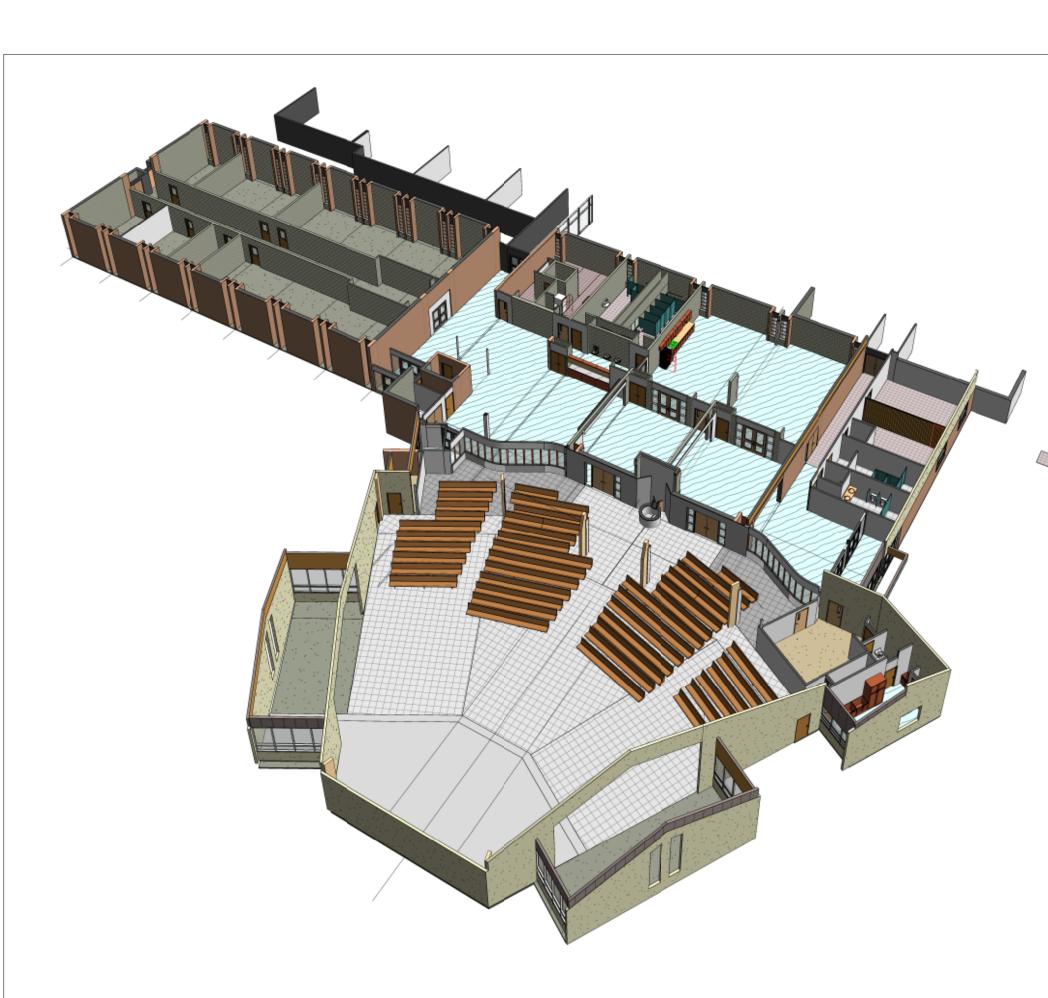
# OUR LADY OF THE PRESENTATION CHURCH REMODELING

LEE'S SUMMIT, MISSOURI



## ARCHITECTURAL

A01 OVERALL PLAN

A02 CODE SHEET

A03 EXISTING FLOOR PLANS

A04 DEMOLITION PLANs

A05 NEW FLOOR PLANS

A06 ENLARGED FLOOR PLANS

A07 FLOOR FINISH PLANS

A08 REFLECTED CEILING PLANS - CHURCH

A09 REFLECTED CEILING PLANS - OFFICES MEETING

A10 ROOF PLANS

A11 INTERIOR ELEVATIONS

A12 INTERIOR ELEVATIONS

A13 WALL SECTIONS

A14 SCHEDULES

### STRUCTURAL

S01 STRUCTURAL NOTES

S02 FRAMING PLANS

S03 STRUCTURAL DETAILS

S04 STRUCTURAL DETAILS

S05 STRUCTURAL DETAILS

## MECHANICAL, PLUMBING, ELECTRICAL

FP1 OVERALL FIRE PROTECTION PLAN

FP2 FIRE PROTECTION PLAN

MECHANICAL ROOF PLAN

M4 MECHANICAL DETAILS

MD1 MECHANICAL DEMOLITION PLAN

MD2 MECAHICAL DEMOLITION ROOF PLAN

PLUMBING PLAN

P2 ENLARGED PLUMBING PLAN

P3 PLUMBING SCHEDULES

P4 PLUMBING DETAILS

E3 POWER PLAN ROOF

ELECTRICAL SCHEDULES

ELECTRICAL DETAILS

ELECTRICAL RISER

FP3 FIRE PROTECTION SCHEDULES

FP4 FIRE PROTECTION DETAILS

MECHANICAL PLAN

M3 MECHANICAL SCHEDULES

P5 PLUMBING RISER

POWER NORTH

E2 POWER SOUTH

E4 LIGHTING PLAN NORTH

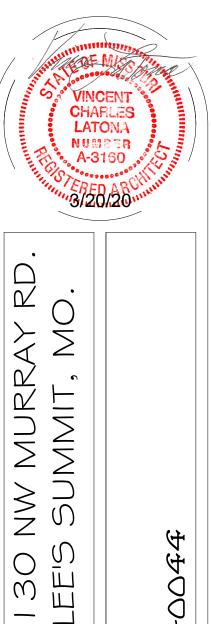
LIGHTING PLAN SOUTH

ELECTRICAL DEMOLITION NORTH PLAN

ED2 ELECTRICAL DEMOLITION SOUTH PLAN

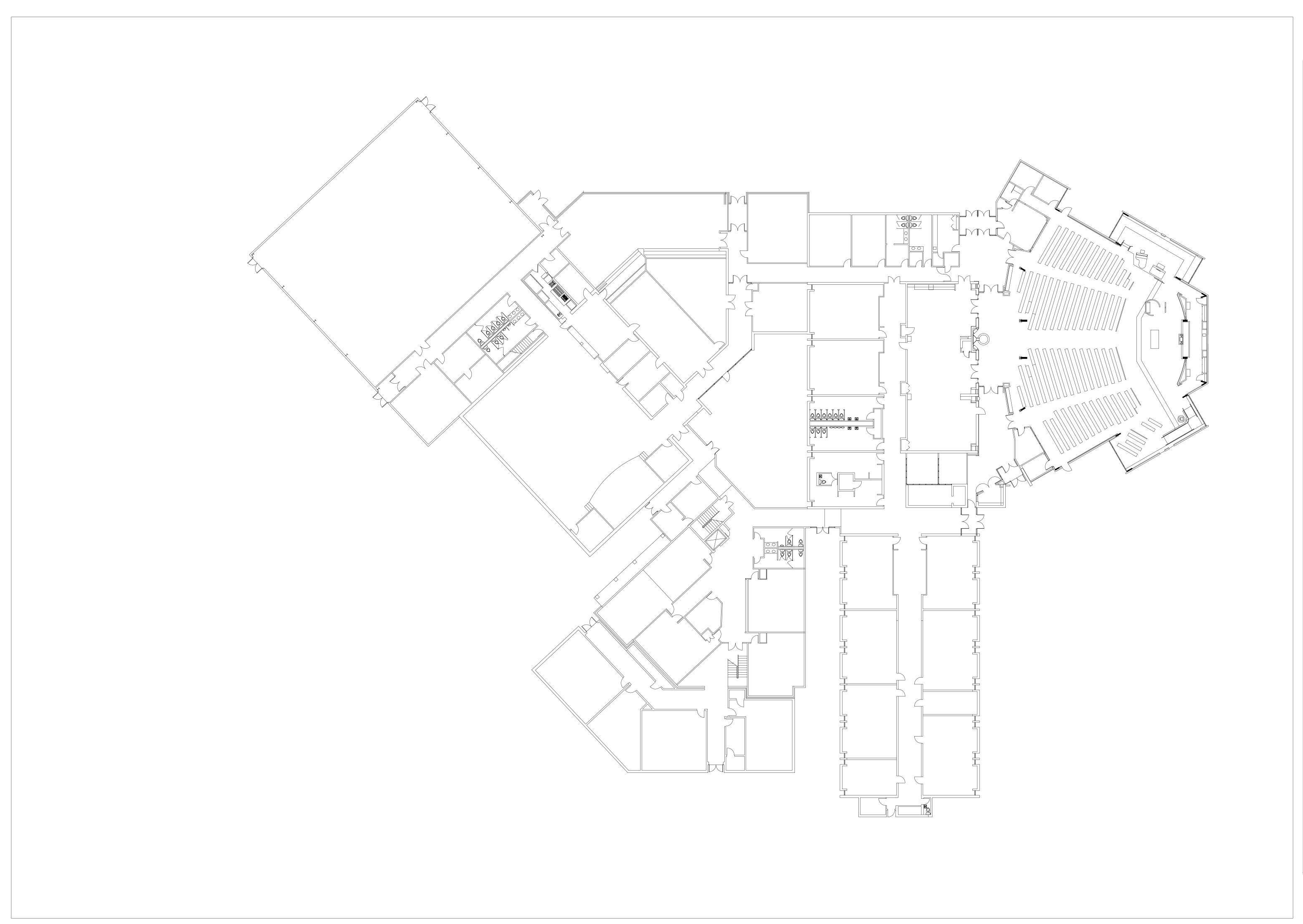
ED3 ELECTRICAL ROOF PLAN DEMOLITION

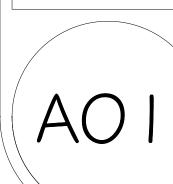
MODEL VIEW



Drawn by: UL

AOO





Drawn by:
Checked by:

Issue date: 2/1/20

Revised:

130 NW MURRAY RD. LEE'S SUMMIT, MO.

APPLICABLE CODES:

2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL PLUMBING CODE 2018 INTERNATIONAL MECHANICAL CODE

2017 NATIONAL ELECTRICAL CODE 2018 INTERNATIONAL FUEL GAS CODE 2018 INTERNATIONAL FIRE CODE

ANSI-A117.1 2017

ROOF CONSTRUCTION

FIRE-RESISTANCE RATING REQ. (FROM TABLE 601) V-B II-B Ο PRIMARY STRUCTURAL FRAME O BEARING WALLS - EXTERIOR O Ο BEARING WALLS - INTERIOR O 0 NONBEARING WALL - EXTERIOR 0 > 30' 0 > 30' NONBEARING WALL - INTERIOR O FLOOR CONSTRUCTION Ο

#### OCCUPANT LOAD :

CHURCH: | | | | OF PEWS @ | 8" PER PERSON = 740 PEOPLE THREE EXITS ARE REQUIRED PER IBC TABLE 1006.3.2 ACTUAL EXITS PROVIDED: 4 EXITS

MULLIGAN ROOM: 1960 SF/15 SF PER PERSON = 130 PEOPLE TWO EXITS ARE REQUIRED PER IBC TABLE 1015.1

ACTUAL EXITS PROVIDED: 4 EXITS MEETING ROOMS 141 \$ 142 : 1408 SF/15 SF PER PERSON = 94 PEOPLE TWO EXITS ARE REQUIRED PER IBC TABLE 1015.1

ACTUAL EXITS PROVIDED: 2 EXITS

OFFICE/MEETING WING

CHURCH

MAXIMUM ALLOWABLE TRAVEL DISTANCE: 250' ACTUAL MAXIMUM TRAVEL DISTANCE = 60' DIAGONAL DISTANCE: 124'-0"

MAXIMUM ALLOWABLE TRAVEL DISTANCE: 250' ACTUAL MAXIMUM TRAVEL DISTANCE = 102'

ACTUAL DISTANCE BETWEEN EXITS: 108' MAX.

MIN. ALLOWABLE DISTANCE BETWEEN EXITS: 120' / 2 = 60'

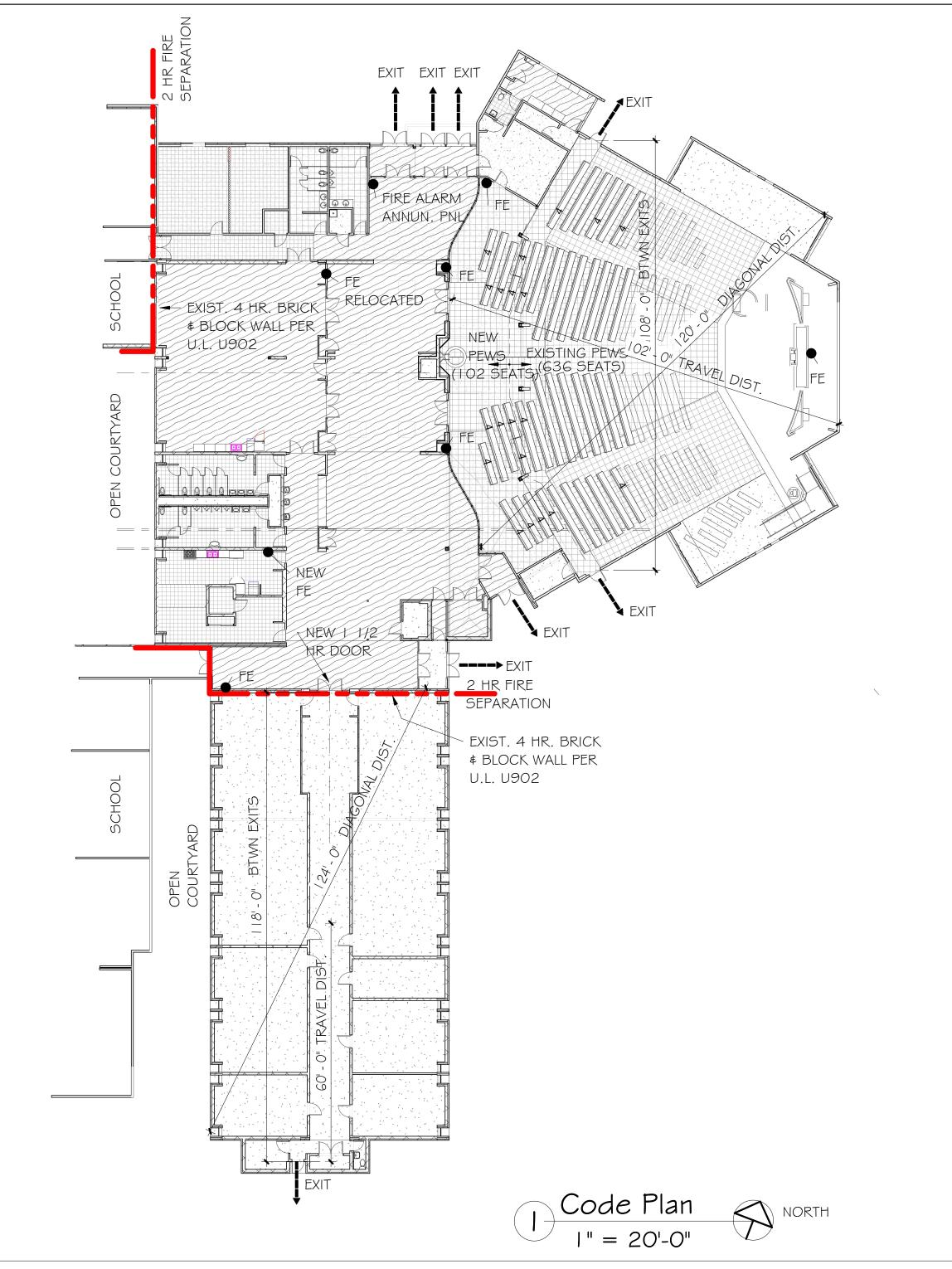
MIN. ALLOWABLE DISTANCE BETWEEN EXITS: 124'/2 = 62'ACTUAL DISTANCE BETWEEN EXITS: 1 15'

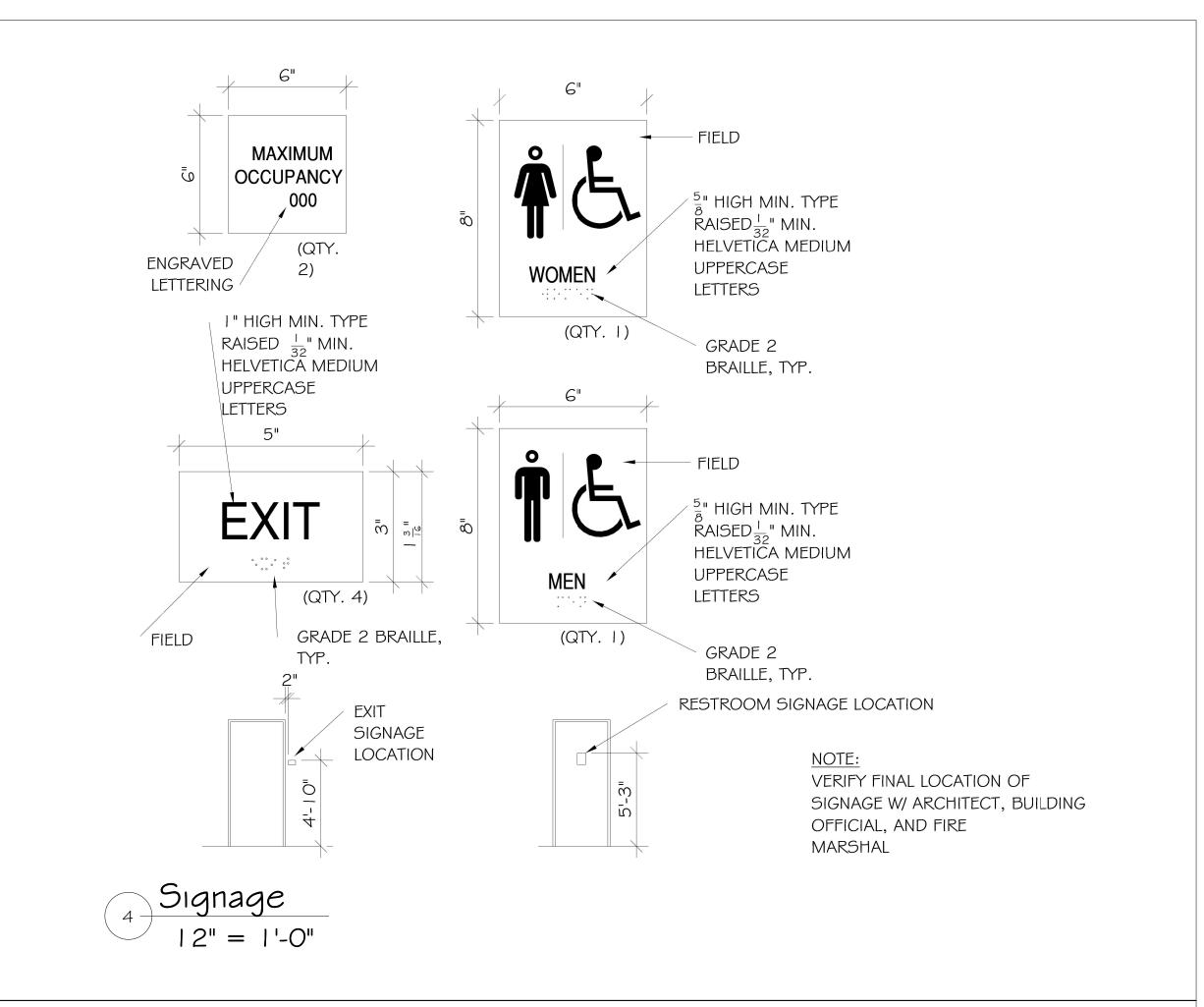
TRAVEL DISTANCE (TABLE 1017.2)

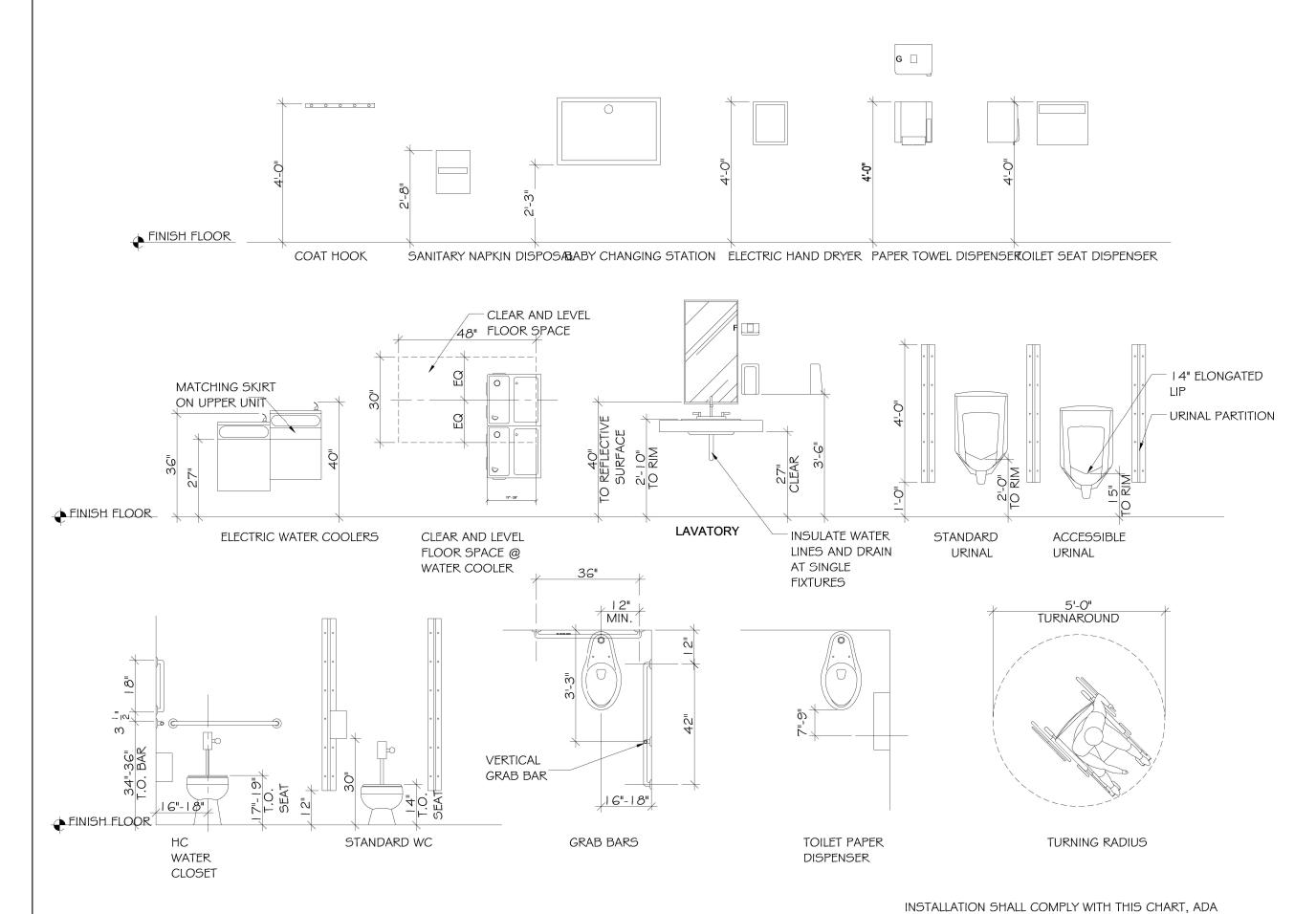
DIAGONAL DISTANCE: 120'-0"

SPACE	OCCUPANCY GROUP	SPRINKLER SYSTEM	FIRE ALARM SYSTEM	CONSTR. TYPE	ALLOWABLE NO. OF STORIES	ACTUAL NO. OF STORIES	HEIGHT		ALLOWABLE SQ. FT.	ACTUAL SQ. FT.
	(SEC. 303.4)			(SEC. 602)	(TABLE 504.4)		(TABLE 504.3)		(TABLE 506.2)	
CHURCH	A-3	YES	YES	V-B	2	I	55'	32'	24,000	20,364
OFFICE/ MEETING	A-3	NO	YES	II-B	2	I	60'	16'	9,500	7,050

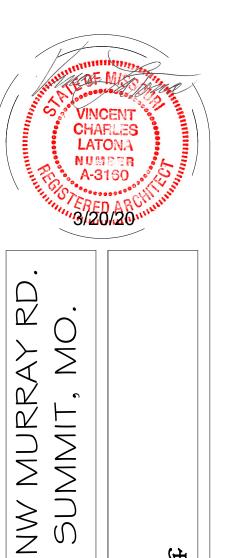
TOILET FIXTURES (TABLE						
_2902.1)_	WATER CLOSETS	<u>LAVATORIES</u>	DRINKING FOUNTAINS	SERVICE SINK		
REQUIRED						
MALE FEMALE	370/150=3 370/ 75=5		740/1000=1	ı		
ACTUAL MALE FEMALE	9 8	5 4	4	2		







Fixture Heights and Clearances 1/8" = 1'-0"



130 LEE'S

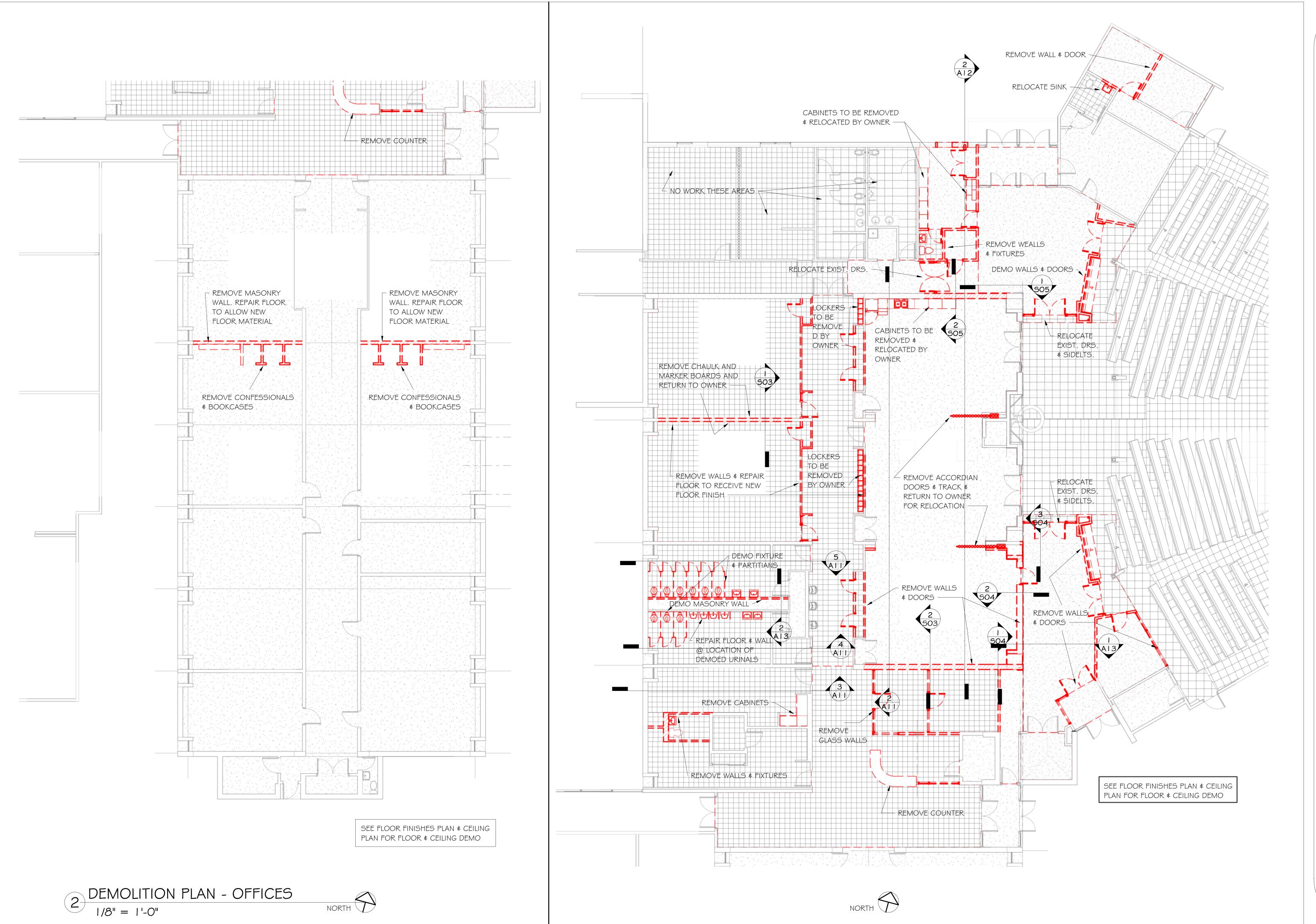
Drawn by: UL Checked by: l55/10 date: 02/01/20

Revised:

STANDARDS, ANSI A I 17.1 AND LOCAL JURISDICTIONAL REQUIREMENTS FOR ACCESIBLE

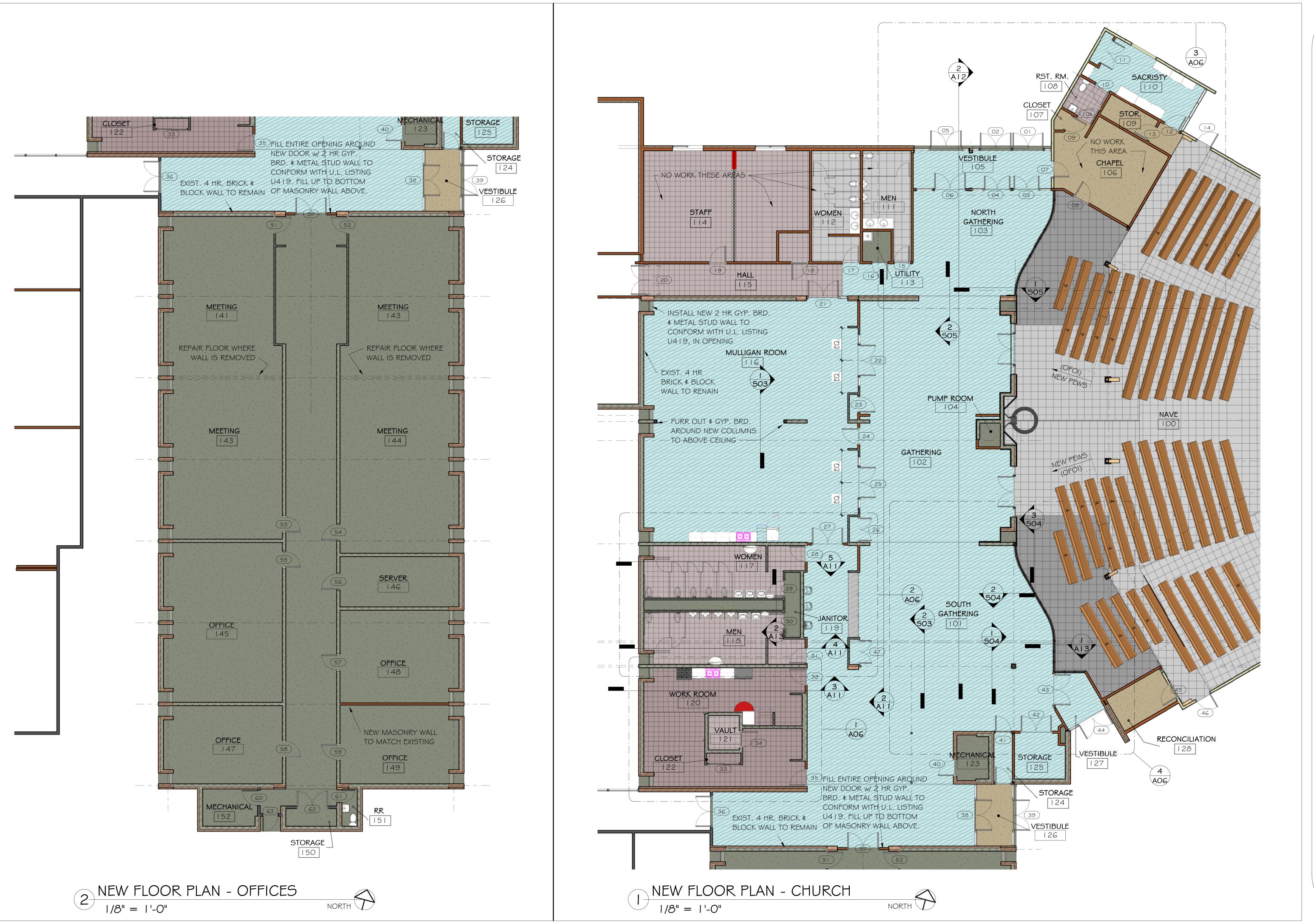






130 NW MURRAY LEE'S SUMMIT, MO

Drawn by: Checked by: lssue date: 2/1/20





Drawn by: Author

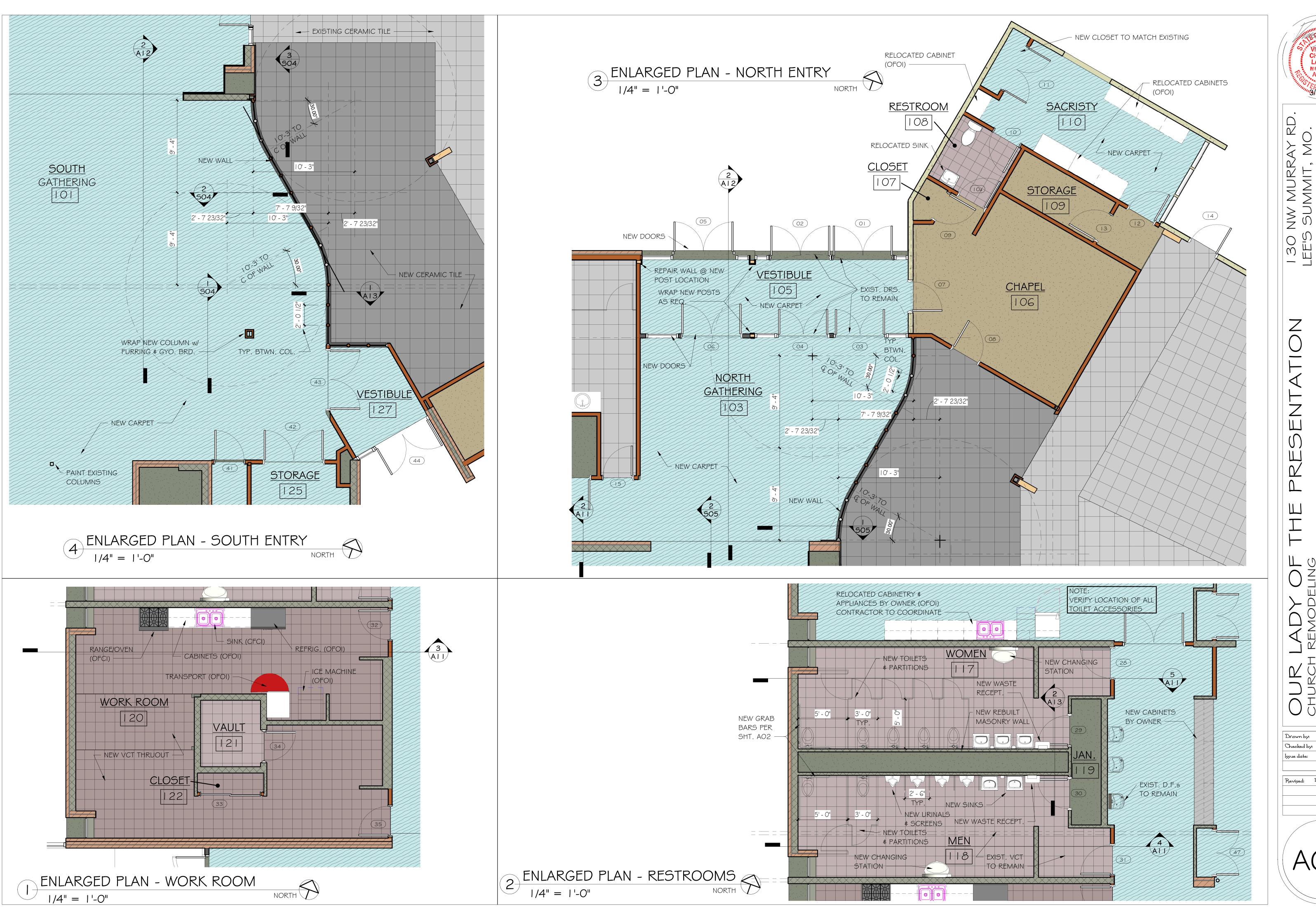
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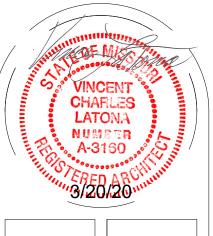
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A05

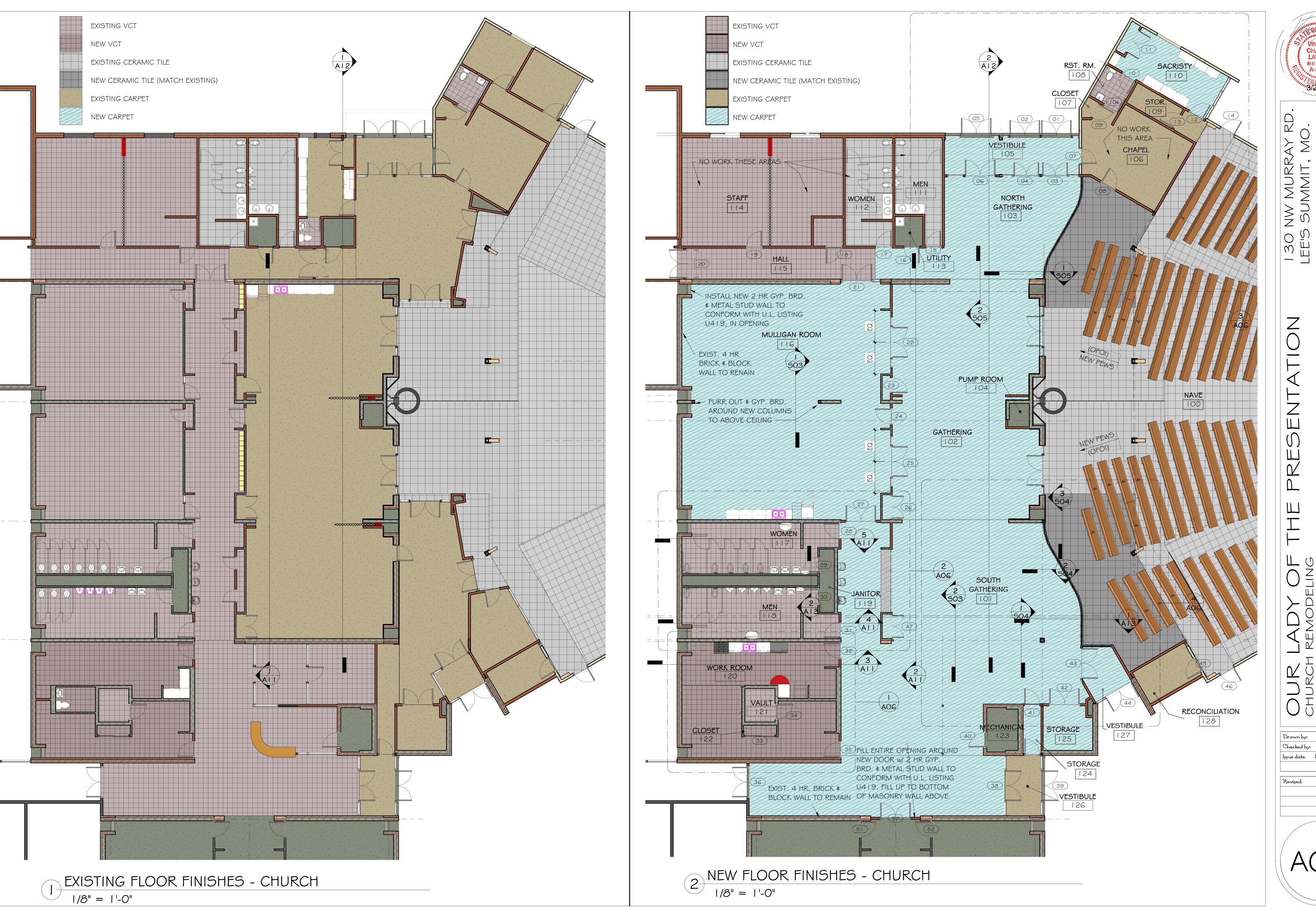
Revised:

NW MURRAY RD SUMMIT, MO.

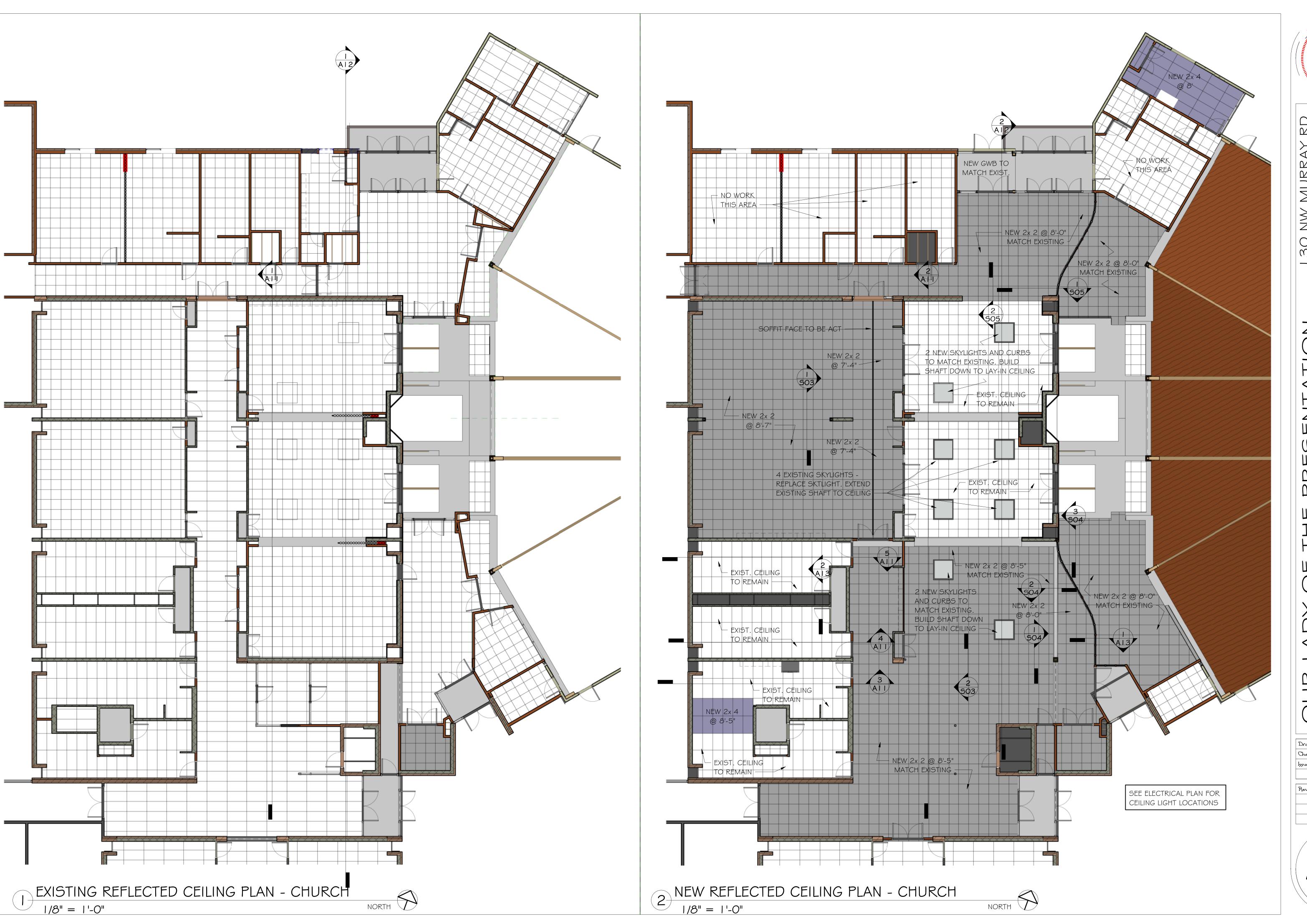




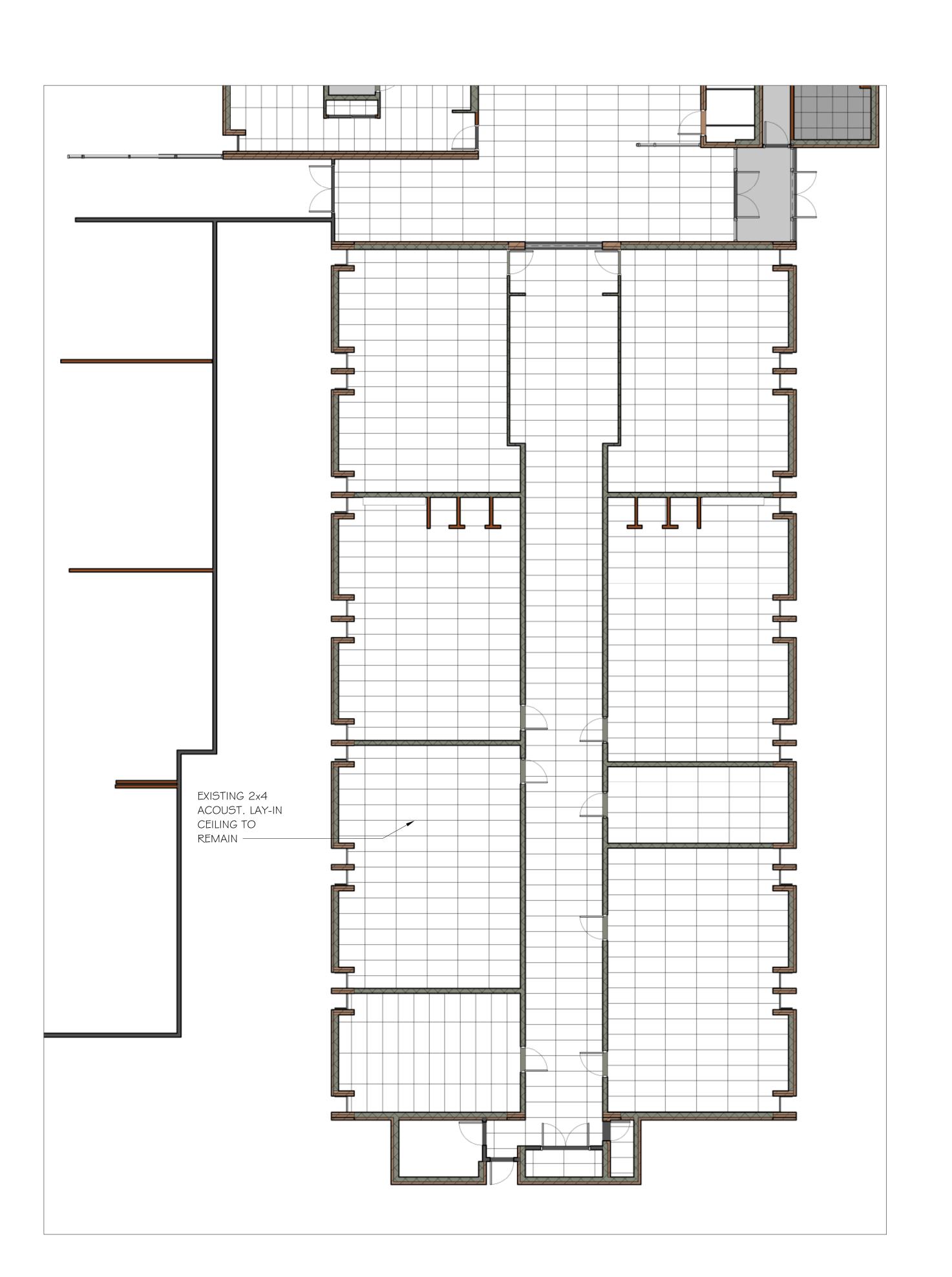
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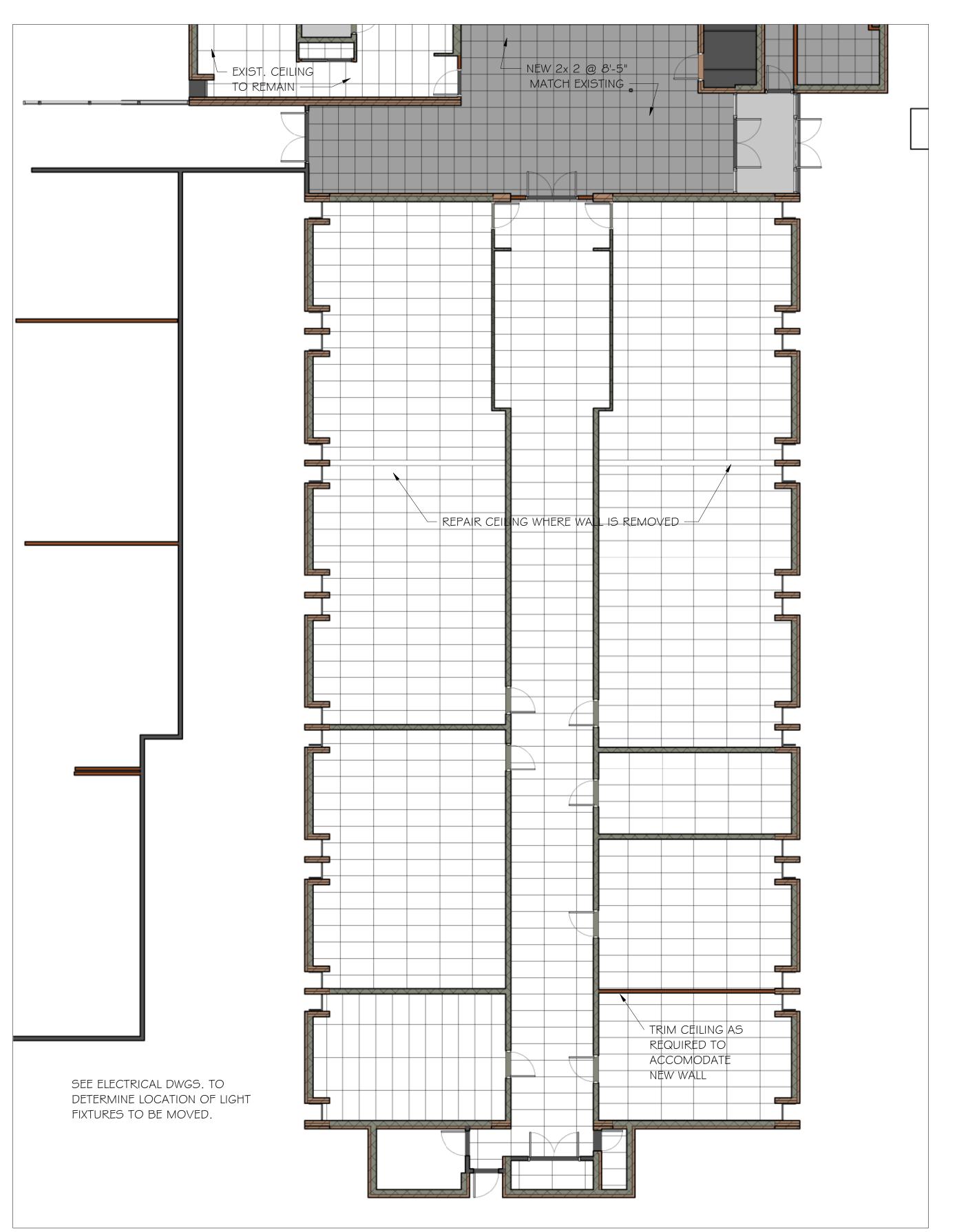


Drawn by: Author Checked by: Checker lssue date: 11/29/19



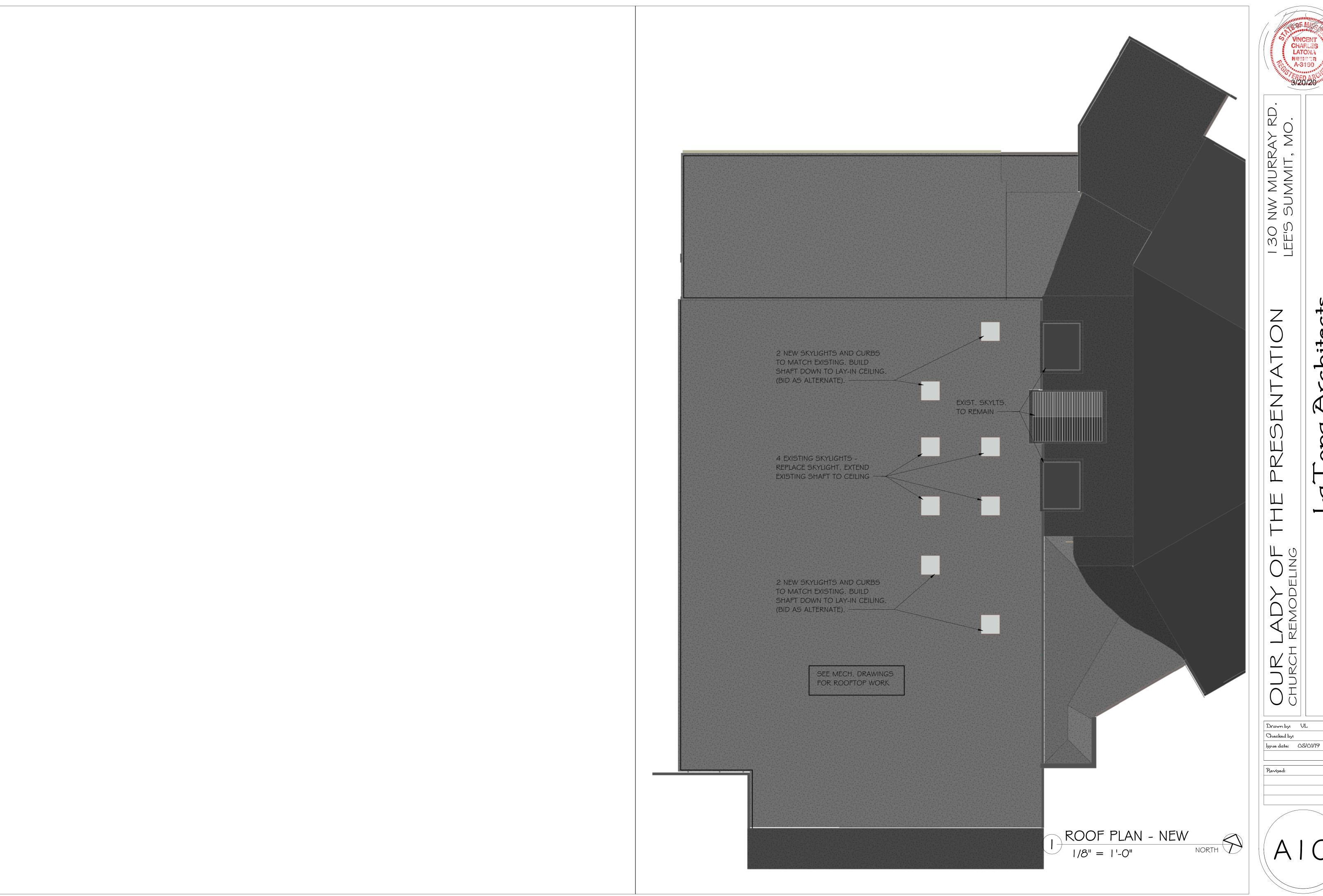
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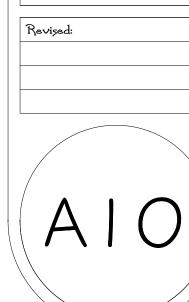




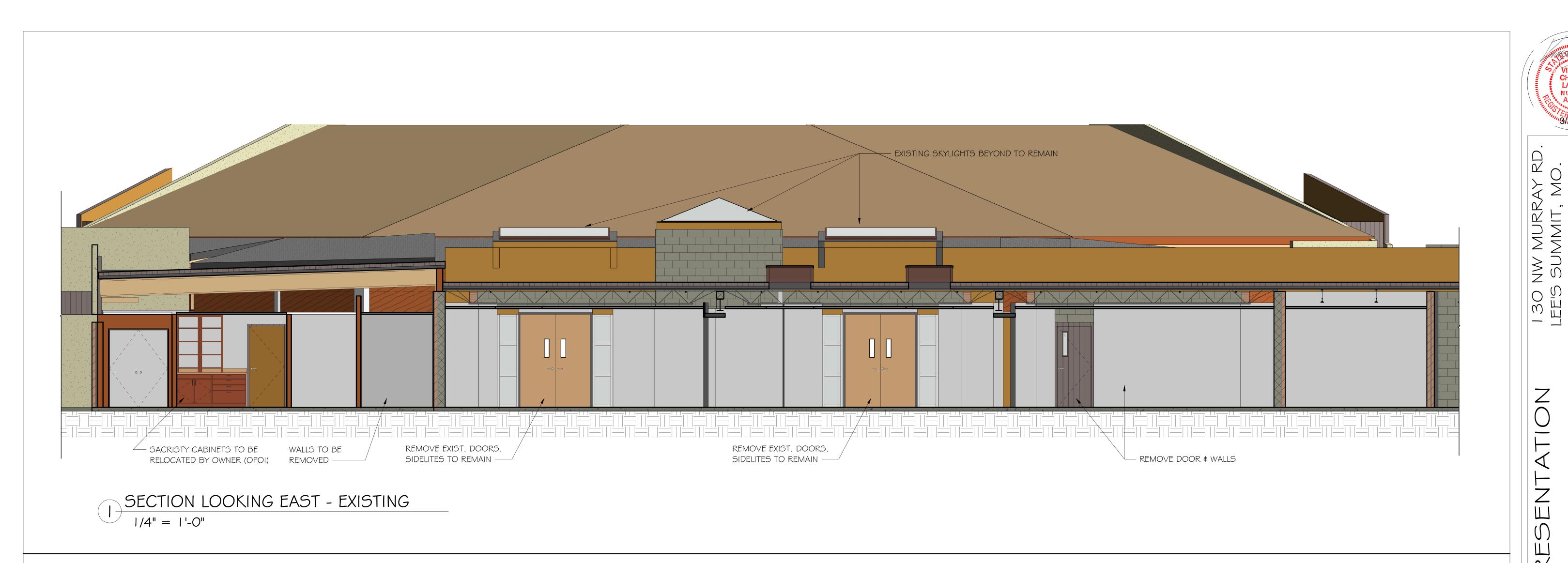
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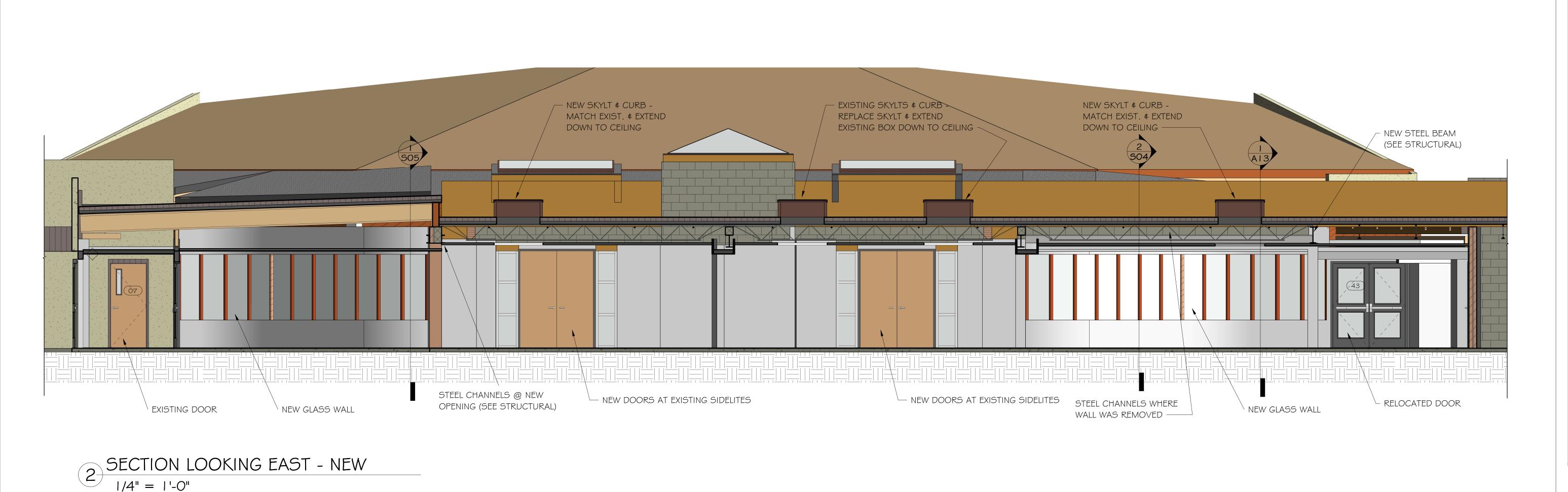
2 NEW REFLECTED CEILING PLAN - OFFICES/MEETING 1/8" = 1'-0"







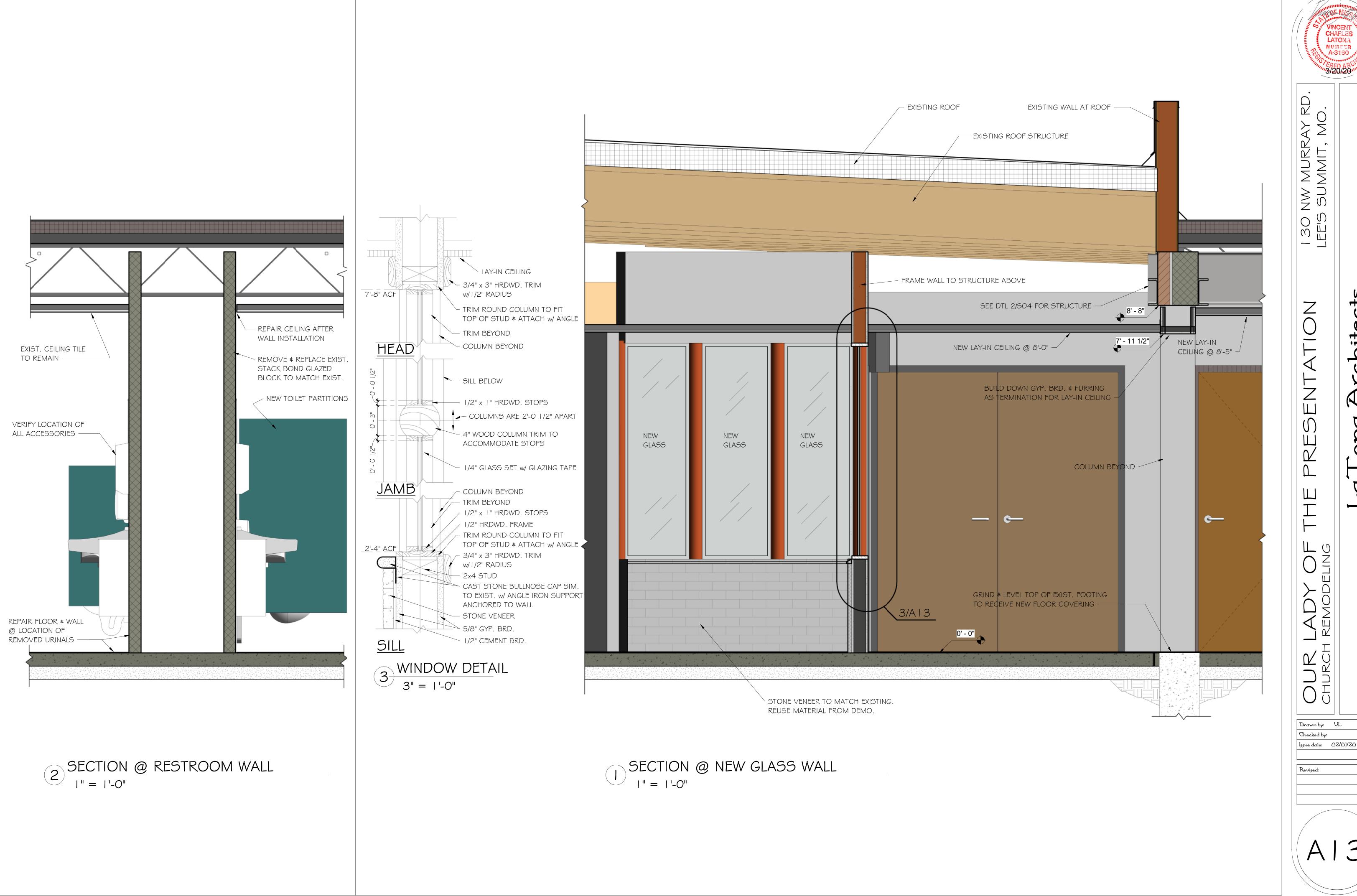




1/4" = 1'-0"

Drawn by: Author

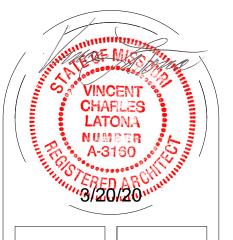
1550e date: 02/01/20



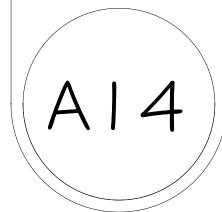
130 NW MURRAY RD LEE'S SUMMIT, MO.

				Room	Finish Schedu	ile			
Number	Name	Floor Finish	Base Finish	Wall - North	Wall - East	Wall - South	Wall - West	Ceiling Finish	Comments
100	NAVE	CERAMIC TILE	CERAMIC TILE	NA	NA	NA	GLASS \$ STONE VENEER	ACOUST. TILE	MATCH EXISTING
101	SOUTH GATHERING	CARPET	6" WOOD, STAINED	PAINT EXISTING	GLASS \$ STONE VENEER	PAINT EXISTING	PAINT EXISTING & NEW	ACOUST. TILE	
102	GATHERING	CARPET	6" WOOD, STAINED	PAINT EXISTING	PAINT EXISTING	NA	PAINT EXISTING & NEW	NO WORK	
103	NORTH GATHERING	CARPET	6" WOOD, STAINED	NA	GLASS \$ STONE VENEER	NA	PAINT EXISTING & NEW	ACOUST. TILE	
104	PUMP ROOM	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
105	VESTIBULE	CARPET	6" WOOD, STAINED	NA	PAINT EXISTING	NA	PAINT EXISTING & NEW	GYPSUM BOARD	
106	CHAPEL	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
107	CLOSET	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
108	REST ROOM	NO WORK	NO WORK	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	NO WORK	
109	STORAGE	NO WORK	6" WOOD, STAINED	PAINT EXISTING	PAINT NEW	PAINT EXISTING	PAINT EXISTING	NO WORK	
110	SACRISTY	CARPET	6" WOOD, STAINED	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	ACOUST. TILE	
111	MEN	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
112	WOMEN	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
113	UTILITY	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
114	STAFF	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
115	HALL	NO WORK	NO WORK	PAINT EXISTING	NA	CLEAN BRICK	PAINT NEW	ACOUST. TILE	
116	MULLIGAN ROOM	CARPET	6" WOOD, STAINED	NO WORK	PAINT EXISTING & NEW	PAINT EXISTING	NO WORK	ACOUST. TILE	
117	WOMEN	NO WORK	NO WORK	PAINT EXISTING	PAINT EXISTING	PAINT NEW MAS.	PAINT EXISTING	NO WORK	
118	MEN	REPAIR	NO WORK	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	NO WORK	
119	JANITOR	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
120	WORK ROOM	VINYL COMP. TILE	COVED RUBBER	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	SOME ACOUST. TILE	
121	VAULT	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
122	CLOSET	VINYL COMP. TILE	COVED RUBBER	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
123	MECHANICAL	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
124	STORAGE	CARPET	6" WOOD, STAINED	PAINT NEW	PAINT EXISTING	PAINT NEW	PAINT EXISTING	ACOUST. TILE	
125	STORAGE	CARPET	6" WOOD, STAINED	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	ACOUST. TILE	
126	VESTIBULE	CARPET	6" WOOD, STAINED	PAINT EXISTING \$ NEW	NA	PAINT EXISTING	NA	NO WORK	
127	VESTIBULE.	CARPET		NA	PAINT EXISTING	NA	PAINT NEW	NO WORK	
128	RECONCILIATION	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
141	MEETING	REPAIR @ DEMO	NO WORK	PAINT EXISTING	PAINT EXISTING	NA	PAINT EXISTING	REPAIR @ DEMO	
142	MEETING	REPAIR @ DEMO	NO WORK	PAINT EXISTING	PAINT EXISTING	NA	PAINT EXISTING	REPAIR @ DEMO	
143	MEETING	REPAIR @ DEMO	NO WORK	NA	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	REPAIR @ DEMO	
144	MEETING	REPAIR @ DEMO	NO WORK	NA	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	REPAIR @ DEMO	
145	OFFICE	NO WORK	NO WORK	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	NO WORK	
146	SERVER	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
147	OFFICE	NO WORK	NO WORK	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	NO WORK	
148	OFFICE	NO WORK	NO WORK	PAINT EXISTING	PAINT EXISTING	PAINT NEW	PAINT EXISTING	NO WORK	
149	OFFICE	NO WORK	NO WORK	PAINT NEW	PAINT EXISTING	PAINT EXISTING	PAINT EXISTING	NO WORK	
150	STORAGE	NO WORK	NO WORK	PAINT EXISTING	NO WORK	NO WORK	NO WORK	NO WORK	
151	REST ROOM	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	
152	MECHANICAL	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	NO WORK	

				Door Schedule	
Mark	Width	Height	Door Type	Frame Type	Comments
01	6' - 0"	7' - 0"			EXISTING TO REMAIN
)2	6' - 0"	7' - 0"			EXISTING TO REMAIN
)3	5' - 0"	7' - 0"			EXISTING TO REMAIN
)4	5' - 0"	7' - 0"			EXISTING TO REMAIN
)5	6' - 0"	7' - 0"			MATCH EXISTING
)6 )7	6' - 0" 3' - 0"	7' - 0" 7' - 0"			MATCH EXISTING EXISTING TO REMAIN
)8	3' - 0"	7' - 0"			EXISTING TO REMAIN
)9	3' - 0"	7' - 0"			EXISTING TO REMAIN
10	3' - 0"	7' - 0"			EXISTING TO REMAIN
10a	3' - 0"	7' - 0"			EXISTING TO REMAIN
11	5' - 0" 3' - 0"	6' - 8" 7' - 0"			RELOCATED BY OWNER
12 13	3' - 0"	7' - 0"			EXISTING TO REMAIN RELOCATED #101
14	3' - 0"	7' - 0"			EXISTING TO REMAIN
15	3' - 0"	7' - 0"			EXISTING TO REMAIN
16	3' - 0"	7' - 0"			EXISTING TO REMAIN
17	3' - 0"	7' - 0"		LIGHTONANTAL	EXISTING TO REMAIN
18 19	3' - 0"	7' - 0" 7' - 0"	SOLID CORE, FLUSH	HOLLOW METAL	RELOCATED FROM #106 EXISTING TO REMAIN
20	5' - 8"	7' - 0"			EXISTING TO NEWAIN  EXISTING RELOCATED FROM #103
21	6' - 0"	7' - 0"			EXISTING TO REMAIN
22	6' - 0"	8' - 0"	SOLID CORE, 2 LITES	HOLLOW METAL	RELOCATED FROM #109
23	3' - 0"	7' - 0"			EXISTING TO REMAIN
24 25	3' - 0"	7' - 0"	SOLID CODE 31 ITES	HOLLOW METAL	EXISTING TO REMAIN
25 26	6' - 0" 4' - 6"	8' - 0" 7' - 0"	SOLID CORE, 2 LITES	HOLLOW METAL	RELOCATED FROM #110 EXISTING TO REMAIN
27	6' - 0"	7' - 0"	WD w/ 2 GLS PANELS	HOLLOW METAL	MATCH #22 & #25
28	3' - 0"	7' - 0"			REFINISH EXISTING
29	3' - 0"	7' - 0"			EXISTING TO REMAIN
30	3' - 0"	7' - 0"			EXISTING TO REMAIN
31 32	3' - 0"	7' - 0" 7' - 0"	SOLID CORE w/ VISION LITE	EXISTING, KEEP SIDELITE	REFINISH EXISTING VERIFY OPENING SIZE
33	6' - 0"	7' - 0"	SOLID CORE W/ VISION LITE	EXISTING, REEF SIDELITE	EXISTING TO REMAIN
34	3' - 0"	7' - 0"			EXISTING TO REMAIN
35	3' - 0"	7' - 0"	SOLID CORE w/ VISION LITE	EXISTING, KEEP SIDELITE	VERIFY OPENING SIZE
36	6' - 0"	7' - 0"			EXISTING TO REMAIN
37	6' - 0"	7' - 0"	WD w/ 2 GLS PANELS	HOLLOW METAL	MATCH #22 & #25 w/ SIDELTS
38 39	6' - 0" 6' - 0"	7' - 0" 7' - 0"			EXISTING TO REMAIN EXISTING TO REMAIN
40	3' - 0"	7' - 0"			EXISTING TO REMAIN
41	3' - 0"	7' - 0"	SOLID CORE, FLUSH	HOLLOW METAL	VERIFY OPENING SIZE
42	6' - 0"	7' - 0"			EXISTING TO REMAIN
43	6' - 0"	7' - 0"	WD w/ 2 GLS PANELS	STOREFRONT FRAME	RELOCATED FROM #114
44 45	6' - 0" 3' - 0"	7' - 0" 7' - 0"			EXISTING TO REMAIN EXISTING TO REMAIN
45 46	3' - 0"	7' - 0"			EXISTING TO REMAIN
47	4' - 6"	7' - 0"			EXISTING TO REMAIN
51	3' - 0"	7' - 0"			EXISTING TO REMAIN
52	3' - 0"	7' - 0"			EXISTING TO REMAIN
53	3' - 0"	7' - 0"			EXISTING TO REMAIN
54 55	3' - 0"	7' - 0" 7' - 0"			EXISTING TO REMAIN EXISTING TO REMAIN
56	3' - 0"	7' - 0"			EXISTING TO REMAIN
57	3' - 0"	7' - 0"			EXISTING TO REMAIN
58	3' - 0"	7' - 0"			EXISTING TO REMAIN
59	3' - 0"	7' - 0"			EXISTING TO REMAIN
60 81	3' - 0"	7' - 0"			EXISTING TO REMAIN
61 62	2' - 6" 6' - 0"	7' - 0" 7' - 0"			EXISTING TO REMAIN EXISTING TO REMAIN
3	3' - 0"	7' - 0"			EXISTING TO REMAIN
101	3' - 0"	7' - 0"			RELOCATE TO #13, NEW STORAGE
102	5' - 0"	6' - 8"			RELOCATE BY OWNER TO SACRISTY
103	5' - 8"	7' - 0"			RELOCATE TO # 20
104	2' - 6"	7' - 0"			DEMO - RETURN TO OWNER
105 106	3' - 0"	7' - 0" 7' - 0"			DEMO - RETURN TO OWNER
107	6' - 0"	7' - 0"			DEMO - RETURN TO OWNER
08	6' - 0"	7' - 0"			DEMO - RETURN TO OWNER
09	6' - 0"	8' - 0"			RELOCATE DRS. & SIDELTS TO # 22
10	6' - 0"	8' - 0"		CHANGE OF ACCUMULATED AT THE	RELOCATE DRS. & SIDELTS TO # 25
11	6' - 0" 6' - 0"	8' - 0" 8' - 0"		CHANGE GLASS IN SIDELT TO CLEAR	REPLACE DRS. TO MATCH #108 REPLACE DRS. TO MATCH #108
12 13	3' - 0"	8' - 0" 7' - 0"		CHANGE GLASS IN SIDELT TO CLEAR	DEMO - RETURN TO OWNER
14	6' - 0"	8' - 0"			RELOCATE TO # 43
15	3' - 0"	7' - 0"			DEMO - RETURN TO OWNER
16	3' - 0"	7' - 0"			DEMO - RETURN TO OWNER
17	3' - 0"	7' - 0"			DEMO - RETURN TO OWNER
118	3' - 0"	7' - 0"			DEMO - RETURN TO OWNER
119	3' - 0"	7' - 0"			DEMO - RETURN TO OWNER
20  21	3' - 0" 2' - 6"	7' - 0" 7' - 0"			DEMO - RETURN TO OWNER  DEMO - RETURN TO OWNER
21	2' - 6"	7' - 0"			DEMO - RETURN TO OWNER  DEMO - RETURN TO OWNER
23	2' - 6"	7' - 0"			DEMO - RETURN TO OWNER
24	2' - 6"	7' - 0"			DEMO - RETURN TO OWNER
25	2' - 6"	7' - 0"			DEMO - RETURN TO OWNER
	2' - 6"	7' - 0"			DEMO - RETURN TO OWNER



Drawn by: UL
Checked by:
Issue date: \QZ/\Q1/Z\Q



#### GENERAL NOTES - STRUCTURAL

- I. The contractor shall verify dimensions and conditions before construction and notify the engineer of any discrepancies, inconsistencies, or difficulties affecting the work before proceeding.
- 2. The contractor shall coordinate all disciplines, verifying size and location of all openings, whether shown on structural drawings or not, as called for on architectural, mechanical, or electrical drawings. All conflicts, inconsistencies, or other difficulties affecting structural work shall be called to the architect or engineer's attention for direction before proceeding.
- All design and construction work for this project shall conform to the requirements of the 2018 International Building Code, as amended by the City of Lee's Summit, Missouri.
- These drawings are for this specific project and no other use is authorized.
- 5. Structural Design Load Criteria:
  - = 100 psf.
  - 25 psf. C. Snow Pq = 20 psf,  $I_s = 1.0$
  - D. Lateral Loads:
    - 1. Wind V = 1.5 mph, exposure B.  $I_w = 1.0$ 2. Seismic =  $S_5 = 0.13q$ ,  $S_1 = 0.06q$ .  $I_E = 1.0$
    - Site Classification C.
    - Seismic Desian Category B.
  - E. This project is designed to resist the most critical effects resulting from the load combinations of section 1605.3 of the 2018 International Building Code.

#### 6. Concrete:

- A. All concrete for footings and foundations shall develop minimum ultimate compressive design strength of 3500 psi in 28 days, but not less than 517 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 6 gallons of water per 100 pounds of cement and not over 4 inches of slump.
- B. All concrete for interior flat work shall develop minimum ultimate compressive design strength of 4000 psi in 28 days, but not less than 540 pounds of cement shall be used per cubic yard of concrete regardless of strengths obtained, not over 5.5 gallons of water per 100 pounds of cement and not over 4 inches of slump.

- C. The preceding minimum mix requirements may have water-reducing admixtures conforming to ASTM C494 added to the mix at manufacturer's dosage rates for improved workability.
- D. The preceding minimum mix requirements may have up to 15% maximum of the cement content replaced with an approved ASTM C6 | 8 Class C fly ash, provided the total minimum cementitious content is not reduced.
- Aggregate for all concrete shall be well graded from coarsest to finest with no more than 18 percent and not less than 8 percent retained on an individual sieve, except that less than 8 percent may be retained on coarsest sieve and on No. 50 and finer sieves.
- F. All interior concrete slabs on grade shall be placed over 10 mil, Class A Vapor Barrier per ASTM E1745 with less than 0.01 perms, tested after mandatory conditioning. All joints shall be lapped and sealed per barrier material shall also be sealed per manufacturer's recommendation prior to concrete placement. The vapor barrier shall be placed over free-draining granular material as prescribed by the project soils report.
- G. All concrete is reinforced concrete unless specifically called out as unreinforced. Reinforce all concrete not otherwise shown with same steel as in similar sections or areas. Any details not shown shall be detailed per ACI 315 and meet requirements of ACI 318, current editions.
- H. Control joints in dirt formed slab to be as shown on plans. Where not shown, limit controlled areas to not more than 150 square feet, or 12 feet on any
- Contractor shall verify that all concrete inserts, reinforcing and embedded items are correctly located and rigidly secured prior to concrete placement.
- Construction joints in beams, slabs, and grade beams shall occur at midspan (middle third) unless noted otherwise. Provide 2 x 4 horizontal keys at construction joints for shear transfer.
- K. No aluminum items shall be embedded in any concrete.

#### 7. Reinforcing Steel:

- A. All reinforcing steel shall conform to the requirements of ASTM A615 or A706 grade 60 steel. Welded plain wire fabric shall be supplied in sheets and conform to the requirements of ASTM A185.
- B. Clear minimum coverage of concrete over reinforcing steel shall be as follows:

Concrete placed against earth Formed concrete against earth Other

All coverage shall be nominal bar diameter minimum.

- C. All dowels shall be the same size and spacing as adjoining main bars (splice lap 40 bar diameters or 24" minimum unless noted otherwise).
- D. At corners of all walls, beams, and grade beams supply corner bars (minimum 2'-0" in each direction or 40 bar diameters) in outside face of wall, matching size and spacing of horizontal bars. Where there are no vertical bars in outside face of wall, supply 3 - #4 vertical support bars for corner bars.
- E. Bars marked continuous and all vertical steel shall be lapped 40 bar diameters (2'-0" minimum) at splices and embedments, unless shown otherwise. Splice top bars near midspan and splice bottom bars over supports, unless noted
- F. At all holes in concrete walls and slabs, add 2 #5 bars (opening dimension plus 80 diameters long) at each of four sides and add 2 - #5 x 5'-0" diagonally at each of four corners of hole. Openings in 8" thick walls are reinforced similar, but with 1 - #5 instead of 2 - #5, respectively.
- G. Accessories shall be as specified in latest edition of the ACI Detailing Handbook and the concrete Reinforcing Steel Institute Design Handbook. Maximum accessory spacing shall be 4'-0" on center, and all accessories on exposed surfaces are to have plastic coated feet.
- H. All slabs and stairs not shown otherwise shall be 6" thick with #4 bars at 12" on center each way. All exterior porches and stoops not otherwise detailed may be constructed in any standard manner, solid or hollow, but must be reinforced with #4 bars at 12" on center each way minimum. Porches shall be doweled to adjacent walls or grade beams with #4 bars at 12" on center, hooked or embedded 40 diameters into both members. Slope porches 1/8" per foot for drainage unless noted otherwise.

#### 8. Structural Steel:

- All structural steel beams shall be ASTM A992, grade 50 steel and all miscellaneous steel shall be ASTM A36 grade steel. Hollow Structural Sections (HSS) shall be ASTM A500, grade B. Pipe columns shall be ASTM A53, Type E, Grade B. Fabrication and erection shall be in accordance with AISC 303-05 "Code of Standard Practice for Steel Buildings and Bridges" in the 13th Edition of the AISC Steel Construction Manual.
- All welding shall conform to the recommendations of the AWS.

- C. All bolts not otherwise specified shall be 3/4" diameter high strength (ASTM A325-N). All bolts shall be fully pretensioned. All connections must be two
- D. All anchor bolts shall be ASTM F1554, Grade 36 unless noted otherwise.

#### 9. Post-Installed Anchors:

- A. Post-installed anchors shall be used only where specified on the drawings unless approved in writing by the engineer of record. See drawings for anchor diameter, spacing and embedment. Performance values of the anchors shall be obtained for specified products using appropriate design procedures and/or standards as required by the governing building code. Anchors installed in concrete shall have an ICC-ES Evaluation Service Report. Special inspection is required for all post-installed anchors.
- Mechanical anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ACI 355.2 and ICC-ES AC193. All anchors shall be installed per the anchor manufacturer's written instructions.
- C. Adhesive anchors used in cracked and uncracked concrete shall have been tested and qualified for use in accordance with ICC-ES AC308. All anchors shall be installed per the anchor manufacturer's written instructions.

#### 10. Timber and Wood Framing:

- A. Quality and construction of wood framing members and their fasteners for load supporting purposes not otherwise indicated on the drawings shall be in accordance with the 2018 International Building Code.
- B. Joists, studs, and truss members shall be Douglas Fir or Southern Pine visually graded lumber, with an allowable fiber stress in bending of 850 psi minimum and an elastic modulus of 1,200,000 psi.
- C. Wood members and sheathing shall be fastened with number and size of fasteners not less than that set forth in Table 2304.9.1 of the 2018 International Building Code.
- D. Sill plates shall be bolted to concrete walls or steel beams with 1/2" diameter bolts at 32" on center. Plates in direct contact with concrete or masonry shall be treated lumber.
- E. Service condition dry with moisture content at or below 19% in service.
- F. Parallel Strand Lumber (PSL) shall have an allowable flexural stress ( $F_b$ ) of 2,900 psi (reduced by size factor) and an elastic modulus (E) of 2,000,000 psi.

#### 11. Concrete Block Masonry:

- A. The contractor shall provide adequate temporary bracing for all masonry walls during construction.
- B. All concrete block shall have 9 gage (or larger) horizontal joint reinforcing (ladder or truss) per architectural drawings and specifications (IG" maximum vertical spacing).
- Cavity wall construction shall be reinforced as designed for specific concrete block used. The horizontal joint reinforcing shall be of the ladder or truss style per specification and continuous between brick and block, as prescribed by architectural drawings.
- D. Concrete block shall be reinforced as follows in 6", 8", 10", and 12" walls unless noted otherwise:
  - 1. Vertical reinforcing shall be a minimum of 1 #4 bar in 8" walls at 2'-8" on center, at each corner, at each door and window jamb, each side of control joints and in the end void of each length of wall. Lap splices for masonry vertical reinforcing shall be 48 bar diameters or 24" minimum.
  - 2. Horizontal reinforcing:
    - A. Horizontal joint reinforcing as noted above.
    - B. Continuous horizontal bars shall be included per section or detail in bond beam or optional running bond beam where noted. Where bond beams are continuous at corners of walls, supply corner bars matching size of horizontal bars (minimum 2'-0" or 40 bar diameters in each direction).
- E. Grout, where noted above, shall have a minimum design ultimate compressive strength of 2500 psi at 28 day test and 3/8" maximum aggregate size.
- F. Non-load bearing concrete block walls shall be isolated from adjacent structural elements with vertical 3/8" control joints and at the top of the wall with I" air space or compressible material and support per architectural detail.
- G. Unless otherwise covered on architectural plans or specifications, vertical control joints in masonry construction shall be 3/8" wide, full height of wall. Joints shall be spaced at a maximum of 24'-0" on center and coordinated with the architect. All horizontal joint reinforcing shall be discontinuous at control joints in masonry. All bond beam horizontal reinforcing shall be continuous through control joints.
- H. Walls shall be anchored top and bottom by dowels matching wall vertical reinforcing (unless noted otherwise) from floor slab bottom and bracing angles at the top, per details on the drawings.

#### 12. Shop Drawing Review:

- A. Bob D. Campbell and Company, Inc. will review the General Contractor's (GC) shop drawings and related submittals (as indicated below) with respect to the ability of the detailed work, when complete, to be a properly functioning integral element of the overall structural system designed by Bob D. Campbell and Company, Inc.
- B. Prior to submittal of a shop drawing or any related material to Bob D. Campbell and Company, Inc., the GC shall:
  - I. Review each submission for conformance with the means, methods, techniques, sequences and operations of construction and safety precautions and programs incidental thereto, all of which are the sole responsibility of the GC.
  - 2. Review and approve each submission.
- 3. Stamp each submission as approved.
- C. Bob D. Campbell and Company, Inc. shall assume that no submission comprises a variation unless the GC advises Bob D. Campbell and Company, Inc. with written documentation.
- Shop drawings and related material (if any) required are indicated below. Should Bob D. Campbell and Company, Inc. require more than ten (10) working days to perform the review, Bob D. Campbell and Company, Inc. shall so notify the GC.
  - 1. Concrete mix designs and material certificates including admixtures and compounds applied to the concrete after placement.
  - 2. Reinforcing steel shop drawings including erection drawings and bending details. Bar list will not be reviewed for correct quantities.
  - 3. Structural steel shop drawings including erection drawings and piece details. Include miscellaneous framing specified on the structural drawings, but do not submit framing specified on non-structural drawings for Bob D. Campbell and Company, Inc. review.
  - 4. Miscellaneous anchors shown on the structural drawings.
  - 5. Layout of engineered SIPPS panels and their connections.
  - 6. Parallel Strand lumber layout drawings.
- E. Bob D. Campbell and Company, Inc. shall review shop drawings and related materials with comments provided that each submission has met the above requirements. Bob D. Campbell and Company, Inc. shall return without comment unrequired material or submissions without GC approval stamp.

#### 13. Structural Special Inspection:

- A. The structural design for this project is based on completion of special inspections during construction in accordance with section 1704 of the 2018 International Building Code. The owner shall employ one or more qualified special inspectors to provide the required special inspections.
- B. Special Inspections shall be required for the items indicated below. The General Contractor shall provide notification to the inspector when items requiring inspection are ready to be inspected and provide access for those inspections.
  - High Strength Bolting
  - 2. Post-Installed Anchors

  - Structural Welding 4. Steel Frame Inspection
- C. The special inspector shall furnish inspection reports to the building official,
- owner, architect and structural engineer, and any other designated person. D. All discrepancies shall be brought to the immediate attention of the contractor for correction, then, if uncorrected, to the proper design authority, building official and structural engineer.
- E. The special inspector shall submit a final signed report stating that the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the building code.

#### 14. Copyright and Disclaimer:

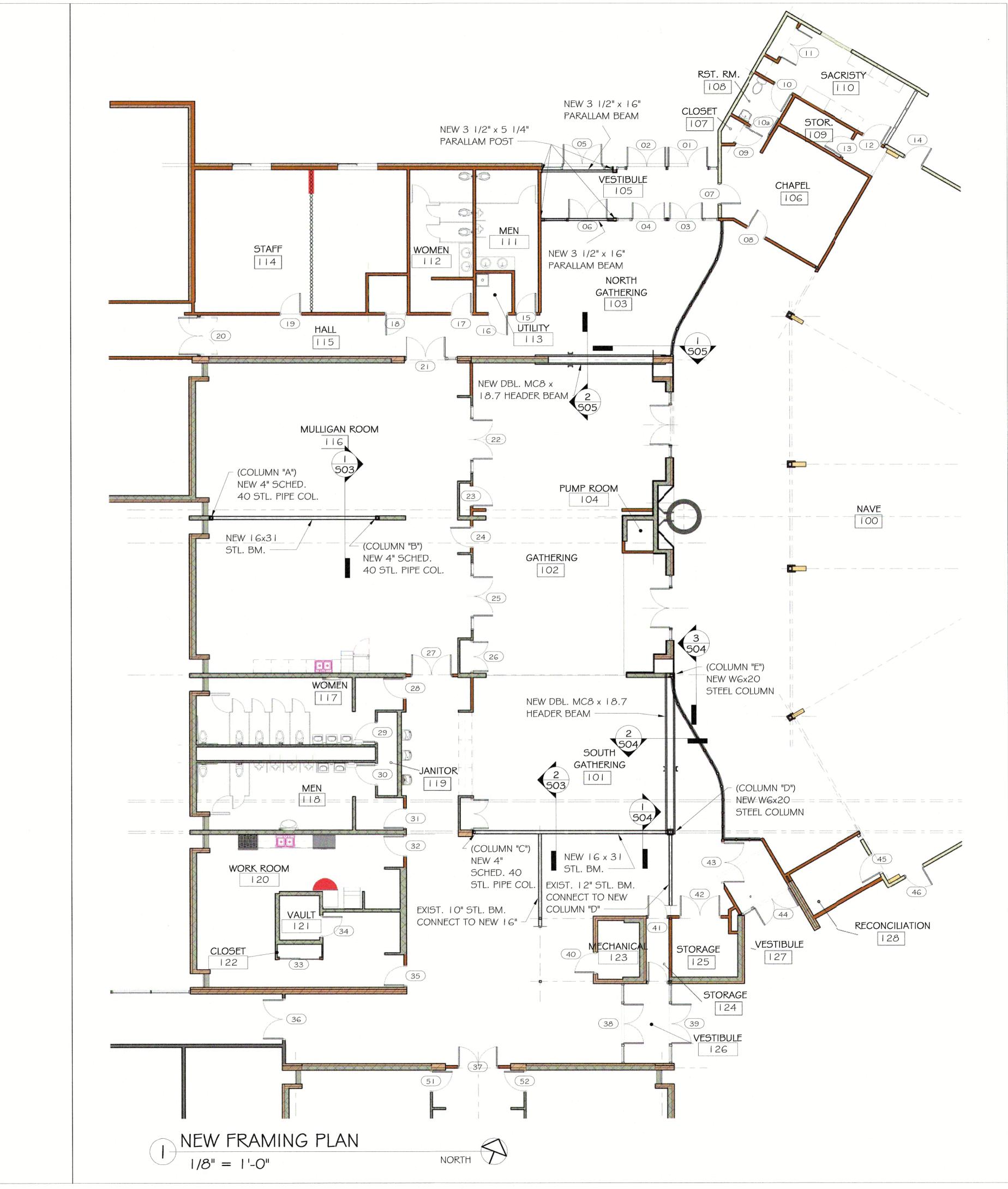
- A. All drawings in the structural set (S-series drawings) are the copyrighted work of Bob D. Campbell and company, Inc. These drawings may not be photographed, traced, or copies in any manner without the written permission of Bob D. Campbell and Company, Inc. Exception: Original drawings may be printed for distribution to the owner, architect, and general contractor for coordination, bidding, and construction. Subcontractors may not reproduce these drawings for any purpose or in any manner.
- B. I, Steven R. Carroll, P.E., registered engineer and a representative of Bob D. Campbell and Company, Inc., do hereby accept professional responsibility as required by the professional registration laws of this state for the structural design drawings consisting of S-series drawings. I hereby disclaim responsibility for all other drawings in the construction document package, they being the responsibility of other design professionals whose seals and signed statements may appear elsewhere in the construction document package.



NW MURRAY S SUMMIT, MC 130 LEE'S

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Drawn by: UL Checked by: SC 1554 date: 02/01/20



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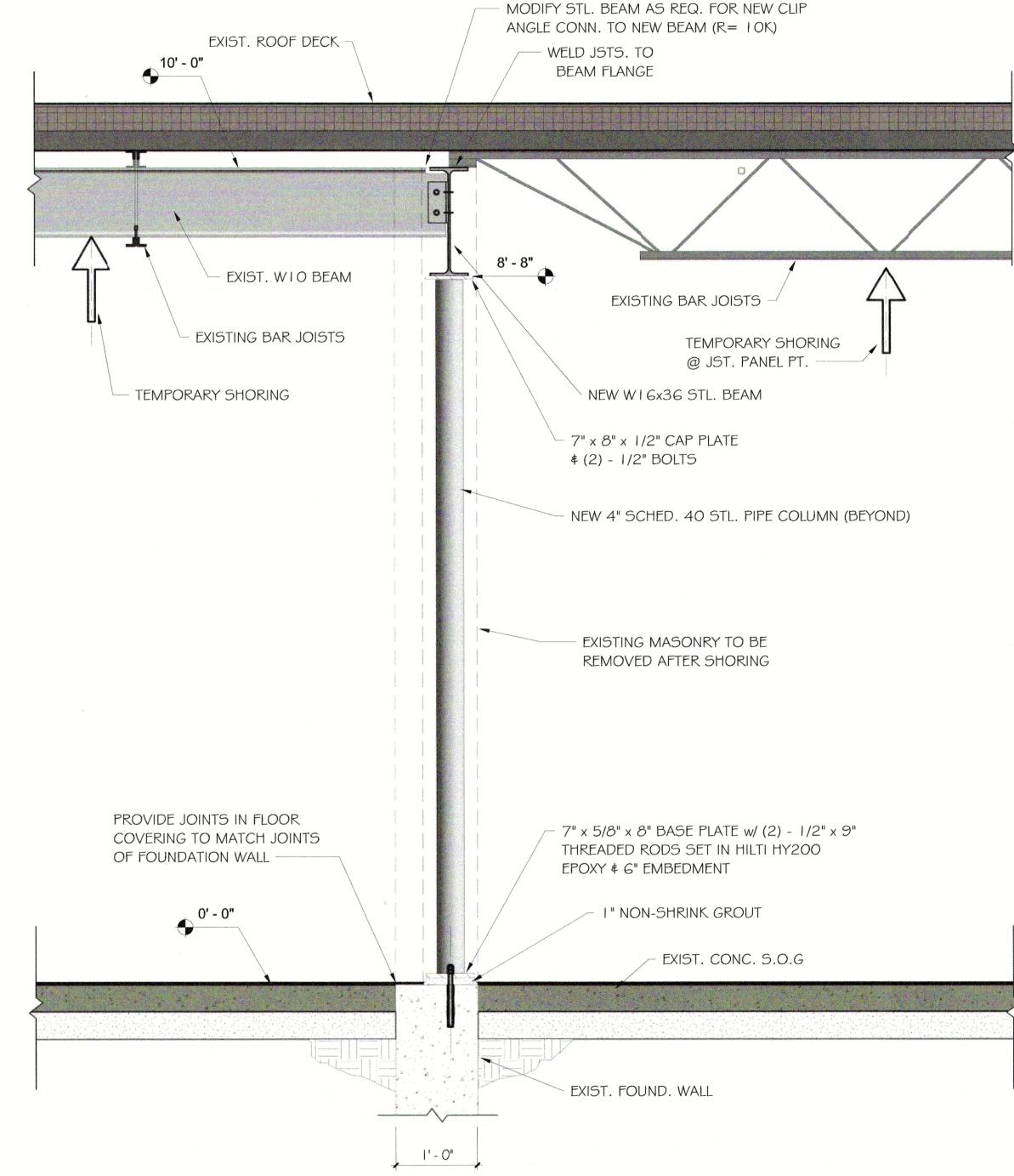
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Drawn by: UL Checked by: SC 155/16 date: 02/01/20

Revised:

502



OUR LADY OF

2 SECTION @ COLUMN "C" | " = | '-O"

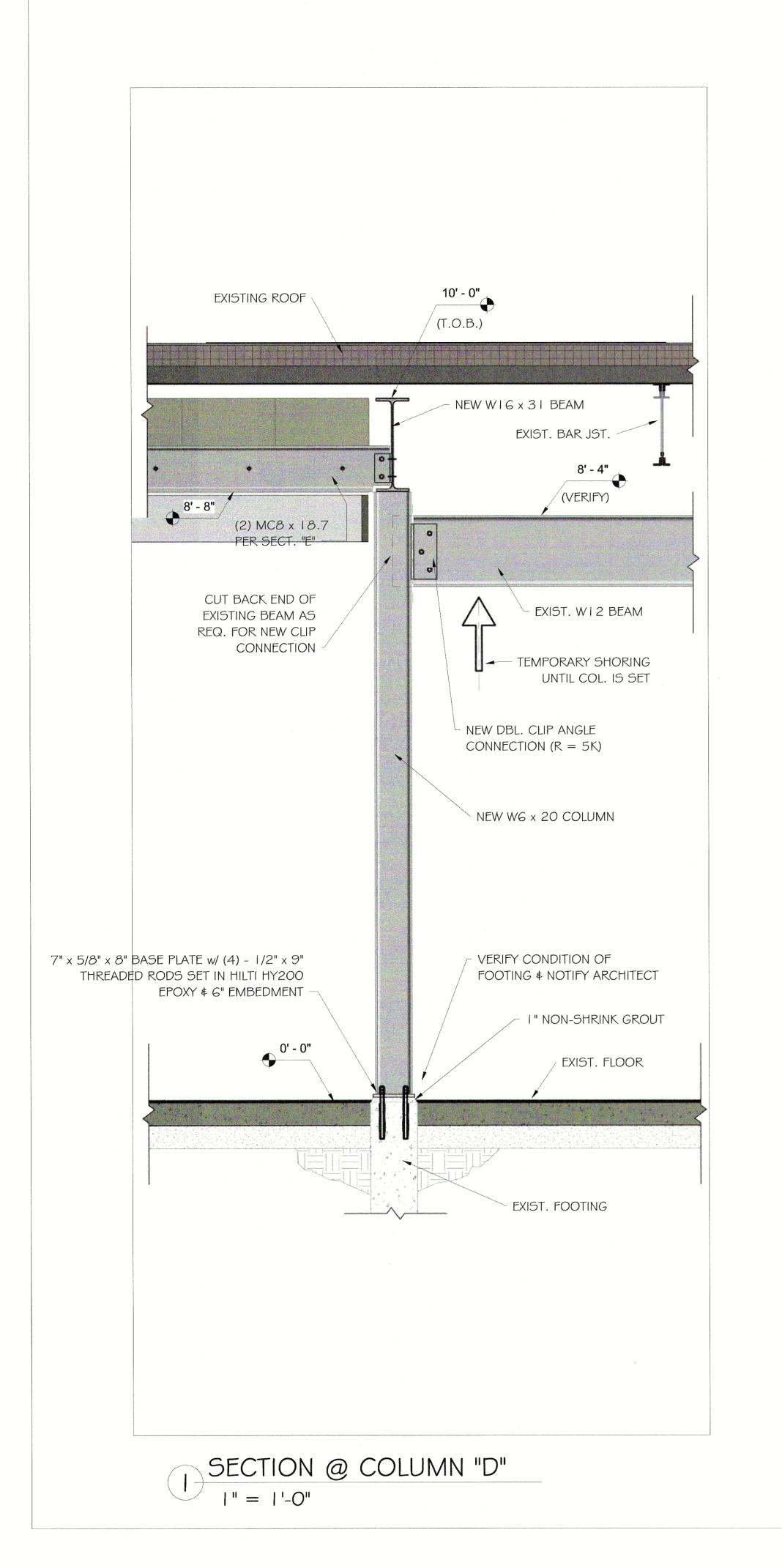
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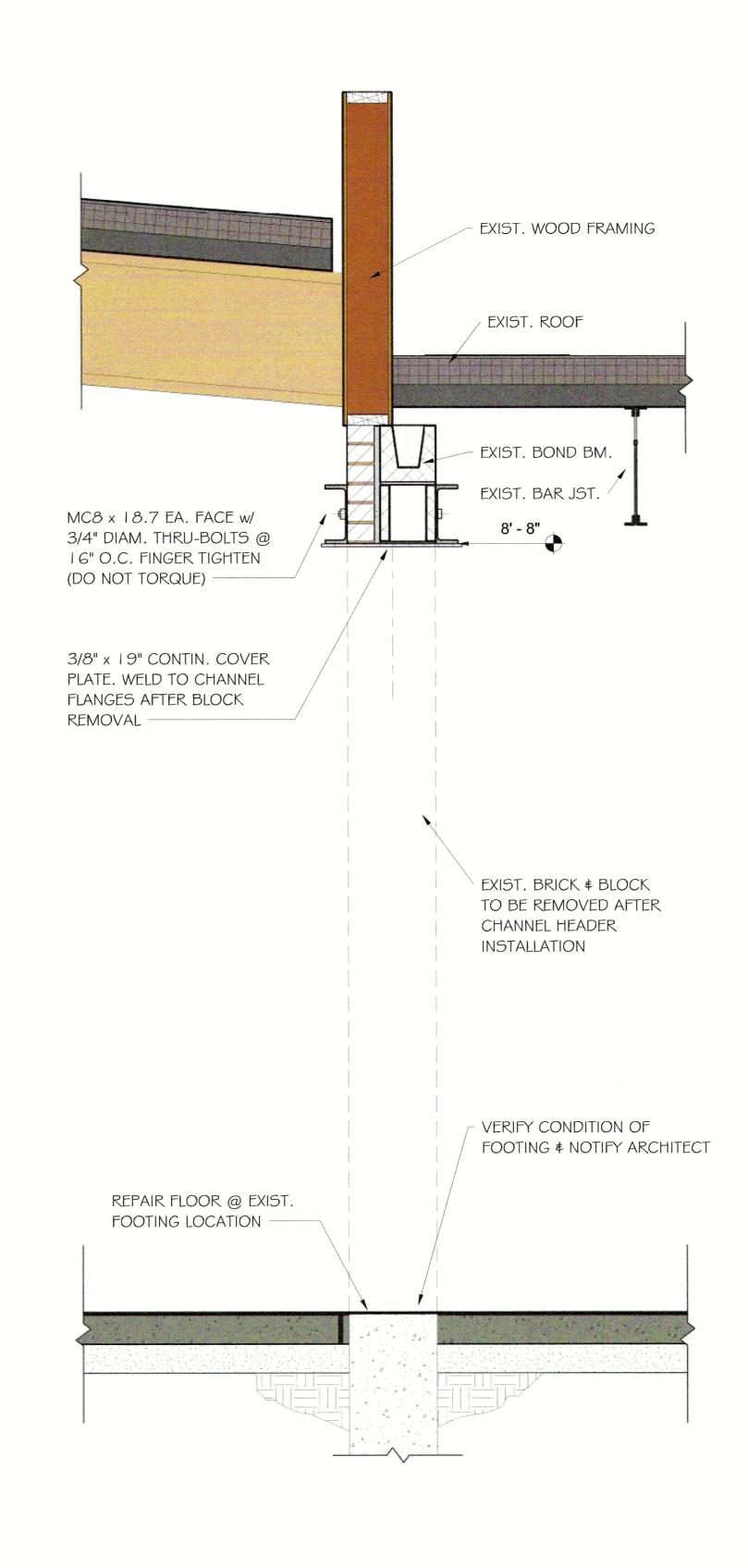
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Revised:

503

SECTION @ COLUMN "B"





SECTION @ BEAM BETWEEN COLUMNS "D" & "E"

| " = | '-O"

REMAINING BRICK # BLOCK WALL 10' - 0" 8' - 8" 8" x 1/2" X 19" (2) MC8 x 18.7 PER SECT. "E" CAP PLATE NEW W6 x 20 COLUMN VERIFY CONDITION OF FOOTING \$ NOTIFY 7" x 5/8" x 8" BASE PLATE w/ (4) - 1/2" x 9" ARCHITECT THREADED RODS SET IN HILTI HY200 EPOXY & 6" EMBEDMENT - I" NON-SHRINK GROUT EXISTING FOOTING

3 SECTION @ COLUMN "E"  $| \cdot | \cdot | = | \cdot | - | - | - | - |$ 

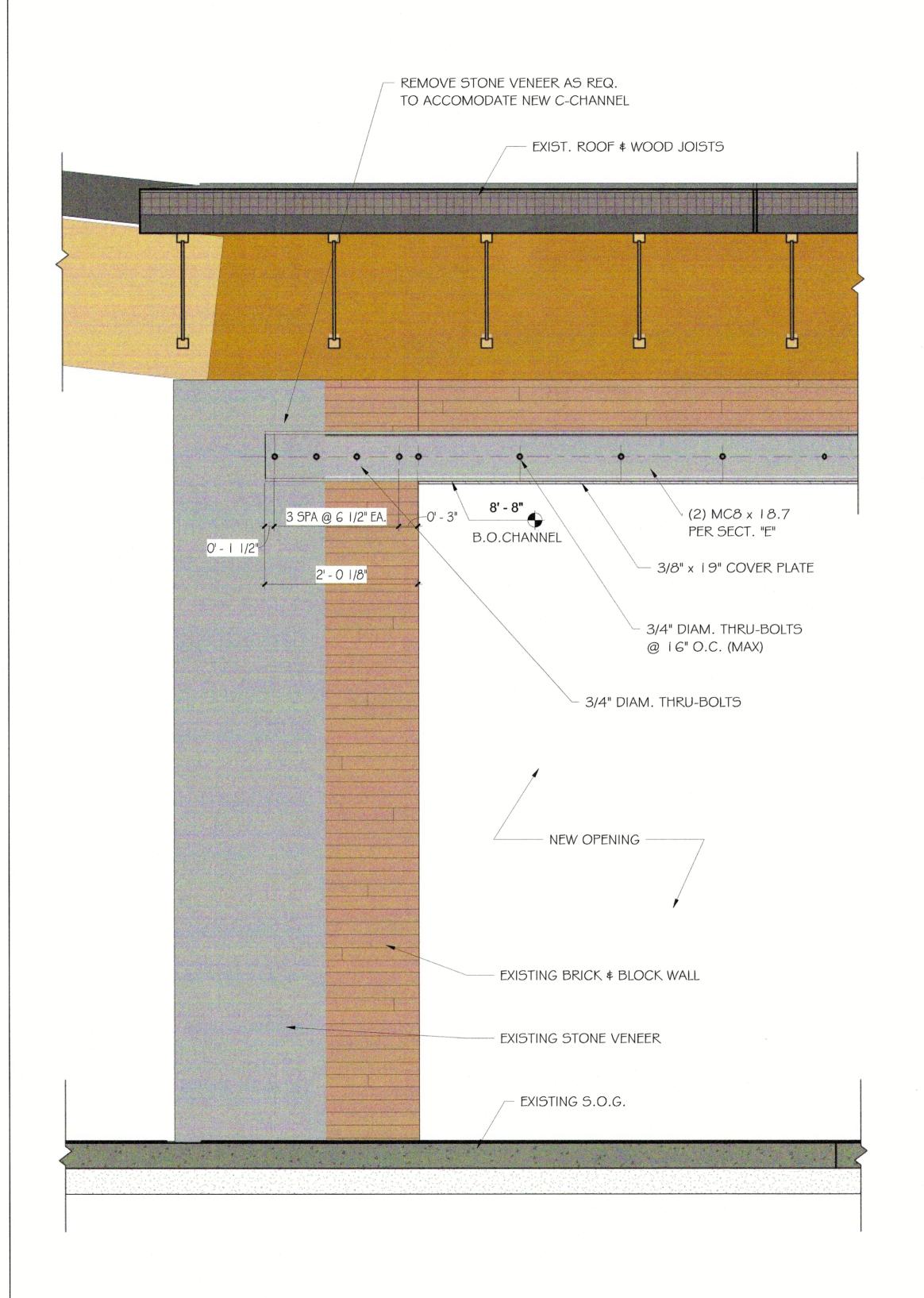
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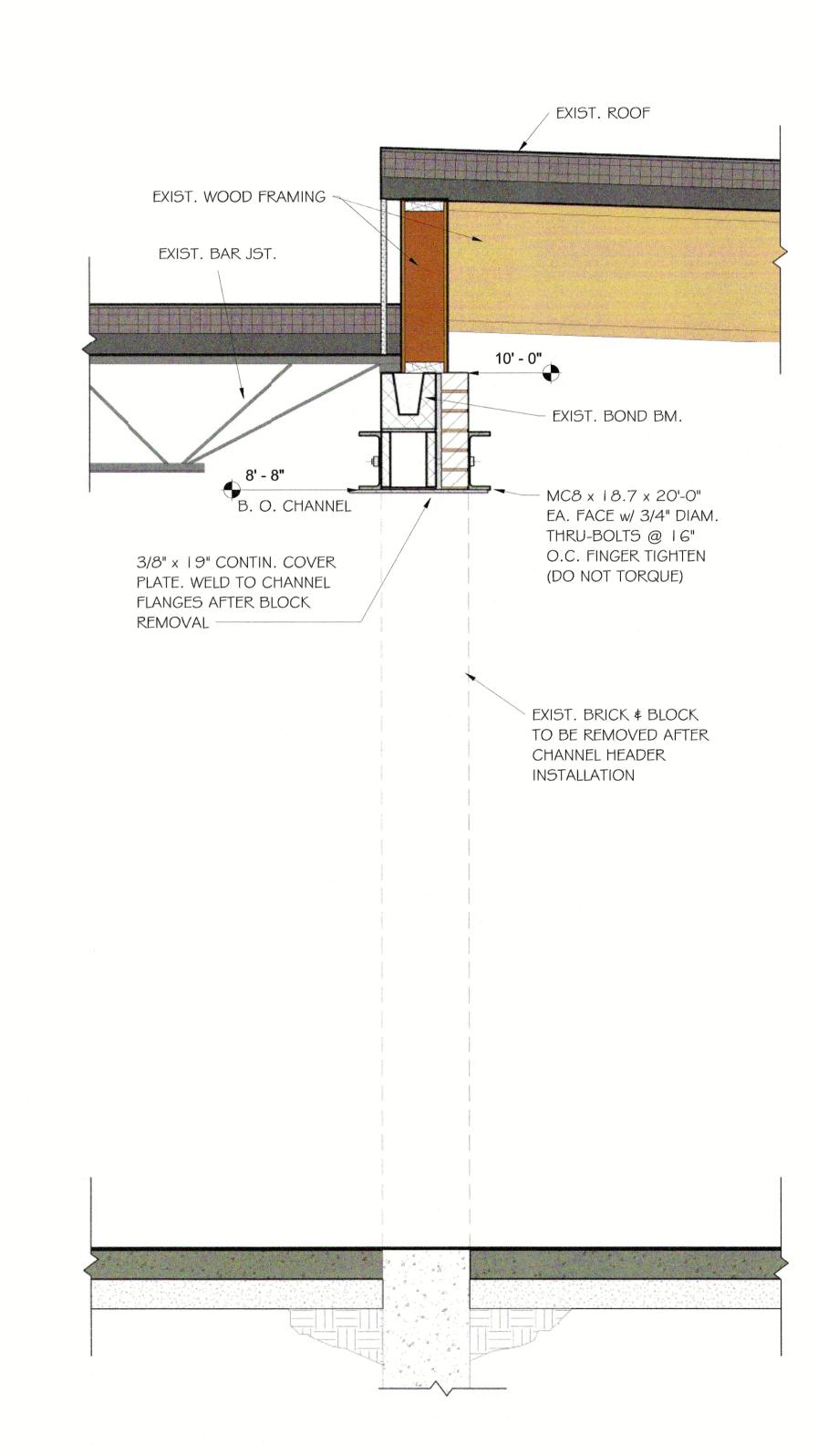
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1,550e date: 02/01/20



SECTION @ NORTH OPENING

| " = 1'-0"



2 ELEVATION @ NORTH OPENING

| " = 1'-0"

RD

NW MURRAY R SUMMIT, MO.

130 N

OUR LADY OF

Drawn by: UL

Revised:

Checked by: SC

1550e date: ΔΖ/Δ1/ΖΔ

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