

Sewage, Wastewater and Sanitation Hearing Advisory Board Meeting Notice and Agenda

MembersOctober 5, 2023Matthew Buehler5:30 p.m.Frank Kurnik5:30 p.m.Chad Carnes, P.E.Washoe County Administration Complex, Building AKenneth Lund, AttorneyCaucus RoomJohn Adams1001 East Ninth StreetMatt Smith – Alt.1001 East Ninth StreetRonald J. Anderson, P.E., Alt.Reno, NV

An item listed with asterisk (*) next to it is an item for which no action will be taken.

5:30 p.m.

- 1. *Roll Call and Determination of Quorum
- 2. *Pledge of Allegiance
- 3. *Public Comment

Any person is invited to speak on any item on or off the agenda during this period. Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item.

- 4. Approval of Agenda (<u>For possible action</u>) October 5, 2023
- 5. Approval of Draft Minutes (For possible action) July 6, 2023
- 6. Public Hearing to determine whether to recommend approval to the District Board of Health for a variance for APN 222-060-25 from section 040.100 of the Northern Nevada Public Health Regulations Governing Sewage, Wastewater, and Sanitation. The variance requests permission to reduce the setback from a building sewer line, a septic tank, a dosing tank, and sand filter bed to a drainage channel. (For possible action) Staff Representative: David Kelly

2474 FARETTO LANE LLC 2474 Faretto Lane Reno, NV 89511

7. *Public Comment

Any person is invited to speak on any item on or off the agenda during this period. Action may not be taken on any matter raised during this public comment period until the matter is specifically listed on an agenda as an action item.

8. Adjournment – (For possible action)

Possible Changes to Agenda Order and Timing: Items on the agenda may be taken out of order, combined with other items, withdrawn from the agenda, moved to the agenda of another later meeting, moved to or from the Consent section, or they may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time but may be heard later. Items listed in the Consent section of the agenda are voted on as a block and will not be read or considered separately unless withdrawn from the Consent agenda.

Special Accommodations: The Sewage, Wastewater and Sanitation Board Meetings are accessible to the disabled. Disabled members of the public who require special accommodations or assistance at the meeting are requested to notify Administrative Health Services in writing at the Northern Nevada Public Health, 1001 East Ninth Street, Building B, Reno, NV 89512, or by calling 775.328.2415, 24 hours prior to the meeting.

Public Comment: During the "Public Comment" items, anyone may speak pertaining to any matter either on or off the agenda, to include items to be heard on consent. For the remainder of the agenda, public comment will only be heard during items that are not marked with an asterisk (*). Any public comment for hearing items will be heard before action is taken on the item and must be about the specific item being considered by the Board. In order to speak during any public comment, each speaker must fill out a "Request to Speak" form and/or submit comments for the record to the Recording Secretary. Public comment and presentations for individual agenda items are limited as follows: fifteen minutes each for staff and appellant presentations, five minutes for a speaker representing a group, and three minutes for individual speakers unless extended by questions from the Board or by action of the Chair.

Response to Public Comment: The Sewage, Wastewater, and Sanitation Hearing Advisory Board can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The *Open Meeting Law* does not expressly prohibit responses to public comments by the Sewage, Wastewater, and Sanitation Hearing Advisory Board. However, responses from the Board members to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Sewage, Wastewater, and Sanitation Hearing advisory Board will consider, Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for Health District Staff action or to ask that a matter be listed on a future agenda. The Sewage, Wastewater, and Sanitation Hearing Advisory Board may do this either during the public comment item or during the following item: "Board Comments – Limited to Announcement or Issues for future Agendas."

Posting of Agenda; Location of Website:

Pursuant to NRS 241.020, Notice of this meeting was posted at the following locations:

Northern Nevada Public Health, 1001 E. 9th St., Reno, NV Downtown Reno Library, 301 S. Center St., Reno, NV Reno City Hall, 1 E. 1st St., Reno, NV Sparks City Hall, 431 Prater Way, Sparks, NV Washoe County Administration Building, 1001 E. 9th St, Reno, NV Northern Nevada Public Health Website: www.nnph.org State of Nevada Website: https://notice.nv.gov

How to Get Copies of Agenda and Support Materials: Supporting materials are available to the public at the Northern Nevada Public Health located at 1001 E. 9th Street, in Reno, Nevada. Ms. Susy Valdespin, is the person designated by to respond to requests for supporting materials. Ms. Valdespin is located at the Northern Nevada Public Health and may be reached by telephone at (775) 328-2415 or by email at <u>svaldespin@nnph.org</u>. Supporting materials are also available at the Northern Nevada Public Health Website <u>www.nnph.org</u> pursuant to the requirements of NRS 241.020.



P. 775-328-2400 1001 E Ninth St. Bldg. B Reno, NV 89512 NNPH.org

SEWAGE, WASTEWATER, AND SANITATION (SWS)

HEARING ADVISORY BOARD MEETING MINUTES

Members

Matthew Buehler, Chair Kenneth Lund, Atty John Adams Chad Carnes, P.E. Matt Smith- Alternate Ronald J. Anderson, P.E- Alternate Thursday, July 6, 2023 5:30 p.m. Washoe County Administration Complex, Building B Health District South Conference Room 1001 East Ninth Street Reno, NV

5:30 p.m.

1. *Roll Call and Determination of Quorum

The following members and staff were present:

Members present: Matthew Buehler Kenneth Lund, Atty John Adams Chad Carnes, P.E.

Staff present:

Michael Large, Atty Dave Kelly Robert Fyda Heather Burris, Recording Secretary

Members absent: Frank Kurnick, Jr. Matt Smith – Alternate Ronald J. Anderson, P.E.– Alternate

2. *Pledge of Allegiance

Those present pledged allegiance to the flag.

3. *Public Comment

As no public comment was presented, the public comment period was closed.

4. Approval of Agenda – July 6, 2023

Mr. Adams moved to approve the agenda of the July 6, 2023, Sewage, Wastewater, and Sanitation (SWS) Board regular meeting. Second by Mr. Carnes, motion approved.

6. Approval of Draft Minutes – May 4, 2023

Mr. Lund moved to approve the minutes of the May 4, 2023, Sewage, Wastewater, and Sanitation Board regular meeting. Second by Mr. Adams, motion approved.

7. Public Hearing - Variance APN 047-032-34 section 040.015 to determine whether to recommend approval to the District Board of Health. Staff Representative: David Kelly

Mr. Kelly, Supervisor with Environmental Health Services at Washoe County Health District, provided and overview and stated that the Health District recommends the Sewage, Wastewater and Sanitation (SWS) Hearing Board support the presented Variance Case H23-0002VARI (Eric Sheetz) to allow the approval of a variance for the minimum acreage requirement as 1.0 acres per septic system on lots created after March 21, 1991 and before October 23, 2002.

Mr. Kelly stated that by WCHD code on the parceling date for the subject parcel, the property is required to have at least 2.0 acres for 2 houses with separate septic systems. The property currently has one A-frame style house on it with its own septic system, and the property owner would like to build-out the property with an additional house. The property owner has performed test trench evaluation on the property and has percolation data that indicates that a standard system would be suitable for the property. The existing system has been located and the proposed additional system has been mapped out, and all elements of the property have been found to meet required setbacks.

Mr. Kelly stated that the board has the right to place conditions on variances like these if they choose, such as limiting house square footage, but staff did not have any specific recommendations for this case. Mr. Kelly stated that the existing system and the proposed system for the second dwelling meet all applicable setbacks, so WCHD does not believe that there is a direct impact to groundwater or public health. Staff present this variance neutrally to the SWS Board, as the volume would be the same if the property were to have a single house with a 2500-gallon tank as it would with two smaller systems, and the initial scenario would be acceptable to the WCHD. Mr. Kelly reiterated that there may be housing and population density questions, but those issues are outside the purview of WCHD, as WCHD is only concerned with the septic system. Mr. Kelly stated that he can take any questions and that Mr. Sheetz (property owner) is here to advocate on his own behalf.

Mr. Buehler asked if this was to be a separate dwelling or if it would be part of the existing dwelling by, for example, sharing a wall. Mr. Kelly stated that this an accessory dwelling and is separate. Mr. Buehler then asked about the expected number of occupants expected for each dwelling. Mr. Kelly responded that WCHD regulations use bedroom count as a proxy for occupants. He stated that the current dwelling is assessed at three bedrooms and the septic system is sized for that, and the proposed dwelling is five bedrooms, and the proposed septic is sized for up to six bedrooms per the WCHD SWS regulations. Mr. Adams commented that that would require a 1500-gallon tank and appropriate field, and Mr. Kelly affirmed this.

Mr. Sheetz stated that the original A-Frame house on the property was built in 1963, and the records may not be complete. Mr. Adams commented that this property was a long way out of town at the time, and Mr. Sheetz affirmed this. Mr. Sheetz stated that he believed this was the second oldest home in this area, then Mr. Adams and Mr. Sheetz briefly discussed some of the older properties in this area. Mr. Sheetz then said that at some later point, a garage structure with an apartment was built on the property, but he is having difficulty finding any records of this being approved. Mr. Sheetz stated that he has been remodeling and upgrading the A-frame house, but in order to conform to code, he needed to install a second septic system for the garage apartment. Mr. Sheetz stated that this apartment is approximately 350 square feet and does not serve his intended purpose. He stated that he received many suggestions for the space,

including turning the unit into storage, and tearing down the structure to build a new house that suits the neighborhood.

Mr. Sheetz stated that he found that to build an accessory dwelling, it must be double the square footage of the existing dwelling, which is why the proposed building is approximately 3500 square feet. He stated that by building this accessory dwelling, the property will be able to come into compliance with various agencies, and it will also appease his neighbors.

Mr. Adams clarified that the existing residence would become the secondary dwelling and the new building will become the primary residence, which Mr. Sheetz affirmed. Mr. Buehler then questioned if the existing residence would still have water and sanitation. Mr. Sheetz responded that the garage apartment water service and drainages will be disconnected so that it cannot be used as a residence. Mr. Adams questioned if this would impact the A-frame house or just the garage apartment. Mr. Sheetz responded that the A-frame house will remain as a residence, only the garage apartment will be disconnected and no longer used as a residence.

Mr. Carnes asked for clarification if this property is part of the Galena Pines HOA (Homeowners Association). Mr. Sheetz affirmed that there is no HOA for this property. Mr. Adams clarified that this property is between St. James Village and Galena Forest, which Mr. Sheetz affirmed. Mr. Buehler asked if there was a road maintenance agreement for the road and creek where the property resides, which Mr. Sheetz stated there was and Mr. Adams clarified that the county maintains the Big Pine Dr but not Dry Creek Rd.

Mr. Buehler questioned if the property is proposed to now have nine total bedrooms, which Mr. Sheetz clarified that there will be five bedrooms in one house and three bedrooms in the second totaling eight bedrooms. Mr. Sheetz stated that the property as it currently exists has four bedrooms, three in the main house and one in the garage apartment. He then stated that there are many neighboring properties that have very large footprints, and he is not looking to imitate that. Mr. Buehler then questioned if the neighboring properties have more than one septic system, or if they all have only one septic per property. Mr. Sheetz responded that most of the neighboring properties only have one septic system, but he is aware of a few properties that have two septic systems. Mr. Buehler then questions WCHD staff if there is a health risk with multiple septic systems on a single property. Mr. Kelly responded that WCHD's stance is if the systems meet all applicable setbacks, then there will not be any additional health risks when installing multiple systems. Mr. Kelly clarified that staff have verified that the proposal does meet all applicable setbacks.

Mr. Carnes asked if the property would be served by public sewer in the future. Mr. Adams responded that sewer is available in the nearby Montreux neighborhood, but there are drainages and multiple property owners that would make that difficult. Mr. Adams then discussed that he has installed many septic systems in this area, and the soil is percable and accepts effluent. Mr. Sheetz responded that there is a rocky lens, but once you get below that the soil is good. Mr. Adams clarified that this property is far enough away from the nearby active drainage on Maggie Ln to protect groundwater, which Mr. Sheetz affirmed.

Mr. Lund then questioned what the condition of the existing septic system is, and asked for clarification about what kind of leach field it is. Mr. Sheetz responded that the septic system was replaced in 2008 before he bought the property and has had no issues with the systems functionality. Mr. Carnes questioned if the installed system was recorded with the WCHD. Mr. Sheetz then stated that the property was subdivided before he bought it, which Mr. Adams clarified that the new septic system was installed because of this parceling process and not due to system failure, which Mr. Sheetz affirmed. Mr. Kelly responded to Mr. Carnes' original

question stating that WCHD has a record of a 13-foot-deep system, 45 or 50 feet long, the location of which has been demonstrated to the WCHD.

Mr. Adams then questioned if the property has adequate area for repair, which Mr. Lund echoed. Mr. Sheetz explained that there is adequate area for repair systems. Mr. Kelly then offered larger plot plans for the SWS board if they would like to better visualize all elements of the property. Mr. Kelly then showed a larger plot plan of the property and identified items on the plan for the SWS board. Mr. Lund questioned if the existing system is engineered, to which Mr. Sheetz responded that it is a standard system. Mr. Carnes clarified that this is consistent with the percolation test that was just performed, which Mr. Kelly confirmed.

The SWS board continued to review the provided plot plan, to which Mr. Adams observed that there are additional areas for repair beyond what is called out in the plan. The board then discussed elements of the plan between themselves. Mr. Buehler asked if there were any issues from an engineering standpoint to which Mr. Carnes stated that he did not believe there were. Mr. Adams agreed with this assertation. Mr. Adams expanded that Galena Pines often has challenging geology but has installed septic system on either side of the subject parcel and has found no issues. Mr. Carnes then asked Mr. Adams if high groundwater has been observed in the area, which Mr. Adams affirmed that there has not been. Mr. Lund clarified that the test trench has already been dug and inspected, and high groundwater was not observed at that time. Mr. Kelly responded that there is room on the property, including room for an engineered system if necessary. Mr. Carnes stated that the groundwater level should be evaluated again during construction and should be evaluated by WCHD staff.

Mr. Adams asked when construction is anticipated to start, to which Mr. Sheetz responded that this variance needs to be completed before he can apply for a permit, but he anticipates starting in the fall. Mr. Lund then clarified the process of the variance before the District Board of Health, to which Mr. Kelly reiterated the standard procedure. Mr. Carnes then recommended as a condition of approval that groundwater be evaluated at time of construction. Mr. Adams responded that this is part of the standard construction process, which Mr. Kelly affirmed.

The SWS board then recommended that a condition of approval be added to state that groundwater will be evaluated again at time of construction with WCHD staff, and any necessary design changes will be made then. Mr. Lund then questioned if this condition would change the way WCHD approached this project, to which Mr. Kelly responded that requiring an additional test trench would allow for more expansive operation, but anytime groundwater is encountered during construction all work is required to stop and a redesign is required.

Conditions of Approval

Washoe County Health District recommends no conditions as proposal appears to meet all required setbacks.

<u>Motion</u>

Motion made by Mr. Buehler "Move to present to the District Board of Health a recommendation for approval of Variance Case # H23-0002VARI (Eric Scheetz) to allow the permitting and construction of a second septic system as proposed, with the following condition: the property must be evaluated for groundwater by WCHD at time of construction to ensure adequate separation" Second by Mr. Adams, motion approved.

Mr. Buehler closed the public hearing.

9. *Public Comment

As there were no public comment requests, closed the public comment period.

10. Adjournment -

At 6:06 p.m., Mr. Buehler moved to adjourn the meeting. Second by Mr. Carnes, meeting adjourned.



STAFF REPORT BOARD MEETING DATE: October 5, 2023

 TO: Sewage, Wastewater, and Sanitation Hearing Advisory Board
 FROM: David Kelly, Environmental Health Specialist Supervisor 775-846-6623, <u>dakelly@nnph.org</u>
 SUBJECT: Variance Case #H23-0003VARI; Variance to Section 040.100, Table 2, Parcel 222-060-25, 2474 Faretto Lane, Washoe County, NV

SUMMARY

This staff report summarizes the Environmental Health Services Division's (EHS) review of the submitted variance application for your decision to recommend or deny approval to the District Board of Health (DBOH) a variance for APN 222-060-25, owned by 2474 Faretto Lane LLC. The variance requests permission to reduce the setback from a building sewer line, a septic tank, a dosing tank, and sand filter bed to a drainage channel.

Previous Action

There has been no previous action with this variance request. The parcel in question is served by a domestic well.

Background

The variance correctly identifies the Northern Nevada Public Health (NNPH) Regulations Governing Sewage, Wastewater, and Sanitation (regulations) required minimum setback to drainages as 25'. Section 010.088 of the regulations defines a drainage channel as anything that "over and/or through which storm waters sometimes flow". As a matter of practice, EHS has applied this to both open and encased storm ditches.

During the plan review of Building permit WBLD19-104029, staff walked the property with the contractors to determine if any irrigation ditches or drainages were present on it or neighboring properties. Numerous irrigation channels were observed but no drainages appeared to be present. The result of that site inspection, along with the hydrology report submitted, it was determined that a very small area existed that met all required setbacks and the plan was approved. The expectation was that the area would not be impacted by and storm water runoff.

During construction, severe water ponding began to occur on the property to the west, to the extent that it began to impact the property in question. Staff were called out to investigate the issue. At the time, it was unclear where the water was coming from and the best guess was that it was storm runoff that was just ponding in a low spot on the neighboring property. The contractor had created a berm to keep the water off the property and the 25' setback from the septic system to the drainage water was met at the time of the site visit.

Subject: Public Hearing, SWS Board Date: October 5, 2023 Page 2 of 3

At some point, the contractor submitted a revision that included the berm. This revision was not found acceptable by the Engineering Department due to the redirecting of storm waters. Several meetings and discussions with the contractor occurred over the next months, and it was discovered that part of waters was due to a break in an irrigation ditch that was created flood irrigation across the property to the west. The contractor worked with the neighbor and fixed the break in the irrigation ditch, which likely will dramatically reduce the water that would pond near the system. The only waters that would be left would be any storm water runoff that might collect in the low spot.

The contractor and their engineers worked with the Engineering Department to come up with a solution that would maintain natural drainage flows for the property to the west. The challenge was that the catching and redirecting had to occur on the subject property, which meant that it would not be able to meet the required 25' setback; this is reason for this variance request. The solution presented in this variance directs the storm water from that collects in the low spot on the neighboring property and coveys it to the irrigation ditch at the front of the property. In order to construct the conveyance, it had to be on the subject property and is only 14' from the portions of the septic system.

EHS generally does not prefer to reduce setbacks as they are intended to protect public health. However, in this case there are very few options available at this time with the septic system constructed and the home nearly complete. It is expected that the repairs to the irrigation ditch has mitigated the biggest potential issue to the septic and public health. The proposed solution does appear to be protective as the conveyance is watertight and in the opinion of EHS should be sufficient. It also meets the requirements of the Engineering Department for maintaining natural flows. Due to the fact that there are so few options and that the mitigation appears sufficient, EHS is comfortable supporting the variance in this situation.

Findings of Fact

The Board must consider the following when making a recommendation on this variance to the DBOH:

1. Will the proposed variance result in contamination of water to the extent it cannot be used for its existing or expected use?

Reply: The proposed system has been designed to meet all other applicable setbacks, including the vertical setback to groundwater. The design of the septic is an engineered sand filter, which provides cleaner effluent than a standard septic system. In addition, the elevation of the storm water conveyance pipe proposed is above the level of the discharge from the septic system. It is not expected that any additional risk of contamination of water will occur due to the proposed variance.

2. Will the proposed variance pose a threat to public health?

Reply: The primary way that sewage can pose a threat to public health is via direct exposure. The setback to drainages helps to prevent the potential for effluent that might reach the surface from being conveyed out into the public. The mitigation proposed in this variance is designed to be watertight and not allow for the potentiality of sewage getting into the drainage. If the sewage cannot reach the drainage, there should be no increased risk of a public health threat.

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3. Are there other reasonable alternatives?

Reply: The only other reasonable alternatives would require construction on the neighboring property, which NNPH cannot dictate. This alternative meets the needs of maintain natural drainage flows for the Engineering Department and is protective of the septic system and public health.

Conditions of Approval

1. NNPH is not recommending any conditions of approval as the two proposed systems appear to be able to meet all applicable setbacks. NNPH would require that the placement of the watertight conveyance be inspected to ensure that it meets all setbacks and is constructed according to the approved variance. Should the Board want to add any conditions approval, they may also require that the conditions recorded to the property if they feel it is warranted.

Recommendation

Staff is in favor that the Sewage, Wastewater and Sanitation (SWS) Hearing Board should support the presented Variance Case # H23-0003VARI (2474 Faretto Lane LLC) to allow for the reduced setback to a drainage channel. The reason for this recommendation is due to the fact that in staff's opinion the mitigation is adequate to prevent potential health hazards and that there does not appear to be any reasonable alternatives in this situation.

Possible Motion

Should the SWS Hearing Board wish to approve the variance application, the three possible motions would be:

- "Move to present to the District Board of Health a recommendation for approval of Variance Case # H23-0003VARI (2474 Faretto Lane LLC) to allow the permitting and construction of a second septic system as proposed, without conditions"; OR
- "Move to present to the District Board of Health a recommendation for approval of Variance Case # H23-0003VARI (2474 Faretto Lane LLC) to allow the permitting and construction of a second septic system as proposed, with the following conditions (list conditions)"; OR
- 3. "Move to present to the District Board of Health a denial of Variance care # H23-0003VARI (2474 Faretto Lane LLC)".

The SWS Board may also formulate their own motion or request additional information from the applicant if desired.

WASHOE COUNTY HEALTH DISTRICT ENHANCING QUALITY OF LIFE	WASHOE COUNTY HEALTH DISTRICT ENVIRONMENTAL HEALTH SERVICES DIVISION 1001 East Ninth Street, Bldg B, Reno, Nevada 89512 Telephone (775) 328-2434 • Fax (775) 328-6176 www.washoecounty.us/health HealthEHS@washoecounty.us APPLICATION FOR VARIANCE TO THE REGULATIONS GOVERNING SEWAGE, SANITATION AND WASTEWATER		Office Use Only Fee Paid Date Paid Cash/CC/Check Receipt No Date Appl. Received Considered Comp
DATE 8-30-23 PROJECT NAME Shadek Residence - 2474 Faretto Lane			
OWNER		ENGINEER	
Name 2474 Faretto Lane LLC		Name Axion Engineering - Ryan Sims, PE	
Address 6330 Muirlands Dr		Address 683 Edison Way	
La Jolla CA 92037		Reno, NV 89502	
Phone (619) 708-2495		Phone (775) 771-7983	
Email Address tfs3820@gmail.com		Email Address ryan@axionengineering.net	
The following items must be submitted with this application:			
JOB ADDRESS 2474 Faretto Lane			
SIZE OF PARCEL 2.51 /Acre			
COPY OF LEGAL DESCRIPTION AND VERIFICATION OF CURRENT VESTING ON TITLEEXISTING PARCEL(S) APN(S)222-060-25LOT1BLOCK			
REASON FOR VARIANCE REQUEST There is an existing low point in the adjacent property to the west along the project property line within 25' of the approved			
and constructed disposal system. In order to convey drainage from this location and maintain existing drainage patterns as closely as possible per Washoe County			
Standards. we propose to construct a drain inlet and waterproof underground drainage pipe within 25' of the OSDS to route drainage around the OSDS.			
SECTION(S) OF REGULATIONS TO BE VARIED 040.100 and Table 2 - Drainage Channels must be a minimum of 25' from Building Sewer, Septic/Dosing Tanks, and Disposal Trenches			
IF A PARCEL MAP: PROJECT NAME ^{n/a}			
APN(S)			
IF TENTATIVE MAP: PROJECT NAME ^{n/a}			
NUMBER OF PROPOSED LOTS			CES
LOT DESCRIPTION(S)			

Prepare and submit this original application with 9 copies and 10 copies of a construction plot plan with specifications drawn to scale (minimum 1 inch = 30 feet) and include the required following requirements:

- **#** Vicinity map.
- **#** The direction of North.
- **1** A diagram of the location of roadways, easements or areas subject to vehicular traffic, material storage or large animal habitation.

- A diagram of the location and distance to any well and on-site sewage disposal system within 150 feet of the subject property (if none, so indicate).
- **1** A diagram of the distances from the proposed on-site disposal system to any proposed or existing on-site well.
- **I** A diagram of the location of any percolation hole or test trench(es) on the property.
- **I** A diagram to scale of the location of all proposed on-site sewage disposal system components, including a delineated area for future replacement of disposal trench(es).
- **#** A diagram of the distance to any available sewer system (if none, so indicate).
- **#** The number of bedrooms in the proposed building.
- **#** The maximum slope across the disposal area.
- **#** A diagram of the lot dimensions and total lot area.
- **#** The location of water supply lines.
- **#** A diagram of all structures on site.
- **#** A diagram of all existing and proposed drainage improvements.
- **1** A diagram of the location of any watercourse and/or natural drainage channel within 150 feet of the property (if none, so indicate).
- # Soil logs and percolation test results, including calculations and actual field data (if required).
- **#** Sewage loading calculations and application rates.
- **#** System sizing calculations.
- **#** Pertinent geological and hydrogeological information.
- **#** Construction drawings, cross-sections and specifications of the proposed system.
- Certification by an engineer that the proposed system is properly designed to function for at least ten (10) years (engineer's seal).
- **I** Submit a completed Notice of Special On-Site Requirements. We will give you the form after variance is approved by the District Board of Health.

BE PREPARED TO SUBMIT:

1 Other information may be required to enable the Board to adequately consider the application.

THE SUBMITTED DATA, DOCUMENTS AND DESIGNS MUST DEMONSTRATE WHETHER:

- 1. The proposed system will significantly and/or adversely impact any water so that the water may no longer be used for its existing or expected beneficial use.
- 2. The proposed system will be detrimental or pose a danger to the public health, safety or create or contribute to a public health hazard.
- 3. Other reasonable alternatives for compliance with these regulations are available to the applicant. State the alternatives considered, including reasons for rejection.



September 1, 2023

Northern Nevada Public Health Environmental Health Services 1001 E 9th St. #B Reno, NV 89512

Re: Sewer Variance for 2474 Faretto Lane

An application for a sewer variance is being submitted for the proposed residence and on site disposal system located at 2474 Faretto Lane. The home and on site disposal system were permitted and are under construction under permit WBLD19-104029. The septic system has been constructed.

During the course of construction it was discovered that the site was receiving irrigation water overland from the property to the west. In order to construct the house, site, and septic system, an embankment was constructed along the west property line to block the unwanted irrigation water and Axion Engineering was engaged to design a system to divert and convey the irrigation water. As this design progressed and permit revisions submitted and reviewed, it was brought to light that the location of the existing low point along the west property line resulted in both irrigation water and drainage water pooling within 25' of the septic system, constructed per the permit WLBD19-104029.

Subsequently, with coordination with adjacent property owners and further investigation into current irrigation operation, some irrigation ditch maintenance has been performed, and upstream irrigation operation has been modified, to the extent that we believe that sheet flow irrigation (intentional or not) will not continue to occur on the property immediately to the west.

This leaves the issue of storm water drainage – a drainage inlet and piping are proposed to convey drainage water from this low point across the property to the proposed pond. This configuration will result in a restoration of natural drainage pattern.

The drainage system must be constructed within the project parcel, in order to drain the existing low point a 79 linear foot portion of the drainage system must be within the 25 foot setback to drainage channels required by the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation, Dated May 23, 2012, Section 040.100, Table 2.

Therefore, this variance request is to reduce the setback of drainage channels to building sewer, septic and dosing tanks, and disposal trenches required by the Regulations of the Washoe County District Board of Health Governing Sewage, Wastewater, and Sanitation, Dated May 23, 2012, Section 040.100, Table 2, from 25 feet to approximately 14 feet.

The embanked material in the west portion of the site will remain between the drainage pipe and the onsite disposal system in order to protect the site and septic system from excessive drainage and irrigation water resultant from faulty irrigation and ditch maintenance and operation by separate parties upstream of the project. Therefore, no offsite surface drainage is expected over the onsite disposal system.

The drainage pipe will be constructed with watertight pipe and joints, and the system is sized to handle calculated 100-year flows from the tributary drainage area, no irrigation included.

The elevation of the drop inlet and connected drainage conveyance pipe will be constructed above the elevation of the bottom of the impermeable barrier surrounded sand filter bed.

There has been much discussion with the owner, builder, NNPH, Washoe County, neighboring property, irrigation ditch operators, and other interested parties, and many options were explored and discussed, and we feel that with all setback and existing conditions on the property, together with the fact that construction is nearing completion, that no suitable alternatives to a reduced drainage setback were observable or feasible.

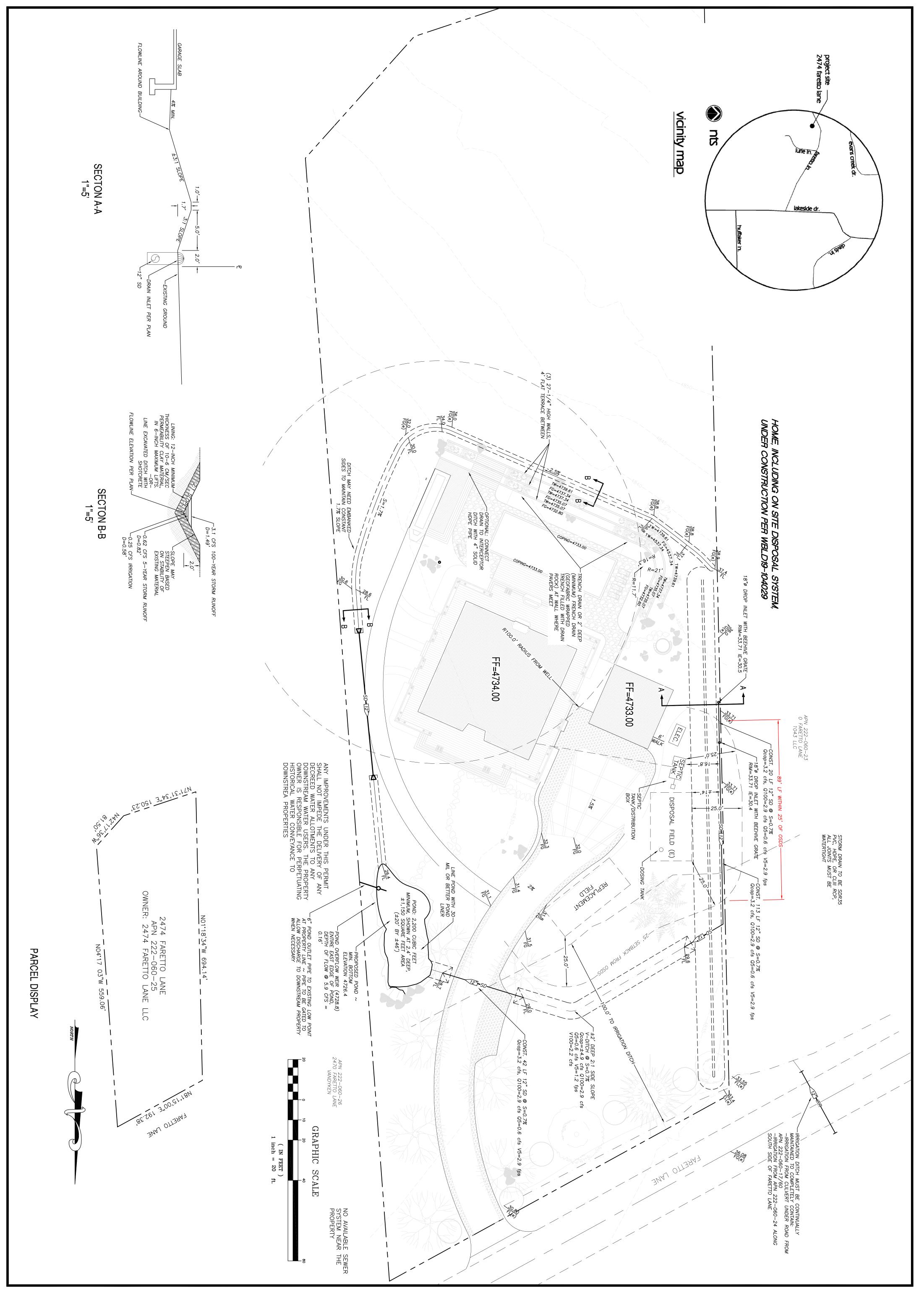
If you have any further questions, please feel free to contact me at 775-771-7983 or email ryan@axionengineering.net

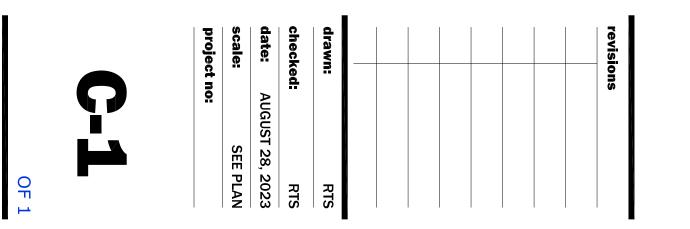
Sincerely,

Axion Engineering, LLC

Ryan T. Sims

Ryan T. Sims, PE





OSDS VARIANCE PLAN SHADEK RESIDENCE 2474 FARETTO LANE

SITE PLAN

WASHOE COUNTY, NEVADA

