GENERAL NOTES

All plans, designs, and concepts shown in these drawings are the exclusive property of BHH Partners, Planners and Architects, A.I.A./P.C. and shall not be used, disclosed, or reproduced for any purpose whatsoever without the Architect's written permission.

This project is governed by the 2012 International Residential Code as adopted by the Town of Silverthorne Colorado. Code compliance is mandatory. The drawings and specifications shall not permit work that does not conform to these codes. The General Contractor and Subcontractors shall be responsible for satisfying all applicable codes and obtaining all permits and required approvals. Building areas are shown for code purposes only and shall be recalculated for any other purposes.

3) FIELD VERIFICATION:

Verify all dimensions, conditions, and utility locations on the job site prior to beginning any work or ordering any materials. Notify Architect of any conflicts or discrepancies in the drawings

Written dimensions always take precedence over scaled dimensions. DO NOT SCALE DRAWINGS. Verify all dimensions shown prior to beginning any work and notify Architect of any conflicts or discrepancies for interpretation or clarification. Plan dimensions are to the face of framing members, face of wood furring or face of concrete walls unless otherwise noted. Section or elevation dimensions are to top of concrete, top of plywood, or top of wall plates or beams unless otherwise noted.

5) DISCREPANCIES:

The Owner has requested the Architect to provide limited architectural and engineering services. In the event additional details or guidance is needed by the Contractor for construction of any aspect of this project, he shall immediately notify the Architect. Failure to give simple notice shall relieve the Architect of responsibility. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved with written direction from the Architect.

6) DUTY OF COOPERATION:

Release of these plans contemplates further cooperation among the Owner, his Contractor, and the Architect. Design and construction are complex. Although the Architect and his Consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect, and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the Architect. Failure to notify the Architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the Architect shall relieve the Architect from responsibility for all consequences.

Any items described herein that impact project budget or time shall be requested from the Contractor via a written change order request prior to such work Performance of such work without approval by change order indicates General Contractor's acknowledgment of no increase in contract sum or time. Changes from the plans or specifications made without consent of the Architect are unauthorized and shall relieve the Architect of responsibility for any and all consequences resulting from such

it is the intent and meaning of these drawings that the Contractor and each Subcontractor provide all labor, materials, transportation, supplies, equipment, etc., to obtain a complete job within the recognized standards of the industry.

Substitution of "equal" products will be acceptable with Architect's 10) CONSTRUCTION SAFETY:

These drawings do not include the necessary components for construction safety. The General Contractor shall provide for the safety, care of utilities and adjacent properties during construction, and shall comply with state and federal safety regulations.

11) EXCAVATION PROCEDURES: Upon completion of any excavation, the Owner shall retain a soils engineer to inspect the subsurface conditions in order to determine

the adequacy of foundation design. See specifications.
CONTRACTOR SHALL NOT POUR ANY CONCRETE UNTIL APPROVAL IS OBTAINED FROM SOILS ENGINEER.

12) FIELD CUTTING OF STRUCTURAL MEMBERS: The General Contractor and Subcontractors shall field coordinate and obtain approval from Engineer before any cutting, notching or drilling of any cast-in-place concrete, steel framing, or any other structural elements which may affect the structural integrity of the building. Refer to the appropriate Code Requirements, manufacturer's or supplier's instructions, and structural drawings for additional requirements.

13) WEATHER CONDITIONS: The Owner has been advised that due to harsh winter conditions, roof and deck surfaces must be maintained reasonably free of ice and snow to ensure minimal problems with these surfaces. All roofing roofing membranes, and waterproofing shall be approved in writing by product manufacturer (WR Grace for bituthene, etc.) prior to proceeding with any work. Failure to provide these written approvals removes all responsibility for the work from the Architect.

14) BUILDING AREA Building areas are shown for code purposes only and shall be recalculated for any other use.

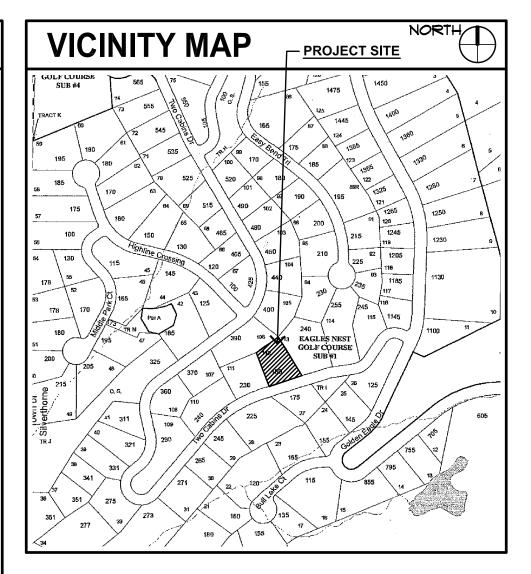
15) PROJECT STAKING The general contractor shall verify all existing grades and stake all building corners and the driveway location for Owner/Architect,

review board and town of Silverthorne approval prior to beginning any site clearing. 16) SITE DISTURBANCE

It is the responsibility of the contractor to protect the existing trees to remain and adjacent properties from damage during construction. Provide protective fencing throughout construction.

The general contractor shall check and verify all grades including paved area slopes prior to pouring any foundations. Survey work should be verified in detail. See numbers 5 and 6.

18) EXTERIOR MATERIAL MOCK UP The General Contractor shall provide a mock up of all exterior materials for review by the Owner, Architect and Eagles Nest Architectural Review Committee. This mock up shall be provided and signed off in writing prior to any exterior stain or exterior finish work. The sample shall include fascia, trim, window cladding and all other exterior finishes including a 3'-0"x3'-0" (min) sample of exterior stonework if applicable. This mock up shall be retained on site until the final punch.



LEGAL DESCRIPTION

EAGLE'S NEST SUBDIVISION 180 TWO CABINS SILVERTHORNE, CO

SITE NOTES

- ELECTRIC, CABLE T.Y. AND TELEPHONE UNDERGROUND IN
- VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY WORK COORDINATE UTILITY ROUTING WITH APPLICABLE UTILITY COMPANY. ALL UTILITIES TO BE UNDERGROUND.
- TOPOGRAPHIC INFORMATION OBTAINED FROM RANGE WEST ENGINEERS & SURVEYORS, INC. DATED 11/30/15.
- PROVIDE POSITIVE DRAINAGE AT BUILDING PERIMETER (SLOPE AWAY FROM BUILDING AT 1:12 MIN.)
- REFER TO FOUNDATION PLAN FOR FOUNDATION DRAIN LOCATION AND SLOPE. DRAINS TO BE SLOPED TO A DRYWELL.
- 6. FLAG ALL TREES FOR OWNER PRIOR TO THINNING OR REMOVING. PROTECT ALL REMAINING TREES WITH SNOW FENCE OR OTHER APPROVED BARRIER DURING CONSTRUCTION.
- PROVIDE 6" DIA. STONE RIP RAP OVER WEED BARRIER FABRIC AT EAVES AND VALLEY DRIP LOCATIONS.
- . STAKE HOUSE LOCATION FOR OWNER, ARCHITECT, AND ARCHITECTURAL REVIEW BOARD PRIOR TO ANY WORK.
- 10. GENERAL CONTRACTOR TO REVIEW & COMPLY WITH ALL SUBDIVISION CONDITIONS. COPIES OF CONDITIONS ARE AVAILABLE FROM ARCHITECT.

FINISHED FLOOR ELEVS

	u.s.g.s.	ARCH'L.
LOWER	9073.00'	100'-0"
ENTRY	9081,771	108'-9 1/4"
MAIN	9084.27'	111'-3 1/4"

AREA CALCULATIONS

	FINISHED	UNFINISHED	TOTAL	
LOWER	1112 S.F.	760 S.F.	1872 S.F.	
MAIN	23 5 3 S.F.	O 5.F.	2353 S.F.	
TOTAL	3465 S.F.	760 S.F.	4225 S.F.	
NOTE: SQUARE FOOTAGES ARE CALCULATED FOR CODE PURPOSES ONLY AND SHOULD BE RECALCULATED FOR ANY OTHER PURPOSES.				

MCCREREY-TWO CABINS



STR'L. ENGINEER:

G3 CONSULTING, LLC

BRECKENRIDGE, CO 80424

MARK GEE

P.O. BOX 2933

(970) 485-2073

mgee@consultg3.com

SURVEYOR:

SILVERTHORNE, CO 80498

BOB JOHNS

P.O. BOX 589

(970) 468-6281 (970) 668-3765 FAX

RANGE WEST ENGINEERS & SURVEYORS, INC.

VIEW FROM TWO CABINS DRIVE

ARCHITECT:

BRECKENRIDGE, CO 80424

MICHAEL HOUX

(970) 453-6880

mhoux@bhhpartners.com

P. O. BOX 931

BHH Partners, Planners and Architects

OWNER/BUILDER:

1ARK MC CREREY

FRISCO, CO 80443

P.O. BOX 1082

(970) 418-1455

MC CREREY FINE HOMES, LLC

markm@mccrereyfinehomes.com

SHEET INDEX

TITLE SHEET/GENERAL NOTES

SITE GRADING PLAN LANDSCAPE PLAN

LOWER LEVEL PLAN MAIN LEVEL PLAN

ROOF PLAN EXTERIOR ELEVATIONS

EXTERIOR ELEVATIONS

BUILDING SECTIONS BUILDING SECTIONS

BUILDING SECTIONS ARCHITECTURAL DETAILS

ARCHITECTURAL DETAILS

ARCHITECTURAL DETAILS OUTLINE SPECIFICATIONS A5.1

OUTLINE SPECIFICATIONS A5.2 FOUNDATION PLAN

FLOOR FRAMING PLAN ROOF FRAMING PLAN

FOUNDATION DETAILS

FLOOR FRAMING DETAILS ROOF FRAMING DETAILS

LOWER LEVEL MECHANICAL/ELECTRICAL PLAN MAIN LEVEL MECHANICAL/ELECTRICAL PLAN

HP GEOTECH, INC.

P.O. DRAWER 1887

(970) 468-1989 (970) 468-5891 FAX

SILVERTHORNE, CO 80498

SOILS ENGINEER:

SHEET NUMBER:

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REVISIONS:

JOB NO:

DRAWN BY

PERMIT

CHECKED BY:

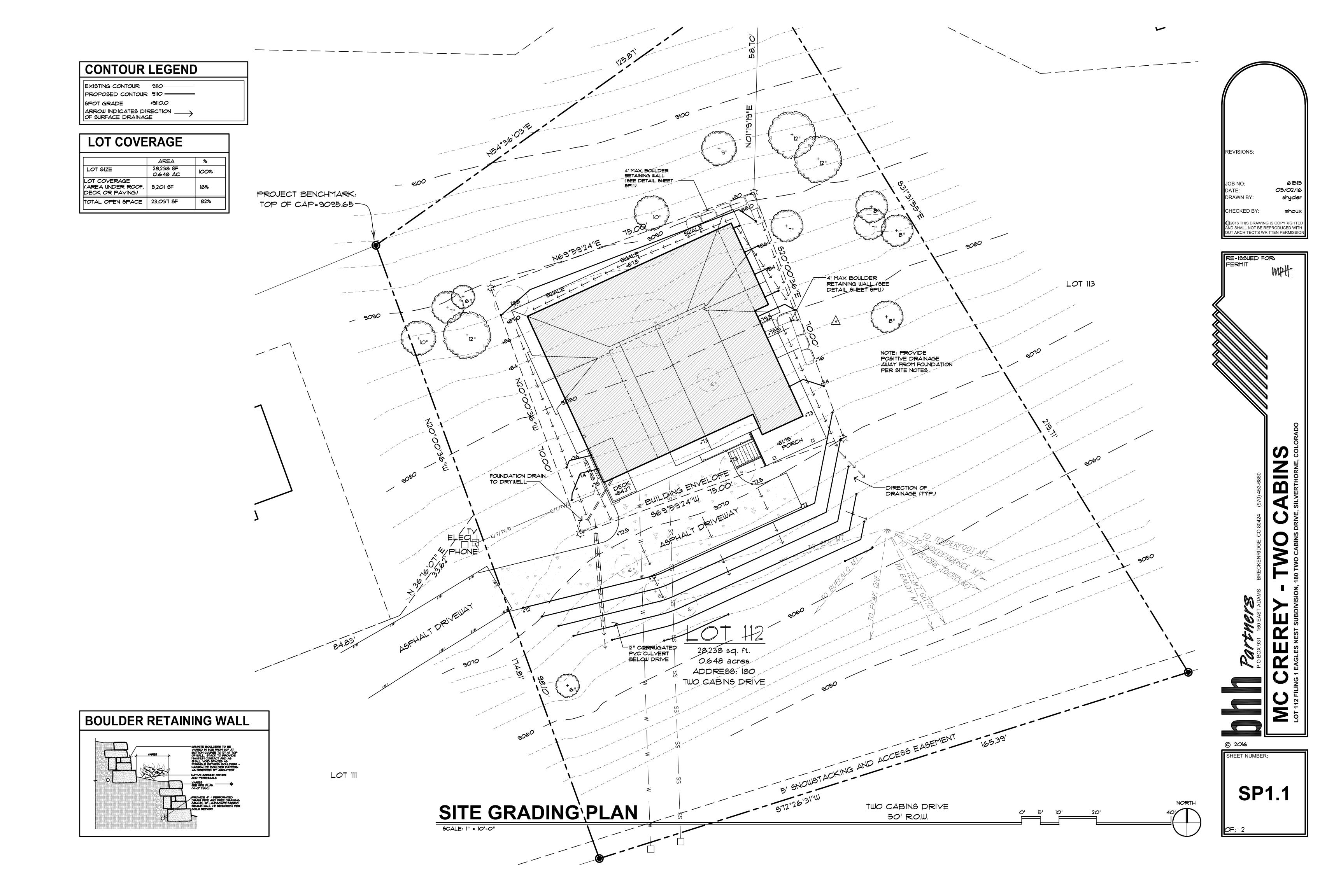
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RE-ISSUED FOR:

ND SHALL NOT BE REPRODUCED WITH-UT ARCHITECT'S WRITTEN PERMISSIO

05/02/16

jbuxkemper



PLANTING LIST & NOTES

T LANTING LIGH & NOTES					
KEY	COMMON	BOTANICAL	NO.	SIZE	
EXIST	ING TREES				
	EXISTING	VARIES -	21	SEE SITE PLAN	
EXIST	ING TREES TO BE RE	MOVED			
\odot	VARIES -	VARIES -	6	SEE SITE PLAN	
TREE	5				
	COLORADO SPRUCE	PICEA PUNGENS OR PICEA ENGELMANNI	3	(2) 8' TO 10' TALL (1) 12' TO 14' TALL	
€	ASPEN	POPULUS TREMULODES	5	2" TO 3" CAL 50 % MULTI-STEM	
SHRU	BS/GROUND COVERS	# PERENNIALS			
	POTENTILLA	POTENTILLA FRUTICOSA	5	5 GAL.	
A CONTRACTOR OF THE PARTY OF TH	ALPINE CURRANT	RIBIES ALPINUM	5	5 GAL.	
\odot	PEKING COTONEASTER	COTONEASTER LUCIDUS OR APICULATUS	5	5 GAL.	
	NATIVE GROUND COYER AND PERENNIALS	PROVIDE SUBMITTAL	5	1 FLAT	

LANDSCAPE NOTES

- 1. PROVIDE 2"-3" (MIN.) CLAYFREE TOPSOIL AND SEED ALL DISTURBED AREAS WITH SUMMIT CO. SHORT SEED MIX (AS APPROVED BY EAGLES NEST SUBDIVISION. STRIP AND STOCKPILE EXISTING TOPSOIL IN CONSTRUCTION AREA. SCREEN TOPSOIL PRIOR TO INSTALLATION.
- 2. KEEP EXISTING TREES WHERE POSSIBLE, TAKING INTO CONSIDERATION DRIP LINES AND ROOT STRUCTURE. PROTECT EXISTING TREES WITH FENCING LOCATED AT OR OUTSIDE DRIP LINE OF TREE. STOCKPILE AND REUSE EXISTING TREES WHERE POSSIBLE.
- GENERAL CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS PER SPECIFICATIONS AND CODE REQUIREMENTS.
 PRIOR TO ANY LANDSCAPE WORK, REMOVE ALL DEBRIS, PAINT, CONCRETE, STUMPS, SLASH, ETC. FROM LANDSCAPE AREA.
- 5. LOCATE ALL PLANTINGS TO AVOID SNOW STACKING & SNOW SLIDE AREAS FROM ABOVE.
- 6. SHRUBS ARE TO BE FIELD LOCATED AS APPROVED BY OWNER AND ARCHITECT.
 7. ALL NEW LANDSCAPING TO BE IRRIGATED WITH DRIP
- IRRIGATION SYSTEM. PROVIDE SUBMITTAL.

 8. ALL NEW PLANTINGS SHOULD BE HIGH ALTITUDE GROWN AND OR COLLECTED TO ENSURE BETTER SURVIVAL.
- 9. NATURALIZE GROUPING OF TREES BY VARYING HEIGHT (
 LOCATION WHEREVER POSSIBLE.
 IO. SCREEN ALL UTILITY PEDESTALS WITH LANDSCAPE
- 11. PROVIDE 3" TO 4" DIAMETER STONE RIPRAP OVER WEED BARRIER FABRIC AT BUILDING DRIP LINES. UNDULATE EDGES AND PROVIDE LANDSCAPE EDGING AT RIPRAP TO TOPSOIL JUNCTURE.
- INSTALL & BACKFILL ALL PLANTINGS WITH SOIL MIX INCLUDING ORGANIC SOIL AMENDMENTS PER SPECIES REQUIREMENTS AND LANDSCAPE DETAILS.
 ROOT FEED ALL NEWLY PLANTED TREES DURING INSTALLATION. PROVIDE LIQUID GROWTH TREE
- STIMULATOR AND SOLUABLE FERTILIZER AT RECOMMENDED RATE FOR EACH TREE SPECIES.

 14. PROVIDE 3" OF SHREDDED BARK MULCH AT ALL SHRUB
- AND TREE WELLS.

 15. LANDSCAPE BOULDERS OF 2' OR LARGER SHALL BE RETAINED ON SITE FOR USE IN LANDSCAPE WORK, BURY DECORATIVE BOULDERS ONE-HALF OF DIAMETER.
- 16. ADDITIONAL CONSULTATION WITH A QUALIFIED LANDSCAPE PROFESSIONAL AT OWNER OPTION IS RECOMMENDED.

NOTE: ALL LANDSCAPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EAGLES NEST DESIGN GUIDELINES.

REVEGETATION NOTES

REVEGETATE ALL DISTURBED AREAS ON THE SITE WITH:

SHORT DRY GRASS MIX #2 LBS/1000 SF:
HARD FESCUE 30%
CREEPING RED FESCUE 30%
SHEEP FESCUE 25%
CANADA BLUEGRASS 10%
CANBY BLUEGRASS 5%

SLOPES OVER 3:1 SHALL BE HAY TACKIFIED OR NETTED.

MOUNTAIN MAGIC WILDFLOWER MIX @1 LB/10,000 SF:
BABY'S BREATH BLANKETFLOWER
CALIFORNIA POPPY SHIRLEY POPPY
BLUE FLAX LUPINE MIX
WALLFLOWER MAIDEN PINKS
PENSTEMON, ROCKY MOUNTAIN
WILD THYME

ROCKY MOUNTAIN BLUE COLUMBINE MIX @ILB/25,000 SF

WESTERN NATIVE WILDFLOWER MIX ®1 LB/6000 SF:

MOUNTAIN LUPINE CONEFLOWER, WESTERN
COLUMBINE, COLORADO SULFUR FLOWER
GERANIUM, RICHARDSON NODDING GROUNDSEL
ASTER, ENGLEMANNS WESTERN LARKSPUR
GAILLARDIA/BLANKETFLOWER AMERICAN VETCH
ORANGE MOUNTAIN DAISY GIANT LOUSEWORT
PENSTEMON, WASATCH PENSTEMON, RYDBERGS

REQUIRED SNOWSTACK

PENSTEMON, ROCKY MOUNTAIN

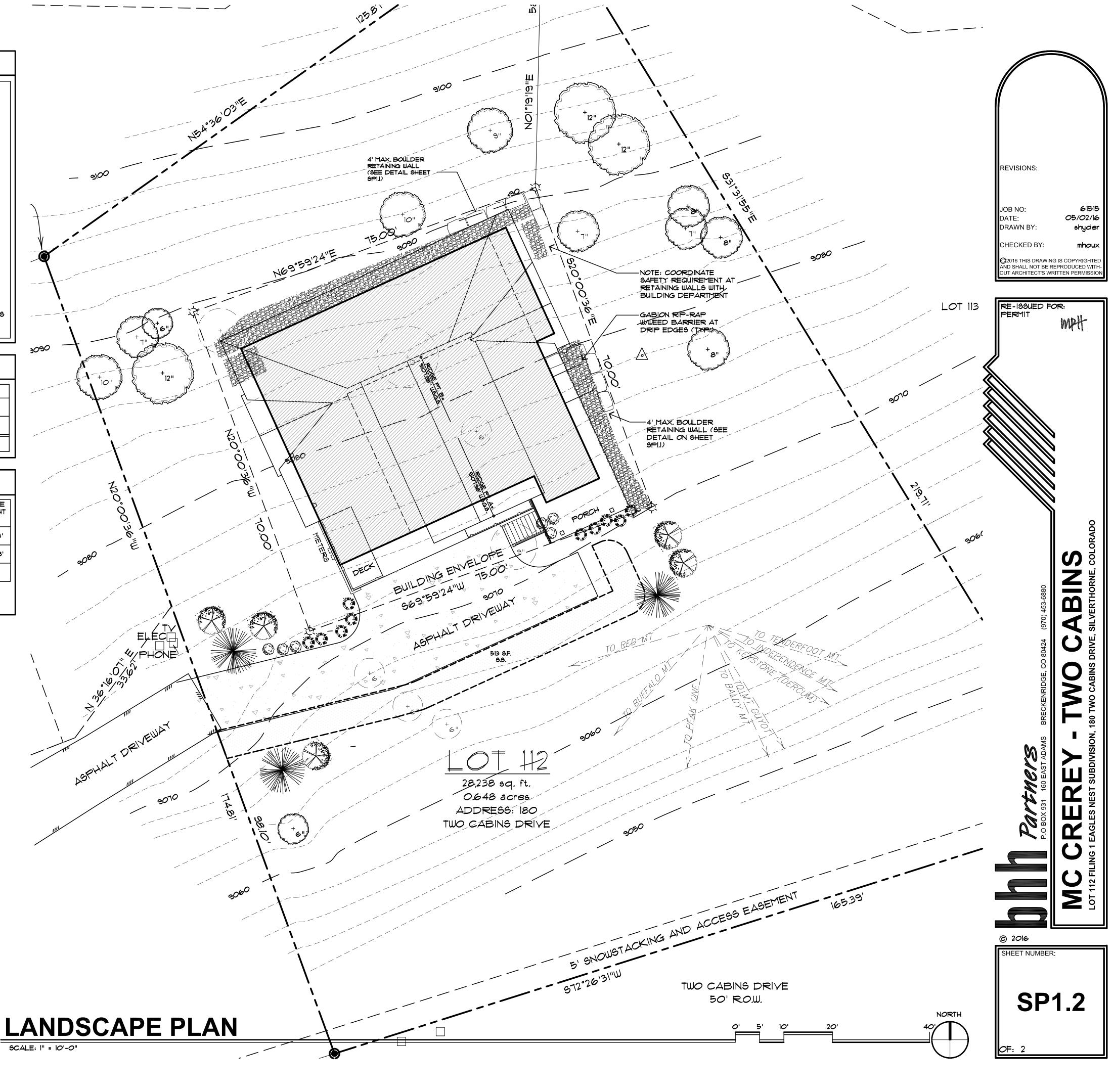
	SQ. FT.	%	
HARDSCAPE (WALKS & DRIVEWAY)	1,364 S.F.	100%	
REQ'D SNOW STACK (25% OF HARDSCAPE)	341 S.F.	25%	
TOTAL SNOW STACK	612 S.F.	45%	

BUILDING HEIGHT

			_	
RIDGE POINT	RIDGE ELEVATION	EXISTING GRADE	HEIGHT CALCULATIONS	RIDGE HEIGHT
(A)	'8 <i>e.</i> roi <i>e</i>	9073.75'	9107.98'-9073.75'	34.23'
B	'8 <i>e.</i> F0 <i>ie</i>	9083.00'	9107.98-19083.00	24.98'

ARCHITECTURAL 100'-0" FOR PROJECT = 9013.00' USGS ALLOWED BUILDING HEIGHT = 35.00' PROPOSED BUILDING HEIGHT = 34.23'

PLANTING DETAIL EVERGREEN TREE DECIDUOUS TREE WRAP DECIDIOUS TREES OVER 1" CAL. WITH BURLAP OR ASPHALTIC KRINKLE KRAFT TREE WRAP DECIDUOUS TREE - PRUNE BACK 1/4" ON-SITE SPRAY WITH ANTIDESICCANT STAKING ACCORDING TO MANUFACTURER'S DIAGRAM INSTRUCTIONS - IF FOLIAGE IS PRESENT. DOUBLE STRAND OF 10 GAUGE GALYANIZED WIRE TWISTED. - 2 1/2" DIA.-10' LONG CEDAR STAKE WITH NOTCHED END (1' EXPOSED) - 2 PER TREE EVERGREEN TREE- GROUND LINE TO BE THE SAME AS EXISTED AT THE NURSERY. FOLD BACK BURLAP FROM TOP OF BALL - 2" MULCH GROMMETED NYLON STRAF -BACKFILL WITH TOPSOIL AND PEAT MOSS 3: TURNBUCKLE RATIO BY VOLUME IN 9" LAYERS. WATER 3 GUYS OF 10 GAUGE TWISTED WIRE 120" APART -EACH LAYER UNTIL SETTLED AROUND TREE.— METAL EDGING — 4" SOIL SAUCER-6" FOR PLANTS UP $24" \times 2" \times 2"$ STAKE LOOSEN TO 4' HEIGHT MIN. 8' DRIVEN FLUSH WITH SUBSOIL ~ FOR PLANTS OVER FINISHED GRADE -4' HEIGHT MIN. EQUAL TO TWICE BALL DIAMETER

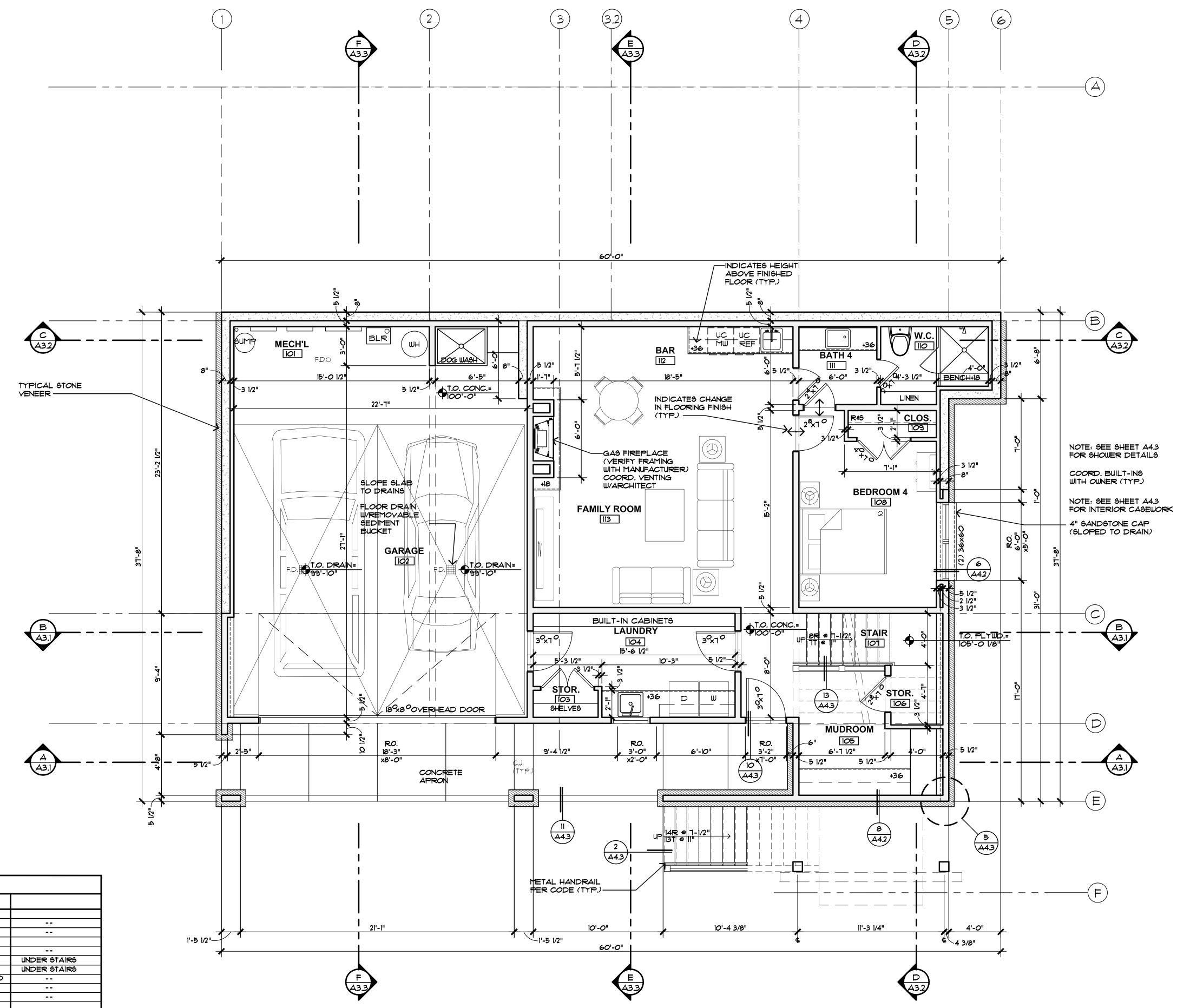


DOOR & WINDOW NOTES

- DUAL GLAZE ALL WINDOWS AND DOORS WITH GLASS.
 PRIOR TO ANY FRAMING WORK, VERIFY ROUGH OPENING DIMENSIONS WITH WINDOW MANUFACTURER.
- 3) SEE PLANS AND ELEVATIONS FOR OPERATION AND WINDOW TYPE.
- 4) PROVIDE WEATHER STRIPPING AND ALUMINUM THRESHOLD AT ALL EXTERIOR DOORS.

NOTIFY ARCHITECT OF ANY DISCREPANCIES.

- 5) VERIFY JAMB WIDTHS WITH WALL THICKNESS PRIOR TO INSTALLATION.
- 6) PROVIDE SAFETY GLASS TO COMPLY WITH CODE REQUIREMENTS (SEE 2012 I.R.C.).
- 1) ALL GLAZING SYSTEMS SHALL BE RATED FOR USE AT HIGH ALTITUDES PER MANUFACTURER'S REQUIREMENTS.
- 8) INSULATE ALL EXTERIOR SHIM SPACES AT DOORS.
- 9) WRAP ALL EXTERIOR OPENINGS WITH 15* FELT (PER SPECS.) PROVIDE 1-1/2" X 1-1/2" HEAD FLASHING AT ALL EXTERIOR OPENINGS (PRIME AND PAINT OR COLOR CLAD).
- 10) EACH SLEEPING ROOM TO HAVE AN EGRESS DOOR OR WINDOW TO MEET THE 2012 I.R.C. REQUIREMENTS.
- 11) WINDOWS AND DOORS TO HAVE FIELD APPLIED EXTERIOR TRIM. (DO NOT PROVIDE BRICK MOLD).
- 12) PROVIDE SHOP DRAWINGS FOR ALL SPECIAL/CUSTOM DOORS AND WINDOWS PRIOR TO FABRICATION.
- 13) FIELD MEASURE TO VERIFY ALL CUSTOM UNIT SIZES.
- 14) WINDOW CATALOGUE NUMBERS ARE INDICATED ON PLAN.
- 15) SEE FLOOR PLANS FOR DOOR & WINDOW SIZES.
 (WIDTH X HEIGHT).
- 16) WINDOWS AND PATIO DOORS GENERIC.
- 17) INTERIOR DOORS TO BE CENTERED ON SPACES OR INSTALLED W/ 4 1/2" OFFSET TO NEAREST WALL (U.N.O.)



R	OOM FINIS	SH SCHI	EDUL	Ε			
#	ROOM NAME	FLOC)R	WALLS	CEIL	ING	
		MATERIAL	BASE	MATERIAL	MATERIAL		
101	MECHANICAL	CONCRETE	NONE	1	1	10'-0"	
102	GARAGE	CONCRETE	NONE	1	1	10'-0"	
103	STORAGE	STAINED CONC.	NONE	1	1	9'-0"	
104	LAUNDRY	STAINED CONC.	NONE	1	1	9'-0"	••
105	MUDROOM	STAINED CONC.	NONE	1	1	VARIES	UNDER STAIRS
106	STORAGE	STAINED CONC.	NONE	1	1	VARIES	UNDER STAIRS
101	STAIR	WOOD	NONE	1	1	VAULTED	
108	BEDROOM 4	CARPET	NONE	1	1	9'-0"	
Q	CLOSET	CARPET	NONE	1	1	9'-0"	
10	W.C.	TILE	CONC.	1,2	1	9'-0"	
111	BATH 4	TILE	CONC.	1,2	1	9'-0"	-
112	BAR	STAINED CONC.	NONE	1	1	9'-0"	•
113	FAMILY ROOM	STAINED CONC.	NONE	1	1	9'-0"	

5/8" TYPE 'X' GYPSUM BOARD WITH LIGHT HAND TROWELED FINISH

4. SPECIFIED STONE VENEER
5/8" CEMENT BOARD WITH TILED FINISH

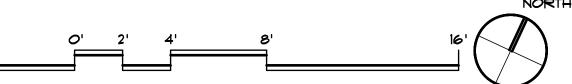
5. IX6 WOOD T&G

BEAD BOARD WAINSCOT

NOTE: VERIFY INTERIOR FINISHES W/ OWNER

NOTE: 5/8" GYP. BD. TO BE INSTALLED THROUGHOUT GARAGE





REVISIONS:

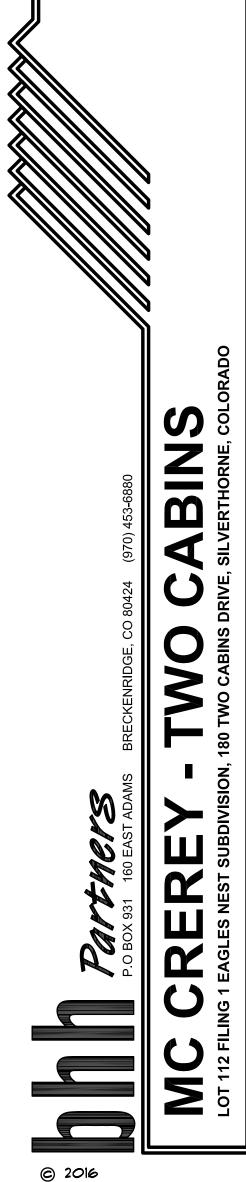
JOB NO: 61515
DATE: 05/02/16
DRAWN BY: shyder

CHECKED BY: mhoux

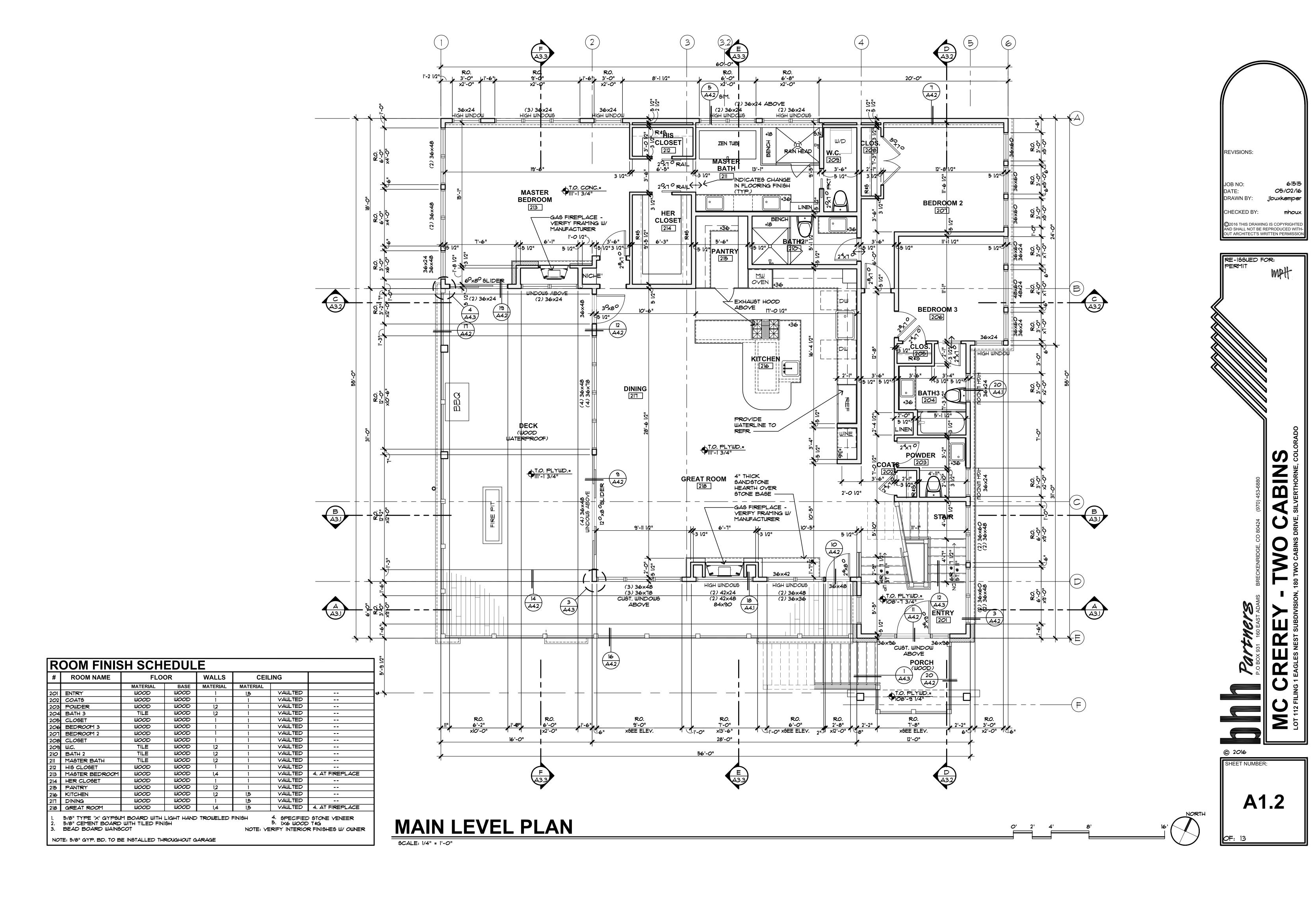
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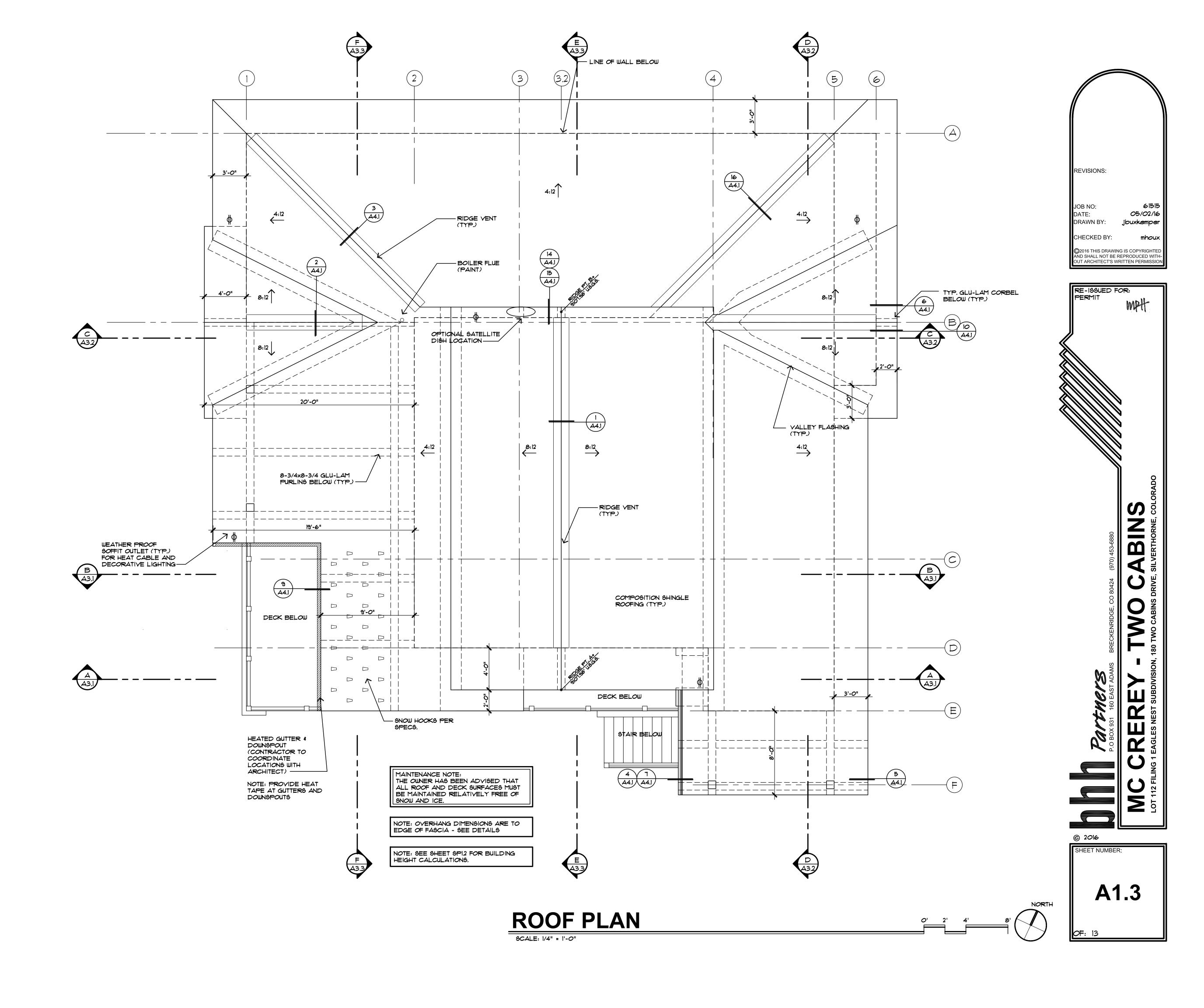
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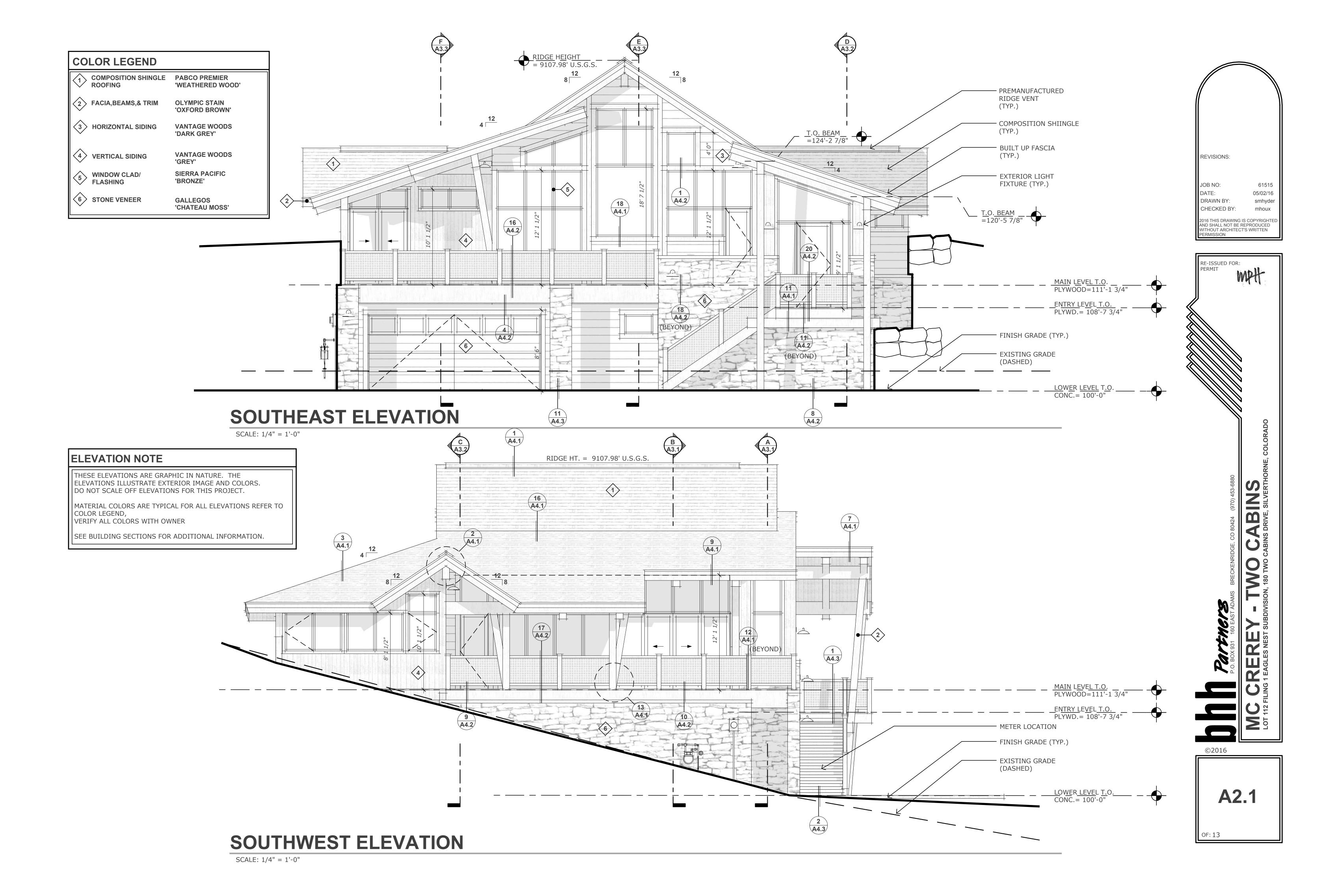
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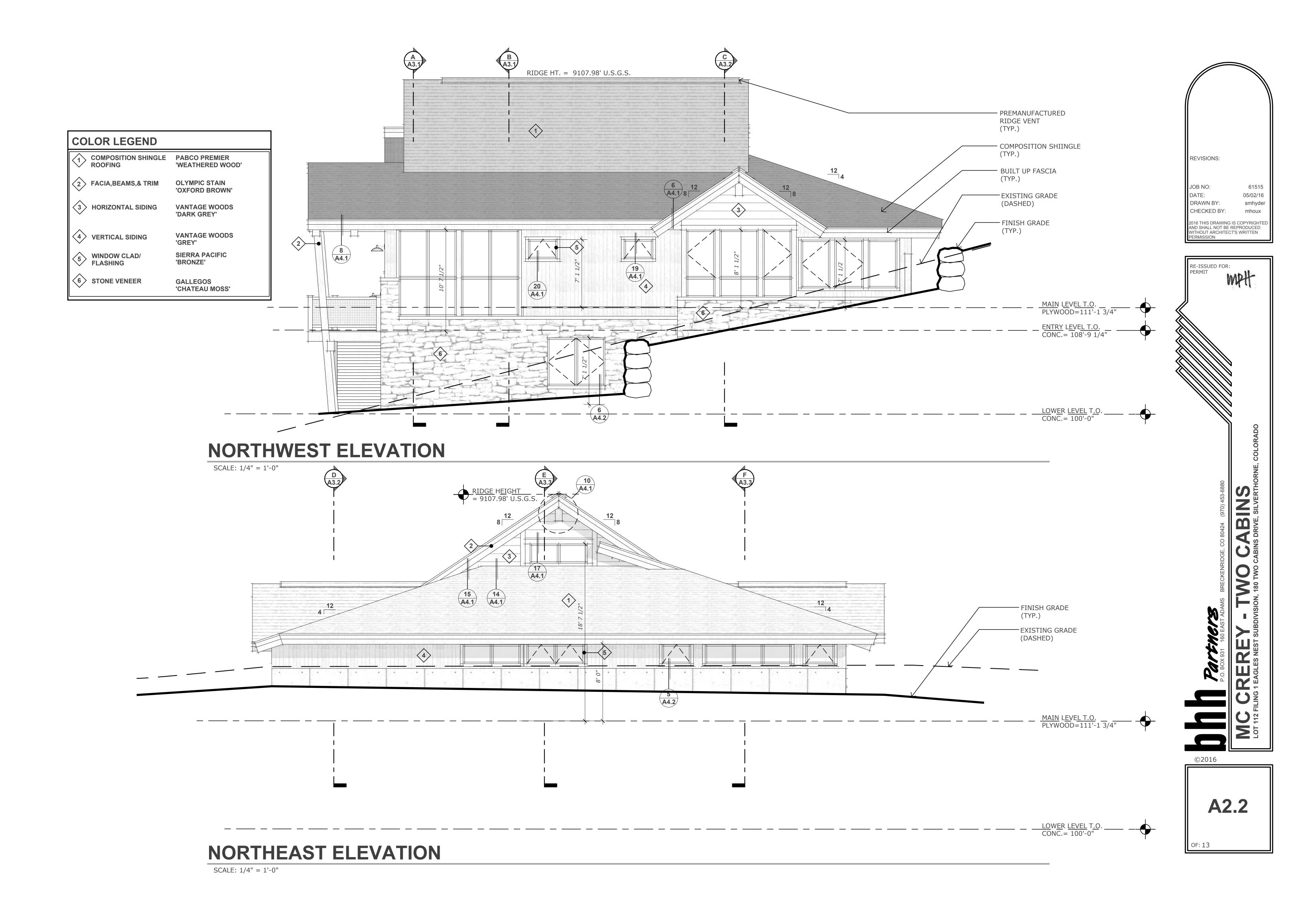


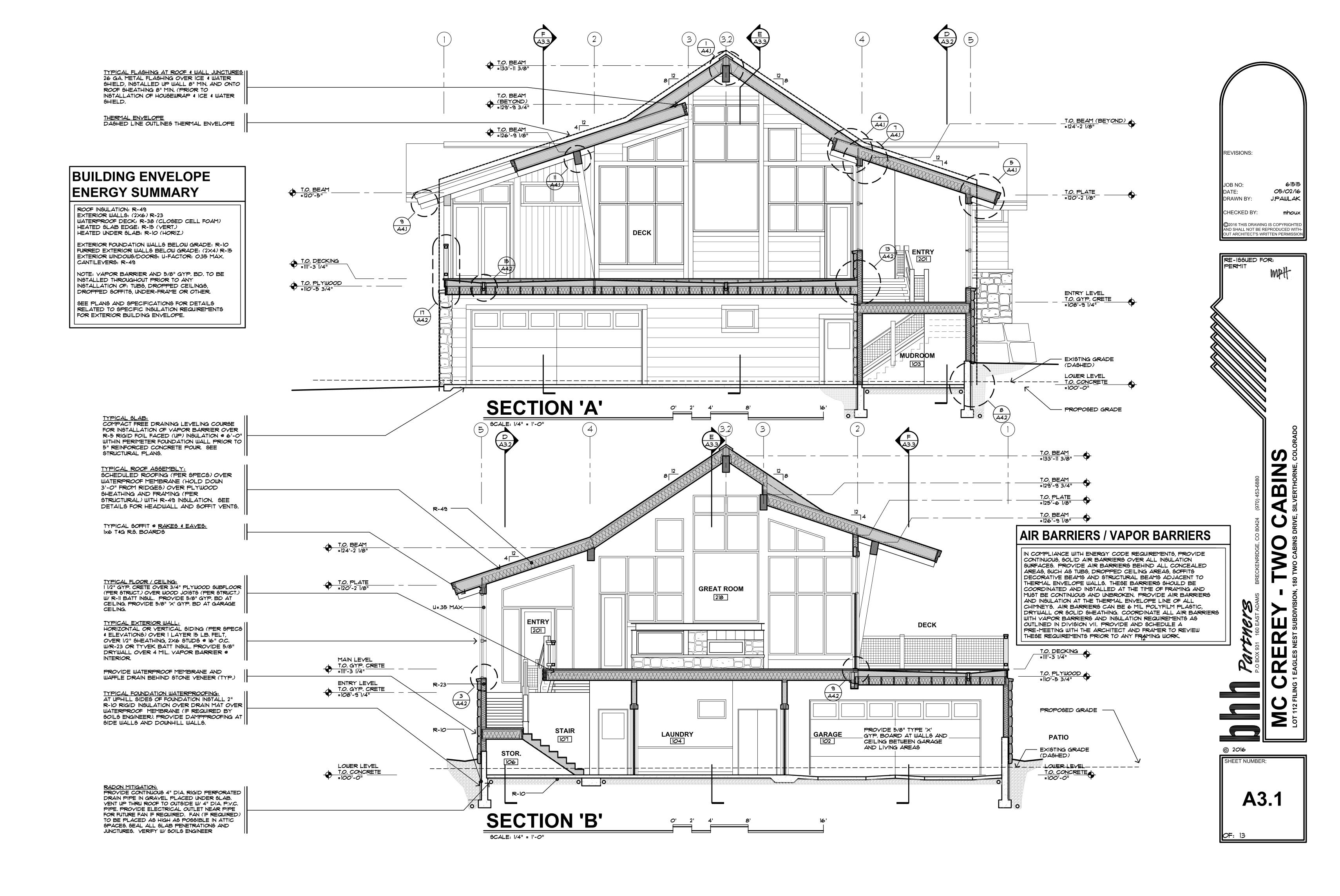
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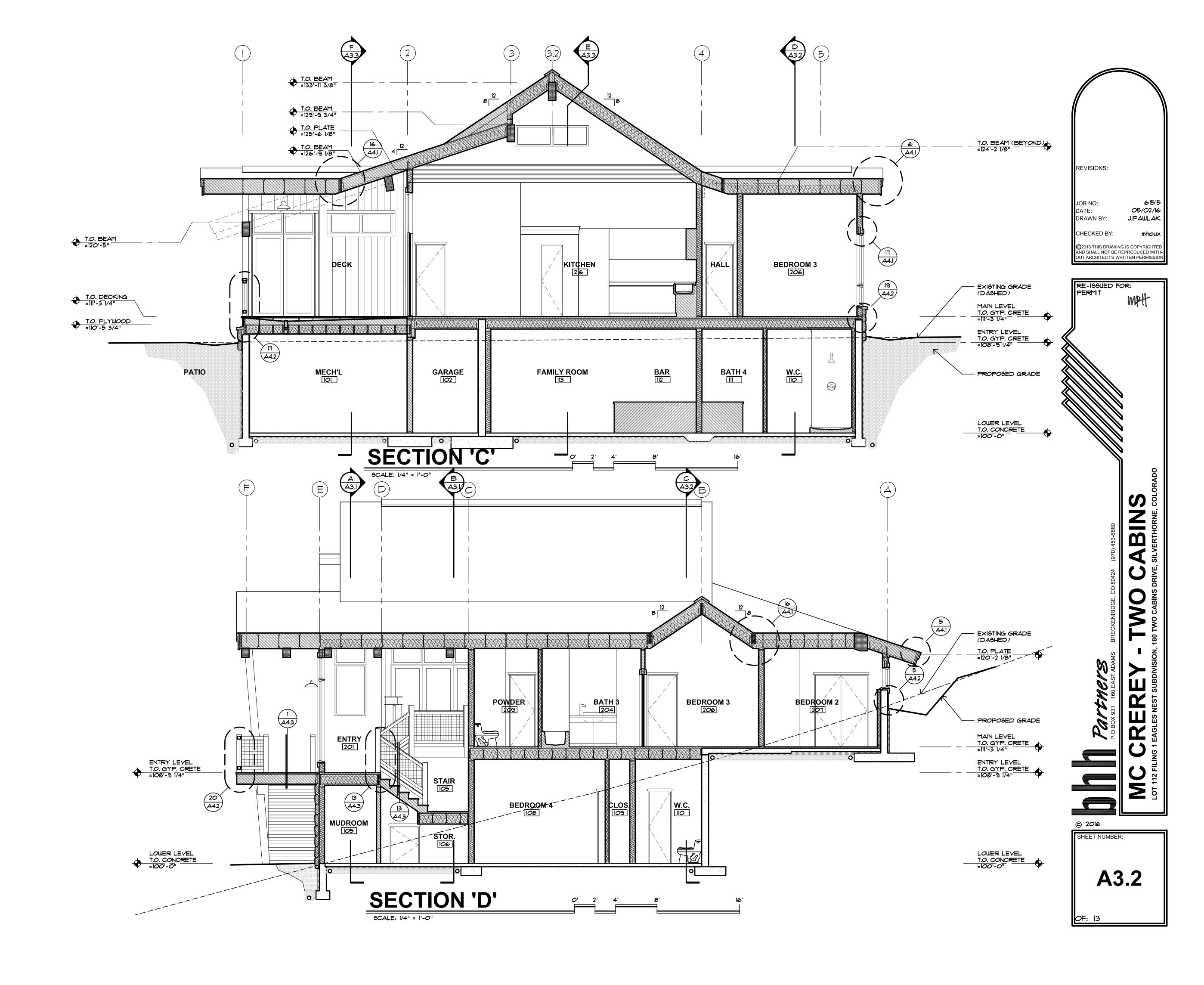


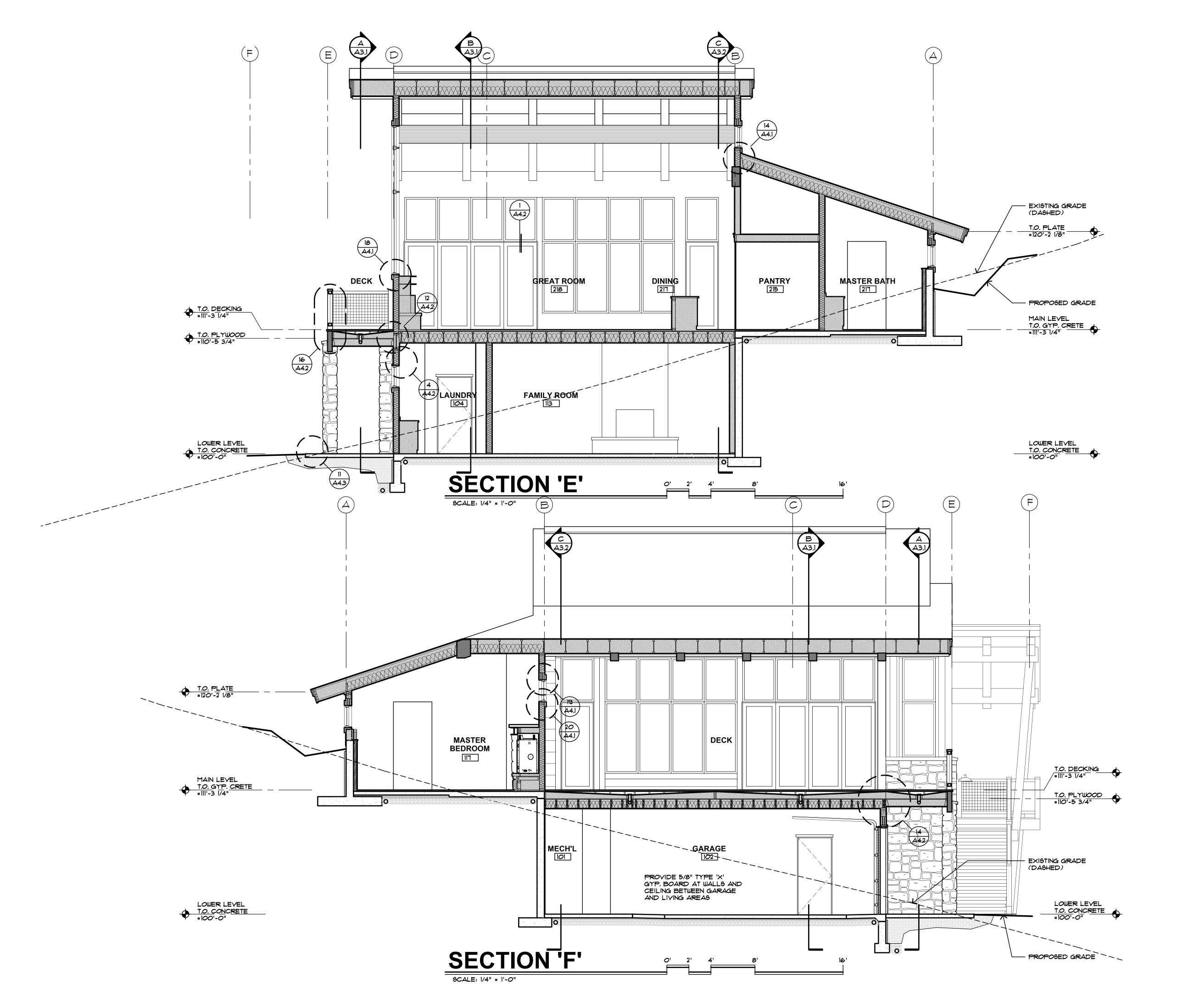


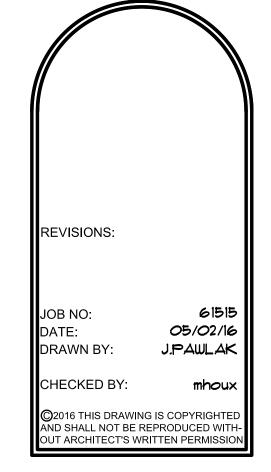


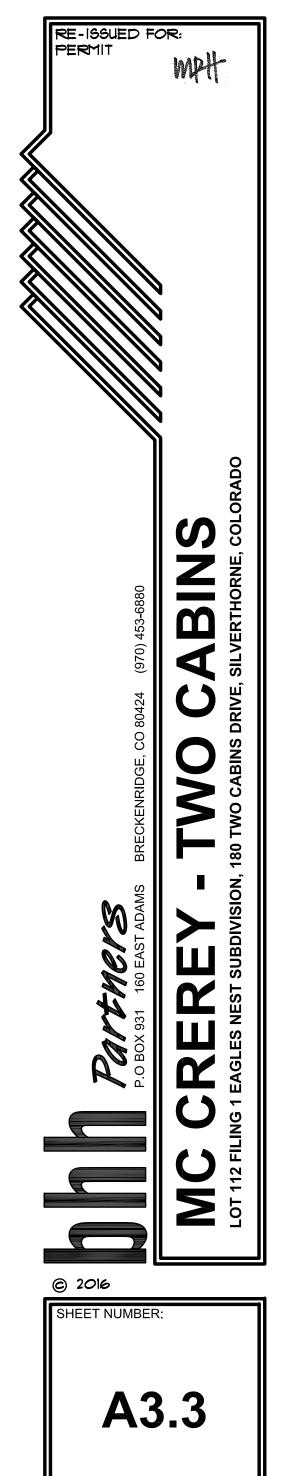


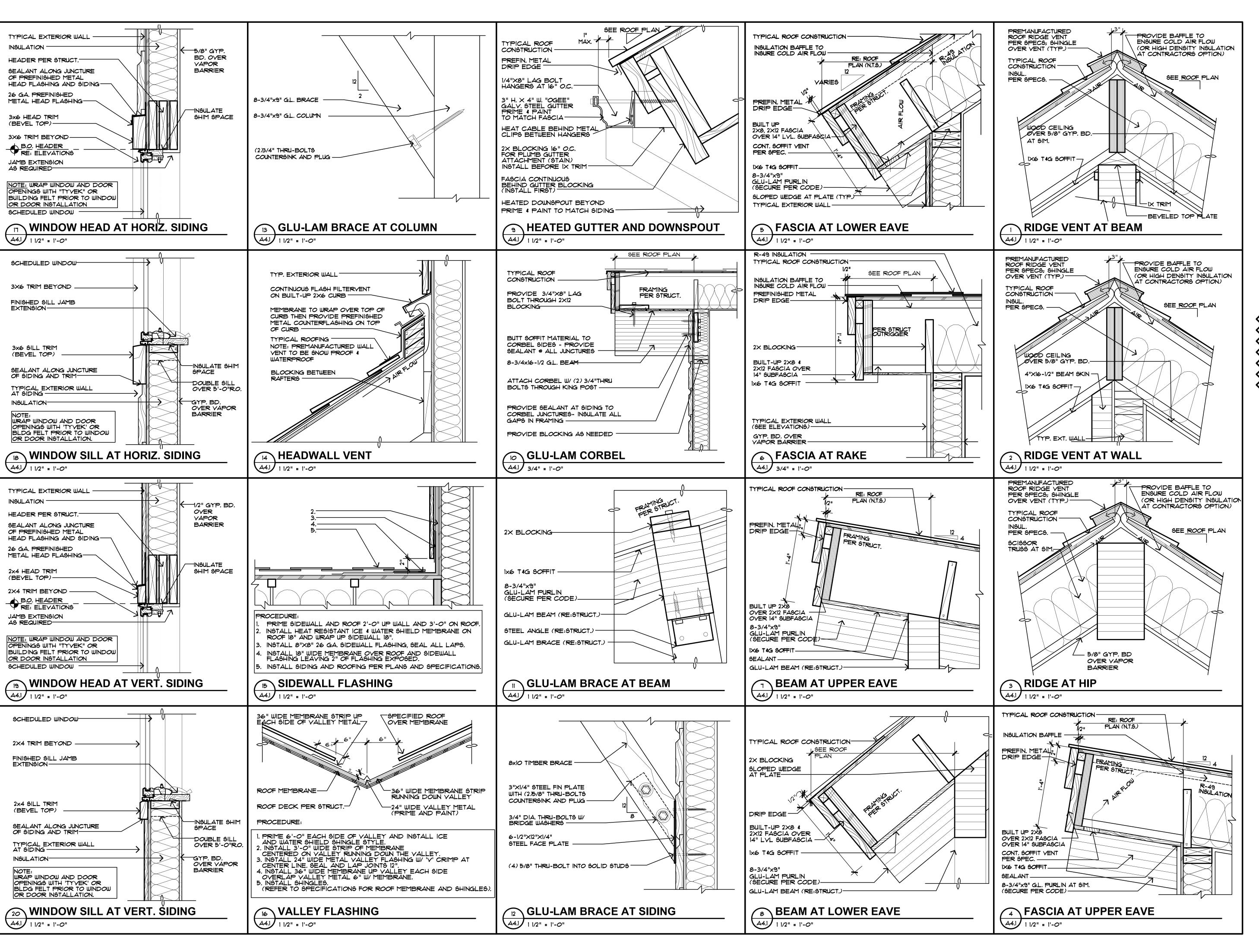


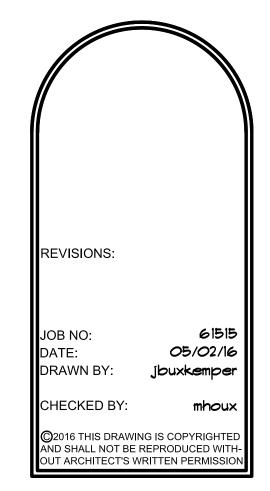


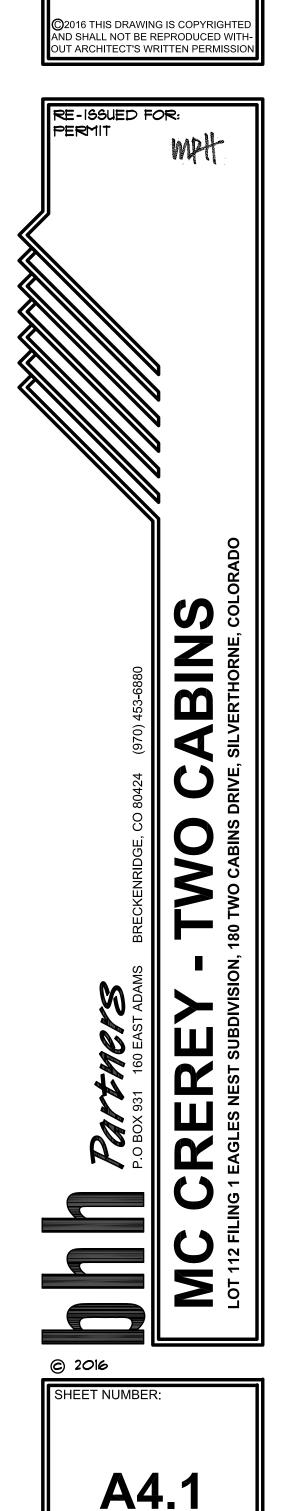


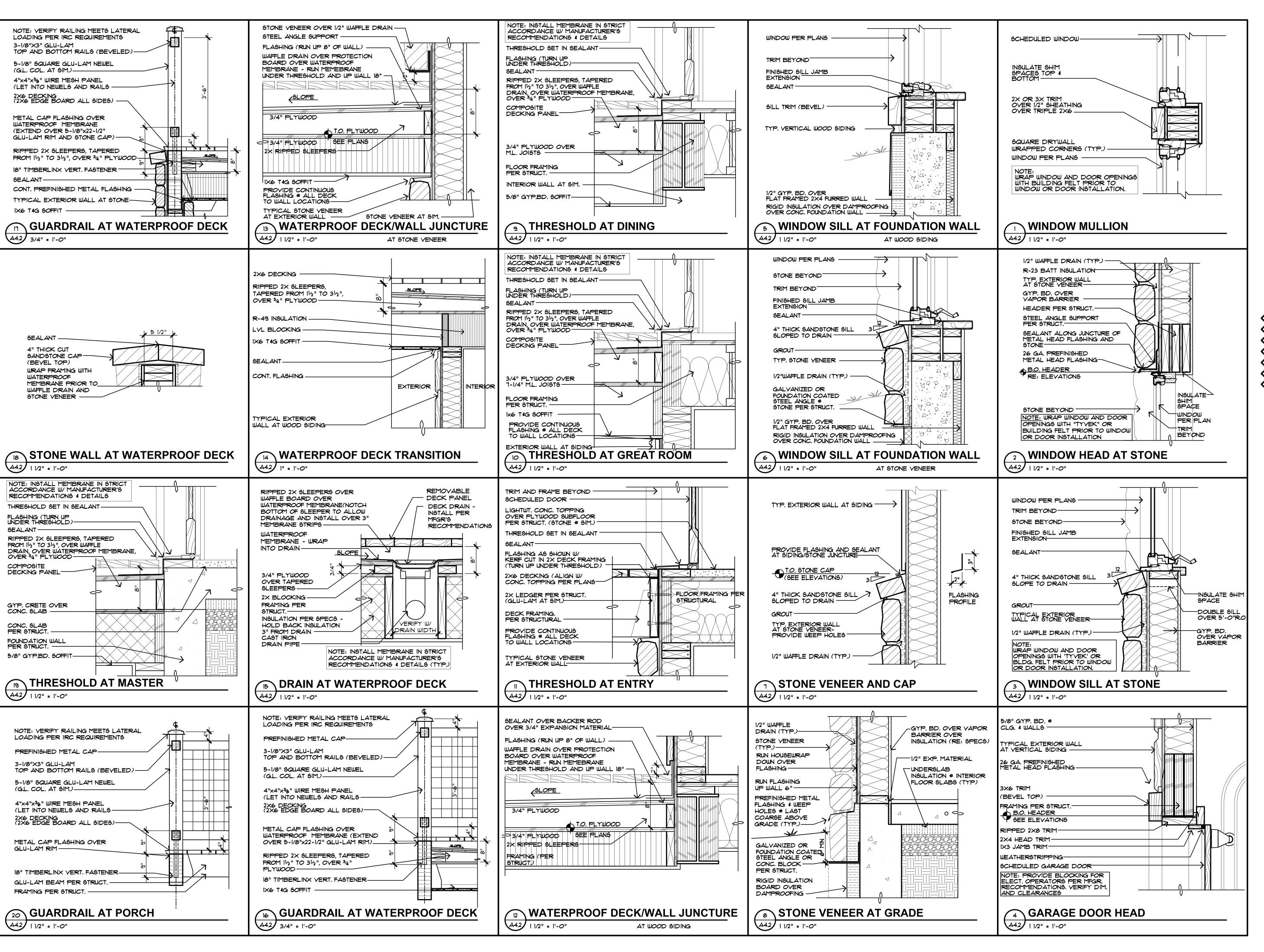


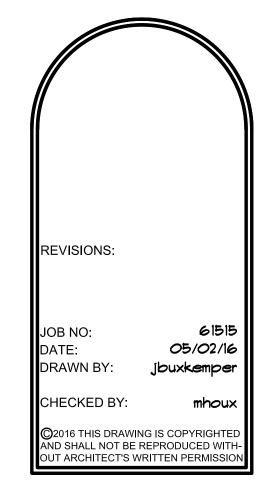


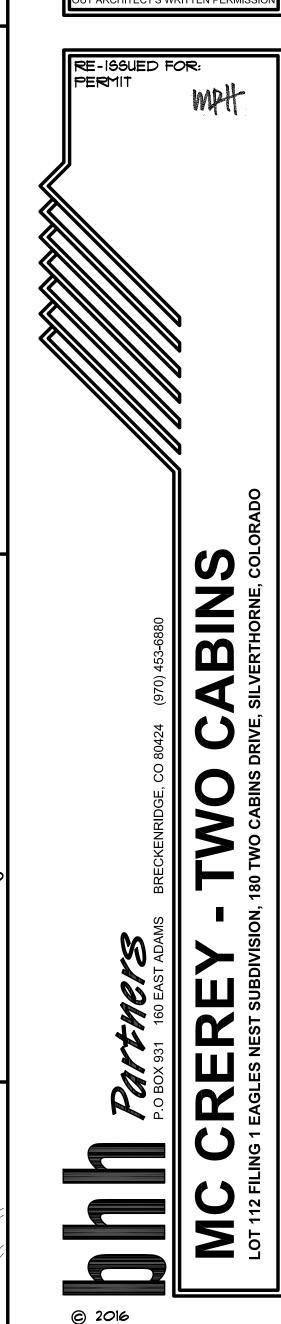






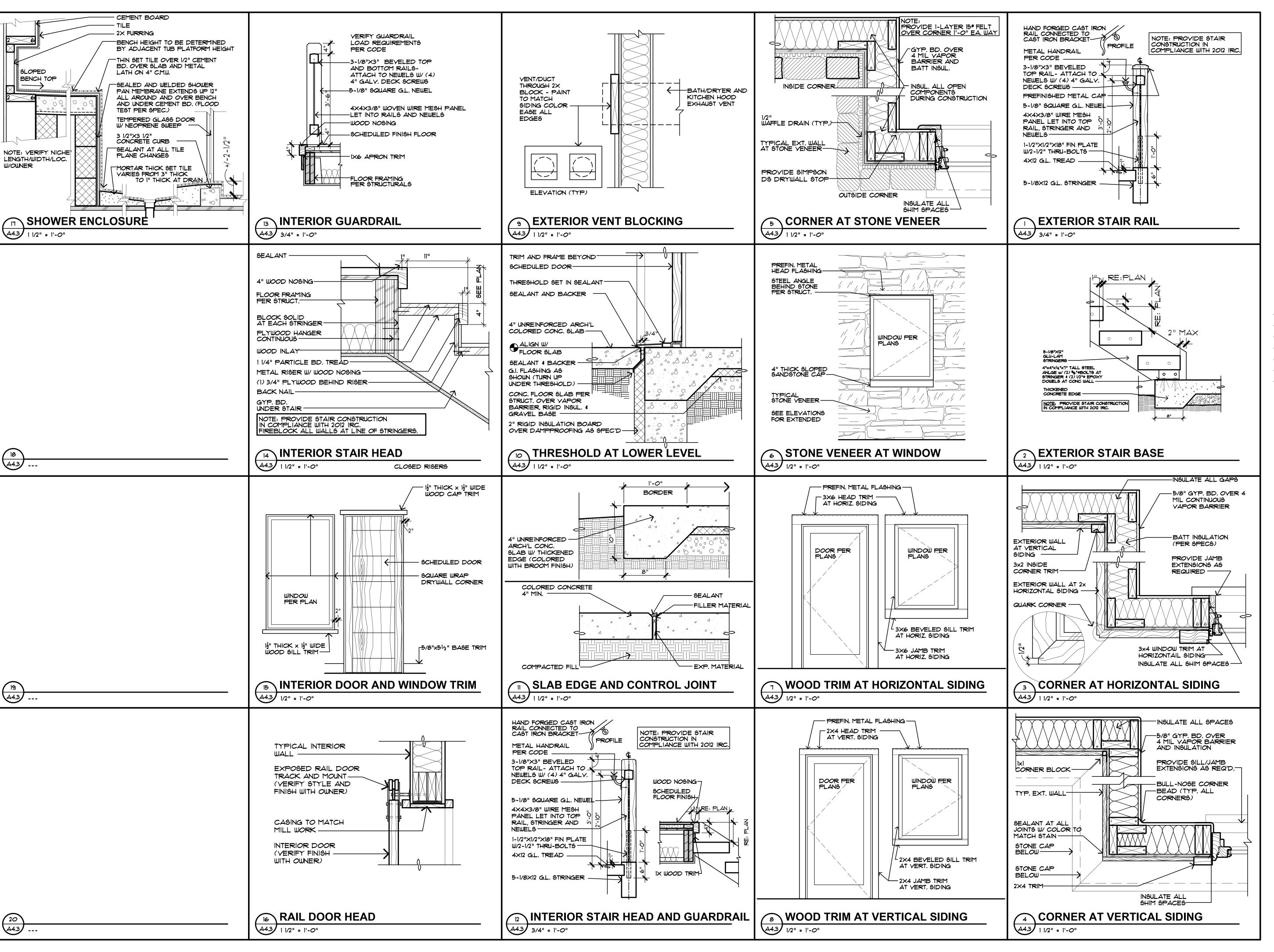


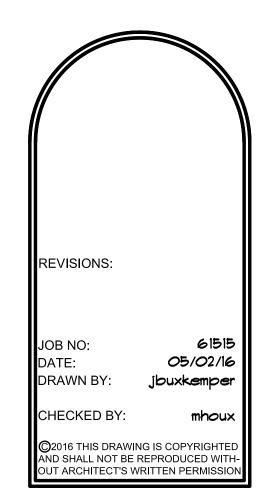


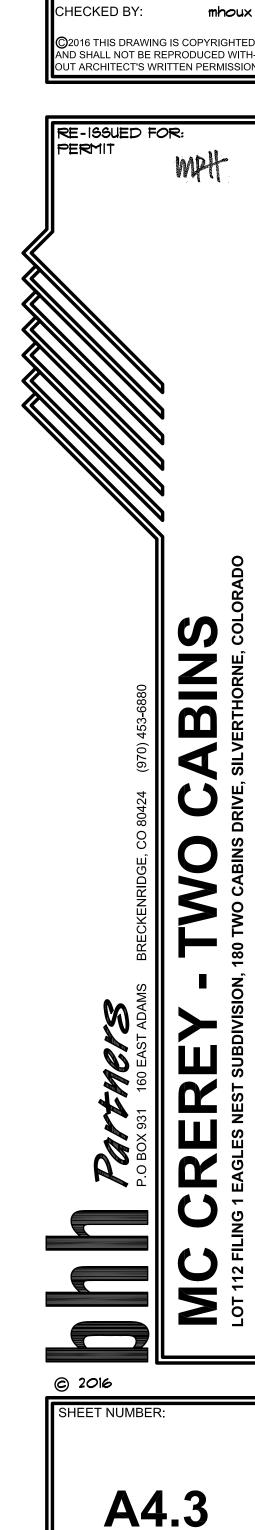


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MCCREREY - TWO CABINS Job #61515 **OUTLINE SPECIFICATIONS**

- GENERAL REQUIREMENTS:
- **GENERAL NOTES**
- SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS: Reference is made to the Project Drawings, Project Contract, Project Addenda, Architect's Supplemental Instructions, and other Contract Documents pertaining to the work related to and associated with these specifications.
- 2. CONFLICTS/DISCREPANCIES/ERRORS/OMISSIONS IN DOCUMENTS: Notify the Architect of any conflicts between this and other Contract Documents prior to performance of any work.

Figured dimensions on the drawings shall govern and details shall take precedence over smaller scale drawings. Specifications and construction drawings are intended to agree. Generally the specifications shall take precedence over the drawings, but should discrepancies occur, the Contractor shall do no work without clarification from the Architect. Work called for by the drawings and not mentioned in the specifications, or vice versa, shall be furnished as though set forth by both.

- 3. SUBSTITUTIONS: Substitution of "equal products" is acceptable but only with the Architect's and
- Owner's permission. Submittal of manufacturer's literature is required. 4. INDUSTRY STANDARDS REQUIREMENTS: All trades shall perform their work within the recognized standards of the applicable industry. Reference is made to specific trade standards for each subcontractor trade. No subcontractor shall begin work until he has accepted the substrates
- 5. CODE REQUIREMENTS: All work shall be in complete conformance with the current edition of the International Residential Code (IRC) as modified and adopted by the local jurisdiction.

on which his work will be based or installed.

- 6. NOTICE OF REVIEW: The Contractor and all Subcontractors shall review all sections of these specifications prior to performance of any work.
- SUBMITTALS: Formal written/graphic shop drawings and/or submittals are recommended for Architect's review and approval. Failure of the Contractor to provide shop drawings and/or submittals removes all responsibility for the design of the work from the Architect.
- 8. DEVIATIONS FROM DRAWINGS: Any deviation whatsoever from the drawings and/or specifications is not allowed without the Architects permission. Failure to provide such written authorization places all responsibility for the variation on the contractor. Deviations from the contract documents shall be made only after approval is obtained from the Owner and Architect.
- 10. APPROVALS: The conditions of approval by the Eagles Nest Design Review Committee and Towr of Silverthorne must be followed by the Contractor.
- 11. STANDARD OF CARE: The Architect shall perform its services in accordance with that degree of skill and care ordinarily exercised by similarly situated members of Architect's profession involved in the design of similar projects in the same locale as the Project.
- 12. MOLD NOTIFICATION: It is understood by the parties that the existing or constructed building may, as a result of post-construction, use, maintenance, operation or occupation, contain or be caused to contain mold substances which can present health hazards and result in bodily injury, property damage and/or necessary remedial measures and costs. Owner and General Contractor agree to release, indemnify and hold the Architect harmless from and against all claims, costs, liabilities and damages, including reasonable attorneys' fees and costs, arising in any way from the existence of mold as a result of the use, maintenance, operation, or occupation of the completed project.
- 13. EXTERIOR MATERIAL MOCK UP: The General Contractor shall provide a mock up of all exterior materials for review by the Owner, Architect and Interior Designer. This mock up shall be provided and signed off in writing prior to any exterior stain or exterior finish work. The sample shall include fascia, trim, window cladding, and all other exterior finishes including 3' x 3' sample of exterior stonework. This shall be retained on site until the final punchlist is complete.
- 14. MAINTENANCE REQUIREMENT: The Owner and General Contractor are advised that ongoing maintenance of the proposed project will be required during and after construction. These items of work that need maintenance include, but are not limited to, water penetration maintenance such as caulking, sealants, and flashing, maintenance of roof surfaces such as sloped roofs, flat roofs, or waterproof decks, if applicable, and interior maintenance of systems that reduce moisture and possibility of mold formation such as HVAC systems, operable windows, exhaust fans, etc.
- 15. SNOW AND ICE MAINTENANCE REQUIREMENT: The Owner and General Contractor are advised that due to harsh winter conditions, roof and deck surfaces must be maintained reasonably free of ice and snow to ensure minimal problems with these surfaces. If applicable, the Owner and General Contractor agree to notify any purchasers of this requirement.
- SUMMARY OF WORK AND SCOPE OF WORK

The intent and meaning of the Contract Documents are that each Contractor, under the terms of h Contract, shall take such actions as necessary and/or required to provide labor, materials, supplies equipment, transportation, facilities, and appurtenances thereto which are indicated or reasonably implied by each Drawing and each section of the Specifications, all of which are collectively necessary and required for the execution of the work, identified and described by the Contract

CASH ALLOWANCES

Cash allowances for purchase net or gross of certain materials are specified hereinafter. The net amounts stated shall be included as a part of the Contractor's Base Bid. The amount stated shall be considered as a net amount including costs for purchase of specified materials and any sales tax in conjunction therewith.

All cash allowance sums are net, and in addition thereto, Contractor shall also include in Base Bid such expenses and profit as he desires for his work and services in connection with the item the cash allowance is to cover, together with all costs for insurance, mark up, freight, delivery to the jol site, bonds, overhead and other usual Contractor's costs. Even if the cash allowance is exceeded no allowance or extra will be authorized for additional Contractor costs related to overhead profit or supervision after Contract is awarded in connection with items covered by cash allowance. All allowances shall be converted to dollar amounts in the final budget for the project. All allowances shall be grouped together in the final project budget to allow them to be analyzed separately from other bid items.

Contractor shall purchase or award subcontracts on items covered by cash allowances to such firms and for such sums as are directed by Architect; provided, however, that Architect will not require that purchases or awards be made to firms against whom Contractor has stated a reasonable

After items covered by cash allowance have been purchased or awarded or negotiated with Contractor, Contract sum shall be adjusted to reflect actual net cost paid by Contractor for such items; if actual cost of items is less than cash allowance, Contract sum shall be reduced by Д shall be likewise increased.

Except for cash allowances that stipulate that they are to include both "purchase and installation," the Contractor shall include in his base bid all costs for installation of the materials that are purchased under the cash allowance.

Provide cash allowances for the following items:

nstallation of all hardware is to be in the base bid.

Bath Accessories: Allow the sum of \$2,000 for purchase of toilet accessories. Installation of all of stockpile topsoil prior to construction. these items shall be in the base bid for the project. Provide blocking as required as part of the base

provided in the project.

Entry Door: Allow the sum of \$10,000 for purchase of entry door and frame transom and sidelights.

Bath/Kitchen Fittings: Allow the net sum of \$15,000 for purchase only of bath and kitchen faucets boulders on site for landscape work. (Boulder walls to be built per industry standards per details.) and fittings. All other incidental materials and piping and installation shall be in contractor's base bid. Provide submittal for Owner and Architect approval.

Interior Cabinetry: Allow the net sum of \$80,000 for the purchase and delivery to the job site of the kitchen, bath, and other interior cabinetry excluding all countertops. Installation and any other incidental work related to millwork shall be in the base bid. Tile work will be performed under cash allowance above.

Granite/Countertops: Allow the sum of \$100 per sq. ft. for the purchase and installation of granite countertops w/ edge detail as approved by Owner. (Tile tops are under tile allowance.) The total cost of this allowance will be determined prior to contract signing.

Wall Tile / Floor Tile: Allow the net sum of \$10 per sq. ft. for the purchase and installation of ceramic wall tile and floor tile. Grout, mastic, backing materials and other related incidental materials shall be included in base bid. The General Contractor shall include in his contract the quantity of wall and floor tile anticipated to be provided in the project. The total cost of this allowance will be determined prior to contract signing.

<u>Electrical Fixtures</u>: Allow the sum of <u>\$25,000</u> for the purchase only of all electrical fixtures in the project to include both interior and exterior fixtures. Recessed housing trim and surface mounted fixtures are also to be included. Recessed housings are to be provided by the General Contractor in the base bid. Bulbs are part of the electrical allowance.

Mirrors, Shower Doors and Wine Enclosure: Allow the net sum of \$6,000 for purchase and delivery of frameless glass products. Installation any other incidental work shall be in the base bid.

Appliances: Allow the gross sum of \$25,000 for the purchase and delivery to site. Installation to be

Stereo System: Allow the sum of \$10,000 for supply and installation of wireless sonos stereo system in areas selected by Owner only. Provide submittals.

<u>Security System</u>: Allow the gross sum of \$6,000 for the supply and installation of monitored security and alarm system as coordinated by Owner with the General Contractor. Provide submittal.

Plumbing Fixtures: Allow the net sum of \$15,000 for the purchase and delivery to the job site of the plumbing fixtures. Installation and any other incidental work related to the plumbing fixtures shall be in the base bid.

Closet Systems: Allow the gross sum of \$20,000 for supply and installation of closet shelving drawers, and rods per Owner's requirements.

PROJECT COORDINATION

All Contractors and/or Subcontractors responsible for work defined by individual sections of the specifications shall, jointly and separately, coordinate their various sections of work as to scheduling, installation procedures, shop drawings, and, finally, installation of all related materials.

Before starting a section of work, the responsible Contractor and/or his Subcontractor shall carefully examine all preparatory work that has been executed to receive his work. He shall check carefully. by whatever means are required, to ensure that his work and adjacent related work will finish to proper contours, planes, and levels. He shall promptly notify the General Contractor of any defects or imperfections in preparatory work that will in any way affect satisfactory completion of his work. Absence of such notification will be construed as an acceptance of preparatory work, and later claims of defects therein will not be recognized.

Under no condition shall work proceed prior to preparatory work having been completed, cured dried, and/or otherwise made satisfactory to receive such related work. Responsibility for timely installation of all materials rests solely with the General Contractor who will maintain coordination at all times.

TEMPORARY FACILITIES

Make required arrangements, secure, and pay for all water, gas, telephone, and other utilities needed during progress of construction. Temporary tie-in for electricity shall be provided by the Contractor. If power is not yet available through Xcel Energy, a temporary generator shall be supplied by the Contractor.

Provide such temporary sheds, sanitary facilities, enclosures, dust control methods, barricades, canopies, and fencing as are required for safe and proper completion of the work and as shown or the drawings. Provide job site fire extinguisher and first aid kit.

The drawings do not include the necessary requirements for construction safety. The General Contractor shall provide all required aspects of construction for safe completion of the work.

Maintain temporary facilities and controls as long as needed for safe and proper completion of the work. Remove such temporary facilities and controls as rapidly as progress of the work will permit or as directed by the Owner.

Dogs are not allowed on the construction site.

Use of tobacco products is not allowed on this construction site.

Fencing requirements shall be reviewed on site and approved by the Owner/Architect.

SUBSTITUTIONS

The Contract shall be based on the standards of quality established in the Contract Documents

The following products do not require further approval except for interface within the work: Products specified by reference to standard specifications such as ASTM and similar standards.

Products specified by manufacturer's name and catalog model number.

Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this work by the Architect.

Where the phrase "or equal" or "or equal as approved by the Architect" occurs in the Contract Documents, do not assume that the materials, equipment, or methods will be approved as equal unless the item has been specifically so approved for this work by the Architect.

PROJECT CLOSEOUT

Closeout is hereby defined to include the general requirements near the end of the Contract Time, in preparation for final acceptance, final payment, normal termination of the Contract, occupancy by the Owner, and similar actions evidencing completion of the work.

All warranties and guarantees shall begin on the date of the AHJ (Authority Having Jurisdiction) Issuance of Certificate of Occupancy unless otherwise specified in writing and approved by the

SITEWORK:

NOTE: The Grading information shown in these plans is diagrammatic and shall be verified and reviewed by a licensed Colorado Engineer. Provide stamped letter and plan revisions required to Owner and to Architect prior to any concrete work from the engineer. See item F below.

SOILS REPORT - A soils report has been provided for this project, from HP Geotech, dated 12/17/19 difference between actual cost and Contract; if actual cost is more than allowance, Contract Sum Upon completion of excavation to final depth, contact Soils Engineer, to arrange for additional site observation prior to the forming of any footings. The Soils Engineer is to provide written recommendations for Owner/Architect review. The recommendations of the Soils Engineer will then be incorporated into the work and the work will be modified accordingly if required. The cost of this work is to be paid by the Owner.

CONSTRUCTION STAGING - Construction staging shall be indicated on the site plan by the general contractor. Provide additional construction staging information in compliance with all requirements of Town of

Hardware: Allow the sum of \$10,000 for the purchase of finish hardware and cabinet hardware. C. SITE CLEARING & TOPSOIL - Flag all trees to be removed as indicated on plans, and receive Owner/Architect/ARB approval prior to cutting. Remove all stumps and organic material and dispose of legally off site. Retain boulders from excavation for reuse as directed by architect and as shown on plans. Strip and

EXCAVATION/BACKFILL - Extent of excavation shall be as shown on the drawings. Backfill for the project shall be of soil containing stones or rocks less than 6" in diameter. Install lifts and compact to minimum Carpet: Allow the sum of \$16.00 per sq. yd. for purchase and installation of carpet and pad for the proctor density as recommended by Soils Engineer. Compact soils disturbed below footing bearing elevations project. The General Contractor shall include in his contract the quantity of carpet anticipated to be or remove loose soils and fill with lean concrete. Backfill to be brought up equally on both sides of subgrade foundation walls where applicable. The foundation is designed to be supported from the top by floor construction. Do not backfill until these items have been completed. Slope finish grade away from building per Hardwood Flooring: Allow the sum of \$12.00 per sq. ft. for the purchase and installation of Soils Engineer recommendations and IBC requirements (6" in 10'). Consult the Architect, Soils Engineer, and Structural Engineer for additional information.

> LANDSCAPING BOULDERS - Provide square boulders (siloam stone or equal) to match exterior stone reneer. Dry stack with minimal space between stones. Install as shown on drawings. Retain existing

> DRAINAGE STRUCTURES - Provide drainage as shown on the drawings. Install all drainage per dustry standards. Provide pit run gravel fill where shown on the drawings. Provide copy of soils engineer design/letter to Owner and Architect.

This project requires special wetland best management practices. See plans for requirements and details of detention pond construction. Additional consultation with Town of Silverthorne Engineering Department and soils engineer may be needed.

G. LANDSCAPING - Contractor to final grade the site.

TOPSOIL - 4" of clean, clay free topsoil.

SEEDING - At all disturbed areas. Provide short grass mix as approved per Town of Silverthorne guidelines. PLANTINGS - See landscape plan.

Provide 18 month written warranty for all planting materials to cover labor & materials. The landscape contractor shall provide a maintenance schedule for owner/maintenance requirements and also a maintenance agreement proposal for owner review. Install all plantings in strict accordance with American Nursery Association Standards.

- H. LANDSCAPE IRRIGATION SYSTEM Provide for irrigation system by others. Provide water rough-in as required. Coordinate system installation and stub outs with owner prior to topsoil.
- DRIVE PAVING Provide 3" of asphalt paving over 6" of type 6 road base per Town of Silverthorne Engineering Department standards. Prior to work, confirm design in writing with Soils Engineer. Road base is in the General Contractor's contract.
- SITE UTILITIES Coordinate site utility installation with Division XV, work. Restore all excavations and trenches to existing conditions. Provide compaction per Town of Silverthorne standards. Utilities have been stubbed to lot line by others and are N.I.C. Utility work onsite is by General Contractor. Sewer line to be verified as appropriate for gravity drain system.
- K. EROSION CONTROL AND DRAINAGE FEATURES Provide snow fencing to protect all trees to remain and areas to be left undisturbed. Provide erosion control and project fencing as required by Town of Silverthorne. See item F above.
- III. CONCRETE: Provide written soils engineer approval for all waterproofing / dampproofing and for all subgrade work prior to any concrete work.
- A. FOUNDATIONS: See structural notes on the drawings. See structural details.

Footings: Concrete - See Plans

Foundation Walls: Concrete - See Plans

Int. Footing Pads: Concrete - See Plans

Retaining Walls: Natural Board-Formed - Random Width - Rough Sawn Concrete - See Plans

FINISHED SLABS: Provide finish concrete slabs at garage and lower level with tooled control joints

- as shown. (Do not saw cut joints.) See structural notes. Verify finish with Owner.
- C. SILLS: Redwood or ACQ treated lumber at areas in contact with concrete. Provide fiberglass sil sealer under all exterior wood sills in contact with concrete. See Division VI. and VII. Provide 1 layer of roof membrane under all wood columns in contact with concrete.
- D. LIGHT WEIGHT CEMENTITIOUS UNDERLAYMENT: Provide 2000 p.s.i. compressive strength light-weight concrete topping underlayment, "Gypcrete" or equal, at the main level and upper level. Provide a complete installation in accordance with manufacturer's standard specifications and
- E. FOUNDATION DRAINAGE: Rigid perforated PVC pipe in 3/4" washed rock and slope to drywell or as directed by the soils engineer. Provide elbow and tee fittings as required. Installation to be per
- RADON PROTECTION: Rigid perforated PVC piping around the perimeter of crawl space or as approved by AHJ. Set piping in 6" gravel or fill and stub to central standpipe in an accessible location and vent through the roof. Provide an electrical outlet for future power. Upon closure of home, provide radon test and review results with Architect and Owner. If radon is present at that time, an in-line fan can be installed to vent the gases to the exterior.
- G. DAMPROOFING: Dissco Mastic 520 or equal. Provide sealant at all joints and hot asphaltic dampproofing at all walls below finish grade to extend over edge of footing. Cove base at wall and footing juncture. Dampproofing may be upgraded at suggestion of soils engineer. See code.
- WATERPROOFING BID ALTERNATE: Parge wall to cover all imperfections and prime walls with W.R. Grace approved primer. Install Bituthene 3000 waterproof membrane sheets (roll stock) as recommended by manufacturer. Prior to backfill, obtain W.R. Grace approval letter of installation and provide copy to Owner and Architect. See code (R406). Provide waffle drain over Bituthene 3000 if recommended by soils engineer.
- INTERIOR SLAB INSULATION: Provide 1-1/2" rigid insulation (R-10) below all concrete slabs or as directed by AHJ. Provide 6 mil polyfilm vapor barrier over insulation. At Contractor option, i approved by Building official, provide closed cell spray foam insulation. Tape all tears and ensure that insulation/vapor barrier is continuous and completely unbroken.
- J. EXTERIOR SLABS: See structural notes. Provide 6" granular gravel fill under all slabs on grade. Slope slabs to drains as shown. Provide hand tooled control joints to 1/3 of slab depth as shown on the plans. Provide air entrained concrete at all exterior slabs.
- K. FOUNDATION WALL INSULATION: 2" (Styrofoam) insulation over mastic from top to footing to grade or as directed by AHJ. This is to be coordinated with Waterproofing System is selected. Provide flashing over foam at areas above grade.
- L. INTEGRAL WAFFLE DRAIN & PROTECTION BOARD BID ALTERNATE: Provide 1-1/2" (240). Insuldrain, extruded polystyrene insulation product with integral drain mat and fabric, by Owens Corning. If required by soils engineer.
- M. EMBEDDED NAILERS: Provide 2x4 ACQ treated embed nailers at siding locations at concrete
- IV. MASONRY:
- A. STONE VENEER: 'Chateau Moss' dry stacked stone veneer as available through Gallegos Stone Company, smoothly coursed. Provide 3'-0" x 3'-0" sample panel for Architect and Owner approval prior to work. Interior fireplaces to have matching stone work as shown. Install all stone with corrugated fasteners @ 16" o.c. Provide solid support for all stone work to include CMU down to footings or steel angle support as approved by structural engineer. All steel angles and fasteners to be galvanized and coated with two coats of foundation damproofing.
- STONE BACKING Prior to stone veneer installation, install Tyvek of #15 felt and waffle drain perforated backer board to ensure adequate drainage plane, air-spaced behind stone veneer.
- C. SANDSTONE Provide and install mantels, caps and hearths at areas indicated on the drawings
- Clean and seal all sandstone immediately after installation per stone sealer specifications. D. CAPSTONES - Provide and install sandstone caps at areas indicated on the drawings.
- STONE FLOORING For both exterior and interior applications, provide thickset flagstone a
- indicated on plans. Provide stone sealer as recommended by stone supplier. FLASHING - Composition or sheet metal of size and configuration shown on the drawings. Provid
- step flashing at roof to masonry fireplace junctures. G. MORTAR: Type S mortar ASTM Standard C270 - Natural grey mortar color. Provide type M mortar
- MASONRY ANCHORS: 7/8" X 6" corrugated corrosion resistant metal ties at 16" O.C. each way unless noted otherwise.
- THROUGH WALL FLASHING: Nobleseal 20 mil chlorinated polyethylene membrane, manufactured by the Noble Company, P. O. Box 332. Grand Haven, Michigan 49417, (616) 842-7844, o approved equal.
- MASONRY SEALER: Provide sealant to all stone products as required and recommended by the manufacturer and supplier. "Stone Glamour" or equal, matte finish. See Division VII. All sealers to be non-glossy matte finish.
- K. CONCRETE SEALER See Division VII., K. Sealant & Caulking
- Note: Installation and components to be per manufacturer's recommendations and code (R703.7).
- V METALS:
- A. METAL FABRICATIONS: Provide shop drawings for all items such as structural steel beams structural steel columns, loose lintels, steel lintels (galvanized for stone veneer), concrete embed plates, steel connector plates, etc.
- B. BOLTS AND CONNECTORS: Provide galvanized bolts, nuts, and washers as indicated on the drawings. Square headed bolts and bridge washes to be utilized at visible locations.
- C. STEEL LINTELS / STEEL ANGLES: Steel shop primed of size and configuration as shown on the drawings. Provide submittal.

E. STEEL HANDRAILS/GUARDRAILS - Provide steel handrails and steel brackets with closed end

pieces at stairways. Custom fabricate as shown on drawings. Clean, polish and wax with BullFrog

D. METAL CAP FLASHINGS: Provide prefinished cap flashing on top of chimney cap.

anti-rust wax from bull-frog.com for natural steel finish. Provide submittal.

- WOOD AND PLASTICS:
- ROUGH CARPENTRY- Prior to building any exterior or interior walls, all framing dimension strings should be checked by the framing contractor and the general contractor to identify any potential framing discrepancies in dimensions. Any discrepancy should be brought to the attention of the Architect prior to
- Coordinate framing work with insulation contractor to provide for continuous air barrier at al insulation areas. Do not frame dropped ceilings, soffits, or fireplaces until air barrier is installed at al
- Exterior Wall Framing As shown on the plans and structural notes Insulate all exterior corners and concealed spaces (headers, etc.) during framing. Provide wall studs at 16" on center or as shown on plans. Install redwood or treated base plates at all areas in contact with slabs or foundation walls. If ACQ treated materials are used provide double galvanized or stainless steel connectors as recommended by ACQ manufacturer.
- Prior to building any exterior or interior walls, all framing dimension strings should be checked by the Framing Contractor and the General Contractor to identify any potential framing discrepancies in

All walls to be framed square, straight, and plumb for rough carpentry. Provide blocking at all locations as shown on plans for any wall mounted handrails, towel bars, and shelving.

Fire Blocking - At walls greater than 10'- 0" height, stairs, etc. per code requirements.

Wall Sheathing - 1/2" CDX plywood sheathing. Attach sheathing per notes on structural plans.

Housewrap - Tyvek or equal at all exterior walls under wood siding and stone veneer. Install per code. Wrap all window and door rough openings with Housewrap prior to window or door installation. Install at window heads per manufacturer recommendations. (Cut in additional strip over nail flange and tuck into slit above window or door openings.) 15-lb building felt may be provided in lieu of Tyvek at contractor option. Install in strict accordance with manufacturer's requirements.

Provide and install sill sealer insulation per Division VII., Section A.

Siding: Install all exterior siding in workman like manner and in compliance with industry standards. Insure that all siding is provided with minimum 6" clearance from finish grade and 2" minimum clearance at roof, concrete or patio surfaces.

Horizontal Siding: Species - Wire brushed, spruce, pine, fir

Draft Stopping - Install draft stops as required by IRC.

Grade - Select Tight Knot Size - 1x8

Pattern - T&G - Flat butt joint Finish - Two coats exterior semi-transparent stain. Pre-stain siding one coat prior to installation. One additional coat to be applied after installation. Nailing - Hot dipped galvanized (double dipped) box nails or siding nails. Pre-drill if within 2" of saw cut.

Installation - Comply with all recommended installation procedures per industry standards.

Vertical Siding: Species - Wire brushed, spruce, pine or fir Grade - Select Tight Knot

as specified. Second coat to be installed after siding installation.

Size - 1x8

Pattern - Shiplap siding (no gaps) Finish - Two coats exterior semi-transparent stain. Pre-stain siding one coa prior to installation. One additional coat to be applied after installation. Nailing - Hot dipped galvanized (double dipped) box nails or siding nails Pre-drill if within 2" of saw cut. Installation - Comply with all recommended installation procedures per industry

Note: Pre-stain all siding and exterior trim with one coat of Sherwin Williams, Olympic or equal stair

Floor Framing - Provide floor framing that is level and square. Provide blocking at all floor framing to support partition walls above. Coordinate floor framing layout with plumbing layout to ensure that conflicts do not exist with plumbing lines.

Material: Species - See structural notes and plans.

Anchors - See plans.

Draftstopping - Per code. Bridging - At midspan, at spans exceeding 10'-0" and at manufacturers recommendations.

Subfloor - 3/4" T & G APA Rated Sturd-I-Floor, exterior ID No. 24 oc. Plywood ID 36/16, glue and

nail per structural notes and plans. Partition Framing - See drawings

> Material: Species - Hem Fir Grade - Construction

Spacing - 16" o.c. unless otherwise noted. Fireblocking - Per code.

Hardware Backing - Provide 2x blocking at all hand railings, grab bars, toilet accessories, and

specialty hangings, as required. Ceiling Framing -

Material: Species - Hem Fir Grade - #2 or better

Spacing - 16" o.c. unless otherwise noted.

Bridging: Stiff back if spans exceed 10' 0". Roof Framing - See drawings. Install roof framing to allow for air flow over all valley and hip beams

1" from top of rafters at areas that are blocked to provide air ventilation path.

Material: Species - See structural notes and plans. Spacing - Per plans Blocking - At spans in excess of 12'0" at mid-span, and at manufacturer's recommendations.

architectural grade beams at all exposed conditions. Provide Douglas fir glu-lams as approved by

to ensure effective ventilation to soffit vents. (Drop hip and valley beams). Drill 11/2" diameter holes

Sheathing - 5/8" APA Rated Sheathing, Exposure 1 Plywood, ID 32/16, glue and nail per structural Glu-Lam Beams - All exposed interior and exterior glu-lam beams to have resawn finish. Provide

Owner. All connections to be flush and concealed. Utilize counter-sunk and pegged (smooth) connectors. Provide "Timber Linx" connections at areas indicated by structural engineer.

Exterior Trim and Detail -

Corner Trim - none.

Soffits - Provide 1x6 T&G wire brushed, tight-knot grade, spruce, pine, or fir.

Fascias - 2x tight-knot grade cedar as shown on the drawings.

Window and Door Trim - 3x and 2x per details. Tight-knot smooth cedar as shown on the drawings. Stone Cap - See Division IV for Sandstone caps.

Soffit Vents - Leigh #649 soffit vent (continuous soffit vent) (paint) as available through Leigh

Ventilation (1-800-253-0361) or as directed by AHJ. Ridge Vents: Provide Cor-a-vent prefabricated ridge vent or equal as shown on the drawings or as directed by AHJ. Provide shingles to match roofing. Install in strict accordance with manufacturer's

requirements. Note: Pre-stain all siding and exterior trim with one coat Sherwin Williams, Olympic or equal stain as specified. Second coat to be installed after siding installation.

Exterior Decking - Provide 2 x 6 synthetic decking as approved by Owner. Provide manufacturer's recommended fasteners at all exterior decks. Framing within 18" of grade shall be ACQ treated lumber or redwood lumber. Deck boards spaced at 5 ¾" o.c., or per manufacturer.

REVISIONS:

IOB NO: DATE: 05/02/16 DRAWN BY: jbuxkemper

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B. FINISH CARPENTRY - All interior woodwork to have stained finish (one coat stain where required plus two coats clear sealer as approved by Architect). Interior finish carpentry to be reviewed prior to beginning work with Architect. Millwork trim and finish to match. All interior finish carpentry shall be of stock material milled to profiles shown. Ease all edges. See Details.

Finish carpentry at all areas to be as follows:

- Door & Window Casings. Provide head leg trim at doors and sill trim at windows. Verify wood species with Owner. See drawings.
- 2. Base Trim Verify wood species with Owner. 5/8 x 5 ½ base trim.
- 3. Interior Stair Millwork & Railings -Verify wood species and steel details with Owner. Per plans Handrails and guardrails shall conform to the 2012 IRC as adopted by Town of Silverthorne, Colorado. See drawings for details.
- 4. Interior Shelving 3/4" enamelized particle board with 1x 2 alder edge.
- 5. Closet Shelving 3/4" enamelized particle board with alder nosing. Provide fir closet rods stained finish. Coordinate design with interior designer and owner. Provide submittal.

See interior elevations and drawings for additional information.

- C. ARCHITECTURAL WOODWORK If applicable, all countertops and backsplashes are to be provided by the General Contractor. Installation for all of the above materials is a part of the contract. The supplier of the kitchen cabinets shall submit a complete layout with descriptions of functions and materials upon final selections by the Owner. The extent of this work is shown on the drawings. In the event of damage, immediately make known to Owner and make all repairs and replacements necessary at no additional cost to Owner. Make adjustments for installation at tile, wood and concrete floors where shown. See Cash Allowances. Provide the following:
- Cabinetry Provide hardwood panel (alder or equal) cabinetry. Manufacturer at Owner option. Provide submittal. See drawings. Provide solid surface countertops with square, eased edges. Verify materials with Owner.
- 2. Built-In Cabinetry Hardwood alder cabinetry. Coordinate with electrical for built-in lighting as

VII. THERMAL AND MOISTURE PROTECTION:

A. INSULATION: - (See division III for foundation wall insulation/protection board). All spaces around windows, mechanical electrical outlets, and other penetrations should be sealed with low expansion closed cell foam insulation. Any fiber insulation to include a fully aligned air barrier provided by sheet material at least equal to the material utilized in formulating the listed rating of the insulation. Install vapor barriers behind all beams and ledgers in contact with thermal envelope walls. Provide appropriate sealant at all such junctures.

For owner's consideration, provide Eco-Seal system by "Knauf" Products http://www.knaufinsulation.us/ Insulation shall be by manufacturer certified technicians in stric accordance with manufacturer requirements.

Exterior Walls Below Grade: Material - Blown-in batt insulation and/or closed cell spray foal

Thickness - 5 1/2" (R-23) or 3 1/2" (R-13) Installation - Blown in. Vapor Barrier - None (breath inward)

Exterior Walls Above Grade: Material - Blown in batt insulation Thickness - 5 1/2" (R-23) or 3 1/2" (R-13)

Installation - Blown in Vapor Barrier - 4 mil polyfilm at inside face of stud at exterior wall only. Seal

and/or tape all penetrations tightly. Polyfilm to be continuous over all wall and ceiling spaces.

Roof/Ceiling: Material - Blown-in batt insulation or ad directed by AHJ. Thickness -12-inch high density (R-49) Installation - Blown in under insulation baffle Vapor Barrier - 4 mil polyfilm - Seal and/or tape all penetrations tightly.

Material - Closed cell foam Thickness - R49 in 3 lifts minimum

Installation - Foamed in place. Vapor Barrier: 4 mill. Polyfilm seal and/or tape all penetrations tightly.

Underslab Insulation: Polystyrene 1 1/2" or 2" thick for under slab use or closed cell spray foam insulation at contractor option (Obtain building department approval). Tape all joints and penetrations per manufacturer recommendations. For heated slabs on grade; minimum R-10 (2" thick) required along perimeter; minimum R-5 for interior portions per IRC. (Verify with Building official.) Provide vapor barriers under all slabs.

Vapor Barrier at Slab: Provide minimum 6 mil. polyfilm under the floor slab (Insultarp or Astrofoil can act as the vapor barrier). Install as dictated and require per code.

Slab Edge: Provide 2" Polystyrene (R-10) thick rigid insulation.

Sills: Fiberglass sill sealer at all concrete to wood plate junctures. Sill sealer to be part of rough

Insulation Baffle: ¼" cardboard corrugated insulation baffles to maintain cold roof flow, where shown

on drawings. (Baffles to be compatible with spray foam urethane closed cell insulation where used.) Interior Wall Sound Insulation: Provide R-11 Batt insulation at all interior walls as indicated on plans and stairs for sound control.

- B. ROOFING UNDERLAYMENT: Under all roofing provide WR Grace Ice and Water Shield. Install in strict compliance with manufacturers specifications and recommendations. Under metal roofs provide VycorTM high temperature membranes as approved by W.R. Grace. Prime area 6'-0" each side of valleys and 6' up from edge of roof overhang with Bituthene primer P-3000. Provide membrane under and around all roof junctures to fascias prior to fascia trim installation. Upon completion of roofing underlayment work and prior to the installation of any roof material, schedule and notify the Architect of the W.R. Grace manufacturer representative review meeting on site. Provide manufacturer letter to the Owner and to the Architect stating that the roofing underlayment was installed in accordance with manufacturer's requirements. If metal roof is provided, install Vycor™ ultra membrane under all metal roofs.
- SHINGLE ROOFING Manufacturer: GAF Timberline Ultra HD or equal composition shingles. Install roofing system in strict accordance with manufacturer specifications and recommendations using manufacturers standard methods and materials of constructions. Provide manufacturers standard 50 year warranty. See Division VI and drawings for cold roof venting details.
- D. WATERPROOF DECKS Provide TPO, E.P.D.M. or equal roofing membrane. Install in strict accordance with manufacturer's requirements. Provide submittal and manufacturer's visit to ensure and certify installation is in compliance with requirements.
- E. SHOWER PAN LINING Chloraloy 240 monolithic polyethylene membrane, manufactured by the Nobel Company, 614 Monroe St., Grand Haven, Michigan 49456, (616) 842-7844, or approved equal. Provide submittal on membrane for approval. A 24 hour flood test will be required to verify water tightness of installation. Install membrane per details on the drawings.

Schlüter system may be provided if approved by Architect as available through Daltile (735 South Huron, Denver CO 80223, 800/999-1743, www.schlüter.com) - provide submittal. Provide submittal to include KERDI matting membrane information, KERDI-BAND, grout specification, and curb waterproofing, in coordination with all tile work.

- F. FLASHING Material: Install all flashing to divert water to the exterior of the building envelope. Install all flashing per standards of the industry and in compliance with SMACNA recommendations. 26 ga. Galvanized Iron Finish - Pre-finish flashing at all visible areas. All exposed sheet metal to be prefinished or painted. Provide kick out flashings with all roof wall junctures.
- G. SEALANT & CAULKING:

Joint Fillers: Closed cell expanded polyethylene, open cell polyurethane foam or as recommende by the sealant manufacturer.

Exterior Sealant at Horizontal Concrete Expansion Joints: Grey color one part urethane sealant PRC 6006 self leveling sealant as available through C.R. Lawrence, Inc. 1-800-421-6144.

Exterior Sealant at Wood, Stone and Vertical Concrete: Color to match adjacent surface as approved by Architect. Work Site U60 Unicrylic sealant or Tremco Mono 1 part acrylic terpolymer sealant as available through C.R. Lawrence, Inc. (800) 421-6144.

Interior Caulking at Latex Painted Area: Color to match adjacent surface as approved by Architect. Work Site 800 acrylic latex caulk as available through C.R. Lawrence. Inc. (800) 421-6144. Caulk between all baseboard trim and wall junctures and between all standing and running trim and wall iunctures

Interior Caulking at Oil Base Painted Areas: Color to match adjacent surfaces as approved by Architect. D.A.P. architectural grade caulking compound as available through C.R. Lawrence, Inc. (800)

Fire Barrier Sealant: At all piping and mechanical penetrations of rated walls, floors and ceilings. "Flame Seal" as manufactured by Nelson Co. or approved equal such as 3M Fire Barrier or Dow Corning System 2000.

MASONRY SEALER: Provide matt finish masonry sealer (Stone Glamour or equal) at all sandstone hearths and stone caps.

VIII. DOORS AND WINDOWS

A. ENTRY DOOR: Entry door as approved by Owner. See Cash Allowances. Provide submittal.

B. EXTERIOR DOORS: Provide weather stripping and thresholds at all exterior doors as a part of the base bid for the work. All doors shall carry manufacturer's standard warranty and shall be installed in strict accordance with manufacturer's recommendations. Provide wood doors with wood frames,

Provide 'Sierra-Pacific', 'Jeld-Wen' or approved equal clad wood patio doors in size and configuration as shown on the drawings. Provide wood frames with integral stops and thresholds. Stain and seal doors per work in Division IX. Exterior patio doors to be clad to match windows.

- INTERIOR DOORS: Verify species with Owner. Provide hardwood doors in sizes as shown and style as Selected by Owner. Provide flush panel doors. Provide full light frosted doors where indicated on plans. Stain grade, Install in strict accordance with manufacturers recommendations. Provide solid core door with threshold at interior garage door. Provide threshold at mechanical room door. Provide submittal for all doors.
- HARDWARE: See Section I.E. for Cash Allowance, Installation of all hardware shall be in the base bid. Provide finish throughout and submittal of hardware with cut sheets for Architect review and approval. Approved manufacturers include Schlage, Russwin, Yale, Baldwin and Sargent.
- RAIL DOOR HARDWARE: Provide horizontal railings in weathered steel patina finish with integral roller system for 1 ¾" thick interior doors. Verify specification with Owner. Provide rail door hardware as selected by Owner from www.barndoorhardware.com.
- WINDOWS: 'Sierra Pacific', 'Jeld-Wen' or approved equal clad wood windows. Provide casement, awning and fixed as shown on the drawings. Provide detailed submittal for Architect approval prior to ordering windows. Provide color clad frames per color sample. Do not provide Brick Mould. Provide Low E glass at all window and patio door locations. Coordinate window coverings with Owner, Architect and Designer.

Provide option from Sierra Pacific for "modern" glazing system. Provide submittal.

INSULATED GARAGE DOOR: Insulated Masonite Doors clad with horizontal wood siding per plans with 3" standard heavy duty track, weatherstripped and with automatic opener. Provide submittal for Owner/Architect approval. Stain to match siding. Provide glazing per elevations. Provide submittal. Provide track as noted above.

A. DRYWALL: Material - 5/8" type "X" drywall or 5/8" standard drywall throughout the project as noted on the drawings. Texture sample is required prior to work for Owner and Architect approval. Hand trowel texture throughout. Provide three coat finish, prime walls and then refinish as required for smooth or textured finish, then re-prime wall as required. Provide smooth finish at wall paper areas.

- DRYWALL CEILINGS: Material 5/8" standard drywall as noted. Textured finish to match wall
- C. TILE Provide 1/2" plywood or cement board underlayment under all areas over framing to receive tile or vinyl floors. Provide tile isolation underlayment (Schluter or equal) at concrete slabs to receive tile as shown on plans. Provide 1/2" cement board (wonder board or durorock) behind all areas to receive wall and ceiling tile. Provide fiberglass tape and screw cement board to framing with galvanized screws. Provide durorock underlayment under all tile countertops.

Tile materials are per Cash Allowance. All tile is to be installed by contractor and per manufacture approved methods and in compliance with Tile Council of America recommended installation methods. See plan for scope of tile work. Provide sealant at all tile horizontal and vertical junctures.

Provide shop drawings for all tile layouts to be approved by Owner and Architect prior to beginning work. In general, all layout work should be centered and positioned in a logical and workmanlike manner. If recessed areas in wet areas are shown, such as shower niches, provide Bituthene 3000 waterproof membrane by W. R. Grace prior to cement underlayment installation.

Provide Schluter Systems shower pan assembly to include compatible drain system, mortar beds, Kerdi-Band and Kerdi-Matting. Install in strict compliance with manufacturer's recommendations. Installer to be certified by Schluter Systems. Provide certificate of certification to Architect prior to any tile work

- GRANITE COUNTERTOPS Provide and install 3/4" thick stone and facing at each countertop (square, eased edges) as selected by Owner and indicated on the drawings. Install in strict accordance with supplier's requirements and recommendations. (Provide substrate and adhesive as approved.)
- CARPET: See Cash Allowances and room finish schedule.

Coordinate corner profile with Owner.

WOOD FLOORING: Provide and install a complete finished wood strip flooring in areas shown on the drawings. Use select grade, as selected by Owner, with tongue and groove edges.

Field finish by sanding to level using successively finer sandpaper. Filler: Benjamin Moore Benwood Paste wood filler or approved equal. Natural finish: Stain and three coats Benjamir Moore Urethane as approved by Owner. Prefinished flooring may be provided at Owner option.

Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. All flooring materials to be stocked on site for a period not less than four weeks prior to installation.

Provid e pre-finished or field finish by sanding to level using successively finer sandpaper. Filler Benjamin Moor Benwood Paste wood filler or approved equal. Natural finish: Stain and three coats Benjamin Moore Urethane as approved by Owner. (Pre-finished floor may be provided if approved by Owner and Architect).

- G. TRANSITION STRIPS: Provide submittal for transition strip to be used at junction or edge of all dissimilar flooring materials.
- EXTERIOR PAINTING: Exterior siding and trim 2 coats semi-transparent Sherwin Williams, Olympic or equal stain. Two colors to be used as approved by Owner and Architect. Provide the first coat to siding and trim prior to installation. Exterior metal surfaces - 2 coats oil base paint as approved by Owner and Architect. Exterior flashings - prefinished flashing. Exterior Deck - 2 coats exterior clear sealer. All exterior surfaces suitable for paint shall be painted as directed by the Architect. See previous specification sections for exterior mock up sample requirements.
- CAULKING: Provide caulking at all baseboard trim and wall junctures and between all standing and running trim and wall junctures.
- INTERIOR PAINTING: All colors and finishes to be approved by Owner and Architect. Refer to room finish schedule for locations of colors

Drywall (dry areas) - Two coats eggshell finish latex paint. Colors as selected by Owner.

Drywall (wet area) - Two coats semi-gloss latex enamel (washable)

Wood doors and trim - Stain and two coats sealer.

Exposed Beams and Timbers - Stain and two coats sealer.

Windows and Jamb Extensions - Stain and two coats sealer to match trim.

Interior Metal - Polish and clear seal.

X. SPECIALTIES:

- PRE-FAB ZERO CLEARANCE FIREPLACES Heat-n-Glo COSMO42 (at great room), COSMO32 (at master, family room) with mirrored interior with clear face from and finish in graphite with glass media as selected by Owner and remote controller. Provide all related equipment as required by Building Department. See details. Provide combustion air kit. Coordinate all options with Owner. Install all in strict accordance with manufacturer's recommendations.
- FIREPIT Napoleon rectangular patio flame outdoor gas fire pit with log kit. Provide stone surround Provide submittal

- C. TOILET & BATH ACCESSORIES Provided backing blocking as required for toilet and bath accessory installation. See Cash Allowances. Provide submittal. Coordinate with interior design dark bronze rustic accessories. Verify with Owner.
- D. MIRRORS 1/4" polished plate glass w/ detailed wood trim as indicated on drawings. Coordinate frames at all interior vanity mirrors with Owner.
- SHOWER ENCLOSURES Provide frameless, clear tempered glass enclosures. Provide option for frosted glass. Set base track prior to tile work. See cash allowances.

XI. EQUIPMENT:

A. APPLIANCES - Appliances are to be selected and verified with the Owner. See Cash Allowances. General Contractor to supply pricing information to Owner so that it may be decided who will purchase appliances. Installation shall be by General Contractor. Verify the appliance requirements with Owner prior to rough-in requirements for appliance work. Provide submittal for information to

KITCHEN / PANTRY: (Verify all finishes and details for appliances)

- (1) 48" Built in Refrigerator with Icemaker (1) 36" Wine refrigerator
- (1) 36" Downdraft cooktop
- (2) 24" Dishwasher (1) 24" Undercounter Microwave (1) Garbage disposal
- (1) 30" Wall oven

LAUNDRY:

(1) Side by side Washer (1) Side by side Dryer

MASTER BATH:

(1) Front load washer (stacked) (1) Front load dryer (stacked)

(1) 24" Under counter Refrigerator (1) 24" Over counter Microwave

XII. FURNISHINGS: - None - N.I.C. by Owner.

XIII. SPECIAL CONSTRUCTION:

- A. MASTER BATH STEAM SHOWERS (Bid Alternate at Master Bath) Location as noted on plans. Steammist or equal in size as recommended by manufacturer. Install in strict accordance with manufacturer's requirements. Provide submittal.
- C. MASTER BATH TUB Provide free standing 'zen tub' at Master Bath (as selected by Owner). Provide any mechanical or electrical requirements for tub as specified by manufacturer.
- D. HOT TUB (BID ALTERNATE) Provide Arctic Spas or equal (93" x 93") hot tub at lower patic Model number of spa as determined by Owner. Provide 22V, 50 amp dedicated circuit in locations as approved by Owner. Provide electric package unit spa as selected by Owner. Provide submittal. Provide lockable cover per code requirements.
- AUTOMATIC SPRINKLER SYSTEM Provide an NFPA 13-D automatic fire sprinkler system throughout the residence as approved by AHJ. Provide storage tank as shown with pressure pump if required. Provide shop drawings and submittals for automatic fire sprinkler system to include pipe layout, hydraulic calculations, valve requirements, and backflow preventer design. Obtain Fire District, Building Department, and Architect approval prior to any work. Schedule pre-submittal conference with Architect to review pipe routing through the residence. Provide side wall heads to greatest extent practical. Provide fully recessed heads at all finished locations and semi-recessed heads elsewhere. Install storage tanks and fire pump as indicated on the approved shop drawings.

XIV. CONVEYING SYSTEMS: None

XV. MECHANICAL:

1. General: Provide submittal for all plumbing work as outlined below prior to any plumbing work.

Pex domestic water piping may be provided as an alternate if approved in writing by the Owner. Provide copy of approval to Architect.

Pex piping may introduce harmful chemicals into domestic water. Copper piping is recommended for cold water supply to kitchen sinks and bathroom lavatories

Water Supply: Connect to water supply provided by Town of Silverthorne tying to stubout at site

- Provide Bid Alternate for optional "Water Cop" motorized safety shut off water valve system. Coordinate with XIII E - Automatic Sprinkler System. 3. Domestic Cold Water Piping: Provide Type "L" copper piping throughout. Provide plumbing riser
- diagrams for Architect approval. Insulate cold water pipes with 1 1/2" Armaflex insulation to protect from heat gain from warm water piping. Provide for landscape irrigation system. 4. Domestic Hot Water Piping: Provide "Type L" copper piping throughout. Provide plumbing rise diagrams for Architect approval. Provide 1/2" Armaflex insulation on hot water piping. Provide hot

water recirculating pump with aquastat timer control for hot water circulation. Provide air hammer

- Gas Piping: Provide threaded black pipe natural gas piping or code approved plastic piping t mechanical room and other areas as indicated on the drawings per code and Xcel Energy requirements. Provide gas meter per the location indicated on the drawings. Provide outlets as
- Sanitary Sewerage: Connect sewer system to Town of Silverthorne Sanitation District. Al connection, labor and materials to be provided by General Contractor.
- Plumbing Fixtures/Fittings: Provide complete submittal prior to any plumbing work. All plumbing fixtures and fittings are to have submittal reviewed by Owner before final ordering. Fittings to be per Cash Allowances. Colors from Kohler standard colors. See plans for fixtures and fittings to be

Provide fixtures as follows:

shown on the drawings.

- (6) Toilets (1) Powder lavatory
- (2) Master bath lavatories (1) Bath 2 lavatory
- (1) Bath 3 lavatory (1) Bath 4 lavatory
- (1) Spa bath lavatory (1) Kitchen sink
- (1) Kitchen prep sink (1) Bar sink
- (1) Laundry sink (1) Floor sink (dog wash at garage)
- (4) Custom showers (steam unit at master bath optional) (2) Tub shower
- (1) Free standing tub at master bedroom (2) Freeze proof hose bib
- (1) Hot/cold hose bib (at garage floor sink)

Note: Verify with Owner all options, accessories, and finishes prior to ordering. See room finish schedule for additional information.

- Wall Hydrants: Freeze proof Woodford #25CP 24" length wall hydrants as shown on the plans, with separate shut-off valve with access panels. Provide independent shut-off valve for all wall hydrants located in an accessible area such as under cabinet. Provide flush access panel if appropriate. Ir other areas provide access with appropriate access panel finished to match adjacent surface.
- 9. Floor Drains and Deck Drains: Provide Wade, Zurn, or Josam (or equal) floor drains and deck drains as shown on plans. Provide removable sediment bucket at garage floor drain (route to drywell or daylight). Deck drains to be metal with 3'-0" minimum cast iron or copper pipe connected drain. Provide brass down spout nozzles. Provide electrical outlet for leaf tape beside each nozzle. Provide submittal
- 10. Ground Water Sump at Garage Mechanical Room: Provide submersible sump pump system (mfgr. At contract option). Rough in sump canister and provide piping to exterior. Tie in radon drain system to sump pit. Provide submittal.
- 11. Automatic Sprinkler System See XIII E.

B. HEATING SYSTEM

- RADIANT IN-FLOOR:
- a. Provide submittals and complete shop drawing information for boiler, hot water storage, radiant in-floor heating system, and snowmelt system, as indicated on the drawings, to include:
- Building heat loss calculations.
- Building heat transfer piping layouts and specifications.
- Supplemental heat specifications as required (review fireplace as a heat source). Unit sizes/model numbers/manufacturer for boiler with specifications.

- Optional Heat exchanger information if required. Pump information and specifications.
- Zone valve information and specifications. Intake air and exhaust requirements.
- Boiler piping locations/layout and control specifications.
- Thermostat submittals and specifications. 11. Flue size/requirements. All exhaust vents to go to roof.
- 12 Gas pipe size/requirements 13. High recovery hot water storage tank(s) specifications. Jacketed tank(s) preferred.
- 14. Optional Snowmelt zones with detailed layouts (if selected by owner) 15. Other pertinent information.

Provide complete submittal information, including manufacturer's cut sheets, and obtain Architects approval PRIOR TO ANY WORK.

b. Equipment - Manufacturer- Laars/Buderus, Viessmann Vitodens, Triangle Tube, or approved equal natural gas with direct vent flue venting system. Size and number of units in accordance with manufacturer specification and sizing information. Contractor shall submit proposed equipment layout and verify space and clearance requirements with manufacturer prior to framing work by General Contractor. Install in strict accordance with manufacturer's recommended details. Submit complete spec. data PRIOR TO ANY WORK.

c. Controls - Manufacturer - Provide all necessary controls for a complete and operational system.

- d. Zones Locate thermostats on interior walls near electrical switch plates. Provide heating zones fo each floor as shown on the drawings. Provide zone for heat exchanger for hot water storage tank. Verify locations with Owner/Architect prior to installation. Install valve on each side of each zone
- e. Other Mechanical Equipment Interface boiler(s) with hot water storage tank. Include in the shop drawings. Provide hot water circulating pump with disconnect switch for recirculating system. Install pumps to minimize vibration through structure. Provide submittal for hot water storage sizing.
- f. Piping Copper piping for hot water supply to Wirsbo or equal cross-linked polyethylene tubing and recommended fittings and components.
- g. Additional Information Boilers to be installed by certified installer in accordance with manufacturer's recommendations. Insulate all hot water supply and return lines with 1/2" Armaflex insulation or equal. Exhaust vent to run up and exhaust at roof.

OTHER DUCT WORK - Provide duct work for clothes dryer and range hood vents to exterior. Provide

duct work for bathroom and laundry exhaust fans to exterior. Provide duct work as required for combustion air to fireplaces. All ducts to be metal. Provide all duct work within the thermal building envelope with exit through exterior walls as required. Provide submittals as required. HUMIDIFIER (Bid Alternate at Master Bath) - Provide and install unit by "Aprilaire" Corporation, (800) 356-9652, or equal as shown on the drawings. Provide model as recommended by manufacturer.

Provide programmable humidistat with locking cover and automatic flushing option. Install in sheet

metal pan with drain. Provide air intake and outlet grilles for recessed installation. Paint grilles to

match wall color and locate humidistats next to wall switches. HRV SYSTEM (Bid Alternate) - Provide and install HRV (Heat Recovery Ventilation) system per plans. Coordinate with hot water supply and return from boiler to fan coil ventilation supply. Provide air-to-air heat exchanger at exhaust system and coordinate all controls for automatic operations.

XVI. ELECTRICAL:

- A. GENERAL The electrical contractor shall provide PRIOR TO ANY WORK electrical load calculations including service one line diagram for Architect approval. In addition, the electrical contractor shall provide panel schedules, equipment information, and complete electrical submittals for the Architect within 30 days of the awarding of the Contract.
- B. ELECTRIC SERVICE Provide 120/240 single phase power as approved by Xcel Energy of Colorado The Contractor shall coordinate this work and pay for the cost of all work from the transformer to the house. The electrical contractor shall pay for electrical permit fee and other required fees and permits if any. The electrical contractor shall be responsible for running the power from the transformer to the building as approved by the utility company. Provide aluminum service wiring and copper circuit wiring throughout. One electric meter shall be provided
- C. ELECTRICAL FIXTURES Provide outlets, switches and plate covers throughout the project of "Decora" design, with built-in dimmers where shown. Install fixtures per manufacturer's requirements and locate fixtures to illuminate all spaces and all stairways per code requirements. (Verify color with Owner and Interior Designer.) Provide new lamps for all fixtures. Provide cut sheets and detailed submittal for Architect approval prior to ordering any materials. Provide ceiling fans as shown and as verified with Owner. See cash allowances.
- All recessed cans within thermal envelope to be low temperature sealed units.

See room finish schedules for additional information.

scope of programmable lighting system.

- D. OPTIONAL PROGRAMMABLE LIGHTING SYSTEM Consult with Owner to provide submittal for
- TELEPHONE SYSTEM Provide for three separate incoming lines (one dedicated line for computer modem/fax machine). Provide separate line from each telephone to central system control panel. Verify with Owner. Per Qwest representative (970) 940-4530. Confirm before installing. Provide structured bundled cable for all telephone and T.V. outlet locations. (See F. below.) All phones to home run to phone/TV panel
- CABLE TV Install as shown on plans and per local Cable Company requirements. Provide structural bundled cable to each T.V. outlet. Structural cable shall include (2) CATV runs and (2) RG6 coaxial cables. Installation to be complete and ready for turn on by Cable T.V. operator at request of Owner. All cable to home run to phone/TV panel.
- HOME ENTERTAINMENT/SOUND/INTERCOM/STEREO SYSTEM Provide submittal for Architect's review from Owner's selection of pre-wire as available through contractor approved by Owner. Supplier to meet with Owner prior to submittal. Coordinate with telephone and cable T.V. systems.
- WIRELESS INTERNET Verify with Owner. As approved by Owner, provide complete wireless internet system for entire home. Provide submittal. Provide conduit for satellite dish installation from south roof area to telephone/T.V. control board.

OTHER EQUIPMENT -Special Outlets - see drawings

Door Bells - see drawings Smoke Detectors/Carbon Monoxide - Shall be installed in all sleeping rooms and all other locations as indicated on drawings. Equipment shall be wired into building electrical system and also contain battery backup per code requirements. Install batteries and test all detectors prior to project completion. Smoke detection system engineered and designed by electrical subcontractor and approved by local jurisdiction.

temperature alarm and heat detected fire monitoring system. Coordinate with "Water Cop" motorized water valve system if included in project. K. SATELLITE DISHES - Verify with Owner. Owner shall coordinate installation requirements with

SECURITY, FIRE, and LOW TEMPERATURE PROTECTION - Provide submittal for Architect's

review from Owner's selection of security system with motion detectors and integrated lov

location at central control panel. See roof plan for location. BATH & LAUNDRY EXHAUST FANS - Panasonic "Whisper Lite" ceiling mounted fan or fan/light

Contractor. Contractor to provide in his base bid PVC conduit from dish location to A/V equipment

- combination. Sone rating to 1.5 or less. Provide submittal along with other electrical fixtures. M. WATERPROOF OUTLETS - Provide GFI protected exterior electrical outlets in soffits or roof headwalls and at all downspout nozzles as shown on the plans for future heat tape installation.
- HEAT CABLE If provided, provide "Sno-Trace" No. RGS-1 by Thermon, (800) 730-4328, or equal, to be coordinated for installation with gutters, and thermostatically controlled downspouts, as located on

OPTIONAL SOLAR PHOTOVOLTAIC SYSTEM (Bid Alternate) - 'SX 3200' BP Solar (www.bpsolar.us)

200 watt high efficiency photovoltaic module solar panels and all related equipment. Provide Bronze

anodized aluminum frame and 25 year limited warranty. Provide inverter module and connection to

electrical panel. Provide roof mounted frame per approval of Architect. Install in strict accordance

with manufacturer's recommendations. Available through Innovative Energy. Verify and confirm all

options with Owner. Provide submittal ADDITIONAL INFORMATION - Installation of all electrical work shall comply with all local codes, rules and regulations and the latest edition of the National Electrical Code. Install site cable TV and

telephone per Xcel Energy shared utility trench agreement.

REVISIONS: OB NO: DATE DRAWN BY: CHECKED BY:

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05/02/16

mhoux

jbuxkemper

@ 2016

SHEET NUMBER:

)	SINGLE RECEPTACLE OUTLET	\$	SWITCH, SINGLE
→	DOUBLE RECEPTACLE OUTLET	\$	SWITCH, MULTIPLE WAY
€wp	DOUBLE RECEPTACLE OUTLET - WATERPROOF	ф	DIMMER, SINGLE
} 220	DOUBLE RECEPTACLE OUTLET - 220 VOLT	ф,	DIMMER, MULTIPLE WAY, ETC.
€FI	DOUBLE RECEPTACLE OUTLET W/GROUND FAULT INTERRUPTER	4	TRACK LIGHTING SYSTEM
) =	DUPLEX OUTLET, SWITCHED TOP HALF	18	SURFACE MOUNT FLUORESCENT SPECIFY LENGTH (INCHES)
+	FOURPLEX OUTLET	18	UNDER COUNTER FLUORESCENT SPECIFY LENGTH (INCHES)
₩	FOURPLEX OUTLET FAX/COMPUTER DEDICATED	ф	CEILING MOUNTED LIGHT FIXTURE (FLUSH)
•	DUPLEX FLOOR OUTLET (FLUSH MOUNT)	Ю	WALL MOUNTED LIGHT FIXTURE
0220	FLOOR OUTLET 220 VOLT		RECESSED DOWNLIGHT (EYEBALL)
€	CEILING OUTLET (FLUSH MOUNT)		RECESSED DOWNLIGHT LOW VOLTAGE (SEALED)
) sp	SPECIAL PURPOSE OUTLET (DW- DISHWASHER, MICRO, REF.)	Ð	DISK UNDER CAB. LIGHT
•	TELEPHONE 1'-0" AFF U.N.O.	F	EXHAUST FAN (RECESSED)
•	TELEPHONE (FLUSH MOUNT)	H	HEAT LAMP
	HALOGEN FLEX STRIP	(H)	MONO POINT LIGHT
D	DEDICATED LINE FOR FAX OR MODEM	F	COMBO, LIGHT FIXTURE/EXHAUST FAN (RECESSED)
₩	SPRINKLER HEAD		GARAGE DOOR OPENER WITH LIGHT
	THERMOSTAT, SPECIFY ZONE		WIRING
Y	TELEVISION OUTLET CATY		FIRE ALARM HORN
•	STEREO SPEAKER OUTLET	F	FIRE ALARM PULL STATION
]	PUSH BUTTON DOOR BELL		DESTRATIFICATION FAN, SPECIFY SIZE
>	PUSH BUTTON FOR GARAGE		(INCHES)
H	DOOR BELL CHIMES		FLUSH MOUNT ELECTRIC PANEL BOARD
9	PHOTO ELECTRIC CELL FIXTURE	一	SURFACE MOUNT ELECTRIC PANEL BOARD
9	MOTOR	—————————————————————————————————————	HOSE BIB (FREEZE PROOF)
TR	TRANSFORMER	H	GAS VALVE
•	GARBAGE DISPOSAL	②	JUNCTION BOX
B	SMOKE DETECTOR	ф	MOTION LIGHT

RADON MITIGATION NOTES
FOR ALL ON-GRADE SLABS

- . 4 INCH PERFORATED DRAIN PIPE PLACED ALONG AND INSIDE OF FOOTINGS IN GRAVEL NEAR EDGE WHERE SLABS ARE POURED.
- BOTH ENDS OF PIPE WILL CONNECT TO A 4 INCH PYC TEE THAT WILL 2. BE EXTENDED WITH 4 INCH PYC ABOVE SLAB.
- 4 INCH PVC WILL BE EXTENDED FROM SLAB TO AND ABOVE ROOF 3. WITH A VENT CAP INSTALLED. (PAINT)
- A STANDARD ELECTRICAL OUTLET WILL BE INSTALLED NEAR PVC 4. PIPE AT SLAB LEVEL FOR FAN IF NEEDED IN FUTURE.

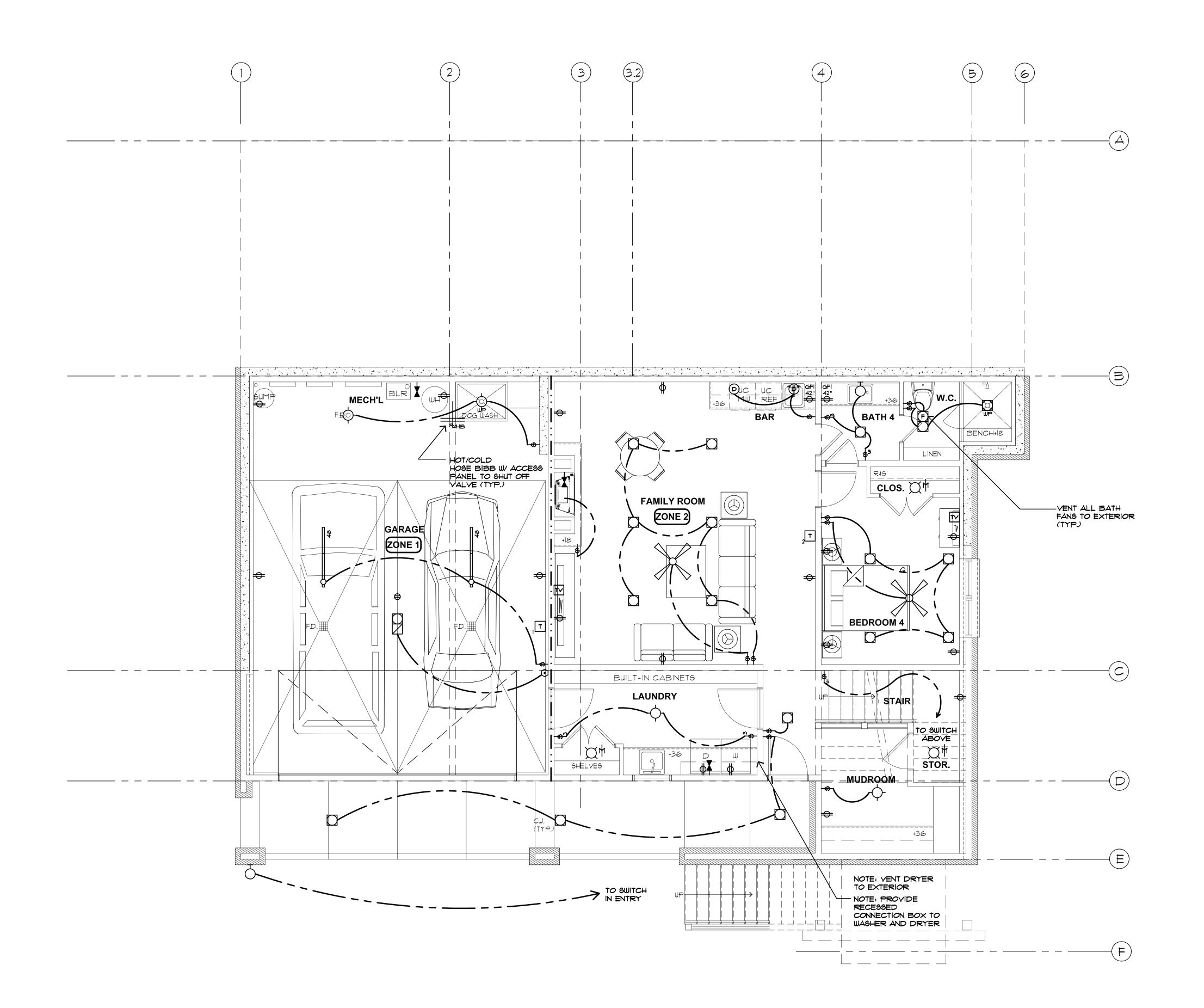
HEATING ZONES

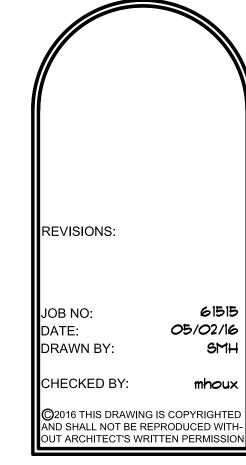
<u>LOWER LEVEL</u> ZONE 1 = GARAGE, MECHANICAL

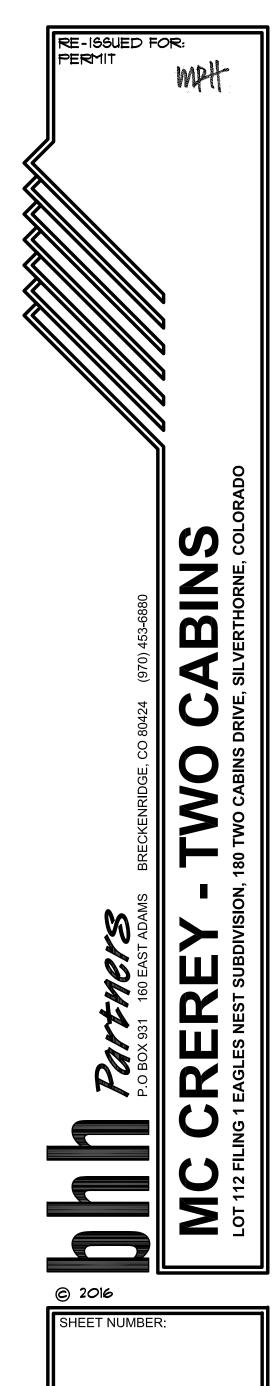
ZONE 2 = FAMILY ROOM, BAR, BATH 4, W.C. CLOSET, BEDROOM 4, STORAGE, MUDROOM, LAUNDRY

MAIN LEVEL ZONE 3 = DINING, GREAT ROOM, KITCHEN, PANTRY, BATH 2

ZONE 4 = ENTRY, COATS, POWDER, BATH 3, CLOSET, BEDROOM 2, CLOSET, BEDROOM 3
ZONE 5 = MASTER BATH, W.C.
ZONE 6 = MASTER BEDROOM, MASTER CLOSET



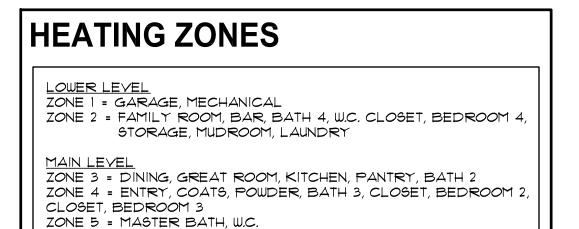




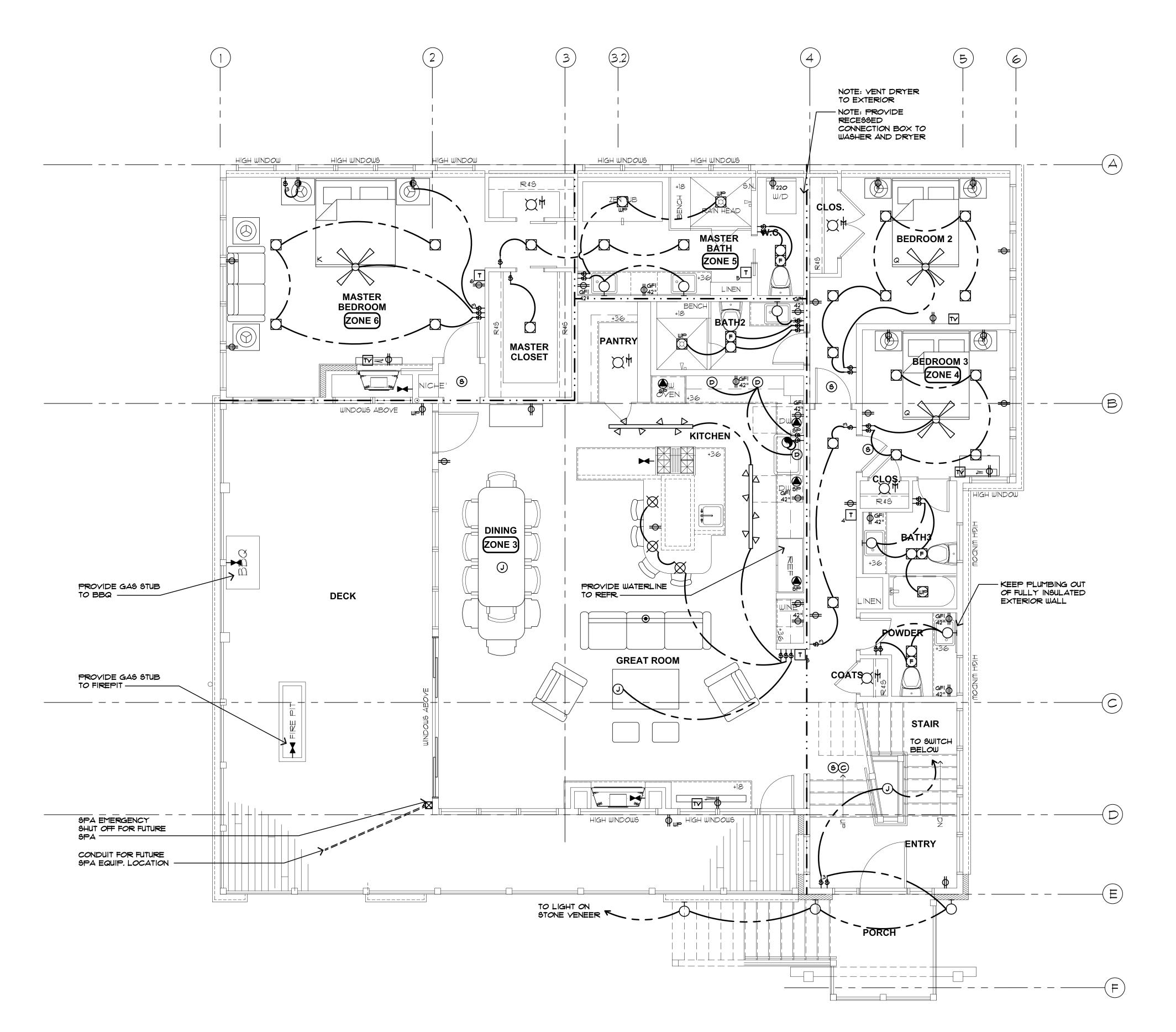


LOWER LEVEL MECHANICAL/ELECTRICALPLAN

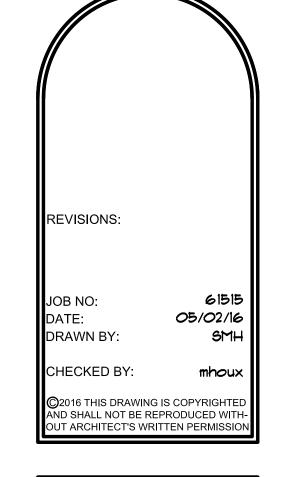
SCALE: 1/4" = 1'-0"

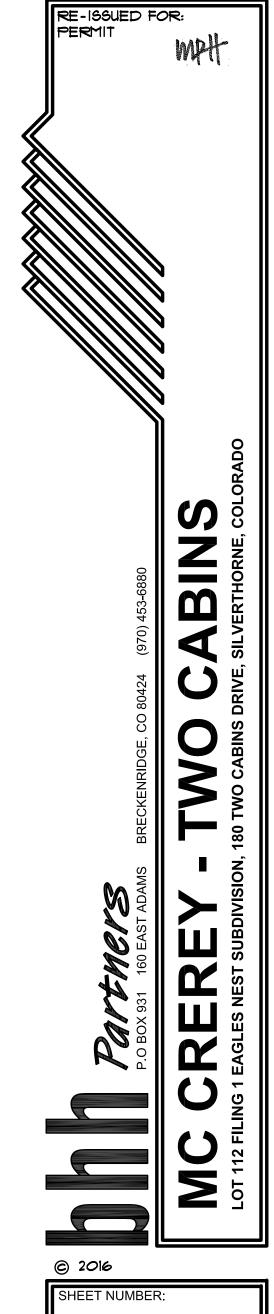


ZONE 6 = MASTER BEDROOM, MASTER CLOSET



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





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SHEET NUMBER:

ME1.2

MAIN LEVEL MECHANICAL/ELECTRICAL PLAN