

Meeting Procedures

Outline of Meeting Procedures:

- ❖ The Chair will call the meeting to order, read the opening meeting statement, and then introduce the item.
- ❖ The typical order is for consent items, old business, and then any new business.
- ❖ Please respect the right of other participants to see, hear, and fully participate in the proceedings. In this regard, anyone who becomes disruptive, or refuses to follow the outlined procedures, is subject to removal from the meeting.

Role of Staff:

- ❖ Staff will review the staff report, address the approval criteria, and give a recommendation on the application.
- ❖ The Staff recommendation is based on conformance to the general plan and meeting the ordinance approval criteria.

Role of the Applicant:

- ❖ The applicant will outline the nature of the request and present supporting evidence.
- ❖ The applicant will address any questions the Planning Commission may have.

Role of the Planning Commission:

- ❖ To judge applications based upon the ordinance criteria, not emotions.
- ❖ The Planning Commission's decision is based upon making findings consistent with the ordinance criteria.

Public Comment:

- ❖ The meeting will then be open for either public hearing or comment. Persons in support of and in opposition to the application or item for discussion will provide input and comments.
- ❖ The commission may impose time limits for comment to facilitate the business of the Planning Commission.

Planning Commission Action:

- ❖ The Chair will then close the agenda item from any further public comments. Staff is asked if they have further comments or recommendations.
- ❖ A Planning Commissioner makes a motion and second, then the Planning Commission deliberates the issue. The Planning Commission may ask questions for further clarification.
- ❖ The Chair then calls for a vote and announces the decision.

Commenting at Public Meetings and Public Hearings

Address the Decision Makers:

- ❖ When commenting please step to the podium and state your name and address.
- ❖ Please speak into the microphone as the proceedings are being recorded and will be transcribed to written minutes.
- ❖ All comments must be directed toward the matter at hand.
- ❖ All questions must be directed to the Planning Commission.
- ❖ The Planning Commission is grateful and appreciative when comments are pertinent, well organized, and directed specifically to the matter at hand.

Speak to the Point:

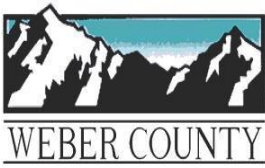
- ❖ Do your homework. Obtain the criteria upon which the Planning Commission will base their decision. Know the facts. Don't rely on hearsay and rumor.
- ❖ The application is available for review in the Planning Division office.
- ❖ Speak to the criteria outlined in the ordinances.
- ❖ Don't repeat information that has already been given. If you agree with previous comments, then state that you agree with that comment.
- ❖ Support your arguments with relevant facts and figures.
- ❖ Data should never be distorted to suit your argument; credibility and accuracy are important assets.
- ❖ State your position and your recommendations.

Handouts:

- ❖ Written statements should be accurate and either typed or neatly handwritten with enough copies (10) for the Planning Commission, Staff, and the recorder of the minutes.
- ❖ Handouts and pictures presented as part of the record will be left with the Planning Commission.

Remember Your Objective:

- ❖ Keep your emotions under control, be polite, and be respectful.
- ❖ It does not do your cause any good to anger, alienate, or antagonize the group you are standing in front of.



OGDEN VALLEY PLANNING COMMISSION

MEETING AGENDA

April 23, 2024

Pre-meeting 4:30/Regular Meeting 5:00



- *Pledge of Allegiance*
- *Roll Call:*

1. Minutes: March 26, 2024

2. Consent Items:

2.1 **CUP 2024-01** Request for approval of a conditional use permit for Reuse Pump Station located at 4350 N 4450 E. Eden, UT 84310

Planner Technician: Marta Borchert

2.2 **CUP 2024-02** a request for approval of a conditional use permit for a Public Utility Substation for a chlorination shed to treat the Cole Canyon Water.

Planner: Felix Lleverino

4. Public Comment for Items not on the Agenda:
5. Remarks from Planning Commissioners:
6. Planning Director Report:
7. Remarks from Legal Counsel

Adjourn to Work session

WS1: Discussion regarding Cowboy Partners form-based rezone application in New Town.

The regular meeting will be held in person at the Weber County Breakout Room, in the Weber Center, 1st Floor, 2380 Washington Blvd., Ogden, Utah.

& Via Zoom Video Conferencing at <https://webercountyutah.zoom.us/j/84172303535> Meeting ID: 841 7230 3535

A Pre-Meeting will be held at 4:30 p.m. The agenda for the pre-meeting consists of discussion of the same items listed above, on the agenda for the meeting. No decisions are made in the pre-meeting, but it is an open public meeting.

In compliance with the Americans with Disabilities Act, persons needing auxiliary services for these meetings should call the Weber County Planning Commission at 801-399-8761

Minutes of the Regular Meeting of the Ogden Valley Planning Commission for March 26, 2024, 5:00 p.m. To join the meeting, please navigate to the following weblink at <https://webercountyutah.zoom.us/j/84970613744>, the time of the meeting, commencing at 5:00 p.m.

Ogden Valley Planning Commissioners Present: Dayson Johnson (Chair), Jeff Burton (Vice Chair), Jeff Barber, Dayson Johnson, Joe Paustenbaugh, Mark Schweppe, Trevor Shuman and Janet Wampler (via Zoom).

Absent/Excused:

Staff Present: Rick Grover, Planning Director; Charlie Ewert, Planner; Felix Lleverino, Planner; Tammy Aydelotte, Planner; Bill Cobabe, Planner; Courtlan Erickson, Legal Counsel; Marta Borchert, Office Specialist.

- **Pledge of Allegiance**
- **Roll Call**

Chair Johnson conducted roll call and indicated all Commissioners were present, with Commissioner Wampler participating via electronic means.

1. Discussion: Vice Chair, Commissioner Jeff Burton was voted in as Vice Chair August 2, 2022.

Legal Counsel Erickson reported that during the February 27, 2024 meeting, the Commission voted to allow Commissioner Burton to continue as Vice Chair so long as he is eligible according to the Commissions Rules of Order and Procedure, which indicate a member of the Commission can only serve in a leadership position for two years. He noted staff found that Vice Chair Burton was voted in as the Vice Chair in August of 2022, so the two-year term limit technically permits him to serve until August of 2024. He noted Planning Director Grover has indicated it would be his recommendation that Vice Chair Burton continue to act as Vice Chair until that time. He concluded that it is an option to clarify the Rules of Order and Procedure to address mid-term leadership appointments.

2. Minutes: February 27, 2024.

Chair Johnson asked if there are any corrections to be made to the minutes as presented. Commissioner Wampler offered a few typographical and content corrections to the minutes. Chair Johnson declared the minutes approved as amended.

Chair Johnson then called for any conflicts of interest to be declared. No declarations were made.

Petitions, Applications, and Public Hearings:

3. Legislative Items:

3.1 ZMA 2023-02: Public hearing for a request for approval of a development agreement between Craig Oberg and Weber County, for property located at approximately 5931 North Fork Road, Liberty, UT, allowing for the creation of a conservation easement and the reconfiguration of existing lots. Planner: Bill Cobabe

Planner Cobabe explained the properties in question are oddly-configured and required certain adjustments to make them usable. However, the current zoning regulations would not allow for the restructuring of these lots to create new lots without the abandonment of certain rights that are currently associated with the property. In recognition of those rights, County staff offered the idea of entering into a development agreement that would allow the lots to be restructured in a way that makes more sense for current and future use and development of these properties. Further, the property owner wishes to ensure that a certain portion of the property is retained in a conservation easement, ensuring that the land will not be developed further. Mr. Cobabe presented a map to orient the Commission to the property to which the development agreement applies; he also identified several changes that have been made to the original plat map over the years and indicated there is some desire to amend the development agreement to clear up the different parcels and ensure that the associated property/development rights are preserved. He summarized the changes to proposed changes to the development agreement and concluded staff recommends that the Planning Commission approve ZDA 2023-02, based on the following findings:

1. The development agreement amendment meets the requirements outlined in the land use code.

2. The development agreement amendment outlines the mutually agreeable terms as desired by the County and the applicant.

Chair Johnson invited input from the applicant.

Craig Oberg expressed his gratitude to Planning staff for their assistance with this matter; the land subject to the development agreement has been in his wife's family for generations and her mother's wishes were to include the two acres near the river bottom in a family trust as a legacy to her husband who has passed. The family would like to place the other parcels of property into a conservation easement to preserve that area as well as the river bottom to prevent development of the area.

Vice Chair Burton inquired as to ownership of the properties in question. Mr. Oberg indicated that there are two family trusts that will own the three parcels of land; the largest parcel will be in the name of the Shaw Family Trust and the other two will be in another family trust. Vice Chair Burton asked if the proposal is to grant an easement to the Ogden Valley Land Trust for all three parcels, to which Mr. Oberg answered yes. He noted he has been talking with other family members who own parcels in the area, and he believes they are feeling encouraged to contribute additional acreage to the land trust. Vice Chair Burton asked if that means they will retain ownership of their land, but their land will also be subject to the easement held by the Ogden Valley Land Trust, to which Mr. Oberg answered yes.

Commissioner Shuman moved to open the public hearing. Commissioner Wampler seconded the motion, all voted aye.

Scott Murray stated his currently the Chair of the Ogden Valley Land Trust and he is very interested in this item and preserving open space in the Valley; his concern was that decisions were going to be made by the Ogden Valley Planning Commission and the County Commission without a full understanding of what a conservation easement does and what role the Ogden Valley Land Trust will play. He stated that the Land Trust has certain obligations to maintain conservation easements according to national standards and this is more than just an administrative matter. The Land Trust is excited about this opportunity but wants to be sure that all parties have a clear understanding of the limitations and parameters of an easement.

Commissioner Barber inquired as to the makeup of the Ogden Valley Land Trust and their purpose. Mr. Murray provided a high-level overview of the incorporation of the Land Trust and the rules they must abide by; if the Trust becomes unable to maintain easements that are granted to them, they must be transferred to another Land Trust organization that will enforce standards and regulations. The Ogden Valley Land Trust has an obligation to annually inspect easement properties to verify that the terms of the easement have not been violated. Commissioner Barber asked if the Ogden Valley Land Trust owns any land or if they just maintain easements on various parcels of land. Mr. Murray stated the Trust has owned land in the past, but prefers not to own land due to liabilities associated with land ownership. Ownership is typically retained by the previous owner, and they reap the benefits of a conservation easement located on their property given that a conservation easement typically increases a land's value. Commissioner Barber asked if a property owner can 'unwind' an action to create a conservation easement on their property, to which Mr. Murray answered no. Easements are placed on a property in perpetuity and it is important that the landowner carefully consider the implications of such an easement before proceeding with this type of action.

Commissioner Paustenbaugh asked if there are any problems associated with the subject properties being held in family trusts. Mr. Murray stated that he is concerned about the size of the property being subject to the easement; it is very small, but it will take the same amount of time to annually inspect the easement area. The Ogden Valley Land Trust typically requires landowners to provide a financial contribution to the Trust to help to cover administrative costs of maintaining the easement.

Chair Johnson invited a response from Mr. Oberg. Mr. Oberg stated that his family initiated the investigation of a conservation easement a few years ago and he understands that the land must be subdivided before the specified area can be subject to a conservation easement. He stated that after the subdivision was approved by the County, his family had planned to meet with the Ogden Valley Land Trust to request the easement. He is aware of the conditions of a conservation easement and meeting with the Ogden Valley Land Trust is one of the steps he will follow as the matter progresses. He acknowledged that the parcel is small, but it is a vital wildlife transfer area and contains a portion of the North Fork River, which would be protected by the easement.

There were no other persons appearing to be heard.

Commissioner Shuman moved to close the public hearing. Commissioner Wampler seconded the motion, all voted aye.

Vice Chair Burton asked what will happen if the Ogden Valley Land Trust does not want to accept an easement on the parcel; he wondered if it would be appropriate to condition the County's action on the Ogden Valley Land Trust's acceptance of the easement. Legal Counsel Erickson stated that paragraph 3.1 of the proposed development agreement states that the "County agrees to allow reduced lot development standards as long as the Property Owner dedicates a conservation easement to an appropriate third party and no additional development lots are created. All lots dedicated for conservation shall be noted as such on the plat." He noted the Commission can ask staff to shore up that section of the agreement to identify the third party and to identify exactly what must be preserved. Vice Chair Burton asked if conservation easements are ever dedicated to the general public. Mr. Erickson stated he is not an expert on conservation easements, but he expects an easement to the general public would be challenging because there would be no clear enforcement body to monitor the easement. Vice Chair Burton asked if the property could be dedicated to the County for management of a conservation easement. Mr. Erickson indicated he is not sure that is allowed under the conservation easement law. He noted that the County needs to have an understanding of the third party that will manage the easement.

Commissioner Shuman moved to forward a positive recommendation to the County Commission regarding application ZMA 2023-02, development agreement between Craig Oberg and Weber County, for property located at approximately 5931 North Fork Road, Liberty, UT, allowing for the creation of a conservation easement and the reconfiguration of existing lots, based on the findings and subject to the conditions listed in the staff report. Commissioner Burton seconded the motion.

Mr. Erickson asked if the Commission is comfortable with any wording adjustments to the development agreement as long as those changes preserve the basic intent that has been described tonight. He noted that ultimately the agreement will be presented to the County Commission for approval, but he asked for the Planning Commission's support of language adjustments. The Commission indicated comfort with Mr. Erickson's suggestion.

Chair Johnson called for a vote on the motion. Commissioners Barber, Burton, Johnson, Paustenbaugh, Schweppe, Shuman, and Wampler voted aye. (Motion carried on a vote of 7-0).

4. Public comments for items not on the agenda.

There were no public comments.

5. Remarks from Planning Commissioners.

Commissioner Wampler stated that she visited the Ogden Valley Planning Commission webpage on the County's website and found that the roster for this body is not correct; she asked that staff update the roster with newly appointed members of the Commission as well as recently elected leadership of the Commission.

6. Planning Director Report:

Planning Director Grover did not make a report.

7. Remarks from Legal Counsel:

There were no remarks from Legal Counsel.

Meeting Adjourned: The meeting adjourned at 5:37 p.m.

Respectfully Submitted,

Cassie Brown

Weber County Planning Commission



Staff Report to the Ogden Valley Planning Commission

Weber County Planning Division

Synopsis

Application Information

Application Request:	Request for approval of a conditional use permit for Reuse Pump Station located at 4350 N 4450 E. Eden, UT 84310.
Application Type:	Administrative
File Number:	CUP 2024-01
Applicant:	Rob Thomas-Authorized Representative
Agenda Date:	Tuesday, March 23, 2024
Approximate Address:	4350 N E 4450 E., Eden UT 84310
Project Area:	21.24 Acres
Zoning:	FV-3
Existing Land Use:	Sewer Improvement
Proposed Land Use:	Sewer Improvement
Parcel ID:	22-006-0014 22-006-0015 22-006-0016

Township, Range, Section: Township 7 North, Range 1 East, Section 16

Adjacent Land Use

North:	Vacant	South:	Vacant RE-20
East:	Residential	West:	Vacant

Staff Information

Report Presenter:	Marta Borchert mborchert@webercountyutah.gov 801-399-8761
Report Reviewer	FL

Applicable Ordinances

- Weber County Land Use Code Title 104 Chapter 14 (FV-3 Zone)
- Weber County Land Use Code Title 108 Chapter 4 (Conditional Uses)
- Weber County Land Use Code Title 108 Chapter 10 (Public Utility Substations)
- Weber County Land Use Code Title 108 Chapter 2 (Ogden Valley Architectural, Landscape, and Screening Standards)
- Weber County Land Use Code Title 108 Chapter 1 (Design Review)

Background and Summary

The applicant is requesting approval of a conditional use permit for the installation of a Reuse Pump Station a “public utility substation” Located at The proposed pump station will move treated effluent from the treatment plant through a new pipeline to a new reuse pond. The FV-3 Zone allows a “public utility substation” as a conditional use. The proposal has demonstrated that the operation will comply with the applicable regulations, with reasonable conditions imposed.

The application is being processed as an administrative review due to the approval procedures in Uniform Land Use Code of Weber County, Utah (LUC) §108-1-2 which requires the planning commission to review and approve applications for conditional use permits and design reviews.

Analysis

General Plan: As a conditional use, this operation is allowed in the FV-3 Zone. With the establishment of appropriate conditions as determined by the Planning Commission, this operation will not negatively impact any of the goals and policies of the General Plan.

Zoning: The subject property is located within the Forest Residential (FR-3) Zone. The purpose of the FR-3 Zone can be further described in LUC §104-17-1 as follows:

The purpose of the Forest Valley Zone, FV-3 is to provide area for residential development in a forest setting at a low density, as well as to protect as much as possible the naturalistic environment of the development.

The following setbacks apply for this public utility substation within the FV-3 zone:

- Front: 10 feet
- Side: 20 feet
- Rear: 20 feet

Conditional Use Review: A review process has been outlined in LUC §108-4-3 to ensure compliance with the applicable ordinances and to mitigate anticipated detrimental effects. Thus far, the applicant has received approval from the County Engineering Division, for the proposal.

The following is an analysis of the proposal reviewed against the conditional use standards:

(1) Standards relating to safety for persons and property. The proposal is not anticipated or expected to negatively impact this property, surrounding properties, or persons.

(2) Standards relating to infrastructure, amenities, and services: The proposal is part of the infrastructure related to adjacent development, and is not anticipated or expected to negatively impact any existing infrastructure, amenities, or services in the area.

(3) Standards relating to the environment. The proposal is not anticipated or expected to negatively impact the environment.

(4) Standards relating to the current qualities and characteristics of the surrounding area and compliance with the intent of the general plan. The property on which the conditional use permit is sought will support future residential development. The proposal complies with and supports the intent of the general plan.

Design Review: The FV-3 zone and the proposed conditional use mandate a design review as outlined in LUC §108-1 to ensure that the general design, layout and appearance of the building remains orderly and harmonious with the surrounding neighborhood. The submitted plans are, including exterior finishes, similar to existing infrastructure within this development. As part of this review, the Planning Commission shall consider the applicable matters based on the proposed conditional use and impose conditions to mitigate deficiencies where the plan is found deficient. The matters for consideration related to this project are as follows:

Considerations relating to traffic safety and traffic congestion. The proposal includes a site plan that identifies the location of the proposed reuse pond and associated buildings. The access road leading to the site is far removed from public roads, therefore traffic congestion and traffic safety issues will not occur. As a means of preventing service vehicles from creating a congestion issue, the planning staff have added a condition that no parking is permitted within the public ROW's.

All vehicles going to and from the site will be relegated to the designated route of Wolf Creek Drive and Fairways Drive.

Considerations relating to landscaping. The applicant has indicated that the landscaping of this site will be consistent with the overall landscaping plan will be consistent with the surroundings.

Considerations relating to buildings and site layout. The existing buildings meet the site development standards of the FV-3 Zone.

Considerations relating to utility easements, drainage, and other engineering questions. The A preliminary review from the County Engineering Department is complete. The County Engineering Department may have further requirements that will need to be addressed before the planning division will issue a conditional use permit.

Staff Recommendation

Staff recommends approval of this conditional use application subject to the applicant meeting the conditions of approval in this staff report and any other conditions required by the Planning Commission. This recommendation is subject to all review agency requirements and is based on the following condition:

1. Wolf Creek Water and Sewer Improvement District service vehicles and hauling vehicles shall not park within the public ROW
2. Dust control measures shall be taken.
3. Trucks hauling material shall obey the speed limit
4. Dirt tracked onto the public street shall be cleared immediately and kept clear of dirt gravel and rocks.
5. All requirements from the County Engineering Department will be satisfied before the issuance of the conditional use permit.
6. Construction activity is limited to weekdays from 7:00 am to 5:00 pm.

This recommendation is based on the following findings:

- The proposed use is allowed in the FR-3 Zone and meets the appropriate site development standards.
- The criteria for issuance of a conditional use permit have been met because mitigation of potential detrimental effects can be accomplished.

Exhibits

- A. Project Narrative
- B. Site Plan
- C. Photos of Reuse pond and pump station



Exhibit A - Project Narrative

WCWSID Reuse pond and pump station

Project narrative: It is proposed to construct a reservoir with a volume of approximately 45 acre-feet and install a packaged pump station at the toe of the dam as a conditional use under Weber County Ordinance 104-2-3(h) - Utility Stations. The proposed reservoir will store reuse water from the Wolf Creek Water and Sewer Improvement District (WCWSID) treatment plant, and the pump station will move water from that reservoir to the Wolf Creek Golf Course for irrigation.

Reasonably anticipated detrimental effects of a proposed conditional use can be substantially mitigated by the proposal or by the imposition of reasonable conditions to achieve compliance with applicable standards. Examples of potential negative impacts are odor, vibration, light, dust, smoke, or noise: Note that the proposed pump station will be placed approximately concurrently with the construction of the mentioned reservoir. The pump station placement will have negligible impacts relative to the construction of the reservoir and the two components will be considered a single and complete project. The statements below refer to the construction of the pump station and reservoir installation .

Possible detrimental effects include:

Construction traffic during an anticipated construction period less than 6 months.

Construction activities associated with the pump station will be typical of what might be experienced during construction of a new accessory building on a residential lot: Underground electricity, water pipelines, a new concrete pad on which to place the pump station, site grading and a new access road (the road providing access to the proposed pump station will be constructed as part of the reservoir project and a small turnout/parking area for the proposed pump station will be constructed as part of the reservoir maintenance/access road). Construction of the earthen reservoir will require large equipment that will utilize material on site to build the pond. Adherence to standard County requirements for site construction (SWPPP, dust control, etc.) will be required of the contractor to mitigate impacts due to construction activities.

Long-term operation impacts:

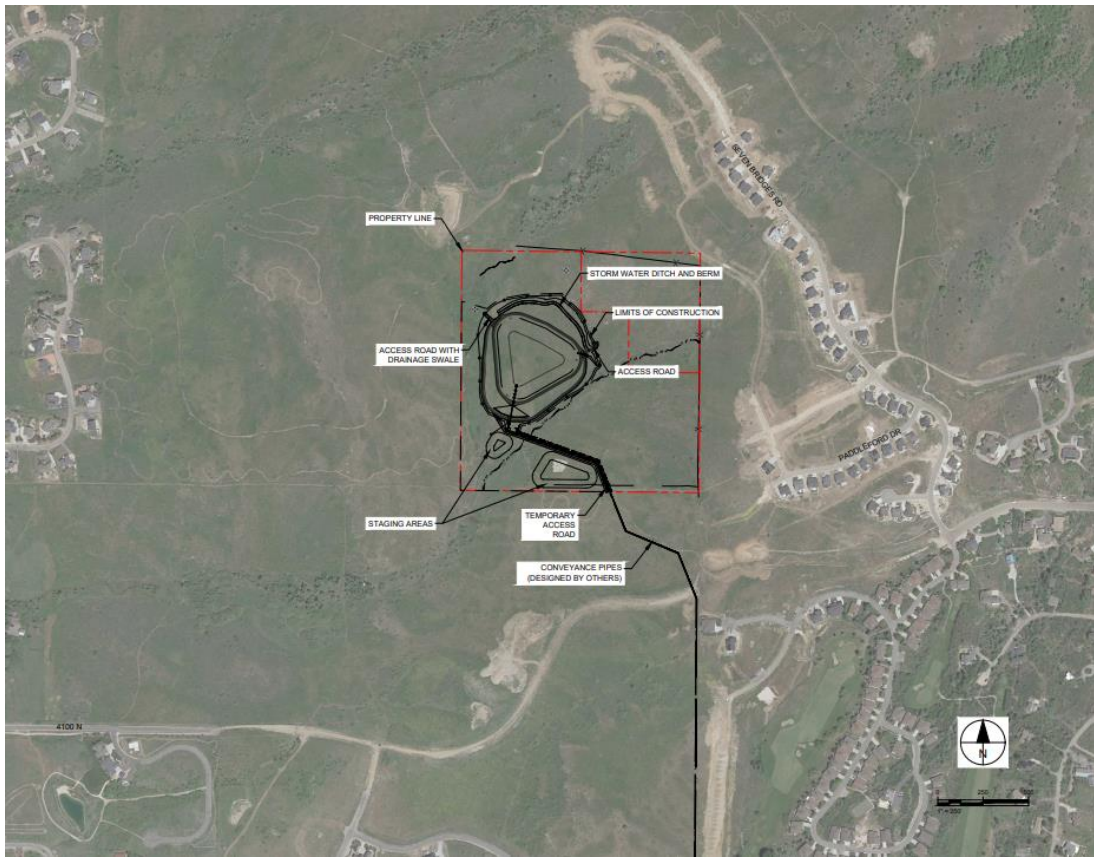
It is anticipated that operation and maintenance of the proposed pump station and reservoir will have negligible impact on the traffic pattern of the surrounding area. The proposed pump station would generate one daily trip by operators. The pumps will be enclosed to reduced sound impacts, have no lighting and access will be made on a maintained gravel roadway around the associated reservoir.

Since the project deals with movement of treated effluent (post plant: clean water), there will be no odor impact.

That the proposed use will comply with the regulations and conditions specified in the Zoning Ordinance and other applicable agency standards for such use: The proposed use will be on property zoned AV-3. Property north, east, and west of the parcel on which this pump station and pond will be located is zoned RE-15. Property south of the parcel on which this pump station and pond will be located is zoned RE-20. The pump station and pond will be well away from property lines. Applicant commits to comply with the regulations and conditions specified in the Zoning Ordinance and other applicable agency standards for such use in the AV-3 zone.

R:\2319 - Wolf Creek Water and Sewer\2302 - Reuse Pipeline\DOCUMENTS\CUP\WCWSID Reuse pond and pump station application narrative.docx

Exhibit B – Site Plan



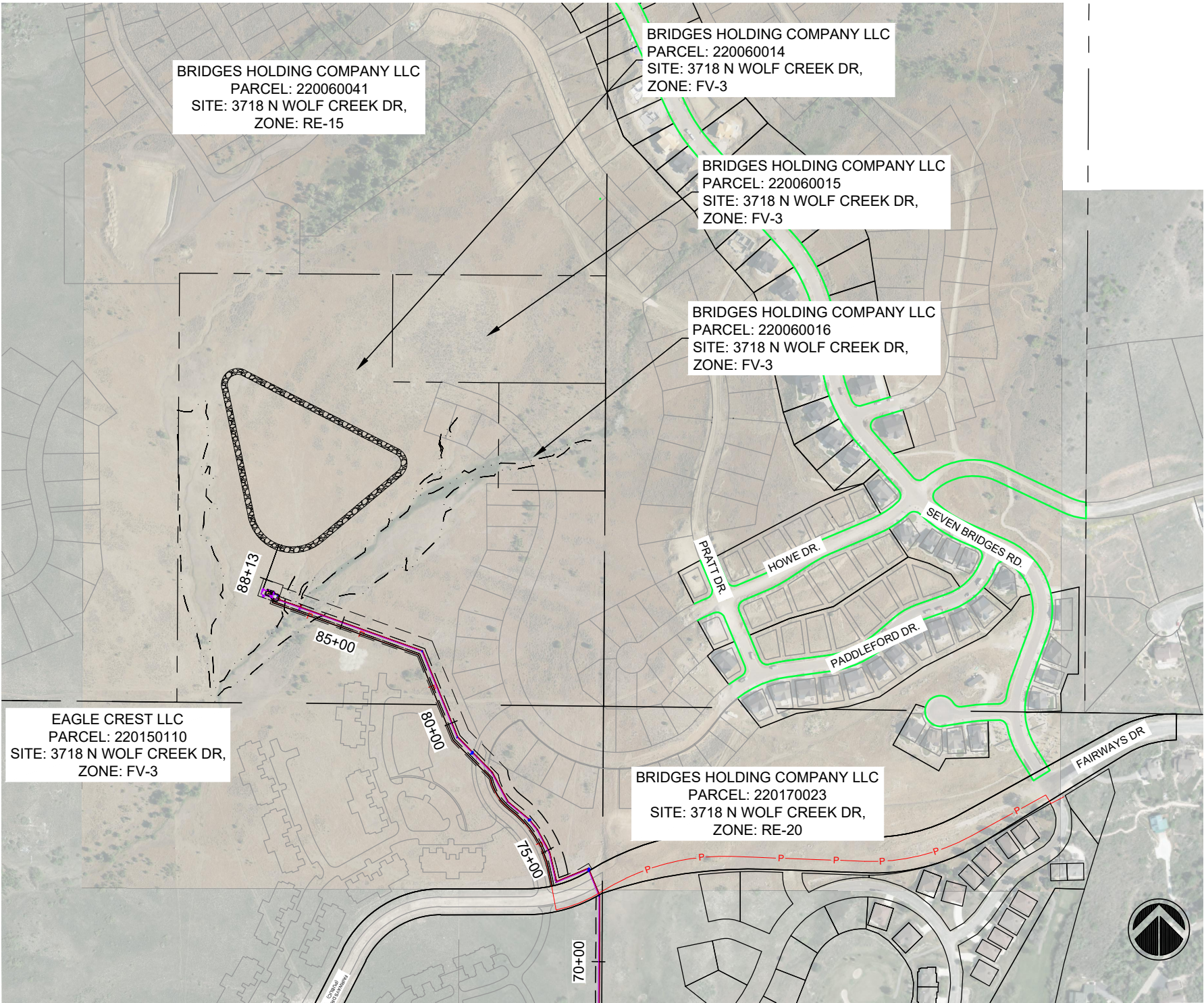
REUSE PROJECT

SCHEDULE C UPPER PUMP STATION VICINITY MAP

WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT - WEBER, UTAH

LOCATION MAP

JANUARY 2024



SHEET INDEX:

CIVIL	
UPS1	COVER SHEET
UPS2	OVERVIEW
UPS3	SITE PLAN
UPP1	PUMP STATION DETAILS
UPP2	PUMP STATION DETAILS
UPP3	PUMP STATION DETAILS

ELECTRICAL
XX
XX



ENGINEER:
GARDNER ENGINEERING
DAN WHITE
1580 S 2100 W
WEST HAVEN, UTAH 84401
801-476-0202

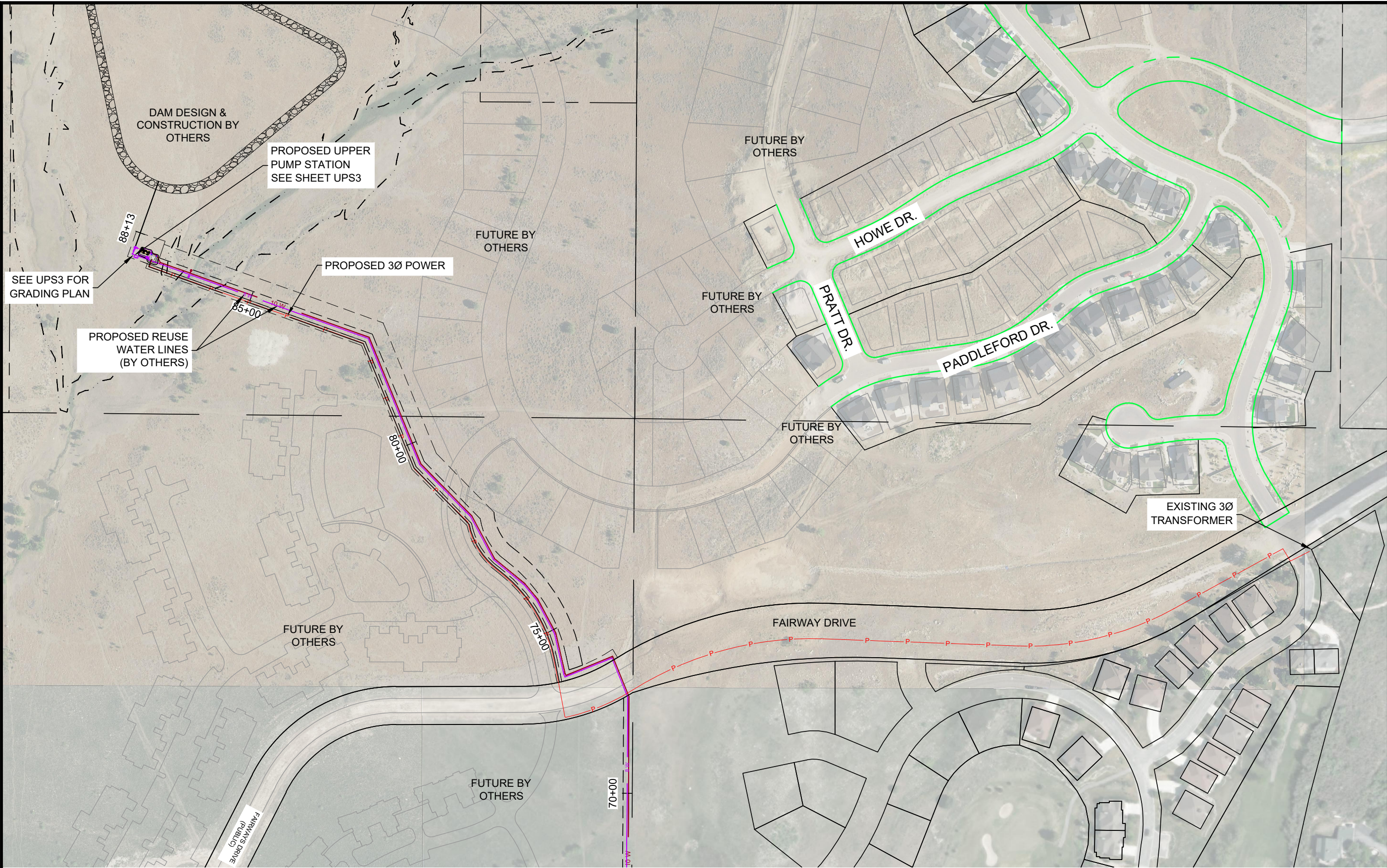
PREPARED FOR:

WOLF CREEK WATER AND SEWER
IMPROVEMENT DISTRICT

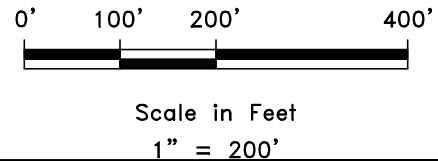
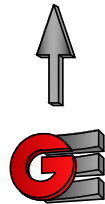
REUSE PROJECT
PRELIMINARY SUBMITTAL


UPS1

R:\2319 - WOLF CREEK WATER AND SEWER\2302 - REUSE PIPELINE\DESIGN.DWG\UPS - REUSE PLAN SET 2023.11_27.DWG

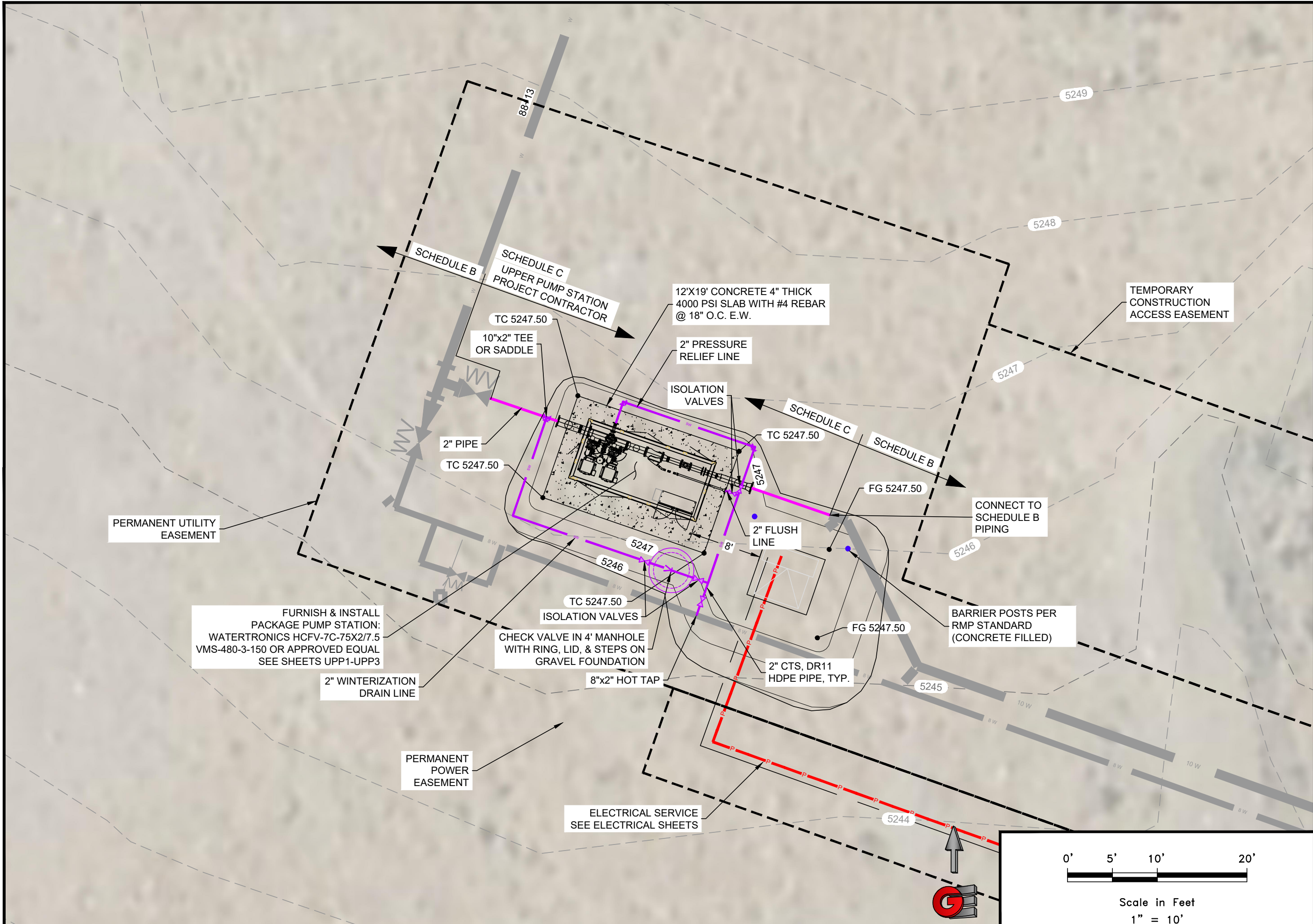


--- BOUNDARY LINE



 GARDNER ENGINEERING CIVIL • LAND PLANNING MUNICIPAL • LAND SURVEYING 1801 W. 2100 S., WEST HAVEN, UT 84401 P 801.476.0202 F 801.476.0066	WOLF CREEK WATER AND SEWER I.D. REUSE PROJECT UPPER PUMP STATION OVERVIEW		Revisions		Date: 1-9-24
			Date	Description	Scale: 1" = 200'
					Designed: DW Drafted: PCA Checked: DW
UPS2					

R:\2319 - WOLF CREEK WATER AND SEWER\2302 - REUSE PIPELINE\DESIGN\DWG\UPS - REUSE PLAN SET 2023_11_27.DWG




Revisions		Date	Description

Date	1-9-24
Scale	1" = 10'
Designed	DW
Drafted	PCA
Checked	DW

WOLF CREEK WATER AND SEWER ID,
REUSE PROJECT

UPPER PUMP STATION
SITE PLAN

GARDNER ENGINEERING
CIVIL • LAND PLANNING
MUNICIPAL • LAND SURVEYING
1880W 2100S, WEST HAVEN, UT 84401
P 801.476.0202 F 801.476.0066



UPS3

R:\2319 - WOLF CREEK WATER AND SEWER\2302 - REUSE PIPELINE\DESIGN\DWG\UPS - REUSE PLAN SET 2023_11_27.DWG

PUMP STATION SPECIFICATIONS:
NAME: WOLF CREEK GC
STATION MODEL:
HCFV-7C-75X2/7.5VMS-480-3-1000-150
STATION TOTAL PERFORMANCE:
1000 GPM @ 150 PSI
FLOODED

PUMP HORSEPOWER:
SUSTAIN PUMP: 7.5HP
PUMP NO.1-2: 75 HP
CHECK VALVE SIZE
SUSTAIN: 2"
PUMP NO.1-2: 5"
ISOLATION VALVE SIZES:
SUSTAIN PUMP: 5"
PUMP NO.1-2: 5"

DISCHARGE ISOLATION VALVE: 6"
RELIEF VALVE SIZE: 3"
PUMP STATION DISCONNECT: 400 AMP

POWER REQUIREMENTS:
480V, 60 HZ, 3 PH, 198 FLA

EXHAUST FAN REQ'D FOR BUILDING:
2550 CFM

INTAKE/SUCTION CONNECTION: ... 10" FL

DISCHARGE CONNECTION: 10" FL

NOMINAL PIPE SIZE: N/A
ACTUAL O.D.: N/A
TYPE:

DROP PIPE COVER: 60"

PLEASE VERIFY ALL INFO WITH
YOUR INITIALS AND DATE

INITIAL	DATE
DW	1/9/24
DW	1/9/24
DW	1/9/24

Pump station shall be provided with the following options
per Watertronics quote Wolf Creek GC HC
BoosterUT_230804Q1 (See quote for full station purchase
specs)

230-0000004 Filter
VAF-V1000 - 8" Flange, 1200 GPM, 300 Micron

900-0000001 Composite Station Enclosure
120 x 96 Inches

910-0000008 Ship Loose Disconnect
400A Fused NEMA 3R

PLEASE USE THE SPACE BELOW FOR ANY ADDITIONAL COMMENTS:

Purchasing/installing contractor shall be entirely
responsible for electrical and hydraulic connections, a fully
and properly functioning pump station and providing 1 full
year of communications, which contract(s) shall be
assumable, transferable and renewable by the Owner, at
the Owner's discretion.

- ☒ APPROVED AS SUBMITTED
- ☐ APPROVED AS NOTED
- ☐ REVISE AND RESUBMIT

REVIEWED BY: _____
NAME: _____
DATE: _____

Dan White
APPROVED
01/09/2024

DIMENSIONS AND SIZES OF EXISTING STRUCTURES, AND/OR COMPONENTS
MUST BE VERIFIED TO WATERTRONICS BEFORE STATION CONSTRUCTION
BEGINS.

UNLESS SPECIFIED BY THE CUSTOMER, PUMP HOUSE/CONCRETE SLAB
DIMENSIONS ARE RECOMMENDED MINIMUMS FOR NEC AND SERVICE
CLEARANCE, AND ARE FOR ILLUSTRATION PURPOSES ONLY. PROJECT
MANAGER SHALL BE CONSULTED ON FINAL DESIGN.

THE PUMP STATION PROPOSED HEREIN IS DESIGNED TO BE PLACED IN A
PUMP HOUSE FOR PROTECTION FROM THE ENVIRONMENT. IF A PUMP HOUSE
IS NOT USED, WATERTRONICS MUST BE NOTIFIED AT TIME OF QUOTATION
SO SPECIAL PROVISIONS CAN BE MADE.



PHONE: 1-262-367-5000
FAX: 1-262-367-5551

SHEET 1 OF 3 SHEETS

DRAWING NO.	PRHC11102	8/4/2023
	R1	1/9/2024

WOLF CREEK WATER AND SEWER ID,

REUSE PROJECT

UPPER PUMP STATION

PUMP STATION DETAILS

**GARDNER
ENGINEERING**

CIVIL • LAND PLANNING
MUNICIPAL • LAND SURVEYING

1880W 2100S, WEST HAVEN, UT 84401
P 801.476.0202 F 801.476.0066



UPP1

Revisions

Date

Description

Date: 1-9-24

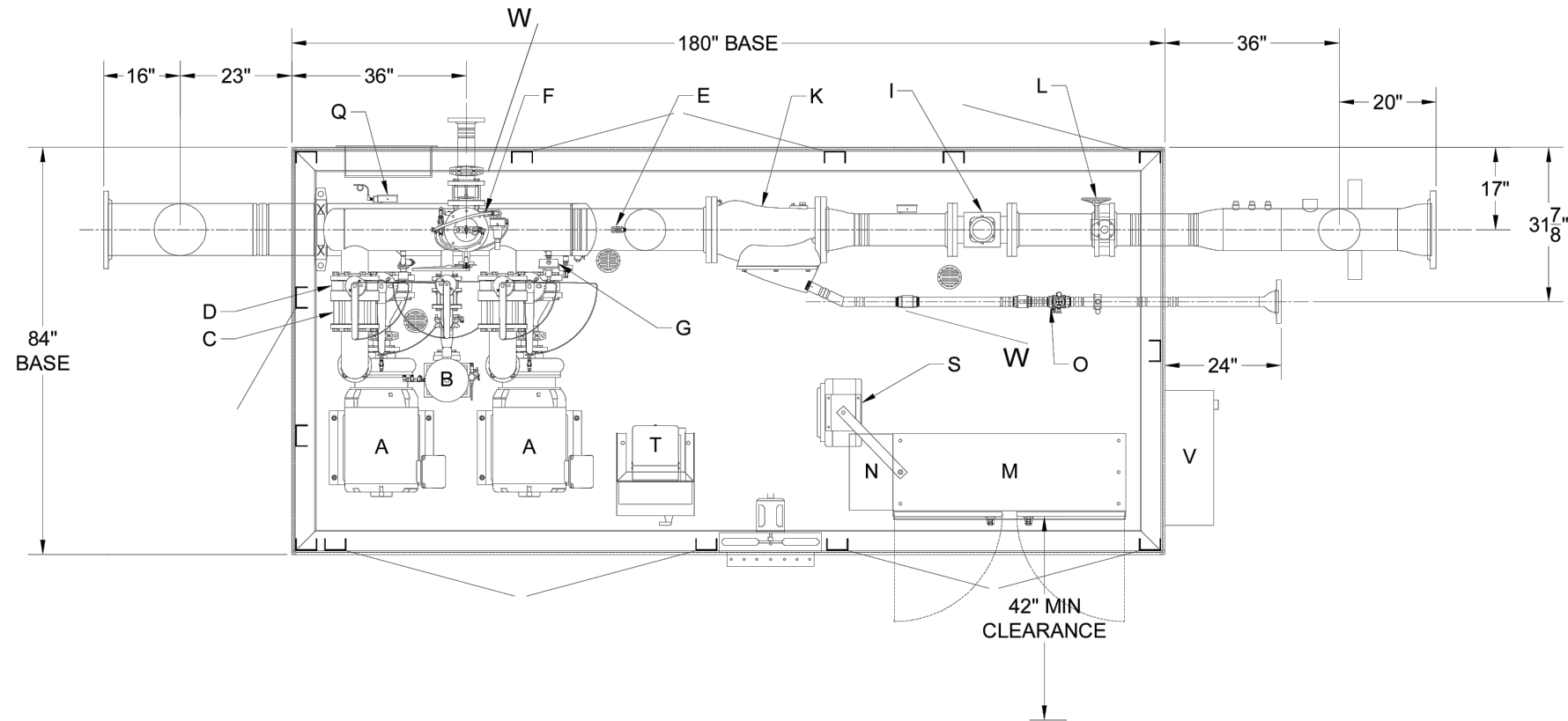
Scale: #####

Designed: DW

Drafted: PCA

Checked: DW

R:\2319 - WOLF CREEK WATER AND SEWER\2302 - REUSE PIPELINE\DESIGN\DWG\UPS - REUSE PLAN SET 2023_11_27.DWG



CONCEPT DRAWING ONLY
NOT TO BE USED FOR CONSTRUCTION

PLAN VIEW

[2022616]

7						DRAWN BY: MTM	DATE: 8/4/2023
6						CHECKED BY: CG	DATE: 8/4/2023
5						THIS DRAWING AND DESIGN, IS THE PROPERTY OF WATERTRONICS AND IS NOT TO BE REPRODUCED IN WHOLE OR PART, NOR EMPLOYED FOR ANY PURPOSE OTHER THAN SPECIFICALLY PERMITTED IN WRITING BY WATERTRONICS. THIS DRAWING LOANED AND SUBJECT TO RETURN ON DEMAND	
4							
3							
2							
1	1/9/2024	--	ADD CHECK VALVE TO PRV AND WYE FLUSH	---	---		
NO.	DATE	BY	DESCRIPTION	CHK DATE	CHK BY		

TITLE:		WOLF CREEK GC	
		HCFV-7C-75X2/7.5VMS-480-3-1000-150	
SCALE: NTS		SHEET 2 OF 3 SHEETS	
JOB NO.: ---		DRAWING NO. PRHC11102	

STATION COMPONENTS:
A 75HP PUMP AND MOTOR W/ WINDING HEATERS
B 7.5HP SUSTAIN PUMP AND MOTOR
C CHECK VALVE
D PUMP ISOLATION VALVE W/ EBV
E DRAIN
F 3" PRESSURE RELIEF VALVE
G DISCHARGE PRESSURE TRANSDUCER W/ GAUGE
H PAINTED STEEL BASE (SANDSTONE)
I 6" ELECTROMAGNETIC FLOW METER
J N/A
K 8" WYE STRAINER W/ SOLENOID AUTOFLUSH
L 6" STATION ISOLATION VALVE
M CONTROL CABINET
N HEAT EXCHANGER (AC WITHOUT ENCLOSURE)
O INLINE CHECK VALVE
P 6" X 10" FL DISCHARGE DROP PIPE
Q INTAKE PRESSURE TRANSDUCER W/ GAUGE
R 10" X 10" FL INTAKE DROP PIPE
S 5KW STATION HEATER
T 3KVA TRANSFORMER & LOAD CENTER
U COMPOSITE STATION ENCLOSURE (OPTIONAL)
V 400AMP EXTERNAL DISCONNECT (OPTIONAL)
W Check Valves

CONCEPT DRAWING ADDITIONAL INFORMATION

WATERVISION CLOUD
HINGED WINDOW KIT

WOLF CREEK WATER AND SEWER I.D.

REUSE PROJECT

UPPER PUMP STATION

PUMP STATION DETAILS

GARDNER
ENGINEERING

CIVIL ■ LAND ■ PLANNING
MUNICIPAL ■ LAND SURVEYING

1880W 2100S, WEST HAVEN, UT 84401
P 801.476.0202 F 801.476.0066

UPP2

Date: 1-9-24

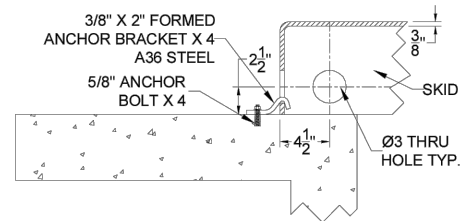
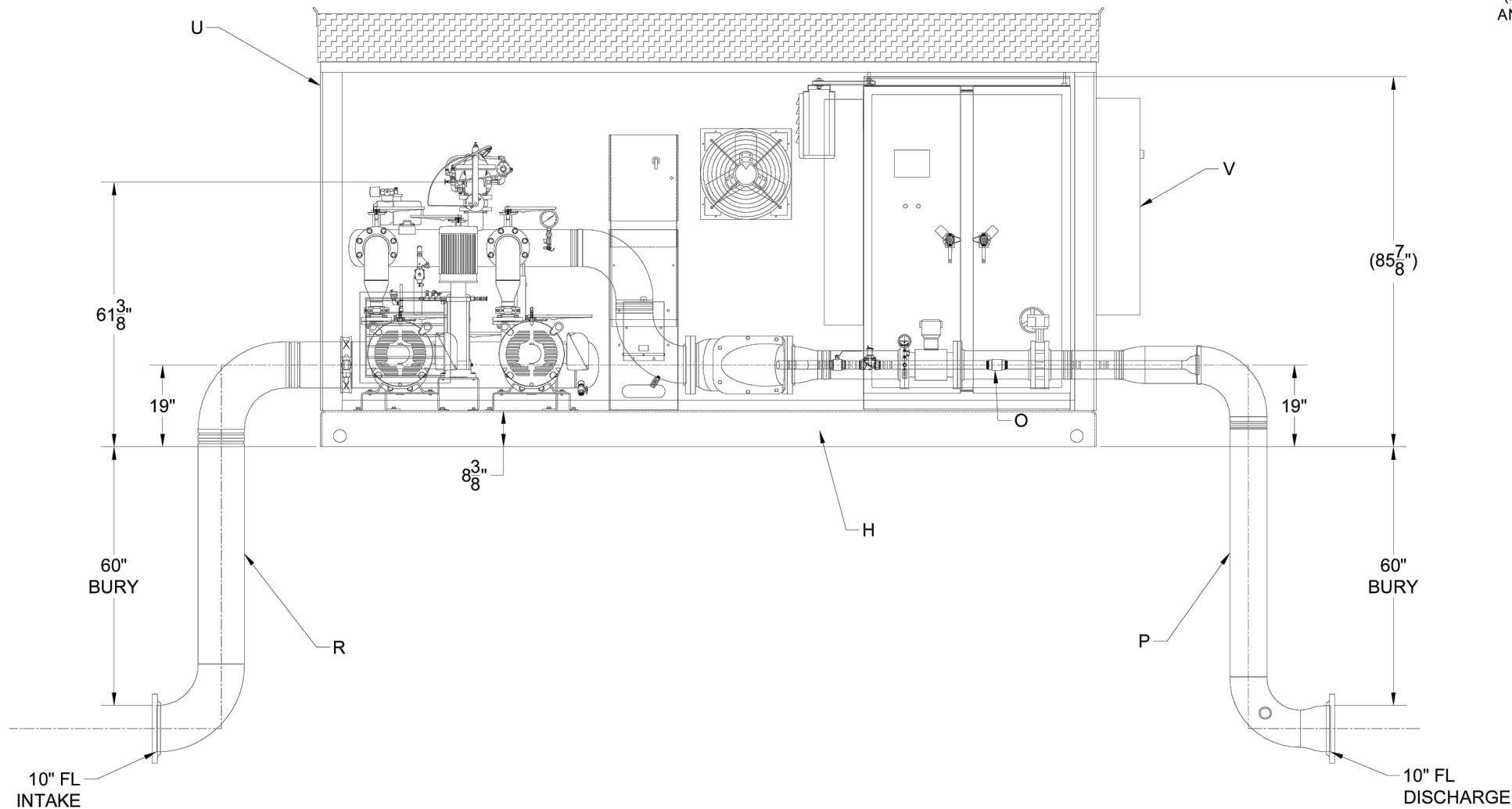
Scale: #####

Designed: DW

Drafted: PCA

Checked: DW

R:\2319 - WOLF CREEK WATER AND SEWER\2302 - REUSE PIPELINE\DESIGN\DWG\UPS - REUSE PLAN SET 2023_11_27.DWG



LIFTING HOLE/ ANCHOR DETAIL
(HOLES AT ALL CORNERS - 8 TOTAL
ANCHORS AT 4 OPPOSITE CORNERS)

ELEVATION VIEW

7						DRAWN BY: MTM	DATE: 8/4/2023
6						CHECKED BY: CG	DATE: 8/4/2023
5						THIS DRAWING AND DESIGN, IS THE PROPERTY OF WATERTRONICS AND IS NOT TO BE REPRODUCED IN WHOLE OR PART, NOR EMPLOYED FOR ANY PURPOSE OTHER THAN SPECIFICALLY PERMITTED IN WRITING BY WATERTRONICS. THIS DRAWING LOANED AND SUBJECT TO RETURN ON DEMAND	
4							
3							
2							
1	1/9/2024	MTM	ADD CHECK VALVE TO PRV AND WYE FLUSH	---	---		
NO.	DATE	BY	DESCRIPTION	CHK DATE	CHK BY		

 GARDNER ENGINEERING CIVIL • LAND PLANNING MUNICIPAL • LAND SURVEYING 1880W 2100S, WEST HAVEN, UT 84401 P 801.476.0202 F 801.476.0066	WOLF CREEK WATER AND SEWER I.D.		Date: 1-9-24	
	REUSE PROJECT		Revisions	Scale: #####
	UPPER PUMP STATION		Date	Designed: DW
UPP3	PUMP STATION DETAILS			Drafted: PCA
				Checked: DW



Staff Report to the Ogden Valley Planning Commission

Weber County Planning Division

Synopsis

Application Information

Application Request: File Number CUP 2024-02 - A request for approval of a conditional use permit for a Public Utility Substation for a chlorination shed to treat the Cole Canyon Water.

Agenda Date: Tuesday, April 23, 2024

Applicant: Rob Birch, Representative

Property Information

Approximate Address: 4150 E 5950 N, Liberty, UT, 84310

Project Area: 160 acres

Zoning: Forest (F-40)

Existing Land Use: Recreation

Proposed Land Use: Public Utility Substation

Parcel ID: 16-001-0004

Township, Range, Section: T7N, R1W, Section 1

Adjacent Land Use

North:	Forest	South:	Forest
East:	Residential	West:	Forest

Staff Information

Report Presenter: Felix Lleverino
flleverino@co.weber.ut.us
801-399-8767

Report Reviewer: BC

Applicable Ordinances

- Weber County Land Use Code Title 101 Chapter 1 General Provisions, Section 7 Definitions
- Weber County Land Use Code Title 104 Chapter 9 (F-40 Zone)
- Weber County Land Use Code Title 108 Chapter 1 (Design Review)
- Weber County Land Use Code Title 108 Chapter 4 (Conditional Uses)
- Weber County Land Use Code Title 108 Chapter 8 (Parking and Loading Space, Vehicle Traffic and Access Regulation)

Summary and Background

The applicant is requesting approval of a conditional use permit for a Public Utility Substation. The Cole Canyon Water Company will place a 150 sq. ft. tuff shed on the north side of the access road to the North Gate of the North Fork Campground. A written agreement between the Weber County Corporation and the Cole Canyon Water Company is completed and approved by the County Commission allowing for access to and construction of the facility. This agreement is attached as Exhibit B. The construction plans and the architectural drawings are included as exhibits in this report.

Analysis

General Plan: As a conditional use, this operation is allowed in the F-40 Zone. With the establishment of appropriate conditions as determined by the Planning Commission, this operation will not negatively impact any of the goals and policies of the General Plan.

Zoning: The subject property is located within the Forest (F-40) Zone. The purpose of the F-40 Zone can be further described in LUC §104-9-1 as follows:

- The intent of the forest zones is to protect and preserve the natural environment of those areas of the county that are characterized by mountainous, forest or naturalistic land, and to permit development compatible to the preservation of these areas.*
- The objectives in establishing the forest zones are:*

1. To promote the use of the land for forest, fish and wildlife and to facilitate the conservation of the natural resources, vegetation and attractions;
2. To reduce the hazards of flood and fire;
3. To prevent sanitation and pollution problems and protect the watershed;
4. To provide areas for private and public recreation and recreation resorts; and
5. To provide areas for homes, summer homes, and summer camp sites.

A Public Utility Substation is defined by LUC §101-2-22-U as follows:

"Utility. The term "utility" means utility facilities, lines, and rights of way related to the provision, distribution, collection, transmission, transfer, storage, generation or disposal of culinary water, secondary water, irrigation water, storm water, sanitary sewer, solid waste, oil, gas, power, information, telecommunication, television or telephone cable, electromagnetic waves, and electricity. See also "quasi-public."

Conditional Use Review: A review process has been outlined in LUC §108-4-3 to ensure compliance with the applicable ordinances and to mitigate anticipated detrimental effects.

The following is an analysis of the proposal reviewed against the conditional use standards:

- 1) Standards relating to safety for persons and property.

The proposal is not anticipated or expected to negatively impact this property, surrounding properties, or persons. The structure housing the chlorination injection equipment will remain locked at all times and will be inspected and maintained by the Cole Canyon Water Company. A chlorine warning sign will be placed on the entry door. The Chlorination injection equipment will be assembled under current building codes, ANSI/NSF, AWWA, and Division of Drinking Water, and inspected for quality workmanship by the Weber County Building Inspections Department.

- 2) Standards relating to infrastructure, amenities, and services.

The proposal is not anticipated or expected to negatively impact any existing infrastructure, amenities, or services in the area.

- 3) Standards relating to the environment.

The proposal will not negatively impact the environment.

- 4) Standards relating to the current qualities and characteristics of the surrounding area and compliance with the intent of the general plan.

The proposal is not anticipated to substantially impact the surrounding area. With the establishment of appropriate conditions as determined by the Planning Commission, this operation is not anticipated to negatively impact the surrounding areas or be at odds with any of the goals and policies of the General Plan.

- 5) Standards relating to performance

The Cole Canyon Water Company is responsible for maintenance, inspections, and licensing.

- 6) Standards generally

The owner is responsible for keeping the operation free of nuisances such as noise, light, and traffic issues. The planning staff's conditions of approval will serve to mitigate potential issues.

- 7) Voluntary contributions providing satisfactory compliance with applicable standards

If the planning commission identifies issues not covered in this report, the applicant has the opportunity to volunteer solutions.

Parking and Loading Space, Vehicle Traffic and Access Regulations: This structure is located in close proximity to a public parking area and a parking area intended for large service vehicle staging. Periodic Cole Canyon service vehicles will park in an area that will not restrict the flow of traffic.

Design Review: In addition to the conditional use review, a design review is required for a Public Utility Substation. The following design review standards were considered and an analysis of the project against the design review standards is in the italicized text below each standard.

Sec 108-1-4 Considerations in the review of applications

- (a) Considerations relating to traffic safety and traffic congestion.

Graded parking areas and asphalt paved access are well established in this area. Traffic safety concerns are not anticipated with this proposal.

- (b) Considerations relating to outdoor advertising.

Business signage will not be used for this proposal. Site signage is limited to a warning sign.

- (c) Considerations relating to landscaping.

The existing established vegetation covering this property is largely natural with a mix of wild grasses and wild shrubs and trees. No further landscaping is required to meet the minimum 20 percent site landscaping.

- (d) Considerations relating to buildings and site layout.

The new structure will be built in an area that is backed by trees. The Cole Canyon Water Company will work with the Weber County Facilities manager to select the colors used for the exterior. The Planning Division will require that natural non-reflective earthtones are used.

- (e) Considerations relating to utility easements, drainage, and other engineering questions.

The engineering division has reviewed the project and does not have any concerns with drainage or other engineering questions.

- (f) Considerations relating to prior development concept plan approval associated with any rezoning agreement planned commercial or manufacturing rezoning, or planned residential unit development approval.

There are no prior development approvals or rezoning development agreements that apply to the subject property.

Staff Recommendation

Staff recommends approval of this conditional use permit application subject to the applicant meeting the following conditions of approval in addition to any conditions of the various reviewing agencies or the Ogden Valley Planning Commission.

Planning conditions of approval:

- 1) Public drinking water system requirements are satisfied
- 2) The site, structure, and mechanical equipment shall be kept and maintained for safety and good visual appearance
- 3) Service vehicle parking is maintained and accessible year-round
- 4) Thoroughfare parking is not permitted.

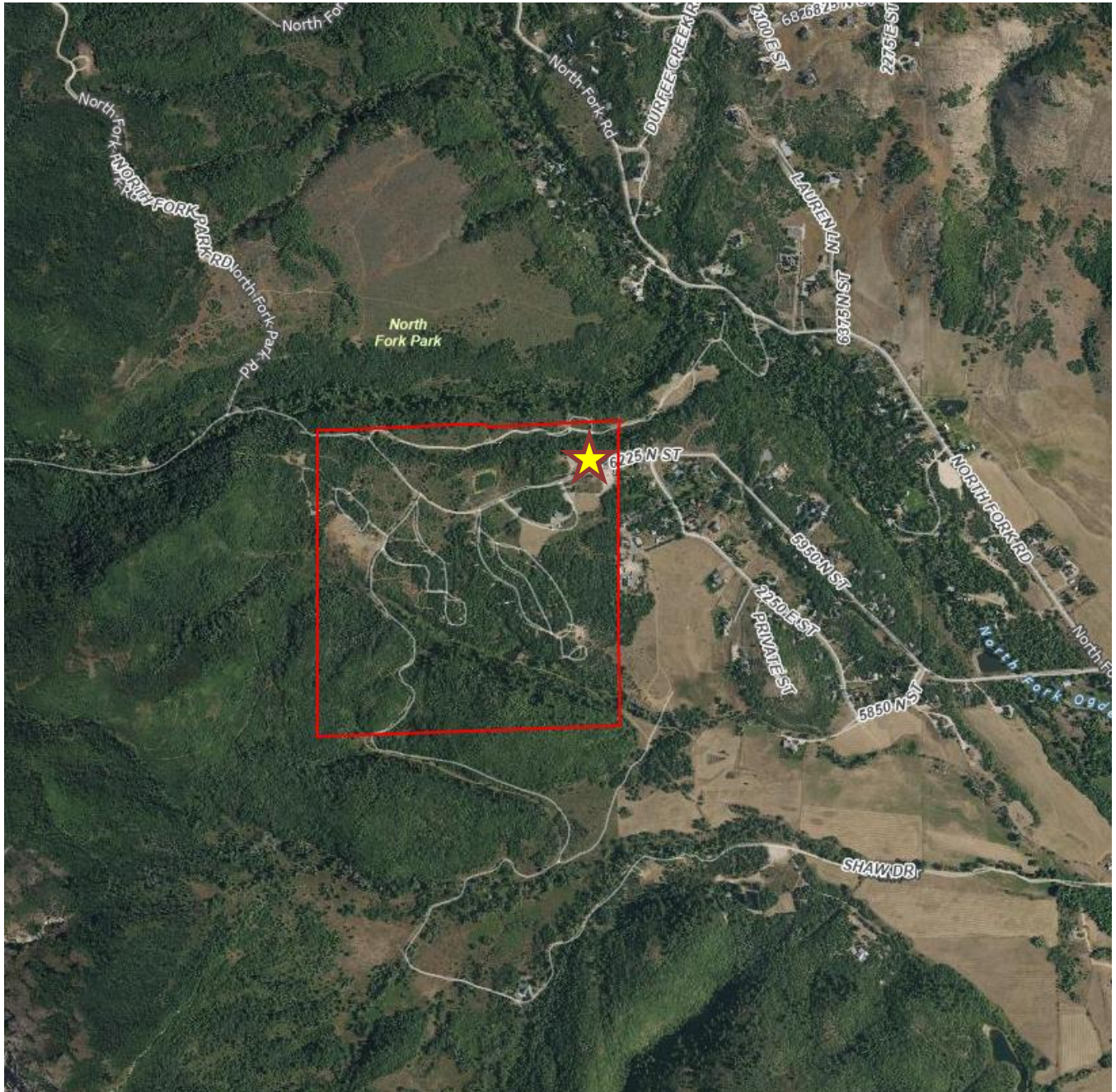
This recommendation is based on the following findings:

- 1) The proposed use is allowed in the F-40 Zone and meets the appropriate site development standards.
- 2) The criteria for issuance of a conditional use permit have been met because mitigation of potential detrimental effects can be accomplished.

Exhibits


- A. Site plan
- B. Narrative
- C. Agreement
- D. Plans

Map 1



Plot Date: 10/23/2023 3:15 PM Plotted By: Caitlin Arnold
Date Created: 10/23/2023 JUB.COM\CENTRAL\CLIENTS\UT COLE CANYON\PROJECTS\55-22-095 SYSTEM FILTRATION AND DISINFECTION\DESIGN\CA\55-22-095 C-101X.DWG





J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, INC.
466 North 900 West
Kaysville, Utah 84037
Phone: 801.547.0393
Fax: 801.547.0397
www.jub.com

CONSTRUCTION

SET

REVISION		DATE
NO.	DESCRIPTION	BY

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ARE THE PROPERTY OF JUB ENGINEERS, INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF JUB ENGINEERS, INC.

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

SITE PLAN

FILE: 55-22-095 C-101X
JUB PROJ. #: 55-22-095
DRAWN BY: CRA
DESIGN BY: BRN
CHECKED BY: BRN
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/23/2023
SHEET NUMBER:
C-101

Project Name: Cole Canyon -Conditional Use Permits
Address: 4150 E 5950 N
Project Type: Conditional Use Permits
Project Sub Type: Conditional Use Permits
Created By: Rob Birch
Created On: 3/19/2024
Project Status: Accepted
Status Date: 3/20/2024
File Number: CUP 2024-02
Project Manager:

Application

Project Description:

Cole Canyon Water Company Filtration and Chlorination Injection Project. Housed in a Tuff Shed.

Property Address:

4150 E 5950 N

Property Owner:

Todd

661-319

tferrario@co.weber.ut.us

Representative:

Rob Birch

208-351

rbirch@hoganconstruction.com

Accessory Dwelling Unit:

False

Current Zoning:

Subdivision Name:

North Fork Park

Number of Lots:

0

Lot Number:

160010004

Lot Size:

Frontage:

Culinary Water Authority:

Not Applicable

Secondary Water Provider:

Not Applicable

Sanitary Sewer Authority:

Not Applicable

Nearest Hydrant Address:

Signed By:

Rob Birch

AGREEMENT
between
WEBER COUNTY
and
COLE CANYON WATER COMPNAY
for access and installation of a chlorinator and associated structure

This agreement ("Agreement") is between **WEBER COUNTY**, a body corporate and politic of the State of Utah on behalf of the Weber County Culture, Parks, and Recreation Department ("County") and **COLE CANYON WATER COMPANY** ("Cole Canyon"). County and Cole Canyon may be referred to jointly as the "parties."

RECITALS

WHEREAS, County owns and operates the North Fork Park (the "Park") located in Weber County's upper valley; and

WHEREAS, Cole Canyon has petitioned the County for access through a portion of County's Park for the purpose of installing a chlorinator and associated structure; and

WHEREAS, County has agreed to allow Cole Canyon temporary and limited access to construct or cause to be constructed a chlorinator and associated structure at a location specified in this agreement and subject to the term and conditions contained in this Agreement; and

THEREFORE, in exchange for valuable consideration, including the mutual covenants contained in this Agreement, the Parties covenant and agree as follows:

1. **SCOPE OF AGREEMENT**

Cole Canyon shall be permitted to access the County's Park for the purpose of installing a chlorinator and associated structure as described in the engineering plans attached to this Agreement as **Exhibit A** and at the location specified in the engineering plans attached to this Agreement as **Exhibit A**.

Cole Canyon shall be responsible for restoration of any and all of the land disturbed by the installation of said chlorinator and associated structure. Any disturbance must be returned to an original or better than original condition. County, in County's sole discretion, shall determine whether any disturbances have been reasonably restored to their original or better than original condition. In the event that County determines Cole Canyon has failed to restore any disturbance to the original or better than original condition, County shall notify Cole Canyon and Cole Canyon shall be responsible for the restoration or the costs of County's endeavors to restore the disturbance to the original or better than original condition.

Cole Canyon shall notify County in advance and as soon reasonably possible of any construction work or disturbances of any kind that could interrupt the regular or daily use of the Park by any users or County personnel. County shall work with Cole Canyon to temporarily divert traffic, personnel, or users of the Park away from Cole Canyon's construction activities as necessary.

2. EFFECTIVE DATE/TERM

This Agreement shall be effective as of the 01 day of August, 2023 and will continue for a period of 1 year following the effective date ("Term"). County reserves the right to review this Agreement on a regular basis regarding performance and cost analysis and may negotiate price and service elements during the term of this Agreement.

3. TERMINATION

- a. Termination for Default. County may terminate this Agreement for an "Event of Default as defined, upon written notice from County to Cole Canyon.
- b. Termination by Cole Canyon for Default. Cole Canyon may terminate this Agreement for an Event of Default upon written notice from Cole Canyon to County.
- c. Event of Default. As used in this Agreement, the term "Event of Default" means a party hereto fails to perform any of its material obligations and such failure continues for a period of 30 (thirty) days after written notice to such defaulting party or any material representation or warranty of a party contained in this Agreement proves to be untrue or incorrect in any material respect when made.
- d. Force Majeure. Neither party shall be liable for any excess costs if the failure to perform arises from causes beyond the control and without the fault or negligence of that party, e.g., acts of God, fires, floods, strikes, or unusually severe weather. If such condition continues for a period in excess of 60 days, Cole Canyon or County shall have the right to terminate this Agreement without liability or penalty effective upon written notice to the other party.
- e. No Limitation of Rights. The rights and remedies of the parties hereto are in addition to any other rights and remedies provided by law or under this Agreement. The parties agree that the waiver of any breach of this Agreement by either party shall in no event constitute a waiver as to any future breach.
- f. Termination for Convenience. County reserves the right to terminate this Agreement, in whole or in part, at any time during the Term or any Additional Terms whenever County determines, in its sole discretion that it is in the County's interest to do so. If County elects to exercise this right, County shall provide written notice to Cole Canyon at least 30 (thirty) days prior to the date of termination for convenience. Upon such termination, Cole Canyon shall be paid for all services up to the date of termination. Cole Canyon agrees that the County's termination for convenience will not be deemed a termination for default nor will it entitle Cole Canyon to any rights or remedies provided by law

or this Agreement for breach of contract by the County or any other claim or cause of action.

4. INDEPENDENT CONTRACTOR AND TAXES

The relationship of County and Cole Canyon under this Agreement shall be that of an independent contractor status. Each party shall have the entire responsibility to discharge all of the obligations of an independent contractor under federal, state and local law, including but not limited to, those obligations relating to employee supervision, benefits and wages; taxes; unemployment compensation and insurance; social security; worker's compensation; disability pensions and tax withholdings, including the filing of all returns and reports and the payment of all taxes, assessments and contributions and other sums required of an independent contractor. Nothing contained in this Agreement shall be construed to create the relationship between County and Cole Canyon of employer and employee, partners or joint venturers.

5. INSURANCE

Cole Canyon shall, at its sole cost and expense, secure and maintain during the term of this Agreement, including all renewal or additional terms, the following minimum insurance coverage:

- A. Workers' compensation and employer's liability insurance as required by the State of Utah.
- B. Commercial general liability insurance in the minimum amount of \$1,000,000 per occurrence with a \$2,000,000 general policy aggregate.
- C. Professional liability insurance in the minimum of amount of \$1,000,000 per occurrence with a \$2,000,000 annual policy aggregate limit.
- D. Commercial automobile liability insurance that provides coverage in the minimum amount of \$100,000 per occurrence per person/ \$300,000 per accident / \$50,000 property damage OR single combined limit of \$500,000.

6. AGENT

No agent, employee or servant of Cole Canyon or County is or shall be deemed to be an employee, agent or servant of the other party. None of the benefits provided by each party to its employees, including but not limited to workers' compensation insurance, health insurance and unemployment insurance, are available to the employees, agents, or servants of the other party. Cole Canyon and County shall each be solely and entirely responsible for its acts and for the acts of its agents, employees, and servants during the performance of this Agreement. Cole Canyon and County shall each make all commercially reasonable efforts to inform all persons with whom they are involved in connection with this Agreement that both are independent contractors.

7. SEVERABILITY

In the event that any condition, covenant or other provision hereof is held to be invalid or void, the same shall be deemed severable from the remainder of this Agreement and shall in no way affect any other covenant or condition herein contained. If such condition, covenant, or other provision shall be deemed invalid due to its scope or breadth, such provision shall be deemed valid to the extent of the scope or breadth permitted by law.

8. COMPLIANCE WITH LAWS

Each party agrees to comply with all federal, state and local laws, rules and regulations in the performance of its duties and obligations under this Agreement. Any violation by Cole Canyon of applicable law, rule or regulation, shall constitute an event of default under this Agreement. Cole Canyon is responsible, at its sole expense, to acquire, maintain and renew during the term of this Agreement, all necessary permits and licenses required for its lawful performance of its duties and obligations under this Agreement.

9. NON-ASSIGNMENT

Neither party shall assign, transfer, or contract for the furnishing of services to be performed under this Agreement without the prior written approval of the other.

10. GOVERNING LAW

It is understood and agreed by the Parties hereto that this Agreement shall be governed by the laws of the State of Utah and the ordinances of Weber County, both as to interpretation and performance. All actions, including but not limited to court proceedings, administrative proceedings, arbitration and mediation proceedings, shall be commenced, maintained, adjudicated and resolved within the jurisdiction of the State of Utah.

11. STANDARD OF PERFORMANCE/PROFESSIONALISM

Cole Canyon acknowledges the standard of performance and professionalism required in the performance of its services under this Agreement. Cole Canyon agrees to perform the services under this Agreement with the level of professionalism expected in its industry/profession in the community. Further, Cole Canyon, while performing its obligations under this Agreement, will conduct itself in such a manner that will promote the best interests of the County.

12. INDEMNIFICATION

Cole Canyon agrees to indemnify and hold harmless the County, its officers, agents, and employees from and against any and all actual or threatened claims, losses, damages, injuries,

and liabilities of, to, or by third Parties, including Cole Canyon, its subcontractors, or the employees of either, including claims for personal injury, death, or damage to personal property or profits and liens of workmen and material men (suppliers), however allegedly caused, resulting directly or indirectly from, or arising out of, Cole Canyon's breach of this Agreement or any acts or omissions of or by Cole Canyon, its agents, representatives, officers, employees, or subcontractors in connection with the performance of this Agreement. Cole Canyon agrees that its duty to indemnify the County under this Agreement includes all attorney's fees, litigation and court costs, expert witness fees, and any sums expended by or assessed against the County for the defense of any claim or to satisfy any settlement, arbitration award, or verdict paid or incurred on behalf of the County.

13. GOVERNMENTAL IMMUNITY

County is a body corporate and politic of the State of Utah, subject to the Governmental Immunity Act of Utah (the "Act"), Utah Code Ann. §§ 63G-7-101 to -904. The Parties agree that County shall only be liable within the parameters of the Governmental Immunity Act. Nothing contained in this Agreement shall be construed in any way, to modify the limits of liability set forth in that Act or the basis for liability as established in the Act.

14. COUNTERPARTS

This Agreement may be executed in several counterparts and all so executed shall constitute one agreement binding on all the Parties, notwithstanding that each of the Parties are not signatory to the original or the same counterpart. Further, executed copies of this Agreement delivered by facsimile shall be deemed an original signed copy of this Agreement.

15. ENTIRE AGREEMENT

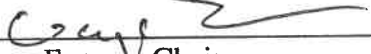
County and Cole Canyon acknowledge and agree that this Agreement constitutes the entire integrated understanding between County and Cole Canyon, and that there are no other terms, conditions, representations or understanding, whether written or oral, concerning the rights and obligations of the Parties to this Agreement except as set forth in this Agreement. This Agreement may not be enlarged, modified or altered, except in writing, signed by the Parties.

16. INTERPRETATION

County and Cole Canyon agree that where possible, each provision of this Agreement shall be interpreted in such a manner as to be consistent and valid under applicable law; but if any provision of this Agreement shall be invalid, prohibited or unenforceable under applicable law, such provision shall be ineffective to the extent of such invalidity or prohibition, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

In witness whereof, the Parties execute this Agreement.

BOARD OF COUNTY COMMISSIONERS
OF WEBER COUNTY


By 
Gage Froerer, Chair

Commissioner Froerer voted Aye

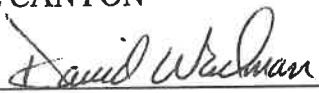
Commissioner Harvey voted Aye

Commissioner Bolos voted Aye

ATTEST

Fol 
Ricky Hatch, CPA
Weber County Clerk/Auditor

COLE CANYON

By: 

Title: Board Members

Date: 8-23-2023

COLE CANYON WATER COMPANY SYSTEM FILTRATION AND CHLORINATION PROJECT

NEAR 2300 NORTH FORK PARK RD
LIBERTY, UT 84310

PWS ID: UTAH29092

Sheet List Table	
Sheet Number	Sheet Title
G-001	COVER SHEET
G-002	VICINITY MAP AND PROJECT LOCATION MAP
G-003	GENERAL NOTES AND ABBREVIATIONS
G-004	LINE AND SYMBOL LEGENDS AND SHEET AND DETAIL KEY
C-101	SITE PLAN
C-501	CIVIL DETAILS
M-101	PIPING PLAN AND SECTION
M-501	MECHANICAL DETAILS
S-001	GENERAL STRUCTURAL NOTES
S-002	GENERAL STRUCTURAL NOTES

Sheet List Table	
Sheet Number	Sheet Title
S-101	STRUCTURAL PLANS
S-201	STRUCTURAL ELEVATIONS
S-501	TYPICAL FOUNDATION DETAILS
S-502	TYPICAL FOUNDATION DETAILS
E-001	ELECTRICAL LEGEND
E-002	ELECTRICAL TABLES
E-101	ELECTRICAL SITE PLAN
E-102	ELECTRICAL PLANS
E-501	ELECTRICAL DETAILS, SHT. 1
E-701	ONE-LINE DIAGRAMS



CONSTRUCTION PLANS

PROJECT NO. 55-22-095
OCTOBER 2023

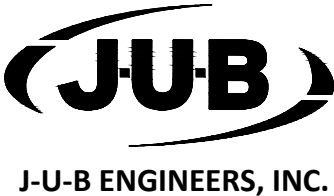
NOTICE AND DISCLAIMER

The plans and/or specifications (documents) are the property of J-U-B Engineers, Inc. ("J-U-B") and by using the documents you agree to be bound by the terms and conditions in this notice and disclaimer.

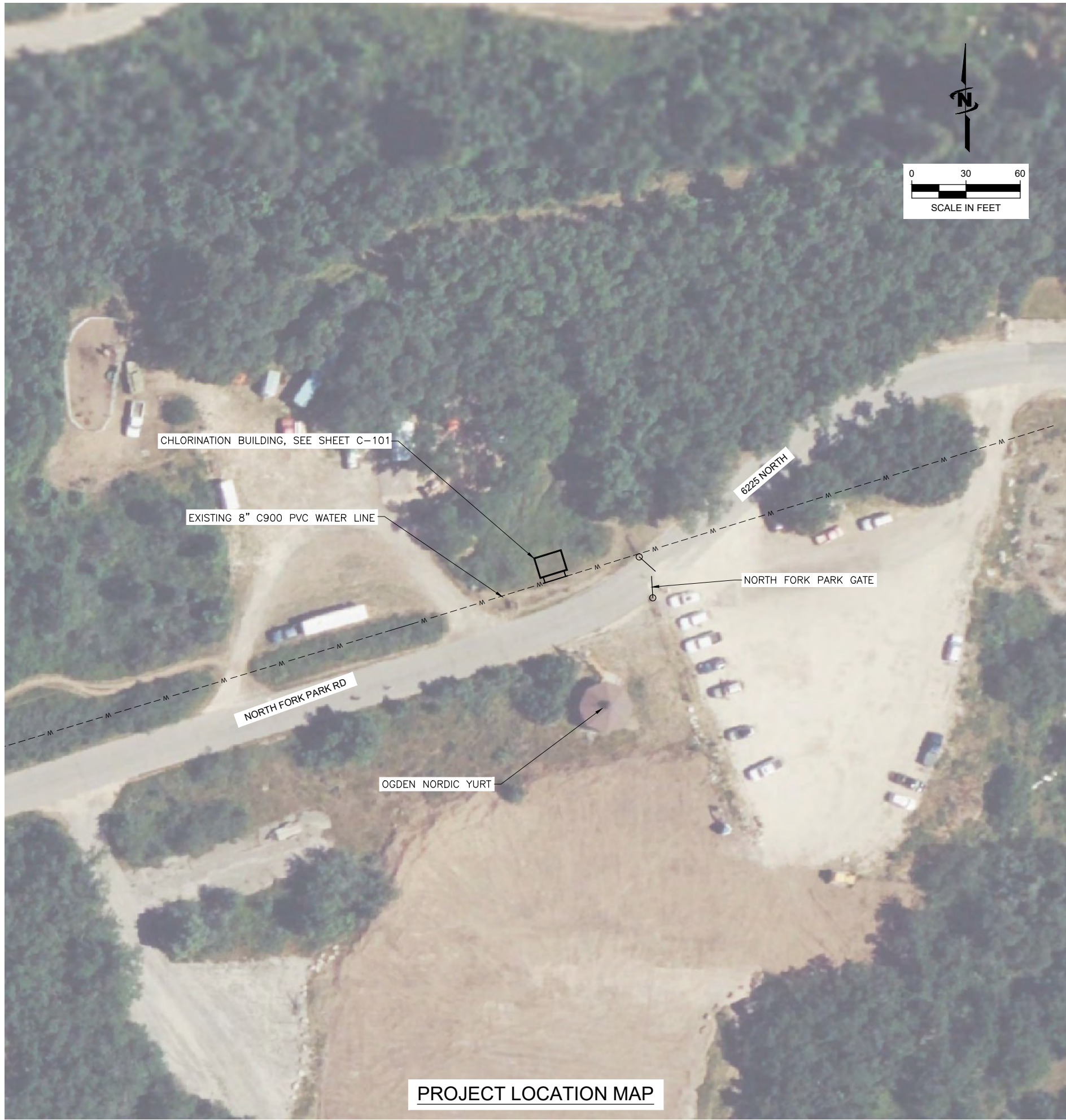
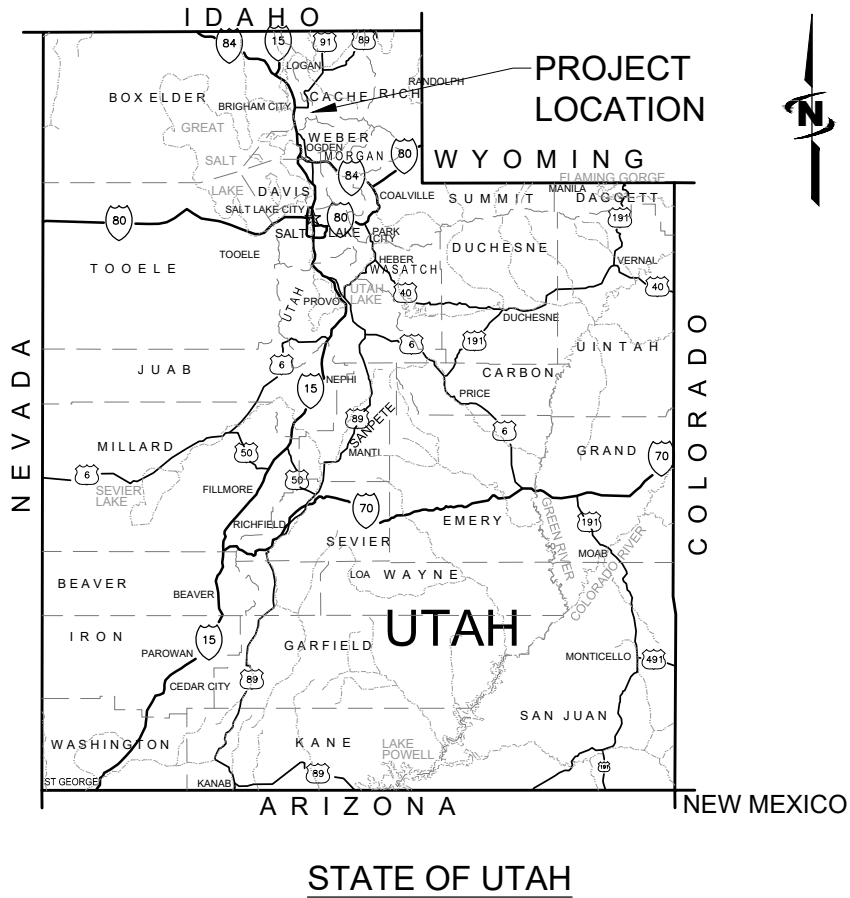
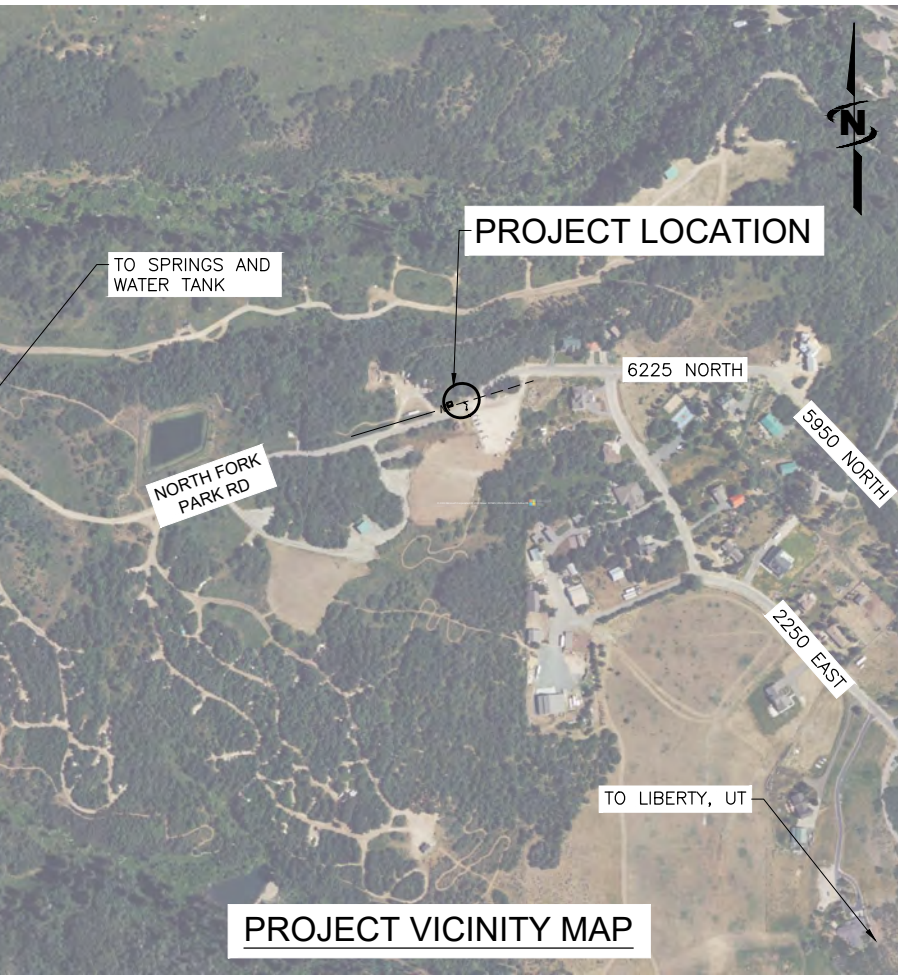
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Plot Date: 10/23/2023 3:13 PM Plotted By: Caitlin Arnold
Date Created: 10/20/2023 JUB.COM\CENTRAL\CLIENTS\UT COLE CANYON\PROJECT\55-22-095 SYSTEM\ITERATION\DISINFECTION\DESIGN\CAD\PROJECT\55-22-095 G-001X.DWG





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CONSTRUCTION

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NO.	REVISION	DESCRIPTION	BY	DATE

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SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

VICINITY MAP AND PROJECT LOCATION MAP

FILE: 55-22-095 G-001X
JUB PROJ. #: 55-22-095
DRAWN BY: CRA
DESIGN BY: BRN
CHECKED BY: BRN
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/23/2023
SHEET NUMBER:
G-002

Plot Date: 10/23/2023 3:15 PM Plotted By: Caitlin Arnold
Date Created: 10/20/2023 JUB.COM\CENTRAL\CLIENTS\UT COLE CANYON\PROJECT\SS-22-095 - SYSTEM FILTRATION AND DISINFECTION\DESIGN\CAD\SHEET\SS-22-095 - G-001.DWG

GENERAL PROJECT NOTES

1. GENERAL:

- A. THE GENERAL NOTES AND SPECIFICATIONS SUPPLEMENT THE PROJECT WRITTEN TECHNICAL SPECIFICATIONS AND THE PROJECT DRAWINGS.
- B. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION BRACING, TEMPORARY SHORING, AND OTHER SITE SAFETY CONTROLS REQUIRED DURING CONSTRUCTION IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS, TO ENSURE THE STABILITY AND SAFETY OF ALL CONSTRUCTION UNTIL IT IS COMPLETED.
- C. DETAILS ON THESE PLANS ARE INTENDED TO DEPICT THE GENERAL CONSTRUCTION DETAILS AND METHODS FOR THIS PROJECT. DETAILS AND CONDITIONS NOT SPECIFICALLY SHOWN THAT ARE SIMILAR IN NATURE TO THOSE THAT ARE SPECIFIED SHALL BE ASSUMED ONE AND THE SAME. IF QUESTIONS REGARDING THE APPLICATION OF DETAILS ARE ENCOUNTERED, NOTIFY THE ENGINEER FOR CLARIFICATION OR INSTRUCTION.
- D. PRIOR TO IMPLEMENTING ANY CHANGES TO THESE PLANS, THE ENGINEER SHALL BE NOTIFIED IN WRITING FOR THEIR WRITTEN APPROVAL. CHANGES IMPLEMENTED WITHOUT THE ENGINEERS WRITTEN APPROVAL SHALL RELIEVE THE ENGINEER OF ANY CLAIM OR LIABILITY RESULTING FROM THAT PORTION OF THE PROJECT CHANGED OR AFFECTED BY THE CHANGE.

2. CONTRACTOR RESPONSIBILITY FOR COORDINATION:

- A. IT IS THE CONTRACTORS PRIME RESPONSIBILITY TO COORDINATE THE WORK SHOWN ON ALL OF THE PROJECT DRAWINGS, GENERAL, SPECIAL, AND TECHNICAL SPECIFICATIONS.
- B. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING CONSTRUCTION MATERIAL TYPES, DIMENSIONS, ELEVATIONS, AND CONDITIONS.
- C. IT IS THE CONTRACTOR’S RESPONSIBILITY TO CAREFULLY STUDY AND COORDINATE THE CONSTRUCTION REQUIREMENTS SHOWN ON THESE DRAWINGS. WHEN CONFLICTS OR DISCREPANCIES ARE FOUND IN THESE DRAWINGS, THE CONTRACTOR SHALL REPORT THEM IMMEDIATELY TO THE PROJECT ENGINEER FOR DIRECTION AND/OR CLARIFICATION.
- D. ANY CONSTRUCTION WORK DONE BY THE CONTRACTOR BEFORE OBTAINING SUCH CLARIFICATION FROM THE PROJECT ENGINEER SHALL BE AT THE CONTRACTOR’S OWN RISK AND COST. FURTHERMORE; ANY WORK REQUIRED TO CORRECT, REPLACE AND/OR RESTORE THE WORK AS DIRECTED BY THE ENGINEER SHALL BE AT THE CONTRACTOR’S OWN RISK AND COST.

3. PROJECT NOTES:

- A. THE CONTRACTOR SHALL LIMIT ACTIVITIES TO IMMEDIATE PROJECT AREA TO FULLEST EXTENT POSSIBLE.
- B. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AT THE CONTRACTOR’S EXPENSE.
- C. THE ENGINEER MAY PROVIDE VERTICAL AND HORIZONTAL CONTROLS ON THE PROJECT SITE. ANY ADDITIONAL CONSTRUCTION STAKING REQUIRED TO COMPLETE THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- D. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UTILITIES AND BE RESPONSIBLE FOR DAMAGES TO EXISTING UTILITIES AND EXISTING IMPROVEMENTS AS A RESULT OF THE CONTRACTOR’S CONSTRUCTION ACTIVITIES.

4. EARTHWORK:

- A. STRIP AND REMOVE EXISTING VEGETATION, DEBRIS, AND OTHER DELETERIOUS MATERIALS FROM THE EXCAVATION LIMITS.
- B. IN THE EVENT THAT GROUNDWATER IS PRESENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING DURING THE CONSTRUCTION PERIOD.
- C. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH EXCAVATION SIDES AND BOTTOM. ALL EXCAVATIONS SHOULD BE SLOPED OR SHORED IN THE INTEREST OF SAFETY FOLLOWING LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING CURRENT OSHA EXCAVATION AND TRENCH SAFETY STANDARDS.
- D. THE CONTRACTOR SHALL EXCAVATE THE SITE TO THE LIMITS AND ELEVATIONS SHOWN ON THE PLANS.

5. EXISTING UTILITIES:

- A. THE LOCATION OF EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY.
- B. DEPTHS AND ELEVATIONS OF UTILITIES ARE UNKNOWN UNLESS OTHERWISE SHOWN.
- C. UNDERGROUND UTILITY LOCATION AND VERIFICATION IS TO BE AN ONGOING PROCESS.
- D. CONTRACTOR IS RESPONSIBLE TO:
 - i. VERIFY EXACT LOCATIONS OF ALL UTILITIES PRIOR TO BEGINNING WORK IN THAT AREA
 - ii. FIELD VERIFY UTILITY LOCATION, DEPTHS, AND ELEVATIONS WHERE CONFLICTING UTILITIES MAY BE PRESENT A MINIMUM OF 500 FEET AHEAD OF TRENCHING OPERATIONS
 - iii. BRING ANY DISCREPANCIES AND/OR CONFLICTS TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
 - iv. NOTIFY APPROPRIATE UTILITY COMPANIES WHEN CONSTRUCTION MIGHT INTERFERE WITH NORMAL OPERATION OF ANY UTILITIES.
 - v. MAINTAIN SERVICE OF EXISTING UTILITIES.
 - vi. RESTORE ANY UTILITIES DAMAGED DUE TO CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

6. INSPECTION AND TESTING:

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MATERIALS TESTING INCLUDING BUT NOT LIMITED TO CONCRETE, ASPHALT, AND COMPACTION. ALL TESTS SHALL MEET MINIMUM ENGINEER REQUIREMENTS. SEE THE CONTRACT DOCUMENTS AND DRAWINGS FOR FREQUENCY OF TESTING.

RESULTS ARE TO BE DELIVERED TO SPECIAL INSPECTOR, OWNER AND ENGINEER.

- B. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ENGINEER AND SPECIAL INSPECTOR FOR INSPECTIONS OF WORK AT APPROPRIATE INTERVALS. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO PAY FOR ADDITIONAL INSPECTIONS THAT ARE THE RESULT OF HIS WORKMANSHIP.

7. PERMITTING AND COORDINATION:

- A. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND BUSINESS LICENSES PRIOR TO CONSTRUCTION.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL LOCAL, STATE, AND FEDERAL PERMITS REQUIRED FOR STORM WATER POLLUTION PREVENTION AS A RESULT OF CONSTRUCTION ACTIVITIES. WHEN CALLED FOR IN THE CONTRACT DOCUMENTS, CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN FOR APPROVAL BY THE ENGINEER AND FOR SUBMITTAL TO LOCAL AUTHORITIES FOR REVIEW AND APPROVAL. IF THE CONSTRUCTION WILL DISTURB MORE THAN ONE ACRE, CONTRACTOR SHALL FILE A “NOTICE OF INTENT” FOR PERMIT COVERAGE UNDER THE STATE’S UPDES STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES (UTR300000) AND PAY ALL ASSOCIATED FEES. THE NOI MAY BE FILED ELECTRONICALLY AT THE FOLLOWING WEBSITE: [HTTP://WWW.WATERQUALITY.UTAH.GOV/UPDES/STORMWATERCON.HTM](http://www.waterquality.utah.gov/updes/stormwatercon.htm) AND FOLLOWING THE DIRECTIONS GIVEN UNDER THE HEADING “ONLINE APPLICATION PROCESS AND SEARCH FOR EXISTING PERMITS”. THE CGP DOES NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH OTHER REGULATIONS OR CONTRACT REQUIREMENTS REGARDING STORM WATER POLLUTION PREVENTION INCLUDING BUT NOT LIMITED TO: PROTECTION OF SURFACE WATERS, PREVENTION OF SOIL RUNOFF INTO DRAINS, DUST CONTROL, PREVENTION OF TRACKING SOILS TO ADJACENT STREETS, FUEL CONTAINMENT, SPILL CONTROL, ETC.
- C. ANY WORK DONE WITHIN A PUBLIC RIGHT–OF–WAY SHALL BE COORDINATED WITH THE APPROPRIATE TRANSPORTATION AGENCY AND SHALL MEET THE REQUIREMENTS OF THAT AGENCY AND, IN PARTICULAR, REQUIREMENTS OF ANY RIGHT–OF–WAY SPECIAL USE PERMIT, OR OTHER PERMIT. ALL WORK SHALL MEET CURRENT OSHA REQUIREMENTS.
- D. WHERE WORK IS PERFORMED ON EASEMENTS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO ELIMINATE ANY ADVERSE EFFECTS ON THE ADJACENT PROPERTY AND/OR TO RESTORE IT TO ITS ORIGINAL CONDITION.

8. MISCELLANEOUS:

- A. CONTRACTOR IS RESPONSIBLE FOR DUST ABATEMENT AND ANY LIABILITY ISSUES RELATED TO DUST AT ANY LOCATION WHICH MAY BE CAUSED BY THIS PROJECT.
- B. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL AND PROTECTION OF PEDESTRIANS IN AND AROUND THIS WORK. REFERENCE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD LATEST EDITION FOR WORK ZONE TRAFFIC CONTROL).
- C. THE CONTRACTOR SHALL PRESERVE EXISTING CITY, COUNTY, STATE, AND FEDERAL LAND MONUMENTS WHENEVER POSSIBLE. IF A MONUMENT MUST BE MOVED, THE ENGINEER SHALL BE CONTACTED 2 WEEKS PRIOR TO REMOVAL TO ARRANGE FOR RELOCATION.
- D. SHOULD CONSTRUCTION BE HALTED BECAUSE OF INCLEMENT WEATHER CONDITIONS, THE CONTRACTOR WILL COMPLETELY CLEAN UP ALL AREAS AND MAINTAIN THE SURFACE IN GOOD CONDITION DURING THE SHUT–DOWN PERIOD.

9. PROJECT CONTACT LIST:

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	KEVINE@AMIAD.COM	
AMIAD	DAN INMAN	(303) 506–1418
	DAN.INMAN@AMIAD.COM	

ABBREVIATIONS	
ABBREV.	TERM
ALUM	ALUMINUM
ASSY	ASSEMBLY
∠	ANGLE
@	AT (MEASUREMENTS)
BC	BEGINNING OF CURVE
BLDG	BUILDING
B.M.	BENCH MARK
BP	ALIGNMENT BEGINNING
BREAK	GRADE BREAK
BSC	BITUMINOUS SURFACE COURSE
BSW	BACK OF SIDEWALK
BVC	BEGIN VERTICAL CURVE
BVP	PROFILE START
B.W.	BOTH WAYS
C	CHANNEL (STRUCTURAL)
CJ	CONTROL JOINT
CL	CENTER LINE
CLR	CLEARANCE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUOUS
CPLG	COUPLING
CTR	CENTER
CU FT	CUBIC FEET
CU YD	CUBIC YARD
DEG OR °	DEGREE
DIA OR Ø	DIAMETER
DI	DUCTILE IRON
DIST	DISTRIBUTION
DWG	DRAWING
EA	EACH
EC	END OF CURVE
ELB	ELBOW
ELEV OR EL.	ELEVATION
EOA	EDGE OF ASPHALT
EP	ALIGNMENT END
EVP	PROFILE END
E.W.	EACH WAY
EXIST	EXISTING
EVC	END VERTICAL CURVE
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
FT OR ’	FEET
FTG	FOOTING
GALV	GALVANIZED
GB	GRADE BREAK
HORIZ	HORIZONTAL

ABBREVIATIONS	
ABBREV.	TERM
HP	HIGH POINT
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN. OR ”	INCH
INV.	INVERT
K	CURVE COEFFICIENT
L	LEFT
LB	LINE BEGINNING
LB OR #	POUND
LC	LEVEL CROWN
LE	LINE END
LF	LINEAL FEET
LN	LINEAL
LP	LOW POINT
MAN	MANUAL
MAX	MAXIMUM
MIN	MINIMUM
NO. OR #	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PE	POLYETHYLENE
PI	TANGENT–TANGENT INTERSECT
PL OR PL	PLATE OR PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL–CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS OR RIGHT
RC	REVERSE CROWN
REQ'D	REQUIRED
REV	REVISION
R/W	RIGHT–OF–WAY
S	SLOPE
SPEC	SPECIFICATION
STA	STATION
STD	STANDARD
STL	STEEL
ST STL	STAINLESS STEEL
TBC	TOP BACK OF CURB
TFC	TOP FACE OF CONCRETE
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOP	TOP OF PIPE
TOW	TOP OF WALL
TYP	TYPICAL
W/	WITH
W/O	WITHOUT
W/REQ'D	WHERE REQUIRED



Know what's below.
Call before you dig.

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE
YOU DIG, GRADE, OR EXCAVATE FOR THE
MARKING OF UNDERGROUND MEMBER
UTILITIES



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REVISION		BY	DATE
NO.	DESCRIPTION		

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

GENERAL NOTES AND ABBREVIATIONS

FILE: SS-22-095-G-001X
JUB PROJ. #: SS-22-095
DRAWN BY: CRA
DESIGN BY: BRN
CHECKED BY: BRN
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/23/2023

SHEET NUMBER:

G-003

SYMBOL LEGEND					
DESCRIPTION	EXIST.	PROP.	DESCRIPTION	EXIST.	PROP.
SANITARY SEWER			IRRIGATION		
CLEANOUT			IRRIGATION VALVE		
SS MANHOLE			IRRIGATION VALVE BOX		
SS VALVE			SPRINKLER		
SS METER			IRRIGATION GATE		
SEWER STUB			NATURAL GAS		
STORM DRAIN			GAS METER		
CATCH BASIN			GAS VALVE		
DRY WELL			GAS MANHOLE		
SD MANHOLE			UTILITIES		
FLARE END			MANHOLE (GENERIC)		
GREASE TRAP			PRESSURE CLEAN OUT AT GRADE		
COMMUNICATION			THRUST BLOCK		
TELE. MANHOLE			VAULT		
TELE. PEDESTAL			VALVE (GENERIC)		
TELE. POLE			UTILITY POLE		
TV PEDESTAL			SITE		
GUY WIRE			BOLLARD		
DOMESTIC WATER			BOULDER		
FIRE HYDRANT			DRINKING FOUNTAIN		
SPIGOT			FLAGPOLE		
WATER MANHOLE			GATE		
WATER METER			MAIL BOX		
WATER VALVE			PARKING METER		
YARD HYDRANT			POST		
ELECTRIC			SIGN		
ELEC. MANHOLE			SPOT ELEVATION		
ELEC. METER			TREE (SHRUB)		
ELEC. TRANS.			TREE		
JUNCTION BOX			TEST HOLE		
GUY WIRE			WELL		
POWER STUB			WELL (MONITORING)		
POWER POLE			SURVEY		
STREET LIGHT			CAP		
STREET LIGHT WITH ARM			CTRL PT		
TRAFFIC SIGNAL POLE			NAIL		
			BOLT		
			REBAR		

LINE LEGEND		
DESCRIPTION	EXIST.	PROP.
STORM DRAIN	-----SD-----	-----SD-----
DRAIN LINE	-----DL-----	-----DL-----
SANITARY SEWER	-----SS-----	-----SS-----
WATER	-----W-----	-----W-----
IRRIGATION	-----IRR-----	-----IRR-----
NATURAL GAS	-----G-----	-----G-----
OVERHEAD POWER	-----OHP-----	-----OHP-----
UNDERGROUND POWER	-----UP-----	-----UP-----
OVERHEAD TELEPHONE	-----OHT-----	-----OHT-----
UNDERGROUND TELEPHONE	-----UT-----	-----UT-----
FIBER OPTIC	-----F/O-----	-----F/O-----
CABLE TELEVISION	-----CTV-----	-----CTV-----
FENCE	-----X-----	-----X-----
DITCH	-----...-----	-----...-----
MAJOR CONTOUR	--- 2520 ---	--- 2520 ---
MINOR CONTOUR	-----	-----
TOP OF BANK	-----TOB-----	-----TOB-----
TOE OF SLOPE	-----TOE-----	-----TOE-----
PROPERTY LINE	-----P/L-----	-----P/L-----
PROPERTY LINE (OPTIONAL)	-----	-----
RIGHT OF WAY	-----R/W-----	-----R/W-----
TEMPORARY EASEMENT	-----T/E-----	-----T/E-----
PERMANENT EASEMENT	-----P/E-----	-----P/E-----
ROAD SHOULDER	-----	-----
ROAD CENTERLINE	-----	-----
ROAD ASPHALT	-----\ \ \-----	-----\ \ \-----
ROAD GRAVEL	-----EG-----	-----EG-----
ROAD DIRT	-----	-----
CURB AND GUTTER	-----	-----

EXAMPLE:

SHEET NUMBER:

C1-101

C

1

-

1

01

DISCIPLINE DESIGNATOR

COMPONENT CODE (OPTIONAL)

SHEET TYPE DESIGNATOR

SHEET SEQUENCE NUMBER

DISCIPLINE DESIGNATORS		
DISCIPLINE	DESIGNATOR	DESCRIPTION
GENERAL	G	ALL GENERAL
	GI	GENERAL INFORMATION
	GC	GENERAL CONTRACTUAL
	GR	GENERAL RESOURCE
SURVEY/MAPPING	V	ALL SURVEY
GEOTECHNICAL	B	ALL GEOTECHNICAL
CIVIL	C	ALL CIVIL
LANDSCAPE	L	ALL LANDSCAPE
STRUCTURAL	S	ALL STRUCTURAL
ARCHITECTURAL	A	ALL ARCHITECTURE
EQUIPMENT	Q	ALL EQUIPMENT
MECHANICAL	M	ALL MECHANICAL
ELECTRICAL	E	ALL ELECTRICAL
PLUMBING	P	ALL PLUMBING
PROCESS	D	ALL PROCESS
RESOURCE	R	ALL RESOURCE

SHEET TYPE DESIGNATORS	
DESIGNATOR	SHEET TYPE
0	GENERAL (SYMBOLS, LEGENDS, NOTES, ETC.)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS, PROFILES, COMBINED PLAN & PROFILES
3	SECTIONS (SECTIONAL VIEWS)
4	LARGE-SCALE VIEWS (PLANS, ELEVATIONS, ETC.)
5	DETAILS OR COMBINED DETAILS AND SECTIONS
6	USER DEFINED
7	USER DEFINED
8	USER DEFINED
9	3D REPRESENTATIONS (ISOMETRICS, PERSPECTIVES, PHOTOS)

SECTION IDENTIFICATION

DETAIL IDENTIFICATION

SECTION IDENTIFIER

DETAIL IDENTIFIER

SHEET NUMBER WHERE SECTION DRAWING IS LOCATED

SHEET NUMBER WHERE DETAIL DRAWING IS LOCATED

SECTION IDENTIFIER

DETAIL IDENTIFIER

SECTION IDENTIFIER

DETAIL IDENTIFIER

SCALE:

SCALE:

SCALE:

SCALE:

NOTE:

A DASH MAY BE PLACED IN THE LOWER PORTION OF THE IDENTIFIER IF THE DETAIL DRAWING OR SECTION VIEW IS LOCATED ON THE SAME SHEET.

SYSTEM FILTRATION AND CHLORINATION PROJECT

COLE CANYON WATER COMPANY

LINE AND SYMBOL LEGENDS AND SHEET AND DETAIL KEY

FILE: 55-22-005_G-001X

JUB PROJ. #: 55-22-005

DRAWN BY: CRA

DESIGN BY: BRN

CHECKED BY: BRN

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

LAST UPDATED: 10/23/2023

SHEET NUMBER:

G-004

MATERIAL NOTES

- 1

SAMPLING TAP, PRESSURE GAUGE, AIR VENT & ISOLATION VALVE. SEE
DETAIL B1, SHEET M-501
- 2

8" GATE VALVE (FLxMJ)
- 3

3" 90° D.I. BEND (FL)
- 4

8"x8"x4" D.I. TEE (FLxFLxMJ)
- 5

4" C900 DR 18 PVC PIPE
- 6

EXISTING 8" PVC WATERLINE
- 7

8" C900 DR 18 PVC PIPE
- 8

AMIAD 4" OPAL 2"x(3)x4" 40 MICRON FILTER SYSTEM WITH POD
ISOLATION B-FLY VALVES, AND CONTROL PANEL, SEE E-102 FOR
PANEL LOCATION
- 9

55 GAL POLYETHYLENE SODIUM HYPOCHLORITE DRUM – 12.5% FREE
CHLORINE, NSF 60 CERTIFIED. PROVIDE WITH EPDM RUBBER GASKET TO
SEAL FEED HOSE, RECEIVING BASIN, AND INVERTED "J" AIR VENT WITH
#14 SCREEN. OWNER TO PROVIDE MEANS TO MEASURE AND RECORD
LEVEL.
- 10

BLUE-WHITE FLEXFLO PERISTALTIC FLOW-PACED METERING PUMP,
MODEL M14-6T, FLOW RANGE 0.0001-1.35 GALLONS PER HOUR.
SUPPLY WITH WALL MOUNT BRACKET (PART NO. KIT-PSM), SUCTION
TUBING (PART NO. C-334-6), DISCHARGE TUBING (PART NO.
C-335-6), AND NECESSARY ACCESSORIES. CONNECT SIGNAL FROM
FLOW METER TO DOSING PUMP.
- 11

BLUE-WHITE PVDF INJECTION QUILL (PART NO. A-01NK-6A)
- 12

EYE WASH WALL STATION- HONEYWELL EYE SALINE 32000462000.
- 13

4" FLANGE COUPLING ADAPTER
- 14

4" AWWA C151 PC 350 D.I. PIPE (FL)
- 15

4"x3" D.I. CONCENTRIC REDUCER (FL)
- 16

3" SIEMENS SITRANS MAG 5100 W FLOW METER WITH EBONITE LINING
AND MAG 5000 TRANSMITTER (115 VAC). MOUNT TRANSMITTER ON
WALL. CONNECT 4-20 mA OUTPUT TO DOSING PUMP. MINIMUM OF 15"
STRAIGHT PIPE UPSTREAM AND MINIMUM OF 9" STRAIGHT PIPE
DOWNSTREAM OF FLOW METER. SEE E-102 FOR TRANSMITTER
LOCATION.
- 17

3" AWWA C151 PC 350 D.I. PIPE (FL)
- 18

4" GATE VALVE (FLxMJ)
- 19

4" 90° D.I. BEND (FL)
- 20

ELECTRIC HEATER, SEE ELECTRICAL SHEETS
- 21

8" FLANGE COUPLING ADAPTER
- 22

4" FLANGE WITH #4 SCREEN AND 3/4" EXPANDED STAINLESS STEEL
SCREEN BETWEEN FLANGES. PLACE #4 SCREEN UPSTREAM OF 3/4"
SCREEN. SEE DETAIL D2, C-501 FOR AIR GAP REQUIREMENTS.
- 23

PIPE SUPPORT, SEE DETAIL B3, SHEET M-501. SUPPORTS UNDER
FILTER SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
- 24

4" AWWA C151 PC 350 DI PIPE (FLxPE)
- 25

8"x8"x4" DI TEE (MJxMJxMJ)
- 26

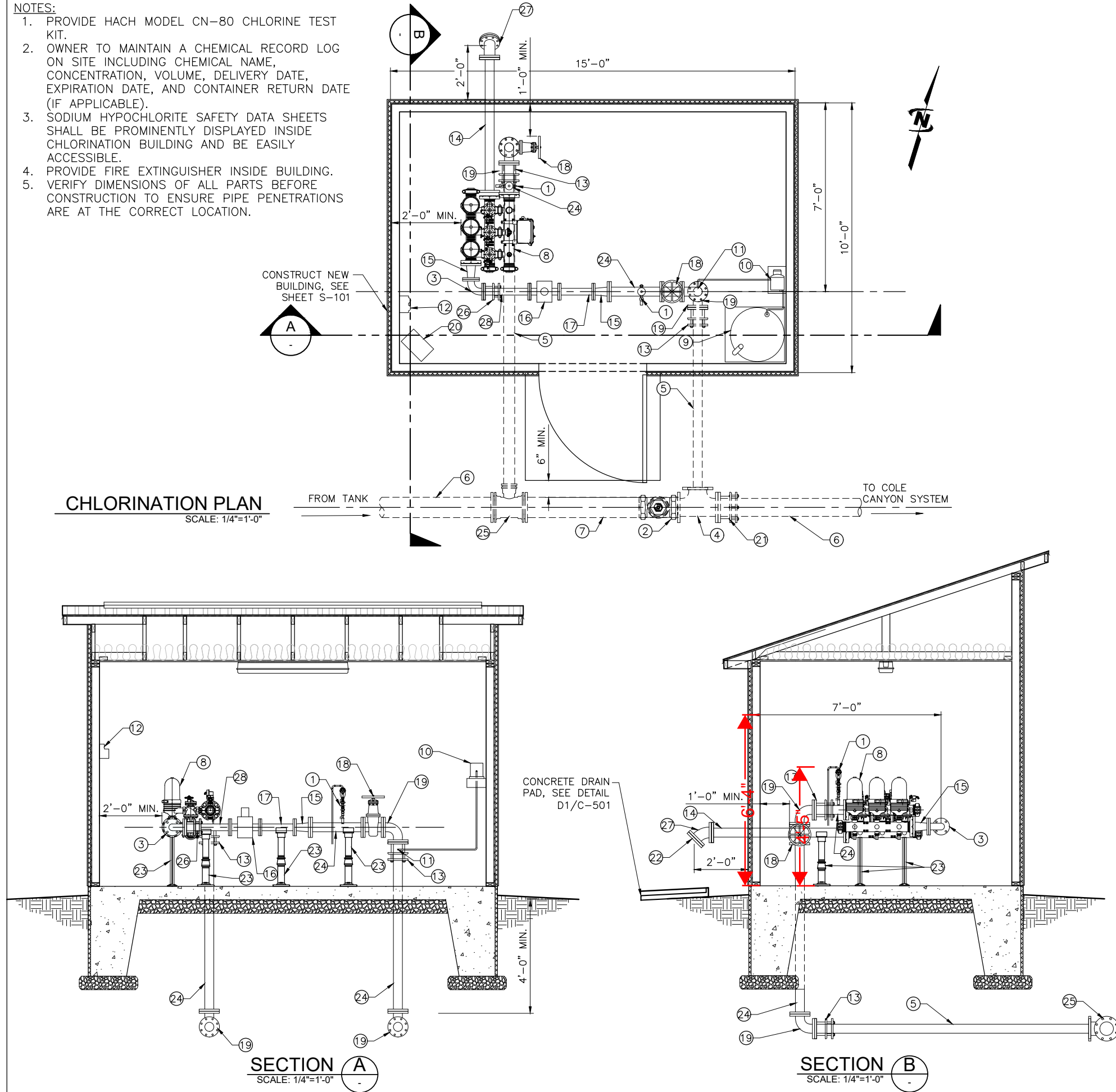
3" FLANGE COUPLING ADAPTER
- 27

4" 45° D.I. BEND (FL)
- 28

3" AWWA C151 PC 350 D.I. PIPE (FLxPE)

NOTES:

1. PROVIDE HACH MODEL CN-80 CHLORINE TEST
KIT.
2. OWNER TO MAINTAIN A CHEMICAL RECORD LOG
ON SITE INCLUDING CHEMICAL NAME,
CONCENTRATION, VOLUME, DELIVERY DATE,
EXPIRATION DATE, AND CONTAINER RETURN DATE
(IF APPLICABLE).
3. SODIUM HYPOCHLORITE SAFETY DATA SHEETS
SHALL BE PROMINENTLY DISPLAYED INSIDE
CHLORINATION BUILDING AND BE EASILY
ACCESSIBLE.
4. PROVIDE FIRE EXTINGUISHER INSIDE BUILDING.
5. VERIFY DIMENSIONS OF ALL PARTS BEFORE
CONSTRUCTION TO ENSURE PIPE PENETRATIONS
ARE AT THE CORRECT LOCATION.



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CONSTRUCTION

SET

REUSE OF DRAWINGS			
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NO.	REVISION	DESCRIPTION	DATE

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

PIPING PLAN AND SECTION

FILE: 55-22-095_M-101X
JUB PROJ. #: 55-22-095
DRAWN BY: CRA
DESIGN BY: BRN
CHECKED BY: BRN
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/23/2023
SHEET NUMBER:

M-101



NOTE:
PIPE SUPPORTS TO BE HOT DIP
GALVANIZED AFTER FABRICATION.



Plot Date: 10/23/2023 3:15 PM Plotted By: Caitlin Arnold
Date Created: 7/11/2023 \\JUB.COM\CENTRAL\CLIENTS\UT COLE CANYON\PROJECTS\55-22-095 SYSTEM FILL TREATMENT AND DISINFECTION\DESIGN\CAD\SHEET\55-22-095 S-001.DWG

- A. These General Structural Notes and Specifications supplement the project written technical specifications and the project structural drawings.
- B. Where conflicts or discrepancies exist between the project drawings, the contract documents, and/or technical specifications, the more stringent requirement shall apply, unless specifically approved in writing by the Engineer.
- C. The Contractor is responsible for all construction bracing, temporary shoring, and other site safety controls required during construction in accordance with all applicable local, state and federal regulations, to insure the stability and safety of all construction until it is completed and self-supporting.
- D. The Contractor is responsible for all water, both above and below ground, runoff and other environmental controls required during construction to insure the site is maintained in compliance with all applicable local, state and federal regulations.
- E. Details on these plans are intended to depict the general construction details and methods for this structure. Connection details and conditions not specifically shown that are similar in nature to those that are specified shall be assumed one and the same. If questions regarding the application of details are encountered, the Contractor shall notify the Engineer for clarification or instruction.
- F. Prior to implementing any changes to these plans, the Engineer shall be notified in writing for their written approval. Changes implemented without the Engineer's written approval shall relieve the Engineer of any claim or liability resulting from that portion of the structure changed or affected by the change.

- A. It is the Contractor's prime responsibility to coordinate the work shown on all of the project drawings, general, special and technical specifications.
- B. The Contractor is responsible to verify all existing construction material types dimensions, elevations and conditions.
- C. The Contractor shall verify and coordinate the dimensions among all drawings and in the field prior to proceeding with any work or fabrication, any discrepancy shall be immediately reported to the Engineer.
- D. It is the Contractor's responsibility to carefully study and coordinate the construction requirements shown on all the drawings of the various disciplines. When conflicts or discrepancies are found between these plan sets and/or within these drawings, the Contractor shall report them immediately to the project Engineer for direction and/or clarification. Any construction work done by the Contractor before obtaining such clarification from the project Engineer shall be at the Contractor's own risk and cost. Furthermore; any work required to correct, replace and/or restore the work as directed by the Engineer shall be at the contractors own risk and cost.

A. Unless otherwise noted, all referenced building codes and standards refer to their current editions, including any local, state, or federal amendments or changes, as adopted in the locality of the Project on the date these drawings are signed and sealed by the Project Engineer.

B. GENERAL:

B.1. International Code Council, ICC, International Building Code, IBC.

B.2. Minimum Design Loads for Buildings and Other Structures, ASCE 7.

C. CONCRETE:

C.1. American Concrete Institute, ACI 301, Specifications for Structural Concrete.

C.2. American Concrete Institute, ACI 318, Building Code Requirements for Structural Concrete.

D. WOOD:

D.1. American Wood Council, AWC, National Design Specification for Wood Construction, NDS.

A.	Occupancy or Use; IBC Table 1607.1:	Chlorination Shed
B.	Occupancy Category:	U
C.	Risk Category; ASCE 7 Table 1.5-2:	II
D.	Dead Load:	
D.1.	Roof:	20 psf
E.	Live Load:	
E.1.	Floor:	40 psf
E.2.	Roof:	20 psf
F.	Snow Load:	
F.1.	Ground Snow Load	$P_g = 79.0$ psf
F.2.	Sloped Roof Snow Load	$P_s = 60.8$ psf
F.3.	Flat Roof Snow Load	$P_f = 60.8$ psf
F.4.	Importance Factor	$I_s = 1.0$
F.5.	Snow Exposure Factor	$C_e = 1.0$
F.6.	Thermal Factor:	$C_t = 1.1$
G.	Wind Load:	
G.1.	Basin Design Wind Speed:	$V = 103$ mph
G.2.	Site Wind Exposure:	B
H.	Ice Load:	
H.1.	Ice Importance Factor – Thickness:	$I_t = 1.00$
H.2.	Ice Importance Factor – Wind:	$I_w = 1.00$
H.3.	Ice Thickness:	0.25 in.
H.4.	Concurrent Temperature:	15 °F
I.	Rain Load:	
I.1.	15-Minute Precipitation Intensity:	5.17 in./hr
I.2.	60-Minute Precipitation Intensity	2.16 in./hr
J.	Seismic Load:	
J.1.	Seismic Importance Factor:	$I_e = 1.00$
J.2.	Soil Site Class:	D
J.3.	Seismic Design Category:	D
J.4.	Mapped Spectral Response Acceleration Parameters:	
J.4.1.	Short Period:	$S_S = 1.146$
J.4.2.	1-second:	$S_1 = 0.418$
J.5.	Design Spectral Response Acceleration Parameters:	
J.5.1.	Short Period:	$S_{DS} = 0.917$
J.5.2.	1-second:	$S_{D1} = 0.65$
J.6.	Long-period Transition Period:	$T_L = 8$
J.7.	Basic Seismic Force Resisting System(s):	
J.7.1.	Light-frame Wood Walls Sheathed with Wood Structural Panels	
J.7.1.1.	Response Modification Coefficient:	$R = 6.5$
J.7.1.2.	System Overstrength Factor:	$\Omega_o = 3.0$
J.7.1.3.	Deflection Amplification Factor:	$C_d = 4.0$
K.	Mechanical Loads:	
K.1.	Refer to mechanical plans for special mechanical equipment loads.	

- A. Submit required copies, one (1) electronic .pdf file or three (3) minimum hardcopy, of product or material design information to the Engineer for review for the following items:
 - A.1. Concrete mix designs and admixtures.
 - A.2. Epoxy anchors.
- B. Submit required copies of shop drawings, one (1) electronic .pdf file or three (3) minimum hardcopy, to the Engineer for review prior to fabrication of the following items:
 - B.1. Reinforcing steel for all concrete.
- C. The following items to be designed by others are considered "Deferred Submittals". Deferred submittals shall be accompanied by design drawings, shop drawings and structural calculations, stamped and signed by a Professional Structural Engineer currently registered in the State of Utah.
 - C.1. Pre-engineered and shop fabricated building.

- B. All footings to be placed on firm undisturbed, inorganic material. Proof roll sub-grade prior to placing concrete where the material has been disturbed by the excavating equipment.
- C. All footings outside or at the perimeter of the structure, or in other unheated areas shall be set to a depth of at least 36" below finish grade, unless otherwise noted on the plans.
- D. Allowable bearing pressure for all footings $Q_a = 1,500$ psf
- E. Local areas of soft and/or unacceptable material encountered at bottom of footing elevations indicated on the plans must be over-excavated and brought up to design grade with compacted "structural fill" or "lean concrete fill".
- F. All structural fill and/or backfill shall be granular, free draining, material; Unified Soils Classification GW, GP, GM or SW; maximum aggregate size of 3-in. and no more than 5% passing a number 200 sieve. Material shall be placed in lifts no greater than 8-in. in depth and compacted to 95% of maximum density as determined per ASTM D1557.
- G. The Engineer shall be notified in writing if any ground water, clay type soils, debris or unconsolidated materials are encountered during excavations for foundations.

- A. GENERAL. Concrete shall be proportioned to provide an average compressive strength, f'_c , as prescribed in ACI 318 and shall satisfy the durability criteria of ACI 318.
- B. PROJECT CONCRETE MIX TYPES: Concrete shall be proportioned and furnished for the various project uses as indicated on the plans and as follows:
 - B.1. $f'_c = 4,000$ psi, Absolute water-cement ratio by weight = 0.45, Air Content = 6% (+/- 1.5%). For all structural concrete and exterior slabs on grade.
- C. CONCRETE MIX COMPONENTS.
 - C.1. A water-reducing admixture conforming to ASTM C494, used in strict conformance with the manufacturer's instructions, shall be incorporated in all concrete mix designs. At Contractor's option, a high-range water-reducing (HRWR) admixture conforming to ASTM C494, Type F or G, may be used provided the total slump is less than 10".
 - C.2. Higher water-cement ratios than shown above may be used if substantiated in accordance with ACI 318.
 - C.3. Fly-ash conforming to ASTM C618 Type F or C, may replace up to 20% of the cement content, provided that the mix strength is substantiated by test data.
 - C.4. Cement: ASTM C150 TYPE I OR II; ASTM C595 Type IP, IL, or IT; ASTM C1157 Type GU.
 - C.5. Water: Clean & Potable.
 - C.6. Air entraining agent: ASTM C260. Except where noted non-air entrained.
 - C.7. Aggregate: 0.75-inch Maximum aggregate per ASTM C33. Unless noted otherwise.

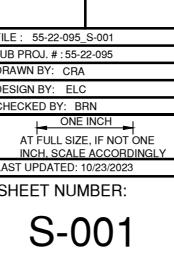
- D.1. REINFORCING STEEL: Reinforcing steel shall conform to ASTM A615 Grade 60; #3 bars may be Grade 40.
- D.2. JOINTING MATERIALS: All jointing materials including expansion joints and sealants, shall be resistant to chemical attack for the design life of the facility. Sealants shall conform to ASTM C 920 and Federal Specification TT-S-00277E.
- E. CONCRETE PROPORTIONS. Concrete mix proportioning shall be in accordance with ACI 211.1; Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
- F. CONCRETE MIX VERIFICATION: Concrete mix designs shall be verified by standard 28-day cylinder tests per ASTM C39.
- G. EVALUATION AND ACCEPTANCE OF CONCRETE. Concrete shall be tested in accordance with the requirements of ACI 318.
- H. MIXING & PLACING CONCRETE. Concrete shall be prepared, mixed, placed and consolidated in accordance with ACI 318 and as follows:
 - H.1. ACI 304; Guide for Measuring, Mixing, Transporting, and Placing Concrete.
 - H.2. ACI 309; Guide for Consolidation of Concrete.
- I. CONCRETE CURING. Concrete shall be maintained above 50-degrees F and in a moist condition for at least 7 days after placement, except when cured in accordance with ACI 318.
 - I.1. Curing of concrete shall be per the recommendations given in ACI 308; Guide to Curing Concrete.
- J. COLD WEATHER REQUIREMENTS. Adequate equipment shall be provided for heating concrete materials and protecting concrete during freezing or near-freezing weather. The recommended procedures listed in ACI 306; Cold Weather Concreting shall be followed.
 - J.1. Cold weather is defined as a period when, for more than 3 consecutive days, the following conditions exist:
 - J.1.1. The average daily air temperature is less than 40-degrees F and
 - J.1.2. The air temperature is not greater than 50-degrees F for more than one-half of any 24-hour period.
- K. HOT WEATHER REQUIREMENTS. During hot weather, proper attention shall be given to ingredients, production methods, handling, placing, protection, and curing to prevent excessive concrete temperatures or water evaporation that could impair required strength or serviceability of the member or structure. The recommended procedures listed in ACI 305; Hot Weather Concreting shall be followed.
 - K.1. Hot weather is any combination of the following conditions that tends to impair the quality of freshly mixed or hardened concrete by accelerating the rate of moisture loss and rate of cement hydration, or otherwise causing detrimental results:

- A. Forms shall result in a final structure that conforms to shapes, lines, and dimensions of the members as required by the design drawings and specifications.
 - A.1. Design of formwork shall be in accordance with ACI 318.
 - A.2. Formwork shall be in accordance with ACI 347; Guide to Formwork for Concrete.
- B. Tolerances for finished concrete surfaces shall meet the following requirements, class of surface is per Table 3.4:
 - B.1. Footings: Class C
 - B.2. Foundation walls: Class B
- C. Chamfer all exposed corners and fillet entrant angles $\frac{3}{4}$ " unless otherwise noted on the drawings.
- D. REMOVAL OF FORMS.
 - D.1. Concrete forms shall not be removed until the retained concrete has reached the following minimum percentage of the required 28 day compressive strength:
 - D.1.1. Footings and base slabs on grade: 50% of f'c.
 - D.1.2. Foundation walls and columns: 67% of f'c.
 - D.2. Where concrete cylinder tests are not available for strength verification the following guide may be used when permitted by the Project Engineer:
 - D.2.1. Footings and base slabs on grade: 12 hours.
 - D.2.2. Foundation walls and columns: 24 hours.
- E. EMBEDMENTS IN CONCRETE.
 - E.1. Conduits, pipes, and sleeves of any material not harmful to concrete and within limitations of ACI 318 shall be permitted to be embedded in concrete with approval of the Project Engineer, provided they are not considered to replace structurally the displaced concrete, except as provided in ACI 318.
 - E.2. Conduits and pipes of aluminum shall not be embedded in structural concrete unless effectively coated or covered to prevent aluminum-concrete reaction or electrolytic action between aluminum and steel.
- F. CONSTRUCTION JOINTS.
 - F.1. Construction joints shall only be placed where indicated on the project drawings or as approved by the Project Engineer.
 - F.2. Construction joints shall be constructed in accordance with ACI 318 Sawed contraction joints. Conform to ACI 301.
- G. CONCRETE FINISHING. All concrete surfaces shall be finished in accordance with ACI 301.
- H. Formed Concrete Surfaces. After removal of forms, give each formed surface one or more of the following finishes:
 - H.1. Concrete Structures:
 - H.1.1. Concrete footings and foundations not exposed to view. Provide an As-cast finish.
 - H.1.2. Foundation wall and other surfaces below grade and not exposed to view. Provide a Rough-form finish.
 - H.1.3. Interior, exterior and top surfaces exposed to view to 6" below grade. Provide a Smooth-form finish.
 - H.2. Unformed Concrete Surfaces. Unformed concrete surfaces including the top surface of all concrete floor slabs shall be finished in accordance with ACI 301 and ACI 302.
 - H.2.1. For the top surfaces of walls, provide a "Scratched finish".
 - H.2.2. Interior floor surfaces shall receive a Troweled finish.
 - H.3. Provide a Nonslip finish for exterior surfaces and where indicated on the plans.
 - H.4. Sawed contraction joints. Conform to ACI 301.

- A. Placement of all reinforcing steel within concrete structures shall be in conformance with ACI 318.
- B. Reinforcing steel hooks, bends, ties, splices and other reinforcement details shall be in accordance with ACI 315; Details and Detailing of Concrete Reinforcement.
- C. Spacing limits for reinforcement shall be in conformance with ACI 318.
- D. Concrete protection for reinforcement. Unless noted elsewhere on the drawings, all reinforcing steel shall have the following concrete cover:
 - D.1. For concrete structures; per ACI 318:
 - D.1.1. Concrete cast against earth: 3.00 inch
 - D.1.2. Concrete exposed to earth, liquid or weather;
 - D.1.2.1. No. 5 or smaller bars: 1.50-inch
 - D.1.2.2. No. 6 or larger bars: 2.00-inch
- E. Concrete blocks or plastic-coated bar chairs shall be provided for support of all slab reinforcing steel, sufficient in number to prevent settlement or sagging, but in no case shall such support be continuous. Metal clips or supports shall not be placed in contact with the forms or the sub-grade.
- F. Dowels and anchor bolts shall be wired or otherwise held in correct position prior to placing concrete. Care shall be taken to insure that dowels and anchor bolts remain plumb after concrete is poured and vibrated. In no case shall dowels or anchor bolts be stabbed into freshly poured concrete.
- G. If the Contractor fails to properly tie reinforcing and anchors before concrete is cast in place, the Contractor shall remove all substandard work and reconstruct the concrete work at his own expense. However, if the Project Engineer determines the concrete work to be adequate to remain in place, the substandard work shall be paid out at a 50% pay deduction for all associated concrete work.
- H. Provide dowels in footings and at construction joints to match vertical reinforcing bar size and spacing, unless otherwise noted on the drawings.
- I. All bar bends, hooks, splices and other reinforcing steel details shall conform to the requirements of ACI 315.
- J. Unless otherwise noted on the plans all bars shall be spliced with a Class B lap splice.
- K. At all corners and wall intersections provide bent bars to match the horizontal reinforcing steel and in accordance with the typical corner reinforcing details.

A. Mechanical openings are not shown on the structural drawings; refer to mechanical plans for size and locations.

B. Openings through concrete greater than 6-inch square or 8-inch round shall be reinforced with a minimum of 1-#5 bar, each of four sides, extending 24" past the opening edge.



1. COORDINATE PLACEMENT OF FLOOR DRAINS AND OTHER FLOOR PENETRATIONS WITH PIPING AND EQUIPMENT. SEE MECHANICAL PLANS.
2. PROVIDE A BROOM SURFACE FINISH TO ALL EXTERIOR CONCRETE SLABS AND SIDEWALKS.
3. PROVIDE A SMOOTH TROWEL SURFACE FINISH TO ALL INTERIOR CONCRETE SLABS.
4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.



B1 FOUNDATION PLAN
SCALE: 1/2" = 1'-0"



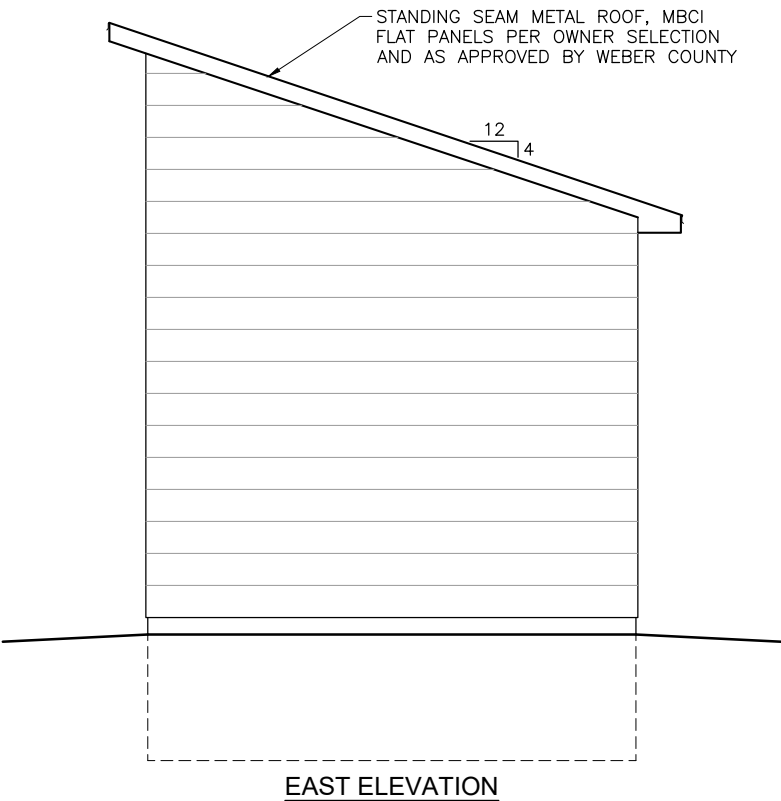
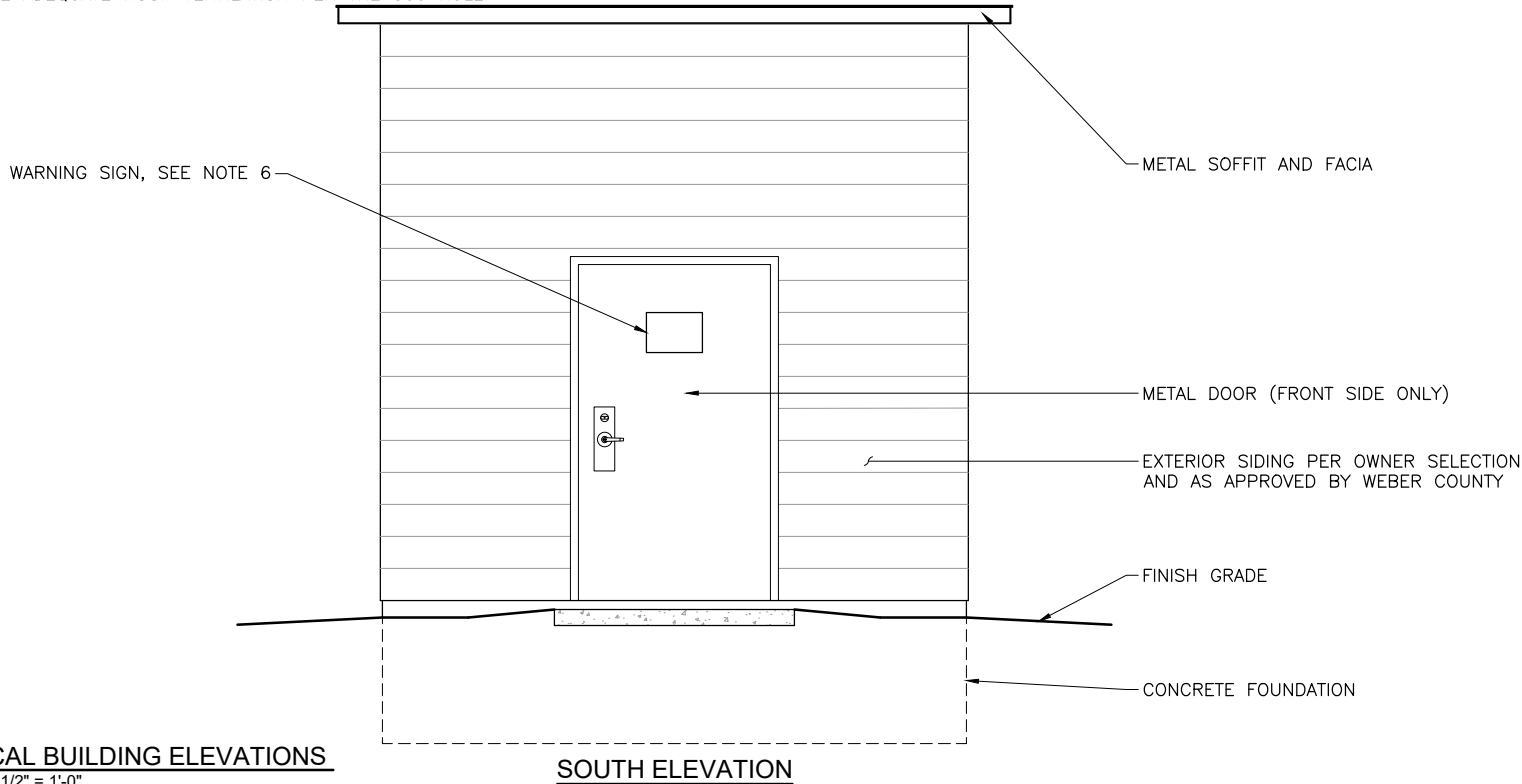
B3 REFLECTED CEILING PLAN
SCALE: 1/2" = 1'-0"



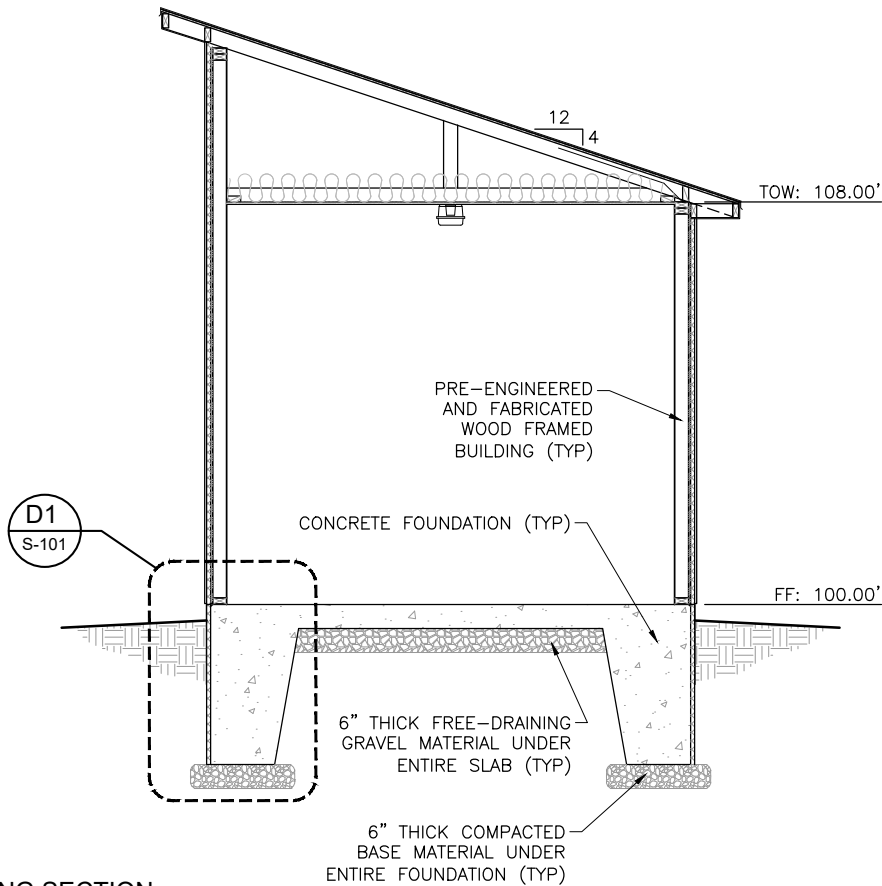
OPTION A



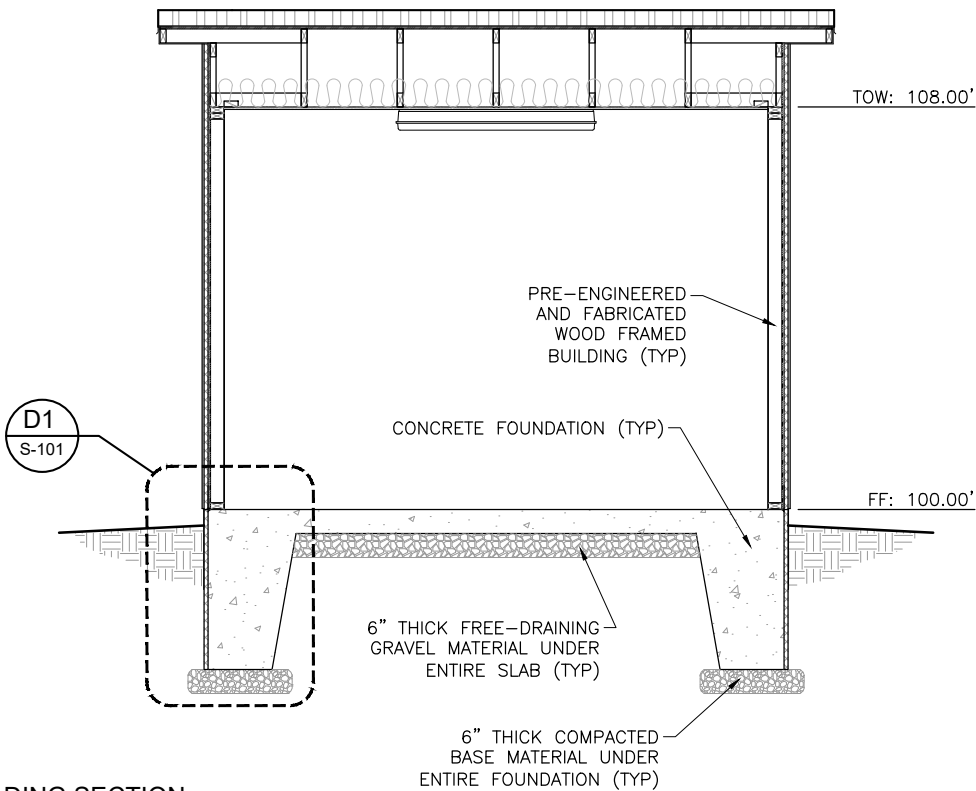
- NOTES:
1. CONTRACTOR TO PROVIDE PRE-ENGINEERED AND FABRICATED WOOD FRAME BUILDING MEETING THE DESIGN CRITERIA AS SPECIFIED IN THE PROJECT DRAWINGS AND SPECIFICATIONS. CONTRACTOR TO SUBMIT SHOP DRAWINGS AND STRUCTURAL CALCULATIONS FOR THE BUILDING STAMPED BY A LICENSED PROFESSIONAL ENGINEER WITH EXPERIENCE IN THE DESIGN OF STRUCTURES FOR REVIEW PRIOR TO FABRICATION.
 2. ALL COLORS AND TEXTURES FOR BUILDING SHALL BE VERIFIED AND APPROVED WITH OWNER. PROVIDE SAMPLES TO VERIFY COLOR.
 3. PROVIDE A BROOM SURFACE FINISH TO ALL EXTERIOR CONCRETE SLABS AND SIDEWALKS.
 4. EPOXY PAINT OR PROVIDE PRE-FINISHED PROTECTIVE COATINGS TO ALL EXTERIOR METAL SURFACES TO PREVENT CORROSION.
 5. CONTRACTOR SHALL FURNISH AND INSTALL TRIMS, FLASHING, AND FINISH PIECES TO PRESENT A FINISHED APPEARANCE.
 6. PLACE ALUMINUM 14"x10" CHLORINE WARNING SIGN ON DOOR EXTERIOR. Safetysign.com ITEM #F8461-BK OR EQUIVALENT.
 7. PROVIDE ADEQUATE ROOF VENTILATION PER THE 300 RULE.



B1 TYPICAL BUILDING ELEVATIONS
SCALE: 1/2" = 1'-0"



D1 TYPICAL BUILDING SECTION
SCALE: 1/2" = 1'-0"



D3 TYPICAL BUILDING SECTION
SCALE: 1/2" = 1'-0"



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J-U-B ENGINEERS, INC.

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CONSTRUCTION



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NO.	REVISION	DESCRIPTION	DATE

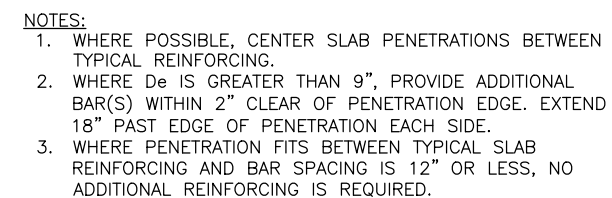
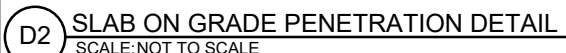
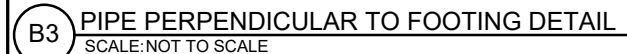
SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

STRUCTURAL ELEVATIONS

FILE: 55-22-005 S-101
JUB PROJ. #: 55-22-005
DRAWN BY: CRA/ELC
DESIGN BY: ELC
CHECKED BY: BRN
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/23/2023

SHEET NUMBER:

S-201



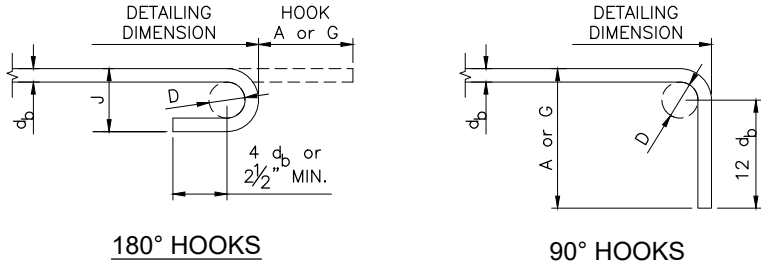
Plot Date: 10/23/2023 3:16 PM Plotted By: Callin Arnold
Date Created: 7/10/2023 JUB.COM\CENTRAL\CLIENTS\UT COLE CANYON PROJECT\SS-22-095 SYSTEM\ITERATION\DESIGN\INFECTION\DESIGN\CAD\SHEET\SS-22-095 S-01.DWG

TYPICAL LAP SPLICE LENGTHS IN INCHES, PER ACI 318									
BAR SIZE	LAP CLASS	f'c=3,000 psi		f'c=4,000 psi		f'c=4,500 psi		f'c=5,000 psi	
		CAT. 1	CAT. 2	CAT.1	CAT. 2	CAT. 1	CAT. 2	CAT. 1	CAT. 2
#4	A	22	33	19	28	18	27	17	25
	B	28	43	25	37	24	35	22	33
#5	A	27	41	24	36	23	34	21	32
	B	36	53	31	46	30	44	28	41
#6	A	33	49	28	43	27	41	25	38
	B	43	64	37	55	36	53	33	50
#7	A	48	72	42	62	40	59	37	56
	B	62	93	54	81	51	77	48	72
#8	A	55	82	47	71	45	68	42	64
	B	71	106	61	92	58	88	55	83
#9	A	62	92	53	80	51	76	48	72
	B	80	120	69	104	66	99	62	93

- NOTES:
- FOR GRADE 60 REINFORCING STEEL BARS.
 - ALL LAP SPLICES SHALL BE CLASS B, UNLESS NOTED OTHERWISE.
 - CATEGORY 1: CLEAR COVER $\geq d_b$ AND CLEAR SPACING $\geq d_b$, AND STIRRUPS OR TIES THROUGHOUT L_d ARE PROVIDED.
CATEGORY 1: CLEAR COVER $\geq d_b$ AND CLEAR SPACING $\geq 2d_b$.
CATEGORY 2: CLEAR COVER $< d_b$ OR CLEAR SPACING $< 2d_b$.
 - FOR TOP BARS, MULTIPLY LAP LENGTH LISTED BY 1.30. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
 - FOR EPOXY COATED BARS, LAP LENGTHS SHALL BE MULTIPLIED BY 1.20.

B1 TYPICAL REBAR LAP SPLICE SCHEDULE

SCALE: NOT TO SCALE



180° HOOKS

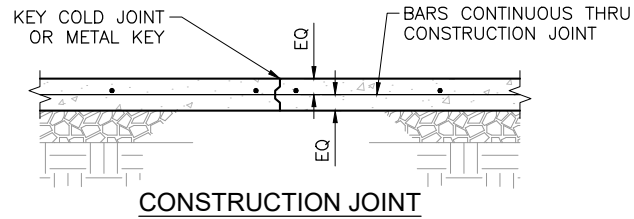
90° HOOKS

TYPICAL HOOK DIMENSIONS				
BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	A or G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	1'-0"
#7	5 1/4"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9 1/2"	1'-3"	11 3/4"	1'-7"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"

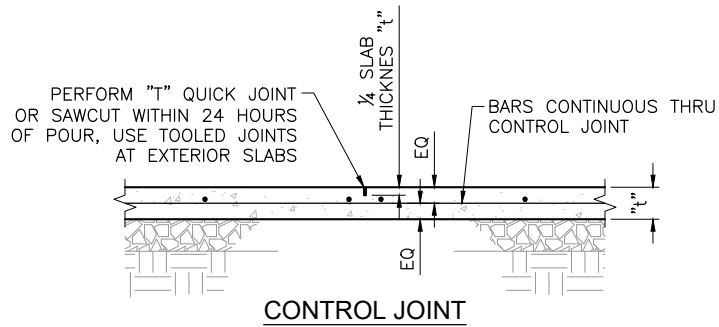
- NOTES:
- d_b = NOMINAL BAR DIAMETER.
 - D = FINISHED INSIDE BEND DIAMETER.
 - MINIMUM D = 6 d_b FOR #3 TO #8 BARS.
 - MINIMUM D = 8 d_b FOR #9 TO #11 BARS.
 - MINIMUM D = 10 d_b FOR #14 AND #18 BARS.

B2 TYPICAL REBAR HOOK DETAILS

SCALE: NOT TO SCALE



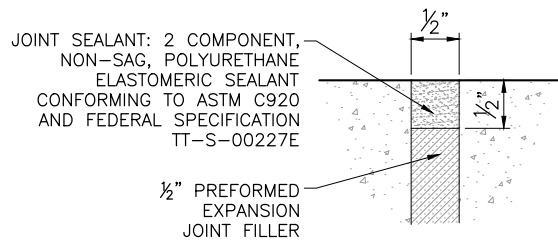
CONSTRUCTION JOINT



CONTROL JOINT

B3 SLAB ON GRADE JOINT DETAIL

SCALE: NOT TO SCALE



C1 EXPANSION JOINT SEALANT DETAIL

SCALE: NOT TO SCALE



J-U-B ENGINEERS, INC.

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CONSTRUCTION



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REUSE OF DRAWINGS		REVISION		BY		DATE	
JUB SHALL RETAIN ALL COMMON LAW, STATUTORY, COPYRIGHT AND OTHER RIGHTS IN THIS DRAWING. NO PART OF THIS DRAWING SHALL BE REUSED WITHOUT WRITTEN CONSENT BY JUB. ANY REUSE WITHOUT WRITTEN CONSENT BY JUB WILL BE AT CLIENT'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO JUB.		NO.		DESCRIPTION		APR	

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

TYPICAL FOUNDATION DETAILS

FILE : 55-22-095 S-101
JUB PROJ. # : 55-22-095
DRAWN BY: CRA/ELC
DESIGN BY: ELC
CHECKED BY: BRN
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/23/2023
SHEET NUMBER:

S-502

GENERAL DRAWING SYMBOLS AND REFERENCES	
	REFERENCE NOTE
	DEMOLITION NOTE
	REVISION NOTE
	IDENTIFICATION NOTE
	PHOTO REFERENCE
	HPE DETAIL BUBBLE
	EQUIPMENT REFERENCE
	WIRE SIZE REFERENCE
	PHOTO REFERENCE
	SECTION/ELEVATION REFERENCE
	EQUIPMENT ID TAG
THIS IS A STANDARD LEGEND NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT	
PLAN SYMBOLS	
	CIRCUIT DISTRIBUTION PANELBOARD SURFACE MOUNTED
	CIRCUIT DISTRIBUTION PANELBOARD RECESSED
	POWER DISTRIBUTION PANELBOARD SURFACE OR FLOOR MOUNTED DOORS DESIGNATE FRONT OF PANEL MDP DESIGNATES MAIN DISTRIBUTION PANEL
	CONTROL PANEL ENCLOSURE
	LIGHTING CONTROL PANEL
	DISCONNECT
THIS IS A STANDARD LEGEND NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT	
	UNIT HEATER, WALL MOUNTED
	UNIT HEATER, CEILING MOUNTED
	CONDENSING UNIT, PAD MOUNTED, SIDE DISCHARGE
	CONDENSING UNIT, PAD MOUNTED, UP FLOW
	ROOFTOP MOUNTED EQUIPMENT
MOTOR AND EQUIPMENT	
	MOTOR (HP SHOWN)
	FRACTIONAL HORSEPOWER MOTOR
	MOTOR STARTER, INDIVIDUAL, NOT LOCATED IN A MOTOR CONTROL CENTER (MCC) OR SIMILAR GROUP ASSEMBLY
	COMBINATION MOTOR STARTER ASSEMBLY, NOT LOCATED IN AN MCC OR SIMILAR ASSEMBLY
	MAGNETIC CONTACTOR ASSEMBLY, NOT LOCATED IN AN MCC OR SIMILAR ASSEMBLY
	DISCONNECT, NON-FUSED, 3 POLE, 100A RATED
	FUSED DISCONNECT SWITCH
	FIELD CONNECTION OR ELECTRICAL TERMINATION AT A FIELD DEVICE
	EQUIPMENT DESIGNATION

POWER ONE-LINE SYMBOLS	
	ANTENNA
	EQUIPMENT GROUND CONNECTION
	TRANSFER SWITCH ATS: AUTOMATIC TRANSFER SWITCH MTS: MANUAL TRANSFER SWITCH
	VARIABLE FREQUENCY DRIVE MOTOR CONTROLLER
	FUSED DISCONNECT SWITCH
	NON-FUSED DISCONNECT SWITCH
	COMBINATION STARTER
	MAGNETIC CONTROLLER
	MOTOR (HP SHOWN)
	GENERATOR
	CONDUCTOR WITH CALLOUT REFERENCE (SEE CONDUIT/CONDUCTOR SCHEDULE)
	POWER FACTOR CAPACITOR
	CIRCUIT BREAKER
	POWER FEED
	CONNECTION POINT
	LUG
	DELTA WYE
THIS IS A STANDARD LEGEND NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT	
GROUNDING SYMBOLS	
	GROUND ROD (3/4" x 10' COPPER COATED STEEL)
	GROUND ROD (3/4" x 10' COPPER COATED STEEL) IN WELL
	BOLTED GROUND CONNECTION (ABOVE GROUND)
	WELDED GROUND CONNECTION (BELOW GRADE)
	GROUND CONDUCTOR (#2/0 BARE COPPER)
THIS IS A STANDARD LEGEND NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT	
LIGHT SWITCHES	
	SINGLE POLE SWITCH
	GANGED SWITCHES IN COMMON BOX WITH COMMON COVER PLATE
	SWITCH SUPERScript MODIFIER, LOWER CASE LETTER INDICATES CIRCUIT CONTROLLER -- a,b,c ETC. MAY BE COMBINED WITH CIRCUIT NUMBER. EXAMPLE: 1a, 3b
	SWITCH SUBScript MODIFIER, UPPER CASE LETTER OR NUMBER: 2 = DOUBLE POLE 3 = THREE WAY 4 = FOUR WAY OC = MOTION OCCUPANCY SWITCH K = KEY OPERATED M = HORSEPOWER RATED MANUAL STARTER MC = MOMENTARY CONTACT, THREE POSITION MS = MANUAL (STARTER) OR SWITCH D = DIMMER S = SURFACE F = FLUSH
THIS IS A STANDARD LEGEND NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT	
CONDUIT AND RACEWAYS	
	RACEWAY OR WIRING SYSTEM IN OR UNDER FLOOR OR CONCEALED IN WALL OR BEHIND STRUCTURE OR EQUIPMENT OR CONDUIT ROUTED BELOW GRADE IN CONCRETE ENCASEMENT
	FLEX CONDUIT
	RACEWAY OR WIRING SYSTEM ABOVE FLOOR LEVEL BELOW CEILING, EXPOSED
	HOMERUN: DESIGNATIONS INDICATE A ONE-LINE DIAGRAM OR PANELBOARD SCHEDULE REFERENCE
	JUNCTION BOX
	RACEWAY OR WIRING SYSTEM TURNED TOWARD THE VIEWER (UP ON PLAN DRAWINGS)
	RACEWAY OR WIRING SYSTEM TURNED AWAY FROM THE VIEWER (DOWN ON PLAN DRAWINGS)
	RACEWAY OR WIRING SYSTEM CHANGE IN ELEVATION OR DISTANCE FROM VIEWER
	CONDUIT STUB AND CAP
THIS IS A STANDARD LEGEND NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT	

H.P.E. INC. ELECTRICAL ENGINEERS
POWER SYSTEMS, CONTROL & INSTRUMENTATION SYSTEMS
HEGERHORST POWER ENGINEERING INCORPORATED
708 EAST 50 SOUTH
AMERICAN FORK, UT 84003
HPE PROJECT: 23.043
FOR INFORMATION ABOUT THIS JOB, PLEASE CONTACT: KEITH HEGERHORST

(801) 642-2051
FAX (801) 642-2154
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GENERAL NOTES:

- VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH-IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO ENSURE NEC CODE CLEARANCE REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
- CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF EQUIPMENT FURNISHED BEFORE BEGINNING ROUGH-IN.
- SEE APPLICABLE SHOP DRAWINGS FOR ROUGH-IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC.
- THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO PIPING, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THROUGH ELECTRICAL ROOMS OR SPACES; OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN THE OTHER AREAS.
- ALL PENETRATIONS OF FLOORS, WALLS AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL.
- FOR PACKAGE EQUIPMENT PROVIDED ON THE PROJECT, SOME CONDUITS AND WIRES ARE SHOWN ON THE DRAWINGS, BUT IT IS EXPECTED THAT SOME ADDITIONAL CONDUITS AND WIRES MAY BE REQUIRED BY EQUIPMENT MANUFACTURERS TO COMPLETE INSTALLATION. IT IS INCUMBENT UPON THE GENERAL CONTRACTOR TO COORDINATE THIS REQUIREMENT WITH HIS SUBCONTRACTORS TO MAKE SURE THAT EQUIPMENT SUPPLIER PROVIDED ALL NECESSARY ELECTRICAL INFORMATION TO ELECTRICAL SUBCONTRACTOR FOR INCLUSION WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS.
- IF OTHER THAN FIRST NAMED EQUIPMENT IS USED, IT SHALL BE CAREFULLY CHECKED FOR ELECTRICAL REQUIREMENTS AND CONTROL REQUIREMENTS OF ALTERNATE EQUIPMENT. SHOULD CHANGES OR ADDITIONS OCCUR IN ELECTRICAL WORK, OR THE WORK OF OTHER CONTRACTORS BE REVISED BY THE ALTERNATE EQUIPMENT, THE COST OF ALL CHANGES SHALL BE BORNE BY THE ELECTRICAL CONTRACTOR.

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REGISTERED PROFESSIONAL ENGINEER
No. 86-171214-2202
KEITH B. HEGERHORST
02/02/22
STATE OF UTAH

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REVISION	NO.	DESCRIPTION	BY	DATE

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

ELECTRICAL LEGEND

FILE: E-001
JUB PROJ. #: 55-22-095
DRAWN BY: KBH
DESIGN BY: KBH
CHECKED BY: KBH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED: 10/24/2023
SHEET NUMBER:
E-001

AMP RATING	DRAWING ID. TAG.	CONDUCTOR		MIN. CONDUIT SIZE	
		QTY.	SIZE	SIZE	EXCEPTIONS
20** 20+	212	2	#12	3/4"	
	312	3		3/4"	
	412	4		3/4"	
30** 30+	20	2	#10	3/4"	
	30	3		3/4"	
	40	4		3/4"	
40** 50+	28	2	#8	3/4"	
	38	3		3/4"	
	48	4		3/4"	
55** 65+	26	2	#6	3/4"	
	36	3		3/4"	
	46	4		3/4"	1"(C9)
70** 85+	24	2	#4	3/4"	1"(C2,C9)
	34	3		1"	3/4"(C4),1-1/4"(C9)
	44	4		1"	1-1/4"(C9)
95** 115+	22	2	#2	1"	1-1/4"(C9)
	32	3		1"	
	42	4		1-1/4"	
110** 130+	21	2	#1	1-1/4"	1"(C3,C4)
	31	3		1-1/4"	1"(C3)
	41	4		1-1/4"	1-1/2"(C2,C9,C10)
150	210	2	1/0	1-1/4"	
	310	3		1-1/4"	1-1/2"(C3,C9)
	410	4		1-1/2"	2"(C9)
175	220	2	2/0	1-1/4"	1-1/2"(C3,C4,C9)
	320	3		1-1/2"	
	420	4		2"	
200	230	2	3/0	1-1/2"	1-1/4(C4)
	330	3		1-1/2"	2"(C3,C9)
	430	4		2"	
230	240	2	4/0	1-1/2"	2"(C3)
	340	3		2"	
	440	4		2"	2-1/2"(C9)
255	225	2	250 KCMIL	2"	1-1/2"(C4)
	325	3		2"	2-1/2"(C1,C8)
	425	4		2-1/2"	2"(C4)
310	235	2	350 KCMIL	2"	2-1/2"(C9)
	335	3		2-1/2"	2"(C4)
	435	4		3"	2-1/2"(C1,C4)
380	250	2	500 KCMIL	2-1/2"	2"(C4)
	350	3		3"	2-1/2"(C1,C4)
	450	4		3"	3-1/2"(C9)
475	275	2	750 KCMIL	3"	
	375	3		3-1/2"	3"(C1,C7,C8)
	475	4		4"	3-1/2"(C1,C4,C8)

* CONDUCTOR QUANTITY DOES NOT INCLUDE GROUNDING CONDUCTOR. SEE EQUIPMENT GROUNDING CONDUCTORS FOR WIRE SIZE.

WHERE:

- C1 = ELECTRICAL METALLIC TUBING
- C2 = ELECTRICAL NON-METALLIC TUBING
- C3 = FLEXIBLE STEEL CONDUIT
- C4 = INTERMEDIATE METALLIC CONDUIT
- C7 = LIQUIDTIGHT FLEXIBLE METAL CONDUIT
- C8 = RIGID METALLIC CONDUIT
- C9 = PVC SCHEDULE 80 CONDUIT
- C10 = PVC SCHEDULE 40 CONDUIT

"**" = RATED AMPACITY AT 60°C
"+" = RATED AMPACITY AT 75°C

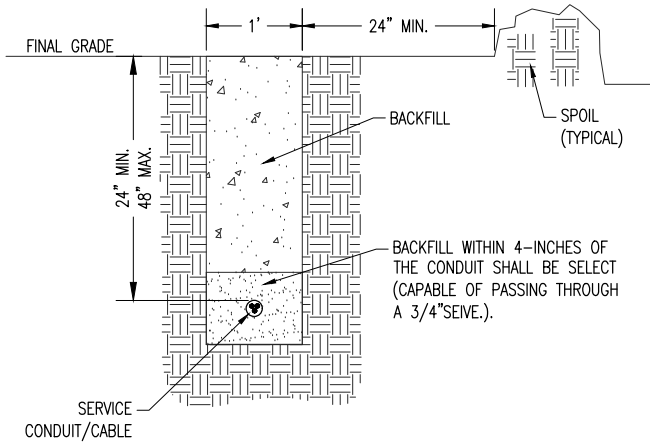
USE 60°C CONDUCTOR RATING WHEN TERMINATION RATINGS ARE NOT PUBLISHED.

GROUNDING ELECTRODE
CONDUCTOR SERVICE
ENTRANCE OR
SEPARATELY DERIVED
SYSTEM

COPPER CONDUCTOR	WIRE SIZE
#2 OR SMALLER	#8
1 OR 1/0	#6
2/0 OR 3/0	#4
>3/0 THRU 350 KCMIL	#2
>350 KCMIL THRU 600 KCMIL	1/0
>600 KCMIL THRU 1100 KCMIL	2/0
>1100 KCMIL	3/0

EQUIPMENT GROUNDING CONDUCTORS

FUSE OR CB SIZE	SIZE (COPPER)
15	14
20	12
30	10
40	10
60	10
100	8
200	6
300	4
400	3
500	2
600	1
800	1/0
1000	2/0
1200	3/0
1600	4/0
2000	250
2500	350



1 RMP SERVICE TRENCH
SCALE: 1" = 1'-0"

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AMERICAN FORK, UT 84003 ©2021
HPE PROJECT:23.043
FOR INFORMATION ABOUT THIS JOB, PLEASE CONTACT: KEITH HEGERHORST

GENERAL NOTES:

1. NOT USED

SHEET KEYNOTES:

1. NOT USED



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SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

ELECTRICAL TABLES

FILE : E-002

SUB PROJ. # : 55-22-095

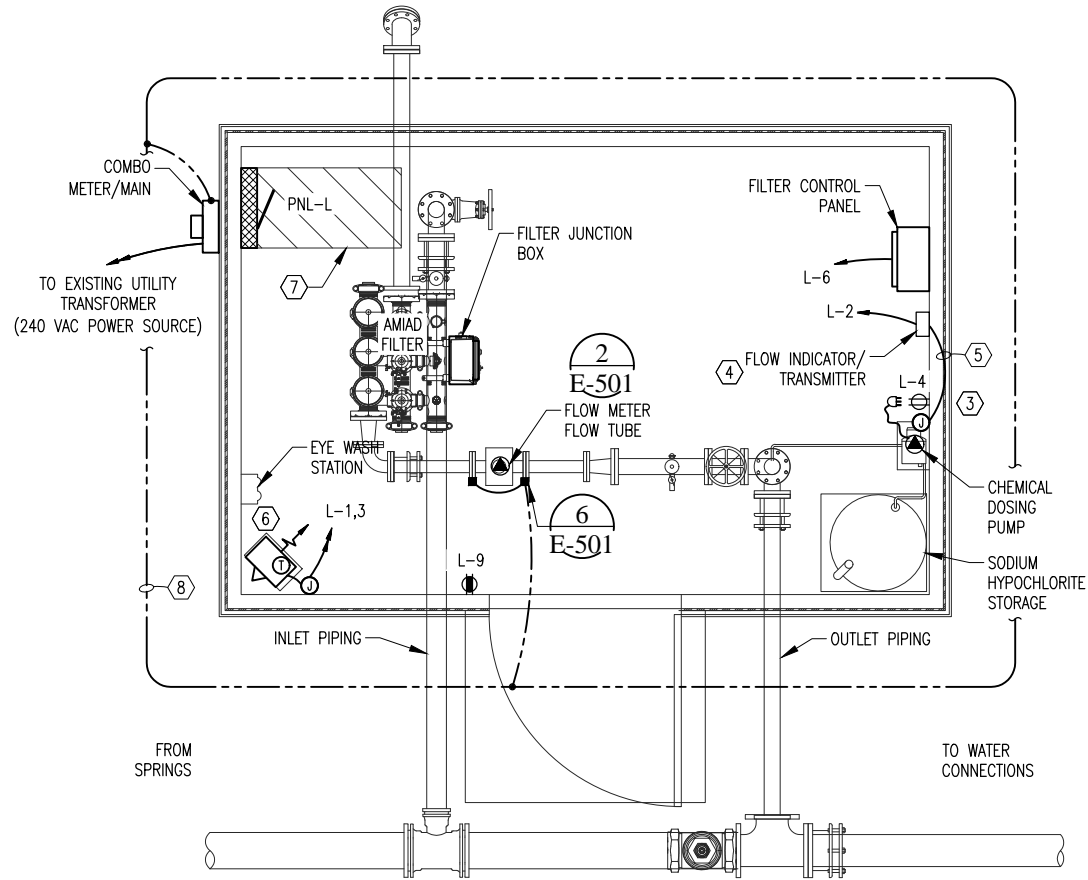
DRAWN BY: KBH

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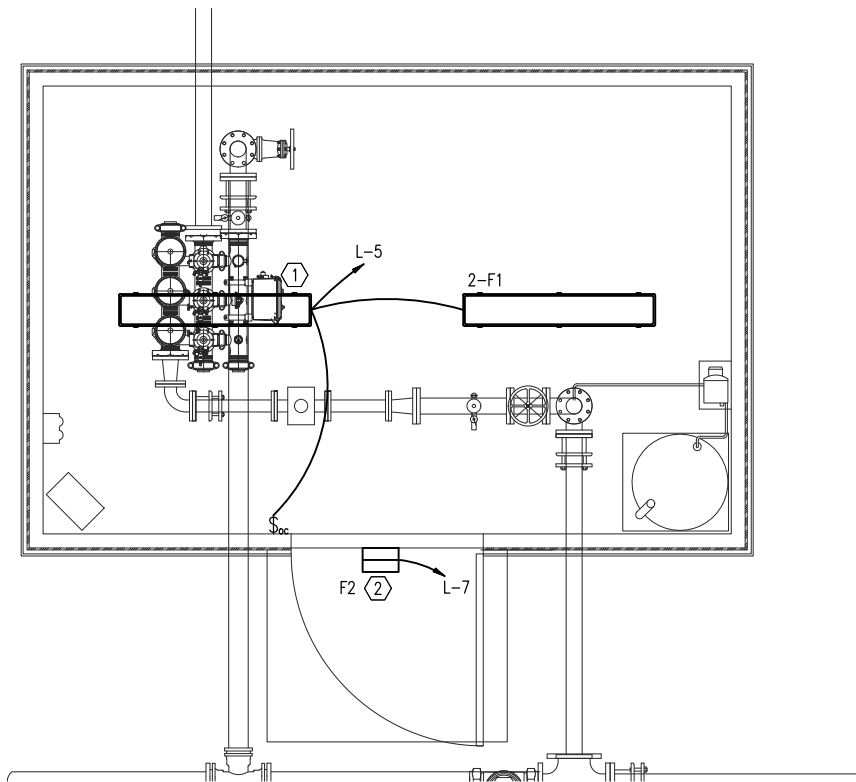
ONE INCH
AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY

SHEET NUMBER:

E-002



ELECTRICAL PLAN



LIGHTING PLAN


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HPE PROJECT:23.043 ©2021
FOR INFORMATION ABOUT THIS JOB, PLEASE CONTACT: KEITH HEGERHORST

GENERAL NOTES:

1. REFER TO PANELBOARD SCHEDULE OR POWER ONE-LINE DIAGRAM FOR THE CIRCUIT ID. THEN, THE WIRE AND CONDUIT REQUIREMENTS ARE LISTED IN THE CONDUIT/CONDUCTOR TABLE ON E-002.
2. INSTALL INTERIOR RECEPTACLES AT +36-IN ABOVE THE ROOM FLOOR. INSTALL EXTERIOR RECEPTACLES AT +18-IN ABOVE FINISHED SURFACE AND PROVIDE IN-SERVICE W/P COVER.

SHEET KEYNOTES:

1. PROVIDE A 90-MINUTE BATTERY POWER SUPPLY IN THIS FIXTURE.
2. INSTALL FIXTURE 6-IN ABOVE CENTER OF DOOR.
3. INSTALL OUTLET FOR CHEMICAL PUMP 6-IN ABOVE TOP OF PUMP.
4. INSTALL FLOW INDICATOR/TRANSMITTER +60" ABOVE FINISHED FLOOR.
5. DOSING PACING SIGNAL: INSTALL A J-BOX NEAR THE DOSING PUMP AND INSTALL A 3/4"C WITH #18 TSP TO THE FLOW INDICATOR/TRANSMITTER.
6. LOCATE HEATER SUCH THAT AN OPERATOR CAN REACH THE BUILT-IN THERMOSTAT.
7. MAINTAIN NEC WORKING CLEARANCE TO PANELBOARD.
8. AWG NO. 2 BC BURIED 18-IN DEEP AND 24-IN FROM BUILDING CONCRETE PAD.



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CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
No. 86-171214-2202
KEITH B. HEGERHORST
02/02/22
STATE OF UTAH

SET

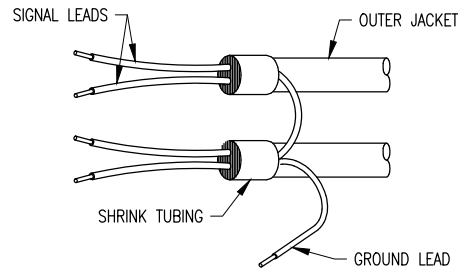
NO.	REVISION	DESCRIPTION	BY	DATE

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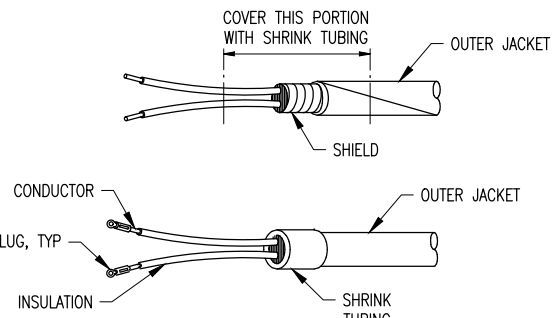
SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

ELECTRICAL PLANS

FILE: E-102
JUB PROJ. #: 55-22-095
DRAWN BY: KBH
DESIGN BY: KBH
CHECKED BY: KBH
ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED: 10/24/2023
SHEET NUMBER:
E-102

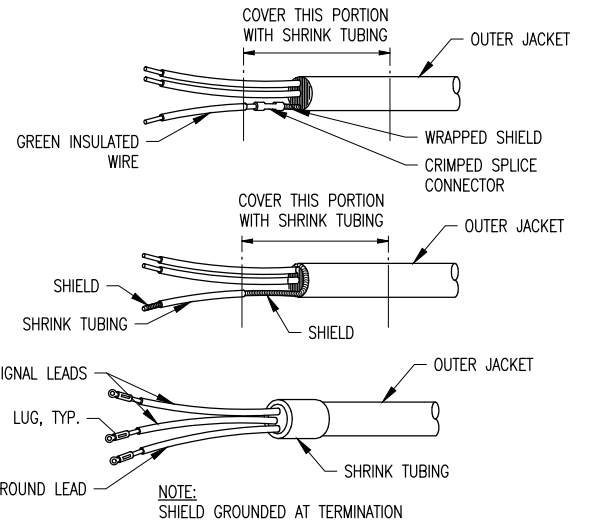


UNACCEPTABLE METHOD OF GROUNDING
CONTROL CABLE SHIELD NTS



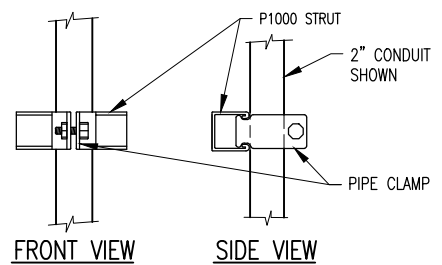
NOTE: SHIELD NOT GROUNDED AT TERMINATION.

TERMINATION OF SHIELDED
CONTROL CABLE NTS



NOTE: SHIELD GROUNDED AT TERMINATION

TERMINATION OF SHIELDED CONTROL CABLE NTS

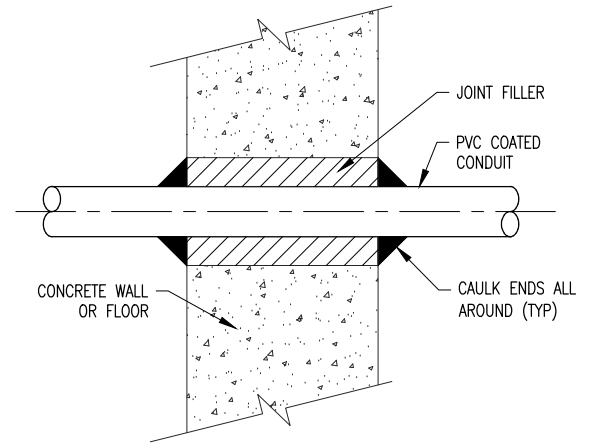


CONDUIT PIPE CLAMPS*			
SIZE	EMT	RGS	EMT/GRS
1/2"	P1426	P1111	-
3/4"	P1427	P1112	P1212
1"	P1428	P1113	P1213
1-1/4"	P1429	P1114	P1214
1-1/2"	P1430	P1115	P1215
2"	P1431	P1117	P1217
2-1/2"	P1118	P1118	-
3"	P1119	P1119	-
3-1/2"	P1120	P1120	-
4"	P1121	P1121	-

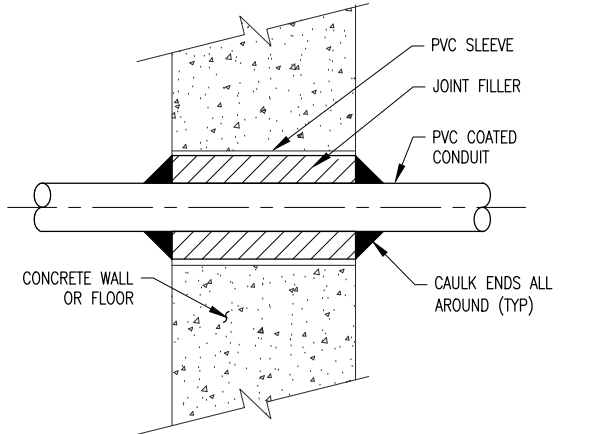
* = SUPPLIED WITH SLOTTED HEAD SCREW AND NUT

1 TYPICAL CONDUIT CLAMP
SCALE: 3" = 1'-0"

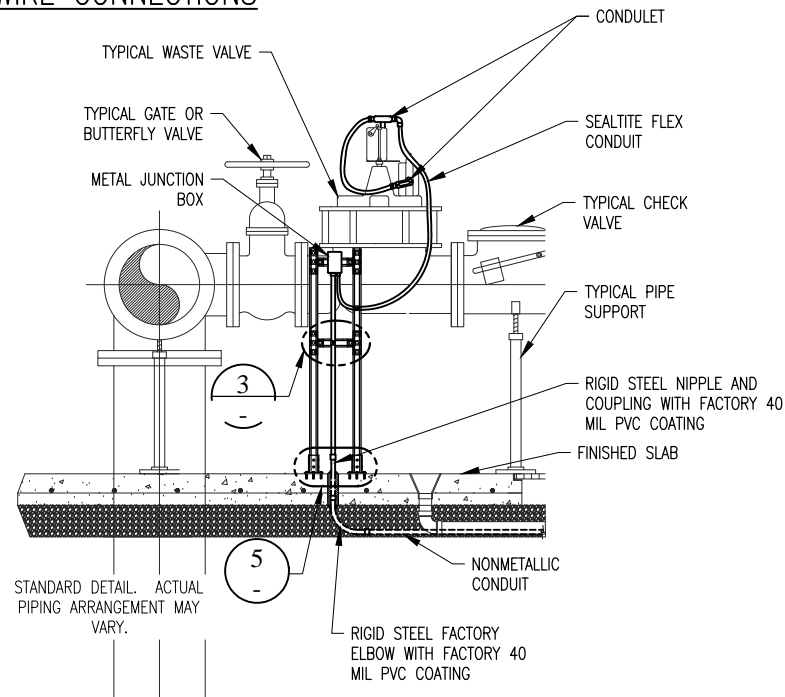
SIGNAL WIRE CONNECTIONS



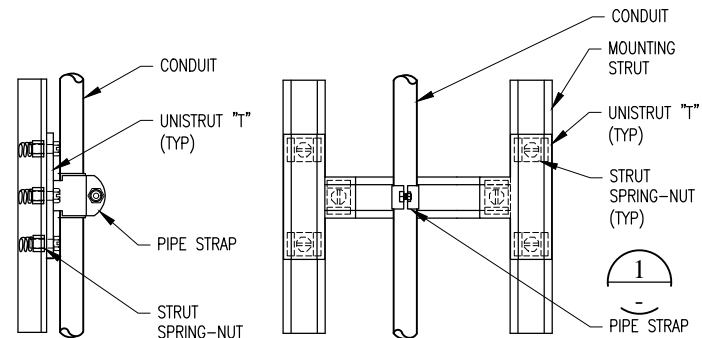
CONDUIT INSTALLATION THROUGH
EXISTING CONCRETE



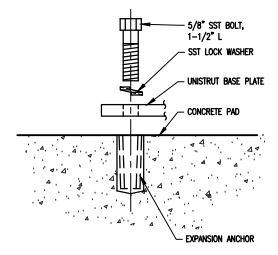
CONDUIT INSTALLATION THROUGH
NEW CONCRETE



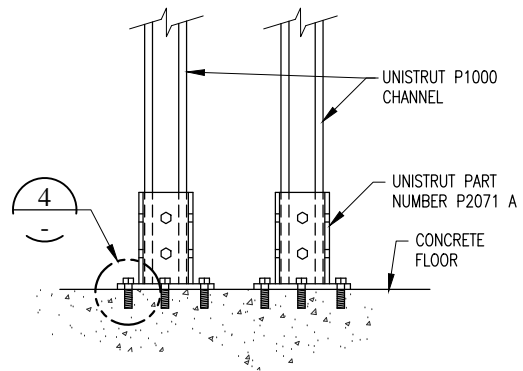
2 CONDUIT INSTALLATION
SCALE: 3/4" = 1'-0"



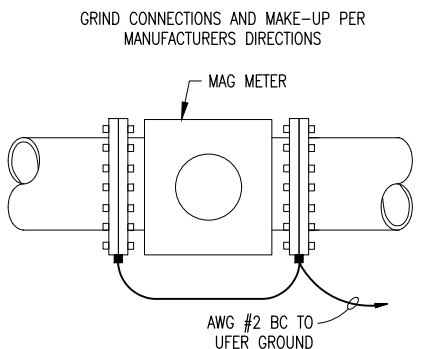
3 CONDUIT SUPPORT BRACE
SCALE: 3" = 1'-0"



4 BASE ANCHOR
SCALE: 3" = 1'-0"



5 SUPPORT BASE INSTALLATION
SCALE: 3" = 1'-0"



6 MAG METER GROUNDING
SCALE: 1 1/2" = 1'-0"

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HPE PROJECT: 23.043 ©2021
FOR INFORMATION ABOUT THIS JOB, PLEASE CONTACT: KEITH HEGERHORST

GENERAL NOTES:

1. NOT USED

SHEET KEYNOTES:

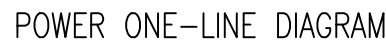
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REVISION
NO. DESCRIPTION BY DATE

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY
ELECTRICAL DETAILS, SHT. 1
FILE: E-501
JUB PROJ. #: 55-22-095
DRAWN BY: KBH
DESIGN BY: KBH
CHECKED BY: KBH
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/24/2023
SHEET NUMBER:
E-501



SERVICE PRIMARY		SUPPLIED BY:	INSTALLED BY:
PRIMARY TRENCHING/BACKFILL	EXISTING	-	-
PRIMARY CONDUIT	EXISTING	-	-
PRIMARY CONDUCTOR	EXISTING	-	-
SERVICE TRANSFORMER		SUPPLIED BY:	INSTALLED BY:
TRANSFORMER PAD	EXISTING	-	-
TRANSFORMER	EXISTING	-	EXISTING
SERVICE SECONDARY		SUPPLIED BY:	INSTALLED BY:
SECONDARY TRENCHING/BACKFILL	-	-	CONTRACTOR
SECONDARY CONDUIT	CONTRACTOR	-	CONTRACTOR
SECONDARY CONDUCTOR	UTILITY COMPANY	-	UTILITY COMPANY
METERING EQUIPMENT		SUPPLIED BY:	INSTALLED BY:
METER	UTILITY COMPANY	-	UTILITY COMPANY
METER SOCKET	CONTRACTOR	-	CONTRACTOR
COMBO METER/MAIN	CONTRACTOR	-	CONTRACTOR
CURRENT TRANSFORMER ENCL.	-	-	-
MAIN SERVICE DISCONNECT	-	-	-
CT ENCL. TO METER SOCKET WIRING	-	-	-
CT ENCL. TO METER SOCKET CONDUIT	-	-	-
MA IN SERVICE DISCONNECT		SUPPLIED BY:	INSTALLED BY:
CIRCUIT BREAKER	CONTRACTOR	-	CONTRACTOR
FUSED DISCONNECT SWITCH	-	-	-



FIXTURE SCHEDULE

NOTES: 1)

1. FILTER CONTROL PANEL SUPPLIED BY FILTER MANUFACTURER INSTALLED BY CONTRACTOR.
2. J-BOX PROVIDED BY FILTER MANUFACTURER WITH THE FILTER.
3. DIFFERENTIAL PRESSURE SWITCH PROVIDED BY FILTER MANUFACTURER. WIRE TO J-BOX AS REQUIRED.
4. WIRING ON FILTER PROVIDED/INSTALLED BY FILTER SUPPLIER.



1. EXISTING SERVICE(S) TO REMAIN. MAINTAIN CIRCUIT INTEGRITY.
2. NEW COMBO METER/MAIN, WITH 40A/2P CIRCUIT BREAKER. INSTALL ON EXTERIOR OF CHEMICAL BUILDING. LABEL AS "MAIN SERVICE DISCONNECT" AND AS REQUIRED BY NEC 110.24.
3. 3" CONDUIT WITH PULL TAPE. INSTALL CONDUIT FROM 2-3 FT NEAR TRANSFORMER TO COMBO METER/MAIN AS REQUIRED. CONDUCTOR PROVIDED AND INSTALLED BY UTILITY COMPANY. RMP WILL MAKE THE CONNECTION AT THE TRANSFORMER.


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CONSTRUCTION

[illegible]

SYSTEM FILTRATION AND CHLORINATION PROJECT
COLE CANYON WATER COMPANY

ONE-LINE DIAGRAMS

FILE: E-701
JUB PROJ. #: 55-22-095
DRAWN BY: KBH
DESIGN BY: KBH
CHECKED BY: KBH
 <p>ONE INCH</p>
AT FULL SIZE, IF NOT ONE INCH, SCALE ACCORDINGLY
LAST UPDATED: 10/24/2023
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