FAIRMONT, LIBERTY 3 SALT LAKE GRANITE STAKE RE-ROOF & SEISMIC UPGRADE

2465 SOUTH 800 EAST SALT LAKE CITY, UTAH PROPERTY #506790112030101 Economic and Sustainable Designs, Professionals You Know and State South Sandy Parkway, Suite 200 Sandy, Utah 84070 801.255.7700 mcneilengi

FAIRIONI, LIBERIY 3

ne Church of Jesus Christ of Latter-day Sair

SALT LAKE GRANITE STAKE

DATE DESCRIPTION

PROJECT NO.

DRAWN BY

CHECKED BY

P. NC5067901120301

COVER SHEET

G1.00

SA

DATE 8 FEBRUARY 2019 **PROP. NC**506790112030101 **GENERAL**

NOTES G1.01

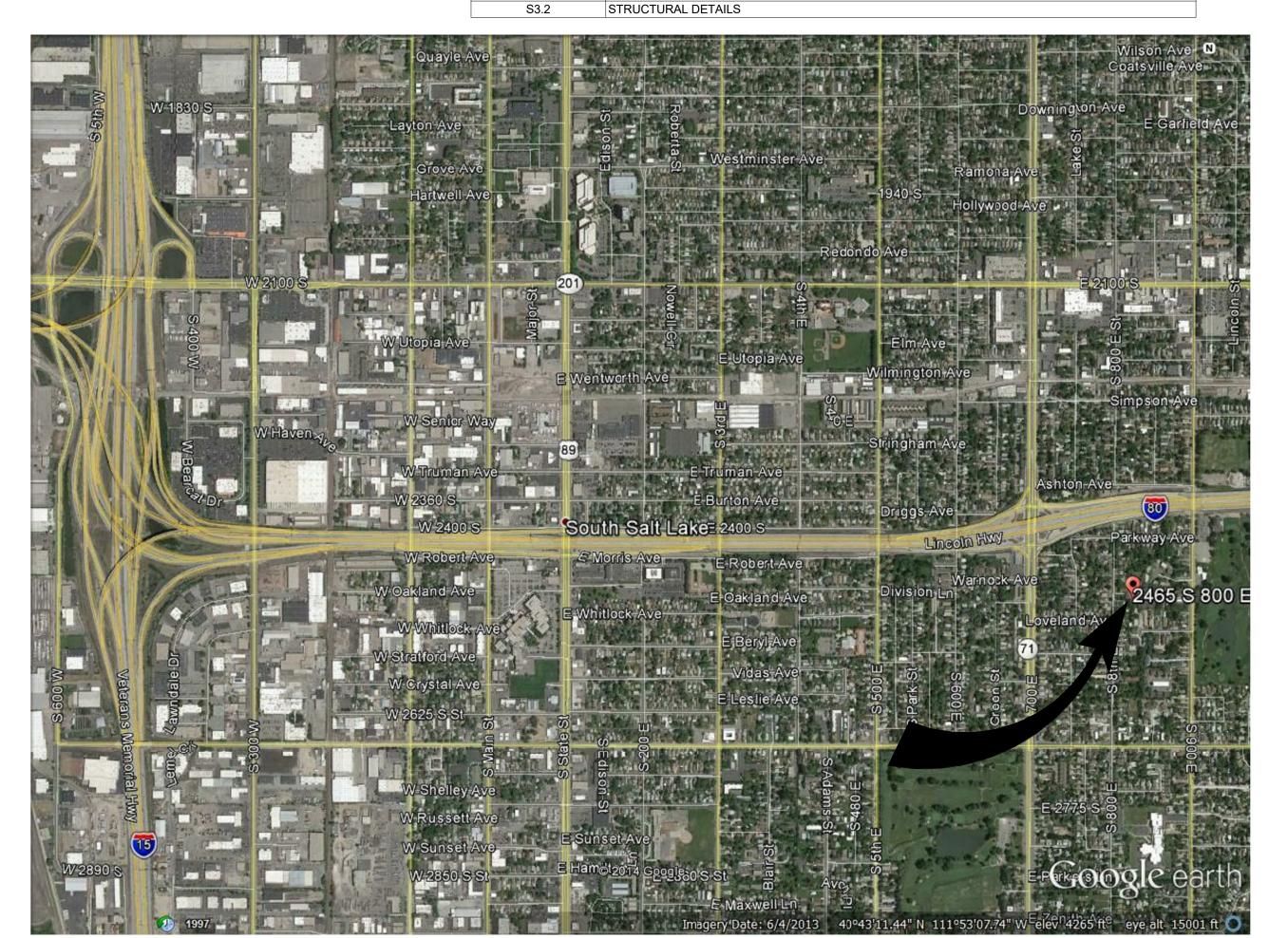
NORTH WEST ISOMETRIC VIEW

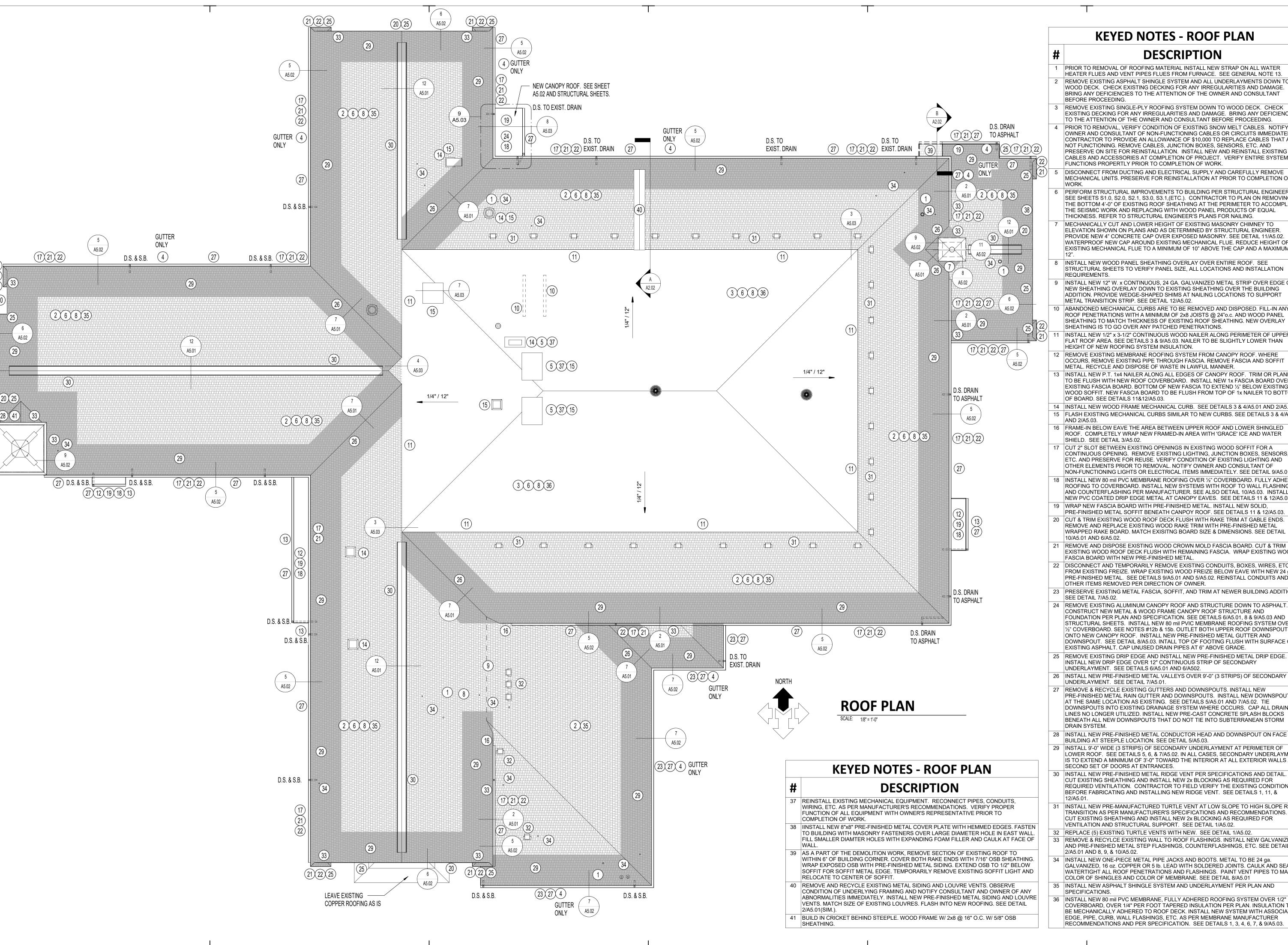
GENERAL NOTES:

- ENGINEER FOR CLARIFICATION, FOR ADDENDUM PRIOR TO BID OPENING. NO ALLOWANCES WILL BE MADE FOR CONDITIONS THAT ARE CLEARLY VISIBLE.
- SHALL HAVE ACCESS TO THE BUILDING WITHOUT PRIOR AUTHORIZATION.
- 3. ALL SAFETY STANDARDS AND REQUIREMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. EXISTING ROOF PENETRATIONS WILL BE FLASHED AND PAINTED.
- 5. ALL EXISTING ROOF VENTS, MECHANICAL UNITS, ROOF HATCHES, ETC. WILL BE A MINIMUM OF 10" ABOVE THE FINISHED ROOF.
- 6. ALL NEW METAL WILL BE GALVANIZED OR PRE-FINISHED. CAULKING WILL BE SAME COLOR AS
- 7. BEFORE FABRICATION OF ANY SHEET METAL WORK, SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL. ALL WORK TO CONFORM TO NRCA OR SMACNA DETAILS AND REQUIREMENTS WHERE NOT SPECIFICALLY DETAILED OTHERWISE.
- 8. COMPLY WITH ALL MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- 9. CONTRACTOR RESPONSIBLE TO KEEP BUILDING WATERTIGHT AT ALL TIMES. STARTING FROM NOTICE TO PROCEED TO SUBSTANTIAL COMPLETION ANY DAMAGE TO THE BUILDING OR ITS CONTENTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 10. CONTRACTOR TO CHECK ALL MECHANICAL EQUIPMENT BEFORE DISCONNECTING TO MAKE SURE THEY ARE OPERATING PROPERLY, CONTRACTOR IS ALSO RESPONSIBLE FOR UNITS TO BE IN COMPLETE OPERATING CONDITION AT THE COMPLETION OF THE PROJECT. COORDINATE SHUTDOWN WITH USERS.
- 11. GUTTERS AND DOWNSPOUTS:
- a. RIVETS & SCREWS TO BE PAINTED SAME COLOR (NO SPRAY PAINT)
- b. USE POP RIVETS AT ALL CONNECTIONS FROM GUTTERS TO DOWNSPOUTS.
- c. SPLASH BLOCKS TO BE UNDER EVERY OPEN DOWNSPOUT CHECK EXISTING SITE. PROVIDE NEW CONCRETE SPLASH BLOCK AT ALL OPEN DOWNSPOUTS.
- d. ALL JOINTS TO BE SEALED WATER TIGHT.
- 12. BEFORE ORDERING ANY MATERIALS, VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. **DO NOT SCALE DRAWINGS FOR QUANTITIES.**
- 13. BEFORE INSTALLATION OF NEW PIPE JACKS AND PIPE FLASHINGS CHECK MECHANICAL FLUES AND VENTS FOR ANY SETTLEMENT OR SHIFTING INTO ROOF. CONTRACTOR TO VERIFY THAT MECHANICAL EQUIPMENT VENTING TO HAVE POSITIVE RELEASE FLOW TO ROOF VENT AND FLUE IS SECURED TO ORIGINAL HEIGHT AND ALL CONNECTIONS ARE TIGHT AND SECURE.
- 14. ANY SIDING, FASCIA, ETC. THAT NEEDS TO BE REMOVED TO COMPLETE THIS JOB IS TO BE PART OF THE CONTRACT. CARE MUST BE TAKEN TO ENSURE THAT ALL ITEMS TO BE REINSTALLED ARE NOT DAMAGED DURING REMOVAL AND/OR INSTALLATION. ALL PIECES THAT ARE DAMAGED WILL BE REPLACED BY CONTRACTOR.
- 15. AT THE END OF CONSTRUCTION, CONTRACTOR IS TO CLEAN OUT AND FLUSH ALL GUTTERS AND DOWNSPOUTS TO MAKE SURE THEY ARE NOT PLUGGED AND ARE IN WORKING CONDITION.
- 16. CONTRACTOR TO SUPPLY AN ON SITE PORTABLE RESTROOM. FACILITY RESTROOMS ARE NOT TO BE USED BY CONTRACTOR OR CONTRACTOR'S EMPLOYEES. LOCATION OF PORTABLE RESTROOM TO BE DETERMINED DURING PRE-CONSTRUCTION MEETING.

	COMMO		S & ABBREVI	ATIONS
S\	MBOLS	AB	BREVIATIONS	
#	ROOM FINISH KEYNOTE	A.F.F. = ABOVE FINISHED FLOOR	H.W.H. = HOT WATER HEATER	SEC. = SECTION
<u> </u>		ALUM. = ALUMINUM	LT. = LIGHT	SECT. = SECTION
#)	GENERAL KEYNOTE	BD. = BOARD	MAX. = MAXIMUM	SIM. = SIMILAR
(4)	WALL CALLOUT	CONC. = CONCRETE	MECH. = MECHANICAL	T&G = TUNG & GROOVE
≝ > WAL	While office of	DIA. = DIAMETER	MFR. = MANUFACTURER	T.O. = TOP OF
#	WINDOW CALLOUT	EA. = EACH	MH = MANHOLE	TYP. = TYPICAL
—	DOOR CALLOUT	FD = FLOOR DRAIN	MIN. = MINIMUM	U.N.O. = UNLESS NOTED OTHERWIS
#		FURN. = FURNACE	NO. = NUMBER	WT. = WEIGHT
#	SECTION CALLOUT	GA. = GAUGE	N.T.S. = NOT TO SCALE	
_	ELEVATION CALLOUT	GALV. = GALVANIZED	O.C. = ON CENTER	
# #		GPF = GALLONS PER FLUSH	O.H. = OVERHANG	
#	DETAIL CALLOUT	GYP. = GYPSUM	PR. = PAIR	
#	ELEVATION MARKER	HB = HOSE BIB	RCP = REFLECTED CEILING PLAN	
		H.C. = HANDI-CAP	RE. = REFERENCE	

SHEET INDEX				
SHEET				
NO.	SHEET TITLE			
G1.00	COVER SHEET			
G1.01	GENERAL NOTES			
A1.01	ROOF PLAN			
A2.01	EXTERIOR ELEVATIONS			
A2.02	EXTERIOR ELEVATIONS			
A5.01	STEEP SLOPE ROOF DETAILS			
A5.02	STEEP SLOPE ROOF DETAILS			
A5.03	LOW SLOPE ROOF DETAILS			
S1.0	GENERAL STRUCTURAL NOTES			
S2.0	ROOF FRAMING PLAN			
S3.0	STRUCTURAL DETAILS			
S3.1	STRUCTURAL DETAILS			
00.0	CTRUCTURAL DETAIL C			





KEYED NOTES - ROOF PLAN

DESCRIPTION PRIOR TO REMOVAL OF ROOFING MATERIAL INSTALL NEW STRAP ON ALL WATER

HEATER FLUES AND VENT PIPES FLUES FROM FURNACE. SEE GENERAL NOTE 13. REMOVE EXISTING ASPHALT SHINGLE SYSTEM AND ALL UNDERLAYMENTS DOWN TO WOOD DECK. CHECK EXISTING DECKING FOR ANY IRREGULARITIES AND DAMAGE. BRING ANY DEFICIENCIES TO THE ATTENTION OF THE OWNER AND CONSULTANT

REMOVE EXISTING SINGLE-PLY ROOFING SYSTEM DOWN TO WOOD DECK. CHECK EXISTING DECKING FOR ANY IRREGULARITIES AND DAMAGE. BRING ANY DEFICIENCIES TO THE ATTENTION OF THE OWNER AND CONSULTANT BEFORE PROCEEDING. PRIOR TO REMOVAL, VERIFY CONDITION OF EXISTING SNOW MELT CABLES. NOTIFY OWNER AND CONSULTANT OF NON-FUNCTIONING CABLES OR CIRCUITS IMMEDIATELY CONTRACTOR TO PROVIDE AN ALLOWANCE OF \$10,000 TO REPLACE CABLES THAT ARE

FUNCTIONS PROPERTLY PRIOR TO COMPLETION OF WORK DISCONNECT FROM DUCTING AND ELECTRICAL SUPPLY AND CAREFULLY REMOVE MECHANICAL UNITS. PRESERVE FOR REINSTALLATION AT PRIOR TO COMPLETION OF

PERFORM STRUCTURAL IMPROVEMENTS TO BUILDING PER STRUCTURAL ENGINEER SEE SHEETS S1.0, S2.0, S2.1, S3.0, S3.1,(ETC.). CONTRACTOR TO PLAN ON REMOVING THE BOTTOM 4'-0" OF EXISTING ROOF SHEATHING AT THE PERIMETER TO ACCOMPLISH THE SEISMIC WORK AND REPLACING WITH WOOD PANEL PRODUCTS OF EQUAL THICKNESS. REFER TO STRUCTURAL ENGINEER'S PLANS FOR NAILING.

MECHANICALLY CUT AND LOWER HEIGHT OF EXISTING MASONRY CHIMNEY TO ELEVATION SHOWN ON PLANS AND AS DETERMINED BY STRUCTURAL ENGINEER. PROVIDE NEW 4" CONCRETE CAP OVER EXPOSED MASONRY. SEE DETAIL 11/A5.02. WATERPROOF NEW CAP AROUND EXISTING MECHANICAL FLUE. REDUCE HEIGHT OF EXISTING MECHANICAL FLUE TO A MINIMUM OF 10" ABOVE THE CAP AND A MAXIMUM OF

8 INSTALL NEW WOOD PANEL SHEATHING OVERLAY OVER ENTIRE ROOF. SEE STRUCTURAL SHEETS TO VERIFY PANEL SIZE, ALL LOCATIONS AND INSTALLATION

INSTALL NEW 12" W. x CONTINUOUS, 24 GA. GALVANIZED METAL STRIP OVER EDGE OF NEW SHEATHING OVERLAY DOWN TO EXISTING SHEATHING OVER THE BUILDING ADDITION. PROVIDE WEDGE-SHAPED SHIMS AT NAILING LOCATIONS TO SUPPORT METAL TRANSITION STRIP. SEE DETAIL 12/A5.02.

10 ABANDONED MECHANICAL CURBS ARE TO BE REMOVED AND DISPOSED. FILL-IN ANY ROOF PENETRATIONS WITH A MINIMUM OF 2x8 JOISTS @ 24"o.c. AND WOOD PANEL SHEATHING TO MATCH THICKNESS OF EXISTING ROOF SHEATHING. NEW OVERLAY SHEATHING IS TO GO OVER ANY PATCHED PENETRATIONS.

INSTALL NEW 1/2" x 3-1/2" CONTINUOUS WOOD NAILER ALONG PERIMETER OF UPPER FLAT ROOF AREA. SEE DETAILS 3 & 9/A5.03. NAILER TO BE SLIGHTLY LOWER THAN HEIGHT OF NEW ROOFING SYSTEM INSULATION.

12 REMOVE EXISTING MEMBRANE ROOFING SYSTEM FROM CANOPY ROOF. WHERE OCCURS, REMOVE EXISTING PIPE THROUGH FASCIA. REMOVE FASCIA AND SOFFIT

13 INSTALL NEW P.T. 1x4 NAILER ALONG ALL EDGES OF CANOPY ROOF. TRIM OR PLANE 1x TO BE FLUSH WITH NEW ROOF COVERBOARD. INSTALL NEW 1x FASCIA BOARD OVER EXISTING FASCIA BOARD. BOTTOM OF NEW FASCIA TO EXTEND 1/2" BELOW EXISTING WOOD SOFFIT. NEW FASCIA BOARD TO BE FLUSH FROM TOP OF 1x NAILER TO BOTTOM OF BOARD. SEE DETAILS 11&12/A5.03.

14 INSTALL NEW WOOD FRAME MECHANICAL CURB. SEE DETAILS 3 & 4/A5.01 AND 2/A5.03 15 FLASH EXISTING MECHANICAL CURBS SIMILAR TO NEW CURBS. SEE DETAILS 3 & 4/A5.01

16 FRAME-IN BELOW EAVE THE AREA BETWEEN UPPER ROOF AND LOWER SHINGLED ROOF. COMPLETELY WRAP NEW FRAMED-IN AREA WITH 'GRACE' ICE AND WATER

17 CUT 2" SLOT BETWEEN EXISTING OPENINGS IN EXISTING WOOD SOFFIT FOR A CONTINUOUS OPENING. REMOVE EXISTING LIGHTING, JUNCTION BOXES, SENSORS, ETC. AND PRESERVE FOR REUSE. VERIFY CONDITION OF EXISTING LIGHTING AND OTHER ELEMENTS PRIOR TO REMOVAL. NOTIFY OWNER AND CONSULTANT OF NON-FUNCTIONING LIGHTS OR ELECTRICAL ITEMS IMMEDIATELY. SEE DETAIL 9/A5.01

18 INSTALL NEW 80 mil PVC MEMBRANE ROOFING OVER ½" COVERBOARD. FULLY ADHERE ROOFING TO COVERBOARD. INSTALL NEW SYSTEMS WITH ROOF TO WALL FLASHING AND COUNTERFLASHING PER MANUFACTURER. SEE ALSO DETAIL 10/A5.03. INSTALL NEW PVC COATED DRIP EDGE METAL AT CANOPY EAVES. SEE DETAILS 11 & 12/A5.03

19 WRAP NEW FASCIA BOARD WITH PRE-FINISHED METAL. INSTALL NEW SOLID, PRE-FINISHED METAL SOFFIT BENEATH CANPOY ROOF. SEE DETAILS 11 & 12/A5.03. 20 CUT & TRIM EXISTING WOOD ROOF DECK FLUSH WITH RAKE TRIM AT GABLE ENDS.

REMOVE AND REPLACE EXISTING WOOD RAKE TRIM WITH PRE-FINISHED METAL WRAPPED RAKE BOARD. MATCH EXISITNG BOARD SIZE & DIMENSIONS. SEE DETAIL 10/A5.01 AND 6/A5.02.

21 REMOVE AND DISPOSE EXISTING WOOD CROWN MOLD FASCIA BOARD. CUT & TRIM EXISTING WOOD ROOF DECK FLUSH WITH REMAINING FASCIA. WRAP EXISTING WOOD FASCIA BOARD WITH NEW PRE-FINISHED METAL.

22 DISCONNECT AND TEMPORARILY REMOVE EXISTING CONDUITS, BOXES, WIRES, ETC. FROM EXISTING FREIZE. WRAP EXISTING WOOD FREIZE BELOW EAVE WITH NEW 24 ga PRE-FINISHED METAL. SEE DETAILS 9/A5.01 AND 5/A5.02. REINSTALL CONDUITS AND OTHER ITEMS REMOVED PER DIRECTION OF OWNER.

23 PRESERVE EXISTING METAL FASCIA, SOFFIT, AND TRIM AT NEWER BUILDING ADDITION

24 REMOVE EXISTING ALUMINUM CANOPY ROOF AND STRUCTURE DOWN TO ASPHAL CONSTRUCT NEW METAL & WOOD FRAME CANOPY ROOF STRUCTURE AND FOUNDATION PER PLAN AND SPECIFICATION. SEE DETAILS 6/A5.01, 8 & 9/A5.03 AND STRUCTURAL SHEETS. INSTALL NEW 80 mil PVIC MEMBRANE ROOFING SYSTEM OVER 1/2" COVERBOARD. SEE NOTES #12b & 15b. OUTLET BOTH UPPER ROOF DOWNSPOUTS ONTO NEW CANOPY ROOF. INSTALL NEW PRE-FINISHED METAL GUTTER AND DOWNSPOUT. SEE DETAIL 8/A5.03. INTALL TOP OF FOOTING FLUSH WITH SURFACE OF EXISTING ASPHALT. CAP UNUSED DRAIN PIPES AT 6" ABOVE GRADE.

25 REMOVE EXISTING DRIP EDGE AND INSTALL NEW PRE-FINISHED METAL DRIP EDGE. INSTALL NEW DRIP EDGE OVER 12" CONTINUOUS STRIP OF SECONDARY

UNDERLAYMENT. SEE DETAILS 6/A5.01 AND 6/A502 26 INSTALL NEW PRE-FINISHED METAL VALLEYS OVER 9'-0" (3 STRIPS) OF SECONDARY

UNDERLAYMENT. SEE DETAIL 7/A5.01. 27 REMOVE & RECYCLE EXISTING GUTTERS AND DOWNSPOUTS. INSTALL NEW PRE-FINISHED METAL RAIN GUTTER AND DOWNSPOUTS. INSTALL NEW DOWNSPOUTS AT THE SAME LOCATION AS EXISTING. SEE DETAILS 5/A5.01 AND 7/A5.02. TIE DOWNSPOUTS INTO EXISTING DRAINAGE SYSTEM WHERE OCCURS. CAP ALL DRAIN LINES NO LONGER UTILIZED. INSTALL NEW PRE-CAST CONCRETE SPLASH BLOCKS BENEATH ALL NEW DOWNSPOUTS THAT DO NOT TIE INTO SUBTERRANEAN STORM

28 INSTALL NEW PRE-FINISHED METAL CONDUCTOR HEAD AND DOWNSPOUT ON FACE OF

INSTALL NEW PRE-FINISHED METAL CONDUCTOR HEAD AND DOWNSPOUT ON FACE OF BUILDING AT STEEPLE LOCATION. SEE DETAIL 5/A5.03.

INSTALL 9'-0" WIDE (3 STRIPS) OF SECONDARY UNDERLAYMENT AT PERIMETER OF LOWER ROOF. SEE DETAILS 5, 6, & 7/A5.02. IN ALL CASES, SECONDARY UNDERLAYMENT IS TO EXTEND A MINIMUM OF 3'-0" TOWARD THE INTERIOR AT ALL EXTERIOR WALLS AND SECOND SET OF DOORS AT ENTRANCES. 29 INSTALL 9'-0" WIDE (3 STRIPS) OF SECONDARY UNDERLAYMENT AT PERIMETER OF

SECOND SET OF DOORS AT ENTRANCES. 30 INSTALL NEW PRE-FINISHED METAL RIDGE VENT PER SPECIFICATIONS AND DETAIL. CUT EXISTING SHEATHING AND INSTALL NEW 2x BLOCKING AS REQUIRED FOR REQUIRED VENTILATION. CONTRACTOR TO FIELD VERIFY THE EXISTING CONDITIONS BEFORE FABRICATING AND INSTALLING NEW RIDGE VENT. SEE DETAILS 1, 11, &

31 INSTALL NEW PRE-MANUFACTURED TURTLE VENT AT LOW SLOPE TO HIGH SLOPE ROOF TRANSITION AS PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. CUT EXISTING SHEATHING AND INSTALL NEW 2x BLOCKING AS REQUIRED FOR VENTILATION AND STRUCTURAL SUPPORT. SEE DETAIL 1/A5.02.

32 REPLACE (5) EXISTING TURTLE VENTS WITH NEW. SEE DETAIL 1/A5.02. 33 REMOVE & RECYLCE EXISTING WALL TO ROOF FLASHINGS. INSTALL NEW GALVANIZED AND PRE-FINISHED METAL STEP FLASHINGS, COUNTERFLASHINGS, ETC. SEE DETAILS 2/A5.01 AND 8, 9, & 10/A5.02.

34 | INSTALL NEW ONE-PIECE METAL PIPE JACKS AND BOOTS. METAL TO BE 24 ga. GALVANIZED, 16 oz. COPPER OR 5 lb. LEAD WITH SOLDERED JOINTS, CAULK AND SEAL WATERTIGHT ALL ROOF PENETRATIONS AND FLASHINGS. PAINT VENT PIPES TO MATCH

COLOR OF SHINGLES AND COLOR OF MEMBRANE. SEE DETAIL 8/A5.01 35 INSTALL NEW ASPHALT SHINGLE SYSTEM AND UNDERLAYMENT PER PLAN AND

36 | INSTALL NEW 80 mil PVC MEMBRANE, FULLY ADHERED ROOFING SYSTEM OVER 1/2" COVERBOARD, OVER 1/4" PER FOOT TAPERED INSULATION PER PLAN. INSULATION TO BE MECHANICALLY ADHERED TO ROOF DECK. INSTALL NEW SYSTEM WITH ASSOCIATED EDGE, PIPE, CURB, WALL FLASHINGS, ETC. AS PER MEMBRANE MANUFACTURER RECOMMENDATIONS AND PER SPECIFICATION. SEE DETAILS 1, 3, 4, 6, 7, & 9/A5.03.

a × TE STAKE J EAST UTAH Ch

aints

S

U

| LA | 465 | ALT | SA

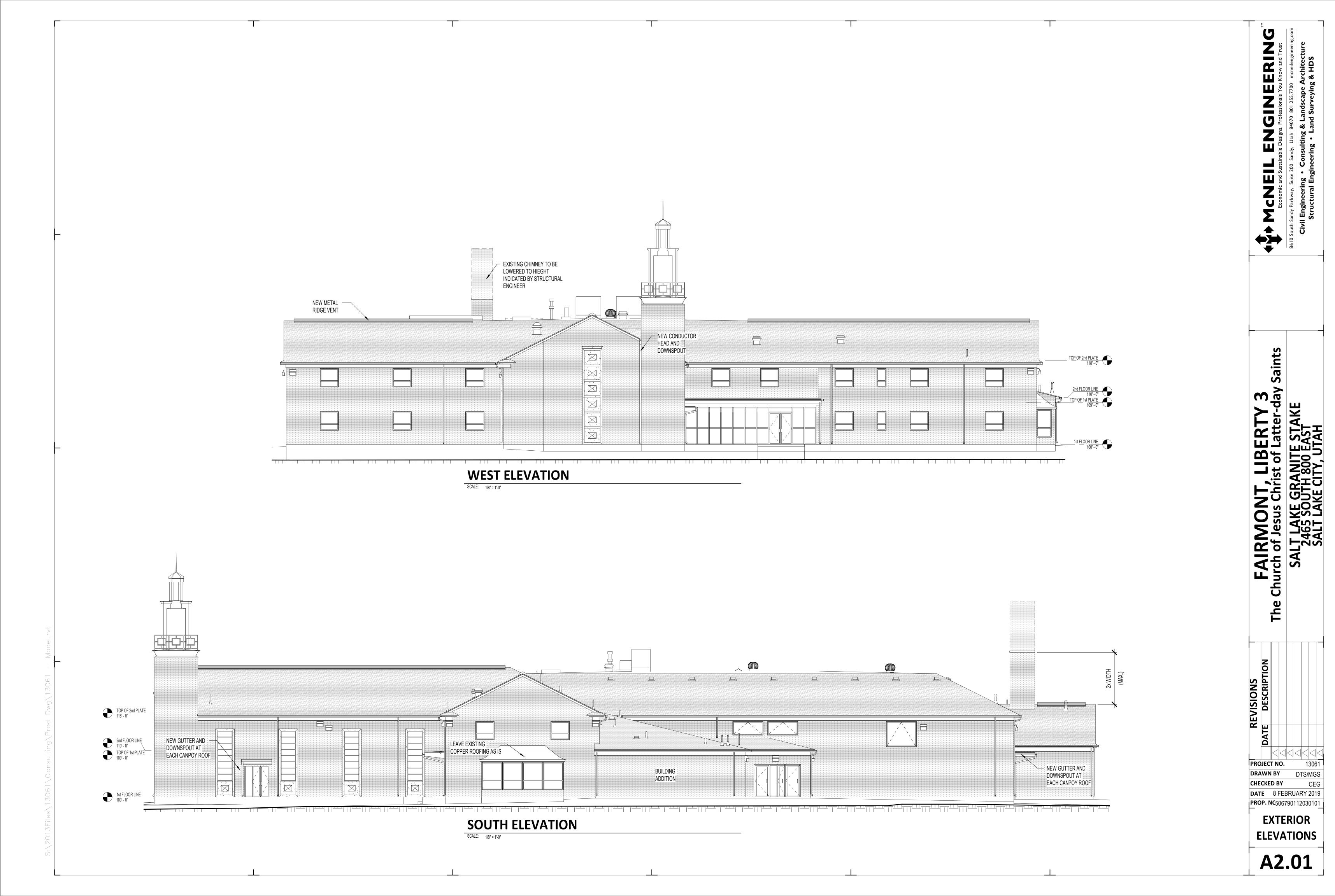
PROJECT NO. 13061

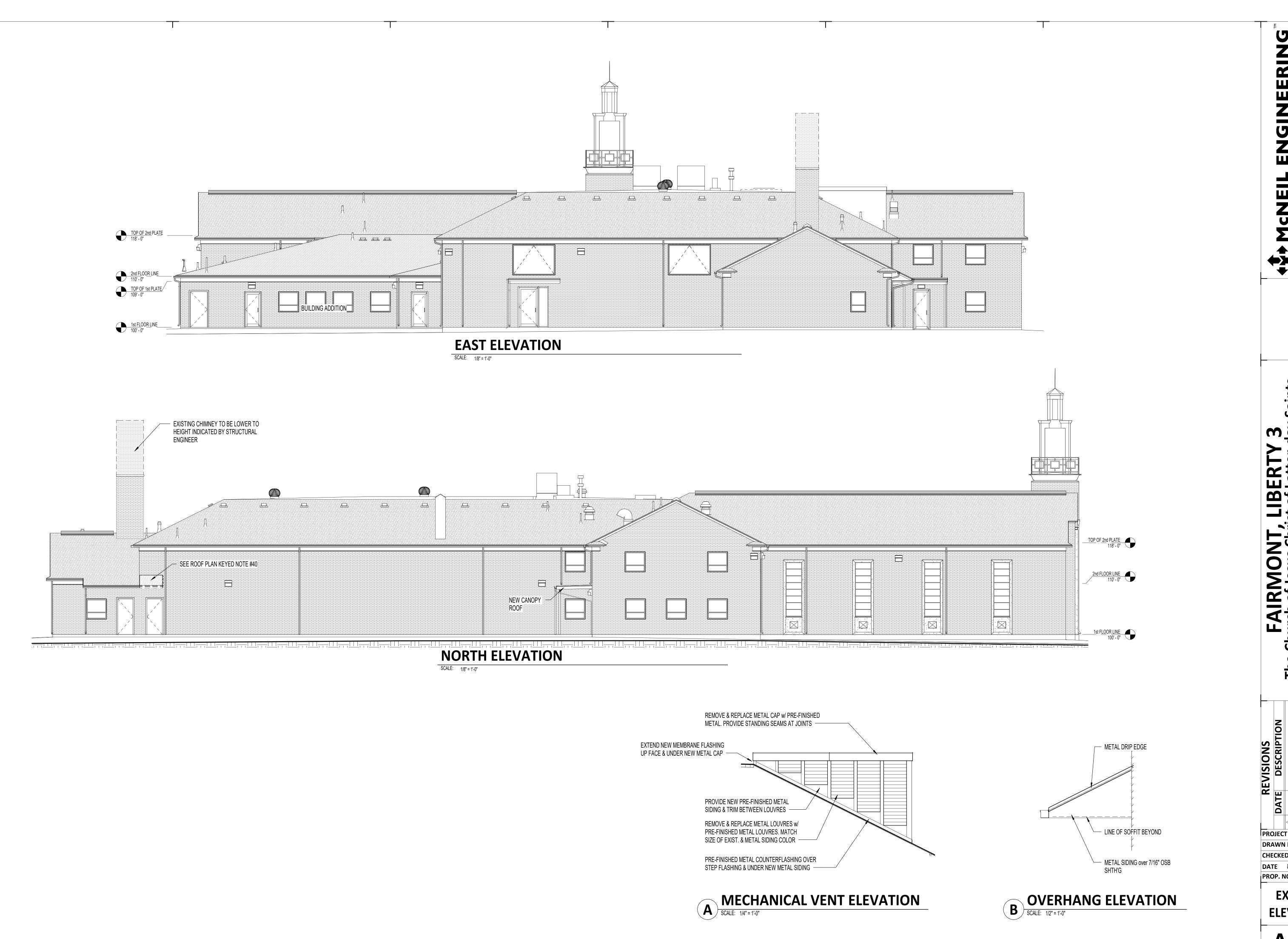
DRAWN BY DTS/MGS **CHECKED BY**

DATE 8 FEBRUARY 2019 PROP. NC506790112030101

ROOF PLAN

A1.01





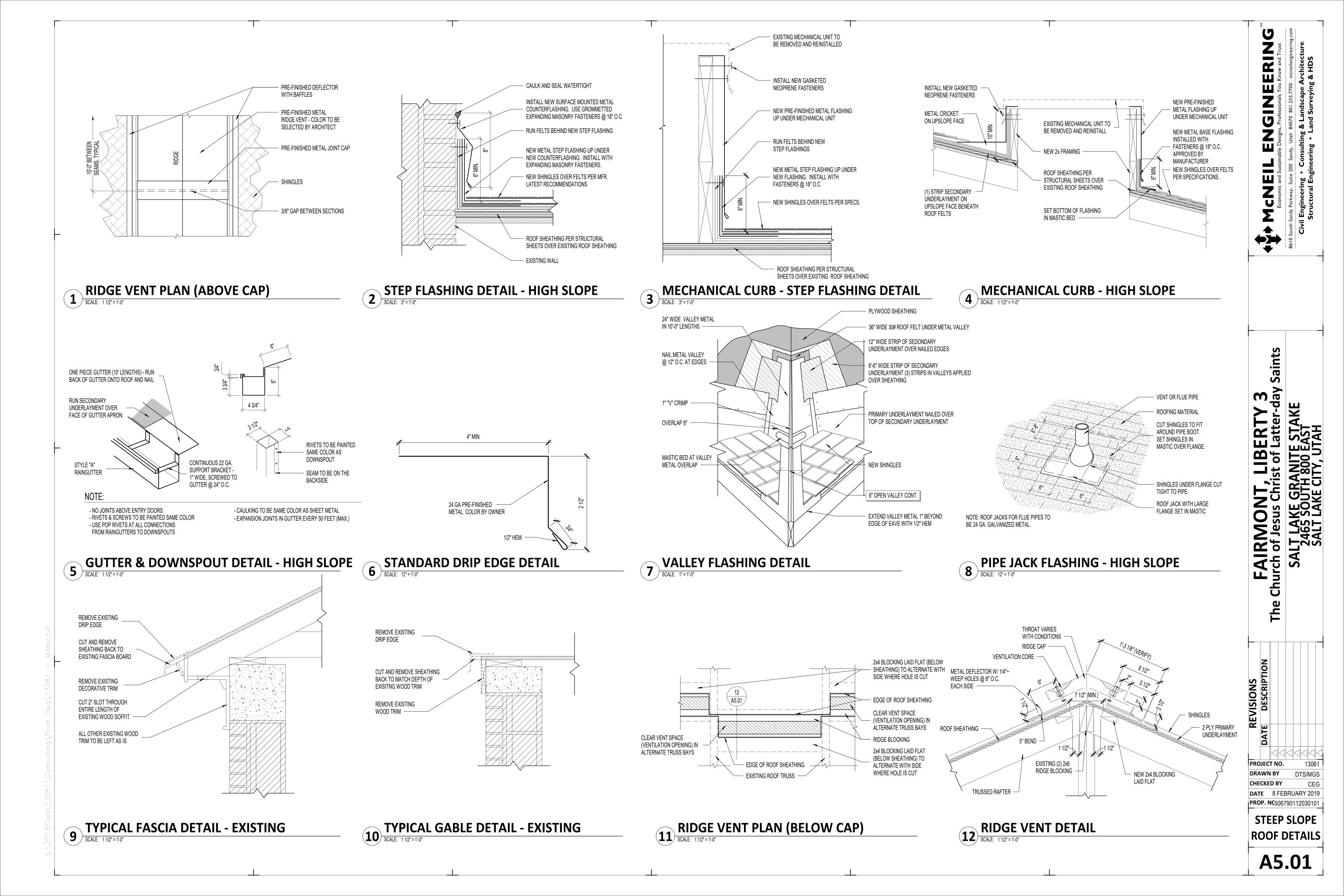
SALT LAKE GRANI 2465 SOUTH 80 SALT LAKE CITY, FAIRMOI Church of Jesus

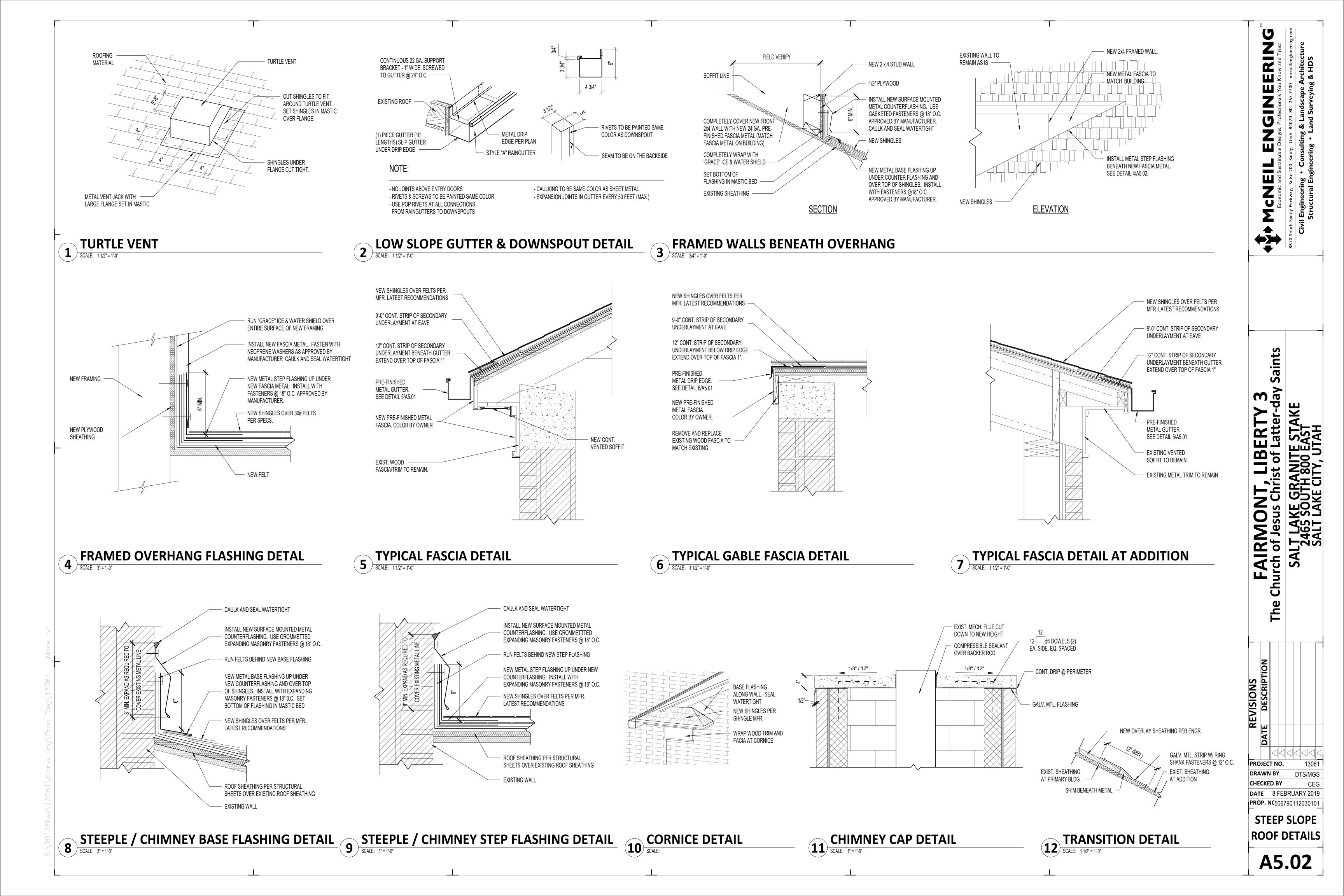
ENGINEERING

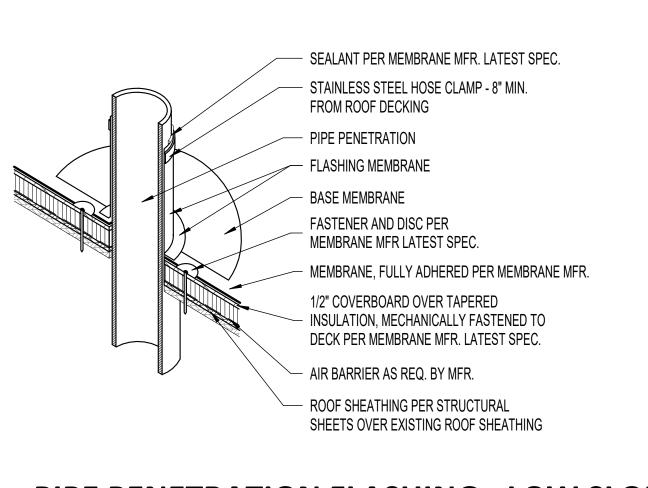
PROJECT NO. **DRAWN BY** DTS/MGS CHECKED BY **DATE** 8 FEBRUARY 2019 **PROP. NC**506790112030101

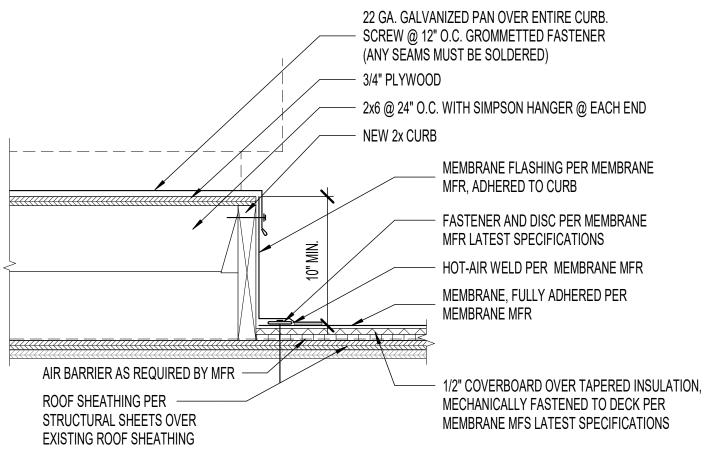
EXTERIOR ELEVATIONS

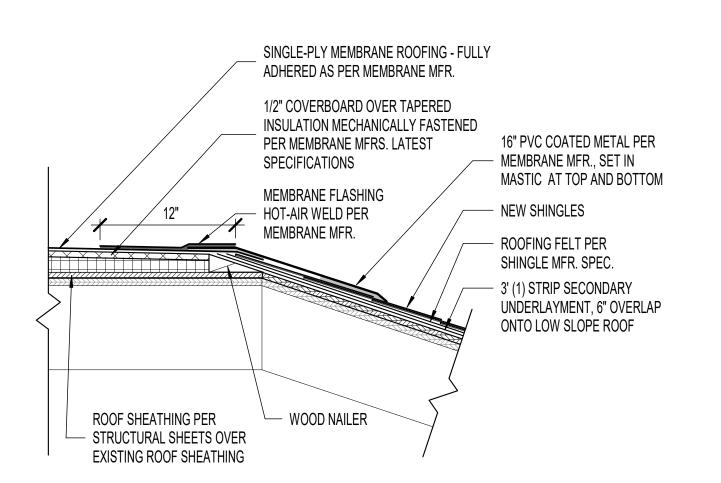
A2.02

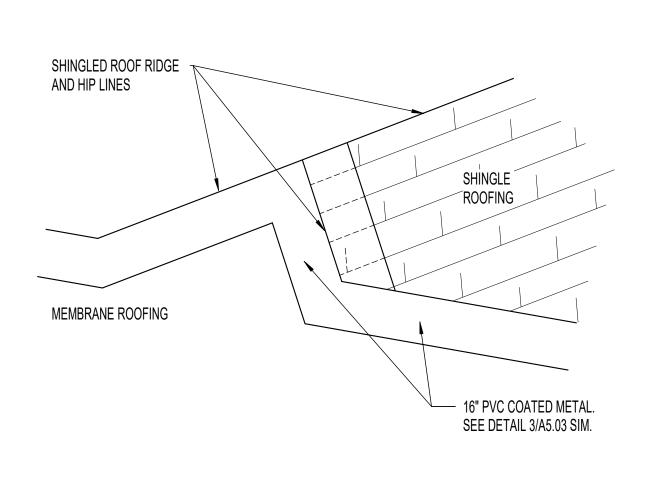










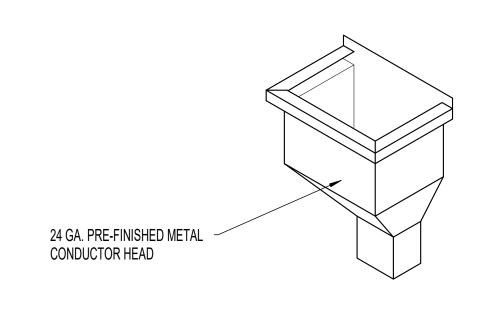


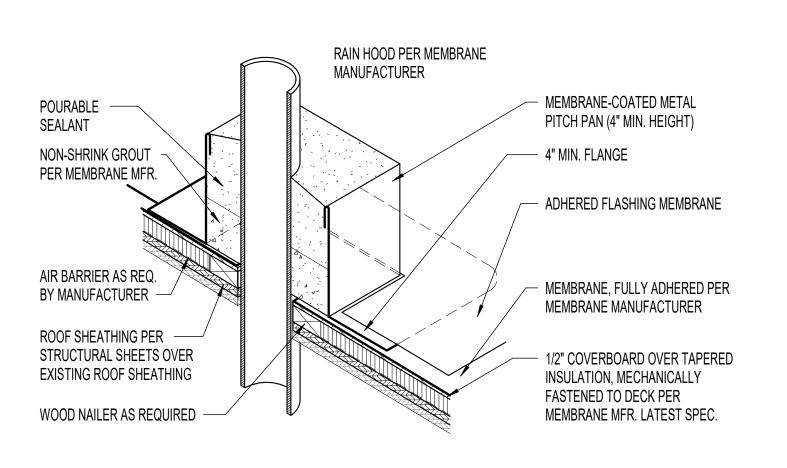
PIPE PENETRATION FLASHING - LOW SLOPE SCALE: 1" = 1'-0"

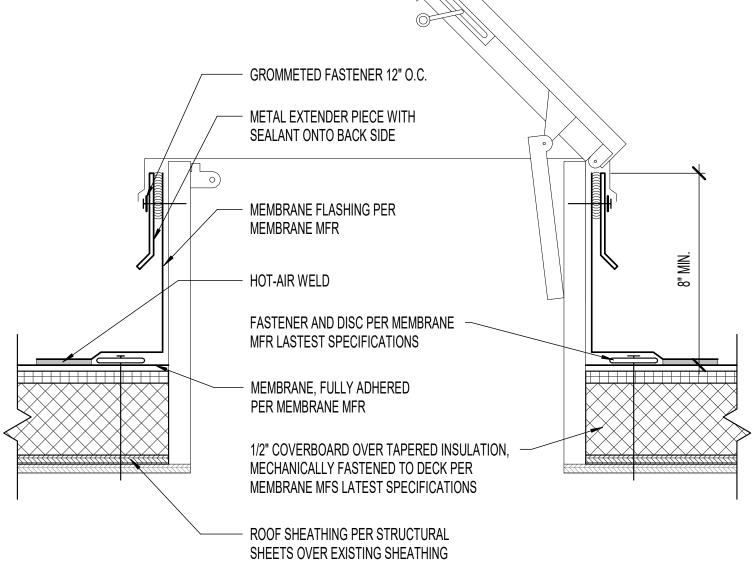
CURB DETAIL @ MECHANICAL UNIT

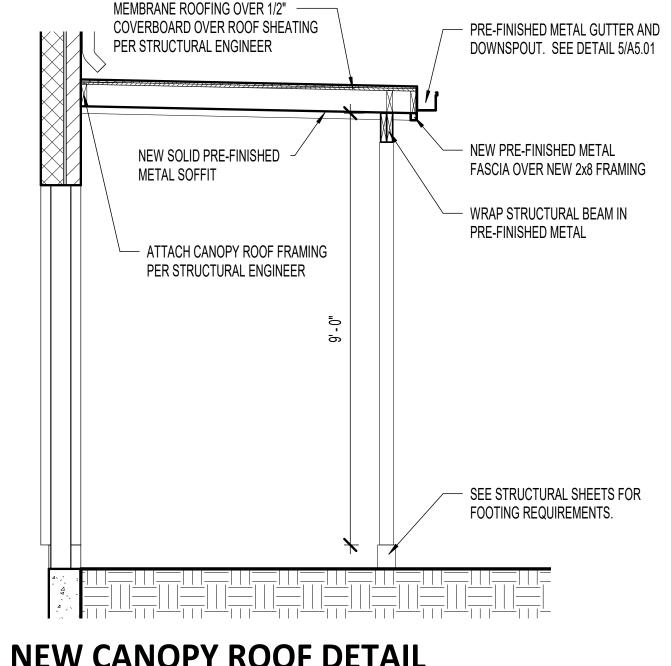
LOW SLOPE DOWN TO HIGH SLOPE TRANSITION SCALE: 1 1/2" = 1'-0" RIDGE TRANSITION TO LOW SLOPE SCALE: 1/2" = 1'-0" 3 SCALE: 1 1/2" = 1'-0"









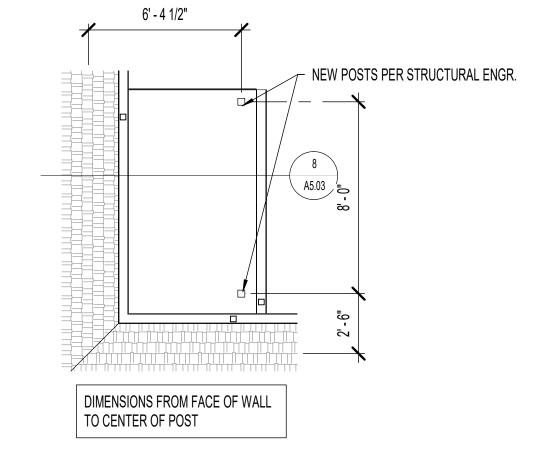


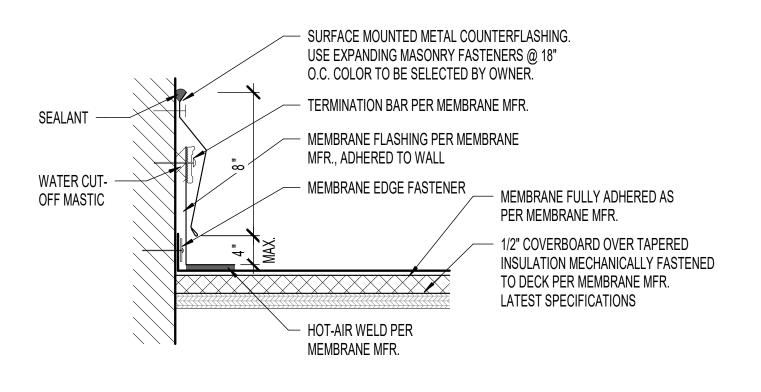
SCALE: 1 1/2" = 1'-0"

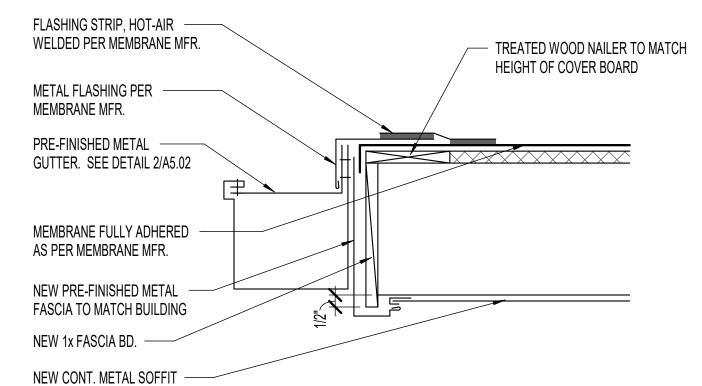


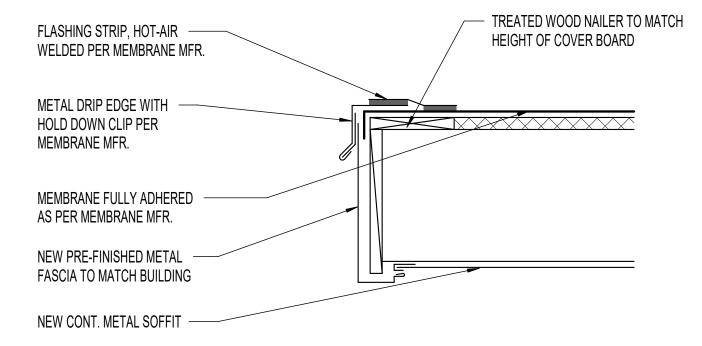
ROOF HATCH ACCESS

NEW CANOPY ROOF DETAIL









9 ENLARGED CANOPY LAYOUT
SCALE: 1/4" = 1'-0"

COUNTER FLASHING AT CANOPY ROOFS

CANOPY ROOFS EDGE DETAIL W/ GUTTER

SCALE: 3" = 1'-0"

CANOPY ROOFS EDGE DETAIL

SCALE: 3" = 1'-0"

REVISIONS DATE DESCRIPTION PROJECT NO. DRAWN BY DTS/MGS **CHECKED BY**

ERING

NUU

aints

S

TE STAKE J EAST UTAH

EAIRMONT, LII
Schurch of Jesus Christ c
SALT LAKE GRANI
2465 SOUTH 800
SALT LAKE CITY,

 $\frac{a}{\sqrt{a}}$

DATE 8 FEBRUARY 2019 **PROP. NC**50679011203010

LOW SLOPE ROOF DETAILS

A5.03

GENERAL NOTES FOR STRUCTURAL SHEETS

BASIS OF DESIGN		
1. BUILDING CODE		2015 IBC
2. RISK CATEGORY		III
3. GRAVITY DESIGN:		
DEAD LOADS:		
Roofs		20 psf
LIVE LOADS:		
Roofs		20 psf
SNOW LOADS:	_	
Snow load on ground,	Pg	42.8 psf
Snow load on flat roof,	Pf	33 psf
Exposure factor,	Ce	1.0
Importance factor,	ls	1.1
Thermal factor,	Ct	1.0
Slope roof factor,	Cs	1.0
Snow load on sloped roof,	Ps	33 psf
4. WIND DESIGN:		
Basic wind speed (ultimate)		115 mph (3 sec gust)
Importance factor,	lw	1.0
Exposure		С
5. SEISMIC DESIGN: (According to ASCE41-06)		
Building performance criteria at 2/3 MCE,		Life Safety
Building performance criteria at Maximum consi	dered MCE,	Collapse Prevention
Mapped Spectral response accelerations:		
	Ss & S1	1.443 & 0.532
Site class		D
Spectral response coefficients:		
	Sxs & Sx1	1.446 & 0.798
Basic Seismic-Force-Resisting System:		
	Ordinary masonry shear	walls
EOR = Engineer of record. See professional sta	amp this page.	

UNO = Unless noted otherwise

(E) = Existing condition

(N) = New construction WD-# = Wood diaphragm call out see schedule

GENERAL

THE GENERAL CONTRACTOR SHALL

A. Be familiar with the contract documents and insure that subcontractors are familiar with their portion of the work. Submit a written request to the Arch/EOR for approval before proceeding with any changes.

B. Verifies site conditions and dimensions at the site. If they differ from the contract documents, notify the Arch/EOR prior to fabrication/construction of affected elements. Existing condition information on the drawings is based on best knowledge acquired during the design phase and may differ from actual conditions. Affected details may require

C. Report to the Arch/EOR modifications made to the structure.

D. Be responsible for safety and protection on and around the job site and adjacent properties.

THE GENERAL CONTRACTOR SHALL COORDINATE:

A. And verify locations, weights and sizes of mechanical units, equipment, etc. prior to the fabrication and erecting of structural supporting elements. Report sizes and locations that differ from those shown on the drawings to the Arch/EOR for review. Additional framing maybe required.

B. Roof, floor, and wall openings required for mechanical, etc. which are not shown on the structural drawings with the

C. Any structural situation not covered by the drawings with the Arch/EOR.

D. Doors, windows, walls, elevations, slopes, stairs, curbs, drains, recesses, depressions, railings, waterproofing, finishes, chamfers, kerfs, pads, landscape walls, trenches in slabs, etc. with the structural work.

E. Inspections, testing, and structural observations as work proceeds. Notify the EOR 48 hours prior to any required structural observations.

3. CONTRACT DOCUMENTS & DRAWINGS:

A. These structural notes complement the specifications and the drawings.

B. Specific details, sections and notes shown on the drawings govern over these general notes and typical details. C. Contract documents take precedence over shop drawings, UNO.

D. Apply typical or similar details, sections and notes to similar situations on the drawings where specific details are not

E. Drawings and details have been prepared to visually represent information provided in scaled form. However, DO NOT scale plans or details for dimensional information.

F. Refer to architectural drawings for dimensions.

4. BUILDING CODE COMPLIANCE: Construction, inspection, materials, testing, and workmanship shall conform to the requirements of the governing building code.

5. CONSTRUCTION SEQUENCE, SHORING, AND BRACING REQUIREMENTS: The general contractor is responsible for the method, means, and sequence of structural erection, UNO. He shall provide adequate temporary shoring or bracing for all structural elements until the entire structural system is completed. Design of shoring and bracing is by others at no

6. OMISSIONS, CONFLICTS & DISCREPANCIES:

A. Bring omissions, conflicts or discrepancies between the elements of the contract documents to the attention of the Arch/EOR before proceeding with work involved.

B. In case of conflicts or discrepancies, follow the most stringent requirements as directed by the Arch/EOR.

7. MISCELLANEOUS:

A. During and after construction, builder and/owner shall keep loads on the structure within the limits of this design. See

B. Site observations by WCA's field representative shall neither be construed as inspection nor approval of construction.

A. Make submittals in a timely manner. WCA's review is for general compliance only and is not intended as approval. Contractor is responsible for verifying sizes, dimensions and elevations on submittals as related to the contract

B. Submit the following items for review prior to proceeding with the work:

Concrete material Certifications & mix designs. Cores material Certifications and grout designs.

Shop Drawings: Reinforcing steel Structural steel

C. Allow two weeks for the review of submittals by the EOR

D. Have EOR approved shop drawings & materials on site before construction of those components begins. E. Substitutions are not allowed unless approved by the EOR. Submit requests for structural substitutions to the Arch/EOR.

Welding procedures and certifications.

STRUCTURAL OBSERVATIONS

Required Structural Observations . Verification of existing and new roof sheathing thickness, appropriate nailing patterns used, and blocking of blocked

2. Verification of construction of all roof to wall connections including blocking clips, connecters, and strapping and new bolting

3. Grouting of cores

ADHESIVE

ALL REFERENCES TO CONSTRUCTION ADHESIVE REFER TO THE FOLLOWING

. 3M5200 MARINE ADHESIVE MANUFACTURED BY 3M

NOTE:

WHERE DETAILS INDICATE A 3/8" DIAMETER BEAD OF CONSTRUCTION ADHESIVE. THE 3/8" IS BEFORE THE TWO MEMBERS ARE PRESSED TOGETHER. AFTER THE MEMBERS BEING CONNECTED ARE PRESSED TOGETHER, THE WIDTH OF THE GLUE SHOULD BE NO LESS THEN 1" WIDE. GLUE SHOULD EXTEND THE FULL LENGTH OF THE SHORTEST CONNECTING MEMBER. GLUING PROCEDURES FOUND TO NOT COMPLY WITH THE INSTRUCTIONS ABOVE WILL REQUIRE CONTRACTOR TO DEMO THE DEFICIENT MEMBER AT THEIR EXPENSE, AND REPLACE USING THE PROPER GLUING PROCEDURES.

POST-INSTALLED ANCHORS

1. PRODUCT: Epoxy Anchors

A. Epoxy for Concrete connections shall be:

1. HIT RE 500-SD (ICC-ESR-2322) by Hilti Corporation 2. HIT_HY 150 MAX-SD (ICC-ESR-3013) by Hilti Corporation

3. Powers PE1000 + (ICC-ESR-2583) by Powers Fasteners Inc

4. SET-XP (ICC-ESR-2508) by Simpson Strong Tie. 5. Alternative epoxies may be used if an ICC-ESR approval for use in cracked concrete is submitted to the structural

engineer prior to use.

B. Epoxy for Masonry Connections shall be: 1. HIT RE 500 (ICC-ESR-1682) by Hilti Corporation (grout filled masonry applications)

2. HIT HY 150 MAX (ICC-ESR-1967) by Hilti Corporation (grout filled masonry applications) 3. HIT HY 20 (ICC-ESR-2659) by Hilti Corporation (hollow masonry applications only) 4. SET (ICC-ESR-1772) by Simpson Strong

C. Follow all of the manufacturer's recommendations and ICC-ESR for epoxy installation. 2. PRODUCT: Mechanical Anchors

A. Mechanical Anchors for Concrete connections shall be: 1. Kwik Bolt TZ (ICC-ESR-1917) by Hilti Corporation 2. Strong-Bolt (ICC-ESR-1771) by Simpson Strong Tie Inc.

3. Power-Stud+ SD1 (ICC-ESR-2818) by Powers Fasteners Inc. 4. Alternative mechanical anchors may be used if an ICC-ESR approval for use in cracked concrete is submitted to the

structural engineer prior to use. B. Mechanical Anchors for Masorny Connections shall be:

1. Kwik Bolt 3 (ICC-ESR-1385) by Hilti corporation (grout filled masonry applications) 2. Wedge-All (ICC-ESR-1396) by Simpson Strong Tie Inc. (grout filled masonry applications) 3. Power-Stud+SD1 (ICC-ESR-2966) by powers Fasteners Inc. (grout filled masonry applications)

C. Follow all of the manufacturer's recommendations and ICC-ESR for mechanical anchor installation. 3. PRODUCT: Screw Anchors

A. Screw Anchors for Concrete and grout filled Masorny connections shall be: 1. Titen HD (ICC-ESR-2713) by Simpson Strong Tie Inc. 2. Wedge-Bolt by Powers Fasteners Inc.

3. Alternative screw anchors may be used if an ICC-ESR approval for use in cracked concrete is submitted to the structural engineer prior to use.

B. Follow all of the manufacturer's recommendations and ICC-ESR for screw anchor installation.

EMBEDMENT OF ADHESIVE ANCHORS BASE MATERIAL REBAR DOWELS THREADED LENGTH SCREEN LENGTH CONCRETE #3 3/8" 5" — #4 1/2" 6" — #5 5/8" 8" — #6 3/4" 10" — CMU (GROUTED) #3 3/8" 4" — #5 5/8" 6" — #6 3/4" 7" — CMU (HOLLOW) #3 3/8" — 4" (HOLLOW) #4 1/2" — 5" #5 5/8" — 6" — #5 5/8" — 6" — #5 5/8" — 5" — #5 5/8" — 6" — 5" #6 3/4" — 5" — 6" #5 5/8" — 6" — 6" #6					
MATERIAL DOWELS ROD Ø LENGTH LENGTH #3 3/8" 5" — #4 1/2" 6" — #5 5/8" 8" — #6 3/4" 10" — #7 7/8" 12" — CMU (GROUTED) #3 3/8" 4" — #5 5/8" 6" — #6 3/4" 7" — CMU (HOLLOW) #4 1/2" — 5" #5 5/8" — 6"	EMBEDMENT OF ADHESIVE ANCHORS				
CONCRETE #4					SCREEN LENGTH
CONCRETE #5 5/8" 8" — #6 3/4" 10" — #7 7/8" 12" — CMU (GROUTED) #4 1/2" 5" — #6 3/4" 7" — CMU (HOLLOW) #4 1/2" — 4" #5 5/8" — 4"		#3	3/8"	5"	_
#6 3/4" 10" — #7 7/8" 12" — CMU (GROUTED) #4 1/2" 5" — #6 3/4" 7" — CMU (HOLLOW) #4 1/2" — 5" #5 5/8" — 4" CMU (HOLLOW) #4 1/2" — 5" #6 6" — #6 6" — #7 7" — #8 5/8" — 6"		#4	1/2"	6"	_
#7 7/8" 12" — CMU (GROUTED) #4 1/2" 5" — #5 5/8" 6" — CMU #3 3/4" 7" — CMU #3 3/8" — 4" (HOLLOW) #4 1/2" — 5" #6 6" #7 6"	CONCRETE	#5	5/8"	8"	_
CMU (GROUTED) #3 3/8" 4" — #4 1/2" 5" — #5 5/8" 6" — #6 3/4" 7" — CMU #3 3/8" — 4" (HOLLOW) #4 1/2" — 5" #5 5/8" — 6"		#6	3/4"	10"	_
CMU (GROUTED) #4 1/2" 5" — #5 5/8" 6" — #6 3/4" 7" — CMU (HOLLOW) #4 1/2" — 5" #5 5/8" — 6"		#7	7/8"	12"	_
(GROUTED) #4 1/2" 5" — #5 5/8" 6" — #6 3/4" 7" — CMU #3 3/8" — 4" (HOLLOW) #4 1/2" — 5" #5 5/8" — 6"	CNALL	#3	3/8"	4"	_
#5 5/8" 6" — #6 3/4" 7" — CMU #3 3/8" — 4" (HOLLOW) #4 1/2" — 5" #5 5/8" — 6"		#4	1/2"	5"	_
CMU #3 3/8" — 4" (HOLLOW) #4 1/2" — 5" #5 5/8" — 6"	(GROUTED)	#5	5/8"	6"	_
(HOLLOW) #4 1/2" - 5" #5 5/8" - 6"		#6	3/4"	7"	_
(HOLLOW) #4 1/2" - 5" #5 5/8" - 6"	CMU	#3	3/8"	_	4"
		#4	1/2"	_	5"
#6 3/4" — 7"		#5	5/8"	_	6"
		#6	3/4"	_	7"

INSTALLATION SHALL BE IN ACCORDANCE WITH THE

MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. EMBEDMENT LENGTH IS INTO STRUCTURE AND NOT VENEER, UNO.

REBAR SHALL BE DEFORMED MINIMUM WALL THICKNESS TO BE EMBEDMENT LENGTH PLUS

GROUT ANY HOLLOW CELLS ACCORDING TO INSTRUCTIONS GIVEN

1-1/2" OTHERWISE SEE STRUCTURAL ENGINEER.

SEE GSN FOR EPOXY TYPES FOR INSTALLATION INTO GROUTED BLOCK, SEE 15/S3.0

1. CODES AND STANDARDS. Comply with:

A. The ANSI/AF&PA "National Design Specification", (NDS). B. The grading requirements of the WWPA.

2. MATERIALS: (All materials shall be clearly marked) A. Structural lumber species and grade shall be as follows: a. Joists, beams or headers: 'DF/L #2' or better.

'DF/L #1' or better. b. Posts and columns: c. Studs: 'DF/L #2' or better. 'DF/L #2' or better, treated. d. Sill plates:

B. Manufactured joists: Trus-Joist or approved equal. C. Structural Glued-Laminated Timber: 24F-V4 for simple spans and 24F-V8 for continuous or cantilevered beams.

D. Engineered Lumber a. Structural Laminated-Veneer-Lumber (LVL): conform to the following minimum design

Fb = 2,600 psi. (Joist/Beam orientation)

Fv = 285 psi. E = 1,900,000 psi

E. Wood structural panels shall be Exposure 1 Grade or better APA rated sheathing with exterior glue and conform to Standard PS 1-83, or PS 2-92. F. Wood connectors shall be Simpson-Strong-Tie.

3. CONSTRUCTION:

A. See plans for roof and floor joists sizes. Joists shall be laterally supported at bearing points by solid blocking or with metal hangers.

B. Erect manufactured joists in accordance with the fabricator's commendations. Joists shall be able support the loads published in their design catalogs. C. Provide bridging at 8'-0" o.c. maximum spacing for dimensional lumber and LVL joists. Provide bridging in all other manufactured joists as per the manufacturer's

recommendations D. Fill all nail holes in wood connectors (framing anchors, joist hangers, purlin anchors, etc.) with nails as specified by the manufacturer, UNO.

E. Install washers under all bolt nuts. Make bolt holes only 1/32 to 1/16 inch larger than bolts. Tighten nuts snugly, but DO NOT crush the wood. DO NOT countersink bolts, UNO. F. Specified nails are common and shall correspond to the following diameters and lengths:

(16d -0.162"Ø & 3-1/2" long; 10d-0.148"Ø & 3" long; 8d-0.131"Ø & 2-1/2" long) G. Minimum nailing of members: Conform to IBC, Table 2304.9.1, UNO. H. Nail built-up beams of 2x_ members 12" deep or less together with 16d nails at 12" o.c., staggered. Add (2) 16d common nails at supports. Bolt 2x_ members deeper than 12"

together with 1/2" bolts at 16" o.c. staggered. Add (2) bolts at supports. I. Fasteners in preservative-treated and fire-retardant-treated wood: Conform to IBC, Section

STATEMENT OF SPECIAL INSPECTIONS

1. The inspection requirements as noted on this sheet are required for the items that are specifically noted, designed and detailed in the structural documents. Refer to the current IBC, Chapter 17, the architectural drawings, and the geotechnical report for additional information and additional inspection requirements for non-structural items.

2. The project owner shall employ one or more special inspectors to provide inspections during construction on the types of work listed below. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official and/or EOR, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections required by the building department of the local jurisdiction.

3. Special inspectors shall keep records of inspections. The special inspector shall furnish inspection reports to the building official and to the EOR in responsible charge. Reports shall indicate that work inspected was done in conformance with approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the building official and to the EOR in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and correction of any discrepancies noted in the inspections shall be submitted at a point in time agreed upon by the permit applicant and the building official prior to the start of work.

4. Special inspections for each task shall be carried out in compliance with requirements per the current IBC and other material standards.

5. FABRICATION SHOP REQUIREMENTS A. Where fabrication of structural load bearing members and assemblies are being performed on the premises of a fabricators shop, special inspections required shall be provided in the shop during the fabrication process. This requirement may be excepted if the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. A certificate shall be required to verify such approval. At completion of the fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction drawings

6. TESTING: The owner will provide testing by qualified testing personnel for the following types of construction:

Bolting: installation and correct torque and/or tension.

Cores: strength of grout. Welding: type, size, length, and quality of shop and all field welds by approved methods. Ultrasonically test complete

Drill and epoxy anchors: load test 10% of anchors, with a minimum of (2) anchors tested

7. THE CONTRACTOR SHALL

ITEM

ITEM

S-8

NA NO RECORDED ITEMS

DIAPHRAGM.

NA NO RTER ITEMS

GUSSET PLATE AT BEARING.

SUPPORTING ROOF OVERBUILD FRAMING.

REMOVE AND REPLACE THE ROTTING WOOD MEMBERS.

A. Coordinate testing. DO NOT proceed with subsequent work until inspections and testing has been approved. B. Copy inspection reports/testing results to the Arch/EOR and owner before work proceeds.

STRUCTURAL UPGRADE MEASURES ADDRESSED PREVIOUSLY IN STRUCTURAL DRAWINGS:

DESCRIPTION

MEASURES FROM STRUCTURAL EVALUATION REPORT (SER):

PLYWOOD GUSSET PLATES AND ADDITIONAL NAILING. FIX TRUSSES THAT HAVE BEEN

MEASURES FROM ROOF TRUSS EVALUATION REPORT (RTER)

STRUCTURAL UPGRADE MEASURES ADDRESSED IN THESE STRUCTURAL DRAWINGS

DESCRIPTION

MEASURES FROM STRUCTURAL EVALUATION REPORT (SER):

STRENGTHEN DIAPHRAGM BY ADDING A NEW OVERLAY ON THE EXISTING 1X SHEATHING

ADD ADDITIONAL OUT-OF-PLANE WALL ANCHORS AND STEEL STRAPPING TO CONNECT

CLIPS, AND BOLTING TO STRENGTHEN AND PROVIDE IN-PLANE SHEAR TRANSFER FROM

PROVIDE BLOCKING AND CLIPS FOR SHEAR TRANSFER. PROVIDE PONY WALLS AT 24"

PROVIDE STRAPPING, BLOCKING, AND TIES TO PROVIDE CONTINUOUS TIES ACROSS THE

PROVIDE BLOCKING AND CLIPS AT ATTACHMENT OF ENTRANCE CANOPIES

S-14 ADD ADDITIONAL LVL MEMBERS TO THE EXISTING BEAM. JACK THE BEAM LEVEL AND

PROVIDE TEMPORARY SUPPORT PRIOR TO INSTALLATION OF LVL MEMBERS

STRENGTHEN TRUSS T-5 BY ADDING AN ADDITIONAL 2X6 TO THE TOP CHORD AND A

PROVIDE HANGERS FROM JOISTS TO SUPPORTING MEMBER TO PROVIDE POSITIVE

ATTACHMENT. PROVIDE NEW BEAM/SUPPORT BELOW THE 1X SHEATHING WHERE

PROVIDE NEW 3X RIDGE BLOCKING IN THE CHAPEL AND NORTH AND SOUTH WING.

MEASURES FROM ROOF TRUSS EVALUATION REPORT (RTER):

TRUSSES, JOISTS, AND WOOD DIAPHRAGM TO MASONRY WALLS. ADD BLOCKING,

TRENGTHEN WOOD TRUSSES BY UPGRADING DEFICIENT CONNECTIONS WITH

MODIFIED FOR INSTALLATION OF MECHANICAL EQUIPMENT.

AND ADDITIONAL STRAPPING, AND BLOCKING AS REQUIRED.

WOOD DIAPHRAGM INTO MASONRY WALLS.

TABLE OF SER AND RTER ITEMS

(all past, present and future SER and RTER Structual Upgrade Measures are included on this table)

STRUCTURAL UPGRADE MEASURES FOR 506-7901

D.C. BELOW OVERBUILD FRAMING TO PROVIDE UNIFORM LOADING TO TRUSSES BELOW. ADDRESSED IN THESE DRAWINGS

C. Correct deficient work at no additional cost to the owner.

CONCRETE CONSTRUCTION INSPECTIONS				
ITEM FOR VERIFICATION & INCRESTION	INSPECTION FREQUENCY		DETAILED INCTRUCTIONS AND EDGOLIENOIS	
ITEM FOR VERIFICATION & INSPECTION	CONTINUOUS PERIODIC		DETAILED INSTRUCTIONS AND FREQUENCIES	
Reinforcing steel, including prestressing tendons	-	Х	Verify prior to placing concrete that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report	
Cast-in bolts & embeds		Х	Inspection of anchors or embeds cast in concrete is required when allowable loads have been increased or where strength design is used	
Post-installed anchors or dowels		Х	All post-installed anchors/dowels shall be specially inspected as required by the approved ICC-ES report	
Use of required mix design		Х	Verify that all mixes used comply with the approved construction documents; ACI 318: Ch. 4, 5.2-5.4; and IBC 1904.3, 1913.2, 1913.3	
Concrete sampling for strength tests, slump, air content, and temperature	X			
Strength verification		Х	Verify that adequate strength has been achieved prior to the removal of shores and forms or the stressing of post-tensioned tendons	
Formwork		Х	Verify that the forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents	
Note:				

. See also Concrete Notes Section 3(E) on GSN sheet S1.0 for structural items that require inspections and testing. Misc concrete items, i.e. bollards, stair pans, garden curb etc., need not be inspected nor tested

ITEM

S-12

NS-2

COMMENT

ADRESSED IN 2012 MECHANICAL UPGRADE

COMMENT

ADDRESSED IN THESE DRAWINGS

NONE

NA

DESCRIPTION

MEASURES FROM STRUCTURAL EVALUATION REPORT (SER):

REMOVE PORTIONS OF UNREINFORCED MASONRY WALLS AND REPLACE WITH NEW

REINFORCED WALLS: ATTACH WALLS TO FOUNDATION WALL BELOW, AND CONCRETE

BOND BEAM ABOVE. PROVIDE A ROOF DRAG AND SHEATHING ON THE EAST CHAPEL

REMOVE PORTIONS OF UNREINFORCED MASONRY WALLS AND REPLACE WITH NEW

REMOVE SECTIONS OF WALL AND ADD NEW REINFORCED MASONRY CHASES TO

STRUCTURE. ADD HELICAL PIERS TO STRENGTHEN SPIRE FOR OVERTURNING

DIAGONAL SHEATHING. ADD A NEW CHORD AROUND THE PERIMETER.

PROVIDE MASONRY CHASE AROUND THE STAIRS SIMILAR TO S-4.

ADD MASONRY CHASE OR NEW STEEL SECTIONS TO STRENGTHEN WALLS OF SPIRE

ROVIDE OUT OF PLANE ATTACHMENT OF FLOOR JOISTS TO MASONRY WALLS AND

FLOOR DIAPHRAGM. ADD NEW BLOCKING, CLIPS, AND BOLTING FOR IN PLANE SHEAR

STRENGTHEN FLOOR DIAPHRAGM BY ADDING A NEW OVERLAY ON THE EXISTING 1X

PROVIDE STRAPPING BLOCKING AND TIES TO PROVIDE CONTINUOUS TIES ACROSS THE

PROVIDE STEEL ANGLE AND BOLTED CONNECTION FOR POSITIVE ATTACHMENT FROM

PROVIDE ATTACHMENT OF INTERIOR MASONRY VENEER IN THE CHAPEL. REPOINT THE

MEASURES FROM ROOF TRUSS EVALUATION REPORT (RTER):

None NONE. STRUCTURAL UPGRADE MEASURES FOR ROOF TRUSSES ARE COMPLETE.

S-3 REINFORCED WALLS; ATTACH WALLS TO FOUNDATION WALL BELOW, AND CONCRETE

STRENGTHEN OUT OF PLANE CAPACITY OF MASONRY WALLS

TRANSFER INTO SUPPORTING MASONRY WALLS.

REMOVE AND REPLACE ROTTING WOOD MEMBERS.

MASONRY AT THE TIME OF THE UPGRADE.

REPLACE GLAZING IN THE EAST WALL OF THE CHAPEL.

WALL ABOVE THE GLASS PARTITION WALL

BOND BEAM ABOVE.

DIAPHRAGM

THE PIER TO THE GIRDER.

STRUCTURAL UPGRADE MEASURES NOT ADDRESSED PREVIOUSLY OR IN THESE STRUCTURAL DRAWINGS: COMMENT PROJECT NAME

UPGRADE DURING NEXT R&I

JPGRADE DURING NEXT R&I

JPGRADE DURING NEXT R&I

UPGRADE DURING NEXT R&I

UPGRADE DURING NEXT R&I

UPGRADE DURING NEXT R&I

NONE

Reroof |506-7901

Engineering in

442 North Main Street, Suite 200

Bountiful, Utah 84010

e-mail: wca@wcaeng.com

(801) 298-1118, Office 298-1122 Fax

CONSULTANTS

2465 S. 800 E. Salt Lake City, UT

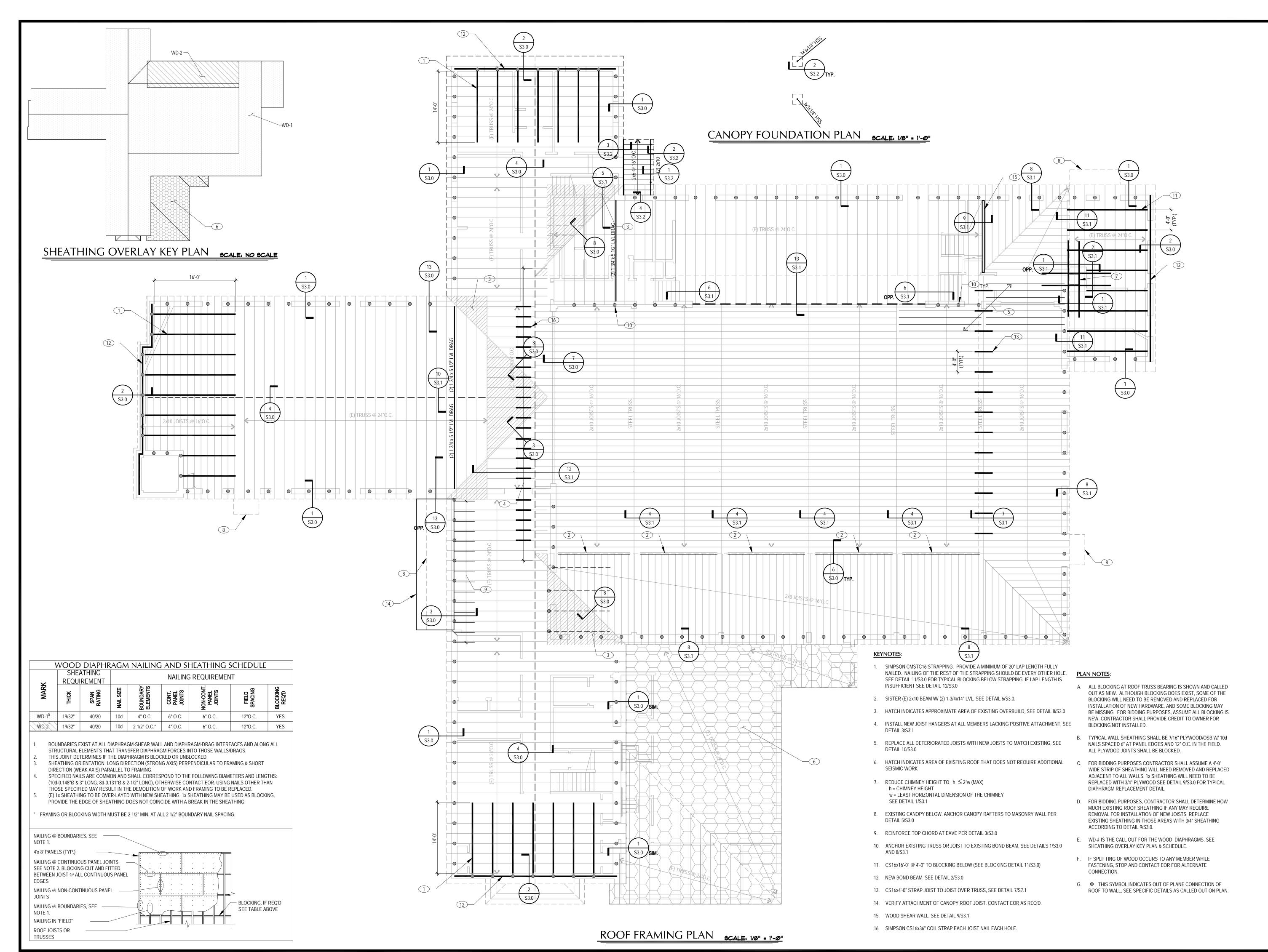
FEB. 11, 2014 PROJECT NO: 13151 DRAWN BY: WCA CHECKED BY:

SHEET TITLE

REVISIONS

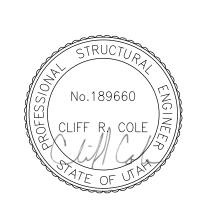
GENERAL NOTES (GSN)

\$1.0



Structural Engineering inc.

442 North Main Street, Suite 200
Bountiful, Utah 84010
e-mail: wca@wcaeng.com
(801) 298-1118, Office 298-1122 Fax



CONSULTANTS

PROJECT NAME

Fairmont-Liberty Reroof 506-7901

2465 S. 800 E. Salt Lake City, UT

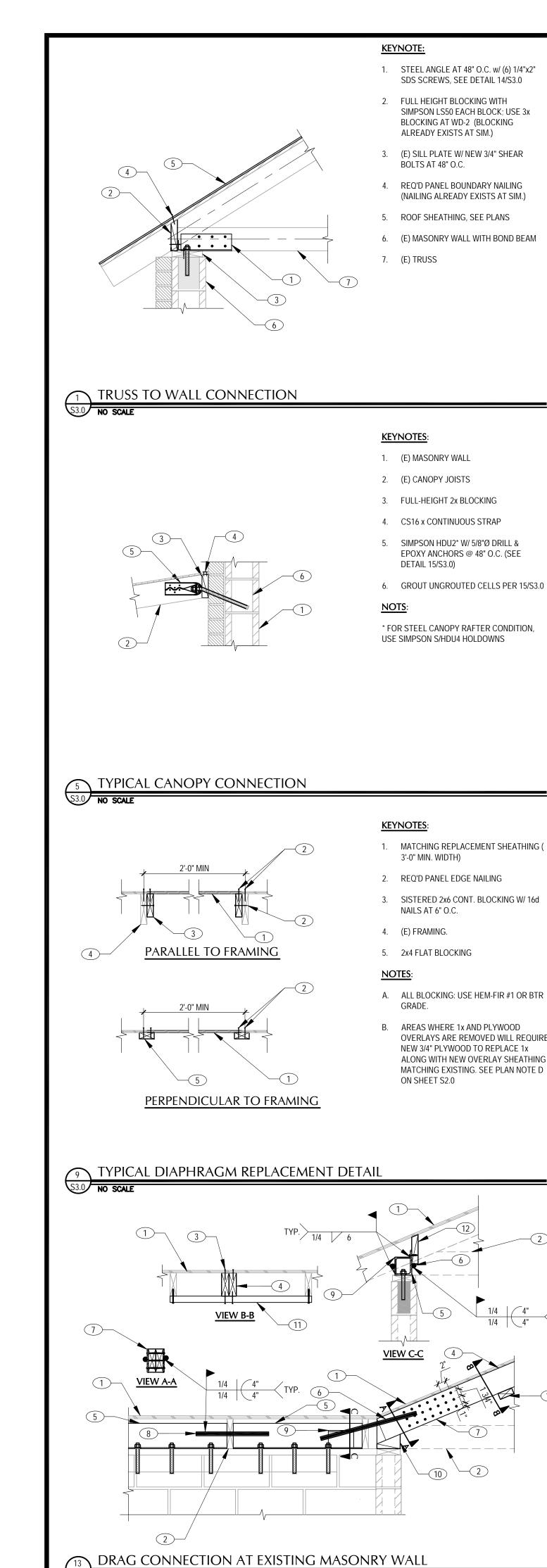
REVISIONS

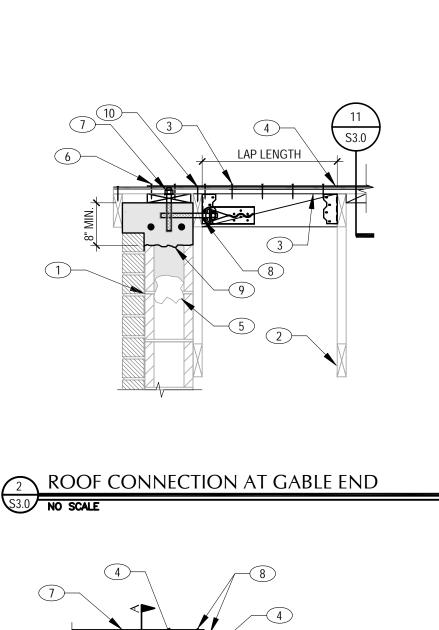
ISSUE: FEB. 11, 2014
PROJECT NO: 13151
DRAWN BY: WCA
CHECKED BY: CC

SHEET TITLE

ROOF FRAMING PLAN

\$2.0





VIEW A-A

(N) LVL SISTER AT (E) BEAM

4

10 DETAIL

KEYNOTES:

FOR ADDITIONAL NAILING

3. (2) ROWS OF REQ'D. BOUNDARY NAILING

INTO MASONRY BOND BEAM.

2. WOOD TRUSS BEYOND

4. LVL DRAG SEE PLANS

6. (2) 7/8Ø RODS

1. (E) ROOF SHEATHING, SEE WOOD DIAPHRAGM AND PLANS

L4x6x5/16 STEEL ANGLE (LLV) WITH (3) 3/4" ANCHOR BOLTS

7. 5/16"x5 1/2x 20" STEEL PLATES EACH SIDE OF LVL DRAG.

INSTALL (20) 1/4"x3" SDS SCREWS EACH PLATE.

8. (1) 7/8"Ø ROD. DRILL 1" HOLE THROUGH TRUSS.

9. 5/16" BENT PLATE 4" TALL A MINIMUM OF 6" LONG.

11. 2X4 DRAG BRACING AT 48" O.C. WITH (2)# 8 SCREWS 3"

12. 2X BLOCKING WITH (2) 1/4" x 2" SDS SCREWS EACH BLOCK.

10. SHAPED BLOCK AT BEARING OF DRAG

LONG EACH END.

SDS SCREWS, SEE DETAIL 14/S3.0

SIMPSON LS50 EACH BLOCK; USE 3x

BLOCKING AT WD-2 (BLOCKING

(E) SILL PLATE W/ NEW 3/4" SHEAR

(NAILING ALREADY EXISTS AT SIM.)

SIMPSON HDU2* W/ 5/8"Ø DRILL &

DETAIL 15/S3.0)

EPOXY ANCHORS @ 48" O.C. (SEE

GROUT UNGROUTED CELLS PER 15/S3.0

MATCHING REPLACEMENT SHEATHING (

3'-0" MIN. WIDTH)

NAILS AT 6" O.C.

GRADE.

ON SHEET S2.0

REQ'D PANEL EDGE NAILING

AREAS WHERE 1x AND PLYWOOD

OVERLAYS ARE REMOVED WILL REQUIRE NEW 3/4" PLYWOOD TO REPLACE 1x

ALONG WITH NEW OVERLAY SHEATHING MATCHING EXISTING. SEE PLAN NOTE D

ALREADY EXISTS AT SIM.)

BOLTS AT 48" O.C.

INSTALL) 2. (E) ROOF TRUSS PAPER DAM

3. (E) 1x SHEATHING W/ NEW PLYWOOD OVERLAY, SEE PLAN & SCHEDULE 4. SIMPSON CONT. STRAP, SEE PLAN FOR REQ'D LENGTH AND TYPE 6. BOUNDARY NAILING 7. 5/8" Ø ANCHOR INTO 2x6 SILL PLATE

KEYNOTES:

(SEE DETAIL 15/S3.0) 8. 5/8" Ø EPXOY ANCHOR (SEE DETAIL 15/S3.0) W/ SIMPSON HDU2 HOLD DOWN @ 4'-0" O.C. ATTACH TO 3x BLOCKING W/ SIMPSON L50 EACH END

1. (E) MASONRY WALL W/ NEW BOND BEAM

(REMOVE TOP OF WALL AS REQ'D TO

9. NEW CONC. BOND BEAM W/ (2) #5 BARS 10. BOUNDARY NAILING, SEE PLAN

KEYNOTES:

2. (E) BEAM

(E) ROOF JOIST

3. LVL BEAMS, SEE PLAN

5. (E) 1x SHEATHING

KEYNOTES:

1. (E) BEAM

2. (N) JOIST, SEE PLAN

3. (E) 1x SHEATHING

4. (N) SHEATHING, SEE PLAN & SCHED.

5. SIMPSON LS70, EACH END

6. SIMPSON LS70, EACH JOIST

KEY PLAN & SCHED.

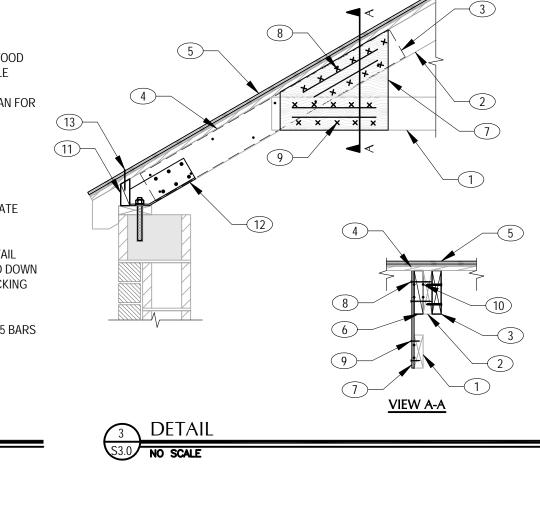
4. SIMPSON SDW22638 SCREWS @ 12"

7. PLYWOOD SHEATHING OVERLAY, SEE

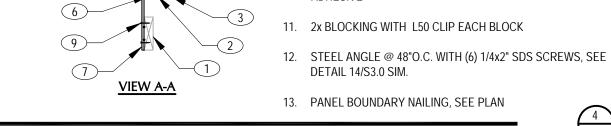
8. BOUNDARY NAILING, SEE SCHEDULING

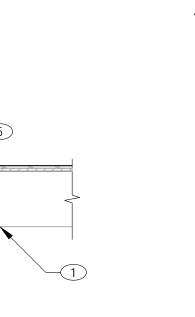
9. SEE DETAIL 4/S3.1 FOR DIAPHRAGM CONNECTION TO TRUSS

O.C., STAGGER TOP & BOTTOM, EACH



3







KEYNOTES: 1. (E) 2x ROOF JOIST

2. (E) 2x STUD WALL WITH SHEATHING

KEYNOTES:

1. (E) 2x6 BOTTOM CHORD

3. (N) 2x6x4'-0" SISTER W/ SIMPSON SDS25300 @ 6" O.C.,

6. NEW 2x SHAPED BLOCKING @ PLYWOOD GUSSET

5. (N) ROOF SHEATHING OVERLAY, SEE KEY PLAN & SCHEDULE

7. 5/8" PLYWOOD GUSSET ONE SIDE. PROVIDE (2) 3/8" Ø BEADS

10. (2) 3/8"Ø BEADS CONSTRUCTION ADHESIVE BETWEEN

BLOCKING & TRUSS MEMBER, SEE PLAN FOR APPROVED

OF CONSTRUCTION ADHESIVE BETWEEN PLYWOOD & TRUSS

2. (E) 2x6 TOP CHORD

STAGGERED

4. (E) 1x SHEATHING

9. (10) 10d COMMON

ADHESIVE

DETAIL 14/S3.0 SIM.

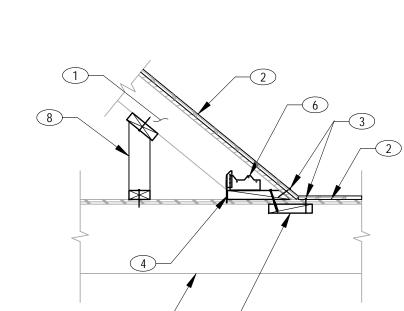
MEMBER & BLOCKING

3. (E) 2x BLOCK WITH SIMPSON LS50 CLIP EACH BLOCK

4. EDGE NAILING, SEE SCHEDULE 5. NEW ROOF SHEATHING OVERLAY, SEE

6. REQ'D PANEL EDGE NAILING

PLAN & SCHED.



KEYNOTES:

1. (E) TRUSS MEMBER

2. (E) 1x SHEATHING

SEE SCHEDULE

5. REQ'D EDGE NAILING

4. NEW 3x RIDGE BLOCKING

3. (N) ROOF SHEATHING OVERLAY,

1. (E) OVER-BUILD FRAMING

KEYNOTES:

2. (E) 1x SHEATHING WITH (E) PLYWOOD OVERLAY REMOVE AND REPLACE AS REQ'D. SEE DETAIL 9/S3.0

3. REQ'D. PANEL EDGE NAILING, SEE SCHEDULE

4. 2x6 SHAPED BLOCK BETWEEN EACH JOIST WITH (2) 1/4"x3" SDS SCREWS IN EACH BLOCK

5. 2x FLAT BLOCK TO RECEIVE EDGE NAILING

6. SIMPSON H3 EACH JOIST

7. (E) ROOF JOISTS

8. 2x4 PONY WALLS @ 24" O.C.

OVERBUILD CONNECTION



KEYNOTES

 REQ'D PANEL BOUNDARY NAILING, SEE SCHEDULE

2. ROOF SHEATHING, SEE KEY PLAN

3. SIMPSON STRAPS, SEE PLANS

4. 4x BLOCKING OR DOUBLE 2x BLOCKING

GLUED AND NAILED WITH (10) 10d NAILS

5. SIMPSON HDU2 (SEE SPECIFIC DETAILS)

5/8"Ø ROD WITH COUPLER NUT

ADDITIONAL SIMPSON HDU2 IS REQUIRED WHEN STRAP LAP LENGTH EXCEEDS THE LENGTH OF THE FIRST BAY OF BLOCKING

|Fairmont-Liberty Reroof 506-7901

PROJECT NAME

Structural

Engineering inc

442 North Main Street, Suite 200

Bountiful, Utah 84010

e-mail: wca@wcaeng.com

(801) 298-1118, Office 298-1122 Fax

CONSULTANTS

|2465 S. 800 E. Salt Lake City, UT

REVISIONS

SHEET TITLE

STRUCTURAL

FEB. 11, 2014

13151

WCA

A. ALL BLOCKING: USE HEM-FIR #1 OR BTR GRADE.

1. SIMPSON STRAP, SEE PLANS FOR

3. 3x4 BLOCKING, UNO (SEE SPECIFIC

2. (E) ROOF SHEATHING AND OVERLAY, SEE

PLAN FOR VERIFICATION OF NAILING

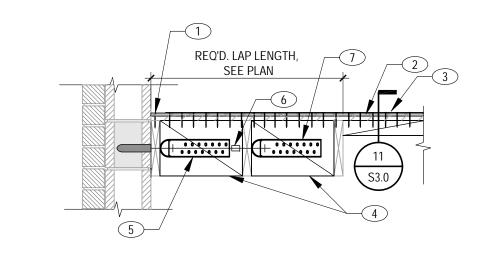
DETAILS) W/ SIMPSON Z38 @ BOTH ENDS

LENGTH AND TYPE

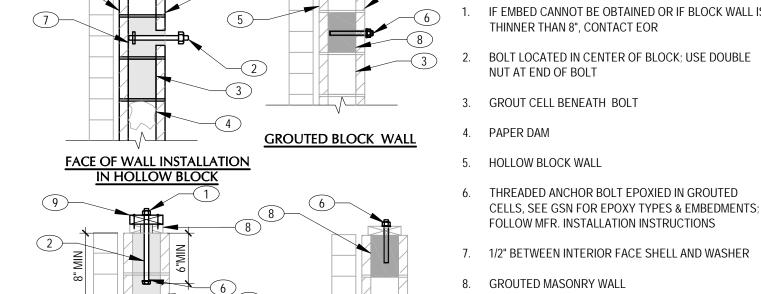
KEYNOTES:

B. REMOVE AND REPLACE ANY SPLIT BLOCKING. USE 3x BLOCKING PRE-DRILL HOLES W/ 7/64"Ø BOT FOR 10d COMMON NAILS & 3/32"Ø BIT FOR 8d COMMON

C. NAILING OF ALL ROOF STRAPS IS EVERY OTHER HOLE EXCEPT AS NOTED OR WHERE STRAPS LAP ONTO FULL HEIGHT BLOCKING



TYP. JOIST TO WALL CONNECTION WITH INSUFFICIENT LAP LENGTHS



TOP OF WALL INSTALLATION TOP OF WALL INSTALLATION IN HOLLOW BLOCK IN GROUTED CELLS

TOP COURSE OF BLOCK. PLACE GROUT AS SHOWN FILLING TO TOP OF WALL PLATE.

DRILL 2 1/2" Ø HOLE IN EXISTING PLATE TO GROUT

2X BLOCK MATCHING SIZE OF PLATE WITH (8) 10d COMMON NAILS (4) EACH SIDE OF NEW ANCHOR BOLT EXTRA PLATE NOT REQUIRED WHEN ATTACHING STEEL ANGLE IN DETAIL 14/S3.0

DETAILS

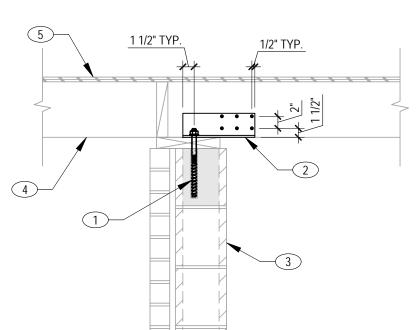
S3.0

PROJECT NO:

CHECKED BY:

DRAWN BY:

11 TYPICAL STEEL STRAPPING



KEYNOTES:

1. 3/4"Ø ANCHOR BOLT, SEE DETAIL 15/S3.0 2. L4x4x1/4" ANGLE 12" LONG

MASONRY WALL (WALL CONSTRUCTION MAY BE DIFFERENT THAN SHOWN)

4. ROOF JOIST/TRUSS AND FRAMING (CONSTRUCTION MAY BE DIFFERENT THAN SHOWN)

5. SHEATHING, SEE PLAN AND SCHEDULE

AT SIM., MODIFY ANGLE TO MATCH SLOPE OF JOIST. PROVIDE 3" BEARING PLATE.

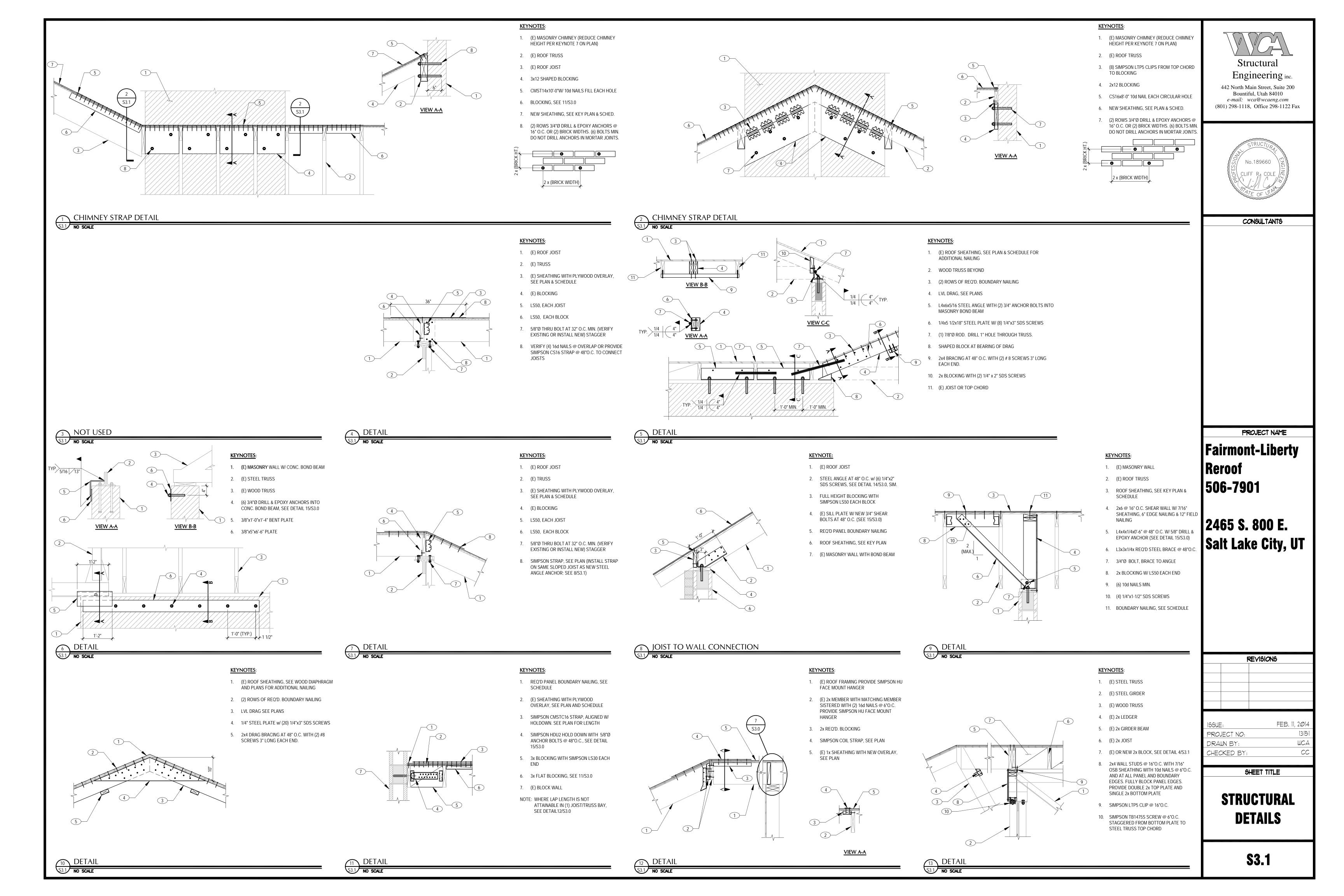
NOTES:

A. SEE EMBEDMENT SCHEDULE FOR REQ'D EMBEDMENT UNO.

ALLOWED. DRY PACK CELL BELOW AND CELL WHERE BOLT WILL BE INSTALLED ANCHOR BOLTS IN CMU BLOCK WALLS

TYPICAL ANGLE DETAIL
S3.0 NO SCALE

B. FOR HOLLOW BLOCK CORE DRILL 2 -1/2"Ø HOLE. USE OF IMPACT EQUIPMENT IS NOT

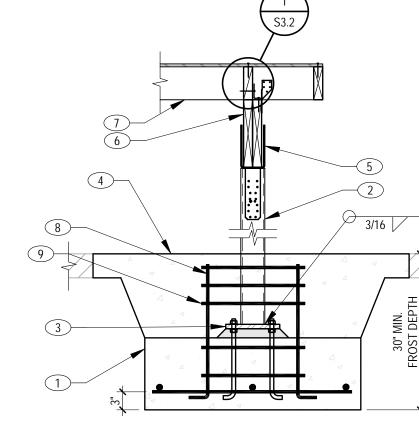


1 DETAIL

S3.2 NO SCALE

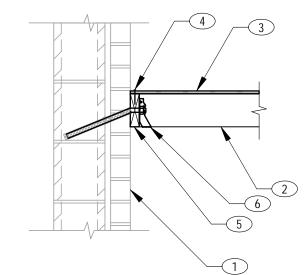
KEYNOTES:

- 1. CANOPY BEAM, SEE PLAN
- 2. CANOPY JOIST, SEE PLAN
- 3. ROOF SHEATHING, WD-1 SEE DIAPHRAGM SCHEDULE. DISREGARD NOTE 5
- 4. 2x BLOCKING WITH SIMPSON LS50 CLIP EACH BLOCK
- 5. SIMPSON H1 CLIP EACH JOIST
- 6. BOUNDARY NAILING, SEE SCHED.



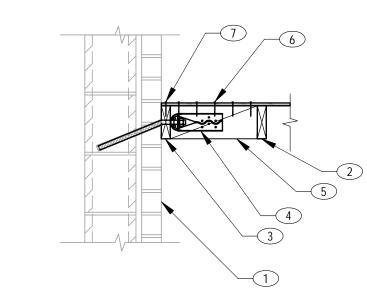
KEYNOTES:

- 1. 2'x2'x12" FOOTING WITH (3) #4 BARS EACH DIRECTION
- 2. HSS COL. SEE PLAN
- 3. PLATE 3/4x9x9" STEEL PLATE WITH (4) 3/4" Ø A.B. PROVIDE 6000psi. 1-1/2" GROUT PAD AND LEVELING NUTS
- 4. REMOVE (E) SLAB AND REPLACE, PER
- 5. SIMPSON CCQ COL. CAP
- 6. CANOPY BEAM, SEE PLAN
- 7. CANOPY JOIST, SEE PLAN
- 8. (4) #4 VERTICAL BARS EXTEND TO BOTTOM STEEL IN FOOTING
- 9. #3 TIES @ 3" O.C. TOP 9 " AND 6" O.C. ELSEWHERE



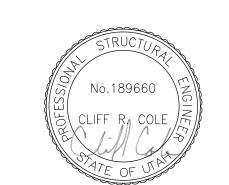
KEYNOTES:

- 1. (E) CMU WALL
- 2. 2x CANOPY JOIST, SEE PLAN
- 3. CANOPY SHEATHING, SEE 1/S3.2
- 4. BOUNDARY NAILING, SEE 1/S3.2
- 5. 2x6 LEDGER WITH 3/4" Ø EPOXY ANCHOR BOLT @ 32"O.C. SEE DETAIL 5/S3.2 FOR EPOXY ANCHOR BOLT INSTALLATION
- 6. SIMPSON LU26 FACE MOUNT HANGER OR



KEYNOTES:

- 1. (E) CMU WALL
- 2. 2x CANOPY JOIST, SEE PLAN
- 3. 2x6 LEDGER WITH 3/4"Ø EPOXY ANCHOR BOLT @ 32"O.C.
- 4. SIMPSON HDU-2 HOLD DOWN @ 32"O.C. 5. 2x FULL HEIGHT BLOCK
- 6. (6) 10d NAILS EACH BLOCK
- 7. BOUNDARY NAILING



Structural

Engineering inc.

442 North Main Street, Suite 200 Bountiful, Utah 84010

e-mail: wca@wcaeng.com

(801) 298-1118, Office 298-1122 Fax

CONSULTANTS

PROJECT NAME

Fairmont-Liberty Reroof 506-7901

2465 S. 800 E. Salt Lake City, UT

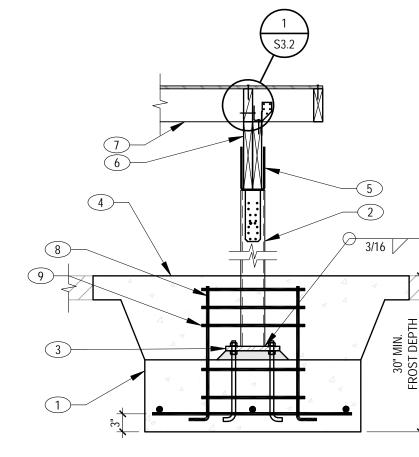
ISSUE:	FEB. 11, 2 <i>0</i> 14
PROJECT NO:	13151
DRAWN BY:	WCA
CHECKED BY:	CC

REVISIONS

SHEET TITLE

STRUCTURAL DETAILS

S3.2



KEYNOTES:

- 1. CORE DRILL HOLE TYP. 1"Ø x 8" DEEP WITH CARBIDE TIPPED DRILL BIT WITH DRILL SET ON ROTATION MODE ONLY. OPTION 1 OR 13" DEEP OPTION 2
- 2. PLACE SCREEN TUBE WITH ADHESIVE TYP. 15/16"Ø x 8" DEEP WITH PLUG AT END
- 3. INSERT STEEL SLEEVE. TYP. 13/16" OUTSIDE
- DIAMETER
- REMAINING MASONRY 5. PLACE THREADED ROD AND ANCHOR PLATE. TYP.

4. AFTER CURING, DRILL HOLE THRU PLUG AND

- 5/8"Ø AND STEEL PLATE 6. BLOCKING OR LEDGER, SEE SPECIFIC DETAILS
- WASHERS
- 8. HOLE IN BLOCK CAN BE OVERSIZED TO PLACE SCREEN TUBE. FILL ANNULUS IN WOOD WITH ADHESIVE
- 9. PRE-BENT THREADED ROD TYP. 3/4"Ø
- 10. SCREEN TUBE TYP. 15/16"Ø

SEE GSN FOR ALLOWABLE EPOXY TYPES



OPTION #1