

Community Services Department

Planning and Building

SPECIAL USE PERMIT

(see page 7)

SPECIAL USE PERMIT FOR GRADING

(see page 9)

SPECIAL USE PERMIT FOR STABLES

(see page 12)

APPLICATION



Community Services Department
Planning and Building
1001 E. Ninth St., Bldg. A
Reno, NV 89512-2845

Telephone: 775.328.6100



July 8, 2021

Chris Bronczyk
Washoe County Planning and Building Division
1001 East 9th Street, Building A
Reno, Nevada 89512

**RE: Hidden Valley Reclaimed Water Tank Special Use Permit
Additional Grading and Temporary Irrigation Narrative**

Dear Chris,

The purpose of this letter is to provide updates to the Special Use Permit (SUP) request associated with the Hidden Valley Reclaimed Water Tank. Although no changes to the project are proposed from what was previously submitted, this letter addresses staff questions by providing additional narrative on the areas being graded and the stabilization of graded areas.

General Tank Information:

Proposed is a ± 1.0 million gallon reinforced concrete tank. The preliminary diameter of the tank is 76.8 feet with a preliminary tank height of 36.5 feet. The tank pad is set at an elevation of 4780 feet giving a top of tank elevation of approximately 4816.5 feet.

This tank is specifically proposed as a reinforced concrete tank to allow backfill against the tank in an effort to minimize any impact to views and reduce disturbance. By backfilling the reinforced concrete tank and constructing walls interior of the backfilled areas at the tank access point on the north side of the tank, a significant portion of the tank will be hidden from view as opposed of being in full view similar to a standard steel tank, most commonly constructed in this area. The tank material selection and grading strategy proposed provide the smallest disturbed area and the largest amount of screening of the proposed tank of all scenarios analyzed during the preliminary design stage.

Slope Grading Below the Tank:

During the construction of a concrete tank, the tank walls are cast in forms set in a staging and lay down area adjacent to the proposed tank and then installed in place with a crane once the reinforced concrete panels have cured. The lay down area must be very close to the proposed tank site both horizontally and vertically to accommodate placement of the concrete walls.

The staging area for this tank will be constructed below the tank in the area of the permanent fill slope. The preliminary construction lay down area is planned at three feet below the tank pad. There will be a 3:1 fill slope below the lay down area that will removed upon completion of the tank.

Once the tank is constructed, fill from the creation of the tank lay down pad will be moved up the slope and will be placed at 2:1 slope grading up from existing ground and against the tank and adjacent retaining walls as well as above the tank pursuant to the next discussion section below. The only purpose for this fill slope and the associated retaining walls is to minimize the impact of the project as viewed from neighboring properties. Instead of viewing the full side of the tank, much of the tank wall will be screened and buffered by the fill slope. The amount of the tank wall visible will vary so that the fill slope matches with surrounding slopes as much as possible. The fill slope is proposed to be between 12 feet and 32 feet tall against the 36.5 foot tall tank. This will be completed by backfilling against the sides of the tank and sloping down to meet the original ground slope below the temporary fill for the lay down area. This 2:1 slope below the tank will closely resemble the existing adjacent slopes in the immediate vicinity of the tank and is proposed to minimize the impact of the tank grading when viewing the site from neighboring properties.

A permanent 3:1 fill slope design alternate was reviewed in the preliminary design stages of the project. The larger area of disturbance associated with modifying the fill slope to a 3:1 slope would significantly increase the area of disturbance associated with the project since the existing slopes are steeper than 3:1 and a new 3:1 slope would not "catch" existing ground grades for a significant distance. 3:1 slopes would also require a significant amount of additional import of fills for this area resulting in additional unnecessary truck traffic. Additionally a 3:1 slope would be highly visible since the 3:1 slope would project beyond the natural 2:1 and steeper slopes immediately adjacent to the site. The 2:1 slopes maintain the character of the immediately adjacent slopes while 3:1 slopes are more in the character of the slopes that lie further below the site at lower elevations. This design minimizes the visual impact of the project from adjacent properties.

Slope Grading Above the Tank:

During initial construction, the cut slope above the tank will cut at a slope of 0.75:1 in the bedrock. This is a permanently stable slope in accordance with the geotechnical report. This temporary cut slope will extend from the tank pad at 4780 feet up to approximately 4859 feet. The tank walls will be constructed during this preliminary grading stage.

To minimize the exposed area of the tank and to provide as much visible screening as possible in the final constructed condition, the tank wall and cut slope above the tank will be backfilled. At the highest point, the backfill will extend up the wall of the tank for approximately 32 feet of the tank elevation to a ground elevation of 4812, allowing for tank vents above grade. To accommodate drainage around the tank, the backfill elevation gradually decreases towards the front of the tank. A 2:1 riprap slope is proposed above the tank from the 4812 elevation to an approximate elevation of 4842. At this elevation, a bench with a cut off swale will be placed to direct water away from the fill slope. The initial 0.75:1 bedrock cut slope will remain above this bench and swale from an elevation of 4842 to the top of the cut slope at 4859 feet. This occurs at the maximum area of disturbance and the 0.75:1 slope will gradually reduce to zero feet in height at the edges of the area of disturbance.

Temporary Irrigation:

To ensure slope stability, rip-rap or geofabric (per conditions) will be used and coupled with revegetation and staining in the proposed slope below the tank to ensure a natural appearance. Regardless of the mechanical stabilization method utilized, the slope below the tank will be revegetated with a native seed mix chosen to provide vegetation similar to that in the area of disturbance. For example, areas of rip-rap and geofabric can be covered with topsoil and revegetated which will hide the mechanical slope stabilization methods. The revegetated areas will be provided with temporary irrigation will ensure the establishment of native revegetation. The water for the temporary irrigation will likely be reclaimed water stored in the tank and will require a temporary booster pump on a temporary generator to provide spray irrigation for the slope. Upon successful establishment of vegetation on the slope, the temporary irrigation facilities will be removed as the native plants selected for the revegetation will be able to survive without permanent irrigation.

Attached to this letter are photographic examples of successful revegetation of 2:1 slopes on local projects designed by Christy Corporation. This same revegetation approach is proposed at the Hidden Valley tank site.

The additional photo simulations you requested have been submitted to Sophia Kirschenman at the Parks Department for review. We are working on requested revisions and have been informed by Sophia that the photo simulations can be submitted on July 12th based on her edits.

Please do not hesitate to contact me at mike@christynv.com or (775) 250-3455 with any questions or concerns. Thank you for your ongoing assistance with the project.

Sincerely,



Mike Railey
Planning Manager

cc: Alan Jones, P.E. – Washoe County Engineering and Capital Projects
Sophia Kirschenman – Washoe County Regional Parks and Open Space
Scott Benedict, P.E. – SB Engineering



April 13, 2021

Chris Bronczyk
Washoe County Planning and Building Division
1001 East 9th Street, Building A
Reno, Nevada 89512

RE: Hidden Valley Reclaimed Water Tank Special Use Permit

Dear Chris,

The purpose of this letter is to provide updates to the Special Use Permit (SUP) request associated with the Hidden Valley Reclaimed Water Tank. Although no changes to the project are proposed from what was previously submitted, this letter addresses additional sections of the Development Code to ensure that all applicable sections are applied and addressed.

It is requested that a waiver of formal landscaping requirements be added to the SUP request. Washoe County Regional Parks and Open Space staff concur that formal landscaping at the tank site will result in additional visual impacts rather than screen the new tank. As described in the submitted application report, native revegetation is proposed in lieu of formal landscaping. This, coupled with partially burying the tank and using earth tone colors, will serve to visually screen the tank and allow it to better blend with its surroundings.

In addition to the landscape waiver, it is requested that deviations to Washoe County grading standards be added to ensure all provisions of section 110.438 of the Development Code are addressed. These deviations can be approved as part of the SUP request currently under review by Washoe County. Additionally, the requested deviations are depicted on the submitted plans and will not require updated plans sets for submittal.

The following outlines the sections of code where deviation is proposed, along with justification for the variation:

Section 110.438.45(a):

Grading shall not result in slopes in excess of, or steeper than, three horizontal to one vertical (3:1) except as provided below:

(1) Storm drainage improvements.

(2) Cut and fill slopes less than thirty (30) inches in height.

(3) Cut slopes proposed to be located behind civic, commercial and industrial buildings, when the cut slope is shorter than and substantially screened by the proposed building. Such slopes are subject to approval of a Director's Modification of Standards by the Director of Community Development.

(4) The County Engineer may waive this requirement for up to fifteen (15) percent of the length of the cut and/or fill where the presence of rock or, in his determination, other practical hardships exists.

As depicted on the submitted plans, 2:1 slopes are proposed adjacent to the tank with 0.75:1 slopes included in a portion above the tank. Water tanks pose a unique challenge from a grading perspective given the fact that they must be located in steep areas to provide proper pressures, etc. In the case of the Hidden Valley tank, surrounding slopes are far steeper than 3:1. Thus, providing 3:1 slopes adjacent to the tank would result in significantly more grading, tremendous visual impacts and scarring, and an overall unnatural post-development appearance.

As proposed, grading is designed to quickly "catch" the slopes that surround the tank site. This is accomplished by utilizing 2:1 slopes. To ensure slope stability, rip-rap or geofabric (per conditions) will be used and coupled with revegetation and staining to ensure a natural appearance. For example, areas of rip-rap and geofabric can be covered with topsoil and revegetated which will hide the mechanical slope stabilization methods. Temporary irrigation will ensure the establishment of native revegetation. Once complete, the post development conditions will mimic the natural surroundings and be far less visually obtrusive compared to 3:1 slopes. The area of 0.75:1 slope is supported by the geotechnical analysis and provides transitions to steep terrain within natural bedrock.

The requested deviation is also supported by provision 110.438.45(a)3 as noted above. The cut slopes will be substantially screened by the tank (a civic use type) and are largely reflective of backfill which will further screen disturbance. Furthermore, sections 110.438.45(g) and (h) also support the requested variation. Section (g) calls for "rounding or contouring" at the intersections of manufactured and natural slopes. As shown on the submitted grading plans, this is what is being proposed with the Hidden Valley tank. The proposed grading will result in a much more natural appearance that allows manufactured slopes to quickly catch that of the adjoining natural terrain. This is encouraged per section (h). For reference, section 110.4387.45(g) and (h) are listed on the following page:

(g) Utilize a gradual transition or “rounding or contouring” of the manufactured slope at the intersection of a manufactured cut or fill slope and a natural slope. Engineered slopes shall not intersect natural slopes at an angle greater than forty-five (45) degrees (see Figure 110.438.45.2).

(h) Visually integrate all slope faces (cut or fill) into the natural terrain by a gradual transition or “contouring/rounding” of the manmade landforms into the natural terrain. To the extent practicable ensure that hillside grading results in undulating naturalistic appearance, consistent with the surrounding undisturbed terrain (see Figure 110.438.45.3).

Section 110.438.45(c):

Finish grading shall not vary from the natural slope by more than ten (10) feet in elevation. Exposed finish grade slopes greater than ten (10) feet in height may be allowed upon the approval of a director’s modification of standards by the Director of Community Development upon recommendation by the County Engineer.

(1) Approval of a director’s modification of standards requires a determination that:

- (i) The proposed cut and/or fill slopes include stepped-back structural containment (retaining walls) that form terraces, and;*
- (ii) The proposed terraces include landscaping, are a minimum of six (6) feet in width, and have a slope flatter than three horizontal to one vertical (3:1).*
- (iii) Retaining walls used to create terraces are limited to a maximum vertical height of ten (10) feet, when located outside any required yard setback.*
- (iv) Terrace widths shall be at least sixty (60) percent of the height of the higher of the two (2) adjacent retaining walls.*
- (v) Bench widths shall be at least four (4) feet.*

(2) An exception to the terrace width may be allowed subject to the approval of a director’s modification of standards by the Director of Community Development, upon recommendation by the County Engineer for cuts into stable rock, supported by a geotechnical report.

In the case of the Hidden Valley tank, finished grading will vary from the natural slope for a distance greater than 10 feet. As designed, the slope behind the proposed tank includes a 2:1 backfill slope that transitions to a 0.75:1 slope at a location where it meets natural bedrock. This design is consistent with recommendations of the geotechnical investigation. Overall, the disturbed area extends approximately 42.5 feet above the tank at this location.

This request is supported by section 110.438(c)2 noted above. The additional slope variation is within backfill and natural bedrock as identified in the geotechnical report. Additionally, this area will be stabilized and/or revegetated per the conditions of approval applied to the SUP.

As depicted in the submitted materials and photo simulations, the disturbed area above the tank is largely screened by the natural topography of the site and the proposed design. The tank itself is “tucked” into the saddle of the hillside. As such, the proposed disturbance is not visible from developed park facilities to the northwest or southwest. The disturbance will be visible from areas within the park that are west/southwest of the new tank. However, the purpose of the increased slopes is to allow for grading to catch more quickly with natural grade and transition smoothly with natural terrain. Once revegetation establishes, the grading will have a much more natural appearance that blends the disturbed area with natural surroundings and will not be visually obtrusive within the park. Residences to the west are over ¼ mile from the tank site further ensuring that visual impacts are more than adequately mitigated.

As presented, a retaining wall will be located around the tank. Backfill will occur behind the tank, but the wall will include heights up to 32± feet. Thus, it is proposed to vary the 10 foot height standard and eliminate the required terracing. Terracing of walls would result in significantly more disturbance. This would also result in an unnatural appearance with substantial visual impacts within the park. As designed, the increased wall heights are largely hidden by the natural topography and contouring of graded slopes. This coupled with planned revegetation will ensure a much more natural post-development appearance and eliminates the potential for significant hillside scarring.

As noted previously, water tank sites are unique in that they must be located in hillside areas. The standards included in section 110.438 are largely intended to apply to conventional development such as subdivisions. In this case, a unique use is proposed. The modifications proposed will serve to fulfill the intent of the grading standards by reducing the amount of required grading and allowing for a much more natural appearance in the post-development condition.

An updated grading plan is attached to this letter and calls out the top of wall heights proposed within the tank site. This clearly shows the areas of wall that are in excess of 10 feet in height and more clearly conveys the requested deviation from a graphical perspective.

Section 110.438.50(a):

In addition to the requirements in Section 110.438.45, cut slope design and construction will also be based on a geotechnical report as required by Section 110.438.36 unless not required by the County Engineer.

(a) The use of riprap and gabions as a mechanical stabilization for cut slopes is prohibited, except where essential for safe access, for passage within the rights-of-way of public roads, and for storm drainage control device(s).

With the proposed 2:1 and 0.75:1 slopes, the use of mechanical stabilization is proposed. This will occur in the form of rip rap, geo fabric, or a combination of both. Final determination of stabilization methods will be determined with final design, with consultation by a geotechnical engineer. It is requested that rip rap specifically be allowed to allow flexibility with final design. In areas where rip rap is implemented, it can then be covered with topsoil and revegetated. This will hide the mechanical stabilization and ensure a natural appearance that blends with the native slopes. In areas where rip rap is less visible or hidden, staining of the rock surface can also be implemented to reduce visual impacts.

The deviations described above are requested primarily to reduce visual impacts of the water tank project. Strict application of Development Code standards will result in significantly more disturbance and visual impacts that require additional mitigation. As proposed, visual impacts will be greatly reduced based on less grading and the ability to blend manmade slopes with the adjoining natural terrain. This will appear natural in the post development condition rather than manmade (as code would dictate). This approach is fully consistent with the intent of the code, which is to reduce visual impacts, scarring, and provide a sensitive approach to site grading.

Please do not hesitate to contact me at mike@christynv.com or (775) 250-3455 with any questions or concerns. Thank you for your ongoing assistance with the project.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Railey". The signature is fluid and cursive, with the first name "Mike" being more prominent than the last name "Railey".

Mike Railey
Planning Manager

cc: Alan Jones, P.E. – Washoe County Engineering and Capital Projects
Sophia Kirschenman – Washoe County Regional Parks and Open Space
Scott Benedict, P.E. – SB Engineering

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: Hidden Valley Reclaimed Water Tank			
Project Description: A SUP to allow for the establishment of a Utility Service use in the PR regulatory zone and to allow grading per Section 110.438.35(1) and (2).			
Project Address: Southern terminus of Parkway Drive at Hidden Valley Regional Park - 4740 Parkway Drive			
Project Area (acres or square feet): A 2.5 acre portion of an overall 480 acre parcel.			
Project Location (with point of reference to major cross streets AND area locator):			
The site is located within south-central portion of Hidden Valley Regional Park. The park is located at the southern terminus of Parkway Drive and the eastern terminus of Mira Vista Drive in the Southeast Truckee Meadows Area Plan.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
051-330-01	480 acres		
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: Washoe County		Name: Christy Corporation, Ltd.	
Address: 1001 E. Ninth St., Bldg. A		Address: 1000 Kiley Pkwy.	
Reno, NV	Zip: 89512	Sparks, NV	Zip: 89436
Phone: 775-954-4651	Fax:	Phone: 775-502-8552	Fax:
Email: ajones@washoecounty.us		Email: mike@christynv.com	
Cell:	Other:	Cell: 775-250-3455	Other:
Contact Person: Alan Jones		Contact Person: Mike Railey	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Same as Above		Name: SB Engineering	
Address:		Address: 586 Citadel Way	
	Zip:	Reno, NV	Zip: 89503
Phone:	Fax:	Phone: 775-223-0922	Fax:
Email:		Email: scott@sbcivilengineering.com	
Cell:	Other:	Cell: 775-223-0922	Other:
Contact Person:		Contact Person: Scott Benedict, P.E.	
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?

This SUP request will allow for the construction (and associated grading) of a new 1,000,000 reclaimed water tank within the PR regulatory zone (Hidden Valley Regional Park). Refer to attached report for a detailed request description.

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.)

Refer to attached report, site plan, and engineering drawings.

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

The project will be completed in a single phase.

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?

As described in the attached report, the tank site was carefully chosen to serve the needs of Washoe County while not impacting the park facility or view sheds within the area. Refer to report for a thorough analysis.

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

The project will provide needed reclaimed water storage that will be used to irrigate park facilities and implement County water saving measures. Refer to attached report for a detailed description.

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

Impact mitigation measures include partially burying the tank, native revegetation, and painting the tank to blend with the natural environment. Refer to attached report for a detailed analysis.

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.

Refer to attached report and plans for specific details related the above noted items.

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
------------------------------	--

9. Utilities:

a. Sewer Service	Truckee Meadows Water Reclamation Facility
b. Electrical Service	NV Energy
c. Telephone Service	Charter Communications or AT&T
d. LPG or Natural Gas Service	NV Energy
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	Charter Communications or AT&T
g. Water Service	Truckee Meadows Water Authority

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 #		acre-feet per year	
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).

The tank will be partially buried and be painted to blend with natural surroundings. Native revegetation will also occur. Refer to attached report for mitigation measures and photo simulations.

10. Community Services (provided and nearest facility):

a. Fire Station	TMFPD - Hidden Valley Station
b. Health Care Facility	Renown Regional Medical Center
c. Elementary School	Hidden Valley Elementary School
d. Middle School	Pine Middle School
e. High School	Wooster High School
f. Parks	Hidden Valley Regional Park
g. Library	Washoe County - Sparks Branch
h. Citifare Bus Stop	McCarran Boulevard at Pembroke Drive

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

1. What is the purpose of the grading?

The grading is required to for the tank itself and is necessary to ensure proper elevation for pressure zones, etc. Refer to attached report for a detailed rationale and analysis.

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

Refer to attached report and plans for specific details related the above noted items.

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

2.5 acres for the tank with additional for access and pipelines. See attached.

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

The attached engineering plans include cut/fill quantities for the project.

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

No. The grading is needed given the fact that water tanks must include a higher elevation in order to properly function. The attached report provides a very specific description of why the tank and proposed grading are necessary.

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. The site is currently undisturbed.

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

Yes. Refer to attached engineering plans.

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

The disturbance will be visible from within Hidden Valley Regional Park as well as homes that border the park to the west. Refer to report for visual impact mitigation measures and post-construction photo simulations.

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)?

Not applicable.

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?

Slopes will include a mix of 2:1 and 0.75:1 as described in the attached report and noted on the engineering plans. Native revegetation and retaining walls will be used to stabilize slopes. Refer to attached report for additional details.

11. Are you planning any berms?

Yes	No <input checked="" type="checkbox"/>	If yes, how tall is the berm at its highest?
-----	--	--

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)?

Wall height varies with a maximum of 32-feet. Refer to attached report and plans.

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

The tank will be partially buried and be painted to blend with natural surroundings. Native revegetation will also occur. Refer to attached report for mitigation measures and photo simulations.

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

A small number of pinyon pines/junipers will be removed and are noted on the attached plans.

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?

Seed mix will be per Washoe County standards and best management practices.

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

Refer to attached revegetation plan for specific irrigation information.

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

This application will be circulated to the WSCD for review and input on final revegetation seed mix.

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

Yes	No <input checked="" type="checkbox"/>	If yes, please attach a copy.
-----	--	-------------------------------

Property Owner Affidavit

Applicant Name: Washoe County

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
COUNTY OF WASHOE)

I, Eric Crump
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 051-330-01

Printed Name Eric Crump

Signed [Signature]

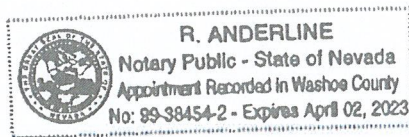
Address 1001 E. Ninth St.
Reno, NV 89512

Subscribed and sworn to before me this 11 day of February, 2021.

(Notary Stamp)

[Signature]
Notary Public in and for said county and state

My commission expires: 4/2/2023



*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

Hidden Valley Reclaimed Water Tank Special Use Permit



Prepared by:



March 8, 2021

HIDDEN VALLEY RECLAIMED WATER TANK

Special Use Permit

Prepared for:

Washoe County

Attention: Community Services Department – Engineering and Utilities

1001 E. Ninth Street, Building A

Reno, Nevada 89512

Prepared by:

Christy Corporation, Ltd.

1000 Kiley Parkway

Sparks, Nevada 89436

(775) 502-8552

March 8, 2021

Table of Contents

Introduction	1
Project Location	1
Existing Conditions	3
Project Request	4
Special Use Permit Findings	10

List of Figures:

Figure 1 – Vicinity Map.....	1
Figure 2 – Tank Location Map	2
Figure 3 – Existing Conditions	3
Figure 4 – Overall Construction Site Plan.....	5
Figure 5 – Overall Final Site Plan	6
Figure 6 – Photo Simulations.....	7

Appendices:

Washoe County Development Application
Owner Affidavit
Special Use Permit Application
Property Tax Verification

Attachments:

Preliminary Civil Improvement Plans and Reports
Preliminary Revegetation Plan
Geotechnical Study

Hidden Valley Reclaimed Water Tank - Special Use Permit

Introduction

This application includes the following request:

- A **Special Use Permit** to allow for the establishment of a Utility Services use (reclaimed water tank) in the Parks and Recreation (PR) regulatory zone and to permit grading per Sections 110.438.35(1) and 110.438.35(2) of the Washoe County Development Code.

Project Location

This application proposes to locate a new reclaimed water tank within Hidden Valley Regional Park. The park is located at the southern terminus of Parkway Drive, east of the Hidden Valley neighborhood within the Southeast Truckee Meadows Area Plan. Specifically, the tank will be located on a portion of the overall 480± acre park site (APN # 051-330-01). Figure 1 (below) depicts the location of Hidden Valley Regional Park while Figure 2 (following page) depicts the proposed tank location within the overall park parcel.

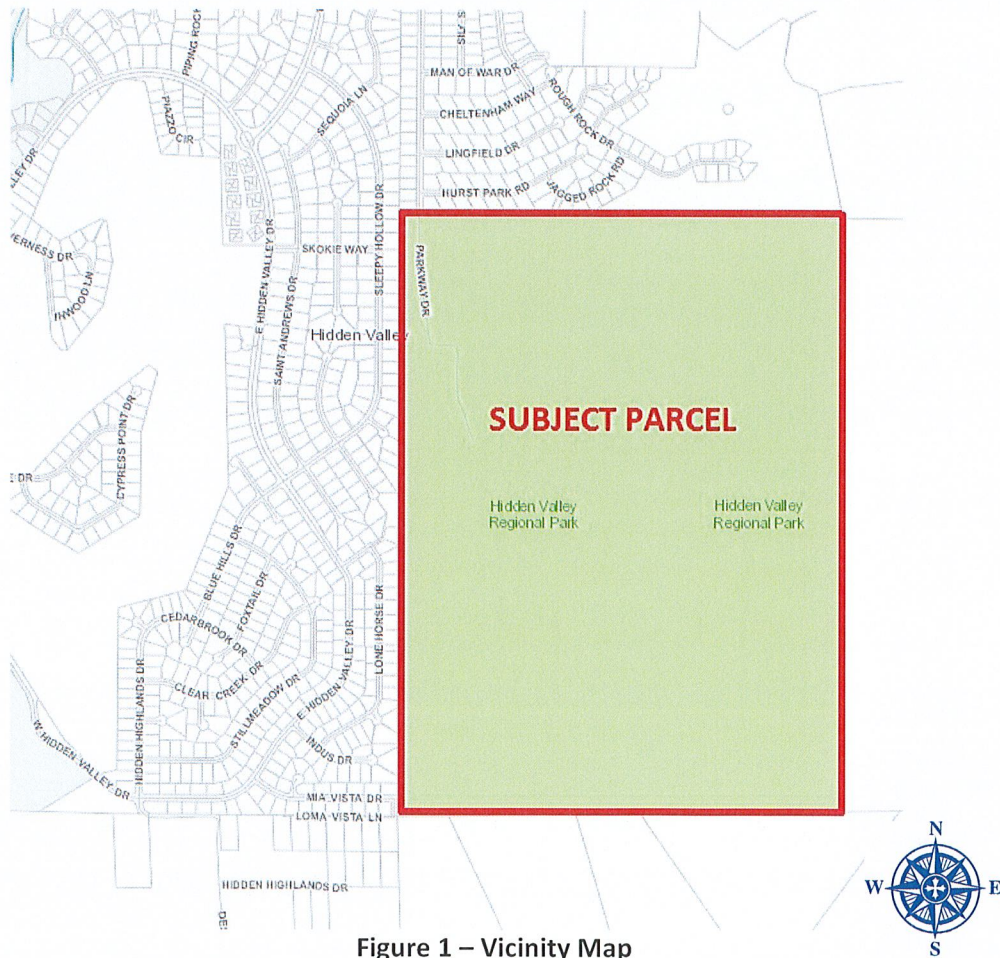


Figure 1 – Vicinity Map

Hidden Valley Reclaimed Water Tank - Special Use Permit

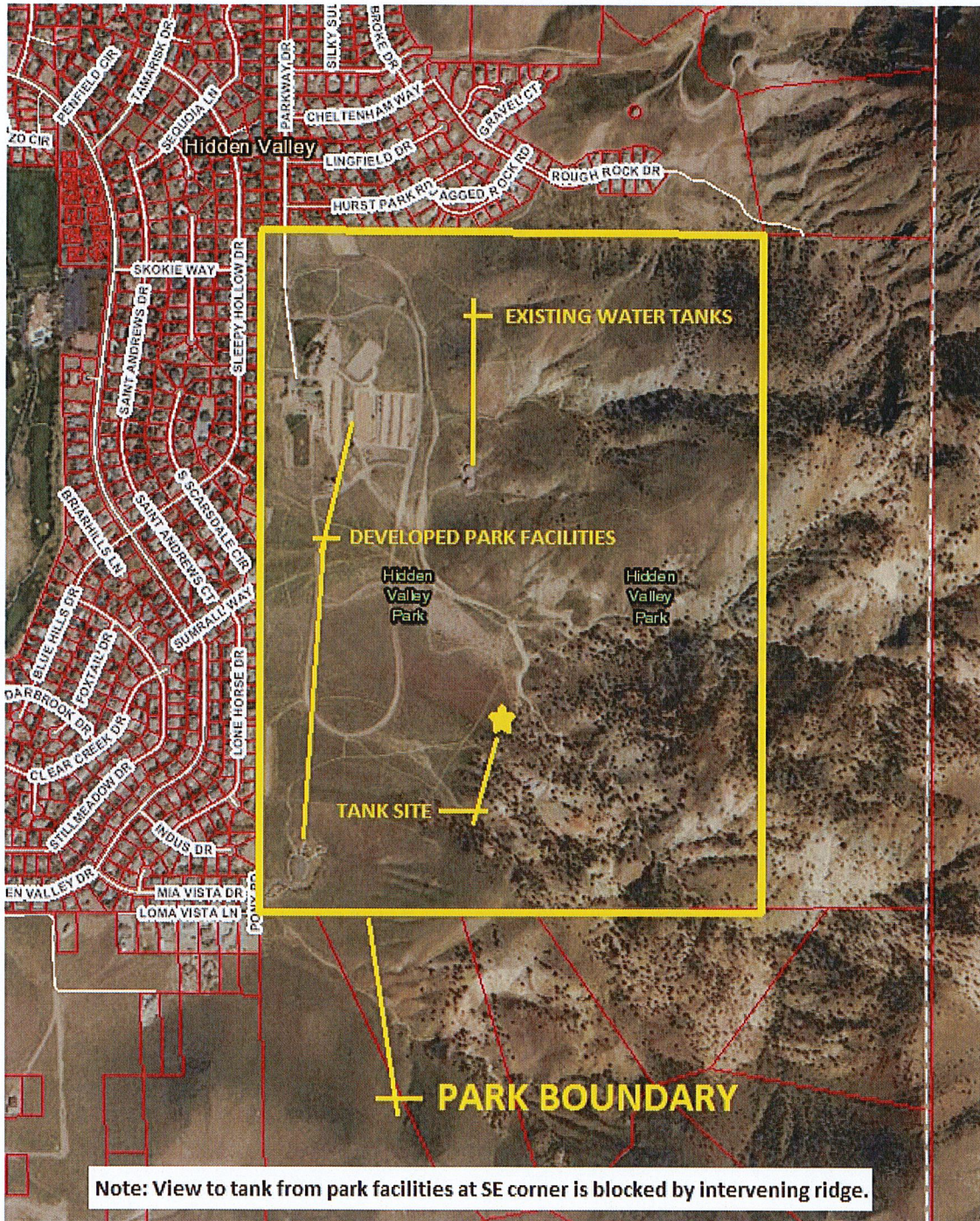


Figure 2 – Tank Location Map

Hidden Valley Reclaimed Water Tank - Special Use Permit

Existing Conditions

The proposed reclaimed water tank will be located within an undeveloped area of Hidden Valley Regional Park at the eastern portion of the park site, within the foothills of the Virginia Range. The area surrounding the tank site includes native vegetation and scattered pinion pines. Various informal walking/hiking trails traverse this portion of the park and provide access into the Virginia Range which essentially forms the eastern park boundary. Figure 3 (below) depicts the existing onsite conditions.

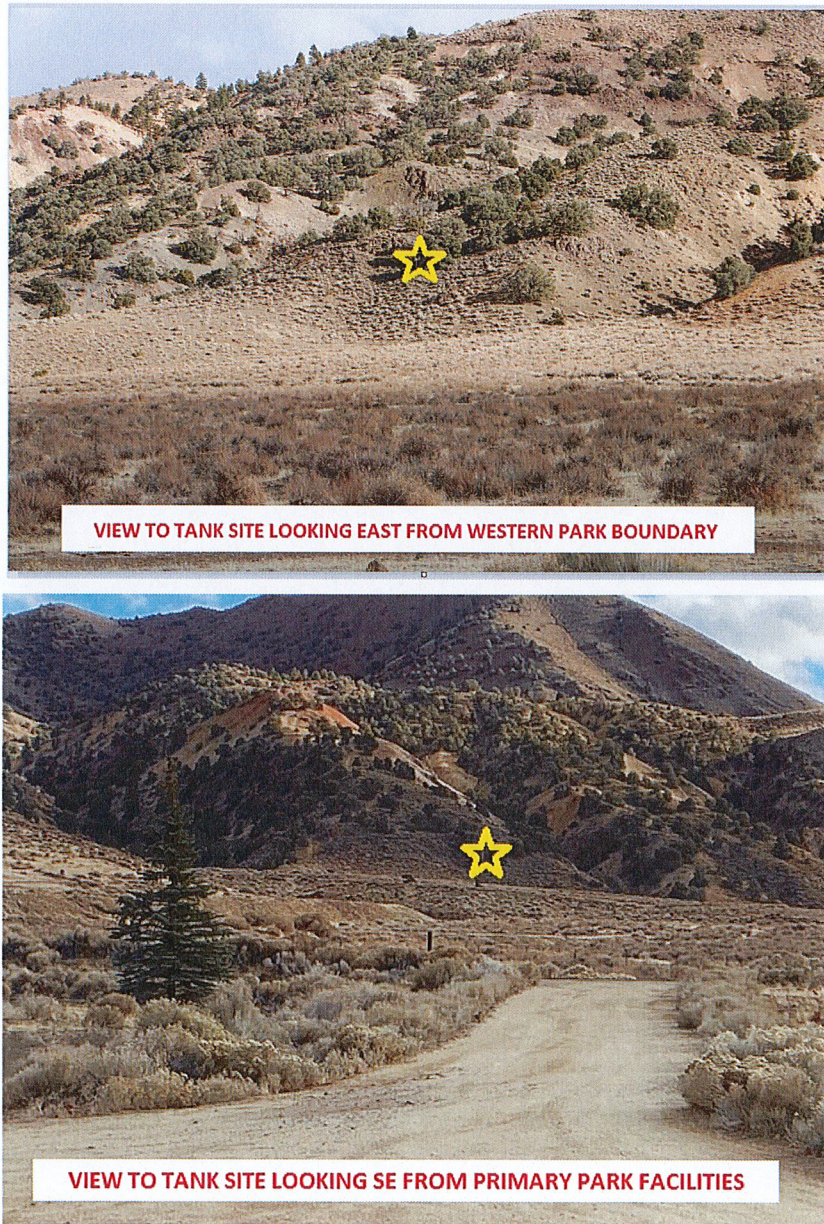


Figure 3 – Existing Conditions

Hidden Valley Reclaimed Water Tank - Special Use Permit

Project Request

Washoe County is requesting Special Use Permit (SUP) to construct and install a 1,000,000 gallon reclaimed water tank within Hidden Valley Regional Park. The tank is needed to expand reclaim service to the Hidden Valley and eastern Reno areas. Reclaim from this expansion will be used to irrigate park facilities, potential service to the Hidden Valley Country Club golf course, future park greenbelt improvements and integration with the City of Reno reclaim system for regional benefits. The use of reclaimed water will offset potable water use within the park that can be reallocated for other purposes.

The proposed tank location was compared to alternate sites and was deemed ideal to meet the needs of the reclaim system expansion. The proposed site is located at the elevation necessary to meet system pressure criteria. The proposed location within the park at the elevation needed provides for the least amount of visual obtrusion being partially buried and “tucked” into the adjoining hillside.

Welded steel and prestressed concrete tank options were evaluated at the preferred site. Even at a higher construction cost the prestressed tank option was selected due to the ability to place backfill directly on the walls which allows burying portions of the tank into the hillside, reducing visibility. Portions of the tank that are not buried will be painted a dark brown to blend with the surrounding terrain. The tank site will be graded into the hillside with cut occurring on the southeast side of the tank site, creating a pad for the tank base. Retaining walls will be added to depress the access road and provide access to the base of the tank for maintenance. The addition of these walls will allow a fill slope to be built up on the northwest side of the tank that will create a berm that will partially shield the tank. The area of fill westward from the tank will be revegetated with native vegetation to blend the disturbed locations with the surrounding natural environment. The overall area of disturbance associated with tank construction (excluding the access road) is approximately 2.5± acres of which 1.6± acres will be revegetated.

The diameter of the tank is 77 feet with a total height of 36 feet 6 inches at its center. The facility will include a 6-foot vinyl coated chain link security fence for security purposes and to prevent public access to the tank. A 15-foot wide access road (approximately 2,000 lineal feet in length) will extend from the existing internal maintenance loop road within the park to the tank site. This roadway will not be paved but will include an all weather surface for year-round access by Washoe County staff. Approximately 11,000± lineal feet of 20/24-inch pipeline will be constructed from the intersection of Veterans Parkway and Steamboat Creek where the Hidden Valley Phase 1 main ends to the tank site, Approximately 3,865-feet of this main is within the park boundary.

As part of the overall project design development, careful consideration was given to the placement of the tank, access road and related pipelines. A variety of sites within the park were evaluated based on elevation, grading impacts, construction cost, long-term visual impacts. The proposed site was chosen based on the least visual impact to the park and surrounding areas. The site location also allows for the tank to be partially buried which further serves to mitigate visual impacts.

Hidden Valley Reclaimed Water Tank - Special Use Permit

Although no homes directly abut the tank site, homes do exist along the western boundary of the park. The new tank will be located approximately 1,800 feet from the nearest residence (see Figure 4 below). Areas disturbed as a result of grading for the tank will be recontoured to blend with the natural slope of the adjoining area to provide a natural post-development appearance. Native revegetation of disturbed areas/slopes will be implemented and allow for the facility to be largely screened and blend with the surrounding natural environment. The view of existing residences eastward to the Virginia Range will not be obstructed as a result of this proposal.

Figure 4 (below) provides an overall site plan of the proposed reclaimed water tank and includes the temporary "lay down" area that will occur during construction, while Figure 5 (following page) depicts the final site plan with the lay down area restored.

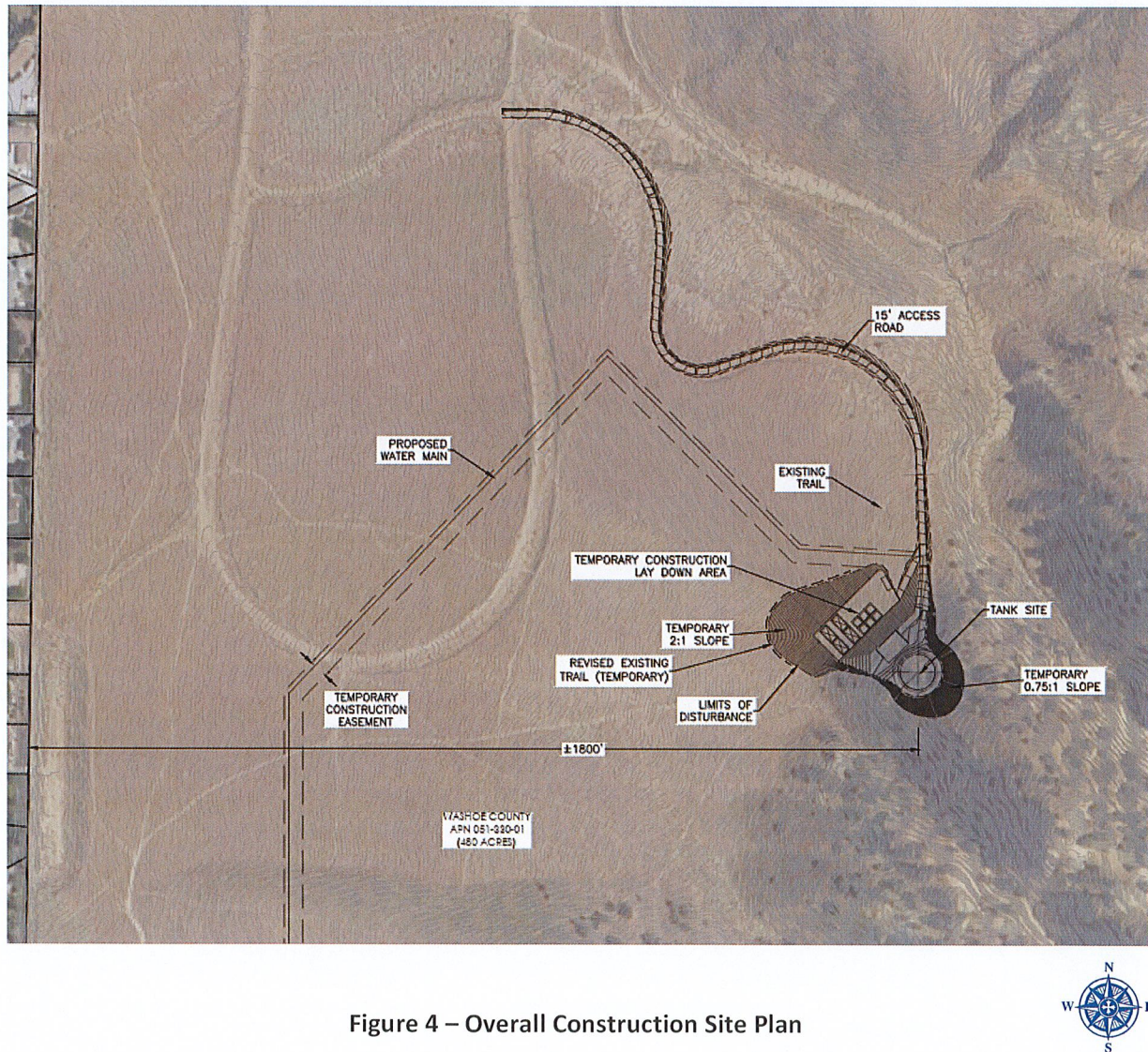


Figure 4 – Overall Construction Site Plan

Hidden Valley Reclaimed Water Tank - Special Use Permit

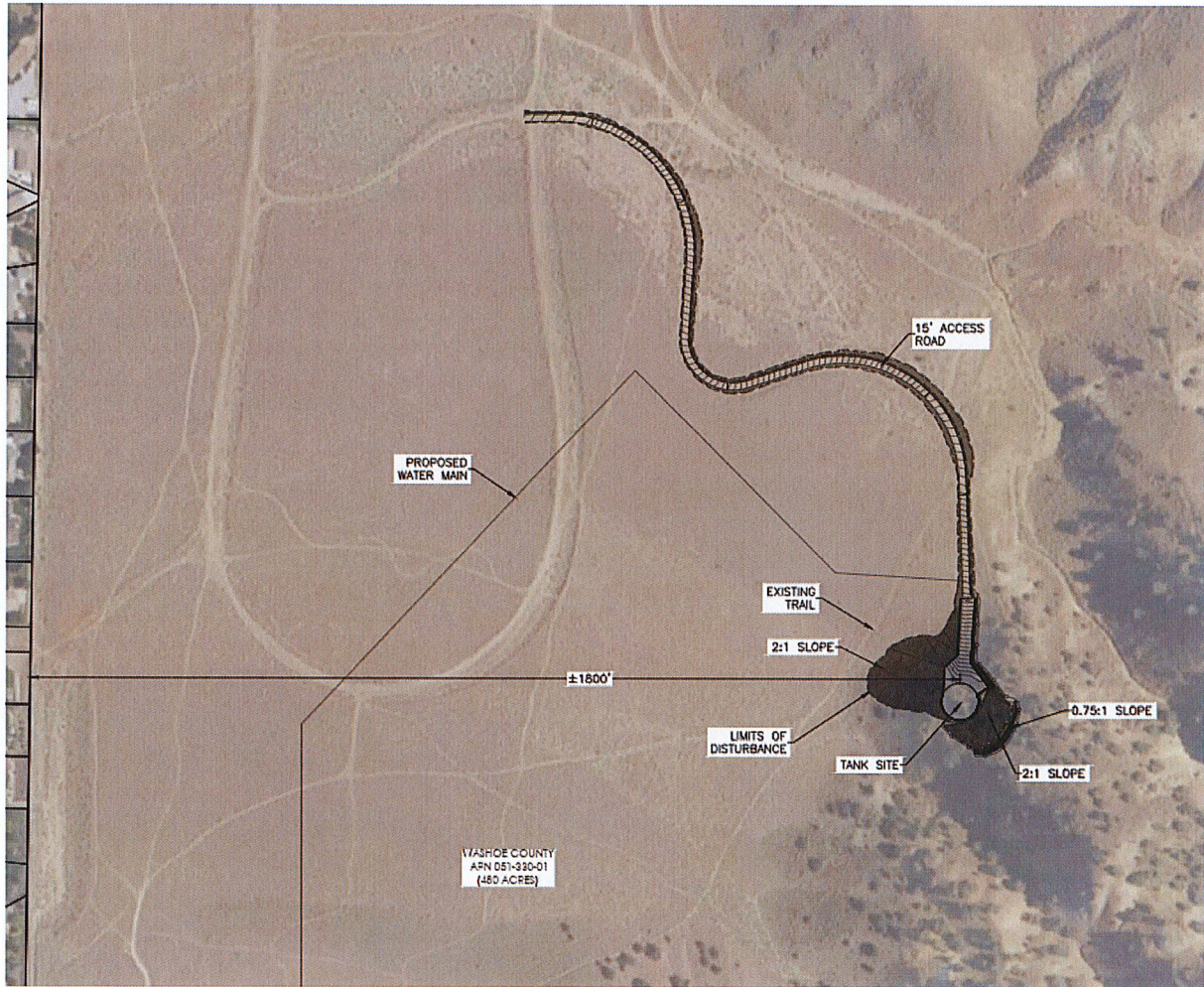


Figure 5 – Overall Final Site Plan

Hidden Valley Reclaimed Water Tank - Special Use Permit

Figure 6 (below) provides photo simulations of the proposed tank from the existing developed facilities within Hidden Valley Regional Park, as well as from the western property boundary, near existing home

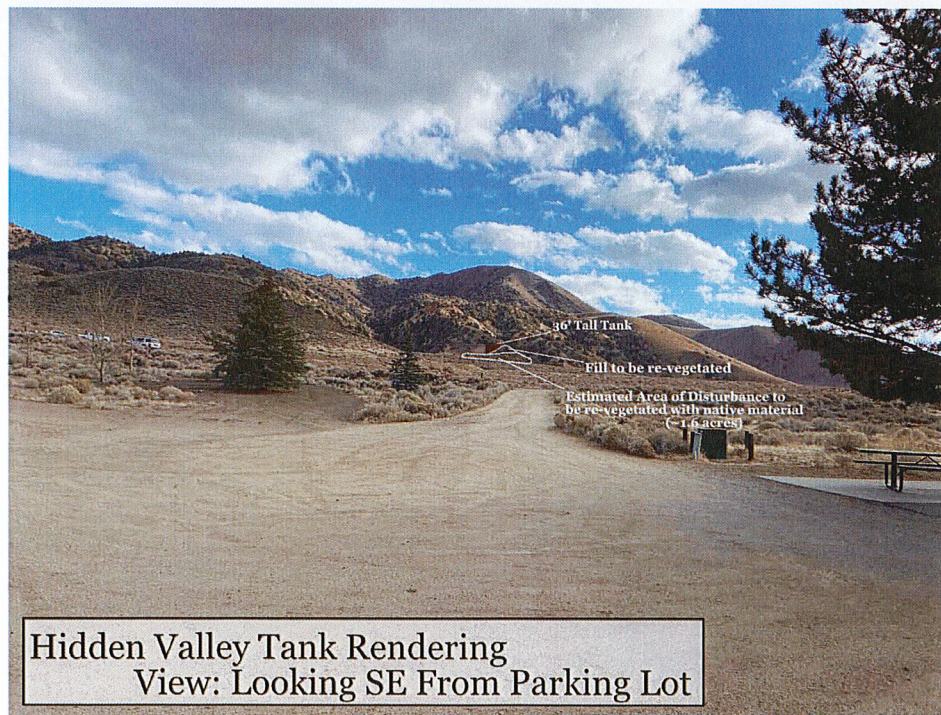
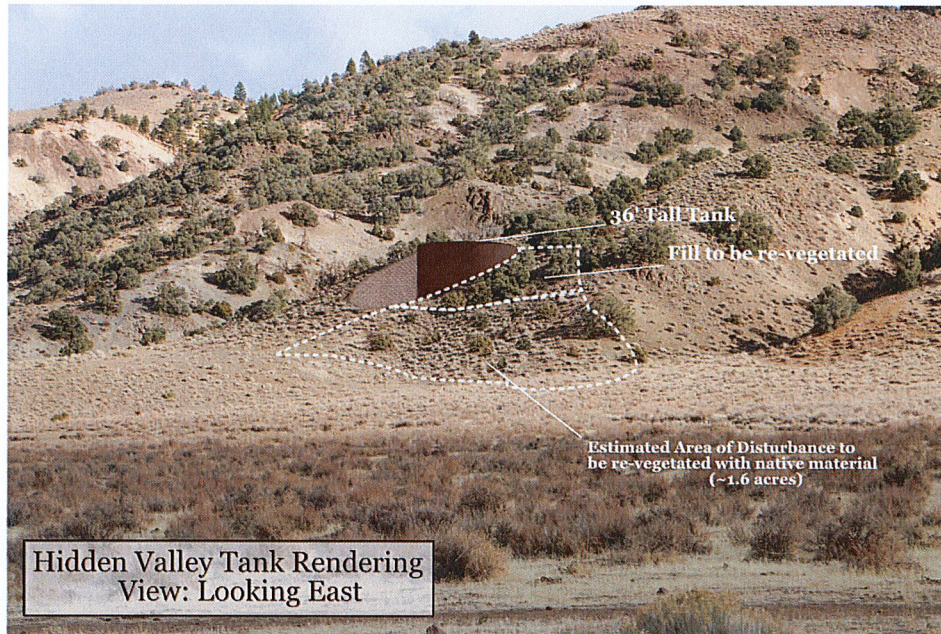


Figure 6 – Photo Simulations

Hidden Valley Reclaimed Water Tank - Special Use Permit

Two individual SUP requests are required to establish the proposed tank. First, the Washoe County Development Code requires a SUP for Utility Service uses within the Parks and Recreation (PR) zone. A tank facility that will provide for needed reclaimed water storage to serve existing County facilities and wetland enhancement projects is completely appropriate within Hidden Valley Regional Park. In fact, two existing tanks are already located within the park boundaries.

The new tank will have little impact to the park or adjoining properties. The tank is located away from existing homes to the west and is designed to blend with the surrounding environment by incorporating a dark brown earth tone color, partially burying the tank and berming. All areas disturbed by grading will be revegetated resulting in a natural post-development appearance.

Most importantly, the tank location does not conflict with any park amenities, including trails. A temporary trail will route hikers and bikers around the construction area while the tank is being built. The existing trail will be reestablished at its current location once the temporary lay-down area is removed upon completion of the tank construction. This was a key consideration in the siting of the tank. An inventory of the existing developed and informal trails/paths located within the park was considered to ensure that facilities currently enjoyed by the public are retained and not impacted by this request.

The tank design included with this SUP request was presented to the Washoe County Open Space and Regional Parks Commission on February 2, 2021 by Washoe County Planning & Building Division staff. The Commission voted to move forward with the SUP request, as presented herein.

The second component of the SUP request is to allow for grading required to create the tank site and access road. Specifically, the project will trigger "Major Grading Permit Thresholds" established in Section 110.438.35(a) of the Washoe County Development Code. Specifically, the following thresholds included in the Development Code are triggered by this request:

- Section 110.438.35(a)(1)(C)
- Section 110.438.35(a)(2)(C)
- Section 110.438.35(a)(2)(C)(ii)(A)
- Section 110.438.35(a)(2)(C)(ii)(B)

Section 110.438.35(a)(1)(C) applies to slopes less than 15 percent and requires a SUP for grading of an area of more than 4 acres on a parcel of any size. The proposed final disturbance area of the tank is approximately 2.5± acres of which 1.6± acres will be revegetated. However, in addition to the tank site, grading of the access roadway will also be required. As part of the tank construction process, cut material generated for the tank pad site (to be used as backfill once the tank is constructed) will be temporary spread below the tanks site. This would result in a total of 3.5± acres of total grading activity on slopes less than 15%. While this is a temporary situation, this provision of the code is included in the SUP to fully ensure compliance with Washoe County standards.

Hidden Valley Reclaimed Water Tank - Special Use Permit

Section 110.438.35(a)(2)(C) applies to grading of slopes 15% or greater. The Hidden Valley Regional Park reclaimed water tank will trigger three SUP provisions from this section of code. First, it would allow for grading of slopes 15% or greater in excess of 2 acres (2.5± acres proposed) as stipulated in Section 110.438.35(a)(2)(C). Second, Sections 4.8.35(a)(2)(ii)(A) and (B) relate to the volume of grading proposed on slopes greater than 15%. The tank site will include approximately 29,000 cubic yards of excavation, triggering section (A).

Section (B) is required to allow importation of 1,000 or more cubic yards of material on sites containing slopes greater than 15%. It is anticipated that this SUP trigger will likely not apply to the Hidden Valley tank project. However, to stabilize slopes surrounding the tank, rip-rap material will be imported to the site. The precise amount will be determined with final design and recommendations of the geotechnical engineering team. Thus, the SUP includes this provision out of an abundance of caution should additional material need to be imported at the time of construction. Overall grading limits depicted with the SUP plans contained herein will not be altered regardless of whether additional import of material occurs or not.

Washoe County requires that all slopes resulting from new grading not exceed 3:1. This SUP requests that this requirement be varied and that the use of slopes greater than 3:1 be permitted. This will significantly reduce the amount of overall disturbance within the site, preserving a more natural appearance and allowing slopes to much better blend with the natural slope/terrain of the surrounding area. As proposed, 2:1 slope (in cut) will occur behind the tank with 2:1 fill slopes below the tank (west side), blending with the natural slopes that lead up to the tank site. The use of 2:1 slope will result in a much more natural appearance as they essentially match that of the existing terrain.

Construction of the tank itself will occur onsite. As part of the overall site development and construction process, area behind the tank will be excavated at 0.75:1 (per recommendations of the geotechnical study). The tank will be constructed onsite and then backfill of the area behind the tank will occur with the incorporation of 2:1 slope. Additionally, a small area of 0.75:1 slope will remain above the 2:1 area (as shown on the site). The geotechnical study supports the incorporation of these slopes and rip-rap (with native revegetation) will occur to ensure slope stabilization in the post-development condition.

As previously noted and depicted on the preliminary site plan, a retaining wall will be constructed along the access road and front of the tank. The incorporation of the walls allows access to the tank while greatly reduces the amount of visual scarring resulting from site grading. The tank itself will largely screen the wall (as depicted in Figure 5-not sure where/what figure 5 is). However, the wall itself will incorporate an earth tone color to blend with the natural surrounding environment.

Hidden Valley Reclaimed Water Tank - Special Use Permit

Special Use Permit Findings

In order to approve a Special Use Permit, the following findings must be made. Responses are provided in **bold**.

1. Consistency. The granting of the special use permit is consistent with the policies and maps of the Comprehensive Plan Elements and the Area Plan in which the property is located.

The proposed project is consistent with the Southeast Truckee Meadows Area Plan and supports policies related to the provisions of infrastructure and water conservation within the Plan area. The new facility will provide reclaimed water storage that will be used for park irrigation and other park enhancements. This also serves to reduce potable water use currently occurring within the park, allowing these resources to be reserved or utilized for other municipal uses.

2. Adequate Public Facilities. Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities must exist or will be provided.

A criterion for the selection of the tank site was the ability to connect with existing infrastructure within the area. Connection to the STMWRF and to facilities within Hidden Valley Regional Park can occur without permanent disruption to the park or loss of facilities. The resulting reclaimed tank will enhance Washoe County infrastructure in the area and provide for overall better utilization of water resources.

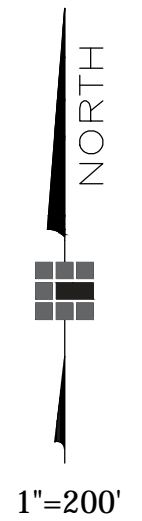
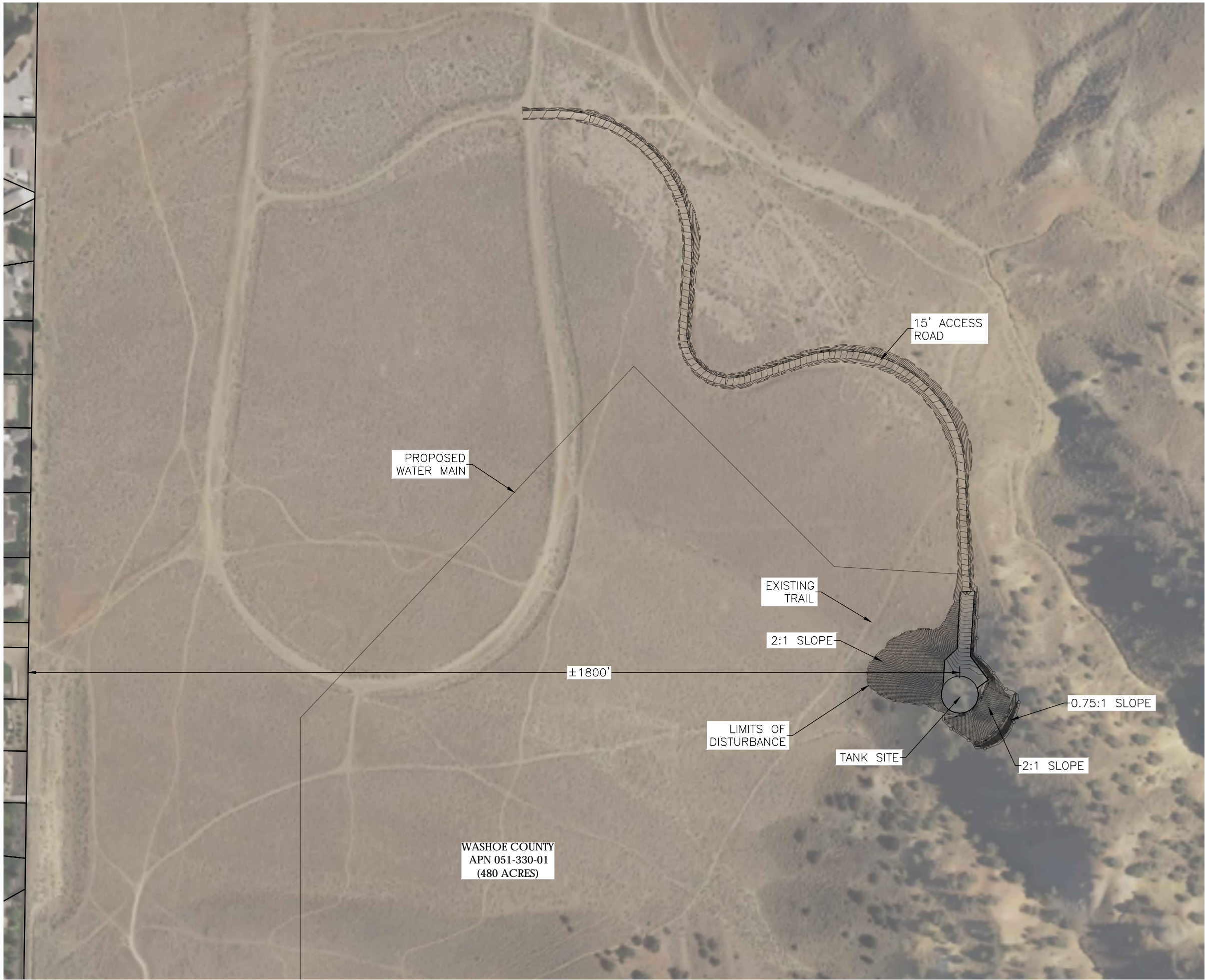
3. Site Suitability. The site must be physically suitable for the proposed use and for the intensity of development.

Water tanks often require significant grading based on the fact that they generally must be located in steeper terrain to ensure proper pressures within the overall system. The site selected for the Hidden Valley Regional Park reclaimed water tank is best located to serve intended uses while limiting disturbance and visual impacts. The site is well suited from a geotechnical perspective and this SUP will allow for slopes and revegetation that blend the post development conditions with the surrounding native terrain and vegetation. The use of earth tone colors for the tank and retaining wall(s) will further soften the tank appearance and allow it to blend with rather than contrast with the natural environment.

Hidden Valley Reclaimed Water Tank - Special Use Permit

4. Issuance Not Detrimental. Issuance of the permit may not be significantly detrimental to the public health, safety or welfare; have a detrimental impact on adjacent properties; or be detrimental to the character of the surrounding area.

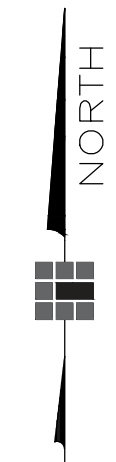
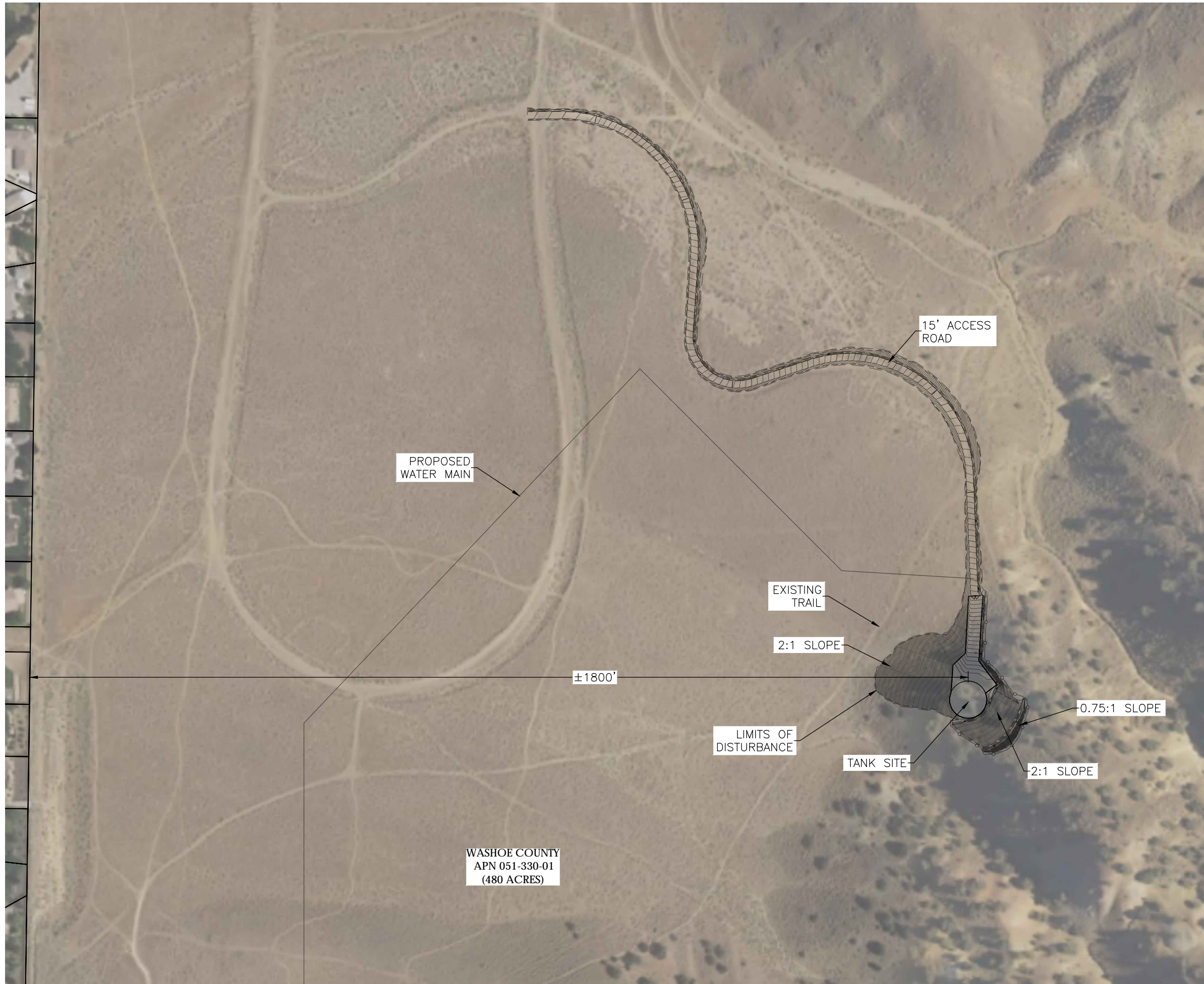
All potential impacts associated with the tank construction will be properly mitigated. Potential impacts relate to the use of park facilities and overall visual appearance. Construction of the tank will not impact existing park amenities, including existing trails. Additionally, by partially burying the tank, incorporating slopes greater than 3:1, utilizing earth tone colors for the tank and walls, and significant revegetation, the visual appearance of the tank will be properly screened and mitigated. The tank is located over one-quarter of a mile from homes along the west side of the park boundary. Thus, views to the Virginia Range from existing residences will not be materially impacted by this request.



FEBRUARY 2021

CHRISTY
CORPORATION
1000 Kiley Parkway | Sparks Nevada 89436
775.502.8552 christynv.com

HIDDEN VALLEY TANK PLANNING
PRE-STRESSED CONCRETE TANK FOOTPRINT



1"=200'

FEBRUARY 2021



1000 Kiley Parkway | Sparks Nevada 89436
775.502.8552 christynv.com

HIDDEN VALLEY TANK PLANNING
PRE-STRESSED CONCRETE TANK FOOTPRINT