

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

## 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.

<b>Project Information</b>		Staff Assigned Case No.: _____	
Project Name:			
Project Description:			
Project Address:			
Project Area (acres or square feet):			
Project Location (with point of reference to major cross streets <b>AND</b> area locator):			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
<b>Applicant Information</b> (attach additional sheets if necessary)			
<b>Property Owner:</b>		<b>Professional Consultant:</b>	
Name:		Name:	
Address:		Address:	
Zip:		Zip:	
Phone:                      Fax:		Phone:                      Fax:	
Email:		Email:	
Cell:                              Other:		Cell:                              Other:	
Contact Person:		Contact Person:	
<b>Applicant/Developer:</b>		<b>Other Persons to be Contacted:</b>	
Name:		Name:	
Address:		Address:	
Zip:		Zip:	
Phone:                      Fax:		Phone:                      Fax:	
Email:		Email:	
Cell:                              Other:		Cell:                              Other:	
Contact Person:		Contact Person:	
<b>For Office Use Only</b>			
Date Received:                      Initial:		Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

# Property Owner Affidavit

**Applicant Name:** TRUCKEE MEADOWS WATER AUTHORITY

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, MARK FOREE as General Manager of Truckee Meadows Water Authority  
(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): 049-171-09

Printed Name Mark Foree, General Manager

Signed *Mark Foree*

P.O. Box 30013  
Address Reno, NV 89520

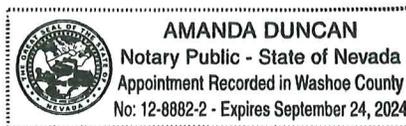
*Amanda Duncan*

Subscribed and sworn to before me this 25<sup>th</sup> day of October, 2021.

*Amanda Duncan*  
Notary Public in and for said county and state

My commission expires: September 24, 2024

(Notary Stamp)



\*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

# Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

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.)

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

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?

This project is an expansion of a previously established use. The site has previously been graded. Additionally, a ridge on the neighbor's property to the east provides screening of the the parcel.

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

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

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.

See attached memo

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 type="checkbox"/> No
------------------------------	-----------------------------

9. Utilities:

a. Sewer Service	
b. Electrical Service	
c. Telephone Service	
d. LPG or Natural Gas Service	
e. Solid Waste Disposal Service	
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 #		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).

N/A for TMWA project
----------------------

10. Community Services (provided and nearest facility):

a. Fire Station	
b. Health Care Facility	
c. Elementary School	
d. Middle School	
e. High School	
f. Parks	
g. Library	
h. Citifare Bus Stop	

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

1. What is the purpose of the grading?

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

Approximately 1,101 CY Cut and 1,869 Fill (Net 768 CY fill)

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

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

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

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.)

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

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

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)?

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?

11. Are you planning any berms?

Yes	No	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)?

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

Landscape screening and revegetation of disturbed area.

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?

Topsoil salvage and replacement and application of inoculant and humic acid. A seed mix comprised of native and regionally adapted grasses, forbs and shrubs will be applied either by broadcast or hydroseed at a minimum of 25 PLS (pure live seed) per acre. Paper mulch and tackifier will be applied to the surface.

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

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

No
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18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No	If yes, please attach a copy.
-----	----	-------------------------------



1325 Airmotive Way, Suite 215  
Reno, NV 89502

# Special Use Permit

Prepared for: Truckee Meadows Water Authority

Project Title: Thomas Creek Wellhouse Replacement

Project No.: 156744

Subject: Thomas Creek Wellhouse Replacement Special Use Permit

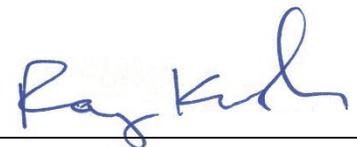
Date: November 8, 2021

To: Planning and Building Division Planning Counter

From: Liz Pierson

Copy to: Ray Kruth

Prepared by:   
Liz Pierson, EI

Reviewed by:   
Raymond Kruth, P.E.

## Limitations:

*This document was prepared solely for Truckee Meadows Water Authority in accordance with professional standards at the time the services were performed and in accordance with the contract between Truckee Meadows Water Authority and Brown and Caldwell dated April 30, 2021. This document is governed by the specific scope of work authorized by Truckee Meadows; it is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by Truckee Meadows Water Authority and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.*

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## Introduction

This application is for a Special Use Permit for Truckee Meadows Water Authority (TMWA) to provide Utility Services (a municipal ground water well) in a Low Density Suburban (LDS) regulatory zone, including a special use permit for grading.

Note, the Owner Affidavit is provided in Attachment A, and proof of property tax exempt status is provided in Attachment B.

## Project Background

The subject parcel was previously developed by Washoe County for utility services, and was equipped with a wellhouse and storage tank, designated the Thomas Creek Well. The existing wellhouse and water storage tank were constructed circa 1979. The water tank was modified, and an underground vault pump station was constructed circa 1996.

With the consolidation of the Washoe County Department of Water Resources (WCDWR) and the South Truckee Meadows General Improvement District (STMGID) into TMWA in December 2014, TMWA took over ownership and operation of the existing Thomas Creek Well located on the subject parcel.

The Thomas Creek well, tank, and pump station are currently in operation providing potable water to TMWA customers. In order to increase TMWA's groundwater supply and redundancy for drought resiliency, TMWA has drilled a new well on the same parcel with a higher production capacity than the existing well. The new well has not yet been equipped with a pump, piping, or appurtenances.

## Project Location

The project site is located on a 2.433 acre parcel owned by TMWA located at 13175 Brush Lane (Assessor's Parcel Number [APN] 049-171-09). The location of the project site is shown in Figure 1.

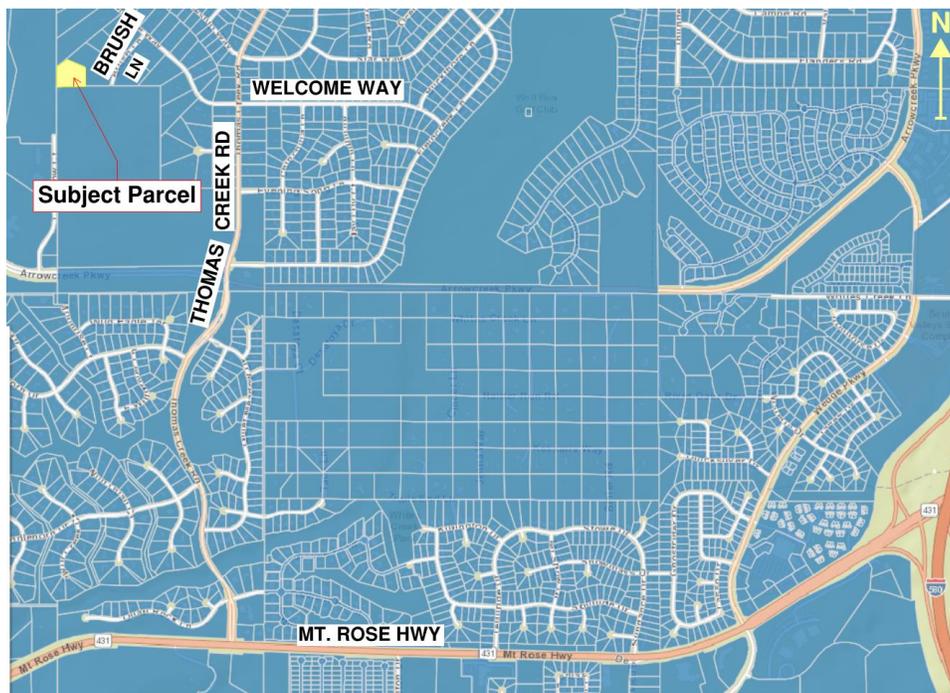


Figure 1. Vicinity map



## Existing Conditions

The property is currently developed with a TMWA production well and wellhouse, an above grade water storage tank, and a below grade pump station. Additionally, a replacement production well has been drilled on the property which has not yet been equipped. Existing structures are shown in an aerial view of the property in Figure 2. Photos of the existing site are shown in Figure 3.

Residences zoned LDS are located adjacent to the subject parcel to the north and east. Vacant, undeveloped United States Forest Service land is located adjacent to the subject parcel to the south (zoned LDS). A vacant, undeveloped parcel owned by Sage Ridge School (zoned LDS) is located adjacent to the subject parcel to the west.

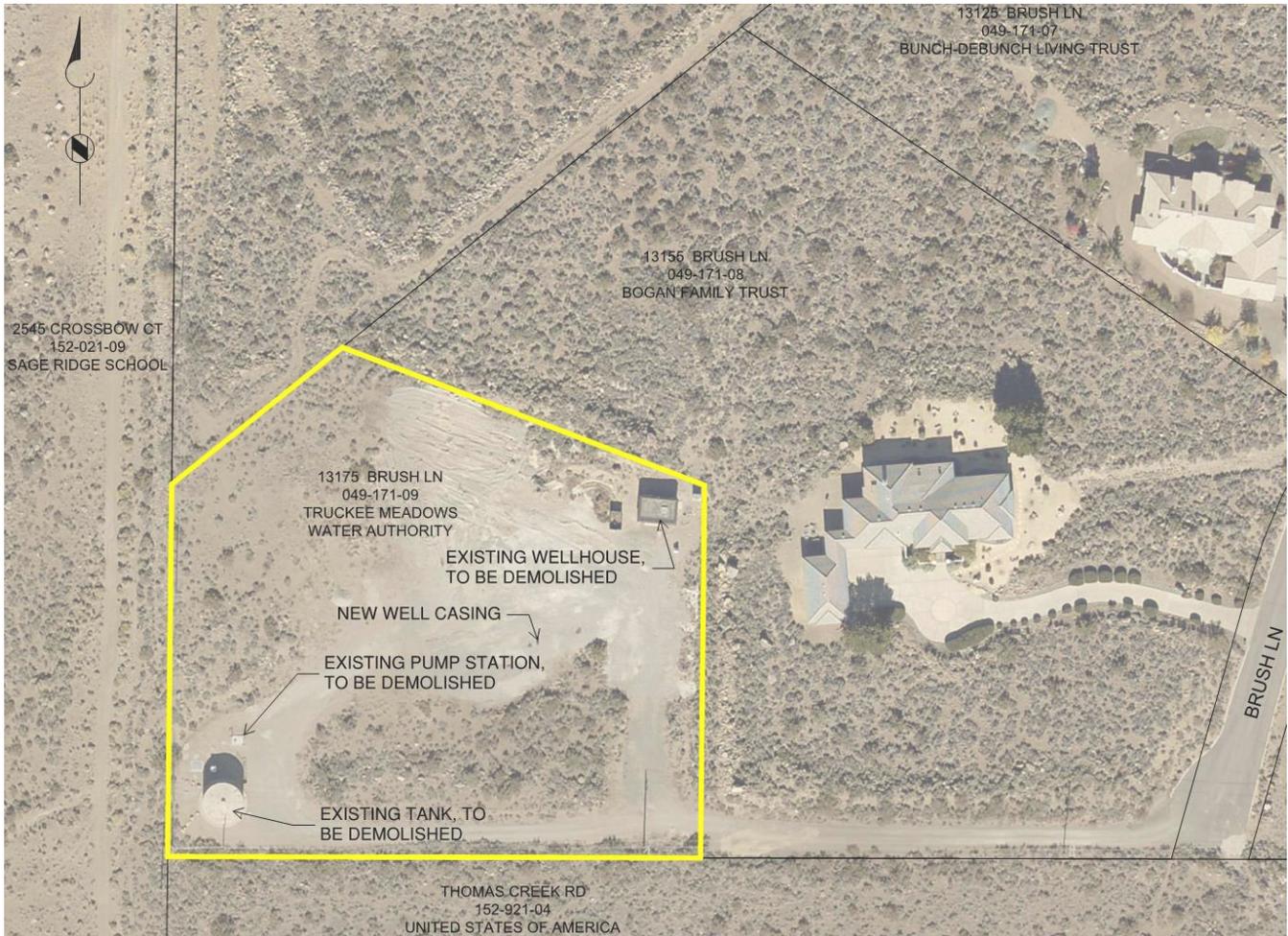


Figure 2. Aerial view of project site



Figure 3. Existing conditions

## Project Components

This section describes the proposed project components of the Thomas Creek Wellhouse Replacement Project.

### New Wellhouse

The new well pump, motor, discharge piping and appurtenances, and water treatment chemicals will be located in a new wellhouse with an approximate building footprint of 1,349 square feet (SF). 500 gallons of water treatment chemicals will be stored in the wellhouse, and more than 550 gallons of secondary spill containment will be provided in the wellhouse.

The new well house will be constructed of concrete masonry unit (CMU) block with an exterior stucco-look insulation system and composition roof. The stucco-look exterior will be painted in natural hues to match the surrounding residential area. The wellhouse plan and elevations are provided in Attachment D.

A site plan depicting the location of the wellhouse is provided in Figure 4, and a full size site plan is provided in Attachment C.

### Existing Structure Demolition

After the new Thomas Creek well is operational, the existing wellhouse, water storage tank, and pump vault will be demolished. The existing wellhouse footprint is approximately 426 SF, the water tank footprint is

approximately 852 SF, and the existing pump station footprint is approximately 31 SF. The total footprint of existing structure proposed to be demolished is 1,323 SF.

### **Site Grading**

The parcel area is 105,981 SF, and the proposed graded area for the project is 38,600 SF. Additionally, construction of a permanent earthen structure is required for an infiltration basin on site. The maximum height of the permanent earthen structure is 6.7 feet which requires a grading special use permit according to Washoe County Development Code (WCDC) Section 110.438.35. The basin is required for disposal of pump-to-waste water at well startup and shutdown, and the basin elevations are set by the elevation of the drainage ditch to the west of the site. A grading plan is provided in Attachment C.

### **Infiltration Basin**

An infiltration basin will be constructed on the northwest quadrant of the parcel as shown in the engineering drawings provided in Attachment C. The basin will be used for disposal of well water discharge on startup and shutdown of the well. This disposal is covered under TMWA's operation and maintenance permit with the Nevada Division of Environmental Protection (NDEP).

Although most water should percolate, if the basin overflows, the flow will discharge to an existing drainage ditch adjacent to the west side of the subject parcel. The terminus of the drainage ditch is a retention pond operated by TMWA at their STMGID 12 well site.

### **Site Paving**

WCDC Section 110.410.25 requires paving of all parking areas, driveways, and maneuvering areas. TMWA would like to request a waiver for this requirement. TMWA proposes applying asphalt concrete paving to the area adjacent to the new wellhouse and applying gravel or aggregate base to the other on-site access roads to reduce new impervious surfaces and reduce future maintenance of paved surfaces. Proposed pavement and gravel extents are shown in the engineering drawings provided in Attachment C.

### **Drainage Report**

A drainage report will be submitted with the commercial building permit application for the Thomas Creek Wellhouse project.

### **Landscaping**

WCDC Section 110.412.40 requires a minimum 20 percent of the developed land area to be landscaped. TMWA proposes to landscape the area adjacent to the new wellhouse with at least one tree every 20 linear feet in offset rows to achieve maximum screening of the wellhouse and apply non-irrigated native revegetation seed mix to the disturbed areas to match the surrounding area. After completion of the new wellhouse, the existing storage tank and wellhouse will be demolished. A landscaping plan is provided in Attachment E.



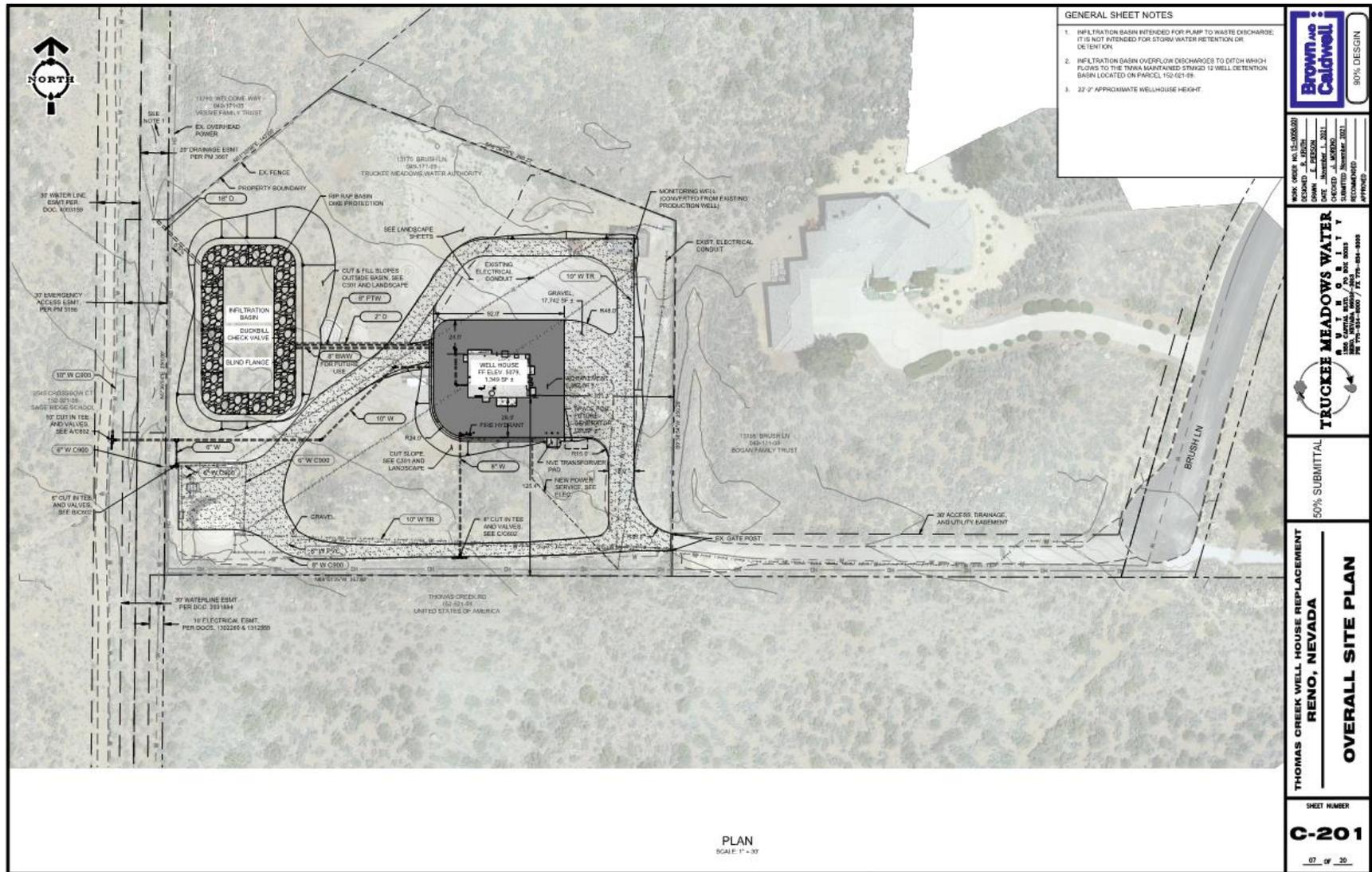


Figure 4. Proposed site plan



## Screening

An existing six foot tall chain link fence with security barbed wire is located along the site perimeter as shown in Figure 5. WCDRC Section 110.406.12 requires an eight foot screening element along residential regulatory zone parcels. .



**Figure 5. Existing Perimeter Chain Link Fence**

TMWA requests a waiver from the eight foot fence requirement and proposes keeping the existing six foot chain link fence. The existing fence will have less visual impact than a new solid fence, and landscaping as described above will provide screening of the new wellhouse. TMWA will retrofit the existing fence to provide better security along the bottom of the fence. The proposed security retrofits are shown in Attachment F.

## Site Lighting

Exterior lighting will be limited to fixtures mounted above the manway doors on each of the four faces of the building. Each light will have a maximum 5,208 lumens output and be angled down so that light from the exterior wall mounted fixtures will not spillover beyond the property line. Because the exterior light will be minimal, a photometric lighting plan has not been provided.

## Traffic Impact

Existing traffic trips to the Thomas Creek Well site include one chemical delivery every two weeks and a weekly maintenance visit from TMWA staff. Because the use of the site is not changing, traffic trip generation is not expected to increase after the project is constructed; therefore, a traffic impact report has not been provided.

## Attachment A: Owner Affidavit

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# Property Owner Affidavit

**Applicant Name:** TRUCKEE MEADOWS WATER AUTHORITY

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, MARK FOREE as General Manager of Truckee Meadows Water Authority  
(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): 049-171-09

Printed Name Mark Foree, General Manager

Signed *Mark Foree*

P.O. Box 30013  
Address Reno, NV 89520

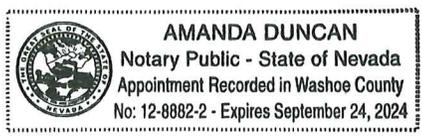
*Amanda Duncan*

Subscribed and sworn to before me this 25<sup>th</sup> day of October, 2021.

*Amanda Duncan*  
Notary Public in and for said county and state

My commission expires: September 24, 2024

(Notary Stamp)



\*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

## **Attachment B: Proof of Property Tax Exempt Status**



## **Attachment C: Engineering Drawings**

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GENERAL SHEET NOTES

1. TOTAL DEMOLISHED STRUCTURE AREA APPROXIMATELY 1,323 SF.



90% DESIGN

WORK ORDER NO. 15-0056.001
DESIGNED R. KRUTH
DRAWN E. PIERSON
DATE November 1, 2021
CHECKED J. MORENO
SUBMITTED November 2021
RECOMMENDED
APPROVED

**TRUCKEE MEADOWS WATER**  
 A U T H O R I T Y  
 1365 CAPITAL BLVD. / PO BOX 30013  
 RENO, NEVADA 89502-3013  
 PH 775-854-8000 / FX 775-854-8003

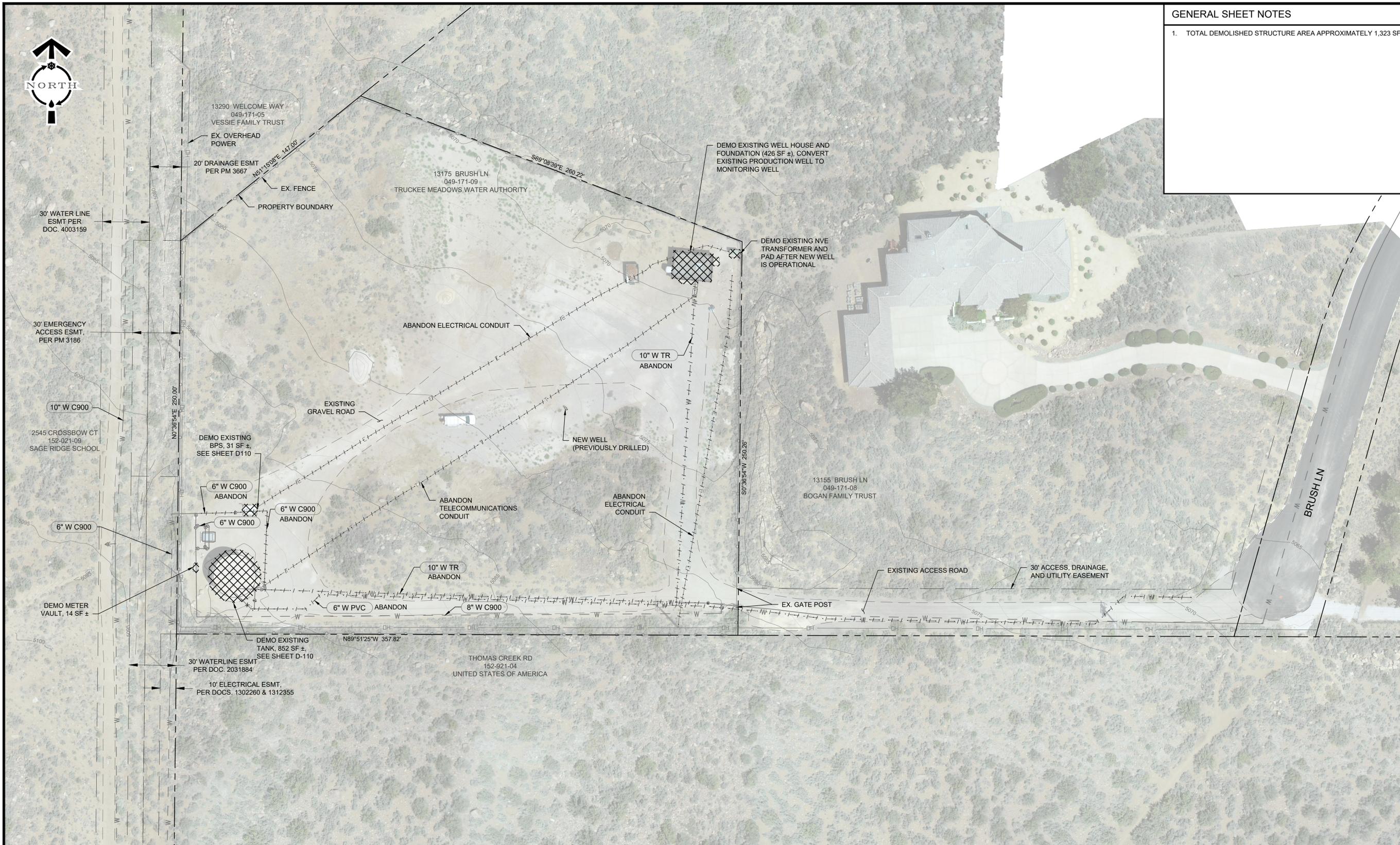
50% SUBMITTAL

**THOMAS CREEK WELL HOUSE REPLACEMENT  
 RENO, NEVADA  
 EXISTING SITE AND  
 DEMOLITION PLAN**

SHEET NUMBER

**Q-101**

06 OF 20



PLAN  
SCALE: 1" = 30'

C:\users\epierson\appdata\local\temp\154327A\C-101.dwg  
Nov 01, 2021 10:16am





GENERAL SHEET NOTES

- 1. APPROXIMATE EARTH WORK VOLUMES:  
CUT: 1,101 CY  
FILL: 1,869 CY  
NET: 768 CY (FILL)



WORK ORDER NO. 15-0056.001  
DESIGNED R. KRUTH  
DRAWN E. PIERSON  
DATE October 29, 2021  
CHECKED J. MORENO  
SUBMITTED October 2021  
RECOMMENDED  
APPROVED

**TRUCKEE MEADOWS WATER**  
A U T H O R I T Y  
1365 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-834-8000 / FX 775-834-8003

50% SUBMITTAL

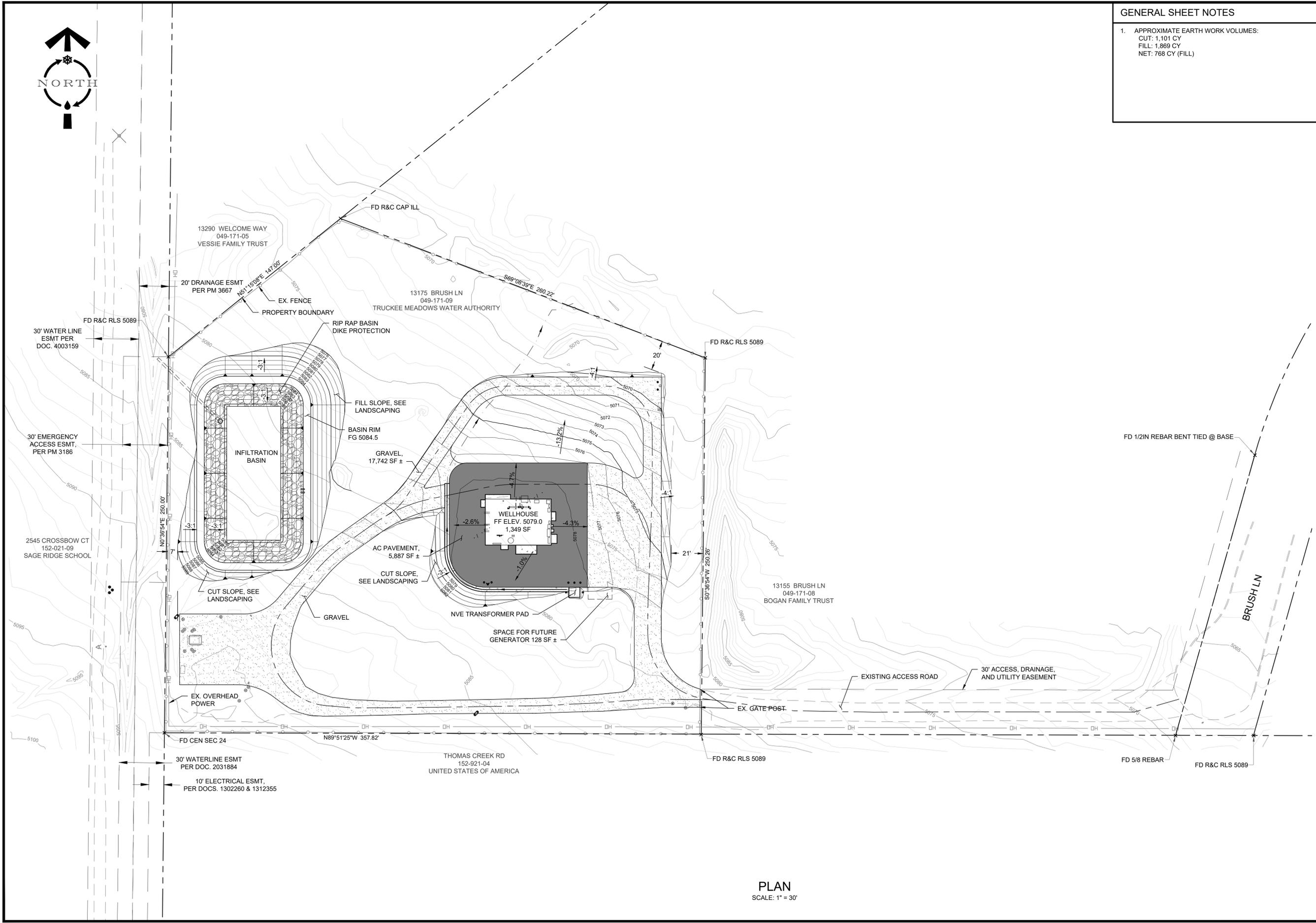
**THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA**

**SITE GRADING AND  
PAVING**

SHEET NUMBER

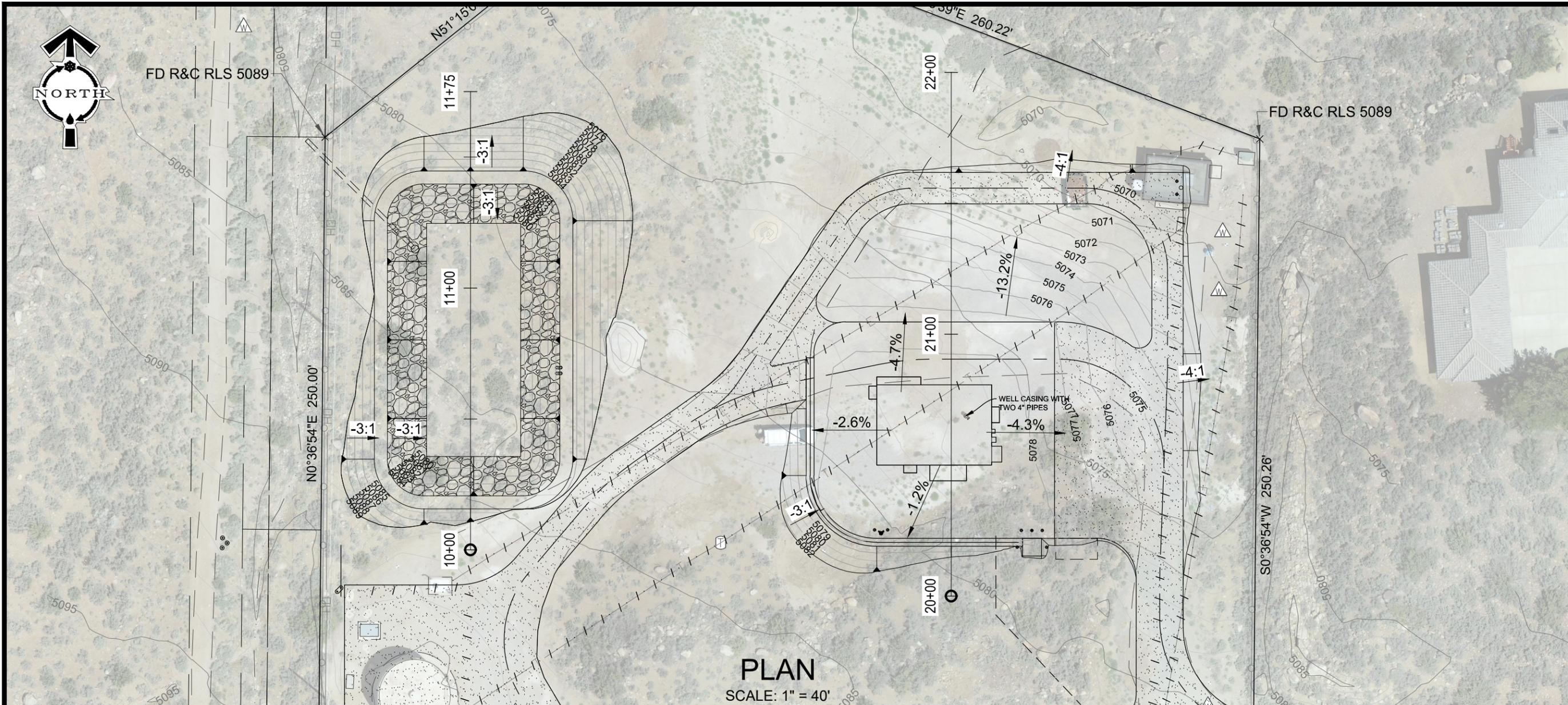
**C-301**

08 OF 20



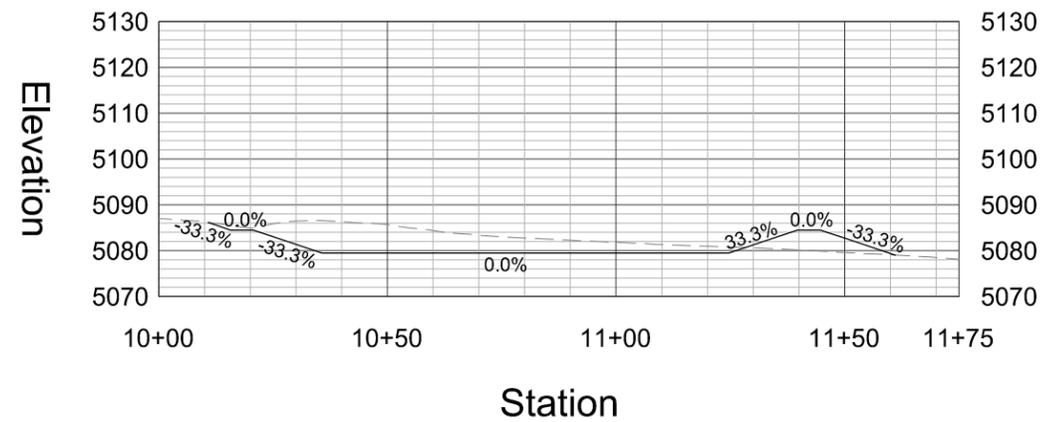
PLAN  
SCALE: 1" = 30'

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Oct 29, 2021 11:19am

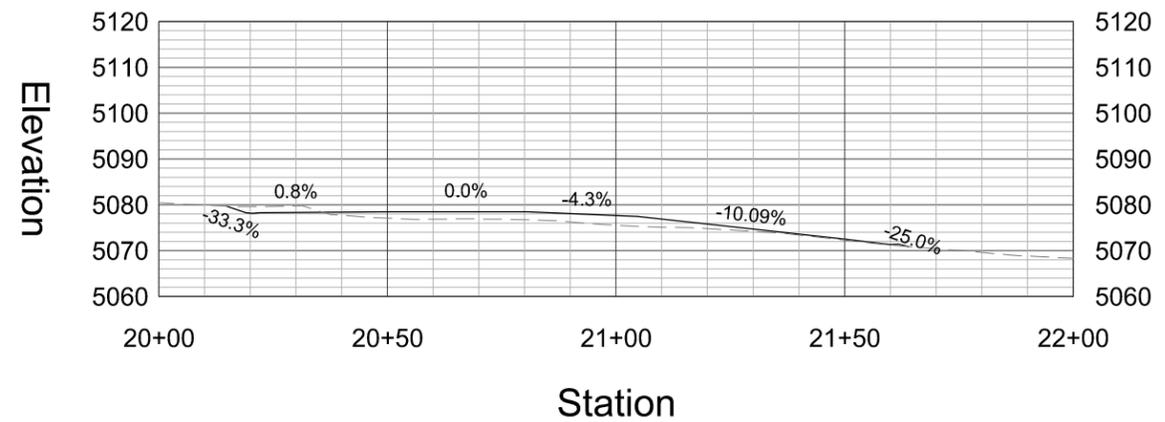


**PLAN**  
SCALE: 1" = 40'

**Profile View of Basin Cross Section**



**Profile View of Wellhouse Site Cross Section**



## **Attachment D: Architectural Drawings**

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**ROOF PLAN NOTES:**

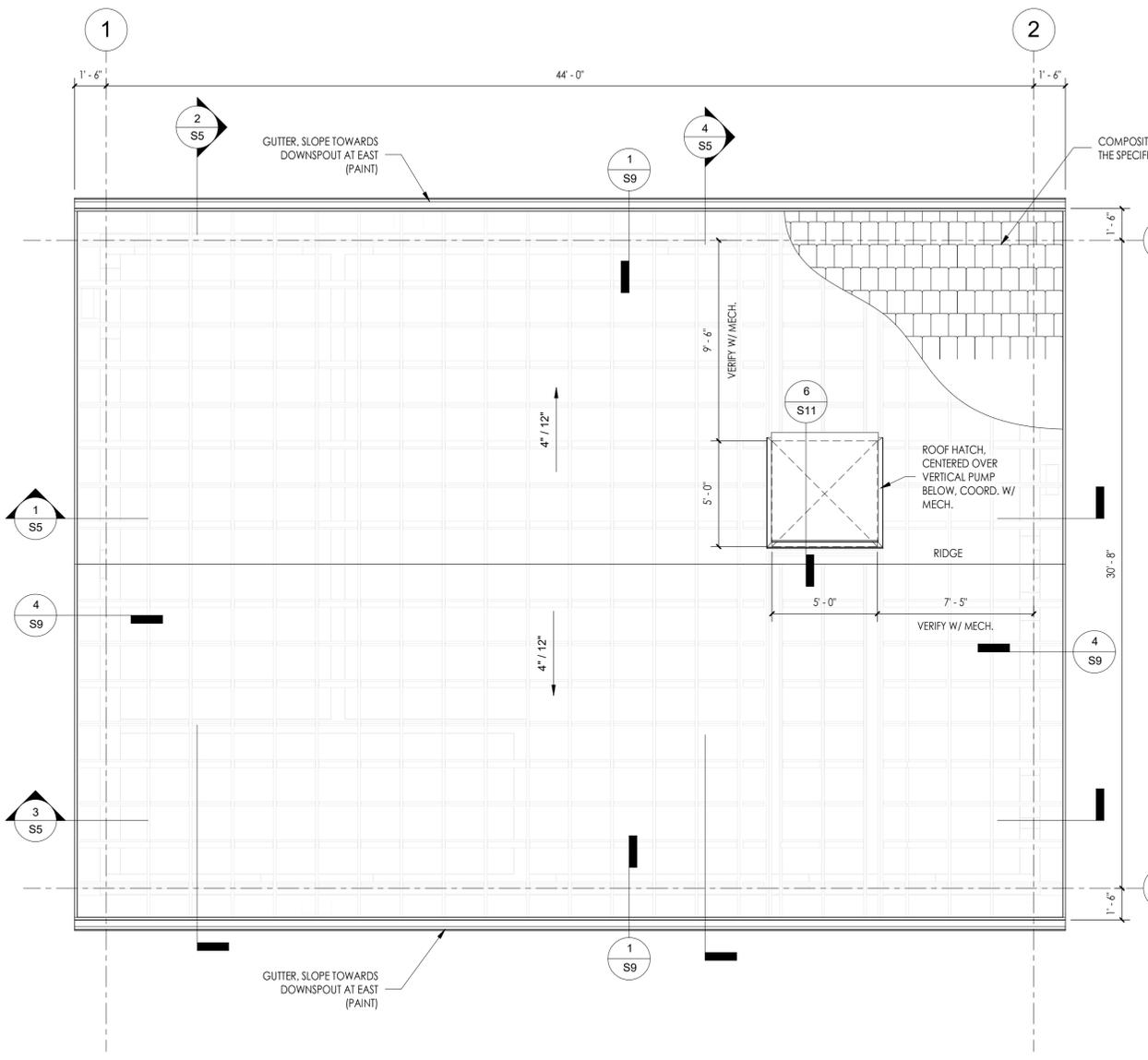
1. SEE S3 FOR ROOF FRAMING AND ADDITIONAL INFORMATION.
2. PROVIDE A 20" x 30" (MIN.) ACCESS PANEL. COORDINATE WITH TMWA.
3. SEE ELECTRICAL FOR CEILING LIGHT FIXTURE LAYOUT.
4. SEE CONTRACT TECHNICAL SECTIONS FOR ARCHITECTURAL SPECIFICATIONS FOR PAINT, STONE-COATED METAL SHINGLE ROOFING, AND OTHER REQUIREMENTS.
5. SEE 6/S11 FOR ROOF HATCH FLASHING. SEE SPECIFICATIONS FOR ROOF HATCH INFORMATION.

**CODE ANALYSIS**

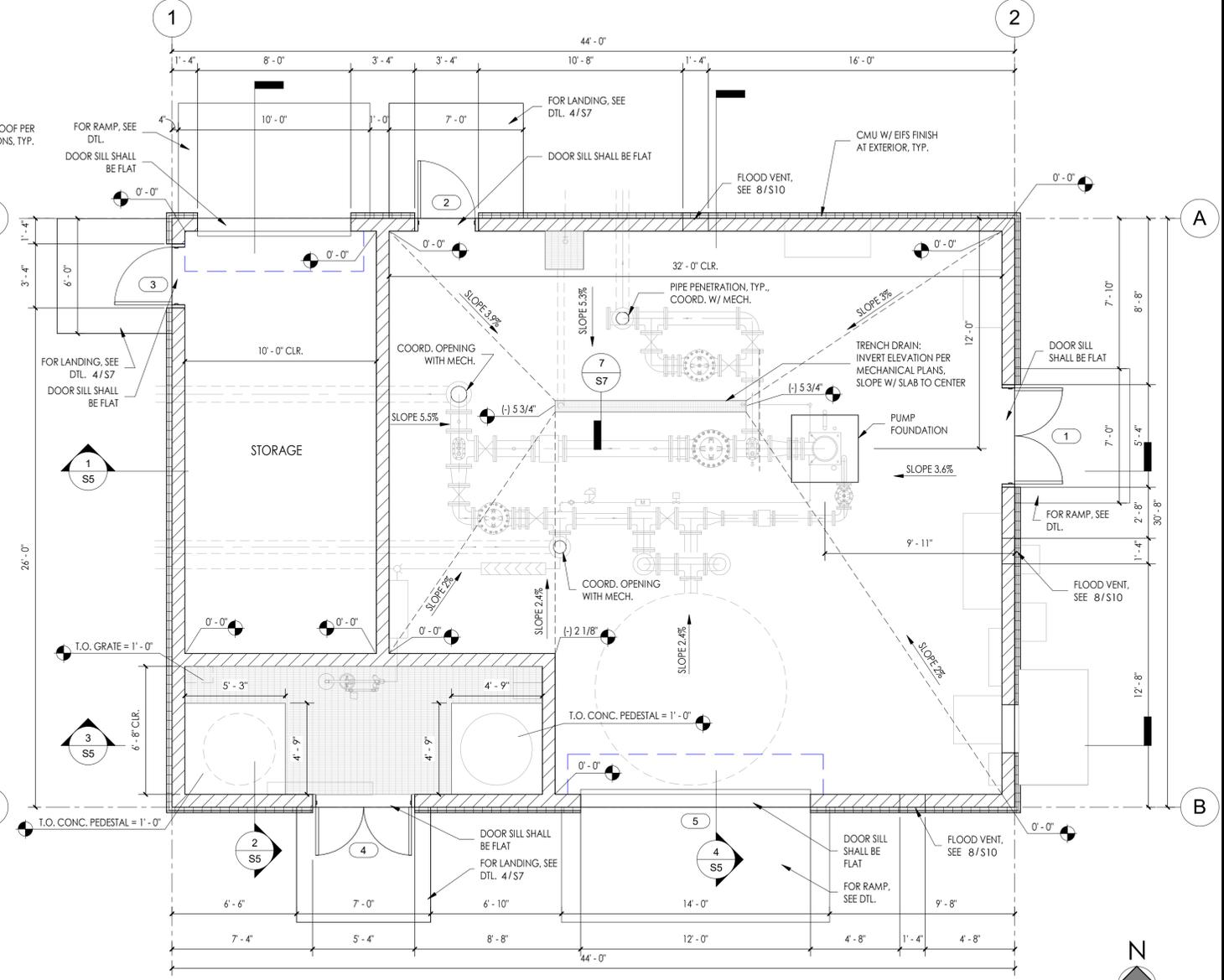
OCCUPANCY GROUP: F-2  
 RISK CATEGORY: IV  
 CONSTRUCTION TYPE: V-B  
 AREA: 1350 SF < ALLOWABLE AREA = 13,000 SF MAX.  
 HEIGHT = 22'-2" < ALLOWABLE HEIGHT = 40'-0"  
 OCCUPANT LOAD: 1350 SF/100 = 14 OCCUPANTS  
 EXITS: 1 & 2 PROVIDED > 1 REQUIRED  
 FIRE SPRINKLER: NOT REQUIRED

**FLOOR PLAN NOTES:**

1. ALL DIMENSIONS ARE FROM FACE-OF-BLOCK TO FACE-OF-BLOCK AND/OR FOAM, U.N.O.
2. REFER TO CIVIL DRAWINGS FOR LOCATING THE BUILDING ON SITE AND FOR FINISHED FLOOR ELEVATIONS. THE FLOOR ELEVATION OF 0'-0" ON THESE PLANS REFERS TO 4804 +/- ON THE CIVIL DRAWINGS.
3. FOR DIMENSIONS OF MASONRY WALL AND ROUGH OPENINGS, S3. MASONRY DIMENSIONS SHOWN ON THIS PLAN ARE REFERENCE ONLY. ANY DISCREPANCIES FOUND BETWEEN THE DIMENSIONS ON THIS SHEET AND THE REST OF THE STRUCTURAL DRAWINGS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
4. SEE S3 FOR FLOOR SLAB CONTROL JOINT LOCATIONS.
5. ALL INTERIOR CMU WALLS, PLYWOOD, AND EXPOSED INTERIOR WOOD FRAMING WITH PITTSBURGH PAINTS "DELICATE WHITE, S18-1".
6. SEE SHEET S10 FOR TYPICAL EIFS DETAILS.
7. SEE DOOR SCHEDULE AND SHEET S10 FOR DOOR, JAMB AND HEADER INFORMATION.



**2 ROOF PLAN**  
 1/4" = 1'-0"



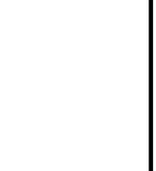
**1 FLOOR PLAN**  
 1/4" = 1'-0"

Plot Date: 11/3/2021 3:54:12 PM Path: C:\Users\gunner\Documents\REVIT Local Files\2021\0022 - Thomas Creek Wellhouse - Central\_Revit\_2020\_gunner\_nwse.rvt



WORK ORDER NO.	DESIGNED BY
DRAWN BY	CHECKED BY
DATE: 8/18/21	RECOMMENDED BY
SUBMITTED	APPROVED BY

**TRUCKEE MEADOWS WATER**  
 A U T H O R I T Y  
 1355 CAPITAL BLVD. / PO BOX 30013  
 RENO, NEVADA 89502-3013  
 PH 775-854-8000 / FX 775-854-8003



**THOMAS CREEK WELL HOUSE PROJECT**  
 RENO, NEVADA  
**FLOOR PLANS**

**ROOF FRAMING PLAN NOTES:**

1. TOP OF BLOCK ELEVATION AT WALL TO BE (+) 16'-0" ABOVE FINISHED FLOOR.
2. CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND CONDITIONS WITH S2 PRIOR TO FABRICATION OR ERECTION.
3. SEE S1.1 FOR TRUSS LOADING REQUIREMENTS.
4. LINTEL REINFORCING PER 6/S8, TYP.
5. ROOF SHEATHING AND NAILING PER DIAPHRAGM ZONE PLAN AND PLYWOOD DIAPHRAGM SCHEDULE. SEE 7/S11 & 8/S11.
6. THE DIAPHRAGM IS CONSIDERED BLOCKED. ALL EDGES OF PANELS TO BE SUPPORTED BY 3x FRAMING, MIN.
7. PROVIDE A 20"x30" (MIN.) CEILING ACCESS PANEL. COORDINATE LOCATION WITH TMWA.
8. SEE SHEET S1 AND THE CONTRACT TECHNICAL SECTIONS FOR STRUCTURAL SPECIFICATIONS.
9. HANGERS FOR OUTRIGGERS AND BLOCKING NOT SHOWN. SEE SHEET S1.1 FOR REQUIREMENTS.
10. SEE S1.1 FOR LINTEL SCHEDULE.

WOOD ROOF TRUSSES AND ENGINEER'S TRUSS REVIEW LETTER SHALL BE A BUILDING DEPARTMENT DELEGATED DESIGN SUBMITTAL.

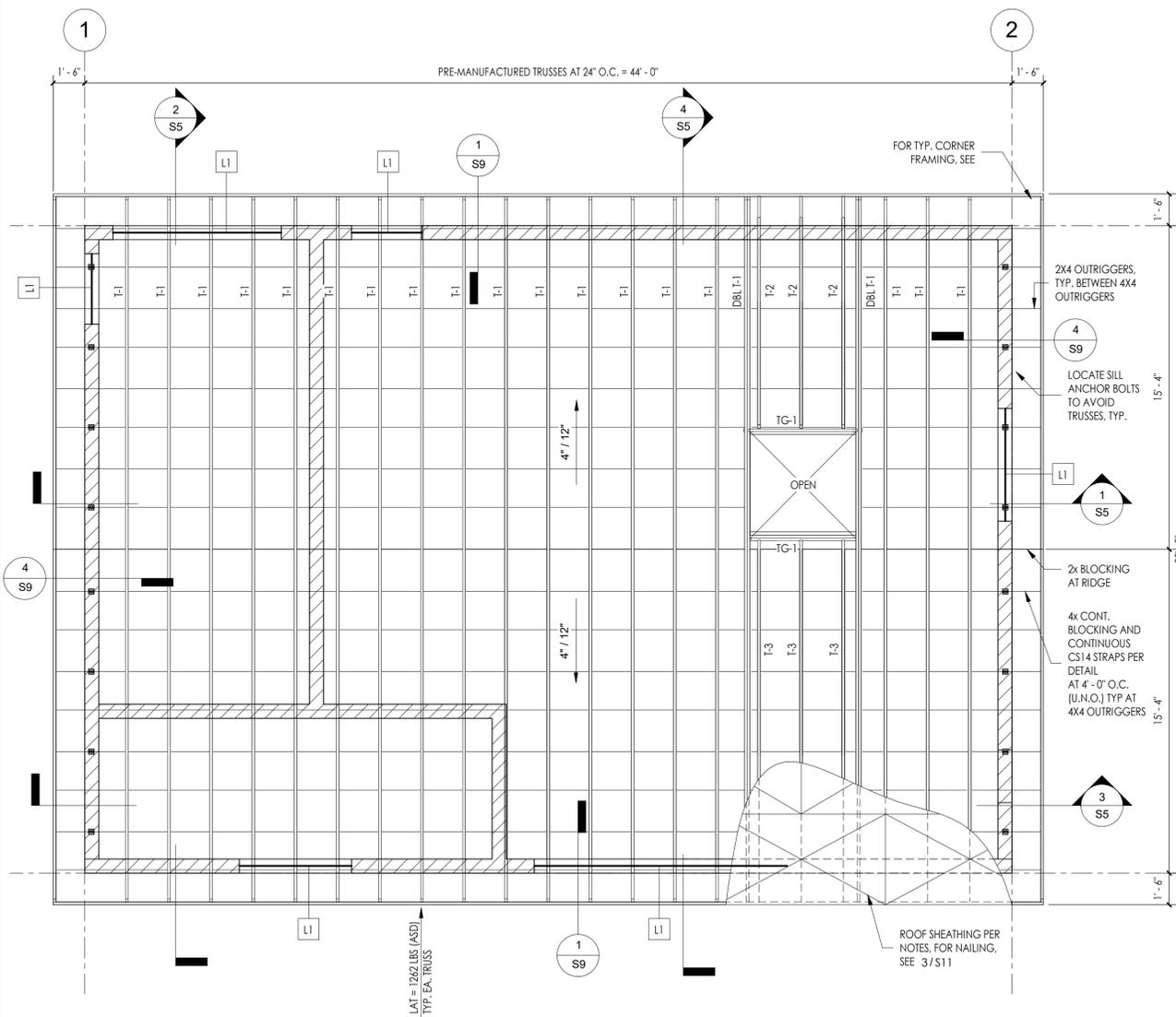
**LEGEND:**

C.J. = CONTROL JOINT PER 6/S6

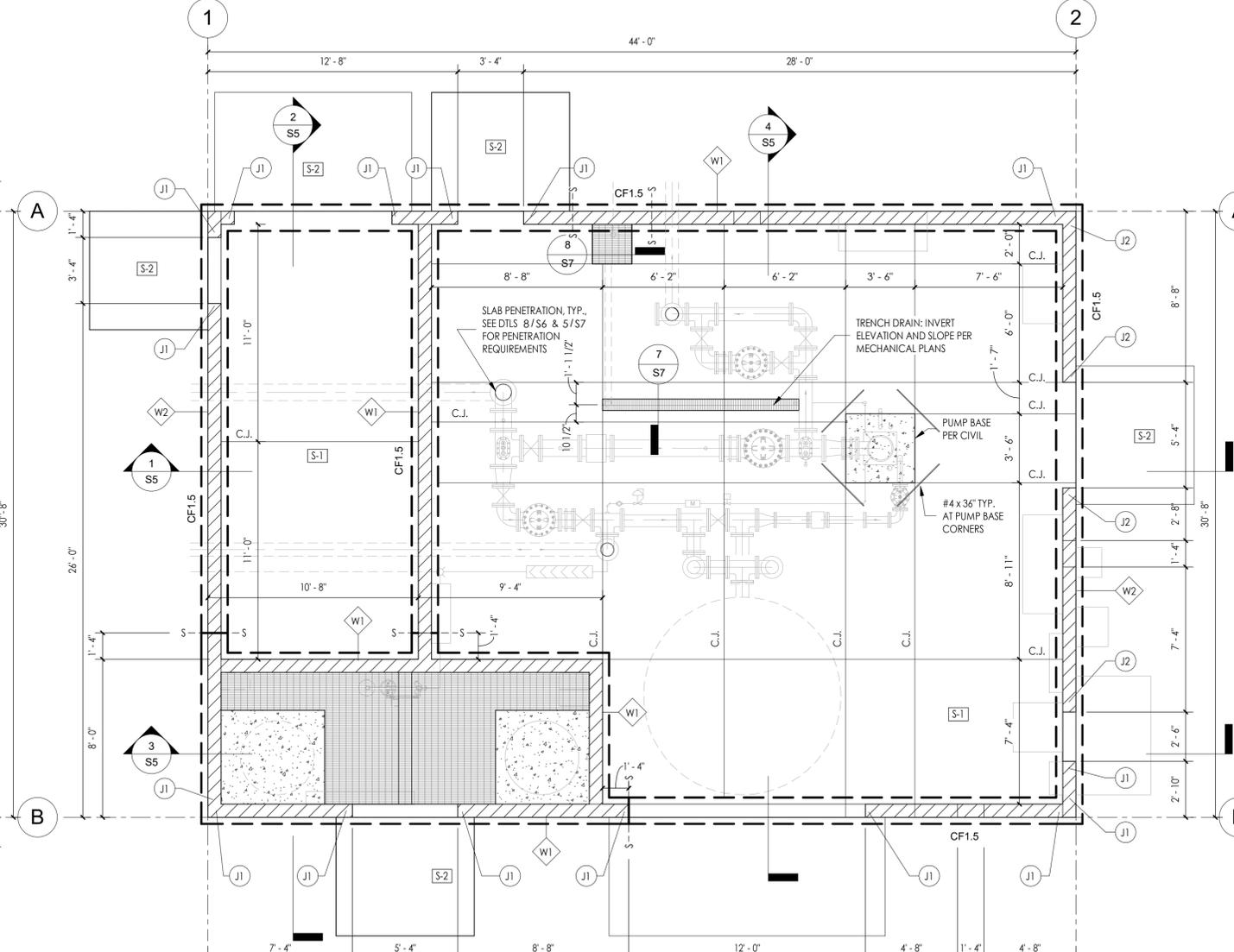
 8" NOMINAL FULLY GROUTED CMU WALL PER SCHEDULE

**FOUNDATION PLAN NOTES:**

1. CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND CONDITIONS WITH S2 PRIOR TO FABRICATION OR ERECTION.
2. T.O. EXTERIOR FOOTINGS = (+) 1'-4" BELOW FINISHED FLOOR TYP., U.N.O.
3. SEE S2 FOR SLAB SLOPE LAYOUT.
4. CENTER ALL STRIP FOOTINGS BELOW CMU WALL CORE, TYP.
5. NO CONDUIT SHALL BE PLACED IN THE SLAB ON GRADE.
6. SEE 3/S7 WHERE UTILITIES ENTER BUILDING OR ARE ADJACENT TO COLUMN FOOTINGS.
7. SEE GENERAL NOTES FOR ENGINEERING FILL REQUIREMENTS AND SUBGRADE PREPARATION REQUIREMENTS ON DTL 1/S7.
8. SEE MECHANICAL/PLUMBING DRAWINGS FOR ANY FLOOR DRAINS OR SINKS. CONTRACTOR TO COORDINATE.
9. SEE 6/S6 FOR TYPICAL SLAB ON GRADE JOINTS. JOINTS TO BE PLACED AT 12'-0" MAX. o.c. AND LOCATED AT ALL RE-ENTRANT SLAB CORNERS, INTERIOR COLUMN LOCATIONS, OR ANY OTHER SLAB ON GRADE DISCONTINUITIES.
10. SEE SHEET S1.1 CMU WALL SCHEDULE AND JAMB SCHEDULE.
11. SEE SHEET S1.1 FOR FOOTING SCHEDULE.
12. SEE 10/S6 FOR TYPICAL FOUNDATION REINFORCING LAPS AT CORNERS, ENDS, AND INTERSECTIONS.
13. SEE 1/S6 & 2/S6 FOR TYPICAL REINFORCING HOOKS, BENDS AND HOOKS & BENDS FOR TIERS.
14. SEE SPECIFICATIONS FOR MASONRY TYPES AND LAYOUT PATTERNS.
15. SEE 3/S8 FOR TYPICAL PLACEMENT OF CMU REINFORCING (U.N.O.).
16. SEE 5/S9 FOR TYPICAL CMU CORNER AND JAMB REINFORCING TO BE COORDINATED WITH FOUNDATION REINFORCING.
17. AT PUMP BASES, CONC. SLAB SHALL BE CAULKED WITH SIKAFLEX 2CNS OR APPROVED EQUIVALENT. SEE THE STRUCTURAL NOTES AND 7/S6 (SIM.)



**2 ROOF FRAMING PLAN**  
1/4" = 1'-0"



**1 FOUNDATION PLAN**  
1/4" = 1'-0"



WORK ORDER NO. \_\_\_\_\_  
DESIGNED: GWF  
DRAWN: DJE  
DATE: 8/18/21  
CHECKED: ERM  
SUBMITTED: \_\_\_\_\_  
RECOMMENDED: \_\_\_\_\_  
APPROVED: \_\_\_\_\_



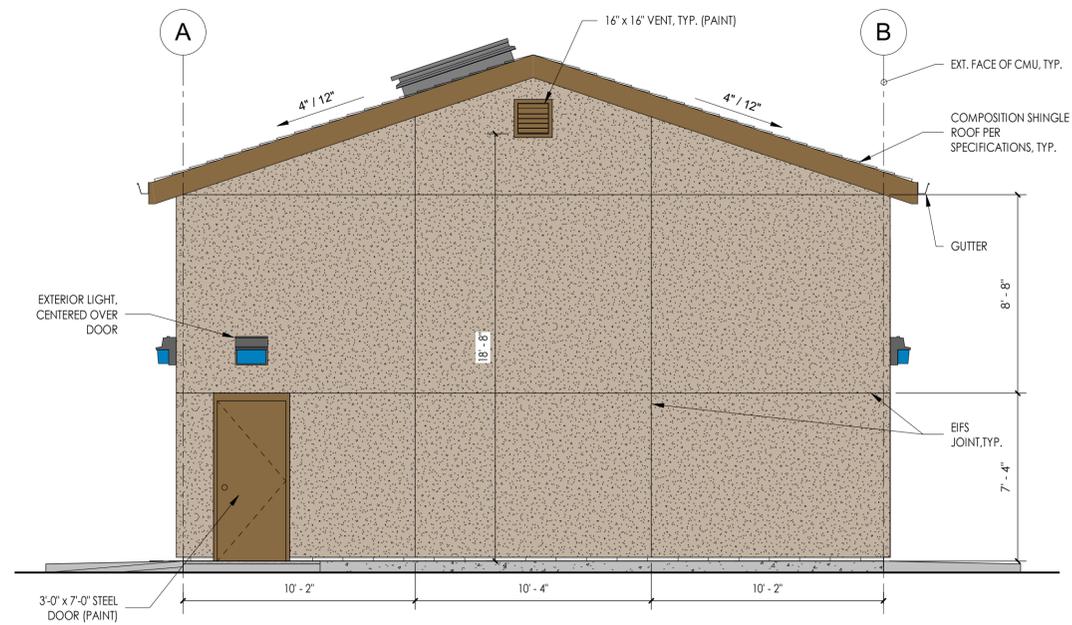
THOMAS CREEK WELL HOUSE PROJECT  
RENO, NEVADA

**STRUCTURAL PLANS**

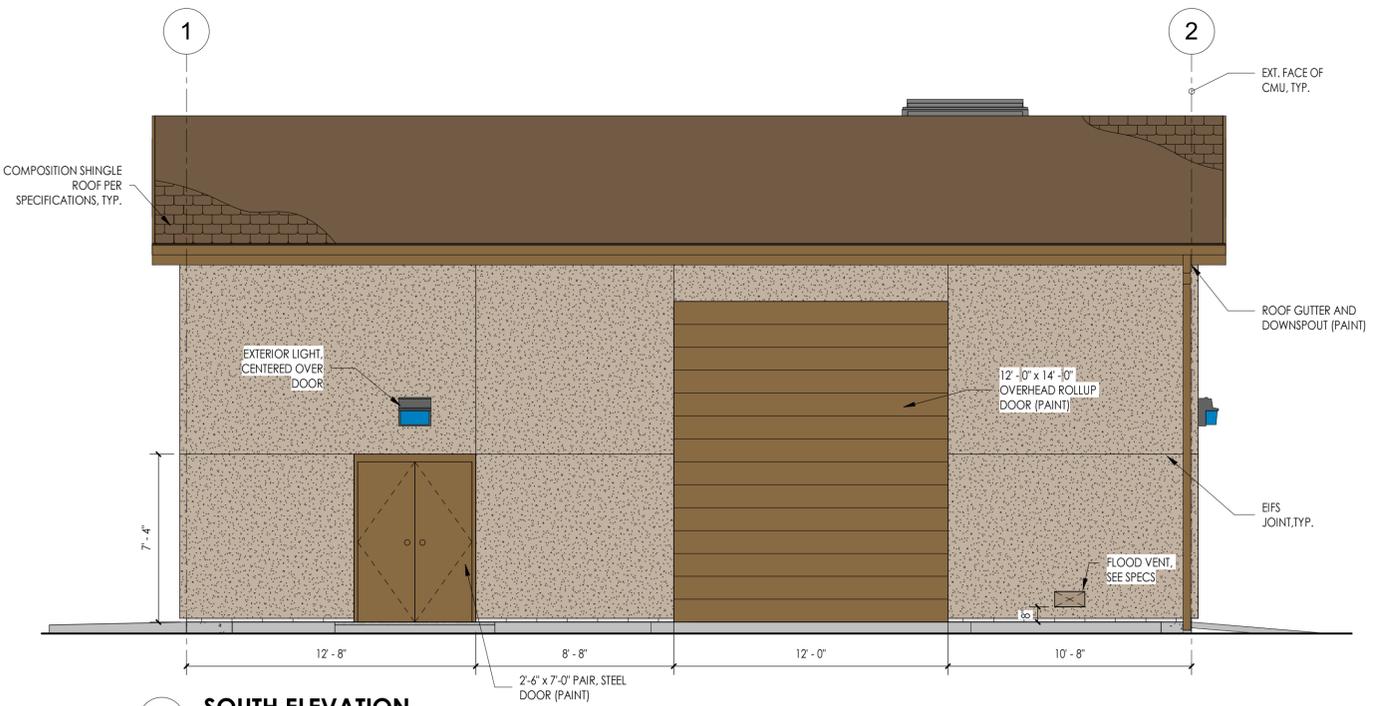
SHEET NUMBER  
**53**  
2 OF 4

PRELIMINARY  
**NELSON WILCOX**  
STRUCTURAL ENGINEERS

Plot Date: 11/3/2021 3:54:13 PM Path: C:\Users\gunner\Documents\REVIT Local Files\2021\0022 - Thomas Creek Wellhouse - Central\_Revit\_2020\_gunner\_nwse.rvt



**4 WEST ELEVATION**  
1/4" = 1'-0"



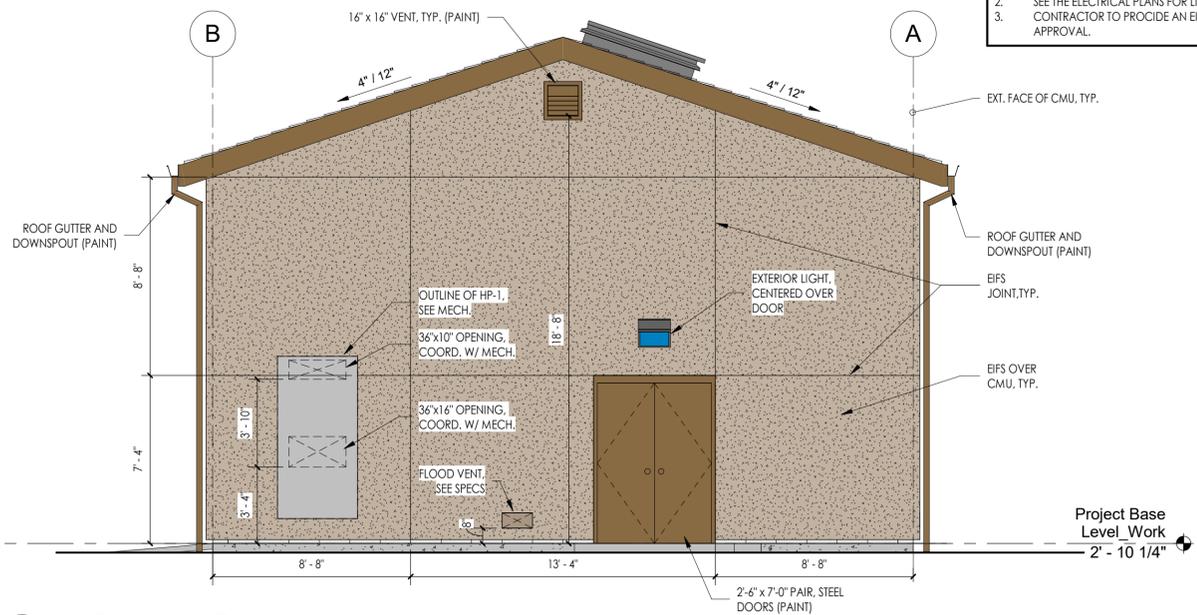
**2 SOUTH ELEVATION**  
1/4" = 1'-0"

**EXTERIOR FINISH LEGEND:**

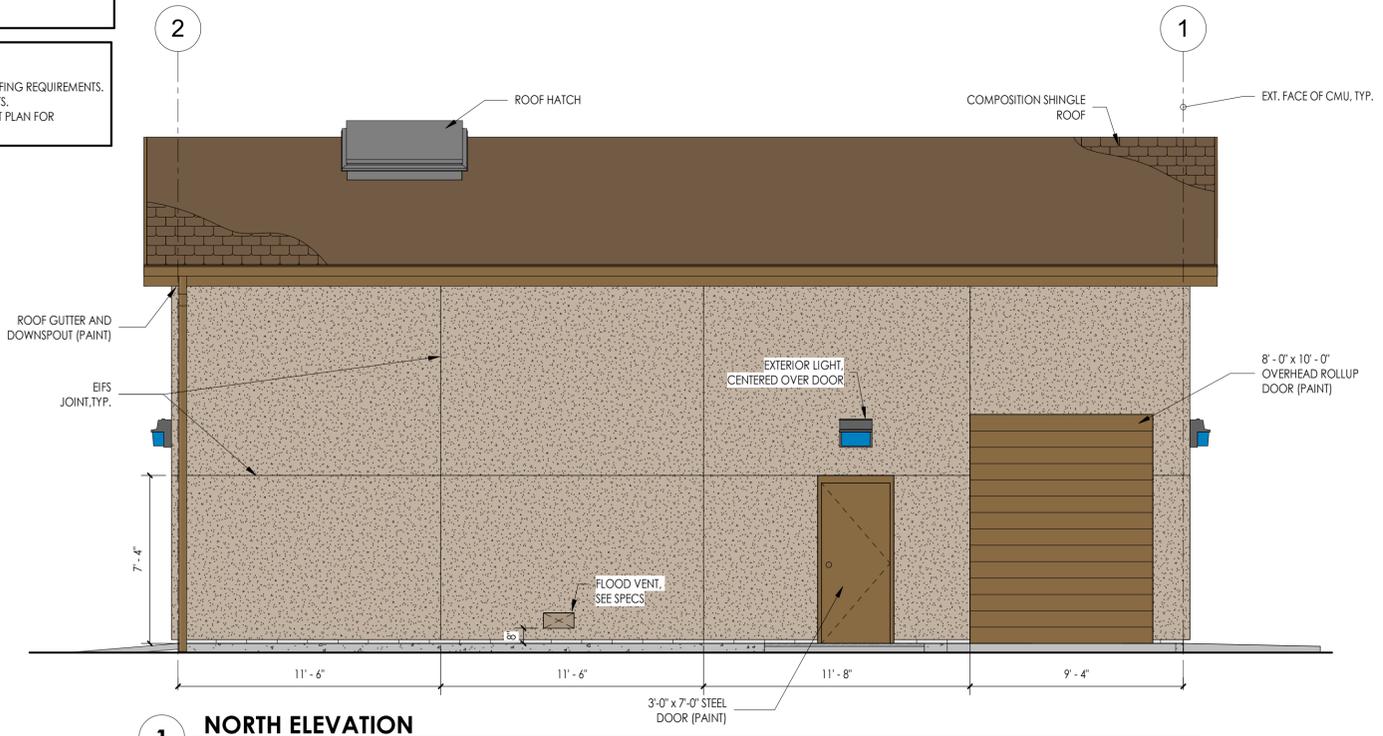
	BUILDING STUCCO: BENJAMIN MOORE, PALM DESERT TAN #1123, TEXTURE FREESTYLE
	EXTERIOR STUCCO ACCENT/DOORS/TRIM/LOUVERS: BENJAMIN MOORE FORT SUMMER TAN #1119
	ROOF COLOR: HICKORY

**ELEVATION NOTES:**

- SEE TECHNICAL SPECIFICATIONS FOR EIFS AND ROOFING REQUIREMENTS.
- SEE THE ELECTRICAL PLANS FOR LIGHT REQUIREMENTS.
- CONTRACTOR TO PROVIDE AN EIFS CONTROL JOINT PLAN FOR APPROVAL.



**3 EAST ELEVATION**  
1/4" = 1'-0"



**1 NORTH ELEVATION**  
1/4" = 1'-0"

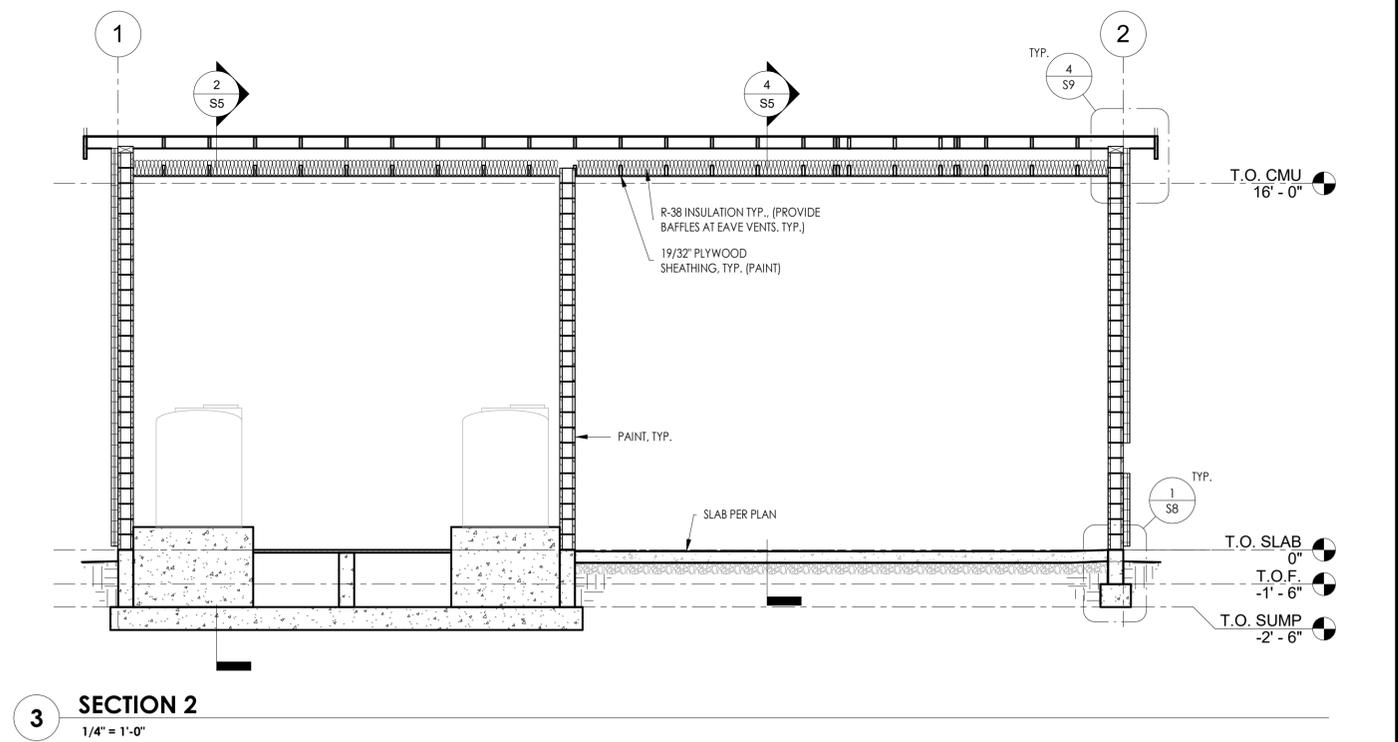
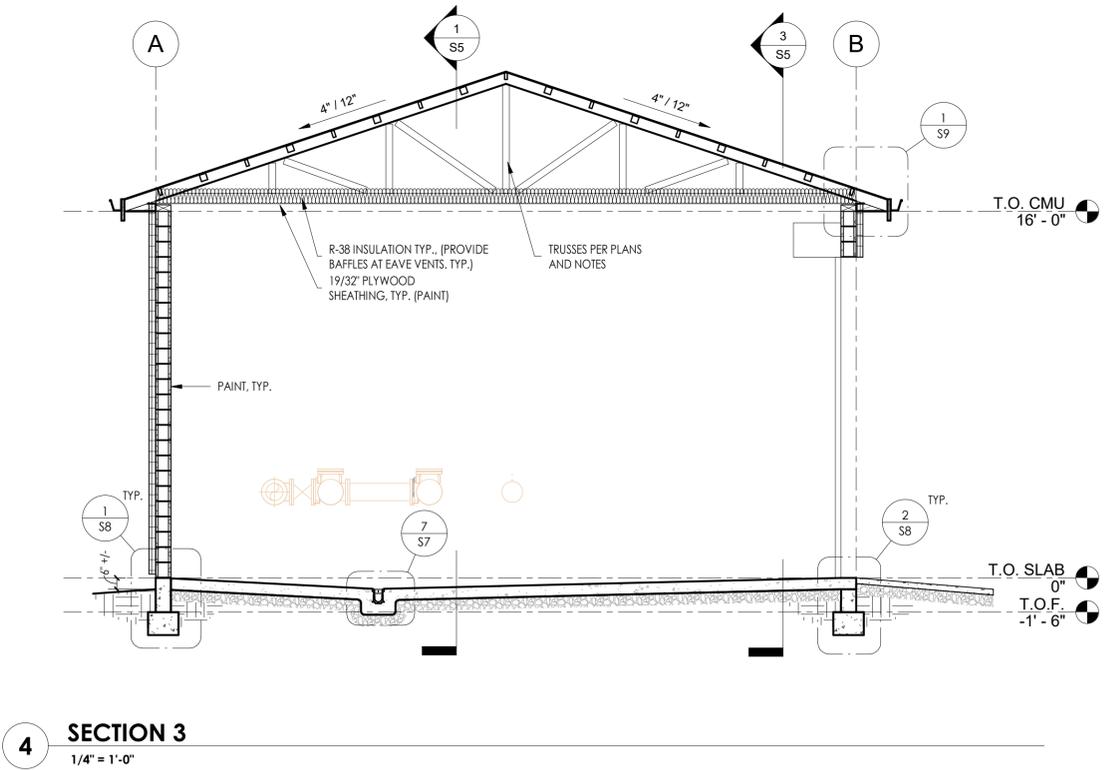
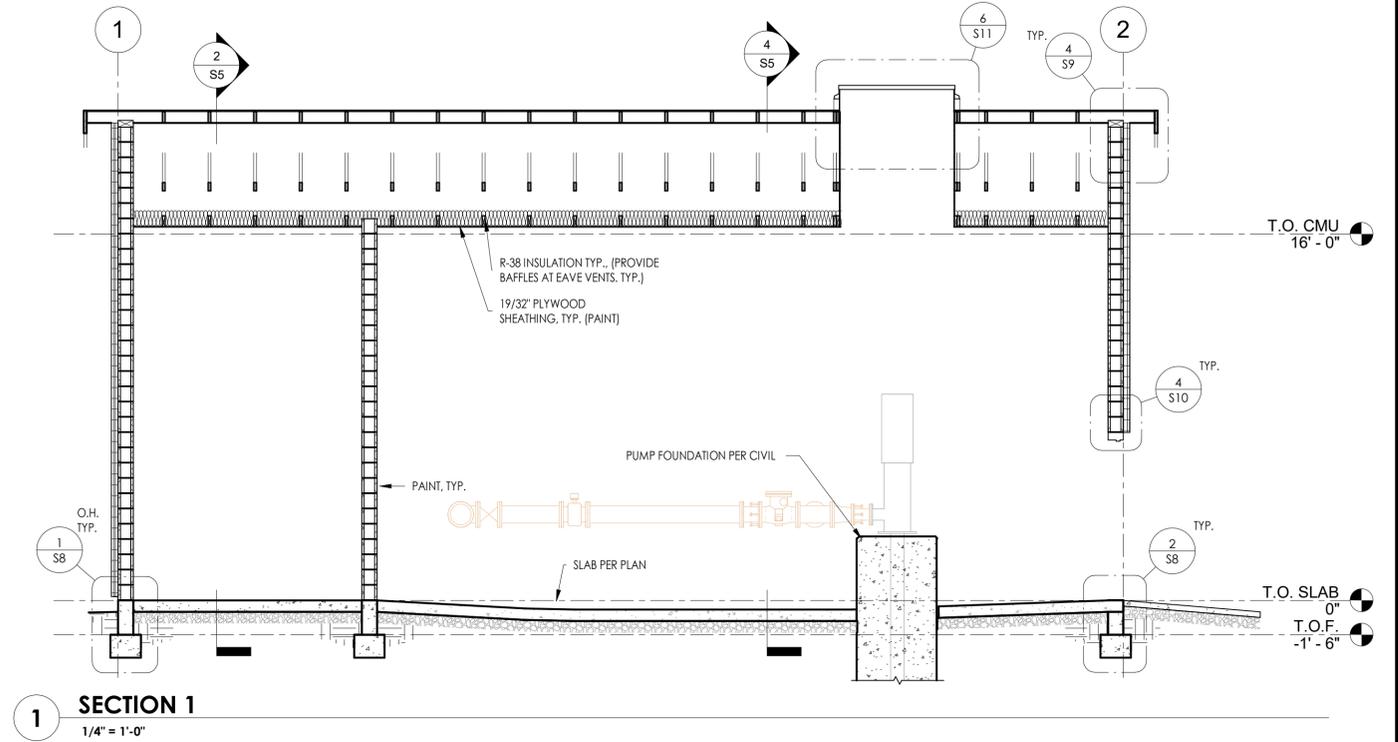
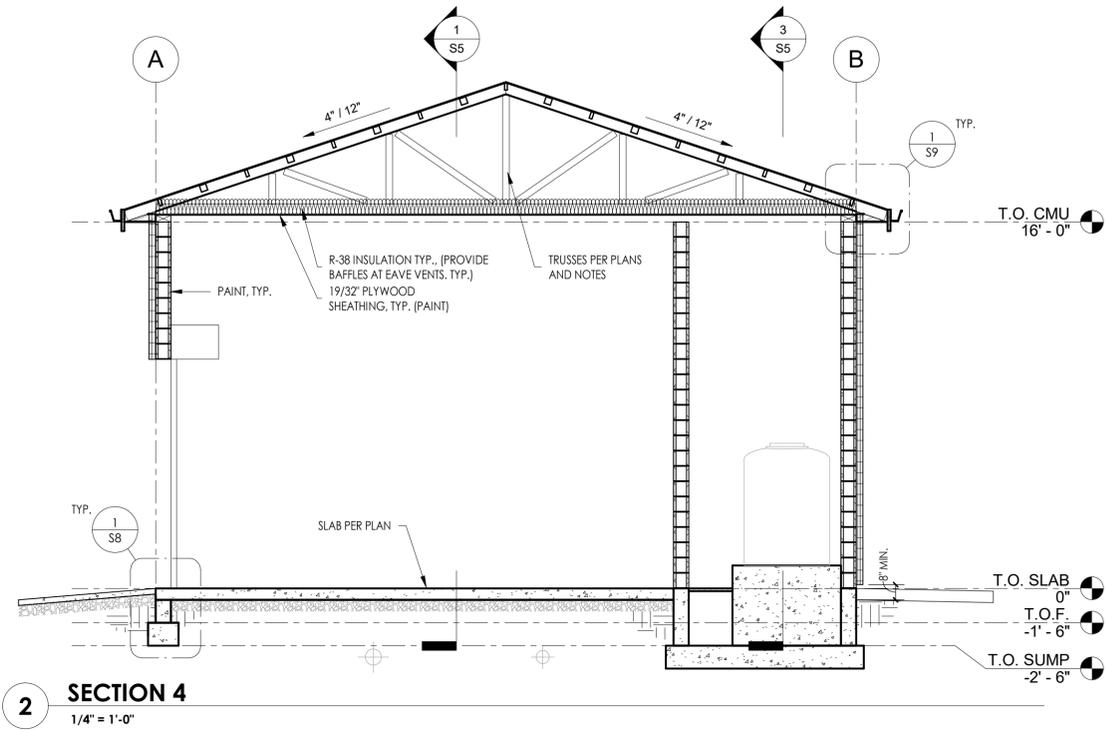


WORK ORDER NO. \_\_\_\_\_  
DESIGNED BY: Designer \_\_\_\_\_  
DRAWN BY: Author \_\_\_\_\_  
DATE: 8/18/21  
CHECKED BY: Checker \_\_\_\_\_  
SUBMITTED: \_\_\_\_\_  
RECOMMENDED: \_\_\_\_\_  
APPROVED: Approver \_\_\_\_\_



**THOMAS CREEK WELL HOUSE PROJECT**  
RENO, NEVADA  
**ELEVATIONS**

Plot Date: 11/3/2021 3:54:14 PM Path: C:\Users\gunner\Documents\REVIT Local Files\2021\0022 - Thomas Creek Wellhouse - Central\_Revit\_2020\_gunner\_nwse.rvt



## **Attachment E: Landscape Planting and Irrigation Plans**



# LANDSCAPE SPECIFICATIONS

## GENERAL

1. PLAN IS DIAGRAMMATIC ONLY. ALL LOCAL GOVERNING CODES SHALL BE MET. EXACT LOCATION OF TREES AND SHRUBS SHALL BE DETERMINED IN THE FIELD (INSTALL AS PER DETAILS) AND APPROVED BY THE OWNER'S REPRESENTATIVE.
2. A MINIMUM OF TWO WORKING DAYS BEFORE PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRIC CABLES, TELEPHONE CABLES, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND PROTECTION OF ALL UTILITIES, AND REPAIR OF ANY DAMAGE RESULTING FROM HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
3. DAMAGES: CONTRACTOR SHALL PROMPTLY REPAIR ALL DAMAGES TO EXISTING SITE AT NO COST TO OWNER.
4. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES (I.E., PAVING, PLUMBING, ELECTRICAL, ETC.)
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION AND TO NOTIFY THE OWNER'S REPRESENTATIVE SHOULD CONDITIONS EXIST WHICH PREVENT CONSTRUCTION AS PER THESE PLANS. COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS AND RESPONSIBILITY FOR CORRECTIONS.
6. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING DUST CONTROL AND SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS AND CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE OWNER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT.

## PLANTING

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADING THROUGHOUT ALL LANDSCAPE AREAS SUCH THAT THERE ARE NO HUMPS OR DEPRESSIONS AND POSITIVE DRAINAGE OCCURS THROUGHOUT.
8. THE CONTRACTOR SHALL PROVIDE SOIL TEST RESULTS FOR EXISTING SITE SOIL INCLUDING: TEXTURE CLASSIFICATION, PH, NITROGEN, POTASSIUM, PHOSPHORUS, SODIUM HAZARD, SALINITY HAZARD, AND FERTILIZATION RECOMMENDATION FOR THE INTENDED USE. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS OF SOIL TEST.
9. INSTALL ALL PLANT MATERIALS AS PER DETAILS AND SOIL AND PLANT LAB REPORT. INFORMATION IN SOILS AND PLANT LAB REPORT SHALL PREVAIL OVER NOTES AND DETAILS.
10. SOIL AMENDMENT SHALL BE TRIPLE MIX COMPOSED OF TOPSOIL, BARK HUMUS, AND COMPOST. SUBMIT TO OWNER'S REPRESENTATIVE FOR APPROVAL.
11. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT MATERIAL PER SYMBOLS AND SPACING INDICATED ON PLAN. SYMBOLS PREVAIL OVER NUMBERS ON PLANT LIST. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT EXPRESSED WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE. SEE SUBMITTALS.
12. ALL PLANTS NOT MEETING OR EXCEEDING REQUIREMENTS AND RECOMMENDATIONS OF THE LATEST EDITION OF THE ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN SHALL BE REJECTED. CONTRACTOR SHALL RECEIVE ON-SITE APPROVAL OF PLANT MATERIAL BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING. FAILURE TO RECEIVE PRIOR APPROVAL MAY RESULT IN REJECTION OF PLANT MATERIAL FOLLOWING INSTALLATION. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND EVALUATE PLANT MATERIAL THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD.
13. ALL PLANTING BEDS IN WHICH NO OTHER GROUND COVER IS SPECIFIED SHALL RECEIVE A FOUR-INCH DEPTH OF DECOMPOSED GRANITE (OAE) INSTALLED OVER LANDSCAPE FABRIC. LANDSCAPE FABRIC TO BE "DEWITT" PRO-5 WEED BARRIER (OAE) INSTALLED IN ACCORDANCE WITH MFG'S SPECIFICATIONS.

## INSPECTIONS/APPROVALS/SUBMITTALS

21. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING OWNER'S REPRESENTATIVE, A MINIMUM OF 48 HOURS IN ADVANCE, FOR THE FOLLOWING SITE OBSERVATIONS AND/OR MEETINGS:
  - A. PRECONSTRUCTION MEETING WITH ALL PARTIES
  - B. PLANT MATERIAL ON SITE, PRIOR TO INSTALLATION
  - C. PLANT LOCATIONS STAKED OUT, PRIOR TO PLANTING
  - D. OPEN TRENCH, MAINLINE (WITH VALVES ATTACHED) PRESSURE TEST
  - E. IRRIGATION COVERAGE TEST
  - F. FINAL PROJECT WALK-THROUGH
  - G. ADDITIONAL SITE OBSERVATIONS AS DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE AND/OR CONTRACTOR.
22. SUBMIT AMENDMENT AND MULCH SAMPLES TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. FAILURE TO COMPLY MAY RESULT IN REJECTION OF MULCH OR AMENDMENT PRIOR TO OR FOLLOWING INSTALLATION.
23. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROVIDE PLANT MATERIAL AS SPECIFIED ON THIS PLAN. THE CONTRACTOR MAY SUBMIT A REQUEST TO PROVIDE SUBSTITUTIONS FOR THE SPECIFIED PLANT MATERIAL UNDER THE FOLLOWING CONDITIONS:
  - A. ANY SUBSTITUTIONS PROPOSED SHALL BE SUBMITTED TO THE PROJECT OWNER'S REPRESENTATIVE WITHIN TWO WEEKS OF THE AWARD OF CONTRACT. SUBSTITUTIONS MUST MEET EQUIVALENT DESIGN AND FUNCTIONAL GOALS OF THE ORIGINAL MATERIALS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. ANY CHANGES MUST HAVE THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
  - B. THE REQUEST WILL BE ACCOMPANIED BY AT LEAST THREE NOTICES FROM PLANT MATERIAL SUPPLIERS THAT THE PLANT MATERIAL SPECIFIED IS NOT AVAILABLE AND WILL NOT BE AVAILABLE PRIOR TO CONSTRUCTION.
24. SUBMIT REQUIRED SOIL REPORT, AND SAMPLE OF PROPOSED SOIL AMENDMENTS TO OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
25. RECORD (AS-BUILT) DRAWINGS: FOLLOWING COMPLETION OF PROJECT INSTALLATION, AND PRIOR TO FINAL APPROVAL, CONTRACTOR SHALL PREPARE AND SUBMIT RECORD DRAWINGS DEPICTING A COMPLETE LANDSCAPE AND IRRIGATION INSTALLATION. PROCURE FROM OWNER FULL-SIZE SHEETS OF CONTRACT DRAWINGS. CONSTRUCTION DRAWINGS SHALL BE ON THE PROJECT SITE AT ALL TIMES DURING INSTALLATION. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF TREES AND SHRUB BEDS, IRRIGATION VALVES, AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDING, CURBS, FENCES, WALKS, OR PROPERTY LINES. DRAWINGS SHALL SHOW MANUFACTURER'S NAME AND CATALOG NUMBER. THE DRAWINGS SHALL BE TO SCALE. ALL INFORMATION NOTED ON THE PRINT SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY WAY. THE RECORD SET/PA SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE.

## GUARANTEES/WARRANTY

26. ALL PLANTED AREAS SHALL BE MAINTAINED FOR A PERIOD OF ONE YEAR FOLLOWING WRITTEN ACCEPTANCE BY OWNER'S REPRESENTATIVE. CONTRACTOR SHALL GUARANTEE ALL TREES AND SHRUBS FOR A PERIOD OF ONE-YEAR FOLLOWING COMPLETION OF MAINTENANCE PERIOD.

# LANDSCAPE REQUIREMENTS

ZONING: LD SUBURBAN  
DEVELOPED SITE AREA: 31760 SF  
TOTAL SITE AREA: 104735 SF

USE: CIVIL USE, MAJOR SERVICES AND UTILITIES, UTILITY SERVICES

- LANDSCAPE COVERAGE: 20% DEVELOPED AREA REQUIRED/PROVIDED 20% (6350 SF)

ZONING: 1 TREE PER/300 SF OF LANDSCAPE AREA, 22 REQUIRED/ PROVIDED

- EVERGREEN MIN SIZE AT PLANTING TO BE 7'HT. 17 PROVIDED
- DECIDUOUS MIN. SIZE AT PLANTING TO BE 2" CAL. 5 PROVIDED

BUFFER REQUIRED ADJOINING RESIDENTIAL USE:

- BUFFER THE WIDTH OF REQUIRED YARD AND 1 TREE/20 LF PROPERTY FRONTAGE REQUIRED
- REDUCTION OF THIS REQUIREMENT REQUESTED THROUGH SUP PROCESS.
- 1 TREE/20 LF PROVIDED DIRECTLY AROUND STRUCTURE, TOTAL 22 TREES PROVIDED

SCREENING ADJOINING RESIDENTIAL USES, SOLID DECORATIVE WALL OR FENCE ALONG ENTIRE EDGE OF PROPERTY LINE REQUIRED

- REMOVAL OF THIS REQUIREMENT REQUESTED THROUGH SUP PROCESS

TREES TOTAL: 22 REQUIRED/ PROVIDED

SHRUBS:

- 50% MIN. SIZE AT PLANTING TO BE 5 GALLON
- 50% MIN. SIZE AT PLANTING TO BE 1 GALLON

# PLANT LEGEND

EVERGREEN	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	JUNIPERUS SCOPULORUM	ROCKY MOUNTAIN JUNIPER	7' HT	30'HX20'W	11
	PINUS PONDEROSA	PONDEROSA PINE	7' HT	60'HX30'W	6
SHADE TREE	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	KOELREUTERIA PANICULATA	GOLDEN RAIN TREE	2" CAL	30'HX30'W	5
SHRUB AREAS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	ROCK MULCH AND SHRUBS AT 6 SHRUBS/300 PLANTING AREA OX ROCK 2"- 6" SIZE PLACED AT 6" DEPTH SEE SHRUB LEGEND FOR SHRUBS TYPE AND SIZE		-		14,774 SF
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	PREVIOUSLY DISTURBED AREA	-		17,824 SF
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	NEW DISTURBED AREA	-		11,517 SF

# SHRUB LEGEND

BOTANICAL NAME	COMMON NAME	SIZE HXW
CERCOCARPUS LEDIFOLIUS	CURL-LEAF MOUNTAIN MAHOGANY	18'HX10'W
CHAMAEBATIARIA MILLEFOLIUM 'FERNBUSH'	FERNBUSH	8'HX8'W
FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	10'HX10'W
HESPERALOE PARVIFLORA	RED YUCCA	3'HX3'W
PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	5'HX4'W
PRUNUS BESSEYI 'P011S' TM	PAWNEE BUTTES SAND CHERRY	1.5'HX5'W

NOTES:

1. SHRUBS TO BE SHOWN IN SUBSEQUENT SUBMITTALS.
2. THE REVEGETATION PROCEDURE WILL INCLUDE TOPSOIL SALVAGE AND REPLACEMENT AND APPLICATION OF INOCULANT AND HUMIC ACID. A SEED MIX COMPRISED OF NATIVE AND REGIONALLY ADAPTED GRASSES, FORBS AND SHRUBS WILL BE APPLIED EITHER BY BROADCAST OR HYDROSEEDING AT A MINIMUM OF 25 PLS (PURE LIVE SEED) POUNDS PER ACRE. PAPER MULCH AND TACKIFIER WILL BE APPLIED TO THE SURFACE.



WORK ORDER NO. 15-00568.001  
DESIGNED BS  
DRAWN TB  
DATE November 3, 2021  
CHECKED BS  
SUBMITTED SEPTEMBER 2021  
RECOMMENDED  
APPROVED

TRUCKEE MEADOWS WATER  
A U T H O R I T Y  
1965 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-834-8000 / FX 775-834-8003

50% SUBMITTAL

THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA  
PLANTING LEGEND  
AND NOTES

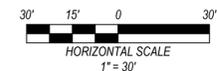
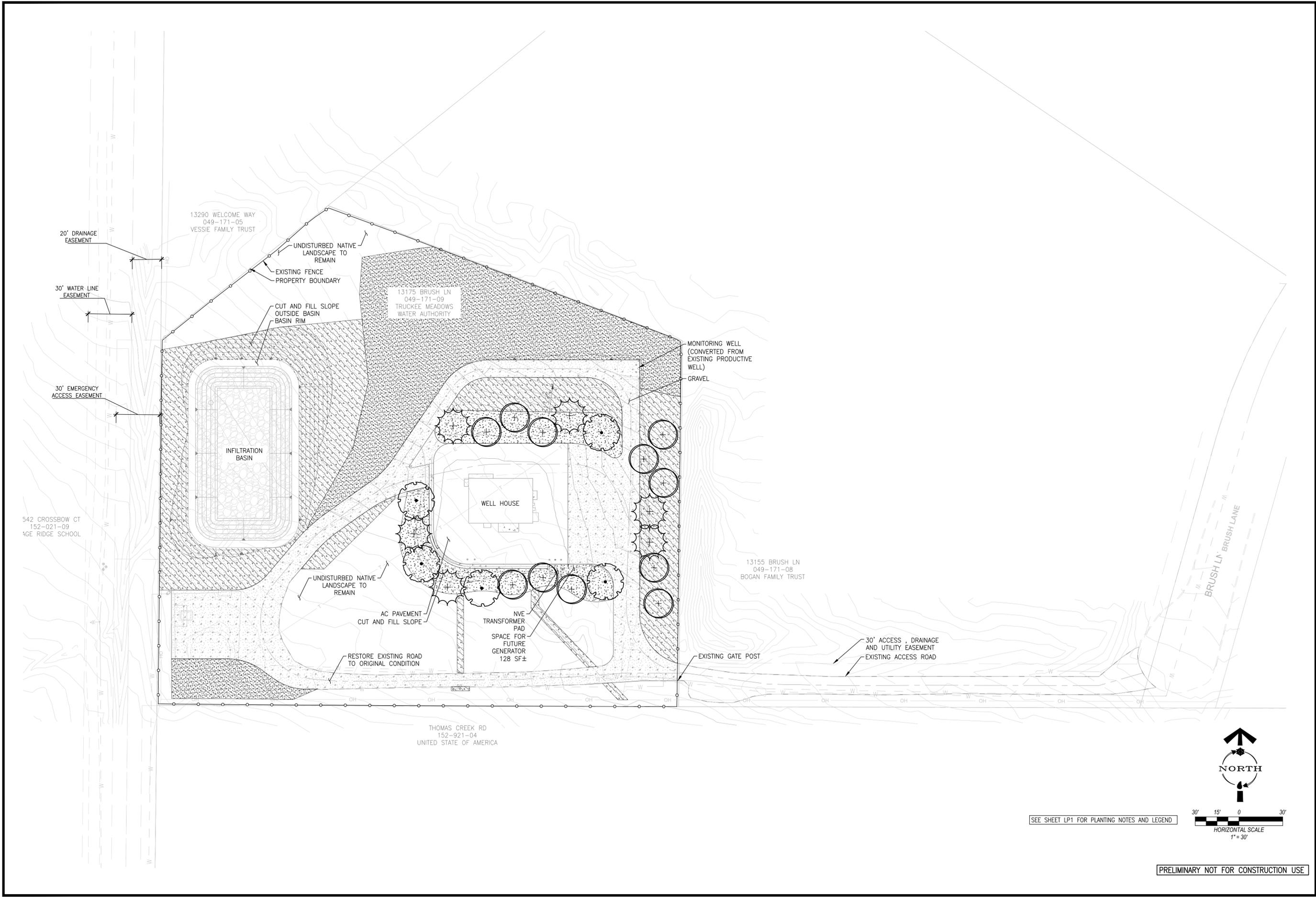
SHEET NUMBER

LP1

1 OF 5

PRELIMINARY NOT FOR CONSTRUCTION USE

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Nov 03, 2021 3:01 pm



SEE SHEET LP1 FOR PLANTING NOTES AND LEGEND

PRELIMINARY NOT FOR CONSTRUCTION USE



WORK ORDER NO. 15-0056.001 DESIGNED BS DRAWN TB DATE November 3, 2021 CHECKED BS SUBMITTED SEPTEMBER 2021 RECOMMENDED APPROVED
 <p><b>TRUCKEE MEADOWS WATER</b> A U T H O R I T Y 1865 CAPITAL BLVD. / PO BOX 30013 RENO, NEVADA 89502-3013 PH 775-854-8000 / FX 775-854-8003</p>
<p>50% SUBMITTAL</p>
<p><b>THOMAS CREEK WELL HOUSE REPLACEMENT</b> <b>RENO, NEVADA</b></p> <p><b>PLANTING PLAN</b></p>
SHEET NUMBER <p><b>LP2</b></p>
2 OF 5

# IRRIGATION SPECIFICATIONS

## GENERAL

1. PLAN IS DIAGRAMMATIC ONLY. FINAL LOCATION OF LINES AND HEADS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE. LINES SHALL BE IN A COMMON TRENCH WHEREVER POSSIBLE. THE POINT-OF-CONNECTION SHALL BE AS INDICATED ON THE PLAN.
2. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND ENSURE THAT ALL LOCAL CODES ARE MET. VERIFY PRESSURE (PSI) PRE AND POST CONSTRUCTION.
3. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL PERMITS REQUIRED FOR INSTALLATION OF THE IRRIGATION SYSTEM AS DEPICTED ON THESE PLANS.
4. CONTRACTOR SHALL VERIFY AVAILABLE FLOW AND PRESSURE DOWNSTREAM FROM THE POINT-OF-CONNECTION PRIOR TO SYSTEM INSTALLATION. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IF AVAILABLE FLOW IS LESS THAN REQUIRED TO RUN THE LARGEST ZONE. CONTRACTOR SHALL NOT PROCEED ANY FURTHER WITH INSTALLATION OF THE SYSTEM UNTIL NECESSARY DESIGN REVISIONS HAVE BEEN DETERMINED BY OWNER'S REPRESENTATIVE.
5. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR DIFFERENCES IN DIMENSIONS EXIST THAT MIGHT HAVE BEEN UNKNOWN DURING ENGINEERING. SUCH OBSTRUCTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO OWNER.
6. ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
7. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SPRINKLER MATERIALS, INCLUDING PIPE, WITH THE LANDSCAPE DRAWINGS TO AVOID INTERFERING WITH THE PLANTING OF TREES, SHRUBS, OR OTHER PLANTINGS.
8. ALL VALVES ARE TO BE LOCATED IN PLANTING AREAS WHEREVER POSSIBLE.
9. ALL ELECTRICAL WIRE FROM CONTROLLER TO VALVES SHALL BE 12 GAUGE UL DIRECT BURIAL OR LARGER AS REQUIRED BY LENGTH PER MANUFACTURER'S SPECIFICATIONS.
10. BACKFILL FOR TRENCHING SHALL BE COMPACTED TO A DRY DENSITY EQUAL TO THE UNDISTURBED ADJACENT SOIL AND SHALL CONFORM TO ADJACENT GRADES WITHOUT DIPS, HUMPS, OR OTHER IRREGULARITIES. BLUE DETECTION TAPE TO BE INSTALLED 10-12" ABOVE PIPE.
11. A MINIMUM OF TWO WORKING DAYS PRIOR TO PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600 FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRICAL CABLES, TELEPHONE CABLES, ETC.
12. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING DUST CONTROL AND SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
13. INSTALL ALL PIPE AND CONTROL WIRES IN LANDSCAPE BEDS AND IN COMMON TRENCHES WHEREVER POSSIBLE.
14. INSTALL ALL PIPE AND CONTROL WIRE, WHICH RUNS UNDER PAVING, WITHIN SCH. 40 PVC SLEEVES 4" DIA. MINIMUM SIZE AS REQUIRED TO ALLOW INSTALLATION WITHOUT BINDING. PROVIDE (1) SLEEVE PER PIPE. PROVIDE SEPARATE SLEEVES FOR CONTROL WIRE. LEAVE ABOVE GRADE MARKERS ON BOTH SIDES OF SLEEVE.
15. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE FOR COMPLETE DRAINAGE OF THE MAINLINES BY INSTALLING MANUAL DRAINS AS INDICATED ON PLAN AND AT ALL SYSTEM LOW POINTS. NO KING DRAINS.

## FLUSHING AND TESTING

16. PIPING SHALL BE COMPLETELY FLUSHED OF FOREIGN PARTICLES BEFORE ATTACHING IRRIGATION COMPONENTS AND DRAIN VALVES.
17. AFTER FLUSHING, AND WHEN ALL VALVES AND QUICK COUPLERS ARE IN PLACE, ALL MAIN SUPPLY LINES SHALL BE TESTED AT 100 POUNDS PER SQUARE INCH (100 PSI) WITH VALVES CLOSED. MAINTAIN PRESSURE FOR A PERIOD OF NOT LESS THAN (4) CONSECUTIVE HOURS. ALL JOINTS SHOWING LEAKS SHALL BE CLEANED, REMADE, AND TESTED.
18. AFTER FLUSHING, LATERAL PIPES SHALL BE TESTED WITH RISERS CAPPED AND DRAIN VALVES CLOSED. THE TEST SHALL BE MADE AT MAXIMUM OPERATING PRESSURE FOR A PERIOD OF NOT LESS THAN (1) HOUR. ALL JOINTS SHOWING LEAKS SHALL BE CLEANED, REMADE, AND TESTED. ALL TESTING SHALL BE DONE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING OVER PIPING.
19. OPERATIONAL TESTING: PERFORM OPERATIONAL TESTING AFTER HYDROSTATIC TESTING IS COMPLETED. DEMONSTRATE TO THE OWNER'S REPRESENTATIVE THAT THE SYSTEM MEETS COVERAGE REQUIREMENTS (100%) AND THAT AUTOMATIC CONTROLS FUNCTION PROPERLY.

## SUBMITTALS

20. MATERIALS LIST: WITHIN (15) DAYS AFTER AWARD OF CONTRACT, SUBMIT TO OWNER'S REPRESENTATIVE (3) COPIES OF A COMPLETE MATERIAL LIST (PARTIAL LIST NOT ACCEPTABLE) OF ALL MATERIALS TO BE USED ON THE PROJECT, SPECIFYING MANUFACTURER, GRADE, TRADE NAME, CATALOG NUMBER, SIZE, ETC. THIS SHALL IN NO WAY BE CONSTRUED AS ALLOWING A SUBSTITUTION FOR ANY ITEM SPECIFIED ON THE PLANS. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE THE MATERIALS AT HIS OWN EXPENSE.
- INSTALLATION AND PERFORMANCE OF APPROVED SUBSTITUTIONS ARE THE CONTRACTORS RESPONSIBILITY. ANY CHANGES REQUIRED FOR INSTALLATION OF ANY APPROVED SUBSTITUTION MUST BE MADE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE WITHOUT ADDITIONAL COST TO OWNER.

21. PRIOR TO SYSTEM INSTALLATION CONTRACTOR SHALL VERIFY AND SUBMIT TO OWNER'S REPRESENTATIVE IN WRITING, AVAILABLE FLOW AND PRESSURE AT POINT-OF-CONNECTION AS DESCRIBED IN SPECIFICATION #4 ABOVE.

22. COMPLETE WARRANTY CARDS FOR AUTOMATIC CONTROLLER AND OTHER IRRIGATION MATERIAL (CONTROLLER KEYS, ETC.) SHALL BE DELIVERED TO OWNER.

23. CONTRACTOR SHALL PREPARE AND ISSUE TO THE OWNER (AT COMPLETION OF THE INSTALLATION) AN ANNUAL CHART INDICATING LOCATION, OPERATING DATES, CYCLES, AND TIME FOR EACH ZONE.

24. ASBUILT IRRIGATION DRAWINGS: CONTRACTOR SHALL FURNISH ASBUILTS OF THE COMPLETE IRRIGATION SYSTEM. PROCURE FROM OWNER'S REPRESENTATIVE FULL-SIZED SHEETS OF CONTRACT DRAWINGS. CONSTRUCTION DRAWINGS SHALL BE ON THE CONSTRUCTION SITE AT ALL TIMES WHILE THE IRRIGATION SYSTEM IS BEING INSTALLED. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF VALVES AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDINGS, CURBS, FENCES, WALKS OR PROPERTY LINES. DRAWINGS SHALL SHOW APPROVED MANUFACTURER'S NAME AND CATALOG NUMBER. THE DRAWINGS SHALL BE TO SCALE AND ALL INDICATIONS SHALL BE NEAT. ALL INFORMATION NOTED ON THE PRINT SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY WAY. THE RECORD SEPIA SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE AT OR BEFORE FINAL ACCEPTANCE/APPROVAL OF THE PROJECT.

## GUARANTEE/FINAL ACCEPTANCE

25. CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE THE IRRIGATION SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. MANUFACTURER WARRANTIES SHALL ONLY EXCEED THIS GUARANTEE AND CONTRACTOR SHALL BE LIABLE FOR REPAIRS/REPLACEMENT OF FAILED MATERIAL/WORKMANSHIP.

## MAINTENANCE

26. AFTER SYSTEM IS INSTALLED AND APPROVED, INSTRUCT OWNER'S DESIGNATED PERSONNEL IN COMPLETE OPERATION AND MAINTENANCE PROCEDURES. DRAIN ENTIRE SYSTEM AT END OF FIRST WATERING SEASON FOLLOWING INSTALLATION. TRAIN OWNER'S DESIGNATED PERSONNEL BY HAVING THEM ASSIST IN WINTERIZING PROCEDURE.

# IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD MDCFCAP DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.
	RAIN BIRD PCT SINGLE OUTLET EMITTER PRESSURE COMPENSATING THREADED LOW-FLOW BUBBLERS. OFFERED IN 5 GPH, 7 GPH, AND 10 GPH MODELS, WITH 1/2" FPT THREADED INLET. LIGHT BROWN = 5 GPH, VIOLET = 7 GPH, AND GREEN = 10 GPH.
	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5GPH=BLUE, 1.0GPH=BLACK, AND 2.0GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET.
	Emitter Notes: 1.0 GPH emitters (3 assigned to each #5 plant)
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD DVF STANDARD CONFIGURATION, ELECTRIC REMOTE CONTROL VALVE. PLASTIC RESIDENTIAL IN 1". WITH FLOW CONTROL.
	RAIN BIRD 44-LRC 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.
	MUELLER CURB STOP VALVE MAINLINE ISOLATION VALVE, SAME SIZE AS MAINLINE.
	RAIN BIRD ESP4MEI WITH (3) ESP-SM6 22 STATION, HYBRID MODULAR INDOOR CONTROLLER. FOR RESIDENTIAL OR LIGHT COMMERCIAL APPLICATIONS.
	RAIN BIRD RSD-BEX RAIN SENSOR, WITH METAL LATCHING BRACKET, EXTENSION WIRE.
	RAIN BIRD PRF-100-RBY 1" INLET/ OUTLET WITH 3.0 TO 15 GPM AND 40 PSI REGULATED PRESSURE. INLET PRESSURE: 20 TO 150 PSI.
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40 PIPE SLEEVE: PVC SCHEDULE 40 ALL SLEEVES SHALL BE 4" IN SIZE AND EXTEND 2' MIN. BEYOND EDGE OF PAVEMENT OR CURB AND MARKED ABOVE GRADE.



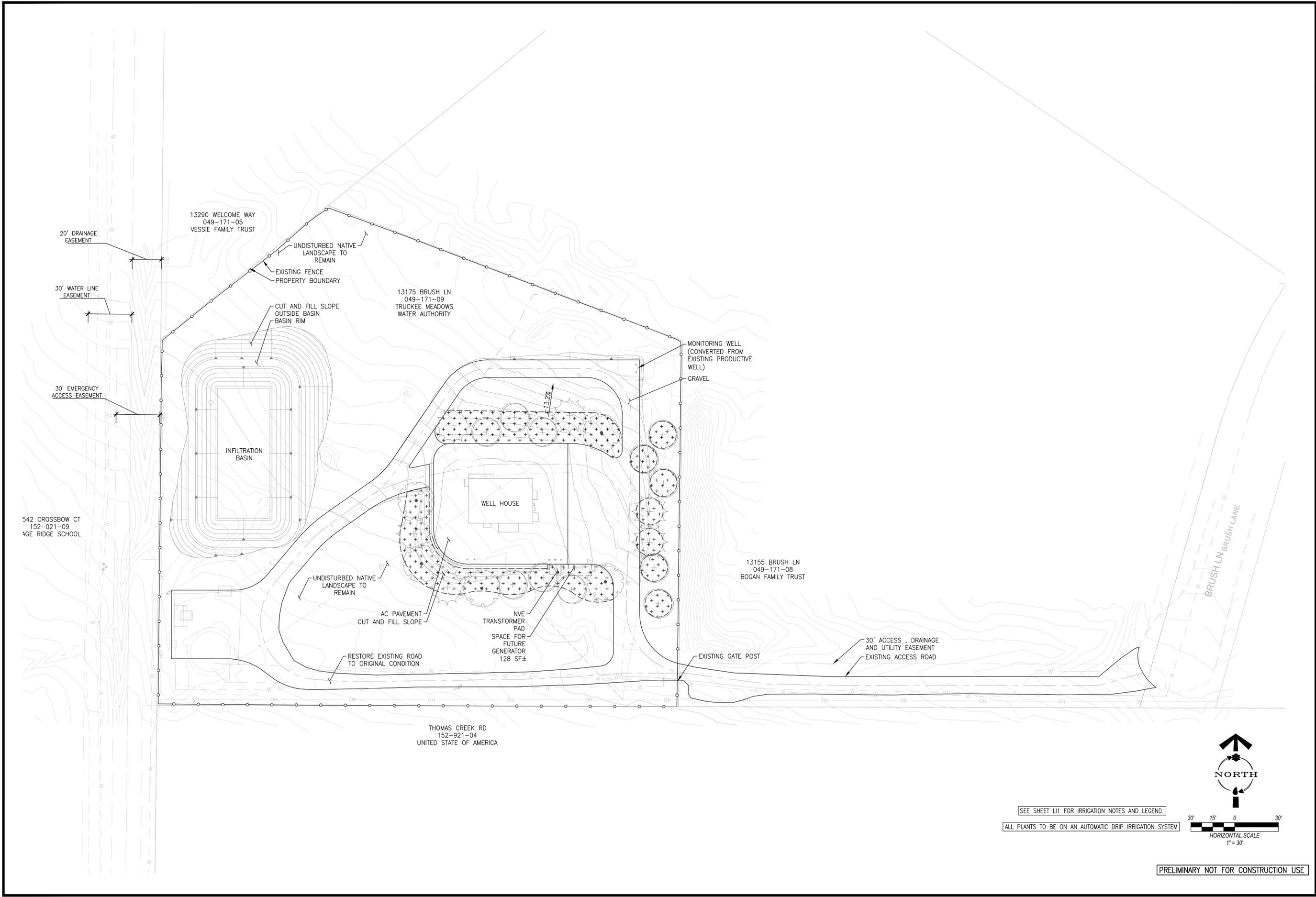
# DESIGN PRESSURE AND FLOW

ASSUMED AVAILABLE WATER PRESSURE AT P.O.C. IS 30 PSI. ASSUMED FLOW IS 20 GPM @ 4.5 FPS. CONTRACTOR TO VERIFY PRIOR TO SYSTEM INSTALLATION. FUTURE PRESSURES MAY VARY DUE TO NEW DEVELOPMENT AND/OR OTHER UNFORESEEN CIRCUMSTANCES. LANDSCAPE ARCHITECT SHALL BEAR NO RESPONSIBILITY FOR FUTURE DEVIATIONS IN PRESSURE AND ANY RESULTING EFFECTS ON THE PERFORMANCE OF THE IRRIGATION SYSTEM.

WHENEVER POSSIBLE, ALL IRRIGATION COMPONENTS SHALL BE LOCATED IN PLANTING BEDS.

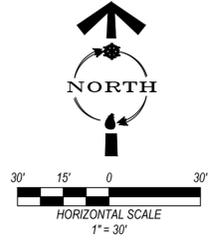
NOTE: ALL CONSTRUCTION DETAILS AND NOTES FROM THE APPROVED LANDSCAPE PLANS SHALL APPLY.

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Nov 03, 2021 - 3:02pm



SEE SHEET L11 FOR IRRIGATION NOTES AND LEGEND

ALL PLANTS TO BE ON AN AUTOMATIC DRIP IRRIGATION SYSTEM



PRELIMINARY NOT FOR CONSTRUCTION USE

**Stantec**

WORK ORDER NO. 15-0056.001

DESIGNED	BS
DRAWN	TB
DATE	November 3, 2021
CHECKED	BS
SUBMITTED	SEPTEMBER 2021
RECOMMENDED	
APPROVED	

**TRUCKEE MEADOWS WATER**  
A U T H O R I T Y  
1865 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-854-8000 / FX 775-854-8003

50% SUBMITTAL

**THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA**

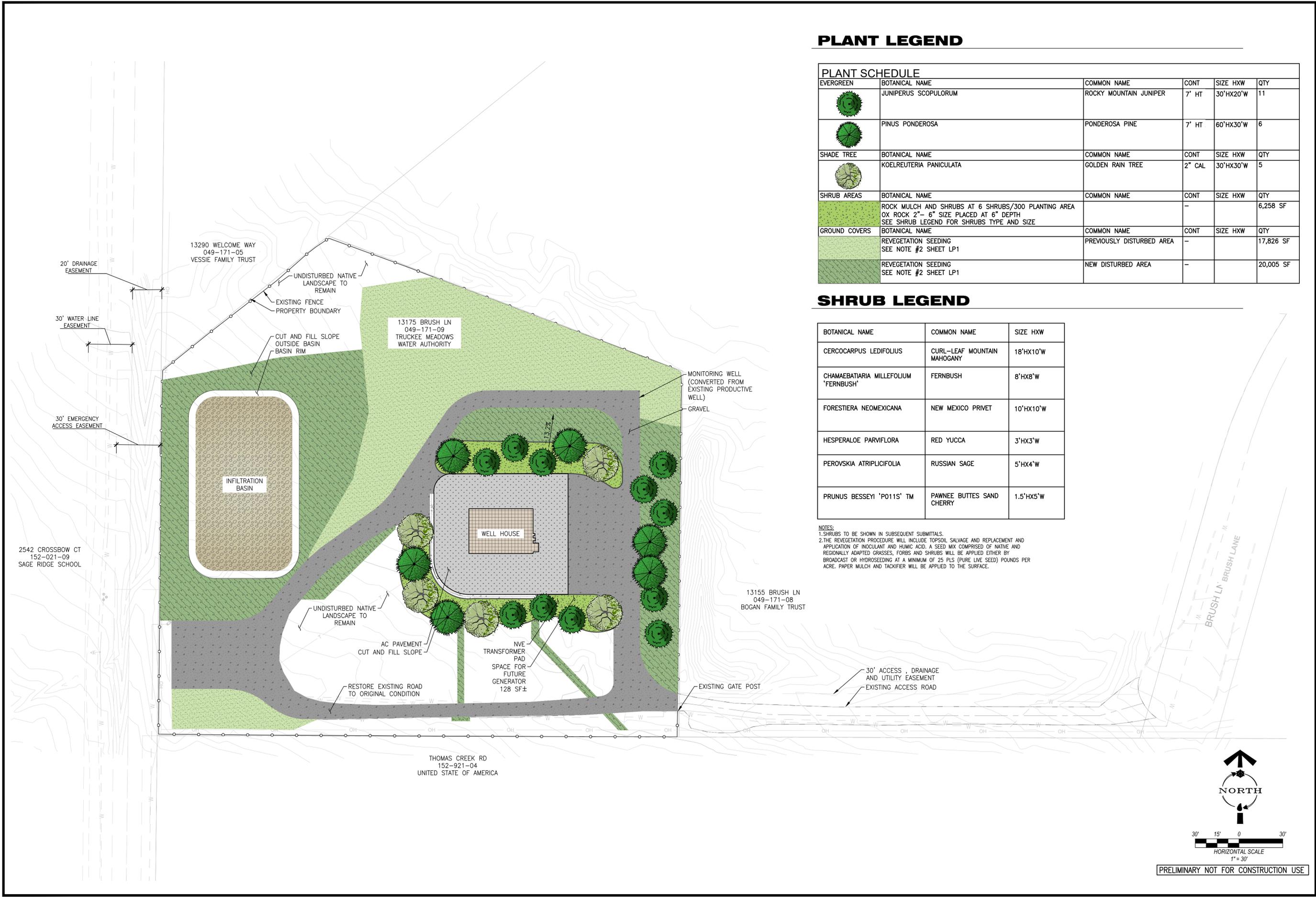
**IRRIGATION PLAN**

SHEET NUMBER

**LN**

4 OF 5

\\u0319-perfect1\workgroup\2042\active\2042606703\drawing\sheet\_files\606703\_1001LP\_Colorred.dwg  
Nov 03, 2021 - 3:04pm



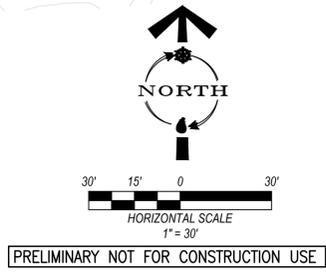
### PLANT LEGEND

PLANT SCHEDULE					
EVERGREEN	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	JUNIPERUS SCOPULORUM	ROCKY MOUNTAIN JUNIPER	7' HT	30'HX20'W	11
	PINUS PONDEROSA	PONDEROSA PINE	7' HT	60'HX30'W	6
SHADE TREE	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	KOELREUTERIA PANICULATA	GOLDEN RAIN TREE	2" CAL	30'HX30'W	5
SHRUB AREAS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	ROCK MULCH AND SHRUBS AT 6 SHRUBS/300 PLANTING AREA OX ROCK 2"- 6" SIZE PLACED AT 6" DEPTH SEE SHRUB LEGEND FOR SHRUBS TYPE AND SIZE		-		6,258 SF
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	PREVIOUSLY DISTURBED AREA	-		17,826 SF
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	NEW DISTURBED AREA	-		20,005 SF

### SHRUB LEGEND

BOTANICAL NAME	COMMON NAME	SIZE HXW
CERCOCARPUS LEDIFOLIUS	CURL-LEAF MOUNTAIN MAHOGANY	18'HX10'W
CHAMAEBATIARIA MILLEFOLIUM 'FERNBUSH'	FERNBUSH	8'HX8'W
FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	10'HX10'W
HESPERALOE PARVIFLORA	RED YUCCA	3'HX3'W
PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	5'HX4'W
PRUNUS BESSEYI 'P011S' TM	PAWNEE BUTTES SAND CHERRY	1.5'HX5'W

NOTES:  
1. SHRUBS TO BE SHOWN IN SUBSEQUENT SUBMITTALS.  
2. THE REVEGETATION PROCEDURE WILL INCLUDE TOPSOIL SALVAGE AND REPLACEMENT AND APPLICATION OF INOCULANT AND HUMIC ACID. A SEED MIX COMPRISED OF NATIVE AND REGIONALLY ADAPTED GRASSES, FORBS AND SHRUBS WILL BE APPLIED EITHER BY BROADCAST OR HYDROSEEDING AT A MINIMUM OF 25 PLS (PURE LIVE SEED) POUNDS PER ACRE. PAPER MULCH AND TACKIFIER WILL BE APPLIED TO THE SURFACE.



WORK ORDER NO. 15-0056.001  
DESIGNED: BS  
DRAWN: TB  
DATE: November 3, 2021  
CHECKED: BS  
SUBMITTED: SEPTEMBER 2021  
RECOMMENDED:  
APPROVED:

**TRUCKEE MEADOWS WATER**  
A U T H O R I T Y  
1865 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-864-8000 / FX 775-864-8003

50% SUBMITTAL

**THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA**

**COLORED SITE PLAN**

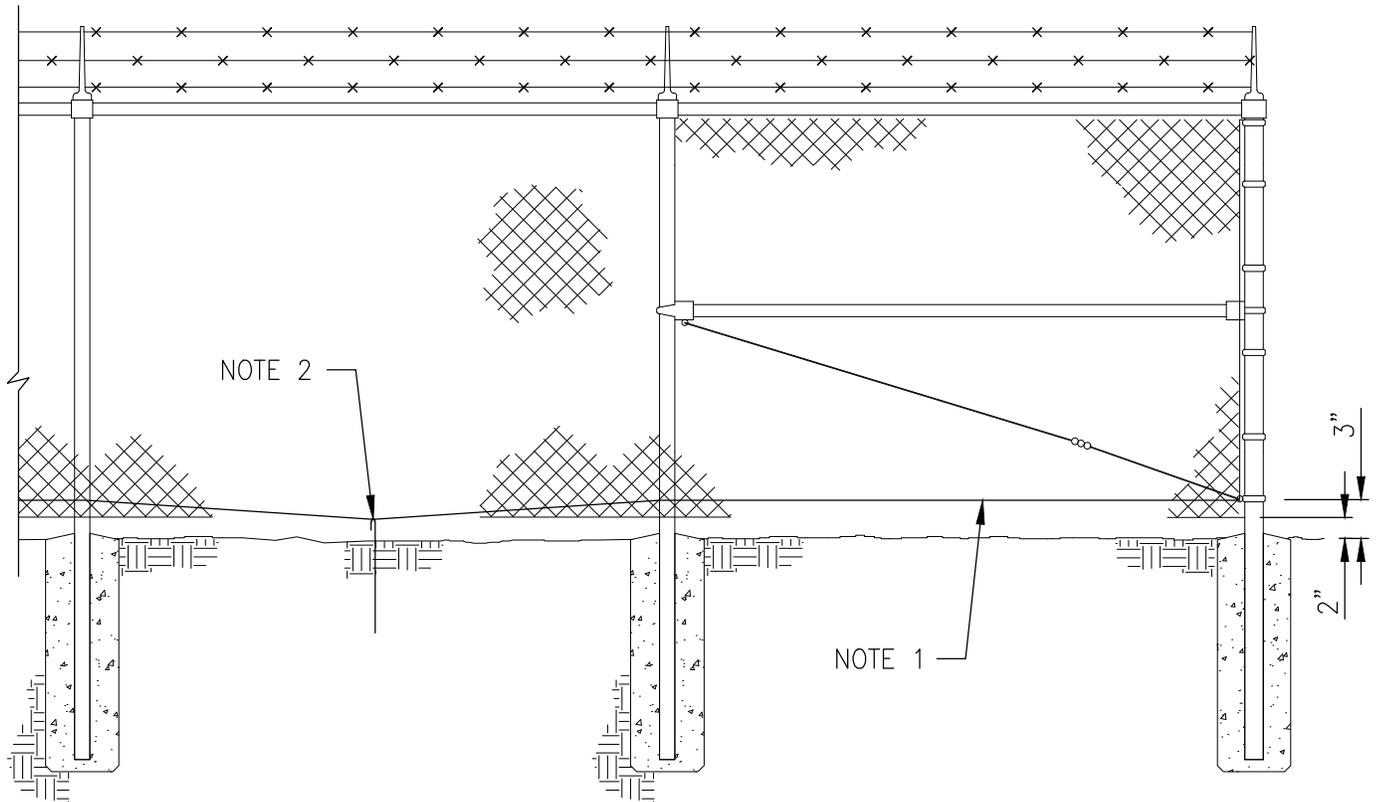
SHEET NUMBER  
**XX**

5 OF 5

## **Attachment F: Existing Fence Security Retrofit**

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NOTES:

1. INSTALL BOTTOM TENSION WIRE,
  - 1.1. 7 GA. (0.180" DIAMETER) GALVANIZED STEEL. WIRE TO BE INSTALLED TAUT @ 3" A.F.G.
  - 1.2. ATTACH FABRIC TO WIRE WITH HOG RINGS.
  - 1.3. CONTRACTOR SHALL ENSURE ALL AREAS OF FENCING CANNOT BE PULLED UP ABOVE 5" A.F.G.
  
2. OPTIONAL J-HOOK REBAR ANCHORS MAY BE UTILIZED TO ACHIEVE NOTE 1.3.



October 2021

156744

**Detail C472/TYP**

**Existing Fence  
Security Retrofit**

1325 Airmotive Way, Suite 215  
Reno, NV 89502

T: 775.834.0165



January 20, 2022

Katherine Stark  
Community Services Department  
Washoe County  
1001 East 9<sup>th</sup> Street  
Reno, NV 89512

156744

Subject: Special Use Permit WSUP21-0030, TMWA Thomas Creek Wellhouse

Dear Ms. Stark:

Truckee Meadows Water Authority (TMWA) representatives and Washoe County Community Services Department representatives met to discuss proposed components of the Thomas Creek Wellhouse project located on APN 049-171-09 Wednesday January 12, 2022. Additionally, TMWA representatives met with the property owners of 13155 Brush Lane (APN 049-171-08) located adjacent and to the east of the subject parcel to discuss the proposed project Sunday January 16, 2022.

As a result of these discussions, the landscape plans have been revised, and the latest landscape plans are attached. The goal of the revised landscape plan is for the wellhouse to visually complement the surrounding residences.

The adjacent property owner will send an email or letter to you expressing their support of the proposed project.

Regards,

**Brown and Caldwell**

A handwritten signature in blue ink, appearing to read 'Liz Pierson', with a long horizontal line extending to the right.

Liz Pierson, Project Manager  
Reno, Nevada

cc: Ben Jesch, TMWA; file

Attachments (1)

1. Attachment A: Revised Landscape Plans

# LANDSCAPE SPECIFICATIONS

## GENERAL

1. PLAN IS DIAGRAMMATIC ONLY. ALL LOCAL GOVERNING CODES SHALL BE MET. EXACT LOCATION OF TREES AND SHRUBS SHALL BE DETERMINED IN THE FIELD (INSTALL AS PER DETAILS) AND APPROVED BY THE OWNER'S REPRESENTATIVE.

2. A MINIMUM OF TWO WORKING DAYS BEFORE PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRIC CABLES, TELEPHONE CABLES, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION AND PROTECTION OF ALL UTILITIES, AND REPAIR OF ANY DAMAGE RESULTING FROM HIS WORK AT NO ADDITIONAL COST TO THE OWNER.

3. DAMAGES: CONTRACTOR SHALL PROMPTLY REPAIR ALL DAMAGES TO EXISTING SITE AT NO COST TO OWNER.

4. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES (I.E., PAVING, PLUMBING, ELECTRICAL, ETC.)

5. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION AND TO NOTIFY THE OWNER'S REPRESENTATIVE SHOULD CONDITIONS EXIST WHICH PREVENT CONSTRUCTION AS PER THESE PLANS. COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS AND RESPONSIBILITY FOR CORRECTIONS.

6. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING DUST CONTROL AND SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS AND CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE OWNER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT.

## PLANTING

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADING THROUGHOUT ALL LANDSCAPE AREAS SUCH THAT THERE ARE NO HUMPS OR DEPRESSIONS AND POSITIVE DRAINAGE OCCURS THROUGHOUT.

8. THE CONTRACTOR SHALL PROVIDE SOIL TEST RESULTS FOR EXISTING SITE SOIL INCLUDING: TEXTURE CLASSIFICATION, PH, NITROGEN, POTASSIUM, PHOSPHORUS, SODIUM HAZARD, SALINITY HAZARD, AND FERTILIZATION RECOMMENDATION FOR THE INTENDED USE. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS OF SOIL TEST.

9. INSTALL ALL PLANT MATERIALS AS PER DETAILS AND SOIL AND PLANT LAB REPORT. INFORMATION IN SOILS AND PLANT LAB REPORT SHALL PREVAIL OVER NOTES AND DETAILS.

10. SOIL AMENDMENT SHALL BE TRIPLE MIX COMPOSED OF TOPSOIL, BARK HUMUS, AND COMPOST. SUBMIT TO OWNER'S REPRESENTATIVE FOR APPROVAL.

11. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PLANT MATERIAL PER SYMBOLS AND SPACING INDICATED ON PLAN. SYMBOLS PREVAIL OVER NUMBERS ON PLANT LIST. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT EXPRESSED WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE. SEE SUBMITTALS.

12. ALL PLANTS NOT MEETING OR EXCEEDING REQUIREMENTS AND RECOMMENDATIONS OF THE LATEST EDITION OF THE ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN SHALL BE REJECTED. CONTRACTOR SHALL RECEIVE ON-SITE APPROVAL OF PLANT MATERIAL BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING. FAILURE TO RECEIVE PRIOR APPROVAL MAY RESULT IN REJECTION OF PLANT MATERIAL FOLLOWING INSTALLATION. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND EVALUATE PLANT MATERIAL THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD.

13. ALL PLANTING BEDS IN WHICH NO OTHER GROUNDCOVER IS SPECIFIED SHALL RECEIVE A FOUR-INCH DEPTH OF DECOMPOSED GRANITE (OAE) INSTALLED OVER LANDSCAPE FABRIC. LANDSCAPE FABRIC TO BE 'DEWITT' PRO-5 WEED BARRIER (OAE) INSTALLED IN ACCORDANCE WITH MFG'S SPECIFICATIONS.

## INSPECTIONS/APPROVALS/SUBMITTALS

21. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING OWNER'S REPRESENTATIVE, A MINIMUM OF 48 HOURS IN ADVANCE, FOR THE FOLLOWING SITE OBSERVATIONS AND/OR MEETINGS:

- A. PRECONSTRUCTION MEETING WITH ALL PARTIES
- B. PLANT MATERIAL ON SITE, PRIOR TO INSTALLATION
- C. PLANT LOCATIONS STAKED OUT, PRIOR TO PLANTING
- D. OPEN TRENCH, MAINLINE (WITH VALVES ATTACHED) PRESSURE TEST
- E. IRRIGATION COVERAGE TEST
- F. FINAL PROJECT WALK-THROUGH
- G. ADDITIONAL SITE OBSERVATIONS AS DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE AND/OR CONTRACTOR.

22. SUBMIT AMENDMENT AND MULCH SAMPLES TO OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INSTALLATION. FAILURE TO COMPLY MAY RESULT IN REJECTION OF MULCH OR AMENDMENT PRIOR TO OR FOLLOWING INSTALLATION.

23. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROVIDE PLANT MATERIAL AS SPECIFIED ON THIS PLAN. THE CONTRACTOR MAY SUBMIT A REQUEST TO PROVIDE SUBSTITUTIONS FOR THE SPECIFIED PLANT MATERIAL UNDER THE FOLLOWING CONDITIONS:

- A. ANY SUBSTITUTIONS PROPOSED SHALL BE SUBMITTED TO THE PROJECT OWNER'S REPRESENTATIVE WITHIN TWO WEEKS OF THE AWARD OF CONTRACT. SUBSTITUTIONS MUST MEET EQUIVALENT DESIGN AND FUNCTIONAL GOALS OF THE ORIGINAL MATERIALS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. ANY CHANGES MUST HAVE THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- B. THE REQUEST WILL BE ACCOMPANIED BY AT LEAST THREE NOTICES FROM PLANT MATERIAL SUPPLIERS THAT THE PLANT MATERIAL SPECIFIED IS NOT AVAILABLE AND WILL NOT BE AVAILABLE PRIOR TO CONSTRUCTION.

24. SUBMIT REQUIRED SOIL REPORT, AND SAMPLE OF PROPOSED SOIL AMENDMENTS TO OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

25. RECORD (AS-BUILT) DRAWINGS: FOLLOWING COMPLETION OF PROJECT INSTALLATION, AND PRIOR TO FINAL APPROVAL, CONTRACTOR SHALL PREPARE AND SUBMIT RECORD DRAWINGS DEPICTING A COMPLETE LANDSCAPE AND IRRIGATION INSTALLATION. PROCURE FROM OWNER FULL-SIZE SHEETS OF CONTRACT DRAWINGS. CONSTRUCTION DRAWINGS SHALL BE ON THE PROJECT SITE AT ALL TIMES DURING INSTALLATION. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF TREES AND SHRUB BEDS, IRRIGATION VALVES, AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDING, CURBS, FENCES, WALKS, OR PROPERTY LINES. DRAWINGS SHALL SHOW MANUFACTURER'S NAME AND CATALOG NUMBER. THE DRAWINGS SHALL BE TO SCALE. ALL INFORMATION NOTED ON THE PRINT SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY MANNER. THE RECORD SEPIA SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE.

## GUARANTEES/WARRANTY

26. ALL PLANTED AREAS SHALL BE MAINTAINED FOR A PERIOD OF ONE YEAR FOLLOWING WRITTEN ACCEPTANCE BY OWNER'S REPRESENTATIVE. CONTRACTOR SHALL GUARANTEE ALL TREES AND SHRUBS FOR A PERIOD OF ONE-YEAR FOLLOWING COMPLETION OF MAINTENANCE PERIOD.

# LANDSCAPE REQUIREMENTS

ZONING: LD SUBURBAN  
DEVELOPED SITE AREA: 31,760 SF  
TOTAL SITE AREA: 104,735 SF

USE: CIVIL USE, MAJOR SERVICES AND UTILITIES, UTILITY SERVICES  

- LANDSCAPE COVERAGE: 20% DEVELOPED AREA REQUIRED (6,350 SF)
- LANDSCAPE PROVIDED (15,150 SF)

TREES: 1 TREE PER/300 SF OF LANDSCAPE AREA, 22 REQUIRED/ PROVIDED  

- EVERGREEN MIN. SIZE AT PLANTING TO BE 7'HT, 14 PROVIDED
- DECIDUOUS MIN. SIZE AT PLANTING TO BE 2" CAL, 8 PROVIDED

BUFFER REQUIRED ADJOINING RESIDENTIAL USE:  

- BUFFER THE WIDTH OF REQUIRED YARD AND 1 TREE/20 LF PROPERTY FRONTAGE REQUIRED
- REDUCTION OF THIS REQUIREMENT REQUESTED THROUGH SUP PROCESS.
- 1 TREE/20 LF PROVIDED AROUND STRUCTURE, TOTAL 22 TREES PROVIDED

SCREENING ADJOINING RESIDENTIAL USES, SOLID DECORATIVE WALL OR FENCE ALONG ENTIRE EDGE OF PROPERTY LINE REQUIRED  

- REMOVAL OF THIS REQUIREMENT REQUESTED THROUGH SUP PROCESS

TREES TOTAL: 22 REQUIRED/ PROVIDED

SHRUBS:  

- 6 SHRUBS PER/300 SF OF REQUIRED LANDSCAPE AREA, 127 REQUIRED/PROVIDED
- 50% MIN. SIZE AT PLANTING TO BE 5 GALLON, 64 REQUIRED 127 PROVIDED

# TREE LEGEND

DECIDUOUS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	KOELREUTERIA PANICULATA	GOLDEN RAIN TREE	2" CAL	30'HX30'W	2
	PRUNUS VIRGINIANA 'CANADA RED'	CANADA RED CHOKECHERRY	2" CAL	25'HX20'W	3
	SORBUS AUCUPARIA 'MICHRED' TM	CARDINAL ROYAL MOUNTAIN ASH	2" CAL	25'HX20'W	3
EVERGREEN	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	JUNIPERUS SCOPULORUM	ROCKY MOUNTAIN JUNIPER	7' HT	30'HX20'W	7
	PINUS PONDEROSA	PONDEROSA PINE	7' HT	60'HX30'W	7

# SHRUB/GROUNDCOVER LEGEND

SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	CERCOCARPUS LEDIFOLIUS	CURL-LEAF MOUNTAIN MAHOGANY	#5	18'HX10'W	12
	CHAMAEBATIARIA MILLEFOLIUM	FERNBUSH	#5	8'HX8'W	32
	FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	#5	10'HX10'W	17
	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	#5	5'HX4'W	38
	PRUNUS BESSEYI 'P011S' TM	PAWNEE BUTTES SAND CHERRY	#5	1.5'HX5'W	28
SHRUB AREAS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	ROCK MULCH OX ROCK 2"- 6" SIZE PLACED AT 6" DEPTH		-		8,821 SF
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	PREVIOUSLY DISTURBED AREA	-		15,388 SF
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	NEW DISTURBED AREA	-		17,543 SF

# EXISTING VEGETATION SCHEDULE

DEMOLITION		
SYMBOL	DESCRIPTION	QTY
[D-01]	TEMPORARY VEGETATION PROTECTION CONSTRUCTION FENCE	1,923 LF
EXISTING CONDITIONS		
SYMBOL	DESCRIPTION	QTY
	EXISTING NATIVE VEGETATION TO BE PRESERVED SEE NOTE #3 SHEET LP1	28,764 SF

- NOTES:
- SEED MIX TO BE SHOWN IN SUBSEQUENT SUBMITTALS.
  - THE REVEGETATION PROCEDURE WILL INCLUDE TOPSOIL SALVAGE AND REPLACEMENT AND APPLICATION OF INOCULANT AND HUMIC ACID. A SEED MIX COMPRISED OF NATIVE AND REGIONALLY ADAPTED GRASSES, FORBS AND SHRUBS WILL BE APPLIED EITHER BY BROADCAST OR HYDROSEEDING AT A MINIMUM OF 25 PLS (PURE LIVE SEED) POUNDS PER ACRE. PAPER MULCH AND TACKIFIER WILL BE APPLIED TO THE SURFACE. REVEGETATION WILL INCLUDE CONSTRUCTION MONITORING AND 2 YEAR MINIMUM POST CONSTRUCTION MONITORING OR UNTIL 70% PLANT DENSITY OF SURROUNDING NATIVE VEGETATION IS ACHIEVED. CONTRACTOR TO PROVIDE CPESC FOR POST CONSTRUCTION MONITORING TO OBSERVE REVEGETATION STATUS EVERY 2 WEEKS FROM APRIL 1 THROUGH OCTOBER 1 EACH YEAR. CPESC TO PROVIDE POST CONSTRUCTION MONITORING REPORT TO OWNER. ADDITIONAL REVEGETATION WILL BE REQUIRED AFTER FIRST YEAR AND SECOND YEAR IF PLANT DENSITY IS NOT ACHIEVED.
  - EXISTING VEGETATION TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH FENCING STAKED AT THE PERIMETER. EXISTING VEGETATION THAT IS DISTURBED SHALL BE RESTORED USING FULL REVEGETATION SPECIFICATIONS AND WARRANTY AND MINIMUM 2 YEAR POST CONSTRUCTION MONITORING AT CONTRACTORS EXPENSE.

**Stantec**

WORK ORDER NO. 15-0056.001

DESIGNED: BS  
DRAWN: TB  
DATE: JANUARY 19, 2022  
CHECKED: BS  
SUBMITTED: SEPTEMBER 2021  
RECOMMENDED:  
APPROVED:

**TRUCKEE MEADOWS WATER**

A U T H O R I T Y

1965 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-854-8000 / FX 775-854-8003



**THOMAS CREEK WELL HOUSE REPLACEMENT**  
**RENO, NEVADA**

**PLANTING LEGEND**  
**AND NOTES**

SHEET NUMBER

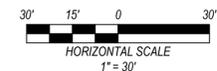
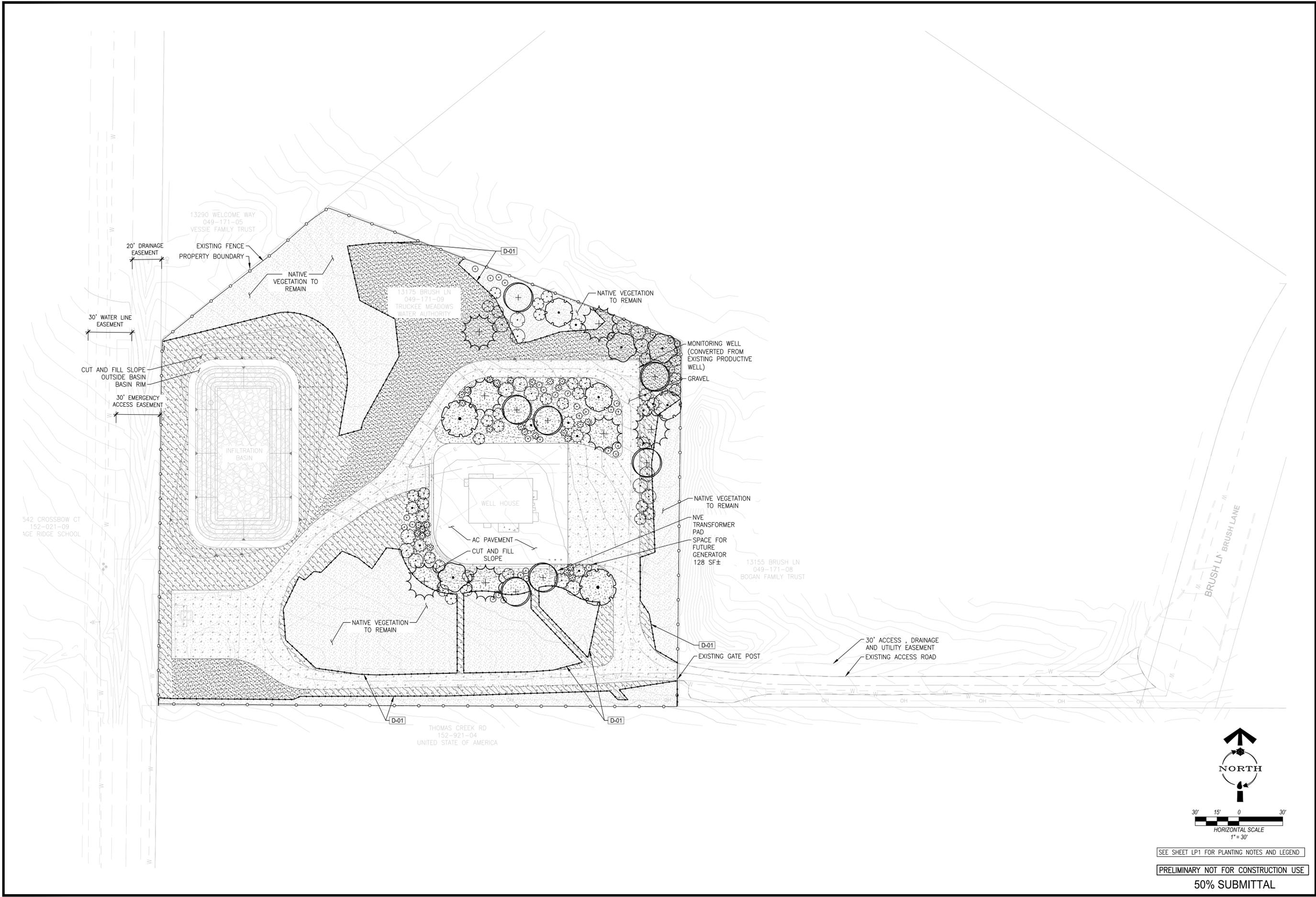
**LP1**

1 OF 6

PRELIMINARY NOT FOR CONSTRUCTION USE  
50% SUBMITTAL

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Jan 20, 2022 11:33pm

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Jan 20, 2022 11:43pm



SEE SHEET LP1 FOR PLANTING NOTES AND LEGEND

PRELIMINARY NOT FOR CONSTRUCTION USE

50% SUBMITTAL

**Stantec**

WORK ORDER NO. 15-0056.001

DESIGNED BS  
DRAWN TB  
DATE JANUARY 19, 2022  
CHECKED BS  
SUBMITTED SEPTEMBER 2021  
RECOMMENDED  
APPROVED

**TRUCKEE MEADOWS WATER**

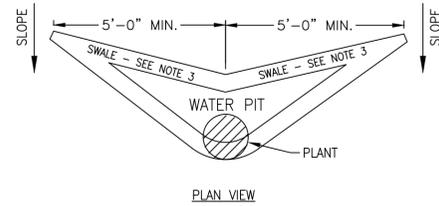
UTILITY

1855 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-854-8000 / FX 775-854-8003



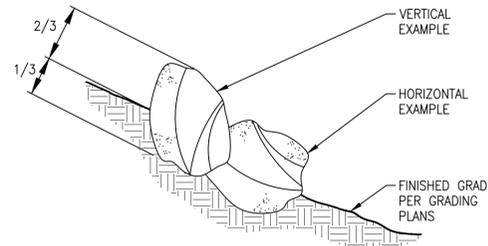
**THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA**

**PLANTING PLAN**



**NOTES:**

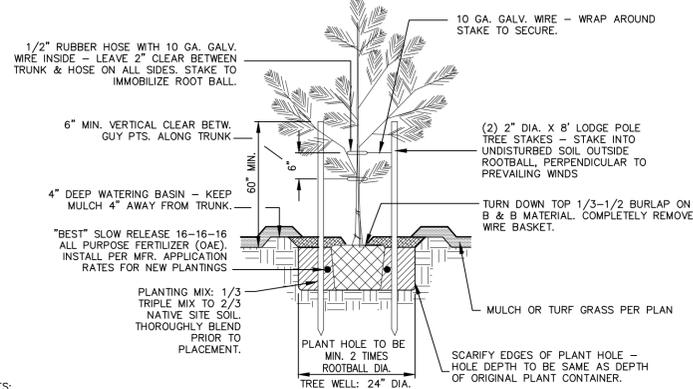
- WHERE PLANTING IN LANDSCAPE AREAS WITH POSITIVE DRAINAGE, INSTALL SHALLOW SWALES ON UPHILL SIDE OF PIT TO HARVEST RAINWATER AND GRADE TO PIT. SEE SPECIAL PLANTING.
- NO SURFACE MULCH SHALL BE PLACED UNTIL PLANT PIT SWALES ARE BUILT AND APPROVED.
- RAIN WATER HARVESTING FOR ALL PLANTS ON SLOPE - DIG (2) SHALLOW 4" DEEP X 12" WIDE X ±5' LONG ON UPHILL SIDE OF PITS TO DIRECT RAINWATER TO PIT CAPTURED FROM SLOPE. FILL WITH SPECIFIED MULCH (NO FINES) OF MATCHING ADJACENT SPECIFIED MULCH (WHERE OCCURS).



**NOTES:**

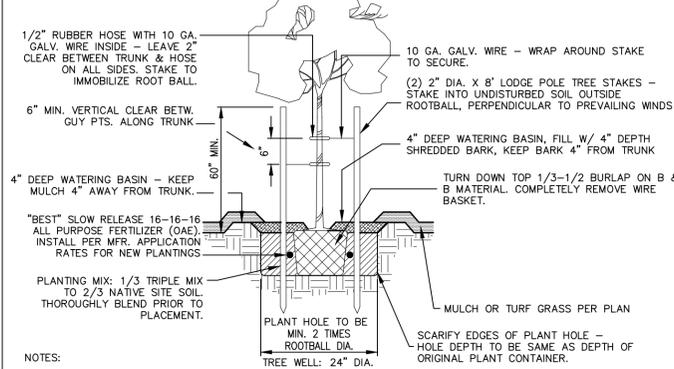
- PLACE 1/3 OF THE TOTAL DIAMETER BELOW FINISHED GRADE.
- STAKE BOULDER LOCATIONS AS SHOWN ON PLAN. LANDSCAPE ARCHITECT TO REVIEW PRIOR TO PLACEMENT.
- REFER TO GEOTECHNICAL RECOMMENDATIONS WHERE APPLICABLE.
- "V" REFERS TO VERTICAL PLACEMENT.

**1 WATER HARVESTING 2 BOULDER PLACEMENT**



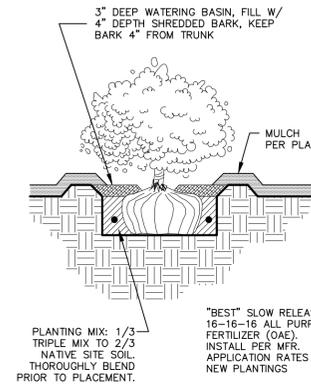
**NOTES:**

- REMOVE ALL NURSERY STAKES, TIES & TAGS - TREES MUST STAND UPRIGHT TO BE ACCEPTABLE. SEE NURSERY STOCK QUALITY STANDARDS. ALL TREES SHALL BE STAKED SO AS TO REMAIN UPRIGHT AND PLUMB FOLLOWING INSTALLATION.
  - REMOVE DAMAGED BRANCHES - DO NOT REMOVE CENTRAL LEADER OR ANY LOWER BRANCHES.
  - TOP OF ROOT BALL\* TO BE 1" ABOVE EXISTING GRADE - NO NATIVE SOIL TO BE PLACED ON TOP OF ROOT BALL.
  - GRADE WATERING BASIN SUCH THAT WATER COLLECTS AT EDGE OF ROOT BALL, NOT AT TRUNK.
  - THOROUGHLY WATER IMMEDIATELY AFTER PLANTING.
  - ORIENT GRAFT UNION TO FACE NORTH.
- \* TOP OF ROOT BALL IS DEFINED AS THE LOCATION OF THE UPPERMOST LATERAL ROOT NOT THE SOIL LEVEL IN THE PLANT CONTAINER.



**NOTES:**

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**3 EVERGREEN TREE PLANTING 4 DECIDUOUS TREE PLANTING 5 SHRUB PLANTING**

WORK ORDER NO. 15-0056.001  
 DESIGNED: BS  
 DRAWN: TB  
 DATE: January 20, 2022  
 CHECKED: BS  
 SUBMITTED: SEPTEMBER 2021  
 RECOMMENDED:  
 APPROVED:

**TRUCKEE MEADOWS WATER**  
 A U T H O R I T Y  
 1985 CAPITAL BLVD. / PO BOX 30013  
 RENO, NEVADA 89502-3013  
 PH 775-854-8000 / FX 775-854-8003



**THOMAS CREEK WELL HOUSE REPLACEMENT**  
**RENO, NEVADA**  
**PLANTING DETAILS**

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# IRRIGATION SPECIFICATIONS

## GENERAL

1. PLAN IS DIAGRAMMATIC ONLY. FINAL LOCATION OF LINES AND HEADS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE. LINES SHALL BE IN A COMMON TRENCH WHEREVER POSSIBLE. THE POINT-OF-CONNECTION SHALL BE AS INDICATED ON THE PLAN.
2. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND ENSURE THAT ALL LOCAL CODES ARE MET. VERIFY PRESSURE (PSI) PRE AND POST CONSTRUCTION.
3. THE CONTRACTOR SHALL APPLY AND PAY FOR ALL PERMITS REQUIRED FOR INSTALLATION OF THE IRRIGATION SYSTEM AS DEPICTED ON THESE PLANS.
4. CONTRACTOR SHALL VERIFY AVAILABLE FLOW AND PRESSURE DOWNSTREAM FROM THE POINT-OF-CONNECTION PRIOR TO SYSTEM INSTALLATION. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY IF AVAILABLE FLOW IS LESS THAN REQUIRED TO RUN THE LARGEST ZONE. CONTRACTOR SHALL NOT PROCEED ANY FURTHER WITH INSTALLATION OF THE SYSTEM UNTIL NECESSARY DESIGN REVISIONS HAVE BEEN DETERMINED BY OWNER'S REPRESENTATIVE.
5. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR DIFFERENCES IN DIMENSIONS EXIST THAT MIGHT HAVE BEEN UNKNOWN DURING ENGINEERING. SUCH OBSTRUCTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO ADDITIONAL COST TO OWNER.
6. ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
7. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SPRINKLER MATERIALS, INCLUDING PIPE, WITH THE LANDSCAPE DRAWINGS TO AVOID INTERFERING WITH THE PLANTING OF TREES, SHRUBS, OR OTHER PLANTINGS.
8. ALL VALVES ARE TO BE LOCATED IN PLANTING AREAS WHEREVER POSSIBLE.
9. ALL ELECTRICAL WIRE FROM CONTROLLER TO VALVES SHALL BE 12 GAUGE UL DIRECT BURIAL OR LARGER AS REQUIRED BY LENGTH PER MANUFACTURER'S SPECIFICATIONS.
10. BACKFILL FOR TRENCHING SHALL BE COMPACTED TO A DRY DENSITY EQUAL TO THE UNDISTURBED ADJACENT SOIL AND SHALL CONFORM TO ADJACENT GRADES WITHOUT DIPS, HUMPS, OR OTHER IRREGULARITIES. BLUE DETECTION TAPE TO BE INSTALLED 10-12" ABOVE PIPE.
11. A MINIMUM OF TWO WORKING DAYS PRIOR TO PERFORMING ANY DIGGING, CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600 FOR INFORMATION ON THE LOCATION OF NATURAL GAS LINES, ELECTRICAL CABLES, TELEPHONE CABLES, ETC.
12. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING DUST CONTROL AND SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
13. INSTALL ALL PIPE AND CONTROL WIRES IN LANDSCAPE BEDS AND IN COMMON TRENCHES WHEREVER POSSIBLE.
14. INSTALL ALL PIPE AND CONTROL WIRE, WHICH RUNS UNDER PAVING, WITHIN SCH. 40 PVC SLEEVES 4" DIA. MINIMUM SIZE AS REQUIRED TO ALLOW INSTALLATION WITHOUT BINDING. PROVIDE (1) SLEEVE PER PIPE. PROVIDE SEPARATE SLEEVES FOR CONTROL WIRE. LEAVE ABOVE GRADE MARKERS ON BOTH SIDES OF SLEEVE.
15. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE FOR COMPLETE DRAINAGE OF THE MAINLINES BY INSTALLING MANUAL DRAINS AS INDICATED ON PLAN AND AT ALL SYSTEM LOW POINTS. NO KING DRAINS.

## FLUSHING AND TESTING

16. PIPING SHALL BE COMPLETELY FLUSHED OF FOREIGN PARTICLES BEFORE ATTACHING IRRIGATION COMPONENTS AND DRAIN VALVES.
17. AFTER FLUSHING, AND WHEN ALL VALVES AND QUICK COUPLERS ARE IN PLACE, ALL MAIN SUPPLY LINES SHALL BE TESTED AT 100 POUNDS PER SQUARE INCH (100 PSI) WITH VALVES CLOSED. MAINTAIN PRESSURE FOR A PERIOD OF NOT LESS THAN (4) CONSECUTIVE HOURS. ALL JOINTS SHOWING LEAKS SHALL BE CLEANED, REMADE, AND TESTED.
18. AFTER FLUSHING, LATERAL PIPES SHALL BE TESTED WITH RISERS CAPPED AND DRAIN VALVES CLOSED. THE TEST SHALL BE MADE AT MAXIMUM OPERATING PRESSURE FOR A PERIOD OF NOT LESS THAN (1) HOUR. ALL JOINTS SHOWING LEAKS SHALL BE CLEANED, REMADE, AND TESTED. ALL TESTING SHALL BE DONE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING OVER PIPING.
19. OPERATIONAL TESTING: PERFORM OPERATIONAL TESTING AFTER HYDROSTATIC TESTING IS COMPLETED. DEMONSTRATE TO THE OWNER'S REPRESENTATIVE THAT THE SYSTEM MEETS COVERAGE REQUIREMENTS (100%) AND THAT AUTOMATIC CONTROLS FUNCTION PROPERLY.

## SUBMITTALS

20. MATERIALS LIST: WITHIN (15) DAYS AFTER AWARD OF CONTRACT, SUBMIT TO OWNER'S REPRESENTATIVE (3) COPIES OF A COMPLETE MATERIAL LIST (PARTIAL LIST NOT ACCEPTABLE) OF ALL MATERIALS TO BE USED ON THE PROJECT, SPECIFYING MANUFACTURER, GRADE, TRADE NAME, CATALOG NUMBER, SIZE, ETC. THIS SHALL IN NO WAY BE CONSTRUED AS ALLOWING A SUBSTITUTION FOR ANY ITEM SPECIFIED ON THE PLANS. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE THE MATERIALS AT HIS OWN EXPENSE.

INSTALLATION AND PERFORMANCE OF APPROVED SUBSTITUTIONS ARE THE CONTRACTORS RESPONSIBILITY. ANY CHANGES REQUIRED FOR INSTALLATION OF ANY APPROVED SUBSTITUTION MUST BE MADE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE WITHOUT ADDITIONAL COST TO OWNER.

21. PRIOR TO SYSTEM INSTALLATION CONTRACTOR SHALL VERIFY AND SUBMIT TO OWNER'S REPRESENTATIVE IN WRITING, AVAILABLE FLOW AND PRESSURE AT POINT-OF-CONNECTION AS DESCRIBED IN SPECIFICATION #4 ABOVE.

22. COMPLETE WARRANTY CARDS FOR AUTOMATIC CONTROLLER AND OTHER IRRIGATION MATERIAL (CONTROLLER KEYS, ETC.) SHALL BE DELIVERED TO OWNER.

23. CONTRACTOR SHALL PREPARE AND ISSUE TO THE OWNER (AT COMPLETION OF THE INSTALLATION) AN ANNUAL CHART INDICATING LOCATION, OPERATING DATES, CYCLES, AND TIME FOR EACH ZONE.

24. ASBUILT IRRIGATION DRAWINGS: CONTRACTOR SHALL FURNISH ASBUILTS OF THE COMPLETE IRRIGATION SYSTEM. PROCURE FROM OWNER'S REPRESENTATIVE FULL-SIZED SHEETS OF CONTRACT DRAWINGS. CONSTRUCTION DRAWINGS SHALL BE ON THE CONSTRUCTION SITE AT ALL TIMES WHILE THE IRRIGATION SYSTEM IS BEING INSTALLED. CONTRACTOR SHALL MAKE A DAILY RECORD OF ALL WORK INSTALLED DURING EACH DAY. ACTUAL LOCATION OF VALVES AND ALL IRRIGATION AND DRAINAGE PIPING SHALL BE SHOWN ON THE PRINTS BY DIMENSIONS FROM EASILY IDENTIFIED PERMANENT FEATURES, SUCH AS BUILDINGS, CURBS, FENCES, WALKS OR PROPERTY LINES. DRAWINGS SHALL SHOW APPROVED MANUFACTURER'S NAME AND CATALOG NUMBER. THE DRAWINGS SHALL BE TO SCALE AND ALL INDICATIONS SHALL BE NEAT. ALL INFORMATION NOTED ON THE PRINT SHALL BE TRANSFERRED TO THE COPIES BY CONTRACTOR AND ALL INDICATIONS SHALL BE RECORDED IN A NEAT, ORDERLY WAY. THE RECORD SEPIA SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE AT OR BEFORE FINAL ACCEPTANCE/APPROVAL OF THE PROJECT.

## GUARANTEE/FINAL ACCEPTANCE

25. CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE THE IRRIGATION SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. MANUFACTURER WARRANTIES SHALL ONLY EXCEED THIS GUARANTEE AND CONTRACTOR SHALL BE LIABLE FOR REPAIRS/REPLACEMENT OF FAILED MATERIAL/WORKMANSHIP.

## MAINTENANCE

26. AFTER SYSTEM IS INSTALLED AND APPROVED, INSTRUCT OWNER'S DESIGNATED PERSONNEL IN COMPLETE OPERATION AND MAINTENANCE PROCEDURES. DRAIN ENTIRE SYSTEM AT END OF FIRST WATERING SEASON FOLLOWING INSTALLATION. TRAIN OWNER'S DESIGNATED PERSONNEL BY HAVING THEM ASSIST IN WINTERIZING PROCEDURE.

# IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD MDCFCAP DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.
	RAIN BIRD PCT SINGLE OUTLET EMITTER PRESSURE COMPENSATING THREADED LOW-FLOW BUBBLERS. OFFERED IN 5 GPH, 7 GPH, AND 10 GPH MODELS, WITH 1/2" FPT THREADED INLET. LIGHT BROWN = 5 GPH, VIOLET = 7 GPH, AND GREEN = 10 GPH.
	AREA TO RECEIVE DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5GPH=BLUE, 1.0GPH=BLACK, AND 2.0GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET.
	Emitter Notes: 1.0 GPH emitters (3 assigned to each #5 plant)
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	RAIN BIRD DVF STANDARD CONFIGURATION, ELECTRIC REMOTE CONTROL VALVE. PLASTIC RESIDENTIAL IN 1". WITH FLOW CONTROL.
	RAIN BIRD 44-LRC 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.
	MUELLER CURB STOP VALVE MAINLINE ISOLATION VALVE, SAME SIZE AS MAINLINE.
	RAIN BIRD ESP4MEI WITH (3) ESP-SM6 22 STATION, HYBRID MODULAR INDOOR CONTROLLER. FOR RESIDENTIAL OR LIGHT COMMERCIAL APPLICATIONS.
	RAIN BIRD RSD-BEX RAIN SENSOR, WITH METAL LATCHING BRACKET, EXTENSION WIRE.
	RAIN BIRD PRF-100-RBY 1" INLET/ OUTLET WITH 3.0 TO 15 GPM AND 40 PSI REGULATED PRESSURE. INLET PRESSURE: 20 TO 150 PSI.
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21
	IRRIGATION MAINLINE: PVC SCHEDULE 40
	PIPE SLEEVE: PVC SCHEDULE 40 PIPE SLEEVE: PVC SCHEDULE 40 ALL SLEEVES SHALL BE 4" IN SIZE AND EXTEND 2' MIN. BEYOND EDGE OF PAVEMENT OR CURB AND MARKED ABOVE GRADE.



# DESIGN PRESSURE AND FLOW

ASSUMED AVAILABLE WATER PRESSURE AT P.O.C. IS 30 PSI. ASSUMED FLOW IS 20 GPM @ 4.5 FPS. CONTRACTOR TO VERIFY PRIOR TO SYSTEM INSTALLATION. FUTURE PRESSURES MAY VARY DUE TO NEW DEVELOPMENT AND/OR OTHER UNFORESEEN CIRCUMSTANCES. LANDSCAPE ARCHITECT SHALL BEAR NO RESPONSIBILITY FOR FUTURE DEVIATIONS IN PRESSURE AND ANY RESULTING EFFECTS ON THE PERFORMANCE OF THE IRRIGATION SYSTEM.

WHENEVER POSSIBLE, ALL IRRIGATION COMPONENTS SHALL BE LOCATED IN PLANTING BEDS.

NOTE: ALL CONSTRUCTION DETAILS AND NOTES FROM THE APPROVED LANDSCAPE PLANS SHALL APPLY.



WORK ORDER NO. 15-00568.001  
 DESIGNED BS  
 DRAWN TB  
 DATE January 20, 2022  
 CHECKED BS  
 SUBMITTED SEPTEMBER 2021  
 RECOMMENDED  
 APPROVED

**TRUCKEE MEADOWS WATER**  
 A U T H O R I T Y  
 1966 CAPITAL BLVD. / PO BOX 30013  
 RENO, NEVADA 89502-3013  
 PH 775-854-8000 / FX 775-854-8003



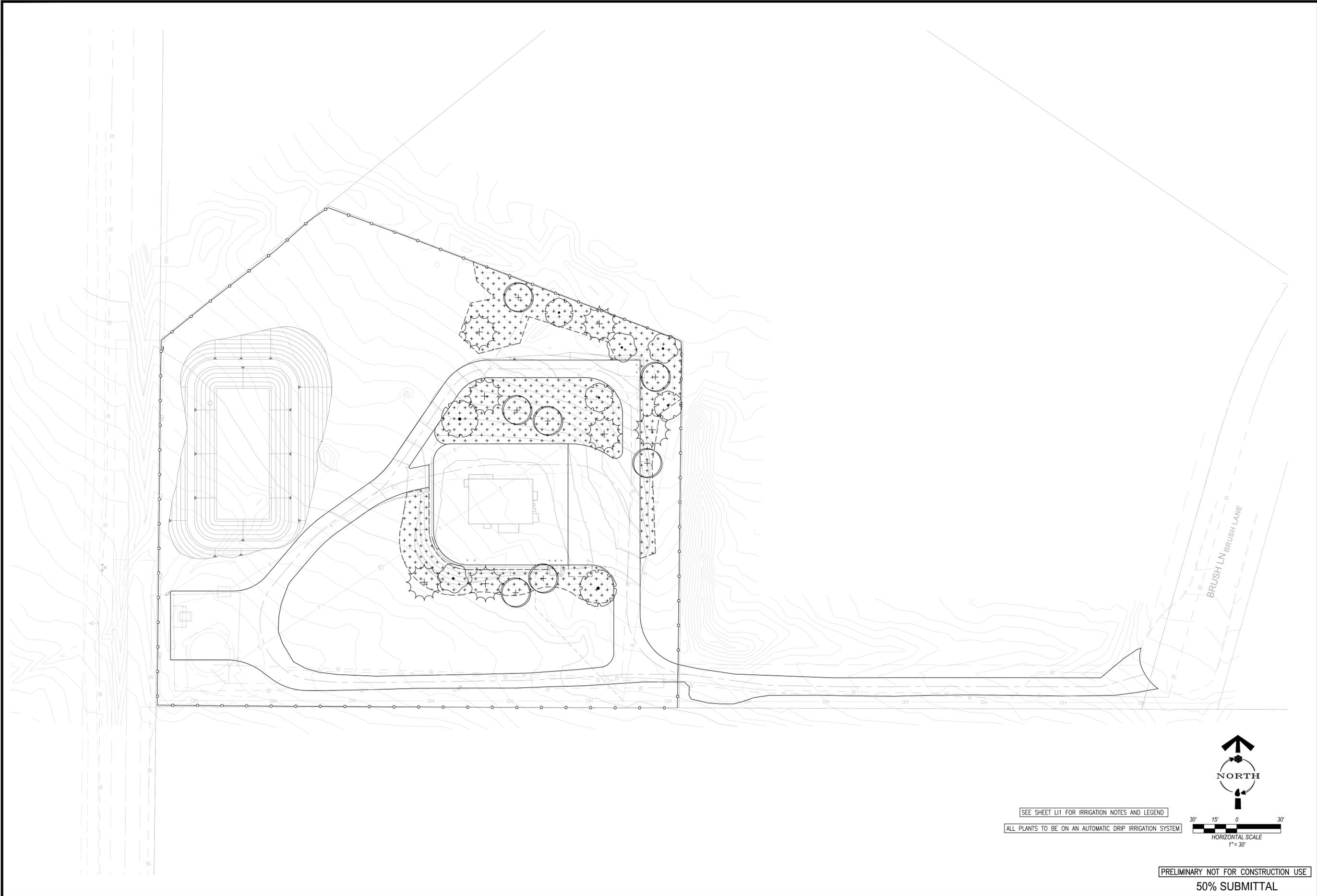
THOMAS CREEK WELL HOUSE REPLACEMENT  
 RENO, NEVADA  
**IRRIGATION LEGEND  
 AND NOTES**

SHEET NUMBER  
**41**  
 4 OF 6

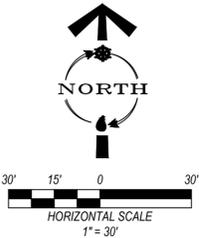
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Jan 20, 2022 - 11:17am



SEE SHEET L11 FOR IRRIGATION NOTES AND LEGEND  
ALL PLANTS TO BE ON AN AUTOMATIC DRIP IRRIGATION SYSTEM



PRELIMINARY NOT FOR CONSTRUCTION USE  
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THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA



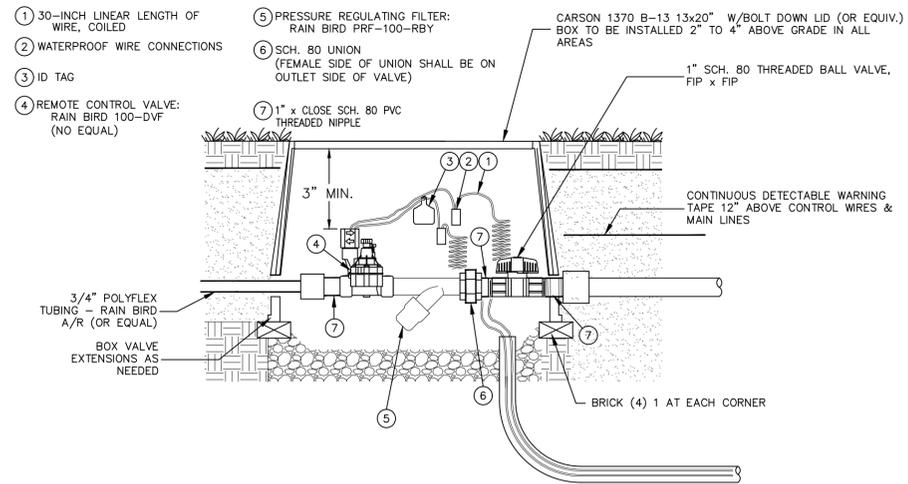
IRRIGATION PLAN

SHEET NUMBER  
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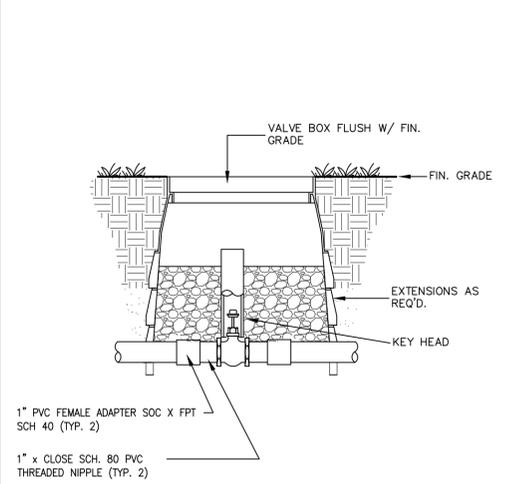
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DESIGNED BS  
DRAWN TB  
DATE JANUARY 19, 2022  
CHECKED BS  
SUBMITTED SEPTEMBER 2021  
RECOMMENDED  
APPROVED

TRUCKEE MEADOWS WATER  
A U T H O R I T Y  
1855 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-834-8000 / FX 775-834-8003

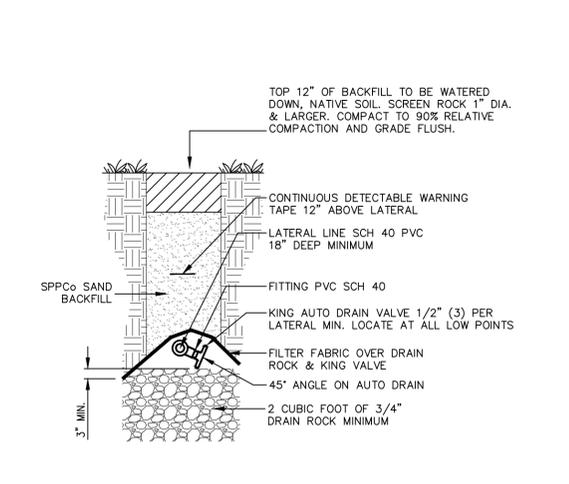




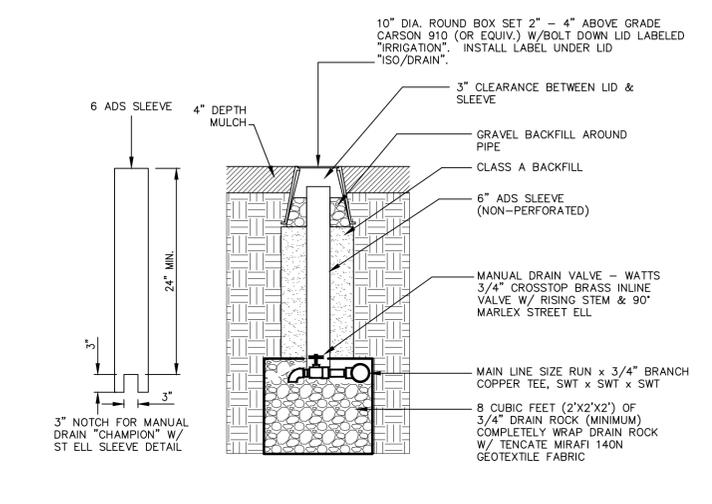
**1 DRIP VALVE ASSEMBLY**



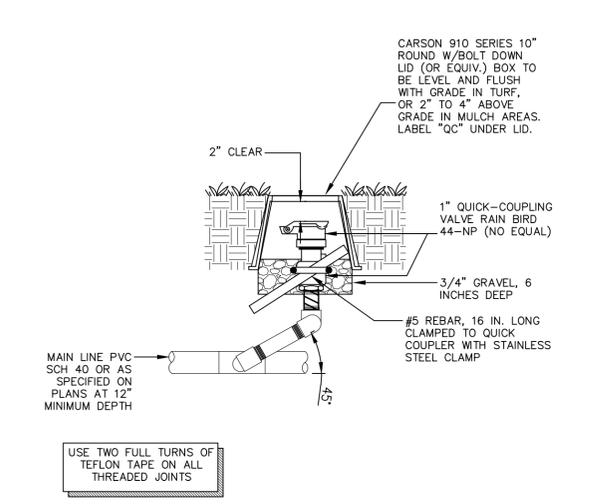
**2 LINE VALVE**



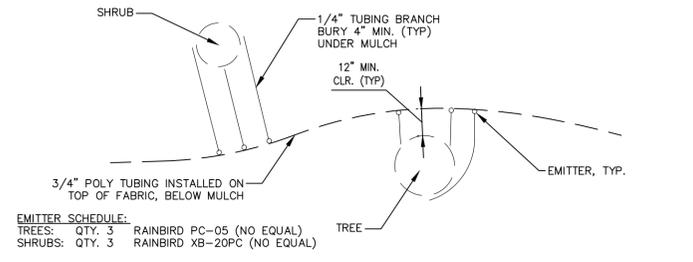
**3 AUTO DRAIN**



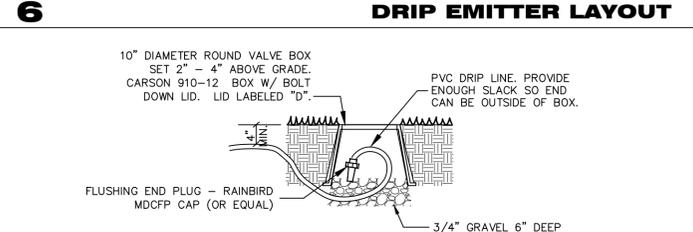
**4 MANUAL DRAIN VALVE**



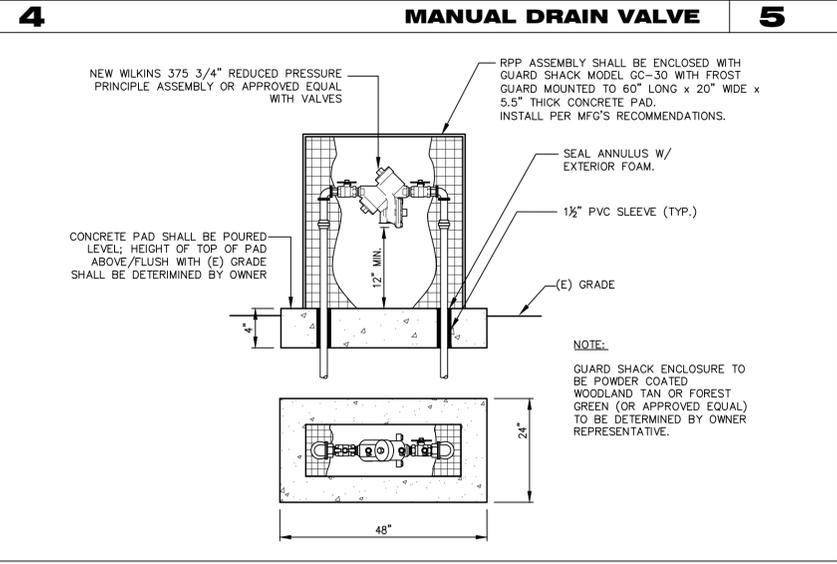
**5 QUICK COUPLING VALVE**



**6 DRIP EMITTER LAYOUT**



**7 FLUSHING END PLUG**



**8 GUARDSHACK CAGE COVER**

**Stantec**

WORK ORDER NO. 15-0058.001  
 DESIGNED BS  
 DRAWN TB  
 DATE January 20, 2022  
 CHECKED BS  
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**TRUCKEE MEADOWS WATER**

A U T H O R I T Y

1385 CAPITAL BLVD. / PO BOX 30013  
 RENO, NEVADA 89502-3013  
 PH 775-854-8000 / FX 775-854-8003



**THOMAS CREEK WELL HOUSE REPLACEMENT**  
**RENO, NEVADA**

**IRRIGATION DETAILS**

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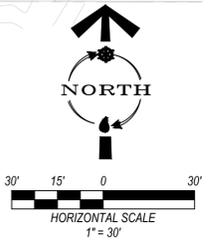
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Jan 20, 2022 11:19pm



**PLANT LEGEND**

PLANT SCHEDULE					
DECIDUOUS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	KOELREUTERIA PANICULATA	GOLDEN RAIN TREE	2" CAL	30'HX30'W	2
	PRUNUS VIRGINIANA 'CANADA RED'	CANADA RED CHOKECHERRY	2" CAL	25'HX20'W	3
	SORBUS AUCUPARIA 'MICHRED' TM	CARDINAL ROYAL MOUNTAIN ASH	2" CAL	25'HX20'W	3
EVERGREEN	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	JUNIPERUS SCOPULORUM	ROCKY MOUNTAIN JUNIPER	7' HT	30'HX20'W	7
	PINUS PONDEROSA	PONDEROSA PINE	7' HT	60'HX30'W	7
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	CERCOCARPUS LEDIFOLIUS	CURL-LEAF MOUNTAIN MAHOGANY	#5	18'HX10'W	12
	CHAMAEBATIARIA MILLEFOLIUM	FERNBUSH	#5	8'HX8'W	32
	FORESTIERA NEOMEXICANA	NEW MEXICO PRIVET	#5	10'HX10'W	17
	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	#5	5'HX4'W	38
	PRUNUS BESSEYI 'P011S' TM	PAWNEE BUTTES SAND CHERRY	#5	1.5'HX5'W	28
SHRUB AREAS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	ROCK MULCH OX ROCK 2"- 6" SIZE PLACED AT 6" DEPTH		-		8,821 SF
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SIZE HXW	QTY
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	PREVIOUSLY DISTURBED AREA	-		15,388 SF
	REVEGETATION SEEDING SEE NOTE #2 SHEET LP1	NEW DISTURBED AREA	-		17,542 SF

EXISTING VEGETATION SCHEDULE		
SYMBOL	DESCRIPTION	QTY
	EXISTING NATIVE VEGETATION TO BE PRESERVED SEE NOTE #3 SHEET LP1	28,764 SF



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SUBMITTED SEPTEMBER 2021  
RECOMMENDED  
APPROVED

**TRUCKEE MEADOWS WATER AUTHORITY**  
1965 CAPITAL BLVD. / PO BOX 30013  
RENO, NEVADA 89502-3013  
PH 775-854-8000 / FX 775-854-8003

**THOMAS CREEK WELL HOUSE REPLACEMENT  
RENO, NEVADA**

**COLORED SITE PLAN**

SHEET NUMBER  
**XX**  
X OF 6