

Memorandum

Date: April 23, 2020

To: SOUTHERN NEVADA DISTRICT BOARD OF HEALTH

From: Robert Fyda, P.E., REHS, Environmental Health Engineer/Supervisor RF

Herbert Luis Sequera, REHS, Environmental Health Manager

Chris Saxton, MPH-EH, REHS, Environmental Health Director

Fermin Leguen, M.D., MPH, Acting Chief Health Officer

Subject: Variance Request for an Application to Construct a Septic System located at 4738

Knotty Pine Way, Mount Charleston, Nevada with the following provisions: 1) allow installation of a septic system on an undersized lot; 2) allow a reduced property line setback; and 3) waive a design standard regarding absorption trench

separation.

I. BACKGROUND:

Frantz Consulting LLC, Owner ("Petitioner"), is requesting a variance to permit and install an individual sewage disposal system (ISDS) on an undersized lot ("Subject Property") served by municipal water, located at Assessor's Parcel Number 129-36-111-011, also known as 4738 Knotty Pine Way, Mt. Charleston, NV 89124.

Petitioner requests a variance from Section 11.20.2 of the Southern Nevada District Board of Health Regulations Governing Individual Sewage Disposal Systems and Liquid Waste Management ("SNHD ISDS Regulations"), which requires a minimum lot size of 0.25 acre for the installation of an ISDS on a lot served by municipal water. The Subject Property has an area of approximately 0.18 acres.

Petitioner further requests a variance from Section 19.2.1 of the SNHD ISDS Regulations, which states that "no septic tank or soil absorption system shall be located within ten feet (10') of any property line." Petitioner proposes reducing this setback to five feet (5').

Petitioner further requests a variance from Section 9.7.1 of the SNHD ISDS Regulations, which defines design criteria for absorption trenches. Petitioner's proposed absorption trench design would normally require twelve feet (12') of separation between the two trenches, but Petitioner proposes separating the trenches by seven feet (7') to meet site constraints.

The petitioner states the following with regards to these requirements:

- 1. There must be circumstances or conditions which are unique to the petitioner, and do not generally affect other persons subject to the regulation:
 - "Square footage of the lot and normal setback requirements greatly hinder the ability to construct a S.F.R [single family residence] on this property."
- 2. There must be circumstances or conditions which make compliance with the regulation unduly burdensome and cause a hardship to and abridge a substantial property right of the applicant, and the variance is necessary to render substantial justice to and preserve the property rights of the applicant. Please indicate in what manner compliance with the regulation would be burdensome or cause a hardship on your business or how the free use of your property may be affected (if economic factors are an issue, please include estimates regarding the costs that would be incurred by compliance):

"This property was purchased with the sole intent of constructing a S.F.R upon it. The variance is being requested to allow-construct the S.F.R upon what otherwise would be considered an unusable lot."

3. Granting the variance will not be detrimental or pose a danger to the public health and safety. Please provide evidence that the variance request, if approved, will not adversely affect the safe and sanitary operation of the applicant(s) pool, spa, or food establishment:

"The variance approval and installation of a new ISDS will allow the current owner the ability to build and use a S.F.R on this property."

II. RECOMMENDATION:

The Subject Property is depicted in Attachment B as Lot 8 of Block 2 of the recorded subdivision known as Cathedral Rock View, which was approved in 1956. The existing subdivision was created prior to the adoption of the current SNHD ISDS Regulations in 2006 and no recorded changes to the Subject Property have been recorded. There is one existing well located downgradient and within four hundred feet (400') of the proposed ISDS. The Subject Property is also located in an area with a high density of existing ISDS; there are 189 lots with an active, traceable ISDS permit within one square mile of the property boundaries (see attached ISDS Density Map).

The Subject Property has an area of approximately 0.18 acres, but the minimum lot size required by the SNHD ISDS Regulations is 0.25 acres. Lot size variances have been approved for other properties on Mount Charleston, some of which were as small as 0.06 acre. The proposed ISDS will be five feet (5') from the closest property line, where ten feet (10') minimum separation is required by the SNHD ISDS Regulations. A five-foot (5') property line setback has been approved for other undersized lots in Mount Charleston. The reduced separation distance between the proposed trenches is acceptable.

Staff is of the opinion that granting the variance would not endanger public health or safety. Staff recommends approval of the variance. If the Board of Health approves the variance, staff recommends approval with the following conditions outlined in Section III.

III. CONDITIONS:

- 1. The applicant and his successor(s) in interest shall abide by all local governmental regulations requiring connection to community sewage systems. Use of the ISDS shall be discontinued and the structure it serves shall be connected to any community sewage system constructed in the future to within four hundred feet (400') of the applicant's property line when connection can be made by gravity flow and the owner(s) are notified and legally required to do so.
- 2. The applicant and his successor(s) will abide by the operation and maintenance requirements of the most current SNHD regulations governing individual sewage disposal systems.
- 3. Construction of the ISDS must be commenced within one (1) year of the date hereof. If the construction has not been commenced within that period, this variance shall automatically expire and be of no further force and effect, unless application is made and approved for an extension of time prior to the expiration date by the applicant or the applicant's successor(s) in interest.

Attachments:

- A. Authorization Letter
- B. Variance Candidate Application
- C. Justification Letter from the Petitioner
- D. Recorded Plat for Cathedral Rock View
- E. Plot and Grading Plan for 4738 Knotty Pine Way
- F. Proposed ISDS Plan
- G. Percolation Test for 4738 Knotty Pine Way
- H. Cone of Influence Letter
- I. ISDS Density Map
- J. Public Notice

Attachment A: Authorization Letter

Authorization Letter

August 12, 2019

Southern Nevada Health District 280 5 Decatur Blvd Las Vegas, NV 89107

I, Frantz Consulting LLC, do hereby authorize Hardin & Sons to make application for a septic system variance in the matter of 4738 Knotty Pine Way, Mount Charleston, NV Assessor's Parcel Number 129-36-111-011. Also, in the event that I cannot be present at the October, 2019 Southern Nevada District Board of Health meeting, Hardin & Sons is authorized to speak on my behalf. However, we understand that both of us must sign both the letter of request and the variance order.

(Owner)_James_Frantz
unty of: Clark
09/15/2019, before me, Stephanic Cenda (notary)
rsonally appeared, James Burnett Frant? (signers)
] Personally known to me
Proved to me on the basis of satisfactory evidence to be person(s) whose name(s) is/are subscribed to the within instrument and has hereby acknowledged to me that he/she/they have cuted the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) entity upon behalf of which the person(s) acted, executed the instrument.
ness my hand and official seal
Attin OVA

STEPHANIE CERDA NOTARY PUBLIC STATE OF NEVADA Commission Expires: 06-12-2023 Certificase No: 19-2804-1



VARIANCE CANDIDATE WORKSHEET

PARI I:
ESTBLISHMENT INFORMATION
Name of Facility/Establishment: Frantz Consulting LLC.
Health Verrait Manager
Name of Operator/Agent: Hardin & Sons fac
Address of Operator/Agent: 20 \ W. Chaus and Al local Act Cong.
Contact Information of Operator/Agent:
Office Phone: 712-399-3878 Cell Phone: 700-379 -9156
Fax Number: 702 - 299 - 2022
Fax Number: 702-399-2032 Email Address: Hardin, Sons @gmail.com
If corporation, the name/title of individual to sign for Variance document: Name: Pale Mar Jin
Title: Presiden t
THE TESIGEN D
CIANIED INFORMATION
OWNER INFORMATION
Name of Property Owner: Frantz Consulting LLC
Address of Property Owner: 710 Coronado Center Fr. # 100, Henderson, No.
Contact Information of Property Owner: 890.52
Office Phone: Cell Phone: 702-499-9208
Fax Number: Email Address: +trush 5792 @ 401 00m
FROPERTY INFIRMATION
Property Address: 4738 Knothy Pine Deve Mount Charleston
Assessor's Parcel Number (APN): 129-3(a-11)-011
Describe location within larger facility (i.e. hotal/casino/recept etc.)
S. F. R. ONLY
Describe Variance Iccus (a) /Indud
has a pulsar to the required (s). (include sections of the Regulation of Nevada Administrative Code
and applies to the request for a variance)
16. S. I. WE WILL NEED TO USE A 5' SETBACK FOR ISDS TO PROPERTY LINE WHERE A
U SETBER IS NORMALLY REQUIRED.
Eb. M. (. 1. WILL NEED TO ALLOW TREND SEPARATION TO BE 7' BETWEEN THE 2 DEEP TRENCHES.
LE SEPARATION IS NORMALLY USED ON A LEACHBED-STYLE SYSTEM.
11. CO. L - ILLU PROPERTY HAS A TOTAL COMBINED SO. GOTAGE OF 7841 SF., WHERE THE MINIMUM
decided it in the mountain on D and Dansey
PROPERTY INFORMATION Property Address: 4738 Knoty Pine Way, Mount Charleston Assessor's Parcel Number (APN): 129-36-111-011 Describe location within larger facility (i.e. hotel/casino/resort, etc.): S. F. R. ONLY Describe Variance Issue (s): (Include sections of the Regulation or Nevada Administrative Code that applies to the request for a variance) S. S. I. We will Need to use A 5' Setback for Isbs to Property Line where A O' SETBACK IS NORMALLY REQUIRED. S. J. I. WILL NEED TO ALLOW TRENDS SEPARATION TO BE 7' BETWEEN THE 2 DEEP TRENCHES. 6' SEPARATION IS NORMALLY USED ON A LENCHBED SO. FORTAGE OF TRYLES. 6' SEPARATION IS NORMALLY USED ON A LENCHBED SO. FORTAGE OF TRYLES. 6' SEPARATION IS NORMALLY USED ON A LENCHBED SO. FORTAGE OF TRYLES. 6' SEPARATION IS NORMALLY USED ON A LENCHBED SO. FORTAGE OF TRYLES.

PART II: Nevada Administrative Code 439.240 states in general that certain conditions or circumstances must be shown to exist in order for a Board of Health to approve a request for a Variance from adopted public health regulations. A variance application letter (as noted below in PART III) MUST specifically address each of the following issues:
1. There must be circumstances or conditions which are unique to the applicant, and do not generally affect other persons subject to the regulation. Please indicate how your request is unique to your situation and is, therefore, not likely to affect other persons subject to the regulations: SQUARE FOOTAGE OF THE LOT AND NORMAL SETBACK REQUIREMENTS GREATLY HINDER THE ABILITY TO CONSTRUCT A S.F.R ON THE PROPERTY.
2. There must be circumstances or conditions which make compliance with the regulation unduly burdensome and cause a hardship to and abridge a substantial property right of the applicant, and the variance is necessary to render substantial justice to and preserve the property rights of the applicant. Please indicate in what manner compliance with the regulation would be burdensome or cause a hardship on your business or how the free use of your property may be affected (if economic factors are an issue, please include estimates regarding the costs that would incurred by compliance): THIS PROPERTY WAS PURCHASED WITH THE SOLE NITENT OF CONTRUCTING A S.F.R. UPON IT. THE VARIANCE IS BEING REQUESTED TO ALLOW—CONSTRUCT THE SER. UPON WHAT OTHERWISE WOULD BE CONSIDERED AN UNUSABLE LOT.
3. Granting the variance will not be detrimental or pose a danger to the public health and safety. Please provide evidence that the variance request, if approved, will not adversely affect the safe and sanitary operation of the applicant(s) pool, spa, or food establishment: THE VARIANCE APPROVAL AND INSTALLATION OF A NEW ISS WILL ALLOW THE CURRENT OWNER THE ABILITY TO BUILD AND USE A SER. ON THIS PROPERTY.

Attachment B: Variance Candidate Application (Page 3 of 3)

NAC 439.240 Approval by State Board of Health. (NRS 439.150, 439.190, 439.200) 1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing

(a) There are circumstances or conditions which:

(1) Are unique to the applicant;

(2) Do not generally affect other persons subject to the regulation;

(3) Make compliance with the regulation unduly burdensome; and

(4) Cause a hardship to and abridge a substantial property right of the applicant; and

(b) Granting the variance:

(1) Is necessary to render substantial justice to the applicant and enable the applicant to preserve and enjoy

his or her property right; and
(2) Will not be detrimental or pose a danger to public health and safety.

 Whenever an applicant for a variance alleges that he or she suffers or will suffer economic hardship by complying with the
regulation, the applicant must submit evidence demonstrating the costs of compliance with the regulation. The Board will consider the evidence and determine whether those costs are unreasonable. [Bd. of Health, Variances Reg. §§ 2.7-2.8, eff. 10-16-80; A 2-5-82; 1-19-84]

PART III:

A Variance Application Letter, which includes all information provided by the applicant on his worksheet, must be submitted in writing to the Environmental Health Division (EHD) Director no later than 40 days before the monthly Board of Health Meeting. The Application letter must be on the owner's letterhead signed by the Owner/Corporate Officer specifically listing which part(s) of the Regulation the proposed Variance covers with this completed Worksheet as an attachment. The written Application Letter must take particular care in providing statements and evidence of circumstances or conditions and reasons why the District Board of Health should grant the Variance as listed in NAC 439.240 as shown at the top of this page. ALL information you have provided in PART I and II of this Worksheet must be included in the body of the letter. The evidence required may include $8\,1/2" \times 11"$ or $11" \times 17"$ detailed drawings and/or photographs.

The Variance process is outlined in Nevada Administrative Code (NAC) 439,200 through 439.260 with the exception that an application fee is payable to SOUTHERN NEVADA HEALTH DISTRICT (SNHD).

This section to be completed by SNHD staff ONLY

Next closing date is: for the	BOH Meeting.
Referred by:	
(Print Name of REHS)	5 .
Completed by:	Date:
(Print Name of REHS if not by supervisor)	Date:
Received by:	Date:
(Owner/Operator/Agent)	D-1
Reviewed by:	Date:
(Signature of SNHD Manager)	

Attachment C: Justification Letter from Petitioner

Justification/Hardship Letter

August 23, 2019

To: Southern Nevada Health District 280 S. Decatur Blvd. Las Vegas, NV 89107

Prom: Frantz Coosulting LLC RE: Parcel # 129-35-111-011 4738 Knotty Pines Way

To whom it may concern:

Thereby make application and petition the Southern Nevade District Board of Health for a variance to the Regulations Coverning individual Sewage Disposal and Equid Waste Management Sections 11.20.2, requiring a minimum of one fourth (1/4) acre (10,900 sc. ft.) for the installation of an individual sewage disposal system (ISDS) on a lot served by an off-site water supply; and Section 5.2, requiring that no septic tank be within 5° of a building or a deep absorption field be located within 20° of a building without a Cone of Influence letter submitted by a State of Kevade registered professional engineer; and Section 5.1, requiring that no suptic tank or leach field be within 10° of a property line.

This variance request is made to permit construction of an ISDS on a lot 7.841 sq. ft. The septic system is to be located 5 ft. from the proposed structure and no closer than 5 ft. from the peacest property line.

The legal description of said property is APN # 128.36.111-011, further described as Parcel II: Lot eight (8) in Block two(2) of CATHEORAL ROCK VIEW PLAT, as shown by map thereof on file in Book 5 of Plats, Page 5, in the Office of the County Recorder of Clark County, Nevada.

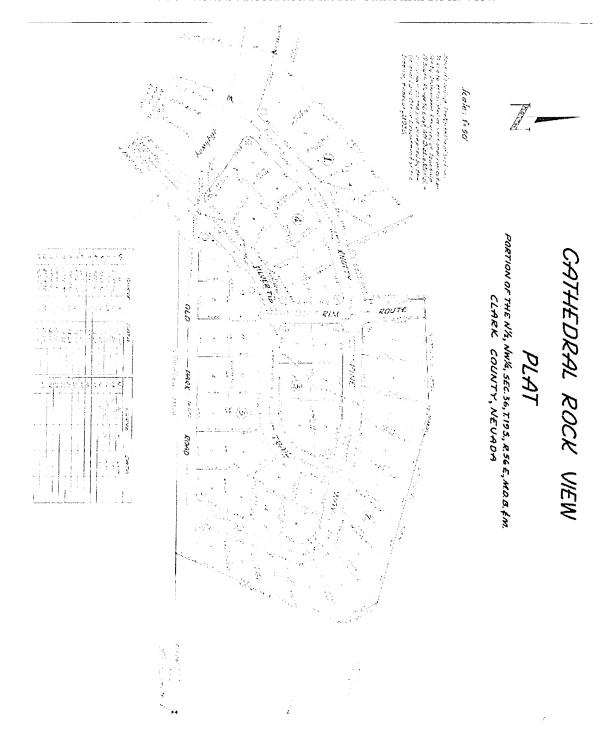
Parcel II: That portion of the Southeast Quarter (SE X) of the Northwest Quarter (NW K) of Section 36, Township 19 South, Range 56 Sast, M.D.S. & M., described as follows:

Beginning at the most Northerly corner of said tot Light (8); there e South 677.47'06" East a distance of 91.37 feet to a point; thence South 67.04.24 "West a distance of 61.01 feet to a point; thence North 28'58'06" West along the East line of said tot Eight (8) a distance of 64.86 feet to the Point of Beginning.

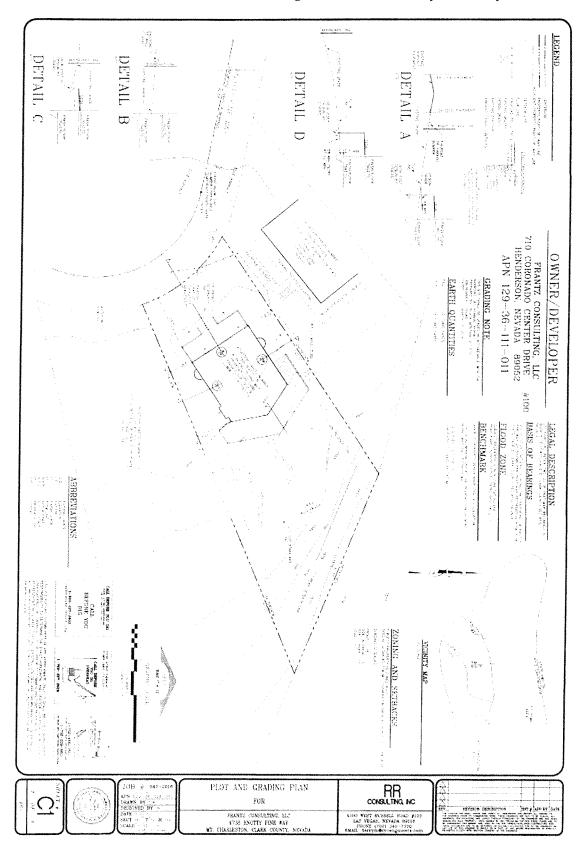
Thave owned the property since February 2, 2016 and wish to apply for this variance.

Thank you for your consideration.

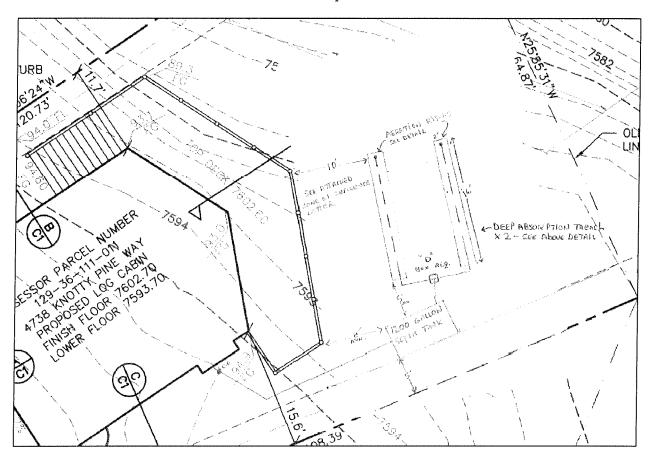
Number Front

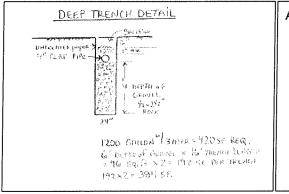


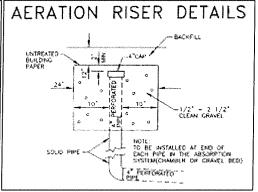
Attachment E: Plot and Grading Plan for 4738 Knotty Pine Way



Attachment F: Proposed ISDS Plan







DLC Consulting

November 21, 2019

Hardin Excavating 2010 Cheyenne Avenue Las Vegas, Nevada

Attention: Dale Martin

Percolation Verification Test for The Single Family Residence Located at

4738 Knotty Pine, Mount Charleston, Nevada. APN 129-36-111-011.

Mr. Martin:

Following is the Percolation Verification Test for the referenced location. Field work was conducted by DLC Consulting in accordance with Southern Nevada Health District guidelines.

Based on the field data, percolation rates are approximately 3 minutes/inch. Soil data from the test pits indicates the presence of gravels and cobbles with sands and silt.

DLC is grateful for the opportunity to provide this report and welcomes any questions or comments regarding this report that may arise.

Sincerely,

DLC Consulting,

Michael W. Payne, C.E.M. Principal Scientist

Landon Christopherson, P.E. Project Engineer

Attachment G: Percolation Test for 4738 Knotty Pine Way (Page 2 of 5)

Perc Test November 21, 2019 Hardin 4738 Knotty Pine

Boring B-1

Project Name: 4738 Knotty Pine

Project Location: 4738 Knotty Pine

Mount Charleston, Nevada

Test Location: See Plan Map

Test Performed By: Michael Payne C.E.M.

Test Reviewed By: Landon Christopherson, P.E.

Date of Test: November 21,2019

Borehole Diameter: 6 inches
Borehole Depth: 36 inches
Time of Presoaking: NA

Depth of Water at beginning of test: 30 inches

Time	of	Time	Depth to	Depth	Percolation	Comments
Reading		Difference (1)	Water	Difference (2)	Rate (1)/(2)	
08:02		0	30"			Begin Test
08:12		10 min	34.16"	4.16	2.4	
08:12		0 min	30"	0		Refill
08:22		10 min	34.16"	4.16	2.4	
08:22		0	30"	0		Refill
08:32		10 min	34"	4.0	2.5	
08:32		0	30"	0		Refill
08:42		10 min	34"	4.0	2.5	
08:42		0	30.0	0		Refill
08:52		10 min	33.7"	3.7	2.7	
08:52		0	30.0	0		Refill
09:02		10 min	33.77"	3.7	2.7	
09:02		0 min	30"	0		Refill
09:12		10 min	33.7"	3.7	2.7	

Soil Data:

Gravelly sands to the maximum boring depth of 10 feet below grade. Soils drained freely from surface. Complete soil borings are attached.

Perc Test Hardin November 21, 2019 4738 Knotty Pine

PERCOLATION TEST RESULTS

Boring B-2

Project Name:

4738 Knotty Pine

Project Location:

4738 Knotty Pine

Mount Charleston, Nevada

Test Location:

Test Performed By:

See Plan Map

Michael Payne C.E.M.

Test Reviewed By:

Date of Test:

Landon Christopherson, P.E.

November 21, 2019

Borehole

Diameter: Borehole Depth: 6 inches

36 inches NA

Time of Presoaking: Depth of Water at beginning of test:

30 inches

Time	of	Time	Depth to	Depth	Percolation	Comments
Reading		Difference (1)	Water	Difference (2)	Rate (1)/(2)	
08:00		0	30"			Begin Test
08:10		10 min	34"	4.0	2.5	
08:10		0 min	30"	U		Refill
08:20		10 min	34"	4.0	2.5	
08:20		0	30"	0		Refill
08:30		10 min	33.7"	3.7	2.7	
08:30		0	30"	0		Refill
08:40		10 min	33.7"	3.7	2.7	
08:40		0	30.0	0		Refill
08:50		10 min .	33.7"	3.7	2.7	
08:50		0	30.0	0		Refill
09:00		10 min	33.7"	3.7	2.7	
09:00		0 min	30"			Refill
09:10		10 min	33.7"	3.7	2.7	

Soil Data:

Gravelly sands to the maximum boring depth of 10 feet below grade. Soils drained freely from surface. Complete soil borings are attached.

Client:

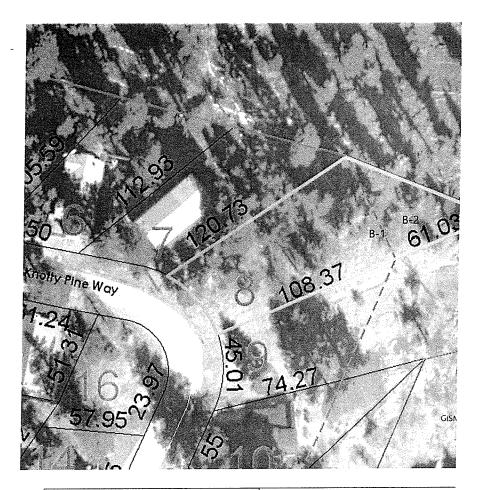
Hardin

Project: Test Pit:

4738 Knotty Pine

	Test Pit: 1									
a.		pth/Fe						11/21/2019		
b.	Sa	mple T	ype			Elevation	Existing Grade	Datum:	Existing	
C.	Mo	isture				Equipment:	Case 580	Operator:	Hardin	
d.	De	nsity				Groundwater:	None			
e.	US	CS CI	ass.							
	а	b	С	d	е		SOIL DESC	RIPTION		
		Bulk	Dry	Loose	GP		Sandy Gravels, slightl	v moist. light	t brown.	
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10		1	l	ı			No groundwater e	ncountered.		
		l					Total depth of test	t pit 10 feet.		
										

Attachment G: Percolation Test for 4738 Knotty Pine Way (Page 5 of 5)



DLC Consulting	Client: Hardin and Sons
4738 Knotty Pine Way	Test Locations: B-1

Attachment H: Cone of Influence Letter

CONE OF INFLUENCE LETTER

November 14, 2019

Robert Fyda Southern Nevada Health District Valley View Boulevard Las Vegas, Nevada

Subject:

Evaluation of the impact of the location and depth of the deep absorption leach field on the foundation of a proposed cabin located at 4738 Knotty Pine way, Cathedral Rock View, Kyle Canyon, Assessor Parcel Number 129-36-111-011

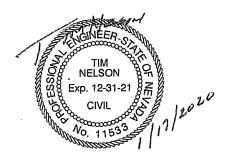
Sir:

This letter is written at your request to address the impact of the deep absorption leach field location and depth on the a proposed single family residence as referenced above. Design measurements established that the distance from the edge of the foundation for the proposed cabin is 10' to the proposed deep absorption leach field when a standard minium distance is 20 feet for a deep absorption system leach field. This system will be 7 feet deep at the highest corner and 7 feet deep at the adjacent corner. The proposed leach field is not affected by any standard setback dimensions.

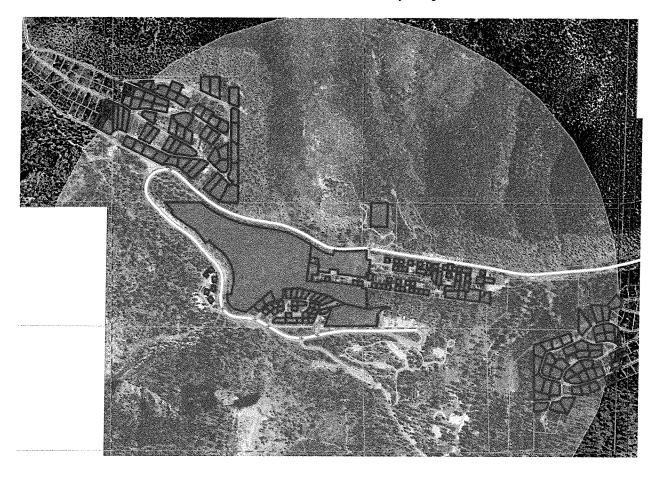
Based on the location of the leach field relative to the structure, the type of footing of the proposed foundation slab, the design grades for the building pad and considering the conditions of the soil that the proposed structure is located on, it is my opinion that the location of the leach field is impacted minimumly by the foundation stress influence and will not adversely impact the structure, nor will the structure adversely impact the septic tank or the leach field. In addition, no adverse impact will occur if the soils adjacent to the structure becomes saturated by the leach field.

Respectfully submitted,

Tim Nelson, PE RR Consultants, Inc. 4882 West Lone Mountain Road Las Vegas, Nevada 89130



Attachment I: ISDS Density Map



Attachment J: Public Notice



PUBLIC NOTICE

The Southern Nevada District Board of Health will conduct a PUBLIC HEARING on Thursday, March 26, 2020 at 9:00 AM during its regular monthly meeting in the Red Rock Conference Room at the Southern Nevada Health District at 280 S. Decatur Blvd., Las Vegas, Nevada, to approve or deny a variance request filed by Frantz Consulting LLC, a limited liability company ("Petitioner"), to permit and install a new individual sewage disposal system on the property located at 4738 Knotty Pine Way, Mt. Charleston, NV 89124, APN 129-36-111-011.

The variance request is made to allow the Petitioner to permit the installation of a conventional septic system not in accordance with the Southern Nevada District Board of Health Regulations Governing Individual Sewage Disposal Systems and Liquid Waste Management. The variance will allow the Petitioner to: 1) install a septic system on an undersized lot; 2) allow a reduced property line setback; and 3) waive a design standard regarding absorption trench separation.

All interested persons may appear at the hearing and state their positions. All written and oral submissions will be considered by the Southern Nevada District Board of Health. Written comments must be forwarded by March 23, 2020 to:

Robert Fyda, P.E., REHS Environmental Health Engineer/Supervisor Southern Nevada Health District P.O. Box 3902 Las Vegas, Nevada 89127 fyda@snhd.org

The variance application is available for review at the Southern Nevada Health District, 280 S Decatur Blvd, Las Vegas, Nevada 89107. Please contact Mallory Jett-Edwards at (702) 759-0660 to schedule an appointment to review the application during the normal business hours of 8:00 AM to 4:30 PM.

- S -	March 11, 2020
Chris Saxton, MPH-EH, REHS	Date
Environmental Health Director	