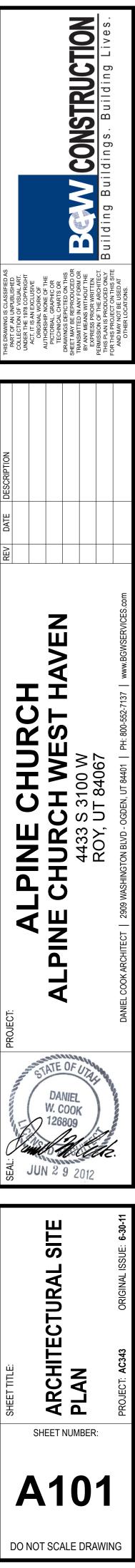


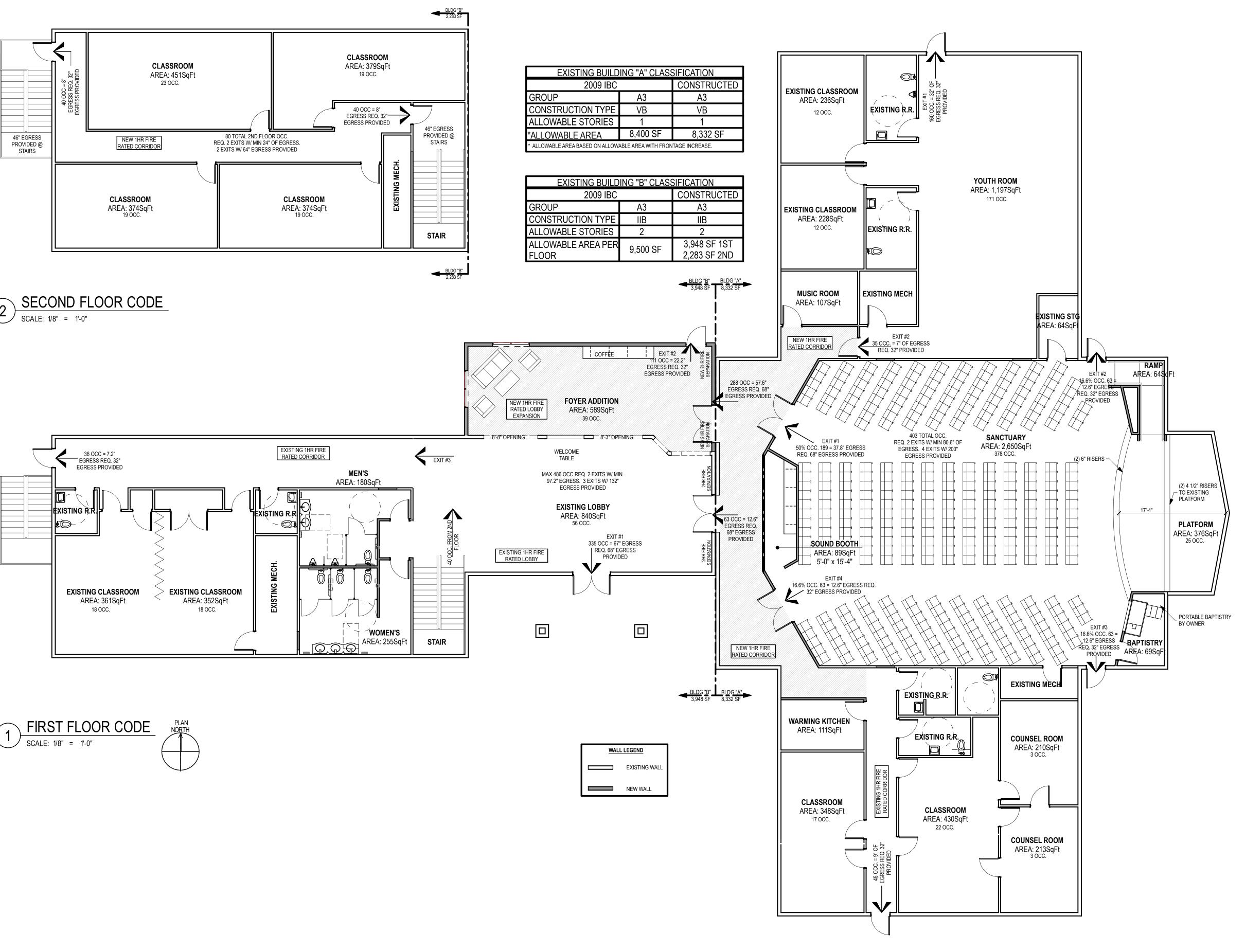
REQUIRED IN ARCHITECTURAL, STRUCTURAL, ELECTRICAL, OR PLUMBING SYSTEMS DUE TO SUBSTITUTION OF EQUIPMENT.

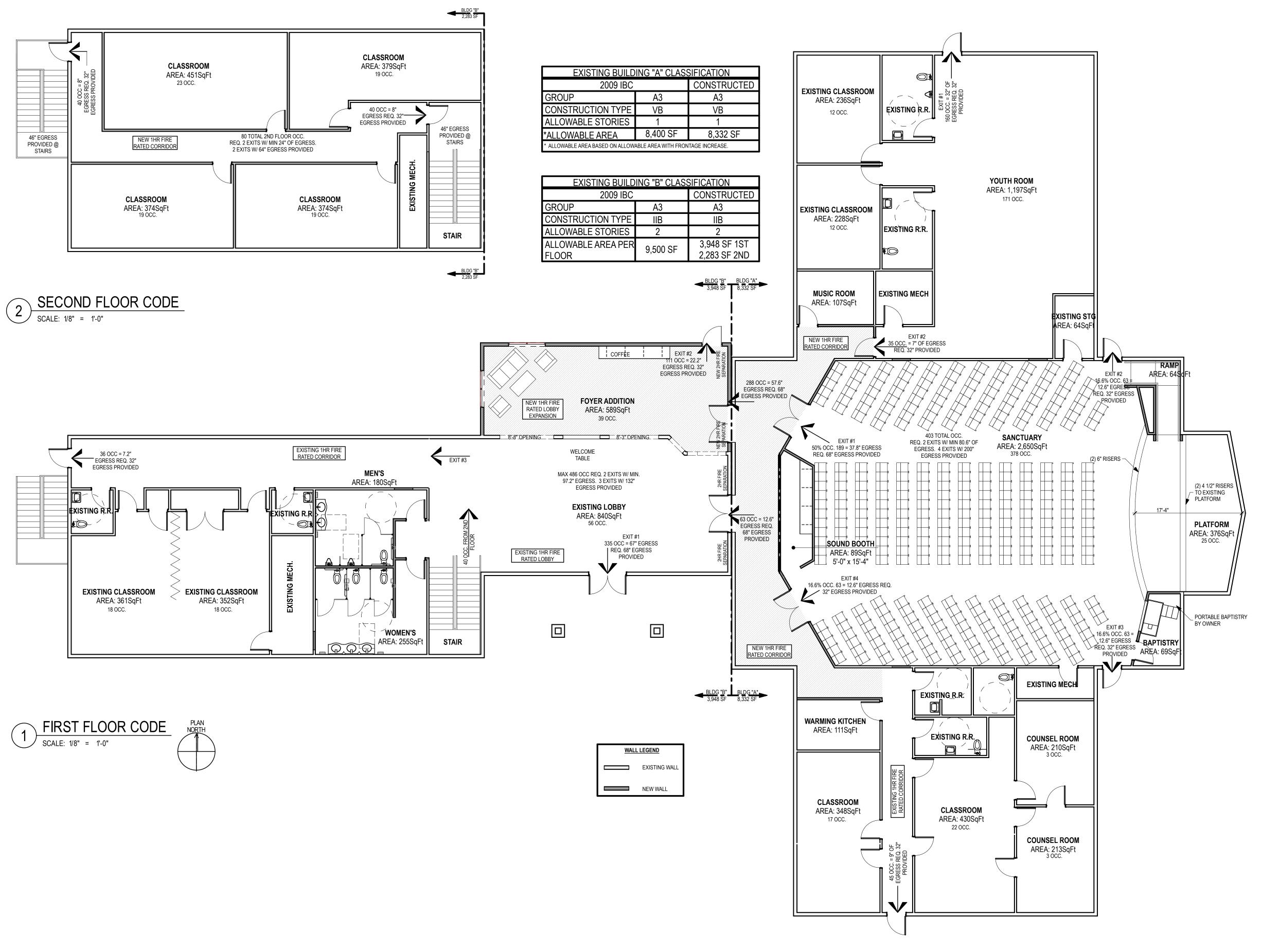
e alping People Pursue God

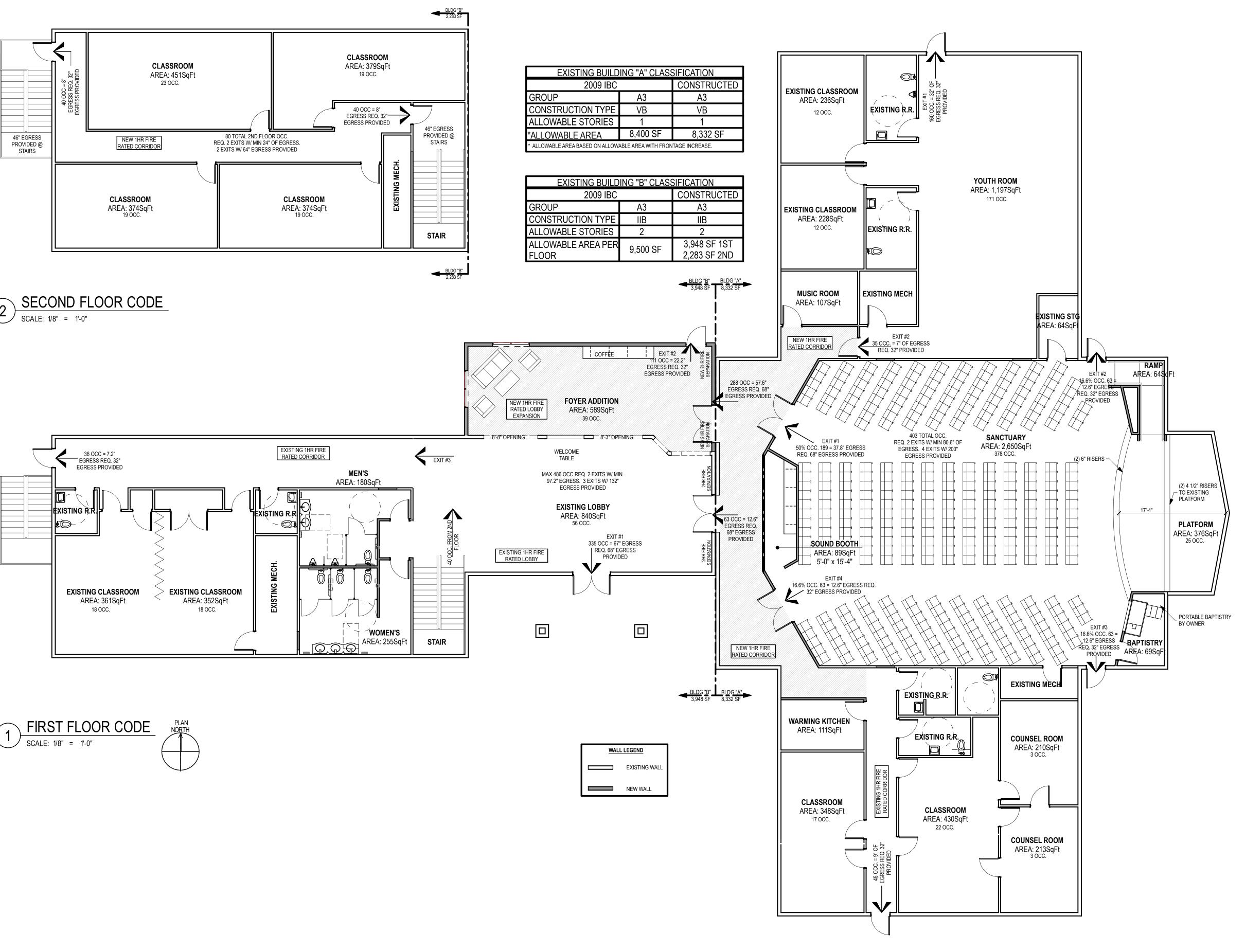
# **ALPINE CHURCH WEST HAVEN** 4433 S 3100 W ROY, UT 84067

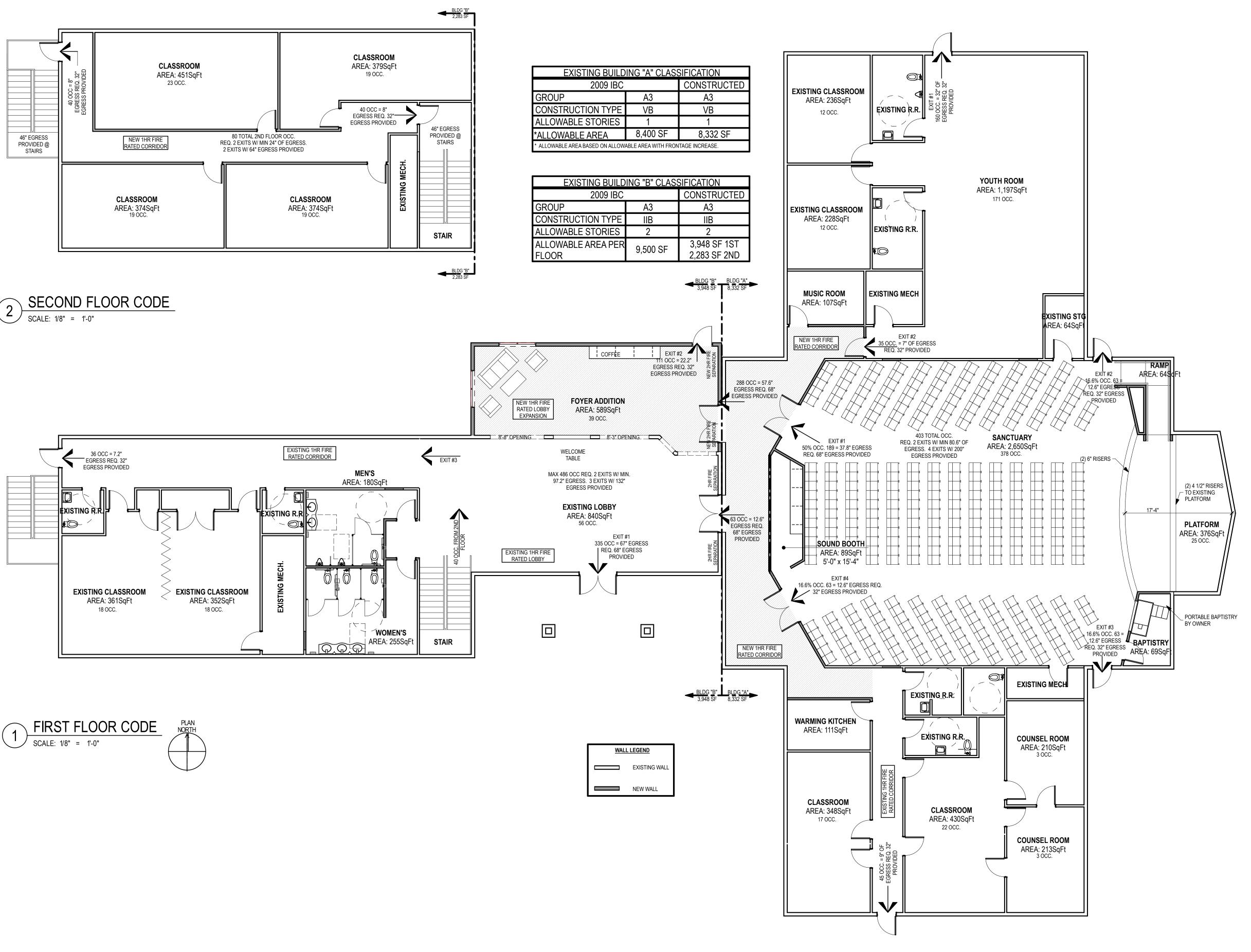
ARCHITECTURAL							
A101	ARCHITECTURAL SITE PLAN						
A102	CODE REVIEW PLANS						
A103	EXISTING FLOOR DEMO PLANS						
A104	REMODEL FLOOR PLANS						
A105	ENLARGED PLANS, ELEVATIONS, SECTIONS						
FOUNDATION STRUCTURAL							
S1	FDN/FRAMING PLAN						
S2	DETAILS						
ELECT	RICAL, MECHANICAL AND PLUMBING PLANS TO E SUBMITTED AS DESIGN BUILD PACKAGES						

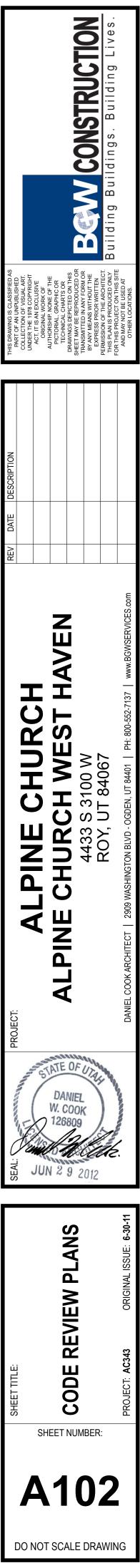


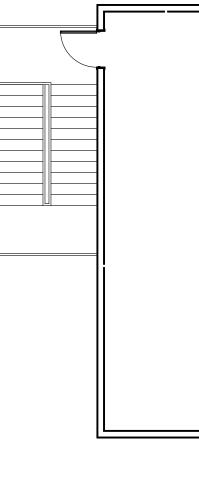


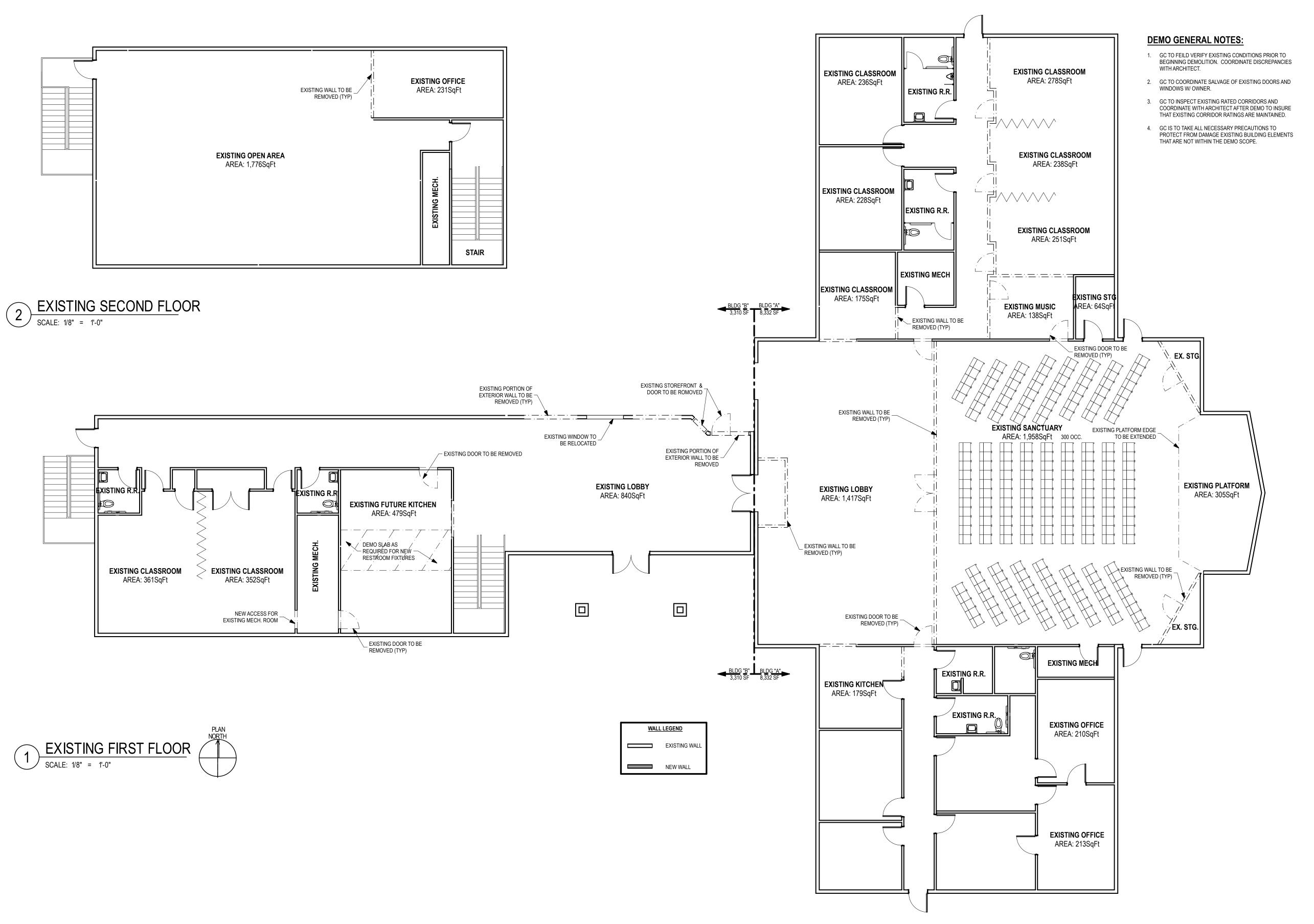


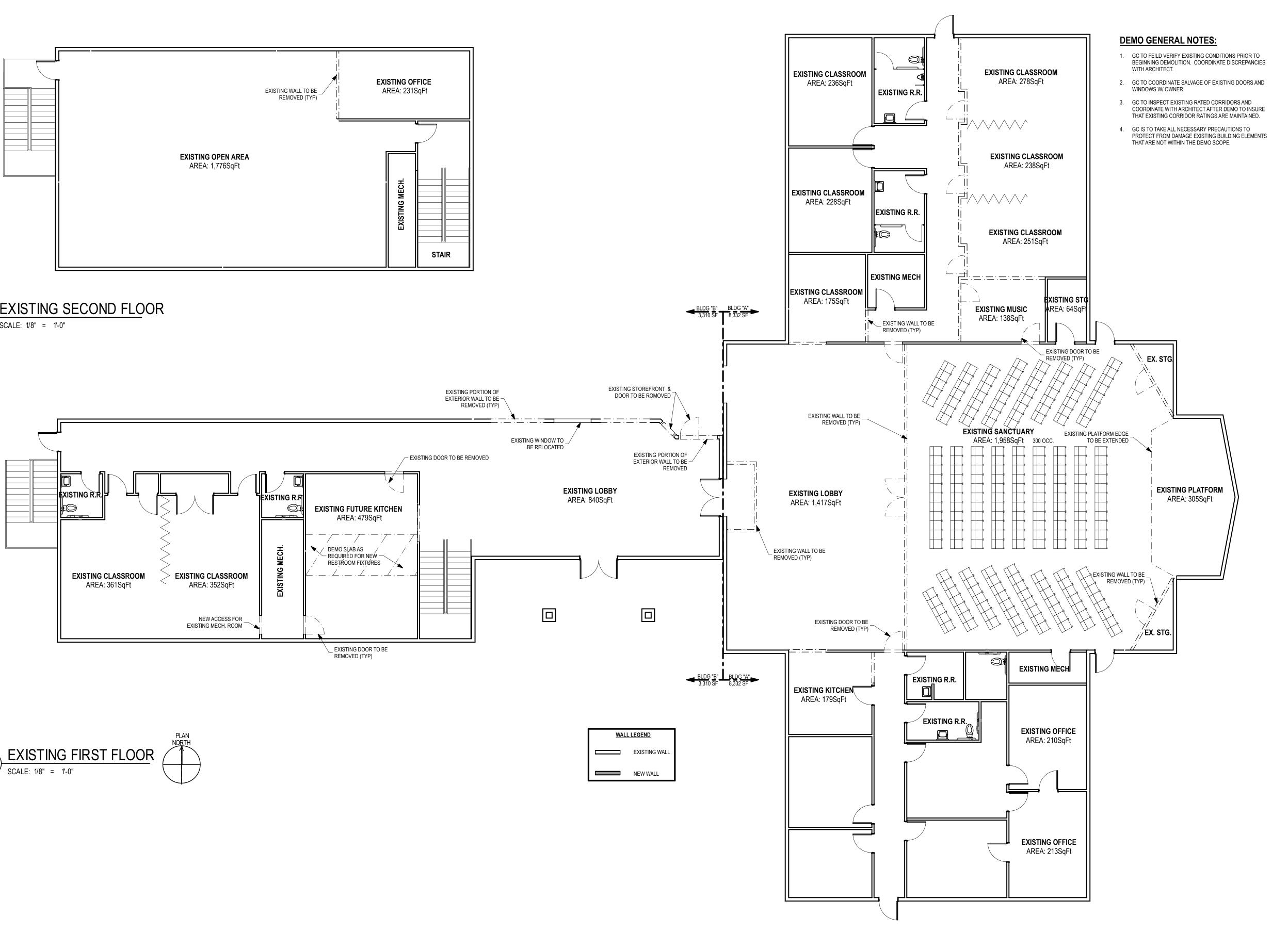


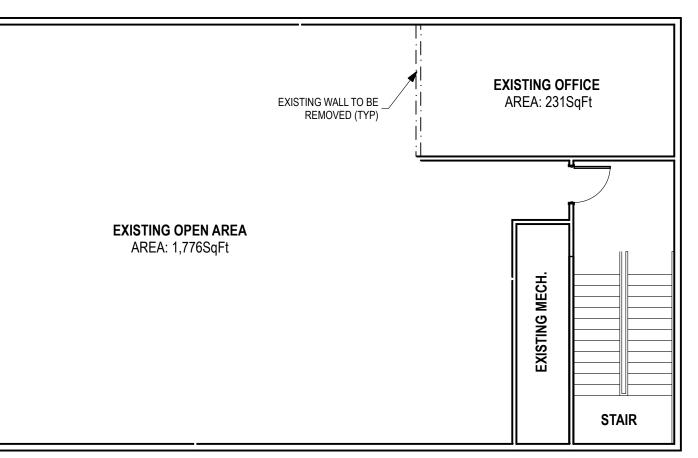




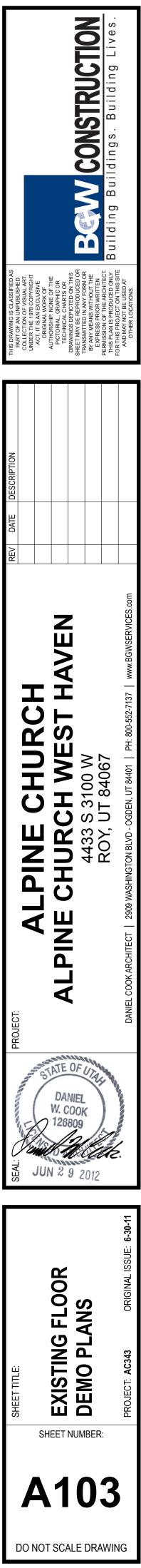


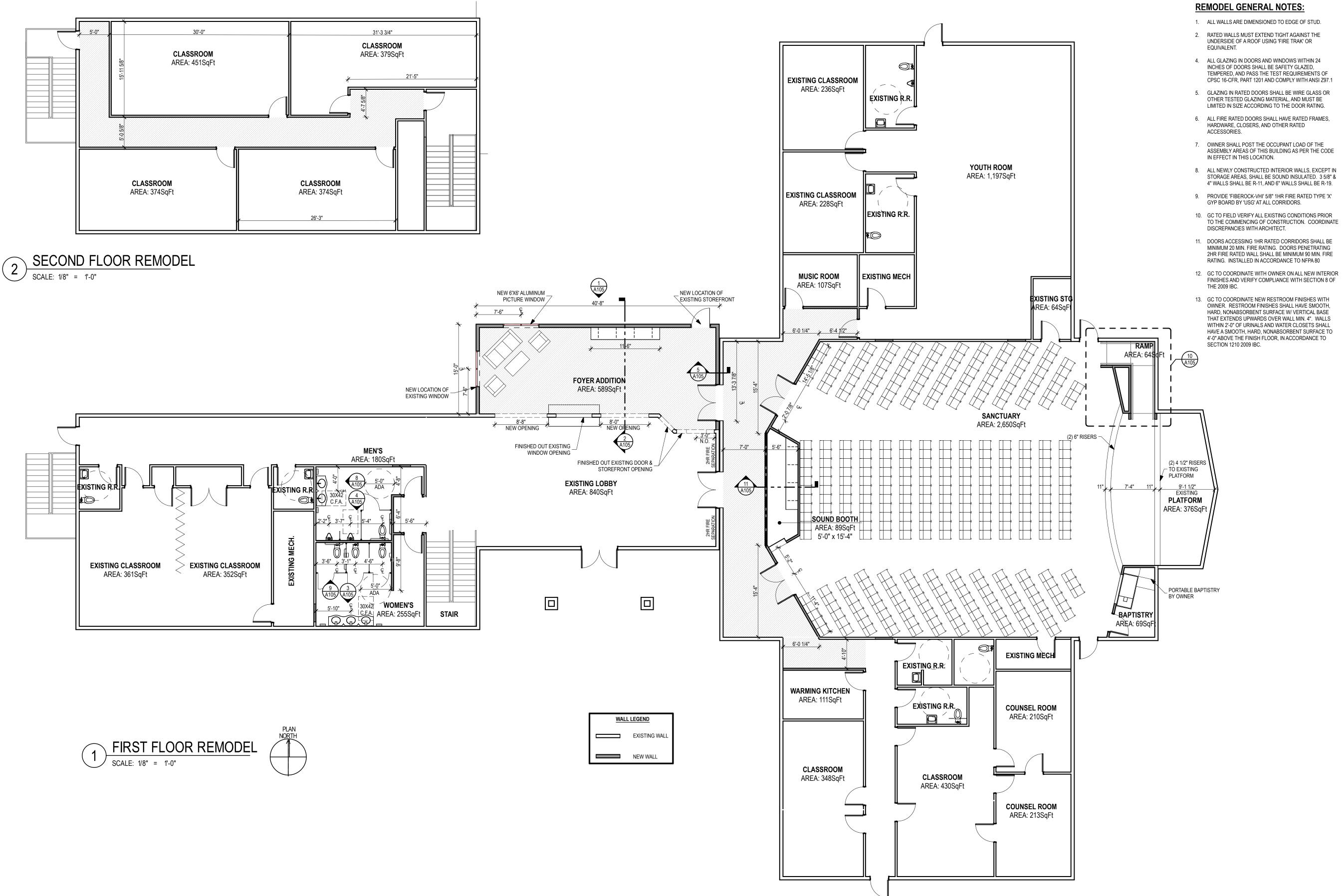


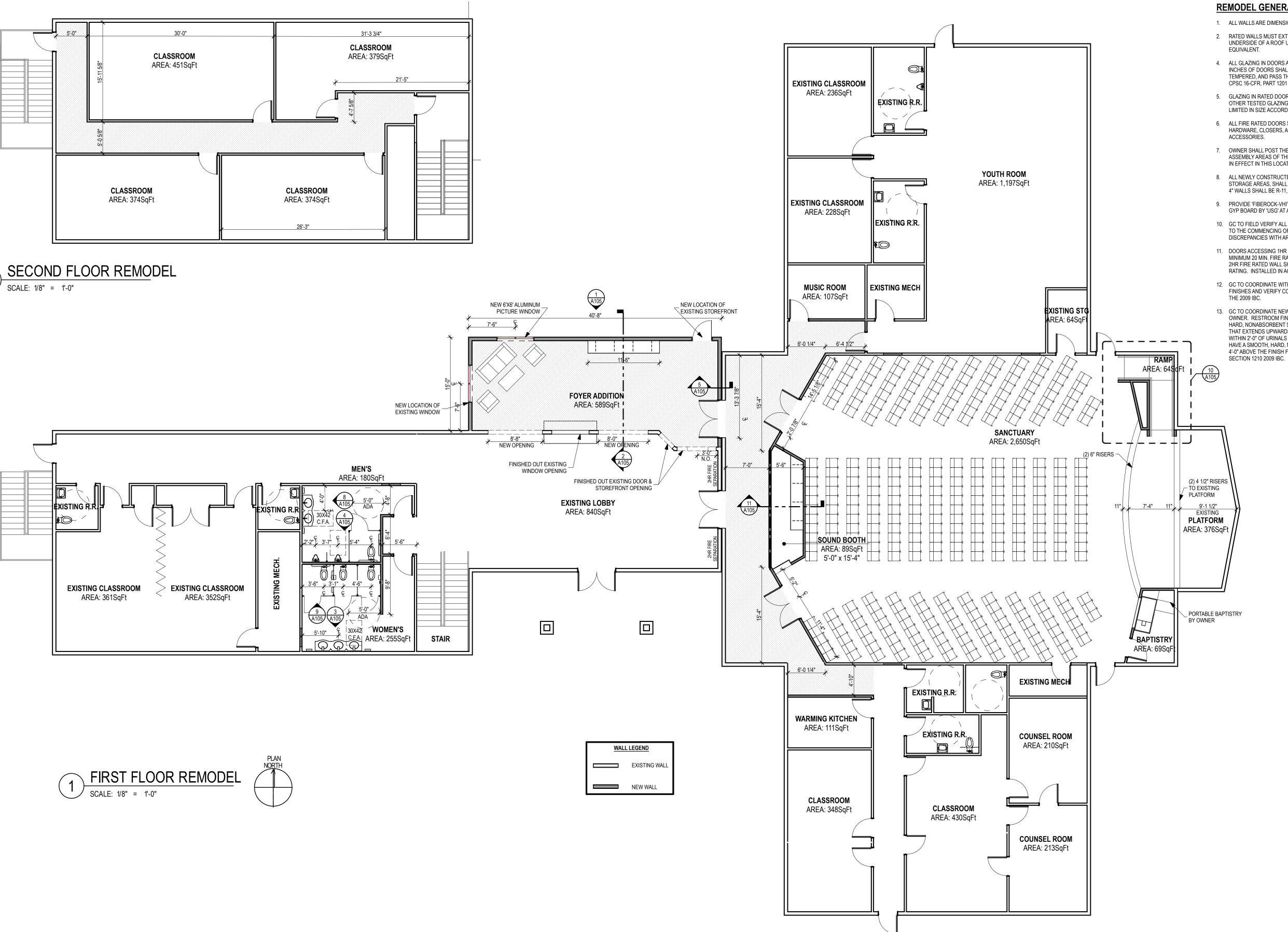


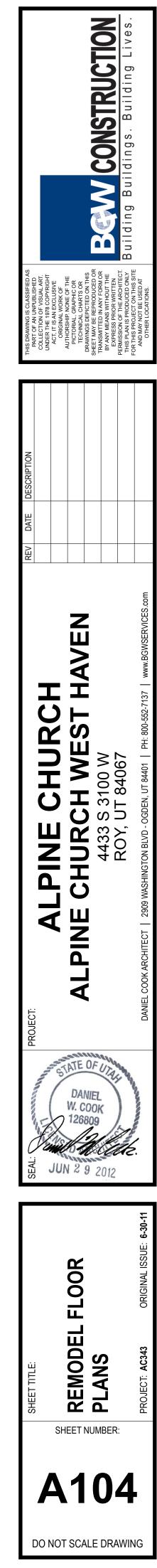


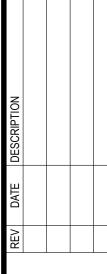


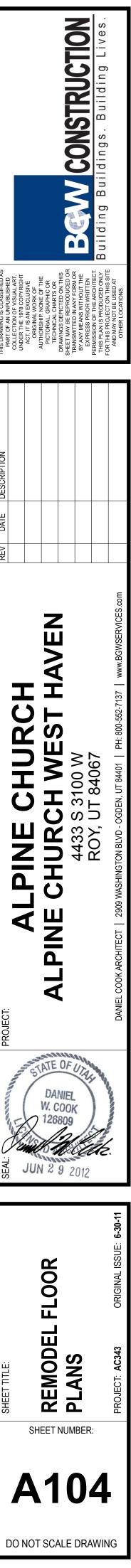


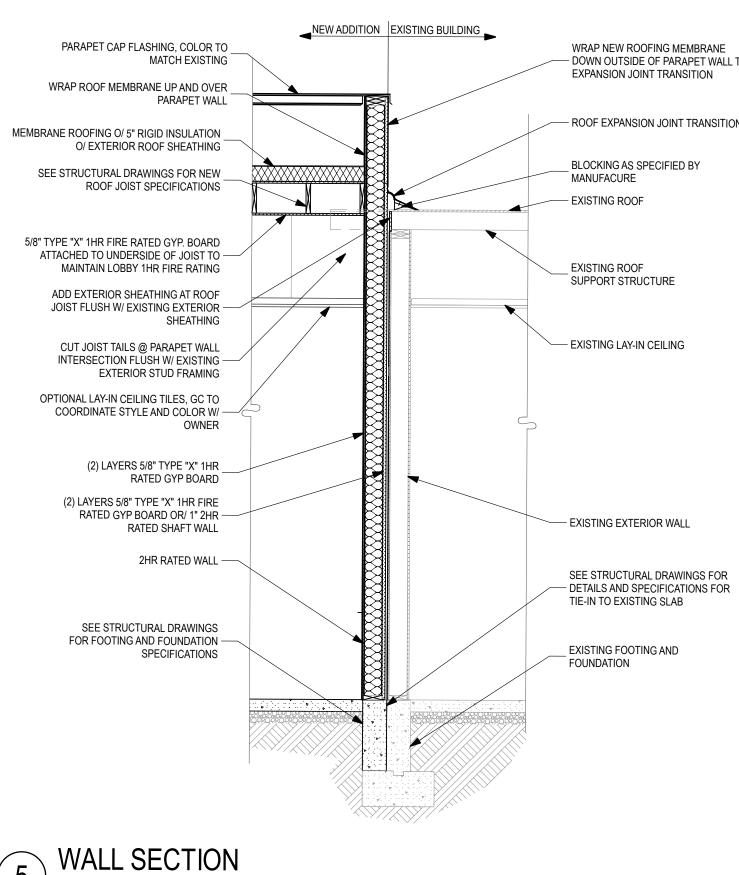


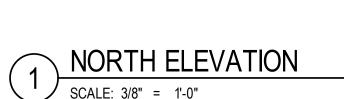


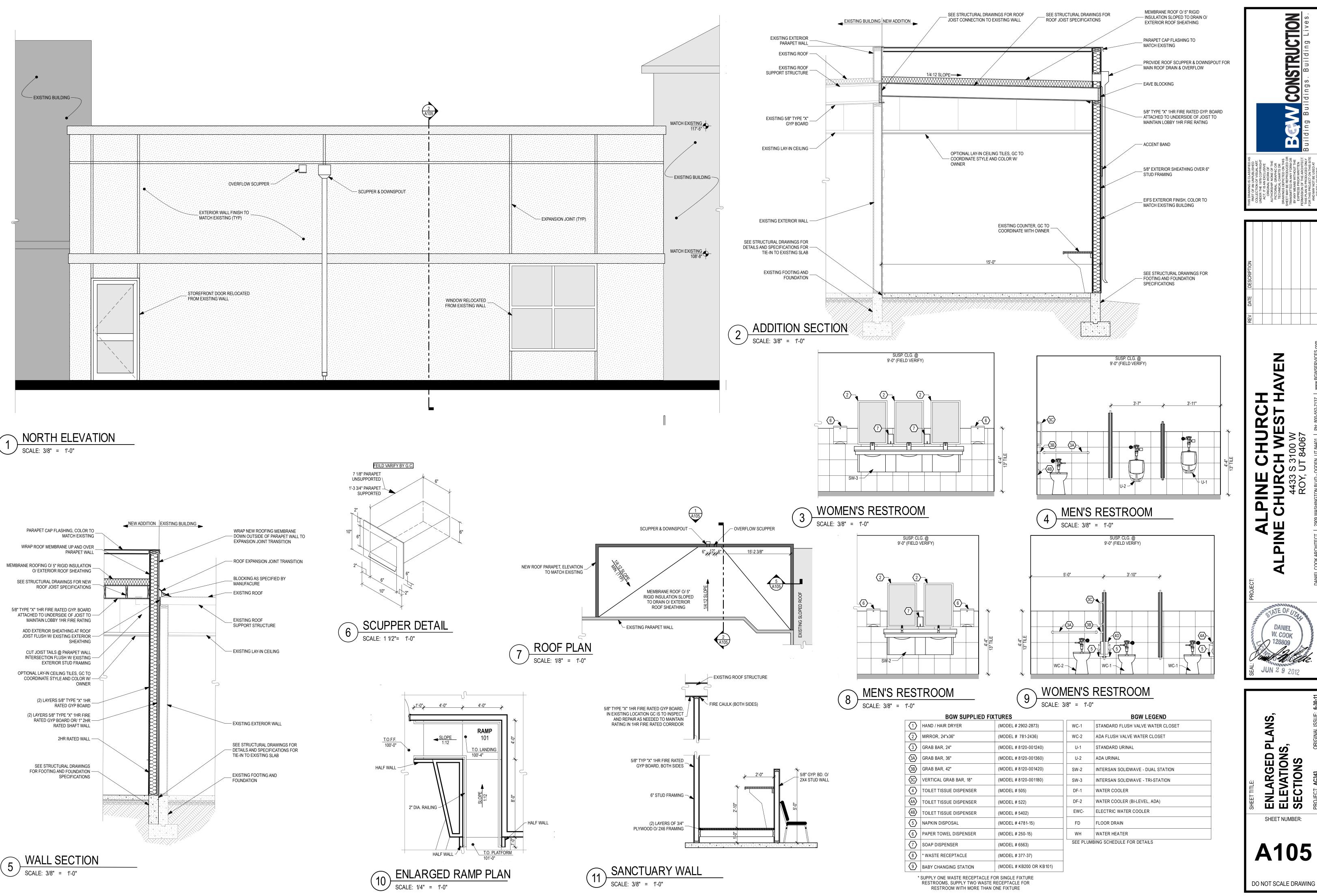




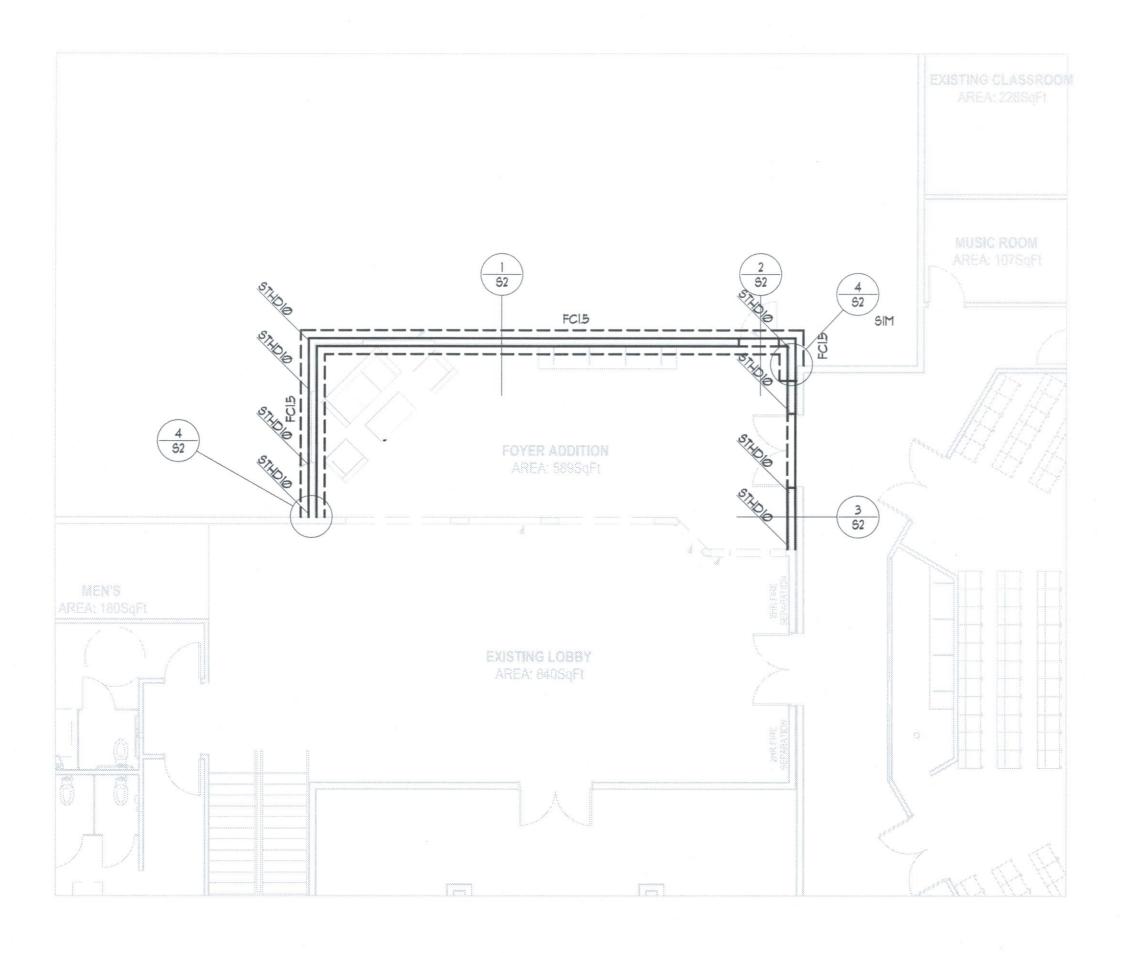












# FOOTING AND FOUNDATION PLAN

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

## GENERAL CONCRETE NOTES:

- 1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE 2009 IBC, ACI 318, AND LOCAL ORDINANCES.
- 2. CONTRACTOR SHALL COORDINATE WITH MECHANICAL, ELECTRICAL, AND ARCHITECTURALPRIOR TO PLACING CONCRETE, PROVIDE SLEEVES, BLOCK
- OUTS, ETC ... AS REQUIRED. 3, CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF ALL ANCHOR BOLTS, SEISMIC ANCHORS OR STRAPS, ETC ... INSTALL PER MANUFACTURER'S SPECIFICATIONS.

### CONCRETE MATERIAL

- 1. REQUIRED 28 DAY COMPRESSIVE STRENGTH OF CONCRETE:
- A. FOOTINGS AND FOUNDATIONS: 3000 PSI B. INTERIOR SLABS ON GRADE: 3000 PSI
- C. WALLS: 4000 PSI
- D. SITE CONCRETE: 4000 PSI
- 2. PROVIDE NORMAL WEIGHT AGGREGATES PER ASTM C-33.
- 3. PROVIDE TYPE I OR II CEMENT PER AGTM C-150 FOR ALL CONCRETE. 4. MAXIMUM WATER TO CEMENT RATIO IS EQUAL TO 0.45 FOR ALL CONCRETE.
- 5. MAXIMUM SLUMP OF CONCRETE IS EQUAL TO 4 INCHES PLUS OR MINUS I INCH.
- 6. PROVIDE AIR ENTRAINING AS RECOMMENDED BY ACI 318 AND ASTM C-260. 1. NO NOT ADD CALCIUM CHLORIDE TO CONCRETE MIX.

### REINFORCEMENT

- I. ALL REINFORCING STEEL SHALL BE GRADE 60 BARS PER ASTM A615. FIELD BENT
- DOWELS MAY BE GRADE 40 (REDUCE INDICATED SPACING BY 1/3). 2. REINFORCING STEEL SHALL BE PROPERLY TIED INTO PLACE PRIOR TO PLACING CONCRETE.
- 3. ALL SPLICES IN REINFORCING BARS SHALL LAP A MINIMUM OF 40 BAR DIAMETERS. 4. HORIZONTAL REINFORCEMENT SHALL BE CONTINUOUS THRU CONSTRUCTION AND
- CONTROL JOINTS.
- 5. DO NOT WELD REINFORCING BARS.
- 6. REINFORCEMENT SHALL HAVE THE FOLLOWING CLEAR COVER: A. CAST-IN-PLACE CONCRETE:
- 1. CAST AGAINST/PERMANENTLY EXPOSED TO EARTH 3" II. FORMED CONCRETE EXPOSED TO EARTH/WEATHER:
- a. #5 AND SMALLER BARS 1-1/2"
- III. CONCRETE NOT EXPOSED EARTH/WEATHER: a. SLABS, WALLS, JOISTS (#1 AND SMALLER) 3/4"
- b. BEAMS, COLUMNS, TIES, STIRRUPS 1-1/2"

GENERAL CONCRETE NOTES CONT .:

FOUNDATION WALLS

- BRACE WALLS AS REQUIRED UNTIL FLOOR SLABS AND/OR FLOOR FRAMING ARE IN PLACE, AND UNTIL WALLS HAVE PROPERLY CURED. 2. CONSTRUCTION JOINTS (COLD JOINTS) IN WALLS SHALL BE WATERPROOFED TO
- PREVENT LEAKS. 3. PROVIDE CORNER BARS AT INTERSECTING WALL CORNERS USING THE SAME BAR SIZE
- AND SPACING AS THE HORIZONTAL WALL REINFORCING. 4. PROVIDE VERTICAL DOWELS INTO FOOTINGS AND FOUNDATIONS THAT MATCH THE SIZE AND SPACING OF THE VERTICAL REINFORCEMENT IN THE ABOVE MEMBER.

### SLABS

- . RECOMMEND REINFORCING ALL SLABS W/ \*4 @ 18" O.C. EACH WAY, OR WITH 6 × 6 -2.1xW2.1 WELDED WIRE FABRIC (WWF). REINFORCEMENT SHALL BE PLACED 1-1/2" TO 2" BELOW THE TOP OF SLAB.
- 2. PROVIDE ISOLATION JOINTS AROUND COLUMNS/SPREAD FOOTINGS, AND CONTROL JOINTS AS REQUIRED (I.E., WHERE SLABS TRANSITION IN SIZE). 3. CONSTRUCTION OR CONTROL JOINTS IN SLABS ON GRADE SHALL NOT EXCEED SPACING OF 30 TIMES THE SLAB THICKNESS IN ANY DIRECTION, UNLESS
- NOTED OTHERWISE ON THE PLAN.

		SHEAR WALL SCHEDUL							
LABEL	SHEATHING	NAIL SIZE	EDGE NAIL	EDGE NAIL	PANE EDGE MEMBER	SILL E TO CO			
SW-1	7/16" 24/16 S.R.	8d	6" O.C.	12" O.C.	2 ×	5/8" ? × 12			

NOTES:

. SEE GENERAL NOTES. 2. PLYWOOD, ORIENTED STRAND BOARD AND COMPOSITE BOARD (BUT NOT STRUCTURAL PARTICLE BOARD)

ARE ACCEPTED AS EQUALS. 3. ALL PANEL EDGES AT SHEAR WALLS SHALL BE BACKED WITH 2" NOMINAL FRAMING, EXCEPT WHERE INDICATED TO BE 3X ON SCHEDULE. 3X MATERIAL MAY BE REPLACED WITH 4X MATERIAL. MULTIPLE AYERS OF 2X FRAMING SHALL NOT BE USED WHERE 3X FRAMING IS INDICATED. 4. ALL ANCHOR BOLTS TO HAVE A 2"x2"x3/16" PLATE WASHER.

5. ALL FRAMING SHALL BE DOUGLAS-FIR NO. 2. 6. SHEAR WALL PANELS INDICATED ON SCHEDULE ARE TO BE SHEATHED FOR FULL HEIGHT OF WALL AND

BLOCKED. 1. SEE HOLDOWN SCHEDULE AND PLAN FOR LOCATION AND SIZE OF HOLDOWNS REQUIRED.

# GENERAL WOOD FRAMING NOTES:

DIMENSIONAL LUMBER

- I. DIMENSIONAL LUMBER USED AS STRUCTURAL FRAMING (I.E. JOISTS, RAFTERS, and HEADERS) SHALL BE DOUGLAS FIR-LARCH NO. 2 OR EQUAL.
- 2. DIMENSIONAL LUMBER USED FOR STUD WALLS SHALL BE STUD GRADE. SPACE STUDS AT 16" O.C. MINIMUM, WITH A DOUBLE TOP PLATE. SPLICES IN THE DOUBLE TOP PLATE SHALL ALTERNATE TOP AND BOTTOM.
- 3. IN NO CASE SHALL 2 X 4" BEARING WALLS SUPPORT MORE THAN TWO FLOORS OF FRAMING IN ADDITION TO ROOF AND CEILING.

ENGINEERED LUMBER

- I. GLU-LAMINATED BEAMS FOR SIMPLE SPANS, CANTILEVERS AND CONTINUOUS SPANS SHALL BE 24F-V4 DF/DF. DO NOT INSTALL GLU-LAMINATED BEAMS UPSIDE DOWN.
- 2. LAMINATED VENEER LUMBER AND THE LIKE SHALL BE INSTALLED PER
- MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. 3. I-JOISTS SHALL BE TJI OR EQUIVALENT, AND SHALL BE INSTALLED PER
- MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- 4. ENGINEERED LUMBER, WITH THE EXCEPTION OF GLU-LAMINATED LUMBER, SHALL NOT BE USED IN EXTERIOR APPLICATIONS. 5. USE REDWOOD OR PRESSURE TREATED LUMBER FOR ALL WOOD IN CONTACT WITH
- CONCRETE, MASONRY, OR EARTH (I.E. MUD SILL).

COLUMNS

NOTE

I. ALL COLUMNS SHALL EXTEND DOWN THROUGH THE STRUCTURE TO THE FOUNDATION. 2. COLUMNS SHALL BE BRACED AT EACH FLOOR LEVEL. 3. POSTS SHALL BE DOUGLAS FIR-LARCH NO. 1 OR EQUAL

ROOF AND WALL SHEATHING

- I. ALL ROOF SHEATHING SHALL BE 5/8" APA EXP. I RATED SHEATHING OR EQUAL WITH 8d COMMON NAILS AT 6" O.C. PERIMETER, 6" O.C. PANEL EDGES AND AT 12" O.C. IN THE FIELD. PROVIDE 2 X SHAPED BLOCKING AT RIDGES UNLESS A CONTINUOUS MEMBER EXISTS. PANEL EDGES ARE UNBLOCKED UNLESS NOTED OTHERWISE ON THE STRUCTURAL PLANS.
- 2. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH 1/16" APA EXP. I RATED SHEATHING OR EQUAL WITH 8d COMMON NAILS AT 6" O.C. EDGES AND AT 12" O.C. IN THE FIELD -FLAT BLOCKED AT ALL PANEL EDGES, UNLESS NOTED OTHERWISE IN THE STRUCTURAL PLANS AND SHEAR WALL SCHEDULE.

		HOLD DOWN SCHEDULE								
5	SIZE	EDGE MEMBER	FOUNDATION EDGE ME ANCHOR ATTACH							
	STHDIØ	(2) STUDS	EMBEDDED	(20) 16d SINK						

NOTES:

ALL ANCHORS ARE SIMPSON STRONG-TIE. 2. INSTALLATION OF ALL HOLDOWN ANCHORS AND STRAPS SHALL BE PER MANUFACTURERS RECOMMENDATIONS

& SPECIFICATIONS.

3. WHEN 3X MEMBER REQUIRED FOR PANEL EDGE IN SHEAR WALL SCHEDULE USE OF A 4X EDGE MEMBER IS PERMITTED. 4. PROVIDE EDGE NAILING ALONG STUDS CONNECTED TO HOLDOWN ANCHORS AND STRAPS.

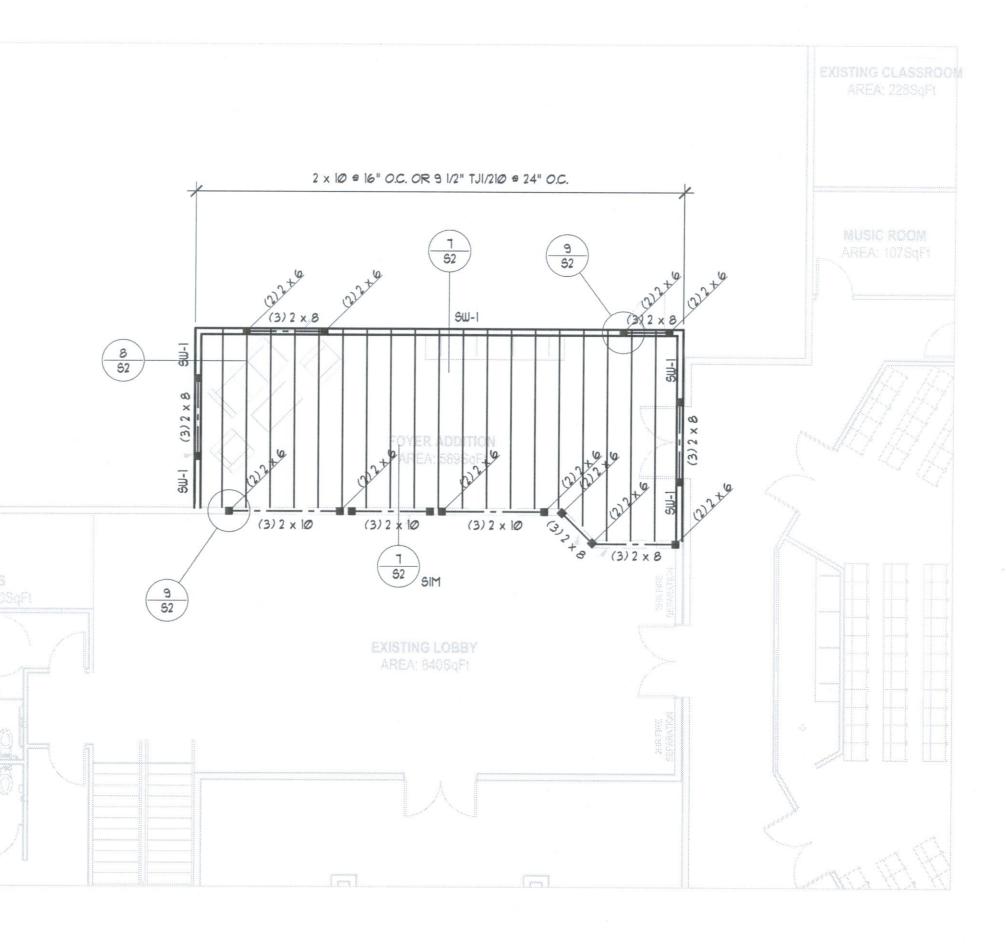
EDGE MEMBER

ATTACHMENT

SILL BOLTING

TO CONCRETE

5/8" ? × 12" @ 32" O.C.



# ROOF FRAMING PLAN

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

# GENERAL WOOD FRAMING NOTES CONT .:

## STRUCTURAL CONNECTIONS

I. WRITTEN PRIOR APPROVAL FROM THE ENGINEER IS REQUIRED FOR ANY DEVIATION FROM THE CONSTRUCTION DOCUMENTS. THE ENGINEER IS NOT RESPONSIBLE FOR CONNECTIONS NOT APPROVED PRIOR TO CONSTRUCTION OR INSTALLATION. 2. PROVIDE SIMPSON CONNECTIONS OR EQUAL IF CONNECTION DETAILS ARE NOT PROVIDED IN THE CONSTRUCTION DOCUMENTS. REQUEST ADDITIONAL ASSISTANCE FROM THE ENGINEER IF NON-STANDARD CONNECTIONS ARE REQUIRED. 3. ALL STRUCTURAL MEMBERS SHALL HAVE 1 3/4" BEARING (MINIMUM). 4. SEE SCHEDULES IN THE IBC FOR ADDITIONAL NAILING REQUIREMENTS.

## BLOCKING, BRIDGING, MISCELLANEOUS.

I. ALL JOISTS AND RAFTERS SHALL HAVE FULL-HEIGHT SOLID BLOCKING AT THEIR BEARING POINTS. CONNECT EACH BLOCK TO THE TOP OF EXTERIOR WALLS WITH SIMPSON A34 CLIPS (U.N.O.), EACH RAFTER AND/OR ROOF TRUSS SHALL BE ANCHORED WITH SIMPSON HI ANCHORS AT EACH END.

2. I-JOIST USED AS JOISTS AND RAFTERS SHALL HAVE FULL-HEIGHT SOLID BLOCKING AT THEIR BEARING POINTS. CONNECT EACH BLOCK TO THE TOP OF EXTERIOR WALLS WITH SIMPSON A34 CLIPS (UN.O.). EVERY OTHER I-JOIST RAFTER SHALL BE ANCHORED WITH A SIMPSON H3 CLIP.

3. STANDARD PENETRATIONS THROUGH STRUCTURAL MEMBERS FOR MECHANICAL, PLUMBING, ELECTRICAL SYSTEMS, ETC. SHALL BE PROVIDED ON THE CENTER LINE OF THE MEMBER'S DEPTH AND WITHIN THE MIDDLE ONE-THIRD OF THE SPAN. LARGER THAN STANDARD PENETRATIONS ARE NOT PERMITTED WITHOUT PRIOR APPROVAL. 4. BIRDS MOUTHS AND/OR NOTCHING OF STRUCTURAL MEMBERS NOT SPECIFICALLY DETAILED ON THE STRUCTURAL PLANS IS NOT PERMITTED WITHOUT PRIOR WRITTEN

## FABRICATED FRAMING

APPROVAL.

I. FABRICATED (PRE-BUILT) TRUSSES MAY BE USED FOR ROOF AND/OR FLOOR FRAMING. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. TRUSS MANUFACTURER SHALL DESIGN TRUSSES FOR ALL LOADS PER THE IBC, INCLUDING UNBALANCED SNOW LOADS, SNOW DRIFTING, SNOW BUILD UP IN VALLEYS AND ON EAVES, ETC. TRUSS MANUFACTURER SHALL RECOMMEND AND PROVIDE ALL REQUIRED TRUSS BRACING, BLOCKING, TRUSS TO TRUSS AND TRUSS TO BEAM CONNECTIONS, ETC. 2. SHOP DRAWINGS FOR ALL FABRICATED FRAMING SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.

GENERAL STRUCTURAL NOTES:

I. THE GENERAL CONTRACTOR, OR PROJECT MANAGER, SHALL COORDINATE THE WORK PERFORMED BY ALL TRADES, AND IS ULTIMATELY RESPONSIBLE FOR COMPLIANCE WITH ALL NOTED REQUIREMENTS,

- 2. TYPICAL DETAILS AND SCHEDULES SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN.
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND / OR ARCHITECT OF ANY DISCREPANCIES, OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND / OR THE SPECIFICATIONS BEFORE PROCEEDING WITH THE FABRICATION OR CONSTRUCTION OF ANY EFFECTED ELEMENTS. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN AND BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER. ANY WORK DONE BY THE CONTRACTOR BEFORE RECEIVING THE ENGINEERS WRITTEN APPROVAL WILL BE AT THE CONTRACTOR'S RISK.
- 4. FAILURE TO FOLLOW PLANS AND CONSTRUCTION DOCUMENTS CONSTITUTES CHANGE IN PROJECT SCOPE. THE ENGINEER RESERVES THE RIGHT TO REQUEST REPLACEMENT OF ANY PORTION OF THE STRUCTURE DEVIATING FROM THE PLANS WHERE WRITTEN APPROVAL HAS NOT BEEN OBTAINED.
- 5. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, SLOPES AND ELEVATIONS, ETC ... AT THE JOB SITE AND SHALL COORDINATE THESE WITH THE ARCHITECT AND ALL TRADES. CONSTRUCTION DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
- 6. DURING AND AFTER CONSTRUCTION, THE LOADS IMPOSED ON THE STRUCTURE BY THE CONTRACTOR AND OWNER SHALL BE WITHIN THE LIMITS OF THE OCCUPANCY DESIGN LOADS.
- 7. VISITS TO THE JOB SITE BY REPRESENTATIVES OF THE ENGINEER DO NOT CONSTITUTE APPROVAL OR SPECIAL INSPECTION OF THE WORK PERFORMED BY THE CONTRACTOR OR HIS SUBCONTRACTORS.

## DESIGN CODE:

2009 INTERNATIONAL BUILDING CODE (IBC)	
DESIGN CRITERIA:	

FLAT ROOF SNOW LOAD PF	= 30 PSF
SNOW EXPOSURE FACTOR, Ce	= 1.0
SNOW IMPORTANCE FACTOR, IS	= 1.0
WIND SPEED	= 90 MPH
WIND IMPORTANCE FACTOR, IW	= 1.0
WIND EXPOSURE	= B
SEISMIC USE GROUP	= 1
SDS, SDI	= 0.789 g, 0.481 g
SOIIL SITE CLASS	= D
ANALYSIS PROCEDURE	= EQUIVALENT LATERAL FORCE

DESIGN LOADS: ROOF SNOW LOAD UNBALANCED ROOF SNOW LOAD ROOF DEAD LOAD

= 30 PSF = 77 PSF = 15 PSF

		FOOTING SCHEDULE											
NOTES	1		WIDTH	LENGTH	DEPTH								
						NO.	SIZE	LENGTH	SPACING	NO.	SIZE	LENGTH	SPACING
		FC1.5	1'-6"	CONT.	1'-Ø"					2			EQ.
		NOTEC											
	,	NOTES:		000000									

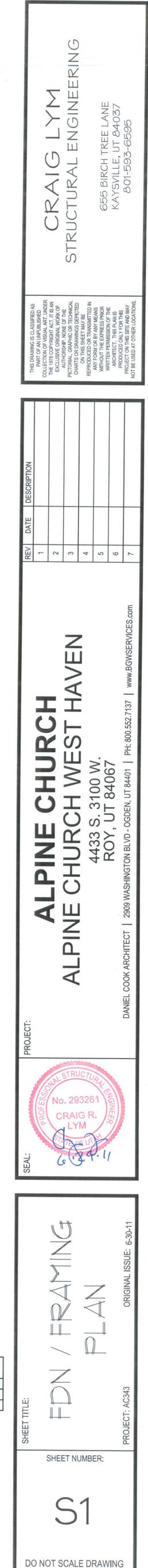
1. ASSUMED ALLOWABLE SOIL BEARING PRESSURE = 1500

MINIMUM CONCRETE COMPRESSIVE STRUNGTH f'c = 3000

ALL CONCRETE WORK MUST MEET THE REQUIREMENTS OF THE 2006 IBC, ACI 318 AND LOCAL ORDINANCES.

4. ALL BARS MUST BE 3" CLEAR FROM GRADE.

(20) IGO SINKER



REMARKS



