City of Ketchum
Planning & Building

OFFICIAL USE ONLY
File Number:
Date Received:
By:
Fee Paid:
Approved Date:
Denied Date:
By:

Floodplain Development Permit and Riparian Alteration Application

NOTE: This permit is required for all properties containing 100 year floodplain area and Riparian Setbacks

PROPERTY OWNER INFORMATION			
Property Owner Name(s): James Beckmann			
Property Owner's Mailing Address: 4356 N Nines Ridge Lane Boise ID 83702			
Phone: 615-478-0415			
Email: jtbeckmann@gmail.com			
PROJECT INFORMATION			
Project Name: Beckmann			
Project Representative's Name (main point of contact for project): Shawn Rendon			
Project Representative's Phone: 208-789-0282			
Project Representative's Mailing Address: 1034 N Justin Place Meridian ID 83646			
Project Representative's Email: shawnr.rci@gmail.com			
Architect's name, phone number, e-mail: Peter Borner, 208-315-5060, peter@bornerworks.com			
Landscape Architect's name, phone number, e-mail: n/a			
Environmental consultant's name, phone number, e-mail: n/a			
Engineer's name, phone number, e-mail: Peter Borner, 208-315-5060, peter@bornerworks.com			
Project Address: 591 2nd Ave S #6 Ketchum ID 83340			
Legal Description of parcel: 0882000060			
Lot Size: Don't know lot size			
Zoning District: RU/T			
Overlay Zones – indicate all that apply: ☒ Floodplain ☐ Floodway ☐ Riparian Zone ☐ Avalanche ☐ Mountain			
Brief description of project scope: Bedroom addition and renovation of the existing space.			
Value of Project: $ 482,000			
TYPE OF PROJECT – indicate all that apply:			
☐ New Building in Floodplain	☒ Building Addition in Floodplain	☐ Streambank Stabilization / Stream Alteration	☐ Other. Please describe:
☐ Riparian Alteration	☐ Floodplain Development		
PROPOSED SETBACKS – if project is a new building or an addition to an existing building			
Front:	Side:	Side: 12.5'	Rear: 16'
ADDITIONAL INFORMATION			
Will fill or excavation be required in floodplain, floodway or riparian zone? Yes ☒ footing only No ☐			
If Yes, Amount in Cubic Yards: Fill: CY Excavation: 1 CY			
Will Existing Trees or Vegetation be Removed? Yes ☐ No ☒			
Will new trees or vegetation be planted? Yes ☐ No ☒			

Applicant agrees in the event of a dispute concerning the interpretation or enforcement of the Floodplain Management Overlay Application, in which the City of Ketchum is the prevailing party, to pay reasonable attorney fees, including attorney fees on appeal, and expenses of the City of Ketchum. I, the undersigned, certify that all information submitted with and upon this application form is true and accurate to the best of my knowledge and belief.

4/13/23

Signature of Owner/Representative Date

FLOODPLAIN MANAGEMENT OVERLAY EVALUATION STANDARDS

Please provide a narrative to address each of the criteria below.

Criteria for Evaluation of Applications: The criteria of floodplain development permit applications and riparian alteration permits shall be as follows:

1. The proposal preserves or restores the inherent natural characteristics of the river, floodplain, and Riparian Zone, including riparian vegetation and wildlife habitat. Development does not alter river channel unless all stream alteration criteria for evaluation are also met.

2. No temporary construction activities, encroachment, or other disturbance into the twenty-five foot (25') Riparian Zone, including encroachment of below grade structures, shall be permitted, except for approved stream stabilization work and restoration work associated with a riparian zone that is degraded.

3. No permanent development shall occur within the twenty-five foot (25') Riparian Zone, except for approved stream stabilization work and restoration work associated with permit issued under this title, or exceptions as described below:

   a. Access to a property where no other primary access is available.

   b. Emergency access required by the Fire Department.

   c. A single defined pathways or staircases for the purpose of providing access to the river channel and in order to mitigate multiple undefined social paths.

   d. Development by the City of Ketchum

4. New or replacement planting and vegetation in the Riparian Zone shall include plantings that are low growing and have dense root systems for the purpose of stabilizing stream banks and repairing damage previously done to riparian vegetation. Examples of such plantings most commonly include red osier dogwood, common chokecherry, serviceberry, elderberry, river birch, skunk bush sumac, Beb's willow, Drummond's willow, little wild rose, gooseberry, and honeysuckle. However, in rare instances the distance from the top-of-bank to the mean high-water mark is significant and the native vegetation appropriate for the Riparian Zone are low growing, drought resistant grasses and shrubs. Replacement planting and vegetation shall be appropriate for the specific site conditions. Proposal does not include vegetation within the twenty-five foot (25') Riparian Zone that is degraded, not natural, or which does not promote bank stability.

5. Landscaping and driveway plans to accommodate the function of the floodplain allow for sheet flooding. Surface drainage is controlled and shall not adversely impact adjacent properties including driveways drained away from paved roadways. Culvert(s) under driveways may be required. Landscaping berms shall be designed to not dam or otherwise obstruct floodwaters or divert same onto roads or other public pathways.

6. Floodwater carrying capacity is not diminished by the proposal.

7. Impacts of the development on aquatic life, recreation, or water quality upstream, downstream or across the stream are not negative.

8. Building setback in excess of the minimum required along waterways is encouraged. An additional ten-foot (10') building setback beyond the required twenty-five foot (25') Riparian Zone is encouraged to provide for yards, decks and patios outside the twenty five foot (25') Riparian Zone.

9. The top of the lowest floor of a building located in, or partially within, the SFHA shall be at or above the Flood Protection Elevation (FPE). A building is considered to be partially within the SFHA if any portion of the building or appendage of the building, such as footings, attached decks, posts for upper story decks, are located within the SFHA. See section 17.88.060, figures 1 and 2 of this chapter to reference construction details. See Chapter 17.08 of this title for definition of "lowest floor."

   a. In the SFHA where Base Flood Elevations (BFEs) have been determined, the FPE shall be twenty-four inches (24") above the BFE for the subject property; twenty-four inches (24") or two (2) feet is the required freeboard in Ketchum city limits.

   b. In the SFHA where no BFE has been established, the FPE shall be at least two (2) feet above the highest adjacent grade.

10. The backfill used around the foundation in the SFHA floodplain shall provide a reasonable transition to existing grade but shall not be used to fill the parcel to any greater extent.

    a. Compensatory storage shall be required for any fill placed within the floodplain.

    b. A CLOMR-F shall be obtained prior to placement of any additional fill in the floodplain.

11. All new buildings located partially or wholly within the SFHA shall be constructed on foundations that are designed by a licensed professional engineer.

12. Driveways shall comply with City of Ketchum street standards; access for emergency vehicles has been adequately provided for by limiting flood depths in all roadways to one foot (1-ft) or less during the 1% annual chance event.

13. Landscaping or revegetation shall conceal cuts and fills required for driveways and other elements of the development.

14. (Stream alteration.) The proposal is shown to be a permanent solution and creates a stable situation.

15. (Stream alteration.) No increase to the one percent (1%) annual chance flood elevation at any location in the community, based on hydrologic and hydraulic analysis performed in accordance with standard engineering practice and has been certified and submitted with supporting calculations and a No Rise Certificate, by a registered Idaho engineer.

16. (Stream alteration.) The project has demonstrated No Adverse Impact or has demonstrated all impacts will be mitigated.

17. (Stream alteration.) The recreational use of the stream including access along any and all public pedestrian/fisher's easements and the aesthetic beauty shall not be obstructed or interfered with by the proposed work.

18. (Stream alteration.) Fish habitat shall be maintained or improved as a result of the work proposed.

19. (Stream alteration.) The proposed work shall not be in conflict with the local public interest, including, but not limited to, property values, fish and wildlife habitat, aquatic life, recreation and access to public lands and waters, aesthetic beauty of the stream and water quality.

20. (Stream alteration.) The work proposed is for the protection of the public health, safety and/or welfare such as public schools, sewage treatment plant, water and sewer distribution lines and bridges providing particularly limited or sole access to areas of habitation.

21. (Wetlands) Where development is proposed that impacts any wetland the first priority shall be to move development from the wetland area. Mitigation strategies shall be proposed at time of application that replace the impacted wetland area with an equal amount and quality of new wetland area or riparian habitat improvement.

APPLICATION CHECKLIST

Please utilize and submit the checklist on the following pages to ensure a complete application.

Floodplain management overlay application certification of completeness is based on submittal of all applicable items on this checklist.

Use for:

- Floodplain Development Permit (includes stream Alteration / streambank stabilization)
- Riparian Alteration

Project name: Beckmann

Reviewed by: Shawn Rendon

DOCUMENTS

- ☒ One (1) digital copy of all application materials
- ☒ Application form
- ☐ Evaluation criteria narrative
- ☒ Description of proposed development
- ☒ Specifications for building construction and materials, flood proofing, filling, grading, dredging, channel improvement/changes and utilities
- ☐ Elevation and/or flood proofing certification prepared by a professional engineer for existing and proposed residential and nonresidential structures located partially or wholly in the regulatory floodplain. Said floodproofing methods shall meet the criteria in subsection 17.88.060.B of the Ketchum Municipal Code.
- ☐ Copy of letter of map amendment based on fill (LOMA-F) application for any proposed fill in the floodplain. LOMA-F approval shall be obtained from FEMA prior to issuance of a floodplain development permit.

SITE SURVEY OF EXISTING CONDITIONS (prepared and stamped by a licensed engineer or surveyor) – REQUIRED FOR NEW BUILDINGS OR ADDITIONS TO BUILDINGS IN THE FLOODPLAIN AND ANY WORK WITHIN THE FLOODWAY

- ☒ Exterior boundary lines of the property together with dimensions
- ☐ Topographic survey of the real property at a minimum of one (1) foot contour intervals, significant hillsides may be a minimum of ten (10) foot contour intervals
- ☒ Location of any existing dwelling units, other structures, fill, storage of materials, drainage facilities and all improved areas (pavement) with dimensions thereof showing the setback of each structure from the nearest property line
- ☐ Location of existing channels and ditches and other significant natural features, boundaries of floodway and floodplain, including Base Flood Elevation (BFE) and other site specific information from the studies referred to in Ketchum Municipal Code, subsection 17.88.040.A.3
- ☒ Location and elevations of adjacent streets, water supply and sewer lines, including private wells and/or septic systems

- ☐ Elevation of the lowest floor (including basement) of all structures existing and proposed partially or wholly located in the one percent (1%) annual chance floodplain, including elevation to which any structure has been or will be floodproofed
- ☐ Identification of the riparian zone and the "mean high water mark," as defined in Ketchum Municipal Code
- ☐ Location of previous stream alterations upstream, downstream and along both banks from subject lot
- ☐ Location of drainage ways, intermittent and year-round, including potential overflow channels or channel movement
- ☐ Location and dimensions of easements, private and public, within and adjacent to the proposed project together with the purpose thereof
- ☐ Location of all existing trees to be preserved and significant trees to be removed
- ☐ Indication of any zoning district overlay which affects the property (floodplain, mountain overlay or avalanche)
- ☒ Location of existing structures on adjacent properties

SITE PLAN – REQUIRED FOR ALL PROJECTS.

- ☒ Vicinity map
- ☐ Proposed excavation or land fill including resulting slope grades for the building pad(s), driveways and any other element of the proposed development where excavation or fill will take place
- ☐ Drainage plan including offsite improvements such as borrow ditches and culverts and including a plan for on- and off-site improvements to provide for unobstructed conveyance of floodwaters
- ☐ Location of on-site parking spaces and access thereto, including the dimensions of the spaces and the width and length of access and curb cuts
- ☐ Location and dimensions of snow storage areas
- ☐ Location of dumpster and/or garbage and recycling can storage areas, including the dimensions and proposed fencing or other screening
- ☐ Location and type of any electrical power transformers, switches and/or sectors
- ☐ Location and type of all heating, ventilation, air conditioning and other mechanical units
- ☐ Drip line of all buildings
- ☐ Percentage of the lot coverage by proposed building and parking areas together with the total square footage of the parcel of property
- ☒ Location of all proposed structures (buildings) and all improved areas (pavement, sidewalk) with dimensions thereof showing the setback of each structure from the nearest property line
- ☐ Designation of the zoning district in which the project is located
- ☐ Location of any zoning district boundary line within the proposed project or the immediate vicinity thereof
- ☐ For any building in the floodplain with an area below the lowest floor that is below the base flood elevation and has a ceiling height of five feet (5') or greater, the building owner shall sign a non-conversion agreement, that shall run with the property, promising not to improve, finish or otherwise convert the area below the lowest floor to living area and granting the city the right to inspect the enclosed area at its discretion. Such agreement shall be recorded at Blaine County's recorder's office

ARCHITECTURAL PLANS – REQUIRED FOR NEW BUILDINGS OR ADDITIONS TO EXISTING BUILDINGS

- ☒ Floor plans of all floors at not less than one-eighth (1/8) scale
- ☐ All exterior elevations
- ☐ Roof plan including direction of snow sliding and snow clips if applicable. Location and type of all mechanical equipment and rooftop appurtenances
- ☒ Cross-section(s) of the property and proposed building adequately establishing the natural grade, finished grade, slope of land, slope of proposed accesses and grades to all public rights-of-way

- ☐ Location and type (cut sheets) of all exterior lighting
- ☐ Model or computer simulation renderings, if required at pre-application design review meeting

LANDSCAPE PLAN – REQUIRED FOR ANY PROJECT PROPOSING TO ALTER VEGETATION IN THE RIPARIAN ZONE OR SPECIAL FLOOD HAZARD AREA

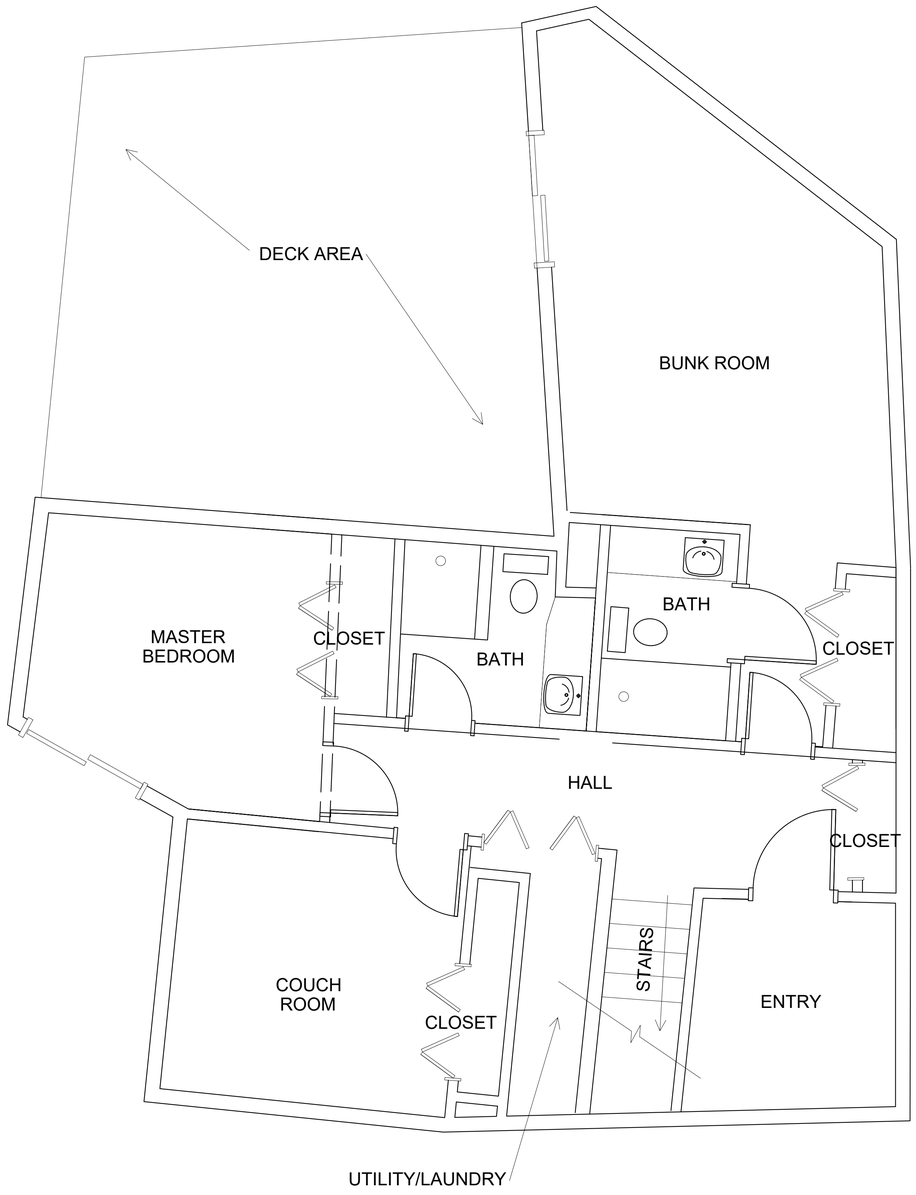
- ☐ All existing vegetation over 2 inches in caliper, including size and species
- ☐ Proposed landscaping of the project including types, quantities and sizes of trees, shrubs, ground cover and other vegetation
- ☐ Proposed landscaping or other improvements within any public rights-of-way
- ☐ Location, type (materials and colors) and height of walls or fences
- ☐ Location of parking areas
- ☐ Location of vehicular and pedestrian circulation patterns, easements and proposed improvements with regard thereto
- ☐ Irrigation system for landscaping
- ☐ Drainage plan including off-site improvements

STREAM ALTERATIONS / STREAMBANK STABILIZATION

- ☐ Copies of the Joint Application for Permits submitted to the U.S. army corps of engineers (USACE) and Idaho department of water resources (IDWR). Please note, USACE and IDWR approvals shall be obtained prior to issuance of a stream alteration permit.
- ☐ Copy of the USACE permit approval.
- ☐ Copy of the IDWR permit approval.
- ☐ Cross section of proposed work
- ☐ Length of stream to be worked, type of work to be done, type of equipment to be used and starting and completion dates of work
- ☐ A valley cross section showing stream channel, floodway limits, elevations of adjacent land areas, Special Flood Hazard Area boundary, floodway boundary, existing Mean High Water mark, proposed Mean High Water mark, Riparian Zone regulated by the City of Ketchum, proposed excavation, proposed fill. A profile showing the slope of the bottom of the channel or flow line of the stream may be required upon review of all other material submitted.
- ☐ For any work proposed to occur in the regulatory floodway: A no net rise certificate, including supporting calculations, prepared and stamped by an Idaho registered professional hydraulic engineer
- ☐ For any work proposed to occur in the floodway: HEC-RAS model

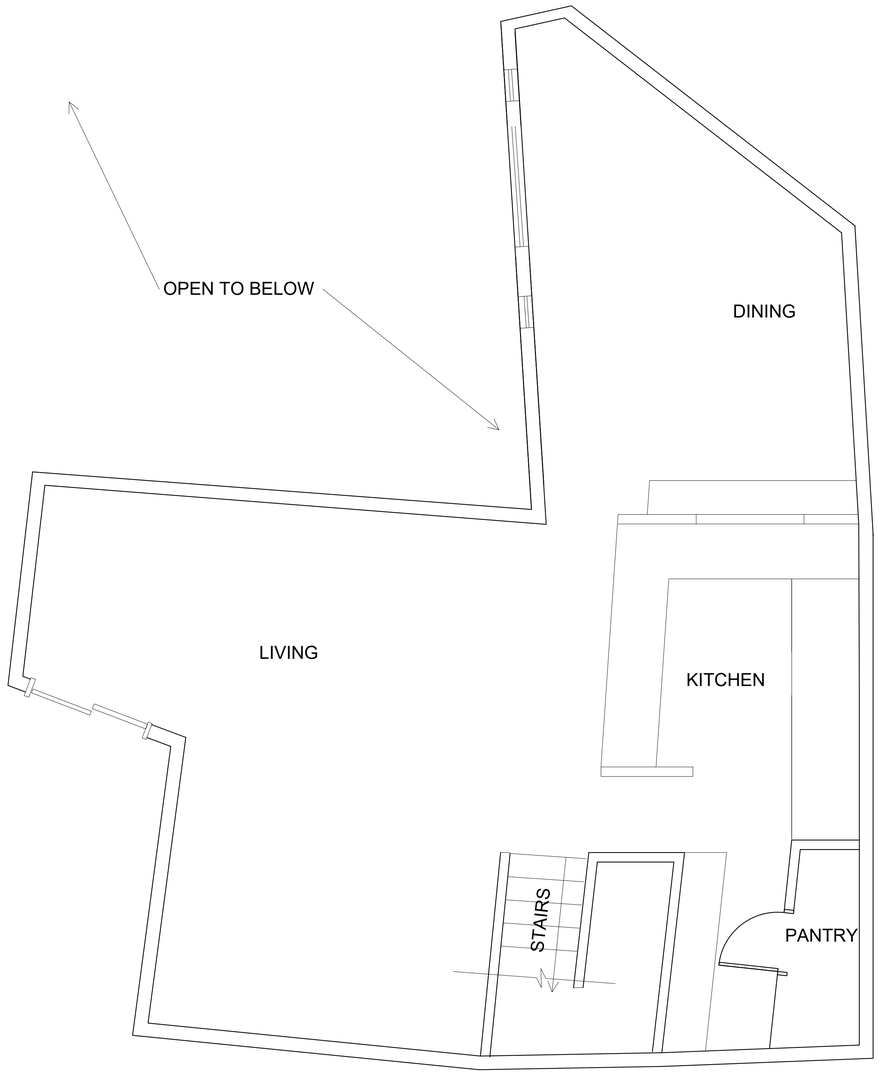
NO ADVERSE IMPACT STATEMENT – WHERE APPLICABLE

- ☐ No Adverse Impact Statement
    - See definition of "No Adverse Impact" in section 17.08.020 of Ketchum Municipal Code.



1ST LEVEL PLAN

SCALE: 3/8" = 1'-0"



2ND LEVEL PLAN

SCALE: 3/8" = 1'-0"

BECKMAN CONDO REMODEL & ADDITION

591 2nd Avenue S #6, Ketchum, Idaho

PO BOX 21436
BILLINGS, MT 59104
(406) 861-9454

BORNER ENGINEERING LLC

REVISIONS	DATE	BY

DESIGNED	GPB	
DRAFTED	GPB	
CHECKED	GPB	
DATE	2/27/2023	

Existing Floor Plan

PROFESSIONAL ENGINEER LICENSED 19279 2/28/23 STATE OF IDAHO G PETER BORNER

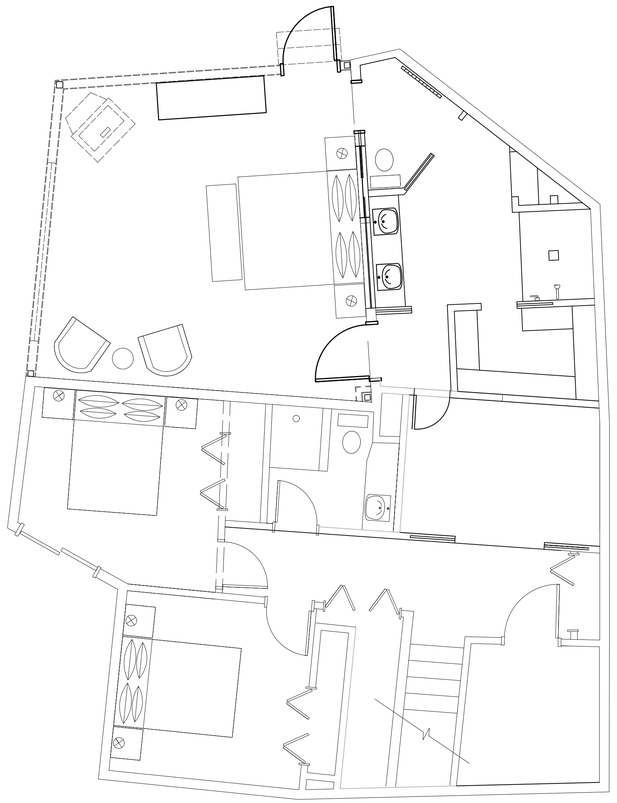
PROJECT # E23-108

DRAWING # A1.1

SHEET: 3 of 11

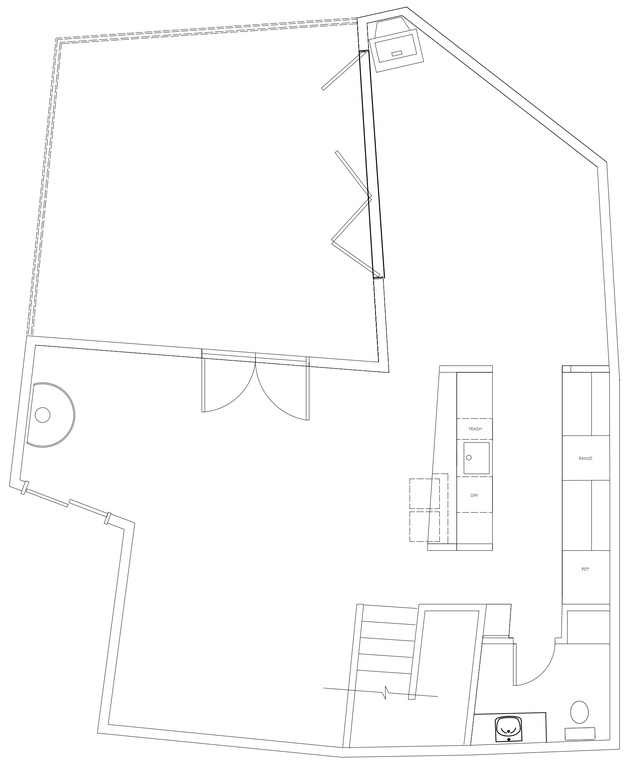
LEGEND	
	WALLS TO REMAIN
	NEW WALLS

NOTES
1. ALL CO AND SMOKE DETECTORS WILL BE BROUGHT UP TO CODE



PROPOSED FIRST FLOOR PLAN

SCALE: 1/4" = 1'0"



PROPOSED SECOND FLOOR PLAN

SCALE: 1/4" = 1'0"

BECKMAN CONDO REMODEL & ADDITION

591 2nd Avenue S #6, Ketchum, Idaho

BORNER ENGINEERING LLC

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REVISIONS	DATE	BY
MASTER BATH REVISIONS	3/14/23	GPB

DESIGNED	GPB
DRAFTED	GPB
CHECKED	GPB
DATE	3/3/23

Proposed Floor Plan

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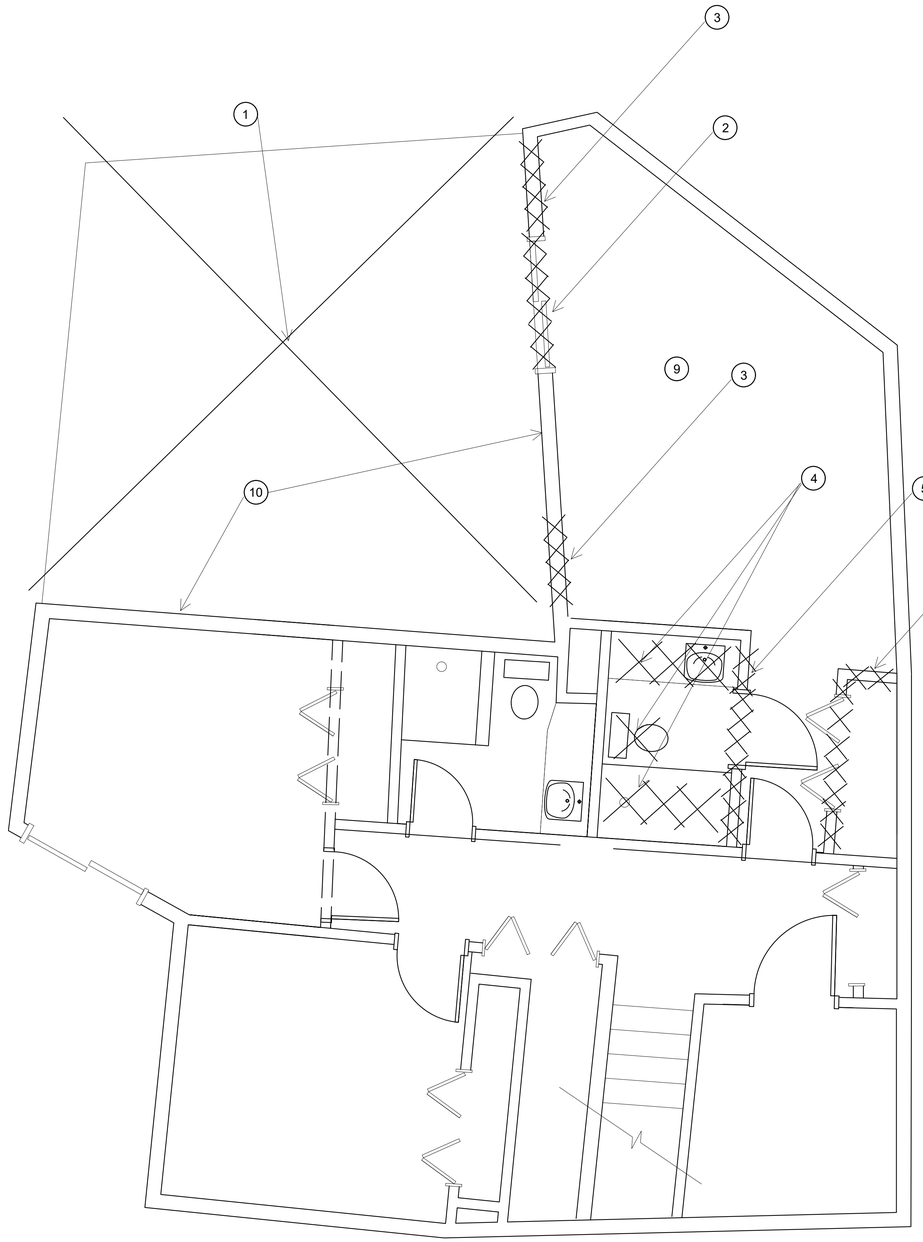
19279
3/3/23
STATE OF IDAHO
PETER BORNER

PROJECT #
E23-108

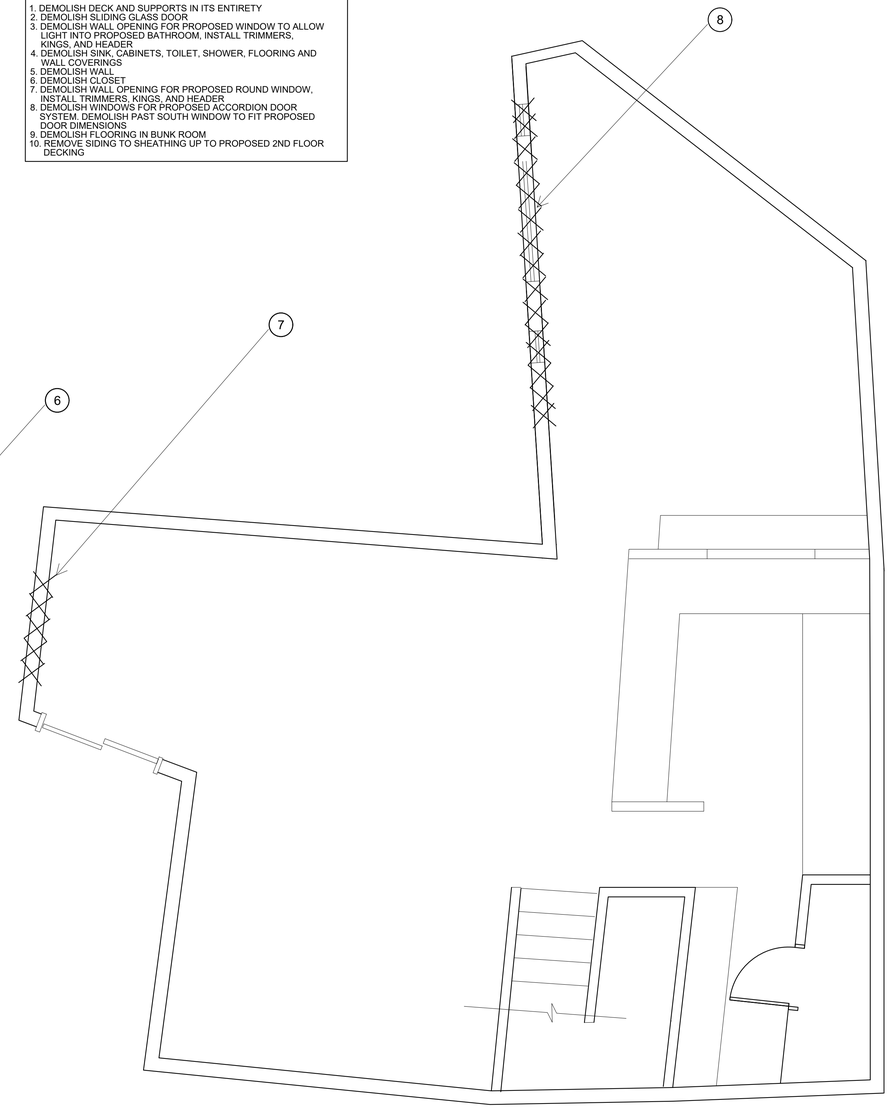
DRAWING #
A1.2

SHEET: 4 of 13



SHEET KEY NOTES

1. DEMOLISH DECK AND SUPPORTS IN ITS ENTIRETY
2. DEMOLISH SLIDING GLASS DOOR
3. DEMOLISH WALL OPENING FOR PROPOSED WINDOW TO ALLOW LIGHT INTO PROPOSED BATHROOM, INSTALL TRIMMERS, KINGS, AND HEADER
4. DEMOLISH SINK, CABINETS, TOILET, SHOWER, FLOORING AND WALL COVERINGS
5. DEMOLISH WALL
6. DEMOLISH CLOSET
7. DEMOLISH WALL OPENING FOR PROPOSED ROUND WINDOW, INSTALL TRIMMERS, KINGS, AND HEADER
8. DEMOLISH WINDOWS FOR PROPOSED ACCORDION DOOR SYSTEM. DEMOLISH PAST SOUTH WINDOW TO FIT PROPOSED DOOR DIMENSIONS
9. DEMOLISH FLOORING IN BUNK ROOM
10. REMOVE SIDING TO SHEATHING UP TO PROPOSED 2ND FLOOR DECKING



1ST LEVEL PLAN

SCALE: 3/8" = 1'-0"

2ND LEVEL PLAN

SCALE: 3/8" = 1'-0"

BECKMAN CONDO REMODEL & ADDITION

591 2nd Avenue S #6, Ketchum, Idaho

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DATE	2/27/2023	

PROFESSIONAL ENGINEER LICENSED 19279 2/28/23 STATE OF IDAHO G PETER BORNER

DemolitionPlan

PROJECT # E23-108

DRAWING # A2.0

SHEET: 5 of 11

1ST LEVEL PLAN
SCALE: 3/8" = 1'-0"

SHEET KEY NOTES

1. EXTERIOR 3'X7' DOOR
2. WOOD STAIRS TO OUTSIDE
3. 2X6 INFILL WALL SEE SECTION
4. HSS 4X4X1/4 COLUMN SUPPORTING 2ND FLOOR DECK
5. GAS STOVE
6. WINDOW 96"X30"
7. KING SIZE BED (NOT IN CONTRACT)
8. 2X4 COLUMN CLOSURE WALL
9. 3'X7' DOOR
10. INFILL WALL WALL WITH KINGS, TRIMMERS ND HEADER FOR WINDOW, PROVIDE 60"W X 12"H WINDOW FOR NATURAL LIGHT INTO BATHROOM
11. 24"X7' DOOR
12. VANITY, TWO SINKS, FAUCETS, MIRROR
13. TILE SHOWER (3 WALLS), SHOWER GLASS (ONE WALL), SHOWER FIXTURES
14. SHOWER GLASS AND DOOR
15. BASIC TOILET
16. 30" POCKET DOOR
17. 2X4 PARTITION WALL FRAMING
18. CLOSET SHELFING
19. 24" POCKET DOOR
20. LINEAR DRAIN WITH HANDHELD FOR DOG WASH

NOTE: FIELD VERIFY ALL DIMENSIONS, CONDO AREAS ARE CONSTRUCTED AT UNIQUE AND INCONSISTENT ANGLES

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR AND CEILING SQUARE FOOTAGE	FLOOR	BASE	WALLS	CEILING	COUNTERTOPS	REMARKS
001	MASTER BEDROOM	300	ENIGINEERED WOOD	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	N/A	PROVIDE 3/4"OSB T&G BELOW FINAL FLOORING SYSTEM
002	MASTER BATH	76	TILE FLOOR, WITH ELECTRIC FLOOR HEAT	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	QUARTZ	
003	MASTER CLOSET	35	CARPET	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	MDF SHELVING	
004	MASTER SHOWER	12	TILE	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	N/A	
005	HALLWAY	96	ENGINEERED WOOD	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	N/A	PATCH FLOORING REQUIRED FOR PLUMBING UPDATES WITH 3/4" OSB
006	GUEST BATHROOM	38	TILE	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	QUARTZ	T&G BELOW FINAL FLOORING SYSTEM
007	PATIO	316	PAVERS	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	N/A	

BECKMAN CONDO REMODEL & ADDITION
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REVISIONS	DATE	BY
MASTER BATH REVISIONS	3/14/23	GPB

DESIGNED	GPB	
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DATE	3/3/23	

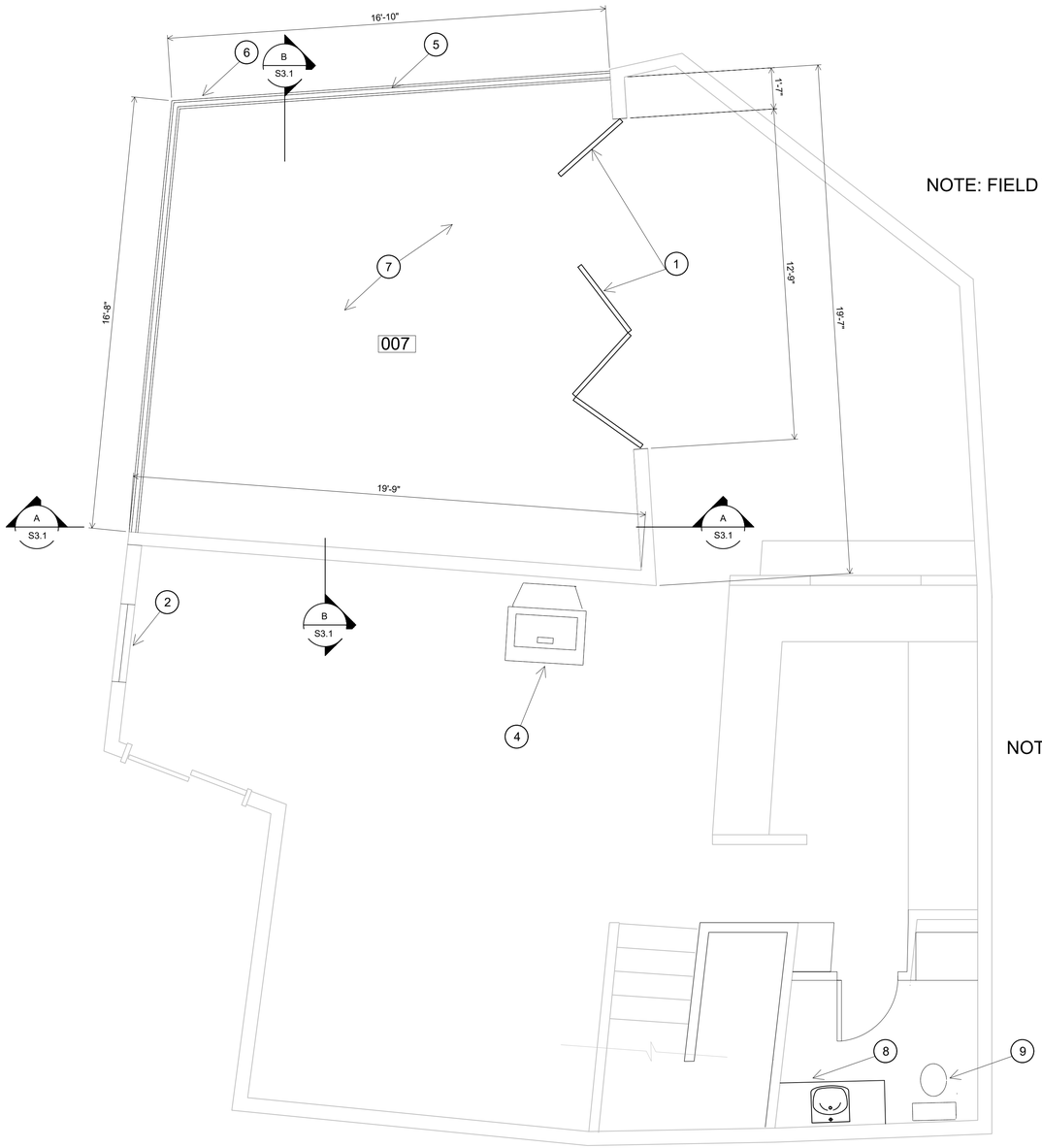
PROFESSIONAL ENGINEER LICENSED 19279 STATE OF IDAHO G PETER BORNER 3/3/23

PROJECT # E23-108

DRAWING # A3.1

SHEET: 6 of 13

1st Floor Plan



SHEET KEY NOTES

1. ACCORDION DOOR SYSTEM
2. 36" ROUND WINDOW
3. NOT USED
4. PELLET STOVE
5. CABLE HANDRAIL
6. HSS 12X4 TUBE STEEL POST AND RAIL, SEE SECTION
7. DECK FRAMING SYSTEM, SEE SECTION
8. VANITY, SINK, FAUCETS, MIRROR
9. BASIC TOILET

NOTE: FIELD VERIFY ALL DIMENSIONS, CONDO AREAS ARE CONSTRUCTED AT UNIQUE AND INCONSISTENT ANGLES

NOTE: KITCHEN OVEN/RANGE WILL BE CHANGED FROM ELECTRIC TO GAS

2ND LEVEL PLAN

SCALE: 3/8" = 1'-0"

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR AND CEILING SQUARE FOOTAGE	FLOOR	BASE	WALLS	CEILING	COUNTERTOPS	REMARKS
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004	MASTER SHOWER	12	TILE	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	N/A	
005	HALLWAY	96	ENGINEERED WOOD	MDF PAINTED	5/8" GYPSUM	5/8" GYPSUM	N/A	PATCH FLOORING REQUIRED FOR PLUMBING UPDATES WITH 3/4" OSB
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BECKMAN CONDO REMODEL & ADDITION

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	DESIGNED	DRAFTED	CHECKED	DATE
	GPB	GPB	GPB	3/3/23

REVISIONS	DATE	BY

2nd Floor Plan

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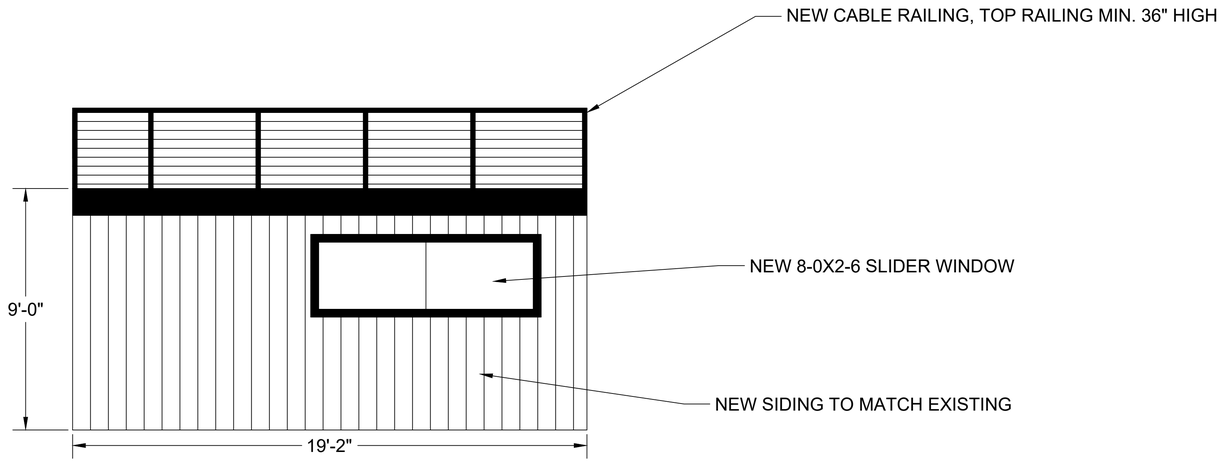
2/3/23
STATE OF IDAHO
PETER BORNER

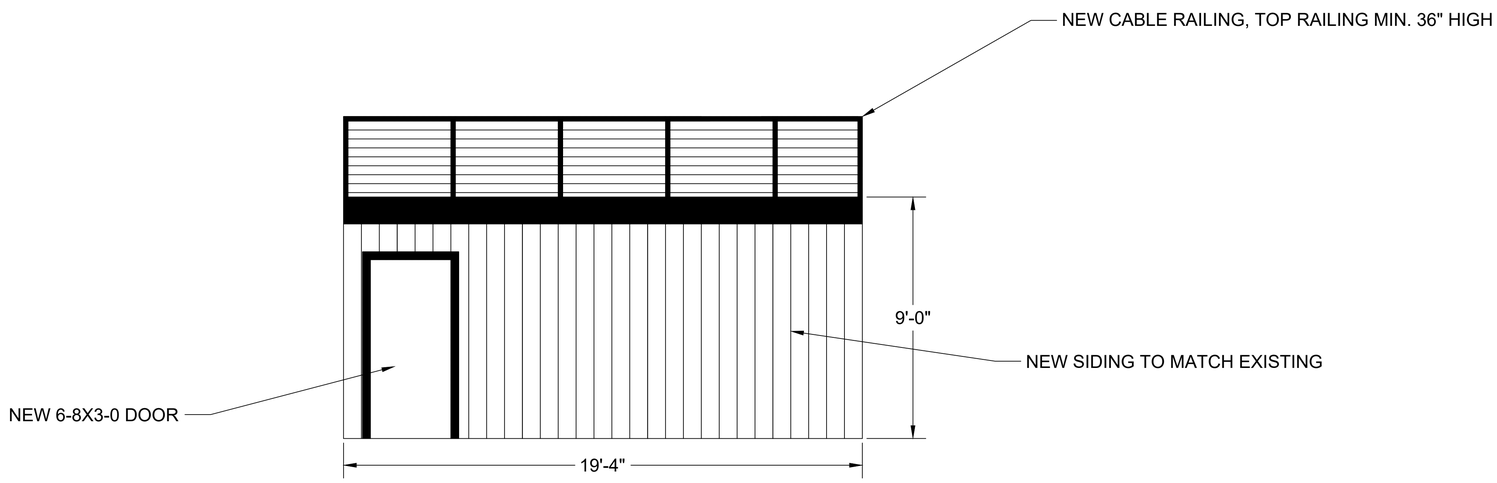
PROJECT # E23-108

DRAWING # A3.2

SHEET: 7 of 13



WEST ELEVATION



NORTH ELEVATION

SCALE: 3/8" = 1 FOOT

BECKMAN CONDO REMODEL & ADDITION
591 2nd Avenue S #6, Ketchum, Idaho

BORNER ENGINEERING LLC
PO BOX 21436
BILLINGS, MT 59104
(406) 861-9454

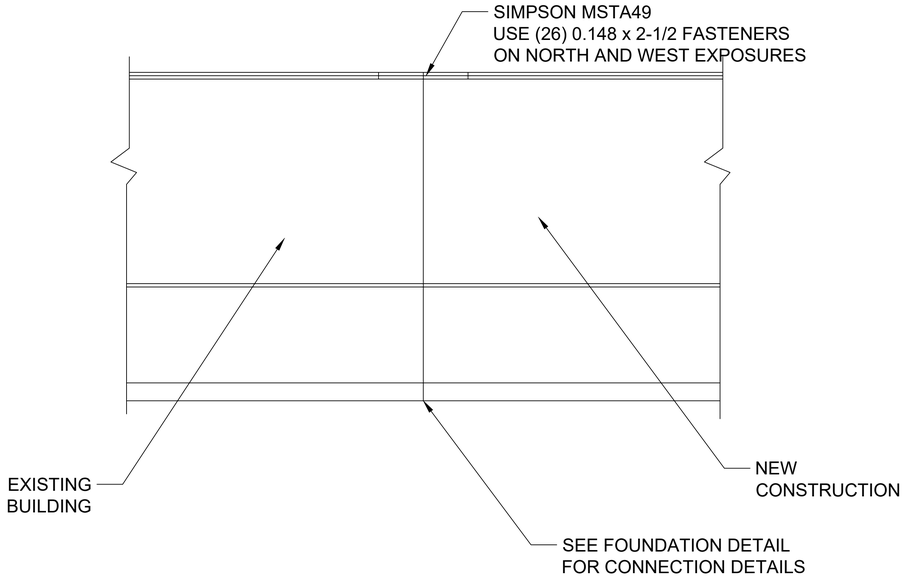
REVISIONS	DATE	BY

DESIGNED	GPB	
DRAFTED	GPB	
CHECKED	GPB	
DATE	3/3/23	

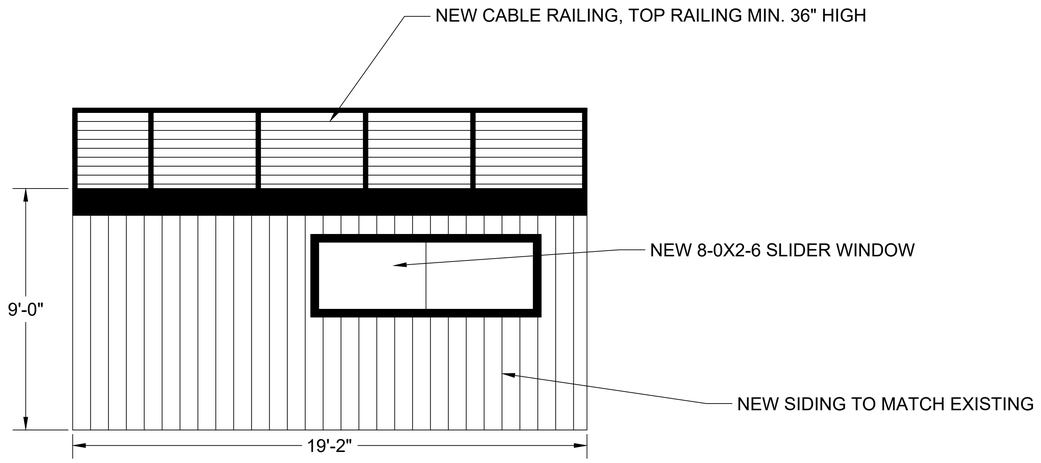
Addition Elevation

PROFESSIONAL ENGINEER LICENSED 19279 3/3/23 STATE OF IDAHO G PETER BORNER

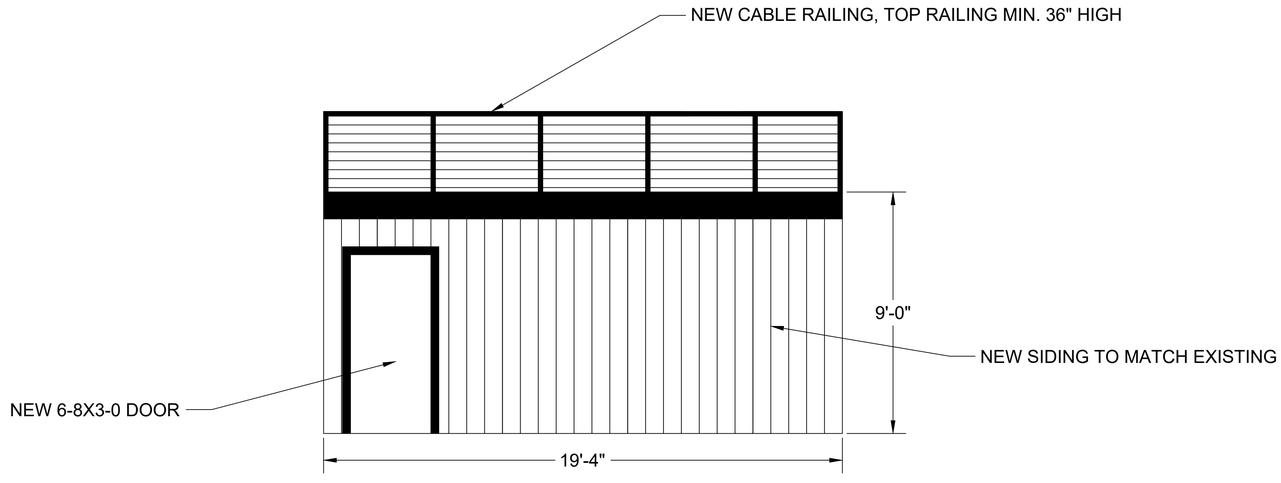
PROJECT # E23-108
DRAWING # A4.2
SHEET: 9A of 13



CONNECTION DETAIL



WEST ELEVATION



NORTH ELEVATION

SCALE: 3/8" = 1 FOOT

BECKMAN CONDO REMODEL & ADDITION
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BORNER ENGINEERING LLC

BY	DATE	REVISIONS

DESIGNED	GPB
DRAFTED	GPB
CHECKED	GPB
DATE	3/3/23

Addition Elevation

PROFESSIONAL ENGINEER LICENSED 19279 STATE OF IDAHO G. PETER BORNER 3/3/23

PROJECT # E23-108
DRAWING # A4.2
SHEET: 9A of 13

PO Box 21436
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peter@bornerworks.com

Project Title: Beckman Condominium Remodel & Addition
Engineer: Peter Borner
Project ID:
Project Descr:

Project Information

Project File: Beckman.ec6

Project Title : Beckman Condominium Remodel & Addition

Description :

I.D. :

Address : 591 2nd Ave. S #6, Ketchum, ID

Project Leader : Peter Borner

Phone : (406) 861-9454 Fax : eMail : peter@bornerworks.com

Project Notes

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Project Title: Beckman Condominium Remodel & Addition
Engineer: Peter Borner
Project ID:
Project Descr:

Wall Footing

Project File: Beckman.ec6

DESCRIPTION: --None--

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.0 ksi
fy : Rebar Yield	=	60.0 ksi
Ec : Concrete Elastic Modulus	=	3,122.0 ksi
Concrete Density	=	145.0 pcf
φ Values Flexure	=	0.90
Shear	=	0.750

Analysis Settings

Min Steel % Bending Reinf.	=	
Min Allow % Temp Reinf.	=	0.00180
Min. Overturning Safety Factor	=	1.0 : 1
Min. Sliding Safety Factor	=	1.0 : 1
AutoCalc Footing Weight as DL :		Yes

Soil Design Values

Allowable Soil Bearing	=	1.50 ksf
Increase Bearing By Footing Weight	=	No
Soil Passive Resistance (for Sliding)	=	250.0 pcf
Soil/Concrete Friction Coeff.	=	0.30

Increases based on footing Depth

Reference Depth below Surface	=	ft
Allow. Pressure Increase per foot of depth	=	ksf
when base footing is below	=	ft

Increases based on footing Width

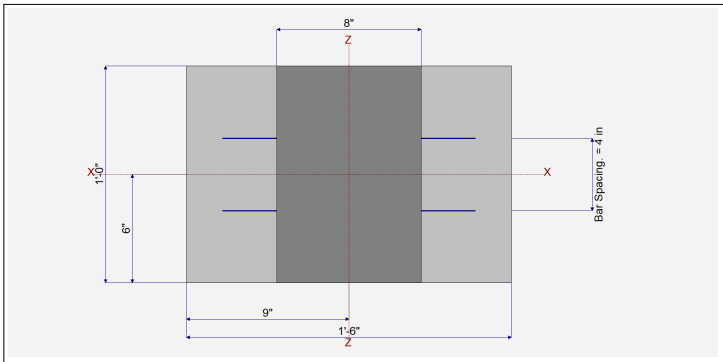
Allow. Pressure Increase per foot of width	=	ksf
when footing is wider than	=	ft

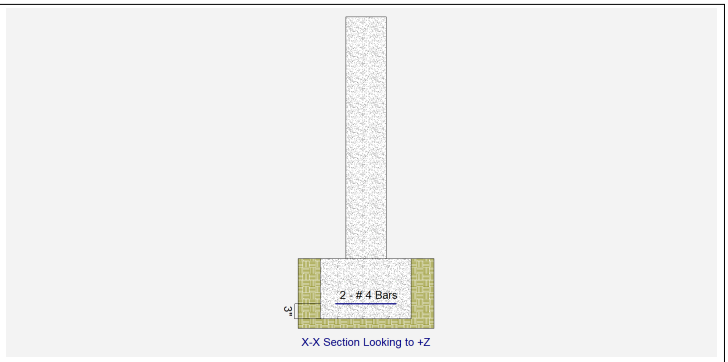
Adjusted Allowable Bearing Pressure = 1.50 ksf

Dimensions

Footing Width	=	1.50 ft	Footing Thickness	=	12.0 in	Bars along X-X Axis	
Wall Thickness	=	8.0 in	Rebar Centerline to Edge of Concrete...			# of Bars in 12" Width	= 2
Wall center offset from center of footing	=	0 in	at Bottom of footing	=	3.0 in	Reinforcing Bar Size	= # 4

Reinforcing





Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	0.40	0.150	0.150	1.20				k
OB : Overburden	=								ksf
V-x	=								k
M-zz	=								k-ft

Vx applied = in above top of footing

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Wall Footing

Project File: Beckman.ec6

DESCRIPTION: --None--

DESIGN SUMMARY

Design OK

	Factor of Safety	Item	Applied	Capacity	Governing Load Combination
PASS	n/a	Overturning - Z-Z	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Sliding - X-X	0.0 k	0.0 k	No Sliding
PASS	n/a	Uplift	0.0 k	0.0 k	No Uplift

	Utilization Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.8078	Soil Bearing	1.212 ksf	1.50 ksf	+D+S
PASS	0.01022	Z Flexure (+X)	0.1583 k-ft	15.494 k-ft	+1.20D+0.50L+1.60S
PASS	0.002076	Z Flexure (-X)	0.03216 k-ft	15.494 k-ft	+0.90D
PASS	n/a	1-way Shear (+X)	0.0 psi	82.158 psi	n/a
PASS	0.0	1-way Shear (-X)	0.0 psi	0.0 psi	n/a

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc	Actual Soil Bearing Stress -X	Actual Soil Bearing Stress +X	Actual / Allowable Ratio
, D Only	1.50 ksf	0.0 in	0.4117 ksf	0.4117 ksf	0.274
, +D+L	1.50 ksf	0.0 in	0.5117 ksf	0.5117 ksf	0.341
, +D+Lr	1.50 ksf	0.0 in	0.5117 ksf	0.5117 ksf	0.341
, +D+S	1.50 ksf	0.0 in	1.212 ksf	1.212 ksf	0.808
, +D+0.750Lr+0.750L	1.50 ksf	0.0 in	0.5617 ksf	0.5617 ksf	0.374
, +D+0.750L+0.750S	1.50 ksf	0.0 in	1.087 ksf	1.087 ksf	0.724
, +0.60D	1.50 ksf	0.0 in	0.2470 ksf	0.2470 ksf	0.165

Overturning Stability

Units : k-ft

Rotation Axis & Load Combination...	Overturning Moment	Resisting Moment	Stability Ratio	Status
Footing Has NO Overturning				

Sliding Stability

Force Application Axis Load Combination...	Sliding Force	Resisting Force	Sliding SafetyRatio	Status
Footing Has NO Sliding				

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Which Side ?	Tension @ Bot. or Top ?	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
, +1.40D	0.05003	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.40D	0.05003	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50Lr+1.60L	0.06111	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50Lr+1.60L	0.06111	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60L+0.50S	0.09149	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60L+0.50S	0.09149	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60Lr+0.50L	0.06111	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60Lr+0.50L	0.06111	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60Lr	0.05677	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60Lr	0.05677	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50L+1.60S	0.1583	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50L+1.60S	0.1583	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60S	0.154	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+1.60S	0.154	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50Lr+0.50L	0.05156	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50Lr+0.50L	0.05156	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50L+0.50S	0.08194	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50L+0.50S	0.08194	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50L+0.70S	0.09583	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +1.20D+0.50L+0.70S	0.09583	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +0.90D	0.03216	-X	Bottom	0.2592	Min Temp %	0.4	15.494	OK
, +0.90D	0.03216	+X	Bottom	0.2592	Min Temp %	0.4	15.494	OK

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Project Title: Beckman Condominium Remodel & Addition
Engineer: Peter Borner
Project ID:
Project Descr:

Wall Footing

Project File: Beckman.ec6

DESCRIPTION: --None--

One Way Shear

Units : k

Load Combination...	Vu @ -X	Vu @ +X	Vu:Max	Phi Vn	Vu / Phi*Vn	Status
+1.40D	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+0.50Lr+1.60L	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+1.60L+0.50S	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+1.60Lr+0.50L	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+1.60Lr	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+0.50L+1.60S	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+1.60S	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+0.50Lr+0.50L	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+0.50L+0.50S	0 psi	0 psi	0 psi	82.158 psi	0	OK
+1.20D+0.50L+0.70S	0 psi	0 psi	0 psi	82.158 psi	0	OK
+0.90D	0 psi	0 psi	0 psi	82.158 psi	0	OK

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Project Title: Beckman Condominium Remodel & Addition
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Project ID:
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General Footing

Project File: Beckman.ec6

DESCRIPTION: --None--

Code References

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16
Load Combinations Used : IBC 2021

General Information

Material Properties

f'c : Concrete 28 day strength	=	3.0	ksi
fy : Rebar Yield	=	60.0	ksi
Ec : Concrete Elastic Modulus	=	3,122.0	ksi
Concrete Density	=	145.0	pcf
φ Values Flexure	=	0.90	
Shear	=	0.750	

Analysis Settings

Min Steel % Bending Reinf.	=	
Min Allow % Temp Reinf.	=	0.00180
Min. Overturning Safety Factor	=	1.0 : 1
Min. Sliding Safety Factor	=	1.0 : 1
Add Ftg Wt for Soil Pressure	:	Yes
Use ftg wt for stability, moments & shears	:	Yes
Add Pedestal Wt for Soil Pressure	:	No
Use Pedestal wt for stability, mom & shear	:	No

Soil Design Values

Allowable Soil Bearing	=	1.50	ksf
Soil Density	=	110.0	pcf
Increase Bearing By Footing Weight	=	No	
Soil Passive Resistance (for Sliding)	=	250.0	pcf
Soil/Concrete Friction Coeff.	=	0.30	

Increases based on footing Depth

Footing base depth below soil surface	=	ft
Allow press. increase per foot of depth	=	ksf
when footing base is below	=	ft

Increases based on footing plan dimension

Allowable pressure increase per foot of depth	=	ksf
when max. length or width is greater than	=	ft

Dimensions

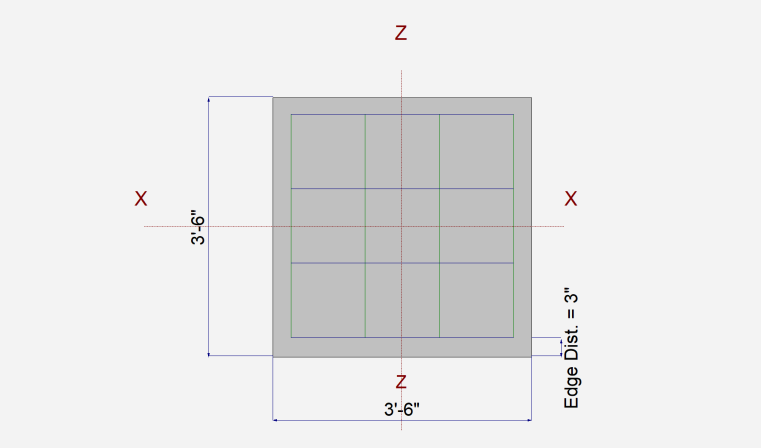
Width parallel to X-X Axis	=	3.50 ft
Length parallel to Z-Z Axis	=	3.50 ft
Footing Thickness	=	10.0 in

Pedestal dimensions...

px : parallel to X-X Axis	=	in
pz : parallel to Z-Z Axis	=	in
Height	=	in

Rebar Centerline to Edge of Concrete...

at Bottom of footing	=	3.0 in

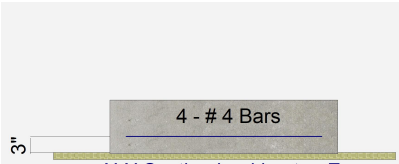


Reinforcing

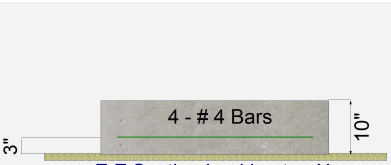
Bars parallel to X-X Axis			
Number of Bars	=		4.0
Reinforcing Bar Size	=	#	4
Bars parallel to Z-Z Axis			
Number of Bars	=		4
Reinforcing Bar Size	=	#	4

Bandwidth Distribution Check (ACI 15.4.4.2)

Direction Requiring Closer Separation	n/a
# Bars required within zone	n/a
# Bars required on each side of zone	n/a



X-X Section Looking to +Z



Z-Z Section Looking to +X

Applied Loads

		D	Lr	L	S	W	E	H	
P : Column Load	=	2.50	1.50		12.0				k
OB : Overburden	=								ksf
M-xx	=								k-ft
M-zz	=								k-ft
V-x	=								k
V-z	=								k

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Project ID:
Project Descr:

General Footing

Project File: Beckman.ec6

DESCRIPTION: --None--

DESIGN SUMMARY

Design OK

	Min. Ratio	Item	Applied	Capacity	Governing Load Combination
PASS	0.870	Soil Bearing	1.305 ksf	1.50 ksf	+D+S about Z-Z axis
PASS	n/a	Overturning - X-X	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Overturning - Z-Z	0.0 k-ft	0.0 k-ft	No Overturning
PASS	n/a	Sliding - X-X	0.0 k	0.0 k	No Sliding
PASS	n/a	Sliding - Z-Z	0.0 k	0.0 k	No Sliding
PASS	n/a	Uplift	0.0 k	0.0 k	No Uplift
PASS	0.3982	Z Flexure (+X)	2.775 k-ft/ft	6.970 k-ft/ft	+1.20D+1.60S
PASS	0.3982	Z Flexure (-X)	2.775 k-ft/ft	6.970 k-ft/ft	+1.20D+1.60S
PASS	0.3982	X Flexure (+Z)	2.775 k-ft/ft	6.970 k-ft/ft	+1.20D+1.60S
PASS	0.3982	X Flexure (-Z)	2.775 k-ft/ft	6.970 k-ft/ft	+1.20D+1.60S
PASS	0.3033	1-way Shear (+X)	24.918 psi	82.158 psi	+1.20D+1.60S
PASS	0.3033	1-way Shear (-X)	24.918 psi	82.158 psi	+1.20D+1.60S
PASS	0.3033	1-way Shear (+Z)	24.918 psi	82.158 psi	+1.20D+1.60S
PASS	0.3033	1-way Shear (-Z)	24.918 psi	82.158 psi	+1.20D+1.60S
PASS	0.6717	2-way Punching	110.366 psi	164.317 psi	+1.20D+1.60S

Detailed Results

Soil Bearing

Rotation Axis & Load Combination...	Gross Allowable	Xecc (in)	Zecc (in)	Actual Soil Bearing Stress @ Location Bottom, -Z	Top, +Z	Left, -X	Right, +X	Actual / Allow Ratio
X-X, D Only	1.50	n/a	0.0	0.3249	0.3249	n/a	n/a	0.217
X-X, +D+Lr	1.50	n/a	0.0	0.4474	0.4474	n/a	n/a	0.298
X-X, +D+S	1.50	n/a	0.0	1.305	1.305	n/a	n/a	0.870
X-X, +D+0.750Lr	1.50	n/a	0.0	0.4168	0.4168	n/a	n/a	0.278
X-X, +D+0.750S	1.50	n/a	0.0	1.060	1.060	n/a	n/a	0.707
X-X, +0.60D	1.50	n/a	0.0	0.1949	0.1949	n/a	n/a	0.130
Z-Z, D Only	1.50	0.0	n/a	n/a	n/a	0.3249	0.3249	0.217
Z-Z, +D+Lr	1.50	0.0	n/a	n/a	n/a	0.4474	0.4474	0.298
Z-Z, +D+S	1.50	0.0	n/a	n/a	n/a	1.305	1.305	0.870
Z-Z, +D+0.750Lr	1.50	0.0	n/a	n/a	n/a	0.4168	0.4168	0.278
Z-Z, +D+0.750S	1.50	0.0	n/a	n/a	n/a	1.060	1.060	0.707
Z-Z, +0.60D	1.50	0.0	n/a	n/a	n/a	0.1949	0.1949	0.130

Overturning Stability

Rotation Axis & Load Combination...	Overturning Moment	Resisting Moment	Stability Ratio	Status
Footing Has NO Overturning				

All units k

Sliding Stability

Force Application Axis Load Combination...	Sliding Force	Resisting Force	Stability Ratio	Status
Footing Has NO Sliding				

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +1.40D	0.4375	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.40D	0.4375	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+0.50Lr	0.4688	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+0.50Lr	0.4688	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+0.50S	1.125	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+0.50S	1.125	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+1.60Lr	0.6750	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+1.60Lr	0.6750	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+1.60S	2.775	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+1.60S	2.775	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+0.70S	1.425	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +1.20D+0.70S	1.425	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
X-X, +0.90D	0.2813	+Z	Bottom	0.2160	AsMin	0.2286	6.970	OK

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Project ID:
Project Descr:

General Footing

Project File: Beckman.ec6

DESCRIPTION: --None--

Footing Flexure

Flexure Axis & Load Combination	Mu k-ft	Side	Tension Surface	As Req'd in^2	Gvrn. As in^2	Actual As in^2	Phi*Mn k-ft	Status
X-X, +0.90D	0.2813	-Z	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.40D	0.4375	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.40D	0.4375	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+0.50Lr	0.4688	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+0.50Lr	0.4688	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+0.50S	1.125	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+0.50S	1.125	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+1.60Lr	0.6750	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+1.60Lr	0.6750	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+1.60S	2.775	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+1.60S	2.775	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+0.70S	1.425	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +1.20D+0.70S	1.425	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +0.90D	0.2813	-X	Bottom	0.2160	AsMin	0.2286	6.970	OK
Z-Z, +0.90D	0.2813	+X	Bottom	0.2160	AsMin	0.2286	6.970	OK

One Way Shear

Load Combination...	Vu @ -X	Vu @ +X	Vu @ -Z	Vu @ +Z	Vu:Max	Phi Vn	Vu / Phi*Vn	Status
+1.40D	3.93 psi	3.93 psi	3.93 psi	3.93 psi	3.93 psi	82.16 psi	0.05	OK
+1.20D+0.50Lr	4.21 psi	4.21 psi	4.21 psi	4.21 psi	4.21 psi	82.16 psi	0.05	OK
+1.20D+0.50S	10.10 psi	10.10 psi	10.10 psi	10.10 psi	10.10 psi	82.16 psi	0.12	OK
+1.20D+1.60Lr	6.06 psi	6.06 psi	6.06 psi	6.06 psi	6.06 psi	82.16 psi	0.07	OK
+1.20D+1.60S	24.92 psi	24.92 psi	24.92 psi	24.92 psi	24.92 psi	82.16 psi	0.30	OK
+1.20D+0.70S	12.80 psi	12.80 psi	12.80 psi	12.80 psi	12.80 psi	82.16 psi	0.16	OK
+0.90D	2.53 psi	2.53 psi	2.53 psi	2.53 psi	2.53 psi	82.16 psi	0.03	OK

Two-Way "Punching" Shear

All units k

Load Combination...	Vu	Phi*Vn	Vu / Phi*Vn	Status
+1.40D	17.40 psi	164.32 psi	0.1059	OK
+1.20D+0.50Lr	18.64 psi	164.32 psi	0.1135	OK
+1.20D+0.50S	44.74 psi	164.32 psi	0.2723	OK
+1.20D+1.60Lr	26.85 psi	164.32 psi	0.1634	OK
+1.20D+1.60S	110.37 psi	164.32 psi	0.6717	OK
+1.20D+0.70S	56.67 psi	164.32 psi	0.3449	OK
+0.90D	11.19 psi	164.32 psi	0.06807	OK

Level			
Member Name	Results	Current Solution	Comments
Floor: Joist	Passed	1 piece(s) 11 7/8" TJI® 210 @ 16" OC	
Roof: Flush Beam	Passed	4 piece(s) 1 3/4" x 16" 2.0E Microllam® LVL	
Roof: Joist	Passed	1 piece(s) 9 1/2" TJI® 210 @ 16" OC	

ForteWEB Software Operator	Job Notes
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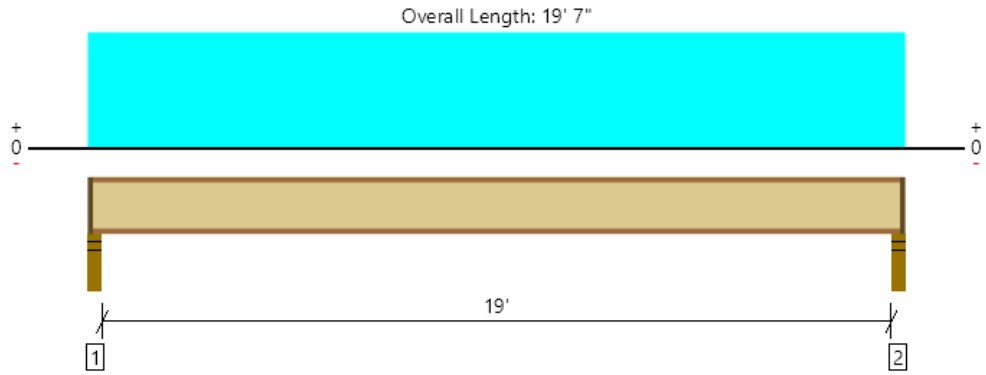
File Name: Beckmann

Level, Floor: Joist
1 piece(s) 11 7/8" TJI® 210 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	672 @ 2 1/2"	1134 (2.25")	Passed (59%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	659 @ 3 1/2"	1655	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	3184 @ 9' 9 1/2"	3795	Passed (84%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.462 @ 9' 9 1/2"	0.479	Passed (L/498)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.601 @ 9' 9 1/2"	0.958	Passed (L/383)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	34	30	Passed	--	--

System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 23/32" Weyerhaeuser Edge™ Panel (24" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: None.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Factored	
1 - Stud wall - SPF	3.50"	2.25"	1.75"	157	522	679	1 1/4" Rim Board
2 - Stud wall - SPF	3.50"	2.25"	1.75"	157	522	679	1 1/4" Rim Board

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' o/c	
Bottom Edge (Lu)	19' 5" o/c	

•TJI joists are only analyzed using Maximum Allowable bracing solutions.
•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 19' 7"	16"	12.0	40.0	Default Load

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
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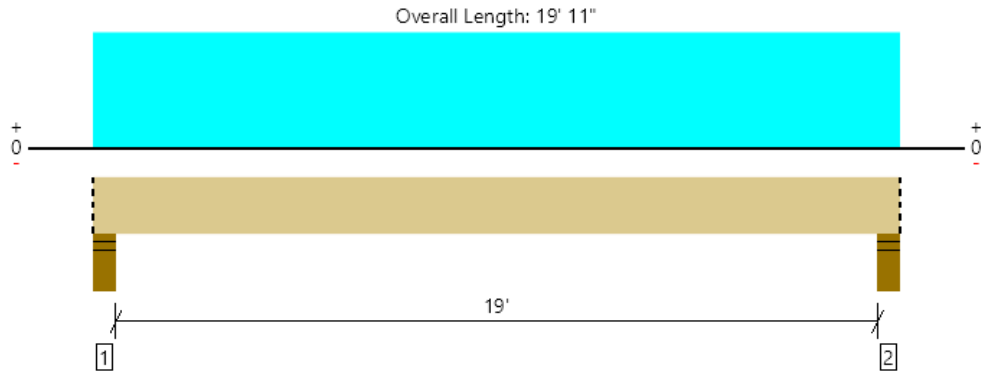
Level, Roof: Flush Beam

4 piece(s) 1 3/4" x 16" 2.0E Microllam® LVL



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	14043 @ 4"	16363 (5.50")	Passed (86%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	11516 @ 1' 9 1/2"	24472	Passed (47%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	65319 @ 9' 11 1/2"	71562	Passed (91%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.791 @ 9' 11 1/2"	0.962	Passed (L/292)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.979 @ 9' 11 1/2"	1.283	Passed (L/236)	--	1.0 D + 1.0 S (All Spans)

System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- Member should be side-loaded from both sides of the member or braced to prevent rotation.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Stud wall - SPF	5.50"	5.50"	4.72"	2690	1892	11353	14043	Blocking
2 - Stud wall - SPF	5.50"	5.50"	4.72"	2690	1892	11353	14043	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	5' 9" o/c	
Bottom Edge (Lu)	19' 11" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 19' 11"	N/A	32.7	--	--	
1 - Uniform (PSF)	0 to 19' 11" (Front)	9' 6"	25.0	20.0	120.0	Default Load

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ForteWEB Software Operator	Job Notes
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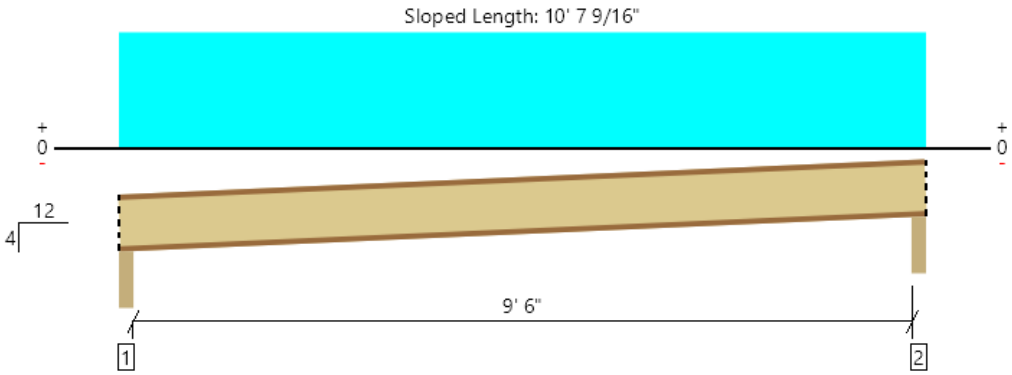
Level, Roof: Joist

1 piece(s) 9 1/2" TJI® 210 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Member Length : 10' 10 11/16"

System : Roof
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD
Member Pitch : 4/12

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	984 @ 2 1/2"	1679 (3.50")	Passed (59%)	1.15	1.0 D + 1.0 S (All Spans)
Shear (lbs)	927 @ 3 1/2"	1530	Passed (61%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	2279 @ 5' 1/2"	3450	Passed (66%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.230 @ 5' 1/2"	0.509	Passed (L/532)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.280 @ 5' 1/2"	0.679	Passed (L/436)	--	1.0 D + 1.0 S (All Spans)

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Factored	
1 - Beveled Plate - SPF	3.50"	3.50"	1.75"	177	134	807	984	Blocking
2 - Beveled Plate - SPF	3.50"	3.50"	1.75"	177	134	807	984	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 3" o/c	
Bottom Edge (Lu)	10' 8" o/c	

•TJI joists are only analyzed using Maximum Allowable bracing solutions.
•Maximum allowable bracing intervals based on applied load.

Vertical Load	Location	Spacing	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
1 - Uniform (PSF)	0 to 10' 1"	16"	25.0	20.0	120.0	Default Load

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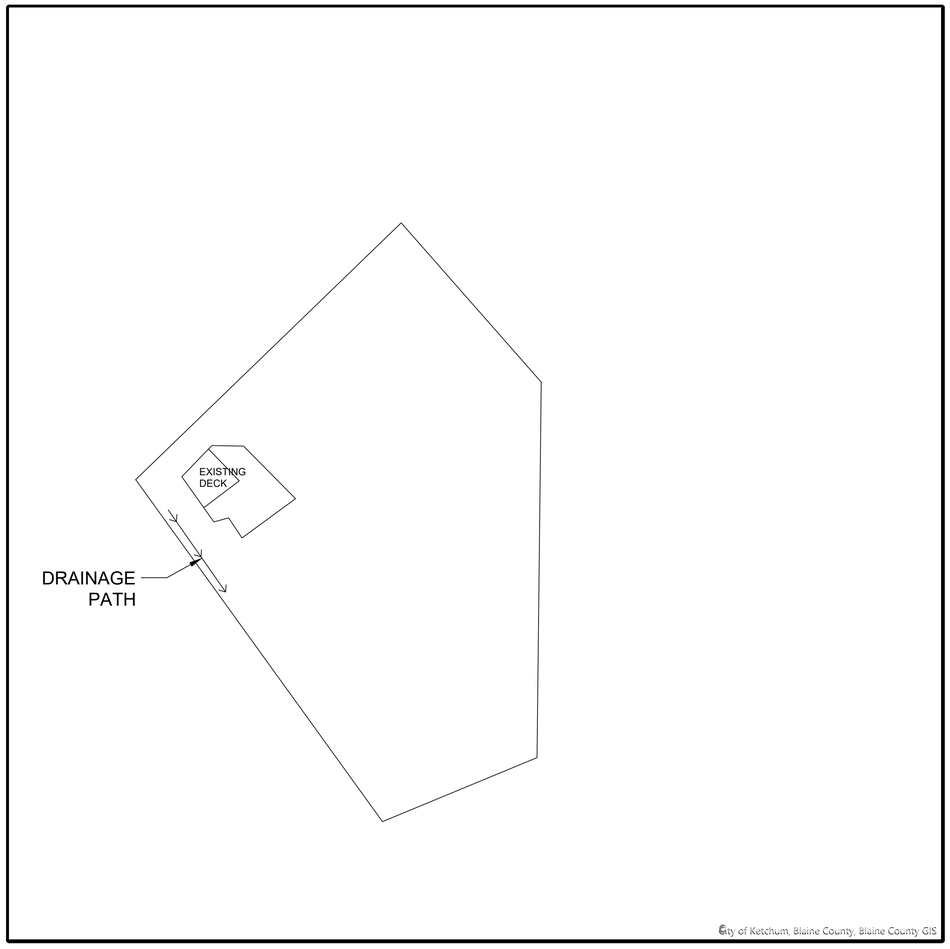
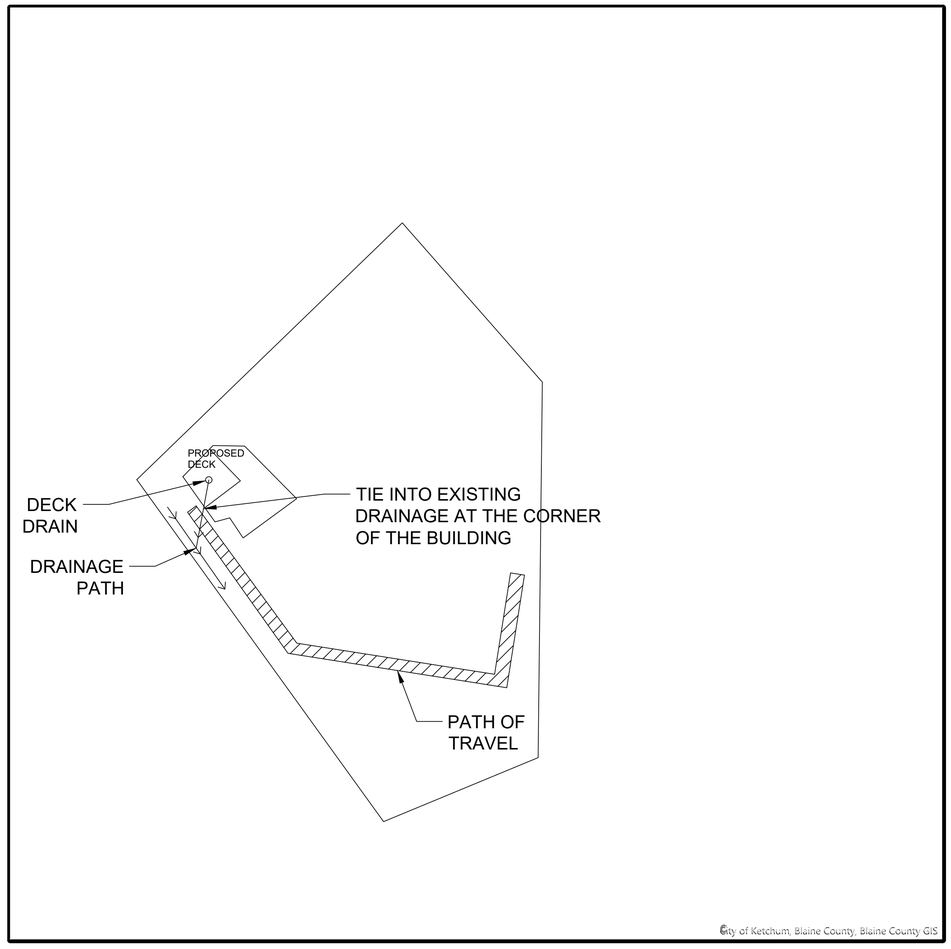
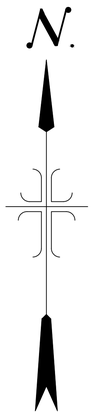
EXISTING DRAINAGE



PROPOSED DRAINAGE





NOTES:

1. NO CHANGES ARE ANTICIPATED IN FINAL GRADE. ROOF DRAINAGE WILL GO TO EXISTING DRAINAGE DITCHES/FLOW PATHS.
2. ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE MANAGES ON A DAILY BASIS.NO MATERIALS OR DEBRIS WILL BE SOTRED ON-SITE.

BECKMAN CONDO REMODEL & ADDITION
591 2nd Avenue S #6, Ketchum, Idaho

BORNER ENGINEERING LLC
PO BOX 21436
BILLINGS, MT 59104
(406) 861-9454

REVISIONS	DATE	BY
MODIFIED SITE PLAN	4/24/23	GPB

DESIGNED	GPB
DRAFTED	GPB
CHECKED	GPB
DATE	3/3/23

Drainage/Grading Plan

PROFESSIONAL ENGINEER
LICENSED
G PETER BORNER
19279
STATE OF IDAHO
3/3/23

PROJECT #
E23-108
DRAWING #
Site
SHEET: 1A of 13

GENERAL NOTES:

The following structural specifications shall apply to the drawings and be assumed as typical unless noted otherwise in the drawings. The specifications will cover information that may or may not be noted on the drawings.

All dimensions and elevations shall be verified by the Contractor to coordinate with the architectural drawings and the existing conditions, prior to the start of construction. Any discrepancies shall be reported to the Engineer for clarification.

All details, notes and specifications shall be verified by the Contractor to coordinate with the architectural drawings and other working drawings. Any discrepancies shall be reported to the Engineer for clarification prior to proceeding with any work or fabrication.

Any omission of various elements shall be approved by Engineer.

All bracing and shoring shall be provided and designed by the General Contractor as required to support all loads that may be imposed on the structure for as long as required for safety and until all structural elements are complete.

Substitution of any materials or products specified in the drawings shall be submitted to the Engineer for approval prior to installation.

The contractor shall provide shop drawings to the Engineer for review prior to fabrication and/or erection of Manufactured Wood Trusses and structural Steel.

During and after construction the contractor and/or owner shall keep loads on the structure at or below the design loads noted below.

Holes, notching or other penetrations through structural members shall not be permitted without Engineer approval. The Contractor shall submit size and location of all penetrations to structural members to the Engineer for approval, prior to commencing installation. Prequalified holes in wood i-joists are permitted per the manufacturers recommendations, without the Engineers approval.

The General Contractor shall be responsible for safety and protection within and adjacent to the job site.

Observation visits by Engineer shall not be construed as construction supervision, inspection and/or construction approval.

The Contractor shall notify Engineer at the completion of framing for a site visit.

DESIGN SPECIFICATIONS:

BUILDING CODE
Design, construction, and inspection shall conform to the International Building Code, (IBC), 2018 Edition and Local Codes that may be applicable.

DESIGN LOADS
At all times, the General Contractor and Owner shall keep the loads on the structure within the limits of the design load criteria.

DESIGN ROOF LOADS
Live Load (Snow)
Pg=120PSF
Ce=1.0
Ct=1.0(warm roof) Pf =100 PSF
Dead Load = 25 PSF
Wood Load Duration Factor = 1.15

DESIGN FLOOR LOADS
Live Load = 40 PSF
Dead Load = 12 PSF

TERRACE LOADS
Snow load =100 PSF
Live load = 65 PSF
Dead load = 35 PSF

WIND LOAD DATA
Basic Wind Speed (3 sec. gust) = 105 MPH
Importance Factor (Iw) = 1
Building Category = II
Risk Category = II
Exposure Category = B

SEISMIC LOAD DATA
Seismic Use Group = II
Importance Factor (Is) = 1
Risk Category = II
Sds = 0.58
Sd1 = 0.28
Site Class = D (assumed)
Seismic design category = D
Response Modification
Coefficient R = 6.5 Wood shear walls
Seismic Weights (W) =Dead Loads + 35% Snow Load
ASCE7-16 Equivalent Lateral Force Procedure

SOIL/FOUNDATIONS:

Geotechnical Engineer should be hired to asses the existing soil conditions, due to possible uncontrolled fill.

Design soil bearing pressure assumed to be 2000psf.

Site preparation, excavation, and drainage per others.

All foundations shall bear on original, undisturbed, firm, drained, granular soil free of organic material. If soil is disturbed, compact soil in maximum 6" deep lifts to 95% maximum dry density per ASTM D1557-00.

Contractor to notify Engineer if soil conditions are contrary to the assumed design conditions which may require a lower assumed soil bearing pressure such as clays, silts, organic, or other problems such as ground water.

Footings shall not be placed in water or frozen ground.

Excavation for any purpose shall not remove lateral support from any foundation without approved underpinning or protection against settlement or lateral translation or adjacent foundations.

CONCRETE:

Properties:
Structural concrete for walls piers and footings:
Minimum 28 day compressive strength: 3000 psi
Minimum air entrainment: 6% minimum air
Maximum aggregate size: 3/4"
Cement: Type II

Concrete for garage and exterior slabs:
Minimum 28 day compressive strength: 4000 psi
Minimum air entrainment: 3%
Maximum aggregate size: 3/4"

Form work, Measuring, mixing, transporting and placing shall comply with ACI 318-14, and the ACI Manual of Concrete Practice

Water shall not be added to the concrete mixture on site.

All concrete stripping and protection shall conform to the specifications, drawings, ACI 318-14 and ACI Manual of Concrete Practice.

Reinforcing steel, anchors and other embedded items shall be tied to ensure proper embedment and location is maintained during concrete pour.

ACI Cold Weather Standards shall be utilized to protect and heat concrete materials when air temperature is less than 40 degrees F. Placement shall comply with ACI 306R recommendations. All concrete materials, reinforcement and embeds shall be free from frost.

CONCRETE WALLS
Reinforce concrete walls as follows, unless specified otherwise in the drawings:

Provide dowels from footing to wall to match vertical reinforcement size, spacing and location. Provide dowel/vertical bar at all corners and wall ends. Embed dowels 48 bar diameters into wall and footing. If footing depth is inadequate for embedment length, provide standard 90-degree hook and embed into footing to a depth 3" clear of bottom face of footing. Provide full length lap splice of vertical reinforcement to dowels.

Provide corner bars with 2'-0" long legs to match horizontal reinforcement size, spacing and location unless otherwise noted in drawings. Lap splice horizontal steel full length with corner bars.

Reinforcing steel shall be continuous through all cold joints.

Provide minimum of (2)- #5 around perimeter of all openings. Extend reinforcing a minimum 3'-0" past opening edges.

Stem, basement and retaining walls shall not be backfilled until all floors are framed and sheathed, basement slabs poured and cured 7 days and wall concrete strength meets specified compressive strength.

Provide adequate drainage behind walls as required to prevent standing water behind walls.

REINFORCING STEEL
#4 and larger bars shall conform to ASTM A615, grade 60.

#3 bars shall conform to ASTM A615, grade 40

Welded Wire Fabric shall conform to ASTM A185, grade 60

Reinforcing steel to be fabricated and placed in accordance with ACI 315 and ACI 318.

All rebar splices in concrete and masonry shall be lapped 36 bar diameters and 48 bar diameters respectively unless otherwise noted. Welded Wire Fabric shall be lapped one mesh tie.

Reinforcement and deformed bar anchors to be welded shall be A706 weldable or prior approved equal. Welding of rebar to be approved by Engineer. Welding shall conform to AWS D1.4 standards.

All bars shall be securely tied in place, prior to pouring concrete.

ANCHORS:

ANCHOR BOLTS
Anchor bolts shall be ASTM A307, with a minimum 7" embedment depth. Anchor bolts shall be of the size and spacing specified in the plans, with a minimum of 5/8"ø X 10" A.B. at 48"o.c. with washer PL1/4x3x3 at concrete walls and 5/8"ø X 8" A.B. at 6'-0"o.c. at pony wall footings. Anchor bolts shall be placed with in 1'-0" from wall ends, 6" for corners in concrete walls, and a minimum of (2) bolts per wall.

ANCHORS
Hold down anchors, base plate anchors and other such embeds shall be accurately located. Exact dimensions shall be known by the contractor prior to pouring of the concrete. Contractor shall coordinate dimensions for hold down anchor locations with architectural dimensions, window/door rough opening dimensions, and Simpson hold down dimensions.

Substitution of epoxy anchors is not acceptable unless approved by the engineer for the specific application.

EPOXY ANCHORS
Epoxy anchors shall be Simpson SET for base material temperature 40 degrees or higher, Simpson AT for lower temperatures. Install per manufacturers instructions, drill hole to manufacturers specified diameter and depth, remove dust from hole with oil free compressed air. Clean with nylon brush and blow out remaining dust. Fill hole with adhesive per instructions, avoiding air pockets. Anchor must be clean and oil free and not disturbed during cure time. Other epoxy anchor systems may be substituted with Engineers approval. Periodic special inspection required for epoxy anchors per IBC section 1707.3.

Epoxy anchors installed to support sustained tension loads shall be installed by certified adhesive anchor installer.

WOOD

WOOD FRAMING
Conventional Light Framing construction shall conform to IBC section 2308, unless noted otherwise.

All framing fastening shall be in accordance with IBC section 2304.10 unless otherwise noted on the drawings.

Minimum header shall be (3)-2X8 unless otherwise noted in drawings.

Minimum header post shall be (2)-2X6 bearing studs plus king stud each end unless otherwise noted.

Typical beam pocket at beam bearing locations shall consist of full beam width 2X6 bearing trimmers and 2X6 grabber stud each side. Where 2X6 grabber studs are not possible, provide Simpson TS22 or ST6224 steel strap attached equally to beam and bearing stud.

Provide minimum 1-1/4" thick solid blocking below all bearing walls. Provide minimum 1-1/4" thick solid rim board at perimeter of all floors.

Provide full height blocking between joists at all floor and roof bearing walls and above all shear walls.

Provide solid blocking in floor space below all posts and trimmers from above. Where "I" joists interrupt blocking, provide joist web stiffeners and blocking per manufacturers recommendations.

Typical wall construction to consist of 2X6 studs @ 16"o.c..

Where wall heights exceed 13'-0", wall construction to consist of 1-1/2"X5-1/2" LVL studs at 16"o.c..

Balloon frame all walls, wall studs shall not be discontinuous between floors/roof diaphragms.

SAWN STRUCTURAL LUMBER
Structural lumber shall conform to the latest edition of the West Coast Lumber Inspection Bureau (WCLIB) or Western Wood Products Association (WWPA) grading rules for the specified sizes and grades listed below.

2X, 3X, 4X	Douglas Fir-Larch No.2
6X and larger	Douglas Fir-Larch No.1
2X and larger S.S.	Douglas Fir-Select Structural

Wood bearing on, or installed within 1" of concrete or masonry shall be pressure treated with and approved preservative.

LAMINATED VENEER LUMBER (LVL)
Laminated Veneer Lumber shall conform to the minimum allowable design properties listed below. LVL material to be of solid sections. Substitution of multiple piece sections requires Engineer prior approval.

Multiple piece sections shall not be substituted for solid sections without prior Engineer approval. Where multiple piece LVL sections are specified in drawings or approved, nail two ply and three ply LVL sections with (3) rows 16d common at 12"o.c. each ply. See drawings or contact Engineer for bolting for (4) ply or greater sections.

LVL Minimum Allowable Design Properties:

Fb =	2600psi
Fv =	285psi
Fc (parallel) =	2500psi
Fc (perpendicular)=	750psi
E =	2,000,000psi

LVL lumber shall not be used outside of the building envelope, unless treated and rated for exterior use, verify with Engineer.

GLUED-LAMINATED TIMBER
Structural Glued-Laminated Timber shall conform to the AITC 117-01 Combination DF/DF 24F-V4 unless noted otherwise in drawings. Enclosed or wrapped glued-laminated timbers to be industrial grade finish. Exposed glued-laminated timbers to be architectural grade, verify finish with architect.

All Glued-Laminated Timber to have zero camber unless otherwise noted on drawings.

Fabrication shall be in accordance with AITC 117-01. Provide wet use adhesives. Maximum moisture content shall be 15%.

Install Glued Laminated Timber beams with "TOP SIDE" up as designated on beam.

Glued Laminated timbers used outside of the building envelope shall be treated and rated for exterior use.

MANUFACTURED WOOD JOISTS
Manufactured wood "I" joists, to be manufactured by Redbuilt, or Trus Joist Corporation or Boise Cascade, and to be of the type and spacing as specified in the drawings.

Joists shall be erected, installed and braced per manufacturer's specifications. Provide blocking stiffeners, bearing details and connections per manufacturer.

Other manufactured wood joists may be substituted with prior Engineer approval.

All holes must be cut within joist web and meet manufacturer's requirements.

PLYWOOD SHEATHING
All plywood sheathing shall be APA rated exposure 1 plywood with thickness, veneer grades and span ratings as noted herein or in drawings.

Plywood at roof and floors shall be laid with face grain perpendicular to supports and end joints staggered at 4'-0" o.c.. Provide 1/8" space at all panel edges.

Nail roof sheathing with 8d galvanized box (0.113X 2 1/2")or 8d ring shank(0.113X2 1/2), provide boundary nail spacing at 6"o.c. to blocking or joist over exterior walls, shear walls and drag struts, provide field nail spacing at 12" o.c., at interior panel edges and to all framing unless otherwise noted on drawings.

Glue floor sheathing and nail with 8d galvanized box or 8d ring shank, provide boundary nailing at 6"o.c. to blocking or joists over exterior walls, shear walls and drag struts, provide field nail spacing at 12" o.c. interior panel edges and to all framing unless otherwise noted.

Unless otherwise noted in drawings and shear wall schedule, nail APA rated wall panel edges and boundaries with 8d galvanized box (0.113 X 2 1/2")at 6"o.c., and 12"o.c. intermediate. Block and edge nail all horizontal panel edges at designated shear walls. Also provide edge nailing to top and bottom plates.

Roof Sheathing:
5/8" CDX Structural 1 or equivalent, minimum (40/20) span rating.

Floor Sheathing:
3/4" CDX T&G minimum (48/24) span rating U.N.O.

Exterior Wall Sheathing
15/32" CDX minimum (24/0) span rating unless otherwise noted. 7/16" Oriented Strand Board with the same span rating may be substituted for exterior wall sheathing.

WOOD FASTENERS

NAILS, BOLTS, LAGS AND PREFABRICATED CONNECTIONS FOR WOOD
Unless otherwise noted in drawings or hardware supplier specification, all nails shall be box or galvanized box. Substitution of staples for nails only with Engineer prior approval.

Wood bolts and lags shall conform to ASTM A307 grade unless otherwise noted. Provide mild steel plate washers at all bolt heads and nuts bearing against wood.

Metal connectors specified in drawings shall be manufactured by the Simpson Strong Tie Company and installed per their specifications. Other manufacturers may be considered where load capacity and dimensions are equal or better. All substitutions must be submitted to the Engineer for review.

Provide Zmax or HDG coating where connectors/fasteners are in contact with treated wood, dissimilar metals or where installed outside of the building envelope.

Provide the maximum nailing pattern for all metal connectors, except Coils straps to the top of wood I-joist.

Nail or screw substitutions, other than manufacturers specified, must have Engineer prior approval.

Drill holes for bolts and lag screws with a bit 1/16" larger than the specified bolt diameter.

Provide cut washers under bolt head typical.

Lag bolts shall be installed by turning with a wrench.

Nails:
8d box: 0.113 X 2 1/2"
8d common: 0.131 X 2 1/2"
8d ring shank: 0.113 X 2 1/2"
10d framing nail: 0.131 X 3"
10d common: 0.148 X 3"
10d ring shank: 0.120 X 3"
16d box: 0.135 X 3 1/2
16d common: 0.162 X 3 1/2"

STRUCTURAL STEEL AND MISCELLANEOUS METALS
Shop drawings of all structural steel items shall be submitted to the engineer. The shop drawings must be approved by the engineer prior to fabrication or erections of all structural steel items shall be reviewed and approved by the engineer.

All structural steel, fabrication, painting, and erection shall comply with AISC Manual of Steel Construction including the Code of Standard Practice and the IBC 2015 edition.

All steel with exposed to exterior conditions, or 1" or closer to grade shall be treated to resist corrosion.

All wide flange sections shall conform to ASTM A992 yield stress = 50 ksi.
All plates, angles, and channels to conform to ASTM A36 yield stress = 36 ksi.
All structural steel tubing to conform to ASTM A500 grade C yield stress = 50 ksi.
All structural round HSS shall conform to ASTM A501 grade C yield stress = 46 ksi.
All structural pipe shall conform to ASTM A53 Grade B Fy=35
Use ASTM A325 bolts for all steel to steel connections with a minimum diameter of 3/4".

Tighten all bolts to the minimum bolt tension in Accordance with AISC Specifications For Structural Joints Using ASTM A325 or A490 Bolts. Direct tension indicators or turn of the nut method may be used. Provide carbonized washers between turned element and steel. Connections indicated as slip critical (SC), shall have a minimum of a Class A contact surface preparation and bolts tightened to the specified minimum bolt tension utilizing direct tension indicators.

All welding shall be performed in accordance with a Welding Procedure Specification (WPS) as required in AWS D1.1:2000 Structural Welding Code and the IBC 2012 code.

Weld Filler shall comply with E70XX low hydrogen electrodes with a Charpy-V-Notch (CVN) of 20 foot-pounds at -20 degrees F. The WPS shall be within the parameters established by the filler metal manufacturer.

Welder shall be certified by AWS standards within the past 12 months. Upon request, written certification shall be submitted to the Engineer or special inspectors for review.

All complete penetration groove welding and inspection of moment frame connections shall comply with the special provisions of AWS D1.1:2000, AISC Seismic Provisions of Steel Buildings, and IBC 2012 Sections 2204 and 1704.

All complete penetration groove welds in moment connections shall be 100% tested by ultra-sonic testing. Testing to be provided by the owner.

Holes in structural steel may be made only with Engineer approval.

Painting, coating and treating of steel per AISC Code of Standard Practice, Chapter 6. Verify fire rating and architectural finish with the Architect.

Quality Control and Quality Assurance shall be provided by the fabricator and erector to comply with the "Minimum Requirements for Inspection of Structural Steel Buildings" AISC 360 section N5.

STATEMENT OF SPECIAL INSPECTION

1. Special inspection shall comply with IBC section 1704.
2. Special inspection and structural testing shall be provided by an independent agency employed by the Owner for all the items identified in the Statement of Special Inspection Schedule and in also as noted in the drawings and specifications, unless waived by the Building Official.
3. Special inspection shall be enforced by the Building official.
4. The names and credentials of the Special inspectors shall be submitted to the Building Official for approval. The special inspector shall be approved by the building official to be qualified to inspect the particular type of construction or operation requiring special inspection.
5. Duties of the Special Inspector:
   a. The Special inspector shall review all work listed in the Statement of Special Inspection Schedule for conformance with the approved construction plans and specifications and the currently adopted IBC.
   b. The Special Inspector shall furnish special inspection reports to the Liv Jensen Engineering, the Contractor , the Owner and the Building Official on a weekly basis, or more frequently as required by the Building Official. all items not in compliance shall be brought to the immediate attention of the Contractor for correction, and if uncorrected to Liv Jensen Engineering and the Building Official.
   c. Once corrections have been made by the Contractor, the Special Inspector shall submit a final signed report to the Building Official stating that the work requiring special inspection was, to the best of the Special Inspector's knowledge, in conformance with the approved construction plans and specifications as well as the application workmanship provisions of the adopted IBC.
6. Duties and responsibilities of the Contractor:
   a. The Contractor (and each sub-contractor responsible main wind or seismic force resisting systems) shall submit a written statement of responsibility to the Owner and the Building Official prior to the commencement of work. In accordance with IBC 1704.4, the statement of responsibility shall contain acknowledgement of the special inspection requirements contain within the "Statement of Special Inspections".
   b. The Contractor shall notify the responsible Special Inspector that work is ready of inspection at least on working day (24 hours minimum) before such inspection is required.
   c. All work requiring special inspection shall remain accessible and exposed until it has been observed by the Special Inspector.
7. Please see the "Special Inspection Schedule" for the types, extents and frequency of the specific items requiring special inspections and structural testes as part of this project. The inspections shall not be conducted by Liv Jensen Engineering. Liv Jensen Engineering will only provide observations of the construction for general compliance with the construction documents.
8. The special inspections shall be provided at the owners expense.
9. Quality insurance required for steel construction per AISC Seismic Provisions Chapter J, shop and erection drawings required per AISC Seismic Provisions Chapter I.

SPECIAL INSPECTION SCHEDULE

Areas requiring special inspection:	Frequency: Continuous	Frequency: Periodic	Comments
SOILS (IBC 1705.6)	REFER TO GEOTECHNICAL ENGINEER FOR REQUIREMENTS		
Verify adequate material below footings		X	Prior to placement of concrete.
Excavation to proper depth and materials		X	Prior to placement of compacted fill or concrete.
Classification and testing of fill materials		X	Check classification and gradations at each lift, but not less than once for each 10,000sf of surface area.
Verify Proper fill materials, lift thicknesses and in-place densities	X		
Verify Properly prepared site and subgrade		X	Prior to placement of concrete.
CONCRETE CONSTRUCTION (IBC 1705.3)	NOT REQUIRED FOR CONTINUOUS FOOTING SUPPORTING LIGHT FRAME CONSTRUCTION		
Reinforcing steel placement			Prior to placement of concrete.
Embedded bolts or plates			
Verify required design mix			Prior to placement of concrete.
Concrete placement/sampling			Includes sampling for air, slump, strength and temperature techniques
Inspect formwork			Verify shape, location and member dimensions
Post installed anchors			In accordance with approved ICC-ES Report. Periodic inspection allowed if state in ES Report.
STRUCTURAL STEEL CONSTRUCTION (IBC 1705.2, 1705.11, 1705.12) QUALITY INSURANCE PER AISC SEISMIC PROVISIONS			
Shop and erection drawings required per AISC Seismic Provision chapter I			Shop and erection drawings required per AISC Seismic Provision chapter I, submitted for Engineer's approval prior to fabrication
Structural steel is not part of the lateral resisting system, no special inspection required			
STRUCTURAL WOOD (IBC 1705.11.2)			
Nailing, bolting, anchoring and other fastening of components within the seismic force resisting system, including shear walls, wood diaphragms, drag struts, and hold downs		X	Verify materials, installation and detailing of elements of the seismic resisting system, including shear wall and diaphragm nailing and blocking, comply with approved plans and IBC 2308 and SDPWS

—

BECKMAN CONDO REMODEL & ADDITION
591 2nd Avenue S #6, Ketchum, Idaho

BORNER ENGINEERING LLC
PO BOX 21436
BILLINGS, MT 59104
(406) 861-9454

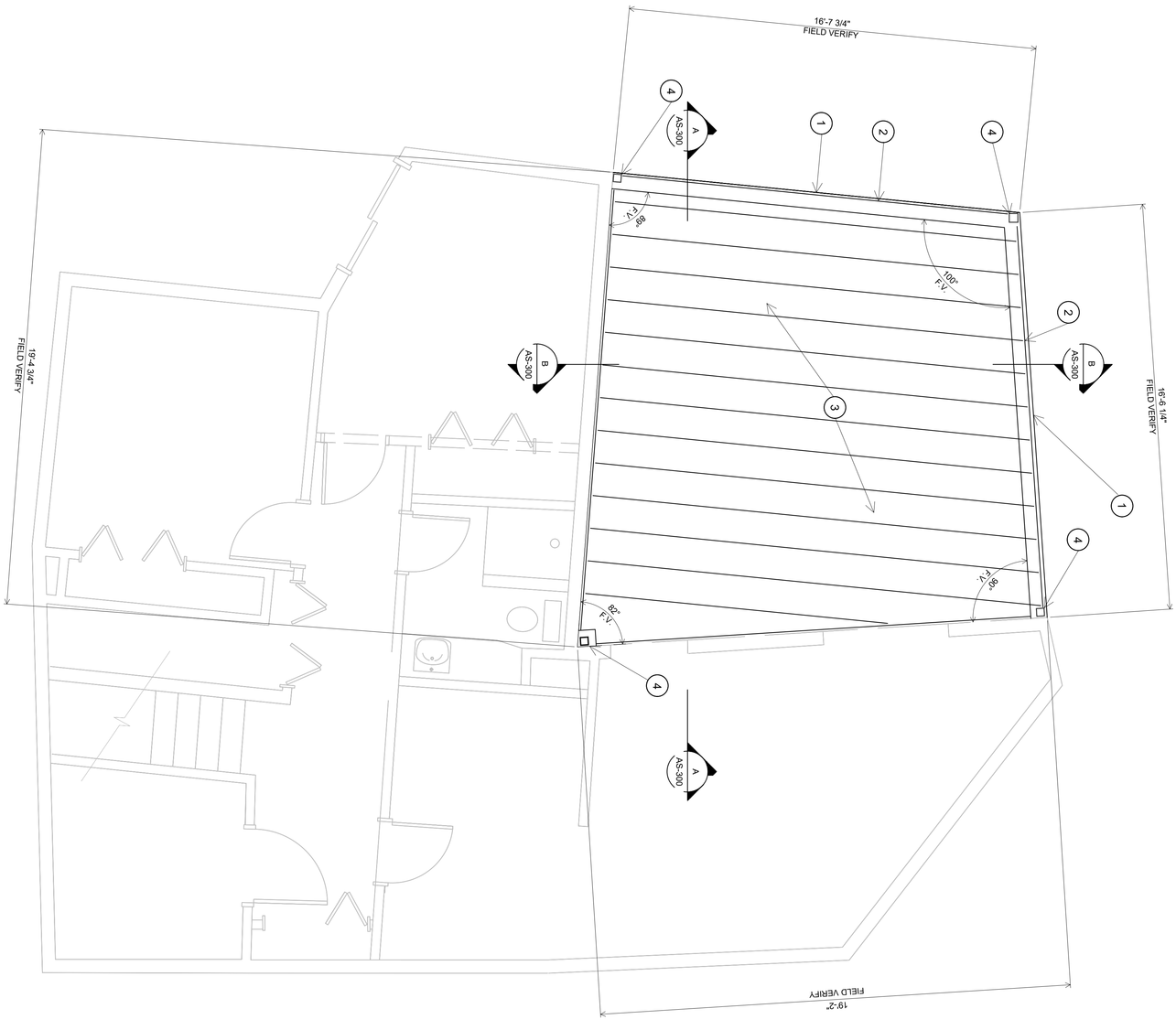
REVISIONS	BY	DATE

DESIGNED	GPB
DRAFTED	GPB
CHECKED	GPB
DATE	2/27/2023

PROFESSIONAL ENGINEER LICENSED 19279 2/27/23 STATE OF IDAHO PETER BORNER

Structural Notes

PROJECT # E23-108
DRAWING # Notes
SHEET: 2 of



FOUNDATION PLAN

SCALE: 3/8" = 1'-0"

SHEET KEY NOTES

1: 8-INCH STEM WALL EXTENSION
2: 1-1/8X11-7/8 RIM BOARD
3: 11-7/8" TJI @ 16" O.C.
4: HSS 8.0X4.0X.125 COLUMN SUPPORTING 2ND FLOOR DECK

DESIGNED	GPB	REVISIONS	DATE	BY
DRAFTED	GPB			
CHECKED	GPB			
DATE	2/27/2023			

PROJECT # E23-108
DRAWING # S1.1
SHEET: 8 of 11

PROFESSIONAL ENGINEER LICENSED BRANDON PETER BORNER STATE OF IDAHO 19279

BECKMAN CONDO REMODEL & ADDITION

591 2nd Avenue S #6, Ketchum, Idaho

Foundation Plan

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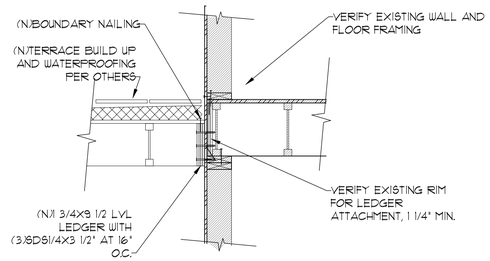

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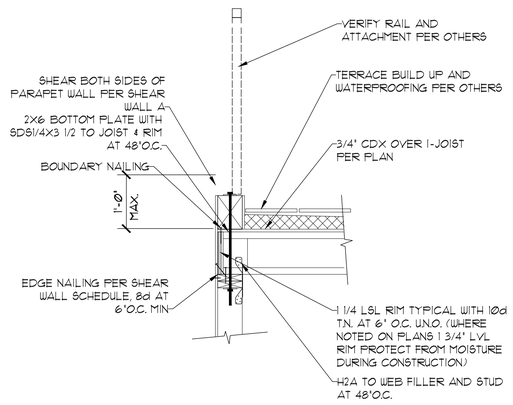

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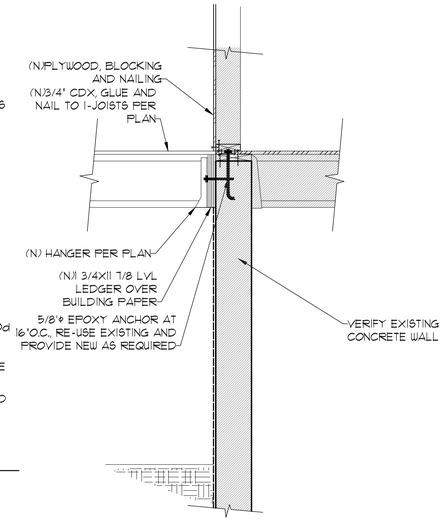

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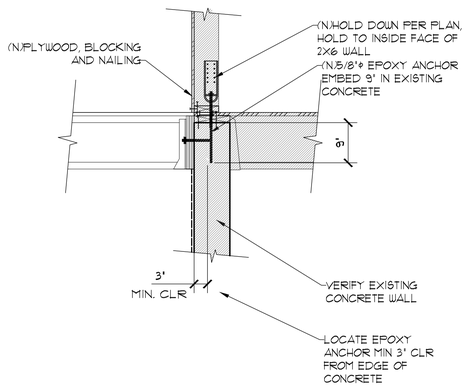

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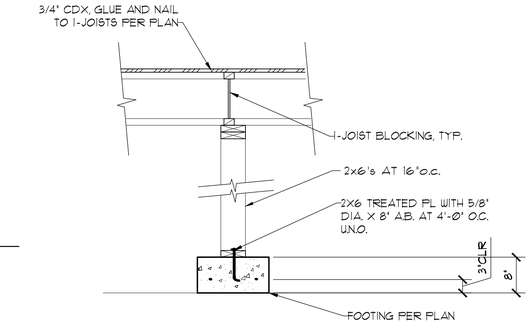

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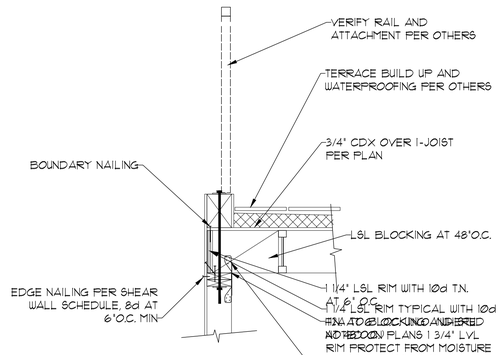

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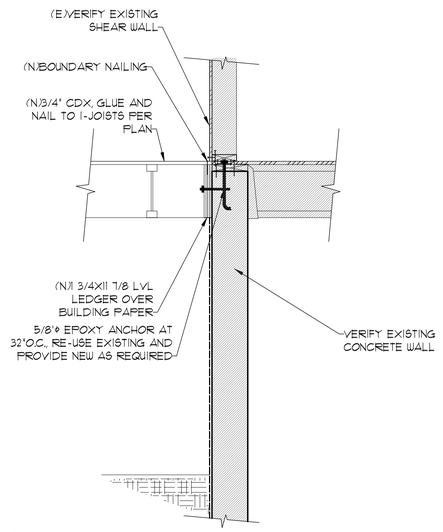

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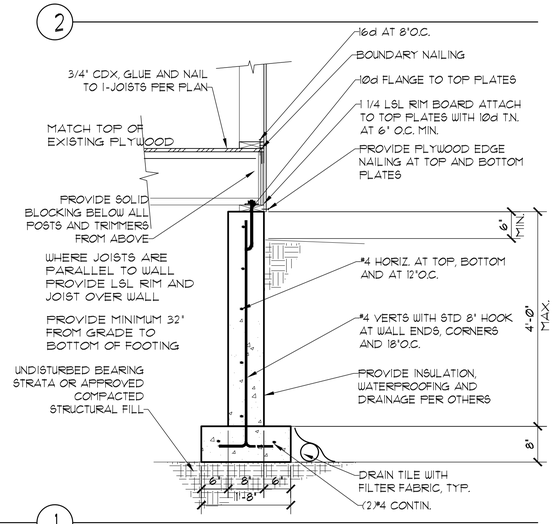

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SCALE: 3/4"=1'-0"

BECKMAN CONDO REMODEL & ADDITION

591 2nd Avenue S #6, Ketchum, Idaho

BORNER ENGINEERING LLC

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BILLINGS, MT 59104
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REVISIONS	BY	DATE

DESIGNED	GPB
DRAFTED	GPB
CHECKED	GPB
DATE	2/27/2023

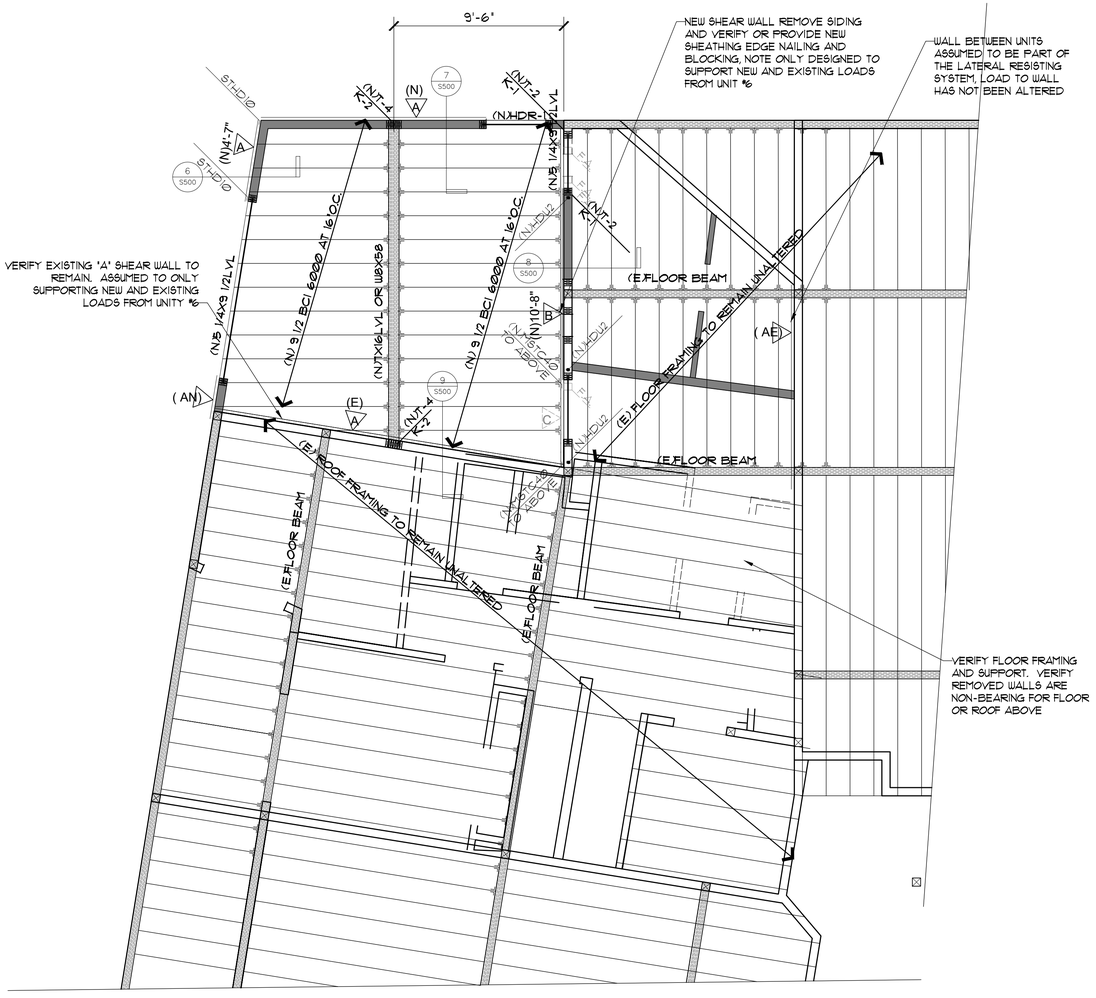
PROFESSIONAL ENGINEER LICENSED 19279 STATE OF IDAHO PETER BORNER 2/28/23

Foundation Details

PROJECT # E23-108

DRAWING # S1.2

SHEET: 9 of 11



HEADER SCHEDULE	
MARK	HEADER OPTIONS
HDR-1	6X8, (3)2X8, HDR-2
HDR-2	5 1/4X9 1/2 LVL

AT ENDS OF ALL HEADERS, PROVIDE MINIMUM (2)2x6 TRIMMERS AND (1) 2 x 6 KING STUD WITH 16d's AT 9"o.c., U.N.O. (NOTE-1 TRIMMER IS ACCEPTABLE FOR HDR-1, BUT 2 ARE RECOMMENDED FOR BEST CONSTRUCTION PRACTICES)

FRAMING NOTES

(N): NEW STRUCTURAL MEMBER
(E): EXITING STRUCTURAL MEMBER VERIFY

IF ACTUAL EXISTING CONDITIONS ARE DIFFERENT THAN ASSUMED IN THE DRAWINGS CONTACT ENGINEER

ALTERATION AND OMISSIONS TO THE PLANS AND DETAILS MUST BE APPROVED BY THE ENGINEER

TRUSS SHOP DRAWINGS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION

T- # : DENOTES NUMBER OF 2X6 TRIMMERS
K- #: NUMBER OF 2X6 KING STUD WITH 10d AT 9" O.C. TO TRIMMERS

WALL LEGEND

NEW WALL 2 x 6 AT 16" o.c.

VERIFY EXISTING WALL TO REMAIN

EXISTING WALL TO BE REMOVED

SHEAR WALL SCHEDULE

	WALL SHEETING	EDGE NAILING	FIELD NAILING	PANEL EDGES
A	15/32 CDX	8d's AT 6" o.c.	8d's AT 12" o.c.	2x6 BLOCKING ALL EDGES
B	15/32 CDX	8d's AT 4" o.c.	8d's AT 12" o.c.	2x6 BLOCKING ALL EDGES
C	15/32 CDX	8d's AT 3" o.c.	8d's AT 12" o.c.	2x6 BLOCKING ALL EDGES

NOTES:

USE 8d COMMON (0.131X2 1/2") OR GALV. BOX NAILS(0.113X2 1/2")

FLAT 2x6 BLOCKING MAY BE USED AT HORIZ. ABUTTING PANEL EDGES WHERE SHEAR IS ONLY ON ONE SIDE

X'-Y" DENOTES MINIMUM WALL LENGTH, CONTACT ENGINEER FOR REVISED ENGINEERING IF WALL LENGTH IS LESS THAN NOTED

IF 7/16" OSB IS SUBSTITUTED AND STUDS ARE SPACED AT 24" O.C. PROVIDE 8d'S AT 6" O.C. FIELD NAILING

DO NOT PENETRATE SHEAR, PLATES OR RIM AT SHEAR WALLS

PANELS SHALL NOT BE LESS THAN 4'X8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING, ALL EDGES SHALL BE SUPPORTED AND FASTENED TO FRAMING OR BLOCKING

PROVIDE SHEAR WALL EDGE NAILING AT EDGES AND AT TOP AND BOTTOM PLATES

(E) WHERE SHEAR WALL NOTED AT EXISTING WALL, VERIFY SHEAR TO REMAIN, REPLACE OR UPGRADE AS REQUIRED

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BORNER ENGINEERING LLC

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DATE	2/27/2023	

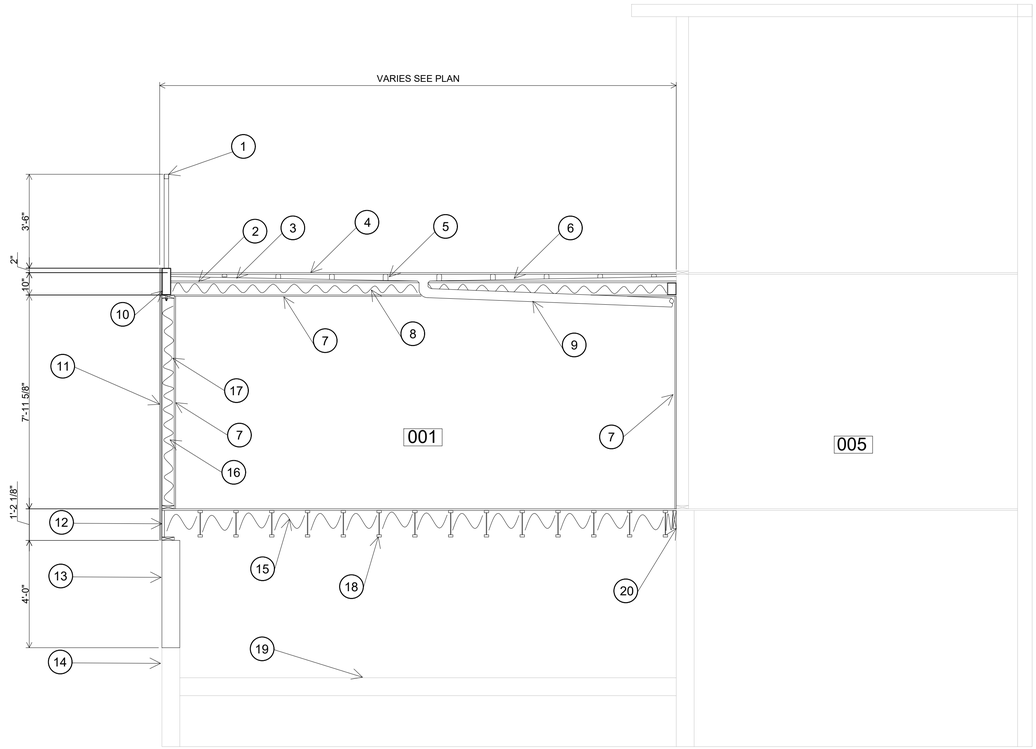
1st Floor /Roof Framing

PROFESSIONAL ENGINEER LICENSED 19279 2/27/23 STATE OF IDAHO G PETER BORNER

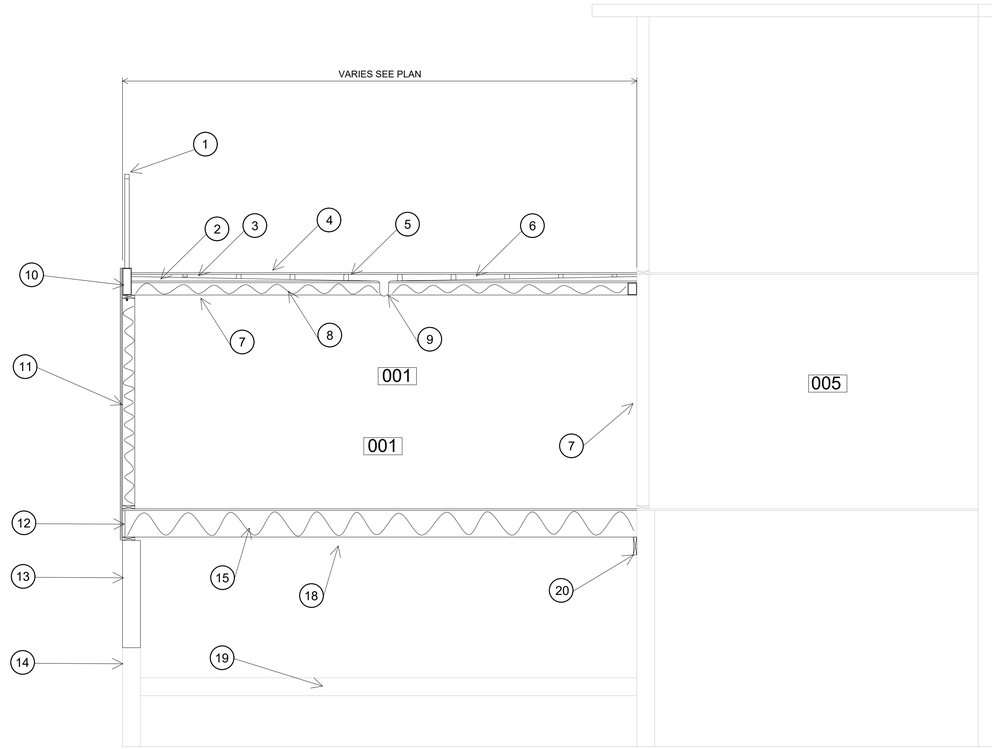
PROJECT # E23-108

DRAWING # S2.1

SHEET: 10 of 11



A SECTION
SCALE: 3/8" = 1'-0"



B SECTION
SCALE: 3/8" = 1'-0"

SHEET KEY NOTES

1. GLASS HANDRAIL SYSTEM. PROVIDE SURFACE MOUNT TO STEEL TUBE SUBSTRATE. 42" TALL. PROVIDE ¼"BUTT JOINTS BETWEEN GLASS PANELS
2. ¾" OSB T7G ATTACHED TO METAL FRAMED FLOOR/CEILING SYSTEM
3. TAPERED INSULATION TO CENTRAL FLOOR DRAIN. PROVIDING BLOCKING WHERE HOT TUB WILL BE LOCATED DIRECTLY TO DECK. PROVIDE SCUPPERS TO ALLOW DRAINAGE
4. 3/4"' INCH PAVER SYSTEM, ARCHATRAK OR SIMILAR WITH PEDESTALS
5. GAS DECK MELT SYSTEM
6. EPDM ROOFING
7. ⅝"GYPSUM WITH HAT CHANNEL AS REQUIRED ON CEILING
8. SPRAY FOAM INSULATION, PER CODE
9. DECK DRAIN AND PIPE. ROUTE TO DRAIN
10. HSS 4X12X5/16" TUBE SYSTEM ALL AROUND, FIELD WELD TO HSS 4X4 COLUMNS AT CORNERS
11. SIDING SYSTEM TO INCLUDE 7/16"OSB, TYVEK, 1" RIGID INSULATION, AND SIDING TO MATCH BUILDING
12. 1-1/8 X 11-7/8 RIM BOARD
13. 8" STEM WALL EXTENSION WITH DOWELS AT 12" O.C. INTO EXISTING STEM WALL.
14. EXISTING CONCRETE WALL, EXCAVATE TO UNCOVER
15. R-30 INSULATION
16. R-24 BLOW IN INSULATION
17. 2X6 WALL CONNECTED AT FLOOR AND AT BOLTED CONNECTION WITH TUBE STEEL
18. 11-7/8 I-JOISTS @ 16" O.C.
19. EXISTING CONCRETE LID TO STRUCTURE, EXCAVATE TO UNCOVER, CLEAN AND REMAIN UNCOVERED
20. 2X8 LEDGER

BECKMAN CONDO REMODEL & ADDITION
591 2nd Avenue S #6, Ketchum, Idaho

BORNER ENGINEERING LLC
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REVISIONS	BY	DATE

DESIGNED	GPB		
DRAFTED	GPB		
CHECKED	GPB		
DATE	2/27/2023		

PROFESSIONAL ENGINEER
LICENSED
19279
2/28/23
STATE OF IDAHO
PETER BORNER

PROJECT #
E23-108

DRAWING #
S3.1

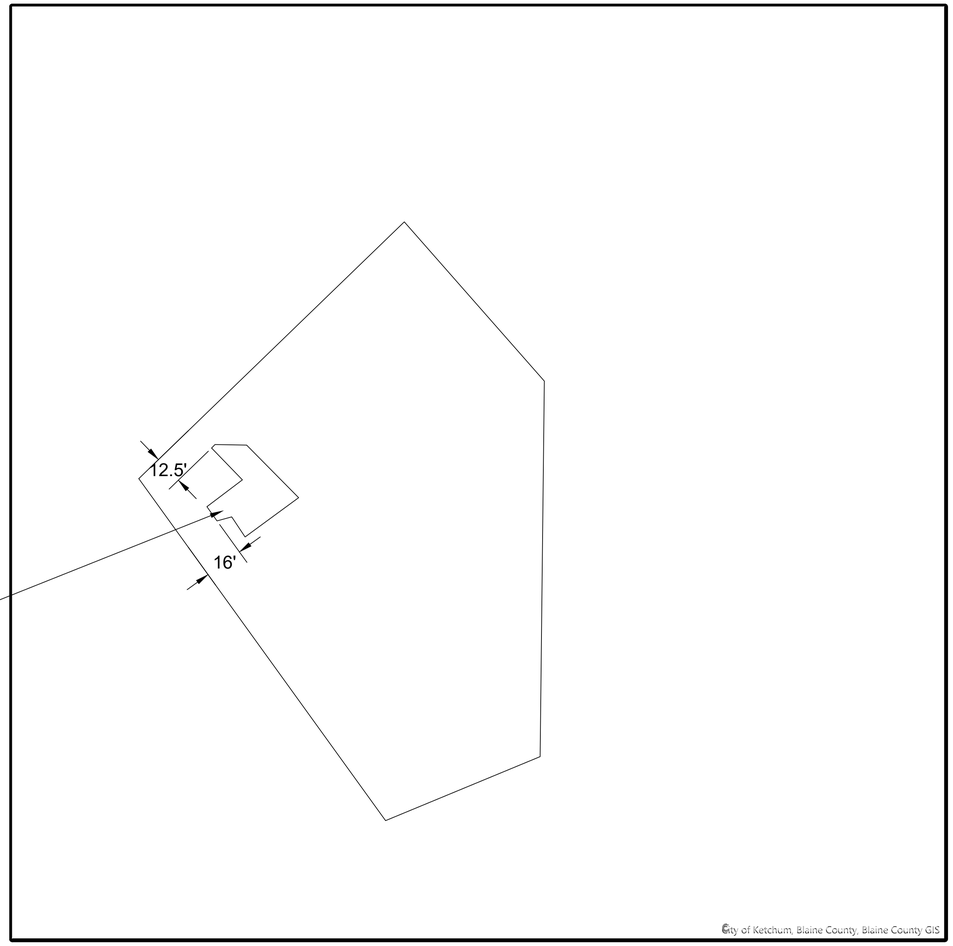
SHEET: 11 of 11

Sections

BECKMANN CONDOMINIUM REMODEL & ADDITION

591 2ND AVENUE S #6, KETCHUM, IDAHO 83340
PTARMIGAN CONDOMINIUMS UNIT 6 LOT 1A
RPK08820000060, ZONING: T

BECKMANN CONDOMINIUM



N.

SETBACKS:

FRONT = 15 FEET
SIDE = 5 FEET
REAR = 10 FEET

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591 2nd Avenue S #6, Ketchum, Idaho

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REVISIONS	DATE	BY
MODIFIED SITE PLAN	4/3/23	GPB

DESIGNED	GPB	
DRAFTED	GPB	
CHECKED	GPB	
DATE	3/3/23	

Site Plan

PROFESSIONAL ENGINEER LICENSED 19279 STATE OF IDAHO G PETER BORNER 3/3/23

PROJECT # E23-108
DRAWING # Site
SHEET: 1 of 13