



Board of Adjustment Staff Report

Meeting Date: December 5, 2019

Agenda Item: 8B

SPECIAL USE PERMIT CASE NUMBER: WSUP19-0022 (Rosakranse Wall)

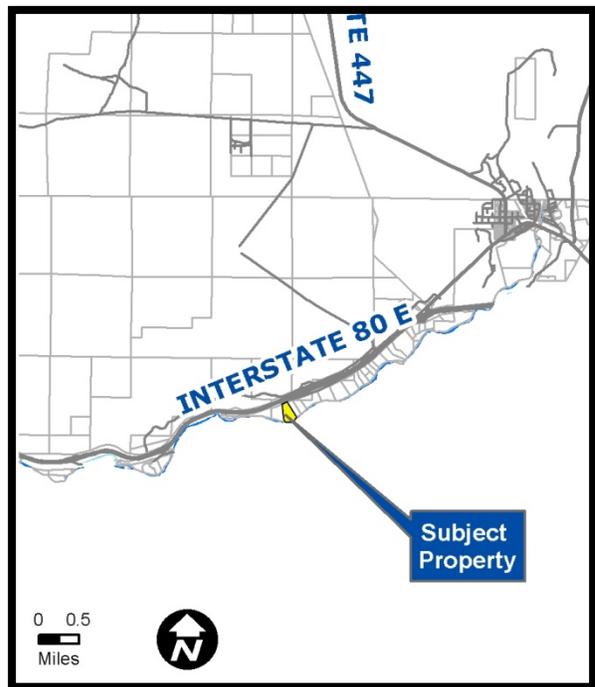
BRIEF SUMMARY OF REQUEST: To approve the construction of a 9 foot permanent earthen structure at 3100 Cantlon Drive.

STAFF PLANNER: Planner's Name: Julee Olander
Phone Number: 775.328.3627
E-mail: jolander@washoecounty.us

CASE DESCRIPTION

For possible action, hearing, and discussion to approve the construction of a 9-foot permanent earthen structure at 3100 Cantlon Drive.

Applicant/Property Owner: Christine Rosakranse
Location: 3100 Cantlon Drive
APN: 084-282-28
Parcel Size: 18.437 acres
Master Plan: Rural Residential (RR)
Regulatory Zone: Medium Density Rural (MDR- 1 unit per 5 acres)
Area Plan: Truckee Canyon
Citizen Advisory Board: East Truckee Canyon
Development Code: Authorized in Article 438, Grading and Article 810, Special Use Permits
Commission District: 4 – Commissioner Hartung



STAFF RECOMMENDATION

APPROVE

APPROVE WITH CONDITIONS

DENY

POSSIBLE MOTION

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Board of Adjustment approve with conditions Special Use Permit Case Number WSUP19-0022 for Christine Rosakranse, having made all four findings in accordance with Washoe County Code Section 110. 810. 30.

(Motion with Findings on Page 7)

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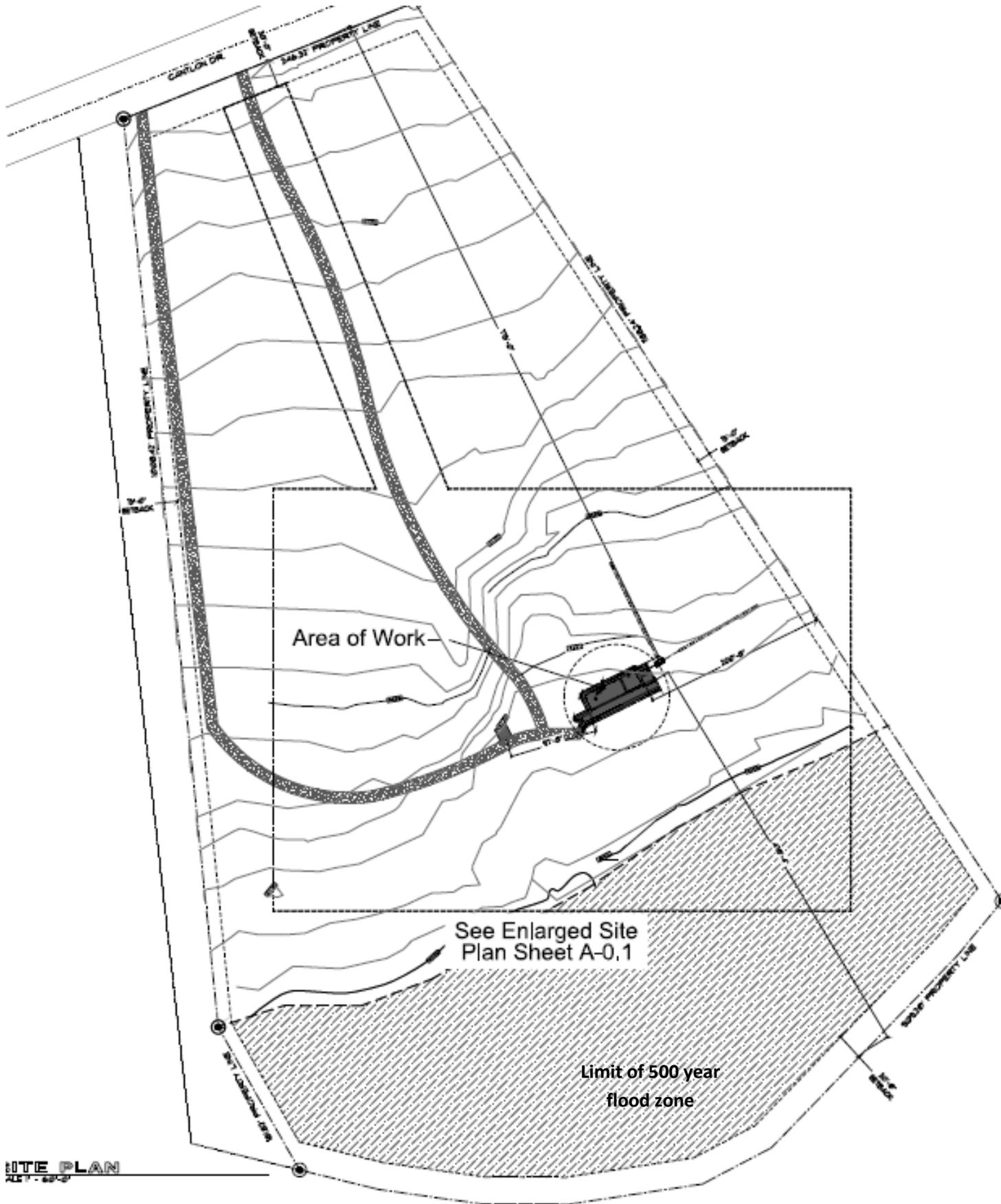
Special Use Permit

The purpose of a special use permit is to allow a method of review to identify any potential harmful impacts on adjacent properties or surrounding areas for uses that may be appropriate within a regulatory zone; and to provide for a procedure whereby such uses might be permitted by further restricting or conditioning them so as to mitigate or eliminate possible adverse impacts. If the Board of Adjustment grants an approval of the special use permit, that approval is subject to conditions of approval. Conditions of approval are requirements that need to be completed during different stages of the proposed project. Those stages are typically:

- Prior to permit issuance (i.e. a grading permit, a building permit, etc.)
- Prior to obtaining a final inspection and/or a certificate of occupancy on a structure
- Prior to the issuance of a business license or other permits/licenses
- Some conditions of approval are referred to as “operational conditions.” These conditions must be continually complied with for the life of the business or project.

The conditions of approval for Special Use Permit Case Number WSUP19-0022 are attached to this staff report and will be included with the action order, if approved.

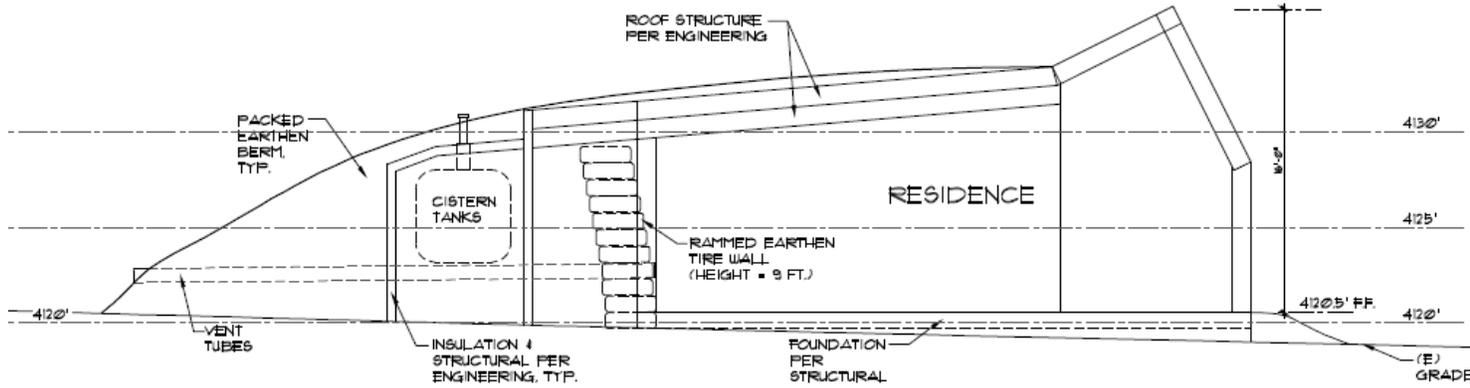
The subject property is designated as Medium Density Rural (MDR). The proposed grading is permitted with a special use permit per WCC 110.438.35. The applicant is seeking approval of this SUP from the Board of Adjustment.



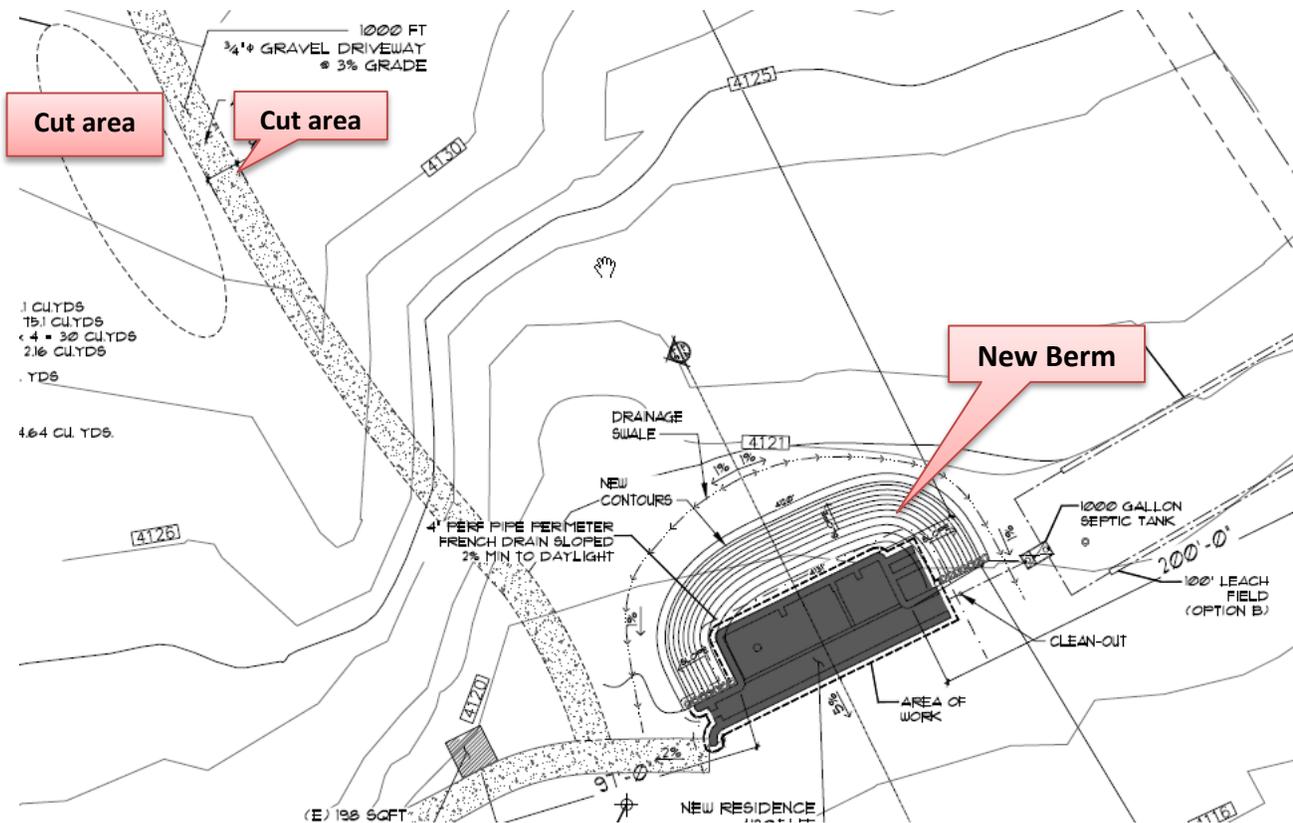
Site Plan

Project Evaluation

The applicant is requesting to construct a 9-foot high berm behind a retaining wall. Washoe County code 110.438.35(4) requires a special use permit when a permanent earthen structure is over six (6) feet in height. The proposed berm is a permanent earthen structure under Washoe County Code. The construction of the residence is planned as a low impact environmental design. The berm is an integral part of the sustainable design and will assist in the insulation factor, energy usage and regulation of the internal temperature of the home (See house design below). The berm will be landscaped with native vegetation that will blend into the surrounding site.



The applicant states that 20,800 sq. ft. of the 18.4 acres site will be disturbed to construct the berm and 1,414.46 cubic yards will be excavated from two sites to fill the area around the residence to construct the berm (see site plan below).



East Truckee Canyon Citizen Advisory Board (ETC CAB)

The CAB did not meet during the month of November and the applicant was not able to present to the CAB. However, the CAB was notified of the application and no comments were received.

Reviewing Agencies

The following agencies received a copy of the project application for review and evaluation.

- Washoe County Community Services Department
 - Planning and Building Division
 - Engineering and Capital Projects Division
- Washoe County Health District
 - Environmental Health Services Division
 - Air Quality
- Truckee Meadows Fire Protection District
- Regional Transportation Commission
- Washoe-Storey Conservation District

The following agencies/departments provided comments and/or recommended conditions of approval in response to their evaluation of the project application (see Exhibits A and B) Washoe County Planning and Building Division address establishing the grading of the site.

Contact: Julee Olander, 775.328.3627, jolander@washoecounty.us

- Washoe County Engineering and Capital Projects Division address the requirement for grading and obtaining permits.
Contact: Leo Vesely, 775.328.2313, lvesely@washoecounty.us

Staff Comment on Required Findings

WCC Section 110.810.30, Article 810, *Special Use Permits*, requires that all of the following findings be made to the satisfaction of the Washoe County Board of Adjustment before granting approval of the request. Staff has completed an analysis of the special use permit application and has determined that the proposal is in compliance with the required findings as follows.

1. Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Truckee Canyon Area Plan.

Staff Comment: Staff has reviewed the Master Plan and the Truckee Canyon Area Plan and the project is consistent with these plans.

2. Improvements. That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven.

Staff Comment: The grading will allow for the establishment of a residence. There is an existing roadway Cantlon Drive to the property and the property owners will establish the required utilities, including a well for water supply and septic for sanitation.

3. Site Suitability. That the site is physically suitable for the proposed grading and for the intensity of such a development.

Staff Comment: The proposed grading will make the site suitable to construct a residential house.

4. Issuance Not Detrimental. That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area.

Staff Comment: The site is currently vacant and the proposed project is anticipated to have minimal impact to the surrounding area and conditions of approval have been included to mitigate any negative potential impacts.

5. Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

Staff Comment: There is no military installation within the area of required notice for this special use permit; therefore, the project will have no effect on a military installation.

Recommendation

After a thorough analysis and review, Special Use Permit Case Number WSUP19-0022 is being recommended for approval with conditions. Staff offers the following motion for the Board's consideration.

Motion

I move that, after giving reasoned consideration to the information contained in the staff report and information received during the public hearing, the Washoe County Board of Adjustment approve, with conditions, Special Use Permit Case Number WSUP19-0022 for Christine Rosakranse, having made all five findings in accordance with Washoe County Code Section 110.810.30.

1. Consistency. That the proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the Truckee Canyon;
2. Improvements. That adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven;
3. Site Suitability. That the site is physically suitable for the proposed grading and for the intensity of such a development;
4. Issuance Not Detrimental. That issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area;
5. Effect on a Military Installation. Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

Appeal Process

Board of Adjustment action will be effective 10 calendar days after the written decision is filed with the Secretary to the Board of Adjustment and mailed to the applicant, unless the action is appealed to the Washoe County Board of County Commissioners, in which case the outcome of the appeal shall be determined by the Washoe County Board of County Commissioners. Any appeal must be filed in writing with the Planning and Building Division within 10 calendar days from the date the written decision is filed with the Secretary to the Board of Adjustment and mailed to the applicant.

Applicant/ Owner: Christine Rosakranse
3935 Belmore Way
Reno, NV 89503
Email: Christine@beehernowfarm.com



Conditions of Approval

Special Use Permit Case Number WSUP19-0022

The project approved under Special Use Permit Case Number WSUP19-0022 shall be carried out in accordance with the conditions of approval granted by the Board of Adjustment on December 5, 2019. Conditions of approval are requirements placed on a permit or development by each reviewing agency. These conditions of approval may require submittal of documents, applications, fees, inspections, amendments to plans, and more. These conditions do not relieve the applicant of the obligation to obtain any other approvals and licenses from relevant authorities required under any other act.

Unless otherwise specified, all conditions related to the approval of this Special Use Permit shall be met or financial assurance must be provided to satisfy the conditions of approval prior to issuance of a grading or building permit. The agency responsible for determining compliance with a specific condition shall determine whether the condition must be fully completed or whether the applicant shall be offered the option of providing financial assurance. All agreements, easements, or other documentation required by these conditions shall have a copy filed with the County Engineer and the Planning and Building Division.

Compliance with the conditions of approval related to this special use permit is the responsibility of the applicant, his/her successor in interest, and all owners, assignees, and occupants of the property and their successors in interest. Failure to comply with any of the conditions imposed in the approval of the special use permit may result in the institution of revocation procedures.

Washoe County reserves the right to review and revise the conditions of approval related to this Special Use Permit should it be determined that a subsequent license or permit issued by Washoe County violates the intent of this approval.

For the purpose of conditions imposed by Washoe County, "may" is permissive and "shall" or "must" is mandatory.

Conditions of approval are usually complied with at different stages of the proposed project. Those stages are typically:

- Prior to permit issuance (i.e., grading permits, building permits, etc.).
- Prior to obtaining a final inspection and/or a certificate of occupancy.
- Prior to the issuance of a business license or other permits/licenses.
- Some "conditions of approval" are referred to as "operational conditions." These conditions must be continually complied with for the life of the project or business.

FOLLOWING ARE CONDITIONS OF APPROVAL REQUIRED BY THE REVIEWING AGENCIES. EACH CONDITION MUST BE MET TO THE SATISFACTION OF THE ISSUING AGENCY.

Washoe County Planning and Building Division

1. The following conditions are requirements of Planning and Building, which shall be responsible for determining compliance with these conditions.

Contact: Julee Olander, (775)-328-3627, jolander@washoecounty.us

- a. The applicant shall attach a copy of the action order approving this project to all administrative permit applications (including building permits) applied for as part of this special use permit.
- b. The applicant shall demonstrate substantial conformance to the plans approved as part of this special use permit. The Planning and Building Division shall determine compliance with this condition.
- c. The applicant shall submit construction plans, with all information necessary for comprehensive review by Washoe County, and initial building permits shall be issued within two years from the date of approval by Washoe County. The applicant shall complete construction within the time specified by the building permits. Compliance with this condition shall be determined by the Planning and Building Division.
- d. A note shall be placed on all construction drawings and grading plans stating:

NOTE

Should any cairn or grave of a Native American be discovered during site development, work shall temporarily be halted at the specific site and the Sheriff's Office as well as the State Historic Preservation Office of the Department of Conservation and Natural Resources shall be immediately notified per NRS 383.170.

- e. The following **Operational Conditions** shall be required for the life of the special use permit:
 - i. Failure to comply with the conditions of approval shall render this approval null and void. Compliance with this condition shall be determined by Planning and Building.
 - ii. Grading shall take place during daylight hours only.

Washoe County Engineering and Capital Projects

2. The following conditions are requirements of the Engineering Division, which shall be responsible for determining compliance with these conditions.

Contact: Leo Vesely, 775.328.2041, lvesely@washoecounty.us

- a. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted when applying for a building/grading permit. Grading shall comply with best management practices (BMPs) and shall include detailed plans for grading, site drainage, erosion control (including BMP locations and installation details), slope stabilization, and mosquito abatement. Placement or removal of any excavated materials shall be indicated on the grading plan. Silts shall be controlled on-site and not allowed onto adjacent property.
- b. All grading shall be in accordance with Article 110.438 Grading Standards.

*** End of Conditions ***



WASHOE COUNTY

COMMUNITY SERVICES DEPARTMENT

Engineering and Capital Projects

1001 EAST 9TH STREET
RENO, NEVADA 89512
PHONE (775) 328-3600
FAX (775) 328.3699

Date: October 30, 2019

To: Julee Olander, Planner

From: Leo Vesely, P.E., Licensed Engineer

Re: Special Use Permit Case **WSUP19-0022 – Rosakranse Wall**
APN 084-282-28

GENERAL PROJECT DISCUSSION

Washoe County Engineering staff has reviewed the above referenced application. The Special Use Permit is for the construction of a 9 foot retaining wall associated with a single family residence. The Engineering Division recommends approval with the following comments and conditions of approval which supplement applicable County Code and are based upon our review of the site and the application prepared by K2 Engineering. The County Engineer shall determine compliance with the following conditions of approval.

For questions related to sections below, please see the contact name provided.

GENERAL CONDITIONS

Contact Information: Leo Vesely, P.E. (775) 328-2041

1. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted when applying for a building/grading permit. Grading shall comply with best management practices (BMPs) and shall include detailed plans for grading, site drainage, erosion control (including BMP locations and installation details), slope stabilization, and mosquito abatement. Placement or removal of any excavated materials shall be indicated on the grading plan. Silts shall be controlled on-site and not allowed onto adjacent property.
2. All grading shall be in accordance with Article 110.438 Grading Standards.

TRAFFIC AND ROADWAY (COUNTY CODE 110.436)

Contact Information: Mitch Fink, (775) 328-2050

1. No comments.

UTILITIES (County Code 422 & Sewer Ordinance)

Contact Information: Tim Simpson, P.E. (775) 954-4648

1. No comments.



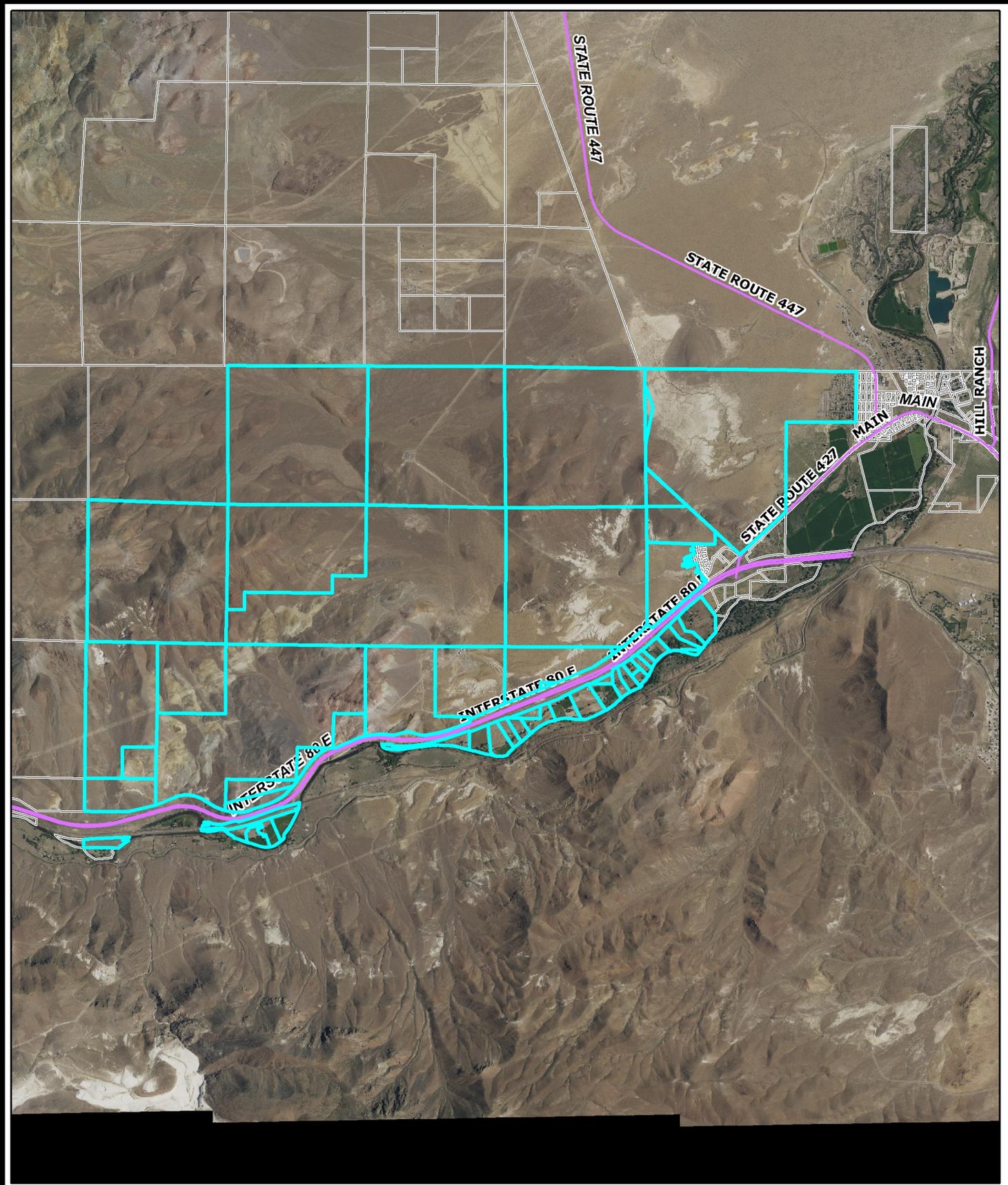
INTEGRITY



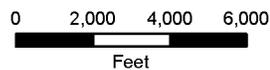
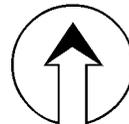
EFFECTIVE
COMMUNICATION



QUALITY
PUBLIC SERVICE



WSUP19-022 Rosakranse Wall
 Noticing Map - 1,600 feet



Community Services
 Department



1001 E Ninth St
 Reno, Nevada 89502

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information		Staff Assigned Case No.: _____	
Project Name: Hill-Rosakranse Residence			
Project Description: Single Family Residence, with retaining wall			
Project Address: 31000 Carlton Dr., Wadsworth, NV 89442			
Project Area (acres or square feet): 2084 sq. ft.			
Project Location (with point of reference to major cross streets AND area locator): Carlton Drive, south of I-80, on the Truckee River			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
084-282-28	18.437 ac.		
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: Christine Rosakranse		Name: Mike Reynolds	
Address: 3935 Belmore Way		Address: 2 Earthship Way	
Reno, NV Zip: 89503		Tres Piedras, NM Zip: 87577	
Phone: 775-622-2941 Fax:		Phone: 575-613-0224 Fax:	
Email: christine@beeherenowfarm.com		Email: michael@earthship.com	
Cell: 775-622-2941 Other:		Cell: Other:	
Contact Person: Christine Rosakranse		Contact Person: Mike Reynolds	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Christine Rosakranse		Name: Nicholas Hill	
Address: 3935 Belmore Way		Address: 3935 Belmore Way	
Reno, NV Zip: 89503		Reno, NV Zip: 89503	
Phone: 775-622-2941 Fax:		Phone: 775-622-2837 Fax:	
Email: christine@beeherenowfarm.com		Email: nick@beeherenowfarm.com	
Cell: 775-622-2941 Other:		Cell: 775-622-2837 Other:	
Contact Person: Christine Rosakranse		Contact Person: Nick Hill	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

**Special Use Permit Application
Supplemental Information**
(All required information may be separately attached)

1. What is the project being requested?

We are building a single family home with a 9 ft. retaining wall and soil berm. This application only refers to the retaining wall and berm. However, we have included the full extent of the grading (1,674.64 cubic yards) so that the committee can see that we are below the 5,000 cubic yards threshold.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

The site plan is attached to each packet as page A-0. An enlarged version is shown on A-0.1.

3. What is the intended phasing schedule for the construction and completion of the project?

Construction will begin at the end of March 2020 with the foundation pour. May-July 2020 will constitute work for the systems (solar, septic) and shell (walls, roof) of the home. August 2020 will be used for finishing work (cabinetry, tilework, painting).

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The home was designed to be low environmental impact, both during the building phase and over the long term.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

We hope that this will be an example of sustainable home design for the larger Washoe community.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

None.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

The non-attached garage and setbacks are shown on the site plan (A-0 and A-0.1).

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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9. Utilities:

a. Sewer Service	
b. Electrical Service	
c. Telephone Service	
d. LPG or Natural Gas Service	
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	
g. Water Service	

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #	App 60410	acre-feet per year	4
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

Attached to original packet.

10. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows FPD
b. Health Care Facility	Renown Medical Group - Fernley
c. Elementary School	Natchez
d. Middle School	Mendive
e. High School	Reed
f. Parks	Fernley Out of Town Park
g. Library	Fernley Branch Library
h. Citifare Bus Stop	N/A

**Special Use Permit Application
for Grading
Supplemental Information**
(All required information may be separately attached)

1. What is the purpose of the grading?

We are grading to create a berm behind the retaining wall (9 ft tall) at the north side of the house. Additional calculations for the total grading have been included. However, the grading totals 1,674.64 cubic yards and is therefore below the threshold of 5,000 cu. yds. So, this application is solely for the berm (cut and fill related to that) and retaining wall.

2. How many cubic yards of material are you proposing to excavate on site?

We will excavate 1,414.64 cubic yards.

3. How many square feet of surface of the property are you disturbing?

20, 800 sq.ft (Calculations listed under Total Disturbed Area located on page A-0.1)

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

None. We have demarcated our cut area as Area #1 and Area #2 on page A-0.1. This area will be graded to not greater than 3:1. Area #2 will be at 3% grade.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

The use of a berm and retaining wall are integral to the sustainable design of the home. They provide an insulative factor and thermal mass that help to regulate the internal temperature of the home, allowing for less energy consumption.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

No.

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain your answer.)

Yes and the calculations are listed on page A-0.1. Area #1 is the primary cut area (excavated area). Area #2 is a planned driveway. The berm (fill area) is shown around the north side of the home.

8. Can the disturbed area be seen from off-site? If yes, from which directions and which properties or roadways?

No.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

No.

10. What is the slope (horizontal/vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

Slope = 12 " x 6.5" with standard BMP's with swaddles as required.

11. Are you planning any berms?

Yes No If yes, how tall is the berm at its highest? 9 ft.

12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

Retaining wall not required. However, 9 ft rammed earth tire wall is part of design.

13. What are you proposing for visual mitigation of the work?

The home will blend into the landscape by design.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

No.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

Native plant mix from Comstock Seed, 15 lbs/acre. Light mulch, cottonwood.

16. How are you providing temporary irrigation to the disturbed area?

Hand watering from well water.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

N/A

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No X	If yes, please attach a copy.
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Account Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

CollectionCart

Collection Cart	Items	Total	Checkout	View
Collection Cart	0	\$0.00		

Pay Online

No payment due for this account.

Washoe County Parcel Information

Parcel ID	Status	Last Update
08428228	Active	10/14/2019 2:07:24 AM

Current Owner:
ROSAKRANSE, CHRISTINE

3935 BELMORE WAY
RENO, NV 89503

SITUS:
31000 CANTLON DR
WASHOE COUNTY NV

Taxing District
4000

Geo CD:

Legal Description

Section 13 Section 18 Lot 2A Range 23 Township 20 Range 24 SubdivisionName
_UNSPECIFIED SubdivisionName _UNSPECIFIED

Tax Bill (Click on desired tax year for due dates and further details)

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
2019	\$1,124.31	\$1,135.75	\$0.00	\$0.00	\$0.00
2018	\$1,071.46	\$1,082.11	\$0.00	\$0.00	\$0.00
2017	\$1,028.57	\$1,028.57	\$0.00	\$0.00	\$0.00
2016	\$999.07	\$997.61	\$0.00	\$0.00	\$0.00
Total					\$0.00

Disclaimer

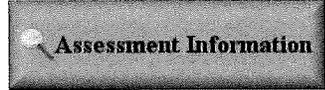
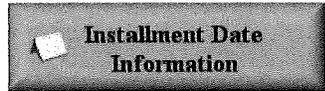
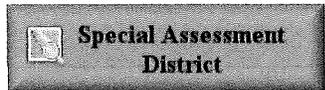
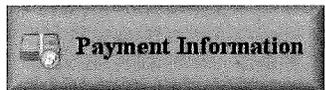
- **ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See Payment Information for details.

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845



Titles Report

Run Date: 9/29/2019 9:46:48 PM

App	Report Rcvd	Basin	New Owner	Sender	Rcpt #	Rpt Reject	Confirm Date
64010	07/21/2017	083	ROSAKRANSE, CHRISTIN	ROSAKRANSE, CHRISTIN	33140		08/27/2018

Hill-Roskranse Residence

K2 ENGINEERING
 860 Maestro Dr., Ste. A
 Reno, NY 13891
 P: (715) 355-0565
 F: (715) 355-0566
 www.k2eng.net

Hill-Roskranse Residence
 3100 Canton Dr.
 Washoe County, NV
 89510
 A.P.N.: 084-282-28

Brandt J. Kennedy, P.E.
 Jared A. Krupa, P.E.



REVISIONS	
Date	10/7/2019
Drawn	K2
Checked	JAK
Project No.	184150

Cover Sheet /
 Site Plan

A-0

GENERAL SITE NOTES

- ALL WORK MUST CONFORM TO LOCAL BUILDING CODES, CITY, COUNTY AND STATE ORDINANCES, SUBDIVISION REGULATIONS AND THE INTERNATIONAL MECHANICAL CODE, INTERNATIONAL ELECTRICAL CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL ENERGY CONSERVATION CODE (1989 EDITIONS).
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING GRADES, UTILITIES, AND DIMENSIONS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL NECESSARY EROSION CONTROL MEASURES AND OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE PUBLIC AGENCY OR UTILITY PROVIDER. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS.
- MAINTENANCE OF ADJACENT UTILITIES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR UTILITY OWNER OF ANY DISCREPANCIES.
- CONC. FLOORWORK TO BE FINISHED PER OWNER'S REQUIREMENTS.
- SLOPE LAIN AREAS FOR DRAINAGE MIN. 1/4" PER 1'-0".
- MAINTAIN EXISTING DRAINAGE WITHIN 3/8" TO 1/2" MIN. AS ONE AWAY FROM 2'-6" MIN. IN FRONT PROPERTY LINES AS REQUIRED TO PREVENT DRAINAGE STALLS. FINISH SLOPE OF DRAINAGE SHALL BE IN ACCORDANCE WITH THE ABOVE.
- THIS SITE IS LOCATED IN FEMA FLOOD ZONE X WHICH IS DETERMINED TO BE OUTSIDE OF THE 100 YEAR FLOOD PLAN. BOARD OF THE 100-YEAR FLOOD PLAN IS NOT WITHIN 100 FEET OF PROPERTY.
- THIS SITE IS SERVICED BY MUNICIPAL WATER AND MUNICIPAL SEWER.
- THE DESIGN FOR THIS SITE HAS BEEN BASED ON THE BEST AVAILABLE INFORMATION. ALL ASSUMED EXISTING INFORMATION, FIELD CONDITIONS, AND INFORMATION FROM ANY OTHER SOURCE, MODIFICATIONS TO THE INITIAL DESIGN IN ORDER TO ACCOMMODATE FIELD CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- NEITHER A TOPOGRAPHICAL OR BOUNDARY SURVEY WAS CONDUCTED FOR THIS SITE. THE BOUNDARY INFORMATION FROM THE WASHOE COUNTY GIS WEBSITE AND THE BOUNDARY SHOWN IS BASED ON RECORD INFORMATION. IT IS RECOMMENDED THAT PRIOR TO CONSTRUCTION, A SURVEY BE CONDUCTED TO VERIFY AND CORRECTLY PLACE THE INFRASTRUCTURE.
- SHOULD ANY PREVIOUS OR HISTORIC REMAINS/ARTIFACTS BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL IMMEDIATELY STOP AT THE DISCOVERY SITE AND THE STATE HISTORICAL SOCIETY SHALL BE NOTIFIED AT THE DISCOVERY SITE. ALL DISCOVERIES SHALL BE NOTIFIED TO RECORD AND PRESERVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND NOTIFICATION SHALL BE LIMITED TO A MAXIMUM OF TWO (2) WORKING DAYS FROM THE DATE OF NOTIFICATION.
- THESE ARE NO WATERCOURSES WITHIN 100' OF PROPERTY.

REVEGETATION

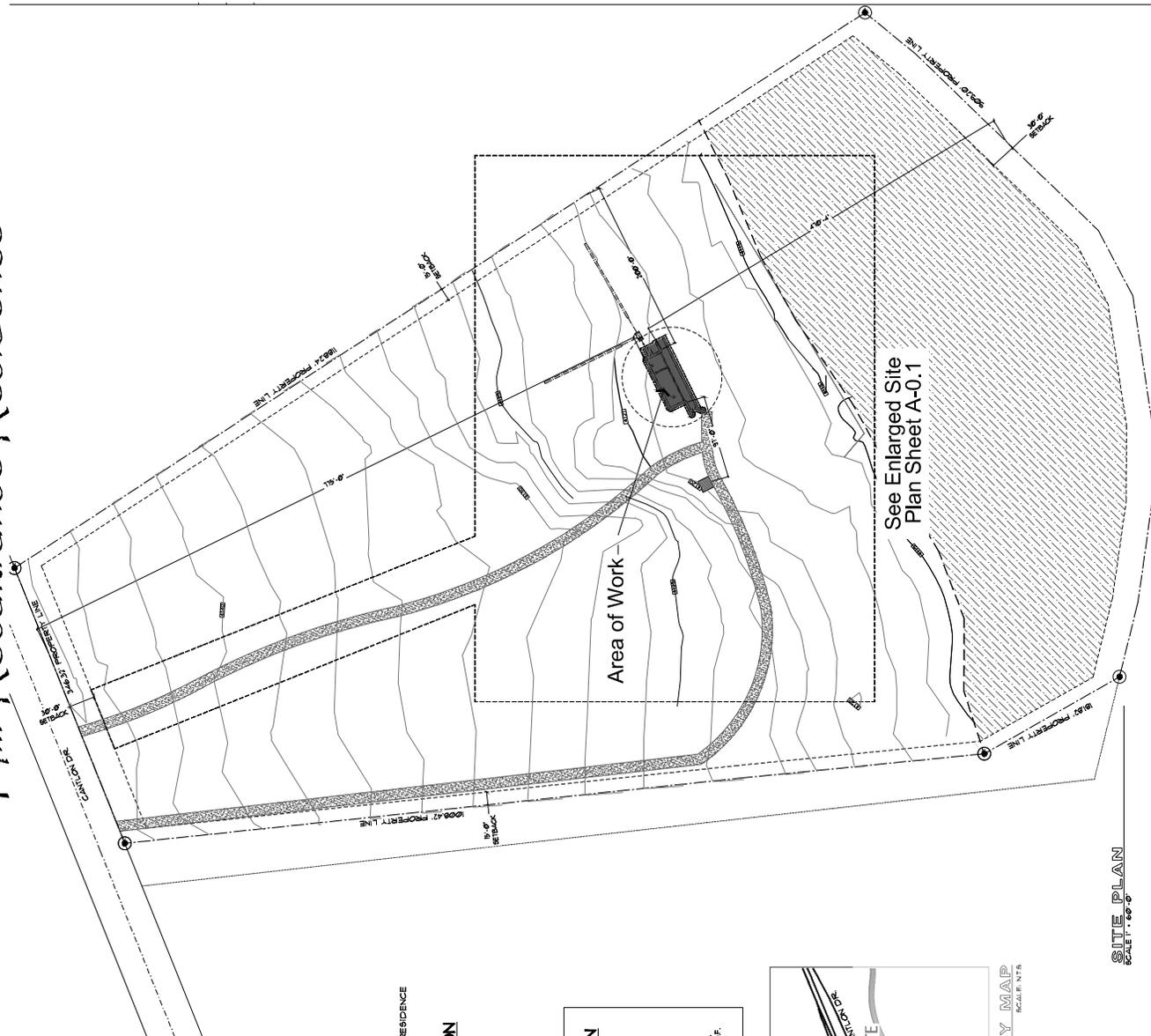
- VEGETATION PROTECTION (REQUIRED PER PLANS AND SUBDIVISION REQUIREMENTS).
- REVEGETATE ALL DISTURBED AREAS PER APPROVED COUNTY STANDARDS.

WATERPROOFING NOTES

- PROVIDE ADEQUATE SITE DRAINAGE INCLUDING BUT NOT LIMITED TO DRAINAGE PROTECTION TRENCHES AT DRIFTLINES, TRENCHES AT PAVING EDGES AND FRENCH DRAINS UNDER SLABS AND DRAINAGE TRENCHES AT PERIMETER WALLS. ALL DRAINAGE TRENCHES SHALL BE AT LEAST 12" DEEP WITH FILTER FABRIC AND WASHED GRAVEL. REFER TO EROSION CONTROL-CONSTRUCTION MANAGEMENT PLAN FOR SPECIFICS.
 - RETAINING WALLS MUST BE FULLY DRAINED TO PREVENT BUILD-UP OF HYDROSTATIC PRESSURE AND/OR SEEPAGE.
 - DRAIN BACK FILL ADJACENT TO WALLS SHALL BE 12 INCHES THICK AND EXTEND FROM FOOTING GRADE TO WITHIN 12 INCHES OF FINISH GRADE.
 - GEOTEXTILE USE 600 G/SY 48" PLACED AS A SEPARATOR DRAIN BACK FILL ADJACENT TO WALLS. DRAIN BACK FILL SHALL BE BOTH ABOVE AND BESIDE THE DRAIN ROCK.
 - 4" FRENCH DRAIN SHALL BE PLACED AT FOOTING GRADE AND SLOPED TO GRAY WATER COLLECTION POINT AND INSTALLED WITH PERFORATIONS FACE DOWN TYP. UNO.
 - FILTER FABRIC TO BE MIRAFLEX OR EQUIVALENT.
 - DRAIN PIPES TO BE SOLID WHERE THEY PASS THROUGH OR UNDER FOUNDATION STEEP WALLS.
 - USE HARD PERS PIPE AT BACK OF RETAINING WALLS.
 - ALL DRAIN PIPES TO SLOPE 7% MIN. TO DRAIN.
 - DRIFTLINE TRENCHES SHALL BE MIN. 18" WIDE BY 6" DEEP FILLED WITH CLEAN CRUSHED AGGREGATE.
 - PROVIDE FILTER FABRIC AROUND GRAVEL DRAINS AND TRENCHES.

UTILITIES

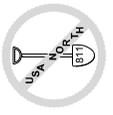
- WATER FOR PROPERTY IS SUPPLIED BY WELL.
- ELECTRICITY IS PROVIDED BY SOLAR PANELS.



See Enlarged Site
 Plan Sheet A-0.1

SITE PLAN
 SCALE: 1" = 40'-0"

VICINITY MAP
 SCALE: 1" = 1/4" MI



ENGINEER OF RECORD

K2 ENGINEERING
 860 MAESTRO DR., SUITE A
 RENO, NV 89311
 715-355-0565 - OFFICE
 715-355-0566 - FAX

SCOPE OF WORK

A NEW DETACHED 4,204 SF. SINGLE FAMILY RESIDENCE

CONTACT INFORMATION

CHRISTINE ROSKRANSE
 3335 BELMORE WAY
 RENO, NV 89503
 PHONE: (715) 622-2831

PROJECT INFORMATION

PARCEL
 3100 CANTON DR.
 WASHOE COUNTY, NV 89510
 A.P.N.: 084-282-28
 PARCELS: 1.25 ACRES
 ZONING: R-108

BUILDING
 PROPOSED RESIDENCE: 4,204 SF.
 EXISTING DETACHED GARAGE: 188 SF.

VICINITY MAP
 SCALE: 1" = 1/4" MI

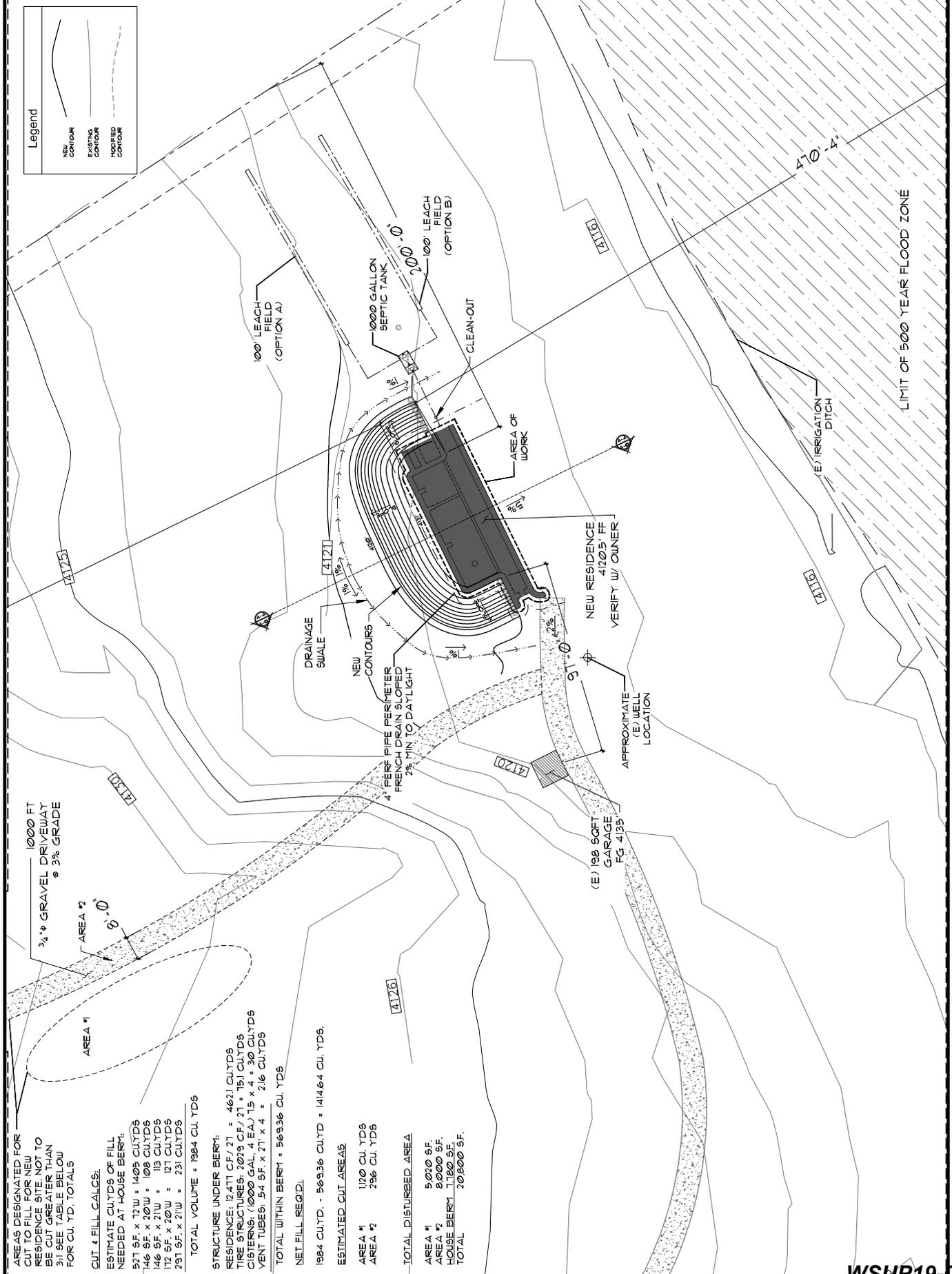
SITE PLAN
 SCALE: 1" = 40'-0"



Revisions	
Date	10/7/2019
Drawn	KJ
Checked	JAK
Project No.	184150

Site Plan

A-0.1



AREAS DESIGNATED FOR CUT TO FILL FOR NEW RESIDENCE SITE, NOT TO BE CUT GREATER THAN 2' BELOW TABLE BELOW FOR CU, YD, TOTALS

AREA #1
 AREA #2

1000 FT
 3/4" GRAVEL DRIVEWAY @ 3% GRADE

EST. 4 FILL CALCS.
 ESTIMATE CUTS OF FILL NEEDED AT HOUSE BERM:

571 SF. x 12"U = 1405 CUYDS
 146 SF. x 20"U = 1008 CUYDS
 146 SF. x 21"U = 113 CUYDS
 172 SF. x 22"U = 121 CUYDS
 291 SF. x 21"U = 231 CUYDS

TOTAL VOLUME = 1984 CU. YDS

STRUCTURE UNDER BERM:
 RESIDENCE: 12,411 CF / 27 = 462.1 CUYDS
 TIRE STRUCTURES: 2025 CF / 27 = 75.1 CUYDS
 CISTERNS: (1000 GAL, 4 EA.) 75 x 4 = 30 CUYDS
 VENT TUBES: 54 SF. x 21" x 4 = 216 CUYDS

TOTAL WITHIN BERM = 569.36 CU. YDS

NET FILL REQD.
 1984 CUYD. - 569.36 CUYD = 1414.64 CU. YDS.

ESTIMATED CUT AREAS

AREA #1 1120 CU. YDS
 AREA #2 256 CU. YDS

TOTAL DISTURBED AREA

AREA #1 5020 SF.
 AREA #2 8000 SF.
 HOUSE BERM 1180 SF.
 TOTAL 20800 SF.

