Sharon Fox <sfox@tetoncountyidaho.gov>

Fwd: Fire Protection Water Supply for 4-lot Subdivision near Tetonia

Tristan Kolb <tkolb@tetoncountyidaho.gov> Wed, Oct 21, 2026 at 12:02 PM
To: Sharon Fox <sfox@tetoncountyidaho.gov>, Joshua Chase <jchase@tetoncountyidaho.gov>, Amber Pence <apence@tetoncountyidaho.gov>

---------- Forwarded message ---------
From: **Kevin Brown** <kbrown@tetoncountyfire.org>
Date: Tue, Oct 20, 2026 at 4:00 PM
Subject: Re: Fire Protection Water Supply for 4-lot Subdivision near Tetonia
To: Nick Mestre [email redacted]

Hi Nick,

Thanks for sending over the improvement plans for Zamora Estates. I went through the fire pond sheets and have a few questions and comments before we can move forward.

Pond volume
Can you walk me through how you got the effective volume of 132,400 gallons? It doesn't look quite right to me. With the 3:1 side slopes, most of the water is up near the top of the pond, and when I run it I come up well short of 120,000 gallons in the bottom 5 feet. I may be missing something, so I'd appreciate seeing the calc.

Silt
The plans account for ice but not silt. Please show how much room you're leaving for sediment on the bottom. The strainer is sitting almost right on the bottom, so it will get buried pretty quick. We'd like to see it raised up, and the volume below it shouldn't count toward the 120,000 gallons.

Dry hydrant freezing
It looks like the water in the hydrant pipe will sit just a foot or two below the ground, which is going to freeze. Please show the normal water level and float setting, and how the hydrant pipe stays open in the winter. Also, what is the 3-way fitting at the base of the hydrant for?

Ice
What are you basing the 2 foot ice deck on? We can get some cold winters up here, so I'd like to know how you landed on that number.

Hydrant
- The hydrant needs to be within [address redacted] It's showing about 14 feet from the cul-de-sac right now.
- Please add a note confirming the hydrant has two 2.5" and one 4.5" outlets (National Standard Thread), the 4.5" faces the road, it's 36" to the center of the 4.5" outlet, and there's a 36" level working area around it.
- The area between the road and the hydrant needs to hold a fire truck. There's a ditch around the cul-de-sac there, so please show how that area will be built.

Maintenance
Please add a plat note or maintenance agreement making the HOA responsible for the pond long term: cleaning out silt, the liner, the hydrant, the auto-fill system, and power.

Road
Guadalupe Lane is about 990 feet long and dead ends. Fire code says roads over 500 feet are supposed to be 26 feet wide. It's showing 22 feet. Please also confirm the cul-de-sac diameter.

Thanks,

Kevin

Kevin Brown
Deputy Chief Prevention/Fire Marshal

t: [phone redacted] [phone redacted]
911 N. Hwy. 33 [address redacted] Driggs, ID, 83422
Web: www.teto rg
Email: kbrown@tetoncountyfire.org

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From: Nick Mestre [email redacted]
Sent: Tuesday, October 20, 2026 12:20 PM
To: Kevin Brown <kbrown@tetoncountyfire.org>
Subject: Re: Fire Protection Water Supply for 4-lot Subdivision near Tetonia

Hi Kevin,
I hope this finds you well. I'm checking back in on this 10-acre 4-lot 'Zamora Estates Subdivision' along Hwy 33 NW of Tetonia that we corresponded about earlier this year. Attached are the improvement plans, pages 4 & 5 showing detailed specs on the fire pond system. In order to proceed with the county development process, I'd appreciate your review and approval of the design. Let me know if you have any questions or comments.

Thanks,

Nick Mestre, PE
Refugio Engineering, PLLC
c [phone redacted]

On Fri, Jan 30, 2026 at 11:18 AM Nick Mestre [email redacted] wrote:

> Thanks Kevin.
>
> For reference, attached is the new Tetonia AOI code. Page 8 (labeled 1-6) has the new AOI map.
>
> Have a good weekend,
>
> **Nick Mestre, PE**
> Refugio Engineering, PLLC
> o [phone redacted]
>
> On Fri, Jan 30, 2026 at 11:14 AM Kevin Brown <kbrown@tetoncountyfire.org> wrote:
>
> > Nick,

Thanks for the call, as we discussed on the phone, the fire district would allow a fire pond for this 4 lot subdivision.

Thanks,

Kevin Brown
Deputy Chief Prevention/Fire Marshal

t: [phone redacted] [phone redacted]
911 N. Hwy. 33 [address redacted] Driggs, ID, 83422
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From: Nick Mestre [email redacted]
Sent: Wednesday, January 21, 2026 8:41 AM
To: Kevin Brown <kbrown@tetoncountyfire.org>
Subject: Re: Fire Protection Water Supply for 4-lot Subdivision near Tetonia

Morning Kevin,

I'm still gathering more info but look forward to catching up when I have a better picture of what our options are. The current regulatory climate for groundwater use in the upper Snake River basin is pretty complex and dynamic, to say the least!

Thanks for checking in,

Nick Mestre, PE

Refugio Engineering, PLLC

c [phone redacted]

On Tue, Jan 20, 2026 at 3:08 PM Kevin Brown <kbrown@tetoncountyfire.org> wrote:

> Hi Nick,
>
> I'd love to hear, or read, more about the water rights and the new legislation if you have insight. I've heard both that all fire water is excluded from the laws, and that fire water is subject to the new rules.

Thanks,

Kevin Brown

Deputy Chief Prevention/Fire Marshal

t: [phone redacted] | m: [phone redacted]

911 N. Hwy. 33 [address redacted] Driggs, ID, 83422

Web: www.tetoncountyfire.org

Email: kbrown@tetoncountyfire.org

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From: Nick Mestre [email redacted]
Sent: Friday, January 16, 2026 12:39 PM
To: Kevin Brown <kbrown@tetoncountyfire.org>
Subject: Re: Fire Protection Water Supply for 4-lot Subdivision near Tetonia

Hi Kevin,

Thanks for the reply. I'm trying to make some phone calls and round up more information before continuing our discussion.

A Buckrail pond sharing agreement is a long shot, but I'll see if I can make contact. When it comes to either pond or fire well, there are some bureaucratic hurdles to assess with the Idaho Department of Water Resources (IDWR), as the situation behind groundwater rights for fire wells and/or pond filling complex.

Take care,

Nick Mestre, PE

Refugio Engineering, PLLC

c [phone redacted]

On Wed, Jan 14, 2026 at 8:27 AM Kevin Brown <kbrown@tetoncountyfire.org> wrote:

Hey Nick,

Here is what the subdivision resolution states:

2.3.2 **Subdivisions with 3 to 10 Residential Lots:**

2.3.2.1 Subdivisions with 3 to 10 residential lots, where average lot sizes are 1 unit to 2.5 or more acres, shall provide:

- One approved water source. (see p. 6, section 2.3.6)
- A central main is preferred, and may be required in a city's area of impact.
- May enter an agreement to share within one mile of driving distance.

If this were more lots, I think I'd be inclined to just require the central main given that the subdivision is in the Tetonia AOI. As far as sharing the pond with Buckrail, do you think they'll be opposed to that? Maybe we start there and see if they are open to a share agreement. If they are not, I'd at least like to see a cost comparison of pond vs pressurized well with hydrant.

Hopefully that all makes sense. Feel free to give me a call to discuss.

Thanks,

Kevin Brown

Deputy Chief Prevention/Fire Marshal

t: [phone redacted] | m: [phone redacted]

911 N. Hwy. 33 [address redacted] Driggs, ID, 83422

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From: Nick Mestre [email redacted]
Sent: Tuesday, January 13, 2026 6:14 PM
To: Kevin Brown <kbrown@tetoncountyfire.org>
Subject: Fire Protection Water Supply for 4-lot Subdivision near Tetonia

Hi Kevin,

I hope this finds you well. I'm a civil engineer in Driggs working on a small proposed subdivision along Highway 33 in the county, northwest of Tetonia. It's 10-acres total, with 4 proposed lots at 2.5-acres each. Access will be off either the highway or an adjacent local road, still TBD.

I met with Joshua in county planning last month, and he mentioned a discussion with you regarding fire pond vs. cistern for this project or one of similar scope. The owners would definitely prefer the pond, so I'm curious to hear your thoughts. Also, and I'm not holding my breath on this, but we may also approach the Buckrail subdivision to the west for a pond sharing agreement, as their ponds are within 1 mile driving of the subject property.

Attached is a simple drawing; please give me a ring a the number below when you get a chance.

Thanks for your time,

Nick Mestre, PE

Refugio Engineering, PLLC

[address redacted]

[address redacted]

c [phone redacted]

[email redacted]

https://www.refugioengineering.com

4_2026-7-28_Zamora Estates Improvement Plans.pdf
2891K