

CITY OF KETCHUM ZONING CODE TITLE 17 ADMINISTRATIVE FLOODPLAIN DEVELOPMENT PERMIT FINDINGS AND DECISION

PROJECT: **Badger Residence**

FILE NUMBER: P23-014

121 Badger Lane LLC **OWNER:**

REPRESENTATIVE: Frazier Cavness

Request to construct a new single-family residence on subject property **REQUEST:**

LOCATION: 121 Badger Ln (ROCKING RANCH SUB #2 PARCEL 4 47,480SF)

ZONING: Limited Residential (LR)

OVERLAYS: Floodplain Management Overlay

Adam Crutcher – Associate Planner **REVIEWERS:**

Notice sent to 300-ft adjoiners 3/16/2023 **NOTICING:**

BACKGROUND FACTS

- 1. The City of Ketchum is a municipal corporation organized under Article XII of the Idaho Constitution and the laws of the State of Idaho, Title 50, Idaho Code. Under Chapter 65, Title 67 of the Idaho Code, the City is required to pass certain ordinances regarding land use, including a zoning ordinance.
- 2. Pursuant to Zoning Code Title 17, Section 17.88.050(D)1, the administrator shall have the authority to consider and approve, approve with conditions, or deny applications for floodplain development permits and for waterways design review.
- 3. The scope of work consists of the construction of a new single-family residence. The proposed residence is located partially within the Special Flood Hazard Area (SFHA). The contains wetlands which are proposed to be modified and relocated.
- 4. The project site contains floodplain.

FINDINGS OF CONFORMANCE WITH FLOODPLAIN DEVELOPMENT REQUIREMENTS

Floodplain Development Permit Requirements 1. EVALUATION STANDARDS: 17.88.050(E)

Co	Compliant		Standards and Staff Comments	
Yes			Guideline City Standards and Staff Comments	
		A		
			17.88.050(E)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.
			Staff	The proposal preserves the inherent natural characteristics of the
			Comments	floodplain by having more cut than fill. Plantings on the property are native with those in delineated wetlands being appropriate species.
			17.88.050(E)2	No temporary construction activities, encroachment or other disturbance into the 25-foot riparian zone, including encroachment of below grade structures, shall be permitted, with the exception of approved stream stabilization work and restoration work associated with a riparian zone that is degraded.
			Staff Comments	The subject property does not contain the 25-foot riparian zone.
			17.88.050(E)3	No permanent development shall occur within the 25-foot riparian zone, with the exception of 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.
			Staff Comments	The subject property does not contain the 25-foot riparian zone.
			17.88.050(E)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 25-foot riparian zone that is degraded, not natural, or which does not promote bank stability.

Compliant				Standards and Staff Comments
Yes			Guideline	City Standards and Staff Comments
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			Staff	The subject property does not contain the 25-foot riparian zone. Still
			Comments	the project does contain wetlands and proposes species associated
				with riparian habitat.
		\boxtimes	17.88.050(E)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.
			Staff	Driveway is slightly raised to ensure no more than 1-ft of sheet
			Comments	flooding occurs (emergency vehicle requirement). Culverts
				underneath driveway will allow conveyance of floodwater. No
				landscape berms are proposed.
\boxtimes			17.88.050(E)6	Flood water carrying capacity is not diminished by the proposal.
			Staff	The proposed development has more excavation (274 cubic yards)
			Comments	than fill (258 cubic yards).
\boxtimes			17.88.050(E)7	Impacts of the development on aquatic life, recreation, or water
				quality upstream, downstream or across the stream are not
				adverse.
			Staff	The subject property is not adjacent to the Big Wood River The
			Comments	wetland plantings will be beneficial to water quality and aquatic life.
				No work is proposed within the floodway or stream. No downstream
				impacts or across stream impacts will be associated with the
				approved landscape plan (L3.0).
		\boxtimes	17.88.050(E)8	Building setback in excess of the minimum required along
				waterways is encouraged. An additional ten-foot building setback
				beyond the required 25-foot riparian zone is encouraged to provide
				for yards, decks and patios outside the 25-foot riparian zone.
			Staff	The subject property does not contain the 25-foot riparian zone.
			Comments	
\boxtimes			17.88.050(E)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 24 inches above the BFE for the
				subject property; 24 inches or two 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 feet above the highest adjacent grade.
			Staff	The top of the lowest floor (finished floor) will be elevated 24" above
			Comments	the Base Flood Elevation of 5786.5. As the proposed elevation is

Co	Compliant			Standards and Staff Comments
Yes			Guideline	City Standards and Staff Comments
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				located within the AE zone the top of the lowest floor is required to
				be 24" above the BFE.
\boxtimes			17.88.050(E)1	The backfill used around the foundation in the SFHA floodplain
			0	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.
			Staff	An estimated 258 cubic yards of fill will be placed within the SFHA.
			Comments	The excavation on the site is proposed to be 2749 cubic yards,
				resulting in 16 cubic yards of excess excavation. Fill and excavation
				on the site transitions to existing grade within the property
	<u> </u>	<u> </u>		boundaries.
\boxtimes			17.88.050(E)1	All new buildings located partially or wholly within the SFHA shall
			1	be constructed on foundations that are designed by a licensed
			a	professional engineer.
			Staff	Both buildings will be constructed with concrete slab on grade
			Comments	foundations designed by David Funk who is a licensed professional
			47.00.050/5\4	engineer within Idaho.
\boxtimes			17.88.050(E)1	Driveways shall comply with City of Ketchum street standards;
			2	access for emergency vehicles has been adequately provided for by
				limiting flood depths in all roadways to one foot or less during the one percent annual chance event.
			Staff	Driveway complies with City of Ketchum street standards. The Fire &
			Comments	Streets Departments have both approved the proposed driveway
			Comments	design.
\boxtimes	П	\Box	17.88.050(E)1	Landscaping or revegetation shall conceal cuts and fills required for
			3	driveways and other elements of the development.
			Staff	Landscaping is proposed on all areas of the property including
			Comments	driveways and other elements of the development. The landscaping
				will conceal any cuts and fill which are required.
		\boxtimes	17.88.050(E)1	(Stream Alteration) The proposal is shown to be a permanent
			4	solution and creates a stable situation.
			Staff	N/A - Stream Alteration is not proposed.
			Comments	
		\boxtimes	17.88.050(E)1	(Stream alteration.) No increase to the one percent annual chance
			5	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.
			Staff	N/A - Stream Alteration is not proposed.
<u> </u>	<u> </u>	<u> </u>	Comments	
		\boxtimes	17.88.050(E)1	(Stream alteration.) The project has demonstrated no adverse
			6	impact or has demonstrated all impacts will be mitigated.
			Staff	N/A - Stream Alteration is not proposed.
			Comments	

Co	Compliant			Standards and Staff Comments
Yes	No	N/	Guideline	City Standards and Staff Comments
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		\boxtimes	17.88.050(E)1	(Stream alteration.) The recreational use of the stream including
			7	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.
			Staff	N/A - Stream Alteration is not proposed.
			Comments	
		\boxtimes	17.88.050(E)1	(Stream alteration) Fish habitat is maintained or improved as a
			8	result of the work proposed.
			Staff	N/A - Stream Alteration is not proposed.
			Comments	
		\boxtimes	17.88.050(E)1	(Stream alteration.) The proposed work shall not be in conflict with
			9	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.
			Staff	N/A - Stream Alteration is not proposed.
			Comments	
		\boxtimes	17.88.050(E)2	(Stream alteration.) The work proposed is for the protection of the
			0	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.
			Staff	N/A - Stream Alteration is not proposed.
			Comments	
\boxtimes			17.88.050(E)2	(Wetlands) Where development is proposed that impacts any
			1	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
			CI. CC	improvement.
			Staff	Project site contains wetlands as delineated by Trent Stumph with
			Comments	Sawtooth Environmental. The proposed development will impact,
				permanently fill approximately 1,277 square feet of wetlands with
				proposed wetland mitigation creating approximately 1,278 square feet of wetlands. Wetlands include species such as Bebbs Willows,
				Red-osier Dogwood, and Quaking Aspen.
\boxtimes			17.88.060.A.1	A. General Standards: In all areas of special flood hazard, the
			17.00.000.A.1	following standards are required:
				1. Anchoring:
				a. All new construction and substantial improvements shall be
				anchored to prevent flotation, collapse, or lateral movement of the
				structure resulting from hydrodynamic and hydrostatic loads,
				including the effects of buoyancy.
				b. All manufactured homes must likewise be anchored to prevent
				flotation, collapse or lateral movement, and shall be installed using
				methods and practices that minimize flood damage. Anchoring
				methods may include, but are not limited to, use of over the top or
				frame ties to ground anchors (reference the Federal Emergency
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Yes	No	N/	Guideline	City Standards and Staff Comments	
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				Management Agency's "Manufactured Home Installation in Flood	
				Hazard Areas" guidebook for additional techniques).	
			Staff	The proposed development is a single-family home that will be	
			Comments	constructed on site and attached to a foundation designed by a	
				professional engineer. Sheet S-111A indicates foundation has been	
				designed to meet standards of this section. The new construction will	
				be anchored to prevent flotation, collapse, or lateral movements.	
\boxtimes	П		17.88.060.A.2	2. Construction Materials And Methods:	
			17100100017112	a. All structural and nonstructural building materials	
				utilized at or below the base flood elevation must be flood	
				resistant. Flood damage resistant materials must be used	
				for all building elements subject to exposure to	
				floodwaters, including floor joists, insulation, and	
				ductwork. If flood damage resistant materials are not used	
				for building elements, those elements must be elevated	
				above the base flood elevation. This requirement applies	
				regardless of the expected or historical flood duration.	
				b. All new construction and substantial improvements shall	
				be constructed using methods and practices that minimize	
				flood damage.	
				c. Electrical, heating, ventilation, plumbing and air	
				conditioning equipment and other service facilities shall be	
				designed and/or otherwise elevated or located so as to	
				prevent water from entering or accumulating within the	
			Charff	components during conditions of flooding.	
			Staff	A. Proposed materials below the BFE include reinforced	
			Comments	concrete & galvanized steel. Both materials are acceptable	
				per FEMA Technical Bulletin 2.	
				B. This project consists of new construction. All floodplain	
				development regulations required by Ketchum Municipal	
				Code will be met.	
				C. The mechanical room and all mechanical equipment are to	
				be located above the BFE and outside of the SFHA. No HVAC	
				or electrical panels will be located below the BFE. Any	
				plumbing and electrical leading from mains to the residence	
			47.00.000.00	will be watertight and located underground.	
\boxtimes			17.88.060.A.3	3. Utilities:	
				a. All new and replacement water supply systems shall be	
				designed to minimize or eliminate infiltration of	
				floodwaters into the system;	
				b. New and replacement sanitary sewage systems shall be	
				designed to minimize or eliminate infiltration of	
				floodwaters into the systems and discharge from the	
				systems into floodwaters; and	
				c. On site waste disposal systems shall be located to avoid	
				impairment to them or contamination from them during	
				flooding.	

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Yes	No	N/	Guideline	City Standards and Staff Comments
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			Staff	Water and sewer services into the residence will be located
			Comments	underground and built to required plumbing codes
		\boxtimes	17.88.060.B.1	1. All construction in AO zones shall be designed and constructed
				with drainage paths around structures to guide water away from
			a	structures
			Staff	Proposed residence is within the AE zone, not the AO.
			Comments 17.88.060.B.2.	2. Residential Construction:
				a. New construction and substantial improvement of any
			а	residential structure in any A1-30, AE and AH zone shall have the
				top of the lowest floor, including basement, elevated a minimum of
				twenty four inches (24") above the base flood elevation.
			Staff	The top of the lowest floor (finished floor) will be elevated 24" above
			Comments	the Base Flood Elevation of 5786.5'. As the proposed elevation is
				located within the AE zone the top of the lowest floor is required to
				be 24" above the BFE. Sheets A-400, A-401, & A-402 show lowest
				floor elevated above BFE by 24".
		\boxtimes	17.88.060.B2.	b. New construction and substantial improvement of any
			b	residential structure in any AO zone shall have the lowest floor,
				including basement, elevated to or above the highest adjacent
				grade at least as high as the FIRM's depth number plus twenty four
			Ctff	inches (24").
			Staff Comments	N/A. Proposed residence is within the AE zone, not the AO
\boxtimes		П	17.88.060.B2.	c. Fully enclosed areas below the lowest floor that are subject to
			c.	flooding are prohibited, or shall be designed to automatically
				equalize hydrostatic flood forces on exterior walls by allowing for
				the entry and exit of floodwaters. Designs for meeting this
				requirement must either be certified by a registered professional
				engineer or architect or must meet or exceed the following
				minimum criteria (see figures 1, "Preferred Crawl Space
				Construction", and 2, "Below Grade Crawl Space Construction", of
				this section):
			Staff	The residence will have one fully enclosed area not raised to the
			Comments	flood protection elevation: the garage. The garage has been
				designed to include to automatically equalize hydrostatic flood forces
				on exterior walls through the installation of flood openings (Smart Vents have been specified for this project). The appropriate number
				of vents to cover the square footage the enclosed area are proposed
				-6 openings for the garage.
\boxtimes			17.88.060.B2.	(1) A minimum of two (2) openings having a total net area of not less than one
		_	c.(1)	square inch for every square foot of enclosed area subject to flooding shall be
				provided. Openings shall be placed on at least two (2) walls to permit entry and exit of floodwaters.
			Staff	Flood openings are placed on at least two walls. Engineered Smart
			Comments	Vents are proposed. One Smart Vent is sized for 200 square feet of
				floor area. The garage is 1170 sq ft and 6 Smart Vents are proposed.
				See sheet A-110.
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Co	mplia	nt	Standards and Staff Comments		
Yes	No	N/	Guideline	City Standards and Staff Comments	
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\boxtimes			17.88.060.B2.	(2) The bottom of each flood vent opening shall be no higher than	
			c.(2)	one foot (1') above the lowest adjacent exterior grade.	
			Staff	Spec sheets for proposed flood vents indicate this requirement will be	
			Comments	met. Bottom of proposed flood vents will be a maximum of one foot	
				(1') above finished grade.	
\boxtimes			17.88.060.B2.	(3) Engineered flood vents are required.	
			c.(3)		
			Staff	Proposed vents are Engineered Smart Vents	
			Comments		
\boxtimes			17.88.060.B2.	(4) Portions of the building below the base flood elevation shall be	
			c.(4)	constructed with material resistant to flood damage.	
			Staff	This standard has been met. See 17.88.060.A.2	
			Comments		
		\boxtimes	17.88.060.B2.	(5) The interior grade of a below grade crawl space (see figure 2,	
			c.(5)	"Below Grade Crawl Space Construction", of this section) below the	
				base flood elevation shall not be more than two feet (2') below the	
				lowest adjacent exterior grade.	
			Staff	N/A. No crawlspace proposed.	
			Comments		
		\boxtimes	17.88.060.B2.	6) The height of a below grade crawl space, measured from the	
			c.(5)	interior grade of the crawl space to the top of the crawl space	
				foundation wall, shall not exceed four feet (4') at any point.	
			Staff	N/A. No crawlspace proposed.	
			Comments		
		\boxtimes	17.88.060.B2.	(7) A below grade crawl space shall have an adequate drainage	
			c.(5)	system that removes floodwaters from the interior area of the	
				crawl space within a reasonable time after a flood event.	
			Staff	N/A. No crawlspace proposed.	
			Comments		
			17.88.060.B2.	(8) The velocity of floodwaters at the site should not exceed five	
			c.(6)	feet per second for any crawlspace	
			Staff	N/A. No crawlspace proposed.	
			Comments		

CONCLUSIONS OF LAW

- 1. The City of Ketchum is a municipal corporation organized under Article XII of the Idaho Constitution and the laws of the State of Idaho, Title 50, Idaho Code;
- 2. Under Chapter 65, Title 67, of the Idaho Code the City has passed a zoning ordinance, Title 17;
- 3. The City of Ketchum Planning Department provided adequate notice of opportunity to comment on this application pursuant to Chapter 17.88.050 D of the zoning ordinance, Title 17;
- 4. The project **does** meet the standards of approval under Chapter 17.88 of Zoning Code Title 17.

DECISION

THEREFORE, the Administrative Floodplain Development Permit for the proposed project, Badger Residence, is approved on this date, June 16th, 2023, with the following conditions.

Conditions of Approval

- 1. This approval is subject to the scope of work described in the documents shown in Attachment A.
- 2. Any modification to approved plans as referenced in this approval shall be subject to a written amendment to this permit approval. If construction or improvements differ from the approved plans, such work may be subject to removal at the applicants expense.
- 3. Follow up site visits to ensure compliance with the approved Landscaping Plan, L3.0 dated 5/4/2023, are required for the three (3) years following the initial site visit that occurs in conjunction with issuance of the Certificate of Occupancy.
 - A. If, upon an annual inspection, 80% or fewer of the plants indicated on Landscape Plan L3.0 dated 5/4/2023 have not survived, the property owner shall re-install new plantings.
- 4. Floodplain Development Permit approval shall expire one (1) year from the date of signing of approved Findings of Fact per the terms of KMC, Section 17.88.050.G, Terms of Approval, if construction has not commenced. Once a building permit has been issued, the approval shall be valid for the duration of the building permit.
- 5. No use of restricted use chemicals or soil sterilants will be allowed within one hundred feet (100') of the mean high-water mark on any property within the city limits at any time (KMC 17.88.040.C.3);
- 6. All applications of herbicides and/or pesticides within one hundred feet (100') of the mean high water mark, but not within twenty five feet (25') of the mean high water mark, must be done by a licensed applicator and applied at the minimum application rates (KMC 17.88.040.C.4);
- 7. Application times for herbicides and/or pesticides will be limited to two (2) times a year; once in the spring and once in the fall unless otherwise approved by the City Arborist (KMC 17.88.040.C.5);
- 8. It shall be unlawful to dump, deposit or otherwise cause any trash, landscape debris or other material to be placed in any stream, channel, ditch, pond or basin that regularly or periodically carries or stores water.
- 9. A building under-construction Elevation Certificate (FEMA FORM 86-0-33) shall be submitted within seven calendar days upon completion of the foundation and lowest floor.
- 10. A final, as built finished construction Elevation Certificate (FEMA Form 86-0-33) with supporting documentation such as an as-built survey of the project produced by a surveyor or engineer licensed in Idaho demonstrating that the project was constructed in accordance with the approved plans, shall be submitted prior to issuance of Certificate of Occupancy. Deficiencies detected by such documentation shall be corrected by the permit holder immediately and prior to certificate of occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a certificate of occupancy.
- 11. The finished construction elevation certificate certifier shall provide at least two photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and elevation locations identified on the approved plans. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least two additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents if applicable. All

photographs must be in color and measure at least three inches by three inches. Digital photographs are acceptable.

- 12. An inspection to verify flood vent placement shall be scheduled within seven calendar days upon completion of first floor framing.
- 13. The Administrator may conduct site inspections of work in progress. The Administrator may make as many inspections of the work as may be necessary to ensure that the work is being done according to the terms of this permit, approved plans and KMC 17.88. In exercising this power, the Administrator has a right, upon presentation of proper credentials, to enter the property at any reasonable hour for the purposes of inspection or other enforcement action.
- 14. Upon notification of imminent flood danger from the City of Ketchum, all construction activity and materials within the designated SFHA shall be removed to a location outside of said zone.

Decision: Approved, subject to conditions above.

DATED this

16th day of June 2023

Adam Crutcher Associate Planner

ATTACHMENTS:

A. Project Plans

Permit Holder's Acknowledgement:

I have read the terms and conditions of this permit approval and agree to follow all the conditions of approval. I understand if construction does not comply with the conditions of approval, the project may be issued a stop work order until any deficiencies are corrected.

Print Name: Frazier Cavness (on behalf of 121 Badger Lane LLC)

Date: 6/20/2023