

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
FLOODPROOFING CERTIFICATE
FOR NON-RESIDENTIAL STRUCTURES

O.M.B. No 3067-0077
Expires May 31, 1993

The floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation; however, a floodproofing design certification is required. This form is to be used for that certification. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or effect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements. The permitting of a floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

BUILDING OWNER'S NAME <u>P.M. Koch</u>	FOR INSURANCE COMPANY USE
STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER <u>901 Lolo St</u>	POLICY NUMBER
OTHER DESCRIPTION (Lot and Block Numbers, etc.)	COMPANY NAIC NUMBER

CITY Missoula STATE MT ZIP CODE 59802

SECTION I FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM:

COMMUNITY NUMBER <u>300049</u>	PANEL NUMBER <u>1215</u>	SUFFIX <u>D</u>	DATE OF FIRM INDEX <u>8/16/88</u>	FIRM ZONE <u>A0</u>	BASE FLOOD ELEVATION (in AO Zones, use depth) <u>1 ft</u>
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SECTION II FLOODPROOFING INFORMATION (By a Registered Professional Engineer or Architect)

Floodproofing Design Elevation Information:

Building is floodproofed to an elevation of 133.00 feet NGVD. (Elevation datum used must be the same as that on the FIRM.)

Height of floodproofing on the building above the lowest adjacent grade is 12 feet.

(NOTE: for insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the Base Flood Elevation to receive rating credit. If the building is floodproofed only to the Base Flood Elevation, then the building's insurance rating will result in a higher premium.)

SECTION III CERTIFICATION (By a Registered Professional Engineer or Architect)

Non-Residential Floodproofed Construction Certification:

I certify that based upon development and/or review of structural design, specifications, and plans for construction that the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

The structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation indicated above, with walls that are substantially impermeable to the passage of water.

All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

I certify that the information on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME <u>Tim Wolfe PE</u>	LICENSE NUMBER (or Affix Seal) <u>5856 E</u>
TITLE <u>PRESIDENT</u>	COMPANY NAME <u>TERRITORIAL Eng. & Surveying Inc.</u>
ADDRESS <u>1122 Cedar St</u>	CITY <u>Missoula</u>
SIGNATURE <u>Tim Wolfe</u>	STATE <u>MT</u>
	ZIP <u>59802</u>
	DATE <u>8/17/92</u>
	PHONE <u>721-0142</u>

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building owner.

From: Todd Klietz
To: Lettie Hunnakko
Date: 06/22/2004 9:33:29 AM
Subject: Re: 899 Lolo - in the floodplain

Lettie: I've located some additional information on microfiche regarding this parcel. Based on actual ground elevations submitted in 1992 by DJ&A for floodplain permit #92-022 to construct the existing structure (on a larger parcel known as 901 Lolo Street prior to this piece being subdivided) the official federal floodplain maps were found to be incorrect. The Montana DNRC recommended that the property owner change the maps through a Letter of Map Amendment (LOMA) but failed to do so. The current property owners (cc'd on this email) have indicated that rather than seeking a floodplain development permit, they will likely seek the LOMA so that floodplain regulations, insurance & permitting requirements will not apply. I'll let you know when that LOMA is issued so that their building permit application may continue to be processed.

CC: w_bernardy@msn.com

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION



STAN STEPHENS, GOVERNOR

LEE METCALF BUILDING
1520 EAST SIXTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-8899
TELEFAX NUMBER (406) 444-8721

HELENA, MONTANA 59620-2301

May 6, 1992

Mr. A. M. Hettich, Floodplain Administrator
Missoula City-County
Office of Community Development
435 Ryman
Missoula, MT 59802-4297

Dear Bud:

This is in response to your memorandum of April 24, 1992 which notified me of a public hearing for the floodplain development permit application by P.M. Koch represented by DJ&A for a non-commercial structure located at 901 Lolo St. which is located in an AO zone according to the FIRM panel 1215 D. The following are comments about the application:

In reviewing the information submitted to me, it appears that the actual ground elevation at the proposed structure site is above the 100-year flood elevation of 3298 by a minimal amount, yet it is still in the AO zone. Therefore, I concur with the application of placing the lowest floor at an elevation of 3300.

You may want to apply for a LOMR to remove this small area out of the AO zone since the actual conditions vary from the mapped conditions. The AO zone interpretation can be very confusing when working with the elevation certificates once a survey has been completed.

If you have any questions, please call me at 444-6646.

Sincerely,

A handwritten signature in cursive script that reads "Karl Christians".

Karl Christians
Community Assistance Program Manager
Engineering Bureau

RECEIVED MAY 11 1992

CENTRALIZED SERVICES
DIVISION
(406) 444-8700

CONSERVATION & RESOURCE
DEVELOPMENT DIVISION
(406) 444-8887

ENERGY
DIVISION
(406) 444-8897

OIL AND GAS
DIVISION
(406) 444-8875

WATER RESOURCES
DIVISION
(406) 444-8801

FLOODPLAIN DEVELOPMENT PERMIT #92-022

Applicant: P.M. Koch

Purpose of permit: For the construction of a personal darkroom and workshop.

Location: 901 Lolo Street.

Public Hearing Date: May 11, 1992

DECISION: PERMIT GRANTED SUBJECT TO THE FOLLOWING CONDITIONS:

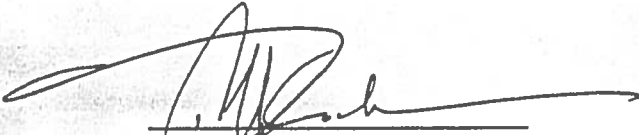
1. A licensed engineer or architect shall certify the flood-proofing methods for the personal darkroom and workshop to be adequate to withstand the flood depths, pressures, velocities, impact and uplift forces associated with a flood of 100-year frequency, see A, 1 in discussion section below;
2. The subject property is located adjacent to a City sewer line on Lolo Street and shall be connected to that line;
3. All plumbing, heating and electrical systems in the structure shall be installed above the 3,300.0 foot elevation or be floodproofed in compliance with the standards contained in Section 7.02. A-C of the Floodplain Regulations;
4. Obtain all appropriate building permits from the Building Department prior to constructing the personal darkroom and workshop;
5. Comply with all requirements as may be set forth by other agencies having jurisdiction within this part of the Rattlesnake Creek; and,
6. Upon completion of construction, the applicant shall notify the City/County Floodplain Administrator to complete a site inspection to ensure that the structure has met all pertinent floodplain regulations.

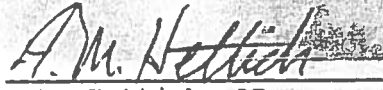
FINDINGS OF FACT:

The six conditions listed above are designed to insure compliance with specific standards for development in areas of a 100 year floods.

- NOTE:**
1. Upon completion of the work for which this permit is issued, contact the Floodplain Administrator for a final inspection;
 2. Floodplain Development Permits are valid for 360 days unless a longer period is specified when the permit is issued or an extension is granted by the Floodplain Administrator; and,
 3. Compliance with these stipulations is a condition of your Floodplain Permit.

UNDERSTOOD AND ACCEPTED THIS 11th DAY OF May, 1992


R. M. Koch
Applicant


A.M. Hettich, AP
Missoula County Floodplain
Administration

cc: Supervisor, Floodplain Management (DNRC)

FLOODPLAIN PERMIT REQUEST FP #92-022

Applicant: P.W. Koch

May 11, 1992

BACKGROUND

A request by P.M. Koch, represented by Terry Forest of Druyvestein, Johnson, & Anderson for a floodplain development permit to construct a detached wood frame structure for a personal darkroom and workshop, on property located at 901 Lolo Street, Missoula, Montana. The site is within a 100-year flood hazard area adjacent to Rattlesnake Creek as shown on FEMA Map #1215.

STAFF RECOMMENDATION

A review of the application for the above permit to construct a detached wood frame structure for a personal darkroom and workshop, suggests that the permit be granted as submitted but subject to the following conditions:

1. A licensed engineer or architect shall certify the flood-proofing methods for the personal darkroom and workshop to be adequate to withstand the flood depths, pressures, velocities, impact and uplift forces associated with a flood of 100-year frequency, see A, 1 in discussion section below;
2. The subject property is located adjacent to a City sewer line on Lolo Street and shall be connected to that line;
3. All plumbing, heating and electrical systems in the structure shall be installed above the 3,300.0 foot elevation or be floodproofed in compliance with the standards contained in Section 7.02. A-C of the Floodplain Regulations;
4. Obtain all appropriate building permits from the Building Department prior to constructing the personal darkroom and workshop;
5. Comply with all requirements as may be set forth by other agencies having jurisdiction within this part of the Rattlesnake Creek; and,
6. Upon completion of construction, the applicant shall notify the City/County Floodplain Administrator to complete a site inspection to ensure that the structure has met all pertinent floodplain regulations.

Floodplain Development Permits are valid for 360 days unless a longer period is specified when the permit is issued or an extension is granted by the Floodplain Administrator

DISCUSSION

A. SPECIFIC STANDARDS

The following is a review of the specific standards contained in the City of Missoula Floodplain Regulations applicable to the floodplain development request:

1. Standards for non-residential structures:

The new construction of structures must be either constructed on suitable fill as specified in these Regulations or be adequately flood-proofed to an elevation no lower than two (2) feet above the elevation of the flood of 100-year frequency. Flood-proofing shall be accomplished in accordance with Chapter VII of these Regulations and shall be certified by a registered professional engineer or architect that the flood-proofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces associated with the flood of 100-year frequency. Prior to the issuance of a building permit for any such construction, a registered engineer or architect, retained by the property owner and/or developer, must certify that the building plans satisfy the flood-proofing requirements of these Regulations. Prior to the issuance of an occupancy permit for any such building, a registered engineer or architect must certify that the flood-proofing elements of the building have been constructed as designed and approved. (Ord. #2639--10/3/88).

- a. If the structure is designed to allow internal flooding of areas below the lowest floor, use of this space shall be limited to parking, loading areas, building access, and storage of equipment or materials not appreciably affected by flood waters. The floors and walls shall be designed and constructed of materials resistant to flooding to an elevation no lower than 2 feet above the base flood elevation. Walls shall be designed to automatically equalize hydrostatic forces by allowing for entry and exit of floodwaters. Openings may be equipped with screens, louvers, valves, other coverings, or devices which permit the automatic entry and exit of floodwaters.
- b. Structures whose lowest floors are used for a purpose other than parking, loading, or storage of materials resistant to flooding shall be flood-proofed to an elevation no lower than 2 feet above the base flood elevation. Flood-proofing shall include impermeable membranes or materials for floors and walls and watertight enclosures for all windows, doors and other openings. These structures shall also be designed to withstand the hydrostatic, hydrodynamic, and buoyancy effects of a 100-year flood.
- c. Flood-proofing of electrical, heating, and plumbing systems shall be accomplished in accordance with Chapter VII of these regulations.

The other conditions required by this floodplain development permit are to ensure that the proposed development is not in conflict with other agencies and that their requirements have been met in full.

1. **Standards for storage of equipment and materials**

Storage of equipment and materials is permitted provided that:

- a. The equipment or material is not subject to major damage by flooding and is properly anchored to prevent floatation or downstream movement; or,
- b. The equipment or material is readily moveable within the limited time available after flood warning.

B. **GENERAL STANDARDS**

Following is a discussion of the standards to which all permit applications are subject to:

1. **The danger to life and property due to increased flood heights, increased flood water velocities, or alterations in the pattern of flood flow caused by encroachments.**

The floodfringe is composed of that area which can be filled without increasing flood heights more than one half foot, the maximum permitted by the Regulations. This structure will not require fill which should not alter flood velocities or flow pattern according to Terry Forest, P.E., Consulting Engineer.

2. **The danger that materials may be swept onto other lands or downstream to the injury of others.**

This structure will be located so that the lowest floor elevation is two feet above the 100 year flood, which should limit the danger of washing materials downstream. Equipment and materials stored below the 100 year flood elevation must be anchored or readily movable.

This structure must be designed and constructed of materials resistant to flooding to an elevation no lower than 2 feet above the base flood elevation. Walls shall be designed to automatically equalize hydrostatic forces by allowing for entry and exit of floodwaters. Openings may be equipped with screens, louvers, valves, other coverings, or devices which permit the automatic entry and exit of floodwaters.

3. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions.

The subject property is located adjacent to the existing City of Missoula sanitary service sewer line that runs along Lolo Street adjacent to this property and will be connected to it.

4. The susceptibility of the proposed facility and its contents to flood damage and the effects of such damage on the individual owner.

Floodproofing this structure will reduce the susceptibility to flood damage. Flood insurance is available to all Missoula residents.

5. The importance of the services provided by the facility to the community.

The proposed structure will only provide additional hobby work space for the owner.

6. The requirement of the facility for a water-front location.

Not applicable.

7. The availability of alternative locations not subject to flooding for the proposed use.

All of the applicant's property is within the AO Zone of the Rattlesnake Creek floodplain.

8. The compatibility of the proposed use with existing development and anticipated development in the foreseeable future.

The surrounding land is developed residential use. The applicant's proposal is consistent with this development pattern.

9. The relationship of the proposed use to the comprehensive plan and floodplain management for the area.

The applicant's proposal is in compliance within the Rattlesnake Area Plan. Floodplain management for the area requires compliance with the standards discussed in this report.

10. The safety of access to property in times of flooding for ordinary and emergency services.

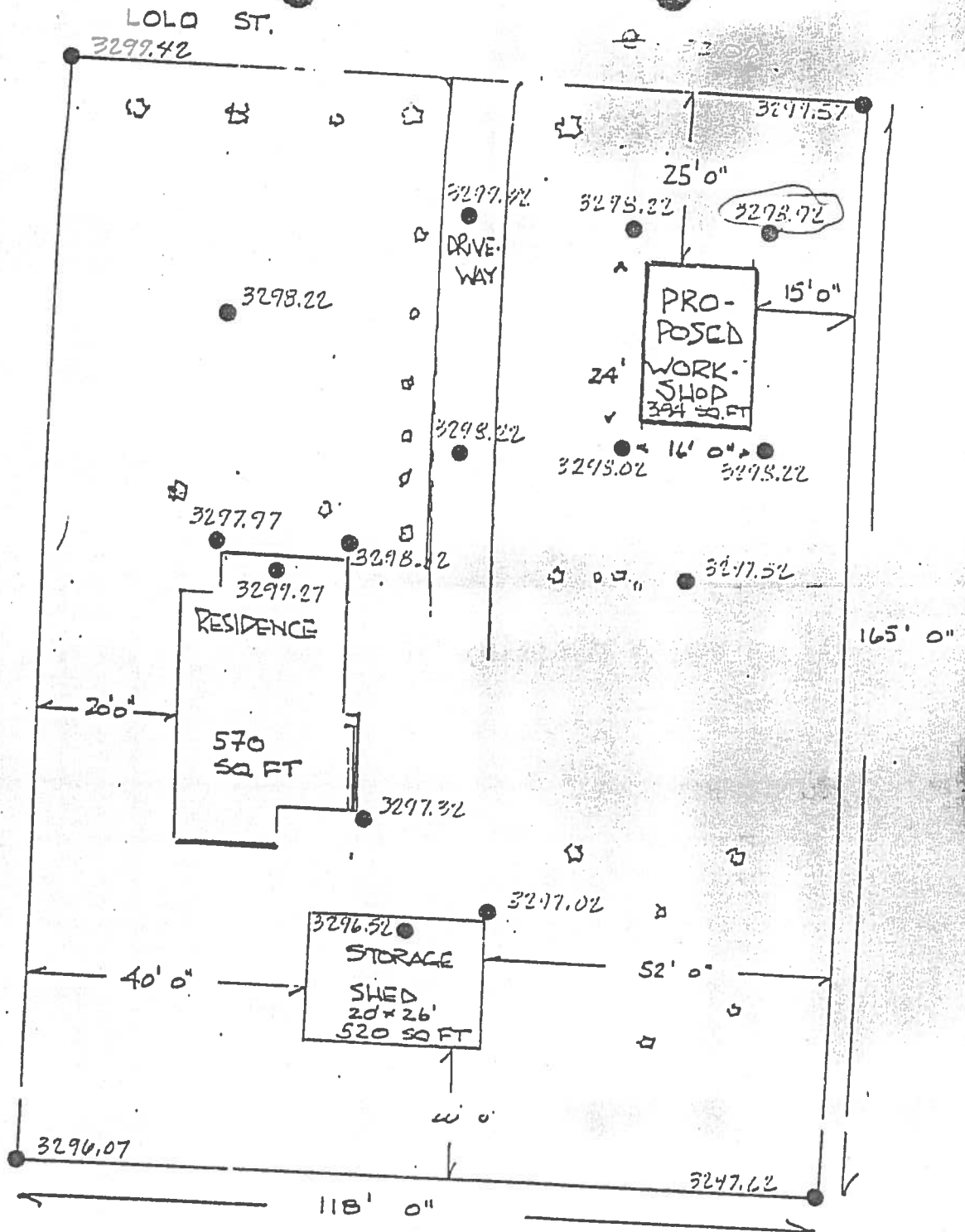
Not applicable.

11. The proposed use shall comply with existing zoning.
The property is zoned residential.

12. Such other factors as are in harmony with the purposes of these Regulations, the Montana Floodplain and Floodway Management Act, and the National Flood Insurance Program.

Conditions required by this floodplain development permit are to ensure that the proposed development is not in conflict with other agencies and that their requirements have been met in full.

MISSOULA AVE



901 LOLO STREET

SITE PLAN 1" = 20' 0"
19,470² FT