



AGENDA

CITY COMMISSION OF THE CITY OF WARRENTON REGULAR MEETING

July 28, 2020 – 6:00 P.M.

Warrenton City Commission Chambers – 225 South Main Avenue
Warrenton, OR 97146

Public Meetings will be conducted in the Commission Chambers with a limited seating arrangement. To adhere to social distancing recommendations, meetings will now also be audio and video live streamed. Go to <https://www.ci.warrenton.or.us/administration/page/live-stream-public-meetings> for connection instructions.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. CONSENT CALENDAR

- A. Fire Department Activity Report – June 2020
- B. Police Department Monthly Statistics – June 2020
- C. Warrenton Landfill Closure Permit - Renewal Letter

4. COMMISSIONER REPORTS

5. PUBLIC COMMENT

At this time, anyone wishing to address the City Commission concerning items of interest may do so. The person addressing the Commission must email their comments to the City Recorder, at cityrecorder@ci.warrenton.or.us, no later than 5:00 p.m. the day of the meeting. The Commission reserves the right to delay any action, if required, until such time as they are fully informed on a matter.

6. PUBLIC HEARINGS – None

7. BUSINESS ITEMS

- A. Consideration of Second Reading of Ordinance No. 1241; Outdoor Burning/Burn Permits

- B. Consideration of Approval to Advertise to Bid – SE Anchor (Harbor – SE 3rd Street) Water Main Replacement Project
- C. Consideration of Approval to Advertise to Bid – 2020 Pavement Management
- D. Consideration of Approval to Advertise to Bid – SW Alder (SW 2nd Street to SW 1st Street)
- E. Consideration of Emergency Declaration Extension; Resolution No. 2574

8. DISCUSSION ITEMS

- A. HWY 101 – HWY 104 – Perkins Lane Intersection Improvements
- B. League of Oregon Cities 2021 Legislative Agenda

9. GOOD OF THE ORDER

10. EXECUTIVE SESSION

Under the authority of ORS 192.660(2)(d); *to conduct deliberations with persons designated by the governing body to carry on labor negotiations.*

11. 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.



Warrenton Fire Department

P.O. Box 250 Warrenton, OR 97146-0250 (503) 861-2494 Fax 503/861-2351
225 S. Main Warrenton, Or 97146-0250

STAFF REPORT

Date: July 7, 2020
To: The Members of the Warrenton City Commission
Linda Engbretson, City Manager
From: Brian Alsbury, Fire Chief
Re: Fire Department Activity Report for **June 2020**

June 2020 Emergency Response Activity -

The Warrenton Fire Department responded to **84** emergency calls during the month of June 2020. The call volume is below average for the month of June, I still believe that this reduction in calls for service is an effect from the COVID-19 pandemic.

68-Emergency Medical Calls (includes Motor Vehicle Crashes) 82.93%

2-Fires (Mutual Aid) 2.44%

4-Service Calls 4.88%

4-Good Intent Calls 4.88%

6-False Alarm and False Calls 7.32%

An average of 6 volunteers responded per call throughout the month. During the month of June-57 of the calls were during daytime hours between 6:00 a.m. and 6:00 p.m. The other 27 calls were during the night, between the hours of 6:00 p.m. and 6:00 a.m.

On June 30th, the department was able to promote Training Officer John Shepherd and Firefighter Scott Watson to the rank of Division Chiefs. Division Chief of Training, John Shepherd and Division Chief of Operations and Recruitment, Scott Watson, are both long overdue appointments. Having Division Chiefs will give the Fire Chief the ability to focus on the future of the department and give him the ability to spend more time on projects, programs, and general day to day administrative duties.

June Training –

The department held 4 regularly scheduled Wednesday evening training sessions during the month of June, with an average attendance of 18 volunteers per drill. This time last year we had an average of 19 volunteers per regular drill. The department conducted a live fire exercise this

month. The house was donated to the department for the use of live fire training and the house provided the department with valuable training.
Department volunteers spent 414.5 hours training in the month of June, estimate of 20 hours per firefighter.

Please see attachments, they include:

EMERGENCY REPORTING REPORTS

1. Breakdown by Major Incidents for Date Range
2. Detailed Breakdown by Incident Type
3. Incidents per Shift for Date Range
 - a. A-shift 0600-1800hrs
 - b. B-shift 1800-0600hrs

Warrenton Fire Department

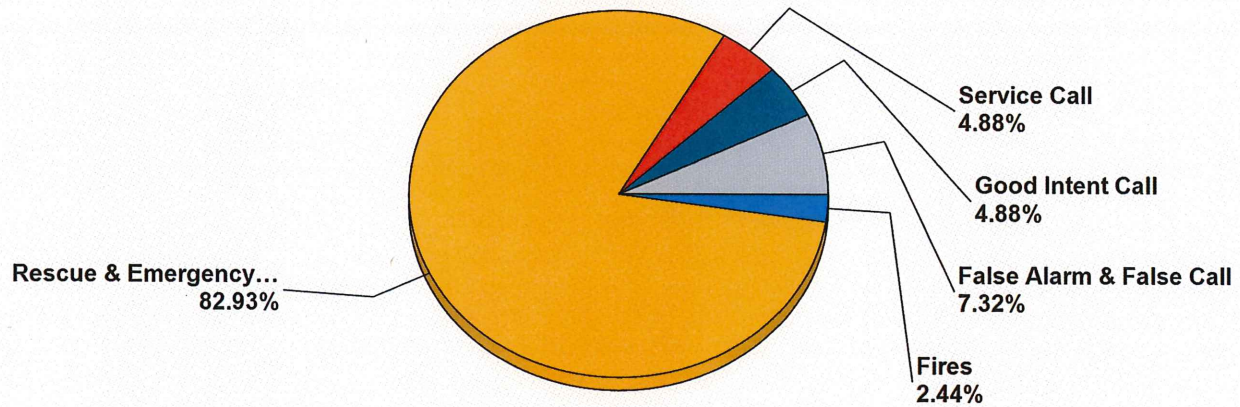
Warrenton, OR

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Breakdown by Major Incident Types for Date Range

Zone(s): All Zones | Start Date: 06/01/2020 | End Date: 06/30/2020



MAJOR INCIDENT TYPE	# INCIDENTS	% of TOTAL
Fires	2	2.44%
Rescue & Emergency Medical Service	68	82.93%
Service Call	4	4.88%
Good Intent Call	4	4.88%
False Alarm & False Call	6	7.32%
TOTAL	84	102.45%

Only REVIEWED and/or LOCKED IMPORTED incidents are included. Summary results for a major incident type are not displayed if the count is zero.



Detailed Breakdown by Incident Type

INCIDENT TYPE	# INCIDENTS	% of TOTAL
111 - Building fire	1	1.19%
142 - Brush or brush-and-grass mixture fire	1	1.19%
311 - Medical assist, assist EMS crew	3	3.57%
320 - Emergency medical service, other	50	59.52%
321 - EMS call, excluding vehicle accident with injury	8	9.52%
323 - Motor vehicle/pedestrian accident (MV Ped)	1	1.19%
324 - Motor vehicle accident with no injuries.	5	5.95%
342 - Search for person in water	1	1.19%
510 - Person in distress, other	1	1.19%
550 - Public service assistance, other	2	2.38%
561 - Unauthorized burning	1	1.19%
600 - Good intent call, other	1	1.19%
622 - No incident found on arrival at dispatch address	2	2.38%
651 - Smoke scare, odor of smoke	1	1.19%
700 - False alarm or false call, other	1	1.19%
714 - Central station, malicious false alarm	2	2.38%
715 - Local alarm system, malicious false alarm	1	1.19%
740 - Unintentional transmission of alarm, other	1	1.19%
745 - Alarm system activation, no fire - unintentional	1	1.19%
TOTAL INCIDENTS:	84	99.98%

Only REVIEWED and/or LOCKED IMPORTED incidents are included. Summary results for a major incident type are not displayed if the count is zero.



Warrenton Fire Department

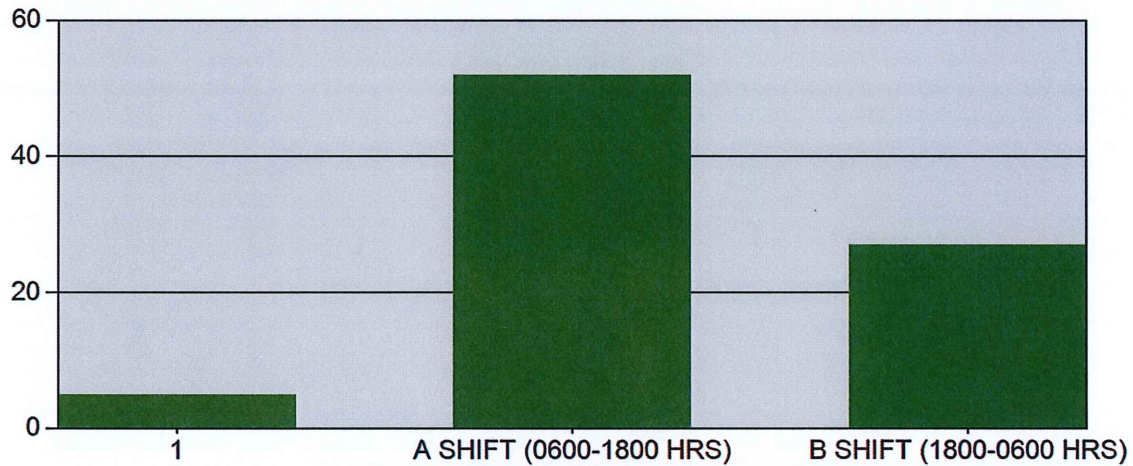
Warrenton, OR

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Incidents by Shift for Date Range

Start Date: 06/01/2020 | End Date: 06/30/2020



SHIFT	# INCIDENTS
	5
A SHIFT (0600-1800 HRS)	52
B SHIFT (1800-0600 HRS)	27
TOTAL:	84

Incidents with multiple EXPOSURES, with distinct stations, may create a slight difference between the report total and total number of actual incidents for the DATE RANGE provided. The totals reflect the # INCIDENTS each STATION was assigned. Only REVIEWED incidents included.





WARRENTON POLICE DEPARTMENT

JUNE 2020 STATISTICS

JULY 28, 2020



June Statistics (% changes are compared to 2019)							
Category	2020	2019	%Chg	2018	%Chg	2017	%Chg
Calls for Service	622	693	-10%	870	-29%	666	-7%
Incident Reports	217	189	15%	238	-9%	181	20%
Arrests/Citations	131	165	-21%	174	-25%	94	39%
Traffic Events	130	182	-29%	266	-51%	173	-25%
DUII Calls	2	1	100%	2	0%	5	-60%
Traffic Accidents	25	16	56%	22	14%	15	67%
Property Crimes	90	99	-9%	109	-17%	64	41%
Disturbances	51	98	-48%	74	-31%	72	-29%
Drug/Narcotics Calls	8	9	-11%	6	33%	8	0%
Animal Complaints	19	31	-39%	32	-41%	30	-37%
Officer O.T.	223	192.9	16%	146	53%	217	3%
Reserve Hours	7.5	27.5	-73%	7	7%	0	100%

Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Calls for Service	645	593	577	529	618	622			
Incident Reports	192	166	146	170	208	217			
Arrests/Citations	132	122	166	168	171	131			
Traffic Events	129	176	95	84	82	130			
DUII Calls	2	3	3	3	4	2			
Traffic Accidents	18	14	10	14	18	25			
Property Crimes	94	104	101	95	81	90			
Disturbances	85	80	66	98	63	51			
Drug/Narcotics Calls	4	4	12	4	3	8			
Animal Complaints	21	15	12	16	25	19			
Officer O.T.	255.07	241	215.73	117.15	187.73	223			
Reserve Hours	0	0	0	0	5	7.5			

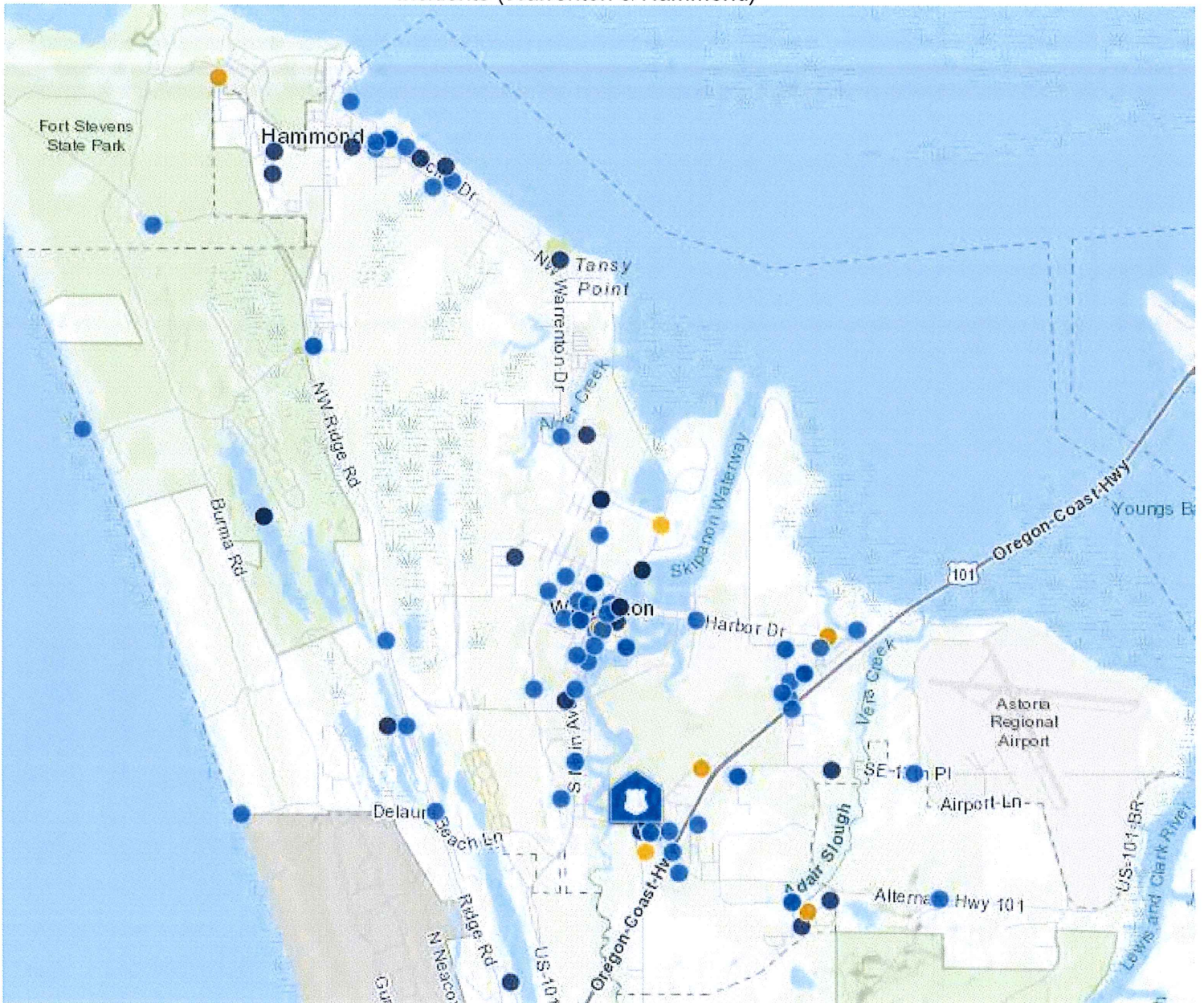
Oct	Nov	Dec	2020 YTD	2020 Estimate	2019	2020 v 2019	2018	2020 v. 2018	2017	2020 v. 2017
			3584	7168	9106	-21%	9332	-23%	7956	-10%
			1099	2198	2420	-9%	2551	-14%	2028	8%
			890	1780	2095	-15%	1731	3%	1098	62%
			696	1392	2461	-43%	3101	-55%	2094	-34%
			17	34	46	-26%	55	-38%	52	-35%
			99	198	260	-24%	271	-27%	226	-12%
			565	1130	1254	-10%	1187	-5%	902	25%
			443	886	1082	-18%	953	-7%	778	14%
			35	70	87	-20%	108	-35%	79	-11%
			108	216	328	-34%	325	-34%	301	-28%
			1239.7	2479.36	2194.5	13%	1731.7	43%	2400.3	3%
			12.5	25	259.5	-90%	359.5	-93%	290	-91%

Homeless Incidents	2020	2019*	* June 29th & 30th Only		
Code 40 (Normal)	15	5			
Code 41 (Aggressive)	0	0			

The following is a graphic representation of statistics for **June 2020** using our **CityProject** membership (formerly [CrimeReports.com](https://www.cityproject.com/)). The “Dots” represent a location of a call and if you would zoom in on the map you would 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, you can zoom in on each incident for more details.

<div> <div> <div>Assault</div> <div>Assault</div> <div>Assault with Deadly Weapon</div> </div> <div> <div>Sexual Offense</div> <div>Sexual Assault</div> <div>Sexual Offense</div> <div>Other Sexual Offense</div> </div> <div> <div>Other Violent Offense</div> <div>Homicide</div> <div>Kidnapping</div> <div>Robbery</div> </div> </div>	<div> <div>Property & Theft</div> <div> <div>Property Crime</div> <div>Breaking & Entering</div> <div>Property Crime Commercial</div> <div>Property Crime Residential</div> <div>Other Property Crime</div> </div> <div> <div>Theft</div> <div>Theft from Vehicle</div> <div>Theft of Vehicle</div> <div>Other Theft</div> </div> </div>	<div> <div>Disorder/Disturbance</div> <div> <div>Disorder</div> <div>Disorder</div> </div> <div> <div>Drugs</div> <div>Drugs</div> </div> <div> <div>Liquor</div> <div>Liquor</div> </div> <div> <div>Quality of Life</div> <div>Quality of Life</div> </div> </div>	<div> <div>911 or Other</div> <div> <div>Community Events</div> <div>Community Policing</div> <div>Proactive Policing</div> </div> <div> <div>Emergency</div> <div>Emergency</div> </div> <div> <div>Fire</div> <div>Fire</div> </div> <div> <div>Police Calls</div> </div> </div>
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Incidents (Warrenton & Hammond)





AGENDA MEMORANDUM

TO: The Honorable Mayor and Warrenton City Commission
FROM: Linda Engbretson, City Manager
DATE: For the Agenda of July 28, 2020
SUBJ: Consent Calendar – Warrenton Landfill Permit Renewal

SUMMARY

The City of Warrenton has a landfill permit from DEQ, Solid Waste Disposal Site Closure Permit #120 – for the old city dump located at Ridge Road and SW 9th (at the soccer fields). The landfill was closed in 1986. The post-closure rules are set for 30 years, after which time DEQ may extend the monitoring period beyond the 30 years if they feel a hazard could exist. DEQ did extend our post-closure monitoring, and our current permit ends in 2020. I believe they are recommending another 10 years. The City's consultant, Jon Sprecher, has noted a couple of new requirements for permit renewal, including a letter of support for the site from the governing body. The letter is attached. I have also attached, for your information, a copy of the last permit renewal, dated 2010.

RECOMMENDATION/SUGGESTED MOTION

Approval of the Consent Calendar is recommended.

ALTERNATIVE

N/A

FISCAL IMPACT

N/A



July 28, 2020

State of Oregon Department of Environmental Quality
Northwest Region
Environmental Partnerships
700 NE Multnomah St., Suite 600
Portland, OR 97232

RE: Warrenton Landfill Closure Permit - Renewal

The Warrenton City Commission approves the submittal of the solid waste closure permit to DEQ for the former Warrenton Landfill located beneath the soccer fields on Ridge Road.

Sincerely,

Henry Balensifer
Mayor



Oregon

Theodore R. Kulongoski, Governor

Department of Environmental Quality

Northwest Region

2020 SW 4th Ave, Suite 400

Portland, OR 97201

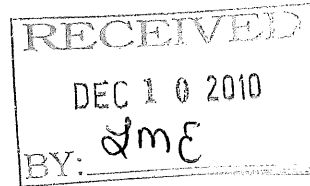
(503) 229-5263

FAX (503) 229-6945

OTRS 1-800-735-2900

December 8, 2010

Bob Maxfield
City of Warrenton
P.O. Box 250
Warrenton, OR 97146



Re: SWDP #120
Warrenton Landfill
Clatsop County
Notification of Permit Issuance

Dear Bob Maxfield:

The Oregon Department of Environmental Quality has issued Solid Waste Disposal Site Closure Permit #120 to the City of Warrenton. Attached is your copy of the final permit. There are a few minor changes from the version that was released for public comment. In particular, Section 9.3 is new. Please take time to familiarize yourself with all of the permit conditions.

If you are dissatisfied with the conditions or limitations of this permit, you may request a hearing before the commission or its authorized representative. Such a request for hearing shall be made in writing to the director within 20 days of the date of mailing of the notification of issuance of the permit.

DEQ received one comment during the public comment period. DEQ's response to this comment is summarized in the attached Permit Evaluation Report.

Section 16 of the permit summarizes many of the due dates contained in the permit. Note especially the following:

- **By January 7, 2011**, submit proof that the deed has been modified, per Section 8.7 of the permit.
- **By March 9, 2011**, submit one copy of the final Post-Closure Plan and Environmental Monitoring Plan, per Section 7.4 and 11.2 of the permit, respectively.

If you have any questions or comments, please contact Lorell Miller at (503) 229-5157 or miller.lorell@deq.or.state.us.

Sincerely,

Audrey O'Brien
Manager, Environmental Partnerships Section

Enclosures: Permit #120 and Permit Evaluation Report

ec: Lorell Miller, DEQ Senior Environmental Engineer (miller.lorell@deq.state.or.us)
Bill Mason, DEQ hydrogeologist (mason.bill@deq.state.or.us)
Jonathan Sprecher, consultant (sprecher@bendbroadband.com)



State of Oregon
Department of
Environmental
Quality

Permit Number: 120
Expiration Date: December 7, 2020
Page 1 of 18

**SOLID WASTE DISPOSAL SITE CLOSURE PERMIT:
Municipal Solid Waste Landfill**

**Oregon Department of Environmental Quality
2020 SW Fourth Avenue, Suite 400
Portland, OR 97201
Telephone: (503) 229-5353**

**Issued in accordance with the provisions of ORS Chapter 459 and
subject to the land use compatibility statement referenced below.**

ISSUED TO:

City of Warrenton
PO Box 250
Warrenton, OR 97146
503-861-0912

FACILITY NAME AND LOCATION:

Warrenton Landfill
Ridge Road and SW 9th St.
Sec 20 T8N R10W, W.M.

Clatsop County

OWNER:

City of Warrenton
PO Box 250
Warrenton, OR 97146
503-861-0912

OPERATOR:

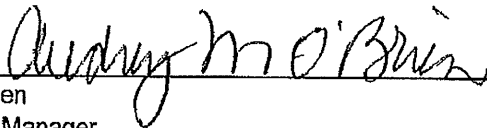
City of Warrenton
PO Box 250
Warrenton, OR 97146
503-861-0912

ISSUED IN RESPONSE TO:

- a solid waste permit renewal application received June 1, 2009
- a Land Use Compatibility Statement from: City of Warrenton, dated May 26, 2009

The determination to issue this permit is based on findings and technical information included in the permit record.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY


Audrey O'Brien
Solid Waste Manager
Northwest Region

December 9, 2010
Date

Permitted Activities

Until this permit expires or is modified or revoked, the permittee is authorized to operate and maintain a solid waste land disposal site in conformance with the requirements, limitations, and conditions set forth in this document including all attachments.

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Introduction This document is a solid waste permit issued by the Oregon Department of Environmental Quality in accordance with Oregon Revised Statutes (ORS) 459 and Oregon Administrative Rules (OAR), Chapter 340.

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PERMIT ADMINISTRATION

1.0 PERMIT ISSUANCE

1.1	In this section	This section describes the administrative aspects of permit issuance, including the following information: <ul style="list-style-type: none">• Permittee• Permit number• Permit term• Facility type• Facility owner/operator• Basis for permit issuance• Definitions• Legal control of property	
1.2	Permittee	This permit is issued to the City of Warrenton.	
1.3	Permit number	This permit will be referred to as Solid Waste Permit Number 120.	
1.4	Permit term	The permit is issued on the date it is signed. The permit's expiration date is December 7, 2020.	
1.5	Facility type	The facility is permitted as a closed municipal solid waste landfill.	
1.6	Facility owner/operator	The owner of this facility is: City of Warrenton PO Box 250 Warrenton, OR 97146 503-861-0912	The operator of this facility is: City of Warrenton PO Box 250 Warrenton, OR 97146 503-861-0912
1.7	Basis for permit issuance	This permit is issued based upon the following documents submitted by the permittee: <ul style="list-style-type: none">• solid waste permit application received June 1, 2009• Land Use Compatibility Statement from the City of Warrenton dated May 26, 2009	
1.8	Definitions	Unless otherwise specified, all terms are as defined in OAR 340-93-0030.	
1.9	Legal control of property	The permittee shall at all times maintain legal control of the disposal site property; including maintaining a current permit, contract or agreement that allows the operation of the facility if the site is not owned by the permittee.	

2.0 DISCLAIMERS

2.1	In this section	This section describes disclaimer information for DEQ, including: <ul style="list-style-type: none">• Property rights• DEQ liability
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2.1	Property rights	The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights.
2.2	DEQ liability	DEQ, its officers, agents, or employees do not sustain any liability on account of the issuance of this permit or on account of the construction, maintenance, or operation of facilities pursuant to this permit.
3.0	AUTHORITY	
3.1	In this section	<p>This section describes the authority of DEQ to issue this permit, including:</p> <ul style="list-style-type: none">• Ten year permit• Documents superseded• Binding nature• Other compliance• Penalties• DEQ access to disposal site
3.2	Ten year permit	This permit is issued for a maximum of ten (10) years as authorized by Oregon Revised Statutes 459.245 (2).
3.3	Documents superseded	This document is the primary solid waste permit for the facility, superseding all other solid waste permits issued for Warrenton Landfill by DEQ.
3.4	Permittee responsibility and liability	Conditions of this permit are binding upon the permittee. The permittee must conduct all facility activities in compliance with the provisions of this permit. The permittee is liable for all acts and omissions of the permittee's contractors and agents in carrying out the operations and other responsibilities pursuant to this permit.
3.5	Other compliance	<p>The issuance of this permit does not relieve the permittee from the responsibility to comply with all other applicable federal, state, or local laws or regulations, including the following solid waste requirements, and any future updates or additions to these requirements:</p> <ul style="list-style-type: none">• solid waste renewal permit application received June 1, 2009• Oregon Revised Statutes, Chapters 459 and 459A• Oregon Administrative Rules Chapter 340• any documents submitted by the permittee and approved by DEQ
3.6	Penalties	Violation of permit conditions will subject the permittee to civil penalties of up to \$25,000 for each day of each violation [ORS 459.995(1)(a)].
3.7	DEQ access to disposal site	<p>The permittee must allow representatives of DEQ access to the disposal facility at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data and carrying out other necessary functions related to this permit.</p> <p>Reference: OAR 340-093-0050(6)</p>

4.0 PERMIT MODIFICATION

4.1	In this section	<p>This section describes the process for modifying this permit, including:</p> <ul style="list-style-type: none">• Permit review• Permit modification• Modification and revocation by DEQ• Modification by permittee• Public participation• Changes in ownership or address
4.2	Permit review	<p>During the permit's term, DEQ may review the permit and amend it if necessary.</p> <p>DEQ will consider the following factors in making this determination:</p> <ul style="list-style-type: none">• Compliance history of the facility• Changes in volume, waste composition, or operations at the facility• Changes in state or federal rules which should be incorporated into the permit• A significant release of leachate or landfill gas from the facility to the environment• A significant change to DEQ-approved site development plan, and/or conceptual design• Other significant information or events
4.3	Permit modification	<p>DEQ or the permittee may, at any time during the permit's term, propose to change the permit.</p> <p>Once approved by DEQ any permit-required plans become part of the permit by reference. DEQ may provide notice and opportunity for review of permit-required plans.</p>
4.4	Modification and revocation by DEQ	<p>The Director may, at any time before the expiration date, modify, suspend, or revoke this permit in whole or in part, in accordance with Oregon Revised Statutes 459.255, for reasons including but not limited to the following:</p> <ul style="list-style-type: none">• Violation of any terms or conditions of this permit or any applicable statute, rule, standard, or order of the Commission• Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts• A significant change in the quantity or character of solid waste received or in the operation of the disposal site
4.5	Modification by permittee	<p>The permittee must apply for a modification to this permit if there is a significant change in facility operations or a deviation from permitted activities.</p>
4.6	Public participation	<p>DEQ will issue a public notice to inform the public of any significant changes to the permit.</p>
4.7	Changes in ownership or address	<p>The permittee must report to DEQ any change in the facility's ownership or the permittee's, or operator's name and address at least ten (10) days prior to the change.</p>

ALLOWABLE ACTIVITIES

5.0 AUTHORIZATIONS

5.1	In this section	This section describes the activities the permittee is authorized to conduct, including: <ul style="list-style-type: none">• Post-closure care• Authorization of activities• Other site activities
5.2	Post-closure care	This permit authorizes the permittee to provide post-closure maintenance and monitoring at the facility.
5.3	Authorization of activities	All facility activities are to be conducted according to the provisions of this permit. All plans required by this permit become part of the permit by reference once approved by DEQ. Any conditions of the approval are also incorporated into this permit unless contested by the permittee within 30 days of the receipt of a conditional approval.
5.4	Other site activities	This permit authorizes the permittee to operate and maintain soccer fields on top of the closed landfill. This includes the concession stand building and attached shed. See Section 8.10 for other site uses.

6.0 PROHIBITIONS

6.1	In this section	This section describes specific activities the permittee is prohibited from conducting, including: <ul style="list-style-type: none">• Waste acceptance• Open burning
6.1	Waste acceptance	The permittee's disposal site is permanently closed. The permittee is prohibited from accepting any waste for disposal or disposing of any waste at this site.
6.2	Open burning	The permittee must not conduct any open burning at the site.

POST-CLOSURE CARE

7.0 POST-CLOSURE OPERATIONS AND MAINTENANCE

7.1 In this section	<p>This section describes the requirements for preparing an updated facility Closure Plan, and conducting post-closure operations and maintenance:</p> <ul style="list-style-type: none">• Discovery of prohibited wastes• Spills notification• Post-closure plan• Closure Plan compliance• Inspection• Post-closure maintenance• Cover system• Vegetation• Surface contour maintenance• Surface water control• Leachate prevention and control• Landfill gas control• Access control• Fire protection• Future use• Submittal Address
7.2 Discovery of prohibited wastes	<p>Any solid wastes discovered at the facility must be isolated or removed immediately. Non-hazardous prohibited waste must, within 48 hours, be transported to a disposal site authorized to accept such waste, unless otherwise approved by DEQ.</p> <p>In the event that discovered wastes are hazardous or suspected to be hazardous, the permittee must, within 7 days, notify DEQ and initiate procedures to identify and remove the waste. Hazardous wastes must be removed within 90 days, unless otherwise approved by DEQ. Temporary storage and transportation must be carried out in accordance with DEQ rules.</p>
7.3 Spills notification	<p>Oregon Revised Statute 466.635 and Oil and Hazardous Materials Emergency Response Rules, Chapter 340, Division 142 require <u>immediate</u> notification to Oregon Emergency Response System (OERS) after taking any required emergency actions to protect human health and the environment when oil or hazardous materials are spilled. The spill must be immediately reported to OERS at 1-800-452-0311 if the spill is of a reportable quantity. Reportable quantities include:</p> <ul style="list-style-type: none">• Any amount of oil spilled to waters of the state;• Oil spills on land in excess of forty-two (42) gallons;• Two hundred (200) pounds (twenty-five (25) gallons) or more of spilled pesticide residue; and• Spills of hazardous materials that are equal to, or greater than, the quantity listed in the Code of Federal Regulations, 40 CFR Part 302 (List of Hazardous Substances and Reportable Quantities), and amendments adopted before July 1, 2002. <p>For a complete list of hazardous materials required to be reported, refer to OAR 340-142-0050.</p>

7.4	Post-closure plan	<p>Within 90 days of the permit issue date, the permittee must submit, for approval, one copy of an updated Post-Closure Plan to DEQ. The permittee must revise the Post-Closure Plan as necessary to keep it reflective of current facility conditions and procedures. Plan revisions must be submitted to DEQ for approval.</p> <p><u>Reference:</u> <i>Solid Waste Landfill Guidance</i>, September 1996, provides information on applicable elements of a Post-Closure Plan</p>
7.5	Post-closure maintenance	<p>The permittee must maintain the disposal site in accordance with the DEQ approved Post-Closure Plan and any amendments to the plan approved in writing by DEQ.</p>
7.6	Inspection	<p>The permittee must physically inspect the entire disposal site at least monthly to determine compliance with this permit and DEQ rules. The permittee must record any post-closure repairs performed. Inspection records must be made available to DEQ upon request.</p>
7.7	Cover system	<p>The permittee must monitor and maintain the cover system including cover thickness. The permittee must repair the cover with approved soil in all areas damaged by erosion, settlement, or cracking; and fertilize, re-seed and maintain sparsely vegetated areas. Any construction or redevelopment proposals involving the landfill must include an evaluation of potential impacts to the cover system and a plan to restore the cover in the event that construction activities disturb the cover.</p>
7.8	Vegetation	<p>The permittee must establish and maintain a dense, healthy growth of vegetation on the landfill cover except for areas occupied by structures or pavement associated with the site.</p>
7.9	Surface contour maintenance	<p>The permittee must maintain the final surface contours of the landfill cover in accordance with the following criteria:</p> <ul style="list-style-type: none">• Erosion and ponding of water is prevented to the maximum extent practicable.• Erosion damage (cuts) must be repaired and seeded so that all waste remains covered.• The permittee must refill with soil, re-grade, and seed all areas that have settled or where water ponds, and all areas where the cover soil has been damaged by cracking or erosion.• Areas where vegetation has not been fully established must be improved so that vegetation is established and maintained in a healthy condition to protect the cover and minimize runoff or leachate creation.
7.10	Surface water control	<p>The permittee must, at all times, divert surface water drainage around or away from the landfill and maintain surface water diversion ditches or structures in good working condition and free of obstructions and debris.</p> <p>The permittee must maintain the soccer field on top of the landfill so that to the extent possible, excess water does not pond on top of the landfill. If a water or irrigation pipe breaks, that line should be isolated from the water system (to eliminate excess water leakage), as soon as possible and within 12 hours after discovery. The broken pipe must be repaired within one week after its discovery. Irrigation in the area of the broken pipe must not happen until the pipe is fixed.</p>
7.11	Leachate prevention and control	<p>The permittee must maintain the landfill in a manner that deters leachate production to the maximum extent practicable.</p>
7.12	Landfill gas control	<p>The permittee must control landfill gas such that methane concentrations do not exceed limits set forth in Section 13.6 of this permit.</p>

7.13 Access control	The permittee must control public access to the facility as necessary to prevent unauthorized entry and dumping.
7.14 Fire protection	<p>The permittee must make arrangements with the local fire control agency to immediately acquire their services when needed and provide adequate on-site fire control protection, as determined through the local fire control agency.</p> <p>Fires must be immediately and thoroughly extinguished and promptly reported to DEQ.</p>
7.15 Future use	Any future use, activity, or construction of buildings, structures, or utilities on or within 1,000 feet of the waste footprint of this disposal site must have DEQ's prior written approval and must be done in a manner that protects the integrity of the final cover system, landfill stability, gas monitoring devices, and surface water control systems.
7.16 Submittal address	<p>All submittals to DEQ under this section must be sent to:</p> <p>Oregon Department of Environmental Quality Manager, Solid Waste Program 2020 SW Fourth Avenue, Suite 400 Portland, OR 97201 (503) 229-5353</p>

8.0 POST-CLOSURE RECORDKEEPING AND REPORTING

8.1 In this section	<p>This section describes requirements for facility post-closure recordkeeping and reporting.</p> <ul style="list-style-type: none">• Non-compliance reporting• Evaluation• Fees• Permit display• Access to records• Deed record• Submittal address
8.2 Non-compliance reporting	<p>The permittee must take immediate corrective action for any violations of permit conditions or DEQ rules and notify DEQ at:</p> <p>(503) 229-5353</p> <p><u>DEQ response:</u> DEQ may investigate the nature and extent of the compliance problem and evaluate the adequacy of the permittee's corrective action plans.</p>
8.3 Evaluation	<p>Prior to September 15 of each year, the permittee must evaluate the facility's status and submit to DEQ, as part of the Annual Environmental Monitoring Report (AEMR), the following information:</p> <ul style="list-style-type: none">• a discussion of implementation of the post-closure plans• a description of unanticipated occurrences and any changes to the post-closure plans
8.4 Fees	The permittee must pay the solid waste fee each year this permit is in effect. An invoice indicating the amount of the fee will be mailed prior to the date due.
8.5 Permit display	The permittee must display this permit where operating personnel can easily refer to it.
8.6 Access to records	DEQ must have easy access to all records and reports related to the permitted facility

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- 8.7 Deed record** Upon issuance of this permit, the permittee must modify the property deed record on file with the appropriate county recording authority to include a detailed description of the site including a plat. The description should include, at a minimum, the general types and location of wastes deposited, depth of waste and other information of probable interest to future land owners. A copy of this deed, with the modification, must be submitted to DEQ within 30 days after the issuance of this permit.

Reference: OAR 340-094-0130(1)(a)

- 8.8 Submittal address** All submittals to DEQ under Section 8.4 must be sent to:
**Oregon Department of Environmental Quality
Land Quality Division
Solid Waste Program
811 SW Sixth Ave
Portland, OR 97204
Phone: (503) 229-5409**

All submittals to DEQ under Section 8 (except Section 8.4) must be sent to:
Oregon Department of Environmental Quality
Manager, Solid Waste Program
2020 SW Fourth Avenue, Suite 400
Portland, OR 97201
(503) 229-5353

9.0 FINANCIAL ASSURANCE

- 9.1 In this section** This section describes the requirements for financial assurance at the facility, including:
- Financial assurance plan
 - Cost Estimate
 - Recertification of financial assurance
 - Use of financial assurance
 - Long-term financial responsibility
 - Submittal address
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- 9.2 Financial assurance plan** The Financial Assurance Plan, dated September 2, 2009 and subsequent updates were approved by DEQ in two letters dated December 18 and 30, 2009.
- The permittee must revise the Financial Assurance Plan as necessary to reflect current post-closure and corrective action costs and the current financial assurance mechanism. Plan revisions must be submitted to DEQ for approval. The permittee must keep this plan in the operating record.

Reference: The plan must be prepared in accordance with OAR 340-094-0140. Acceptable mechanisms are described in OAR 340-094-0145.

- 9.3 Cost Estimate** The cost estimate for post-closure care must be calculated based on a minimum of 20 years of post-closure care. The cost-estimate must be updated annually and must continue to cover a minimum of 20 years of post-closure care, until notified in writing by DEQ of a change in this requirement.

Reference: The cost estimate must be prepared in accordance with DEQ guidance and OAR 340-094-0140.

9.4	Recertification of financial assurance	<p>The permittee shall annually review and update financial assurance. The annual update must be submitted to DEQ prior to December 30 of each year.</p> <p><u>Note:</u> The annual review must be in accordance with OAR 340-094-140.</p>
9.5	Use of financial assurance	<p>The permittee must not use the financial assurance for any purpose other than to finance the permitted facility's approved post-closure activities, to guarantee that those activities will be completed, or to finance required corrective actions at the facility.</p>
9.6	Long-term financial responsibility	<p>The permittee must continuously maintain financial assurance for the facility until the permittee or other person owning or controlling the site is no longer required by DEQ to demonstrate financial responsibility for post-closure maintenance or corrective actions.</p>
9.7	Submittal address	<p>All submittals to DEQ under this section must be sent to:</p> <p>Oregon Department of Environmental Quality Manager, Solid Waste Program 2020 SW Fourth Avenue, Suite 400 Portland, OR 97201 (503) 229-5353</p>

ENVIRONMENTAL MONITORING

10.0 ENVIRONMENTAL SAMPLING REQUIREMENTS

10.1	In this section	<p>This section describes general sampling requirements, including:</p> <ul style="list-style-type: none">• Notification• Split sampling• Monitoring schedule• Changes in sampling or split sampling
10.2	Notification	<p>The permittee must notify DEQ in writing of all upcoming sampling events at least ten (10) working days prior to the scheduled date of the sampling event at the following address or via email to the program manager and current project manager:</p> <p>Oregon Department of Environmental Quality Manager, Solid Waste Program 2020 SW Fourth Avenue, Suite 400 Portland, OR 97201 (503) 229-5353</p>
10.3	Split sampling	<p>The permittee must split samples with DEQ when requested, and must schedule all requested split-sampling events with DEQ laboratory at least forty-five (45) days prior to the sampling event. Split sampling events with DEQ should be scheduled for 2014 and 2019.</p>
10.4	Monitoring schedule	<p>The permittee must refer to the approved EMP for environmental monitoring procedures.</p>

10.5	Changes in sampling or split sampling	During the life of this permit, DEQ may add to or delete from the list of scheduled sampling events, sample locations, parameters to be sampled for, and to conduct unscheduled samplings or split sampling. In the event of changes to the split sampling schedule, DEQ will make every effort to notify the permittee of the changes at least 30 days prior to the split sampling event.
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11.0 ENVIRONMENTAL MONITORING PLAN (EMP)

11.1	In this section	<p>This section describes environmental monitoring plan requirements for the facility, including:</p> <ul style="list-style-type: none">• EMP submittal• EMP contents• EMP revisions and updates• Long-term monitoring plan• Additional monitoring points• EMP compliance
11.2	EMP submittal	<p>Within 90 days after the permit issue date, the permittee must submit, for approval, one copy of the EMP to DEQ.</p> <p>Major changes or updates to the original EMP require that the entire EMP be submitted as a stand-alone document; at a minimum, this must be done at least once every ten years.</p> <p>The EMP, or any updates to the EMP, must be prepared and stamped by an Oregon Registered Geologist or an Oregon Registered Engineering Geologist. Upon approval, the EMP is incorporated into this permit by reference.</p>
11.3	EMP contents	<p>The updated EMP must establish an environmental monitoring program that will characterize potential facility impacts. The updated plan may consist of the previous approved EMP with any subsequent changes or additions (such as approved concentration limits, revised parameter lists, revised schedules, new wells).</p> <p>The updated EMP must include the following contents, as well as applicable elements from the reference document:</p> <ul style="list-style-type: none">• Monitoring Network Design and Construction• A Sampling and Analysis Plan• Field QA/QC Procedures• Lab QA/QC Procedures• Data Analysis and Evaluation• Report Format and Executive Summary <p><u>Reference:</u> The <i>Solid Waste Landfill Guidance</i>, September 1996, provides information on applicable elements of an Environmental Monitoring Plan. Following the organizational format provided in the Guidance will expedite DEQ review of the plan.</p>
11.4	EMP revisions and updates	<p>The permittee must revise the current EMP as necessary to reflect current and future environmental conditions, facility development and regulatory requirements. A Geologist or Certified Engineering Geologist, with current Oregon registration, must prepare and stamp the EMP revisions and submit two copies (one paper copy and one electronic copy) to DEQ for review and approval.</p>
11.5	Long-term monitoring plan	<p>After DEQ approves any Remedial Action Concentration Limits (RACLs), the permittee must update the EMP to reflect the long-term monitoring program and submit the updated plan for DEQ review and approval.</p>

11.6	Additional monitoring points	The permittee must incorporate any new or replacement monitoring point or device into the EMP and submit the updated EMP to DEQ for review and approval.
11.7	EMP compliance	The permittee must conduct all environmental monitoring at the facility in accordance with the approved EMP, including any conditions of EMP approval, EMP amendments and updates.

12.0 ESTABLISHING REMEDIAL ACTION CONCENTRATION LIMITS (RACLs)

12.1	In this section	This section describes establishment of various concentration limits, including: <ul style="list-style-type: none">• Gathering data• Proposing RACLs
12.2	Gathering data	The permittee must monitor the designated background wells in accordance with the approved EMP or propose an alternative intrawell approach. Background monitoring must continue until all necessary data sets have been collected. The permittee then must demonstrate to DEQ's satisfaction that the selected background data set is valid and unaffected by facility releases.
12.3	Proposing RACLs	Before DEQ can consider termination of this permit, the permittee must propose for DEQ's review and approval RACLs pursuant to the guidelines specified in OAR 340-040. The proposal must address all parameters DEQ deems necessary.

13.0 ENVIRONMENTAL MONITORING STANDARDS

13.1	In this section	This section describes requirements related to compliance with environmental monitoring standards, including: <ul style="list-style-type: none">• Applicable regulatory standard• Compliance points• Review of results• Resampling results• Methane limits• Methane exceedance• Certified environmental laboratory data
13.2	Applicable regulatory standard	The permittee must not allow the release of any substance from the landfill into groundwater, surface water, or any other media, which would result in a violation of any applicable federal or state air or water limits, drinking water rules, or other regulations, beyond the solid waste boundary of the disposal site or an alternative boundary specified by DEQ. <u>Reference:</u> OAR 340-094-0080.
13.3	Compliance points	Compliance wells must be defined in the most current site-specific DEQ approved EMP.
13.4	Review of results	The permittee must review the analytical results after each monitoring event according to the protocols established in the most currently approved site-specific EMP.

13.5 Resampling results	Upon receipt of data from resampling, the permittee must review the analytical results according to the protocols established in the most currently approved site-specific EMP.
13.6 Methane limits	<p>The methane concentration must not exceed:</p> <ul style="list-style-type: none">• Any detectable level in onsite or surrounding structures and confined spaces (excluding gas control structures or gas recovery system components); or• Methane's Lower Explosive Limit at the facility property boundary. <p>Note: Methane's Lower Explosive Limit is equal to a concentration of five percent by volume in air.</p>
13.7 Methane exceedance	<p>If methane levels are detected in structures or confined spaces, but are less than twenty-five percent of the lower explosive limit (1.25% cbv), the permittee must retest the methane levels the next day. If similar methane levels are detected during the second sampling, then proceed with the steps below described for detection levels above 1.25%.</p> <ol style="list-style-type: none">1. Take immediate steps to protect human health and safety;2. Notify DEQ within 24 hours at 503-229-5353 or via e-mail at info@deq.state.or.us;3. Within seven days of detection, confirm the measures taken to protect human health and safety (unless DEQ approves an alternative schedule), and describe the methane test results and response measures in the facility operating record; and4. Within 60 days of the methane exceedances, develop and implement a remediation plan, incorporate the plan into the monitoring records, and submit a progress report to DEQ.
13.8 Certified environmental laboratory data	To ensure the best possible data quality, DEQ suggests that the permittee contract with environmental labs certified under the Oregon Laboratory Accredited Program (ORLAP) or the National Volunteer Laboratory Accreditation Program (NVLAP). Use of an ORLAP or NVLAP approved lab will facilitate DEQ's future review of EMP updates, AEMRs, and Remedial Investigation/Feasibility Study (RI/FS) documents.

14.0 ENVIRONMENTAL MONITORING RECORDKEEPING AND REPORTING

14.1 In this section	<p>This section describes recordkeeping and reporting requirements associated with environmental monitoring, including:</p> <ul style="list-style-type: none">• AEMR• Statement of compliance• AEMR contents• Split sampling submittal• Lab address• DEQ response to split samples
14.2 AEMR	<p>Prior to September 15 of each year, the permittee must submit to DEQ two copies (one paper copy and one electronic copy) of an annual monitoring report for the previous calendar year's monitoring period. The report must conform to the format detailed in the approved EMP and be prepared and stamped by a Geologist or a Certified Engineering Geologist, with current Oregon registration.</p> <p><u>Note:</u> The permittee is strongly encouraged to submit reports printed on both sides of the paper.</p>

14.3 Statement of compliance	<p>The AEMR must include a brief (approximately one-page) cover letter that:</p> <ul style="list-style-type: none">• Compares the analytical results with the relevant monitoring standards (RACs, when developed)• Documents any exceedances of federal or state standards for relevant media• Documents any significant change in water quality, land quality, air quality or methane levels in monitored media.
14.4 AEMR contents	<p>The AEMR must reflect the facility's current conditions, present accurate data that correspond with the original field and lab data, and include the elements presented in the most recently approved EMP.</p>
14.5 Split sampling submittal	<p>Within 90 days after any split sampling event, the permittee must submit the following information to DEQ's laboratory:</p> <ul style="list-style-type: none">• A copy of all information pertinent to the sample collection, handling, transport and storage, including field notes• Copies of all laboratory analytical reports• Copies of all laboratory QA/QC reports• Any other data or reports requested by the DEQ.
14.6 Lab address	<p>Report all required split sampling information to:</p> <p>Oregon Department of Environmental Quality Laboratory, Groundwater Monitoring Section 3150 NW 229th, Suite 150 Hillsboro, OR 97124 Phone: (503) 693-5700 Fax: (503) 693-4999</p>
14.7 DEQ response to split samples	<p>If the permittee submits all required split sampling data and requests DEQ's results, DEQ's lab may provide, to the permittee, copies of the following information:</p> <ul style="list-style-type: none">• DEQ's analysis of the split sample• The QA/QC report• The analytical report• The field data sheets

15.0 ENVIRONMENTAL MONITORING NETWORK

15.1 In this section	<p>This section describes requirements for the environmental monitoring network, including:</p> <ul style="list-style-type: none">• Monitoring devices• Monitoring stations and equipment• Access to monitoring stations and equipment• Reporting equipment damage• Monitoring well construction• Reporting well construction and repairs• Well decommissioning or replacement
15.2 Monitoring devices	<p>The permittee must protect, operate, and maintain groundwater and surface water monitoring devices so that samples collected represent actual conditions.</p>

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| 15.3 Monitoring stations and equipment | <p>To ensure that every sample is representative of the site's environmental conditions, the permittee must protect, operate, and maintain all environmental monitoring stations and equipment in accordance with DEQ's requirements.</p> <p>The permittee must clearly label all monitoring stations with the monitoring location identification described in this permit and/or the EMP in addition to an Oregon Water Resources Department Well Identification Label, if required. The permittee must monitor and maintain labels such that they are clearly legible.</p> <p>Reference: OAR 640-240-0024 and 640-240-0026.</p> |
| <hr/> | |
| 15.4 Access to monitoring stations and equipment | <p>To facilitate sample collection and/or inspection and maintenance activities, the permittee must maintain reasonable all-weather access to all monitoring stations and associated equipment.</p> |
| <hr/> | |
| 15.5 Reporting equipment damage | <p>Within 14 days of discovering any damaged monitoring equipment or station, the permittee must submit to DEQ a report describing the damage, the proposed repair or replacement measures, and the schedule to complete this work.</p> <p>Example: a well's impaired function or altered position/location.</p> |
| <hr/> | |
| 15.6 Monitoring well construction | <p>The permittee must complete any monitoring well or gas monitoring probe abandonment (decommissioning), replacement, repair, or installation in a manner that complies with the Water Resources Rules, OAR 690-240.</p> |
| <hr/> | |
| 15.7 Reporting well construction and repairs | <p>The permittee must document all monitoring well or gas probe repair and construction activities, including driller's logs, well location information, and construction information in a report prepared and stamped by a Geologist or Certified Engineering Geologist, with current Oregon registration. The permittee must submit the report to DEQ within 30 days of the action and include this documentation in the next Annual Environmental Monitoring Report (AEMR).</p> |
| <hr/> | |
| 15.8 Well decommissioning or replacement | <p>The permittee must submit a written recommendation to DEQ prior to decommissioning or replacing any well or gas monitoring probe in the monitoring network. After receiving DEQ's approval, the permittee must decommission or replace any well or gas probe that meets the following criteria:</p> <ul style="list-style-type: none">• The well or gas probe was installed in a borehole that hydraulically intersects two saturated strata;• The permittee lacks supporting documentation demonstrating that the well or gas probe was properly installed and constructed;• The well or gas probe was damaged beyond repair or destroyed; or• Other reasons as determined by either the permittee or DEQ. |
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COMPLIANCE SCHEDULE

16.0 SUMMARY OF DUE DATES

16.1 Summary The following is a summary of event-driven reporting required by this permit. This section does not include permit-required routine reporting and submittals required by this permit.

Due Date	Activity	See section...
Immediately	Oil or hazardous materials spill	7.3 Spills notification
Within 90 days of permit issuance	Submit one copy of Post-closure Plan	7.4 Post-closure Plan
Monthly	Physical inspection of site	7.6 Inspection
Specified due date on invoice	Solid waste fees	8.4 Fees
Within 30 days of permit issuance	Recording of modified deed	8.7 Deed record
By every December 30th	Submit an Annual Financial Assurance Recertification Report	9.2 Annual FA Recertification
At least 10 days prior to sampling event	Notify DEQ of scheduled date of sampling	10.2 Notification
At least 45 days prior to split sampling event	Schedule split-sampling events with DEQ.	10.3 Split sampling
Within 90 days of permit issuance	Submit one copy of EMP	11.2 EMP
By every September 15 th	Submit an Annual Environmental Monitoring Report (AEMR)	14.2 AEMR
Within 90 days after a split sampling event	Submit all required documentation to DEQ	14.5 Split sampling submittal
14 days after discovery of damage to a monitoring device	Submit proposal to repair or replace	15.5 Reporting equipment damage
Within 30 days of the action	Submit well construction or repair report	15.8 Reporting well construction and repairs

ATTACHMENTS

17.0 ATTACHMENTS TO PERMIT

17.1 Attachment list Attachments to the permit include :

Number	Description
1	Remedial Action Concentration Limits

ATTACHMENT 1: REMEDIAL ACTION CONCENTRATION LIMITS

During the previous permit cycle, Permit Specific Concentration Limits (PSCLs) had been established for the Warrenton Landfill. The purpose of PSCLs is to establish when a release of a landfill contaminant to groundwater needs to trigger corrective action. For the Warrenton Landfill, the PSCLs were exceeded, and this triggered additional investigation, including ecological risk assessment and beneficial land and water use surveys.

After remedial investigations have been undertaken and after remedial action has been implemented (i.e., the landfill cap and stormwater controls, in this case, comprise the implemented remedy), Remedial Action Concentrations Limits (RACLs) must be established as outlined in OAR 340-040-0050. These limits function as "cleanup goals" for the landfill, and are used to evaluate when a landfill can end post-closure care.

RACLs have not yet been established for the site.

To: Warrenton Landfill File

From: Lorell Miller, PE,
Senior Environmental Engineer-NWR

Bill Mason, RG,
Senior Groundwater Hydrologist - WR

Subject: Solid Waste Permit Evaluation Report
Warrenton Landfill
Solid Waste Disposal Permit No. 120
Closed Municipal Waste Landfill

Date: December 8, 2010

Facility Contact: Bob Maxfield, City Manager, City of Warrenton, 503-861-2233

Landfill Description

The landfill is located on Ridge Road, near 9th Street, just west of Shag Lake and the City of Warrenton.

The landfill is a 5-acre municipal solid waste disposal site that closed in 1986. When it was active, the landfill was classified as an "Open Dump," and experienced operational issues and problems with groundwater contamination. The closed landfill has been converted into a soccer field. A building was constructed on the west edge of the landfill to serve as a storage shed and concession stand for the soccer games. Later, two more soccer fields were constructed; one north of the landfill and one west of the landfill across Ridge Road.

Closure Design

The closure cap for the landfill consists of a one-foot thick foundation layer comprised of local sandy soils, covered by a one-foot thick layer of compacted clay, covered by another one-foot thick layer of sandy soil and finally organic soil seeded with grass as final vegetative cover.

Post-Closure Care

Solid waste rules set the standard post-closure care period at 30 years, after which time DEQ may consider terminating the solid waste closure permit. The rules also allow DEQ to extend the post-closure care period past 30 years if DEQ finds that there is a need to protect against a significant hazard or risk to public health or safety or the environment. The Warrenton Landfill officially closed in 1986. The 30 year post-closure timeframe for Warrenton Landfill is scheduled to end in 2016. Based on the following review, DEQ has determined that ongoing post-closure care must continue beyond 2016.

Background

There is no national or consistent state-based process for evaluating, optimizing, or potentially ending post-closure care (Environmental Research & Education Foundation [EREF], 2006). The following information is being used to evaluate environmental conditions at the Warrenton Landfill.

Long-Term Waste Transformation Processes in Landfills (adapted from EREF, 2006)

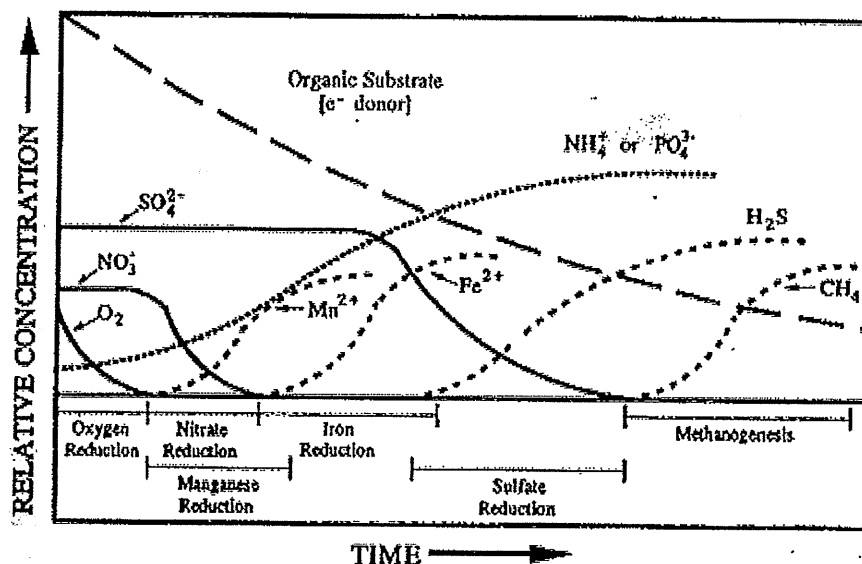
Ample laboratory and field-scale research shows that municipal solid waste transforms in landfills over the long term in several predictable phases. Appendix B of the EREF 2006 document contains a comprehensive summary of these studies and findings.

Certain trends in leachate quality at municipal solid waste landfills in general indicate the development of a bio-filter layer of stabilized waste at the bottom of landfills. This process makes it possible to estimate future characteristics of leachate with a high level of confidence, based on the behavior of indicator parameters. These types of data provide a simple but reliable indicator of the need for post-closure care of a landfill.

Phases of Landfill Waste Degradation

Biodegradation of municipal solid waste in landfills has traditionally been considered to occur in five more or less sequential and predictable phases in which chemical and biological processes occur as described by Farquhar & Rovers (1973); Ehrig (1984); Pohland & Harper (1986); Christensen & Kjeldsen (1989); and EREF2006. However, researchers reporting in Kjeldsen 2003, et al., propose that the fifth phase be subdivided into three separate phases to better describe landfill behavior over the very long term. The resulting seven phases include 1) aerobic phase; 2) acid phase; 3) initial methanogenic phase; 4) stable methanogenic phase; 5) air intrusion phase; 6) carbon dioxide phase; and 7) soil air phase.

Groundwater with a source of organic carbon or other electron donors shows a sequence of distinct oxidation-reduction zones along flow paths. Similar patterns can be seen along upward flow paths in discharge areas in organic-rich wetland and bottom sediments (USGS 2006).



(Source: <http://md.water.usgs.gov/posters/nutrientsRedox/index.html>)

Warrenton Landfill's Phase of Degradation

Given the groundwater characteristics near the landfill, DEQ has determined that the Warrenton Landfill is in Phase IV, the stable methane-generating phase of decomposition. This is based on low dissolved oxygen values (~ 1 mg/L or less), high concentrations of ammonia (~ 50 mg/L), chemical oxygen demand (below 3000 mg/L), low volatile organic compound concentrations (single digit $\mu\text{g/L}$ range, or less), and low concentrations of nitrate (< 1 mg/L). This is further supported by high concentrations of iron and manganese.

Risk screening

A Level I ecological risk scoping and a Level II ecological risk assessment were conducted for the closed landfill in 2004 and 2005, respectively. DEQ reviewed these reports and asked for, and received, clarification concerning surrounding land uses and beneficial groundwater and surface water uses.

DEQ concludes that the Warrenton Landfill, in its current stable condition, does not pose a current risk of impact to human or animal health. However, because hazardous substances have been released from the landfill in the past, DEQ plans to place the site in DEQ's Environmental Cleanup Site Information database and also place it on DEQ's Confirmed Release List, as required under OAR 340-122-0073. The site will continue to be managed by DEQ's Solid Waste program until groundwater monitoring demonstrates that the waste in the landfill has reached its final phase of degradation. Given the likely future beneficial land and water use, the site is not likely to pose a future impact to human health and the environment.

Post-Closure Care Term

Results of the ongoing groundwater sampling regime at the closed landfill indicate that several chemicals are present in groundwater at concentrations 10 to 100 times background. As a result, DEQ plans to require the City to continue monitoring groundwater until most of these parameters, including ammonia/ammonium, return to levels that are closer to background levels, unless additional work to establish the full extent of groundwater contamination is completed. Similarly, DEQ will require the City to continue to monitor for methane in onsite structures and confined spaces.

Accordingly, DEQ is renewing the closure permit for 10 years, which is the maximum term that DEQ has authority to permit. This ensures continued post-closure environmental monitoring of the site. The permit can be renewed for another term of up to 10 years if continued environmental monitoring is needed. Conversely, if DEQ finds, or the permittee can demonstrate, that environmental monitoring is no longer needed and that there is no longer a need to protect against hazard or risk to public health or the environment before the permit expires, DEQ has the authority to terminate the permit before the expiration date.

Financial Assurance

By rule, municipal waste landfills are required to provide financial assurance through at least 30 years of post-closure care. Warrenton Landfill still presents risks of methane gas accumulation in onsite structures and of impacts to groundwater. Accordingly, in the closure permit DEQ requires the City of Warrenton to provide on-going post-closure care for an undetermined period beyond the 30 year minimum.

The closure permit includes language requiring the City of Warrenton to provide continuous financial assurance adequate to cover a rolling 20 year period of post-closure care. That is, each required annual submittal of financial assurance would need to cover a period of 20 years forward. This 20 year "cushion" would not be reduced during the term of the closure permit unless DEQ determines that Warrenton Landfill no longer needs post-closure care. In that case, DEQ would no longer require financial assurance and would terminate the closure permit for the landfill.

Solid Waste Compliance

- | | |
|------------|---|
| 12/10/1991 | Notice of Noncompliance (NWR-91-331): Failure to replace defective groundwater monitoring well. |
| 4/3/2009 | Warning Letter with Opportunity to Correct (NWR-SW-09-0001): Failure to submit a permit renewal application in a timely manner; failure to maintain financial assurance; and, failure to monitor the site buildings for landfill gas. |
| 6/2/2010 | Closeout of NWR-SW-09-001: Corrective actions completed. |

Solid Waste Inspections

The landfill was most recently inspected on November 8, 2007, December 28, 2007 and August 25, 2010. During the November 8, 2007 inspection, some violations were found (see April 3, 2009 Warning Letter described above). No violations were found during the August 25, 2010 inspection.

Permitting Timeline

According to a DEQ Environmental Quality Commission report from April 19, 1985, the landfill was established between 1965 and 1970. DEQ did not receive solid waste authority for permitting and regulatory oversight from the Oregon State Legislature until 1971. DEQ issued Warrenton Landfill's first permit in 1972.

The following is a summary of DEQ permitting for the landfill:

- 4/24/1972 The City of Warrenton submits a permit application to DEQ for a solid waste disposal site, existing on or before April 15, 1972, with the City of Warrenton as the official applicant and Excel Service as the disposal site operator.
- 6/16/1972 Excel Service submits a permit application to DEQ for a solid waste disposal site, existing on or before April 15, 1972, with Excel Service as the official applicant.
- 6/30/1972 DEQ issues Short-term Solid Waste Disposal Permit No. 120 to Excel Services, with an expiration date of 7/1/1973.
- 4/22/1977 The City of Warrenton submits a permit renewal application to DEQ with the City of Warrenton as the official applicant.
- 6/23/1977 DEQ issues Solid Waste Disposal Permit No. 120 to the City of Warrenton with an expiration date of 12/31/1978.
- 7/30/1979 The City of Warrenton submits a permit renewal application to DEQ.
- 12/14/1979 DEQ renews Permit No. 120 for the City of Warrenton with an expiration date of 12/31/1983.
- 9/15/1980 DEQ classifies the landfill as an "Open Dump" because the landfill fails to meet the criteria for classification as a solid waste disposal landfill under the Resource Conservation and Recovery Act (RCRA). The landfill was added to the Federal Register "Open Dump List."
- 5/26/1983 DEQ notifies the City of Warrenton their permit will not be renewed after 12/31/1983.
- 8/1/1983 DEQ issues Addendum #1 to Permit No. 120, prohibiting acceptance of solid waste after 12/31/1983 and requiring the permittee (City of Warrenton) to submit a closure plan prior to 10/1/1983.
- 8/18/1983 The City of Warrenton appeals the 8/1/1983 Addendum #1 to Permit 120. Meanwhile, during the next year, the City of Warrenton negotiates with the City of Astoria to bring their waste first to the Astoria Landfill and then to a transfer station that was to be built at the old Astoria Landfill.
- 11/1/1983 The City of Warrenton submits a permit renewal application. DEQ decides to withhold renewal of the permit until the City of Warrenton can secure another disposal location.

- 2/7/1985 DEQ renews Permit No. 120 for the City of Warrenton, authorizing acceptance of solid waste until 2/28/1985 with an expiration date of 7/31/1985.
- 2/26/1985 The City of Warrenton appeals the permit renewal, requesting a hearing to present their case that the landfill should continue to operate until the City of Astoria transfer station opens.
- 6/26/1985 DEQ and the City of Warrenton approve Stipulation and Final Order No. SW-NWR-95-58 to submit a closure permit application to DEQ by 8/15/1985, start closing portions of the landfill by 7/1/1985, terminate use of the landfill on or before 10/1/1985 and to complete closure of the landfill by 10/31/1985.
- 10/1/1985 Last day that solid waste is accepted at the landfill.
- 10/31/1985 Compacted clay cap placement complete. (Final closure construction was completed during 1986.)
- 5/14/1986 DEQ issues Solid Waste Disposal Site Closure Permit No. 120, with an expiration date of 2/28/1996.
- 9/27/1995 The City of Warrenton submits a permit renewal application to DEQ.
- 2/20/1997 DEQ renews Closure Permit No. 120, with an expiration date of 2/28/2007.
- 6/1/2009 The City of Warrenton submits a permit renewal application.

Other DEQ Permits

There are no other DEQ permits currently issued for this landfill.

Recommendation

DEQ recommends that Solid Waste Closure Permit No. 120, for the City of Warrenton be renewed for 10 years. The recommended permit renewal includes updated standard permit language and updated environmental monitoring standards.

DEQ recommends monitoring for biological oxygen demand and sulfates. DEQ further recommends that oxidation-reduction potential be added to the permit to confirm that the closed Warrenton Landfill is in Phase IV.

Public Involvement

On September 29, 2010 DEQ issued a public notice and request for comments. The notice was mailed to 75 residents and property owners within one quarter mile of the closed landfill and over 1,400 other interested parties via the *Gov.Delivery* e-mail list. Advertisements were also placed in the *Daily Astorian* and *Columbia Press* newspapers. The comment period closed on November 3, 2010.

DEQ received one comment by e-mail from Barbara Lewis who lives on SW 9th Avenue in Warrenton. Her initial comment was in regards to the Warrenton Stump Dump landfill on Juniper Avenue and not the closed City of Warrenton Landfill. However, after DEQ

provided Ms. Lewis with a map showing both landfills, she commented that the closed City of Warrenton Landfill should be cleaned up and that health is more important than dog parks or soccer fields.

DEQ Response

As described in this permit evaluation report, the closure permit contains conditions requiring the City of Warrenton continue monitoring of groundwater and methane for the closed Warrenton Landfill. Should it be determined, as a result of this on-going monitoring, that there is a risk to the environment or public health from the closed landfill, DEQ would require the City of Warrenton to perform corrective action measures.

References

- Christensen T.H. & Kjeldsen P. 1989. Basic biochemical processes in landfills. In *Sanitary Landfilling: Process, Technology and Environmental Impact*. Academic Press, San Diego, CA, USA.
- Ehrig H.J. 1984. Laboratory scale tests for anaerobic degradation of municipal solid waste. In *Proc. ISWA Conf.*, Philadelphia PA, USA.
- EREF (Environmental Research and Education Foundation). 2006. Project Summary Report—Performance-Based System for Post-Closure Care at MSW Landfills: A Procedure for Providing Long-Term Stewardship Under RCRA Subtitle D. Alexandria, Va. (<http://www.erefndn.org/>).
- Farquhar G.J. & Rovers F.A. 1973. Gas production during refuse decomposition. *Water, Air & Soil Pollution* 2(2), 483-495.
- Kjeldsen P.K., Barlaz M.A., Rooker A.P., Baun A., Ledin A., & Christensen T.H. 2003. Present and long term composition of MSW landfill leachate: a review. *Critical Rev. Environ. Sci. & Tech.*, 32(4), 297-336.
- Pohland F.G. & Harper S.A. 1986. Critical review and summary of leachate and gas production from landfills. *EPA/600/2-86/073*, USEPA OSW, Washington DC, USA.
- USGS. 2006. Evaluating Nutrient Fate and Redox Controls in Groundwater in Riparian Areas, By Michelle M. Lorah (USGS MD-DE-DC Water Science Center, Baltimore, Maryland), Isabelle M. Cozzarelli and J. K. Böhlke (USGS National Research Program, Virginia). Accessed on 8-31-2010 at: <http://md.water.usgs.gov/posters/nutrientsRedox/index.html>



AGENDA MEMORANDUM

TO: The Warrenton City Commission
FROM: Brian Alsbury, Fire Chief
DATE: 07/28/2020
SUBJ: 2nd Reading of Outdoor Burning/Burn Permit

SUMMARY

The City Commission conducted the 1st reading of Ordinance No.1241 at its July 14th, 2020 meeting, it is being presented for it's 2nd reading and adoption.

Per. City commission that all fees for permits be waved until end of burn ban 2020. Date undetermined at this time, it will be determined by weather and the moisture content of fuels.

RECOMMENDATION/SUGGESTED MOTION

"I move to conduct the 2nd reading by title only of City Ordinance No. 1241; AN ORDINANCE AMENDING WARRENTON MUNICIPAL CODE CHAPTER 8.08.030, 8.08.040 AND 8.08.060, OPEN BURNING; AND AMENDING ORDINANCE NO. 956-A

"I move to adopt City Ordinance No. 1241"

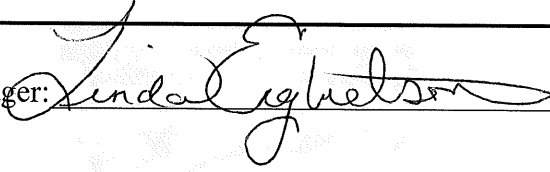
ALTERNATIVE

None

FISCAL IMPACT

None currently, the City of Warrenton currently does not collect fees for burn permits

Approved by City Manager:

A handwritten signature in black ink, reading "Linda Eglerton", written over a horizontal line.

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

ORDINANCE NO. 1241

INTRODUCED BY ALL COMMISSIONERS

**AN ORDINANCE AMENDING WARRENTON MUNICIPAL CODE CHAPTER 8.08.030, 8.08.040
AND 8.08.060, OPEN BURNING; AND AMENDING ORDINANCE NO. 956-A**

WHEREAS, the City Commission has made it a priority to update open burn regulations; and

WHEREAS, the City of Warrenton held multiple public meetings and work sessions, open to the public to solicit comments; and

WHEREAS, the Burn Permit Regulations need to be updated to better outline the rules and regulations put forth by the City of Warrenton, the Warrenton Fire Department and Oregon DEQ; and

NOW THEREFORE, THE City of Warrenton ordains as follows: (Key: **new**, ~~deleted~~)

Section 1. Amendments to the Warrenton Municipal Code Chapter 8.08 OPEN BURNING are as follows:

WMC 8.08.030 Permit – Application

- A. Any person wanting to burn within the City of Warrenton shall apply for a permit during regular business hours at the Warrenton City Hall. The issuance of a permit does not exonerate the applicant from any damage or injury which may result from their burning of a fire. (Ord. 956-A § 3, 1996)
- B. **Those in need of a burn permit shall contact City Hall, complete and application, and pay the permit/inspection fee; this fee is nonrefundable. Warrenton Fire Department will then schedule a burn permit site inspection within 72 hours, and issue the permit if all rules and regulations have been abided by the permit applicant.**

WMC 8.08.040 Permit – Issuance

- A. ~~The Fire Chief or designee shall issue such permits without charge.~~ **Burn permits are issued to resident by the Warrenton Fire Department after an onsite inspection.**
- B. The Fire Chief may impose such regulations and restrictions in connection with the issuance of such permits and with such burning as in the Chief's judgment are required in the public interest on a case-by-case basis.
- C. ~~A permit is in effect for a maximum of 30 days from date of issuance. (Ord. 956-A §§ 4, 6, 12, 1996)~~ **Burn permits will be issued on a yearly basis.**
- D. **City of Warrenton Finance Department will collect a burn permit application/inspection fee.**
Fees are as follows:

- Burn Barrel and/or Recreational Campfire Permit	\$25.00 per year/inspection
- Burn Pile (10x10x4 or smaller) Permit	\$50.00 per year/inspection

WMC 8.08.060 Regulations

- A. ~~E.~~ Any permit holder must call the Warrenton Fire Department prior to ignition to check weather conditions for safe burning times or other environmental conditions which may affect air quality. They will no longer be required to call and report to the Fire Department that they will be burning.
- B. ~~A.~~ All fires will be no larger than 400 cubic feet (10 x 10 x 4) or contained within a burn barrel not larger than a 55-gallon capacity.
- C. ~~B.~~ All burn barrels will be covered with a fine mesh (not larger than one-half inch by one-half inch) screen during any burning.
- D. ~~C.~~ A minimum of 50 feet will be maintained between any open fire and any structure. A minimum of 20 feet will be maintained between any building and a burn barrel.
- E. ~~D.~~ At all times a garden hose or other fire extinguishing equipment must be on hand.
- ~~E.~~ Any permit holder must call the Warrenton Fire Department prior to ignition to check weather conditions for safe burning times or other environmental conditions which may affect air quality.
- ~~F.~~ Fire during land clearing operations may exceed the size limit only when a piece of equipment (backhoe, bulldozer, etc.) and an operator is on site during any burning operation.
- F. ~~G.~~ It is prohibited to burn any painted wood, plywood, food rubbish, tires, composition siding or roofing, styrofoam, rubber, plastics, polyethylene products, paints, or any hydrocarbon based product.
- G. ~~H.~~ The burning of any product which emits an obnoxious or objectionable odor is prohibited. (Ord. 956-A §§ 7—11, 14—16, 1996)
- H. Burn piles or barrels can continue to burn after dark if permit holder is not continuing to add materials to fire. Permit holder will need to contact the Fire Department's on call Duty Officer to advise they are burning after dark. (971-286-8003)
- I. All burning must be attended by an adult 18 years or older and you must have a garden hose and shovel within 15 feet of burn pile or burn barrel.
- J. The burning of any logging slash inside the city limits is prohibited. those burning logging slash outside city limits must obtain an ODF permit.
- K. The burning of trees and debris for development of a site inside or within 3 miles of the City of Warrenton is prohibited.
- L. Debris would not be allowed to be hauled onto a different lot, unless it is designated as a certified solid waste reception site. This would also prohibit burning of the debris on that lot.
- M. The open burning of any debris from a commercial business or jobsite is prohibited.

Section 2. This Ordinance shall take full force and effect 30 days upon its adoption by the Commission of the City of Warrenton.

First Reading:

Second Reading:

Adopted by the City Commission of the City of Warrenton, this ____ day of _____, 2020.

APPROVED

Henry A. Balensifer III, Mayor

Attest:

Dawne Shaw, CMC, City Recorder

OPEN BURNING PERMIT REGULATIONS

Please follow these directions very carefully, a fee of \$200.00 per hour per apparatus for extinguishment may be charged to the applicant if the below stipulations are violated.

- A. Burn permits shall be required for all open burning in the city limits of Warrenton, this includes burn barrels, 10x10x4 brush piles and campfires outside of campgrounds.
- B. The burning of painted wood, plywood, rubbish, tires, composition siding or roofing, Styrofoam, rubber, plastics, polyethylene products, paints, or any other hydrocarbon products is strictly prohibited.
- C. The burning of garbage or debris which emits obnoxious or objectionable order is strictly prohibited.
- D. All fire must be tended by a responsible party. A minimum clearance set by forth by Oregon State law. Permitted open fires need to be at least 50 feet from anything that can burn. Permitted recreational fires need to be at least 25 feet away from anything that can burn. A garden hose or other extinguishing equipment must be on hand.
- E. Permit holders must call the Warrenton Fire Department at 503-861-2494 prior to burning, to check for current restrictions. If nobody is available to take your call, follow the instructions on the recording.
- F. Burn barrels or approved waste burner will be no larger than 55 gallons and be covered with a fine mesh screen.
- G. Open burn piles shall be no larger than 400 cubic feet (10ft. x 10ft x4ft) no exceptions.
- H. The Burning of industrial, construction and demolition waste materials is strictly prohibited. Demolition waste includes any materials resulting from the clearing of any site for land improvement or cleanup. Examples of land clearing waste includes trees, brush, logs, stumps, and any man-made structures for the purpose of site cleanup or site preparation.
- I. Any officer of the City of Warrenton Fire or Police Department may, without notice, revoke this permit for failure to abide by the above stipulations.
- J. Permits are effective for a maximum of 1 year of issue date once the site and inspection fee have been payed.
- K. I agree to hold the City of Warrenton and its representatives harmless for any damage or harm to any person or property which may occur as a direct or indirect effect of this activity.
- L. Burn permits will not be issued to anyone under 18 years of age.

City of Warrenton / Warrenton Fire Department
225 S. Main Ave. Warrenton Or, 97146

Burn Permit

Applicant Information

Full Name: _____ Date: _____
Last First M.I.

Burn Location: _____
Street Address Apartment/Unit #

_____ *City State ZIP Code*

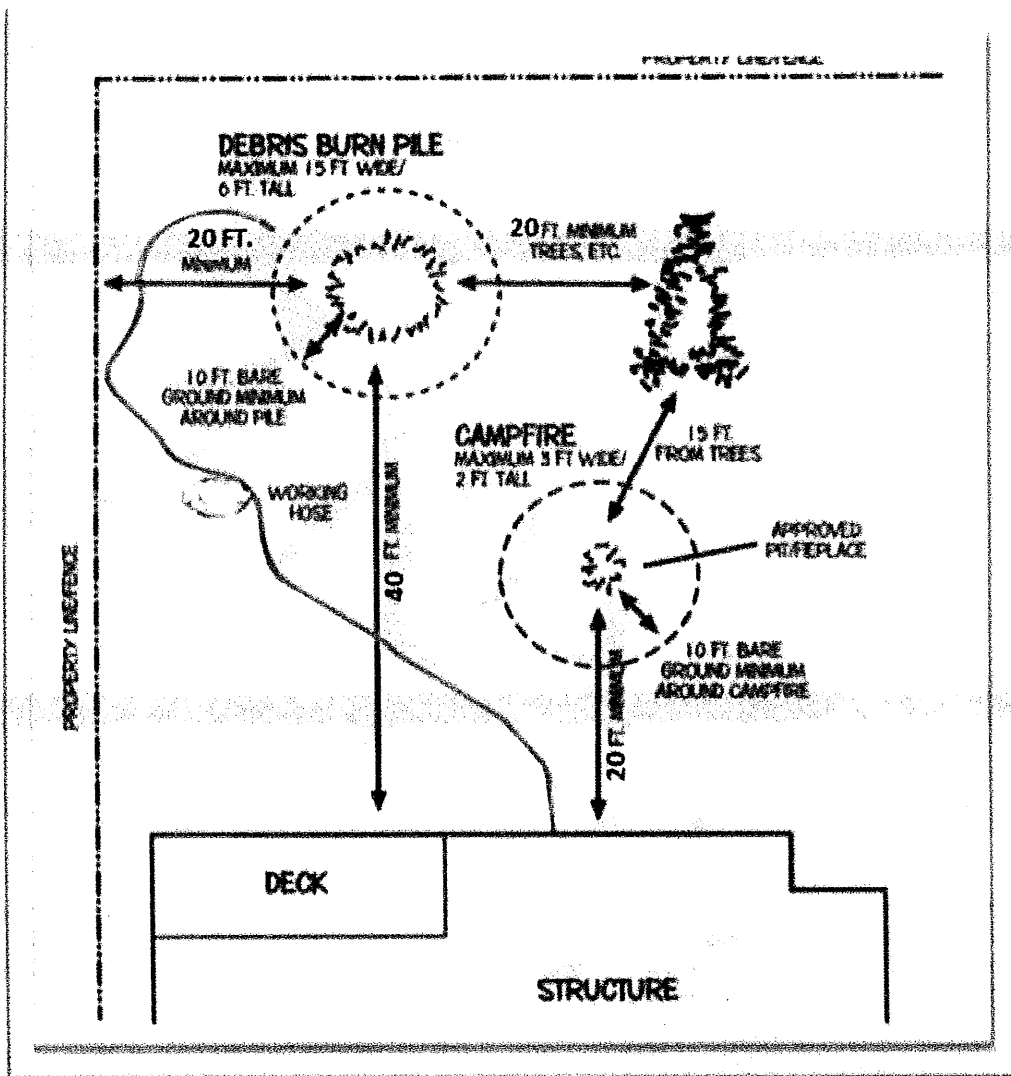
Phone: _____ Email: _____

Signature

Signature: _____ Date: _____

- A. **Burning Requirements:** Burn permits shall be required for all open burning in the city limits of Warrenton, this includes burn barrels, 10x10x4 brush piles and campfires outside of campgrounds.
- B. The burning of painted wood, plywood, rubbish, tires, composition siding or roofing, Styrofoam, rubber, plastics, polyethylene products, paints, or any other hydrocarbon products is strictly prohibited.
- C. The burning of garbage or debris which emits obnoxious or objectionable odor is strictly prohibited.
- D. All fire must be tended by a responsible party. A minimum clearance set by forth by Oregon State law. Permitted open fires need to be at least 50 feet from anything that can burn. Permitted recreational fires need to be at least 25 feet away from anything that can burn. A garden hose or other extinguishing equipment must be on hand.
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Enforcement:



La seguridad y los incendios en la remoción de desperdicios de jardín y el uso de equipos de jardinería

¿SABÍA USTED?

- Muchos de los incendios en Oregon son provocados por la quema incorrecta de desechos o por chispas provenientes de equipos a motor.
- Las máquinas podadoras y las sierras eléctricas son algunos ejemplos de equipos que pueden provocar incendios forestales cuando las chispas encienden la vegetación alrededor como pasto (césped), malas hierbas o corteza molida.

Estas sugerencias le ayudarán a prevenir incendios cuando dé mantenimiento a su jardín, y a proteger a su vivienda de incendios forestales.

CÓMO DESECHAR DESPERDICIOS DE JARDÍN

- Recicle los desperdicios de jardín. Triture los desperdicios, conviértalos en composta o téngalos a un centro de reciclaje.

- Cheque con la compañía de basura de su zona, la agencia de incendios u otro recurso en su comunidad sobre las maneras de reciclar y desechar los desperdicios de jardín sin quemarlos.
- Colabore con sus vecinos para organizar un día para el desecho de desperdicios en la comunidad.
- Para conservar su propiedad despejada, algunos propietarios emplean la quema de desperdicios para eliminar los desechos de jardín tales como ramas, maleza, paja y hojas, en lugar de llevarlos a un basurero.

CÓMO QUEMAR LOS DESPERDICIOS DE JARDÍN DE FORMA SEGURA

- Llame antes de quemar. Cheque con la agencia local de incendios o con la autoridad de protección del aire para informarse de cualquier tipo de restricción en la quema, y para saber si necesita un permiso especial.
- Esté al tanto del pronóstico del tiempo. Jamás queme desperdicios en días secos o con viento, ya que es fácil que la quema al aire libre se esparza incontroladamente.
- Queme solo desperdicios de jardín. Los reglamentos estatales prohíben la quema al aire libre de cualquier material que produzca humos densos u olores dañinos. Los plásticos, la madera tratada y otros productos fabricados desprenden gases dañinos al ser quemados.

- Mantenga pequeña la pila de quema o use un barril especial para quemar. Despeje por lo menos un radio de 15 pies (5 metros) alrededor del barril y por lo menos un radio de 25 pies (8.5 metros) alrededor de su pila de quema y asegúrese de que no haya ramas ni cables de electricidad sobre ellos. Moje el área alrededor antes de empezar a quemar.
- Supervise a los niños cerca de los fuegos con desperdicios. Mantenga siempre un área de seguridad de 15 pies (5 metros) alrededor del fuego y recuérdelos a los niños que esa es un área solamente para las personas adultas.
- Tenga siempre consigo agua y herramientas para incendios. Tenga cerca una manguera de agua, un cubo de agua, una pala y tierra o arena para apagar el fuego. Esto asegura que cualquier chispa o braza que se escape pueda ser apagada rápidamente.
- No desatienda el fuego. Las leyes de Oregon exigen que se supervise la quema de desperdicios continuamente, desde principio a fin hasta que el fuego se apague por completo.
- Apague el fuego. Emplee agua para solocar la pila de quema, remueva el carbón y vuelva a echarle agua. Repita hasta que el fuego esté apagado por completo.
- Revise el fuego. Regrese y vuelva a revisar las pilas de quema anteriores ya que podrían conservar calor durante varias semanas y volver a encenderse cuando la temperatura ambiental se incremente y empiece a soplar el viento.

INFORMACIÓN SOBRE EL USO SEGURO DE EQUIPOS

- Tenga presente las restricciones vigentes respecto al fuego.
- Asegúrese de que todo el equipo a motor cuente con un para-chispas aprobado.
- Use equipo a motor temprano por la mañana cuando la humedad es mayor y las temperaturas son menores.
- Remueva toda piedra u objeto que pueda golpear con la cuchilla de la podadora y provocar chispas.

INFORMACIÓN DE SEGURIDAD RESPECTO A LA GASOLINA

- Use gasolina en áreas bien ventiladas y espere hasta que las máquinas podadoras u otras máquinas a gasolina se hayan enfriado por completo antes de ponerles gasolina. Limpie de inmediato la gasolina que haya caído, absorbiéndola con arena para gatos o con absorbentes comerciales que puede comprar en tiendas de productos para autos. Deseche los materiales de limpieza debidamente, colocándolos en un receptáculo de metal con una tapa hermética.
- No use gasolina en la quema de desperdicios de jardín. Para empezar el fuego, emplee papel, cartulina o briquetas.

YARD DEBRIS REMOVAL & EQUIPMENT USE FIRE SAFETY



LAS LEYES DE OREGON EXIGEN QUE SE SUPERVISE LA QUEMA DE DESPERDICIOS CONTINUAMENTE, DESDE PRINCIPIO A FIN HASTA QUE EL FUEGO SE APAGUE POR COMPLETO.

Safety information from the Oregon Office of State Fire Marshal and your local fire agency



DID YOU KNOW?

- Many outside fires in Oregon are caused by improper debris burning or sparks from power equipment use.
- Lawn mowers and chain saws are a few examples of equipment that can cause a wildfire when sparks ignite vegetation such as grass, weeds, or bark dust.

These tips will help you prevent escaped fires when maintaining your landscape and protecting your home from wildfire.

HOW TO DISPOSE OF YARD DEBRIS

- Recycle yard debris. Chip, compost, or haul debris to a recycling center.
 - Check with your garbage hauler, fire agency, or other community resources for ways to recycle or dispose of yard debris without burning.
- Work with neighbors to organize a community debris disposal day.
- To keep their property clear, some property owners use debris burning to dispose of yard debris such as branches, brush, needles, and leaves, rather than going to the landfill.

HOW TO BURN YARD DEBRIS SAFELY

- Call before you burn. Check with your local fire agency or air protection authority to learn if there are any burning restrictions and if a permit is required.
- Know the weather forecast. Never burn on dry or windy days because it is easy for open burning to spread out of control.
- Burn only yard debris. State regulations prohibit the open burning of any material that creates dense smoke or noxious odors. Plastics, treated lumber, and other manufactured products give off toxic fumes when burned.
- Keep your burn pile small or use a burn barrel. Clear at least a 15-foot radius around a barrel and at least a 25-foot radius around your burn pile, and make sure there are no tree branches or power lines above. Wet down the surrounding area before and during the burn.
- Supervise children around debris fires. Always keep at least a 15-foot safety zone around the fire and remind children that this area is for adults only.

- Always have water and fire tools on site. Keep a water-charged hose, a bucket of water, a shovel, and dirt or sand nearby to extinguish the fire. This ensures that any escaped sparks or embers can be extinguished quickly.
- Stay with the fire. Oregon law requires that you monitor a debris burn continually from start to finish until completely out.
- Extinguish the fire. Drown the burn pile with water, stir the coals, and drown again. Repeat until the fire is completely out.
- Recheck the fire. Go back and recheck old burn piles, as they can retain heat for several weeks and rekindle when the weather warms and the wind begins to blow.

EQUIPMENT USE SAFETY INFORMATION

- Be aware of the fire restrictions in effect.
- Make sure all power equipment has an approved spark arrestor.
- Use power equipment in the early morning when the humidity is higher and temperatures are lower.

- Remove any rocks or other objects that might be hit with the mower blade and cause a spark.

GASOLINE SAFETY INFORMATION

- Use gas in a well-ventilated area and wait until lawn mowers or other gas-powered equipment are cool before adding gas. Clean up gasoline spills promptly by absorbing it with cat litter or commercial absorbents found at auto-supply stores. Discard clean-up materials properly by placing them in a metal container with a tight-fitting lid.
- Don't use gas to start yard debris fires. Use paper, cardboard, or manufactured fire starters.

CONTENT COURTESY OF OREGON LIFE SAFETY TEAM



Oregon State Police
OFFICE OF STATE FIRE MARSHAL
503-934-8228
oregon.gov/osp/sfm | osfm.ca@state.or.us
fb.com/OregonStateFireMarshal
twitter.com/OSFM

OREGON LAW REQUIRES THAT YOU MONITOR A DEBRIS BURN CONTINUALLY FROM START TO FINISH UNTIL COMPLETELY OUT.

FOR LIFE-THREATENING EMERGENCIES, CALL 911.

05/2016



AGENDA MEMORANDUM

TO: The Warrenton City Commission
FROM: Collin Stelzig, P.E., Public Works Director
DATE: July 28th, 2020
SUBJ: SE ANCHOR (HARBOR-SE 3rd ST) Water Main Replacement Project - Advertise Request for Bids

SUMMARY

The work for the SE Anchor (Harbor-SE 3rd St) water main replacement project will consist of furnishing all labor, materials, equipment, and installation of a new 8" water line, disinfection and testing, including residential water services and one new hydrant, and decommission the old water main. The work will be accomplished in the Summer-Fall of 2020 at an estimated cost of \$142,863.00

Public Works is seeking Commission approval to advertise the request for bids for the SE Anchor (Harbor-SE 3rd St) water main replacement project.

RECOMMENDATION/SUGGESTED MOTION

I move to approve advertising the request for bids for the SE Anchor (Harbor-SE 3rd St) water main replacement project.

ALTERNATIVE

- 1) Other action as deemed appropriate by the City Commission
- 2) None recommended

FISCAL IMPACT

This project has been approved by the City Commission and is included in the City of Warrenton 2020-2021 Adopted Budget.

Approved by City Manager: _____

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



CITY OF WARRENTON, OREGON

SE Anchor (Harbor – SE 3rd St) Waterline Project
CIP Project No. 620085

CONTRACT DOCUMENTS and TECHNICAL SPECIFICATIONS

Submitted to:
City of Warrenton
Attention: Collin Stelzig
Public Works Director
45 SW 2nd Street/P.O. Box 250
Warrenton, OR 97146
Phone: 503.861.0917

July 2020

Prepared By:
Otak, Inc.
Attention: Kyle Ayers, PE
Project Manager
808 SW Third Avenue, Suite 800
Portland, OR 97204
Phone: 503.287.6825

Otak Project No. 19383.000

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CONTRACT DOCUMENTS

INVITATION TO BID

Sealed bids for the **SE Anchor (Harbor – SE 3rd St) Waterline Project** 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 **August 6, 2020** for the Owner, City of Warrenton, 45 SW 2nd Street, 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 Warrenton, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Install new water line, disinfection and testing, including residential water services and one new hydrant. The work will be accomplished in the Summer-Fall of 2020.

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

1. Install new water line, disinfection and testing, decommissioning existing main
2. Install new residential water services and one new hydrant
3. Overlay water main trench and services with AC trench patch

NOTE: The intent of this contract is to provide a new water main and services per contract technical specifications.

IMPORTANT: Complete digital project bidding documents are available at <http://www.questcdn.com>. You may download the digital plan documents for \$30 by inputting Quest project **#7151520** 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) 812-3732 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 \$50,000.00]. 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 **Tuesday, August 6, 2020**. 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

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INSTRUCTIONS TO BIDDERS

1. THE PROJECT:

The work of this project will take place in Warrenton, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Install new 6"-8" water line, disinfection and testing, including residential water services and one new hydrant. Decommission old main. Repave Anchor Way and SE 3rd St. Overlay the listed streets below with a 2" AC trench patch. The work will be accomplished in the Summer-Fall of 2019.

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

1. Install new water line, disinfection and testing, decommissioning existing main
2. Install new residential water services and one new hydrant
3. Overlay water main trench and services with 4" AC trench patch

NOTE: The intent of this contract is to provide a new water main and services per contract technical specifications.

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 Otak, 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, P.E., the Engineer for Otak, Inc., email: kyle.ayers@otak.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 **90** 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 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 nonresponsive bid. A nonresponsive bid will not be considered by the Owner for award. The Owner will consider for 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 attached Bid Form. All blanks must be appropriately filled in. Where so indicated by the make up of the Bid Form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount in words shall govern. Bidders shall make no additional stipulations on the Bid Form nor qualify any bid in any manner. Only one copy of the Bid Form is required.

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 attached hereto, 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. 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.

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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
SE Anchor (Harbor – SE 3rd St) Waterline
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 contract. 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 _____, 2020

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:

SE Anchor (Harbor – SE 3rd St) Waterline

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 _____, 20____.

PRINCIPAL: _____ **SURETY:** _____

By _____ BY ATTORNEY-IN-FACT:
Signature

Official Capacity

Name

Attest: _____
Corporation Secretary

Signature

Address

City State Zip

Phone Fax

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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: SE Anchor (Harbor – SE 3rd St) Waterline Project

BID #: _____ BID CLOSING: Date: August 6, 2020 Time: 2:00 ☐ AM ☒ PM
REQUIRED DISCLOSURE DEADLINE: Date: August 6, 2020 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.	_____	_____	_____
6.	_____	_____	_____

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 #: _____

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AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2020 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

SE Anchor (Harbor – SE 3rd St) Waterline Project

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. Drawing prepared by Otak, Inc.
- n. Specifications prepared or issued by Otak, Inc., dated July 2020.
- o. Addenda:

No. _____, dated _____, 2020.

No. _____, dated _____, 2020.

No. _____, dated _____, 2020.

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 shall be achieved not later than 90 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 damages 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 \$300.00 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 Otak, 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:

CONTRACT DOCUMENTS

SE Anchor (Harbor – SE 3rd St) Waterline Project

CD – 18

PROJECT NO. 19383.000

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 45 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.

GC-4 SCOPE OF WORK

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 expense 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 so as 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:

Construction stakes will be provided to the Contractor for accurate construction of the project. Contractor shall provide 5 days advanced written notice of staking needs.

5.8.01 Construction Survey Staking – S & F Land Service will provide survey staking of the water line and valves as designed by Otak, Inc. Grades will not be provided on water stakes. Said stakes will be nail or wood hub. Copies of the field notes will be provided to the Contractor upon request.

All additional staking or restaking requests required by the Contractor shall be at the Contractor's sole expense. The Contractor shall contract directly with the project Surveyor.

5.9 PROTECTION OF SURVEY MARKERS:

5.9.01 Permanent Survey Markers - The Contractor shall not disturb permanent survey monuments, stakes, or bench marks 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:

CONTRACT DOCUMENTS

SE Anchor (Harbor – SE 3rd St) Waterline Project

CD – 28

PROJECT NO. 19383.000

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 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 Agencies

Department of Agriculture
Forest Service
Natural Resources Conservation Service
Department of Defense
Army Corps of Engineers
Department of Energy
Federal Energy Regulatory Commission
Environmental Protection Agency
Health and Human Services Department

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

Department of Fish and Wildlife
Division of State Lands
Water Resources Department
Department of Fish and Wildlife

Local Agencies

City Councils: Board of County Commissioners

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 statute, 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 insure 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 insure 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 to be 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 therefor.

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: **SE Anchor (Harbor – SE 3rd St) Waterline Project**

_____(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 _____, 2020

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: **SE Anchor (Harbor – SE 3rd St) Waterline Project**

_____ (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 _____, 2020

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: Collin Stelzig, P.E., Public Works Director

PROJECT NAME: SE Anchor (Harbor – SE 3rd St) Waterline Project

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]

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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 Warrenton, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Install new 6"-8" water line, disinfection and testing, including residential water services and one new hydrant. Decommission old main. Repave Anchor Way and SE 3rd St. Overlay the listed streets below with a 2" AC trench patch. The work will be accomplished in the Summer-Fall of 2019.

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

1. Install new water line, disinfection and testing, decommissioning existing main
2. Install new residential water services and one new hydrant
3. Overlay water main trench and services with 4" AC trench patch

NOTE: The intent of this contract is to provide a new water main and services per contract technical specifications.

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. References within these Specifications also include the Oregon Standard Specifications for Construction. In the event of a conflict or where there appears to be a conflict in Specifications or the Construction Plans, the most stringent shall apply. In the event that these Specifications are silent, the most current edition of the Oregon Standard Specifications for Construction shall be used. A PDF copy of these specifications can be found at the following location:

[https://www.oregon.gov/ODOT/HWY/SPECS/Pages/2015_Standard_Specifications.aspx#2015_Standard_Specifications_\(PDF_Versions\)](https://www.oregon.gov/ODOT/HWY/SPECS/Pages/2015_Standard_Specifications.aspx#2015_Standard_Specifications_(PDF_Versions))

101.2 WORK SEQUENCE:

The Contractor shall schedule work to maintain the public's continuous access to those properties having driveways and main access routes within the limits of the project. 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 access to those businesses and properties abutting and adjacent to the limits of the project. No additional payment to the Contractor will be allowed on account of the Contractor's failure to anticipate such costs.

101.2.01 Public Access - The Contractor shall schedule work on this project such that it be excavated and constructed in an orderly manner according to the following sequencing requirements.

- All removed concrete sidewalks shall be available for use by the public with crushed rock sidewalk leveling course as a temporary sidewalk surface not later than 3:00 p.m. of each work day preceding each weekend throughout the duration of the project.
- All existing concrete sidewalk areas shall be available for continuous public access every weekend and holiday throughout the duration of the project with either:
 - a) the existing concrete surface,
 - b) the temporary crushed rock surface, or
 - c) the new concrete surface.

101.2.02 Driveway Access - The Contractor shall coordinate with each property owner and provide a minimum 1 week notice prior to disruption of existing driveway.

101.2.03 Removal of Asphalt Pavement - Remove all existing asphalt pavement surfaces designated to be removed as necessary to construct new water main. The Contractor shall schedule all pavement demolition

work in order to provide the public with the maximum amount of access along existing pavement surfaces and/or new base rock surfaces.

101.2.04 Traffic Control - The Contractor shall develop and submit a Traffic Control Plan (TCP) for review and approval as specified in Section 130.4. The traffic control plan shall detail key intersections within the project zone in accordance with Section 157 of these specifications. The contractor shall include signage along side streets as necessary to inform traffic of the route closure and proper rerouting. 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 within the project's limits. 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.

101.2.05 General sequence of work - The Contractor shall begin work on the project within 10 days from the date the Notice to Proceed is issued.

101.2.06 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.

101.2.07 Removal of existing water mains within project limits - The Contractor is responsible for cutting, capping and installing temporary valving as necessary to make clean, straight connections to the existing water system with as few fittings as possible or as directed by the Engineer. The Contractor shall demolish the existing water mains within the work area as necessary to create the necessary room for the proposed utilities. The Contractor shall develop and submit a Water Sequencing Plan (WSP) for review and approval as specified in Section 130.6.

101.2.08 Interference between existing utilities and new utilities - Conflicts exist between existing franchise utilities and proposed utility and road improvements. The Contractor shall make all necessary provisions to perform necessary relocations as specified in the plans to allow for the new construction of the water and storm system.

101.2.09 Project Dewatering - The Contractor is responsible for installing a dewatering system as specified in Section 222. The Contractor shall have the dewatering system designed and in place and operational prior to beginning installation of any new utilities or performing any compaction efforts as determined necessary by the Engineer.

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

104.1 PROJECT 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 (503) 232-1987.)

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 Water System; City of Warrenton Public Works Department, Collin Stelzig, (503) 861-0917 or Kyle Sharpsteen, (503) 298-9306.

104.1.02 - City Storm/Sanitary Sewer System; Larry Neahring, (503) 791-2944.

104.1.03 - CATV; Charter Communications, Bill Honi, (503) 298-0129.

104.1.04 - Telephone Facilities; Centurylink, Mike Meisner, (503) 242-7676.

104.1.05 - Electric Facilities; Pacific Power, Marilyn Brockey, (503) 861-6005.

104.1.06 - Gas Facilities; Northwest Natural Gas, Rich Girard, (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 until the Engineer provides further instructions.

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. The Contractor shall conform to all jurisdiction requirements of the governing agencies when working within the public right-of-way.

Work hours are to be between 7am and 7pm, Monday through Friday. Any deviation from this schedule must be requested by the Contractor in writing and receive approval from the City.

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.

Residents adjacent to the project will be allowed to be present at these weekly meeting in order to be informed about road closures, access to their properties and proposed work for the week.

END OF SECTION 120

SECTION 130 – SUBMITTALS

130.1 GENERAL:

The Contractor shall be required to submit the following submittals.

- 1) Construction Schedule
- 2) Shop Drawings, Product Data, and Samples
- 3) Traffic Control Plan & Sequencing Plan
- 4) Demolition Plan
- 5) Water Shut-Down & Sequencing Plan
- 6) Record Drawings at completion of project
- 7) Dewatering Plan
- 8) Aggregate, Asphalt Mix & Concrete Mix Design

130.2 CONSTRUCTION SCHEDULE:

130.2.01 Project Schedule - The anticipated construction schedule is set forth in the Instructions to Bidders. 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. An updated project schedule shall be submitted on a monthly basis along with every monthly progress payment request. If Contractor's submitted schedule and the prosecution of work vary 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.

130.4 TRAFFIC CONTROL PLAN & SEQUENCING PLAN:

130.4.01 Traffic Control Plan (TCP) Guidelines:

1. TCP shall be drawn on 24" x 36". Base Map is available from the Engineer upon request.
2. TCP must use legible lettering and clear, contrasting, symbols for viewing or printing.
3. Include name and telephone number of the 24-hour contact person representing the contractor.
4. Show all nearby streets with street names to assure proper orientation.
5. Show existing sidewalks, driveways and intersections in the construction work zone including areas

affected by taper transition.

6. Show location and dimensions of the construction work zone.
7. Show staging area and materials storage area, as appropriate.
8. Indicate location of construction signs, barricades, and delineators.
9. Use a legend to define all signs and symbols and designate them with MUTCD nomenclature.
10. Show existing and proposed temporary parking restriction zones and signs, as needed, within the work area.
11. Road closures will require approval from the Director of Public Works, Police, Fire Department and Emergency Services.
12. Signs and barricades will be required to direct pedestrians and bicyclists through or around the construction work zone and shall be shown on the TCP.
13. Indicate on the plan the duration of the construction work and subsequent traffic control (include type of work and estimated start date, as appropriate).

130.5 DEMOLITION PLAN:

130.5.01 Demolition Plan - Contractor shall detail the different stages of the demolition plan, located within the Construction Drawings. Details of these stages may be incorporated into the Construction Schedule.

130.6 WATER SHUT-DOWN & SEQUENCING PLAN:

130.6.01 - A Water Sequencing Plan (WSP) shall be submitted by the contractor and approved by the City and Engineer prior to the installation of any water main or appurtenances. At a minimum, the WSP shall address the following information:

1. WSP shall be drawn on 24" x 36". Base Map is available from the Engineer upon request.
2. Indicate on the plan the duration of the construction work and subsequent disruptions and tie-ins (include type of work and estimated start date, as appropriate).
3. Contractor shall sequence construction to allow for continuous water service to all residences throughout the project area, except as required for mandatory shut-downs. Due to the lack of water valves on the existing system within the project region, breaks, shut-downs and tie-ins will impact large portions of the City's residence.
4. The existing asbestos (AC) water main has been repaired numerous times along the project alignment and is susceptible to breakage. Contractor shall take every precaution possible to secure and protect the existing main and services.
5. Conflicts exist between the existing water main and new water main throughout the project, particularly at intersections. The contractor shall install temporary thrust blocking and temporary valving as necessary to allow the demo of conflicting water pipes.
6. Contractor shall phase construction to limit the amount of mandatory shut downs when tying the new water mains into the existing system. This may require the contractor to construct, test and disinfect the new water main in sections, utilizing temporary tie-ins.
7. New water mains and appurtenances - construction should begin in the proximity of existing mains to facilitate future installation of the testing corporation stop assembly (i.e. jumper) and tie-in.
8. Connection to any existing waterline is not allowed until contractor is ready to test new water mains prior to placing them in service. Contractor shall be responsible for all labor and equipment required for pressure testing flushing, dechlorination, erosion prevention, and repair of any damage caused by any and all water main flushing prior to issuance of tentative acceptance by the city or engineer.
9. Initial flush - initial flushing of new water main(s), including all hydrants and dead-end water main(s), may commence after jumper has been installed and connection to the existing water main is complete. City personnel may verify that initial flushing is properly performed and all air and debris have been removed from the new water main. All water mains shall be initially flushed at a minimum rate of 2.5 feet per second (fps) and for the duration necessary to provide a minimum of 2 complete water turn-overs within the new water main(s).
10. Removal of the jumper and final flush – Once City or Engineer approval has been granted, the Contractor may remove the jumper and perform needed flushing on the new water main to remove any remaining air and debris. City personnel may flush existing water mains as necessary and verify that Contractor's flushing of the new water main(s) is adequate.

130.7 DEWATERING PLAN:

130.7.01 Dewatering Plan - Contractor shall submit a dewatering plan meeting the requirements of Section 222 of these technical specifications as required by the Engineer.

130.8 RECORD DRAWINGS AT COMPLETION OF PROJECT:

130.8.01 Record Drawings - Contractor shall submit Record Drawings to the Engineer or City upon completion of construction. Record Drawings shall be submitted in both paper and digital (PDF) form. 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.

151.3 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 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.

151.5 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:

Per the approved TCP, the Contractor shall at his 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 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 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 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 the ODOT.

157.2 TRAFFIC ON LOCAL STREETS:

The Contractor shall allow minimum one-way traffic along within the project limits to residences and businesses having accesses within the project limits. 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 commercial properties and residences on within the project limits. The barricades 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 his 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.

157.4 MEASUREMENT AND PAYMENT:

The Contractor shall include in the contract bid sum, sufficient funds as may be required for producing the TCP and supplying all labor, equipment and materials necessary for the proper regulation of traffic. This will be paid for under the bid item for "Mobilization".

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 – No substitutions will be allowed on the proposed water system. Other 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 he 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

170.1 FINAL INSPECTION:

When all on-site paving 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

DIVISION TWO - SITEWORK

SECTION 201 – MOBILIZATION

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 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 Lump Sum Basis - Payment for the performance of the mobilization work as above specified will be made at the contract lump sum amount for the item "Mobilization". The amounts to be allowed for "Mobilization" in the progress payment to be made under the contract 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.

202.2 MATERIALS:

All materials used in temporary installations under this Section shall be in conformance with ODOT 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, nonreflective 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 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 and crosswalks for temporary access over concrete curbs and concrete crosswalks;
- 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 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 "Mobilization".

END OF SECTION 202

SECTION 205 – DEMOLITION

205.1 DESCRIPTION:

TECHNICAL SPECIFICATIONS

SE Anchor (Harbor – SE 3rd St) Waterline Project

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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 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 trash pumps set in the trench shall be considered as incidental to, and all costs included in, the various contract pay items in the proposal.

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 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 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 Contractor'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 native sand.

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 - 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, Surface Restoration & Protection". 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 three (3) weeks 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 3 HMAC (class) of Concrete and Proportions of Materials – The asphalt concrete mixture shall be of the level (class) as shown on the plans (Level 3 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 HMA 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 HMA and shall have a gross static weight of at least 8 tons. Finish rolling shall be performed 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 HMA Level 3 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 specified by ODOT.

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 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, preparing, and installing all forms of striping and pavement markings.

258.2 MATERIALS:

258.2.01 Preformed thermoplastic pavement markings shall be PREMARK PLUS as supplied by Flint Trading Co., 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. ($\pm 10\%$) 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 manufacturer's 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·m⁻²·lx⁻¹ for white and 300 mcd·m⁻²·lx⁻¹ for yellow as measured with an LTL-2000 or LTL-X Retroreflectometer.

258.3 CONSTRUCTION:

258.3.01 General - Contractor shall install pavement marking in accordance with applicable requirements of Oregon Standard Specifications Subsection 0850.

258.3.01A Prepare and Prime Pavement - Remove contaminants from new AC surfaces that may adversely affect the installation of the pavement markings by sandblasting, shot-blasting, or sweeping. Air blast the pavement with a high-pressure system to remove extraneous or loose material. Apply materials to new asphalt concrete that is sufficiently cured according to the manufacturer's recommendations. After the pavement surface is clean and dry, apply primer as recommended by the manufacturer to the area receiving the pavement markings. Apply the primer in a continuous, solid film according to the recommendations of the primer manufacturer and the pavement markings manufacturer.

258.3.01B Protection - Protect all applied marking from traffic until sufficiently cured so as not to be damaged or tracked by traffic movements.

258.3.02 Thermoplastic Pavement Markings, General - The Engineer will be responsible for preliminary 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.

258.3.03 Preformed Thermoplastic Pavement Markings shall be applied on asphalt using the propane torch method recommended by the manufacturer or using a method approved equal by the Engineer. 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 Thermoplastic Pavement Markings - The quantities of stop bars will be measured and paid for a lineal foot basis for the quantity ordered and actually installed. Gaps between stripes will not be measured. Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

END OF SECTION 258

SECTION 261 – WATER PIPE AND FITTINGS

261.1 DESCRIPTION:

This item includes all work necessary for the installation of water pipe and fittings as shown on the plans for use in water distribution systems.

261.2 MATERIALS:

261.2.01 General - Materials and strength specifications shall be as hereinafter specified for the particular kind of pipe and fittings as shown on the plans. No pipe and fittings that are not hereinafter specified will be allowed on the project. All water system materials shall be NSF approved for use in domestic water supply systems.

261.2.02 Water Main Pipe:

261.2.02A Polyvinyl Chloride (PVC) pipe shall be **DR18** and conform to the requirements of AWWA C900/C905. Pipe shall have integral bell and spigot joints conforming to the requirements of ASTM D3139. The pressure class shall be Class 305, DR14. Ductile iron fittings shall be used with PVC pipe.

261.2.03 Water main pipe fittings shall be of a class and rating at least equal to the adjacent pipe unless specified otherwise. Joint materials shall be compatible with the adjacent pipe. All fittings shall be cast or ductile iron. Mechanical joint and push-on joint type coupling shall conform to ANSI A21.10 and A21.11 (AWWA C153), cement lined and seal coated according to ANSI A21.4 (AWWA C104). Other types of joints shall conform to FS WWP-421 b, Type II for push-on joints. Flanged couplings shall be drilled and faced in accordance with ANSI B-16.1 or B-16.2. Rubber gasket type shall be U.S. Pipe, Tyton or approved equal. Cast iron fittings for use with FS Type II and Type III cast iron water pipe shall conform to the same specifications except that joints shall be mechanical type and include cast iron glands, plain rubber gaskets and T-head cast iron bolts and nuts per ANSI A21.11 or an approved compression type with rubber gasket.

261.2.04 Valves:

261.2.04A Gate valves, three inches and larger in diameter, up to eight inches in diameter, shall conform to the requirements of AWWA C500 as to composition and quality of material and workmanship and shall be NSF approved. Valves shall be iron body, bronze mounted, resilient wedge type, with triple O-ring seals, non-rising stem, and 2-inch square operating nut. Gate valves shall be Clow, Dresser M and H, or Mueller. Valve ends shall be mechanical joint, flanged joint, or push-on joint, or a combination of the foregoing as called for in the plans.

261.2.04B Gate Valves - Two inches and smaller in diameter shall be NRS with operating hand wheel, screw ended, and have a rated working pressure not less than 150 p.s.i. The valves shall conform to the requirements of FS WWB 54B, Class A, Type 1.

261.2.05 Valve Boxes –Cast iron valve boxes shall be furnished with all valves 3 inches and larger, "Vancouver" style, Olympic Foundry Model 910. Extensions shall be used as required for varying installation conditions and shall be a single piece of PVC sewer pipe, ASTM D-3034. Valve box covers shall be marked "W". All valve boxes shall be equipped with a valve box base Model VC212 by 3DC or approved equal.

261.2.06 Flanged coupling adapters shall be by Uniflange Corp., Series 900-C, or approved equal.

261.2.07 Pipe Restraint fittings shall be "GripRing" by Romac Industries, Inc. or approved equal.

261.2.08 Water Service Assemblies:

261.2.08A Tubing shall be 1" Crosslinked Polyethylene (PEXa) "REHAU-MUNICIPEX" water service tubing conforming to ASTM F876 and NSF/ANSI Standard 14 and 61 (NSF-pw-g), minimum 200 p.s.i. Pipe shall be certified to AWWA C 904 Cross-linked Polyethylene (PEX) Pressure Pipe and certified to standards ASTM F876, CSA B137.5, NSF 14, NSF 61 and PPI TR-4, by approved testing agencies, with a standard materials designation code of 3306. Pipe shall have the minimum markings: PEXa 3306, CSA B137.5, ASTM F876, F2023 and F2080, NSF-pw.

All compression joints shall use stainless steel insert stiffeners.

261.2.08B Service saddles shall be nylon coated, ductile iron saddles with single stainless-steel strap, Romac Style 202NS.

261.2.08C Corporation stops for waterlines with service saddles or tees shall be type Mueller type H-15028N with AWWA IPT inlet and CTS Mueller 110 Conductive Compression Connection for water service tubing outlet.

261.2.08D Angle meter stops shall be FORD for PE water service tubing inlet on services up to 2 inches.

261.2.08E Meter boxes - New meter boxes shall be Armorcast RPM A600164PCX12/18 with 20K traffic rated lid (drop-in) and will be furnished by the City/Contractor and installed to finished grade by the Contractor.

261.2.08F Water meters will be supplied and installed by the City.

261.2.08G Water service fittings on the customer side of the meter will be supplied and installed by the City.

261.2.08H Casing shall be Schedule 40 PVC, pushed under the existing pavement and shoulders of the road, sized to allow for the tubing to be installed inside of the PVC casing.

261.2.09 Fire hydrants shall: Be suitable for general waterworks service, Have dry barrel, post type with compression main valve closing with the inlet pressure, Have a Replaceable Stem Coupling and a replaceable Traffic Flange at the ground line to prevent or minimize traffic damage, Comply with AWWA Standard C502, Be UL listed and FM approved, and Be Certified to ANSI/NSF 61/372.

Each hydrant shall be equipped with two 2 1/2 inch hose nozzles and one 4 1/2 inch threaded pumper nozzle. Main valve shall be 5 1/2 inch compression type with a 6 inch inlet and counter clockwise opening. Hydrants shall be furnished with factory lubricate, O-ring sealed bonnet, safety flange construction, allowing for 360° rotation of nozzle section on stem. Hydrant assemblies shall include main line tees and connecting pieces with integrally cast joint restraint, Tyler mechanical joint swivel fittings, or approved equal. Hydrants shall be Mueller Super Centurion 250 Fire Hydrants. Hydrant shall be Shop Coated with high performance 2-part Epoxy.

261.2.10 Tracer wire shall be #12 multi stranded copper wire with blue colored insulation.

261.2.11 Thrust blocks shall be constructed of Portland cement concrete conforming to the requirements of ASTM C94. Compressive field strength shall be not less than 2,000 p.s.i. at 28 days. Maximum size of aggregate shall be 1½ inches.

261.2.12 Air Release Valves shall be A.R.I. Model S-50 or approved equal.

261.3 CONSTRUCTION:

261.3.01 Alignment and Grade - All pipe shall be laid to the required lines and grades. Fittings and valves shall be at the required locations with joints centered, spigots home, and valve and hydrant stems plumb. Temporary support, adequate protection and maintenance of all underground and surface utility structures, drains, sewers, or other obstructions encountered in the process of the work shall be furnished by the Contractor at no expense to the Owner. Where the grade or alignment of the pipe is obstructed by existing utility structures such as conduits, ducts, pipes, branch connections, the obstructions shall be permanently supported, relocated, removed or reconstructed by the Contractor in full cooperation with the Owners of such utility structures, or the new water pipe shall be laid to an alignment and/or grade to miss the obstruction. No deviation shall be made from the required line or grade except with the written consent of the Engineer.

261.3.02 Depth of Trench - Water mains shall have a minimum cover of 30" from finish grade to top of pipe. Water service lines shall have a minimum cover of 24 inches below finish grade. The Contractor shall increase the depth of cover on all new water mains as needed with additional trench depth and vertical bends in order to avoid conflicts with the existing water main and with the new storm drainage pipes.

261.3.03 Curvature - PVC pipe may be laid on horizontal and vertical curves so long as the radius is no less than the following values:

- 10" pipe - 500 ft. radius (4-1/2" offset per 20' length)
- 8" pipe - 400 ft. radius (6" offset per 20' length)
- 6" pipe - 300 ft. radius (8" offset per 20' length)
- 4" pipe - 200 ft. radius (12" offset per 20' length)

Where the design alignment and grade call for greater curvature, appropriate angle fittings shall be used. Water service tubing may be laid on horizontal and vertical curves with a minimum radius of 1 foot.

261.3.04 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.

261.3.05 Installation - Trench excavation, bedding and backfill shall be in accordance with Section 221.

261.3.05A Push-on Joints - After a section of pipe has been lowered into the prepared trench, wipe clean the gasket and gasket seat inside the bell with a cloth. Place the gasket in the bell with the large round side of the gasket first. Apply a thin film of lubricant to the inside surface of the gasket. Using a cloth, wipe clean the plain end of the next pipe and insert into the bell just far enough to make contact with the gasket. Force "home" the plain end into the bell end by the use of a bar, fork tool or jack assembly. Align pipe for position and tamp into place.

261.3.05B Mechanical Joints - Before laying all pipe, valves, or fittings, remove all lumps, blisters, and excess coal-tar coating from the bell ends. Wire brush and wipe clean the inside of the bell and the outside of the spigot to remove all loose rust and foreign material just prior to assembly. Swab the cleaned surfaces with soapy water just prior to slipping the gasket over the spigot end. Accurately center the spigot end in the bell before inserting the gasket. After the gasket is in place, assembly the gland and bell end with bolts by alternately tightening the bolts around the bell end maintaining approximately equal tension until the final tension is reached.

261.3.06 Pipe Restraint - The Contractor shall provide restrained joints at all tees, caps, plugs, and bends for the lengths shown on the plans adjoining such fittings. Joint restraint shall be mechanical joint with retainer glands, or push-on with approved locking gasket, U.S. Pipe Tyt-Lok, or approved equal. All joint restraint method shall be submitted to the Engineer for review prior to such use.

261.3.07 Pipe cutting shall be accomplished using proper pipe cutting tools designed specifically for that purpose. Cuts shall be made in accordance with the pipe manufacturer's recommendations.

261.3.08 Tracer wire shall be installed adjacent to PVC pipe and wrapped around service tubing in continuous lengths. Joints or splices in tracer wire shall be waterproof with approved grease nuts. Ends of wire shall be accessible in all valve boxes and meter boxes.

261.3.09 Fire hydrants shall be installed as shown on the plans and in accordance with the hydrant manufacturer's recommendations. Install hydrant with proper depth of bury or use extension for height adjustment such that hydrant traffic flange shall be located above grade as shown on the plans. Hydrants shall be set true and plumb. Hydrants shall be repainted to the satisfaction of the Engineer should the paint be scratched, chipped, faded or discolored.

261.3.10 New Water Services - The Contractor shall furnish and install new water services either to the existing meter box location or to the new meter box location, as shown on the plans and as staked by the Engineer. All water services shall be installed with service saddle, corporation stop, water serviced tubing and angle meter prior to all testing and disinfection. Connections between the new main and the new water services shall be made with approved type fittings. All connections shall be inspected by the inspector prior to covering with backfill.

261.3.11 Reconnecting Existing Water Services - The Contractor shall furnish and install all water services either to the existing meter box location or to the new meter box location, as shown on the plans and staked by the Engineer. All water services shall be installed with service saddle, corporation stop, water serviced tubing and angle meter prior to all testing and disinfection. Connections between the new main and the new water services shall be made with approved type fittings. All connections shall be inspected by the inspector prior to covering with backfill.

Following successful testing and disinfection of all mains and services in each section of the project, the City Water Department Staff will disconnect, replace, and reconnect existing water services between the customer and the new water service angle meter stop.

261.3.12 Water Service Interruptions - The Contractor shall coordinate all service interruptions of the occupants of the affected properties with the City Water Department Staff. Service interruptions shall be for

as short a time period as possible and the Contractor shall be responsible for arranging for alternative service of the affected property as required.

261.3.13 Valve Boxes – Install valve boxes with PVC pipe as extensions. The Contractor shall compact all backfill materials and surface restoration layers around all valve boxes with mechanical vibrators or impact tampers. Adjust final grade of all valve boxes to be maximum 1/8-inch above asphalt finish grade, minimum flush with finish grade. Valve boxes set into depressions of finish grade will not be acceptable. Valve boxes shall be installed within diamond shape concrete collars as shown on the construction plans. The Contractor shall remove and reset any valve boxes that are set into depressions of asphalt finish grade.

261.4 TESTING:

261.4.01 General - A pressure test and a leakage test shall be made by the Contractor of every section of water main after the completion of the final trench backfill. All connections to existing mains shall be left uncovered for a period of 4 hours after normal operating pressure is applied, after which time the inspector shall inspect all such connections and joints, and any leaks which appear shall be repaired.

261.4.02 Pressure Test:

261.4.02A Pre-test - After each valved section of pipe has been laid and partially backfilled, the Contractor shall perform a hydrostatic pressure test as outlined below. The maximum length for testing shall be confined to each block of the project (the project is divided into four blocks). The results shall be given to the Engineer prior to complete backfill of the pipe. If the test indicates materials or workmanship that does not meet design requirements, defective material and/or workmanship shall be corrected and the test re-run until specifications are fulfilled.

261.4.02B Pressure Test of Completed Waterline - All mains, hydrants and fittings shall be subjected to a pressure test in the presence of the inspector after all pre-testing has been completed. All water services shall be installed with service saddle, corporation stop, water serviced tubing and angle meter prior to all testing and disinfection. A separate test shall be made on each section of the project whenever any section of the work is installed in such a manner as to permit its segregation as a unit. The maximum length for testing shall be confined to each block of the project (the project is divided into four blocks). Each section of pipe shall be completely filled with water and care shall be taken to insure that all air is expelled from the pipe line. The specified test pressure shall be applied by means of a pump connected to the main through a corporation stop and service tubing. The test pressure, measured at the point of lowest elevation, shall be 150% of the working pressure at that point. The test pressure shall be held for two hours during which time, all exposed pipe, fittings, valves and couplings will be carefully examined for leaks. The portion of main being tested shall be considered "acceptable" for the purposes of this test if the pressure does not decrease more than 5 p.s.i. in 1 hour. All leaks shall be repaired. The test shall be repeated until satisfactory.

261.4.03 Leakage Test - A leakage test shall be conducted after the pressure test has been satisfactorily completed and shall consist of an examination of all exposed joints for leakage as well as overall leakage test of the completed section of pipe. The pressure to be maintained during the test shall be the same as for the pressure test and shall be measured at the low point of the system. The same procedure for filling the line and expelling air shall be used as for the pressure test. The duration of each leakage test shall be 1 hour. Any joint found where accumulated leakage of the joint exceeds the rate of leakage specified by the manufacturer of the pipe shall be rejected. The overall permissible leakage for the section of pipe tested shall not be greater than the number of gallons per hour as determined by the formula in which:

$L = \frac{SD \sqrt{P}}{133,200}$	L=	Allowable leakage, in gallons per hour
	S=	Total length of pipe tested, in feet
	D=	Nominal diameter of the pipe, in inches
	P=	Average test pressure during the leakage test, in pounds per square inch (gauge)

Should any test of a section of pipe line disclose joint leakage greater than that permitted, the Contractor shall, at no expense to the Owner, locate and repair the defective joints until the leakage is within the permitted allowance.

261.4.04 Testing of Service Lines - Corporation stops, service lines, and angle meter stops shall be installed prior to the above described tests. Water service reconnections shall be tested up to the angle meter stop. Reconnected portions of water services beyond the last valve will be accomplished by the City Water Department Staff, and shall be approved by the inspector prior to covering, and any leaks which appear beyond the last valve will be repaired by the Owner. Any leaks which appear in front of the last valve shall be repaired by the Contractor. Water service connections for future use shall be tested up to the last valve.

261.4.05 Disinfection and Flushing - Upon completion of the testing, water mains shall be disinfected in accordance with AWWA C651 and the latest Oregon State Health Division regulations. After disinfection, the chlorinated water shall be flushed from the water main until the replacement water tests are equal chemically and bacteriologically to those of the permanent source of supply. The chlorinated water shall be disposed of in a manner approved by the Oregon State Health Division and the Oregon State DEQ. The chlorinated water shall be discharged into the sanitary sewer system only after the written permission of the sewer system Owner is obtained by the Contractor. At the option of the Contractor, and if the chlorinated water is not discharged into the sanitary sewer system, the Contractor shall neutralize the chlorinated water with a chemical neutralizing agent prior to discharging the chlorinated water.

261.5 MEASUREMENT AND PAYMENT:

261.5.01 Water Main Pipe - Measurement for pipe will be made on a linear foot basis for the various classes, types, and size of pipe listed and installed. No reduction in length will be made for valves and fittings. Where pipe is laid on a continuous slope greater than 10% for a distance greater than 100 feet, measurement will be made upon the average slope distance between 100 foot stations. Payment will be at the contract price per linear foot and shall constitute full compensation for the pipe in place, including excavation, bedding, mechanical restraints, thrust blocking, anchorage, backfill, testing and disinfection.

261.5.02 Valves - Measurement and payment for water main valves will be made at the contract price for each valve installed. Payment will be made at the contract price and shall constitute full compensation for the valve in place including valves, mechanical restraint, thrust blocking, valve boxes, concrete, reinforcement and lids as specified in the bid schedule or as shown on the construction drawings. Hydrant valves will be paid for as a part of the fire hydrant assembly contract price. Valves included in the separate item marked "Connections" are not included for payment in this item.

261.5.03 Fire Hydrant Assemblies - Measurement and payment for fire hydrant assemblies will be made at the contract price for each hydrant installed. Payment will be made at the contract price and shall constitute full compensation for the entire hydrant assembly in place, including hydrant valve, valve box and lid, pipe connecting the hydrant to the main, anchorage, restraints, blocks, tracer wire, gravel and painting.

261.5.04 Water Service Pipe and Assemblies - Measurement and payment for water service pipe and water service assemblies will be made on a per each basis at the contract price for each water service assembly installed. Water service fittings include the service saddle, water service pipe, corporation stop, angle meter stop, tracer wire and City provided meter box. Payment will be at the contract price per each water service assembly and shall constitute full compensation for the water service pipe and assembly in place including testing, disinfection, excavation, bedding, backfill, connections and fittings to existing water services.

261.5.05 Water Main Fittings - Measurement and payment for water main fittings will be made at the contract price for each fitting installed. Payment will be made at the contract price and shall constitute full compensation for the fitting in place, including thrust blocks or other mechanical joint restraint. Water service fittings including service saddle, corporation stop, angle meter stop and meter box and are not included in this payment item. Where individual fittings are not shown on the bid schedule, those fittings will be considered incidental to the water main pipe construction and no separate payment will be made for incidental fittings. Fittings included in the separate item marked "Connections" are not included for payment in this item.

261.5.06 Connections - Measurement and payment for water main connections will be made at the contract price for the entire connection installed along with any temporary thrust blocking, valving or connections

needed to maintain water service and as delineated in the WSP, Demolition and Utility Plans of the contract drawings. Payment will be made at the contract price and shall constitute full compensation for the complete connection in place.

261.5.07 Air Release Assemblies - Measurement and payment for air release assemblies will be made at the contract price for each assembly installed. Payment will be made at the contract unit price and shall constitute full compensation for the entire assembly in place including service saddle, meter box, corporation stop, service tubing, angle meter stop, air release valve, drain pipe and necessary support.

END OF SECTION 261

END OF DIVISION 02

DRAFT

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.

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 INSTALLATION:

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.

END OF SECTION 320

SECTION 330 – CAST-IN-PLACE 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.

330.4 QUALITY ASSURANCE:

330.4.01 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.

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 INSTALLATION:

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.

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 INSTALLATION:

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.

END OF SECTION 361

END OF DIVISION 03

END OF TECHNICAL SPECIFICATIONS DOCUMENTS

CITY OF WARRENTON

SE ANCHOR (HARBOR - SE 3RD ST)

WATERLINE REPLACEMENT

WARRENTON, OREGON

CITY PROJECT #620085, FUNDING SOURCE 029-430

GENERAL NOTES

1. ATTENTION CONTRACTORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THESE RULES ARE SET FORTH IN OUR 920-201-0010 THROUGH OUR 920-201-0005. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1897 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. 260.140, 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. 260.150, 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 PREDESIGN POINTEERING WAS DONE TO ESTABLISH THESE LOCATIONS. CONTACT UTILITY COMPANIES FOR PREDESIGN. CONTRACTOR TO PROVIDE 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 THOSE SHOWN. NOTIFY ENGINEER 24 HOURS PRIOR TO POINTEERING.
 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 IN THE CONTRACT DOCUMENTS. 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 UNDER 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 (2007/APWA) SHALL BE REFERENCED WHERE CONTRACT SPECIFICATIONS DO NOT ADDRESS A SPECIFIC ITEM. SEE SPECIFICATIONS FOR CONSTRUCTION METHODS AND OTHER NOTES PERTAINING 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. CONTRACTOR MAY EXCAVATE HIGH GROUND-WATER TABLE AT SITE LOCATION. HIGH GROUND-WATER IN CONJUNCTION WITH BEACH SAND SUBGRADE WILL CAUSE A "BULGE" EFFECT, WHICH WILL RESULT IN THE DESTABILIZATION OF ADJACENT SOILS, UTILITIES AND STRUCTURES. CONTRACTOR SHALL ANTICIPATE AND COORDINATE ANY AND ALL DESTABILIZING TECHNIQUES NECESSARY AND/OR REQUIRED TO COMPLETE PROJECT AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS. CONTRACTOR SHALL BEAR ALL COSTS PERTAINING TO DESTABILIZING EFFORTS.
- ROADWAYS/SURFACES:**
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. REPLACEMENT OF THE STREET MARKINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 12. THE CONTRACTOR SHALL HAVE A SUFFICIENT NUMBER OF COMPACTION TESTS PERFORMED TO MEET SPECIFICATION REQUIREMENTS AT THE CONTRACTOR'S EXPENSE. 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.
- SIGNS:**
13. CONTRACTOR SHALL DIRECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER DOT & MUTED 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. ALL WATER PIPE CONSTRUCTION AND APPURTENANCES SHALL BE NSF-61 LISTED AND APPROVED.
 15. INSPECTION BY ENGINEER OR CITY REPRESENTATIVE OF WATER SYSTEMS PRIOR TO BACKFILL SHALL BE REQUIRED.
 16. CONTRACTOR TO COORDINATE PLACEMENT OF WATER SERVICE METER WITH CITY PUBLIC WORKS.
 17. WATER LINE FITTINGS MUST BE FULLY RESTRAINED BY THROST BLOCKS AND APPROVED RESTRAINT SYSTEM UNLESS SPECIFICALLY OTHERWISE INDICATED ON THESE DOCUMENTS.
 18. CONNECTION OF NEW WATER SERVICE TO EXISTING MAIN SHALL BE COORDINATED WITH CITY STAFF. ALL WATER MAIN VALVES SHALL ONLY BE OPERATED BY CITY PERSONNEL. NO EXCEPTIONS UNLESS AUTHORIZED IN WRITING BY CITY.
 19. POTENTIAL 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.
- DEMOLITION:**
20. 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:**
21. THE CONTRACTOR SHALL DEVELOP AND SUBMIT A TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL INCLUDE STORAGE AS NECESSARY TO IMPROVE TRAFFIC OF ANY CLOSURE AND PROPER REDOUTING. THE CONTRACTOR SHALL FURNISH AND PLACE TRAFFIC CONTROL BARRICADES AND SIGNS ACCORDING TO THE MUTED AND ODOT SPECIFICATIONS IN ORDER TO ALLOW THE PUBLIC REASONABLE ACCESS TO BUSINESSES AND RESIDENTIAL PARKING. THE CONTRACTOR SHALL USE CONES, DELICATORS, OCTAGON 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.

LEGEND

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET & GENERAL INFORMATION
2	PLAN & PROFILE - STA: 1+00 TO 2+00
3	PLAN & PROFILE - STA: 2+00 TO 2+70
4	WATER CONSTRUCTION DETAILS
5	WATER CONSTRUCTION DETAILS

EXISTING UTILITIES

UTILITY LOCATES SHOWN ON THIS MAP ARE BASED ON ABOVE GROUND STRUCTURES AND SURFACE LOCATES AT THE TIME THE FIELD WORK WAS COMPLETED. THE COMPANIES THAT PLACE THE PLANT MARKS DO NOT GUARANTEE THEIR SURFACE LOCATES TO BE PRECISE. THEREFORE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS THEREFORE OTAK RESERVES THE SAME. LOCATIONS OF THE CHANGING SURFACE LOCATES ARE NOT TO BE USED FOR DESIGNING AND PROTECTING THE LOCATION OF ALL UNDERGROUND UTILITIES.

UTILITY PROVIDERS

ELECTRICITY
PACIFIC POWER
AT&T: MARLIN BROOKER
3340 SE OCEAN
WARRENTON, OR 97146
503-861-6505
503-861-6020 (FAX)

CABLE TELEVISION
CHARTER COMMUNICATIONS
AT&T: RICH WIGGINS
418 GATEWAY
ASTORIA, OR 97103
503-325-5887
503-325-7421 (FAX)

GAS
NORTHWEST NATURAL GAS
AT&T: TERRY AGARD
178 W. MARINE DR.
ASTORIA, OR 97103
503-325-1632 EXT. 8430
503-325-6332 (FAX)

PROJECT TEAM

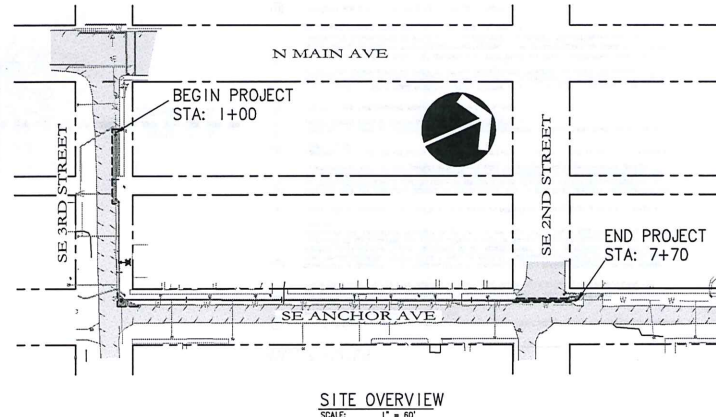
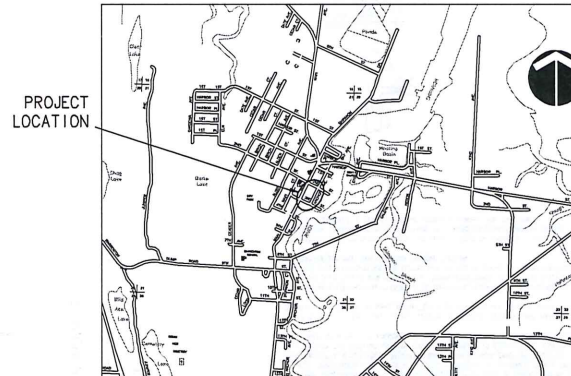
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TELEPHONE
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ASTORIA, OR 97103
503-342-7975
503-242-8448 (FAX)

ONE CALL CENTER
1-800-333-2344 OR 811

WATER, STORM, ROADS
CITY OF WARRENTON
AT&T: RICHARD STELLIG, P.E.
PUBLIC WORKS DIRECTOR
225 S. MAIN
P.O. BOX 250
WARRENTON, OR 97146
503-861-0917

OWNER
CITY OF WARRENTON
AT&T: RICHARD STELLIG, P.E.
PUBLIC WORKS DIRECTOR
225 S. MAIN
P.O. BOX 250
WARRENTON, OR 97146
503-861-0917



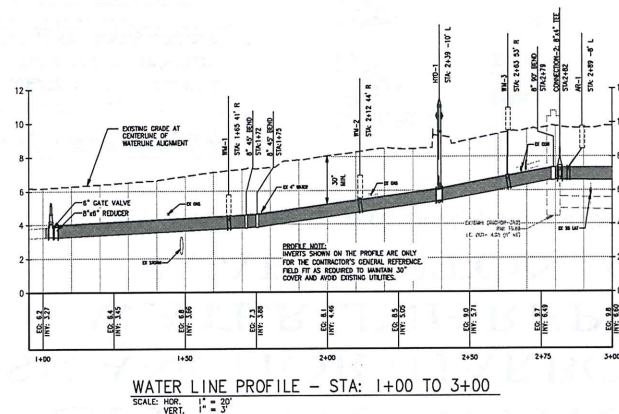
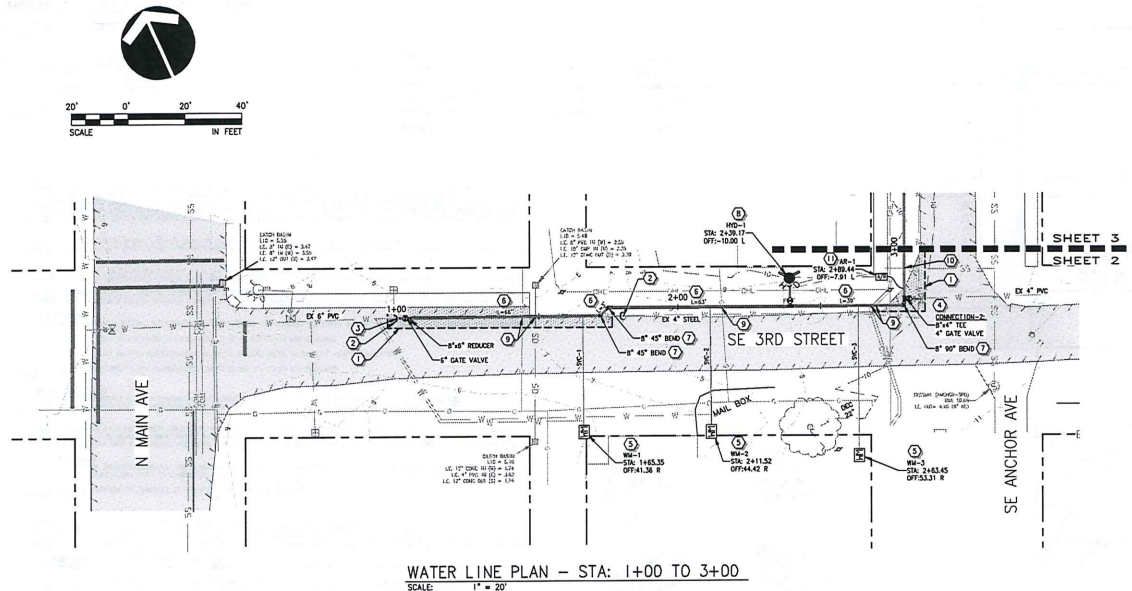
AGENCY REVIEW SET

CITY OF WARRENTON
WATERLINE REPLACEMENT PROJECT
SE ANCHOR (HARBOR - SE 3RD ST)
COVER SHEET & GENERAL INFORMATION
CITY OF WARRENTON, CLATSOP COUNTY, OR

Otak
808 SW Third Ave., Suite 300
Portland, OR 97204
Phone: 503.287.6825
Fax: 503.415.2304
Internet: www.otak.com
19363 03/06/2019 DWG
Project No. 1
Sheet No. 1
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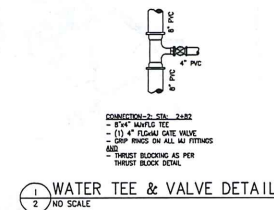


WATER NOTES

1. SAWCUT EXISTING ASPHALT, SURFACE RESTORATION SHALL MATCH EXISTING MATERIALS. CONTRACTOR SHALL RESTORE SURFACES TO EXISTING CONDITION OR BETTER.
2. CUT, CAP AND TEMPORARILY THRUST BLOCK EXISTING 4" WATER MAIN AT STA: 1+00 AND 1+80. REMOVE EXISTING WATER MAIN STA: 1+00 TO 1+80. NEW WATER MAIN TO BE INSTALLED IN EXISTING WATER MAIN LOCATION.
3. CONNECTION-1: CONNECT TO EXISTING WATER MAIN. CONTRACTOR SHALL PERFORE EXISTING LINE AND REPORT FINISHES TO ENGINEER. CONNECT TO EXISTING LINE WITH 6" HARD SLEEVE COUPLER, 6" GATE VALVE AND 6" 4" REDUCER. JOINT RESTRAINTS SHALL BE PLACED ON ALL JOINTS WITHIN 10' OF THE CONNECTION IF EXPOSED. CONTRACTOR TO CALIBRATION TAP APPROXIMATELY 3' EAST OF CONNECTION POINT. CALIBRATION POINT SHALL BE PLACED BY THE CONTRACTOR AS SPECIFIED BY THE CITY PW UPON COMPLETION & ACCEPTANCE OF ALL REQUIRED TESTING.
4. CONNECTION-2: CONSTRUCT 8" 4" TEE & 4" GATE VALVE AS PER DETAIL 1, THIS SHEET & DETAIL 3, SHEET 4.
5. CONSTRUCT NEW 3/4" MUNICIPAL SERVICE AS PER DETAIL 2, SHEET 4. NEW WATER SERVICES INSTALLATION SHALL BE TRENDLESS UTILIZING A LINE SPLITTER OR APPROVED EQUAL METHOD. IF TRENDLESS CONSTRUCTION IS NOT OPTIMAL, NEW SERVICE SHALL BE OPEN TRENCH. IF EXISTING SERVICE LINE IS IN ACCEPTABLE CONDITION AND IS APPROVED BY THE CITY PW, CONNECT NEW SERVICE LINE TO EXISTING LINE USING APPROVED COUPLER.
6. CONSTRUCT PVC C-900, 24" DIAMETER WATER MAIN AS PER DETAIL 1, SHEET 4. SIZE AS SPECIFIED IN PLAN & PROFILE VIEW.
7. CONSTRUCT B.I. BOND AS SPECIFIED IN PLAN VIEW WITH MECHANICAL RESTRAINT AND THRUST BLOCKING. CIP THRUST BLOCKS SHALL BE CONSTRUCTED AS PER DETAIL 5, SHEET 4.
8. CONSTRUCT NEW FIRE HYDRANT ASSEMBLY AS PER DETAIL 4, SHEET 4.
9. UTILITY CROSSING: WATER SHALL PASS OVER/UNDER EXISTING UTILITY LINE WITH 12" OPTIMAL, 8" MIN. CLEARANCE. CONTRACTOR SHALL PERFORE CROSSING SHIM PRIOR TO CONSTRUCTION OF CROSSING TO DETERMINE APPROPRIATE TRENCH DEPTH AS SPECIFIED BY THE ENGINEER. SEE CONSTRUCTION NOTES FOR FURTHER DETAIL.
10. SINKER LATERAL: CROSSING: VERIFY 18" SEPARATION BETWEEN WATER AND SINKER. WATER SHALL PASS OVER EXISTING SINKER LATERAL. CONTRACTOR SHALL PERFORE CROSSING SHIM PRIOR TO CONSTRUCTION OF CROSSING TO DETERMINE APPROPRIATE TRENCH DEPTH AS SPECIFIED BY THE ENGINEER. IF ADEQUATE SEPARATION NOT POSSIBLE, DISPLACE SINKER LATERAL WITH CIP AS PER DETAIL 6, SHEET 4.
11. CONSTRUCT NEW AIR RELEASE VALVE AS PER DETAIL 1, SHEET 5.

CONSTRUCTION NOTES

1. NO POWER, GAS, COMMUNICATIONS OR TELEPHONE UTILITIES SHALL BE DEVELOPED AS PART OF THIS PROJECT. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO STABILIZE AND PROTECT EXISTING PIPES, POLES, PRECASTS WHEN WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER AND UTILITY AGENCY IF CONFLICT IS ENCOUNTERED. CONTRACTOR SHALL COORDINATE WITH UTILITY AGENCY AND BEAR ALL COSTS ASSOCIATED WITH UTILITY STABILIZATION.
2. WATER SEWERING PLAN SHALL BE PROVIDED BY CONTRACTOR PRIOR TO ANY WATER LINE EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO ANY SERVICE INTERRUPTIONS.
3. EXISTING UNDERGROUND UTILITIES SHALL BE SUPPORTED, SECURED AND MAINTAINED AS NECESSARY TO ALLOW INSTALLATION OF NEW WATER MAIN. CONTRACTOR SHALL PERFORE ALL UTILITY CROSSINGS. EXISTING UTILITY LOCATIONS AND DEPTHS IN 24 HRS. IN ADVANCE OF CONSTRUCTION, TYP. (SUBSURFACE EXPLORATION) DIG WITH EXTREME CAUTION.
4. CONTRACTOR SHALL HAND DIG AROUND TREE ROOT SYSTEMS OR SHRUBBERY TO PROTECT REMAINING VEGETATION. CONTRACTOR SHALL ALSO HAND DIG AROUND EXISTING LANDSCAPING AND TAKE EVERY NECESSARY PRECAUTION TO PROTECT AND STABILIZE DURING CONSTRUCTION.

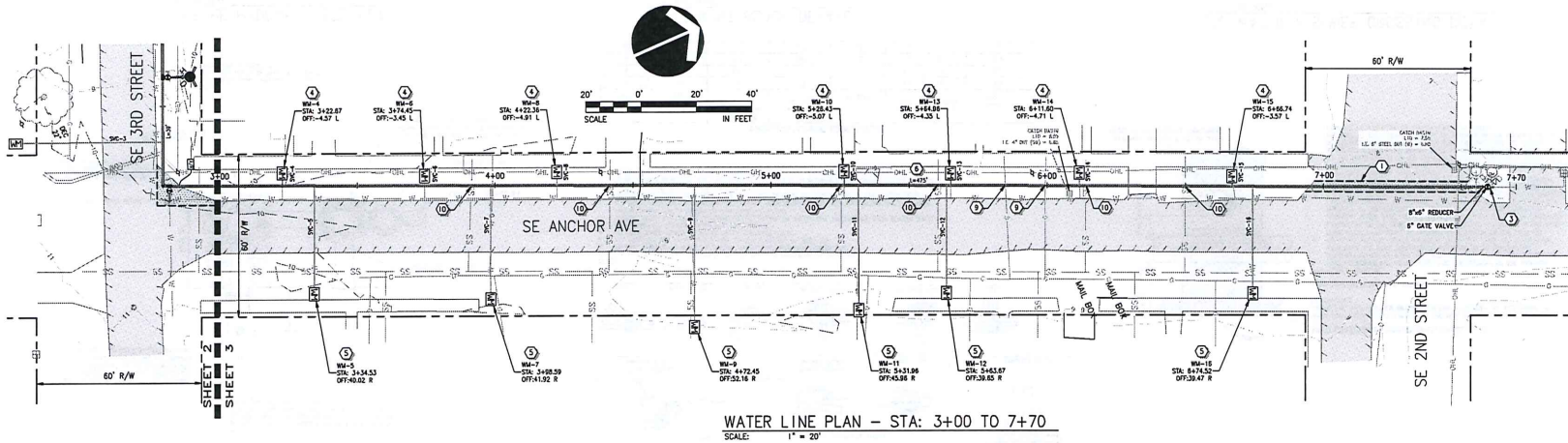


AGENCY REVIEW SET

CITY OF WARRENTON
WATERLINE REPLACEMENT PROJECT
SE ANCHOR (HARBOR - SE 3RD ST)
PLAN & PROFILE - STA: 1+00 TO 3+00
CITY OF WARRENTON, CLATSOP COUNTY, OR

Otak
808 SW Third Ave., Suite 300
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Internet: www.otak.com
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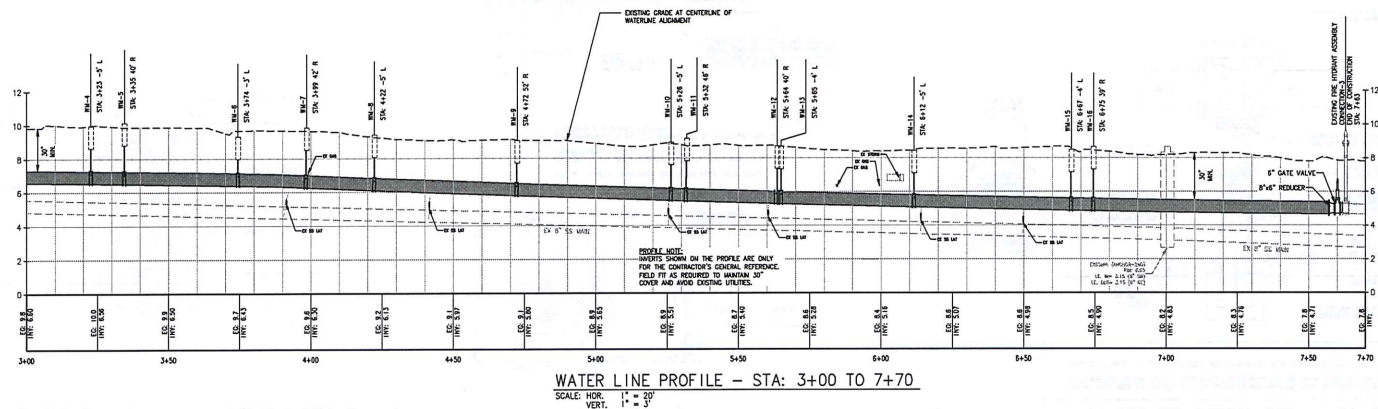


WATER NOTES

1. SAWCUT EXISTING ASPHALT. SURFACE RESTORATION SHALL MATCH EXISTING MATERIALS. CONTRACTOR SHALL RESTORE SURFACES TO EXISTING CONDITION OR BETTER.
2. CONNECTION-3. CONNECT TO EXISTING INTRANT TEE. CONTRACTOR SHALL PORTHOLE EXISTING LINE AND REPORT FINDINGS TO ENGINEER. CONNECT TO EXISTING LINE WITH 8" 4" REDUCER AND 8" GATE VALVE. JOINT RESTRAINTS SHALL BE PLACED ON ALL JOINTS WITHIN 15' OF THE CONNECTION IF EXPOSED. CONDUCTED AT CALORINATION TAP APPROXIMATELY 3' SOUTH OF CONNECTION POINT. CALORINATION PORT SHALL BE PLUGGED BY THE CONTRACTOR AS SPECIFIED BY THE CITY PW UPON COMPLETION & ACCEPTANCE OF ALL REQUIRED TESTING.
3. CONSTRUCT NEW 3/4" MANHOLE SERVICE AS PER DETAIL 2, SHEET 4.
4. CONSTRUCT NEW 3/4" MANHOLE SERVICE AS PER DETAIL 2, SHEET 4. NEW WATER SERVICES INSTALLATION SHALL BE TRENCHLESS UTILIZING A LINE SPLITTER OR APPROVED EQUAL METHOD. IF TRENCHLESS CONSTRUCTION IS NOT OPTIMAL, NEW SERVICE SHALL BE OPEN TRENCH. IF EXISTING SERVICE LINE IS IN ACCEPTABLE CONDITION AND IS APPROVED BY THE CITY PW, CONNECT NEW SERVICE LINE TO EXISTING LINE USING APPROVED COMPLEX.
5. CONSTRUCT PVC C-900, DR-18 WATER MAIN AS PER TRENCH DETAIL 1, SHEET 4. SIZE AS SPECIFIED IN PLAN & PROFILE VIEW.
6. UTILITY CROSSING. WATER MAIN SHALL PASS OVER/UNDER EXISTING UTILITY LINE WITH 12" OPTIMAL, 6" MIN. CLEARANCE. CONTRACTOR SHALL PORTHOLE CROSSING 24" PRIOR TO CONSTRUCTION OF CROSSING TO DETERMINE APPROPRIATE TRENCH DEPTH AS SPECIFIED BY THE ENGINEER. SEE CONSTRUCTION NOTES FOR FURTHER DETAIL.
7. SEWER LATERAL CROSSING. VERIFY 18" SEPARATION BETWEEN WATER AND SEWER. WATER MAIN SHALL PASS OVER EXISTING SEWER LATERAL. CONTRACTOR SHALL PORTHOLE CROSSING 24" PRIOR TO CONSTRUCTION OF CROSSING TO DETERMINE APPROPRIATE TRENCH DEPTH AS SPECIFIED BY THE ENGINEER. IF ADEQUATE SEPARATION NOT POSSIBLE, DISAPASSATE SEWER LATERAL WITH CIP AS PER DETAIL 6, SHEET 4.

CONSTRUCTION NOTES

1. NO POWER, GAS, COMMUNICATIONS OR TELEPHONE UTILITIES SHALL BE DEDICATED AS PART OF THIS PROJECT. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO STABILIZE AND PROTECT EXISTING PIPES, WIRES, POLES, PEDESTALS WHEN WORKING NEAR EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY ENGINEER AND UTILITY AGENCY IF CONFLICT IS ENCOUNTERED. CONTRACTOR SHALL COORDINATE WITH UTILITY AGENCY AND BEAR ALL COSTS ASSOCIATED WITH UTILITY STABILIZATION.
2. WATER SEQUENCING PLAN SHALL BE PROVIDED BY CONTRACTOR PRIOR TO ANY WATER LINE DEDICATION. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO ANY SERVICE INTERRUPTIONS.
3. EXISTING UNDERGROUND UTILITIES SHALL BE SUPPORTED, SECURED AND MAINTAINED AS NECESSARY TO ALLOW INSTALLATION OF NEW WATER MAIN. CONTRACTOR SHALL PORTHOLE ALL UTILITY CROSSINGS, EXISTING UTILITY LOCATIONS AND DEPTHS MIN. 24 HRS IN ADVANCE OF CONSTRUCTION, TYP. (SURFACE CORRELATION) DIG WITH EXTREME CAUTION.
4. CONTRACTOR SHALL HAND DIG AROUND TREE ROOT SYSTEMS OR SHRUBBERY TO PROTECT REMAINING VEGETATION. CONTRACTOR SHALL ALSO HAND DIG AROUND EXISTING LANDSCAPING AND TAKE EVERY NECESSARY PRECAUTION TO PROTECT AND STABILIZE DURING CONSTRUCTION.



AGENCY REVIEW SET

CITY OF WARRENTON
WATERLINE REPLACEMENT PROJECT
SE ANCHOR (HARBOR - SE 3RD ST)
PLAN & PROFILE - STA: 3+00 TO 7+70
CITY OF WARRENTON, CLATSOP COUNTY, OR

Otak

808 SW Third Ave., Suite 300
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Internet: www.otak.com

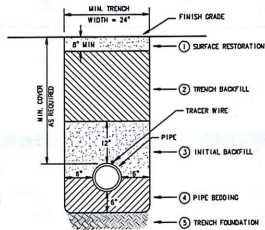
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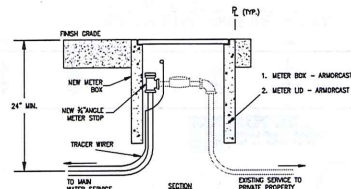
NOTES:
1. ALL DIMENSIONS SHOWN ARE MINIMUM AND RELATIVE TO OUTSIDE OF PIPE BELL.
2. MINIMUM COVER:
WATER MAIN = 30"
WATER SERVICE = 24"

TRENCH MATERIAL

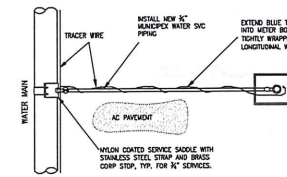
1. MATCH FINISH GRADE MATERIALS AS SHOWN ON PLANS.
2. 12"-0" COMPACTED CRUSHED ROCK.
3. 12"-0" COMPACTED CRUSHED ROCK.
4. 12"-0" CRUSHED ROCK.
5. UNDISTURBED NATIVE MATERIAL OR 1-1/2" MINUS CRUSHED ROCK IF TRENCH FOUNDATION STABILIZATION IS REQUIRED.



1 TYP. WATER TRENCH DETAIL
NO SCALE

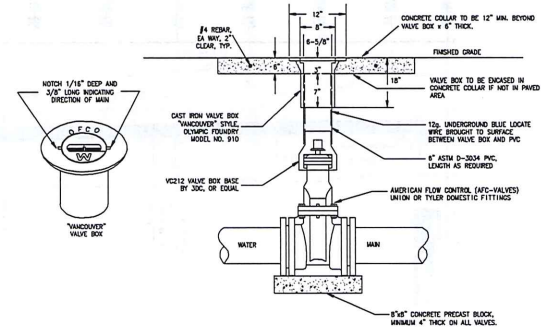


1. TEST AND DISMISST FROM WATER MAIN UP TO ANGLE METER STOP.
2. ANY WORK TO THE METER ASSEMBLY AND METER INSTALLATION TO BE COMPLETED BY CITY WATER DEPT.
3. ALL WORK COMPLETED ON THE CUSTOMER SIDE OF THE METER SHALL BE PERFORMED BY A LICENSED PLUMBER.

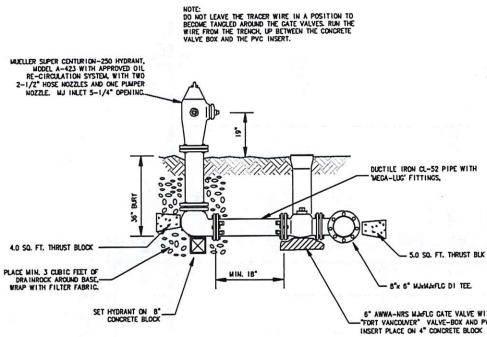


2 TYPICAL WATER SERVICE RECONNECT
NO SCALE

1. CRUSHED ROCK BASE AND BACKFILL SHALL BE COMPACTED WITH VIBRATORY PLATE AND INSPECTED BY THE ENGINEER PRIOR TO FINAL FINISH. VALVE BOXES PLACED BELOW ADJACENT FINISH GRADE WILL NOT BE ACCEPTED.
2. VALVE BOXES SHALL BE PLUMB & CENTERED DIRECTLY OVER THE VALVE NOT IN A VERTICAL POSITION.

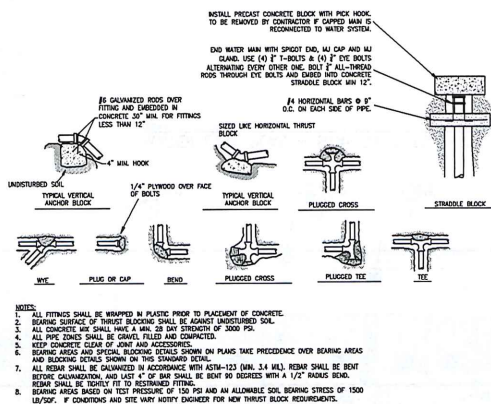


3 STANDARD VALVE BOX DETAIL
NO SCALE



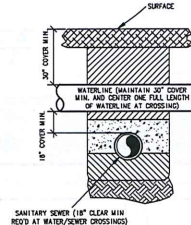
NOTE:
CONFIRM REQUIRED HYDRANT ASSEMBLY PARTS AND DEPTH OF BURY WITH EACH INDIVIDUAL HYDRANT

4 FIRE HYDRANT ASSEMBLY
NO SCALE



FITTING SIZE	TEE, WYE, PLUG OR CAP	90° BEND OR PLUGGED CROSS	TEE PLUGGED ON RUN	45° BEND	22 1/2° BEND	11 1/4° BEND	STRAIGHT BLOCK
4	2.0	2.0	3.8	2.2	1.0	1.0	4.8
6	4.2	6.0	8.6	3.2	2.0	1.0	11.1
8	7.6	10.8	15.2	5.8	3.0	2.0	15.9
10	11.0	17.0	22.0	8.2	4.8	2.2	23.0

5 THRUST BLOCK DETAIL
NO SCALE



- WATER LINES PASSING OVER OR UNDER GRAVITY SEWERS WHEN LOCAL CONDITIONS PREVENT A VERTICAL SEPARATION AS DESCRIBED ABOVE (18 INCH MINIMUM BETWEEN BOTTOM OF WATER LINE AND CROWN OF SEWER LINE).
- CONSTRUCTION SHALL BE AS FOLLOWS:
- WATER LINES SHALL BE:
1. CONSTRUCTED OF PVC ASTM C-900. THE ONE SEGMENT OF THE MAXIMUM STANDARD LENGTH OF PIPE (BUT NOT LESS THAN 18 FEET LONG) SHALL BE USED WITH THE PIPE CENTERED TO MAXIMIZE JOINT SEPARATION.
 2. STANDARD GRAVITY-SEWER MATERIAL WITH LESS THAN 18\"/>

6 WATER / SEWER CROSSING DETAIL
NO SCALE

AGENCY REVIEW SET

CITY OF WARRENTON
WATERLINE REPLACEMENT PROJECT
SE ANCHOR (HARBOR - SE 3RD ST)
WATER CONSTRUCTION DETAILS
CITY OF WARRENTON, CLATSOP COUNTY, OR

Otak
808 SW Third Ave., Suite 300
Portland, OR 97204
Phone: 503.297.6825 Fax: 503.415.2304
Internet: www.otak.com
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Project No. Drawing No. 4
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RD270

- GENERAL NOTES FOR ALL DETAILS:**
1. Air release/air vacuum valve shall be size specified in Contract.
Piping and valves to be same size as combination air release/air vacuum valve.
 2. Locate at high point of main.
 3. Tap top of main.
 4. Provide insulation and additional depth when specified for freeze protection.
 5. See project plans for details not shown.

CALC. REVIEW NO.	N/A	ISSUING PERIOD DATE	25-JUL-2017
<p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>		<p>NOTE: All material and workmanship shall be in accordance with the current Oregon standard Specifications</p>	
		<p>OREGON STANDARD DRAWINGS</p> <p>COMBINATION AIR RELEASE AIR VACUUM VALVE ASSEMBLY (2" AND SMALLER)</p>	
		<p>2018</p>	
		<p>DATE: _____ DESIGNED: _____</p>	

Effective Date: December 1, 2019 – May 31, 2020

RD27

Section Title

BASE BID	Line Item	Item Code	Item Description	U of M	Quantity
	1	1	Mobilization, Traffic Control & Flagging (5%)	LS	1
	2	2	Erosion Control, Stormwater Management & Trench Dewatering	LS	1
	3	3	Asphalt Sawcut	LF	395
	4	4	Asphalt Pavement & Concrete Demolition, includes wastehaul (In Place Quantities) [(4' x 1500')/9]	SY	112
	5	5	General Excavation & General Fill (In Place Quantities)	CY	250
	6	6	Over-Excavation & Base Stabilization, Including Excavation, Haul-Off, Fabric and Pit-Run Rock (As Directed - In Place, Compacted Quantities)	CY	50
	7	7	3/4"-0" Aggregate Leveling Course (In Place, Compacted Quantities, as Directed by Engineer)	CY	60
	8	8	CDF Backfill (As Directed By Engineer)	CY	50
	9	9	Asphalt Paving 4" - 1000 SF patching	Ton	26
	10	10	12" White Striping, Thermoplastic	LF	24
	11	11	Adjust Existing Surface Structures	EA	3
	12	12	Raise/Lower Existing Franchise Utility to Allow For New Water Main Construction (Per Plan & As Directed By Engineer)	EA	3
	13	13	Reconstruct 4" diam. ASTM D-3034 Sewer Service Lateral at New Grade If Conflict Exists (As Directed By Engineer)	EA	1
	14	14	Water Service Assembly	EA	17
	15	15	Asbestos Pipe Demolition	LF	40
	16	16	8" AWWA C-900 PVC DR18 Water Main Pipe Including Trench Excavation, Select Bedding/Backfill, Disinfection and Testing, per specifications)	LF	650
	17	17	8" D.I. Bends - Various Angles - Including Vertical (Not Including Connection Bends) (swr lateral avoidance)	EA	4
	18	18	8"x 6" D.I. Concentric Reducer -(includes connection fittings/bolt pkg- complete)	EA	2
	19	19	6" Gate Valve, MJxMJ w/mega-lug - complete	EA	2
	20	20	8" x 4" DI TEE MJ x MJ, w/mega-lug - complete	EA	1
	21	21	4" Gate Valve, MJ x MJ, w/mega-lug - complete	EA	1
	22	22	Air Release Assembly, Complete per plans	EA	1
	23	23	Hydrant Assembly - Complete per plans (at intersection of 3rd/SE Anchor Way)	EA	1
	24	24	Water Connection-1: (includes connection fittings/bolt pkg - complete)	EA	1
	25	25	Water Connection-2: (includes connection fittings/bolt pkg - complete)	EA	1
	26	26	Water Connection-3: (includes connection fittings/bolt pkg - complete)	EA	1



AGENDA MEMORANDUM

TO: The Warrenton City Commission
FROM: Collin Stelzig, P.E., Public Works Director
DATE: July 28th, 2020
SUBJ: 2020 Pavement Management – Advertise Request for Bids

SUMMARY

The work for this project will take place in Warrenton and Hammond and will consist of furnishing all labor, materials, equipment, and superintendence necessary for the following: Furnish and install an Asphalt overlay to 21 City streets in Hammond and Warrenton. The work will be accomplished in the Summer of 2020, and the estimated cost for completion is \$369,508.00.

Public Works is seeking Commission approval to advertise the request for proposals and bid documents for the 2020 Paving Management project. Bid items will include cleaning of streets to be overlaid of loose rock, dirt dust, adjustment of utilities to new surface level, add track coat to clean dry street per specification, 2" AC Overlay, 4" AC Overlay, and installation of shoulder rock.

RECOMMENDATION/SUGGESTED MOTION

I move to approve advertising the request for bids for the 2020 Paving Management project.

ALTERNATIVE

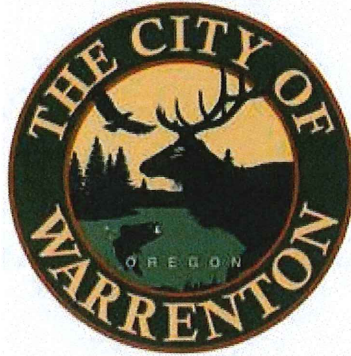
- 1) Other action as deemed appropriate by the City Commission
- 2) None recommended

FISCAL IMPACT

This project has been approved by the City Commission and is included in the City of Warrenton 2020-2021 Adopted Budget.

Approved by City Manager:

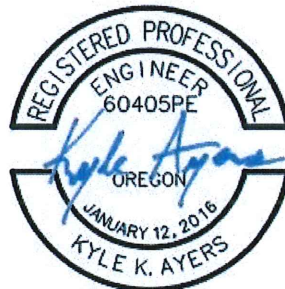
All supporting documentation, i.e., maps, exhibits, etc., must be attached to this memorandum.



CITY OF WARRENTON, OREGON

PAVEMENT MANAGEMENT PROGRAM: 2020

CONTRACT DOCUMENTS and TECHNICAL SPECIFICATIONS



RENEWAL DATE: DECEMBER 31, 2021

Submitted to:
City of Warrenton
Attention: Collin Stelzig, PE
Public Works Director
45 SW 2nd Street/P.O. Box 250
Warrenton, OR 97146
Phone: 503.861.0917

July 2020

Prepared By:
Otak, Inc.
Attention: Kyle Ayers, PE
Project Manager
808 SW Third Avenue, Suite 800
Portland, OR 97204
Phone: 503.287.6825

Otak Project No. 18970.A00



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ATTACHMENT:

City of Warrenton Map "Pavement Management Program: 2020"

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CONTRACT DOCUMENTS

INVITATION TO BID

Sealed bids for the **Pavement Management Program 2020** 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 **August 4, 2020** for the Owner, City of Warrenton, 45 SW 2nd Street, 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 for this project will take place in Warrenton and Hammond, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Furnish and Install a 2" Asphalt overlay to twenty (20) City streets in Hammond and Warrenton and a 4" overlay to one (1) street. The work will be accomplished in the Summer of 2020.

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

1. Clean streets to be overlaid of loose rock, dirt, dust
2. Adjust utilities to new surface level
3. Add tack coat to clean dry street per specifications
4. Overlay 2" per specifications, 20 streets, with shoulder rock
5. Overlay 4" per specifications, 1 street, with shoulder rock

NOTE: The intent of this contract is to provide a 2" or 4" compacted AC overlay drive surface to 21 streets.

IMPORTANT: Complete digital project bidding documents are available at <http://www.questcdn.com>. You may download the digital plan documents for \$30 by inputting Quest project **#7137841** 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) 812-3732 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 \$50,000.00]. 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 **Tuesday, August 4, 2020**. 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

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INSTRUCTIONS TO BIDDERS

1. THE PROJECT:

The work for this project will take place in Warrenton and Hammond, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Furnish and Install a 2" Asphalt overlay to twenty (20) City streets in Hammond and Warrenton and a 4" overlay to one (1) street. The work will be accomplished in the Summer of 2020.

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

1. Clean streets to be overlaid of loose rock, dirt, dust
2. Adjust utilities to new surface level
3. Add tack coat to clean dry street per specifications
4. Overlay 2" per specifications, 20 streets, with shoulder rock
5. Overlay 4" per specifications, 1 street, with shoulder rock

NOTE: The intent of this contract is to provide a 2" or 4" compacted AC overlay drive surface to 21 streets.

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 Otak, 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, P.E., the Engineer for Otak, Inc., email: kyle.ayers@otak.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 **90** 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 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 nonresponsive bid. A nonresponsive bid will not be considered by the Owner for award. The Owner will consider for 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 attached Bid Form. All blanks must be appropriately filled in. Where so indicated by the make up of the Bid Form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount in words shall govern. Bidders shall make no additional stipulations on the Bid Form nor qualify any bid in any manner. Only one copy of the Bid Form is required.

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 attached hereto, 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. 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
- 2.

Pavement Management Program 2020

- 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 contract. 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 _____, 2020

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:

Pavement Management Program 2020

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 _____, 20__.

PRINCIPAL: _____ **SURETY:** _____

By _____ BY ATTORNEY-IN-FACT:
Signature

Official Capacity

Name

Attest: _____
Corporation Secretary

Signature

Address

City State Zip

Phone Fax

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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: **Pavement Management Program 2020**

BID #: _____ BID CLOSING: Date: August 4, 2020
REQUIRED DISCLOSURE DEADLINE: Date: August 4, 2020

Time: 2:00 ☐AM ☒PM
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.	_____	_____	_____
6.	_____	_____	_____

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 #: _____

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AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2020 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

PAVEMENT MANAGEMENT PROGRAM 2020

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. Drawing prepared by City of Warrenton "Pavement Management Program: 2020" with project limits set in field. (Map at end of Technical Specifications)
- n. Specifications prepared or issued by Otak, Inc., dated July 2020.
- o. Addenda:

No. _____, dated _____, 2020.

No. _____, dated _____, 2020.

No. _____, dated _____, 2020.

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 shall be achieved not later than 90 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 damages 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 \$300.00 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 Otak, 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 45 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.

GC-4 SCOPE OF WORK

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 expense 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 so as 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:

No actual construction staking in the field will be done for this project. The streets shown on the attached overlay map are approximate locations only. The Construction limits will be set in the field by flagging and pre-marked project limits on each street for bidders to evaluate the project. These pre-markings will be refreshed prior to the actual overlay. The contractor is encouraged to take pictures and measurements of the specific road or street overlay.

5.9 PROTECTION OF SURVEY MARKERS:

5.9.01 Permanent Survey Markers - The Contractor shall not disturb permanent survey monuments, stakes, or bench marks 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 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 Agencies

Department of Agriculture
 Forest Service
 Natural Resources Conservation Service
Department of Defense
 Army Corps of Engineers
Department of Energy
 Federal Energy Regulatory Commission
Environmental Protection Agency
Health and Human Services Department
 Department of Housing and Urban Development

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

Oregon State Agencies

Department of Agriculture
 Soil and Water Conservation Commission
Department of Energy
Department of Environmental Quality
Department of Fish and Wildlife

Department of Fish and Wildlife
Division of State Lands
Water Resources Department
Department of Fish and Wildlife

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 statute, 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 insure 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 insure 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 to be 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 uncomplished 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: **Pavement Management Program 2020**

_____ (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 _____, 2020

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 **Pavement Management Program 2020**

_____(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 _____, 2020

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: Collin Stelzig, P.E., Public Works Director

PROJECT NAME: Pavement Management Program 2020

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]

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TECHNICAL SPECIFICATIONS

DIVISION ONE – GENERAL REQUIREMENTS

SECTION 101 – SUMMARY OF WORK

101.1 THE PROJECT:

The work for this project will take place in Warrenton and Hammond, Oregon and will consist of, but is not limited to furnishing all labor, materials, equipment and superintendence necessary for the following: Furnish and Install a 2" Asphalt overlay to twenty (20) City streets in Hammond and Warrenton and an 4" overlay to one (1) street. The work will be accomplished in the Summer of 2020.

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

1. Clean streets to be overlaid of loose rock, dirt, dust
2. Adjust utilities to new surface level
3. Add tack coat to clean dry street per specifications
4. Overlay 2" per specifications, 20 streets, with shoulder rock
5. Overlay 4" per specifications, 1 street, with shoulder rock

NOTE: The intent of this contract is to provide a 2" or 4" compacted AC overlay drive surface to 21 streets.

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 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, Collin Stelzig, Public Works Director, (503)-861-0917 or Kyle Sharpsteen, (503) 298-9306.

104.1.02 – City Storm/Sanitary System: Larry Neahring, (503) 791-2944.

104.1.03 – CATV; Charter Communications, Bill Honl, (503) 298-0129.

104.1.04 – Telephone Facilities; Centurylink, Mike Meisner, (503) 242-7676.

104.1.05 – Electric Facilities; Pacific Power, Marilyn Brockey, (503) 861-6005.

104.1.06 – Gas Facilities; Northwest Natural Gas, Rich Girard, (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. The Contractor shall conform to all jurisdiction 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. Construction Schedule
2. Shop Drawings, Product Data, and Samples
3. Traffic Control Plan
4. Asphalt Mix (3 week lead time, prior to application)
5. Schedule of Unit Values

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 10 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 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 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 along S. Hemlock Street in Warrenton 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 "Mobilization."

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 he 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 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

DIVISION TWO – SITEWORK

SECTION 201 – MOBILIZATION

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.

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 "Mobilization".

END OF SECTION 202

SECTION 224 – OVERLAY SHOULDER ROCK

224.1 DESCRIPTION:

This item includes all work necessary to furnish, place shoulder rock on a prepared subgrade for the overlay shoulder. This item of work also includes any additional work directed by the Engineer.

224.2 MATERIALS:

224.2.01 Shoulder rock shall be of the designated size ¾ inch-minus and shall meet the requirements of ODOT 2018 Standard Specifications Subsection.

224.2.02 Acceptance will be based on periodic sample of the material in place prior to placing on the shoulder.

224.3 CONSTRUCTION:

224.3.01 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 on the overlay shoulder. The Contractor shall spread and strike off the material to the designated overlay, 2.0' beyond the overlay shoulder.

224.4 MEASUREMENT AND PAYMENT:

224.4.01 Measurement for the shoulder rock will be measured and paid for on a cubic yard truck measure basis for the item "Furnish and Install Shoulder Rock" to the limits called out by these specifications and the Engineer.

224.4.02 Payment for the shoulder rock will be at the unit contract price and shall constitute full compensation for supplying, placing, grading the shoulder rock next to the overlays.

END OF SECTION 224

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 three (3) weeks 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 performed 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%