City of Warrenton City Commission
Agenda
City Hall, 225 S. Main Warrenton, OR 97146
Tuesday, May 27, 2025

*****The meeting will be broadcast via Zoom at the following link*****
https://us02web.zoom.us/j/5332386326?pwd=VHNVVXU5blkxbDZ2YmxISWpha0dhUT09#success
Meeting ID: 533 238 6326 | **Passcode:** 12345 | **Dial-in Number**: 253-215-8782

Public Comment: To provide public comment, participants should register prior to the meeting. All remarks will be addressed to the whole City Commission and limited to 3 minutes per person. The Commission reserves the right to delay any action, if required, until such time as they are fully informed on a matter. Once your public comment is submitted it becomes part of permanent public record.

You may provide public comment using the following methods:

1. In-person: Complete a public comment card and submit to the City Recorder prior to the start of the meeting.
2. Via Zoom: Register with the City Recorder, at cityrecorder@warrentonoregon.us no later than 3pm the day of the meeting. Please ensure that your zoom name matches the name registered to comment.
3. Written comments: Submit via e-mail to the City Recorder, at cityrecorder@warrentonoregon.us, no later than 3:00 p.m. the day of the meeting.

City Commission Regular Meeting 6:00 PM

1. **Call to order**
2. **Pledge of Allegiance**
3. **Employee Recognition – Sergeant Jim Pierce**
4. **Consent Calendar**
   A. City Commission Meeting Minutes 2025.05.13
   B. Police Department Monthly Report – April 2025
5. **Commissioner Reports**
6. **Public Comment**
7. **Public Hearings** – None
8. **Business Items**
   A. Consideration of Wastewater Treatment Plant Pre-Design Contract; Kennedy-Jenks
   B. Consideration of Low Pressure Sewer Policy
   C. Consideration of Iredale Culvert Replacement Project – Request for Bids
   D. Consideration of Water Rates Adjustment; Resolution No. 2701
   E. Consideration of Sewer Rate Adjustment; Resolution No.2702
   F. Consideration of Recycling Rate Adjustment; Resolution No. 2703
9. **Discussion Items** – None
10. **Good of the Order**

Warrenton City Hall is accessible to the disabled. An interpreter for the hearing impaired may be requested under the terms of ORS 192.630 by contacting Dawne Shaw, City Recorder, at 503-861-0823 at least 48 hours in advance of the meeting so appropriate assistance can be provided.

11. Executive Session

Under the authority of ORS 192.660(2)(e); to conduct deliberations with persons designated by the governing body to negotiate real property transactions.

12. Adjournment

Warrenton City Hall is accessible to the disabled. An interpreter for the hearing impaired may be requested under the terms of ORS 192.630 by contacting Dawne Shaw, City Recorder, at 503-861-0823 at least 48 hours in advance of the meeting so appropriate assistance can be provided.

City of Warrenton City Commission
Minutes
City Hall, 225 S. Main Warrenton, OR 97146
Tuesday, May 13, 2025

1. **City Commission meeting called to order at 6:00 pm.**

2. **Pledge of Allegiance**

Commission Members	Present	Excused
Gerald Poe	X	
Jessica Sollaccio	X	
Tom Dyer		X
Paul Mitchell	X	
Henry Balensifer, Mayor	X	

Staff Members Present	
City Manager Esther Moberg	City Recorder Dawne Shaw
Police Chief Mathew Workman	Public Works Director Kevin Gorman
Library Director Josh Saranpaa	

3. **Consent Calendar**

*Items on the Consent Calendar have previously been discussed and/or are considered routine. Approval of the Consent Calendar requires a motion, a second, and no discussion, unless requested by a member of the City Commission.

A. City Commission Work Session Minutes 2025.04.08
B. City Commission Joint Work Session Minutes 2025.04.22
C. City Commission Meeting Minutes 2025.04.22
D. Marina Update – April 2025
E. Parks Advisory Committee Minutes 2025.02.10
F. Monthly Finance Report – March 2025
G. Warrenton Community Library Computer Grant

Motion:	Move to approve the consent calendar as presented.				
Moved:	Mitchell				
Seconded:	Poe	**Aye**	**Nay**	**Abstain**	**Recused**
Vote:	Poe	X			
	Sollaccio	X			
	Mitchell	X			
	Balensifer	X			
Passed:	4/0				

4. **Commissioner Reports**

Commissioner Mitchell stated he attended the League of Oregon Cities (LOC) conference and noted highlights and laws regarding the homeless. He also gave a kudos to the Public Works trash dept for going above and beyond.

Commissioner Sollaccio reviewed and discussed meetings she attended.

City Manager Esther Moberg noted her thoughts are with the family of Capt. Raliegh boat and noted a piling on E dock is compromised.

Mayor Balensifer echoed Commissioner Mitchell and City Manager Esther Moberg. He also noted he attended LOC conference and that May 28th is the preliminary court date for FEMA BiOp lawsuit.

5. Public Comment – None

6. Public Hearings

A. Mayor Balenisfer stated the City Commission is not required by law to hold a hearing on the matter, they are doing so to allow public comment and for public transparency. Mayor Balensifer opened the public hearing on fluoride supplementation. Formalities followed. No conflicts of interest or ex parte contacts were reported. Public Works Director Kevin Gorman reviewed his staff report outlining the existing issues with fluoride supplementation. He explained the reason the city's fluoride supply comes from China. He noted the differences between the powdered and liquid forms and discussed why the city uses the powder. He noted that he misspoke at a prior meeting, and that fluoride requires a full hazmat suite, and the sodium hypochlorite requires less personal protective equipment (PPE). Mayor Balensifer asked for public comments. He noted the packet of comments received via email and also a comment Commissioner Poe entered into the record.

Scott Santos, a dentist from Seaside, spoke in opposition to the removal of fluoride in city water.

Matthew Sanchez, spoke in regard to national security matters regarding fluoride from China, the tariffs and the US based alternatives.

Jackie Sanchez, spoke in opposition to the removal of fluoride.

Jeremiah Shakespear, dentist in Astoria, spoke in opposition to the removal of fluoride.

There were no comments in favor of the fluoride removal or neutral. Mayor Balenisfer noted the number of comments for and against (verbal and emailed). There being no further comments, Mayor Balensifer closed the public testimony section of the hearing. Commissioner Poe asked if we see the price coming down with the pause on tariffs; Gorman stated they will monitor it. Mayor Balensifer asked if we had to go to liquid what would that entail; Gorman stated it would be diluted first and put into the system he also noted concerns with cost and safety risks. Commissioner Sollaccio noted the cost saved versus saving costs elsewhere; Gorman responded. Mayor Balensifer closed the public hearing.

Mayor Balensifer noted a lot of people have stopped him to talk to him about the matter and noted how other cities have handled it. Commissioner Mitchell noted his thoughts and information he has received. Commissioner Sollaccio noted the downstream effects if we remove the fluoride. She noted data and risks of removal. Commissioner Poe noted it came to them as a cost cutting measure and it has turned into something else. He noted that they could take it to the voters. Mayor Balensifer agreed that it went from a cost cutting issue, to something else. He noted how many comments received that were actually from Warrenton residents. Commissioner Sollaccio noted the non-residents that submitted comments. Discussion continued.

Motion:	Move to continue fluoridation until such time voters have decided in the earliest election.				
Moved:	Poe				
Seconded:	Balensifer	**Aye**	**Nay**	**Abstain**	**Recused**
Vote:	Sollaccio		X		
	Poe	X			
	Mitchell	X			
	Balensifer	X			
Passed:	3/1				

7. Business Items

A. Consideration of Raw Waterline RP-2 Project Contact Award:

Gorman reviewed his staff report. There was brief discussion on why the bid was so low; Gorman noted the bid was reviewed with a fine tooth comb.

Motion:	Move to approve the award of the construction contract for the Raw Waterline RP-2 Project to Trench Line Excavation, Inc., in the amount of $898,191.				
Moved:	Sollaccio				
Seconded:	Poe	**Aye**	**Nay**	**Abstain**	**Recused**
Vote:	Sollaccio	X			
	Poe	X			
	Mitchell	X			
	Balensifer	X			
Passed:	4/0				

B. Consideration of Revised Amendment #3 – Hammond Transmission Waterline:

Gorman reviewed a revision to amendment #3 of the safe drinking water revolving loan fund agreement for the Hammond Transmission Line Project.

Motion:	Move to authorize the Mayor to execute the revised Amendment #3 to the Safe Drinking Water Revolving Loan Fund Agreement for the Hammond Transmission Waterline Project.				
Moved:	Poe				
Seconded:	Sollaccio	**Aye**	**Nay**	**Abstain**	**Recused**
Vote:	Sollaccio	X			

	Poe	X			
	Mitchell	X			
	Balensifer	X			
Passed:	4/0				

8. Discussion items – None

9. Good of the Order

Commissioner Sollaccio noted the Library grant and gave kudos to staff. She noted ballots are due May 20th.

Moberg noted that she appreciated the discussion around fluoride.

Mayor Balensifer noted the experimental aircraft association will have an event for adults this Saturday.

10. Executive Session

At 7:00 pm, Mayor Balensifer announced the Commission will meet in Executive Session *Under the authority of* ORS 192.660(2)(i)*; to review and evaluate the employment-related performance of the chief executive officer of any public body, a public officer, employee or staff member who does not request an open hearing.*

11. Adjournment

At 7:26 pm, Mayor Balenisfer reconvened the meeting, and noting no further business, adjourned the meeting.

Approved:

Henry A. Balensifer III, Mayor

Attest:

Dawne Shaw, CMC, City Recorder

WARRENTON POLICE DEPARTMENT
MONTHLY REPORT

TO: The Warrenton City Commission

FROM: Chief Mathew Workman

DATE: May 27, 2025

RE: April 2025 Stats Report

Upcoming Dates:

- *05/28 – 911 Subscriber Meeting*
- *05/30 – Police Clerk Asst. Interviews*
- *06/05 – WPD Training Day*
- *06/06 – Kiwanis BUGs – WGS*
- *06/09 – Kiwanis BUGs – WMS*
- *06/14 – Pierce Retirement Ceremony*
- *06/19 – LEA Meeting*

Highlights Since the Last Report:

- *04/23 – 911 Subscriber Meeting*
- *04/22 - 04/25 – OACP Conf. Pendleton*
- *04/25 - 04/27 – Crab/Wine Festival*
- *05/01 - 05/02 – CIS Spring Supervisor Trn*
- *05/08 – WPD Training Day*
- *05/05 – Muni Court Clerks Week*
- *05/15 – LEA Meeting*
- *05/20 – Kiwanis BUGs Awards – Anchor Academy*
- *05/21 – 911 Subscriber Meeting*

Traffic Statistic Highlights:

- One (1) DUII Arrests – Alcohol
- Twelve (12) Driving While Suspended Citations/Arrests
- Six (6) Speeding Citations
- Six (6) Failure to Yield or Traffic Control Device Citations
- Two (2) Following Too Close Citation
- Thirteen (13) Insurance Citations
- One (1) Interlock Device Citations
- Three (3) Driver's License Citations
- One (1) License/Registration Citations
- One Hundred Sixty-Six (166) other Citations and Warnings
- Seventeen (17) Traffic Crash Investigations
- **Citation vs Warning:** **211** Traffic Stops: **48** Citations, **163** Warnings; *Warning **77%** of the time.*

Overall Statistics:

April Statistics (% changes are compared to 2025)

Category	2025	2024	% Chg	2023	% Chg	2022	% Chg
Calls for Service	723	696	4%	724	0%	590	23%
Incident Reports	237	200	19%	190	25%	197	20%
Arrests/Citations	92	97	-5%	85	8%	132	-30%
Traffic Stops/ Events	249	216	15%	161	55%	165	51%
DUII's	1	2	-50%	2	-50%	4	-75%
Traffic Crashes	17	12	42%	20	-15%	12	42%
Property Crimes	67	99	-32%	77	-13%	59	14%
Person Crimes	55	53	4%	62	-11%	68	-19%
Drug/Narcotics Calls	3	4	-25%	5	-40%	4	-25%
Animal Calls	26	15	73%	22	18%	12	117%
Officer O.T.	105.3	167.5	-37%	63.5	66%	218.5	-52%
Reserve Hours	0	0	0%	0	0%	0	0%

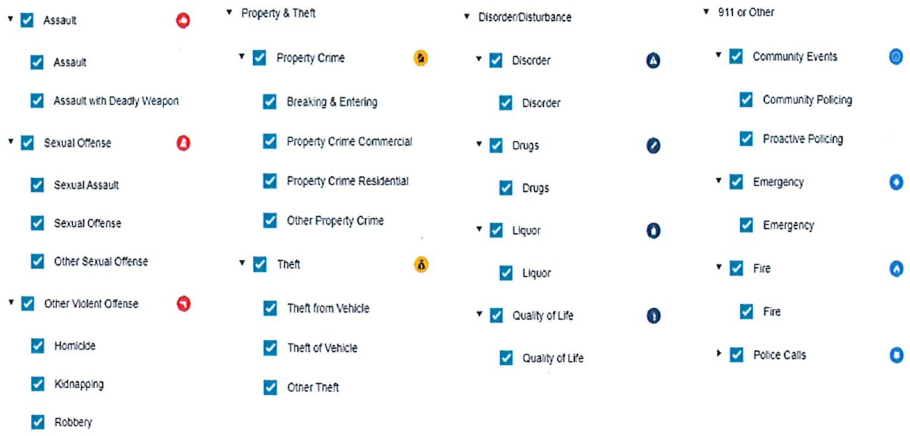
Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Calls for Service	644	581	654	723						
Incident Reports	205	190	224	237						
Arrests/Citations	91	63	103	92						
Traffic Stops/ Events	160	110	132	249						
DUII's	8	3	2	1						
Traffic Crashes	20	20	17	17						
Property Crimes	76	56	90	67						
Person Crimes	61	62	50	55						
Drug/Narcotics Calls	4	1	2	3						
Animal Calls	22	29	18	26						
Officer O.T.	160.25	54.5	85.1	105.25						
Reserve Hours	0	0	0	0						

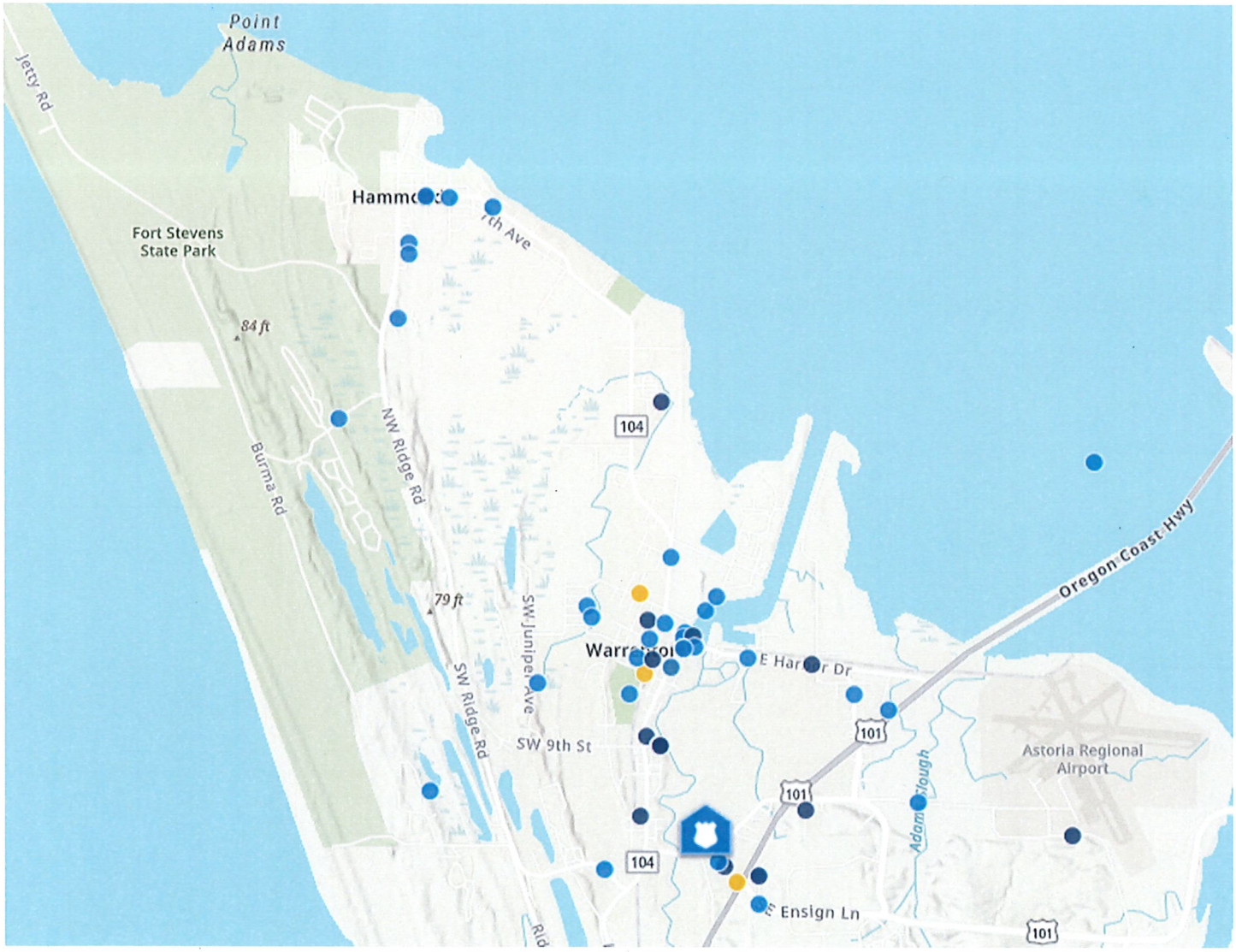
Category	Nov	Dec	2025 YTD	2025 Estimate	2024	2025 v 2024	2023	2024 v. 2023	2022	2025 v. 2022
Calls for Service			2602	7806	8458	-8%	9084	-14%	8050	-3%
Incident Reports			856	2568	2618	-2%	2529	2%	2484	3%
Arrests/Citations			349	1047	1317	-21%	1335	-22%	1602	-35%
Traffic Stops/ Events			651	1953	2215	-12%	2369	-18%	1848	6%
DUII's			14	42	27	56%	30	40%	34	24%
Traffic Crashes			74	222	209	6%	217	2%	168	32%
Property Crimes			289	867	1190	-27%	1127	-23%	1204	-28%
Person Crimes			228	684	786	-13%	825	-17%	811	-16%
Drug/Narcotics Calls			10	30	56	-46%	60	-50%	40	-25%
Animal Calls			95	285	307	-7%	335	-15%	273	4%
Officer O.T.			405.1	1215.3	1635.3	-26%	1572	-23%	2212.8	-45%
Reserve Hours			0	0	0	0%	0	0%	0	0%

April Homeless Incidents	2025	2024	2023	2022
Code 40 (Normal)	23	39	25	25
Code 41 (Aggressive)	1	1	3	2
April Monthly Total:	24	40	28	27
YTD Total Homeless Incidents	116	173	100	115

April Elk Incidents	2025	2024	2023	2022
Interaction:	0	1	1	0
Traffic Accidents:	0	0	0	1
Traffic Complaints:	0	0	0	0
April Monthly Total:	0	1	1	1
YTD Total Elk Incidents	2	6	9	6

The following is a graphic representation of statistics for **April 2025** using our **CityProtect** membership (formerly CrimeReports.com). The "Dots" represent the location of a call, and if you zoom in on the map, you will see an icon for the type of call and some basic time/date details. Some dots represent multiple calls at one location. If you go to the website (www.cityprotect.com), you can zoom in on each incident for more details.





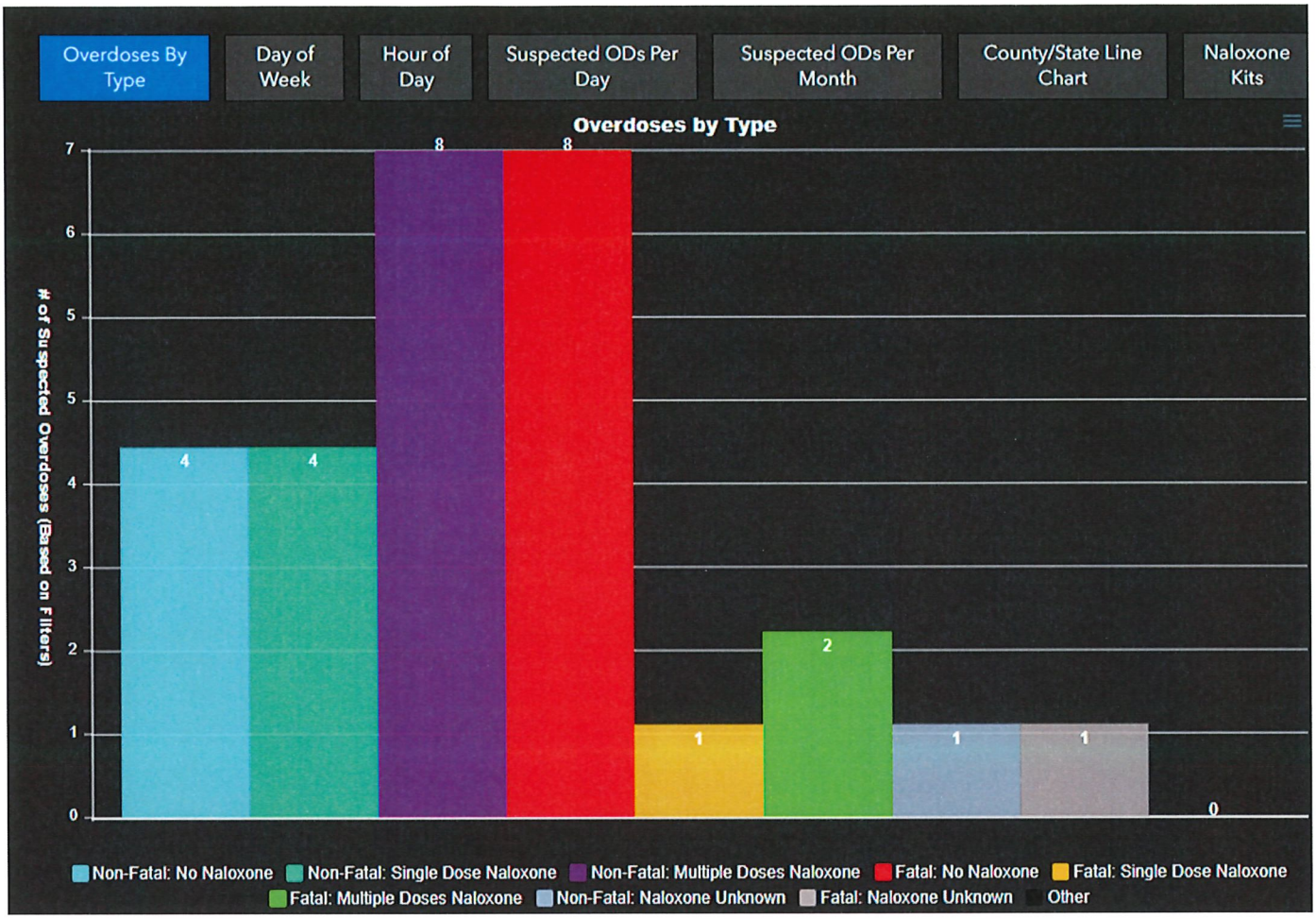
WPD Overdose Response Statistics

The following information on WPD calls involving Overdoses was requested by Commissioner Sollaccio. I signed the WPD up with ODMAP (Overdose Detection Mapping Application Program), a program created by HIDTA (High Intensity Drug Trafficking Area). ODMAP encourages agencies to enter basic OD information into an online database to help track ODs and look for "spike alerts" and trends. The information is publicly available at www.odmap.org. The WPD is one of 96 participating agencies in Oregon and 1 of 4 agencies participating in Clatsop County, along with Public Health, Knappa Fire District, and the Oregon-Idaho HIDTA region.

We started using ODMAP in 2022. Using the data I have submitted to ODMAP, here are the total ODs as of 05/20/25 that the WPD was aware of or involved with:

Here is 2025 so far:

Here is a more detailed breakdown:



- The 12 Non-Fatal cases where a single or multiple doses of Naloxone were administered by a mixture of police, medical personnel, and bystanders. Doses administered after being transported are unknown and not captured. The 2 Fatal cases where a single or multiple doses were administered were transported and pronounced dead at the hospital. It is unknown how many doses were administered.
- Fentanyl was suspected or confirmed as the primary drug in 22 of the 29 ODs. Of the 22, 10 were fatal.
- Of the 29 ODs, the other suspected or confirmed primary drugs were Psilocybin Mushrooms (1), Morphine (1), Oxycodone (1), Alcohol/Prescription Drugs (1), Heroin (1), and Unknown (2). Of these 7, 1 was fatal (Heroin).
- Ages ranged from 18 to 78.
- Total: 18 Males, 11 Females
- Fatal ODs: 7 Males, 5 Females

Spruce Up Warrenton 4th of July Parade Guidelines

The 4th of July is a time to come together as a community, celebrating freedom, unity, and the spirit of Warrenton. The Spruce Up Warrenton 4th of July Parade is a joyful and inclusive event, and we invite all to participate in a way that reflects our shared values of respect and togetherness.

To ensure this, we have established the following guidelines for float participation.

Prohibited Themes & Displays

- Hate Speech or Discriminatory Messaging - Any signs, slogans, or imagery that promote discrimination, exclusion, or harm toward any group.
- Politically Divisive or Extremist Messages - Floats endorsing specific political candidates, parties, or extremist ideologies.
- Violent or Aggressive Imagery - Symbols, language, or decorations that promote violence, intimidation, or hostility.
- Historical or Cultural Appropriation - Depictions that mock, misrepresent, or disrespect cultures or historical events.
- Exclusionary Themes - Messages that promote exclusion of any community group.
- Offensive Symbols or Flags - Any display of symbols historically associated with hate groups, oppression, or discrimination.

Encouraged Themes

- Patriotism & Community Pride - Red, white, and blue themes, local history, and hometown heroes.
- Diversity & Inclusion - Representing different cultures, traditions, and backgrounds.
- Family-Friendly Fun - Creative themes like classic Americana, local nature and wildlife, or historical moments of unity.
- Acts of Kindness & Togetherness - Celebrating volunteerism, local heroes, and community support.

Ensuring Compliance

To maintain these guidelines, we have implemented the following steps:

1. Clear and Early Communication - Guidelines will be shared with all applicants, who must agree to the rules before participating.
2. Application & Approval Process - Participants must submit float designs for review prior to the parade.
3. Parade Check-In & Inspection - Floats will be inspected before the parade begins.
4. Monitors Along the Parade Route - Parade marshals will oversee compliance during the event.
5. Enforcement & Accountability - Violators may be removed from the parade and banned from future participation.

Legal Considerations & First Amendment Compliance

The Spruce Up Warrenton 4th of July Parade's guidelines do not violate First Amendment rights. As a privately organized and permitted event, the parade has the right to set rules for participation. These rules are applied fairly and equally to all participants and focus on maintaining a positive, family-friendly, and inclusive environment.

To remain legally sound, these policies are:
- Content-neutral (not targeting specific viewpoints)
- Applied equally to all participants
- Framed around inclusivity and community values

By following these principles, we ensure the parade is a celebration for all while upholding community standards.

Thank You for Making This a Celebration for All!

We appreciate your commitment to making the Spruce Up Warrenton 4th of July Parade a safe, welcoming, and joyful event. If you have any questions about the guidelines, please reach out. Let's make this a parade to remember!

City Commission Agenda Memo

Meeting Date: May 27, 2025
From: Kevin Gorman, Public Works Director
Subject: Wastewater Treatment Plant Redesign - Phase 1

Summary:

As part of the City's long-term wastewater system improvements, we are preparing to begin **Phase 1 design work** for upgrades to our **Wastewater Treatment Plant and collection system**. These improvements are based on the **Facility Plan approved by the Commission and DEQ in August 2024**, which identified key upgrades needed to meet future treatment standards and accommodate projected growth in Warrenton over the next 20 years.

We have received a proposal from our design consultant, **Kennedy Jenks**, to complete this initial 30% design phase for a **not-to-exceed amount of $1,540,542**. This work includes site surveys, preliminary design, permitting, and reporting to DEQ standards. The environmental review and permitting process is expected to extend into 2026, while the core design work will be completed within approximately 11 months.

The full proposal, including detailed scope and cost breakdown, is attached for review. This phase will inform the final design scope (Phase 2), which will be brought to the Commission separately at a later date.

Recommendation/Suggested Motion:

*"I move to authorize the City Manager to execute an agreement with Kennedy Jenks Consultants for Phase 1 engineering services for the Wastewater Treatment Plant and Collection System Improvements Project, in an amount not to exceed **$1,540,542**, as outlined in the proposed scope of work."*

Alternative:

None recommended

Fiscal Impact:

N/A or...budgeted....or how funded

Attachments:
(All supporting documentation, i.e., maps, exhibits, etc., must be attached to this memorandum.)

- Scope of Work – Engineering Services for Wastewater System Improvements (Phase 1)

Approved by City Manager: Esther Moberg

Kennedy Jenks

1 May 2025

Memorandum

To: Esther Moberg, (City of Warrenton, City Manager)

Kevin Gorman, (City of Warrenton, Public Works Director)

From: Shawn Spargo, (Kennedy Jenks, Project Manager)

Subject: Wastewater Treatment Plant Engineering Services Contract – Phase 1
KJ 257600X.00

Esther and Kevin,

The attached scope and fee for engineering services is for the Wastewater Systems improvements Project will address design for the necessary treatment plant and collection system upgrades as outlined in the approved Facility Plan adopted by the Commission and approved by Oregon Department of Environmental Quality (DEQ) in August of 2024. The goal is to provide the City with upgrades that will meet treatment requirements and predicted growth in Warrenton for the next 20 years. The scope includes the following:

- Pre-design Report to DEQ standards
- 30% design with 80+ Drawings, 3D Revit building and mechanical preliminary design
- Opinion of Probable Cost to construct the improvements
- Bid Package with final Design Drawings for sludge removal from West Lagoon
- Update of your Biosolids Management Plan to DEQ standards for sludge removal
- Environmental/Wetland Permitting (Geo Engineers as a subconsultant)
- Geotechnical Investigation/Engineering Report (also Geo Engineers)
- Archeology to satisfy Section 106, needed for Federal Funding (ASCC as a subconsultant)
- Landscape/storm water design (Greenworks as a subconsultant)
- Survey of the WWTP with utility locates to support all of the above

The opinion of probable cost for the treatment plant and collection system upgrades will inform the scope for final design as determined by the City. Phase 2 final design will only include the improvements the City elects to carry forward, or any additional improvements that DEQ requires based on their review of the Predesign Report. Phase 2 would be a separate scope of work and would include bid ready drawings and specifications. Understanding exactly which improvements are moving forward will help us tailor the Phase 2 budget. The cost would be similar to Phase 1 – Preliminary design and the combined budget (Phase 1 and Phase 2) would not likely exceed 10% of the project construction cost, which was estimated at $35M in the Facility Plan.

Please reach out to me with any questions on the project or our proposal for engineering services. We look forward to working with the City on this important project. You can reach me at 503-423-4041 or by email at shawnspargo@kennedyjenks.com.

Enclosure(s) (1)

cc: Mark Cullington, Portland

Kennedy Jenks

14 April 2025

Engineering Services for Wastewater System Improvements Scope of Work

To: Esther Moberg, (City of Warrenton, City Manager)

From: Shawn Spargo, PE (Kennedy Jenks, Project Manager)
Emily Hudish, PE (Kennedy Jenks, Principal in Charge)

Subject: Engineering Services for Wastewater System Improvements
Phase I Scope of Work and Fee Estimate
K/J Project Number: 257600X.00

Introduction

Kennedy/Jenks Consultants (Kennedy Jenks) is excited to provide engineering services for predesign of process and capacity improvements at the City of Warrenton's Wastewater Treatment Plant (WWTP). Based on the City Commission Agenda Memo dated November 12, 2024, the following Scope of Work is proposed for completing Phase 1 (predesign) of the project. The following documents have been used as the basis of the Scope of Work:

- ***Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities Financed by* Infrastructure Finance Authority**, Oregon Department of Environmental Quality; Business Oregon; Rural Community Assistance Corporation and United States Department of Agriculture. May 2013.

- ***Final Warrenton Wastewater Facility Plan***, prepared for the City of Warrenton by Kennedy/Jenks Consultants. June 2024. The facility plan was approved by the Oregon Department of Environmental Quality in August of 2024.

Background

The City of Warrenton (City) has experienced continued population growth within its wastewater service area and expects this trend to continue. A condition assessment of the wastewater treatment plant has revealed that some assets are nearing the end of their service life. Finally, a condition assessment of the City's wastewater collection system has revealed defects causing increased inflow and infiltration and subsequent high peak flows at the WWTP. For these reasons, the Warrenton WWTP (and some collection system infrastructure) needs an expansion and upgrade.

The City retained the services of Kennedy Jenks to prepare a Wastewater Treatment Plant Facility Plan to detail the defects listed above, to evaluate a number of capital improvement alternatives to address these issues, and to identify a recommended alternative to meet its NPDES permit obligations over a 20-year planning period. The recommended alternative consists of the following:

- Convert existing sequencing batch reactors to membrane bioreactors.
- Upgrade the existing UV disinfection system.

- Improvements to the 5th Avenue pump station and headworks.
- Addition of a fine screens and primary effluent pump station.
- Replacement of the existing septage receiving station with a packaged station.
- Upgrades to the vactor waste station.
- Blower room mechanical and electrical upgrades.
- WWTP site utility water improvements.
- Replacement and relocation of an existing generator.

This project will include predesign deliverables at a 30 percent completion level and pertinent site investigation and permitting support (Phase I). The proposed Scope of Work for predesign services is described within this document and will include site investigation and wetland permitting, archeological services to meet Section 106 requirements to obtain federal funding, preliminary equipment layout drawings, an updated biosolids management plan and bid documents for lagoon biosolids removal, and a conceptual-level Engineer's Opinion of Probable Construction Cost (OPCC). The scope will also provide a permit modification pre-application meeting, and submitting a Preliminary Design Report (Predesign Report) to Oregon Department of Environmental Quality (DEQ). Project schedules, deliverables, and cost estimates will be provided to the City for review.

A Scope of Work for Phase II (detailed design) will be discussed with the City for review and approval following the completion of Phase I. Phase II activities will include the development of Final Design documents and bid period assistance. Task 0 is included as project contingency. This budget would only be used with the City's permission to address out-of-scope work needed to complete the Project or if tasks identified herein require additional effort.

Phase I will be completed in three tasks, as follows:

Task 1: Project Management

Task 2: Project Site investigation and Permit Support

Task 3: Predesign

Scope of Work

Task 1: Project Management and Meetings

Kennedy Jenks will develop and implement the appropriate management procedures and actions to facilitate timely and cost-effective delivery of quality service and deliverables to the City for the Project. This includes project administration related to schedule, budget, and scope management, management of subconsultants, and communication of project activities with the City.

The specific elements of this task include the following: project-setup, monthly invoicing, monthly progress reports, subconsultant agreements, development of project schedule, Project Initiation Plan, Health & Safety Plan, coordination with the City and consultant team, Concept & Criteria Review meeting, and a Project kick-off meeting. Quality Assurance management is included in this task, however, Quality Control (QA/QC) reviews of deliverables will be completed and included as a component under each individual task. This task also includes three workshops to coordinate and review design criteria and deliverables.

Task 1.1: Project Set-up, Invoicing, Progress Reports and Subconsultant Agreements

Kennedy Jenks will set-up the project within our accounting system which includes the development of a Project Initiation Plan (PIP). The PIP provides the project details for the entire team to follow including scope, schedule, and budget. A baseline project schedule will be developed as part of the PIP and presented at the Project kick-off meeting. We will also prepare subconsultant agreements. Kennedy Jenks will prepare and electronically submit monthly invoices to the City showing the breakdown of work completed to date for each staff, amount spent on the project to date, remaining budget and a summary of work completed for each month.

Task 1.1 Deliverables:

- Monthly invoices and project progress reports (electronic copy)

Task 1.2: Health and Safety Plan

Kennedy Jenks will prepare and implement a Health & Safety Plan for project activities. When Kennedy Jenks or subconsultants perform field work, they will implement the requirements of the Plan. During the Project, we anticipate site visits to coordinate work with City staff, assess existing facilities, and meet with subconsultants and vendors. The development of the Plan will include requirements pertaining to personal protective equipment, illness, or injury response procedures, and signed by all Kennedy Jenks staff who will perform field work. We anticipate the Phase I plan will also apply to Phase II work.

Task 1.2 Deliverables:

- Health & Safety Plan (electronic, PDF format).

Task 1.3: Project Coordination

Project coordination will include bi-weekly phone calls or Teams virtual meetings with the City's Project Manager and support staff as requested by the City. We will discuss work progress, schedule, and budget. Additional regular communication with the City's Project Manager will be done by phone and email to coordinate project activities. The frequency of these calls will be adjusted throughout the Project according to the level of activity. In addition, Kennedy Jenks will regularly communicate with the Project Engineer, project team members, and subconsultants to ensure delivery of the project. The internal meetings will be held weekly to coordinate staff and subconsultant activity. This task includes preparation and distribution of minutes and action items to the City.

Task 1.3 Assumptions:

- Virtual meetings will be facilitated using Microsoft Teams platform and in-person meetings will be held at the City.
- Bi-weekly meetings will be attended by the Kennedy Jenks Project Manager, Project Technical lead, and one staff engineer.
- A 10-month (~40 Week) schedule is assumed for the Project.
- The City will make the appropriate staff available for coordination of the Project, meetings and workshops.

Task 1.3 Deliverables:

- Bi-weekly status phone calls / Teams virtual meetings.

Task 1.4: Schedule Development and Update

Kennedy/Jenks shall develop a baseline project schedule for Project activities defined in this Scope of Work following the Notice to Proceed and shall maintain the schedule through the life of the project. The schedule will identify the major activities for the Project. The schedule will be updated as project conditions change, but no more than monthly. The schedule will be sent electronically when updated. The schedule will be prepared using Microsoft Project software and delivered electronically to City in PDF format. Kennedy Jenks shall prepare responses to comments received from the City on the draft schedule and incorporate the responses into the final schedule.

Task 1.4 Deliverables:

- Draft and final versions of Baseline Project Schedule (Electronic, PDF format).
- Monthly updates of Project Schedule (included with invoice, Electronic, PDF format).

Task 1.5: Quality Planning and Execution

Kennedy Jenks will develop a Project Work Plan that includes the quality plan for the project. The quality plan identifies and documents the plan and procedures that will be used throughout the entirety of the project to provide quality controls and assurance. The plan will be executed and include internal project initiation planning, routine project reviews and an in-house Concept and Criterion Review (C&CR) meeting. These processes will review technical delivery, as well as progress of the scope, schedule and budget.

The C&CR will be conducted early in the Project to obtain focused technical input from senior Kennedy Jenks staff based on their experience from other similar projects. This process is a component of Kennedy Jenks' quality control process and allows for senior staff, not directly involved in the project, to provide technical review and input into the design aspects of the project. It helps address opportunities for improvements to the design and address potential future challenges prior to expending effort in detailed design activities.

The C&CR meeting will be held at Kennedy Jenks's office and will be attended by up to four (4) key project team members.

Task 1.6: Project Kick-off Meeting (In-Person)

The purpose of the Project kick-off meeting is to review the Scope of Work, Project Schedule, discuss the communication plan for coordinating the various elements of the Project, and any short-term and long-term goals exclusive to the Scope of Work.

We request representatives from the City's Public Works Staff attend this meeting for introductions and to review the Project Scope of Work and Project Schedule in advance of the meeting. This meeting will be up to two (2) hours in length. Kennedy Jenks will prepare an agenda and graphics for presentation. During this meeting we will discuss the following:

- Project Scope and Schedule.
- Project Goals.
- Coordination of site investigation by subcontractors.
- Land use permitting.
- Coordination of a Request for Information.
- Biosolids Management goals and updates.

- Design deliverables and communications protocols.

Task 1.6 Assumptions:

- Up to three (3) KENNEDY JENKS Staff will attend an on-site meeting of up to two (2) hours in length, plus travel.

Task 1.6 Deliverables:

- Kick-off meeting agenda and minutes (electronic, pdf and Microsoft Word, respectively).

Task 1.7: Workshop 1 – Site Investigation Findings and Permitting Review (Virtual)

Kennedy Jenks will prepare and lead a meeting to discuss findings from Task 2 site investigations, including:

- Wetland delineation.
- Cultural resources investigation.
- SERP Environmental Assessment.
- Biological Evaluation.
- Joint Permit Application/Removal-Fill Permit.

The meeting will be attended by the Project Manager, Project Engineer, and up to one other Kennedy Jenks staff. The intent of the meeting will be to review permitting and SRF funding requirements with the City, as well as review the schedule for permit applications and anticipated agency review periods.

Task 1.7 Assumptions:

- Up to three (3) Kennedy Jenks staff will attend a virtual meeting of up to two (2) hours in length

Task 1.7 Deliverables:

- Workshop meeting agendas and notes (electronic, Microsoft Word).

Task 1.8: Workshop 2 – Conceptual Design and Cost Estimate Review (in person)

Kennedy Jenks will prepare and lead a meeting of up to two (2) hours in length at City Hall to discuss design criteria for WWTP and conveyance improvements. The intent of the workshop is to engage operations staff. This workshop will be somewhat less detailed than a Final Design Value Engineering Workshop and will function as a brainstorming session to refine costs and design criteria for treatment and collection system improvements. The workshop will be attended by Kennedy Jenks' Project Manager, Project Engineer, and Cost Estimator. The workshop agenda will cover the following:

- Design Criteria – WWTP and Collection System.
- Preliminary layout concepts for new equipment.
- Construction phasing.
- Capital cost development and estimate.

Task 1.8 Assumptions:

- Up to three (3) Kennedy Jenks staff will attend a virtual meeting of up to two (2) hours in length.

Task 1.8 Deliverables:

- Workshop meeting agendas and notes (electronic, Microsoft Word).

Task 1.9: Workshop 3 – Review Draft Predesign Design Report Meeting (Virtual)

After the draft Predesign Report has been reviewed by the City, we will present the recommendations from the report and have an open dialogue regarding any comments and concerns. We anticipate the workshop to be 2-hours long. Kennedy Jenks' Project Manager, Project Engineer, and up to one (1) other Kennedy Jenks staff will attend the workshop. We will incorporate comments from the workshop into a final Predesign Report.

Task 1.9 Assumptions:

- Up to three (3) Kennedy Jenks staff will attend a virtual meeting of up to two (2) hours in length.
- Client will provide initial Predesign review comments to Kennedy Jenks in spreadsheet form at least five (5) business days prior to the Draft Predesign review meeting (electronic, Microsoft Excel).

Task 1.9 Deliverables:

- Workshop meeting agendas and notes (electronic, Microsoft Word).

Task 1.10: Workshop 4 – Commission Update (In person)

After the draft Predesign Report has been reviewed by the City and comments have been incorporated, we will present the final recommendations to the Commission at a regular meeting at City Hall. Kennedy Jenks will answer questions from the Commission regarding the proposed project.

Task 1.10 Assumptions:

- Up to two (2) Kennedy Jenks staff will attend a commission meeting of up to two (2) hours in length.
- City will schedule a time and present materials to the Commission in advance of the meeting.

Task 1.10 Deliverables:

- Workshop meeting presentation materials (electronic, Microsoft Powerpoint).

Task 2: Project Site Investigation and Permit Support

The goal of this task will be to determine site-specific constraints and geotechnical design criteria for proposed WWTP site improvements and to perform site investigations in support of State Revolving Fund requirements. Kennedy Jenks will subcontract a site survey and geotechnical evaluation for the WWTP site in support of design activities. Copies of the site survey (Statewide Surveying) and geotechnical engineer (Geoengineers) subconsultants Scopes of Work are included in Attachment A in this proposal.

This task will also support State Environmental Review Program (SERP) reporting requirements for the SRF program. Kennedy Jenks will subcontract with Geoengineers to complete wetland delineations; an Environmental Assessment; a joint permit application USACE Section 404/Department of State Lands Remove-Fill Permit; and a threatened and endangered species

biological evaluation. Kennedy Jenks will subcontract ASCC to complete cultural resource studies pursuant to SERP requirements. Findings from these tasks will be included in a SERP Environmental Study. Geoengineers' and ASCC's proposals are included in Attachment A. In addition to the SERP Environmental Assessment, Kennedy Jenks will provide support to the City to prepare a county land use permit.

Task 2.1: Site Survey

Kennedy Jenks will work with our subconsultant, Statewide Surveying, to provide land surveying services to develop a base map for the project area within the WWTP and at select points outside the fence line where pump station improvements are planned. The survey will include the following elements: locations of existing structures; exposed piping; underground and above ground utilities; topographic features including 1-foot contours, major surface features, edge of roadways, and changes in elevation; and location and diameter of trees 6-inches in diameter or greater. Horizontal and vertical control datums used will match the state plane coordinate system. Kennedy Jenks will review the survey against marked utilities and plant as-built drawing from the 2007 expansion in the field and provide feedback to the surveyor. One (1) day onsite is budgeted for this review.

Task 2.1 Assumptions:

- The survey subconsultant will locate buried utilities based on "one-call" locates for work outside the WWTP fence line. The services of a private utility locator are included for utility locates inside the WWTP fence line using ground penetrating radar (GPR) scanning to located subsurface utilities. Statewide will retain Applied Professional Services (APS) for the GPR scanning and utility locates. Kennedy Jenks will review existing drawings and compare them to the surveyed underground utilities to identify the piping.
- Potholing of buried connection points at the existing WWTP and at locations along the pipeline is not included and assumed not to be needed at this Phase I effort.
- Survey horizontal and vertical control datums will be Oregon State Plain Coordinate System (NAD 83-) and National Geodetic Vertical Datum of 1929 (NGVD 1929).
- City will assist all subcontractors in gaining access to the WWTP.
- City will assist Kennedy Jenks with field review of survey and provide institutional knowledge on utility locations where locates are incomplete or information is conflicting between the survey and as-builts.
- Surveyor will follow Kennedy Jenks surveying and CAD standards.

Task 2.1 Deliverables:

- Survey base map set to Imperial, US Survey Feet (electronic pdf, sealed and signed by Professional Land Surveyor; and AutoCAD format).
- Land XML file of the existing surface.

Task 2.2: Geotechnical Investigation

Kennedy Jenks will work with our subconsultant, Geoengineers, to conduct a geotechnical investigation consisting of subsurface exploration, soils testing, and engineering analysis. The work will be documented in a Geotechnical Engineering Report that will be used to support the design of proposed WWTP site improvements. This report would include recommendations for site preparation, removal/mitigation of fill or unsuitable soil, subgrade preparation, evaluation of proposed imported site fill, foundation design, concrete slab and pavement design criteria.

Task 2.2 Assumptions:

- Kennedy Jenks will assist all subcontractors in gaining access to the WWTP Subcontractor will submit a plan of proposed subsurface investigation. City will review proposed subsurface investigation plan to confirm no conflicts exist at proposed borings or other subsurface exploration. City will locate and mark buried utilities in vicinity of proposed subsurface investigation.
- Surveyor will pick up boring locations following field investigation and include with the survey base map (Task 2.1).

Task 2.2 Deliverables:

- Draft and Final Geotechnical Engineering Report (electronic format: Microsoft Word and pdf).

Task 2.3: Wetland Delineation

Kennedy Jenks will work with Geoengineers to delineate jurisdictional waters (e.g., wetlands and streams) in the project area and document findings in a technical memorandum (TM). Geoengineers will use the methods defined in the 2010 Western Mountains, Valleys, and Coast Regional Supplement to the U.S. Army Corps of Engineers (Corps) 1987 Wetlands Delineation Manual to determine the presence and extent of wetlands in the project area, including the regulatory implications of existing water resources. The ordinary high water of streams and/or centerline of smaller waterways will be recorded with GPS.

Task 2.3 Assumptions:

- City will supply existing GIS files that include the WWTP and any environmental GIS data with relevance to the site.
- City will cover permit fees and submit Removal-Fill application to Department of State Lands (DSL).
- Surveyor will pick up wetland flagging following field delineation and include with the survey base map (Task 2.1).

Task 2.3 Deliverables:

- Draft and Final Wetland/Waterway Delineation Report (electronic format: Microsoft Word and PDF Acrobat pdf).
- Following confirmation of listed wetlands, provide a Removal-Fill permit to the City for review.

Task 2.4: Cultural Resources

Kennedy Jenks will subcontract with Archeological Services of Clark County (ASCC) to perform a historic properties desktop study of the project area pursuant to Code of Federal Regulations (CFR) 36 CFR 800.4 for proposed WWTP and conveyance infrastructure improvements where archaeological records indicate artifacts may be present. The study is intended to determine whether the proposed project will adversely affect historic properties, including archaeological resources. ASCC will submit an "existing conditions" report to DEQ for review and concurrence prior to conducting field studies.

If required, ASCC will provide a cultural resources survey (field work) to satisfy a portion of Section 106 of the National Historic Preservation Act, as amended, and its implementing regulation, CFR

36 CFR 800 as part of Phase II of this Project. The project may require a wetland impact permit from the Corps, providing the federal nexus that initiates the Section 106 process.

Task 2.4 Assumptions:

- The City will provide prior cultural resources assessments that may be relevant to the subject project area.
- ASCC will provide tribal notifications as required. DEQ as the lead permitting agency will submit existing conditions report to SHPO for review and approval.
- Field investigations for permit compliance will be scoped separately if required.

Task 2.4 Deliverables:

- Draft and Final Existing Conditions Report (electronic format: Microsoft Word and PDF Acrobat pdf).

Task 2.5: SERP Environmental Study

Kennedy Jenks will subcontract with Geoengineers to assist the City in complying with Oregon's State Environmental Review Process (SERP), the National Environmental Policy Act (NEPA) documentation and associated environmental permits required to comply with SRF and federal funding requirements. Planning for environmental permits will be discussed with the City in Workshop 1 (Task 1.8).

Geoengineers will prepare an Environmental Assessment (EA) that describes an evaluation of existing site conditions and potential environmental impacts from the proposed project. The EA will document the required federal cross-cutter coordination that is needed to meet DEQ State Environmental Review Process (SERP) requirements, in accordance with DEQ's Applicant Guide to the SERP (2022) and related guidance for preparation of the environmental report, including USDA's Rural Utility Service Guide for Preparing the Environmental Report for Water and Environmental Program Proposals (2008).

Geoengineers will identify application requirements for permitting requirements that may be necessary. Geoengineers will maintain ongoing coordination with the project team, the City, and agency representatives to complete the SERP application and required reporting. Geoengineers will prepare a permit matrix identifying the regulatory permits necessary for construction of WWTP and collection system improvements and identify the permit triggers, permit linkages, level of design needed for application, typical review times, overall schedule estimates, and potential permit obstacles. Geoengineers will prepare all permit applications and develop the supporting information necessary for submitting complete permit applications. Potential permits anticipated for this project include:

Joint Aquatic Resources Permit Applications (JARPAs) in support of:

- US Army Corps of Engineers Section 404 permits.
- Clean Water Act Section 401 water quality certifications.
- Endangered Species Act compliance.
- Biological assessments or evaluations.
- Wetland, aquatic, and critical areas permits including, aquatic habitat evaluation, delineation, and mitigation measures.
- Department of State Lands (DSL) removal fill permit.

Task 2.5 Assumptions:

- The City will provide prior environmental assessments or biological opinions that may be relevant to the subject project area.
- All pertinent information from this task will be included in the Predesign Report.
- The Environmental Assessment (EA) will document anticipated environmental impacts from the preferred WWTP improvements alternative identified in the 2024 WWTP Facility Plan.
- The EA will incorporate content from technical reports prepared as part of other subtasks of this scope, including the Wetland Delineation, Biological Assessment, and Cultural Resources report.
- This scope assumes an EA will support a DEQ Finding of No Significant Impact (FONSI) for the project. If it is determined the project will result in significant environmental impacts and an Environmental Impact Statement (EIS) and Record of Decision (ROD) are needed, this scope could be amended to facilitate that level of review and documentation.
- Kennedy Jenks has budgeted for two teleconferences with DEQ to coordinate SRF deliverables.
- The City will provide prior environmental assessments or biological opinions that may be relevant to the subject project area.
- The project will qualify for coverage under a USACE Nationwide Permit.
- The project will require an Individual Removal-Fill Permit from DSL.
- Mitigation for wetland impacts can be satisfied through mitigation bank credit purchase.
- Mitigation requirements for permanent waterway impacts, if required, will be verified with USACE, and a mitigation approach (e.g., riparian habitat enhancement through planting) will be described in the application. This scope of work does not include design services for mitigation, but this service could be provided under a scope amendment if required/requested.
- The City will sign the JPA and DSL Removal-Fill permit as Applicant and pay agency permit review fees.
- Kennedy Jenks will convert the GIS layer to AutoCAD format to include with the survey and to display wetland boundaries on civil drawings.

Task 2.5 Deliverables:

- DEQ meeting minutes and notes (electronic, PDF format).
- GIS layer indicating ordinary high water surface for mapped wetlands (Shapefile, .shp)
- Draft and Final EA (electronic, PDF format).
- Draft and Final Biological Assessment (electronic, PDF format).
- Draft JPA Package and 401 WQ Certification Request for City review (electronic, PDF format).
- Final JPA to USACE (electronic, Word and PDF format).

Task 2.6: Land Use Permit

Kennedy Jenks will coordinate with the City to prepare a land use application to facilitate a land use review in compliance with City standards. The application will address the City's procedures and application requirements prescribed in the municipal code. The application will include a completed Land Use Application form and a written narrative that addresses the relevant development standards and approval criteria for utility facilities. Kennedy Jenks will provide conceptual site plans for the WWTP in support of the application.

Task 2.6 Assumptions:

- DEQ's standard Land Use Compatibility Statement will be issued. Information on tax lots

and exhibits showing extents of improvement will be completed using PDF markups.
- Land use code review and summary of the narrative will be included in the Pre-design report (Task 3).
- Since construction will occur within existing lot lines, the effort included for land use approval is assumed to require 16 hours for a staff engineer and 16 hours for the project task lead, with 4 hours of oversight by the project manager. Coordination with the City Planner is included.

Task 2.6 Deliverables:

- Draft and final narrative for land use application with relevant land use criteria from the Warrenton Municipal Code cited for ease of review by City planning department.
- Draft and Final Land Use Application (electronic format: Microsoft Word and PDF Acrobat pdf).

Task 3: Predesign

Kennedy Jenks will expand upon concepts outlined in the Facility Plan to meet the requirements of the DEQ for a Predesign Report. This evaluation will focus on options for improvements for the new WWTP and Collection System. Site utility availability and requirements for power, water and natural gas will also be determined. As part of this scope, Kennedy Jenks will provide:

- Predesign report, including site investigation information from Task 2
- Preliminary equipment sizing and layouts, including biological and hydraulic modelling
- Preliminary drawings, developed to a 30% level of completion.
- Site visit to confirm design assumptions
- A preliminary Engineer's Opinion of Probable Construction Cost (Class IV estimate)
- An update of the City's Biosolids management plan (Task 4), to account for revised solids loads as determined by biological modeling in this task.
- Preliminary plans for partial removal of biosolids from the West Sludge Lagoon along with bid documents will be prepared as part of Task 4 for the City to administer the bid process.
- A preliminary Table of Contents of expected technical specifications to be completed during the detailed design phase.
- An internal QA/QC process to review all submittal documents.

Task 3.1: Process Design Review

Subtask 3.1.1 – Data Request

Kennedy Jenks will coordinate with City staff to gather available wastewater characterization and process operating data needed to support the process simulation. Coordination on the request will be communicated with the City during regular project check-ins (Task 1.3). This task involves preparing and submitting a data request for routinely collected operating data. The data request will also include drawing records, technical studies, utility billing or power consumption data, and other information not in Kennedy Jenks' possession if determined to be necessary to complete the evaluation. GIS information for the site will be requested and coordination with City GIS staff is included. As-built drawings for any pump stations addressed as part of this project will be requested.

Task 3.1 Deliverables

- Data request (electronic, PDF format, ESRI Arcview (GIS) shape files).

Task 3.1 Assumptions

- City staff will collect, organize, scan (if necessary), and transmit the requested documents in an easy to use electronic format (Excel, PDF, AutoCAD, MS Word, and Arcview shape files).
- The City will furnish influent, effluent, and plant operating data in Excel format in a single compiled spreadsheet for the last five (5) years with units included and all data labeled.
- Kennedy Jenks will use WWTP drawings from the 2007 improvements that have been provide previously.

Subtask 3.1.2 – Additional Sampling & Analysis

It is anticipated that additional sampling and analysis will be beneficial in performing the process assessment. Kennedy Jenks will prepare and submit a request for the City to sample and analyze for influent and effluent parameters that are not routinely collected by City staff. The analytical results will be used to establish ratios between normally monitored influent and effluent parameters, such as five (5) day biochemical oxygen demand (BOD_5), and parameters that may not be routinely monitored, such as chemical oxygen demand (COD). The request will identify sample locations, type of sample to be taken, analyses to be run on each sample, and frequency and duration of sampling at each location. Kennedy Jenks will review the analytical data provided by the City and request that the City provide clarification of any ambiguities that are observed in the data.

Based on past experience, it is anticipated that ten (10) days of sampling over a two-week period will be requested. Wastewater sampling may include COD, BOD_5, TSS, volatile suspended solids (VSS), total Kjeldahl nitrogen (TKN), ammonia-nitrogen, alkalinity, pH, temperature, nitrate and nitrite, total and ortho-phosphorus (TP and OP), conductivity, salinity, TDS, calcium, magnesium, iron, ultraviolet transmittance (UVT), turbidity, and other wastewater parameters that could impact the performance of the WWTP.

Deliverables

- Written request for additional wastewater sampling and analyses (electronic, PDF format).

Assumptions

- All sampling and analysis will be conducted and coordinated by, arranged for, and paid by the City, including lab costs. Kennedy Jenks can assist with sample collection and analysis, but this effort would be an additional cost.
- The City will furnish the analytical results compiled and organized into one or more PDF files. Kennedy Jenks to develop an Excel spreadsheet with all units labeled and samples identified by location, date, and analyte.

Subtask 3.1.3 – Process Simulation Review

This task will involve the review of a computer-based simulation of the WWTP secondary process provided by the packaged membrane bioreactor vendor based on design flows and loads determined by Kennedy Jenks. If the City elects to collect additional sample data (Task 3.1.2) Kennedy Jenks will provide that data to the vendor to refine their process model. The objective of this review will be to confirm the vendor's process design is reasonable. The results of the vendor's model simulations will be confirmed using hand calculations. Diurnal load

variations and the resulting required aeration system adjustments will not be modeled, but will be estimated by the vendor. The aeration estimates will be verified using hand calculations. Following this assessment, Kennedy Jenks will summarize process sizing provided by the vendor in the Predesign Report.

Deliverables

- Spreadsheet data summary for additional sampling results (electronic, Excel format)
- Draft and Final sampling results and modeling summary to be submitted with BODR (electronic, PDF format).

Assumptions

- One round of review comments will be provided to the vendor for necessary corrections to the vendor's process model.
- Review of up to six (6) steady state process simulations will be conducted.
- Vendor-simulated processes are expected to include a modified Ludzack-Ettinger (MLE) process with membrane bioreactor (MBR) for solids separation.
- Hand calculations for sizing aerobic digestion will be based on vendor model outputs for waste activated sludge production.

Task 3.2: Hydraulic Modeling

Kennedy Jenks will revise existing plant hydraulic models to determine plant hydraulic capacity and to create a plant hydraulic profile. Open-channel modeling will be conducted using Visual Hydraulics software and will be depicted in the plant hydraulic profile drawing. Hydraulic modeling to size pumps will be completed in Excel for pumps selected as part of the design including proposed collection system lift station improvements.

Task 3.2 Assumptions:

- Only steady-state flow model will be developed and used to assess the maximum month wet weather flow and the peak hour flow developed with the flow projections as part of the Predesign Report. Kennedy Jenks will use the Visual Hydraulics model developed during the Facility Plan for use in this scope of work.

Task 3.3: Draft Predesign Report

Kennedy Jenks will develop a draft Predesign Report (PDR) for City review. The report will follow Oregon Department of Environmental Quality's (DEQ's) *Guidelines for Writing Wastewater Engineering Design and Pre-Design Reports, 1994.* The BODR will also comply with *Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities, a joint publication developed by Infrastructure Finance Authority, Oregon DEQ, Rural Community Assistance Corporation and the United States Department of Agriculture, 2013.* The BODR is anticipated to contain the following information:

- Executive Summary
- Basis of Design:
  - Flow and load projections
  - Effluent water quality requirements
- Hydraulic Design Criteria

- Engineering evaluation and design criteria for the following unit operations:
    - Influent Pump Station
    - Headworks Screening
    - Grit Removal
    - Fine Screening
    - Anoxic Selector/Flow Equalization
    - Aeration
    - MBR Process, including chemical cleaning
    - Recycled and Waste Activated Sludge Pumping
    - UV Disinfection
    - Effluent Pumping
    - Aerobic Digestion
    - Utility Water System
    - Generator and Electrical Systems
    - Instrumentation and Control Systems
- Civil Improvements
- Geotechnical Considerations
- Environmental Permitting Evaluation
- Biosolids Disposal and Lagoon Capacity
- Collection System Improvements
- Process Control Description
- Code Review
- Stormwater Requirements
- Project Schedule
- Opinion of Probable Cost
- Drawings as summarized in Task 3.5, and
- Table of Contents for Specifications to be developed during design

Workshop 3 (Task 1.10) will be held virtually to review and discuss comments on the draft Report. Comments from the Workshop will be incorporated into another draft version for submittal to DEQ for their review. Kennedy Jenks will submit the revised draft Report to DEQ. The City and Kennedy Jenks will meet with DEQ (virtually) to discuss their comments on the draft Report.

Task 3.3 Assumptions:

- The City will provide consolidated review comments of the draft BODR in 14 calendar days in electronic format (excel).
- DEQ review of the draft BODR is assumed to be 60 days. The DEQ review meeting to discuss comments will be one (1) hour with up to three (3) consultants present.

Task 3.3 Deliverables:

- Draft PDR (electronic, PDF format).

Task 3.4: Final Predesign Report

Following the draft predesign report review meeting (Task 1.10), Client and DEQ comments will be incorporated into a final predesign report. The final report will be signed and sealed by professional engineer registered in the State of Oregon.

Task 3.4 Deliverables:

- Final BODR (electronic, PDF format).

- Update Comment log showing how DEQ comments have been resolved (electronic, Microsoft Excel).

Task 3.5: Preliminary Layout Drawings

Kennedy Jenks will advance a set of drawings (approximately 80) to a 30 percent completion level. A drawing list is included as Attachment B. The intent of the 30 percent design will be to develop a complete opinion of probable cost. These drawings will consist of:

- General Sheets, including notes and symbology; hydraulic profiles; process flow diagrams; design criteria; and conceptual construction staging.
- Demolition and Civil sheets, including a site plan and yard piping layouts.
- Structural notes, seismic parameters, plans and structural REVIT models.
- Architectural REVIT models, with plans and elevation drawings of selected areas.
- Process and Instrumentation Diagrams (P&IDs) showing primary flow path and control elements for recommended equipment.
- Process and Building Mechanical REVIT models with plans and sections showing equipment configurations.
- Electrical site plans, single line diagram, load calculation for generator sizing and area classification for new and modified structures per NFPA 820 guidelines.

These drawings will be submitted to DEQ to facilitate Predesign review.

Task 3.5 Deliverables:

- Preliminary Design Drawings bound with the BODR (Electronic, PDF format) AutoCAD (.dwg) and REVIT (.rvt) files can be made available upon request.

Task 3.5 Assumptions:

- Project will utilize Kennedy Jenks CAD Standards, title block, front-end sheets, standard details, 2D drawing and 3D model file templates as a basis for drawing production.
- Development of P&IDs for equipment provided by the MBR supplier will be vendor-provided and included as an appendix in the BODR. These include P&IDs for the anoxic selector, aeration basin, membrane basins, clean in place chemical system and Membrane/Aeration blowers.
- Six drawings required for the biosolids removal bid set (Task 4) will be developed to 100 percent and are described in Task 4. The 30 percent submittal will allow City review of these drawings.

Task 3.6: Site Visit

Kennedy Jenks will conduct up to one (1) site visit to the wastewater treatment plant for six discipline task leads plus the project manager and project task lead. The intent of the visit is to view process details, examine existing conditions and confirm project elements during preliminary design. The lead architect will confirm building materials to match existing site aesthetics. The project task lead for the biosolids removal effort will scope the removal including haul routes and contractor staging areas for the biosolids dewatering equipment. Building mechanical lead will review existing HVAC equipment for modification or replacement and perform a condition

assessment on exposed ducts and louvers. Electrical and instrumentation leads will confirm process and electrical interconnections once 30 percent design is progressing.

Task 3.6 Assumptions:

- Up to four (4) hours are budgeted for the site visit. Additional travel time is included per staff member based on office location.
- The site visit is in addition to in-person meetings described in Task 1.

Task 3.7: Preliminary Design QA/QC

Kennedy Jenks' Project Manager will oversee and implement our QA/QC program that will include review of pre-design deliverables (PDR, drawings, Spec TOC, Biosolids management plan, and cost estimate) prior to submission to the City.

Task 3.8: Cost Estimate

Kennedy Jenks shall prepare an Opinion of Probable Construction Cost (OPCC) for the Project in conjunction with the Draft BODR deliverable. Kennedy Jenks shall follow the principles and guidelines of the Association for the Advancement of Cost Engineering International (AACEI) and standard Kennedy Jenks cost estimating procedures. The OPCC shall meet the requirements of an AACE Class 4 estimate. The OPCC will be projected to the midpoint of the construction period and will be organized by process area and will be broken down by specification divisions. Results of the preliminary OPCC will be shared during Workshop 2 (Task 1.9). Revisions will be made based on changes to the scope and the final OPCC will be included in the Draft BODR.

Task 3.8 Assumptions

- Hazardous materials and contaminated soils removal and disposal will be excluded from OPCC.
- Unit rates will be developed using industry standard rates for labor and materials published in RS Means or comparable annual publication, in combination with recent contractor bid tabulations from local work performed within the last two (2) years and direct vendor quotes solicited for this project.

Task 3.8 Deliverables

- Class 4 OPCC (Electronic, PDF Acrobat format).

Task 4: Biosolids Management Plan and Solids Removal

Kennedy Jenks will update the City's Biosolids Management Plan to meet the requirements of the DEQ for continued lagoon solids management with removal and backfill activities for the West Lagoon summarized in a bid package complete with drawings.

Task 4.1: Update Biosolids Management Plan and Solids Disposal Bid Package

The goal of updating the BMP will be to obtain permission for dredging and land application of solids from the West Lagoon. Solids will be removed to create land area for new treatment plant improvements. Solids generation and retention rates will change as a result of process changes to the WWTP. Kennedy Jenks will use solids production and retention rates, projected in the modeling efforts in Task 3.1, to update the City's existing Biosolids Management Plan.

Kennedy Jenks will revise this plan in accordance with the Oregon Administrative Rule (OAR) Chapter 340, Division 50 and 40 CFR Part 503 requirements. These include description of solids processing, management aspects of biosolids production, land application, solids handling and transport means, biosolids monitoring and sampling program, and remedial procedures. This Task includes a Draft Review by the City and DEQ followed by incorporation of comments into the Final Plan.

Kennedy Jenks will take six (6) drawings to final design to create a bid package for lagoon dredging and disposal, which include:

G-001 Cover Sheet, Vicinity Map
G-002 Drawing List
C-001 Civil Legend and Notes
C-400 West Lagoon Plan and Sections
C-600 Erosion Control Standard Notes
C-601 Erosion and Sediment Control Plan

The bid package will also include development of Division 0 and 1 "Front End" specifications that include contract language. Up to three (3) technical specifications will be included for the City to bid the dredging and disposal work. Technical sections include: 1) Earthwork, 2) Dredging, Dewatering and Disposal, and 3) Site Restoration. Acceptance of the updated Biosolids Management Plan by DEQ will be required before the project is advertised. A draft of the plans and specifications will be provided to the City for review and comment. Kennedy Jenks will incorporate City comments and issue a final bid package for the City to advertise.

Task 4.1 Assumptions

- Permit revisions assume that six (6) of the 30 percent design drawings will be finalized for use in the bid set. The same drawings will be used for resubmittal of the permit application.
- The Biosolids Management Plan assumes no change to the Class of Biosolids produced, which will remain "Class B."
- The City will submit the amended Biosolids Management Plan to DEQ and pay review fees.
- Kennedy Jenks will budget up to one (1) hour for up to three Kennedy Jenks staff to attend a call with DEQ to discuss the updated Draft Biosolids Management Plan.
- The City will provide all comments to the Draft Biosolids Management Plan in electronic format (Word or email) within ten (10) business days.
- The final Report and the Bid Package will be signed and sealed by a Professional Engineer registered in the State of Oregon.
- Bid package will contain Kennedy Jenks' standard front end specifications (Division 0 and 1) and up to three (3) technical specifications covering sludge removal, berm construction and site restoration.
- City will host the plans and administer the bid process. City will open bids.
- Kennedy Jenks will answer questions from contractors during the bid period and issue one addendum if necessary.

Task 4.1 Deliverables

- Draft Biosolids Management Plan (electronic, PDF format).

- An electronic log of City and DEQ comments and the means of resolution thereof (electronic, excel format).
- Final Biosolids Management Plan (electronic, PDF format).
- Solids Removal Bid Package Draft and Final with specifications (electronic, PDF format).
- Addendum during bid period for City to distribute to bidders (electronic, PDF format).

Budget and Schedule

We propose to perform this Scope of Services on a time and material basis Not-to-Exceed (NTE) in the amount of $1,540,542. The NTE amount will not be exceeded unless approved by the City in writing. The detailed proposed budget and schedule of charges is located in Attachments C, and D, respectively. The schedule shows a project duration of approximately eleven (11) months for submitting the Basis of Design Report and Updated Biosolids Management Plan to DEQ. Environmental permitting tasks will extend into 2026 due to agency review times and the need to develop site concepts ahead of submitting the applications. The preliminary project schedule is included as Attachment E.

Authorization

This project will utilize Kennedy Jenks' Standard Terms and Conditions dated 1 August 2021 (Attachment F). We are prepared to begin immediately upon receipt of notice to proceed. We appreciate the opportunity to submit this proposal to the City. If you have any questions, please call me at (503) 333-7113 or by email at shawnspargo@kennedyjenks.com.

Very truly yours,

KENNEDY/JENKS CONSULTANTS, INC.

Very truly yours,

KENNEDY/JENKS CONSULTANTS, INC.

Emily Hudish
Principal in Charge

Shawn Spargo
Client Service Manager

AUTHORIZATION:

CITY OF WARRENTON

By: _____
(Signature)

_____
(Print Name)

Title: _____

Date: _____

Attachments:

Attachment A: Subconsultant Agreements
Attachment B: Preliminary Drawing List
Attachment C: Proposed Budget
Attachment D: Schedule of Charges
Attachment E: Preliminary Project Schedule
Attachment F: Standard Terms and Conditions

Attachment A - Subconsultant Scopes

ABHT
STRUCTURAL ENGINEERS
1022 NW Marshall Street #350
Portland, OR 97209
Tel 503.243.6682
www.abht-structural.com

DRAFT
February 12, 2025

Mr. Shawn Spargo, PE
Kennedy/Jenks Consultants, Inc.
1500 NE Irving St., Suite 200
Portland, Oregon 97232

RE: Warrenton WWTP Predesign + 30% Design
Warrenton, OR

Dear Shawn,

We are pleased to submit the following fee proposal for structural engineering services related to the Warrenton WWTP Predesign + 30% Design project located in Warrenton, OR. We understand that the City of Warrenton is entering into a contract with Kennedy/Jenks Consultants, Inc. ("Kennedy/Jenks") for this project, and that ABHT Structural Engineers ("ABHT") will be a sub-consultant to Kennedy/Jenks to provide structural engineering consulting services for the project. The following assumed drawing list was used in development of the project scope and fee:

Structural Drawing List:
S-001 Abbreviations and General Structural Notes
S-002 General Structural Notes - I
S-003 General Structural Notes - II
S-004 Statement of Special Inspection - I
S-005 Statement of Special Inspection - II
S-006 Statement of Special Inspection - III
S-008 Typical Sheet Notes
S-301 Septage Receiving Station Plan
S-401 Headworks Plan
S-402 Fine Screens Plan
S-501 MBR Basin Plan
S-502 MBR Building Plan
S-601 Blower Room Plan
S-801 UV Disinfection and Utility Water PS Plan
S-803 Generator Pad Plan

Project Scope of Work:

Task 1 - Project Management
1. Perform general project management and monthly invoicing services.

Task 3 - Pre-Design (30%)
1. Perform (1) Field Review of existing site conditions readily exposed to view. No destructive demolition or testing will be performed.
2. Attend Kickoff Meeting with Design Team and Client.
3. Attend (4) Design Meetings - assumed 1 hour/ea. via Teams.
4. Prepare structural section of the Basis of Design Report. Establish and confirm structural design requirements for the project. Confirm loading criteria and governing codes to be used in design of building and tank structures. Confirm special loading criteria as required.
5. Prepare 30% Design calculations and drawings for all process and non-process structures outlined in the structural drawing list. We assume that REVIT models will be provided to us for our use in setting up the structural models and drawings.
6. Prepare 30% Structural Specifications. ABHT assumes that we will markup Kennedy/Jenk's master structural specification sections which will be provided to us for review.
7. Attend 30% Review Meeting assumed via Teams.
8. Perform in-house 30% QA/QC.

Scope of Work - Overall Items

1. ABHT will review and comment on the structural portion of the cost estimate produced by the CM/GC and/or the cost estimating consultant at distinct stages of the project as required.
2. ABHT is responsible for design and specification consistency with the recommendations of the Geotechnical Report and coordinating amendments to the report when the foundation design requires additional recommendations/information from the geotechnical engineer. We assume that references to the Geotechnical Report are permitted in the Structural Documents. Geotechnical Engineer will markup the Earthwork section of Specifications to include recommendations as noted within their Geotechnical Report.
3. ABHT is responsible for all Structural Steel-Framed, Timber-Framed, Concrete and Load Bearing Masonry Assemblies.
4. ABHT is responsible for the structural design and documentation of architecturally exposed structural steel framing, including secondary framing such as canopies and other elements that are connected to the primary frame.
5. ABHT to provide support to Kennedy/Jenks for miscellaneous Fabricated Metal components.
6. ABHT will design the roof structures to support loads induced from a rooftop anchor system for the building's "Fall Arrest/Safety Restraint System." Kennedy/Jenks will provide rooftop anchor location information. The Fall Arrest/Safety Restraint System itself along with anchorage to the existing roof structure will be a contractor-designed deferred submittal item.
7. Exterior cladding systems at the exterior face of the building's primary structural wall framing along with their attachments are assumed to be contractor designed.
8. Exterior metal stud framing systems including their connections to the primary structure which provide support for exterior cladding systems are assumed to be contractor designed. Such metal stud framing systems include but are not limited to stud walls, wall girts, soffit framing, etc.
9. Additional assumed contractor designed items include, but are not limited to, the following:
    a. Ground Improvements (i.e., stone columns, geopiers, etc.)
    b. Building egress and other stairs, ladders, ships ladders, handrails and guardrails
    c. Curtainwall, windows, storefront and any other glazing systems.
    d. MEP equipment and distribution system gravity support and seismic/wind bracing
    e. Storage tanks or underground vaults with the exception of concrete basins designed for this project.
    f. Mechanisms/guide systems/backup guiderail and machine support for elevators
    g. Support for any solar or PV panel systems (if applicable)
    h. Precast Elements
    i. Overhead Crane, Jib Crane or Hoist Systems. ABHT will design foundations for such systems and coordinate the forces which such systems may impart on the primary structure. Travelling bridge cranes and their required structural support systems within a pre-engineered metal building (PEMB) are assumed to be designed by the PEMB manufacturer.
    j. Site Accessory Structures.
    k. Landscape Features and Furnishings (including but not limited to retaining walls, site walls, fences, screens, and catenary elements.)
    l. Flagpoles, Light Poles and their associated foundations
    m. Exterior stairs, ladders, ships ladders, guardrails and handrails
    n. Temporary or Permanent Excavation, Excavation Shoring, or Underpinning engineering and documents (this also includes support of adjacent structures due to issues from excavation in its proximity).
    o. Micro Piles and other specialty deep foundation systems if required by Geotechnical
    p. Pre-engineered wood roof trusses
    q. Pre-engineered metal buildings

Project Assumptions:

1. Estimated Predesign + 30% Design project duration is 8 months.
2. Structural drawings and details will be prepared using REVIT and CAD.
3. Design will be based on the requirements of the 2025 Oregon Structural Specialty Code (OSSC) assuming Risk Category IV buildings. Environmental engineering concrete structures will be designed per ACI 350-20. Since the 2025 OSSC will not be available until later this year, we will utilize the 2022 OSSC for preliminary design.
4. We assume that a site specific Geotechnical report will be provided to us for our use. We assume that foundations for all structures will consist of conventionally reinforced concrete spread or mat footings.
5. Cost estimating services are excluded from this scope of work. ABHT will only provide review and comments to the structural related portions of the cost estimate produced by others.
6. Responding to third party review (other than structural review comments by the owner or AHJ) is not included in this scope of work.
7. Kennedy/Jenks will cover the cost of hardcopy submittals if required.

Our fee for the work outlined in the Project Scope of Work and Project Assumptions above, as well as on the attached Excel work sheet, per the terms and conditions of the Master Contract between Kennedy/Jenks Consultants, Inc. and ABHT, LLC, dba ABHT Structural Engineers, would be billed on an hourly basis not to exceed a maximum amount of **$136,970 (including estimated reimbursable expenses)**. All task subtotals are approximate and not indicative of the amount that will be billed during that task or phase. We assume that we will bill on an hourly not-to-exceed basis (regardless of task or phase) up to a maximum amount of the Total Fee. We assume that the fee for each phase can be moved forward or backwards to other tasks or phases as needed to cover total hours spent.

We will bill for our services monthly, based on the hours of work performed. Additional or extra services, beyond those noted in the scope of work above will be billed at the hourly rates listed below.

2025 Hourly Rates	
Principal	$255.00/hr
Associate	$200.00/hr
Design Engineer	$180.00/hr
CAD/REVIT Drafter	$160.00/hr
Administrative	$105.00/hr

Reimbursable expenses as described within the Master Contract will be billed at our direct cost.

Please contact us if you have any questions or need further information. We look forward to working with you on this project.

Sincerely,

Clinton J. Ambrose, P.E., S.E.
Principal

Agreed to by:

_____
Signed (for Kennedy/Jenks Consultants, Inc.) Date

_____
Printed Name

ARCHAEOLOGICAL SERVICES LLC
601 Officers Row Vancouver, WA 98661 (360) 260-8614 archaeologicalservices.com

CULTURAL RESOURCE INVESTIGATION SCOPE/ ESTIMATE / CONTRACT

Warrenton WWTP Improvements Project, Clatsop County, Oregon

Prepared for:

Shawn Spargo, P.E. | Senior Engineer
1500 NE Irving St., Suite 200, Portland, OR 97232
Direct: (503) 423-4041 Cell: (503) 333-7113
ShawnSpargo@KennedyJenks.com

January 29, 2025

1. PROJECT UNDERSTANDING

Kennedy Jenks (KJ) is anticipating a contract with the city of Warrenton, OR to carry out design and permitting tasks associated with proposed improvements at the city's wastewater treatment plant (WWTP). The project is situated within the southeast quarter of Section 16 and the southwest quarter of Section 15, township 8 North, Range 10 West, Willamette Meridian.

As ASCC understands the project, it will involve: 1) the removal of the sludge in the West Pond and deepening this pond, 2) upgrading and possibly expanding the UV System building, 3) installing new underground conveyance piping in where existing piping exists, 4) redesigning the existing pre-aeration basin to expand capacity, 5) widening the access road on the west side of the WWTP, 6) performing electrical upgrades on existing infrastructure and 7) possibly constructing a new 6-inch septage pipeline.

The project is receiving funding from the U.S. Environmental Protection Agency (EPA) funding through the Oregon Department of Environmental Quality (DEQ) Clean Water State Revolving Fund program and is also expected to require compliance with NEPA and applicable federal environmental cross-cutting authorities making the project subject to cultural resources review under Section 106 of the National Historic Preservation Act (NHPA), as amended. The scope of work below is designed to inform this review and assist DEQ with Section 106 compliance. The project may also require a Section 404 permit for filling wetlands, which would trigger involvement from the U.S. Army Corps of Engineers (USACE).

Since the project's area of potential effect (APE) is on non-federal, municipally owned land, the proposed archaeological survey will require permitting from the Oregon State Historic Preservation Office (SHPO) if subsurface investigations are to be carried out per ORS390.235 and 358.905-961.

Preliminary background research shows a precontact shell midden site located near the project area.

This estimate is broken down into tasks starting with conducting a desktop review and a scoping trip to the project area – this first task will be the cultural resource assessment (CRA). Based on the results of the CRA, ASCC may recommend a formal cultural resources survey (CRS), that may include a subsurface investigation. If this is the case, ASCC will apply for and obtain the required SHPO permit.

2. SCOPE OF WORK

Archaeological Services, LLC (ASCC) shall agree to be responsible for the following tasks:

a) Discussions as needed with consulting parties, including the Oregon State Historic Preservation Office (SHPO), DEQ, and interested Tribes, including but not limited to the Grand Ronde, Siletz and Shoalwater Bay Tribes.
b) A cultural resources assessment of the APE, consisting of:
    a. A desktop review of background research to establish the APE's environmental, ethnographic, archaeological, and historical context.
    b. A scoping trip to the project area to assess existing conditions
c) If needed, a cultural resources survey of the APE, consisting of:
    a. A pedestrian survey covering the entire APE, walking parallel transects spaced no farther than 5 meters apart.
    b. A subsurface survey consisting of the excavation of up to 10 shovel test probes (STPs), targeting any high-probability areas identified during background research and/or the pedestrian survey. Each STP will be excavated by shovel as a ~45-cm circular hole to a depth of at least 60 cm below ground surface (BGS), barring impasse or collapse. If possible, one or more STPs may be sampled below the reach of a shovel using a hand-operated bucket auger, reaching as deep as 200 cm BGS. All excavated soils will be screened using nested 1/4-inch and 1/8-inch (6-mm and 3-mm) hardware cloth. Any recovered artifacts will be reburied onsite.
d) Documentation of the field effort using field notes, digital photography, and GPS/GIS data obtained using a Trimble R1 receiver.
e) Preparation of a technical report summarizing the results of the investigation and making recommendations for further study, as appropriate.

3. DELIVERABLE ITEMS

The deliverable items under this Agreement are:

a) A technical report detailing methods and results of the assessment/survey effort
b) SHPO site inventory forms as necessary
c) Project maps, photographs, and GIS data showing the APE, STP locations, and any cultural resources located during the investigation.
d) Recommendations for further work or avoidance areas, if warranted by findings

4. ESTIMATED COSTS

The total estimated, not-to-exceed cost to complete all the above tasks, is **$22,987.27** See the following pages for cost breakdowns. Please be aware that these estimated costs are based on currently available information. Unforeseen requests by consulting parties, unusually significant finds, or changes in project scope may necessitate a revision of these costs, to be discussed with the client at the earliest opportunity.

ASCC will track time and materials and will only invoice for actual time and materials accrued during project implementation.

Cost Breakdown Table:
Warrenton WWTP Improvements Project, Clatsop County, Oregon

1/29/25

Task - CR Assessment	Personnel	Estimated Hours	Billing Rate/Hr	Billable Amount
Project consultation with the Client, SHPO, Tribes, and other Agencies as needed	Principal Investigator	2	184.05	$368.10
	Archaeologist III	2	99.89	$199.78
Background & Literature Review	Principal Investigator	2	184.05	$368.10
	Archaeologist III	8	99.89	$799.12
Field Mobilization/Demobilization	Archaeologist III	1	99.89	$99.89
Travel Time	Archaeologist III	4	99.89	$399.56
GPS/GIS data management	Archaeologist III	1	99.89	$99.89
Graphics preparation	Archaeologist III	4	99.89	$399.56
Project Scoping	Archaeologist III	2	99.89	$199.78
CRA Report Writing	Archaeologist III	24	99.89	$2,397.36
	Principal Investigator	2	184.05	$368.10
			CRA Total Cost	**$5,699.24**

Continued Next Page...

Task - CR Survey w/ Shovel Probes	Personnel	Estimated Hours	Billing Rate/Hr	Billable Amount
SHPO Permit Application	Professional Archaeologist	2	152.71	$305.42
	Archaeologist III	8	99.89	$799.12
Field Mobilization/Demobilization	Archaeologist III	2	99.89	$199.78
Travel Time	Archaeologist III	8	99.89	$799.12
Fieldwork for a Cultural Resources Survey: Up to 10 STPs	Archaeologist III	8	99.89	$799.12
	Archaeologist II	0	87.48	$0.00
	Archaeologist I	0	80.19	$0.00
GPS/GIS data management	Archaeologist III	3	99.89	$299.67
Graphics preparation	Archaeologist III	6	99.89	$599.34
Artifact Processing	Lab Coordinator	16	99.89	$1,598.24
Artifact Analysis	Archaeologist III	8	99.89	$799.12
Report Writing and Editing	Archaeologist III	36	99.89	$3,596.04
	Principal Investigator	3	184.05	$552.15
Project Coordination/Scheduling Internal Discussions	Archaeologist III	2	$99.89	$199.78
Administrative	Office Coordinator	2	$74.94	$149.88
			Sub-Total	**$10,696.78**

Out-of-town Expenses

Additional Expenses	Unit Cost	Est. Units	Cost	
Mileage	0.700	200	$140.00	
Lodging	$125.00	2	$250.00	
Per diem	$60.00	2	$120.00	
			Sub-Total	**$510.00**

Continued Next Page...

Contingencies for Positive Findings

Contingencies	Personnel	Estimated Hours	Billing Rate/Hr	Billable Amount
Section 106 Clearance Form	Archaeologist III	5	$99.89	$499.45
Archaeological Site Form(s) Preparation	Archaeologist III	5	$99.89	$499.45
			Sub-Total	**$998.90**

OMNCH CURATION

Task	Personnel	Estimated Hours	Billing Rate/Hr	Billable Amount
Curation Prep*	Lab Coordinator	40	$99.89	$3,995.60
Travel Time to UOMNCH Museum	Archaeologist I	4	$80.19	$320.76
Collection Drop Off & Meeting with Museum Staff	Archaeologist I	1	$80.19	$80.19
			Sub-Total	**$4,396.55**
Additional Expenses	**Unit Cost**	**Est. Units**	**Cost**	
UOMNCH curation fees *per box	$420.00	1	$420.00	
Curation Supplies	Varies	Varies	$105	
Mileage to OMNCH	0.67	240	$160.80	
			Sub-Total	**$685.80**
			Total Curation	**$5,082.35**

* Hours for curation prep, and number of boxes needed for transfer, depends entirely on the volume of collected artifacts, which cannot be ascertained before completing fieldwork. One 40-hour week is assumed

Estimated Totals

CRA Total	5,699.20
CRS (No Findings)	$14,508.66
CRS (Positive)	$22,987.27

CULTURAL RESOURCES INVESTIGATION PROPOSAL
Warrenton WWTP Improvements Project, Clatsop County, Oregon

1/31/25

ASCC considers a signed estimate as notice to proceed.

_____ _____
FOR THE CONTRACTOR (ASCC) DATE

X
_____ _____
FOR THE CLIENT DATE

_____
PRINT NAME

*Estimate valid for 90 days from Contractor signature
1/30/25—AWG

Please provide contact information for your accounts payable (A/P) department for billing purposes.

Company Name _____

Billing Address _____

City, State, Zip _____

_____

A/P Contact _____

A/P Phone Number _____

A/P Email Address _____

GeoEngineers
4000 Kruse Way Place
Building 3 Suite 200
Lake Oswego, Oregon 97035
503.624.9272

February 11, 2025

Kennedy/Jenks Consultants, Inc.
2300 Oakmont Way, Suite 102
Eugene, Oregon 97401

Attention: Matt Horton and Shawn Spargo

Subject: Proposal
Geotechnical Engineering Design Services
Warrenton Wastewater Treatment Plant
Warrenton, Oregon
File No. 05579-005-00

Introduction and Project Understanding

GeoEngineers, Inc. (GeoEngineers) appreciates the opportunity to provide geotechnical engineering services for the City of Warrenton Wastewater Treatment Plant (WWTP). The wastewater treatment plant is located at 105 NE 5th Street in Warrenton, Oregon.

In preparing this proposal, we reviewed information provided by Kennedy/Jenks Consultants, Inc. (Kennedy Jenks) including the original 2003 geotechnical report for previous improvements, as well as nearby geotechnical reports in our files and aerial photos of the site. The project will include modifying existing infrastructure and building new infrastructure to meet the forecasted demands for the growing population in the area. The plant expansion includes the construction of a new membrane bioreactor (MBR) support building and a new building to house fine screens and pump station. These two new structures will expand the plant to the east and will require dredging and filling of the adjacent sludge lagoon. Based on current design concepts, the western 60 to 70 feet of the lagoon will be dredged and filled adjacent to aeration basins AB #1 and AB #2. The existing aeration basins will be replaced with new aeration basin structures and associated MBR trains. We understand that the existing aeration basins extend about 12 feet below existing grade and that the base of the new basins will approximately match this depth. Equipment upgrades are also planned in the UV building located in the northern part of the plant. We understand that the structures for this project are classified as Risk Category IV, which demands a low tolerance for ground deformations.

Soil conditions are anticipated to consist of up to 20 feet of soft compressible fine-grained soils overlying a layer of sand, which is underlain by soft compressible clay with interbedded sand layers. Groundwater is anticipated to fluctuate within the upper 9 feet of the dike. Key geotechnical considerations for the project are estimating static and seismic settlements at the site and providing foundation design and construction

recommendations. Based on the anticipated soil conditions, we anticipate that ground improvement or deep foundations will be necessary to meet the project performance criteria for settlement and lateral displacement after the design seismic event.

Scope of Services

The purpose of our geotechnical engineering services is to evaluate soil and groundwater conditions as a basis for developing geotechnical design criteria for the proposed project. Our proposed scope of services is based on our experience in the area and on similar projects. We are proposing additional deep boring explorations and laboratory testing to define the consolidation characteristics of the clay soils and provide detailed information for foundation and seismic design. Our proposed locations of subsurface explorations are provided in the attached site plan.

TASK 1 – PHASE 1 PROJECT MANAGEMENT AND MEETINGS

1. Attend design team meetings, as requested (estimate of 4 virtual team meetings).
2. General project management, invoicing and design team communications.

TASK 2 – REFERENCE DOCUMENT REVIEW

1. Review previous geotechnical reports, geologic/hydrogeologic mapping and published data for the site and nearby area.
2. Review as-built plans for the facilities, as available.
3. Coordinate with the design team regarding locations of (1) planned excavations and schedule, (2) new foundations for structures/piping, (3) existing and proposed subgrade improvements, and (4) deep foundations/ground improvement. Use this information to refine new exploration locations, as applicable.

TASK 3 – SUBSURFACE EXPLORATION AND LABORATORY TESTING

1. Develop an exploration plan for review by the City and design team. The plan will include locations of explorations, descriptions of drilling and sampling methods, well installation methods, schedule and site coordination, and proposed laboratory testing and procedures. Based on the design improvements we anticipate completing the following additional site explorations to supplement the existing subsurface data:
   - One boring to a depth of 90 feet,
   - Two borings to a depth of 70 feet,
   - Two borings to a depth of 50 feet.
   - Monitoring wells will be installed in three of the borings.

   Preliminary proposed boring locations are presented in the attached site plan. Preliminary locations of the monitoring wells are in borings B-1, B-2 and B-5 in order to space the groundwater data relatively uniformly across the site. If practical, we will coordinate the locations of the monitoring well installations so that they are outside of future excavation/construction areas. If this is not practical, the wells will

need to be decommissioned before the start of construction. We plan to install 10-foot long well screens at depths of approximately 25 to 35 feet within the anticipated water bearing sand layer.

2. Subcontract drilling to complete borings/monitoring wells identified above, using a truck- or track-mounted drill rig. Driven SPT samples will be obtained at 5-foot intervals. Relatively undisturbed Shelby tube samples will be obtained at selected locations for consolidation testing.
3. Install pressure transducer dataloggers in up to three of the monitoring wells to provide continuous groundwater level readings (hourly readings). Twelve months of groundwater monitoring is typical for projects where the groundwater level influences the design (buoyancy, liquefaction, consolidation settlement). However, we will not need to wait 12 months to do our analysis. A design groundwater elevation can be selected based on the first measurement after the wells are installed, proximity to the Skipanon River, and observations during drilling. Our fee estimate included budget for GeoEngineers to visit the site on a quarterly basis for 12 months to obtain groundwater monitoring data. The measurements will be plotted to determine typical seasonal fluctuations in groundwater levels.
4. Complete laboratory testing on representative soil samples obtained in the borings. Grain size analyses, consolidation testing and Atterberg Limits testing is anticipated, to characterize subsurface soils for foundation support, permeability, estimated ground settlement, and provide percent fines results for liquefaction analyses and seismic design.
5. Process data from soil, groundwater, and laboratory testing. Prepare final boring logs based on laboratory test results.

TASK 4 – ENGINEERING ANALYSES AND REPORTING

1. Describe site conditions including detailed subsurface soil and groundwater conditions and interpreted subsurface profiles at each improvement area based on results of the above tasks.
2. Provide seismic design parameters in accordance with 2018 IBC. Complete liquefaction analyses and estimated settlements due to liquefaction for varied earthquakes for subsurface conditions encountered in each of the improvement areas. Also provide estimates of differential settlements across differing foundation conditions and differing subsurface conditions.
3. Assess landslide and seismic hazards and complete seismic slope stability analyses of the proposed new embankment.
4. Provide recommendations for excavation, temporary cut slopes, and temporary shoring. This will include lateral pressures for conventional or internally braced shoring, and an assessment of other types of shoring as appropriate (soldier pile and lagging with full dewatering or groundwater cut-off walls)
5. Provide recommendations for monitoring shoring and adjacent facilities, where appropriate.
6. Provide a preliminary dewatering assessment based on the subsurface soil and groundwater conditions encountered, the planned excavations, and the historic dewatering activities at the site. This will include evaluation of groundwater monitoring in newly installed wells, hydraulic conductivity estimates based on laboratory test results, and estimated settlements caused by dewatering.
7. Evaluate short and long-term settlement resulting from placement of new loads (planned embankment and structures) and provide settlement mitigation measures (preload, surcharge, ground improvement), as appropriate.

8. Provide recommendations for shallow foundations for light facilities supported at grade where feasible, based on results of tolerable static and seismic settlements.
9. Provide alternative foundation support measures (ground improvement, deep foundations) based on the results of liquefaction analyses, tolerable settlements, and discussions with the structural engineer.
10. Assess foundation installation measures with respect to impacts to existing site infrastructure and current operations (proximity of excavations, support of facilities, vibrations, settlement due to dewatering, etc).
11. Provide recommendations for above-grade retaining walls for the improvements, and for other at-grade facilities and equipment slabs as needed (lateral pressures, subgrade preparation for slabs, subgrade modulus, foundation recommendations and allowable bearing pressures, etc).
12. Provide recommendations for below-grade structure design including lateral pressures, buoyancy and uplift, and foundation support for static and seismic conditions.
13. Provide recommendations for earthwork including new embankment fill and excavation backfill (structural fill content and gradation, suitability of on-site soils for reuse, placement and compaction, and mitigation of unsuitable soil conditions). This will include an evaluation of the effects of weather and/or construction equipment on site soils.
14. Develop a scope for additional hydrogeologic assessment or pumping test for dewatering analyses, if needed, based on our geotechnical evaluation and the planned improvements.
15. Prepare a draft geotechnical design report for review and comments. Incorporate review comments into the final report.

Our geotechnical work will be directly supervised by a professional engineer licensed in the state of Oregon. Our engineer will apply their professional seal to the final report.

Add Alternate Scope

If requested, GeoEngineers can perform slug testing and pumping tests to determine hydraulic conductivities of site soils.

Assumptions

In preparing this proposal, we have made the following assumptions with respect to the geotechnical engineering services.

1. Access to the site will be coordinated by others and be arranged prior to our arrival at the site to mark boring locations and conduct field explorations.
2. Based on discussions with our environmental team, we plan to store excess drill cuttings in drums and dispose off site.
3. Contaminated soils will not be encountered during our exploration and sampling. If contaminated or suspected contamination is encountered (based on field screening), we will consult with our environmental engineering staff, notify you and discuss how to proceed.

Schedule, Terms and Fees

Drilling subcontractors are approximately 4 to 6 weeks out for scheduling. We understand that approval for drilling onsite is not anticipated until May 2025. We estimate that the exploration program will require approximately 5 to 6 days to complete. Our report will be available approximately 4 weeks after completing the explorations. We will provide a verbal summary of our findings as the information becomes available, if requested.

Our scope of services will be provided on a time-and-expense basis for an estimated fee, in accordance with the Schedule of Charges and the General Conditions that are attached to and considered a part of this proposal. An approximate itemization of our expenditures for the scope of services outlined above follows.

TABLE 1. FEE ESTIMATE

DESCRIPTION	ESTIMATED FEES
Task 1 – Project Management and Meetings	**$5,000**
Task 2 – Reference Document Review	**$2,000**
Task 3 – Subsurface Exploration and Laboratory Testing	
Drilling Subcontractor	$42,000
Private Utility Locator	$1,000
GeoEngineers' Field Staff/Travel Expenses/Office Support During Drilling	$13,000
Geotechnical Laboratory Testing	$5,500
Task 3 Subtotal	**$61,500**
Task 4 –Engineering Analyses and Reporting	**$16,000**
Project Total	**$84,500**

Our services are for the exclusive use of Kennedy/Jenks Consultants, Inc. and their authorized agents for this project. There are no intended third-party beneficiaries arising from the services described in this proposal and no party other than those listed above shall have the right to legally rely on the product of our services without prior written permission of GeoEngineers. This proposal is valid for a period of 60 days.

We appreciate the opportunity to submit this proposal. Please call if you have questions regarding this submittal. Formal authorization for our services can be provided by returning one signed copy of this agreement.

Sincerely,
GeoEngineers, Inc.

Kyle M. Smith, PE
Senior Geotechnical Engineer

Debra C. Overbay, PE
Associate Geotechnical Engineer

KMS:DCO:alb:cdb

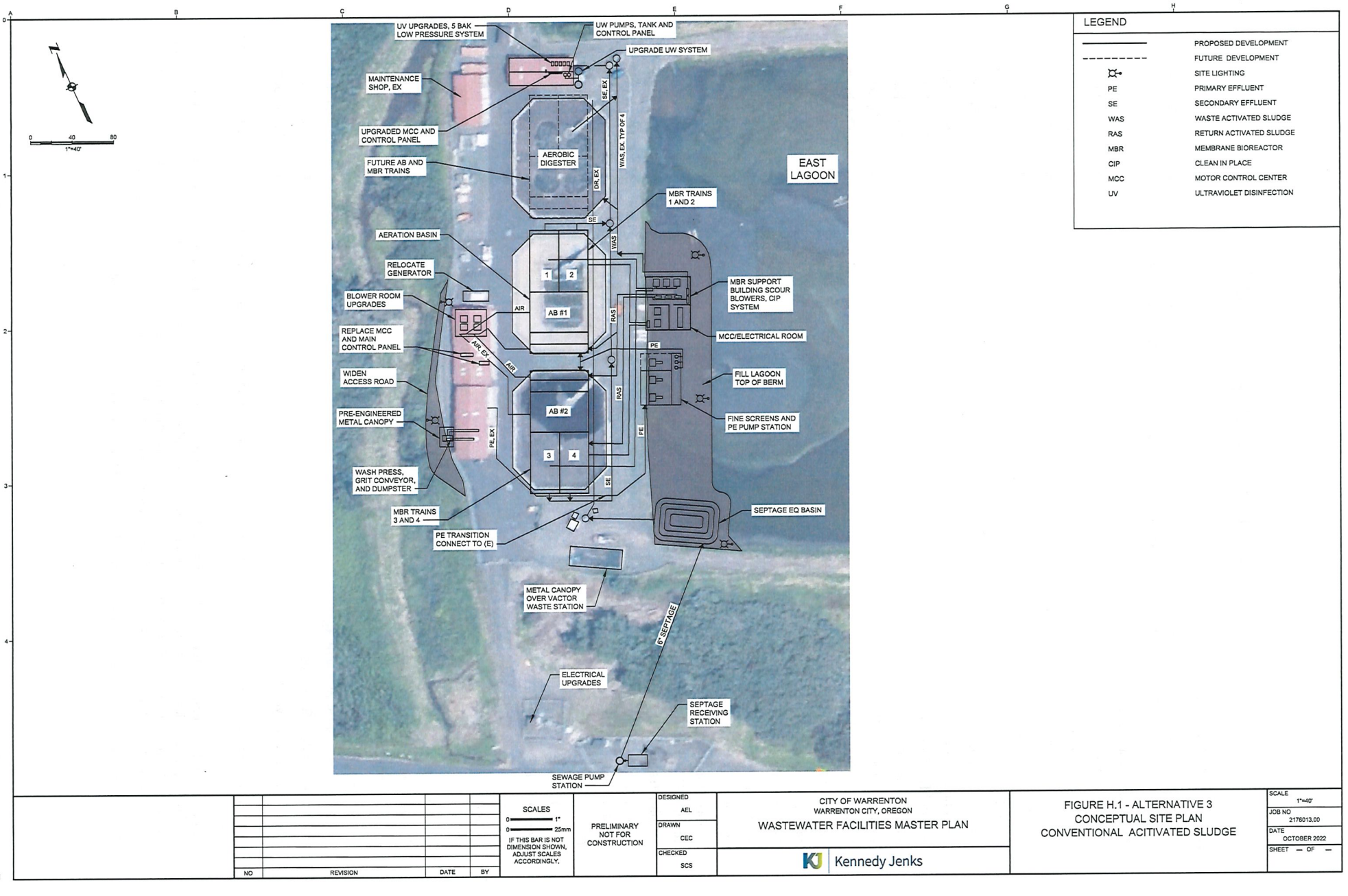
Attachments:
Site Plan
General Conditions – Standard 2021
Schedule of Charges – Portland 2025

One electronic copy submitted

The parties hereto have made, executed and agreed to this Agreement as of the day and year first above written. By signature below, Client accepts the scope of services and all terms described herein. In addition, Client's signature shall constitute as authorization to proceed on the date listed below Client's printed/typed name unless such authorization has been otherwise provided in writing.

Kennedy/Jenks Consultants, Inc.	
ORGANIZATION	* SIGNATURE
DATE	TYPED OR PRINTED NAME

*Individual with contracting authority.



NO	REVISION	DATE	BY

SCALES
0 1"
0 25mm
IF THIS BAR IS NOT DIMENSION SHOWN, ADJUST SCALES ACCORDINGLY.

PRELIMINARY NOT FOR CONSTRUCTION

DESIGNED AEL
DRAWN CEC
CHECKED SCS

CITY OF WARRENTON
WARRENTON CITY, OREGON
WASTEWATER FACILITIES MASTER PLAN

Kennedy Jenks

FIGURE H.1 - ALTERNATIVE 3
CONCEPTUAL SITE PLAN
CONVENTIONAL ACITIVATED SLUDGE

SCALE 1"=40'
JOB NO 2176013.00
DATE OCTOBER 2022
SHEET — OF —

Schedule of Charges - 2025

COMPENSATION

Our compensation will be determined on the basis of time and expenses in accordance with the following schedule unless a lump sum amount is so indicated in the proposal or services agreement. Current rates are:

PROFESSIONAL STAFF		
Staff 1 Scientist	$	138/hour
Staff 1 Engineer	$	146/hour
Staff 2 Scientist	$	155/hour
Staff 2 Engineer	$	164/hour
Staff 3 Scientist	$	173/hour
Staff 3 Engineer	$	184/hour
Project Scientist 1	$	205/hour
Project Engineer 1	$	212/hour
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Project Engineer 2	$	215/hour
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Senior Scientist 2	$	244/hour
Senior Engineer 2	$	248/hour
Associate	$	274/hour
Principal	$	295/hour
Senior Principal	$	305/hour
TECHNICAL SUPPORT STAFF		
Administrator 1	$	90/hour
Administrator 2	$	100/hour
Administrator 3	$	115/hour
CAD Technician	$	120/hour
CAD Designer	$	140/hour
Senior CAD Designer	$	164/hour
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Environmental Database Manager	$	212/hour
Health and Safety Specialist	$	135/hour
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*Hours in excess of 8 hours in a day or 40 hours in a week will be charged at one and one-half times the hourly rates listed above.

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Rates for data storage and web-based access will be provided on a project-specific basis.

EQUIPMENT		
Air Quality Equipment, per day	$	210.00
Air Sparging Field Test, per day	$	500.00
Asbestos Sample Kit, per day	$	35.00
Blastmate, per day/per week	$	120.00/500.00
Crack Gauges, per gauge	$	50.00
D&M Sampler, per day (1 day min.)	$	150.00
Dive Boat (plus fuel), per day	$	800.00
Electrical Tape, per day	$	35.00
Environmental Exploration Equipment, per day	$	210.00
Field Data Acquisition Equipment (Field Tablet), per day	$	55.00
Flow Meter, per day	$	60.00
Gas Detection and Oxygen Meters, per day (1 day min.)	$	105.00
Generator, per day (1 day min.)	$	105.00
Geotechnical Exploration Equipment, per day	$	180.00
Groundwater Development and Sampling Pump, per day (1 day min.)	$	205.00
Groundwater Pressure Transducer with Datalogger, per day /per week	$	55.00/220.00
GPS Unit – Professional Grade, per day	$	125.00
Hand Auger, per day	$	20.00
Hydro Multi Probe, per day	$	130.00
Inclinometer, per day (1 day min.)	$	210.00
Interface Probe, per day	$	65.00
Nuclear Density Gauge, $80/day, or $40/half-day	$	80.00/40.00
Peristaltic Pump, per day	$	60.00
pH Probe/Meter, per day	$	20.00
PID, FID or OVA, per day	$	130.00
Rock/Slope Fall Protection/Rigging Equipment, per day	$	700.00
Saximeter, per day	$	60.00
Scuba Diving, per day/per diver	$	700.00
Single Channel Data Logger w/Transducer, per day	$	110.00
Strain Gauge Readout Equipment, per day	$	45.00
Tedlar Bags & Air Sampling Equipment, per sample	$	25.00
Turbidity Testing Equipment, per day	$	50.00
Vapor Extraction Field Test, per day	$	510.00
Vehicle usage, per mile, or $50/half-day, whichever is greater	$	0.70
Water Quality Equipment, per day	$	150.00

Specialized and miscellaneous field equipment not listed above will be quoted on a project-specific basis.

OTHER SERVICES, SUPPLIES AND SPECIAL TAXES

Charges for services, equipment, supplies and facilities not furnished in accordance with the above schedule, and any unusual items of expense not customarily incurred in our normal operations, are charged at cost plus 15 percent. This includes shipping charges, subsistence, transportation, printing and reproduction, miscellaneous supplies and rentals, surveying services, drilling equipment, construction equipment, watercraft, aircraft, and special insurance which may be required. Taxes required by local jurisdictions for projects in specific geographic areas will be charged to projects at direct cost.

Per diem may be charged in lieu of subsistence and lodging.

Routinely used field supplies stocked in-house by GeoEngineers, at current rates, list available upon request.

In-house testing for geotechnical soil characteristics at current rates, list available upon request.

Associated Project Costs (APC)

Associated Project Costs (APC) equal to six percent (6%) of professional fees will be assessed. This fee allows GeoEngineers to invest in the necessary infrastructure to ensure we provide our clients with the latest technological and data security standards. The investments include maintaining and advancing technical tools and platforms across all aspects of our business, and strengthening our defenses against cyber threats to ensure data remains secure. These costs are not included in our hourly rates or direct expenses.

All rates are subject to change upon notification.

GeoEngineers
4000 Kruse Way Place, Building 3, Suite 200
Lake Oswego, Oregon 97035
503.624.9272

February 10, 2025

Kennedy/Jenks Consultants, Inc.
2300 Oakmont Way, Suite 102
Eugene, Oregon 97401

Attention: Matt Horton and Shawn Spargo

Subject: Wetland and Waterways Delineation and Permitting Proposal
Warrenton Wastewater Treatment Plant
Warrenton, Oregon
File No. 5579-005-00

Introduction

GeoEngineers, Inc. (GeoEngineers) is pleased to present this proposal for Wetland and Waterways Delineation and Permitting services for City of Warrenton Wastewater Treatment Plant (WWTP) located at 105 NE 5th Street in Warrenton, Oregon. We understand the project will include modifying existing infrastructure and building new infrastructure to meet the forecasted demands for the growing population in the area. The plant expansion includes the construction of a new membrane bioreactor (MBR) support building and a new building to house fine screens and pump station. Facility upgrades will include one area of road expansion that is potentially into a regulated wetland and/or waterway adjacent to the existing facility.

GeoEngineers will follow Department of State Lands (DSL), United States Army Corps of Engineers (USACE) and local regulatory code and guidance in identifying and collecting data on the subject of wetlands and waterbodies, and developing permit application materials, as described in greater detail within each task description below. This scope and cost estimate has been prepared based on our email correspondence with Kennedy/Jenks Consultants, Inc. (KJ) beginning in November 2024 through present.

Scope of Services

The proposed scope of services for this project includes three tasks (Tasks 1 through 3) as described below.

TASK 1. SITE VISIT AND WETLAND AND WATERWAYS DELINEATION REPORT

GeoEngineers will gather known information regarding habitat conditions at the site, such as the mapped presence of potential wetlands and other waterbodies that occur on or adjacent to the project area. We will compile soil, stream and wetland spatial data available from federal, state and local agencies. Additional

information such as topographic maps, aerial photographs and street layers will also be reviewed prior to conducting fieldwork and will be used to prepare report documentation.

GeoEngineers will conduct a field investigation to delineate waterways and wetlands with potential to be impacted by the project. The wetland delineation will be completed for the project using methods described in the *2010 Regional Supplement (Western Mountains, Valleys, and Coast)*[1] to the *Corps of Engineers 1987 Wetlands Delineation Manual*[2], and the *Manual for the Oregon Rapid Wetland Assessment Protocol (ORWAP)*[3]. The ordinary high water mark (OHWM) of any adjacent waterways, creeks or streams will be delineated in the project area following USACE protocol as referenced in the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Stream Interim Version*, November 2022 (David et al. 2022)[4]. Wetland/waterway boundaries will be marked in the field for follow-up survey by a professional surveyor (not part of this task), and/or boundaries and plot locations will be located by GeoEngineers' environmental staff using handheld global positioning system (GPS) units. A wetland and waterways delineation report will be prepared based on guidelines and requirements of DSL and the USACE.

Findings from the background review and field investigation will be presented in a delineation report prepared according to DSL and local requirements. The wetland delineation report will also include a function and value assessment of delineated wetlands and to support project permitting. The wetland assessment, if wetlands are identified, will be completed using the ORWAP[3]. The stream assessment, if streams are identified, will be completed using the *Stream Function Assessment Method* (SFAM)[5].

A draft report will be prepared and submitted to you for internal review and comment. After your comments are discussed and addressed, GeoEngineers will produce the final report that can be submitted with Joint Permit Application (JPA) permit documentation.

Assumptions

- City of Warrenton (City) will supply existing geographic information system (GIS) files that include the WWTP and any environmental GIS data with relevance to the site.
- The investigation area, for the purposes of this task, is limited to the road widening portion of the proposed project, occurring on the west side of the existing treatment facility footprint.

---

[1] United States Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

[2] Environmental Laboratory. 1987. U.S. Army Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

[3] Adamus, P., K. Verble, and M. Rudenko. 2016. Manual for the Oregon Rapid Wetland Assessment Protocol (ORWAP, revised). Version 3.1. Oregon Dept. of State Lands, Salem, OR.

[4] David, Gabrielle C. L., Ken M. Fritz, Tracie-Lynn Nadeau, Brian J. Topping, Aaron O. Allen, Patrick H. Trier, Steven L. Kichefski, L. Allan James, Ellen Wohl, and Daniel Hamill. 2022. National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams. Army Corps of Engineers Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory. TR-22-26.

[5] Nadeau, T-L., D. Hicks, C. Trowbridge, N. Maness, R. Coulombe, N. Czarnomski. 2020. Stream Function Assessment Method for Oregon (SFAM, Version 1.1). Oregon Dept. of State Lands, Salem, OR, EPA 910-R-20-002, U.S. Environmental Protection Agency, Region 10, Seattle, WA.

- All wetlands, streams and waterbodies within the investigation area will be delineated during the site visit. However, it is assumed that only one wetland and one waterbody/stream will be categorized/typed for the purposes of the report.
- This estimated cost is based on two GeoEngineers' biologists to be onsite. Two biologists are required for safety.
- There will be one round of revisions of the draft report before the report is finalized.
- GeoEngineers will respond to one round of agency comments and questions but will not conduct a second site visit as part of this scope.
- The wetland and waterways delineation report will not include a project impact analysis or proposed mitigation.

Deliverables

- Draft Wetland and Waterways Delineation Report
- Final Wetland and Waterways Delineation Report

TASK 2. PERMITTING

Task 2.1 – Agency and Design Team Coordination

Upon notice to proceed we will coordinate with KJ and the City to gather information and documentation regarding existing site conditions and proposed design direction. Upon approval by KJ, we will begin coordination with permitting agencies regarding a permitting pathway as well as State Environmental Review Process (SERP) coordination.

Various coordination requirements have been identified, including: wetland coordination with DSL, floodplain coordination with the City/Clatsop County (County) floodplain manager, farmland protection policy act coordination with the local planning department, coastal zone management coordination with the Department of Land Conservation and Development, and Endangered Species Act (ESA) and Magnuson-Stevenson Fishery Conservation Act (MSA) coordination with the US Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS).

More detailed descriptions of Agency and design team coordination items are discussed individually in Tasks 2.2 and 2.3 below.

Assumptions

- Duration of approximately 8 months.
- We assume at least two virtual meetings with regulators to broadly discuss the project will be required.
- Additional phone call and email coordination will also be needed.

Task 2.2 – JPA

Excavation and fill activities within waterways or wetlands would trigger the need for a Clean Water Act (CWA) Section 404 Permit from USACE and a Removal-Fill Permit from Oregon DSL. The issuance of a

federal (USACE) permit would also trigger the need to obtain a 401 Water Quality (WQ) Certification for the project from Oregon Department of Environmental Quality (DEQ). If additional wetland/waterway impacts are identified through the delineation efforts, then those impacts may also require permit coverage.

GeoEngineers will prepare a JPA form with supporting attachments that address USACE, DSL and DEQ submittal requirements for content and format. The application will describe the project's purpose/need and major elements, proposed construction approach, alternatives considered, unavoidable impacts, and avoidance and minimization measures. The application will include orientation maps (e.g., vicinity map, tax lot maps, aerial photograph) and project drawings based on KJ design plans, as required for a complete application.

In addition to the JPA package, GeoEngineers will prepare the 401 WQ Certification Request through DEQ's online system and prepare the required 30-day Pre-Filing Meeting Request ahead of the 401 Certification Request submittal. GeoEngineers will participate in a pre-filing meeting with DEQ if requested by DEQ.

GeoEngineers will coordinate with USACE, DSL and DEQ before and after application submittal to help communicate project objectives and approach, review anticipated impacts, and discuss application content, review process and schedule. GeoEngineers will maintain contact after application submittal to track review status and respond to questions or comments as appropriate.

Assumptions

- The project will qualify for coverage under a USACE Nationwide Permit
- The project will require a General Permit (GP) – Transportation-Related Structures under the Removal-Fill Permit from DSL.
- As listed in the GP eligibility criteria, compensatory mitigation for wetland impacts can be satisfied through mitigation bank credit purchase, in-lieu fee or payment in-lieu, unless otherwise approved by DSL. If compensatory mitigation under bank or in-lieu fee is not feasible, GeoEngineers will work with DSL and USACE to identify an alternate mitigation approach. However, this scope of services does not include preparation of a mitigation plan or associated analyses.
- Based on Oregon State mitigation bank maps, a suitable bank appears to be available within the watershed of the project area. If an alternate mitigation approach is needed, GeoEngineers can develop an alternate mitigation plan under a scope amendment.
- A subset of drawings required for the JPA submittal will be provided by KJ, including Site Plan, Plan view and cross section drawings, and Erosion and Pollution Control Plan(s).
- The City will sign the JPA as Applicant and pay agency permit review fees.

Deliverables

- Draft JPA Package and 401 WQ Certification Request for KJ review
- Revised Draft JPA Package and 401 WQ Certification Request for City review
- Final JPA Package and 401 WQ Certification Request for USACE, DSL and DEQ review

Task 2.3. – Environmental Assessment (EA) for Clean Water State Revolving Fund Funding

The City's application to DEQ for Clean Water State Revolving Fund (CWSRF) financing will require compliance with DEQ's CWSRF environmental review and documentation requirements. GeoEngineers will prepare an EA that describes an evaluation of existing site conditions and potential environmental impacts from the proposed project. The EA will document the required federal cross-cutter coordination that is needed to meet DEQ SERP requirements, in accordance with DEQ's *Applicant Guide to the SERP* (2022[6]) and related guidance for preparation of the environmental report, including *Preparing Wastewater Planning Documents and Environmental Reports for Public Utilities* (2019[7]) and *Guide for Preparing the Environmental Report for Water and Environmental Program Proposals* (2008[8]). The following resource categories will be covered in the EA document:

- Wetlands
- Floodplains
- Farmland
- Coastal Zone Resources
- Wild and Scenic Rivers
- Threatened and Endangered Species and Essential Fish Habitat (EFH)
- Air Quality
- Safe Drinking Water

The completed EA will be submitted to DEQ for review and distribution for public comment. GeoEngineers will assist KJ and the City with answering questions and responding to comments received from DEQ and/or the public on the EA content.

Assumptions

- The EA will document anticipated environmental impacts for one development alternative.
- This task does not include historic and cultural resources survey for compliance with the National Historical Preservation Act and Archeological and Historic Preservation Act.
- The EA will incorporate content from technical reports prepared as part of other subtasks of this scope, including the Wetland and Waterways Delineation.

---

[6] Oregon DEQ Applicant Guide to the State Environmental Review Process. 2022. Available at: https://www.oregon.gov/deq/FilterDocs/SERPApplicantGuide.pdf. June 2022.

[7] Business Oregon, Oregon DEQ, Rural Community Assistance Corporation and United States Department of Agriculture. 2019. Available at: https://www.oregon.gov/deq/FilterDocs/FacilitiesPlansGuidelines.pdf

[8] U.S. Department of Agriculture. 2008. Guide for Preparing the Environmental Report for Water and Environmental Program Proposals. RUS Bulletin 1794A-602. March 2008 Version 1.2. Available at: https://www.oregon.gov/deq/FilterDocs/GreenGuide.pdf

- With the exception of wetlands and waterways, other EA categories will be based on readily available literature and professional judgement. If specific discipline reports are prepared by others, we can incorporate those into the EA documentation.
- This scope assumes an EA will support a DEQ Finding of No Significant Impact (FONSI) for the project. If it is determined the project will result in significant environmental impacts and an Environmental Impact Statement (EIS) and Record of Decision (ROD) are needed, this scope could be amended to facilitate that level of review and documentation.
- Threatened and endangered species and EFH discussions within the EA will be sufficient for USACE ESA Biological Assessment (BA) requirements. A standalone BA is not proposed as part of this task.

Deliverables

- Draft EA for KJ review
- Revised Draft EA for City review
- Final EA for DEQ review
- Responses to Comments Received on EA

Schedule and Budget

We are in a position to begin work within 4 to 5 weeks after receiving your authorization to proceed. Our services will be completed in accordance with the terms described in our General Conditions, which are attached and form a part of this proposal. Please review our General Conditions carefully and advise us if you have any questions or desire to modify the terms of our agreement. We will endeavor to keep you apprised of project status and conditions that may significantly affect our scope and estimate.

The professional services listed above will be provided on a time-and-expense basis for an estimated fee in accordance with the attached Schedule of Charges. We will invoice for the balance on a monthly basis. The total estimated fees for the work described above based on the assumptions also described above is $45,700. A breakdown of costs is provided in the following table.

TABLE 1. FEE ESTIMATE

TASK	FEE
Task 1 – Site Visit and Wetland and Waterways Delineation Report	$16,100
Task 2 – Permitting	
Task 2.1 – Agency and Design Team Coordination	$9,500
Task 2.2 – JPA	$6,600
Task 2.3 – Environmental Assessment (EA) for Clean Water State Revolving Fund Funding	$13,500
Total Fee Estimate	**$45,700**

Our services are for the exclusive use of Kennedy/Jenks Consultants, Inc. and their authorized agents for this project. There are no intended third-party beneficiaries arising from the services described in this proposal and no party other than the party executing this proposal shall have the right to legally rely on the product of our services without prior written permission of GeoEngineers.

This proposal is valid for a period of 60 days commencing from the first date listed above and subject to renegotiation by GeoEngineers, Inc. after the expiration date.

Please call if you have questions or require additional information.

Sincerely,
GeoEngineers, Inc.

Courtney M. Stoker, PWS
Biologist

Jason R. Scott, FP-C
Associate Fisheries Scientist

CMS:JRS:tlm

Attachments:
General Conditions – Standard 2021 (rev. 07.22.21)
Schedule of Charges – Portland 2025

Schedule of Charges - 2025

COMPENSATION

Our compensation will be determined on the basis of time and expenses in accordance with the following schedule unless a lump sum amount is so indicated in the proposal or services agreement. Current rates are:

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Flow Meter, per day	$	60.00
Gas Detection and Oxygen Meters, per day (1 day min.)	$	105.00
Generator, per day (1 day min.)	$	105.00
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Hydro Multi Probe, per day	$	130.00
Inclinometer, per day (1 day min.)	$	210.00
Interface Probe, per day	$	65.00
Nuclear Density Gauge, $80/day, or $40/half-day	$	80.00/40.00
Peristaltic Pump, per day	$	60.00
pH Probe/Meter, per day	$	20.00
PID, FID or OVA, per day	$	130.00
Rock/Slope Fall Protection/Rigging Equipment, per day	$	700.00
Saximeter, per day	$	60.00
Scuba Diving, per day/per diver	$	700.00
Single Channel Data Logger w/Transducer, per day	$	110.00
Strain Gauge Readout Equipment, per day	$	45.00
Tedlar Bags & Air Sampling Equipment, per sample	$	25.00
Turbidity Testing Equipment, per day	$	50.00
Vapor Extraction Field Test, per day	$	510.00
Vehicle usage, per mile, or $50/half-day, whichever is greater	$	0.70
Water Quality Equipment, per day	$	150.00

Specialized and miscellaneous field equipment not listed above will be quoted on a project-specific basis.

OTHER SERVICES, SUPPLIES AND SPECIAL TAXES

Charges for services, equipment, supplies and facilities not furnished in accordance with the above schedule, and any unusual items of expense not customarily incurred in our normal operations, are charged at cost plus 15 percent. This includes shipping charges, subsistence, transportation, printing and reproduction, miscellaneous supplies and rentals, surveying services, drilling equipment, construction equipment, watercraft, aircraft, and special insurance which may be required. Taxes required by local jurisdictions for projects in specific geographic areas will be charged to projects at direct cost.

Per diem may be charged in lieu of subsistence and lodging.

Routinely used field supplies stocked in-house by GeoEngineers, at current rates, list available upon request.

In-house testing for geotechnical soil characteristics at current rates, list available upon request.

Associated Project Costs (APC)

Associated Project Costs (APC) equal to six percent (6%) of professional fees will be assessed. This fee allows GeoEngineers to invest in the necessary infrastructure to ensure we provide our clients with the latest technological and data security standards. The investments include maintaining and advancing technical tools and platforms across all aspects of our business, and strengthening our defenses against cyber threats to ensure data remains secure. These costs are not included in our hourly rates or direct expenses.

All rates are subject to change upon notification.

Utility Locating

Applied Professional Services, Inc.

43530 SE North Bend Way
North Bend, WA 98045

"Solutions that exceed expectations"

Date	Project Address/Job Number:	Services Performed For:
2/14/2025	105 NE 5th street Warrenton OR Q036-2025 Kennedy Jenks Warrenton, OR. **RM Reference Mapping was requested on this site **** **This covers a 3-man crew with all requested science.**	Statewide Surveying Greg Engelgau
	Scope is an area in red sent in image sent by Greg. ** **GPR and Sonde success depends on site specific conditions and access. No guarantees***	greg@statewidesurveying.com 971-235-0037

Scope of Work

A. APS, Inc. will employ all industry and best practices to designate and mark the known conductible and/or non-conductible utilities within the project boundaries.
B. APS, Inc. will sweep the area, after the known utilities have been marked, to attempt to identify any unknown or abandoned utilities.
C. The project boundaries are defined by civil drawings or maps provided by the Client.
D. **Conductible Utility Locating** refers to conductible *(metallic)* utilities only.
E. **Non-Conductible Utility Locating** refers to non-conductible *(non-metal)* utilities only. This is generally for sewer & storm facilities only, or sewer & storm video inspection.
F. **GPR Utility Locating** refers to Ground Penetrating Radar, used to find non-metallic utilities such as concrete, PVC, or polyethylene water mains, USTs, and other anomalies.

Cost Estimate

Mobilization fee and lodging	1	$4,290.00	$4,290.00
RM Conductible budget	32	$155.00	$4,960.00
RM GPR budget	8	$210.00	$1,680.00
RM Sonde Budget	12	$195.00	$2,340.00
		Labor Est. Total	$13,270.00

TERMS AND CONDITIONS
Applied Professional Services, Inc.

Invoicing

Net 30 days on all billing unless specified otherwise under a separate contract or negotiation.

Disclaimer

APS, Inc, and or its employees cannot guarantee that all conductible and/or non-conductible utilities within the project boundaries can or will be found.

Project Estimate

NOT TO EXCEED WITHOUT WRITTEN CLIENT APPROVAL:

This hourly / not to exceed project estimate is based on the estimated number of hours it will take to perform the Scope of Work. If the project requires additional time or costs to complete the Scope of work, then written approval to exceed the original cost estimate is required.

Statewide Land Surveying

By _____

Name _____

Title _____

43 NW Ava Ave
Gresham, OR 97030
503-665-7777

STATEWIDE LAND SURVEYING INC.

1915 Washington Ave
Baker City, OR 97814
541-406-3012

Client Name:	Kennedy Jenks	**Bid No:**	Q036-2025
Client Contact:	Matt Horton	**Date:**	Monday, January 27, 2025
Project Name:	Topographic Survey / Record of Survey	**Prepared By:**	Eric Hyatt PLS
Site Location:	City of Warrenton WWTP	**Expires:**	2/26/2025
Attachments:	None	**Status:**	**Confidential**

Topographic / Existing Conditions Survey

Mapping of topography and existing site conditions will be accompanied by a Record of Survey (see "Record of Survey" section below). Mapping shall include the following features:

- Contours at 1-foot intervals
- On-site development including (but not limited to): Dwelling(s), outbuilding(s), fencing/landscape features
- Vegetation/Trees (as required; diameter at breast height only, Arborist required for species identification)
- Utilities (as-painted)

The following documents shall be provided upon request: CAD file and PDF of drawing, Land XML surface file(s), and survey point file(s).

Services	Amount
Research/Project Preparation	$99.00
Research Deed and Survey/Plat Records	
Pre-calculations	
Field Investigation	$7,916.80
Project Briefing	
Establish Project Control	
Map Topography/Conditions	
Calculations/Analysis	$492.00
Analysis of Field Data	
Analysis of Deeds/Title	
Drafting/Deliverables	$2,340.00
Topographic / Existing Conditions Survey	
Topographic / Existing Conditions Survey Total Labor	**$10,847.80**

Record of Survey

A Record of Survey includes the following services:

- Research of deed(s) and existing survey/plat records
- Analysis of research documents and pre-calculations for field investigation
- Field investigation of monuments of record to establish project control and occupation mapping (as applicable)
- Analysis of collected field investigation data
- Drafting and Professional Land Surveyor (PLS) review of a Record of Survey
- Setting property corner monuments and property line staking (as applicable)
- Submittal of Record of Survey to County for review/filing
- Submittal of electronic Record of Survey to Client (hard copies available upon request)

If sufficient corner monumentation is found during the initial field work and the needs of the Client are met, the project may be deemed completed and costs will revert to time and materials.

Services	Amount
Calculations/Analysis	$324.00
Analysis of Field Data	
Analysis of Deeds/Title	
PLS Analysis of Boundary	
Field Investigation / Corner Establishment	$2,112.00
Boundary	
Set Corner Monumentation	
Drafting/Deliverables	$1,107.00
Drafting of Record of Survey	
PLS Review	
PLS Review	$536.00
Record of Survey Total Labor	**$4,079.00**

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1915 Washington Ave
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Hydrographic Survey				
Single beam hydrographic survey of approximately 0.7 acres.				
Services	**Quantity**	**Unit**	**Unit Price**	**Amount**
1 Person Survey Crew	10.00	Hour	$168.00	$1,680.00
Vessel Operator	10.00	Hour	$132.00	$1,320.00
6' CEE-USV Survey Boat	1.00	Per	$362.00	$362.00
Hydrogracphic Survey Total Labor	**21.00**			**$3,362.00**

Survey Recording Fees				
Type	**Quantity**	**Unit**	**Unit Price**	**Amount**
County Recording Fee	1.00	Per	$395.00	$395.00
Processing Fee	1.00	Per	$58.00	$58.00
Total Recording Fees	**2.00**			**$453.00**

Survey Equipment/Materials				
Equipment/Materials	**Quantity**	**Unit**	**Unit Price**	**Amount**
None	0.00	Per		$0.00
None	0.00	Per		$0.00
None	0.00	Per		$0.00
Total Survey Equipment/Materials	**0.00**			**$0.00**

Reimbursable Expenses				
Per Diem	**Quantity**	**Unit**	**Unit Price**	**Amount**
Survey Techinician 1	5.00	Day	$135.00	$675.00
Survey Techinician 2	5.00	Day	$135.00	$675.00
	0.00	Day	$0.00	$0.00
Survey Truck 1	0.00	Mile	$0.580	$0.00
Survey Truck 2	0.00	Mile	$0.580	$0.00
Total Reimbursable Expenses	**10.00**			**$1,350.00**

Survey Fee Schedule		
Classification	**Unit**	**Rate**
1 person survey crew	Hour	$168.00
2 person survey crew	Hour	$226.00
3 person survey crew	Hour	$288.00
Vessel Operator	Hour	$132.00
Clerical	Hour	$58.00
Computations	Hour	$102.00
Drafting	Hour	$102.00
Licensed Land Surveyor	Hour	$158.00
Planning	Hour	$116.00
Research	Hour	$102.00

43 NW Ava Ave
Gresham, OR 97030
503-665-7777

STATEWIDE LAND SURVEYING INC.

1915 Washington Ave
Baker City, OR 97814
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Standard Agreement for Professional Services between Statewide Land Surveying, Inc. (SWLS) and Client

Terms and Conditions

1. SWLS assumes that the survey is limited to the project area identified within the Scope of Services
2. SWLS assumes that the client will provide a continuous right of entry for all areas.
3. SWLS assumes all services to be performed will be completed in accordance with the current governing agencies requirements as of the time of this proposal. Modifications or revisions required because of new jurisdictional code or design requirements will be completed as a Contract Addendum.
4. SWLS assumes that reimbursable expenses will be itemized and invoiced separately at cost plus 10% and any additional work will be invoiced as per our Survey Fee Schedule, less any negotiated discounts.
5. SWLS assumes that during the course of any survey, it may become necessary to enter adjoining ownerships, which could add time, expense, and difficulty to the project. These additional expenses may be charged to the client on a time and materials basis.
6. SWLS assumes that the client agrees to allow a copy of the map being created under the scope of work to be provided to property owners whose property we enter during the course of this survey (if the property is outside of the urban growth boundary, and the survey is requested in writing) per ORS 672.047 (Oregon only, a copy of this statute may be obtained online at the following address: http://www.oregonlaws.org/ors/672.047).
7. SWLS assumes that traffic control (i.e.-flaggers/traffic control application/plan), if necessary, shall be provided by the client, or billed at cost plus 10%.
8. SWLS assumes that all fees will be paid by client and/or owner at the time fees are required.
9. SWLS assumes that full payment for services will be paid prior to filing or recording of any maps, surveys, plats and/or etc.
10. SWLS assumes that client (or client's representative[s]) will communicate all existing and potential safety hazards (working tub-grinders, mechanical brush clearing, logging, blasting, etc.) to SWLS prior to starting work, and will coordinate with SWLS regarding such hazards for the duration of the project to ensure that our staff members will not be required to be present during such activities.
11. SWLS assumes that our staff members (and our sub-consultants) have the right to leave a site at any time due to conditions perceived to be unsafe (working tub-grinders, mechanical brush clearing, logging, blasting, etc.) and that any additional costs associated with exercising this right may require a Contract Addendum.
12. SWLS will make all reasonable effort to schedule a field crew within 48 hours of receiving a staking request (excluding weekends and holidays). Requests received after 2:00 p.m. will be scheduled 48 hours from the start of the next business day.
13. If boundary resolution is involved in the scope of services SWLS assumes that there are no conflicts in the deeds, surveys, and/or plats. If a problem arises the client will be notified immediately and the fee will need to be adjusted.
14. Matters of unwritten property rights are not within the scope of the Standard Agreement, unless stated otherwise.

Contract Addendums

SWLS assumes additional services requested by the client not identified within the above Scope of Services will be completed on a time and materials basis or lump sum in a contract addendum. These services will be listed in detail in the contract addendum and required to be approved by the client prior to commencement of the services.

Sub-Consultant Services

SWLS assumes no sub-consultant services are needed at this time. SWLS assumes any wetland, traffic, arborist, geotechnical, site electrical, site lighting, street illumination, or architectural services will be contracted directly with the owner.

Reimbursemable Expenses

Customary reimbursable expenses are the actual expense incurred in direct connection with the project plus 10% (including, but not limited to: copy and reproduction services, travel expenses and express postage). Vehicle mileage is reimbursed at a rate of $0.580 per mile for project related travel in excess of 100 miles.

Due Dates and Past Due Balances

Balances are due within 30 days of the date shown on the invoice. If balance is not paid within 45 days of the date shown on the invoice, the balance is considered "Past Due" and a 18% APR will be applied to the remaining balance until paid in full. If balances are not paid in full within 50-60 days of the date shown on the invoice, SWLS will contact their attorney and/or the balance will be sent to a collection agency.

Attorney Fees

SWLS assumes that if an attorney is required, to collect fees, for arbitration and/or for a court of law, all fees accumulated by SWLS shall be paid by the client.

43 NW Ava Ave
Gresham, OR 97030
503-665-7777

STATEWIDE LAND SURVEYING INC.

1915 Washington Ave
Baker City, OR 97814
541-406-3012

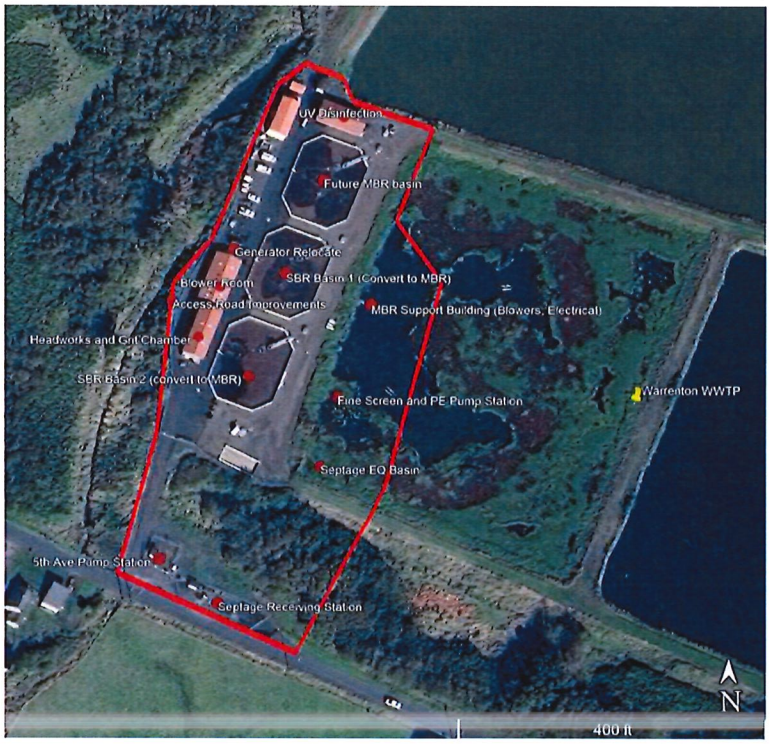
Acknowledgement	
Estimated Topographic / Existing Conditions Survey Labor Cost:	$10,847.80
Estimated Record of Survey Labor Cost:	$4,079.00
Estimated Hydgrographic Survey Fee:	$3,362.00
Estimated Recording Fees:	$453.00
Estimated Survey Equipment/Materials Cost:	$0.00
Estimated Reimbursable Expenses:	$1,350.00
Total Estimated Project Cost*:	**$20,091.80**

*Project stages will be billed as they are completed. Additional rates apply to work not addressed in this estimate. Cancellation fees apply.

This professional service agreement is entered into Monday, January 27, 2025 by and between Statewide Land Surveying, Inc. (SWLS) and Kennedy Jenks (Client) for the provisions of professional land services at City of Warrenton WWTP (location).

Eric Hyatt PLS Statewide Land Surveying, Inc.	Kennedy Jenks Client / Representative
1/27/2025 Date Signed	Date Signed

Site



Attachment B - Drawing List

Number	Drawing Title	Number	Drawing Title
1	G-001 COVER, GENERAL LOCATION AND VICINITY MAPS	46	I-001 INSTRUMENTATION LEGEND AND NOTES
2	G-002 DRAWING INDEX	47	I-201 P&ID UTILITY WATER & 5TH AVENUE PUMP STATION
3	G-003 GENERAL ABBREVIATIONS	48	I-301 P&ID SEPTAGE RECEIVING STATION
4	G-004 GENERAL NOTES AND LEGEND	49	I-401 P&ID HEADWORKS
5	G-005 GENERAL EQUIPMENT DESIGNATIONS AND PROCESS IDENTIFICATION CODES	50	I-402 P&ID FINE SCREENS
6	G-006 GENERAL PROCESS SYMBOLS	51	I-403 P&ID PE PUMP STATION
7	G-007 STAGING AREA AND CONSTRUCTION SEQUENCING	52	I-701 P&ID WAS PUMP
8	G-008 DESIGN CRITERIA	53	I-801 P&ID UV DISINFECTION EQUIPMENT
9	G-009 HYDRAULIC PROFILE	54	M-001 MECHANICAL LEGEND AND NOTES
10	G-010 PROCESS FLOW DIAGRAM	55	M-201 5TH AVENUE PUMP STATION PLAN
11	D-010 EXISTING CONDITIONS AND DEMOLITION PLAN	56	M-301 SEPTAGE RECEIVING STATION PLAN
12	C-001 CIVIL NOTES	57	M-401 HEADWORKS PLAN
13	C-002 CIVIL LEGEND	58	M-402 FINE SCREENS
15	C-100 OVERALL SITE PLAN	60	M-501 MBR BASINS 1 & 2
16	C-101 HORIZONTAL CONTROL AND PAVING PLAN - I	61	M-502 MBR BASINS 3 & 4
17	C-102 HORIZONTAL CONTROL AND PAVING PLAN - II	62	M-503 MBR BUILDING PLAN
20	C-250 SECTIONS - I	65	M-801 UV SYSTEM AND UTILITY WATER PLAN
21	C-251 SECTIONS - II	66	M-803 GENERATOR PLAN
22	C-300 YARD PIPING PLAN - I	67	H-001 HVAC NOTES AND LEGENDS
23	C-301 YARD PIPING PLAN - II	68	H-002 HVAC EQUIPMENT SCHEDULES
24	C-400 WEST LAGOON PLAN AND SECTIONS	69	H-401 HEADWORKS HVAC SCHEMATIC
25	C-500 DETAILS	70	H-601 BLOWER MECHANICAL AND ELECTRICAL ROOM HVAC SCHEMATIC
26	C-600 EROSION CONTROL STANDARD NOTES	71	H-502 MBR SUPPORT BUILDING HVAC SCHEMATIC
27	C-601 EROSION AND SEDIMENT CONTROL PLAN - I	72	H-402 FINE SCREENS HVAC SCHEMATIC
28	C-602 EROSION AND SEDIMENT CONTROL PLAN - II	73	H-801 UV BUILDING HVAC SCHEMATIC
29	S-001 STRUCTURAL NOTES	74	E-001 ELECTRICAL ABBREVIATIONS AND NOTES
30	S-002 SPECIAL INSPECTION AND TESTING PLAN	75	E-002 ELECTRICAL SYMBOLS - I
31	S-003 STANDARD CONCRETE NOTES	76	E-003 ELECTRICAL SYMBOLS - II
32	S-301 SEPTAGE RECEIVING STATION PLAN	77	E-010 SINGLE LINE DIAGRAM - I
33	S-401 HEADWORKS PLAN	78	E-011 SINGLE LINE DIAGRAM - II
34	S-402 FINE SCREENS PLAN	79	E-012 SINGLE LINE DIAGRAM - III
35	S-501 MBR BASIN PLAN	80	E-101 SITE PLAN
36	S-502 MBR BUILDING PLAN	81	E-102 AREA CLASSIFICATIONS
37	S-601 BLOWER ROOM PLAN	82	E-501 MBR SUPPORT BUILDING EQUIPMENT PLAN
38	S-801 UV DISINFECTION AND UTILITY WATER PS PLAN	83	ED-001 SINGLE LINE DIAGRAM DEMOLITION - I
39	S-803 GENERATOR PLAN	84	ED-002 SINGLE LINE DIAGRAM DEMOLITION - II
40	A-001 CODE REVIEW	85	ED-003 SINGLE LINE DIAGRAM DEMOLITION - III
41	A-401 HEADWORKS SCREENINGS STORAGE AREA PLAN		
42	A-402 HEADWORKS SCREENINGS STORAGE AREA EXTERIOR ELEVATIONS		
43	A-501 MBR SUPPORT BLDG PLAN		
44	A-502 MBR SUPPORT BLDG EXTERIOR ELEVATIONS		
45	A-801 UV DISINFECTION AND UTILITY WATER PUMP PLAN		

Client Name: City of Warrenton
Project Description: WWTP Upgrades
KJ Project Number: 25760XX.00
Date 4/14/2025
Project Schedule: 46 Weeks

Classification:	PIR (Walz) (E8)	PIC - Project Reviews (Hudak) (E8)	CSM (Wood) (E8)	QA/QC (Wright) (E7)	QA/QC (Boardman) (E7)	Project Manager (Jones) (E7)	Project Technical Lead Engineer (Engineering Staff (Collections) (Horton) (E4)	Engineering Staff (Boucher/Hager) (E2/E3)	Process Modeling QC (Seymour)(E8)	Process Modeling (Kim) (E5)	Engineering Staff (Kowalkowski) (E2/E3)	Electrical QC (Mohr) (E8)	Discipline Lead Architectural (Preston) (E7)	Architect (Mahoney) (E4)	Discipline Lead Electrical (Hoepfl) (E6)	Discipline Lead HVAC/P Ryan Ray (E6)	Forrest Herndon (E4)	Instrumentation QC (Reisinger) (E7)	Cost Estimating (Gerlach) (E5)	Cost Estimate QC (Hoffman) (E7)	Discipline Lead Instrumentation (Mejia) (E4)	H&S Plan (Jindra) (E4)	Senior CAD Designer (Hill)	Senior CAD Designer	Project Admin. (Dias)	Total	KJ Labor	KJ Applied Project Cost	Sub Survey/Locates (StatewideAPS)	Sub Stormwater Design (Grennorks)	Sub Geotech & SERP (Geoengineers)	Sub Cultural Resources (ASCC)	Sub Structural ABHT	KJ SubMarkup	KJ ODCs	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses
Hourly Rate:	$295	$295	$295	$270	$270	$270	$225	$200	$165	$295	$245	$200	$295	$270	$200	$245	$295	$200	$270	$225	$270	$200	$200	$180	$180	$155	Hours	Fees	$/hr	Fees	Fees	Fees	Fees	Fees	5%	Fees				Fees
Task 00: Project Contingency	4	4	4	4	4	4	4	4	4	2	2	4	2	4	4	4	4	4	4	4	4	4	4	8	12	4	110	$25,330	$550						$0		$25,880	$0	$0	$25,880
Task 1: Project Management																																								
1.1: Project Set-up, Invoicing, Progress Reports and Subconsultant Agreem	8	16	16			32	78	8	2			4														24	188	$44,440	$940	$3,500	$2,000	$7,000	$2,400	$6,500	$1,070		$45,380	$22,470	$0	$67,850
1.2: Health and Safety Plan						2		2	1			1											4				10	$2,105	$50						$0		$2,155	$0	$0	$2,155
1.3: Project Coordination			22			132	178	92	92			92	8	4	16	16	4	16		8		16			40	12	748	$163,160	$3,740						$0		$166,900	$0	$0	$166,900
1.4: Schedule Development and Update			4			16	40	16																			76	$17,700	$380						$0		$18,080	$0	$0	$18,080
1.5: Project Work Plan and C&CR			2	2		8	8	12	2	4		12	4														54	$12,580	$270						$0		$12,850	$0	$0	$12,850
1.6: Project Kick-off Meeting (external and internal) - In-Person internal (assume 1 hr) external (2 hr on site)	0	0	1 1	1 1		11 3 8	10 2 8	12 2 10	4 4	0	1 1	1 1	1 1	1	1	1	1	1	1 1	1	1 1	1	0	1 1	1 1	2 2	54	$12,160	$270						$0	$630	$12,430	$630	$0	$13,060
1.7: Workshop 1 – Site Investigation Findings and Preliminary Review - Virtual						6	6	6	6			6													6		36	$7,440	$180						$0		$7,620	$0	$0	$7,620
1.8: Workshop 2 – Conceptual Design and Cost Review - In Person (3 staff)						8	10	2	2			2							12								36	$8,240	$180						$0	$700	$8,420	$0	$700	$9,120
1.9: Workshop 3 - Review Draft Predesign Report - Virtual						6	6	6				8															26	$5,770	$130						$0		$5,900	$0	$0	$5,900
1.10: Workshop 4 - Commission Update - In Person (2 staff)						12	8					8															28	$6,640	$140						$0	$570	$6,780	$0	$570	$7,350
Task 1 - Subtotal	8	16	45	3	0	233	344	156	109	4	1	134	13	5	17	17	5	17	1	21	1	17	4	1	47	38	1256	$280,235	$6,140	$3,500	$2,000	$7,000	$2,400	$6,500	$1,070	$1,330	$279,735	$22,470	$1,330	$310,885
Task 2: Project Site Investigation and Permit Support																																							
2.1: Site Survey						2	12	4	12			4												24		4	62	$11,780	$310	$30,525					$1,526		$12,070	$32,052	$0	$44,122
2.2: Geotechnical Investigation					8	2	4	4	4			12												4			38	$8,180	$190		$10,000	$77,500			$4,375		$8,370	$91,875	$0	$100,245
2.3: Wetland Delineation (WWTP)						2	4	4	12			4												16			42	$7,900	$210	$2,500		$16,100			$930		$8,110	$19,530	$0	$27,640
2.4: Cultural Resources						2	12	4	4			4												8			34	$6,940	$170				$20,588		$1,029		$7,110	$21,617	$0	$28,727
2.5: SERP Environmental Study			2			4	12	4	8			4												16			50	$10,170	$250			$29,600			$1,480		$10,420	$31,080	$0	$41,500
2.6: Land Use Permit (LUCS)			2			2	16	4	16			4															44	$8,970	$220						$0		$9,190	$0	$0	$9,190
Task 2 - Subtotal	0	0	4	0	8	14	60	24	56	0	0	32	0	0	0	0	0	0	0	0	0	0	0	68	0	4	270	$53,930	$1,350	$33,025	$10,000	$123,200	$20,588	$0	$9,341	$0	$55,270	$196,154	$0	$251,424
Task 3: Predesign																																								
3.1: Process Modeling																											0	$0	$0						$0		$0	$0	$0	$0
3.1.1: Data Request						1	4		12	16	8	12															53	$12,230	$265						$0		$12,495	$0	$0	$12,495
3.1.2: Additional Sampling & Analysis							2		8	2	2	8															22	$4,450	$110						$0		$4,560	$0	$0	$4,560
3.1.3: Process Simulation & TM							2	11	20	14	37	74															158	$33,945	$790						$0		$34,735	$0	$0	$34,735
Confirm Vendor Process Model (rolled into 3.1.3)											6	12																											
Review Process Simulations (6) (rolled into 3.1.3)								2		4	8	16																											
Prepare Hand Calculations (rolled into 3.1.3)								2		2	8	16																											
Initial Process Design Criteria (rolled into 3.1.3)								2		4	8	16																											
Review vendor-provided process sketch								1		1	1	2																											
Draft Modeling Summary for BODR (rolled into 3.1.3)								2		2	4	8																											
Final Modeling Summary for BODR (rolled into 3.1.3)								2		1	2	4																											
3.2: Hydraulic Modeling						4	8	8	32																		52	$9,760	$260						$0		$10,020	$0	$0	$10,020
3.3: Draft Predesign Report			2			8	16	56	64	8	40	40	8	8	12	12	12	16		8				24	12	6	352	$74,080	$1,760		$10,000				$500		$75,840	$10,500	$0	$86,340
3.4: Final Predesign Report						4	12	24	32	4	16	16	4	4	8	8	8	8	0	4		8		16	12	4	192	$40,100	$860		$5,000				$250		$41,060	$5,250	$0	$46,310
3.5: Preliminary Layout Drawings (30%) + Spec TOC	0	0	0	0		58	223	196	60	0	8	148	11	16	62	156	48	117	18	0		62	0	108	782	4	2078	$420,373	$10,388					$130,470	$8,524		$430,760	$138,994	$0	$567,754
3.6: Site Visit (30%)							16	10	8			16		10		8		8				8					84	$17,080	$420						$0	$5,400	$18,480	$0	$5,400	$23,880
3.7: Preliminary Design QA/QC			2	12	16	16	4	4	8	16			16	8			16		8					40	4	170	$41,790	$850						$0		$42,640	$0	$0	$42,640
3.8: Estimate of Probable Cost						8	8	16	8					2						84	8						134	$30,080	$670						$0		$30,750	$0	$0	$30,750
Task 3 - Subtotal	0	0	4	12	16	99	295	325	252	60	111	315	39	48	82	184	84	149	26	96	8	78	0	148	846	18	3295	$684,788	$16,473	$36,525	$27,000	$130,200	$22,988	$136,970	$17,684	$7,300	$701,260	$152,744	$5,400	$859,404
Task 4: Update Biosolids Management Plan & Bid Package																																							
4.1: Update Biosolids Management Plan			8	2		4	12	40	60			40								12						8	186	$36,520	$930						$0		$37,450	$0	$0	$37,450
4.2: Finalize Biosolids Drawings (6 Sheets)			2			6	12	28	18			40												16	38		160	$31,150	$800						$0		$31,950	$0	$0	$31,950
4.3: QC Report and Drawings			2	10		2	4	4	12															16			50	$12,010	$280						$0		$12,290	$0	$0	$12,290
4.4: Bid Package with Specifications			2	2		2	12	4	12			12												8			54	$10,990	$270						$0		$11,260	$0	$0	$11,260
Task 4 - Subtotal	0	0	12	22	0	14	40	76	102	0	0	92	0	0	0	0	0	0	0	12	0	0	0	40	38	8	456	$90,670	$2,280	$0	$0	$0	$0	$0	$0	$0		$92,950	$0	$0	$92,950
All Phases Total	8	16	65	37	24	360	739	581	519	84	112	573	52	53	99	201	89	166	27	129	9	95	4	257	931	68	5277	$1,109,613	$26,383	$36,525	$27,000	$130,200	$22,988	$136,970	$17,684	$7,300	$1,135,995	$371,367	$7,300	$1,549,543

Attachment D

Kennedy Jenks

Client/Address: City of Warrenton
225 S Main Ave.
Warrenton, OR 97146

Proposal Date: April 14, 2025

Schedule of Charges

Date: January 1, 2025

PERSONNEL COMPENSATION

Classification	Hourly Rate
Engineer-Scientist-Specialist 1	$155
Engineer-Scientist-Specialist 2	$165
Engineer-Scientist-Specialist 3	$180
Engineer-Scientist-Specialist 4	$200
Engineer-Scientist-Specialist 5	$225
Engineer-Scientist-Specialist 6	$245
Engineer-Scientist-Specialist 7	$270
Engineer-Scientist-Specialist 8	$295
Engineer-Scientist-Specialist 9	$305
Senior CAD-Designer	$180
CAD-Designer	$170
Senior CAD-Technician	$165
CAD-Technician	$150
Project Assistant	$150
Administrative Assistant	$133

In addition to the above Hourly Rates, an APC charge of $5.00 per hour will be added to Personnel Compensation for costs supporting projects including telecommunications, software, information technology, internal photocopying, shipping, and other support activity costs related to the support of projects.

Direct Expenses

Reimbursement for direct expenses, as listed below, incurred in connection with the work, will be at cost plus ten percent for items such as:

a. Maps, photographs, 3rd party reproductions, 3rd party printing, equipment rental, and special supplies related to the work.
b. Consultants, soils engineers, surveyors, contractors, and other outside services.
c. Rented vehicles, local public transportation and taxis, travel and subsistence.
d. Project specific telecommunications and delivery charges.
e. Special fees, insurance, permits, and licenses applicable to the work.
f. Outside computer processing, computation, and proprietary programs purchased for the work.

Reimbursement for vehicles used in connection with the work will be at the federally approved mileage rates or at a negotiated monthly rate.

If prevailing wage rates apply, the above billing rates will be adjusted as appropriate.

Overtime for non-exempt employees will be billed at one and a half times the Hourly Rates specified above.

Rates for professional staff for legal proceedings or as expert witnesses will be at rates one and one-half times the Hourly Rates specified above.

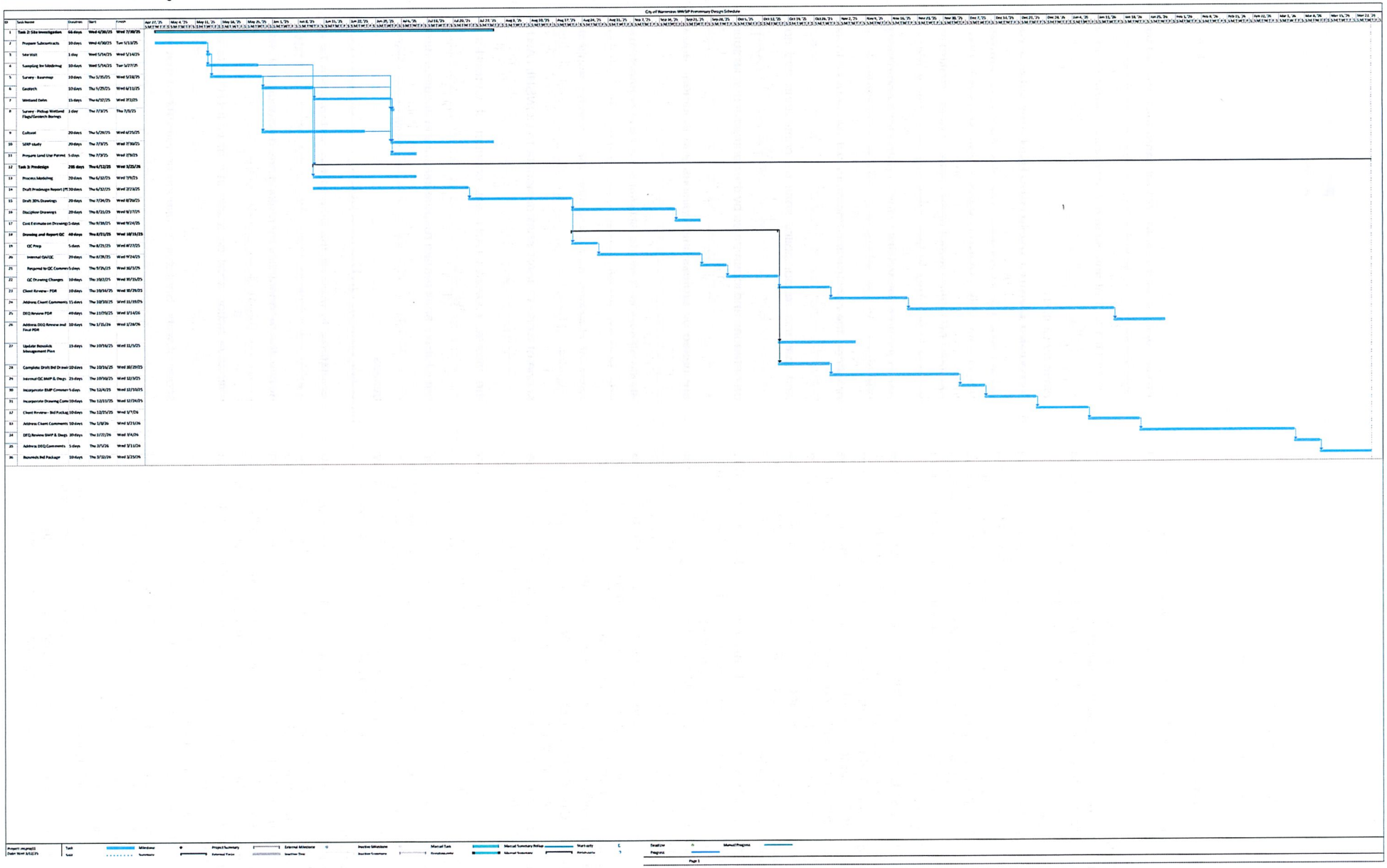
Excise and gross receipts taxes, if any, will be added as a direct expense.

Attachment D

Kennedy Jenks

The foregoing Schedule of Charges is incorporated into the agreement for the services provided, effective 1 January 2025 through 31 December 2025. After 31 December 2025, invoices will reflect the Schedule of Charges currently in effect.

Attachment E: Schedule - Predesign



Kennedy Jenks

Client: CIty of Warrenton

Contract/Proposal Date: April 14, 2025

Standard Conditions

1 August 2021

CLIENT and KENNEDY/JENKS CONSULTANTS, INC. ("CONSULTANT") agree that the following provisions shall be a part of their agreement.

1. **TERMS OF PAYMENT.** CLIENT will be invoiced at the end of the first billing period following commencement of work and at the end of each billing period thereafter. Payment in full of an invoice must be received by CONSULTANT within thirty (30) days of the date of such invoice.
2. **EFFECT OF INVOICE.** The work performed shall be deemed approved and accepted by CLIENT as and when invoiced unless CLIENT objects within fifteen (15) days of invoice date by written notice specifically stating the details in which CLIENT believes such work is incomplete or defective, and the invoice amount(s) in dispute. CLIENT shall pay undisputed amounts as provided for in the preceding paragraph.
3. **INTEREST; SUSPENSION OF WORK.** Failure of CLIENT to make full payment of an invoice so that it is received by CONSULTANT within said sixty (60) days of the date thereof subjects the amount overdue to a delinquent account charge of one percent (1%) of the invoice amount per month, compounded monthly, but not to exceed the maximum rate permitted by law. Failure of CLIENT to submit full payment of an invoice within sixty (60) days of the date thereof subjects this agreement and the work herein contemplated to suspension or termination at CONSULTANT's discretion.
4. **ADVANCE PAYMENT: WITHHOLDING OF WORK PRODUCT.** CONSULTANT reserves the right to require payment in advance for work it estimates will be done during a given billing period. CONSULTANT, without any liability to CLIENT, reserves the right to withhold any services and work products herein contemplated pending payment of CLIENT's outstanding indebtedness or advance payment as required by CONSULTANT. Where work is performed on a reimbursable basis, budget may be increased by amendment to complete the scope of work. CONSULTANT is not obligated to provide services in excess of the authorized budget.
5. **STANDARD OF CARE.** CONSULTANT's services performed under this agreement will be performed in a manner consistent with the care and skill ordinarily exercised by members of the profession practicing under similar conditions at the same time and in the same or similar locality. When the findings and recommendations of CONSULTANT are based on information supplied by CLIENT and others, such findings and recommendations are correct to the best of CONSULTANT's knowledge and belief. No warranty, express or implied, is made or intended by this agreement, or by the foregoing statement of the applicable standard of care, or by providing consulting services or by furnishing oral or written reports of findings made. No entity other than CLIENT or CONSULTANT shall be construed as a beneficiary to this Agreement.
6. **INSURANCE COVERAGE.** CONSULTANT is protected by Worker's Compensation insurance as required by applicable state laws and will maintain employer's liability coverage of $1,000,000 each accident for bodily injury, $1,000,000 each employee and $1,000,000 policy limit for bodily injury by disease. During the performance of this agreement CONSULTANT will maintain professional liability insurance with a limit of $1,000,000 on a claims made, annual aggregate basis, and commercial general liability and automobile liability insurance each with a limit of not less than $1,000,000 million on an occurrence basis.
7. **ALLOCATION OF RISK.** CLIENT and CONSULTANT have discussed the risks associated with this project and the extent to which those risks should be shared by CLIENT and by CONSULTANT, and have agreed: (a) To the fullest extent permitted by law, CLIENT agrees to limit the liability of CONSULTANT, its officers, employees, and subconsultants to CLIENT, all landowners, contractors, subcontractors, lenders, suppliers, manufacturers, third parties, and their employees such that the total aggregate liability, including all attorneys fees and costs shall not exceed $50,000.00 or the total fees paid for CONSULTANT's services on this project, whichever is greater. (b) All damages such as loss of use, profits, anticipated profits, and the like losses are consequential damages for which CONSULTANT is not liable. (c) CLIENT shall give written notice to CONSULTANT of any claim of negligent act, error or omission within one (1) year after the completion of the work performed by CONSULTANT. Failure to give notice herein required shall constitute a waiver of said claim by CLIENT.
8. **SERVICES DURING CONSTRUCTION.** Any construction inspection or testing provided by CONSULTANT is for the purpose of determining compliance by contractors with the functional provisions of project documents only. CLIENT agrees that CONSULTANT will have no inspection responsibilities at the jobsite except to the extent specifically provided for in the agreed upon scope of work. CONSULTANT shall not be held in any way to guarantee any contractor's work, nor to assume responsibility for means, methods or appliances used by any contractor nor to assume responsibility for a contractor's compliance with laws and regulations or for contractor's errors, omissions, or defective work. CLIENT agrees that in accordance with generally accepted construction practices, the construction contractor will be required to assume sole and complete responsibility for jobsite conditions during the course of construction of the project, including safety of all persons and property and that this responsibility shall be continuous and not be limited to normal working hours. CLIENT agrees to require in all construction contracts for the project, provisions that CLIENT and CONSULTANT shall be defended and indemnified by the contractor and its subcontractors and named additional insureds on contractor's and subcontractor's insurance. Any Opinion of Probable Construction Cost furnished by CONSULTANT are based on professional opinions and judgment, and CONSULTANT will not be responsible for fluctuations in construction costs.
9. **SERVICES BY CLIENT.** CLIENT will provide access to site of work, obtain all permits, provide all legal services in connection with the project, and provide environmental impact reports and energy assessments unless specifically included in the scope of work. CLIENT shall pay the costs of checking and inspection fees, zoning application fees, soils engineering fees, testing fees, surveying fees, and all other fees, permits, bond premiums, and all other charges not specifically covered by the scope of work. CLIENT shall designate to CONSULTANT the location of all subsurface utility lines and other subsurface man-made objects (in this agreement collectively called "buried utilities") within the boundaries of the jobsite. CONSULTANT will conduct at CLIENT's expense such additional research as in CONSULTANT's professional opinion is appropriate to attempt to verify the location of buried utilities at the jobsite, but CLIENT shall remain responsible for the accurate designation of their location and, shall indemnify, defend, and hold CONSULTANT harmless from any claims or loss arising from the failure to accurately locate buried utilities.
10. **COMPLIANCE WITH LAWS.** CLIENT and CONSULTANT shall each use reasonable care in its efforts to comply with laws, codes, ordinances and regulations in force at the time of the performance by each under this agreement, insofar as such laws are applicable to a party's performance. Unless otherwise provided for in the scope of work of this agreement or by law, the responsibility for making any disclosures or reports to any third party, for notifying all governmental authorities of the discovery of hazardous materials on the jobsite, and for taking corrective, remedial, or mitigative action shall be solely that of CLIENT. It is CONSULTANT's belief that the work is not subject to California or any applicable state Prevailing Wage Law, unless expressly identified as such within the scope of work. Should it be alleged or determined that some or all of the work is subject to California's or any applicable state Prevailing Wage Law, then CLIENT shall reimburse CONSULTANT for the additional costs associated with CONSULTANT complying with those laws.
11. **USE OF DOCUMENTS.** Drawings, reports, writings and other original documents (documents) furnished by CONSULTANT are for the exclusive use of CLIENT and CONSULTANT retains all intellectual property rights including copyrights. Documents are furnished to CLIENT upon CLIENT's specific agreement that it assumes all liability resulting

Standard Conditions (Page 2)

1 August 2021

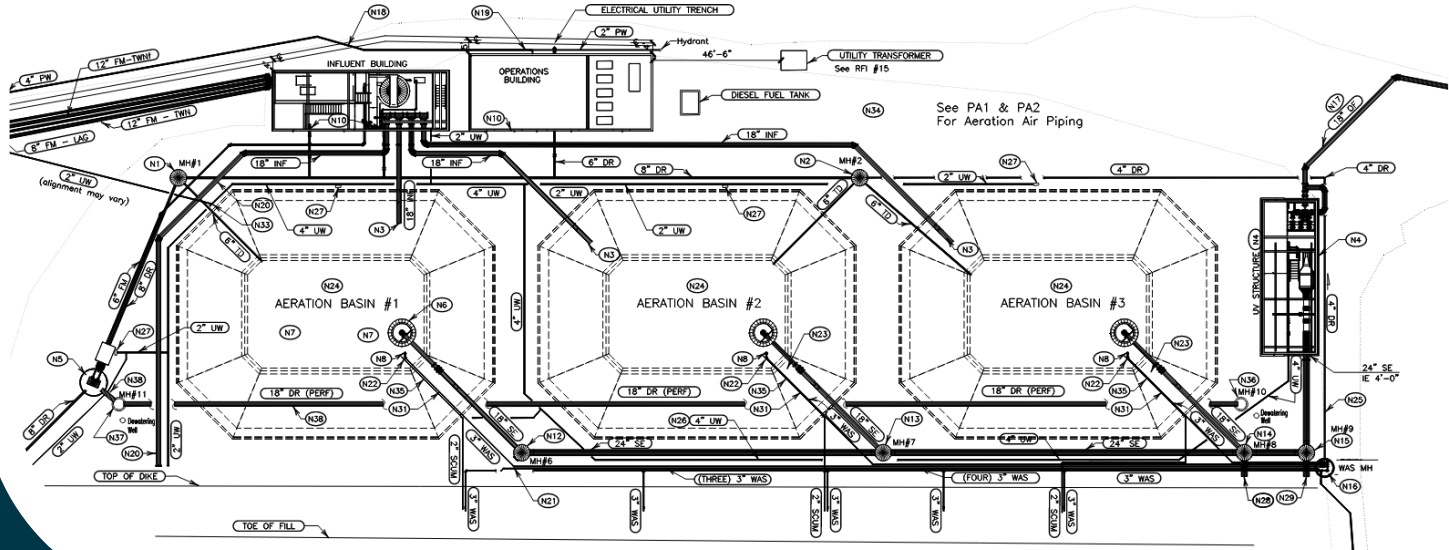
from the further distribution of such documents, or any portion of them, and that CLIENT will indemnify CONSULTANT and hold it harmless against any claims associated with the unauthorized use of such documents. In no event will CLIENT or any person acting on its behalf edit, abridge, or modify any document prepared by CONSULTANT without CONSULTANT's express written consent.

12. **ELECTRONIC DATA.** Documents provided by CONSULTANT in electronic formats are provided under the following conditions unless detailed otherwise in the scope of work or by a written amendment. Documents are provided in CONSULTANT's standard software formats. CLIENT recognizes that electronic data and its transmission can be easily damaged, may not be compatible with CLIENT'S software formats and systems, may develop inaccuracies during conversion or use, and may contain viruses or other destructive programs, and that software and hardware operating systems may become obsolete. As a condition of delivery of electronic data, CLIENT agrees to defend indemnify and hold CONSULTANT, its subconsultants, agents and employees harmless from and against all claims, loss, damages, expense and liability arising from or connected with its use, reuse, misuse, modification or misinterpretation. In no event shall CONSULTANT be liable for any loss of use, profit or any other damage.
13. **TERMINATION.** This agreement may be terminated by either party by written notice should the other party fail substantially to perform its obligations under this agreement and continue such default after the expiration of a seven (7) day notice period. Either party may terminate this agreement without necessity of cause upon the expiration of a thirty (30) day notice period. If this agreement is terminated by CLIENT in the absence of default by CONSULTANT, CONSULTANT shall be paid for services performed and costs incurred by it prior to its receipt of notice of termination from CLIENT, including reimbursement for direct expenses due, plus an additional amount, not to exceed ten percent (10%) of charges incurred to the termination notice date, to cover services to orderly close the work and prepare project files and documentation, plus any additional direct expenses incurred by CONSULTANT including but not limited to cancellation fees or charges. CONSULTANT will use reasonable efforts to minimize such additional charges.
14. **PRECEDENCE OF CONDITIONS.** Should any conflict exist between the terms herein and the terms of any purchase order or confirmation issued by CLIENT, the terms of these Standard Conditions shall prevail in the absence of CONSULTANT's express written agreement to the contrary.
15. **ASSIGNMENT: SUBCONTRACTING.** Neither CLIENT nor CONSULTANT shall assign any of its rights including a right to sue, or delegate its duties under this agreement without the written consent of the other.
16. **FORCE MAJEURE.** Any delay or default in the performance of any obligation of CONSULTANT under this agreement resulting from any cause(s) beyond CONSULTANT's reasonable control shall not be deemed a breach of this agreement. The occurrence of any such event shall suspend the obligations of CONSULTANT as long as performance is delayed or prevented thereby, and the fees due hereunder shall be equitably adjusted.
17. **MERGER: WAIVER: SURVIVAL.** This agreement constitutes the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations and/or agreements, written or oral. One or more waiver of any term, condition or other provision of this agreement by either party shall not be construed as a waiver of a subsequent breach of the same or any other provision. Any provision hereof which is legally deemed void or unenforceable shall not void this entire agreement and all other provisions shall survive and be enforceable.
18. **APPLICABLE LAW.** This agreement shall be interpreted and enforced according to the laws of the State of Oregon. In the case of invalidity or unenforceability of any provision or portion thereof, the provision shall be rewritten and enforced to the maximum extent permitted by laws to accomplish as near as possible the intent of the original provision. Nothing herein shall be construed to provide for indemnification against damages arising from a party's gross negligence or willful misconduct.
19. **COUNTERPARTS; SIGNATURES.** This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The parties agree that electronic (including without limitation .pdf), email or facsimile signatures of this Agreement shall have the same force and effect as original signatures. Each undersigned representative of the parties to this Agreement certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind such party to this Agreement.

Kennedy Jenks

City of Warrenton **Wastewater System Improvement Predesign**

May 27, 2025



Agenda

About Kennedy Jenks

Local Wastewater Experience

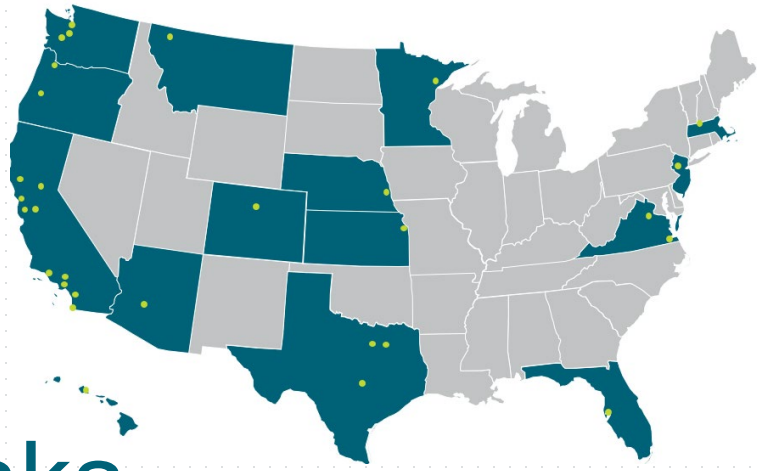
Facilities Plan Evaluation

Predesign Scope

Preliminary Schedule

Next Steps

Kennedy Jenks



About Kennedy Jenks

- A full-service engineering consulting firm specializing in water and wastewater treatment
- Privately held with over 525 engineers, scientists and support staff. KJ has been in business for 106 years
- We deliver exceptional engineering and environmental consulting services
- We reduce project risk by utilizing proven technologies, and experienced staff
- Known for our dedication to industry-leading client service and tailored solutions

Local Experience

- Local projects include:
- Rainier
- Dundee*
- Camp Rilea
- La Center, WA*

- *Membrane Bioreactor (MBR) Technology

Similar MBR Projects

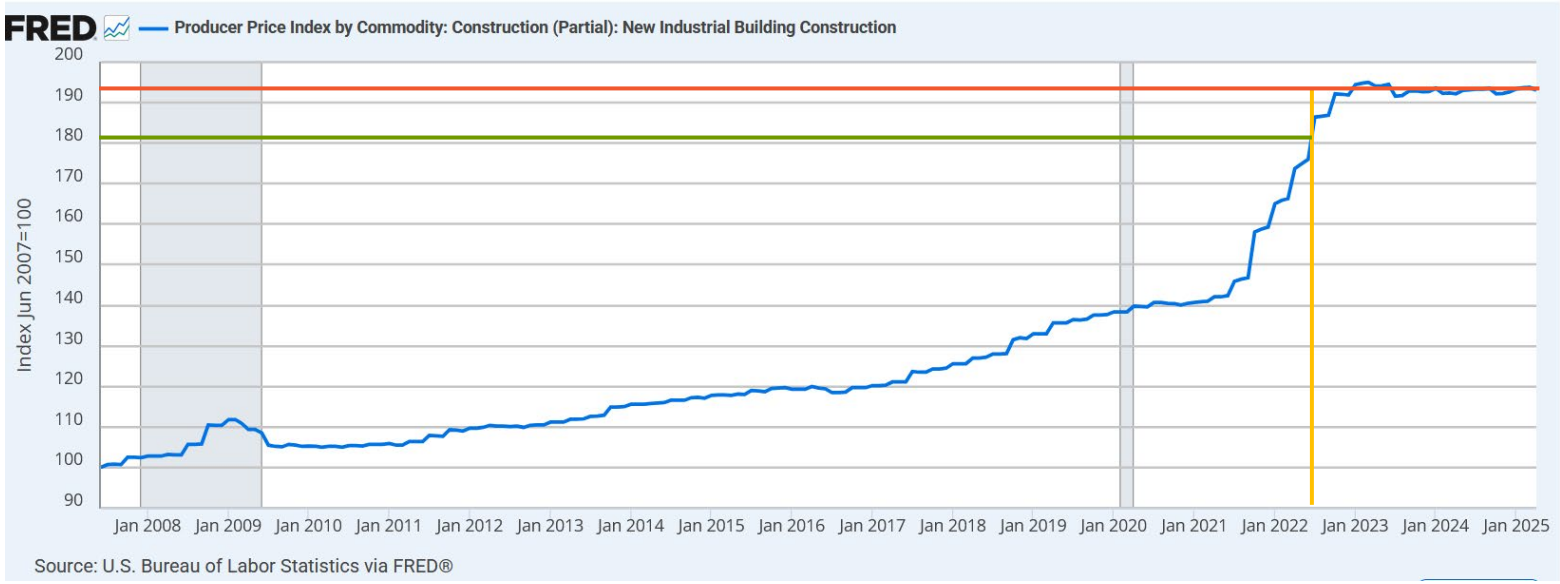
Dundee

Hermiston

Recap of Facility Plan Alternatives

Alternative 1: Sequencing Batch Reactor (SBR) Expansion	Alternative 2: Activated Sludge	Alternative 3: Membrane Bioreactor (MBR) Expansion	Alternative 4: Phased SBR Expansion	Alternative 5: Forcemain and Pump Station, Offsite Treatment
• SBRs have had difficulty operating at the facility. Covers required.	• Cannot meet treatment requirements without disk filters	• Highest level of treatment. Will help in complying with future regulations.	• Phased approach could save funds in the short term	• Decommissioned treatment plant land could be used for other purposes
• SBRs cannot meet treatment requirements without disk filters	• Large footprint and difficult to expand	• Process is mostly automated, reducing O&M effort.	• SBRs cannot meet treatment requirements without disk filters	• Would require buy-in and coordinate with other municipality
• Cost effective	• Expensive to build and operate	• Easiest to expand and has the smallest footprint	• SBRs have had difficulty operating at the facility. Covers required.	• Expensive to build
Capital Cost: $28.3M	**Capital Cost: $33.4M**	**Capital Cost: $29.3M**	**Capital Cost: $20.7M 2025, +$9.1M 2035**	**Capital Cost: $45.9M**
		Recommended Alternative		

Inflation and Project Cost Impact

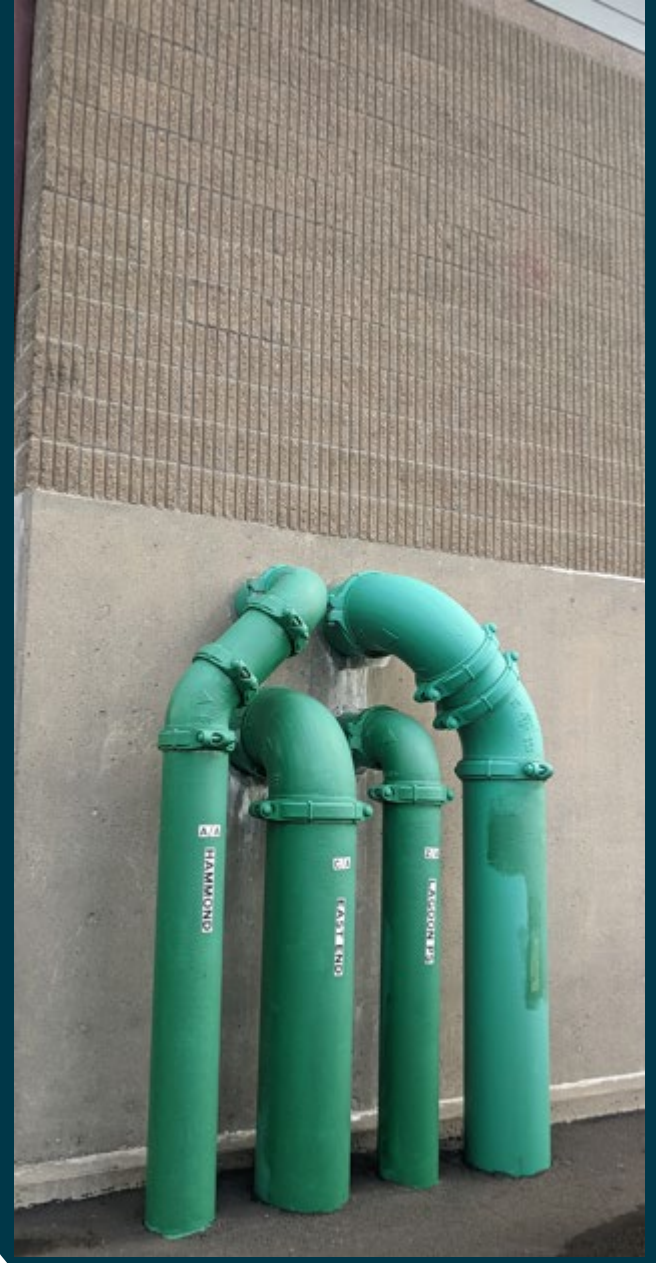


FROM MAY 2022 TO NOW, REPRESENTS AN INCREASE IN THE PPI FOR INDUSTRIAL BUILDING CONSTRUCTION OF 194/181 = 7.2%

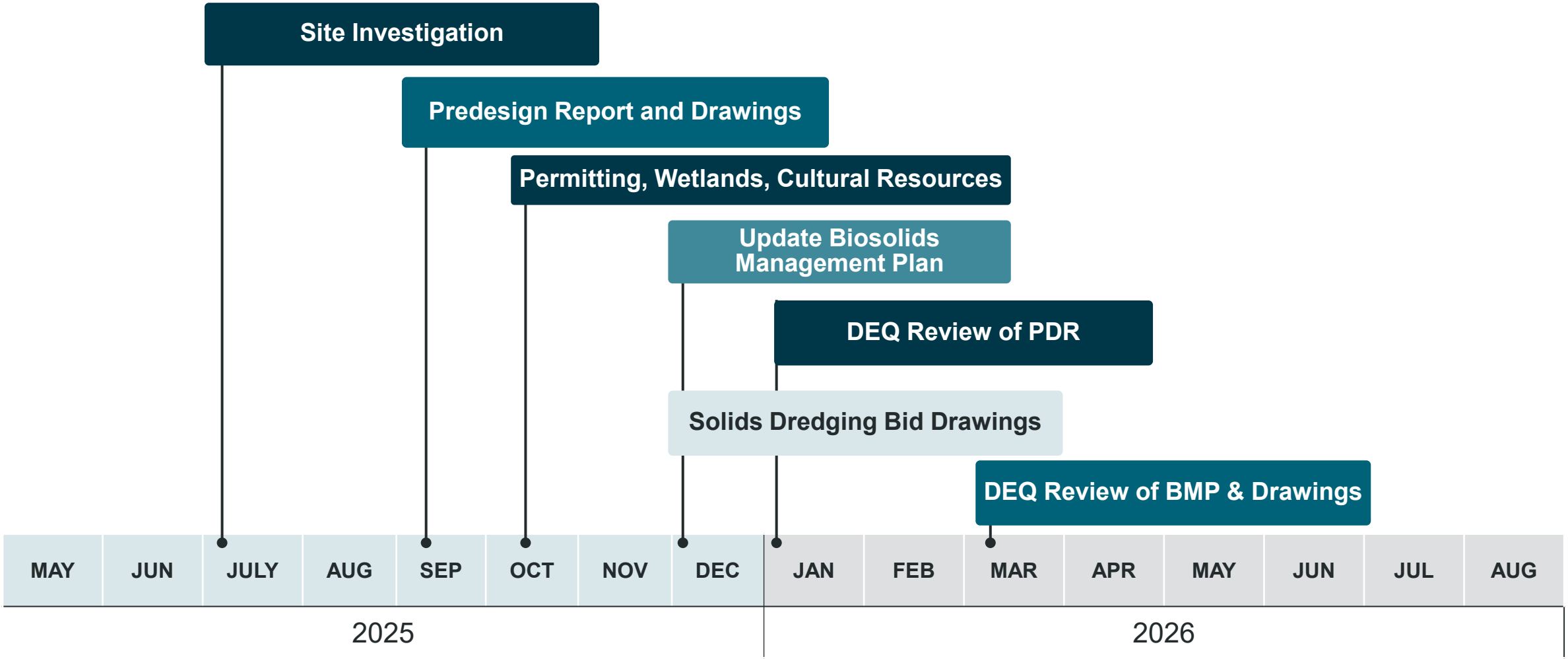
- RECENT TREATMENT PLANT BID IN OREGON (MAY 2025) IS CARRYING A $0.5M CONTINGENCY TO ADDRESS TARIFFS ON A $56M PROJECT
- EQUIPMENT COSTS ARE 20% HIGHER THAN BUDGETARY ESTIMATES OBTAINED 6 MONTHS BEFORE TARIFFS WERE ANNOUNCED
- PROJECT IMPACT: CAPITAL COST $29.3M IN MAY 2022 WITH INFLATION IS APPROXIMATELY $31.5M IN 2025 + $0.3M (TARIFFS)= ~$32M IN 2025

Scope of Work

- Site Investigation and Permitting Support
  - Geotechnical, archeology, wetland delineation, stormwater
- Biological and Hydraulic Modeling
- Treatment Plant Design Criteria and Equipment Layouts
- Detailed Cost Estimate
- Predesign Report (to DEQ standards)
- Biosolids Management Plan and partial lagoon dredging
- Preliminary Table of Contents for Technical Specifications
- Internal QA/QC for all submittal documents



Anticipated Schedule – Predesign & Dredging



Kennedy Jenks

Next Steps

- Determine Updated Cost of Improvements
- Predesign Report Approval
- Remove Lagoon Solids
- Design Improvements
- Construct New WWTP

City Commission Agenda Memo

Meeting Date: May 27th, 2025
From: Kevin Gorman, Public Works Director
Subject: Update to the Low-Pressure Sewer System Homeowner Packet and Policy

Summary:

The Public Works Department is updating the City's standard equipment and associated documentation for Low Pressure Sewer Systems. In the past, the City specified a particular grinder pump brand as the standard for these systems. However, that manufacturer is no longer in business.

Following a review of alternative options, Public Works recommends adopting the Environment One (E/One) grinder pump as the City's new standard. This pump was the second choice in our original research and meets all performance and reliability requirements.

To reflect this change, we propose updating the homeowner information packet and City policy to identify the E/One grinder pump as the official standard. These updates will make it easier for homeowners to understand their sewer system options, when a Low-Pressure Sewer System is required, and how to maintain their equipment.

Only minor wording changes were made to reflect the current standard equipment. No other technical or policy changes are proposed at this time.

Recommendation/Suggested Motion:

"I move to approve the proposed updates to the Low-Pressure Sewer System homeowner packet and policy to reflect the Environment One (E/One) grinder pump as the City's new equipment standard."

Alternative:

None recommended

Fiscal Impact:

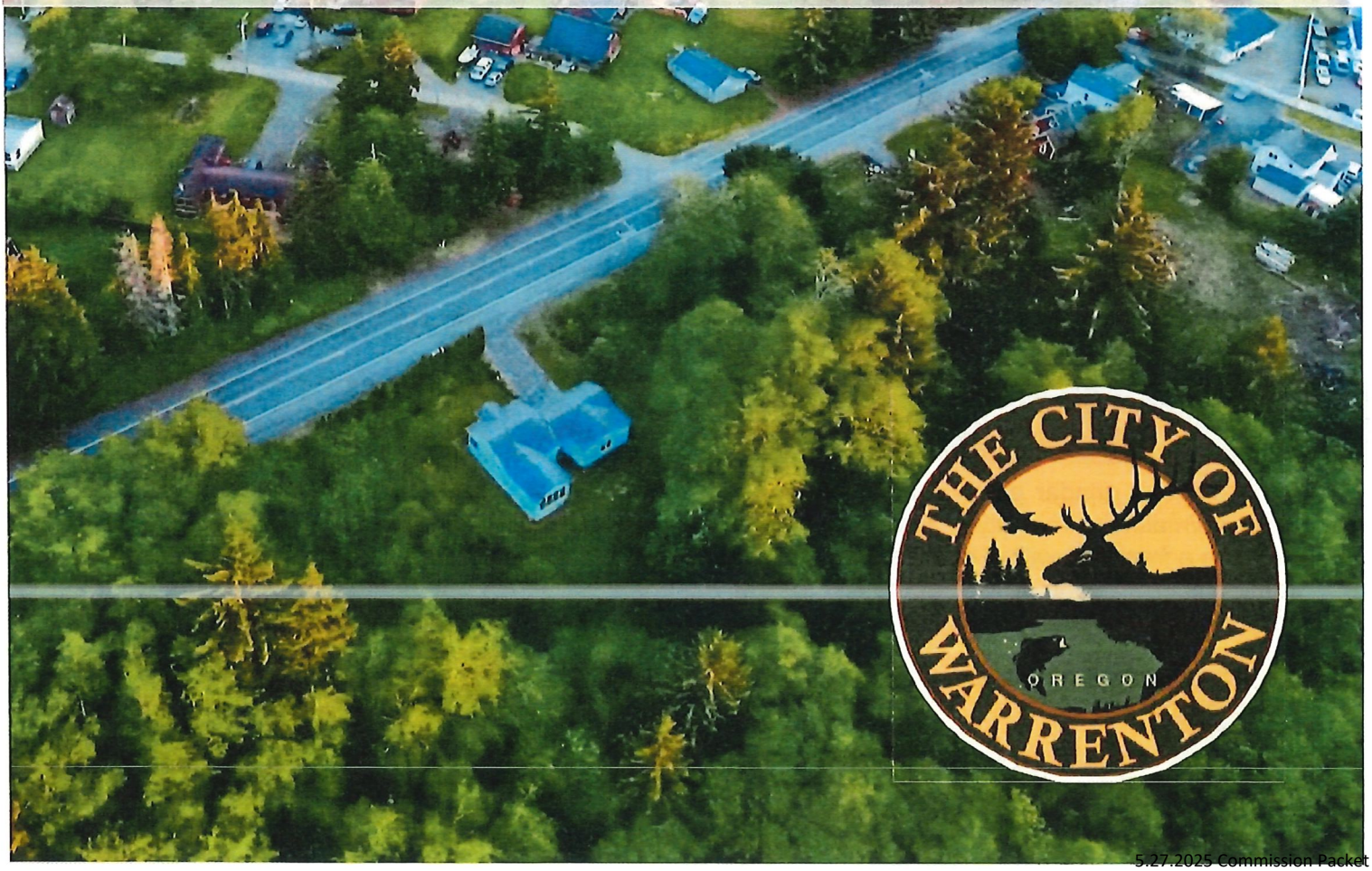
No fiscal impact is anticipated.

Attachments:
(All supporting documentation, i.e., maps, exhibits, etc., must be attached to this memorandum.)

- Homeowner Packet – Guidance for Operating and Maintaining Your Grinder Pump System

Approved by City Manager: _____

Guidance for Operating and Maintaining Your Grinder Pump System

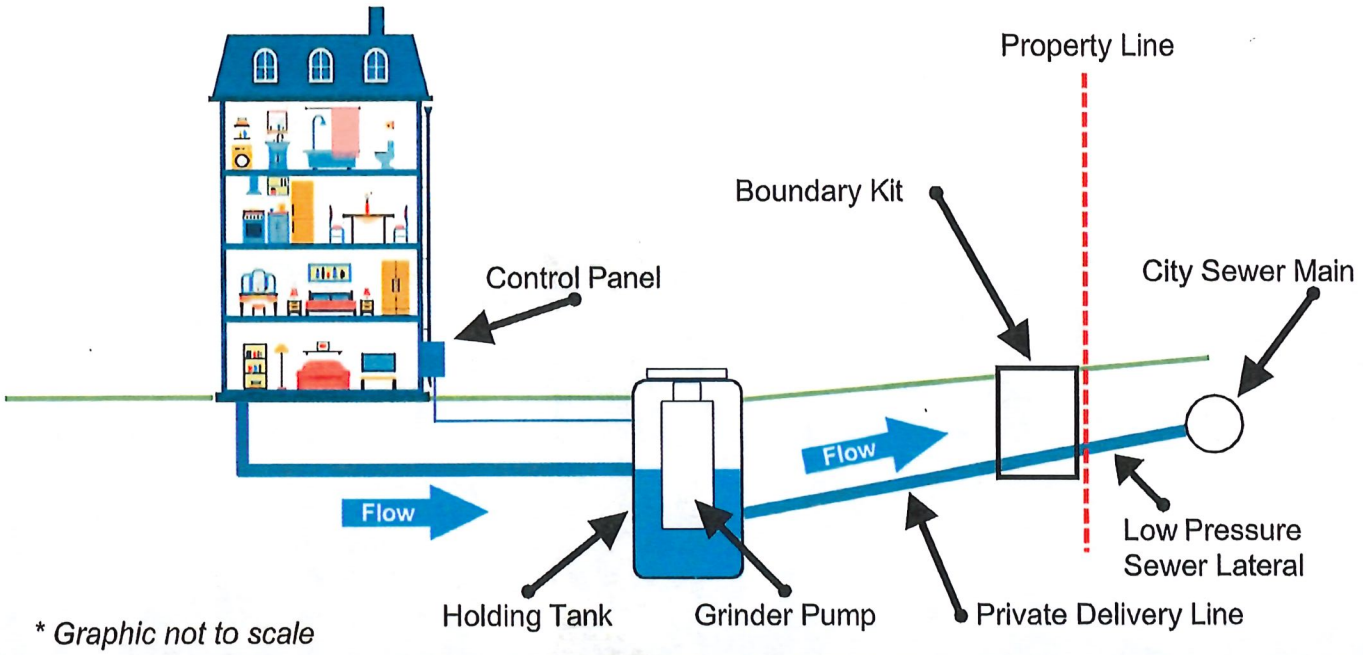


What is a Grinder Pump System and why do I have one?

Have you ever wondered where the water goes when you flush your toilet? The water leaves the toilet bowl and enters a network of pipes inside your home before eventually exiting through an underground pipe. That underground pipe – known as a service lateral – connects your home's plumbing to the City's sewer system.

Building plumbing systems and the City's sewer system are usually designed to transport sewage using gravity. Sometimes, like when a home is located at a lower elevation than the City's sewer main, a pump is needed to raise the sewage from the home into the sewer main. That's where a grinder pump system comes in!

The grinder pump system includes pumps, a collection vault, an inlet pipe, a pressurized discharge pipe, valves, and other electronics and control systems. A grinder pump system allows all of the sewage from your home to flow by gravity into a collection vault that is likely buried in your yard. Inside that vault are grinder pumps which will periodically turn on and pump sewage from the vault, into a pressurized discharge pipe, and eventually into a City sewer main. That sewer main transports the sewage to the City's wastewater treatment plant.



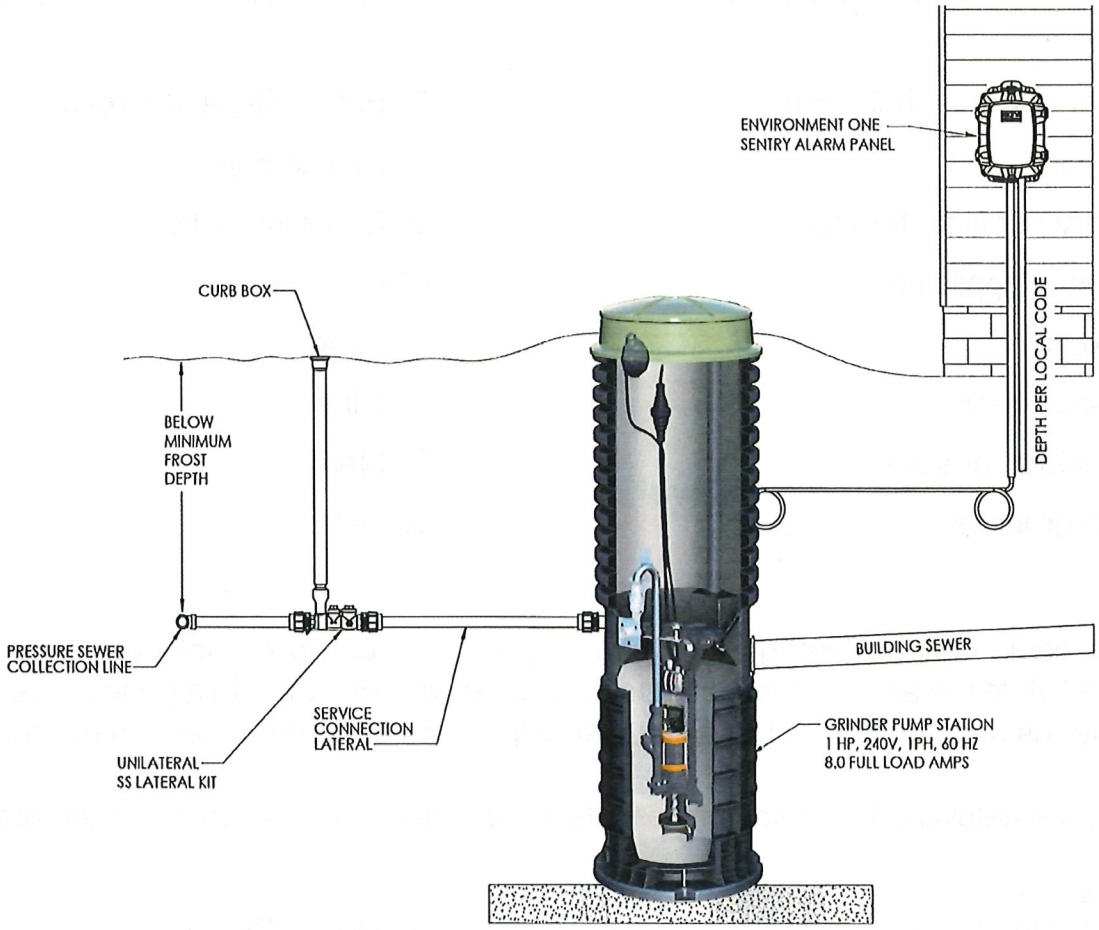
** Graphic not to scale*

Who Owns and Maintains the Grinder Pump System for my House?

You do! The grinder pump system serving your home is your property and your responsibility to operate/maintain. The City of Warrenton requires homeowners using grinder pump systems to have a service agreement with a qualified service provider to help properly maintain the systems. This document is intended to provide some tips to help you properly operate and maintain your grinder pump system and provides information about who you could contact if you need additional support.

What is a Grinder Pump System and why do I have one?

The City of Warrenton has gone through a thorough competitive selection process to identify a standard grinder pump system for use in the City. The Environment One grinder pump system was selected as the standard system. Here is a look and the different components that make up the standard grinder pump system.



Proper Use and Care of your Grinder Pump System

Proper use and maintenance of your grinder pump system can help extend the life of the system and reduce unanticipated/emergency maintenance. Below are answers to some commonly asked questions about what you should do as the owner of a grinder pump system.

QUESTION: Is there anything I can't put down my drain?

ANSWER: The grinder pump system is only designed to handle routine domestic sewage. Solid waste should be thrown in the trash and not down the drain! You should avoid introducing the following into the sewer:

- Flushable wipes, baby wipes, or diapers
- Sanitary napkins, tampons, or tampon applicators
- Condoms
- Seafood Shells
- Rags, cloth, or socks
- Coffee grounds
- Fats, Oils, and Grease
- Plastic objects
- Cigarette butts
- Cat litter
- Food
- Glass
- Metal
- Q-Tips

These items could clog or damage your grinder pump system, potentially resulting in a costly repair! While the above items may be particularly troublesome to a grinder system, all of these items shouldn't be put in the sewer regardless of your connection method.

Additionally, the following hazardous materials should never be poured down the drain:

- Explosives
- Flammable Materials
- Lubricating Oils or Grease
- Strong Chemicals
- Gasoline

Please contact the Clatsop County Household Hazardous Waste Program at (503) 325-8500 for information about how you can properly dispose of these materials.

QUESTION: There appears to be a wet spot near the collection vault. What should I do?

ANSWER: If it hasn't been raining, there is a possibility that the wet spot is caused by a leak in the grinder pump system or a break in one of the pipes connected to the grinder pump system. Immediately contact a qualified contractor to inspect and repair the system. You can find a list of qualified contractors able to service these systems at the end of this document.

QUESTION: I've found the lid to the collection vault in my yard. Can I take a look inside?

ANSWER: For your safety, you should not open or enter the collection vault in your yard. Sewage can produce toxic gases and only trained individuals should open or enter the collection vault where they may be exposed to these gases. If you see that the lid to the collection vault is damaged, contact a qualified service provider to purchase a replacement. You can find a list of qualified contractors able to service these systems at the end of this document.

QUESTION: I keep hearing an alarm from the grinder pump system. What should I do?

ANSWER: The alarm on your grinder pump station will sound when the wastewater in the tank reaches a certain level ("alarm level").

If the alarm is going off, the water in the tank is too high. If this occurs for more than a few minutes after a power outage or a heavy usage period, call your qualified service provider for help. In all cases, if the alarm is going off, limit water usage until the alarm has stopped, or a service professional has given the all-clear.

QUESTION: What should I do if the power goes out?

ANSWER: The grinder pump and electronics inside your grinder pump system require electricity to operate. If a power outage occurs, your grinder pump system will not work nor will alarms sound to alert you to a problem. The most important step is to minimize the amount of water you send down your drain. The tank has a small amount of storage capacity but not enough for washing clothes or taking long showers. In the event of a prolonged power outage (greater than 24 hours), you may need to contact a local septage hauler to have the collection vault pumped empty to avoid an overflow or having sewage backup into your home. Systems are required to include a plug (NEMA L14-30) to allow for generators to provide electricity in the event of a power outage. A minimum 12 kW generator is needed to power the pumping unit.

QUESTION: I'm thinking about doing some construction on my property. Will this impact my grinder pump system?

ANSWER: If your construction could potentially increase the volume of sewage you send to your grinder pump system, you will want to consult with an engineer or plumber prior to construction to determine if modifications to the grinder pump system are necessary.

QUESTION: Help! I see liquid coming up from around my grinder pump system. What do I do?

ANSWER: If you notice liquid coming from your grinder pump system, immediately turn off all appliances (washing machines, dish washers, etc.) that use water and limit showers, toilet flushing, and sink use. Contact a qualified service provider to assist with system repairs. Call the City of Warrenton Public Works Department at 503- 861-0912 to report the spill.

Your Responsibilities as a Grinder Pump System Owner

1. Operate and maintain the grinder pump system in accordance with the installation and operations manual provided with your grinder pump system. Contact the contractor who installed the system to obtain a copy of the installation and operations manual if you do not have one.

2. If the grinder pump system has an alarm or overflows, have the system repaired immediately. Contact the service provider you entered into a service agreement with for assistance. Refer to the qualified contractor list at the end of this document for companies that are qualified to act as service providers for these systems. In the event of an overflow, contact the City of Warrenton Public Works Department immediately at (503) 861-0912.

3. If you are undertaking any modifications to your property that could increase the amount of sewage you generate, contact an engineer or plumber to discuss modifications to the grinder pump system that may be required. Property modifications that could necessitate a change to your grinder pump system include, but are not limited to:

   - Constructing an outbuilding or accessory dwelling unit which will produce sewage and be connected to the existing grinder pump system collection vault.
   - Renovating your home to include additional plumbing fixtures.
   - Installing a pool or hot tub which will have a drain needing to be connected to the sewer.

4. Complete and submit your annual Grinder Pump System Permit Application. Contact the City of Warrenton Public Works Department at (503) 861-0912 for a copy of the permit application.

All property owners discharging wastewater to the City of Warrenton Sewer System are required to comply with all local, City, State, and Federal requirements pertaining to the discharge of wastes to a municipal sewer system. Homeowners with grinder pump systems agree to comply with those requirements and acknowledge that their grinder pump system is being operated and maintained in accordance with the City of Warrenton Low Pressure Sewer System policy. The City of Warrenton has the right to access the system for inspection and in case of emergency events. In the event of an imminent or active sanitary sewer overflow, the City may lock off the water meter. Homeowners must regularly review the City of Warrenton grinder pump system homeowner's manual titled "Guidance for Operating and Maintaining Your Grinder Pump System" and must comply with the requirements related to materials which can and cannot be discharged to the sewer system.

For more information about using grinder pumps in the City of Warrenton, please contact:

City of Warrenton
Public Works Department
(503) 861-0912

For more information about the City's standard grinder pump system (Environmental One), please visit the following locations:

City of Warrenton Low Pressure Sewer Systems Webpage:-
https://www.ci.warrenton.or.us/publicworks/page/low-pressure-sewer-systems

E One Pumps:
https://eone.com/sewer-systems/products/grinder-pump-systems

Looking for someone to maintain or repair your Grinder Pump System?

These companies have all indicated an ability to work with grinder pump systems. This list is only intended to help homeowners identify potential sources of assistance and should not be construed as a list which:

1. Endorses the work of these companies or
2. Limits homeowners to only working with the companies listed.

All warranty and service work shall be coordinated through:
Correct Equipment Inc. 503.582.0555 300 S Redwood St, Suite 135 Canby OR 97013
Email: service@ceipnw.com

Company	Contact Information
Ed's Septic Tank Cleaning (Tank Cleaning) 92042 Koppisch Rd, Astoria OR 97103	503-458-6521
Coastal Maintenance and Plumbing (E/One Install, Push & Pull Experience) 2103 SE Dolphin Ave, Warrenton OR 97146	503-861-0766
Terry's Plumbing (E/One Install, Push & Pull Experience) 415 Gateway Ave, Astoria OR 97013	503-325-5180
A&B Sepic (Tank Cleaning, Repair, Push & Pull Experience) 100 41st Ave SE, Albany OR 97322	541-924-0851

City of Warrenton- Low Pressure Sewer System Policy

1. Purpose

The City of Warrenton Commission has developed this policy statement to provide a clear guide as to where and how low pressure sewers can be used in the City of Warrenton.

2. Scope

The City of Warrenton Commission has a clear preference for its sewers to be conventional gravity systems, but it also recognizes that this is not always possible. Therefore, the City will permit the limited use of Low Pressure Sewer Systems (LPSS) within the City, where conventional gravity sewers are not environmentally or physically feasible.

3. Definitions

Boundary Kit: Valve at the property boundary incorporating an isolation valve, check valve and inspection tee piece, which allows the property to be isolated from the low pressure sewer main in the right-of-way.

City: City of Warrenton

Commission: City of Warrenton Commission

Control Panel: The box incorporating the electrical controls, high level alarms, switches for pumps, and telemetry.

Emergency Storage: The capacity in the storage vessel above the high-level alarm point.

Equivalent Dwelling Unit (EDU): An Equivalent Dwelling Unit (EDU) is the basic unit of measure used to quantify the demand or loading on water supply or sewer services, respectively. One EDU represents the equivalent demand or loading from a single-family residence.

Low Pressure Sewer Lateral: Line from the sewer main to the property boundary kit.

Preferred Service Provider: Service providers who are known to provide service to LPSS systems in the City.

Private delivery line: Pipeline connecting the property boundary kit to pump unit.

Pump Unit: Comprises of grinder pump, storage vessel, control panel, pressure switches, and ancillary equipment.

Sanitary Sewer Overflow (SSO): A condition in which untreated (raw) sewage is discharged from a sanitary sewer into the environment prior to reaching a treatment facility.

Standard connection: Single dwelling equivalent to 1 EDU.

4. Policy Statement

The purpose of this policy is to define where and when low pressure sewer systems will be allowed within the City boundary, who is responsible for the installation and maintenance, and what systems will be permissible.

5. Roles and Responsibilities

The Public Works Director, or their designee (authorized representative), will be responsible for approving all new low pressure sewer installations.

The Public Works Director or their designee (authorized representative) will be responsible for investigating if a landowner/tenant has inadvertently, through introducing banned substances (as set out in the homeowner's manual) or willfully, damaged a low pressure system, including downstream systems. They will also determine whether the landowner/tenant will be billed for the repairs to the unit and the relevant cost.

6. LOW PRESSURE SEWER SYSTEM POLICY

6.2. Low Pressure Sewer Systems

6.2.1. What is a Low Pressure Sewer System?

A low pressure sewer system is broadly defined as a system where macerated sewage is conveyed under pressure generated by a pump unit located on each property to a low pressure sewer main.

A low pressure sewer system as covered in this Policy is defined as comprising of:

A. A pumping unit containing a grinder pump, specifically designed for low pressure sewer applications, installed on each property to pump sewage from an individual property. These pumping units will only be those that have been approved by the City of Warrenton Public Works Department for that purpose. Currently, the Environmental One (EONE Simplex WF36X72) is the selected standard pumping unit to be used in the City.
B. An alarm system built within the overall pumping unit to warn residents that the pump is no longer working and to allow maintenance to occur within an acceptable timeframe. Residents are required to contact the Service Provider under contract with the Homeowner to arrange for servicing immediately.
C. Connections of these pumping units to City of Warrenton's public low pressure sewer main, via a Unilateral Stainless Steel Lateral assembly (NB0184P01) from E-One.
D. A public sewer system specifically designed for low pressure sewer applications, and capable of supporting several individual pumping units to transport the sewer to the system discharge point.

6.2.2. Where can Low Pressure Sewer Systems be used?

Use of low pressure sewer systems will only occur where designated by the Public Works Department.

Low pressure sewer systems will only be considered where thorough studies of all alternatives clearly indicate that a gravity collection and disposal system with (or without) a central sewage pump station is not practical. No pressure sewer laterals shall be installed running parallel to and inside the right-of-way. Pressure sewer laterals must be connected to public pressure sewer main.

6.2.3. Limited Low Pressure Sewer Pump Technologies

When a new low pressure sewer system has been authorized by the City, only an Environment One grinder pump system will be allowed. A competitive selection process was used to evaluate multiple equipment suppliers and the Environmental One (EONE) by Correct Equipment was identified as the standard system approved for use in the City.

6.2.4. Supporting Documentation

Public Works Department has, in support of this Policy Statement, prepared the following supporting documentation:

A. City Engineering Specifications and Design Criteria to regulate the nature of all low pressure sewer pumping units purchased and detailing the manner in which they are to be installed and maintained.
B. A Homeowner's manual to inform the resident what is expected of them and what they can and cannot do in relation to the low pressure sewer system on their property. It will also contain instructions on what to do if their system should fail.

C. A preferred service provider list with known service providers that have proven they provide a standard level of service within the City.

6.3. General Responsibilities

6.3.1. Ownership of Residential Pumping Units

The basic configuration for approved pressure applications will be a separate single pumping unit provided for each separate property. The ownership of the pumping unit, in this standard configuration, will reside with the property owner and includes the following:

A. Pump;
B. Storage tank;
C. Control panel and ancillary fittings;
D. Private delivery lines;
E. Boundary kit.

The hydraulic termination point for City ownership of the low pressure sewer system will be the boundary kit valve closest to the property boundary. All electrical and control system components shall be owned and operated by the property owner.

The City requires an access easement over any part of the "on-property" installation of the low pressure sewer system, to inspect safe ongoing operation of the system, the minimization of any health concerns, or the protection of any City property. This access easement will allow the city to provide emergency service in the event of an imminent or active SSO – fees will apply.

6.3.2. Maintenance of the Residential Pumping Unit

Property owners with low pressure sewer systems will be responsible for the costs associated with repair and maintenance of the pumping unit. When the resident is not also the property owner, the responsibility nonetheless falls to the property owner.

It will be a condition of being connected to the City's sewer system that the property owner enters into a service agreement with a preferred service provider. This agreement will define what is expected of both parties in the operation and maintenance of the low pressure sewer system.

6.3.3. Power for the Pumping Unit

The pumping unit's power connection will not be metered separately, and the residents will be responsible for the power costs for the low pressure sewer pumping unit. The pumping unit shall be installed on a dedicated 30A electrical circuit breaker.

6.3.4. Discovering the Property has a Low Pressure Sewer System

The property will be marked, by deed or other legal document, to indicate that the property is served by a low pressure sewer system. This is specifically required to allow a prospective purchaser to discover prior to their purchase that the property is serviced by a low pressure sewer unit.

In addition to this notification, an access easement reinforcing the City's right of access to the property to inspect the unit will also be required.

6.4. Installing Low Pressure Sewers – General

6.4.1. Design Services

The design of low pressure sewer system shall be completed by a registered professional engineer, or other qualified and duly authorized representative of the applicant, with verification that the drawings, plans and specifications submitted with the application comply with applicable technical codes, rules and regulations and the City Engineering Specifications and Design Criteria. All improvements require review and approval by the Public Works Department. The low pressure sewer system must also be reviewed and approved by the Oregon Department of Environmental Quality (DEQ). Fees associated with the City and DEQ reviews are the responsibility of the developer.

For new systems or developments, the design shall also be reviewed by Environment One and Correct Equipment (the manufacturer and distributor of the City's standard Low Pressure Sewer System pump units) or their regional design representative.

6.4.2. Number of Pumping Units per Property/Non-Standard Connections

Developments for commercial or industrial properties or residential properties which are greater than 1 EDU are classified as non-standard connections.

Any internal sewer system within the property boundary of the non-standard connection will be the responsibility of the property owner and will require City approval. The sizing of the pumping units and the overall design of these non-residential systems needs to be carried out by an experienced designer, based upon the actual anticipated sewer output and the capacity of the receiving sewer system.

The ownership of these systems including design, installation, replacement and payment of all City charges and fees will be the responsibility of the owner.

6.5. Installation on the Property

The units will be installed by an accredited installer of low pressure sewer systems to preserve the supplier's warranty. The units are to be installed to the requirements of the electric and plumbing codes.

Where a pressure unit is to be installed to service an existing dwelling, the accredited installer will first undertake a full audit of the existing dwelling electrical and sewer connections. The installer will then advise the property owner what needs to be done to upgrade these connections as necessary to allow a pumping unit to be installed. The property owner will be responsible for the costs associated with these upgrades.

6.6. Installation of the Sewer Mains

Prior to construction of the sewer system, the design of the low pressure sewer system shall be undertaken by an appropriately qualified engineer. The design plans shall be completed by a registered professional engineer and duly authorized representative of the applicant, with verification that the drawings, plans, and specifications submitted with the application comply with applicable technical codes, rules, and regulations.

Construction will then be in accordance with these plans and will be from acceptable materials and constructed in accordance with the City's Engineering Specifications and Design Criteria.

The low pressure sewer laterals will be extended from the public sewer main to just inside of the property boundaries. A valve arrangement known as the boundary kit will be placed at this termination point, to allow the connection of the property. The valving arrangement within the boundary kit should allow for the isolation of the property from the LPSS.

6.7. Application of the Technology

6.7.1. Existing On-Site Systems

Owners of properties that have existing on site systems on the fringe of a sewer system area are NOT covered in this policy.

Any existing property that discharges into a sewer main through a private pumping arrangement may continue to operate their private system. They remain the responsibility of the property owner and resident.

Any existing STEP systems shall not be allowed to connect to the low pressure sewer system. When an existing STEP system needs to be replaced, the property owner must comply with the requirements of this policy by installing the approved low pressure sewer system pump unit.

6.7.2. New On-Site Systems

Installation of a low pressure unit to service a new lot will be allowed only as described in Section 6.2.2. However, the installation, operating costs and maintenance will be the responsibility of the property owner. The City will not accept the asset or carry out any repairs or maintenance.

Developers will be required to pay System Development Charges (SDCs), connection charges, and any other applicable charge or fee prior to release of final plans the proposed development.

6.8. Operation and Maintenance of the Low Pressure Sewer System

6.8.1. City Responsibilities

The City is responsible for the public sewer system. The City will only respond to emergency conditions on the homeowner side of the boundary kit, such as:

A. Imminent threats to human health and the environment.
B. Sanitary Sewer Overflows (SSO) - these are required to be reported to DEQ.

The City may lock off water meter as a response to emergency conditions. Refer to Section 6.3 for information about access easements that allow the City to access properties with low pressure sewer systems in response to emergency conditions.

The City will also provide a homeowner's manual to the original developer – this manual will also be available online via the City's website.

6.8.2. Resident Responsibilities

The Resident's primary role is to notify their contracted Preferred Service Provider if their system's alarm sounds or if the system overflows. If the system overflows, the City must be notified immediately. The resident is also required to:

A. Avoid discharging into the pumping unit any of those substances identified in the Homeowner's manual as inappropriate for low pressure sewers.
B. Comply with the other requirements set out in the homeowner's manual.
C. Not interfere with the electrical operation of the pumps in accordance with what is detailed in the homeowner's manual.
D. Comply with the low pressure sewer permit and conditions.
E. Properly maintain and operate the system.

6.8.3. Property Owner Responsibilities

Property owners will be required to acknowledge in the permit application (renewed annually) that they have read and agree to the terms set out in this policy and the homeowner's manual. The property owner is responsible to ensure that the resident (if different from the property owner), understands that the property is serviced by a low pressure sewer system and that the resident has a copy of the homeowner's manual.

6.8.4. Emergency Access for City Maintenance Employees

It will be a condition of being connected to the City low pressure sewer system that the property owner's consent will be given to allow the City or its agents to enter the property and inspect the pumping unit. The City will attempt to contact the homeowner prior to system inspections. The City may also respond in the event of an imminent or active SSO. In the event of an emergency, the City may lock off the water meter. Refer to Section 6.3 for information about access easements that allow the City to access properties with low pressure sewer systems in response to emergency conditions.

6.8.5. Identification of Maintenance Employees and Contractors

Any City employee (or contractor) entering private property should have photographic identification and appropriate authorization to enter the property.

6.9. Modifications or Household Additions

Building over the low pressure sewers system will not be allowed. Any modifications to the approved system must be completed with approval and permits from City Planning, Building and Public Works Departments and as such, meet the following scenarios:

A. The hydraulics on the property allow for the pumping unit to be moved.
B. There is a more suitable alternative route/s for the property delivery pipeline.
C. The costs for the relocation work are being paid by the property owner.
D. All technical requirements, as set out in City's Engineering Specifications and Design Criteria, being met.
E. Full details of the "as constructed" works must be provided to the City.
F. Any modifications being carried out by an accredited installer.

Residents wanting to relocate the pumping unit or property delivery line are required to contact the Public Works Department for advice on what will be required.

Residents interfering with delivery lines or pumping units without the City's approval may be subject to relevant fines. Residents will also be required to meet all costs arising from the loss of warranty on that pumping unit, and/or damage to that unit and/or, all other costs associated with such unauthorized work.

6.10. Change of Ownership

Properties in low pressure sewer areas will be required to enter into an agreement for maintenance of the "on property" pumping system and be specified on the property deed or other legal document. The annual permit is not transferable to new property owners.

New property owners will be required to establish a new utility account and secure a low pressure sewer system annual permit.

6.11. Annual Permit

Property owners connected to a low pressure sewer system will be required to apply for and pay a fee for an annual permit through the Public Works Department. If the property owner is found to be in violation of the permit or without a permit, the water service to the property will be locked-off until such time as the violation has been addressed to the satisfaction of the City. The permit shall be renewed annually with a copy of the operation records submitted at renewal. The annual permit is not transferable to new property owners.

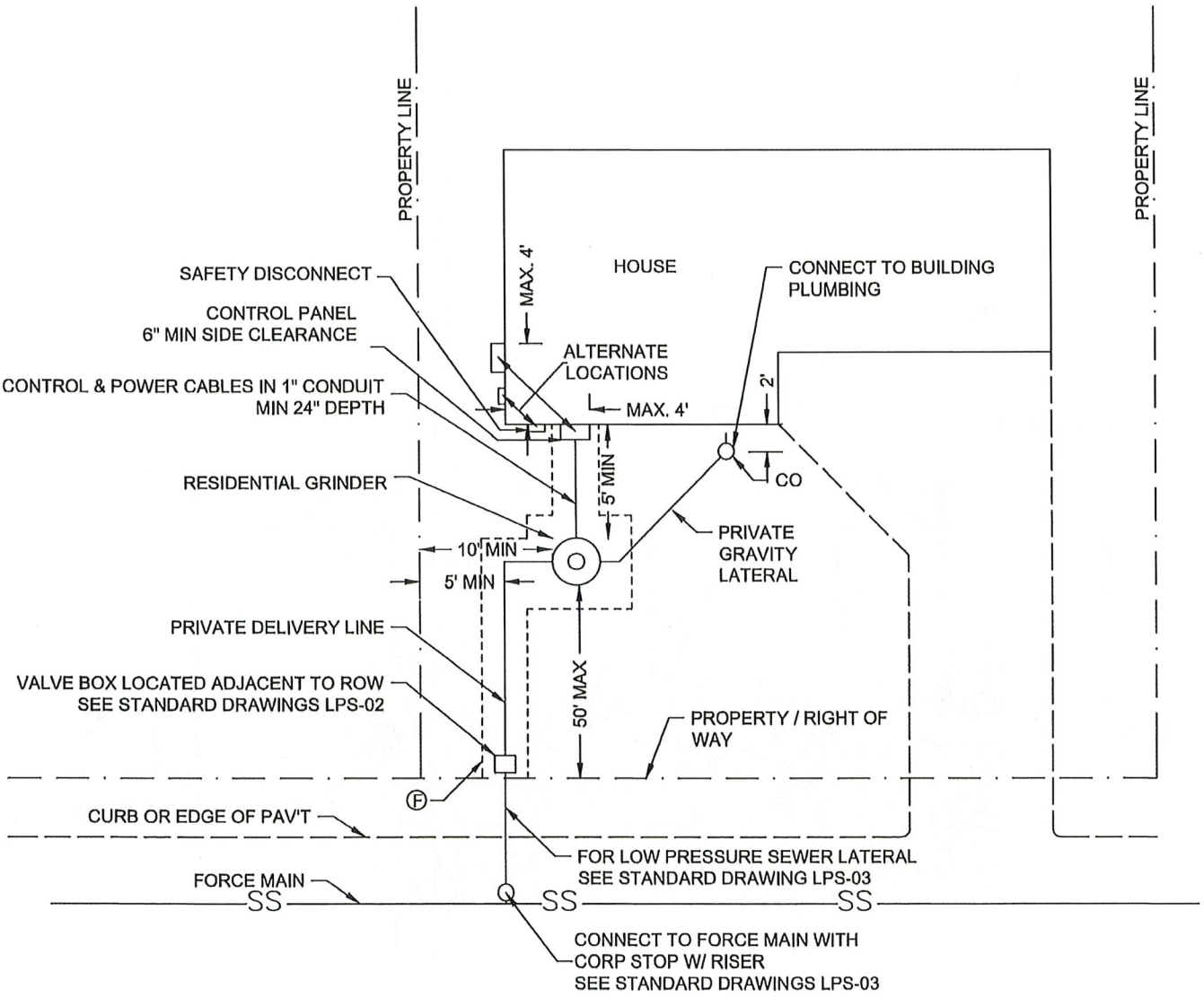
6.11.1. Operation Records

Property owners will maintain records of the operation of the low pressure sewer system and include them with the annual permit renewal. This requirement includes:

A. All alarms on the system and the solution
B. All sewer overflows and the response
C. Any modifications to the system and the approval documentation
D. All maintenance performed, including pump replacement
E. Pump run time meter at time of application for permit renewal
F. Verification of a service agreement
G. Acknowledgment of review and compliance of homeowner's manual

6.11.2. Property Diagrams

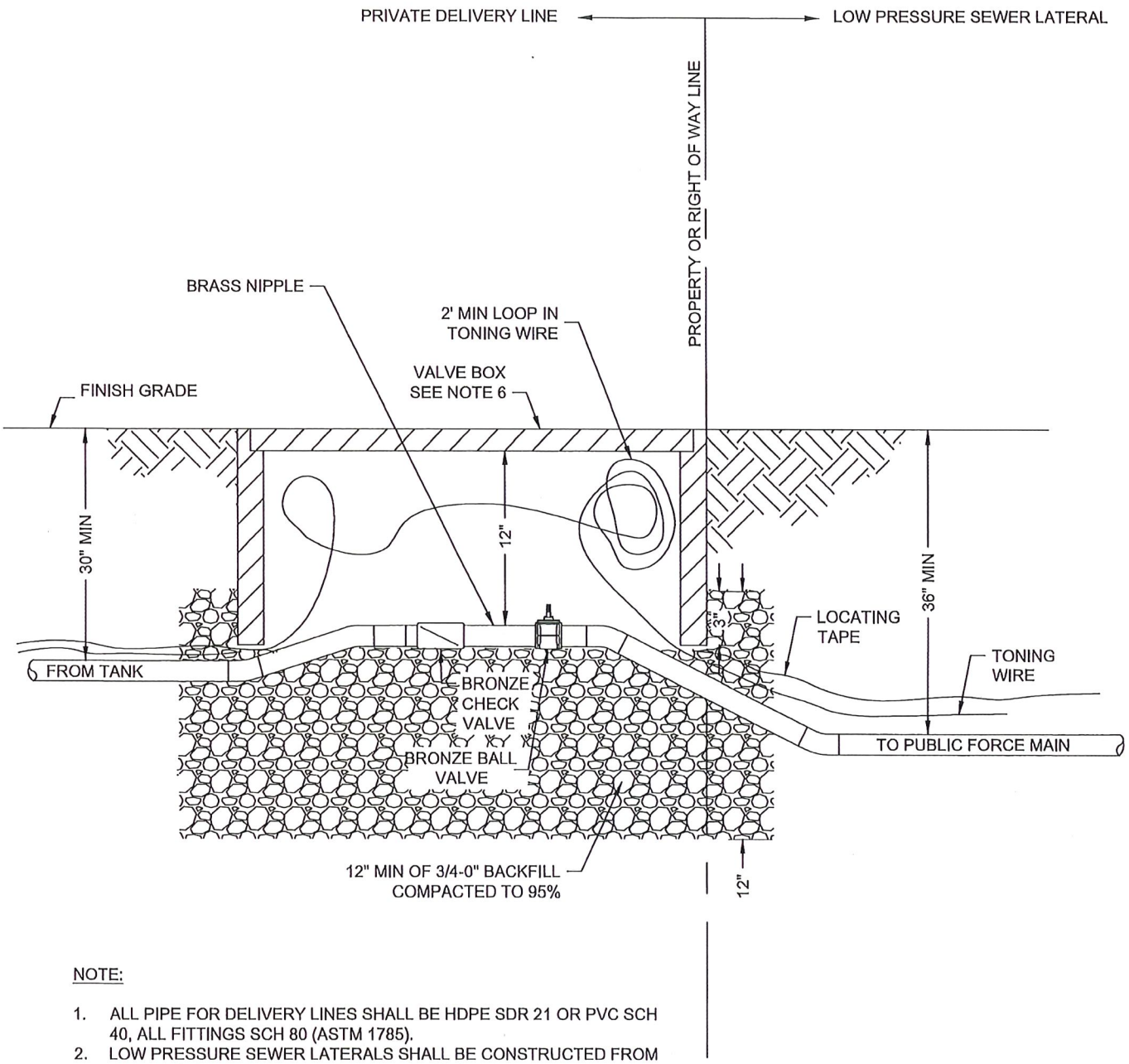
Property owners must maintain a copy of all house service details for their records and provide copies to the City when requested.



NOTES:

A. LOCATE GRINDER TANK MIN OF 5' FROM BUILDING & AS CLOSE TO PUBLIC RIGHT-OF-WAY AS POSSIBLE.
B. MAINTAIN CITY ACCESS TO GRINDER TANK, VALVE BOX, CONTROL PANEL, & SAFETY DISCONNECT.
C. CONTROL PANEL SHALL BE LOCATED WITH AN UNOBSTRUCTED LINE OF SIGHT TO THE GRINDER TANK.
D. VALVE BOX OR TANK SHALL NOT BE LOCATED IN DRIVEWAY WITHOUT WRITTEN CITY APPROVAL.
E. OBTAIN WRITTEN CITY SITE PLAN APPROVAL PRIOR TO INSTALLATION.
F. EASEMENT FOR ACCESS, OPERATION AND MAINTENANCE REQUIRED.

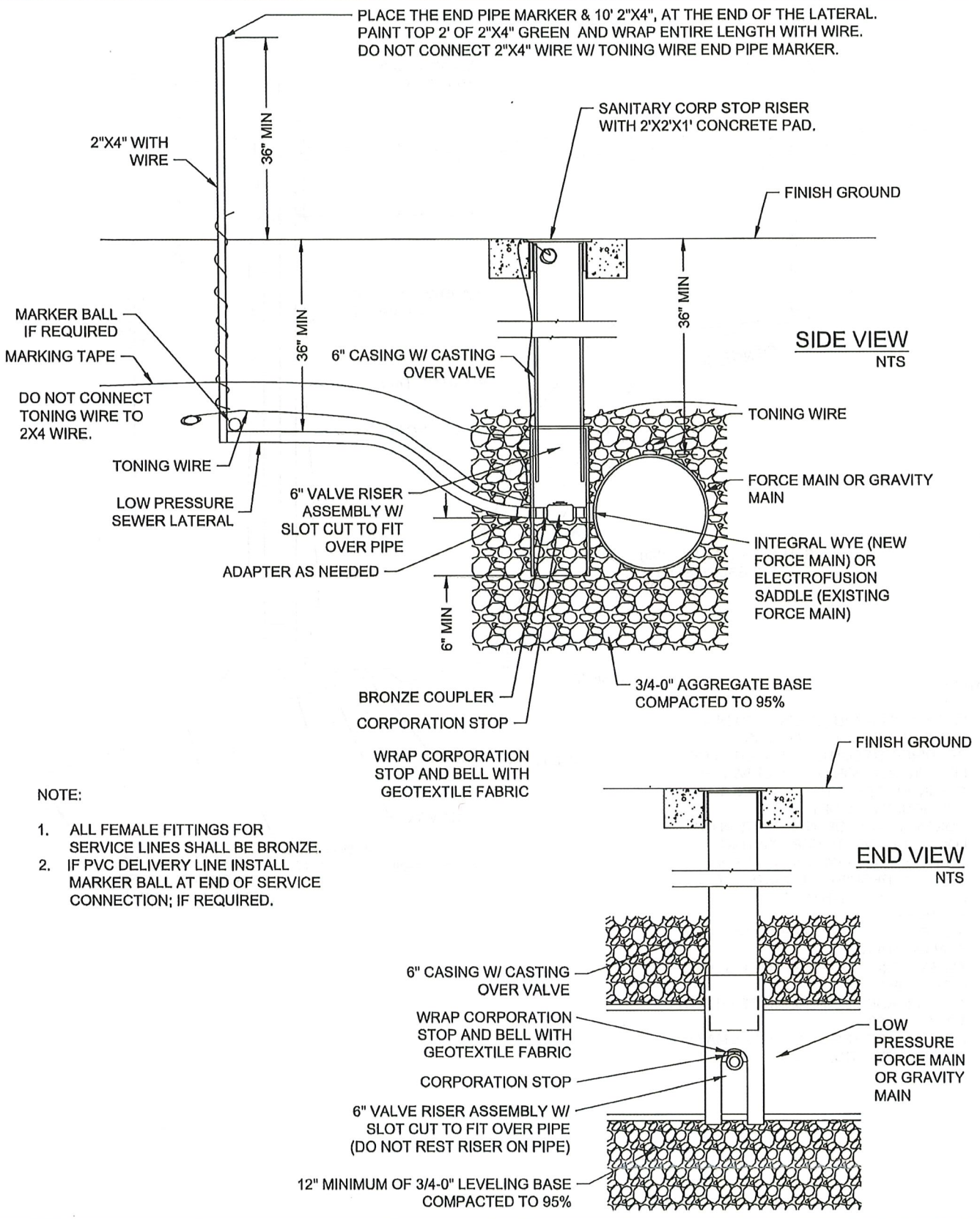
THE CITY OF WARRENTON OREGON	CITY OF WARRENTON 225 SOUTH MAIN STREET WARRENTON, OREGON 97146 (503) 861-2233	RESIDENTIAL GRINDER PUMP INSTALLATION	SHEET NO. LPS-01 APPROVED: DRAFT



NOTE:

1. ALL PIPE FOR DELIVERY LINES SHALL BE HDPE SDR 21 OR PVC SCH 40, ALL FITTINGS SCH 80 (ASTM 1785).
2. LOW PRESSURE SEWER LATERALS SHALL BE CONSTRUCTED FROM HDPE (MINIMUM SDR 21 PRESSURE RATING).
3. FITTINGS & VALVES SHALL MATCH PIPE SIZE.
4. NO CLOSE NIPPLES.
5. VALVE BOX SHALL BE CARSON IND. MOD# 1419 W/ BOLTED. NON-HINGED COVER & A # 1419E EXTENSION OR APPROVED EQUAL.

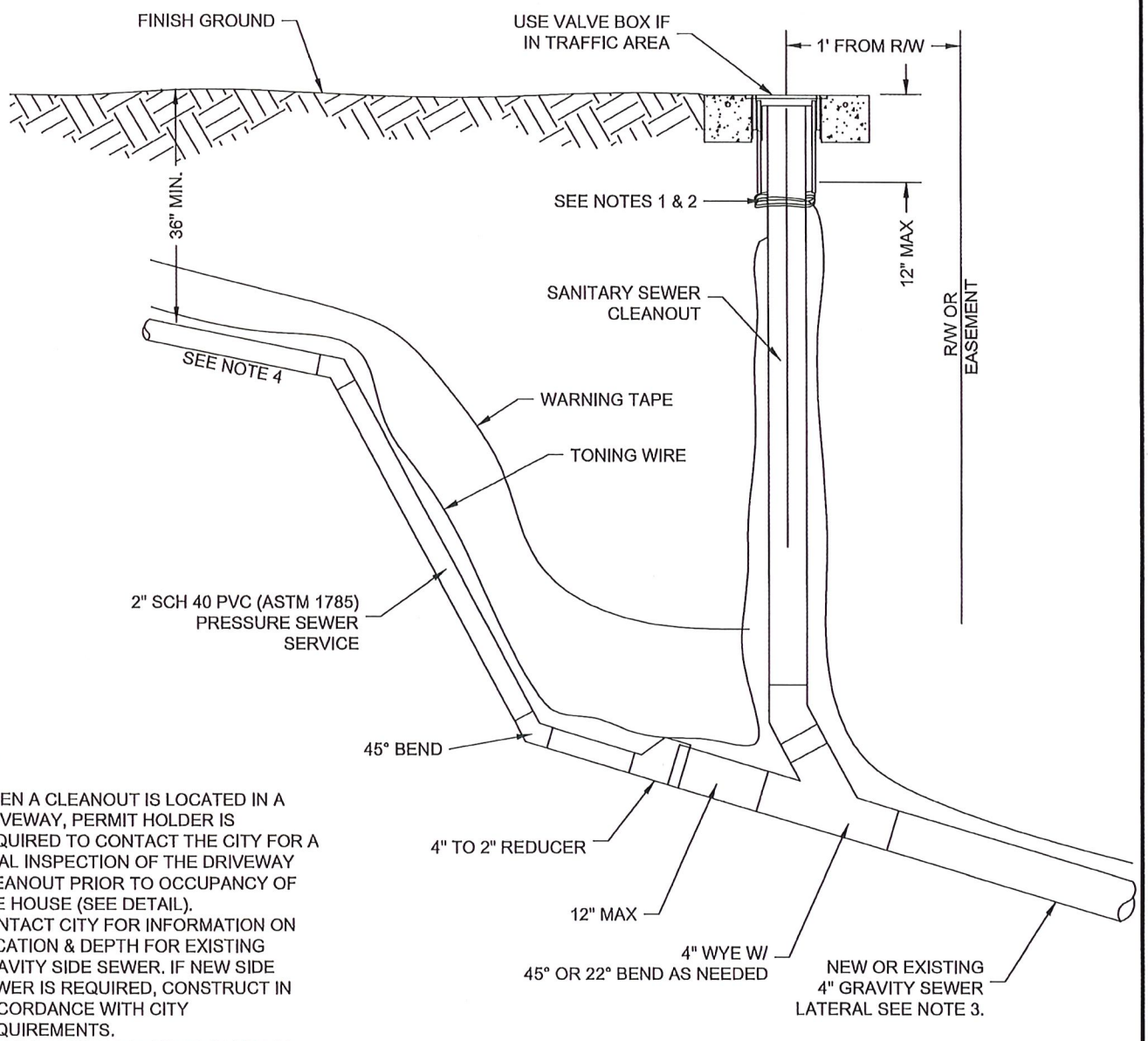
THE CITY OF WARRENTON OREGON	CITY OF WARRENTON 225 SOUTH MAIN STREET WARRENTON, OREGON 97146 (503) 861-2233	RESIDENTIAL GRINDER SYSTEM BOUNDARY KIT	SHEET NO. LPS-02 APPROVED: DRAFT



NOTE:

1. ALL FEMALE FITTINGS FOR SERVICE LINES SHALL BE BRONZE.
2. IF PVC DELIVERY LINE INSTALL MARKER BALL AT END OF SERVICE CONNECTION; IF REQUIRED.

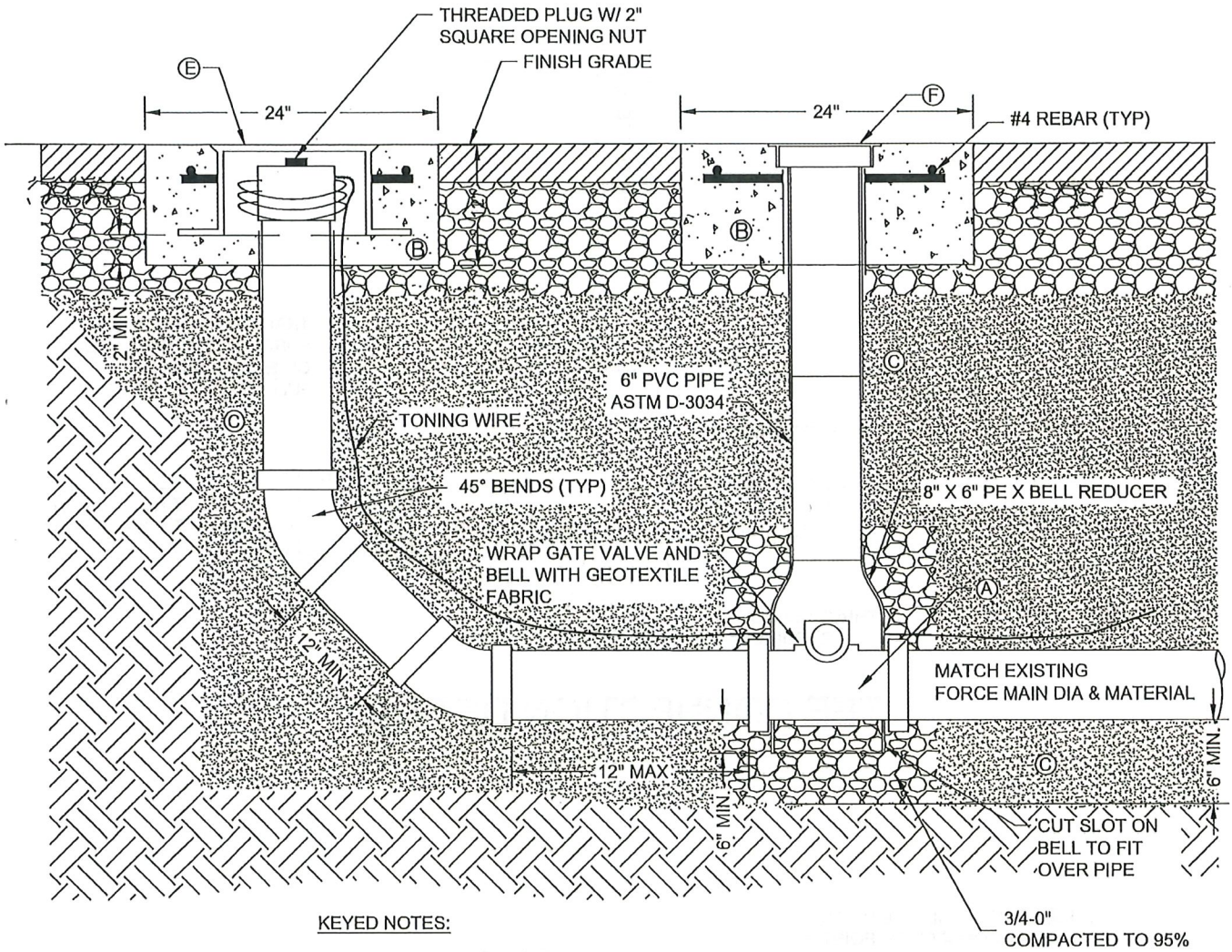
THE CITY OF WARRENTON OREGON	CITY OF WARRENTON 225 SOUTH MAIN STREET WARRENTON, OREGON 97146 (503) 861-2233	RESIDENTIAL PRESSURE SERVICE CONNECTION	SHEET NO. LPS-03 APPROVED: DRAFT



NOTES:

1. WHEN A CLEANOUT IS LOCATED IN A DRIVEWAY, PERMIT HOLDER IS REQUIRED TO CONTACT THE CITY FOR A FINAL INSPECTION OF THE DRIVEWAY CLEANOUT PRIOR TO OCCUPANCY OF THE HOUSE (SEE DETAIL).
2. CONTACT CITY FOR INFORMATION ON LOCATION & DEPTH FOR EXISTING GRAVITY SIDE SEWER. IF NEW SIDE SEWER IS REQUIRED, CONSTRUCT IN ACCORDANCE WITH CITY REQUIREMENTS.
3. VALVE BOX NOT REQUIRED IF NOT IN TRAFFIC AREA.
4. ALL PVC PRESSURE PIPE TO BE SCH 40 (ASTM 1785).
5. ALL THREADED PVC PRESSURE FITTINGS TO BE SCH 80.
6. GRAVITY SIDE SEWER MATERIAL MAY BE ABS, PVC PLASTIC, OR DUCTILE IRON PIPE.

THE CITY OF WARRENTON OREGON	CITY OF WARRENTON 225 SOUTH MAIN STREET WARRENTON, OREGON 97146 (503) 861-2233	PRESSURE TO GRAVITY SERVICE CONNECTION	SHEET NO. LPS-04 APPROVED: DRAFT



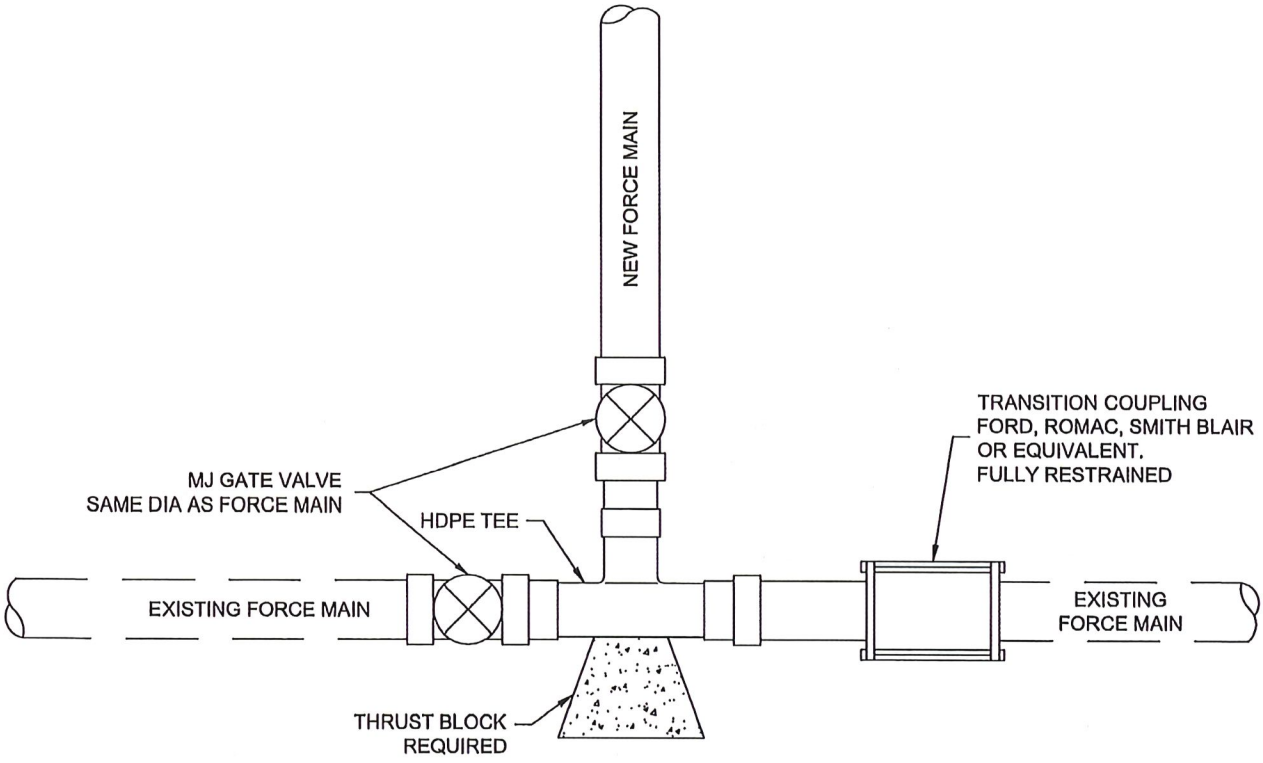
KEYED NOTES:

A. MJ GATE VALVE (AWWA C515) W/ NON RISING STEM W/ 2" SQUARE BRONZE OPERATOR W/ RESTRAINED JOINTS (EACH SIDE).
B. CONCRETE COLLAR TO BE INSTALLED WHEN LOCATED OUTSIDE OF PAVED AREAS W/ 50# FELT BETWEEN PIPE AND CONCRETE.
C. BEDDING & BACKFILL TO CONFORM WITH MATERIALS. SPECIFIED IN THE SEWER LINE EXTENSION PLANS.
D. NOT USED.
E. STANDARD ADJUSTABLE CLEANOUT CAST IRON FRAME AND COVER MANUFACTURED BY EAST JORDAN IRON WORKS OR APPROVED EQUAL.
F. VALVE BOX SHALL BE OLYMPIC FOUNDRY CAST IRON COVER TO READ "SEWER".

NOTE:

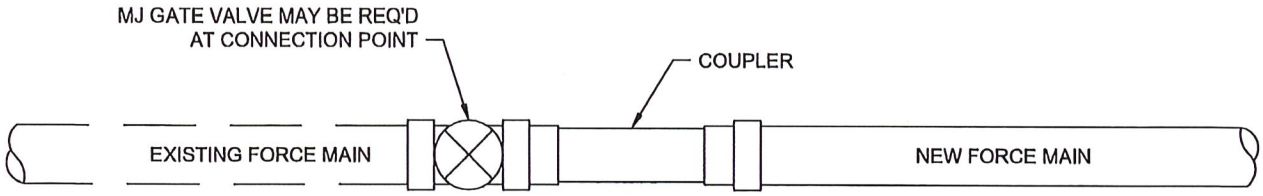
VALVE AND CLEANOUT SHALL BE THE SAME SIZE OR LARGER THAN THE FORCE MAIN

THE CITY OF WARRENTON OREGON	CITY OF WARRENTON 225 SOUTH MAIN STREET WARRENTON, OREGON 97146 (503) 861-2233	FORCE MAIN CLEANOUT	SHEET NO. LPS-05 APPROVED: DRAFT



TEE CONNECTION DETAIL

NTS



IN LINE CONNECTION DETAIL

NTS

NOTE:
ALL JOINTS MUST BE FULLY RESTRAINED

THE CITY OF WARRENTON	CITY OF WARRENTON 225 SOUTH MAIN STREET WARRENTON, OREGON 97146 (503) 861-2233	LOW PRESSURE FORCE MAIN CONNECTION	SHEET NO. LPS-06 APPROVED: DRAFT

Utility Easement Agreement

The undersigned _____, ("Grantor" and "Owner"), does hereby grant unto the CITY OF WARRENTON, its successors and assigns ("Grantee" and the "City") , a perpetual utility easement (the "Easement") on the property described as follows (as further described in Exhibit A attached hereto), referred to herein as the "Property," together with the right of access to the Easement over the Property:

[INSERT PROPERTY DESCRIPTION HERE]

1. Purpose of Easement. The Easement is granted for providing low pressure sewer system service to the following: [INSERT ADDRESS]. The low pressure sewer system ("Equipment") generally consists of piping, a boundary kit containing valves, a wet well, a pump, a control panel, and electrical service. The Easement allows access to inspect the Equipment and to operate or repair the Equipment if needed to minimize health concerns or protect City property. In addition to including all Equipment, the Easement shall extend to a public Right of Way to allow the City to access the Easement.

2. Maintenance of Easement Area. Owner shall be responsible for maintaining the Property and Easement area, provided, however, that the City shall have the right to (a) cut, trim, and control the growth or trees, shrubbery and other vegetation in the Easement area to the extent necessary to keep them clear of the Equipment, and (b) cut, down, trim, or control the growth of all dead, weak, leaning or other trees on or near the Property that the City reasonably believes may endanger or interfere with the Equipment and operation thereof. Owner shall not erect or maintain any structure upon, over, under, or within five feet of the Equipment which could endanger the operation or interfere with the operation or maintenance of the Equipment.

3. Nonexclusive. The Easement shall be nonexclusive to the City, such that the Owner may use the Easement area for purposes that do not impair the City's rights hereunder, except that Owner shall not permit any other third party to impair or interfere with the Equipment and operation and maintenance thereof.

4. Location of the Easement Area. Upon installation of the Equipment, the Easement area shall be limited to the area reasonably necessary to exercise the City rights hereunder, but in any event, no less than 5 feet on either side of the Equipment. The Easement shall encompass all installed Equipment which form the functional low pressure sewer system, including but not limited to, the boundary kit, piping, wet well, pump, control panel, and electrical service to the control panel. Owner shall not unreasonably withhold its consent to a relocation of the Equipment and Easement area if the City determined that such relocation or expansion is necessary.

5. Ownership of Equipment; Damage. Owner agrees that all Equipment shall remain the property of the Owner. Owner shall be responsible for any damage to the Equipment caused by the Owner, its agents, invitees, or contractors. The City shall not be liable for any damages caused to Owner's property caused by actions reasonably taken by the City in the exercise of its rights hereunder.

6. Right to Grant Easement. Owner covenants and warrants to the City that it is the sole owner of the Property and has the right to grant the Easement under this agreement.

7. Binding Effect. This Easement shall be binding on the Property and all owners of the Property.

Agreed this [Day] day of [Month] [Year] by:

Grantor/Owner:

_____

Grantor Signature

_____

Grantor Printed Name

STATE OF OREGON)
) ss.
County of Clatsop)

This instrument was acknowledged before me on this _____ day of _____, _____ by _____.

_____

Notary Public of Oregon

My Commission Expires:_____

Public Works Low Pressure Sewer System Permit

City of Warrenton – Public Works
45 SW 2nd Street, Warrenton, OR 97146
Phone: (503) 861-0912 **Fax:** (503) 861-9661
Web: www.ci.warrenton.or.us

Permit Number:	
Date Submitted:	
Date Approved:	
User Permit Fee:	

PROPERTY & APPLICANT INFORMATION

Street Name(s)/Location **attach site diagram or map*:	
Clatsop County Tax Lot Number:	
New Permit or Permit Renewal (circle one): NEW PERMIT	PERMIT RENEWAL
Applicant Name:	
Applicant Mailing Address:	
Applicant City/State/ZIP:	
Applicant Phone:	Applicant Email:
Property Owner Name (If different from Applicant):	
Property Owner Mailing Address (If different from Applicant):	
Property Owner Phone (If different from Applicant):	

IF APPLYING FOR A NEW PERMIT, PLEASE COMPLETE THIS SECTION

Is this grinder pump system newly constructed or purchased from an existing property owner?

NEW CONSTRUCTION *PREVIOUSLY OWNED*

Provide the make, model, and date of installation of the grinder pump system.

Make:

Model:

Date of Installation:

Name of Installer:

Provide the name and contact information for the service provider with whom the permit applicant has entered into a service agreement:

Service Provider Name:

Service Provider Phone Number:

IF RENEWING AN EXISTING PERMIT, PLEASE COMPLETE THIS SECTION

Permit Number:

Previous Date of Permit Issuance:

Pump run time meter reading at the time of application:

Provide the name and contact information for the service provider with whom the permit applicant has entered into a service agreement:

Service Provider Name:

Service Provider Phone Number:

In the previous 12 months, have you completed the maintenance activities recommended by the manufacturer? (circle one)

YES NO

List all maintenance activities performed in the previous 12 months:

In the previous 12 months, did the Service Provider conduct an inspection of the grinder pump system?

YES NO

List any alarms that occurred during the previous 12 months and describe how each alarm was resolved.

In the previous 12 months, did sewage overflow from your grinder pump system? (circle one)

YES NO

If so, when did this occur and how did you resolve the issue that caused the system to overflow?

In the previous 12 months, did you modify your grinder pump system or complete any construction activities on your property? If so, please describe in detail.

CERTIFICATION STATEMENT

All property owners seeking authorization to discharge to the City of Warrenton Sewer System are required to comply with all local, City, State, and Federal requirements pertaining to the discharge of wastes to a municipal sewer system. By submitting this application, the applicant agrees to comply with those requirements and acknowledges that their grinder pump system is being operated and maintained in accordance with the City of Warrenton Low Pressure Sewer System policy. The applicant acknowledges that the City of Warrenton has the right to access the system for inspection and in case of emergency events. In the event of an imminent or active sanitary sewer overflow, the City may lock off the water meter. The applicant acknowledges that they have reviewed the City of Warrenton grinder pump system homeowner's manual titled "Guidance for Operating and Maintaining Your Grinder Pump System" and agree to comply with the requirements related to materials which can and cannot be discharged to the sewer system.

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED IN THIS PERMIT APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

Applicant's Signature: **Date:**

City Commission Agenda Memo

Meeting Date: May 27th, 2025
From: Kevin Gorman, Public Works Director
Subject: Request for Commission Approval to Advertise for Bids – Iredale Culvert Replacement Project

Summary:

Staff requests authorization to advertise for construction bids for the Iredale Tide Gate and Culvert Replacement Project. This critical stormwater infrastructure project addresses a failed culvert that has compromised the drainage system, resulting in tidal backflow and frequent flooding on City streets. The project was designed and put out to bid in 2022; however, the bids received exceeded available funding. Emergency repairs were completed in 2023, and the City has since secured funding through the Legislative Pre-Disaster Mitigation (LPDM) grant program to complete the remaining work. The final design has been updated to reflect current site conditions and is now ready for construction.

Recommendation/Suggested Motion:

"I move to authorize the advertisement for construction bids for the Iredale Culvert Replacement Project."

Alternative:

None recommended

Fiscal Impact:

No additional fiscal impact. The project is fully funded in the adopted FY 2024–2025 budget, with $1.1 million allocated. Funding includes a $763,088.29 LPDM grant and a $254,362.76 non-federal match.

Attachments:
(All supporting documentation, i.e., maps, exhibits, etc., must be attached to this memorandum.)

- Bid Plan Set
- Contract Documents

Approved by City Manager: _____

CITY OF WARRENTON

IREDALE CULVERT REPLACEMENT PROJECT

HAMMOND, OREGON

PHASE 2 - BID SET

GENERAL NOTES

1. ATTENTION CONTRACTORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987 OR 1-800-332-2344). AT LEAST TWO (2) BUSINESS DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OREGON UTILITY NOTIFICATION CENTER OF THE DATE AND LOCATION OF THE PROPOSED CONSTRUCTION, AND THE TYPE OF WORK TO BE PERFORMED.
2. ALL EXISTING FACILITIES TO BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE ENGINEER.
3. IN ACCORDANCE WITH O.R.S.209.140, IF THE CONTRACTOR FINDS IT NECESSARY TO INTERFERE WITH OR PAVE OVER ANY ESTABLISHED PUBLIC LAND SURVEY CORNER OR ITS ACCESSORIES, WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE COUNTY SURVEYOR PRIOR TO DOING SO.
4. IN ACCORDANCE WITH O.R.S.209.150, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ALL SURVEY MONUMENTS DISTURBED OR DESTROYED DURING CONSTRUCTION. REPLACING THE SURVEY MONUMENTS SHALL BE DONE BY A REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
5. EXISTING UTILITY LOCATIONS SHOWN (PLAN & PROFILE) ARE APPROXIMATE ONLY. NO PRECISION POTHOLING WAS DONE TO ESTABLISH THESE LOCATIONS. CONTACT UTILITY COMPANIES FOR PREMARKING. CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CONNECTION & CROSSING LOCATIONS TO VERIFY DEPTH, LOCATION & TYPE OF EXISTING WATER MAIN, SEWER MAIN & STORM MAIN PRIOR TO ORDERING CONNECTION MATERIALS. NOTIFY ENGINEER IMMEDIATELY IF EXISTING CONDITIONS VARY FROM THAT SHOWN. NOTIFY ENGINEER 24 HOURS PRIOR TO POTHOLING.
6. CONTRACTOR SHALL VERIFY ALL CONDITIONS ON THE JOB SITE INCLUDING ALL DIMENSIONS, GRADES, ELEVATIONS, EXTENT AND COMPATIBILITY TO THE EXISTING SITE CONDITIONS, AND WITH THE WORK DESCRIBED ON THE CONTRACT DRAWINGS. ANY DISCREPANCIES OR UNEXPLAINED CONDITIONS THAT AFFECT OR CHANGE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. CONTRACTOR SHALL NOT PROCEED WITH ANY OF THE WORK IN THE AREA OF DISCREPANCIES UNTIL ALL SUCH DISCREPANCIES ARE RESOLVED. IF THE CONTRACTOR CHOOSES TO DO SO, THEN IT IS UNDERSTOOD THAT HE SHALL BE PROCEEDING AT HIS OWN RISK AND INCUR ALL COST, IF ANY, TO RESOLVE THE ISSUE TO THE SATISFACTION OF THE ENGINEER.
7. TECHNICAL SPECIFICATIONS FOR CONSTRUCTION ARE TO FOLLOW THE CONTRACT SPECIFICATIONS AND THE MOST CURRENT EDITION OF THE IBC, UPC. OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (ODOT/APWA) SHALL BE REFERENCED WHERE CONTRACT SPECIFICATIONS DO NOT ADDRESS A SPECIFIC ITEM. SEE SPECIFICATIONS FOR CONSTRUCTION METHODS AND OTHER NOTES PERTINENT TO THIS PROJECT.
8. UPON COMPLETION OF CONSTRUCTION OF THE PROJECT, CONTRACTOR TO SUBMIT RECORD DRAWINGS TO THE ENGINEER OR CITY. THE PROJECT SHALL NOT BE CONSIDERED COMPLETE UNTIL RECORD DRAWINGS ARE ACCEPTED BY CITY.
9. OVERHEAD POLE STABILIZATION BY PACIFIC POWER TO BE COORDINATE WITH MARILYN BROCKEY (SEE UTILITY PROVIDERS LIST).

ROADWORK/SITEWORK

10. CONTRACTOR SHALL RESTORE ALL SURFACES TO MATCH EXISTING AND ADJACENT GRADES.
11. ALL DESIGN ELEVATIONS SHOWN SHALL BE CONSIDERED TO BE FINISH SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. ALL SURFACES SHALL BE GRADED SMOOTH AND FREE OF IRREGULARITIES THAT COULD ACCUMULATE SURFACE WATER.
12. THE CONTRACTOR SHALL HAVE A SUFFICIENT NUMBER OF COMPACTION TESTS PERFORMED TO MEET SPECIFICATION REQUIREMENTS. TESTS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY AND WRITTEN RESULTS SHALL BE PROVIDED TO THE APPROPRIATE AGENCY. SHOULD COMPACTION REQUIREMENTS NOT BE MET, CONTRACTOR SHALL RECOMPACT AND PAY ALL ADDITIONAL TESTING COSTS RELATED TO THE RECOMPACTION.

SIGNAGE

13. CONTRACTOR SHALL ERECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER ODOT REQUIREMENTS. ACCESS TO EXISTING DRIVEWAYS AND BUSINESSES TO BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL REPLACE ALL SIGNS REMOVED DURING CONSTRUCTION. CITY TO APPROVE INSTALLATION.

WATER

14. WATERLINE FITTINGS MUST BE FULLY RESTRAINED BY THRUST BLOCKS AND APPROVED RESTRAINT SYSTEM UNLESS SPECIFICALLY OTHERWISE INDICATED ON THESE DOCUMENTS.
15. POTHOLE EXISTING WATER PIPES FOR CONNECTION OF NEW WATER SYSTEM. ALL INVERT ELEVATIONS, PIPE SIZES AND MATERIALS ARE TO BE MEASURED BY CONTRACTOR PRIOR TO ORDERING ANY MATERIALS FOR THE WATER SYSTEM.

STORM & SEWER

16. POTHOLE EXISTING STORM AND SEWER PIPES FOR CONNECTION OF NEW SYSTEMS. ALL INVERT ELEVATIONS, PIPE SIZES AND MATERIALS ARE TO BE MEASURED BY CONTRACTOR PRIOR TO ORDERING ANY MATERIALS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL CATCH BASINS, CLEANOUTS, MANHOLES, VAULTS, ETC., THAT ARE AFFECTED BY CONSTRUCTION AND/OR FILL TO FINISH GRADE. STORM DRAIN INLET STRUCTURES SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING.
18. PIPE FOR CULVERT SHOULD BE INSTALLED PER CITY OF WARRENTON ENGINEERING STANDARDS, APRIL 2020.

DEMOLITION

19. CONTRACTOR TO DEVELOP A CONSTRUCTION PHASING PLAN AND PROVIDE IT TO THE CITY AND ENGINEER PRIOR TO BEGINNING CONSTRUCTION. PLAN SHALL INDICATE STAGES OF DEMOLITION AND DURATION OF OUTAGES. ALL OUTAGES ARE TO BE KEPT TO A MINIMUM.

TRAFFIC CONTROL

20. THE CONTRACTOR SHALL DEVELOP AND SUBMIT A TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL. THE TRAFFIC CONTROL PLAN SHALL DETAIL KEY INTERSECTIONS WITHIN THE PROJECT ZONE, SPECIFICALLY AT IREDALE STREET IN ACCORDANCE WITH SECTION 157 OF THESE SPECIFICATIONS. THE CONTRACTOR SHALL INCLUDE SIGNAGE ALONG PACIFIC DRIVE AS NECESSARY TO INFORM TRAFFIC OF THE IREDALE CLOSURE AND PROPER DETOURING. THE CONTRACTOR SHALL FURNISH AND PLACE TRAFFIC CONTROL BARRICADES AND SIGNS ACCORDING TO THE MUTCD AND ODOT SPECIFICATIONS IN ORDER TO ALLOW THE PUBLIC REASONABLE ACCESS TO THOSE BUSINESSES AND RESIDENCES. THE CONTRACTOR SHALL USE CONES, DELINEATORS, DETOUR SIGNS AND BARRICADES TO KEEP VEHICULAR AND PEDESTRIAN TRAFFIC OUT OF THE IMMEDIATE CONSTRUCTION ZONE OF THE CONTRACTOR. ALL SIGNS AND BARRICADES MUST BE APPROVED BY THE CITY OF WARRENTON AND THE ENGINEER PRIOR TO ORDERING. SEE SECTION 157 OF THESE SPECIFICATIONS.
21. CONTRACTOR WILL ENCOUNTER HIGH GROUND-WATER TABLE AT SITE LOCATION. RECENT ONSITE EXCAVATIONS, (AUGUST, 2022) HAVE DETERMINED GROUNDWATER TO BE APPROXIMATE ELEVATION 6.0'. IF ADDITIONAL RAIN OR HIGH TIDES OCCUR, THE GROUND WATER CAN INCREASE HIGHER DURING THE PROJECT. THE CONTRACTOR SHALL ANTICIPATE ALL EFFORTS FOR OBSERVING THE GROUND WATER ELEVATIONS AND TIDES THROUGHOUT THE ENTIRE PROJECT DURATION AND ALONG THE ENTIRE PROJECT ALIGNMENT.

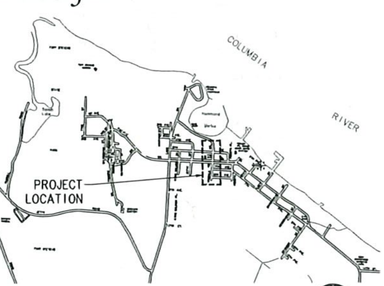
THE HIGH GROUND-WATER IN COMBINATION WITH SAND SUBGRADE WILL CAUSE A "QUICK" EFFECT, RESULTING IN THE DESTABILIZATION OF ADJACENT SOILS, UTILITIES AND STRUCTURES. CONTRACTOR SHALL ANTICIPATE AND COORDINATE ANY AND ALL DEWATERING TECHNIQUES NECESSARY AND/OR REQUIRED TO COMPLETE THE PROJECT AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS. CONTRACTOR SHALL BEAR ALL COSTS PERTAINING TO DEWATERING EFFORTS.

UTILITY PROVIDERS

- ELECTRICITY
  PACIFIC POWER
  ATTN: MARILYN BROCKEY
  2340 SE DOLPHIN
  WARRENTON, OR 97146
  503-861-6005
  503-861-6020 (FAX)
- TELEPHONE
  LUMEN
  ATTN: JOSH FALLIN
  740 STATE ST. ROOM 407
  SALEM, OR 97103
  503-798-1309
- CABLE TELEVISION
  SPECTRUM
  ATTN: VINNY BILLECI
  410 GATEWAY
  ASTORIA, OR 97103
  503-298-0129
  503-338-7710 (OFFICE)
- ONE CALL CENTER
  1-800-332-2344 OR 811
- GAS
  NORTHWEST NATURAL GAS
  ATTN: RYAN WINFREE
  178 W. MARINE DR.
  ASTORIA, OR 97103
  503-226-4211 EXT. 2987
  503-325-4353 (FAX)
- WATER, STORM, ROADS
  CITY OF WARRENTON
  ATTN: TWYLA VITTETOE,
  PUBLIC WORKS ENGINEER TECHNICIAN
  225 S. MAIN
  P.O. BOX 250
  WARRENTON, OR 97146
  503-861-0917

PROJECT TEAM

- ENGINEER
  NORTH COAST CIVIL DESIGN, LLC
  ATTN: KYLE AYERS, PE
  35240 TOHL AVE
  NEHALEM, OR 97131
  503-812-3732 (C)
  503-368-3732 (O)
- OWNER
  CITY OF WARRENTON
  ATTN: TWYLA VITTETOE,
  PUBLIC WORKS ENGINEER TECHNICIAN
  45 SW 2ND ST/PO BOX 250
  WARRENTON, OR 97146
  503-861-0917



LOCATION MAP

NO SCALE

SURVEY NOTES

THIS TOPOGRAPHIC SURVEY AND FIELD MAPPING WAS PERFORMED BY CKI, INC. THE PURPOSE OF THE SURVEY INFORMATION SHOWN IS TO SHOW EXISTING TOPOGRAPHIC INFORMATION FOR THE IREDALE CULVERT REPLACEMENT PROJECT AND UTILITY RECONSTRUCTION PROJECT WITHIN THE PROJECT LIMITS SHOWN.

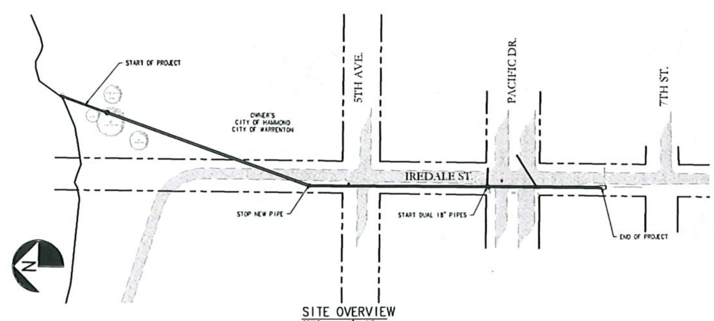
THIS MAP DOES NOT CONSTITUTE A BOUNDARY SURVEY.

UTILITY LOCATES SHOWN ON THIS MAP ARE BASED ON ABOVE GROUND STRUCTURES AND SURFACE LOCATES AT THE TIME OF FIELD WORK. THE ABOVE GROUND PAINT MARKS ARE APPROXIMATE LOCATION ONLY AND THE COMPANIES THAT PLACE THE PAINT MARKS DO NOT GUARANTEE THEIR SURFACE LOCATES TO BE FREE OF ERRORS AND OMISSIONS. THEREFORE, NORTH COAST CIVIL RESERVES THE SAME LIMITATIONS.

ELEVATIONS SHOWN HERE ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

SHEET INDEX

SHEET NAME	SHEET DESCRIPTION	STATION RANGE/ADD'L DESCRIPTION
SHEET G1	COVER SHEET & GENERAL NOTES	
SHEET G2	GENERAL INFORMATION	
SHEET EX1	EXISTING CONDITIONS	
SHEET EC1	EROSION CONTROL PLAN AND DEMOLITION PLAN	STA: 1+00 TO 11+50
SHEET U1	STORM UTILITY CONSTRUCTION DRAWING PLAN & PROFILE	STA: 1+00 TO 6+50
SHEET U2	STORM UTILITY CONSTRUCTION DRAWING PLAN & PROFILE	STA: 6+50 TO 11+50
SHEET D1	STORM WATER CONSTRUCTION DETAILS	
SHEET D2	EROSION CONTROL & STORM WATER CONSTRUCTION DETAILS	



SITE OVERVIEW

SCALE: 1" = 80'

NORTH COAST CIVIL DESIGN
35340 TOHL AVE.
NEHALEM, OR 97131
Phone 503.440.1069
Cell 503.812.3732
Internet www.nccivil.com

CITY OF WARRENTON

IREDALE CULVERT REPLACEMENT PROJECT
COVER SHEET & GENERAL NOTES

HAMMOND, OR

Project No. 21001 | Drawing No. G01.DWG

Sheet No. G1

BID SET – 03.28.2025

LEGEND

- PROPERTY LINE
- EXISTING GROUND CONTOUR
- EXISTING SIDEWALK/CONCRETE
- EXISTING STORM LINE
- EXISTING WATER LINE
- EXISTING SANITARY LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD POWER
- EXISTING POWER POLE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING CATCH BASIN
- EXISTING STORM MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING SPOT ELEVATION
- UTILITY PEDESTAL AS NOTED

PROPOSED

- SEDIMENT FENCE
- SAWCUT AND DEMOLISH
- CLEARING AND GRUBBING LIMITS
- ASPHALT SURFACE
- CATCH BASIN - CONCRETE
- STORM LINE
- STORM MANHOLE

ABBREVIATIONS

AC	ASPHALT FINISHED GRADE	ELEV	ELEVATION	ORS	OREGON REVISED STATUTES
ACI	AMERICAN CONCRETE INSTITUTE	EOP	EDGE OF PAVEMENT	PED	PEDESTAL
ACOE	UNITED STATES ARMY CORPS OF ENGINEERS	EX	EXISTING	PS	PUMP STATION
ADJ	ADJUSTABLE	FFE	FINISHED FLOOR ELEVATION	PSF	POUNDS PER SQUARE FOOT
APWA	AMERICAN PUBLIC WORKS ASSOCIATION	FG	FINISH GRADE	PSI	POUNDS PER SQUARE INCH
AR	AIR RELEASE VALVE	FIP	FEMALE IRON PIPE	PT	PRESSURE TREATED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	FLG	FLANGE	PVC	POLY VINYL CHLORIDE
ATTN	ATTENTION	FNPT	FEMALE NATIONAL PIPE THREAD	PW	PUBLIC WORKS
AVG	AVERAGE	GALV	GALVANIZED	PWR	POWER
CB	CATCH BASIN	GPM	GALLONS PER MINUTE	S	SLOPE
CDF	CONTROLLED DENSITY FILL	GV	GATE VALVE	SCH	SCHEDULE
CITY	CITY OF MANZANITA	HDD	HORIZONTAL DIRECTIONAL DRILLING	SD	STORM DRAIN
CLR	CLEAR	HDPE	HIGH DENSITY POLYETHYLENE	SDMH	STORM DRAIN MANHOLE
CMP	CORRUGATED METAL PIPE	HMAC	HOT MIX ASPHALTIC CONCRETE	SF	SQUARE FOOT
CO	CLEANOUT	HP	HORSEPOWER	SS	SANITARY SEWER
COE	UNITED STATES ARMY CORPS OF ENGINEERS	HR	HOUR	SSMH	SANITARY SEWER MANHOLE
CONC	CONCRETE FINISHED GRADE	IBC	INTERNATIONAL BUILDING CODE	STA	STATION
CPP	CORRUGATED PLASTIC PIPE	I.E.	INVERT ELEVATION	SVC	SERVICE
DEMO'D	DEMOLISHED	IN	INCH	TC	TOP OF CURB
DEPT	DEPARTMENT	IPS	IRON PIPE SIZE	TEL	TELEPHONE
DEQ	DEPARTMENT OF ENVIRONMENTAL QUALITY	L	LENGTH	TPUD	TILLAMOOK PEOPLE'S UTILITY DISTRICT
DI	DUCTILE IRON	LF	LINEAL FEET	TYP	TYPICAL
DIA	DIAMETER	MIN	MINIMUM	UBC	UNIFORM BUILDING CODE
DIAG	DIAGONAL	MJ	MECHANICAL JOINT	UG	UNDER GROUND
DR	DIMENSION RATIO	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	UPC	UNIFORM PLUMBING CODE
DSL	OREGON DEPARTMENT OF STATE LANDS	NAVD88	NORTH AMERICAN VERTICAL DATUM - 1988	W/	WITH
DITCH	BOTTOM OF DITCH	NTS	NOT TO SCALE	WT	WATER TIGHT
EG	EXISTING GRADE	OAR	OREGON ADMINISTRATIVE RULES	WWF	WELDED WIRE FABRIC
EL	ELEVATION	ODOT	OREGON DEPARTMENT OF TRANSPORTATION		
ELEC	ELECTRICAL	OH	OVER HEAD		

BID SET - 03.28.2025

NORTH COAST
Civil Design
38340 TOHL AVE.
NEHALEM, OR 97131
Phone 503.440.1089
Cell 503.812.3732
Internet www.ncdsd.com

CITY OF WARRENTON
IREDALE CULVERT REPLACEMENT PROJECT
GENERAL INFORMATION
HAMMOND, OR

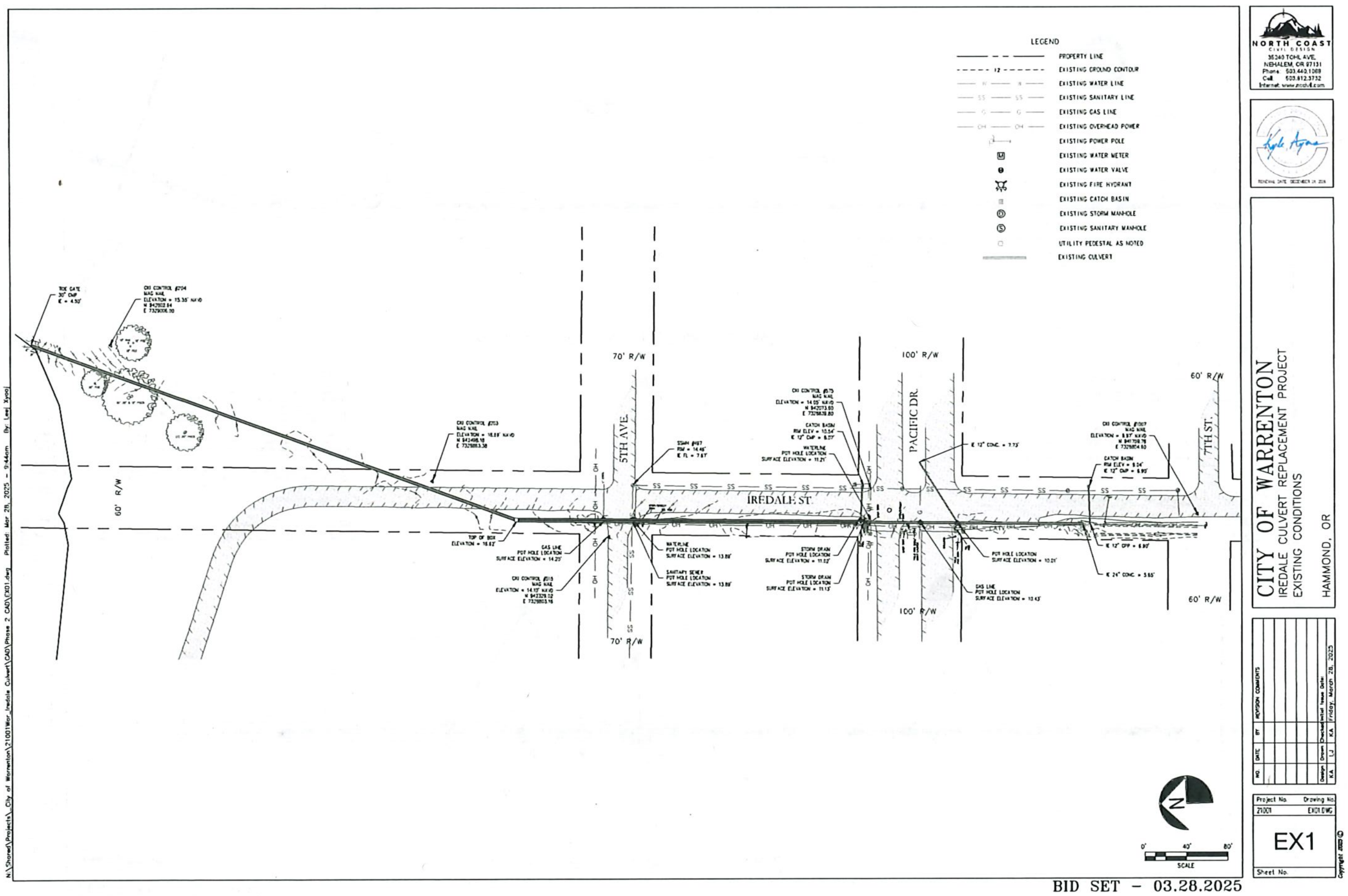
NO.	DATE	BY	REVISION DESCRIPTION

Design: Drawn: Checked: Date: Friday, March 28, 2025
K.A. L.F. K.A.

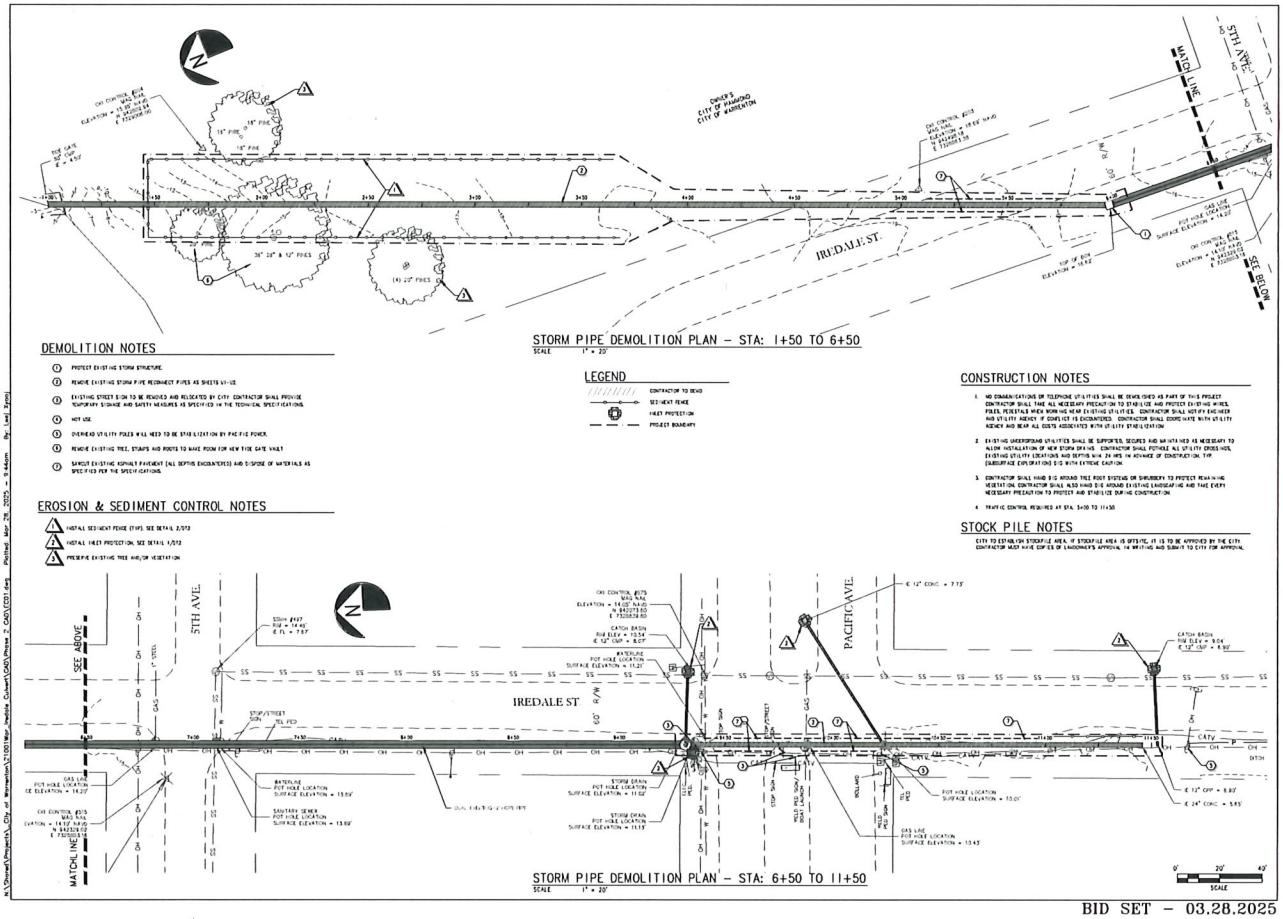
Project No. 21001 | Drawing No. G01.DWG

G2

Sheet No.



LEGEND
PROPERTY LINE
EXISTING GROUND CONTOUR
EXISTING WATER LINE
EXISTING SANITARY LINE
EXISTING GAS LINE
EXISTING OVERHEAD POWER
EXISTING POWER POLE
EXISTING WATER METER
EXISTING WATER VALVE
EXISTING FIRE HYDRANT
EXISTING CATCH BASIN
EXISTING STORM MANHOLE
EXISTING SANITARY MANHOLE
UTILITY PEDESTAL AS NOTED
EXISTING CULVERT
5TH AVE.
PACIFIC DR.
7TH ST.
IREDALE ST.
70' R/W
100' R/W
60' R/W
NORTH COAST
CITY OF WARRENTON
IREDALE CULVERT REPLACEMENT PROJECT
EXISTING CONDITIONS
HAMMOND, OR
Project No. 21001
EX1
SCALE
BID SET – 03.28.2025



BID SET – 03.28.2025

NORTH COAST CIVIL DESIGN
38240 TOWL AVE.
NEHALEM OR 97131
Phone 503.440.1009
Cell 503.812.3732
Internet www.ncdesi.com

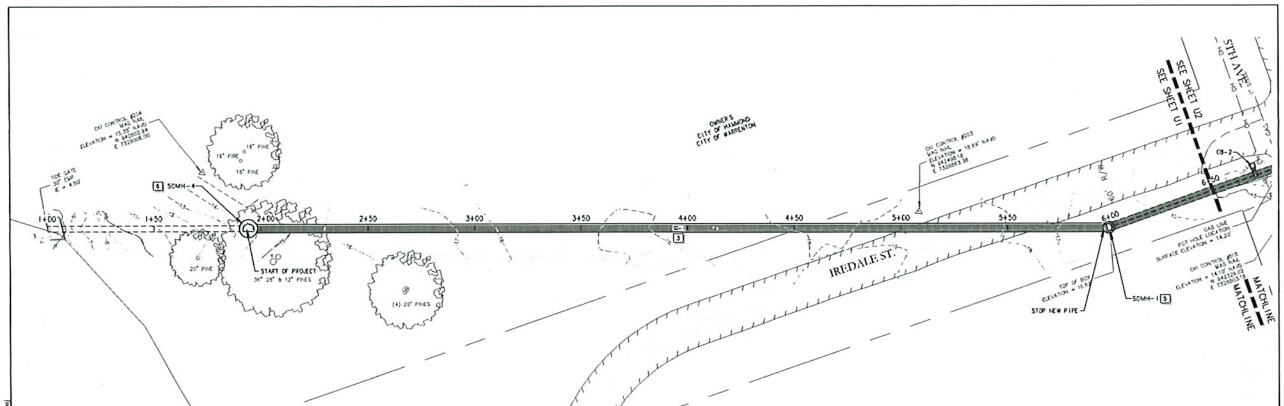
CITY OF WARRENTON
IREDALE CULVERT REPLACEMENT PROJECT
EROSION CONTROL PLAN AND DEMOLITION PLAN
HAMMOND, OR

NO.	DATE	REVISION COMMENTS

Design: KA Drawn: LJ Checked: KA Final Submittal: Friday, August 29, 2025

Project No. 21001 Drawing No. EC1

Sheet No.

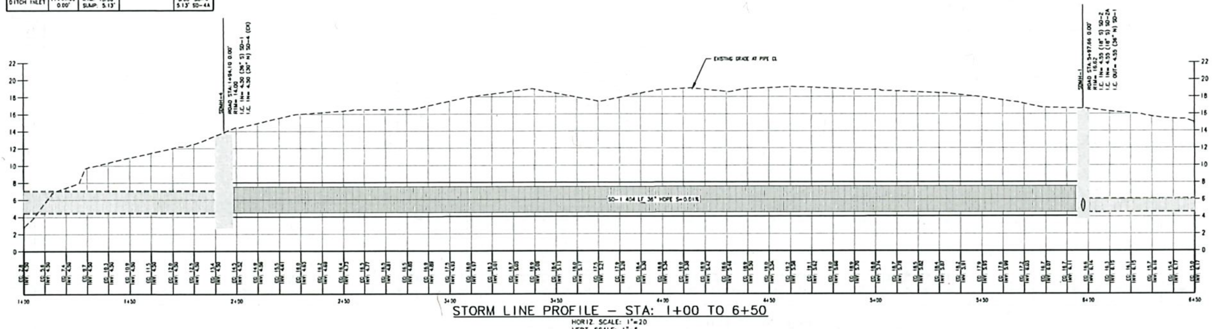


STORM LINE PLAN – STA: 1+00 TO 6+50

SD STRUCTURE TABLE				
Structure Name	Street Location	Structure Details	I.E. IN	I.E. OUT
SDMH-4	1+94.10 0.00'	RIM: 14.00' SUMP: 3.00'	4.50' SD-1 4.50' SD-4 (EX)	
SDMH-1	5+97.66 0.00'	RIM: 16.62' SUMP: 4.05'	4.55' SD-2 4.55' SD-2A	4.55' SD-1
CB-2	6+70.59 4.61' L	RIM: 13.95' SUMP: 11.40'		11.40' CB-2
SDMH-2	9+31.12 0.00'	RIM: 10.87' SUMP: 4.74'	4.85' SD-3 7.32' CB-1EX 8.00' CB-1A-EX 5.18' SD-3A	4.80' SD-2 4.80' SD-2A
SDMH-3	10+24.27 0.00' R	RIM: 10.03' SUMP: 4.85'	5.13' SD-4 5.65' Pipe - (59) 5.50' SD-4A	5.13' SD-3 4.85' SD-3A
DITCH INLET	11+47.95 0.00'	RIM: 10.08' SUMP: 5.13'		5.50' SD-4 5.13' SD-4A

STORM NOTES

1. UTILITY CROSSING. CONTRACTOR SHALL POTHOLE CROSSING 24HR PRIOR TO CONSTRUCTION OF CROSSING TO DETERMINE APPROPRIATE TRENCH DEPTH AS SPECIFIED BY THE ENGINEER. SEE CONSTRUCTION NOTES FOR FURTHER DETAIL.
2. EXISTING (2) 18"Ø STORM PIPES, CORRUGATED HDPE.
3. CONSTRUCT 36"Ø STORM PIPE, CORRUGATED HDPE. INSTALLATION OF CULVERT PIPE SHALL BE PER ASTM D2321 AND ADS RECOMMENDED INSTALLATION GUIDELINES. SEE DETAIL 1, SHEET D1 FOR TRENCH DETAIL. ALL PIPE FITTINGS & CONNECTIONS TO BE WT.
4. CONSTRUCT CONCRETE CATCH BASIN WITH GRATE AS PER DETAIL 3, SHEET D1.
5. SAVE EXISTING VAULT.
6. CONSTRUCT 96"Ø CONCRETE STORM DRAIN MANHOLE, AS PER DETAIL 2, SHEET D1. CONNECT EXISTING CMP PIPE TO NEW MANHOLE. CONTRACTOR SHALL VERIFY INTEGRITY CONDITION OF EXISTING PIPE TO DETERMINE THE BEST METHOD TO CONSTRUCTION STORM PIPE CONNECTIONS.



STORM LINE PROFILE – STA: 1+00 TO 6+50

HORIZ. SCALE: 1"=20
VERT. SCALE: 1"=5

NORTH COAST CIVIL DESIGN
36240 TOHL AVE.
NEHALEM, OR 97131

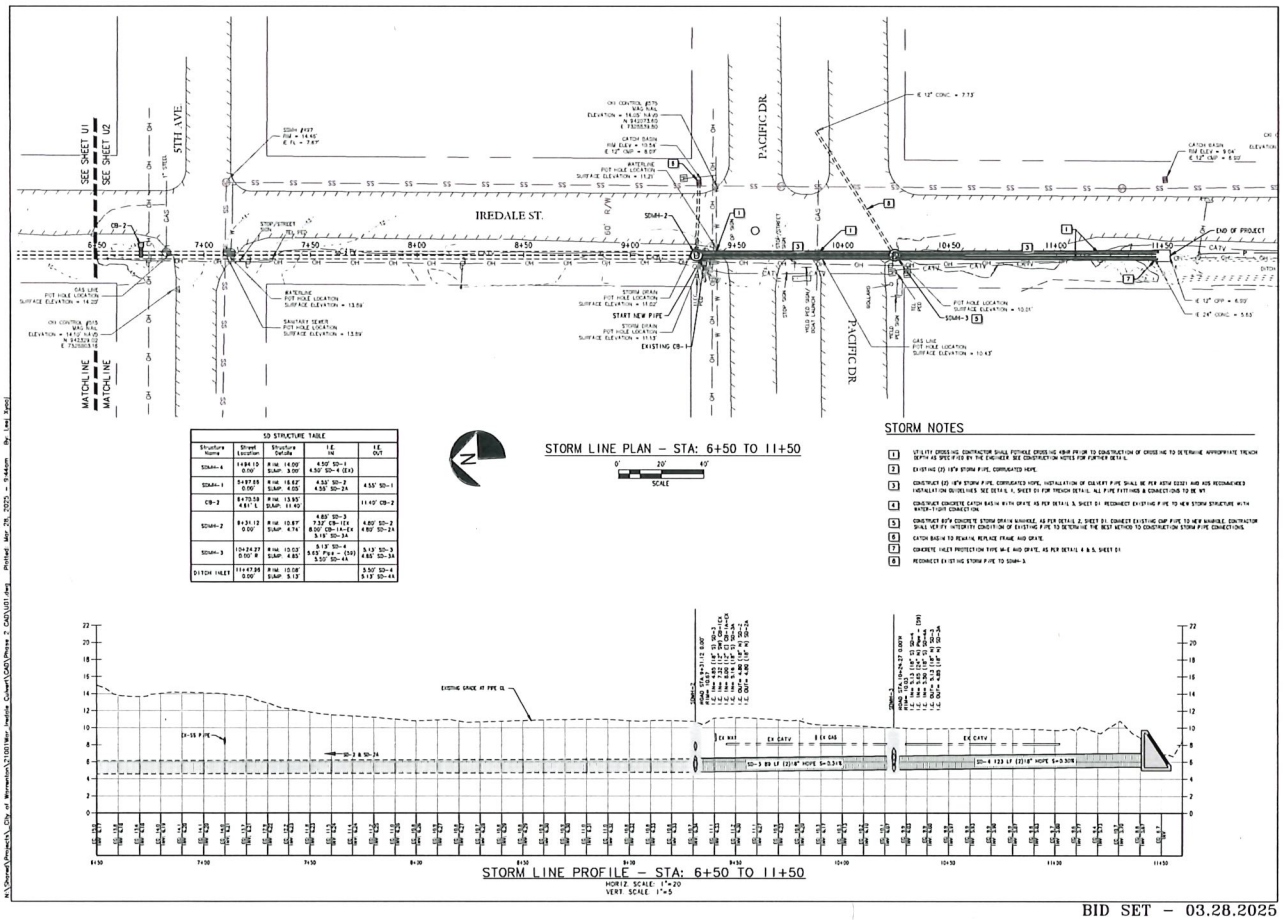
CITY OF WARRENTON
IREDALE CULVERT REPLACEMENT PROJECT
STORM UTILITY CONSTRUCTION DRAWINGS
STA 1+00 TO 6+50 – PLAN & PROFILE VIEW
HAMMOND, OR

Project No. 21001 | Drawing No. U01.DWG

U1

Sheet No.

BID SET – 03.28.2025



SD STRUCTURE TABLE				
Structure Name	Street Location	Structure Details	I.E. IN	I.E. OUT
SDMH-4	6+84.10 0.00'	R Ind. 14.00' SUMP 3.00'	4.50' SD-1 4.50' SD-4 (EX)	
SDMH-1	9+97.88 0.00'	R Ind. 16.62' SUMP 4.00'	4.55' SD-2 4.55' SD-2A	4.55' SD-1
CB-2	8+73.59 4.81' L	R Ind. 13.95' SUMP 11.40'		11.40' CB-2
SDMH-2	8+31.12 0.00'	R Ind. 10.87' SUMP 4.74'	4.80' SD-3 7.33' CB-1E 8.00' CB-1E-EX 5.19' SD-3A	4.80' SD-2 4.80' SD-2A
SDMH-3	10+24.27 0.00' R	R Ind. 13.02' SUMP 4.83'	5.13' SD-4 5.83' Pipe - (SD) 5.33' SD-4A	5.13' SD-3 4.83' SD-3A
DITCH INLET	11+47.38 0.00'	R Ind. 12.08' SUMP 5.13'		3.50' SD-4 5.13' SD-4A

STORM LINE PLAN – STA: 6+50 TO 11+50

0' 20' 40'
SCALE

STORM NOTES

1. UTILITY CROSSING: CONTRACTOR SHALL POTHOLE CROSSING PRIOR TO CONSTRUCTION OF CROSSING TO DETERMINE APPROPRIATE TRENCH DEPTH AS SPECIFIED BY THE ENGINEER. SEE CONSTRUCTION NOTES FOR FURTHER DETAILS.
2. EXISTING (2) 18"Ø STORM PIPE, CORRUGATED HDPE.
3. CONSTRUCT (2) 18"Ø STORM PIPE, CORRUGATED HDPE, INSTALLATION OF CULVERT PIPE SHALL BE PER ASTM D2321 AND ADS RECOMMENDED INSTALLATION GUIDELINES. SEE DETAIL 6, SHEET D1 FOR TRENCH DETAIL. ALL PIPE FITTINGS & CONNECTIONS TO BE WT.
4. CONSTRUCT CONCRETE CATCH BASIN WITH GRATE AS PER DETAIL 3, SHEET D1. RECONNECT EXISTING PIPE TO NEW STORM STRUCTURE WITH WATER-TIGHT CONNECTION.
5. CONSTRUCT 60"Ø CONCRETE STORM DRAIN MANHOLE, AS PER DETAIL 2, SHEET D1. CONNECT EXISTING CMP PIPE TO NEW MANHOLE. CONTRACTOR SHALL VERIFY INTERNAL CONDITION OF EXISTING PIPE TO DETERMINE THE BEST METHOD TO CONSTRUCTION STORM PIPE CONNECTIONS.
6. CATCH BASIN TO REMAIN, REPLACE FRAME AND GRATE.
7. CONCRETE INLET PROTECTION TYPE M-E AND GRATE, AS PER DETAIL 4 & 5, SHEET D1
8. RECONNECT EXISTING STORM PIPE TO SDMH-3.

STORM LINE PROFILE – STA: 6+50 TO 11+50

HORIZ SCALE 1"=20
VERT SCALE 1"=5

BID SET – 03.28.2025

NORTH COAST
35240 TOHL AVE.
NEHALEM, OR 97131
Phone 503.440.1009
Cell 503.812.3732
Internet www.ncdc8.com

CITY OF WARRENTON
IREDALE CULVERT REPLACEMENT PROJECT
STORM UTILITY CONSTRUCTION DRAWINGS
STA 6+50 TO 11+50 – PLAN & PROFILE VIEW
HAMMOND, OR

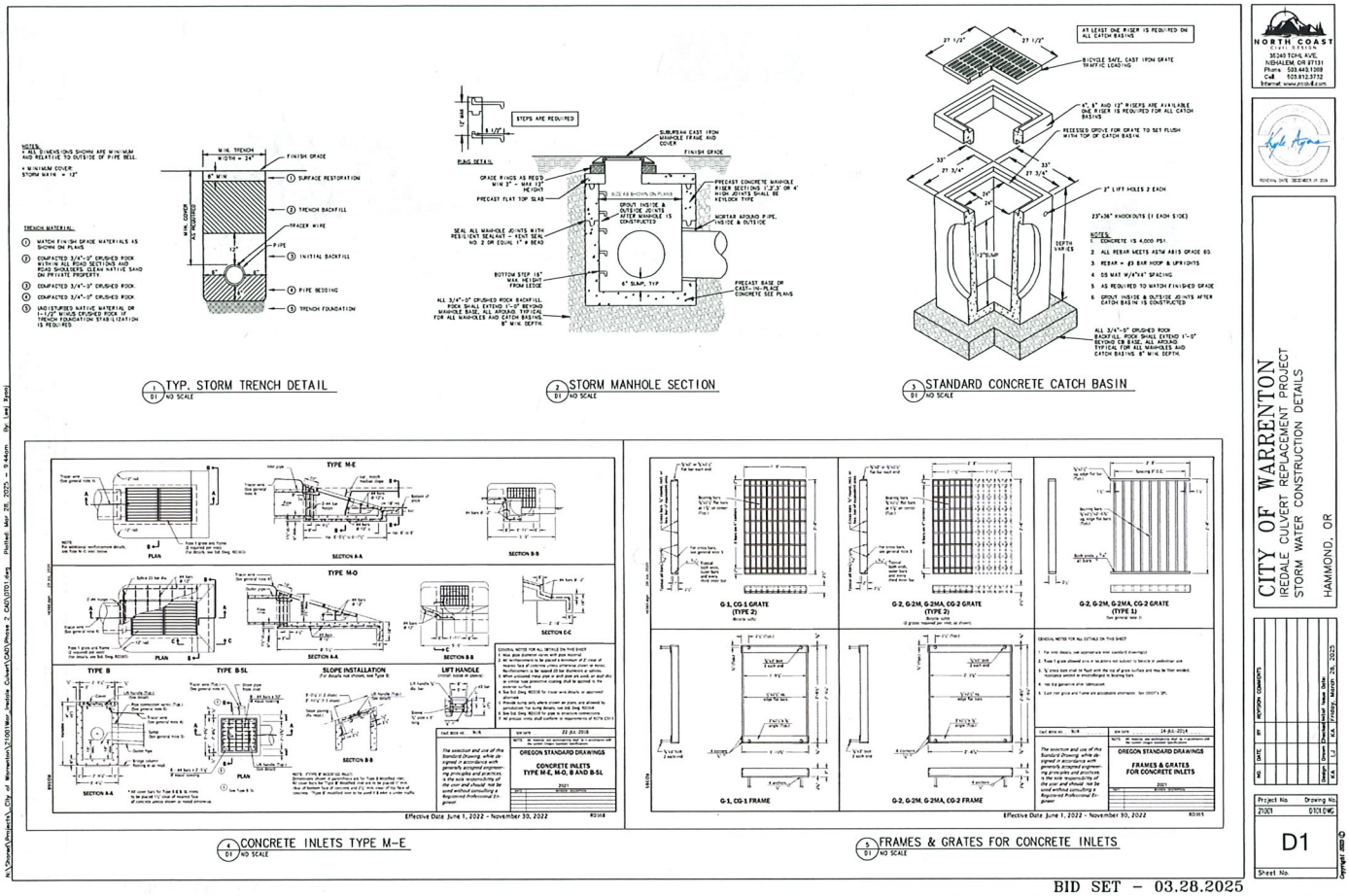
NO.	DATE	BY	REVISION COMMENTS

Design: Dsmn: Checked: Appr: Date:
K.A. L.J. K.A. Friday, March 28, 2025

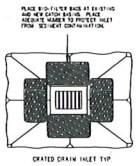
Project No. 21001 Drawing No. U01.DWG

U2

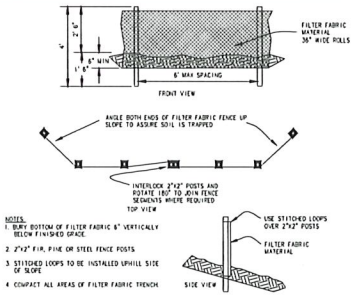
Sheet No.



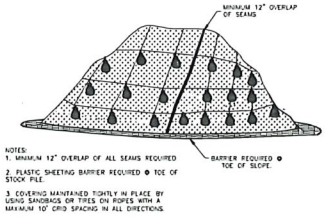
BID SET - 03.28.2025



1/D2 SEDIMENT CONTROL AT CATCH BASIN
NO SCALE



2/D2 SEDIMENT FENCE INSTALLATION
NO SCALE



3/D2 SOIL STOCKPILE PROTECTION DETAIL
NO SCALE

NORTH COAST
CIVIL SERVICE
36340 TOMA AVE.
NEHALEM, OR 97131
Phone 503.440.1089
Cell 503.812.3732
Internet www.ncsdu8.com

CITY OF WARRENTON
IREDALE CULVERT REPLACEMENT PROJECT
EROSION CONTROL & STORM WATER CONSTRUCTION DETAILS
HAMMOND, OR

NO.	DATE	BY	REVISION COMMENTS

Design: KA | Drawn: LJ | Checked: KA | Name: Stiles | Friday, March 28, 2025

Project No. 21009 | Drawing No. 0101.DWG

D2

Sheet No.

BID SET – 03.28.2025

NORTH COAST
CIVIL DESIGN

CITY OF WARRENTON, OREGON

CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

for:

IREDALE CULVERT REPLACEMENT PROJECT-PHASE II
(HAMMOND, OREGON)

REGISTERED PROFESSIONAL ENGINEER
60405PE
OREGON
JANUARY 12, 2016
KYLE K. AYERS
RENEWAL DATE: DECEMBER 31, 2023

Submitted to:
City of Warrenton
Attn: Twyla Vittetoe
Public Works, Engineering Technician
45 SW 2nd Street/P.O. Box 250
Warrenton, OR 97146
Phone: 503.861.0917

Prepared By:
North Coast Civil Design, LLC
Attention: Kyle Ayers, PE
Project Manager
35240 Tohl Ave
Nehalem, Oregon
Phone: 503.440.1088

May 2025

NC Civil Project No. 25004War

TABLE OF CONTENTS

CONTRACT DOCUMENTS

INVITATION TO BID

Sealed bids for the **IREDALE CULVERT REPLACEMENT PROJECT-PHASE II** will be received and accepted via the online electronic bid services through QuestCDN vBid (www.questcdn.com) until 2:00 P.M., Pacific Standard Time, on **Thursday, June 26, 2025** for the Owner, the City of Warrenton, at City Hall, 225 S. Main Ave, Warrenton, Oregon 97146, at which time and place they will be publicly opened and read aloud. No bids will be accepted after this time. All bidders shall submit, electronically, separately, within two working hours of the bid opening time, on the bid date, a completed First-Tier Subcontractor Disclosure Form in compliance with ORS 279C.370.

The work of this project will take place in Hammond, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Replace the remaining sections of the Iredale storm drainage pipe and structures that were not replaced in the original work. The work will be accomplished in the Summer of 2025.

In general, the elements of work include, but are not limited to:

1. Prior to Construction: Prepare and submit a Project Plan and Schedule for Engineer/City Approval
2. Prior to Construction: Obtain ODOT Right-of-Way Permit
3. Demo and Replace existing storm drainage pipe and structures
4. Extensive De-Watering required throughout the project
5. Repave street crossings from culvert replacement
6. Add shoulder rock as required by Engineer

Complete digital project bidding documents are available at http://www.questcdn.com. You may download the digital plan documents for **$35.00** by inputting Quest project **#9578904** on the website's Project Search page. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information. Please contact Kyle Ayers, P.E., at (503) 440-1088 if you have any questions. No paper documents will be accepted.

All bidders shall comply with the provisions of ORS 279C.800-870 [workers on public works to be paid not less than prevailing rate of wage for projects over $50,000]. Contractors submitting bids are required to be registered with the Construction Contractor's Board.

A pre-bid conference ***will not*** be held.

Bid security in the amount of not less than 10% of the bid must accompany each bid in accordance with the Instructions to Bidders. The online bid must be completed and submitted, all addenda acknowledged, and acknowledgement uploaded to the site, and a copy of the bid bond uploaded to the site. If a copy of the bid bond is uploaded, the original must be provided to the City after the bid opening but before the end of business on **Thursday, June 26, 2025**. The Owner reserves the right to reject any bid not in compliance with all prescribed public bidding procedures and requirements, and may reject, for good cause, any or all bids upon a finding of the Owner that is in the public interest to do so in accordance with ORS 279C.395. The Owner reserves the right to waive any bid irregularities or informalities.

No bidder may withdraw or modify the bidder's bid after the hour set for the opening thereof, until after the lapse of 30 days from the bid opening.

By Order of the

City of Warrenton

INSTRUCTIONS TO BIDDERS

1. THE PROJECT:

The work of this project will take place in Hammond, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Replace the remaining sections of the Iredale storm drainage pipe and structures that were not replaced in the original work. The work will be accomplished in the Summer of 2025.

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5. Repave street crossings from culvert replacement
6. Add shoulder rock as required by Engineer

2. CONTRACT DOCUMENTS:

Contract Documents include the Advertisement for Bids, Instructions to Bidders, Bid Form, Bid Bond, First-Tier Subcontractor Disclosure Form, Agreement, General Conditions to the Agreement, Supplemental General Conditions, Performance Bond, Payment Bond, Notice of Award, Notice to Proceed, the Drawings and Technical Specifications prepared or issued by NC Civil, Inc., and all Addenda issued prior to, and all Change Orders issued after execution of this Agreement.

3. ADDENDA AND INTERPRETATIONS:

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be emailed to Kyle Ayers, PE, the Engineer for NC Civil, LLC, email: kyle@nccivil.com and to be given consideration must be received at least four days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be delivered via messenger or facsimile transmission to all prospective bidders not later than 72 hours prior to the bid opening, at the respective addresses furnished for such purposes.

Failure of any bidder to receive any such addendum of interpretation shall not relieve such bidder from any obligation under the bidder's bid as submitted. All addenda so issued shall become part of the contract documents.

4. TIME OF COMPLETION:

The work to be performed under this contract shall be completed within **60** calendar days after the date of written Notice to Proceed by the Owner to the Contractor with such extensions of time as provided for in the General Conditions.

5. QUALIFICATIONS OF BIDDER AND SUBCONTRACTOR:

The City, at its sole discretion, shall have the right to reject any bid based upon record of past performance, including but not limited to: price and cost data from previous projects, quality of work, ability to meet schedules (which may result in damages to City), cost control and contract administration, including whether there is evidence of satisfactory performance. The City may reject any bid not in compliance with all prescribed public bid procedures and requirements and may reject for good cause any or all bids in accordance with ORS279B.110.

The Owner may make such investigations as deemed necessary to determine the ability of the bidder and subcontractors to perform the work, and the bidder shall furnish to the Owner all such information and data for this

purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder and subcontractor is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Each bid must contain a statement as to whether the bidder is a resident bidder, as defined in ORS 279A.120. Contractors submitting bids are required to be registered with the Construction Contractor's Board. All Subcontractors performing work described in ORS 701.005(2) (i.e., construction work) are required to be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.026 to 701.035 before the Subcontractors commence work under the contract. Contractors or Subcontractors need not be licensed under ORS 468A.720 [asbestos abatement].

The Contractor and every Subcontractor shall each have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under section 2 (7) or (8) of Enrolled Senate Bill 477 (SB-477B) as enacted by the State Legislature in 2005.

6. CONDITIONS OF WORK:

Each bidder must investigate and be fully informed of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of the bidder's obligation to furnish all material and labor necessary to carry out the provisions of this contract. Insofar as possible the Contractor, in carrying out the Contractor's work, must employ such methods or means as will not cause any interruption of work.

7. BIDDER'S REPRESENTATION:

Each bidder is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any bidder to do any of the foregoing shall in no way relieve the bidder from any obligation in respect to the bidder's bid. Each bidder, by submitting a bid, represents that:

a. The bidder has read and understands the Bidding Documents and the bidder's bid is made in accordance therewith.
b. The bidder has inspected the site(s), has become familiarized with the site conditions under which the work is to be performed, and has correlated the bidder's observations with the requirements of the proposed Contract Documents.
c. The bidder's bid is based upon the products, systems, and equipment described in the bidding documents without exception.

8. PREBID MEETING:

A pre-bid conference ***will not*** be held.

9. DISCLOSURE OF FIRST-TIER SUBCONTRACTORS:

In accordance with ORS 279C.370, each bidder must submit a completed First-Tier Subcontractor Disclosure Form within two working hours after the date and time of the bid opening through www.QuestCDN.com. The list shall identify any first-tier subcontractors that will be furnishing labor or furnishing labor and materials meeting the minimum amount specified in ORS 279C.370. A bidder shall submit the required disclosure form either with its bid submission or electronically within two working hours after the date and time of the bid closing deadline.

Failure to submit a completed disclosure form by the disclosure deadline of two working hours after the bid opening time will result in a non-responsive bid. A nonresponsive bid will not be considered by the Owner for award. The Owner will consider for a contract award only those bids for which the required disclosure form has been submitted.

The bidder is specifically advised that any person, firm or party to whom it is proposed to award a subcontract under this contract must be acceptable to the Owner. Substitution of affected first-tier subcontractors shall be made only in accordance with ORS 279C.585. The Contractor shall notify the Owner in writing of all proposed changes in subcontractors prior to making any changes in subcontractors. No subcontractor doing work in excess of

5% of the total amount of the bid, but at least $15,000, and who is not listed on the disclosure form shall be used without the written approval of the Owner.

Instructions for First-Tier Subcontractor Disclosure Form:

Bidders are required to disclose information about certain first-tier subcontractors when the contract value for a Public Improvement project is greater than $100,000 (see ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor furnishing labor or furnishing labor and materials on the contract, if awarded, whose subcontract value would be greater than or equal to:

(i) 5% of the total project bid, but at least $15,000; or
(ii) $350,000 regardless of the percentage of the total project bid;

the bidder must disclose on the disclosure form and submit the following information about the first-tier subcontractors either with the bid submission or within two working hours after bid closing:

1) the subcontractor's name,
2) the dollar value of the subcontract, and
3) the category of work that the subcontractor would be performing.

If the bidder will not be using any subcontractors that are subject to the above disclosure requirements, the bidder is required to indicate "NONE" on the disclosure form.

10. PREPARATION OF BIDS:

Bids shall be submitted on the online Bid Form. All blanks must be appropriately filled in. Bidders shall make no additional stipulations on the Bid Form nor qualify any bid in any manner.

11. BID SECURITY:

Each bid must be accompanied by cash, a cashier's check, a certified check of the bidder, an irrevocable letter of credit issued by an institution as defined in ORS 279C.380, or a bid bond prepared on the form of the bid bond included, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 10% of the bid. A copy of the original bid bond shall be uploaded electronically with the bid package. The original bid bond shall be delivered to the City within 24 hrs of the bid closing.

Such bid security will be returned to all except the three lowest bidders within seven days after the opening of bids. The remaining bid security will be returned promptly after the Owner and the accepted bidder has executed the contract. If no award has been made within **30** days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as the bidder has not been notified of the acceptance of the bidder's bid, the bid shall be returned. The bid security of the successful bidder will be retained until the Performance Bond and Payment Bond have been executed and approved, after which it will be returned.

12. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT:

The successful bidder, upon the bidder's failure or refusal to execute and deliver the contract and bonds required within **10** days after the bidder has received notice of the acceptance of the bidder's bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with the bidder's bid.

13. SUBMISSION OF BIDS:

Bids shall be submitted as specified prior to the time and date for receipt of bids indicated in the Advertisement for Bids or any extension thereof made by Addendum. Bids received after the time and date for receipt of bids (the bid closing deadline) will be returned unopened. Oral, telephonic, faxed, or telegraphic submissions of bids are invalid and will not receive consideration.

14. MODIFICATION OR WITHDRAWAL OF BID:

The Contractor may withdraw the Contractor's bid by submitting a written request to withdraw the bid prior to the time of the bid opening. Withdrawn bids may be resubmitted up to the time designated for the receipt of bids

provided that they are then fully in conformance with these Instructions to Bidders. Bid Security shall be in an amount sufficient for the bid as modified or resubmitted. A bid may not be withdrawn, modified or canceled by the bidder for 30 days following the time and date designated for the receipt of bids. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the Bidder. Per OAR-137-047-0440

15. UNBALANCED BIDS:

A materially unbalanced bid is defined as, "a bid which generates a reasonable doubt that award to the bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the Owner."

A bid will be considered irregular and may be rejected if the Owner determines that any of the unit prices are significantly or materially unbalanced to the potential detriment of the Owner. The Owner will place specific emphasis on its review of bids that appear to be unbalanced, as it may be to the detriment of the Owner, and other bidders who choose not to unbalance their bids. If the Owner finds that a bid is a detriment to the Owner or not in the best interest of the public, the Owner will act by rejecting all such unbalanced bids.

16. CONSIDERATION OF BIDS:

The Owner shall have the right to reject any or all bids and to reject a bid not accompanied by the required Bid Security or data required by the Bidding Documents, or to reject a bid, which is in any way incomplete or irregular. The Owner shall have the right to waive any informality or irregularity in any bid received and to accept the bid which, in its judgement, is in its own best interest. All work of this project will be awarded as a single general contract to one Contractor. Award will be made to the lowest responsible bidder. In determining the lowest responsible bidder, the Owner will, for the purpose of awarding the contract, add a percent increase on the bid of a nonresident bidder equal to the percent, if any of the preference given to that bidder in the state in which the bidder resides. The Owner shall consider all bids immediately after the bid opening.

17. SECURITY FOR FAITHFUL PERFORMANCE:

Simultaneously with delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner.

18. POWER OF ATTORNEY:

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effective dated copy of their power of attorney.

19. LAWS AND REGULATIONS:

The bidder's attention is directed to the fact that all federal, state and local laws, ordinances, rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the same as though herein written out in full. All bidders shall comply with the provisions of ORS 279C.840 (Prevailing Wage Rates).

On federally funded projects, all bidders shall comply with the provisions of the Davis-Bacon Act (40 U.S.C. 276a). No bid will be considered by the Owner unless the bid contains a statement by the bidder that the provisions of ORS 279C.840 or 40 U.S.C. 276a are to be complied with. The public agency shall pay a fee to the Oregon Bureau of Labor and Industries (BOLI) in the amount of one-tenth of 1% of the contract price; however, there is a minimum fee of $250 and a maximum fee of $7,500.

20. EXECUTION OF CONTRACT:

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance bond, payment bond and required insurance within 10 calendar days from the date when Notice of Award is

delivered to the bidder. The Notice of Award shall be accompanied by the necessary Agreement and bond forms. In case of failure of the bidder to execute the Agreement, the Owner may at the Owner's option consider the bidder in default, in which case the Bid Security accompanying the bid shall become the property of the Owner. The Owner within 10 days of receipt of acceptable performance bond, payment bond and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement and a written Notice to Proceed. Should the Owner not execute the Agreement and issue a written Notice to Proceed within such period, the bidder may by written notice withdraw the bidders signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

The Notice to Proceed shall be issued within 10 days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the Owner and Contractor. If the Notice to Proceed has not been issued within the 10-day period or within the period mutually agreed upon, the Contractor may terminate the Agreement without further liability on the part of either party.

BID FORM

BID OF _____ (hereinafter called "Bidder"), organized and existing under the laws of the State _____, doing business as _____.
(Insert "a joint venture", "a corporation", "a partnership" or "an individual" as applicable.)

To City of Warrenton
[hereinafter called "Owner"]:

1. The undersigned Bidder, in compliance with your invitation for bids, including the ADVERTISEMENT FOR BIDS and the INSTRUCTIONS TO BIDDERS, for

IREDALE CULVERT REPLACEMENT PROJECT-PHASE II

having examined the plans and specifications with related documents and having examined the site of the project work and being familiar with all the conditions pertaining to the construction of the project, hereby offers to furnish all labor, materials, equipment and supplies necessary to construct the project in accordance with the contract documents within the time set forth therein, and at the unit prices stated below. The prices are to cover all the costs connected with performing the work required under the contract documents, of which this bid is a part.

2. The Bidder submits the unit prices set forth herein as those at which the Bidder will perform the work involved. The extensions in the column headed "Total" are made for the sole purpose of facilitating comparison of bids and if there are any discrepancies between the unit prices and the total amounts shown, the unit prices shall govern.

3. The Bidder certifies, under penalty of perjury, by the submission of this bid, that all requirements of ORS 279C.838-840 (Prevailing Wage Rate Laws) will be complied with throughout the course of this contact. The Bidder further certifies, under penalty of perjury, that the Bidder is a resident bidder, as defined by ORS 279A.120 (1)(b), of the State of Oregon. The Bidder further certifies, under penalty of perjury, that the Bidder is, to the best of the Bidder's knowledge, not in violation of any tax laws described in ORS 305.380 (4).

4. The Bidder acknowledges receipt of the following Addenda numbered _____through _____. The Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of bid security. The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 45 calendar days after the scheduled closing date for receiving bids.

5. The Bidder agrees to comply with all the Federal, State and Local laws, ordinances, rules and regulations that are pertinent to construction contracts of this character even though such laws may not have been quoted or referred to in the contract documents.

6. Upon receipt of written Notice of Award, Bidder will execute the Agreement attached within 10 calendar days and deliver a Surety Bond or Bonds as required by the contract documents. The Bid Security accompanying this bid is to become the property of the Owner in the event the contract and bonds are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

7. The Bidder agrees to commence work under this contract within 10 calendar days after issuance to the Bidder of written Notice to Proceed by the Engineer. The Bidder agrees to substantially complete the project on or before the dates or within the number of calendar days indicated in Article II of the Agreement, with such extensions of time as are provided in the General Conditions. The Bidder accepts the provisions of the Agreement regarding liquidated damages (Article III of the Agreement) in the event of failure to complete the work of the project on or before the dates or within the number of calendar days indicated in Article II of the Agreement, with such extensions of time as are provided in the General Conditions.

8. The Bidder declares that the only persons or parties interested in this bid are those named herein, that this bid is in all respects fair and without fraud, and that it is made without collusion with any other bidder and without collusion with any representatives of the Owner. The Bidder hereby represents that no employee of the Owner, or any partnership or corporation in which an employee of the Owner has an interest, has, or will receive any remuneration of any description from the Bidder, either directly or indirectly, in connection, except as specifically declared in writing.

9. The Bidder certifies that the Bidder has not discriminated against minority, women or emerging small business enterprises in obtaining any required subcontracts.

10. The Bidder will complete the work for the following prices found in vBid online documents.

The following documents are attached to and made a condition of this bid:

a. The required Bid Security submitted on-line with the Bid Form.

b. The First-Tier Subcontractor Disclosure Form submitted on-line within two hours after the date and time of the bid opening.

c. The on-line vBid Schedule of Contract Prices as filled out and submitted by the Contractor.

Respectfully Submitted,

Name of Firm _____

Address _____

_____

Federal Employer I.D. No. _____

State Employer I.D. No. _____

State C.C.B. Registration No._____

Telephone (____) _____

FAX No. (_____) _____

By _____
(Signature)

Name _____
(Please Print)

Title _____

If Corporation, Attest _____
(Secretary of Corporation)

Dated this _____ day of _____, 2025

BID BOND

We, _____, as "Principal,"
(Name of Principal)

and _____, an _____ Corporation,
(Name of Surety)
authorized to transact Surety business in Oregon, as "Surety," hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns to pay unto the City of Warrenton ("Obligee") the sum of ($_____)

_____ dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its bid to an agency of the Obligee in response to Obligee's project identified as:

IREDALE CULVERT REPLACEMENT PROJECT-PHASE II

which bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to ORS 279C.365 (5) and the procurement document.

NOW, THEREFORE, if the bid submitted by Principal is accepted, and if a contract pursuant to the bid is awarded to Principal, and if Principal enters into and executes such contract within the time specified in the procurement document and executes and delivers to Obligee its good and sufficient performance and payment bonds required by Obligee within the time fixed by Obligee, then this obligation shall be void; otherwise, it shall remain in force and effect.

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this _____day of _____, 2025.

PRINCIPAL: _____ **SURETY:** _____

By_____ BY ATTORNEY-IN-FACT:
Signature

_____ _____
Official Capacity Name

Attest: _____ _____
Corporation Secretary Signature

_____
Address

_____
City State Zip

_____ _____
Phone Fax

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM *(OAR 137-049-0360)*

Bids which are submitted by Bid Closing, but for which a required disclosure submittal has not been made by the specified Disclosure Deadline, are not responsive and shall not be considered for Contract award

AGENCY SUPPLIED INFORMATION:

PROJECT NAME: **IREDALE CULVERT REPLACEMENT PROJECT-PHASE II**

BID #: _____ BID CLOSING: Date: June 26, 2025 Time: 2:00 ☐AM ☒PM
REQUIRED DISCLOSURE DEADLINE: Date: June 26, 2025 Time: 4:00 ☐AM ☒PM

Deliver Form To (Agency): City of Warrenton

Designated Recipient (Person):
Agency's Address: **"Sealed bids will ONLY be received and accepted via the online electronic Bid service through www.QuestCDN.com"**

INSTRUCTIONS:

The contracting agency will insert "N/A" above if the contract value is not anticipated to exceed $100,000. Otherwise this form must be submitted either with the bid or within two (2) working hours after the advertised bid closing date and time; but no later than the DISCLOSURE DEADLINE stated above.

Unless otherwise stated in the solicitation, this document shall not be submitted by facsimile. It is the responsibility of bidders to submit this disclosure form and any additional sheets, with the bid number and project name clearly marked, at the location indicated by the specified disclosure deadline. See "Instructions to Bidders".

List below the Name, Category of Work add Dollar Value for each first-tier subcontractor that would be furnishing labor, or labor and material, for which disclosure is required. Enter the word "NONE" if there are no first-tier subcontractors subject to disclosure. ATTACH ADDITIONAL SHEETS IF NECESSARY.

BIDDER DISCLOSURE:

	SUBCONTRACTOR NAME	CATEGORY OF WORK	DOLLAR VALUE
1.			
2.			
3.			
4.			
5.			

The above listed first-tier subcontractor(s) are providing labor, or labor and material, with a Dollar Value equal to or greater than:

a) 5% of the total Contract Price, but at least $15,000. [If the Dollar Value is less than $15,000 do not list the subcontractor above.]
or
b) $350,000 regardless of the percentage of the total Contract Price.

Form Submitted By (Bidder Name): _____

Contact Name: _____ Phone #: _____

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2025 by and between

CITY OF WARRENTON

hereinafter called the Owner, and _____, hereinafter called the "Contractor."

WITNESSETH, that the Contractor and the Owner, for the considerations hereinafter named, agree as follows:

ARTICLE I - Scope of the Work

The Contractor hereby agrees to furnish all labor, materials, equipment and supplies necessary for the construction and completion of the project entitled

IREDALE CULVERT REPLACEMENT PROJECT-PHASE II

all in accordance with the requirements and provisions of the Contract Documents. The term "Contract Documents" means and includes the following:

a. Advertisement for Bids
b. Instructions to Bidders
c. Bid Form
d. Bid Bond
e. First-Tier Subcontractor Disclosure Form
f. Agreement
g. General Conditions to the Agreement
h. Performance Bond
i. Payment Bond
j. Notice of Award
k. Notice to Proceed
l. All Change Orders issued after execution of this Agreement
m. Plans and Specifications prepared or issued by NC Civil, LLC, dated March 2025.
n. Addenda:

No. _____, dated _____, 2025.

No. _____, dated _____, 2025.

No. _____, dated _____, 2025.

All of the above form the Contract, and all are as fully a part of the contract as if attached to this Agreement or repeated herein.

ARTICLE II - Time of Completion

The work to be performed under this contract shall be commenced within 10 calendar days after the date of written notice by the Owner to the Contractor to proceed. The written notice to proceed shall be issued within 10 days following receipt of the acceptable performance bond, payment bond and Agreement signed by the party to whom the Agreement was awarded. Substantial completion of this project shall be achieved not later than **60** calendar days following the date of the written Notice to Proceed with such extensions of time as are provided for in the General Conditions.

ARTICLE III – Liquidated Damages

The Owner and Contractor recognize that time is of the essence of this Agreement and that the Owner will suffer financial loss if the work is not substantially complete within the time specified in Article II above, plus any extensions of time allowed in accordance with the General Conditions. The Owner and the Contractor also recognize that it would be impractical and extremely difficult to estimate, ascertain, or determine the actual damages suffered by the Owner if the work is not substantially complete on time. Accordingly, the Owner and the Contractor agree that as liquidated damaged for delay (but not as penalty), the Contractor shall pay the Owner for each day that expires after the time specified in Article II until the work is substantially complete as set forth in the General Conditions, an amount of **$500.00** per day.

ARTICLE IV - Contract Sum

The Owner will pay the Contractor for the performance of the contract the amounts determined for the total number of each of the units of work in the bid schedule completed at the unit price stated. The number of units contained in this schedule is approximate only, and the final payment will be made for the actual number of units that are incorporated in, or made necessary by, the work covered by the Contract.

ARTICLE V - Progress Payments

1. On no later than the fourth calendar day of every month the Contractor shall prepare and submit to the Engineer a progress payment estimate filled out and signed by the Contractor. The estimate shall cover the total quantities under each item of work that have been completed from the start of the job up to and including the last day of the preceding month. The estimate shall include the value of the work so completed determined in accordance with such supporting evidence as may be required by the Owner and/or Engineer. The estimate shall also include an allowance for the cost of such materials and equipment required in the permanent work as has been delivered to the site and suitably protected but not as yet incorporated in the work.

2. The Engineer will, within 5 days after receipt of each progress payment estimate, either indicate in writing the Engineer's approval of payment and present the progress payment estimate to the Owner, or return the progress payment estimate to the Contractor indicating in writing the Engineer's reasons for refusing to approve payment. In the latter case, the Contractor may make the necessary corrections and resubmit the progress payment estimate.

3. The Owner will, after deducting previous payments made, promptly pay to the Contractor 95% of the amount of the estimate as approved by the Engineer. The 5% retainage will be held by the Owner until the final completion of all work under the Contract. Money retained by the Owner under ORS 279C.570 (7) or OAR 137-049-0820 shall be:
    a) Retained in a fund by the Owner and paid to the Contractor in accordance with ORS 279C.570; or
    b) At the option of the Contractor, interest shall be paid to the Contractor automatically when payments become overdue in accordance with ORS 279C.570 (3) or ORS 279C.570 (4) and in a manner authorized by the Director of the Oregon Department of Administrative Services.

4. In accordance with ORS 279C.515, if the contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the contractor or a subcontractor by any person in connection with this public improvement contract as the claim becomes due, the Owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the contractor by reason of the contract.

5. The Owner will, after deducting previous payments made, any payments made under ORS 279C.515 and the above-described retainage, promptly pay to the Contractor the amount of the estimate as approved by the Engineer. Progress payments shall not be considered acceptance or approval of any work or waiver of any defects therein. In accordance with ORS 279C.570, the Owner will pay to the Contractor interest on the progress payment, not including retainage, due the Contractor. The interest shall be charged and paid in accordance with ORS 279C.570.

6. Notwithstanding ORS 279C.555 or 279C.570 (7), if a Contractor is required to file certified payroll statements under ORS 279C.845 the Owner shall retain (25%) percent of any amount earned by the Contractor on the public works until the Contractor has filed with the Owner certified payroll statements as required by ORS 279C.845. The Owner shall pay the Contractor the amount retained under this subsection within 14 days after the Contractor files the certified payroll statements as required by ORS 279C.845, regardless of whether a subcontractor has failed to file certified payroll statements as required by ORS 279C.845.

7. Such progress payments shall be made under the terms and conditions governing final payment, except that progress payments shall not constitute a waiver of claims.

ARTICLE VI - Acceptance and Final Payment

1. Upon receipt of written notice that the work is ready for final inspection and acceptance, the Engineer shall within 4 days make such inspection. When the Engineer finds the work acceptable under the contract and contract fully performed, the Engineer will promptly issue a final certificate stating that the work required by this contract has been completed and is accepted by the Engineer and all regulatory approval agencies under the terms and conditions thereof. The entire balance found to be due the Contractor including the retained percentage, will be paid to the Contractor by the Owner within 30 days after the date of said final certificate.

2. Before final payment is due, the Contractor shall submit evidence satisfactory to the Engineer that all payrolls, material bills, and other indebtedness connected with work have been paid. In the case of disputed indebtedness or liens, the Contractor may submit in lieu of evidence of payment a surety bond satisfactory to the Owner guaranteeing payment of all such disputed amounts when adjudicated, in cases where such payment has not already been guaranteed by surety bond.

3. The making and acceptance of the final payment shall constitute a waiver of all claims by the Owner, other than those arising from unsettled liens, from faulty work appearing within 1 year after final payment, from requirements of the specifications, or from manufacturers' guarantees. It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

4. If after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor, and the Engineer so certifies, the Owner shall upon certificate of the Engineer, and without terminating the Contract, make payment of the balance due for the portion of the work fully completed and accepted.

ARTICLE VII – General Conditions

GC-1 DEFINITIONS AND ABBREVIATIONS

1.1 DEFINITIONS:

In these specifications and the contract, the following words or expressions shall be understood to have the meanings given below:

"Act of God" - Means an earthquake, flood, cyclone or other cataclysmic phenomenon of nature. Rain, wind, flood or other natural phenomenon of intensity less than that recorded for the locality of the work shall not be construed as an Act of God and no reparation shall be made to the Contractor for damages to the work resulting therefrom.

"Addenda" - Written or graphic instruments issued by the Engineer prior to the execution of the Agreement

which modify or interpret the contract documents.

"Bidder" - Any individual, firm or corporation formally submitting a bid for the work contemplated, or any portion thereof, acting directly or through an authorized representative.

"Bid" - The written offer of the bidder on the bid form furnished in the contract documents, that is required to be signed by the bidder, for the work contemplated.

"Bid Security" - The security to be furnished by the bidder as a guarantee of good faith to enter into a contract for the work contemplated if it be awarded to the bidder.

"Change Order" - A written order to the Contractor authorizing an addition, deletion or revision in the work within the general scope of the contract documents, or an adjustment in the contract price or the contract time.

"Contract Price" - The total amount payable to the Contractor under the terms and provisions of the contract documents.

"Contract Time" - The number of calendar days stated in the contract documents allowed the Contractor to complete the Work.

"Contractor" - The individual, firm or corporation undertaking the execution of the work under the terms of the contract and acting directly or through the Contractor's agents or employees.

"Engineer" - The firm of NC Civil, Inc., or authorized personnel acting for the firm, the Engineer being the agent of the Owner.

"Field Order" - A written order effecting a change in the work but not involving an adjustment in the contract price or an extension of the contract time.

"Inspector" - The authorized representative of the Engineer or Owner assigned to observe the work or materials therefore.

"Notice of Award" - The written notice of the acceptance of the bid from the Owner to the successful bidder.

"Notice to Proceed" - The written notice given by the Owner to the Contractor authorizing the Contractor to proceed with the work and establishing the date of commencement of the work.

"Owner" - The Owner of the work, when it is completed as indicated in the official advertisement and named in the contract.

"Payment Bond" – The form of security approved by the Owner, furnished by the Contractor and the Contractor's surety guaranteeing the owner that subcontractors and suppliers will be paid the monies that they are due from the principal Contractor.

"Performance Bond" - The form of security approved by the Owner, furnished by the Contractor and the Contractor's surety guaranteeing the complete and faithful performance of all of the obligations and conditions placed upon the Contractor by the contract.

"Plans" - The maps, plans and drawings as listed and referred to in the "Contract Documents" together with any additional maps, plans, or drawings furnished by the Contractor if and when they are approved by the Engineer. This also includes any supplemental drawings furnished by the Engineer to the Contractor and also all approved shop drawings submitted by the Contractor and approved by the Engineer, all as provided elsewhere in these specifications or other contract documents.

"Public Works Bond" – The public works bond as required by Enrolled Senate Bill 477 (SB 477B) as enacted by the State Legislature in 2005, which shall be in addition to any other bond the Contractor or Subcontractor is required to obtain.

"Responsible" means meeting the standards set forth in OAR 137-047-0640 or 137-049-0390(2), and not debarred or disqualified by the Contracting Agency under OAR 137-047-0575 or 137-049-0370.

"Responsible Offeror" means, as the context requires, a Responsible Bidder, Responsible Proposer or a Person who has submitted an Offer and meets the standards set forth in OAR 137-047-0640 or 137-049-0390(2), and who has not been debarred or disqualified by the Contracting Agency under OAR 137-047-0575 or 137-049-0370.

"Responsive" means having the characteristic of substantial compliance in all material respects with applicable

solicitation requirements.

"Responsive Offer" means, as the context requires, a Responsive Bid, Responsive Proposal or other Offer that substantially complies in all material respects with applicable solicitation requirements.

"Specifications" - The directions, requirements, explanations, terms and provisions pertaining to the various features of the work to be done, the manner and method of performance, and the manner and method of measurement and payment. The specifications include such directions, requirements and explanations as appear on the plans.

"Subcontractor" - Any individual, firm or corporation acting for or in behalf of the Contractor in the execution of all or any part of the contract. This does not include those working for hire or suppliers of material or equipment except that production of materials or supplies at the project site shall be deemed as being produced by a Subcontractor where such is not produced by the Contractor's own forces and equipment.

"Substantial Completion" - The date as certified by the Engineer when the work, or a specified part thereof, is sufficiently completed in accordance with the contract, so that the work or specified part can be utilized for the purposes for which it is intended.

"Supplemental Agreement" - Any written agreement or understanding entered into between the Contractor and the Owner to supplement or clarify, or alter the plans, specifications or contract, or to otherwise provide for unforeseen work, contingencies, alterations in plans, and other matters not contemplated by or adequately provided for in the plans and specifications.

"Surety" - The Company or Association which is bound with and for the Contractor for the acceptable performance of the contract and for the Contractor's payment of all obligations arising out of the contract. Where applying to the "Bid Security," it refers to the Company or Association that engages to be responsible for the bidder's execution of a satisfactory contract when and if the Contractor's bid is accepted by the Owner.

"Work" - Work shall be understood to mean the furnishing of all labor, materials, equipment and other incidentals necessary or convenient to the successful completion of the project or the portion of the project involved and the carrying out of all the duties and obligations imposed by the contract.

"Work Area" - The area provided by the Owner for use in constructing the work covered by the contract, including the appurtenances thereto. The work area so designated may be either temporary or permanent.

"Written Notice" - A written communication delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered or sent by mail to the last business address known to the one who gives the notice. It shall be the duty of each party to advise the other parties to the contract as to any change in business address until completion of the contract.

1.2 ABBREVIATIONS:

Whenever the following abbreviations are used in these contract documents, they are to be construed the same as follows:

AASHTO - American Association of State Highway and Transportation Officials
ACI - American Concrete Institute
AGC - Associated General Contractors of America
AISC - American Institute of Steel Construction
AISI - American Iron and Steel Institute
ANSI - American National Standards Institute
APWA - American Public Works Association
ASCE - American Society of Civil Engineers
ASME - American Society of Mechanical Engineers
ASTM - American Society for Testing and Materials
AWPA - American Wood Preservers Association
AWS - American Welding Society
AWWA - American Water Works Association
CRSI - Concrete Reinforcing Steel Institute
DEQ - Department of Environmental Quality
DFPA - Division for Product Approval of American Plywood Assoc.
EPA - Environmental Protection Agency

FHWA - Federal Highway Administration
ITE - Institute of Traffic Engineers
NEC - National Electrical Code
NEMA - National Electrical Manufacturer's Association
NLMA - National Lumber Manufacturer's Association
ORS - Oregon Revised Statutes
OSHA - Occupational Safety and Health Administration
ODOT - Oregon State Department of Transportation
PCA - Portland Cement Association
UBC - Uniform Building Code
UL - Underwriter's Laboratories, Inc.
WWPA - Western Wood Products Association

GC-2 BID REQUIREMENTS

2.1 INCLUSION OF BID IN CONTRACT:

The requirements and conditions of the Proposal including the Advertisement for Bids and Instructions to Bidders are hereby made part of this contract.

GC-3 AWARD AND EXECUTION OF CONTRACT

3.1 TIME RESERVED FOR AWARD OF CONTRACT AND PREPARATION OF CONTRACT DOCUMENTS:

The time of completion of the work contemplated by this contract shall not be vitiated by the fact that there will, of necessity, be a certain period of elapsed time between the date of receiving bids and the signing of the written instruments by all parties thereto. In specifying the dates for completion, it has been assumed that a period of not more than **30** days will elapse between the receiving of the bids and the submission to the Contractor of the written contract for the Contractor's execution. If the above period exceeds this amount, the bidder will be released from the Contractor's bid security unless by written notice to the Owner the Contractor has granted the Owner an extension of time for the official award of the contract.

3.2 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK:

It is understood that the Contractor, before signing the contract, has made a careful examination of the plans, specifications, and contract; that the Contractor has become fully informed as to the quality and quantity of materials and the character of the work required; and that the Contractor has made a careful examination of the location and condition of the work and the sources of supply for any and all materials. The Owner will in no case be responsible for any loss or for unanticipated costs that may be suffered by the Contractor as a result of conditions pertaining to the work.

3.3 AMOUNT OF CONTRACT:

The amount of the contract shall be understood to be the total sum of the amounts computed from the prices of the items included in the contract or the lump sum as given in the bid form. Where prices are given on alternate items, only the amounts of the alternates accepted by the Owner will be included in the total.

3.4 ESTIMATES OF QUANTITIES APPROXIMATE ONLY:

It is expressly agreed that the quantities shown in the bid form whether for a "Unit Price Contract" or in connection with a "Lump Sum Contract," given under the heading "Schedule of contract Prices" are approximate only and are not to be taken to be either representations or warranties. The Owner does not expressly nor by implication agree that the actual amount of work will correspond therewith and reserves the right to increase or decrease the amount of any class or portion of the work as may be deemed necessary or expedient by the Engineer, without extra or special compensation to the Contractor except as provided in Subsection 4.5.

3.5 PERFORMANCE BOND, PAYMENT BOND AND GUARANTEE:

The Contractor shall within 10 days from the date of notification by the Owner that the contract is ready for signature and before commencing work thereunder, furnish to the Owner and maintain in force during the continuance of this contract a Performance Bond and a separate Payment Bond satisfactory to the Owner and with such surety or sureties as the Owner may approve. The bonds shall be in the full amount of the contract price and shall be for the faithful performance of this contract in all respects, including but not limited to payments for materials, labor, etc., and no contract shall be binding until the said bonds are furnished and approved by the Owner. The Payment Bond shall be solely for the protection of claimants under ORS 279C.600. If said bonds are not so furnished within the 10 days herein specified, the contract may be immediately terminated by the Owner without any notice to the Contractor. No work may be commenced until the bonds have been approved by the Owner.

Whether or not there appears here or elsewhere herein specific reference to guarantees of all items of material, equipment, or workmanship they nevertheless shall be so guaranteed against mechanical, structural, or other defects for which the Contractor is responsible that may develop or become evident within a period of one year from and after acceptance of the work by the Owner. Such guarantees shall include care of backfilling of ditches or of structures should the fill settle to such extent as to require refilling or resurfacing roadway surfaces to restore the original or intended condition or grade. This guarantee shall be understood to imply prompt attention to any remedy of such defects as those mentioned above if and as they occur after the Contractor shall have written notice of their existence. If the defect, in the opinion of the Owner, is of such nature as to demand immediate repair, the Owner shall have the right to make them, and the cost thereof shall be borne by the Contractor.

In accordance with ORS 279C.515, if the contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the contractor or a subcontractor by any person in connection with this public improvement contract as the claim becomes due, the Owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the contractor by reason of the contract.

In accordance with ORS 279C.600, a person claiming to have supplied labor or materials for the prosecution of the work of this contract, including any person having direct contractual relationship with the Contractor furnishing the bond or direct contractual relationship with any subcontractor, or an assignee of such person, or a person claiming moneys due the State Accident Insurance Fund Corporation, the State Department of Employment Trust Fund or the Department of Revenue in connection with the performance of the contract, has a right of action on the Contractor's payment bond as provided for in ORS 279C.380 and 279C.400, only if (a) the person or the assignee of the person has not been paid in full; and (b) the person gives written notice of claim, as prescribed in ORS 279C.605, to the Contractor and to the contacting agency (the Owner).

To support the above guarantee the Contractor's performance bond shall remain in full force and effect for one year following the acceptance of the project by the Owner. The bond shall be executed by a surety company authorized to do business within the State and it shall be subject to the approval of the attorney for the Owner.

In addition to the above requirements, the Contractor shall make the Contractor's own determinations as to the amount of the bond which will be required by any corporation or agency granting a permit for work to be done under these plans and specifications. Such bonds shall be in addition to that required by the Owner as indicated above.

3.6 SUBCONTRACTING OR ASSIGNMENT OF CONTRACT:

The Contractor agrees not to assign, sell, convey, dispose of, or transfer rights, nor delegate duties under this Contract, or otherwise dispose of the contract or the Contractor's right, title, or interest therein, or the Contractor's power to execute such Contract, either in whole or in part, to any other person, firm, or corporation, or to subcontract any part of the work without the previous written consent of the Owner. In this connection, it is to be understood that the Owner will not approve of the subcontracting of more than 75% of the work to be done under the contract.

It is understood and agreed that, if any part of the work to be done under the contract is subcontracted, the

subcontracting shall be done in accordance ORS 279C.580. In addition, the Contractor shall be bound by the following provisions:

- The Contractor shall submit a list of all First-Tier Subcontractors to the Owner in accordance with the Instructions to Bidders. Substitution of affected first-tier subcontractors shall be made only in accordance with ORS 279C.585. The Contractor shall notify the Owner of all proposed changes in subcontractors prior to making any changes in subcontractors.

- All subcontracts shall be in writing and shall provide that all work to be performed thereunder shall be conducted and performed in accordance with the terms of the main contract. All subcontracts shall include a provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under section 2 (7) or (8) of Enrolled Senate Bill 477 (SB-477B) as enacted by the State Legislature in 2005. Upon request, certified copies of any or all subcontracts shall be furnished to the Engineer.

  Notwithstanding ORS 279C.555 or 279C.570 (7), the Contractor shall retain (25%) percent of any amount earned by a first-tier Subcontractor on the public works until the Subcontractor has filed with the Owner certified payroll statements as required by ORS 279C.845. The Contractor shall pay the first-tier Subcontractor the amount retained under this subsection within 14 days after the Subcontractor files the certified payroll statements as required by ORS 279C.845.

- In case the work being done or to be done under any subcontract is not conducted in a manner satisfactory to the Engineer, the Contractor shall, upon written notice to this effect, cause such subcontract to be terminated and the Subcontractor and the Subcontractor's employees to be removed from the work. Any loss or damage that may be suffered on account of such action shall be borne by the Contractor. The Contractor agrees that the Contractor is as fully responsible to the Owner for the acts and omissions of the Contractor's Subcontractors and of persons either directly or indirectly employed by them, as the Contractor is for the acts and omissions of the Contractor's own employees. Nothing contained in the contract documents shall create any contractual relation between any Subcontractor and the Owner.

- Insofar as is practicable, the Contractor shall make payment for subcontract work in the same units and on the same basis of measurement as apply under the main contract. The Owner will not be responsible for loss resulting from the Contractor's failure to do so. In making payments to Subcontractors, the Contractor shall protect against the possibility of overpayment, and the Contractor shall assume such losses as may result from overpayment.

- The subcontracting of any or all of the work to be done will in no way relieve the Contractor of any part of the Contractor's responsibility under the contract. The Contractor shall have on the work at all times a qualified and capable superintendent whose duty shall be to direct and coordinate the operations of the Subcontractors and to see that the orders of the Engineer are carried out promptly and intelligently. Failure of the Contractor to control the work of the Subcontractors to the satisfaction of the Engineer will result in the issuance of orders requiring the cancellation of the Subcontractors and the removal of the Subcontractors from the work.

- All Subcontractors performing work described in ORS 701.005(2) (i.e., construction work) are required to be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.035 to 701.055 before the Subcontractors commence work under the contract.

3.7 EXECUTION OF CONTRACT:

Within 10 days after the date the bidder receives notification of award of contract as evidenced by receipt from the Owner of properly prepared contract documents, the bidder to whom award is made shall execute and return the contract in the required number of copies, and shall furnish a performance bond, payment bond and other required bonds and insurance satisfactory to the Owner.

4.1 INTENT OF THE PLANS AND SPECIFICATIONS AND CONTRACT:

The true intent of the plans and specifications and contract is to provide for the execution and completion in every detail of the project or work. Except as otherwise specifically provided, the Contractor shall furnish all labor, tools, implements, machinery, supplies, materials, and incidentals, and shall do all things necessary to perform and to complete, according to the specifications and plans, the work to be done under the contract.

4.2 DEVIATION FROM THE PLANS:

No deviation from the plans or the approved working and/or shop drawings is permissible except on written order of the Engineer.

4.3 INTERPRETATION OF CONTRACT, SPECIFICATIONS AND PLANS:

In cases of conflict in the terms, requirements and provisions as set out by the contract, the specifications or the plans, such conflict shall be reconciled by the acceptance of the following order of precedence for the various contract documents; (1) the Agreement bearing the signature of the Owner and the Contractor; (2) the written Bid Form of the Contractor; (3) Special Provisions; (4) Technical Specification; (5) the Plans, including notes written thereon; and (6) Instructions to Bidders.

The apparent silence of the specifications and plans as to any detail or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only approved material and workmanship of first quality are to be used.

The Contractor shall take no advantage of any errors or omissions in the specifications and plans or of any discrepancies in or between same; but where such errors, omissions or discrepancies occur, the Contractor will be governed by the apparent intent of the specifications and plans and by orders of the Engineer. Work performed by the Contractor as a result of an error or omission in the plans and specifications when such error or omission is not called to the attention of the Engineer shall be at the Contractor's risk.

4.4 PLANS, SHOP AND SUPPLEMENTAL DRAWINGS:

Figured dimensions on the drawings shall be used in preference to scaling the drawings. Where the work of the Contractor is affected by finish dimension, these shall be determined by the Contractor at the site, and the Contractor shall assume responsibility, therefore.

General drawings showing such details as are necessary to give a comprehensive idea of the construction contemplated will be included in the plans; but the Contractor shall submit to the Engineer for review and approval such additional shop details, settings, schedules and such other supplemental drawings as may be required for the construction of any part of the work, and prior to the review and approval of such plans any work done or material ordered shall be at the Contractor's risk. All shop and supplemental drawings shall be made in such a manner that clear and legible reproductions can be made from them. Any drawings submitted for review which are, in the Engineer's opinion, carelessly prepared, erroneous or unchecked, will be returned to the Contractor for redrawing and checking; and after such redrawing and checking shall be resubmitted to the Engineer.

Shop drawings for mechanical equipment and other structures or equipment shall consist of such detailed plans as may be reasonably required for the successful prosecution of the work and which are not included in the plans furnished by the Engineer. These may include plans for false work, bracing, centering and form work, masonry layout diagrams, bending diagrams for metal reinforcement, shop details for precast concrete items, and installation drawings or instructions.

It is expressly understood that the review by the Engineer of supplemental drawings or shop drawings submitted by the Contractor or the Contractor's agents will not relieve the Contractor from responsibility for errors in details, dimensions, or quantity or strength of such materials. Material improperly fabricated shall be replaced or modified at the Contractor's expense.

The Contractor shall submit, with such promptness as to cause no delay in the Contractor's own work or in that of any other Contractor, 3 copies of each shop drawing or setting drawing and schedule required for the work of the various trades. The Engineer will check and return 2 copies of such drawings and schedules only for conformance with the design concept of the project and compliance with the information given in the contract documents. The Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Engineer with 2 corrected copies. If requested by the Engineer, the Contractor shall furnish additional copies as requested. Regardless of corrections made in or approval given to the drawings by the Engineer, the Contractor shall be responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications, unless the Contractor notifies the Engineer in writing of any deviations at the time the Contractor furnishes such drawings.

The contract bid prices shall include the cost of furnishing all shop and installation drawings and the Contractor will be allowed no extra compensation for such drawings.

The Contractor shall keep one copy of all drawings (including shop drawings) and specifications on the work, in good order, available to the Engineer and to the Engineer's representatives at the construction site.

4.5 INCREASED OR DECREASED QUANTITIES:

The right is reserved by the Owner, without impairing the contract, to make such increases and decreases in the quantities of the work as may be considered necessary to complete fully and satisfactorily the work included in the contract. The Contractor shall have no claim for damages or for anticipated profits on account of any portion of the work that may be reduced or deleted. Deletion of entire items generally shall be made when the contract is executed but in case the Contractor shall have performed some work on account of any item which is subsequently deleted, the Contractor shall be paid therefore on the basis of extra work.

4.6 CHANGES IN WORK:

4.6.01 Changes Requested by the Contractor:

Changes in specified methods of construction may be made at the Contractor's request when approved in writing by the Engineer. Changes in the plans and specifications, requested in writing by the Contractor, which do not materially affect the work, and which are not detrimental to the work or to the interests of the Owner, may be granted by the Engineer.

Payment will be made per Section GC-9 MEASUREMENT AND PAYMENT, of this contract.

4.6.02 Changes Initiated by the Owner:

The Owner may change the plans, specifications, character of the work, or quantity of work. Change orders shall be in writing and state the dollar value of the change or establish method of payment, any adjustments in contract time and, when negotiated prices are involved, shall provide for the Contractor's signature indicating acceptance.

Payment for all work will be made per Section GC-9 MEASUREMENT AND PAYMENT, of this contract.

4.7 CHANGED CONDITIONS:

The Contractor shall notify the Engineer in writing of the following work site conditions, hereinafter called changed conditions, promptly upon their discovery and before they are disturbed:

a. Subsurface or latent physical conditions differing materially from those represented in the contract; and
b. Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed.

The Engineer will promptly investigate conditions of which notified, or any conditions discovered by the Engineer which appear to be changed conditions. If it is determined that the conditions are changed conditions and that they will materially increase or decrease the costs of any portion of the work, a written change order will be issued by the Engineer adjusting the compensation for such portion of the work. If the Engineer determines that conditions of which notified by the Contractor do not justify an adjustment in compensation, the Contractor will be so advised

in writing. Should the Contractor disagree with such determination, a notice of potential claim may be submitted to the Engineer.

4.8 EXTRA WORK:

Upon the written Extra Work Order of the Engineer, the Contractor shall perform such additional or extra work that may or may not be included under or covered by contract prices, as may be necessary for the satisfactory completion of the project. If the work is of a kind for which a specification is given herein, it shall be performed in accordance with that specification subject to such supplemental or additional specifications, plans and instructions as the Engineer may issue. If the work is of a kind not covered by a specification given herein, it shall be performed in accordance with accepted practice for the class of work intended and in accordance with such plans as may be issued by the Engineer.

The Owner shall have the option of paying for additional or extra work at the stipulated unit prices or stipulated lump sum prices given in the bid form or on a force account or cost plus basis described in Subsection 9.5 of these specifications. Payment for extra work will be made only when the work involved has been authorized by the Engineer, in writing prior to performance of the work.

Change order pricing, provided by the Contractor, shall be commensurate with the Bid, Schedule of Unit Prices. If requested by the Engineer, the Contractor shall supply a Schedule of Unit Values detailing the component breakdown of the provided unit prices within the Bid. The Schedule of Unit Values shall detail all labor, equipment, materials, profit and overhead associated with each component of the unit price, as requested or directed by the Engineer. These supplied values will be the used to verify pricing for extra work when the scope of the extra work does not fall under an established bid item. Pricing for extra work provided by the Contractor which is not commensurate to the Schedule of Unit Values will be rejected.

4.9 CLAIMS FOR EXTRA COMPENSATION:

In any case where the Contractor deems extra compensation is due the Contractor for work or materials not clearly covered in the contract or not ordered by the Engineer as an extra as defined herein, the Contractor shall in writing notify the Engineer of the Contractor's intention to make claim for such compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the Engineer is not afforded proper records and reports by the Contractor for keeping strict account of actual cost, then the Contractor hereby agrees to waive the claim for extra compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim. In case the claim is found to be just, it shall be allowed and paid for under a supplemental agreement to be entered into between the parties to the contract.

Changes in the work shall be priced commensurate with the Bid Schedule of Contract Prices.

4.10 RECORDS:

The Contractor shall furnish the Engineer every reasonable record and report necessary for obtaining such information as the Engineer may desire respecting the nature and quality of the materials used or to be used and the progress and manner of the work.

The Contractor shall maintain records in such a manner as to provide a clear distinction between the direct cost of extra work paid for on the force account basis and the costs of other operations performed in connection with the contract. The Contractor shall furnish to the Engineer daily reports in duplicate of the extra work to be paid for on a force account basis. The reports shall itemize the materials used and shall set forth the direct cost of labor and the charges for equipment rental whether furnished by the Contractor, or Subcontractor. The reports shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked together with the size, type and identification number of equipment and hours of equipment operation.

Material charges shall be submitted by vendors' invoices. Such invoices shall be submitted with the reports; or, if not available, they shall be submitted with subsequent reports. In the event said vendors' invoices are not submitted within 15 days after acceptance of the work, the Owner reserves the right to establish the cost of such materials at the lowest current price at which said materials are available in the appropriate quantities delivered

to the location of the work.

All reports shall be signed by the Contractor or an authorized representative.

The Engineer will compare records with the reports furnished by the Contractor, make any necessary adjustments and then compile the costs of extra work paid for on a force account basis on forms furnished by the Owner. When these extra work reports are agreed upon and signed by both parties, they shall become the basis of payment for the work performed.

4.11 NO COMPENSATION:

Subject to Subsection 4.12, Compensation for Standby, the Contractor shall not have any claim for compensation or damages against the Owner or Engineer for any suspension, stoppage, hindrance or delay from any cause whatsoever.

4.12 COMPENSATION FOR STANDBY:

When the Work or any part of it is suspended by order of the Engineer for a reason which is not related to the Contractor's performance of the Work, the Owner may consider a claim for payment of standby costs which may be incurred by the Contractor. When such costs are claimed they shall be legitimate, reasonable, and supported by proper documentation as required by the Engineer.

The Owner will not pay for standby costs related to any of the following:

- Weather or other natural conditions;
- Failure by the Contractor to carry out orders given by the Engineer;
- Any failure by the Contractor to comply with a requirement or provision of the Contract;
- Any failure by the Contractor to appropriately schedule the sequence of Work;
- Any failure by the Contractor to appropriately explore underground conditions and report findings to the Engineer in a timely manner and well in advance of critical path items such as crossings, tie-ins, special order parts or equipment, etc.;
- Any failure by the Contractor to provide for the safety of the public or his, the Owner's or the Engineer's work force;
- Any failure by the Contractor to protect the property of the Owner or others;
- Any delay occurring while defects or failures in the Work are being remedied;
- Any change in the quantity of any item of Work from the estimated quantity shown in the Contract Unit Price Schedule;
- Any equipment or work force which was not actually present and actively working on the Work immediately prior to the suspension of the Work;
- Any haul trucks or their drivers used on the Work;
- Any suspension of the Work that is less than 4 hours in duration; and
- Testing of Material or Work for compliance with Specifications and Plans.

When the Owner fails to provide right-of-way necessary for access to the Work, and has not so notified the Contractor in the special provisions of the Contract, and in the Engineer's opinion alternate work areas are not available or practical to allow continued prosecution of the Work, the Owner may consider the payment of a claim for standby, which shall not in any case exceed 10 days.

When a claim for standby is considered by the Owner, direct costs which, in the opinion of the Engineer, could not have been avoided by the judicious handling of forces, equipment or plant, will be paid to the Contractor in an amount that the Owner finds to be fair and reasonable. No item of cost other than idle time rate of equipment and necessary payments for idle time of workers will be considered.

Compensation for standby time of workers and equipment will be determined by the Owner, and in accordance with the following:

(i) The time paid for will not exceed eight hours in any one day;
(ii) Saturdays, Sundays and statutory holidays will be excluded;
(iii) Overhead and profit will be excluded; and
(iv) The idle time equipment rates will be determined by the Owner.

Upon termination of the suspension by the Engineer or the Owner, the Contractor shall resume operations at once.

GC-5 CONTROL OF THE WORK

5.1 AUTHORITY OF THE ENGINEER:

To prevent misunderstandings, disputes and litigation it is expressly understood and hereby agreed to by all of the parties to the contract, including the surety, that the Engineer will, in all cases, determine any and all questions which may arise concerning the quality, quantity and acceptability of materials furnished and work performed; the manner and rate of progress of the performance of all work; the interpretation of plans and specification; and the amounts and classifications of the several kinds of work and materials; and the Engineer's estimates and decisions in these matters will be final, binding, and conclusive upon all parties to the contract.

The Engineer will be the Owner's representative during the construction period and will observe the work in progress on behalf of the Owner; that said work will not be considered completed until approved by the Engineer and accepted by the Owner; that the Contractor shall at all times carry out and fulfill the instructions and directions of the Engineer insofar as the work to be performed under the contract is concerned; and that in the event the Contractor fails to carry out and fulfill such instructions and directions, the Owner may refuse to make any partial or final payments to the Contractor so long as such instructions and directions are not complied with. All communication between the Owner and the Contractor shall be through the Engineer.

In case of the termination of the employment of the Engineer, the Owner shall appoint a capable and reputable Professional Engineer whose status under the contract shall be that of the former Engineer.

5.2 AUTHORITY AND DUTIES OF INSPECTORS:

Inspectors shall be authorized to inspect all work done and all materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. It is the duty of the inspector to report to the Engineer as to the progress of the work and the manner in which it is being performed, also to report whenever it appears that the material furnished or the work performed by the Contractor fails to fulfill the requirements of the plans and specifications, and to call to the attention of the Contractor any such failure.

In case of any dispute arising between the Contractor and the Inspector as to materials furnished or manner of performing the work, the Inspector shall have authority to reject materials or suspend the work until the question at issue can be referred to and decided by the Engineer. The Inspector is not authorized to revoke, alter, enlarge, relax or release any requirements of the plans and specifications, nor to approve or accept any portion of the work, nor to issue instructions contrary to the plans and specifications.

The Contractor's responsibility for work performed under this contract shall in no way be relieved because of the presence or absence of an Inspector. No work shall be deemed acceptable by reason of the presence of an Inspector.

5.3 INSPECTION:

The Engineer or the Engineer's representatives shall be allowed access to all parts of the work at all times and shall be furnished with every reasonable facility for ascertaining whether or not the work as performed is in accordance with the requirements and intent of the plans and specifications. The Contractor shall cut and replace with new materials, at the Contractor's own expense, such samples as are customarily required for testing purposes. If the Engineer requests it, the Contractor shall, at any time before acceptance of the work, remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or the making good of the parts removed shall be paid for as "Extra Work," but should the work so exposed or examined prove unacceptable, the uncovering or removing, and replacing of the covering and the making good of the parts removed, shall be at the Contractor's expense.

5.4 RESPONSIBILITY OF THE CONTRACTOR:

The Contractor shall do all the work and furnish all labor, materials, equipment, tools and machines necessary for the performance and completion of the project in accordance with the contract documents within the specified time.

Material and construction details of plants, forms, shoring, false work and other structures built by the Contractor but not a part of the permanent project shall meet the approval of the Engineer, but such approval shall not relieve the Contractor from responsibility for their safety and sufficiency.

The Contractor shall be responsible for all expenses involved in making any required changes in the plans or specifications to accommodate a substitution approved by the Engineer for the convenience of the Contractor or to circumvent an unforeseen difficulty in obtaining a specified article.

The Contractor shall assume all responsibility for the work. As between the Contractor and the Owner, the Contractor shall bear all losses and damages directly or indirectly resulting to the Contractor, to the Owner or to others on account of the character of performance of the work, unforeseen difficulties, accidents or any other cause whatsoever.

The Contractor shall indemnify and hold harmless the Owner, its officers, employees, and agents (including the Engineer) from all loss, claims, demands, suits, including costs and attorney's fees, or actions of every name and description brought for or on account of any damage, injury, loss, expense, inconvenience, or delay received or sustained, or claimed to be received or sustained by any person or persons, which damage, injury, loss, expense, inconvenience or delay may have been caused by or may have resulted from the performance of the work to be done under the contract, or from any act, omission, or neglect of the Contractor, the Contractor's Subcontractors, or their employees, provided however that the Owner shall promptly call to the attention of the Contractor any claim, demand, action or suit filed with the Owner for any such injury or damage and should suit or action be commenced against the Owner to recover any such claim or damage, the Owner shall, before time for answer expires or before default has been entered, furnish the Contractor and/or the Contractor's surety with a copy of the complaint.

5.5 NOTICE TO CONTRACTORS:

Any written notice to the Contractor which may be required by law or by the provisions of the specifications may be served on said Contractor or the Contractor's representative, either personally or by mailing to the address given in the contract or by leaving the same at said address.

5.6 NOTICE BY CONTRACTORS:

Wherever in the specifications the Contractor is required to notify the Engineer concerning the progress of the work, or concerning any complaint which the Contractor may have to make, or for any other reason, it shall be understood that such notification is to be made in writing, delivered to the Engineer or the Engineer's representative in person, or mailed to the office of the Engineer at the address given in the official "Advertisement for Bids."

5.7 UTILITIES AND EXISTING IMPROVEMENTS:

In accordance with ORS 757.557, Contractor shall, prior to performing any excavation, notify appropriate utility organization and comply with provisions stated in referenced statute.

Any information shown as to the location of existing water courses, drains, sewer lines or utility lines which cross or are adjacent to the project, has been compiled from the best available sources, but is not guaranteed to be accurate.

The Contractor shall provide for the flow of sewers, drains or water courses interrupted during the progress of the work and shall restore such drains or water courses as approved by the Engineer. The Contractor shall make excavations and borings ahead of work as necessary, to determine the exact location of utilities or underground structures. Ordinarily, utility companies responsible for facilities located within the work area will be required to complete any installation, relocation, repair, or replacement prior to the commencement of work by the Contractor. However, when this is not feasible or practicable or the need for such work was not foreseen, such utility Owners or

the Owner shall have the right to enter upon the work area and upon any structure therein for the purpose of making new installations, changes or repairs. The Contractor shall conduct operations to provide the time needed for such work to be accomplished during the progress of the improvement.

The Contractor shall be responsible for all costs for the repair of damage to the contract work or to any utility, previously known or disclosed during the work, as may be caused by operations. The Contractor shall maintain in place utilities now shown on the drawing to be relocated or altered by others and shall maintain utilities which are relocated by others in their relocated positions in order to avoid interference with structures which cross the project work. All costs for such work shall be included in the prices bid for the various items of work.

5.8 SURVEY SERVICE:

NOTE: Construction stakes will not be provided by the owner for this project. Survey services shall be provided, per the Unit of Bid Prices, by the Contractor as required for accurate construction of the project. Contractor shall not begin pipe or any underground construction until survey stakes and project survey control is established in the sections of pipe making up PHASE II and approved by the Engineer.

5.9 PROTECTION OF SURVEY MARKERS:

5.9.01 Permanent Survey Markers - The Contractor shall not disturb permanent survey monuments, stakes, or benchmarks without the consent of the Engineer, and shall notify the Engineer and bear the expense of replacing any that may be disturbed without permission. Replacement shall be done by a registered land surveyor at no expense to the Owner.

When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the monument cover shall be adjusted to the new grade.

5.9.02 Lines and Grades - The Contractor shall preserve construction survey stakes and marks for the duration of their usefulness during construction. If any construction survey stakes are lost or disturbed, and in the judgment of the Engineer need to be replaced, such replacement shall be by the Engineer at no expense to the Owner. The cost of replacement shall be charged against, and shall be deducted from, the payment for the work.

5.10 USE OF LIGHT, POWER AND WATER:

The Contractor shall furnish temporary light, power and water complete with connecting piping, wiring, lamps and similar equipment necessary for the work as approved. The Contractor shall install, maintain and remove temporary lines upon completion of work. The Contractor shall obtain all permits and bear all costs in connection with temporary services and facilities at no expense to the Owner.

5.11 VERBAL AGREEMENTS:

No verbal agreement or conversation with any officer, agent or employee of the Owner, either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the contract. Any such verbal agreement or conversation shall be considered as unofficial information and in no way binding upon the Owner.

5.12 UNAUTHORIZED AND DEFECTIVE WORK:

Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or of any other cause found to exist during construction or within one year after final acceptance shall be removed immediately and replaced by work and materials which shall conform to the specifications, or shall be remedied otherwise in an acceptable manner authorized by the Engineer. These provisions shall have full effect regardless of the fact that the defective work may have been done or the defective materials used with the full knowledge of the Inspector. The fact that the Inspector in charge may have previously overlooked such defective work shall not constitute an acceptance of any part of it.

Work done contrary to or regardless of the instructions of the Engineer, work done beyond the lines shown on the

plans or as given, except as herein provided or any extra work done without written authorization, will be considered as unauthorized and will not be paid for by the Owner. Work so done may be ordered removed or replaced at the Contractor's expense.

5.13 CLEANUP:

From time to time as the work progresses and immediately after completion of the work, the Contractor shall clean up and remove all refuse and unused materials of any kind resulting from the work. Upon failure to do so within 24 hours after directed, the work may be done by the Owner and the cost thereof be deducted from any payment due the Contractor.

After all other work embraced in the contract is completed and before final acceptance of the project, the entire work area and easement area including the roadbed, planting, sidewalk, shoulders, driveways, alley and side street approaches, slopes, ditches, utility trenches, and construction areas shall be neatly finished to the lines, grades and cross Sections shown and as specified.

As a condition precedent to final acceptance of the project, the Contractor shall remove all equipment and temporary structures, and all rubbish, waste and generally clean up the work area and premises to conform substantially to conditions as they existed before the commencement of work.

5.14 FINAL TRIMMING OF WORK:

The work to be done under the contract shall include such repair work as may be necessary to overcome such deterioration as may occur on some portions of the work while other portions of the work are being performed. The project shall be in a neatly trimmed and well finished condition throughout at the time of completion and acceptance.

5.15 FINAL CLEAN UP:

Upon completion of the work and before acceptance and final payment shall be made, the Contractor shall clean up the work area and all properties on which the Contractor has operated in the construction of the project, including removing or burning all discarded materials, rubbish and debris. The Contractor shall tear down, remove or burn all construction plant structures erected by or for the Contractor, or by or for the Contractor's Subcontractors or employees on the work area or on property controlled by the Owner. The Contractor shall do all things necessary to put the whole of the work area and such other property controlled by the Owner as the Contractor may occupy in a neat clean and orderly condition.

5.16 FINAL INSPECTION:

At such time as all construction work on the project is complete and all extra work bills, forms and documents required under the contract are submitted, the Contractor shall so notify the Engineer in writing. The Engineer will make an inspection of the project and project records within 15 days of receiving said notice. If, at such inspection, all construction provided for and ordered under the contract is found completed and satisfactory and all certificates, bills, forms and documents have been properly submitted, such inspection shall constitute the final inspection.

If any work in whole or in part is found unsatisfactory, or it is found that all certificates, bills, forms, and documents have not been properly submitted, the Engineer will give the Contractor the necessary instructions as to replacement of material and performance or reperformance of construction work necessary and prerequisite to satisfactory final completion of construction work and will give the Contractor the necessary instructions for submission of bills, forms and documents, and the Contractor forthwith shall comply with and execute such instructions. At such time as such instructions are complied with and executed, the Contractor shall so notify the Engineer in writing. The Engineer will make another inspection within 15 days after such notice and this inspection shall constitute the final inspection, if all requirements of the instructions have been met to the satisfaction of the Engineer.

If the instructions are not completed to the satisfaction of the Engineer, additional instructions will be issued by the Engineer and the process will be repeated until the Engineer is satisfied all requirements are complied with. The

inspection, when the Engineer is satisfied all requirements have been met, will be considered the final inspection.

5.17 OWNERSHIP AND USE OF DOCUMENTS:

All documents, or other material submitted to the City by Contractor shall become the sole and exclusive property of the City. All material prepared by Contractor under this Agreement may be subject to Oregon's Public Records Law."

GC-6 CONTROL OF MATERIALS AND EQUIPMENT

6.1 TRADE NAMES, APPROVED EQUALS OR SUBSTITUTIONS:

In order to establish standards of quality, the Engineer may have, in the technical specifications referred to certain products by name and catalog number. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers. The words "approved equal" shall be considered following all such listings regardless of whether or not they so appear. The Contractor shall furnish to the Engineer the complete list of proposed desired substitution in sufficient time prior to their use to give the Engineer adequate time for the Engineer's review, together with such Engineering and catalog data as the Engineer may require.

Failure on the part of the Contractor to supply data to the Engineer prior to ordering or using such alternate material or equipment shall not relieve the Contractor of furnishing acceptable material or equipment as required by the Engineer.

The Contractor shall abide by the Engineer's judgment when proposed substitute materials or items of equipment are judged to be unacceptable and shall furnish the specified material or item of equipment in such case. All proposals for substitutions shall be submitted in writing by the Contractor and not by individual trades or material suppliers. The Engineer will approve or disapprove proposed substitutions in writing within a reasonable time. No substitute materials shall be used unless approved in writing.

Only materials conforming with the specified requirements and approved by the Engineer shall be used in the work. Before the delivery of any material to be used in the work is commenced, the Contractor shall have advised the Engineer as to the source from which the material is to be obtained, shall have furnished such samples as may be required for testing purposes, and shall have received the Engineer's approval of the use of that particular material. The approval of any source of supply by the Engineer will not imply that all material from that source will be approved and should material from an approved source fail to maintain a quality meeting the requirements of the specifications, use of material from that source shall be discontinued, and the Contractor shall furnish approved material from other sources. Regardless of the source, any material delivered upon the project which fails to meet the requirements will be rejected, and only material meeting all requirements will be allowed to be incorporated in the work. Any material or item incorporated in the work which does not meet the requirements of the contract documents, even though it be installed with the consent and/or in the presence of an Inspector, shall be removed and approved material shall be used in its place and all costs for removal and installation of approved material shall be at the Contractor's expense.

Material which after approval has, for any reason, become unsuitable for use, shall be rejected and not used.

The contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or approved equal items.

6.2 TESTS OF MATERIALS:

All tests of materials shall be made in accordance with approved methods as described and designated in the specifications. When tests of materials are required, such tests shall be made by a testing laboratory approved by the Engineer and at the expense of the Owner. The Contractor shall afford such facilities as may be required for collecting and forwarding samples and shall hold the materials represented by the samples until tests have been made and the materials found equal to the requirements of the specifications or to approved samples. The Contractor in all cases shall furnish the required samples without charge.

In the absence of any definite specification or reference to a specification in the technical specifications or in the special provisions for the particular project involved, it shall be understood that such materials and tests shall meet the specifications and requirements of ASTM. Unless otherwise specified, all tests of materials shall be made in accordance with the methods prescribed by ASTM.

Wherever in the specifications a particular specification of ASTM is referred to by number, it shall be understood that such reference shall include all amendments and additions thereto adopted by ASTM prior to the award of the contract.

Upon completion of laboratory testing of materials as specified above, the results of the tests made therein shall be used as a basis for acceptance or rejection, in accordance with the specifications for the particular material.

6.3 STORAGE OF MATERIALS:

Materials shall be stored in such manner as to insure the preservation of their quality and fitness for use. When considered necessary to protect materials against dampness, or to keep them clean and free from dust, dirt or other detrimental matter, suitable sheds, platforms and covers shall be provided. Materials shall be stored in such a manner as to facilitate inspection.

6.4 DEFECTIVE MATERIALS:

All materials not conforming to the requirements of the specifications shall be considered as defective. No defective material, the defects of which have been subsequently corrected, shall be used until approval has been given. Upon failure on the part of the Contractor to remove, repair or replace defective material when so ordered by the Engineer, the Owner shall have authority to remove, repair or replace such defective material and to deduct all costs so incurred from any monies due or to become due the Contractor. Defective material not permitted for use shall be immediately removed from the site or disposed of as directed by the Engineer.

6.5 ORDERING MATERIALS:

The Contractor is cautioned against placing orders for full quantities of materials until the work has advanced to a state permitting the determination of the exact quantities required. Estimates of quantities of materials furnished by the Engineer are understood to be approximate only, and, unless otherwise specified, the Owner will in no way be responsible for any materials in excess of actual requirements. Neither will the Owner be responsible for any increased costs of extra expense the Contractor may have to bear on account of materials or work not being ordered at some earlier date.

6.6 MATERIALS FURNISHED BY THE OWNER:

Materials specifically indicated shall be furnished by the Owner. The fact that the Owner is to furnish material is conclusive evidence of its acceptability for the purpose intended and the Contractor may continue to use it until otherwise directed. If the Contractor discovers any defect in material furnished by the Owner, the Contractor shall notify the Engineer. Unless otherwise noted or specifically stated, materials furnished by the Owner, which are not of local occurrence, are considered to be f.o.b. the nearest freight station. The Contractor shall be prepared to unload and properly protect all such material from damage or loss. The Contractor shall be responsible for material loss damage after receipt of material at the point of delivery.

6.7 MANUFACTURER'S DIRECTIONS:

Manufactured articles, material and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

6.8 EQUIPMENT APPROVAL DATA:

The Contractor shall furnish 3 copies of complete catalog data for the manufactured items of equipment and all components to be used in the work, including specific performance data, material description, rating, capacity, working pressure, material gauge or thickness, brand name, catalog number and general type as requested by the Engineer.

This submission shall be compiled by the Contractor and approved by the Engineer before any of the equipment is ordered.

Each data sheet or catalog in the submission shall be indexed according to specifications section and paragraph for easy reference.

After written approval, this submission shall become a part of the contract, and may not be deviated from except upon written approval of the Engineer.

Catalog data for equipment approved by the Engineer shall not in any case supersede the contract documents. The approval of the Engineer shall not relieve the Contractor from responsibility for deviations from drawings or specifications, unless the Contractor has in writing called the Engineer's attention to such deviations at the time of submission and secured the Engineer's written approval, nor shall it relieve the Contractor from responsibility for errors of any sort in the items submitted. The Contractor shall check and approve the work described by the catalog data with the contract documents for deviations and errors prior to submission to the Engineer for approval. It shall be the responsibility of the Contractor to ensure that items to be furnished fit the space available. The Contractor shall make necessary field measurements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the drawings and specifications. Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the Contractor to install the equipment to operate properly, and in harmony with the work required by the different arrangement of connections.

Upon approval of the equipment by the Engineer, the Contractor shall furnish six copies of catalog data of all process equipment or components thereof together with operating and maintenance instructions.

6.9 GUARANTEE PERIOD:

The Contractor shall warrant all materials and equipment furnished by the Contractor for a period of one year from date of final acceptance of the work by the Owner unless a different time is stipulated for specific items. This warranty shall mean prompt attention to the correction and/or complete replacement of the faulty material or equipment.

GC-7 LEGAL RELATIONS AND RESPONSIBILITIES

7.1 LAWS AND REGULATIONS:

The Contractor at all times shall observe and comply with all federal, state, and local laws, ordinances, and regulations in any manner affecting the conduct of the work, and all such orders or decrees as exist at present and those which may be enacted later, of bodies or tribunals having any jurisdiction or authority over the work, and shall indemnify and save harmless the Owner, its officers, employees, and agents (including the Engineer) against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, orders or decrees, whether such violations be by the Contractor, the Contractor's Subcontractors or their employees. All provisions of ORS 279C.500 – 279C.530 (construction contracts) are incorporated herein.

7.1.01 Working Conditions - In accordance with ORS 279C.540, no person shall be employed by the Contractor for more than ten hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases the person so employed shall be paid at least time and a half pay:

- For all overtime in excess of eight hours a day or forty hours in any one week when the work week is five consecutive days, Monday through Friday; or
- For all overtime in excess of ten hours a day or forty hours in any one week when the work week is four consecutive days, Monday through Friday; and
- For work performed on Saturday and on any legal holiday specified in ORS 279C.540.

The Contractor shall give notice to employees who work on a public contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees of the number of hours per day and days per week that the employees may be required to work.

Any worker employed by the Contractor shall be foreclosed from the right to collect any overtime provided in ORS 279C.540 unless a claim for payment is filed with the Contractor within 90 days from the completion of the contract, providing the contractor has:

(1) Caused a circular clearly printed in bold-face 12-point type and containing a copy of ORS 279C.545 to be posted in a prominent place alongside the door of the timekeeper's office or similar place which is readily available and freely visible to any or all workers employed on the work.
(2) Maintained such circular continuously posted from the inception to the completion of the contract on which workers are or have been employed.

7.1.02 Environmental and Natural Resources Laws – In conformance with ORS 279C.525, the attention of the Contractor is called to statutes, ordinances or regulations of the federal government, the State of Oregon and local agencies dealing with the prevention of environmental pollution of water and air and the preservation of natural resources that affect the performance of the contract. The Contractor shall carry out the Contractor's operations in conformity with the applicable sections of federal, state and local statutes, ordinances and all regulations that are adopted pursuant thereto. If the Contractor is delayed or must undertake additional work by reason of the enactment of new or the amendment of existing statutes, ordinances or regulations relating to the prevention of environmental pollution and the preservation of natural resources occurring after the submission of the successful bid, the Owner shall grant a time extension and issue a change order setting forth the additional work that must be undertaken. The change order shall not invalidate the contract and there shall be, in addition to a reasonable extension of the contract time, a reasonable adjustment in the contract price to compensate the Contractor for all costs and expenses incurred, including overhead and profits, as a result of such delay or additional work.

In compliance with ORS 279C.525, the following is a list of federal, state, and local agencies, of which the Owner has knowledge, that have enacted ordinances or regulations relating to environmental pollution and the preservation of natural resources that may affect the performance of the Contract:

Federal

Department of the Interior
- Bureau of Land Management
- Bureau of Reclamation
- U. S. Geological Survey
- U.S. Fish and Wildlife Service

Department of Labor
- Occupation Safety and Health Review Commission
- Water Resources Council
- Department of Housing and Urban Development

Oregon State Agencies

- Department of Agriculture
  - Soil and Water Conservation Commission
- Department of Energy
- Department of Environmental Quality
- Department of Fish and Wildlife
- Division of State Lands
- Water Resources Department

Local Agencies

- City Councils
- Board of County Commissioner

7.1.03 Sanitary Provisions - The Contractor shall observe all rules and regulations of the State and local health officials and shall take such precautions as are necessary to avoid creating conditions which are not sanitary. The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for use of the Contractor's employees as may be necessary to comply with the requirements of public health officials. The Contractor shall permit no public nuisance at any place over which the Contractor has control.

7.1.04 Prevailing Wage Rate Law - The Contractor shall conform with provisions of ORS 279C.830 relating to

payment of prevailing wage rates as established by the State Labor Commissioner. The current posted Prevailing Wage Rates,(at the time of project bidding) and any addenda issued to Prevailing wage rates for Public Contracts in Oregon shall be used for this project. A copy of the Prevailing Wage Rates can be obtained from the Oregon Bureau of Labor and Industries located at:

800 NE Oregon Street, Suite 1045
Portland, OR 97232
or via their website at www.oregon.gov/BOLI

BOLI wage rates are those in effect as of the bid date.

7.1.05 Public Works Bond - The Contractor and every Subcontractor shall each have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under section 2 (7) or (8) of Enrolled Senate Bill 477 (SB-477B) as enacted by the State Legislature in 2005.

7.1.06 Medical Care Payment Law - In accordance with ORS 279C.530, the Contractor shall promptly, as due, make payment to any person, copartnership, association or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all monies and sums which the Contractor collected or deducted from the wages of the Contractor's employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.

7.1.07 Drug Testing Program - In accordance with ORS 279C.505 (2), the Contractor shall demonstrate to the satisfaction of the Owner, that an employee drug-testing program is in place. The Contractor may attach hereto a written description of the Contractor's drug testing program, or a copy of the adopted drug-testing program, to comply with this condition.

7.1.08 Salvage or Recycle of Construction and Demolition Debris - In accordance with ORS 279C.510 (1), the Contractor shall salvage or recycle construction and demolition debris, if feasible or cost-effective.

7.1.09 Salvage or Recycle of Lawn and Landscaping Maintenance - In accordance with ORS 279C.510 (2), the Contractor shall compost or mulch yard waste material at an approved site, if feasible and cost effective.

7.2 PERMITS AND LICENSES:

The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work. Such fees shall be included in the basic contract price.

CITY BUSINESS LICENSE: Prior to starting work CONTRACTOR shall pay the CITY business license tax and provide the Public Works Department with a copy of business license receipt. CONTRACTOR shall, likewise, require all subcontractors to pay the CITY business license tax and provide a copy of the receipt to the Public Works Department prior to commencement of work.

7.3 PATENTED DEVICES, MATERIALS, AND PROCESSES:

The Contractor assumes the responsibility of defending any and all suits or actions brought for the infringement of any patent claimed to be infringed by any material, device, plan, method or process to be incorporated in the work and/or required to be used in connection with the work to be done under the contract, including all attorney's fees and court costs, and the Contractor shall indemnify and save harmless the Owner, its officers, employees, and agents (including the Engineer) from all claims of and suits or Sections for infringements of patents.

7.4 USE OF PREMISES:

The Contractor shall confine the Contractor's apparatus, the storage of materials and the operations of the Contractor's worker's to limits indicated by the contract Documents, ordinances, permits, or directions of the Engineer and shall not unreasonably encumber the premises with the Contractor's materials.

The Contractor shall not load or permit any part of a structure which the Contractor is constructing under this

contract to be loaded with a weight that will endanger its safety, nor shall the Contractor use any such structure for any purpose without the approval of the Engineer.

7.5 COOPERATION WITH OTHER CONTRACTORS:

The Contractor shall conduct the Contractor's operations so as to interfere as little as possible with those of other Contractors or Subcontractors on or near the work. It is expressly understood that the Owner has the right and may award other contracts in connection with the work so long as it does not interfere with the work under this contract.

Where one Contractor's operations are within the limits or adjoin the operations of another Contractor, each shall be responsible to the other for any damage, injury, loss, or expense which may be suffered on account of interference of operations, neglect or failure to finish work at the proper time, or of any other cause.

7.6 LABOR AND EQUIPMENT:

The Contractor shall employ only competent and efficient laborers, mechanics, or artisans; and whenever, in the opinion of the Engineer, any employee is or becomes unsatisfactory for the work assigned to the employee the Contractor shall, upon request of the Engineer, remove that employee from the work and not employ that employee again upon it.

The methods, equipment, and appliances used and the quantity and quality of the personnel employed on the work shall be such as will produce a satisfactory quality of work and shall be adequate to complete the contract within the time limit specified.

Only efficient and competent laborers and foremen shall be employed on force account work, and only tools and equipment in good condition and suitable for the work shall be used. The Engineer shall have authority to dismiss from force account work any laborer or foreman whose efficiency is, in the opinion of the Engineer, below that of the average of the Contractor's forces, and to refuse to allow the use of tools and equipment which, in the opinion of the Engineer, are not suitable for the work. Laborers and foremen dismissed and/or tools and equipment rejected shall be replaced by the Contractor to the satisfaction of the Engineer.

The Contractor shall be an independent Contractor for all purposes and shall be entitled to no compensation other than the compensation provided under **Article IV** of this contract.

The Contractor acknowledges that for all purposes related to the Contract, the Contractor is and shall be deemed to be an independent Contractor and not an employee of the Owner, shall not be entitled to benefits of any kind to which an employee of the Owner is entitled and shall be solely responsible for all payments and taxes required by law; and furthermore in the event that the Contractor is found by a court of law or an administrative agency to be an entitled employee of the Owner for any purposes, the Owner
shall be entitled to repayment of any amounts from Contractor under the terms of the Contract; to the full extent of any benefits or other remuneration the Contractor receives (from the Owner or third party) as a result of said finding and to the full extent of any payments that the Owner is required to make (to the Contractor or to the third party) as a result of said finding.

7.7 PUBLIC SAFETY AND CONVENIENCE:

The Contractor shall conduct the project with proper regard for the safety and convenience of the public. When the project involves use of public ways, the Contractor shall provide Flaggers when directed and install and maintain means of free access to all fire hydrants, warehouses, and other property. Private roadways shall be closed only with approval of the Engineer or specific permission of the tenant. The Contractor shall not interfere with normal operation of vehicles unless otherwise authorized.
The Contractor shall not obstruct or interfere with travel over any public street without approval. Where detours are necessary, they shall be maintained with good surface and shall be clearly marked. The Contractor shall provide open trenches and excavations with adequate barricades of an approved type which can be seen from a reasonable distance. At night, the Contractor shall mark all open work and obstructions by lights. The Contractor shall install and maintain all necessary signs, lights, flares, barricades, railings, runways, stairs, bridges and facilities. The Contractor shall observe all safety instructions received from the Engineer or governmental

authorities, but following of such instructions shall not relieve the Contractor from the responsibility or liability for accidents to workers or damage or injury to person or property. The Contractor shall not work before 7:00 a.m. or after 6:00 p.m. without written permission of the Engineer.

Emergency traffic such as police, fire and disaster units shall be provided reasonable access to the work area at all times. The Contractor shall be liable for any damages which may result from failure to provide such reasonable access or failure to notify the appropriate authority.

7.8 BARRICADES, WARNING SIGNS, AND FLAGGERS:

The Contractor shall at the Contractor's expense and without further or other order provide, erect and maintain at all times during the progress or temporary suspension of the work suitable barricades, fences, signs, or other adequate warnings or protection, and shall provide, keep and maintain such danger lights, signals, and Flaggers as may be necessary or as may be ordered by the Engineer to insure the safety of the public as well as those engaged in connection with the work. All barricades and obstructions shall be protected at night by signal lights which shall be suitably distributed across the roadway and which shall be kept burning from sunset to sunrise. Barricades shall be of substantial construction and shall be suitably painted to increase their visibility at night.

Failure of the Engineer to notify the Contractor to maintain barriers, lights, signals, or Flaggers shall not relieve the Contractor from this responsibility.

If Flaggers are necessary for the purpose of protection and safety to traffic, such Flaggers shall be furnished at the Contractor's expense.

The signs to be furnished and used by the Contractor in directing, controlling and safeguarding traffic shall conform with the standard sign designs in use by the ODOT.

The Contractor's responsibility for the safeguarding of traffic as specified above shall cease when the work included in the contract is accepted as complete.

7.9 SAFEGUARDING OF EXCAVATIONS:

The Contractor shall provide such safeguards and protections around and in the vicinity of the excavations the Contractor makes as may be necessary to prevent and avoid the occurrence of damage, loss, injury and death to property and persons because of such excavations. Liability for any such damage, loss, injury or death shall rest with the Contractor. The Contractor's responsibility for safeguarding and protecting and the Contractor's liability for damage, loss, injury or death shall cease when all work to be done under the contract is completed and accepted by the Owner.

7.10 USE OF EXPLOSIVES:

The use of explosives is not required for this project. In the event they become necessary, the following provisions will apply:
In the use and storage of explosives, the Contractor shall use every precaution to prevent injury to persons and damage to property. Secure storage places shall be provided and all such places shall be clearly marked with warning signs. Only persons experienced in the handling of explosives shall be allowed to use them on the work, and no shot shall be put off until warning has been sounded and all persons within the radius of danger removed. In the handling and storage of explosives, the Contractor shall comply with all Federal, State and local laws, and the Owner and Engineer will in no way be responsible for any noncompliance therewith or for damages to property or injury to persons resulting from accidental or premature explosions.

When explosives are used, particularly in proximity to buildings or other structures, care shall be taken to protect the surroundings from injury by the explosion, the resultant concussion or by flying rocks or debris. The quantities of explosives and the manner of their use shall be such that adjacent property shall not be damaged. In case the vicinity of the work is accessible to the general public, the Contractor shall, before any shots are fired, post workers about the work in various directions to warn all persons of the danger existing and to prevent the public from approaching closer than safety will permit.

7.11 PERSONAL SAFETY:

The Contractor shall be responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours. Safety provisions shall conform to the applicable federal, state, county and local laws, ordinances and codes. Where any of these are in conflict, the more stringent requirement shall be followed.

The Contractor shall maintain at the office or other well-known place at the job site, all articles necessary for giving first aid to the injured and establish the procedure for the immediate removal to a hospital or a doctor's care of employees and other persons who may be injured on the job site.

The duty of the Engineer to conduct construction reviews of the Contractor's performance is not intended to include a review of the adequacy of the Contractor's safety measures in, on or near the construction site.
All accidents causing death or serious injuries, or damages shall be reported immediately by telephone or messenger to both the Engineer and the Owner. In addition, the Contractor shall promptly report in writing to the Engineer all accidents whatsoever arising out of, or in connection with, the performance of the work, whether on or adjacent to the site, giving full details and statements of witnesses.

If any claim is made by anyone against the Contractor or any Subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

7.12 PROTECTION OF WORK AND PROPERTIES:

The Contractor shall continuously maintain adequate protection of all the Contractor's work from damage and shall protect the Owner's property from injury or loss arising in connection with this contract. The Contractor shall make good any such damage, injury or loss, except such as may be directly due to errors in the contract documents or caused by agents or employees of the Owner. The Contractor shall adequately protect adjacent property as provided by law and these contract documents.

At points where the Contractor's operations are adjacent to properties of railway, telegraph, telephone, water, gas, other pipeline and power companies, or are adjacent to other property, damage to which might result in material expense, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection of the interests of the Owner, as well as any interest that a third party may have therein, have been made.

In an emergency affecting the safety of life or of the work or of adjoining property the Contractor, without special instruction or authorization from the Engineer or Owner, is hereby permitted to act, at the Contractor's discretion, to prevent such threatened loss or injury, and the Contractor shall so act, without appeal, if so instructed and authorized. Any compensation, claimed by the Contractor on account of emergency work, shall be determined by agreement.

7.13 RESTORATION OF DAMAGED PROPERTY:

All damage and injury to property that may be caused by or that may result from the carrying out of the work to be done under the contract, or from any act, omission or neglect of the Contractor, the Contractor's Subcontractors, or their employees, shall promptly be made good by the Contractor either by the repairing, rebuilding, or replacing of the property damaged, or in some other manner satisfactory to the Owner of such property. In case of failure on the part of the Contractor to promptly and satisfactorily make good such damage or injury, the Owner may, without notice to the Contractor, proceed to repair, rebuild, or replace such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due the Contractor under the contract.

In applying the provisions above stated, the repairing, rebuilding or replacing of damaged property shall be understood to include the providing of any temporary facilities that may be needed to maintain normal service until the required repairing, rebuilding or replacing is accomplished.

7.14 RESPONSIBILITY FOR DAMAGES:

The Contractor shall be responsible for all damages to property, injury to persons, and loss, expense, inconvenience, and delay that may be caused by or that may result from any act, omission, or neglect of the Contractor, the Contractor's Subcontractors, or their employees in the performance of the work to be done under this contract.

The Contractor shall indemnify and hold harmless the Owner, its officers, employees, and agents (including the Engineer) from all loss, claims, demands, suits, including costs and attorney's fees, or actions of every name and description brought for or on account of any damage, injury, loss, expense, inconvenience, or delay received or sustained, or claimed to be received or sustained by any person or persons, which damage, injury, loss, expense, inconvenience or delay may have been caused by or may have resulted from the performance of the work to be done under the contract, or from any act, omission, or neglect of the Contractor, the Contractor's Subcontractors, or their employees, provided however that the Owner shall promptly call to the attention of the Contractor any claim, demand, action or suit filed with the Owner for any such injury or damage and should suit or action be commenced against the Owner to recover any such claim or damage, the Owner shall, before time for answer expires or before default has been entered, furnish the Contractor and/or the Contractor's surety with a copy of the complaint.

The Owner, its officers, employees, and agents (including the Engineer), will not in any manner be answerable or accountable for any loss or damage resulting to the said work, or any part thereof, or to any of the equipment, materials or other things used or employed in prosecuting or completing said work, during its progress from any cause whatsoever, but all such loss or damage shall be solely at the Contractor's risk until it has been finally accepted by the Owner.

7.15 TRESPASS:

The Contractor will be solely responsible for any trespass upon adjacent property or injury thereto, resulting from or in connection with the Contractor's operations. The Contractor will be liable for any claims that may be made on account of trespass or the deposit of debris of any kind upon private property.

7.16 CONTRACTOR'S RESPONSIBILITY FOR WORK:

Until final acceptance of the contract, the Contractor shall be held responsible for any injury or damage to the work or to any part thereof by the action of the elements, or from any cause whatsoever, and the Contractor shall make good at the Contractor's own expense all injuries or damages to any portion of the work before its completion and final acceptance.

7.17 NO WAIVER OF LEGAL RIGHTS:

The Owner shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefore from showing the true amount and character of the work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate, or certificate is untrue or incorrectly made, or that the work or materials do not conform in fact to the contract. The Owner shall not be precluded or estopped, notwithstanding any such measurement, estimate or certificate, and payment in accordance therewith, from recovering from the Contractor and the Contractor's sureties such damages as the Owner may sustain by reason of the Contractor's failure to comply with the terms of the contract. Neither the acceptance by the Owner, or by any representative or agent of the Owner, nor any payment for nor acceptance of the whole of any part of the work, nor any extension of time, nor any possession taken by the Owner shall operate as a waiver of any portion of the contract or of any power herein reserved, or any right to damages herein provided. A waiver of any breach of the contract shall not be held to be waiver of any other subsequent breach.

7.18 INSURANCE:

7.18.01 General - The Contractor shall not commence work until the Contractor has obtained all insurance required under this Section or until the Contractor has satisfied the Owner in this respect; nor shall the Contractor allow any Subcontractor to commence work until the Subcontractor also has obtained similar

insurance which is applicable to the Subcontractor's work. The Contractor shall maintain such insurance throughout the life of this contract, including the guarantee and maintenance period, and will hold the Owner and the Owner's agents harmless and shall indemnify the Owner for any losses arising out of the Contractor's operations, including any contingent liability arising therefrom.

7.18.02 Contractor - The Contractor shall purchase and maintain such comprehensive general liability and other insurance as is appropriate for the work being performed and furnished and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance and furnishing of the work and Contractor's other obligations under the contract Documents, whether it is to be performed or furnished by Contractor, by any Subcontractor, by anyone directly or indirectly employed by any of them to perform or furnish any of the work, or by anyone for whose acts any of them may be liable.

a. Claims under workers' or workmen's compensation, disability benefits and other similar employee benefit acts;
b. Claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
c. Claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
d. Claims for damages insured by personal injury liability coverage which are sustained
    1. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
    2. by any other person for any other reason.
e. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

7.18.03 - The Contractor shall purchase and maintain, at the Contractor's own expense during the contract time, Contractor's General Public Liability and Property Damage Insurance including vehicle coverage issued to the Contractor and protecting the Contractor from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the contract Documents, whether such operations be by the Contractor or by any Subcontractor employed by the Contractor or anyone directly or indirectly employed by the Contractor or by a Subcontractor employed by the Contractor. The Owner and the Engineer shall be named as an additional insured on the liability policy. Insurance shall be written with a limit of liability of not less than $2,000,000.00 for all damages rising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than $2,000,000.00 aggregate for any such damages sustained by 2 or more persons in any one accident. Insurance shall be written with a limit of liability of not less than $2,000,000.00 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than $2,000,000.00 aggregate for any such damage sustained by 2 or more persons in any one accident. Vehicular liability limits shall be not less than $2,000,000.00 for any one person and not less than $2,000,000.00 aggregate for each occurrence.

The Contractor shall either (a) require each of the Contractor's Subcontractors to procure and to maintain during the life of the Subcontractor's subcontract, Subcontractor's Commercial General Liability Insurance and Property Damage and Vehicular Liability of the type and in the same amounts specified in the preceding paragraph, or (b) insure the activities of the Contractor's Subcontractors in the Contractor's own policy.

7.18.04 Public Liability Insurance - Public Liability Insurance shall indemnify the Contractor and the Contractor's Subcontractors against loss from liability imposed by law upon, or assumed under contract by the Contractor or the Contractor's Subcontractors for damages on account of such bodily injury and property damage. Such insurance shall be provided on a comprehensive liability policy form written by underwriters through an agency satisfactory to the Owner; covering bodily injury and broad form occurrence property damage, owned and non-owned vehicles and equipment, Contractor's protective coverage and blanket contractual liability. Such liability insurance shall not exclude explosion, collapse, underground excavation or removal of lateral support. The Owner and the Engineer shall be named as an additional insured on the liability policy, but only in respect to the Contractor's operations. Whenever the performance of any portion of the work involves the use of watercraft, comprehensive insurance shall include watercraft exposure with appropriate endorsements for the Jones Act with Federal longshoremen and harbor workers' coverage.

7.18.05 Industrial Accident or Worker's Compensation Insurance - The Contractor shall purchase and maintain, at the Contractor's own expense, during the contract time, Industrial Accident or Workmen's Compensation Insurance, including occupational disease provisions, for all of the Contractor's employees at the site of the project. The Contractor shall comply with the provisions of ORS 279C.530 and the laws of the State of Oregon, ORS 656.017. In case any work is sublet, the Contractor shall require such Subcontractor similarly to provide Workmen's Compensation Insurance and to comply with ORS 656.017, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under Workmen's Compensation statue, the Contractor shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of its employees not otherwise protected.

7.18.06 Property Insurance – The Contractor shall purchase "All Risk" type Builder's Risk Insurance for work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the contract price totaled in the bid. The policy shall cover not less than the losses due to fire and extended coverage, earthquake, flood, explosion, hail, lightening, vandalism, malicious mischief, wind, collapse, riot, aircraft, smoke the results of faulty workmanship, during the contract time, and until the work is accepted by the Owner. The policy shall name as the insured the Contractor and the Owner.

7.18.07 Certificates of Insurance - Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the work. These certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least 30 days prior written notice has been given to the Owner.

7.19 PAYMENT OF OBLIGATIONS:

The Contractor shall promptly make full payment for labor, material, supplies and provisions, at such times as they become due and payable, to all persons supplying said Contractor or the Contractor's Subcontractor with labor, services, materials, supplies or provisions for the prosecution of the work provided for in the contract. The Contractor shall not permit any lien or claim to be filed or prosecuted against the Owner for or on account of any labor, services, material, supplies or provisions furnished.

The Contractor and Subcontractor shall pay all contributions or amounts due the Industrial Accident Fund from the Contractor or any Subcontractors incurred in the performance of the Contract. The Contractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 279C.505.

In accordance with ORS 279C.515 (1), in the event that said Contractor fails, neglects, or refuses to make prompt and full payment of any claim for labor, services, materials, supplies or provisions furnished by any person in connection with the contract as said claim becomes due, whether said labor, services, materials, supplies or provisions to be performed or furnished for said Contractor or for the Contractor's Subcontractor, then, and in such event the proper public officer or officers representing the Owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the Contractor by reason of the Contractor's contract.

In accordance with ORS 279C.515 (2), if the Contractor or a First-Tier Subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the public contract for a public improvement within 30 days after receipt of payment from the public contracting agency or a Contractor, the Contractor or First-Tier Subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10 day period that payment is due under ORS 279C.580(3)(A) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to the Contractor or First-Tier Subcontractor on the amount due shall equal three times the discount rate on 90 day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve District that includes Oregon on the date that is 30 days after the date when payment was received from the public contracting agency or from the Contractor, but the rate of interest shall not exceed 30 percent. The amount of interest may not be waived.

In accordance with ORS 279C.515(3), if the Contractor or a Subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the public contract, the person may file a

complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580(5).

In accordance with ORS 279C.515 (4), the payment of a claim in the manner authorized in this section shall not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claims.

7.20 SUIT OR ACTION:

In the event suit or action is instituted to enforce any of the terms of this contract, the prevailing party shall be entitled to recover from the other party such sum as the Court may adjudge reasonable as attorney's fees at trial or on appeal of such suit or action, in addition to all other sums provided by law.

GC-8 PROSECUTION AND PROGRESS

8.1 PROSECUTION OF WORK:

The work to be done under the contract shall not be commenced until the contract, performance bond and payment bond have been executed by the Contractor and the Contractor's surety and delivered to the Owner and until written notice to proceed has been received by the Contractor.

Performance of the work to be done under the contract shall be commenced within the stipulated time limit, unless later commencement of the work is authorized by the Engineer. From the time of commencement of the work to the time of completion, the work shall be prosecuted as vigorously and as continually as weather conditions will permit and always in accordance with a schedule which will ensure completion within the specified time limit, due allowances being made for possible unfavorable conditions, interference, breakdowns, and other causes of delay. There shall be no voluntary shutdown or slowing of operations without prior approval of the Engineer.
If it appears to the Engineer that the rate of progress being made is not such as it will ensure the completion of the work within the specified time limit, it shall be within the authority of the Owner, upon notification by the Engineer, to require the Contractor to provide additional equipment and men and to take such other steps as may be necessary to insure completion as specified.

8.2 LIMITATIONS OF OPERATIONS:

Operations on the various units or portions of the work shall be begun at the times and locations approved by the Engineer and shall be prosecuted between such limits as the Engineer may establish. No part of the work shall be undertaken without the approval of the Engineer, and no work shall be carried on contrary to the Engineer's instructions.

In case of a dispute arising between two or more Contractors engaged on the same work as to the respective rights of each under the specifications, the Engineer shall determine the matters at issue and shall define the respective rights of the various interests involved, in order to secure the completion of all parts of the work in general harmony and with satisfactory results, and the Engineer's decision shall be final and binding on all parties concerned.

8.3 CONTRACTOR TO HAVE REPRESENTATIVE ON WORK:

The Contractor shall designate in writing before starting work an authorized representative, who shall have complete authority to represent and to act for the Contractor in the Contractor's absence from the work site, in all directions given to the authorized representative by the Engineer. The Contractor or the authorized representative shall give efficient supervision to the work, using the best skill and personal attention to the prosecution of the work, and shall be present on the site continually during its progress. The authorized representative shall have full authority to execute the orders or directions of the Engineer without delay and to supply promptly such materials, tools, plant, equipment, and labor as may be required, regardless of whether or not the work is to be performed by the Contractor's own forces or those of a Subcontractor. The fact that an approved Subcontractor is performing any portion of the work shall not relieve the Contractor of this requirement.

8.4 TEMPORARY SUSPENSION OF THE WORK:

The Engineer shall have authority to suspend the work wholly or in part for such period or periods as the Engineer may deem necessary, due to unsuitable weather or such other conditions as are considered unfavorable for the prosecution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or to perform any or all provisions of the contract.

If it should become necessary to stop work for an indefinite period, the Contractor shall store all materials in such a manner that they will not obstruct or impede the traveling public unnecessarily nor become damaged in any way, and the Contractor shall take every precaution to prevent damage or deterioration of the work performed, provide suitable drainage, et cetera, and erect temporary structures where necessary. The Contractor shall not suspend the work without written approval from the Engineer. In all cases of suspension of construction operations, the work shall not again be resumed until permitted by order of the Engineer.

The Contractor will be responsible for all damage to the work that may occur during suspensions of work the same as though the damage had occurred while the work was in progress.

8.5 PROTECTION OF WORK DURING SUSPENSION:

If it should become necessary, because of the lateness of the season or any other reason, to stop the work, then the Contractor shall open proper drainage ditches, erect temporary structures where necessary; prepare the work so there will be minimum interference with traffic, if the work is on a public right-of-way; and take every precaution to prevent any damage or unreasonable deterioration of the work during the time the work is closed. If upon reopening the work, it is found that any such damages or deterioration has occurred, due to the lack of said precautions, then, and in that event, the Contractor shall correct all such conditions at the Contractor's own expense in a manner acceptable to the Engineer.

8.6 TIME OF COMPLETION OF WORK AND EXTENSION OF TIME LIMIT:

Time is of the essence of the contract. All of the work to be done under the contract shall be completed in its entirety within the time specified in the contract; provided however, that the Engineer may at the Engineer's discretion recommend that the Owner extend the time for completion of the work without invalidating any of the provisions of the contract and without releasing the surety.

Extensions of time, when recommended by the Engineer, will be based upon the effect of delays to the project as a whole and will not be recommended for noncontrolling delays to minor included portions of the work unless it can be shown that such delays did in fact, delay the progress of the project as a whole. Acts of God, governmental regulations, priorities, labor disputes, strikes, fires, inability to obtain materials, equipment, or labor because of Federal Government restrictions arising out of the National Defense or War Program, and required Extra Work, may constitute such a delay.

Should the Owner cause a delay in the completion of the work by reason of requirements on extra work or otherwise not provided for by the plans or these specifications, the Contractor will be granted an extension of time by the Owner for completion equal to the amount of such a delay and no charge will be made against the Contractor for the extension of time so granted. Changes in plans and increases in the quantities of work to be performed will be considered cause for extension of time only when they are of such nature and when they occur at such times that they materially and necessarily affect the completion time of the work.

Delay forced upon the Contractor by failure on the part of the Owner and its representatives to act promptly in the carrying out of its obligations and duties under the contract will be considered cause for extension of time only when and to such extent as such failure does actually prevent completion of the work within the specified time.

The Engineer shall have the right to order the work to cease for a time because of inclement weather, but in case such order is given, the Engineer also will give notice as to when the work shall be resumed and the Contractor's time for completion will be extended for a time equal to the amount of the delay so ordered. All extensions requested by the Contractor shall be made to the Engineer in writing on or before the fifth of the month following that in which the alleged delay is said to have occurred and any claim for extension of time shall state explicitly

the reasons therefore. Should the Contractor fail to file such written claim for extension of time within the period provided therefore, the Contractor thereby shall have abandoned any claim therefore.

In naming the prices for completion of the work within the time specified it shall be understood and agreed the work shall be completed within that time. If, however, said work is not completed within the time named in the contract, as extended to cover the total days delay allowed in the paragraphs above, the Owner may deduct and retain out of any sum then due or that may become due the Contractor at time of such delinquency, or later, the sum specified in the contract for each and every calendar day that the date of final completion of each contract is delayed. In submitting a bid and signing the contract, the Contractor thereby shall have agreed to these provisions and, furthermore, that the sum deducted and retained is not a penalty but a reimbursement to the Owner for damages which the Owner will have sustained by reason of such delayed completion.

Damages so liquidated are understood to include the additional cost to the Owner for Engineering supervision, interest charges, and overhead all of which damages would be difficult or impossible to ascertain accurately.

Amounts due the Owner from the Contractor under the foregoing provisions shall be deducted from any monies then due or to become due said Contractor under the contract, and such deductions shall not in any degree release the Contractor from further obligations in respect to the fulfillment of the entire contract, nor any right which the Owner may have to claim, sue for, and recover compensation and damages for no performance or breach of the contract.

8.7 EARLY TERMINATION:

This contract may be terminated without cause by mutual written consent of the parties according to the terms of ORS 279C.655 through ORS 279C.670. If work under the contract is suspended by an order of a public agency for any reason considered to be in the public interest other than by a labor dispute or by reason of any third party judicial proceeding relating to the work other than a suit or action filed in regard to a labor dispute. If the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the Contract. Payment to the Contractor shall be provided per ORS 279C.660 and shall be prorated to include the day of termination and shall be in full satisfaction of all claims by the Contractor against the Owner under this contract. Termination under any provision of this paragraph shall not affect any right, obligation, or liability of the Contractor or Owner, which accrued prior to such termination.

8.8 ANNULMENT AND CANCELLATION OF CONTRACT:

If the Contractor should be adjudged bankrupt, or if the Contractor should make a general assignment for the benefit of the Contractor's creditors, or if a receiver should be appointed on account of the Contractor's insolvency, or if the Contractor should persistently or repeatedly refuse or should fail to supply enough properly skilled workers or proper materials for the efficient prosecution of the project, or if the Contractor should fail to make prompt payment to Subcontractors or for material or persistently disregard laws, ordinances, or the instructions of the Engineer, or otherwise be guilty of a substantial violation of any provisions of the contract, then the Owner, upon the certificate of the Engineer that, in the Engineer's opinion, sufficient cause exists to justify such action, may without prejudice to any other right or remedy and after giving the Contractor and the Contractor's surety 7 days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method it may deem expedient.

In the event action as above indicated is taken by the Owner, the Contractor shall not be entitled to receive any further payment until the work is completed. On completion of the work, determination shall be made by the Engineer of the total amount the Contractor should have been entitled to receive for the work under the terms of the contract, had the Contractor completed the work. If the difference between said total amount and the sum of all amounts previously paid to the Contractor, which difference will hereinafter be called the "unpaid balance," exceeds the expense incurred by the Owner in completing the work, including expense for additional managerial and administrative services, such excess will be paid to the Contractor, with the consent of the surety. If, instead, the expense incurred by the Owner exceeds the unpaid balance, the amount of the excess shall be paid to the Owner by the Contractor or the Contractor's surety. The expense incurred by the Owner as herein provided, and the damage incurred through the Contractor's default, shall be as determined and certified by the Engineer.

In addition to and apart from the above mentioned rights of the Owner to terminate the employment of the Contractor, it is expressly understood that the contract may be cancelled at the election of the Owner for any willful failure or refusal on the part of the Contractor to faithfully perform the contract according to all of its terms and conditions; provided however, that in the event the Owner should cancel the contract, neither the Contractor nor the Contractor's surety shall be relieved from damages or losses suffered by the Owner on account of the Contractor's said breach of contract.

It is understood and agreed that the Owner may, at its discretion, avail itself of any or all of the above rights or remedies and that the invoking of any one of the above rights or remedies will not prejudice or preclude the Owner from subsequently invoking any other right or remedy set forth above or elsewhere in the contract.

8.9 USE OF COMPLETED OR UNCOMPLETED PORTIONS:

The Owner shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding that the time for completing the entire work or such portions may not have expired, but such taking possession and use shall not be deemed as acceptance of any work not completed in accordance with the contract documents. If such prior use increases the cost of or delays the completion of uncompleted work or causes refinishing of completed work, the Contractor shall be entitled to such extra compensation; or extension of time or both, as the Engineer may determine.

8.10 RIGHT OF OWNER TO DO WORK:

If the Contractor should neglect to prosecute the work properly or fail to perform any provision of the contract, the Owner after 3 days written notice to the Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and deduct the cost thereof from the payment then or thereafter due the Contractor.

8.11 CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT:

If the work should be stopped under an order of any court, or other public authority, for a period of three months, through no act or fault of the Contractor or of anyone employed by the Contractor, or if the Engineer should fail to issue any certificate for payment within 10 days after it is due, or if the Owner should fail to pay to the Contractor within 30 days of its presentation, any sum certified by the Engineer and approved by the Owner, then the Contractor may, upon 7 days written notice to the Owner and Engineer, stop work or terminate this contract and recover from the Owner payment for all work executed and any loss sustained upon any plant or materials and reasonable profit and damages.

8.12 LEGAL ACTIONS CONCERNING THE WORK:

Should legal action be entered into either by the Contractor (or the Contractor's surety) against the Owner or by the Owner against the Contractor (or the Contractor's surety), such legal action shall be tried in the county of the state in which the work was or is to be performed.

If one of the questions at issue is the satisfactory performance of the work by the Contractor and should the appropriate judicial body judge the work of the Contractor to be unsatisfactory, then the Contractor or the Contractor's surety shall reimburse the Owner for all legal and all other expenses (as may be allowed and set by the court) incurred by the Owner because of the legal action and, further, it is agreed that the Owner may deduct such expenses from any sum or sums then or that may become due the Contractor.

Should there be no such funds available, or should such funds not be sufficient to cover the said expenses, then the Contractor or the Contractor's surety shall pay all of such additional costs involved.

8.13 CERTIFICATE OF COMPLIANCE:

After completion of all items of work specified in the contract, and completion of the final inspection as set forth in Subsection 5.16, the Contractor shall submit to the Owner a Certificate of Compliance in form substantially as follows: "I (we) hereby certify that:

1. All work has been performed and materials supplied in accordance with the plans, specifications and contract documents for the above work;

2. There have been no unauthorized substitutions of Subcontractors; nor have any subcontracts been entered into without the names of the Subcontractors having been submitted to the Owner prior to the start of such subcontracted work;
3. No subcontract was assigned or transferred or performed by any Subcontractor other than the original Subcontractor, without prior notice having been submitted to the Owner together with the names of all Subcontractors;
4. All Subcontractors performing work described in ORS 701.005(2) (i.e., construction work) were registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.026 to 701.035 before the Subcontractors commenced work under the contract;
5. All claims for material and labor and other service performed in connection with these specifications have been paid;
6. All monies due the State Industrial Accident Fund, the State Unemployment Compensation Trust Fund, the State Tax Commission (in accordance with ORS 305.385 and ORS 279C.530), hospital associations and/or others have been paid."

8.14 COMPLETION AND ACCEPTANCE:

After completion of all items of work specified in the contract, and completion of the final inspection as set forth in Subsection 5.16, and acceptance of all public portions of utility construction by the respective public utility regulatory agency, and completion of the Certificate of Compliance as set forth in Subsection 8.13, the Engineer will recommend to the Owner that the work be accepted, and payment made as provided for in Subsection 9.11.

It is mutually agreed between the parties to the contract that a certificate of completion of the project, submitted by the Engineer or other agent of the Owner and approved by the governing body of the Owner, shall constitute final acceptance of the work and materials included in the contract on the date of such approval. It is provided further that such approval shall not constitute an acceptance of any authorized work, that no payment made under the contract except the final payment shall be evidence of the performance of the contract, either wholly or in part, and that no payment shall constitute an acceptance of unauthorized or defective work or improper material.

The acceptance of the contract work shall not prevent the Owner from making claim against the Contractor for any defective work.

GC-9 MEASUREMENT AND PAYMENT

9.1 MEASUREMENT OF QUANTITIES:

All work completed under the contract shall be measured by the Engineer according to United States standard measure. The methods of measurement and computation to be used in the determination of the quantities of materials furnished and the quantities of work performed under the contract shall be the methods outlined in these specifications or by those methods generally recognized as good Engineering practice, which, in the opinion of the Engineer, give the greatest accuracy consistent with practicable application.

9.2 SCOPE OF PAYMENT:

The Contractor shall accept the compensation as herein provided, in full payment for furnishing all materials, labor, tools and equipment, and for performing all work under the contract, also for all loss, damage, or liability arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered delaying the prosecution of the work until its final acceptance by the Owner.

9.3 ALTERATION IN DETAILS OF CONSTRUCTION:

The Owner reserves the right to make, at any time during the progress of the work, such increases or decreases in quantities and such alterations in the details of construction as may be found to be necessary or desirable.

Such increases and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to accept the work as altered, the same as if it had been a part of the original contract.

Unless such alterations and increases or decreases materially change the character of the work to be performed or the cost thereof, the altered work shall be paid for at the same unit prices as other parts of the work. If, however, the character of the work or the unit costs thereof are materially changed, an allowance shall be made on such basis as may have been agreed to in advance of the performance of the work, or in case no such basis has been previously agreed upon, then an allowance shall be made, either for or against the Contractor, in such amount as the Engineer may determine to be fair and equitable.

9.4 QUANTITIES AND LUMP SUM PRICES:

9.4.01 Lump Sum - The Contractor shall include in the contract sum all allowances named in the contract document for items (or for the entire work) which are to be paid for under a lump sum price(s) and shall cause the work so covered to be done for such sums. Should the Engineer direct that additional work be required, or work deleted under a lump sum price(s) item, the contract sum will be adjusted therewith by negotiation or by deletion or addition of other work of equivalent value at the option of the Owner. The Contractor declares that the lump sum price(s) includes such sums for all expenses and profit as the Contractor deems proper. No demand for expense or profit other than those included in the lump sum price(s) will be allowed.

9.5 PAYMENT FOR FORCE ACCOUNT (EXTRA) WORK:

When extra work is ordered by the Engineer to be done on a force account basis (either by the Contractor or an approved Subcontractor), such work will be paid for on the basis of the actual cost to the Contractor or Subcontractor for labor cost, material cost and equipment cost plus an allowance of 15% thereof. This allowance is to cover the costs of administration, general superintendence, other overhead, bonds, anticipated profit, and the use of small tools and equipment for which no rental is allowed. Where said work is performed by an approved Subcontractor, an additional 5% will be allowed the Contractor for administration and supervision of the Subcontractor's work.

The items of cost to which the above percentage will be added and to which reimbursement will be made are as follows:

9.5.01 Labor - The wages of supervisors, equipment operators, and skilled, semiskilled and common laborers assigned to the specific operation will be reimbursed at contract or actual payroll rate of wages per hour and actual fringe benefits paid, for each hour that the employees are actually engaged in the performance of the force account work. Reimbursement for hourly wage rates and benefits shall not exceed prevailing wage rates and benefits for the class or classes of work performed under force account.
In addition to wages and fringe benefits, reimbursement will be allowed for indirect labor costs as follows:

a) Social Security Tax and Unemployment Tax at the percentage legally required;
b) Industrial Accident or Worker's Compensation Insurance at the policy percentage rate;
c) Contractor's Public Liability Insurance and Contractor's Property Damage Liability Insurance at the policy percentage rate;

9.5.02 Materials - Purchased materials and supplies used on force account work will be reimbursed at the prices billed to the Contractor or Subcontractor by the supplier, less all discounts. It will be assumed that the Contractor or the Contractor's Subcontractor has taken advantage of all possible discounts on bills for materials and supplies, and such discounts will be subtracted from the total amounts of bills regardless of any failure of the Contractor to take advantage of same. Freight and express on material and supplies will be considered a part of the cost and will be reimbursed as materials and supplies.

9.5.03 Equipment - Equipment, either owned or rented by the Contractor, that is mutually considered necessary, will be reimbursed at equipment rental rates. The hourly rental rate will be determined using the monthly rental rates taken from the current edition of the *Rental Rate Blue Book for Construction Equipment* and dividing by 176. The daily rental rate for equipment used on a 24-hour basis will be determined by dividing the monthly rate by 22. To the above rates, add the predominant area adjustment percentage for the state as shown on the area adjustment map in the *Rental Rate Blue Book*. In the case of equipment not listed in the *Rental Rate Blue Book*, a monthly rate will be computed on the basis of 6 percent of the manufacturer's list price for sale of new equipment. The hourly rate in this case will be determined by dividing the monthly rate by 176. For equipment used on a 24-hour basis and having no rate listed in the *Rental Rate Blue Book*, the daily rate will be 6 percent of the manufacturer's list price for the sale of new equipment, divided by 22.

The rental rates reimbursed for equipment will in all cases be understood to cover all fuel, supplies, maintenance, repairs and renewals, and no further allowances will be made for those items unless specific agreement to that effect is made in writing before the work is commenced. Individual pieces of equipment having a value of $100.00 dollars or less will be considered to be tools or small equipment, and no rental will be reimbursed on such.

The percentage allowances made to the Contractor in accordance with the terms outlined above will be understood to be reimbursement and compensation for all superintendence, use of tools and small equipment, overhead expenses, bond cost, insurance premiums, profits, indirect costs and losses of all kinds, and all other items of cost not specifically designated herein as items involved are furnished or incurred by the Contractor or by the Subcontractor. No other reimbursement, compensation or payment will be made for any such services, costs or other items.

Should any percentage allowance or other corresponding allowance be made by the Contractor to a Subcontractor (other than specified herein), in connection with force account work, such allowance shall be at the sole expense of the Contractor and the Contractor will not be reimbursed or otherwise compensated for the same by the Owner.

9.6 FORCE ACCOUNT BILLS:

The Contractor and the Engineer will review the record of extra work quantities done on a force account basis at the end of each day.

Bills for force account work shall show in payroll form the dates, names, hours worked each day, rates of pay, and amounts paid to each individual employed on such work and shall give in detail the nature of the work done by each. Bills for materials shall be fully itemized, showing dates of delivery, quantities, unit prices, amounts, and discounts, and shall be accompanied by receipted invoices covering every item.

All bills, payrolls, and other forms of claims for payment on force account work shall be submitted in triplicate, shall state the number of force account work or change order applicable and the name or number of the contract under which the work was performed, and must be approved by the Engineer. Failure to present claims in proper form within 30 days after the close of the month in which the work covered was performed shall constitute a waiver on the part of the Contractor of the Contractor's right to present such claim thereafter or to receive payment, therefore.

9.7 ELIMINATED ITEMS:

The Owner shall have the right to cancel the portions of the contract relating to the construction of any item therein by payment to the Contractor of a fair and equitable amount covering all items of cost incurred prior to the date of cancellation or suspension of the work by order of the Engineer. Where practical, the work completed before cancellation shall be paid for at unit prices, otherwise the Contractor shall be allowed a profit percentage as provided under Subsection 9.5 but no allowance will be made for anticipated profits. Acceptable materials ordered by the Contractor or delivered on the work prior to the date of cancellation or suspension of the work by order of the Owner shall be purchased from the Contractor by the Owner at actual cost and thereupon becomes the property of the Owner.

9.8 PROGRESS PAYMENTS:

At a regular period each month the Engineer shall make an estimate of the amount of work completed and of the value of such completed work. The Contractor shall also make an estimate of the amount and value of acceptable material to be incorporated in the completed work which has been delivered and properly stored at or near the site or at a location acceptable to the Engineer. With these estimates as a base, a progress payment shall be made to the Contractor, which progress payment shall be equal to the value of completed work as computed from the Engineer's estimate, plus the value of accepted materials which are in condition or state of fabrication ready to be incorporated in the completed structure and which are held in storage on or near the work, the value of such materials computed in accordance with Subsection 9.9 of these specifications, less such amounts as may have been previously paid, less such other amounts as may be deductible or as may be owing and due to the Owner for any cause, and less an amount to be retained in protection of the Owner's interests.

The Engineer may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any payment certificate to such extent as may be deemed necessary to protect the Owner from loss on account of:

a. Defective work not remedied.
b. Claims filed or reasonable evidence indicating probable filing of claims.
c. Failure of the Contractor to make payments properly to Subcontractors or for material or labor.
d. A reasonable doubt in the opinion of the Engineer that the contract can be completed for the balance then unpaid.
e. Damage to another Contractor.
f. Reasonable indication that the work will not be completed within contract time.
g. Unsatisfactory prosecution of the work by the Contractor.

Should the amount due the Contractor under the estimate for any given month be less than $500.00 dollars, at the option of the Engineer, no payment shall be made for that month.

Progress payments shall not be construed as an acceptance or approval of any part of the work covered thereby, and they shall in no manner relieve the Contractor of responsibility for defective workmanship or material.

The estimates upon which progress payments are based are not represented to be accurate estimates, and all quantities shown therein are subject to correction in the final estimate. If the Contractor uses such estimates as a basis for making payment to Subcontractors, the Contractor does so at the Contractor's own risk, and the Contractor shall bear all loss that may result.

The making of progress payments under the contract, either before or after the date set for completion of the work, shall not operate to invalidate any of the provisions of the contract or to release the surety.

At the time payment is made for any materials which have been stored at or near the site, the Ownership of such materials shall be vested in the Owner, and they shall remain in storage until used on the work. Such materials shall not be used on other work.

9.9 ADVANCES ON MATERIALS:

For materials delivered and held in storage upon the work (or near the site of the work if approved by the Engineer), allowances will be made in the progress payments to the Contractor. These allowances shall be in amounts not exceeding 90% of the net cost to the Contractor of the material f.o.b. the work, and from such allowances there shall be retained the percentage regularly provided for in connection with progress payments. In cases where there is a bid price on a given material in place the allowance shall be further limited not to exceed 90% of the difference between the bid price and the cost of placing as estimated by the Engineer.

At the option of the Engineer, no allowance for materials shall be made on any progress estimate unless the total allowable value for all materials on hand is at least $1,000.00 and no allowance shall be made upon any single class of material the value of which is not at least $500.00. The inventory of materials for which advances are requested shall be kept to a reasonable size as approved by the Engineer. No allowance shall be made upon fuels, supplies, form lumber, falsework, or other materials, or on temporary structures of any kind, which will not become an integral part of the finished construction. As a basis for determining the amount of advances on material, the Contractor shall make available to the Engineer such invoices, freight bills, and other information

concerning the materials in question, as the Engineer may request. Should there be reasonable evidence, in the opinion of the Engineer, that the Contractor is not making prompt payments for material on hand, allowances for material on hand will be omitted from progress payment.

9.10 ALLOWANCE FOR MATERIALS LEFT ON HAND:

Materials delivered to the work or acceptably stored at approved sites at the order of the Engineer but left unused due to changes in plans or variations in quantities will, if the materials are not practically returned for credit, be purchased from the Contractor by the Owner at actual cost (without percentage allowance for profit) and shall thereupon become the property of the Owner.

9.11 FINAL PAYMENT:

The Engineer will make a final estimate and recommend acceptance of the work as of a certain date. Upon approval and acceptance by the Owner, the Contractor will be paid a total payment equal to the amount due under the contract including all retainage.

Prior to final payment, the Contractor shall deliver to the Owner, a receipt for all amounts paid or payable to the Contractor and a release and waiver of all claims against the Owner arising from or connected with the contract and shall furnish satisfactory evidence that all amounts due for labor, materials and all other obligations have been fully and finally settled or are fully covered by insurance.

9.12 ACCEPTANCE OF FINAL PAYMENT:

The acceptance by the Contractor of the final payment shall release the Owner and the Engineer as agent of the Owner from all claims and all liability to the Contractor for all things done or furnished in connection with the work, and every act of the Owner and others relating to or arising out of the work. No payment, however, final or otherwise, shall operate to release the Contractor or the Contractor's sureties from obligations under the contract and the performance, payment and other bonds and warranties, as herein provided.

9.13 SUSPENSION OF PAYMENTS:

No partial or final payment shall be made as long as any order made by the Engineer to the Contractor in accordance with the specifications remains uncomplied with. Neither shall any progress or final payment be made as long as any claim or lien filed or prosecuted against the Owner, the Owner's officers or employees contrary to the provisions of the contract remains unsatisfied.

9.14 FINAL GUARANTEE:

Neither the final acceptance nor payment nor any provision in the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship, and unless otherwise specified, the Contractor shall remedy any defects due thereto and pay for any damage to other work resulting therefrom, which appear within a period of one year from the date of final acceptance. The Owner shall give notice of observed defects with reasonable promptness. The Contractor shall initiate corrective action within 5 days after written notification from the Owner. All questions arising under this paragraph shall be decided by the Engineer.

9.15 PAYMENTS:

Payments under the contract shall be paid in cash by the Owner unless otherwise provided by the Special Provisions of these specifications.

This Agreement will not be effective until approved by The City Commission.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first written above.

CITY OF WARRENTON:

By: _____

Title: _____

ATTEST: _____

Title: _____

CONTRACTOR:

By: _____

Name: _____

Address: _____

E-mail: _____

ATTEST: _____

Title: _____

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PERFORMANCE BOND

Bond No._____

Solicitation _____N/A_____

Project Name: **IREDALE CULVERT REPLACEMENT PROJECT - PHASE II**

_____(Surety #1) Bond Amount No. 1: $_____

_____(Surety #2)* Bond Amount No. 2:* $_____

* *If using multiple sureties*

Total Penal Sum of Bond: $_____

We, _____as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto the State of Oregon the sum of (Total Penal Sum of Bond)

(Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety), and

WHEREAS, the Principal has entered into a contract with the City of Warrenton the plans, specifications, terms and conditions of which are contained in the above-referenced Project;

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and all authorized modifications of the Contract which increase the amount of the work, the amount of the Contract, or constitute an authorized extension of the time for performance, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things undertaken by Contractor to be performed under the Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the City of Warrenton and members thereof, its officers, employees and agents, against any direct or indirect damages or claim of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Principal or its subcontractors, and shall in all respects perform said contract according to law, then this obligation is to be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond, nor shall the City of Warrenton be obligated for the payment of any premiums.

This bond is given and received under authority of ORS 279C.380, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES.

Dated this _____ day of _____, 2025

PRINCIPAL: _____

By_____
Signature

_____
Official Capacity

Attest: _____
Corporation Secretary

SURETY: _____
[Add signatures for each surety if using multiple bonds]

BY ATTORNEY-IN-FACT:
[Power-of-Attorney must accompany each surety bond]

_____
Name

_____
Signature

_____
Address

_____
City State Zip

_____ _____
Phone Fax

PAYMENT BOND

Bond No. _____

Solicitation _____N/A_____

Project Name: **IREDALE CULVERT REPLACEMENT PROJECT - PHASE II**

_____(Surety #1) Bond Amount No. 1: $ _____

_____(Surety #2)* Bond Amount No. 2:* $ _____

* *If using multiple sureties*

Total Penal Sum of Bond: $ _____

We, _____, as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto the City of Warrenton the sum of (Total Penal Sum of Bond)

(Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety), and

WHEREAS, the Principal has entered into a contract with the City of Warrenton the plans, specifications, terms and conditions of which are contained in above-referenced Project;

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Payment Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and schedule of contract prices which are set forth in the Contract and any attachments, and all authorized modifications of the Contract which increase the amount of the work, or the cost of the Contract, or constitute authorized extensions of time for performance of the Contract, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the City of Warrenton and members thereof, its officers, employees and agents, against any claim for direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Contractor or its subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its subcontractors in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all sums required to be deducted and retained from the wages of employees of the Principal and its subcontractors pursuant to ORS 316.167, and shall permit no lien nor claim to be filed or prosecuted against the State on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State then this obligation shall be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the City of Warrenton be obligated for the payment of any premiums.

This bond is given and received under authority of ORS 279C.380, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES:

Dated this _____ day of _____, 2025

PRINCIPAL: _____

By_____
Signature

_____
Official Capacity

Attest: _____
Corporation Secretary

SURETY: _____
[Add signatures for each surety if using multiple bonds]

BY ATTORNEY-IN-FACT:
[Power-of-Attorney must accompany each surety bond]

_____
Name

_____
Signature

_____
Address

_____
City State Zip

_____ _____
Phone Fax

CERTIFICATE OF COMPLIANCE

City of Warrenton
45 SW 2nd Street/P.O. Box 250
Warrenton, OR 97146

ATTN: Twyla Vittetoe, Engineering Technician
Public Works Department

PROJECT NAME: **IREDALE CULVERT REPLACEMENT PROJECT - PHASE II**

PROJECT LOCATION: Warrenton, Oregon

I hereby certify that:

A. All work on the above referenced contract has been performed and materials supplied in accordance with the plans, specifications and contract documents for the above work;

B. There have been no unauthorized substitutions of Subcontractors; nor have any subcontracts been entered into without the names of the subcontractors having been submitted to and approved by the Owner prior to the start of such subcontracted work;

C. No subcontract was assigned or transferred or performed by any Subcontractor other than the original Subcontractor, without prior notice having been submitted to and approved by the Owner together with the names of all Subcontractors;

D. All Subcontractors performing work described in ORS 701.005(2) (i.e., construction work) were registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS 701.026 to 701.035 before the Subcontractors commenced work under the contract;

E. All claims for material and labor and other service performed in connection with these specifications have been paid;

F. All money due the State Industrial Accident Fund, the State Unemployment Compensation Trust Fund, the State Tax Commission (in accordance with ORS 305.385 and ORS 279C.530), hospital associations and/or others have been paid.

Authorized Signature _____ _____
[Contractor] *[Date]*

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TECHNICAL SPECIFICATIONS

DIVISION ONE – GENERAL REQUIREMENTS

SECTION 101 – SUMMARY OF WORK

101.1 THE PROJECT:

The work of this project will take place in Hammond, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Replace the remaining sections of the Iredale storm drainage pipe and structures that were not replaced in the original work. The work will be accomplished in the Summer of 2025.

In general, the elements of work include, but are not limited to:

1. Prior to Construction: Prepare and submit a Project Plan and Schedule for Engineer/City Approval
2. Prior to Construction: Obtain ODOT Right-of-Way Permit
3. Demo and Replace existing storm drainage pipe and structures
4. Extensive De-Watering required throughout the project
5. Repave street crossings from culvert replacement
6. Add shoulder rock as required by Engineer

These specifications in conjunction with applicable provisions or other parts of the specifications and the plans shall govern the character and quality of equipment, material, construction procedures and workmanship for work under this contract.

In the event of a conflict within these specifications or the construction plans, the most stringent shall apply. In the event that these specifications are silent, the most current edition of ODOT/APWA shall be used.

101.2 WORK SEQUENCE:

The Contractor shall schedule work to maintain the public's continuous access to those properties having driveways, main access and delivery routes on streets to be paved. The Contractor shall include in the contract sum sufficient funds as may be required for delays and interruptions of work caused by the public's continuous use and continuous access to those properties abutting streets to be paved. No additional payment to the Contractor will be allowed on account of the Contractor's failure to anticipate such costs.

101.2.01 Traffic Control – The Contractor shall furnish and place traffic control barricades and signs according to the MUTCD and ODOT specifications in order to allow the public access to those residences on streets to be paved. The Contractor shall coordinate directly with the residences that will be impacted by the daily work and make all necessary arrangements to assist their entering and exiting of their residence. The Contractor shall use cones, delineators, detour signs and barricades to keep vehicular and pedestrian traffic out of the immediate construction zone of the Contractor. All signs and barricades must be approved by the City of Warrenton and the Engineer prior to ordering. See Section 157 of these specifications.

101.2.02 Contractor's Construction Equipment –All construction equipment shall be so parked so as not to disrupt normal two-way traffic along side streets and so as not to block any vehicular or pedestrian access to adjoining properties. Any damage to the existing roadway, utilities, drainage system or shoulders shall be repaired to the City's satisfaction at the Contractor's expense.

Steel tracked equipment shall not be used on paved surfaces that are not to be replaced. If steel tracked equipment cannot avoid moving across these asphalt surfaces, protection measures shall be used such as steel plates, plywood or other means to protect the remaining surface. Any surface damaged by steel tracked equipment shall be repaired or replaced to the satisfaction of the Owner at the Contractor's expense.

101.3 OWNER'S RIGHTS UPON THE PREMISES:

The Owner, on behalf of both the public and the City of Warrenton, reserves the right to enter upon the premises, to use same, or to use parts of the work before substantial or final completion of the work, it being understood that such use by the Owner and the public in no way relieves the Contractor from full responsibility for the entire work until final completion of the contract.

END OF SECTION 101

SECTION 104 – COORDINATION

ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: The telephone number for the Oregon Utility Notification Center is 1-(503) 232-1987 or 1-(800) 332-2344.)

The work of this project involves underground and overhead utilities, and public rights-of-way. The Contractor shall coordinate all work with the following agencies prior to beginning the project.

104.1.01 – City Street Right-of-Way, Storm Drainage System, and Sewer System; City of Warrenton, Public Works Department, Twyla Vittetoe, Public Works Dept, (503)-861-0917 or PW Director Kevin Gorman

104.1.02 – City Storm/Sanitary System: Twyla Vittetoe, (503) 861-0917

104.1.03 – CATV; Spectrum/Charter Communications, Vinny Billeci, (503) 298-0129.

104.1.04 – Telephone Facilities; Centurylink, Mark Briese, (503)983-3781

104.1.05 – Electric Facilities; Pacific Power, Marilyn Brockey, (503) 861-6005.

104.1.06 – Gas Facilities; Northwest Natural Gas, Ryan Winfree (503) 226-4211 Ext. 2967

104.2 CUTTING AND PATCHING:

104.2.01 Notification – The Contractor shall notify the Engineer at least 3 days prior to any cutting which affects:

a. the structural integrity of any completed or existing work, or
b. the weatherproof integrity of any weather-exposed or moisture-resistant work.

104.2.02 Preparation – Prior to any cutting, the Contractor shall provide and maintain adequate temporary support and protection necessary to assure the structural and weatherproof integrity of the affected work. The Contractor shall protect from damage all portions of the exposed work and other portions of the project.

104.2.03 Existing Conditions – After uncovering work, the Contractor shall inspect the existing conditions and report to the Engineer any unsatisfactory or questionable conditions to the Engineer. The Contractor shall not proceed with further work directly related to the existing condition until the Engineer provides further instructions. During this time, the Contractor shall make every effort to continue work on other portions of the project. No additional time or payment to the Contractor will be allowed on account of the Contractor's failure to schedule alternate work accordingly.

104.3 MEASUREMENTS:

Before ordering any materials or doing any work, the Contractor shall verify all measurements on the project and shall be responsible for the correctness of the same. No additional payment to the Contractor will be allowed on account of difference between actual dimensions and measurements indicated on the plans.

END OF SECTION 104

SECTION 106 – REGULATORY REQUIREMENTS

106.1 PERMITS AND FEES:

The Contractor shall procure all construction permits, performance bonds and licenses required by all approving agencies. The work of this project falls under the jurisdiction of the City of Warrenton and ODOT. The Contractor shall conform to all jurisdiction and permit requirements of the governing agencies when working within the public right-of-way.

Work hours are to be between 7:00 AM and 6:00 PM, Monday through Friday. Any deviation from this schedule must be requested by the Contractor in writing and receive approval from the City. The Contractor shall obtain a City of Warrenton Business License before starting construction.

END OF SECTION 106

SECTION 120 – PROJECT MEETINGS

120.1 PRECONSTRUCTION CONFERENCE:

Immediately after signing the Agreement and prior to the start of any work, the Contractor, the Engineer and the Owner shall meet together to review procedures for ensuring the smooth progress of the work and to discuss any other items requiring clarification.

120.2 WEEKLY PROGRESS MEETINGS:

Periodic project meetings between the Contractor and the Engineer shall be scheduled by the Engineer throughout the construction process on a weekly basis to discuss coordination and scheduling of construction activities. In general, such meetings shall be held each Monday morning on the project site. The Contractor shall inform the Engineer of the project schedule and construction activities planned for the coming week and shall provide a verbal update to the Engineer on the project schedule for the actual work completed through the end of each week.

END OF SECTION 120

SECTION 130 – SUBMITTALS

130.1 GENERAL:

The Contractor shall be required to submit to the Engineer, the following submittals.

1. Project Plan and Construction Schedule
2. Shop Drawings, Product Data, and Samples
3. Dewatering Plan,
4. Traffic Control Plan
5. Aggregates
6. Asphalt Mix (prior to application)
7. Schedule of Unit Values
8. Survey Field Notes and Culvert Stakeout

130.2 CONSTRUCTION SCHEDULE:

130.2.01 – Project Schedule - The anticipated construction schedule is set forth in the Instructions to Bidders and all work shall be completed in dry weather, in accord with the Contractor's submitted Schedule. Prior to commencing work on the project, the Contractor shall submit to the Engineer for review, a complete construction schedule detailing the order in which the work will proceed together with an estimated time schedule. If Contractor's submitted schedule and the prosecution of work varies by 2 weeks or more, Contractor shall re-submit a new schedule, and a work plan to complete project on time.

130.3 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES:

130.3.01 Identification – Shop drawings, product data, and samples shall be dated and contain: Name of project; description or names of equipment, materials and items; identification of locations at which the equipment, materials or items are to be installed.

130.3.02 Transmittals – Submission of shop drawings, product data, and samples shall be accompanied by transmittal letter, in duplicate, containing project name, Contractor's name, number of drawings, data and samples, and titles.

130.3.03 Quantity – Unless otherwise specified, the number of shop drawings, product data, and samples which the Contractor shall submit and, if necessary, resubmit shall be the number of copies that the Contractor requires to be retained plus two copies which will be retained by the Engineer.

130.3.04 Record Drawings – Contractor shall submit Record Drawings to the Engineer or City upon completion of construction. Any associated warranty information, manuals, cut sheets, etc. pertinent to the construction shall also be submitted.

END OF SECTION 130

SECTION 151 – TEMPORARY FACILITIES AND CONTROLS

151.1 TEMPORARY ELECTRICITY:

The Contractor will provide and pay all charges for a source of power. The Contractor shall provide his own extension cords, temporary lighting lamps and wiring for his work. Heavy or special power sources required for welders, etc., shall be provided by the Contractor by the use of generators or making his own arrangements with the Power Company and pay all costs for same.

151.2 TEMPORARY WATER

151.2.01 Temporary Water for Construction Use – The Owner will designate fire hydrants within or near the project as a source of water for construction use. The Contractor shall operate such hydrants in an approved manner. The Contractor shall provide valves, hoses, extensions, and nozzles as required. Water usage shall be metered with hydrant flow meter as provided by the City with approved backflow device.

151.2.02 Temporary Water Service – If existing water lines are to be out of service during the course of construction, the Contractor shall provide and maintain temporary water service to all properties affected. All details of such temporary service shall be subject to the approval of the Engineer.

151.3 TEMPORARY SANITARY FACILITIES:

151.3.01 Temporary Facilities for Workmen – The Contractor shall furnish, install, and maintain adequate sanitary facilities for the workmen. All such facilities shall comply with governing health regulations.

151.4 TEMPORARY FIRE PROTECTION

The Contractor shall maintain adequate access for firefighting and other emergency equipment to those properties abutting the project. Where the Contractor is working in a public roadway or private driveways, as a minimum requirement, at the end of each day of work on the project, the Contractor shall construct, rough grade and keep clear a 12 foot wide lane upon the existing ground surface over the roadway or driveway.

151.5 TEMPORARY SIGNS

All signs posted on the job site shall be approved by the Engineer. All signs shall conform to applicable Oregon State Department of Transportation standards and the Manual of Uniform Traffic Control Devices, (MUTCD).

151.6 MEASUREMENT AND PAYMENT

All temporary facilities and construction will be paid for as a single lump sum item at the contract price for "Mobilization". Payment shall constitute full compensation for supplying all labor, equipment and materials, constructing, installing, maintaining and removing all temporary facilities and construction specified herein.

END OF SECTION 151

SECTION 157 – TRAFFIC REGULATION

157.1 BARRICADES, WARNING SIGNS, AND FLAGMEN:

The Contractor shall at their expense and without further or other order provide, erect and maintain at all times during the progress or temporary suspension of the work suitable barricades, fences, signs, or other adequate warnings or protection, and shall provide, keep and maintain such danger lights, signals, and flagmen as may be necessary or as may be ordered by the Engineer to ensure the safety of the public as well as those engaged in connection with the work. All barricades and obstructions shall be protected at night by signal lights which shall be suitably distributed across the roadway and which shall be kept burning from sunset to sunrise. Barricades shall be of substantial construction and shall be suitably painted to increase their visibility at night. Failure of the Engineer to notify the Contractor to maintain barriers, lights, signals, or flagmen shall not relieve the Contractor from this responsibility.

In conjunction with the required general traffic control work, the Contractor shall furnish and maintain the temporary signs and ODOT Type III barricades, including a certified flagger as detailed on the Traffic Control Plan.

If flagmen are necessary for the purpose of protection and safety to traffic, such flagmen shall be furnished at the Contractor's expense. The signs to be furnished and used by the Contractor in directing, controlling and safeguarding traffic shall conform to the standard sign designs in use by ODOT/MUTCD.

157.2 TRAFFIC ON LOCAL STREETS:

The Contractor shall allow minimum one-way traffic in Hammond to all residences. The Intersections may be temporarily closed to through traffic in accordance with Section 157 of these specifications. The Contractor shall furnish and place traffic control barricades and signs in order to allow the public access to properties. Signs shall be placed at each end of the project, including all side streets. The Contractor shall use additional cones, delineators and barricades to keep vehicular and pedestrian traffic out of the immediate construction zone of the Contractor. See Section 157 of these specifications.

157.3 PEDESTRIAN ACCESS:

The Contractor shall so conduct their operations as to cause the least possible obstruction and inconvenience to the public and the Owners and occupants of abutting properties and their visitors. The Contractor shall maintain convenient pedestrian access at all times along all walking paths abutting the project. Project security as related to pedestrian access shall be the responsibility of the Contractor.

157.4 MEASUREMENT AND PAYMENT:

The Contractor shall include in the contract bid sum, sufficient funds as may be required for supplying all labor, equipment and materials necessary for the proper regulation of traffic. This will be paid for under the bid item for "Temporary Protection and Direction of Traffic".

END OF SECTION 157

SECTION 160 – MATERIALS AND EQUIPMENT

160.1 TRANSPORTATION AND HANDLING:

The Contractor shall arrange for all product and material deliveries in accordance with the project schedule to avoid any unnecessary delays. Products and materials shall be delivered undamaged, in the manufacturer's original packaging, and with legible identifying labels intact. Immediately upon delivery, the Contractor shall inspect all products for compliance with the contract documents.

160.2 STORAGE AND PROTECTION:

The Contractor shall store all products according to manufacturer's instructions. Before and after installation, the Contractor shall protect all products from damage and discoloration.

160.3 PRODUCT SUBSTITUTIONS AND OPTIONS:

160.3.01 Substitutions – Substitutions will be considered, however, only substitutions approved by the Engineer shall be incorporated in the work. Each request for product substitution shall be made to the Engineer in writing and shall include:

a. The identification of the specified product.
b. The identification of the proposed substitution complete with manufacturer's literature and other information necessary for evaluation.
c. All changes required in other work as a result of the proposed substitution.
d. All cost increases as a result of the proposed substitution.
e. Contractor shall provide a purchase order for the Engineer to evaluate proposed substitutions and/or subsequent approval by the City.

The Engineer shall be the sole judge of the acceptability of each proposed substitution.

160.3.02 Contractor's Options:

160.3.02A - For products specified by general standards, such as ASTM, etc., the Contractor shall select any product meeting the specified standard.

160.3.02B - For products specified by naming several manufacturers, the Contractor shall select any product manufactured by a specified manufacturer meeting the specifications.

160.3.02C - For products specified by "or approved equal", the Contractor shall submit requests for substitution as specified above.

160.3.03 Inappropriate Products and Methods - If the Contractor believes that any specified product, method, or system is inappropriate for use, they shall so notify the Engineer before performing the work in question. Start of work shall constitute acceptance on the part of the Contractor that the specified products, methods, and systems are appropriate for the specified use.

END OF SECTION 160

SECTION 170 – CONTRACT CLOSEOUT

When all on-site paving, shoulder rock at street crossings and related work is completed, including site cleanup, the Contractor shall notify the Engineer in writing that the project is ready for final inspection. The Engineer will make an inspection within **15** calendar days of receiving notification. The Engineer will notify the Contractor, in writing, within **10** calendar days thereafter. If all construction work required by the contract is found complete and satisfactory, this inspection will constitute the final inspection.

If any work is found incomplete or unsatisfactory, the Engineer will give written instructions as to what shall be done to satisfactorily complete the work. After complying with the Engineer's instructions, the Contractor shall follow the above procedures of notification, requesting a final inspection.

The Engineer will issue a notice to the Contractor when all the following work is satisfactorily completed:

a. All work required under the contract;
b. All change order work;
c. The final trimming and cleanup work; and,
d. All required certifications, bills, forms, and other documents are received from the Contractor.

170.2 PROJECT SITE CLEAN-UP:

Prior to the release of the retainer, the project site shall be cleared of any debris, trash, construction materials, or any other materials left on the site as a result of paving and striping construction of the project. As the work progresses and immediately after completion of the work, the Contractor shall clean up and remove all refuse and unused materials of any kind resulting from the work. If the Contractor fails to commence the cleanup within 24 hours after directed by the Engineer, the Engineer may have the work performed by others. The cost shall be borne by the Contractor and may be deducted from payments due or to become due to the Contractor. After work is completed and before final acceptance of the work, all areas affected by the work shall be neatly finished and all equipment, temporary structures, rubbish and waste shall be removed from the work area.

END OF SECTION 170

END OF DIVISION ONE

201.1 DESCRIPTION:

Mobilization shall consist of preparatory work and operations, including but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of offices, buildings and other facilities necessary for work on the project for traffic control; for premiums on bond and insurance for the project, and for other temporary work and operations which the Contractor must perform or costs he must include before beginning work on the project.

201.2 MATERIALS:

The Contractor shall provide all materials required to accomplish the work as specified.

201.3 CONSTRUCTION:

201.3.01 General - The Contractor shall set up construction facilities in a neat and orderly manner within designated or approved work areas.

201.4 MEASUREMENT AND PAYMENT:

201.4.01 Measurement for the performance of the mobilization work as above specified will be made at the lump sum amount for the item "Mobilization." The amounts to be allowed for "Mobilization" in the progress payment to be made under the contract price will be made as follows:

1. When 5% of the total contract amount, as modified by change order, is earned from other bid items, not including advances on materials, 50% of the amount bid for mobilization, or 5% of the total original contract amount, whichever is the least, less normal retainage, will be paid.
2. When 10% of the total contract amount, as modified by change order, is earned from other bid items, not including advances on materials, 100% of the amount bid for mobilization, or 10% of the total original contract amount, whichever is the least, less normal retainage, will be paid.
3. Upon completion of all work on the project, payment of any amount bid for mobilization in excess of 10% of the total original contract amount will be paid.

The above schedule of progress payments for mobilization shall not limit or preclude progress payments otherwise provided by the contract.

END OF SECTION 201

SECTION 202 – TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC

202.1 DESCRIPTION:

This work consists of furnishing, installing, moving, operating, and maintaining signs, barricades, and other traffic control devices throughout the area affected by the project. This item of work also requires coordination and permitting by ODOT.

202.2 MATERIALS:

All materials used in temporary installations under this Section shall be in conformance with ODOT - MUTCD Specifications.

202.3 CONSTRUCTION:

202.3.01 General - Protective and directional devices shall be provided by the Contractor as required, in addition to the specific signs and barricades shown on the Traffic Control Plan. The devices and their placement shall conform to the requirements of the ODOT specifications.

202.3.02 Contractor's Plan and Schedule - Prior to beginning the work, the Contractor shall submit a proposed Traffic Control Plan for protective and directional measures in compliance and approved by the Engineer. During the performance of the work, the Contractor shall submit any proposed revisions to the plan for the Engineer's approval. No work shall be started on any stage of construction until the Contractor's Traffic Control Plan has been approved and all approved traffic control devices are in place.

During construction, the Contractor shall determine if any protective and directional devices are required in addition to those in place and shall immediately notify the Engineer. The Contractor shall immediately make any changes approved or directed by the Engineer but shall not place or remove devices without prior approval from the Engineer.

202.3.03 Maintenance - The Contractor shall maintain all traffic devices in proper position, clean, and legible at all times. Vegetative growth or other materials shall be trimmed or removed to permit clear vision of the devices. Lights, beacons, and flashers shall be kept clean, visible and operable. The effectiveness of the installations shall be verified at frequent intervals, both in daylight and dark, by actual travel and inspection by the Contractor. Devices damaged or destroyed by any means shall be repaired, replaced, or restored by the Contractor.

The Contractor shall have a person on the job during working hours and on call at all other times, who will maintain all directional and warning devices in proper position and condition. The name and phone number for that person shall be on file with the Engineer and local law enforcement agencies.

202.3.04 Barricades, Signs and Temporary Devices used under these provisions remain the property of the Contractor and shall be moved, removed, or made inoperative as occasion dictates during the life of the contract. Inappropriate temporary or existing signs shall be covered or turned to preclude visibility to traffic. Flags shall be removed or rolled and completely covered with an opaque, black, non-reflective sheath. Upon completion of the work, the devices shall be removed from the project and evidence of their existence obliterated.

202.3.05 Flaggers shall have satisfactorily completed approved training courses.

202.3.06 Lane Closures - The Contractor shall obtain the Engineer's approval of proposed methods and timing of lane closures.

202.3.07 Obstruction of Traffic - The Contractor shall conduct work to assure the least possible obstruction to traffic. Work which would restrict or interrupt traffic movement shall not be performed on opposite sides of the traveled way at the same time. See also Section 101.2 Construction Sequencing.

202.4 MEASUREMENT AND PAYMENT:

202.4.01 General - Measurement and payment for temporary protection and direction of traffic will include but not necessarily be limited to, the following work items:

a. Furnishing and installing tubular markers, flashers, and other traffic control devices not covered by other pay items;
b. Maintaining, moving and removing all devices;
c. Placing, maintaining, and removing temporary sign covers;
d. Providing for and furnishing electrical energy;
e. Cleaning up and removing devices destroyed or damaged by public traffic;
f. Furnishing, placing, maintaining, and removing temporary crushed rock ramps at driveways for temporary access;

g. Maintaining all directional and warning devices; and
h. Furnishing all other labor, materials, and equipment necessary to perform the temporary protection and direction of traffic.

202.4.02 Lump Sum Basis - Temporary protection and direction of traffic will be paid for on a lump sum basis for all required work. The Contractor shall include in the contract bid sum, sufficient funds as may be required for supplying all labor, equipment and materials necessary for the proper regulation of traffic. This will be paid for under the bid item for "Temporary Protection and Direction of Traffic".

END OF SECTION 202

SECTION 203 – SURVEY SERVICE-CONSTRUCTION LINE & GRADES

203.1 DESCRIPTION:

This item includes all work necessary for a survey crew (licensed in the State of Oregon) to stake out the construction line and grades for the culvert and appurtenance's installation. It also includes setting bench marks for the Contractor to check into prior to excavation of the alignment. Survey details shall be submitted to the Engineer for review at least **5 days** prior to actual stake out, per **Submittal Section 130,** (of these specifications). The Engineer will provide AUTOCAD drawings for the Contractor's use.

203.2 MATERIALS:

The Surveyor will provide staking with wooden hubs and marker laths for each interval.

203.3 CONSTRUCTION:

The Contractor, Surveyor, Engineer, and the City shall hold a survey coordination meeting before the start of construction. The survey details submitted in the required submittals along with the Engineer's requirements shall form the basis of this meeting.

The Surveyor will stake the culvert alignment, manholes and catch basins, with cuts/fills to finish grade elevation. Additional stakes shall be placed at curves and grade breaks as needed. The Surveyor will stake the culvert alignment at +/-50' intervals with cuts to invert of culvert pipe. Said wooden hubs shall be utilized and have 2 offsets, at 5' and 10' off the alignment. Copies of the survey field notes will be provided to the Contractor and the Engineer and shall be handled as submittals, see Section 130 of these specifications. No excavation will be allowed until the Engineer reviews the cut sheets. Additional staking or re-staking requests required by the Contractor shall be at the Contractor's sole expense. The Contractor shall contract directly with the project Surveyor.

203.4 MEASUREMENT AND PAYMENT:

203.4.01 Measurement for all construction survey activities will be made per lump sum basis at the contracted price in the Bid Worksheet

203.4.02 Payment will be made at the contract price and shall constitute full compensation for all survey materials, services, and field staking.

END OF SECTION 203

SECTION 205 – DEMOLITION

205.1 DESCRIPTION:

This item includes all work necessary for the demolition, removal and disposal of all pavement, curbs, driveways, sidewalks and abandoned pipelines within the designated limits and to preserve from injury or damage such objects and structures as are designated to remain in place.

This item also includes the disposal of unsuitable and excess excavated material within the designated limits.

205.2 MATERIAL:

205.2.01 No disposal site will be provided by the Owner. The Contractor shall dispose of all excess material not required elsewhere on the project, make arrangements for disposal and bear all cost related thereto. All details for the use of such site shall be the responsibility of the Contractor. Written permission to place material on private property shall be obtained by the Contractor from the property owner or other responsible party prior to placing the material thereon, and evidence of such permission shall be furnished the Engineer. The permit shall be in writing and shall be so phrased as to absolve the Owner from any and all responsibility in connection with the placing of material on said property.

205.2.03 Disposal of Removed Materials - The Contractor shall dispose of all removed pipelines, materials, unsuitable and excess material not required elsewhere on the project.

205.3 CONSTRUCTION:

205.3.01 Public streets used by the Contractor between the project site and all disposal sites shall be kept free and clear of any and all debris resulting from the Contractor's demolition activity.

205.3.02 Asphalt surfaces designated to remain, and which will abut new asphalt surfaces shall be sawcut to a neat and straight edge. The Contractor shall pre-cut all existing pavement before commencing excavation. All saw cuts shall be made with a concrete saw. Where the Contractor fails to protect the cut edges during trenching and backfilling, the Contractor shall be required, at the Contractor's expense, to re-cut the edges prior to repairing the pavement.

205.3.03 Water Pipeline Demolition - The Contractor is responsible for cutting, capping and installing temporary valving at beginning, end and each side road of the project as necessary to make a clean tie-in to the existing water main. This will allow the Contractor to demolish the existing water mains in order to create the necessary room for the proposed water main. The Contractor shall be responsible for protecting any temporary water services throughout construction and assisting the City if modifications need to be made during construction in order to provide continuous water service to residents.

205.4 MEASUREMENT AND PAYMENT:

205.4.01 Measurement and payment for all demolition activities will be made according to the following items:

205.4.01A Asphalt Pavement Demolition will be measured and paid for on a square yard basis of the gross surface area of pavement designated and actually removed under the bid item "Asphalt Pavement & Concrete Demolition."

205.4.01B Concrete Demolition will be measured and paid for on a square yard basis of the gross surface area of pavement designated and actually removed under the bid item "Asphalt Pavement & Concrete Demolition."

205.4.01C Sawed asphalt and concrete joints will be measured on a linear foot basis for the lengths designated and sawed.

205.4.01D Non-Asbestos Water Pipeline Demolition - There will be no separate payment for water pipeline demolition, except as specified under Section 206 – Asbestos pipe. The cost of pipe demolition is to be included in one or more of the unit prices.

205.4.02 Payment will be made at the appropriate contract price and shall constitute full compensation for all demolition work, loading, hauling, disposal and disposal site activities.

END OF SECTION 205

SECTION 206 – ASBESTOS CONTAINING PIPE DEMOLITION AND DISPOSAL

206.1 DESCRIPTION

This item includes all work necessary for the safe handling, demolition, removal, and disposal of asbestos containing pipe in accordance with Oregon Department of Environmental Quality (DEQ) guidelines. A copy of the Oregon DEQ guidelines for Asbestos (AC) Water Pipe can be found at the following location:

http://www.deq.state.or.us/aq/asbestos/docs/cementpipe.pdf

206.2 MATERIALS:

206.2.01 Nonfriable Asbestos - Nonfriable asbestos material has a solid matrix that holds the asbestos fibers in check and will not allow asbestos fibers to release easily, unless mishandled, damaged, or is in badly weathered condition. In most cases, AC water pipe that is in reasonably good condition is considered to be non-friable. Removal of nonfriable asbestos material in good condition does not require a DEQ licensed asbestos abatement contractor and does not require DEQ certified asbestos workers.

206.2.02 Friable Asbestos - Friable asbestos material will easily release fibers when crushed which can easily be released into the air where it poses a serious threat to health. AC water pipe that has been shattered, crushed, or pulverized will become friable. Removal of friable asbestos requires a DEQ licensed asbestos abatement contractor and is not covered in this specification.

206.2.03 Disposal Site - Any landfill that is permitted by the DEQ to accept demolition waste can also accept non-friable asbestos. Some landfills may have special restrictions on nonfriable asbestos so the Contractor is encouraged to arrange for disposal in advance.

206.3 CONSTRUCTION

206.3.01 DEQ Nonfriable Notification - At least 5 days prior to the removal of AC pipe, the Contractor shall file an ASN-6 NonFriable Asbestos Removal Notification Form with the Oregon DEQ and pay the nonfriable fee as outlined in OAR 340-248-0260.

206.3.02 Excavation - The Contractor shall carefully expose the entire length of pipe to be removed. Pipe shall be exposed to the first joint past the designated work area. The Contractor shall take precautions not to damage the pipe during the excavation. The exposed pipe shall be thoroughly wetted by spraying with a garden hose or other suitable means.

206.3.03 Removal - Pipe shall be removed in whole sections wherever possible. Couplings shall be split using a hammer and chisel to aid in removal of whole sections. All AC pipe that is exposed must be removed. Some breakage will occur, however this should be kept to the absolute minimum. Broken pieces of pipe shall also be removed. All pipe parts shall be kept thoroughly wet during the removal process. Sawing, sanding, grinding, chipping or use of power tools on the pipe is not permitted.

206.3.04 Disposal - Pipe shall be disposed of at an authorized disposal site, as described above. Pipe shall be kept thoroughly wet and covered during transport between the project site and the disposal site.

206.3.05 Friable Asbestos - If the pipe is so badly damaged that it becomes friable, the Contractor shall notify the Project Engineer and stop work immediately. The Contractor shall then file a friable asbestos abatement notification as outlined in OAR 340-248-0260 and retain the services of a DEQ licensed asbestos abatement contractor to remove the friable asbestos.

206.4 MEASUREMENT AND PAYMENT:

206.4.01 Measurement for all asbestos pipeline demolition and disposal activities will be on a linear foot basis along the length of asbestos pipeline removed.

206.4.02 Payment will be made at the appropriate contract price and shall constitute full compensation for all asbestos pipeline demolition work, including trenching, excavation, trench backfill, loading, hauling, disposal of

removed pipelines and disposal site activities. A receipt from the disposal site shall be required and presented to the Engineer prior to payment. No payment shall be made for pipelines abandoned in place.

END OF SECTION 206

SECTION 220 – EARTHWORK

220.1 DESCRIPTION:

This item includes all work necessary for excavating and grading all roadways, driveway areas, parking areas planting areas, cuts, embankments, slopes, fills, roadway ditches, lot grading and all other earth-moving work required in the construction of the project including disposal of all surplus material.

All excavation covered in this item shall be unclassified excavation regardless of the type, nature or condition of the materials encountered. The Contractor shall assume full responsibility to estimate the kind and extent of the various materials to be encountered in order to accomplish the work.

220.2 MATERIALS:

220.2.01 Disposal of Unsuitable and Excess Material - The Contractor shall dispose of all unsuitable and excess material not required elsewhere on the project according to Section 210.3.02.

220.3 CONSTRUCTION:

220.3.01 Embankments and fills shall be placed in approximately horizontal layers of a maximum of 8 inches in thickness, each layer being separately and thoroughly compacted.

220.3.02 Excavation and grading shall be to the lines and grades as shown on the plans and as staked by the Engineer. The Contractor shall trim all roadbeds, parking areas ditches and other excavations and embankments to the established lines and grades. All surfaces shall be left in a neat and well-finished condition prior to the time the project is completed and accepted. Immediately prior to completion of the earthwork, the Contractor shall clean the entire roadway right-of-way area of debris and foreign matter of all kinds and dispose of as directed.

220.3.03 Roadway subgrade shall be excavated and shaped to line, grade, and cross-section as shown on the plans and as staked by the Engineer. The Contractor shall remove all soft or otherwise unsuitable material as directed and replace with suitable material from the excavation.

220.3.04 Compaction - See Section 223

220.4 MEASUREMENT AND PAYMENT:

220.4.01- Earthwork will be measured by the cubic yard in-place basis for all general excavation of materials within the designated limits and paid for under the bid item for General Excavation & General Fill, including loading of all materials into trucks and disposal of all excess material. This item will also include contractor coordination with individual property owners in coordinating placement of landscape materials that the property owner wishes to salvage.

220.4.02 - Payment will be at the contract price per cubic yard and shall constitute full compensation for all work specified herein. Contractor shall supply truck tickets for all disposal work at the end of each work day to the City or Engineer as requested.

END OF SECTION 220

SECTION 221 – TRENCH EXCAVATION, BEDDING AND BACKFILL

221.1 DESCRIPTION:

This item includes all work necessary for trench excavation, trench foundation, pipe bedding, pipe zone, trench backfill, and surface removal and replacement.

221.1.01 Trench excavation is defined as the removal of all material encountered in the trench to the depths as shown or as directed. Trench excavation shall be classified as unclassified excavation.

221.1.02 Trench foundation is defined as the bottom of the trench on which the pipe bedding is to lay and is responsible for the support of the pipe.

221.1.03 Pipe bedding is defined as the furnishing and placing of specified materials on the trench foundation so as to uniformly support the barrel of the pipe. The total bedding depth shall extend from a point 6 inches below the barrel of the pipe to the horizontal centerline of the pipe.

221.1.04 The initial backfill is defined as the full width of the trench from the top of the bedding to a point 12 inches above the top outside surface of the barrel of the pipe.

221.1.05 Trench backfill is defined as the furnishing, placing and compacting of material in the trench between the top of the initial backfill material and the bottom of the pavement base rock, ground surface, or surface material as directed.

221.2 MATERIAL:

221.2.01 The trench foundation shall be undisturbed native material in all areas except where in the opinion of the Engineer, the native material is such that it cannot support the pipe. In those conditions, excavation shall be included to additional depths as required by the Engineer and backfilled with select trench foundation material which shall be 1½ inch-minus crushed rock.

221.2.02 Pipe bedding material:

221.2.02A Native Pipe Bedding - free of humus, organic matter, vegetative matter, frozen material, clods, sticks and debris and containing no stone having a dimension greater than 1½ inches. The materials shall predominate in the fine sizes and in place, shall present no isolated points or areas or larger stones which would cause fracture or denting of the structure or subject it to undue stress. When, in the opinion of the Engineer, the native material is unsuitable for pipe bedding, an extra work order will be issued and select pipe bedding material shall be used which shall be clean pea gravel or crushed rock with a maximum size of ¾ inch, uniformly graded from coarse to fine. All pipe bedding materials shall be subject to the Engineer's approval.

221.2.02B Select Pipe Bedding material shall be crushed rock with a maximum size of ¾ inch, uniformly graded from coarse to fine.

221.2.03 The initial backfill material shall consist of native sand, free of humus, organic matter, vegetative matter, frozen material, clods, sticks and debris and containing no stone having a dimension greater than 1½ inches. The materials shall predominate in the fine sizes and in place, shall present no isolated points or areas or larger stones which would cause fracture or denting of the structure or subject it to undue stress. When, in the opinion of the Engineer, the native material is unsuitable for initial backfill, an extra work order will be issued and select initial backfill material shall be used which shall be select pipe bedding material, as described above. All initial backfill materials shall be subject to the Engineer's approval.

221.2.04 Trench backfill shall be native sand, free of humus, organic matter, vegetative matter, frozen material, clods, sticks and debris and containing no stone having a dimension greater than 1½ inches which, in the opinion of the Engineer, meets the desired characteristic required for the specific surface loading or other criteria of the backfill zone. When, in the opinion of the Engineer, the native material is

unsuitable for trench backfill, an extra work order will be issued and select trench backfill material shall be used which shall be pit-run or river-run rock, maximum aggregate size ¾ inches, with sufficient fine material to act as binder but no excess earth.

221.3 CONSTRUCTION:

221.3.01 Trench excavation:

221.3.01A General - All trench excavation and backfill shall conform to any and all specifications of any controlling regulatory agency under which the work is being performed. Pipelines shall be constructed in continuous open trench except that, in special locations, short tunnels or the cut and tunnel method of excavation may be used under specific instructions of the Engineer. The Engineer may require the use of tunnels to pass obstructions or to minimize traffic interference.

221.3.01B Potholing and Subsurface Investigation – In advance of the trenching operations for waterline and storm construction, the Contractor shall pothole and explore the subsurface conditions, including types of materials and types of fittings of the existing mains and the locations of other utilities, at all locations noted on the plan General and Construction Notes. In general, potholing will occur at locations as directed by the Engineer, such as at all connections to existing mains and at utility crossings. The Contractor shall note all pertinent materials and locations of utilities at each pothole. If subsurface conditions differ from that as shown on the plans, the Contractor shall immediately notify the Engineer. The Contractor shall record all potholes on the as-built plans including location, date, time, depth dug and crossing elevations of found existing utilities.

221.3.01C Open Trench Limit - The length of open trench excavated shall always be kept to a minimum. The Engineer shall be the sole judge of the amount of open trench allowed based upon work conditions of the area. In normal cases, the open trench length shall not exceed 100 feet. Related trench construction such as crushed rock surface restoration, concrete restoration, etc. shall normally be completed within 300 feet of the open trench limit unless otherwise instructed by the Engineer.

221.3.01D Trench Width - It is the intent of these specifications that the trench width at the surface of the ground be kept to a minimum necessary to install the pipe in a safe manner. In all cases, trenches must be of sufficient width to allow for shoring and permit proper joining of the pipe and backfilling of material along the sides of the pipe. The minimum trench width, in the pipe zone shall be the outside diameter of the pipe plus 12 inches. No maximum width of trench at the top of the pipe will be specified herein. When required by design, it will be shown on the plans. If the maximum width shown is exceeded by the Contractor without written authorization, the Contractor will be required, at no expense to the Owner, to provide pipe of a higher strength designation, a higher class of bedding, or both, as approved. Excavation for manholes and other structures shall be wide enough to provide a minimum 12 inches between the structure surface and the sides of the excavation. The Contractor shall confine the top width of the trench to right of ways or easements. Special written agreements to extend the width may be made with the affected property Owner, provided such agreement is first approved by the Engineer. The Contractor shall take all necessary precautions to avoid damage to properties, structures and utilities adjacent to the trench.

221.3.01E Grade - The Contractor shall excavate the trench to the lines and grades as shown or established by the Engineer, with proper allowance for pipe thickness, pipe bedding and foundation stabilization as required. The subgrade upon which the bedding is to be placed shall be firm, undisturbed and true to grade. If the trench is over-excavated, the Contractor shall restore to grade with material of the type specified for select bedding material at no expense to the Owner and place the material over the full width of the trench in compacted layers not exceeding 6 inches deep to the established grade with allowance for the pipe bedding.

221.3.01F Disposal of Excess Material - The Contractor shall dispose of all excess material not required elsewhere on the project, make arrangements for disposal and bear all cost related thereto, in accordance with Section 205.

221.3.01G Shoring - Unless otherwise provided in the special provisions, the Contractor shall provide all materials, labor and equipment necessary to adequately shore trenches to protect the work, existing property, utilities, pavement, etc., and to provide safe working conditions in the trench. The method of shoring shall be according to the Contractor's design. The Contractor may elect to use a combination of shoring and overbreak, tunneling, boring, sliding trench shields or other methods of accomplishing the work, provided the method conforms to all applicable local, state and federal safety codes. Removal of any cribbing and sheeting from the trench shall be accomplished in such a manner as to fulfill the above requirements. Damages resulting from improper cribbing or from failure to crib shall be the sole responsibility of the Contractor. Cribbing will not be a pay item and the cost thereof shall be included in the unit contract price for "Install Water Main", or "Install Storm Drainage Pipe" as applicable. That portion of cribbing or sheeting extending below the crown elevation of flexible pipe shall be left in place unless satisfactory means of reconsolidating bedding or side support, disturbed by cribbing or sheeting removal, can be demonstrated. If a moveable box is used in lieu of cribbing or sheeting and the bottom cannot be kept above the crown elevation of flexible pipe, the bedding or side support shall be carefully reconsolidated behind the movable box prior to placing backfill. The use of horizontal strutting below the barrel of pipe or the use of the pipe as support for trench bracing will not be permitted.

221.3.01H Location of Excavated Material - Excavated material shall be placed at locations and in such a manner that it does not interfere with the function of existing drainage facilities.

221.3.02 Dewatering – The Contractor shall provide and maintain ample means and devices with which to promptly remove and dispose of all water entering the trench excavation during the time the trench is being prepared for the pipe laying, during the laying of the pipe and until the backfill at the pipe zone has been completed. The Contractor shall dispose of the water in a suitable manner without damage to adjacent property. Groundwater shall be controlled such that softening of the bottom of excavations or formation of "quick" conditions or "boils" during excavation shall be prevented. Where the native trench material is sand, the Contractor shall use appropriate trench dewatering methods such that running sand, moving sand and "quick" sand conditions are prevented at the bottom of the excavation. Dewatering systems shall be designed and operated so as to prevent removal of the natural soils and so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. Dewatering of the trench by conventional pumps set in the trench shall be considered as incidental to, and all costs included in, the various contract pay items in the proposal.

SPECIAL NOTE ON DEWATERING

As highlighted in the QuestCDN vBid advertisement for bids, the City of Warrenton has observed water levels at elevation 6.0' in this area. Contractor is advised to prepare for this during construction and take appropriate measures, such as preparing a rigorous dewatering plan and working with the tides in the area. Further, the dewatering wells may require State of Oregon approval.

221.3.03 Trench Foundation - When, in the judgment of the Engineer, the existing material in the bottom of the trench is unsuitable for supporting the pipe, the Contractor shall excavate below the pipe, as directed by the Engineer. No pipe or structure shall be placed on wet, frozen or muddy subgrade. The Contractor shall backfill the trench to subgrade of the pipe bedding, with select trench foundation material over the full width of the trench and compact in layers not exceeding 6 inches deep to the required grade. Where the native trench material is sand, no trench foundation materials will be authorized by the Engineer on account of water entering the trench excavation. In such case, the Contractor shall stabilize the native sand trench foundation with adequately designed dewatering systems in accordance with Subsection 221.3.02.

221.3.04 Pipe Bedding consists of leveling the bottom of the trench or the top of the foundation material and placing bedding material to the horizontal centerline of the pipe. Bedding material shall be as specified here in before and placed in at least two lifts. Place the first lift to provide the minimum 6 inch depth of bedding material as shown on the plan before the pipe is installed. The Contractor shall spread the bedding smoothly to proper grade so that the pipe is uniformly supported along the barrel and excavate bell holes at each joint to permit proper assembly and inspection of the entire joint. Bedding under the pipe shall provide a firm, unyielding support along the entire pipe length. The Contractor shall place subsequent lifts of not more than 6 inches in thickness up to the horizontal centerline of the pipe, bring lifts up together on both sides of the pipe and carefully work under the pipe haunches by slicing with a shovel, tamping or other approved procedure. Particular attention must be given to the area from the flow line to the horizontal centerline of the pipe or top

of bedding to insure that firm support is obtained to prevent any lateral movement of the pipe during the final backfilling of the pipe zone. Pipe bedding shall be placed the full width of the trench.

221.3.05 Initial Backfill - The Contractor shall place the specified initial backfill material carefully around the pipe in 6 inch layers and thoroughly hand tamp with approved tamping sticks supplemented by "Walking In" and from movement either horizontally or vertically during placement and compaction of initial backfill material. Mechanical compactors shall not be utilized in placement of the initial backfill material.

221.3.06 Trench Backfill - The Engineer will sample excavated material to determine the suitability of the native sand for backfill use. If the native sand backfill is found to be compactable and within the tolerance range of the moisture content, the Contractor will be allowed to use it for trench backfill. The Contractor shall take reasonable precautions to prevent excavated material from becoming saturated beyond the critical moisture limits and replace any saturated native material with other approved native material at no expense to the Owner. When, in the opinion of the Engineer, the excavated material is unsuitable for trench backfill by reason of pre-existing moisture content or other undesirable physical characteristics, the Contractor shall use suitable excess excavated material at the direction of the Engineer. The Contractor shall backfill the trench above the pipe zone to the final surface grade, or subgrade, as shown on the plans, in lifts not to exceed 12-inch loose depth. The Contractor shall compact each lift to a minimum of 95% of the maximum density as determined by AASHTO T99, Method D. Any subsequent settlement of the trench during the warranty period shall be considered to be the result of improper compaction and shall be promptly corrected. The Contractor shall compact and rake the soil to match the ground surface elevation adjacent to the trench and maintain the surface of the backfilled trench level with the existing grade until the entire project is accepted by the Owner.

221.4 MEASUREMENT AND PAYMENT:

221.4.01 Trench excavation will not be a pay item and the cost thereof shall be included in the contract unit price for the appropriate pipe installation, as applicable.

221.4.02 Select Pipe Bedding, Initial Backfill, and Trench Backfill will not be a pay item and the cost thereof shall be included in the contract unit price for the appropriate pipe installation, for the particular depth of installation.

221.4.03 Native sand Pipe Bedding, Initial Backfill, and Trench Backfill will not be a pay item and the cost thereof shall be included in the contract unit price for the appropriate pipe installation, for the particular depth of installation.

221.4.04 Potholing – There will be no separate payment for potholing. The cost of potholing and associated restoration is to be included in one or more of the unit prices.

221.4.05 CDF Backfill Material will be measured and on a cubic yard in-place basis for locations shown on plans or deemed necessary by the Engineer. Measurement will be made of the gross surface area and depth of CDF actually installed, based on truck tickets.

END OF SECTION 221

SECTION 222 – DEWATERING SYSTEM

222.1 DESCRIPTION:

This section provides specifications for dewatering systems and appurtenances which may be required during construction.

The Contractor shall be responsible for payment of any regulatory agency fees associated with its proposed dewatering system.

222.1.01 Quality Control - Before dewatering commences, the Contractor shall submit to the Engineer, plans setting forth the details of the proposed dewatering system. The dewatering system plans shall be in sufficient detail to indicate sizes of pumps, piping, appurtenances, and the ultimate disposal point for water.

The Contractor shall select the particular method of dewatering to be employed.

222.1.02 Submittals - The following shall be submitted in accordance with Section 130.

222.2 METHOD:

222.2.01 General - The Contractor shall furnish, install, operate, maintain and remove all machinery, appliances, and equipment to maintain all excavations free from water during construction, and shall dewater and dispose of the water so as not to cause injury to public or private property, or to cause a nuisance or menace to the public.

The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not reduced to the extent, which would cause damage or endanger adjacent structures or utilities. In addition, the system shall be fully filtered and protected against intake of any sand, which may otherwise cause subsurface voids, caving, and damage to adjacent structures.

The static water level shall be drawn down at least 2 feet below the bottom of the excavation in order to maintain the undisturbed state of the foundation soils and to facilitate the placement of fill or backfill compacted to the required density as specified in accordance to Section 221.3.03.

222.3 EXECUTION:

222.3.01 Installation - The Contractor shall install all equipment necessary for dewatering. He shall have on hand, at all times, sufficient pumping equipment headers and manifolds, and machinery in good working condition and shall have available, at all times, competent worker for the operation of the pumping equipment. Adequate standby equipment shall be kept available at all times to ensure efficient dewatering and maintenance of dewatering operations during power failure.

222.3.02 Performance - The control of groundwater shall be such that softening of the bottom of excavations or formation of "quick" conditions or "boils" during excavation shall be prevented. Dewatering systems shall be designed and operated to prevent erosion of, and intake of, any soils. Care shall be taken to prevent disturbance, by the method of dewatering, of pipe bedding already in place in the trench. The Contractor is fully responsible for maintaining the integrity of previously placed pipe and bedding during dewatering and the release of groundwater.

During excavation, construction of structures, installation of pipelines, placement of the structure and trench backfill, and the placing and setting of concrete, excavations shall be kept free of water. The Contractor shall control surface runoff to prevent entry or collection of water in excavations or any adjacent erosion. The static water level shall be drawn down in the vicinity of the excavation to maintain the undisturbed state of the foundation soils and allow the placement of any fill or backfill to the required density. The dewatering system shall be installed and operated so that the groundwater level outside the excavation is not reduced to an extent that would damage or endanger adjacent structures, utilities or property.

All dewatering systems shall be equipped with adequate filtering systems to prevent intake of any soils or soil grains from the ground in and around the excavations.

222.3.03 Discharge Points - Discharge of ground and surface runoff water shall be in accordance with the Contractor's dewatering plan. The Contractor may discharge groundwater to the existing system as long as the rate does not exceed the system's capacity. If, in the opinion of the Engineer or City, the storm system being used for discharge is being overwhelmed, the Contractor shall utilize portable tanks such as "Rain for Rent" to transport waters to an approved alternate location for discharging. Prior to any discharge, the Contractor shall take all necessary precautions to avoid discharge of oil, grease, and excessive suspended solids.

222.3.04 Release of Groundwater - The release of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils, prevent disturbance of compacted backfill, and prevent flotation or movement of any structures, pipelines, and sewers.

222.3.05 Damages - The Contractor shall be responsible for and shall repair without cost to the Owner for any damage to existing facilities or utilities, work in place, or other Contractors' equipment, and the excavation, including damage to the bottom due to the heave and including removal of material and pumping out of the excavated area, that may result from the Contactor's dewatering operations, including any damages that may result from any mechanical or electrical failure of the dewatering system.

222.4 MEASUREMENT AND PAYMENT:

222.4.01 Dewatering – Payment will be made at the contract lump sum amount and shall constitute full compensation for all dewatering required throughout the full duration of the project.

END OF SECTION 222

SECTION 223 – SUBGRADE

223.1 DESCRIPTION:

This work consists of the preparation of the subgrade. Subgrade is defined as the area of new or existing roads, streets, alleys, driveways, sidewalks, or other public place upon which additional materials are to be placed as a part of work covered in other Sections or by future work. All subgrade on this project is classified as untreated subgrade.

223.1.01 Untreated Subgrade - The top 1 foot of material placed in embankments or removed from cuts in the normal grading of the roadbed and which is brought to true line and grade, shaped and compacted to provide a foundation for the pavement structure constitutes untreated subgrade.

223.2 MATERIALS:

223.2.01 Soil - The native ground on all streets of this project is unknown and unclassified.

223.3 CONSTRUCTION:

223.3.01 Preparation - Prior to starting subgrade work, including backfill, all underground work contemplated in the area of the subgrade shall be completed. This requirement includes work by the Contractor, by the Owner, or by others. The Contractor shall drain all depressions or ruts which contain water.

223.3.02 Untreated Subgrade - The Contractor shall remove unsuitable material as directed and replace with approved material. The subgrade shall be excavated and shaped to line, grade, and cross section and then scarified and compacted to the specified density. Compaction shall extend to a line 1 foot beyond the edge of the paving curbs or forms and to a depth of 12 inches below final subgrade.

223.3.03 Moisture Content – Moisture Content at the time of compacting the subgrade materials shall be prepared to within -4% to +2% of optimum moisture content. Material which does not contain sufficient moisture to obtain proper compaction shall be wetted and thoroughly mixed as directed. Subgrade areas which too wet to be compacted to specified density, but which in the judgment of the Engineer otherwise meet the requirements, shall be scarified and aerated to provide -4% to +2% of optimum moisture content. The upper 12 inches of the subgrade shall be scarified and dried by manipulation, aeration, drainage, or other means before being compacted. The Engineer may authorize the removal of excessively wet material and/or the use of additional stabilizing of material as extra work.

223.3.04 Tolerances - The Contractor shall rework areas found to be deficient in thickness by more than 0.04 foot, except that fresh stabilizing material shall be added in an amount equal to one half of the original amount. The Contractor shall accomplish all reworking at no expense to the Owner.

The finished surface of untreated subgrade shall not vary more than 0.04 foot from established grade and cross section at any point. The Finished surface, when tested with a 10 foot straightedge, shall not vary from the testing edge by more than 0.04 foot at any point.

223.3.05 Compaction equipment for roadway subgrade shall be standard steel wheeled rollers or vibratory rollers capable of meeting the specified density requirement.

223.3.06 Compaction equipment for curb, gutter, and sidewalk subgrade shall be mechanical vibrators or impact tampers. All compaction equipment shall provide compaction of demonstrated equivalency to that of a standard steel wheeled or vibratory roller.

223.3.07 Compaction - The required density of untreated subgrade materials within the roadway section shall be not less than 95% of maximum density as determined by AASHTO T180 (modified Proctor).

If the specified compaction is not obtained, the Contractor shall notify the Engineer. The Contractor may be required to use a modified compaction procedure or apply additional compaction effort. If approved materials meeting the specifications can be compacted to the required density regardless of compaction effort or method, the Engineer may reduce the required density or direct that alternate materials be used. In no case shall finishing and compaction of the subgrade proceed until the Contractor is able to compact the material to the satisfaction of the Engineer.

223.4 MEASUREMENT AND PAYMENT:

223.4.01 Untreated subgrade will be considered incidental work. Subgrade preparation will not be a separate bid item. All work required to be accomplished under this section shall be included in the pay item for Aggregate Base Course.

223.4.02 Incidental Work - When not listed in the bid schedule, draining water from the subgrade; smoothing the subgrade in preparation for staking; blading, shaping, compacting and wetting the subgrade, including roadbed, excavating, transporting and placing onsite materials, road grade staking, to final line, grade and cross section, and other anticipated items will be considered incidental work.

223.4.03 Compaction Testing – Compaction testing will be performed periodically by the Owner's compaction testing agency. Tests will be performed upon completion of the Contractor's final compaction efforts. The Owner will provide initial compaction tests for the Contractor. All compaction tests which fail to meet specifications and require additional testing shall be provided and paid for by the Contractor, at no additional cost to the Owner.

END OF SECTION 223

SECTION 224 – AGGREGATE BASES

224.1 DESCRIPTION:

This item includes all work necessary to furnish, place and compact one or more courses of aggregate base, sub-base, or leveling courses on a prepared subgrade within the designated limits. This item also includes crushed rock surfacing used for shoulder work and driveways.

224.2 MATERIALS:

224.2.01 Base Course Aggregate shall be of the designated size 1 inch-0 (25 mm-0) and shall meet the requirements of Oregon Standard Specifications subsection 02630. At the option of the Contractor, leveling course aggregate as specified in Section 224.2.02 herein may be substituted for the base course aggregate

224.2.02 Leveling course aggregate, sidewalk rock, driveway rock and shoulder rock shall be of the designated size ¾ inch-0 (19 mm-0) and shall meet the requirements of Oregon Standard Specifications subsection 02630.

224.2.03 Acceptance will be based on periodic samples of the material stockpiles and in place prior to compaction. The testing agency will take proctor samples of contractor's aggregate source (3 samples maximum). If the aggregate does not meet the specified requirements, it will be rejected and shall be removed from the project site at the sole expense of the contractor. Additional proctor samples for new

aggregate sources will be paid for by the Contractor. Similarly, if the aggregate changes in size, appearance or consistency throughout the duration of the project, additional proctor samples for the aggregate will be taken by the testing agency and paid for by the Contractor.

224.3 CONSTRUCTION:

224.3.01 Preparation of Foundation - All surfaces on which a base is to be constructed shall be firm at the time aggregate is placed thereon. No materials shall be placed on a soft, muddy, or frozen subgrade.

224.3.02 Placing The Contractor shall haul and deposit the material so as to provide a homogeneous mixture of unsegregated and uniformly dispersed materials as placed in position for compacting. The Contractor shall spread and strike off the material to the designated line, grade and transverse slope with surface texture of uniform appearance without segregation or fracture of material.

224.3.03 Compaction equipment for roadway aggregate bases shall be standard steel wheeled rollers or vibratory rollers capable of meeting the specified density requirement. See also Section 223.

224.3.04 Compaction equipment for gutter aggregate bases shall be mechanical vibrators or impact tampers. All compaction equipment shall provide compaction of demonstrated equivalency to that of a standard steel wheeled or vibratory roller.

224.3.05 Roadway Base Rock Density Requirements - The Contractor shall begin compaction of each layer of roadway base rock as soon as practicable after the material is spread and continue until a density of not less than 95% of the maximum density has been achieved. Maximum density will be determined by AASHTO T180.

224.3.06 Road Base Widening - The existing road shoulders shall be excavated to a depth of 16 inches below the new asphalt grade, in order to allow for a minimum of 8 inches of new compacted base course and 4 inches leveling course below the new asphalt

224.3.07 Thickness of Base Course on Street Shoulders - If the existing base is found to be less than 3 inches in depth after excavating to a depth of 3 inches below the existing asphalt grade, new base material shall be installed to a depth of 6 inches below the existing asphalt grade.

224.3.08 Surface Finish - The roadway base rock aggregate base surface shall be within 0.1 foot of the required grade, and when tested with a 10 foot straightedge shall not vary from the testing edge by more than 0.08 foot at any point.

224.4 MEASUREMENT AND PAYMENT:

224.4.01 Roadway Base Course Rock Aggregate will be measured and paid for on a cubic yard in-place basis to the design grades and limits as staked and as authorized by the Engineer.

224.4.02 Leveling Course Rock, Shoulder Rock and Driveway Aggregate will be measured and paid for on a cubic yard in-place basis to the design grades and limits as staked and as authorized by the Engineer.

224.4.03 Over-Ex & Base Stabilization will be measured and on a cubic yard in-place basis for locations shown on plans or deemed necessary by the Engineer. Measurement will be made of the gross surface area and depth actually installed. Work shall include excavating and hauling unsuitable material, smoothing & compacting the subgrade; blading, shaping, road fabric, base rock, compacting subgrade and rock, and other required items will be considered incidental work.

224.4.04 Payment will be at the unit contract price for the various types of rock and shall constitute full compensation for supplying, placing, grading, compacting and maintaining the aggregate bases and shoulder rock aggregate.

END OF SECTION 224

SECTION 227 – EROSION CONTROL

227.1 DESCRIPTION:

The Contractor shall construct temporary erosion control structures as shown on the plans and specified herein. The Contractor shall maintain these structures throughout the course of construction as set forth in these specifications.

227.2 SUBMITTALS:

The Contractor shall submit manufacturer's data on the silt fence system and bio-bag materials to the Engineer prior to ordering materials.

227.3 MATERIAL:

227.3.01 Silt fence system shall be the "Envirofence" silt fence system manufactured by Mirafi, Inc., or equal. The height of a silt fence shall not exceed 36 inches (higher fences may impound volumes of water sufficient to cause failure of the structure).

227.3.02 Bio bags shall be 8" inches in diameter, 30 inches long and constructed with ½ inch mesh fiber filled with clean wood chips.

227.3.03 Hold down stakes shall be 24 inch long steel rods (1/2 inch diameter), or rebars (#4). Precast concrete blocks, 8" x 8" x 16", shall be used in lieu of stakes on hard surfaces such as asphalt pavement and concrete valley gutters.

227.04 CONSTRUCTION:

227.4.01 - All erosion control products and materials will be installed in accordance with the manufacturer's recommendations and as shown on the plans.

227.4.02 - All erosion control measures shall be left in place until all slope stabilization and/or reseeding efforts are completed and vegetation has taken root, or as directed by the Engineer.

227.4.03 Bio Bag protection for catch basin inlets - Bags shall be placed lengthwise in a single row in a half circle around the catch basin with the ends of adjacent bags pressed together. Each bag shall be securely anchored to the ground and held in place by at least two concrete blocks.

227.4.04 Silt Fences - The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. Where joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6 inch overlap, and securely sealed. Posts shall be spaced a maximum of 10 feet apart at the barrier location and driven securely into the ground (minimum of 24 inches). A trench shall be excavated approximately 6" (wide) x 6" (deep) along the line of posts and upslope from the barrier. The trench shall be backfilled and the soil compacted over the filter fabric. Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently seeded and stabilized.

227.4.05 Maintenance of Bio Bags - Bio bags barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall by the Contractor. Close attention shall be paid to the repair of damaged bags, end runs and undercutting beneath bags. Necessary repairs to barriers or replacement of bags shall be accomplished promptly by the Contractor. Sediment deposits should be removed after each rainfall. They must be removed when the level of deposition reaches approximately half the height of the barrier. Any sediment deposits remaining in place after the bio bag barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded.

227.4.06 Maintenance of Silt Fences - Silt fences and filter barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall by the Contractor. Any required repairs shall be made immediately by the Contractor. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the fabric shall be

replaced promptly. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one-quarter the height of the barrier.

227.4.07 Removal of Erosion Control Structures - Any material remaining in place after the fence or barrier is no longer required shall be graded to conform to the finished grade and/or reseeded.

227.05 MEASUREMENT AND PAYMENT:

227.5.01 - Measurement for the work as above specified will be made at the contract lump sum amount for the item "Erosion and Sedimentation Control, Stormwater Management & Dewatering".

227.5.02 - Payment for the work as above specified will be made at the contract lump sum amount for the item "Erosion and Sedimentation Control, Stormwater Management & Dewatering". This work shall constitute full compensation for the purchase, installation, maintenance, removal and disposal of all erosion and sedimentation control activities.

END OF SECTION 227

SECTION 250 – ASPHALT CONCRETE PAVEMENT

250.1 DESCRIPTION:

This item includes all work necessary for the construction of hot mix asphalt concrete pavements upon prepared foundations or base surfaces. The Contractor shall provide submittal information to the Engineer for approval on all materials, methods, equipment and HMAC mix design. Such submittal information shall be submitted a minimum of one (1) week prior to construction. Unless otherwise specified, the number of copies of submittal information that the Contractor shall submit shall be the number of copies that the Contractor requires to be returned plus two copies that will be retained by the Engineer.

250.2 MATERIALS:

All materials shall meet the requirements of the ODOT Standard Specifications, 2018 or most current edition, unless specifically noted herein.

250.2.01A Asphalt Cement, Additives and Aggregate treatment shall meet the requirements of Section 00744, Hot Mixed Asphalt Concrete (HMAC), ODOT Standard Specifications, 2018 or most current edition, and the requirements of ODOT, Standard Specifications for Asphalt Materials, 2018 or most current edition. Use PG 64-28 asphalt cement.

250.2.01B 2018 Asphalt Cement and Additives – Asphalt Cement and Additives - Furnish the following asphalt cement and additives:

(a) Asphalt Cement - Provide asphalt cement conforming to the requirement of ODOT's publication "Standard Specifications for Asphalt Materials". Copies of the publication are available from ODOT's website. The applicable Specifications are those contained in the current publication on the date the Project is advertised. Use the grade of asphalt that is specified.

(b) Asphalt Cement Additives - Use standard recognized asphalt cement additive products that are of known value for the intended purpose and approved for use on the basis of laboratory tests and capable of being thoroughly mixed. Do not use asphalt cement additives that have detrimental effects on the asphalt material. Do not use silicones as an additive. Add the following asphalt cement additives when required by the JMF:

- Anti-stripping asphalt cement additives to prevent stripping or separation of asphalt coatings from Aggregates to satisfy the TSR specified in 00744.13.
- Asphalt cement admixtures used to aid in the mixing or use of asphalt mixes.

250.2.02 Mineral filler shall conform to the requirements of AASHTO M17. Collector dust may be used as mineral filler, in whole or in part, provided the dust or the resultant mineral filler mixture conforms to the above requirements.

250.2.03 Level 2 HMAC (class) of Concrete and Proportions of Materials – The asphalt concrete mixture shall be of the level (class) as shown on the plans (Level 2 if not shown elsewhere) and shall conform to the requirements of ODOT, Standard Specifications for Asphalt Materials, 2018 or most current edition. The mix design shall be developed by the Contractor and shall meet Section 00744, Hot Mixed Asphalt Concrete (HMAC), ODOT Standard Specifications, 2018 or most current edition.

250.2.04 Tack coat asphalt shall be emulsified asphalt and meet the requirements of Section 00730, ODOT Standard Specifications, 2018 or most current edition.

250.3 CONSTRUCTION:

250.3.01 Foundation Preparation - All bases and foundations shall be constructed to the condition prescribed under the applicable specification. Broken or ragged edges of existing Portland cement concrete or bituminous surfaces underlying or abutting the new pavement shall be trimmed back to firm material. Contact surfaces of structures in the paving area shall be treated with an asphalt tack coat prior to placing the asphalt concrete. Underlying surfaces of Portland cement concrete and designated areas of asphalt-deficient, fine-cracked or spalled bituminous material shall be treated with an asphalt tack coat prior to placing the asphalt concrete.

250.3.02 Preparation and Acceptance of Foundation – In general, aggregate bases will be constructed, graded and compacted by the Contractor. Following the completion of the base rock on that project, those streets shall be available for use by the public for local vehicular traffic to abutting properties, with traffic operations on the aggregate base course. The paving subcontractor for this project shall inspect the aggregate base immediately prior to paving operations and make recommendations to the Engineer for foundation preparation work to prepare the aggregate base for the paving work. Such foundation preparation work will not be considered as additional work but will be included in the normal foundation preparation work described above in this section.

250.3.03 Existing Pavement Surfaces – Existing pavement surfaces shall be cleaned of all loose material, dirt and dust by brooming, by flushing with water or by other approved methods. All vegetation on existing asphalt surfaces shall be removed by first burning with a torch followed by careful removal of the burned vegetation by scraping and brooming.

250.3.04 Weather Limitations – Asphalt concrete mixtures shall be placed on dry prepared surfaces when the air temperature in the shade and the surface temperature is 55°F (15°C) and warmer. However, the Engineer may permit the Contractor to begin paving work if the temperature is 50°F or above and rising, and in the judgment of the Engineer will be 55°F in a reasonable period of time. Placing any mixture during rain or other adverse weather conditions will not be permitted, except that mix in transit at the time these adverse conditions occur may be laid if the following conditions are met:

a. Mix is at proper temperature.
b. Mix is covered during transit.
c. Mix is placed on a foundation free of standing or flowing water.

250.3.05 Tack coat asphalt shall be applied to existing bituminous and Portland cement concrete surfaces prior to placing asphalt concrete per ODOT Standard Specifications. A tack coat is not required before placing ACP on Aggregate bases. Apply the Emulsified Asphalt with a pressure distributor conforming to ODOT Standard Specification, 00730.22, unless otherwise allowed. Apply the Emulsified Asphalt to the prepared surface at a rate between 0.05 and 0.20 gallons per square yard as directed and with the Emulsified Asphalt temperature between 140°F and 185°F as recommended by the manufacturer. Application rates for tack coat diluted according to ODOT Standard Specification 00730.11 will be increased as necessary to provide the same amount of residual asphalt as the application rates specified above.

It shall be applied only so far in advance of the asphalt concrete paving operations as is necessary in order to provide a tacky surface upon which to place the asphalt concrete.

Do not place hot mixed asphalt concrete Pavement or Emulsified Asphalt Concrete Pavement on the tack coat until the Emulsified Asphalt separates from the water (breaks), but before it loses its tackiness.

250.3.06 Hot Mix Asphalt Concrete Pavers – The HMAC paving operations shall meet the requirements of Section 00744 of ODOT Standard Specifications, 2018 or most current edition.

250.3.07 Placing - Asphalt concrete shall be at a temperature of between 285°F and 300°F at the time it is placed. (If the submitted Job Mix Formula, temperature-viscosity curve of the asphalt cement supports a lower temperature, it will be allowed by the Engineer.) Asphalt Concrete shall be placed in panels of such width as to hold to a practical minimum the number of longitudinal joints required. The longitudinal joints in any panel shall offset those joints in underneath panels by not less than 6 inches. Special care shall be taken at longitudinal joints to provide the required bond and density. The placing of asphalt concrete shall be a continuous operation as nearly as practicable. If the capacity of the paving machine exceeds the capacity of the hauling vehicles, the paving machine shall be operated at a reduced uniform speed so as to maintain a continuous operation.

250.3.08 Overlay paving shall be applied in a minimum of two lifts. The first lift shall be a leveling course, followed by a cover course or wearing course.

250.3.09 Compaction and Rolling – Longitudinal joints shall be rolled directly behind the paving machine. The first panel shall have vertical edges, and the abutting panel shall be tightly crowded against its edge. Material from the second panel shall be pushed over the surface of the first panel so as to develop an overlap of from 3 inches to 6 inches. Breakdown rolling shall immediately follow the rolling of the longitudinal joints and edges. Rollers shall be operated as close to the paving machine as necessary to obtain adequate density without causing undue displacement. The breakdown roller shall be operated with the drive roll or wheels nearest the paving machine. Exceptions may be made when working on steep slopes or super-elevated curves. Roller wheels shall be kept moist with only enough water to avoid picking up the material. Rollers shall move at a uniform speed not to exceed 3 mph for steel wheeled rollers. Rollers shall be in good condition and capable of being reversed without backlash. The line of rolling shall not be suddenly changed nor the direction of rolling suddenly reversed. Any pronounced change in direction of the roller shall be made on stable material. If rolling causes displacement of the material, the affected areas shall be loosened and restored to the original grade with loose material before being re-rolled. Heavy equipment, including rollers, shall not be permitted to stand on finished surface before it has thoroughly cooled or set. The finished surface shall be true to line and grade, free of irregularities and roller wheel tracks.

Breakdown and intermediate rolling and the rolling of longitudinal joints shall be performed until the entire surface of each course has been compacted by at least six coverages of the roller(s). Breakdown and intermediate compaction shall be completed before the HMAC temperature drops below 180°F, unless otherwise directed. Steel-wheeled rollers shall have a gross static weight of at least 8 tons. Vibratory rollers shall be equipped with amplitude and frequency controls capable of at least 2000 vibrations per minute, shall be specifically designed to compact HMAC and shall have a gross static weight of at least 8 tons. Finish rolling shall be preformed with additional coverages until all roller marks are eliminated. If steel-wheeled rollers are used for finish rolling, they shall have a gross static weight of at least 6 tons.

250.4 MEASUREMENT AND PAYMENT:

250.4.01 Measurement - of asphalt concrete pavement will be by weighing the mixed materials on a certified scale. The weight of asphalt concrete shall include the asphalt cement in the mixture. Certified plant mix temperatures at loading and weight slips shall be supplied to the Engineer at the point of delivery.

250.4.02 Payment will be at the contract price per ton for each category of the material placed and compacted to the designated depths and limits and/or furnished at the plant site and will be limited to not more than 105% of the calculated tonnage within the designated limits. Payment shall constitute full

compensation for all work specified herein, either for furnishing the pavement materials only or for furnishing and installing the pavement materials as listed in the bid schedule.

250.4.03 HMAC Level 2 Payment will be measured and paid for on a per ton basis to the limits as shown on the construction drawings at a nominal compacted depth of 2".

250.4.04 Tack Coat – No separate payment will be made for the asphalt tack coat, the cost of which is to be included in one or more of the unit prices.

250.4.05 Asphalt Berm Measurement and Payment

250.4.05.1 Measurement – of the berm will be by the linear foot of the berm or water bar constructed.

250.5.05.2 Payment – shall include full compensation for furnishing all labor, materials, tools, equipment and other incidentals, for constructing the berm or water bar, complete in place, as directed by the Engineer.

250.4.06 Asphalt Cement Price Adjustment – An asphalt cement escalation/de-escalation clause will be in effect during the life of this contract. The price adjustment will use the Monthly Asphalt Cement Material Price (MACMP) established by the Oregon Department of Transportation (ODOT) on the first of each month. The price adjustment will use the MACMP for the month the contract was awarded as the Base Asphalt Cement Material Price "Base." The price adjustment will be determined by multiplying the Adjustment Factor, as established below, by six (6) percent and adding to the unit price for asphalt concrete pavement and pavement patching. The Monthly Asphalt Cement Adjustment Factor will be determined each month of the contract as follows:

- If the MACMP is within +/- 10% of the "Base", then there will be no adjustment.
- If the MACMP is more than 110% of the base, then:
  - Adjustment Factor = (MACMP) – (1.10 x "Base")
- If the MACMP is less than 90% of the base, then:
  - Adjustment Factor = (MACMP) – (.90 x "Base")

The "Base" price established for this contract is the MACMP for the contract date as established by ODOT.

END OF SECTION 250

SECTION 258 – PAVEMENT MARKINGS

258.1 DESCRIPTION:

This item includes all work necessary for furnishing and installing striping and pavement markings.

258.2 MATERIALS:

258.2.01 Striping Paint shall be the alkyd resin type, ready mixed, white or yellow, as required, Type I, conforming to the requirements of AASHTO M248.

258.2.02 Preformed thermoplastic pavement markings shall be PREMARK PLUS as supplied by Flint Trading Co., (Thomasville, North Carolina, tel. 336-475-6600, www.flinttrading.com) or approved equal. The pavement markings shall contain factory applied surface beads, 30% glass beads by weight, for high retro-reflectivity. The thermoplastic material shall conform to AASHTO designation M249-79 (98), with the exception of the relevant differences due to the material being supplied in a preformed state.

258.2.01A Graded Glass Beads – The material shall contain a minimum of thirty percent (30%) intermixed graded glass beads by weight. The intermixed beads shall be clear and transparent. Not more than twenty percent (20%) consists of irregular fused spheroids, or silica. The index of refraction shall not be less than 1.50. The material shall have factory applied coated surface beads in addition to the intermixed

beads at a rate of 1 lb. (± 10%) per 11 sq. ft. These factory applied coated surface beads shall have the following specifications:

1) Minimum 80% rounds
2) Minimum refractive index of 1.5
3) Minimum SiO2 Content of 70%
4) Maximum iron content of 0.1%

Size Gradation	% Retained
1400 µm (14 U.S. mesh)	0-3%
1180 µm (16 U.S. mesh)	2-10%
1000 µm (18 U.S. mesh)	10-30%
850 µm (20 U.S. mesh)	30-60%
600 µm (30 U.S. mesh)	50-80%
500 µm (35 U.S. mesh)	60-85%
355 µm (45 U.S. mesh)	95-100%
250 µm (60 U.S. mesh)	98-100%

258.2.01B Pigments – White: Sufficient titanium dioxide pigment shall be used to ensure a color similar to Federal Highway White, Color No. 17886, as per federal Standard 595. Yellow: Sufficient yellow pigment shall be used to ensure a color similar to Federal Highway Yellow, Color No. 13655, as per Federal Standard 595. The yellow pigment shall be of an organic nature only and contain no lead chromate.

258.2.01C Heating Indicators – The top surface of the material (same side as the factory applied surface beads) shall have regularly spaced indents. These indents shall act as a visual cue during application that the material has reached a molten state so satisfactory adhesion and proper bead embedment has been achieved and a post-application visual cue that the installation procedures have been followed.

258.2.01D Skid Resistance – The surface, with properly applied and embedded surface beads, shall provide a minimum resistance value of 45 BPN when tested according to ASTM E-303.

258.2.01E Thickness – The material shall be supplied at a minimum thickness of 125 mils (3.15 mm).

258.2.01F Versatility – As an option, turn arrows and combination arrows may come without surface applied glass beads, thus facilitating the use of those arrows as either left or right indicators, thereby reducing inventory requirements.

258.2.01G Environmental Resistance – The material shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

258.2.01H Retroreflectivity – The material, when applied in accordance with manufacturers guidelines, shall demonstrate a uniform level of sufficient nighttime retroreflection when tested in accordance to ASTM E1710-97. The applied material shall have an initial minimum intensity reading of 500 $mcd \cdot m^{-2} \cdot lx^{-1}$ for white and 300 $mcd \cdot m^{-2} \cdot lx^{-1}$ for yellow as measured with an LTL-2000 or LTL-X Retroreflectometer.

258.3 CONSTRUCTION:

258.3.01 Traffic Paint, General – The Contractor will be responsible for spotting of the lines and markings to be painted and approval of the Engineer must be obtained before pavement marking may begin. The area to be painted shall be dry, clean and fee of lose particles. The paint machine shall be of the spray type capable of satisfactorily applying the paint under pressure with a uniformity of feed through nozzles spraying directly upon the pavement.

258.3.02 Striping Paint shall be thoroughly mixed prior to application and shall be applied when the air temperature is above 40°F. The rate of application for paint shall not exceed 80 square feet per gallon

(approximately 20 miles wet thickness). This rate is effectively 20 gallons of paint per mile of 4 inch width solid stripes. For narrower or wider or other marking, paint shall be applied at a proportional rate with the four-inch stripes.

258.3.03 Thermoplastic Pavement Markings, General – The Contractor will be responsible for spotting of the lines and markings to be installed and approval of the Engineer must be obtained before thermoplastic pavement marking may begin. The area to be marked shall be dry, clean and free of loose particles. The Contractor shall ensure that no moisture is present on the surface.

258.3.04 Thermoplastic Pavement Markings shall be applied on asphalt using the propane torch method recommended by the manufacturer. The material shall be able to be applied at ambient and road temperatures down to 32°F without any preheating of the pavement to a specific temperature. The material shall be able to be applied without the use of a thermometer. The pavement shall be clean, dry and free of debris. The material supplier shall enclose application instructions with each box/package of the thermoplastic pavement markings.

258.4 MEASUREMENT AND PAYMENT:

258.4.01 Stop Bars – Measurement for stop bars will be made on a linear foot basis for the width and type of pavement markings listed in the bid schedule and installed. Payment will be at the contract price per linear foot and shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary or incidental to the specified work.

END OF SECTION 258

SECTION 266 – STORM DRAINAGE PIPE AND FITTINGS

266.1 DESCRIPTION:

This item includes all work necessary for the construction of surface and subsurface storm drainage inlet structure, storm drainage piping and facilities including a tide gate and necessary storm drainage fittings.

266.2 MATERIALS:

266.2.01 General - Storm drainage pipe and fittings shall be as hereinafter specified for the particular kind of pipe and fittings required, as designated on the plans. Joints for all fittings shall be the same as the joints used on the pipe. No pipe and fittings that are not hereinafter specified will be allowed on the project, and no substitution of approved pipe materials will be allowed other than the pipe materials shown on the plans.

266.2.02 Storm Drainage Pipe:

266.2.02A Corrugated High Density Polyethylene Smooth Interior (HDPE) pipe and fittings shall be ADS SaniTite HP pipe for use in gravity flow sanitary sewer applications. Dual wall pipe shall conform to the requirements of ASTM F2736. Pipe shall be joined with a gasketed integral bell & spigot joint meeting the requirements of ASTM F2736 and ASTM F2764, for the respective diameters. Pipe shall be watertight according to the requirements of ASTM D3212, with the addition of a 15psi pressure requirement. Spigot shall have two gaskets meeting the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gaskets are free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly. Pipe shall have a reinforced bell with a polymer composite band installed by the manufacturer.

266.2.02B Reinforced concrete pipe with rubber gasket, shall conform to the requirements of ASTM C 443, Class 5.

266.2.02C ADS N-12 Water-Tight dual-wall pipe (per ASTM F2648) shall have a smooth interior, bell & spigot configuration and annular exterior corrugations. • 4- through 60-inch pipe shall meet ASTM F2648. • Manning's "n" value for use in design shall be 0.012. Pipe shall be joined using a bell & spigot joint meeting ASTM F2648. The joint shall be watertight according to the requirements of ASTM D3212.

Gaskets shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly. 12- through 60-inch diameters shall have an exterior bell wrap installed by the manufacturer.

266.2.02D Joint Materials, Couplings and Fittings shall conform to ASTM F2736, ASTM F2764, and AASHTO M330, for the respective diameters. Bell & spigot connections shall utilize a welded or integral bell and spigot with gaskets meeting ASTM F477. Fittings and connections shall provide a watertight connection according to the requirements of ASTM D3212.

266.2.03 Drain rock for shall be railroad ballast rock which shall consist of uniformly graded 2 inches to 3 inches, rough edged aggregate. At the option of the Contractor, rounded river rock, washed to remove all fines, with a maximum size of 3 inches, may be substituted for railroad ballast rock as drain rock.

266.2.04 Pipe bedding material, select pipe bedding material, initial backfill material, and trench backfill material shall be as specified in Section 221.

266.2.05 Tide Gate – shall be a Waterman 36" AF-41-f for wall mounting. The valve gate flange shall be mounted to the tide gate vault wall.

266.2.06 Concrete Inlet Structure – shall be constructed per ODOT design sheet RD-368, attached to plans. All steel materials shall be hot-dipped galvanized per ODOT standards.

266.3 CONSTRUCTION:

266.3.01 Trench excavation, bedding and backfill for storm drainage piping shall be as specified in Subsection 221.1.

266.3.02 Pipe bedding consists of leveling the bottom of the trench and placing bedding material to the depth as specified on the plans. Bedding material shall be as specified hereinbefore. The Contractor shall spread the bedding smoothly to proper grade so that the pipe is uniformly supported along the barrel. Bedding under the pipe shall provide a firm, unyielding support along the entire pipe length. The Contractor shall place subsequent lifts of not more than 6 inches in thickness up to the required depth, bring lifts up together on both sides of the pipe and carefully work under the pipe haunches by slicing with a shovel, tamping or other approved procedure. Particular attention must be given to the area from the flow line to the horizontal centerline of the pipe or top of bedding to insure that firm support is obtained to prevent any lateral movement of the pipe during the final backfilling of the pipe zone. Pipe bedding shall be placed the full width of the trench.

266.3.03 Initial Backfill - The Contractor shall place the specified initial backfill material carefully around the pipe in 6 inch layers and thoroughly hand tamp with approved tamping sticks supplemented by "Walking In" and slicing with a shovel. The Contractor shall prevent pipe from movement either horizontally or vertically during placement and compaction of pipe zone material. Mechanical compactors shall not be utilized in placement of the material. The material shall be placed to a depth of 12 inches above the top of the pipe.

266.3.04 Trench backfill shall be as specified in Subsection 221.3.06.

266.3.05 HDPE and CPE Joint Construction - Joints shall be made with an integral built-in bell and factory installed gasket that requires no extra couplers, grout or other sealants to install. Installation shall be in accordance with ASTM Recommended Practice D2321, or as directed by the Engineer.

266.3.06 Line and Grade - Survey line and grade control hubs will be provided by the Engineer on an offset line at intervals not greater than 100 feet when the Contractor uses a laser beam for pipe alignment, and at intervals not greater than 40 feet for other methods of pipe alignment. The Engineer will furnish the Contractor with the elevation of the hubs and the corresponding storm invert elevation at such hubs. Should the Contractor's operations cause or allow removal of stakes or hubs, their replacement shall be at the expense of the Contractor. Variance from established line and grade shall not be greater than ½ inch for line and ¼ inch for grade, provided that such variation does not result in a level or reverse sloping invert. The Contractor shall

establish line and grade for pipe by the use of lasers or by transferring the cut from the offset hubs to the trench at whatever intervals necessary to maintain the line and grade. The method of transferring the cut from the offset hubs to the trench shall be subject to the approval of the Engineer. A transfer method not approved by the Engineer shall not be used. The Contractor shall constantly check both line and grade for each length of pipe laid and in the event they do not meet the limits described, the work shall be immediately stopped, the Engineer notified, and the cause remedied before proceeding with the work. When using laser alignment the Contractor shall check beam alignment at 100 foot intervals.

266.3.07 Pipe Distribution and Handling - The Contractor shall not distribute material on the job faster than it can be used to good advantage. The Contractor shall unload pipe only by approved means. Pipe will not be unloaded by dropping to the ground. The Contractor shall inspect all pipe and fittings prior to lowering into trench to insure no cracked, broken, or otherwise defective materials are used. The Contractor shall clean ends of pipe thoroughly and remove foreign matter and dirt from inside of pipe and keep it clean during laying and joining. The Contractor shall use approved implements, tools, and facilities for the safe and proper protection of the work. The Contractor shall lower pipe into the trench in such a manner as to avoid any physical damage to the pipe. The Contractor shall remove all damaged pipe from the job site. Pipe shall not be dropped or dumped into trenches.

266.3.08 Laying Pipe on Curves - The Contractor shall lay pipe on horizontal or vertical curves only when approved and at the direction of the Engineer.

266.3.09 Installation of Service Tees and Wyes - Fittings shall be placed where indicated on the plans or as staked by the Engineer, or as required by existing services. The Contractor shall provide ends of all inactive service laterals and fittings with approved watertight plugs, caps, or stopper, suitably braced to prevent blow off during internal hydrostatic or air testing. Such plugs or caps shall be removable and their removal shall provide a socket suitable for making a flexible joint lateral connection or extension. If any fitting is placed when the Engineer is not present, the Contractor shall place a stake and see that it is maintained to mark the location of such fitting until the Engineer has recorded the location of the fitting.

266.3.10 Pipe Placing and Laying - Trench excavation, bedding and backfill shall be in accordance with Section 221.

When the pipe is laid within a movable trench shield, all necessary precautions will be taken to prevent pipe joints from pulling apart when the shield is moved ahead. The Contractor shall take the necessary precautions required to prevent excavated or other foreign material from getting into the pipe during the laying operation. At all times, when laying operations are not in progress, at the close of the day's work, or whenever the workers are absent from the job, the open end of the last laid Section of pipe will be closed and blocked to prevent entry of foreign material or creep of the gasketed joints.

The Contractor shall plug or close off pipes which are stubbed off for manhole construction or for connection by others, with temporary plugs. The Contractor shall take all precautions necessary to prevent the uplift or floating of the line prior to the completion of the backfilling operation. When cutting and/or machining of the pipe is necessary, the Contractor shall use only the tools and methods recommended by the pipe manufacturer. The Contractor shall join the pipe in conformance with the manufacturer's recommendations. Joints or pipe will not be deflected more than recommended by the manufacturer.

266.4 TESTING:

266.4.01 Cleaning Prior to Test - Prior to the internal pressure testing and inspection of the system by the Engineer, the Contractor shall flush and clean all parts of the system. The Contractor shall remove all accumulated construction debris, rocks, gravel, sand, silt and other foreign material from the system at or near the closest downstream manhole. If necessary, the Contractor shall use mechanical rodding or bucketing equipment. Upon the Engineer's inspection of the system, if any foreign matter is still present, the Sections and portions of the system shall be reflushed and cleaned as required.

266.4.02 Television Inspection of Storm Sewers - Upon completion of all storm sewer construction, testing and repairs, the Contractor shall conduct a color TV acceptance inspection of all installed lines 8 inches to 72 inches. Unless otherwise directed, the Contractor shall conduct a subsequent warranty TV inspection of all installed

lines. Warranty TV inspections shall be in color and shall be conducted during the warranty period in a season of high ground water conditions as defined by the Engineer. The acceptance inspection and the warranty inspection shall be conducted by an approved technical service which is equipped to make audio-visual tape recordings of the televised inspections.

The audio-visual recordings shall be compatible with the Owner's playback equipment. The Contractor shall ensure that recording equipment is functioning properly and that a clear and usable record is made of all possible defects. The equipment used for recording shall be equipped with a footage meter which records a visual record on the tape. A voice accounting of suspected deficiencies shall be made on the sound track.

A written report shall be made at the time of each television inspection. This report shall be made on a form approved by the Engineer. The video record and the written report of the acceptance inspection and the warranty inspection shall be submitted to the Engineer and will become the property of the Owner.

The audio and visual reports of the acceptance inspection and the warranty inspection shall include identification of individual groundwater infiltration sources such as laterals, and construction defects.

266.5 MEASUREMENT AND PAYMENT:

266.5.01 Measurement of storm drainage pipe – including Alternates, will be on a linear foot basis for the various sizes and types of pipe installed as shown on the plans. Measurement will be the pipe length along the centerline from end to end of each pipe. Payment will be made at the contract price per linear foot for the various sizes of pipe installed and shall constitute full compensation for all work and materials specified herein, including trenching, pipe laying, backfill, tracer wire and testing.

266.5.02 Payment will be made at the contract price per linear foot for the various sizes of pipe installed and shall constitute full compensation for all work and materials specified herein, including trenching, pipe laying, backfill, tracer wire and testing.

266.5.03 Measurement of storm drainage tees, bends and fittings will be measured on a per each basis for each of the various fittings installed as shown on the plans, and as listed on the bid schedule. Where individual fittings are not shown on the bid schedule, those fittings will be considered incidental to the storm drainage pipe construction and no separate payment will be made for incidental fittings.

266.5.04 Payment for tee and bend fittings will be in addition to payment for pipe from end to end of each pipe or from main to catch basin. Where shown on the bid schedule, payment will be made at the contract price per each tee and bend for the various types and sizes of fittings installed and shall constitute full compensation for all work and materials specified herein, including trenching, installation of the fittings, jointing, backfill and end of main concrete blocks.

266.5.05 Storm Drainage Connections - Measurement for storm pipe connections will be made at the contract price for the entire connection installed along with any temporary connections and pumping needed to maintain storm flow as delineated on the contract drawings.

266.5.06 Payment will be made at the contract price and shall constitute full compensation for the complete connection in place, including all materials, piping, tees, inserta-tee or fittings required to make a water-tight connection to the existing storm system.

266.2.07 Concrete Inlet Structure – Measurement for the construction of the inlet structure shall be made at the contract price for the complete inlet structure, constructed in place, per plans and specifications.

266.2.08 Concrete Inlet Structure – Payment for the inlet structure and its installation will be made at the contract price. Payment shall constitute full compensation for supplying all labor, equipment and materials, hot-dipping treatment, constructing, installing, and finishing the surface grade at the inlet structure.

END OF SECTION 266

SECTION 267 – STORM DRAINAGE CATCH BASINS

267.1 DESCRIPTION:

This item includes all work necessary for the construction of catch basins of the types and sizes shown on the plans.

267.2 MATERIALS:

267.2.01 Precast concrete catch basins shall conform to the requirements of ASTM C478.

267.2.02 Precast concrete top sections with cast iron frames and grates shall be used on all precast concrete catch basins. Cast iron frames and grates shall conform to the requirements of AASHTO M105, Class 30B.

267.3 CONSTRUCTION:

267.3.01 Excavation and backfill shall be in accordance with applicable portions of Section 266.

267.3.02 Precast concrete catch basins shall be installed according to the plans. The units shall be placed on a prepared bedding of 8 inches compacted thickness of ¾ inch-minus crushed rock. Precast concrete units shall be set plumb and level. Riser sections shall be installed as needed with a full bed of mortar between all sections and the catch basin. The Contractor shall set the top unit in a full bed of mortar and shall adjust the top unit as needed to match the slope of the adjacent grate.

267.3.03 Pipe connections shall be smoothly finished with the inside surface of the catch basin wall, and shall not project into the catch basin opening.

267.3.04 Existing catch basins – where shown on the plans, existing catch basins shall be retrofitted with a new cast iron frame and slotted inlet grates in accordance with the plans. The contractor shall remove existing lids and tops and make all necessary adjustments to retrofit the new tops to receive the new frames and grates. Pipe connections shall be smoothly finished with the inside surface of the catch basin wall and shall not project into the catch basin opening.

267.4 MEASUREMENT AND PAYMENT:

267.4.01 Measurement – where shown on the plans, existing catch basins or new catch basins will be made on a per each basis for the number and type of units listed and construed or retrofitted.

267.4.02 Payment – will be made at the unit contract price and shall constitute full compensation for the catch basin in place, including excavation, bedding, backfill, and pipe connections.

END OF SECTION 267

SECTION 269 – STORM DRAINAGE MANHOLES

269.1 DESCRIPTION:

This item includes all work necessary for the construction of storm drainage manholes and storm drainage vaults.

269.1.01 Related Technical Specifications - The Oregon Standard Specifications, current edition, is incorporated into this specification by reference. It shall be understood that in any matter addressed by both the text of this technical specification and the referenced specification, be it in construction method, material, or quality control, the more stringent specification is intended and shall be enforced.

269.2 MATERIALS:

269.2.01 Cast-in-Place Storm Drainage Manholes:

269.2.01A Aggregates shall be of the designated size 3/4 inch-0 and shall meet the requirements of Oregon Standard Specifications Subsection 2630.

269.2.01B Portland Cement and Portland Cement Concrete (PCC) shall conform to the requirements of ASTM C94. Compressive field strength shall be not less than 3,000 p.s.i. at 28 days. Maximum size of aggregate shall be 3/4 inch. Slump shall be between 2 inches to 4 inches.

269.2.01C Metal Reinforcement shall conform to the requirements of ASTM A 615, Grade 60, deformed bars.

269.2.01D Forms - Exterior surfaces shall be formed with steel or plywood. Other surfaces shall be formed with matched boards, plywood, or other approved material. Trench walls, rock, or earth will not be acceptable form material.

269.2.02 Metal Castings:

269.2.02A General - Manhole covers shall be designed so they may be secured to the frames. Matching surfaces of covers and frames shall be flat to prevent any movement of covers within frames. Covers and frames shall be interchangeable.

269.2.02B Cast Iron Materials shall conform to the requirements of ASTM A 48. Class 30B. The foundry shall certify as to the tensile and transverse properties and Brinell Hardness. The Owner reserves the right to require a rough transverse bar, size of bar 1.2" (diameter) x 20" (long), and/or a tensile bar as per ASTM A 48 for each 20 castings or heat when less than 20 castings are made.

269.2.02C Storm Drainage Manhole Frames and Covers shall be of heavy duty design with minimum weight of 295 pounds. Frames and covers shall be machine finished or ground on seating surfaces to assure a non-rocking fit in any position and interchangeability. Covers shall be marked with "STORM" or "S" in minimum 2 inch raised or indented letters, and shall have 1 or 2 vent holes only. Frames shall provide for a minimum 23 inch diameter clear opening.

269.2.02D Clean out frames and covers shall have a minimum weight of 80 pounds.

269.2.02E Cap Screws and Washers for watertight manhole covers shall be stainless steel with 60,000 p.s.i. minimum tensile strength conforming to the requirements of ASTM A453.

269.2.04 Precast Concrete Storm Drainage Manholes:

269.2.04A Precast Concrete Manhole Sections and appurtenances shall conform to the requirements of ASTM C478. Minimum wall thickness shall be 4 inches. Cones shall have the same wall thickness and reinforcement as riser sections. Cones shall be eccentric. Joints shall be tongue-and-groove or keylock type. Prior to delivery of precast manhole sections to the job site, yard permeability tests may be

required at the point of manufacture. The precast sections to be tested will be selected at random from the stockpiled material which is to be supplied to the project. All test specimens will be mat tested, and shall meet the permeability test requirements of ASTM C 14. Precast manhole sections shall consist of circular sections in standard nominal inside diameters of 42, 48, 54, 60, 72, 84, or 96 inches. Heights of sections shall be multiples of 12 inches. Heights of manhole sections 72 inches through 96 inches in diameter shall be as required to fit site conditions. Other sections shall be 24 inch riser and flattop sections.

269.2.04B Precast Concrete Manhole Bases may be used provided all the details of construction are approved prior to construction. Inlet and outlet pipe holes shall be core-drilled at the plant location or in the field. Conical-type flexible neoprene boots shall be installed in the factory core-drilled hole to create a water-tight connection between manhole and storm pipe, Kor-N-Seal or approved equal. Kor-N-Seal Pipe Adapter shall be used to create a water-tight seal with the boot.

269.2.04C Precast Concrete Vault – shall be Oldcastle Precast 687-2-LA, 6' x 8'. The top shall have locking galvanized steel doors, Part Number 687-T-2332P.

269.2.04D Precast Concrete Vault top – shall be Oldcastle Precast Part Number 687-T-2332P, and shall have dual-locking galvanized, steel doors.

269.2.05 Storm Drainage Manhole Joint Materials:

269.2.05A Mortar shall conform to the requirements of ASTM C387, or be proportioned 1 part Portland cement to 2 parts clean, well-graded sand that will pass a 1/8 inch screen. Admixtures may be used not exceeding the following percentages of weight of cement: hydrated lime, 10%; diatomaceous earth or other inert materials, 5%. Consistency of mortar shall be such that it will readily adhere to the precast concrete if using the standard tongue-and-groove type joint. If the keylock type joint is used, the consistency shall be such that excess mortar will be forced out of the groove and support is not provided for the next precast manhole section to be placed. Mortar mixed for longer than 30 minutes shall not be used.

269.2.05B Non-Shrink Grout shall be Sika 212, Euco N-S, Five-Star, or approved equal non-metallic cementitious commercial grout exhibiting zero shrinkage per ASTM C-827 and CRD-C-621. Grout shall not be amended with cement or sand and shall not be reconditioned with water after initial mixing. Unused grout shall be discarded after 20 minutes and shall not be used. Non-shrink grouts shall be placed or packed only with the use of an approved commercial concrete bonding agent applied to all cured concrete surfaces being grouted. The bonding agent shall be compatible with the brand of grout being used. Water shall not be used as a substitute for the commercial bonding agent.

269.2.05C Preformed Plastic Gaskets shall be used in addition to mortaring all joints. Preformed plastic gaskets shall meet all the requirements of federal specification SS-S-00210.

269.2.05D Rubber Gaskets shall conform to ASTM C 443.

269.2.06 Cleanouts shall be constructed with pipe and fittings conforming to the applicable portions of Sections 266 and shall be of the same material as the pipe in the section of storm main to which the cleanout is constructed. Rubber-gasketed water-tight mechanical plugs shall be furnished at each cleanout.

269.3 CONSTRUCTION:

269.3.01 General:

269.3.01A - Manhole and outfall excavation and foundation stabilization shall be in accordance with applicable portions of Section 221. Manholes and outfalls shall be installed on a prepared surface base of crushed rock as shown on the plans. All backfill around manholes and outfalls shall be 3/4" - 0" crushed rock.

269.3.01B Pipe connections at manholes shall be made according to manufacturer's recommendations. Special care shall be taken by the Contractor to see that the pipe connections at manholes are completely watertight. Manholes shall be placed on firmly compacted bedding material.

269.3.02 Bases shall be placed on a prepared bedding of 8 inches compacted thickness of ¾ inch-minus crushed rock.

269.3.02A Cast-in-place Bases shall be constructed according to the plans. The concrete shall be consolidated by mechanical vibration, hand spading, rodding, or tamping. The concrete shall be screeded off such that the manhole riser section has a level uniform bearing for the full circumference.

269.3.02B Precast Bases shall be carefully placed on the prepared bedding so as to be fully and uniformly supported in true alignment, making sure that all entering pipes can be inserted on proper grade. HDPE pipe connections to manholes shall be grouted watertight with non-shrink grout conforming to Subsection 273.2.05B. Adapters requiring the use of grout for installation shall be anchored and finished using non-shrink grout conforming to Subsection 269.2.05B.

No channels shall be constructed in the base of storm drainage manholes. Storm drainage manhole bases shall function as sediment traps. Inverts on storm drainage manholes shall use the unfinished precast manhole base as a catchment basin with no channel.

269.3.03 Precast Concrete Manhole Risers - All lift holes shall be thoroughly wetted, then completely filled with mortar, and smoothed and pointed both inside and out to ensure watertightness. Preformed plastic or rubber gaskets shall be used on all sanitary manholes. Mortar shall be used on 24 inch extension rings above the cones. All mortar joints between precast elements shall be thoroughly wetted, then completely filled mortar. On proposed street grades, a minimum of one 24 inch precast riser will be required between the cone and the manhole cover frame. Watertight seals between the precast concrete manhole section(s) and the precast bases and eccentric cones shall be effected by placing a preformed plastic or rubber gasket between the precast sections, then filling the remaining voids in the joint seam, both inside and outside, with mortar.

269.3.04 Manhole, Grates, Frames and Covers shall be installed in such a manner as to prevent infiltration of surface or ground water between the frame and the concrete of the manhole section. All mortared manhole necks and all riser ring joints made with mortar shall be constructed using an approved commercial concrete bonding agent applied to all cured concrete surfaces being mortared. No joints, necks, or frames on manholes shall be mortared without an approved bonding agent. Rim elevations shall be adjusted with approved precast concrete grade rings and final asphalt paving graded rings.

269.4 MEASUREMENT AND PAYMENT:

269.4.01 Measurement for Storm Drainage Manholes Measurement for manholes will be made at the contract price, on a per each basis for each type and size shown for all depths.

269.4.02 Payment for Storm Drainage Manholes - will be at the contract price per each manhole for each type and size and shall constitute full compensation for all work and materials necessary to construct all water-tight manholes.

269.4.03 Measurement for Precast Concrete Vault and top– Measurement for the tide gate vault and top shall be at the contract price, on a per each basis, as shown in the plans and for complete installation.

269.4.04 Payment for Precast Concrete Vault and top – shall be made at the contract price. Payment shall constitute full compensation for supplying all labor, traffic control, equipment and materials, required for installing, construction and surface finishing required for the tide gate vault.

END OF SECTION 269

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DIVISION THREE – CONCRETE

SECTION 310 – CONCRETE FORMWORK

310.1 DESCRIPTION:

This item includes all work necessary to do all of the concrete formwork required to complete this project. Concrete formwork engineering, design and construction shall be the responsibility of the Contractor.

310.2 MATERIALS:

310.2.01 General - Concrete formwork shall conform to ACI 347-68 unless otherwise noted. The Contractor shall be responsible for adequate strength and safety of all formwork including false work, bracing and shoring.

310.2.02 Plywood forms shall be DFPA exterior "Plyform", or approved, Class I or Class II as required by concrete placement rate.

310.2.03 Form ties shall be plastic cone type, Burke, Bowman, Richmond, Dayton, JEF, or approved equal.

310.2.04 Form coating shall be stainless, non-grain raising, form sealer, Madden "N", or approved equal.

310.3 CONSTRUCTION:

310.3.01 General - Forms shall be constructed to the required lines, grades, dimensions and surfaces, all according to ACI 347-68.

310.3.02 Embedded items such as sleeves, inserts, anchors, conduits, etc. shall be properly located and placed. All embedded items required by other trades shall be coordinated with those trades.

310.3.03 Form Removal - The Contractor shall not remove formwork until concrete has sufficient strength to permit safe removal and adequate support of its own weight and imposed loads.

310.4 MEASUREMENT AND PAYMENT:

310.4.01 Measurement for concrete formwork - Measurement for concrete formwork shall be incidental to another bid item.

310.4.02 Payment for concrete formwork – there will be no separate payment for concrete formwork. The cost of which shall be incidental and included in another bid item.

END OF SECTION 310

SECTION 320 – CONCRETE REINFORCEMENT

320.1 DESCRIPTION:

This item includes all work necessary for the furnishing and placement of all materials for the reinforcing steel work for all concrete as shown on the plans.

320.2 MATERIALS:

320.2.01 Reinforcing bars shall be deformed as defined in ASTM specifications. All reinforcing bars shall be Grade 40, ASTM A615. Metal reinforcement at the time concrete is placed shall be free from mud, oil, loose mill scale, loose rust, or other coatings that adversely affect bonding capacity in the opinion of the Engineer.

320.3 CONSTRUCTION:

320.3.01 General - All requirements of concrete reinforcement not covered in these specifications or on the plans shall be in accordance with "Manual of Standard Practice", as published by the Concrete Reinforcing Steel Institute (CRSI). All hooks shall conform to bend dimensions defined as "Standard Hooks" in "Manual of Standard Practice", as published by CRSI. Reinforcing bars shall not be bent or straightened in a manner that will injure the material.

320.3.02 Placing - Reinforcing bars shall be accurately placed and shall be firmly and securely held in position by wiring at intersections with black annealed No. 16 gage wire and by using precast mortar blocks or metal chairs, spacers, metal hangers, supporting wires and other approved devices of sufficient strength to resist crushing under full load. Metal supports which extend to the surface of the concrete, except where shown on the plans, and wooden supports shall not be used. Placing bars on layers of fresh concrete as the work progresses and adjusting bars during this placing of concrete will not be permitted. Clearance between reinforcement and embedded pipe, etc., shall not be less than 12 times the maximum aggregate size. Minimum lap splices shall be 12 inches.

320.4 MEASUREMENT AND PAYMENT:

320.4.01 Measurement for concrete reinforcement - Measurement for concrete reinforcement shall be incidental to another bid item.

320.4.02 Payment for concrete reinforcement – there will be no separate payment for concrete reinforcement. The cost of which shall be incidental and included in another bid item.

END OF SECTION 320

SECTION 330 – CASTINPLACE CONCRETE

330.1 DESCRIPTION:

This item includes the furnishing of all labor, materials and tools necessary to do all the plain and reinforced concrete work, including finishing as shown on the plans.

330.2 MATERIALS:

330.2.01 Concrete shall be 6-sack transit-mixed concrete in accordance with ASTM C94. In no case will the use of concrete be permitted which has been mixed with water for more than 90 minutes prior to placing. Water content shall be controlled such that maximum slump by standard slump cone test, ASTM C143, shall not exceed 3 ½ inches.

330.3 CONSTRUCTION:

330.3.01 Placing - Concrete shall be placed in such a manner as to prevent segregation. Concrete shall be consolidated to the maximum practicable density, free from pockets of coarse aggregate and entrapped air, and closed snugly against all surfaces of forms and embedded materials. Consolidation of concrete in structures shall be by electric or pneumatic drive, immersion-type vibrators. Consolidation of all other concrete shall be by vibration, hand spading, rodding, or tamping. Mechanical vibration shall not be used to transport concrete.

330.3.02 Finishing of Slabs - After the concrete has been placed, consolidated, struck off, and leveled, the concrete shall not be worked further until ready for floating. Floating shall begin when the water sheen has disappeared and when the surface has stiffened sufficiently to permit the operation. All high and low spots shall be leveled during this operation to produce a true plane surface within 3 inch in 10 feet, as determined by a 10 foot straightedge placed anywhere on the surface. Immediately after the concrete has received a float finish, it shall be given a coarse transverse scored texture by drawing a broom or burlap belt across the surface.

330.3.03 Form tie holes and minor defects which are exposed to final view shall be filled with patching mortar mixed as dry as feasible, packed solid, and neatly finished to match adjoining surfaces.

330.3.04 Curing - Concrete shall be protected from premature drying, freezing, wash by drainage rains, snow, vandalism, and from traffic and mechanical injury. Formed concrete surfaces shall be cured by leaving the forms in place for at least 7 days after placing. Steel plates shall be furnished for protection as requested by the engineer. Flat concrete surfaces shall be water cured by spraying lightly with water as soon as the concrete has hardened enough to prevent damage from spraying, then covered completely with a plastic waterproof membrane. A curing compound approved by the Engineer and applied in accordance with manufacturer's instructions may be used in lieu of water curing. Precast concrete slabs shall not be moved for at least 28 days after casting.

330.3.05 Finishing of Walls – Minor defects on exposed vertical surfaces shall be repaired with patching mortar containing one part Portland Cement and two parts sand. Patching mortar shall be mixed as dry as feasible, packed solid, and neatly finished to match adjoining surfaces. Plastering will not be permitted on exposed surfaces. Honeycombed and other structurally defective concrete shall be removed and replaced at no expense to the Owner. While the concrete is still green, the exposed surfaces shall be broom finished as required to provide a uniform texture and smooth surface.

330.3.05 QUALITY ASSURANCE: Inspection of formwork and reinforcement by the Engineer will be required prior to concrete placing. The Contractor shall notify the Engineer 24 hours before each expected concrete pour.

330.4 MEASUREMENT AND PAYMENT:

330.4.01 Measurement for cast-in-place concrete – Measurement for cast-in-place concrete shall be incidental to another bid item.

330.4.02 Payment for cast-in-place concrete – there will be no separate payment for concrete formwork. The cost of which shall be incidental and included in another bid item.

END OF SECTION 320

SECTION 360 – GROUT

360.1 DESCRIPTION:

This item includes the furnishing of all labor, materials and tools necessary to perform all grouting and drypacking as shown on the plans.

360.2 MATERIALS:

360.2.01 Grout shall consist by volume of one part Portland cement and two parts of sand passing No. 16 U.S. standard sieve, of aluminum powder or other approved admixture which prevents settlement & shrinkage, and of water. For drypack only enough water shall be used to produce a mix that is at the point of becoming rubbery when solidly packed.

360.3 CONSTRUCTION:

360.3.01 Concrete areas to be in contact with the grout shall be cleaned of all loose or foreign matter that would in any way prevent bond between the mortar and the concrete surface and shall be kept thoroughly saturated with water prior to placing the grout. The grout shall be tightly packed in place and fill all the voids intended to be grouted or packed. After placing, all exposed surfaces of the grout shall be kept covered with a heavy thickness of burlap saturated with water for a period of three days, or shall be improperly cured or otherwise defective grout shall be removed and replaced.

360.4 MEASUREMENT AND PAYMENT:

360.4.01 Measurement for grout shall be incidental to another bid item.

360.4.02 Payment for grout – there will be no separate payment for concrete formwork. The cost of which shall be incidental and included in another bid item.

END OF SECTION 360

SECTION 361 – NON-SHRINK GROUT

361.1 DESCRIPTION:

This item includes the furnishing of all labor, materials and tools necessary to perform all grouting and drypacking as shown on the plans.

361.2 MATERIALS:

361.2.01A Non-Shrink grout shall be Sika 212, Euco N-S, Five-Star, or approved equal non-metallic cementitious commercial grout exhibiting zero shrinkage per ASTM C-827 and CRD-C-621. Grout shall not be amended with cement or sand and shall not be reconditioned with water after initial mixing. Unused grout shall be discarded after 20 minutes and shall not be used. Non-shrink grouts shall be placed or packed only with the use of an approved commercial concrete bonding agent applied to all cured concrete surfaces being grouted. The bonding agent shall be compatible with the brand of grout being used. Water shall not be used as a substitute for the commercial bonding agent.

361.3 CONSTRUCTION:

361.3.01 Concrete areas to be in contact with the grout shall be cleaned of all loose or foreign matter that would in any way prevent bond between the mortar and the concrete surface and shall be kept thoroughly saturated with water prior to placing the grout. The grout shall be tightly packed in place and fill all the voids intended to be grouted or packed. After placing, all exposed surfaces of the grout shall be kept covered with a heavy thickness of burlap saturated with water for a period of three days, or shall be improperly cured or otherwise defective grout shall be removed and replaced.

361.4 MEASUREMENT AND PAYMENT:

361.4.01 Measurement for non-shrink grout – shall be incidental to another bid item.

361.4.02 Payment for non-shrink grout – there will be no separate payment for non-shrink grout. The cost of which shall be incidental and included in another bid item.

END OF SECTION 361

END OF DIVISION 03

END OF TECHNICAL SPECIFICATIONS DOCUMENTS

NORTH COAST CIVIL DESIGN

5-13-25/FOR CITY OF WARRENTON

ESTIMATED CITY APPROVAL_BIDDING_CONSTRUCTION SCHEDULE		
1.	SEND PROJECT TO CITY COMMISSION PACKET (*Project due Com. Packet 7.5 days ahead of Commission meeting)	Noon - May 19th 2025
2.	CITY COMMISSION'S APPROVAL TO BID PROJECT	May 27th, 2025
3.	CD-TS/DOCUMENTATION AVAILABLE – ADVERTISE 2X (3 weeks)	DA June 5th & 19th DJC June 6th & 20th
4.	MAND. PRE-BID MEETING & SITE WALKTHRU @ 10:00 AM *(usually 7 days from adv)*	YES/NO-DATE
5.	**PROJECT BID CLOSING - OPEN** *(not < 5 days after last Ad (Tues-Thurs-2 PM)*	**Thursday, June 26, 2025**
6.	PROJECT TO COMMISSION FOR APPROVAL TO CONSTRUCT (1 week before Commission mtg)	Noon - Friday June 27, 2025
7.	COMMISSION APPROVAL TO CONSTRUCT	July 8, 2025
8.	ENGINEER SENDS OUT NOTICE OF INTENT TO AWARD W/BID TABS	July 9, 2025
9.	ISSUE NOTICE OF AWARD *(7 days after NIA) (WA 2 days after intent)*	July 15, 2025
10.	EXECUTE AGREEMENT *(Contractor 10 days + City 10 days/per ORS) – assume 20 days)*	August 4, 2025
11.	**ISSUE NOTICE TO PROCEED** *(MAY VARY-Coordinate w/City & Contractor)*	**August 14, 2025**
12.	PROOF ALL REQ. PAPERWORK TO CITY/BOLI *(before work begins, verify)*	August 15, 2025
13.	PRE-CONSTRUCTION CONFERENCE *(w/in 7 days of NTP)*	August 16, 2025
14.	START OF CONSTRUCTION *(within 10 days of NTP)*	August 25, 2025
15.	SUBSTANTIAL COMPLETION *(REMOVE HOLIDAYS = 1, Duration +/- 3.0 months, 92 days+/-)*	November 7, 2025
16.	**END OF ALL CONSTRUCTION - *PUNCH LIST*** (14 days+/-)	**November 21, 2025**

*Warrenton City Commission meets every 2nd and 4th Tuesday of the month

City Commission Agenda Memo

Meeting Date: May 27th, 2025
From: Kevin Gorman, Public Works Director
Subject: Resolution No. 2701 - Water Rates Adjustment

Summary:

The Budget Committee approved a 4% water rate increase for Fiscal Year 2025-2026. The attached resolution reflects this increase and the resulting changes to Exhibits A and B.

Recommendation/Suggested Motion:

"I move to conduct the first reading, by title, of Resolution No. 2701; Adopting Water Department Rates and Fees, Establishing July 1, 2025, as the Effective Date, and Repealing All Other Resolutions in Conflict."

Alternative:

None recommended

Fiscal Impact:

A 4% rate increase is expected to increase water fund revenues by approximately $179,289 for fiscal year ending June 30, 2026.

Attachments:

- Resolution No. 2701
- Exhibit A – Monthly Water Service Rates
- Exhibit B – Water Department Installation and Administrative Fees

Approved by City Manager: Esther Moberg

RESOLUTION NO. 2701
Introduced by All Commissioners

ADOPTING WATER DEPARTMENT RATES AND FEES; ESTABLISHING JULY 1, 2025, AS THE EFFECTIVE DATE, AND REPEALING ALL OTHER RESOLUTION IN CONFLICT

WHEREAS, the City of Warrenton Water Department operates as an enterprise fund, requiring that revenues fully cover operating expenses, capital needs, and debt service;

WHEREAS, the City of Warrenton must update its water rates to reflect increasing operational costs, capital improvements, and debt service obligations; and

WHEREAS, the Warrenton Budget Committee has approved a 4% increase in water rates as part of the Fiscal Year 2025-2026 budget process; and

NOW THEREFORE, The City Commission of the City of Warrenton resolves as follows:

Section 1: The Warrenton City Commission hereby adopts the attached schedule of water rates, listed in Exhibit A for all customers of the municipal water service.

Section 2. The Warrenton City Commission hereby adopts the attached schedule of installation and administrative fees, listed in Exhibit B, for all customers of the municipal water service.

Section 3. Any fees, charges, taxes, or penalties established by this resolution are hereby determined by the Warrenton City Commission to not be subject to the limitations of Section 11b, Article XI of the Oregon Constitution, and are adopted in accordance with ORS 310.145, Sections 1(b)(e) and 2.

Section 4. This resolution shall take effect July 1, 2025.

First reading: May 27, 2025
Second reading: June 10, 2025

ADOPTED by the City Commission of the City of Warrenton this 10th day of June 2025.

APPROVED

ATTEST

Henry A. Balensifer III, Mayor

Dawne Shaw, City Recorder

EXHIBIT A

City of Warrenton
Monthly Water Service Rates
Effective 7/1/25

Monthly water service rates for customers of the water system shall be a combination of the following:

Base Rate: Every account shall pay a base rate per month, according to the size of the meter, to include a consumption allowance of 2,000 gallons per month. All customers are subject to the monthly "ready-to-serve" base rate, regardless of consumption:

Base Rate		
Meter Size (inches)	**Inside City**	**Outside City**
3/4	$ 36.75	$ 55.07
1	$ 42.57	$ 63.84
1 1/2	$ 57.00	$ 85.49
2	$ 74.36	$ 111.53
3	$ 120.78	$ 181.14
4	$ 172.90	$ 259.32
6	$ 317.62	$ 476.46
8	$ 491.38	$ 737.08
10	$ 694.19	$ 1,041.29

Volume Rate: Every meter shall pay a volume rate, according to customer class, for every thousand gallons of metered consumption:

Volume Rate		
Range/Customer Class	**Inside City**	**Outside City**
0 to 2,000 gallons:		
Residential / Multi Family	$ -	$ -
Commercial	$ -	$ -
Industrial	$ -	$ -
Institutional	$ -	$ -
Government	$ -	$ -
City of Gearhart	$ -	$ -
2,001 gallons and over:		
Residential / Multi Family	$ 5.21	$ 7.86
Commercial	$ 7.81	$ 11.64
Industrial	$ 9.26	$ 13.94
Institutional	$ 6.34	$ 9.56
Government	$ 9.81	$ 14.70
City of Gearhart*	$ 9.81	$ 14.70

*Per agreement

EXHIBIT B

City of Warrenton

Water Department Installation and Administrative Fees

INSTALLATIONS

Meter Size	Equivalent Meter Rations	Capacity Allowance (GPD)	Connection Fee Base Rate*
¾"	1.0	690	$1,300.00
1"	1.7	1,173	$1,500.00
1 ½"	3.3	2,277	$1,148.00
2"	5.3	3,657	$1,844.00
3"	10.0	6,900	$3,480.00
4"	16.7	11,523	$5,812.00
6"	33.3	22,977	$11,588.00
8"	53.3	36,777	$18,548.00
10"	76.7	52,923	$26,692.00

*Actual costs for a full-service connection installation above connection fee base rate will be billed to the applicant after installation is complete.

INSTALLATION ADMINISTRATION FEES

**Connection for which the owner has provided all infrastructure improvements for complete installation other than the meter and tailpiece.

Each subdivision lot for single-family or manufactured dwelling (meter only by City)	¾" $500.00 ** 1" $600.00 **
Each living unit in a multi-family dwelling, accessory building, each separate unit in a commercial, industrial, or institutional structure unless each unit has its own separate water meter.	$178.00
Each RV space (in complex with a master meter)	$ 136.00
Administrative fees for Requests for Information on water availability not associated with a proposed project or pre-application.	$ 50.00

SERVICE CALL

Call requested by customer In-City	$ 20.00
Call requested by customer Outside-City	$ 30.00
Final Read In-City	$ 20.00
Final Read Outside-City	$ 30.00
Emergency After Hours Fee	$ 150.00

LATE CHARGES

Additional charge for late payment NOT RECEIVED by 5:00 pm on last business day of each month	$ 3.00
Door hanger penalty on Past-Due Accounts	$ 33.00
Shutoff penalty on Past-Due Accounts	$ 120.00

METER REMOVAL

Cancelled Account	$ 75.00

VACANCY/VACATION CHARGES

Temporary Billing Suspension Fee – Off	$ 100.00
Temporary Billing Suspension Fee – On	$ 100.00

MISCELLANEOUS CHARGES

Lien Searches	$ 15.00
Returned Payment Fee Payment	$ 35.00
Inaccessible to Read Penalty (daily)	$ 100.00
Unauthorized Use Penalty (each)	$ 1,000.00

HYDRANT METER CHARGES

Hydrant Meter Deposit	$ 500.00

City Commission Agenda Memo

Meeting Date: May 27th, 2025
From: Kevin Gorman, Public Works Director
Subject: Resolution No. 2702 - Sewer Rate Adjustment

Summary:

The Budget Committee approved a 8% sewer rate increase for Fiscal Year 2025-2026. The attached resolution reflects this increase and the resulting changes to Exhibit A.

Recommendation/Suggested Motion:

"I move to conduct the first reading, by title only, of Resolution No. 2702; Adopting Sewer Department Monthly Rates, Establishing July 1, 2025, as the Effective Date, and Repealing All Other Resolutions in Conflict."

Alternative:

None recommended

Fiscal Impact:

A 8% rate increase is expected to increase sewer fund revenues by approximately $261,417 for the fiscal year ending June 30, 2026.

Attachments:

- Resolution No. 2702
- Exhibit A – Monthly Sewer Service Rates

Approved by City Manager: Esther Moberg

RESOLUTION NO. 2702
Introduced by All Commissioners

ADOPTING SEWER DEPARTMENT MONTHLY RATES; ESTABLISHING JULY 1, 2025, AS THE EFFECTIVE DATE; AND REPEALING ALL OTHER RESOLUTIONS IN CONFLICT

WHEREAS, the City of Warrenton Sanitary Sewer Department is an enterprise fund and revenues must pay expenses; and

WHEREAS, the City of Warrenton provides sewer services to customers both inside and outside (Shoreline Sanitary district) its city limits; and

WHEREAS, the City of Warrenton needs to update its sewer rates to keep up with increasing costs and debt service; and

WHEREAS, the Warrenton Budget Committee approved a 8% Sewer Department Monthly Rate Increase during its Fiscal Year 2025-2026 Budget Process.

NOW THEREFORE, The City Commission of the City of Warrenton resolves as follows:

Section 1: The Warrenton City Commission hereby adopts the attached schedule of monthly sewer rates, listed in Exhibit A for all users of its municipal sewer service.

Section 2: This resolution shall take effect July 1, 2025.

First reading: May 27, 2025
Second reading: June 10, 2025

ADOPTED by the City Commission of the City of Warrenton this 10th day of June 2025.

APPROVED

_____
Henry A. Balensifer III, Mayor

ATTEST

_____
Dawne Shaw, City Recorder

EXHIBIT A

City of Warrenton
Monthly Sewer Service Rates
Effective 7/1/25

Monthly sewer service rates for customers of the sewer system shall be a combination of the following:

Base Rate: Every unit shall pay a base rate per month, according to customer class. All customers are subject to the monthly "ready-to-serve" base rate:

Base Rate		
Class		**Rate**
Single Unit	$	74.35
Metered	$	74.35
Bio-Oregon	$	214.71
Warrenton Deep Sea	$	81.03
Fort Stevens	$	6,111.87
Pacific Coast Seafoods	$	270.85
Point Adams	$	439.34
Warrenton Boat Yard-Industrial Waste Permitted Use	$	113.14
Shoreline Sanitary District	$	92.93

Volume Rate: Accounts classified as "metered" sewer customers shall pay a volume rate for every thousand gallons of metered water consumption:

Volume Rate		
Class		**Rate**
0 to 5,000 gallons:		
Metered	$	-
5,001 gallons and over:		
Metered	$	10.44

City Commission Agenda Memo

Meeting Date: May 27th, 2025
From: Kevin Gorman, Public Works Director
Subject: Resolution No. 2703 - Recycling Rate Adjustment

Summary:

Recology Western Oregon, the City's franchised residential recycling service provider, has notified the City of a 2.10% annual rate adjustment in accordance with the terms of the franchise agreement. The proposed increase is based on operational cost increases and CPI adjustments affecting Recology's service area.

The City's Sanitation Fund operates as an enterprise fund, which requires that user fees fully cover the cost of service. The rate adjustment ensures that the City can continue to meet its contractual obligations with Recology and maintain financial stability in the fund.

Recommendation/Suggested Motion:

"I move to conduct the first reading, by title, of Resolution No. 2703; Adopting New Rates and for Residential Recycling Services, Establishing July 1, 2025, as the Effective Date, and Repealing All Other Resolutions in Conflict."

Alternative:

None recommended

Fiscal Impact:

If rates are not adjusted, the City will not fully recover the cost of recycling services billed by Recology Western Oregon. The Sanitation Fund would be required to absorb the shortfall. The 2.10% increase ensures the City continues to break even on pass-through costs for residential recycling pickup.

Attachments:

- Resolution No. 2703
- Recology Western Oregon - Summary Rate Sheet

Approved by City Manager: Esther McEvoy

RESOLUTION NO. 2703
Introduced by All Commissioners

ADOPTING NEW RATES FOR RESIDENTIAL RECYCLING SERVICES; ESTABLISHING JULY 1, 2025, AS THE EFFECTIVE DATE; AND REPEALING ALL OTHER RESOLUTIONS IN CONFLICT

WHEREAS, Recology Western Oregon, the City's Residential Recycling Service Provider, is instituting an increase in the residential recycling service rates in the City of Warrenton; and

WHEREAS, the increase requires an adjustment in user rates to meet City of Warrenton recycling expenses in the City's Sanitation Fund; and

WHEREAS, the City of Warrenton Sanitation Department is an enterprise fund and revenues must pay expenses;

NOW THEREFORE, BE IT RESOLVED that the Warrenton City Commission does hereby adopt the following as its Residential Recycling Rates for the City of Warrenton:

Section 1: The Warrenton City Commission hereby adopts a rate increase for Residential Recycling as listed in Exhibit A for all users of its recycling service.

Section 2. The rate increase will be 2.10%, from $9.37 to $9.57 monthly for Residential Recycling Services every other week.

Section 3. This resolution shall take effect July 1, 2025.

First reading: May 27, 2025
Second reading: June 10, 2025

ADOPTED by the City Commission of the City of Warrenton this 10th day of June 2025.

APPROVED

ATTEST

Henry A. Balensifer III, Mayor

Dawne Shaw, City Recorder

RECOLOGY WESTERN OREGON **SUMMARY RATE SHEET**

WAR CITY OF WARRENTON **REVISED EFF. DATE: 7/1/2025**

CODE	DESCRIPTION	CURRENT RATE	INC %	INC $$	NEW RATE
COLLECTION SERVICES - BILLED TO CITY					**MONTHLY RATES**
90REC	90G COMMINGLED RECYCLING -CURB	$ 9.37	2.10%	$ 0.20	$ 9.57
90RES	90G COMMINGLE-SIDE*	$ 9.37	2.10%	$ 0.20	$ 9.57
1CBE	CARDBOARD CONTAINER - ALL SIZES	$ 45.97	2.10%	$ 0.97	$ 46.94
2GEW	2YD WASTE WATER EOW	$ 232.42	2.10%	$ 4.88	$ 237.30

*sideyard only available with City approval for customers with medical needs.

BULKY ITEM COLLECTION (SVC CHARGE + CHARGE PER ITEM)

RATES LISTED ARE FOR COLLECTION AT CURB. ADDITIONAL CHARGES MAY APPLY FOR RETRIEVAL. **RATE PER EACH**

APF	REFRIGERATOR/FREEZER	$ 57.26	2.10%	$ 1.20	$ 58.46
APPL	APPLIANCE	$ 12.72	2.10%	$ 0.27	$ 12.99
FURN	FURNITURE CHARGE	$ 19.09	2.10%	$ 0.40	$ 19.49
IRSC	IN ROUTE SERVICE CHARGE	$ 40.32	2.10%	$ 0.85	$ 41.17
SC	SERVICE CHARGE	$ 161.30	2.10%	$ 3.39	$ 164.69

RELATED FEES **RATE PER EACH**

CORDF	CONTAINER RE-DELIVERY FEE	$ 161.30	2.10%	$ 3.39	$ 164.69

Note: Re-Delivery fees apply for resume service after suspend.

RATE PER EACH

CCF	CART CLEANING FEE	$ 27.71	2.10%	$ 0.58	$ 28.29
CRF	CART REPLACEMENT FEE	$ 72.05	2.10%	$ 1.51	$ 73.56

Note: Replacement fee is used for loss/damage beyond normal wear and tear.

RATE PER EACH

WLI	WIND LATCH INSTALLATION	No charge for Warrenton residents			
RF	REINSTATEMENT FEE	$ 15.00	0.00%	$ -	$ 15.00
NSFCF	RETURNED CHECK FEE	$ 25.00	0.00%	$ -	$ 25.00

FRONT-LOAD CONTAINER SERVICE

(City provides service for container sizes 3yds & under, unless City directs RWO to service)

1 YARD CONTAINERS **MONTHLY RATES**

1GE	1YD TRASH EOW	$ 123.06	2.10%	$ 2.58	$ 125.64
1XP	EXTRA PICK UP-1YD TRASH	$ 45.27	2.10%	$ 0.95	$ 46.22

1.5 YARD CONTAINERS **MONTHLY RATES**

1HXP	EXTRA PICK UP-1.5YD TRASH	$ 58.26	2.10%	$ 1.22	$ 59.48

2 YARD CONTAINERS **MONTHLY RATES**

2GW	2YD TRASH	$ 314.07	2.10%	$ 6.60	$ 320.67
2GE	2YD TRASH EOW	$ 174.02	2.10%	$ 3.65	$ 177.67
2GM	2YD TRASH MONTHLY	$ 98.64	2.10%	$ 2.07	$ 100.71
2OC	ON CALL-2YD TRASH	$ 71.15	2.10%	$ 1.49	$ 72.64
2XP	EXTRA PICK UP-2YD TRASH	$ 71.15	2.10%	$ 1.49	$ 72.64

3 YARD CONTAINERS **MONTHLY RATES**

3GW	3YD TRASH	$ 415.94	2.10%	$ 8.73	$ 424.67
3GE	3YD TRASH EOW	$ 224.94	2.10%	$ 4.72	$ 229.66
3GM	3YD TRASH MONTHLY	$ 122.14	2.10%	$ 2.56	$ 124.70
3OC	ON CALL-3YD TRASH	$ 97.03	2.10%	$ 2.04	$ 99.07
3XP	EXTRA PICK UP-3YD TRASH	$ 97.03	2.10%	$ 2.04	$ 99.07

RECOLOGY WESTERN OREGON **SUMMARY RATE SHEET**

WAR **CITY OF WARRENTON** **REVISED EFF. DATE: 7/1/2025**

CODE	DESCRIPTION	CURRENT RATE	INC %	INC $$	NEW RATE
4 YARD CONTAINERS					**MONTHLY RATES**
4GW	4YD TRASH	$ 509.27	2.10%	$ 10.69	$ 519.96
4GE	4YD TRASH EOW	$ 271.59	2.10%	$ 5.70	$ 277.29
4GM	4YD TRASH MONTHLY	$ 143.72	2.10%	$ 3.02	$ 146.74
4OC	ON CALL-4YD TRASH	$ 120.75	2.10%	$ 2.54	$ 123.29
4XP	EXTRA PICK UP-4YD TRASH	$ 120.75	2.10%	$ 2.54	$ 123.29
5 YARD CONTAINERS					**MONTHLY RATES**
5GW	5YD TRASH	$ 611.12	2.10%	$ 12.83	$ 623.95
5GE	5YD TRASH EOW	$ 322.53	2.10%	$ 6.77	$ 329.30
5GM	5YD TRASH MONTHLY	$ 167.25	2.10%	$ 3.51	$ 170.76
5OC	ON CALL-5YD TRASH	$ 146.61	2.10%	$ 3.08	$ 149.69
5XP	EXTRA PICK UP-5YD TRASH	$ 146.61	2.10%	$ 3.08	$ 149.69
6 YARD CONTAINERS					**MONTHLY RATES**
6GW	6YD TRASH	$ 713.01	2.10%	$ 14.97	$ 727.98
6GE	6YD TRASH EOW	$ 373.46	2.10%	$ 7.84	$ 381.30
6GM	6YD TRASH MONTHLY	$ 190.78	2.10%	$ 4.01	$ 194.79
6OC	ON CALL-6YD TRASH	$ 172.51	2.10%	$ 3.62	$ 176.13
6XP	EXTRA PICK UP-6YD TRASH	$ 172.51	2.10%	$ 3.62	$ 176.13
8 YARD CONTAINERS					**No new customers at this rate - safety issues**
8GW	8YD TRASH	$ 831.83	2.10%	$ 17.47	$ 849.30
8GE	8YD TRASH EOW	$ 432.89	2.10%	$ 9.09	$ 441.98
8GM	8YD TRASH MONTHLY	$ 218.22	2.10%	$ 4.58	$ 222.80
8OC	ON CALL-8YD TRASH	$ 202.69	2.10%	$ 4.26	$ 206.95
8XP	EXTRA PICK UP-8YD TRASH	$ 202.69	2.10%	$ 4.26	$ 206.95
CONTAINER MONTHLY RENT (CHARGED TO WILL-CALL CUSTOMERS, SAME FOR ALL SIZES)					
RNT1	1YD RENT - TRASH	$ 22.17	2.10%	$ 0.47	$ 22.64
RNT4	4YD RENT - TRASH	$ 22.17	2.10%	$ 0.47	$ 22.64
RNT5	5YD RENT - TRASH	$ 22.17	2.10%	$ 0.47	$ 22.64
RNT6	6YD RENT - TRASH	$ 22.17	2.10%	$ 0.47	$ 22.64
RNT8	8YD RENT - TRASH	$ 22.17	2.10%	$ 0.47	$ 22.64

FRONT-LOAD COMPACTOR RATE FACTORS - For all compacted material, including pre-compacted waste.

Compactor Rating	4 : 1	3 : 1	2 : 1
Factor applied to container rate of same size	1.5	1.3	1.12

MEDICAL WASTE COLLECTION SERVICES					RATE PER EACH
M4HSC	4.7 QT SHARPS CONTAINER	$ 23.20	2.10%	$ 0.49	$ 23.69
M10SC	10 QT SHARPS CONTAINER	$ 26.87	2.10%	$ 0.56	$ 27.43
M23SC	23 QT SHARPS CONTAINER	$ 51.90	2.10%	$ 1.09	$ 52.99
9CDBC	9GAL CONFIDENTIAL DOCUMENT BOX	$ 37.22	2.10%	$ 0.78	$ 38.00
MLGPB	PATHOLOGY BOX	$ 56.53	2.10%	$ 1.19	$ 57.72
MW17G	MEDICAL WASTE 17 GAL	$ 24.95	2.10%	$ 0.52	$ 25.47
MW31G	MEDICAL WASTE 31 GAL	$ 32.15	2.10%	$ 0.68	$ 32.83
MW43G	MEDICAL WASTE 43 GAL	$ 38.80	2.10%	$ 0.81	$ 39.61
MOWPT	OVERWEIGHT MEDICAL TUB	$ 22.17	2.10%	$ 0.47	$ 22.64

Note: Additional fees may apply for overweight tubs. Improperly prepared materials cannot be collected.

RECOLOGY WESTERN OREGON **SUMMARY RATE SHEET**

WAR CITY OF WARRENTON **REVISED EFF. DATE: 7/1/2025**

CODE	DESCRIPTION	CURRENT RATE	INC %	INC $$	NEW RATE

RECOLOGY WESTERN OREGON **SUMMARY RATE SHEET**

WAR **CITY OF WARRENTON** **REVISED EFF. DATE: 7/1/2025**

DEBRIS BOX SERVICES

CODE	DESCRIPTION	CURRENT RATE	INC %	INC $$	NEW RATE
SET HAUL FEES (BASED ON AVERAGE TRUCK TIMES)					**RATE PER HAUL**
DEL	DELIVERY CHARGE	$ 80.64	2.10%	$ 1.69	$ 82.33
10HD	RECYCLE HAULS TO TRAILS END	$ 120.96	2.10%	$ 2.54	$ 123.50
10HG	10 YD TRASH BOX HAUL	$ 161.29	2.10%	$ 3.39	$ 164.68
20HG	20 YD TRASH BOX HAUL	$ 161.29	2.10%	$ 3.39	$ 164.68
30HG	30 YD TRASH BOX HAUL	$ 161.29	2.10%	$ 3.39	$ 164.68
47HG	47 YD TRASH BOX HAUL	$ 161.29	2.10%	$ 3.39	$ 164.68
40CG	COMPACTOR HAUL FEE (ALL SIZES)	$ 192.57	2.10%	$ 4.04	$ 196.61
DEBRIS BOX DISPOSAL FEES ($$/TON)					**RATE PER TON**
DFDM	DISPOSAL FEE - DEMOLITION	$ 131.87	2.10%	$ 2.77	$ 134.64
DFG	DISPOSAL FEE - GARBAGE	$ 130.42	2.10%	$ 2.74	$ 133.16
DFYD	DISPOSAL FEE - YARD DEBRIS	$ 22.17	2.10%	$ 0.47	$ 22.64

Note: Recycling ton fees will be equal to or less than trash fees, based on current market pricing.

RELATED FEES					**RATE PER DAY**
RENTD	DAILY RENTAL FEE	$ 16.11	2.10%	$ 0.34	$ 16.45

Note: Daily Rent applies after 48 hours, excluding evenings and weekends.

					RATE PER MONTH
RENTM	MONTHLY RENTAL FEE	$ 160.65	2.10%	$ 3.37	$ 164.02

Note: Monthly rent applies for customers who keep a box for a year or longer.

					RATE PER HOUR
TIME	TRUCK TIME FEE	$ 161.29	2.10%	$ 3.39	$ 164.68
1T1E	1 TRUCK - 1 EMPLOYEE	$ 161.30	2.10%	$ 3.39	$ 164.69
1T2E	1 TRUCK - 2 EMPLOYEES	$ 241.90	2.10%	$ 5.08	$ 246.98

Note: Hourly Truck Time is used for hauls to destinations outside our normal operating areas.

BULKY ITEMS - DEBRIS BOX

STARDARD FEES APPLY FOR THESE ITEMS IF DECLARED & SEPARATED ACCORDING TO INSTRUCTIONS.

ADDITIONAL FEES MAY APPLY FOR ITEMS FOUND IN LOADS.					**RATE PER EACH**
TOFFR	TIRE CHARGE NO RIM	$ 5.09	2.10%	$ 0.11	$ 5.20
TONR	TIRE CHARGE ON RIM	$ 10.18	2.10%	$ 0.21	$ 10.39
APPL	APPLIANCE	$ 12.72	2.10%	$ 0.27	$ 12.99
APF	REFRIGERATOR/FREEZER	$ 57.26	2.10%	$ 1.20	$ 58.46

Finance Charges (0.75% monthly, 9% annually) will be assessed on any past due amount (excluding amounts in dispute over billing or service issues).
Billing Terms: Commercial Accounts are billed on a monthly basis.