AGENDA

PLANNING COMMISSION
February 16, 2023
5:30 p.m.

City Hall Council Chambers
313 Court Street, The Dalles, Oregon

Via Zoom
https://us06web.zoom.us/j/82327794645?pwd=c1d2UGhUb1BoVithR0tFUzczcWtXQT09
Meeting ID: **823 2779 4645** Passcode: **001537**
Dial: 1-669-900-6833 or 1-253-215-8782

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES – January 5, 2023
6. PUBLIC COMMENT – During this portion of the meeting, anyone may speak on any subject that does not later appear on the agenda. Five minutes per person will be allowed.
7. QUASI-JUDICIAL PUBLIC HEARING

   CUP 203-22, Maul, Foster & Alongi, Inc., 3400 River Road, 2N 13E 28 tax lot 708
   Request: Applicant is requesting approval to site and construct a sanitary sewer lift station with underground storage tanks, meter and valve vaults, diesel generator, underground utilities and associated security fencing and gates. Once completed, these improvements will be owned and maintained by the City of The Dalles. Approval of the Conditional Use Permit (CUP) will establish a Community Facilities Overlay (CFO) on the site.
8. RESOLUTION

   Resolution PC 613-22: Adoption of Resolution PC 613-22 for approval to site and construct a sanitary sewer lift station with underground storage tanks, meter and valve vaults, diesel generator, underground utilities and associated security fencing and gates.

9. DISCUSSION ITEM

   Overview and open discussion regarding Chapter 10.12 of The Dalles Municipal Code regulating Recreational Vehicle (RV) Parks

10. STAFF COMMENTS / PROJECT UPDATES

11. COMMISSIONER COMMENTS / QUESTIONS

12. ADJOURNMENT

Meeting conducted in a room in compliance with ADA standards.

Prepared by/
Paula Webb, Secretary
Community Development Department

MINUTES

PLANNING COMMISSION MEETING
January 5, 2023
5:30 p.m.

City Hall Council Chambers
313 Court Street, The Dalles, Oregon 97058
Via Zoom / Livestream via City Website

PRESIDING: Cody Cornett, Chair

COMMISSIONERS PRESENT: John Grant, Maria Pena, Mark Poppoff (arrived at 5:40), Nik Portela, one position vacant

COMMISSIONERS ABSENT: Philip Mascher

STAFF PRESENT: Director Joshua Chandler, Associate Planner Kaitlyn Cook, Secretary Paula Webb

CALL TO ORDER

The meeting was called to order by Chair Cornett at 5:34 p.m.

PLEDGE OF ALLEGIANCE

Chair Cornett led the Pledge of Allegiance.

APPROVAL OF AGENDA

It was moved by Portela and seconded by Grant to approve the agenda as submitted. The motion carried 4/0; Cornett, Grant, Pena and Portela voting in favor, none opposed, Mascher and Poppoff absent, one position vacant.

ELECTION OF OFFICERS

Chair Cornett opened nominations for Chair.

Chair Cornett nominated himself for Chair. Commissioner Grant seconded the nomination. There were no other nominations.

The vote for Cody Cornett as Chair carried 4/0; Cornett, Grant, Pena and Portela voting in favor, none opposed, Mascher and Poppoff absent, one position vacant.

Commissioner Portela nominated himself for Vice Chair. There were no other nominations.

The vote for Nik Portela as Vice Chair carried 4/0; Cornett, Grant, Pena and Portela voting in favor, none opposed, Mascher and Poppoff absent, one position vacant.

APPROVAL OF MINUTES

It was moved by Grant and seconded by Portela to approve the minutes of November 3, 2022 as submitted. The motion carried 4/0; Cornett, Grant, Pena and Portela voting in favor, none opposed, Mascher and Poppoff absent, one position vacant.

It was moved by Portela and seconded by Grant to approve the minutes of November 17, 2022 as submitted. The motion carried 4/0; Cornett, Grant, Pena and Portela voting in favor, none opposed, Mascher and Poppoff absent, one position vacant.

PUBLIC COMMENT

None.

Commissioner Poppoff arrived at 5:40 p.m.

QUASI-JUDICIAL PUBLIC HEARING

Chair Cornett read the rules of a public hearing. He then asked if any Commissioner had ex parte contact, bias, or conflict of interest which would prevent an impartial decision. Hearing none, Chair Cornett opened the public hearing at 5:44 p.m.

CUP 206-22 – Power Constructors, Inc., 3600 River Road, 2N 13E 28 707
Request: Approval to site and construct an electrical substation. Approval of the CUP will establish a Community Facilities Overlay on the site.

Associate Planner Cook provided the staff report and presentation, Exhibit 1.

Larry Sevy, Power Constructors, 9420 SW 53rd Ave., Portland, Oregon 97219

Mr. Sevy stated Power Constructors is working for Northern Wasco County PUD.

Kurt Conger, Assistant General Manager, Northern Wasco County PUD, 2345 River Rd, The Dalles

Mr. Conger stated Power Constructors is working on capacity improvements to the electrical power transmission and distribution system in coordination with Bonneville Power Administration. This facility is necessary to provide the level of service the customer has requested.

Chair Cornett closed the public hearing at 5:58 p.m.

It was moved by Portela and seconded by Grant to approve Conditional Use Permit 206-22. The motion carried 5/0; Cornett, Grant, Pena, Poppoff and Portela voting in favor, none opposed, Mascher absent, one position vacant.

Chair Cornett read the rules of a public hearing. He then asked if any Commissioner had ex parte contact, bias, or conflict of interest which would prevent an impartial decision. Hearing none, Chair Cornett opened the public hearing at 6:07 p.m.

CUP 207-22 – RTD Development, LLC, 2514 W. Tenth Street, 2N 13E 32 DB 1100
Request: Approval to site and construct a nine-space Recreational Vehicle (RV) park on a 3.6-acre parcel.

Director Chandler provided the staff report and presentation, Exhibit 2. Director Chandler directed attention to public comments, Exhibit 3.

Director Chandler noted driveways are allowed under a BPA easement. The minimum grade for a driveway is based on the road classification; this road requires no more than 5% in the first 20 feet.

Tammy McVane, 1020 Sunflower Street W, The Dalles

Ms. McVane is proposing a nine-space RV Park with six spaces for short-term stays. Short-term spaces will encourage visitors for sporting events and recreation.

In response to questions, Ms. McVane replied:

- Ms. McVane does not have experience running an RV park, but has researched the operations extensively.
- A manager will be on site. Ideally, the manager will live on site in an existing house.
- Plans for the remaining space are dependent on the economy. Ideas include cottage clusters or duplexes. Chair Cornett noted the zoning is High Density, and encouraged further use of the property.
- Rules will be enforced to prevent eyesores. Outside storage and tarps are not allowed. Trailers will be less than 15 years old. All RVs must be operable. Vintage RVs will be allowed on a case-by-case basis.
- Long-term spaces will rent for approximately $600 per month. Short-term spaces will rent between $50 and $70 per night.
- The RV park will be family-oriented.
- At this time, no minimum stay is required. The intent is to remain available for all.
- Long-term residents will be subject to a background check.
- Lack of payment will result in eviction following State guidelines.

Proponents:

Kurt Conger, General Manager, Northern Wasco County PUD, 2345 River Road, The Dalles

Housing for itinerant workers remains a priority for NWC PUD. The PUD has been unable to hire qualified line workers, in part, due to the housing shortage.

Opponents:

Laure Shelquist, 2512 W. 13th Street, The Dalles

Ms. Shelquist agreed The Dalles needs an RV park. Her concern is with the safety of the community, especially children. In Oregon, it is illegal to perform background checks for renters

in RV parks. It can take up to a year to remove someone from an RV park. Ms. Shelquist stated the RV park would take away her children's safety and her own safety in the home she purchased. The Dalles needs duplexes and apartments, not RV parks.

Ms. Shelquist asked if the renters would pay lodging taxes. Chair Cornett replied short-term renters pay Transient Room Tax (TRT). Director Chandler added System Development Charges (SDCs) are incurred for all long-term sites.

Ms. Shelquist stated a neighborhood is unsuitable for an RV park.

Pat Camp, 1440 Sterling Court, The Dalles

Mr. Camp noted skilled labor is a problem for everyone. RV parks are needed, and one was recently approved.

Mr. Camp said the proposed location is better suited to foundations. He asked if the park would affect fire access. Mr. Camp stated the Industrial Zone is better suited for an RV park.

Chair Cornett noted RV parks are an allowed use in many zones.

Richard Hynd, 2426 W. 13th Street, The Dalles

Mr. Hynd noted the number of occupants per RV could present a problem. He added a 36-foot RV with a five-foot hitch and a 16-foot Jeep could not access the site without crossing the centerline of the street.

Mr. Hynd, owner of Oregon Trail Mini Storage, has found people trying to live on site in RVs. If not monitored, a lot will happen at night. He stated it is critically important to limit the number of occupants per vehicle.

Stephen Barteck, 2235 W. 14th Street, The Dalles

Mr. Barteck stated he purchased his home based on the neighborhood. Residential areas should remain residential. It is not advantageous to locate in a residential area, close access to a highway is better. Mr. Barteck will hate to see the neighborhood downgraded.

David Stone, 2423 W. 14th Street, The Dalles

Mr. Stone expressed concerns with screening and vegetation. Extra vehicles are also a concern.

Chair Cornett noted each space allowed for one RV and one vehicle.

Mr. Stone asked if there were pet restrictions, especially in relation to quiet hours. Will tenants be allowed to leave for one day, and then return for another year? He is also concerned about impacts to local wildlife.

Sharon Stone, 2423 W. 14th Street, The Dalles

Mrs. Stone is concerned with behavioral issues. Many neighbors have installed cameras. There are many children in the neighborhood. Securing an on-site manager will be difficult. People can wander up to W. 13th Street through the open field.

Mrs. Stone asked if there will be a pet relief area, and if pets will be allowed to wander the open field. She also questioned where a second vehicle could park, and noted the potential fire danger.

Cyndi Camp, 1440 Sterling Court, The Dalles

Mrs. Camp asked who would enforce quiet hours (10:00 pm to 8:00 am) during the time a manager would be on site (9:00 am to 5:00 pm). Mrs. Camp has children and owns a business operated from her home. She stated this area is a neighborhood. She is in favor of RV parks, but not when located in a neighborhood. This will remove the community atmosphere.

Dayna Elledge, 1409 Gordon Court, The Dalles

Ms. Elledge stated it was a neighborhood. The park should be in a place where it will be correctly utilized. Ms. Elledge added the applicant's business plan is inadequate.

Proponent:

Tammy McVane, 1020 Sunflower Street West, The Dalles

In response to Commission questions, Ms. McVane replied:

- Cameras will be installed on the property. The ultimate goal is to have someone live in the house. Redevelopment of the house will be completed during park construction.
- Occupancy limits are typically four people per RV.
- Long-term sites are 56 feet long. Depending on the length of the RV, the space may allow for two vehicles. Director Chandler noted the Code allows for only one vehicle per space. Parking on W. 10th Street is allowed.
- There are no plans for guest parking.
- All pets must be on a leash. Insurance carriers will sometimes have breed restrictions.
- No fire pits will be installed. Fireworks are prohibited.
- A business plan is in place and compliant with all state, county and city criteria. The state has extensive rules on eviction; all rules will be followed.
- Ms. McVane is currently the Controller for Columbia Gorge Toyota and Honda. She does not have experience managing an RV park, but successfully managed Griffith Motors and knows how to run a business.

In response to Commissioner Portela's inquiry, Ms. McVane replied tenants could change spaces and stay longer than one year. Director Chandler noted the Code specifies a stay may not exceed one year. Each spot must be designated either short- or long-term to ensure system development charges and transient room taxes are appropriately applied. Short-term spaces will operate under a Short Term Rental license.

Director Chandler added the City has a robust enforcement process. Any use operating outside the Staff Report and Notice of Decision will go through the enforcement process, and may result in revocation of the permit.

Jack Kuzma, 2500 W. 13th Street, The Dalles

Mr. Kuzma stated this is a quiet neighborhood with resident wildlife.

Mr. Kuzma travels in an RV 90-100 days per year and has visited hundreds of RV parks. In his experience, he never saw a park with only nine spaces that created a profit. The national average is approximately 30% occupancy per year.

Mr. Kuzma stated we need duplexes and apartments. Homes belong in this neighborhood. He is also concerned with traffic impacts.

Chair Cornett closed the public hearing at 7:37 p.m.

Commissioner Grant shared his concern with the difficulties in evicting tenants. He said he would like to see the state regulations for RV parks and removing tenants.

Chair Cornett asked if this was an appropriate time to discuss or add additional enforcement to the state laws surrounding RV parks and tenancy. City Attorney Kara replied as Planning Commissioners, no, not during this meeting. The appropriate mechanism would be for the public to contact the City Council and Mayor to express their concerns. It would involve adopting a general ordinance and updating the Code.

Commissioner Portela recommended opening the park only with a 24-hour, on-site manager. He asked if the placement of the park allowed for further expansion.

Chair Cornett said although he agreed with many of the comments, the Code allows RV parks. The Planning Commission imposes conditions of approval to improve development.

Commissioner Poppoff preferred development of cottage clusters or row houses to infill with more than nine units. He suggested conditions to address on-site management.

Commissioner Pena stated there were many unknowns, and was not in favor of the RV park.

Chair Cornett agreed with the condition requiring on-site management, 24 hours per day. He added there is no room in the Code for the Commission to say, “best use of space” or “highest and best use.”

Chair Cornett requested an engineered master plan for the property. Other options may benefit future development.

In order to limit impacts to the neighborhood, Chair Cornett recommended a condition prohibiting access from W. 13th Street.

Additional conditions of approval include:

- Screening vegetation must be 6-feet tall when planted
- One vehicle per RV site
- Pet policy
- No check in or check out outside of operating hours
- Quiet hours from 10:00 pm to 9:00 am.

Commissioner Pena suggested a gate at the property. Director Chandler said a gate was not a practical solution. Although it would improve security, it would negatively affect traffic. Director Chandler would not recommend a gate with the current layout.

Director Chandler referred to the request for a master plan. The purpose of the hearing was not to determine future development, but to address the application for an RV park. He asked Attorney Kara if the Commission could require a master plan for future redevelopment.

City Attorney Kara asked if the proposed expansion was a review criterion for tonight's application. Director Chandler replied is was not.

City Attorney Kara replied, generally the rule in the Land Use and Development Ordinance (LUDO) is that the Commission may approve conditional use permits subject to any conditions the Commission thinks necessary. However, those conditions must satisfy the review criteria. This expansion is not implicated in the review for this application. Since it is not a review criteria, it is not within the Commission's authority to impose those conditions. This is true for all conditions proposed tonight that do not speak to review criteria being implemented for this application.

Chair Cornett asked, what if the applicant admitted in their testimony the expansion and future development of the property. Attorney Kara replied the Commission may not apply conditions to a development permit that otherwise would not be subject to those same type of conditions, unless it is a review criteria addressed in the staff report and findings.

Director Chandler stated access from W. 13th Street can be prohibited for this application. He questioned whether access from W. 13th Street could be prohibited for future development. City Attorney Kara cautioned against restricting future access from W. 13th Street.

It was determined a master plan could not be a condition of approval.

Director Chandler asked the Commission if a gate would be required. Discussion included several options such as increasing the distance of the development from the street, calling ahead to secure entrance, and security codes to open the gate. Director Chandler noted traffic concerns for key fob or key entry at all times.

Chair Cornett suggested the gate remain open during working hours and closed during quiet hours. Personal vehicles could enter or exit during quiet hours, RVs could not.

The Commission proposed conditions of approval. Director Chandler reiterated the conditions of approval:

- The park may not open until a live-in, on-site manager is available 24 hours a day.
- The screening around the development must be six feet in height at the time of planting.
- The applicant must establish a pet policy.
- Check-in and check-out time will be available outside of quiet hours.
- Quiet hours will be from 10:00 pm to 9:00 am.

- The front entrance will include a gate that is open during operating hours and closed during quiet hours.
- The RV make and model for all long-term stays must be no more than 15 years old from the date of the stay.
- One vehicle space per RV spot is the maximum.

The Commission discussed the possibility of a reduced short-term stay. Director Chandler noted that condition was not imposed on three previously approved RV parks. He also noted transient room tax is collected for each short-term stay.

An additional condition of approval limited short-term stays to 14 days.

It was moved by Portela and seconded by Poppoff to approve Conditional Use Permit 207-22. The motion carried 5/0; Cornett, Grant, Pena, Poppoff and Portela voting in favor, none opposed, Mascher absent, one position vacant.

Chair Cornett shared his appreciation for the public comments. He noted the opportunity remains to appeal the Planning Commission's decision. Chair Cornett urged the applicant to hear the public concerns, and make their best effort to be a good neighbor.

RESOLUTIONS

Resolution PC 611-22: Approval of CUP 206-22, Power Constructors, Inc.

It was moved by Grant and seconded by Portela to adopt Resolution PC 611-22 for Conditional Use Permit 206-22, approval to site and construct an electrical substation. The motion carried 5/0; Cornett, Grant, Pena, Poppoff and Portela voting in favor, none opposed, Mascher absent, one position vacant.

Resolution PC 612-22: Approval of CUP 207-22, RTD Development, LLC

It was moved by Portela and seconded by Poppoff to adopt Resolution PC 612-22 for Conditional Use Permit 207-22, approval to site and construct a nine-unit Recreational Vehicle (RV) Park. The motion carried 5/0; Cornett, Grant, Pena, Poppoff and Portela voting in favor, none opposed, Mascher absent, one position vacant.

COMMISSIONER COMMENTS / QUESTIONS

Chair Cornett stated when The Dalles Municipal Code was created, this number of RV parks was not anticipated. Chair Cornett directed Staff to add a Discussion Item regarding RV parks on a future agenda.

STAFF COMMENTS / PROJECT UPDATES

Director Chandler is hoping to fill the vacant Commissioner position in the coming weeks.

Angie Brewer, the former Wasco County Planning Director and now the regional Department of Land Conservation and Development (DLCD) representative, will provide Planning

Commissioner training in late February or early March. Bylaws will also be updated at that meeting.

Director Chandler thanked the Commission for their attendance; cancelled meetings impact both the public and applicants.

ADJOURNMENT

Chair Cornett adjourned the meeting at 8:36 p.m.

Submitted by/
Paula Webb, Secretary
Community Development Department

SIGNED: _____
Cody Cornett, Chair

ATTEST: _____
Paula Webb, Secretary
Community Development Department

City of The Dalles Planning Commission

JANUARY 5, 2023| 5:30 PM

1

Conditional Use Permit 206-22

Applicant: POWER Constructors, Inc.

Land Owner: Design LLC

Address: 3600 River Road

Zoning: Industrial

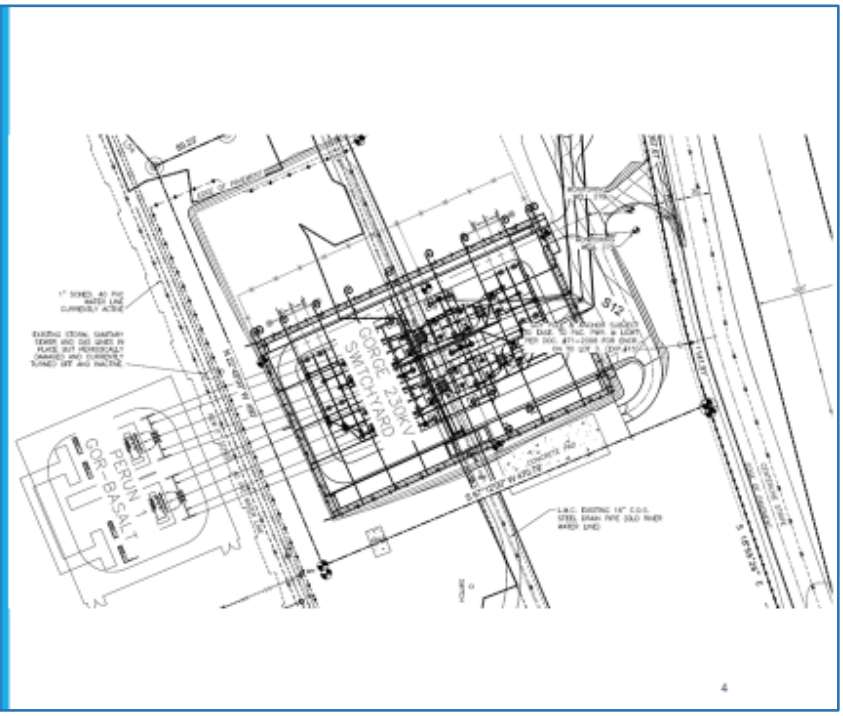
Proposal: The Applicant is requesting approval to site and construct an electrical substation. Approval of the Conditional Use Permit (CUP) will establish a Community Facilities Overlay (CFO) on the site.

2

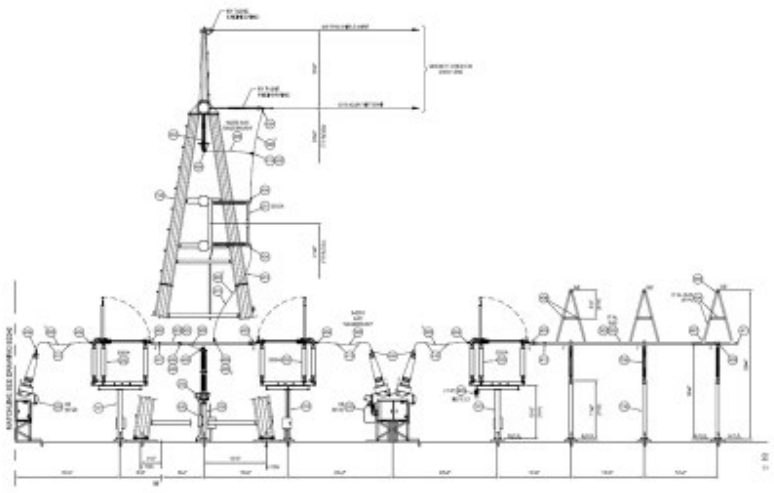
Background

- Former Northwest Aluminum Company smelter plant site that closed in the 1980's.
- No comments received during the 14-day comment period.
- Vacant

Proposal



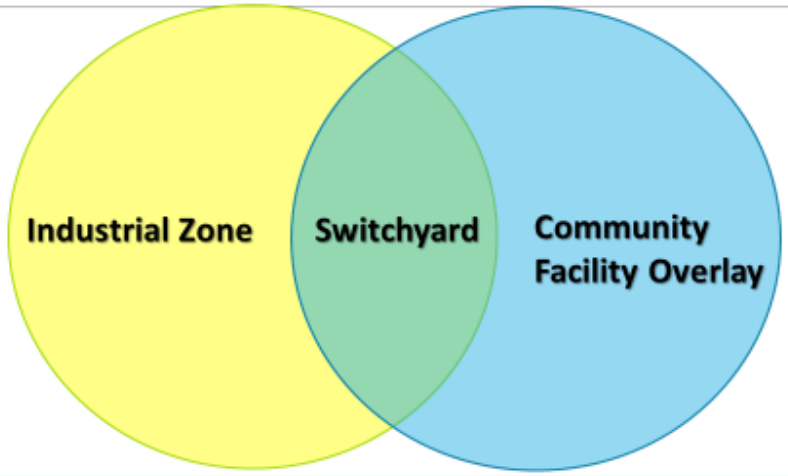
Proposal



5

Industrial Zone Requirements

Section 5.090.030 Conditional Uses, I



6

Impacts

(Review Criteria 10.3.050.040 C.)

1. **Noise impacts** across the property line shall not exceed 60 decibels. Noise related to traffic impacts shall not be included in this determination. Nothing in this Article shall modify other noise ordinance standards as adopted by the City.

2. **Lighting impacts** across the property line shall not exceed 0.5 foot-candles (a foot-candle is the amount of light falling upon a 1-square-foot surface which is 1 foot away from a 1-candlepower light source.)

3. **Dust and other particulate matter** shall be confined to the subject property.

4. The following **odors** shall be completely confined to subject property:
   a) Industrial and/or chemical grade chemicals, solvents, paints, cleaners, and similar substances;
   b) Fuels; and
   c) Fertilizers, manure, or other animal waste products, other than for landscape installation and maintenance.

5. **Vibrations** shall not be felt across the property line.

7

Impacts

(Review Criteria 10.3.050.040 C.)

6. The **transportation system** is capable, or can be made capable, of supporting the additional transportation impacts generated by the use. Evaluation factors shall include, but are limited to:
   a. Street designation and capacities;
   b. On-street parking impacts;
   c. Bicycle safety and connectivity;
   d. Pedestrian safety and connectivity; and
   e. Transit capacity and efficiency.

8

Exceptions to Standards

Section 10.5.090.060 B. Parking

B. Parking. The following permitted and conditional uses may be exempted from the off-street parking requirements of this Title as follows:

1. *Vehicles and Bicycles.*
   - A. *Uses which the Director determines have no employees on site and are not open to the public.*
   - B. *Wireless communication facilities.*

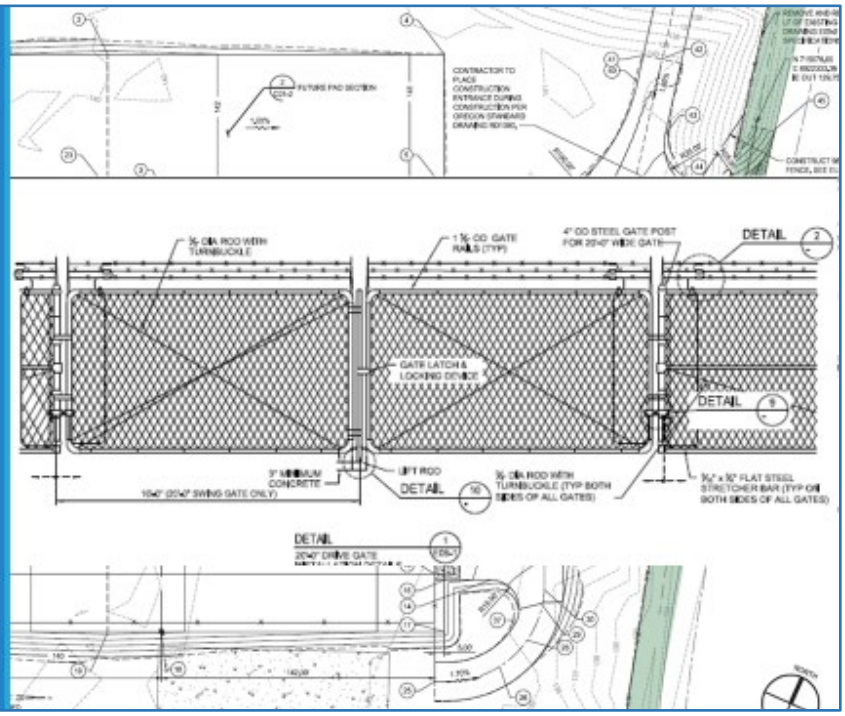
9

Landscaping

10.6.010.070 Required Landscaping by Zone

a) 5-foot landscaping buffer required

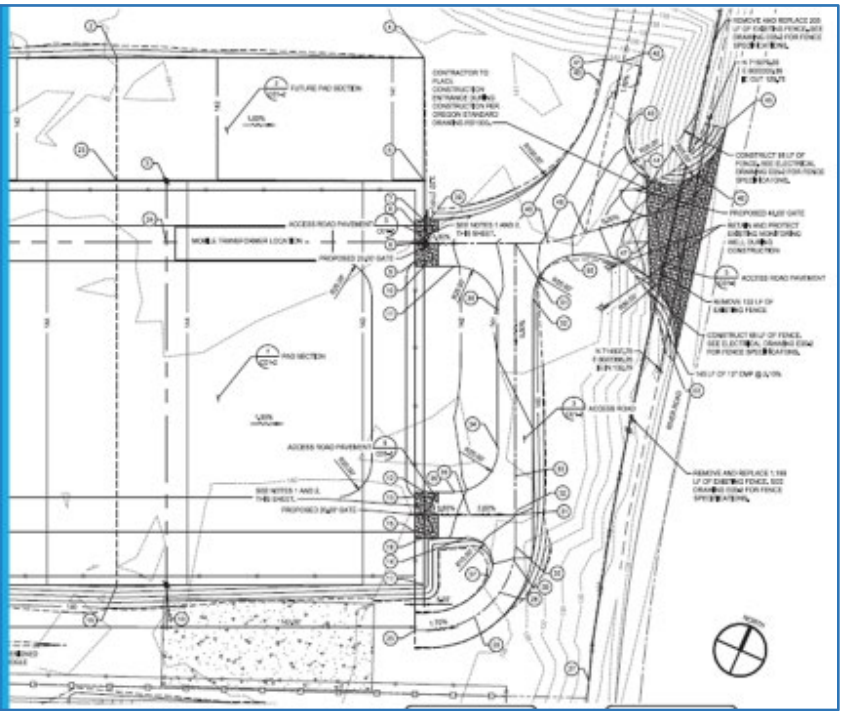
b) 7 ft. tall metal security fence



Driveway Standards

Article 6.060

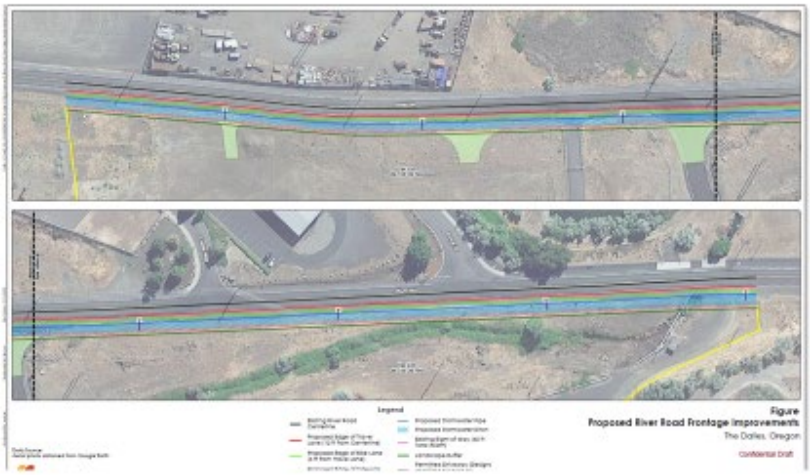
- Licensed engineer needs to demonstrate the need for a driveway width is over 35' ft.
- Drive approaches installed in the public ROW shall hard surfaced, in accordance with City Public Works standards.
- Driveway and entrance grades at the sidewalk shall not exceed 2%, and the approach grade not to exceed 5%, for the first 20 feet.



Improvements Required with Development

Chapter 10.10

- 6 ft. bicycle lane
- 5 ft. sidewalk
- Improvements occurring over three parcels.



Commission Alternatives

1. **Staff recommendation:** The Planning Commission move to adopt Resolution PC 611-22 approving Conditional Use Permit 206-22, with the proposed Conditions of Approval included with this report, based upon the findings of fact and conclusions of law set forth in the Agenda Staff Report.
2. If the Planning Commission desires to deny Conditional Use Permit 206-22, move to direct staff to prepare a resolution of denial. The Planning Commission shall identify the specific criteria concerning this decision.

13

Questions?

14

City of The Dalles Planning Commission

THURSDAY, JANUARY 5, 2023 | 5:30 PM

Conditional Use Permit No. 207-22

Applicant: RTD Development

Address: 2514 W. 10th Street

Assessor's Map and Tax Lot: 2N 13E 32 DB 1100

Zoning District: High Density Residential "RH"

Proposal: *Approval to site and construct a 9-unit RV Park.*

Comments Received

Seven (7) comments received as of January 5, 2023 (noon): 6 opposition, 1 support

Comments were sent to Applicant for their response, as well as provided to Commissioners and posted on the City's website

Applicant provided response

Staff will address TDMC based criteria only

Subject Property

2514 W. 10th Street

2N 13E 32 DB 1100

Subject Property

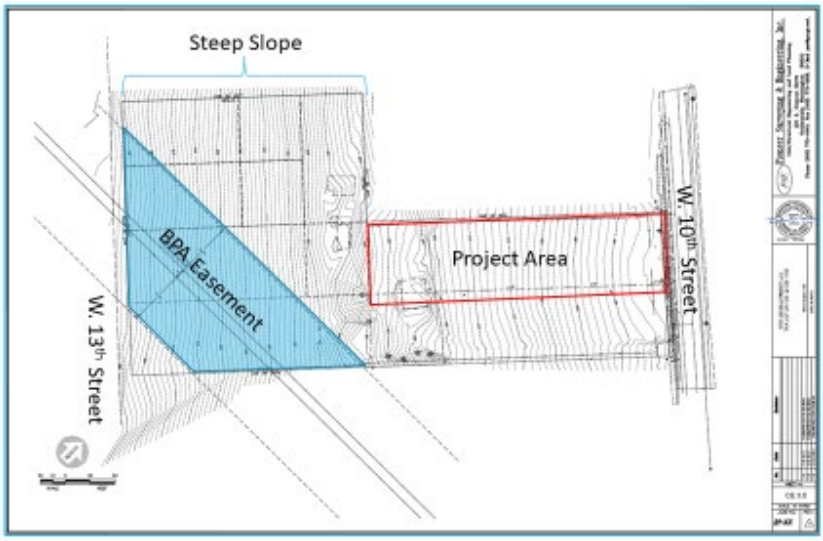
2514 W. 10th Street

2N 13E 32 DB 1100

Project Area

No plans have been discussed for additional development at this time

Steep slope and BPA easement will limit future development in rear



Proposal

9 total RV spaces

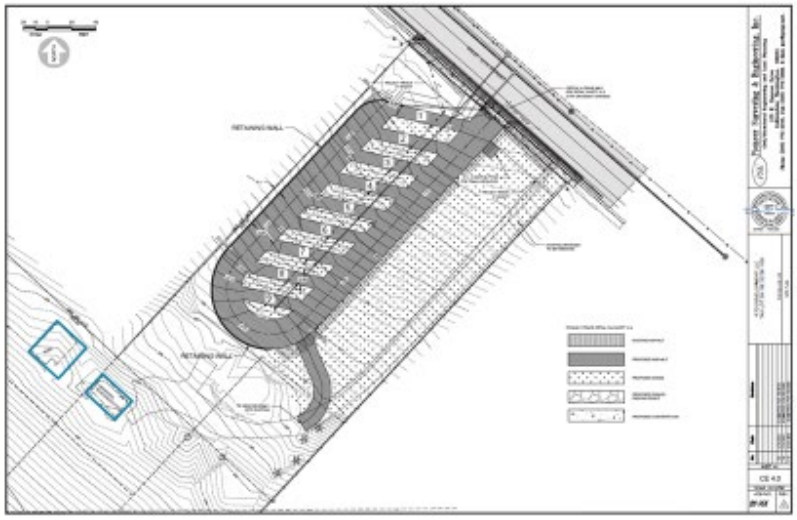
- 3 long-term (up to 1 year)
- 6 short-term (up to 30 days)

1 vehicle parking space per RV space

Reuse Existing Buildings

- Existing Dwelling & Barn

ROW Improvements/Sidewalks



Proposal

9 total RV spaces

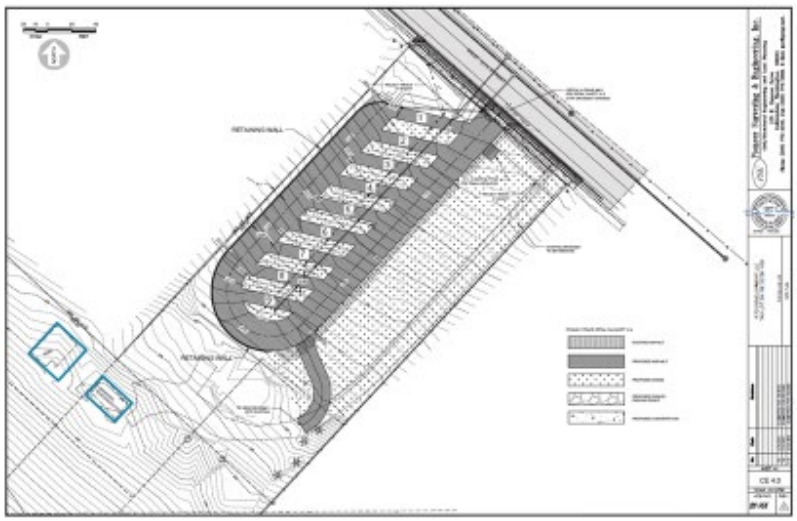
- 3 long-term (up to 1 year)
- 6 short-term (up to 30 days)

1 vehicle parking space per RV space

Reuse Existing Buildings

- Existing Dwelling & Barn

ROW Improvements/Sidewalks



Impact (TDMC 10.3.050.040)

1. Noise impacts across the property line shall not exceed 60 decibels. Noise related to traffic impacts shall not be included in this determination. Nothing in this Article shall modify other noise ordinance standards as adopted by the City.
2. Lighting impacts across the property line shall not exceed 0.5 foot-candles (a foot-candle is the amount of light falling upon a 1-square-foot surface which is 1 foot away from a 1-candlepower light source.)
3. Dust and other particulate matter shall be confined to the subject property.
4. The following odors shall be completely confined to subject property:
5. Vibrations shall not be felt across the property line.
6. The transportation system is capable, or can be made capable, of supporting the additional transportation impacts generated by the use. Evaluation factors shall include, but are limited to:
7. ~~In areas designated as Historic Districts, proposed development and redevelopment shall first require review and approval of the Historic Landmarks Commission in accordance with the procedures of Chapter 11.12 – Historic Resources.~~

Impact (TDMC 10.3.050.040)

1. Noise impacts across the property line shall not exceed 60 decibels. Noise related to traffic impacts shall not be included in this determination. Nothing in this Article shall modify other noise ordinance standards as adopted by the City.

Proposed Conditions:

4a. Applicant establish and enforce reasonable quiet hours

4b. No mechanical component of a RV may exceed 60 decibels across property lines

4c. No exterior generators

Recommendations:

Check in/Check out times occur outside of quiet hours

Impact (TDMC 10.3.050.040)

2. Lighting impacts across the property line shall not exceed 0.5 foot-candles (a foot-candle is the amount of light falling upon a 1-square-foot surface which is 1 foot away from a 1-candlepower light source.)
3. Dust and other particulate matter shall be confined to the subject property.

Proposed Conditions:

1h. Screening required along street frontage and abutting properties.

Impact (TDMC 10.3.050.040)

4. The following odors shall be completely confined to subject property:
   a. *Industrial and/or chemical grade chemicals, solvents, paints, cleaners, and similar substances;*
   b. *Fuels; and*
   c. *Fertilizers, manure, or other animal waste products, other than for landscape installation and maintenance.*
5. Vibrations shall not be felt across the property line.

Impact (TDMC 10.3.050.040)

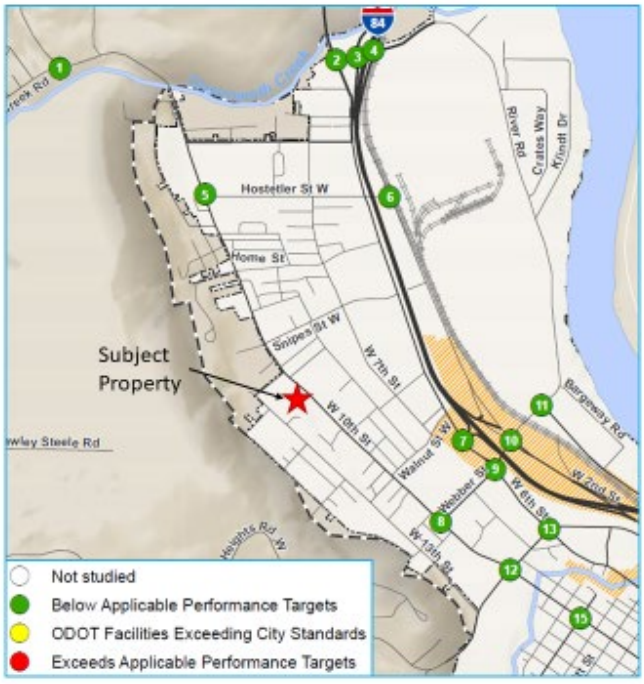
6. The transportation system is capable, or can be made capable, of supporting the additional transportation impacts generated by the use. Evaluation factors shall include, but are limited to:
   a. *Street designation and capacities;*
   b. *On-street parking impacts;*
   c. *Bicycle safety and connectivity;*
   d. *Pedestrian safety and connectivity*

Traffic Stats

Located between intersections #5 and #8, as defined in TSP

Both intersection currently and projected (2035) – below applicable performance targets

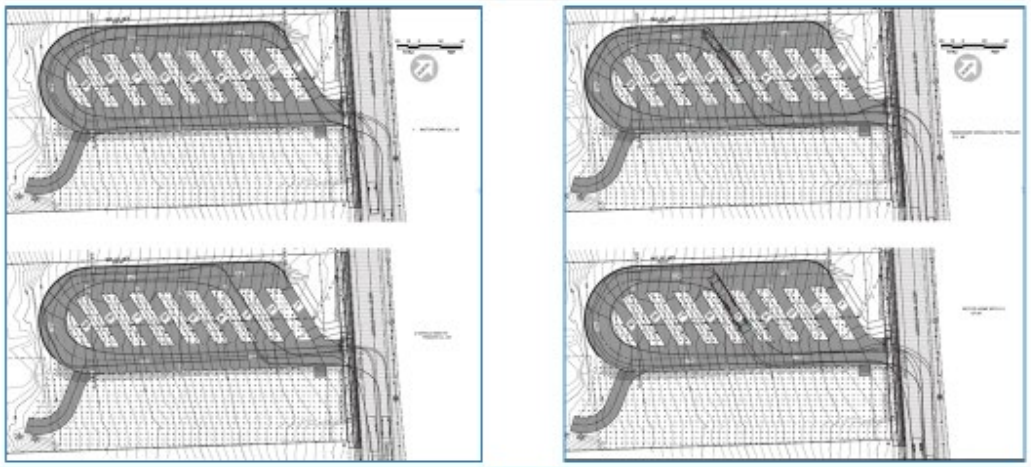
No mitigation required



Access

- One access point is required for RV Parks of 9 spaces or less
  - New 24' wide driveway is proposed
- Existing driveway is required to be removed
- Internal pedestrian walkway is required connecting to W. 10th Street
- Vehicle turning templates provided demonstrating entrance/exit to park and RV spaces

Access: Turning Templates

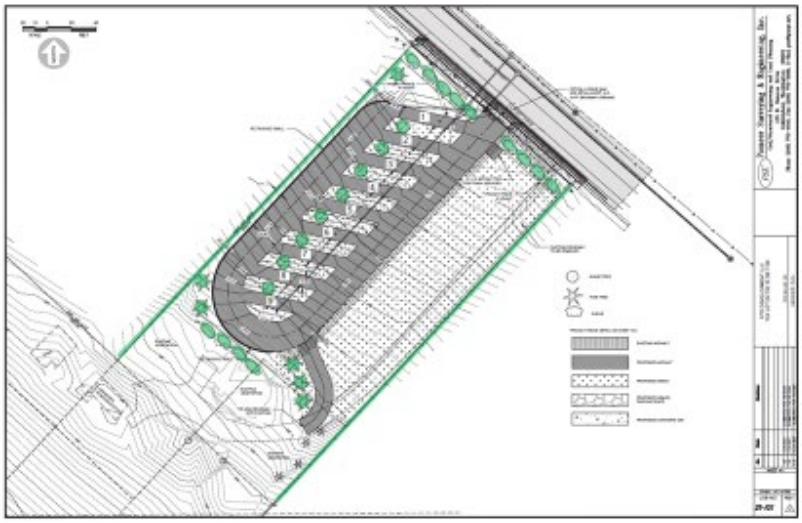


Landscaping

Landscaping and/or hard surfacing provided throughout park

All landscaping on frontage must meet clear vision requirements

Perimeter screening must be shown on site plan and setback no less than 5'



Additional Requirements

- RV stays may not exceed 1 year (unless approved by PC this evening)
- Manager contact information must be posted on-site at all times
- No outside storage
- All other State RV Park requirements must be met

Violations of park requirements will be handled on a complaint basis

Commission Alternatives

1. **Staff recommendation:** The Planning Commission move to adopt Resolution PC 612-22 approving Conditional Use Permit 207-22, with the proposed Conditions of Approval included with this report, based upon the findings of fact and conclusions of law set forth in the Agenda Staff Report.
2. If the Planning Commission desires to deny Conditional Use Permit 207-22, move to direct staff to prepare a resolution of denial. The Planning Commission shall identify the specific criteria concerning this decision.

City of The Dalles Planning Commission

THURSDAY, JANUARY 5, 2023 | 5:30 PM

Paula Webb

Subject: FW: CUP 207-22

From: Dayna Wynn-Elledge <dayna@quest-1.com>
Sent: Friday, December 09, 2022 8:40 AM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Subject: CUP 207-22

Good Morning

We got wind of another attempt by RTD Development on the RV Park

I am not going to waste time sending out another letter- This email should be enough.

I am appalled that they think that by changing the number of spaces in the park will appease our neighborhood.

Again, We are against this Business to be built in a family neigborhood.

1. Traffic flow is still an issue
2. Enviormentail impacts to the community- people and wild life.
3. Concerns of children in the area- walking to and from school, church and friends.
4. The roads are a mess and this added large vehicles will only create more issues
5. If this is for bringing tourism—it needs to be downtown. We do not need these vehicles up and down our community.

Thank you
Dayna

Dayna Wynn-Elledge |Development Manager | Quest One, LLC
Email dayna@ quest-1.com
Main Phone (470) 554-7747
Cell 425-318-2868
AS 9120/ISO 9001:2015 Certified | A woman Owned Small Business | Website www.quest-1.com

Paula Webb

Subject: FW: RV park on 13th

From: Elizabeth Turner <marklizturner3@gmail.com>
Sent: Saturday, December 10, 2022 2:11 PM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Subject: Fwd: RV park on 13th

---------- Forwarded message ---------
From: **Elizabeth Turner** <marklizturner3@gmail.com>
Date: Sat, Dec 10, 2022, 2:10 PM
Subject: RV park on 13th
To: <jchandler@ci.the-dslles.or.us>

Iam absolutely for the RV park..
If the request application is legal the city should adopt and ok it..to not do it is discrimination.
We have a documented terrible housing problem. I served two years on a area wide committee. It's very true. We lost our paid staff on that committee because she could find no housing
RV life is being chosen now by many. Including tiny houses. They are excellent choices for downsizing. I've known several who live in them full time. People working that are respected in their fields.
If your going to base your decisions on ignorant selfish bigots instead of the legal requirements you should be sued. They do not have the right to decide what kind of housing others live in when it's legal. Nobody does.
I do not think that legal plans that offer our city needed housing even need hearings. Does every dwelling in town being built get a hearing?
The city needs to adhere to the law not a bunch of bitchy people who are heartless and frankly uninformed. The city can't grow, there's no place to live. Progress is being made with the new area on the west for business. But nobody can establish a new business here without housing.
Ignore the screaming idiots and follow the law. I have no sympathy for anyone against legal housing.
Elizabeth Turner
77849 Hwy 216
Maupin, Oregon 97037

Paula Webb

Subject: FW: CUP 199-21

From: Richard Hynd <rlh3030@gmail.com>
Sent: Sunday, December 11, 2022 12:49 PM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Subject: Re: CUP 199-21

this is the letter i sent on June 14. All provisions still apply

On Tue, Jun 14, 2022 at 6:59 PM Richard Hynd <rlh3030@gmail.com> wrote:

> 2514 W 10TH
>
> Mr. Chandler
> I live on 13th street a bit S.E. of the subject property. I have developed property in The Dalles and have owned several RVs including a 36 foot diesel pusher.
> When I first heard of the proposal I was sceptical because it appears to be the very worst of several site choices for an RV Park. The slope, Ingress and Egress as well as dimensions and site location would seem to eliminate this location as an option. Having said that, my main concern is what's not addressed in the application;the remaining property abutting 13th street. It seems highly likely that the developer will create an attractive nuisance area that would result in vagrant camping and the associated litter, pollution and vandalism. Can you insure that that will not happen?
>
> I will agree that The Dalles desperately needs RV sites, but the need for single and multi family dwellings is as dire and would be much more appropriate for this area I can't imagine that highest and best use for this property is 26 RV spaces. It makes me wonder what the long term plan may be
>
> At the very least I think an environmental impact study is in order regarding wildlife and drainage..
>
> Sincerely Richard L Hynd 2426 W 13th

January 2, 2023

Pat & Cyndi Camp
1440 Sterling Ct.
The Dalles, Oregon 97058
541-965-0240
503-869-9441

Dear The City of The Dalles Planning Commission,

My husband and I have been residing in The Dalles since 2007, own a home, run a successful plumbing business and contribute to the community in many different ways.

The reason we are writing this letter is because we were recently made aware of the proposed Recreational Vehicle (RV) park this time with 9 spaces 3 of them being long term on a 3.6 acre parcel, application number CUP 207-22 – RTD Development, LLC, 2514 W. Tenth Street, 2N 13E 32 DB 1100

We have many concerns about this proposal and what it will do to the surrounding neighborhood.

The proposed recreation vehicle park would increase the traffic flow on West 10th street which would likely increase the amount of vehicle accidents and the decrease the safety for the children walking to and from school even with the proposed one way in one way out.

It would create an increase in fire hazard to all neighboring homes, increased noise, not only when constructing the recreational vehicle park but after completion due to all of the short term/long term persons residing there. It would increase the loitering and exploration of private property not only bringing in more pollution, litter, drugs, alcohol and crime to the area.

The proposed is going to have 3 long term sites (1 year) and 6 short term sites (30 days). It was stated that there will be upkeep at the rv park but as you drive around town and look at other "home parks" that used to be eye pleasing they are most certainly not anymore.

Will there be a year built limit for the trailers coming in or will the trailers be aged and well used?

Since it is not legal to do background checks on short term tenants our concern is sexual predators and non-law abiding citizens will see this short term/long term rv park a good place to reside as this is not being proposed as a day to day use recreational vehicle park as stated in the news article.

The proposed site is only using the bottom part of the property and the existing home will be used for the full time camp host. What will be done to the upper part of the property closest to West 13th street in the future? Are we just seeing phase one of RDT Development's plan?

The Dalles is in need of a recreation vehicle park and there was one being built on the outskirts of the westside of town closer to the freeway that is on **154.76 acres** and there is another proposed 26 unit RV Park being proposed **yet again** in the middle of a neighborhood setting, which many other residents are against reading the last meeting minutes for the same concerns we all have.

- My husband I have stayed in many rv parks over the years and we have not once seen a short term RV park placed in the middle of a residential neighborhood. I would not want to stay in an rv park that was in a residential neighborhood where there isn't a wide open space for check in and check out or an easy access for turning around. **For the planning commission: it states that RV parks must provide at least 2 vehicular exists spaced no closer then 75' (edge to edge). Why have this rule if you are now going to provide a reduction of almost 1/2 of the required separation AND they are only providing 1 exit?** If you miss the entrance on W 10th St. the directions will redirect you to go up Walnut, Verdant or any other side residential streets that are close by. That would increase traffic and be a potential hazard for clipping parked vehicles, kids playing in their driveways and or sidewalks, kids walking to and from school or riding their bikes in the neighborhood cul-de-sac. The neighboring hills are steep and the turns are sharp, I would hate to see any property damage happen on the corner lots.

- Usually there is one parking spot available in an RV park for a vehicle or guests. Where are all the other vehicles going to be parked when the long term residents have a guest or decide to purchase another vehicle?

- Will there be smoking allowed at the RV parks, fireworks, will the tenants be allowed to bring their own fire pits or briquet bbq's? Has the fire department been made aware of the proposed rv park? Will there be enough turn around space for a firetruck/ ambulance to get onto the property or surrounding areas if something were to catch on fire? Will there be an adequate water source to run all of the fire hoses?

- Do you live in the proposed area or the surrounding neighborhood where your RV park will be built? I really would like to know. If not, would you want to live across the street from an RV park and everything that comes with it? There are many other options for land on the outskirts of town or by the river that are properly zoned. When purchasing our home we decided on this *neighborhood* because of the surrounding community and seclusion. This will impact our property value and the *neighborhood* feel.

Growth is needed and is welcomed in The Dalles, but using land that in a **residential neighborhood** to build a short term/long term rv park is not what the land was intended for. **People go camping to get away from the city and surrounding areas.** If I were wanting to camp in The Dalles I would not want to camp in a residential neighborhood. *The only people who would be seeking out this rv park would be if they are planning on staying long term and that would make this a* ***trailer park*** *rather than a recreational site as proposed.* I would rather see a nice well maintained duplex, triplex or a single family house on that land to improve the quality of the neighborhood and a strong community feel.

Once again we still strongly oppose the proposed application CUP

207-22 Thank you.

Pat and Cyndi Camp

Paula Webb

Subject: FW: 207-22, RV Site 2514 W 10th

-----Original Message-----
From: Tom Elledge <tomelledge@aol.com>
Sent: Tuesday, January 03, 2023 10:26 AM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Subject: CUP: 207-22, RV Site 2514 W 10th

WARNING: Email from external source. Links and attachments could pose security risks. Investigate sender and think before you click.

This is the second attempt by RTD Development, LLC (David Griffith).
We know Mr Griffith has certain Status in the enter-workings of The Dalles and the Columbia Gorge, holding various position's such as Port Representative to Mid-Columbia Economic Development District and the list goes on and on. His request for an RV park in the Middle of a residential area on West 10th is totally unacceptable from The families residing in and adjacent to the proposed site. One Of the last items our city needs is A RV park. The city needs to direct Its time and resources into permanent housing not RV parks, Our city should demand more than RV parks, also the logistics of RV's traveling into and out of this site is Very dangerous. RV's moving off Of I-84 and traveling over city Streets to 10th and blocking Traffic while making wide turns Getting onto 10th and then in and Out on 10th from the park is not A good situation. It is my request That this application be denied. I'm sure Mr. Griffith has other property That he can use outside the city For his RV park.
Tom Elledge
1409 Gordon Court
The Dalles
Email: tomelledge@aol.com

Sent from my iPhone

Matt and Laure Shelquist

2512 W 13th ST

The Dalles, OR. 97058

RE: CUP 207-22
Conditional use permit to site and construct a 9 unit RV park

We would like to strongly object to the proposal based on zoning and safety issues with the proposed location.

I will start by saying we as a family have traveled extensively with our 36 foot toy hauler and stayed in many RV parks around. I have never stayed in an RV park that was placed in the middle of a residential neighborhood just down the street from schools and houses like you are proposing. Being an avid traveler I feel if I was to show up at this RV park I most likely would not feel comfortable leaving my belongings after looking around at what is in front and just down from the proposed site. We love our town and feel like the west side is starting to feel a little safer and look cleaner than it has in many years. By placing this RV park that is going to have long term spots available it is going to make an already struggling neighborhood worse. Rv parks with long term spots historically become an eyesore and will eventually devalue neighboring properties. I drove around town and found several other properties farther away from high density residential communities that would be much more suited for what is being proposed.

The Dalles is in great need for affordable housing and I feel this piece of property should be used for what it is zoned for…. Affordable housing/apartments maybe for struggling families. Rent is astronomical and low income struggling single parents are winding up homeless because they cannot find housing for under 2000 a month. By building apartments, townhouses or duplexes you would be helping families to provide for their families and in the meantime contributing to the community and helping beautify the surrounding neighborhood. It would be safer for the children in the community because background checks could be done for people renting apartments etc which is not done in RV parks. We should be focusing on dealing with the housing crisis for the citizens of our own town and not travelers coming to town to work. I realize it is limited on what can be done with the property due to the overhead power lines that run across the top of the property.

We understand progress has to be made but at what cost?

The proposed area already has a heavy traffic flow of 35 mph and no side walks for most of the road. There are several schools in the area and bus stops along W 10th with large amounts of kids walking to and from school and playing in the area. Increased traffic is going to put more of a strain on the already busy road. I turn on to 10th from walnut on my way to and from various locations at all times of the day and sometimes i wait several minutes to be able to pull out safely. To add when we leave with our travel trailer we have to pull into oncoming traffic to be able to pull out onto the road. Travel trailers pulling out from proposed location is going to have to do the same which is going to be a hazard to people traveling on 10th st. Not to mention those turning into the park needing to turn wide and into oncoming traffic.
Will another entrance be placed at the back of property on W 13th? You have not stated what would be done with the largest part of the property on w 13th. Is there another phase that you

are not telling us about? Our house is located directly in back of the property on W 13th st, so this concerns me.
My daughter attends St. Marys Academy and rides her bike to and from school and plays basketball. Traffic and speed is already a concern.

We do not disagree The Dalles needs an RV park but feel this location could potentially be disastrous to the neighborhood in many ways. I have been informed there are a couple other RV parks that have been proposed and are in the works on the west side. How many do we really need? Shouldn't we be focusing on making our town a little more pleasing to the eye and cleaning it up a little?

The most vulnerable are our children and it is our/your job to protect them. Placing an RV park that caters to traveling workers in the middle of a densely populated neighborhood with a lot of children that play outside, walk to and from school and have several bus stops could be disastrous. Background checks are not done on the travelers and how do we know they are not targeting children. With this they are given the perfect opportunity to watch and learn routines and victimize them and then be gone.

I am going to share with you a personal experience of a neighboring RV park when I first moved to Oregon in the late 90's.. unfortunately for my daughter I was oblivious of the dangers until it was too late.

I moved to the Medford area and the townhouse I rented at the time was close to an RV park similar to what is being proposed. My daughter and her friend were both sexually assaulted by a gentleman that was residing in the park. He was a convicted sex offender and no-one was aware because background checks are not conducted on RV park residents. When I received the letter stating the proposal for the conditional use permit my PTSD took over and I have not slept nor eaten well. This has consumed me. I now have a 10 year old and 3 year old daughters. I have almost irrational fears with the thought of this nightmare happening to us again or another family.

My daughter who is now 28 has long lasting emotional issues and is still in counseling. I fear for the hundreds of children being put at risk with this type of park being placed on 10th st so close to bus stops, schools, houses and apartment buildings. I realize there is always risks of this sort of thing happening on a day to day basis but why increase the risk? We are here to protect our children and this is potentially putting them in harms way.

As homeowners we have the right to feel safe and secure in our homes and surrounding areas and that is why we chose the house we did. We will not feel safe allowing our children to play outside or go to and from school anymore.

I understand there is exceptions and these types of parks are being considered in residential neighborhoods but I implore you to look more at the location and see the negative impact this will have on our community. Duplexes and multi family housing is what this property is zoned for, please lets keep it that way as the community is in much need of that. Let's keep the RV parks on the outskirts of town or down by the river where people will make this a destination and want to come here.

We strongly disagree and object to the proposed RV Park

The Shelquist Family

Matt Shelquist-971-219-8882
Laure Shelquist-971-219-6802

Paula Webb

Subject: FW: Application CUP 207-22 resident comment

From: Amie Baldy <amiebaldy5@gmail.com>
Sent: Wednesday, January 04, 2023 7:56 PM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Subject: Application CUP 207-22 resident comment

WARNING: Email from external source. Links and attachments could pose security risks. Investigate sender and think before you click.

Jan 3, 2023

Amie Baldy
Brian Baldy
2628 W 13th St The Dalles
541-993-5045
Our tax Account numbers: 8451, 8448, 16588, 16586

To: City of The Dalles Community Development Department,
Re: CUP 207-22

Subject: Strong objection to proposal to approve land use of 2514 W 10th St The Dalles to construct a 9 space RV Park.

We are home owners at 2628 W 13th St The Dalles owning four tax lots for a total of 2.29 acres. We have lived at our residence for 19 years. Our neighborhood is all single family homes. The sidewalks on W 13th and W 10th are few and far between which causes a safety concern with local residents walking their dogs, children bicycling and walking to and from their school bus stops. The number of scheduled bus stops daily on W 13th during the 10 months of school is 6 times daily between 7AM-3:30PM. The school buses stop on W 10th street near American Village Apartments/Eric Ct 6 times between 7AM-3:30PM 10 months of the year. The RV campground would be within the high density residential area of 2400 W 10th St near American Village Apartments. The proposed location is a terrible location for a year round RV campground no matter the number of camping spots. RTD Development's plan to build a campground for 9 RV spots in the middle of a high density residential neighborhood does not meet the City of The Dalles' comprehensive plan to meet projected housing needs. Upon review of City of The Dalles Housing Strategies Report dated April 2017, the use of this 3.6 acre parcel fits within the city's goal to approve multi-family housing in the form of duplex, 4-plexes, townhomes, cottages and apartments. It would be a misuse of limited prime residential property within city limits to approve an RV campground. Our opposition is also based on the highly probable negative impact that the RV campground will place on the resalability and cause a lower resale value of our home. Together, with our neighbors and friends, we ask that your committee carefully and thoughtfully weigh in our factual comments and concerns. We do believe that an RV campground is needed in The Dalles, however not in a high density residential neighborhood and certainly not at 2514 W 10th St.

Sincerely,

Amie L Baldy

Brian J Baldy

CITY of THE DALLES
313 COURT STREET
THE DALLES, OREGON 97058

(541) 296-5481 ext. 1125
COMMUNITY DEVELOPMENT DEPARTMENT

STAFF REPORT
CUP 203-22

Applicant:	Maul, Foster & Alongi, Inc.
Procedure Type:	Quasi-Judicial
Hearing Date:	February 16, 2023
Property Owner:	Design LLC
Assessor's Map:	Township 2 North, 13 East, Section 28
Tax Lot:	708
Address:	3400 River Road
Zoning District:	"I" Industrial
Prepared By:	Joshua Chandler, Community Development Director

REQUEST: Applicant is requesting approval to site and construct a sanitary sewer lift station with underground storage tanks, meter and valve vaults, diesel generator, underground utilities and associated security fencing and gates. Once completed, these improvements will be owned and maintained by the City of The Dalles. Approval of the Conditional Use Permit (CUP) will establish a Community Facilities Overlay (CFO) on the site.

NOTIFICATION: Property owners within 300 feet, City Departments and Franchise Utilities.

COMMENTS RECEIVED: One comment received as of the date this report was published (February 9, 2023).

- *February 6, 2023: David Ison, WSDOT Aviation*
  Washington Department of Transportation Aviation acknowledged the request and confirmed no airspace or compatibility issues with the Columbia Gorge Regional/The Dalles airport.

REVIEW CRITERIA:

I. City of The Dalles Municipal Code, Title 10 Land Use and Development

Section 10.3.010.040 Applications

A. Acceptance

FINDING #1: Applicant submitted a pre-application, Site Team, request on June 13, 2022 for consideration of a CUP application. This meeting was held on June 22, 2022. Following the Site Team meeting, Staff requested additional information to include with the application material. On January 20, 2023, the Applicant submitted all required information. **Criterion met.**

B. Completeness

FINDING #2: The application was deemed complete on January 23, 2022. **Criterion met.**

Section 10.3.020.050 Quasi-Judicial Actions

A. Decision Types.

FINDING #3: Pursuant to The Dalles Municipal Code (TDMC), CUP applications are processed as Quasi-Judicial Actions. **Criterion met.**

B. Staff Report.

FINDING #4: This document serves as the staff report. **Criterion met.**

C. Public Hearings.

FINDING #5: The public hearing is scheduled for February 16, 2023, which is within 45 days from the date the application was deemed complete. **Criterion met.**

D. Notice of Hearing.

FINDING #6: Appropriate mailings to property owners within 300 feet and notice to affected departments and agencies were made on February 2, 2023. **Criterion met.**

Section 10.3.050.030 Applications

A. Applications.

FINDING #7: Digital copies of all required plans have been submitted. Staff determined no paper copies are required at this time. **Criterion met.**

B. Review.

FINDING #8: See Finding #3. Staff will include as a Condition of Approval that all final plans, consistent with all Conditions of Approval, be approved by the Community Development Director and the City Engineer prior to issuance of a building permit. **Criterion met with conditions.**

Section 10.3.050.040 Review Criteria

A. Permitted Conditional Use. The proposed use is conditionally permitted in the zone district where it is proposed to be located.

FINDING #9: Pursuant to TDMC 10.5.090.030, Community Facilities sites are allowed conditionally in the Industrial (I) zone and are subject to the provisions of Article 5.100. **Criterion met.**

B. Standards. The proposed use conforms to all applicable standards of the zone district where the use is proposed to be located. The proposed use will also be consistent with the purposes of this Title, and any other statutes, ordinances, or policies that may be applicable.

FINDING #10: All applicable standards of TDMC are addressed within this staff report. **Criterion met.**

C. Impact. The proposed structure(s) and use(s) shall be designed and operated in such a way as to meet the standards of this Article. Impacts caused by the construction of the conditional use shall not be considered regarding a decision on the validation of the application.

1. Noise impacts across the property line shall not exceed 60 decibels. Noise related to traffic impacts shall not be included in this determination. Nothing in this Article shall modify other noise ordinance standards as adopted by the City.

FINDING #11: The proposed development will include one generator used for emergency scenarios (ex., power failure) and periodic maintenance only. This generator will be enclosed within a Level 2 sound attenuation enclosure designed to dampen operational sound. Applicant provided information demonstrating that noise impacts will not exceed 60 decibels along the River Road frontage; however, the decibel range would exceed 60 decibels along the north and west property lines as originally presented. Following additional discussion with Staff, the Applicant proposed installing a sound attenuating barrier along the north and west property lines, which would reduce the decibel to below 60 decibels. Staff will include as a Condition of Approval that the installation of the sound attenuating barrier, as proposed, be shown on a revised site plan and installed prior to operation. **Criterion met.**

2. Lighting impacts across the property line shall not exceed 0.5 foot-candles (a foot-candle is the amount of light falling upon a 1-square-foot surface which is 1 foot away from a 1-candlepower light source.)

FINDING #12: Applicant is proposing to install one LED lighting unit under the roof of the electrical panel weather protection structure, located approximately 90' from River Road. Applicant submitted a photometric plan, which demonstrates the proposed light will not exceed 0.5 foot-candles across the property line. **Criterion met.**

3. Dust and other particulate matter shall be confined to the subject property.

FINDING #13: Applicant is proposing to hard surface portions of the property with asphalt and crushed rock, as well as installing hydro seed and a 5' landscaping buffer along River Road. Additional hydro seed will be installed in portions outside of the property line including the entire construction site. Staff determined the proposed surfacing will adequately mitigate dust and debris from impacting neighboring properties. **Criterion met.**

4. *The following odors shall be completely confined to subject property:*
    a. *Industrial and/or chemical grade chemicals, solvents, paints, cleaners, and similar substances;*
    b. *Fuels; and*
    c. *Fertilizers, manure, or other animal waste products, other than for landscape installation and maintenance.*

FINDING #14: Applicant does not intend on using any odorous materials listed in TDMC 10.3.050.040 (4), other than for landscape installation and maintenance. The sanitary sewer lift station will include an automatic flushing system that will reduce sedimentation in the pump, reducing unpleasant odors on and around the property. **Criterion met.**

5. *Vibrations shall not be felt across the property line.*

FINDING #15: The proposed sanitary sewer lift station is not expected to generate vibrations across the property line. Once constructed, the City's Public Works Department will conduct routine inspections of pumps, motors and drives for unusual noise, vibration, heating and leakage, and will take appropriate action following an established Operations and Maintenance Manual to correct abnormal operating conditions. **Criterion met.**

6. *The transportation system is capable, or can be made capable, of supporting the additional transportation impacts generated by the use. Evaluation factors shall include, but are limited to:*
    a. *Street designation and capacities;*
    b. *On-street parking impacts;*
    c. *Bicycle safety and connectivity;*
    d. *Pedestrian safety and connectivity; and*

FINDING #16: Other than routine maintenance to the sanitary sewer lift station, no employees will be on-site and the facility will be closed to the public, thus generating minimal traffic. This development is required to install full right-of-way (ROW) improvements along the River Road frontage. Improvement requirements will be addressed in subsequent findings. **Criterion met.**

7. *In areas designated as Historic Districts, proposed development and redevelopment shall first require review and approval of the Historic Landmarks Commission in accordance with the procedures of Chapter 11.12 - Historic Resources.*

FINDING #17: The proposed use is not located in a historic district or structure. **Criterion not applicable.**

Chapter 10.5 Zone District Regulations

Article 9.090 Industrial District

Section 10.5.090.030 Conditional Uses

I. Community facilities sites, subject to the provisions of Article 5.100: Community Facilities Overlay District.

FINDING #18: This development proposal is for a sanitary sewer lift station, classified as a Community Facility Site, subject to the provisions of Article 5.100 Community Facilities Overlay District. **Criterion met.**

Section 10.5.090.060 Exceptions to Standards

B. Parking

FINDING #19: Other than routine maintenance to the sanitary sewer lift station, no employees will be on-site and the facility will be closed to the public. Staff determined parking is exempt for the proposed use. **Criterion not applicable.**

Section 10.5.090.070 Performance Standards

FINIDNG #20: Pursuant to TDMC 10.5.090.070, the proposed use and operation shall comply with all applicable local, state, and federal standards, and shall not create a nuisance due to odor, vibration, noise, dust, vector control, smoke or gas. Applicant shall prevent the collection of nuisance materials and debris from being windblown or migrating off site. Staff will include these standards as Conditions of Approval. Any nuisance concerns that may arise with this development will be addressed on a complaint basis. **Criterion met with conditions.**

Article 5.100 CFO Community Faculty Overlay District

Section 5.100.020 Allowed Uses

K. Public Utility Facilities

FINDING #21: The proposed sanitary sewer lift station is classified as a "Public Utility Facility" and will be owned and operated by the City of The Dalles. **Criterion met.**

Section 10.5.100.050 Development Standards

FINDING #22: Staff determined this proposal complies with the development standards of the CFO District. Landscaping and access requirements will be addressed in subsequent findings. **Criterion met.**

Section 10.5.100.060 Master Plans

A. General.

FINDING #23: Applicant provided a narrative and detailed plans of the proposed sanitary sewer lift station. **Criterion met.**

Chapter 10.6 General Regulations

Article 6.010 Landscaping Standards

10.6.010.050 Screening

FINDING #24: Applicant is proposing to install a 6' chain link fence around the perimeter of the sanitary sewer lift station. **Criterion met.**

Section 10.6.010.070 Required Landscaping by Zone

Zone I: Site Requirement: A 5-foot landscaping buffer adjacent to all public right-of-way, but limited to 10% of the area of the entire site.

FINDING #25: Applicant is proposing a 5' landscaping buffer along River Road. Landscaping is required to include a minimum of 40% live materials and irrigated to ensure survival. See Finding #29 for timing of installation. **Criterion met with conditions.**

Article 6.050 Access Management

10.6.050.030 Access Standards

FINDING #26: The subject property is accessed from an existing access easement under the same ownership. **Criterion not applicable.**

Article 6.060 Driveway and Entrance Standards

10.6.060.020 General Standards

FINDING #27: The subject property is accessed from an existing access easement under the same ownership. **Criterion not applicable.**

Article 6.100 Vision Clearance

FINDING #28: Applicant demonstrated compliance with vision clearance on the submitted site plans. **Criterion met.**

Chapter 10.10 Improvements Required with Development

10.10.030 Timing of Improvements

FINDING #29: The subject property is a portion of the former Northwest Aluminum Company aluminum smelter plant. Following the closure of the plant in the 1980s, the plant property had multiple partitions and subsequent land transactions. This parcel is encumbered by a previously approved delayed development agreement along with two abutting parcels (tax lots 700, 708), which requires the property owner to install ROW improvements for all three parcels at the time of development. In addition, the property owner will be required to install a 5' landscaping buffer along all three parcel street frontages. Staff will include as a Condition of Approval that the property owner and Applicant coordinate the timing of these improvements with the Community Development Director and City Engineer. Staff anticipates the installation of improvements for all three parcels will occur concurrently. **Criterion met with conditions.**

Section 10.10.040 Pedestrian Requirements

FINDING #30: Applicant is required to coordinate the installation of a 5' sidewalk along River Road. See Finding #29 for timing of improvements. Staff will include this requirement as a Condition of Approval. **Criterion met with conditions.**

Section 10.10.050 Bicycle Requirements

FINDING #31: Applicant is proposing to install a 5' bicycle lane along the frontage of River Road. See Finding #29 for timing of improvements. Staff will include the

installation of all proposed improvements as a Condition of Approval. **Criterion met with conditions.**

Section 10.10.060 Street Requirements

C. Improved to Standards

FINDING #32: Pursuant to TDMC 10.10.060 (C), "Where a development site abuts an existing public street not improved to City standards, the abutting street shall be improved to City standards along the full frontage of the property concurrent with development." Existing street frontage along River Road is unimproved. The property owner is required to install ROW improvements along River Road. See Finding #29 for timing of improvements. Staff will include this requirement as a Condition of Approval. **Criterion met with conditions.**

10.10.080 Public Improvement Procedures

FINDING #33: Prior to the installation of public facilities, a pre-construction meeting is required between the City and the Applicant. Staff will include this requirement as a Condition of Approval. **Criterion met with conditions.**

10.10.090 Final Inspection Procedure

FINDING #34: Upon completion of ROW improvements, the City Engineer will conduct a final inspection of all improvements to ensure they meet City standards before the City formally accepts them for ownership, operation or maintenance. Applicant shall warranty all public improvements against any defects and workmanship provided for a period of one year from the date of the City's final acceptance of the work. Staff will include these requirements as Conditions of Approval. **Criterion met with conditions**.

Section 10.10.100 Franchise Utility Installations

A. General

FINDING #35: Applicant is required to coordinate all franchise utility requirements, timing of installation, and payment for services with the appropriate utility provider. In addition, Applicant shall coordinate with the City Engineer to determine any street lighting requirements. All resulting franchise utility requirements must be shown on a site plan. Staff will include these requirements as Conditions of Approval. **Criterion met with conditions.**

RECOMMENDATION: Based on the application materials and findings demonstrating compliance with the applicable criteria, **Staff recommends approval of Conditional Use Permit 203-22, subject to the following conditions of approval**. Any modifications to the approved plans other than those required by this decision will require a new land use application and approval.

1. **Conditions Required Prior to Final Plan Approval:**
    a. Final plan submission must meet all the requirements of The Dalles Municipal Code, Title 10 Land Use and Development, and all other applicable provisions of The Dalles Municipal Code.

b. All final plans, consistent with all Conditions of Approval, shall be approved by the Community Development Director and the City Engineer prior to the issuance of a building permit.

c. The sound attenuating barrier along the north and west property lines must be shown on a revised site plan.

d. All construction/design plans for public infrastructure, improvements, or rights-of-way (ROW) shall be approved by the City Engineer.

e. Applicant is required to coordinate any franchise utility requirements, timing of installation, and payment for services with the appropriate utility provider.

2. Conditions Required During Construction of Public Improvements and Franchise Utilities

a. A pre-construction meeting including the City Engineer and Construction Inspector is required prior to construction or site prep work. All public improvements shall first obtain design and construction approval from the City Engineer.

b. Applicant must warranty all public improvements against defect for one year from the date of final acceptance by the City.

c. All proposed franchise utilities are required to be installed in accordance with each utility provider.

d. All proposed improvements included within the plan set must be installed.

3. Conditions Required Prior to Occupancy

a. Applicant must install the sound attenuating barrier along the north and west property lines.

b. Upon completion of ROW improvements, the City Engineer will conduct a final inspection of all improvements to ensure they meet City standards before the City formally accepts them for ownership, operation or maintenance.

4. Ongoing Conditions

a. All lighting shall not directly illuminate adjoining properties. Lighting sources shall be shielded and arranged so as not to produce glare in any public ROW, with a maximum illumination at the property line not to exceed 0.5 foot-candles.

b. All development must adhere to the approved site plan for this development.

c. The proposed use and operation shall comply with all applicable local, state, and federal standards, and shall not create a nuisance due to odor, vibration, noise, dust, vector control, smoke or gas. Applicant shall prevent the collection of nuisance materials and debris from being windblown or migrating off site.

d. All landscaping, buffering, and screening must be adequately maintained and irrigated to ensure the survival of plant materials. Landscaping must include no less than 40% of live plant material.

e. Applicant shall warranty all public improvements against any defects and workmanship provided for a period of one year from the date of the City's final acceptance of the work.

f. The timing of right-of-way improvements and 5' landscaping buffer must be coordinated with the Community Development Director and City Engineer.

COMMISSION ALTERNATIVES:

1. **Staff recommendation:** The Planning Commission move to adopt Resolution PC 613-22 approving Conditional Use Permit 203-22, with the proposed Conditions of Approval included with this report, based upon the findings of fact and conclusions of law set forth in the Agenda Staff Report.
2. If the Planning Commission desires to deny Conditional Use Permit 203-22, move to direct staff to prepare a resolution of denial. The Planning Commission shall identify the specific criteria concerning this decision.

Paula Webb

Subject: FW: CUP 203-22
Attachments: KDLS-sewer-fac-2-6-23.pdf

From: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Sent: Monday, February 06, 2023 2:01 PM
To: Paula Webb <pwebb@ci.the-dalles.or.us>
Subject: FW: CUP 203-22

Paula,

Could you file this in the associated land use folder? Thanks.

Joshua Chandler (he/him/él)
Community Development Director
City of The Dalles
541-296-5481 x1121

From: Ison, David <IsonD@wsdot.wa.gov>
Sent: Monday, February 06, 2023 12:55 PM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Cc: MacArthur, John P <MacartJ@wsdot.wa.gov>
Subject: CUP 203-22

M Chandler,

WSDOT Aviation Division reviewed this proposal on 02/06/2023. There appears to be no airspace or compatibility issues in reference to the nearby Columbia Gorge Regional/The Dalles airport. No FAA notifications are suggested. For further guidance on FAA reporting requirements see: https://oeaaa.faa.gov/oeaaa/external/portal.jsp

See attached mapped analysis.

Sincerely,

David Ison, PhD | Aviation Planner
Airport Land Use Compatibility & Emerging Aviation Technologies
Washington State Department of Transportation
isond@wsdot.wa.gov C: 360-890-5258

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

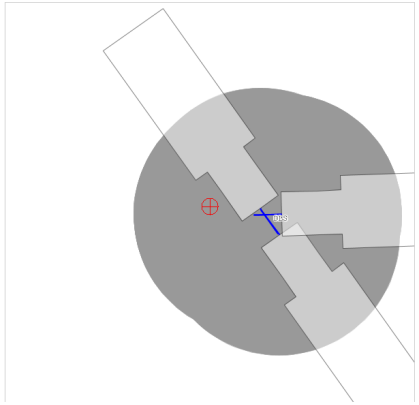
The tool below will assist in applying Part 77 Notice Criteria.

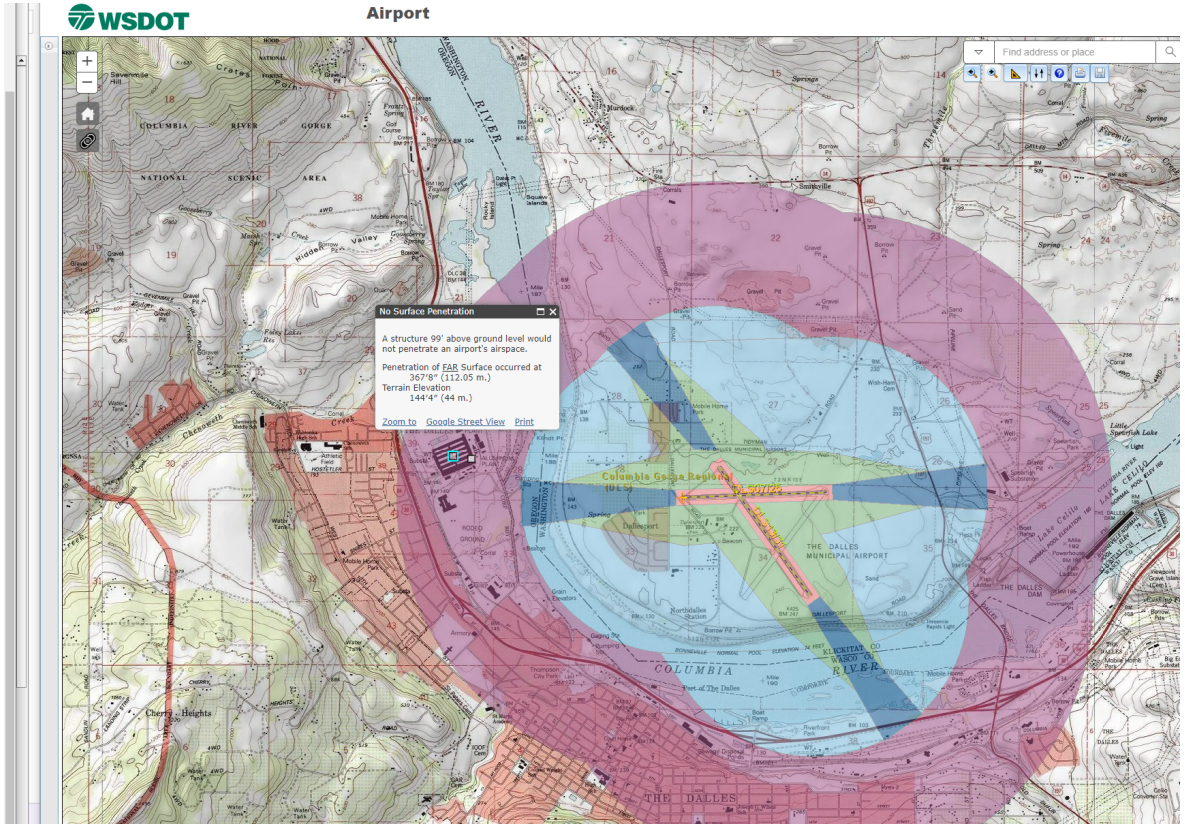
* Structure Type:	WASTE_MANAGEMENT | Waste Management Facility Please select structure type and complete location point information.
Latitude:	45 Deg 37 M 28 S N
Longitude:	121 Deg 12 M 24 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	145 (nearest foot)
Structure Height :	99 (nearest foot)
Is structure on airport:	No Yes

Submit

Results

You do not exceed Notice Criteria.





City of The Dalles
Community Development Dept
313 Court Street
The Dalles, OR 97058
(541) 296-5481, ext. 1125
www.thedalles.org

Application #: CUP 203-22
Filing Fee: $550.00
Receipt #: XBP 134173107
Deemed Complete: 01/23/2023
Ready to Issue:
Date Issued:

Received: 06/13/2022

Conditional Use Permit Application

Applicant
Name: Maul Foster & Alongi, Inc.
Address: 3140 NE Broadway Street
Portland, OR 97232
Phone #: 971-713-3573
Email: cgokcora@maulfoster.com

Legal Owner (if different than Applicant)
Name: Design, LLC
Address: 1600 Amphitheater Parkway
Mountain View, California 94043
Phone #: (650) 618-1499
Email: pgammons@google.com

Property Information
Address: 3313 W 2nd Street, The Dalles, OR 97058
Map and Tax Lot: 2N 13E 28 708
Zone: Enterprise, Industrial
Overlay: N/A
City Limits: (•) Yes ( ) No
Size of Development: 0.29 acres
Geohazard Zone: N/A
Flood Designation: N/A

Project Information
(•) New Construction ( ) Expansion/Alteration ( ) Change of Use ( ) Amend Approved Plan
Current Use of Property: Industrial
Proposed Use of Property: Community Facility Overlay (municipal sanitary sewer lift station)

Briefly Explain the Project:
The proposed facilities include a sanitary sewer lift station with underground storage tanks, meter and valve vaults, diesel generator, underground utilities and associated security fencing and gates. Once completed, these improvements will be owned and maintained by the City of The Dalles.

Proposed Building(s) Footprint Size (ft^2): -
Total Number of Parking Spaces Proposed: - 1
Parking Lot Landscaping Proposed (ft^2): -
Total Landscaping Proposed (ft^2): - 360
Percentage of Irrigated Landscaping: - 100

Project Information (continued)

Economic Development Information

☑ Proposed Project is in the Enterprise Zone

(for questions regarding Enterprise Zones, please contact the Assistant to the City Manager's Office at (541) 296-5481, ext. 1150)

Full Time Equivalent (FTE) jobs are currently provided: -

FTE jobs are expected to be created by the proposed project: -

---

In addition to the requirements of Article 3.010: Application Procedures, this application must be accompanied by the information required in Article 3.050 Site Plan Review, contained in Title 10 Land Use and Development of the City of The Dalles Municipal Code.

Upon submission of this application, please provide the following material:

Site Team / Pre-Application:
- Completed application
- Concept plan (PDF recommended)
- 50% application fee

Official Conditional Use Permit Review:
- Remainder of application fees
- Professional plans (PDF required)

Following an approved Site Plan Review determination, plans with all necessary changes must be submitted to City Staff for final review. Please provide the following number of copies for review:

- 1 – PDF of final plans
- 1 – 11" x 17" set of final plans
- 2 – Full size sets of construction detail plans

Following final plan review, please provide the following number of copies:

- 1 – PDF of final plans
- 2 – 11" x 17" sets of final plans
- 4 – Full size sets of construction detail plans

Signature of Applicant

DocuSigned by: CEM GOKCORA C1684543B2EE46E...

12-Dec-2022

Date

Cem E. Gokcora
Senior Engineer

Signature of Property Owner

DocuSigned by: Patrick Gammons A5AC67FB5E3E47C...

12-Dec-2022

Date

Patrick Gammons
Director

CONDITIONAL USE PERMIT APPLICATION (CUP 203-22) NARRATIVE FOR RIVERVIEW SANITARY LIFT STATION

3700 RIVER ROAD, THE DALLES, OREGON

Prepared for
DESIGN, LLC
January 20, 2023
Project No. 1663.08.027

Prepared by
Maul Foster & Alongi, Inc.
3140 NE Broadway Street, Portland, OR 97232

MAUL FOSTER ALONGI

CONDITIONAL USE PERMIT APPLICATION FOR RIVERVIEW SANITARY LIFT STATION

3700 RIVER ROAD, THE DALLES, OREGON

The material and data in this report were prepared under the supervision and direction of the undersigned.

MAUL FOSTER & ALONGI, INC.

Caitlin Bryan
Program Manager

Cem Gokcora, PE
Senior Engineer

CONTENTS

1 BACKGROUND INFORMATION

1.1 Site Information

Address: 3700 River Road, The Dalles, OR 97058

Zoning: Base Zones—"I" Industrial

Overlay Districts—Enterprise Zone

Tax Lots: 2N 13E 28 708

Site Size: 0.29 acres

1.2 Proposal

Applicant is requesting approval to site and construct a sanitary sewer lift station with underground storage tanks, meter and valve vaults, diesel generator, underground utilities, asphalt/concrete surfacing and associated security fencing with gates. The proposed Riverview Lift station (lift station) will be constructed to serve approximately 95 acres of industrial development. The lift station also will receive discharge from a neighboring industrial parcel (Hydro Extrusions). Upon acceptance of the facility construction by the City of the Dalles (the City), the ownership of the improvements will be transferred to the City. Approval of the CUP will establish a Community Facilities Overlay (CFO) on the site.

1.3 Applicable Sections of Code

The proposed development is within the City municipality and urban growth boundary and is subject to the Conditional Use Permit criteria in section 10.3.050.040 and the Site Plan Review criteria in section 10.3.030.040 of The Dalles, Oregon Municipal Code (the Municipal Code).

2 CITY OF THE DALLES STANDARD DOCUMENT

2.1 10.3.050.030 Review Procedures

1. **Applications. In addition to the requirements of Article 3.010: Application Procedures, conditional use permit applications shall be accompanied by at least 15 copies of a concept site plan, and, when required, 2 copies of the detailed landscape and construction/design plans, per the provisions of Article 3.030: Site Plan Review.**

   Response: The applicant has followed the requirements of Article 3.010, submitted their CUP application for a Site Team meeting, attended the City held Site Teams meeting on June 22, 2022, in which the planning process for the proposed application was discussed. The CUP

application has been finalized with this narrative and the attached Site Plan addressing the Site Teams notes (issued on June 27, 2022, by the City) summarizing the items discussed during the meeting. The applicant will meet this criterion by providing a minimum of 15 copies of the conceptual site plan and a minimum of two copies of the 90% design plans for the sanitary sewer lift station upon request by The City.

2. **Review: Conditional use permits shall be processed as quasi-judicial actions, per the provisions of Section 10.3.020.050: Quasi-Judicial Actions and approved or denied by the Commission.**

   Response: The applicant recognizes and acknowledges the criterion set in Section 10.3.020.050 of the Municipal Code as applicable.

3. **Review: Site plan approval, and when required, detailed landscape plan and detailed construction design plan approval, per the provisions of Article 3.030: Site Plan Review, shall always be a condition of conditional use approval. Concept site plans can be submitted for review by the Commission in lieu of the detailed site plan required for building permit approval.**

   Response: The applicant recognizes the criterion as applicable. The applicant follows the requirements outlined in subsection C of Section 10.3.050.030 of The Municipal Code and is submitting a detailed site plan with this application. See responses to 5 through 7 below.

4. **The Commission may require a performance guarantee, per the provisions of Section 10.9.040.060(I): Performance Guarantee to ensure compliance with any conditions of approval.**

   Response: The applicant will meet this criterion if required by the Commission.

5. **Concept Review: The City offers a two-stage concept approval process for conditional uses. The applicant may request initial concept approval using the quasi-judicial process. If approval of the concept is granted, the applicant must then submit a detailed site plan and get final approval through the site plan review process.**

   Response: The applicant has been coordinating with the City Engineer regarding the engineering design for the lift station, submitted a detailed plan along with technical specifications and have addressed one round of review comments. A detailed site plan reflecting the City reviewed engineering design is attached with this application narrative for final approval through the site plan review process.

6. **Applicants choosing the concept option must provide sufficient information in the form of site plans, narratives, or other documents to allow the Commission to make an initial decision.**

   Response: This criterion is not applicable as the applicant is submitting a detailed site plan for final approval.

7. **The Commission may impose conditions or require performance guarantees on concept approval in the same manner as for regular conditional use applications.**

Response: This criterion is not applicable as the applicant is submitting detailed site plan for final approval.

2.2 10.3.050.040 Review Criteria

8. **Permitted Conditional Use. The proposed use is conditionally permitted in the zone district where it is proposed to be located.**

   Response: The site is located in "I" Industrial zoning district with no residential property nearby. The proposed use for the site is Public Utility Facility; and it is allowed in the Communities Facilities Overlay Zone. According to paragraph I in Section 10.5.090.030 of the Municipal Code, community facility sites (subject to provisions of Article 5.100: Communities Facilities Overlay District) are allowed as conditional use, subject to review and approval by the City per the appropriate provisions of Article 3.050. The criterion has been met.

9. **Standards. The proposed use conforms to all applicable standards of the zone district where the use is proposed to be located. The proposed use will also be consistent with the purposes of this Title, and any other statutes, ordinances, or policies that may be applicable.**

   Response: The proposed use of the site will be for public utility facility purposes only in conformance with all development standards set under Section 10.5.090.040 of the Municipal Code. The lot size is approximately 12,700 square feet, exceeding the 10,000 square feet minimum lot size for the Industrial District. A ten feet setback along the River Road right of way will be provided in compliance with the applicable development standards. No above ground building is proposed for the site with the exception of an approximately ten feet tall steel frame structure for electrical panel weather protection. Frontage improvements including a five feet wide sidewalk within River Road right of way are proposed as shown in the attached River Road Frontage Improvements plan set. Off-street parking with over 1,000 square feet of gravel surfacing for up to two City Public Works vehicles will be provided on site. Six feet tall chain-link fence is proposed around the lift station development for site security. A five feet landscape buffering adjacent to the public right of way (limited to ten percent of the area of the entire site) will be provided in compliance with Article 6.010. The site will be accessed via a 32 feet wide driveway approach and a shared private roadway off of River Road. A 20 feet wide double swing gate will be provided at the entrance of the chain-link fenced facility.

   The proposed use of the site will also be consistent with all applicable titles, statutes, ordinances, and policies. The applicant will meet these criteria.

10. **Impact. The proposed structure(s) and use(s) shall be designed and operated in such a way as to meet the standards of this Article. Impacts caused by the construction of the conditional use shall not be considered regarding a decision on the validation of the application.**

    A. **Noise impacts across the property line shall not exceed 60 decibels. Noise related to traffic impacts shall not be included in this determination. Nothing in this Article shall modify other noise ordinance standards as adopted by the City.**

Response: The proposed site generator will include a Level 2 sound attenuation enclosure. The generator is proposed to be located approximately 100 feet from River Road right of way, buffered with a five feet landscape strip along the right of way. Furthermore, the site is located within the City's Industrial District with no residential properties nearby. The applicant will meet this criterion.

B. Lighting impacts across the property line shall not exceed 0.5 foot-candles (a foot-candle is the amount of light falling upon a 1-square-foot surface which is 1 foot away from a 1-candlepower light source.)

Response: One LED lighting unit is proposed under the roof of the electrical panel weather protection structure, which is located approximately 90 feet from the River Road right of way, as shown in the attached design drawings (sheet E001 and E005). This LED lighting unit is not expected to cast lighting that exceeds 0.5 foot-candles across the property line. The applicant will meet this criterion.

C. Dust and other particulate matter shall be confined to the subject property.

Response: Best management practices will be implemented to reduce the movement of dust and particulate matter on-site during the site construction period. Upon construction completion, the site with all operable surfaces paved with asphalt and parking areas that will be surfaced with compacted gravel is not expected to generate dust or other particulate matter that will travel offsite during operation. The applicant will meet this criterion.

D. The following odors shall be completely confined to subject property: (1) Industrial and/or chemical grade chemicals, solvents, paints, cleaners, and similar substances (2) Fuels; and (3) Fertilizers, manure, or other animal waste products, other than for landscape installation and maintenance.

Response: The proposed lift station is not expected to generate any strong odors associated with industrial or chemical grade chemicals, fuels, or animal waste products other than for landscape installation and maintenance. Any odors that are generated should be confined to the property. Additionally, the lift station pumping unit set up will be equipped with a mixing flush valve which will provide an effective and a fully automatic way of continuously keeping pump sump free of sludge by flushing the sump at the beginning of every pumping cycle. Sedimentation in the sump will be greatly reduced, and unpleasant odors in and around pumping station are virtually eliminated. Furthermore, the site is located within the City's Industrial District with no nearby residential districts. The applicant will meet this criterion.

E. Vibrations shall not be felt across the property line.

Response: The proposed lift station is not expected to generate any strong vibrations that can be felt across the property. The Public Works staff will conduct periodic inspections which would include observations of pumps, motors and drives for unusual noise, vibration, heating and leakage, and will take the appropriate action following the Operations and Maintenance Manual of the lift station to correct abnormal operating conditions. The applicant will meet this criterion.

F. The transportation system is capable, or can be made capable, of supporting the additional transportation impacts generated by the use. Evaluation factors shall include, but are limited to: (1) Street designation and capacities; (2) On-street parking impacts; (3) Bicycle safety and connectivity; (4) Pedestrian safety and connectivity; and (5) Transit capacity and efficiency.

Response: The proposed development will not generate any significant traffic trips due to its proposed municipal/public utility use. The only additional traffic resulted from the proposed development will be associated with the operation and maintenance of the lift station by the City of The Dalles Public Works staff. The applicant will meet the street designation and capacities criterion.

Furthermore, the street connecting to the site is private and will not be available to the public. The project proposes off-street parking for Public Works' vehicles and does not include any on-street parking. The proposed frontage improvements will provide bicycle and pedestrian connectivity along the frontage of the proposed development. The access to the site will be limited to the Public Works Staff for operation and maintenance, and authorized contractors for maintenance. Transit capacity and efficiency evaluation factor is not applicable to this proposal.

G. In areas designated as Historic Districts, proposed development and redevelopment shall first require review and approval of the Historic Landmarks Commission in accordance with the procedures of Chapter 11.12 - Historic Resources.

Response: The proposed development is not located within a designated Historic District. The criterion is not applicable for this proposal.

2.3 10.3.030.040 Review Criteria

1. **City Ordinance Provisions. All the provisions from the City ordinances have been met or will be met by the proposed development.**

   Response: The applicant will meet this criterion.

2. **Public Facilities Capacity. Adequate capacity of City facilities for water, sanitary sewer, storm sewer, and streets and sidewalks can and will be provided to, and where applicable, through the subject property in order to: (1) meet connectivity standards per the Transportation System Plan and other adopted plans and engineering standards of the City of The Dalles; and (2) provide for future development of surrounding property**

   Response: The applicant meets these requirements where applicable. The design plans include utility connections for water, power and sanitary sewer that follow the City code.

   All drivable site surfacing is proposed to receive asphalt pavement consistent with the City requirements for operable areas of sewage pumping facilities. Stormwater generated within the

footprint of the proposed impervious surface will be routed to vegetated areas of the site for infiltration, and will be contained on site.

Five feet landscape buffer which is comprised of erosion control seeding and street trees at 30 feet (max) spacing per City ordinance 10.6.010.070, will be provided along east property line (abutting the public right-of-way).

The applicant has been coordinating with Northern Wasco People's Utility District (PUD) for power service extension to the site. Based on these coordination meetings, Northern Wasco PUD will serve the site through an existing power easement along east property line. The applicant is currently coordinating with the PUD on regular power service request.

One LED lighting unit is proposed under the roof of the electrical panel weather protection structure as shown in the attached design drawings (sheet E001 and E005).

The site plan also incorporates a driveway approach design consistent with City code requirements. Other requirements provided in this section are not applicable to the application or are being satisfied through frontage improvement requirements/local improvement district agreements in tandem with the north adjacent parcel.

3. **Arrangement of Site Elements: Promote pedestrian, bicycle, and vehicular safety and welfare. For housing developments this standard is met through compliance with the applicable zone standards and the requirements of this Article, as applicable.**

   Response: The proposed lift station will ultimately be transferred to the City upon City's acceptance of the construction, and access to the site will be supervised by City staff. The criterion is not applicable or are being satisfied through frontage improvement requirements/local improvement district agreements in tandem with the north adjacent parcel.

4. **Arrangement of Site Elements: Preserve and maintain public amenities and significant natural features. For housing developments this standard is met through compliance with the applicable zone standards and the requirements of this Article, as applicable.**

   Response: The applicant notes that the public does not have access to the site. There are no significant natural features on the site. The criterion is not applicable.

5. **Arrangement of Site Elements: Avoid traffic congestion. For housing developments this standard is met through compliance with subsection B, above.**

   Response: The proposed development does not have a significant impact on existing traffic conditions, as the facility will not generate significant traffic. The only additional traffic resulted from the proposed development will be City of The Dalles Public Works staff for operation and maintenance of the lift station. The applicant will meet this criterion.

6. **Arrangement of Site Elements: Minimize potential adverse impacts on surrounding properties. For housing developments this standard is met through compliance with the applicable zone standards and the requirements of this Article, as applicable.**

Response: The site is located in "I" Industrial zoning district with no residences nearby. The proposed development will not have any significant adverse impacts on adjacent properties. The applicant will meet this criterion.

7. **Design Standards – All Development: Scale. Buildings with walls greater than 80 feet in length shall include street façades that are varied and articulated at regular 20-, 30-, 40- or 50-foot intervals along the façade to provide the appearance of smaller buildings. Articulation shall be achieved through the use of offsets, jogs, variation of finishes, projections, windows, bays, porches, traditional storefront elements, entries or other similar distinctive changes.**

   Response: The proposed development does not include any buildings. The criterion is not applicable.

8. **Design Standards – All Development: Parking Location. With exception of driveway parking, parking areas and parking lots shall not be located in the front yard setback.**

   Response: The applicant proposes up to two parking spaces for the site which will not be located in the front yard setback. The criterion has been met.

9. **Design Standards – All Development: Fences/Walls. Fences and walls in front yards and corner side yards, individually or in combination, shall be no more than 4 feet in height. A fence and wall are considered combined when located less than 5 feet apart at grade.**

   Response: The applicant proposes six feet tall chain link fence along the perimeter of the site for safety and security purposes. Public access is prohibited to the site and higher fences will ensure the sites security criterion are met.

10. **Design Standards – All Development: Parking Lot Landscaping. Where more than 4 contiguous surface parking spaces are provided, the requirements of Section 10.7.030.040(B): Landscaping and Screening Along a Public Right-of-Way shall apply.**

    Response: The applicant proposes up to two parking spaces on the site. The criterion is not applicable.

11. **Design Standards – All Development: Pedestrian/Bicycle Circulation. All primary building entrances in a development shall be connected to the public right-of-way, on-site parking, and open space areas, if any, by a network of paved walkways or sidewalks of not less than 5 feet in width.**

    Response: The proposed development is a municipal sanitary lift station with security fencing, and no public access will be allowed. The criterion is not applicable.

12. **Design Standards – All Development: Building Orientation. Except where a building cannot orient to a street because it is accessed from a private drive or is part of a multi-building complex and does not have street frontage, new buildings shall have their primary orientation to the street utilizing features such as front porches, windows, doorways, walkways, and traditional storefront elements.**

Response: The applicant is not proposing any buildings on the site. The criterion is not applicable.

13. **Design Standards – All Development: Front Porches. The minimum front setback for covered front porches is 5 feet less than the standard front setback for the zone. For purposes of this standard, a covered front porch must connect to the primary building entrance.**

    Response: The proposed site use is municipal sanitary lift station facility. No front porches are proposed with the development. The criterion is not applicable.

14. **Design Standards – All Development: Trim and Details. Trim shall be used around the windows, doors, frieze, and corners of buildings. Details shall be used around the porch, fascia board, and window and door tops.**

    Response: The applicant is not proposing any buildings on the site. The criterion is not applicable.

15. **Design Standards – Residential: In addition to the design standards for all development, the following standards shall apply to the different types of residential development:**

    Response: The site is a proposed industrial development with no residential structures. The criterion is not applicable for this section of the Municipal Code.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

From: Cem Gokcora
To: Joshua Chandler
Cc: Caitlin Bryan; Ellery Howard
Subject: RE: Riverview Lift Station CUP application, CUP 203-22
Date: Monday, February 06, 2023 10:51:39 AM
Attachments: image001.png
image003.png
image004.png
image005.png
image006.png
image007.png
Attachment A_Riverview Lift Station CUP App.pdf
Attachment B_Riverview Lift Station CUP App.pdf

Hi Joshua,

Based on our phone correspondence on 2/2/2023, MFA compiled the following follow up responses regarding the City's requests on supporting documentation/calculations for code review response language associated with City of The Dalles Municipal Code articles 10.3.050.040.C.1 and 10.3.050.040.C.2. In this email, I included the specific code language, the original response followed by the follow up response along with supporting attachments.

10.3.050.040.C.1: Noise impacts across the property line shall not exceed 60 decibels. Noise related to traffic impacts shall not be included in this determination. Nothing in this Article shall modify other noise ordinance standards as adopted by the City.

MFA Response (in 1/20/2023 dated application): The proposed site generator will include a Level 2 sound attenuation enclosure. The generator is proposed to be located approximately 100 feet from River Road right of way, buffered with a five feet landscape strip along the right of way. Furthermore, the site is located within the City's Industrial District with no residential properties nearby. The applicant will meet this criterion.

MFA Follow Up Response: Attachment A includes datasheets from Cummins that lists the rated sound pressure levels of the proposed diesel generator set with Level 2 attenuation enclosure (measured at 23 feet). It also includes a print-out demonstrating sound impact calculations following the Inverse Square Law. The higher end of the anticipated sound pressure levels (72 dBA) from the Cummins' datasheet and the distance from the proposed generator set to the River Road right of way line (as shown in the design drawings) were used in the attached calculations. The sound pressure level at the right of way line is calculated as 59.2 dBA, below 60 dBA, meeting the above referenced City code requirement. Please note that our calculations did not account for any of the potential sound buffering site features such as chain-link fence and the landscape buffer that are to be located between the proposed generator set and the right of way line.

10.3.050.040.C.2: Lighting impacts across the property line shall not exceed 0.5 foot-candles (a foot-candle is the amount of light falling upon a 1-square-foot surface which is 1 foot away from a 1-candlepower light source.)

MFA Response (in 1/20/2023 dated application): One LED lighting unit is proposed under the roof of the electrical panel weather protection structure, which is located approximately 90 feet from the River Road right of way, as shown in the attached design drawings (sheet E001 and E005). This LED lighting unit is not expected to cast lighting that exceeds 0.5 foot-candles across the property line. The applicant will meet this criterion.

MFA Follow Up Response: Below is the lighting fixture schedule provided in the design drawings Sheet E005 Electrical Details II:

LIGHTING FIXTURE SCHEDULE				
TYPE	DESCRIPTION	MANUFACTURER NAME	MANUFACTURER CATALOG NO.	REMARKS
A1	LIGHT FIXTURE, LED, 4'-0" LONG, 120 VAC, 33 WATT, 3,500 LUMENS, 40K COLOR TEMPERATURE, HIGH EFFICIENCY DRIVER, HIGH-IMPACT POLYCARBONATE LENS, MOLDED POLYCARBONATE HOUSING, U.L. LISTED FOR WET LOCATIONS, CEILING MOUNTED. MOUNT PHOTOCELL AT TOP OF CANOPY FACING NORTH, PER ROMTEC DESIGN.	LITHONIA	XVML L48 3500LM MVOLT 40K 80CRI	

Based on most recent correspondence with the vendor, the production of XVML units was recently discontinued. We will replace the light fixture specifications with Lithonia's CSVT model. Please see Attachment B for photometrics analysis provided by Acuity (the manufacturer) showing 0.0 fc at 80 feet from the fixture, meeting the above referenced City code requirement.

Please let me know if you have any other questions.

Best Regards,

CEM E. GOKCORA PE | MAUL FOSTER & ALONGI, INC.
Senior Engineer
pronouns: he/him
d. 971 713 3573 | m. 503 318 8862

Sound data
C80D6C
QSB5-G13 60Hz
Diesel Generator Set

Sound Pressure Level @ 7 meters, dB(A)

See notes 2,5,7-11 listed below

Configuration	Exhaust system	Position (Note 1)								8 Position Average
		1	2	3	4	5	6	7	8	
Standard – Unhoused	Infinite Exhaust	78.1	80.2	80.2	82.3	78.6	81.6	81.2	80.4	80.5
F216-2 Weather Protective Aluminium	Mounted	80.5	82.5	80.2	83	81.3	82.4	81.3	82.2	81.8
F231-2 Sound Attenuated Level 1, Aluminium	Mounted	78.6	75.5	71.1	72.7	72.5	73	72.2	75.2	74.6
F217-2 Sound Attenuated Level 2, Aluminium	Mounted	72	72.4	69.5	70.9	70.6	71.1	71	71.5	71.2

Sound Power Level, dB(A)

See notes 2-4, 7 and 8 listed below

Configuration		Octave Band Center Frequency (Hz)										Overall Sound Power Level
		31.5	63	125	250	500	1000	2000	4000	8000	16000	
Standard – Unhoused	Infinite Exhaust	54.4	79.3	88.5	92.5	100.8	102.3	101.6	97.8	94.1	89.9	107.5
F216-2 Weather Protective Aluminium	Mounted	55.8	87.2	97.3	98.4	102.0	103.0	101.1	98.5	93.8	84.4	108.5
F231-2 Sound Attenuated Level 1, Aluminium	Mounted	59.2	85.3	88.5	90.9	95.6	97.4	95.2	92.1	88.2	82.2	102.3
F217-2 Sound Attenuated Level 2, Aluminium	Mounted	56.9	85.5	88.1	89.2	92.7	92.6	90.2	87.6	83.7	73.9	98.7

Exhaust Sound Power Level, dB(A)

See notes 4,6 and 9 listed below

Open Exhaust (No Muffler) @ Rated Load	Octave Band Center Frequency (Hz)									Overall Sound Power Level
	31.5	63	125	250	500	1000	2000	4000	8000	
	56	83	98	104	110	112	114	113	111	120

Note:

1. Sound pressure levels at 1 meter are measured per the requirements of ISO 3744, ISO 8528-10, ANSI S1.13, ANSI S12.1 and European Communities Directive 2000/14/EC as applicable. The microphone measurement locations are 1 meter from a reference parallelepiped just enclosing the generator set (enclosed or unenclosed).
2. Seven-meter measurement location 1 is 7 meters (23 feet) from the generator (alternator) end of the generator set, and the locations proceed counter clockwise around the generator set at 45° angles at a height of 1.2 meters (48 inches) above the ground surface.
3. Sound Power Levels are calculated according to ISO 3744, ISO 8528-10, and or CE (European Union) requirements.
4. Exhaust Sound Levels are measured and calculated per ISO 6798, Annex A.
5. Reference Sound Pressure Level is 20 µPa.
6. Reference Sound Power Level is 1 pW (10-12 Watt).
7. Sound data for remote-cooled generator sets are based on rated loads without cooling fan noise.
8. Sound data for the generator set with infinite exhaust do not include the exhaust noise contribution.
9. Sound levels are subject to instrumentation, measurement, installation, and manufacturing variability

10. Unhoused/Open configuration generator sets refers to generator sets with no sound enclosures of any kind
11. Housed/Enclosed/Closed/Canopy configuration generator sets refer to generator sets that have noise reduction sound enclosuresinstalled over the generator set and usually integrally attached to the skid base/base frame/fuel container base of the generator set.

Sound Attenuation – Inverse Square Law

In order to determine an estimate of a sound pressure level at a distance the **Inverse Square Law** can be used. In terms of the **propagation** and **attenuation** of sound, the inverse square law is a principle in physics whereby a **point source** emits a sound wave uniformly in all directions (essentially spherically), where the intensity of the sound wave energy at any given point away from the source is diminished as a function of the total surface area of the sphere coincident with that point.

To determine the sound attenuation over a distance using the inverse square law, an idealisation needs to be made in which there are no **reflective surfaces** or **barriers** between the source and the location at which the sound level is being determined.

According to the inverse square law, it can be shown that for each doubling of distance from a point source, the sound pressure level decreases by approximately 6 dB. Examples of points sources could include valves, small pumps and motors.

Calculate the sound attenuation using either metric or imperial units of distance (i.e. metres or feet).

We have created YouTube videos explaining the theory of the tool as well as a short clip demonstrating how the tool works. Click on the links below to watch our videos, subscribe to our channel and turn on post notifications to never miss an update!

Search...

Noise and Vibration Tools

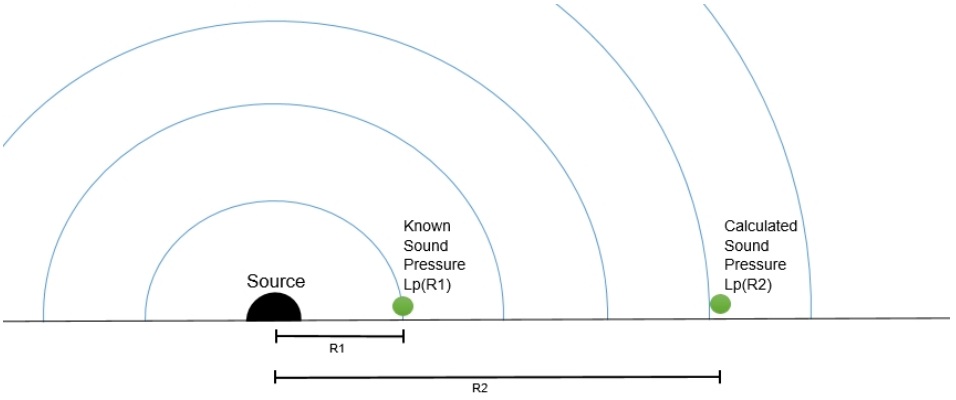
- Sound Attenuation Calculator – Inverse Square Law
- Sound Attenuation Calculator – Line Source
- Sound Pressure to Sound Power Converter
- Logarithmic Addition of Sound Pressure Levels
- Flare Noise Calculator
- Generator Noise Calculator
- Pump Noise Calculator

Sound Attenuation Calculator - Inverse Square Law

The formula to calculate sound attenuation over distance for a **point source** is:

$Lp(R2) = Lp(R1) - 20 \cdot Log_{10}(R2/R1)$

Where:
Lp(R1) = Known sound pressure level at the first location (typically measured data or equipment vendor data)
Lp(R2) = Unknown sound pressure level at the second location Location
R1 = Distance from the noise source to location of known sound pressure level
R2 = Distance from noise source to the second location



Known sound pressure level (dB(A))

72

- Wind Turbine Noise Calculator
- Vent Noise Calculator
- Acoustic Induced Vibration (AIV) Screening Tool
- Flow-Induced Vibration LOF Calculator
- Blast Overpressure and Grounde-Bourne Vibration Calculator
- BS4142 Industrial and Commercial Sound Assessment Tool
- Noise Barrier Calculator

Air Quality Tools

- Emissions Calculator for Engines, Turbines and Heaters
- Gas Turbine Emissions Calculator – US EPA AP-42
- Online Air Dispersion Model
- Flare Effective Height & Diameter Calculator
- Calorific Value Reference Tool

Select Metric or Imperial Units:

- ○ Metric
- ◉ Imperial

Distance from source for known sound pressure level (R1) (ft)

23

Tested sound pressure levels are commonly given at 1m or 3ft (R1)

Distance from source to position R2 (ft)

100

Attenuated sound pressure level (dB(A))

59.2

Is there an environmental engineering tool you would like to see at wkcgroup.com, or do you have recommendations on the tools we have? Please complete our online tools feedback form.

Disclaimer

Please note that this or any other calculators on the wkcgroup.com tools room are for information only. WKC Group has endeavoured to ensure that the information presented here is accurate and that the calculations are correct, but will not accept responsibility for any consequential damages, faults or human errors that may arise from the use of formulas, inventories and values.

- Atmospheric Emission Licence (AEL)
- Correction from Actual to Normal Stack Data Calculator
- Stack Gas Volumetric Flow Correction Calculator

Recent Posts

- Carbon Capture in the Natural Environment
- WKC conducted AIV and FIV studies for Qatar Energy
- Qatar Environmental Permitting System
- Wind Turbines and Shadow Flicker Impacts

Visual Wallwash Tool

File Help Tools

AcuityBrands.

Settings

Units: Feet - Footcandles

Point Spacing X		ft
Point Spacing Z		ft

Surface

Width [X]*	90	ft
Height [Z]*	90	ft
Base [Z]	0	ft

Criteria

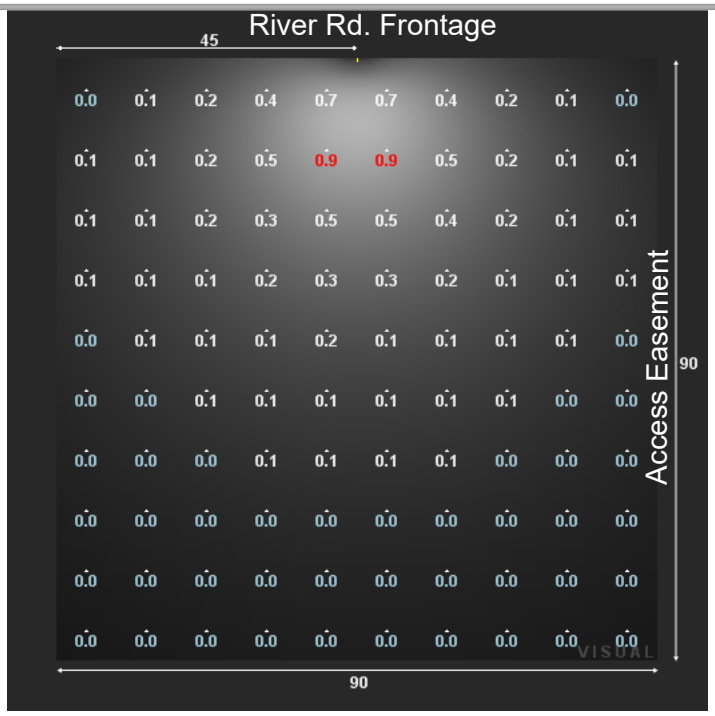
Setback*	15	ft
Average		fc
Minimum		fc
Ave / Min		
Max / Min		

Constraints

Quantity	1	
On Center Spacing		ft

Target Area

Width [X]		ft
Height [Z]		ft
Center Offset X		ft
Center Offset Z		ft



Spacing Results [A]

Spacing	90 ft
Quantity	1
Tilt	0°

Calculation Results [A]

Minimum	0.0 fc
Average	0.1 fc
Maximum	0.9 fc
Ave / Min	13
Max / Min	92
Point Spacing	9 x 9 ft
Fixture to Surface Eff.	33.7%
Lamp to Surface Eff.	33.7%
iterations	1
Points Calculated	2,701

Display

Points

0.2 [A]

☑	0.5	fc
☑	1	fc
☑	2	fc
☑	5	fc

Project Information

Project Name		Your Name	
Project Description		Company Name	
		Your Phone	
		Your Email	

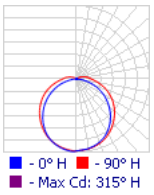
A

CSVT L48 3000LM MVOLT 3500K 80CRI

Lithonia Lighting

[A] - CSVT L48 3000LM MVOLT 3500K 80CRI

Tilt	0	Light Loss Factor	1	Lumens Per Lamp	3033
Orientation	0	Suspension Length	0	Wattage	24.3



From: Cem Gokcora
To: Joshua Chandler
Cc: Caitlin Bryan; Ellery Howard
Subject: RE: Riverview Lift Station CUP application, CUP 203-22
Date: Wednesday, February 08, 2023 2:39:52 PM
Attachments: image001.png
image003.png
image004.png
image005.png
image006.png
image007.png

Hi Joshua,

Following up on our phone conversation regarding the application response to the City code 10.3.050.040.C.1: a sound attenuating barrier product, Acoustifence®, may be installed on the proposed 6' tall perimeter chain-link fence along a 30-40 feet stretch of the north property line (30-40 feet along north PL and 30 feet along west PL starting from the northwest corner of the property) to be in compliance with the City code 10.3.050.040.C.1. Please check the link provided above for similar applications. Here is what the manufacturer states on product's performance: "*Acoustifence has an acoustical performance of STC 28, which gives you a transmission loss of 28dB through the material. It is worth noting that the level of attenuation of all outdoor barriers is affected by a variety of factors including end diffraction, angle of diffraction, wind direction, humidity and temperature*." The standby generator with level II sound attenuation enclosure is expected to emit max 72 dBA (see email 2/6/23 dated MFA email for specs); with the sound attenuating barrier the sound impacts may be reduced to as low as 44 dBA, meeting the above referenced City code.

We would like to reiterate that the proposed emergency standby generator will only turn on during emergency conditions, and periodically once a month (for a few minutes) to help keep components lubricated by circulating the oil throughout the engine.

Please contact me if you have further questions.

Thanks,

CEM E. GOKCORA PE | MAUL FOSTER & ALONGI, INC.
Senior Engineer
pronouns: he/him
d. 971 713 3573 | m. 503 318 8862

MAUL FOSTER ALONGI

6 Centerpointe Drive, Suite 360, Lake Oswego, OR 97035
www.maulfoster.com

From: Cem Gokcora <cgokcora@maulfoster.com>
Sent: Tuesday, February 7, 2023 9:37 AM
To: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Cc: Caitlin Bryan <cbryan@maulfoster.com>; Ellery Howard <ehoward@maulfoster.com>
Subject: RE: Riverview Lift Station CUP application, CUP 203-22

Joshua,

Thank you for the call this morning and giving me the opportunity to provide further clarifications on the photometrics analysis and standby (emergency) generator use.

Please let me know if you have any other questions.

Regards,

CEM E. GOKCORA PE | MAUL FOSTER & ALONGI, INC.
Senior Engineer
pronouns: he/him
d. 971 713 3573 | m. 503 318 8862

MAUL FOSTER ALONGI

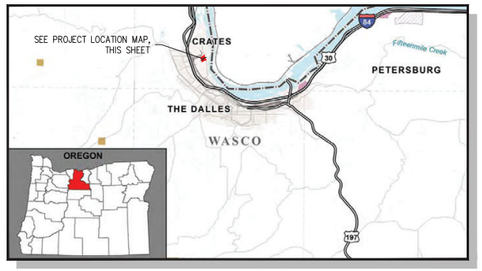
6 Centerpointe Drive, Suite 360, Lake Oswego, OR 97035
www.maulfoster.com

From: Joshua Chandler <jchandler@ci.the-dalles.or.us>
Sent: Monday, February 6, 2023 9:20 PM
To: Cem Gokcora <cgokcora@maulfoster.com>

RIVERVIEW LIFT STATION

022-0049.02.02

PROJECT VICINITY MAP



PROJECT LOCATION MAP

SURVEY NOTES

HORIZONTAL DATUM
NAD 1983, US STATE PLANE, 1983, ZONE OREGON NORTH, INT. FOOT

VERTICAL DATUM
NAVD 88

SURVEY NOTES
1. SURVEY CONDUCTED BY TENNESON ENGINEERING CORP.
2. UTILITIES ARE APPROXIMATE AND LOCATED FROM ABOVE GROUND EVIDENCE, AND CITY OF THE DALLES AS-BUILTS. THERE MAY BE ADDITIONAL UTILITY LINES WITHIN SURVEYED AREAS.

CALL 48 HOURS BEFORE YOU DIG
ONE CALL 811

REPORT ALL SPILLS
DEPT. OF ECOLOGY 1-800-258-5990

DRAWING INDEX

Sheet List Table

Sheet Number	Sheet Title	Dwg No
01	COVER	C0V
02	GENERAL NOTES	G01
03	EXISTING SITE & TESC PLAN	C01
04	PROPOSED SITE PLAN I	C02
05	GRADING PLAN I	C03
06	LIFT STATION & SITE DETAILS I	D01
07	LIFT STATION & SITE DETAILS II	D02
08	LIFT STATION & SITE DETAILS III	D03
09	ELECTRICAL LEGEND	E001
10	ELECTRICAL SITE PLAN	E002
11	POWER AND DISTRIBUTION SIGNAL PLAN	E003
12	ELECTRICAL DETAILS II	E004
13	ELECTRICAL DETAILS II	E005
14	ELECTRICAL SCHEDULES	E006
15	COMMUNICATIONS DIAGRAM	E007
16	PLC INPUT AND OUTPUT WIRING I	E008
17	PLC INPUT AND OUTPUT WIRING II	E009
18	ELECTRICAL NOTES I	E010
19	ELECTRICAL NOTES II	E011
20	ELECTRICAL NOTES III	E012
21	ELECTRICAL NOTES IV	E013
22	ELECTRICAL NOTES V	E014
23	ELECTRICAL SCHEDULE II	E015
24	GENERATOR ATS WIRING DIAGRAM	E016
25	ELECTRICAL SHELTER & ELEVATIONS	E017
26	MECHANICAL NOTES I	M01
27	WASTEWATER PUMP STATION LAYOUT	M02
28	WET WELL ASSEMBLY DETAILS	M03
29	VALVE VAULT ASSEMBLY DETAILS	M04
30	METER VAULT ASSEMBLY DETAILS	M05
31	STORAGE TANK ASSEMBLY DETAILS	M06

SUBSURFACE UTILITY LEGEND

THE CLASSIFICATIONS FOR SUBSURFACE UTILITIES ARE OUTLINED AND EXPLAINED IN THE FOLLOWING LIST:

UTILITY QUALITY LEVEL A. - PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE OF (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. UNLESS OTHERWISE NOTED, QUALITY LEVEL A IS ONLY APPLICABLE AT POTHOLED LOCATIONS ON THE PLANS. AT ALL OTHER AREAS, THE UTILITY SHOULD BE ASSUMED TO BE QUALITY LEVEL B.
POTHOLE LOCATION

UTILITY QUALITY LEVEL B. - INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

UTILITY QUALITY LEVEL C. - INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES

UTILITY QUALITY LEVEL D. - INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS

NOTE: THE USE OF THE LINE TYPES PROVIDED ABOVE WAS A PRIMARY METHOD FOR INDICATING THE ACCURACY OF THE UTILITIES SHOWN WITHIN THESE PLANS. WHEN THE SOURCE OF THE INFORMATION WAS UNKNOWN OR THE METHOD FOR LOCATING THE UTILITIES WAS UNAVAILABLE, QUALITY LEVEL D WAS USED AS THE DEFAULT.

SECTION AND DETAIL REFERENCES

THE FOLLOWING CONVENTIONS HAVE BEEN USED WITHIN THESE DRAWINGS TO REFER THE READER BETWEEN THE SECTION/DETAIL AND THE PLAN FROM WHICH IT IS REFERENCED.

REFERENCE BUBBLES

X / X000 — PLAN REFERENCE BUBBLE - REFERS READER BACK TO THE PLAN FROM WHICH THE DETAIL OR SECTION ORIGINATED.

X / X000 — DETAIL/SECTION REFERENCE BUBBLE - REFERS READER TO THE DRAWING ON WHICH THE DETAIL OR SECTION IS LOCATED.

WHERE, ID = SECTION/DETAIL REFERENCE NUMBER
= DRAWING NUMBER ON WHICH DETAIL ORIGINATED OR RESIDES.

SECTION/DETAIL REFERENCE NUMBER CONVENTIONS:
SECTIONS OR ELEVATIONS SHOULD HAVE A LETTER REFERENCE NUMBER (A THROUGH ZZ).

ABBREVIATIONS

CB	CATCH BASIN	ODOT	OREGON DEPARTMENT OF TRANSPORTATION
CONC	CONCRETE	PE	POLYETHYLENE
CL	CENTERLINE	PExPE	PLAIN END
CPEP	CORRUGATED POLYETHYLENE	PJ	PACK JOINT
CSBC	CRUSHED SURFACING BASE COURSE	PROP	PROPOSED
CSTC	CRUSHED SURFACING TOP COURSE	PVC	POLYVINYL CHLORIDE
DIAM	DIAMETER	R	RIGHT
DI	DUCTILE IRON	RJxRJ	RESTRAINED JOINT
DWG	DRAWING	RT	RIGHT
E	EASTING	ROW	RIGHT-OF-WAY
ELEV	ELEVATION	SPEC	SPECIFICATIONS
EOP	EDGE OF PAVEMENT	SS	SANITARY SEWER
EX	EXISTING	SSMH	SANITARY SEWER MANHOLE
FIP	FEMALE IRON PIPE	ST	STORM
FWxFW	FUSION WELD	STA	STATION LINE
HMA	HOT MIXED ASPHALT	STD	STANDARD
L	LEFT	SY	SQUARE YARDS
LT	LEFT	TYP	TYPICAL
LF	LINEAR FEET	W	WATER
MIP	MALE IRON PIPE		
N	NORTHING		

CONTACT PERSONNEL

CONTACT	AGENCY	PHONE
PAUL CROSS, P.E. (PRINCIPAL ENGINEER)	RH2 ENGINEERING	509-392-6502
KYLE SMITH, P.E. (PROJECT MANAGER)	RH2 ENGINEERING	509-392-6490
VICTOR LARA (STAFF ENGINEER)	RH2 ENGINEERING	509-222-0778
DALE MCCABE	CITY	541-506-2021

REGISTERED PROFESSIONAL ENGINEER — OREGON — MAY 13, 2008 — PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

RH2

LEGEND

EXISTING LEGEND

SURVEY UTILITY LEGEND

- WATER GUARD POST
- WATER METER
- FIRE HYDRANT (2 PORT)
- WATER METERING WELL
- STORM DRAIN MANHOLE
- CATCH BASIN (ROUND)
- CATCH BASIN (RECTANGULAR)
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- FORCEMAIN AIR RELIEF VALVE

SURVEY CONTROL LEGEND

- TP-X TEST PIT

SURVEY DRY UTILITY LEGEND

- TELEPHONE POLE
- TELEPHONE GUY ANCHOR
- POWER POLE
- POWER GUY SUPPORT POST
- POWER GUY ANCHOR
- POWER PAD MOUNT TRANSFORMER
- POWER JUNCTION BOX
- NATURAL GAS METER
- NATURAL GAS VALVE

SURVEY SIGNAL LEGEND

- STREET LIGHT ASSEMBLY
- BRIDGE SIGN
- CANTILEVERED SIGN
- SINGLE POST SIGN
- DOUBLE POST SIGN

SURVEY UTILITY LINETYPES

- TV UNDERGROUND CABLE
- OHTV OVERHEAD CABLE
- T UNDERGROUND TELEPHONE
- FO UNDERGROUND FIBER OPTICS
- OHT OVERHEAD TELEPHONE
- G NATURAL GAS
- OIL PETROLEUM
- P UNDERGROUND POWER
- OHP OVERHEAD POWER
- SS SANITARY SEWER
- SSFM SEWER FORCEMAIN
- STORM DRAIN CULVERT
- STORM DRAIN DITCH
- ST STORM DRAIN LINE
- WATER LINE
- WATER SERVICE LINE
- UIK UNKNOWN UTILITY

SURVEY CONTROL LINETYPES

- EASEMENT
- ACCESS EASEMENT
- RIGHT OF WAY EASEMENT
- PROPOSED EASEMENT
- UTILITY EASEMENT
- PROPERTY LINE
- PROPERTY SECTION BOUNDARY
- RAILROAD CENTERLINE
- RIGHT OF WAY CENTERLINE
- RIGHT OF WAY LINE
- RAILROAD RIGHT OF WAY

SURVEY SITE LINETYPES

- MAJOR CONTOUR
- MINOR CONTOUR
- BUILDING OVERHANG
- CONCRETE CURB
- RAILROAD TRACK
- DIRT ROAD EDGELINE
- GRAVEL ROAD EDGELINE
- FENCE
- TOPO DITCH

SURVEY AREA HATCHING

- PARKING LOT ASPHALT AREA
- PARKING LOT CONCRETE AREA
- ROADWAY ASPHALT AREA
- ROADWAY CONCRETE AREA
- DIRT ROADWAY
- GRAVEL ROADWAY
- LANDSCAPING (SOD, PLANTINGS)
- SIDEWALK ASPHALT
- SIDEWALK CONCRETE

PROPOSED LEGEND

DEMOLITION LEGEND

- SAWCUT LINE
- ASPHALT REMOVAL AND REPLACEMENT
- CONCRETE REMOVAL AND REPLACEMENT
- GRAVEL REMOVAL
- GRAVEL RESTORATION
- VEGETATION REMOVAL AREA
- STABILIZED CONSTR. ENTRANCE
- INLET PROTECTION
- STRAW WATTLES
- SILT FENCE
- UTILITY REMOVAL LIMITS
- MAJOR CONTOUR FINISHED GRADE
- MINOR CONTOUR FINISHED GRADE

SEWER MAIN LEGEND

- FORCE/GRAVITY SEWER MAIN
- RESTRAINED JOINT PIPE
- CASING SLEEVE
- CDF ENCASEMENT
- THRUST BLOCK
- WATER VALVE
- FLANGED FITTING
- MECHANICAL JOINT FITTING
- RESTRAINED JOINT FITTING
- CAP
- AIR/COMBINATION VALVE
- TAPPING TEE ASSEMBLY
- CONNECTION TO EXISTING

ROADWAY AND SITE LEGEND

- CONCRETE
- ASPHALT
- SIGN
- MAINTENANCE ROCK
- CRUSHED SURFACING
- HYDROSEED
- LANDSCAPE BUFFER

GENERAL NOTES

1. ALL WORKMANSHIP, CONSTRUCTION AND MATERIALS SHALL BE PERFORMED OR SUPPLIED IN ACCORDANCE WITH THESE SPECIAL PROVISIONS, PLANS, OWNER STANDARD DETAILS, AND THE ODOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION, AS ISSUED BY THE OREGON STATE DEPARTMENT OF TRANSPORTATION AND THE AMERICAN PUBLIC WORKS ASSOCIATION AND AS AMMENDED BY THE CITY OF THE DALLES, WHICH IS HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS.
2. A PRECONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO CONSTRUCTION, AND 48 HOURS ADVANCE NOTIFICATION PRIOR TO ACTUAL START OF WORK IS REQUIRED.
3. THE EXISTING TOPOGRAPHIC AND PHYSICAL FEATURES SHOWN ON THESE PLANS ARE BASED ON LIDAR PROVIDED BY MAUL, FOSTER AND ALONGI, SURVEY BY TENNESON ENGINEERING CORP., AND RECORD DRAWINGS.
4. THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE RECORDS BUT HAVE NOT BEEN EXPOSED AND MEASURED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK TO AVOID DAMAGE OR DISTURBANCE, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES. IT IS UNDERSTOOD THAT OTHER ABOVE GROUND AND UNDERGROUND FACILITIES NOT SHOWN ON THE PLANS MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK.
5. THE CONTRACTOR SHALL PROTECT BUILDINGS, FENCES, APPURTENANCES, ABOVE GROUND UTILITIES, AND OTHER PROPERTY ADJACENT TO ALL CONSTRUCTION AREAS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR REPAIRING ALL DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES.
6. IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY STANDARDS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING ALL FUGITIVE DUST THAT MAY BE GENERATED BY THE CONSTRUCTION PROJECT.
7. THE CONTRACTOR SHALL CONTAIN WORK TO WITHIN RIGHT-OF-WAY OR THE CONSTRUCTION LIMITS AS ILLUSTRATED IN THE PLANS.
8. THE CONTRACTOR SHALL SECURE NECESSARY PERMITS PRIOR TO STARTING CONSTRUCTION. THE OWNER WILL OBTAIN SOME OF THE REQUIRED PERMITS. SEE SPECIAL PROVISIONS FOR FURTHER INFORMATION REGARDING PERMITS.
9. ONSITE EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND BE IN PLACE PRIOR TO CONSTRUCTION. ANY PROBLEMS OCCURRING BEFORE FINAL ACCEPTANCE BY THE OWNER SHALL BE CORRECTED BY THE CONTRACTOR. UPON FINAL ACCEPTANCE BY THE OWNER, OR AS OTHERWISE DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY, NON-DEGRADABLE EROSION CONTROL MEASURES.
10. ANY REVISIONS TO PLANS MUST BE MADE BY THE ENGINEER AND APPROVED BY THE OWNER PRIOR TO ANY IMPLEMENTATION IN THE FIELD.
11. ALL PAVEMENT MARKINGS AND SIGNING SHALL CONFORM TO THE REQUIREMENTS OF THE MUTCD.
12. A COPY OF THE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
13. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE CONTRACTOR SHALL SAW CUT OR OVERLAY AND FEATHER NEW PAVEMENT TO PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. APPLICATION OF A THIN TACK COAT OF EMULSIFIED ASPHALT SHALL BE APPLIED TO INSURE PROPER BONDING.
14. THE COMPLETED SURFACE OF ALL COURSES SHALL BE OF UNIFORM TEXTURE, SMOOTH, UNIFORM AS TO CROWN AND GRADE, AND FREE FROM DEFECTS OF ALL KINDS. THE COMPLETED SURFACE OF THE WEARING COURSE SHALL NOT VARY MORE THAN 1/8 INCH FROM THE LOWER EDGE OF A 10-FOOT STRAIGHTEDGE PLACED ON THE SURFACE PARALLEL TO THE CENTERLINE. THE TRANSVERSE SLOPE OF THE COMPLETED SURFACE OF THE WEARING COURSE SHALL VARY NOT MORE THAN 1/4 INCH IN 10- FEET FROM THE RATE OF TRANSVERSE SLOPE SHOWN ON THE PLANS.
15. MATERIALS SAMPLING AND TESTING SHALL BE AT A FREQUENCY AND MAGNITUDE AS SPECIFIED IN THE STANDARD SPECIFICATIONS OR DETERMINED BY THE ENGINEER. A PRIVATE AND INDEPENDENT TESTING LABORATORY SHALL PERFORM TESTING AND SAMPLING. CERTIFIED TEST REPORTS SHALL BE FURNISHED FOR ALL TESTS PERFORMED BY PRIVATE TESTING LABORATORIES. THE OWNER WILL BE RESPONSIBLE FOR ACCEPTANCE TESTING.
16. CONTRACTOR TO INSTALL STABILIZED CONSTRUCTION ENTRANCES AT ALL ACCESS POINTS FROM PAVED AREAS.

STANDARD KEYNOTES

GENERAL NOTES

- G1 EXISTING FENCE LINE, REMOVE AND REPLACE
- G2 RESTORE ALL EXISTING VEGETATED AREAS WITH HYDROSEED
- G3 RESTORE GRAVEL TO EXISTING OR BETTER CONDITION
- G4 ABANDONED RAIL LINE, REMOVE AND DISPOSE TRACKS AND TIES
- G5 PIPE TRENCH SECTION
- G6 RESTORE ASPHALT TO EXISTING OR BETTER CONDITION
- G7 TIE INTO EXISTING 3" SERVICE LINE
- G8 EXISTING 48" CMP CULVERT, DO NOT DISTURB
- G9 PROVIDE TYPE CL-6 FENCING, PER CITY STANDARD DRAWING RD815
- G10 EXISTING LANDSCAPING/VEGETATION/TREES, CONTRACTOR SHALL COORDINATE WITH CITY AND LANDOWNER AND SHALL LIMB/REMOVE EXISTING TREES AS NECESSARY FOR CONSTRUCTION. CONTRACTOR TO MINIMIZE AREA OF IMPACT.
- G11 STEEL CASING BY OTHERS. SEE UPRR CASEMENTS PLAN SET BY MFA.
- G12 RESTORE CONCRETE TO EXISTING OR BETTER CONDITION.

UTILITY NOTES

- U1 EXISTING 18" STORM LINE, DO NOT DISTURB
- U2 EXISTING GAS LINE, DO NOT DISTURB
- U3 EXISTING WATERLINE, DO NOT DISTURB
- U4 UNKNOWN UTILITY, PRESERVE AND PROTECT UNLESS DIRECTED OTHERWISE BY ENGINEER OR OWNER.
- U5 VERIFY UNDERGROUND ELECTRICAL LINE, REMOVE AND DISPOSE
- U6 EXISTING STORM LINE, DO NOT DISTURB
- U7 EXISTING CONCRETE VAULT, DO NOT DISTURB
- U8 EXISTING OVERHEAD POWER POLE. SUPPORT, PRESERVE, AND PROTECT.

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

GENERAL NOTES

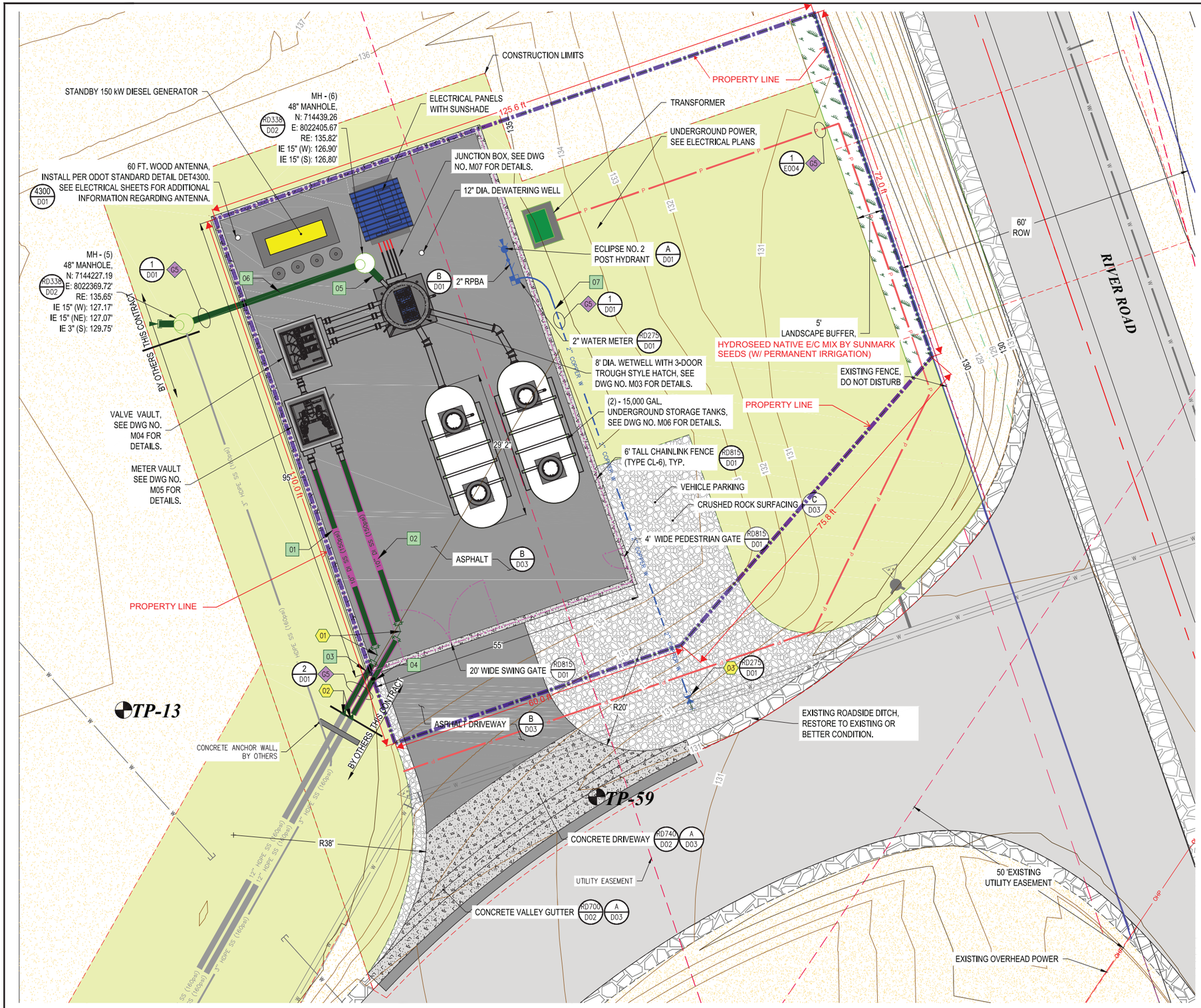
JOB NO: 022-094B.02.02
CLIENT: MFA
FILENAME: RVLS-P-COV.DWG
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS

REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW
1	10/20/2022	REVISED PER CITY COMMENTS	VGL	PRC

SC
0"
DRAWIN
B
DWG NO.:
G01

Local Govt 3LAs Oregon



PROPOSED SITE PLAN
1" = 10'

GENERAL NOTES

XX SEE DWG NO. G01 FOR STANDARD KEYNOTES

1. CONTRACTOR TO POTHOLE EXISTING WATER AND SEWER TO CONFIRM DEPTH PRIOR TO CONSTRUCTION.
2. MIN 4' BURY DEPTH FOR PROPOSED WATER SERVICE. WATER SERVICE SHALL BE CONTINUALLY RISING OR FALLING AS DIRECTED BY THE OWNER OR ENGINEER.
3. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS AND PIPING TO MAKE A SUCCESSFUL CONNECTION TO THE EXISTING WATER MAIN.
4. CONTRACTOR SHALL NOTIFY WITH THE CITY A MINIMUM OF TWO WORKING DAYS PRIOR TO CONNECTING TO THE EXISTING WATER MAIN.

CITY OF THE DALLES LANDSCAPE ORDINANCE:
1. IN GENERAL, A MINIMUM OF 40% OF THE REQUIRED LANDSCAPE AREA BE PLANTED WITH LIVE PLANT MATERIAL.
2. STREET TREES:
2.1. TREES SHALL BE PLANTED ALONG ALL PUBLIC STREET FRONTAGES. MEDIUM TREES SHALL BE SPACED A MAXIMUM OF 30' O.C.
3. REQUIRED LANDSCAPE BY ZONE (INDUSTRIAL):
3.1. A 5' LANDSCAPE BUFFER ADJACENT TO ALL PUBLIC R.O.W., BUT LIMITED TO 10% OF THE AREA OF THE ENTIRE SITE.

SITE LIGHTING NOTE:
1. SEE SHEET E001 FOR PROPOSED LIGHTING FIXTURE LOCATION AND SHEET E005 FOR LIGHTING FIXTURE SCHEDULE.

PIPE AND FITTING KEYNOTES

- 01 (2) – 10" DI 45° BEND (RJxRJ)
- 02 (2) – 12" x 10" DI REDUCER (RJxRJ)
- 03 (1) – 24"X 2" DI SADDLE TAP (FIP)
- 01 PROVIDE APPROX 37 LF of 10" DI PIPE, (RJ)
- 02 PROVIDE APPROX 34 LF of 10" DI PIPE, (RJ)
- 03 PROVIDE APPROX 11 LF of 10" DI PIPE, (RJ)
- 04 PROVIDE APPROX 18 LF of 10" DI PIPE, (RJ)
- 05 PROVIDE APPROX 3 LF of 15" PVC PIPE
- 06 PROVIDE APPROX 34 LF of 15" PVC PIPE
- 07 PROVIDE APPROX 92 LF of 2" COPPER PIPE

VICINITY MAP

RH2

REGISTERED PROFESSIONAL ENGINEER
81597
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

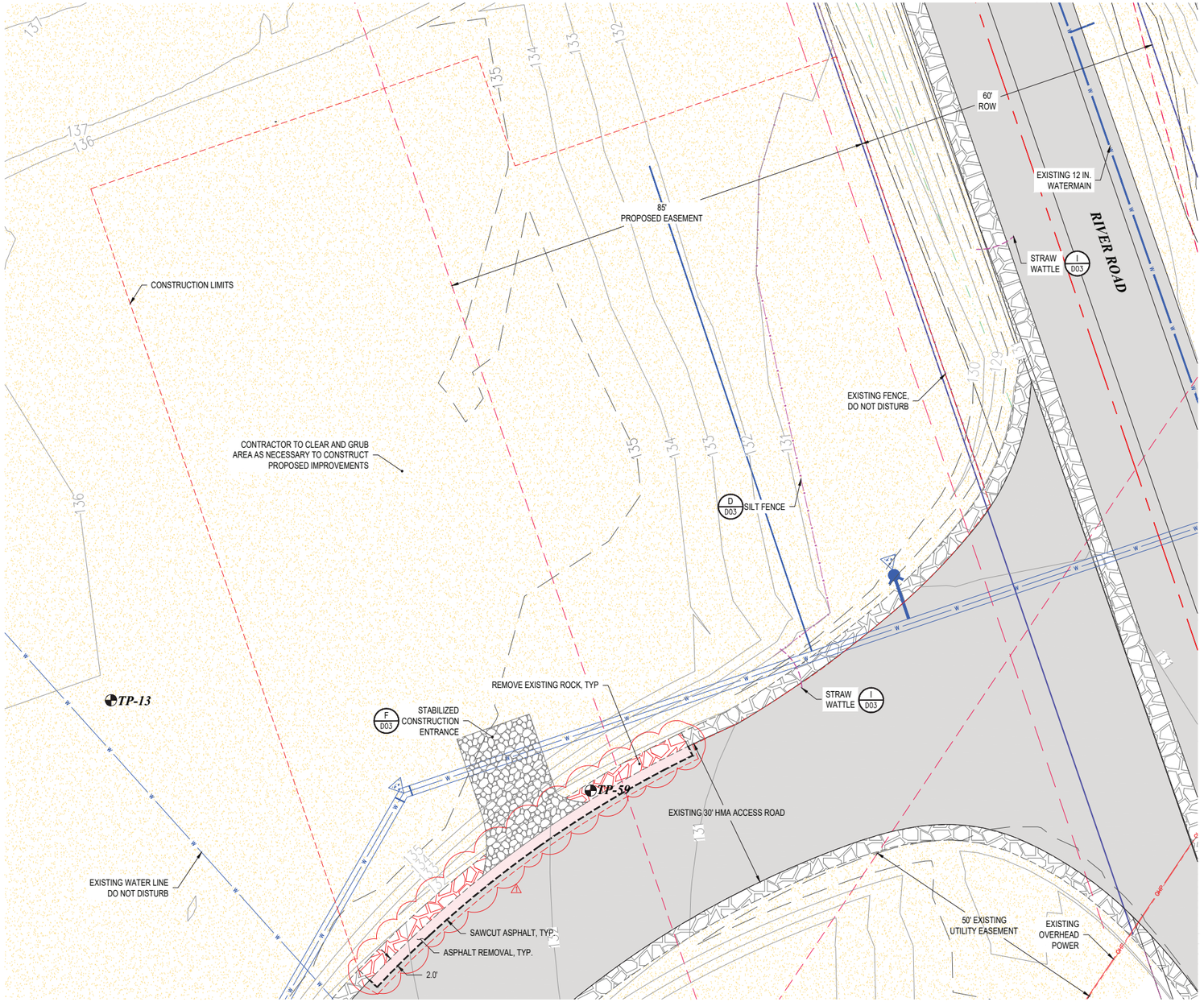
PROPOSED SITE PLAN I

NO.	DATE	DESCRIPTION	BY	REVIEW
1	10/20/2022	REVISED PER CITY COMMENTS	VGL	PRC

REVISIONS

ENGINEER: VGL
REVIEWED: KRS
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 27, 2022
CLIENT: MFA
FILENAME: RVLS-P-SITEP.DWG
JOB NO: 022-0049.02.02

SCALE: 1" = 10'-0"
DRAWING NO: C02



EXISTING SITE AND TESC PLAN

1" = 10'

SOIL DATA

TEST PIT	MATERIAL DESCRIPTION
TP-13	(0-0.5 FEET): MOSS AND TOP SOIL. (0.5-3.5 FEET BGS): DRY TO MOIST, LOOSE, COBBLY BOULDERS WITH SOME SILTY SAND. (3.5 FEET BGS): BASALT BEDROCK.
TP-59	(0-5.5 FEET BGS): DENSE SILTY MOIST ANGULAR GRAVEL WITH SAND, COBBLES (15%), ANGULAR BOULDERS (20%, UP TO 2' DIA.), AND TRACE METAL AND PLASTIC DEBRIS. (5.5 FEET BGS): WEATHERED BASALT BEDROCK.

VICINITY MAP

RH2

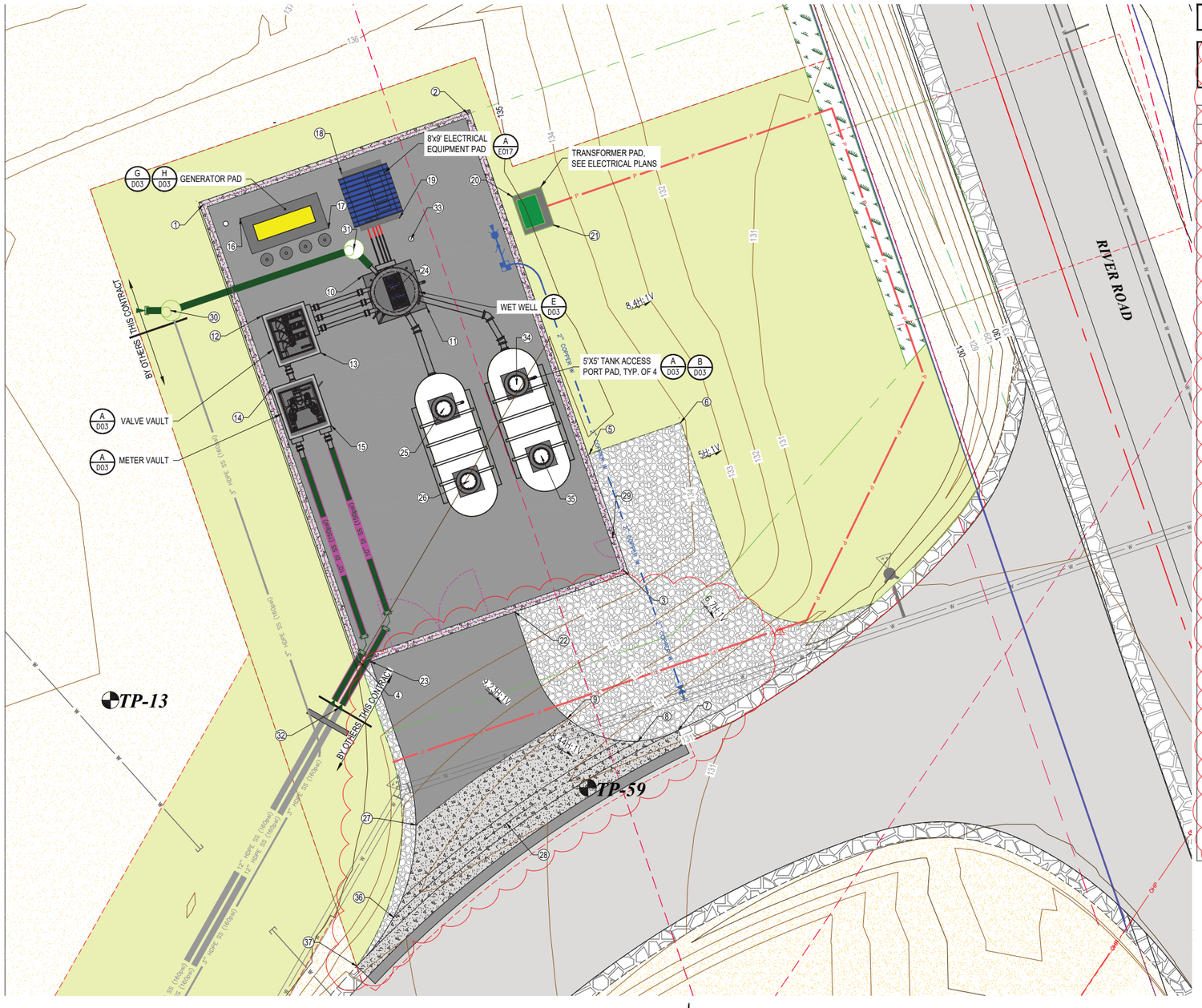
REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

EXISTING SITE & TESC PLAN

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	10/20/2022	REVISED PER CITY COMMENTS	VGL

JOB NO: 022-049.02.02
CLIENT: MFA
FILENAME: RVLS-P-SITE-X.DWG
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS
DRAWN: B
DWG NO: C01



GRADING PLAN
1" = 10'

GRADING NOTES

1. FINISHED GRADE POINTS REFER TO SURFACE ELEVATIONS AT THE LOCATIONS SHOWN. VAULT LIDS, ACCESS PORTS, AND OTHER STRUCTURES MAY BE SET HIGHER THAN FINISHED GRADE. REFER TO ROMTEC PRE-PACKAGED LIFT STATION SHEETS FOR FURTHER DETAILS.

POINT TABLE - GRADING

POINT NO.	ELEV.	NORTHING	EASTING	DESC.
1	135.98	714448.04	8022376.03	NW CORNER OF FENCE
2	135.50	714465.90	8022428.10	NE CORNER OF FENCE
3	134.52	714376.01	8022458.86	SE CORNER OF FENCE
4	135.00	714358.18	8022406.83	SW CORNER OF FENCE
5	134.75	714399.04	8022452.02	NW CORNER OF PARKING AREA
6	134.04	714405.20	8022470.00	NE CORNER OF PARKING AREA
7	130.50	714344.62	8022469.44	SE CORNER OF CONCRETE APRON
8	130.59	714342.49	8022461.56	SE CORNER OF CONCRETE APRON
9	132.04	714346.99	8022447.68	SE CORNER OF ASPHALT DRIVEWAY
10	135.52	714433.99	8022407.37	NW CORNER OF WET WELL SLAB (TOP)
11	135.32	714427.76	8022420.07	SE CORNER OF WET WELL SLAB (TOP)
12	135.70	714426.15	8022387.54	NW CORNER OF VALVE VAULT
13	135.51	714418.87	8022399.20	SE CORNER OF VALVE VAULT
14	135.57	714411.85	8022389.63	NW CORNER OF METER VAULT
15	135.39	714404.55	8022401.27	SE CORNER OF METER VAULT
16	135.88	714445.25	8022383.30	NW CORNER OF GENERATOR SLAB
17	135.66	714443.45	8022400.73	SE CORNER OF GENERATOR SLAB
18	135.71	714454.24	8022403.23	NW CORNER OF ELECTRICAL PAD
19	135.51	714445.49	8022414.70	SE CORNER OF ELECTRICAL PAD
20	135.04	714449.62	8022436.80	NW CORNER OF TRANSFORMER PAD
21	134.55	714443.99	8022445.07	SE CORNER OF TRANSFORMER PAD
22	134.71	714367.92	8022437.32	NE CORNER OF ASPHALT DRIVEWAY
23	134.98	714358.20	8022408.94	NW CORNER OF ASPHALT DRIVEWAY
24	135.42	714430.87	8022413.72	CENTER OF WET WELL
25	135.15	714407.87	8022423.37	CENTER OF NORTHWEST TANK ACCESS
26	134.99	714393.62	8022428.22	CENTER OF SOUTHWEST TANK ACCESS
27	132.74	714326.01	8022417.90	SW CORNER OF ASPHALT DRIVEWAY
28	131.41	714326.32	8022435.73	CENTERLINE OF VALLEY GUTTER
29	134.59	714382.64	8022456.59	SOUTH FENCE POST SINGLE GATE
30	135.65	714427.19	8022369.72	CENTER OF MANHOLE #5
31	135.57	714439.26	8022405.67	CENTER OF MANHOLE #6
32	135.21	714349.04	8022402.79	CONNECTION TO SCHEDULE A
33	135.46	714441.29	8022416.96	CENTER OF DEWATERING WELL
34	135.01	714412.78	8022437.70	CENTER OF NORTHEAST TANK ACCESS
35	134.86	714398.53	8022442.55	CENTER OF SOUTHEAST TANK ACCESS
36	132.20	714307.84	8022413.46	CENTERLINE OF VALLEY GUTTER
37	132.61	714298.23	8022406.24	SW CORNER OF CONCRETE APRON

VICINITY MAP

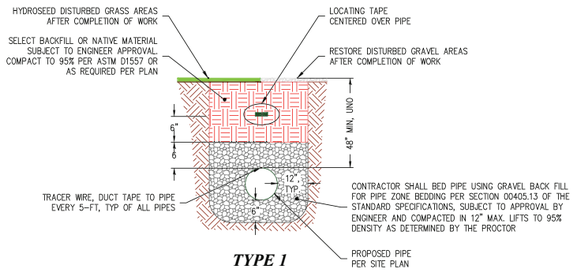
RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION
GRADING PLAN I

REVISIONS			
NO.	DATE	DESCRIPTION	REVIEW
1	10/20/2022	REVISED PER CITY COMMENTS	PRC

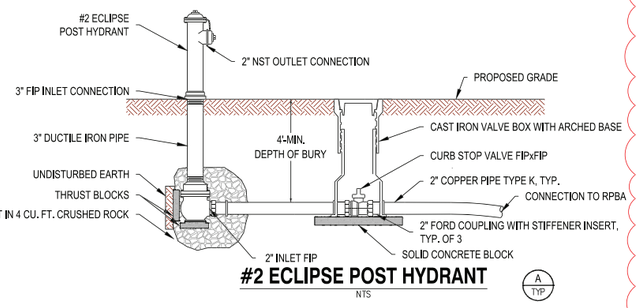
JOB NO.: 022-0048.02.02
CLIENT: MFA
FILENAME: RVLS-P-SITEP.DWG
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 28, 2022
ENGINEER: VGL
REVIEWED: KRS
SCALE: 1" = 10'
DRAWING NO.: C03



TYPICAL PIPE TRENCH

NOT TO SCALE

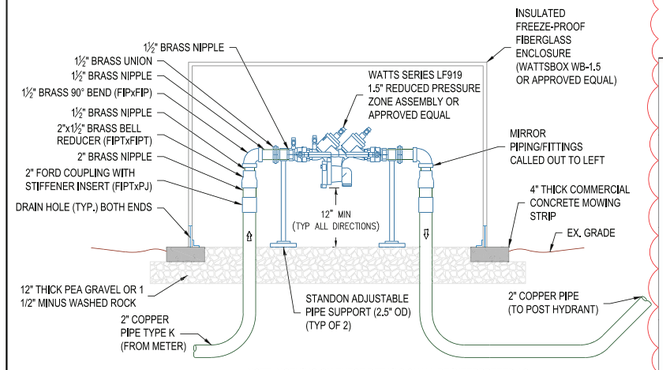
1 TYP



#2 ECLIPSE POST HYDRANT

NTS

A TYP

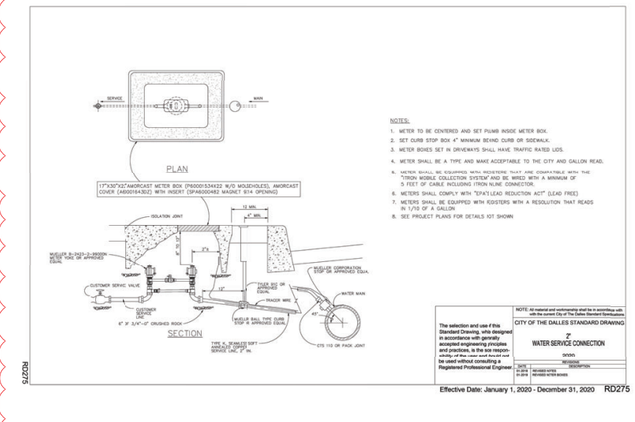


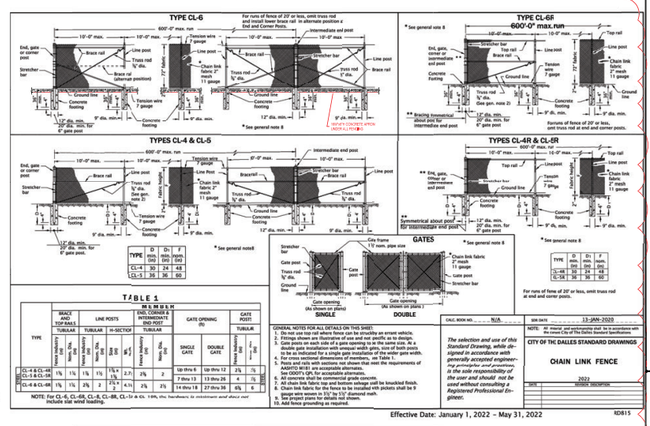
NOTE: NOTHING ON THESE DETAILS SHALL BE INTERPRETED AS WAIVING STATE CROSS CONNECTION CONTROL REQUIREMENTS. ASSEMBLY SHALL BE WASHINGTON DOH-APPROVED.

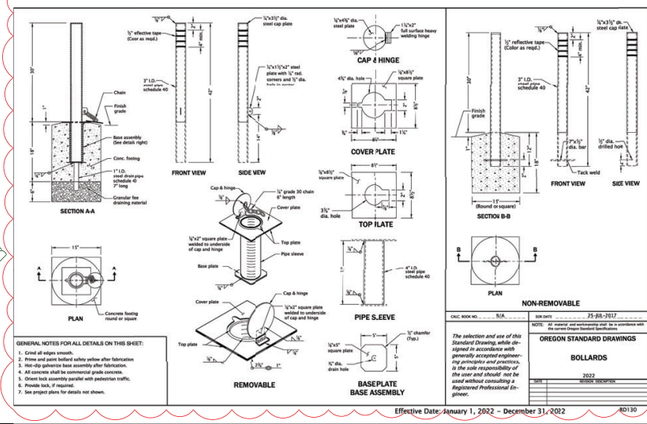
REDUCED PRESSURE BACKFLOW ASSEMBLY

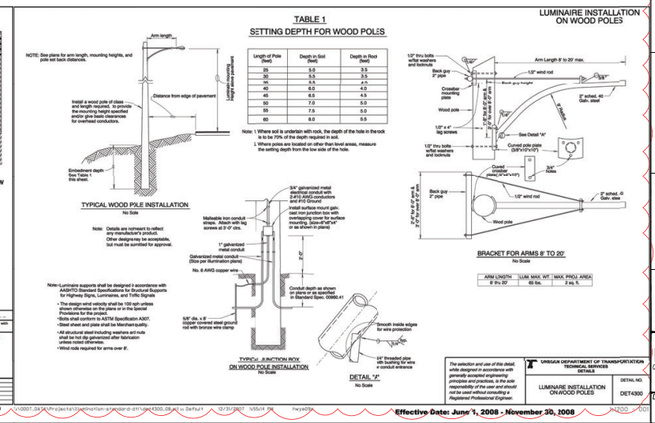
NTS

B TYP









RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS

EXPIRES: 12/31/2023
SIGNED: 10/28/2022

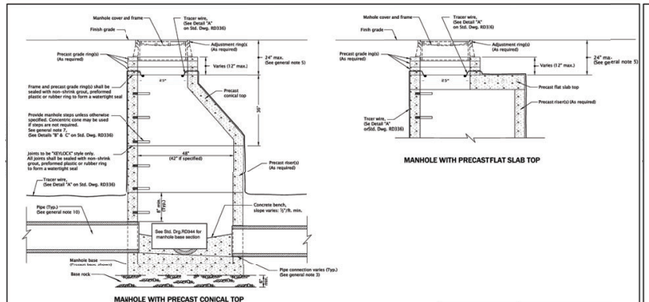
MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

LIFT STATION & SITE DETAILS I

ENGINEER: VGL	JOB NO.: 022-004/D.02.02		
DRAWN: KRS	CLIENT: MFA		
CHECKED: VGL	FILENAME: RVLS-D-LIDET.DWG		
SAVE DATE: Oct 27, 2022	**REVISIONS**		
PLOT DATE: Oct 27, 2022	NO.	DATE	DESCRIPTION
	1	10/20/2022	REVISED PER CITY COMMENTS

PRC	VGL	REVIEW
		BY

SCALE: 1" = DRAWING NO.: D01



CALC. BOOK NO. N/A — SIGN DATE 21-JUN-2019

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connection.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate.
7. See Std. Dwg. RD336 for manhole steps.
8. See Std. Dwg. RD336 for details not shown.
9. See Std. Dwg. RD336 for manhole covers and frames, manhole djustment rings, etc.
10. Min. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. Location, elevation, diameter, slope, and number of pipe(s) vary, see project plans.
13. This detail limited to interior drop of 24". See Std. Dwgs. RD350 or RD352 for drop manhole details for drops in excess of 24".

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

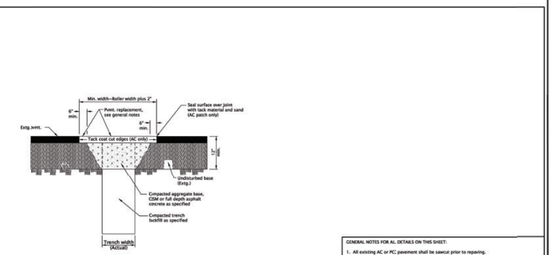
CITY OF THE DALLES STANDARD DRAWINGS

STANDARD SANITARY SEWER MANHOLE

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD336



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All existing AC or PC pavement shall be sawcut prior to repaving.
2. Concrete pavement shall be replaced with concrete to a minimum thickness of 8" or the thickness of removed pavement, whichever is greater.
3. For joining new concrete to existing concrete, see contract plans for specific details.
4. Place AC into minimum thin, of 4" or the thkn. of the removed pavement, whichever is greater.Compact as specified.

CALC. BOOK NO. N/A — SIGN DATE 20-JUL-2020

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

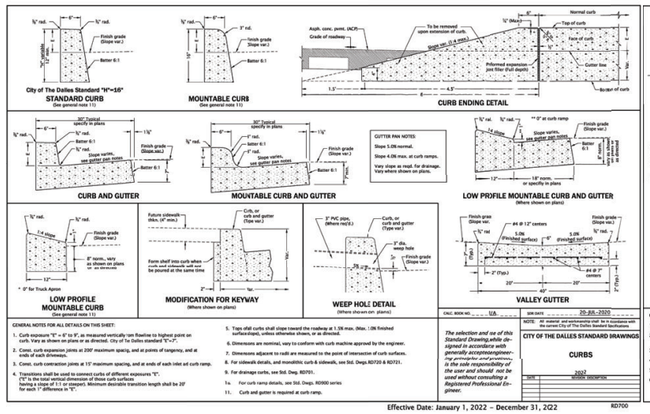
CITY OF THE DALLES STANDARD DRAWINGS

STREET CUT

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD302



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb exposure "X" = 6" to 9", as measured vertically rom Rowline to highest point on curb. Vary as shown on plans or as directed. City of Tie Dalles standard "X"=7".
2. Const. curb expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. curb contraction joints at 15' maximum spacing, and at ends of each inlet sd curb ramp.
4. Transitions shall be used to connect curbs of different exposures "X". ("X" is the total vertical dimension of those curb surfaces Transitions shall be 2' to 10' in length. Minimum desirable transition length shall be 20' for each 1" difference in "X".
5. Traps shall curbs shall slope toward the roadway at 1.5% min. (Min. ↓.0% finished surface/slope), unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approval by the engineer.
7. Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb & sidewalk, see Std. Dwgs RD720 & RD721.
9. For drainage curbs, see Std. Dwg. RD701.
10. For curb ramp details, see Std. Dwgs. RD900 series
11. Curb and gutter is required at curb ramp.

CALC. BOOK NO. N/A — SIGN DATE 20-JUL-2020

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

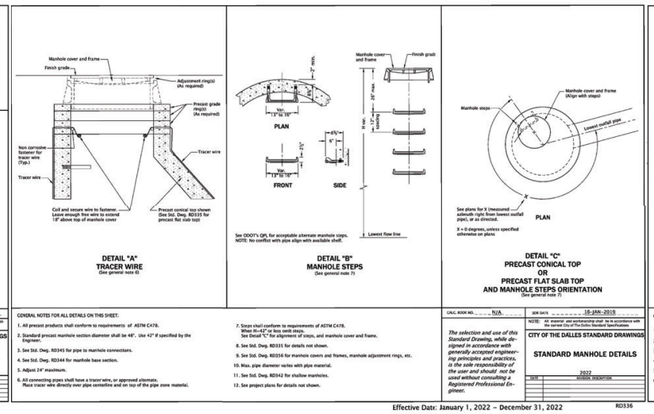
CITY OF THE DALLES STANDARD DRAWINGS

CURBS

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD700



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connections.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate. Place tracer wire directly over pipe centerline and on top of the pipe zone material.
7. Steps shall conform to requirements of ASTM C478. Where 42-48" dia. steps are used, See Detail "C" for alignment of steps, and manhole cover and frame.
8. See Std. Dwg. RD335 for details not shown.
9. See Std. Dwg. RD336 for manhole covers and frames, manhole adjustment rings, etc.
10. Min. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. See project plans for details not shown.

CALC. BOOK NO. N/A — SIGN DATE 18-JAN-2019

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

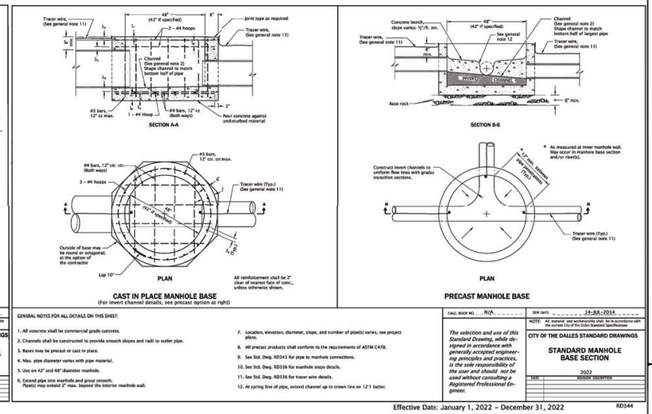
CITY OF THE DALLES STANDARD DRAWINGS

STANDARD MANHOLE DETAILS

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD336



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All concrete shall be commercial grade concrete.
2. Channels shall be constructed to provide smooth slopes and radii to outlet pipe.
3. Bases may be precast or cast in place.
4. Max. pipe diameter varies with pipe material.
5. Use on 42" and 48" diameter manhole.
6. Cement pipe into manhole and grout smooth. Pipe(s) may extend 2" max. beyond the interior manhole wall.
7. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
8. All precast products shall conform to the requirements of ASTM C478.
9. See Std. Dwg. RD342 for pipe to manhole connections.
10. See Std. Dwg. RD336 for manhole steps details.
11. See Std. Dwg. RD342 for tracer wire details.
12. At spring line of pipe, extend channel up to crown line on 12:1 batter.

CALC. BOOK NO. N/A — SIGN DATE 14-JUL-2014

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

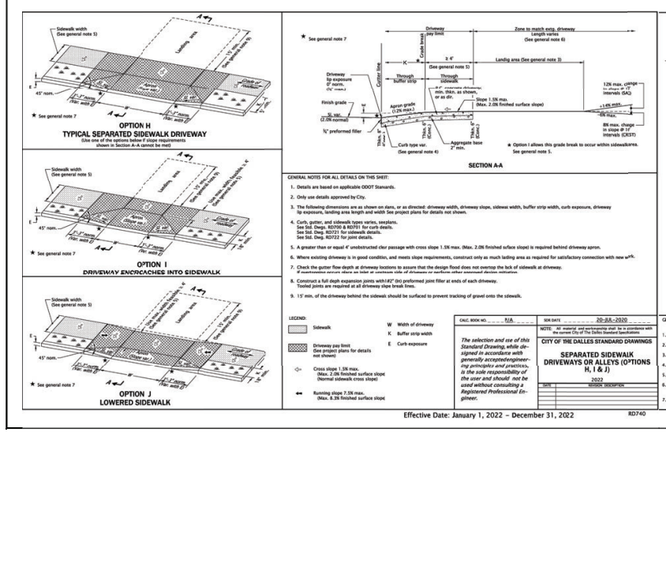
CITY OF THE DALLES STANDARD DRAWINGS

STANDARD MANHOLE BASE SECTION

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD344



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Details are based on applicable ODOT Standards.
2. Only use details approved by City.
3. The following dimensions are as shown on dans, or as directed: driveway width, driveway slope, sidewak width, buffer strip width, curb exposure, driveway tip exposure, landing area length and width See project plans for details not shown.
4. Curb, gutter, and sidewalk types varies, seeplans. See Std. Dwgs. RD700 & RD701 for curb deails. See Std. Dwg. RD721 for sidewalk details. See Std. Dwg. RD722 for joint details.
5. A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished suface slope) is required behind driveway apron.
6. Where existing driveway is in good condition, and meets slope requirements, construct only as much lading area as required for satisfactory connection with new w**k.
7. Check the gutter flow depth at driveway lootions to assure that the design flood does not overtop the lck of sidewalk at driveway.
8. Construct a full depth expansion joints with1/4" (in) preformed joint filler at ends of each sidewalk. Tooled joints are required at all driveway slope break lines.
9. 1'0 min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.

LEGEND:
- Sidewalk
- Driveway pay limit (See project plans for details not shown)
- Cross slope 1.5% max. (Max. 2.0% finished surface slope (Normal sidewalk cross slope)
- Running slope 7.5% max. (Max. 8.3% finished surface slope
- W Width of driveway
- K Buffer strip width
- E Curb exposure

CALC. BOOK NO. N/A — SIGN DATE 20-JUL-2020

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

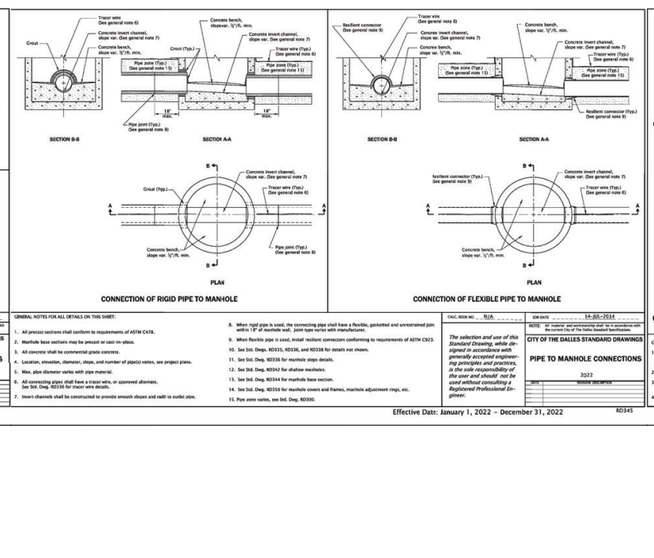
CITY OF THE DALLES STANDARD DRAWINGS

SEPARATED SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS H, I & J)

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD740



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All precast sections shall conform to requirements of ASTM C478.
2. Manhole base sections may be precast or cast-in-place.
3. All concrete shall be commercial grade concrete.
4. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
5. Max. pipe diameter varies with pipe material.
6. All connecting pipes shall have a tracer wire, or approved alternate. See Std. Dwg. RD336 for tracer wire details.
7. Invert channels shall be constructed to provide smooth slopes and radii to outlet pipe.
8. When rigid pipe is used, the connecting pipe shall have a flexible, gasketed and unrestrained joint within 18" of manhole wall. Joint type varies with manufacturer.
9. When flexible pipe is used, install resilient connect conforming to requirements of ASTM C923.
10. See Std. Dwgs. RD335, RD336, and RD338 for details not shown.
11. See Std. Dwg. RD336 for manhole steps details.
12. See Std. Dwg. RD342 for shallow manholes.
13. See Std. Dwg. RD344 for manhole base section.
14. See Std. Dwg. RD350 for manhole covers and frames, manhole adjustment rings, etc.
15. Pipe zone varies, see Std. Dwg. RD300.

CALC. BOOK NO. N/A — SIGN DATE 14-JUL-2014

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

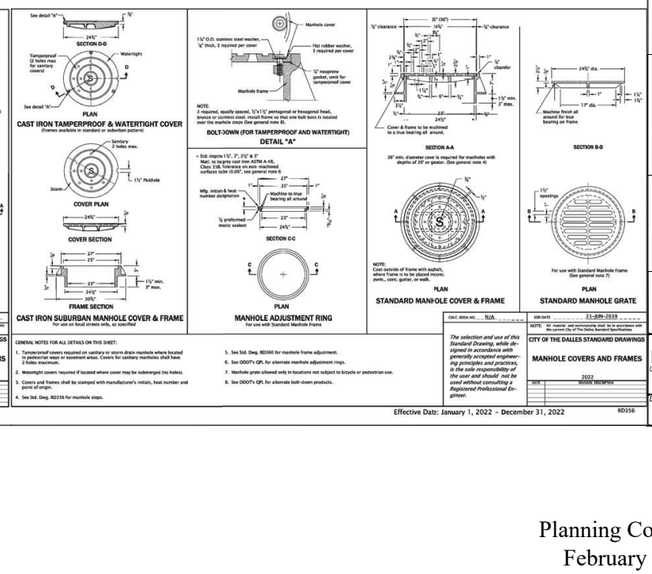
CITY OF THE DALLES STANDARD DRAWINGS

PIPE TO MANHOLE CONNECTIONS

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD345



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Tamperproof covers required on sanitary or storm drain manhole where located in pedestrian ways or easement areas. Covers for sanitary manholes shall have 2 holes maximum.
2. Watertight covers required if located where cover may be submerged (no holes).
3. Covers and frames shall be stamped with manufacturer's initials, heat number and point of origin.
4. See Std. Dwg. RD336 for manhole steps.
5. See Std. Dwg. RD350 for manhole frame adjustment.
6. See ODOT's QPL for alternate manhole adjustment rings.
7. Manhole grate allowed only in locations not subject to bicycle or pedestrian use.
8. See ODOT's QPL for alternate bolt-down products.

CALC. BOOK NO. N/A — SIGN DATE 21-JUN-2019

NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CITY OF THE DALLES STANDARD DRAWINGS

MANHOLE COVERS AND FRAMES

2022

DATE	REVISION DESCRIPTION

Effective Date: January 1, 2022 – December 31, 2022 RD356

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

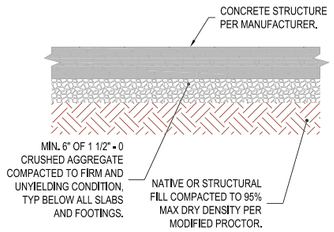
LIFT STATION DETAILS II

NO.	DATE	DESCRIPTION	BY	REVIEW
1	10/20/2022	REVISED PER CITY COMMENTS	VGL	PRC

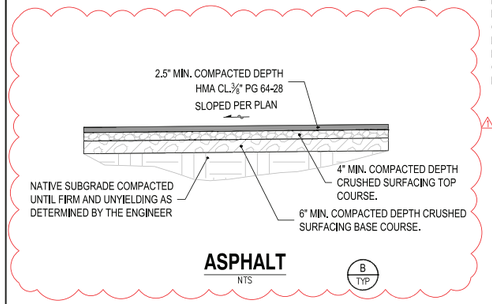
REVISIONS

JOB NO.: 022-00458.02.02
CLIENT: MFA
FILENAME: RVLS-D-DET.DWG
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS

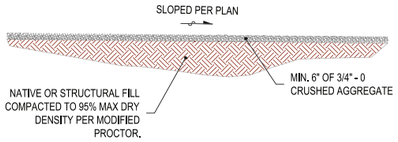
SCALE: 0"
DRAWN: B
DWG NO.: D02



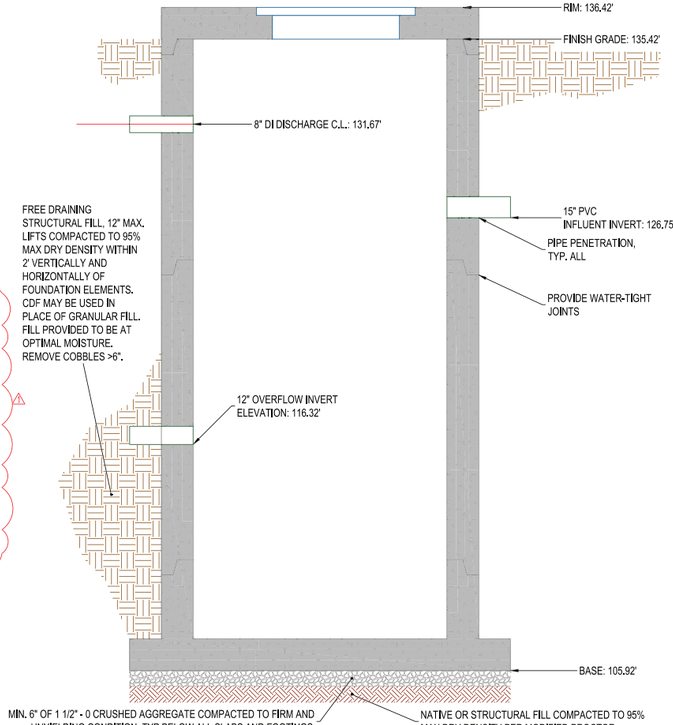
CONCRETE STRUCTURE SUBGRADE
1" = 1'-0" — A TYP



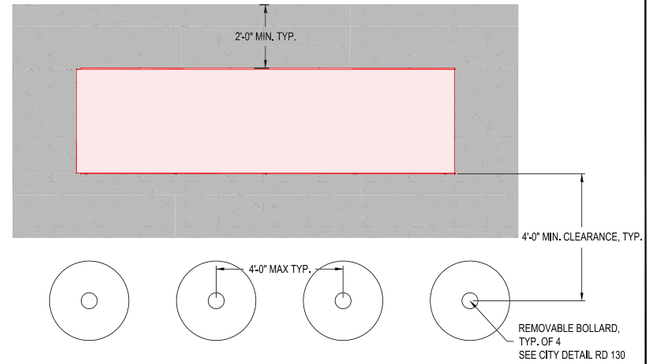
ASPHALT
NTS — B TYP



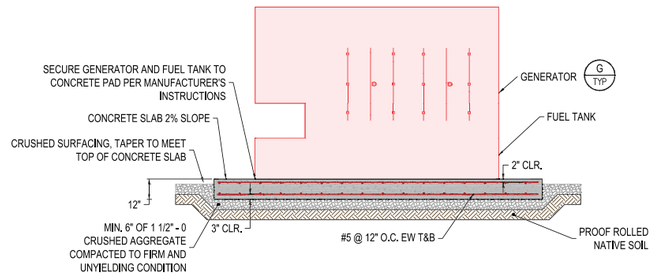
CRUSHED ROCK SURFACING
NTS — C TYP



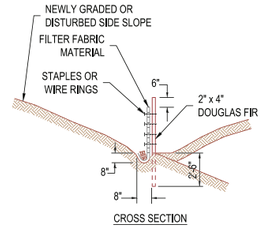
WETWELL BACKFILL
NTS — E TYP



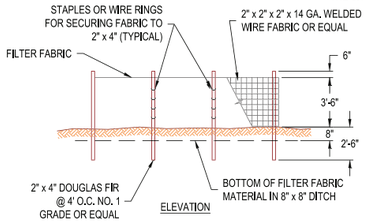
GENERATOR AND FUEL TANK PLAN VIEW
1/2" = 1'-0" — G TYP



GENERATOR AND FUEL TANK SIDE ELEVATION VIEW
1/4" = 1'-0" — H TYP

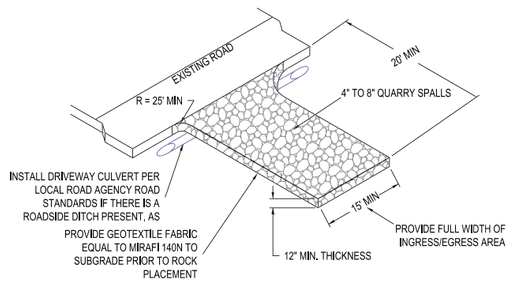


SILT FENCE NOTES:
1. WHERE POSSIBLE, MAINTAIN NATURAL VEGETATION FOR SILT CONTROL.
2. ALL SILT FENCING SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND SURFACE RESTORATION HAS BEEN COMPLETED AND VEGETATION IS STABILIZED.
3. RETURN SILTATION CONTROL AREAS TO ORIGINAL GROUND CONDITIONS, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE CITY.



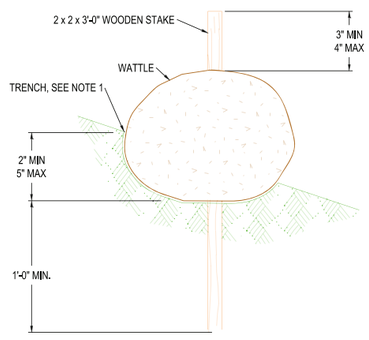
SILT FENCE
NTS — D TYP

ENTRANCE NOTE:
CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE AT ANY LOCATION WHERE SEDIMENT OR OTHER DEBRIS IS BEING TRANSPORTED ONTO A PAVED ROAD SURFACE. STABILIZED ENTRANCE SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE.



STABILIZED CONSTRUCTION ENTRANCE
NTS — F TYP

WATTLE NOTES:
1. WATTLES SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING RD1010. INSTALL WATTLES ALONG CONTOURS. INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(10).
2. SECURELY KNOT EACH END OF WATTLE. ABUT ADJACENT WATTLES TIGHTLY, END TO END, WITHOUT OVERLAPPING THE ENDS.
3. PILOT HOLES MAY BE DRIVEN THROUGH THE WATTLES AND INTO THE SOIL WHEN SOIL CONDITIONS REQUIRE.
4. LIVE STAKES MAY BE USED FOR PERMANENT INSTALLATION AND SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 9-14.5(6).
5. WATTLES SHALL BE INSPECTED REGULARLY, AND IMMEDIATELY AFTER A RAINFALL PRODUCES RUNOFF, TO ENSURE THEY REMAIN THOROUGHLY ENTRENCHED AND IN CONTACT WITH THE SOIL.
6. PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).



STRAW WATTLE
NTS — I TYP

RH2

REGISTERED PROFESSIONAL ENGINEER — OREGON — MAY 13, 2008 — PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

LIFT STATION & SITE DETAILS III

REVISIONS				
NO.	DATE	DESCRIPTION	BY	REVIEW
1	10/20/2022	REVISED PER CITY COMMENTS	VGL	PRC

CLIENT: MFA
FILENAME: RV-LS-D-DET.DWG
JOB NO.: 022-0049.02.02
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS
SC
DRAWN: B
DWG NO.: D03

Legal Base SLAs Accepted

ONE-LINE DIAGRAM SYMBOLS

- CIRCUIT BREAKER
  XXX/YY – CB SIZE & NO. OF POLES
  ET – ELECTRONIC TRIP
  TM – THERMAL MAGNETIC BREAKER
  MCP – MOTOR CIRCUIT PROTECTOR
  SE – SERVICE ENTRANCE
  GFI – GROUND FAULT INTERRUPTER
- FUSE
- FUSED DISCONNECT SWITCH
- PLUG–IN CONNECTION
- RTM – RUN TIME METER
- OC – MOTOR OPERATION COUNTER
- SSRVS – SSRVS – SOLID STATE REDUCED VOLTAGE STARTER
- VARIABLE FREQUENCY DRIVE
- MOTOR STARTER
- MOTOR STARTER W/ OPERATOR DEVICES (A B C D)
  A – HAND–OFF–AUTO
  B – OPERATIONAL COUNTER
  C – RUN TIME METER
  D – RUN LIGHT
  E – FAIL LIGHT
  F – EMERGENCY STOP
- K – KIRK KEY INTERLOCK
- POWER TRANSFORMER
- CONTROL POWER TRANSFORMER
- TRANSFORMER
- CURRENT TRANSFORMER
- VOLTAGE TRANSFORMER
- CONTACTOR
- CAPACITOR
- ENGINE GENERATOR
- GENERATOR CONNECTION RECEPTACLE
- S/N – SOLID NEUTRAL
- TB – TERMINAL BLOCK
- SURGE PROTECTION DEVICE
- SPD – SURGE PROTECTION DEVICE (ALTERNATIVE)

GROUNDING SYSTEM SYMBOLS

- GROUND
- METAL PIPE GROUND
- CONNECTION POINT, EXOTHERMIC WELD. CADWELD OR APPROVED EQUAL.
- GROUND ROD SIZED PER N.E.C. USE EXOTHERMIC WELD CONNECTION AT THE GROUND ROD.
- PIGTAIL, BARE COPPER, LENGTH AS REQUIRED, 8' MINIMUM.
- CONNECTION POINT, MECHANICAL, COMPRESSION TYPE.

ELECTRICAL SITE PLAN SYMBOLS

- UTILITY POLE AND GUY WIRE
- HH – MANHOLE OR HANDHOLE
- P – BURIED POWER VAULT OR MANHOLE
- T – TELEPHONE VAULT OR PEDESTAL
- F – FIBER OPTICS VAULT OR PEDESTAL
- LUMINAIRE
- PAD–MOUNT TRANSFORMER

PANELBOARDS, SWITCHES, AND EQUIPMENT

- SERVICE ENTRANCE, SWITCHGEAR, MOTOR CONTROL CENTER, OR PANELBOARD
- SURFACE MOUNTED PANELBOARD
- FLUSHED MOUNTED PANELBOARD
- NXX – FIELD CONTROL STATION WITH NEMA REQUIREMENTS.
  N1 – NEMA 1
  N3R – NEMA 3R
  N4 – NEMA 4
  N4SS – NEMA 4 STAINLESS STEEL
  N4F – NEMA 4 FIBERGLASS
  N6 – NEMA 6
  N12 – NEMA 12 GASKETED
- EQUIPMENT MOUNTING STAND
- HEATER, WATTAGE NOTED
- EQUIPMENT CONNECTION
- M – SINGLE PHASE MOTOR, HORSEPOWER AS NOTED
- HP – THREE PHASE MOTOR, HORSEPOWER AS NOTED
- HP – SINGLE PHASE MOTOR, HORSEPOWER AS NOTED
- ELECTRICAL PLUG
- DISCONNECT SWITCH
- F – FUSED DISCONNECT SWITCH
- COMBINATION MOTOR STARTER AND DISCONNECT SWITCH

RECEPTACLES AND JUNCTION BOX SYMBOLS

- J – CEILING JUNCTION BOX
- J – WALL JUNCTION BOX
- J – FLOOR JUNCTION BOX
- DUPLEX WALL RECEPTACLE , 120V
  WP = WEATHERPROOF
  G = GROUNDED
  IG = ISOLATED GROUND
  GFI = GROUND FAULT INTERRUPTER
- DOUBLE DUPLEX
- SINGLE RECEPTACLE, 120V
- SINGLE RECEPTACLE, 208V
- DUPLEX FLOOR RECEPTACLE, 120V
- SPECIAL PURPOSE WALL RECEPTACLE, RATING AS NOTED
- CLOCK
- TV – TELEVISION
- TELEPHONE
- TELEPHONE/DATA WITH CABLE
- TELEPHONE/DATA WITHOUT CABLE

SWITCH OUTLETS

- S – STANDARD SWITCH, 120VAC, 20 AMP
- S_3 $_{3WAY}$ – 3–WAY SWITCH, 120VAC, 20 AMP
- S_{HOA} $_{HOA}$ – 3–POSITION SWITCH, 120VAC, 20 AMP, LABEL SWITCH POSITION HAND–OFF–MOTION OR PHOTO

- S_{DEE} SINGLE–POLE
- S_2 DOUBLE–POLE
- S_3 THREE WAY
- S_4 FOUR WAY
- S_D DIMMER
- S_{OS} OCCUPANCY SENSOR
- S_P PILOT–LIGHTED
- S_K KEY–OPERATED
- S_{LV} LOW VOLTAGE
- S_M MASTER
- PUSHBUTTON

LIGHTING FIXTURES/DEVICES

- FLUORESCENT FIXTURE
- WALL/CEILING MOUNTED FIXTURE
- EMERGENCY LIGHT WITH SELF CONTAINED BATTERY
- SURFACE OR PENDANT MOUNTED FIXTURE
- RECESSED FIXTURE
- MD – MOTION DETECTOR
- PC – PHOTO CONTROL CELL

FIRE SYSTEM SYMBOLS

- H – HEAT DETECTOR
- S – SMOKE DETECTOR
- D – FIRE ALARM DISPATCH STROBE ALARM
- A – FIRE ALARM AUDIBLE/VISUAL ALARM
- F – FIRE ALARM MANUAL PULL STATION

ADDITIONAL SYMBOLS

- S – SOUND SYSTEM SPEAKER
- V – SOUND SYSTEM VOLUME CONTROL
- B – DOORBELL

VALVE SYMBOLS

- PILOT VALVE SOLENOID
- VALVE
- CHECK VALVE
- CONTROL VALVE

PID FORMAT

- XYZ – SUPERSCRIPT: X=MEASURED OR INITIATING VARIABLE; Y=READOUT OR FUNCTION; Z=MODIFIER
- ABC – INSTRUMENT BUBBLE: ABC=LOOP NUMBER

ISA STANDARDS FOR P&ID

	1st LETTER (MEASURED OR INITIATING VARIABLE)	2nd LETTER (READOUT OR FUNCTION)	3rd LETTER (MODIFIER)
A	ANALYSIS	ALARM	
B	BURNER (BATTERY)		
C	COMMUNICATION	CONTROL (DELAY)	(BACK) CLOSED
D	DENSITY		
E	VOLTAGE		
F	FLOW		FAIL (FLOW) GREEN BULB
G	GAS		HIGH
H	HAND	MANUAL INDICATE	
I	CURRENT (INTRUSION)		
J	POWER (EQUIPMENT)		
K	TIME	CONTROL STATION LIGHT	
L	LEVEL		LOW
M	MOTION		MIDDLE
N	USERS CHOICE		
O	USERS CHOICE		OPEN
P	PRESSURE	(PUMP)	(PRESSURE)
Q	QUANTITY (EVENT)	TOTALIZE	
R	RADIATION (REQ'D)	RECORD	
S	SPEED (SMOKE)	SWITCH	RED BULB SOLENOID
T	TEMPERATURE	TRANSMITTER	(TRANSMITTER)
U	MULTI VARIABLE	MULTI FUNCTION VALVE	
V	VISCOSITY (pH)		
W	WEIGHT		
X	UNCLASSIFIED		
Y	USERS CHOICE	RELAY (TRANSDUCER)	
Z	POSITION		

ABBREVIATIONS

SPDT – SINGLE POLE, DOUBLE THROW
SPST – SINGLE POLE, SINGLE THROW
DPST – DOUBLE POLE, SINGLE THROW
WP – WEATHER–PROOF
GFI – GROUND FAULT INTERRUPT
P – POWER
C – CONTROL
J – INSTRUMENTATION
PC – POWER & CONTROL
CJ – CONTROL & INSTRUMENTATION
CKT. – CIRCUIT
C.O. – CONDUIT ONLY
N.L. – NIGHT LIGHT
AL. – ALUMINUM
CU. – COPPER

- HOA – HAND–OFF–AUTO SWITCH
- RTM – RUN TIME METER
- OC – OPERATION COUNTER
- MRIL – MOTOR RUN INDICATION LIGHT
- SFIL – SEAL FAIL INDICATION LIGHT
- SFTR – SEAL FAIL TRIP RESET
- OTIL – OVER TEMPERATURE INDICATION LIGHT
- MOIL – MOTOR OVERLOAD INDICATION LIGHT

INDICATE TYPE BY LETTER

- V
- AH

INSTRUMENT METER

A – AMMETER
AH – AMPERE–HOUR
PF – POWER FACTOR
V – VOLTMETER
VA – VOLT AMMETER
VAR – VARMETER
VARH – VARHOUR METER
W – WATTMETER
WH – WATTHOUR METER

RACEWAY LEGEND

SITE PLAN LEGEND

- P – PROPOSED POWER
- TEL – PROPOSED TELEPHONE
- TELM – PROPOSED INSTRUMENTATION
- FO – PROPOSED FIBER OPTICS

BUILDING OR FACILITY PLAN LEGEND

- 480 VOLT EXPOSED RACEWAY
- 480 VOLT WIRING CONCEALED, UNDERGROUND, EMBEDDED, OR CONCRETE ENCASED RACEWAY
- 120/208/240 VOLT EXPOSED RACEWAY
- 120/208/240V WIRING CONCEALED, UNDERGROUND, EMBEDDED, OR CONCRETE ENCASED RACEWAY
- CONTROL OR INSTRUMENTATION EXPOSED RACEWAY
- CONTROL OR INSTRUMENTATION, UNDERGROUND, EMBEDDED, OR CONCRETE ENCASED RACEWAY
- HOME RUN TO PANELBOARD OR AS INDICATED
- CONDUIT RUN, BROKEN AND CONTINUED SAME SHEET OR AS NOTED
- FLEXIBLE CONDUIT
- CONDUIT RUN, HATCH MARKS INDICATE NUMBER OF CONDUCTORS
- ½" GRC, 2–#12 – CALLOUT INDICATING CONDUIT SIZE, NUMBER AND SIZE OF WIRE.
- XXX – CALLOUT INDICATING CONDUIT PER SCHEDULE
- CONDUIT BENT UP OR TOWARD
- CONDUIT BENT DOWN OR AWAY
- CAPPED CONDUIT

LADDER LOGIC SYMBOL LEGEND

- INDICATOR LIGHT – INDICATOR LIGHT: A – AMBER, G – GREEN, B – BLUE, R – RED, C – CLEAR, W – WHITE
- RELAY (XYZ 123) – RELAY: TR – TIMED RELAY, CR – CONTROL RELAY
- LIMIT SWITCH – LIMIT SWITCH, NORMALLY OPEN
- FLOAT SWITCH – FLOAT SWITCH, NORMALLY OPEN
- LIMIT SWITCH – LIMIT SWITCH, NORMALLY CLOSED
- FLOAT SWITCH – FLOAT SWITCH, NORMALLY CLOSED
- TIME DELAY CONTACT – TIME DELAY CONTACT, NORMALLY OPEN, TIME TO CLOSE
- PUSHBUTTON – PUSHBUTTON, NORMALLY CLOSED
- TIME DELAY CONTACT – TIME DELAY CONTACT, NORMALLY CLOSED, TIME TO OPEN
- PUSHBUTTON – PUSHBUTTON, NORMALLY OPEN
- TIME DELAY CONTACT – TIME DELAY CONTACT, NORMALLY OPEN, TIME TO OPEN
- THERMOSTAT – THERMO SWITCH, NORMALLY OPEN
- TIME DELAY CONTACT – TIME DELAY CONTACT, NORMALLY CLOSED, TIME TO CLOSE
- THERMOSTAT – THERMO SWITCH, NORMALLY CLOSED
- RELAY CONTACT, NC / RELAY CONTACT, NO – RELAY CONTACT, INSTANTANEOUS CHANGE
- FLOWSWITCH – FLOWSWITCH, NORMALLY OPEN
- PRESSURE SWITCH – PRESSURE SWITCH, NORMALLY OPEN
- FLOWSWITCH – FLOWSWITCH, NORMALLY CLOSED
- PRESSURE SWITCH – PRESSURE SWITCH, NORMALLY CLOSED
- 2 POLE SWITCH

LADDER LOGIC LINETYPES

- COMPONENT INSTALLED INSIDE ENCLOSURE
- COMPONENT INSTALLED ON FRONT OF ENCLOSURE
- FIELD CONNECTED COMPONENT

- 3 POLE SWITCH

GENERAL NOTES

1. THIS IS A STANDARD LEGEND, NOT ALL OF THE INFORMATION SHOWN ON THIS PAGE WILL APPEAR IN THIS SET OF PLANS.
2. THESE DRAWINGS ARE DIAGRAMMATIC ONLY; EXACT LOCATIONS OF ELECTRICAL EQUIPMENT SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THE INSTALLATION OF ALL EQUIPMENT SHOWN ON THESE DRAWINGS OR DESCRIBED IN THE SPECIFICATIONS SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE LATEST EDITIONS OF ALL APPLICABLE CODES AND UTILITY COMPANY STANDARDS. CONTACT THE UTILITY COMPANY REPRESENTATIVES AND VERIFY THEIR REQUIREMENTS.
3. NOTIFY THE ENGINEER IMMEDIATELY IF CONFLICTS IN EQUIPMENT LOCATIONS ARE DISCOVERED OR IF PROBLEMS ARISE DUE TO FIELD CONDITIONS, LACK OF INFORMATION OR ANY OTHER REASON. NO PAYMENT WILL BE MADE FOR CHANGES WHICH HAVE NOT BEEN REVIEWED BY THE ENGINEER.

RH2

REGISTERED PROFESSIONAL ENGINEER – OREGON – MAY 13, 2005 – PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

ELECTRICAL LEGEND

REVISIONS			
NO.	DATE	DESCRIPTION	BY
			REVIEW

JOB NO. 022-0049.02.02
CLIENT: MFA
FILENAME: RVLS-D-E001.DWG
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS
SCALE: 0" DRAWN BY
DWG NO.: E001

ELECTRICAL SITE PLAN

1" = 10'

ELECTRICAL NOTES	
1	1. COORDINATE WITH UTILITY ON CONDUIT EXTENSION FROM VAULT TO TERMINATION.
2	2. UTILITY TO EXTEND CONDUIT FROM PROPOSED SWITCHYARD TO VAULT.
3	3. COORDINATE WITH UTILITY ON VAULT LOCATION.
4	4. COORDINATE WITH UTILITY ON CONDUIT EXTENSION FROM VAULT TO TRANSFORMER.

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS

EXPIRES: 12/31/2023
SIGNED: 10/28/2022

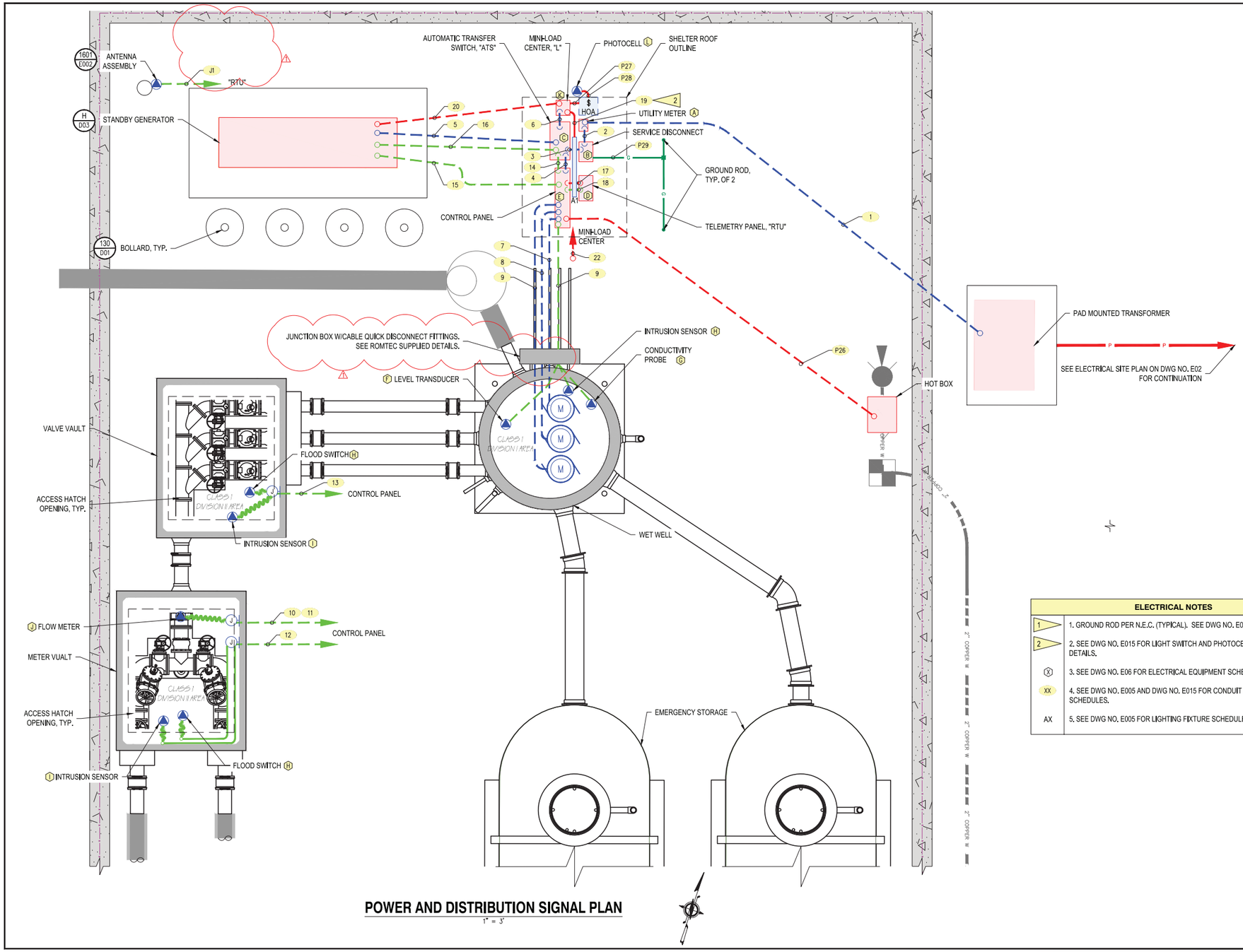
MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

ELECTRICAL SITE PLAN

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	10/27/2022	REVISED PER CITY COMMENTS	KRS

ENGINEER: VGL
REVIEWED: KRS
SAVE DATE: Oct 27, 2022
PLOT DATE: Oct 28, 2022
CLIENT: MFA
FILENAME: RVLS-SD-E002.DWG
JOB NO.: 022-0049.0222

SC
DRAWN
DWG NO.: E002



POWER AND DISTRIBUTION SIGNAL PLAN

1" = 3'

ELECTRICAL NOTES	
1	1. GROUND ROD PER N.E.C. (TYPICAL). SEE DWG NO. E04 FOR DETAIL.
2	2. SEE DWG NO. E015 FOR LIGHT SWITCH AND PHOTOCELL INSTALLATION DETAILS.
X	3. SEE DWG NO. E06 FOR ELECTRICAL EQUIPMENT SCHEDULE.
XX	4. SEE DWG NO. E005 AND DWG NO. E015 FOR CONDUIT AND CONDUCTOR SCHEDULES.
AX	5. SEE DWG NO. E005 FOR LIGHTING FIXTURE SCHEDULE.

RH2

REGISTERED PROFESSIONAL ENGINEER OREGON MAY 13, 2008 PAUL R. CROSS

EXPIRES: 12/31/2023
SIGNED: 10/28/2022

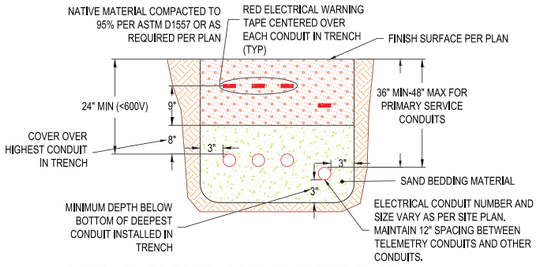
MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

POWER AND DISTRIBUTION SIGNAL PLAN

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	10/20/2022	REVISED PER CITY COMMENTS	VGL

JOB NO.: 022-0048.02.02
CLIENT: MFA
FILENAME: RVLS-D-E003.DWG
SAVE DATE: Oct 21, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS
PRC

SC
0"
DRAWN
DWG NO.: E003

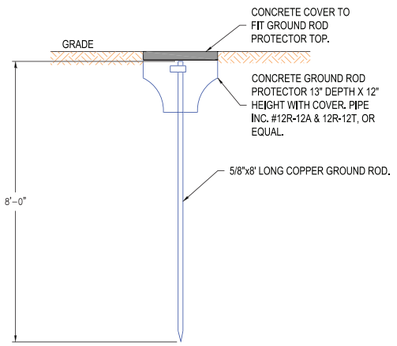


TYPICAL ELECTRICAL TRENCH DETAIL

1 TYP.

NOT TO SCALE

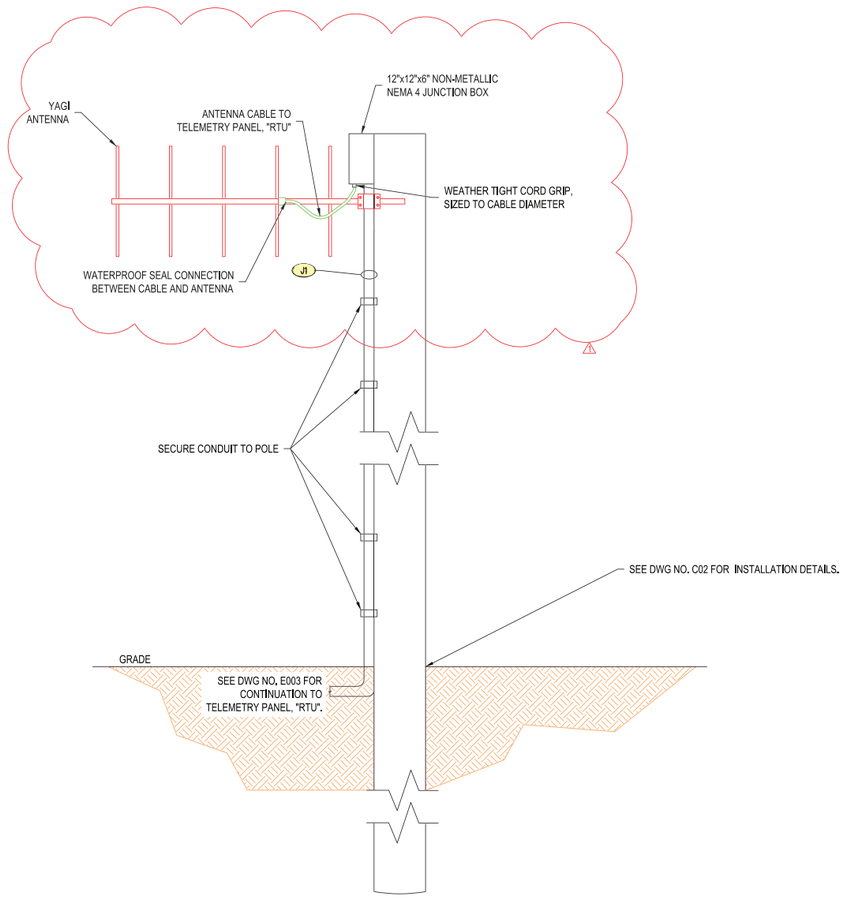
NOTE: BURY DEPTH OF CONDUIT AND HORIZONTAL SPACING SHALL BE CONFIRMED WITH SERVING UTILITY BEFORE CONSTRUCTION.



GROUND ROD DETAIL

2 TYP.

NOT TO SCALE



ANTENNA DETAIL

1601 E003

NOT TO SCALE

ELECTRICAL NOTES	
XX	1. SEE DWG NO. E005 AND DWG NO. E015 FOR CONDUIT AND CONDUCTOR SCHEDULES.

RH2

REGISTERED PROFESSIONAL ENGINEER OREGON MAY 13, 2008 PAUL R. CROSS

EXPIRES: 12/31/2023

SIGNED: 10/28/2022

MAUL FOSTER ALONGI

RIVERVIEW LIFT STATION

ELECTRICAL DETAILS I

REVISIONS

NO.	DESCRIPTION	DATE	BY	REVIEW
1	REVISED PER CITY COMMENTS	10/20/2022	VGL	PRC

JOB NO: 022-0948.02.02

CLIENT: MFA

FILENAME: RVLS-D-E004.DWG

SAVE DATE: Oct 19, 2022

PLOT DATE: Oct 27, 2022

ENGINEER: VGL

REVIEWED: KRS

DRAWN BY:

DWG NO.: E004

ELECTRICAL EQUIPMENT AND INSTRUMENTATION SCHEDULE			
ITEM	DESCRIPTION	MANUFACTURER	MODEL NO.
(A)	MAIN SERVICE UTILITY METER – NEMA 3R ENCLOSURE, 200 AMP, 480 VOLT, 3ϕ.	PER UTILITY STANDARDS	PER UTILITY STANDARDS
(B)	MAIN SERVICE DISCONNECT SWITCH – NEMA 3R ENCLOSURE, HEAVY DUTY BREAKER, SERVICE ENTRANCE RATED, THERMAL MAGNETIC, 200 AMP, 480 VOLT, 3ϕ 22 KAIC WITHSTAND, CIRCUIT BREAKER SWITCH.	SIEMENS	HFD6 OR EQUAL
(C)	AUTOMATIC TRANSFER SWITCH	SEE ROMTEC SPECIFICATIONS	SEE ROMTEC SPECIFICATIONS
(E)	CONTROL PANEL	SEE ROMTEC SPECIFICATIONS	SEE ROMTEC SPECIFICATIONS
(F)	LEVEL TRANSDUCER	SEE ROMTEC SPECIFICATIONS	SEE ROMTEC SPECIFICATIONS
(G)	CONDUCTIVITY PROBE	SEE SPECIFICATIONS	SEE SPECIFICATIONS
(H)	FLOOD SWITCH	SEE ROMTEC SPECIFICATIONS	SEE ROMTEC SPECIFICATIONS
(I)	INTRUSION SENSOR	SEE ROMTEC SPECIFICATIONS	SEE ROMTEC SPECIFICATIONS
(J)	FLOW METER	SEE ROMTEC SPECIFICATIONS	SEE ROMTEC SPECIFICATIONS
(K)	MINI-LOAD CENTER – 7.5 KVA, 480-120 VAC 1ϕ, NEMA 3R ENCLOSURE	EATON	P48G11S07P
(L)	PHOTOCELL	SEE SPECIFICATIONS	SEE SPECIFICATIONS

LIGHTING FIXTURE SCHEDULE				
TYPE	DESCRIPTION	MANUFACTURER NAME	MANUFACTURER CATALOG NO.	REMARKS
A1	LIGHT FIXTURE, LED, 4'-0" LONG, 120 VAC, 33 WATT, 3,500 LUMENS, 40K COLOR TEMPERATURE, HIGH EFFICIENCY DRIVER, HIGH-IMPACT POLYCARBONATE LENS, MOLDED POLYCARBONATE HOUSING, U.L. LISTED FOR WET LOCATIONS, CEILING MOUNTED, MOUNT PHOTOCELL AT TOP OF CANOPY FACING NORTH, PER ROMTEC DESIGN.	LITHONIA	XVML L48 3500LM MVOLT 40K 80CRI	

CONDUIT AND CONDUCTOR SCHEDULE (OTHER THAN ROMTEC SCHEDULED)					
CIRCUIT	SOURCE	DESTINATION	TRADE SIZE	(QUANTITY) CONDUCTORS	NOTES
P26	CONTROL PANEL	HOT BOX	3/4"	(2) – #12, (1) – #12 GRD	
P27	MINI-LOAD CENTER, "L"	HOA LIGHT SWITCH	3/4"	(2) – #12, (1) – #12 GRD	
P28	HOA LIGHT SWITCH	PHOTOCELL	3/4"	(2) – #12, (1) – #12 GRD	
P29	MAIN DISCONNECT	GROUNDING RODS	3/4"	(1) – #6 GRD	
J1	RADIO ANTENNA	TELEMTRY PANEL "RTU"	2"	(1) – ANTENNA CABLE	

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

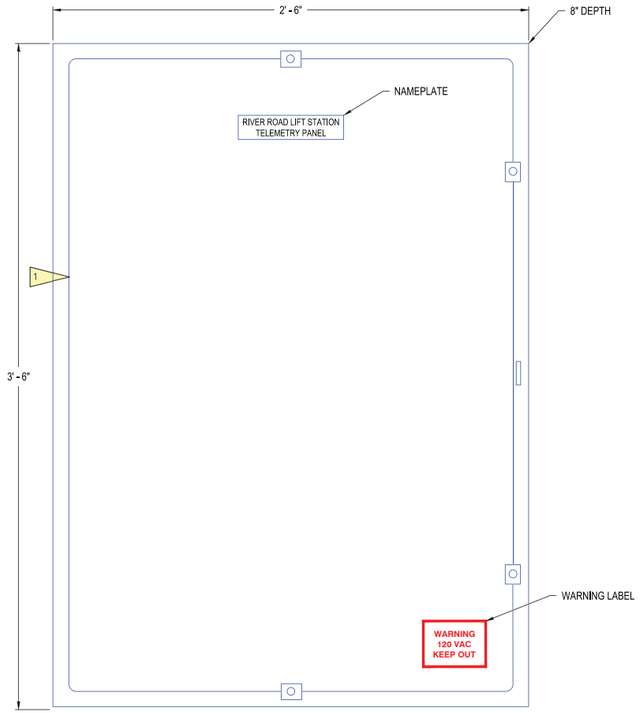
ELECTRICAL DETAILS II

REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

JOB NO.: 022-0049.02.02
CLIENT: MFA
FILENAME: RVLS-ELE05.DWG
SAVE DATE: Oct 19, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS

SC
0"
DRAWIN
B
DWG NO.: E00



0801 E010 **TELEMETRY PANEL EXTERIOR LAYOUT**

NOT TO SCALE

ELECTRICAL NOTES	
1	1. WHITE ENCLOSURE WHITE PER CITY STANDARDS FOR OUTDOOR PANELS.

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS

EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

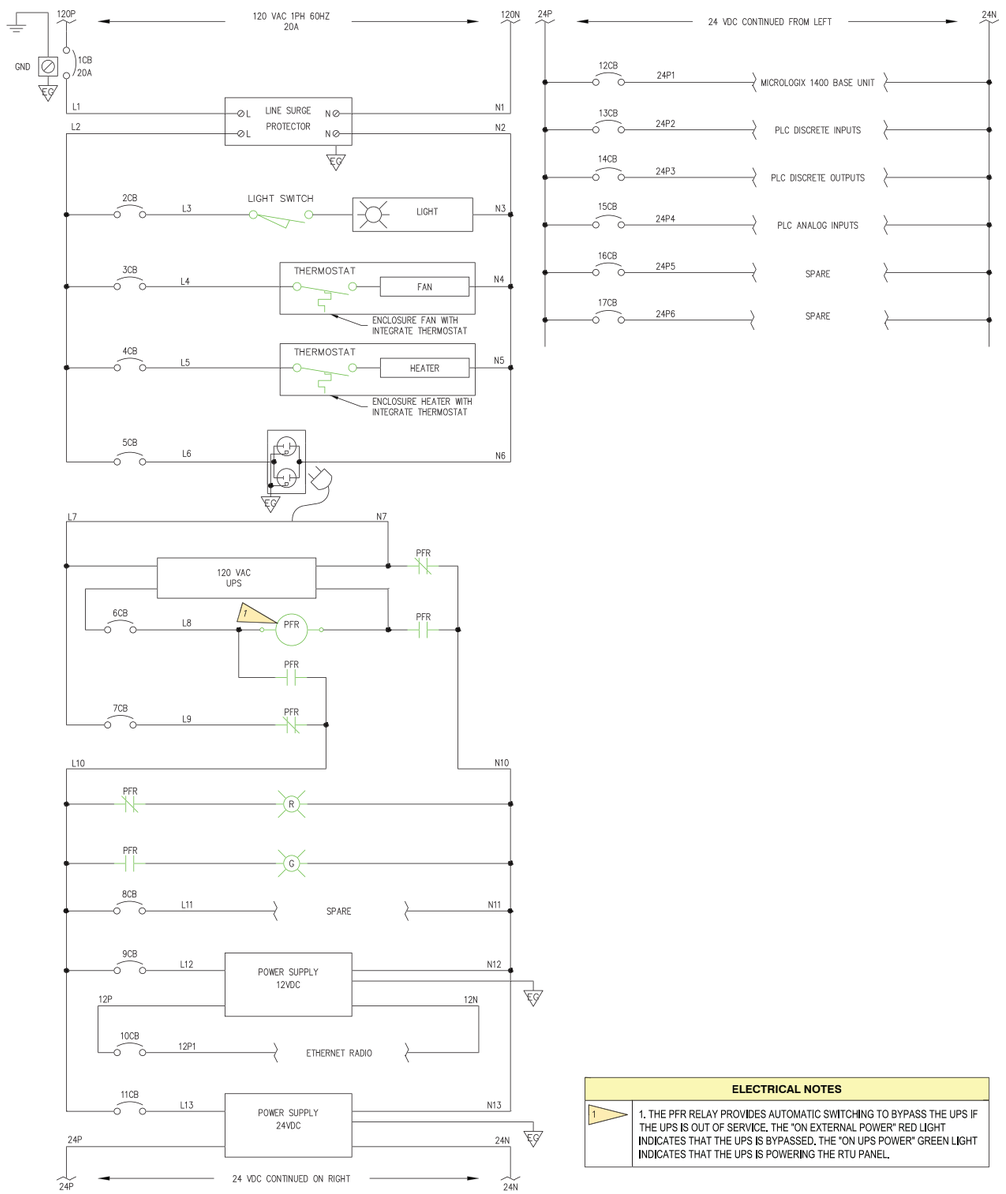
ELECTRICAL SCHEDULES

JOB NO: 022-0048.02.02
CLIENT: MFA
FILENAME: RVLS-ID-E006.DWG
SAVE DATE: Jul 6, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS

REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

SC
DRAWN
B
DWG NO.:
E006

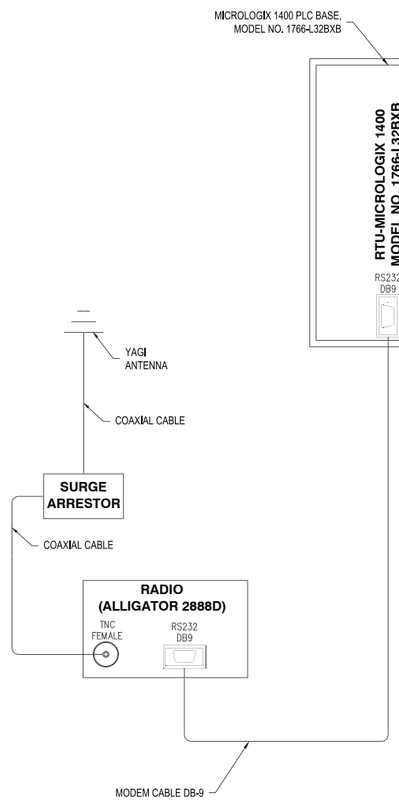


ELECTRICAL NOTES

1. 1. THE PFR RELAY PROVIDES AUTOMATIC SWITCHING TO BYPASS THE UPS IF THE UPS IS OUT OF SERVICE. THE "ON EXTERNAL POWER" RED LIGHT INDICATES THAT THE UPS IS BYPASSED. THE "ON UPS POWER" GREEN LIGHT INDICATES THAT THE UPS IS POWERING THE RTU PANEL.

POWER LAYOUT

NOT TO SCALE



COMMUNICATIONS LAYOUT

NOT TO SCALE

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS

EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

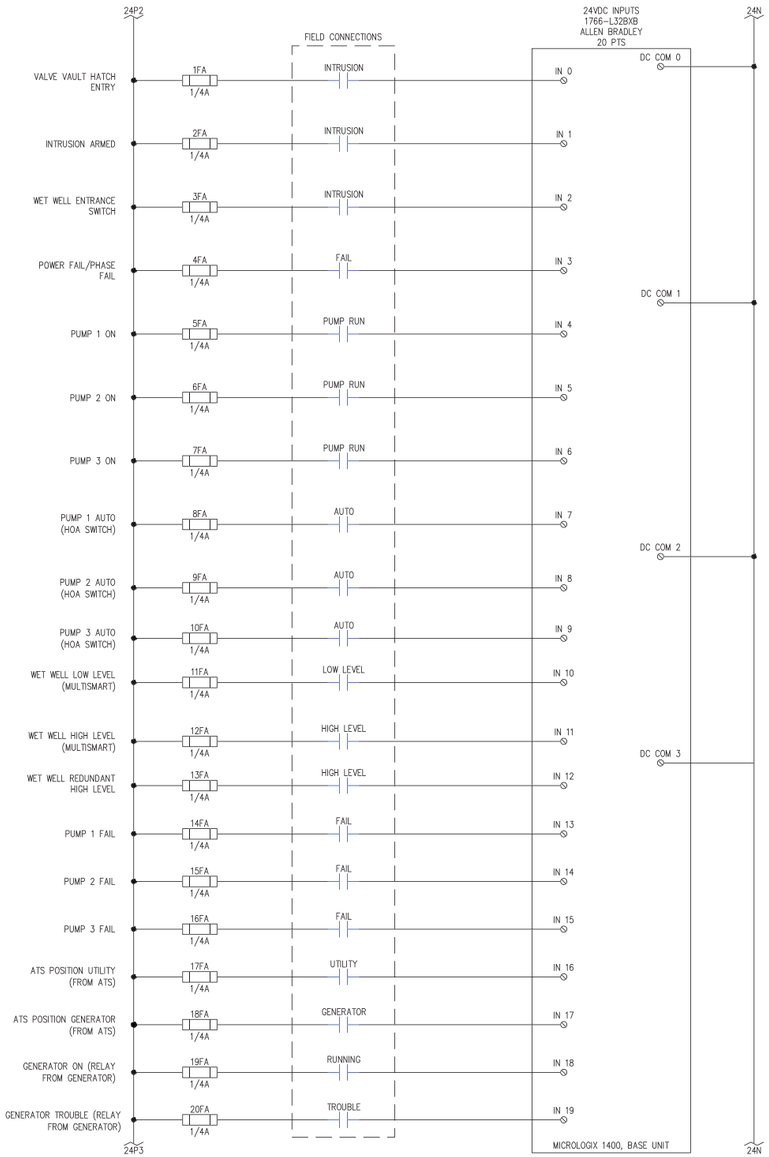
COMMUNICATIONS DIAGRAM

JOB NO.: 022-004/02.02
CLIENT: MFA
FILENAME: RVLS-D-E007.DWG
SAVE DATE: Jul 6, 2022
PLOT DATE: Oct 27, 2022
ENGINEER: VGL
REVIEWED: KRS

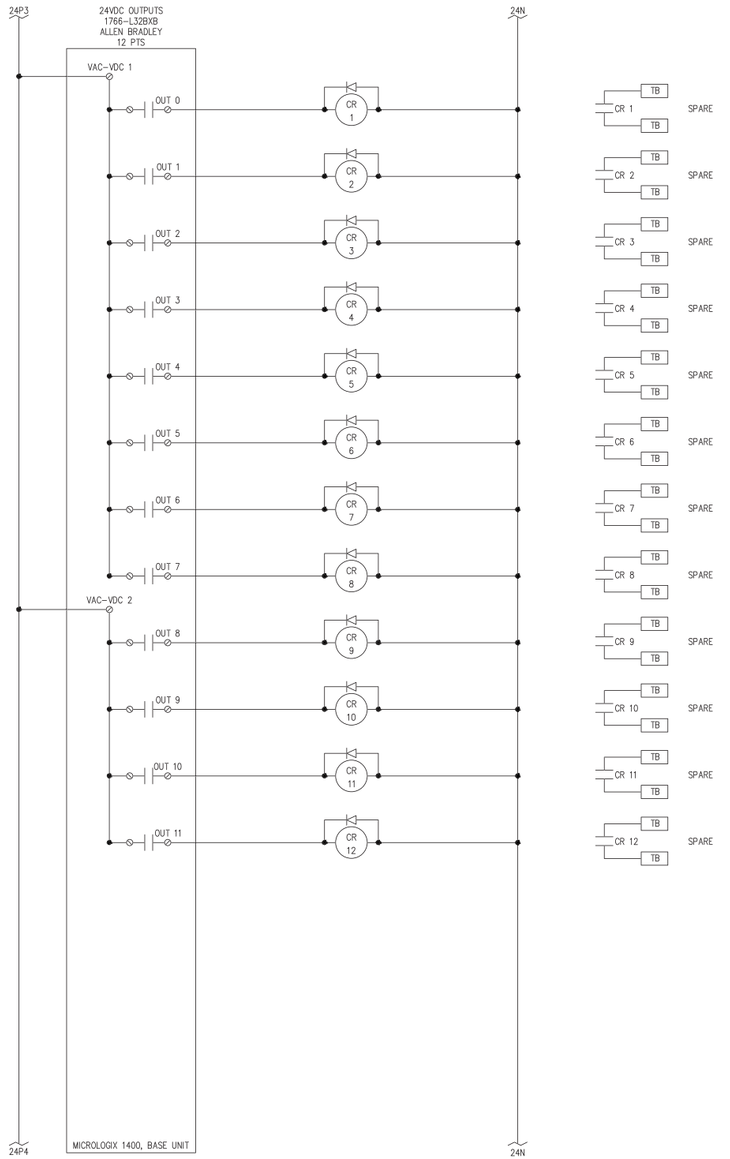
REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

SC
DRAWIN
DWG NO.: E007



DIGITAL INPUTS, BASE UNIT
NOT TO SCALE



DIGITAL OUTPUTS, BASE UNIT
NOT TO SCALE

RH2
REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

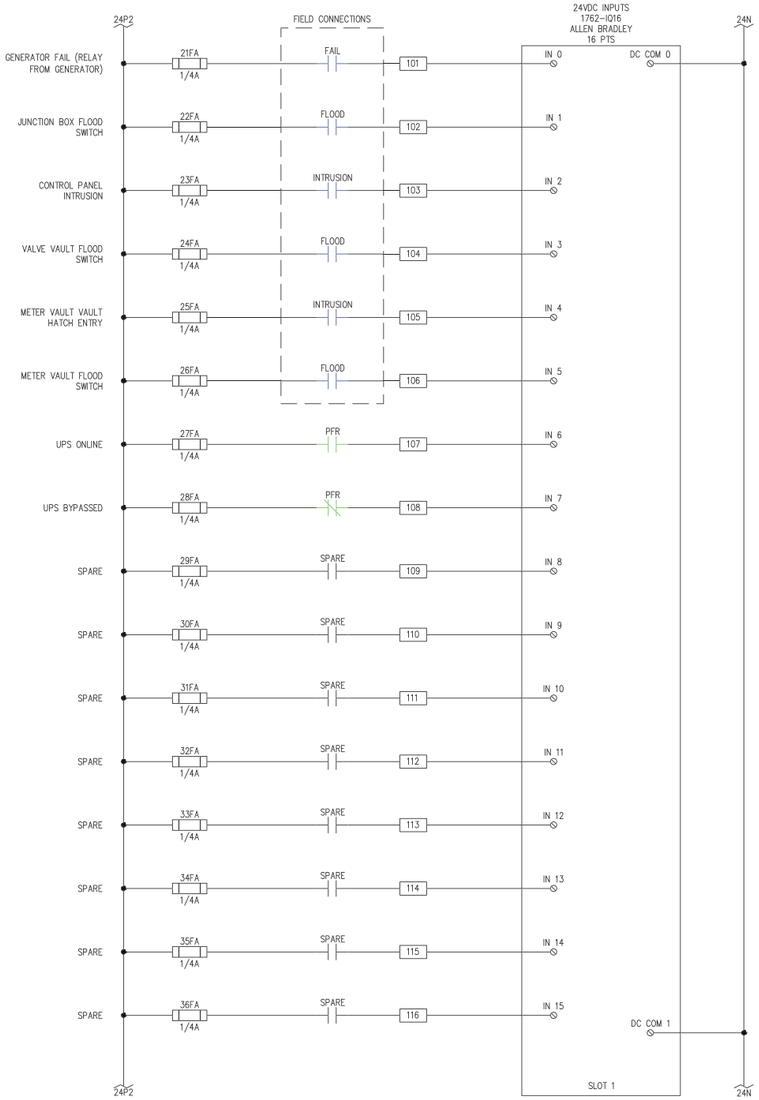
PLC INPUT AND OUTPUT WIRING I

JOB NO:	022-0948.02.02
CLIENT:	MFA
FILENAME:	RVLS-D-E008.DWG
SAVE DATE:	Jul 6, 2022
PLOT DATE:	Oct 27, 2022
ENGINEER:	VGL
REVIEWED:	KRS

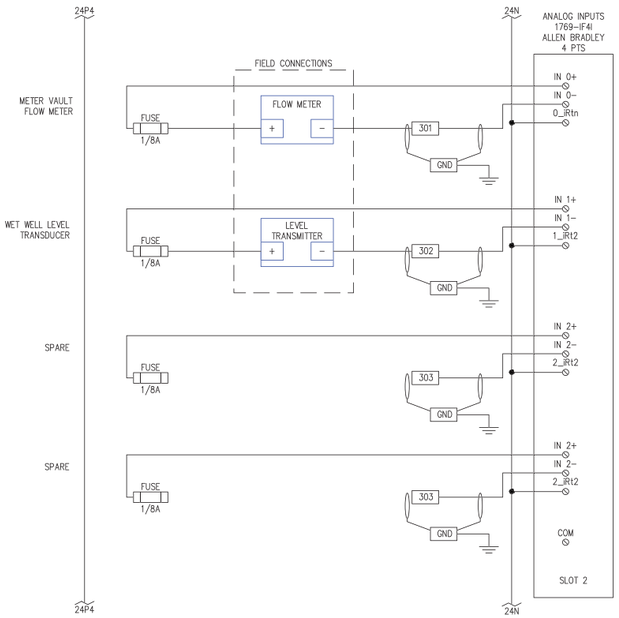
REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

SC
0"
DRAWIN
B
DWG NO.:
E008



DIGITAL INPUTS, SLOT 1
NOT TO SCALE



ANALOG INPUTS, SLOT 2
NOT TO SCALE

RH2

REGISTERED PROFESSIONAL ENGINEER
OREGON
MAY 13, 2008
PAUL R. CROSS
EXPIRES: 12/31/2023
SIGNED: 10/28/2022

MAUL FOSTER ALONGI
RIVERVIEW LIFT STATION

PLC INPUT AND OUTPUT WIRING II

JOB NO.:	022-0049.02.02
CLIENT:	MFA
FILENAME:	RVLS-FI-E009.DWG
SAVE DATE:	Jul 6, 2022
PLOT DATE:	Oct 27, 2022
ENGINEER:	VGL
REVIEWED:	KRS

REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW

SC
DRAWIN
B
DWG NO.:
E009

GENERAL INFORMATION
- ELECTRICAL SERVICE - 480V, 3 PHASE
- PUMPS - (3) 20HP, 460V, 3PH, 26 FLA, TRIPLEX CONFIGURATION
- PUMP MODEL - FLYGT, NP3153MT ~
- PRIMARY CONTROLLER - MULTISMART CONFIGURED FOR TRIPLEX OPERATION
- DEVICE MOUNTING - INNER DOOR
- PANEL MOUNTING - FLOOR MOUNT

LEVEL SENSING
- PRIMARY LEVEL SENSING - PRESSURE TRANSDUCER WIRED FOR INTRINSICALLY SAFE
- MODEL - E&H FMX21
- SECONDARY LEVEL SENSING - 10-PT CONDUCTIVE PROBE WIRED FOR INTRINSICALLY SAFE
- MODEL - MOTOR PROTECTION ELECTRONICS
- OVERFLOW SENSOR - 1PT. CONDUCTIVE PROBE WIRED FOR INTRINSICALLY SAFE

PUMP CONFIGURATION
- MANUFACTURER - FLYGT
- MODEL - NP3153MT
- HP - 20
- NP FLA - 26
- TRIPLEX
- CABLE DIA. - 1.02

CONTROL PANEL
- NEMA 3R PAINTED STEEL - WHITE, 60"H X 48"W X 12""D, 3 POINT LOCKING LATCH
- 12" LEG KIT
- MAIN DISCONNECT CIRCUIT BREAKER W/LOCKOUT PROVISIONS
- PHASE MONITOR RELAY
- TRANSIENT VOLTAGE SURE PROTECTION
- HOA SELECTOR SWITCHES
- RUN & FAULT INDICATOR LIGHTS
- ELAPSED TIME METERS
- SOFT STARTERS
- INNER DOOR MOUNTED DEVICES
- UL LISTED

CONTROL OPTIONS
- SOFT STARTERS
- INTRUSION SWITCHES
- MICROLOGIXS 1400 PLC

COMMUNICATIONS
- TELEMETRY CONTACTS
- ----
- ----
- ----

JUNCTION BOX
- TYPE - IN GROUND VAULT
- DESCRIPTION - CONCRETE 4' X 4' X 4'

GENERATOR
- MODEL - C80 D6
- 80 KW
- VOLTAGE - 480V, 3PH
- FUEL - DIESEL
- ENCLOSURE - SOUND ATTENUATED II
- 40kW LOAD BANK

AUTOMATIC TRANSFER SWITCH
- MODEL - OTEC 225A
- VOLTAGE - 480V, 3PH
- ENCLOSURE - NEMA 3R

ELECTRICAL INSTALLATION RECOMMENDATIONS

THE FOLLOWING INFORMATION IS A RECOMMENDATION ONLY. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO REVIEW ALL AS BUILT SYSTEM INFORMATION AND MAKE THE INSTALLATION AS PER THE NATION ELECTRICAL CODE (NEC).

INSTALL ALL BRANCH CIRCUIT AND/OR FEEDER OVERCURRENT PROTECTION DEVICES IN ACCORDANCE WITH THE NEC.

TABLE 1

TRIPLEX LIFT STATION CONTROL PANEL (LCP)				
VOLTS	480		LARGEST HP	20
PHASE	3		LARGEST FLA	26
FREQUENCY	60 HZ		CPT VA	3000
			TOTAL FLA	90.75

NOTE: LARGEST FLA BASED OFF OF TABLE 430.250 PER NEC ARTICLE 430.6(A)(1).

TABLE 2

RECOMMENDED CONDUIT SIZES				
DEVICE	HP	POWER DIA.	CONTROL DIA.	CONDUIT SIZE
PUMP 1	20	1.02	N/A	1-1/2"
PUMP 2	20	1.02	N/A	1-1/2"
PUMP 3	20	1.02	N/A	1-1/2"
TRANSDUCER			.35	1"
FLOATS			.25	

NOTE: ALL CONDUIT CALCULATION BASED ON RIGID METAL CONDUIT (RMC) @ 40% MAXIMUM FILL AS PER THE 2017 NATIONAL ELECTRICAL CODE.

SIZE ALL CONDUIT IN ACCORDANCE WITH THE NEC, OR AS RECOMMENDED, WHICHEVER IS GREATER.

SPECIAL NOTE:
THE ABOVE INFORMATION IS A PRELIMINARY INFORMATION ONLY. IT IS THE INSTALLING CONTRACTOR'S RESPONSIBILITY TO REFERENCE THE ELECTRICAL INSTALLATION DOCUMENTATION TO VERIFY ALL INFORMATION AND TO CONFIRM THAT THE INSTALLATION MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND ANY LOCAL CODE REQUIREMENTS.

REVISION HISTORY

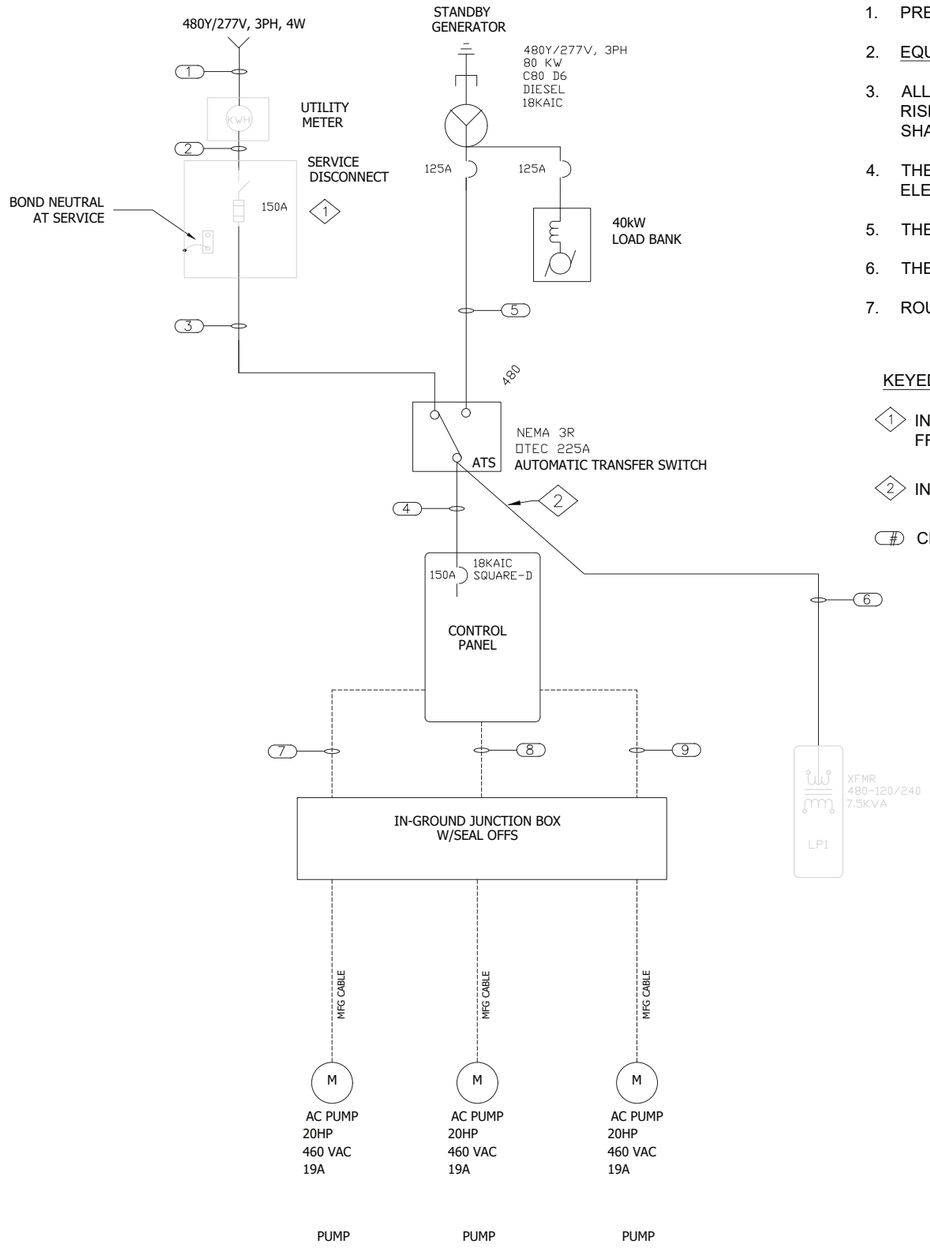
REV	DATE	DESCRIPTION	BY
			KAS

DWG NO.: E010

PROJECT #:EO106D10
DSN:DSN
DRN:DRN
CKD:CKD
DATE:10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVERVIEW
THE DALLES, OR
ELECTRICAL NOTES
TRIPLEXLIFT STATION



GENERAL NOTES:

1. PRELIMINARY DRAWINGS AND NOTES PROVIDED FOR ESTIMATING PURPOSES ONLY. NOT FOR CONSTRUCTION.
2. EQUIPMENT SHOWN GRAYED OUT IS SUPPLIED BY OTHERS.
3. ALL ITEMS RELATED TO THE ELECTRICAL SERVICE SUCH AS SERVICE CONDUIT, CONDUCTORS, DUCT, PAD MOUNT, RISERS, PULL BOXES, FITTINGS, PERMITS, FEES, AND PROTECTIVE COVERING FROM THE SERVICE POINT LOCATION SHALL BE VERIFIED WITH THE SERVING UTILITY
4. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE SERVICE IN COMPLIANCE WITH THE SERVING UTILITY, NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES.
5. THE ELECTRICAL CONTRACTOR SHALL SUPPLY ALL ELECTRICAL CONDUIT, WIRE, FASTENERS AND FITTINGS.
6. THE ELECTRICAL CONTRACTOR SHALL SUPPLY THE UTILITY METER BASE AND METHOD OF MAIN SERVICE DISCONNECT.
7. ROUTE CONTROL WIRING SEPARATE FROM POWER WIRING.

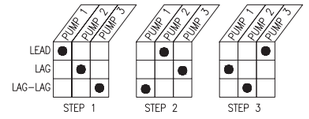
KEYED NOTES:

◇1 INSTALL METHOD OF MAIN SERVICE DISCONNECT OR FEEDER WITH OVERCURRENT PROTECTION FROM EXISTING SOURCE.

◇2 INSTALL PER NEC 240.21(B).

(#) CIRCUIT NUMBER

ALTERNATION TABLE



REV	DATE	DESCRIPTION	BY
		REVISION HISTORY	KAS

DWG NO.: E011

PROJECT #:E0106D10
DSN:DSN
DRN:DRN
CKD:CKD
DATE:10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVERVIEW
THE DALLES, OR
ELECTRICAL NOTES
TRIPLEXLIFT STATION

GENERAL NOTES

A. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR REVIEW OF ALL DRAWINGS FOR THE LOCATION AND SI E OF E UIPMENT. THE ELECTRICAL CONTRACTOR IS ALSO RE UIRED TO BE COMPLETELY FAMILIAR WITH THE PLANS AND SPECIFICATIONS PRIOR TO BEGINNING INSTALLATION. IF ANY CLARIFICATION IS RE UIRED, THE ELECTRICAL CONTRACTOR SHOULD CONTACT THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING INSTALLATION.

B. THE ELECTRICAL CONTRACTOR OR OWNER IS RESPONSIBLE FOR COORDINATING THE SUPPLY OF INCOMING UTILITY POWER.

C. THE SERVING UTILITY MUST VERIFY ALL ITEMS RELATED TO ELECTRICAL SERVICE, SUCH AS SERVICE CONDUIT, CONDUCTORS, DUCTS, PAD MOUNT(S), RISERS, PULL BOXES, PERMITS, FEES, AND PROTECTIVE COVERING(S).

D. THE ELECTRICAL CONTRACTOR MUST INSTALL THE ELECTRICAL SERVICE IN COMPLIANCE WITH THE SERVING UTILITY, THE NATIONAL ELECTRICAL CODE (NEC), AND ALL APPLICABLE STATE AND LOCAL CODES.

E. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY AND INSTALLATION METHOD OF MAIN SERVICE DISCONNECT OR FEEDER WITH OVERCURRENT PROTECTION FROM EXISTING SOURCE.

F. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLY AND INSTALLATION OF ALL RE UIRED CONDUIT AND WIRE TO CONNECT TO THE ROMTEC UTILITIES SUPPLIED E UIPMENT. ALL CONDUIT AND CONDUCTORS MUST BE SI ED AND INSTALLED PER THE NEC AND ANY APPLICABLE STATE AND LOCAL CODES.

G. INSTALLATION OF E UIPMENT INCLUDING ANY GROUNDING ARRANGEMENT TO BE IN ACCORDANCE WITH NEC ARTICLES 501, 502 AND ANS /ISA-RP12.06.01-2003 RECOMMENDED PRACTICE FOR WIRING METHODS FOR HA ARDOUS (CLASSIFIED) LOCATIONS INSTRUMENTATION WHEN APPLICABLE.

H. SEE SEPARATE CONTROL SCHEMATICS (PROVIDED BY THE CONTROL PANEL MANUFACTURER) FOR FURTHER WIRING AND CABLING DETAILS.

I. MINIMUM SPACING RE UIREMENTS ARE PER UL698A INTRINSICALLY SAFE BARRIER INSTALLATION:
   - 2 SPACING BETWEEN NON-INTRINSICALLY SAFE CIRCUIT/WIRING AND INTRINSICALLY SAFE INTERNAL WIRING.
   - 5 SPACING BETWEEN NON-INTRINSICALLY SAFE CIRCUIT/WIRING AND INTRINSICALLY SAFE TERMINALS
   - 8 SPACING BETWEEN NON-INTRINSICALLY SAFE FIELD TERMINALS AND INTRINSICALLY SAFE FIELD TERMINALS.

NOTE : INTRINSICALLY SAFE FIELD WIRING AND NON-INTRINSICALLY SAFE FIELD WIRING CANNOT BE RAN IN THE SAME RACEWAY.

SPECIAL NOTES

A. THE PROJECT S SITE ENGINEER AND/OR ELECTRICAL ENGINEER ARE RESPONSIBLE FOR ALL ASPECTS OF THE PROJECT. ROMTEC UTILITIES OFFERS ELECTRICAL INFORMATION ONLY AS A WAY TO CLARIFY THE PRODUCT OFFERING. PLEASE REFER TO THE SITE ENGINEER S SITE PLANS FOR SPECIFIC DETAILS. THE SITE ENGINEER S PLANS, SPECIFICATIONS, AND THE APPROVED SUBMITTAL DOCUMENTS GOVERN ALL ASPECTS OF THE WORK.

B. ROMTEC UTILITIES DOES NOT PROVIDE CORED HOLES IN CONCRETE STRUCTURES FOR ELECTRICAL CONDUIT RUNS. ALL ELECTRICALLY RELATED CORED HOLES ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR AND/OR ELECTRICAL CONTRACTOR.

C. ROMTEC UTILITIES WILL ONLY PROVIDE THOSE CONNECTION POINTS RE UIRED FOR SUPPLIED E UIPMENT, INCLUDING DEFINED TIE POINTS OR AS-PURCHASED. THE CUSTOMER IS RESPONSIBLE FOR ALL OTHER CONNECTIONS.

D. THE OWNER OR INSTALLING CONTRACTOR IS RESPONSIBLE FOR SUPPLYING AND INSTALLING A LOAD CENTER FOR ALL AUXILIARY LOADS. ROMTEC UTILITIES DOES NOT RECOMMEND SUPPLYING GENERAL PURPOSE RECEPTACLES OR INDUCTIVE TYPE LOADS FROM THE SUPPLIED CONTROL PANEL.

COMMUNICATIONS

A. ALL COMMUNICATION DEVICES FOR REMOTE ANNUNCIATION OR SYSTEM CONTROL AND DATA AC UISITION (SCADA) ARE TO BE CONFIGURED, TESTED, AND MAINTAINED BY THE OWNER OR OWNER S REPRESENTATIVE UNLESS SPECIFICALLY NOTED OTHERWISE. ROMTEC UTILITIES CAN INSTALL CUSTOMER-SPECIFIED COMMUNICATION DEVICES IN THE CONTROL PANEL IF RE UESTED.

B. A FULLY DOCUMENTED LIST OF ALL RE UIRED SIGNALS NEEDED FOR SCADA COMMUNICATIONS MUST BE PROVIDED TO ROMTEC UTILITIES FOR PROPER INTEGRATION OF SCADA E UIPMENT.

C. IF THE OWNER HAS A DESIGNATED SCADA INTEGRATOR, THAT INDIVIDUAL MUST BE AVAILABLE DURING THE SCHEDULED SYSTEM STARTUP FOR FINAL TESTING, TRAINING, AND CONFIGURATION.

D. RADIO/CELLULAR SITE SURVEYS, ANTENNAS MAST(S), AND ANTENNA MOUNTING ARE THE RESPONSIBILITY OF THE OWNER OR INSTALLING CONTRACTOR, NOT ROMTEC UTILITIES. IN OTHER WORDS, VERIFICATION OF SIGNAL RECEPTION BY THE ANTENNA/COMMUNICATION DEVICE IS NOT PROVIDED BY ROMTEC UTILITIES.

E. ALL APPLICABLE COMMUNICATION SERVICE LINES MUST BE INSTALLED AND READY TO USE PRIOR TO SYSTEM STARTUP. FOR EXAMPLE, IF AN AUTODIALER RE UIRES DSL SERVICE, IT IS THE RESPONSIBILITY OF THE OWNER OR INSTALLING CONTRACTOR TO ENSURE THAT DSL SERVICE IS INSTALLED AND READY TO USE PRIOR TO SYSTEM STARTUP. SIMILARLY, ENSURING THAT A RADIO MODEM HAS SUFFICIENT RECEPTION AT THE ANTENNA/MOUNTING LOCATION DURING SYSTEM STARTUP IS THE RESPONSIBILITY OF THE OWNER OR INSTALLING CONTRACTOR, NOT ROMTEC UTILITIES.

F. IF THE ROMTEC UTILITIES STARTUP TECHNICIAN DISCOVERS UPON ARRIVAL THAT THE APPLICABLE COMMUNICATION SERVICE IS NOT READY TO USE DURING SYSTEM STARTUP, ANY ADDITIONAL TIME OR TRAVEL RE UIRED FOR SYSTEM STARTUP ACTIVITIES WILL BE UOTED AND PROVIDED UNDER A SEPARATE SERVICE ORDER.

G. IF THE CONTROL SYSTEM INCLUDES A SCADA CONNECT COMMUNICATION DEVICE, CONTACT THE ROMTEC UTILITIES PROJECT MANAGER FOR ACCOUNT SETUP INFORMATION PRIOR TO SYSTEM STARTUP.

FOR A ROMTEC UTILITIES SUPPLIED GENERATOR

A. ALL ENGINE PIPING, HANGERS, FLANGES, GASKETS, BOLTS, INSULATION, DUCTING, SHROUDS AND ANY OTHER MATERIALS ASSOCIATED WITH THE MOTOR EXHAUST SYSTEM AND HEAT EXHAUST SYSTEM INSTALLATION ARE SUPPLIED BY OTHERS UNLESS SPECIFICALLY LISTED IN THE SUBMITTAL.

B. ALL ENGINE FUEL, FUEL PIPING TO SUPPLY OR RETURN, VENTING, VALVES, COOLERS, FILTERS, PUMPS, FITTINGS, FUEL STORAGE TANK, SENDER, AND OTHER ASSOCIATED MATERIALS ARE SUPPLIED BY OTHERS UNLESS SPECIFICALLY LISTED IN THE SUBMITTAL. SOME GENERATORS MAY INCLUDE FUEL TANK VENT PIPING, BUT IT MAY NOT BE ENOUGH TO REACH THE DESIRED TERMINATION POINT. ANY EXCESS PIPING IS SUPPLIED BY THE INSTALLING CONTRACTOR, NOT BY ROMTEC UTILITIES.

C. ALL ENGINE WIRING, FIELD TERMINATION OF WIRING, AND LUGS ARE SUPPLIED BY OTHERS UNLESS SPECIFICALLY LISTED IN THE SUBMITTAL. THIS INCLUDES ALL CONNECTIONS BETWEEN THE GENERATOR AND AUTOMATIC TRANSFER SWITCH (ATS), CONTROL PANEL, OR ANY OTHER ELECTRICAL COMPONENTS THAT ARE PART OF THE SYSTEM.

D. OFFLOADING, PLACEMENT, AND INSTALLATION OF THE ROMTEC UTILITIES SUPPLIED GENERATOR IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. GENERATOR E UIPMENT MAY BE SHIPPED IN AN ENCLOSED TRUCK. ROMTEC UTILITIES IS NOT RESPONSIBLE FOR DETERMINING THE MEANS OF OFFLOADING AT THE PROJECT SITE.

E. ALL AIR UALITY PERMITTING, INCLUDING CODE COMPLIANCE FOR ANY LOCAL, STATE, OR ANY OTHER AUTHORITY HAVING JURISDICTION IS THE RESPONSIBILITY OF THE OWNER OR SITE ENGINEER. ROMTEC UTILITIES WILL ASSIST THE RESPONSIBLE PARTY BY PROVIDING MANUFACTURER S INFORMATION WHENEVER POSSIBLE.

GENERATOR STARTUP

A. GENERATOR STARTUP AND TESTING MUST BE SCHEDULED CONCURRENTLY WITH THE REST OF THE SYSTEM STARTUP, TESTING, AND TRAINING IN ORDER TO ENSURE THAT ALL APPLICABLE OPERATION SCENARIOS ARE TESTED AND APPROVED.

B. THE OWNER OR INSTALLING CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL RE UIRED PERSONNEL ARE PRESENT DURING THE SCHEDULED SYSTEM STARTUP ACTIVITIES FOR TRAINING.

C. IF ROMTEC UTILITIES IS RE UIRED TO RETURN TO THE SITE FOR GENERATOR STARTUP/TESTING/TRAINING OUTSIDE OF THE PREVIOUSLY SCHEDULED SYSTEM STARTUP ACTIVITIES, THE SERVICE WILL BE PROVIDED UNDER A SEPARATE UOTE AND SERVICE ORDER.

REVISION HISTORY			
DESCRIPTION	DATE	REV	BY
			KAS

DWG NO.: E012

PROJECT #:EO106D10
DSN:DSN
DRN:DRN
CKD:CKD
DATE:10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVERVIEW
THE DALLES, OR
ELECTRICAL NOTES
TRIPLEXLIFT STATION

SH
20

GENERATOR FUEL

DIESEL FUEL

A. ROMTEC UTILITIES RECOMMENDS ASTM D975 NO. 2-D GRADE DIESEL FUEL EXCEPT IN COLD CLIMATES. FOR COLD CLIMATES, PREMIUM NO. 1-D GRADE DIESEL IS RECOMMENDED.

B. ONSITE FUEL STORAGE SHOULD BE SI ED SO THAT FUEL IS TURNED OVER REGULARLY. ROMTEC UTILITIES RECOMMENDS COMPLETE FUEL TURNOVER AT A MAXIMUM OF EVERY SIX MONTHS. IF COMPLETE FUEL TURNOVER TAKES LONGER THAN SIX MONTHS, OR IF HIGH-MOISTURE CONDITIONS PROMOTE MICROBIAL GROWTH, FUEL ADDITIVES MAY BE RE UIRED.

NATURAL GAS FUEL

A. NATURAL GAS GENERATORS RE UIRE CLEAN, DRY, PIPELINE- UALITY GAS TO GENERATE THE RATED POWER AND ENSURE OPTIMAL ENGINE LIFE. ENGINE DAMAGE CAN RESULT WHEN SOME UTILITIES OCCASIONALLY ADD BUTANE TO THE NATURAL GAS SUPPLY TO MAINTAIN LINE PRESSURE.

B. NATURAL GAS REGULATORS FOR THE FUEL SUPPLY ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR, NOT ROMTEC UTILITIES. ROMTEC UTILITIES DOES NOT DESIGN, SUPPLY, OR INSTALL GAS REGULATORS.

C. GENERATOR MANUFACTURERS RECOMMEND A CERTAIN MINIMUM SI E OF GAS REGULATOR TO ACCOMMODATE THE GENERATOR FUEL RE UIREMENTS. IN ROMTEC UTILITIES EXPERIENCE, GAS REGULATORS ARE KNOWN TO VARY IN THEIR ACTUAL VERSUS RATED OUTPUT. IN OTHER WORDS, THE ACTUAL OUTPUT OF ANY GIVEN GAS REGULATOR CAN AND DOES DIP BELOW THE RATED OUTPUT IN SOME SITUATIONS.

D. ROMTEC UTILITIES RECOMMENDS INSTALLING A GAS REGULATOR FOR THE GENERATOR THAT IS RATED FOR OUTPUT WELL ABOVE THE MINIMUM RE UIREMENT SPECIFIED BY THE GENERATOR MANUFACTURER. FOR EXAMPLE, IF THE GENERATOR MANUFACTURER RECOMMENDS A GAS REGULATOR SI ED BETWEEN 7-13 INCHES OF WATER (IWC), ROMTEC UTILITIES DOES NOT RECOMMEND USING A GAS REGULATOR THAT IS SI ED FOR 7 IWC, BECAUSE THE ACTUAL OUTPUT OF THE REGULATOR MAY DIP BELOW THE MINIMUM RE UIRED FOR THE GENERATOR TO OPERATE PROPERLY.

LIQUID PETROLEUM GAS (LPG) FUEL

A. LPG CAN BE STORED INDEFINITELY. HOWEVER, IN COLD CLIMATES, THE STORAGE TANK MUST BE SI ED TO PROVIDE THE RE UIRED RATE OF VAPORI ATION AT THE LOWEST AMBIENT TEMPERATURE TO WHICH THE TANK WILL BE EXPOSED. OTHERWISE, A LI UID WITHDRAWAL SYSTEM THAT INCLUDES A VAPORI ING HEATER MUST BE PROVIDED.

B. DETERMINATION OF COLD CLIMATE RE UIREMENTS FOR LPG FUELED GENERATORS IS BY OTHERS. ROMTEC UTILITIES DOES NOT DETERMINE THE RE UIREMENTS OR SUPPLY ANY RE UIRED FUEL LINES OR VAPORI ING HEATER SYSTEMS.

FOR A GENERATOR THAT IS SUPPLIED BY OTHERS

A. IF THE GENERATOR IS EXISTING OR SUPPLIED BY OTHERS, IT IS THE RESPONSIBILITY OF THE OWNER OR SUPPLIER TO VERIFY THAT THE GENERATOR WILL INTEGRATE WITH THE SYSTEM DESIGN, SPECIFICALLY WITH ANY RECEPTACLES AND/OR TIE-INS ASSOCIATED WITH THE ROMTEC UTILITIES SUPPLIED CONTROL PANEL.

B. ROMTEC UTILITIES WILL REVIEW ALL PROVIDED INFO AND ASSIST WITH CONFIRMING INTEGRATION ABILITY, BUT FINAL VERIFICATION OF ANY E UIPMENT NOT SUPPLIED BY ROMTEC UTILITIES IS BY THE OWNER OR SUPPLIER.

NOTE: FOR EXAMPLE, IF IT IS DISCOVERED DURING SYSTEM STARTUP THAT A PORTABLE GENERATOR SUPPLIED BY OTHERS HAS A PLUG THAT DOES NOT FIT THE RECEPTACLE AS DESCRIBED IN THE APPROVED ROMTEC UTILITIES SUPPLIED CONTROL PANEL, IT IS THE RESPONSIBILITY OF THE GENERATOR OWNER/OPERATOR TO CORRECT THE GENERATOR PLUG. ANY CORRECTIVE WORK THAT ROMTEC UTILITIES PROVIDES IN THIS SITUATION WOULD BE PERFORMED UNDER A SEPARATE UOTE AND SERVICE ORDER.

SIZE AND MOUNTING STYLE OF THE CONTROL PANEL ENCLOSURE

A. THE SI E AND/OR MOUNTING STYLE OF THE FINAL, AS-BUILT CONTROL PANEL ENCLOSURE MAY NOT EXACTLY MATCH THE SI E OR MOUNTING STYLE OF THE ENCLOSURE AS DESCRIBED IN THE SUBMITTAL. THE PANEL MANUFACTURER MAY ALTER DIMENSIONS AS NEEDED DURING PRODUCTION TO ACCOMMODATE ALL OF THE RE UIRED E UIPMENT.

B. THE FINAL AS-BUILT DRAWINGS OF THE CONTROL PANEL WILL BE AVAILABLE APPROXIMATELY 6-8 WEEKS AFTER ROMTEC UTILITIES RECEIVES FORMAL NOTICE TO PROCEED ON PRODUCTION OF THE SYSTEM. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THEY HAVE THE AS-BUILT DRAWINGS PRIOR TO INSTALLATION OF THE CONTROL PANEL ENCLOSURE.

INSTRUCTIONS FOR CONDUIT ENTRY

A. FOR **TOP** OF ENCLOSURE CONDUIT ENTRY:
- USE ONLY UL LISTED, RAIN-TIGHT OR LI UID-TIGHT CONDUIT HUBS.
- INSTALL HUBS AND CONDUIT ACCORDING TO THE HUB MANUFACTURER S INSTRUCTIONS.
- PUNCH OR DRILL THE CORRECT HOLE SI E FOR THE HUB.
- CAPTURE **ALL** DRILLING FINES TO PREVENT INTERIOR COMPONENT DAMAGE.

B. FOR **BOTTOM** OF ENCLOSURE CONDUIT ENTRY:
- PUNCH OR DRILL THE CORRECT HOLE SI E FOR THE CONDUIT.
- USE ONLY UL LISTED, RAIN-TIGHT OR LI UID-TIGHT CONDUIT, HUBS, OR SEALING LOCKNUTS ON THE OUTSIDE ENTRY POINT.
- INSTALL CONDUIT, HUBS, OR SEALING LOCKNUTS PER THE MANUFACTURER S INSTRUCTIONS.
- SECURE CONDUITS ON THE INSIDE WITH LOCKNUTS.
- USE PLASTIC BUSHING OR GROUNDING BUSHING WHERE APPLICABLE.

C. CONDUIT HOLE SEALING
- SEAL ALL UNUSED HOLES WITH HOLE SEALS THAT ARE RECOGNI ED FOR USE WITH THE ENCLOSURE S NEMA RATING.
- INSTALL SEALS ACCORDING TO THE SEAL MANUFACTURER S INSTRUCTIONS.

POWER QUALITY

A. ROMTEC UTILITIES RECOMMENDS THAT SUPPLY VOLTAGE TO THE ROMTEC UTILITIES SUPPLIED CONTROL PANEL COMPLY WITH THE NATIONAL E UIPMENT MANUFACTURERS ASSOCIATION (NEMA) STANDARD MB1-1987 SECTION 14.34B. ANY PERFORMANCE ISSUES THAT ARISE AS A RESULT OF NON-COMPLIANCE WITH THIS STANDARD ARE THE RESPONSIBILITY OF THE OWNER/INSTALLER. ROMTEC UTILITIES IS NOT RESPONSIBLE FOR IDENTIFYING OR MITIGATING ANY POWER UALITY ISSUES THAT ARE A RESULT OF POOR POWER UALITY ASSOCIATED WITH THE UTILITY SUPPLY VOLTAGE.

B. POOR POWER UALITY CAN HAVE AN ADVERSE EFFECT ON CONTROL SYSTEM OPERATION AND RELIABILITY. ADDITIONALLY, PUMP MOTORS CAN BE DAMAGED BY SUSTAINED APPLICATION OF UNBALANCED PHASE VOLTAGES AND/OR VOLTAGES ABOVE OR BELOW NORMAL NAMEPLATE RATINGS.

C. NEMA PUBLISHED TOLERANCES ARE AS FOLLOWS:
- VOLTAGE IMBALANCE NOT TO EXCEED 1 MEASURED AT THE MOTOR TERMINALS
- CURRENT IMBALANCE NOT TO EXCEED 5 MEASURED AT THE MOTOR TERMINALS
- VOLTAGE LEVELS NOT TO EXCEED /-10 OF THE MOTOR NAMEPLATE RATING.

PUMP CABLE INSPECTION AND INSTALLATION

A. INSPECT THE FULL LENGTH OF ALL PUMP CABLES FOR SIGNS OF DAMAGE, INCLUDING ABRASIONS, CUTS, CRUSHED INSULATION, AND SIGNS OF MOISTURE ENTRY. IF CABLE DAMAGE IS FOUND, THE CABLE WILL RE UIRE TESTING OF THE CABLE AND ITS OVERALL INTEGRITY BY A UALIFIED TECHNICIAN.

B. A HIGH PERCENTAGE OF CABLE FAILURES ARE DUE TO MECHANICAL DAMAGE, WHICH TYPICALLY OCCURS DURING TRANSPORTATION, HANDLING, AND INSTALLATION.

C. WHEN CABLES ARE INSTALLED IN A RACEWAY, UNDERGROUND ELECTRICAL DUCT, OR CABLE TRAY, THE FOLLOWING MUST BE CONSIDERED:
- CABLE CONFIGURATION
- RACEWAY OR CABLE TRAY FILL
- PHYSICAL LIMITATIONS OF THE CABLES
- INSTALLATION E UIPMENT
- AMBIENT TEMPERATURE AND CONDITIONS (LOW TEMPERATURES ARE CAUSE FOR CONCERN)

D. PRIOR TO INSTALLING PUMP CABLES IN COLD TEMPERATURES (BELOW 10 F), CABLES MUST BE PRE-CONDITIONED BY STORING THEM FOR A MINIMUM OF 24 HOURS AT A MINIMUM TEMPERATURE OF 55 F. DO NOT DROP (OR OTHERWISE SHARPLY IMPACT), KINK, OR SHARPLY BEND PUMP CABLES THAT HAVE BEEN STORED IN LOW TEMPERATURES.

E. ALL CABLES INSTALLED IN A RACEWAY MUST BE PULLED TOGETHER. CABLES SHOULD BE TRAINED AND GUIDED INTO THE RACEWAY USING AN APPROVED PULLING COMPOUND OR LUBRICANT WHEN NECESSARY.

F. CONDUITS MUST BE CLEANED AND FREE OF DEBRIS PRIOR TO CABLE INSTALLATION TO PREVENT DAMAGE TO THE OUTER CABLE JACKET.

G. CABLES MUST BE VERTICALLY SUPPORTED IN THE WET WELL BY STAINLESS STEEL WIRE MESH CABLE SUPPORT GRIPS THAT ARE APPROPRIATELY SI ED FOR THE APPLICATION.

H. ALL HARDWARE, INCLUDING FITTINGS, HANGERS, SUPPORTS, AND FASTENERS, MUST HAVE CORROSION PROTECTION SUITABLE FOR THE SURROUNDING ATMOSPHERE.

BY	DESCRIPTION	DATE	REV
KAS			

REVISION HISTORY

DWG NO.: E013

PROJECT #: EO106D10
DSN: DSN
DRN: DRN
CKD: CKD
DATE: 10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-3568
WWW.ROMTECUTILITIES.COM

RIVERVIEW
THE DALLES, OR
ELECTRICAL NOTES
TRIPLEXLIFT STATION

SHEET 21

I. CONDUIT BUSHINGS MUST BE INSTALLED AS RE UIRED TO PREVENT CABLE DAMAGE.

J. PUMP CABLES MUST BE INSTALLED IN THE WET WELL WITH ADE UATE LENGTH TO ALLOW FOR PUMP REMOVAL WITHOUT DISCONNECTING THE CABLES.

K. EXTRA CABLE LENGTH MUST BE PROPERLY SECURED SO AS NOT TO INTERFERE WITH PUMP INTAKE. PROPER SECURING OF EXTRA CABLE RE UIRES USING A HEAVY DUTY, NON-RELEASABLE UV-RESISTANT CABLE TIE SECURED TO A SUITABLE SUPPORTING DEVICE.

L. IF THE PUMPS INCLUDE EXCESSIVE CABLE LENGTH THAT MAY STILL INTERFERE WITH PUMP INTAKE, THE EXCESS CABLE LENGTH MUST BE TRIMMED TO LENGTH.

RECOMMENDATIONS FOR E TENDED CONTROL PANEL STORAGE

A. STORE THE CONTROL PANEL IN THE UPRIGHT POSITION IN A CLEAN, DRY LOCATION FREE FROM EXTREME TEMPERATURES AND DIRECT SUNLIGHT.

B. WHEN STORING THE CONTROL PANEL FOR A PERIOD LONGER THAN 30 DAYS, SEAL ALL CONDUIT ENTRIES AND PLACE DESICCANT PACKS WITHIN THE ENCLOSURE TO PREVENT MOISTURE BUILDUP.

C. THE CONTROL PANEL IS DESIGNED BASED ON THE ASSUMPTION THAT THE PANEL WILL GENERALLY REMAIN ENERGI ED, WHICH WILL PRODUCE A CERTAIN AMOUNT OF INTERNAL HEAT THAT HELPS REPEL THE BUILDUP OF CONDENSATION. CONDENSATION MAY EVENTUALLY LEAD TO CORROSION.

D. IF THE CONTROL PANEL IS INSTALLED WITHOUT BEING ENERGI ED, PROTECTIVE MEASURES MUST BE TAKEN TO PROTECT THE CONTROL PANEL FROM THE ELEMENTS.

E. FAILURE TO FOLLOW THESE RECOMMENDATIONS MAY VOID THE ROMTEC UTILITIES WARRANTY FOR THE CONTROL PANEL.

RECOMMENDATIONS FOR PRESSURE TRANSDUCER STORAGE

A. UPON RECEIVING A PRESSURE TRANSDUCER, INSPECT THE TRANSMITTER FOR ANY DAMAGE THAT MAY HAVE OCCURRED DURING SHIPPING.

B. CHECK THE PACKAGING FOR ANY ACCESSORIES.

C. DURING INTERMEDIATE STORAGE PERIODS OR DURING TRANSPORTATION OF THE PRESSURE TRANSDUCER, STORE THE TRANSDUCER IN THE ORIGINAL PACKAGING IN A WARM, DRY ATMOSPHERE.

D. MOST SUBMERSIBLE PRESSURE TRANSMITTERS RELY ON A VENTED CABLE TO PROPERLY REFERENCE THE SENSOR TO ATMOSPHERIC PRESSURE. CARE MUST BE TAKEN TO PREVENT MOISTURE INTRUSION OF THE CABLE THROUGH THE VENT TUBE, INCLUDING ATMOSPHERIC HUMIDITY. IN SOME CASES, CARE MUST ALSO BE TAKEN TO PREVENT MOISTURE INTRUSION VIA WICKING INTO THE CABLE BETWEEN THE CONDUCTORS. ANY FAILURE TO FOLLOW THESE RECOMMENDATIONS MAY SEVERELY AFFECT THE RELIABILITY AND SERVICE LIFE OF THE PRESSURE TRANSDUCER.

E. PRIOR TO INSTALLATION OF A PRESSURE TRANSDUCER, INSPECT THE FULL LENGTH OF THE CABLE FOR SIGNS OF DAMAGE, INCLUDING ABRASIONS, CUTS, CRUSHED INSULATION, AND SIGNS OF MOISTURE ENTRY.

F. WHENEVER POSSIBLE, THE PROCESS OF TRIMMING AND TERMINATING THE CABLE SHOULD BE PERFORMED IN DRY CONDITIONS. WHEN CABLE TERMINATION MUST BE PERFORMED DURING RAINY OR WET CONDITIONS, CARE MUST BE TAKEN TO KEEP THE END OF THE CABLE SEALED AND DRY UNTIL IT IS PLACED IN A PROTECTIVE ENCLOSURE.

G. CONDUITS MUST BE CLEANED PRIOR TO INSTALLING THE TRANSDUCER CABLE TO PREVENT DAMAGE TO THE OUTER JACKET.

H. ALL HARDWARE, INCLUDING HANGERS, SUPPORTS, AND FASTENERS MUST HAVE CORROSION PROTECTION SUITABLE FOR THE LOCAL ATMOSPHERE.

I. CONDUIT BUSHINGS MUST BE USED AS NEEDED TO PREVENT CABLE DAMAGE.

J. DO NOT KINK THE CABLE DURING INSTALLATION. ANY KINKS WILL CAUSE A BLOCKAGE TO THE BREATHER TUBE.

K. INSTALL A PROTECTIVE BARRIER THAT GUARDS AGAINST MOISTURE BUILDUP IN THE CABLE VENT TUBE. THIS PROTECTIVE BARRIER MAY INCLUDE A DESICCANT FILTER, ANEROID BELLOW, OR OTHER SIMILAR DEVICE. THE PROTECTIVE BARRIER WILL ENSURE RELIABLE OPERATION AND LONG SERVICE LIFE BY PROTECTING THE SENSITIVE ELECTRICAL COMPONENTS FROM MILDEW OR THE FORMATION OF A COLUMN OF LI UID IN THE BREATHER TUBE. ANY SUCH OBSTRUCTION DIRECTLY AFFECTS THE TRANSDUCER CALIBRATION AND MAY RENDER THE TRANSDUCER UNUSABLE.

L. ROMTEC UTILITIES RECOMMENDS AVOIDING INSTALLATION OF THE TRANSMITTER OR ROUTING OF THE CABLE IN CLOSE PROXIMITY TO A SOURCE OF ELECTRICAL NOISE, SUCH AS A VARIABLE SPEED DRIVE OR OTHER HIGH-POWERED ELECTRICAL DEVICE.

REV	DATE	DESCRIPTION	BY
			KAS

REVISION HISTORY

DWG NO.: E014

PROJECT #:E0106D10
DSN:DSN
DRN:DRN
CKD:CKD
DATE:10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVERVIEW
THE DALLES, OR
ELECTRICAL NOTES
TRIPLEXLIFT STATION

SH 22

WIRE AND CONDUIT SCHEDULE

ALL CONDUCTORS BASED ON COPPER XHHW-2, 90 DEGREE RATED CONDUCTORS UNLESS OTHERWISE NOTED.

ALL CONDUITS ARE SI ED BASED ON RIGID METAL CONDUIT.

CONDUCTOR ARE CODED AS FOLLOWS: P-POWER CONDUCTORS, G-GROUND CONDUCTORS, N-NEUTRAL CONDUCTOR, C-CONTROL CONDUCTORS, SP-SPARE CONDUCTORS, AND TSP FOR TWISTED SHIELDED CONDUCTORS.

CIRCUITS REVISED SINCE LAST ISSUE ARE INDICATED BY AN ASTERISK ( ).

CIRCUIT NUMBER	FROM	TO	CONDUCTORS	RACEWAY	NOTES
1	UTILITY	METER BASE	SEE NOTES		COORDINATE CONDUCTOR AND RACEWAY RE UIREMENTS WITH SERVING UTILITIY.
2	METER BASE	SERVICE DISCONNECT	(3) #3/0 P (1) #3/0 N (1) #4AWG G	2	BOND THE NEUTRAL AT THE SERVICE DISCONNECT
3	SERVICE DISCONNECT	AUTOMATIC TRANSFER SW.	(3) #1/0 P (1) #1/0 N (1) #6AWG G	2	
4	AUTOMATIC TRANSFER SW	CONTROL PANEL	(3) #1/0 P (1) #1/0 N (1) #6AWG G	2	
5	AUTOMATIC TRANSFER SW	GENERATOR	(3) #1/0 P (1) #1/0 N (1) #6AWG G	2	
6	AUTOMATIC TRANSFER SW	MINI-LOAD CENTER	(2) #8AWG P (1) #8AWG G	1	LIGHTING PANEL FEEDER CONDUCTORS
7	CONTROL PANEL	DISCONNECT PANEL	(3) #8AWG P (2) #14AWG C (1) #10AWG G	1	PUMP ONE POWER CONTROL CONDUCTORS
8	CONTROL PANEL	DISCONNECT PANEL	(3) #8AWG P (2) #14AWG C (1) #10AWG G	1	PUMP TWO POWER CONTROL CONDUCTORS
9	CONTROL PANEL	DISCONNECT PANEL	(3) #8AWG P (2) #14AWG C (1) #10AWG G	1	PUMP THREE POWER CONTROL CONDUCTORS
9	CONTROL PANEL	DISCONNECT PANEL	(17) #14AWG C (1) #14AWG G (1) #18AWG TSP	1-1/2	LEVEL SENSING, FLOOD SWITCH WETWELL INTRUSION SWITCH TSP BELDEN 88760
10	CONTROL PANEL	METER VAULT	(1) MFG CABLES	1	E H FLOW METER CABLE
11	CONTROL PANEL	METER VAULT	(1) MFG CABLES	1	E H FLOW METER CABLE
12	CONTROL PANEL	METER VAULT	(4) #14AWG C (1) #14AWG G	3/4	FLOOD INTRUSION SWITCH

WIRE AND CONDUIT SCHEDULE CONTINUED

ALL CONDUCTORS BASED ON COPPER XHHW-2, 90 DEGREE RATED CONDUCTORS UNLESS OTHERWISE NOTED.

ALL CONDUITS ARE SI ED BASED ON RIGID METAL CONDUIT.

CONDUCTOR ARE CODED AS FOLLOWS: P-POWER CONDUCTORS, G-GROUND CONDUCTORS, N-NEUTRAL CONDUCTOR, C-CONTROL CONDUCTORS, SP-SPARE CONDUCTORS, AND TSP FOR TWISTED SHIELDED CONDUCTORS.

CIRCUITS REVISED SINCE LAST ISSUE ARE INDICATED BY AN ASTERISK ( ).

CIRCUIT NUMBER	FROM	TO	CONDUCTORS	RACEWAY	NOTES
13	CONTROL PANEL	VALVE VAULT	(4) #14AWG C (1) #14AWG G	3/4	FLOOD INTRUSION SWITCH
14	CONTROL PANEL	AUTOMATIC TRANSFER SW	(3) #14AWG C (1) #14AWG G	3/4	STATUS INPUT SIGNALS TO PLC
15	CONTROL PANEL	GENERATOR	(4) #14AWG C (2) #14AWG SP (1) #14AWG G	3/4	STATUS INPUT SIGNALS TO PLC
16	GENERATOR	AUTOMATIC TRANSFER SW	(5) #14AWG C (1) #14AWG G	3/4	GENERATOR CONTROL WIRING
17	CONTROL PANEL	RTU ENCLOSURE	(1) #14AWG P (1) #14AWG N (1) #14AWG G	3/4	REMOTE TELEMETRY PANEL POWER
18	CONTROL PANEL	RTU ENCLOSURE	(27) #14AWG C (1) #14AWG G (2) #14AWG SP (1) #18AWG TSP	2	TELEMETRY SIGNALS TO RTU PANEL
19	MINI-LOAD CENTER	CANOPY LIGHT	(1) #12AWG P (1) #12AWG N (1) #12AWG G	3/4	MOUNT LIGHT SWITCH TO SHELTER SUPPORT POLE AT 48 AFG. MOUNT PHOTO CELL AT TOP OF CANOPY FACING NORTH.
20	MINI-LOAD CENTER	GENERATOR	(2) #12AWG P (2) #12AWG N (1) #12AWG G	3/4	GENERATOR COOLANT HEATER BATTERY CHARGER
21	MINI-LOAD CENTER	GENERAL PURPOSE RECEPTACLE	(1) #12AWG P (1) #12AWG N (1) #12AWG G	3/4	MOUNT RECEPTACLE 48 AFG IN AN IN USE WEATHER PROOF BOX
22	MINI-LOAD CENTER	SPARE		3/4	EXTEND OUTSIDE THE CANOPY APRON TOWARDS THE LIFT STATION AND CAP OF CONDUIT
23	GENERATOR	LOAD BANK	(3) #1AWG P (1) #6AWG G	1-1/4	
24	GENERATOR	LOAD BANK	(2) #14AWG C (1) #14AWG G (1) #18AWG TSP	3/4	REMOTE LOAD DUMP. INSTALL CT1 CURRENT SENSOR IN GENSET.
25	LOAD BAND	LOAD BANK CONTROL PANEL	(15) #14AWG C (1) #14AWG G	1	FIELD LOCATE LOAD BANK CONTROL PANEL.
26	GENERATOR	REMOTE E-STOP	(2) #14AWG C (1) #14AWG G	3/41	FIELD LOCATE REMOTE EMERGENCY STOP PUSH-BUTTON.

Panel Schedule LP1 1 Phase 3 Wire Voltage LL: 240 Voltage LG: 120

OC Devices: BREAKERS Device Family: BR Mounting: WALL MOUNT Enclosure: NEMA 1
Comments: MINI-POWER CENTER #P48G11SO7P Bus Rating: 30 Available Fault Duty: 14KAIC 1 Phase

Ckt No	Description/ Location	*Load Type	Criteria Ea	Qty	Dem	Total VA	Remarks	Device Amps	P	H	Device Amps	P	Remarks	Total VA	*Load Type	Criteria Ea	Qty	Dem	Description/ Location	Ckt No
1	GENERATOR AUX LOADS	HTR	1500	1	3	1500		30		A	20			180	LTG	180	1	3	LIGHTING	2
3	RECEPTACLE	RECP	180	1	3	180		20		B	20			240	LTG	240	1		BATTERY CHARGER	4
5	SPARE							20		A										6
7										B										8
9										A										10
11										B										12

ENDUSE LOADS: PHASE A VA 1680 PHASE B VA 420
TOTAL LOADS: CONNECTED KVA 2.1
CONNECTED FLA 8.75

LOAD SUMMARY TABLE

QTY.	DESCRIPTION	LOAD
3	20HP PUMPS	78
NON MOTOR LOADS		
	CONTROL PANEL	6.25
	LOAD CENTER	7.8
SUB TOTAL		92.05
	LARGEST MOTOR X 25%	6.5
	NON MOTOR LOADS X 25%	1.6
TOTAL		100.2A

REVISION HISTORY

REV	DATE	DESCRIPTION	BY
			KAS

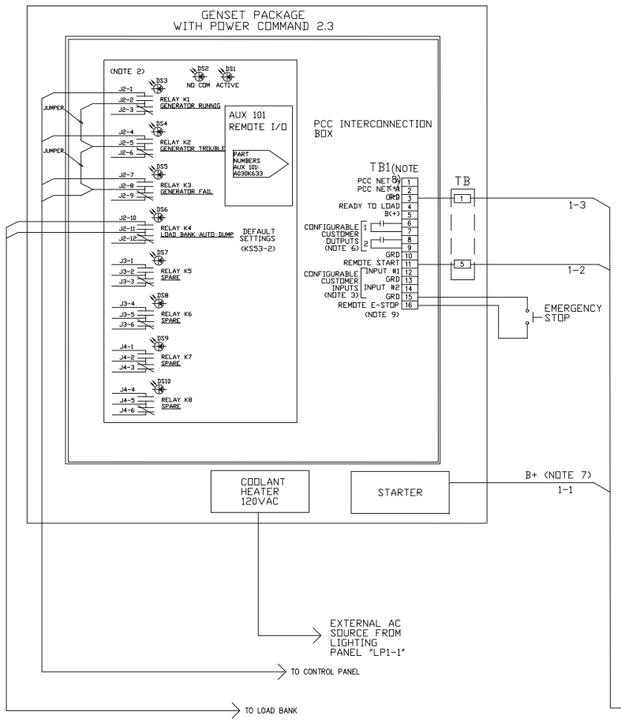
DWG NO.: E015

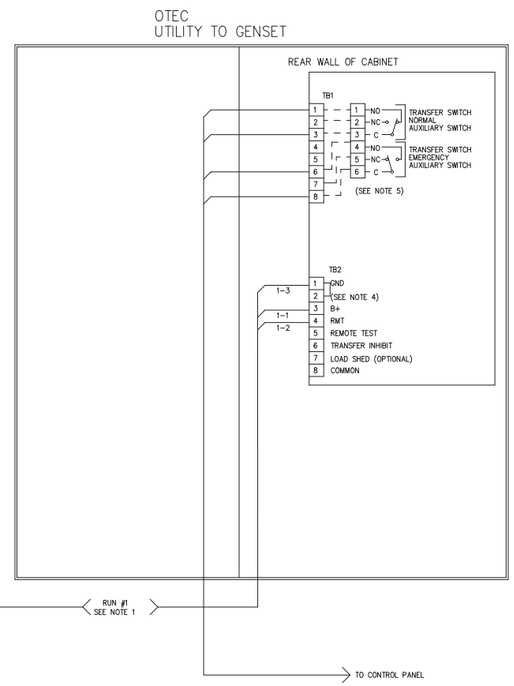
PROJECT #:E0106D10
DSN:DSN
DRN:DRN
CKD:CKD
DATE:10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVERVIEW
THE DALLES, OR
WIRE CONDUIT SCHEDULE
TRIPLEXLIFT STATION

SH 23





(NOTE 1)

WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)				
	A	B	C	D	E
16	1000	90	–	50	–
14	1600	150	20	80	5
12	2400	225	30	125	10
10	4000	350	50	200	15
8	–	600	80	300	25
6	–	1000	125	500	40

NOTES:

1. WIRE SIZES MUST BE AS FOLLOWS:
   RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
   WITH NO BATT CHARGER-LEADS 1-1, -2, -3, USE COL A.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1, &1-3 USE COL B.
   WITH 12/15 AMP CHARGER MAXIMUM VOLTAGE DROP OF 1.5 VOLTS, LEADS 1-1 & 1-3 USE COL. C.
   WITH 2 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, &1-3 USE COL D.
   WITH 12/15 AMP CHARGER, MAXIMUM VOLTAGE DROP OF 0.75 VOLTS, LEADS 1-1, & 1-3 USE COL E. TO MEET THE NFPA110 REQUIREMENT TO RETURN A FULLY DISCHARGED BATTERY TO 100% OF IT'S AMPERE-HOUR RATING WITHIN 24 HOURS USE COL. E.
2. CONTACTS RATED: 3 AMPS AT 30 VDC OR 120V MAX.
3. CONNECTIONS TO TB1-12 THRU 14 ON GENSET ARE FOR CUSTOMER USE AND MAY BE CONFIGURED TO DISPLAY CUSTOM ALARM MESSAGES ON GENSET CONTROL. LOW FUEL IS REQUIRED FOR NFPA110 COMPLIANCE.
4. INSTALL JUMPER BETWEEN TB2-1 & TB2-2.
5. TRANSFER SWITCH SHOWN CLOSED TO NORMAL
6. CONTACTS RATED: _2 AMPS AT 30 VDC OR 0.60 AMPS AT 120 VAC.
7. CONFIGURATION SHOWN IS FOR ATS-MOUNTED BATTERY CHARGER. IF WALL-MOUNTED CHARGER IS USED, CONNECT B+ & GND FROM CHARGER DIRECTLY TO BATTERY.
8. MAXIMUM WIRE SIZE ON TB1 IS 12 AWG. WIRING MUST BE STRANDED.
9. REMOVE JUMPER BETWEEN TB1-15 & TB1-16 WHEN REMOTE E-STOP IS USED.

REVISION HISTORY

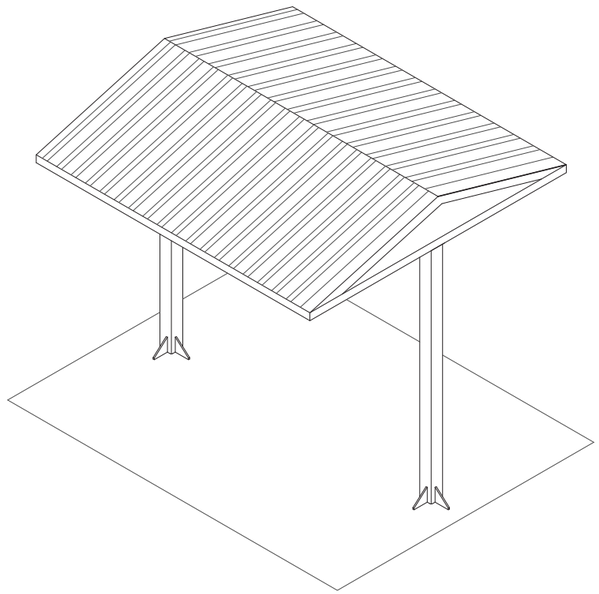
REV	DATE	DESCRIPTION	BY
			KAS

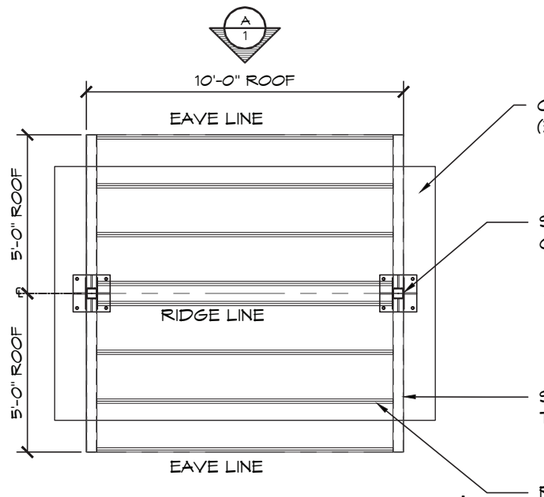
DWG NO.: E0106

PROJECT #:E0106D10
DSN:DSN
DRN:DRN
CKD:CKD
DATE:10/13/22

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

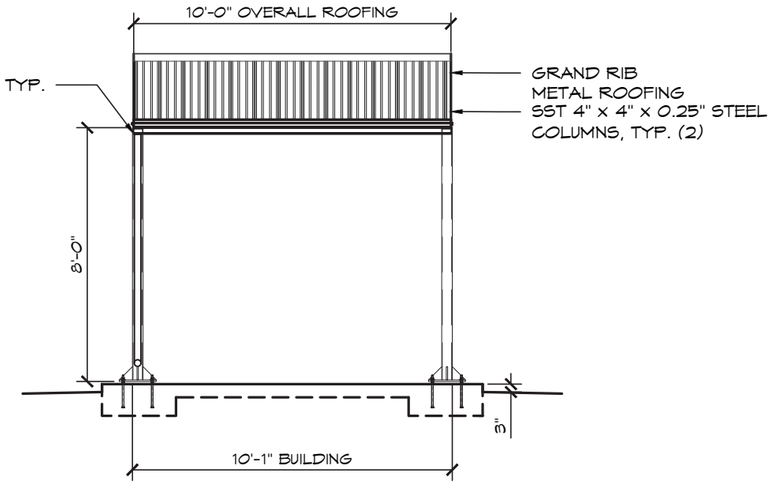
RIVERVIEW
THE DALLES, OR
GENERATOR ATS CONNECTIONS
TRIPLEXLIFT STATION





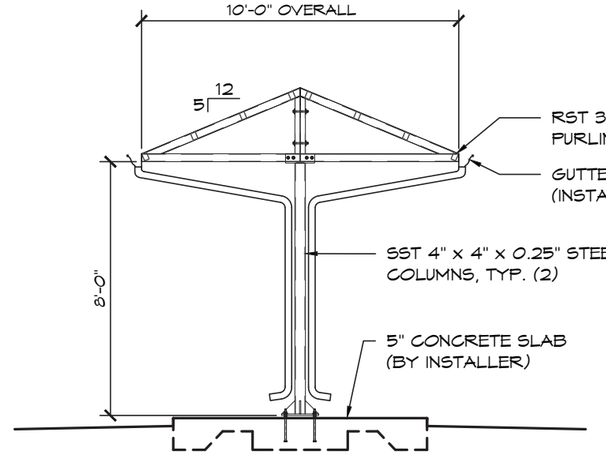
1 FLOOR PLAN

SCALE: 1/4" = 1'-0"



A ELEVATION VIEW

SCALE: 1/4" = 1'-0"



B ELEVATION VIEW

SCALE: 1/4" = 1'-0"

ROMTEC
18240 NORTH BANK ROAD - ROSEBURG, OR 97470
(541) 496-3541 FAX (541) 496-0803

PRELIMINARY

PROJECT: CUSTOMER PROJECT LOCATION

SHEET TITLE: FLOOR PLAN AND ELEVATIONS DWG. NO.: E017

PROJECT#: XXXX

DATE: 00/00/11

REVISIONS

REV.	DATE:	BY

DRAWN BY:

SHEET NO. 25 OF

JOB CREATED: 3/11/2022 - LAST SAVED BY: landerson ON 3/11/2022 - LAST PRINTED: 3/11/2022 - LOCATION: O:\Engineering R\Sales Drawings\Templates\R.U. Shelter - 3151-3160\3151\3151 TWO POST STEEL SINGLE SHELTER 220311.dwg

ACCEPTED PUMP PERFORMANCE STANDARDS

A. ROMTEC UTILITIES PUMP EQUIPMENT FOR THIS SYSTEM TO MEET THE PROVIDED DESIGN CRITERIA. THE PUMP PERFORMANCE CURVE(S) SHOW THE PUMP ACHIEVING A PUMPING RATE IN GALLONS PER MINUTE (GPM) AT A SPECIFIC TOTAL DYNAMIC HEAD (TDH). THIS INDUSTRY STANDARDS FOR MEETING THIS TARGET POINT ARE AS FOLLOWS:

B. THE HYDRAULIC INSTITUTE SPECIFIES A LEVEL A AND A LEVEL B ACCEPTANCE. LEVEL A ALLOWS +10% FLOW AT THE RATED TDH, OR A +8% TDH AT THE RATED FLOW, WITH NO NEGATIVE TOLERANCE. LEVEL B ALLOWS +/-5% FLOW AT THE RATED TDH, OR +5%/-3% OF RATED TDH AT THE RATED FLOW.

C. THE PUMPS SHOULD PERFORM WITHIN THIS RANGE AS LONG AS THE TDH PROVIDED BY THE CUSTOMER IN THE GIVEN DESIGN CRITERIA IS TRUE AND CORRECT. WHEN ROMTEC UTILITIES CALCULATES THE TDH USING CUSTOMER SUPPLIED DOCUMENTS (E.G., FORCE MAIN PROFILES), AND THE ACTUAL FIELD CONDITIONS DIFFER FROM THE PROVIDED PLANS, ROMTEC UTILITIES CANNOT BE HELD RESPONSIBLE FOR PUMP PERFORMANCE ISSUES TIED TO CHANGES IN THE CALCULATED TO ACTUAL TDH.

NOT ALL ELECTRICAL COMPONENTS ARE SUBMERGENCE RATED

A. FLOW METERS, LIMIT SWITCHES, AND INTRUSION SWITCHES ARE EXAMPLES OF ELECTRICAL COMPONENTS THAT MAY NOT BE SUBMERGENCE RATED. THESE COMPONENTS WILL BE HOUSED IN A STRUCTURE THAT IS NOT INTENDED TO FILL WITH WATER AND HAS A MEANS FOR WATER EGRESS, SUCH AS A VAULT WITH A DRAINBACK PIPE.

B. WATER DAMAGE TO NON-SUBMERGENCE RATED ELECTRICAL COMPONENTS IS NOT COVERED UNDER THE ROMTEC UTILITIES WARRANTY. ROMTEC UTILITIES CAN ASSIST WITH THE REPLACEMENT OF DAMAGED COMPONENT(S), BUT ROMTEC UTILITIES IS NOT RESPONSIBLE FOR THE COST OF THE REPLACEMENT(S).

C. ANY POTTING KITS SUPPLIED BY ROMTEC UTILITIES MUST BE INSTALLED BY THE INSTALLING CONTRACTOR. IF WATER DAMAGE OCCURS TO ITEMS THAT SHOULD HAVE HAD A POTTING KIT INSTALLED, ROMTEC UTILITIES CAN ASSIST WITH REPLACING THE DAMAGED COMPONENT(S), BUT ROMTEC UTILITIES IS NOT RESPONSIBLE FOR THE COST OF THE REPLACEMENT(S).

FINAL CONCRETE DIMENSIONS

A. ACTUAL CONCRETE DIMENSIONS WILL BE WITHIN +/- 0.5▪▪FOR MAJOR DIMENSIONS ON THE APPROVED PRODUCTION DRAWING(S) (LENGTH, WIDTH, HEIGHT; CORE LOCATIONS; WALL THICKNESS; ETC.). ROMTEC UTILITIES WILL NOT ACCEPT ANY CHARGES FOR FIELD ADJUSTMENTS OR ENGINEERED PLAN REVISIONS BASED ON THESE SLIGHT CHANGES TO CONCRETE DIMENSIONS IN THE FIELD.

NOTE: MANUFACTURERS OF PRECAST CONCRETE CANNOT PRODUCE ITEMS SUCH AS BARRELS, BASES, OR TOP SLABS TO EXACT DIMENSIONS MEASURED IN HUNDREDTHS OF AN INCH. THE PRODUCTION DRAWINGS MAY SHOW DIMENSIONS IN THE HUNDREDTHS OF AN INCH, BUT IT IS NOT REALISTIC TO CAST CONCRETE TO THOSE EXACT DIMENSIONS.

B. ALL CONCRETE JOINTS MUST BE THOROUGHLY CLEANED AND DRIED PRIOR TO APPLYING BUTYL SEALANT, CAULKING, AND/OR JOINT WRAP.

C. CORED HOLES FOR ELECTRICAL WIRING AND CONDUITS ARE **NOT** BY ROMTEC UTILITIES. THEY ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR.

OUTFALL DESIGN

A. ROMTEC UTILITIES IS NOT RESPONSIBLE FOR THE OUTFALL STRUCTURE AT THE DISCHARGE END OF THE FORCE MAIN. ROMTEC UTILITIES HAS NOT REVIEWED THE SIZE OF THE OUTFALL STRUCTURE TO DETERMINE ITS ABILITY TO HANDLE THE SYSTEM'S PUMPING RATE. REVIEW OF THE OUTFALL STRUCTURE FOR COMPATIBILITY WITH THIS SYSTEM IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

B. ANY PROBLEMS WITH THE OUTFALL STRUCTURE DURING SYSTEM STARTUP AND GENERAL OPERATION ARE THE RESPONSIBILITY OF OTHERS, NOT ROMTEC UTILITIES.

STRUCTURAL AND MECHANICAL DISCLAIMERS

1. ROMTEC UTILITIES IS NOT RESPONSIBLE FOR STRUCTURAL OR LEAK TESTING

A. THE CUSTOMER IS RESPONSIBLE FOR ANY ONSITE HYDROSTATIC OR VACUUM TESTING OF UNDERGROUND STRUCTURES. THE ROMTEC UTILITIES WARRANTY TERMS REQUIRE THAT ANY AND ALL TESTING OF UNDERGROUND STRUCTURES OCCURS PRIOR TO BACKFILLING AROUND THE STRUCTURE(S).

B. ROMTEC UTILITIES RECOMMENDS THE FOLLOWING TEST METHODS IF NECESSARY:
   a. ASTM C497-05, SECTION 8, HYDROSTATIC TEST METHOD
   b. ASTM C497-05, SECTION 9, PERMEABILITY TEST METHOD

C. REPAIR OF CONCRETE STRUCTURES IS ALLOWABLE IF NECESSITATED BY DAMAGE THAT OCCURRED DURING SHIPPING. THE ROMTEC UTILITIES WARRANTY TERMS REQUIRE THAT ANY REPAIR TO CONCRETE STRUCTURES CONFORMS TO THE REQUIREMENTS OF ASTM C478-09, AND THAT ROMTEC UTILITIES BE NOTIFIED IF ANY REPAIRS ARE PLANNED.

D. ROMTEC UTILITIES STRONGLY RECOMMENDS AGAINST THE USE OF ANY TYPE OF CONCRETE AS BACKFILL MATERIAL.

2. ANY STRUCTURAL LEAKING FOUND DURING OR AFTER THE INSTALLATION OF UNDERGROUND STRUCTURES IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR

A. ROMTEC UTILITIES HAS MADE EVERY EFFORT IN THE SYSTEM DESIGN TO HELP THE INSTALLING CONTRACTOR ENSURE THAT UNDERGROUND STRUCTURES ARE WATER TIGHT. ALL PRECAST CONCRETE IS PRODUCED TO MEET OR EXCEED INDUSTRY STANDARDS, INCLUDING ASTM 318, ASTM 478, AND ASTM 857, AS APPLICABLE.

B. THE DESIGN OF THESE CONCRETE STRUCTURES INCLUDES MULTIPLE LAYERS OF LEAK PROOFING AT THE JOINTS BETWEEN THE BASE, BARRELS/RISERS, AND TOP SLAB AS SHOWN ON THE MECHANICAL AND STRUCTURAL DRAWINGS. THESE LAYERS TYPICALLY INCLUDE A COMBINATION OF BUTYL SEALANT, CAULKING, AND/OR JOINT WRAP.

C. THE ROMTEC UTILITIES SYSTEM MAY ALSO INCLUDE KOR-N-SEALS, LINK SEALS, OR OTHER PIPE BOOT PRODUCTS. THESE ARE TO BE USED BY THE INSTALLING CONTRACTOR TO SEAL BETWEEN THE CORED HOLE(S) AND THE PIPING ENTERING THE STRUCTURE.

D. THE ROMTEC UTILITIES PLANS SHOW THE ALIGNMENT OF STRUCTURES IN RELATION TO EACH OTHER. INSTALLING CONTRACTORS ARE EXPECTED TO INSTALL STRUCTURES EXACTLY AS SPECIFIED. FOR EXAMPLE, THE CENTER LINE OF A WET WELL AND VALVE VAULT MUST ALIGN CORRECTLY FOR DISCHARGE PIPING TO ATTACH CORRECTLY. PROBLEMS ARISING FROM INCORRECTLY INSTALLED STRUCTURES AND/OR PIPING BETWEEN THE STRUCTURES ARE THE RESPONSIBILITY OF THE INSTALLER, NOT ROMTEC UTILITIES.

3. CONCRETE STRUCTURES LEAK FOR MANY REASONS DURING AND AFTER INSTALLATION

A. CONCRETE STRUCTURES MUST BE INSTALLED ON A COMPACTED, LEVEL FOUNDATION PER ASTM C1821-16. SPECIFICATION FOR THIS FOUNDATION IS SITE SPECIFIC, AND IS MADE BY OTHERS, NOT BY ROMTEC UTILITIES. ALL JOINTS BETWEEN STACKED CONCRETE SECTIONS MUST BE LEVEL AND EVENLY SUPPORTED. ANY LEANING OR UNEVENLY SUPPORTED STRUCTURES WILL RESULT IN MANY PROBLEMS, INCLUDING LEAKING AT THE JOINTS.

B. MOST STRUCTURAL LEAKS ORIGINATE AT CORED HOLES FOR PIPE PENETRATIONS. THE SYSTEM HAS BEEN DESIGNED SO THAT ALL PIPING ENTERING/EXITING THE STRUCTURE MUST PASS THROUGH PARALLEL TO THE CORED HOLE. IN OTHER WORDS, THE PIPING MUST GO STRAIGHT THROUGH CORED HOLES WITHOUT DEFLECTION. IF THE PIPING IS BROUGHT THROUGH ANY OF THE CORED HOLES AT AN ANGLE, THERE IS RISK OF LEAKING AT THAT LOCATION. IF FIELD CONDITIONS REQUIRE PIPING TO ENTER/EXIT THE STRUCTURE AT AN ANGLE, IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT THE PENETRATION IS WATER TIGHT.

C. AREAS OF HIGH GROUND WATER WILL TEST THE WATER TIGHTNESS OF ALL JOINTS AND PENETRATIONS IN THE STRUCTURE. INSTALLING CONTRACTORS SHOULD TAKE EXTRA PRECAUTIONS TO ENSURE WATER TIGHTNESS WHEN INSTALLING IN AN AREA WITH HIGH GROUND WATER.

D. HIGH GROUND WATER CAN BE SEASONAL, SO THE INSTALLER OR OWNER SHOULD CHECK THE STRUCTURES FOR LEAKS DURING WET MONTHS, ESPECIALLY AFTER AN INSTALLATION DURING A DRY PERIOD.

E. A LEAK IN A LINED OR COATED STRUCTURE MAY COMPOUND THE PROBLEM THAT A LEAK CREATES. INFLOWING WATER FROM THE LEAK CAN FLOW BETWEEN THE LINING/COATING AND THE CONCRETE, CREATING A SEPARATION THAT REQUIRES REPAIR. REPAIR CAN BECOME EVEN MORE DIFFICULT IF THE ACTUAL POINT OF INGRESS IS CONCEALED BY THE LINING/COATING. IN OTHER WORDS, THE ACTUAL POINT OF INGRESS MAY NOT BE THE SAME POINT WHERE THE LEAK SHOWS THROUGH THE LINING/COATING.

F. WHILE ROMTEC UTILITIES MAY SUPPLY AND/OR PRE-INSTALL THE LINING OR COATING, ROMTEC UTILITIES IS NOT RESPONSIBLE FOR ANY COST ASSOCIATED WITH REPAIR OF THE LINING/COATING DUE TO STRUCTURAL LEAKING.

4. PRECAST CONCRETE INSPECTIONS

A. IF REQUIRED, ANY CUSTOMER INSPECTION OF PRECAST CONCRETE MUST BE MADE AT THE PRECASTER FACILITY, NOT AFTER DELIVERY TO THE JOB SITE. IN OTHER WORDS, IF THE CUSTOMER REQUIRES ADDITIONAL CONCRETE INSPECTION, THIS MUST BE PERFORMED PRIOR TO WHEN THE CONCRETE LEAVES THE PRECASTER FACILITY FOR DELIVERY.

5. LININGS AND COATINGS OF CONCRETE

A. MOST CONCRETE COATINGS AND LININGS REQUIRE SIGNIFICANT CURE TIMES (TYPICALLY FOUR WEEKS). ROMTEC UTILITIES IS NOT RESPONSIBLE FOR CONSTRUCTION DELAYS CAUSED BY LINING/COATING CURE TIMES. INSTALLATION OF STRUCTURES THAT OCCURS BEFORE THE CURING PROCESS IS COMPLETE WILL VOID BOTH THE LINING/COATING MANUFACTURER'S WARRANTY AND THE ROMTEC UTILITIES WARRANTY.

B. ANY DAMAGE TO LININGS OR COATINGS THAT OCCURS DURING SHIPPING OR CONSTRUCTION IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO REPAIR OR REPLACE.

INSTALLATION INFO AND RECOMMENDATIONS

ROMTEC UTILITIES DELIVERS THE FOLLOWING ITEMS WITH A TYPICAL PRECAST CONCRETE WET WELL.

A. PRECAST WET WELL BASE ASSEMBLY - THE BASE ARRIVES READY TO BE PLACED ON THE COMPACTED FOUNDATION (AS APPROVED BY THE SITE ENGINEER)

B. PRECAST WET WELL BARRELS - ALL PIPE PENETRATIONS SHOWN ON THE COMPONENT DRAWING(S) ARE PRE-CORED UNLESS OTHERWISE NOTED. PIPE BOOTS ARE PROVIDED FOR USE IN SEALING THE CORED HOLES.

C. PRECAST WET WELL TOP SLAB - THE TOP SLAB WILL INCLUDE THE PRE-INSTALLED HATCH AND IS READY TO BE PLACED.

D. ACCESSORY PALLET - THE PALLET INCLUDES THE FOLLOWING:
   a. BUTYL SEALANT, CAULKING, AND OR JOINT WRAP FOR CONCRETE JOINTS
   b. DISCHARGE PIPING
   c. GUIDE RAILS AND BRACKETS
   d. LEVEL SENSING DEVICES

NOTE: THE SUPPLIED DISCHARGE PIPING AND GUIDE RAILS ARE INTENTIONALLY TOO LONG. THE INSTALLING CONTRACTOR IS EXPECTED TO MEASURE THE PIPING AND TRIM TO FIT AS NEEDED. THE CONTRACTOR MUST ALSO PLUMB THE DISCHARGE PIPING AND SECURE IT TO THE PRE-INSTALLED BRACKET(S).

ROMTEC UTILITIES STRONGLY RECOMMENDS THAT THE INSTALLING CONTRACTOR PROVIDE THE FOLLOWING ITEMS DURING DELIVERY AND INSTALLATION

A. A PERSON ONSITE WHOSE SOLE RESPONSIBILITY IS TO BE IN CHARGE OF SAFETY

B. APPROPRIATE SHORING OF EXCAVATIONS TO PROVIDE A SAFE WORKSPACE

C. AN APPROPRIATELY SIZED CRANE FOR OFFLOADING AND PLACING CONCRETE SECTIONS.

D. AN APPROPRIATELY SIZED FORKLIFT FOR OFFLOADING PALLETS AND/OR CONTROL PANEL COMPONENTS

E. IDENTIFICATION OF ALL OVERHEAD OBSTRUCTIONS PRIOR TO DELIVERY

F. A SECURE COVERED AREA FOR STORING THE ACCESSORY PALLET, CONTROL PANEL, AND PUMPS. IF THIS AREA IS OFFSITE, AN APPROPRIATE TRANSPORTATION VEHICLE WILL BE REQUIRED TO MOVE THESE ITEMS TO THE SECURE LOCATION UNTIL FINAL INSTALLATION.

RECOMMENDED LIFTING METHOD FOR PRECAST CONCRETE

A. ALL CONCRETE COMPONENTS ARE DESIGNED TO BE LIFTED AND PLACED BY USE OF THE PRE-INSTALLED ANCHORS AND LIFTING GEAR.

B. PRIOR TO PLACING THE CONCRETE COMPONENTS, ENSURE THAT THE EXCAVATION AND COMPACTED FOUNDATION IS COMPLETE AS SPECIFIED BY THE SITE ENGINEER. THE FOUNDATION MUST NOT ALLOW THE STRUCTURE TO SETTLE OR TILT DURING OR AFTER INSTALLATION.

C. PROVIDE A SAFE, OSHA-APPROVED METHOD OF CAVE-IN PROTECTION (SHORING).

D. USE LIFTING EQUIPMENT OF THE APPROPRIATE SIZE AND CAPACITY. FOR EXAMPLE, A PARTICULARLY HEAVY ITEM SHOULD BE LIFTED USING ONE APPROPRIATELY SIZED CRANE, NOT BY USING TWO UNDERSIZED EXCAVATORS.

NOTE: THE INSTALLING CONTRACTOR IS EXPECTED TO KNOW AND USE INDUSTRY BEST PRACTICES FOR LIFTING AND PLACING PRECAST CONCRETE.

E. THE INSTALLING CONTRACTOR IS EXPECTED TO PROVIDE THE APPROPRIATE LIFTING CABLES, STRAPS, OR CHAINS, AS WELL AS CONNECTION DEVICES TO ATTACH THE CABLES TO THE CRANE AND LIFTING CLUTCHES.

F. ALL LIFTING CABLES, STRAPS, OR CHAINS MUST BE LONG ENOUGH TO PREVENT RIGGING FROM PUTTING LATERAL PRESSURE ON ANY OF THE LIFT ANCHORS. ROMTEC UTILITIES RECOMMENDS THE USE OF A SPREADER BAR WHENEVER THE CABLE LENGTH IS QUESTIONABLE. DAMAGE RESULTING FROM FAILURE TO FOLLOW THIS RECOMMENDATION WILL NOT BE COVERED BY ROMTEC UTILITIES.

G. SEE THE CONCRETE PRODUCTION DRAWINGS FOR WEIGHT OF INDIVIDUAL COMPONENTS.

OFFLOADING AND STORING CONCRETE

A. ALL OFFLOADED CONCRETE THAT IS NOT IMMEDIATELY PLACED IN ITS FINAL INSTALLATION LOCATION MUST BE APPROPRIATELY STORED ON LEVEL DUNNAGE WITH EVEN, REGULAR SUPPORT UNDER THE CONCRETE, NOT DIRECTLY ON UNEVEN GROUND OR WITH UNEVEN, IRREGULAR SUPPORT. DAMAGE CAUSED BY FAILURE TO FOLLOW THIS RECOMMENDATION WILL NOT BE COVERED BY ROMTEC UTILITIES.

B. ALL CONCRETE THAT IS TEMPORARILY STORED PRIOR TO FINAL INSTALLATION SHOULD BE THOROUGHLY CLEANED BEFORE IT IS STACKED. FAILURE TO CLEAN CONCRETE JOINTS PRIOR TO STACKING CAN RESULT IN SEALANT FAILURE AND LEAKS. ROMTEC UTILITIES WILL NOT WARRANTY STRUCTURES THAT ARE NOT CLEAN AND DRY PRIOR TO INSTALLATION.

RECOMMENDATIONS FOR EXTENDED PUMP STORAGE

A. NEVER STORE PUMPS IN THE WET WELL PRIOR TO START-UP. STORE PUMPS IN AN UPRIGHT POSITION IN A CLEAN, DRY LOCATION FREE FROM TEMPERATURE EXTREMES AND DIRECT SUNLIGHT.

B. ONCE DURING EVERY MONTH OF STORAGE, THE PUMP IMPELLERS SHOULD BE MANUALLY ROTATED BY HAND TO ENSURE FREE MOVEMENT OF ALL ROTATING PARTS (SEALS, BEARINGS, AND IMPELLERS). ADD SILICONE SPRAY OR RUST-INHIBITING OIL TO THE LOWER CASING, COMPLETELY COATING THE IMPELLER AND INSIDE OF THE LOWER CASE. ALSO FULLY COAT THE DISCHARGE FLANGE FACE.

C. PROTECT PUMP CABLES FROM DAMAGE AND MOISTURE. CABLES SHOULD BE STORED SO THAT THERE IS NO TENSION ON THE CABLE ENTRY POINT INTO THE PUMP. THE FREE END OF THE CABLE MUST BE PROTECTED FROM MOISTURE AT ALL TIMES. NEVER LIFT A PUMP BY THE CABLE.

D. THE PUMP MANUFACTURER MAY HAVE MORE STORAGE AND HANDLING RECOMMENDATIONS.

INSTALLATION AND BACKFILL RECOMMENDATIONS

A. ALL EXCAVATIONS MUST BE KEPT DRY DURING INSTALLATION. THIS MAY REQUIRE THE USE OF MULTIPLE DEWATERING PUMPS.

B. PRECAST CONCRETE SECTIONS MUST BE LEVEL WHEN PLACED ON THE COMPACTED BASE. THIS COMPACTED BASE IS SPECIFIED BY THE SITE ENGINEER AND/OR GEOTECHNICAL REPORT. ROMTEC UTILITIES STRONGLY RECOMMENDS THAT THE BASE BE THOROUGHLY CLEANED AND TRANSIT-LEVELLED.

C. A SAFE WORKING AREA WILL BE REQUIRED AROUND THE PLACED STRUCTURE FOR THE INSTALLING CONTRACTOR TO APPLY THE SEALANT AND/OR JOINT WRAP.

D. ALL JOINTS MUST BE KEPT CLEAN AND DRY WHILE SEALANT AND/OR JOINT WRAP ARE BEING APPLIED.

E. JOINT SEALANTS SHOULD BE APPLIED PER THE MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. WHEN APPLYING SEALANT, MAKE SURE TO REMOVE THE PAPER BACKING AND MOLD/KNEAD CUT ENDS TOGETHER TO FORM ONE PIECE.

F. SEALANT SHOULD COMPRESS A MINIMUM OF 50% PRIOR TO ANY BACKFILLING. COLD WEATHER MAY DELAY THE TIME IT TAKES TO ACHIEVE PROPER COMPRESSION. IF BACKFILL IS ADDED PRIOR TO SEALANT COMPRESSION, IT MAY PREVENT FULL COMPRESSION AND RESULT IN LEAKS. ROMTEC UTILITIES IS NOT RESPONSIBLE FOR ANY LEAKS RESULTING FROM FAILURE TO FOLLOW THESE RECOMMENDATIONS.

G. PUSHING/PULLING OR MANUAL COMPRESSION OF CONCRETE SECTIONS WITH AN EXCAVATOR IS **NOT** RECOMMENDED. IF CONCRETE SECTIONS ARE MOVED OR REMOVED AFTER PLACEMENT, SEALANT MUST BE REAPPLIED.

H. SUITABLE BACKFILL MATERIAL (PER THE SITE ENGINEER AND/OR GEOTECHNICAL REPORT) MUST BE USED TO AVOID ANY DAMAGE OR SHIFTING OF CONCRETE SECTIONS. ROMTEC UTILITIES STRONGLY ADVISES AGAINST USING ANY TYPE OF CONCRETE AS BACKFILL MATERIAL. POTENTIAL FOR DAMAGE DURING INSTALLATION IS GREATLY INCREASED WITH CONCRETE AS BACKFILL MATERIAL. CONCRETE BACKFILL ALSO SEVERELY LIMITS ACCESS TO PIPING FOR FUTURE MAINTENANCE.

I. BACKFILL MUST BE PLACED EVENLY AROUND THE STRUCTURE IN A MAXIMUM OF 12▪▪COMPACTED LIFTS WITHIN 1' OF THE WALL. FAILURE TO FOLLOW THIS METHOD CAN RESULT IN UNEVEN PRESSURE ON THE CONCRETE STRUCTURE, RESULTING IN SHIFTING OF JOINTS AND/OR PIPING THAT EVENTUALLY CAUSES LEAKING. ROMTEC UTILITIES WILL NOT COVER LEAKS THAT RESULT FROM FAILURE TO FOLLOW THESE RECOMMENDATIONS.

J. USE CAUTION WHEN ADDING BACKFILL MATERIAL TO ENSURE THAT NO PRESSURE OR FORCE IS APPLIED TO THE CONCRETE STRUCTURE, ESPECIALLY NEAR JOINTS OR PIPING.

K. IF HYDROSTATIC OR VACUUM TESTING IS REQUIRED, IT MUST BE PERFORMED PRIOR TO BACKFILLING. ANY LEAKS DISCOVERED AFTER BACKFILLING AROUND THE STRUCTURE ARE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR.

ROMTEC UTILITIES

1

REVISION HISTORY

REV	DATE	DESCRIPTION	BY
1	10/26/22	REVISED PER CITY COMMENTS	RD

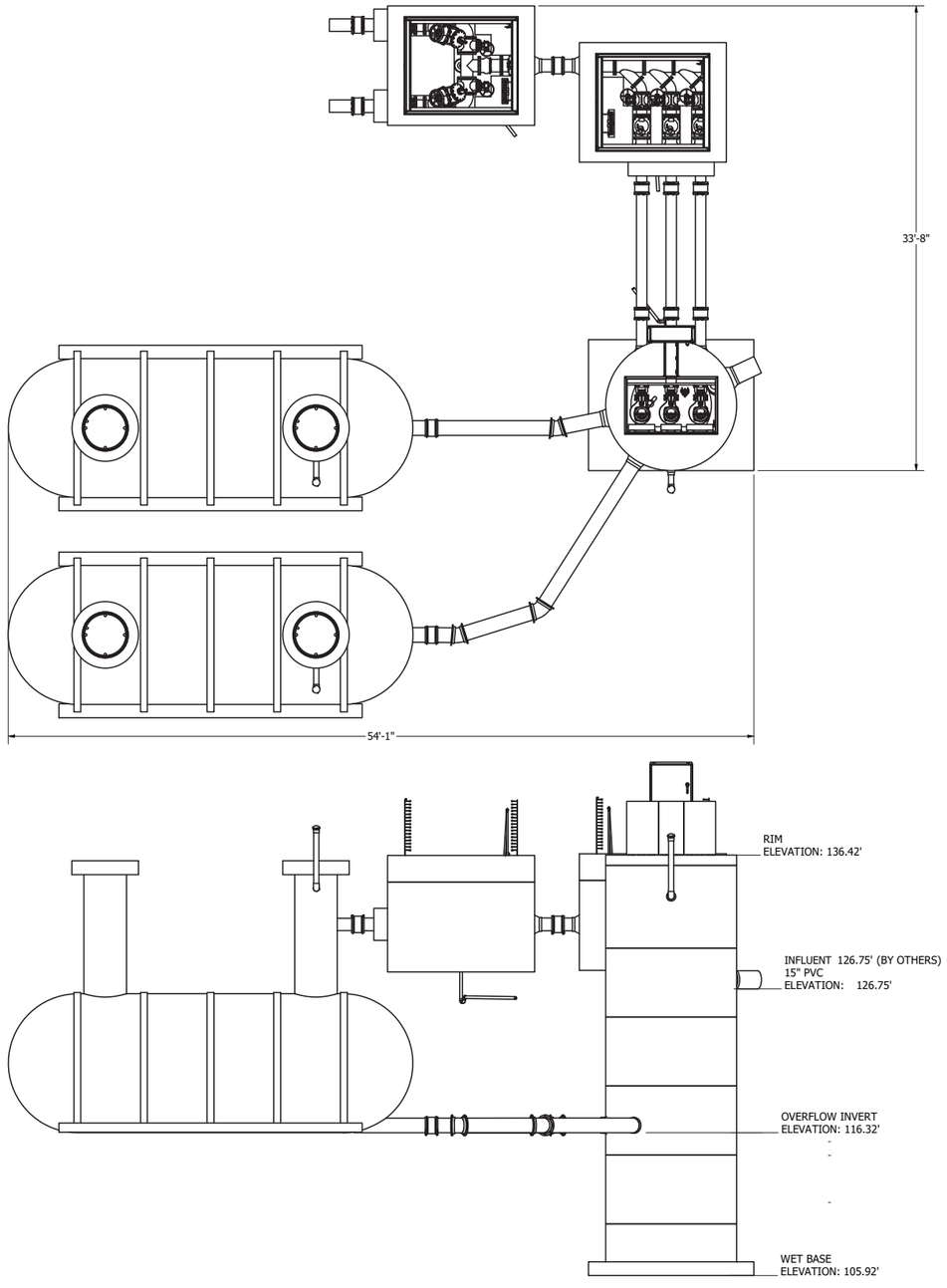
VERIFY SCALE
BAR MEASURES 1" ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALE ACCORDINGLY
0 1"

DSN:
DRN: KB
CKD:
DATE: 7-10-20

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVER ROAD
THE DALLES, OR

GENERAL NOTES
DWG NO.:
M01



ROMTEC UTILITIES

1

VERIFY SCALE
BAR MEASURES 1" ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALE ACCORDINGLY
0 1"

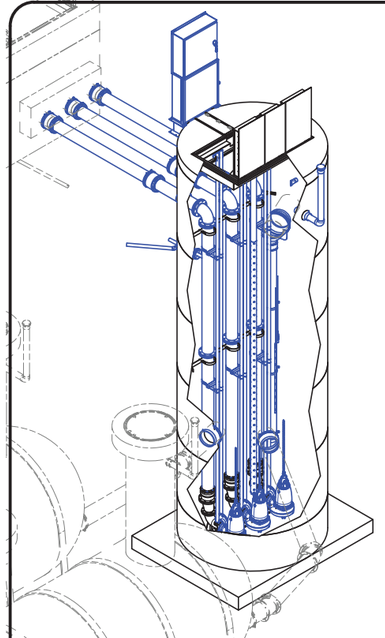
DSN: RD
DRN: RD
CKD:
DATE: 10/21

REV	DATE	DESCRIPTION	BY
1	10/26/22	REVISED PER CITY COMMENTS	RD

REVISION HISTORY

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVER ROAD
THE DALLES, OR
WASTWATER PUMP STATION
LAYOUT DRAWING
DWG NO: MO2



8' DIAMETER WET WELL
8" DISCHARGE PIPING
TRIPLEX FLYGT N PUMPS
8" VALVE VAULT, 10" METER VAULT

NOTE: INITIAL PHASE TO BE DUPLEX

FOR DESIGN REVIEW

COLOR LEGEND

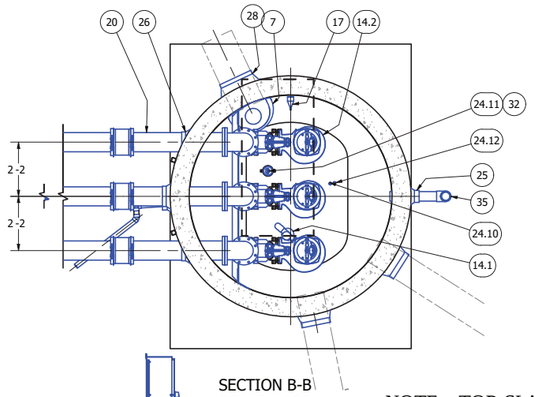
- MAJOR CONCRETE COMPONENTS WITH PRE-INSTALLED COMPONENTS.
- COMPONENTS PRE-ASSEMBLED TO THE EXTENT POSSIBLE AND WILL NEED TO BE FIELD INSTALLED.

NOTE: PRE-ASSEMBLY IS DONE AT ROMTEC UTILITIES DISCRETION AND MAY CHANGE AT THE TIME OF PRODUCTION.

ALL MATERIALS SHOWN ON THIS SHEET WILL BE SUPPLIED BY ROMTEC UTILITIES AND DELIVERED TO THE SITE AFTER THE HOLE HAS BEEN EXCAVATED AND SHORED. THE CONTRACTOR SHALL SUPPLY A CRANE OF SUFFICIENT SI E TO LOWER ALL THE CONCRETE PIECES INTO THE HOLE SAFELY. THE CONTRACTOR SHALL INSTALL THE WET WELL (AND VALVE VAULT AND METERING VAULT IF APPLICABLE). ROMTEC UTILITIES WILL PROVIDE A REPRESENTATIVE FOR TECHNICAL ASSISTANCE ON THE DAY OF INSTALLATION TO ANSWER ANY UESTIONS THAT MAY ARISE. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING AND ELECTRICAL CONNECTIONS AND INSTALLATION. ITEMS NOTED AS BY OTHERS WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. ROMTEC UTILITIES WILL NOT INSTALL ANY OF THE COMPONENTS SHOWN ON THIS PAGE.

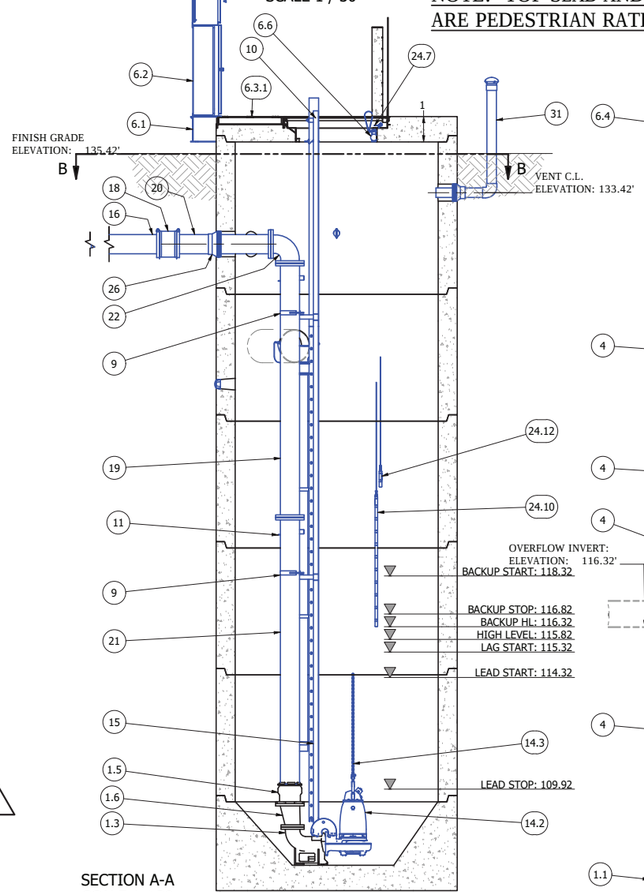
ROMTEC UTILITIES

1

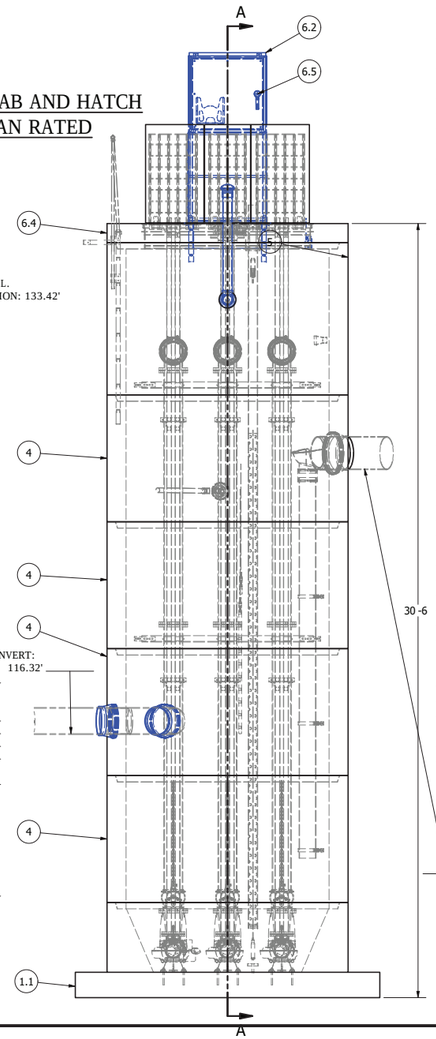


SECTION B-B
SCALE 1 / 30

NOTE: TOP SLAB AND HATCH ARE PEDESTRIAN RATED



SECTION A-A
SCALE 1 / 30



PRIMARY SENSOR ELEVATION TABLE		
DESCRIPTION	ELEVATION	
INFLUENT INVERT	126.75'	
HIGH LEVEL ALARM	115.82'	0.50'
LAG PUMP START	115.32'	1.00'
LEAD PUMP START	114.32'	4.40'
PUMP STOP	109.92'	3.00'
WELL FLOOR	106.50'	

MISC. ELEVATION TABLE	
DESCRIPTION	ELEVATION
BACKUP PUMP START	118.32'
BACKUP PUMP STOP	116.82'
BACKUP HIGH LEVEL	116.32'

PARTS LIST			
ITEM	TY	STOCK NUMBER	DESCRIPTION
1	1	10-CB000000	BASE SLAB ASSEMBLY
1.1	1	10-CB08000W	BASE - WW - 8ft DIA - RU DESIGN
1.2	1	18-BR04SWLO	STILLING WELL - LOWER SUPPORT - 4in
1.3	3	31-EL0600FL	DISCHARGE ELBOW - 6in - FLYGT
1.4	3	31-HW00AKSG	ANCHOR KIT - 316SS - DISCHARGE ELBOW
1.5	3	44-AD08RMAL	FLANGE ADAPTER - 8in - ROMAC ALPHA
1.6	3	48-RD0806DE	REDUCER - DI - ECCENTRIC - 8in X 6in
1.7	3	49-GS060000	GASKET - FLANGE - 6in
2	1	11-LC0800EX	COATING - EXTERIOR - 8ft DIA
3	1	11-LC0800IN	COATING - INTERIOR - 8ft DIA
4	4	12-CR08600W	BARREL - 8ft DIA x 5ft H
5	1	12-CR08720W	BARREL - 8ft DIA x 6ft H
6	1	14-CT000000	TOP SLAB ASSEMBLY
6.1	1	13-DS3612MT	DISCONNECT STAND MOUNT - 36in x 12in
6.2	1	13-DS3636SS	DISCONNECT STAND - SS - 36in X 36in X 12in
6.3	1	13-HH08H0DC	HATCH - H-20 - 8ft - DUPLEX - RU CABLE TRAY
6.3.1	1	13-CA090000	9in CABLE TRAY - RU DESIGN - 8ft TOP SLAB
6.3.2	1	13-HH08HDTE	HATCH - H20 - 8ft - TRIPLEX
6.4	1	14-CT08HDDW	TOP SLAB - 8ft DIA - H20 - DUPLEX
6.5	1	61-EP5036DC	PNL DISCONNECT 31-50FLA (36x36)
6.6	1	84-PX00IT00	INTRUSION SWITCH ASSEMBLY
7	1	15-DB00000L	DROP BOWL ASSEMBLY - LARGE
8	3	17-AC38000B	BOLT KIT - UPPER GUIDE BAR BRACKET
9	6	17-IG02S6FL	BRACKET - 316SS - INTERMEDIATE GUIDE BAR
10	3	17-UG0200FL	BRACKET - 316SS - UPPER GUIDE BAR - 2in
11	2	18-BR000000	BRACKET ASSEMBLY - 316SS - DISCHARGE SUPPORT
12	1	18-BR04SWUP	STILLING WELL - UPPER SUPPORT - 4in
13	1	18-VT0000MC	VENT - 4in - MUSHROOM CAP
14	1	30-PU000000	PUMP SHIPPING CRATE
14.1	1	30-MFVFLYGT	MIX FLUSH VALVE - FLYGT
14.2	2	30-PU0000FL	PUMP - FLYGT NP3153MT*
14.3	2	32-AC0000FL	PUMP LIFTING SLING - 316SS*
14.4	2	32-CGSS000F	CABLE SUPPORT GRIP - 304SS - 1.25in-1.49in*
14.5	1	32-PLGE0000	GRIP EYE UNIT
15	162 ft	40-PP0200S6	PIPE - 316SS SCH40 - 2in DIA
16	27 ft	40-PP0800D0	PIPE - DI - 8in DIA
17	2	42-TF020000	CHECK VALVE - TIDEFLEX - 2in
18	6	44-CP080AD0	COUPLING - 8in - ROMAC ALPHA
19	3	45-FF081200	SPOOL - DI - 8in DIA x 120in - FLGxFLG
20	3	45-FP080480	SPOOL - DI - 8in DIA x 48in - FLGxPE
21	3	45-FP081260	SPOOL - DI - 8in DIA x 126in - FLGxPE
22	3	46-EL0890DI	ELBOW - DI - 8in x 90deg - FLGxFLG
23	9	49-GS080000	GASKET - FLANGE - 8in
24	1	50-AC000000	WELL SHIPPING CRATE
24.1	1	13-KY000000	HATCH KEY
24.2	4	18-AC00CH00	CABLE HANGER ASSEMBLY - 316SS
24.3	4	18-HD080000	LIFTING CLUTCH - 8 TON
24.4	1	51-AC00NSTB	NEVER SIEZE - TUBE
24.5	176 ft	51-JWCS2120	JOINT WRAP - 12in - CONSEAL CS-212
24.6	176 ft	51-SECS231S	SEALANT - 1in x .75in - CONSEAL CS-231
24.7	1	62-BR00PB00	BRACKET - PROBE MOUNTING
24.8	1	62-CG00PT00	CORD GRIP - PRESSURE TRANSDUCER - WEDGE CLAMP
24.9	1	80-FI00PT00	DESSICANT FILTER - PRESSURE TRANSDUCER
24.12	1	80-PB0750MP	PROBE - LIQUID LEVEL - LP-7-1-50
24.10	1	80-PB6150MP	PROBE - LIQUID LEVEL - 10 SENSOR - 5ft LENGTH
24.11	1	80-PT1500EH	PRESSURE TRANSDUCER - 0-15PSI - 60ft CABLE
26	3	59-KB1208DI	KOR-N-SEAL - 12in CORE x 8in DIPS PIPE
27	2	59-KB1612DI	KOR-N-SEAL - 16in CORE x 12in DIPS PIPE
25	2	59-KB080400	KOR-N-SEAL - 8in CORE - 4in thru 1.5in PIPE
28	1	59-KB201400	KOR-N-SEAL - 20in CORE x 14in PIPE
29	20 ft	70-PP0200P4	PIPE - PVC SCH40 - 2in DIA
30	9.0 ft	70-PP0400P4	PIPE - PVC SCH40 - 4in DIA
31	6.0 ft	70-PP0400P8	PIPE - PVC SCH80 - 4in DIA
32	19.5 ft	70-SW0400P4	STILLING WELL - 4in PVC PIPE - PERFORATED
33	1	74-AD04008M	ADAPTER - PVC SCH80 - 4in - SLIP x MNPT
34	1	76-EL024540	ELBOW - PVC SCH40 - 2in x 45deg - SLIP
35	1	76-EL049080	ELBOW - PVC SCH80 - 4in x 90deg - SLIP
36	1	76-TE020240	TEE - PVC SCH40 - 2in x 2in - SLIP

NOTE - INITIAL PHASE IS DUPLEX. ONLY TWO OF THE NOTED ITEMS ARE BEING PROVIDED.

INFLUENT SEWER (BY OTHERS)
15"
ELEVATION: 126.75'

NOTE: DEVIATION FROM CHENOWETH REGARDING THE HATCH. A FLOODTIGHT HATCH IS NOT BEING PROVIDED AS THE SAFETY GRATES WOULD INTERFERE WITH THE INSTALL/REMOVAL OF THE PUMP. A GASKETED CHANNEL FRAME HATCH DESIGNED FOR TRIPLEX PUMPS IS BEING PROVIDED. THE CHANNEL FRAME ALLOWS INFILTRATING WATER TO BE DRAINED OUT TO AN OUTFALL AREA.

NOTE: ALL DIMENSIONS AND ELEVATIONS SHOWN ARE NOMINAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE ON-SITE CONTRACTOR OR ROMTEC UTILITIES CUSTOMER (NOT ROMTEC UTILITIES) TO VERIFY THE ACCURACY OF ANY CRITICAL DIMENSIONS OR ELEVATIONS PRIOR TO SETTING OR INSTALLING ANY E UIPMENT.

REVISION HISTORY

REV	DATE	DESCRIPTION	BY
1	10/26/22	REVISED PER CITY COMMENTS	RD

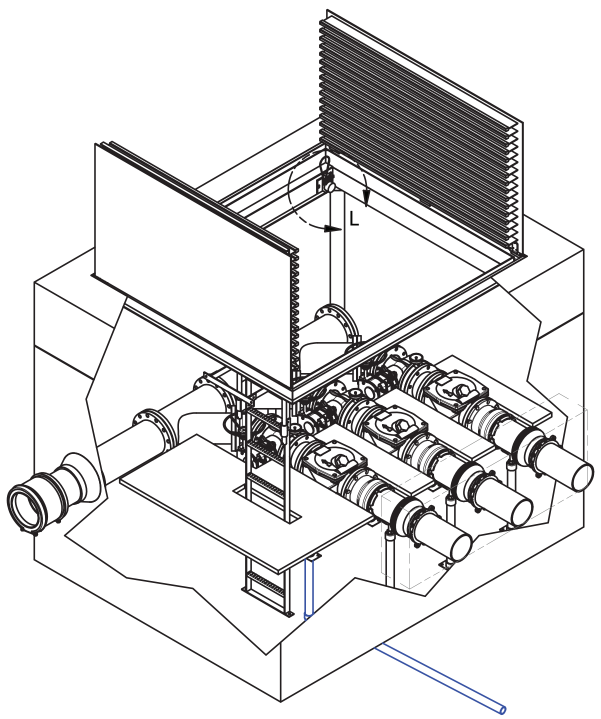
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET ADJUST SCALE ACCORDINGLY
0 1"

DSN: KB
DRN: KB
CKD:
DATE: 7-10-20

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

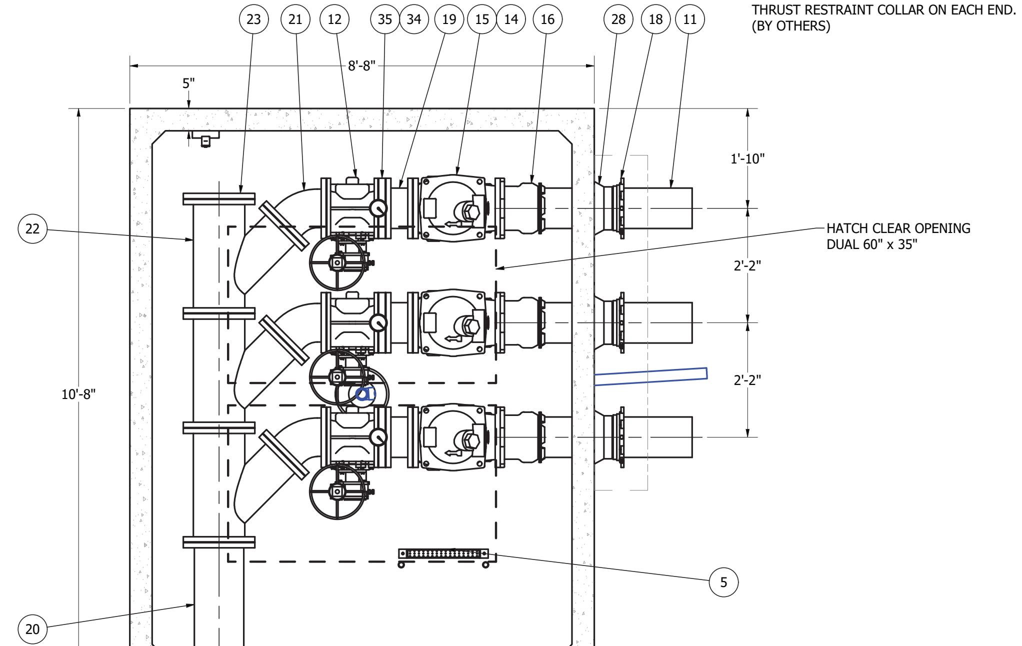
RIVER ROAD
THE DALLES, OR

WET WELL ASSEMBLY
COMPONENT DRAWING
DWG NO.:
M03

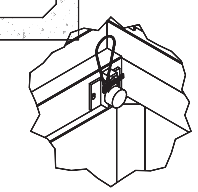


810 VALVE VAULT
8" PIPING AND VALVES
W/ 10" OUTLET

FOR DESIGN REVIEW



SECTION D-D
SCALE 1 / 18



DETAIL L
SCALE 1 / 12

PARTS LIST			
ITEM	QTY	STOCK NUMBER	DESCRIPTION
1	1	20-CB810200	BASE - VV - 810 (2 piece)
2	1	23-HH810999	HATCH - VV - 810 - FLOOD RESIST.
3	1	24-CT810HD0	TOP SLAB - VV - 810 - H20
4	1	25-FG999999	GRATING - FIBERGLASS W/ SS STANDS
5	1	25-LD070800	LADDER - 7ft-8in
6	9	25-PS0BBASE	PIPE STAND BASE - 304SS - 2in - 2 BOLT
7	3	25-PS08RUFL	PIPE STAND - 304SS - 8in FLANGE
8	3	25-PS08S92S	PIPE STAND - SAD S92 - 8in - NO BASE
9	3	25-PS10RUFL	PIPE STAND - 304SS - 10in FLANGE
10	18.2 ft	40-PP0200S4	PIPE - 304SS SCH40 - 2in DIA
11	10.5 ft	40-PP0800D0	PIPE - DI - 8in DIA
12	3	41-PV080HD0	PLUG VALVE - 8in - GEARED HANDWHEEL
13	1	42-AC0800BF	BACKFLOW ACTUATOR - 8in
14	3	42-MI100000	MECHANICAL INDICATOR - 10in
15	3	42-SF0800D0	CHECK VALVE - SWING FLEX - 8in
16	3	44-AD08RMAL	FLANGE ADAPTER - 8in - ROMAC ALPHA
17	1	44-CP100AD0	COUPLING - 10in - ROMAC ALPHA
18	3	44-RG080STR	RETAINER GLAND - 8in - HEAVY DUTY
19	3	45-FF080060	SPOOL - DI - 8in DIA x 6in - FLGxFLG
20	1	45-FP100480	SPOOL - DI - 10in DIA x 48in - FLGxPE
21	3	46-EL0845DI	ELBOW - DI - 8in x 45deg - FLGxFLG
22	3	46-YL1008DI	WYE - DI - 10in x 8in - FLGxFLG
23	1	48-FL100BD0	FLANGE - DI - 10in - BLIND
24	15	49-GS080000	GASKET - FLANGE - 8in
25	4	49-GS100000	GASKET - FLANGE - 10in
26	39 ft	51-JWCS2120	JOINT WRAP - 12in - CONSEAL CS-212
27	39 ft	51-SE0101SL	JOINT SEALANT - 1in - CONSEAL CS-202
28	3	59-KB1208DI	KOR-N-SEAL - 12in CORE x 8in DIPS PIPE
29	1	59-KB161000	KOR-N-SEAL - 16in CORE x 10in PIPE
30	10 ft	70-PP0200P4	PIPE - PVC SCH40 - 2in DIA
31	2	76-EL02904S	ELBOW - PVC SCH40 - 2in x 90deg - SLIP x SPIG
32	1	76-EL029040	ELBOW - PVC SCH40 - 2in x 90deg - SLIP
33	1	80-FSFLOOD9	FLOAT SWITCH ASSEMBLY - VAULT FLOOD
34	3	81-PG3H00QB	PRESSURE GAUGE - 3.5in DIA x 100#
35	3	83-GI080000	ISO RING - 8in
36	1	84-PX00IT00	INTRUSION SWITCH ASSEMBLY

COLOR LEGEND

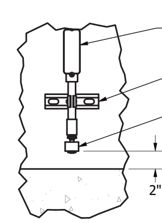
- MAJOR CONCRETE COMPONENTS WITH PRE-INSTALLED COMPONENTS.
- COMPONENTS PRE-ASSEMBLED TO THE EXTENT POSSIBLE AND WILL NEED TO BE FIELD INSTALLED.

NOTE: PRE-ASSEMBLY IS DONE AT ROMTEC UTILITIES' DISCRETION AND MAY CHANGE AT THE TIME OF PRODUCTION.

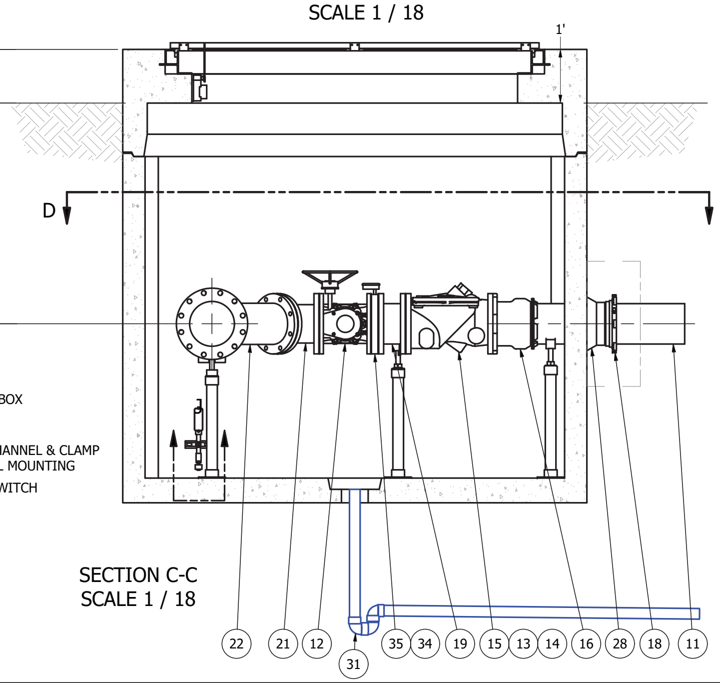
ALL MATERIALS SHOWN ON THIS SHEET WILL BE SUPPLIED BY ROMTEC UTILITIES AND DELIVERED TO THE SITE AFTER THE HOLE HAS BEEN EXCAVATED AND SHORED. THE CONTRACTOR SHALL SUPPLY A CRANE OF SUFFICIENT SIZE TO LOWER ALL THE CONCRETE PIECES INTO THE HOLE SAFELY. THE CONTRACTOR SHALL INSTALL THE WET WELL (AND VALVE VAULT AND METERING VAULT IF APPLICABLE). ROMTEC UTILITIES WILL PROVIDE A REPRESENTATIVE FOR TECHNICAL ASSISTANCE ON THE DAY OF INSTALLATION TO ANSWER ANY QUESTIONS THAT MAY ARISE. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING AND ELECTRICAL CONNECTIONS AND INSTALLATION. ITEMS NOTED AS "BY OTHERS" WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. ROMTEC UTILITIES WILL NOT INSTALL ANY OF THE COMPONENTS SHOWN ON THIS PAGE.

ROMTEC UTILITIES

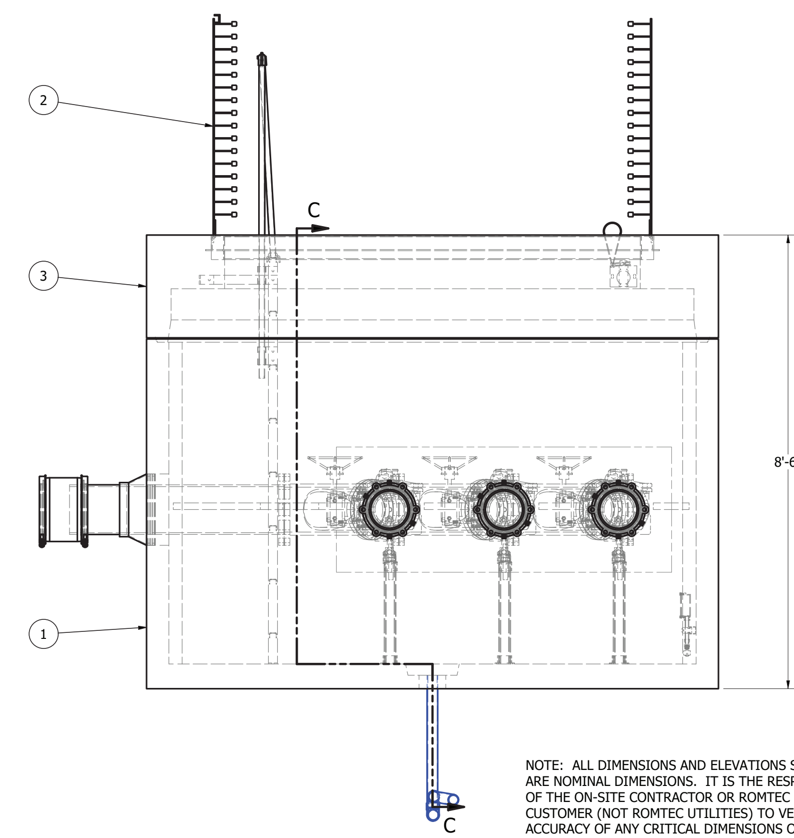
1



DETAIL J
SCALE 1 / 9



SECTION C-C
SCALE 1 / 18



NOTE: ALL DIMENSIONS AND ELEVATIONS SHOWN ARE NOMINAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE ON-SITE CONTRACTOR OR ROMTEC UTILITIES CUSTOMER (NOT ROMTEC UTILITIES) TO VERIFY THE ACCURACY OF ANY CRITICAL DIMENSIONS OR ELEVATIONS PRIOR TO SETTING OR INSTALLING ANY EQUIPMENT.

REV	DATE	DESCRIPTION	BY
1	10/26/22	REVISED PER CITY COMMENTS	RD

REVISION HISTORY

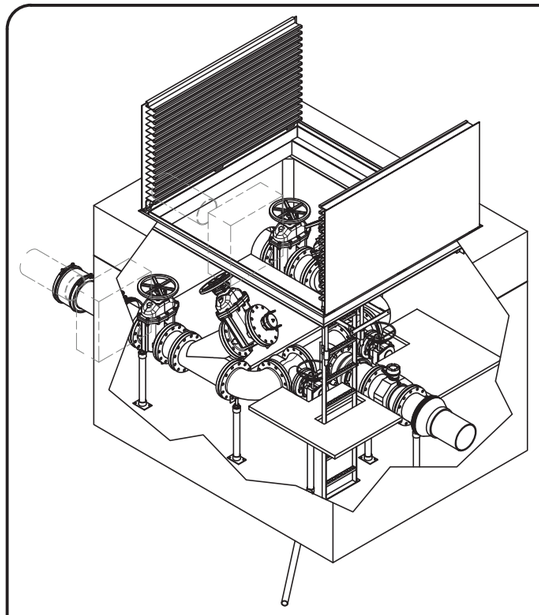
VERIFY SCALE 0 1"

DSN: KB
DRN: KB
CKD:
DATE: 7-10-20

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

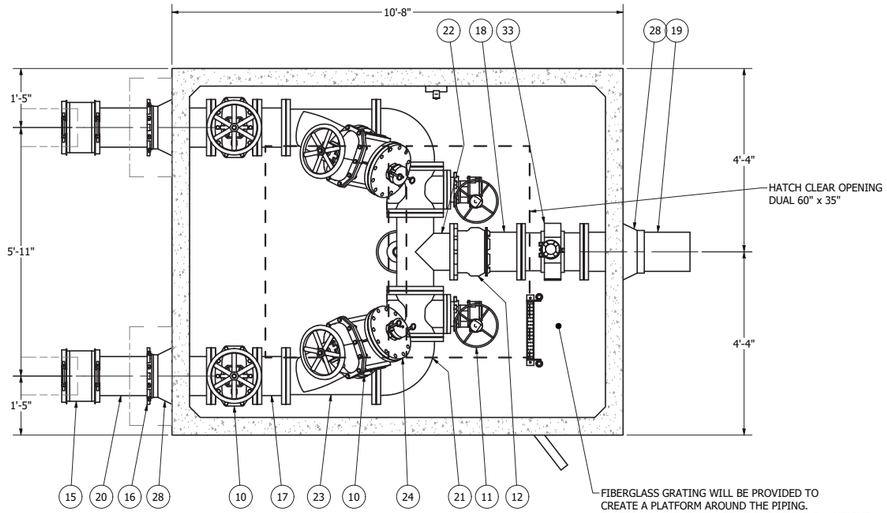
RIVER ROAD
THE DALLES, OR
VALVE VAULT ASSEMBLY
COMPONENT DRAWING
DWG NO.:
M04

2



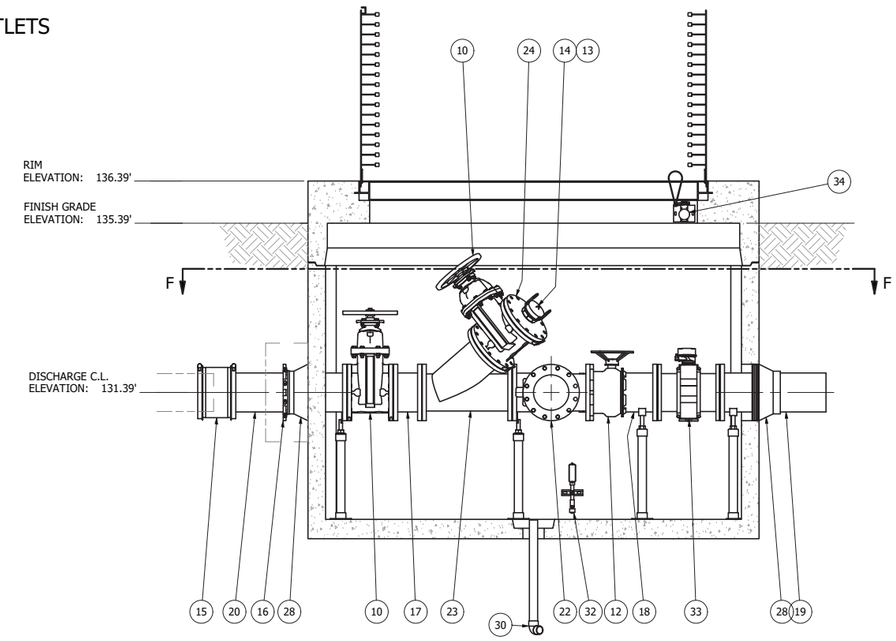
810 METER VAULT
10" PIPING AND VALVES
W/ PIGGING PORTS, DUAL OUTLETS

FOR DESIGN REVIEW

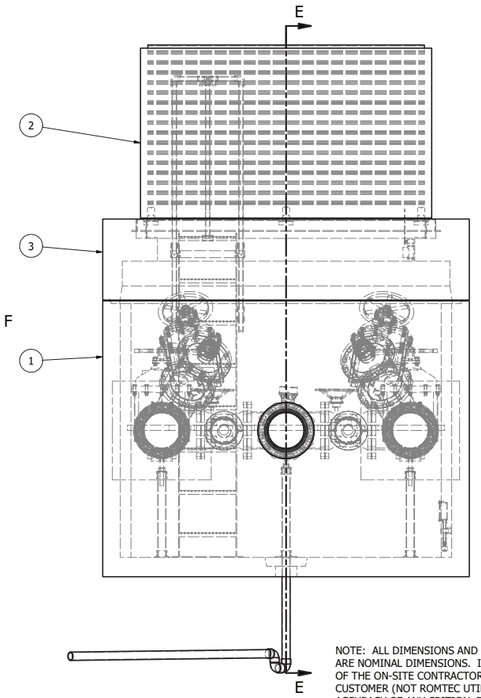


SECTION F-F
SCALE 1 / 18

PARTS LIST			
ITEM	QTY	STOCK NUMBER	DESCRIPTION
1	1	20-CB810200	BASE - VV - 810 (2 piece)
2	1	23-HH810999	HATCH - VV - 810 - FLOOD RESIST.
3	1	24-CT810HD0	TOP SLAB - VV - 810 - H20
4	1	25-FG999999	GRATING - FIBERGLASS W/ SS STANDS
5	1	25-LD070800	LADDER - 7ft-8in
6	6	25-PS0BBASE	PIPE STAND BASE - 304SS - 2in - 2 BOLT
7	4	25-PS10RUFL	PIPE STAND - 304SS - 10in FLANGE
8	2	25-PS10S92S	PIPE STAND - SAD S92 - 10in - NO BASE
9	12.2 ft	40-PP0200S4	PIPE - 304SS SCH40 - 2in DIA
10	4	41-GV100HD0	GATE VALVE - 10in - HANDWHEEL
11	2	41-PV100HD0	PLUG VALVE - 10in - GEARED HANDWHEEL
12	1	44-AD10RMAL	FLANGE ADAPTER - 10in - ROMAC ALPHA
13	2	44-CL04S6PM	CAM LOCK - 316SS - 4in - PLUG x MNPT
14	2	44-CL04SCAP	CAM LOCK - 316SS - 4in - SOCKET CAP
15	2	44-CP100AD0	COUPLING - 10in - ROMAC ALPHA
16	2	44-RG100STR	HEAVY DUTY RETAINER GLAND - 10in
17	2	45-FF100080	SPOOL - DI - 10in DIA x 8in - FLGxFLG
18	1	45-FP100180	SPOOL - DI - 10in DIA x 18in - FLGxPE
19	1	45-FP100300	SPOOL - DI - 10in DIA x 30in - FLGxPE
20	2	45-FP100360	SPOOL - DI - 10in DIA x 36in - FLGxPE
21	2	46-EL1090DI	ELBOW - DI - 10in x 90deg - FLGxFLG
22	1	46-TE1010DI	TEE - DI - 10in - FLGxFLG
23	2	46-YL1010DI	WYE - DI - 10in x 10in - FLG x FLG
24	2	48-FL100BD0	FLANGE - DI - 10in - BLIND
25	18	49-GS100000	GASKET - FLANGE - 10in
26	39 ft	51-JWCS2120	JOINT WRAP - 12in - CONSEAL CS-212
27	39 ft	51-SE0101SL	JOINT SEALANT - 1in - CONSEAL CS-202
28	3	59-KB1161000	KOR-N-SEAL - 16in CORE x 10in PIPE
29	10 ft	70-PP0200P4	PIPE - PVC SCH40 - 2in DIA
30	2	76-EL02904S	ELBOW - PVC SCH40 - 2in x 90deg - SLIP x SPIG
31	1	76-EL029040	ELBOW - PVC SCH40 - 2in x 90deg - SLIP
32	1	80-FSFLOOD9	FLOAT SWITCH ASSEMBLY - VAULT FLOOD
33	1	82-FM10LREH	FLOWMETER - 10in - ENDRESS & HAUSER
34	1	84-PX00IT00	INTRUSION SWITCH ASSEMBLY



SECTION E-E
SCALE 1 / 18



NOTE: ALL DIMENSIONS AND ELEVATIONS SHOWN ARE NOMINAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE ON-SITE CONTRACTOR OR ROMTEC UTILITIES CUSTOMER (NOT ROMTEC UTILITIES) TO VERIFY THE ACCURACY OF ANY CRITICAL DIMENSIONS OR ELEVATIONS PRIOR TO SETTING OR INSTALLING ANY EQUIPMENT.

COLOR LEGEND

- MAJOR CONCRETE COMPONENTS WITH PRE-INSTALLED COMPONENTS.
- COMPONENTS PRE-ASSEMBLED TO THE EXTENT POSSIBLE AND WILL NEED TO BE FIELD INSTALLED.

NOTE: PRE-ASSEMBLY IS DONE AT ROMTEC UTILITIES' DISCRETION AND MAY CHANGE AT THE TIME OF PRODUCTION.

ALL MATERIALS SHOWN ON THIS SHEET WILL BE SUPPLIED BY ROMTEC UTILITIES AND DELIVERED TO THE SITE AFTER THE HOLE HAS BEEN EXCAVATED AND SHORED. THE CONTRACTOR SHALL SUPPLY A CRANE OF SUFFICIENT SIZE TO LOWER ALL THE CONCRETE PIECES INTO THE HOLE SAFELY. THE CONTRACTOR SHALL INSTALL THE WET WELL (AND VALVE VAULT AND METERING VAULT IF APPLICABLE). ROMTEC UTILITIES WILL PROVIDE A REPRESENTATIVE FOR TECHNICAL ASSISTANCE ON THE DAY OF INSTALLATION TO ANSWER ANY QUESTIONS THAT MAY ARISE. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING AND ELECTRICAL CONNECTIONS AND INSTALLATION. ITEMS NOTED AS "BY OTHERS" WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. ROMTEC UTILITIES WILL NOT INSTALL ANY OF THE COMPONENTS SHOWN ON THIS PAGE.

ROMTEC UTILITIES

1

REVISION HISTORY

REV	DATE	DESCRIPTION	BY
1	10/26/22	REVISED PER CITY COMMENTS	RD

VERIFY SCALE
IF NOT ONE INCH ON THIS DRAWING THEN SCALE DRAWING ACCORDINGLY
0 1"
IF NOT SAME AS SCALE INDICATED ADJUST AS NECESSARY

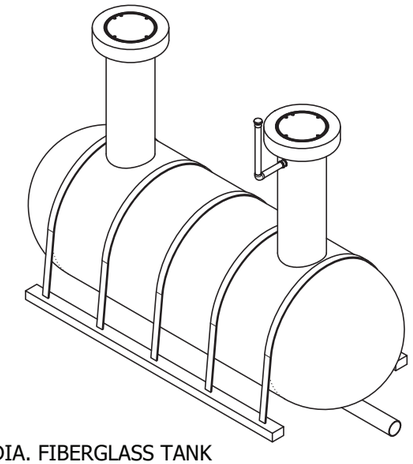
DSN: KB
DRN: KB
CKD:
DATE: 7-10-20

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVER ROAD
THE DALLES, OR

METER VAULT ASSEMBLY
COMPONENT DRAWING
DWG NO.:
M05

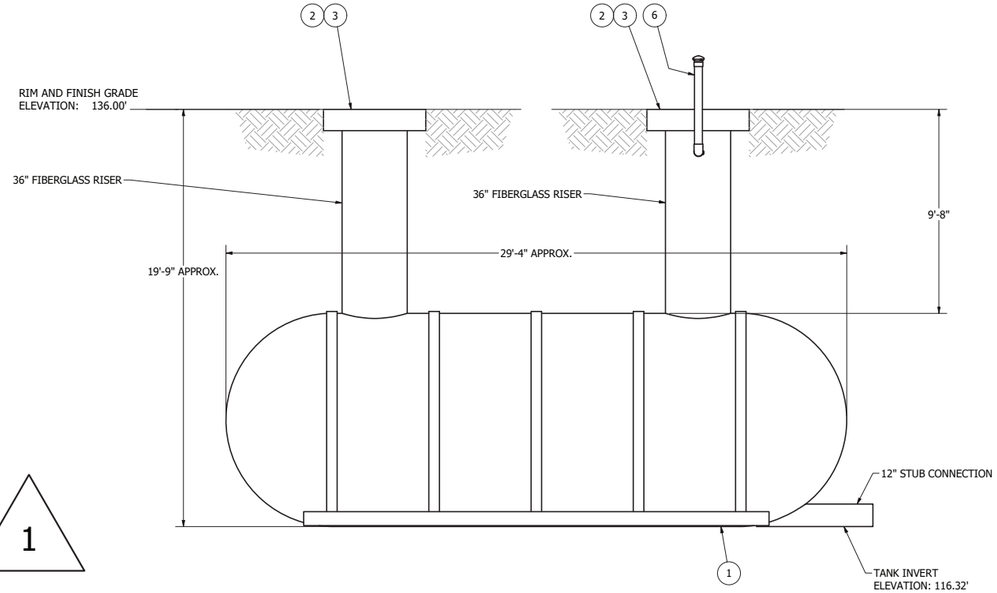
FOR DESIGN REVIEW

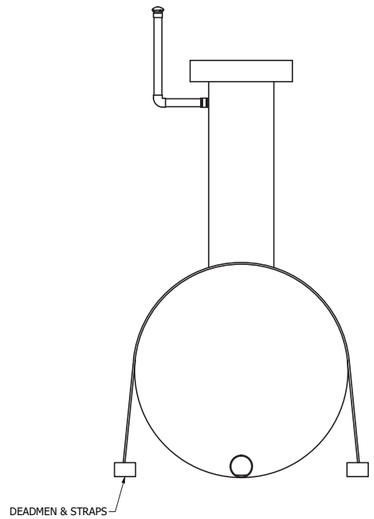


10' DIA. FIBERGLASS TANK
2 x 15,000 GALLONS

PARTS LIST			
ITEM	QTY	STOCK NUMBER	DESCRIPTION
1	1	10-TK999999	TANK - FIBERGLASS - 10ft DIA - 15K GALLON
2	2	13-HH360000	MANHOLE ASSEMBLY - 36in
3	2	14-CT0436MH	TOP SLAB - 4ft - 36in MANHOLE COVER
4	1	15-CP040000	COUPLING - FERNCO - 4in
5	1	18-VT0000MC	VENT - 4in - MUSHROOM CAP
6	6.0 ft	70-PP0400P8	PIPE - PVC SCH80 - 4in DIA
7	1	74-AD04008M	ADAPTER - PVC SCH80 - 4in - SLIP x MNPT
8	1	76-EL049080	ELBOW - PVC SCH80 - 4in x 90deg - SLIP

NOTE: TWO TANKS AND ASSOCIATED ACCESSORIES TO BE SUPPLIED





NOTE: ALL DIMENSIONS AND ELEVATIONS SHOWN ARE NOMINAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE ON-SITE CONTRACTOR OR ROMTEC UTILITIES CUSTOMER (NOT ROMTEC UTILITIES) TO VERIFY THE ACCURACY OF ANY CRITICAL DIMENSIONS OR ELEVATIONS PRIOR TO SETTING OR INSTALLING ANY EQUIPMENT.

ROMTEC UTILITIES

1

REVISION HISTORY

REV	DATE	DESCRIPTION	BY
1	10/26/22	REVISED PER CITY COMMENTS	RD

VERIFY SCALE
IF BAR MEASURES LESS THAN 1" ADJUST SCALE ACCORDINGLY
0 1"
IF NOT ONE INCH ON THIS SHEET ADJUST SCALE ACCORDINGLY

DSN: KB
DRN: KB
CKD:
DATE: 7-10-20

ROMTEC UTILITIES
18240 NORTH BANK ROAD
ROSEBURG, OREGON 97470
PHONE: (541) 496-9678
WWW.ROMTECUTILITIES.COM

RIVER ROAD
THE DALLES, OR

STORAGE TANK ASSEMBLY
COMPONENT DRAWING
DWG NO.:
M06

RIVER ROAD FRONTAGE IMPROVEMENTS

PREPARED FOR:

DESIGN, LLC

LOCATED IN WASCO COUNTY, THE DALLES, OREGON

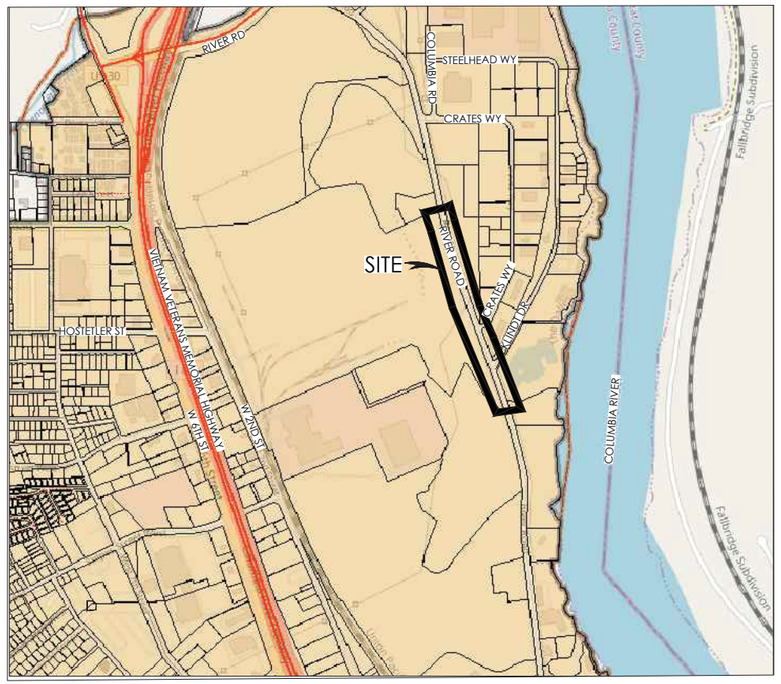
PROJECT CONTACTS

CLIENT	CIVIL ENGINEER
DESIGN, LLC SITE ADDRESS: 3400, 3500 & 3600 RIVER ROAD THE DALLES, OR 97058	MAUL, FOSTER & ALONGI, INC. 3140 NE BROADWAY STREET PORTLAND, OR 97232 P: 971-544-2139 KRISTI BOON, PE kboon@maulfoster.com
SURVEYOR TENNESON ENGINEERING CORPORATION 3775 CRATES WAY THE DALLES, OR 97058 P: 541-296-9177	

PROJECT SUMMARY

SITE ADDRESS:
3400, 3500 & 3600 RIVER ROAD
WASCO COUNTY
THE DALLES, OR 97058

WORK DESCRIPTION:
IMPROVE RIVER ROAD FRONTAGE WITH HALF WIDTH IMPROVEMENTS TO INCLUDE RESURFACING AN EXISTING 12' TRAVEL LANE, AND A NEW DEDICATED BIKE LANE, STORMWATER CONVEYANCE DITCH, AND SIDEWALK.



VICINITY MAP

NOT TO SCALE

SHEET INDEX

GENERAL NOTES

1. SURVEY PERFORMED BY TENNESON ENGINEERING. IN 2022..
2. HORIZONTAL DATUM: OREGON STATE PLANE COORDINATE SYSTEM NORTH ZONE IN INTERNATIONAL FEE, NAD 83/91. ELEVATION DATUM: NAVD 88
3. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION. A MINIMUM OF TWO FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 (UTILITY NOTIFICATION CENTER) FOR LOCATION MARK-UP OF EXISTING UTILITIES.
4. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF THE CITY OF THE DALLES AND THE LATEST EDITION OF THE "OREGON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION" PREPARED BY ODOT/APWA OR THE "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION" PREPARED BY ODOT/APWA.
5. IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
6. ANY CHANGES TO THE DESIGN AND/OR CONSTRUCTION SHALL BE APPROVED BY THE OWNER OR ENGINEER.
7. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION NOT SPECIFICALLY SHOWN ON THE PLANS. PLANS FOR STRUCTURES SUCH AS BRIDGES, BUILDINGS, TANKS, VAULTS, ROCKERIES, AND RETAINING WALLS MAY REQUIRE A SEPARATE REVIEW AND APPROVAL BY THE BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.
8. A COPY OF THESE APPROVED PLANS SHALL BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
10. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED TO OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.
11. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL HAVE AN APPROVED PUBLIC RIGHT-OF-WAY WORK PERMIT PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE RIGHT-OF-WAY.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS.
13. ANY PUBLIC OR PRIVATE CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CITY OF THE DALLES STANDARDS AND PRACTICES.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WATER, SANITARY SEWER, STORMWATER, POWER, TELEPHONE, CABLE TV, GAS, IRRIGATION, AND STREET LIGHTING. THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES 48 HOURS IN ADVANCE OF ANY WORK AFFECTING ACCESS OR SERVICE AND SHALL MINIMIZE INTERRUPTIONS TO DRIVEWAYS FOR RESIDENTS AND BUSINESSES ADJACENT TO THE PROJECT.
15. ALL LAWN AND VEGETATED AREAS DISTURBED WILL BE RESTORED TO ORIGINAL CONDITION. ANY DISTURBANCE OR DAMAGE TO OTHER PROPERTY ON ADJACENT PARCELS OR IN THE PUBLIC RIGHT OF WAY SHALL ALSO BE REPAIRED OR RESTORED TO ORIGINAL CONDITION.

MAUL FOSTER ALONGI
3140 NE BROADWAY ST
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
A	12/07/2020	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED:—
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE

SHEET TITLE
COVER SHEET

SHEET
C0.0

PRELIMINARY
12/07/2022

CONSTRUCTION NOTES

EROSION AND SEDIMENT CONTROL

1. ALL GRADING AND EROSION CONTROL MATERIALS, WORKMANSHIP AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE "EROSION AND SEDIMENT CONTROL MANUAL" PREPARED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY AND THE EXISTING PROJECT NPDES 1200-C PERMIT, EPA NO. TBD. EROSION CONTROL SHALL BE PER THE SPECIFICATIONS AND DETAILS CONTAINED THEREIN AND SHALL TAKE PRECEDENCE OVER OTHER STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL MAINTAIN AN ON-SITE WRITTEN DAILY LOG OF EROSION CONTROL AND MAINTENANCE.
3. DURING THE PERIOD FROM OCTOBER 1ST TO APRIL 30TH, NO SOIL SHALL BE EXPOSED FOR MORE THAN TWO (2) DAYS. FROM MAY 1ST TO SEPTEMBER 30TH, NO SOILS SHALL REMAIN EXPOSED FOR MORE THAN SEVEN (7) DAYS.
4. INLET PROTECTION FABRIC SHALL BE INSTALLED UNDER GRATES FOR ALL INLETS.
5. THE CONTRACTOR WILL PROVIDE APPROPRIATE PROACTIVE EROSION CONTROL DURING CONSTRUCTION TO PREVENT THE EROSION CONTROL SYSTEMS FROM FAILING DUE TO SILT. THE CONTRACTOR SHALL ENSURE THAT SEDIMENT DOES NOT IMPACT THE ADJACENT PROPERTIES OR THE SURROUNDING PUBLIC ROADS DURING CONSTRUCTION.
6. THE IMPLEMENTATION OF THESE EROSION AND SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION IS ESTABLISHED.
7. CARE SHOULD BE TAKEN TO NOT DISTURB MORE AREA THAN NEEDED FOR CONSTRUCTION REQUIREMENTS. ALL DISTURBED SOILS SURFACES ARE TO BE STABILIZED. STABILIZATION OF DISTURBED SOIL AREAS SHALL CONSIST OF: HYDROSEEDING OR HANDSEEDING, MULCHING, PLACING OF EROSION CONTROL BLANKETS OR PLASTIC IN LANDSCAPING SOIL AREAS. IT WILL ALSO CONSIST OF PAVING AND CONCRETE WORK IN DRIVING, PARKING, AND SIDEWALK AREAS. ALL SEEDED AREAS ARE TO BE FERTILIZED, WATERED, AND MAINTAINED TO ENHANCE THE IMMEDIATE REGROWTH OF VEGETATION.
8. MATERIAL STOCKPILES ARE TO BE PROTECTED FROM PRECIPITATION BY THE FOLLOWING MEANS:

   • TEMPORARY - COVER PILES WITH TARPS OR PLASTIC SHEETING WEIGHTED WITH TIRES, LUMBER, OR CONCRETE BLOCKS.

   • PERMANENT - COVER PILES WITH TARPS OR PLASTIC, OR RESEED. PERIMETER AREAS AROUND PILES ARE TO BE SURROUNDED WITH EROSION CONTROL FILTER FABRIC FENCES UNTIL SOILS SURFACE IS STABILIZED WITH RESEEDING.
9. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE CONTINUOUS FUNCTIONING. INSPECTION AND MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO:

   • VERIFYING THAT ALL AREAS ARE GRADED SUCH THAT ALL RUNOFF IS DIRECTED TO A SEDIMENTATION TRAP FACILITY BEFORE BEING DISCHARGING TO SURFACE.

   • REMOVAL OF TRAPPED SILTS AT SILT BARRIERS, SILT TRAPS, OR POINTS OF ACCUMULATION.

   • ADDITIONAL PROTECTIVE MEASURES, AS REQUIRED, DUE TO JOB SITE CONDITIONS.

   • IF SEDIMENT IS TRANSPORTED ONTO A ROAD SURFACE, THE SURFACE IS TO BE CLEANED AT THE END OF EACH DAY.
10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
11. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
12. THIS SEDIMENTATION AND EROSION CONTROL PLAN IS INTENDED TO BE UTILIZED AS A GUIDE TO CONTROL THE TRANSPORTATION OF LOOSE SOILS FROM THE PROPERTY THAT CAUSE WATER QUALITY AND NUISANCE PROBLEMS OUTSIDE OF THE CONSTRUCTION AREA.
13. DEPENDING ON THE CONTRACTOR'S CONSTRUCTION PRACTICES, SOME PORTIONS OF THE PROPOSED EROSION CONTROL PLAN MAY BE VARIED ACCORDING TO THE JOB SITE CONDITION. ALL CHANGES TO THE PLAN MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ADJUSTMENT.

SITE GRADING

14. ALL PORTIONS OF THE SITE WITHIN THE LIMITS OF THE WORK SHALL BE MOWED AND STRIPPED TO REMOVE ALL GRASS, ROOTS, ORGANIC SOIL, AND CONSTRUCTION FILL DEBRIS PRIOR TO THE BEGINNING OF ANY GRADING OPERATIONS. THE CONTRACTOR SHALL SALVAGE AND STOCKPILE ENOUGH SELECT TOPSOIL TO ACCOMMODATE LANDSCAPING NEEDS. THE CONTRACTOR SHALL SAMPLE ANY SOIL TO BE USED IN STORMWATER DITCH AREA OR PRIOR TO OFF-SITE DISPOSAL FOR WASTE PROFILE PURPOSES.
15. FOLLOWING STRIPPING AND GRUBBING, THE EXPOSED SOILS SHALL BE PROOF ROLLED TO REVEAL WEAK, ORGANIC, OR OTHER UNSUITABLE SOILS. UNSUITABLE SOILS SHALL BE EXCAVATED TO FIRM GROUND AND FILLED TO GRADE WITH SUITABLE NATIVE OR IMPORTED STRUCTURAL FILL.
16. EXPOSED SUBGRADE SOILS ON AREAS TO RECEIVE STRUCTURAL FILL SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES.
17. IF FILLS ARE NEEDED FOR STRUCTURAL SUPPORT, THEY SHALL BE INSTALLED IN NO MORE THAN 8-INCH LIFTS, AND SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY FOR FINE GRAINED NATIVE SOILS UNLESS OTHERWISE SPECIFIED ON THE PLAN. THE TOP LIFT OF FILL SHALL BE COMPACTED TO 92%. ALL OTHER SOILS SHALL BE COMPACTED TO NO LESS THAN 85%.
18. COMPACTION TESTING SHALL BE DONE IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR).
19. AT THE END OF THE GRADING OPERATION, THE STOCKPILED STRIPPINGS SHALL BE DISTRIBUTED ON THE LANDSCAPED AREAS IN A COMPACTED DEPTH NOT TO EXCEED 12".
20. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT MIGHT ACCUMULATE SURFACE WATER.
21. ALL GRADING OPERATIONS AND DISTURBED SURFACE STABILIZATION SHALL BE IN ACCORDANCE WITH THE PROJECT EROSION CONTROL PLAN.

TRANSPORTATION

22. THE MOST CURRENT EDITIONS OF THE OREGON DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS AND STANDARD DETAILS AND THE MOST CURRENT EDITIONS OF THE CITY OF THE DALLES DESIGN STANDARDS SHALL BE UTILIZED IN THE CONSTRUCTION OF TRANSPORTATION ELEMENTS OF THESE PLANS.
23. STREET SIGNING AND STRIPING SHALL BE INSTALLED BY THE CONTRACTOR. ALL STREET SIGNS AND STRIPING SHALL BE INSTALLED PER THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S.DEPARTMENT OF TRANSPORTATION AND LATEST ADOPTED EDITION OF THE STATE OF OREGON SUPPLEMENT TO THE MUTCD.
24. ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL HAVE AN APPROVED TRAFFIC CONTROL PLAN AND RIGHT-OF-WAY PERMIT PRIOR TO ANY ON-SITE CONSTRUCTION ACTIVITY.
25. PAVING WITHIN THE PUBLIC RIGHT-OF-WAY WILL NOT BE ALLOWED DURING WET OR COLD WEATHER, PER DOT SPECIFICATIONS.
26. ALL PAVEMENT SHALL BE STRAIGHT CUT PRIOR TO PAVING. EXISTING PAVEMENT SHALL BE REMOVED AS NECESSARY TO PROVIDE A SMOOTH TRANSITION FOR BOTH RIDE AND DRAINAGE.
27. ALL ADA PEDESTRIAN RAMPS SHOWN ON THE PLANS AND ON THE DETAIL SHEETS SHALL BE CONSTRUCTED WITH THE PROJECT.
28. CONTRACTOR SHALL REPORT ALL DAMAGES IMMEDIATELY TO THE CITY'S PUBLIC WORKS DEPARTMENT OR CONTACT THE INSPECTOR ON THE JOB.
29. PUBLIC RIGHTS-OF-WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEPT AND REMOVED WITH A VACUUM SWEEPER.

STORM SEWER CONSTRUCTION

30. ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS IN THE LATEST EDITION OF THE "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION" BY THE AMERICAN PUBLIC WORKS ASSOCIATION AND THE OREGON DEPARTMENT OF TRANSPORTATION. WHEREVER THE STANDARD SPECIFICATIONS REFER TO THE "STATE", "SECRETARY", OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "OWNER". ADDITIONALLY, ALL MATERIALS AND INSTALLATION OF STORM SEWERS AND DRAINAGE SYSTEMS IN THE RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS IN THE MOST CURRENT EDITIONS OF THE CITY OF THE DALLES DESIGN STANDARDS.
31. PIPE LENGTHS SHOWN ON THE PLANS ARE TO THE CENTER OF THE STRUCTURE.
32. PRE-PAVING AS-BUILTS ARE REQUIRED FOR STORMWATER, WATER, AND SANITARY FACILITIES. PROVIDE AS-BUILT INFORMATION TO THE CONSTRUCTION INSPECTOR AND CONSTRUCTION ENGINEER FOR APPROVAL PRIOR TO ANY PAVING.
33. MATERIALS FOR STORM SEWER INLET LATERALS AND MAINS SHALL BE DUAL-WALLED, SMOOTH INTERIOR, CORRUGATED POLYETHYLENE STORM SEWER PIPE, UNLESS OTHERWISE SPECIFIED ON PLANS.
34. SEE THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION SECTION 00445 FOR STORM SEWER PIPE MATERIALS AND PLANS.
35. PERFORATED PIPE MATERIALS SHALL BE PERFORATED CORRUGATED POLYETHYLENE STORM SEWER PIPE.
36. CATCH BASINS SHALL BE TYPE 1 H-20 OR PROJECT APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED ON PLANS.
37. TRENCH EXCAVATION SHALL MEET THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION BY THE AMERICAN PUBLIC WORKS ASSOCIATION AND THE OREGON DEPARTMENT OF TRANSPORTATION SECTION 00405.41.
38. STORM SEWER PIPE BEDDING AND BACKFILL SHALL MEET THE REQUIREMENTS OF SECTIONS 00405.12-14, AND SECTIONS 00405.45-46. PIPE BEDDING MATERIALS SHALL BE ¾" - 0 AGGREGATE BEDDING PER SECTION 00405.12 AND PIPE BACKFILL MATERIALS SHALL BE CLASS A OR CLASS B PER SECTION 00405.14 AS APPROVED BY THE INSPECTOR. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM RELATIVE DENSITY PER ASTM D 698 (STANDARD PROCTOR). NATIVE BACKFILL MAY BE USED UPON APPROVAL FROM THE INSPECTOR. STORM SEWER PIPE SHALL BE INSTALLED IN THE RIGHT OF WAY IN ACCORDANCE TO THE "UTILITY TRENCH" CITY OF THE DALLES STANDARD DETAIL.
39. STORM SEWER INLETS, AS NOTED ON THE PLANS, SHALL BE FITTED WITH AN APPROVED TRAP.

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: ----
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE

SHEET TITLE
CONSTRUCTION NOTES

SHEET
C1.0

PRELIMINARY
12/07/2022

PLOTTED ON: 2022-12-07 8:57 AM PLOTTED BY: Loraine Daniel FILENAME: G:\00_MFA Civil\30\00_PROJECTS\1663.08 Gamma Triangul 4 (Basalt)\PLANS\River Road Frontage Improvements\PLANS\C1.0 CONSTRUCTION NOTES.dwg

ABBREVIATIONS

AC	ACRE, ASPHALT CONCRETE PAVEMENT	LB	POUND(-S)
ACOE	ARMY CORPS OF ENGINEERS	LF	LINEAR FEET
AD	AREA DRAIN	LONG.	LONGITUDINAL
AGG	AGGREGATE	LT	LEFT
AIR	AIR RELIEF	MAX	MAXIMUM
AMSL	ABOVE MEAN SEA LEVEL	MFA	MAUL FOSTER & ALONGI, INC.
AP	ANGLE POINT	MFR	MANUFACTURER
APN	APPARENT PARCEL NUMBER	MH	MANHOLE
APPD	APPROVED	MIC	MONUMENT (IN CASE)
APPROX, ±	APPROXIMAT(-E, -LY)	MIN	MINIMUM; MINUTE
ASPH	ASPHALT	MISC	MISCELLANEOUS
ASSY	ASSEMBLY	MJ	MECHANICAL JOINT
		MON	MONUMENT (SURFACE)
BCR	BEGIN CURB RETURN	MW	MONITORING WELL
BF	BUTTERFLY		
BGS	BELOW GROUND SURFACE	N	NORTH
BLDG	BUILDING	N/A	NOT APPLICABLE
BLVD	BOULEVARD	NAT G, NG	NATURAL GAS
BM	BENCHMARK	NE	NORTHEAST
BMP	BEST MANAGEMENT PRACTICE	NO.	NUMBER
BO	BLOW-OFF	NTS	NOT TO SCALE
BOC	BACK OF CURB	NW	NORTHWEST
BOT, BTM	BOTTOM		
B.O.W.	BOTTOM OF WALL	OC	ON CENTER
BVC	BEGIN VERTICAL CURVE	OD	OUTSIDE DIAMETER
		OHP	OVERHEAD POWER
CB	CATCH BASIN	OT	OWNERSHIP TIE
CDF	CONTROLLED DENSITY FILL		
CEM	CEMENT	P	PIPE
CF	CUBIC FEET	P TRAN	PAD MOUNTED TRANSFORMER
CFS	CUBIC FEET PER SECOND	PC	POINT OF CURVATURE
CIP	CAST IRON PIPE	PCC	PORTLAND CEMENT CONCRETE
CIR	CIRCLE	PEN.	PENETRATION
CK	CHECK	PERF	PERFORAT(-E, -ED, -ES, -ION)
CL, ℄	CENTERLINE	P.L., PL	PROPERTY LINE, PLACE
CMP	CORRUGATED METAL PIPE	POW V	POWER VAULT
CO	CLEANOUT	PP	POWER POLE
COMP	COMPACTION	PROP.	PROPOSED
CONC	CONCRETE	PS	PUMP STATION
CPE	CORRUGATED POLYETHYLENE	PSF	POUNDS PER SQUARE FOOT
CPL	COUPLING	PSI	POUNDS PER SQUARE INCH
CT	COURT	PT	POINT OF TANGENT
CTR	CENTER	PV	PLUG VALVE
CULV	CULVERT	PVI	POINT OF VERTICAL INTERSECTION
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE
		PVMT	PAVEMENT
D	DEPTH		
DEG	DEGREE(-S)	R, RAD	RADIUS
DI	DUCTILE IRON	RC	REINFORCED CONCRETE
DIA	DIAMETER	RCP	REINFORCED CONCRETE PIPE
DIM.	DIMENSION(-S)	RD	ROOF DRAIN
DIP, D.I.P.	DUCTILE IRON PIPE	RED	REDUCER
DOT	DEPARTMENT OF TRANSPORTATION	REQD	REQUIRED
		REQT	REQUIREMENT
DR	DIMENSION RATIO	REV	REVISION
DTL	DETAIL	R/W, ROW	RIGHT OF WAY
DWG(S)	DRAWING(-S)	RT	RIGHT
E	EAST	S	SOUTH, SLOPE
EA	EACH	SB	SOIL BORING
ECR	END CURB RETURN	SCH	SCHEDULE
EG	EXISTING GROUND	SD	STORM DRAIN
EL, ELEV	ELEVATION	SDR	STANDARD DIMENSION RATIO
ELB, ELL	ELBOW	SE	SOUTHEAST
ELEC	ELECTRIC(-AL)	SF	SQUARE FEET
ENGR	ENGINEER	SHT	SHEET
ENTR	ENTRANCE	SL	SLOPE
EP, EOP	EDGE OF PAVEMENT	SPEC	SPECIFICATIONS
EQ	EQUAL(-LY)	SQ	SQUARE
ESC	EROSION CONTROL	SQ IN	SQUARE INCHES
ESMT	EASEMENT	SRF	SURFACE
EST	ESTIMATE(-D)	ST	STREET
EVC	END VERTICAL CURVE	STA	STATION
EXC	EXCAVATE	STD	STANDARD
EX., EXTG.	EXISTING	STL	STEEL
EW	EACH WAY	STRM	STORM
		STRUCT	STRUCTUR(-E, -AL)
FF	FINISH FLOOR	SSWR	SANITARY SEWER
FG	FINISH GRADE	SW,S/W	SIDEWALK, SOUTHWEST
FH	FIRE HYDRANT		
FL	FLOW LINE	TB	THRUST BLOCK
FLG	FLANGE	TBM	TEMPORARY BENCHMARK
FM	FORCE MAIN	TC	TOP OF CURB
FT	FEET, FOOT	TEL, TELE	TELEPHONE
		TEMP	TEMPORARY
GAL	GALLON(-S)	TP	TOP OF PAVEMENT, TEL POLE, TURNING POINT
GM	GAS METER		
GND	GROUND	TW	TOP OF WALL
GP	GUARD POST	TYP	TYPICAL
GPM	GALLONS PER MINUTE		
GRD	GRADE	UG	UNDERGROUND
GV	GAS VALVE, GATE VALVE	UGE	UNDERGROUND ELECTRIC
		UTIL	UTILITY
HDPE	HIGH DENSITY POLYETHYLENE		
HGT, HT	HEIGHT	VC	VERTICAL CURVE
HP	HORSEPOWER	VERT	VERTICAL
HORZ	HORIZONTAL	VOL	VOLUME
HYD	HYDRANT		
		W	WIDTH; WIDE; WEST
ID	INSIDE DIAMETER	W/	WITH
IE	INVERT ELEVATION	WATR	WATER
IN	INCH(-ES)	WM	WATER METER
INTX	INTERSECTION	W/O	WITHOUT
INV	INVERT	WSE	WATER SURFACE ELEVATION
IP	IRON PIPE	WV	GATE/GENERAL WATER VALVE
L	LENGTH	YD	YARD
LAT	LATERAL	YR	YEAR

GENERAL LEGEND

GAS/POWER/TELEPHONE SYMBOLS

SYMBOL EXIST. PROP. — DESCRIPTION

- GAS METER
- GAS VALVE
- PAD MOUNTED TRANSFORMER
- POWER VAULT
- TRANSMISSION TOWER
- UTILITY POLE
- UTILITY POLE ANCHOR
- TELEPHONE RISER
- TELEPHONE VAULT
- LIGHT POLE

SURVEY SYMBOLS

SYMBOL THEOR./EXIST. FOUND/PROP. — DESCRIPTION

- ANGLE POINT
- BENCH MARK
- BLOCK CORNER
- IRON PIPE
- MONUMENT
- OWNERSHIP TIE
- SECTION DATA:
- SECTION CENTER
- SECTION CORNER
- QUARTER CORNER
- SIXTEENTH CORNER
- CLOSING CORNER
- MEANDER CORNER (MC)
- WITNESS CORNER (WC)
- SOIL BORING
- SPOT ELEVATION

WATER SYMBOLS

SYMBOL EXIST. PROP. — DESCRIPTION

- CAP/PLUG
- COUPLING
- GUARD POST / BOLLARD
- REDUCER
- THRUST BLOCK
- WATER METER
- DOUBLE CHECK VALVE ASSEMBLY
- FIRE HYDRANT
- AIR RELIEF
- BLOW-OFF VALVE
- CHECK VALVE
- GATE VALVE

BENDS:

- 90 DEGREE BEND
- 45 DEGREE BEND
- 22.5 DEGREE BEND
- 11.25 DEGREE BEND
- VERTICAL BEND
- TEE
- CROSS

SANITARY/STORM SEWER SYMBOLS

SYMBOL EXIST. PROP. — DESCRIPTION

- SAN. SEWER CLEAN OUT
- SAN. SEWER MANHOLE
- STORM DRAIN CATCH BASIN
- STORM DRAIN CULVERT
- STORM DRAIN MANHOLE
- DRY WELL
- AREA DRAIN

CHANNELIZATION SYMBOLS

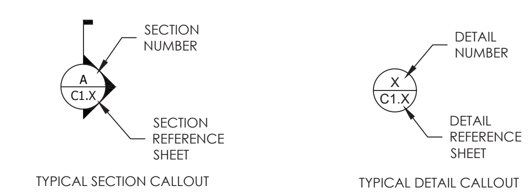
SYMBOL EXIST. PROP. — DESCRIPTION

- BIKE PATH
- HANDICAP SYMBOL
- STOP
- RAISED MARKERS:
- LANE MARKERS TYPE I
- LANE MARKERS TYPE II
- SIGN

MISCELLANEOUS SYMBOLS

SYMBOL EXIST. PROP. — DESCRIPTION

- MONITORING WELL
- INLET PROTECTION PILLOW
- CONSTRUCTION ENTRANCE
- PROPOSED SPOT SHOT (FG 83.88)
- CURB CUT



Line types

- EXISTING GRADE MAJOR CONTOUR (27)
- EXISTING GRADE MINOR CONTOUR (27)
- EXISTING STORM DRAIN PIPE (SD x)
- EXISTING WATER PIPE (W x)
- EXISTING SANITARY SEWER PIPE (SS x)
- EXISTING AC PAVEMENT
- EXISTING CONCRETE SURFACING
- EXISTING GRAVEL SURFACING
- EXISTING BUILDING
- EXISTING FENCE LINE
- EXISTING ROAD CENTERLINE
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE (PL)
- PROPOSED GRADE MAJOR CONTOUR (5.0' INTERVAL) (27)
- PROPOSED GRADE MINOR CONTOUR (1.0' INTERVAL) (27)
- PROPOSED STORM DRAIN PIPE
- PROPOSED WATER PIPE
- PROPOSED SANITARY SEWER PIPE
- PROPOSED AC PAVEMENT
- PROPOSED CONCRETE SURFACING
- PROPOSED GRAVEL SURFACING
- PROPOSED BUILDING
- PROPOSED FENCE LINE (X)
- PROPOSED ROAD CENTERLINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED PROPERTY LINE (PL)
- PROPOSED SEDIMENT FENCE (SF)
- PROPOSED FLOW DIRECTION (OR / OR)
- PROPOSED GRADE BREAK
- PROPOSED DITCH FLOW LINE
- PROPOSED COMPOST SOCK
- PROPOSED PAINT STRIPE
- PROPOSED TRUNCATED DOMES
- EXISTING FLOW DIRECTION
- EXISTING OVERHEAD POWER (P)
- EXISTING UNDERGROUND POWER (E x)
- EXISTING UNDERGROUND TELEPHONE (T)
- EXISTING UNDERGROUND GAS (G)

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

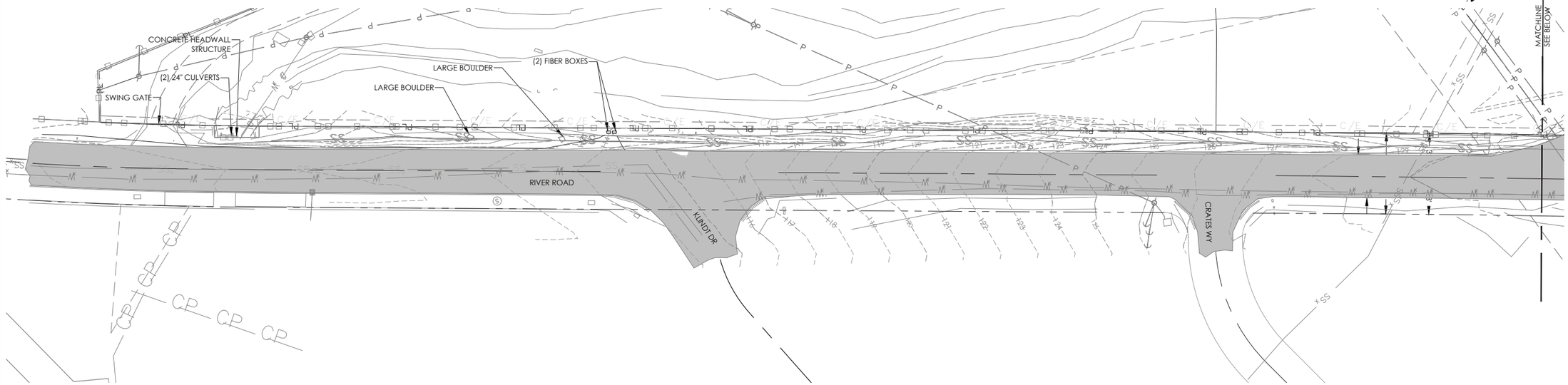
ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: —
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE

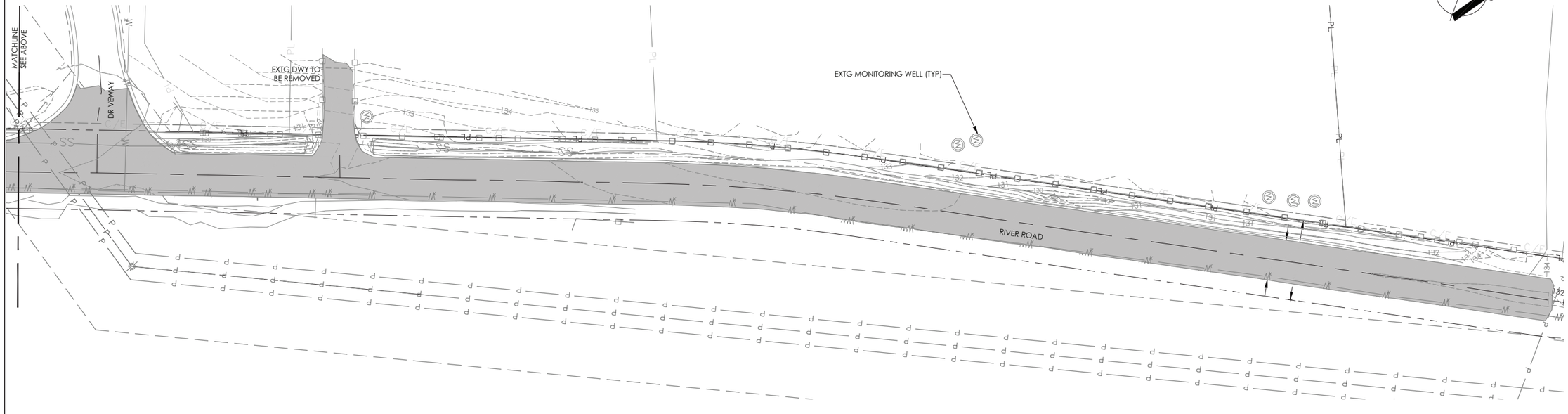
SHEET TITLE
MASTER LEGEND

SHEET
C1.1

PRELIMINARY
12/07/2022



RIVER ROAD PLAN VIEW
SCALE: 1"=40'



RIVER ROAD PLAN VIEW
SCALE: 1"=40'

PRELIMINARY
12/07/2022

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
---	---	---
---	---	---
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: ---
DRAWN: L. DANIEL
CHECKED: K. BOON

SCALE
0 40' 80'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
EXISTING CONDITIONS

SHEET
C1.2

PLOTTED ON: 2022-12-07 8:30 AM PLOTTED BY: Lorraine Daniel FILENAME: G:\00_MFA Civil 3D\00_PROJECTS\1663.08 Gamma Triangle (Bissell)\PLANS\River Road Frontage Improvements\PLANS\C1.2 EXISTING CONDITIONS.dwg

47 LF SEDIMENT FENCE

30 LF SEDIMENT FENCE

963 LF SEDIMENT FENCE

EXTG ROW

MATCHLINE SEE BELOW

109+00

Δ=5.4268
L=310.38'
R=3277.00

Mid: 109+72.43

110+00

111+00

PI: 111+82.81

112+00

113+00

RIVER ROAD

60' ROW

TYPE 3 INLET PROTECTION
(SEE DTL RD1010, SHT C2.2) (TYP)

MATCHLINE SEE ABOVE

MATCHLINE SEE BELOW

115+00

PI: 115+85.00

116+00

117+00

N19° 38' 36.90"W
279.98'

60' ROW

118+00

PI: 118+65.00

N19° 43' 41.76"W
88.01'

PI: 119+43.00

119+00

120+00

RIVER ROAD

KLINDT DR

CRATES WY

MATCHLINE SEE ABOVE

DRIVEWAY

130 LF SEDIMENT FENCE

67 LF SEDIMENT FENCE

PROPOSED SITE ENTRANCE

310 LF SEDIMENT FENCE

MATCHLINE SEE SHT C2.1

120+00

N19° 18' 34.00"W
255.91'

60' ROW

121+00

PI: 121+59.82

122+00

N18° 53' 27.48"W
182.77'

123+00

PI: 123+42.59

124+00

N18° 59' 04.02"W
223.35'

125+00

PC: 125+65.41

RIVER ROAD

PRELIMINARY
12/07/2022

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS

DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: —
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE

0 20' 40'

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

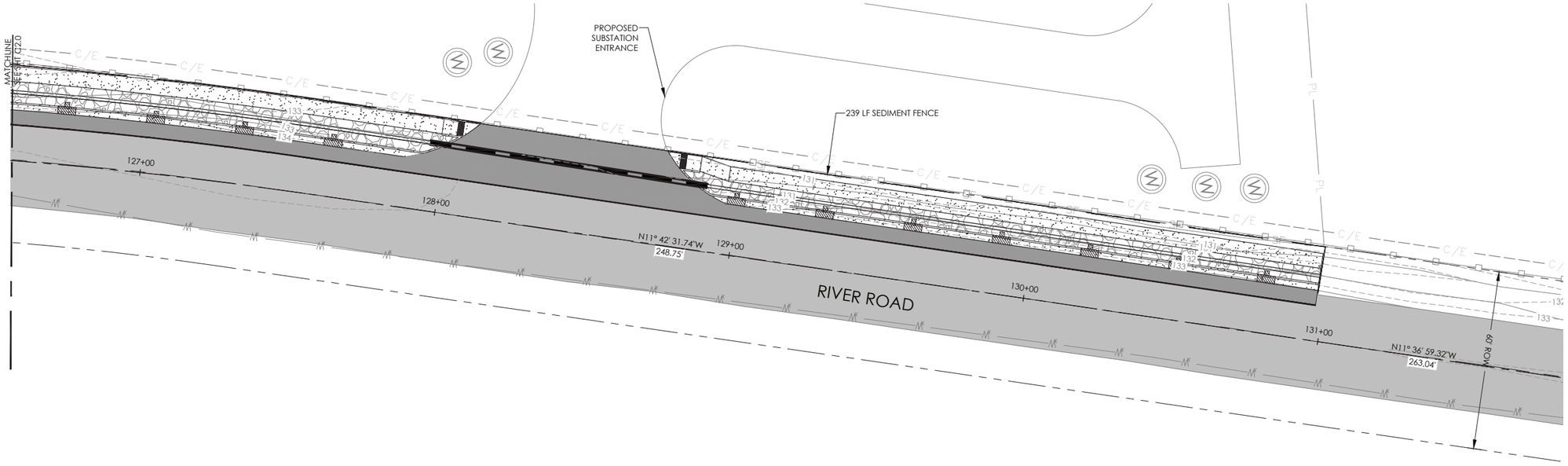
SHEET TITLE

EROSION & SEDIMENT CONTROL PLAN

SHEET

C2.0

PLOTTED ON: 2022-12-08 7:29 AM PLOTTED BY: Lorraine Daniel FILENAME: G:\00_MFA Civil 3D\00_PROJECTS\1663.08 Gamma Frangul (Brasil)\PLANS\River Road Frontage Improvements\PLANS\C2.0 EROSION & SED CONTROL.dwg



MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED:---
DRAWN: L. DANIEL
CHECKED: K. BOON

SCALE
0 20' 40'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

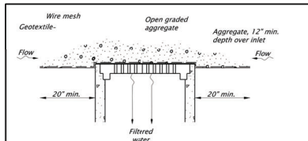
SHEET TITLE
EROSION & SEDIMENT CONTROL PLAN II

SHEET
C2.1

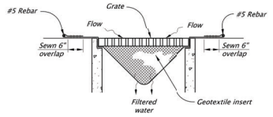
PRELIMINARY
12/07/2022

PLOTTED ON: 2022-12-08 7:40 AM PLOTTED BY: Lorene Daniel FILENAME: G:\00_MFA Civil 3D\00_PROJECTS\1663.08 Gamma Triangle (Bissell)\PLANS\Sheet Road Frontage Improvements\PLANS\C2.1 EROSION & SED CONTROL II.dwg

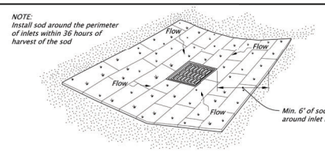
rd1010.dgn 01-20-2021



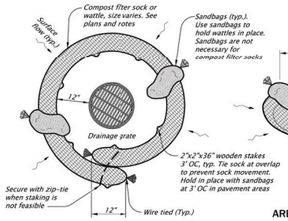
GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2
NOT TO SCALE



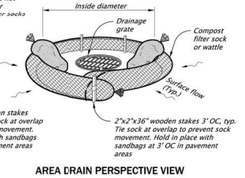
PREFABRICATED FILTER INSERT - TYPE 3
NOT TO SCALE



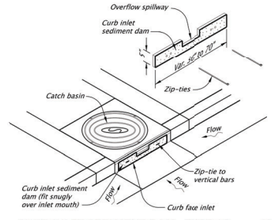
SOD PROTECTION - TYPE 6
NOT TO SCALE



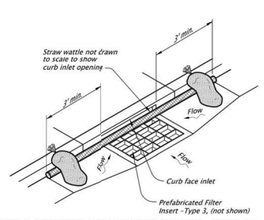
AREA DRAIN PLAN



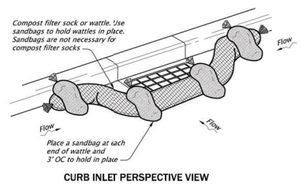
AREA DRAIN PERSPECTIVE VIEW



CURB INLET SEDIMENT DAM - TYPE 10
NOT TO SCALE



WATTLE BARRIER WITH FILTER INSERT - TYPE 11
NOT TO SCALE



CURB INLET PERSPECTIVE VIEW

COMPOST FILTER SOCK OR WATTLE - TYPE 7
NOT TO SCALE

NOTES:
Type 2 – Geotextile/wire mesh/aggregate
Place the wire mesh over the grate.
Place sediment fence geotextile over the wire mesh and perimeter area around structure.
Install aggregate over the geotextile fabric.

Type 3 – Prefabricated filter inserts
Install prefabricated filter inserts according, to the plans, special provisions, and manufacturer recommendations.
Prefabricated inserts with provisions for overflow are allowed only when accompanied by additional BMP's to prevent the potential of sediments entering project storm systems.
Field fabricated inserts are not allowed.

Type 7 – Compost filter sock
Drive 2"x2" wood stakes a minimum of 6" into ground and flush with the top of the sock.
Overlap ends of sock per manufacturers recommendations (12"min., 36" max.).
Use 8" to 12" dia sock on curbside in traffic areas.

(Type 7 cont.)
Use 12" to 18" dia sock in non-traffic areas or areas where the larger socks can be used safely.
use synthetic mesh socks for temporary installations.

Type 10 – Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet mouth. Curb inlet sediment dam is required for use with inlet filter insert where at-grade inlet grate and curb inlet are combined at a catch basin.

Type 11 – Wattle barrier with filter insert
Install prefabricated filter insert per Type 3 detail.
Install wattles over opening and 36" to each side of opening tight against curb. Adjust wattle to force storm water to flow through filter insert or wattle prior to leaving the site.
Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

CALC. BOOK NO. N/A
SDR DATE January, 2021
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

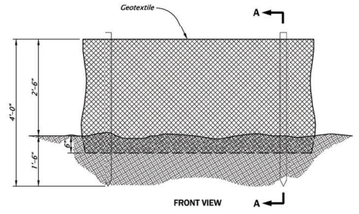
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS
INLET PROTECTION
TYPE 2, 3, 6, 7, 10 AND 11
2021

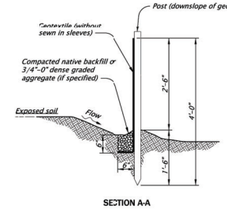
DATE	REVISION DESCRIPTION
Jan 2021	Removed Cat. book numbers
Jan 2021	Moved notes up from overlapping the sheet border

Effective Date: June 1, 2022 - November 30, 2022 RD1010

rd1040.dgn 01-20-2021

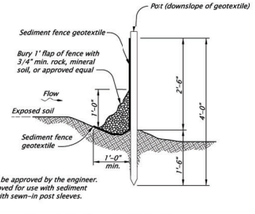


FRONT VIEW



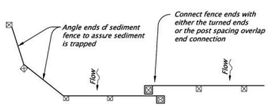
SECTION A-A

SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1
NOT TO SCALE

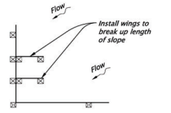


NOTES:
1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post sleeves.

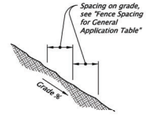
ALTERNATE SEDIMENT FENCE WITHOUT TRENCHING - TYPE 2
NOT TO SCALE



PLAN VIEW



TERMINATION AT CORNER OR PROPERTY LINE



GENERAL NOTES:
1. Use 2"x2" wood fence posts.
2. Posts to be installed on downhill side of sediment fence geotextile. Position posts to prevent separation from geotextile.
3. Compact fiber fabric trench backfill and soil on uphill side of fence.
4. Locate fence no closer than three feet to the toe of a slope.
5. Wing spacing shall comply with "Fence Spacing for General Application Table".

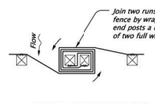
FENCE SPACING FOR GENERAL APPLICATION TABLE

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAXIMUM SPACING ON GRADE
Grade ≤ 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'

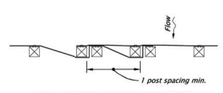
POST SPACING TABLE

6'	Sediment Fence with Geotextile elongation less than 50%
4'	Sediment Fence with Geotextile elongation 50% or more

GEOTEXTILE WITH POST SLEEVES



TURNED ENDS CONNECTION



POST SPACING OVERLAP CONNECTION

GEOTEXTILE END CONNECTIONS
NOT TO SCALE

CALC. BOOK NO. N/A
SDR DATE January, 2021
NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CITY OF THE DALLES STANDARD DRAWINGS
SEDIMENT FENCE
2022

DATE	REVISION DESCRIPTION
Jan 2021	Removed Cat. book numbers

Effective Date: January 1, 2022 - December 31, 2022 RD1040

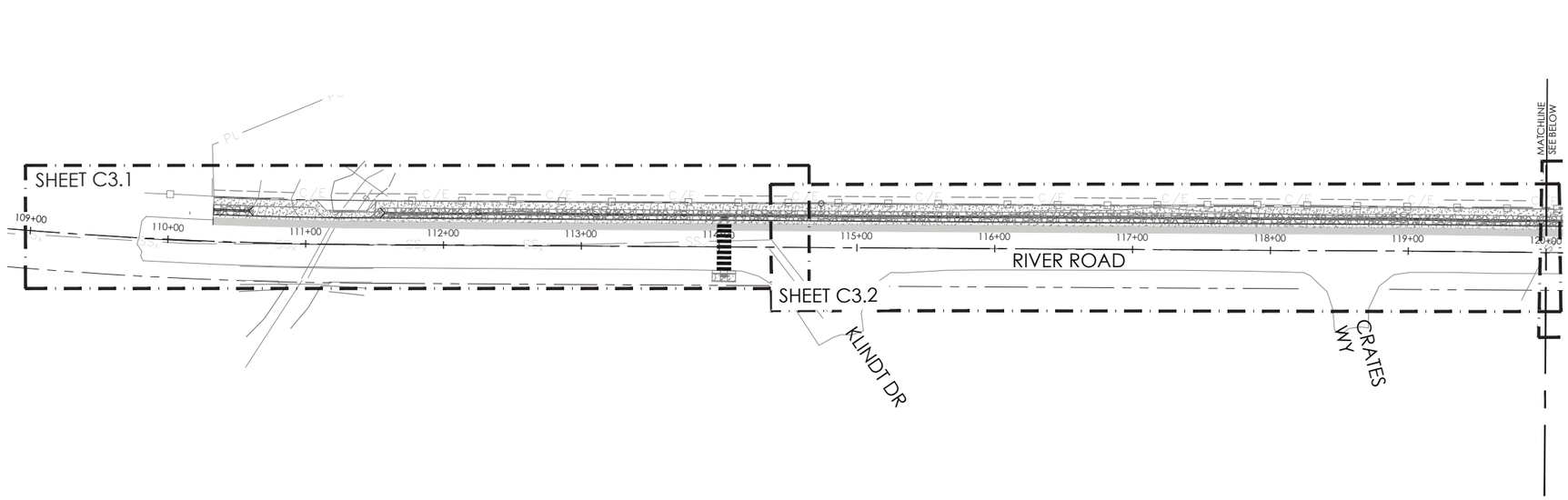
MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

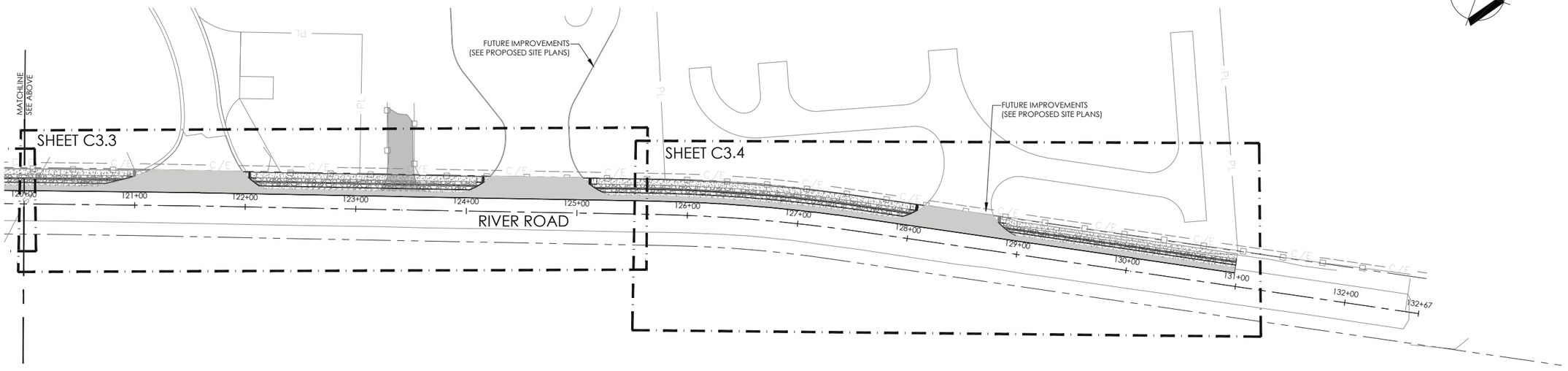
ISSUE	DATE	DESCRIPTION
---	---	---
---	---	---
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: ---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE
SCALE AS NOTED
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.
SHEET TITLE
EROSION & SEDIMENT CONTROL DETAILS
SHEET
C2.2

PRELIMINARY
12/07/2022



RIVER ROAD PLAN VIEW
SCALE: 1"=50'



RIVER ROAD PLAN VIEW
SCALE: 1"=50'

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

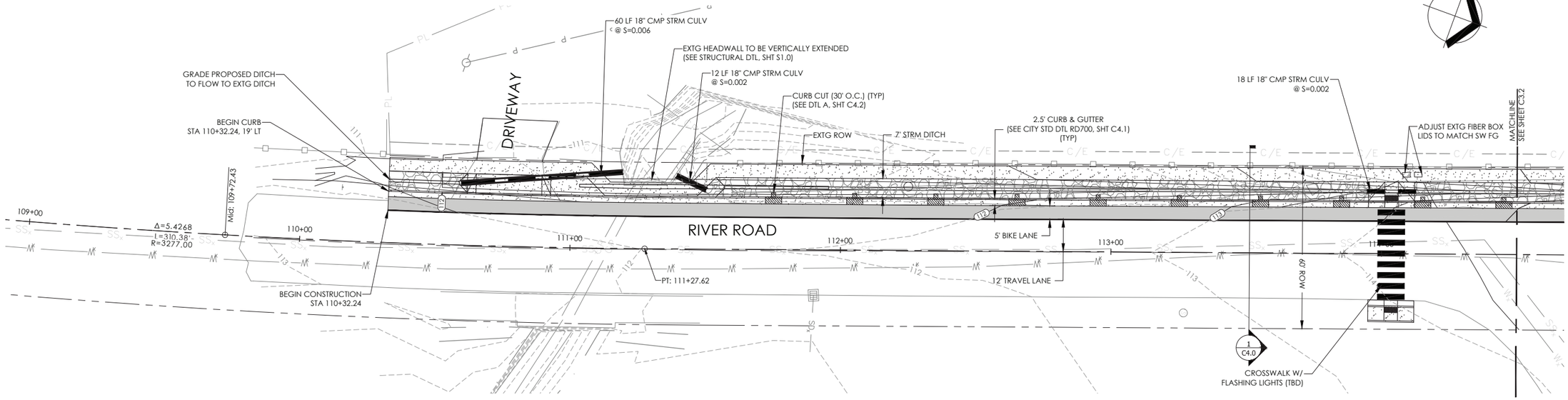
ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

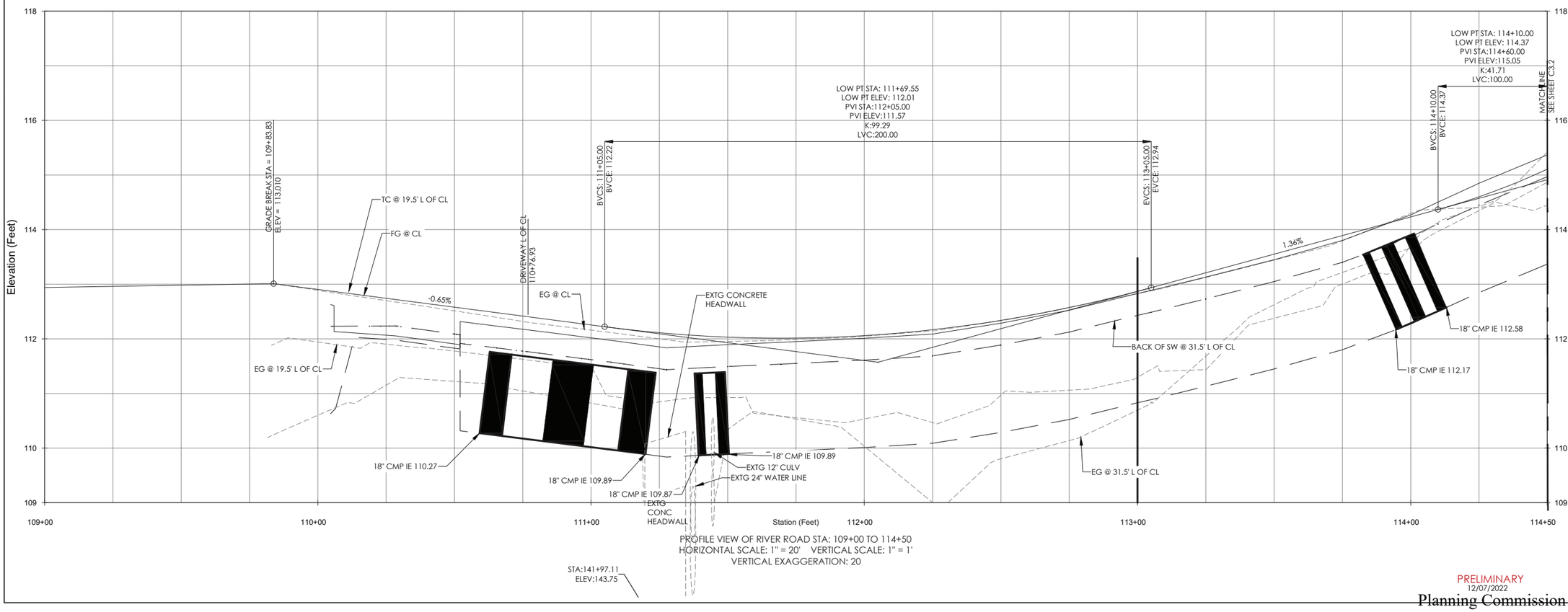
PROJECT: M1663.08.028
DESIGNED:---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE
0 50' 100'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
MASTER STREET PLAN

SHEET
C3.0

PRELIMINARY
12/07/2022





PROFILE VIEW OF RIVER ROAD STA: 109+00 TO 114+50
HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 1'
VERTICAL EXAGGERATION: 20

PRELIMINARY
12/07/2022

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

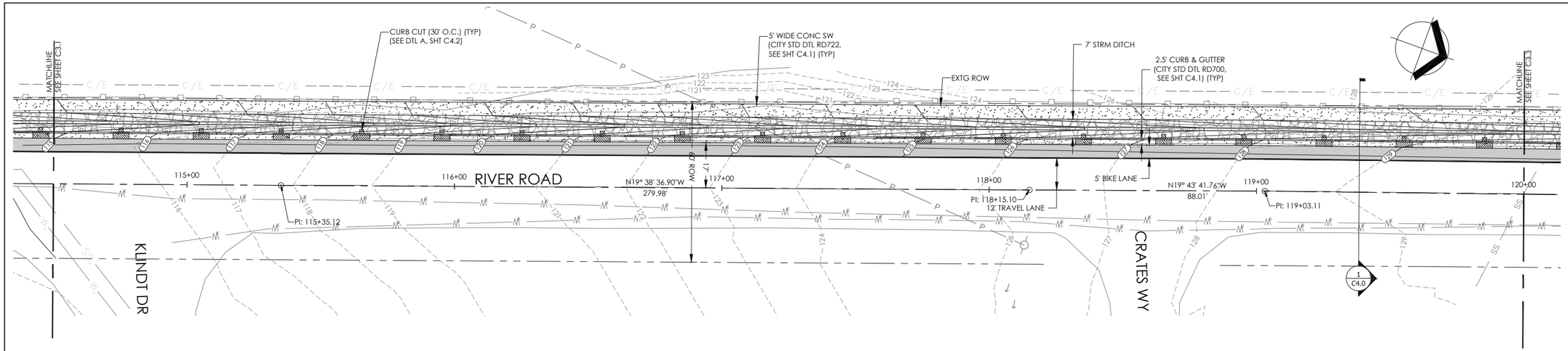
ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

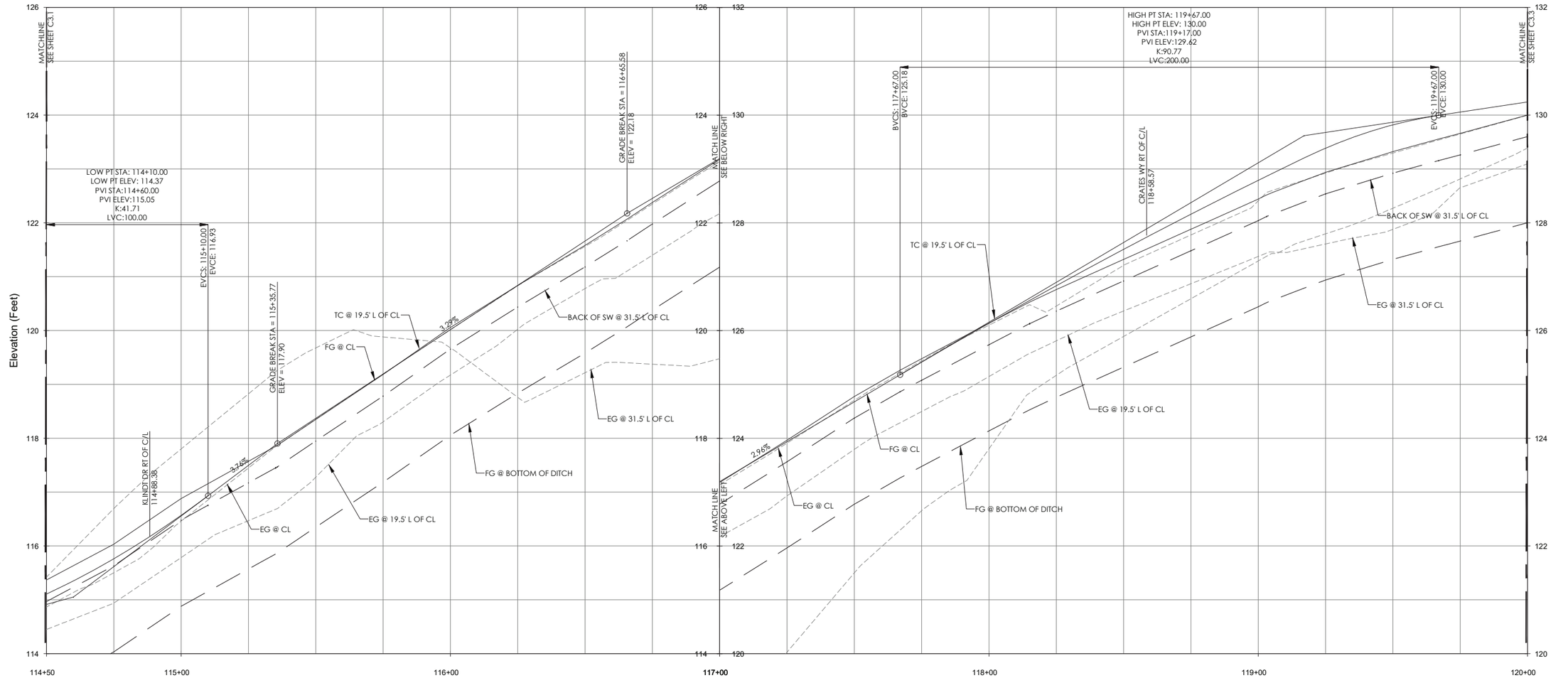
PROJECT: M1663.08.028
DESIGNED:---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE
0 20' 40'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
PLAN AND PROFILE STA 109+00 TO 114+50

SHEET
C3.1

PLOTTED BY: Kristi Boon FILENAME: G:\00_MFA Civil 3D\00_PROJECTS\1663.08 Gamma Triangle (Bissell)\PLANS\River Road Frontage Improvements\PLANS\C3.1 PLAN AND PROFILE Stff.dwg
PLOTTED ON: 2022-12-08 8:39 AM





PROFILE VIEW OF RIVER ROAD STA: 114+50 TO 120+00
HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 1'
VERTICAL EXAGGERATION: 20

PRELIMINARY
12/07/2022

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

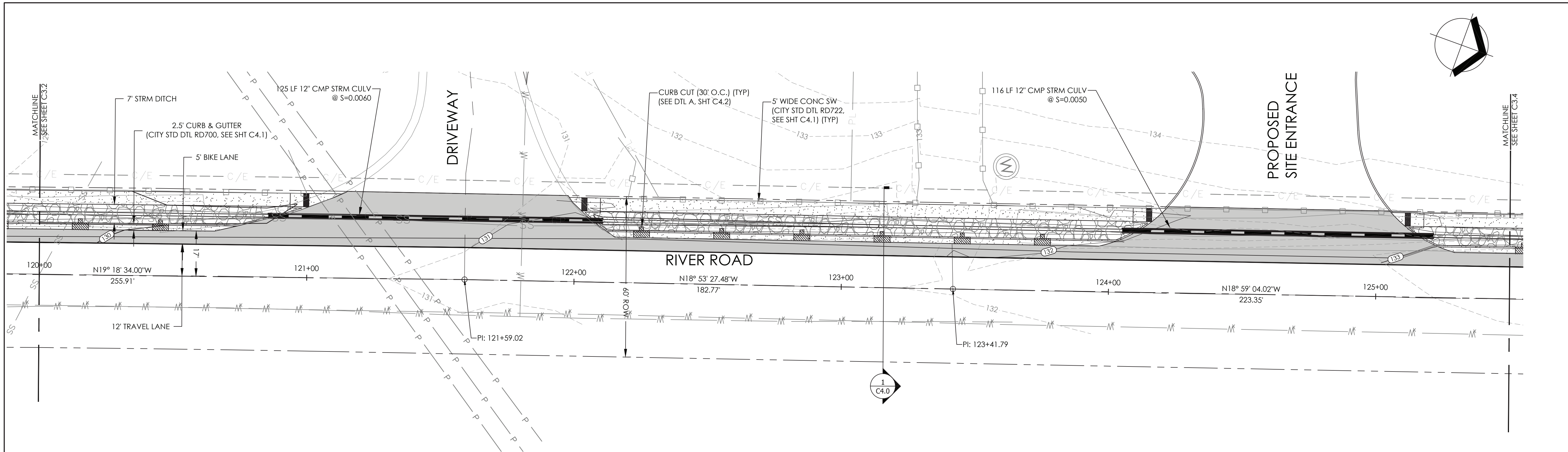
ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

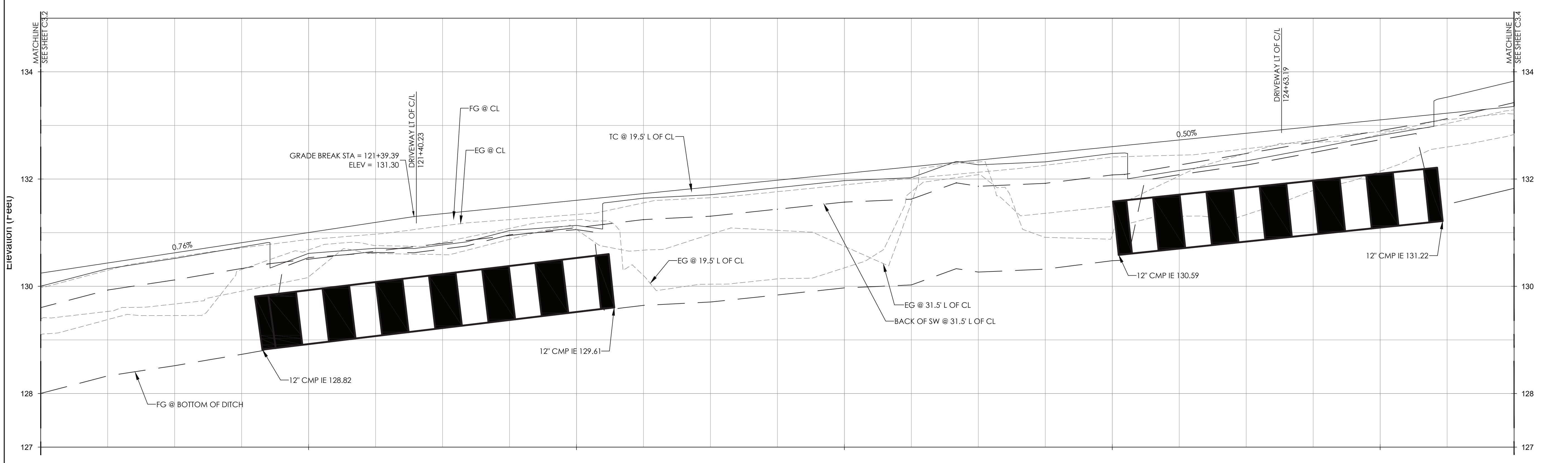
PROJECT: M1663.08.028
DESIGNED:---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE
0 20' 40'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
PLAN AND PROFILE STA 114+50 TO 120+00

SHEET C3.2

PLOTTED BY: Lorraine Daniel FILENAME: O:\05_MFA Civil 3D\02_PROJECTS\1663.08 Gamma Triangle (Boyd)\PLANS\River Road Frontage Improvements\PLANS\C3.2 PLAN AND PROFILE SHT.dwg
PLOTTED ON: 2022-12-08 9:51 AM





PROFILE VIEW OF RIVER ROAD STA: 120+00 TO 125+50
HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 1'
VERTICAL EXAGGERATION: 20

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS

DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

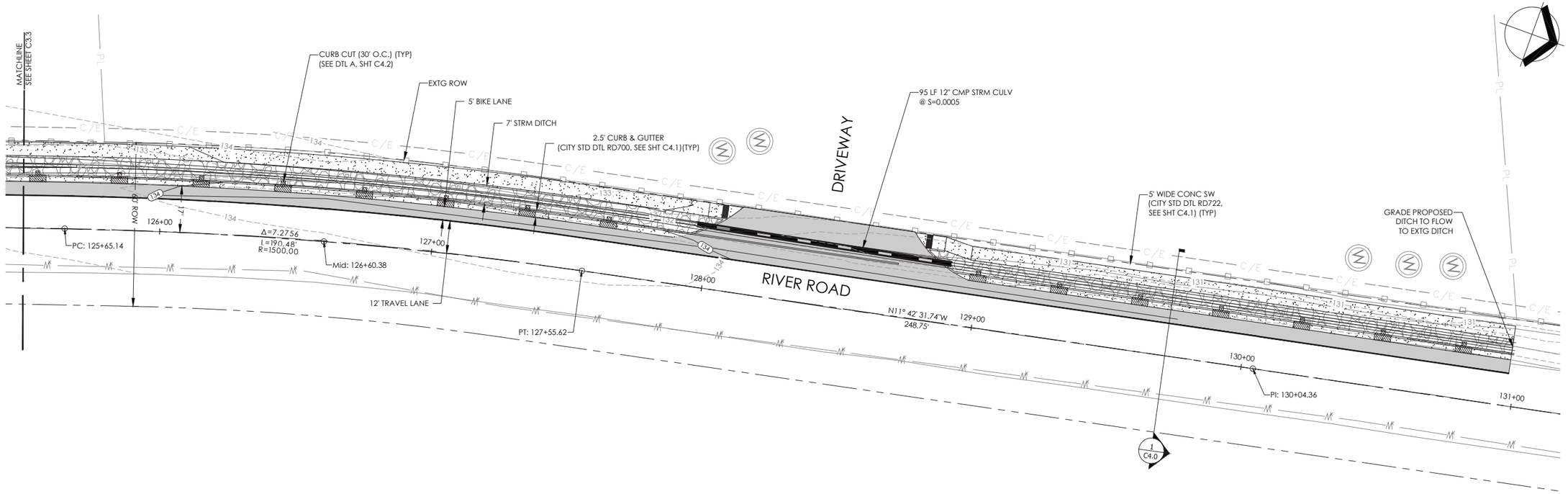
PROJECT: M1663.08.028
DESIGNED: ---
DRAWN: L. DANIEL
CHECKED: K. BOON

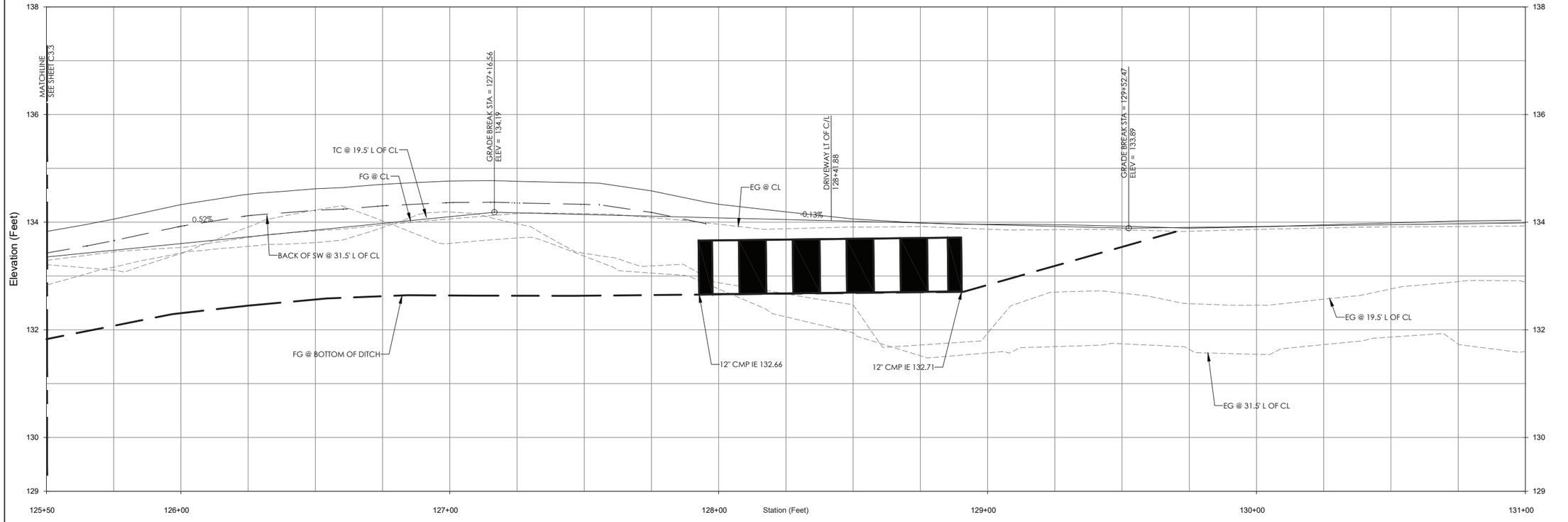
SCALE
0 20' 40'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
PLAN AND PROFILE STA 120+00 TO 125+00

SHEET
C3.3

PRELIMINARY
12/07/2022





PROFILE VIEW OF RIVER ROAD STA: 125+50 TO 131+00
HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 1'
VERTICAL EXAGGERATION: 20

PRELIMINARY
12/07/2022

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS

DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
A	12/07/2022	PRELIMINARY PLANS

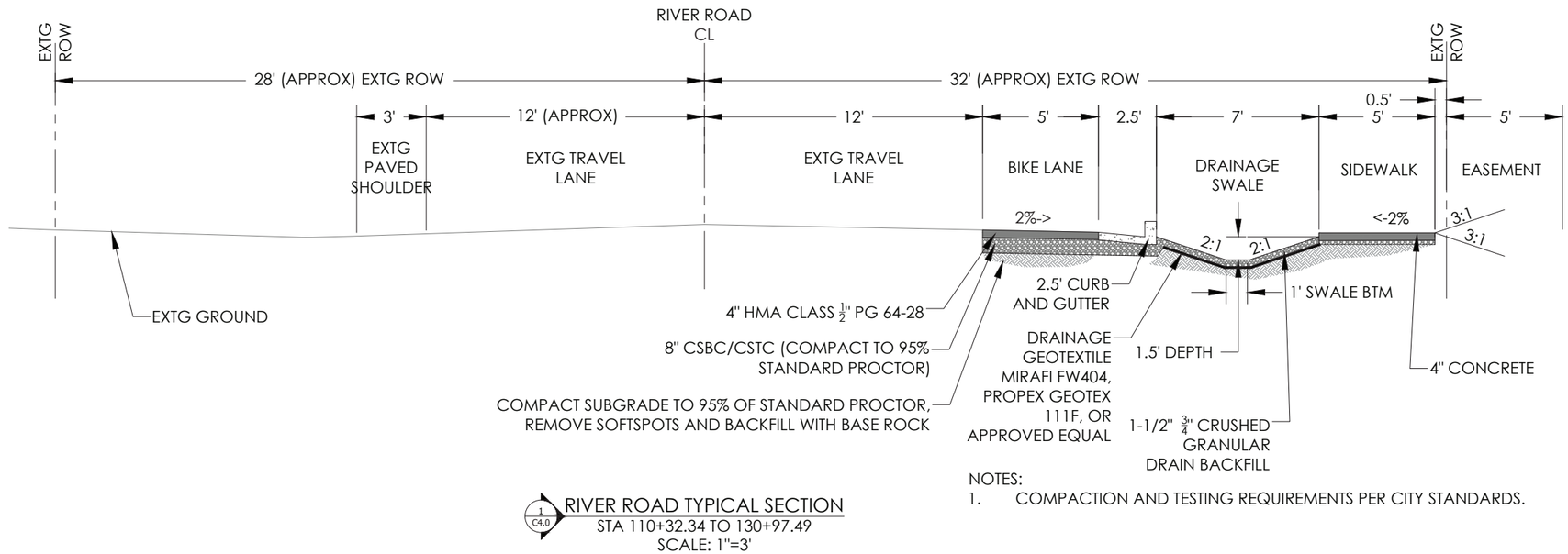
PROJECT: M1663.08.028
DESIGNED:---
DRAWN: L. DANIEL
CHECKED: K. BOON

SCALE
0 20' 40'
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE
PLAN AND PROFILE STA 125+00 TO 131+00

SHEET
C3.4

PLOTTED ON: 2022-12-08 8:43 AM PLOTTED BY: Lorene Daniel FILENAME: G:\00_MFA Civil 3D\00_PROJECTS\1663.08 Gamma Triangle (Bissell)\PLANS\River Road Frontage Improvements\PLANS\C3.4 PLAN AND PROFILE Sht.dwg



1 C4.0 RIVER ROAD TYPICAL SECTION
STA 110+32.34 TO 130+97.49
SCALE: 1"=3'

NOTES:
1. COMPACTION AND TESTING REQUIREMENTS PER CITY STANDARDS.

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
---	---	---
---	---	---
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: ---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE

SCALE AS NOTED

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

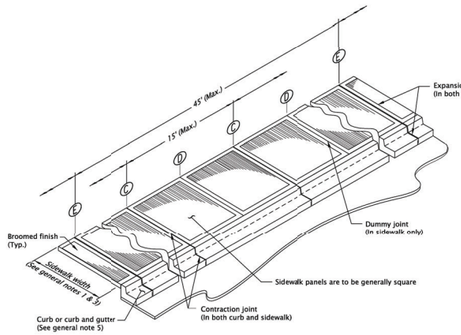
SHEET TITLE

DETAILS I

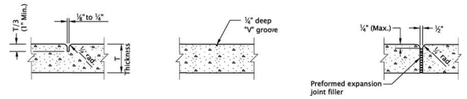
SHEET C4.0

PRELIMINARY
12/07/2022

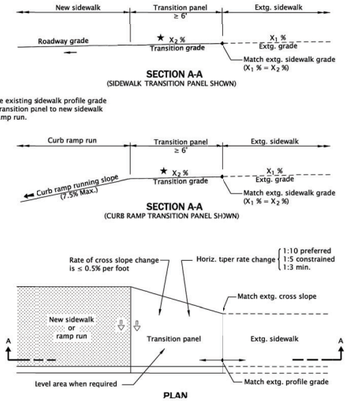
PLOTTED ON: 2022-12-07 1:15 PM PLOTTED BY: Lorraine Daniel FILENAME: G:\05_MFA Civil 3D\05_PROJECTS\1663.08 Gamma Triangle (Bossi)\PLANS\River Road Frontage Improvements\PLANS\C4.0 DETAILS I.dwg



JOINT DETAIL
(Curb line sidewalk with curb and gutter shown)



Ⓒ **CONTRACTION JOINT** (See general note 6)
Ⓓ **DUMMY JOINT**
Ⓔ **EXPANSION JOINT** (See general notes 2 & 5)



★ Project the existing sidewalk profile grade through transition panel to new sidewalk or curb ramp run.

SECTION A-A
(SIDEWALK TRANSITION PANEL SHOWN)

SECTION A-A
(CURB RAMP TRANSITION PANEL SHOWN)

PLAN

SIDEWALK AND CURB RAMP TRANSITION PANELS

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See Std. Dwgs. RD720 & RD721 for concrete sidewalk details. See project plans for sidewalk width, placement and design specified.
2. Provide expansion joints around poles, boxes, at ends of each driveway and other fixtures which protrude through or against the structures. For sidewalk, monolithic curb and sidewalk, construction expansion joints at 45' max. spacing.
3. On sidewalks 8' and wider, provide a longitudinal joint at the midpoint of sidewalk panel.
4. See Std. Dwgs. RD700 & RD701 for concrete curb details. See project plans for the curb design specified.
5. For curb ramps, do not place expansion joints within the limits of curb ramps and between separate concrete pours.
6. Const. contraction joints at 15' max. spacing, and at each curb ramp, driveway, sidewalk and curb.

LEGEND:
- New sidewalk or ramp run
- Slope 1.5% max. (Max. 2.0% finished surface slope; Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)
- Zero exposure

CALC. BOOK NO. N/A
SDR DATE 20-JUL-2020
NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CITY OF THE DALLES STANDARD DRAWINGS

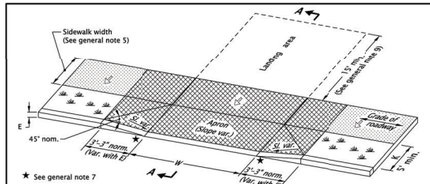
SIDEWALK JOINTS AND TRANSITION PANELS

2022

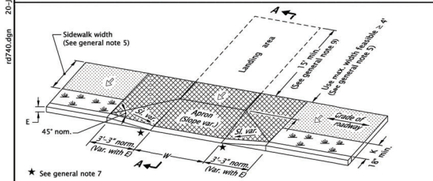
DATE	REVISION DESCRIPTION

RD722

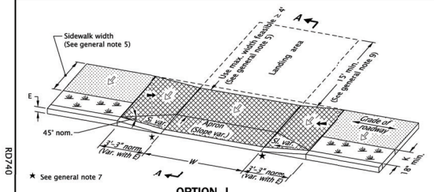
Effective Date: January 1, 2022 – December 31, 2022



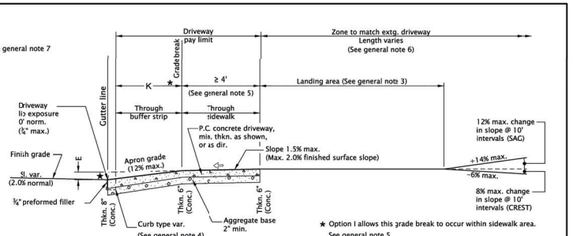
OPTION H
TYPICAL SEPARATED SIDEWALK DRIVEWAY
(Use one of the options below if slope requirements shown in Section A–A cannot be met)



OPTION I
DRIVEWAY ENCROACHES INTO SIDEWALK



OPTION J
LOWERED SIDEWALK



SECTION A-A

GENERAL NOTES FOI ALL DETAILS ON THIS SHEET:

1. Details are based on applicable ODOT Standards.
2. Only use details approved by City.
3. The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, buffer strip with, curb exposure, driveway lip exposure, lading area length and width. See project plans for details not shown.
4. Curb, gutter, and sidewalk types varies, see plans.
   See Std. Dwgs. ID700 & RD701 for curb details.
   See Std. Dwg. R3721 for sidewalk details.
   See Std. Dwg. R3722 for joint details.
5. A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
6. Where existing driveway is in good condition, and meets slope requirements, construct only as much landing area as required for satisfactory connection with new work.
7. Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
8. Construct a full depth expansion joints with 1#2" (in) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
9. 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.

LEGEND:
- Sidewalk
- Driveway pay limit (See project plans for details not shown)
- Cross slope 1.5% max. (Max.2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope 7.5% max. (Max. 8.3% finished surface slope)

W Width of driveway
K Buffer strip width
E Curb exposure

CALC. BOOK NO. N/A
SDR DATE 20-JUL-2020
NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CITY OF THE DALLES STANDARD DRAWINGS

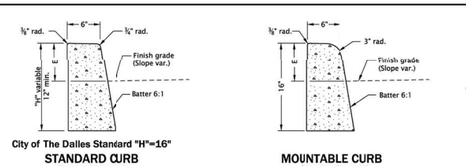
SEPARATED SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS H, I & J)

2022

DATE	REVISION DESCRIPTION

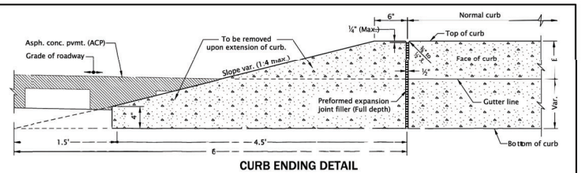
RD740

Effective Date: January 1, 2022 – December 31, 2022

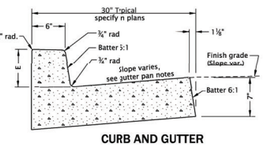


City of The Dalles Standard "H"=16"
STANDARD CURB
(See general note 11)

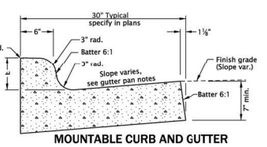
MOUNTABLE CURB
(See general note 11)



CURB ENDING DETAIL

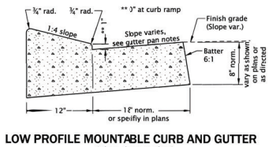


CURB AND GUTTER

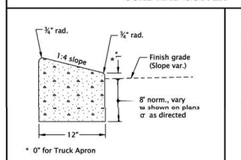


MOUNTABLE CURB AND GUTTER

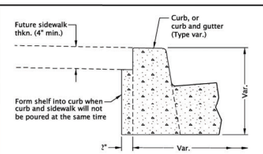
GUTTER PAN NOTES:
Slope 5.0% normal.
Slope 4.0% max. at curb ramps.
Vary slope as reqd. for drainage. Vary where shown on plans.



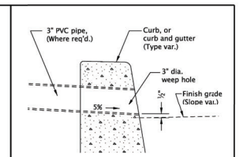
LOW PROFILE MOUNTABLE CURB AND GUTTER
(Where shown on plans)



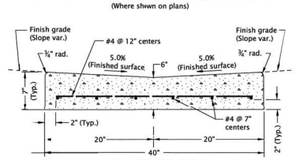
LOW PROFILE MOUNTABLE CURB
(See general note 1)



MODIFICATION FOR KEYWAY
(Where shown on plans)



WEEP HOLE DETAIL
(Where shown on plans)



VALLEY GUTTER

GENERAL NOTES FOR ALL DETAILS ONTHIS SHEET:

1. Curb exposure "E" = 6" to 9", as measured vertically from flowline to highest point on curb. Vary as shown on plans or asdirected. City of The Dalles standard "E"=7".
2. Const. curb expansion joints at 20' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. curb contraction joints at 1:' maximum spacing, and at ends of each inlet and curb ramp.
4. Transitions shall be used to connect curbs of different exposures "E". ("E" is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
5. Tops of all curbs shall slope toward the roadway at 1.5% max. (Max. 2.0% finished surface slope), unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
7. Dimensions adjacent to radii are measurd to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb& sidewalk, see Std. Dwgs. RD720 & RD721.
9. For drainage curbs, see Std. Dwg. RD701.
10. For curb ramp details, see Std. Dwgs. RD900 series
11. Curb and gutter is required at curb ramp.

CALC. BOOK NO. N/A
SDR DATE 20-JUL-2020
NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CITY OF THE DALLES STANDARD DRAWINGS

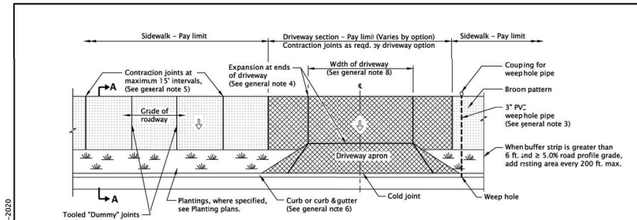
CURBS

2022

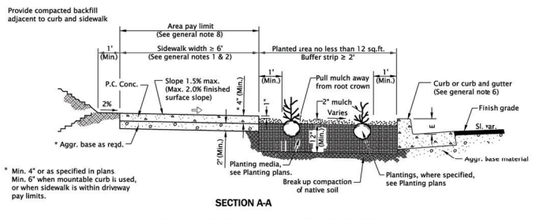
DATE	REVISION DESCRIPTION

RD700

Effective Date: January 1, 2022 – December 31, 2022



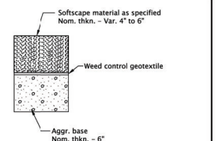
TYPICAL PLAN VIEW - SEPARATED SIDEWALK



* Min. 4" or as specified in plans
Min. 6" when mountable curb is used, or when sidewalk is within driveway pay limits.

SECTION A-A

TYPICAL SETBACK SIDEWALK CROSS SECTION
E = curb exposure, see general note 6



NON-PLANTED SOFTSCAPE CROSS SECTION

NOTES:
1 Use softscape materials allowed by juisdiction.
2. Approved softscape materials:
   a) Loose, durable round rock 2"–4" in diameter
   b) Lava rock 2"–4" diameter
   c) Wood chips/bark mulch
   d) Sand
3. No crushed aggregate or pea gravel allowed.
4. Install softscape material flush with the top of sidewalk.

LEGEND
- Sidewalk pay limit.
- Driveway pay limit, varies by option, (See general note 8).
- Cross slope 1.5% max. (Max. 2.0% finished surface sope) (Normal sidewalk cross slope

CALC. BOOK NO. N/A
SDR DATE 20-JUL-2020
NOTE: All material and workmanship shall be in accordance with the current City of The Dalles Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CITY OF THE DALLES STANDARD DRAWINGS

SEPARATED SIDEWALKS

2022

DATE	REVISION DESCRIPTION

RD721

Effective Date: January 1, 2022 – December 31, 2022

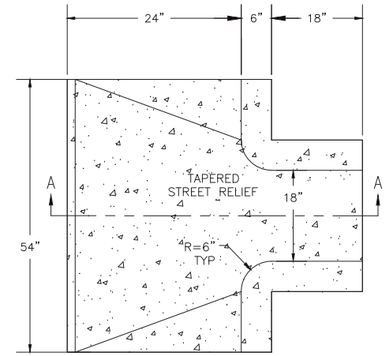
MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

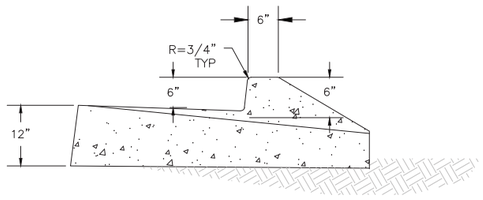
RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
---	---	---
---	---	---
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED: ---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE
SCALE AS NOTED
NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.
SHEET TITLE
DETAILS II
SHEET
C4.1

PRELIMINARY
12/07/2022





A CURB CUT DETAIL
Scale: NTS

MAUL FOSTER ALONGI
3140 NE BROADWAY STREET
PORTLAND, OR 97232
PHONE: 971.544.2139
www.maulfoster.com

RIVER ROAD FRONTAGE IMPROVEMENTS
DESIGN, LLC
THE DALLES, OREGON

ISSUE	DATE	DESCRIPTION
---	---	---
---	---	---
A	12/07/2022	PRELIMINARY PLANS

PROJECT: M1663.08.028
DESIGNED:---
DRAWN: L. DANIEL
CHECKED: K. BOON
SCALE

SCALE AS NOTED

NOTE: BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE ACCORDINGLY.

SHEET TITLE

DETAILS III

SHEET

C4.2

PRELIMINARY
12/07/2022

PLOTTED ON: 2022-12-07 11:11 AM PLOTTED BY: Loraine Daniel FILENAME: G:\ID_MFA Civil 3D\00_PROJECTS\1663.08 Gamma Triangle (Bossi)\1_FA\MS\River Road Frontage Improvements\1_FA\MS\LC4.2 DETAILS III.dwg

CITY of THE DALLES
313 COURT STREET
THE DALLES, OREGON 97058

(541) 296-5481 ext. 1125
COMMUNITY DEVELOPMENT DEPARTMENT

RESOLUTION PC 613-22

Approval of Conditional Use Permit (CUP) Application **203-22, Maul, Foster & Alongi, Inc.,** for approval to site and construct a sanitary sewer lift station with underground storage tanks, meter and valve vaults, diesel generator, underground utilities and associated security fencing and gates. Once completed, these improvements will be owned and maintained by the City of The Dalles. Approval of the Conditional Use Permit will establish a Community Facilities Overlay (CFO) on the site. Property is located at 3400 River Road and further described as 2N 13E 28 tax lot 708. Property is zoned I – Industrial District.

I. RECITALS:

A. The Planning Commission of the City of The Dalles has on February 16, 2023 conducted a public hearing to consider the above request. A staff report was presented, stating the findings of fact, conclusions of law, and staff recommendation.

B. Staff's report of Conditional Use Permit 203-22 and the minutes of the February 16, 2023 Planning Commission meeting, upon approval, provide the basis for this resolution and are incorporated herein by reference.

II. RESOLUTION:

Now, therefore, be it FOUND, DETERMINED, and RESOLVED by the Planning Commission of the City of The Dalles as follows:

In all respects as set forth in Recitals, Part "I" of this resolution, Conditional Use Permit 203-22 is hereby approved with the following conditions of approval:

1. **Conditions Required Prior to Final Plan Approval:**
   a. Final plan submission must meet all the requirements of The Dalles Municipal Code, Title 10 Land Use and Development, and all other applicable provisions of The Dalles Municipal Code.
   b. All final plans, consistent with all Conditions of Approval, shall be approved by the Community Development Director and the City Engineer prior to the issuance of a building permit.
   c. The sound attenuating barrier along the north and west property lines must be shown on a revised site plan.
   d. All construction/design plans for public infrastructure, improvements, or rights-of-way (ROW) shall be approved by the City Engineer.

e. Applicant is required to coordinate any franchise utility requirements, timing of installation, and payment for services with the appropriate utility provider.

2. Conditions Required During Construction of Public Improvements and Franchise Utilities

a. A pre-construction meeting including the City Engineer and Construction Inspector is required prior to construction or site prep work. All public improvements shall first obtain design and construction approval from the City Engineer.

b. Applicant must warranty all public improvements against defect for one year from the date of final acceptance by the City.

c. All proposed franchise utilities are required to be installed in accordance with each utility provider.

d. All proposed improvements included within the plan set must be installed.

3. Conditions Required Prior to Occupancy

a. Applicant must install the sound attenuating barrier along the north and west property lines.

b. Upon completion of ROW improvements, the City Engineer will conduct a final inspection of all improvements to ensure they meet City standards before the City formally accepts them for ownership, operation or maintenance.

4. Ongoing Conditions

a. All lighting shall not directly illuminate adjoining properties. Lighting sources shall be shielded and arranged so as not to produce glare in any public ROW, with a maximum illumination at the property line not to exceed 0.5 foot-candles.

b. All development must adhere to the approved site plan for this development.

c. The proposed use and operation shall comply with all applicable local, state, and federal standards, and shall not create a nuisance due to odor, vibration, noise, dust, vector control, smoke or gas. Applicant shall prevent the collection of nuisance materials and debris from being windblown or migrating off site.

d. All landscaping, buffering, and screening must be adequately maintained and irrigated to ensure the survival of plant materials. Landscaping must include no less than 40% of live plant material.

e. Applicant shall warranty all public improvements against any defects and workmanship provided for a period of one year from the date of the City's final acceptance of the work.

f. The timing of right-of-way improvements and 5' landscaping buffer must be coordinated with the Community Development Director and City Engineer.

The Secretary of the Commission shall (a) certify to the adoption of the Resolution; (b) transmit a copy of the Resolution along with a stamped approved/denied site plan or plat to the applicant.

APPROVED AND ADOPTED THIS 16TH DAY OF FEBRUARY, 2023.

_____
Cody Cornett, Chair
Planning Commission

I, Joshua Chandler, Community Development Director for the City of The Dalles, hereby certify that the foregoing Resolution was adopted at the regular meeting of the City Planning Commission, held on the 16th day of February, 2023.

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

ATTEST: _____
Joshua Chandler, Director
Community Development Department
City of The Dalles

CITY of THE DALLES
313 COURT STREET
THE DALLES, OREGON 97058

(541) 296-5481 ext. 1125
COMMUNITY DEVELOPMENT DEPARTMENT

MEMORANDUM

To:	City of The Dalles Planning Commission
Meeting Date:	February 16, 2023
Re:	Discussion: Recreational Vehicle Parks
Prepared by:	Joshua Chandler, Community Development Director

DISCUSSION:

With a continued housing shortage and increased housing costs, as well as work/lifestyle changes attributed to the Covid-19 pandemic, the City of The Dalles has seen a growing interest in the development of Recreational Vehicle (RV) Parks. Since 2016, the Community Development Department has approved four RV Parks within The Dalles City Limits, three of which were approved since 2022. Pursuant to The Dalles Municipal Code, RV Parks are processed as Conditional Use Permits and subject to the standards of Chapter 10.12. Other than the Low Density Residential zone, Parks may be located in all zoning districts. On January 5, 2023, following a series of lengthy, and at times divided public hearings for the three most recent Park approvals, the Commission requested Staff prepare a future discussion concerning Chapter 10.12 and an overview of Park regulations.

To help guide this discussion, Staff compiled a list of multiple topics previously discussed during the application comment periods and hearing proceedings, as well as suggestions for clarity and efficiency in regulating RV Parks. The list, provided below, is in no particular order.

- Length of Stay
  - Short Term vs. Long Term
  - Restrictions: number of days, no length limit/permanent, ORS
  - Reporting process
- Operations
  - Operational plan/park rules, operating hours/quiet hours
  - Security
- Site Features
  - Landscaping/Screening
  - Parking
  - Access

    - Bathroom/Shower facilities
    - On-site storage
- Zoning
    - Restrictions
    - Process: Site Plan Review, Conditional Use Permit
- Floodplain/Stream Corridor standards

NEXT STEPS:

Following discussion, Staff is requesting further direction from the Planning Commission regarding any potential modifications to existing RV Park regulations.

Chapter 10.12 RECREATIONAL VEHICLE PARKS

10.12.010 Purpose

The provisions in this Chapter are intended to ensure a safe and healthful living environment in recreational vehicle parks, to protect the general public health, safety and welfare, and to describe the requirements for recreational vehicle park development.

10.12.020 Zoning

Recreational vehicle parks (RV parks) are allowed outright in the CG (General Commercial), CR (Recreational Commercial), and CLI (Commercial Light Industrial) zones. RV parks are allowed conditionally in the I (Industrial), NC (Neighborhood Center Overlay), RH (High Density Residential), and RM (Medium Density Residential) zones.

10.12.030 Development Standards

A. Laws and Regulations. All the requirements of federal, state, and local laws and regulations shall be met. Refer to Oregon Revised Statutes Section 455.680 and Oregon Administrative Rules Chapter 918, Division 650 for State of Oregon requirements for RV parks.

B. Hazards to Property and Occupants. The condition of soil, groundwater level, drainage, and topography shall not create hazards to the property or the health and safety of occupants. Park sites shall not be located in areas exposed to objectionable smoke, noise, odors, or other adverse influences. No portion of any park subject to unpredictable or sudden flooding, subsidence, or erosion shall be used for any purposes which would expose persons or property to hazards.

C. Setbacks. Setbacks shall be the same as the setbacks required by the zone district.

D. Access in Residential Zones.

1. Access to an RV park shall be from an arterial or collector street, or shall be from a street with sufficient width and ease of access to allow any RV to enter and exit without causing undue traffic problems. If the access is not from an arterial or collector street, each access shall be evaluated on a case-by-case basis to determine if access is adequate for the type of RV which is anticipated to enter into, and exit from, the RV park. The evaluation will include on-street parking allowances and the condition of the street.

2. In order to facilitate ease of entry and exit, the Planning Commission may authorize a wider driveway entrance than is otherwise provided for in this Title.

3. Park access connections to public streets shall meet the requirements of Article 6.050: Access Management.

4. For RV parks of 10 or more spaces, at least 2 vehicular exits shall be provided in every park. Each exit shall be no closer than 75 feet (edge to edge) from any other exit.

E. Screening. Except for the access roadway into the park, the park shall be screened with vegetation on all sides abutting rights-of-way or neighboring properties per the provisions of Section 10.11.050: Park Perimeter Screening.

F. Surfacing. All spaces for RVs shall be covered with crushed gravel or paved with asphalt, concrete or similar material and be designed to provide for the control of runoff or surface water. The part of the space which is not occupied by the RV, not intended as an accessway to the RV or part of an outdoor patio, need not be paved or covered with gravel provided the area is landscaped or otherwise treated to prevent dust or mud.

G. Non-Recreational Vehicle Parking Requirement. In addition to the number of parking spaces required for park administration, there shall be a minimum of 0.15 and a maximum of 1 parking spaces per RV space. Parking areas shall meet all of the requirements of Article 7.030: General Design Standards for Surface Parking Lots.

10.12.040 Landscaping

All areas not occupied by buildings, streets, and RV spaces shall be landscaped per the provisions of Article 6.010: Landscaping. A landscape plan is required prior to the City signing a building permit application. The landscaping plan will include internal shade trees.

10.12.050 Park Maintenance and Storage

Each RV park shall at all times keep a neat appearance. Except for the allowed vehicles, there shall be no outside storage of materials or equipment belonging to the park or to any of the guests.

10.12.060 Length of Stay

The operational plan for the RV park required in LUDO Section 10.12.080: Review Criteria shall include provisions for both short-term stay (up to 30 days) and long-term stay (up to 1 year). Spaces shall be identified for each kind of stay. Stays longer than 1 year may be approved by the Planning Commission. Except for a park manager, no space may be used for permanent residency.

10.12.070 Review Process

Recreational vehicle parks shall be reviewed as conditional uses per the provisions of Article 3.050: Conditional Use Permits.

10.12.080 Review Criteria

RV park development proposals shall include two parts. First, a site plan showing all aspects of the park layout including access, roadways, number of spaces, space design, buildings, and other required features. A second site plan may be required by the Planning Commission showing features required in the conditional use permit process. Second, a written operational plan in narrative form explaining such operational aspects as park hours, landscaping and irrigation, lighting, utility connections, roadways, access to public streets, emergency contact phone numbers, and other requirements as set by the Planning Commission.