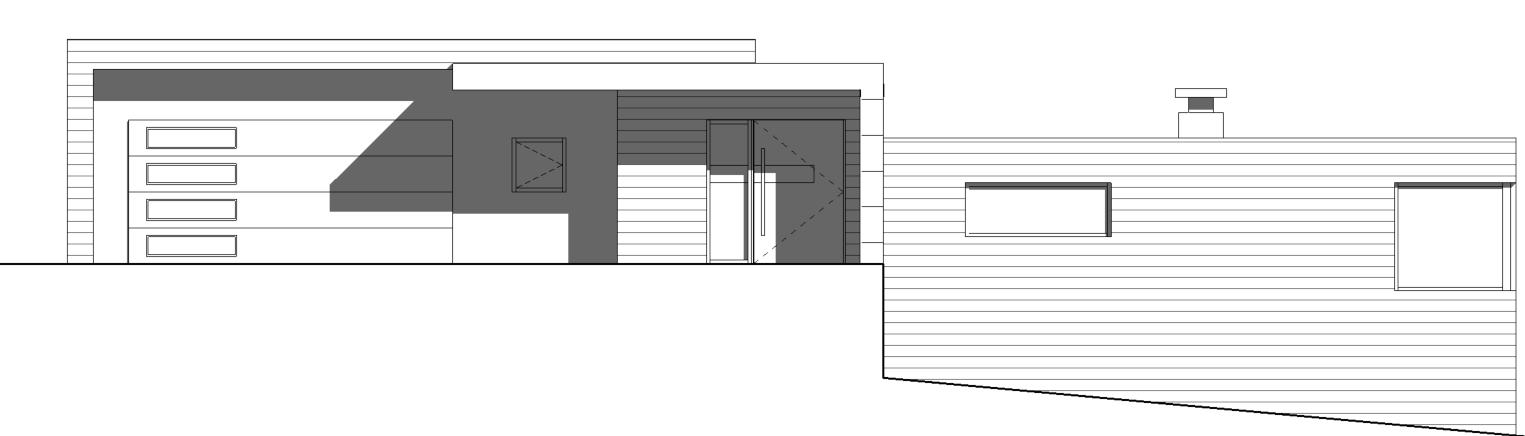
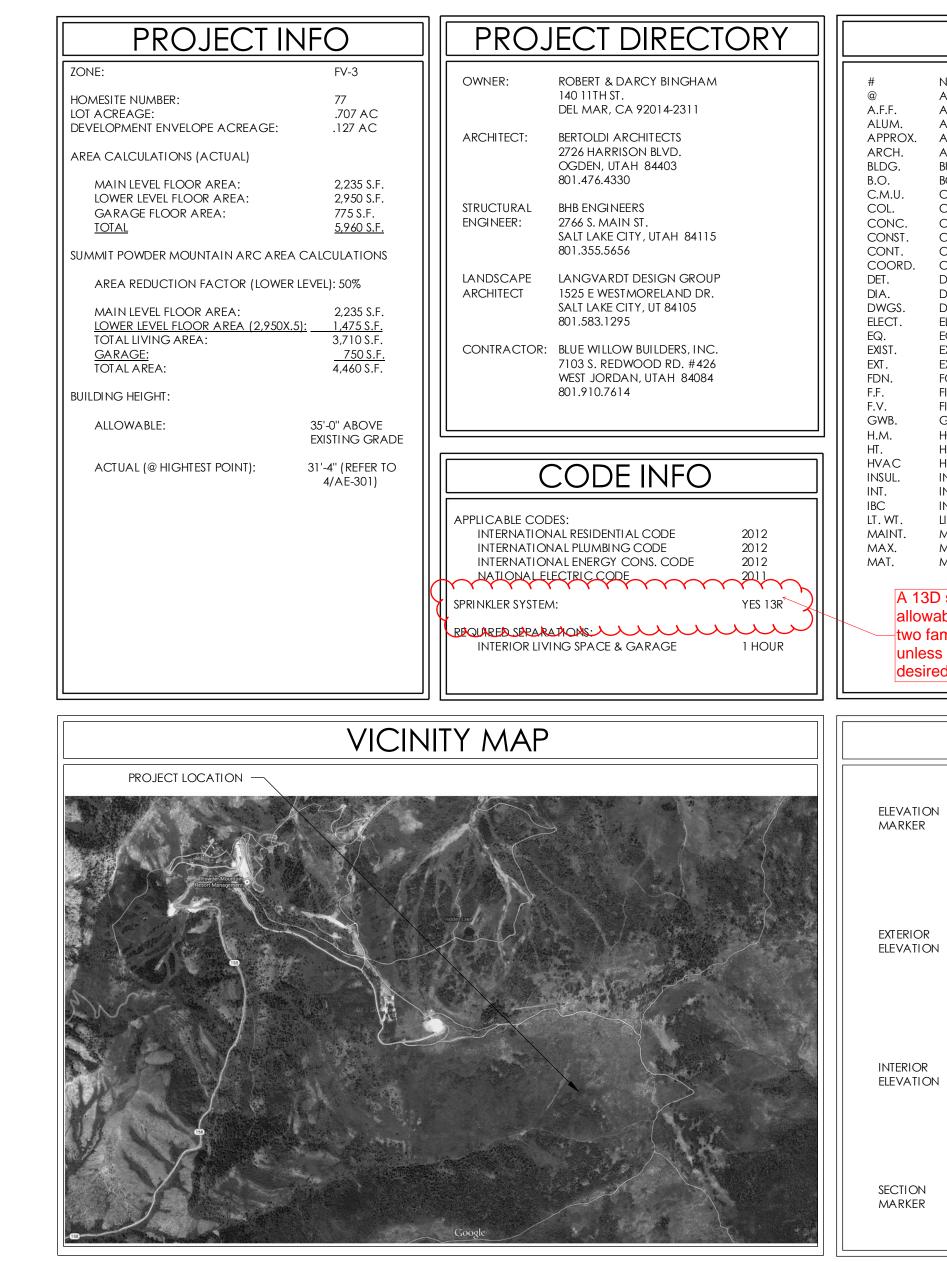
# BINGHAM RESIDENCE LOT 77





SUMMIT POWDER MOUNTAIN, UTAH 84310

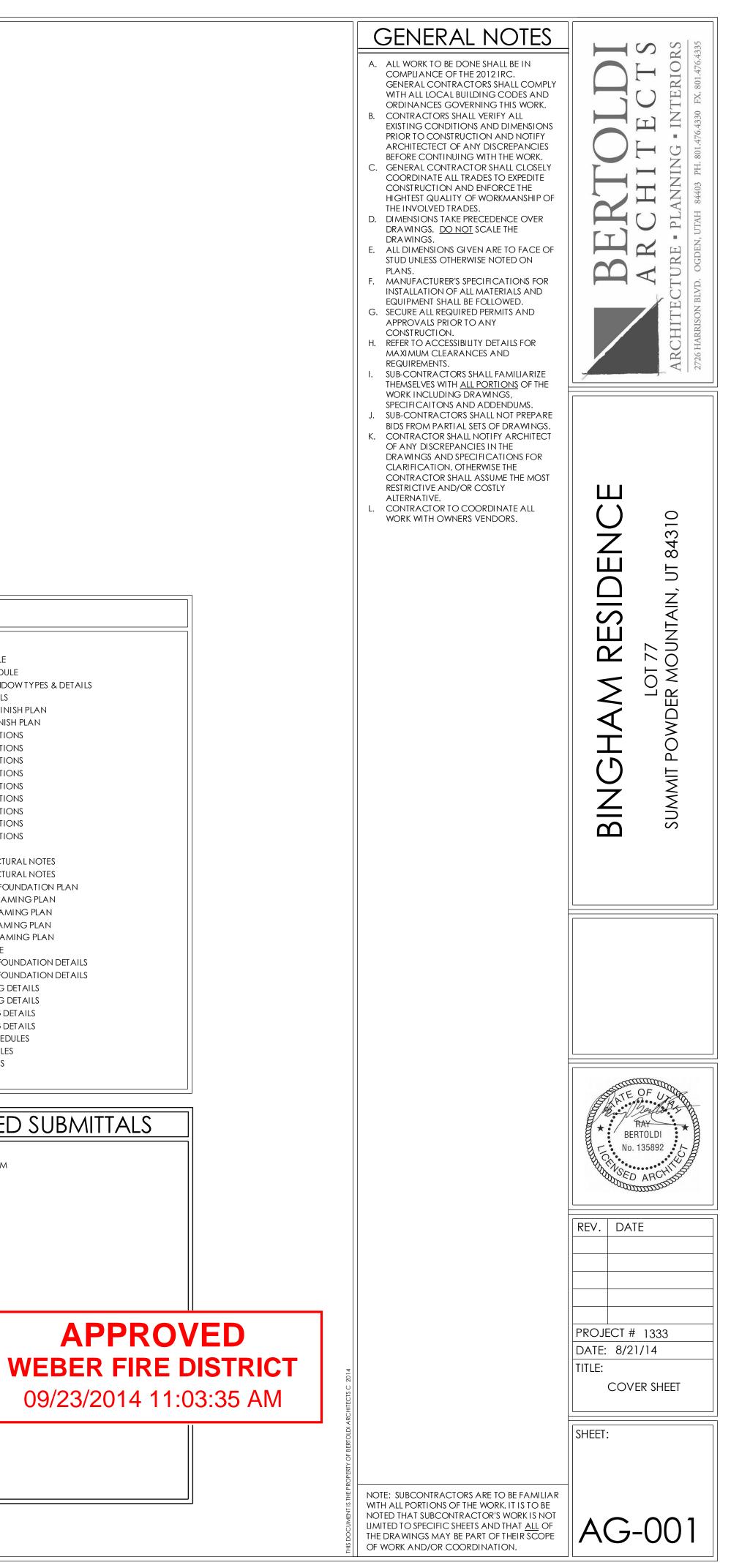
STANDARD ABB	REVIAT	IONS	S S	HEET LIS	Γ
NUMBER AT ABOVE FINISHED FLOOR ALUMINUM APPROXIMATELY ARCHITECT/ARCHITECTURAL BUILDING BOTTOM OF CONCRETE MASONARY UNIT COLUMN CONCRETE CONSTRUCTION CONTINUOUS COORDINATE DETAIL DIAMETER DRAWINGS ELECTRICAL EQUAL EXISTING EXTERIOR FOUNDATION FINISH FLOOR FIELD VERIFY GYPSUM WALL BOARD HOLLOW METAL HEIGHT HEATING/VENTILATION/AIR CONDITIONING INSULATE INTERIOR INTERNATIONAL BUILDING CODE LIGHT WEIGHT MAINTENANCE MAXIMUM MATERIAL D system is rable for one and amily dwellings, as a 13R system is ed.	MECH. MFR. MIN. MISC. MTL. N.I.C. O.C. O.H. OPP. PNT. PRE-FIN. PROJ. QTY. RAD REQ. RM. SCHED. SHT. SIM. SPEC. STRUCT. S.F. SQ. FT. T.O. T.O.F. T.O.S T.O.W. TYP. TFM U.N.O. VCT VEST. W/ WD	MECHANICAL MANUFACTURER MINIMUM MISCELLANEOUS METAL NOT IN CONTRACT ON CENTER OVERHEAD OPPOSITE PAINT PRE-FINISHED PROJECT QUANTITY RADIUS REQUIRED ROOM SCHEDULE SHEET SIMILAR SPECIFICATIONS STRUCTURAL SQUARE FEET SQUARE FEET SQUARE FEET TOP OF TOP OF FOOTING TOP OF SLAB TOP OF WALL TYPICAL THERMOFUSED MELAMINE UNLESS NOTED OTHERWISE VINYL COMPOSITION TILE VESTIBULE WITH WOOD	GENERALAG-001COVER SHEETAS-101SITE SURVEYAS-102BUILDING ENVELOPE/UTILITY PLANLANDSCAPEH1.0HARDSCAPE PLANH1.1HARDSCAPE PLANL1.0LANDSCAPE PLANL1.1LANDSCAPE PLANL1.1LANDSCAPE NOTES DETAILS & SCHED.SW-1SWPPPARCHITECTURALAE-121LOWER FLOOR LIGHTING PLANAE-122MAIN FLOOR UGHTING PLANAE-101LOWER FLOOR PLANAE-102MAIN FLOOR PLANAE-103ROOF PLANAE-111LOWER FLOOR REFELECTED CEILING PLANAE-112MAIN FLOOR REFELECTED CEILING PLANAE-131LOWER FLOOR POWER PLANAE-132MAIN FLOOR POWER PLANAE-131LOWER FLOOR HVAC PLANAE-141LOWER FLOOR HVAC PLANAE-202EXTERIOR ELEVATIONSAE-201EXTERIOR ELEVATIONSAE-202EXTERIOR ELEVATIONSAE-303BUILDING SECTIONS/MAX. HEIGHTAE-304BUILDING SECTIONS/MAX. HEIGHTAE-311WALL SECTIONSAE-312WALL SECTIONSAE-312WALL SECTIONSAE-312WALL SECTIONSAE-312DETAILSAE-313STAIR DETAILS	AE-33: AE-60 AE-60: AE-610 AI-101 AI-102 AI-402 AI-402 AI-402 AI-402 AI-406 AI-407 AI-406 AI-407 AI-406 AI-407 AI-407 SIRUCTL SIRUCTL S-001 S-001 S-002 S-101 S-111 S-112 S-113 S-114 S-201 S-501 S-502 S-511 S-512 S-521 S-522 S-601 S-602 S-603	<ol> <li>DOOR SCHEDULE</li> <li>WINDOW SCHEDULE</li> <li>DOOR AND WINDOW T</li> <li>OPENING DETAILS         <ul> <li>LOWER FLOOR FINISH PL</li> <li>INTERIOR ELEVATIONS</li> <li>INTERIOR ELEV</li></ul></li></ol>
STANDARD S	YMBO	LS	FIRE PROTECTION		DEFERRED
NName Elevation	DETAIL MARKER	1     SIM       A101     SIM       Room name     101	PROVIDE NFPA TYPE 13R FIRE PROTECTION SYSTEM THROUGHOUT STRUCTURE. ALL HEADS ARE TO BE CONCEALED TYPE AND COVERS ARE TO BE PAINTED TO MATCH ADJACENT SURFACE. LOCATION OF ALL HEADS ARE TO BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. SIDEWALL "DRY PIPE" HEADS ARE TO BE USED AT EXTERIOR LOCATIONS AS REQUIRED BY ALL APPLICABLE CODES. GLYCOL TYPE SYSTEMS ARE NOT TO BE USED.	1. F	IRE SPRINKLER SYSTEM
A101	ROOM MARKER	101	Note: 1) While a 13R system may be used, it is		

ON R	Elevation		A101	S
		ROOM MARKER	Room name	
R ON	A101	CEILING MARKER	(1 1'-0")	1 a f
	1 Ref	DOOR MARKER	(101)	
r On		WINDOW MARKER	(1t)	
	1 Ref	WALL TYPE MARKER	(1,A)	
5	1 A101	KEYNOTE MARKER	\$	t f

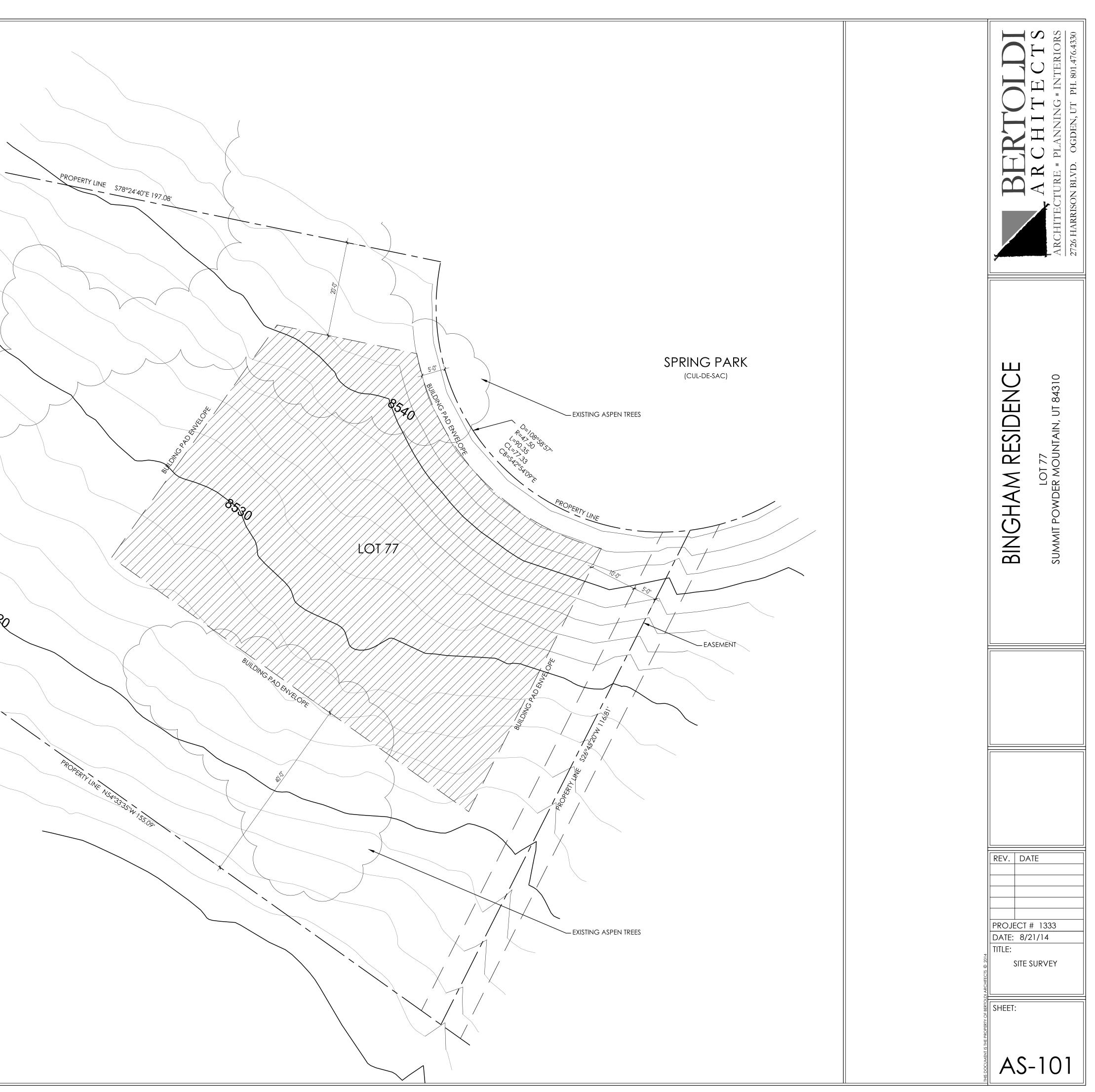
# allowable to use a 13D system in one and two family dwellings.

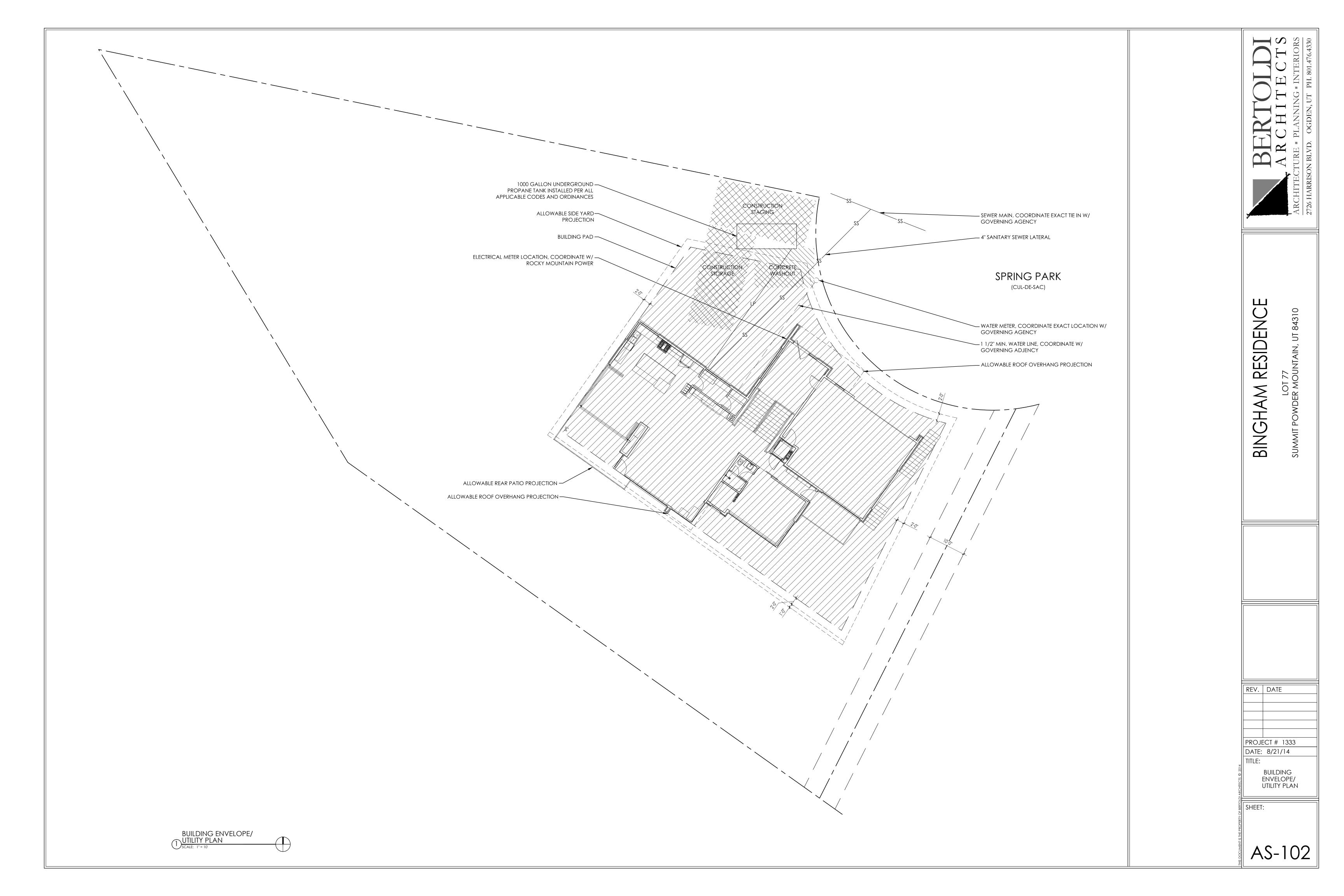
2) If a 13D system is used, no exterior protection is required.

3) If antifreeze is not used in the system, the sprinkler contractor, general contractor and architect must coordinate to ensure that methods of freeze protection are used such as tenting insulation, providing air exchange vents, fur-downs for piping, using exposed copper piping etc. Some heat must be provided to the building during winter months to ensure freezing does not occur.



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# **CONSTRUCTION NOTES:**

CONCRETE - BROOM FINISH SEE DETAIL 1, SHEET H1.1 CONCRETE RETAINING WALL - SEE DETAIL 2, SHEET H1.1 CONCRETE HEADER - SEE DETAIL 3, SHEET H1.1 UNDERGROUND PROPANE TANK - SEE ARCH. DECOMPOSED GRANITE PATIO - SEE DETAIL 4, SHEET L1.1 STACKED STONE BOULDER WALL - SEE DETAIL 4, SHEET H1.1 CONCRETE WALL & METAL STAIRS GAS FIRE PIT / RING - SEE ARCH.

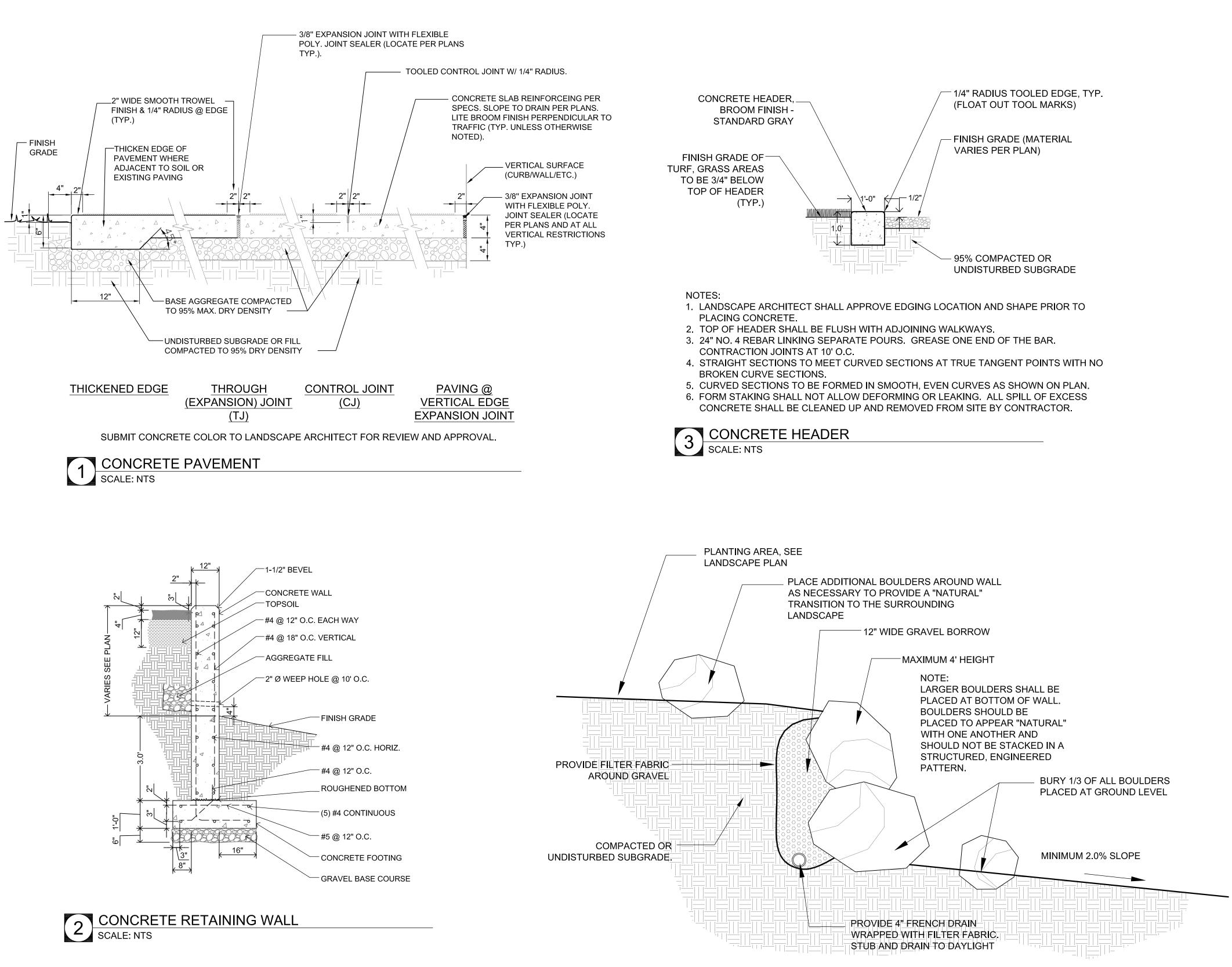
SPA W/ GLASS WINDSCREEN - SEE ARCH.

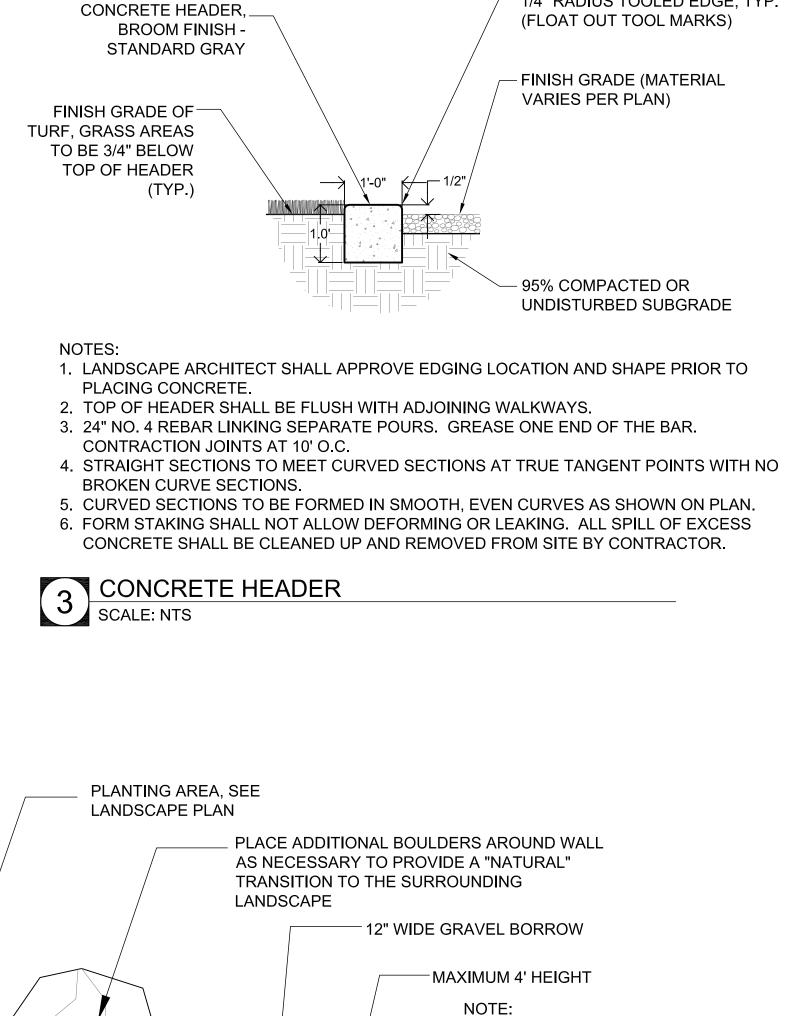


BINGHAM RESIDENCE LOT 77 SUMMIT POWDER MOUNTAIN

DATE:	AUGUST 2014
PROJECT:	000.0000.25
DRAWN BY:	MP
REVIEW BY:	EL
VERSION:	PERMIT SET
REVISIONS:	
SHEET TITLE: HARDS PLA	
SHEET NUMBER:	
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5 10 20 SCALE: 1"=10'



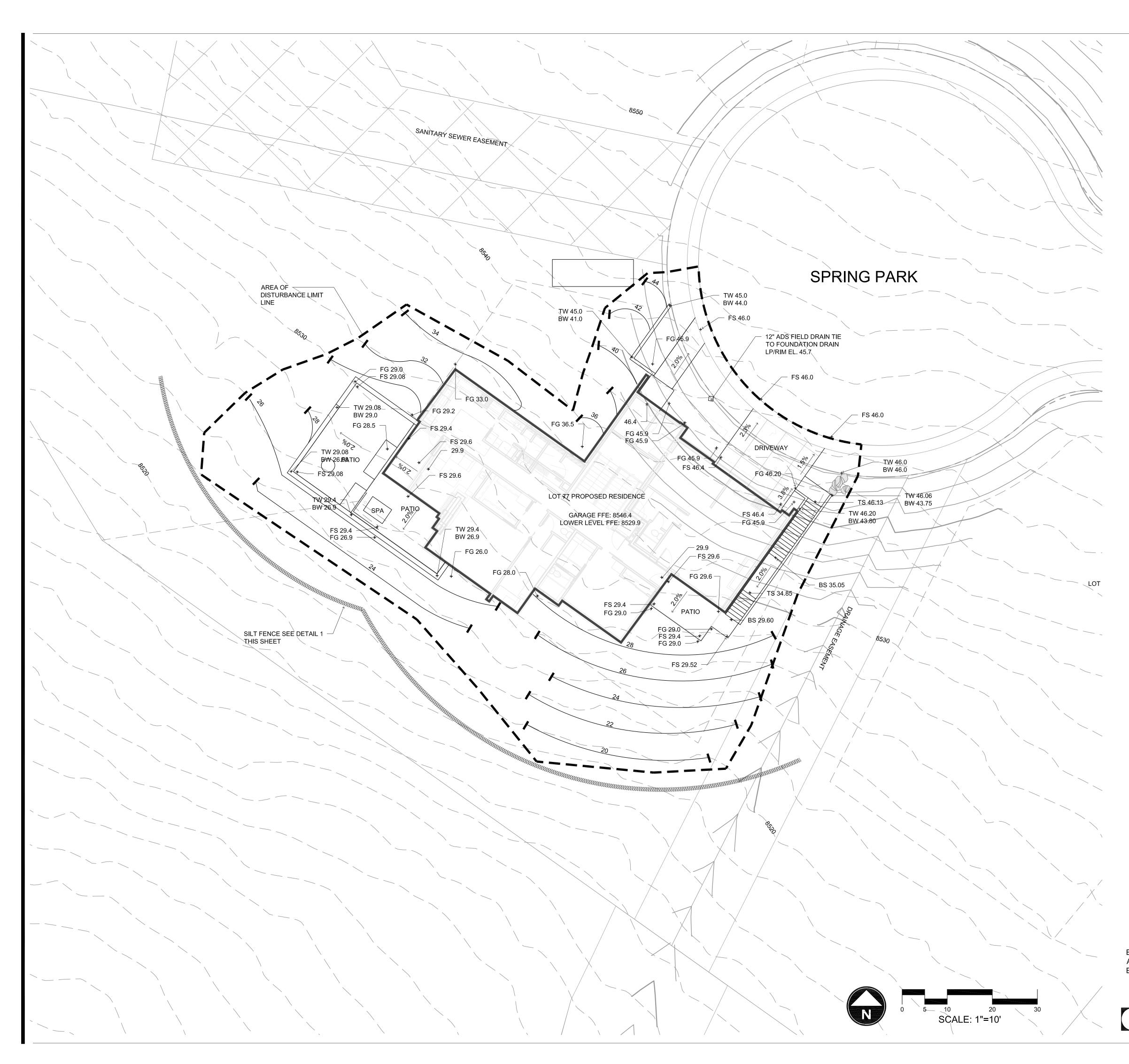


# 4 BOULDER RETAINING WALL SCALE: NTS



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# GRADING AND EROSION CONTROL NOTES

1. CONTROLLING SEDIMENT TRANSPORT AND PREVENTING AND/OR CORRECTING PROBLEMS ASSOCIATED WITH EROSION AND RUNOFF PROCESSES WHICH COULD OCCUR BOTH DURING AND AFTER PROJECT CONSTRUCTION WILL BE CLOSELY MONITORED. PERIODIC MAINTENANCE AND INSPECTION OF SEDIMENT CONTROL DEVICES WILL BE SCHEDULED. PARTICULAR ATTENTION SHALL BE GIVEN TO EXISTING DRAINAGE PATTERNS WHICH RUN THROUGH DISTURBED AREAS AND OVER EXTREME SLOPES. THESE PATTERNS WILL BE IDENTIFIED TO ISOLATE PROBLEM AREAS WHERE WATER WILL CONCENTRATE. PROVISIONS SHALL BE MADE TO CHANNEL RUNOFF AWAY FROM NEW OR EXISTING IMPROVEMENTS TO PREVENT UNDERMINING AND GENERAL SITE EROSION. THESE PROVISIONS SHALL BE STABILIZED AND SHALL REMAIN IN PLACE UNTIL THE PERMANENT STORM DRAINAGE FACILITIES ARE INSTALLED AND FUNCTIONAL.

2. BEFORE CONSTRUCTION BEGINS, THE LIMITS OF DISTURBANCE BOUNDARY SHALL BE FLAGGED ON SITE AND APPROVED BY COUNTY REPRESENTATIVE AND THE ENGINEER. UNDER NO CIRCUMSTANCES SHALL SITE DISTURBANCE OCCUR OUTSIDE THE DESIGNATED AREAS AT ANY TIME DURING CONSTRUCTION.

3. EXCAVATION AND EMBANKMENT OPERATIONS SHALL PROCEED IN SUCH A MANNER SO THAT FINISHING OF SLOPES, INCLUDING REVEGETATION, SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER ROUGH GRADING. ALL SLOPES 2:1 OR FLATTER SHALL BE SCARIFIED WITH HEAVY EQUIPMENT, LEAVING TRACKS PERPENDICULAR TO THE SLOPE,

4. ALL PUBLIC ROADWAYS MUST BE CLEARED DAILY OF ALL DIRT, MUD AND DEBRIS DEPOSITED ON THEM AS A RESULT OF THE GRADING OPERATION AND PERFORMED TO THE SATISFACTION OF THE COUNTY ENGINEER.

5. DISTURBED AREAS, BOTH ON AND OFF-SITE SHALL BE REVEGETATED. THESE AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO ALL UNSURFACED AREAS WITHIN THE FLAGGED LIMITS OF DISTURBANCE, STAGING AND STORAGE AREAS, MATERIAL WASTE AREAS, UNDERGROUND UTILITY CONSTRUCTION AREAS, BENCHED AREAS INCLUDING RETAINING WALL BENCHES, AND TEMPORARY OR EXISTING ACCESS ROADS USED FOR CONSTRUCTION ACTIVITIES.

6. A SWALE SEDIMENT TRAP FOR ALL DRAINAGEWAYS INTERCEPTED BY PROPOSED ROAD CONSTRUCTION WILL BE FORMED. TRAPS WILL BE PLACED IN SURFACE DRAIN DITCHES JUST BEFORE THE RUNOFF WATER LEAVES THE PROPERTY, ENTERS A WATERCOURSE OR IMMEDIATELY PRECEDING DITCH INLETS OR STABILIZED OUTLETS.

7. GRADING ADJACENT TO ALL STRUCTURES SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'. ALL PATIOS SHALL HAVE A MINIMUM OF 2% SLOPE AWAY FROM THE STRUCTURE.

8. FOUNDATION WALLS SHALL EXTEND A MINIMUM OF 6" ABOVE ALL ADJACENT FINSHED GRADES.

9. THE SITE SHALL BE GRADED TO DIRECT COLLECTED RUNOFF THROUGH SILT FENCES OR STRAW BALES.

10. SILT FENCE SHALL BE INSTALLED AT THE TOE OF ALL DOWNHILL SLOPES IN THE CONSTRUCTION AREAS. NO GRUBBED AREA SHALL BE WITHOUT SILT FENCE OR OTHER EROSION CONTROL DEVICE FOR LONGER THAN 48 HOURS. ALL SILT FENCE OR L.O.D. FENCING IS TO BE REPAIRED/REPLACED AS NECESSARY.

11. SEDIMENT TRAPS MUST OUTLET ONTO STABILIZED (PREFERABLY UNDISTURBED) GROUND, INTO A WATER COURSE, OR (IN THE CASE OF A SMALL DRAINAGEWAY) LEFT TO PERCOLATE INTO THE GROUND.

12. ALL SEED MIX SHALL BE APPLIED AT A RATE SO THAT GERMINATION AND SUBSEQUENT COVERAGE REACHES 80 PERCENT IN A REPRESENTATIVE 10' BY 10' AREA. IF COVERAGE DOES NOT REACH 80 PERCENT, RESEEDING MUST OCCUR.

13. FUGITIVE DUST SHALL BE CONTROLLED BY WATERING AND/OR CHEMICAL STABALIZATION, PROVIDING VEGETATIVE OR SYNTHETIC COVER AND WIND BREAKS CONSISTENT WITH UTAH STATE DIVISION OF AIR QUALITY STANDARDS.

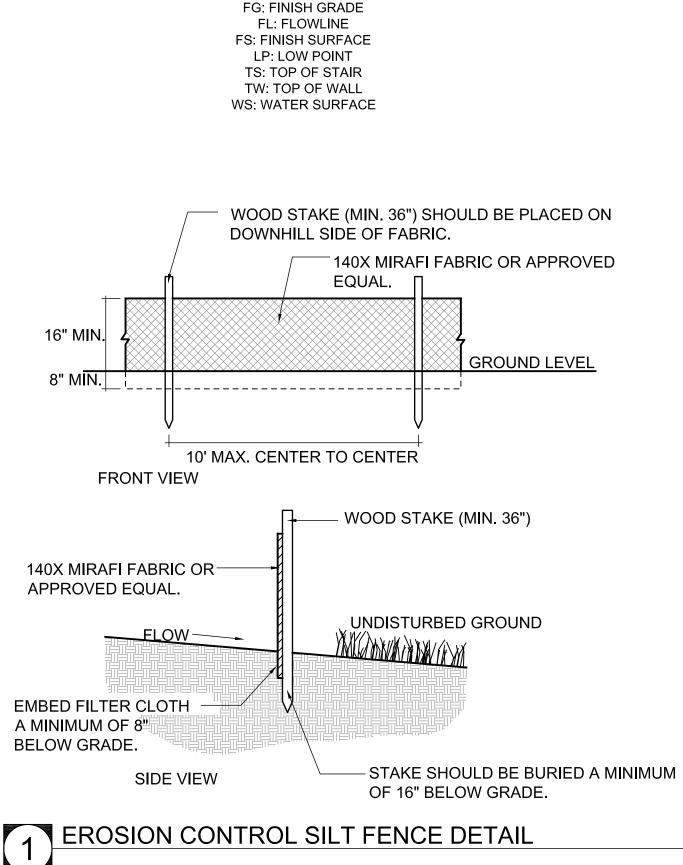
ABBREVIATION LEGEND

**BS: BOTTOM OF STAIR** 

**BW: BOTTOM OF WALL** 

EG: EXISTING GRADE

FFE: FINISH FLOOR ELEVATION

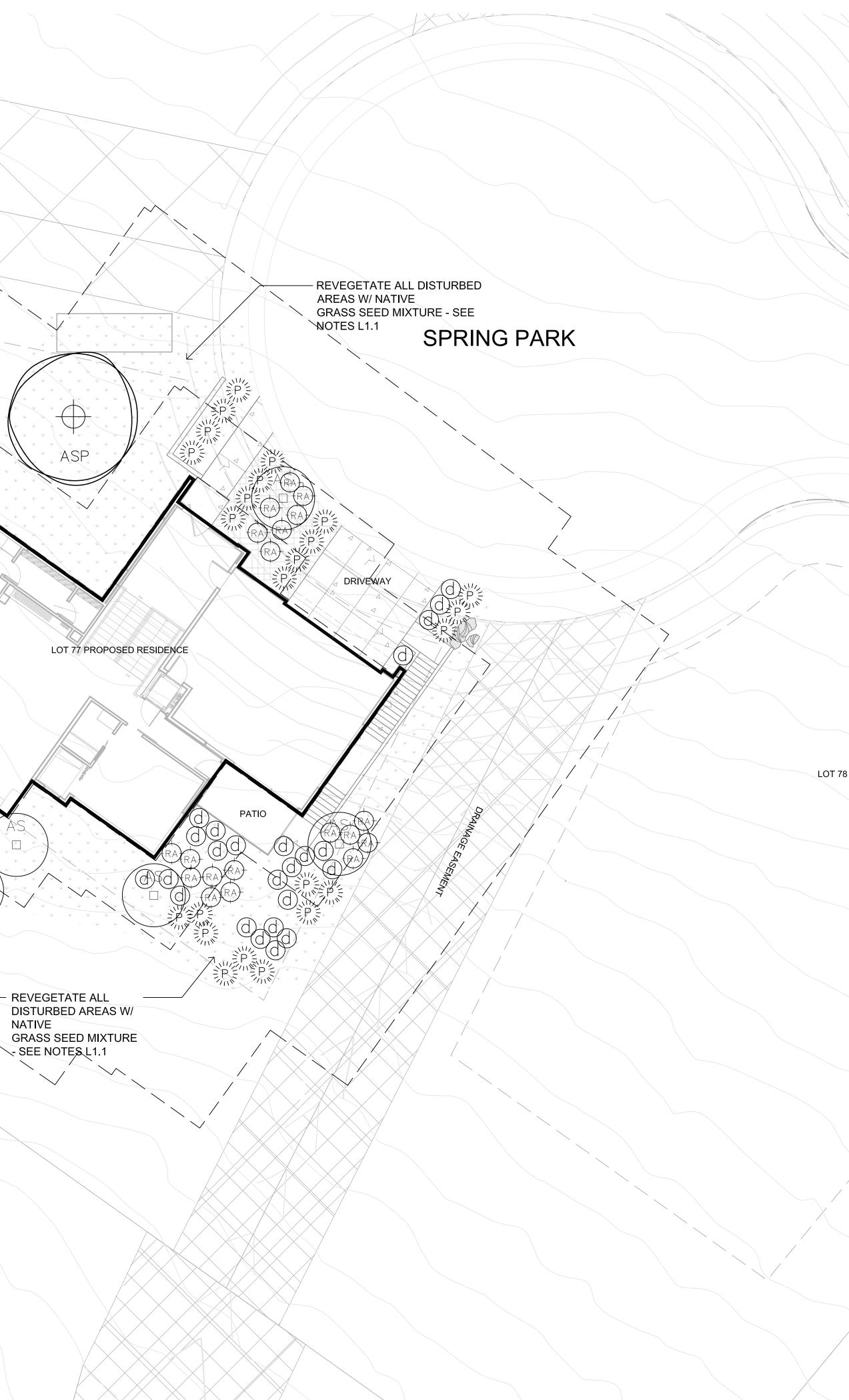




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SANITARY SEWER EASEMENT  $\oplus$  $\bigcirc$  $\bigcirc$ ASP ASP ASP PRESERVE ALL EXISTING VEGETATION TO THE GREATEST EXTENT POSSIBLE NW/ PE VNV(N) → ≥P3 30' 'MODERATE' — DEFENSIBLE SPACE WILDLAND FIRE SETBACK REVEGETATE ALL DISTURBED AREAS W/ NATIVE GRASS SEED MIXTURE - SEE NOTES L1.1 PATIO SPA 10' 'MODERATE' — DEFENSIBLE SPACE WILDLAND FIRE SETBACK  $\mathbb{V}$ 



Plant Schedule	
SYMBOL	BOTANICAL/COMMON NAME

# TREES

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ASP

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Populus tremuloides Quaking Aspen

# SHRUBS

Amelanchier alnifolia Saskatoon Saskatoon Serviceberry Ribes alpinium 'Green Mound; Green Mound Alpine Currant

# GRASSES

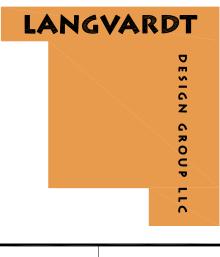
Panicum virgatum 'Heavy Metal' Heavy Metal Switch Grass

# PERENNIALS

- Leucanthemum x superbum maximum 'Becky' Becky Daisy
- Rudbekia fulgida 'Goldstrum' Black Eyed Susan

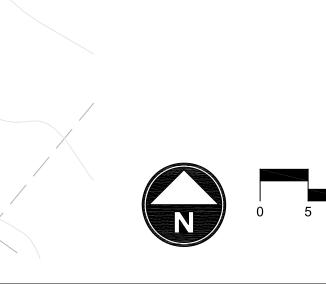
## MATERIALS

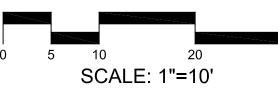
- Native Seed Mix Cabin Blend Seed Mix - Granite Seed
- Shredded Bark Mulch As Approved by Landscape Architect
- Wasatch Gray Chat Crusher Fines As Approved by Landscape Architect

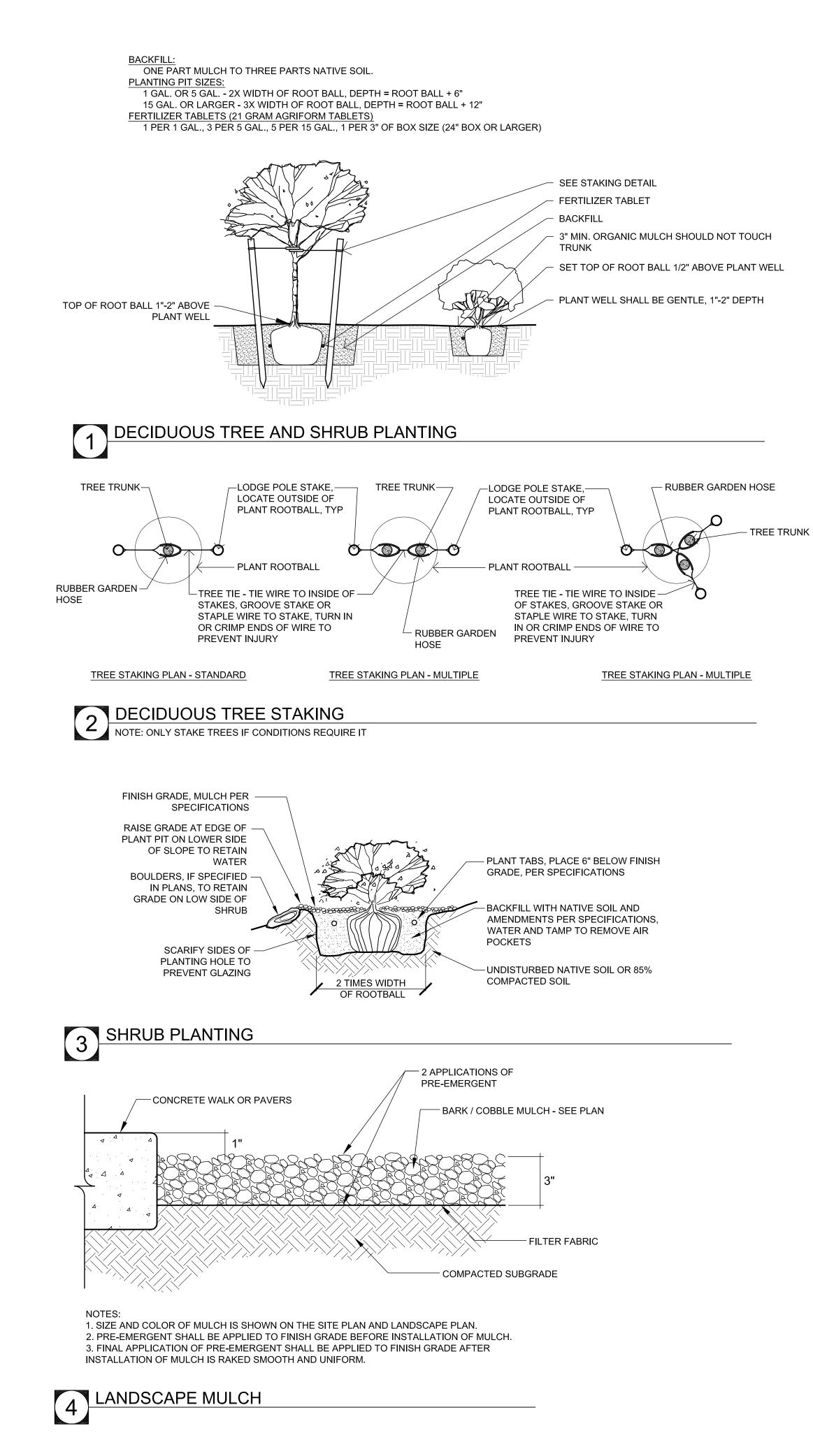


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NOTE: ALL GROUNDCOVERS TO BE PLANTED ON CENTER (SEE PLANT LEGEND) IN A TRIANGULAR PATTERN. 52 SPACING (X) ROW (Y) 3 FT. O.C. 2.60 FT. 4 FT. O.C. 3.46 FT. PLANT SPACING - MULCH SOIL TO A DEPTH OF 2", 1' IN DIAMETER. KEEP MULCH 2" AWAY FROM PLANT BASE 23 PREPARE SOIL PER SPECIFICATIONS AND ROTOTILL TO A DEPTH OF 6" PRIOR TO ANY SPRINKLER WORK BACKFILL WITH NATIVE SOIL. APPLY FERTILIZER TO SURFACE AWAY FROM TRUNK PER SPECIFICATIONS **GROUNDCOVER SPACING** 5 4,570 S.F. 3 C.Y. GENERAL LANDSCAPE NOTES 3 C.Y. 1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING AND PROPOSED UTILITIES, AND ALL SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE PROJECT MANAGER AND ALL OTHER CONTRACTORS WORKING ON THE SITE. 2. THE FINISH GRADE OF ALL PLANTING AREAS SHALL BE SMOOTH, EVEN AND CONSISTENT, FREE OF ANY HUMPS, DEPRESSIONS OR OTHER GRADING IRREGULARITIES. THE FINISH GRADE OF ALL LANDSCAPE AREAS SHALL BE GRADED CONSISTENTLY 3/4" BELOW THE TOP OF ALL SURROUNDING WALKS, CURBS, ETC. 3. THE CONTRACTOR SHALL STAKE THE LOCATION OF ALL PLANTS FOR APPROVAL PRIOR TO PLANTING. TREES SHALL BE LOCATED EQUIDISTANT FROM ALL SURROUNDING PLANT MATERIAL. SHRUBS AND GROUND COVERS SHALL BE TRIANGULAR AND EQUALLY SPACED. 4. THE PLANT MATERIALS LIST IS PROVIDED AS AN INDICATION OF THE SPECIFIC REQUIREMENTS OF THE PLANTS SPECIFIED, WHEREVER IN CONFLICT WITH THE PLANTING PLAN, THE PLANTING PLAN SHALL GOVERN. 5. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT REQUIRED FOR THE PROPER COMPLETION OF ALL LANDSCAPE WORK AS SPECIFIED AND SHOWN ON THE DRAWINGS. 6. ALL PLANT MATERIALS SHALL BE APPROVED PRIOR TO PLANTING. THE OWNER/LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT ANY AND ALL PLANT MATERIAL NOT CONFORMING TO THE SPECIFICATIONS. THE OWNER/LANDSCAPE ARCHITECTS DECISION WILL BE FINAL. 7. THE CONTRACTOR SHALL KEEP THE PREMISES, STORAGE AREAS AND PAVING AREAS NEAT AND ORDERLY AT ALL TIMES. REMOVE TRASH, SWEEP, CLEAN, HOSE, ETC. DAILY. 8. THE CONTRACTOR SHALL PLANT ALL PLANTS PER THE PLANTING DETAILS, STAKE/GUY AS SHOWN. TOP OF ROOT BALLS SHALL BE PLANTED FLUSH WITH FINISH GRADE. 9. THE CONTRACTOR SHALL NOT IMPEDE DRAINAGE IN ANY WAY. THE CONTRACTOR SHALL ALWAYS MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING, WALLS, ETC. 10. THE CONTRACTOR SHALL MAINTAIN ALL WORK UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER. UPON COMPLETION OF LANDSCAPE WORK AN INSPECTION FOR ACCEPTANCE OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER/LANDSCAPE ARCHITECT FOR SCHEDULING OF INSPECTION AT LEAST SEVEN (7) DAYS IN ADVANCE. 11. THE CONTRACTOR SHALL MAINTAIN AND GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. REPLACEMENT PLANTS SHALL BE GUARANTEED FOR AN ADDITIONAL 90 DAYS. MAINTENANCE SHALL INCLUDE MOWING, WEEDING, FERTILIZING, CLEANING, INSECTICIDES, HERBICIDES, ETC. 12. NATIVE GRASS SEEDED AREAS TO BE THE CABIN BLEND MIXTURE: CABIN BLEND GENERALLY CONTAINS: MOUNTAIN BROME (BROMUS MARINATES), SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS), SANDBERG BLUEGRASS (POA SECUNDA SSP. SANDBERGII), BIG BLUEGRASS (POA SECUNDA SSP. AMPLA), SHEEP FESCUE (FESTUCA OVINA), WESTERN WHEATGRASS (PASCOPYRUM SMITHII), AND BEARDLESS BLUEBUNCH WHEATGRASS (PSEUDOROEGNERIA SPICATA SSP. INERMIS) SEEDING RATE: 35 LBS PLS/ACRE 13. ALL DISTURBED AREAS OUTSIDE MULCHED LANDSCAPE BEDS ARE TO BE SEEDED WITH NATIVE GRASS MIXTURE. **IRRIGATION NOTE:** 1. ALL PLANT MATERIALS SHOWN ON THE DRAWING SHALL BE SERVICED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. ALL SHRUB BED AREAS, INCLUDING TREES SHALL BE IRRIGATED WITH A LOW PRESSURE DRIP IRRIGATION SYSTEM. ALL GRASS AREAS, EITHER NATIVE OR MANICURED SHALL BE IRRIGATED WITH A BROADCAST IRRIGATION SYSTEM.

2. THE CONTRACTOR IS TO HAVE A QUALIFIED IRRIGATION SYSTEM SPECIALIST PREPARE A DESIGN FOR AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM AND SUBMIT DRAWINGS TO THE ENGINEER FOR APPROVAL AT LEAST 30 DAYS PRIOR TO THE SYSTEM INSTALLATION.

3. UNDERGROUND IRRIGATION SYSTEM DRAWINGS SHALL BE PREPARED ON 24"X 36" SHEETS, NEATLY DRAWN AND VERY LEGIBLE. DRAWINGS ARE TO INCLUDE HEAD SPACING, TYPES OF HEADS, PIPING WITH SIZES, VALVES, FITTINGS AND ALL OTHER ITEMS REQUIRED FOR PROPER INSTALLATION OF THE SYSTEM.

4. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL IRRIGATION SLEEVES PRIOR TO PLACEMENT OF HARD IMPROVEMENTS. COORDINATE WITH THE GENERAL CONTRACTOR.

5. THE UTILITY CONTRACTOR IS TO PROVIDE AN IRRIGATION SYSTEM CONNECTION TO EITHER THE CULINARY OR SECONDARY WATER LINE WITH A BACK FLOW PREVENTION DEVICE, AS APPLICABLE, WITHIN STATE AND LOCAL JURISDICTIONAL CODES. THE IRRIGATION CONTRACTOR IS RESPONSIBLE TO COORDINATE THIS ITEM WITH THE UTILITY CONTRACTOR. IF SECONDARY WATER IS USED, THE SYSTEM SHALL BE FILTERED WITH A CLEANABLE FILTER SYSTEM.

6. THE IRRIGATION CONTROL BOX SHALL BE LOCATED AT THE DIRECTION OF THE PROJECT MANAGER/OWNER.

# Plant Schedule

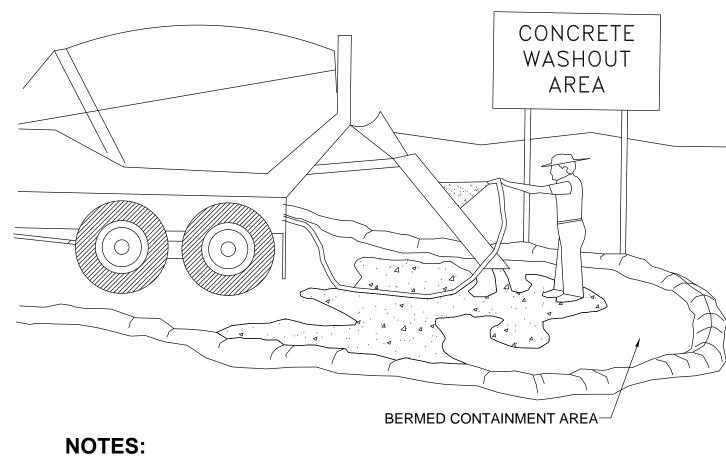
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YMBOL	BOTANICAL/COMMON NAME	SIZE	
	TREES		
	Populus tremuloides Quaking Aspen	2" CAL.	35'x20'
AS	SHRUBS		
	Amelanchier alnifolia Saskatoon Saskatoon Serviceberry	5 Gal.	10'x10'
(RA)	Ribes alpinium 'Green Mound; Green Mound Alpine Currant	5 Gal.	3'x3'
	GRASSES		
	Panicum virgatum 'Heavy Metal' Heavy Metal Switch Grass	1 Gal.	5'x3'
	PERENNIALS		
Ø	Leucanthemum x superbum maximum 'Becky' Becky Daisy	1 Gal.	36"x 24
$\ominus$	Rudbekia fulgida 'Goldstrum' Black Eyed Susan	1 Gal.	3'x2'
	MATERIALS		
	Native Seed Mix Cabin Blend Seed Mix - Granite Seed	Hydroseed	
	Shredded Bark Mulch As Approved by Landscape Architect	3" Depth	
	Wasatch Gray Chat Crusher Fines	3" Depth	

As Approved by Landscape Architect

LANGVARDT

# BINGHAM RESIDENCE OT 77 SUMMIT POWDER MOUNTAIN

DATE:	AUGUST 2014
PROJECT:	000.0000.25
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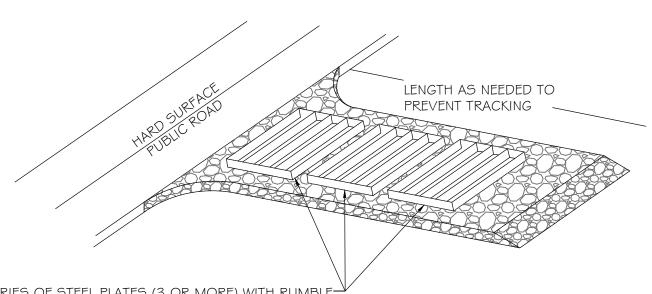


1. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.

2. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED ON SITE. 3. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHAL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.

### **EROSION CONTROL NOTES:**

- 1. SANDBAGS WILL BE PLACED AT DISCHARGE LOCATIONS TO CONTAIN AND DIVERT STORM WATER THROUGH THE INLET PROTECTION.
- 2. AN EARTHEN BERM 6" HIGH WILL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIVERT IT TO DISCHARGE AREAS.
- 3. STORM WATER WILL BE DISCHARGED INTO AN EXISTING DRAINAGE SYSTEM. EXISTING LINES SHALL BE INSPECTED PRIOR TO CERTIFICATE OF OCCUPANCY AND CLEANED IF NECESSARY.
- 4. THE STORM WATER POLLUTION PREVENTION PLAN SHALL CONFORM TO ALL STATE DIVISION OF ENVIRONMENTAL PROTECTION REGULATIONS.



A SERIES OF STEEL PLATES (3 OR MORE) WITH RUMBLE STRIPS OR MIN. 3" COARSE AGGREGATE.

### **ENTRANCE STABILIZATION NOTES:**

1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE STORM DRAIN SYSTEMS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.

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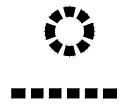
- 2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE: a. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A
- CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY AND SIDEWALK OR PARKING AREA. b. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN. 3" COARSE
- AGGREGATE WITH LENGTH, WIDTH AND THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES. 3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH
- WATER CAN GREATLY IMPROVE EFFICIENCY. 4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED
- CONSTRUCTION ENTRANCE SITES.

### STREET MAINTENANCE NOTES:

- 1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY. 2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT
- BECOMES VISIBLE. 3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

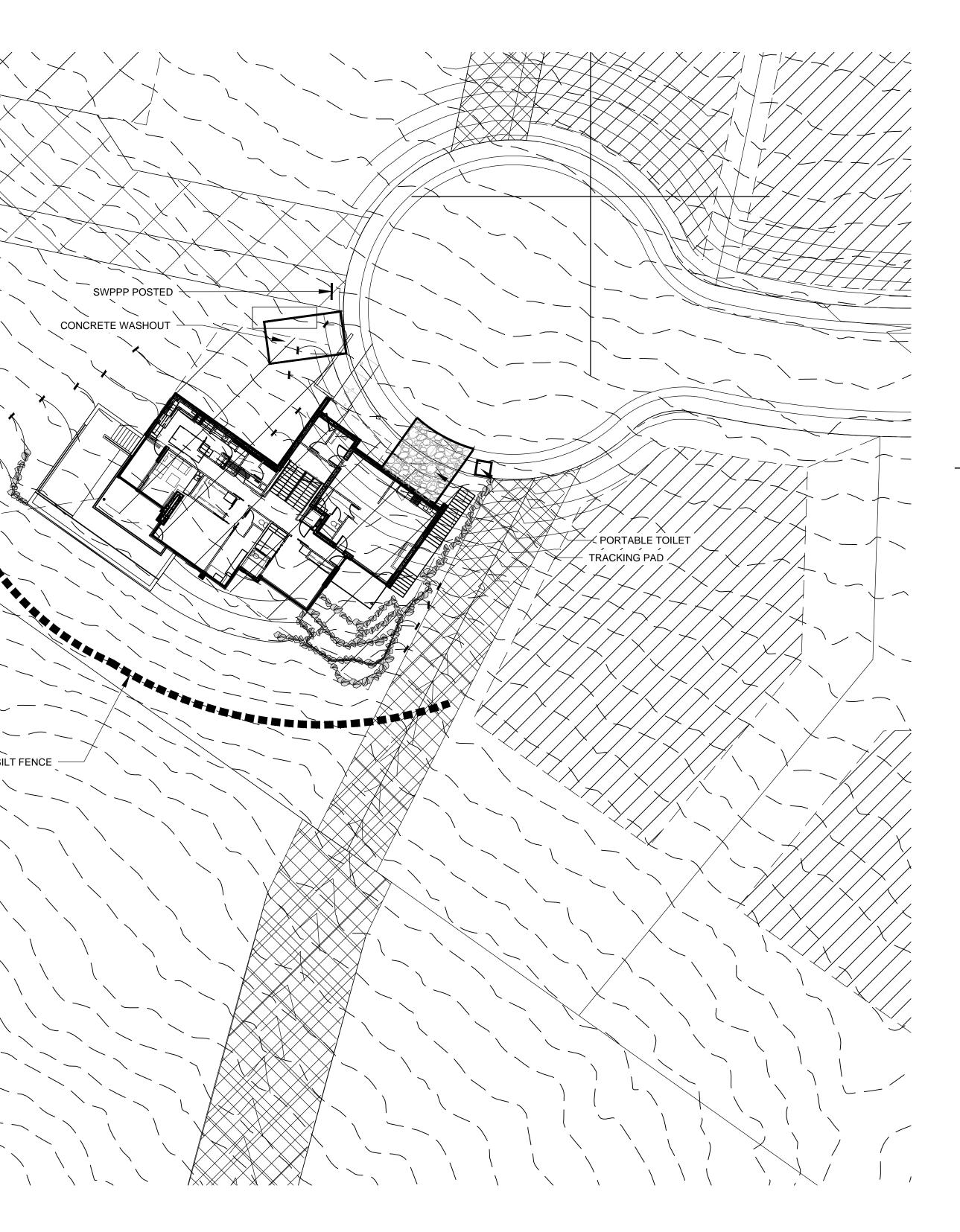
### NOTE:

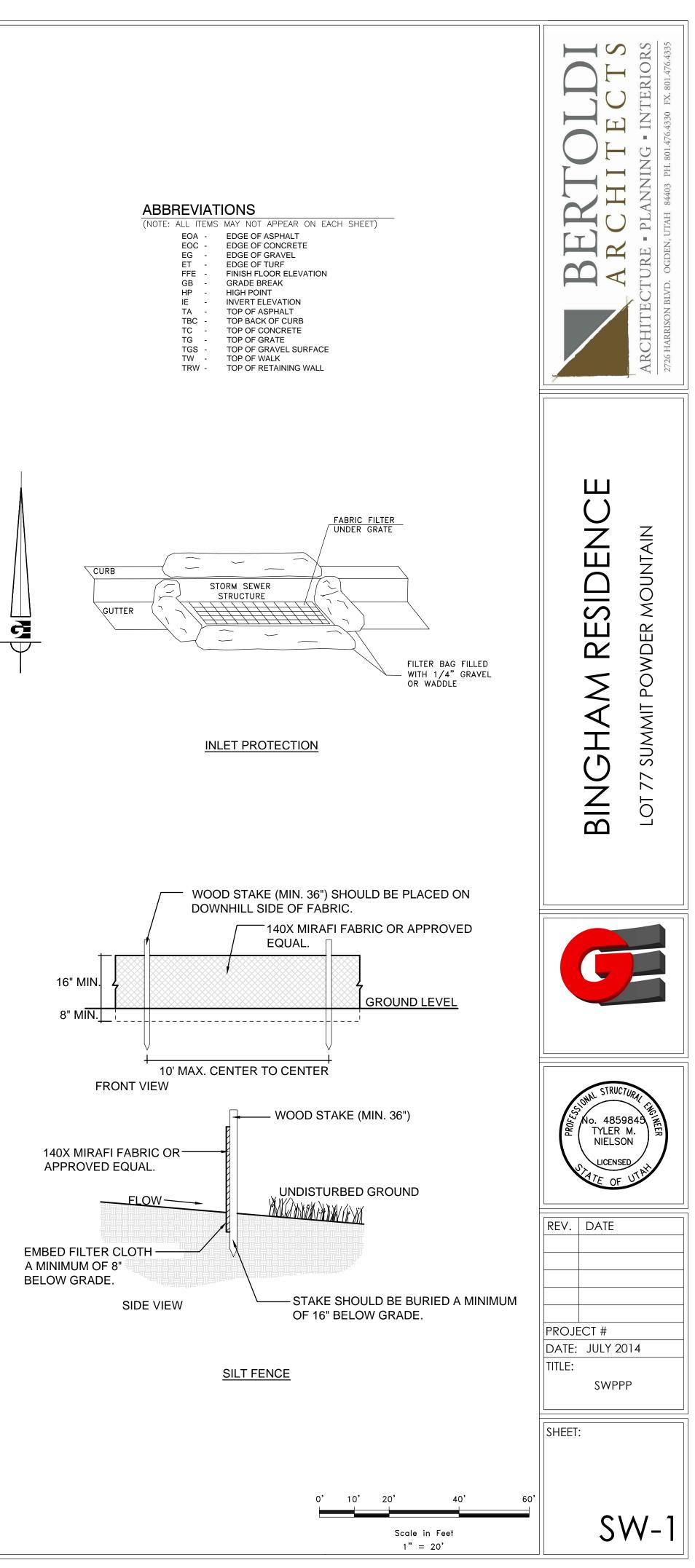
CONTRACTOR SHALL COMPLETE AND SUBMIT A STATE NOTICE OF INTENT (NOI) AND A STORM WATER POLLUTION PREVENTION PLAN BOOKLET

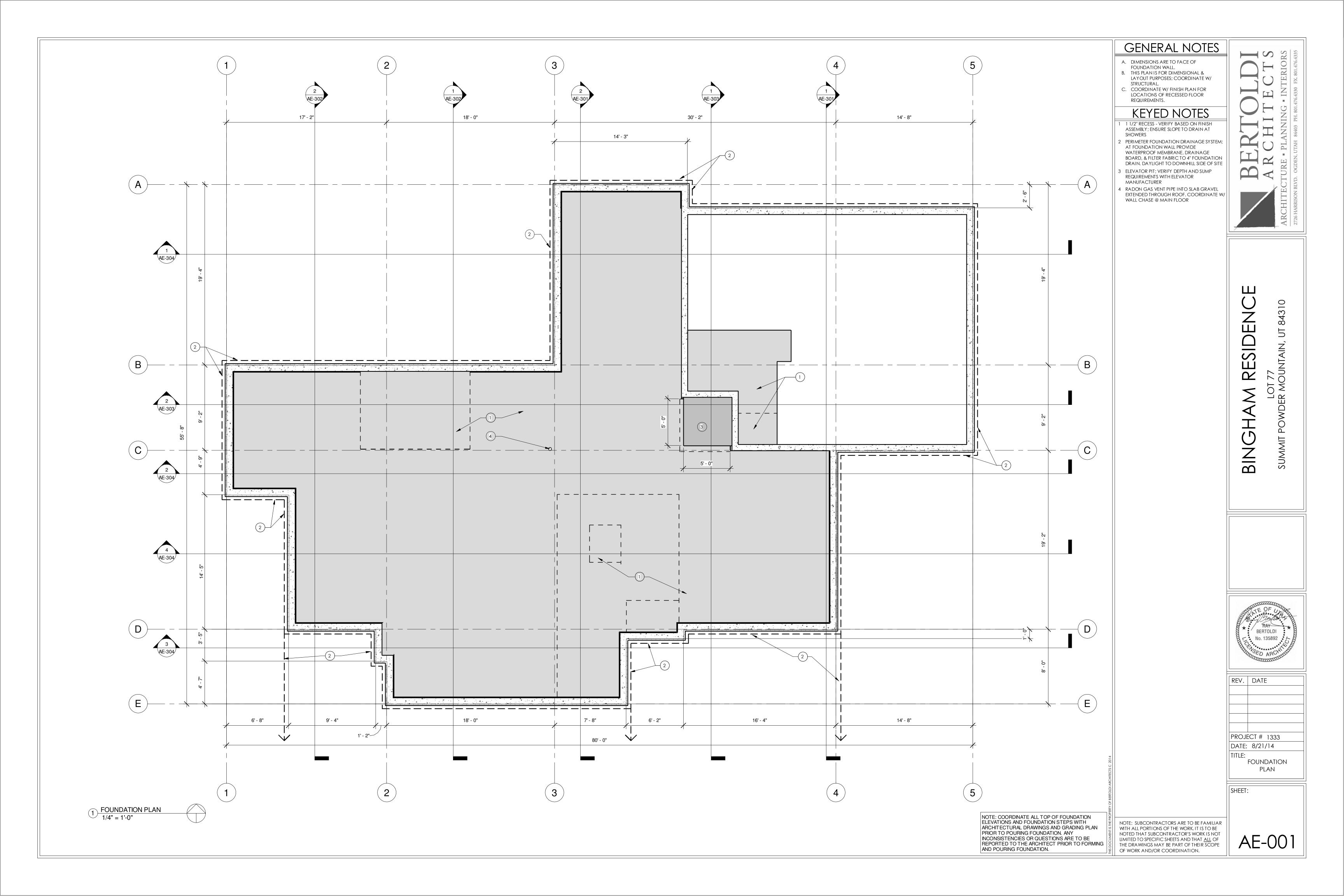


INLET PROTECTION

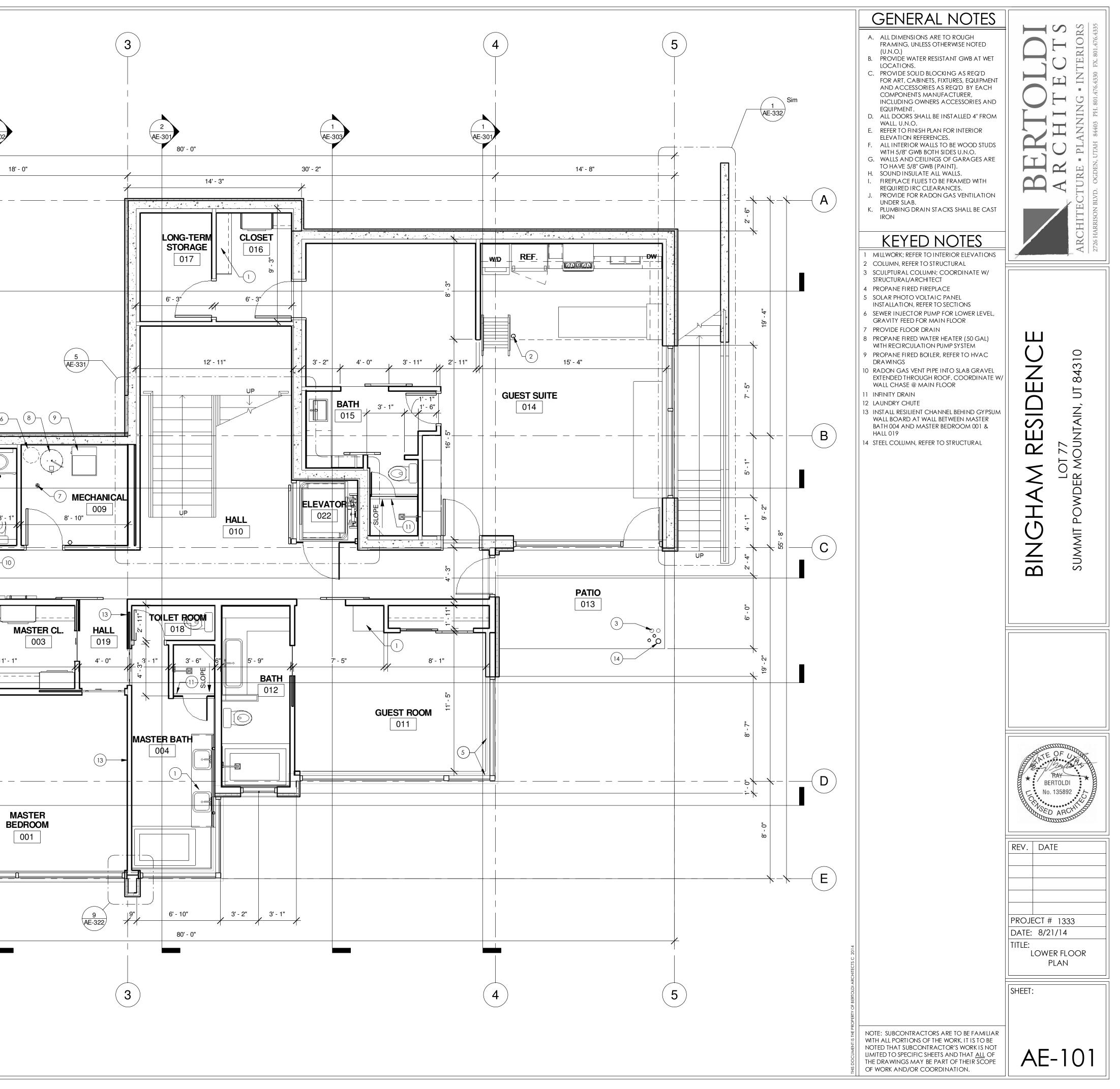
SILT FENCE

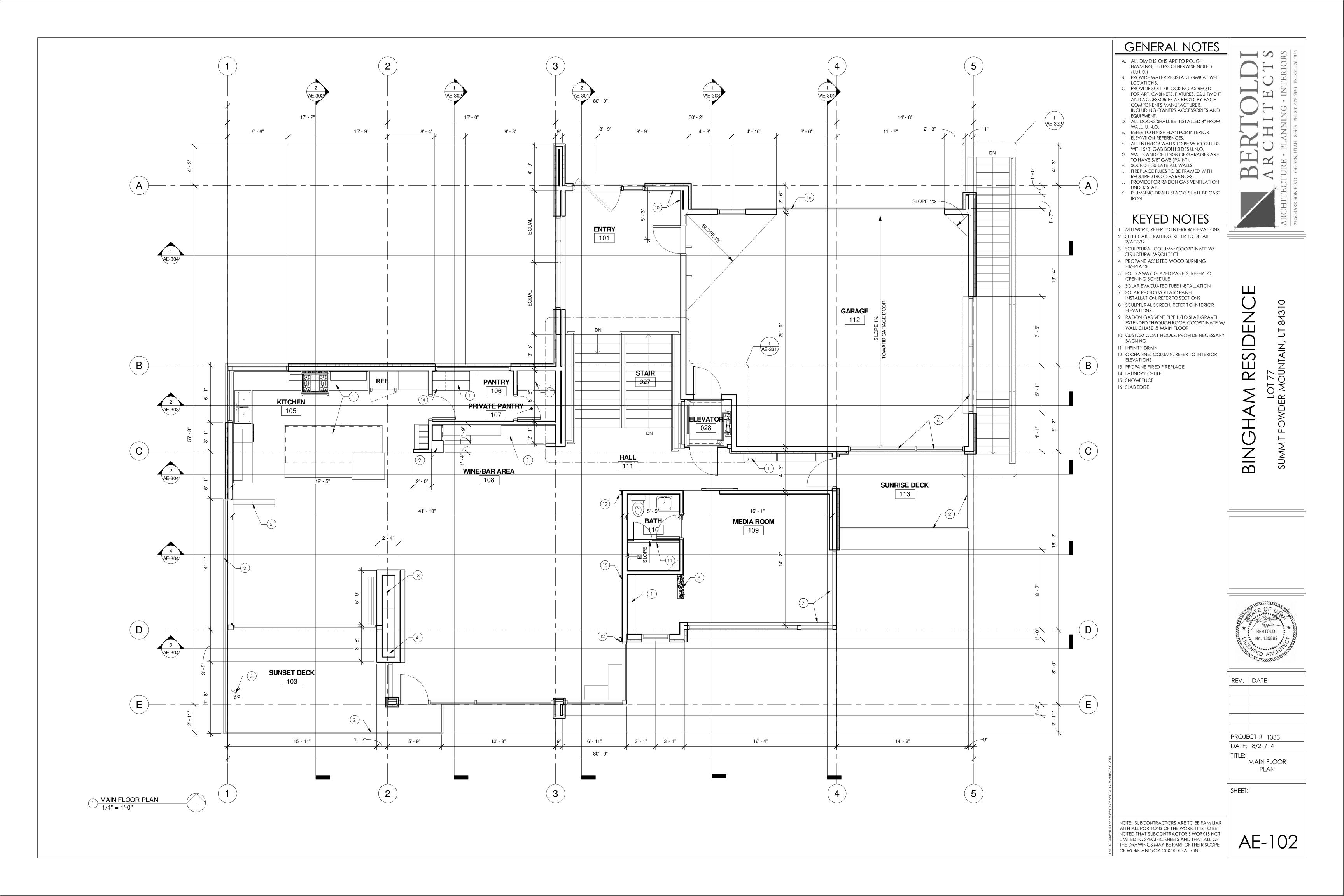


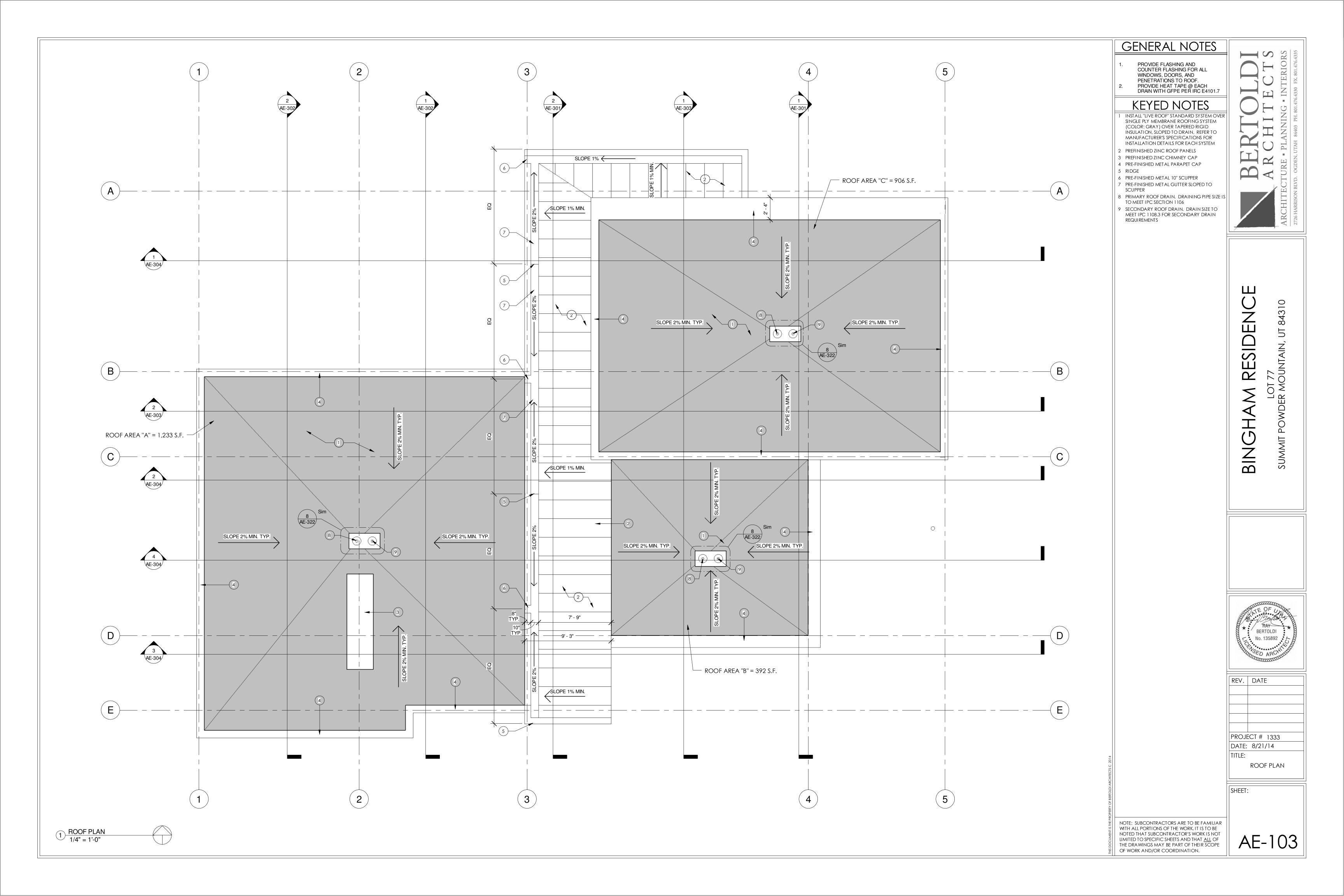


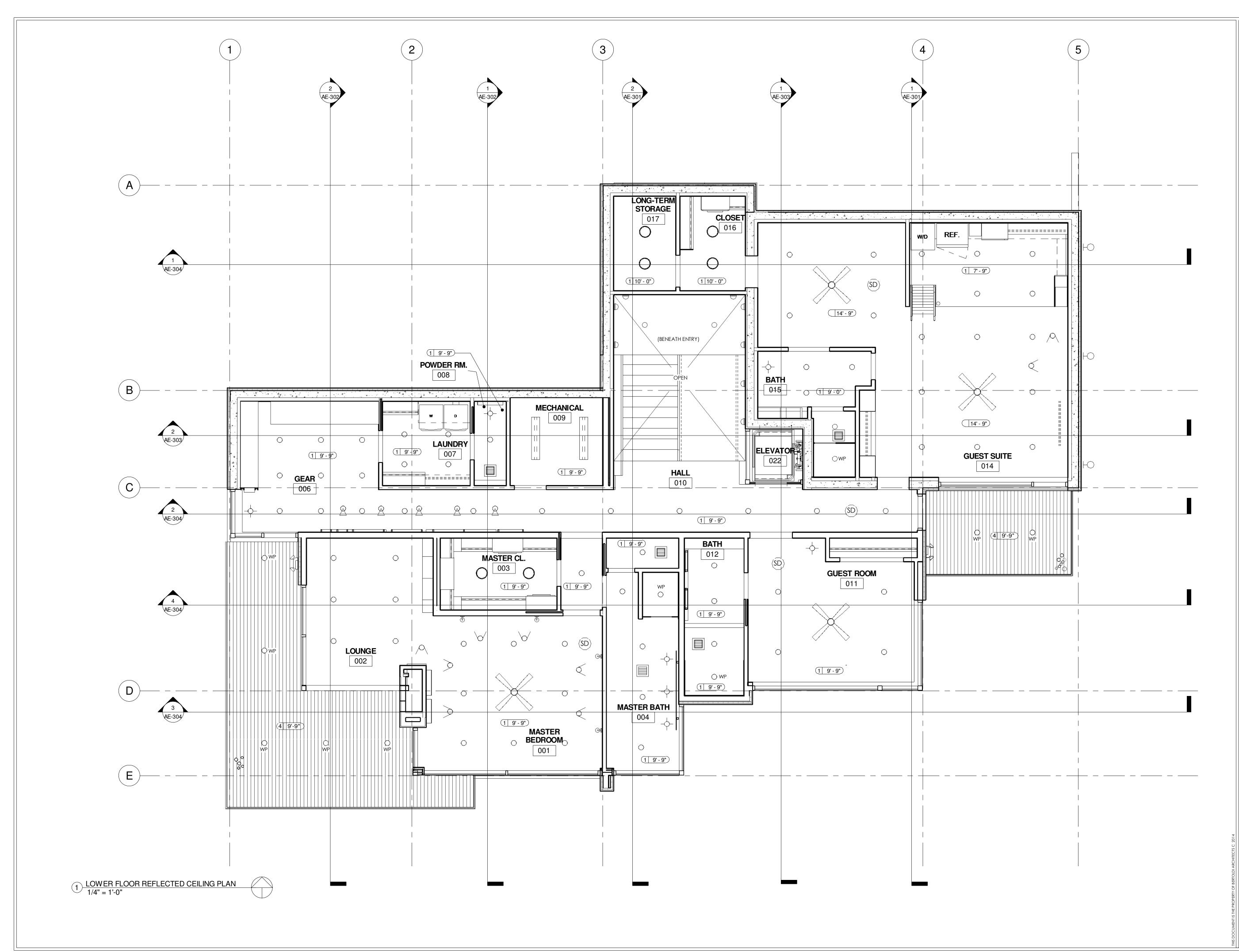


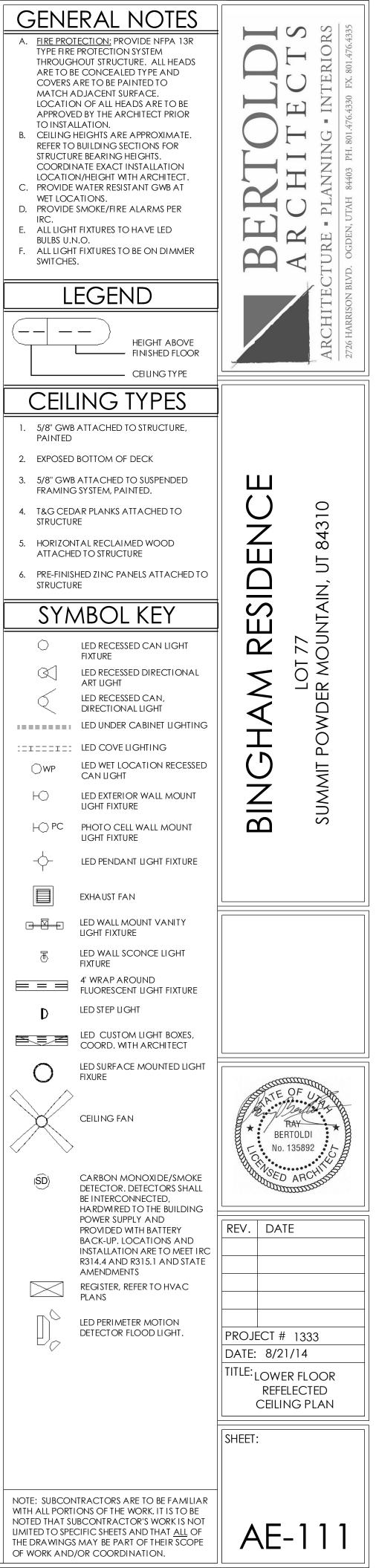
(2) 1 AF-30 AE-30 17' - 2" A 1 AE-304 POWDER RM. (12) 008 ( B )  $\begin{pmatrix} 2 \end{pmatrix}$ AE-303 GEAR LAUNDRY 006 007 13' - 4" \_8' - 4"\_\_\_\_ C 2 AE-304 (1)12' - 0" 4 AE-304 LOUNGE 002 8' - 11" 2' - 5" -14  $(\mathsf{D})$ \_\_\_\_\_ 3 AE-304 PATIO 005 -14 É E 10' - 6" (2) 1  $1 \underbrace{1/4" = 1'-0"}$ 

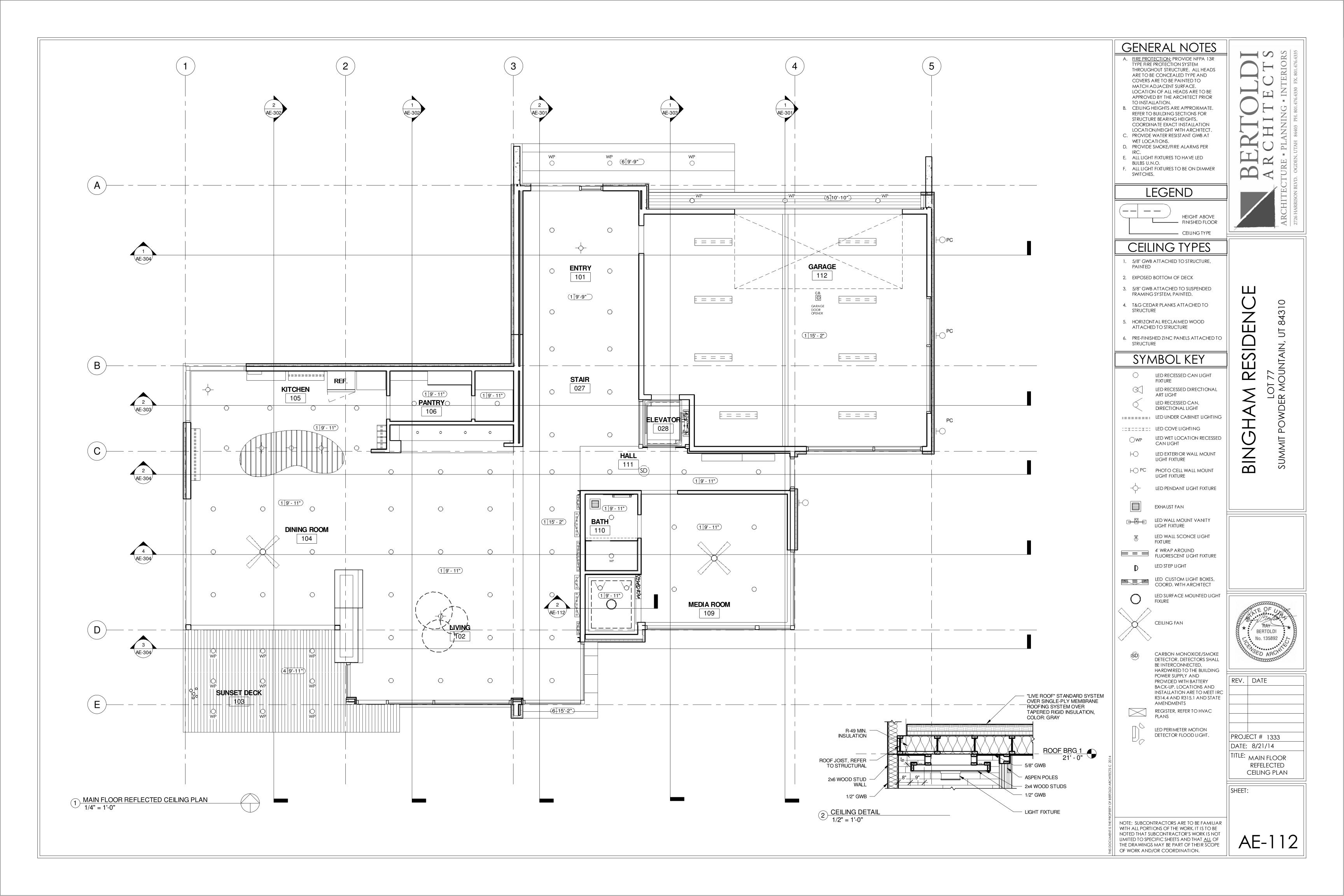


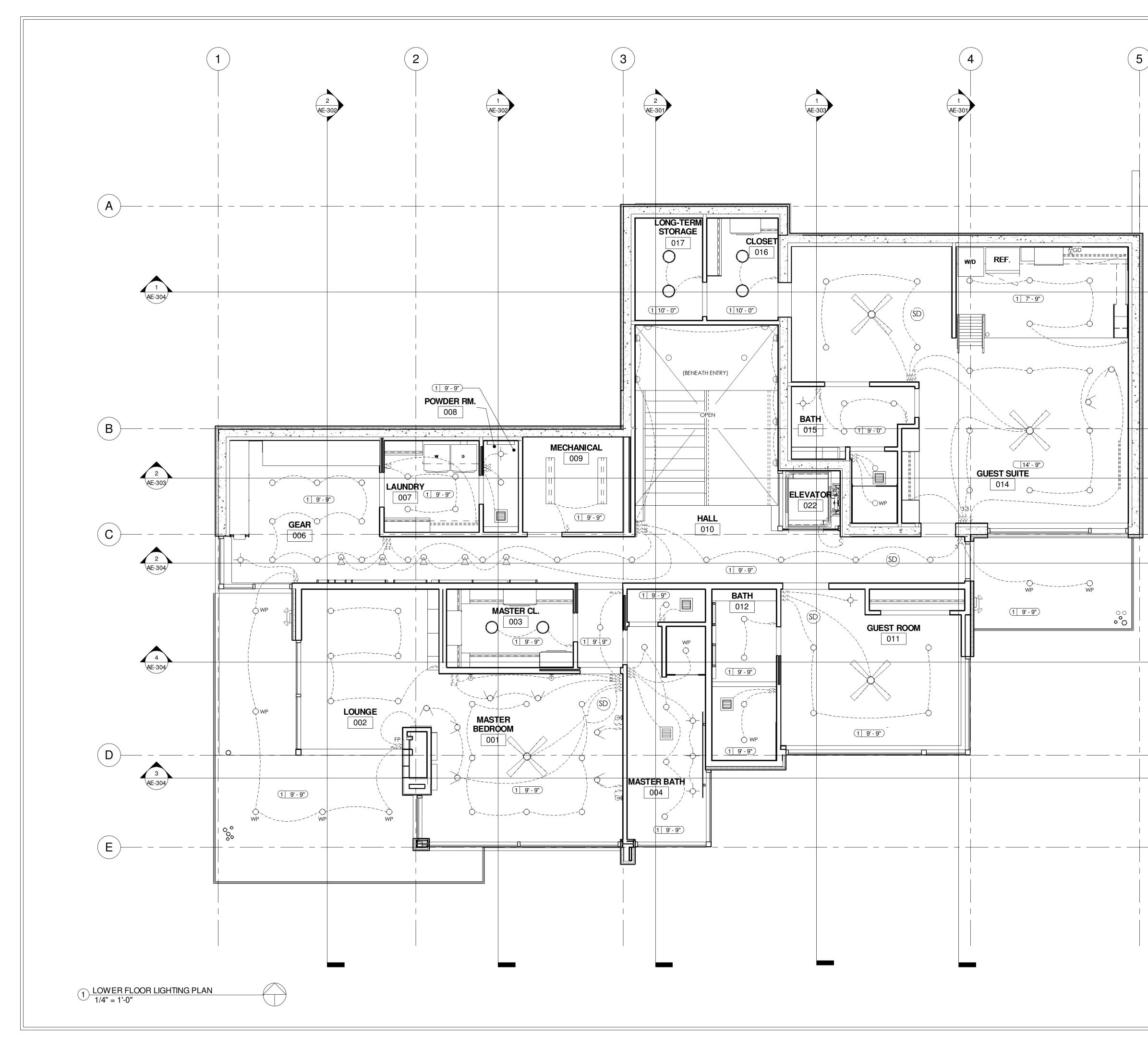




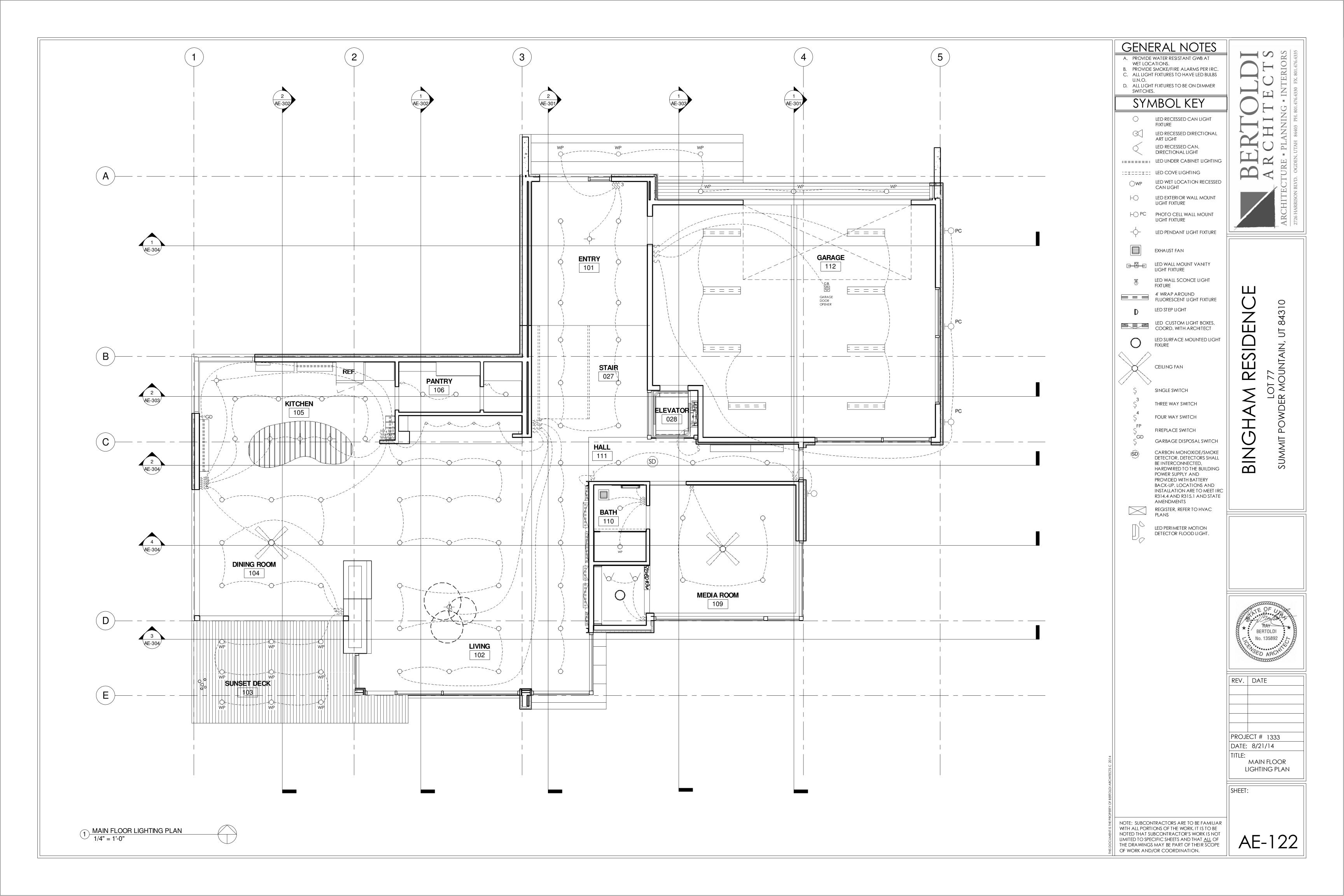




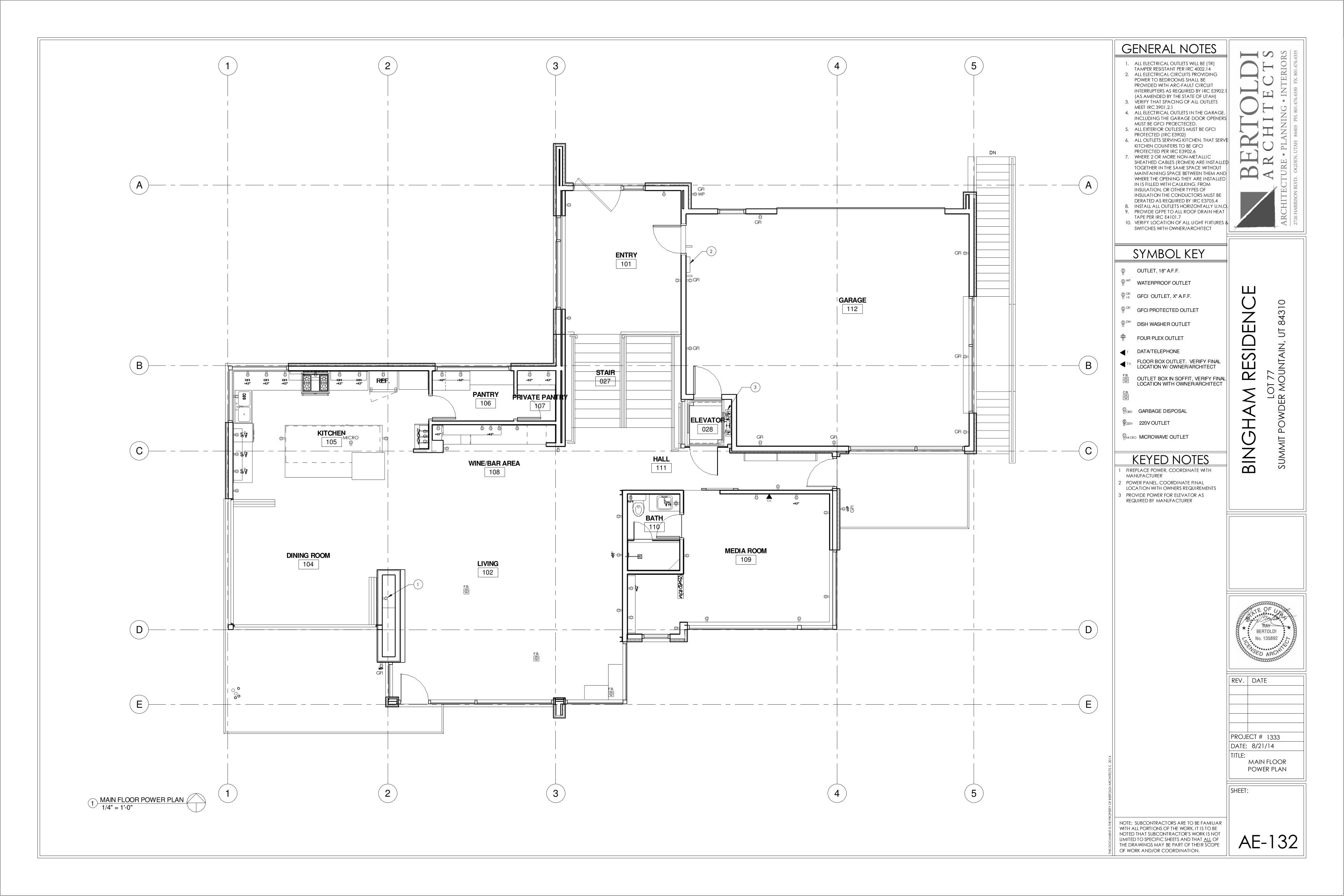


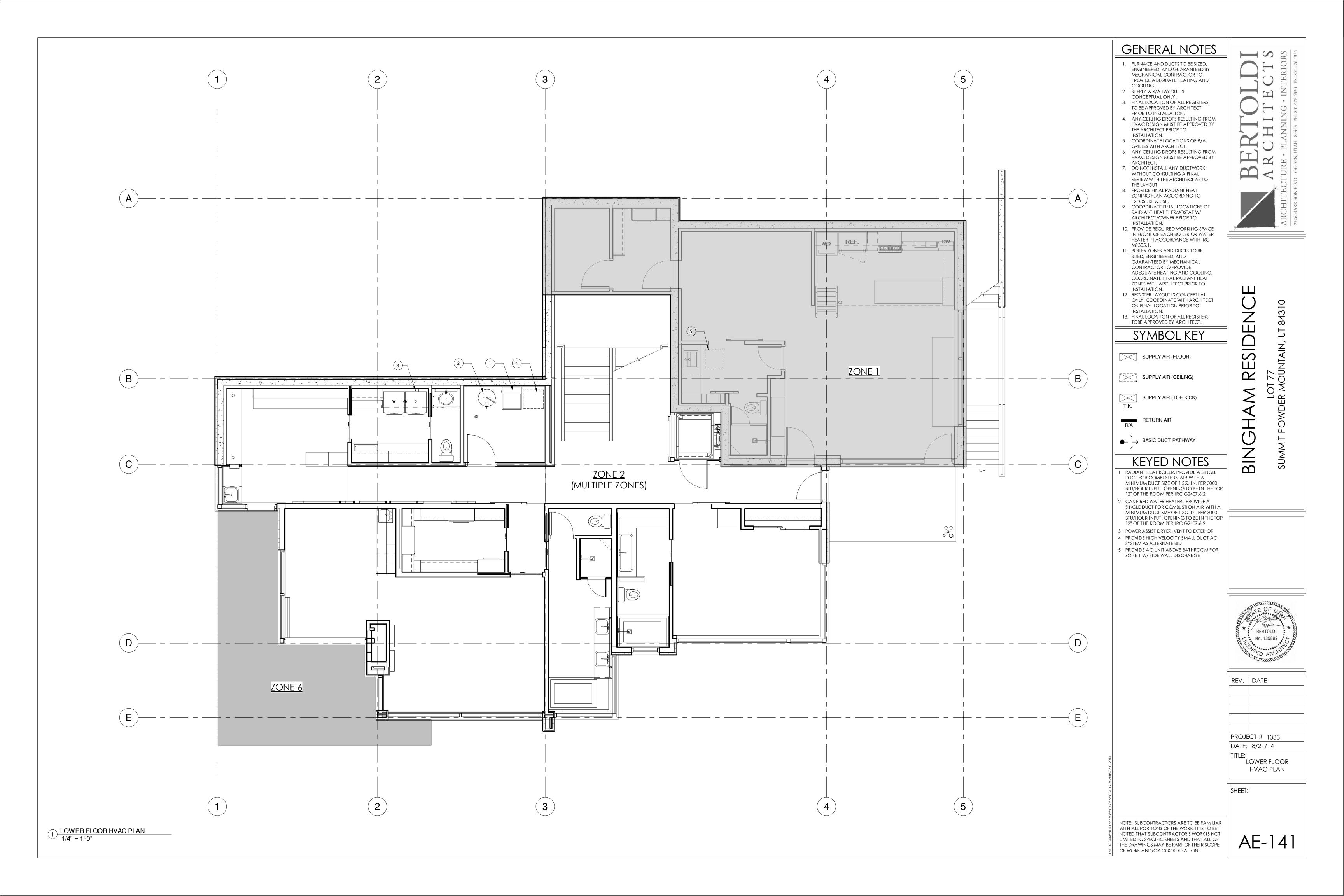


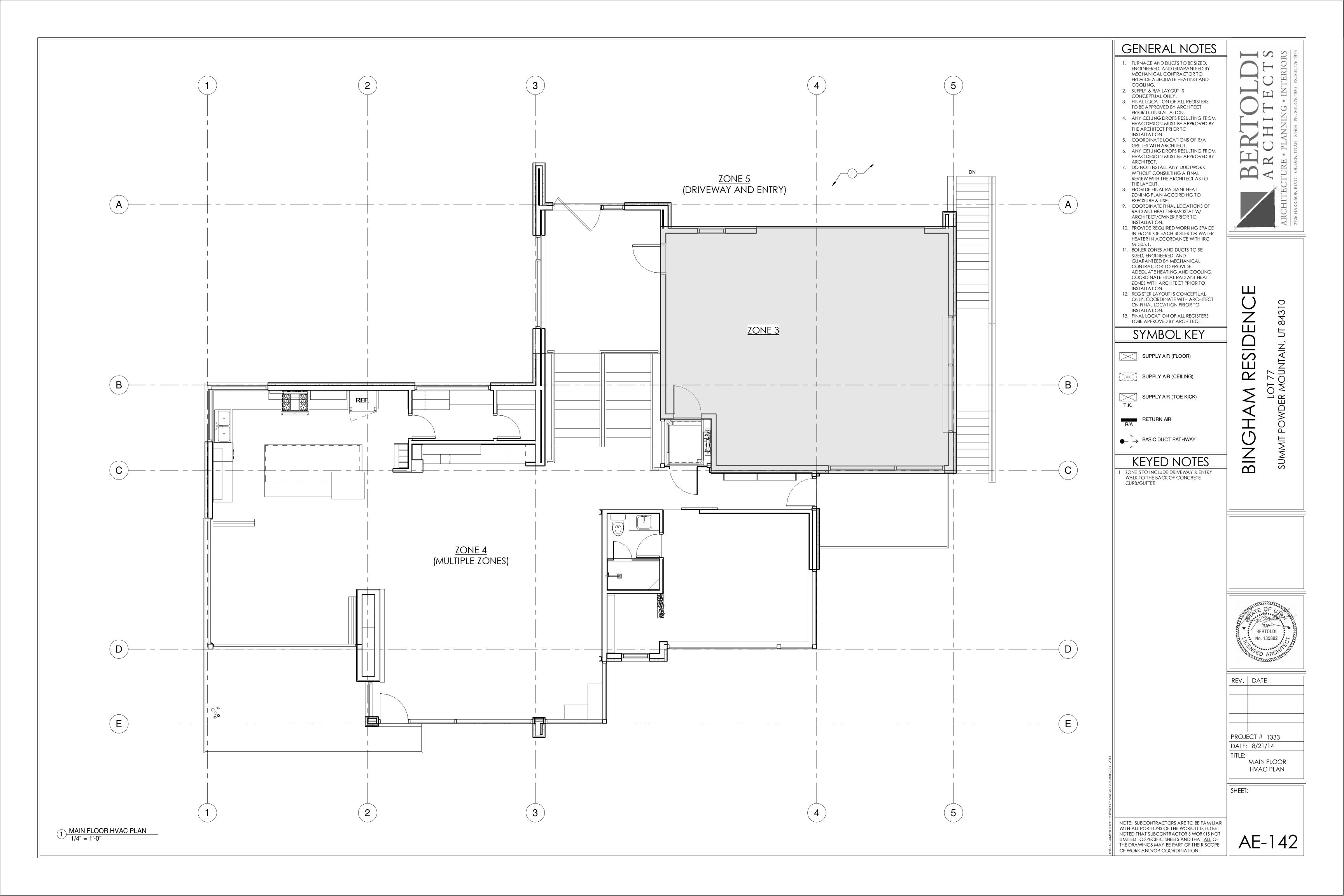
Second state       Second state         A.       PROVIDE WATER RESISTANT GWB AT WET LOCATIONS.         B.       PROVIDE SMOKE/FIRE ALARMS PER IRC.         C.       ALL LIGHT FIXTURES TO HAVE LED BULBS U.N.O.         D.       ALL LIGHT FIXTURES TO BE ON DIMMER SWITCHES.         DE ALL LIGHT FIXTURES TO BE ON DIMMER SWITCHES.         DE DE DRECESSED CAN LIGHT FIXTURE         I.ED RECESSED CAN LIGHT FIXTURE         I.ED RECESSED DIRECTIONAL ART LIGHT         I.ED RECESSED CAN, DIRECTIONAL LIGHT         I.ED RECESSED CAN, DIRECTIONAL LIGHT         I.ED RECESSED CAN, DIRECTIONAL LIGHT         I.ED UNDER CABINET LIGHTING         I.ED COVE LIGHTING         I.ED WET LOCATION RECESSED CAN LIGHT         I.ED EXTERIOR WALL MOUNT LIGHT FIXTURE         I.ED PPC       PHOTO CELL WALL MOUNT LIGHT FIXTURE	ARCHITECTURE • PLANNING • INTERIORS 2726 HARNSON BLVD. OCDEN, UTAH 84403 PH. 801.476.4330 FX. 801.476.4335
IED PENDANT LIGHT FIXTURE         EXHAUST FAN         IED WALL MOUNT VANITY         UGHT FIXTURE         IED WALL SCONCE LIGHT         FIXTURE         IED WALL SCONCE LIGHT         IED WALL SCONCE LIGHT         FIXTURE         IED STEP LIGHT         IED CUSTOM LIGHT BOXES,         COORD. WITH ARCHITECT         IED SURFACE MOUNTED LIGHT         FIXURE         CEILING FAN         SINGLE SWITCH         S         SINGLE SWITCH         S         GD         GARBAGE DISPOSAL SWITCH         S         GARBAGE DISPOSAL SWITCH         S         GARBAGE DISPOSAL SWITCH         S         CARBON MONOXIDE/SMOKE         DETECTOR, DETECTORS SHALL         BI INTERCONNECTED,         HARDWRED TO THE BUILDING         POWER SUPPLY AND         PROVIDED WITH BATTERY         BACK-UP, LOCATIONS AND         INSTALLATION ARE TO MEET IRC         REGISTER, REFER TO HVAC         PLANS         IED PERIMETER MOTION         DETECTOR FLOOD LIGHT.	BINGHAM RESIDENCE LOT 77 SUMMIT POWDER MOUNTAIN, UT 84310
	REV. DATE PROJECT # 1333 DATE: 8/21/14 TITLE: LOWER FLOOR LIGHTING PLAN SHEET: AEE-121

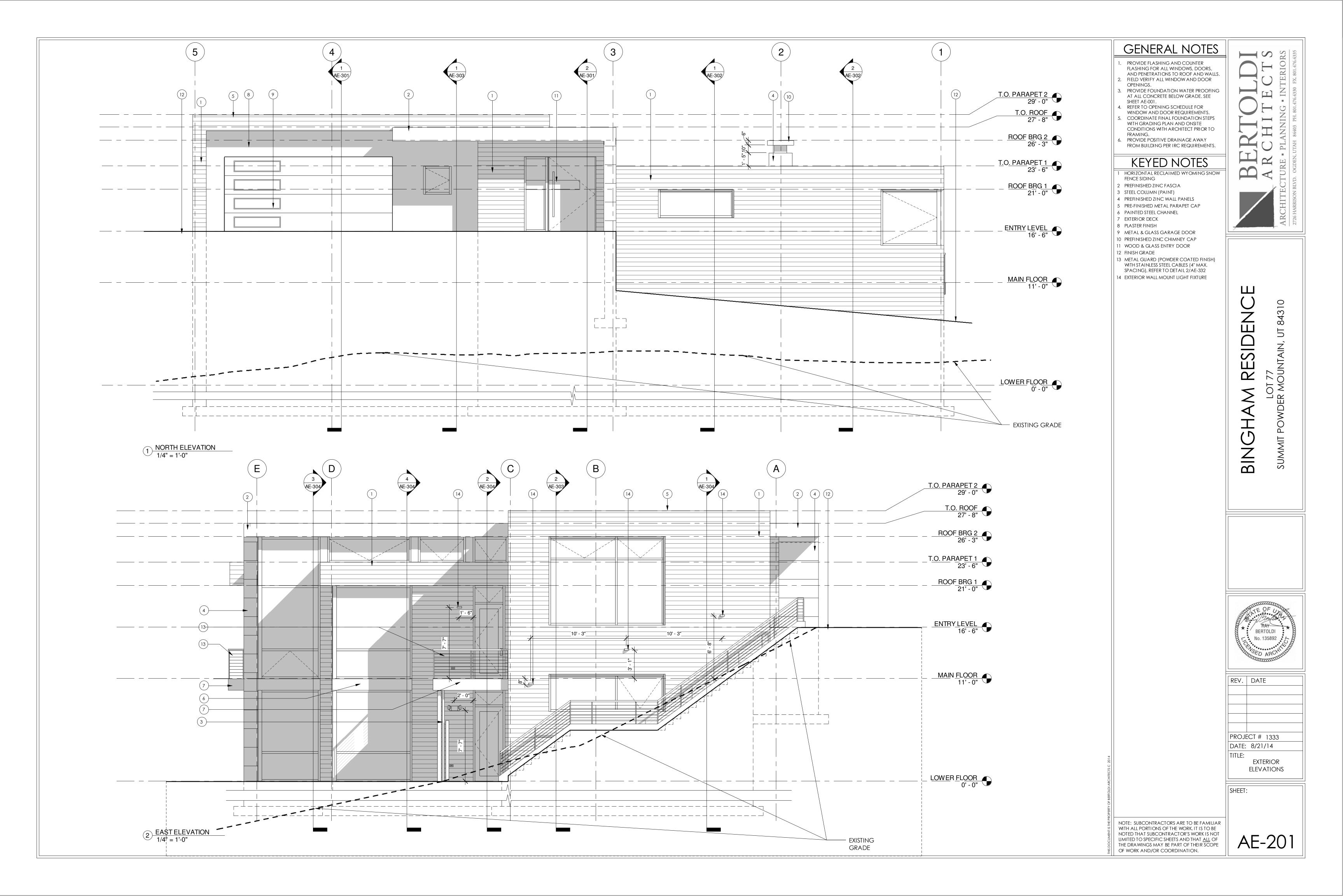


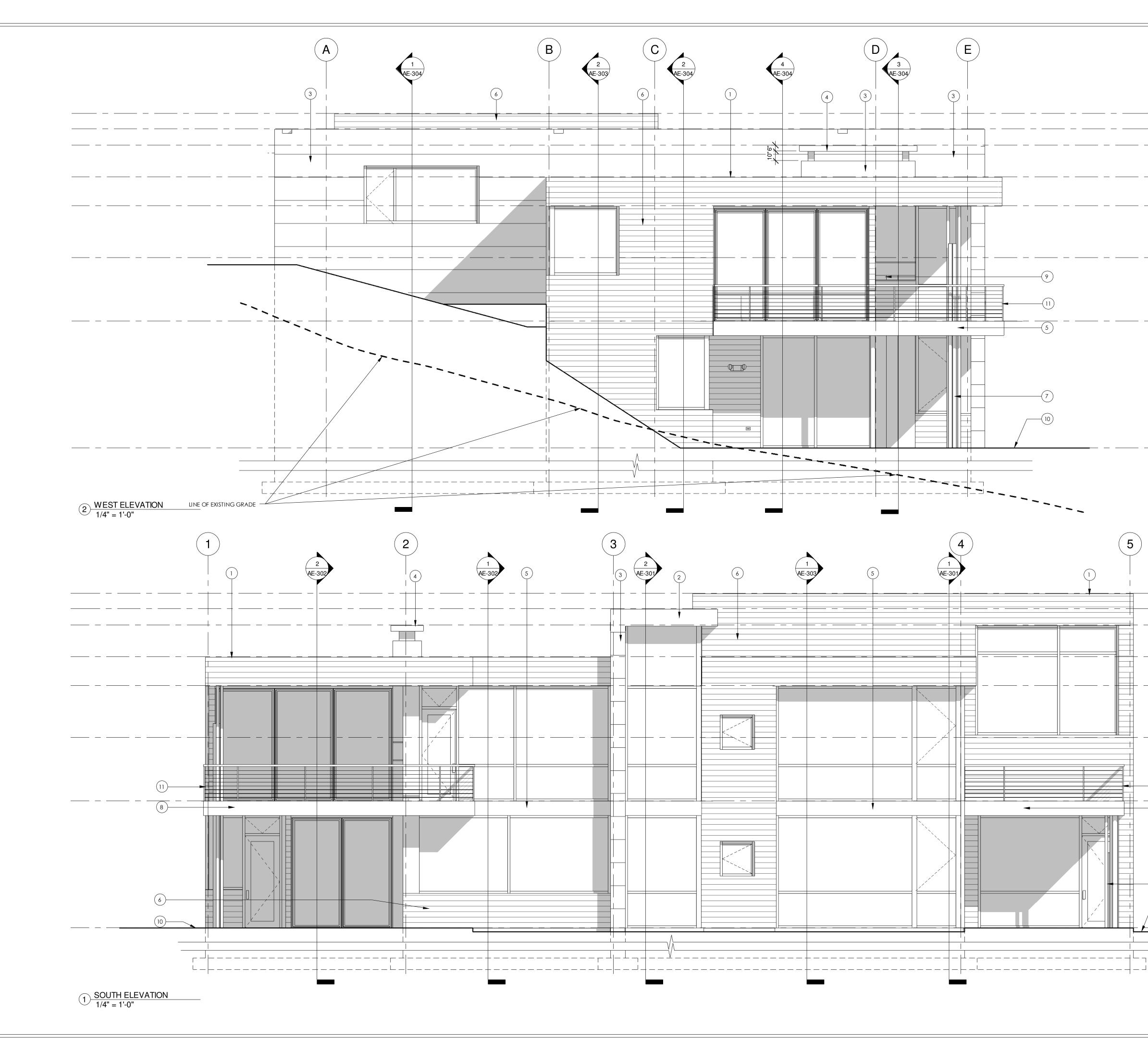


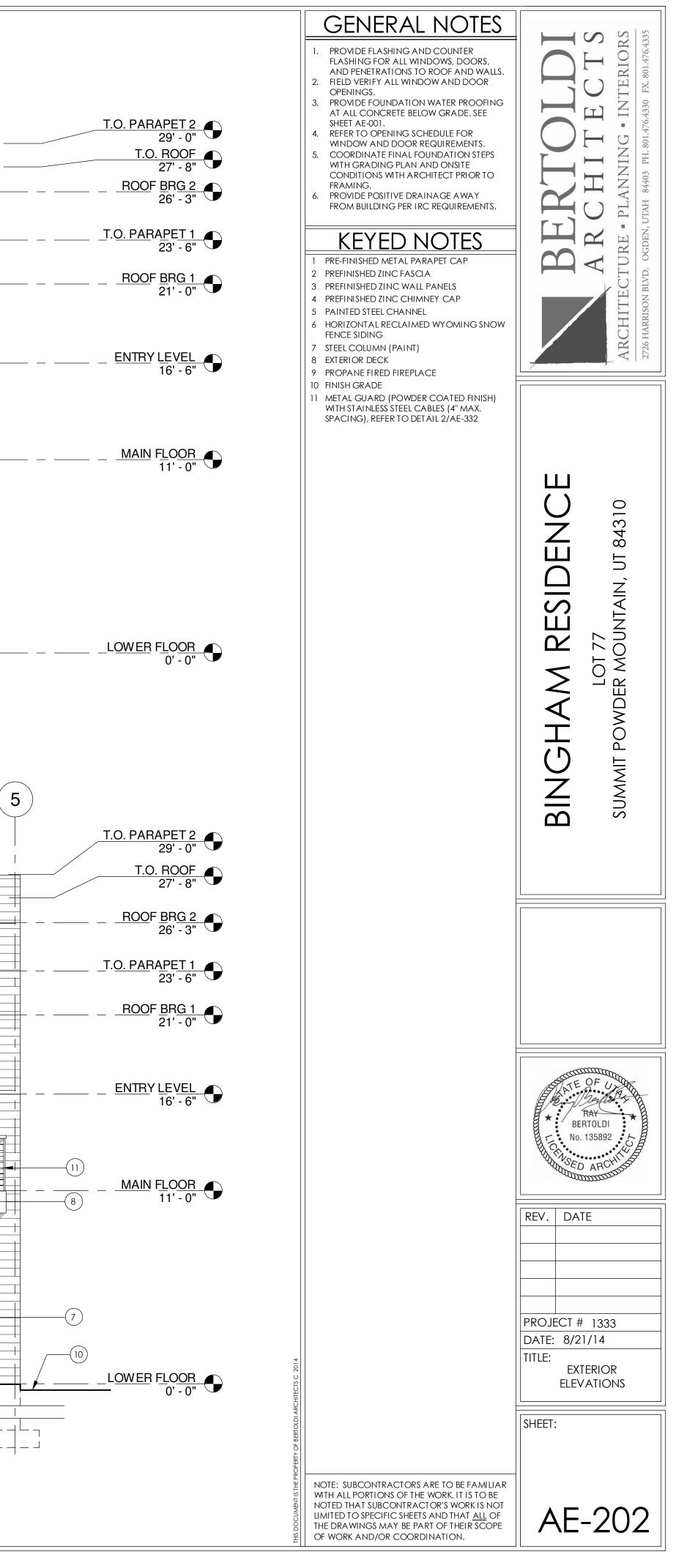




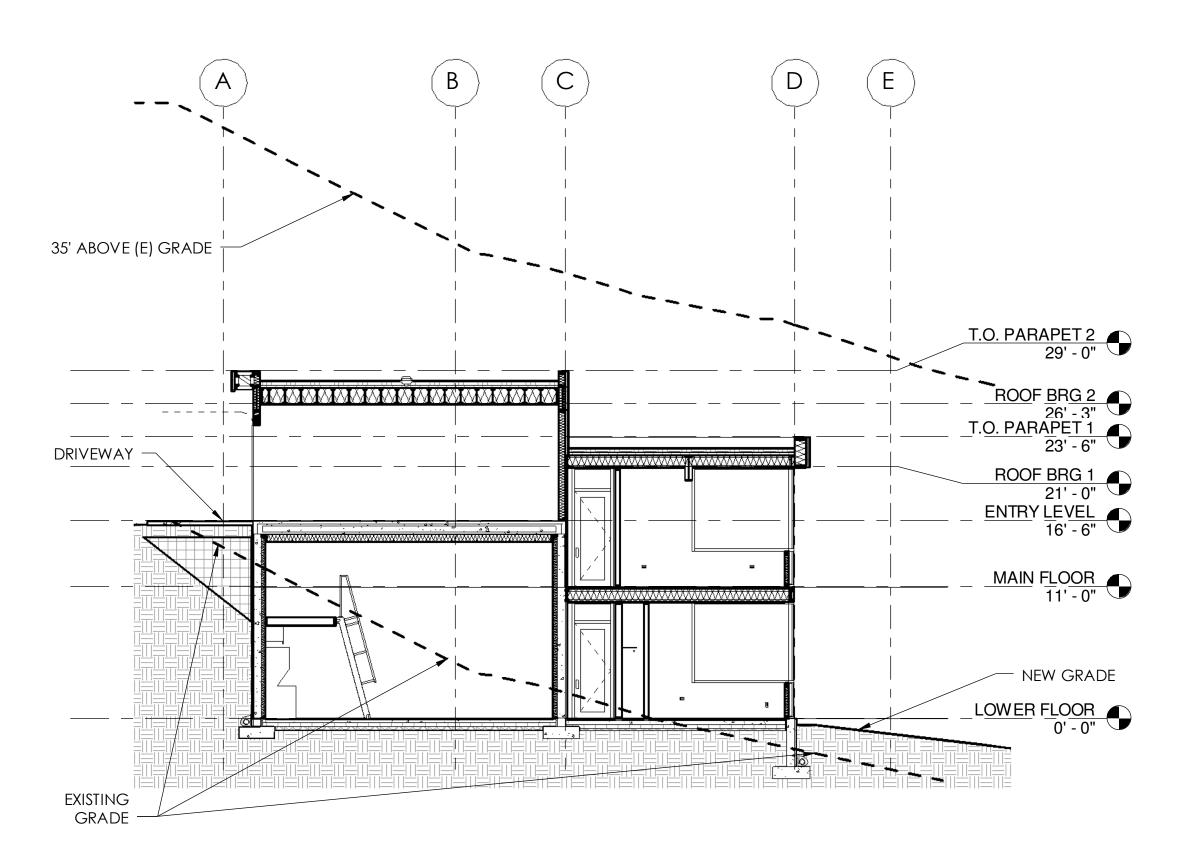




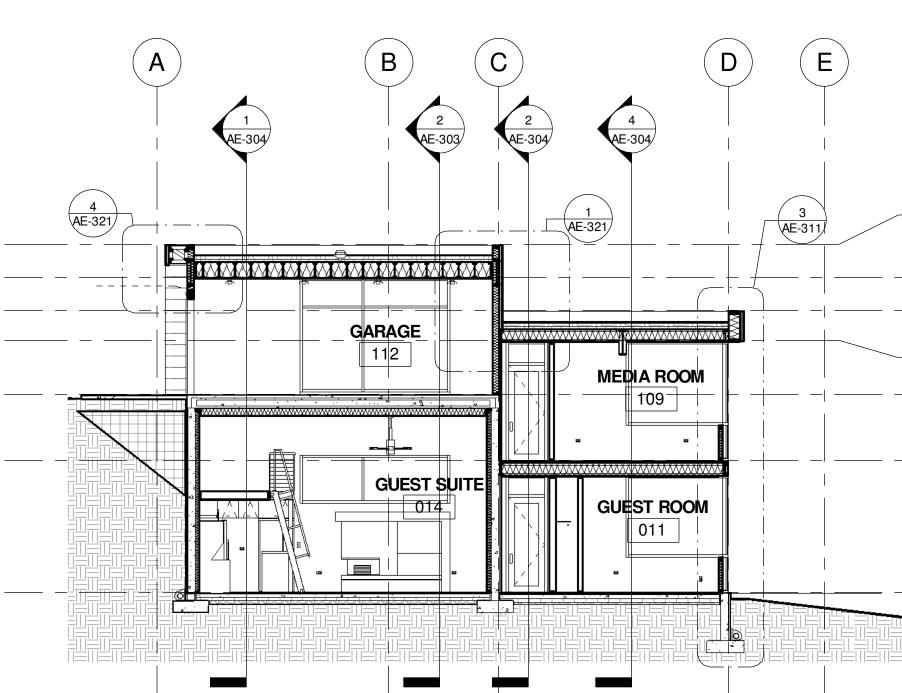


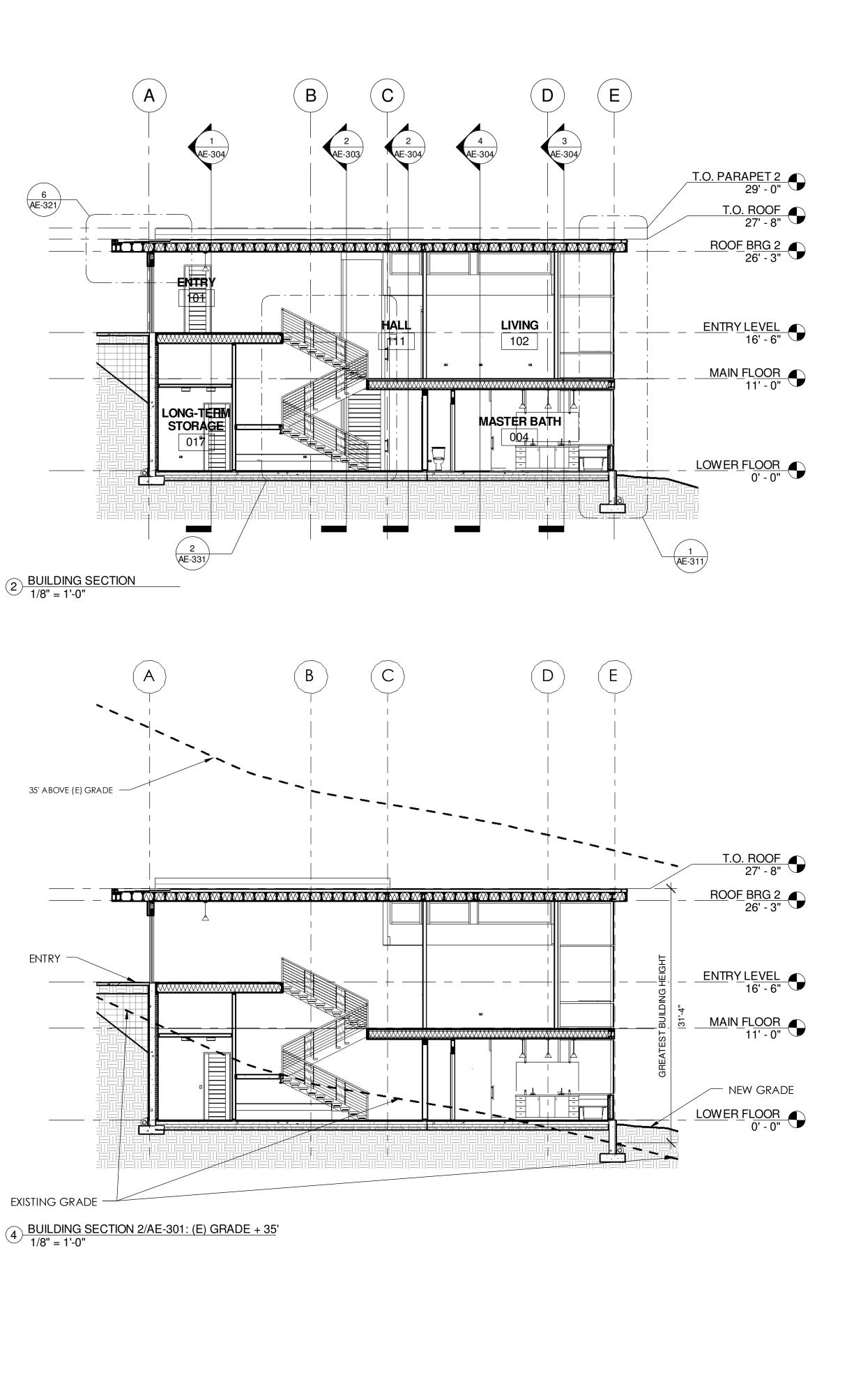


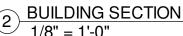
3 BUILDING SECTION 1/AE-301: (E) GRADE + 35' 1/8" = 1'-0"

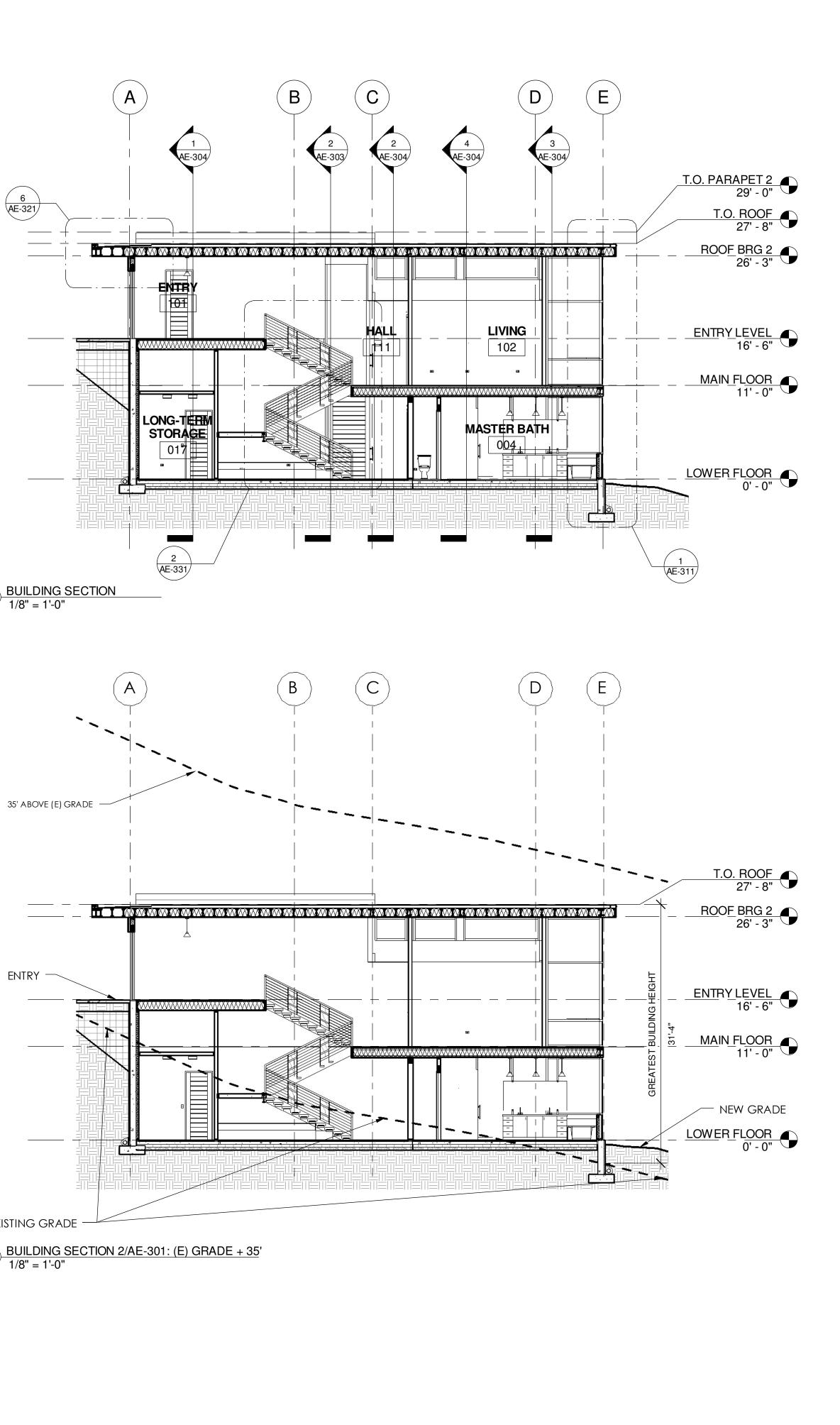


1 BUILDING SECTION 1/8" = 1'-0"

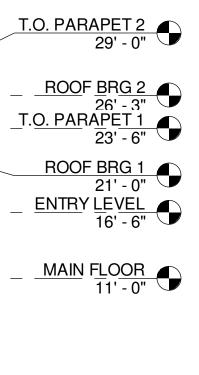


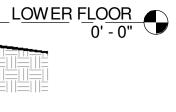




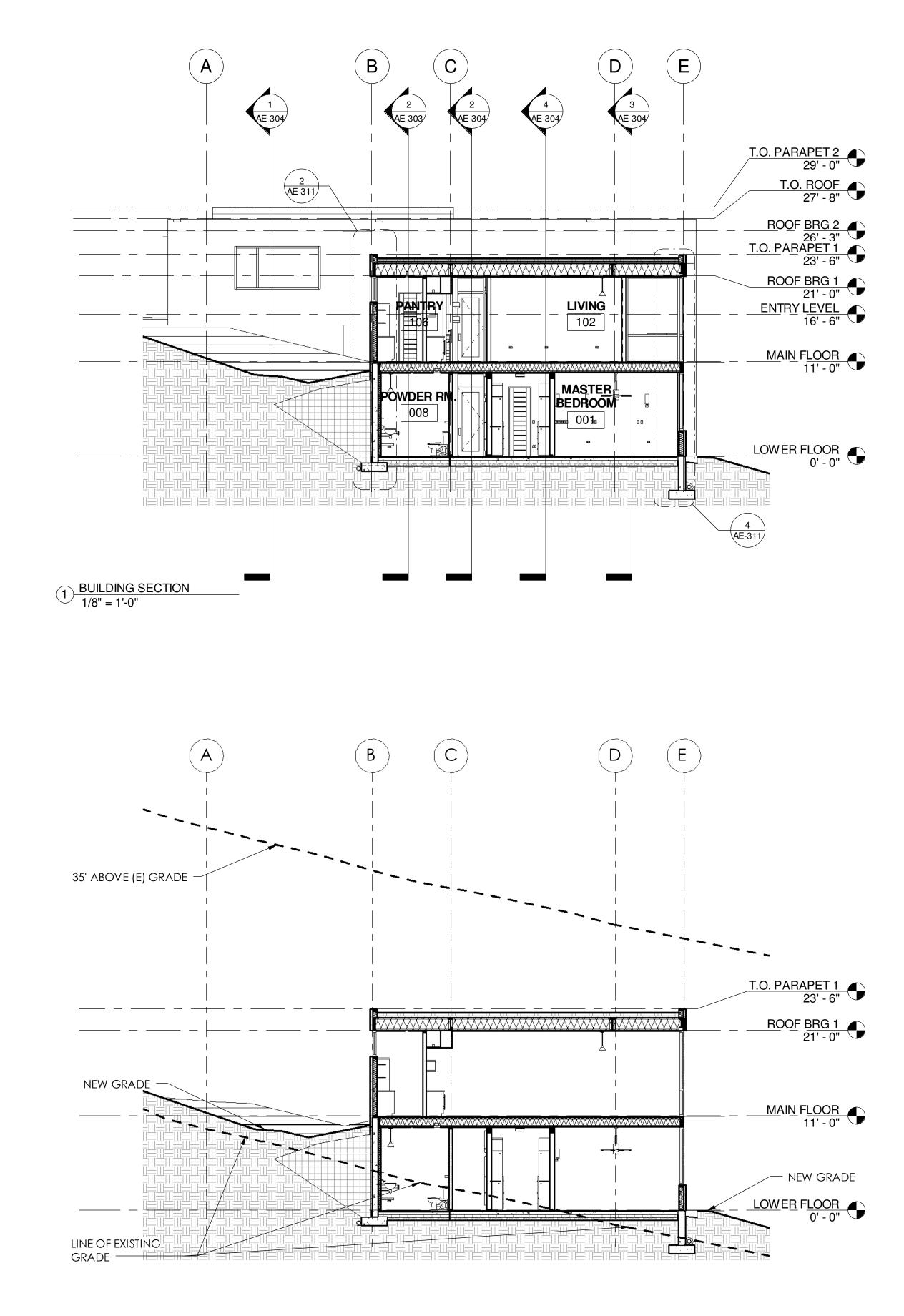


4 BUILDING SECTION 2/AE-301: (E) GRADE + 35' 1/8" = 1'-0"



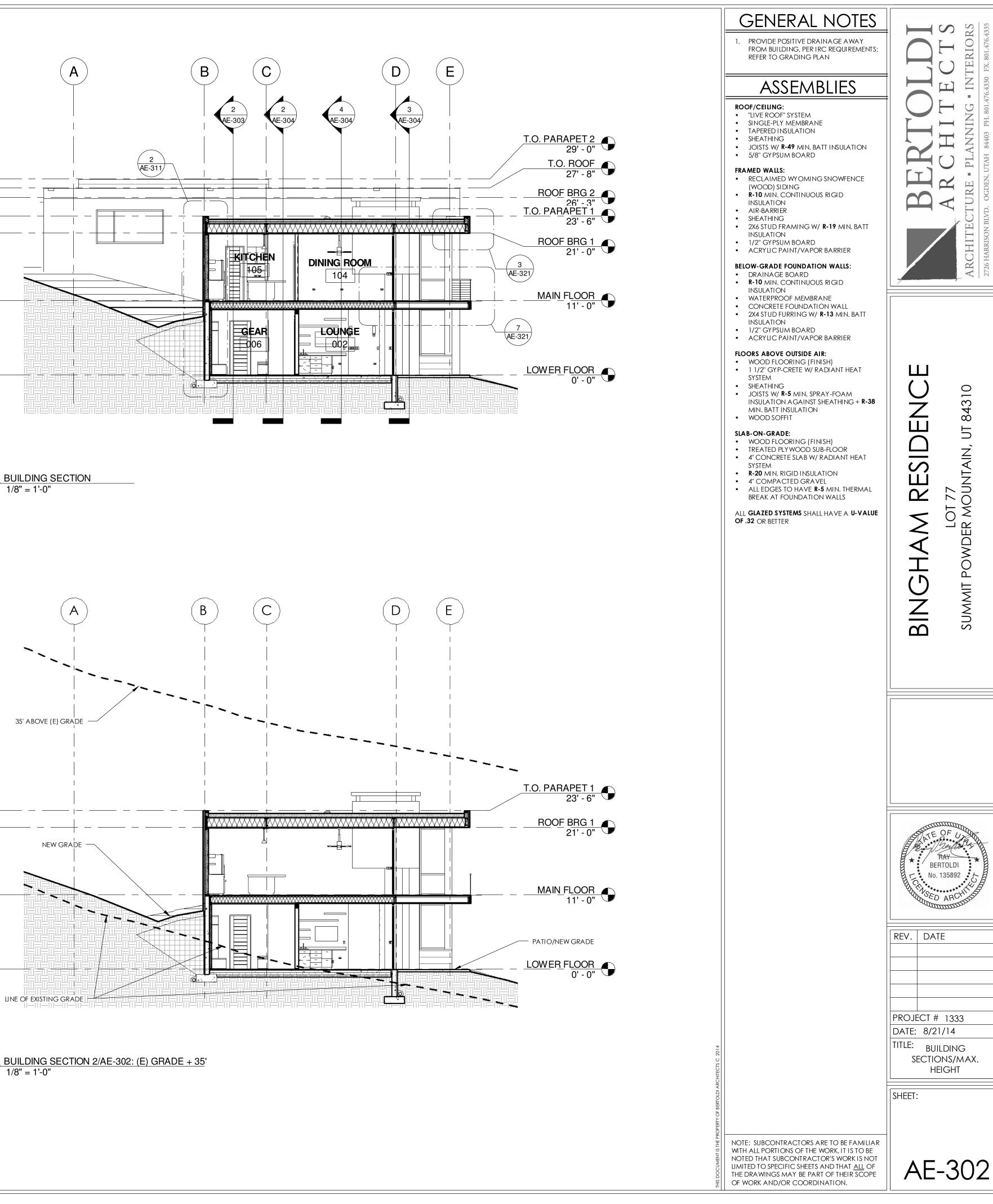


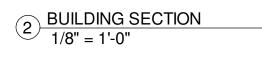


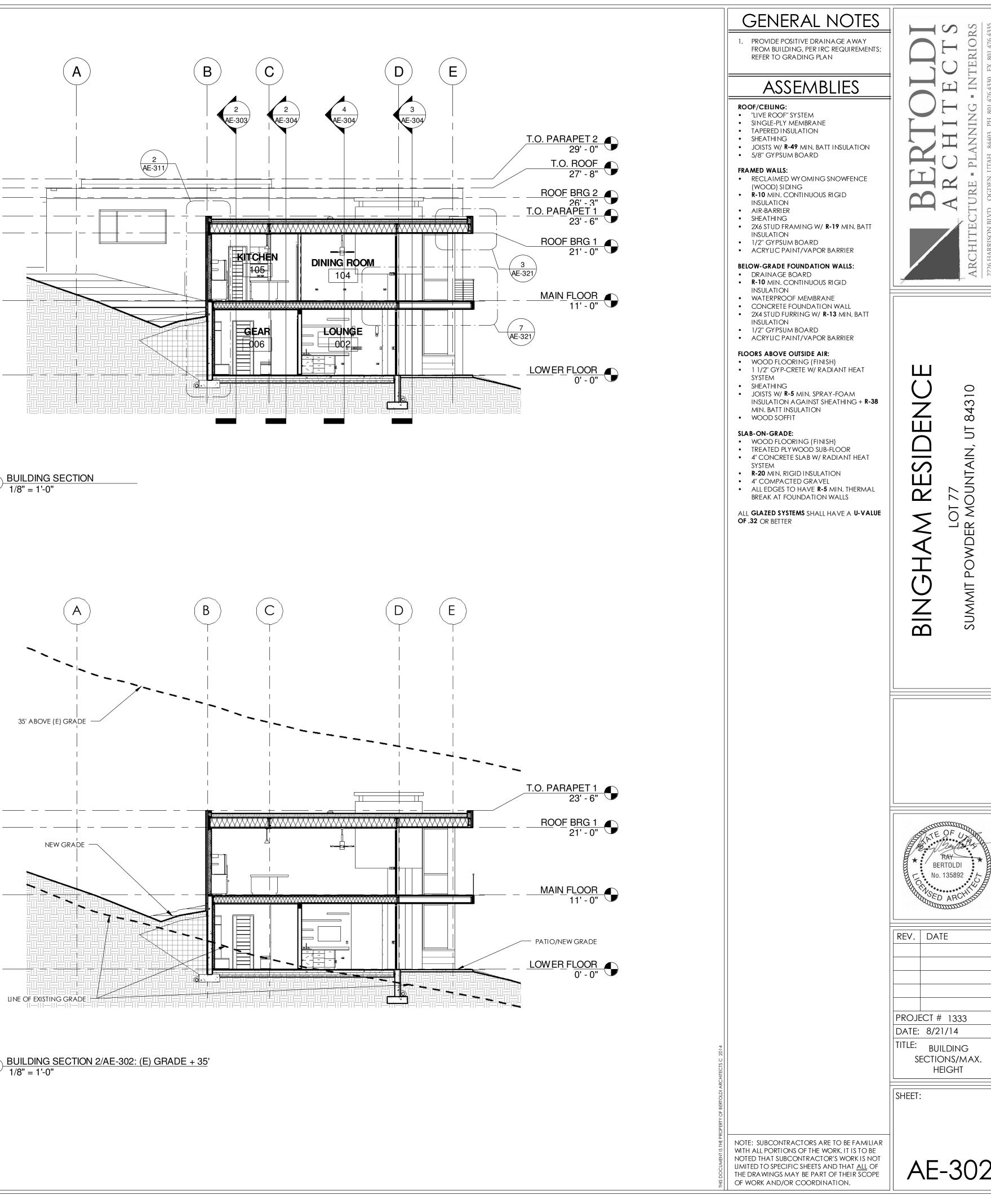


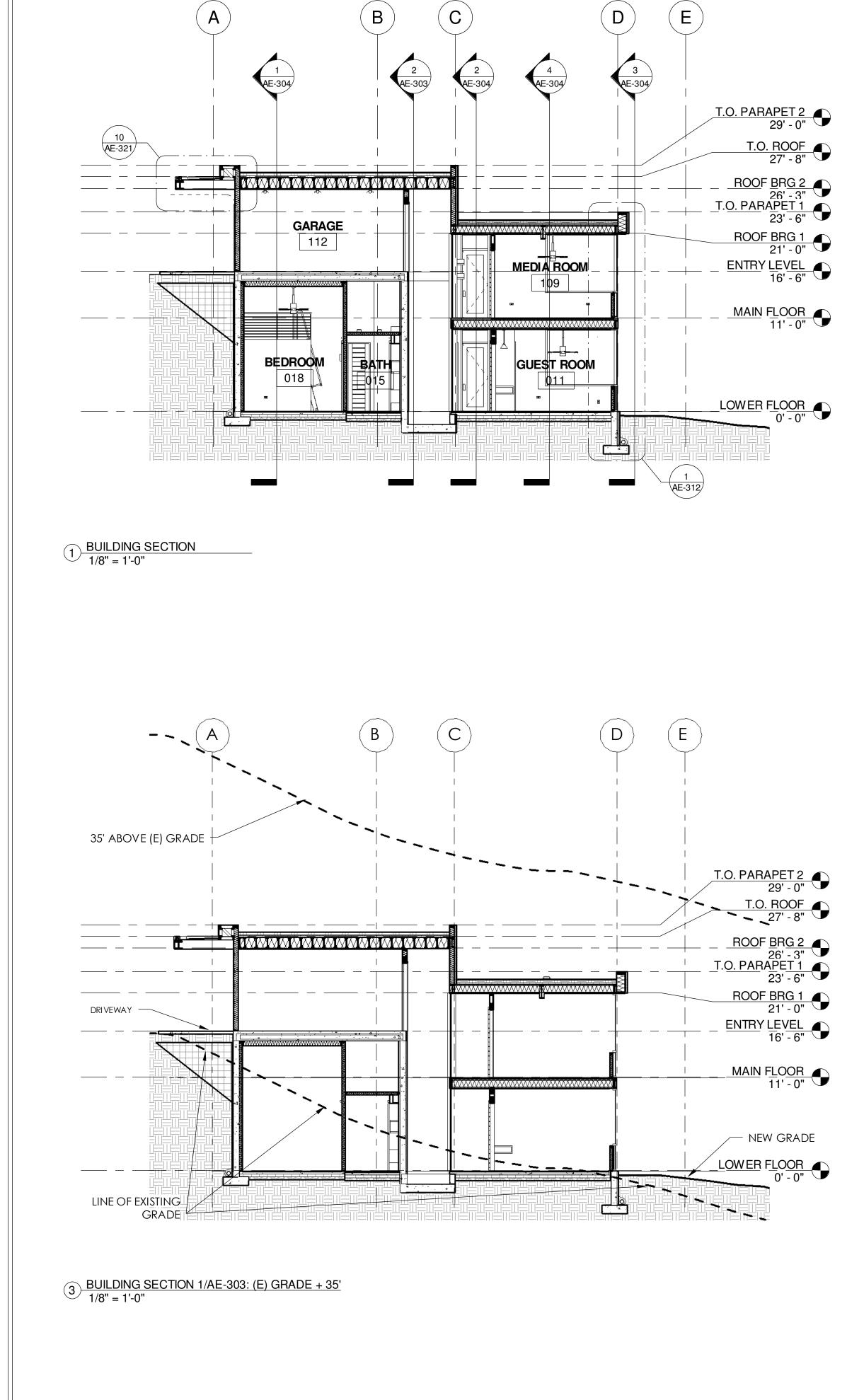
3 BUILDING SECTION 1/AE-302: (E) GRADE + 35' 1/8" = 1'-0"

# 4 BUILDING SECTION 2/AE-302: (E) GRADE + 35' 1/8" = 1'-0"

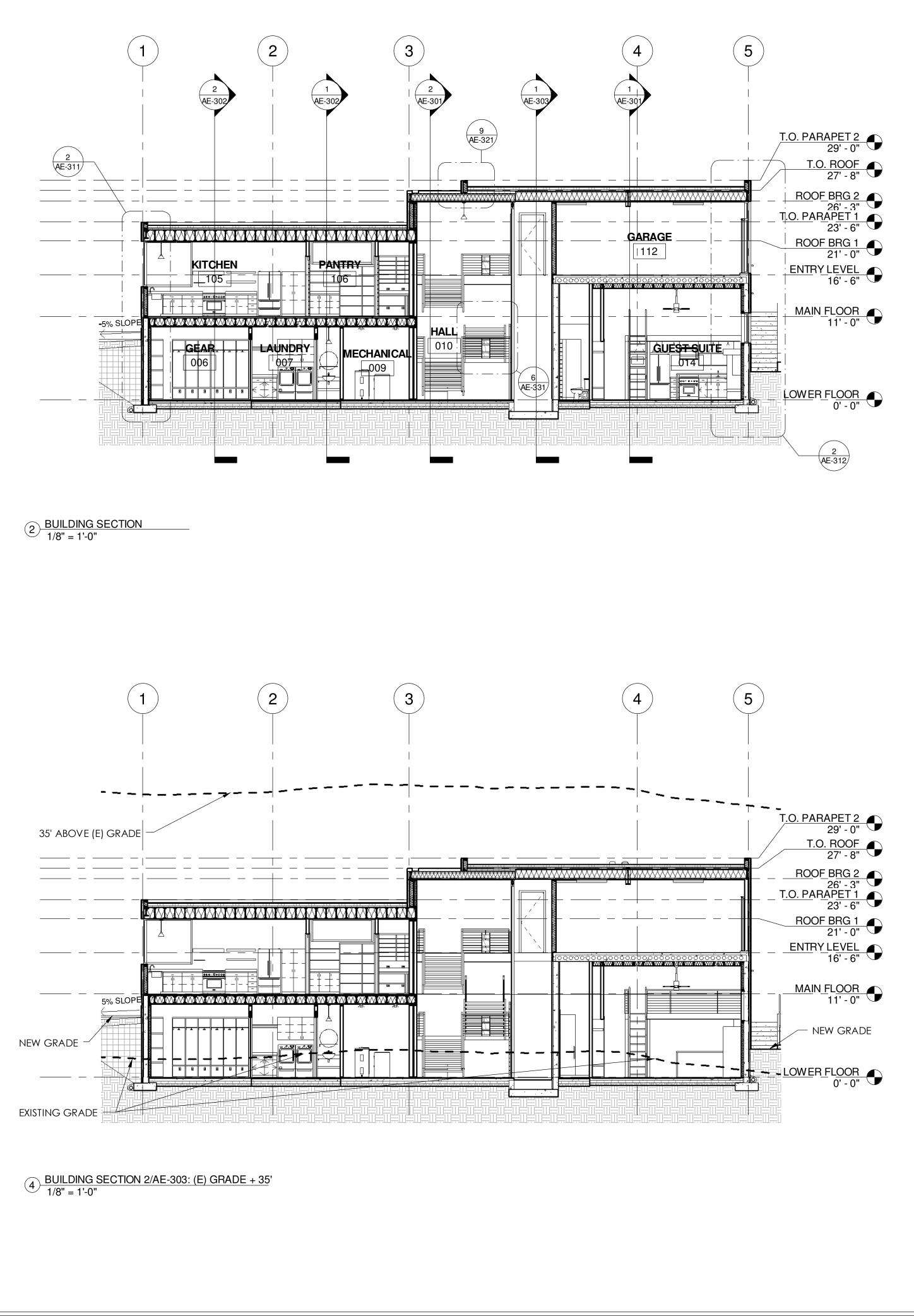


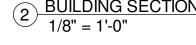


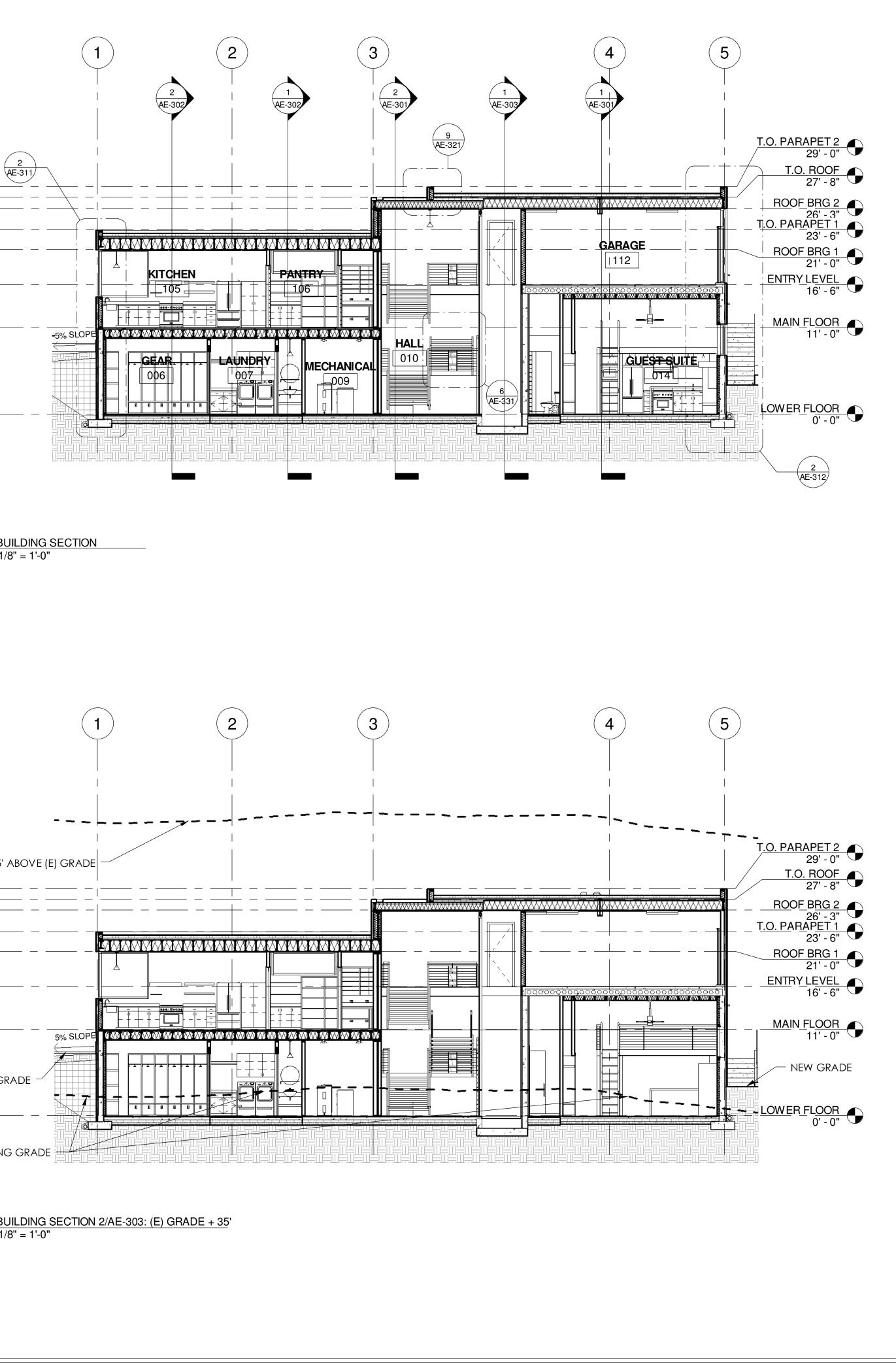


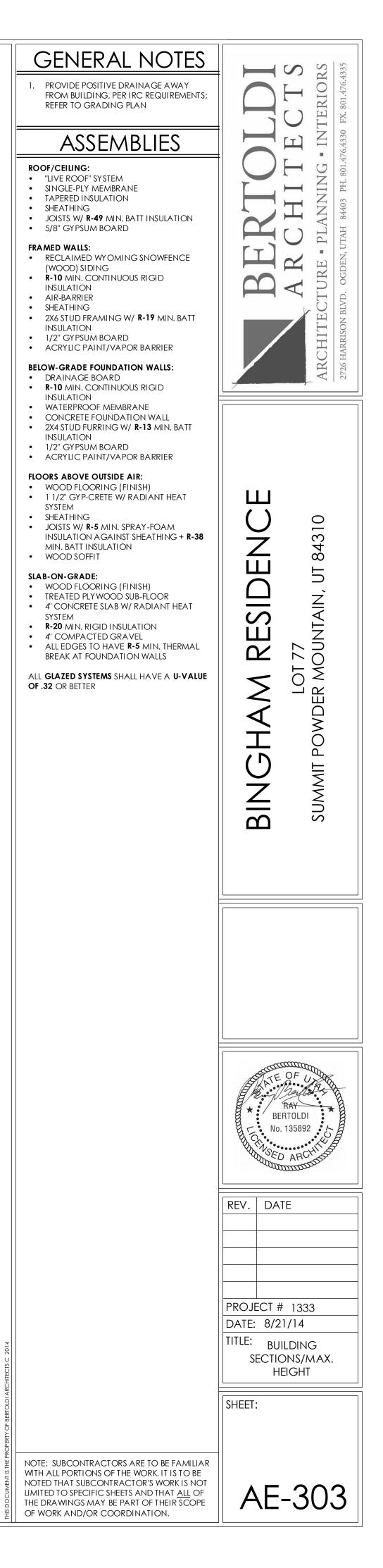


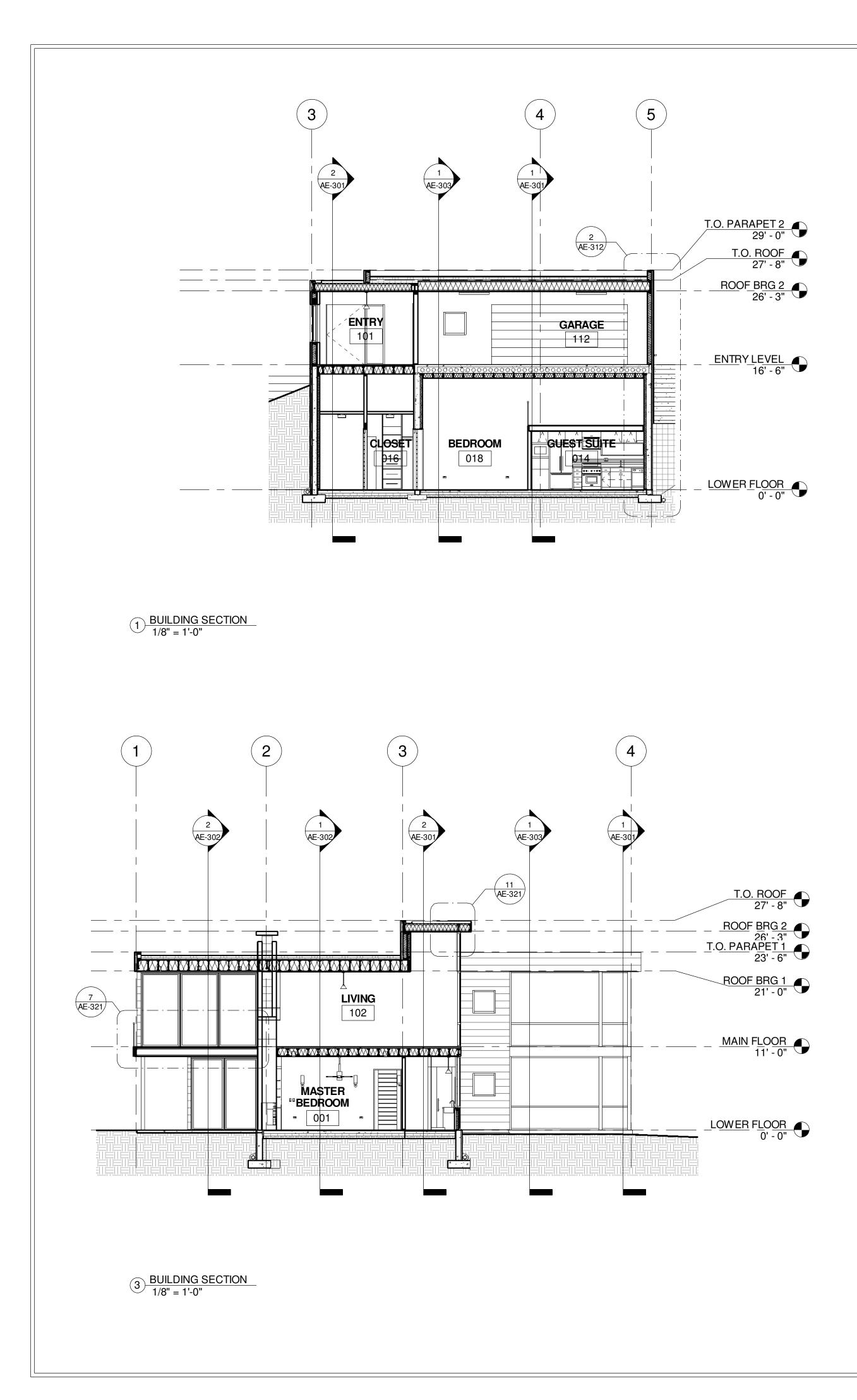


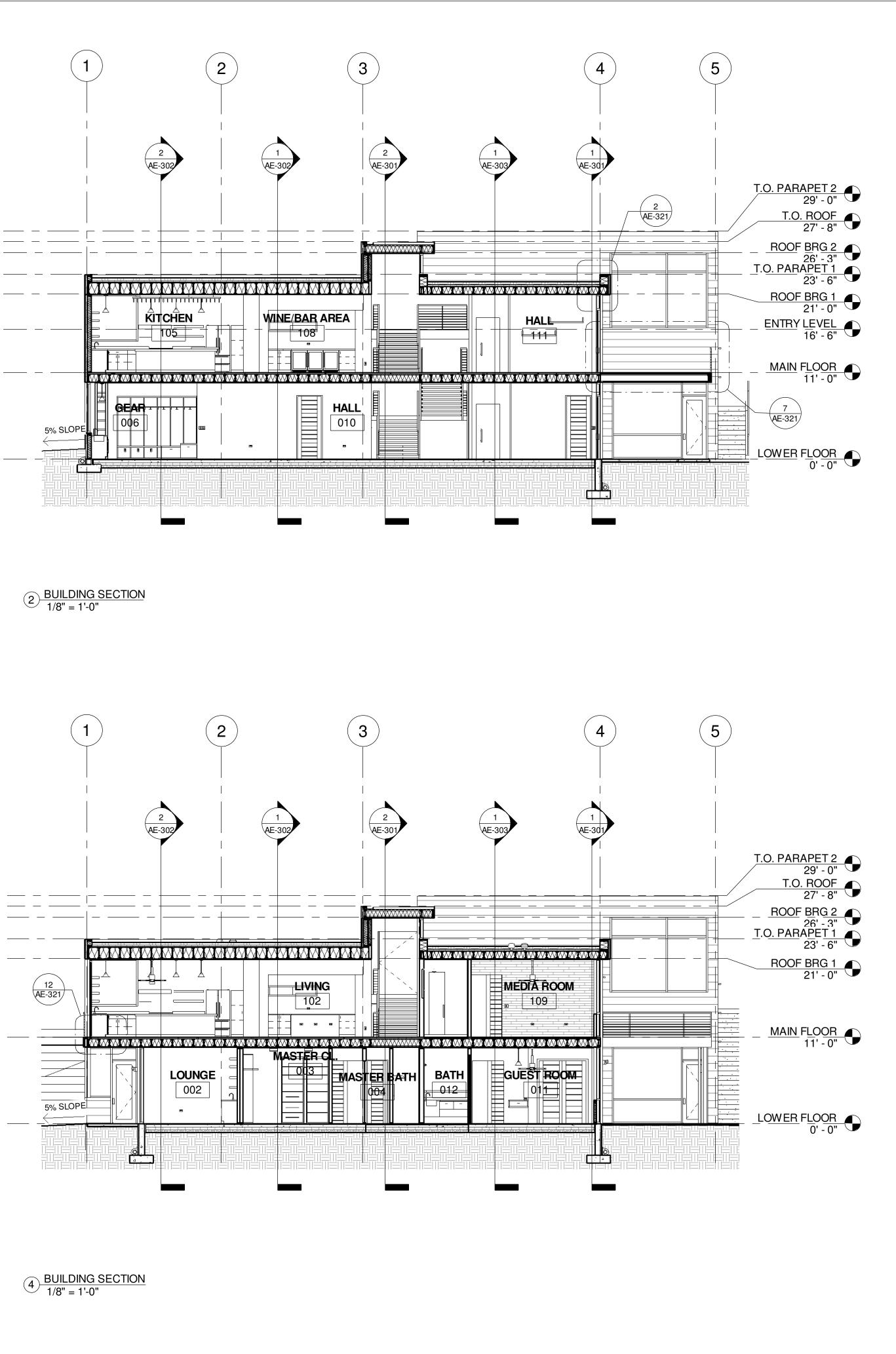


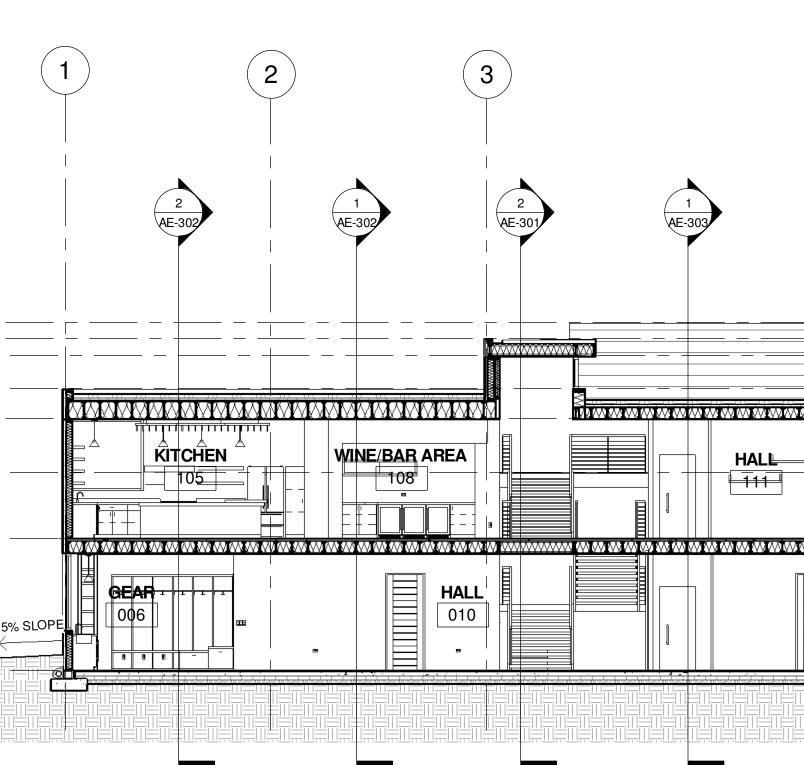




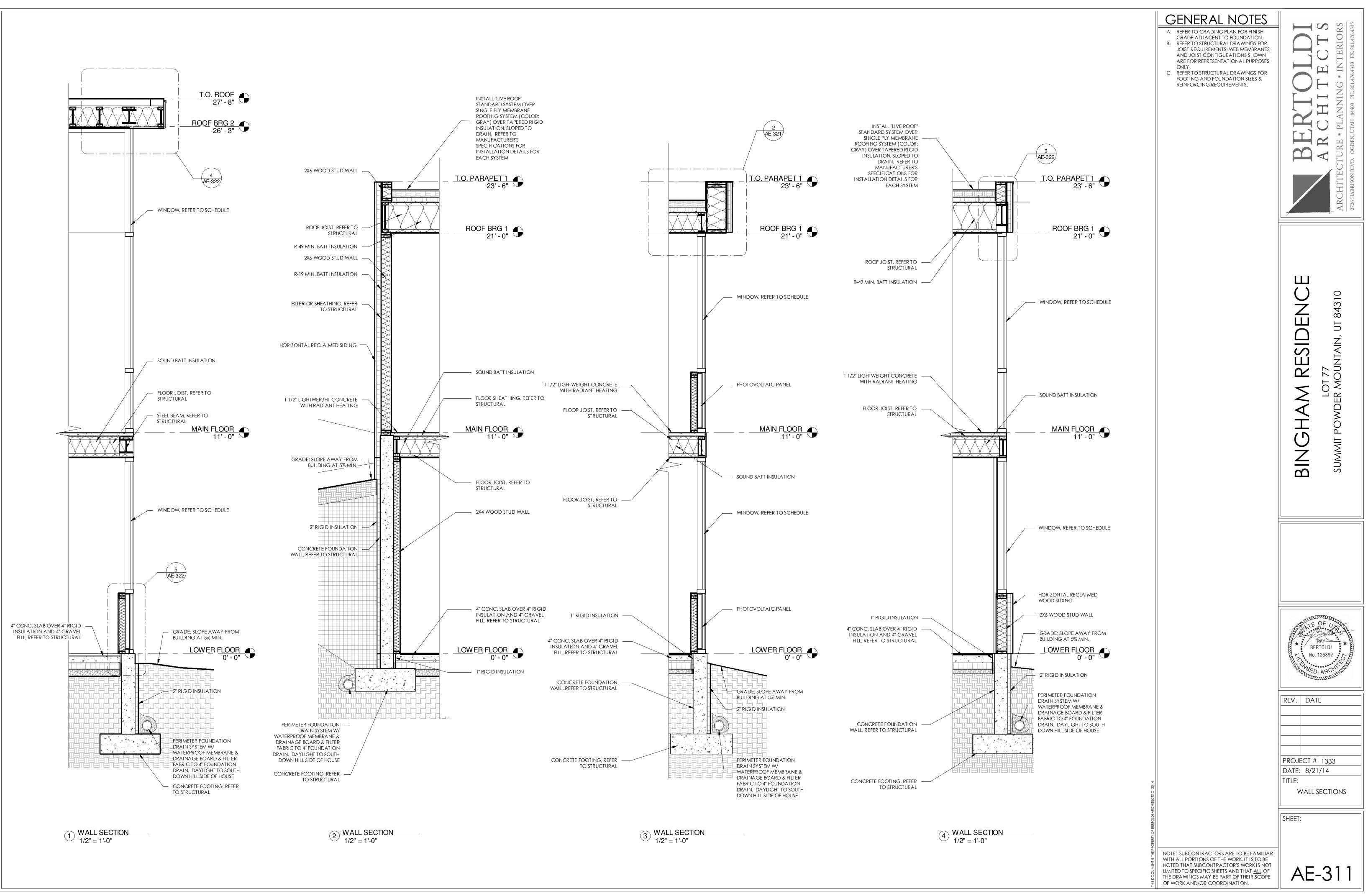


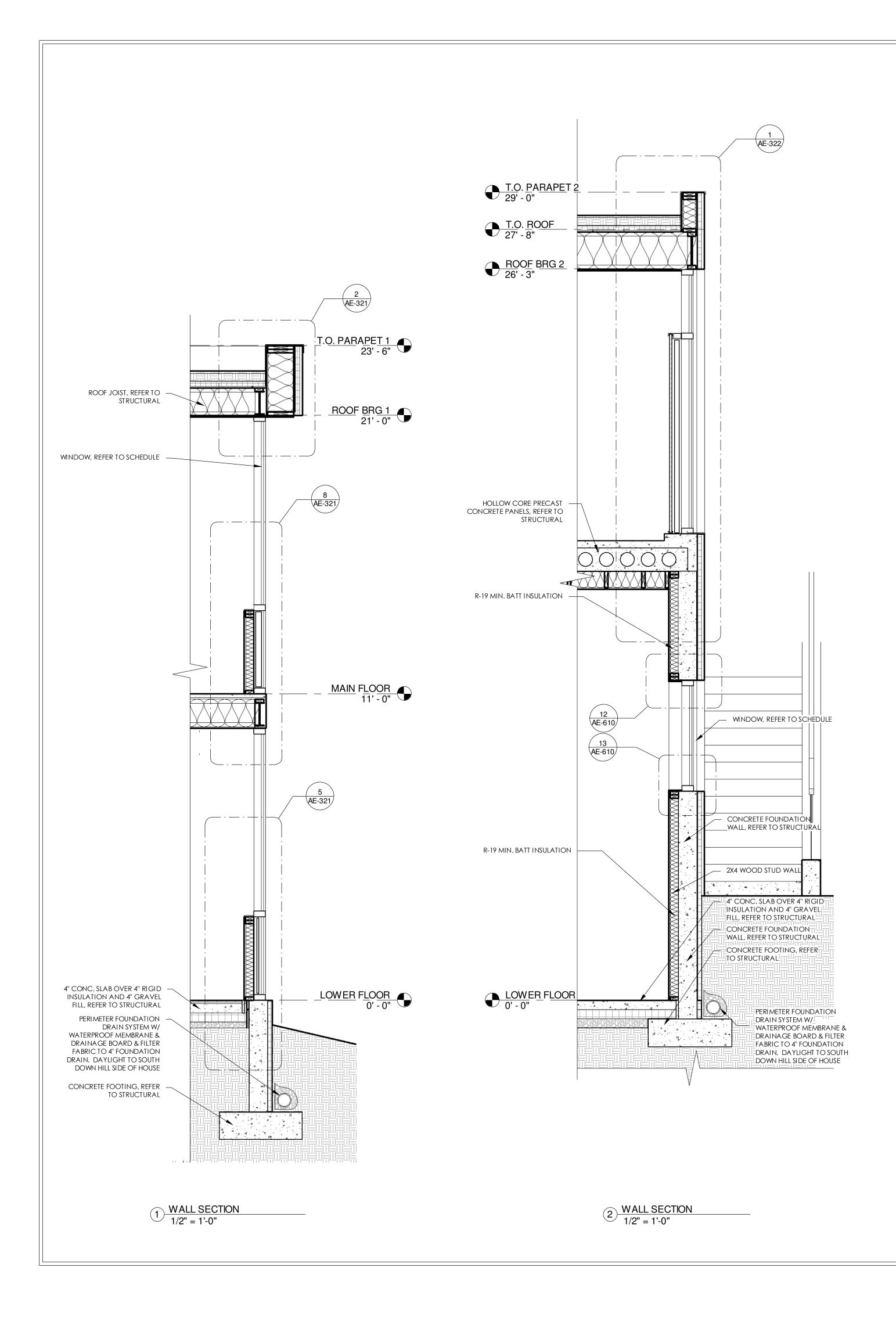


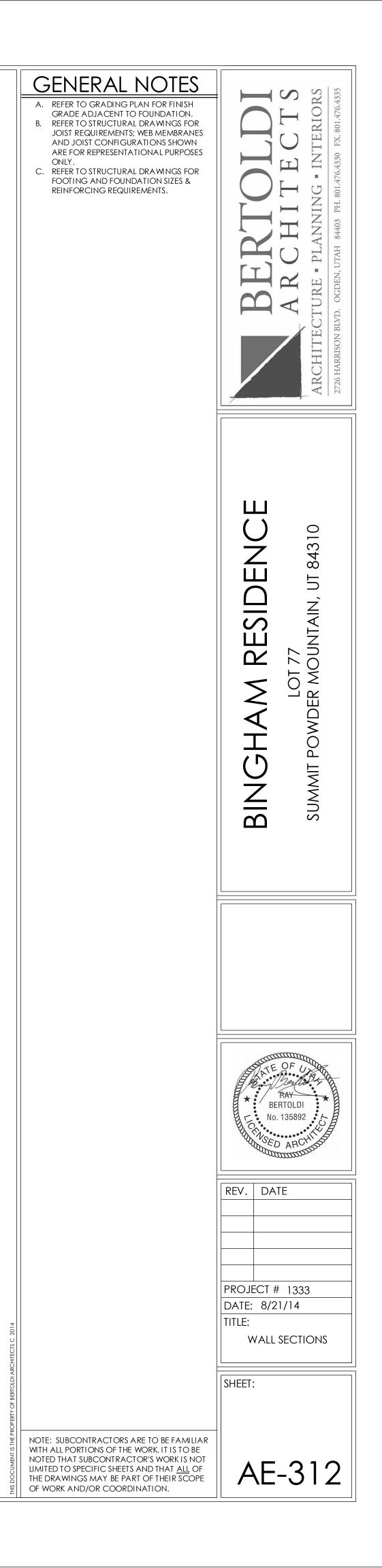


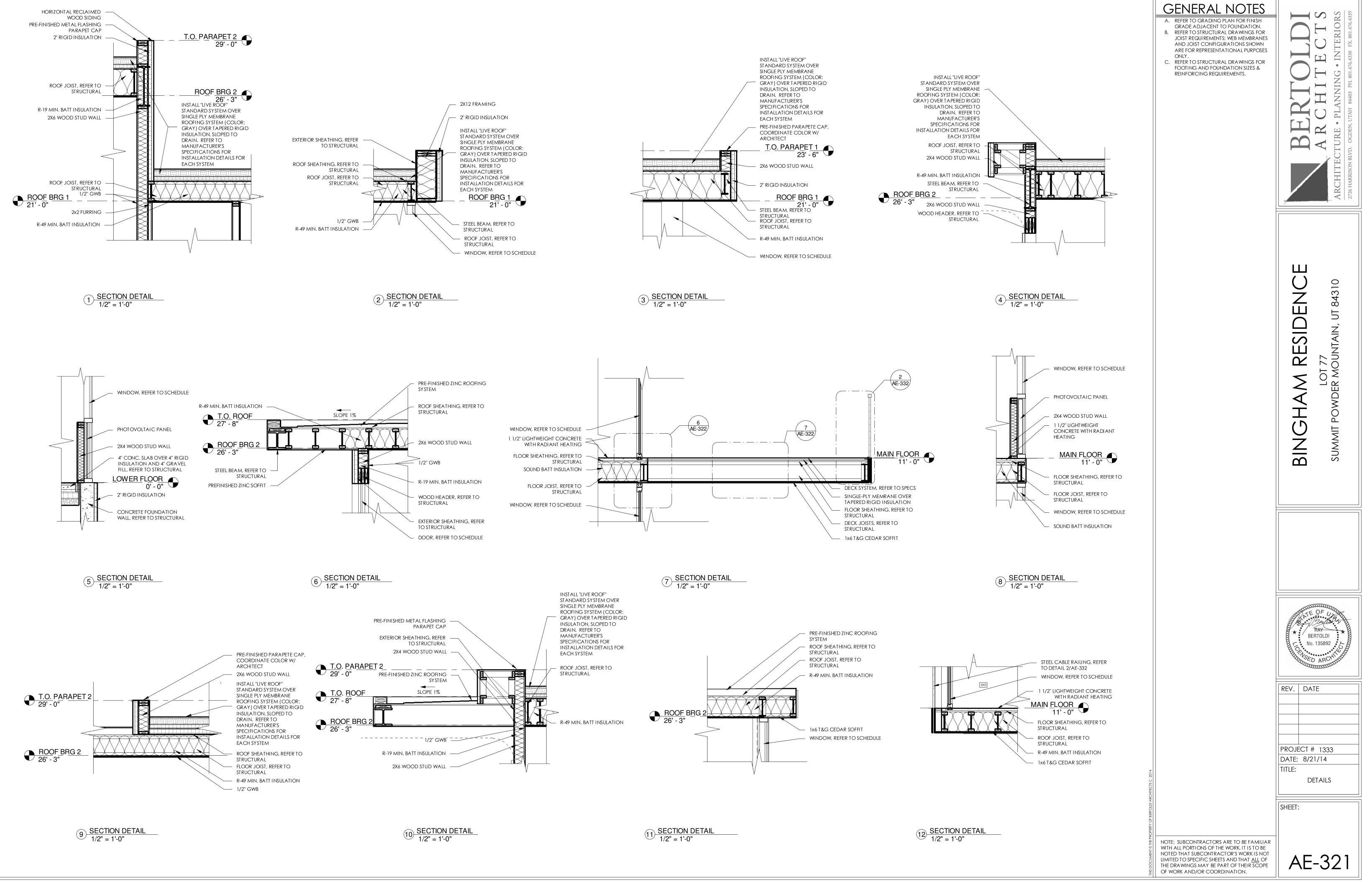


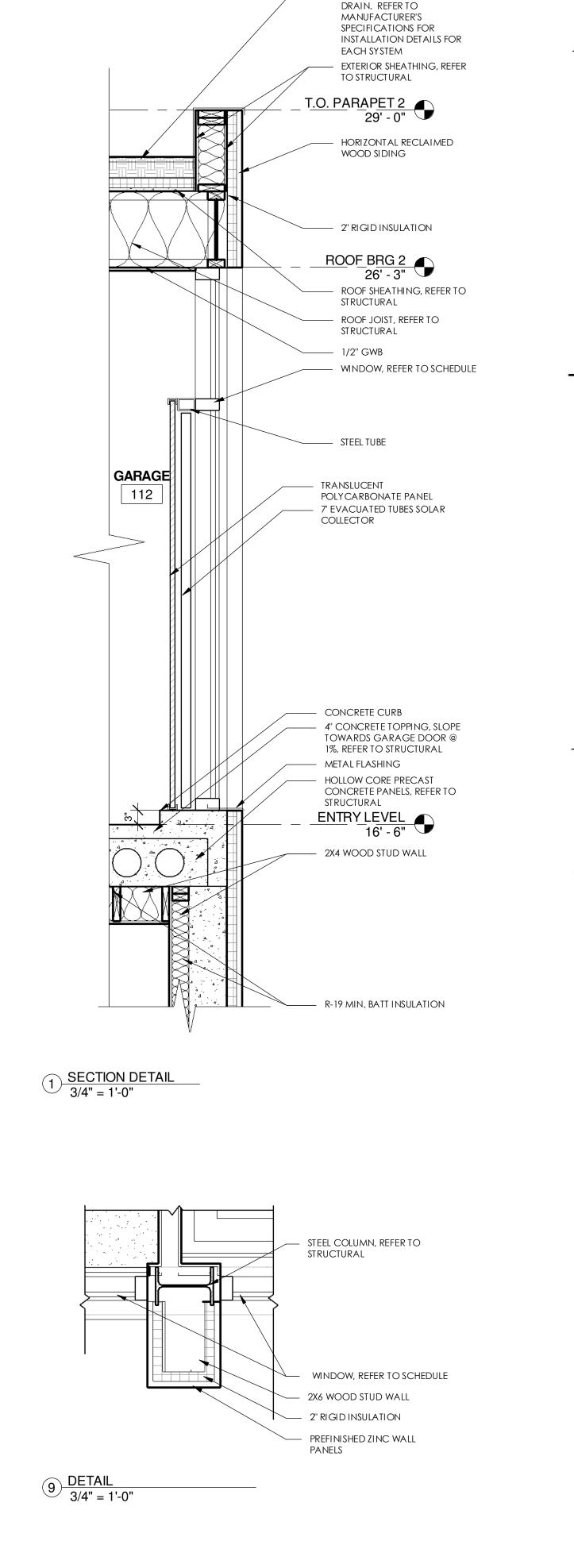












INSTALL "LIVE ROOF"

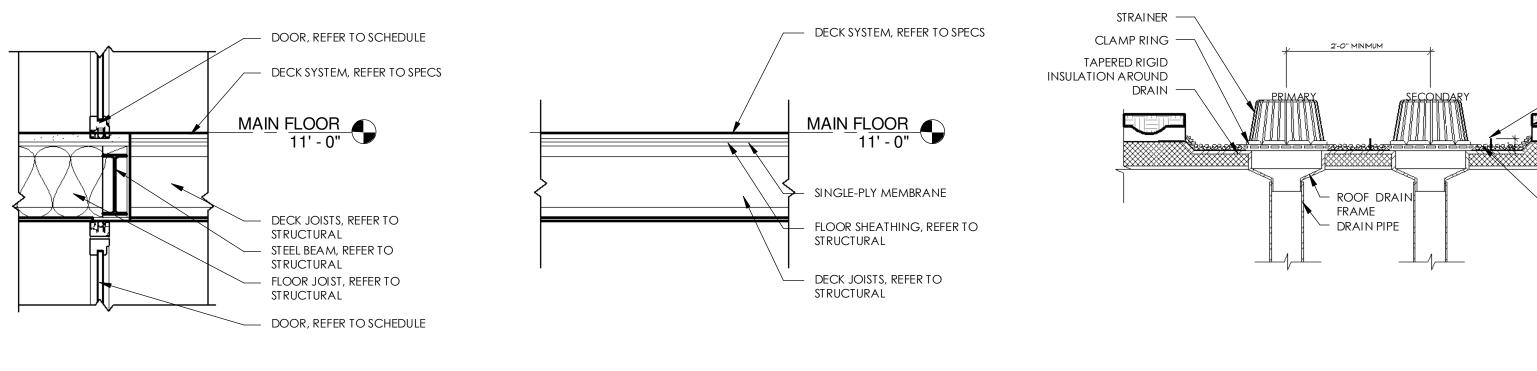
STANDARD SYSTEM OVER

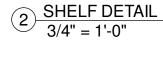
ROOFING SYSTEM (COLOR:

INSULATION, SLOPED TO

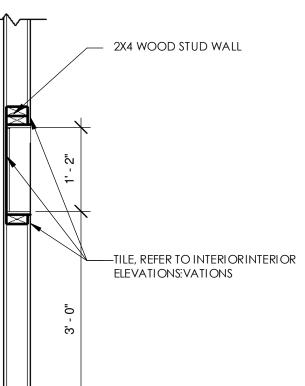
GRAY) OVER TAPERED RIGID

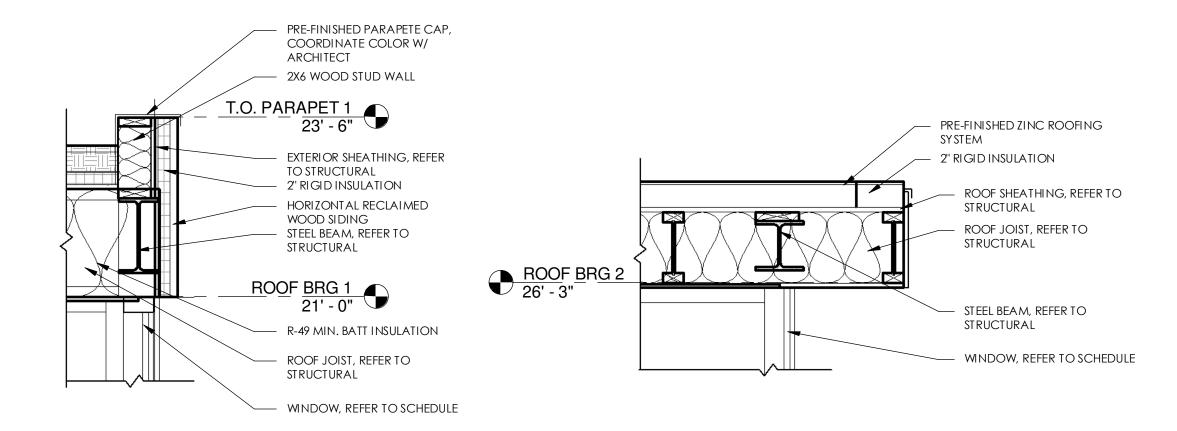
SINGLE PLY MEMBRANE





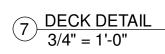
6 DECK DETAIL 3/4" = 1'-0"



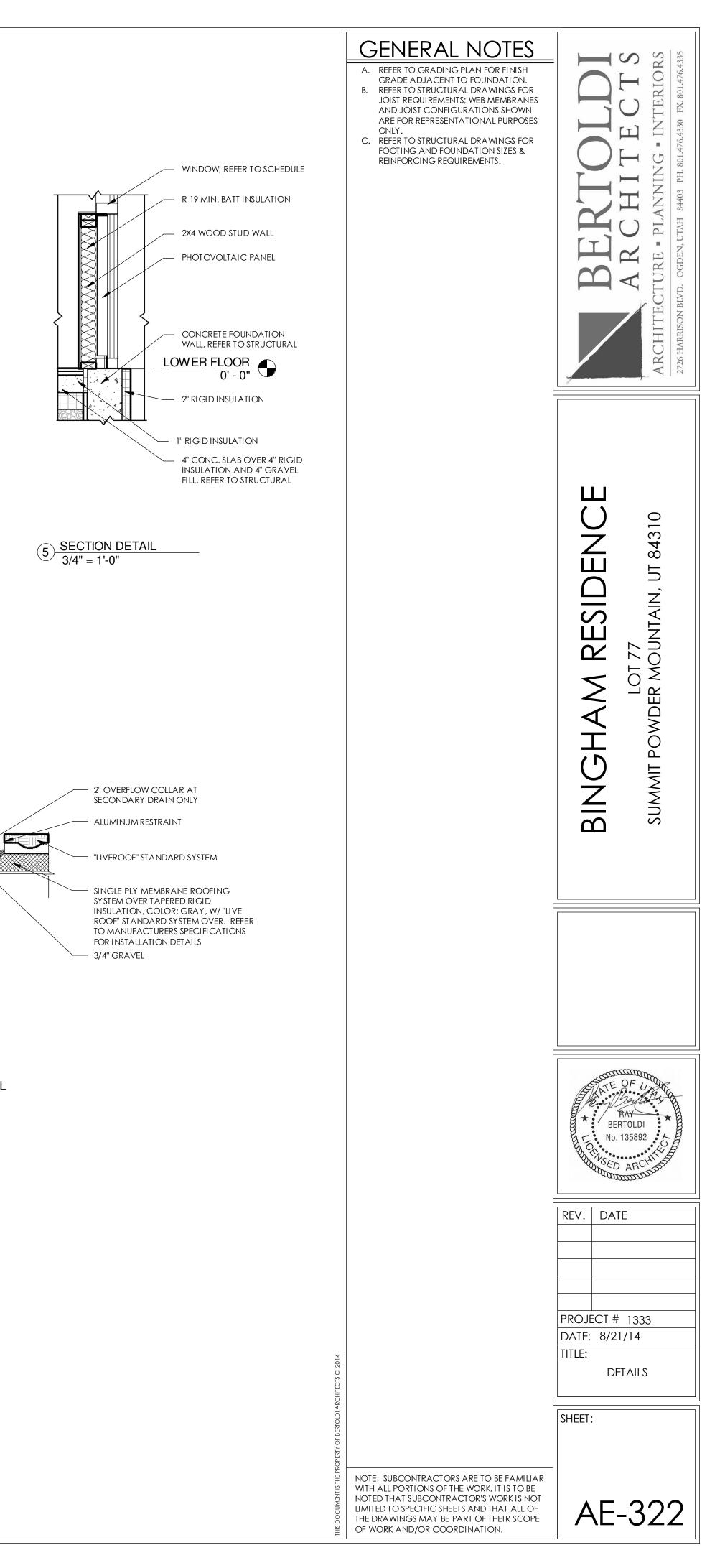


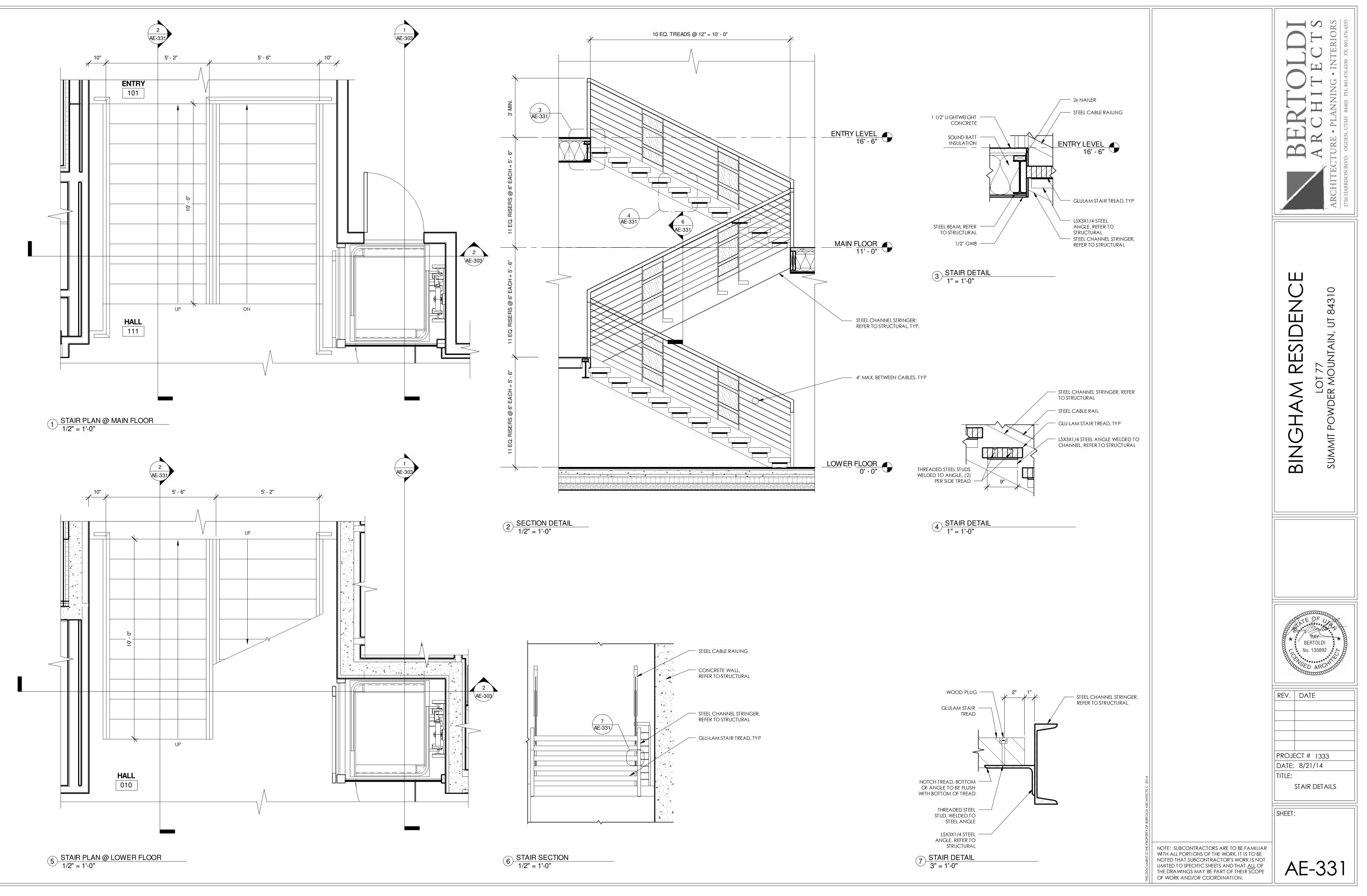
 $3 \frac{\text{SECTION DETAIL}}{3/4" = 1'-0"}$ 

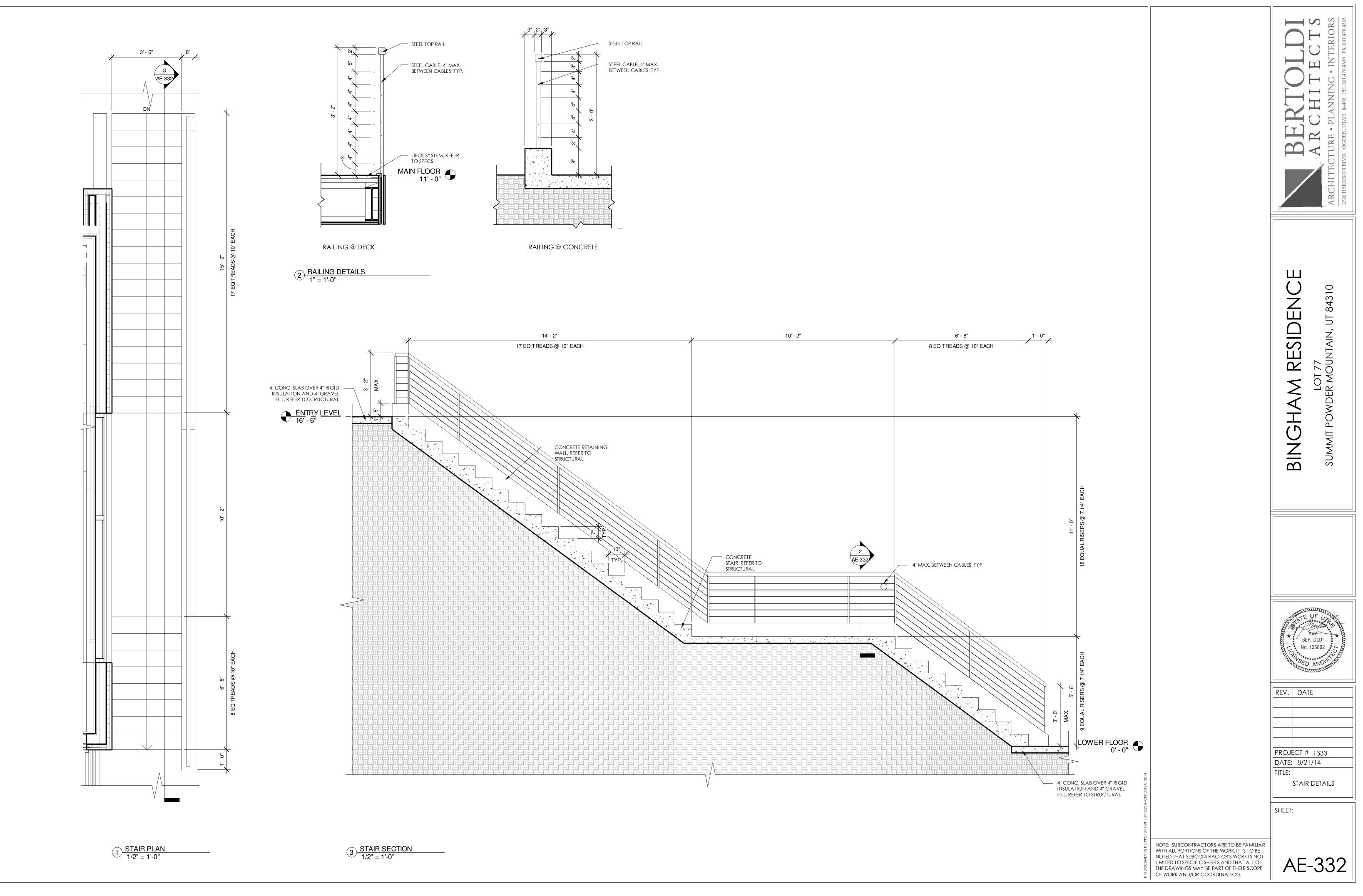
(4) SECTION DETAIL 3/4" = 1'-0"

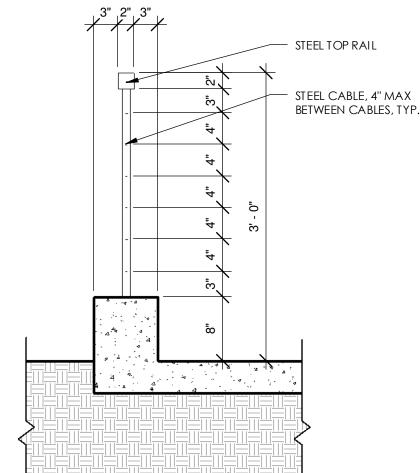


 $(8) \frac{\text{ROOF DRAIN SECTION DETAIL}}{3/4" = 1'-0"}$ 



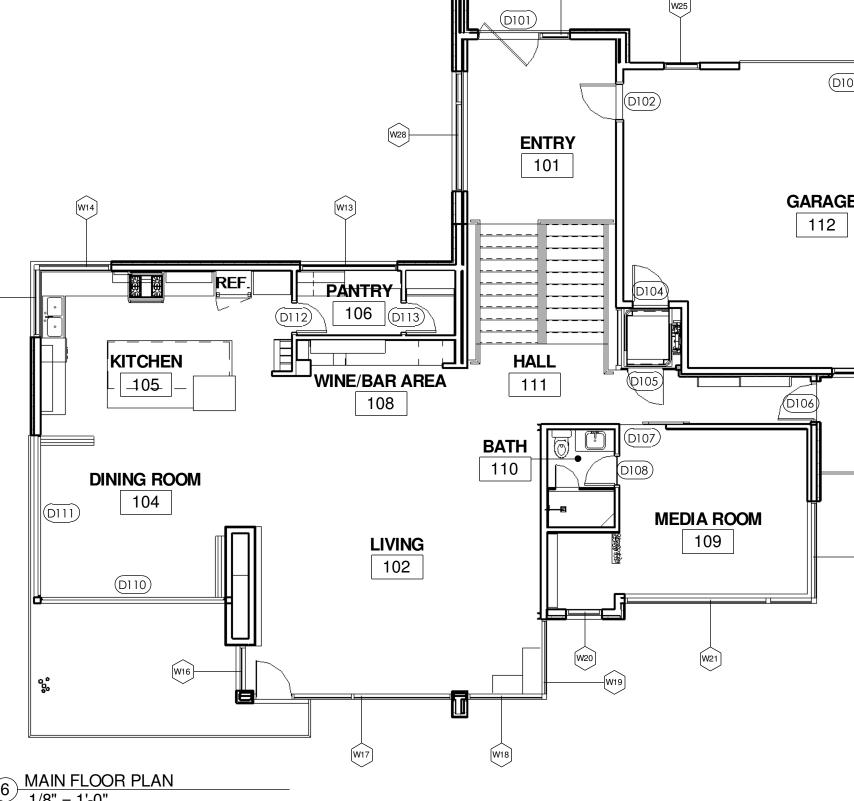


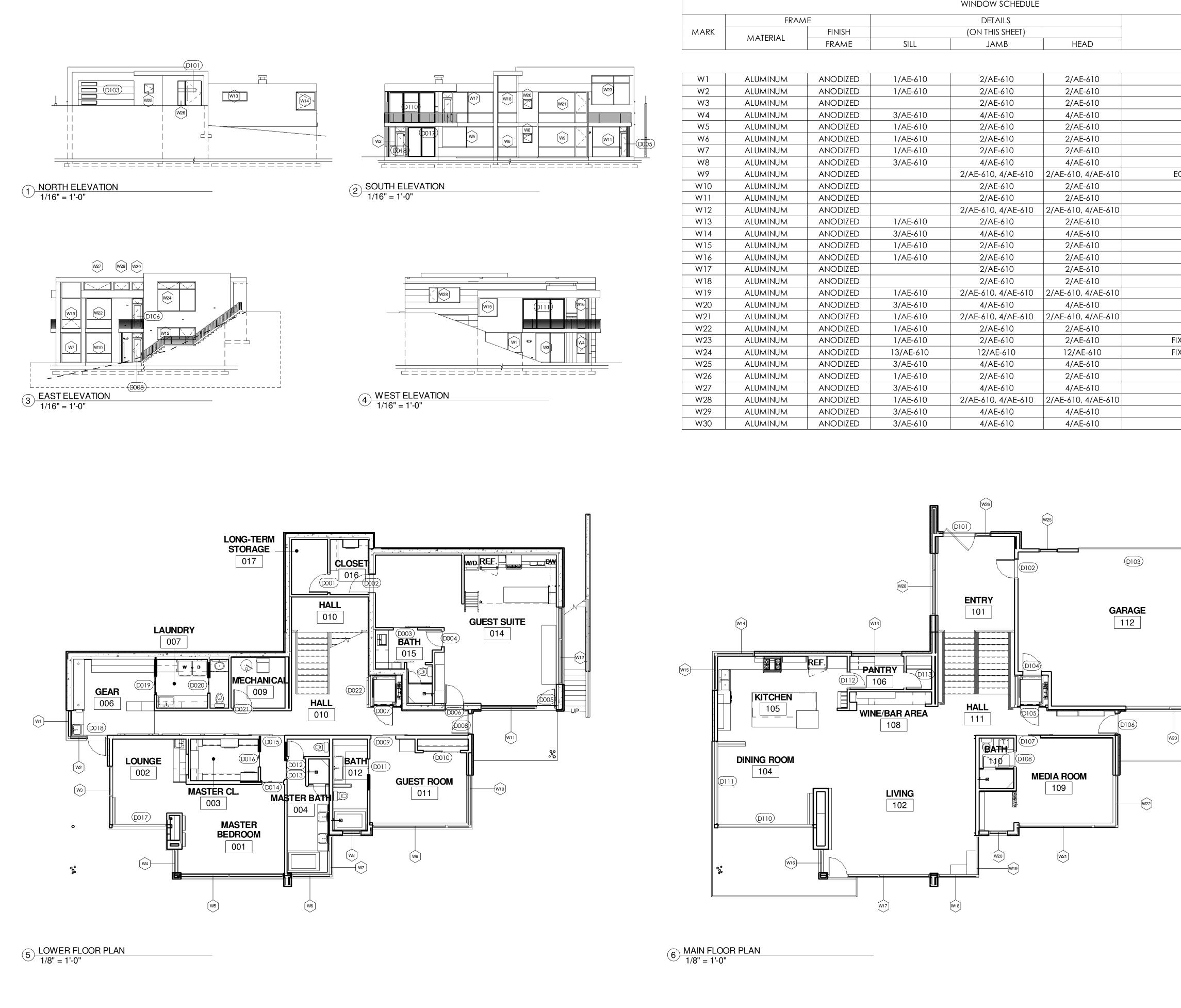






							CHEDULE					GENERAL NOTES	RS RS 4335		
		ROOM	TYPE			OOR			AME	REMARKS	HEAD DETAIL	1. PROVIDE SAFETY GLAZING FOR ALL SHOWER COMPARTMENTS, SLIDING GLASS DOORS AND OTHER HAZARDOUS AREAS WHERE REQUIRED BY IRC R 308.4	C T TERIO FX. 801.476		
Mark D001	ROOM NAME LONG-TERM STORAGE	NUMBER 017	1	WIDTH 3' - 0''	HEIGHT 8' - 0''	MATERIAL WOOD	finish stain	MATERIAL WOOD	finish stain	SWINGING	(JAMB SIM) 9/AE-610	2. GARAGE DOORS INTO HOUSE MUST HAVE SELF-CLOSING DEVICE			
D002 D003	CLOSET BATH	016	1	3' - 0'' 3' - 11''	8' - 0'' 8' - 0''	WOOD WOOD	STAIN STAIN	WOOD	stain -	BARN DOOR	9/AE-610 10/AE-610	3. ALL GLAZED SYSTEMS SHALL HAVE A U- VALUE OF 0.32 OR BETTER	G • I • 5		
D004	BATH	015	1	2' - 6''	8' - 0''	WOOD	stain	WOOD	STAIN	POCKET DOOR	11/AE-610		I I NIN ON IN		
D005 D006	GUEST SUITE GUEST SUITE	014	1	3' - 0'' 3' - 0''	8' - 0'' 8' - 0''	ALUMINUM WOOD	anod stain	ALUMINUM WOOD	ANOD STAIN	STOREFRONT SYSTEM	9/AE-610		ANN H C		
D007 D008	ELEVATOR HALL	022	4	3' - 0'' 3' - 0''	7' - 0'' 8' - 0''	GLASS ALUMINUM	ANOD	FRAM ELESS	FRAM ELESS ANOD	TEMPERED STOREFRONT SYSTEM			L C C		
D009	GUEST ROOM	011	8	4' - 0''	8' - 0''	WOOD	stain	-	-	BARN DOOR	10/AE-610		GDEN, RE		
D010 D011	GUEST ROOM BATH	011 012	2	6' - 0'' 2' - 6''	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	WOOD WOOD	STAIN STAIN	BI-SLIDE POCKET DOOR	9/AE-610 11/AE-610				
D012 D013	TOILET ROOM MASTER BATH	018	1 2	2' - 6'' 3' - 0''	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	WOOD WOOD	STAIN STAIN	POCKET DOOR	9/AE-610 11/AE-610		ON BLA		
D014	HALL	019	2	3' - 6''	8' - 0''	WOOD	stain	WOOD	STAIN	POCKET DOOR	11/AE-610		CHI CHI		
D015 D016	HALL MASTER CL.	010	8	3' - 11" 2' - 6"	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	- WOOD	- STAIN	BARN DOOR POCKET DOOR	10/AE-610 11/AE-610		ARCHITE 2726 HARRISON B		
D017	LOUNGE	002	9	8' - 10''	9' - 9''	ALUMINUM	ANOD	ALUMINUM	ANOD	FOLDING	6/AE-610				
D018 D019	GEAR GEAR	006	2	3' - 0'' 3' - 0''	8' - 0'' 8' - 0''	ALUMINUM WOOD	anod stain	ALUMINUM WOOD	ANOD STAIN	STOREFRONT SYSTEM POCKET DOOR	11/AE-610				
D020 D021	LAUNDRY MECHANICAL	007	2	2' - 6'' 3' - 0''	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	WOOD WOOD	STAIN STAIN	POCKET DOOR	11/AE-610 9/AE-610				
D022	HALL	010	13	4' - 10''	10' - 0''	WOOD	stain	WOOD	STAIN	BARN DOOR (HALL CONNECTION)					
D101 D102	ENTRY GARAGE	101 112	6	5' - 0'' 3' - 0''	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	WOOD WOOD	STAIN STAIN	PIVOT DOOR W/TEMPERED GLASS 20 MIN. RATED			Щ		
D103	GARAGE	112	12	18' - 0''	8' - 0''	WOOD	stain	STEEL		SECTIONAL OHD, METAL PANEL W/ GLASS			84310 84310		
D104	ELEVATOR	028	3	3' - 0''	8' - 0''	WOOD	stain	WOOD	STAIN	20 MIN. RATED			843 843		
D105 D106	ELEVATOR HALL	028	4	3' - 0'' 3' - 0''	7' - 0'' 8' - 0''	GLASS ALUMINUM	ANOD	FRAM ELESS	FRAMELESS ANOD	TEMPERED STOREFRONT SYSTEM					
D107 D108	MEDIA ROOM BATH	109 110	8	3' - 11'' 2' - 6''	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	- WOOD	- STAIN	BARN DOOR	10/AE-610 9/AE-610				
D109	LIVING	102	5	3' - 0''	8' - 0''	ALUMINUM	ANOD	ALUMINUM	ANOD	STOREFRONT SYSTEM			RESIC 77 OUNTAIN,		
D110 D111	DINING ROOM	104 104	11	15' - 5" 13' - 6"	10' - 0'' 10' - 0''	ALUMINUM ALUMINUM	ANOD ANOD	ALUMINUM ALUMINUM	ANOD ANOD	FOLDING FOLDING	6/AE-610 6/AE-610		A R MOU		
D112 D113	PANTRY PRIVATE PANTRY	106 107	1	2' - 6'' 2' - 6''	8' - 0'' 8' - 0''	WOOD WOOD	stain Stain	WOOD WOOD	STAIN STAIN		9/AE-610 9/AE-610				
								R THAN OPENIN	<b>^</b>				HA Mov		
							W26						SUMA SUMA		
					W28			D102	DI03						
	W15	<b>KITCHEN</b>			<b>NTRY</b> 106 D113 <b>E/BAR ARE</b> 108			D104					RAY BERTOLDI No. 135892		
	D111	DINING ROOM 104			<b>LIVING</b>	<b>BATH</b> 110		D107) 108 MEDIA ROC 109		W23			REV. DATE		
	<b>م</b>	W16			W17		W20 W19	W21			IY OF BERTOLDI ARCHITECTS C 2014		DATE: 8/21/14 TITLE: DOOR SCHEDULE		
	6 MAIN FLC 1/8" = 1'-0	DOR PLAN 0"				W18					THIS DOCUMENT IS THE PROPERT	NOTE: SUBCONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTOR'S WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT <u>ALL</u> OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION.	AE-601		



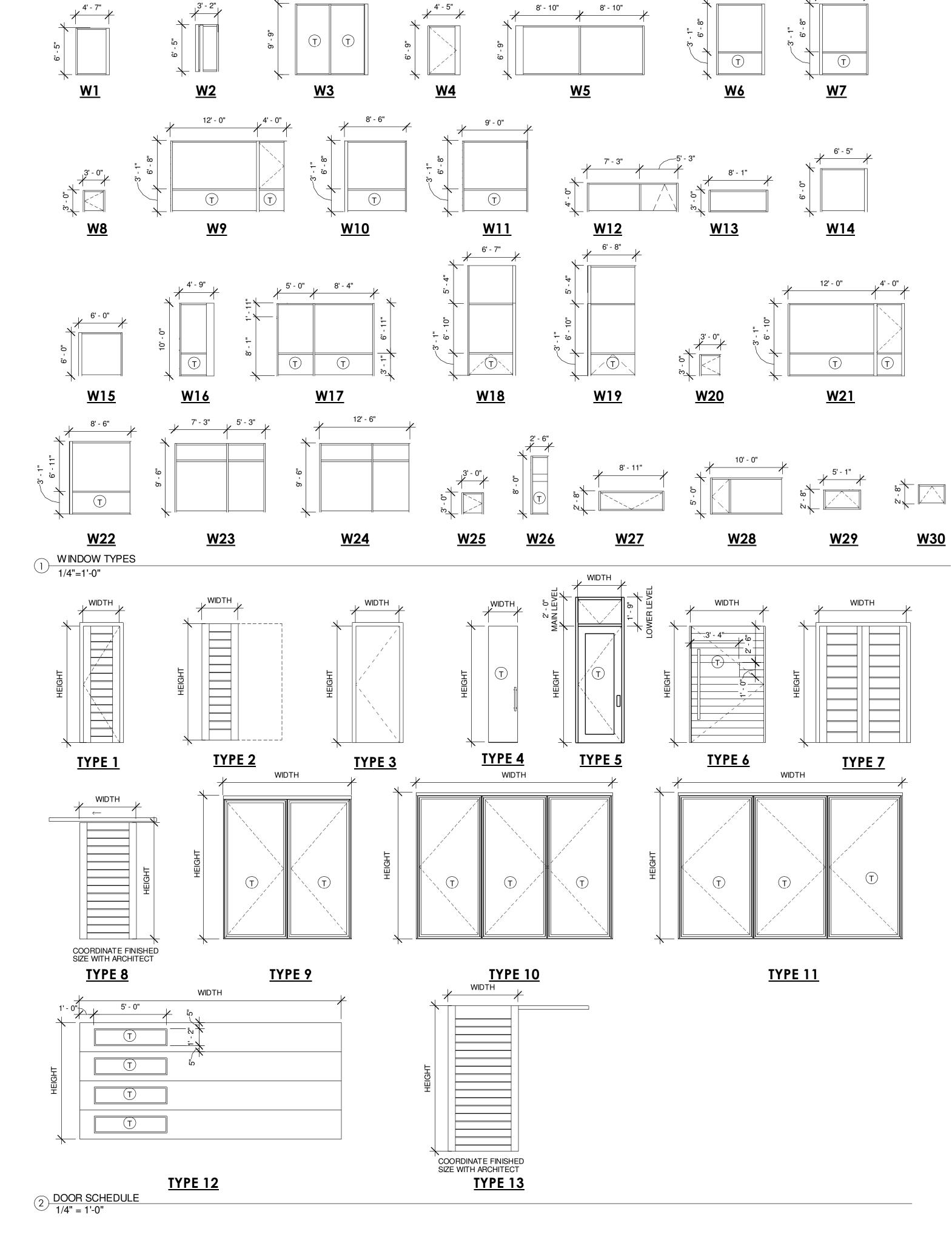


WINDOW SCHEDULE						
	FRAM	E		DETAILS		
MARK		FINISH		(ON THIS SHEET)		
	MATERIAL	FRAME	SILL	JAMB	HEAD	

	W16	

	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W1
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W2
	2/AE-610	2/AE-610		ANODIZED	ALUMINUM	W3
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W4
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W5
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W6
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W7
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W8
EG	2/AE-610, 4/AE-610	2/AE-610, 4/AE-610		ANODIZED	ALUMINUM	W9
	2/AE-610	2/AE-610		ANODIZED	ALUMINUM	W10
	2/AE-610	2/AE-610		ANODIZED	ALUMINUM	W11
	2/AE-610, 4/AE-610	2/AE-610, 4/AE-610		ANODIZED	ALUMINUM	W12
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W13
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W14
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W15
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W16
	2/AE-610	2/AE-610		ANODIZED	ALUMINUM	W17
	2/AE-610	2/AE-610		ANODIZED	ALUMINUM	W18
	2/AE-610, 4/AE-610	2/AE-610, 4/AE-610	1/AE-610	ANODIZED	ALUMINUM	W19
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W20
	2/AE-610, 4/AE-610	2/AE-610, 4/AE-610	1/AE-610	ANODIZED	ALUMINUM	W21
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W22
FIXI	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W23
FIXI	12/AE-610	12/AE-610	13/AE-610	ANODIZED	ALUMINUM	W24
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W25
	2/AE-610	2/AE-610	1/AE-610	ANODIZED	ALUMINUM	W26
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W27
	2/AE-610, 4/AE-610	2/AE-610, 4/AE-610	1/AE-610	ANODIZED	ALUMINUM	W28
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W29
	4/AE-610	4/AE-610	3/AE-610	ANODIZED	ALUMINUM	W30

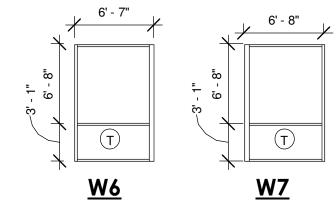
# GENERAL NOTES PROVIDE SAFETY GLAZING FOR ALL SHOWER COMPARTMENTS, SLIDING GLASS DOORS AND OTHER HAZARDOUS AREAS WHERE REQUIRED BY IRC R 308.4 GARAGE DOORS INTO HOUSE MUST REMARKS HAVE SELF-CLOSING DEVICE ALL GLAZED SYSTEMS SHALL HAVE A U-VALUE OF 0.32 OR BETTER FIXED FIXED FIXED EGRESS, INSWING FIXED FIXED FIXED INSWING EGRESS, FIXED/INSWING FIXED FIXED W/DOOR FIXED/INSWING FIXED EGRESS, INSWING FIXED FIXED FIXED W/DOOR FIXED **FIXED/INSWING** INSWING FIXED/INSWING RESIDENC 84310 FIXED FIXED W/ VACUUM TUBES IXED W/ VACUUM TUBES UT INSWING - 77 OUNTAIN, FIXED INSWING FIXED/INSWING INSWING INSWING LOT DER MC BINGHAM POW UMMIT DN $\mathcal{O}$ BERTOLD No. 13589 REV. DATE PROJECT # 1333 DATE: 8/21/14 TITLE: WINDOW SCHEDULE SHEET: NOTE: SUBCONTRACTORS ARE TO BE FAMILIAR WITH ALL PORTIONS OF THE WORK. IT IS TO BE NOTED THAT SUBCONTRACTOR'S WORK IS NOT LIMITED TO SPECIFIC SHEETS AND THAT <u>ALL</u> OF THE DRAWINGS MAY BE PART OF THEIR SCOPE OF WORK AND/OR COORDINATION. AE-602

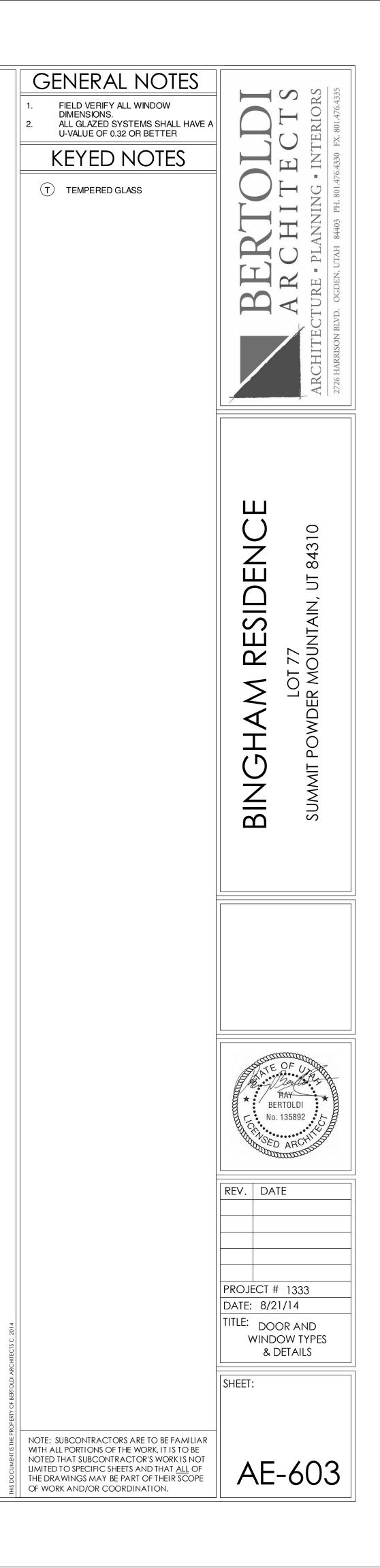


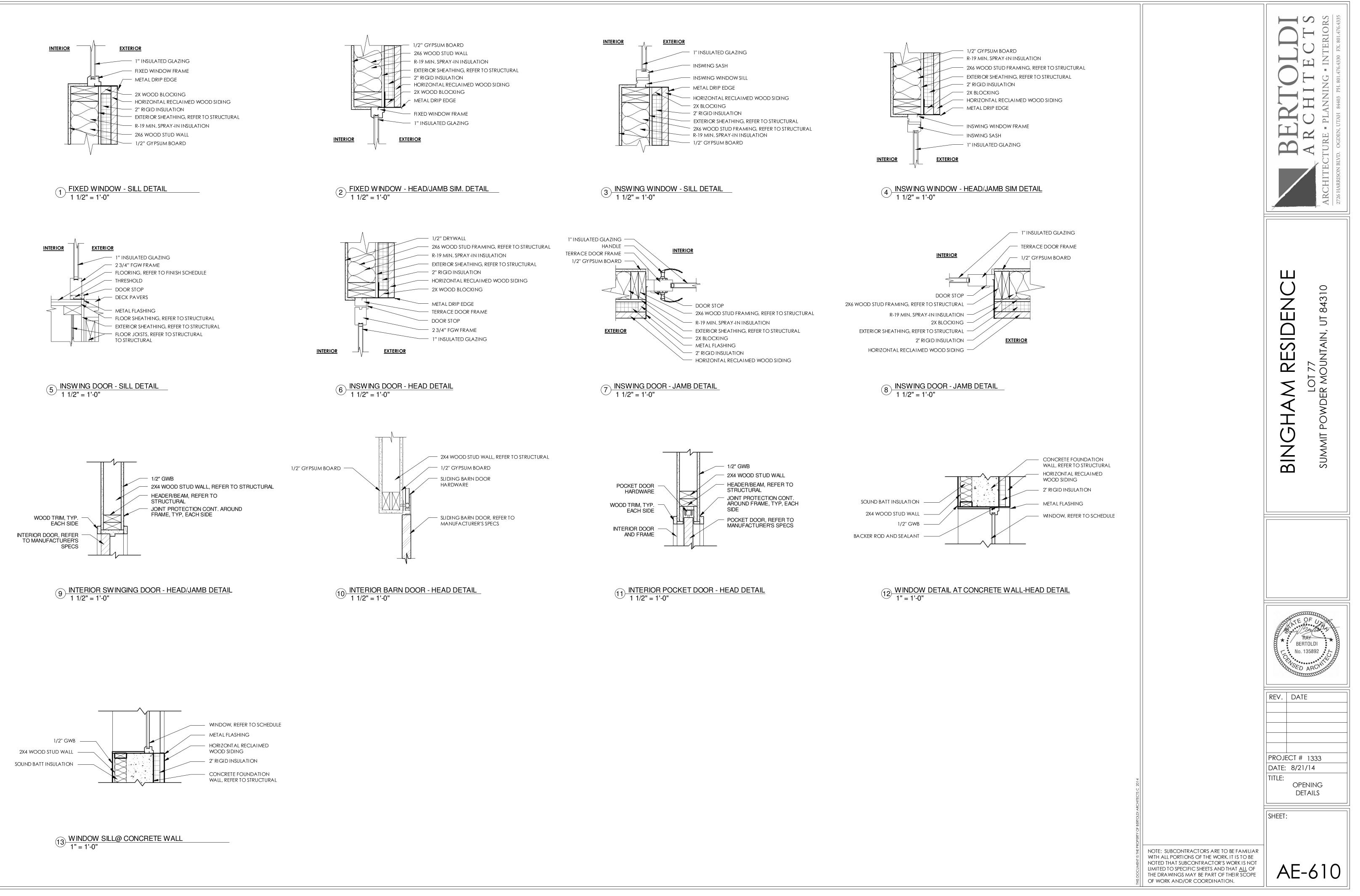
8' - 10"

4' - 5"

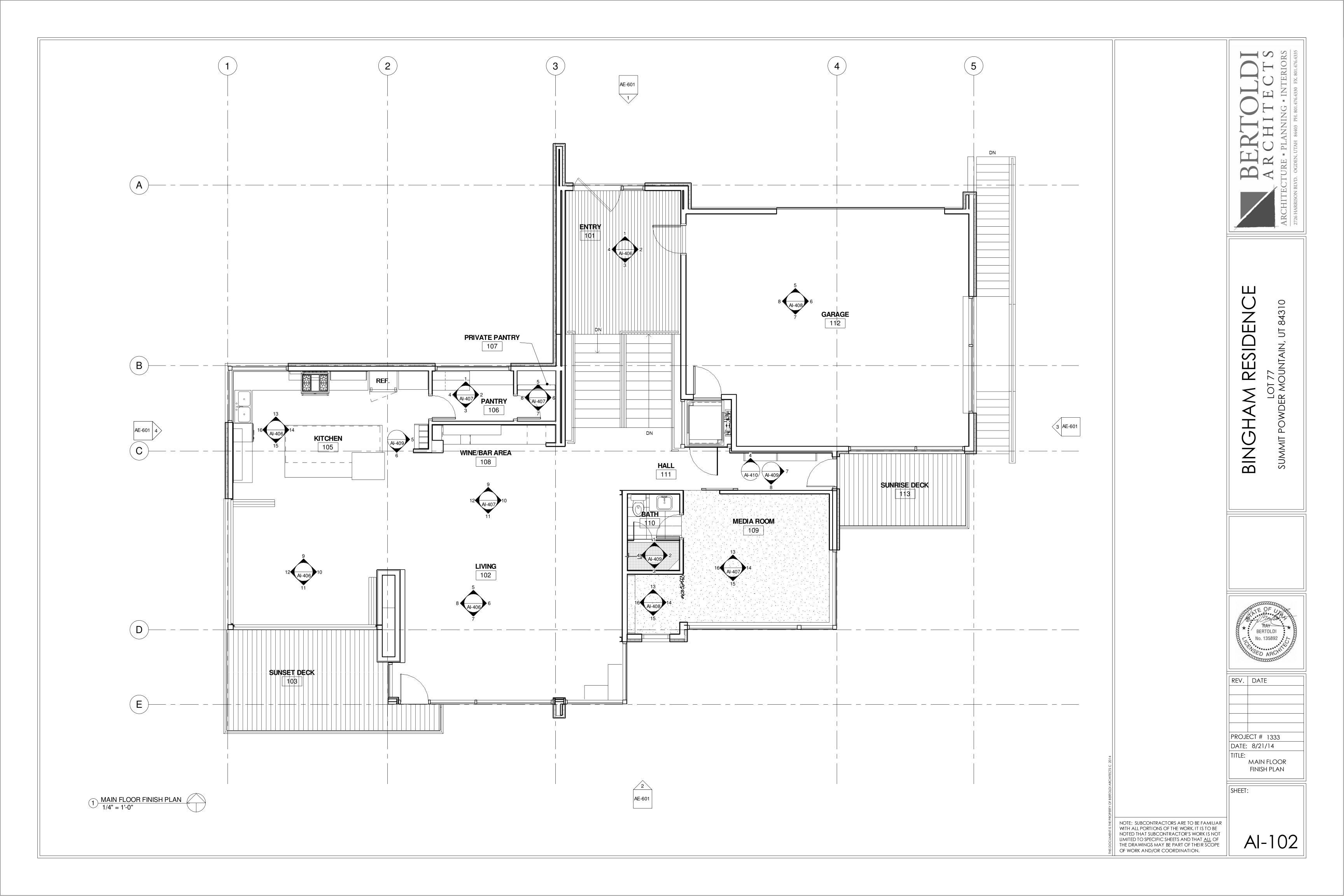
10' - 0"

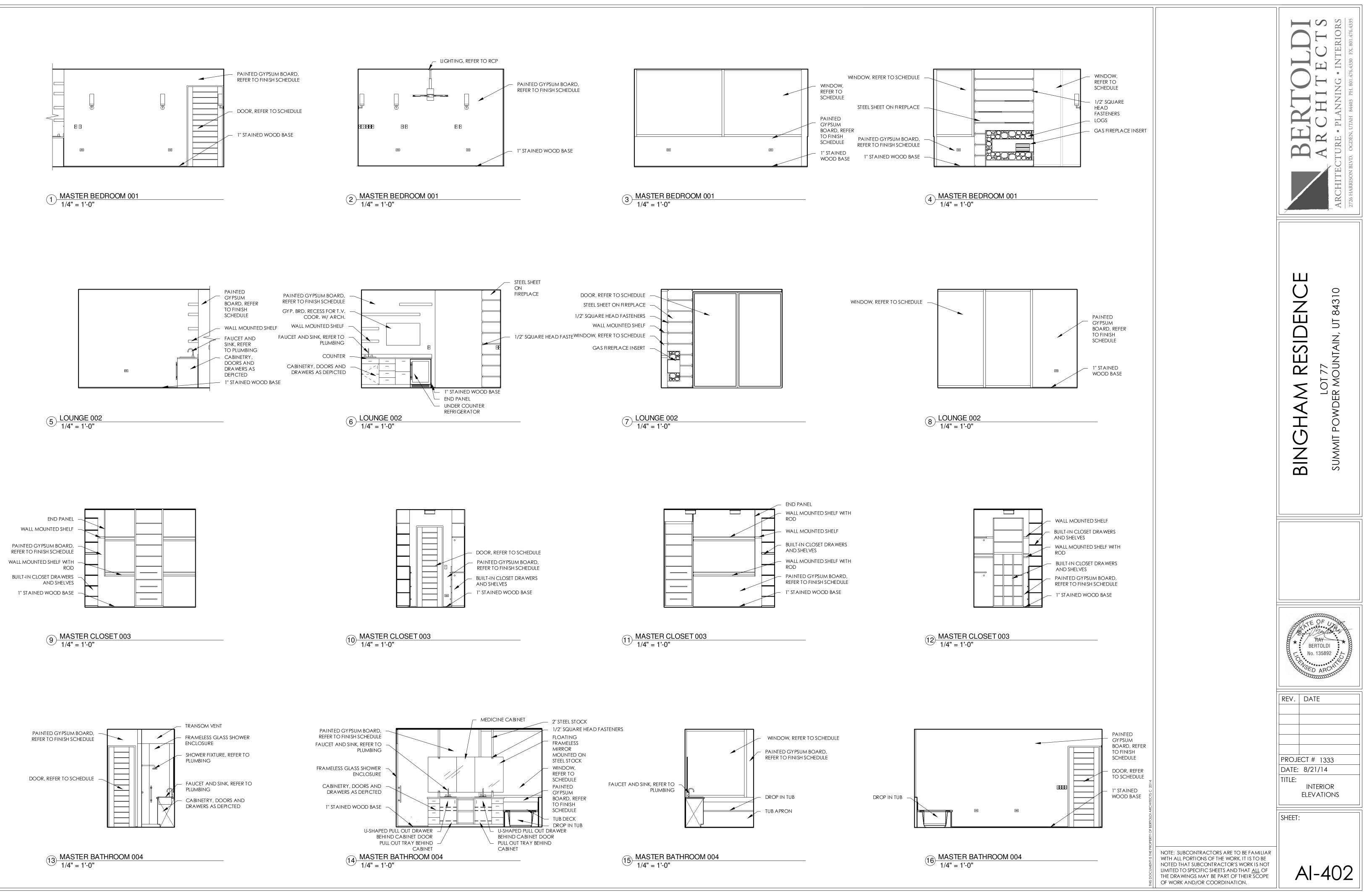


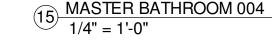


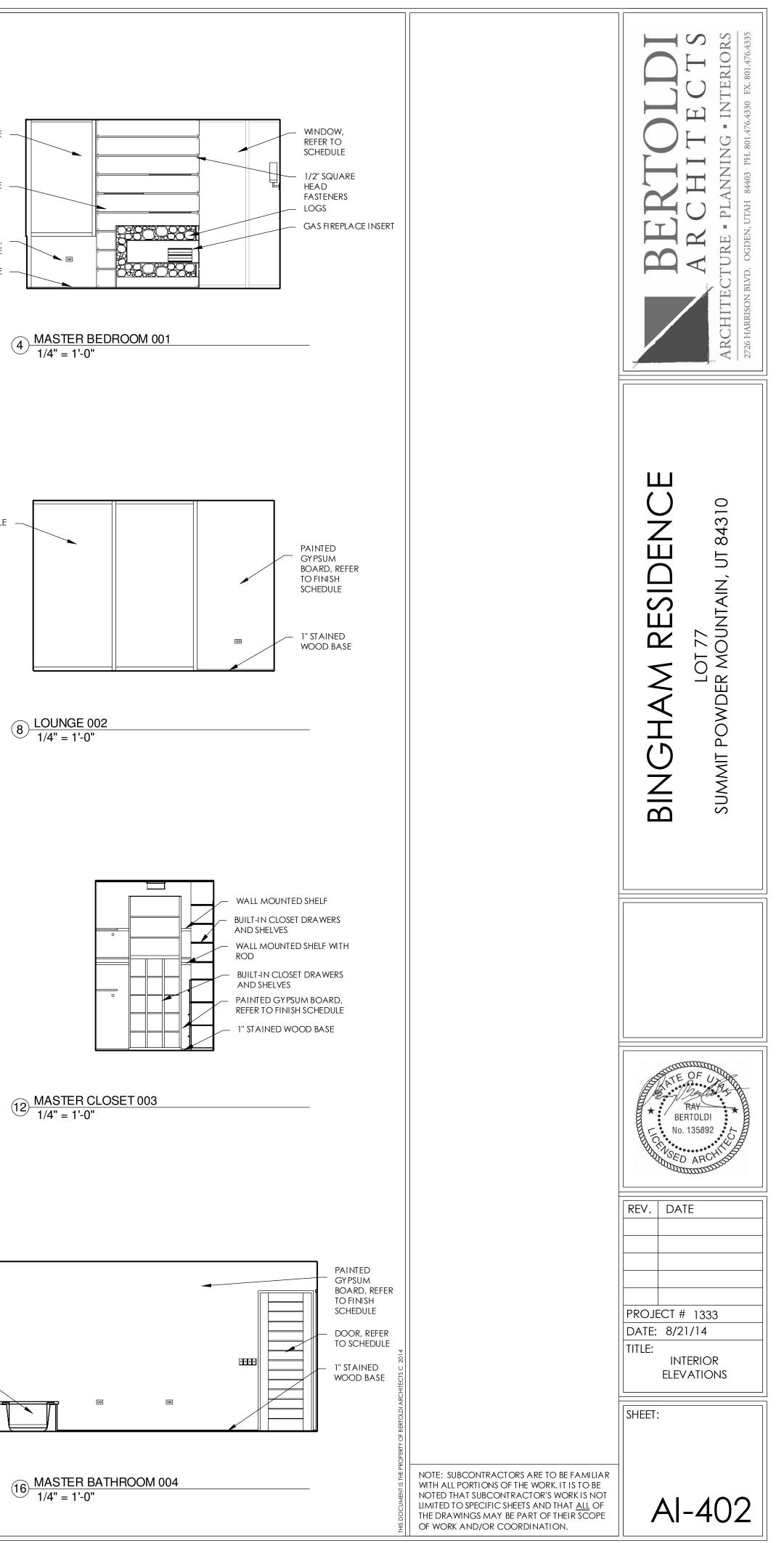


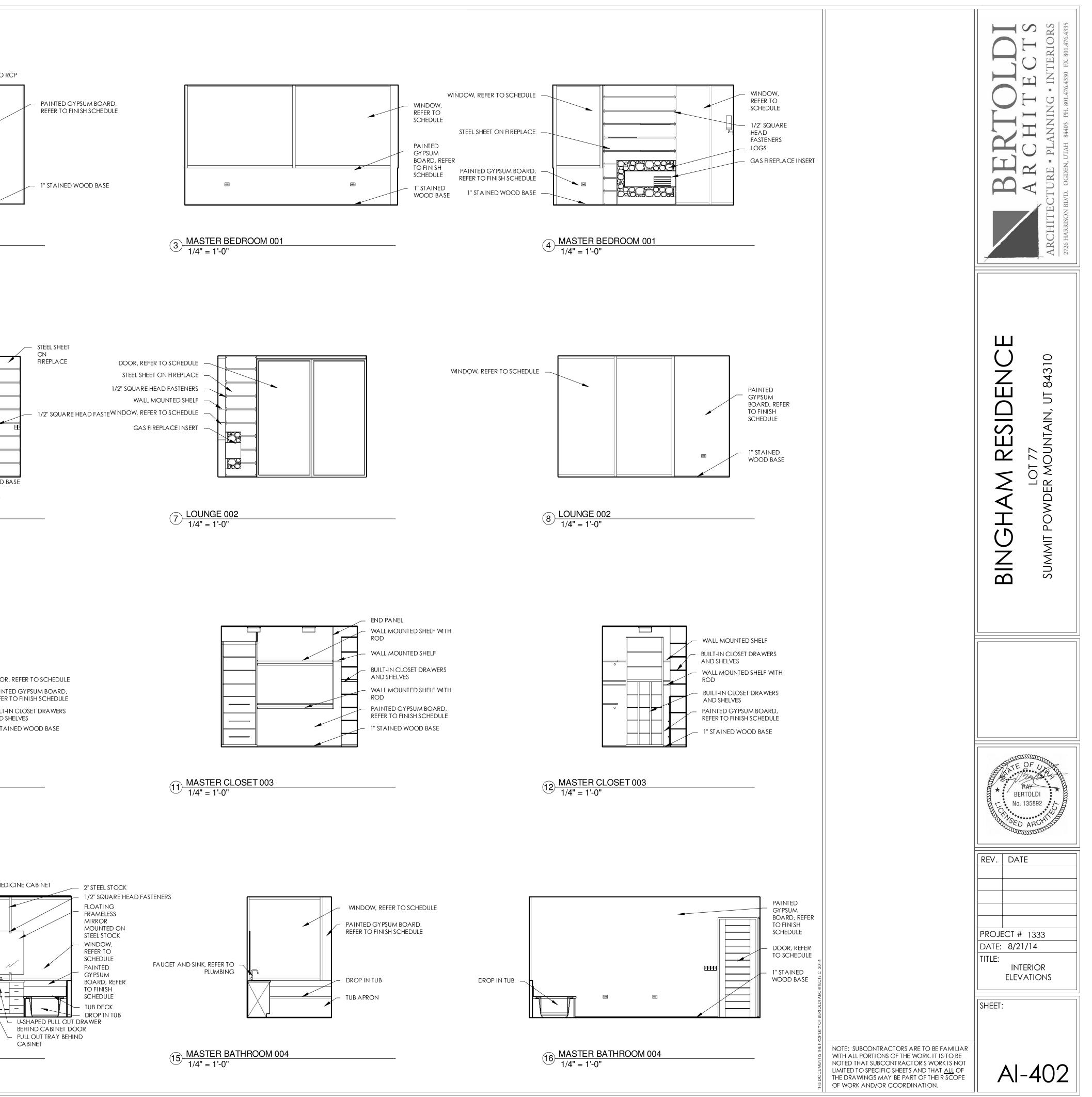


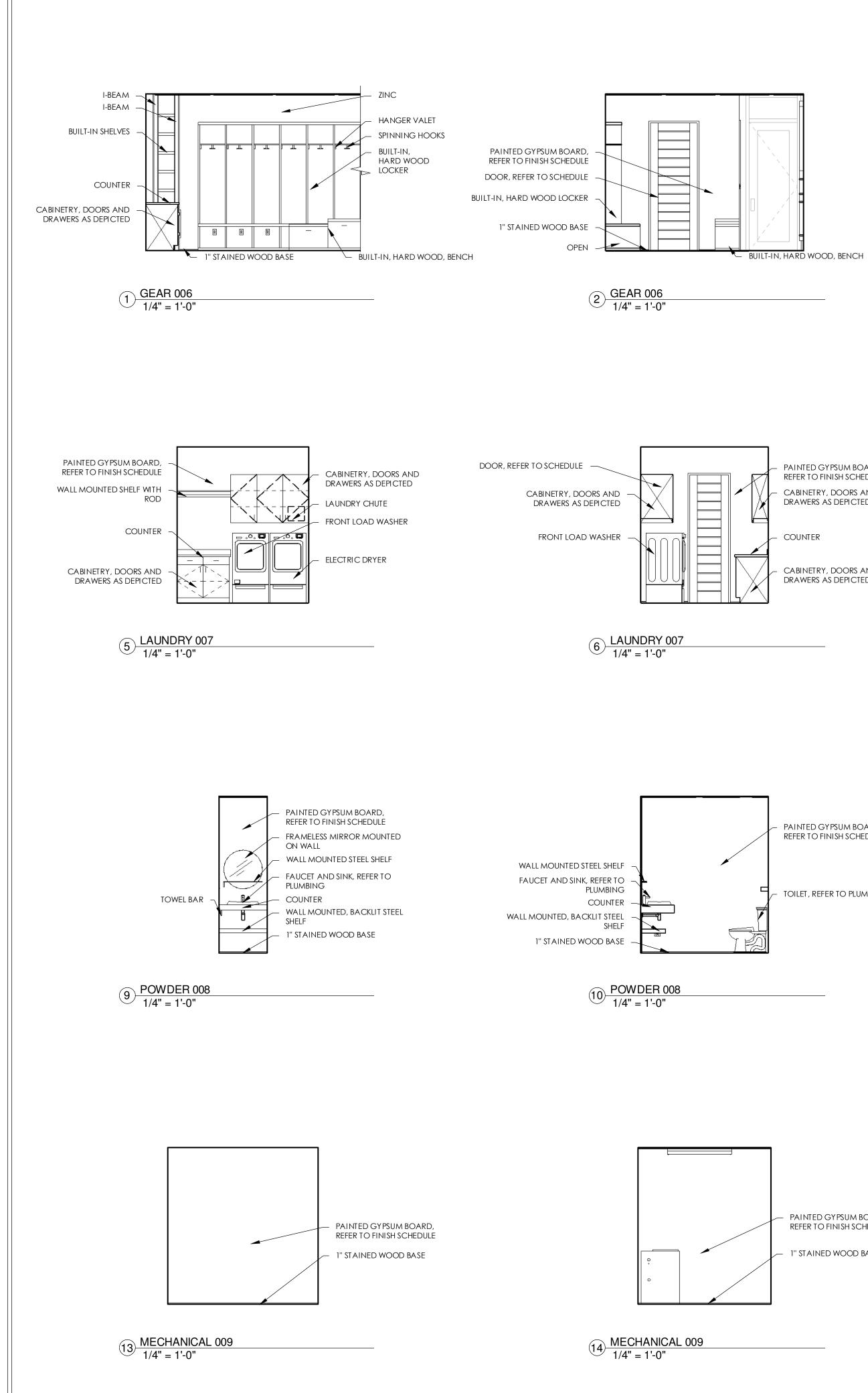




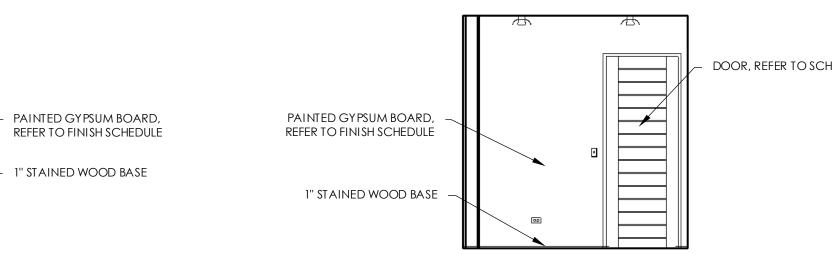






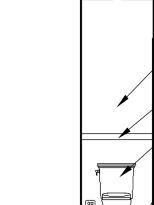


# (15) MECHANICAL 009 1/4" = 1'-0"



TOILET, REFER TO PLUMBING

REFER TO FINISH SCHEDULE



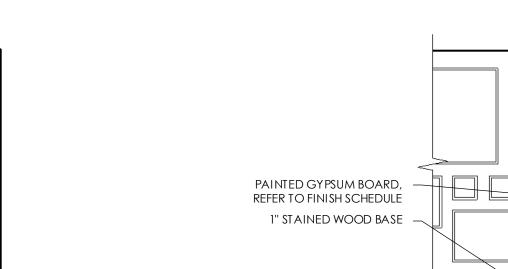
PAINTED GYPSUM BOARD,

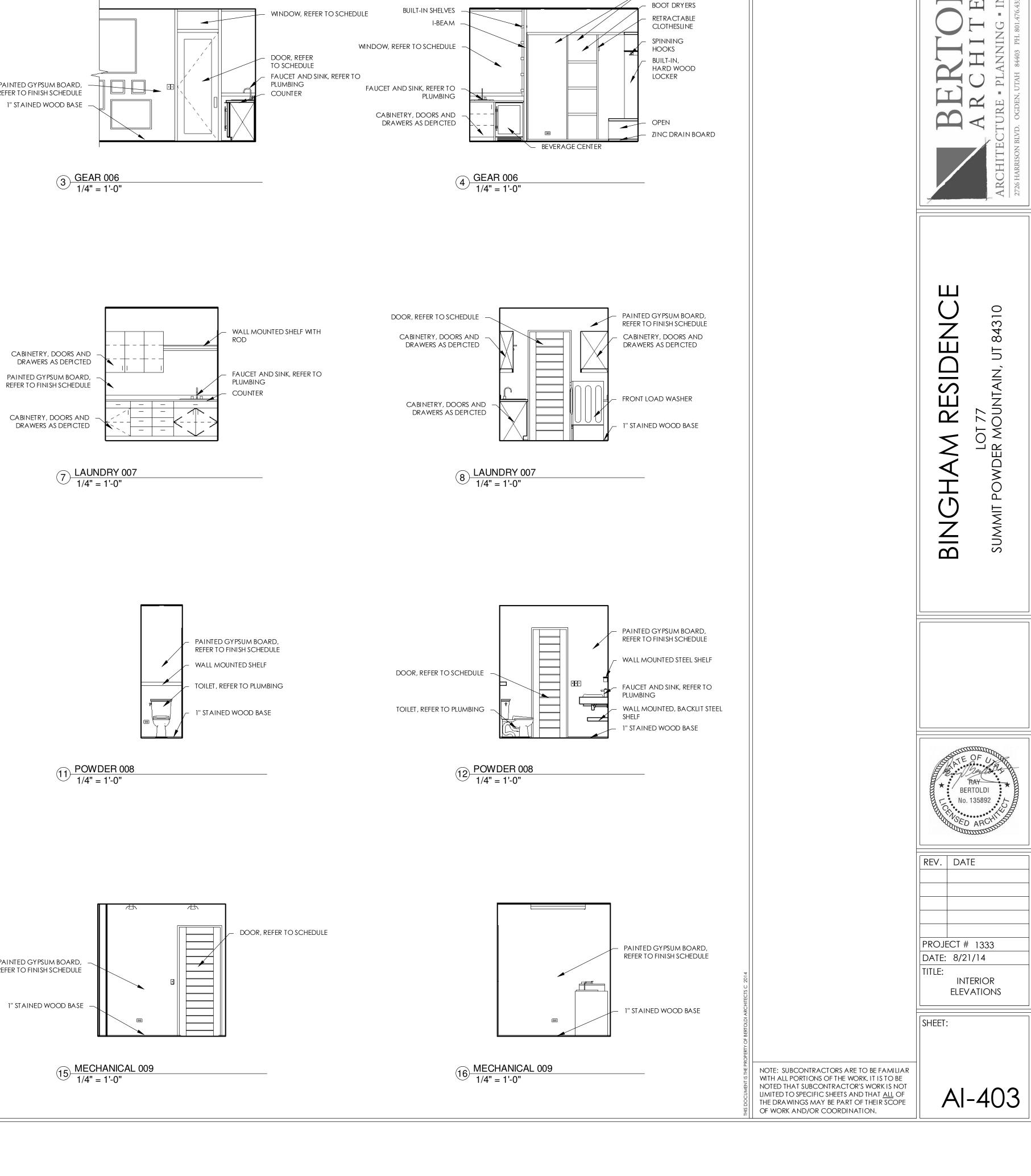
CABINETRY, DOORS AND DRAWERS AS DEPICTED

COUNTER

CABINETRY, DOORS AND DRAWERS AS DEPICTED

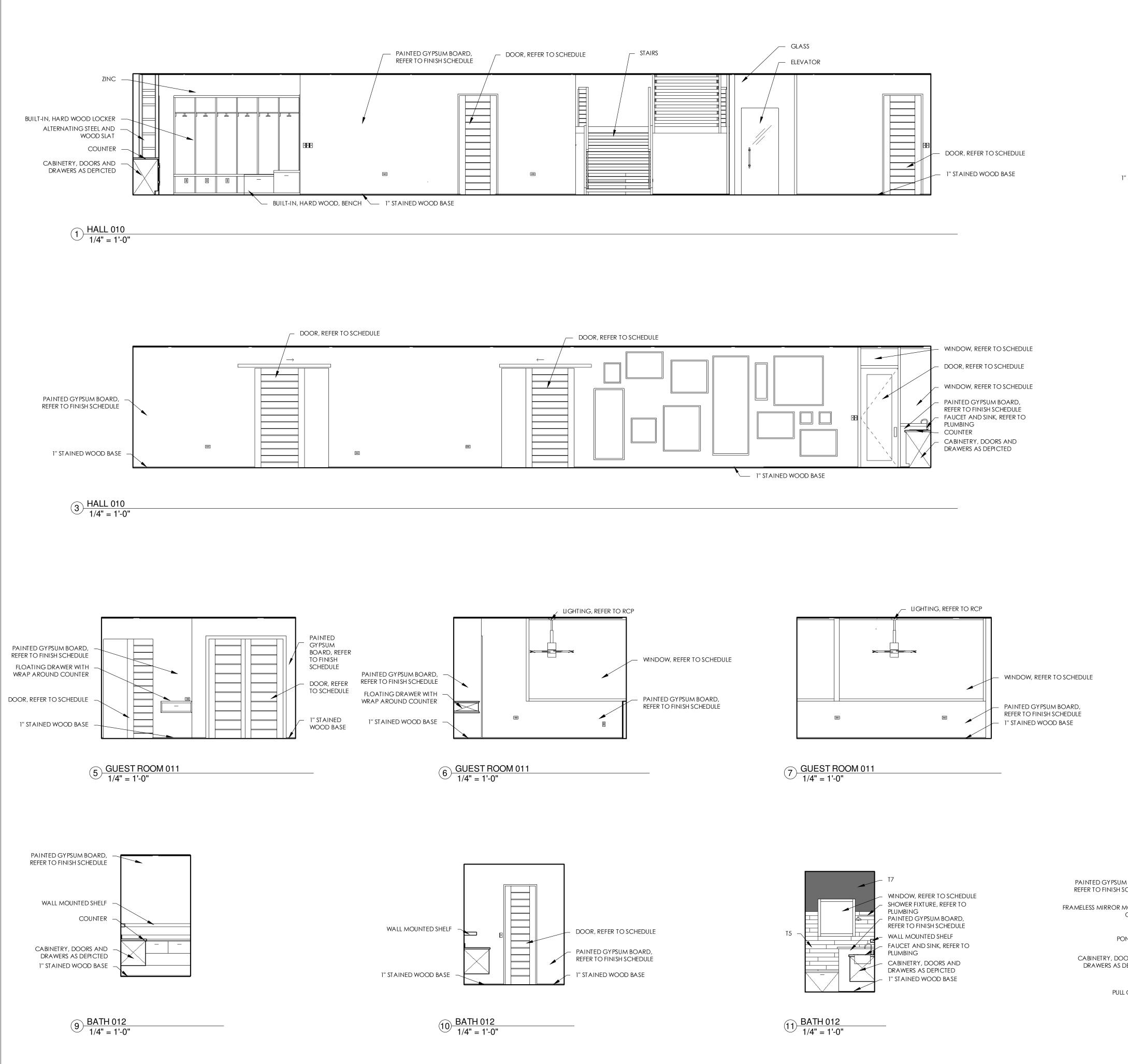
PAINTED GYPSUM BOARD, REFER TO FINISH SCHEDULE

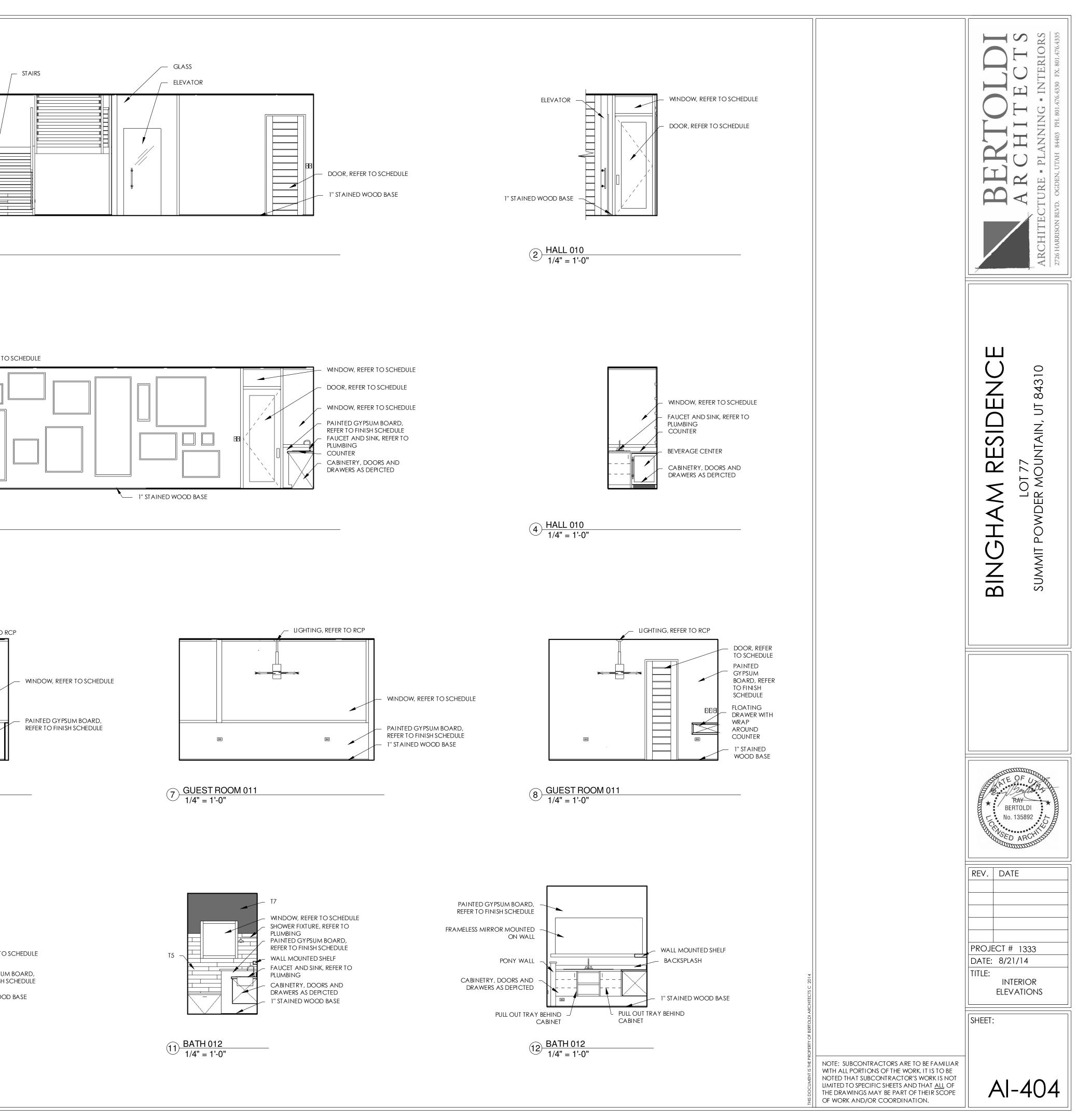


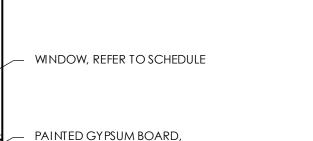


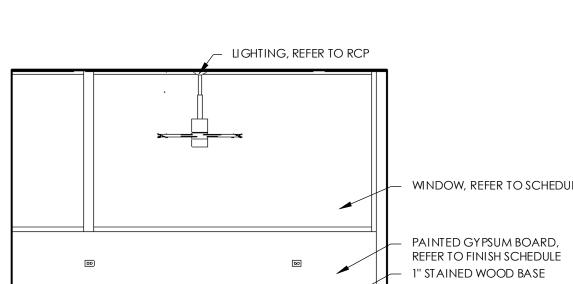
ZINC

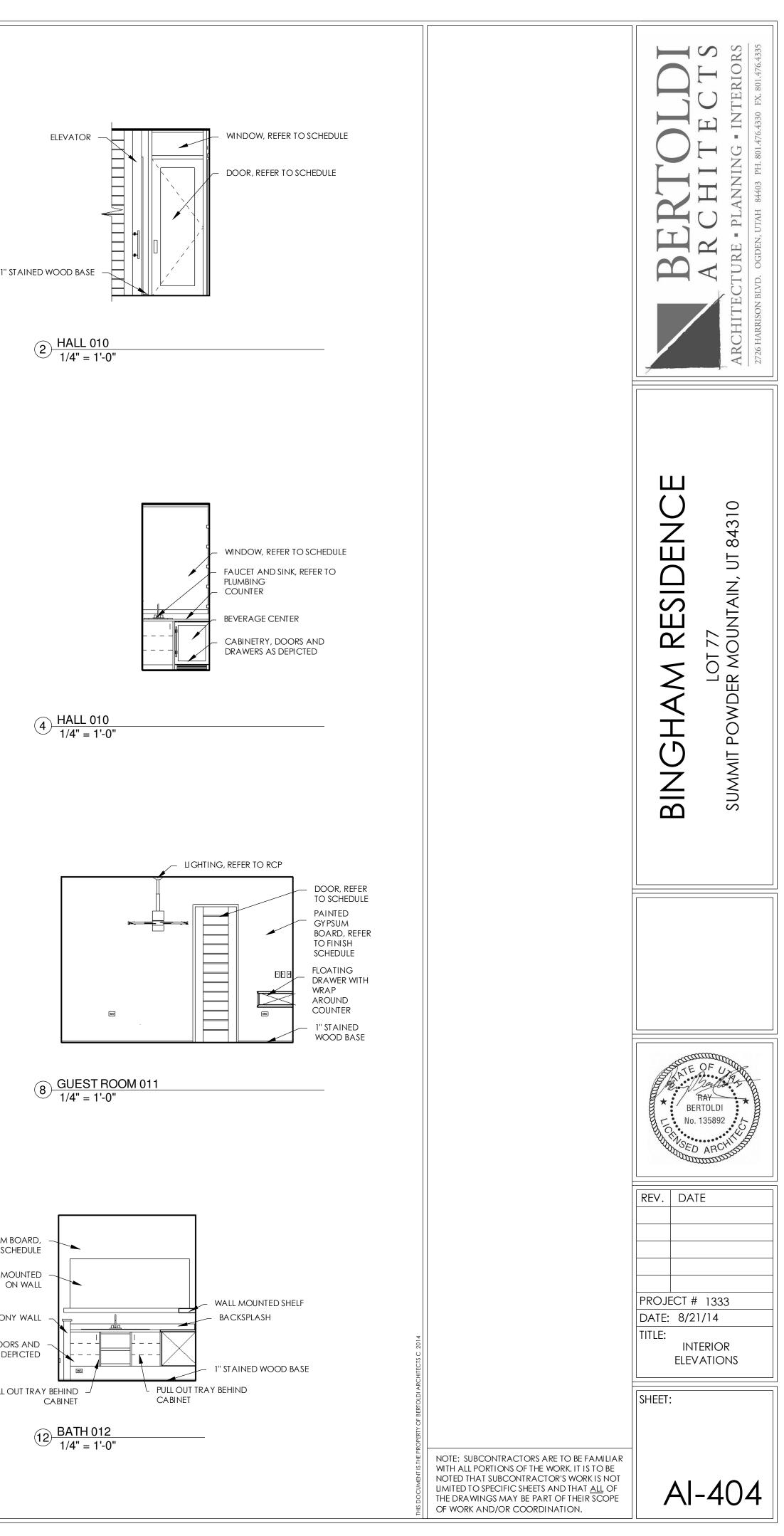
**N** 

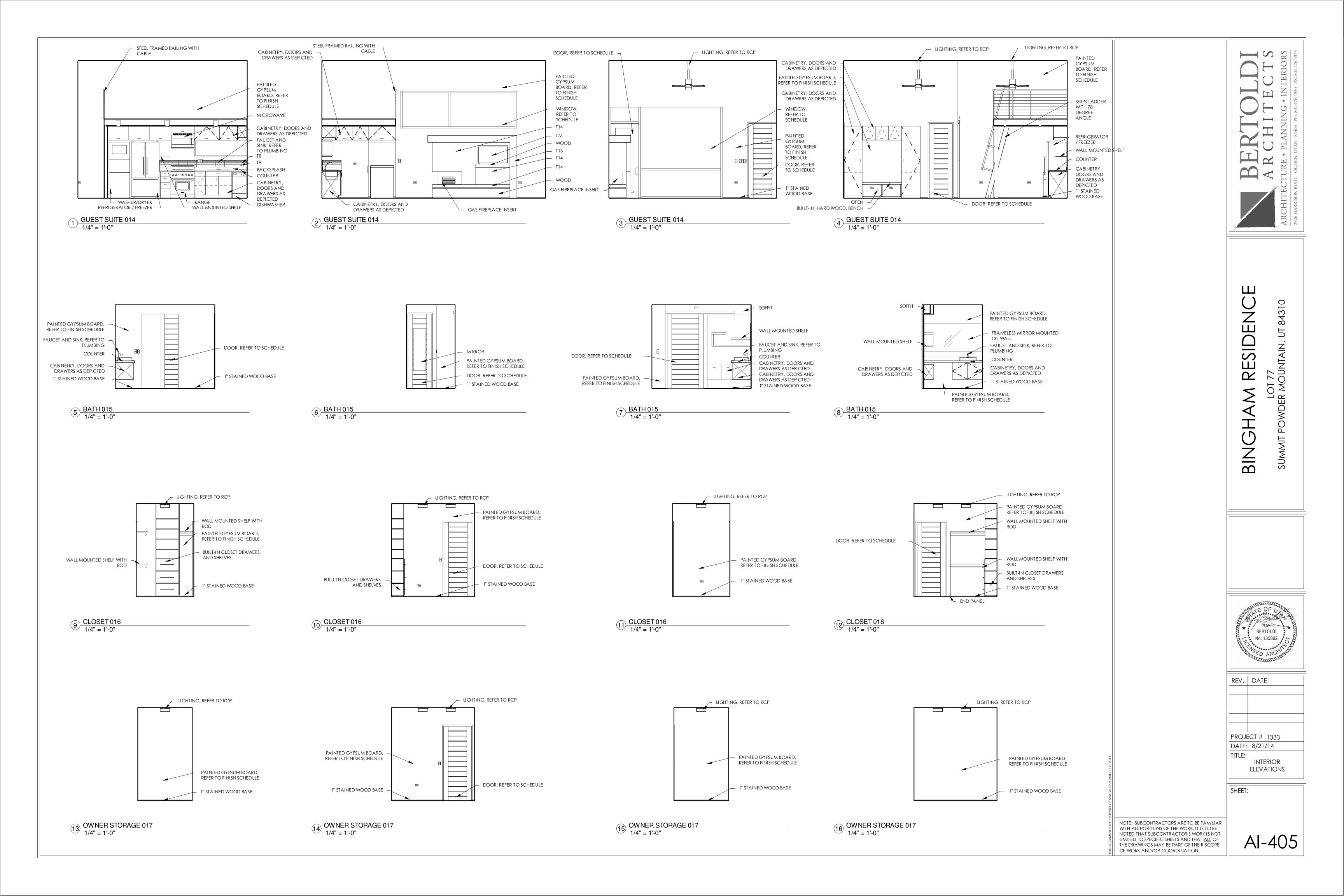


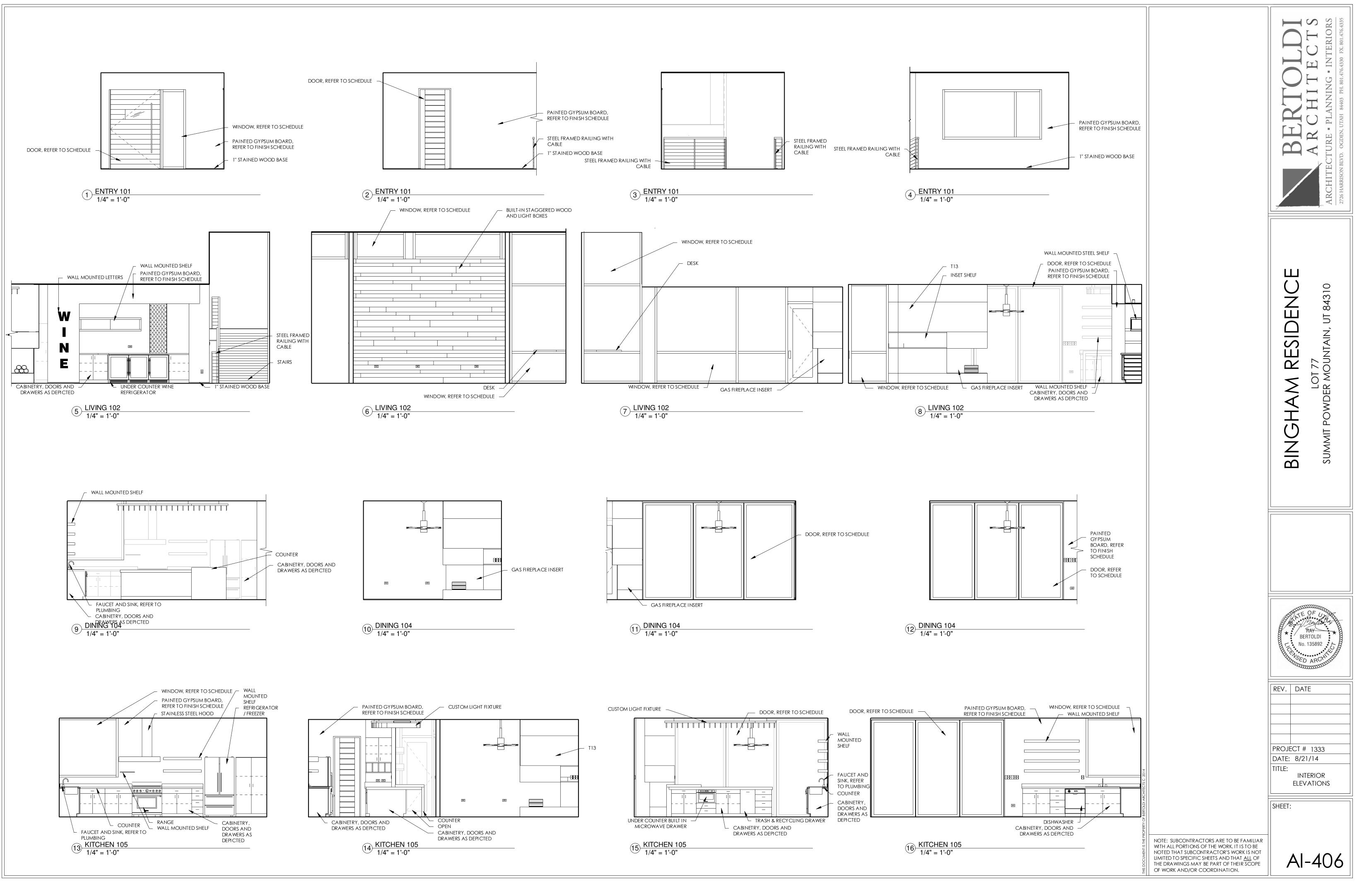


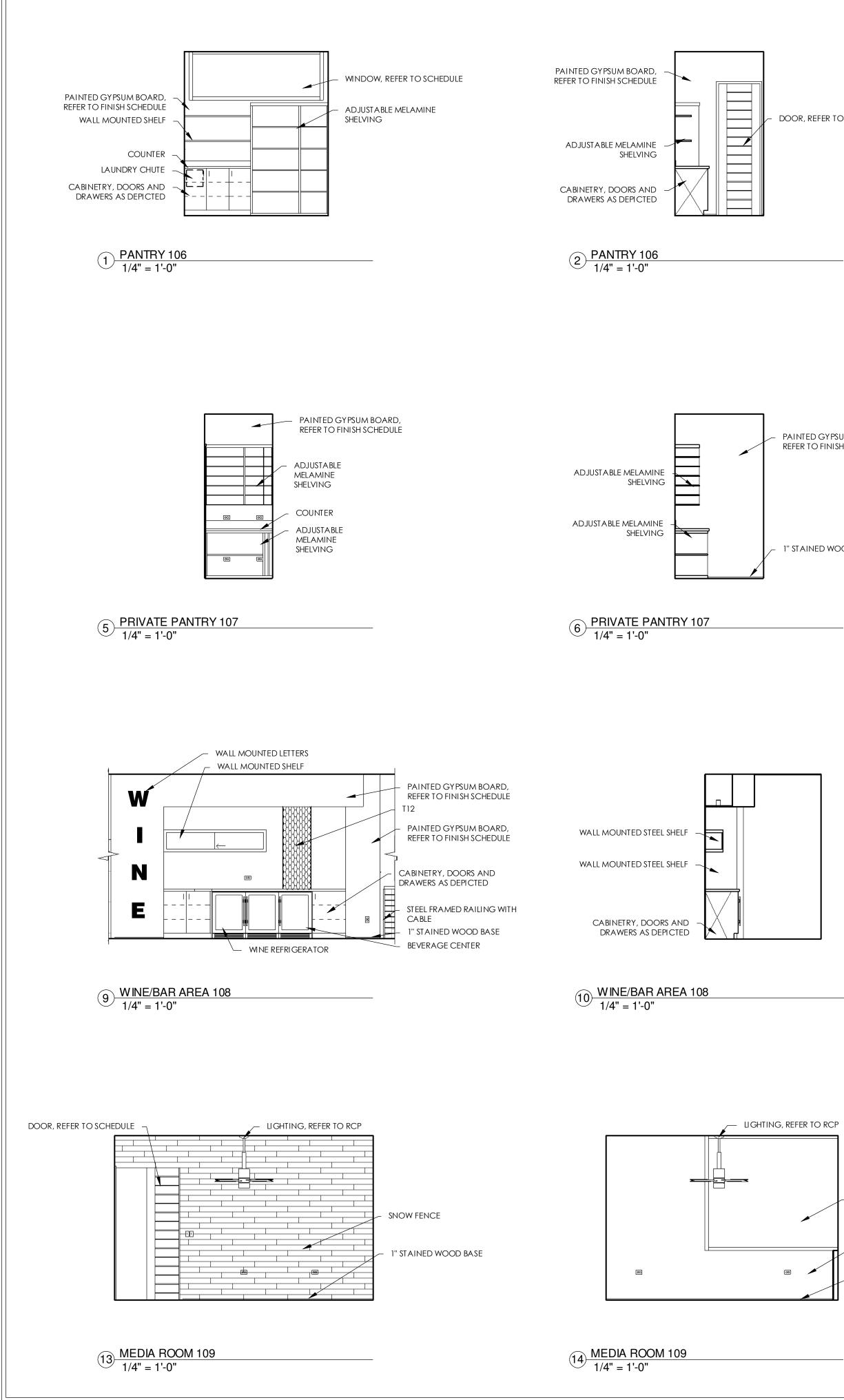






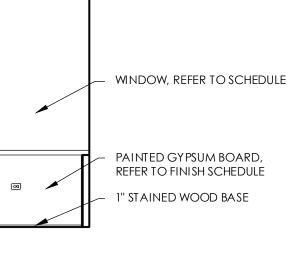


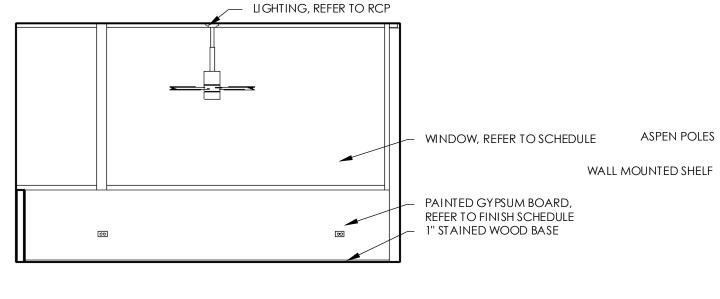


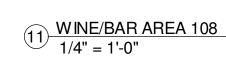


# 15 MEDIA ROOM 109 1/4" = 1'-0"

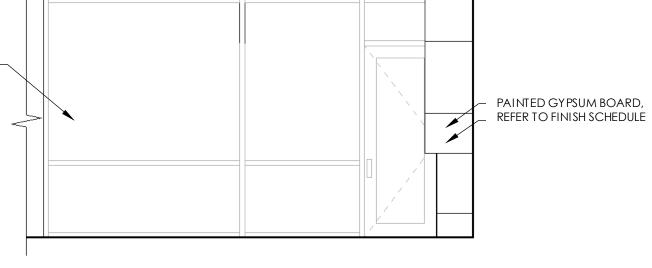












WINDOW, REFER TO SCHEDULE

7 PRIVATE PANTRY 107 1/4" = 1'-0"

3 PANTRY 106 1/4" = 1'-0"

PAINTED GYPSUM BOARD, REFER TO FINISH SCHEDULE -1" STAINED WOOD BASE

DOOR, REFER TO SCHEDULE

(4) PANTRY 106 1/4" = 1'-0"

DOOR, REFER TO SCHEDULE

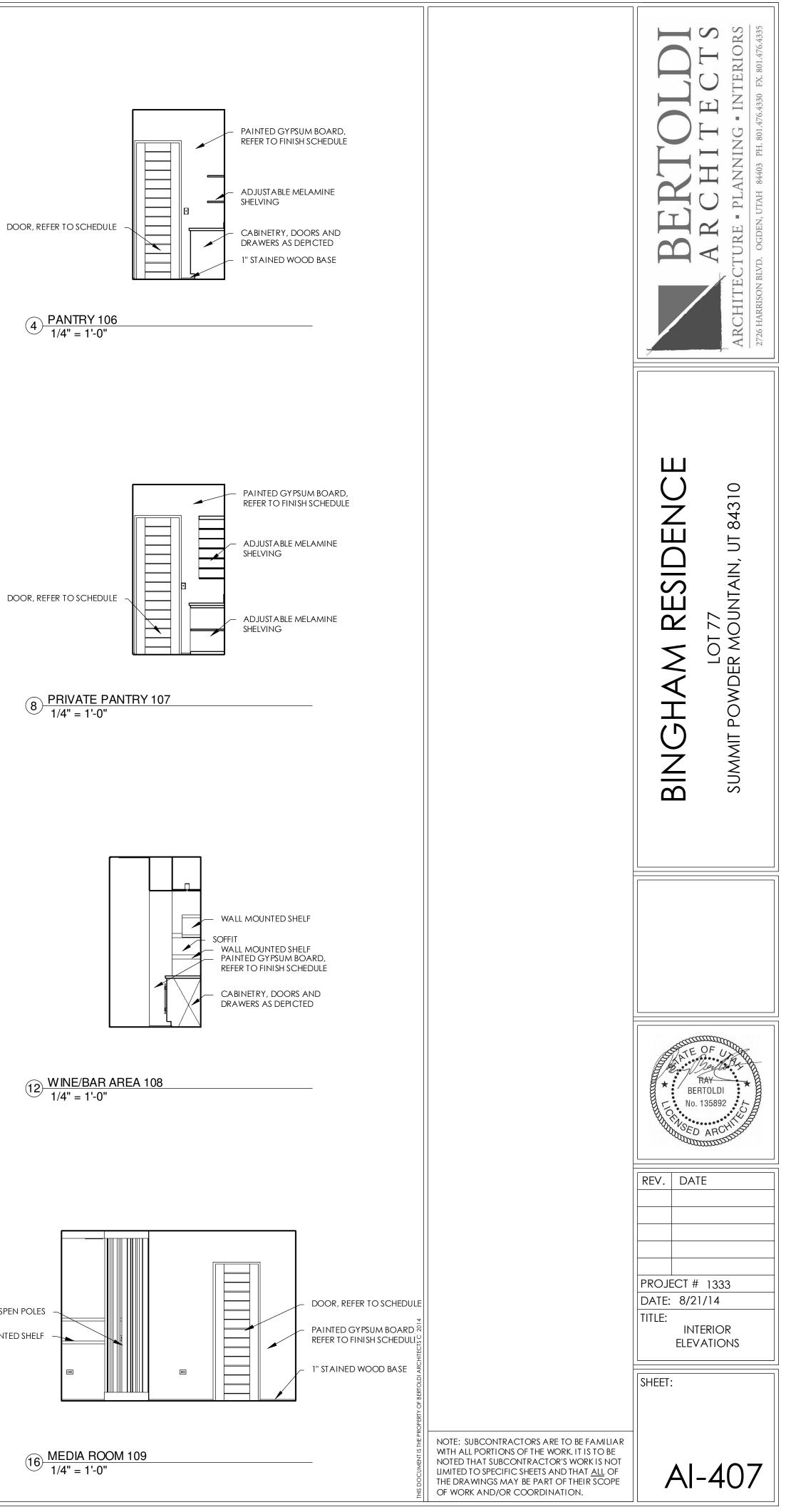
PAINTED GYPSUM BOARD,

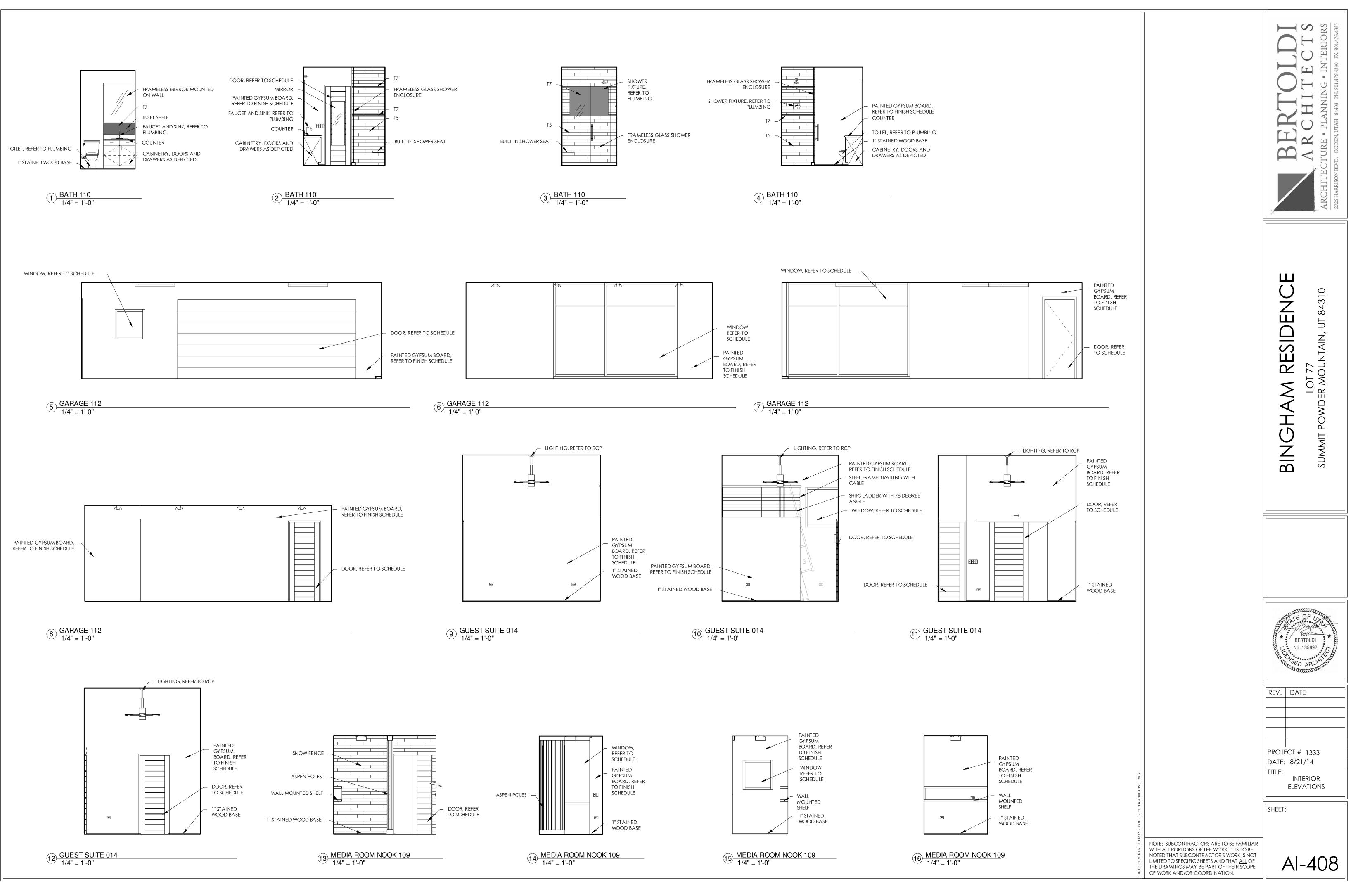
1" STAINED WOOD BASE

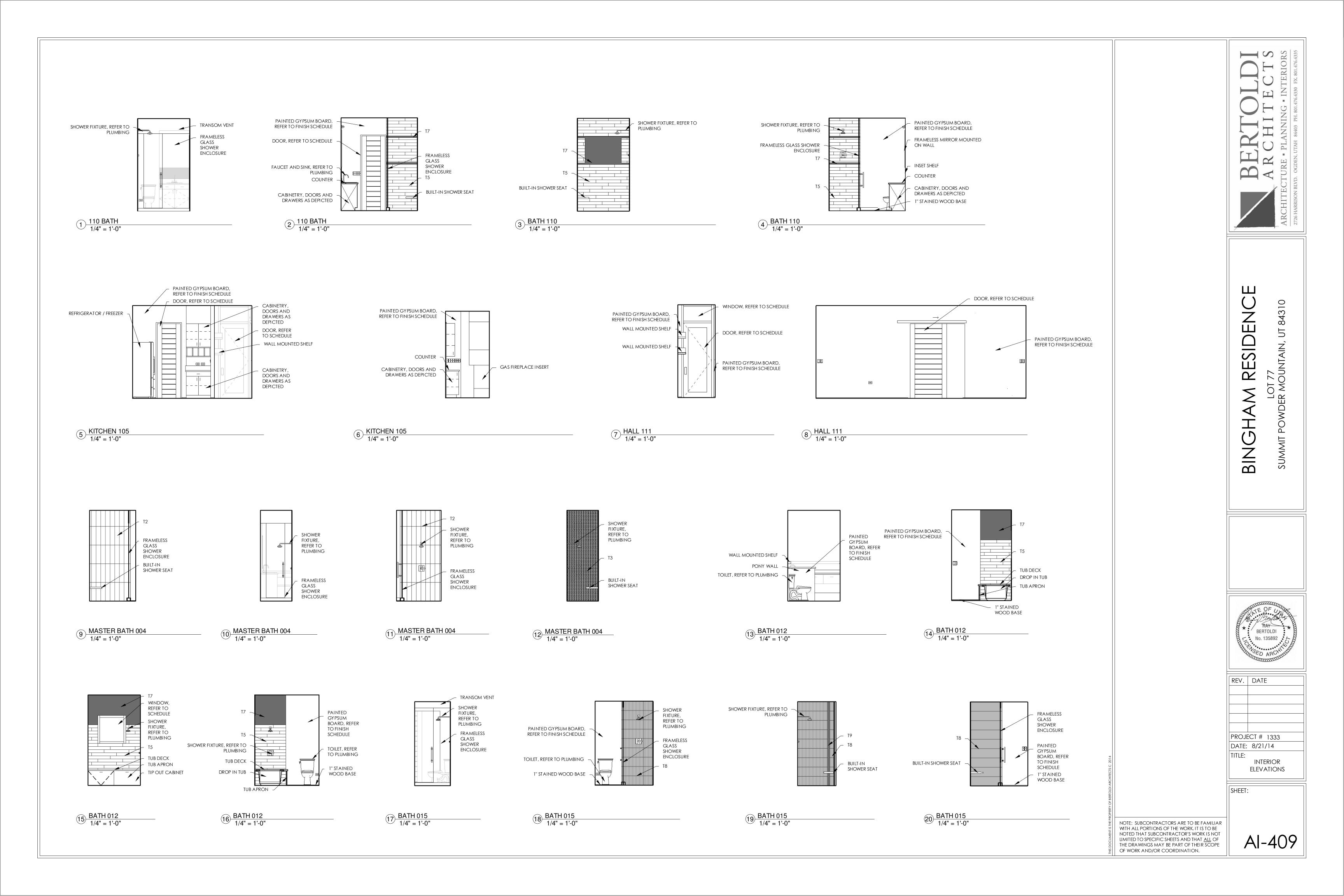
REFER TO FINISH SCHEDULE

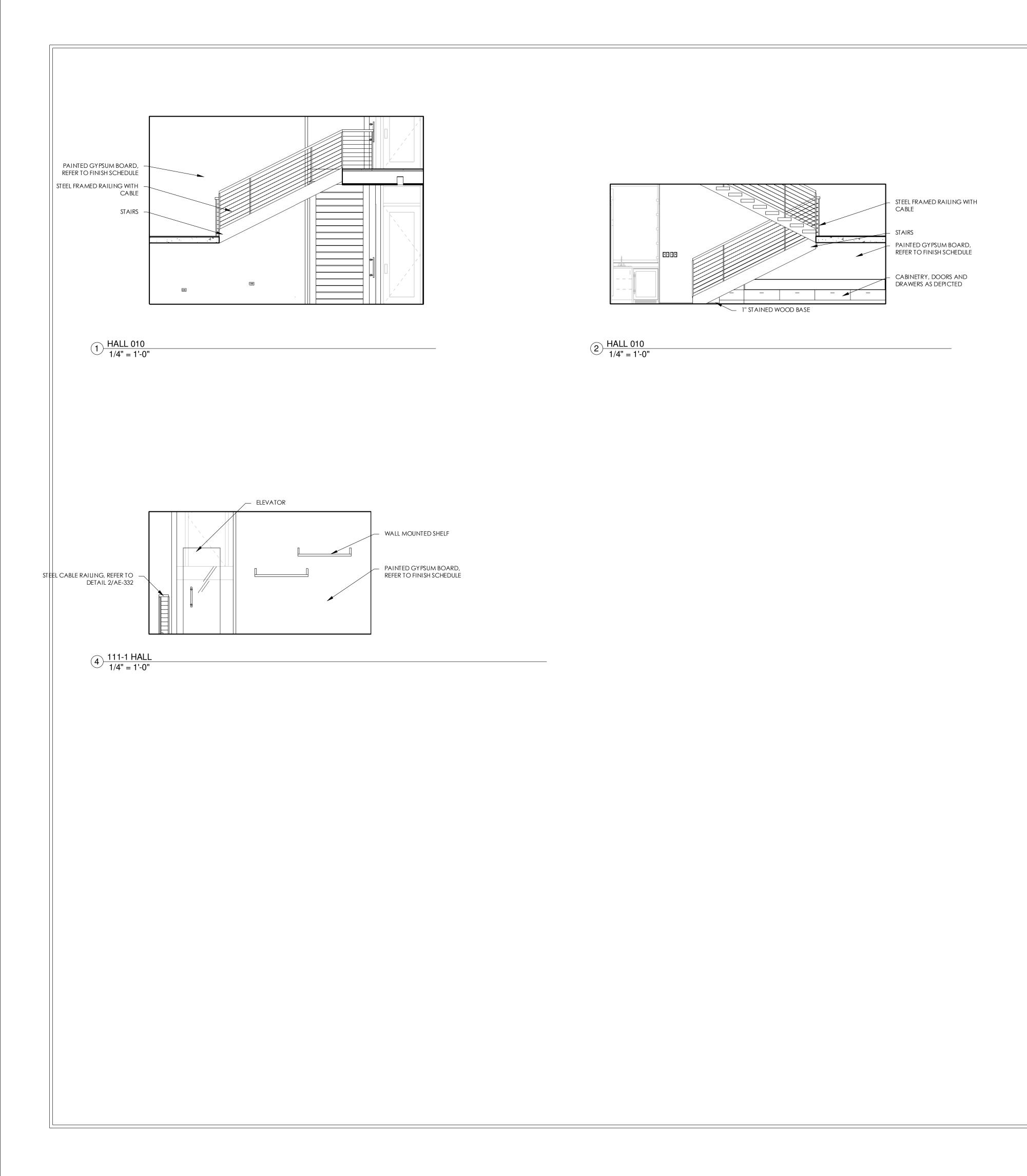
- 1" STAINED WOOD BASE

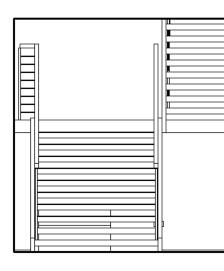
- PAINTED GYPSUM BOARD, REFER TO FINISH SCHEDULE



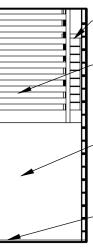








3 HALL 010 1/4" = 1'-0"

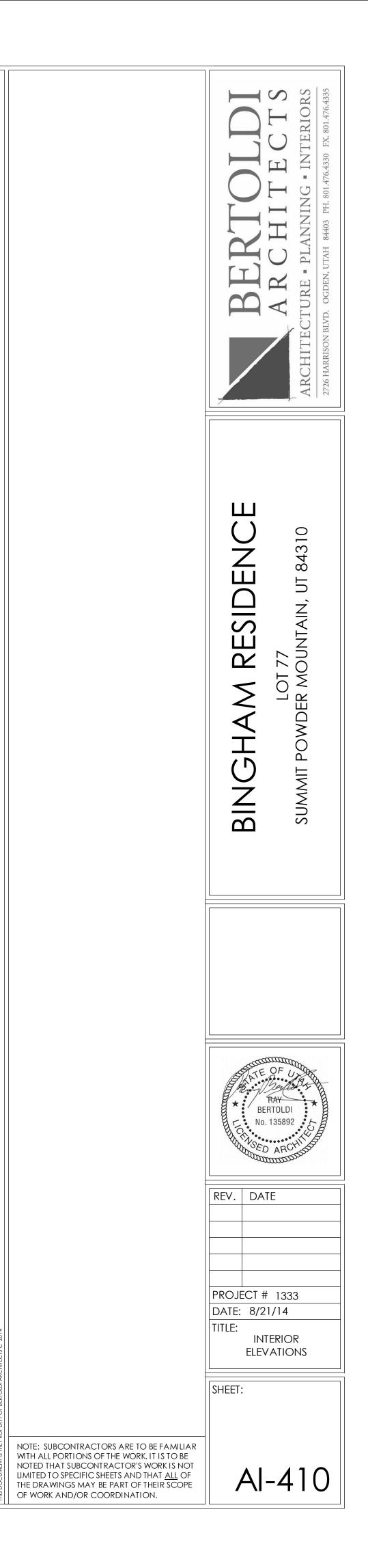


- STEEL FRAMED RAILING WITH CABLE

stairs

### - PAINTED GYPSUM BOARD, REFER TO FINISH SCHEDULE

1" STAINED WOOD BASE



### GENERAL

- 1. The structural notes are intended to complement the project specifications. Specific notes and details in the drawings shall govern over the structural notes and typical details 2. Typical details and sections shall apply where specific details are not shown.
- 3. The contractor shall verify all site conditions and dimensions. If actual conditions differ from those shown in the contract drawings, the contractor shall immediately notify the
- architect/engineer before proceeding with the fabrication or construction of any effected elements 4. Omissions or conflicts between the contract drawings and/or specifications shall be brought to the attention of the architect/engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirement as directed by the architect/engineer at no additional cost to the owner.
- 5. The contractor shall submit a written request to the architect/engineer before proceeding with any changes, substitutions or modifications. Any work done by the contractor before receiving written approval will be at the contractor's risk.
- 6. The contractor shall coordinate with all trades any items that are to be integrated into the structural system such as openings, penetrations, mechanical and electrical equipment, etc. Sizes and locations of mechanical and other equipment that differs from those shown on the contract drawings shall be reported to the architect/engineer.
- 7. The contractor shall provide adequate shoring and bracing as required for his method of erection. Shoring and bracing shall remain in place until final connections for the permanent members are completed. The building shall not be considered stable until all connections are completed. Walls shall not be considered self-supporting and shall be braced until the floor/roof system is
- 8. The contractor shall not cut or core any holes in concrete walls without prior review by the architect/engineer.
- 9. Site observations by BHB Consulting Engineers, P.C.'s field representative shall not be construed as approval of construction procedures nor special inspection. 10. Detailing and shop drawing production for structural elements will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevations, depressions, slopes, mechanical housekeeping pads, etc. are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural, mechanical and electrical
- 11. Review of shop drawing submittals by BHB Consulting Engineers, P.C. is for general compliance only and is not intended for approval. The shop drawing review shall not relieve the contractor from the responsibility of completing the project according to the contract documents.
- 12. Shop drawings made from reproductions of the contract drawings will be rejected unless the contractor signs a release agreement prior to the shop drawings being reviewed. 13. Only an authorized representative of BHB Consulting Engineers, P.C. may make changes to these contract drawings. BHB Consulting Engineers, P.C. shall not be held responsible or liable for any claims arising directly or indirectly from changes made without written authorization by an authorized representative of BHB Consulting Engineers, P.C.

### BASIS OF DESIGN

1.	Governing Building Code a. Risk Category	International Building Code 2012 II
2.	<ul> <li>Roof Snow Load</li> <li>a. Ground Snow Load</li> <li>b. Snow Importance Factor</li> <li>c. Snow Exposure Coefficient</li> <li>d. Thermal Exposure Coefficient</li> <li>e. Roof Snow Load</li> </ul>	$P_g = 263 \text{ psf}$ $I_s = 1.0$ $C_e = 1.0$ $C_t = 1.0$ $P_f = 0.7^*C_e \ ^*C_t \ ^*I_s \ ^*P_g = 184 \text{ psf plus Snow Drift}$
3.	Floor Live Loads a. Residential	40 psf
4.	$\begin{array}{llllllllllllllllllllllllllllllllllll$	$S_{D1} = 2/3 * F_V * S_1 = 0.275g$ ystem Wood Shear Walls
5.	Wind Loads	

a. Wind Velocity (3 Second Gust) 115 mph (Strength) 90 mph (Allowable (lw = 1.0))

 b. Exposure Type c. Internal Pressure Coefficient, GC<sub>pi</sub> +/-0.18 d. Topographic Factor, K<sub>zt</sub> 10 e. Components and Cladding Wind Force Table (psf; Strength Design)

Component					
Elevation	Effective Wind Area for Component (sq ft.)		sq ft.)		
above grade	10 sq ft.	20 sq ft.	50 sq ft.	100 sq ft.	500 sq ft
15	-38.6	-36.0	-32.6	-30.0	-23.9
20	-41.0	-38.2	-34.6	-31.8	-25.4
25	-43.0	-40.1	-36.3	-33.4	-26.7
30	-44.7	-41.7	-37.7	-34.7	-27.7
35	-46.1	-43.0	-38.9	-35.8	-28.6
40	-47.5	-44.3	-40.0	-36.8	-29.4
45	-48.6	-45.4	-41.0	-37.8	-30.2
50	-49.7	-46.4	-42.0	-38.6	-30.8
55	-50.7	-47.3	-42.8	-39.4	-31.5
60	-51.7	-48.2	-43.6	-40.1	-32.1

### FOUNDATION

1. Soils Report by IGES Dated: November 2012. Project No. 01628-003

- 2. Soil Bearing Pressure:2500 psf, on Compacted Fill. 3. Frost Protection: 42 inches minimum to bottom of footing.
- Contractor shall field verify that the footing elevations and final grades indicated on the plans will provide the minimum frost protection. The contractor shall notify the architect/engineer if there are any locations where the minimum frost protection might not be achieved prior to placing concrete.
- 4. Lateral Soil Pressure Fluid Equivalent Density. a. Active .. .. 40 pcf (retaining walls with level backfill) b. Active. .. 64 pcf (retaining walls with 2H:1V sloped backfill) c. At Rest .. 60 pcf (retaining walls with level backfill) d. At Rest .. 96 pcf (retaining walls with 2H:1V sloped backfill)
- e. Passive... .. 360 pcf 5. Coefficient of Friction .. 0.45

### EARTHWORK

- 1. All footings shall bear on compacted structural fill extending down to suitable natural material. 2. All footings shall bear on 2 feet minimum of compacted structural fill. See detail 2/S502.
- 3. Consult the project specifications and soils report for further earthwork requirements.

### CONCRETE

1. Materials, unless noted otherwise: ASTM C 33 a. Normal weight aggregates

	i.		e gradation for slabs and other designated concrete shall be op size aggregates ( $1\frac{1}{2}$ in.) or 8% - 22% for smaller top size $\frac{3}{4}$ in.) retained on each sieve below the top size and above
	ii.	Maximum Aggregate (1) 1/5 the narrowest	e Size shall be not be larger than: t dimension of the forms
	Deinfensi		lear spacing between bars
C.		d Bar Anchors (DBA)	ASTM 615 Grade 60 (Fy = 60 ksi) Use Grade 40 (Fy = 40 ksi) for field bent dowels with spacings indicated reduced by 1/3. ASTM A496
	Anchor R		ASTM A108
	Typical. Momen	, uno nt Frame Columns	ASTM F1554, Grade 36, with ASTM A563 heavy hex nuts and hardened washers Grade A ASTM F1554, Grade 55 (or 105) with ASTM A563 heavy hex nuts and hardened washers Grade A
f.	Admixtur i.		tures shall comply with ASTM C 260 (when used).
	ii. iii.	Calcium chloride sha Water-reducing adm used).	all not be added to the concrete mix. ixture shall comply with ASTM C 494/C 494M, Type A (when
	ÎV. V.		shall comply with ASTM C 494/C 494M, Type B (when used) retarding admixture shall comply with ASTM C 494/C 494M
	vi. vii.	High-range, water-re Type F (when used). High-range, water-l	educing admixture shall comply with ASTM C 494/C 494M reducing and retarding admixture shall comply with
a	viii.	Admixture manufactor compatibility all admi	/I Type G (when used). urer shall have ISO 9001 Quality Certification. To ensure ixtures shall be from the same manufacturer. n ASTM C-150 shall be used for all concrete. Cement source
-	shall rem	ain the same for the e	
i.	Fly Ash -	ASTM C618, Class F	-25% maximum cementitious content ials ratios shall meet the requirements of Table 4.3.1 o
	above gra	air entraining as recon ade and is exposed to	nmended by Table 4.4.1 of ACI 318. Concrete that extends freezing and thawing while moist shall be air-entrained.
Ι.		shall be embedded in	uct containing aluminum or any other material injurious to concrete.
	Interior F	ootings& Interior Four	
h	Classif	fication	
D.	Streng		
C.	Interior S	labs on Grade	
d.	Classif	•	F0, S0, P0, C0
	Classif	fication	5,000 psi F3, S0, P1, C2
e.		Concrete without Reinf gth	orcement 
	hours after	er concrete placemen	however, shall forms and shoring be removed in less than 24 t.
Cas a.	hours afte orcement s t-in-place Cast aga	er concrete placemen shall have the followin Concrete: inst and permanently	however, shall forms and shoring be removed in less than 24 t. g concrete cover: Clear Cover exposed to earth
Cas a.	hours afte orcement s t-in-place Cast aga Formed c #6	er concrete placemen shall have the followin Concrete inst and permanently concrete exposed to e 6 thru #18 bars	g concrete cover: exposed to earth
Cas a. b.	hours afte orcement s t-in-place Cast aga Formed c #6 #5 Concrete Slabs,	er concrete placemen shall have the followin Concrete: inst and permanently concrete exposed to e b thru #18 bars and smaller bars o not exposed to weath Walls, Joists; #11 bai	however, shall forms and shoring be removed in less than 24 t. g concrete cover: exposed to earth
Cas a. b. c.	hours afte orcement s t-in-place Cast aga Formed c #5 Concrete Slabs, Beams truction Joi Provide a	er concrete placemen shall have the followin Concrete: inst and permanently concrete exposed to e thru #18 bars and smaller bars	however, shall forms and shoring be removed in less than 24 t. g concrete cover: 
Cas a. b. c. 6. Consi a.	hours afte orcement s t-in-place Cast aga Formed c #6 #5 Concrete Slabs, Beams truction Jo Provide a construct otherwise approxim Control jo	er concrete placemen shall have the followin Concrete: inst and permanently concrete exposed to e b thru #18 bars o and smaller bars o not exposed to weath Walls, Joists; #11 bar s, Columns: Primary R ints, Control (Contract a formed and bevele tion joints including b e. In addition, all joi nately 1/4 inch. bints shall be installed	however, shall forms and shoring be removed in less than 24 t. g concrete cover: 
Cas a. b. c. c. c. a.	hours afte orcement s t-in-place Cast aga Formed of #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to o hours of t hours, de	er concrete placemen shall have the followin Concrete:	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
Cas a. b. c. c. S. Const a.	hours after orcement s t-in-place ( Cast aga Formed of #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to o hours, de cannot be cannot be tool shall i. Sa	er concrete placemen shall have the followin Concrete: inst and permanently concrete exposed to so o thru #18 bars and smaller bars and smaller bars and exposed to weath Walls, Joists; #11 bars s, Columns: Primary R ints, Control (Contract a formed and bevele tion joints including b e. In addition, all joi nately 1/4 inch. bints shall be installed n 1.25:1. Control joint operate the cutter on t the slab pour. For ear epending on weather e be used to complete aw cut a depth of 1/4 t	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
Cas a. b. c. 5. Const a. b.	hours afte orcement s t-in-place Cast aga Formed c #6 #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more thal okay to o hours of t hours, de cannot be tool shall i. Sa ii. To For interior	er concrete placemen shall have the followin Concrete:	however, shall forms and shoring be removed in less than 24 t. g concrete cover: 
Cas a. b. c. 5. Const a. b.	hours after orcement s t-in-place ( Cast aga Formed c #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to o hours of t hours, de cannot be tool shall i. Sa ii. Toc For interid or control any direct	er concrete placemen shall have the followin Concrete: inst and permanently concrete exposed to e 5 thru #18 bars 5 and smaller bars 6 not exposed to weath Walls, Joists; #11 bar s, Columns: Primary F ints, Control (Contract a formed and bevele tion joints including b e. In addition, all join tately 1/4 inch. bints shall be installed n 1.25:1. Control joint operate the cutter on t the slab pour. For ear epending on weather of e cut along the entire p be used to complete aw cut a depth of 1/4 t boled joints a depth of or concrete slabs-on-of l joints in slabs on gra tion, unless noted othe erings the contractor h	however, shall forms and shoring be removed in less than 24 t. g concrete cover: 
Cas a. b. c. c. a. b. c.	hours after orcement s t-in-place of Cast aga Formed of #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to of hours, de cannot be tool shall i. Sa ii. To For interirio any direct floor cove shall not	er concrete placemen shall have the followin Concrete:	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
Cas a. b. c. . Consi a. b. c.	hours after orcement st t-in-place ( Cast aga Formed of #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to o hours of th hours, de cannot bé tool shall i. To For interio or control any direct floor cove shall not truction	er concrete placemen shall have the followin Concrete:	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
Cas a. b. c. 5. Const a. b. c. c. c. b.	hours after orcement st t-in-place ( Cast aga Formed of #5 Concrete Slabs, Beams truction Jo Provide a construct otherwise approxim Control jc more that okay to o hours of th hours, de cannot be tool shall i. Sa ii. To For interition Use chai reinforce adequate placemer Concrete	er concrete placemen shall have the followin Concrete: inst and permanently concrete exposed to e 5 thru #18 bars a not smaller bars a not exposed to weath Walls, Joists; #11 bai s, Columns: Primary R ints, Control (Contract a formed and bevele tion joints including b e. In addition, all joi nately 1/4 inch. Dints shall be installed in 1.25:1. Control joint operate the cutter on t the slab pour. For ear epending on weather of be used to complete aw cut a depth of 1/4 t boled joints a depth of or concrete slabs-on-g l joints in slabs on gra tion, unless noted othe erings the contractor h exceed a distance of irs or other support ment bars prior to pla ally supported on prece it ob e mechanically of	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
Cas a. b. c. i. Const a. b. c. c. b. c.	hours after orcement s t-in-place of Cast aga Formed of #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to of hours of t hours, de cannot be tool shall i. Sa ii. To For interivi or control any direct floor cove shall not truction Use chai reinforcel adequate placemer Concrete Contracto inserts an	er concrete placemen shall have the followin Concrete:	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
Cas a. b. c. 5. Const a. b. c. c. d.	hours after orcement station-place of Cast aga Formed of #5 Concrete Slabs, Beams truction Joi Provide a construct otherwise approxim Control jo more that okay to of hours of th hours, de cannot bé tool shall i. To For interior or control any direct floor cove shall not truction Use chai reinforcet adequate placemer Concrete	er concrete placemen shall have the followin Concrete:	however, shall forms and shoring be removed in less than 2- t. g concrete cover: 
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bottom of the footing. Footing dowels (#8 bars and smaller) with hooks need not extend more than 20" into footings. Horizontal wall reinforcing shall be continuous through construction and control joints. See detail 8/S501 for reinforcing around miscellaneous openings (8" to 36" wide). For openings wider than 36", contact the engineer. All recesses that interrupt reinforcing shall be reinforced the same as an opening.

## GENERAL STRUCTURAL NOTES

## POST-INSTALLED ANCHORS

1. Adhesive Anchors

- a. For concrete, the adhesive shall be HIT RE 500-SD (ICC-ES ESR-2322) by Hilti Inc., HIT-HY 200 with Safe Set™ Technology (ICC-ES ESR-3187) by Hilti Inc., Powers PE1000 + (ICC-ES ESR-2583) by Powers Fasteners Inc, SET-XP (ICC-ES ESR-2508) by Simpson Strong-Tie or AT-XP (IAPMO-UES ER-263) by Simpson Strong-Tie Inc..
- b. Follow all of the manufacturer's recommendations and certification testing reports fo adhesive installation. c. Alternative epoxies may be used if an ICC-ES ESR or IAPMO-UES ER approval for use
- in cracked concrete is submitted to the structural engineer prior to use. 2. Mechanical Anchors
- a. For concrete, the mechanical anchor shall be Kwik Bolt TZ (ICC-ES ESR-1917) by Hilti Inc., Strong-Bolt 2 (ICC-ES ESR-3037) by Simpson Strong-Tie Inc. or Power-Stud+ SD1 (ICC-ES ESR-2818) by Powers Fasteners Inc. b. Follow all of the manufacturer's recommendations and certification testing reports for
- mechanical anchor installation. c. Alternative mechanical anchors may be used if an ICC-ES ESR or IAPMO-UES ER
- approval for use in cracked concrete is submitted to the structural engineer prior to use. 3. Screw Anchors a. For concrete, the screw anchors shall be Titen HD (ICC-ES ESR-2713 for concrete only ) by Simpson Strong-Tie, or Wedge-Bolt + (ICC-ES ESR-2526 for concrete only ) by Powers Fasteners Inc or Kwik HUS-EZ (ICC-ES ESR-3027 for concrete only ) by Hilti Inc.
- b. Follow all of the manufacturer's recommendations and certification testing reports for screw anchor installation. c. Alternative screw anchors may be used if an ICC-ES ESR or IAPMO-UES ER approval for use in cracked concrete is submitted to the structural engineer prior to use.
- 4. Powder Actuated Fasteners a. For fasteners driven into steel, the fastener shall be X-U P8 TH Universal Knurled Shank Fastener (ICC-ES ESR-2269) by Hilti Inc., PDPA (ICC-ES ESR-2138) by Simpson
- Strong-Tie Inc. or 8mm Head Spiral CSI Drive Pin (ICC-ES ESR-1995) by Powers Fasteners Inc. b. For fasteners driven into concrete, the fastener shall be X-U Universal Knurled Shank Fastener (ICC-ES ESR-2269) by Hilti Inc., PDP or PDPA (ICC-ESR-2138) by Simpson
- Strong-Tie Inc. or 8mm Head Spiral CSI Drive Pin (ICC-ES ESR-1995 for concrete only) by Powers Fasteners Inc. c. Follow all of the manufacturer's recommendations and certification testing reports for
- powder actuated fastener installation. d. Alternative powder actuated fasteners may be used if an ICC-ES ESR or IAPMO-UES ER approval for use in cracked concrete is submitted to the structural engineer prior to use.

ASTM A992 (50 ksi)

ASTM A500 (46 ksi) Grade B

ASTM F1554, Grade 55 (or 105) with ASTM A563 heavy

hex nuts and ASTM F436 hardened washers Grade A

ASTM A36 (36 ksi)

ASTM A496

ASTM A108

ASTM A325 with ASTM A563 nuts and

ASTM C 1107

## STRUCTURAL STEEL

- 1. Material: a. Wide Flanges Section b. All Thread Rods, Other Shapes & Plates
- c. Square or Rectangular HSS d. Deformed Bar Anchors (DBA)
- e. Headed Stud Anchors (HSA) f. Non-Metallic Shrinkage Resistant Grout
- a. Anchor Rods ASTM F1554, Grade 36, with ASTM A563 heavy hex Gravity Columns nuts and ASTM F436 hardened washers Grade A
- Moment Frame Columns
- h. Bolted Connections:
- ASTM F436 hardened washers. i. All structural steel shapes and plates listed below which are part of the Seismic Load Resisting System shall be tested in accordance with ASTM A6, Supplementary Requirement S30. Charpy V-Notch Impact Test for Structural Shapes - Alternate Core Location. The impact test shall meet a minimum average value of 20 ft-lbs or greater absorbed energy at 70 degrees Fahrenheit i. Shapes: with flanges 1 1/2" or thicker ii. Plates: 2" and thicker
- iii. Test Frequency: Each heat. 2. Fabrication and construction shall comply with the latest edition of the following Codes and
- Standards: a. American Institute of Steel Construction (AISC), "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings," with "Commentary". b. AISC "Code of Standard Practice" excluding the following: Section 3.2, Section 4.4, Section 4.4.1, c. AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts"
- d. American Welding Society (AWS), Structural Welding Code (specific items do not apply when they conflict with the AISC requirements). e. AISC "Seismic Provision for Structural Steel Buildings"- ANSI/AISC 341
- Weldin a. Field weld flags that have been put in these documents are for suggestion only. The contractor has the option to substitute shop welding for field welding or vice versa. The steel fabrication and steel erection drawings must clearly distinguish between shop welds
- and field welds prior to any work being performed. b. Steel fabricators shall indicate the shop welds that are excluded from their bids. Steel erectors shall indicate the field welds that are excluded from their bids. It is the responsibility of the contractor to coordinate shop welding and field welding with the appropriate subcontractors. c. All welding and cutting shall be performed by AWS certified welders.
- d. Use E-70 XX or as noted otherwise. e. All intersecting steel shapes which are not bolted shall be connected by a fillet weld all around, unless noted otherwise. Where fillet weld sizes are not shown they shall be 1/16" less than the thinnest of the connected parts for thicknesses 1/4" and larger. Fillet welds on plates less than 1/4" shall be of the same size as the thinnest of the connected part. f. Reinforcing Bars: Do not weld rebar. Do not substitute reinforcing bars for deformed bar
- anchors (DBAs), machine bolts, or headed stud anchors (HSAs). g. Do not weld anchor bolts, including "tack" welds. h. Headed Stud Anchors (HSAs) welding and deformed bar anchor welding shall conform to
- the manufacturer's specifications. i. Where welds are designated Demand Critical for moment frames, they shall be made with a filler metal capable of providing a minimum Charpy V-Notch (CVN) toughness of 20 ft-lb (27 J) at minus 20 degrees Fahrenheit and 40 ft-lb at 70 degrees Fahrenheit. Acceptable
- electrodes include E70TG-K2, E71T-8 and E71T-1 j. Special Provisions for full penetration welds used in moment frames. Welding methods, procedures and quality control shall comply with ANSI/AWS D1.1 (Latest Edition) and the following:
- i. Tack weld quality comply with Section 5.18 ii. Arc Strikes, gouges and other imperfections within or adjacent to the joint, shall be
- repaired or removed. iii. Preheat, and interpass requirements as outlined in Section 5.6 or per the electrode
- manufacturer's guidelines. iv. Use weld tabs at beam flange connections; after welding, remove the weld tabs and
- finish to a smooth contour per Section 5.31. v. Backing bars shall be removed from the beam bottom flange connections to columns. The root of the weld shall be back gouged to sound metal to remove all slag and cracks. Weld the back gouged region and finish welding using a
- reinforcing fillet weld, according to Section 5.10.4. vi. Backing bars need not be removed from the beam top flange connections to columns provided that the backing bars are 1/4" thick or less and are welded to the column flange with a continuous fillet weld for the entire length of the backing bar.
- vii. Unrepaired cracks, gouges, grooves and notches will not be permitted in the joint 4. Reduced Beam Special Moment Resisting Frames
- a. The reduced section shall be formed by means of appropriate mechanically guided thermal cutting process. Freehand thermal cutting shall not be used. b. The cutting equipment shall be so adjusted and manipulated as to avoid cutting beyond
- (inside) the prescribed lines. c. The roughness value of the finished cut shall not exceed 250 per ANSI/.ASME B46.1
- parallel to the flange and 1000 perpendicular to the flange. d. The radius cut shall be free of notches and gouges. Rigging and erection practices shall be performed so as to protect the radius cut region from damage.
- 5. Bolted Connections: a. Use ASTM A325N bolts for steel to steel connections, as noted herein or as noted on the drawings. A325N bolts shall be used in connections for simple span framing and beam (or girder) to bearing plate connections. Tighten bolts to a snug tight condition. See sheet S-
- b. Use hardened washers beneath the turned element of all bolts or nuts. Use hardened beveled washers, to compensate for the lack of parallelism, where the outer face of the bolted parts has a slope greater than one in twenty with respect to the plane normal to the bolt axis. At oversized holes hardened washers or plates shall conform with ASTM F-436 and shall completely cover the slot after installation. c. Where a steel to steel beam connection is not shown, provide a standard AISC framed
- connection for one half the total uniform load capacity of the beam for the span and steel specified. d. Bolts, nuts and washers shall not be reused.
- 6. Provide full-depth web-stiffener plates at each side of all beams at all bearing points. Stiffener plates shall be the thickness called out below unless noted otherwise and shall be welded both sides with fillet welds all around: STIFFENER THICKNESS WELD SIZE FLANGE WIDTH

	STITLENER THICKNESS	
Less than 8 1/4"	1/4"	3/16"
8 1/4" to 12 1/4"	3/8"	1/4"
12 1/4" to 16 ½"	1/2"	5/16"
16 ½" to 20 ¾"	5/8"	3/8"

#### Shank Diameter Min. Penetration into Support Member <u>Nail Size</u> 0.148" 1.63" 10d 0.162" 1.75" ii. Fastener sizes other than those listed above are not permitted without prior written approval from the engineer. iii. All fasteners, including nails, for preservative-treated and fire retardant-treated wood shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper iv. Bolts shall be ASTM A36 or equal with ASTM A563 heavy hex nuts and ATSM F436 hardened washers, Grade A, unless noted otherwise. b. Framing Lumber i. All framing lumber shall be # 2 Douglas Fir-Larch or better unless noted otherwise. c. Engineered Lumber i. Glu-lam beams shall be Douglas-fir combination number 24F-V4 except cantilevered and continuous beams shall be combination number 24F-V8. Glu-lam columns shall be DF combination symbol #9 for columns. ii Wood I-joists shall be T.II as manufactured by Trus-Joist Corporation BCI as manufactured by Boise Cascade Corporation. Red-I as manufactured by RED Built. SolidStart I-Joists by LP Corporation, RFPI by Roseburg. iii. Laminated Veneer Lumber (LVL) shall be Micro-Lam 1.9E by Trus-Joist Corporation, Versa-Lam 2.0E Boise Cascade Corporation, RedLam 2.0E by RED Built, SolidStart LVL 2.0E by LP Corporation or RigidLam 2.0E by Roseburg. iv. Rimboard shall be TimberStrand LSL Rim Board by Trus-Joist Corporation, Versa-Rim by Boise Cascade Corporation, SolidStart LSL by LP Corporation or OSB RigidRim RimBoard by Roseburg (Rimboard shall be 1 1/8" thick, minimum) v. All required blocking bridging and bracing shall be provided by joist manufacturer and installed by contractor. All penetrations through the joists shall be done per manufacturers' recommendations and requirements. d. Sheathing i. Wood sheathing shall meet the minimum performance criteria given in APA PRP-108, Performance Standards and Policies for Structural-Use Panels, Form E445, Voluntary Product Standard PS 1 & PS 2 and Performance Standard for Wood-Based Structural-Use Panels, Form S350, and Structural Plywood, Form H860.

i. Nails used for all framing anchors, post caps, hold downs, column bases, etc. shall

be standard common with the following properties:

WOOD

1. Materials:

a. Fasteners

40/20 Roof (19/32 inch thick) 2. All wood in contact with concrete, masonry or soil shall be pressure treated or be redwood.

rating, unless noted otherwise,

48/24

Panels shall be unsanded plywood or oriented strand board (OSB) and shall be

interior grade with exterior glue and have the minimum following thickness and span

Walls (7/16 inch thick)

Floors (23/32 inch thick)

- 3. General framing and carpentry shall be connected as per "Minimum Nailing Schedule" on sheet S-S602 unless noted otherwise. 4. All framing anchors, post caps, hold downs, column bases, etc. shall be provided by Simpson
- Strong-Tie, USP Structural Connectors or approved equal. If Simpson isn't used, the contractor shall provide a comparison list. 5. Wood I-joist connection hangers are based on the joist manufacturer indicated on the plans. If the contractor elects to substitute the wood I-joists for a another manufacturer, the contractor
- shall submit a revised hanger list, prior to construction, that includes the following information: a. Specified hanger indicated on these plans b. Requested substitution hanger c. Allowable capacity of the requested substitution hanger
- 6. Provide solid shaped blocking at least 2 in (nominal) thick and full depth of joist at ends and at each support of joist. Attach blocking between joists to the wood top plate of the wall with one Simpson "A35" framing anchor per each piece of blocking and fill all holes in the framing anchor
- with 8-d x 1-1/2" nails (12 nails per A35). 7. Provide approved bridging at 8'-0" o.c. maximum between joist end supports. 8. Built-up beams of 2X-member 12 in. or less in depth shall be spiked together with not less than 16-d spikes at twelve-inch (12 in.) centers, staggered. If the depth of beam is more than twelve inches (12 in.), the members shall be connected together with 1/2" Ø bolts @ 24 in. o.c. staggered. Bolts shall be placed 1/4 the depth of the member from the top and bottom of the
- 9. All walls shall have a minimum of two top plates. Splices in top plates shall be staggered a minimum of four feet from the nearest splice in adjoining top plate. 10. Provide a double joist under parallel partitions.





### SPECIAL INSPECTION AND QUALITY ASSURANCE

Special inspection and quality assurance, as required by section 1704 and 1705 of the 2012 IBC, shall be provided by an independent agency employed by the owner unless waived by the building official. The contractor shall coordinate and cooperate with the required inspections. All testing and inspection reports shall be sent within 24 hours of the test to the architect, engineer, building official and contractor for review. Special inspection during fabrication is not required if the fabricator is registered and approved to perform such work with out special inspection. Items requiring special inspection and quality assurance are:

- Soils (2012 IBC Section 1705.6)
   a. Prior to placement of the prepared fill, the special inspector shall determine that the site has been prepared in accordance with the soils report.
- b. During placement and compaction of the fill material, the special inspector shall determine that the material being used and the maximum lift thickness comply with the
- soils report.
  c. The special inspector shall determine that the in-place dry density of the compacted fill material complies with the soils report.
  i. Continuous Footing Backfill: At each compacted backfill layer, at least one test
- for each 40 linear feet or less of wall length, but no fewer than 2 tests. ii. Spot Footing Backfill: Minimum of one compaction test for each lift for each spot
- footing. d. See specifications for further requirements.
- Concrete (2012 IBC Section 1705.3 and Section 1705.12.1) The following concrete elements require special inspection:

All concrete footings, all concrete walls including foundation walls, interior concrete slab-ongrade, concrete piers.

### a. Concrete placement

- i. Continuous special inspection shall be provided
   ii. Cylinders, slump, temperature and air-entrainment shall be done for every 50 cubic yards or each day's production if the day's production is less than 50 cubic yards
- iii. Protection of concrete during cold and hot weather
- iv. See specifications for further concrete testing requirements.b. Bolts installed in concrete
- Periodic special inspection shall be provided for all bolts installed prior to and during concrete placement.
   Embeds and Inserts installed in concrete
- Periodic special inspection shall be provided for all embeds and inserts installed prior to and during concrete placement.
- d. Concrete reinforcing steel placement

   Periodic special inspection shall be provided for all reinforcing prior to concrete
   placement.
- Structural welding (2012 IBC section 1705.2 and section 1705.11.1 and section 1705.12.2 and AISC 360-10 Chapter N and AISC 341-10 Chapter J)

   Inspection Tasks Prior to Welding
  - i. Inspection tasks required to be performed on a random basis (operations need not be delayed pending these inspections):
  - Welding procedures specifications and manufacturer certifications for welding consumables shall be available
  - ii. Inspection tasks required to be performed for each welded joint or member:

     Material identification (type/grade)
     Malder identification extern
  - Welder identification system
     Fit-up of groove welds including joint geometry, joint preparation,
  - dimensions, cleanliness, tacking and backing type and fit 4. Configuration and finish of access holes
  - 5. Fit-up of fillet welds including dimensions, cleanliness and tacking
  - 6. Check welding equipment
- b. Inspection Tasks During Welding

   Inspection tasks required to be performed for each welded joint or member:
  - Use of qualified welders
     Control and handling of welding consumables including packaging and
  - exposure control 3. No welding over cracked tack welds
  - Environmental conditions including wind speed within limits and precipitation and temperature
     WPS followed including settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature (min./max.) maintained, proper position (F, V, H, OH)
- Welding techniques including interpass and final cleaning, each pass within profile limitations, each pass meets quality requirements
   c. Inspection Tasks After Welding
- i. Inspection tasks required to be performed on a random basis (operations need not be delayed pending these inspections):
- Welds cleaned
   Inspection tasks required to be performed for each welded joint or member:
- Size, length and location of welds
   Welds meet visual acceptance criteria such as: crack prohibition,
- weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut and porosity
- Arc strikes, k-area, backing removed and weld tabs removed (if required), repair activities
   Document acceptance or rejection of welded joint or member
- Welding and testing for Demand Critical Welds (2012 IBC section 1705.11.1 and section 1705.12.2 and AISC 360-10 Chapter N and AISC 341-10 Chapter J)
   Bess metal tisless the 11/2" when subjected to through thiskness weld shrinkers
- a. Base metal thicker than 1-½", when subjected to through thickness weld shrinkage strains shall be ultrasonically inspected for discontinuities directly behind such welds
- and three inches above and below the weld after joint assembly completion.b. Any material discontinuities shall be accepted or rejected on the basis of the defect rating in accordance with the IBC Standards as it refers to the testing in A.W.S. D1.1,
- Chapter 6. All deficient welds shall be corrected and tested at no additional cost to the owner.

 Welding and testing for Ductile Moment Resisting Steel Frames (2012 IBC section 1705.2 and section 1705.11.1 and section 1705.12.2)
 a. Welded connections between the primary members of Special Moment Resisting Special Moment Resisting Special Moment Resisting Special Moment Resisting

- Space Frames (SMRSF) shall be tested for compliance according to 2012 IBC section 1705.2 and Appendix Q5 of AISC 341. Special Inspection shall be done by a qualified testing inspector. As a minimum, the testing shall include the following:
- b. All complete penetration groove welds contained in joints and splices shall be tested 100 percent either by ultrasonic testing or by radiography.
- c. Partial penetration groove welds when used in column splices shall be tested either by ultrasonic testing or radiography. A minimum of 50% of these welds shall be tested.
- d. Base metal thicker than 1-½", when subjected to through thickness weld shrinkage
- strains shall be ultrasonically inspected for discontinuities directly behind such welds and three inches above and below the weld after joint assembly completion.
- e. Any material discontinuities shall be accepted or rejected on the basis of the defect rating in accordance with the 2012 IBC Standards as it refers to the testing in A.W.S. D1.1, Chapter 6. All deficient welds shall be corrected and tested at no additional cost to the owner.
- 6. Protected Zone Inspection (2012 IBC section 1705.11.1 and 1705.12.2 and AISC 360-10 Chapter N and AISC 341-10 Chapter J)

   a. Protected zones for special moment frames shall be periodically inspected to ensure no
- holes and/or unapproved attachments have been made by the contractor.b. Shop drawings shall designate that protected zones are to be painted or marked prior to arrival in the field for easy recognition.
- High Strength bolted connections (2012 IBC section 1705.2.1, section 1705.11.1 and section 1705.12.2 and AISC 360-10 Chapter N and AISC 341-10 Chapter J)

   a. Inspection Tasks Prior to Bolting
  - i. Inspection tasks required to be performed on a random basis (operations need not be delayed pending these inspections):
    - Manufacturer's certifications available for fastener materials
       Fasteners marked in accordance with ASTM requirements
    - Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)
    - 4. Proper bolting procedure selected for joint detail5. Connecting element, including the appropriate faying surface condition
  - and hole preparation, if specified, meet applicable requirements
    6. Proper storage provided for bolts, nuts, washers and other fastener components
  - ii. Inspection tasks required to be performed for each bolted joint or member:
     1. Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used
- b. Inspection Tasks During Bolting

   Inspection tasks required to be performed on a random basis (operations need not be delayed pending these inspections):
- Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required.
   Joint brought to the snug-tight condition prior to the pretensioning
  - operation 3. Fastener component not turned by the wrench prevented from rotating
- Fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges
   Inspection Tasks After Bolting
- i. Inspection tasks required to be performed for each bolted joint or member:
   1. Document acceptance or rejection of bolted connection

- Wood diaphragms and shear walls (2012 IBC Sections 1704.2, 1705.10.1 and 1705.11.2)

   Periodic special inspection shall be provided for all wood diaphragms and shear walls with nail spacing of 4 inches or less o/c. The special inspector shall verify wood panel sheathing, grade, thickness and nominal size of framing members, adjoining panel edges, nailing, bolting, anchoring (including hold downs) and other fastening of components within the lateral force resisting system.
- 9. Post Installed Anchors (2012 IBC Section 1705.1.1) a. Epoxy Anchors
- Special inspection shall be performed per manufacturer's requirements and approved ICC-ES reports noted in Post-Installed Anchor section of the General Structural Notes prior to installation of epoxy and anchor rod.
   Mechanical Anchors and Screw Anchors
- Special inspection shall be provided per manufacturer's requirements and approved ICC-ES reports noted in POST INSTALLED ANCHOR section of the General Structural Notes prior to installation of mechanical or screw anchor.
   Architectural Components (2012 IBC Sections 1705.11.5 and 1705.11.7)
- a. Periodic special inspection is required for exterior cladding when located in Seismic Design Categories D, E and F.
   i. Inspection shall include attachments of exterior metal clad fastening systems and
- drift clips.
  b. Periodic special inspection is required for erection and fastening of interior and exterior nonbearing walls when location in Seismic Design Categories D, E and F.
  i. Inspection shall include verification of appropriate materials, fasteners and attachment at commencement of work and at completion. (Not required if <30 feet or for interior walls < 15 psf.)</li>

## SITE OBSERVATIONS BY STRUCTURAL ENGINEER

Site observations, as required by IBC section 1704, shall be done by the Engineer of Record or an approved subordinate at the stages of construction listed below. The contractor shall notify the engineer when he has reached the construction stage listed below and before the work to be observed is covered up, walled in or becomes otherwise hidden from view or in-accessible to any necessary corrections. At the conclusion of the project, the structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that to the best of the structural observer's knowledge have not been resolved (See 1704.1).

1. No structural observations are required by code.

### DEFERRED SUBMITTALS

For the purpose of this section, deferred submittals are defined as per section 107.3.4.1 of the IBC. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building. Deferred structural submittals for this project are:

1. None

## LEGEND OF MARKS AND ABREVIATIONS

AB	ANCHOR BOLT(S)	KLF	KIPS
ABV ALT	ABOVE ALTERNATE	KSF	KIPS
APPROX ARCH	APPROXIMATE ARCHITECT(URAL)	LBS LF	POU LINE
BLDG	BUILDING	LLH LLV	LON LON
BLW BM	BELOW BEAM	LSH LSV	LON LON
B.N. BOT	BOUNDARY NAILING BOTTOM	LVL	LAM
BRG	BEARING	MAX	MAX
BTWN	BETWEEN	MECH MF-X	MEC
CC. C.J.	CENTER-TO CENTER CONST/CONTROL JOINT	MFR MIN	MAN MINI
	COLUMN CONCRETE	MISC	MISC
CONST CP-x	CONSTRUCTION CONCRETE PIER	NIC NTS	NOT NOT
CRW-x CTR	CONCRETE RETAINING WALL CENTER	O.C.	ON
CW-x	CONCRETE WALL	O.F. OPNG	OUT OPE
DB DBA	DECK BEARING DEFORMED BAR ANCHOR	OPP	OPP
DBE DBL	DECK BEARING ELEVATION DOUBLE	PAF PCF	POV POU
DET DIA	DETAIL DIAMETER	PL PLF	PLA <sup>-</sup> POU
DIM	DIMENSION DOWN	PNL PSF	PAN POU
DWG DWL	DRAWING DOWEL	PSI PT	POU
EA	EACH	FI	FOI
E.N. E.F.	EDGE NAILING EACH FACE	REINF REQD	REIN REQ
E.J.	EXPANSION JOINT	R.D. RTU	ROC
			ROC
EQUIP EQ	EQUIPMENT EQUAL	SBP-x SCW	STE
E.W. EXT	EACH WAY EXTERIOR	SC-x SCP-x	STE STE
FC-x	CONTINUOUS FOOTING MARK	SHT SI	SHE SPE
F.D. FDN	FLOOR DRAIN FOUNDATION	SIM SMU	SIMI SUS
F.F. F.N.	FINISHED FLOOR FIELD NAILING	SOG SQ	SLA SQU
FR-x FS-x	RECTANGULAR FOOTING MARK SQUARE FOOTING MARK	STAG STD	STA STA
FT FTG	FOOT FOOTING	STL STR	STE STR
FTS-x	THICKEN SLAB MARK	STS	SEL
GA GALV	GAUGE GALVANIZED	T&B TEMP	TOP TEM
GLB GSN	GLU-LAM BEAM GENERAL STRUCTURAL NOTES	THDS T.O.	THR
HORIZ	HORIZONTAL	TOC	TOP
HSA HT	HEADED STUD ANCHOR HEIGHT	TOF	TOP
ICC	INTERNATIONAL CODE COUNCIL	TOW TYP	TOP TYP
IBC I.F.	INTERNATIONAL BUILDING CODE INSIDE FACE	UNO	UNL
IN.	INCH		
INT JT		VERT W/	VER
JST	JOINT JOIST	WT	WITI
k	KIP(S) = 1000 POUNDS	WWF WWM	WEL WEL

F iF	KIPS PER LINEAL FOOT KIPS PER SQUARE FOOT
S H V H V L	POUNDS LINEAL FOOT LONG LEG HORIZONTAL LONG LEG VERTICAL LONG SIDE HORIZONTAL LONG SIDE VERTICAL LAMINATED VENEER LUMBER
AX ECH F-X FR N SC	MAXIMUM MECHANICAL MOMENT FRAME MANUFACTURER MINIMUM MISCELLANEOUS
C S	NOT IN CONTRACT NOT TO SCALE
C. F. PNG PP	ON CENTER OUTSIDE FACE OPENING OPPOSITE
F F IL F	POWER-ACTUATED FASTENER POUNDS PER CUBIC FOOT PLATE POUNDS PER LINEAL FOOT PANEL POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POINT
EINF EQD D. U	REINFORCING REQUIRED ROOF DRAIN ROOF TOP UNITS
P-x ≫W >-x P-x P-x IT MU DG AG D L R S	STEEL BASE PLATE MARK SEISMIC CRITICAL WELD STEEL COLUMN MARK STEEL CAP PLATE MARK SHEET SPECIAL INSPECTION SIMILAR SUSPENDED MECHANICAL UNITS SLAB-ON-GRADE SQUARE STAGGERED STANDARD STEEL STRUCTURAL SELF TAPPING SCREWS
B MP IDS DC DD DF SS WW P	TOP AND BOTTOM TEMPERATURE THREADS TOP OF TOP OF CONCRETE TOP OF DECK TOP OF FOOTING TOP OF STEEL TOP OF WALL TYPICAL
10	UNLESS NOTED OTHERWISE
RT	VERTICAL
r NF NM	WITH WALL THICKNESS WELDED WIRE FABRIC WELDED WIRE MESH



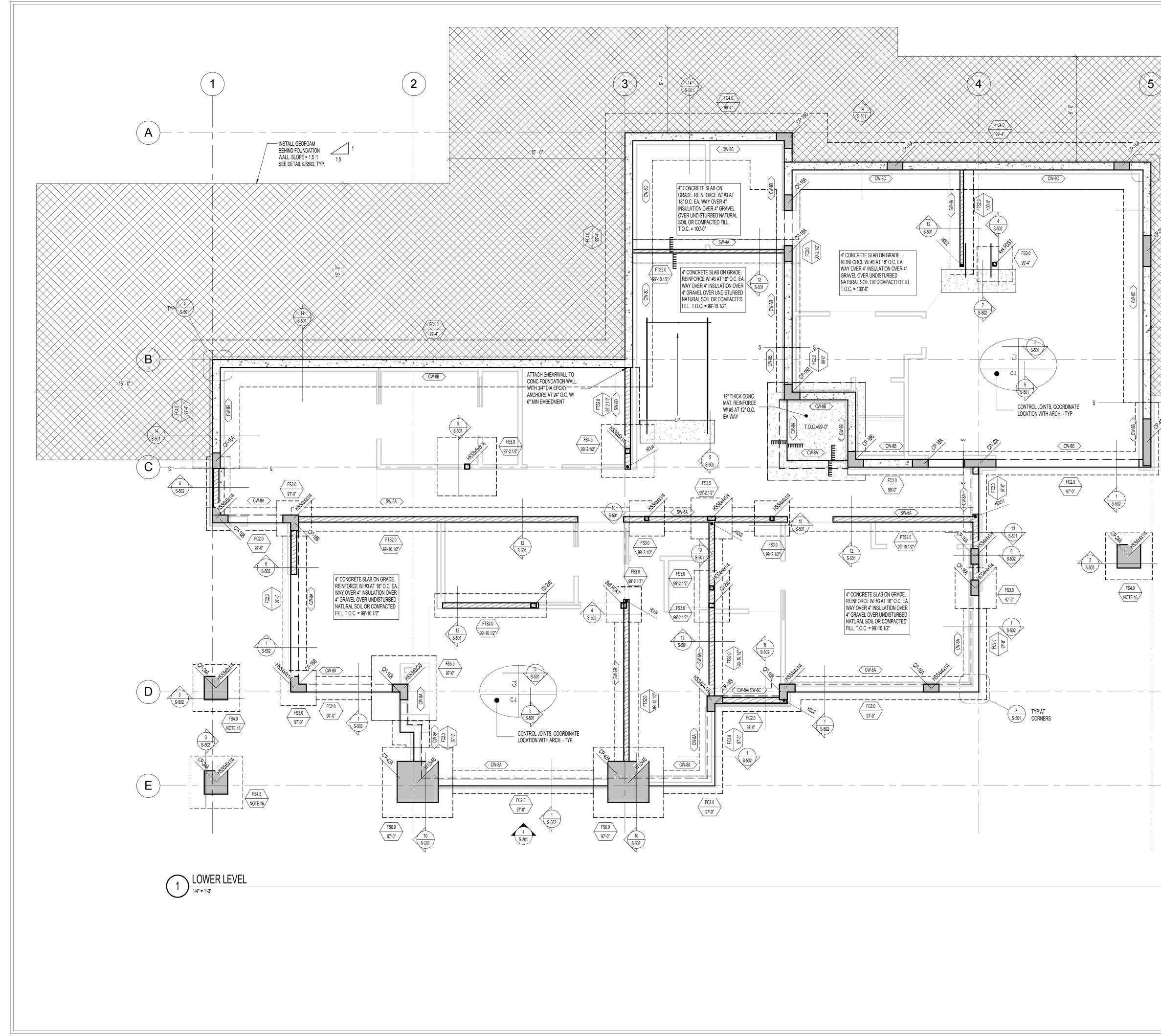
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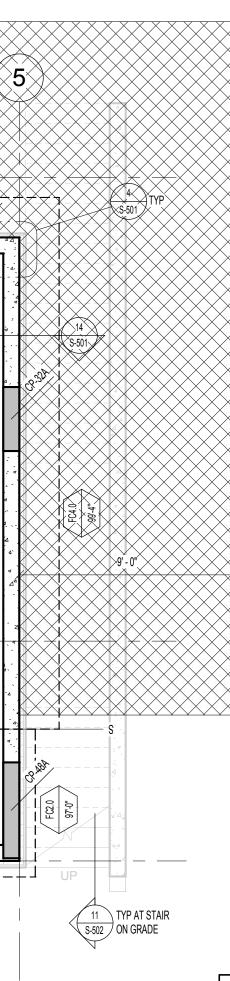
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PROJE	ECT # 14336
DATE:	08/21/14
TITLE:	GENERAL
	STRUCTURAL

NOTES

SHEET:





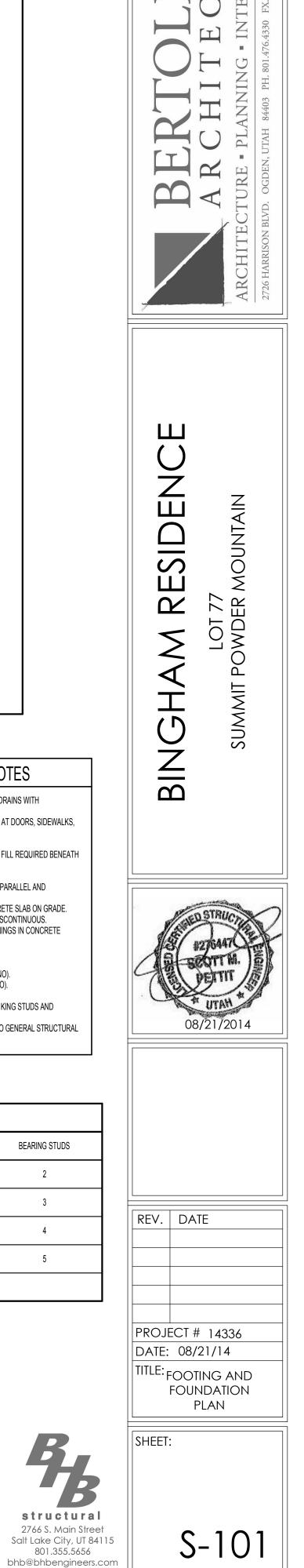


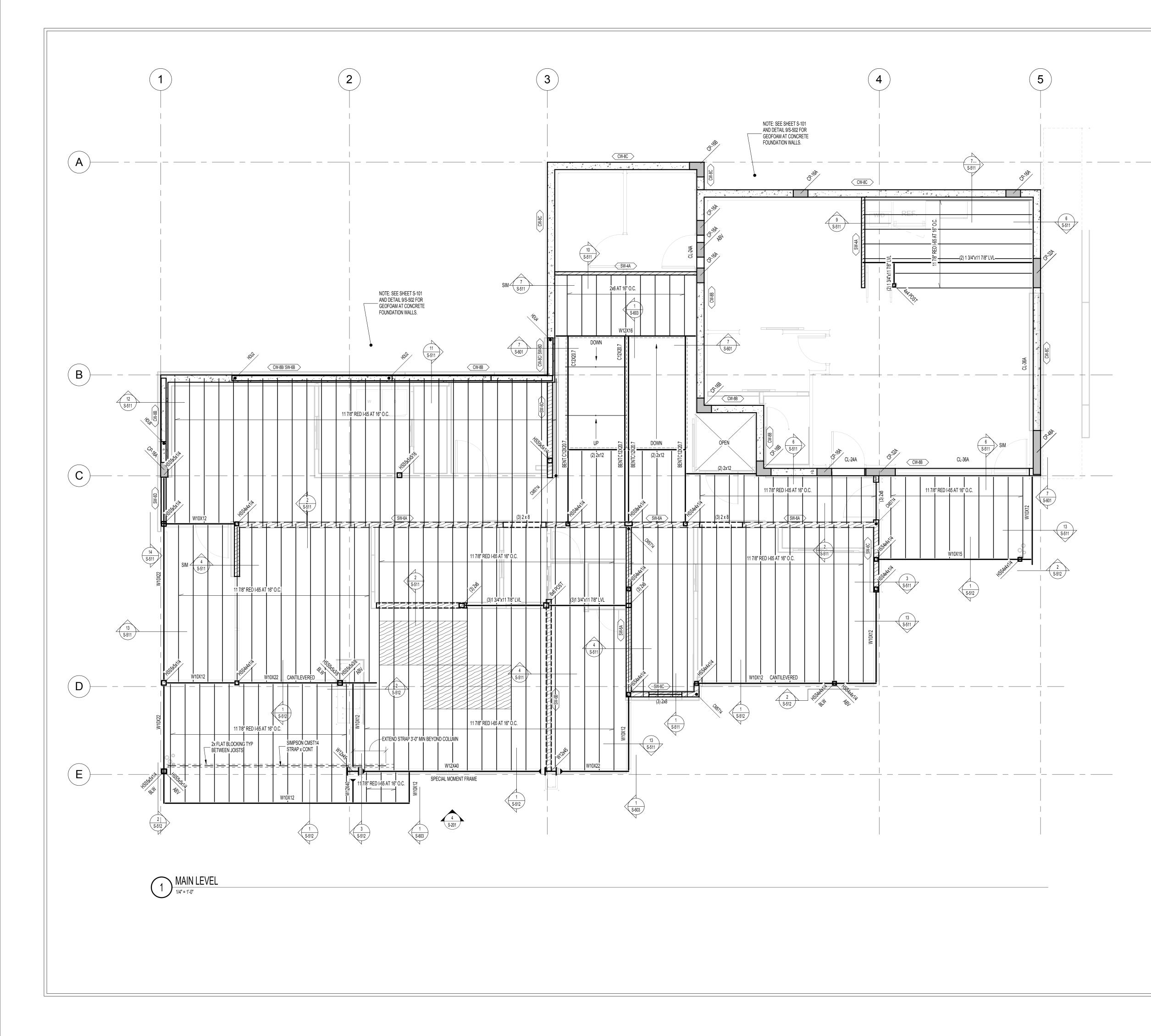
MARKS	AND SYMBOLS LEGEND
	-SECTION MARK
	-Sheet Number
	FOOTING DESIGNATION
$\left\langle \begin{array}{c} \bullet \\ \bullet \end{array} \right\rangle$	 TOP OF FOOTING ELEVATION
	 TOP OF FOOTING ELEVATION
S S	INDICATES FOOTING STEP, SEE DETAIL 1/S501
1	INDICATES CONCRETE WALL. DASHED WALLS STOP AT DECK
	INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK
■■	DEPRESS FOUNDATION WALL AND POUR SLAB OVER. SEE DETAIL
	INDICATES DEPRESSED SLAB, SEE ARCHITECTURAL PLANS.
CW-x	INDICATES CONCRETE FOUNDATION WALL TYPE, SEE SCHEDULE ON SHEET S601
SW-x	INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S601
CW-x/SW-x	INDICATES WOOD SHEARWALL (AND TYPE) OVER CONCRETE WALL (AND TYPE), SEE SCHEDULES ON SHEET(S) S601
MFC-x	INDICATES STEEL MOMENT FRAME COLUMN, SEE SCHEDULE ON SHEET S201
MF-x	INDICATES MOMENT FRAME. SEE ELEVATIONS ON SHEET S201
mminimm	INDICATES FLOOR OFFSET, SEE DETAILS
HSS-x	INDICATES STEEL COLUMN SIZE, SEE SCHEDULE ON SHEET S603
FCx.x	INDICATES CONTINUOUS FOOTING. SEE SCHEDULE ON SHEET S601
FSx.x	INDICATES SPOT FOOTING. SEE SCHEDULE ON SHEET S601
FTSx.x	INDICATES THICKENED SLAB FOOTING. SEE SCHEDULE ON SHEET S601
HDUx	INDICATES SIMPSON HOLD DOWN TYPE. SEE SCHEDULE ON SHEET S602

# FOOTING AND FOUNDATION PLAN NOTES

- COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS,
- ETC. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
- SEE "EARTHWORK" NOTES ON SHEET S-001 AND DETAIL 2/S-502 FOR MINIMUM FILL REQUIRED BENEATH FOOTINGS.
- ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO). SEE DETAILS 1/S-501 AND 2/S-501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND
- PERPENDICULAR TO FOOTINGS. SEE DETAIL 5/S-501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
- SEE DETAIL 7/S-501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS. SEE DETAIL 8/S-501 FOR ADDITIONAL REINFORCING AT MISCELLANEOUS OPENINGS IN CONCRETE
- WALLS.
- SEE SHEET S-602 FOR HOLDOWN SCHEDULE. SEE DETAIL 11/S-501 FOR TYPICAL SILL PLATE BOLTING DETAIL. ALL EXTERIOR BEARING WALLS SHALL BE 2x6 STUDS AT 16" O.C. - TYPICAL (UNO).
- ALL INTERIOR BEARING WALLS SHALL BE 2x6 STUDS AT 16" O.C. TYPICAL (UNO).
- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS. REFER TO DETAIL 7/S-521 AND HEADER BEARING SCHEDULE FOR NUMBER OF KING STUDS AND BEARING STUDS REQUIRED AT TYPICAL OPENINGS IN WOOD STUD WALLS. FIELD COORDINATE TOP OF FOOTING ELEV WITH FINISHED GRADES. REFER TO GENERAL STRUCTURAL NOTES FOR MINIMUM FROST DEPTH.

HEADER BEARING SCHEDULE				
OPENING WIDTH	KING STUDS	BEARING STUDS		
0'-0" TO 4'-0"	1	2		
4'-1" TO 6'-0"	1	3		
6'-1" TO 10'-0"	2	4		
10'-1" TO 13'-0"	2	5		

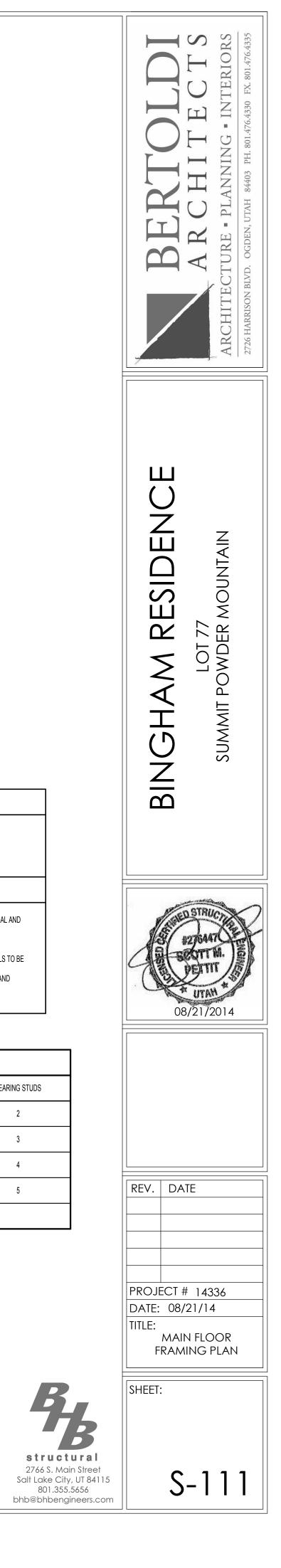


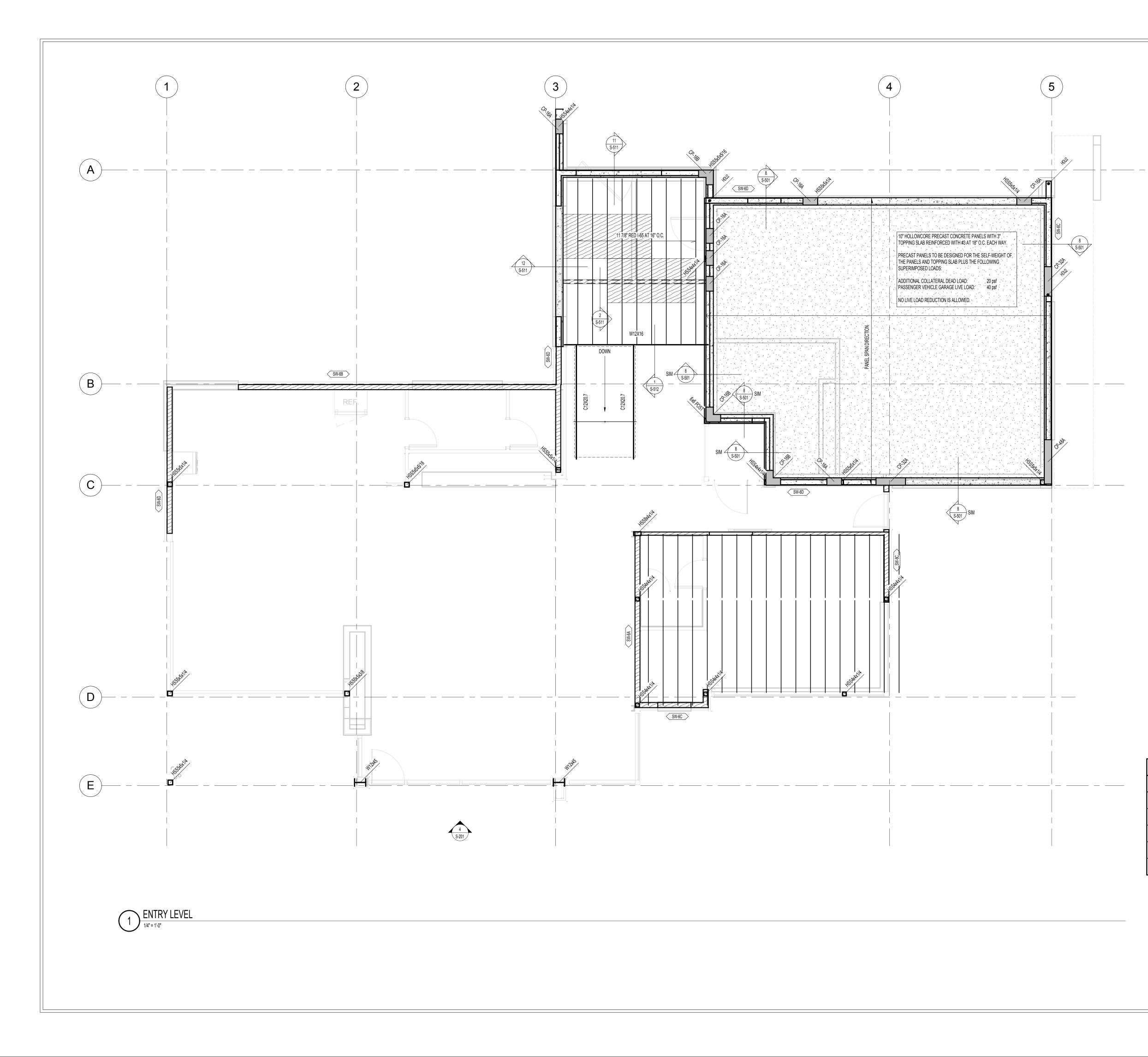


MARKS	AND SYMBOLS LEGEND
	-SECTION MARK
	-SHEET NUMBER
	INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK
SW-x	INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S601
	INDICATES PLYWOOD ROOF SHEATHING, SEE SCHEDULE ON SHEET S601
▶	INDICATES MOMENT CONNECTION, SEE DETAILS
mminimm	INDICATES FLOOR OFFSET, SEE DETAILS
HSS-x	INDICATES STEEL COLUMN SIZE, SEE SCHEDULE ON SHEET S603
HDUx	INDICATES SIMPSON HOLD DOWN TYPE. SEE SCHEDULE ON SHEET S602
CMSTx	INDICATES SIMPSON HOLDDOWN STRAP SIZE. SEE SCHEDULE ON SHEET S602

FLOOR FRAMING DESIGN LOADS					
<u>FLOOR</u> DEAD I <u>LIVE L(</u> TOTAL	OAD 30 psf DAD <u>40 psf</u>				
	FLOOR FRAMING PLAN NOTES				
	VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND				
1.	MECHANICAL DRAWINGS.				
2.	MECHANICAL DRAWINGS. SEE DETAIL 1/S-521 FOR FRAMING AROUND ALL OPENINGS.				
2. 3.	MECHANICAL DRAWINGS. SEE DETAIL 1/S-521 FOR FRAMING AROUND ALL OPENINGS. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.				
2.	MECHANICAL DRAWINGS. SEE DETAIL 1/S-521 FOR FRAMING AROUND ALL OPENINGS.				

HEADER BEARING SCHEDULE				
OPENING WIDTH	KING STUDS	BEARING STUDS		
0'-0" TO 4'-0"	1	2		
4'-1" TO 6'-0"	1	3		
6'-1" TO 10'-0"	2	4		
10'-1" TO 13'-0"	2	5		





MARKS	AND SYMBOLS LEGEND
	-SECTION MARK
•	SHEET NUMBER
	INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK
SW-x	INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S601
	INDICATES PLYWOOD ROOF SHEATHING, SEE SCHEDULE ON SHEET S601
•	INDICATES MOMENT CONNECTION, SEE DETAILS
mminimm	INDICATES FLOOR OFFSET, SEE DETAILS
HSS-x	INDICATES STEEL COLUMN SIZE, SEE SCHEDULE ON SHEET S603

SCHEDULE ON SHEET S603

- INDICATES SIMPSON HOLD DOWN TYPE. SEE SCHEDULE ON SHEET S602 HDUx
- CMSTx INDICATES SIMPSON HOLDDOWN STRAP SIZE. SEE SCHEDULE ON SHEET S602

# FLOOR FRAMING DESIGN LOADS <u>FLOOR LOAD:</u> DEAD LOAD <u>LIVE LOAD</u> TOTAL LOAD 30 psf <u>40 psf</u> 70 psf

FLOOR FRAMING PLAN NOTES

- VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. SEE DETAIL 1/S-521 FOR FRAMING AROUND ALL OPENINGS. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS. UNLESS NOTED OTHERWISE, WOOD EXTERIOR WALLS AND INTERIOR BEARING/SHEAR WALLS TO BE

- 2x6 AT 16" O.C. REFER TO DETAIL 7/S-521 AND HEADER BEARING SCHEDULE FOR NUMBER OF KING STUDS AND BEARING STUDS REQUIRED AT TYPICAL OPENINGS IN WOOD STUD WALLS.

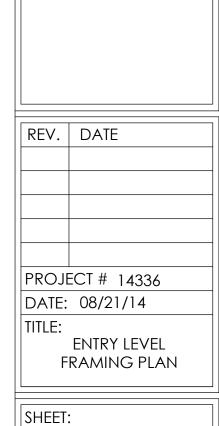
HEADER BEARING SCHEDULE								
OPENING WIDTH	KING STUDS	BEARING STUDS						
0'-0" TO 4'-0"	1	2						
4'-1" TO 6'-0"	1	3						
6'-1" TO 10'-0"	2	4						
10'-1" TO 13'-0"	2	5						



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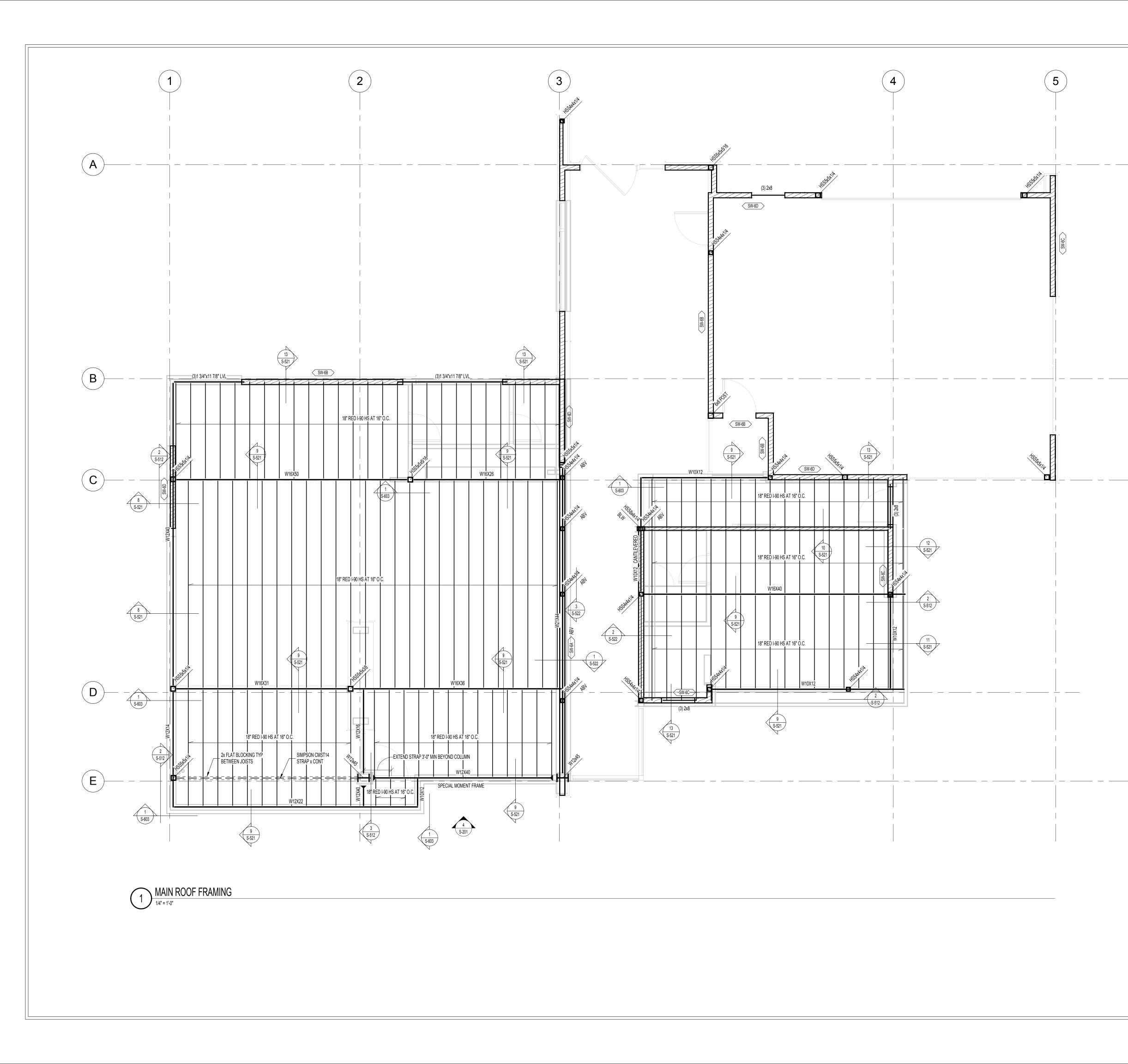
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**B**B structural 2766 S. Main Street Salt Lake City, UT 84115 801.355.5656 bhb@bhbengineers.com

S-112





MARKS AND SYMBOLS LEGEND SECTION MARK SHEET NUMBER INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK SW-x INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S601 INDICATES PLYWOOD ROOF SHEATHING, SEE SCHEDULE ON SHEET S601 INDICATES MOMENT CONNECTION, SEE DETAILS

INDICATES STEEL COLUMN SIZE, SEE SCHEDULE ON SHEET S603 HSS-x

ROOF FRAMING DESIGN LOADS								
<u>ROOF I</u> DEAD L <u>SNOW</u> TOTAL	OAD 45 psf LOAD 184 psf	<u>ROOFS</u> <u>AT 1</u> 45 p <u>221</u> 266	<u>psf</u>					
	RO	OF FRAMING F	PLAN NOTES					
1.	VERIFY ALL ROOF OPENI MECHANICAL DRAWINGS		FTS, DRAINS, ETC. WITH ARCHITECTURAL AND					
2. 3.	2. SEE DETAIL 1/S-521 FOR FRAMING AROUND ALL OPENINGS.							

- SEE DETAIL 1/3-321 FOR TYPICAL BUILT-OP BEAM DETAIL. SEE DETAIL 3/S-521 FOR TYPICAL TOP PLATE SPLICE DETAIL. SEE DETAIL 4/S-521 FOR TYPICAL TOP PLATE SPLICE SCHEDULE AT PIPE. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS. UNLESS NOTED OTHERWISE, WOOD EXTERIOR WALLS AND INTERIOR BEARING/SHEAR WALLS TO BE 2x6 AT
- 16" O.C. REFER TO DETAIL 7/S-521 AND HEADER BEARING SCHEDULE FOR NUMBER OF KING STUDS AND BEARING STUDS REQUIRED AT TYPICAL OPENINGS IN WOOD STUD WALLS.

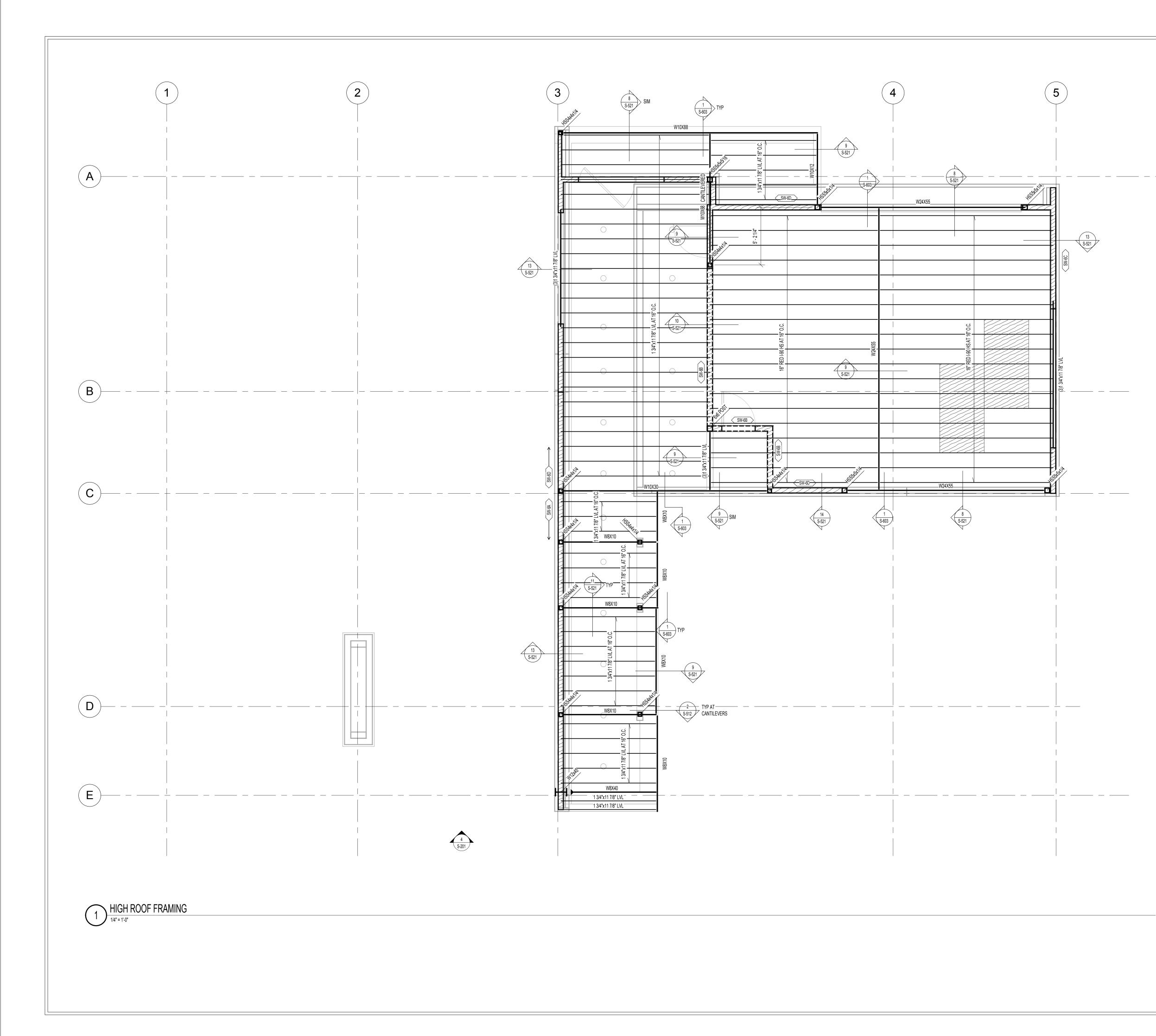
OPENING WIDTH	KING STUDS	BEARING STUDS
0'-0" TO 4'-0"	1	2
4'-1" TO 6'-0"	1	3
6'-1" TO 10'-0"	2	4
10'-1" TO 13'-0"	2	5

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structural 2766 S. Main Street

Salt Lake City, UT 84115 801.355.5656 bhb@bhbengineers.com

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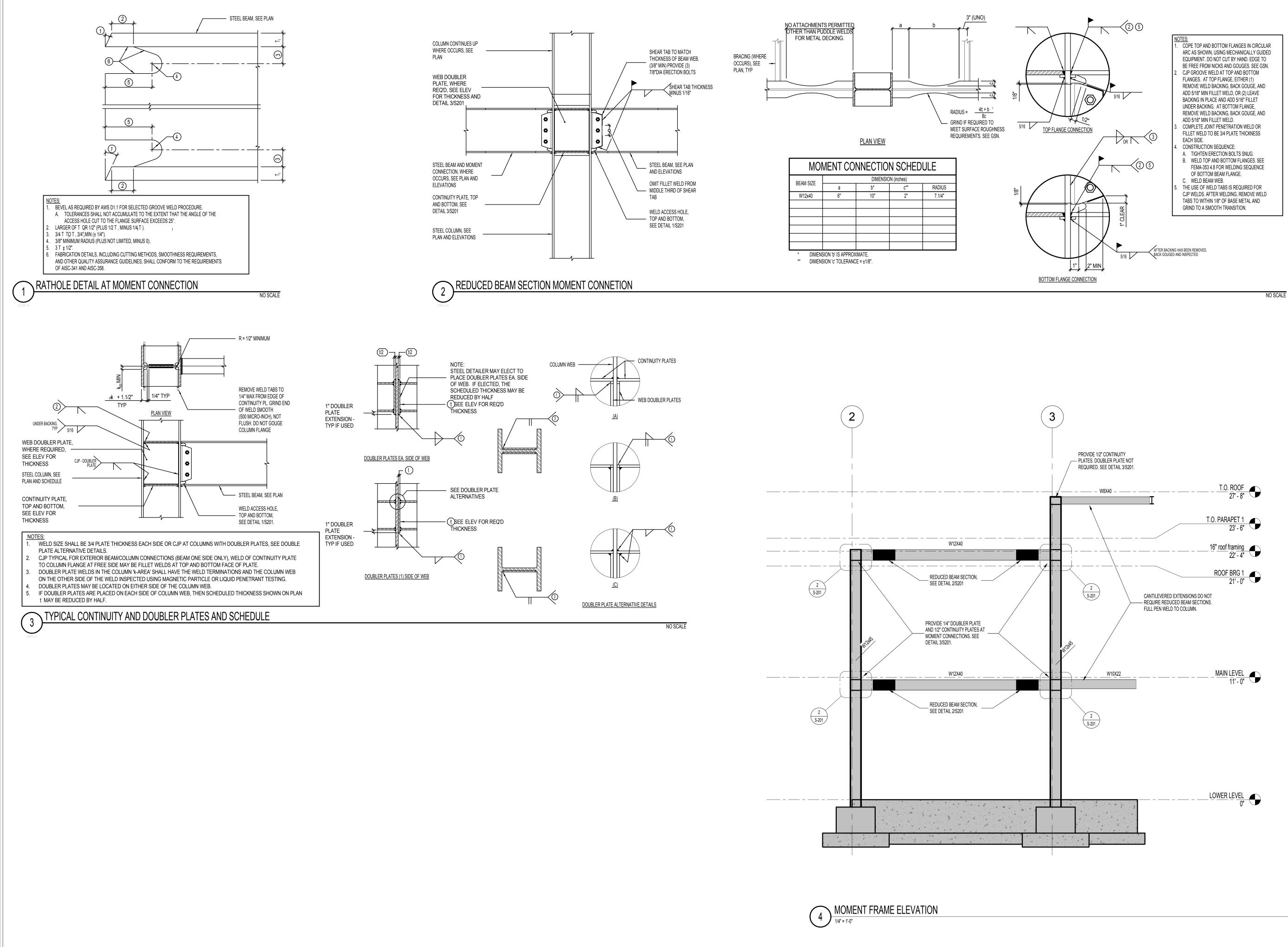


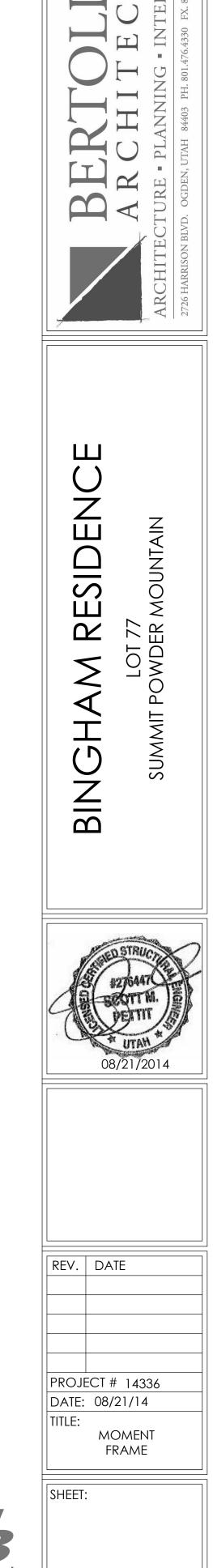


MARKS	AND SYMBOLS LEGEND
	-SECTION MARK
	–SHEET NUMBER
	INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK
<u>SW-x</u>	INDICATES WOOD SHEARWALL TYPE, SEE SCHEDULE ON SHEET S601
	INDICATES PLYWOOD ROOF SHEATHING, SEE SCHEDULE ON SHEET S601
▶	INDICATES MOMENT CONNECTION, SEE DETAILS
HSS-x	INDICATES STEEL COLUMN SIZE, SEE SCHEDULE ON SHEET S603

<b>ROOF FRAMING DESIGN LOADS</b>							
ROOF LOA DEAD LOAI <u>SNOW LOA</u> TOTAL LOA	D 45 psf D 184 psf	<u>AT UNHEATED ROOFS</u> 45 psf <u>221 psf</u> 266 psf					
ROOF FRAMING PLAN NOTES							
1. 2. 3. 4. 5. 6. 7. 8.	MECHANICAL DRAWINGS. SEE DETAIL 1/S-521 FOR FRAMING / SEE DETAIL 1/S-521 FOR TYPICAL B SEE DETAIL 3/S-521 FOR TYPICAL T SEE DETAIL 4/S-521 FOR TYPICAL T SEE ARCHITECTURAL PLANS FOR D UNLESS NOTED OTHERWISE, WOOD 16" O.C.	UILT-UP BEAM DETAIL. OP PLATE SPLICE DETAIL. OP PLATE SPLICE SCHEDULE AT PIPE. DIMENSIONS TO ALL STEEL COLUMNS. D EXTERIOR WALLS AND INTERIOR BEA DER BEARING SCHEDULE FOR NUMBER	RING/SHEAR WALLS TO BE 2x6 A				

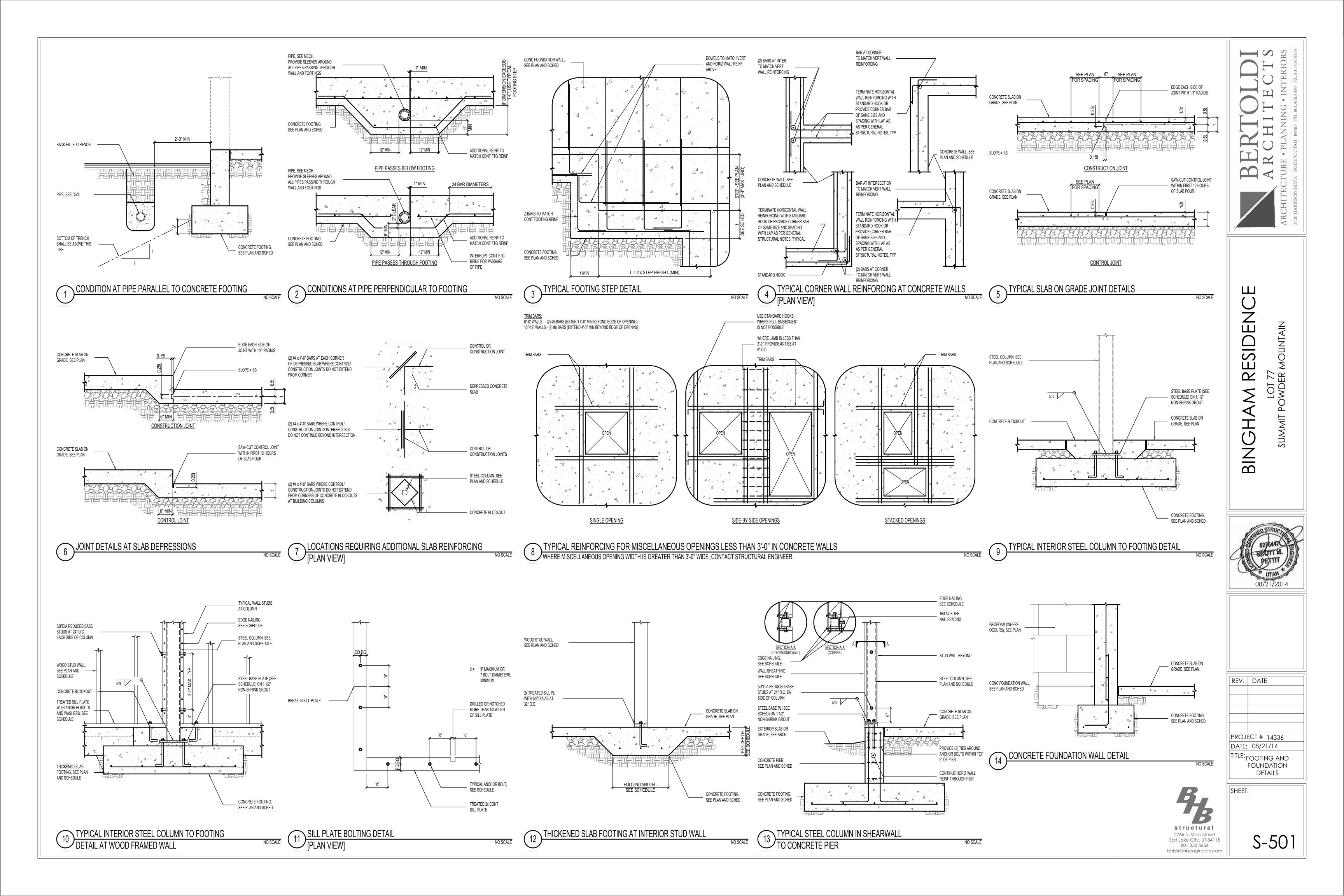
HEADER BEARING SCHEDULE								
OPENING WIDTH	KING STUDS	BEARING STUDS						
0'-0" TO 4'-0"	1	2						
4'-1" TO 6'-0"	1	3						
6'-1" TO 10'-0"	2	4						
10'-1" TO 13'-0"	2	5						

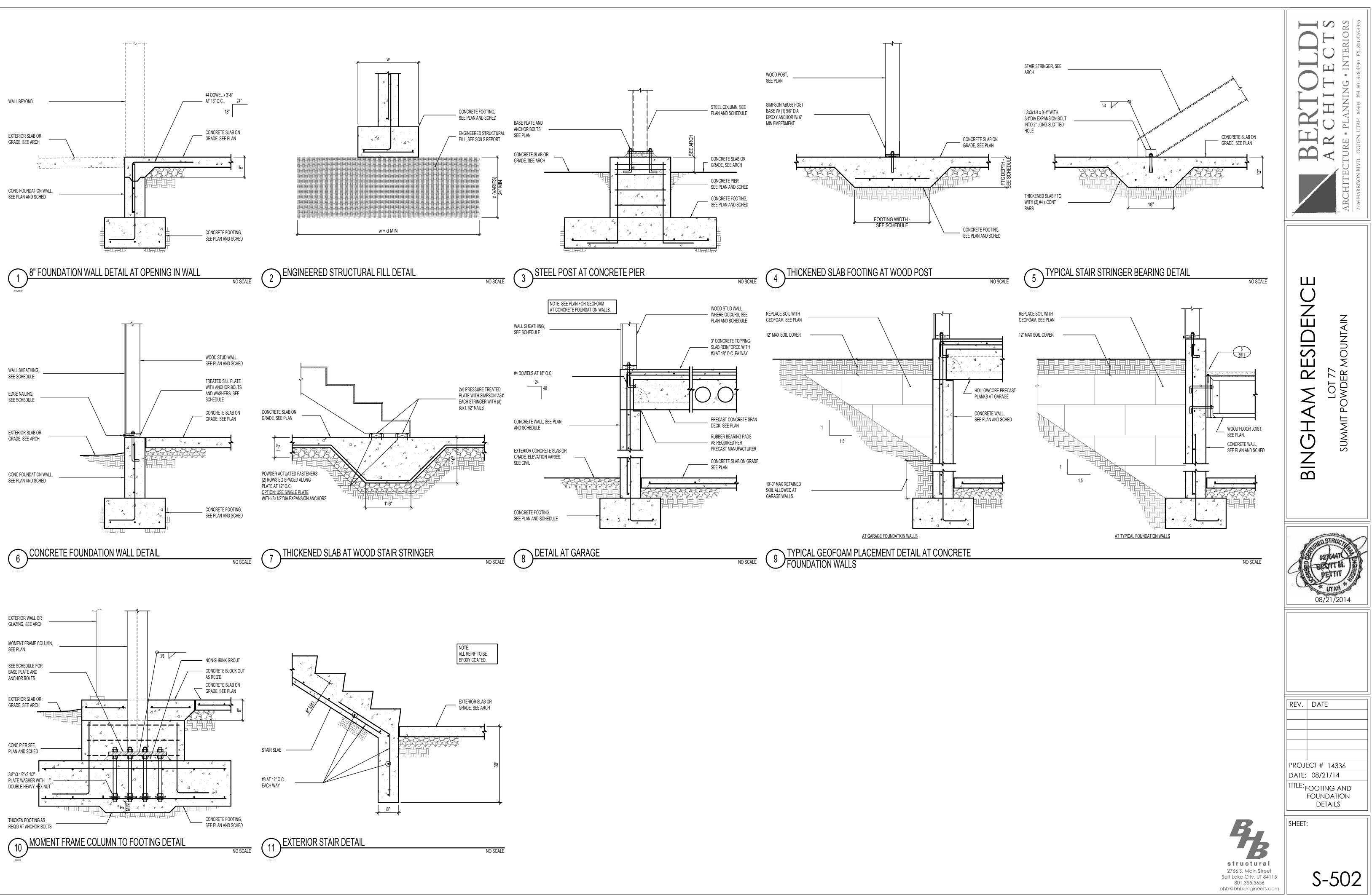


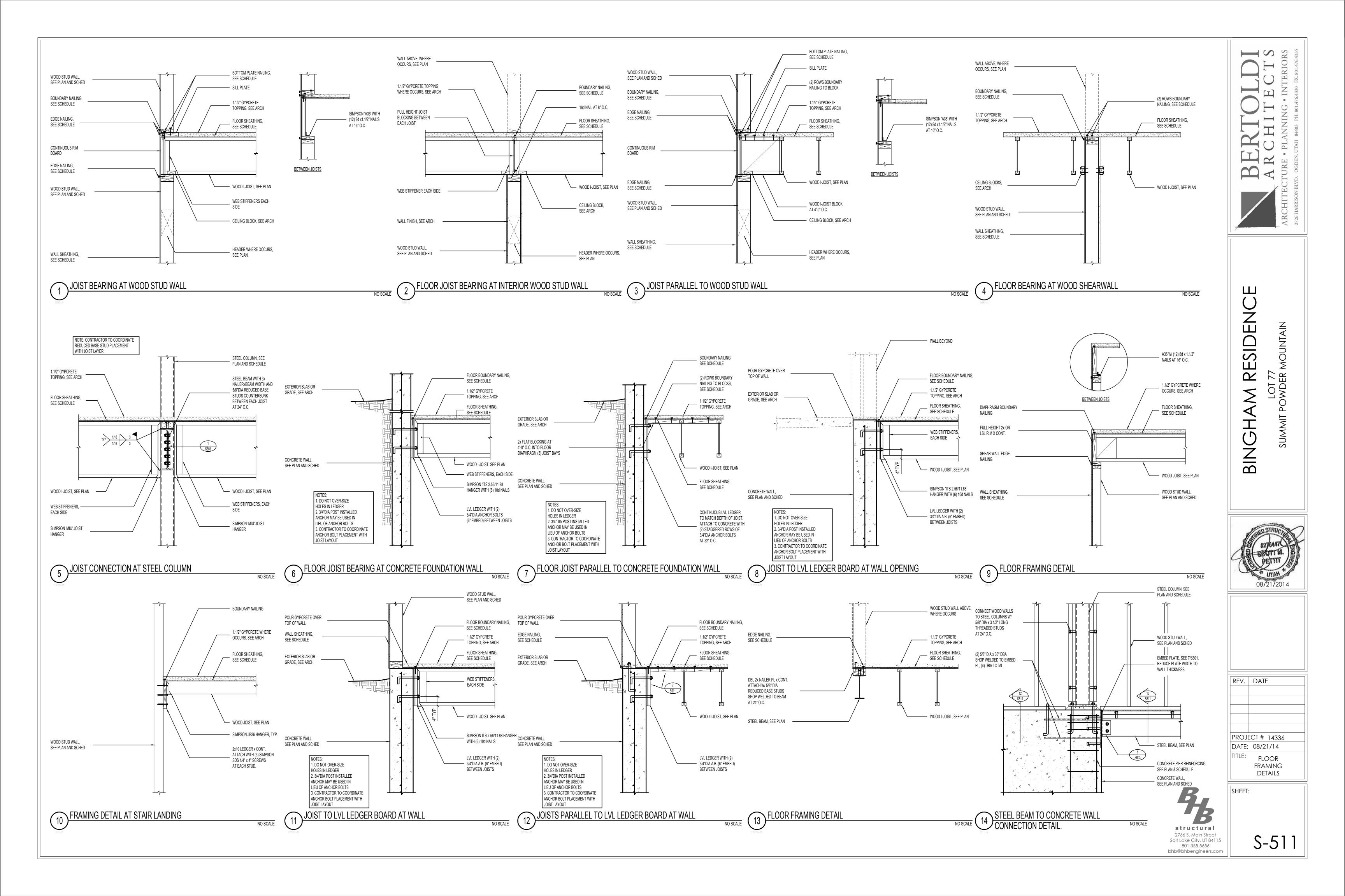


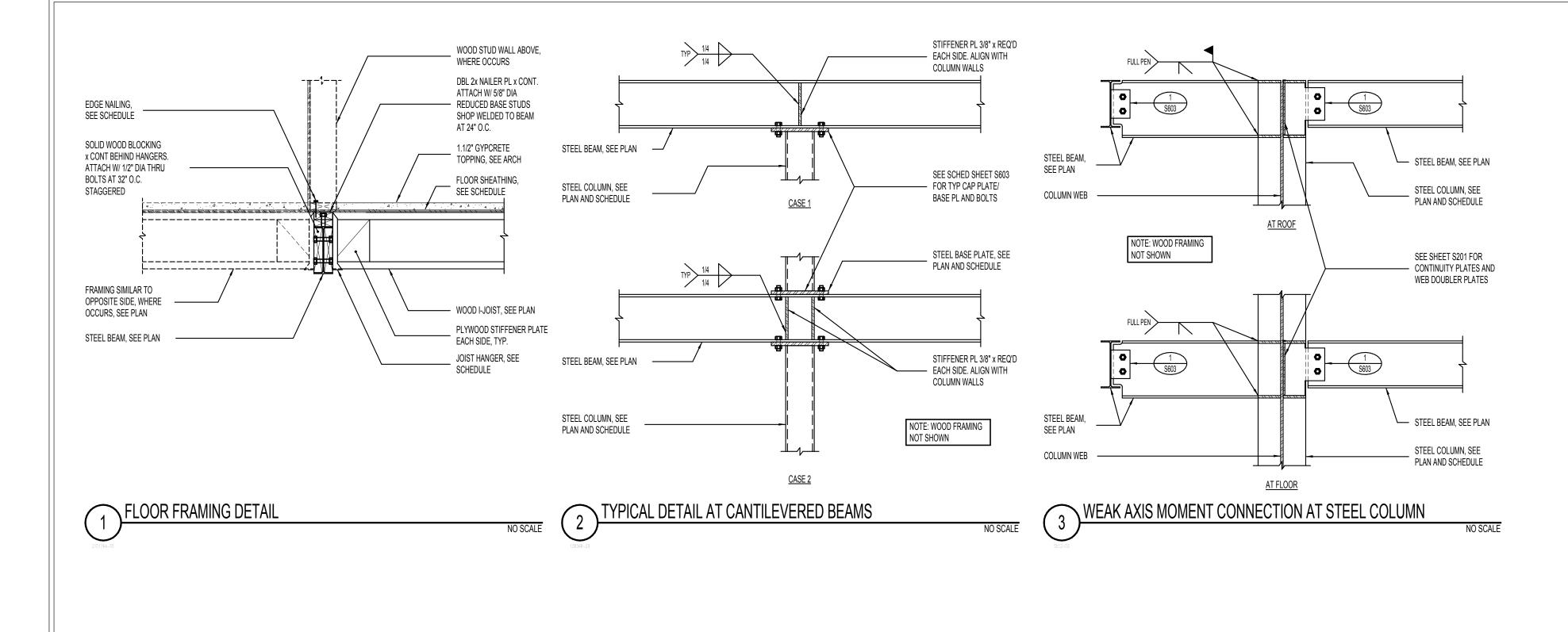
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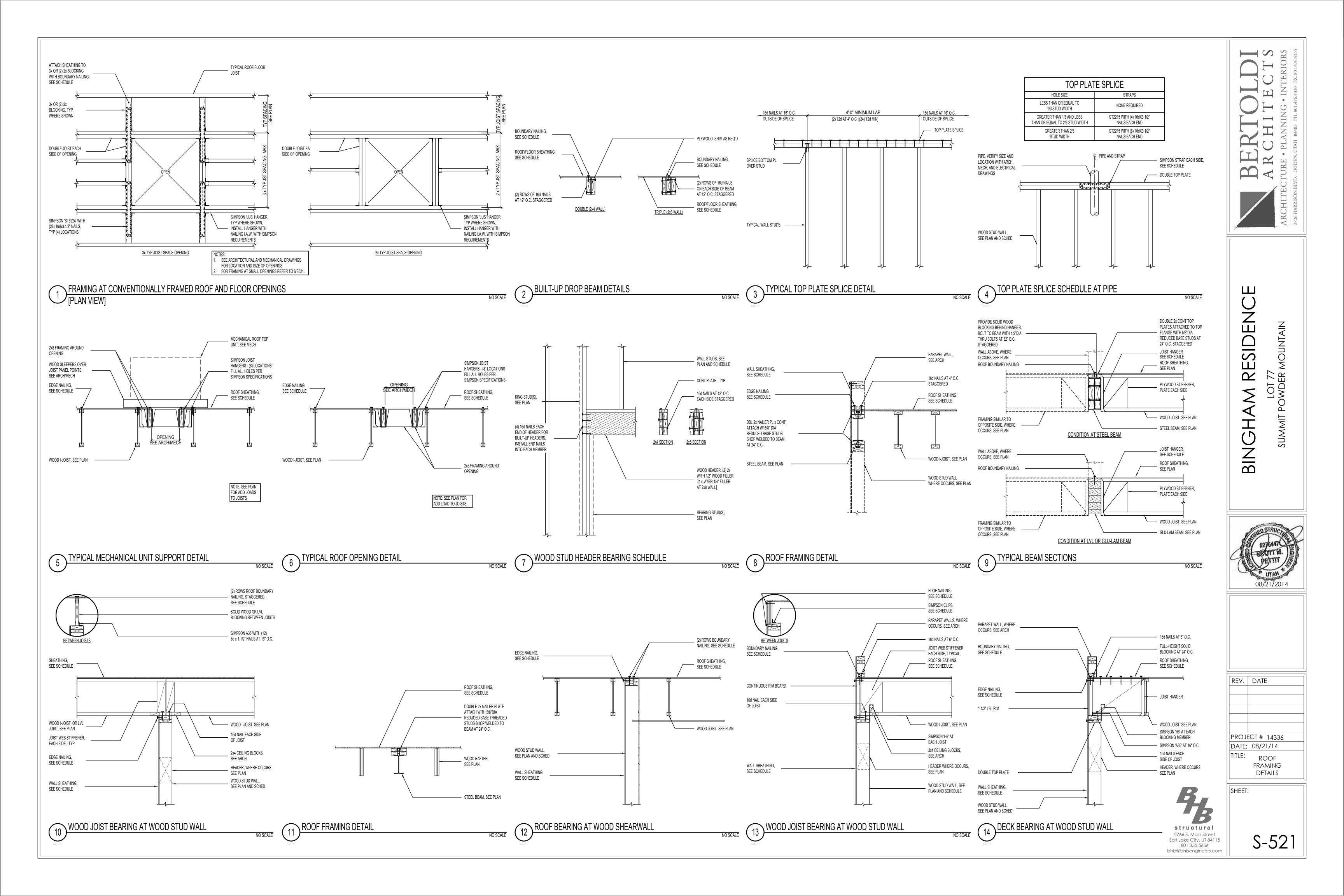


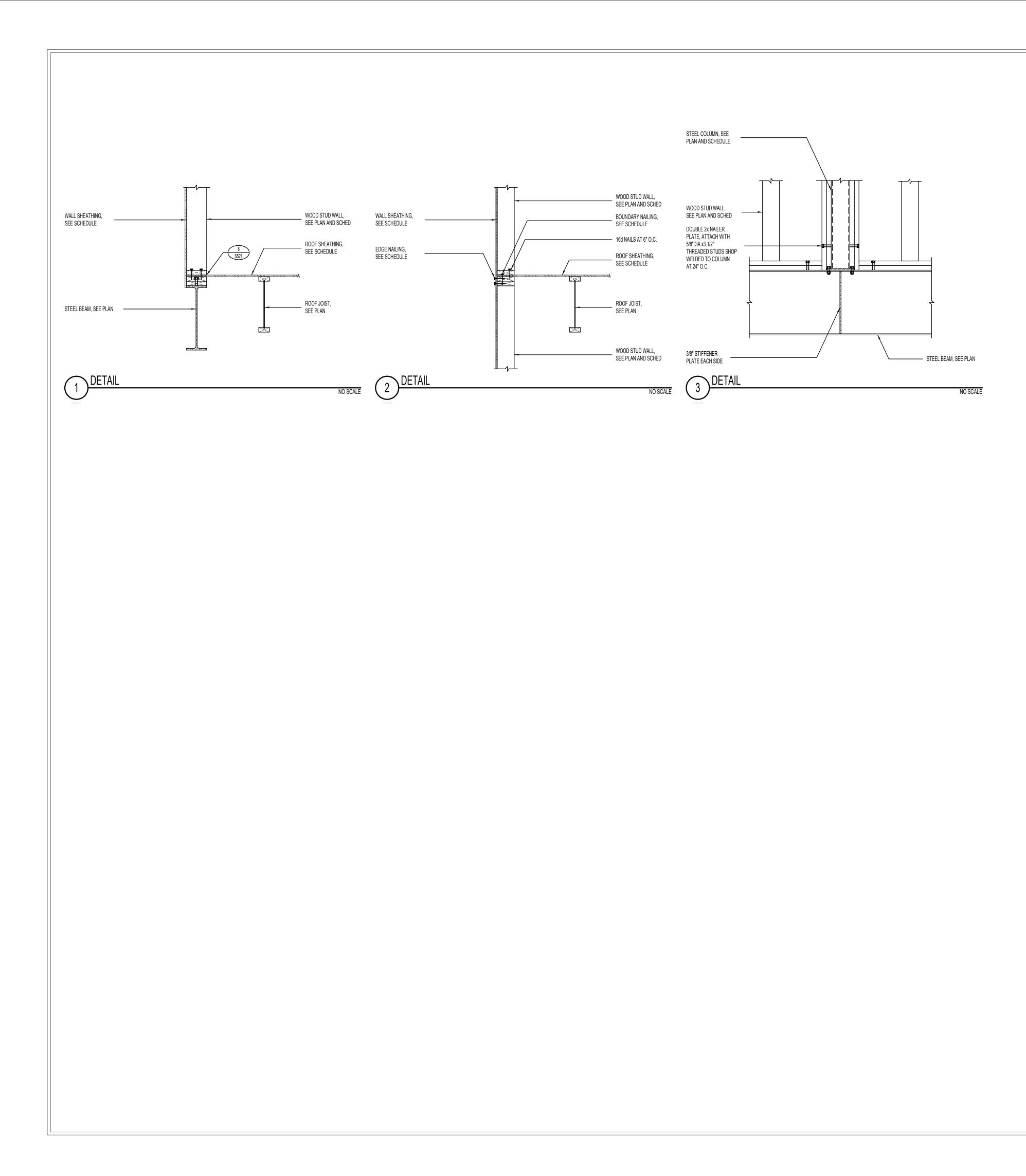














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	CONCRETE FOOTING SCHEDULE											
MARK	WIDTH	LENGTH	DEPTH		REINFOF	CING CROSS	WISE		REINFOR	CING LENGTH	WISE	COMMENTS
WARK		LENGIN	DEPIN	No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	COMINIENTS
FTS2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	THICKENED SLAB
FC1.5	1'-6"	CONT	12"	-	#4	1'-0"	48"	2	#5	CONT	EQ	
FC2.0	2'-0"	CONT	12"	-	#4	1'-6"	48"	3	#4	CONT	EQ	
FC2.5	2'-6"	CONT	12"	-	#5	2'-0"	14"	3	#5	CONT	EQ	
FC3.0	3'-0"	CONT	12"	-	#5	2'-6"	14"	3	#5	CONT	EQ	
FC3.5	3'-6"	CONT	12"	-	#5	3'-0"	14"	3	#5	CONT	EQ	
FC4.0	4'-0"	CONT	12"	-	#5	3'-6"	14"	4	#5	CONT	EQ	
FC4.5	4'-6"	CONT	12"	-	#5	4'-0"	14"	4	#5	CONT	EQ	
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	EQ	3	#5	2'-6"	EQ	
FS3.5	3'-6"	3'-6"	12"	3	#5	3'-0"	EQ	3	#5	3'-0"	EQ	
FS4.0	4'-0"	4'-0"	12"	4	#5	3'-6"	EQ	4	#5	3'-6"	EQ	
FS4.5	4'-6"	4'-6"	12"	4	#5	4'-0"	EQ	4	#5	4'-0"	EQ	
FS5.0	5'-0"	5'-0"	12"	5	#5	4'-6"	EQ	5	#5	4'-6"	EQ	
FS5.5	5'-6"	5'-6"	12"	5	#5	5'-0"	EQ	5	#5	5'-0"	EQ	
FS6.0	6'-0"	6'-0"	12"	6	#5	5'-6"	EQ	6	#5	5'-6"	EQ	REINFORCE TOP & BOTTOM
FS6.5	6'-6"	6'-6"	12"	6	#5	6'-0"	EQ	6	#5	6'-0"	EQ	
FS7.0	7'-0"	7'-0"	13"	7	#5	6'-6"	EQ	7	#5	6'-6"	EQ	
FS7.5	7'-6"	7'-6"	14"	8	#5	7'-0"	EQ	8	#5	7'-0"	EQ	
FS8.0	8'-0"	8'-0"	15"	6	#6	7'-6"	EQ	6	#6	7'-6"	EQ	
FS8.5	8'-6"	8'-6"	15"	7	#6	8'-0"	EQ	7	#6	8'-0"	EQ	
FS9.0	9'-0"	9'-0"	16"	8	#6	8'-6"	EQ	8	#6	8'-6"	EQ	
FS9.5	9'-6"	9'-6"	17"	9	#6	9'-0"	EQ	9	#6	9'-0"	EQ	
FS10.0	10'-0"	10'-0"	18"	10	#6	9'-6"	EQ	10	#6	9'-6"	EQ	
			_	_						_		



1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO).

2. TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.

3. IF FOOTINGS ARE EARTH-FORMED, FOOTINGS SHALL BE 6" LONGER AND WIDER THAN SCHEDULED. 4. RUN CONTINUOUS FOOTING REINFORCEMENT THROUGH SPOT FOOTINGS.

5. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. 6. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

CONCRETE FOOTING SCHEDULE

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE																	
		f'c = 3	000psi		fo	c = 4000psi 8	& f'c = 4500 j	osi		f'c = 5	000psi			f'c = 6	6000psi		
	REG	ULAR	T	OP	REG	ULAR	TC	)P	REG	ULAR	T	OP	REG	ULAR	T	OP	
BAR SIZE	CL/	ASS	CL	ASS	CL	ASS	CLA	ISS	CL	ASS	CL	ASS	CL	ASS	CL	CLASS	
	A	В	Α	В	A	В	A	В	А	В	A	В	А	В	A	В	
#3	13"	17"	17"	21"	12"	16"	16"	21"	12"	16"	16"	21"	12"	16"	16"	21"	
#4	17"	22"	22"	28"	15"	19"	19"	25"	13"	17"	17"	22"	12"	16"	16"	21"	
#5	21"	27"	27"	35"	18"	24"	24"	31"	16"	21"	21"	27"	15"	19"	19"	25"	
#6	27"	36"	36"	46"	24"	31"	31"	40"	21"	28"	28"	36"	20"	25"	25"	33"	
#7	37"	48"	48"	63"	32"	42"	42"	54"	29"	38"	38"	49"	27"	34"	34"	44"	
#8	49"	64"	64"	82"	42"	55"	55"	71"	38"	49"	49"	64"	35"	45"	45"	58"	
#9	62"	80"	80"	104"	54"	70"	70"	90"	48"	62"	62"	81"	44"	57"	57"	74"	
#10	78"	102"	102"	132"	68"	88"	88"	115"	61"	79"	79"	102"	56"	72"	72"	94"	
#11	96"	125"	125"	162"	83"	108"	108"	141"	76"	97"	97"	126"	68"	88"	88"	115"	

CONCRETE REINFORCING BAR LAP SPLICE NOTES:

1. THIS SCHEDULE SHALL BE USED FOR ALL BAR SPLICES IN CONCRETE WALLS, UNLESS NOTED OTHERWISE.

2. CLASS 'A' SPLICES MAY BE USED ONLY IN CASES WHERE 50% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH. 3. CLASS 'B' SPLICES SHALL BE USED FOR ALL SPLICES UNLESS THE REQUIREMENTS OF NOTE No. 2 ABOVE ARE MET.

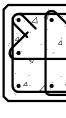
4. TIES AND STIRRUPS SHALL NOT BE SPLICED. 5. DO NOT SPLICE VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN.

6. SPLICES FOR BUNDLED BARS:

- a. FOR BUNDLED BARS OF THREE OR LESS, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.2. b. FOR BUNDLED BARS OF FOUR OR MORE, LAP SPLICE LENGTHS SHALL BE MULTIPLIED BY 1.33.
- c. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP.
- d. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.
- 7. FOR ALL LIGHTWEIGHT CONCRETE, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3.
- 8. FOR ALL EPOXY COATED BARS, LAP LENGTHS SHALL BE MULTIPLIED BY 1.3 FOR TOP BARS AND 1.5 FOR REGULAR BARS. 9. TOP BARS ARE CLASSIFIED AS HORIZONTAL BARS WHERE 12", OR MORE, OF FRESH CONCRETE IS CAST BELOW THE REINFORCING BAR.

10. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE

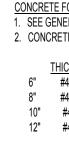


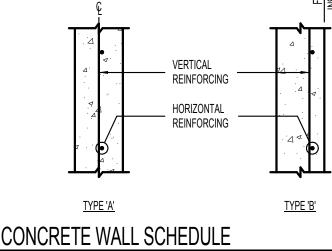






	CONCRETE WALL SCHEDULE									
			REINFORCING			COMMENTS				
MARK	THICKNESS	VERTICAL	HORIZONTAL	TOP AND BOTTOM	- WALL TYPE	COMMENTS				
CW-8A	8"	#4 AT 18" O.C.	#4 AT 12" O.C.	(1) #4	A	USE AT BASEMENT WALLS WITH LESS THAN 3'-0" OF RETAINED SOIL. CONTRACTOR VERIFY WITH FINAL GRADES				
CW-8B	8"	#5 AT 12" O.C.	#4 AT 12" O.C.	(1) #4	A	USE AT BASEMENT WALLS WITH MORE THAN 3'-0" OF RETAINED SOIL. CONTRACTOR VERIFY WITH FINAL GRADES				
CW-8C	8"	#5 AT 12" O.C. I.F.	#4 AT 12" O.C.	(1) #4	В	USE AT GARAGE FOUNDATION WALL				







NO SCALE

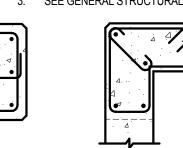
NO SCALE

EPOXY DOWEL E	MBED SCHEDU
DOWEL SIZE	MINIMUM EMBEDMEN EXISTING CONCRI
#4	6.1/2"
#5	7.1/2"
#6	10"
#7	1'-1"
#8	1'-4"

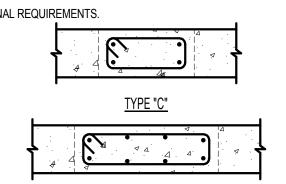
5 EPOXY DOWEL EMBED SCHEDULE

CONCRETE PIER SCHEDULE								
		REINF	ORCING	ТУРГ	COMMENTS			
MARK	PIER SIZE	VERTICAL	TIES	- TYPE	COMMENTS			
CP-16A	WTx16"	(4) #6	#3 AT 8" O.C.	C .				
CP-16B	WTx16"x16"	(6) #6	#3 AT 8" O.C.	В				
CP-24A	24"X24"	(8) #6	#3 AT 8" O.C.	A				
CP-32A	WTx32"	(8) #6	#3 AT 8" O.C.	D				
CP-42A	42" x 42"	(12) #8	#4 AT 8" O.C.	F				
CP-48A	WTx48"	(14) #6	#3 AT 8" O.C.	E				

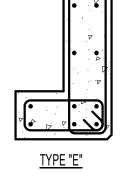
<u>CONCRETE PIER NOTES:</u> 1. INSTALL (3) SETS OF TIES WITHIN TOP 5" OF ALL PIERS (UNO). RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED MONOLITHICALLY WITH CONCRETE WALL. 3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



TYPE "B"



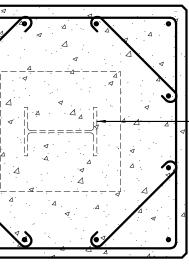
TYPE "D"



NO SCALE

NO SCALE

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## STEEL COLUMN, SEE

PLAN AND SCHEDULE

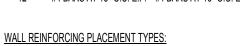
## TYPE "F"

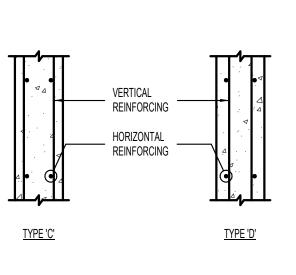
## CONCRETE PIER SCHEDULE

CONCRETE FOUNDATION WALL NOTES: 1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

2. CONCRETE FOUNDATION WALLS NOT DESIGNATED ON PLANS SHALL BE REINFORCED AS FOLLOWS:







ABBREVIATIONS: E.F. EACH FACE I.F. INSIDE FACE O.F. OUTSIDE FACE

EMBED PLATE

PL 1/2"x16"x1'-0"



CONCRETE LINTEL NOTES: HORIZONTAL REINFORCING SHALL EXTEND 4'-0" BEYOND EDGE OF OPENING. IF HORIZONTAL REINFORCING CANNOT EXTEND 4'-0" BEYOND EDGE OF OPENING PROVIDE 90° STD HOOK. 2. SPLICE TOP BARS AT MID-SPAN OF LINTEL ONLY AND BOTTOM BARS OVER SUPPORTS

THICKNESS

WT

MARK

CL-36A

ONLY. 3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS. LINTEL REINFORCING PLACEMENT TYPES:

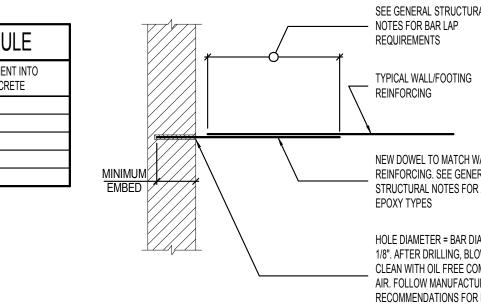
DEPTH

36"



BEAM DEPTH

W10, W12



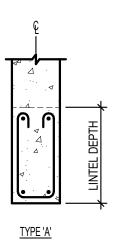
SEE GENERAL STRUCTURAL

NEW DOWEL TO MATCH WALL/FTG REINFORCING. SEE GENERAL STRUCTURAL NOTES FOR ACCEPTED

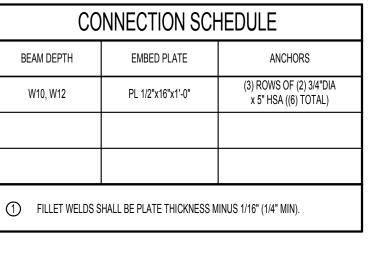
HOLE DIAMETER = BAR DIAMETER + 1/8". AFTER DRILLING, BLOW HOLE CLEAN WITH OIL FREE COMPRESSED AIR. FOLLOW MANUFACTURERS RECOMMENDATIONS FOR EPOXY INSTALLATION

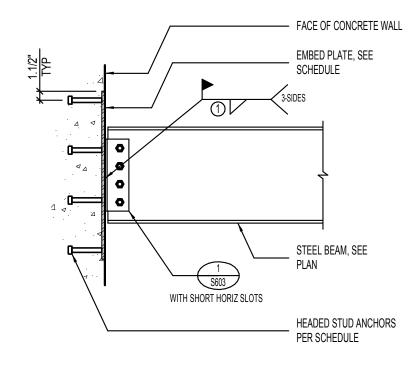
NO SCALE

CONCRETE LINTEL SCHEDULE										
REINFC	RCING	TYPF	COMMENTS							
HORIZONTAL	STIRRUPS	ITE	COMMENTS							
(2) #7 TOP AND BOTTOM	#3 AT 8" O.C.	А								



NO SCALE

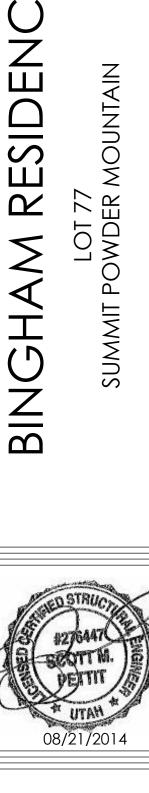


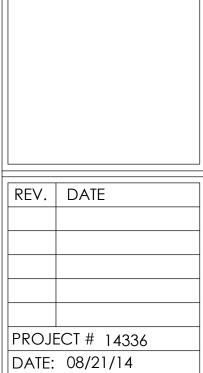


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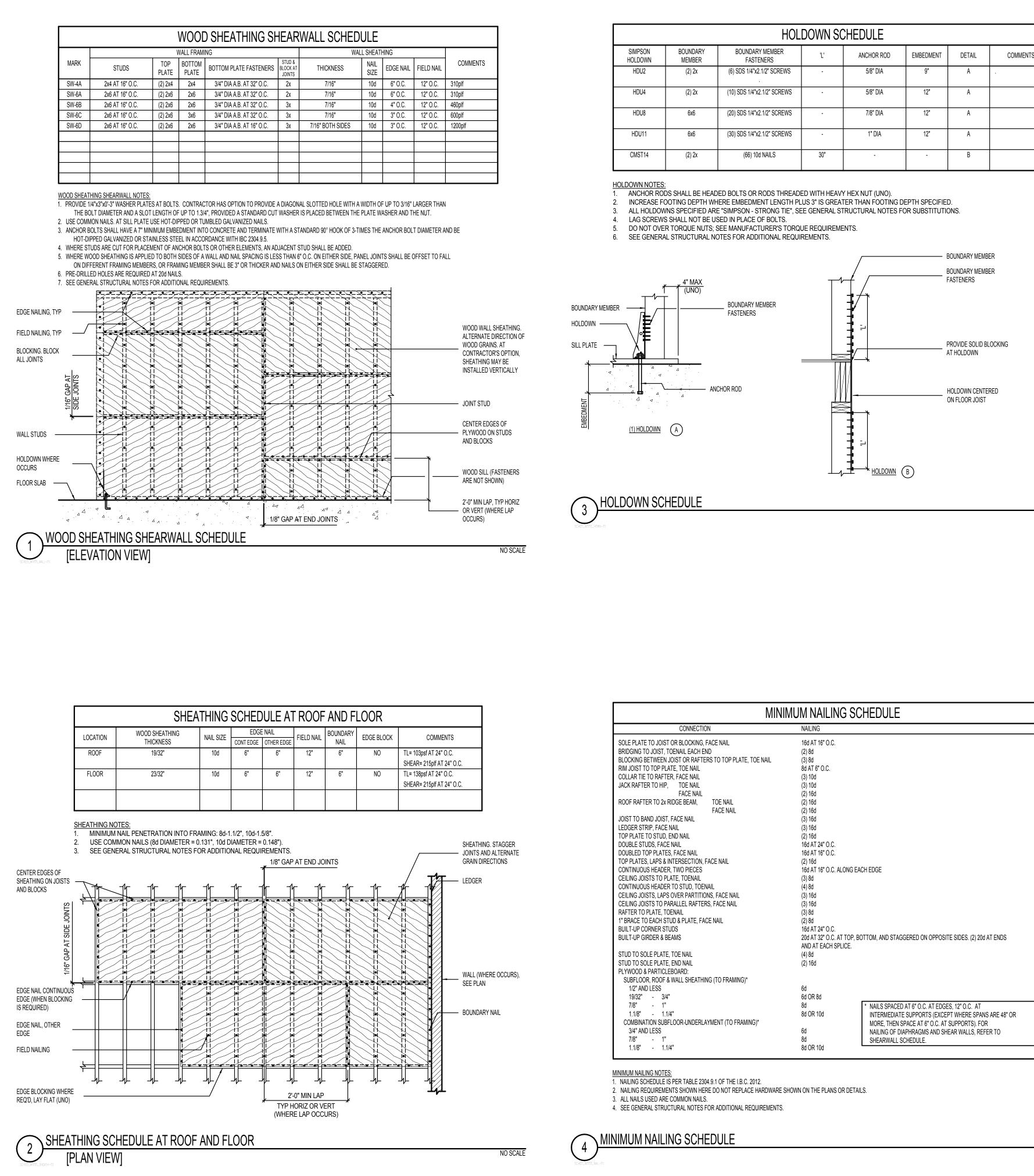
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TITLE: CONCRETE SCHEDULES

SHEET:



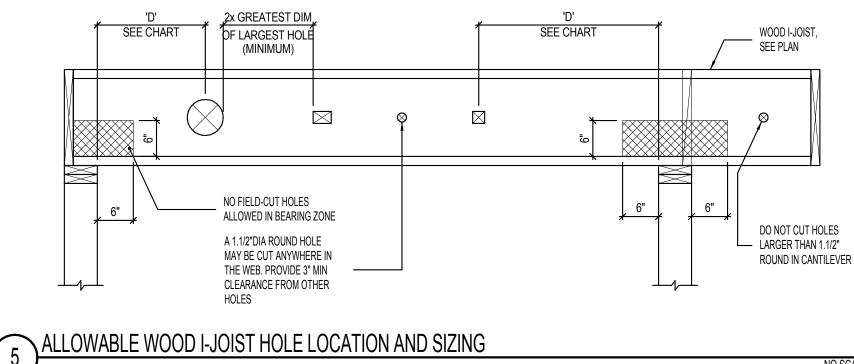
HOLDOWN SCHEDULE										
SIMPSON HOLDOWN	BOUNDARY MEMBER	BOUNDARY MEMBER FASTENERS	Έ'	ANCHOR ROD	EMBEDMENT	DETAIL	COMMENTS			
HDU2	(2) 2x	(6) SDS 1/4"x2.1/2" SCREWS	-	5/8" DIA	9"	A				
HDU4	(2) 2x	(10) SDS 1/4"x2.1/2" SCREWS	-	5/8" DIA	12"	A				
HDU8	6x6	(20) SDS 1/4"x2.1/2" SCREWS	-	7/8" DIA	12"	A				
HDU11	6x6	(30) SDS 1/4"x2.1/2" SCREWS	-	1" DIA	12"	А				
CMST14	(2) 2x	(66) 10d NAILS	30"	-		В				

NO	SCAL	F

NO SCALE

	MINIMUM E	DISTAN	NCE (I	D) FR(	OM AN	IY SU	PPOR	T TO T	THE C	ENTE	RLINE	OF T	HE HO	OLE	
				, R	EQUIRED	For All H	HOLES GR	EATER TH	AN 1 1/2"						
ROU	IND HOLE DIAMETER	2"	3"	4"	5"	6"	7"	8"	8 7/8"	10"	11"	12"	13"	14"	15"
RECT	ANGULAR HOLE SIDE	-	-	-	3"	5"	7"	-	-	-	-	-	-	-	-
9.1/2"	8'-0" MAX SPAN	1'-0"	1'-1"	1'-8"	2'-4"	2'-11"	3'-7"								
JOIST	12'-0" MAX SPAN	1'-0"	1'-7"	2'-7"	3'-6"	4'-5"	5'-4"								
	16'-0" MAX SPAN	1'-0"	2'-2"	3'-5"	4'-8"	5'-11"	7'-2"								
ROU	IND HOLE DIAMETER	2"	3"	4"	5"	6"	7"	8"	8 7/8"	10"	11"	12"	13"	14"	15"
RECT	ANGULAR HOLE SIDE	-	-	-	2"	3"	5"	7"	8"	-	-	-	-	-	-
11.7/8"	8'-0" MAX SPAN	1'-0"	1'-1"	1'-6"	2'-0"	2'-5"	2'-11"	3'-5"	3'-10"						
JOIST	12'-0" MAX SPAN	1'-0"	1'-7"	2'-3"	3'-0"	3'-8"	4'-5"	5'-1"	5'-9"						
	16'-0" MAX SPAN	1'-2"	2'-1"	3'-0"	4'-0"	4'-11"	5'-10"	6'-10"	7'-8"						
	20'-0" MAX SPAN	1'-5"	2'-7"	3'-10"	5'-0"	6'-2"	7'-4"	8'-6"	9'-7"						
ROU	IND HOLE DIAMETER	2"	3"	4"	5"	6"	7"	8"	8 7/8"	10"	11"	12"	13"	14"	15"
RECT	ANGULAR HOLE SIDE	-	-	-	-	2"	3"	5"	6"	8"	9"	-	-	-	-
14"	8'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-6"	1'-11"	2'-4"	2'-9"	3'-3"	3'-8"				
JOIST	12'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-7"	2'-3"	2'-11"	3'-6"	4'-1"	4'-10"	5'-6"				
	16'-0" MAX SPAN	1'-0"	1'-1"	1'-3"	2'-2"	3'-0"	3'-10"	4'-9"	5'-6"	6'-6"	7'-4"				
	20'-0" MAX SPAN	1'-0"	1'-1"	1'-7"	2'-8"	3'-9"	4'-10"	5'-11"	6'-10"	8'-1"	9'-2"				
	24'-0" MAX SPAN	1'-0"	1'-1"	1'-11"	3'-3"	4'-6"	5'-10"	7'-1"	8'-3"	9'-9"	11'-0"				
ROU	IND HOLE DIAMETER	2"	3"	4"	5"	6"	7"	8"	8 7/8"	10"	11"	12"	13"	14"	15"
RECT	ANGULAR HOLE SIDE	-	-	-	-	-	2	3	5	6	8	9	10	-	-
16"	8'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-7"	1'-11"	2'-4"	2'-9"	3'-2"	3'-7"		
JOIST	12'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-9"	2'-4"	2'-11"	3'-7"	4'-2"	4'-9"	5'-4"		
	16'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-7"	2'-5"	3'-2"	3'-10"	4'-9"	5'-7"	6'-4"	7'-2"		
	20'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	2'-0"	3'-0"	4'-0"	4'-10"	5'-11"	6'-11"	7'-11"	8'-11"		
	24'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-3"	2'-5"	3'-7"	4'-9"	5'-10"	7'-2"	8'-4"	9'-6"	10'-9"		
ROU	IND HOLE DIAMETER	2"	3"	4"	5"	6"	7"	8"	8 7/8"	10"	11"	12"	13"	14"	15"
RECT	ANGULAR HOLE SIDE	-	-	-	-	-	-	2	3	5	6	7	9	10	11
18"	12'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-5"	1'-11"	2'-4"	2'-9"	3'-3"	3'-9"	4'-2"	4'-8'	5'-1"	5'-7"
JOIST	16'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-4"	1'-11"	2'-7"	3'-2"	3'-8"	4'-5"	5'-0"	5'-7"	6'-3"	6'-10"	7'-5"
	20'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-8"	2'-5"	3'-3"	4'-0"	4'-8"	5'-6"	6'-3"	7'-0"	7'-9"	8'-7"	9'-4"
	24'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	2'-0"	2'-11"	3'-10"	4'-9"	5'-7"	6'-7"	7'-6"	8'-5"	9'-4"	10'-3"	11'-2"
	28'-0" MAX SPAN	1'-0"	1'-1"	1'-4"	2'-5"	3'-5"	4'-6"	5'-7"	6'-6"	7'-9"	8'-9"	9'-10"	10'-11"	12"-0"	13'-1"
ROU	IND HOLE DIAMETER	2"	3"	4"	5"	6"	7"	8"	8 7/8"	10"	11"	12"	13"	14"	15"
	ANGULAR HOLE SIDE	-	-	-	-	-	-	-	2	3	5	6	7	8	10
20"	12'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-6"	1'-11"	2'-3"	2'-9"	3'-2"	3'-7"	3'-11"	4'-4"	4'-9"
JOIST	16'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-2"	1'-6"	2'-1"	2'-7"	3'-1"	3'-8"	4'-3"	4'-9"	5'-3"	5'-10"	6'-4"
	20'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-3"	1'-11"	2'-7"	3'-3"	3'-10"	4'-7"	5'-3"	5'-11"	6'-7"	7'-4"	8'-0"
	24'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-6"	2'-4"	3'-1"	3'-11"	4'-7"	5'-6"	6'-4"	7'-2"	7'-11"	8'-9"	9'-7"
	28'-0" MAX SPAN	1'-0"	1'-1"	1'-2"	1'-9"	2'-8"	3'-8"	4'-7"	5'-5"	6'-6"	7'-5"	8'-4"	9'-3"	10'-3"	11'-2"

NOTES: 1. KNCOKOUTS PROVIDED BY JOIST MANUFACTURER MAY BE USED AT ANY POINT. DO NOT CUT, DRILL, OR NOTCH FLANGES. RECTANGULAR HOLE SIZES ARE BASED ON THE MEASUREMENT OF THE LONGEST SIDE. HOLES MAY BE LOCATED VERTICALLY ANYWHERE IN THE WEB. LEAVE 1/8" OF WEB (MIN) AT TOP AND BOTTOM OF HOLE. 5. CHART VALUES ARE BASED ON I-JOISTS FROM BOISE (BCI), IF AN ALTERNATE PRODUCT IS USED, CONSULT MANUFACTURERS CHART.



WOOD JOIST/BEAM HANGER SCHEDULE									
JOIST / BEAM SIZE	LOCATION	SIMPSON HANGER	FASTI	COMMENTS					
		SIZE	INTO CARRYING MEMBER	INTO CARRIED MEMBER					
1.3/4"x11.7/8" LVL	UPPER ROOF	BA 1.81/11.88	(8) 16d NAILS	(2) 10d NAILS x1.1/2'					
(3) 1.3/4"x11.7/8" LVL	(3) 1.3/4"x11.7/8" LVL UPPER/MAIN ROOF WP5.5/11.88 (3) 16d NAILS		(2) 10d NAILS						
18" RED I 90-HS	UPPER/MAIN ROOF	WPI418	(2) 16d NAILS	(2) 10d NAILS x1.1/2'					
11.7/8" RED I-65	FLOOR/COVERED PORCH	ITS 2.56/11.88	(6) 10d NAILS	-					
11.7/8" RED I-65	ROOF/UNCOVERED PORCH	MIT 311.88	(8) 16d NAILS	(2) 10d NAILS x1.1/2'					

WOOD JOIST/BEAM HANGER SCHEDULE

NO SCALE



PROJECT # 14336 DATE: 08/21/14 TITLE:

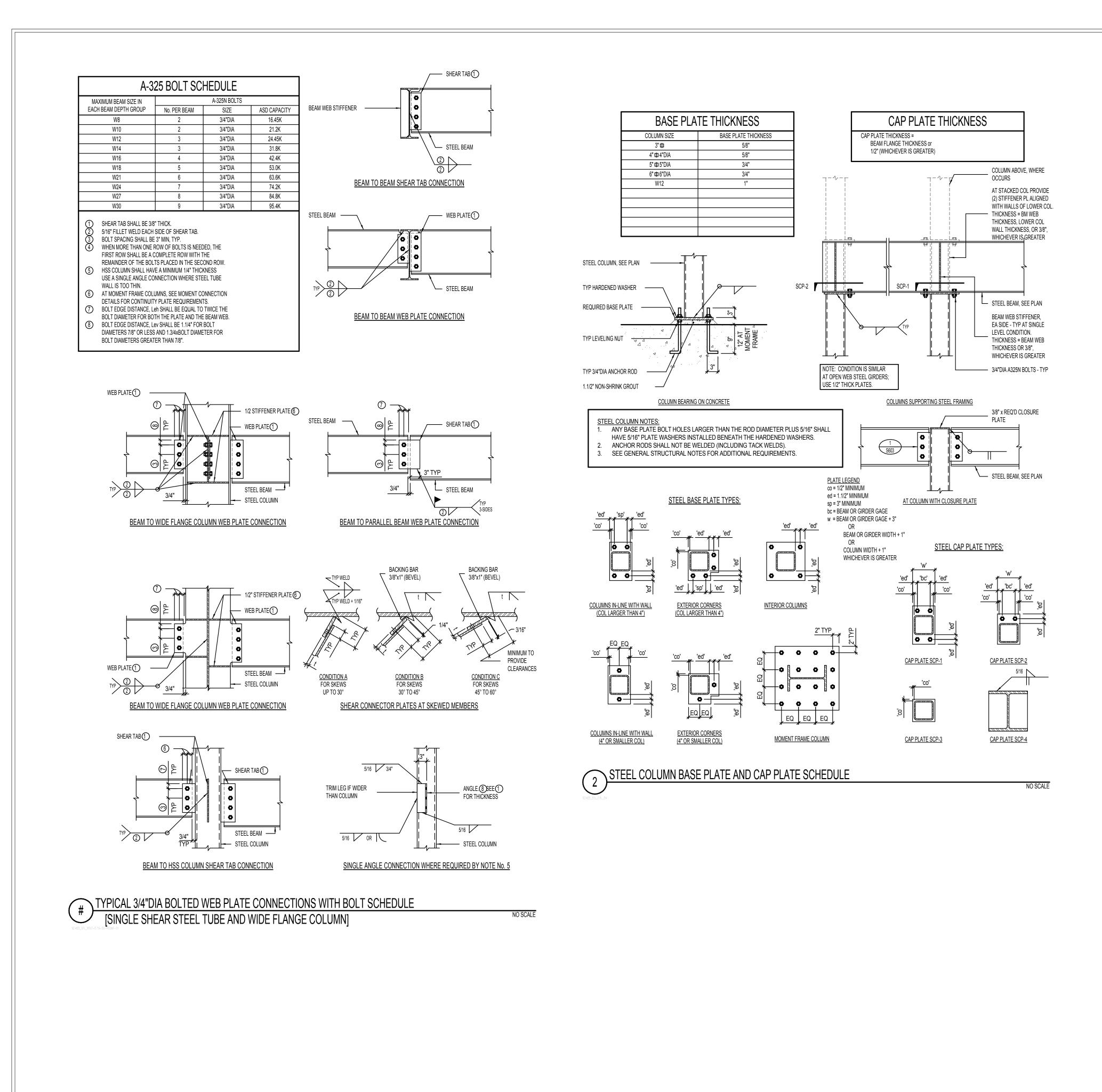
> WOOD SCHEDULES

SHEET:



S-60

NO SCALE





B D structural 2766 S. Main Street Salt Lake City, UT 84115 801.355.5656 bhb@bhbengineers.com