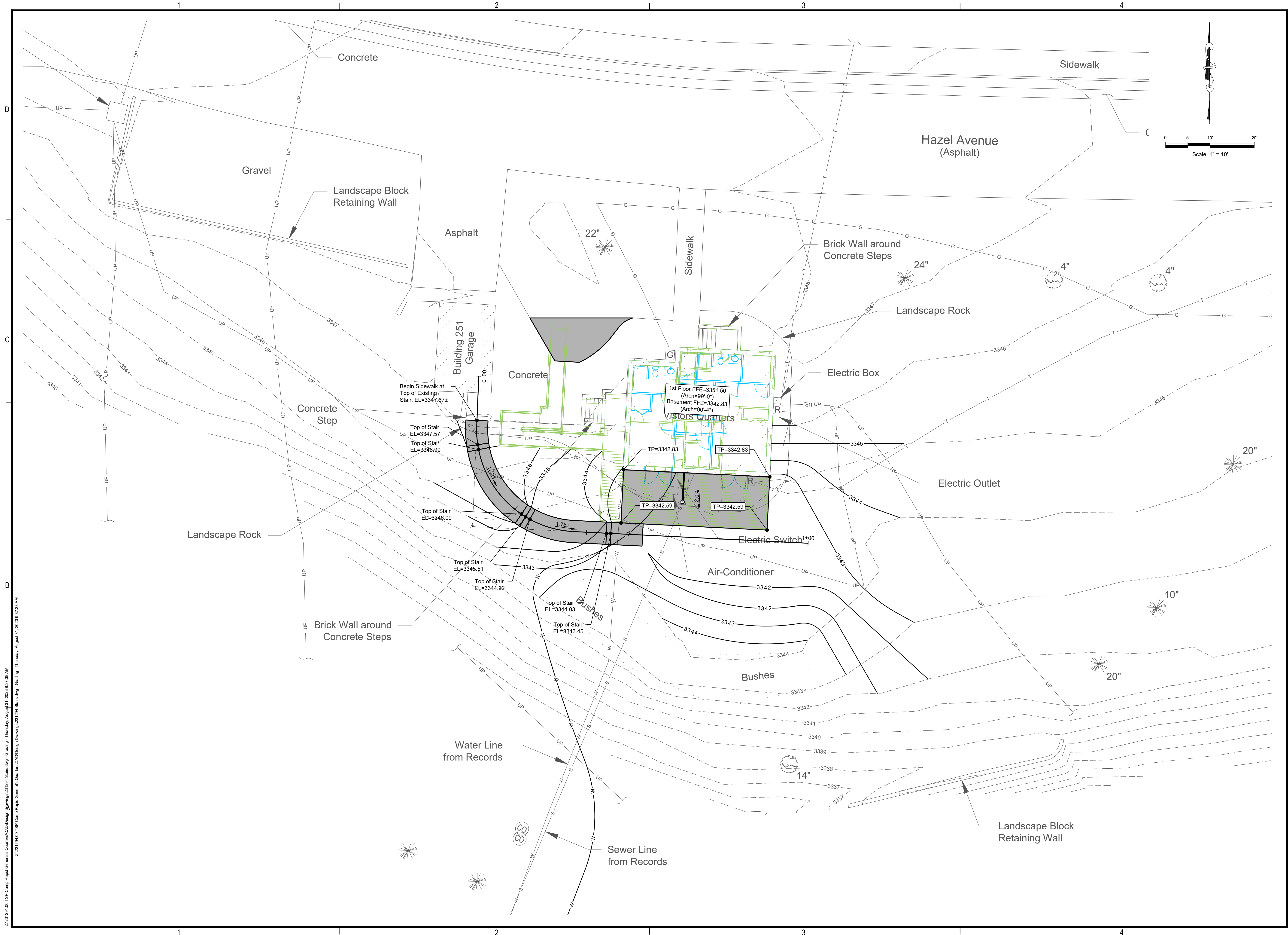
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C-101

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2:23:26.00 TSP-Camp Rapid General's Quarters/CAO Design Drawing 032124, State Job - Grading - Thursday, August 31, 2023 9:27:39 AM



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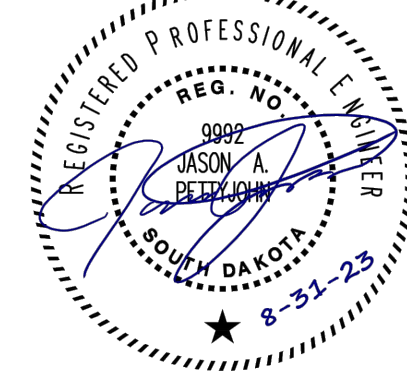
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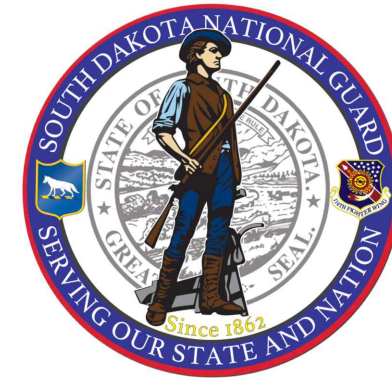
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PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY MDS
PROJECT #	03221580	CHECKED BY JAP

SHEET TITLE

Grading Plan

SHEET NUMBER

C-102

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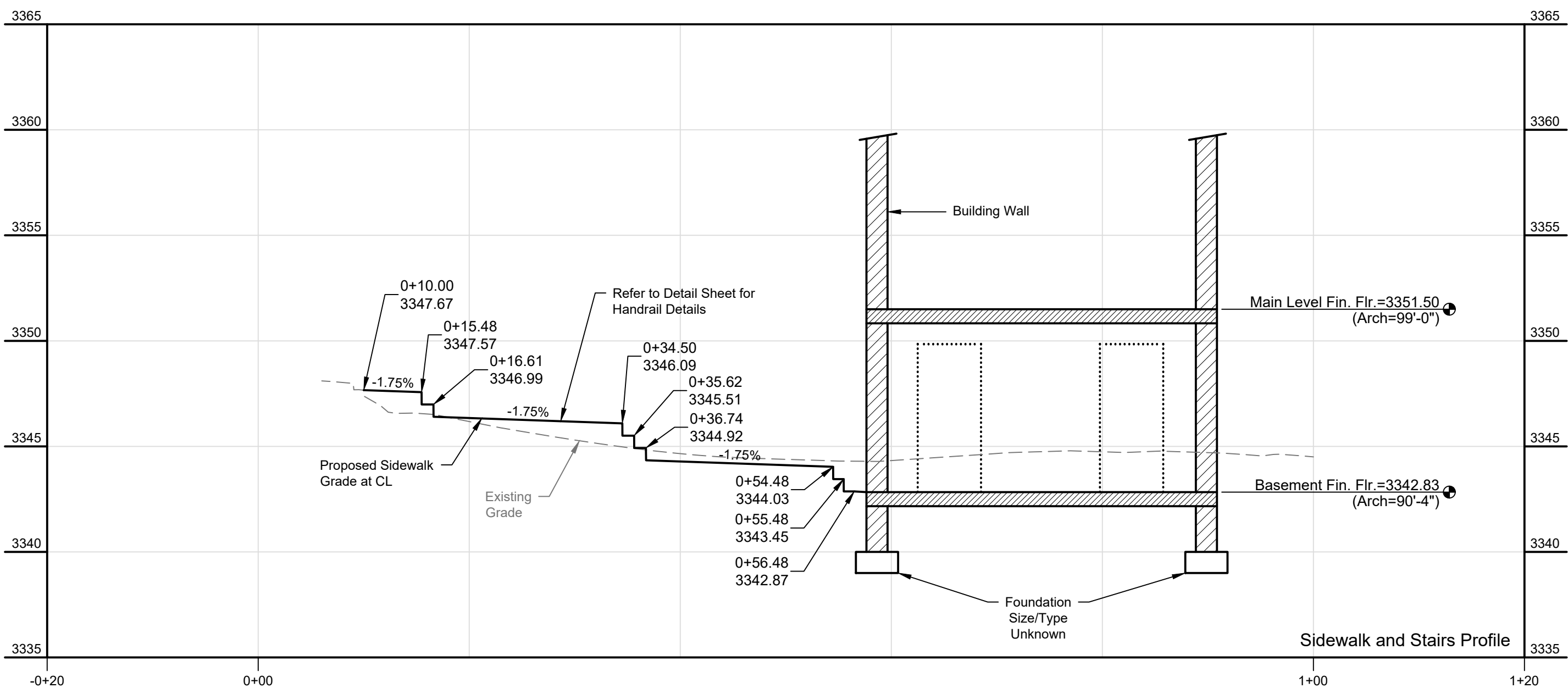
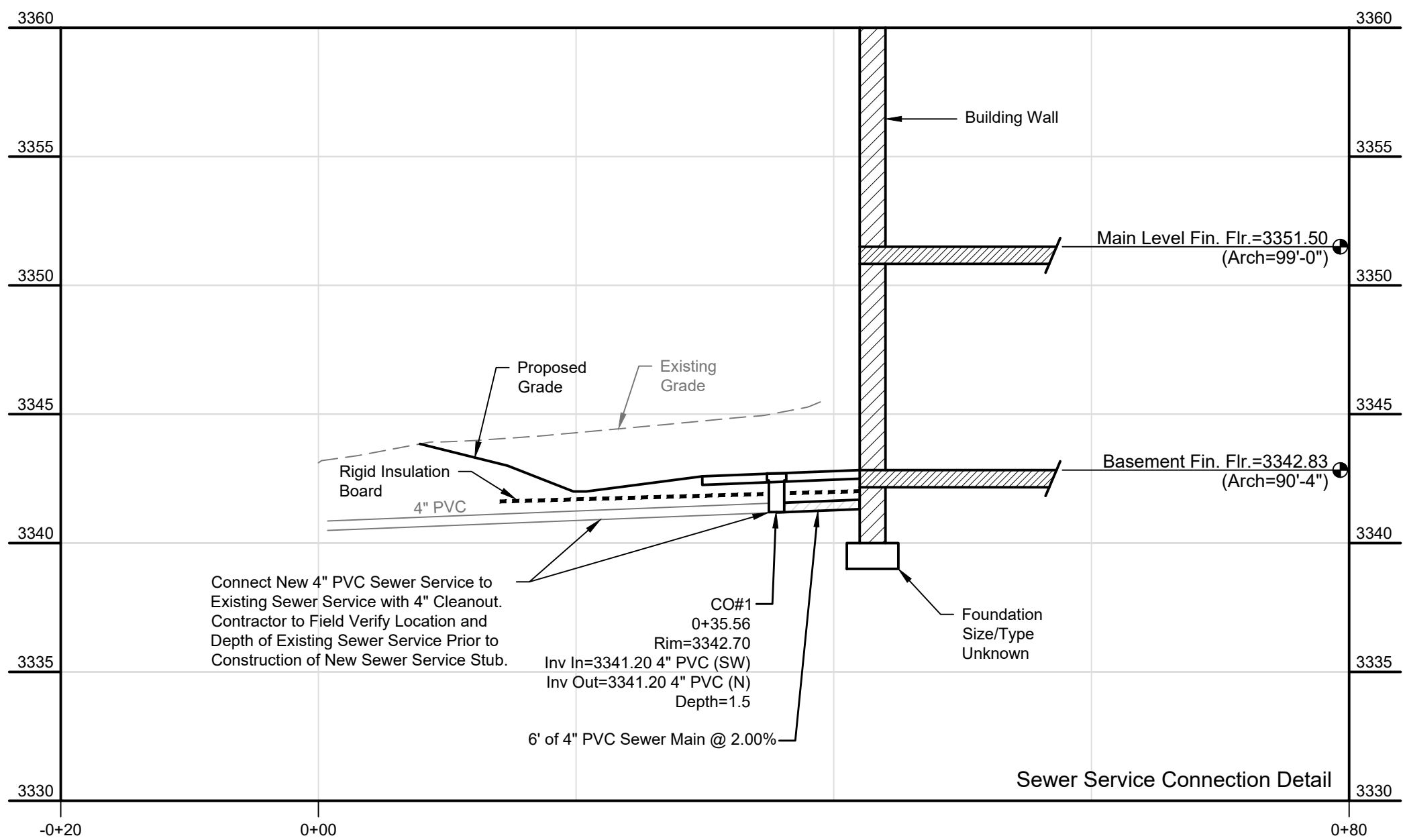
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PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

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Site Profiles

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C-103

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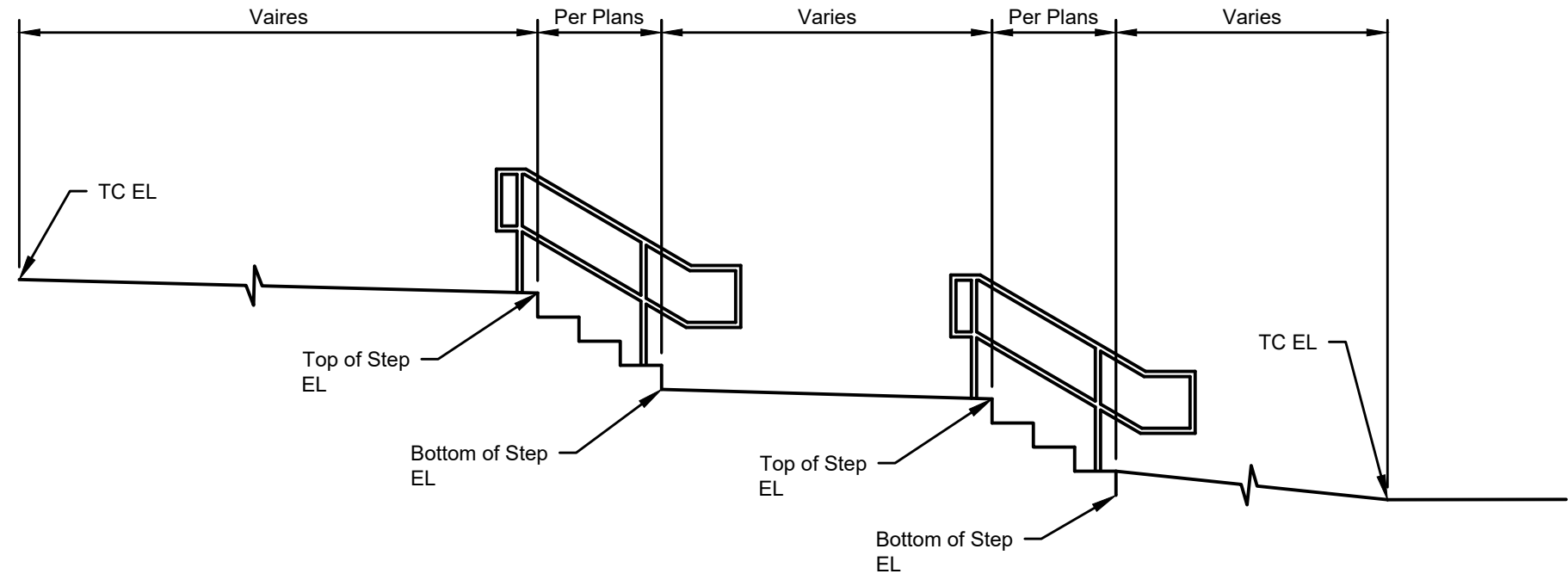
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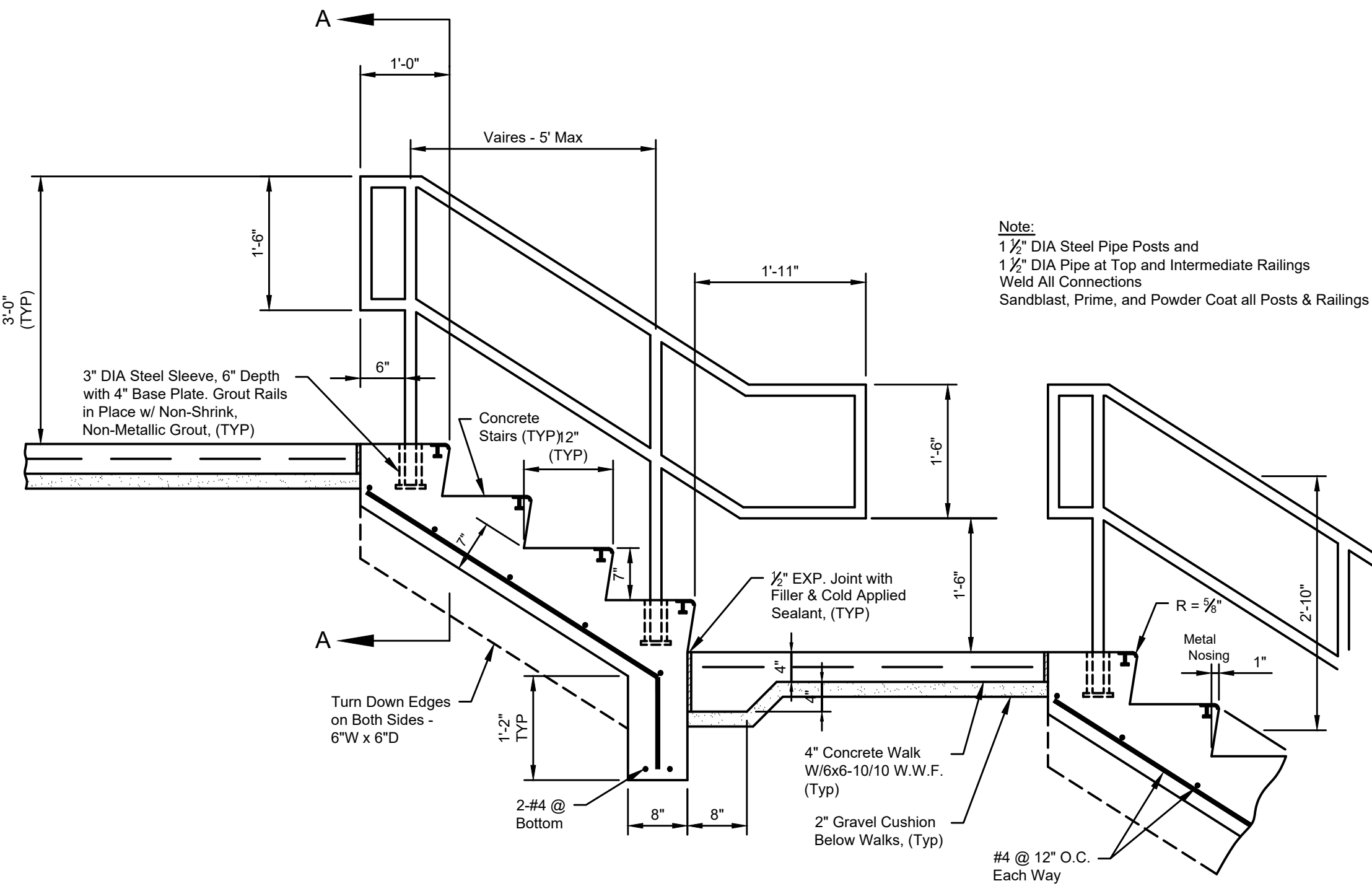
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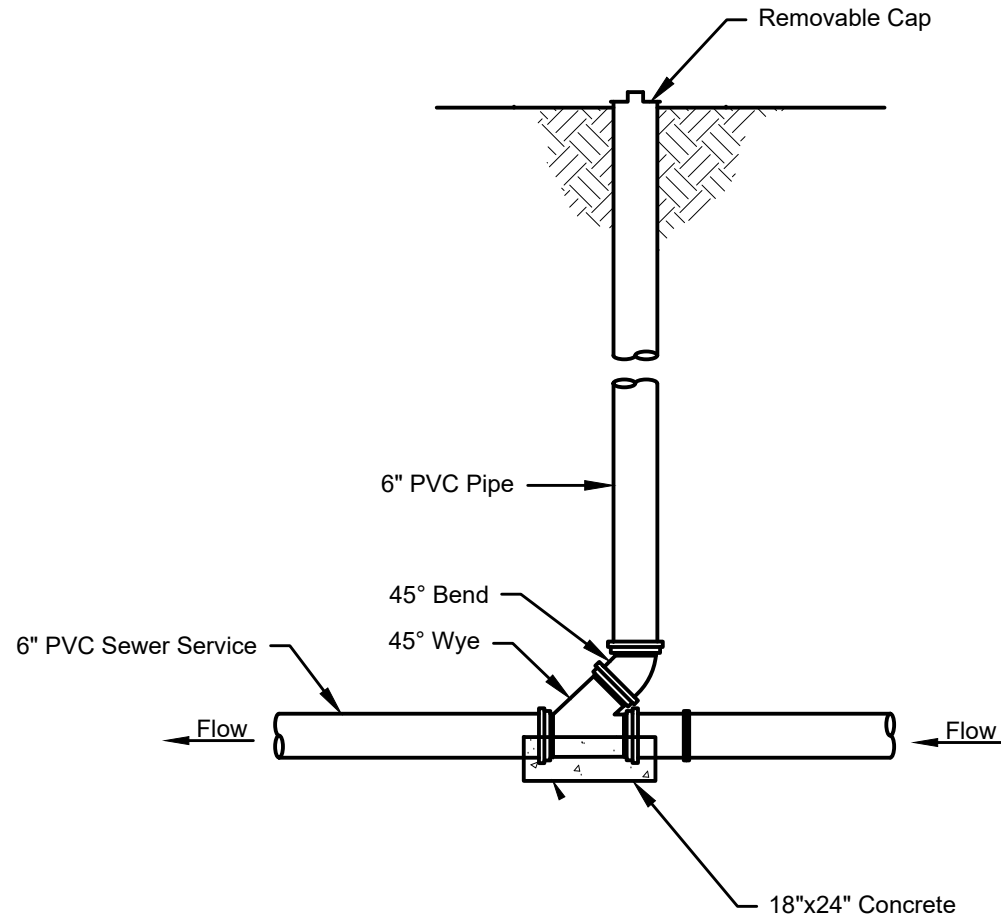
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SIDEWALK AND STAIR PROFILE
Not to Scale



CONCRETE STAIR - TYPICAL SECTION
Scale: 3/4"=1'-0"



SANITARY SEWER CLEANOUT
Not To Scale

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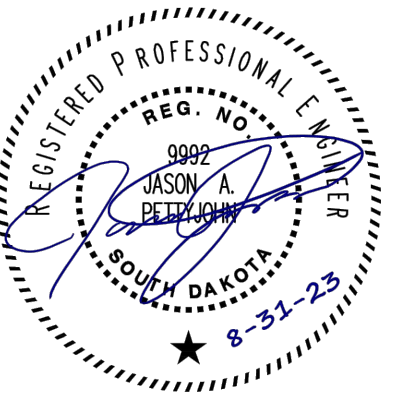
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**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
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SHEET TITLE

Site Details

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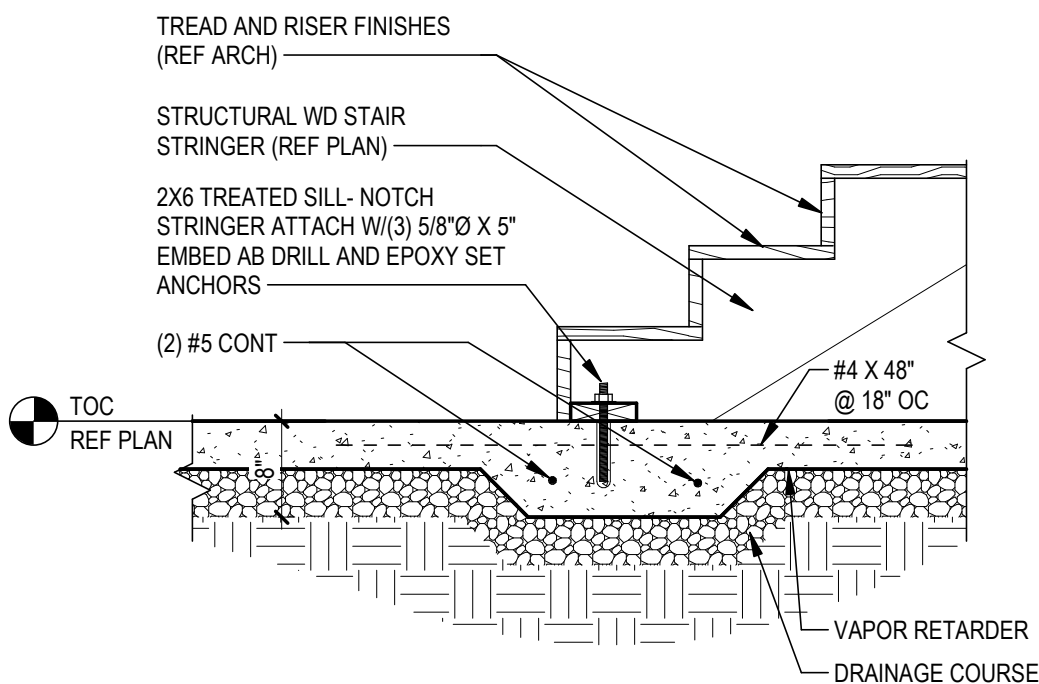
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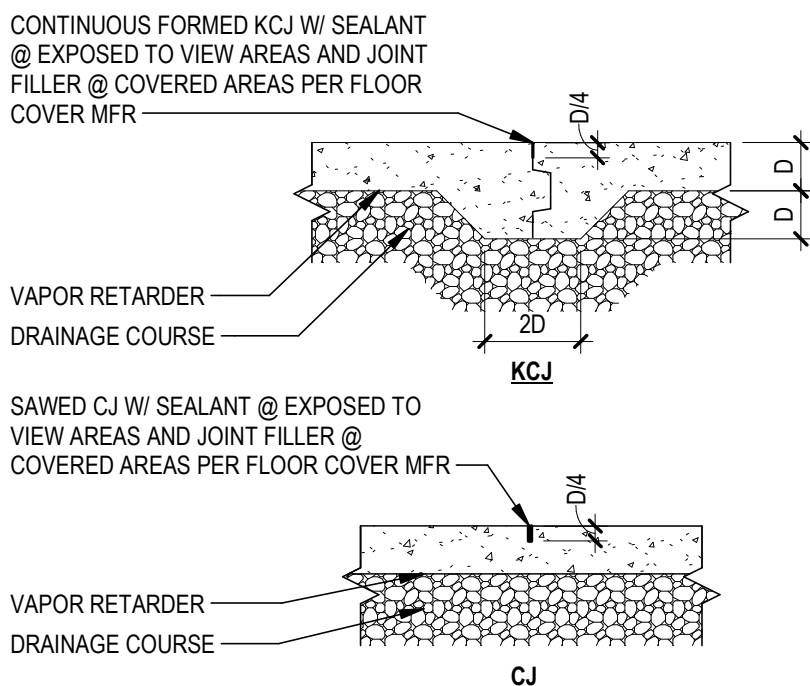
GENERAL STRUCTURAL NOTES

DESIGN CODE	FOUNDATIONS
1. INTERNATIONAL BUILDING CODE, 2021	1. FOOTINGS HAVE BEEN DESIGNED FOR A MAXIMUM SOIL BEARING PRESSURE OF 1500 PSF. THE CONTRACTOR IS TO EMPLOY A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF SOUTH DAKOTA TO VERIFY THIS DESIGN ASSUMPTION. CONTRACTOR TO FOLLOW GEOTECHNICAL RECOMMENDATIONS TO ACHIEVE DESIGN SOIL BEARING PRESSURE. IF THE SOIL AT THE FOOTING ELEVATIONS SHOWN IS OF QUESTIONABLE BEARING VALUE, NOTIFY THE ARCHITECT/ENGINEER AT ONCE FOR RESOLUTION.
2. BUILDING CODE FOR THE CITY OF RAPID CITY, SD	2. TESTING SERVICE MUST INSPECT AND APPROVE SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS PERFORMED THEREON. NOTIFY TESTING SERVICE PRIOR TO PROCEEDING WITH PLACEMENT OF FOOTINGS, FILL, OR OTHER CONSTRUCTION OVER SUBGRADES AND FILL.
DESIGN LOADS	3. WATER SHALL NOT BE PERMITTED TO POND IN FOOTING EXCAVATION. KEEP EXCAVATION DRY. FAILURE TO DO SO WILL BE CAUSE FOR REQUIRING CONTRACTOR TO REMOVE WATER DAMAGED SOILS AND REPLACE WITH CONTROLLED FILL AS DIRECTED.
1. FLOOR LOADS RESIDENTIAL FLOOR LIVE LOAD - 40 PSF PLUS PARTITION SUPERIMPOSED FLOOR LIVE LOAD - 15 PSF EXTERIOR BALCONY FLOOR LIVE LOAD - 60 PSF	4. SHOULD ANY QUESTIONABLE CONDITIONS BE ENCOUNTERED DURING EXCAVATION, NOTIFY A/E IMMEDIATELY. FOOTING ELEVATIONS ARE SUBJECT TO CHANGE DEPENDING ON SOIL CONDITIONS ENCOUNTERED.
2. ROOF LIVE LOAD GROUND SNOW LOAD $P_g = 43$ PSF FLAT ROOF SNOW LOAD $P_f = 30$ PSF SNOW EXPOSURE FACTOR $C_e = 1.0$ SNOW LOAD IMPORTANCE FACTOR $I = 1.0$ THERMAL FACTOR $C_t = 1.0$ PLUS APPLICABLE SLIDING, DRIFTING AND UNBALANCED SNOW LOAD INCREASES	5. REMOVE ANY ABANDONED SEWER OR SERVICE LINE ENCOUNTERED DURING EXCAVATION WITHIN THE BUILDING LINES. SHOULD SUCH LINES BE FOUND BELOW OR ADJACENT TO FOOTING LOCATIONS, NOTIFY THE A/E.
3. CONCENTRATED LOADS AS SHOWN IN ASCE 7 TABLE 4.3-1 SHALL BE ACCOUNTED FOR AS INDICATED.	6. ALL FOOTINGS SHALL BE CENTERED UNDER WALLS. NO OFFSETS SHALL BE PERMITTED.
4. WIND LOADS BASIC WIND SPEED = 115 MPH RISK CATEGORY II (ASCE 7-16) WIND EXPOSURE = C	7. WHERE FILL MATERIAL IS PLACED ON BOTH SIDES OF GRADE BEAMS OR WALLS, IT SHALL BE PLACED IN LAYERS ALTERNATELY ON OPPOSITE SIDES TO MAINTAIN LEVELS THAT WILL AVOID DISPLACEMENT OF, OR DAMAGE TO, THE WALLS OR BEAMS.
5. SEISMIC LATERAL LOADS RISK CATEGORY II (ASCE 7-16) SPECTRAL RESPONSE COEFFICIENTS S_s (0.2 SEC) = 0.142g S_1 (1.0 SEC) = 0.041g SEISMIC IMPORTANCE FACTOR = 1.00 SITE CLASS D (ASSUMED DEFAULT) SEISMIC DESIGN CATEGORY A	8. WHERE FILL MATERIAL IS PLACED ON ONE SIDE OF A WALL, THE WALL SHALL BE ADEQUATELY SHORED AND BRACED OR THE MATERIAL SHALL NOT BE PLACED UNTIL SUPPORTING FLOOR SLABS HAVE BEEN POURED AND SET.
MATERIALS GRADES AND STRENGTHS	9. NO FILL OR BACKFILL SHALL BE "SETTLED" BY THE USE OF WATER.
NOTE: ALL CONSTRUCTION MATERIALS MUST MEET BABAA (BUILD AMERICA, BUY AMERICA ACT). CONTRACTOR RESPONSIBLE FOR VERIFYING BABAA COMPLIANCE OF ALL CONSTRUCTION MATERIALS.	10. PROVIDE DRAINAGE COURSE BELOW ALL INTERIOR, EARTH SUPPORTED, CONCRETE SLABS UNLESS NOTED OTHERWISE:
1. CAST-IN-PLACE CONCRETE COMPRESSIVE STRENGTH: 4500 PSI @ 28 DAYS AGGREGATE: ASTM C33, CLASS 3S, 3/4" MAX COARSE-AGGREGATE SIZE CEMENTITIOUS MATERIALS: PORTLAND CEMENT-ASTM C150, TYPE III/ OR IL FLY ASH (25% MAX BY WEIGHT)-ASTM C618, CLASS F OR C WATER/CEMENT RATIO: 0.45 (MAX) SLUMP LIMIT: 4" +1/-1" (BEFORE ADDING HRWR OR PLASTICIZING ADMIXTURES) AIR CONTENT: CONCRETE EXPOSED TO FREEZING & THAWING SHALL CONTAIN 6% (+/-1.5%) ENTRAINED AIR	11. PROTECT IN-PLACE FOUNDATIONS AND SLABS ON GRADE FROM FROST PENETRATION UNTIL PROJECT COMPLETION.
2. REINFORCING STEEL BARS - ASTM A615 (GRADE 60)	12. SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS SHALL NOT EXCEED ONE VERTICAL TO TWO HORIZONTAL. STEP FOOTINGS DOWN AS NECESSARY TO MAINTAIN THIS SLOPE.
3. STRUCTURAL STEEL PLATES AND OTHER SHAPES - ASTM A36 (F _y =36 KSI) HOLLOW STRUCTURAL SECTION (RECTANGULAR)- ASTM A500, GRADE C (F _y =50 KSI) STEEL PIPE - ASTM A53 HIGH STRENGTH BOLTS, UNO - A325N ANCHOR BOLTS/RODS - ASTM F1554, GRADE 36 EXPANSION BOLTS - DEWALT DOMESTIC WEDGE ANCHOR (OR EQUAL - INSTALL PER ICC REPORT) POST-INSTALLED ANCHOR EPOXY - DEWALT PURE110+ (OR EQUAL)	13. ALL EXTERIOR DOORS SHALL HAVE A FROST-FREE STOOP.
4. WOOD FRAMING DIMENSION LUMBER - HEM-FIR #2 OR BETTER STUDS - HEM-FIR #2 OR BETTER MICROLAMS (LVL) - Fb=2600 psi, E=1,900,000 psi, Fv=285 psi PARALLAM PLUS PSL, EXTERIOR TREATED (PSL) - Fb=2400 psi, E=1,800,000 psi, Fv=190 psi SHEATHING (SUBFLOOR, ROOF, WALL) - APA RATED, THICKNESS, GRADE AND EXPOSURE AS NOTED ON THE DRAWINGS BOTTOM PLATES - TREATED HEM-FIR STUD GRADE	CONCRETE
GENERAL	1. CODE FOR REINFORCED CONCRETE DESIGN AND CONSTRUCTION IS ACI 318, LATEST EDITION.
1. THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS IS NOT TO BE SCALED, AS THE ITEMS SHOWN MAY NOT BE TO SCALE FOR THE SPECIFIC LOCATION.	2. COLD WEATHER CONCRETE PLACEMENT SHALL FOLLOW ACI 306 PROCEDURES. HOT WEATHER CONCRETE PLACEMENT SHALL FOLLOW ACI 305 PROCEDURES.
2. NO OPENINGS OR SLEEVES SHALL BE CUT OR PROVIDED IN WALLS OR FLOOR CONSTRUCTION WITHOUT APPROVAL BY THE A/E.	3. ARRANGEMENT AND BENDING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI'S MANUAL OF STANDARD PRACTICE, LATEST EDITION.
3. EXAMINE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS TO DETERMINE LOCATION AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.	4. IN ADDITION TO OTHER REINFORCING NOTED, PROVIDE 2 - #5 ON EVERY SIDE OF EACH OPENING IN CONCRETE WALLS. EXTEND #5 BARS 24" BEYOND EACH EDGE OF OPENING.
4. BEFORE FABRICATION AND ERECTION OF ANY MATERIALS, FIELD VERIFY ALL EXISTING ELEVATIONS, DIMENSIONS AND CONDITIONS AS SHOWN ON THE DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER AT ONCE FOR RESOLUTION.	5. AT ALL PENETRATIONS THROUGH SLABS ON GRADE, PROVIDE #4 BARS ON EVERY SIDE OF EACH OPENING IN CONCRETE SLAB. EXTEND #4 BARS 18" BEYOND EACH EDGE OF OPENING.
5. STRUCTURAL MEMBERS INCLUDING JOISTS, SLABS, BEAMS, TRUSSES, COLUMNS AND WALLS ARE DESIGNED FOR "IN PLACE" LOADS. CONTRACTOR IS RESPONSIBLE FOR BRACING, WITHOUT OVERSTRESSING, ALL STRUCTURAL ELEMENTS (AS REQUIRED AT ANY STAGE OF CONSTRUCTION) UNTIL COMPLETION OF THIS PROJECT.	6. PROVIDE FLOOR DRAINS AS SHOWN ON ARCHITECTURAL AND/OR MECHANICAL DRAWINGS. REFERENCE ARCHITECTURAL AND/OR MECHANICAL FOR DRAIN TYPES, QUANTITIES, LOCATIONS, AND FLOOR SLOPES.



A1 THICKENED SLAB @ WOOD STRINGER
SCALE: 3/4" = 1'-0"

STEEL FRAMING
1. LATEST AISC STEEL CONSTRUCTION MANUAL, AISC 303 CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AND AISC 360 SPECIFICATIONS APPLY.
2. WELDING ELECTRODES SHALL BE 70XX, UNO.
3. ALL WELDING SHALL BE BY WELDERS HOLDING VALID CERTIFICATES IN THE TYPE OF WELD REQUIRED.
4. TO AVOID UNDESIRABLE STRESSES IN PLATES OR THEIR ANCHORS, ALL WELDS SHALL BE MADE IN SINGLE PASSES IF APPLICABLE, SYMMETRICALLY AROUND THE PLATE. WHEN MULTIPLE PASSES ARE REQUIRED SUFFICIENT TIME SHALL BE ALLOWED BETWEEN PASSES FOR THE HEAT TO DISSIPATE.
5. ALL HIGH STRENGTH BOLTED CONNECTIONS (NOT WITHIN THE SLIP-CRITICAL CATEGORY NOR SUBJECT TO TENSION LOADS NOR REQUIRED TO BE FULLY TENSIONED BEARING-TYPE CONNECTIONS) SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION SPECIFIED IN THE SECTION 8.1 OF THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, ARTICLE 8(c).
6. NOT ALL CONNECTIONS ARE DETAILED; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED. CONTACT THE ENGINEER OR ARCHITECT PROMPTLY TO VERIFY THE DETAILS OF MEMBERS OR CONNECTIONS IN ANY SITUATION WHERE REQUIREMENTS ARE UNCLEAR. CONTRACTOR SHALL PROVIDE THE NECESSARY BRACING DURING ERECTION AND UNTIL ALL STEEL IS PLUMB AND SECURED.
7. ALL WELDING AND TESTING OF WELDS SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY CODES AND RECOMMENDATIONS.
8. FIELD CUTTING OR OTHER FIELD MODIFICATIONS TO STRUCTURAL STEEL SHALL NOT BE MADE WITHOUT SPECIFIC PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
9. STRUCTURAL STEEL FRAMING SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS ARE FINAL BOLTED OR WELDED.
WOOD
1. PLACE 5/8" DIAMETER HEADED ANCHOR BOLTS (7" MIN EMBED) AT 48" OC IN TOP OF THICKENED SLAB FOUNDATION FOR ANCHORAGE OF WOOD PLATE.
2. NO OPENINGS OR SLEEVES SHALL BE CUT OR PROVIDED IN WALLS OR FLOOR CONSTRUCTION WITHOUT APPROVAL BY THE A/E.
3. PROVIDE WOOD FRAMING MEMBERS OF SIZE AND SPACING INDICATED; DO NOT SPLICE STRUCTURAL MEMBERS BETWEEN SUPPORTS.
4. FASTEN 2-PLY AND 3-PLY DIMENSION LUMBER BEAMS TOGETHER USING 2 ROWS OF 10D NAILS STAGGERED AT 6" OC, UNO.
5. FLOOR AND ROOF SHEATHING PANELS SHALL BE ORIENTED WITH FACE GRAIN PERPENDICULAR TO TRUSS SUPPORTS AND PANEL JOINTS SHALL BE STAGGERED.
6. ALL CONSTRUCTION SHALL COMPLY WITH THE "CONVENTIONAL LIGHT-FRAME CONSTRUCTION PROVISIONS" OF THE INTERNATIONAL BUILDING CODE (SECTION 2308), UNO.
7. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY.
8. GLUE LAMINATED MEMBERS TO BEAR THE AITC STAMP AND CERTIFICATE AND GRADE STAMP.
9. ALL METAL CONNECTORS SHALL BE IBC APPROVED.
10. ALL NAILS SHALL BE COMMON NAILS, UNO. REFER TO THE NAILING SCHEDULE IN THE INTERNATIONAL BUILDING CODE TABLE NO. 2304.10.1 FOR CONNECTIONS NOT DETAILED.
11. GLUE AND NAIL SUBFLOOR SHEATHING TO JOISTS.
12. ALL BOLTED SILL PLATES, TOP PLATES, LEDGERS, ETC., SHALL HAVE BOLTS WITHIN 6" OF END OF ALL SPLICES AND SHALL HAVE A MINIMUM OF TWO BOLTS PER SECTION OR AS INDICATED ON DRAWINGS.
13. PROVIDE 1 X 4 BRIDGING OR SOLID BLOCKING AT 8'-0" MAXIMUM CENTERS FOR JOISTS AND RAFTERS.
14. DO NOT NOTCH OR DRILL JOISTS OR LOAD BEARING STUDS WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
15. PROVIDE DOUBLE JOISTS UNDER ALL STUD PARTITIONS RUNNING PARALLEL TO FLOOR JOISTS.
16. PROVIDE (2) SIMPSON ST6224 STRAPS AT ALL LOCATIONS WHERE BOTH TOP PLATES ARE THROUGH CUT.
17. JOISTS SHALL BE ANCHORED TO TOP PLATES WITH ONE SIMPSON H3 HANGER AT EACH BEARING POINT.
19. ALL INTERIOR BEARING WALLS SHALL HAVE SHEATHING ON EACH FACE FASTENED @ 6" OC ALONG ALL PANEL EDGES (FULLY BLOCKED). AT GYPSUM WALL BOARD USE 6d COOLER NAILS AND AT WOOD SHEATHING USED 8d NAILS MINIMUM.
IBC SPECIAL INSPECTION REQUIREMENTS
THE FOLLOWING WORK ITEMS REQUIRE SPECIAL INSPECTION PER IBC CHAPTER 17:
A. 1705.2 STEEL CONSTRUCTION - REF AISC 360 FOR REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION.
B. 1705.3 CONCRETE CONSTRUCTION - REF TABLE 1705.3 FOR REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION.
C. 1705.5 WOOD CONSTRUCTION - REF SECTION 1704.2.5 FOR PREFABRICATED WOOD ELEMENTS AND ASSEMBLIES. REF SECTION 1705.5 FOR SITE-BUILT ASSEMBLIES.
D. 1705.6 SOILS - REF SECTION 1705.6 AND TABLE 1705.6 FOR REQUIRED VERIFICATION AND INSPECTION OF SOILS.






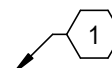
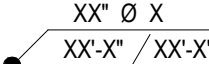





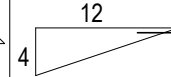


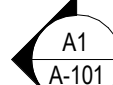
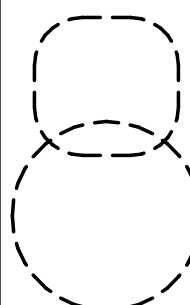



A3 TYP CONTROL/CONSTRUCTION JOINT
SCALE: 3/4" = 1'-0"

MOST COMMONLY USED STRUCTURAL ABBREVIATIONS

SYMBOLS USED AS ABBREVIATIONS:		FFE	FINISH FLOOR ELEVATION	PAR	PARALLEL
&	AND	FIN	FINISH (ED)	PCF	POUNDS PER CUBIC FOOT
L	ANGLE	FLG	FLANGE	PEMB	PRE-ENGINEERED METAL
LL	DOUBLE ANGLE	FLR	FLOOR (ING)	PERP	PERPENDICULAR
@	AT	FDTN	FOUNDATION	PC	PRECAST
d	PENNEY	FTG	FOOT, FEET	PREFAB	PREFABRICATE
#	POUND OR NUMBER	FS	FAR SIDE	PL	PLATE
Ø	ROUND OR DIAMETER	FUT	FUTURE	PLF	POUNDS PER LINEAR FOOT
ABBREVIATIONS:				PLYWD	PLYWOOD
A&E	ARCHITECTURAL AND ENGINEERING	GA	GAGE, GAUGE	PNL	PANEL
AB	ANCHOR BOLT/ROD	GC	GENERAL CONTRACTOR	PSI	POUNDS PER SQUARE INCH
ABV	ABOVE	GLU-LAM	GLU LAMINATED (BEAM)	PSF	POUNDS PER SQUARE FOOT
ADD	ADDENDUM	GR BM	GRADE BEAM	PT	PRESSURE TREAT(ED)
ADJ	ADJUSTABLE, ADJACENT, ADJOINING	GYP	GYPSUM	PT	POINT
AFF	ABOVE FINISH FLOOR	HAB	HEADED ANCHOR BOLT	PVC	POLYVINYL CHLORIDE
AGGR	AGGREGATE	HAS	HEADED ANCHOR STUD	R	RADIUS/RISER
ALT	ALTERNATE	HC	HOLLOW CORE	REF	REFERENCE
APPROX	APPROXIMATE	HDR	HEADER	REIN	REINFORCE (D), (ING), (MENT)
ARCH	ARCHITECT (URAL)	HORIZ	HORIZONTAL	REQ	REQUIRED
		HSS	HOLLOW STRUCTURAL SHAPE	REQD	REQUIRED
		HT	HEIGHT	REV	REVISION (S), REVISED
		INSUL	INSULATE (D), INSULATION	RO	ROUGH OPENING
BFF	BELOW FINISH FLOOR	INT	INTERIOR	SECT	SECTION
BL	BRICK LEDGE	INV EL	INVERT ELEVATION	SHT	SHEET
BLKG	BLOCK (ING)			SHTHG	SHEATHING
BM	BEAM	JST	JOIST	SIM	SIMILAR
BOT	BOTTOM	JT	JOINT	SOG	SLAB-ON-GRADE
BO	BOTTOM OF			SPEC	SPECIFICATION (S)
BRG	BEARING	K	THOUSAND POUND (KIP)	SQ	SQUARE
BTWN	BETWEEN	KCJ	KEYED CONSTRUCTION JOINT	SST	STAINLESS STEEL
C	CHANNEL	KIP	THOUSAND POUND	STD	STANDARD
CF	CUBIC FEET OR FOOT	KLF	THOUSAND POUND PER LINEAR FOOT	STL	STEEL
CHFR	CHAMFER			STRUCT	STRUCTURAL
CIPC	CAST-IN-PLACE CONCRETE	KSF	THOUSAND POUND PER SQUARE FOOT	T&B	TOP AND BOTTOM
CJ	CONTROL JOINT	KSJ	THOUSAND POUND PER SQUARE INCH	T&G	TONGUE AND GROOVE
CL	CENTER LINE			TBD	TO BE DETERMINED
CLR	CLEAR, CLEARANCE	L	LENGTH	THD	THREAD (ED) (S)
CMU	CONCRETE MASONRY UNIT	LB	POUND	THK	THICKNESS
COL	COLUMN	LF	LINEAR FEET	THRU	THROUGH
CONC	CONCRETE	LL	LIVE LOAD	TL	TOTAL LOAD
CONN	CONNECT (ION)	LLH	LONG LEG HORIZONTAL	TO	TOP OF
CONST	CONSTRUCTION	LLV	LONG LEG VERTICAL	TOB	TOP OF BEAM
CONT	CONTINUOUS, CONTINUE	LCC	LOCATION	TOC	TOP OF CONCRETE
CONTR	CONTRACT (OR)	LOC	LONGITUDINAL	TOF	TOP OF FOOTING
COORD	COORDINATE	LONG	LONGITUDINAL	TOP	TOP OF PIER
CTR	CENTER	LT WT	LIGHTWEIGHT	TOS	TOP OF SLAB
CY	CUBIC YARD			TOT	TOP OF STEEL
		MAX	MAXIMUM	TRANS	TRANSVERSE
DBL	DOUBLE	MC	MISCELLANEOUS CHANNEL	TS	TUBE STEEL
DEMO	DEMOLITION, DEMOLISH	MCH	MECHANICAL	TYP	TYPICAL
DET	DETAIL	MIN	MINIMUM		
DIA	DIAMETER	MISC	MISCELLANEOUS	UNO	UNLESS NOTED OTHERWISE
DIAG	DIAGONAL	MTL	METAL		
DIM	DIMENSION			VERT	VERTICAL
DL	DEAD LOAD	NA	NOT APPLICABLE	VR	VAPOR RETARDER
DWG	DRAWING (S)	NIC	NOT IN CONTRACT		
EA	EACH	NO	NUMBER	W	WIDTH
EF	EACH FACE	NS	NEAR SIDE	W/	WITH
EL	ELEVATION	NSNM	NON-SHRINK, NON-METALLIC	W/O	WITHOUT
EMB	EMBED (ED)	NTS	NOT TO SCALE	WD	WOOD
EOR	ENGINEER OF RECORD			WF (W)	WIDE FLANGE
EQ	EQUAL	OC	ON CENTER	WL	WIND LOAD
EQUIP	EQUIPMENT	OD	OUTSIDE DIAMETER	WP	WORKING POINT
EXP	EACH WAY	OH	OVERHEAD	WT	WEIGHT
EXST	EXISTING	OPP	OPPOSITE	WWF	WELDED WIRE FABRIC
EXP BT	EXPANSION BOLT				
EXT	EXTERIOR				

SYMBOLS LEGEND

 STP FTG	 STP WALL	 CONT	 C1	 1	 1	 XX'-X' / XX'-X'
FOOTING STEP	FOUNDATION WALL STEP	CONTINUOUS BEAM INDICATOR	CORNER REINF INDICATOR	REVISION SYMBOL	KEYNOTE IDENTIFIER	PIER TAG INDICATOR
 P1	 R1		 GRID	 SPAN		
MASONRY PIER INDICATOR	WALL REINFORCING INDICATOR	DETAIL SECTION INDICATOR	COLUMN/FND GRID INDICATOR	PC SPAN IDENTIFIER	ROOF SLOPE INDICATOR	ELEVATION TAG
 A1 A-101	 A1 A-101		 PLAN NORTH NORTH ORIENTED 90° TO THE SHEET	<div><div><div><div>MATCH LINE</div><div>SEE</div></div><div>MATCH LINE INDICATOR</div></div><div><div><div>A1</div><div>PLAN OR DETAIL</div><div>SCALE: 1'-0" = 1'-0"</div></div><div>VIEW TITLE</div></div></div>		
DETAIL INDICATOR	SECTION INDICATOR	DETAIL BUBBLE INDICATORS	PLAN NORTH			

SHEET INDEX - STRUCTURAL	
SHEET #	SHEET NAME
S-001	STRUCTURAL GENERAL NOTES & TITLE SHEET
S-101	EXISTING FOUNDATION, FLOOR FRAMING, & ROOF FRAMING PLANS
S-102	FOUNDATION PLAN
S-103	FLOOR FRAMING PLAN
S-104	ROOF FRAMING PLAN
S-501	STRUCTURAL DETAILS



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RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY KRC/ARW
PROJECT #	03221580	CHECKED BY ARW

SHEET TITLE

**STRUCTURAL GENERAL
NOTES & TITLE SHEET**

SHEET NUMBER

S-001

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TOP OF BASEMENT CONCRETE SLAB ON GRADE = 90'-4" (+/-) (FIELD VERIFY).

AT ALL INTERIOR LOCATIONS, UNO, PROVIDE A 4" CONCRETE SLAB ON GRADE ATOP VAPOR RETARDER ATOP GEOTECH/TESTING AGENCY APPROVED COMPACTED EXISTING SUBGRADE UNO. COORDINATE SLAB ELEVATIONS AND SLOPES W/ ARCH.

COMPACTION REQUIREMENTS (UNO BY GEOTECH ENGINEER/TESTING SERVICE RECOMMENDATIONS).
- LIFTS SHALL BE MADE 8" OR LESS FOR HEAVY SELF-PROPELLED COMPACTION EQUIPMENT OR 4" TO 6" LIFTS FOR HAND-GUIDED COMPACTION EQUIPMENT.
- MINIMUM OF 95% COMPACTION OF MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) & +/-3% OPTIMUM MOISTURE CONTENT.

PROVIDE FLOOR DRAINS AS SHOWN ON ARCH AND/OR MECH DRAWINGS. REFERENCE ARCH AND/OR MECH FOR DRAIN TYPES, QUANTITIES, LOCATIONS AND FLOOR SLOPES.

MAXIMUM SPACING FOR CONTROL JOINTS IN THE CONCRETE SLAB ON GRADE SHALL BE 12'-0". THE MAXIMUM RATIO OF UNJOINTED SLAB PANELS BETWEEN JOINTS SHALL NOT EXCEED 1 : 1.5 (1 & 9'-0", 12'-0", NO REINSTRAT CORNERS ALLOWED WITHIN A PANEL. REFERENCE DETAIL A3S-001 FOR JOINT INFORMATION.

JOISTKEEPING PADS REQUIRED FOR MECHANICAL OR ELECTRICAL EQUIPMENT ARE NOT SHOWN ON THIS PLAN. COORDINATE QUANTITY, SIZE AND LOCATION WITH MECH AND ELEC.

EXISTING FLOOR FRAMING BEARING ELEVATION = 98'-1" (+/-) (FIELD VERIFY).

TOP OF NEW LVL BEAM ELEVATION = 98'-10-1/2" (+/-), UNO (MATCH EXIST - FIELD VERIFY).

NEW FLOOR JOIST INFILL BEARING ELEVATION = 98'-1" (+/-), UNO (MATCH EXIST - FIELD VERIFY).

CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. IF ANY NEW CONSTRUCTION CONFLICTS WITH EXISTING CONDITIONS CONTRACTOR SHALL NOTIFY ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH CONSTRUCTION.

REPLACE ANY EXISTING JOISTS THAT HAVE BEEN CUT THROUGH (REF D4/S-501).

HATCHED AREA REPRESENTS APPROXIMATE EXTENTS OF DEMOLITION OF EXISTING CONCRETE SLAB. REFERENCE ARCH FOR ADDITIONAL INFORMATION. INFILL AREA WITH NEW THICKENED EDGE CONCRETE SLAB (REF SHEET GENERAL NOTES AND A1/S-501)

PROVIDE THICKENED SLAB FOOTING (REF PLAN FOR LENGTH AND WIDTH, 8" THICK) AT WOOD POST LOCATIONS. REINFORCE THICKENED SLAB WITH #5 @ 12" OC EACH WAY (#5 @ 12" OC EA WAY TAB @ SIM). ATTACH WOOD POST TO THICKENED SLAB WITH SIMPSON AUB44Z POST BASE (BABAA COMPLIANT - INSTALL PER MANUFACTURER'S RECOMMENDATIONS) @ (2) 2X4 POSTS & SIMPSON AUB66Z (BABAA COMPLIANT - INSTALL PER MANUFACTURER'S RECOMMENDATIONS) @ (3) 2X6 POSTS W/ (1) 5/8" OX 5" EMBED DEWALT PURE110+ (OR EQUAL) DRILL AND EPOXY SET ANCHOR.

HATCHED AREA REPRESENTS MINIMUM EXTENTS OF RIGID INSULATION FOR FROST PROTECTED SHALLOW FOUNDATION DOOR STOOP AND PATIO (REF A4/S-501).

PROVIDE SIMPSON AUB66Z (BABAA COMPLIANT) POST BASE (GALV W/ (1) 5/8" OX 5" EMBED (GALV) DEWALT PURE110+ DRILL AND EPOXY SET ANCHOR AT POST LOCATIONS.

AT NEW OPENING LIMIT, PROVIDE L3X3X3/16 X 1'-0" LONG CLIP WELDED TO FACE OF JAMB COLUMN WITH A 3/16" X 12" LONG FIELD FILE LET. ATTACH CLIP TO EXIST CONCRETE W/ (2) 1/2" X 5" EMBED DEWALT PURE110+ DRILL AND EPOXY SET ANCHORS. FIELD VERIFY EXISTING CONDITIONS AND DEMO SLAB AT JAMB AS REQUIRED TO INSTALL BOTTOM OF JAMB COLUMN/CLIP APPROXIMATELY 4" BELOW SLAB TO CONCEAL JAMB CONNECTION. INFILL CONCRETE AS REQUIRED.

EXIST FLOOR JOISTS @ 16" OC (FIELD VERIFY). APPROXIMATE JOIST SIZE IS 1 3/4" X 9 1/2".

NEW WOOD 2X10 INFILL FLOOR JOISTS @16" OC MAX.

PRESSURE TREATED WOOD 2X10 DECK JOISTS @ 16" OC MAX. ATTACH DECK JOISTS TO GIRDERS WITH SIMPSON LUS28 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL). TOP OF DECK JOIST ELEVATION = 98'-0 1/2".

PROVIDE SIMPSON COLUMN CAP CONNECTOR AT ALL COLUMN TO BEAM/GIRDER CONNECTION LOCATIONS AS FOLLOWS (NOTE: SPLICE BEAMS/GIRDERS ONLY AT COLUMN LOCATIONS AS REQUIRED):

- (2) 1 3/4 X 9 1/4 LVL TO (2) 2X4 COLUMN - SIMPSON CCQ44SDS25 (BABAA COMPLIANT)
- (2) 1 3/4 X 9 1/4 LVL TO (2) 2X6 COLUMN - SIMPSON CCQ46SDS25 (BABAA COMPLIANT)
- (3) 1 3/4 X 9 1/4 LVL TO (2) 2X6 COLUMN - SIMPSON CCQ66SDS25 (BABAA COMPLIANT)
- (2) 1 3/4 X 11 7/8 PSL TO 6X6 COLUMN - GALV SIMPSON COQ46SDS25 (BABAA COMPLIANT)

ATTACH (3) 1 3/4 X 9 1/4 LVL BEAM TO (2) 1 3/4 X 9 1/4 LVL GIRDER WITH SIMPSON HHU55.50/10 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL) @ SIM. ATTACH (2) 1 3/4 X 9 1/4 LVL BEAM TO (2) 1 3/4 X 9 1/4 LVL GIRDER WITH SIMPSON HU412 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL).

EXISTING ROOF RAFTERS @ APPROXIMATELY 24" OC (FIELD VERIFY).

EXISTING BRACING FROM ROOF RAFTERS TO TOP OF WALL (FIELD VERIFY). TYP @ EA RAFTER.

PROVIDE NEW 2X BRACING FROM ROOF RAFTERS TO TOP OF NEW WALL ON EA SIDE OF NEW WALL (FIELD VERIFY - MATCH EXIST) - LEAVE EXIST BRACING IN PLACE.

PROVIDE THICKENED SLAB AT STAIR STRINGER (REF A1/S-001)

DEMOLISH EXISTING CHIMNEY. INSTALL EXISTING OPENINGS IN FLOOR FRAMING WITH BLOCKING AND DECKING (MATCH EXISTING) AS REQUIRED. PROVIDE 2X6 FRAMING AT ROOF OPENING BETWEEN RAFTERS AS SHOWN ON PLAN TO SUPPORT NEW FALSE CHIMNEY (NO MASONRY). REFERENCE ARCHITECTURE FOR MORE INFORMATION.

PROVIDE BUILT-UP (2) 2X6 COLUMN TO SUPPORT LVL BEAM. ATTACH BUILT-UP COLUMN TO BEAM BELOW WITH SIMPSON CCQ44SDS25 (BABAA COMPLIANT) OR EQUAL.

1 3/4 X 11 7/8 LVL STAIR STRINGERS @ 16" OC. ATTACH SIDE STRINGERS TO WALL FRAMING.

2X8 STAIR LANDING JOISTS @ 16" OC. ATTACH JOISTS TO LVL BEAMS W/ SIMPSON LUS28 (BABAA COMPLIANT) FACE MOUNT HANGERS (OR EQUAL)

PROVIDE ADDITIONAL 2X (MATCH EXISTING) SISTERED TO RAFTER TIE/CEILING JOIST BETWEEN NEW LVL BEAMS.

ATTACH (2) 1 3/4 X 11 7/8 PSL BEAM TO (2) 1 3/4 X 11 7/8 PSL GIRDER WITH SIMPSON HU412 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGERS.

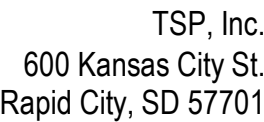
ATTACH (2) 1 3/4 X 11 7/8 PSL BEAM TO (2)2X12 PT LEDGER WITH SIMPSON HU412 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGER.

ATTACH 2X10 PT JOISTS TO (2)2X12 PT LEDGER WITH SIMPSON LUS210 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGERS.

PROVIDE PRESSURE TREATED (2)2X12 LEDGER. ATTACH LEDGER TO EXISTING CONCRETE WALL WITH (2) ROWS 1/4" CONCRETE SCREWS (BABAA COMPLIANT) STAGGERED @ 12" OC. ATTACH DECK BEAMS TO LEDGER W/ (2) ROWS #10 WOOD SCREWS TAGGERED @ 12" OC.

PROVIDE PRESSURE TREATED (2)2X6 KNEE BRACES BETWEEN POST AND GIRDER.

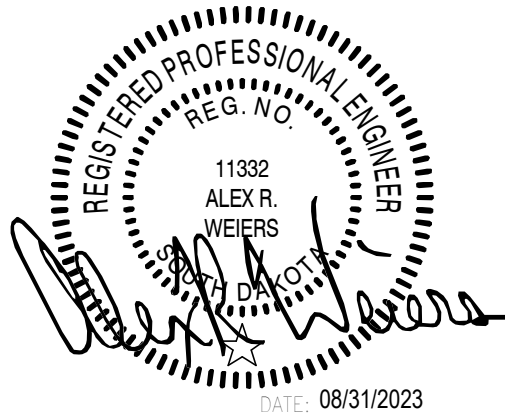
NOTE: NOT ALL KEYNOTES MAY BE USED FOR EACH PLAN.



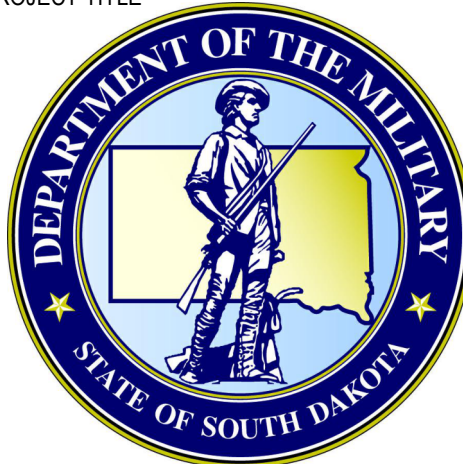
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ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	DRAWN BY	
08/31/2023	KRC/ARW	
PROJECT #	CHECKED BY	
03221580	ARW	

SHEET TITLE

FOUNDATION PLAN

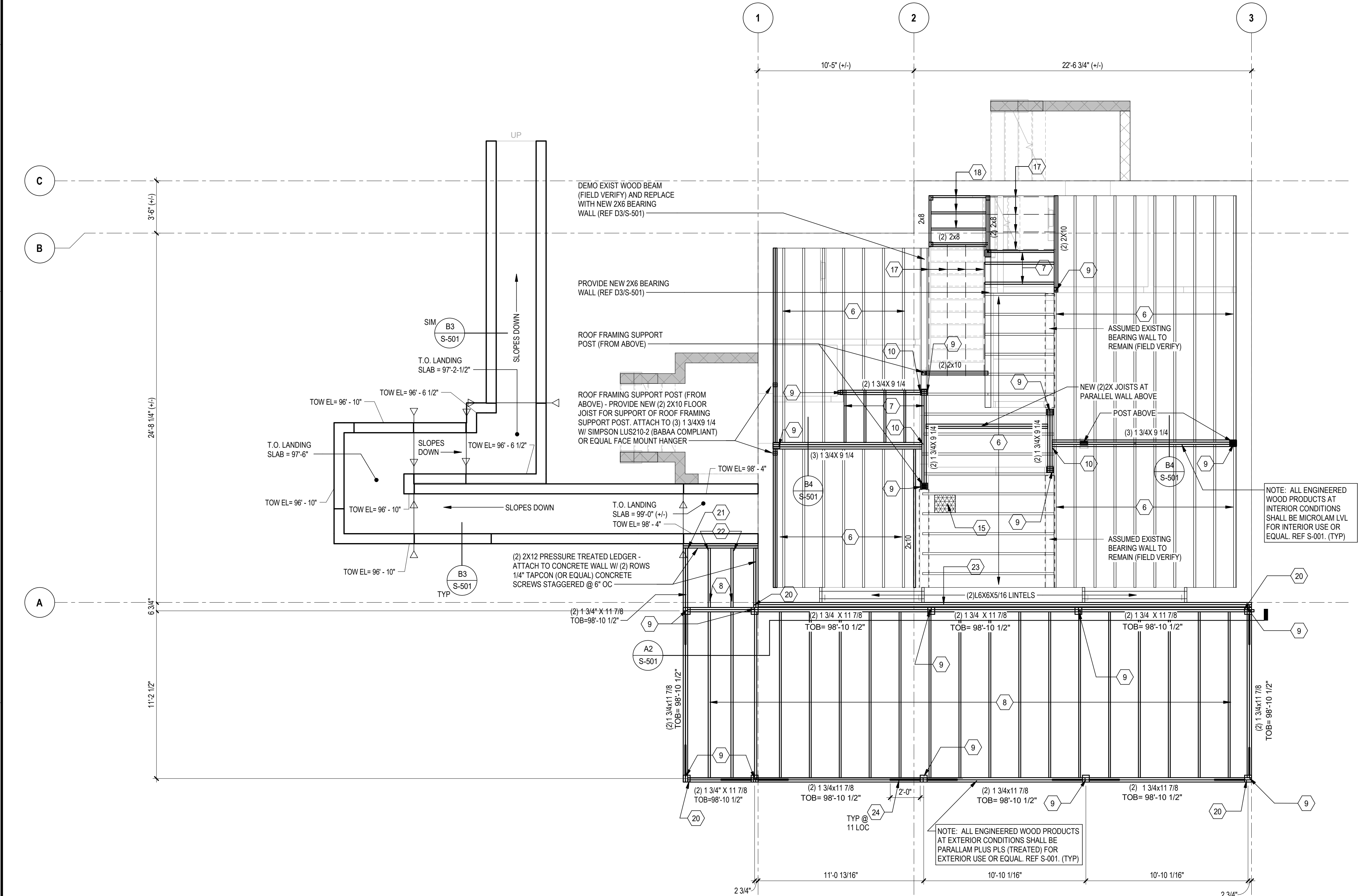
SHEET NUMBER

S-102

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LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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A1 FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"

SHEET GENERAL NOTES:

- A. TOP OF BASEMENT CONCRETE SLAB ON GRADE = 90'-4" (+/-) (FIELD VERIFY)
- B. AT ALL INTERIOR LOCATIONS, UNO, PROVIDE A 4" CONCRETE SLAB ON GRADE ATOP VAPOR RETARDER ATOP GEOTECH/TESTING AGENCY APPROVED COMPACTED EXISTING SUBGRADE UNO. COORDINATE SLAB ELEVATIONS AND SLOPES W/ ARCH.
- C. COMPACTION REQUIREMENTS (UNO BY GEOTECH ENGINEER/TESTING SERVICE RECOMMENDATIONS):
- LIFTS SHALL BE MADE 8" OR LESS FOR HEAVY SELF-PROPELLED COMPACTION EQUIPMENT OR 4" TO 6" LIFTS FOR HAND-GUIDED COMPACTION EQUIPMENT.
- MINIMUM OF 95% COMPACTION OF MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) & +/-3% OPTIMUM MOISTURE CONTENT.
- D. PROVIDE FLOOR DRAINS AS SHOWN ON ARCH AND/OR MECH DRAWINGS. REFERENCE ARCH AND/OR MECH FOR DRAIN TYPES, QUANTITIES, LOCATIONS AND FLOOR SLOPES.
- E. MAXIMUM SPACING FOR CONTROL JOINTS IN THE CONCRETE SLAB ON GRADE SHALL BE 12'-0". THE MAXIMUM RATIO OF UNJOINTED SLAB PANELS BETWEEN JOINTS SHALL NOT EXCEED 1 : 1.5 (i.e. 8'-0" : 12'-0"). NO REENTRANT CORNERS ALLOWED WITHIN A PANEL. REFERENCE DETAIL A3/S-001 FOR JOINT INFORMATION.
- F. HOUSEKEEPING PADS REQUIRED FOR MECHANICAL OR ELECTRICAL EQUIPMENT ARE NOT SHOWN ON THIS PLAN. COORDINATE QUANTITY, SIZE AND LOCATION WITH MECH AND ELEC.
- G. EXISTING FLOOR FRAMING BEARING ELEVATION = 98'-1" (+/-) (FIELD VERIFY).
- H. TOP OF NEW LVL BEAM ELEVATION = 98'-10-1/2" (+/-), UNO (MATCH EXIST - FIELD VERIFY).
- I. NEW FLOOR JOIST INFILL BEARING ELEVATION = 98'-1" (+/-), UNO (MATCH EXIST - FIELD VERIFY).
- J. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. IF ANY NEW CONSTRUCTION CONFLICTS WITH EXISTING CONDITIONS CONTRACTOR SHALL NOTIFY ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH CONSTRUCTION.
- K. REPLACE ANY EXISTING JOISTS THAT HAVE BEEN CUT THROUGH (REF D4/S-501).

KEY NOTES:

1. HATCHED AREA REPRESENTS APPROXIMATE EXTENTS OF DEMOLITION OF EXISTING CONCRETE SLAB. REFERENCE ARCH FOR ADDITIONAL INFORMATION. INFILL AREA WITH NEW THICKENED EDGE CONCRETE SLAB (REF SHEET GENERAL NOTES AND A1/S-501)
2. PROVIDE THICKENED SLAB FOOTING (REF PLAN FOR LENGTH AND WIDTH, 8" THICK) AT WOOD POST LOCATIONS. REINFORCE THICKENED SLAB WITH #5 @ 12" OC EACH WAY (#5 @ 12" OC EA WAY TAB @ SIM). ATTACH TO SIMPSON A244Z POST BASE (BABAA COMPLIANT - INSTALL PER MANUFACTURER'S RECOMMENDATIONS) @ (2) 2X4 POSTS & SIMPSON ABU62Z (BABAA COMPLIANT - INSTALL PER MANUFACTURER'S RECOMMENDATIONS) @ (3) 2X6 POSTS W/ (1) 5/8"Ø X 5" EMBED DEWALT PURE110+ (OR EQUAL) DRILL AND EPOXY SET ANCHOR.
3. HATCHED AREA REPRESENTS MINIMUM EXTENTS OF RIGID INSULATION FOR FROST PROTECTED SHALLOW FOUNDATION DOOR STOOP AND PATIO (REF A4/S-501).
4. PROVIDE SIMPSON ABU62Z (BABAA COMPLIANT) POST BASE (GALV) W/ (1) 5/8"Ø X 5" EMBED (GALV) DEWALT PURE110+ DRILL AND EPOXY SET ANCHOR AT POST LOCATIONS.
5. AT NEW OPENING LINTEL PROVIDE L3X3X3/16 X 1'-0" LONG CLIP WELDED TO FACE OF JAMB COLUMN WITH A 3/16" X 12" LONG FIELD FILLET WELD. ATTACH CLIP TO EXIST CONCRETE W/ (2) 1/2"Ø X 5" EMBED DEWALT PURE110+ DRILL AND EPOXY SET ANCHORS. FIELD VERIFY EXISTING CONDITIONS AND DEMO SLAB AT JAMB AS REQUIRED TO INSTALL BOTTOM OF JAMB COLUMN/CLIP APPROXIMATELY 4" BELOW SLAB TO CONCEAL JAMB CONNECTION. INFILL CONCRETE AS REQUIRED.
6. EXIST FLOOR JOISTS @ 16" OC (FIELD VERIFY). APPROXIMATE JOIST SIZE IS 1 3/4" X 9 1/2".
7. NEW WOOD 2X10 INFILL FLOOR JOISTS @16" OC MAX.
8. PRESSURE TREATED WOOD 2X10 DECK JOISTS @ 16" OC MAX. ATTACH DECK JOISTS TO GIRDERS WITH SIMPSON LUS28 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL). TOP OF DECK JOIST ELEVATION = 98'-10 1/2".
9. PROVIDE SIMPSON COLUMN CAP CONNECTOR AT ALL COLUMN TO BEAM/GIRDER CONNECTION LOCATIONS AS FOLLOWS (NOTE: SPLICE BEAMS/GIRDERS ONLY AT COLUMN LOCATIONS AS REQUIRED):
- (2) 1 3/4 X 9 1/4 LVL TO (2) 2X4 COLUMN - SIMPSON CCQ44SDS2.5 (BABAA COMPLIANT)
- (2) 1 3/4 X 9 1/4 LVL TO (3) 2X6 COLUMN - SIMPSON CCQ46SDS2.5 (BABAA COMPLIANT)
- (3) 1 3/4 X 9 1/4 LVL TO (3) 2X6 COLUMN - SIMPSON CCQ66SDS2.5 (BABAA COMPLIANT)
- (2) 1 3/4 X 11 7/8 PSL TO 6X6 COLUMN - GALV SIMPSON CCQ46SDS2.5 (BABAA COMPLIANT)
10. ATTACH (3) 1 3/4 X 9 1/4 LVL BEAM TO (2) 1 3/4 X 9 1/4 LVL GIRDER WITH SIMPSON HUS5010 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL) @ SIM; ATTACH (2) 1 3/4 X 9 1/4 LVL BEAM TO (2) 1 3/4 X 9 1/4 LVL GIRDER WITH SIMPSON HUS412 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL).
11. EXISTING ROOF RAFTERS @ APPROXIMATELY 24" OC (FIELD VERIFY).
12. EXISTING BRACING FROM ROOF RAFTERS TO TOP OF WALL (FIELD VERIFY), TYP @ EA RAFTER.
13. PROVIDE NEW 2X BRACING FROM ROOF RAFTERS TO TOP OF NEW WALL ON EA SIDE OF NEW WALL (FIELD VERIFY - MATCH EXIST) - LEAVE EXIST BRACING IN PLACE.
14. PROVIDE THICKENED SLAB AT STAIR STRINGER (REF A1/S-001)
15. DEMOLISH EXISTING CHIMNEY. INFILL EXISTING OPENINGS IN FLOOR FRAMING WITH BLOCKING AND DECKING (MATCH EXISTING) AS REQUIRED. PROVIDE 2X6 FRAMING AT ROOF OPENING BETWEEN RAFTERS AS SHOWN ON PLAN TO SUPPORT NEW FALSE CHIMNEY (NO MASONRY). REFERENCE ARCHITECTURE FOR MORE INFORMATION.
16. PROVIDE BUILT-UP (2) 2X6 COLUMN TO SUPPORT LVL BEAM. ATTACH BUILT-UP COLUMN TO BEAM BELOW WITH SIMPSON CCQ44SDS2.5 (BABAA COMPLIANT) OR EQUAL.
17. 1 3/4 X 11 7/8 LVL STAIR STRINGERS @ 16" OC. ATTACH SIDE STRINGERS TO WALL FRAMING.
18. 2X8 STAIR LANDING JOISTS @ 16" OC. ATTACH JOISTS TO LVL BEAMS W/ SIMPSON LUS28 (BABAA COMPLIANT) FACE MOUNT HANGERS (OR EQUAL)
19. PROVIDE ADDITIONAL 2X (MATCH EXISTING) SISTERED TO RAFTER TIE/CEILING JOIST BETWEEN NEW LVL BEAMS.
20. ATTACH (2) 1 3/4 X 11 7/8 PSL BEAM TO (2) 1 3/4 X 11 7/8 PSL GIRDER WITH SIMPSON HU412 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGERS.
21. ATTACH (2) 1 3/4 X 11 7/8 PSL BEAM TO (2)2X12 PT LEDGER WITH SIMPSON HU412 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGER.
22. ATTACH 2X10 PT JOISTS TO (2)2X12 PT LEDGER WITH SIMPSON LUS210 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGERS.
23. PROVIDE PRESSURE TREATED (2)2X12 LEDGER. ATTACH LEDGER TO EXISTING CONCRETE WALL WITH (2) ROWS 1/4" CONCRETE SCREWS (BABAA COMPLIANT) STAGGERED @ 12" OC. ATTACH DECK BEAMS TO LEDGER W/ (2) ROWS #10 WOOD SCREWS STAGGERED @ 12" OC.
24. PROVIDE PRESSURE TREATED (2)2X6 KNEE BRACES BETWEEN POST AND GIRDER.

NOTE: NOT ALL KEYNOTES MAY BE USED FOR EACH PLAN.

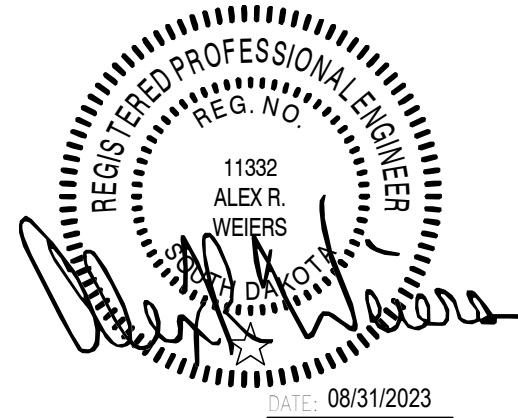


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ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY KRC/ARW
PROJECT #	03221580	CHECKED BY ARW

SHEET TITLE

FLOOR FRAMING PLAN

SHEET NUMBER

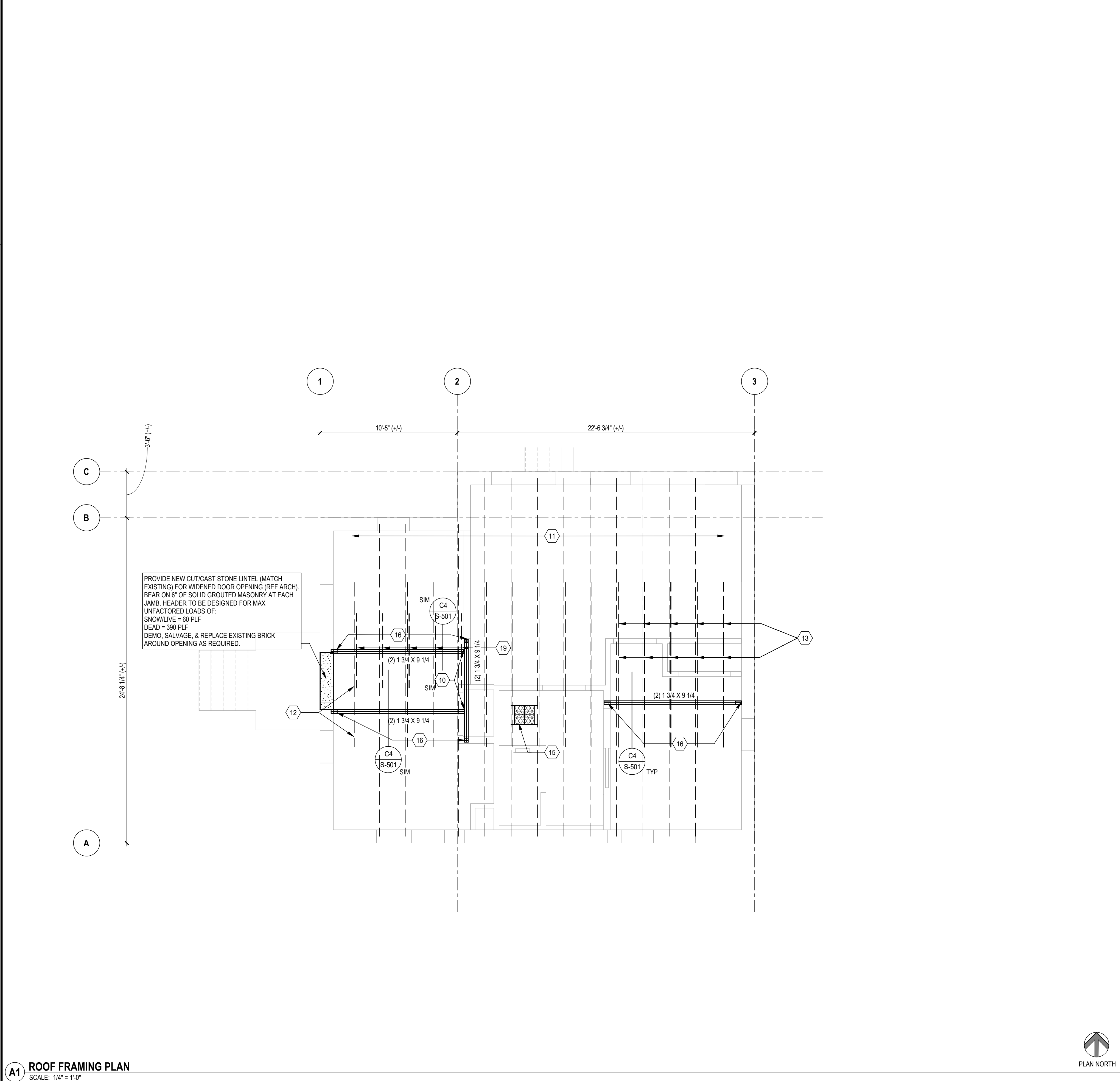
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SHEET GENERAL NOTES:

- A. TOP OF BASEMENT CONCRETE SLAB ON GRADE = 90'-4" (+/-) (FIELD VERIFY)
- B. AT ALL INTERIOR LOCATIONS, UNO, PROVIDE A 4" CONCRETE SLAB ON GRADE ATOP VAPOR RETARDER ATOP GEOTECH/TESTING AGENCY APPROVED COMPACTED EXISTING SUBGRADE UNO. COORDINATE SLAB ELEVATIONS AND SLOPES W/ ARCH.
- C. COMPACTION REQUIREMENTS (UNO BY GEOTECH ENGINEER/TESTING SERVICE RECOMMENDATIONS):
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- MINIMUM OF 95% COMPACTION OF MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) & +/-3% OPTIMUM MOISTURE CONTENT.
- D. PROVIDE FLOOR DRAINS AS SHOWN ON ARCH AND/OR MECH DRAWINGS. REFERENCE ARCH AND/OR MECH FOR DRAIN TYPES, QUANTITIES, LOCATIONS AND FLOOR SLOPES.
- E. MAXIMUM SPACING FOR CONTROL JOINTS IN THE CONCRETE SLAB ON GRADE SHALL BE 12'-0". THE MAXIMUM RATIO OF UNJOINTED SLAB PANELS BETWEEN JOINTS SHALL NOT EXCEED 1 : 1.5 (i.e. 8'-0" : 12'-0"). NO REINFRANT CORNERS ALLOWED WITHIN A PANEL. REFERENCE DETAIL A3/S-001 FOR JOINT INFORMATION.
- F. HOUSEKEEPING PADS REQUIRED FOR MECHANICAL OR ELECTRICAL EQUIPMENT ARE NOT SHOWN ON THIS PLAN. COORDINATE QUANTITY, SIZE AND LOCATION WITH MECH AND ELEC.
- G. EXISTING FLOOR FRAMING BEARING ELEVATION = 98'-1" (+/-) (FIELD VERIFY).
- H. TOP OF NEW LVL BEAM ELEVATION = 98'-10-1/2" (+/-), UNO (MATCH EXIST - FIELD VERIFY).
- I. NEW FLOOR JOIST INFILL BEARING ELEVATION = 98'-1" (+/-), UNO (MATCH EXIST - FIELD VERIFY).
- J. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. IF ANY NEW CONSTRUCTION CONFLICTS WITH EXISTING CONDITIONS CONTRACTOR SHALL NOTIFY ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH CONSTRUCTION.
- K. REPLACE ANY EXISTING JOISTS THAT HAVE BEEN CUT THROUGH (REF D4/S-501).

KEY NOTES:

1. HATCHED AREA REPRESENTS APPROXIMATE EXTENTS OF DEMOLITION OF EXISTING CONCRETE SLAB. REFERENCE ARCH FOR ADDITIONAL INFORMATION. INFILL AREA WITH NEW THICKENED EDGE CONCRETE SLAB (REF SHEET GENERAL NOTES AND A1/S-501)
2. PROVIDE THICKENED SLAB FOOTING (REF PLAN FOR LENGTH AND WIDTH, 8" THICK) AT WOOD POST LOCATIONS. REINFORCE THICKENED SLAB WITH #5 @ 12" OC EACH WAY (#5 @ 12" OC EA WAY TAB @ SIM). ATTACH SLAB WITH SIMPSON ABU44Z POST BASE (BABAA COMPLIANT - INSTALL PER MANUFACTURER'S RECOMMENDATIONS) @ (2) 2X4 POSTS & SIMPSON ABU66Z (BABAA COMPLIANT - INSTALL PER MANUFACTURER'S RECOMMENDATIONS) @ (3) 2X6 POSTS W/ (1) 5/8"Ø X 5" EMBED DEWALT PURE110+ (OR EQUAL) DRILL AND EPOXY SET ANCHOR.
3. HATCHED AREA REPRESENTS MINIMUM EXTENTS OF RIGID INSULATION FOR FROST PROTECTED SHALLOW FOUNDATION DOOR STOOP AND PATIO (REF A4/S-501).
4. PROVIDE SIMPSON ABU66Z (BABAA COMPLIANT) POST BASE (GALV) W/ (1) 5/8"Ø X 5" EMBED (GALV) DEWALT PURE110+ DRILL AND EPOXY SET ANCHOR AT POST LOCATIONS.
5. AT NEW OPENING LINTEL PROVIDE L3X3X3/16 X 1'-0" LONG CLIP WELDED TO FACE OF JAMB COLUMN WITH A 3/16" X 12" LONG FIELD FILLET WELD. ATTACH CLIP TO EXIST CONCRETE W/ (2) 1/2"Ø X 5" EMBED DEWALT PURE110+ DRILL AND EPOXY SET ANCHORS. FIELD VERIFY EXISTING CONDITIONS AND DEMO SLAB AT JAMB AS REQUIRED TO INSTALL BOTTOM OF JAMB COLUMN/CLIP APPROXIMATELY 4" BELOW SLAB TO CONCEAL JAMB CONNECTION. INFILL CONCRETE AS REQUIRED.
6. EXIST FLOOR JOISTS @ 16" OC (FIELD VERIFY). APPROXIMATE JOIST SIZE IS 1 3/4" X 9 1/2".
7. NEW WOOD 2X10 INFILL FLOOR JOISTS @16" OC MAX.
8. PRESSURE TREATED WOOD 2X10 DECK JOISTS @ 16" OC MAX. ATTACH DECK JOISTS TO GIRDERS WITH SIMPSON LUS28 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL). TOP OF DECK JOIST ELEVATION = 98'-10 1/2".
9. PROVIDE SIMPSON COLUMN CAP CONNECTOR AT ALL COLUMN TO BEAM/GIRDER CONNECTION LOCATIONS AS FOLLOWS (NOTE: SPLICE BEAMS/GIRDERS ONLY AT COLUMN LOCATIONS AS REQUIRED):
- (2) 1 3/4 X 9 1/4 LVL TO (2) 2X4 COLUMN - SIMPSON CCQ44SDS2.5 (BABAA COMPLIANT)
- (2) 1 3/4 X 9 1/4 LVL TO (3) 2X6 COLUMN - SIMPSON CCQ46SDS2.5 (BABAA COMPLIANT)
- (3) 1 3/4 X 9 1/4 LVL TO (3) 2X6 COLUMN - SIMPSON CCQ66SDS2.5 (BABAA COMPLIANT)
- (2) 1 3/4 X 11 7/8 PSL TO 6X6 COLUMN - GALV SIMPSON CCQ46SDS2.5 (BABAA COMPLIANT)
10. ATTACH (3) 1 3/4 X 9 1/4 LVL BEAM TO (2) 1 3/4 X 9 1/4 LVL GIRDER WITH SIMPSON HHUS5010 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL) (@ SIM; ATTACH (2) 1 3/4 X 9 1/4 LVL BEAM TO (2) 1 3/4 X 9 1/4 LVL GIRDER WITH SIMPSON HUS412 (BABAA COMPLIANT) FACE MOUNT HANGER (OR EQUAL).
11. EXISTING ROOF RAFTERS @ APPROXIMATELY 24" OC (FIELD VERIFY).
12. EXISTING BRACING FROM ROOF RAFTERS TO TOP OF WALL (FIELD VERIFY), TYP @ EA RAFTER.
13. PROVIDE NEW 2X BRACING FROM ROOF RAFTERS TO TOP OF NEW WALL ON EA SIDE OF NEW WALL (FIELD VERIFY - MATCH EXIST) - LEAVE EXIST BRACING IN PLACE.
14. PROVIDE THICKENED SLAB AT STAIR STRINGER (REF A1/S-001)
15. DEMOLISH EXISTING CHIMNEY. INFILL EXISTING OPENINGS IN FLOOR FRAMING WITH BLOCKING AND DECKING (MATCH EXISTING) AS REQUIRED. PROVIDE 2X6 FRAMING AT ROOF OPENING BETWEEN RAFTERS AS SHOWN ON PLAN TO SUPPORT NEW FALSE CHIMNEY (NO MASONRY). REFERENCE ARCHITECTURE FOR MORE INFORMATION.
16. PROVIDE BUILT-UP (2) 2X6 COLUMN TO SUPPORT LVL BEAM. ATTACH BUILT-UP COLUMN TO BEAM BELOW WITH SIMPSON CCQ44SDS2.5 (BABAA COMPLIANT) OR EQUAL.
17. 1 3/4 X 11 7/8 LVL STAIR STRINGERS @ 16" OC. ATTACH SIDE STRINGERS TO WALL FRAMING.
18. 2X8 STAIR LANDING JOISTS @ 16" OC. ATTACH JOISTS TO LVL BEAMS W/ SIMPSON LUS28 (BABAA COMPLIANT) FACE MOUNT HANGERS (OR EQUAL)
19. PROVIDE ADDITIONAL 2X (MATCH EXISTING) SISTERED TO RAFTER TIE/CEILING JOIST BETWEEN NEW LVL BEAMS.
20. ATTACH (2) 1 3/4 X 11 7/8 PSL BEAM TO (2) 1 3/4 X 11 7/8 PSL GIRDER WITH SIMPSON HU412 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGERS.
21. ATTACH (2) 1 3/4 X 11 7/8 PSL BEAM TO (2)2X12 PT LEDGER WITH SIMPSON HU412 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGER.
22. ATTACH 2X10 PT JOISTS TO (2)2X12 PT LEDGER WITH SIMPSON LUS210 (BABAA COMPLIANT) OR EQUAL FACE MOUNT HANGERS.
23. PROVIDE PRESSURE TREATED (2)2X12 LEDGER. ATTACH LEDGER TO EXISTING CONCRETE WALL WITH (2) ROWS 14" CONCRETE SCREWS (BABAA COMPLIANT) STAGGERED @ 12" OC. ATTACH DECK BEAMS TO LEDGER W/ (2) ROWS #10 WOOD SCREWS STAGGERED @ 12" OC.
24. PROVIDE PRESSURE TREATED (2)2X6 KNEE BRACES BETWEEN POST AND GIRDER.

NOTE: NOT ALL KEYNOTES MAY BE USED FOR EACH PLAN.



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**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	DRAWN BY	
08/31/2023	KRC/ARW	
PROJECT #	CHECKED BY	
03221580	ARW	

SHEET TITLE

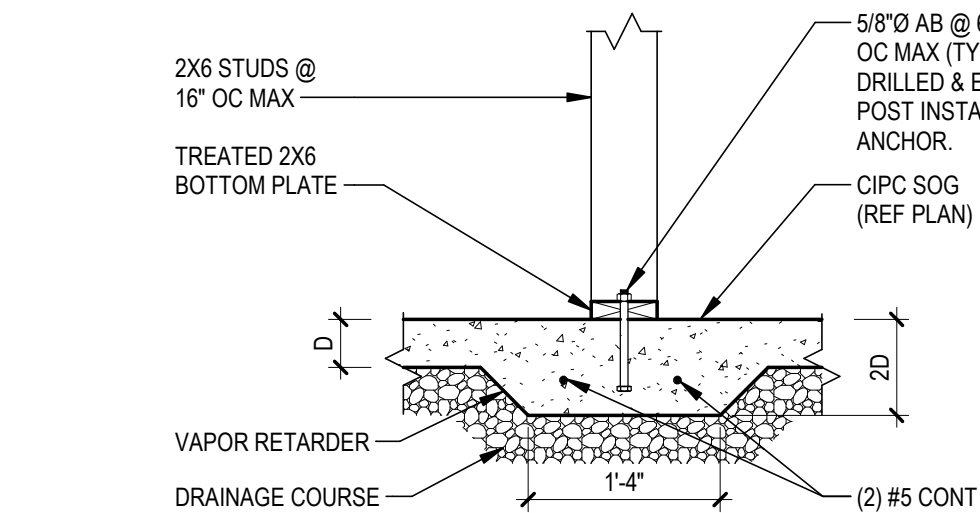
ROOF FRAMING PLAN

SHEET NUMBER

S-104

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100% CONSTRUCTION DOCUMENTS

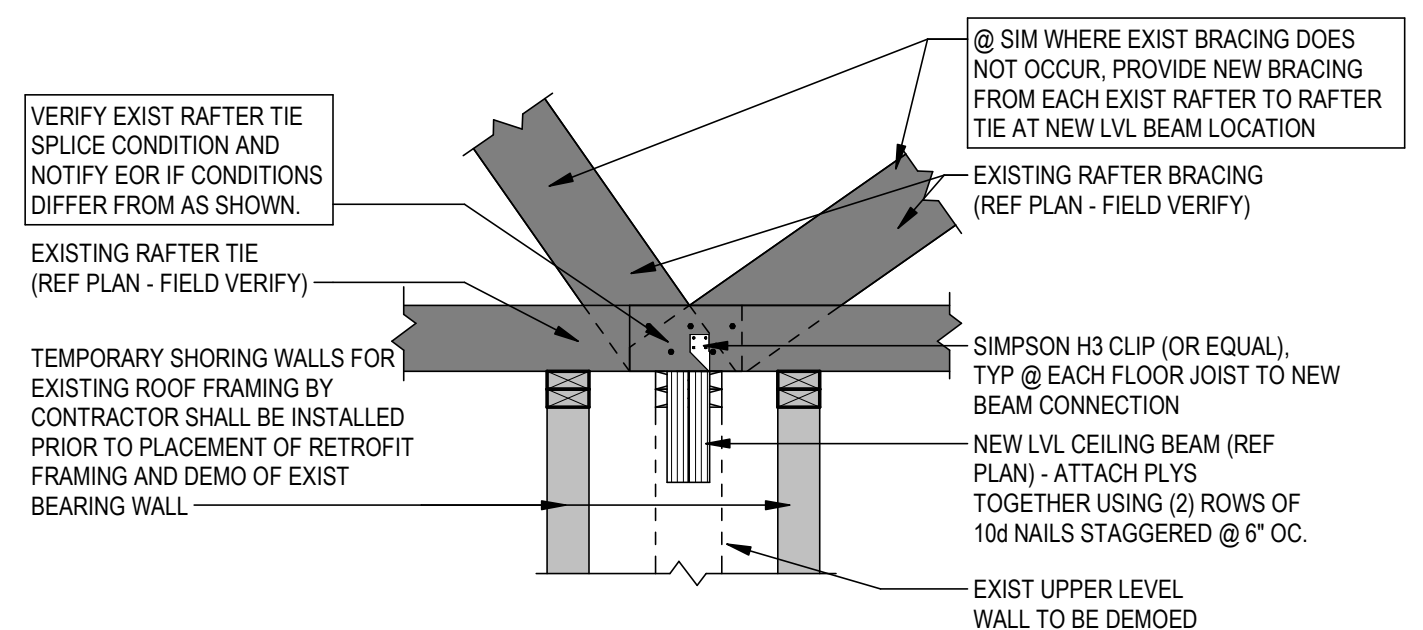


D3 THICKENED SLAB DETAIL WD STUD WALL
SCALE: 3/4" = 1'-0"

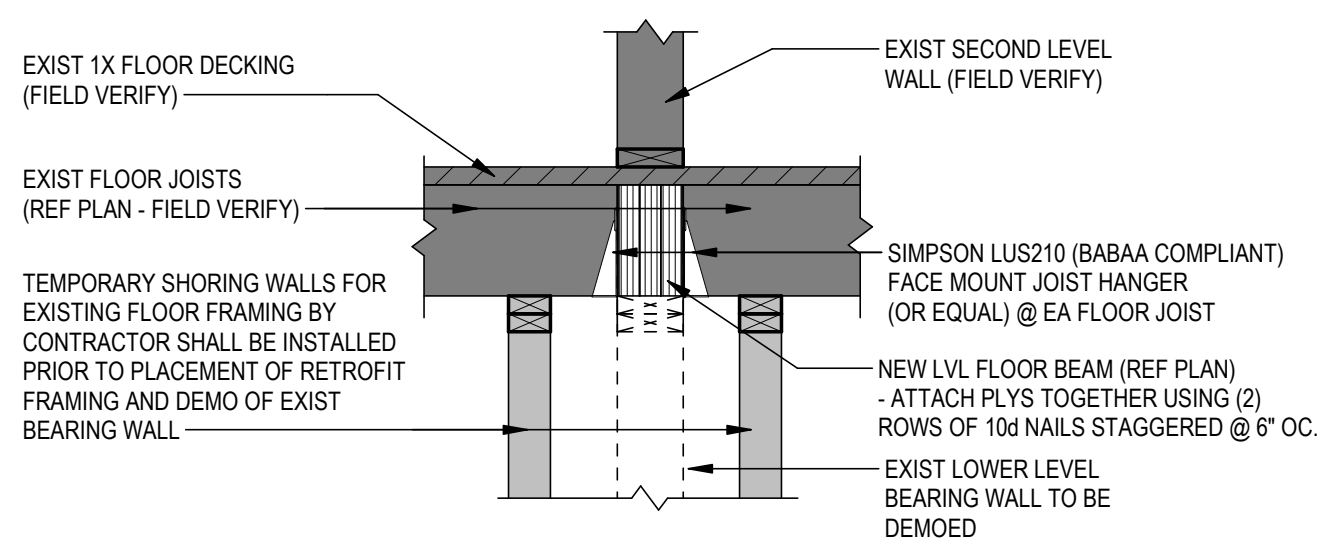
DURING RE-FRAMING OF FLOOR JOISTS, REPLACE, OR LEAVE IN PLACE AND PROVIDE A NEW JOIST IMMEDIATELY ADJACENT, ANY EXISTING FLOOR JOISTS THAT HAVE BEEN CUT OR MODIFIED SUCH THAT THEY DO NOT MEET JOIST NOTCHING AND BORING CRITERIA SPECIFIED IN IBC 2021 SECTION 1605.2. THE DEPTH OF EXISTING JOIST NOTCHES SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH (2 1/4"), NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH (1 1/2") AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN JOISTS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST AND THE DIAMETER SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST (3"). ESTIMATED 40% OF EXISTING JOISTS ANTICIPATED TO BE REPLACED. _____



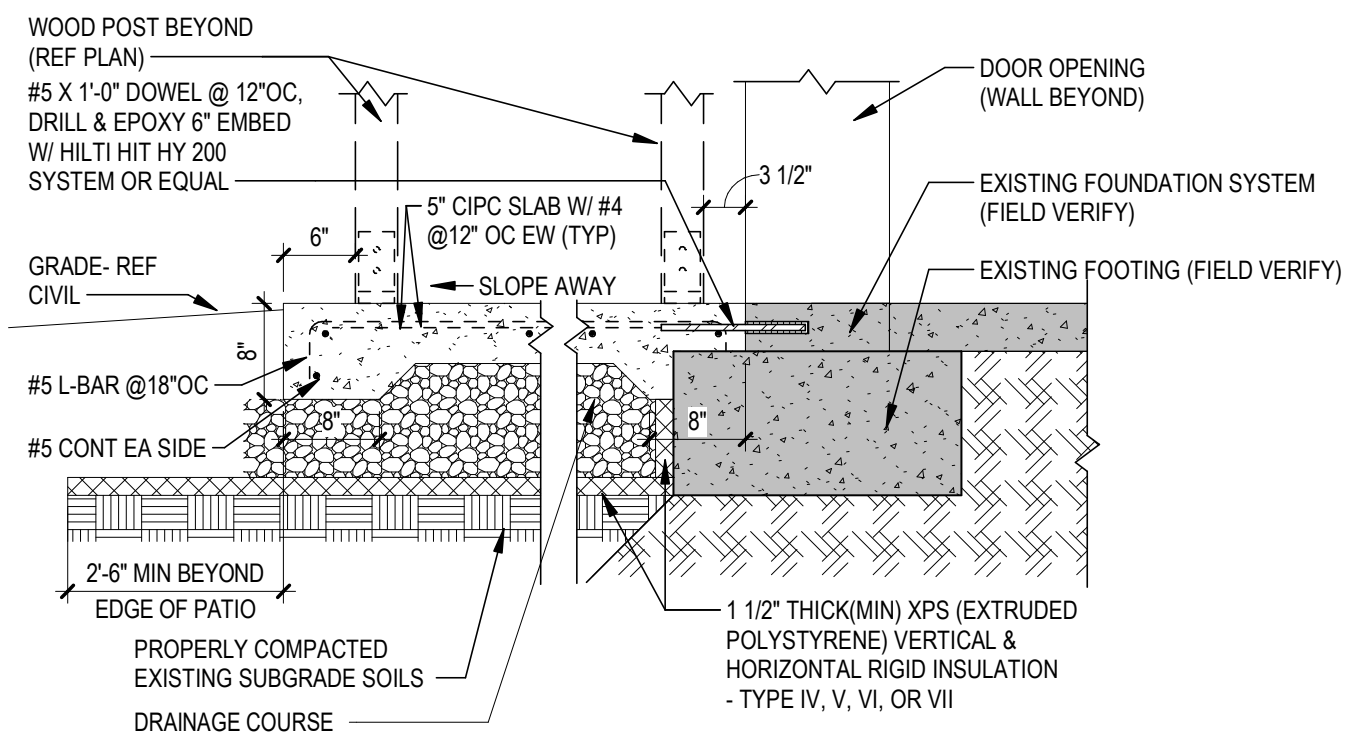
D4 EXISTING JOISTS TO BE REPLACED
SCALE: 3/4" = 1'-0"



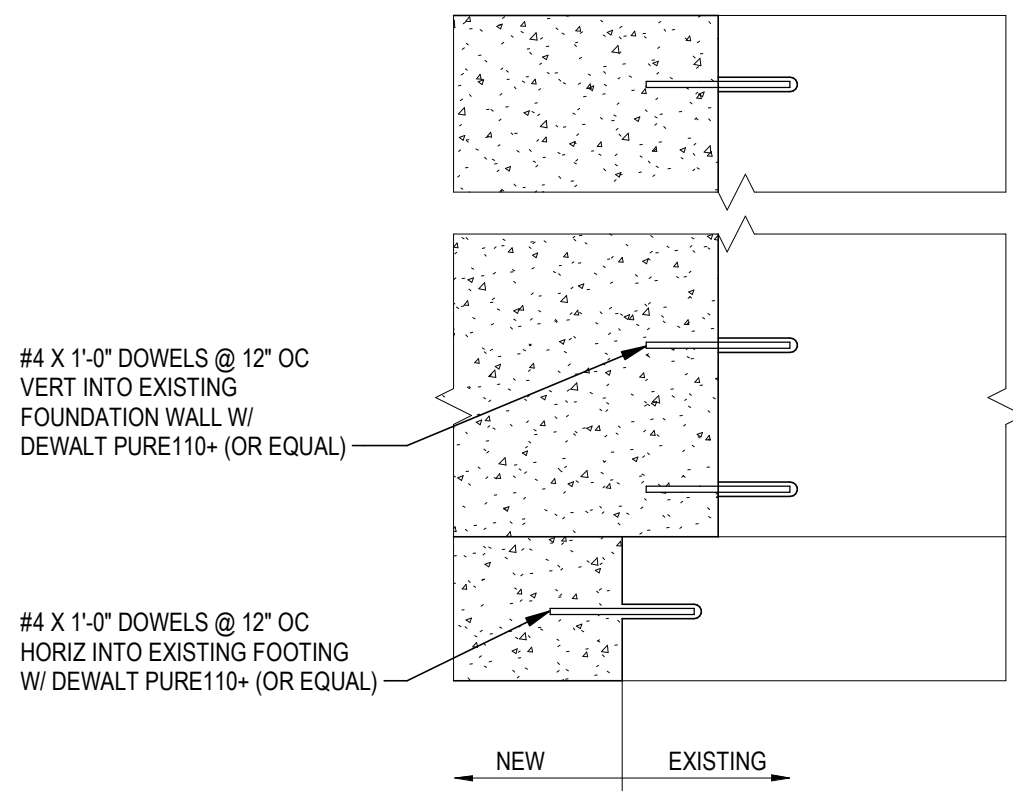
NEW ROOF SUPPORT BEAM AT EXISTING WALL DEMO/RAFTER SPLICE
SCALE: 3/4" = 1'-0"



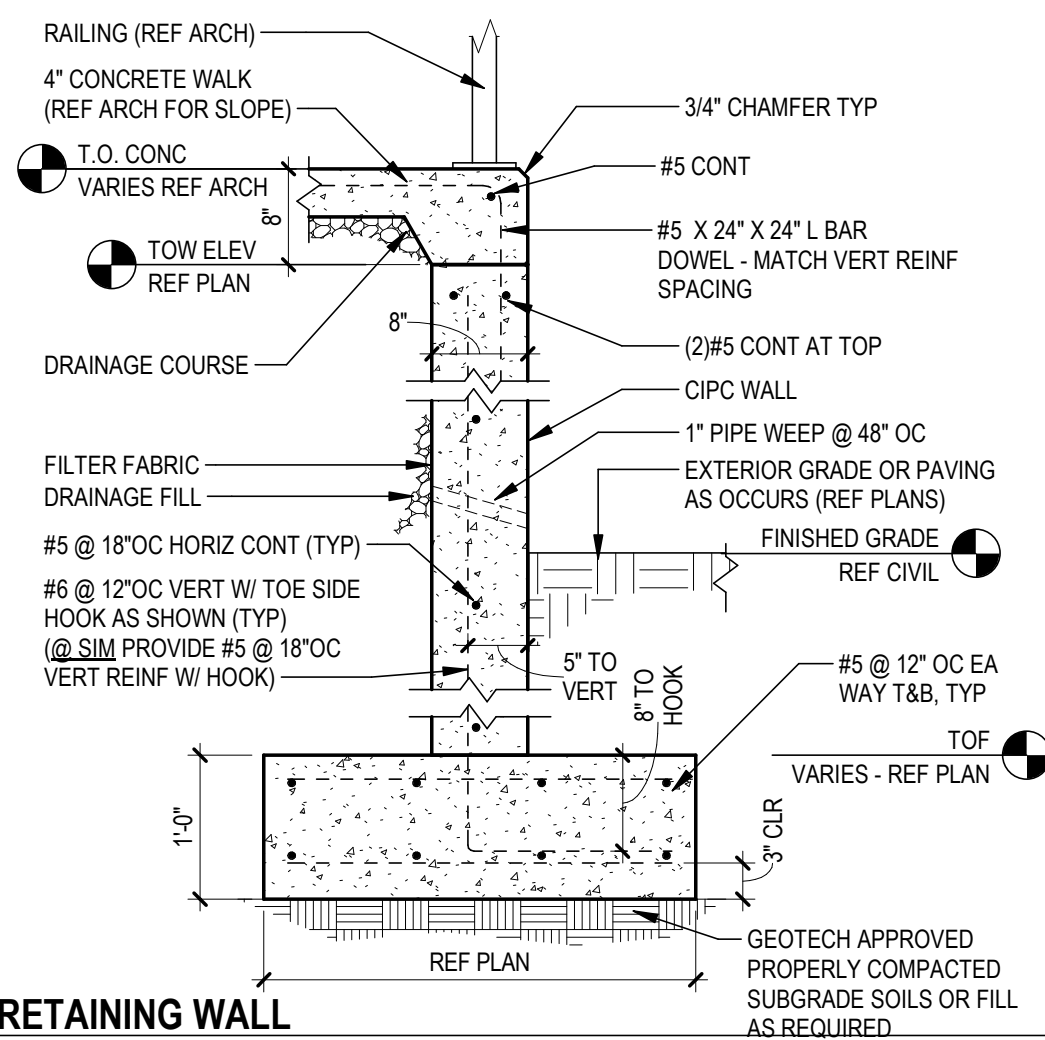
B4 **NEW FLOOR BEAM AT EXISTING BEARING WALL DEMO**
SCALE: 3/4" = 1'-0"



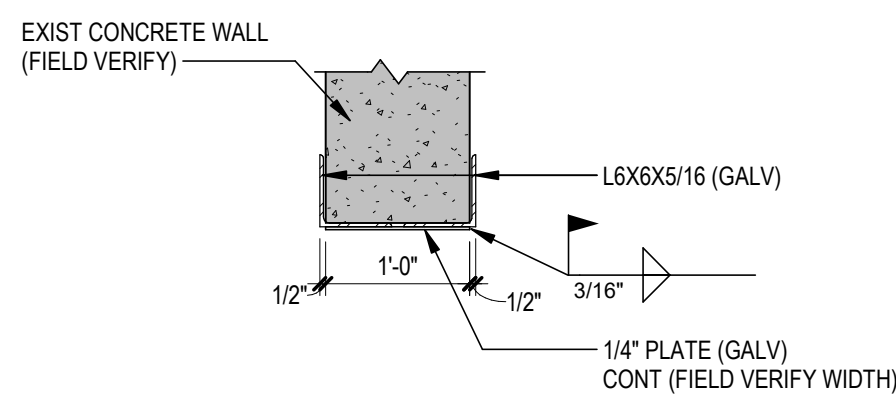
A4 FPSF DOOR STOOP DETAIL
SCALE: 3/4" = 1'-0"



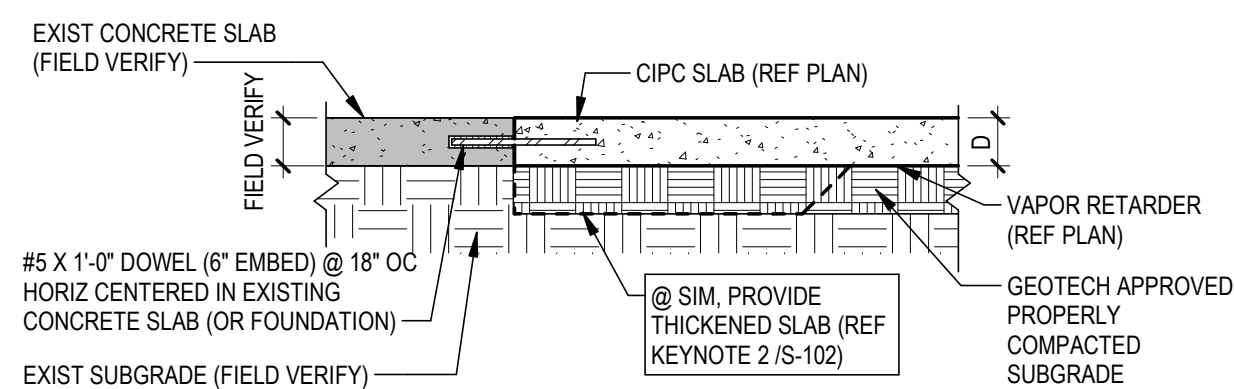
C3 FOUNDATION DOWEL DETAIL
SCALE: 3/4" = 1'-0"



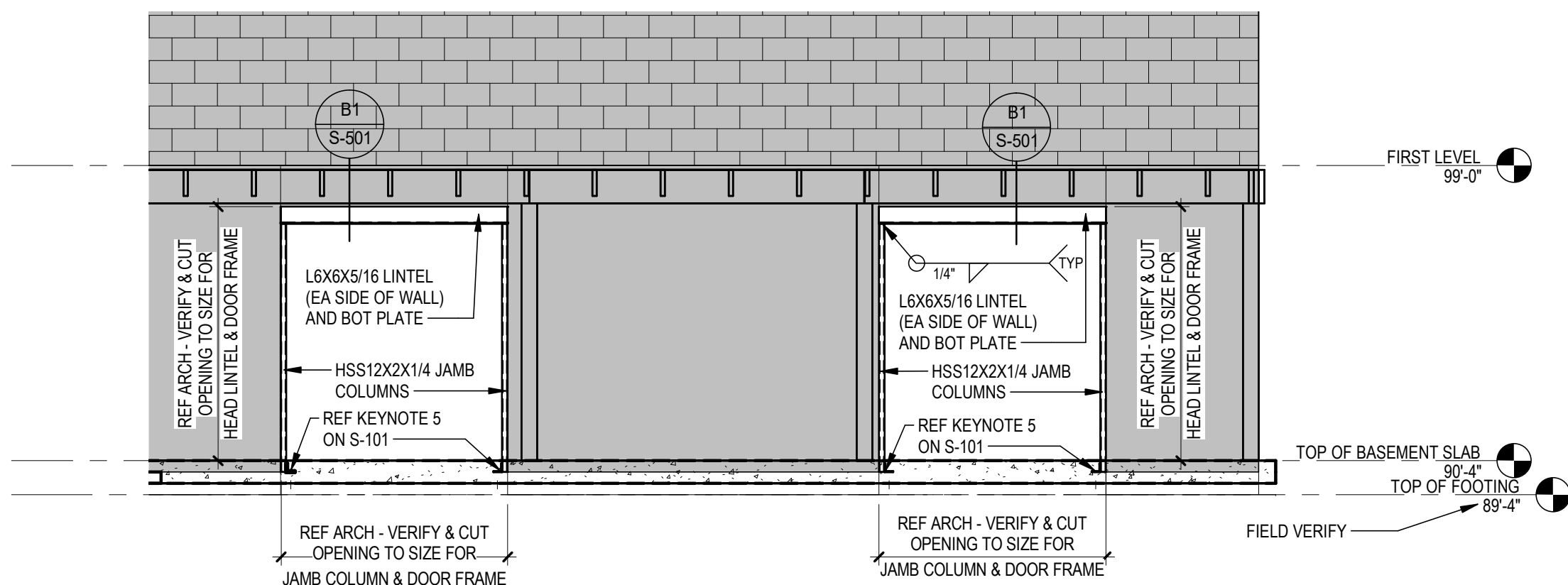
B3 **RETAINING WALL**
SCALE: 3/4" = 1'-0"



B1 STEEL LINTEL @ NEW OPENING
SCALE: 3/4" = 1'-0"



A1 **TYP SLAB INFILL DETAIL**
SCALE: 3/4" = 1'-0"



A2 NEW OPENINGS IN EXIST WALL - ELEVATION
SCALE: 1/4" = 1'-0"

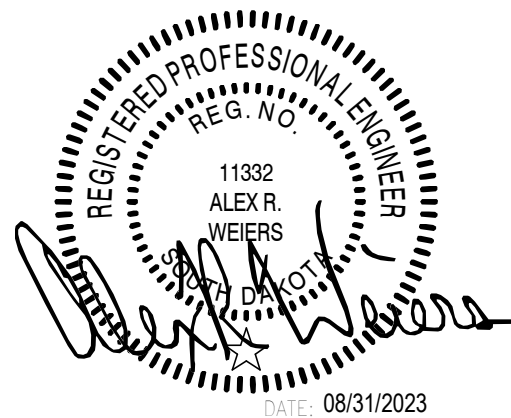


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QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE 08/31/2023	DRAWN BY KRC/ARW	
PROJECT # 03221580	CHECKED BY ARW	
SHEET TITLE		

STRUCTURAL DETAILS

SHEET NUMBER

S-501

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



AI SCALE: 1/4" = 1'-0"

A.	GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO ALLOW FOR COMPLETION OF WORK AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS - DEMOLITION OPERATIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE ITEMS DESCRIBED BY KEYNOTES HEREIN.
B.	ALL SURFACES DAMAGED DURING DEMOLITION SHALL BE REPAIRED FOR APPLICATION OF NEW FINISHES OR PATCHED TO MATCH EXISTING. INDEPENDENT TRADES ARE RESPONSIBLE FOR THEIR RESPECTIVE CUT AND PATCH. REFER TO SPECIFICATIONS.
C.	CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WHICH ARE TO MATCH EXISTING CONSTRUCTION. CONTACT A/E WITH DISCREPANCIES.
D.	COORDINATE DEMOLITION WITH OWNER'S SCHEDULE FOR OCCUPANCY.
E.	TEMPORARY PARTITIONS SHOULD BE SECURE AND WATERTIGHT.
F.	WHERE EXISTING DOORS ARE SHOWN TO BE REMOVED, ASSOCIATED FRAMES ARE TO BE REMOVED AS WELL.
G.	REFER TO STRUCTURAL SHEET S-101 FOR DEMO OF STRUCTURAL ITEMS.
E.	REMOVE INSULATION IN ATTIC.
F.	REMOVE ENTIRETY OF LOWER LEVEL FLOOR SLAB FOR PLUMBING AND STRUCTURAL WORK. COORDINATE/PHASE AS REQUIRED WITH SHORING REQUIREMENTS.

	REFERENCE KEYNOTE TAG		
	CONSTRUCTION LIMITS		
	AREAS TO RECEIVE NO WORK		
	EXISTING WALL TO REMAIN		EXISTING WATER CLOSET TO REMAIN
	EXISTING WALL REMOVED		EXISTING WATER CLOSET REMOVED
	EXISTING DOOR TO REMAIN		EXISTING URINAL TO REMAIN
	EXISTING DOOR AND FRAME REMOVED		EXISTING URINAL REMOVED
	EXISTING WINDOW TO REMAIN		EXISTING LAVATORY TO REMAIN
	EXISTING WINDOW REMOVED		EXISTING LAVATORY REMOVED
	EXISTING CASEWORK TO REMAIN		
	EXISTING CASEWORK REMOVED		

2.01 DEMO EXISTING WALL CONSTRUCTION.

2.02 DEMO EXISTING DOOR, FRAME, AND HARDWARE.

2.03 DEMO EXISTING PLUMBING FIXTURE. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

2.05 DEMO ALL CASEROCK, COUNTERTOP, AND MOUNTING STANDSTANDS.

2.06 DEMO EXISTING FLOOR FINISH. DEMO EXISTING WALL, BATH, AND BATH TUB. REFER TO RECEIVE NEW FINISH.

2.07 DEMO EXISTING BLINDS AND PREP WINDOWS FOR NEW UNIT.

2.08 DEMO EXISTING GELDS IN ITS ENTIRETY. REFERENCE REPAIR FOR NEW GELDS REQUIREMENTS.

2.09 DEMO EXISTING TRIMMAGE, INCLUDING TRIM, AND TRIM FOR NEW TRIM.

2.10 REMOVE ALL TRIMING AROUND DOORWINDOWS AND PREP FOR NEW TRIM TO BE INSTALLED.

2.14 DEMO EXISTING STAIR ASSEMBLY.

2.16 DEMO WALL PANELING - GYP WALL TO MATCH.

2.17 REMOVE EXTERIOR DOOR AND DEMO WALL AS REQUIRED FOR INSTALLATION OF NEW DOOR AND HEADER.

2.18 REMOVE STAIR, STAIRWELL, INCLINER, AND DOORS, SET BACKS FOR REUSE.

2.19 DEMO AS REQUIRED FOR INSTALLATION OF NEW RAMP LANDING AND CONNECTION. REFER TO STRUCTURAL.

2.21 REMOVE CHIMNEY IN ITS ENTIRETY, INCLUDING ABOVE THE ROOF. NEW FANACE CHIMNEY TO BE INSTALLED AT THE ROOF.



REGISTERED PROFESSIONAL ARCHITECT
REG. NO. 15208
BRADLEY RYAN MITZELFEIT
SOUTH DAKOTA
DATE: 8/31/2023

RC CAMP RAPID

ISSUES

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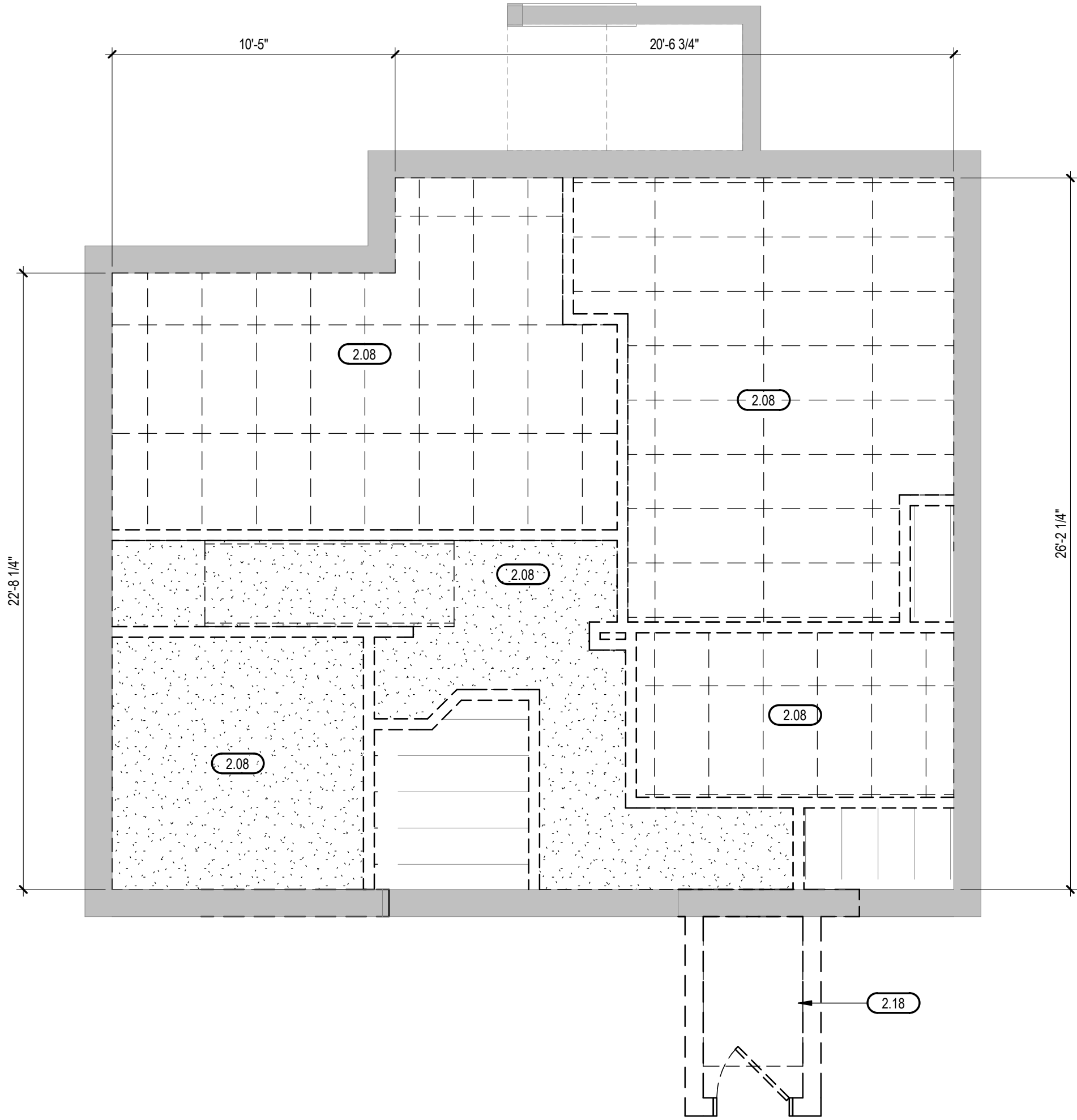
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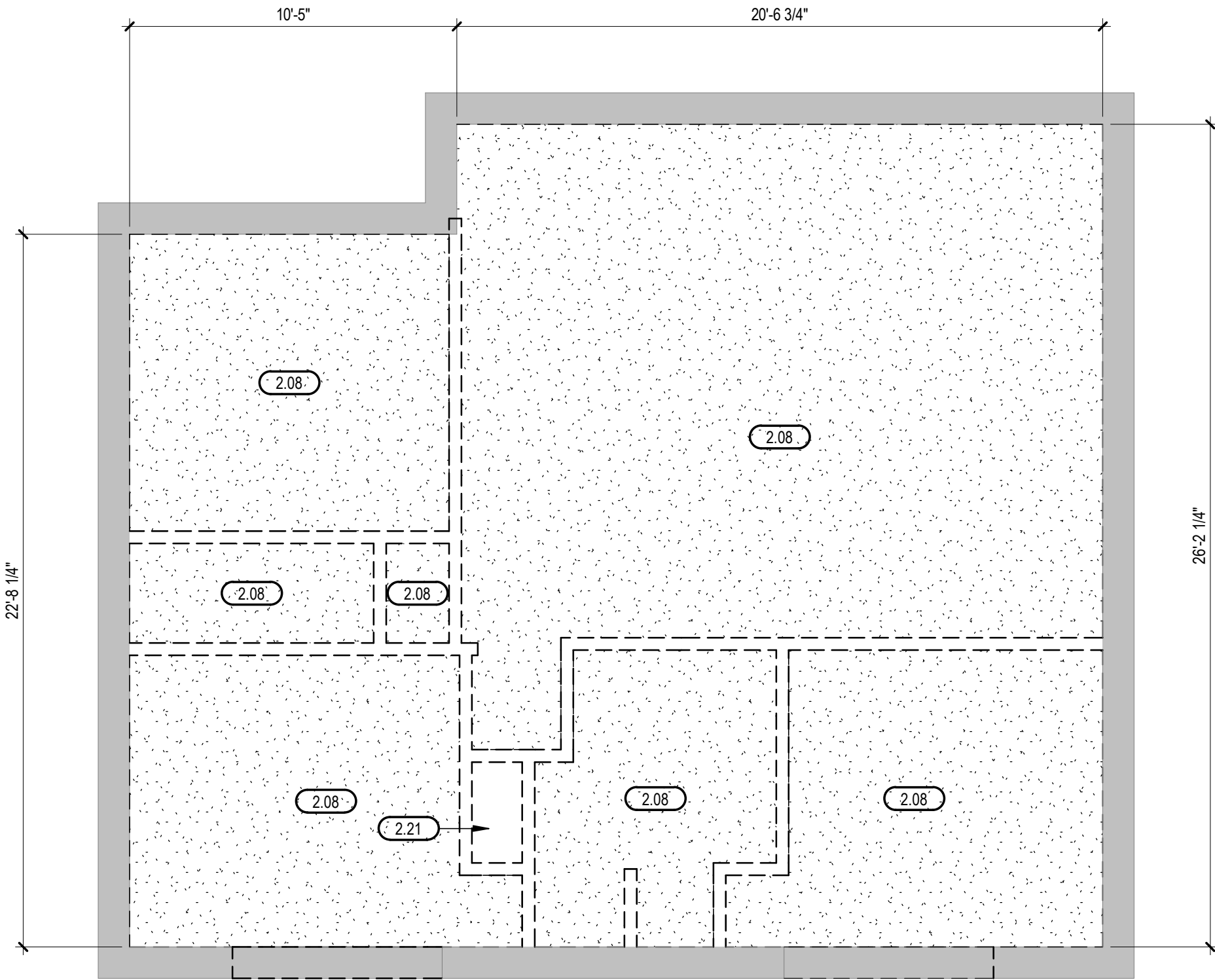
LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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B1 LOWER LEVEL CEILING DEMO PLAN
SCALE: 1/4" = 1'-0"



A1 FIRST LEVEL CEILING DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



DEMOLITION PLAN GENERAL NOTES

- A. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO ALLOW FOR COMPLETION OF WORK AS DESCRIBED IN THE CONSTRUCTION DOCUMENTS - DEMOLITION OPERATIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE ITEMS DESCRIBED BY KEYNOTES HEREIN.
- B. ALL SURFACES DAMAGED DURING DEMOLITION SHALL BE REPAIRED FOR APPLICATION OF NEW FINISHES OR PATCHED TO MATCH EXISTING. INDEPENDENT TRADES ARE RESPONSIBLE FOR THEIR RESPECTIVE CUT AND PATCH. REFER TO SPECIFICATIONS.
- C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WHICH ARE TO MATCH EXISTING CONSTRUCTION. CONTACT A/E WITH DISCREPANCIES.
- D. COORDINATE DEMOLITION WITH OWNER'S SCHEDULE FOR OCCUPANCY.
- E. TEMPORARY PARTITIONS SHOULD BE SECURE AND WATERTIGHT.
- F. WHERE EXISTING DOORS ARE SHOWN TO BE REMOVED, ASSOCIATED FRAMES ARE TO BE REMOVED AS WELL.
- G. REFER TO STRUCTURAL SHEET S-101 FOR DEMO OF STRUCTURAL ITEMS.
- E. REMOVE INSULATION IN ATTIC.
- F. REMOVE ENTIRETY OF LOWER LEVEL FLOOR SLAB FOR PLUMBING AND STRUCTURAL WORK. COORDINATE/PHASE AS REQUIRED WITH SHORING REQUIREMENTS.

DEMOLITION PLAN LEGEND

- 2 ### REFERENCE KEYNOTE TAG
- CONSTRUCTION LIMITS
- AREAS TO RECEIVE NO WORK
- EXISTING WALL TO REMAIN
- EXISTING WALL REMOVED
- EXISTING DOOR TO REMAIN
- EXISTING DOOR AND FRAME REMOVED
- EXISTING WINDOW TO REMAIN
- EXISTING WINDOW REMOVED
- EXISTING CASEWORK TO REMAIN
- EXISTING CASEWORK REMOVED
- EXISTING WATER CLOSET TO REMAIN
- EXISTING WATER CLOSET REMOVED
- EXISTING URINAL TO REMAIN
- EXISTING URINAL REMOVED
- EXISTING LAVATORY TO REMAIN
- EXISTING LAVATORY REMOVED

REFERENCE KEYNOTES

2.08	DEMO EXISTING CEILING IN ITS ENTIRETY. REFERENCE RCP FOR NEW CEILING REQUIREMENTS.
2.18	REMOVE STAIR, STAIRWELL, INCLUDING ROOF, AND DOORS. RETAIN BRICKS FOR REUSE.
2.21	REMOVE CHIMNEY IN ITS ENTIRETY, INCLUDING ABOVE THE ROOF. NEW FAKE CHIMNEY TO BE INSTALLED AT THE ROOF.



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250**

RC CAMP RAPID

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ISSUE	DATE	DESCRIPTION
ISSUE DATE	DRAWN BY	
08/31/2023	BRM	
PROJECT #	CHECKED BY	
03221580	BRM	

SHEET TITLE

**REFLECTED CEILING
DEMOLITION PLANS**

SHEET NUMBER

AD102

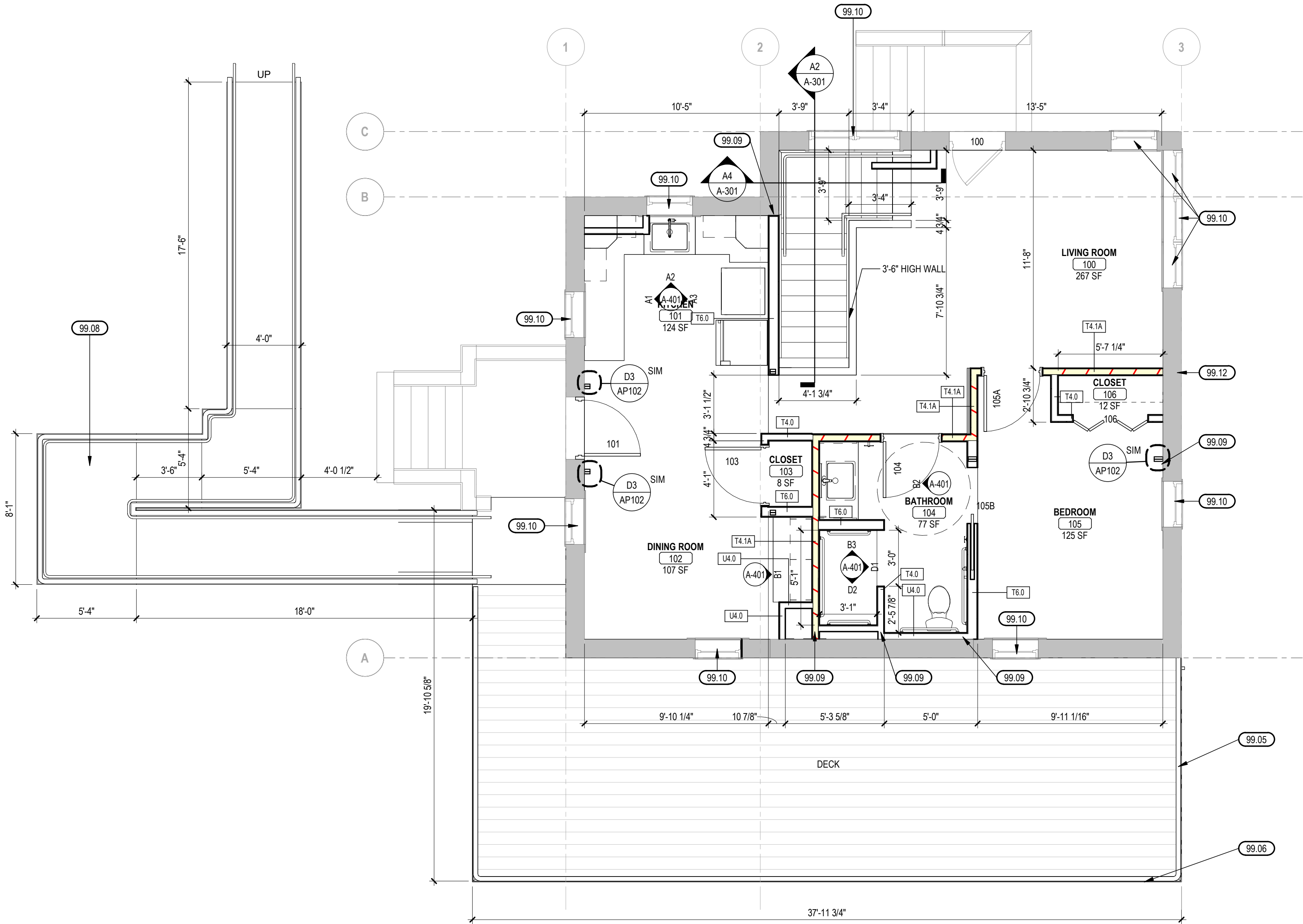
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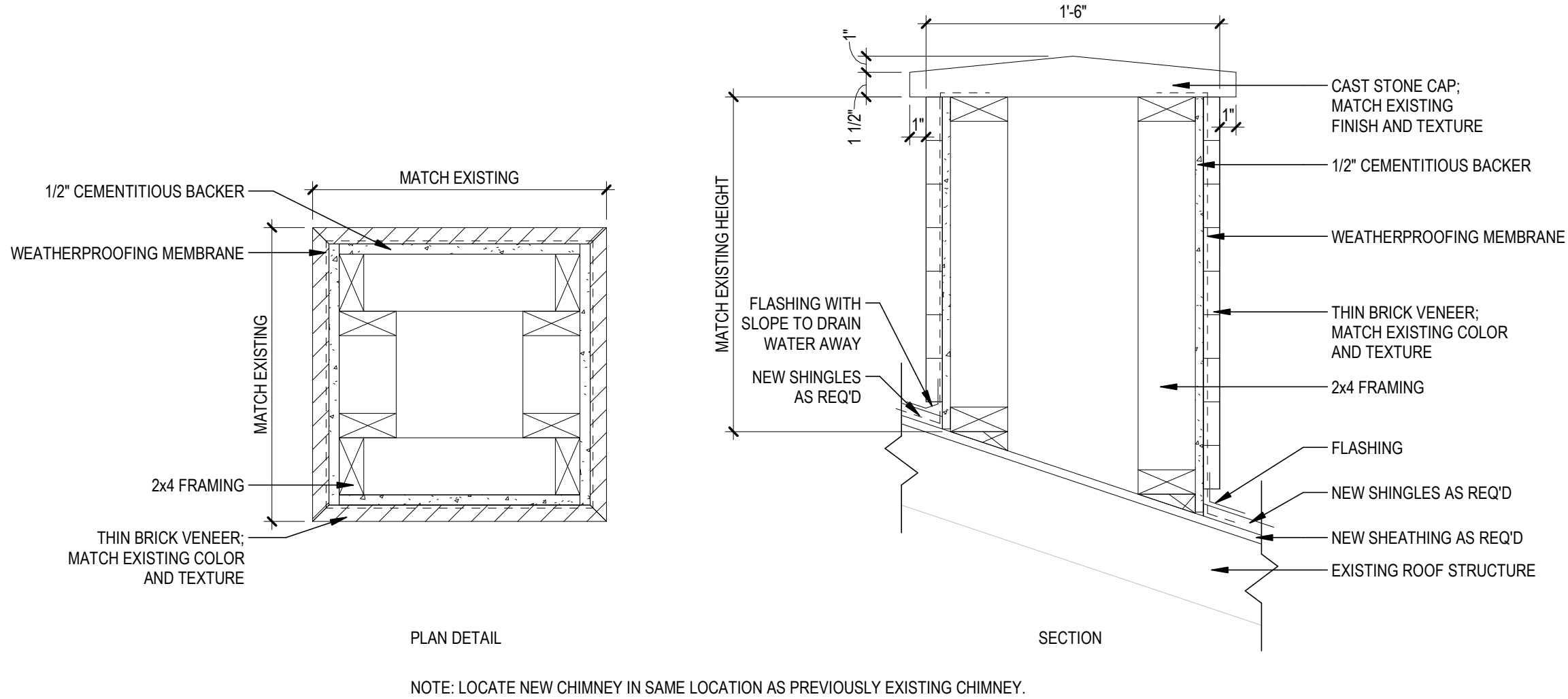
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A1 FIRST LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"



C2 NEW CHIMNEY DETAILS
SCALE: 1 1/2" = 1'-0"



FLOOR PLAN GENERAL NOTES

- A. ALL WALLS ARE TYPE T4.0 UNLESS OTHERWISE NOTED.
- B. PROVIDE BLOCKING AT PARTITIONS AS REQUIRED FOR MOUNTING OF FURNISHED AND NON-FURNISHED WALL MOUNTED ITEMS.
- C. ALIGN FINISHED FACE OF CONTINUOUS PARTITIONS THAT CHANGE PARTITION TYPES ALONG A STRAIGHT RUN.
- D. EDGE OF INTERIOR DOOR FRAMES TO BE 4\"/>
- E. REFER TO AF101 SHEET FOR DOOR SCHEDULE, DOOR, WINDOW, AND FRAME TYPES.
- F. ALL WALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, CMU, BRICK, OR CONCRETE, U.N.O.

FLOOR PLAN LEGEND

ROOM NAME	ROOM TAG
101	EXISTING ITEMS TO REMAIN
101A	NEW WORK W/ DOOR TAG
---	CONSTRUCTION LIMITS
XX	WINDOW TAG
XXX	WALL TAG
TA-GB18	EQUIPMENT TAG
	TA = TOILET ACCESSORIES. SEE SCHEDULE
	FE = WALL MOUNTED FIRE EXTINGUISHER
	FEC = FIRE EXTINGUISHER CABINET
7.###	REFERENCE KEYNOTE TAG
CJ	MASONRY CONTROL JOINT
CJ	GYPSUM BOARD CONTROL JOINT
CR	CARD READER
	ELECTRICAL PANEL. REF ELECTRICAL PLANS

REFERENCE KEYNOTES

99.05	TREX TRANSCEND RAILING SYSTEM.
99.06	TREX TRANSCEND LINEAGE COMPOSITE DECKING.
99.08	CONCRETE RAMP W/ TREX GUARDRAIL AND HANDRAIL SYSTEM. CONFIRM EXACT LENGTH REQUIRED IN FIELD. SLOPE 1:12 WITH MAX 3/4\"/>
99.09	PATCH WALLS WHERE EXISTING FINISHES WERE REMOVED PRIOR TO APPLYING NEW FINISHES.
99.10	PREP WINDOW FOR NEW STAIN FINISH TO MATCH TRIM TO BE INSTALLED.
99.12	INSPECT ENTIRE BUILDING AND REPAIR FLUOPONT BRICKWORK AS REQUIRED. REPLACE BRICKS AS NECESSARY. UTILIZE BRICKS FROM DEMOLITION.

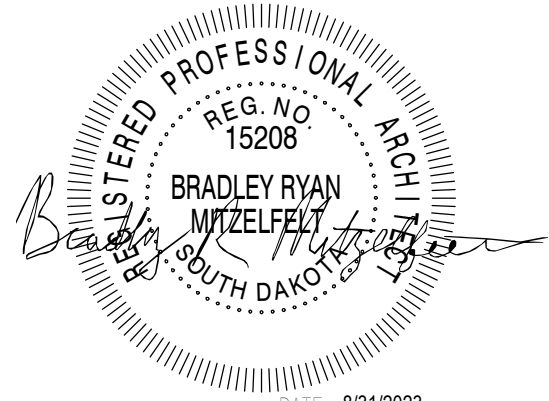


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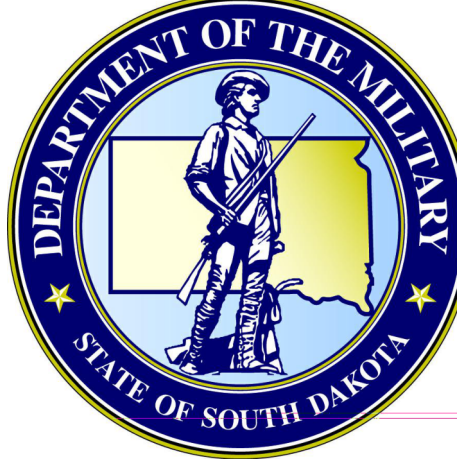
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DATE: 8/31/2023

PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
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RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY BRM
PROJECT #	03221580	CHECKED BY BRM

SHEET TITLE

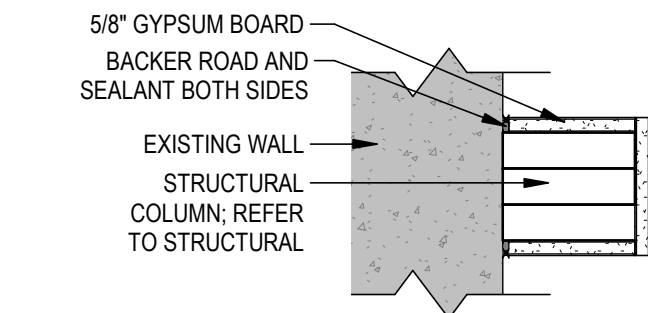
**FIRST LEVEL FLOOR
PLAN**

SHEET NUMBER

AP101

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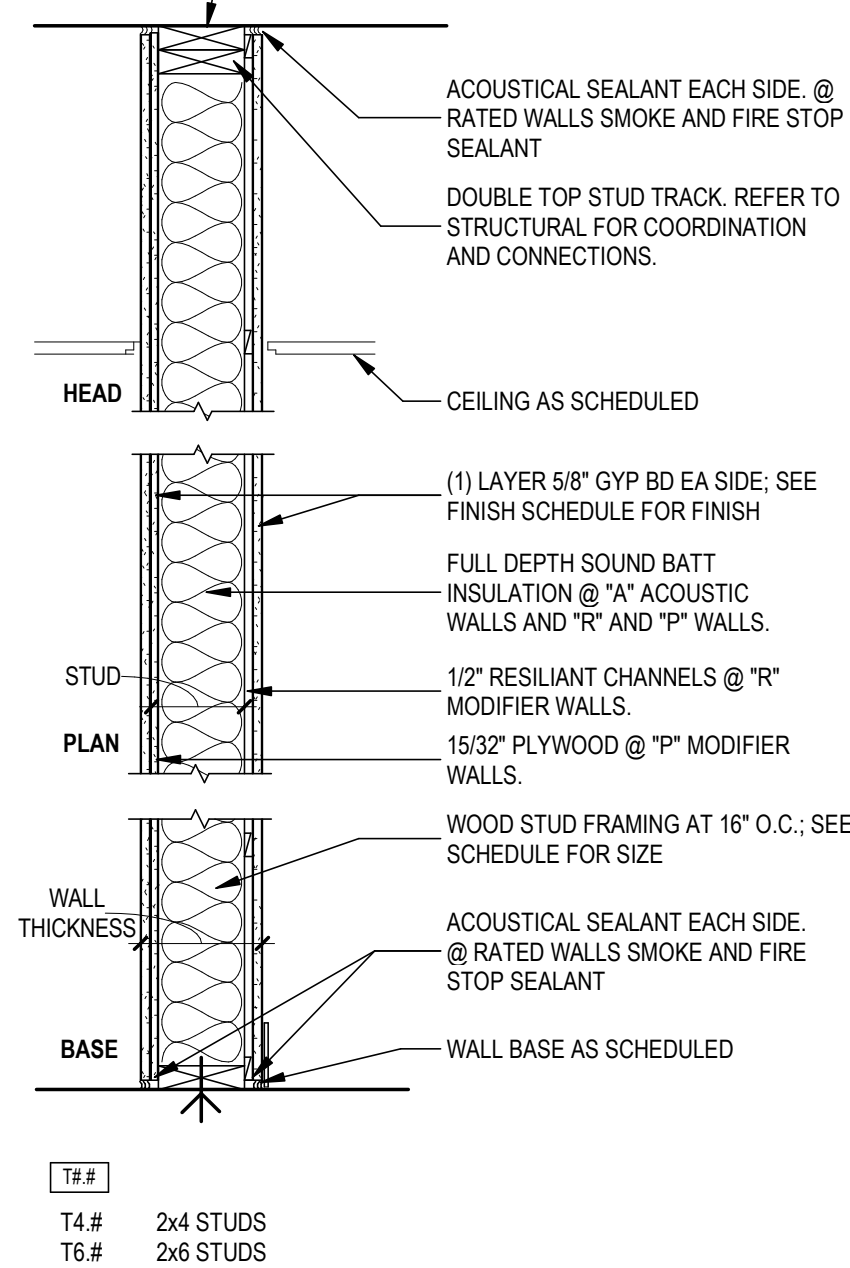
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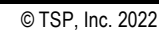
A1 LOWER LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"



99.09	PATCH WALLS WHERE EXISTING FINISHES WERE REMOVED PRIOR TO APPLYING NEW FINISHES.
99.11	INFILL WALL WHERE EXISTING ELECTRICAL AND PLATE WERE REMOVED.
99.12	INSPECT ENTIRE BUILDING AND REPAIR/UPPOINT BRICKWORK AS REQUIRED. REPLACE BRICKS AS NECESSARY. UTILIZE BRICKS FROM DEMOLITION.



4



LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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A1 FIRST LEVEL CEILING PLAN
SCALE: 1/4" = 1'-0"



REFLECTED CEILING PLAN GENERAL NOTES

- A. ALL SURFACES DAMAGED DURING DEMOLITION SHALL BE REPAIRED FOR APPLICATION OF NEW FINISHES OR PATCHED TO MATCH EXISTING.
- B. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WHICH ARE TO MATCH EXISTING CONSTRUCTION. CONTACT A/E WITH DISCREPANCIES.
- C. GENERAL CONTRACTOR TO COORDINATE ALL CEILING MOUNTED EQUIPMENT SUPPORT REQUIREMENTS, LOCATIONS, DIMENSIONS, ETC, WITH EQUIPMENT SUPPLIER AND OWNER, PRIOR TO INSTALLATION.
- D. INSTALL NEW INSULATION IN ATTIC.
- E. ALL FIRST FLOOR CEILINGS TO BE AT BOTTOM OF STRUCTURE.

REFLECTED CEILING PLAN LEGEND

- ROOM NAME**
101 ROOM TAG
- 10'-11" CEILING HEIGHT ELEVATION TAG
- 8'-0" SPOT ELEVATION TAG
- EXP EXPOSED STRUCTURE
- 7.### REFERENCE KEYNOTE TAG
- RECESSED OR SEMI-RECESSED LIGHT FIXTURE
- SURFACE SUSPENDED LIGHT FIXTURE
- SURFACE MOUNT LIGHT FIXTURE
- CEILING EXIT SIGN, SINGLE OR DOUBLE FACE. REF ELECTRICAL
- SUPPLY REGISTER OR DIFFUSER
- EXHAUST OR RETURN REGISTER
- SMOKE DETECTOR
- GYPSUM BOARD CEILING

REFERENCE KEYNOTES

- 9.202 NEW GYPSUM BOARD CEILING. MATCH EXISTING HEIGHT. PAINT.
- 9.203 GYP BOARD BULKHEADS AS REQUIRED TO CONCEAL DUCTWORK OR STRUCTURE.



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PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	DRAWN BY	
08/31/2023	BRM	
PROJECT #	CHECKED BY	
03221580	BRM	

SHEET TITLE

**FIRST LEVEL
REFLECTED CEILING
PLAN**

SHEET NUMBER

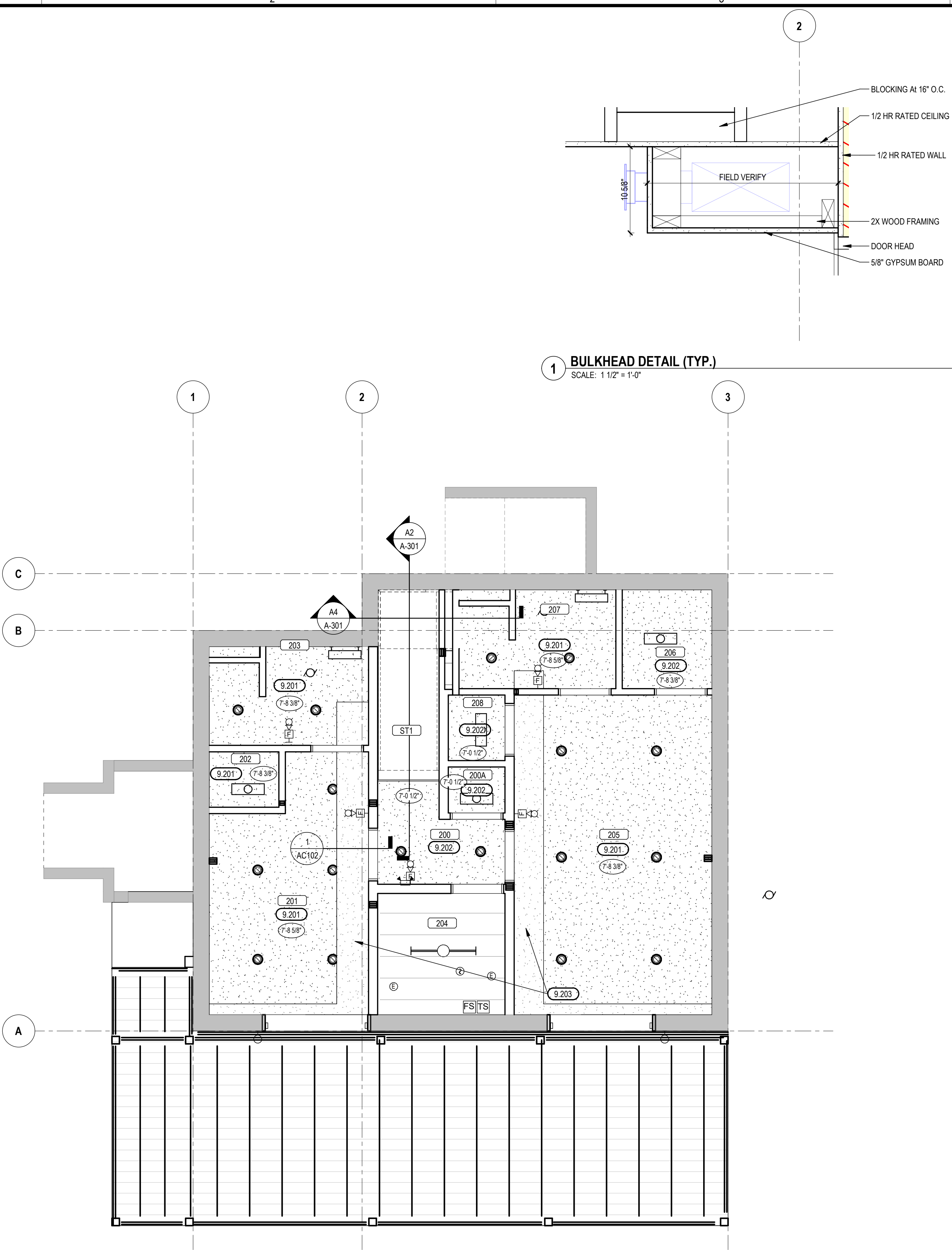
AC101

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LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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A1 LOWER LEVEL CELING PLAN
SCALE: 1/4" = 1'-0"

1 BULKHEAD DETAIL (TYP.)
SCALE: 1 1/2" = 1'-0"

REFLECTED CEILING PLAN GENERAL NOTES

- A. ALL SURFACES DAMAGED DURING DEMOLITION SHALL BE REPAIRED FOR APPLICATION OF NEW FINISHES OR PATCHED TO MATCH EXISTING.
- B. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS WHICH ARE TO MATCH EXISTING CONSTRUCTION. CONTACT A/E WITH DISCREPANCIES.
- C. GENERAL CONTRACTOR TO COORDINATE ALL CEILING MOUNTED EQUIPMENT SUPPORT REQUIREMENTS, LOCATIONS, DIMENSIONS, ETC, WITH EQUIPMENT SUPPLIER AND OWNER, PRIOR TO INSTALLATION.
- D. INSTALL NEW INSULATION IN ATTIC.
- E. ALL FIRST FLOOR CEILINGS TO BE AT BOTTOM OF STRUCTURE.

REFLECTED CEILING PLAN LEGEND

- ROOM NAME ROOM TAG
- CEILING HEIGHT ELEVATION TAG
- SPOT ELEVATION TAG
- EXP EXPOSED STRUCTURE
- REFERENCE KEYNOTE TAG
- RECESSED OR SEMI-RECESSED LIGHT FIXTURE
- SURFACE SUSPENDED LIGHT FIXTURE
- SURFACE MOUNT LIGHT FIXTURE
- CEILING EXIT SIGN, SINGLE OR DOUBLE FACE. REF ELECTRICAL
- SUPPLY REGISTER OR DIFFUSER
- EXHAUST OR RETURN REGISTER
- SMOKE DETECTOR
- GYPSUM BOARD CEILING

REFERENCE KEYNOTES

9.201	NEW 12 HOUR RATED GYPSUM BOARD CEILING MOUNTED TO THE UNDERSIDE OF STRUCTURE
9.202	NEW GYPSUM BOARD CEILING. MATCH EXISTING HEIGHT. PAINT.
9.203	GYP BOARD BULKHEADS AS REQUIRED TO CONCEAL DUCTWORK OR STRUCTURE.

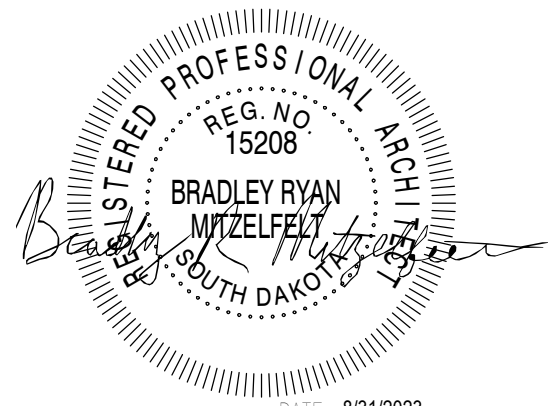


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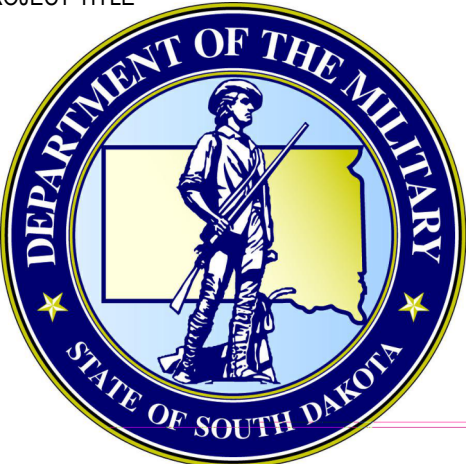
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**SOUTH DAKOTA
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QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY BRM
PROJECT #	03221580	CHECKED BY BRM

SHEET TITLE

**LOWER LEVEL
REFLECTED CEILING
PLAN**

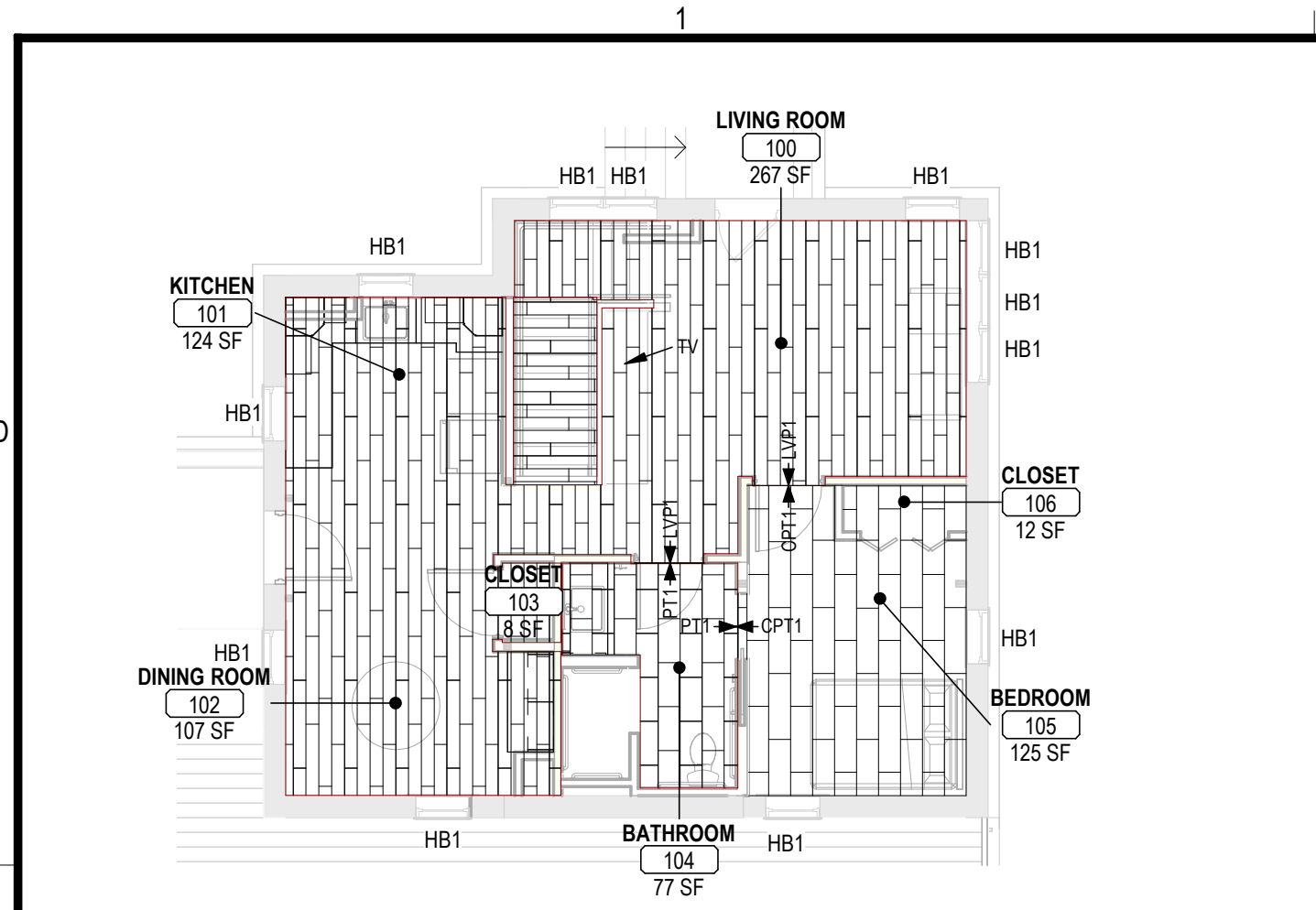
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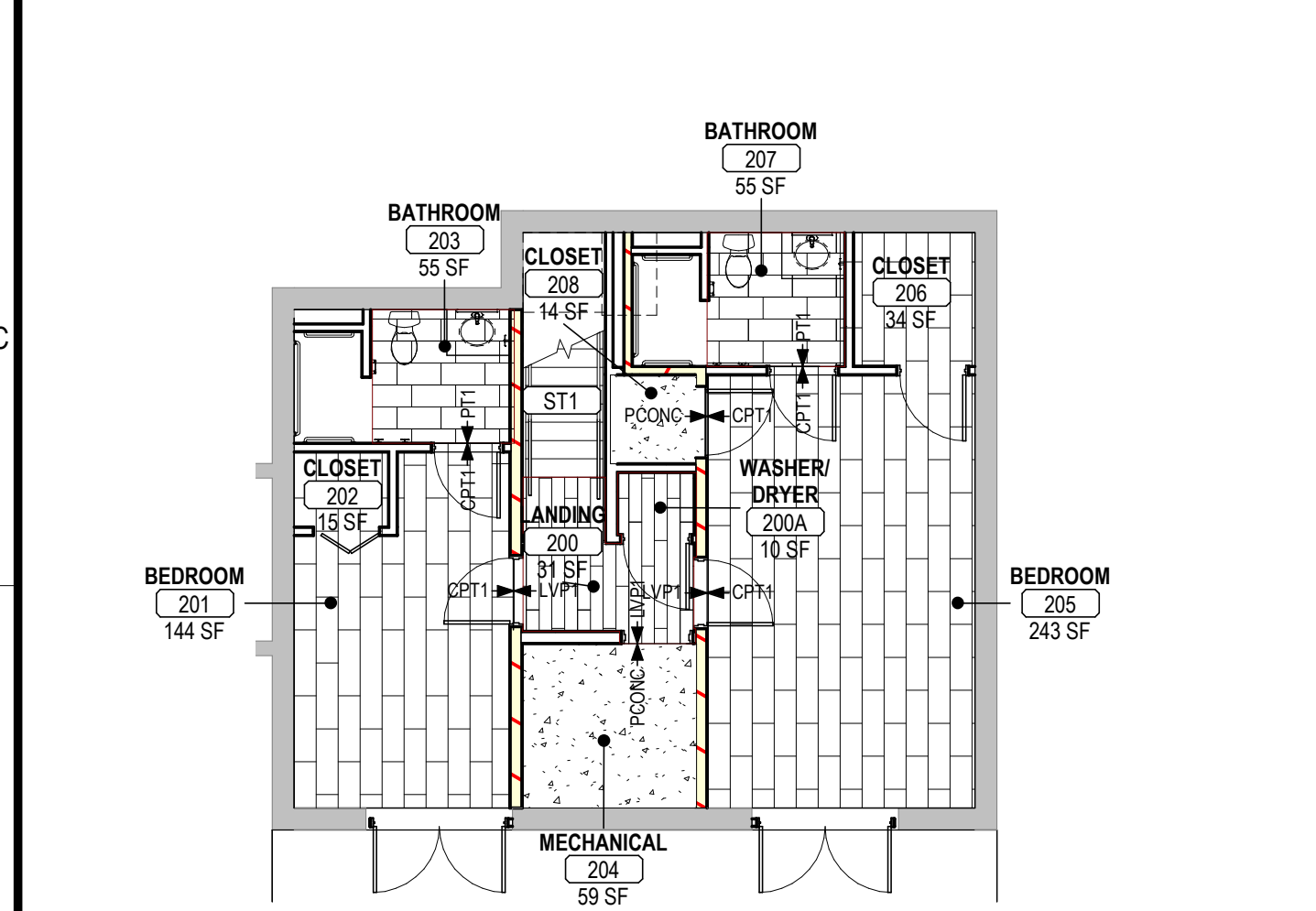
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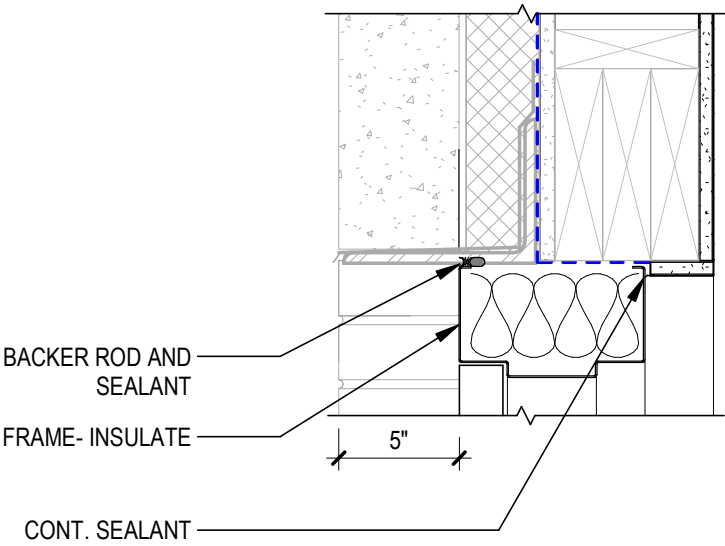
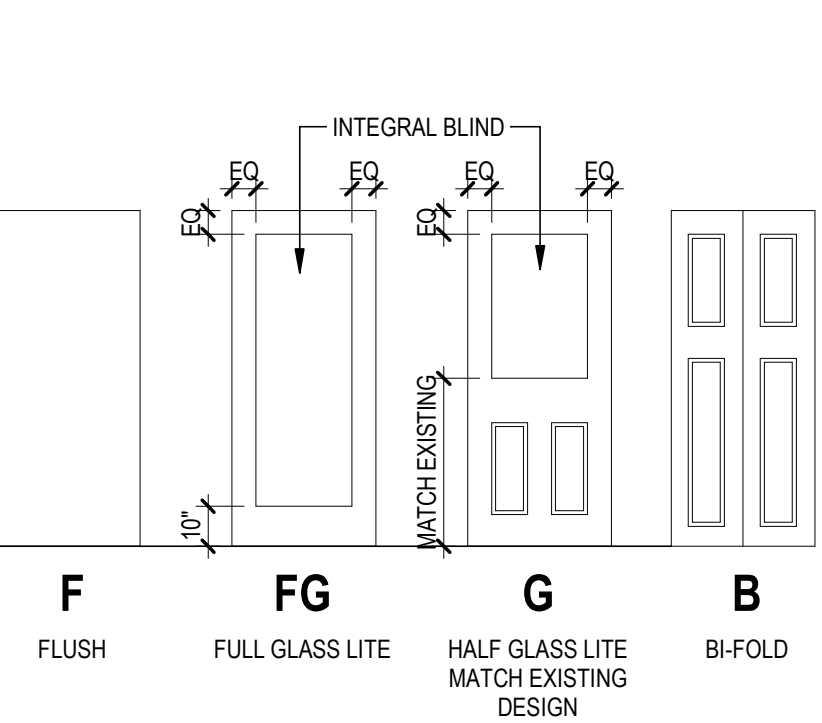
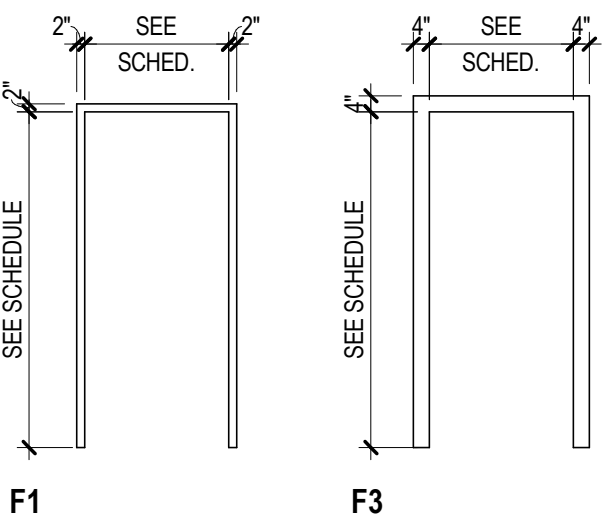


D1 FIRST LEVEL FINISH PLAN
SCALE: 1/8" = 1'-0"

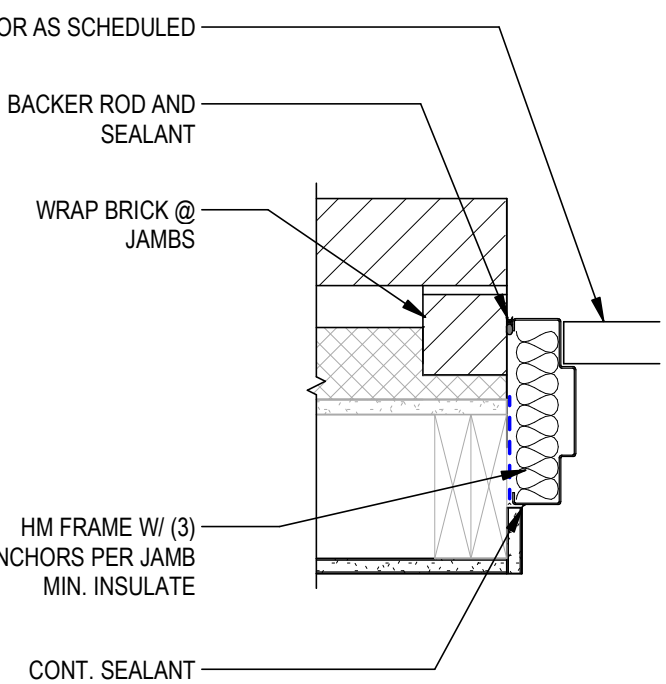


C1 LOWER LEVEL FINISH PLAN
SCALE: 1/8" = 1'-0"

- GENERAL FRAME NOTES:
- SEE DOOR SCHEDULE FOR DOOR FRAME FINISH
 - SEE DOOR SCHEDULE FOR GLAZING TYPE, U.N.O.
 - ANY/ALL DOORS ARE TO BE INSTALLED AS PER MANUFACTURER'S STANDARDS, DETAILS & INSTRUCTIONS
 - SEE SPECIFICATIONS FOR ANY/ALL ADDITIONAL DOOR & FRAME INFORMATION



1 DOOR - EXT HM HEAD - MTL STUD/BRICK
SCALE: 1 1/2" = 1'-0"



A2 DOOR - EXT HM JAMB - WD STUD/BRICK
SCALE: 1 1/2" = 1'-0"

FINISH KEY						
SPEC SECTION	CODE	DESCRIPTION	MANUFACTURER	PATTERN	COLOR	NUMBERS
06 20 23	WB	WOOD BASE INTERIOR TRIM	MASTERCRAFT	PINE	UNFINISHED	4172845
06 41 13	WCC1	CABINETRY	WOODLAND	DOOR STYLE: TAYLOR WOOD SPECIES: MDF	PAINT: WHITE	
06 41 13	WCC2	CABINETRY	WOODLAND	DOOR STYLE: TAYLOR WOOD SPECIES: RUSTIC HICKORY	STAIN: SPICE	
09 30 13	PT1	TILE	RAGNOUSA	PORCELAIN FLOOR TILE	ALPINE WHITE	AL45
09 30 13	CT2	TILE	MILESTONE	CERAMIC TILE GLAZED	BALANCE	1102528
09 65 13	RSTA	RUBBER STAIR TREAD NOSING	MANNINGTON COMMERCIAL	575 OVERLAP STAIR NOSING	LIGHT BEIGE	206
09 65 19	LVP1	LVP FLOORING	MANNINGTON COMMERCIAL	SPACIA WOOD	WINDSOR OAK GOLDEN	SSSW12386
09 68 13	CPT1	CARPET	MOHAWK GROUP	DIGITAL TERRAIN	SULPHUR	GT341
09 91 23	P1	PAINT - OVERALL	DIAMOND VOGEL		SANDSTONE PALETTE	0273
09 91 23	P2	PAINT - CEILINGS	DIAMOND VOGEL		DOVE WHITE	0018
09 91 23	P3	PAINT - ACCENT	DIAMOND VOGEL		ATLANTIC WAVES	0473
09 93 00	ST	STAIN	MINWAX		MULBERRY	MW 473
12 21 13	HB1	BLINDS	HUNTER DOUGLAS	APPLAUSE CELLULAR SHADES	GELATO	E26-772
12 36 61.16	SSM1	SOLID SURFACE COUNTERTOP	CORIAN SOLID SURFACE		SANDALWOOD	
12 36 61.16	SSM2	SOLID SURFACE COUNTERTOP	CORIAN SOLID SURFACE		VENARO WHITE	

ROOM FINISH SCHEDULE											
ROOM #	ROOM NAME	FLOOR	BASE	CEILING	WALLS				CASEWORK		REMARKS
					NORTH	EAST	SOUTH	WEST	CABINET	COUNTER	
100	LIVING ROOM	LVP1	WB	P2	P1	P1	P3	P1			
101	KITCHEN	LVP1	WB	P2	P1	P3	P1	P1	WCC1	SSM1	FULL HEIGHT BACKSPLASH
102	DINING ROOM	LVP1	WB	P2	P1	P3	P1	P1	WCC1	SSM1	FULL HEIGHT BACKSPLASH
103	CLOSET	LVP1	WB	P2	P1	P1	P1	P1			
104	BATHROOM	PT1	WB	P2	P3	P1	P1/P3	CT2	WCC2	SSM2	NO BACKSPLASH OR SIDESPLASH FROM COUNTERTOP
105	BEDROOM	CPT1	WB	P2	P1	P3	P1	P1			
106	CLOSET	CPT1	WB	P2	P1	P1	P1	P1			
200	LANDING	LVP1	WB	P2	P1	P1	P1	P1			
200A	WASHER/ DRYER	LVP1	WB	P2	P1	P1	P1	P1			
201	BEDROOM	CPT1	WB	P2	P1	P1	P1	P3			
202	CLOSET	CPT1	WB	P2	P1	P1	P1	P1			
203	BATHROOM	PT1	WB	P2	CT2/P1	P3	P1	CT2/P3	WCC2	SSM2	NO BACKSPLASH OR SIDESPLASH FROM COUNTERTOP
204	MECHANICAL	PCONC	WB	P2	P1	P1	P1	P1			
205	BEDROOM	CPT1	WB	P2	P1	P3	P1	P1			
206	CLOSET	CPT1	WB	P2	P1	P1	P1	P1			
207	BATHROOM	PT1	WB	P2	CT2/P1	P3	P1	CT2/P3	WCC2	SSM2	NO BACKSPLASH OR SIDESPLASH FROM COUNTERTOP
208	CLOSET	PCONC	WB	P2	P1	P1	P1	P1			
ST1	STAIR	LVP1/ RSTA	WB	P2	P1	P1	P1	P1			

DOOR SCHEDULE										
DOOR NO.	WIDTH X HEIGHT	DOOR			FRAME			RATING	HDWR	COMMENTS
		TYPE	MATERIAL	GLAZING	TYPE	MATERIAL	GLAZING			
101	3'-0" x 6'-8"	G	HM	GL3.1 FT	F3	HM	-	-		INTEGRAL BLIND
103	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		
104	3'-0" x 6'-8"	F	WD	-	F1	WD	-	45MIN		
105A	3'-0" x 6'-8"	F	WD	-	F1	WD	-	45MIN		
105B	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		POCKET DOOR
106	4'-0" x 6'-8"	B	WD	-	F1	WD	-	-		4 PANELS
200	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		
201A	3'-0" x 6'-8"	F	WD	-	F1	WD	-	45MIN		
201B	6'-0" x 6'-8"	FG	HM	GL3.1 FT	F3	HM	-	-	1	INTEGRAL BLIND
202	3'-0" x 6'-8"	B	WD	-	F1	WD	-	-		2 PANELS
203	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		
204	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		
205A	3'-0" x 6'-8"	F	WD	-	F1	WD	-	45MIN		
205B	6'-0" x 6'-8"	FG	HM	GL3.1 FT	F3	HM	-	-	1	INTEGRAL BLIND
206	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		
207	3'-0" x 6'-8"	F	WD	-	F1	WD	-	-		
208	3'-0" x 6'-8"	F	WD	-	F1	WD	-	45MIN		

GLAZING LEGEND

GL3.1 = 1" INSULATING CLEAR

ALL GLASS TO BE HEAT STRENGTHENED UNLESS DESIGNATED AS "FT" SUFFIX (FULLY TEMPERED)

FINISH PLAN GENERAL NOTES

- CLEAN ALL EXPOSED SURFACES PRIOR TO PRIMING AND PAINTING.
- PAINT ALL EXPOSED DUCTWORK, STRUCTURE, CONDUIT, ELECTRICAL BOXES, AND SIMILAR, U.N.O.
- PAINT ALL EXPOSED CMU AND GYP BD, U.N.O.
- SEE REFLECTED CEILING PLANS FOR SOFFIT LOCATIONS AND HEIGHTS
- PROVIDE APPROPRIATE FLOORING TRANSITION TYPE. (CENTER UNDER DOOR AT DOOR LOCATIONS)

FINISH PLAN LEGEND

ROOM NAME	ROOM TAG
101	
CPT1	FINISH TRANSITION
CPT1	
7###	REFERENCE KEYNOTE TAG
	LVP1 HORIZONTAL LAY PATTERN
	LVP1 VERTICAL LAY PATTERN
	PT1
	CPT1
	PCONC

DOOR SCHEDULE ABBREVIATIONS

AL	ALUMINUM
EX	EXISTING
HM	HOLLOW METAL
IHM	INSULATED HOLLOW METAL
WD	WOOD
SS	STAINLESS STEEL

ROOM FINISH SCHEDULE GENERAL NOTES

- PAINT ALL EXPOSED STRUCTURE. U.N.O.

ROOM FINISH SCHEDULE REMARKS

- PROVIDE FLOORING TRANSITIONS AT EVERY CHANGE OF MATERIAL. TRANSITIONS SHOULD OCCUR UNDER THE CENTER OF THE DOOR.
- FLOORING TRANSITIONS:
 - SHEET VINYL / LUXURY VINYL PLANK OR TILE: BUTT JOINT
 - RESILIENT FLOORING / CARPET TILE: SCHLUTER SCHIENE STAINLESS STEEL
 - RESILIENT FLOORING / CONCRETE: SCHLUTER RENO RAMP STAINLESS STEEL
 - RESILIENT FLOORING / PORCELAIN TILE: SCHLUTER SCHIENE STAINLESS STEEL
 - PORCELAIN WALL TILE OUTSIDE CORNERS: SCHLUTER QUADREC STAINLESS STEEL
 - EXPOSED EDGE OF WALL TILE: SCHLUTER DILEX STAINLESS STEEL
 - PORCELAIN TILE / WALL TILE: SCHLUTER DILEX STAINLESS STEEL
 - WALL TILE, INSIDE OR OUTSIDE CORNER WHERE CHANGING FROM ONE TILE SIZE TO ANOTHER AND THE HORIZONTAL GROUT JOINTS WILL NOT LINE UP:
 - INSIDE CORNERS: SCHLUTER DILEX STAINLESS STEEL
 - OUTSIDE CORNERS: SCHLUTER QUADREC STAINLESS STEEL
 - FLOAT UP VINYL TO BE FLUSH WITH TRANSITION STRIP
 - INTEGRAL COVE SHEET VINYL: HEAT WELD TO MATCH SPECKLE. 6" HIGH
 - INTEGRAL BASE WITH BONDED STAINLESS STEEL CAP, PUNCTURE PROOF
 - ALUMINUM COVE REINFORCEMENT.
- CG: CORNER GUARD, PROVIDE ON ALL OUTSIDE CORNERS
- WP: VINYL WALL PROTECTION
- COUNTERTOPS:
 - COUNTERTOPS WITHOUT SINKS: 1-1/8" THICK PLASTIC LAMINATE WITH 3MM EDGES AND INTEGRAL BACKSPLASH.
 - COUNTERTOPS WITH SINKS: 1-1/2" THICK PLASTIC LAMINATE WITH DOUBLE BULLNOSE (R-1/4" TOP AND BOTTOM) RETURN LAMINATE 1" UNDER COUNTERTOP, INTEGRAL BACKSPLASH.
 - ALL COUNTERTOPS TO HAVE 1-1/2" RADIUS ON ALL OUTSIDE CORNERS.
 - SOLID SURFACE COUNTERTOPS TO BE 1-1/2" THICK WITH EASED EDGES.

STANDARD INTERIOR ABBREVIATIONS

APC	ACOUSTICAL PANEL CEILING
AWP	ACOUSTICAL WALL PANEL
BCMU	BURNISHED CONCRETE MASONRY UNIT
CG	CORNER GUARD
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CPT	CARPET
CT	CERAMIC TILE
DCMU	DECORATIVE CONCRETE MASONRY UNITS
EP	EPOXY PAINT
EPF	EPOXY FLOORING
FRP	FIBERGLASS REINFORCED PANEL
GLT	GLASS TILE
GT	GROUT
GWB	GYP SUM WALL BOARD
LVT	LUXURY VINYL TILE
WB	METAL BASE
MPC	METAL PANEL CEILING
P	PAINT
PCONC	POLISHED CONCRETE
PLAM	PLASTIC LAMINATE
PT	PORCELAIN TILE
PTB	PORCELAIN TILE BASE
QT	QUARRY TILE
QTB	QUARRY TILE BASE
RAF	RESILIENT ATHLETIC FLOORING
RBR	RUBBER FLOORING
RBRT	RUBBER TILE FLOORING
RBRF	RUBBER SHEET FLOORING
RSTA	RUBBER STAIR TREAD / NOSING
RP	RESINOUS PANEL
SCONC	SEALED CONCRETE
SCMU	SPLITFACED CONCRETE MASORY UNIT
ST	SOLID SURFACE MATERIAL
STCONC	STAIN
SVF	STAINED CONCRETE
TER	SHEET VINYL FLOORING
RB	TERRAZZO
VCT	RESILIENT BASE
VWC	VINYL COMPOSITION TILE
WB	VINYL WALL COVERING
WCPT	WOOD BASE
WP	WALK-OFF CARPET TILE
WPC	WALL PROTECTION
WG	WOOD PANEL CEILING
	WALL GUARD

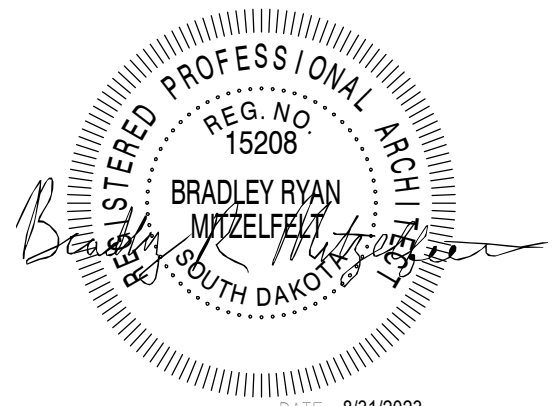


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DATE: 8/31/2023

PROJECT TITLE



SOUTH DAKOTA
DEPARTMENT OF THE
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RENOVATE GENERALS
QUARTERS BUILDING
250

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY MPP
PROJECT #	03221580	CHECKED BY BRM
SHEET TITLE		

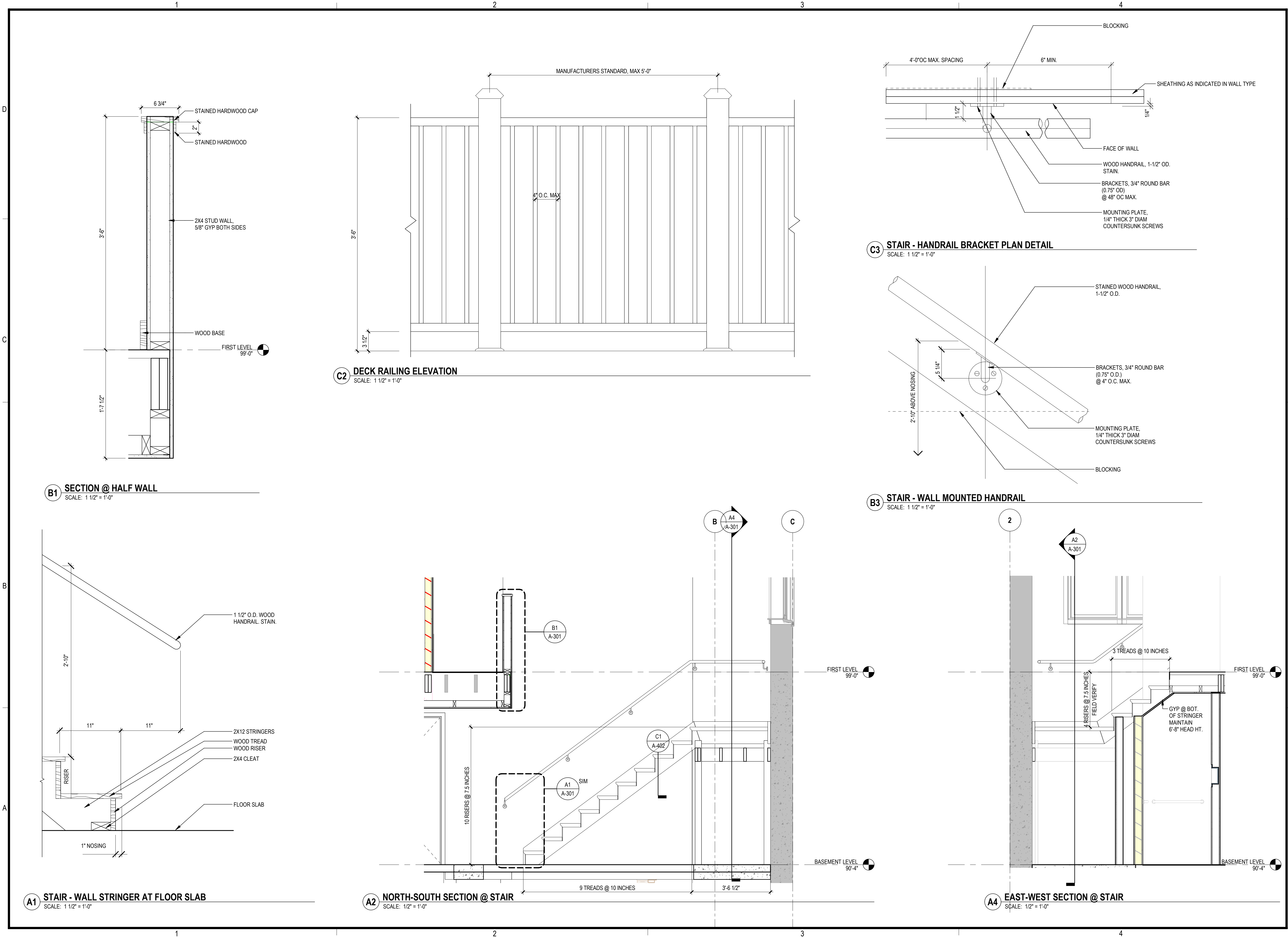
FINISH FLOOR PLAN
AND SCHEDULES

SHEET NUMBER

AF101

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250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY BRM
PROJECT #	03221580	CHECKED BY BRM

SHEET TITLE

**STAIR AND DECK
DETAILS**

SHEET NUMBER

A-301

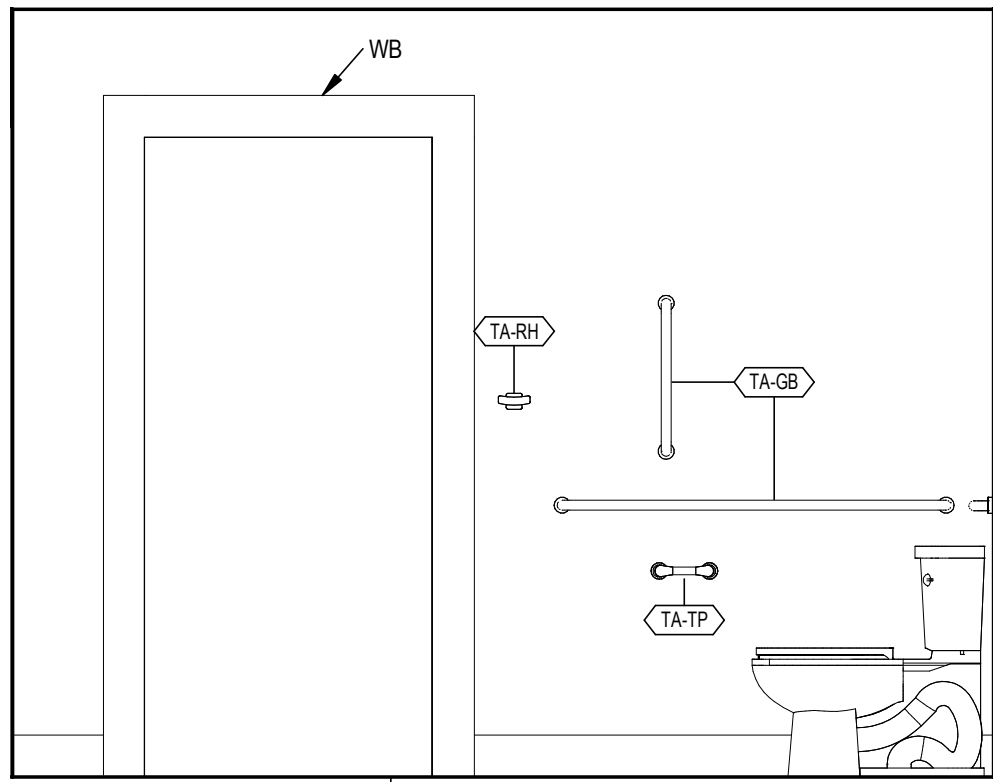
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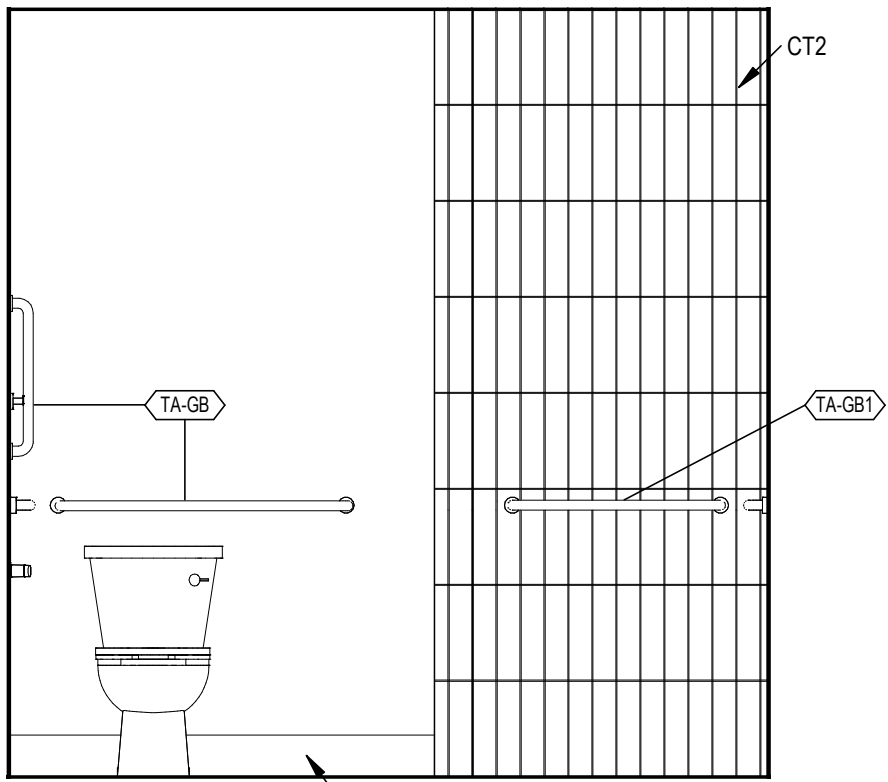
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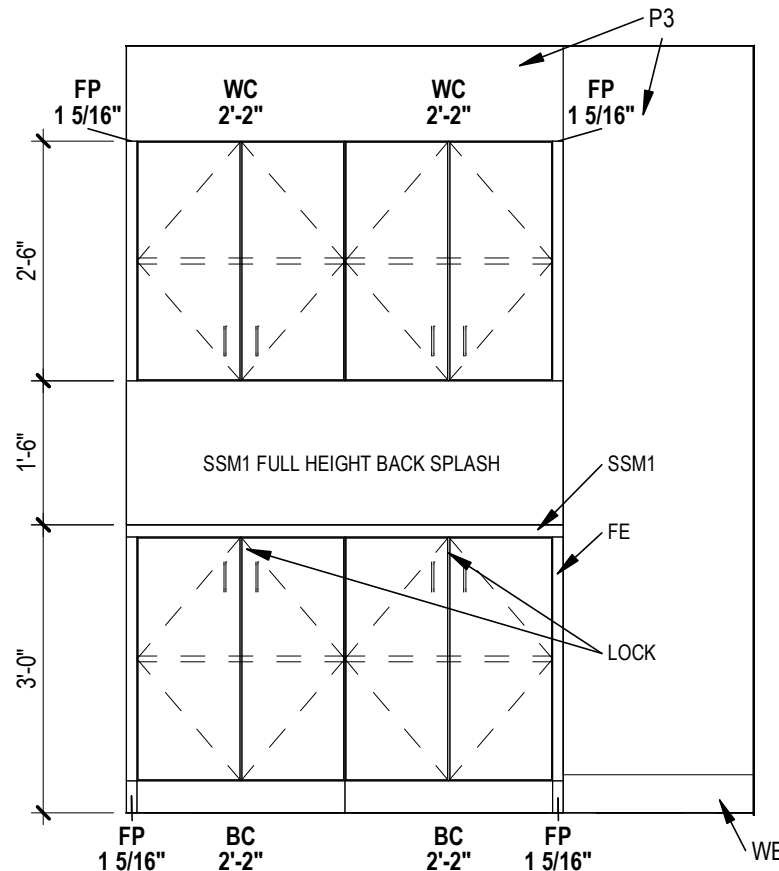
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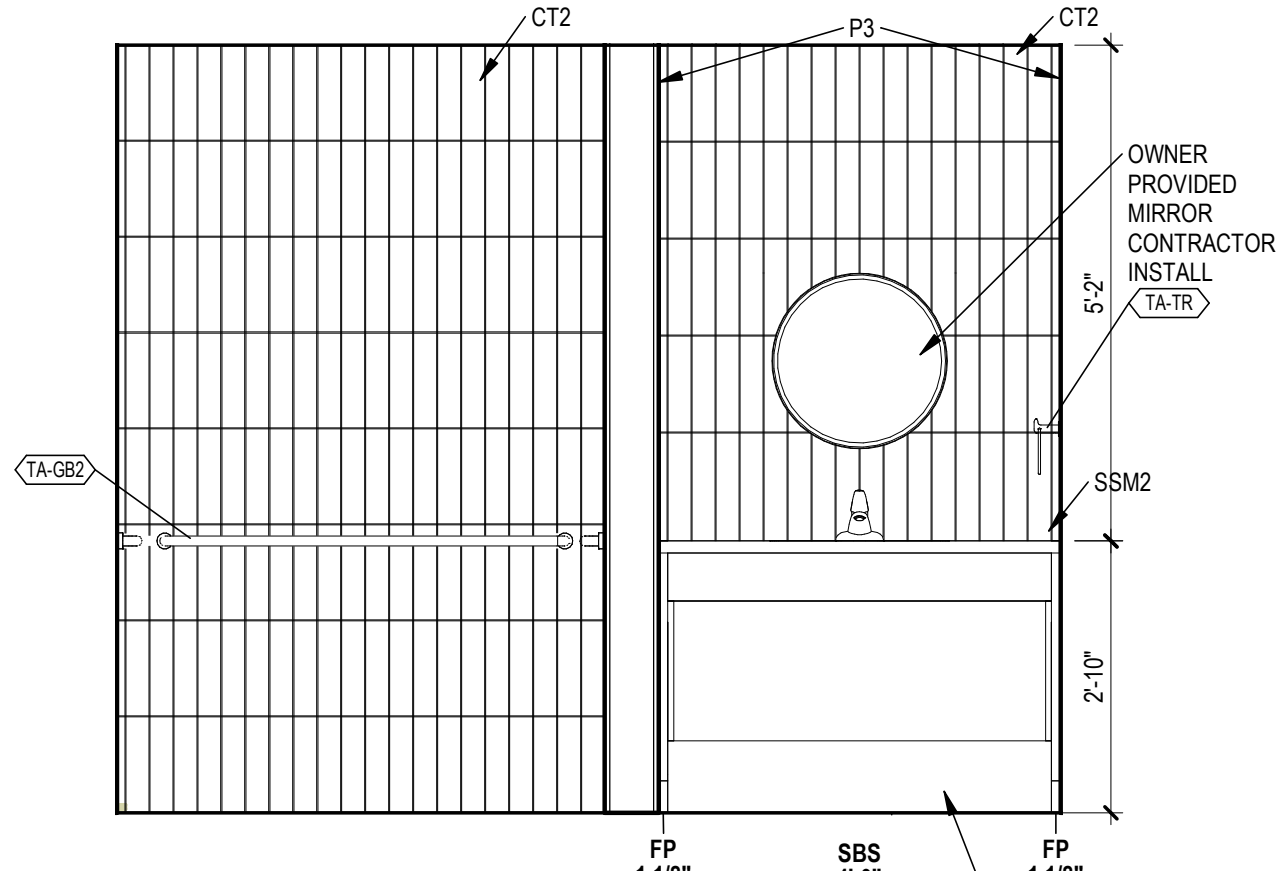
D1 104 BATHROOM EAST WALL
SCALE: 1/2" = 1'-0"



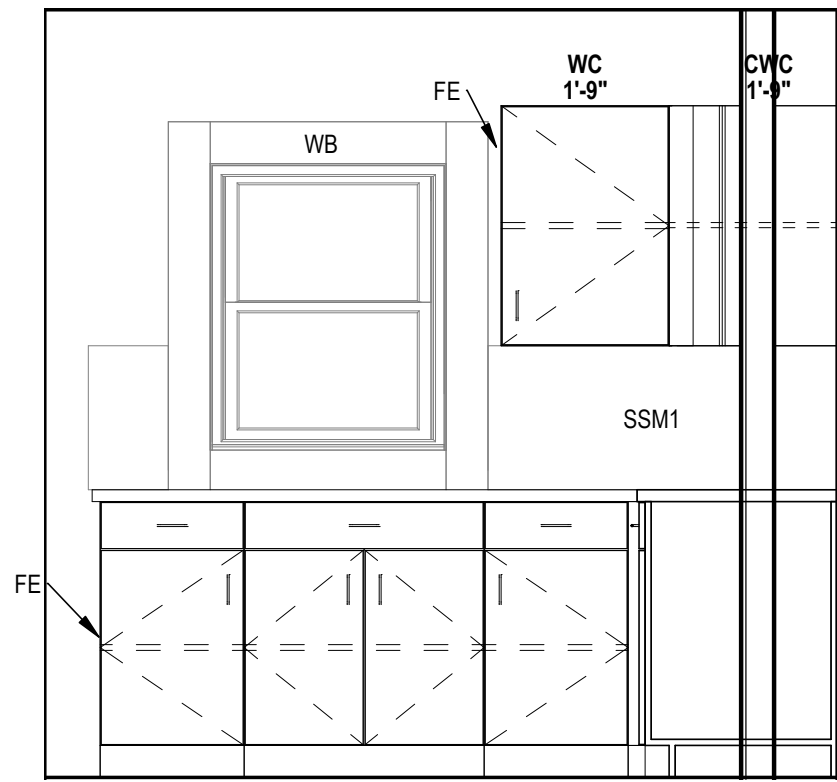
D2 104 BATHROOM SOUTH WALL
SCALE: 1/2" = 1'-0"



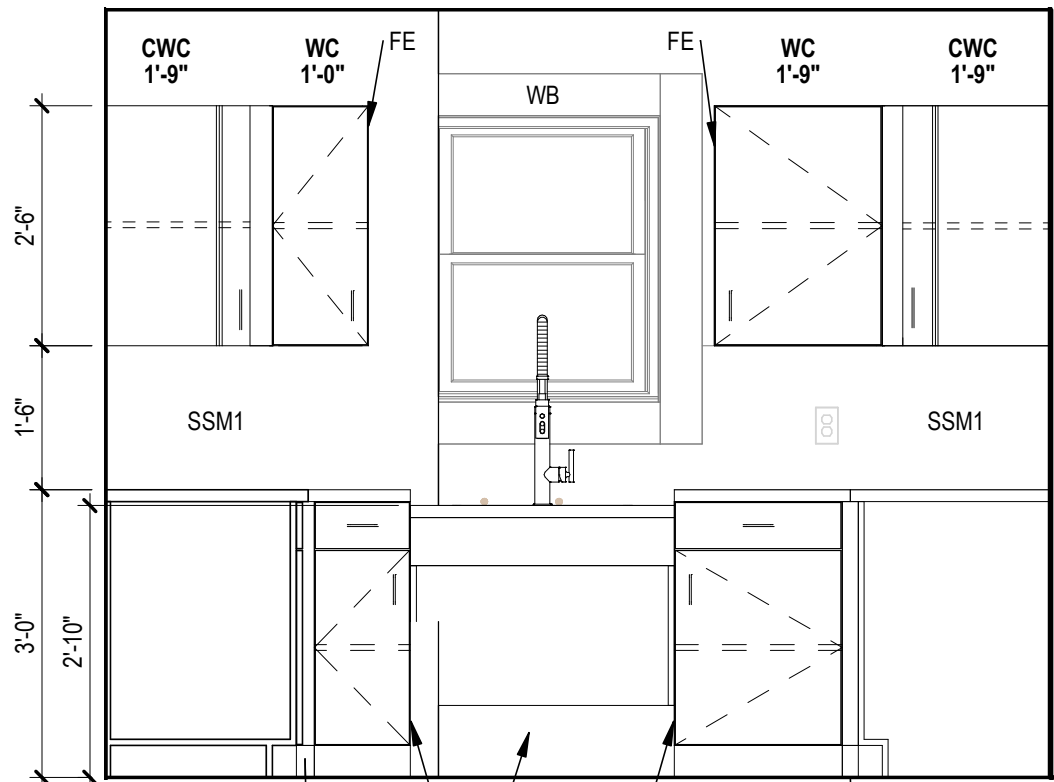
B1 102 DINING EAST WALL
SCALE: 1/2" = 1'-0"



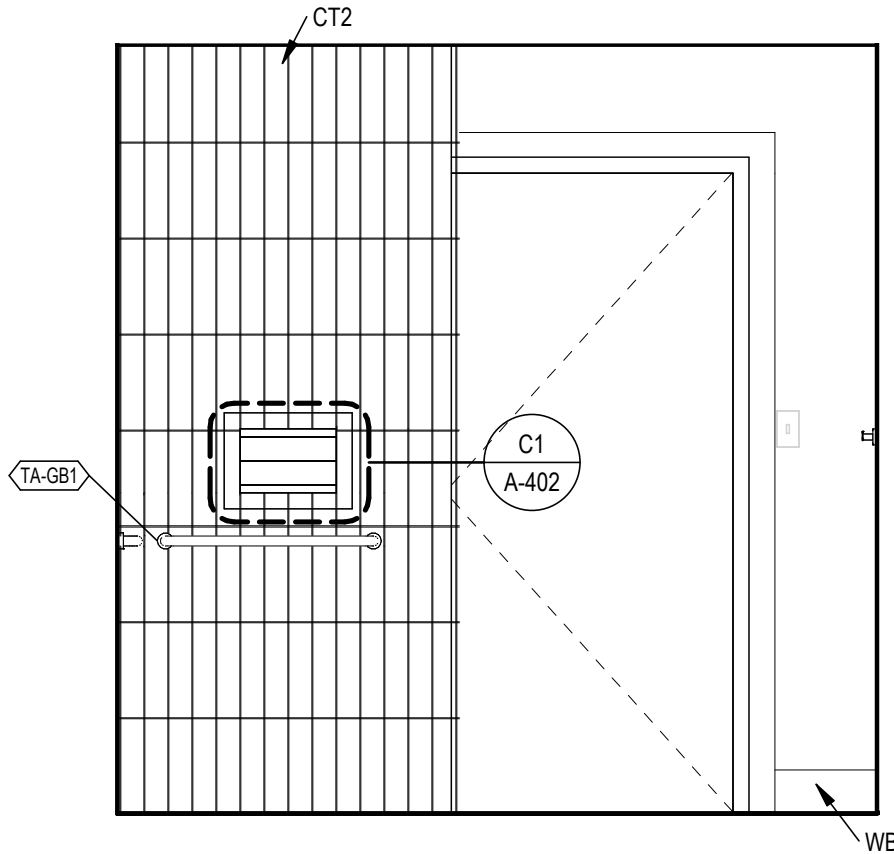
B2 104 BATHROOM WEST WALL
SCALE: 1/2" = 1'-0"



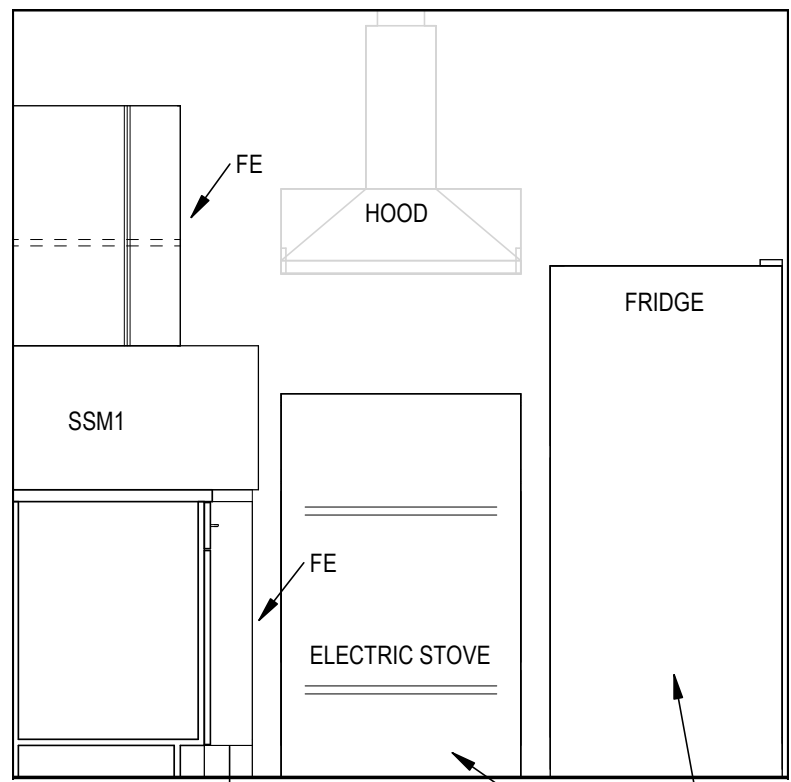
A1 101 KITCHEN WEST WALL
SCALE: 1/2" = 1'-0"



A2 101 KITCHEN NORTH WALL
SCALE: 1/2" = 1'-0"



B3 104 BATHROOM NORTH WALL
SCALE: 1/2" = 1'-0"



A3 101 KITCHEN EAST WALL
SCALE: 1/2" = 1'-0"

ENLARGED PLAN AND INT ELEV GENERAL NOTES

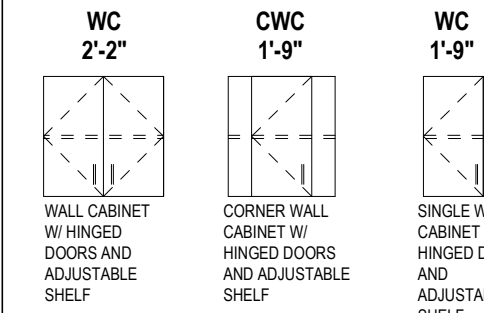
- ALIGN FINISHED FACE OF CONTINUOUS PARTITIONS THAT CHANGE PARTITION TYPES ALONG A STRAIGHT RUN.
- EDGE OF INTERIOR DOOR FRAMES TO BE 4" FROM ADJACENT WALL, U.N.O.
- ALL WALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, CMU, BRICK, OR CONCRETE; U.N.O.
- 25 1/2" DEEP PLASTIC LAMINATE COUNTERTOP U.N.O.
- SEE BUILDING ACCESSORY AND INTERIOR ELEVATION LEGENDS ON SHEET A-400 FOR ADDITIONAL INFORMATION.
- ASSUME PLASTIC LAMINATE FILLER AT END OF ALL CASEWORK ADJACENT TO A WALL.
- ALL WALL CABINETS AND TALL CABINETS WILL HAVE SLOPED TOPS U.N.O.
- COORDINATE GROMMET LOCATION WITH OWNER.
- CABINET DEPTH (NOT INCLUDING DOORS) U.N.O.
WALL CABINET = 14"
BASE CABINET = 24"
- INTERIOR TRIM AROUND ALL DOORS AND WINDOWS. DIMENSIONS = 5 1/4" WIDE OVERALL.

CABINET KEY

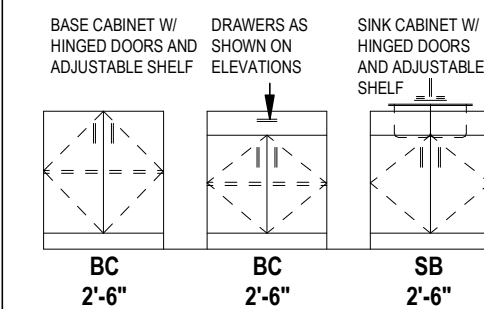
GUIDE TO INTERIOR ELEVATION CASEWORK TAG DESCRIPTIONS

INDICATES UNIT TYPE ———→ WC
INDICATES UNIT DEPTH (OTHER THAN STANDARD) ———→ 3'-0"
INDICATES UNIT WIDTH ———→ 1'-6"D

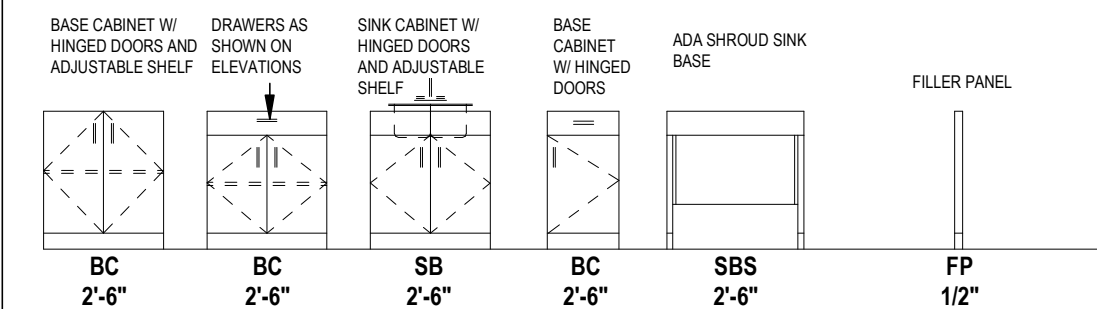
WALL CABINETS



BASE CABINETS



MISC.



TOILET ACCESSORY SCHEDULE

MARK	DESCRIPTION	FURNISH/INSTALL	COMMENTS
TA-GB	GRAB BAR SET OF THREE	CFCI	MAIN LEVEL BATHROOM ONLY
TA-GB1	26 INCH ADA COMPLIANT GRAB BAR	CFCI	ALL BATHROOMS
TA-GB2	50 INCH ADA COMPLIANT GRAB BAR	CFCI	ALL BATHROOMS
TA-RH	ROBE HOOK	CFCI	ALL BATHROOMS
TA-TP	Pivoting Paper Holder	CFCI	ALL BATHROOMS
TA-TR	Towel ring	CFCI	ALL BATHROOMS

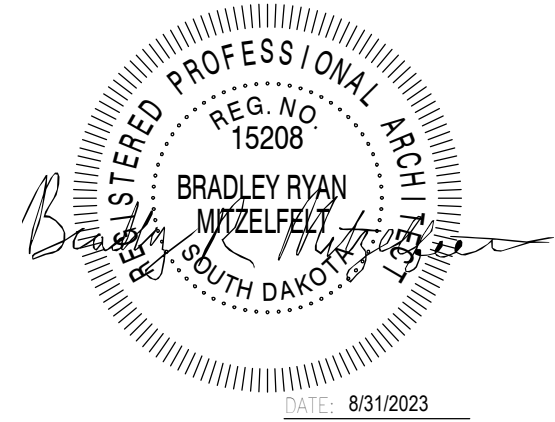


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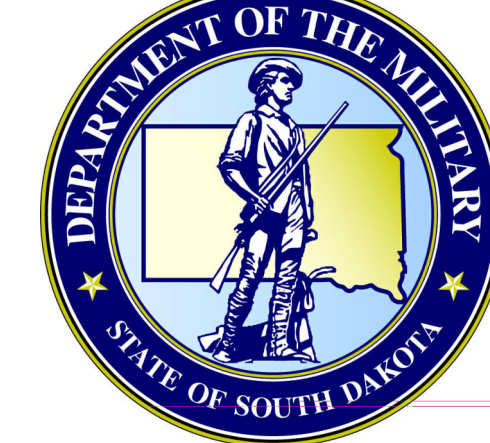
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PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY MPP
PROJECT #	03221580	CHECKED BY BRM

SHEET TITLE

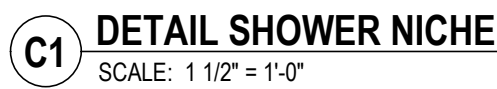
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SHEET NUMBER

A-401

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LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

GENERAL MECHANICAL SYMBOLS	
	PONT WHERE NEW CONNECTS TO EXISTING
	NUMBER OF DETAIL ON SHEET
	KEYNOTE
	CONTINUATION SYMBOL
	ROOM NAME AND NUMBER
	EQUIPMENT TAG

HVAC SYMBOLS	
	SQUARE DUCT SIZE TAG (WIDTH X HEIGHT)
	OVAL DUCT SIZE TAG (WIDTH / HEIGHT)
	ROUND DUCT SIZE TAGE (DIAMETER)
	RECTANGULAR SUPPLY/OUTSIDE AIR DUCT RISE
	ROUND SUPPLY/OUTSIDE AIR DUCT RISE
	RECTANGULAR RETURN/TRANSFER AIR DUCT RISE
	ROUND RETURN/TRANSFER AIR DUCT RISE
	RECTANGULAR EXHAUST/RELIEF AIR DUCT RISE
	ROUND EXHAUST/RELIEF AIR DUCT RISE
	ELBOW WITH TURNING VANES
	COUPLING
	SOUND ATTENUATOR
	VAV BOXES
	POWER ROOF VENTILATOR
	UNIT HEATERS
	LINEAR DIFFUSER
TYPE CFM VOLUME DAMPER FLEX DUCT RETURN DIFFUSER MOTORIZED DAMPER COMBINATION SMOKE & FIRE FIRE DAMPER BACKDRAFT DAMPER CARBON DIOXIDE SENSOR CARBON MONOXIDE SENSOR NITROGEN DIOXIDE SENSOR HUMIDITY SENSOR MANUAL SWITCH HUMIDISTAT TEMPERATURE & HUMIDITY SENSOR TEMPERATURE SENSOR THERMOSTAT	

LAB AND MEDICAL SYMBOLS	
— LA —	LAB AIR
— LDE —	LAB DEIONIZED WATER
— LDI —	LAB DISTILLED WATER
— LG —	LAB GAS
— LV —	LAB VACUUM
— MA —	MEDICAL AIR
— CO2 —	MEDICAL CO2
— MGAS —	MEDICAL GAS
— H —	MEDICAL HYDROGEN
— NI —	MEDICAL NITROGEN
— NO —	MEDICAL NITROUS OXIDE
— O —	MEDICAL OXYGEN
— MV —	MEDICAL VACUUM

FIRE PROTECTION SYMBOLS	
— DF —	DRY FIRE SPRINKLER
— FP-O —	FIRE PROTECTION OTHER
— FP-PA —	FIRE PROTECTION PRE-ACTION
— FP —	FIRE PROTECTION WET
— FP-DOM-W —	COMBINATION FIRE & DOMESTIC
	UPRIGHT SPRINKLER HEAD
	PENDANT SPRINKLER HEAD
	RECESSED SPRINKLER HEAD
	CONCEALED SPRINKLER HEAD
	D' REPRESENTS DRY SPRINKLER HEAD
	SIDEWALL SPRINKLER HEAD
	EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD
	OBSTRUCTION FROM DUCTWORK 48" AND GREATER

PLUMBING AND PIPING SYMBOLS	
	PIPE SIZE TAG (DIAMETER)
	PIPE SLOPE TAG
	EXISTING PIPE TAG
	PIPE BEING DEMOLISHED
	ACID WASTE ABOVE GRADE
	ACID WASTE BELOW GRADE
	CHILLED WATER RETURN
	CHILLED WATER SUPPLY
	COMBINATION WASTE AND VENT
	COMPRESSED AIR
	CONDENSATE DRAIN
	CONDENSATE RETURN
	CONDENSER WATER RETURN
	CONDENSER WATER SUPPLY
	DEIONIZED WATER
	DOMESTIC COLD WATER
	DOMESTIC COLD WATER - FILTERED
	DOMESTIC COLD WATER HARD
	DOMESTIC COLD WATER SOFT
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER - 140 DEGRESS
	DOMESTIC HOT WATER RECIRCULATING
	DOMESTIC HOT WATER RECIRCULATING 140 DEGREES
	DUAL TEMP WATER RETURN
	DUAL TEMP WATER SUPPLY
	GEOTHERMAL RETURN
	GLYCOL HOT WATER RETURN
	GLYCOL HOT WATER SUPPLY
	GREASE VENT
	GREASE WASTE
	HEATING WATER RETURN
	HEATING WATER SUPPLY
	MITIGATION VENT
	NATURAL GAS
	NATURAL GAS - 2LB
	OIL VENT
	OIL WASTE
	PUMP DISCHARGE
	REFRIGERANT
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	REFRIGERANT HOT GAS
	REVERSE OSMOSIS WATER
	STEAM - HP
	STEAM - HP CONDENSATE
	STEAM - MP
	STEAM - MP CONDENSATE
	STEAM - LP
	STEAM - LP CONDENSATE
	SANITARY VENT
	SANITARY WASTE
	SANITARY WASTE - BELOW GROUND
	STORM DRAINAGE
	STORM DRAINAGE - BELOW GRADE
	STORM DRAINAGE OVERFLOW
	STORM DRAINAGE OVERFLOW BELOW GRADE
	PLUG
	REDUCING 45 DEGREE TEE
	45 DEGREE TEE
	SIDE CONNECTION
	ELBOW DOWN
	PIPE ANCHOR
	ELBOW UP
	SHUT OFF VALVE
	BALANCING VALVE
	CONTROL VALVE
	PRESSURE REDUCING VALVE
	PRESSURE RELIEF VALVE
	CHECK VALVE
	AIR VENT
	PRESSURE GAUGE
	THERMOMETER
	PRESSURE TAP
	MANUAL CALIBRATED BALANCING VALVE
	AUTOMATIC FLOW CONTROL VALVE
	MEDICAL GAS OUTLET
	HOSE BIBB OR WALL HYDRANT
	INSERTION FLOW METER
	FLOW METER
	REDUCED PRESSURE BACKFLOW PREVENTER
	AQUASTAT
	3-WAY VALVE
	FLOOR CLEAN OUT
	WALL CLEAN OUT
	FLOOR DRAIN
	DOMESTIC WATER HEATER
	GAS METER
	END CAP
	PIPE BREAK
	DOWNSPOUT NOZZLE
	PLUMBING FIXTURE
	PLUMBING FIXTURE TAG
	TYPE (SEE SCHEDULE)
	TYPE (SEE SCHEDULE)

EQUIPMENT ABBREVIATIONS	
AC	AIR CONDITIONING UNIT
ACC	AIR COOLED CONDENSER
ACCU	AIR COOLING CONDENSING UNIT
AFMS	AIR FLOW MEASURING STATION
AHU	AIR HANDLING UNIT
AS	AIR SEPARATOR
B	BOILER
CF	CABINET FAN
CF	CHEMICAL FEEDER
CFP	CHEMICAL FEEDER PUMP
CH	CHILLER
CRU	CONDENSATE RETURN UNIT
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
CWP	CONDENSER WATER PUMP
CHWP	CHILLED WATER PUMP
DBP	DOMESTIC WATER BOOSTER PUMP
DC	DUCT MOUNTED COIL
DOP	DOMESTIC WATER CIRCULATING PUMP
EF	EXHAUST FAN
EDC	ELECTRIC DUCT COIL
ET	EXPANSION TANK
EW	ELECTRIC WATER HEATER
FCU	FAN COIL UNIT
FP	FIRE PUMP
GI	GREASE INTERCEPTOR
GRV	GRAVITY ROOF VENTILATOR
H	HUMIDIFIER
HWP	HEATING WATER PUMP
HX	HEAT EXCHANGER
HPU	HEAT PUMP UNIT
HUR	HEAT RECOVERY UNIT
ILC	INLINE CENTRIFUGAL
PF	PROPELLER FAN
PRV	POWER ROOF VENTILATOR
PWF	POWER WALL FAN
RE	RETURN/EXHAUST FAN
RTU	ROOFTOP UNIT
SA	SHOCK ABSORBER
SAT	SOUND ATTENUATOR
SEP	SEWAGE EJECTOR PUMP
SF	SUPPLY FAN
SP	SUMP PUMP
UH	UNIT HEATER
US	UTILITY SET
UV	UNIT VENTILATOR
WFMS	WATER FLOW MEASURING STATION
WH	WATER HEATER

ABBREVIATIONS	
&	AND
Ø	ROUND
A	AIR
AC	AIR CONDITIONING
ACOUS	ACOUSTICAL
AD	AREA DRAIN
ADD	ADDENDUM
ADL	ADDITIONAL
AF	ABOVE FINISHED FLOOR
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AG	ABOVE GROUND
ALT	ALTERNATE
ALUM	ALUMINUM
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECT/ARCHITECTURAL
AV	ACID RESISTANT VENT
AW	ACID RESISTANT WASTE
AUTO	AUTOMATIC
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BLW	BELOW
BM	BEAM
BO	BY OTHER
BOT	BOTTOM
BSMT	BASEMENT
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS PER HOUR
BTWN	BETWEEN
CAP	CAPACITY
CB	CATCH BASIN
COW	COUNTER CLOCKWISE
CFV	CONSTANT FLOW CONTROL VALVE
CFM	CUBIC FEET PER MINUTE
CHW	CIRCULATING HOT WATER
CI	CAST IRON
CL	CEILING
CLG	COOLING
CO	CLEAN OUT
COL	COLUMN
COMB	COMBINATION
CONC	CONCRETE
COND	CONDENSATE
CONF	CONFERENCE
CONN	CONNECT
CONST	CONSTRUCTION
CONT	CONTINUE/CONTINUATION
CONTR	CONTRACT/CONTRACTOR
COORD	COORDINATE
CTR	CENTER
CUFT	CUBIC FEET
CV	CHECK VALVE
CW	COLD WATER
CW	CLOCKWISE
D	DEGREE
DB	DRY BULB
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIV	DIVISION
DI	DEIONIZED WATER
DMPR	DAMPER
DN	DOWN
DWG	DRAWING
DW	DISTILLED WATER
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EL	ELBOW
ELEC	ELECTRICAL
ELEV	ELEVATION
EP	EXPLOSION PROOF
EQ	EQUAL
EQUIP	EQUIPMENT
EW	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
E/A	EXHAUST AIR
EAH	EXHAUST HOOD
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F	DEGREES FAHRENHEIT
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FD	FIRE DAMPER
FDV	FIRE DEPARTMENT VALVE
FHC	FIRE HOSE CABINET
FL	FLOOR
FLEX	FLEXIBLE
FLG	FLANGE
FO	FUEL OIL
FOV	FUEL OIL VENT
FOS	FUEL OIL RETURN
FPM	FUEL OIL SUPPLY
FRP	FEET PER MINUTE FIBERGLASS REINFORCED PIPE
FS	FULL SIZE
FS	FLOOR SINK
FT	FOOT/FEET
FTG	FOOTING
FTR	FIN TUBE RADIATION
GA	GAGE/GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR/GENERAL
GPH	GALLONS PER MINUTE
GR	GRADE
GW	GREASE WASTE
HB	HOSE BIB
HORZ	HORIZONTAL
HP	HORSE POWER
HTG	HIGH PRESSURE
HTR	HEATER
HW	HOT WATER
HYD	HYDRANT
ID	INDIRECT
IN	INCH
INL	INLET
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
INWG	INCHES WATER GAUGE
JOINT	JOINT
LAB	LABORATORY
LB	POUND
LSHR	POUNDS PER HOUR
LF	LEAVING AIR TEMPERATURE
LINEAL	LINEAL FOOT
LP	LOW PRESSURE
LPG	LIQUEFIED PETROLEUM GAS
LS	LIQUID REFRIGERANT
LSHR	LEAVING WATER TEMPERATURE
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
M/A	MIXED AIR
MAN	MANUAL
MATL	MATERIAL
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBD	MOTORIZED BYPASS DAMPER
MBH	ONE THOUSAND BTU PER HOUR
MCW	MAKE-UP AIR
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTR	MOTOR
MUA	MAKE-UP/AIR
N	NECK / NORTH
NC	NOISE CRITERIA
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NOM	NUMBER / NORMALLY OPEN
NTS	NOT TO SCALE
O	OXYGEN
O/A	OUTSIDE AIR
OC	ON CENTER
OF	OVERFLOW
OPNG	OPENING
ORD	OVERFLOW ROOF DRAIN
PD	PRESSURE DROP
PIV	POST INDICATOR VALVE
PLBG	PLUMBING
PR	PAIR
PRESS	PRESSURE
PRIM	PRIMARY
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PW	POTABLE WATER
PWR	POWER
R	DUCT RISER
R/A	RETURN AIR
RCP	RADIANT CEILING PANEL
RD	ROOF DRAIN
REC	RECESSED
RED	REDUCER
REFR	REFRIGERATION
RH	RELATIVE HUMIDITY
REQD	REQUIRED
REV	REVERSE
R/LA	RELIEF AIR
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RW	RAIN WATER
SF	SQUARE FOOT
S/A	SUPPLY AIR
SAN	SANITARY
SCHED	SCHEDULE
SECT	SECTION
SD	SMOKE DAMPER
SHT	SHEET
SIM	SIMILAR
SLV	SLEEVE
SM	SURFACE MOUNT
SP	STANDPIPE / STATIC PRESSURE
SPEC	SPECIFICATION
SPS	STATIC PRESSURE STATION
SQ	SQUARE
SR	SUCTION REFRIGERANT
SSD	SOIL SUBDRAIN
SS	STAINLESS STEEL
STD	STANDARD
STM	STEAM
STRUCT	STRUCTURAL
SUCT	SUCTION
SUSP	SUSPENDED
T	THERMOSTAT
TCF	TEMPERATURE CONTROL PANEL
TD	TEMPERATURE DROP
TDR	TRENCH DRAIN
TEMP	TEMPERATURE
TYP	TYPICAL
UPD	UNDER FLOOR DUCT
UG	UNDERGROUND
VAC	VACUUM
V	VENT
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VENT	VENTILATION
VERT	VERTICAL
VOL	VOLUME
VTR	VENT THROUGH ROOF
W	WASTE
WB	WET BULB
WCO	WALL CLEAN OUT
WHD	WALL HYDRANT

PROJECT GENERAL NOTES	
DEMO 1	WHERE EQUIPMENT AND/OR FIXTURES ARE INDICATED TO BE REMOVED, THE EXISTING SERVICES SHALL BE CAPPED AND CONCEALED BEHIND FINISHED SURFACES. ABANDONED BRANCH SERVICES SHALL BE REMOVED BACK TO THE MAINS AND CAPPED, UNLESS OTHERWISE INDICATED.
DEMO 2	CAP ANY ABANDONED OR UNUSED PIPE AND/OR DUCT OPENINGS.
DEMO 3	THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND PAINTING TO MATCH EXISTING WALLS, FLOORS, AND CEILINGS.
DEMO 4	DOMESTIC PIPING SHALL BE THOROUGHLY CLEANED BEFORE PUTTING INTO PERMANENT SERVICE.
DEMO 5	WHERE MATERIAL IS INDICATED TO BE REMOVED, IT SHALL REMAIN THE PROPERTY OF THE OWNER. THIS CONTRACTOR SHALL DISPOSE OF MATERIAL AS DIRECTED BY THE OWNER.
EXST 1	REMOVE ALL UNUSED PIPING, DUCTWORK AND ACCESSORIES.
EXST 2	THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING, PRIOR TO FINAL BID, ALL EXISTING CONDITIONS FOR PLUMBING AND MECHANICAL SYSTEMS.
EXST 3	WHERE FLOOR DRAINS OCCUR WITHIN THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENING PRIOR TO START OF WORK.
NEW 1	COORDINATE AND COOPERATE WITH THE OTHER TRADES ON THE INSTALLATION OF PIPING, DUCTWORK, CONDUIT, LIGHTS, CABLE TRAY, STRUCTURE, AND EQUIPMENT TO PREVENT CONFLICTS.
NEW 2	THE CONTRACTOR SHALL BE FAMILIAR WITH ALL THE CONDITIONS BOTH EXISTING AND THOSE ILLUSTRATED BY THESE DOCUMENTS AS WELL AS THOSE WHICH CAN BE REASONABLY ANTICIPATED INCLUDING, BUT NOT LIMITED TO ARCHITECTURAL, ELECTRICAL, VENTILATION, PLUMBING, AND OTHER SYSTEMS INVOLVED ON THIS PROJECT.
NEW 3	FINAL PROJECT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND INTERNATIONAL MECHANICAL CODE.
NEW 4	LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE CEILING.
NEW 5	ALL ROOF MOUNTED EQUIPMENT SHALL BE A MINIMUM 10'-0" FROM EDGE OF ROOF.
NEW 6	LOCATE DUCTWORK, PIPING AND MECHANICAL EQUIPMENT AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT.
NEW 7	ADJUST PIPING AND DUCTWORK SIZES TO PROPERLY CONNECT TO MECHANICAL EQUIPMENT.
NEW 8	REFER TO PLUMBING SERIES DRAWINGS FOR GAS AND A.C. CONDENSATE DRAIN PIPING.
NEW 9	PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN.
NEW 10	FOR DETAILS, EQUIPMENT CONNECTIONS, AND PIPE SIZES NOT SHOWN ON THE SEGMENTS, REFER TO DETAILS, SCHEDULES, AND SPECIFICATIONS.
NEW 11	INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
NEW 12	LOCATIONS OF PIPING, DUCTWORK AND EQUIPMENT AS INDICATED ON THE DRAWING, ARE APPROXIMATE AND

LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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FIRE SPRINKLER TYPE LEGEND:

- STANDARD RESPONSE, STANDARD TEMPERATURE PENDANT
- QUICK RESPONSE, INTERMEDIATE TEMPERATURE PENDANT
- ▷ DRY STYLE, EXTEND BARREL SIDEWALL

FIRE SUPPRESSION SYSTEM ASSUMED DESIGN CRITERIA:

"BELOW ARE THE ASSUMED PARAMETERS FOR THE NFPA-13R SYSTEM. PARAMETERS AND SYSTEM COMPONENTS WERE ASSUMED IN ORDER TO PLAN BUILDING ELEMENTS AROUND THE EVENTUAL INSTALLATION OF THE FIRE SUPPRESSION SYSTEM. IT IS THE RESPONSIBILITY OF THE DELEGATED DESIGN CONTRACTOR AND QUALIFIED SPRINKLER SYSTEM DESIGNER TO VERIFY REQUIREMENTS AND PERFORM THEIR OWN INTERPRETATION OF NFPA-13R WHEN DESIGNING FIRE SUPPRESSION SYSTEM.

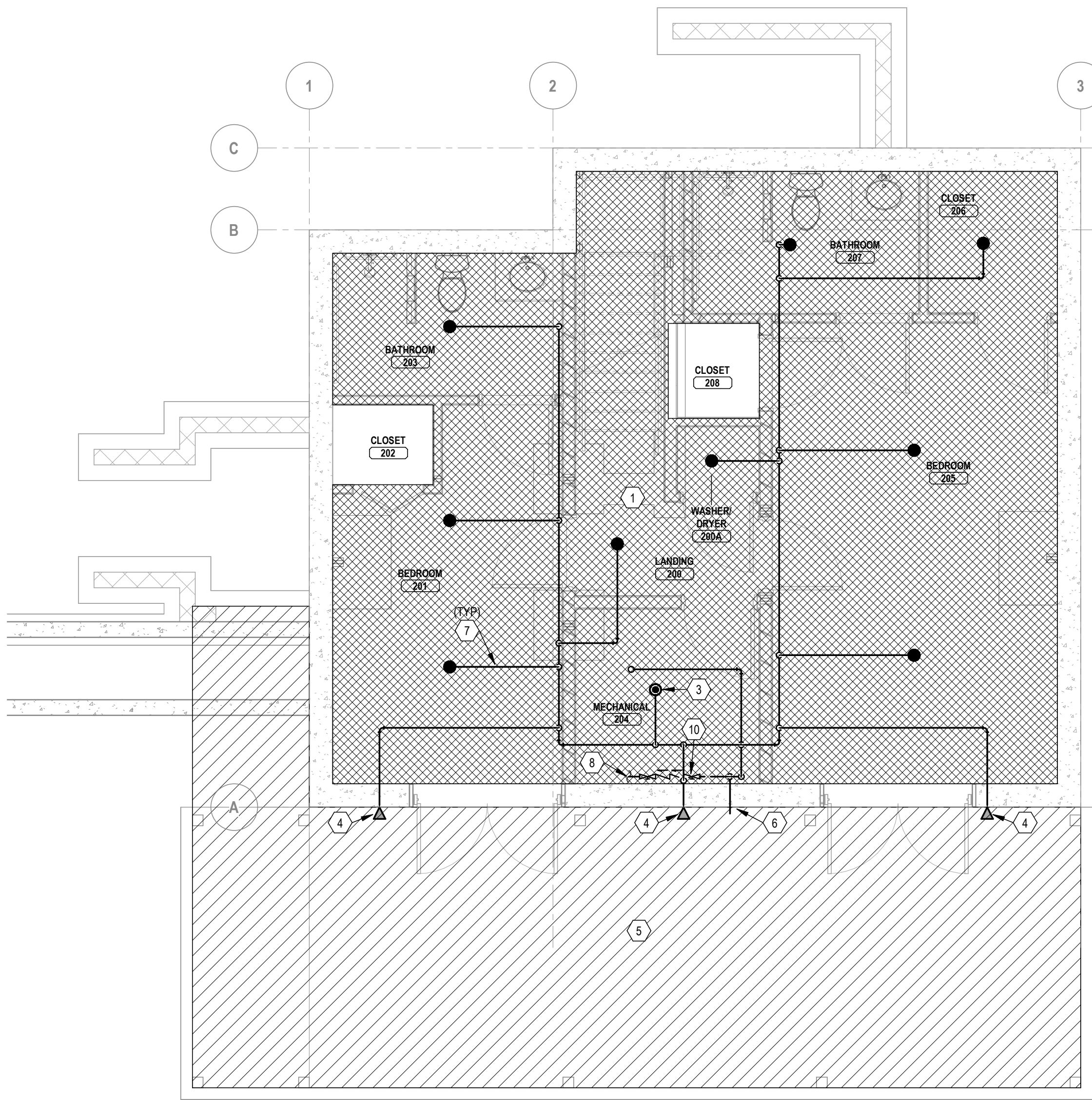
SPACE:	OCCUPANCY:	SYSTEM TYPE:	HAZARD:	AREA (LARGEST):
ZONE #1 - LIVING QUARTERS:				
BEDROOM	R3 OCCUPANCY	WET PIPE	LIGHT HAZARD	APPROX. 240 SF
BATHROOM	R3 OCCUPANCY	WET PIPE	LIGHT HAZARD	APPROX. 75 SF
LIVING ROOM	R3 OCCUPANCY	WET PIPE	LIGHT HAZARD	APPROX. 271 SF
KITCHEN	R3 OCCUPANCY	WET PIPE	LIGHT HAZARD	APPROX. 128 SF
DINING ROOM	R3 OCCUPANCY	WET PIPE	LIGHT HAZARD	APPROX. 109 SF
CLOSET	R3 OCCUPANCY	WET PIPE	LIGHT HAZARD	APPROX. 34 SF
*CLOSETS BELOW 24 SF ARE NOT REQUIRED TO BE SPRINKLERED PER NFPA-13R.				
MECHANICAL ROOM	R3 OCCUPANCY	WET PIPE	ORDINARY HAZARD	APPROX. 59 SF

SHEET GENERAL NOTES

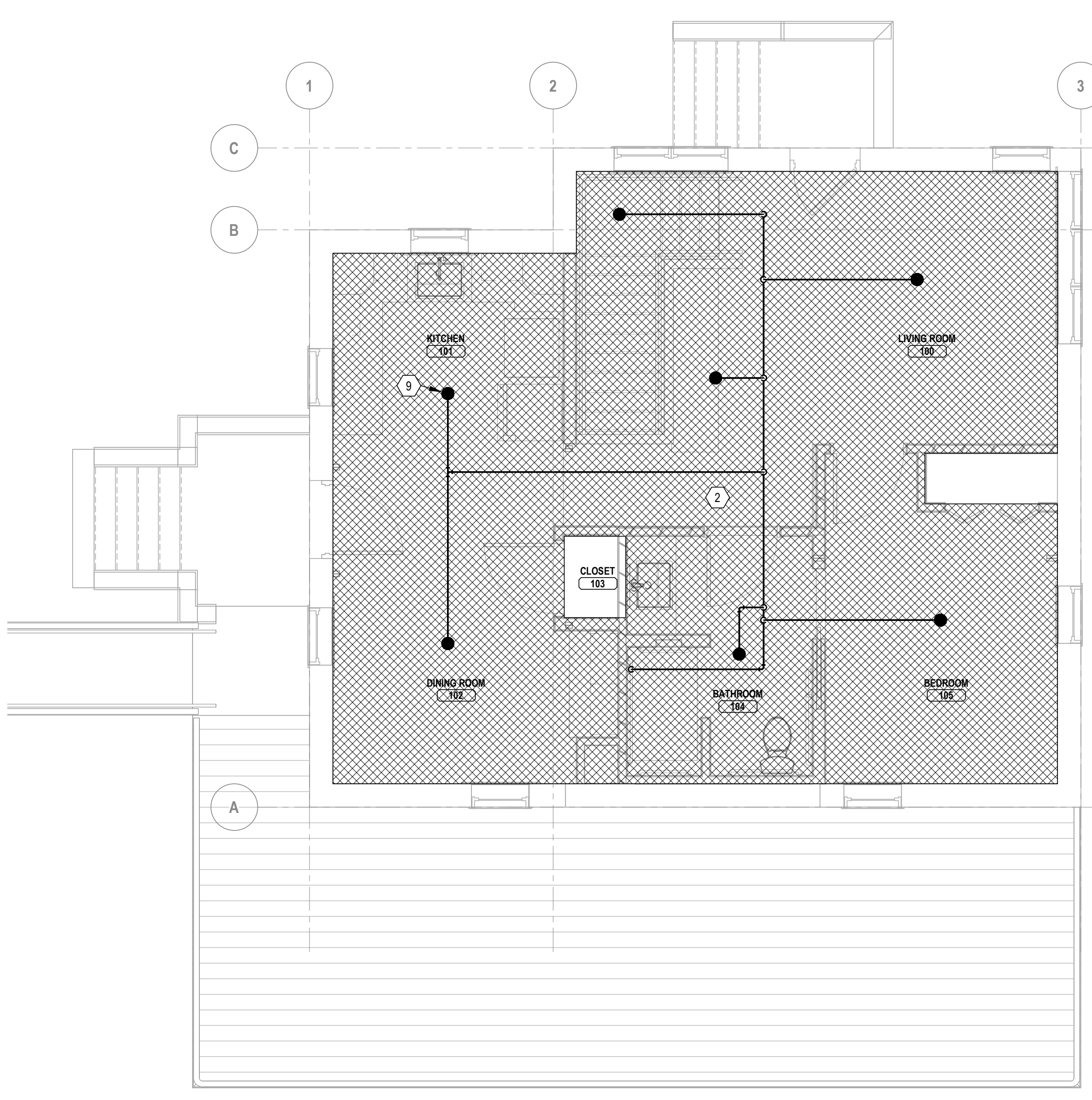
- INSTALL NEW FIRE SPRINKLER SYSTEM THAT SHALL PROVIDE FULL COVERAGE TO THE ENTIRE BUILDING AREA. ALL WORK SHALL COMPLY WITH NFPA-13R, LOCAL FIRE MARSHALL, AND OWNERS INSURANCE CARRIER REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND OBTAINING ALL NECESSARY PERMITS AND APPROVALS.
- REFERENCE ARCHITECTURAL REFLECTED CEILING PLANS FOR AREAS WITH CEILINGS OR AREAS THAT ARE EXPOSED.
- ATTIC NOT REQUIRED TO BE PROTECTED PER NFPA-13R. REFERENCE FIRE SPRINKLER PIPING INSTALLATION AND FREEZE PROTECTION DETAILS SHEET M-501 FOR PIPING ROUTED IN ATTIC.

KEYNOTES

- BASEMENT TO BE PROTECTED OFF WET PIPE ZONE #1, APPROXIMATE SQUARE FOOTAGE OF 707 SF.
- FIRST LEVEL TO BE PROTECTED OFF WET PIPE ZONE #1, APPROXIMATE SQUARE FOOTAGE OF 755 SF.
- PROVIDE QUICK-RESPONSE INTERMEDIATE TEMPERATURE SPRINKLER TO PROTECT MECHANICAL ROOM PER NFPA-13R.
- PROVIDE DRY SIDEWALL SPRINKLERS WITH EXTENDED BARREL TO PROTECT BELOW DECK AREA. BARREL MUST BE MINIMUM 8" IN LENGTH FROM INTERIOR OF FOUNDATION WALL PER NFPA-13R.
- DIAGONAL HASHED LINES INDICATED APPROXIMATE EXTENTS OF DECK ABOVE. CONTRACTOR TO FIELD VERIFY.
- PROVIDE DRAIN AND INSPECTOR'S TEST THROUGH FOUNDATION WALL.
- ROUTE RETURN BEND PIPING UP THROUGH JOISTS. REFERENCE STRUCTURAL PLANS, DETAIL D4, SHEET S-501 FOR JOIST NOTCHING REQUIREMENTS. MEET IBC 2021 SECTION 2308.4.2.4 NOTCHING AND BORING REQUIREMENTS AS INDICATED BY STRUCTURAL PLANS.
- SEE PL101 FOR CONTINUATION OF PIPING FROM COMBINED WATER AND FIRE SERVICE ENTRANCE.
- MAINTAIN 18" SEPARATION FROM RANGE HOOD PER NFPA-13R.
- PROVIDE DOUBLE CHECK BACKFLOW PREVENTER FOR COMBINATION FIRE SUPPRESSION AND DOMESTIC WATER SERVICE. DOUBLE CHECK SHALL BE LISTED FOR FIRE SERVICE.



A1 FIRE PROTECTION PLAN - LOWER FLOOR
SCALE: 1/4" = 1'-0"



A3 FIRE PROTECTION PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



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Architecture
Engineering
Planning

CONSULTANTS



PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY CHM
PROJECT #	03221580	CHECKED BY CHM

SHEET TITLE

**FIRE PROTECTION
PLANS**

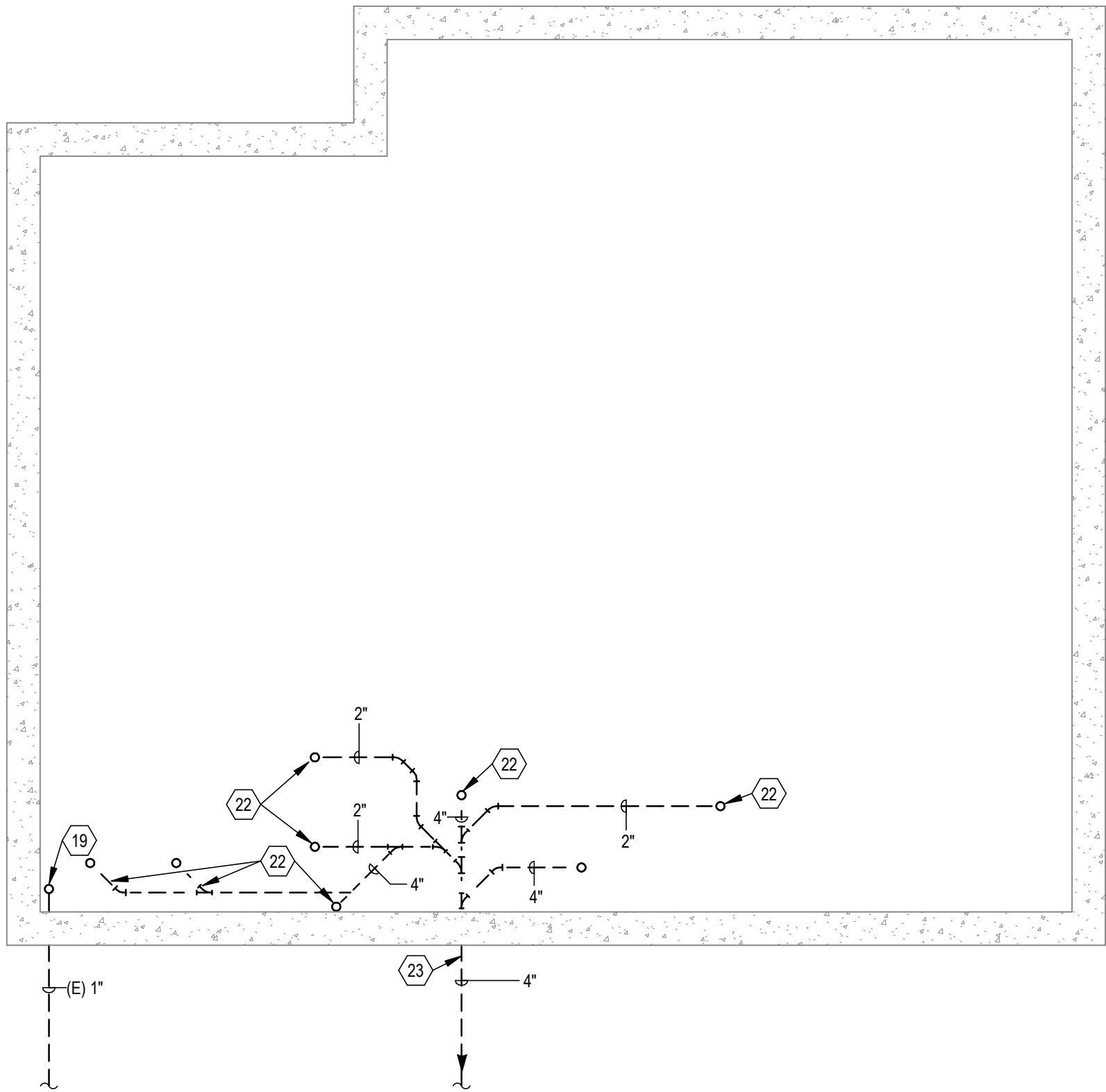
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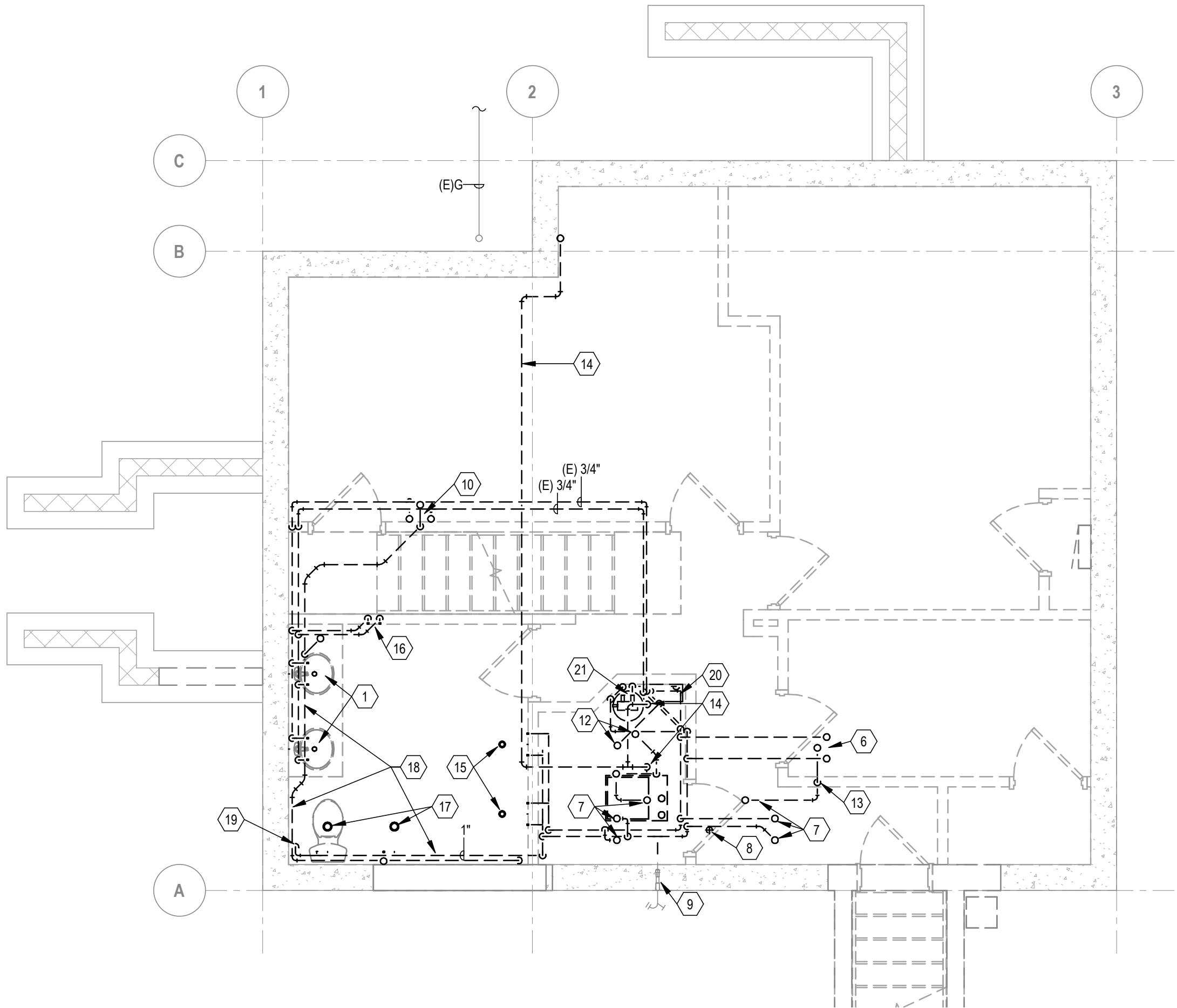
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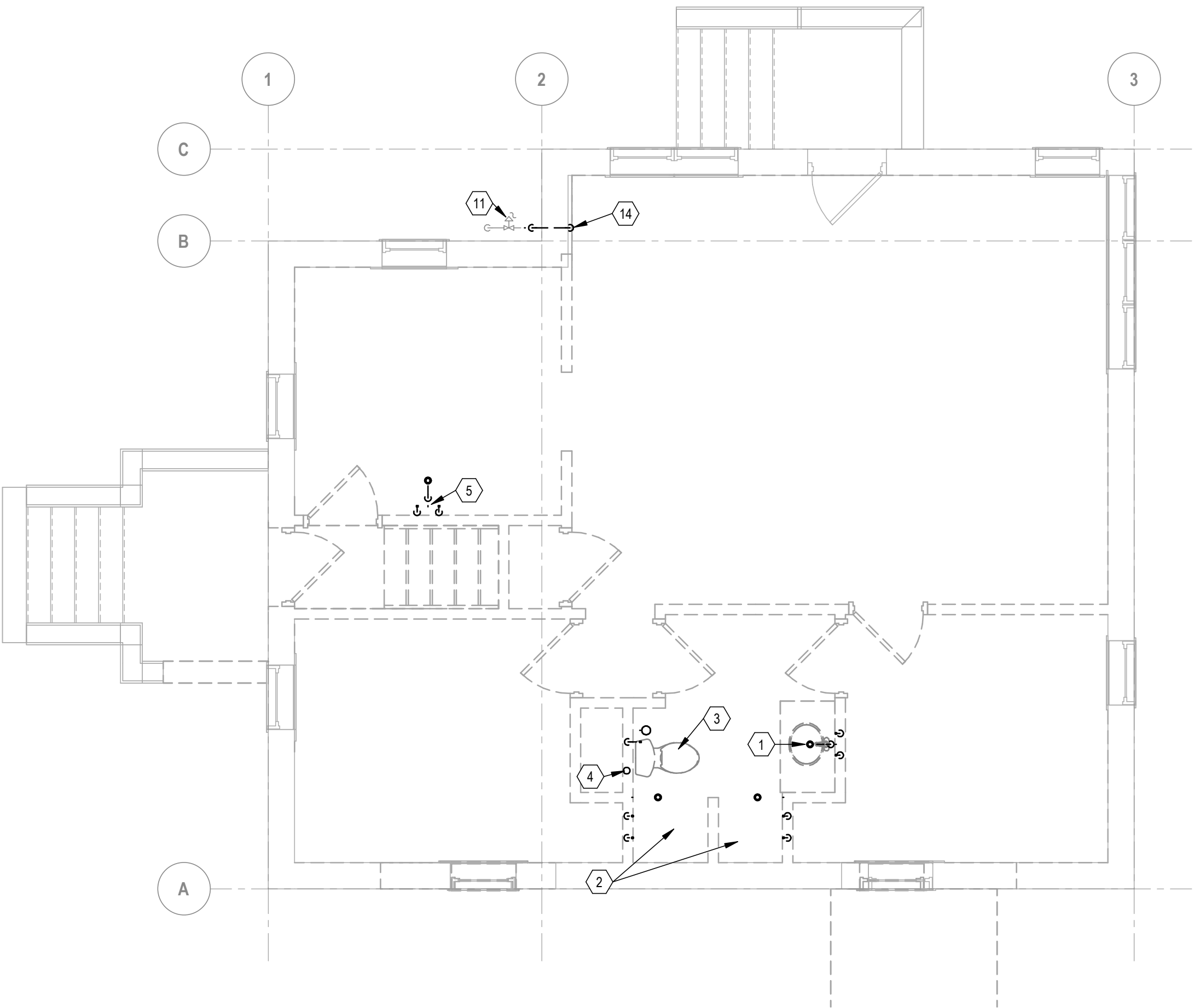
LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT



C1 PLUMBING DEMOLITION PLAN - BELOW GRADE
SCALE: 1/4" = 1'-0"



A1 PLUMBING DEMOLITION PLAN - LOWER FLOOR
SCALE: 1/4" = 1'-0"



A3 PLUMBING DEMOLITION PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



SHEET GENERAL NOTES

- A EQUIPMENT, DUCTWORK, PIPING, ETC. TO BE REMOVED OR RELOCATED IS SHOWN IN HEAVY DASHED LINES, UNLESS NOTED OTHERWISE.
- B EQUIPMENT, DUCTWORK, PIPING, ETC. TO REMAIN IS SHOWN IN LIGHT LINES, UNLESS NOTED OTHERWISE.
- C CONTRACTOR SHALL CONFIRM LOCATION AND SIZE OF EXISTING EQUIPMENT, DUCTWORK, PIPING ETC.
- D COORDINATE WORK WITH ALL OTHER TRADES. UNCOORDINATED WORK WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- E COORDINATE ALL SYSTEM SHUTDOWNS WITH OWNER'S REPRESENTATIVE.

KEYNOTES

- 1 REMOVE LAV AND ASSOCIATED DOMESTIC WATER PIPING AND SANITARY WASTE AND VENT PIPING.
- 2 REMOVE PRE-FAB FIBERGLASS SHOWER, CONTROL VALVE, AND ASSOCIATED DOMESTIC WATER AND SANITARY WASTE AND VENT PIPING.
- 3 REMOVE WATER CLOSET AND ASSOCIATED DOMESTIC WATER AND SANITARY WASTE AND VENT PIPING.
- 4 REMOVE WASTE STACK DN TO UNDERFLOOR. EXISTING VENT STACK FROM CEILING UP TO VTR TO REMAIN. PREPARE FOR NEW PIPING CONNECTIONS TO NEW FIXTURES.
- 5 REMOVE KITCHEN SINK AND ASSOCIATED DOMESTIC WATER PIPING AND SANITARY WASTE AND VENT PIPING.
- 6 REMOVE PIPING DN FROM LAV ABOVE.
- 7 REMOVE PIPING DN FROM SHOWER ABOVE.
- 8 REMOVE FLOOR DRAIN AND ASSOCIATED PIPING.
- 9 EXISTING WALL HYDRANT TO REMAIN. DISCONNECT AND RE-FEED WITH NEW DOMESTIC COLD WATER PIPING.
- 10 REMOVE PIPING DN FROM KITCHEN SINK ABOVE.
- 11 EXISTING NATURAL GAS SERVICE REGULATOR. CONTRACTOR TO FIELD VERIFY REGULATOR CAN HANDLE NEW CONNECTED LOAD.
- 12 REMOVE PIPING DN FROM WATER CLOSET ABOVE.
- 13 REMOVE 2" W. PIPING DN BELOW FLOOR SLAB. ABANDON AND CAP WASTE PIPING BELOW FINISHED FLOOR.
- 14 DISCONNECT 3/4" NATURAL GAS PIPING FROM FURNACE AND WATER HEATER AND REMOVE 1" NATURAL GAS PIPING BACK TO REGULATOR ASSEMBLY. PREPARE PIPING FOR NEW CONNECTION AND RE-ROUTING.
- 15 REMOVE PRE-FAB FIBERGLASS SHOWER, CONTROL VALVE, AND ASSOCIATED DOMESTIC WATER AND SANITARY WASTE AND VENT PIPING. CAP WASTE PIPING BELOW SLAB AND ABANDON.
- 16 REMOVE WASHING MACHINE TUBING AND ASSOCIATED STANDPIPE.
- 17 REMOVE WATER CLOSET AND ASSOCIATED DOMESTIC WATER AND SANITARY WASTE AND VENT PIPING. CAP WASTE BELOW FLOOR AND ABANDON.
- 18 DOMEST HOT/COLD WATER AND SANITARY WASTE ROUTED EXPOSED LOW ALONG WALL. REMOVE ALL EXPOSED PIPING BACK TO FLOOR PENETRATION. CAP WASTE PIPING BELOW FLOOR AND ABANDON.
- 19 REMOVE EXISTING 1" WATER SERVICE FROM BUILDING. REFERENCE SITE UTILITY PLANS FOR ADDITIONAL INFORMATION.
- 20 REMOVE NAVIEN TANKLESS WATER HEATER AND ALL ASSOCIATED PIPING AND ACCESSORIES.
- 21 REMOVE EXISTING WATER SOFTENER AND ALL ASSOCIATED PIPING AND ACCESSORIES.
- 22 REMOVE ALL EXISTING WASTE PIPING BELOW GRADE. COORDINATE EXTENTS OF FLOOR SAWCUTTING AND PATCHING WITH G.C.
- 23 EXISTING 4" SANITARY SEWER SERVICE TO BE REPLACED WITH NEW 4" PVC. FIELD VERIFY INVERT OF EXISTING SANITARY SEWER SERVICE AND MATCH INVERT FOR NEW SEWER IF ABLE. COORDINATE WITH SITE UTILITY CONTRACTOR TO MEET REQUIRED MINIMUM INVERT LISTED ON SHEET PL101 FOR NEW SANITARY SEWER SERVICE.

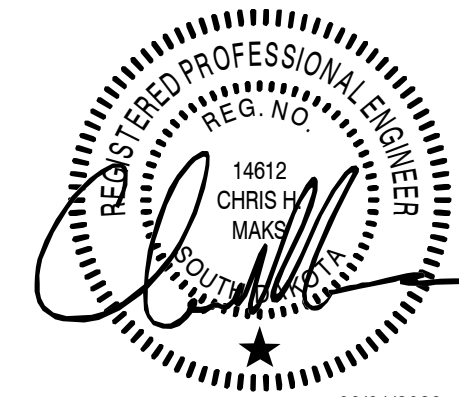
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PROJECT TITLE



**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY CHM
PROJECT #	03221580	CHECKED BY CHM

SHEET TITLE

**PLUMBING DEMOLITION
PLANS**

SHEET NUMBER

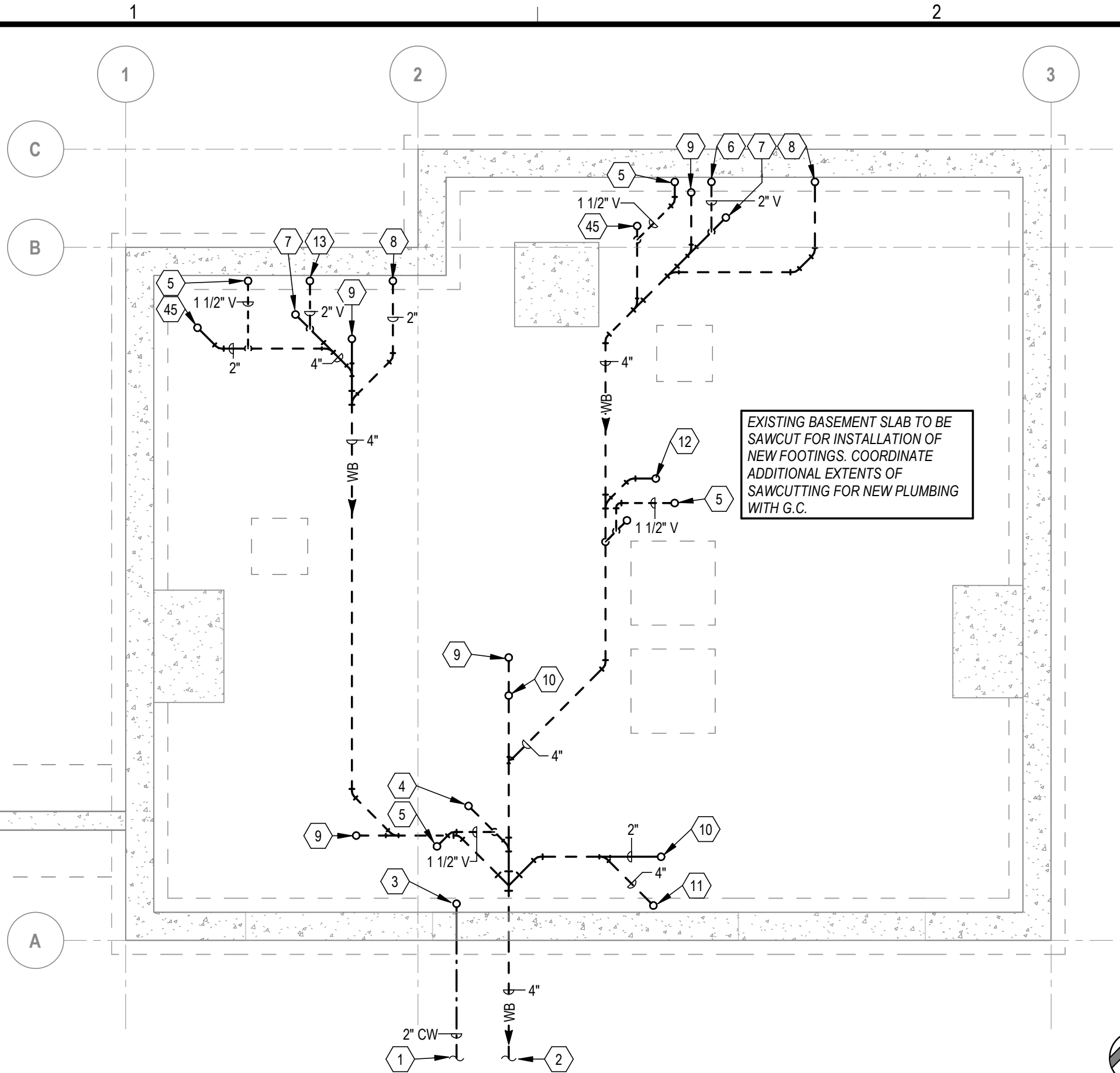
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LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

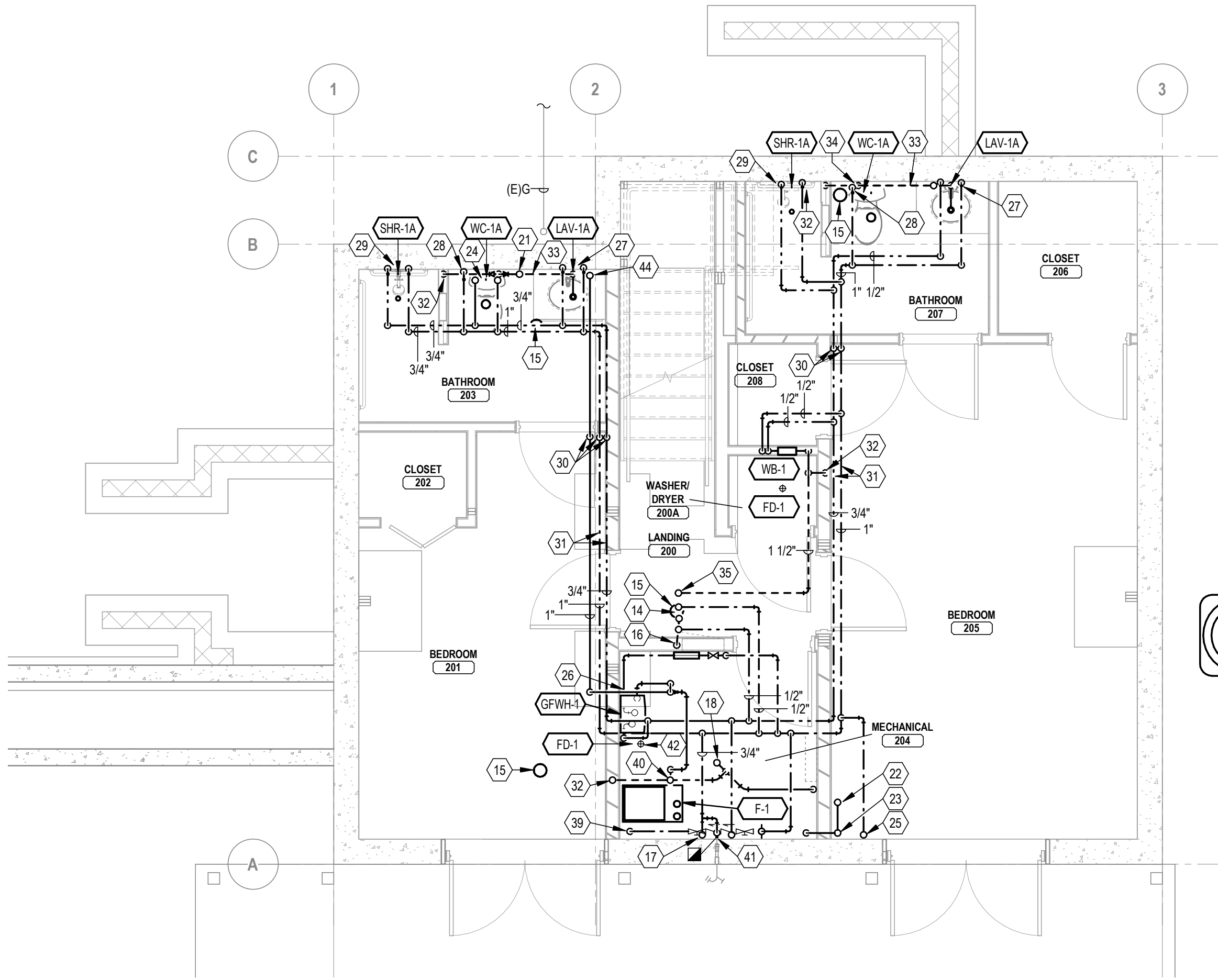


C1 PLUMBING PLAN - UNDERFLOOR
SCALE: 1/4" = 1'-0"

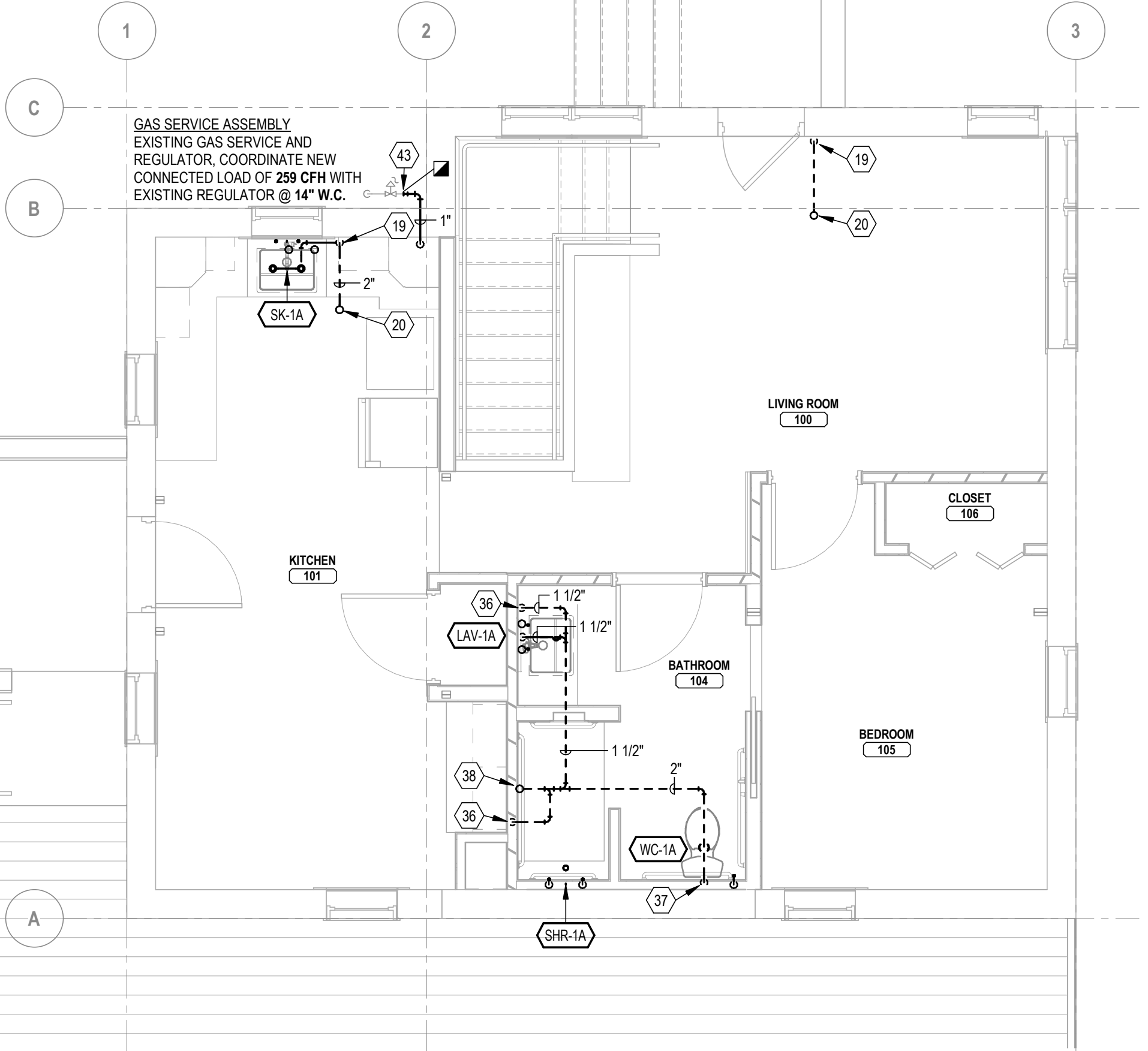


KEYNOTES	
1	SEE SITE UTILITY PLAN FOR CONTINUATION. REFERENCE CIVIL PLANS FOR SITE LOCATED PIV, COORDINATED FINAL LOCATION AND REQUIREMENTS WITH LOCAL FIRE AUTHORITY AND ELECTRICAL CONTRACTOR. PROVIDE MINIMUM OF 6'-0" OF COVER OR INSULATION FOR FROST PROTECTION.
2	SEE SITE UTILITY PLAN FOR CONTINUATION. EXTEND 4" WASTE BELOW (WB) GRADE 5'-0" BEYOND BUILDING AND PROVIDE YCO IN PATIO. MINIMUM I.E. 88'-10" (18" BELOW FF, FIELD VERIFY) REQUIRED. COORDINATE MINIMUM INVERT WITH EXISTING SEWER TO BE REPLACED INVERT TO DETERMINE GRADE TO MATCH WITHIN THE SITE.
3	COMBINED 2" DOMESTIC CW AND FIRE SERVICE UP INTO MECHANICAL ROOM.
4	2" WB UP TO FLOOR DRAIN.
5	1 1/2" V. UP.
6	2" V. UP.
7	4" WB UP TO WATER CLOSET.
8	2" WB UP TO LAV.
9	4" WB UP TO FCO.
10	2" WB UP.
11	4" WB UP.
12	2" WB UP TO WB-1.
13	2" WET VENT UP.
14	2" WB, 1/2" CW & 1/2" HW UP TO LAV.
15	FCO (WASTE). MUST BE ACCESSIBLE.
16	2" W. DN. IN WALL.
17	1/2" HW & 1/2" CW UP TO SHOWER.
18	2" W. UP TO SHOWER DRAIN.
19	ROUTE 2" V. TIGHT TO WALL AND UP INTO ATTIC.
20	2" V. UP TO 4" VTR.
21	2" WET VENT CONTINUED UP TO SERVE DRAIN FROM 2-COMPT. SINK. OFFSET IN STUD CAVITY TO MISS FLOOR JOISTS ABOVE.
22	4" W. UP TO WATER CLOSET.

KEYNOTES	
23	2" V. UP/4" W. DN.
24	1/2" HW & 1/2" CW UP TO 2-COMPT. SINK.
25	1/2" CW UP TO WATER CLOSET.
26	1" HW & 1" CW DN. TO WATER HEATER.
27	1/2" CW & 1/2" HW DN TO LAV IN FURRING WALL.
28	1/2" CW DN TO WATER CLOSET IN FURRING WALL.
29	3/4" CW & 3/4" HW DN TO SHOWER IN FURRING WALL.
30	OFFSET PIPING UP ABOVE CEILING.
31	1" CW & 3/4" HW ROUTED TIGHT TO WALL IN SOFFIT IN ORDER TO PASS UNDER STRUCTURAL BEAMS.
32	1 1/2" V. UP FROM UNDERFLOOR IN WALL.
33	CONNECT VENTS IN FURRING WALL TO 2" VENT STACK FROM WATER CLOSET.
34	2" VENT STACK CONTINUED UP TO FIRST FLOOR. OFFSET IN WALL TO ROUTE UP NEXT TO DOORWAY ABOVE.
35	1 1/2" V. UP TO MAIN FLOOR. TIE TO LAV VENT IN WALL ABOVE FLOOD RIM.
36	1 1/2" V. UP FROM BASEMENT CEILING.
37	2" V. UP FROM BASEMENT CEILING.
38	TIE NEW VENT INTO EXISTING VENT STACK AND REUSE EXISTING ROOF PENETRATION, CONTRACTOR TO FIELD VERIFY EXISTING VENT SIZE.
39	2" COMBINED FIRE AND WATER SERVICE UP FROM UNDERGROUND.
40	1 1/2" V. CONTINUED UP TO FIRST FLOOR. COORDINATE WITH DUCT ROUTING AND ADJUST VENT AS NECESSARY TO MISS DUCTWORK RISERS.
41	RECONNECT 3/4" CW TO SERVE EXISTING WALL HYDRANT.
42	SPILL. CONDENSATE DRAINAGE FROM FURNACE AND WATER HEATER TO FLOOR DRAIN WITH AIR GAP.
43	1" NATURAL GAS SERVICE, RE-ROUTE INTO BUILDING AND DN TO LOWER LEVEL THRU BASE CABINET/WALL FURRING. CONTRACTOR TO FIELD VERIFY SIZE OF EXISTING REGULATOR IS ADEQUATE TO HANDLE NEW CONNECTED LOAD. CONTACT ENGINEER WITH ANY DISCREPENCIES. PROVIDE NEW BALL VALVE SHUTOFF VALVE AT ENTRANCE TO BUILDING.
44	1" LOW PRESSURE NATURAL GAS DN FROM FIRST FLOOR. ROUTE THROUGH JOIST SPACE OVER TO SOFFIT.
45	2" WB UP TO SHOWER DRAIN.



A1 PLUMBING PLAN - LOWER FLOOR
SCALE: 1/4" = 1'-0"



A3 PLUMBING PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



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**SOUTH DAKOTA
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RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY CHM
PROJECT #	03221580	CHECKED BY CHM

SHEET TITLE

**PLUMBING PLANS - NEW
CONSTRUCTION**

SHEET NUMBER

PL101

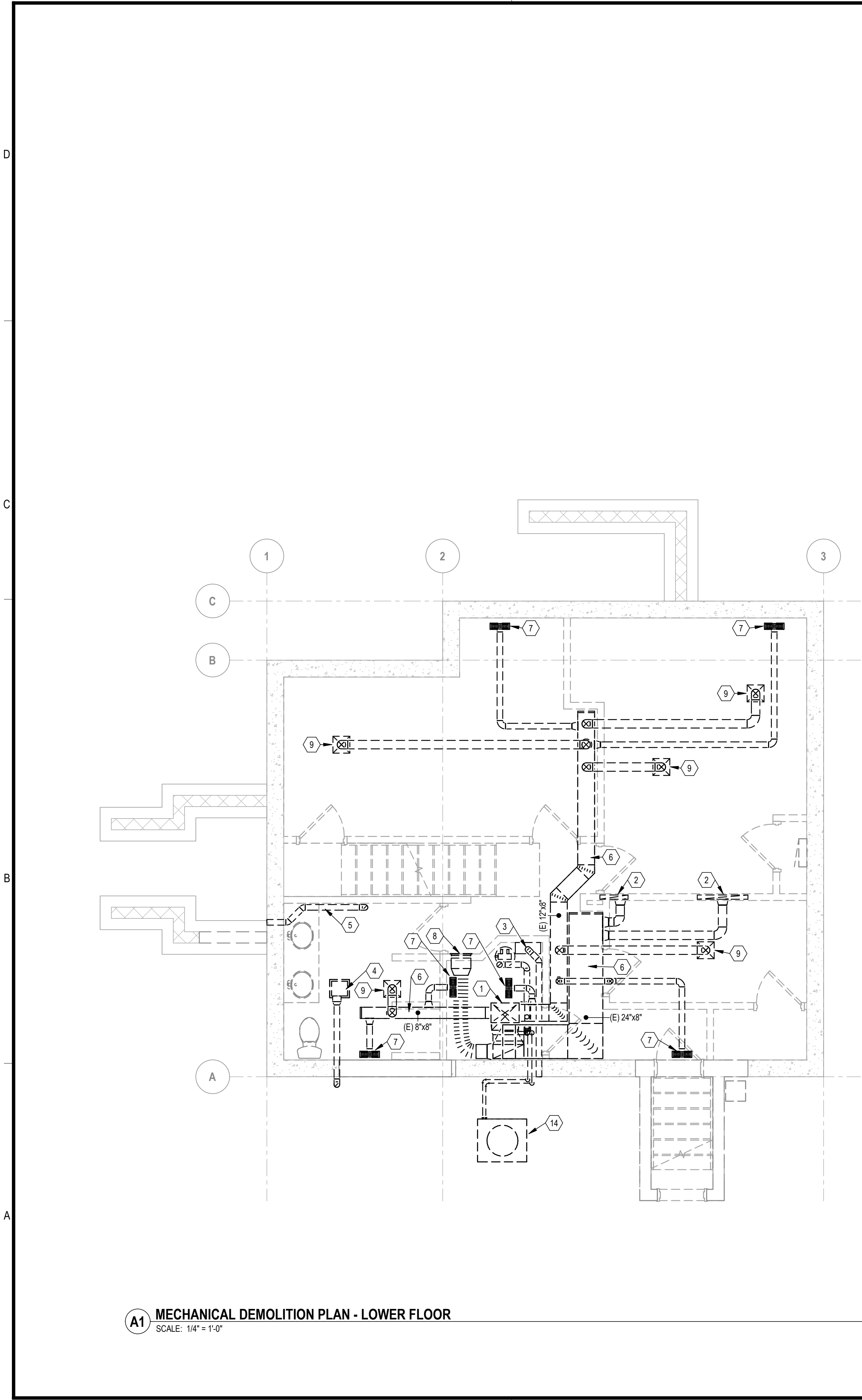
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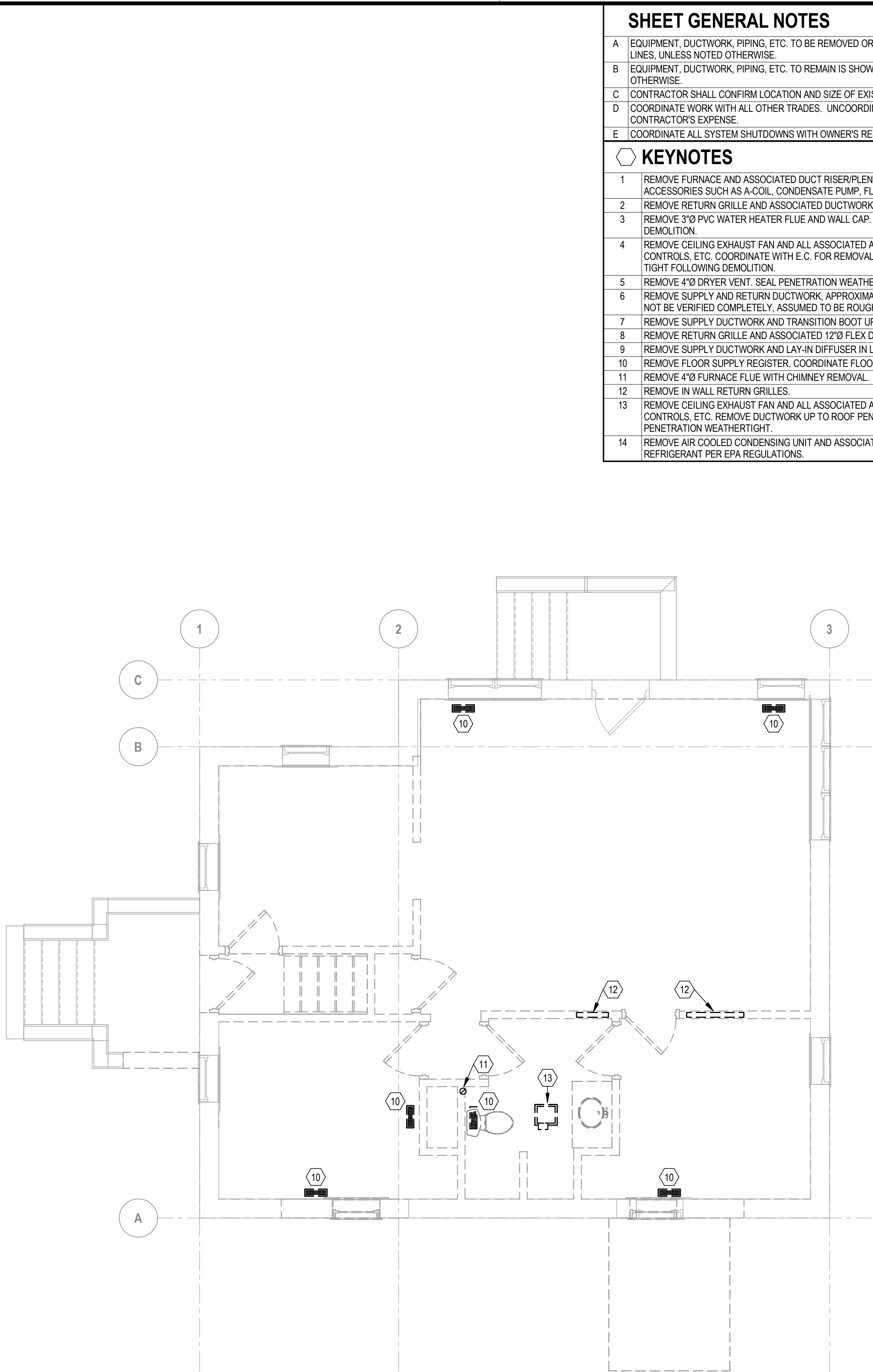
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A1 MECHANICAL DEMOLITION PLAN - LOWER FLOOR
SCALE: 1/4" = 1'-0"



PLAN NORTH



A3 MECHANICAL DEMOLITION PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



PLAN NORTH

SHEET GENERAL NOTES

- A EQUIPMENT, DUCTWORK, PIPING, ETC. TO BE REMOVED OR RELOCATED IS SHOWN IN HEAVY DASHED LINES, UNLESS NOTED OTHERWISE.
- B EQUIPMENT, DUCTWORK, PIPING, ETC. TO REMAIN IS SHOWN IN LIGHT LINES, UNLESS NOTED OTHERWISE.
- C CONTRACTOR SHALL CONFIRM LOCATION AND SIZE OF EXISTING EQUIPMENT, DUCTWORK, PIPING ETC.
- D COORDINATE WORK WITH ALL OTHER TRADES. UNCOORDINATED WORK WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- E COORDINATE ALL SYSTEM SHUTDOWNS WITH OWNER'S REPRESENTATIVE.

KEYNOTES

- 1 REMOVE FURNACE AND ASSOCIATED DUCT RISER/PLENUMS. REMOVE ALL ASSOCIATED ACCESSORIES SUCH AS A-COIL, CONDENSATE PUMP, FLUE, ETC.
- 2 REMOVE RETURN GRILLE AND ASSOCIATED DUCTWORK.
- 3 REMOVE 3/2" PVC WATER HEATER FLUE AND WALL CAP. SEAL OPENING WEATHER TIGHT FOLLOWING DEMOLITION.
- 4 REMOVE CEILING EXHAUST FAN AND ALL ASSOCIATED ACCESSORIES SUCH AS HANGAR BRACKETS, CONTROLS, ETC. COORDINATE WITH E.C. FOR REMOVAL OF POWER. SEAL PENETRATION WEATHER TIGHT FOLLOWING DEMOLITION.
- 5 REMOVE 4"Ø DRYER VENT. SEAL PENETRATION WEATHER TIGHT FOLLOWING DEMOLITION.
- 6 REMOVE SUPPLY AND RETURN DUCTWORK, APPROXIMATE SIZES LISTED ON PLAN. RUNOUTS COULD NOT BE VERIFIED COMPLETELY. ASSUMED TO BE ROUGHLY 6"Ø TO REGISTERS.
- 7 REMOVE SUPPLY DUCTWORK AND TRANSITION BOOT UP TO FLOOR REGISTER ON FIRST LEVEL.
- 8 REMOVE RETURN GRILLE AND ASSOCIATED 12"Ø FLEX DUCTWORK BACK TO RETURN RISER.
- 9 REMOVE SUPPLY DUCTWORK AND LAY-IN DIFFUSER IN LOWER FLOOR CEILING.
- 10 REMOVE FLOOR SUPPLY REGISTER. COORDINATE FLOOR PATCHING WITH G.C.
- 11 REMOVE 4"Ø FURNACE FLUE WITH CHIMNEY REMOVAL.
- 12 REMOVE IN WALL RETURN GRILLES.
- 13 REMOVE CEILING EXHAUST FAN AND ALL ASSOCIATED ACCESSORIES SUCH AS HANGAR BRACKETS, CONTROLS, ETC. REMOVE DUCTWORK UP TO ROOF PENETRATION AND REMOVE ROOF JACK. SEAL PENETRATION WEATHERTIGHT.
- 14 REMOVE AIR COOLED CONDENSING UNIT AND ASSOCIATED LINESETS. PUMP DOWN AND CAPTURE REFRIGERANT PER EPA REGULATIONS.

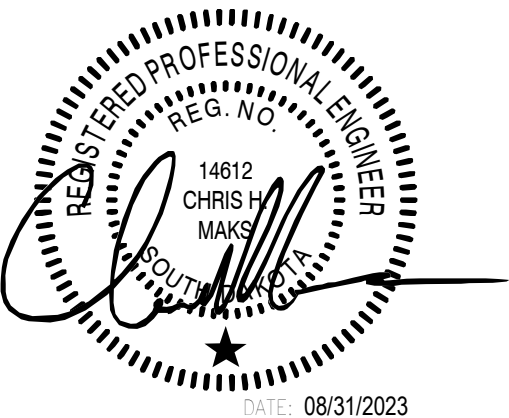
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**SOUTH DAKOTA
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MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY CHM
PROJECT #	03221580	CHECKED BY CHM

SHEET TITLE

**MECHANICAL
DEMOLITION PLANS**

SHEET NUMBER

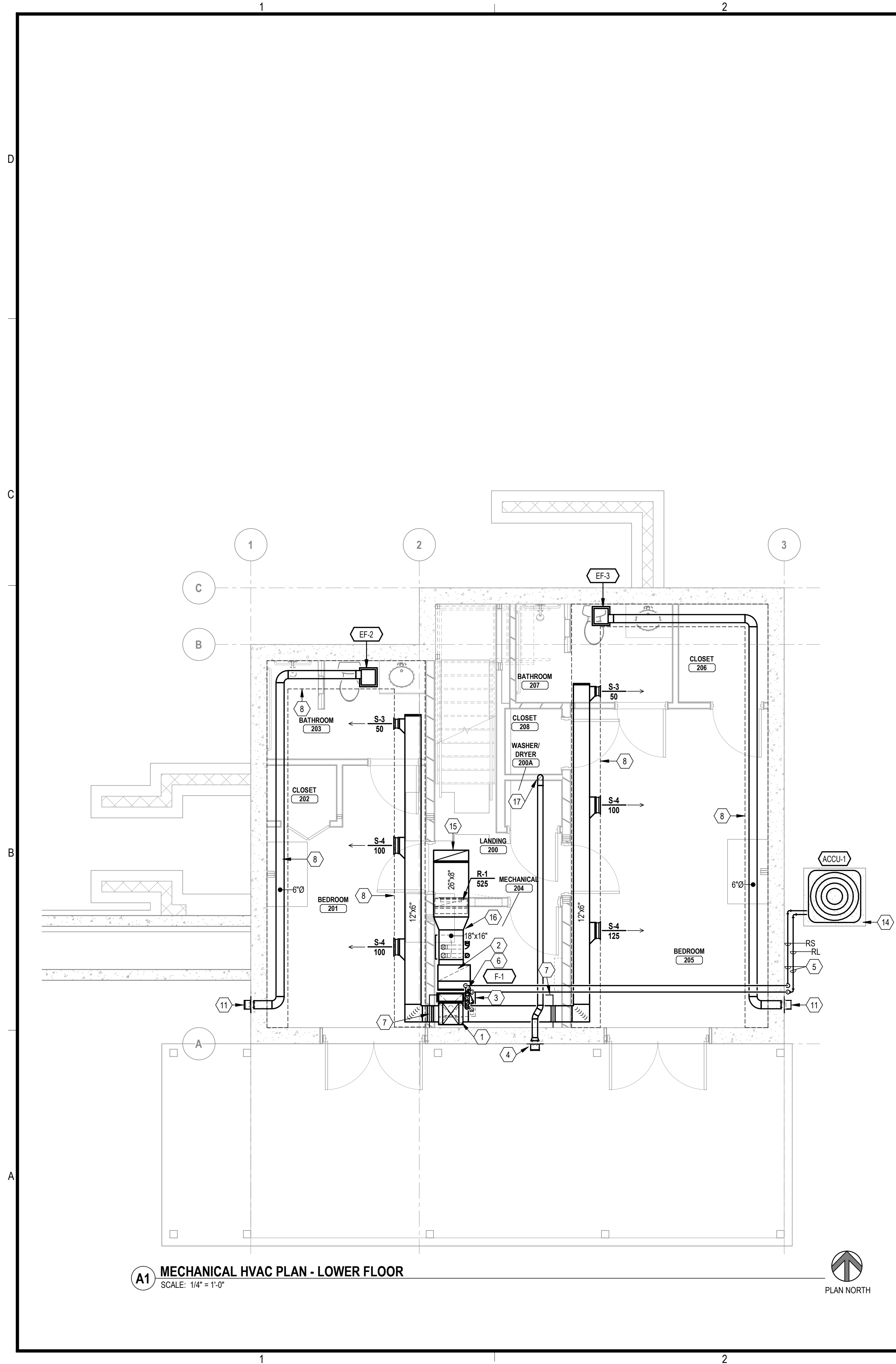
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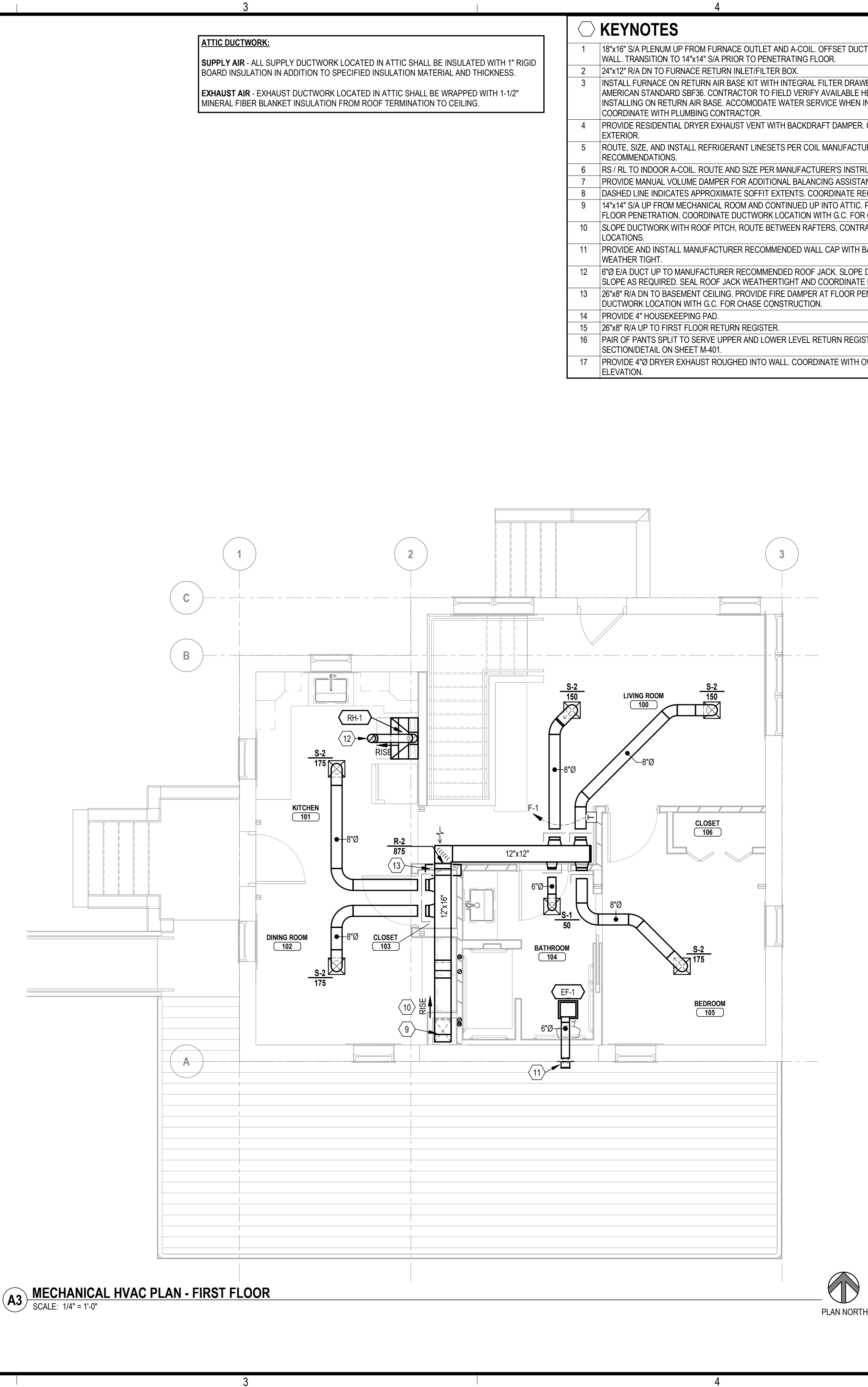
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A1 MECHANICAL HVAC PLAN - LOWER FLOOR
SCALE: 1/4" = 1'-0"



A3 MECHANICAL HVAC PLAN - FIRST FLOOR
SCALE: 1/4" = 1'-0"



ATTIC DUCTWORK:

SUPPLY AIR - ALL SUPPLY DUCTWORK LOCATED IN ATTIC SHALL BE INSULATED WITH 1" RIGID BOARD INSULATION IN ADDITION TO SPECIFIED INSULATION MATERIAL AND THICKNESS.

EXHAUST AIR - EXHAUST DUCTWORK LOCATED IN ATTIC SHALL BE WRAPPED WITH 1-1/2" MINERAL FIBER BLANKET INSULATION FROM ROOF TERMINATION TO CEILING.

KEYNOTES

- 18"x16" S/A PLENUM UP FROM FURNACE OUTLET AND A-COIL. OFFSET DUCTWORK TO EXTERIOR WALL. TRANSITION TO 14"x14" S/A PRIOR TO PENETRATING FLOOR.
- 24"x12" R/A DN TO FURNACE RETURN INLET/FILTER BOX.
- INSTALL FURNACE ON RETURN AIR BASE KIT WITH INTEGRAL FILTER DRAWER, BASIS OF DESIGN AMERICAN STANDARD SBF36. CONTRACTOR TO FIELD VERIFY AVAILABLE HEIGHT PRIOR TO INSTALLING ON RETURN AIR BASE. ACCOMMODATE WATER SERVICE WHEN INSTALLING FURNACE, COORDINATE WITH PLUMBING CONTRACTOR.
- PROVIDE RESIDENTIAL DRYER EXHAUST VENT WITH BACKDRAFT DAMPER. COLOR TO MATCH EXTERIOR.
- ROUTE, SIZE, AND INSTALL REFRIGERANT LINESETS PER COIL MANUFACTURER'S RECOMMENDATIONS.
- RS / RL TO INDOOR A-COIL. ROUTE AND SIZE PER MANUFACTURER'S INSTRUCTIONS.
- PROVIDE MANUAL VOLUME DAMPER FOR ADDITIONAL BALANCING ASSISTANCE.
- DASHED LINE INDICATES APPROXIMATE SOFFIT EXTENTS. COORDINATE REQUIREMENTS WITH G.C.
- 14"x14" S/A UP FROM MECHANICAL ROOM AND CONTINUED UP INTO ATTIC. PROVIDE FIRE DAMPER AT FLOOR PENETRATION. COORDINATE DUCTWORK LOCATION WITH G.C. FOR CHASE CONSTRUCTION.
- SLOPE DUCTWORK WITH ROOF PITCH, ROUTE BETWEEN RAFTERS, CONTRACTOR TO FIELD VERIFY LOCATIONS.
- PROVIDE AND INSTALL MANUFACTURER RECOMMENDED WALL CAP WITH BACKDRAFT DAMPER. SEAL WEATHER TIGHT.
- 6"Ø E/A DUCT UP TO MANUFACTURER RECOMMENDED ROOF JACK. SLOPE DUCTWORK WITH ROOF SLOPE AS REQUIRED. SEAL ROOF JACK WEATHERTIGHT AND COORDINATE FLASHING WITH G.C.
- 26"x8" R/A DN TO BASEMENT CEILING. PROVIDE FIRE DAMPER AT FLOOR PENETRATION. COORDINATE DUCTWORK LOCATION WITH G.C. FOR CHASE CONSTRUCTION.
- PROVIDE 4" HOUSEKEEPING PAD.
- 26"x8" R/A UP TO FIRST FLOOR RETURN REGISTER.
- PAIR OF PANTS SPLIT TO SERVE UPPER AND LOWER LEVEL RETURN REGISTERS, REFERENCE SECTION/DETAIL ON SHEET M-401.
- PROVIDE 4"Ø DRYER EXHAUST ROUGHED INTO WALL. COORDINATE WITH OWNER FOR ROUGH-IN ELEVATION.

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**SOUTH DAKOTA
DEPARTMENT OF THE
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RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY CHM
PROJECT #	03221580	CHECKED BY CHM

SHEET TITLE

**MECHANICAL HVAC
PLANS - NEW
CONSTRUCTION**

SHEET NUMBER

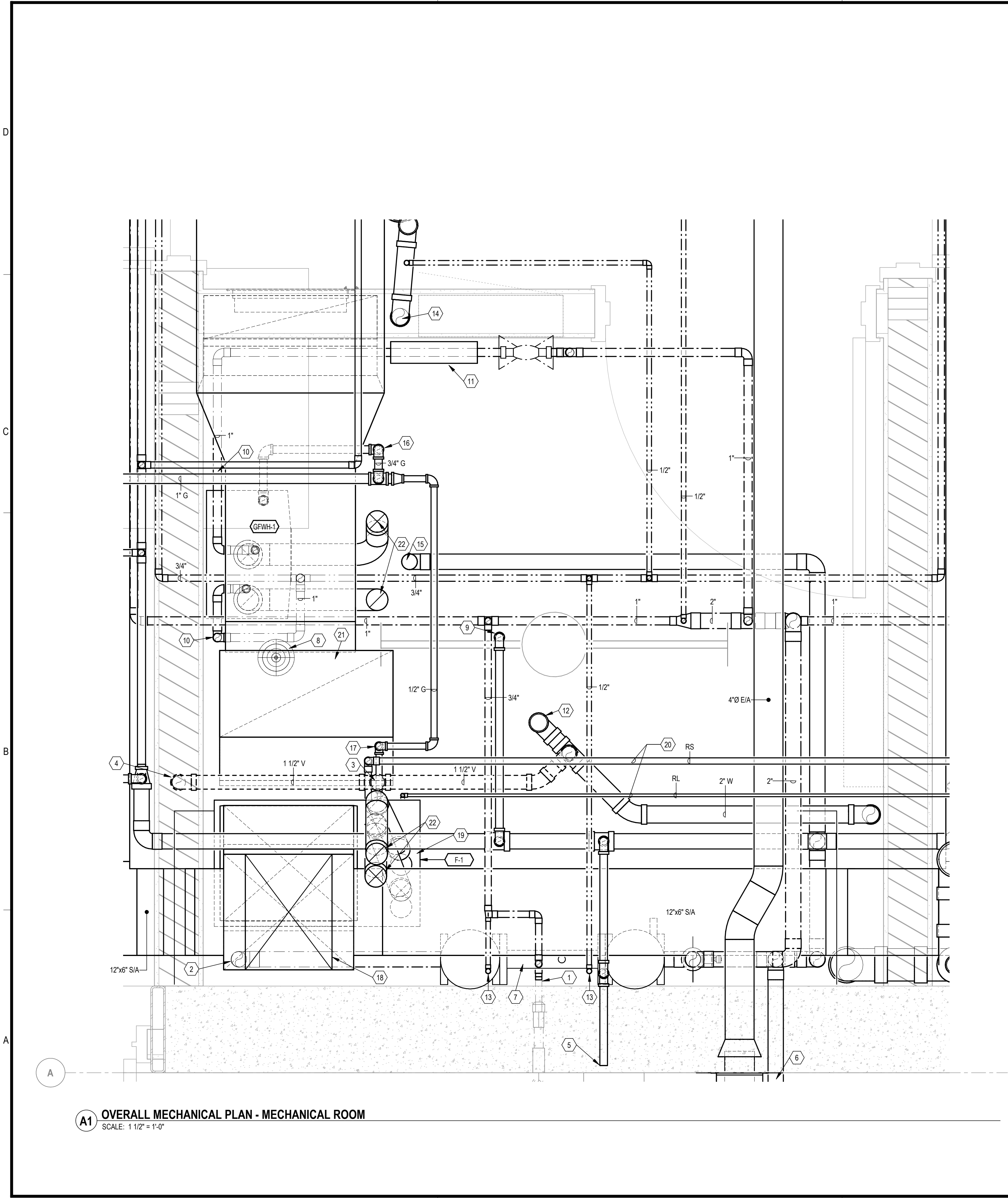
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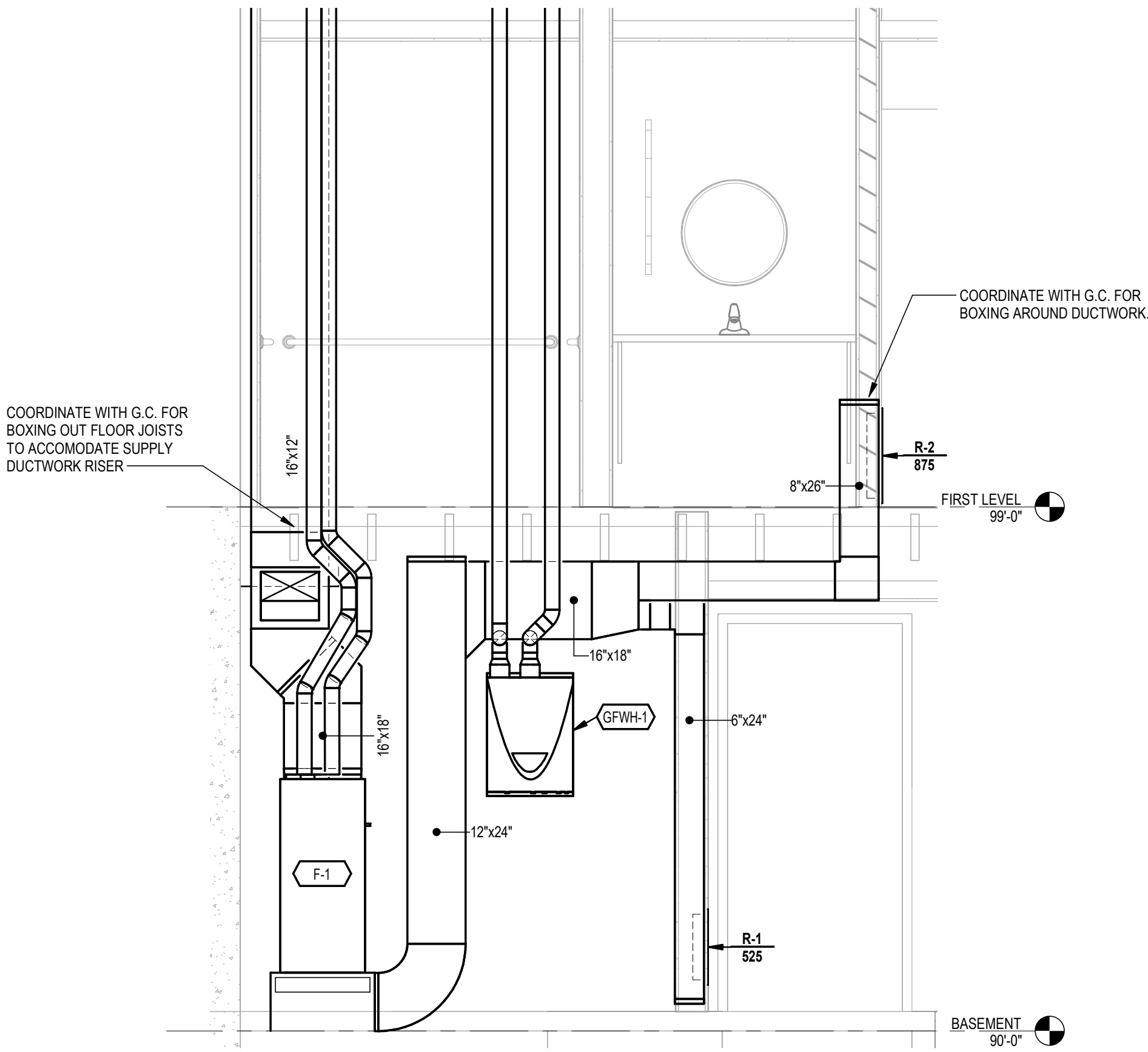
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A1 OVERALL MECHANICAL PLAN - MECHANICAL ROOM
SCALE: 1 1/2" = 1'-0"

KEYNOTES	
1	RECONNECT 3/4" CW TO SERVE EXISTING WALL HYDRANT.
2	2" COMBINED FIRE AND WATER SERVICE UP FROM UNDERGROUND.
3	1 1/2" V. CONTINUED UP TO FIRST FLOOR. COORDINATE WITH DUCT ROUTING AND ADJUST VENT AS NECESSARY TO MISS DUCTWORK RISERS.
4	1 1/2" V. UP FROM UNDERFLOOR IN WALL.
5	PROVIDE DRY SIDWALL SPRINKLERS WITH EXTENDED BARREL TO PROTECT BELOW DECK AREA. BARREL MUST BE MINIMUM 8' IN LENGTH FROM INTERIOR OF FOUNDATION WALL PER NFPA-13R.
6	PROVIDE DRAIN AND INSPECTOR'S TEST THROUGH FOUNDATION WALL.
7	PROVIDE DOUBLE CHECK BACKFLOW PREVENTER FOR COMBINATION FIRE SUPPRESSION AND DOMESTIC WATER SERVICE. DOUBLE CHECK SHALL BE LISTED FOR FIRE SERVICE.
8	SPILL CONDENSATE DRAINAGE FROM FURNACE AND WATER HEATER TO FLOOR DRAIN WITH AIR GAP.
9	PROVIDE QUICK-RESPONSE INTERMEDIATE TEMPERATURE SPRINKLER TO PROTECT MECHANICAL ROOM PER NFPA-13R.
10	1" HW & 1" CW DN. TO WATER HEATER.
11	INLINE HARD WATER CONDITIONER. BASIS OF DESIGN ZILMET ACTIVEFLO ZAF010, SIZED FOR OPTIMUM FLOW OF 6 GPM.
12	2" W. UP TO SHOWER DRAIN.
13	1/2" HW & 1/2" CW UP TO SHOWER.
14	2" W. DN. IN WALL.
15	WET PIPE FIRE SUPPRESSION PIPING UP TO ATTIC IN WALL TO SERVE FIRST FLOOR.
16	3/4" LOW PRESSURE NATURAL GAS PIPING DN TO TANKLESS WATER HEATER. PROVIDE SHUTOFF VALVE, UNION, AND 6" DIRT LEG. BASIS OF DESIGN MANUFACTURERS LITERATURE RECOMMENDS 10.5" W.C. INCOMING PRESSURE. COORDINATE WITH PROVIDED WATER HEATER'S REQUIREMENTS.
17	1/2" LOW PRESSURE NATURAL GAS PIPING DN TO FURNACE. PROVIDE SHUTOFF VALVE, UNION, AND 6" DIRT LEG. BASIS OF DESIGN MANUFACTURERS LITERATURE RECOMMENDS 3.5" W.C. INCOMING PRESSURE. COORDINATE WITH PROVIDED WATER HEATER'S REQUIREMENTS.
18	18"x16" S/A PLENUM UP FROM FURNACE OUTLET AND A-COIL. OFFSET DUCTWORK TO EXTERIOR WALL OVER WATER SERVICE ENTRANCE. TRANSITION TO 14"x14" S/A PRIOR TO PENETRATING FLOOR.
19	INSTALL FURNACE ON RETURN AIR BASE KIT WITH INTEGRAL FILTER DRAWER. BASIS OF DESIGN SEF36. CONTRACTOR TO FIELD VERIFY AVAILABLE HEIGHT PRIOR TO INSTALLING ON RETURN AIR BASE. ACCOMMODATE WATER SERVICE WHEN INSTALLING FURNACE. COORDINATE WITH PLUMBING CONTRACTOR.
20	RS / RL TO INDOOR A-COIL. ROUTE AND SIZE PER MANUFACTURER'S INSTRUCTIONS.
21	24"x12" R/A DN TO FURNACE RETURN INLET/FILTER BOX.
22	COMBUSTION AIR AND FLUE UP TO FIRST FLOOR AND CONTINUED UP TO ROOF IN CHASE/WALL. SIZE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS, INITIAL SIZE PLANNED AT 3". CONTRACTOR TO FIELD VERIFY WITH MANUFACTURERS LITERATURE BASED ON INSTALLED LENGTH. TERMINATE WITH CONCENTRIC VENT KIT FOR SLOPED ROOF TERMINATION.



A3 DUCTWORK RISER
SCALE: NOT TO SCALE

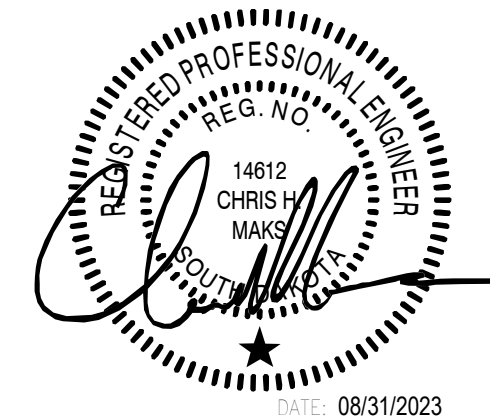


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QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY CHM
PROJECT #	03221580	CHECKED BY CHM

SHEET TITLE

**ENLARGED
MECHANICAL PLANS**

SHEET NUMBER

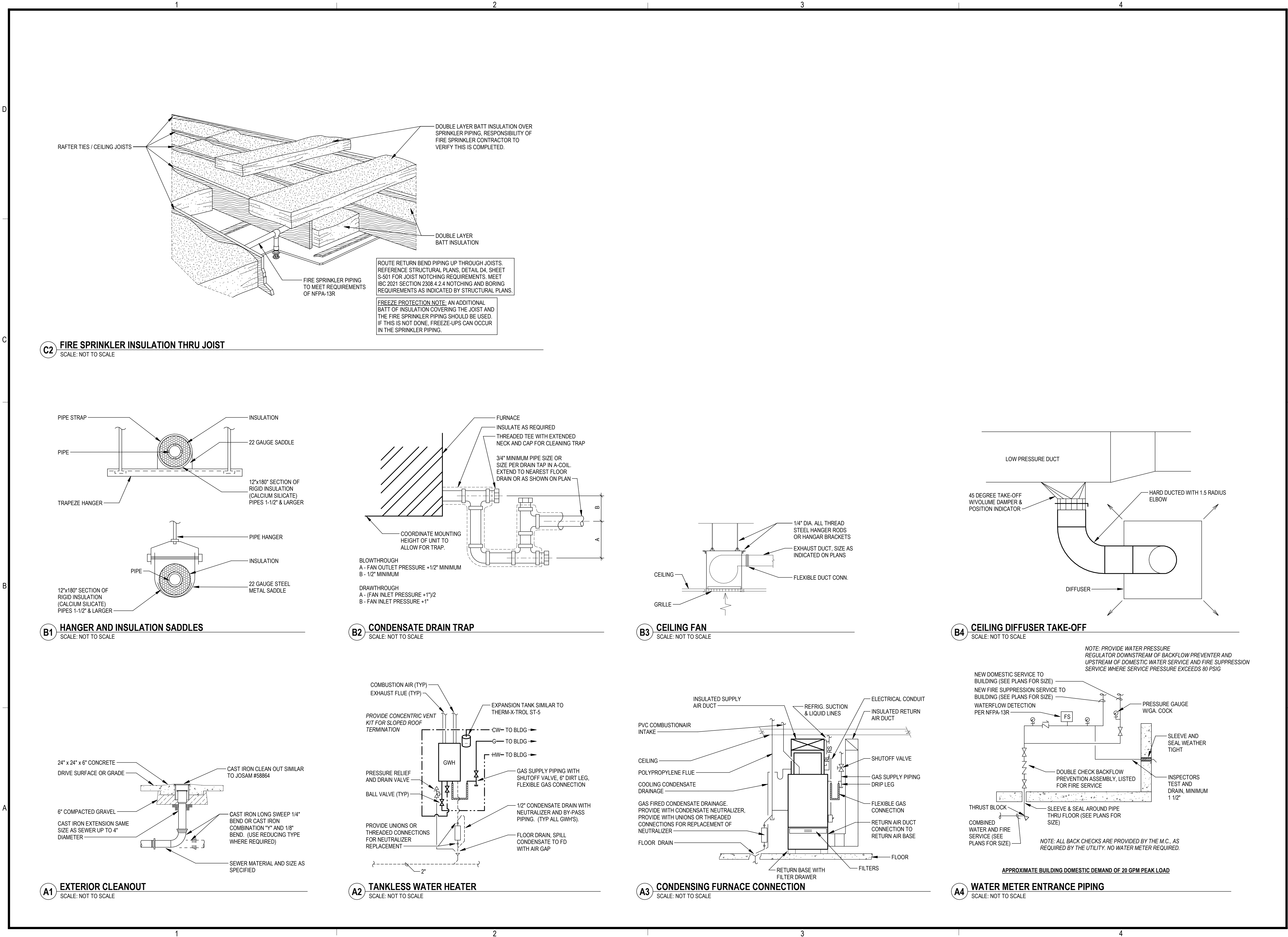
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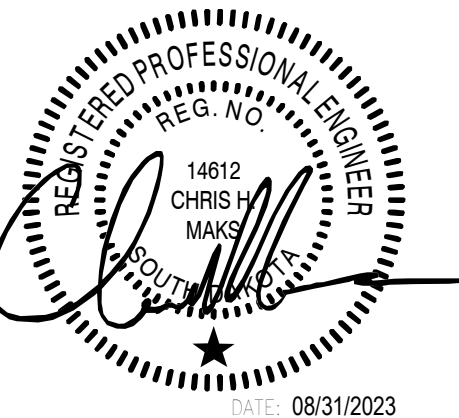
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ISSUE DATE	08/31/2023	DRAWN BY CHM
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SHEET TITLE		

MECHANICAL DETAILS

SHEET NUMBER

M-501

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LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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GAS FURNACE SCHEDULE																																			
EQUIPMENT REQUIREMENTS																							ELECTRICAL REQUIREMENTS												
UNIT NO.	LOCATION	MANUFACTURER	MODEL NO.	ARRANGEMENT	SUPPLY FAN				EVAPORATOR COOLING COIL				GAS FIRED HEAT EXCHANGER								WIRE SIZE / CONDUIT	CONTROLLER					DISCONNECT			ELECTRICAL NOTES					
					AIRFLOW	ESP	DRIVE TYPE	MOTOR POWER	TOTAL CLG. CAP.	ENTERING AIR TEMP. DB	EVAPORATING AIR TEMP. WB	LEAVING AIR TEMP. DB	LEAVING AIR TEMP. WB	PRESSURE DROP	INPUT @ 2ND STAGE	OUTPUT @ 2ND STAGE	NO. OF STAGES	FUEL TYPE	AFUE	UNIT WEIGHT		EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	MOCBP	TYPE	SIZE	LOCATION	CTL DEVICE		AUX	BY	CONTROL BY	TYPE	BY
F-1	MECH ROOM	AMERICAN STANDARD	S9V2B06U4P58B	UPFLOW	1400 CFM	0.90 in-wg	DIRECT	0.75 hp	33985 Btu/h	77.1 °F	62.3 °F	55.2 °F	52.9 °F	0.40 in-wg	60000 Btu/h	58300 Btu/h	2	NG	95	122 lb	ALL	120/1	13.5	15	SEE CIRCUIT SCHEDULE	INTEGRAL	-	-	-	-	-	DIV. 22/23	MOTOR RATED TOGGLE SWITCH	DIV. 26	

- EQUIP NOTES:
- VARIABLE SPEED DIRECT DRIVE BLOWER WITH DIRECT DRIVE COMBUSTION FAN.
 - 2-STAGE HEATING, 2-STAGE COOLING.
 - PROVIDE WITH MATCHING GASED COIL, BASIS OF DESIGN 4TXCB004D53.
 - PROVIDE WITH 409 STAINLESS STEEL PRIMARY HEAT EXCHANGER, 29-4C SECONDARY HEAT EXCHANGER.
 - PROVIDE WITH MERV 8, HIGH VELOCITY FILTER, APPROXIMATE SIZE 16"x25"x1". PROVIDE REPLACEMENT FILTER AT THE COMPLETION OF PROJECT.
 - PROVIDE WITH RETURN AIR BASE WITH FILTER DRAWER, BASIS OF DESIGN SBF36.
 - PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT COMPATIBLE FOR 2-STAGE HEATING AND COOLING, BASIS OF DESIGN AMERICAN STD ACONT824.
 - PROVIDE MANUFACTURER RECOMMENDED CONDENSATE NEUTRALIZER KIT.
 - PROVIDE WITH MANUFACTURER RECOMMENDED CONCENTRIC VENT KIT, DESIGNED FOR TERMINATION THROUGH SLOPED ROOF.

AIR COOLED CONDENSING UNIT SCHEDULE																														
EQUIPMENT REQUIREMENTS																			ELECTRICAL REQUIREMENTS											
UNIT NO.	LOCATION	MANUFACTURER	MODEL NO.	CONDENSER FAN		TOTAL CLG. CAP.	COMPRESSOR			REFRIGERANT TYPE	SUMMER OUTDOOR AIR TEMP.	SUBCOOLIN G(DEG F)	COOLING EFFICIENCY (SEER)	EQUIPMENT NOTES	VOLT/PH	MIN AIC	MIN CKT AMP	MOCP	WIRE SIZE / CONDUIT	CONTROLLER						DISCONNECT		ELECTRICAL NOTES		
				QUANTITY	POWER		QUANTITY	STAGES	POWER											TYPE	SIZE	LOCATION	CTL DEVICE	AUX	BY	CONTROL BY	TYPE		BY	
ACCU-1	EXTERIOR	AMERICAN STANDARD	4A7A7036A	1	0.13 hp	33985 Btu/h	1	2		R-410A	95.0 °F	9.0 °F	0	ALL	240/1	2600	18.4	30	SEE CIRCUIT SCHEDULE	INTEGRAL	-	LOCATION	-	AUX	-	BY	DIV. 22/23	E1	DIV. 26	

- EQUIP NOTES:
- UNIT SHALL ALLOW FOR COOLING OPERATION DOWN TO 32°F.
 - 2-STAGE COOLING.
 - PROVIDE WITH FOLLOWING OPTIONS: COMPRESSOR CRANKCASE HEATER, COMPRESSOR HARD START KIT, LOW PRESSURE CUTOUT SWITCH, AND OUTDOOR THERMOSTAT.
 - RESISTANCE HEAT SWITCH.
 - FREESTAT, TUBING SIZED PER MANUFACTURER'S RECOMMENDATIONS.
 - THERMAL EXPANSION VALVE.
- ELEC NOTES:
- PROVIDE 30A, HEAVY-DUTY, NON-FUSED DISCONNECT IN A NEMA 3R ENCLOSURE.

GRILLES, REGISTERS AND DIFFUSERS SCHEDULE																
TYPE	SYSTEM	MANUFACTURER	MODEL NO.	FACE SIZE	NECK SIZE	MOUNTING TYPE	SPECIFICATION	MAX NC (dB)	MAX PD ("WG)	INTEGRAL DAMPER	FINISH COLOR	MATERIAL	REMARKS			
S-1	SUPPLY	PRICE	SPD	12x12	6"Ø	SURFACE	SQUARE PLAQUE DIFFUSER, ONE PIECE BACKPAN, 360° THROW	20	0.05	-	BY ARCH	STEEL	-			
S-2	SUPPLY	PRICE	SPD	12x12	8"Ø	SURFACE	SQUARE PLAQUE DIFFUSER, ONE PIECE BACKPAN, 360° THROW	20	0.05	-	BY ARCH	STEEL	-			
S-3	SUPPLY	PRICE	520	9"x6"	7"x4"	SURFACE	DOUBLE DEFLECTION GRILLE WITH FRONT BLADES PARALLEL TO LONG DIMENSION, 3/4" SPACING	20	0.05	OBD	BY ARCH	STEEL	-			
S-4	SUPPLY	PRICE	520	12"x4"	12"x6"	SURFACE	DOUBLE DEFLECTION GRILLE WITH FRONT BLADES PARALLEL TO LONG DIMENSION, 3/4" SPACING	20	0.05	OBD	BY ARCH	STEEL	-			
R-1	RETURN	PRICE	530	18"x16"	16"x14"	SURFACE	FIXED 45° DEFLECTION RETURN GRILLE, 3/4" BLADE SPACING	20	0.05	OBD	BY ARCH	STEEL	-			
R-2	RETURN	PRICE	530	26"x20"	24"x18"	SURFACE	FIXED 45° DEFLECTION RETURN GRILLE, 3/4" BLADE SPACING	20	0.05	OBD	BY ARCH	STEEL	-			

RANGE HOOD SCHEDULE																								
EQUIPMENT REQUIREMENTS													ELECTRICAL REQUIREMENTS											
UNIT NO.	LOCATION	MANUFACTURER	MODEL NO.	EXHAUST FAN		EXHAUST AIR CONNECTOR	SONES @ HIGH SPEED	DIMENSIONS			EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	WIRE SIZE / CONDUIT	CONTROLLER					CONTROL BY	DISCONNECT		ELECTRICAL NOTES	
				AIRFLOW	EXT. STATIC PRESS.			DUCT DIA.	LENGTH	WIDTH					HEIGHT	TYPE	SIZE	LOCATION	CTL DEVICE		AUX	BY		TYPE
RH-1	KITCHEN 101	Broan-NuTone	EW4330SS	350 CFM	0.30 in-wg	0'-6"	7.5	2'-6"	1'-7 1/2"	0'-3"	ALL	120/1	2	SEE CIRCUIT SCHEDULE	INTEGRAL	-	-	-	-	DIV. 22/23	DIV. 22/23	LOCKABLE CIRCUIT BREAKER	DIV. 26	

- EQUIP NOTES:
- FACTORY PROVIDED BACKDRAFT DAMPER AND ROUND EXHAUST DUCT CONNECTION.
 - MAX BLOWER CFM OF 460 CFM WITH 3-SPEED TOUCH CONTROL.
 - PROVIDE WITH INTEGRAL LED LIGHTING.
 - PROVIDE WITH MANUFACTURER RECOMMENDED ROOF JACK FOR SLOPED ROOF TERMINATION.
 - COLOR SELECTED BY ARCHITECT, BASIS OF DESIGN MODEL SELECTED WITH STAINLESS STEEL COLOR.
 - PROVIDE WITH S99010476 ALUMINUM GREASE FILTERS.

EXHAUST FAN & POWER ROOF VENT SCHEDULE																										
EQUIPMENT REQUIREMENTS															ELECTRICAL REQUIREMENTS											
UNIT NO.	LOCATION	SERVES	MANUFACTURER	MODEL NO.	TYPE	AIRFLOW	ESP	RPM	BRAKE POWER	POWER	SONES	UNIT WEIGHT	EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	WIRE SIZE / CONDUIT	TYPE	SIZE	LOCATION	CTL DEVICE	AUX	BY	CONTROL BY	DISCONNECT TYPE	BY	ELECTRICAL NOTES
EF-1	BATHROOM 104	BATHROOM 104	PENNBARRY	ZJ1-SC	CENTRIFUGAL CEILING CABINET BLOWER	75 CFM	0.50 in-wg	940	0.03 hp	0.17 hp	1.57	15 lb	ALL	120/1	2.13	SEE CIRCUIT SCHEDULE	SWITCH	-	BATHROOM 104	-	-	DIV. 26	DIV. 26	INTEGRAL	DIV. 22/23	
EF-2	BATHROOM 203	BATHROOM 203	PENNBARRY	ZJ1-SC	CENTRIFUGAL CEILING CABINET BLOWER	75 CFM	0.50 in-wg	940	0.03 hp	0.17 hp	1.57	15 lb	ALL	120/1	2.13	SEE CIRCUIT SCHEDULE	SWITCH	-	BATHROOM 203	-	-	DIV. 26	DIV. 26	INTEGRAL	DIV. 22/23	
EF-3	BATHROOM 207	BATHROOM 207	PENNBARRY	ZJ1-SC	CENTRIFUGAL CEILING CABINET BLOWER	75 CFM	0.50 in-wg	940	0.03 hp	0.17 hp	1.57	15 lb	ALL	120/1	2.13	SEE CIRCUIT SCHEDULE	SWITCH	-	BATHROOM 207	-	-	DIV. 26	DIV. 26	INTEGRAL	DIV. 22/23	

- EQUIP NOTES:
- PROVIDE WITH WHITE ALUMINUM GRILLE AT FAN INLET, INTEGRAL SPEED CONTROLLER, BACKDRAFT DAMPER, AND THERMAL OVERLOAD PROTECTION.
 - PROVIDE WITH VIBRATION ISOLATION HANGAR BRACKETS FOR JOIST MOUNTING. COORDINATE ANY ADDITIONAL FRAMING MEMBERS NECESSARY FOR HANGING WITH G.C.

WATER HEATER SCHEDULE																								
EQUIPMENT REQUIREMENTS													ELECTRICAL REQUIREMENTS											
UNIT NO.	LOCATION	MANUFACTURER	MODEL NO.	INPUT	INPUT @ MIN. FIRE	FUEL TYPE	TEMP RISE	COMBUSTION AIR DUCT DIAMETER	EXHUAUST AIR DUCT DIAMETER	EQUIPMENT NOTES	VOLT/PH	MIN CKT AMP	MOCP	WIRE SIZE / CONDUIT	CONTROLLER					CONTROL BY	DISCONNECT		ELECTRICAL NOTES	
															TYPE	SIZE	LOCATION	CTL DEVICE	AUX		BY	TYPE		BY
GFWH-1	MECH. ROOM	A.O. Smith	ACT-1991-N	199000 Btu/h	15000 Btu/h	NG	80 °F	3"	3"	ALL	120/1	5	20	SEE CIRCUIT SCHEDULE	INTEGRAL	-	-	-	-	-	DIV. 22/23	CORD AND PLUG	DIV. 22/23	

- EQUIP NOTES:
- PROVIDE ISOLATION AND PRESSURE RELIEF VALVES PER MANUFACTURER'S INSTRUCTIONS.
 - PROVIDE PVC CONCENTRIC VENT KIT FOR VERTICAL TERMINATION THROUGH SLOPED ROOF, 3" EXHAUST AND 3" COMBUSTION.
 - PROVIDE WITH MANUFACTURER RECOMMENDED CONDENSATE NEUTRALIZER KIT.

PLUMBING FIXTURE SCHEDULE													
UNIT NO.	DESCRIPTION	MANUFACTURER	MODEL	SPECIFICATIONS	FLUSH VALVE OR FAUCET	ACCESSORY	CONNECTIONS				MOUNTING HEIGHT		
							CW	HW	WASTE	VENT			
FD-1	FLOOR DRAIN - ROUND	SIoux CHIEF	833	CAST IRON, NICKEL BRONZE ADJUSTABLE STRAINER, FLASHING COLLAR CLAMP AND P-TRAP.	--	--	-	-	2"	1 1/2"	--		
LAV-1A	LAVATORY - COUNTER - ADA COMPLIANT	KOHLER	BRYANT	20"x16 1/2" OVAL DROP-IN BASIN, VITREOUS CHINA, SELF-RIMMING, FAUCET LEDGE, FRONT OVERFLOW	KOHLER TAUT 4" CENTERSET FAUCET, QUARTER-TURN CERAMIC DESC VALVING, (1.2 GPM), BRUSHED NICKEL FINISH. PROVIDE WITH MATCHING POP-UP DRAIN.	1 1/4" P-TRAP, CHROME ANGLE SUPPLIES & STOPS, ASSE 1070 POINT-OF-USE MIXING VALVE.	1/2"	1/2"	2"	1 1/2"	DROP-IN WITH CASEWORK AT ADA HEIGHT.		
SHR-1A	SHOWER - ADA COMPLIANT	BEST BATH	P6036E	WALLS BUILT UNDER GENERAL CONSTRUCTION. PROVIDE WITH 36"x60" ADA ACCESSIBLE FIBERGLASS SHOWER PAN WITH ASSOCIATED BRASS DRAIN.	KOHLER PURIST 1.75 GPM MULTI-FUNCTION SHOWER HEAD, HAND HELD SHOWER WITH 5'-0" FLEX HOSE, 30" SLIDE BAR, VACUUM BREAKER, MATCHING SHOWER CONTROL VALVE, INTEGRAL STOPS, BRUSHED NICKEL FINISH.	PROVIDE WITH ASSE 1016 MIXING VALVE. PROVIDE WITH 12"x20" SCHLUTER KERDI-BOARD SHOWER NICHE.	1/2"	1/2"	2"	1 1/2"	72" TO HEAD, 42" TO HAND HELD SHOWER AND VALVE		
SK-1A	FARMHOUSE SINK, SINGLE COMPARTMENT - ADA COMPLIANT	ELKAY	ELGUAD2519PDWH0	SINGLE COMPARTMENT UNDERMOUNT SINK, 25" X 18-1/2" X 5-1/2" D, MOLDED QUARTZ-RESIN, REAR-CENTER DRAIN.	KOHLER PURIST SEMI-PROFESSIONAL HIGH-ARC WITH 3-FUNCTION SPRAYHEAD, SINGLE LEVER HANDLE, FLEXIBLE SUPPLY LINES, CERAMIC DISC VALVING, AERATOR, BRUSHED NICKEL FINISH. PROVIDE WITH ASSOCIATED 3-1/2" SINK STRAINER BASKET, STRAINER, AND TAILPIECE. COORDINATE SINGLE CUTOUT HOLE WITH G.C. FOR FAUCET INSTALL.	1 1/2" P-TRAP, CHROME ANGLE SUPPLIES AND STOPS.	1/2"	1/2"	2"	1 1/2"	--		
WB-1	WASHING SUPPLY BOX	SIoux CHIEF	696-23	WASHING MACHINE OUTLET BOX, FIRE RATED, WHITE FINISH, 2" DRAIN, DOMESTIC HOT AND COLD WATER VALVES	--	2" P-TRAP WITH 24" STANDPIPE IN WALL.	1/2"	1/2"	2"	1 1/2"	COORDINATE ROUGH-IN ELEVATION WITH OWNER.		
WC-1A	WATER CLOSET - FLOOR MOUNT - ADA COMPLIANT	KOHLER	CIMARRON	VITREOUS CHINA, ELONGATED BOWL, 1.28 GPF	3/8" ANGLE SUPPLY LOOSE KEY STOP, CONTROLS TO OPEN SIDE OF BATHROOM PER ADA.	CACHET ELONGATED SEAT, WHITE, WITH SELF-SUSTAINING CHECK HINGE, FLAT BOLT CAPS, INSULATED TANK.	1/2"	-	4"	2"	17" TO RIM		



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PROJECT TITLE



SOUTH DAKOTA

DEPARTMENT OF THE MILITARY

RENOVATE GENERALS

QUARTERS BUILDING

250

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY JJF
PROJECT #	03221580	CHECKED BY KAO

SHEET TITLE

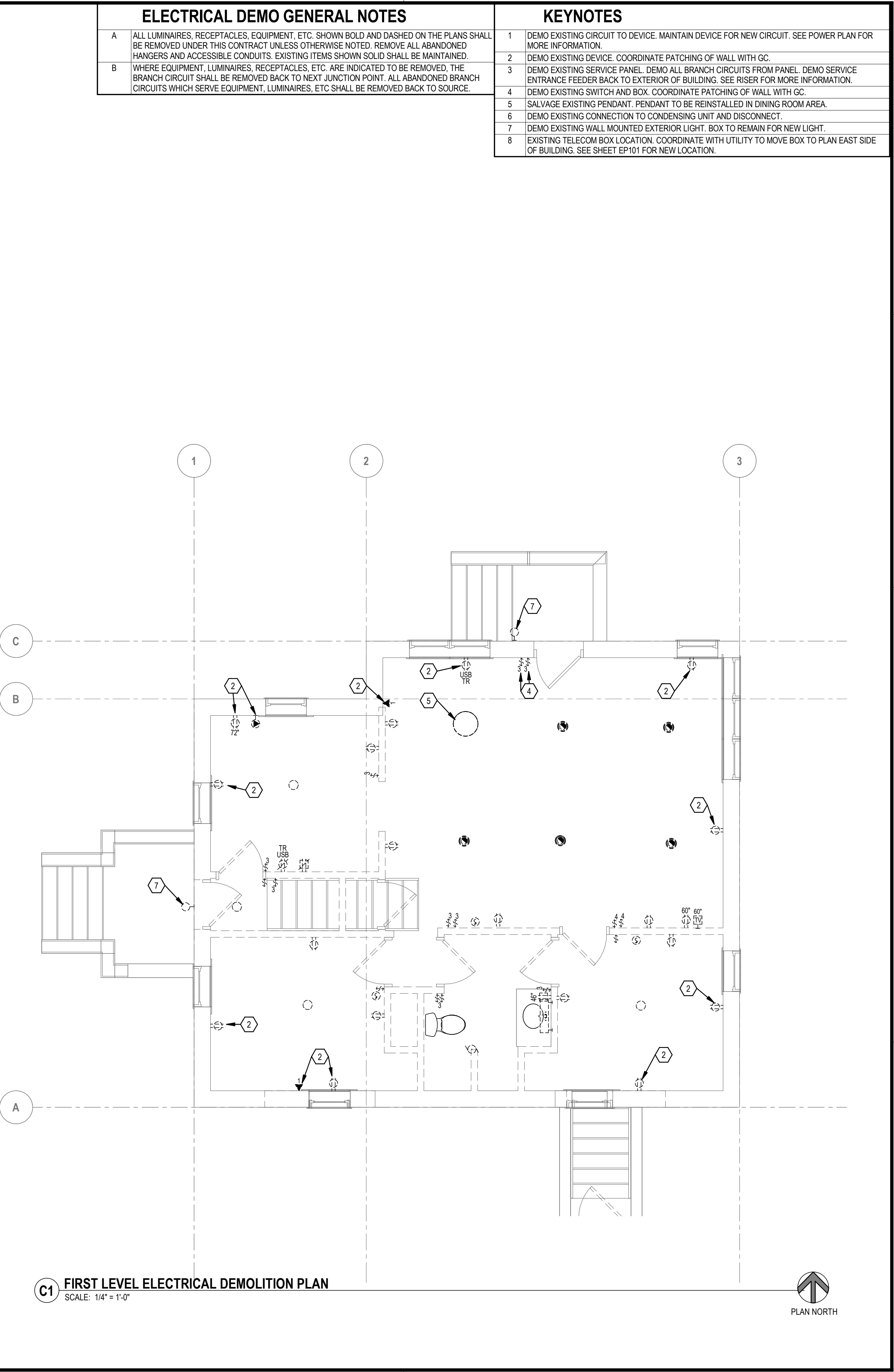
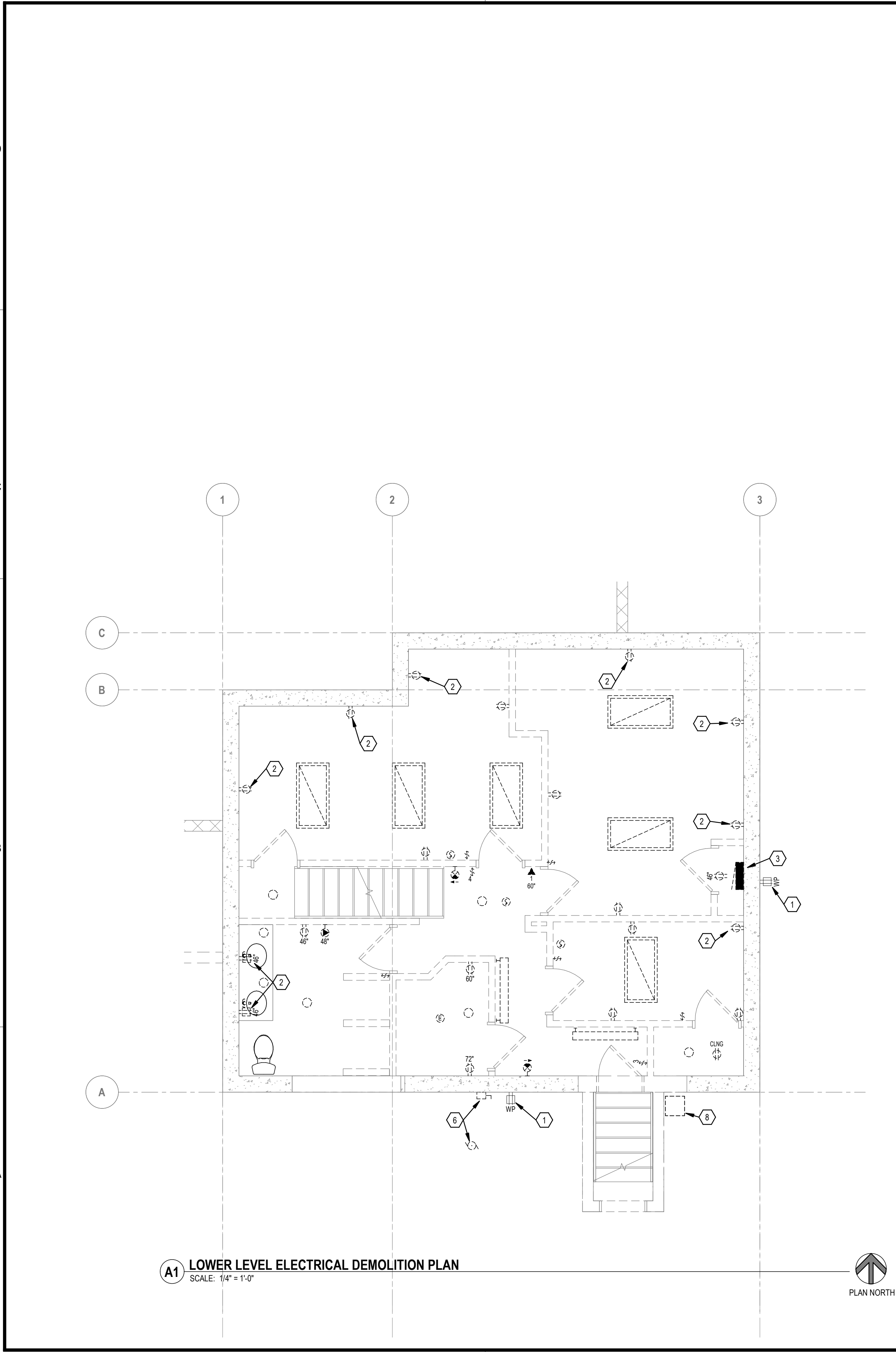
ELECTRICAL SYMBOLS,
ABBREVIATIONS, AND
GENERAL NOTES

F-001

SHEET NUMBER

LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT

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ELECTRICAL DEMO GENERAL NOTES		KEYNOTES	
A	ALL LUMINAIRES, RECEPTACLES, EQUIPMENT, ETC. SHOWN BOLD AND DASHED ON THE PLANS SHALL BE REMOVED UNDER THIS CONTRACT UNLESS OTHERWISE NOTED. REMOVE ALL ABANDONED HANGERS AND ACCESSIBLE CONDUITS. EXISTING ITEMS SHOWN SOLID SHALL BE MAINTAINED.	1	DEMO EXISTING CIRCUIT TO DEVICE. MAINTAIN DEVICE FOR NEW CIRCUIT. SEE POWER PLAN FOR MORE INFORMATION.
B	WHERE EQUIPMENT, LUMINAIRES, RECEPTACLES, ETC. ARE INDICATED TO BE REMOVED, THE BRANCH CIRCUIT SHALL BE REMOVED BACK TO NEXT JUNCTION POINT. ALL ABANDONED BRANCH CIRCUITS WHICH SERVE EQUIPMENT, LUMINAIRES, ETC SHALL BE REMOVED BACK TO SOURCE.	2	DEMO EXISTING DEVICE. COORDINATE PATCHING OF WALL WITH GC.
		3	DEMO EXISTING SERVICE PANEL. DEMO ALL BRANCH CIRCUITS FROM PANEL. DEMO SERVICE ENTRANCE FEEDER BACK TO EXTERIOR OF BUILDING. SEE RISER FOR MORE INFORMATION.
		4	DEMO EXISTING SWITCH AND BOX. COORDINATE PATCHING OF WALL WITH GC.
		5	SALVAGE EXISTING PENDANT. PENDANT TO BE REINSTALLED IN DINING ROOM AREA.
		6	DEMO EXISTING CONNECTION TO CONDENSING UNIT AND DISCONNECT.
		7	DEMO EXISTING WALL MOUNTED EXTERIOR LIGHT. BOX TO REMAIN FOR NEW LIGHT.
		8	EXISTING TELECOM BOX LOCATION. COORDINATE WITH UTILITY TO MOVE BOX TO PLAN EAST SIDE OF BUILDING. SEE SHEET EP101 FOR NEW LOCATION.



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**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY JJF
PROJECT #	03221580	CHECKED BY KAO

SHEET TITLE

**ELECTRICAL
DEMOLITION PLAN**

SHEET NUMBER

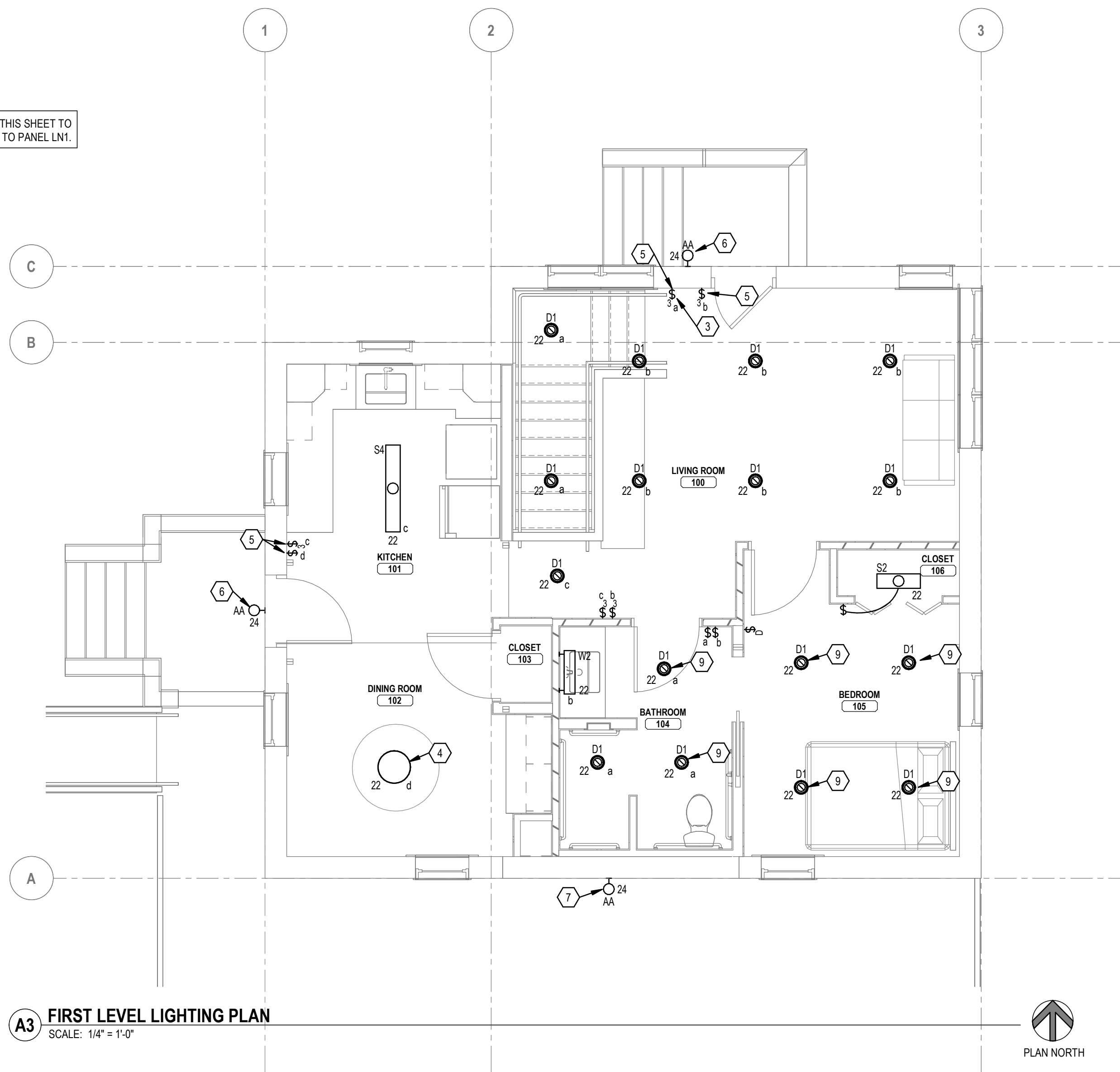
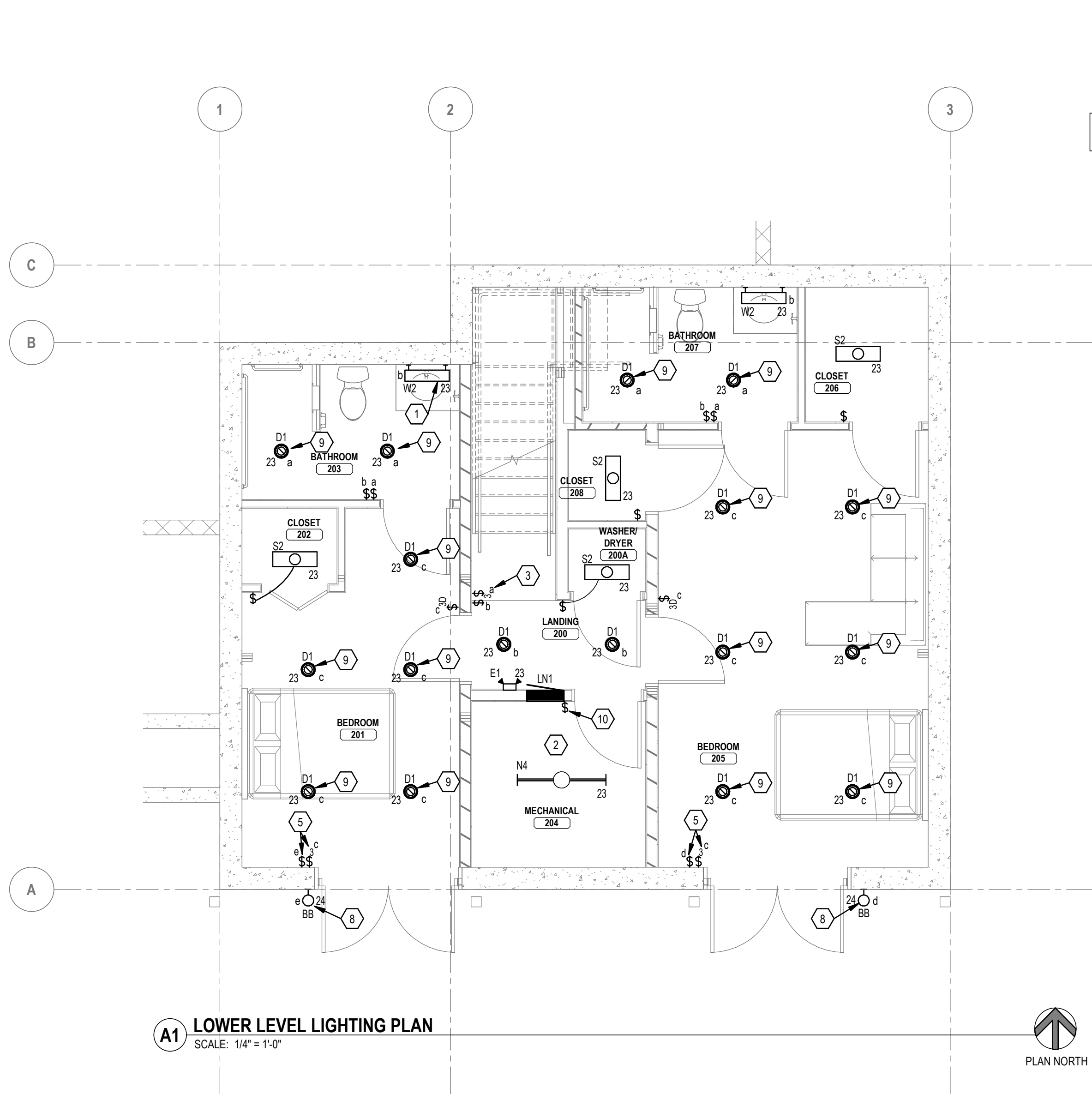
ED101

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LIGHTING GENERAL NOTES	
A	ALL FIXTURES, DEVICES, MATERIALS, ETC PROVIDED IN THIS PROJECT SHALL BE BABAA COMPLIANT.
B	TYPE MC CABLE WILL BE ALLOWED WHERE USED IN ACCORDANCE WITH THE NEC. TYPE NM WILL NOT BE ALLOWED.
C	WHERE JUNCTION BOXES ARE REQUIRED IN CONCEALED LOCATIONS THE CONTRACTOR SHALL COORDINATE WITH GC TO PROVIDE ACCESS PANELS AS REQUIRED. ACCESS PANELS ARE NOT SHOWN ON DRAWINGS.

KEYNOTES	
1	MOUNT FIXTURE 6" AND CENTERED ABOVE MIRROR. TYPICAL FOR ALL TYPE W2 FIXTURES.
2	SUSPEND FIXTURE IN THIS ROOM SO THAT BOTTOM OF FIXTURE IS 7' AFF. COORDINATE MOUNTING OF FIXTURE WITH MECHANICAL EQUIPMENT AND DUCT WORK IN ROOM.
3	SWITCH TO CONTROL LIGHTING IN STAIRCASE.
4	REINSTALL SALVAGED PENDANT. PROVIDE NEW LED BULBS THAT ARE COMPATABLE WITH PENDANT.
5	CUT AND PATCH EXISTING WALL FOR NEW SWITCH.
6	REUSE EXISTING BOX FOR NEW LIGHT FIXTURE.
7	CUT AND PATCH EXTERIOR WALL AS REQUIRED TO PROVIDE NEW BOX AND CONDUIT FOR EXTERIOR LIGHT. MOUNT FIXTURE 7' ABOVE DECK FLOOR.
8	CUT AND PATCH EXTERIOR WALL AS REQUIRED TO PROVIDE NEW BOX AND CONDUIT FOR EXTERIOR LIGHT. MOUNT FIXTURE 7' AFG.
9	PROVIDE FIRE RATED RECESSED LIGHT COVER FOR 6" DOWNLIGHT. BASIS OF DESIGN: TENMAT FF109-300.
10	SURFACE MOUNT BOX AND CONDUIT FOR NEW SWITCH.



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**SOUTH DAKOTA
DEPARTMENT OF THE
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RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE 08/31/2023	DRAWN BY JJF	
PROJECT # 03221580	CHECKED BY KAO	

SHEET TITLE

LIGHTING PLANS

SHEET NUMBER

EL101

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PROJECT TITLE



RC CAMP RAPID

ISSUES

SHEET TITLE

POWER AND TECHNOLOGY PLANS

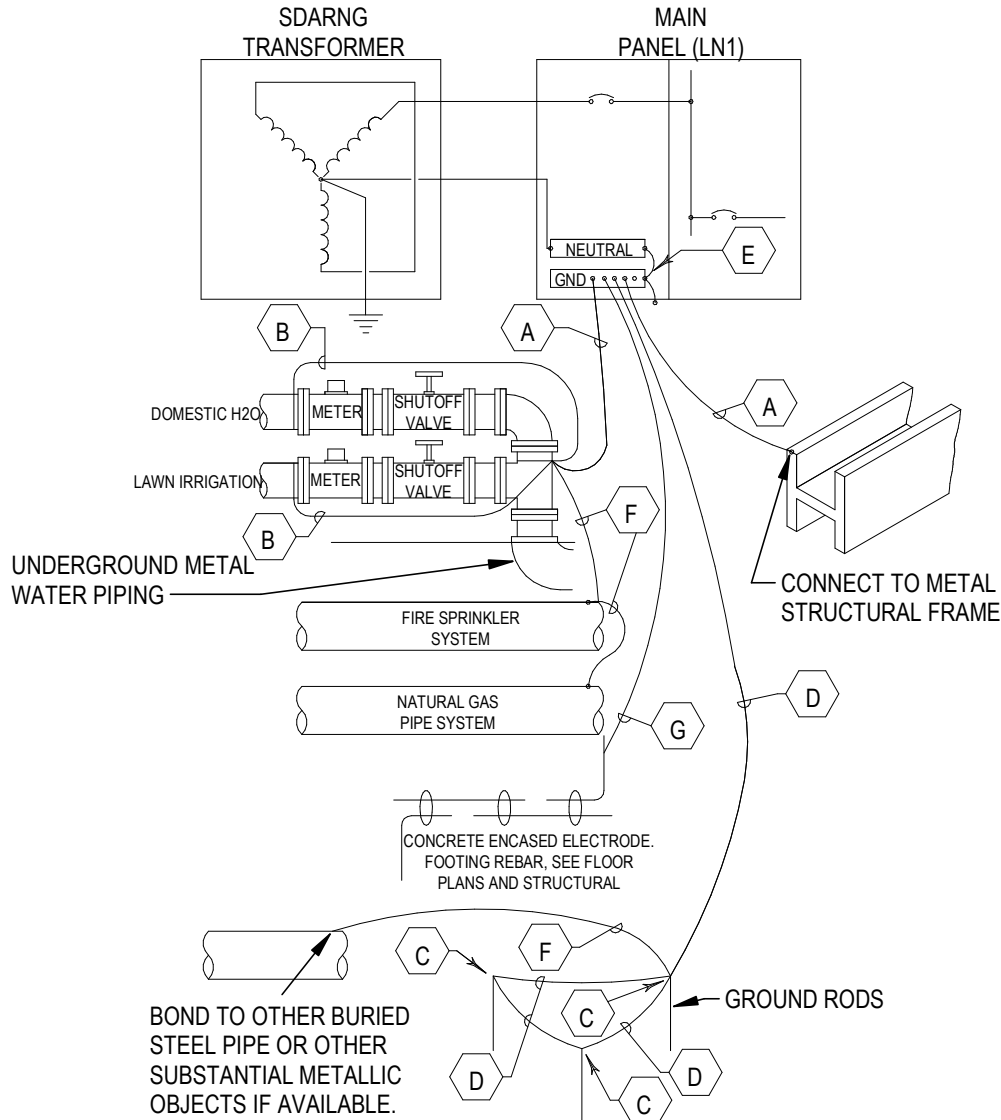
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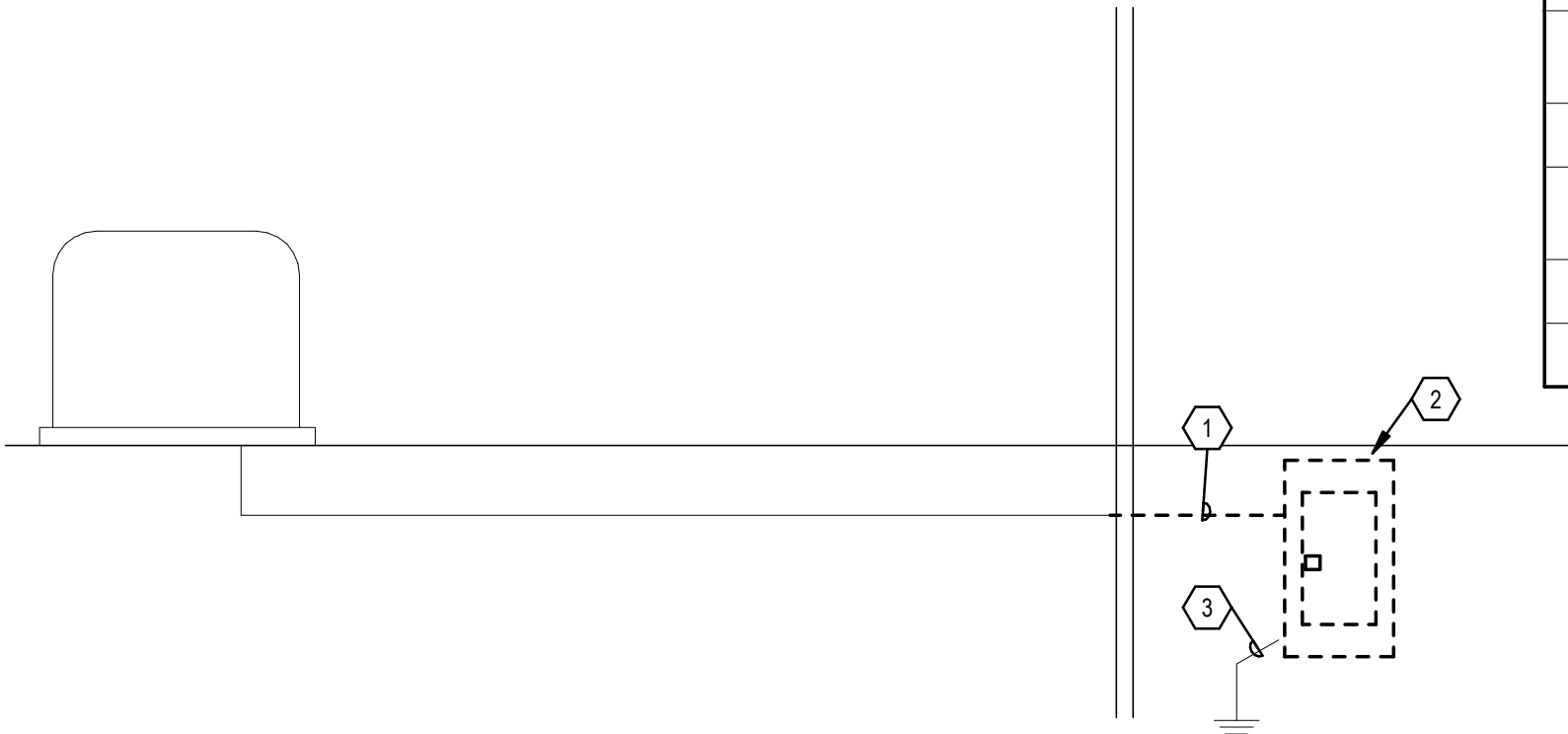
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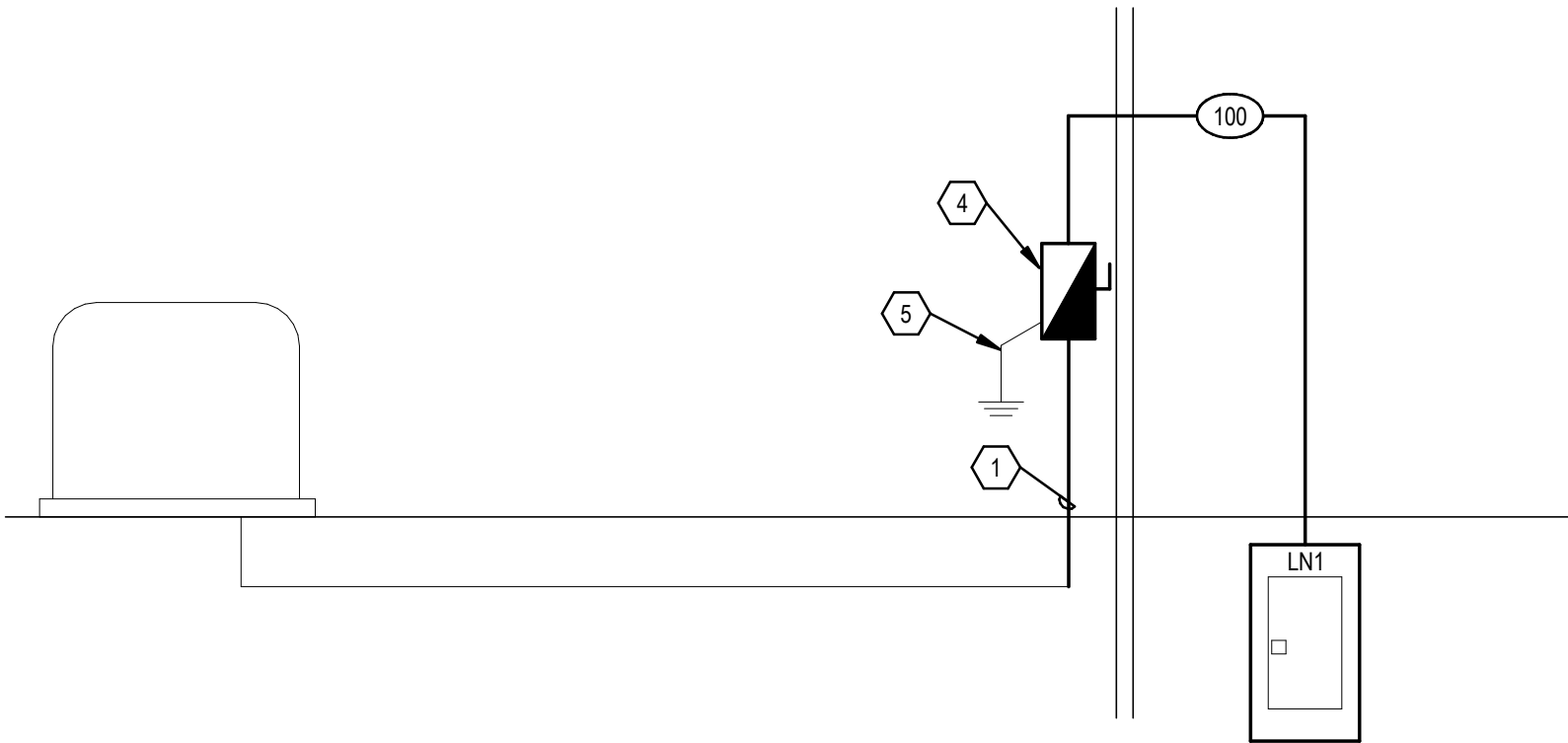
LISTED DRAWINGS SCALE(S) UNLESS REDUCED FROM ORIGINAL 22 x 34 FORMAT



C1 GROUNDING DETAIL
SCALE: NOT TO SCALE



B1 DEMO RISER DIAGRAM
SCALE: NOT TO SCALE



A1 NEW RISER DIAGRAM
SCALE: NOT TO SCALE

KEYNOTES

- A. GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN. SIZE PER NEC TABLE 250.66.
- B. BOND WATER SYSTEMS AROUND ALL VALVES AND METERS PER NEC.
- C. CONNECT GROUNDING ELECTRODE CONDUCTOR TO GROUND ROD WITH GROUND CONNECTOR.
- D. GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN. #6 AWG BARE COPPER CONDUCTOR.
- E. SYSTEM BONDING JUMPER SHALL NOT BE SMALLER THAN THE SIZES SHOWN IN NEC TABLE 250.66. WHERE THE SUPPLY CONDUCTORS ARE LARGER THAN 1100KCMIL COPPER, THE BONDING JUMPER SHALL HAVE AN AREA THAT IS NOT LESS THAN 12 1/2 PERCENT OF THE AREA OF THE LARGEST PHASE CONDUCTOR.
- F. BOND METAL WATER PIPING AND OTHER METAL PIPING SYSTEMS WITH BONDING JUMPER SIZED PER NEC.
- G. GROUND ELECTRODE CONDUCTOR TO GROUNDING ELECTRODE, AS SHOWN. #4 AWG COPPER CONDUCTOR.

KEYNOTES

- 1 DEMO EXISTING SERVICE ENTRANCE FEEDERS BACK TO EXTERIOR OF BUILDING AND RE-ROUTE TO NEW DISCONNECT. CONTRACTOR TO CONFIRM LOCATION WHERE FEEDERS ENTER BUILDING BELOW GRADE.
- 2 DEMO EXISTING PANEL. DEMO ALL BRANCH CIRCUITS ASSOCIATED WITH PANEL. EXTEND CIRCUITS THAT REMAIN FROM THE GARAGE TO THE NEW PANEL LOCATION.
- 3 DISCONNECT PANEL FROM EXISTING BUILDING GROUNDING SYSTEM. GROUNDING SYSTEM TO RECONNECT TO NEW SERVICE ENTRANCE DISCONNECT. SEE NEW RISER DIAGRAM FOR MORE INFORMATION.
- 4 PROVIDE A NEW 100A, SERVICE ENTRANCE RATED, FUSED DISCONNECT SWITCH, FUSED AT 100A IN A NEMA 3R ENCLOSURE.
- 5 CONNECT NEW SERVICE ENTRANCE DISCONNECT TO EXISTING BUILDING GROUNDING SYSTEM. VERIFY GROUNDING REQUIREMENTS MEET DETAIL C1 THIS SHEET AND NEC.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG SERIES	DESCRIPTION	VOLTAGE	MOUNTING	BALLAST/DRIVER	LAMP	WATTAGE	EQUIVALENTS
D1	JUNO	6SSEMWH HL SMMW5 90CRI, Q06 W G J6	6" LED DOWNLIGHT AND HOUSING, 1200LM, 35K, RATED FOR USE IN SHOWERS, BABAA COMPLIANT	120 V	RECESSED/CEILING	0-10V DIMMING	LED	10 W	SUBMIT FOR PRIOR APPROVAL
E1	LITHONIA	ELM4L UVOLT LTP	LED BUG-EYE, 700LM, EMERGENCY BATTERY BACK-UP, BABAA COMPLIANT	120 V	WALL	LED STANDARD	LED	1 W	SUBMIT FOR PRIOR APPROVAL
N4	LITHONIA	ZL1D L48 SMR 3000 FST MVOLT 35K 80 CRI WH	4" LED STRIP LIGHT, 3000LM, BABAA COMPLIANT	120 V	SUSPENDED	LED STANDARD	LED	30 W	SUBMIT FOR PRIOR APPROVAL
S2	LITHONIA	LBL2 2000LM 80CRI 35K NODIM MVOLT	2" LED WRAP, 2000LM, 35K, BABAA COMPLIANT	120 V	SURFACE/CEILING	0-10V DIMMING	LED	17 W	SUBMIT FOR PRIOR APPROVAL
S4	LITHONIA	LBL4 3000LM 80CRI 35K NODIM MVOLT	4" LED WRAP, 3000LM, 35K, BABAA COMPLIANT	120 V	SURFACE/CEILING	0-10V DIMMING	LED	17 W	SUBMIT FOR PRIOR APPROVAL
W2	LUMINII	EXPV-24"-72SO-35K-F-SA	2" LED VANITY, 3500LM, 35K, BABAA COMPLIANT	120 V	WALL	LED STANDARD	LED	22 W	SUBMIT FOR PRIOR APPROVAL
AA	LITHONIA	WDGE2 P2 35K 80CRI VW MVOLT SRM PE DDBXD	LED EXTERIOR WALL PACK, 2000LM, INTEGRAL PHOTOCELL, BABAA COMPLIANT	120 V	WALL	LED STANDARD	LED	20 W	SUBMIT FOR PRIOR APPROVAL
BB	LITHONIA	WDGE2 P2 35K 80CRI VW MVOLT SRM DDBXD	LED EXTERIOR WALL PACK, 2000LM, BABAA COMPLIANT	120 V	WALL	LED STANDARD	LED	20 W	SUBMIT FOR PRIOR APPROVAL

PANELBOARD: LN1

LOCATION: LANDING 200					VOLTAGE: 120/240 V, 1 ø 3 W.									
MOUNTING: RECESSED TYPE 1					A.I.C. RATING: 10,000 AMPS SYMMETRICAL									
MAIN DEVICE: 100 A MLO					SPECIAL: SPD									
BUS AMPS: 100 AMPS														
N	LOAD DESCRIPTION	RATING	P	CKT	A		B		CKT	P	RATING	LOAD DESCRIPTION	N	
1	REC BEDROOM 205	20 A	1	1	0.9	2.2			2					
1	REC - 203, 207, 206, 200	20 A	1	3			0.5	2.2	4	2	30 A	REC - WASHER/ DRYER 200A	4	
1	REC - EXTERIOR	20 A	1	5	0.4	1.1			6	1	20 A	REC - BEDROOM 201		
1	REC - BEDROOM 105	20 A	1	7			1.1	1.3	8	1	20 A	REC - LIVING ROOM 100	1	
1	REC ROOM 102, 100, 104	20 A	1	9	0.9	1.0			10	1	20 A	REC - FRIDGE	2	
3	FACP	20 A	1	11			0.2	0.0	12	1	20 A	EXISTING GARAGE OUTLETS	1	
4	RANGE	50 A	2	13	4.2	0.0			14	1	20 A	EXISTING GARAGE OUTLETS	1	
				15			4.2	0.4	16	1	20 A	REC - KITCHEN 101	1	
1	REC - KITCHEN 101	20 A	1	17	0.4	0.2			18	1	20 A	GFWH-1	1	
	ACCU-1	30 A	2	19			2.2	0.6	20	1	15 A	F-1	1	
				21	2.2	0.2			22	1	20 A	LTG - FIRST FLOOR	1	
1	LTG - LOWER LEVEL	20 A	1	23			0.3	0.1	24	1	20 A	LTG - EXTERIOR	1	
1	REC - LANDING 200	20 A	1	25	0.2	0.2			26	1	20 A	REC - BATHROOM 104	1	
1	REC - BATHROOM 203	20 A	1	27			0.2	0.1	28	1	15 A	KITCHEN HOOD	1,3	
1	REC - BATHROOM 207	20 A	1	29	0.2	0.2			30	1	20 A	WATER SOFTENER	1	
1	EF-2, EF-3	15 A	1	31			0.2	0.2	32	1	20 A	REC - WASHER/ DRYER 200A	1	
1	EF-1	15 A	1	33	0.1	0.0			34	1	20 A	SPARE	1	
	SPARE	20 A	1	35			0.0	0.0	36	1	20 A	SPARE	1	
	SPARE	20 A	1	37	0.0	--			38	1	--	SPACE		
	SPARE	20 A	1	39			0.0	--	40	1	--	SPACE		
	SPARE	20 A	1	41	0.0	--			42	1	--	SPACE		
					TOTAL LOAD:		14 kVA							
					TOTAL AMPS:		119 A							
LOAD CLASSIFICATION		CONNECTED		DEMAND		ESTIMATED		PANEL TOTALS						
REC		21960 VA		72.77%		15980 VA								
LTG		637 VA		125.00%		796 VA		CONNECTED LOAD: 27839 VA						
SPEC		678 VA		100.00%		678 VA		ESTIMATED DEMAND: 23079 VA						
MTR		4680 VA		123.08%		5760 VA		CONNECTED CURRENT: 116 A						
								EST. DEMAND CURRENT: 96 A						
NOTES (N):														
1. PROVIDE AN AFCI CIRCUIT BREAKER.														
2. PROVIDE A COMBINATION AFCI/GFCI BREAKER.														
3. PROVIDE A LOCKABLE CIRCUIT BREAKER.														
4. PROVIDE A GFCI BREAKER.														

CIRCUIT SCHEDULE			
MARK (AMPACITY)	SERVICE CONDUCTORS PH/N-C	4-WIRE (W/NEUTRAL) PH/N-GND-C	3-WIRE (NO NEUTRAL) PH-GND-C
15	12-3/4"	12-12-3/4"	12-12-3/4"
20	12-3/4"	12-12-3/4"	12-12-3/4"
25	10-3/4"	10-10-3/4"	10-10-3/4"
30	10-3/4"	10-10-3/4"	10-10-3/4"
35	8-1"	8-10-1"	8-10-3/4"
40	8-1"	8-10-1"	8-10-3/4"
45	6-1 1/4"	6-10-1 1/4"	6-10-1"
50	6-1 1/4"	6-10-1 1/4"	6-10-1"
60	6-1 1/4"	6-10-1 1/4"	6-10-1"
70	4-1 1/2"	4-8-1 1/2"	4-8-1 1/4"
80	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"
90	3-1 1/2"	3-8-1 1/2"	3-8-1 1/2"
100	2-1 1/2"	2-8-1 1/2"	2-8-1 1/2"

MISCELLANEOUS NOTES:

- ALL CIRCUITS (BRANCH, FEEDERS, AND SERVICE) SHALL BE SIZED PER THE OVERCURRENT DEVICE AND THIS CIRCUIT SCHEDULE UNLESS OTHERWISE NOTED. THE ABOVE CHART IS THE MINIMUM CONDUCTOR AND CONDUIT SIZE FOR THE OVERCURRENT DEVICE. CHART DOES NOT INCLUDE REQUIRED VOLTAGE DROP.
- CIRCUITS SHALL BE 4 WIRE (4W) UNLESS DENOTED WITH "3W" (3 WIRE) OR "K" (K RATED), OR IS THE SERVICE ENTRANCE FROM THE UTILITY.
- ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.
- ALL CONDUCTORS SHALL BE COPPER.
- THE NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTORS UNLESS 3-WIRE, OR NOTED OTHERWISE.
- THE NUMBER OF PARALLEL SETS IS INDICATED IN PARENTHESIS.
- SINGLE PHASE CIRCUITS SHALL BE SIZED PER THE OVERCURRENT DEVICE UNLESS OTHERWISE NOTED. SIZE THE CONDUCTORS AND CONDUIT PER THE 4-WIRE COLUMN OF THIS CHART BUT REDUCE THE AMOUNT OF PHASE CONDUCTORS AS REQUIRED.



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**SOUTH DAKOTA
DEPARTMENT OF THE
MILITARY
RENOVATE GENERALS
QUARTERS BUILDING
250**

RC CAMP RAPID

ISSUES

ISSUE	DATE	DESCRIPTION
ISSUE DATE	08/31/2023	DRAWN BY JUF
PROJECT #	03221580	CHECKED BY KAO

SHEET TITLE

**ELECTRICAL RISER AND
SCHEDULES**

SHEET NUMBER

E-601

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100% CONSTRUCTION DOCUMENTS