# CONTRACT DOCUMENTS AND SPECIFICATIONS

RIVER ST SEWER REPLACEMENT PROJECT

SET NO. Cascade Ditching

\$ 258,571.40

# CONTRACT DOCUMENTS

AND

# **SPECIFICATIONS**

NEWBERG SEWERAGE SYSTEM IMPROVEMENTS RIVER ST. SEWER REPLACEMENT PROJECT

FOR

CITY OF NEWBERG, OREGON

AUGUST, 1987



Bert S. Teitzel, P.E. Director of Public Works

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#### ADVERTISEMENT FOR BIDS

# Newberg Sewerage System Improvements River St. Sewer Replacement Project Newberg, Oregon

Sealed bids for the construction of the River St. Sewer Replacement Project in the City of Newberg, Oregon addressed to the Director of Public Works, 414 E. First St., Newberg, Oregon 97132, will be received by Bert S. Teitzel, Director of Public Works, until 2:00 p.m. prevailing time on the 27th of August, 1987 in the Council Chambers, City of Newberg, 414 E. First St., Newberg, Oregon at which time and place all bids will be opened and publicly read aloud by the undersigned or his designated representative.

The project generally consists of constructing 930 lineal feet of 27 inch, 1,104 lineal feet of 21 inch, and 100 lineal feet of 8 inch PVC sanitary sewer; 1,320 lineal feet of 6 inch PVC service laterals, 8 manholes and other appurtenances.

Plans and Specifications may be obtained at the office of the City Engineer, City Hall, 414 E. First St., Newberg, Oregon 97132 upon payment of a non-refundable payment of \$25.00 for each set.

Plans and specifications may be examined at the office of the Director of Public Works, 414 E. First St., Newberg, Oregon 97132; Builders Exchange Co-op, 1125 SE Madison St., Portland, OR 97214; Construction Data, 925 NW 12th, Portland, Oregon, 97214; Northwest Plan Center, 901 SE Oak, Portland, OR 97214, and Salem Contractors Exchange, 2256 Guidons St., SE, Salem, Oregon 97302.

Bidders must be prequalified. Those who are not prequalified with the City must file application no later than 5:00 p.m. prevailing time on the 21st day of August 1987.

No proposal will be received or considered unless the bid contains statements by the bidder as a part of his bid, that the provisions required by ORS 279.348 through 279.363, and the Davis-Bacon Act, as may be applicable are to be complied with. Applicable state wage rates are included with the contract documents.

All bidding shall comply with Presidents Executive Order No. 11246.

All bidders shall comply with the applicable provisions of the Equal Employment Opportunity Act of 1972 and the Civil Rights Act of 1964.

Each bid must be submitted on the prescribed form in a sealed envelope, and clearly marked on the outside that it is a bid. Each bid must be accompanied by a certified check or bid bond payable to the City of Newberg, Oregon, in an amount of not less than 10 percent of the total amount of the bid submitted.

The successful Bidder will be required to furnish a bond for faithful performance on the contract in the full amount of the contract price.

The City of Newberg reserves the right to reject any or all bids to waive informalities, and to accept the bid which is in the best interest of the City. No bidder may withdraw his bid for a period of thirty (30) calendar days after the date set for opening.

Bert S. Teitzel, P.E. Director of Public Works

PLACE:

CITY OF NEWBERG, OREGON

PROJECT:

River St. Sewer Replacement Project

TO:

MAYOR AND CITY COUNCIL CITY OF NEWBERG, OREGON

414 E. FIRST ST.

NEWBERG, OREGON 97132

The undersigned, hereinafter called the Bidder, in compliance with your advertisement for bid offers to enter into a Contract with the City of Newberg, Oregon, hereinafter referred to as the Owner, to furnish all labor, materials, equipment, supplies and machinery to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the prices stated below.

The Bidder declares that he has carefully examined the plans and specifications with related documents, that he has personally inspected the site of the proposed work; that he has satisfied himself as to the quantities involved including materials and equipment, and is familiar with all of the conditions surrounding the construction of the proposed project including availability of materials and labor.

The Bidder further declares that the Bid is made according to the provisions and under the terms of the Contract Documents, which are hereby made a part of this Bid, and that the prices below are to cover all expenses incurred in performing the work required under the Contract Documents of which this Bid is a part.

The Bidder agrees that if this Bid is accepted, he will, within ten calendar days after notification of acceptance, execute the Contract with the Owner; and will at that time deliver to the Owner the Performance and Payment Bond and insurance documents required herein, and will, to the extent of his Bid, furnish all labor, equipment and materials necessary to complete the work in the manner, in the time, and according to the methods as specified in the Contract Documents and required by the Director of Public Works.

The Bidder further agrees to begin work within ten calendar days after notification of receipt of written "Notice to Proceed" of the owner and to have the River St. Sewer Replacement Project sewer main completed, tested and in operation to Manhole 4 station 9+30, within thirty (30) consecutive calendar days thereafter, and to complete all remaining work within sixty (60) additional calendar days immediately following, for a total contract term of ninety (90) days. Bidder further agrees to pay as liquidated damages, the sum of one hundred and fifty dollars (\$150.00) for each consecutive calendar day thereafter until the work shall have been finished. Sundays and legal holidays shall be excluded in determining days in default.

#### BID Cont.

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract documents and based on the following schedule of lump sum or unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the lump sum prices and unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

The undersigned Bidder hereby agrees that the provisions of ORS 279.348 to 279.356 will be complied with, so that the undersigned Bidder and Bidder's subcontractors will pay to their employees not less than the specified minimum prevailing rate of wage as determined by the Oregon Commissioner of the Bureau of Labor and Industries and further agrees to pay such wages not less than once per week.

# SCHEDULE OF PRICES PAGE 1

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE FIGURES	UNIT PRICE IN WRITING TOTAL AMOUNT
1.	Mobilization	L.S.	L.S.	17,50000	Zwe Hundard 17,500.00
2.	Sewer Main Construction PVC Gravity Sewer Pipe ASTM F-679 Class B Bedding, Class B Bac	kfill			
	. 27 " dia. 0' - 14' 14' - 16' 16' - 18'	80 565 285	LF LF LF	58.63 65.34 74.71	Forty Eight 163/100 4,690.46 Senty Fine +36/100 36,928.40 Jevesty Jan + 11/100 21,29235
b	. 21" dia. 0' - 14'	1,120	LF	43,58	Farty Three + 58/100 48,809.60
	. 18" dia. 0' - 14'	5	LF	272.19	Two Hundred 19/100 1,360.95
d	. 8" dia. 0' - 6' 6' - 10' 10' - 12'	80 0 20	LF LF LF	15.52 19.02 23.02	Fifteen + 52/100 1,241.60 Minteen + 02/100 -0- Wenty Insec+02/100 460.40
	. Service Wye (Factory Fabric 27" x 6" 21" x 6"	26 (ated)	EA EA	163.00	One Hendred 2934.00 Sexton Three 4238.00 Sexty Three
3.	Sewer Service Laterals PVC Gravity Sewer Pipe ASTM 3034 SDR 35 Class B Bedding, Class B Bac	ekfill	er in in in		
·a	. 6" dia. pipe 0' - 8'	1,314	LF	13.50	Thirteen + 50/100 17,739.00
4.	Foundation Stabilization	50	CY	23,50	Twenty Three +39/100 1175.00

# SCHEDULE OF PRICES PAGE 2

ITEM		ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE FIGURES	UNIT PRICE IN WRITING	TOTAL AMOUNT
5.	Standard 54" Manhole 0' - 8' deep	4	EA	2,317.00	Two Thousand Three Hundred Speentcen	9,268,00
6.	Standard 48" Manhole 0' - 8'	4	EA	2,192.00	Two Thousand, one Hundred Mentay Tur	8,768,00
7.	Extra depth Manhole over 8'	45	LF	240,00	Two Hundred Faity	10,800.00
8.	Drop Structure Includes Pipe, Fittings, Concrete	8	EA	4.6000	Eleven Hundred	<u>8,800 cc</u>
9.	Plug Upstream 16" Pipe in existing MH-0+08	1	LS	600,00	Six Hundred	_(00000
10.	Connect to Existing MH-1 at 0+00	1	LS	600.00	Six Hundred	600.00
11.	Connect to Existing Line at MH - 20+22	1	LS	186060	Eighteen Hundrad	1800.00
12.	Remove Existing Manhole	6	EA	700.00	Seven Hundred	4,200.00
13.	Connect 12' Force Main to MH-5, sta. 9 + 30. Includes all Pipe, Fittings, Manhole Drop,		. Here's	and the second		garage (see 1997)
	Labor and Materials and Diversi Sewage During Construction.	lon of 1	LS	4,000,00	Four Thousand	4,000 00

#### SCHEDULE OF PRICES PAGE 3

<u>ITEM</u>	DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE FIGURES	UNIT PRICE IN WRITING	TOTAL AMOUNT
14. Sawcu	t Pavement	5,248	LF	3,75	Three + 75/100	19,68000
a. Type	ce Restoration I, AC Pavement II, Landscaped rete Sidewalk	1,332 725 704	SY LF SF	17.85 1.16 3.00	Seventeen + 85/100 One + 10/100 Three + 00/100	23,776,20 797.50 211200
16. Final	Cleanup		LS	5,00000	Fire Mayerand	5,000 00

Total Bid in Writing

Total Bid in Figures

Tur Hundred Fifty Eight Thousand Fine Hundred Seventy one + 43/100

258,571.40

#### BID Cont.

The above unit prices shall include all labor, materials, equipment, tools, overhead, profit, insurance, etc., to complete the work called for.

It is agreed that if the Bidder is awarded the Contract for the work herein proposed and shall fail or refuse to execute the Contract and furnish the required Performance and Payment Bond within the time herein proposed, then, in that event, the bid security deposited herewith shall be retained by the Owner as liquidated damages.

The Bidder understands that the Owner may reject any or all bids and waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of thirty (30) calendar days after the scheduled closing time for receiving bids.

The Bidder acknowledges receipt of the following addendum.

NO DATE	<u>97-8</u> 7 NO	DATE	_
NO DATE	NO	DATE	_
The name of the Bidder submitt		· · · · · · · · · · · · · · · · · · ·	
Cascade Detching	co.	doing business at	
3983 Dringle Pd. Street	S. Scolem.	Dre . 97	302
Street	City	State Zip	

which is the address to which all communications shall be sent.

BIDDER'S PERFORMANCE BOND STATEMENT

(Name of Contractor), hereinafter referred to as

Contractor, is submitting a bid to the City of Newberg pursuant to the latter's advertisement for bids dated for each 27/98 for River St. Sewer Replacement Project.

Contractor certifies that if awarded the Contract, Contractor has the financial ability to obtain a good and sufficient bond issued by a surety to Owner in a sum equal to the amount of the bid providing for the faithful performance of the Contract.

# BID Cont.

Contractor understands and agrees if Contractor fails to provide the performance bond, the Owner will reject such bid and the bid bond or security submitted with the subject bid will be forfeited.
The Surety requested to issue the Performance Bond will be
(Surety Company). Contractor hereby authorizes
(Surety Company) to disclose any information to the
Owner concerning Contractor's ability to supply a performance bond in the amount of the Contract.
In witness thereto the undersigned has set his (its) hand this
Edward D. Moore. Signature of Bidder
Prescelent
Yitle
(If Corporation) In witness whereof the undersigned corporation has caused this instrument to be executed and the seal affixed by its duly authorized officers this
of Cascade Ditching Co.
Name of Corporation
Edward D. Moore
Drew Edent
Tftle
Attest Wils I Cloves Secretary

#### ADDENDA NO. 1 RIVER ST. SEWER REPLACEMENT PROJECT AUGUST 24, 1987

This addenda forms a part of the contract documents. It modifies the original bidding documents.

The contractor shall submit a bid for Fowler "Inserta-tee" as an alternate to "service wyes" bid as item 2e. in the bid proposal.

The City shall have a right to award the contract based on either item 2e. or 2f. listed below.

**ESTIMATED** UNIT OF UNIT PRICE ITEM DESCRIPTION QUANTITY **FIGURES** MEASUREMENT UNIT PRICE IN WRITING TOTAL AMOUNT

- 2. Sewer Main Construction PVC Gravity Sewer Pipe ASTM F-679 Class B Bedding, Class B Backfill
  - f. Fowler "Inserta-tee" 6" Dia., Installed

EA

44

Bidders shall acknowledge on Page 7 of the Contract Documents that they have received addenda by writing in addenda number and date received.

Bert S. Teitzel, P.E.

Director of Public Works

CONTRACT FOR CONSTRUCTION

	e CITY OF NEWBE			day of A		ne
	Cascad	e Ditc	thing (	Co.		
of			Orego		:	
			$\mathcal{O}$			

hereinafter called the "CONTRACTOR".

#### WHITENESS:

Said Contractor, in consideration of the sum to be paid him by the said Owner and of the covenants and agreements herein contained, hereby agrees at his own proper cost and expense to do all the work and furnish all the materials, tools, labor, and all appliances, machinery and appurtenances for the River St. Sewer Replacement Project to the extent of the Bid made by the Contractor on the 27 the day of 1987, all full compliance with Contract Documents referred to herein.

The <u>Advertisement for Bid</u>, the signed copy of the <u>Bid</u> made by the Contractor, the fully executed <u>Performance and Payment Bond</u>, the <u>General</u>

<u>Provisions</u>, the <u>Special Provisions</u>, the <u>Technical Provisions</u>, and the <u>Plans</u> consisting of three (3) sheets entitled <u>River St. Sewer Replacement Project</u> dated June 1987, are hereby referred to and by reference made a part of this Contract as fully as if the same were completely set forth herein.

In consideration of the faithful performance of the work herein embraced, as set forth in these Contract Documents, and in accordance with the direction of the Director of Public Works and to his satisfaction to the extent provided in the Contract Documents, or as otherwise herein provided and based on the said Bid made by the Contractor, and to make such payments in the manner at the times provided in the Contract Documents.

The Contractor agrees to complete the work within the time specified herein and to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said Bid.

The Contractor agrees to indemnify and save harmless the Owner from any and all defects appearing or developing in the materials furnished and the workmanship performed under this Contract for a period of one year or such other time as applicable law may allow after the date of acceptance of the work in the Contract by the Owner.

#### CONTRACT FOR CONSTRUCTION Cont.

In the event that the Contractor shall fail to complete the work within the time limits or the extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid at the rate of One Hundred and Fifty Dollars per consecutive calendar day. Sundays and legal holidays shall be excluded in determining days in default.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed the day and year first herein above written.

CITY OF NEWBERG, OREGON

By

Title

CONTRACTOR Cascade Detching

Bv

presedent

Title

Approved as to form:

City Attorney

#### PERFORMANCE - PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That we

CASCADE DITCHING CO.	· · · · · · · · · · · · · · · · · · ·
ACORPORATION	hereinafter called
(Corporation, Partnership, or Individual)	
"Principal" and A Mutual Company	of <u>Wausau</u> .
State of <u>Wisconsin</u> , hereinafter held firmly bound unto the <u>City of Newberg, Orego</u> called "Owner" in the penal sum of <u>TWO HUNDRED FI</u>	<u>n</u> , hereinafter
HUNDRED SEVENTY ONE AND 40/100 Dollars (\$257,471.40 United States, for the payment of which sum well ourselves, our heirs, executors, administrators, severally, firmly by these presents.	and truly to be made, we bind
THE CONDITION OF THIS OBLIGATION is such that Whe certain contract with the Owner, dated this, 19 87, a copy of which is hereto attached and construction of the River St. Sewer Replacement P	day of September made a part hereof for the

NOW THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms conditions, and agreements of said contract during the original term thereof, and any extension thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, and shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contracts and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools consumed or used in connection with the construction of such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

#### PERFORMANCE - PAYMENT BOND cont.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition of the terms of the contract or the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specification.

PROVIDED. FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_\_day of <u>September</u>, 19<u>87</u>.

CASCADE DITCHING CO. Principal

P.O. Box 3818, Salem, OR 97302 (Address - Zip Code)

Witness as to Principal

P.O. Box 17991, Salon, OR 97365 (Address - Zip Code)

**ATTEST** 

(SEAL)

Surety) Servetaryx

EMPLOYERS INSURANCE OF WAUSAU A Mutual Company Surety

P. O. Box 3488

Portland, Oregon 97208

(Address - Zip Code)

(SEAL)

Witness as to Surety Corroon & Black of Oregon

P. O. Box 8699

Portland, Oregon 97207

(Address - Zip Code)

Note: Date of Bond must not be prior to the date of Contract. If Contractor is Partnership, all partners should execute bond.

# EMPLOYERS INSURANCE OF WAUSAU A Mutual Company

# POWER OF ATTORNEY

That the EMPLOYERS INSURA	RESENTS: ANCE OF WAUSAU A Mutual ( sin, and having its principal of	Company, a corporation of fice in the City of Waus	duly organized and existing under au, County of Marathon, State of
Wisconsin, has made, constitute	and appointed, and does by the	ese presents make, const G. HARRIS	itute and appoint
its true and lawful attorney-in-fa seal, acknowledge and deliver a OBLIGATIONS IN THE NATU	ANV OR ALL BONDS UNDER	RTAKINGS. RECOGNIZ	name, place and stead, to execute, ZANCES OR OTHER WRITTEN IM OF TEN MILLION
DOLLARS (\$10,000,000)	•		
the corporate seal of the corporate	ation and duly attested by its se	nt as if such bonds were si ecretary hereby ratifying	gned by the President, sealed with and confirming all that the said
meeting duly called and held on "RESOLVED, that the Presi WAUSAU A Mutual Compathe attorney named in the g Mutual Company bonds, un and that each or any of the thereto the seal of EMPLO "FURTHER RESOLVED, the A Mutual Company may be any such power of attorney upon the EMPLOYERS INSto any bond, undertaking	I pursuant to the following resoluthe 18th day of May, 1973, which dent and any Vice President — early be, and that each of them here were power of attorney to execute dertakings and all contracts of sm hereby is, authorized to attest DYERS INSURANCE OF WAL at the signatures of such officers affixed to any such power of attor certificate bearing such facsing SURANCE OF WAUSAU A Muttor contract of suretyship to wind.	h resolution is still in efficientive or appointive — or reby is, authorized to exert on behalf of EMPLOYED auretyship; and that any suche execution of any such and the seal of EMPLOY orney or to any certificate hile signatures and facsinual Company when so afthich it is attached."	temployers insurance of cute powers of attorney qualifying RS INSURANCE OF WAUSAU A secretary or assistant secretary be, h power of attorney, and to attach
			nereto affixed this 1ST day
of JUNE	_, 19 <u>87</u> . employers insuranc		
SEAL	By R. C. Retterath	A (Aster	Senior Vice President
Attest: A. A. Berry	R. C. Retteratio	( (	Schol Vice Freshent
R. J. Besteman	Assistant Secretary		
STATE OF WISCONSIN )	-		:
STATE OF WISCONSIN ) second of the second of	i.		:
COUNTY OF MARATHON ) On this 1ST day of			, 19 <u>87</u> , before me personally came
On this day of R. C. Retterath and say that he is a senior vice presiderand which executed the above instrurseal and that it was so affixed by ord	JUNE  nt of the EMPLOYERS INSURANC nent; that he knows the seal of said co er of the Board of Directors of said c	E OF WAUSAU A Mutual Corporation; that the seal affixor corporation and that he signed	o being by me duly sworn, did depose Company, the corporation described in ed to said instrument is such corporate ed his name thereto by like order.
On this 1ST day of R. C. Retterath and say that he is a senior vice presider and which executed the above instruments.	JUNE  nt of the EMPLOYERS INSURANC nent; that he knows the seal of said co er of the Board of Directors of said c	E OF WAUSAU A Mutual Corporation; that the seal affixor corporation and that he signed	o being by me duly sworn, did depose Company, the corporation described in ed to said instrument is such corporate ed his name thereto by like order.
On this day of R. C. Retterath and say that he is a senior vice presiderand which executed the above instrurseal and that it was so affixed by ord	JUNE  nt of the EMPLOYERS INSURANC nent; that he knows the seal of said co er of the Board of Directors of said c	E OF WAUSAU A Mutual Corporation; that the seal affixor corporation and that he signed	o being by me duly sworn, did depose Company, the corporation described in ed to said instrument is such corporate ed his name thereto by like order.
On this day of R. C. Retterath and say that he is a senior vice presiderand which executed the above instrurseal and that it was so affixed by ord	JUNE  Int of the EMPLOYERS INSURANCE of the the knows the seal of said content; that he knows the seal of said content of the Board of Directors of Said Content of The Board of The Bo	E OF WAUSAU A Mutual Corporation; that the seal affixor corporation and that he signed	o being by me duly sworn, did depose Company, the corporation described in ed to said instrument is such corporate ed his name thereto by like order.  Therein first above written.  Company  Notary Public IC NSIN
COUNTY OF MARATHON )  On this 1ST day of R. C. Retterath  and say that he is a senior vice presider and which executed the above instrurseal and that it was so affixed by ord IN WITNESS WHEREOF, I have here the senior vice presider and which executed the above instrurseal and that it was so affixed by ord IN WITNESS WHEREOF, I have here the senior vice president of the senior vice president senior	DUNE  Int of the EMPLOYERS INSURANCE of the the knows the seal of said content; that he knows the seal of said content of the Board of Directors of Said Content of the Board of Said Content of the Board of Said Content of the Board of Said Content of Said Conten	Patricia A. Klema NOTARY PUBLI STATE OF WISCOI COMMISSION EXPIRES  URANCE OF WAUSAU	o being by me duly sworn, did depose Company, the corporation described in ed to said instrument is such corporate ed his name thereto by like order.  Therein first above written.  Company  Notary Public IC NSIN

not been revoked; and furthermore that the resolution of the Board of Directors set forth in the power of attorney is still in force.

SET TAB STOPS AT ARROWS ISSUE DATE (MM/DD/YY)

9/14/871mh

PRODUCER	
Corroon & Black of Oregon	Inc
PO Box 8699	
Portland, Oregon 97207	
(503) 224-4155	

Cascade Ditching Company

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policies below.

#### COMPANIES AFFORDING COVERAGE

COMPANY LETTER	A	United	Pacific	Insurance
-------------------	---	--------	---------	-----------

COMPANY

COMPANY C

COMPANY DETTER

COMPANY E

#### 200130 V2130.

P.O. Box 3818

Salem, Oregon 97302

INSURED

This is to certify that policies of insurance listed below have been issued to the insured hamed above for the policy period indicated. Hotwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions, and conditions of such policies.

	TIO	ns of such policies.						
COLTR		TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIABILI	TY LIMITS IN T	
-	_			5/12 (IIII656/11)	DATE (MINISOSTI)	ļ	EACH OCCURRENCE	AGGREGATE
	GE	eneral Liability				BODILY INJURY		
	X	COMPREHENSIVE FORM				INJUNT	\$	\$
Ĭ	X.	PREMISES/OPERATIONS				PROPERTY	_	
Α	X	UNDERGROUND EXPLOSION & COLLAPSE HAZARD	LP 0387510	5/6/87	5/6/88	DAMAGE	\$	\$
А	X	PRODUCTS/COMPLETED OPERATIONS				21.0.20		
	X	CONTRACTUAL				BI & PD COMBINED	\$1,000	\$1,000
	X	INDEPENDENT CONTRACTORS			:			
A STATE OF THE STA	X	BROAD FORM PROPERTY DAMAGE	•					
X	Х	PERSONAL INJURY				PERSO	NAL INJURY	\$1,000
	Х	\$1,000 Property Dam	age Deductible					
	A	UTOMOBILE LIABILITY				BODILY		
Ĭ	X	ANY AUTO				(PER PERSON)	\$	
	Х	ALL OWNED AUTOS (PRIV. PASS.)			ļ	BODILY INJURY		
		ALL OWNED AUTOS (OTHER THAN)				(PER ACCIDENT)	\$	
	Х	HIRED AUTOS	€ **		'	PROPERTY		
Α	Х	NON-OWNED AUTOS	LP 0387510	5/6/87	5/6/88	DAMAGE	\$	
		GARAGE LIABILITY				BI & PD		1
						COMBINED	ৠ,000	
	EX	Cess Liability				T		
		UMBRELLA FORM				BI & PD COMBINED	S	\$
		OTHER THAN UMBRELLA FORM					,	
		MORKEROL COMBENICATION				STATUTOR	RY	
		workers' compensation				\$	(EACH A	CCIDENT)
		OMA				\$	(DISEASE	-POLICY LIMIT)
		employers' liability				\$	(DISEASE	-EACH EMPLOYEE)
¥.	OT	1ER						
								į
	l			1	1	1		

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

RE:River Street sewer replacement project

aavujio jus korojai 🐃

City of Newberg
Department of Public Works
414 E. First Street
Newberg, Oregon 97132

should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail  $10^\circ$  days written notice to the certificate holder named to the left, but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives.

AUTHORIZED REPRESENTATIVE

# GENERAL PROVISIONS

NEWBERG SEWERAGE SYSTEM IMPROVEMENTS RIVER ST. SEWER REPLACEMENT PROJECT

CITY OF NEWBERG

#### SECTION 1.00 DEFINITIONS AND TERMS

Terms used or referred to herein are defined as follows:

#### 1.01 BID

The offer of the bidder when submitted on the proposal form, properly signed and guaranteed.

#### 1.02 BIDDER

Any individual, firm partnership, corporation or combination thereof acting directly or through a duly authorized representative, submitting a proposal on the work contemplated.

#### 1.03 CHANGE ORDER

A written instruction to the Contractor, signed by the Engineer, prescribing any change in the work.

#### 1.04 CONTRACTING AGENCY

The agency which has been contracted for the performance of the work or for whom the work is being performed.

#### 1.05 CONTRACT

The written agreement covering performance of the work including formal contract, advertisement for bids, instructions to bidders, proposal with required affidavit, specifications, bonds, plans, and all other Contract Documents.

#### 1.06 CONTRACTOR

The individual, partnership, corporation, or other entity entering into a contract with the Contracting Agency to perform the contemplated work. In the case of work being done under a permit issued by the Contracting Agency, the Permitee shall be construed to be the Contractor.

#### 1.07 ENGINEER

The Engineer of the Contracting Agency, acting either directly or through his authorized representatives, and designated by the Contracting Agency to supervise the work during its execution.

#### 1.08 HOUSE CONNECTION SEWER

Any sewer pipe line lying within an easement, public street or right of way which connects or is proposed to connect, a house sewer or any lot or part of a lot with a public sewer.

#### 1.09 HOUSE SEWER

Any sewer pipe line which connects, or is proposed to connect, any building to a house connection sewer.

#### 1.10 INSPECTOR

An authorized representative of the Engineer of the Contracting Agency, limited to the particular duties entrusted by the Engineer.

#### 1.11 LABORATORY

A materials testing laboratory operated by a public agency or if approved by the Engineer, any private, commercial testing laboratory.

#### 1.12 LINEAL FOOT

Horizontal measurement as determined by engineers' station.

#### 1.13 MAJOR ITEM

Any items or work and/or materials having an original contract value in excess of \$500.00 or which exceeds ten (10) percent of the amount of the original contract, whichever is greater.

#### 1.14 NOTICE TO PROCEED

A written notice to the Contractor from the Contracting Agency, designating the date by which the Contractor shall begin prosecution of the work.

#### 1.15 PERSON

Any individual, firm, association, partnership, corporation, trust, or joint venture.

#### 1.16 PLANS

The plans, profiles, cross sections, and drawings, or reproductions thereof, approved by the Engineer, which show the details of the work to be done.

#### 1.17 PROPOSAL GUARANTY

Certified check or bidder's surety bond executed by a bonafide surety company, accompanying the Bid as a guarantee that the bidder will enter into a contract with the Board for the performance of the work.

#### 1.18 REFERENCE SPECIFICATIONS

Bulletins, standards, rules, methods of analysis or test, codes and specifications of other agencies, engineering societies, or industrial associations referred to in these specifications. All such references specified herein, refer to the latest edition thereof, including any amendments thereto

which are in effect and published at the time of advertising for bids or issuing the permit for the project.

#### 1.19 ROADWAY

That portion of the right of way or easement intended for use by vehicles.

#### 1.20 SANITARY SEWER

A sewer that carries liquid and water-carried wastes together with minor quantities of storm, surface, and groundwaters that are not admitted intentionally.

#### 1.21 SEWER

A pipe or conduit that carries wastewater or drainage water.

#### 1.22 SPECIAL PROVISIONS

Specific clauses setting forth conditions or requirements peculiar together with minor quantities of storm, surface, and groundwaters that are not admitted intentionally.

#### 1.23 SEWER

A pipe or conduit that carries wastewater or drainage water.

#### 1.24 SPECIAL PROVISIONS

Specific clauses setting forth conditions or requirements peculiar to the work which modify or supplement the standard specification.

#### 1.25 SPECIFICATIONS

This term includes the standard specifications and specifications included herein by reference, any special or project specifications, and specifications included therein by reference, specifications on the plans referred to and specifications contained or referred to in supplemental agreements between the Contractor and the Contracting Agency.

#### 1.26 STANDARD DRAWINGS

Drawings of structures or devices referred to on the plans or in specifications by title and/or an index number.

#### 1.27 STATE

The State of Oregon.

#### GENERAL PROVISIONS

#### 1.28 STORM SEWER

A sewer that carries storm water and surface water, street wash and other wash waters, or drainage, but excludes domestic wastewater and industrial wastes. Also called storm drain.

#### 1.29 STREET

Any road, highway, parkway, freeway, alley, walk or way.

#### 1.30 SURETY

The bondsman, party or parties who may guarantee the fulfillment of the contract by bond.

#### 1.31 UTILITY

Tracks, overhead or underground wires, pipe lines, conduits, ducts of structures, owned, operated, or maintained in or across a public right of way or private easement.

#### 1.32 WORK

That which is proposed to be constructed or done under the contract.

#### 1.33 ABBREVIATIONS AND SYMBOLS

A.A.S.H.O. (AASHO) American Association of State Highway Officials.
A.G.C. (AGC) Associated General Contractors of American. A.P.W.A. (APWA)
American Public Works Association. A.S.T.M. (ASTM) American Society for Testing
Materials. A.W.W.A. (AWWA) American Water Works Association. O.R.S. (ORS)
Oregon Revised Statutes.

#### SECTION 2.00 PROPOSAL REQUIREMENTS AND CONDITIONS

#### 2.01 INTERPRETATION OF PLANS AND SPECIFICATIONS

The Engineer will interpret the meaning of any part of the plans and specifications about which any misunderstanding may arise, and his decision will be final.

Should the Contractor become aware of any error or discrepancy in or between the plans and specifications, he shall refer the matter to the Engineer for adjustment before proceeding further with the work. Should the Contractor proceed with the work without referring the matter, he does so on his own responsibility.

#### 2.02 FIELD CONDITIONS

Logs of test holes, ground water levels, and any accompanying soil reports as furnished by the Contracting Agency are furnished for general information only. The field conditions so set forth shall not constitute a representation or warranty, expressed or implied that such conditions are actually existent. Bidders shall make their own investigations and form their own estimates of the site conditions as set forth in the soils reports or as shown by the logs of test holes and the actual conditions revealed during the progress of the work or otherwise.

#### 2.03 CONTRACT DOCUMENTS

The Contract Documents under which it is proposed to execute this work consist of the material bound herewith. These Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work. Any person contemplating the submission of a Bid and being in doubt as to the meaning or intent of said Contract Documents should request of the Engineer, in writing, an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing, and a copy of such interpretation or change will be mailed or delivered to each person receiving a set of the Documents. The Contracting Agency will not be responsible for any other explanation or interpretations of said Documents.

#### 2.04 TYPE OF BID

The Bid for the work contemplated is to be submitted on the form prescribed in the Bid.

#### 2.05 PREPARATION OF BIDS

All blank spaces in the Bid form must be filled, in ink, in both words and figures where required. No changes shall be made in the phraseology of the forms or in the items mentioned here in. Written amounts shall govern in cases of discrepancy between the amounts stated in writing and the amounts stated in figures. In the case of error in extending unit prices in the bid, the correct extension of the unit prices shall govern.

Any Bid shall be deemed informal which contains omissions, erasures, alterations or additions of any kind, or items uncalled for, or in which any of

the items are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Advertisement for Bids.

The Bidder shall sign his Bid in the blank space provided therefore. Bids made by corporations or partnerships shall contain names and addresses of the principal officers or partners. If the Bid is made by a corporation, it must be acknowledged by one of the principal officers thereof; if made by a partnership, by one of the partners.

#### 2.06 SUBMISSION OF BIDS

All Bids must be submitted at the time and place and in the manner prescribed in the Advertisement for Bids. Bids must be made on the prescribed Bid forms and submitted with the Contract Documents.

#### 2.07 WITHDRAWAL OF BID

Any bid may be withdrawn prior to the scheduled time for the opening of bids either by telegraph or written request, or in person. No bid may be withdrawn after the time scheduled for opening of bids unless the time specified in Section 3.01 has elapsed.

#### 2.08 BID SECURITY

Bids must be accompanied by a certified check drawn on a bank in good standing, or a bid bond issued by a surety company authorized to issue such bonds in the State of Oregon, in an amount of not less than ten (10) percent of the total amount of the Bid submitted. This check or bid bond shall be given as a guarantee that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish a properly executed Performance Bond in the full amount of the Contract price within the time specified.

The Contracting Agency reserves the right to retain the bid security of the three lowest bidders until the successful Bidder has signed and delivered the Contract, and furnished a one-hundred percent (100%) Performance Bond within the specified time; the next lowest bid may be accepted at the Owner's discretion whereupon the above instructions and requirements will apply to the said second bidder.

#### 2.09 CONDITIONS OF WORK

Each Bidder must inform himself of the conditions relating to the regular execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents.

Each Bidder must inform himself of all laws and statutes, both Federal and State, relative to the regular execution of the work, the employment of labor, protection of public health, the protection of private property, right-of-way, and access to the work, fire protection regulations, and similar requirements.

# 2.10 PREQUALIFICATION OF BIDDERS

Bidders who are in doubt as to their qualifications should refer to the requirements regarding prequalification in the Advertisement for Bids for this contract. Prequalification requests must be submitted by the time stipulated in the Advertisement for Bids.

#### SECTION 3.00 AWARD AND EXECUTION OF CONTRACT

#### 3.01 AWARD OF CONTRACT

After the Bids for the contemplated work have been opened and read as provided in these specifications, the respective totals thereof will be checked and compared by the Contracting Agency; and the results thereupon will be considered public information.

Unless otherwise stated in the Special Provisions or in the Advertisement for Bids the contract will be awarded within the forty-five (45) days after the opening of Bids to the lowest bidder meeting the qualifications required by law, including but not limited to the law relating to prequalification of bidders, and the requirements stated in the advertisement for bids, and instructions to bidders, and/or the specifications, and whose bid complies with all the prescribed requirements unless all bids are rejected. The Contracting Agency reserves the right to reject any and all bids and no bid shall be considered as being binding upon the Contracting Agency until the execution of the Contract; and failure of the Awardee to properly execute the awarded contract and furnish acceptable bonds and insurance as provided herein, shall be just and sufficient cause for the annulment of the award and the forfeiture of his proposal guaranty.

#### 3.02 EXECUTION OF CONTRACT

The contract shall be signed by the successful bidder and returned together with the contract bonds and required insurance documents within 15 calendar days after the award of the contract unless otherwise stated in the Special Provisions or in the Advertisement for Bids, and after receipt of same by the Contracting Agency the proposal guarantees will be returned to all bidders. The Contractor shall carry all insurance which may be required by Federal and State laws by local ordinances, and by these specifications.

The attention of the Contractor is called to the fact that, when the United States Government participates in all or any portion of the cost of the work, the Federal laws authorizing such participation and the rules and regulations made pursuant to such laws must be observed by the Contractor. The work shall be subject to the inspection and approval of the authorized representatives of such Federal agencies as are created for the administration of these laws.

#### 3.03 CONTRACT BONDS

Prior to the execution of the Contract, the Contractor shall file with the Contracting Agency a Performance Bond in the amount and for the purposes noted below, duly executed by a responsible corporate surety authorized to issue such bonds in the State of Oregon, which bond must in all respects comply with ORS 279.029 and ORS 279.526 Et. Seq. inclusive, and be satisfactory and acceptable to the Contracting Agency and he shall pay all premiums and costs thereof and incidental thereto to keep such bond in full force until one year after acceptance of the work in writing by the Contracting Agency.

The bond must be signed by both the Contractor and Surety and shall be in the sum of not less than 100% of the contract price to assure the claims of

materialmen supplying materials to him, and of mechanics and laborers employed by him on the work required under these specifications.

Provided the Contractor 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 him undertaken, and within the time prescribed therein or as extended as provided in the applicable Standard Specifications, and shall indemnify and save harmless the Contracting Agency, its officers, employees, and agents, against any 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 said contract by the said Contractor or his subcontractors; and shall make payment promptly, as due, to all subcontractors and to all persons supplying to the Contractor or his subcontractors: equipment, supplies, labor, or materials for the prosecution of the work, or any part thereof, provided for in said contract, and shall pay all contributions or amounts due the State Industrial Accident Fund and the State Tax Commission; and shall pay all other debts, dues and demands incurred in the performance of the said contract and shall in all respects perform said contract according to law, then this obligation is to be void, otherwise to remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the Contracting Agency be obligated for the payment thereof.

Should any surety or sureties upon said bonds or any of them become insufficient, said Contractor shall renew said bond or bonds with good and sufficient sureties within ten (10) days after receiving notice from the Contracting Agency that the surety or sureties are insufficient.

# 3.04 PROTECTIVE LIABILITY INSURANCE REQUIREMENTS AND PROPERTY INSURANCE

The Contractor shall furnish to the Contracting Agency in triplicate, a policy or certificate or protective liability insurance in which the Contracting Agency shall be named insured or be named in such insurance as an additional insured with the Contractor. In compliance with this provision, the Contractor may file with the Contracting Agency a satisfactory "blanket coverage" policy or certificate of insurance. The policy shall insure the Contracting Agency, its officers, employees and agents against all claims arising out of or in connection with the work to be performed and shall remain in full force and effective until the work is accepted by the Contracting Agency. The policy shall provide the following minimum limits.

Bodily Injury	\$	500,000	each	person
	\$	500,000	each	occurrence
Property Damage	Ś	500 000	each	accident

Such policy shall provide coverage at least as broad as that provided in the Standard Form approved by the National Bureau of Casualty Underwriters together with such endorsements as are required to cover the risks involved. In addition, the Contractor shall furnish evidence of a commitment by the insurance company to notify the Contracting Agency of the expiration of cancellation of the insurance policies.

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The Contractor shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof. This insurance shall include the interests of Contracting Agency, Contractor, Subcontractors, and consultants in the Work, all of whom shall be listed as insureds or additional insured articles, shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the SPECIAL CONDITIONS, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or otherwise provided in the SPECIAL CONDITIONS. Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit.

All policies of insurance for the certificate or other evidence thereof required to be purchased and maintained by Contractor will contain a provision or endorsement that the coverage afforded will not be cancelled or materially changed or renewal refused until at least thirty days prior written notice has been given to the Contracting Agency by certified mail.

#### 3.05 CONTRACTING AGENCY'S IMMUNITY FROM LIABILITY

The Contractor shall save, keep and hold harmless, the Contracting Agency and all officers and agents thereof from all damages, costs or expenses in law or equity that may at any time arise or be set up because of damages to property or of personal injury received by reason of or in the course of performing said work, which may be occasioned by any negligence upon the part of the Contractor or any of said Contractor's employees, or any subcontractor performing any of the work contemplated by the Contract.

The Contracting Agency shall not be liable or responsible for any accident, loss, or damage happening to the works referred to in the contract prior to the completion and acceptance thereof.

#### 3.06 INDUSTRIAL ACCIDENT INSURANCE

The Contractor shall secure and maintain in full force and effect and bear the cost of complete Industrial Accident Insurance in accordance with the requirements of the Workmen's Compensation laws. The Contracting Agency, its officers, employees, or agents will not be responsible for any claims or suits in law or equity occasioned by this paragraph.

#### SECTION 4.00 SCOPE OF WORK

#### 4.01 INTENT OF CONTRACT

The intent of the contract is to prescribe a complete work or improvement which the Contractor undertakes to do, in full compliance with the provisions and requirements of the contract. The Contractor for all or any part shall furnish all labor, materials, tools, equipment, transportation, necessary supplies and incidentals required to make each and every item complete as contemplated by the contract. Any deviation from these requirements must be stipulated in the SPECIAL PROVISIONS.

#### 4.02 PLANS, SPECIFICATIONS AND WORK

The plans, together with specifications and other contract documents will govern the work to be done. Anything mentioned in the specifications and not shown on the plans and detailed drawings and not mentioned in the specifications, shall be of like effect as though shown or mentioned in both.

Specifications and plans referred to in any of the contract documents shall be considered as being included in the document in which such reference is made. A reference to a particular specification including officially adopted revision or amendments thereto which is in force at the time of advertising for bids.

In case of conflict, the order of precedence of the following documents in controlling the work shall be:

- (1) Permits from outside the agencies required by law.
- (2) Special Provisions
- (3) Plans
- (4) Standard Specifications

Change orders, supplemental agreements and approved revisions to plans and specifications will take precedence over contract documents listed above.

#### 4.03 PLANS AND SHOP DRAWINGS

The plans furnished and included with the specifications will show such details as may be necessary to comprehensively indicate the work that is proposed and the results that are intended to be accomplished. Any additional working drawings, detail plans, or shop drawings that may be required in connection with the prosecution or construction of any part of such work shall be supplied by and at the expense of the Contractor as they will not be accepted by the Engineer from suppliers or others.

When shop drawings are required in the various sections of the specifications or are requested by the Engineer, they shall be prepared in accordance with modern engineering practice. Unless otherwise specified, shop drawings shall be submitted in quadruplicate to the office of the Engineer for approval or correction not less than 30 days before approved drawings will be required. One set will be returned to the Contractor marked "approved" or "approved as corrected". If changes are required, four copies of corrected shop drawings shall be delivered to the Engineer.

#### GENERAL PROVISIONS

Shop drawings shall be of sufficient size and scale to clearly show all details.

No materials shall be furnished or work done on items requiring shop drawings prior to approval.

Approval of shop drawings shall not relieve the Contractor from responsibility for errors or omissions of any sort in the shop drawings.

The Contractor shall keep a copy of the plans and specifications at the job site and access thereto shall at all times be accorded the Engineer.

# 4.04 CHANGES AT THE CONTRACTOR'S REQUEST

Provision has been made in the specifications for certain specific changes in methods of construction which may be made at the Contractor's request and upon approval of the Engineer. Changes in the drawings and specifications, other than those specified herein, which do not materially affect the work, and which are not detrimental to the work or to the interests of the Contracting Agency as determined by the Engineer, may be granted to facilitate the work of the Contractor when such changes are requested in writing and submitted to the Engineer for approval. In the event such changes are granted, the changes shall be Contracting Agency reserves the right to receive an equitable adjustment in the contract price or contract time as a consideration for authorizing any such change.

# 4.05 ALTERATION OF QUANTITIES AND EXTRA WORK

The Contracting Agency reserves the right to make such increase or decrease in the quantity of any item or work or material to be performed or furnished under such contract, or to order the performance of such additional or extra work of a class not contemplated by the proposal as may be considered expedient or advantageous and essential to the satisfactory completion of proposed work and the full accomplishment of the intended purpose thereof, without thereby affecting the validity of the contract or contract bonds, and without giving notice to the surety of any such bond, unless the total bid price is increased more than 25%. In such cases the Contractor will be required to perform or furnish additional quantities or extra items of work or materials or to decrease the amount of work or materials to be performed or furnished under the contract or to omit portions thereof, and to furnish and provide the necessary labor and equipment to do so, when and as the Engineer may so order in writing within the limitations herein or by law provided. In the event that any such increase or decrease in the quantity of work or materials to be performed or furnished is so ordered, the amount to be paid the Contractor under his contract shall be correspondingly increased or decreased as the case may be, in proportion to the increased or decreased quantities of work or materials performed or furnished under such order.

#### 4.06 ALTERATION OF QUANTITIES

In the event that the Contractor is directed by the Engineer to increase, decrease or omit portions of the work, and the total pay quantity for any items of work varies from the original contract quantity by 25% or less, payment will be made for the quantity of work performed at the contract unit price thereof.

If the total pay quantity for any item of work required under the contract varies from the original contract quantity by more than 25%, the compensation to the Contract will be determined as follows:

If a change is made which, together with any previous changes in quantity, increases the quantity of any major item or decreases the quantity of any item more than 25% of the original contract quantity, the payment for the work in excess of the 25% increase over the original contract amount of that item will be determined by negotiation; at the option of the Engineer, payment for such excess will be made on the basis of "Extra Work" as hereinafter provided. Credit for decreases in the quantity of any item may be determined by negotiation but in no event shall the amount of credit exceed the contract unit prices for the omitted items.

#### 4.07 EXTRA WORK

Any new and unforeseen work will be classed as "Extra Work" when determined by the Engineer that said work is not covered by any of the contract items for which there is a bid price, or by a combination of such items.

Changes in the work involving either additional costs or credits for unforeseen additions or omissions in the work shall be made only subsequent to execution of a Change Order by the Engineer or by Supplemental Agreement issued by the Contracting Agency.

Payment of extra work on a lump sum or Unit Price basis required to be performed in accordance with the provisions of this section will be established by mutual agreement between the Contractor and the Engineer within the legal limits provide by State Laws or local ordinances. When no mutual agreement can be reached, payment will be made on a force account basis as hereinafter prescribed.

When the extra work is to be performed on a force account basis, the Contractor shall keep full and complete records of the cost of such work and shall permit the Engineer to have access thereto as may be necessary to assist in the determination of the compensation payable for such work. An itemized statement of such work shall be submitted to the Engineer for approval prior to submitting invoice for payment. The Contractor will be paid for labor, materials, and equipment rental as hereinafter prescribed.

Only materials incorporated in the work will be paid for.

To the totals computed as hereinafter prescribed for labor, materials and equipment rental will be added 15% for overhead, profit and supervision. It is understood that labor, materials, and equipment may be furnished by the Contractor or the subcontractor or by others on behalf of the Contractor. However, when extra work to be paid for on a force account basis is performed by forces other than those of the Contractor, the Contractor shall reach agreement with such other forces as to the distribution of the payment to be made by the Contracting Agency for such work and no additional payment will be made therefor.

#### 4.07A LABOR

The cost of all labor used in performing the work under this contract shall be based on the prevailing wage scale as may be set forth in the Special Provisions for each particular craft or type of workman involved. Employer payments for payroll taxes and insurances, health and welfare, pension, vacation, and other similar purposes shall be included in this cost.

#### 4.07B MATERIALS

The cost of materials incorporated in the work will be the cost to the purchaser, whether Contractor, Subcontractor or other forces, from the supplier thereof, except as follows:

- a. If materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the Engineer. No markup except for actual costs incurred in the handling of such materials will be permitted.
- b. If the materials are obtained from a supplier or source owned wholly or in part by the purchaser, payment therefor will not exceed the price paid by the purchaser, payment therefor will not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or the current price of such materials delivered to the job site, whichever price is lower.
- c. The Contracting Agency reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and profit on such furnished materials.

#### 4.07C EQUIPMENT RENTAL

The Contractor will be paid for the use of equipment on the basis of, but not exceeding the prevailing hourly rental rates established by the Oregon State Highway Department and recognized by the Associated General Contractors for the area where such equipment is required to be operated.

On any equipment for which no rental rate has been established by Oregon State Highway Department, or where the required operation of the equipment is less than four hours or in excess of one week, rental rates shall be proposed by the Contractor and agreed upon in writing by the Engineer prior to the start of force account work.

Equipment that is in operational condition and is standing by with the Engineer's approval for participation in force account work will be paid for at 50% of the agreed upon rental rate.

Rental time will not be allowed while equipment is inoperative due to breakdowns for periods in excess of 30 minutes. Rental time shall be computed in 1/2 hour increments. In computing rental time of equipment in actual operation, less than 30 minutes will be considered 1/2 hour.

The rental rates paid, as above provided, shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and

maintenance of any kind, depreciation, storage, insurance, and all incidentals. Operators of rented equipment will be paid for as provided under Section 4.08.

All equipment shall, in the opinion of the Engineer be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools having a replacement value of \$50.00 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

- a. Equipment on the Work The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed and, in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.
- b. Equipment Not on the Work For the use of equipment moved in for the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid rental rates as agreed to, as provided in Section 4.07C above, and for the cost of transportation of the equipment to the location of the work and its return to its original location, all in accordance with the following provisions.
- (1) The original location of the equipment to be hauled to the location of the work shall be agreed to by the Engineer in advance.
- (2) The Contracting Agency will pay the costs of loading and unloading such equipment.
- (3) The cost of transporting equipment in low bed trailers shall not exceed the hourly rates charged by established haulers or the applicable minimum established rates of the Oregon Public Utility Commission.
- (4) The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays and legal holidays unless the extra work is performed on such days, and shall terminate at the end of the day on which the Engineer directs the contractor to discontinue the use of such equipment. The maximum rental time to be paid per day shall not exceed 8 hours unless the equipment is in operation for a longer period of time.
- (5) Should the Contractor desire the return of the equipment to a location other than its original location, the Contracting Agency will pay the cost of

transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment of the work.

(6) Payment for transportation, loading, and unloading equipment as above provided, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.

#### 4.07D RECORDS

The Contractor shall maintain his 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 the 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 all names or identifications and classifications of workmen, 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 substantiated 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 Contracting Agency reserves the right to establish the cost of such materials at the lowest current price at which said materials are available in the quantities concerned delivered to the location of the work.

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

The Engineer will compare his 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 Contracting Agency. When these extra work reports are agreed upon and signed by both parties, they shall become the basis of payment for the work performed.

# 4.08 CLEANUP AND DUST CONTROL

Throughout the period of construction, the Contractor shall keep the site free and clean from all rubbish and debris and shall promptly clean up all or any portion of the site when notified to do so by the Engineer. Care shall be taken to prevent spillage on the streets over which hauling is done, and any such spillage or debris deposited on streets due to the Contractor's operations shall immediately be cleaned up. The Contractor shall promptly remove any parts form the working area of all unused materials, surplus earth, and debris. Construction areas shall be left in a clean, neat and acceptable condition at the earliest time following completion of that portion of the work.

In the event that the Contractor fails to comply with the orders of the Engineer regarding cleanup, the Engineer may require the Contractor to cease progress on

any or all parts of the work under contract until the unsatisfactory condition is corrected. The Engineer may order such cleanup work performed by others and the costs therefor deducted from payments due the Contractor. No additional compensation will be allowed as a result of such suspension.

During all phases of the construction work; the Contractor shall take precautions to abate dust nuisance by cleaning up, sweeping, sprinkling with water, or other means as necessary to accomplish results satisfactory with the Engineer.

Upon completion of the work and prior to final inspection the entire site of operations shall be cleared of equipment, unused materials and rubbish so as to present a clean and neat appearance. All costs of "Cleanup" include all charges for water, are to be absorbed in the prices bid for the various bid items.

#### 4.09 VERMIN CONTROL

At the time of occupancy by the Contracting Agency, any structure or structures entirely constructed under the contract shall be free of rodents, insects, vermin and/or pests. Extermination work as may be necessary shall be arranged and paid for by the Contractor as part of the contract work within the contract time and shall be performed by a licensed agency and in accordance with the requirements of governing authorities. The Contractor shall be responsible for any injury to persons or property resulting from extermination operation.

#### 4.10 SANITARY PROVISIONS

The Contractor shall provide, and maintain in a neat and sanitary condition, such accommodations for the use of the employees as may be necessary to comply with all applicable laws, ordinances and regulations.

In the event of damage to the existing sewer facilities, or interruptions of existing sewage flows, the Contractor shall promptly dispose of any free sewage by pumping or other means. Sewage shall not be permitted to flow in the trenches or be covered by backfill. Continuous sanitary sewer service in closed conduits shall be maintained at all times.

#### SECTION 5.00 CONTROL OF WORK

#### 5.01 SUPERVISION AND INSPECTION

The Engineer shall decide within the provisions of the specifications all questions which may arise concerning the quality or acceptance of materials furnished and work performed, and all questions concerning the acceptable fulfillment of the contract by the Contractor.

The Engineer or his representatives shall have access to the work at all times. The Contractor shall furnish all facilities for inspection at the construction site, and at shops or yards, and shall not cover up any work requiring inspection until the same has been approved by the Engineer. If work should be covered up before being inspected, the Contractor will be required to remove such portions of the work as may be necessary to disclose the part in question.

The Contractor shall notify the Engineer 24 hours prior to commencing any work, or resuming work after shutdowns, except for normal resumption of work following Saturdays, Sundays, or Holidays.

The Contractor shall be fully responsible for providing proper supervision and sufficient labor and equipment to accomplish the work and to complete the work within the contract time.

The Contractor shall maintain a local telephone for the duration of the contract, at his own expense, where he or his authorized representative may be reached directly or by message at all times; during and outside of working hours.

#### 5.02 COOPERATION WITH OTHERS

Ordinarily, utility owners and Contracting Agency responsible for facilities located within the right-of-way will be required to complete any installation, relocation, repair, or replacement prior to 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 Contracting Agency shall have the right to enter upon the right-of-way and upon any structure therein for the purpose of making new installations, changes or repair, and the Contractor shall so conduct his operations as to provide the time needed for such work to be accomplished during the progress of the improvement.

Where two or more contractors are employed on related or adjacent work, each shall conduct his operations in such a manner as not to cause any unnecessary delay or hindrance to the other.

#### 5.03 MUTUAL RESPONSIBILITY OF CONTRACTORS

The Contracting Agency may let other contracts on any portion of the site for any work not included in the contract.

The Contractor shall perform the work of the contract so that is will properly coordinate with and fit the work performed by other contractors. He also shall give the other contractors every reasonable opportunity to perform

their work, store materials, and place equipment therefor, and fit their work to the work of other contractors. He shall furnish to the other contractors all information necessary in order that they may properly connect and fit their work to his and in ample time, so that they may have reasonable opportunity to prepare their work accordingly. He shall make the work of the contract ready to receive the work of the other contractors at the time fixed therefor, and shall fit this work to that of the other contractors at the times fixed therefor.

#### 5.04 UTILITIES

Utilities for the purposes of these specifications shall be considered as including but not limited to: pipe lines, conduits, transmission lines, and appurtenances of Public Utilities and those of private industry, businesses or individuals solely for their own use or for use of their tenants, and storm drains, sanitary sewers, irrigation facilities, street lighting, traffic signals, telephone, television, and fire alarm systems.

The Contracting Agency has by a search of known records, endeavored to locate and indicate on the drawings, all utilities which exist within the limits of work. However, the accuracy or completeness of the utilities indicated on the drawings is not guaranteed. Service connections to adjacent property may or may not be shown on the drawings. It shall be the responsibility of the Contractor to determine the exact location of all utilities and their service connections. The Contractor shall contact all utility owners and request that they locate and mark any existing utilities and their appurtenances and that service connections which may be affected by the contract work also be marked. In addition, the Contractor shall notify the Engineer as to any utility, appurtenances, and service connections located by him which have been incorrectly shown or omitted from the drawings.

Unless otherwise specified the Contractor shall remove all interfering portions of utilities which are shown on the drawings as "abandoned" or "to be abandoned in place", and which interfere with the construction of the project. All costs involved in said removals shall be included in the prices bid for the various items of work. All such abandoned utilities removed by the Contractor, shall be included in the prices bid for the various items of work. All such abandoned utilities removed by the Contractor, shall be stored on the site where directed and shall remain the property of the owner utility company or Contracting Agency as determined by the Engineer.

Where utilities are shown on the drawings as "abandoned" or "to be abandoned in place", it shall be the Contractor's responsibility to contact the utility company involved, as required in 5.11 herein, prior to excavating around such utilities to ascertain that the abandonment of the utility has been completed.

In certain cases where indicated on the drawings, the Contractor shall locate utilities in advance of his construction operations. In these cases the Contractor shall backfill the excavations and shall construct either a temporary or permanent resurfacing over the backfill. The temporary resurfacing shall be constructed when the exploratory excavations are made in an area located within the proposed project excavation.

The permanent resurfacing when specified shall be constructed when the exploratory excavations are made in an area located outside the proposed project

excavation. Said permanent resurfacing shall be of the type and thickness specified or as field conditions may otherwise require. In either case, the excavations shall be backfilled by the methods and to the relative density specified.

This work shall be performed as soon as practical after award of the contract in any event a sufficient time in advance of construction to avoid possible delays to the Contractor's work. All costs for making such exploratory excavations (including the backfilling and the resurfacing as specified herein) shall be included in the prices bid for the various items of work.

Utilities which upon exploration, are found to interfere with the permanent project work will be relocated, altered, or reconstructed by others in accordance with the provisions of Section 5.05 herein, or the Engineer may approve and order changes in location, line or grade of structures being built in order to avoid the utilities. The cost of such changes will be paid for under applicable bid items or as "Extra Work" as provided under Section 4.07.

Work required in connection with utilities because of interference with contract work will be performed and paid for as specified in the following paragraphs.

#### 5.05 BY OTHER THAN THE CONTRACTOR

When it is stated in the detailed specifications or indicated on the drawings, that a utility is to be relocated, altered or reconstructed by other than the Contractor, the Contracting Agency will conduct all negotiations with the owners in respect to such work and the work shall be done at no cost to the Contractor.

Service connections which physically interfere with project structures or appurtenances, whether or not so stated or indicated, shall be relocated by other than the Contractor; except as otherwise specified or unless directed by the Engineer in accordance with Section 5.08.

#### 5.06 BY THE CONTRACTOR UNDER A SPECIFIC CONTRACT ITEM

When bidding schedule contains a separate item covering the relocation, alteration, or reconstruction of a utility by the Contractor, the price bid for said item shall cover all costs involved in such work.

The drawings and detailed specifications will give the construction details for the work, and unless the time at which the work must be done is specified in the detailed specifications, the Contractor shall coordinate with the Engineer in respect to when the work is to be done.

#### 5.07 BY THE CONTRACTOR BUT NOT UNDER A SPECIFIC CONTRACT ITEM

When the work on a utility is specified or indicated on the drawings to be done by the Contractor, but is not included as a separate contract item in the bidding schedule, the Contracting Agency will make all arrangements with the owner of the utility in respect to the construction details, however, the Contractor shall coordinate with the owner as to when the work is to be done.

Any costs for such work shall be absorbed in the unit prices to be included in the lump sum amounts bid for the various contract items.

5.08 BY THE CONTRACTOR - SERVICE CONNECTIONS (EXCEPT SANITARY SEWER)

For the purpose of these specifications, service connections shall be constructed to mean all, or any portion of, the conduit cable or duct which connects a utility main distribution line to the meter box of an individual user.

Except when shown on the drawings to be relocated by others, and except as otherwise specified herein, the alteration or permanent relocation of service connection which physically interfere with project structures, or appurtenances thereto, which are to be constructed under this contract shall, when directed by the Engineer, be arranged for by the Contractor in accordance with the requirements of the utility owner. The costs for such work will be paid for as "Extra Work" as per Section 4.07.

#### 5.09 BY THE CONTRACTOR FOR HIS OWN CONVENIENCE

The temporary or permanent relocation of alteration of utilities including service connections, desired by the Contractor for his own convenience, shall be the Contractor's own responsibility and he shall make all arrangements regarding such work. The costs of such work shall be absorbed in the unit prices or included in the lump sum amounts bid for the various contract items.

5.10 BY THE CONTRACTOR OR BY OTHERS - UNKNOWN UTILITIES DISCLOSED DURING CONTRACT WORK

In the event that a utility is disclosed subsequent to the award of the contract, such utility not being indicated on the drawings, or in the event that an existing utility is found to be in a materially different location than shown on the drawings and thus requires additional or more costly work on the part of the Contractor for its maintenance, relocation, or support, the necessary alteration, relocation, proper support and protection shall be done and paid for as follows:

- a. When said utility is found to occupy the space to be occupied by a part of the permanent works to be constructed, or when utility is, in the opinion of the Engineer, in such close proximity to the new work as to require the relocation of alteration of said utility the Contracting Agency will arrange for such relocation or alteration, or require the Contractor to do so as "Extra Work" as per Section 4.07.
- b. When any portion of a utility is in close proximity and more or less parallel to the structure of conduit and does not lie between the vertical planes or pay lines specified in subparagraph a., above, the Contractor shall advise the owner thereof, and in cooperation with the owner, provide and place th necessary support for proper protection to insure continuous and safe operation of the utility structure. All costs for such work shall be borne by the Contractor.
- c. With the exception of service connections, when said utility lies within the excavation but does not intercept the permanent works to be constructed and the

length of said utility between the vertical planes or pay lines specified in paragraph a., above, is less than five times the perpendicular distance between pay lines, the Contractor shall maintain the utility in place. The work of maintaining the utility in place shall be considered as "Extra Work" (see Section 4.07).

#### 5.11 RESPONSIBILITY OF THE CONTRACTOR

The Contractor shall be held responsible for all costs for the repair of any and all damage to the contract work or to any utility (whether previously known or disclosed during the work), as may be caused by his operations. Utilities not shown on the drawings to be relocated or altered by others, shall be maintained in place by the Contractor. Utilities which are relocated by others in order to avoid interference with structures and which cross the project work shall be maintained in the relocation positions by the Contractor. All costs for such work shall be absorbed or included in the prices bid for the various items of work.

The Contractor shall notify the owners of all utilities at least 2 working days in advance of excavating around any of their structures.

#### 5.12 DELAYS CAUSED BY FAILURE TO RELOCATE UTILITIES

Where parties other than the Contractor are responsible for the relocation of utilities and a delay in the Contractor's work is caused by the failure on the part of said parties to remove or relocate such utilities in time to prevent such delay, or by any action or lack of action on the part of the Contracting Agency, it shall be understood that the Contractor shall not be entitled, as a result of such delay to his work, to damages or additional payments over and above the contract price. If delays in the Contractor's work are caused by the reasons mentioned herein, the Contractor shall be entitled to an extension of time. The length of such extension of time will be determined by the Engineer with consideration as to the effect of the delay on the project as a whole.

In order to minimize delays to the Contractor caused by the failure of other parties to relocate utilities which interfere with structures, the Contractor upon request to relocate utilities which interfere with structures, the Contractor upon request to the Engineer, may be permitted to temporarily omit the portion of work affected by the utility. The portion thus omitted shall be constructed by the Contractor immediately following the relocation of the utility involved.

#### 5.13 PERMANENT SURVEY MARKERS

The Contractor shall notify the Engineer not less than seven days prior to starting work in order that the Engineer may take necessary measures to insure the preservation of survey monuments, stakes, and bench marks. The Contractor shall not disturb permanent survey monuments, stakes or bench marks without the consent of the Engineer, and shall notify Engineer and bear the expense of replacing any that may be disturbed without permission. Replacement shall be done or arranged for only by the Engineer.

When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall, at his own expense, adjust the monument cover to the new grade unless otherwise specified.

#### 5.14 LOT STAKES

Unless otherwise directed by the Engineer or shown on the plans, the Contractor shall preserve existing survey stakes that mark property lines and corners. Any stakes that become lost or disturbed by his operation shall be replaced at the Contractor's expense and by a Registered Land Surveyor.

#### 5.15 SURVEY SERVICE

The Engineer will furnish and set construction stakes establishing lines and grades as determined necessary by the Engineer for all work indicated on the plans or required under the contract, including lines and grades for street excavation and fill, finished subgrade, finished base gravel, curbs and gutters, walks, structures and utilities, and will furnish the Contractor all the necessary information relative to the lines and grades.

Line and grade stakes will be offset from the construction area. They will show the offset distances, stationing and required cut or fill to the finished grade or flow lie as indicated on the plans or grade sheet. Upon request a copy of the grade sheet will be furnished to the Contractor. Grade stakes will be set by the Engineer to the finished grade of the subgrade and also of the base gravel, or as determined necessary by the Engineer, and the tops of these stakes marked blue or red.

The Contractor shall construct the work in accordance with the Engineer's stakes and marks, making use of them before they are disturbed, and shall be charged with full responsibility for conformity and agreement of the work with such stakes and marks.

The Contractor shall be responsible for the preservation of 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 opinion of the Engineer need to be replaced, such replacement shall be by the Engineer at the expense of the Contractor. The cost of replacing them shall be charged against, and all shall be deducted from, the payment of the work.

The Contractor shall give notice to the Engineer not less than two working days in advance of when he will require survey services in connection with the laying out of any portion of the work.

#### 5.16 PRIVATE ENGINEERS

Surveying by private engineers on permit projects or any other work under the control of the Contracting Agency shall conform in all respects to the quality and practice required of the Contracting Agency's surveyor as set forth in subsection 5.15 above.

#### 5.17 LINE AND GRADE

All work during its progress and upon its completion, shall conform to the lines, elevations, and grades shown on the plans. Distances and

measurements, except elevations and structural dimensions, are given and made on horizontal planes.

Three consecutive points set on the same slope shall be used together in order than any variation is found, it shall be reported to the Inspector; and, in the absence of such report prior to completion of grade, the Contractor shall be responsible for any error in the grade of the finished work.

#### 5.18 PRESERVATION OF PROPERTY

The Contractor shall protect all public and private property including irrigation berms, insofar as it may be endangered by his operations, and he shall take every reasonable precaution to avoid damage to such property.

Public or private improvements of facilities within the right of way not designated for removal but visibly evident or correctly shown on the plans which are damaged or injured directly or indirectly by or on account of any act, omission, or neglect of the Contractor in the execution of the work shall be restored by the Contractor at his expense to a condition substantially equivalent to that existing before such damage or injury occurred, by repairing, rebuilding, or otherwise affecting restoration thereof, or if this is not feasible, a suitable settlement shall be made with the owner of the damaged property.

The Contractor shall give reasonable notice to occupants of buildings on property adjacent to the work to permit the occupants to remove vehicles, trailers, and other possessions as well as salvage or relocate plants, trees, fences, sprinkler systems, or other improvements in the right-of-way which are designated for removal or which might be destroyed or damaged by the Contractor's operations.

The Contractor shall be responsible for the protection of all designated trees and planted areas within the right-of-way. He shall also exercise care and conduct his operations so as to minimize damages to other planted areas.

#### 5.19 DAMAGE TO RAILROADS

The provisions given elsewhere herein, which require the Contractor to protect property against damage, and which place upon the contractor all responsibility for damage to property, injury to persons, and loss, expense, inconvenience and delay to the owners of the property and others, shall be understood to apply in connection with railway lines or railroads the same as in connection with other kinds of property. In the protection of railway lines and railroads, however, the Contractor will be required to exercise particular care to avoid any damage which might result in train wrecks or in delays in train service. In the performance of work in close proximity to railroad tracks, he shall consult with the railroad owners or officials in regard to means and methods of conducting the work, and unless the Engineer orders otherwise, he shall use in the performance of the work means and methods which are not unsatisfactory to said owners of officials and he shall at his own expense provide such trackwalkers and flagmen as the said owners and officials may deem necessary for the adequate protection of the railroad property and train service.

The Contractor shall be solely and directly responsible to the owners and operators of such properties for any damage, injury, expense, loss, inconvenience or delay which may result from the carrying out of the work to be done under this contract, and if the Special Provisions so specify, he shall give bond or insurance in the amount therein specified to each corporation, company, partnership, or individual owning or operating any of the properties affecting, in guarantee of this responsibility. Any extension of time granted the Contractor in which to complete the contract shall no relieve him or his surety from this responsibility.

#### 5.20 PROTECTION OF MATERIALS AND WORK

The Contractor shall provide and maintain substantial and adequate protection as necessary to protect new or existing work, and all items of equipment and furnishings, for the duration of the contract, except that by the Contracting Agency action the contractor may be relieved of certain responsibilities for maintenance and protection of completed portions of the work as provided under Section 23, hereof.

Unless relieved of responsibility as provided under Section 5.21, the Contractor and his sureties shall be fully liable for any loss or damage to the works referred to in the contract, resulting from any cause whatsoever, including but not limited to fire, theft, vandalism, malicious mischief, or injury or damage by the elements, except for any loss or damage that may be occasioned by acts of God, acts of the public enemy, acts of governmental authorities, or any act, omission, or default of the Contracting Agency prior to completions of the project and final acceptance thereof by the Contracting Agency.

#### 5.21 RELIEF FROM MAINTENANCE AND RESPONSIBILITY

Upon the request of the Contractor and with the approval of the Contracting Agency, or upon the Contracting Agency, the Contractor will be relieved of the duty of maintaining and protecting certain portions of the work which are ready to be placed in service and which have been completed in accordance with the plans and specifications, including cleanup.

In addition, such action by the Contracting Agency will relieve the Contractor of responsibility for injury or damage to said completed portions of the improvement resulting from use by public traffic or from the action of the elements or from any other cause, excepting injury or damage resulting from the contractor's own operations or from his negligence. The Contractor will not be required to again clean up such portions of the improvement prior to field acceptance, excepting for such items of work as a result from his operations. However, nothing in this section shall be construed as relieving the Contractor from the full responsibility for making good defective work or materials found to be defective.

#### 5.22 STORAGE OF MATERIALS IN PUBLIC STREETS, ROADS, OR HIGHWAYS

Materials shall not be stored in streets, roads, or highways for longer than four working days after being unloaded, unless a longer storage period is permitted by the Engineer. In the event that the rate of progress of construction is such that the materials stored in streets, roads, or highways are not installed in its final position within the time period stipulated

hereinabove, the Contractor shall when so directed by the engineer remove such materials to storage areas to be provided by the contractor at his own expense.

Unless otherwise permitted by the Engineer, no storage of excavated material will be permitted in public streets, roads, or highway. After the placing of the backfill in said trench, all remaining excavated material shall be removed from the site of the work.

#### 5.23 HISTORICAL AND ARCHAEOLOGICAL REPORTS

Where historical objects of archaeological and paleontological nature, including ruins, sites, buildings, artifacts, fossils and other objects of antiquity are encountered within the areas on which the Contractor's operations are performed, the Contractor shall postpone operations in the area, shall preserve such objects for disturbance or damage and shall notify the Engineer of their existence and location.

Upon receipt of such notification, the Engineer will arrange for the disposition of the objects or for the recording of data relative thereto, and will notify the Contractor when it is proper for him to proceed with the work in the affected area. If the Contractor is directed by the Engineer to perform any work in salvaging said objects, the Contractor shall do so on the "Extra Work" basis set forth in Section 4.07.

#### 5.24 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 determined by the Engineer. The Contractor shall install, maintain, and remove his temporary lines upon completion of work. All expenses in connection with temporary services and facilities shall be paid by the Contractor, unless specified differently in the Special Provisions.

#### SECTION 6.00 CONTROL OF MATERIALS

#### 6.01 MATERIALS AND WORKMANSHIP

All materials, parts and equipment furnished by the Contractor shall be new, high grade, and free from defects and imperfections unless otherwise hereinafter specified. Workmanship shall be in accord with the best standard practice. Both materials and workmanship shall be subject to the approval of the Engineer.

All materials and workmanship not conforming to the requirements of these specifications shall be considered as defective and will be rejected. Defective material whether in place or not, shall be removed immediately from the site of the work by the Contractor at his expense when so directed by the Engineer. No rejected material, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the Engineer.

In the event any defect in material or workmanship is of a minor nature and the engineer determines that it is not of such consequence as to result in a dangerous and undesirable condition, or that the removal of such work would create a dangerous or undesirable condition, the Contracting Agency shall have the right to retain such work and make such deductions in the payment therefor as they determine reasonable and in the public interest. Such determination by the contracting Agency shall be final.

#### 6.02 TEST OF MATERIALS

Except as may otherwise be provided, all testing that may be required by the Contracting Agency to determine the quality, fitness and suitability of such materials shall be performed under the direction and upon the order of the Engineer, and at no expense to the Contractor; samples being secured and tested wherever considered necessary by the Engineer. In those cases in which the Contractor is required to provide and bear the expense of such testing the specifications or drawings will definitely so state.

The Contractor at his own expense, shall deliver the materials for testing at the time and to the place designated by the Engineer.

#### 6.03 TRADE NAMES AND EQUALS

Whenever in the specifications any particular materials, process, and/or equipment is indicated or specified by patent, proprietary, or brand name, or by name of manufacturer, such working shall be deemed to be used for the purpose of facilitating description of the material, process, and/or equipment desired, and shall be deemed to be followed by the words "or approved equal". The lists of acceptable materials indicated in various sections of the specifications, or on drawings, for materials are not intended to be comprehensive lists, or in any order of preference. The Contractor may offer any material, process, and/or equipment which complies with the governing specification and which he considers to be equivalent to that indicated or specified.

If a substitute offered by the Contractor is not found by the Engineer to be equal to the material specified, or indicated, then the Contractor shall furnish and install the item specified or indicated by name.

The Contractor shall, before installation, submit data substantiating a request for substitution of "an equal" item. The Contractor shall, at his own expense, furnish information and/or data concerning the material and/or equipment offered by him as an equivalent to that specified or indicated by name, and if the Engineer shall so require, the Contractor, at his own expense, shall have the said material tested as to its quality, strength, physical, chemical, and/or other pertinent characteristics, including the durability, finish, efficiency, dimensions, service, suitability to perform the function intended to be served by the material and/or equipment.

The method of performing the test or tests shall be subject to the approval of the Engineer, and the results of said tests shall be reported promptly to the Engineer, who shall evaluate the results thereof and shall determine whether or not the substitute material and/or equipment so tested is deemed to be equivalent, and his findings shall be final. Installation and use of the material shall not be made until such substitute material has been approved by the Engineer.

The time specified for completion of the work under the contract shall not be affected by any circumstances whatsoever development from the provisions of this section.

#### SECTION 7.00 RESPONSIBILITY TO THE PUBLIC

#### 7.01 PUBLIC CONVENIENCE

The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to traffic, and he shall have under construction no greater amount of work than he can prosecute properly with due regard for the rights of the public.

The Contractor shall obtain prior approval from the Engineer for the closing or partial closing of any street, alley or other public thoroughfare. He shall also give advance notice of such closure to all agencies providing emergency services, including police, fire and ambulance services.

Unless otherwise provided by the plans or project specifications or authorized by the Engineer, vehicular access to properties at established driveways and pedestrian access to building entrances shall be provided and maintained by the Contractor, except for such periods of time as may be reasonably necessary to expeditiously complete those construction operations which preclude such access.

The Contractor shall conduct his operations in a manner which will minimize interference with the normal use of property adjacent to the construction.

Occupants of property fronting on the street shall be given at least 24 hours advance notice that the entire street or half the street, as the case may be, will be closed to vehicular traffic whenever necessary for the normal prosecution of the work. Such notices shall be given by the Contractor unless otherwise directed by the Engineer, or otherwise specified in the Special Provision. Parking of cars may be prohibited on streets where construction work, such as maintaining controlled or one-way traffic over one-half of the street while construction is progressing on the other half.

In order that all unnecessary delay to the traveling public may be avoided where ordered by the Engineer, the Contractor shall provide and maintain temporary "No Parking" and/or detour signs, pilot cars and station competent flagmen whose sole duties shall consist of directing the movement of public traffic either through or around the work. Signs shall be of standard size and design as approved by the Engineer and shall comply with the requirements specified in Section 7.03 hereof. Such signs shall be removed as soon as practicable or when directed by the Engineer.

The cost of all work involved in providing for public convenience including detours, as set forth in this article shall be considered as included in the prices paid for the various contract items of work and no additional allowance will be made.

#### 7.02 DETOURS

The Contractor shall construct and maintain temporary detours as shown on the plans or specified in the Special Provisions, or as necessary to provide adequate passage of public traffic and for protection of his work, or as determined necessary by the Contracting Agency. Routing and width of detours shall be approved by the Engineer.

Unless otherwise specified, when a detour is required the Contractor shall be governed by the following:

- 1. One day duration
  - (a) Passable no gravel but graded
  - (b) Water and maintain smooth and dust free
- 2. One day to one week duration
  - (a) Gravel
  - (b) Water
  - (c) Maintain smooth and dust free
- 3. More than one week if on a major or secondary street (if on a collector street, treatment No. 2 above will suffice)
  - (a) Gravel 2 in. and graded
  - (b) Penetration with a minimum of .30 gal. per square yard MC70
  - (c) Maintain with patching of chuck holes

#### 4. General Conditions

- (a) If maintenance is not performed, the Contracting Agency will do the maintenance and bill the Contractor at rates specified in Section 4.07 through 4.10.
- (b) When directed by the Engineer detours shall be removed and all ditches, etc. restored before the permit is closed out. If restoration is delayed more than one week after completion of work, the Contracting Agency will restore the area and bill the Contractor.
- (c) Before pavement is cut, the Engineer must approve the construction and barricading.
- (d) Provisions for public convenience and public safety shall be maintained in compliance with Section 7.01 through 7.03 hereof.

The Engineer will reserve the right to estimate the expected time the detour will be in use and will order construction accordingly.

#### 7.03 PUBLIC SAFETY

The Contractor shall erect and maintain temporary fences, traffic control signs, bridges, railing, lights, and barriers, taking all other necessary precautions, and place proper guards for prevention of accidents. In the event any of the above items becomes misplaced, damaged, or destroyed, they shall be replaced immediately in their proper location.

All warning signs, barriers, barricades, lights and performance of flagmen shall conform to the "Oregon Manual on Uniform Traffic Control Devices for Streets and Highway" issued by the Oregon State Highway Department; local

ordinances; and existing published rules and/or traffic control manuals and regulations of the Contracting Agency.

The Contractor shall at all times keep open or backfilled excavations in a safe or protected condition. In the event of the existence of unsafe or hazardous conditions in the Contractor's work or operations, the Contractor shall immediately take such measures as are necessary to eliminate the conditions.

The cost for all work involved in providing for public safety as set forth in this article shall be considered as included in the prices paid for the various contract items of work and no additional allowance will be made.

#### 7.04 FIRE HYDRANTS

Access shall be provided to all fire hydrants at all times. Pavements and sidewalks adjacent to fire hydrants shall be kept clean and clear of debris, materials and contractor's equipment. The Contractor shall not draw any water from a fire hydrant for use on the work other than for extinguishing fire, without first obtaining permission from the owner. Slow-closing valves will be required in connection with the use of fire hydrants. Unnecessary wasting or leakage of water shall not be permitted.

In the event a fire hydrant is damaged, or for any reason becomes inoperative, or is placed out of service due to the nature of the construction, it shall be the Contractor's responsibility to immediately notify the owner and the Engineer.

#### 7.05 USE OF EXPLOSIVES

The use of explosives will be permitted only when authorized in writing by the Engineer unless otherwise stated in the Special Provisions. Explosives shall be handled, used, and stored in accordance with the provisions and requirements of all applicable laws, ordinances, and regulations with respect thereto.

The approval by the Engineer for the use of explosives shall not relieve the Contractor from his responsibility.

#### 7.06 SAFETY

Construction materials, equipment, methods and workmanship shall be in accordance with applicable local ordinances and State laws. The Contractor shall comply with the lawful orders and codes issued by the Workmen's Compensation Board of the State of Oregon.

#### 7.07 LABOR

The Contractor shall be bound by and comply with all applicable provisions of the Revised Statutes of the State of Oregon and shall keep informed of and observe and comply with, and cause all of his agents and employees to observe and comply with, all Federal, State, and local laws which in any way affect the conduct of the work in this contract.

None but competent workmen shall be employed on any work under these specifications; and any laborer, workman, mechanic, foreman, superintendent, or other person so employed who is found to be incompetent, intemperate, troublesome, disorderly or otherwise objectionable, or who fails or refuses to perform his work properly and in an acceptable manner, shall be removed from the job immediately upon notification in writing, and not again be employed on the work unless approved by the Engineer.

#### 7.08 NONDISCRIMINATION OF LABOR

The attention of the Contractor is directed to the provisions of Chapter 659, Oregon Revised Statutes relative to unlawful employment practices and discrimination by employers against any employee or applicant for employment because of race, religion, color, or national origin. Particular reference is made to Section 659.030 ORS, which states that it is unlawful employment practice for an employer, because of the race, religion, color, or national origin of any individual, to refuse to hire or employ or to bar or discharge from employment such individual or to discriminate against such individual in compensation or in terms conditions, or privileges of employment.

In the event the contract is funded in whole or in part by federal funds, the Contractor shall comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the Secretary of Labor.

In the event of the Contractor's noncompliance with the nondiscrimination, clauses of a contract so funded, or with any such rules, regulations, or orders the contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts for federally assisted construction contracts, in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and and remedies invoked as provided in Executive Order No. 11246 of September 14, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

#### .7.09 MINIMUM WAGE, PAYMENT OF LABORERS AND MATERIALMEN

The Contractor shall comply fully with ORS 279.348 through 279.363, which provide in part that "the hourly rate of wage to be paid by any contractor or subcontractor to workmen upon all public works shall be not less than the prevailing rate of wage for an hours work in the same trade or occupation in the same trade or occupation in the locality where such labor is performed".

The provisions of this law do not apply to workmen or to persons regularly employed on a monthly or per diem salary. The "prevailing rate of wage", for the purposes hereof, shall be the rate of hourly wage and overtime paid in the locality, as hereinafter defined, to the majority of workmen in the same trade or occupation; provided, however, that there is not a majority in the same trade or occupation paid at the same rate, the average rate of hourly wage and overtime paid in the locality to workmen in the same trade or occupation shall be the prevailing rate, and provided further, than when a contractor or subcontractor is a party to a state-wide agreement in effect with any labor organization, the rate of wages as established in the agreement shall be considered to be the prevailing rate in the locality.

If a substitute offered by the Contractor is not found by the Engineer to be equal to the material specified, or indicated, then the Contractor shall furnish and install the item specified or indicated by name.

The Contractor shall, before installation, submit data substantiating a request for substitution of "an equal" item. The Contractor shall, at his own expense, furnish information and/or data concerning the material and/or equipment offered by him as an equivalent to that specified or indicated by name, and if the Engineer shall so require, the Contractor, at his own expense, shall have the said material tested as to its quality, strength, physical, chemical, and/or other pertinent characteristics, including the durability, finish, efficiency, dimensions, service, suitability to perform the function intended to be served by the material and/or equipment.

The method of performing the test or tests shall be subject to the approval of the Engineer, and the results of said tests shall be reported promptly to the Engineer, who shall evaluate the results thereof and shall determine whether or not the substitute material and/or equipment so tested is deemed to be equivalent, and his findings shall be final. Installation and use of the material shall not be made until such substitute material has been approved by the Engineer.

The time specified for completion of the work under the contract shall not be affected by any circumstances whatsoever development from the provisions of this section.

#### SECTION 7.00 RESPONSIBILITY TO THE PUBLIC

#### 7.01 PUBLIC CONVENIENCE

The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to traffic, and he shall have under construction no greater amount of work than he can prosecute properly with due regard for the rights of the public.

The Contractor shall obtain prior approval from the Engineer for the closing or partial closing of any street, alley or other public thoroughfare. He shall also give advance notice of such closure to all agencies providing emergency services, including police, fire and ambulance services.

Unless otherwise provided by the plans or project specifications or authorized by the Engineer, vehicular access to properties at established driveways and pedestrian access to building entrances shall be provided and maintained by the Contractor, except for such periods of time as may be reasonably necessary to expeditiously complete those construction operations which preclude such access.

The Contractor shall conduct his operations in a manner which will minimize interference with the normal use of property adjacent to the construction.

Occupants of property fronting on the street shall be given at least 24 hours advance notice that the entire street or half the street, as the case may be, will be closed to vehicular traffic whenever necessary for the normal prosecution of the work. Such notices shall be given by the Contractor unless otherwise directed by the Engineer, or otherwise specified in the Special Provision. Parking of cars may be prohibited on streets where construction work, such as maintaining controlled or one-way traffic over one-half of the street while construction is progressing on the other half.

In order that all unnecessary delay to the traveling public may be avoided where ordered by the Engineer, the Contractor shall provide and maintain temporary "No Parking" and/or detour signs, pilot cars and station competent flagmen whose sole duties shall consist of directing the movement of public traffic either through or around the work. Signs shall be of standard size and design as approved by the Engineer and shall comply with the requirements specified in Section 7.03 hereof. Such signs shall be removed as soon as practicable or when directed by the Engineer.

The cost of all work involved in providing for public convenience including detours, as set forth in this article shall be considered as included in the prices paid for the various contract items of work and no additional allowance will be made.

#### 7.02 DETOURS

The Contractor shall construct and maintain temporary detours as shown on the plans or specified in the Special Provisions, or as necessary to provide adequate passage of public traffic and for protection of his work, or as determined necessary by the Contracting Agency. Routing and width of detours shall be approved by the Engineer.

clearing. The merit shall set forth the precautionary conditions and manner under which the clearing shall be done."

"(2) A person engaged in clearing any right-of-way or forest land shall not place on adjoining land or property any forest material or debris resulting from such clearing without the permission of the owner of the adjoining land."

#### 7.13 LICENSING OF CONTRACTORS

The Contractor shall be licensed in accordance with all state and local requirements.

#### 7.14 PATENTS, FEES OR ROYALTIES

In the event that any patented article, material or process is to be installed or used in the performance of the work as shown on the plans or particular specifications therefore, the Contractor shall pay the royalty chargeable, if any, and shall save, keep and hold the Contracting Agency if enjoined from using such patented article or material and the incidental damage caused by the loss of use and damage to the Contracting Agency's property in removing same, and the cost of replacing the article or material the use of which is enjoyed. Provided further the Bond for Faithful Performance shall be deemed to be expressly applied to this provision of the specifications.

#### 7.15 LIABILITY FOR MONIES DUE STATE COMMISSIONS

The Contractor shall promptly pay all contributions or amounts due the State Industrial Accident Fund and the State Unemployment Compensation Trust Fund from such Contractor or his subcontractors, incurred in the performance of the contract.

The Contractor shall pay all sums of money withheld from his employees and payable to the Department of Revenue pursuant to ORS 316.162 to 316.212.

## 7.16 LIABILITY FOR AMOUNTS DUE HOSPITAL ASSOCIATIONS, ETC.

The Contractor shall comply fully with ORS 279.320 which reads in part as follows:

"...The Contractor shall promptly, as due, make payments 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 employees pursuant to any law, contract or agreement for the purpose of providing or paying of such service."

## 7.17 CONTRACTOR'S CONSTRUCTION EQUIPMENT

The Contractor shall furnish and maintain in good condition all equipment and facilities including stairs, ramps, runways, scaffolds, hoists, etc., as required for the proper execution and inspection of the work. All such equipment and facilities shall meet all requirements of all ordinances and laws applicable thereto.

#### 7.18 RIGHT OF WAY

The right-of-way for the improvement will be provided by the Contracting Agency. Unless the plans or specifications show additional work area to be provided by the Contracting Agency, the Contractor shall make his own arrangements and pay all expenses for additional area required by him outside the limits of the right-of-way.

#### SECTION 8.00 PROSECUTION AND PROGRESS

#### 8.01 PROGRESS OF THE WORK

The Contractor shall commence the work within 10 calendar days after receiving notice to proceed, unless otherwise stated in the SPECIAL PROVISIONS, and shall diligently prosecute the same to completion within the time limit specified.

#### 8.02 CONTRACTOR'S CONSTRUCTION SCHEDULE

Before starting work, the Contractor shall submit for approval his proposed construction schedule to the Engineer. In the event the Contractor desires to carry on operations in more than one location simultaneously he shall submit for approval a schedule therefor, two weeks in advance of beginning such operations. In the event that the Contractor's proposed construction schedule does not meet the necessary construction program schedule as determined by the Contracting Agency, he may be required to resubmit a schedule that shall conform to an approved program of construction operations. The Contractor must obtain from the Engineer written approval of a construction schedule prior to start of work.

#### 8.03 SUSPENSION OF WORK

The Engineer shall have the authority to suspend work wholly or in part for such periods as may be necessary because of unsuitable weather or unforeseen conditions or the failure of the Contractor to carryout lawful orders to comply with any of the provisions of the contract. The Contractor shall immediately suspend work when so ordered, and he shall resume work after such suspension only on written instruction from the engineer. Upon receipt of such instructions to resume work, he shall immediately proceed with the work.

If through the fault of the Contracting Agency, the Contractor must suspend operations and incurs expenses or sustains losses which could not have been avoided by the judicious handling of forces and equipment, and if by a diligent prosecution of the work he could not have completed amounts as may be agreed upon between the Contractor and the Contracting Agency to be a fair and reasonable compensation and a commensurate extension of contract time will be granted.

If work is suspended through no fault of the Contracting Agency, all such expenses and losses incurred by the Contractor during such suspensions of work shall be borne in full by him. In the event the Contractor fails to properly provide for public safety, traffic, and protection of the work, during periods of suspension of work, the Contracting Agency may elect to do so, and deduct the cost thereof from monies due the Contractor.

#### 8.04 TIME OF COMPLETION

The Contractor shall complete the work called for under the contract in all part and requirements within the number of calendar days set forth in the Contract. Unless otherwise provided, all work shall be performed during the normal working days. A working day is defined as any day except Saturdays, Sundays, legal holidays, days on which the Contractor is specifically required by the Contract to suspend construction operations, and days on which the

Contractor is prevented from working by inclement weather or interference from utility relocation or alteration work.

Credit for inclement weather or interference from utility relocation or alteration work will be allowed only when the Contractor is prevented by such weather or utility work or conditions resulting immediately therefrom, from proceeding for at least five hours with at least 75% of the normal labor and equipment force engaged in the current controlling operation or operations.

Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather, or the condition of the work, prevents the work from beginning at the usual starting time and the new crew is dismissed as a result thereof, the Contractor will not be charged for a working day whether or not conditions should change thereafter during said day and the major portion of the day could be considered suitable for such construction operations.

The current controlling operation or operations is to be construed to include any feature of the work which, if delayed at the time being considered, could delay the completion of the work beyond the contract period.

Determination of each nonworking day except Saturdays, Sundays, legal holidays, and days on which the Contractor is specifically required by the contract to suspend construction operations shall be made and agreed upon during such a day by conference between the Engineer and the contractor. In the event of failure to agree, the Contractor will allow 15 days in which to file a written protest setting forth in what respects he differs from the Engineer. Otherwise the decision of the Engineer shall be deemed to have been accepted by the Contractor as correct.

#### 8.05 LIQUIDATED DAMAGES

It is agreed by the parties of the contract that in case all of the work required under the terms of this contract is not completed within the number of calendar days as specified therefor in the contract or any lawful extension thereof as provided herein, damage will be sustained by the Contracting Agency as a result thereof, but to definitely determine and ascertain the actual amount of such damage, either before or after the occurrence thereof would be difficult and impractical. The sum stated in the SPECIAL PROVISIONS for liquidated damages for each and every calendar day that the completion of said work is delayed beyond the prescribed completion date, or lawful extension thereof, is hereby stipulated as being the nearest and most exact measure of such damage that can be fixed at this or any subsequent time; and when so assessed by the Contracting Agency, the Contractor shall become liable for and shall pay to the Contracting Agency as liquidated damages and not as a penalty said sum per day for each and every calendar day of such delay. When the amount of liquidated damages is not stated in the SPECIAL PROVISIONS it is agreed by the parties to the Contract that the amount of liquidated damages shall be One Hundred and Fifty Dollars (\$150.00) per day for each and every day of such delay. The amount of such liquidated damages may be deducted by the Contracting Agency from any compensation due, or that may become due, the Contractor under his contract, and the Contractor and his sureties shall be liable for any excess.

It is further agreed that if the work is not finished and completed in all parts and requirements within the number of calendar days as specified therefor in the Contract or any lawful extension thereof as provided herein, the Contracting Agency will have the right to extend the time for completion if to do so seems best to serve its interests; and in case said Contracting Agency decides to so extend the time limit for the completion of the work, it shall have further right to charge to the Contractor, his heirs, assigns, or sureties, all or any part as it may deem proper, the actual costs of engineering, inspection, supervision, and other overhead expenses, that are directly chargeable to the contract and accrue during the period of such extension, and deduct the amount thereof from the final payment for the work; provided, however, that the cost of the final survey and preparation of the final estimate will not be included in such charges.

In the event that the Contractor is directed to perform extra or additional work, the number of calendar days specified in the contract shall be extended by an amount determined by application to the original number of calendar days of the ratio that the value of the extra or additional work bears to the original contract value.

Should the nature of the extra or additional work be such that the Contractor believes that a longer time extension should be granted than that computed by the above procedures, he may notify the Engineer in writing.

The Contracting Agency may grant such additional time extension as it feels warranted.

Should any default, act or omission of the Contracting Agency, act of the State, act of public enemy or act of God, epidemic, quarantine restriction, strike, freight embargo, fire or flood cause any delay in the completion of the work the Contractor will not be assessed for liquidated damages nor engineering or other overhead charges for the period of such delay, provided that he shall, within ten (10) days subsequent to the beginning of any such delay, file a written report as to the cause thereof with the Engineer, who will ascertain the facts relative thereto and the extent of the delay, and whose finding in connection therewith shall be final and conclusive. The Contracting Agency shall not be liable to the Contractor for any damages on account of such delay.

# 8.06 RESPONSIBILITY OF CONTRACTOR AND OF CONTRACTOR'S REPRESENTATIVE ON THE WORKS

The Contractor shall give his personal attention and supervision to the work until same is entirely completed. In the absence of the Contractor from the work, he shall have a representative in charge who shall be competent to superintend and direct the progress of the work and who shall be authorized to receive instructions and to act for the Contractor on all matters relating to the work. The name, address and telephone number of this representative shall be sent by letter to the Engineer immediately after the awarding of the contract.

#### 8.07 PROVISIONS RELATIVE TO DEFAULT BY CONTRACTOR

If, at any time, the Contractor shall neglect or refuse to prosecute the work with reasonable diligence, or should refuse or neglect to perform the work according to the drawings and specifications, as interpreted by the Engineer, the Contracting Agency will give him written notice to proceed. If the Contractor fails to comply with such notice within a period of seven (7) days, he shall be in default of the contract. The Contracting Agency will have the right, without further notice to the Contractor, and without voiding the Contract, to take possession of all materials, to complete the work, and to charge cost of so doing against the Contractor. Should the unpaid balance of the contract price exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expenses shall exceed the balance due the Contractor, the Contractor and his bondsmen agree to pay the excess to the Contracting Agency.

Notice, for the purposes of this section, may be served personally, or may be served by mail, addressed to the Contractor and his surety at their respective places of business as indicated in the contract documents.

The determination by the Engineer of the question as to whether any of the terms of the Contract of specifications have been violated, or have not been performed satisfactorily, shall be conclusive upon the Contractor, his surety, and any and all other parties who may have any interest in the Contract or any portion thereof.

The foregoing provisions of this section shall be in addition to all other rights and remedies available to the Contracting Agency under law.

#### 8.08 TERMINATION OF CONTRACT

If Conditions encountered during the progress of the work make it impossible or impracticable to proceed with the work, the Contracting Agency may order the termination of the contract. Upon such termination, the Contracting Agency will pay the Contractor fair and reasonable compensation as agreed upon between the Contractor and the Contracting Agency. In the event that no agreement is reached between the Contractor and the Contracting Agency as to fair and reasonable compensation, the Contracting Agency will be liable to the Contractor only for the reasonable value of the work performed and any other actual costs sustained by the Contractor.

#### 8.09 ADVERTISING

No contract or any portion thereof, may be assigned without consent of the Contracting Agency except that money due the Contractor may be assigned as specified below.

The Contractor may assign money due or to become due him under the contract and such assignment will be recognized by the Contracting Agency, if given written notice thereof, to the extent permitted by law, but any assignment of money shall be subject to all proper set-offs and withholdings in favor of the Contracting Agency and to all deductions provided for in the contract, and particularly all money withheld, whether assigned or not, shall be subject to being used by the Contracting Agency for completion of the work in the event the Contractor should be in default therein.

#### 8.10 SUBCONTRACTS

Names of subcontractors for all or any portion of the work shall be submitted to the Engineer prior to commencement of any subcontracted work. Such submittals shall state the types of work to be subcontracted and the names of the proposed subcontractors. Subcontracting all or any portion of the work shall not be construed to relieve the Contractor of any of his responsibility under the Contract.

No subcontractors will be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor. The Contractor will be held responsible for their work, which shall be subject to the provisions of the contract and specifications.

#### 8.11 CERTIFICATE OF COMPLIANCE

The Contractor shall file with the Engineer, prior to the acceptance of the work, a certificate in form substantially as follows: "I, (We) hereby certify that all work has been performed and materials supplied in accordance with the plans, specifications and contract documents for the above work, and that:

- 1. Not less than the prevailing rates of wages as ascertained by the Contracting Agency has been paid to laborers, workmen and mechanics employed on this work:
- 2. There have been no unauthorized substitutions of subcontractors; nor have any subcontractors been entered into without the names of the subcontractors having been submitted to the Engineer prior to the start of such subcontracted work;
- 3. No subcontract was assigned, transferred to, or performed by any subcontractor other than the original subcontractor, without prior notice having been submitted to the Engineer together with the names of all subcontractors.
- 4. All claims for material and labor and other service performed in connection with these specifications have been paid.
- 5. All monies due the State Industrial Accident Fund, the State Unemployment Compensation Trust Fund (ORS 279.510), the State Department of Revenue (ORS 316.162 to .212) a hospital associations and/or others, (ORS 279.320), have been paid."

#### SECTION 9.00 MEASUREMENT AND PAYMENT

#### 9.01 METHODS OF MEASUREMENT

Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the methods stipulated in the particular sections herein covering materials or types of work.

When material is to be paid for on a volume basis and it would be impracticable to determine a volume by the specified method of measurement, or when requested by the Contractor and approved by the Engineer, the material will be weighed in accordance with the requirements specified for weight measurement and such weights will be converted to volume measurement for payment purposes. Factors for conversion from weight measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities will be adopted.

Unless otherwise provided, when mineral aggregate or roadway material is being paid for by weight, deductions from pay quantities will be made for the weight of water in excess of 3% if the material is to be treated with bitumen, and 6% if the material is to be waterbound.

#### 9.02 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORKS

Unless otherwise specified, linear or area quantities of work such as grading, landscaping, paving, curb, gutter, walk and other work of a similar nature shall be determined from measurements of dimensions of such work and computed in horizontal planes. However, linear quantities of underground cable, piling and timber, shall be considered as being the true length measured along the longitudinal axis thereof. For pipe work see related sections.

Volumetric quantities shall be determined by the average end area method.

#### 9.03 UNITS OF MEASUREMENT

Measurements shall be in accordance with U.S. Standard Measures. A pound shall be avoirdupois. A ton shall be 2,000 pounds. The unit of liquid measure shall be the U.S. gallon.

#### 9.04 CERTIFIED WEIGHTS

When payment is specified to be made on the basis of weight, the weighing shall be done on certified platform scales licensed in accordance with Chapter 618 Oregon Revised Statutes. The Contractor shall furnish the Engineer with licenses issued with the information required by Chapter 618 Oregon Revised Statutes. The Contractor shall pay all costs, if any, in connection with obtaining said information. The Contracting Agency will accept the certificates as evidence of the weight delivered.

#### 9.05 PAYMENT

Once each month, the Engineer will make an approximate measurement of the work performed to that date and an estimate of the value thereof based on the contract prices. When the work has been satisfactorily completed, the Engineer will determine the final quantity of work performed and prepare the final estimate of the value thereof. The quantities listed in the bid schedule do not govern final payment. Payments to the Contractor shall be made only for the actual quantities of contract items performed in accordance with the plans and specifications and if upon completion of the construction these actual quantities show either an increase or decrease from the quantities given in the bid schedule, the contract unit prices will still prevail.

In unit price contracts, when an item for mobilization is included in the bid, this item shall include the cost of assembling of materials, plan, and equipment as set forth in said bid items, and as more fully described in the specifications. An evaluation for the purpose of payment for mobilization will be included in progress estimates in unit price contracts only when mobilizations is so set forth as an item in the bid. In such cases, the specifications will indicate a fixed sum or a percentage of the total bid price as a maximum that may be bid on this item.

In accordance with ORS Chapter 279, from each progress and final estimate, except on contracts for County roads and bridges, or unless otherwise required by the SPECIAL PROVISIONS applicable Federal or State Contracting Agency, and the remainder less the amount of all previous payments will be paid to the Contractor.

At the expiration of 30 days from the date of acceptance of the work by the Contracting Agency, provided that the Contractor has furnished the Contracting Agency satisfactory receipts for all labor and material bills and waivers or liens from any and all persons holding claims against the wage rates as required by Section 279.354, Oregon Revised Statutes, the amount deducted from the final estimate and retained by the Contracting Agency will be paid to the Contractor, with the exception of such amounts as are required by law to be further retained, not on any payment tendered by the Contracting Agency and acceptance thereof is refused by the Contractor.

Payments for work or materials performed or furnished under an assessment proceedings contract will be made as provided in the particular proceedings or legislative act under which such contract was awarded.

# SECTION 10,00 REQUIREMENTS OF OREGON LAW FOR PUBLIC CONTRACTS

To any extent that they are not already incorporated into the Contract Documents the terms and conditions of ORS 279.310 to ORS 279.575 are an integral part of this Contract and Contract Documents, and incorporated herein at this point by reference.

#### SPECIAL PROVISIONS

NEWBERG SEWERAGE SYSTEM IMPROVEMENTS RIVER ST. SEWER REPLACEMENT PROJECT

CITY OF NEWBERG, OREGON

#### 1. TEMPORARY UTILITIES

#### a. Telephone

Not required at the site

#### b. Electrical Power

The Contractor will arrange for all electric power required for construction including power necessary for the operation of all tools and equipment.

#### c. Water

Water is available from hydrants. The Contractor shall secure permission from the City before obtaining water from fire hydrants.

The Contractor shall make his own arrangements and pay all costs for obtaining and transporting the water from the hydrants to the area of usage for the construction and testing of the facilities. Upon completion of the work, the Contractor shall remove all temporary piping and facilities used during the construction.

Use only special hydrant operating wrenches to open hydrants and also make certain that the hydrant valve is open "full", since "cracking" the valve causes damage to the hydrant. If any hydrants are damaged, the Contractor will be held responsible and shall notify the City so that all damage can be repaired as quickly as possible. Maintain fire hydrants used for temporary water within the work area in a completely accessible condition available to the Fire Department at all times.

#### 2. CONTRACT COMPLETION TIME

As set forth in the contract, the contractor has thirty (30) consecutive calendar days to construct the sewer main to Manhole 4 Station 9+30, and to connect the 12" force main to the new sewer. The contractor has an additional sixty (60) consecutive calendar days to complete all remaining work.

# 3. <u>DIVERSION OF SEWAGE DURING CONNECTION OF FORCE MAIN AT MANHOLE 4</u> STATION 9+30

The diversion of the 12" force main will be near the intersection of Center St. and Ninth St., one block west of River St. It requires connecting approximately 80 feet of 6 inch minimum diameter, restrained joint pipe, from a valve in the force main access manhole to the 15 inch gravity sewer manhole.

In addition to the pipe, four flanged  $90^{\circ}$  elbows and temporary blocking will be required to connect the sewers. The contractor will supply all materials and labor necessary to complete the operation.

The contractor shall notify the engineer one week in advance of the diversion work so that he may arrange for City personnel to operate the pump station. The sewer treatment plant operator may postpone the diversion if sewage flows are abnormally high.

Before cutting or disconnecting the force man and putting it out of service, the contractor will have:

- 1. The sewer main complete, tested, and approved to station 9+30
- 2. All materials at site ready for installation
- 3. Excavation completed, pipe cleaned
- 4. Thrust blocking material ready
- 5. Backfill material on site
- 6. Notified City Sewage Treatment Plant Operator and arrange for City personnel to shut down pump station.
- 7. The 15" line between the old and new manholes plugged a minimum seven days prior, or provide means of protecting new plug from scour.

#### 3. LOCATING EXISTING SEWER SERVICE LATERALS

The locations of sewer laterals shown on the plans are approximate, and are taken from record locations of service tees placed during the construction of the old sewer main. The tee locations have been found to be accurate within a few feet, but there is no record as to which tee a house may be connected to. In most cases, several tees were available for a house to connect to. Some houses may be connected to a sewer lateral on a side street.

The contractor will accurately locate the sewer service at the property line by digging, probing, or electronic detection at his own expense. The contractor shall not receive compensation for sewer laterals shown connected to the River St. sewer but found to be connected to another sewer, unless the amount of the service laterals exceeds 20% of the engineer's estimate for service lateral construction.

#### 4. PROGRESSION OF WORK

The contractor shall schedule his work to limit his work to a 2 block area. The sewer main will be tested block by block and service connections will be made following acceptance of that section of sewer main.

## 5. TEMPORARY SURFACE AND PAVING SCHEDULE

The contractor will maintain the unpaved trench surface daily. The temporary rock surface will contain sufficient fines and fractures rock to create a tight interlocking surface resistant to potholing.

Permanent asphalt paving will be required after completion and acceptance of each two block section of sewer construction.

#### 6. DETOURING TRAFFIC

The contractor shall be responsible for detouring traffic and providing signs and flagmen as required by the State Uniform Traffic Code, and shall notify the City Police dispatcher at 538-8321 ext. 218 before detouring traffic. Emergency vehicle access must be maintained at all times. The contractor shall restore the street to a safe passable condition at the end of each work day.

#### 7. PROTECTION OF SURVEY MONUMENTS

Where a street centerline monument or property corner marker is to be disturbed for construction purposes, the contractor will notify the engineer 48 hours in advance so that the monument can be referenced and removed. If a survey monument is disturbed for any reason during construction that monument will be checked or re-set by a licensed Oregon Professional Land Surveyor at the contractor's expense.

#### 8. PRECONSTRUCTION CONFERENCE

A preconstruction conference will be held at a time and place as prescribed by the City Engineer after the Contract is awarded and before the Notice to Proceed is issued. At the preconstruction conference, the Contractor shall provide the City Engineer with an estimated schedule of progress of the work. In addition to the Prime Contractor, all available subcontractors will be required to attend.

# 9. PREVAILING RATE OF WAGE AND CERTIFICATIONS OF RATE OF WAGE

As prescribed in ORS 279.352 AND 279.354 Bidder as Contractor and Bidder's subcontractors will pay to their workers not less than the specified minimum prevailing wage as set forth in the attached copy of "Prevailing Wage Rates for Public Works Contracts in Oregon" which is attached hereto and incorporated herein at this point by reference.

Once before the first payment and once before final payment is made of any sum due on account of a contract for a public work, the Contractor or his surety and every subcontractor or his surety shall file a statement with the public contracting agency in writing in form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying the hourly rate of wage paid each classification of workers employed by him upon such public work, and further certifying that no worker employed by him upon such public work has been paid less than the minimum hourly rate of wage specified in the contract, which certificate and statement shall be verified by the oath of the Contractor or his surety or subcontractor or his surety that he has read such statement and certificate and knows the contents thereof and that the same is true to his knowledge. A true copy of the certification or certifications required to be filed pursuant to this section shall also be filed at the same time with the Commissioner of the Bureau of Labor and Industries. (ORS 279.354).

#### SPECIAL PROVISIONS

The existing prevailing rate of wage is that rate which is in effect at the time the specifications are first advertised for bid solicitation. If during the bidding process the prevailing wage rate changes, the Owner retains the option to amend these SPECIAL PROVISIONS to reflect such change.

# PREVAILING WAGE RATES

for

# Public Works Contracts in Oregon





Mary Wendy Roberts
Commissioner
Bureau of Labor and Industries

Effective July 1, 1987

# BUREAU OF LABOR AND INDUSTRIES

Mary Roberts, Commissioner

July 1, 1987

This booklet contains the Prevailing Wage Rates for the building and construction trades in the State of Oregon. These rates are effective July 1, 1987. These rates have been amended in accordance with ORS 279.348 through ORS 279.365.

Prevailing Wage Rates are the minimum wages that must be paid to all workers employed in the construction, reconstruction, major renovation or painting of any public works. Copies of these rates must be incorporated into all bid specifications when the advertisement for a public works contract is issued. A provision that Prevailing Wage Rates be paid must also be put in the contract. The rates in effect at the time the bid specifications are first advertised are those that apply for the duration of the project, with one exception; if during the bidding process the Prevailing Wage Rates change, the public contracting agency has the option of amending the bid specifications to reflect such changes.

If you identify any errors in the rates published, please bring them to the attention of the Prevailing Wage Rate Analyst in Portland (229-6655). If you have any questions about the manner in which the Prevailing Wage Rates are enforced, contact the Wage and Hour Division in Portland (229-5750).

MARY WENDY ROBERTS

Commissioner

Bureau of Labor and Industries

PORTLAND 1400 SW 5th Avenue Portland, Oregon 97201

MEDFORD 700 E. Main Medford, Oregon 97504 SALEM 3865 Wolverine St. NE; E-1 Salem, Oregon 97310

COOS BAY 320 Central Ave., Suite 510 Coos Bay, Oregon 97420 BEND 1230 NE Third, Suite A244 Bend, Oregon 97701 EUGENE 165 E. 7th Street, Suite 220 Eugene, Oregon 97401

PENDLETON 700 SE Emigrant, Suite 240 Pendleton, Oregon 97801

#### **ANNOUNCEMENT**

The Prevailing Wage Rates contained in this booklet generally reflect those rates determined for Oregon by the Secretary of Labor of the United States pursuant to the Davis-Bacon Act; certain changes have been made to better relect prevailing practices in Oregon. Pursuant to ORS 279.348 to ORS 279.365, these rates have been adopted for use on public works contracts in Oregon. If you have specific questions regarding how rates are determined or if you would like a copy of this booklet, please contact:

Prevailing Wage Rate Analyst
Bureau of Labor and Industries
1400 S. W. 5th Avenue,
Portland, OR 97201
(503)229-6655

The first copy is free. Additional copies are available for 75¢ each.

#### GENERAL INFORMATION

Information in this section and in the "Commonly Asked Questions" is meant to provide a convenient reference to Oregon's Prevailing Wage Rate Law. It is in no way a complete statement of the laws and rules.

If you have questions about the enforcement of Prevailing Wage Rates, please contact the Wage and Hour Division. Division offices may be reached at the following phone numbers:

Bend	388-6330
Eugene	686-7623
Medford	776-6013
Pendleton	276-7884
Portland	229-5750
Salem	378-3292

## Apprentices and Trainees

Apprentices and trainees may be employed on public works. To qualify as an apprentice or trainee, the worker <u>must</u> be registered in a bonafide apprenticeship or training program of the U.S. Department of Labor, Bureau of Apprenticeship and Training (BAT) or with any State Apprenticeship and Training Agency recognized by BAT. The apprentice or trainee is to receive all fringe benefits and a percentage of the journeyman's wage rate; the appropriate percentage shall be determined by the apprenticeship or training committee. All other workers must receive rates as published.

#### Zone Pay

In certain trades, the basic hourly rate of pay progressively increases based upon the distance between the job site and a designated landmark; this is commonly referred to as zone pay. To determine the hourly wage, find the correct zone based on the number of road miles the job site is from the closest designated city (based either on distance from city hall or from geographical center of the city, depending on the trade) and add the amount for that zone to the basic hourly rate. Zone pay, unlike travel pay, is the basic hourly wage upon which overtime is computed.

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#### Bid Specifications

The specifications for every public works contract must include the current Prevailing Wage Rates in effect at the time the specifications are first advertised. A statement incorporating the existing rates by reference will not satisfy this requirement (ORS 279.352).

NOTE: If a public agency fails to include the Prevailing Wage Rates in the contract specifications or fails to include in the contract the provision that Prevailing Wage Rates must be paid, the liability for any unpaid prevailing wages could be exclusively that of the agency.

#### Fringe Benefits

Payments for fringe benefits are <u>in addition</u> to the basic hourly rate. Fringe benefits means the amount for:

- medical or hospital care; pensions on retirement or death; compensation for injuries or illness resulting from an occupational activity, or insurance to provide any of the foregoing;
- b) unemployment benefits, life insurance, disability and sickness insurance or accident insurance;
- c) vacation and holiday pay;
- d) defraying costs of apprenticeship or other similar programs; and
- e) other such bona fide benefits.

NOTE: For the purpose of Prevailing Wage Rates, fringe benefits <u>do not</u> include any benefits which may be required by federal, state or local law (e.g. Workers' Compensation, Unemployment Insurance, etc.).

Fringe benefits may be paid to the worker in cash or to a third party administering a fringe benefit program. When an hourly rate in excess of the required prevailing base rate is paid, the amount by which the rate is exceeded may be credited toward payment of fringe benefits.

#### Overtime

Workers employed on a public works job for more than eight hours in a day or 40 hours in a week must be paid overtime for each additional hour so worked (ORS 279.334). Overtime is calculated at no less than one and one-half times the basic hourly rate as determined by the Commissioner of Labor (not including fringe benefits which are paid at the straight rate for every hour worked). In the computation of overtime, travel pay does not need to be included but zone pay differentials do.

Work performed on <u>Saturday</u>, <u>Sunday</u> or <u>legal holidays</u> must also be compensated at time and one-half. Legal holidays for purposes of Prevailing Wage Rates include the following: 1) New Year's Day on January 1; 2) Memorial Day on the last Monday in May; 3) Independence Day on July 4; 4) Labor Day on the first Monday in September; 5) Thanksgiving Day on the fourth Thursday in November; 6) Christmas Day on December 25.

NOTE: Contractors who are signatory to a collective bargaining agreement may be subject to different overtime requirements (ORS 279.334[3]).

# Certification of Payroll

The law requires every contractor and subcontractor to file certain information on wages paid to each worker employed on a public works contract. This statement must completely and accurately reflect payroll records for the work week immediately preceding the submission. A contractor or subcontractor must complete and submit the certified statement contained on Form WH-38 as well as the information required on the weekly payroll side of the form. A copy of Form WH-38 and instructions for completing it are included in the back of this booklet; xeroxed copies may be used for filing.

The schedule for submitting payroll information is as follows: once within 15 days of the date the contractor or subcontractor first began work on the project and once before the final inspection of the project by the public contracting agency; in addition, for projects exceeding 90 days, submissions are to be made at 90 day intervals. Payroll information is to be filed with both the public contracting agency and the Wage and Hour Division, Bureau of Labor and Industries, 1400 S.W. Fifth Avenue, Portland, Oregon 97201. The payroll information must be kept by the contractor and or subcontractor for three years.

# COMMONLY ASKED QUESTIONS

# 1) What are "Prevailing Wage Rates?"

A prevailing wage rate is the minimum wage, including fringe benefits to be paid workers employed on contracts for public works. Different rates are established for specific trades and specific geographical areas.

# 2) Who must be paid "Prevailing Wage Rates?"

All employees of a contractor or subcontractor engaged on a public works project when the total price of the project is \$10,000 or more must receive at least the Prevailing Wage Rate (PWR) for time worked on the project, unless otherwise exempt.

Supervisory and office/clerical employees are not required to be paid the PWR. A person who owns <u>and</u> operates his/her <u>own</u> truck or other hauling equipment on construction projects (Owner/Operator) is not required to be paid the PWR.

# 3) What about contracts when Federal funds are used?

When more than \$2,000 of federal funds are involved, the contract is usually subject to the provisions of the Davis-Bacon Act, not Oregon statutes. Further information may be obtained from the U.S. Department of Labor, Wage and Hour Division, Portland, Oregon (221-3057). However, in the event that federal funds are involved, but the contract is not regulated under Davis-Bacon, Oregon's Prevailing Wage Rates Statutes may apply (ORS 279.348 - 279.365).

# **COMMONLY ASKED QUESTIONS** (Continued)

# 4) I don't have a pension fund. How do I calculate fringe benefits?

Workers must receive at a minimum the sum of the basic hourly rate plus all fringe benefits for each hour worked on a public works contract. Fringe benefits may be paid either to a third party trust account or in cash directly to the worker.

# 5) What if the employees are not paid on an hourly basis?

All workers must receive at least the basic hourly rate of wage and fringe benefits for each hour worked on the project. If an employee is paid other than on an hourly basis, the equivalent hourly rate (for both wages and fringe benefits) must still be at least equal to the rates published.

# 6) How do I classify workers?

Virtually all of the job classifications/trades normally used in the construction industry are represented by the job classifications used in this PWR publication. These classification titles should be used according to common practice. Try to fit your workers into existing classifications. If you have questions about how to classify workers, contact the Wage and Hour Division at 229-5750 in Portland or at one of the offices listed on page 1 of this booklet.

Laborers who do basic work requiring no specific skills, training or knowledge are generally classified as Group 1 Laborers.

(Note that Landscapers are classified as Laborers, and Ornamental Ironworkers are classified as Ironworkers.)

# 7) When are new rates determined? How long are they effective?

Prevailing Wage Rates are determined once each year by the Commissioner of the Bureau of Labor and Industries. The Commissioner may amend the rates at any time. The rates are usually amended at least once each year. The rates in effect at the time the bid specifications are first advertised are those that apply for the duration of the contract, with one exception. If during the bidding process the prevailing wage rate changes, the public contracting agency (not the contractor) has the option of amending the bid specifications to reflect such change.

# 8) How do I post Prevailing Wage Rates?

Every contractor or subcontractor employing workers on a public works project is required to post the applicable Prevailing Wage Rates in a conspicuous and accessible place in or about the work-site.

Rates need to be posted for the duration of the job. Contractors and subcontractors who intentionally fail to post the PWR can be made ineligible to receive any public works contract for up to three years.

# **COMMONLY ASKED QUESTIONS** (Continued)

# 9) What can I do about a contractor who is not complying with Oregon's PWR law?

File a complaint with the nearest office of the Oregon Bureau of Labor and Industries or contact the Wage and Hour Division, Bureau of Labor and Industries, 1400 S.W. 5th Avenue, Portland, Oregon 97201 (229-5750). Other Bureau offices are located in Bend (388-6330), Coos Bay (269-4575), Eugene (686-7623), Medford (776-6013), Pendleton (276-7884) and Salem (378-3292). You may also complain to the contracting agency, which has the contractual authority to pay PWR claims directly to a contractor's or subcontractor's workers (ORS 279.314).

# 10) What happens to contractors who do not comply with PWR statutes?

Contractors and subcontractors who pay less than the Prevailing Wage Rates may be liable to the workers affected for the amount found due plus an equal amount as liquidated damages (ORS 279.356). Contracting agencies also have the contractual authority to withhold payments due or to be due to the contractor or subcontractor in order to pay the unpaid prevailing wages directly to the worker (ORS 279.314).

Contractors and subcontractors who intentionally refuse to pay the Prevailing Wage Rate to workers employed on public works or to post the PWR on the job site may be determined to be ineligible to receive any public works contracts for a period of up to three years (ORS 279.361). Workers employed by the contractor or subcontractors have a right of action against the surety of the prime contractor for any unpaid prevailing wages.

A list is kept of all contractors, subcontractors, and other persons ineligible to receive public works contracts and subcontracts. When a contractor or subcontractor is a corporation, the individual officers and agents of the corporation can be debarred, in addition to the corporation. As a result, individuals who intentionally fail to pay or post the PWR are prevented from simply moving from one corporation to another.

# 11) How much do I pay apprentices?

To qualify as an apprentice, the worker must be registered in a bona fide apprenticeship program of the U.S. Department of Labor, Bureau of Apprenticeship and Training (BAT) or with any State Apprenticeship Agency recognized by BAT. The apprentice is to receive <u>all</u> fringe benefits and a percentage of the journeyman's wage rate; the appropriate percentage shall be determined by the apprenticeship committee. All other workers receive rates as published.

# COMMONLY ASKED QUESTIONS (Continued)

# 12) What records must I keep? For how long?

Contractors and subcontractors are required to keep records necessary for determining if Prevailing Wage Rates were paid. These records must include the Payroll and Certified Statement Form (WH-38) as well as the of each employee: name and address following: The classification(s) of each employee; the rate(s) of wages and fringe benefits paid to each employee; the rate(s) of fringe benefit payments made in lieu of those required to be provided to each employee; total daily and weekly compensation paid to each employee; daily and weekly hours worked by each employee; apprenticeship and training agreements; any payroll and other such records pertaining to the employment of employees upon a public works contract.

These need to be kept for a period of three (3) years from the completion of the public work contract. Records relating to public works contracts must be maintained separately from records relating to private projects/contracts.

# 13) What forms are public agencies required to file with the Bureau of Labor and Industries?

Public agencies are required to prepare and file with the Commissioner of the Bureau of Labor and Industries a list of every public improvement that the agency intends to fund during the subsequent budget period (ORS 279.023[2]). If, after the original filing, the agency plans additional public improvements, a revised list is to be submitted (OAR 839-16-008[2]).

The "Notice of Award of Public Works Contract" is to be filed with the Wage and Hour Division within 30 days of the date when a contract is awarded which requires the payment of Prevailing Wage Rates (i.e., is regulated under ORS 279.348 to 279.365).

Copies of the "Planned Public Improvement Summary" (Form No. WH-118), the "Capital Improvement Project Cost Comparison Estimate" (WH-119), and the "Notice of Award of Public Works Contract" (WH-81) can be found at the back of this booklet.

# 14) <u>Does a contracting agency have any power to enforce payment of Prevailing Wage Rates on its public works projects?</u>

Yes. According to ORS 279.314, all public contracts for work or services  $\frac{\text{must}}{\text{pay}}$  contain a clause or condition permitting the contracting agency to pay a worker's past due wage claim, charging the payment against funds due or to become due to the contractor.

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	AREA 1 AREA 2		15.01 12.99	3.30 + B 2.01		CLACKAMAS CLATSOP COLUMBIA	MALHEUR (A) MORROW MULTNOMAH	TILLAMOOK UMATILLA UNION	Wasco (B) Washington Yamhill (a)
	WITH LES	OF BASIC HOURL S THAN ONE YEA TH MORE THAN O	R OF SERVICE.	PLOYEES 6% FOR		GILLIAM  A) North	HALF	B) North	OF MAUPIN
	AREA 1 - ALL	COUNTIES EXCE	PT MALHEUR CO	UNTY	***	TRUCK DRIV	ERS (SEE PAGE	11)	•
	AREA 2 - MAL	HEUR COUNTY			*** WELDERS : RIGGERS				
	*SPRINKLER FI		20.30	3.55			RATE FOR CRAF LDING AND RIG		G OPERATION TO CIDENTAL.
<del>- ArA i</del>	* TENDERS TO M					•	********	*********	
	TENDERS FOR BRICKLAYERS, TILE SETTERS, MARBLE SETTERS AND TERRAZZO WORKERS, TOPPING FOR CEMENT FINISHERS AND MORTER MIXERS.						•		
	(LABOR AND (THIS RATE REFRACTORY	COST OF BRICK MATERIAL) IS NOT APPLICABL MATERIAL, CLE R RESTORATION	LESS THAN \$20 E TO FIRE BRI ANING, POINTI	00,000 CK,					
	-				ı				

3.65

3.65

3.65

3.65

12.05 14.05

12.05

13.56

• WHERE THE COST OF THE PLASTERING WORK (LABOR AND MATERIAL) IS LESS THAN \$200,000:

• WHERE THE COST OF THE PLASTERING WORK (LABOR AND MATERIAL) IS MORE THAN \$200,000:

• ALL OTHER WORK
\*\*\*\* TENDERS TO PLASTERERS

# \*\*\* CARPENTERS, CEMENT MASONS, LABORERS, POWER EQUIPMENT OPERATORS AND TRUCK DRIVERS

UNDER THE FOLLOWING CIRCUMSTANCES AN 80% RATE MAY BE USED FOR THESE FIVE TRADES:

THE 80% RATE APPLIES TO ALL PUBLIC WORKS PROJECTS OF LESS THAN \$1.0 MILLION. THE 80% RATE ALSO APPLIES TO PROJECTS UNDER \$1.5 MILLION INVOLVING THE CONSTRUCTION, RECONSTRUCTION, MAJOR RENOVATION OR PAINTING OF BUILDINGS. BRIDGES OR DOCKS. (WHEN THE AMOUNT IS BETWEEN \$1.0 AND \$1.5 MILLION THE WORK DONE ON A BUILDING, BRIDGE OR DOCK MUST CONSTITUTE AT LEAST 20% OF THE TOTAL PROJECT PRICE TO USE 80% RATES.) IN DETERMINING THE \$1.5 MILLION FIGURE, DO NOT INCLUDE THE COST OF UNDERGROUND UTILITIES (I.E., THE AMOUNT OF THE CONTRACT DEDICATED TO FACILITIES FOR ELECTRICITY. WATER, GAS, SEWERAGE INCLUDING STORM WATER, AND COMMUNICATIONS) WHICH ARE FIVE FEET OR MORE OUTSIDE OF AND AWAY FROM THE BUILDING, BRIDGE OR DOCK AND ARE SUBORDINATE AND INCIDENTAL TO THE MAJOR PURPOSE OF THE PROJECT.

NOTE: IN DETERMINING WHETHER OR NOT THE 80% RATES ARE APPLICABLE. CONSIDER THE TOTAL PROJECT COST, AND NOT THE COST OF ANY INDIVIDUAL CONTRACT (OR SCHEDULE) WITHIN THAT PROJECT.

# ZONE RATES AND DESCRIPTIONS

ZONE DIFFERENTIAL FOR <u>CARPENTERS</u> (<u>GROUPS 1 AND 2 ONLY</u>). <u>LABORERS</u>, <u>POWER EQUIPMENT OPERATORS</u> AND <u>TRUCK DRIVERS</u>

(ADD TO ZONE 1 RATE)

ZONE 2	.65
ZONE 3	1.15
	1.70
ZONE 4	
70NF 5	2.75

ZONE 1: PROJECTS WITHIN 30 MILES OF CITY HALL IN THE CITIES LISTED BELOW.

ZONE 2: MORE THAN 30 MILES BUT LESS THAN 40

MILES.

ZONE 3: MORE THAN 40 MILES BUT LESS THAN 50 MILES.

ZONE 4: MORE THAN 50 MILES BUT LESS THAN 80 MILES.

ZONE 5: MORE THAN 80 MILES.

#### CITIES

ALBANY EUGENE ASTORIA GOLDENDALE BAKER GRANTS PASS BEND HERMISTON BROOKINGS HOOD RIVER BURNS KLAMATH FALLS COOS BAY LAGRANDE CORVALLIS LAKEVIEW	LONGVIEW MADRAS MEDFORD MCMINNVILLE NEWPORT OREGON CITY ONTARIO PENDLETON	PORTLAND PORT ORFORD REEDS PORT ROSEBURG SALEM THE DALLES TILLAMOOK
---	---	---

\*\*\* <u>CARPENTERS</u> (SEE PRECEDING COLUMN FOR DESCRIPTION OF WHEN 80% RATES MAY BE USED)

	<u>80%</u>	100%	
ZONE 1 (BASE RATE): GROUP 1 GROUP 2 GROUP 3 GROUP 4 GROUP 5 GROUP 6	14.04	17.02	3.67
	14.16	17.17	3.67
	14.24	17.27	3.67
	14.36	17.42	3.67
	14.12	17.12	3.67
	14.20	17.22	3.67

\*NOTE: ZONE RATES FOR CARPENTER GROUPS 1 AND 2 ARE LISTED IN THE PRECEDING COLUMN. ZONE RATES FOR CARPENTER GROUPS 3 THROUGH 6 ARE LISTED BELOW.

ZONE DIFFERENTIAL FOR GROUPS 3 THROUGH 6 ONLY (ADD TO ZONE 1 RATE)

Zone 2	.85
ZONE 3	1.25
ZONE 4	1.70
ZONE 5	1.95
ZONE 6	2.80

ZONES FOR GROUPS 3. 4. 5 AND 6 CARPENTERS ARE DETERMINED BY THE DISTANCE BETWEEN THE PROJECT SITE AND EITHER 1) THE WORKER'S RESIDENCE OR 2) CITY HALL OF A REFERENCE CITY FOR THE APPROPRIATE GROUP SHOWN BELOW, WHICHEVER IS CLOSER.

ZONE 1: 0-30 MILES. ZONE 2: 30-40 MILES. ZONE 3: 40-50 MILES. ZONE 4: 50-60 MILES. ZONE 5: 60-70 MILES. ZONE 6: OVER 70 MILES.

#### CITIES FOR GROUPS 3 AND 4

CORVALLIS LONGVIEW NORTH BEND THE DALLES EUGENE MEDFORD PORTLAND

# CITIES FOR GROUPS 5 AND 6

ASTORIA EUGENE NEWPORT SALEM
BEND KLAMATH FALLS PORTLAND THE DALLES
COOS BAY MEDFORD ROSEBURG

## GROUP 1 GROUP 2

AUTO. NAILING MACHINE
CARPENTERS
FORM STRIPPER
MANHOLE BUILDERS

FLOOR LAYERS & FINISHERS
STATIONARY POWER SAW
OPERATORS
WALL & CEILING INSULATORS

GROUP 3 GROUP 4

MILLWRIGHTS CERTIFIED WELDERS MACHINE ERECTORS

GROUP 5 GROUP 6

BRIDGE. DOCK & WHARF BOOM MEN

BUILDERS PILEDRIVERMEN

# \*\*\* CEMENT MASONS<sup>1</sup>

80% 100%

ZONE 1 (BASE RATE):

CEMENT MASONS

13.35

4.72 16.19

• COMPOSITION WORKERS (INCLUDES INSTALLATION OF EPOXY & OTHER RESINOUS TOPPINGS). AND POWER MACH. OPER.

4.72 16.51 13.61

## **70NE DIFFERENTIAL FOR CEMENT MASONS** (ADD TO ZONE 1 RATE)

ZONE 2 ZONE 3 ZONE 4 ZONE 5

PROJECTS WITHIN 30 MILES OF CITY HALL ZONE 1:

IN THE CITIES LISTED BELOW.

MORE THAN 30 MILES BUT LESS THAN 400 ZONE 2:

MILES.

MORE THAN 40 MILES BUT LESS THAN 50 ZONE 3: MILES.

MORE THAN 50 MILES BUT LESS THAN 80 ZONE 4: MILES.

MORE THAN 80 MILES. ZONE 5:

## CITIES

ASTORIA BEND COOS BAY	EUGENE KLAMATH FALLS	NEWPORT PASCO PENDLETON	ROSEBURG SALEM THE DALLES
COOS BAY CORVALLIS	LONGVIEW MEDFORD	PENDLETON	VANCOUVER

# \*\*\* LABORERS<sup>1</sup>

	<u>80%</u>	100%	
ZONE 1 (BASE RATE):2  • GROUP 1*  • GROUP 2  • GROUP 3  • GROUP 4  • GROUP 5	10.67 10.95 11.19 11.39 8.00	12.84 13.19 13.49 13.74 8.00	4.65 4.65 4.65 4.65

4.65 \*GROUP 1 LABORERS WHO 8.76 MEET THE FOLLOWING DESCRIPTION ONLY:

GROUP 1 LABORERS (NOT INVOLVED IN THE POURING OF CONCRETE) ON PROJECTS OF LESS THAN \$1.0 MILLION INVOLVING THE CONSTRUCTION. RECONSTRUCTION. MAJOR RENOVATION OR PAINTING OF BUILDINGS. WORK DONE ON A BUILDING MUST CONSTITUTE AT LEAST 20% OF THE TOTAL PROJECT PRICE TO USE THIS RATE.) IN DETERMINING THE \$1.0 MILLION FIGURE, DO NOT INCLUDE THE COST OF UNDERGROUND UTILITIES (I.E. THE AMOUNT OF THE CONTRACT DEDICATED TO FACILITIES FOR ELECTRICITY, WATER, GAS, SEWERAGE INCLUDING STORM WATER, AND COMMUNICATIONS) WHICH ARE FIVE FEET OR MORE OUTSIDE OF AND AWAY FROM THE BUILDING AND ARE SUBORDINATE AND INCIDENTAL TO THE MAJOR PURPOSE OF THE PROJECT.

## LABORERS (CONTINUED)

#### GROUP 1

ASPHALT PLANT LABORERS GENERAL LABORER ASPHALT SPREADERS
BATCH WEIGHMAN GUARDRAIL. MEDIAN RAIL (C) LEVERMAN OR AGGREGATE BROOMERS SPREADER (D)
MATERIAL YARD MAN (E) BRUSH BURNERS/CUTTERS CARPENTER TENDER CAR & TRUCK LOADERS POWDERMAN TENDER RAILROAD TRACK LABORERS RIBBON SETTERS (F) RIP RAP MAN (HAND CHANGE HOUSE MAN CHOKE SETTER CHIPPER OPERATOR (A) CLEAN-UP LABORERS PLACED) ROAD PUMP TENDER CONCRETE LABORERS CULVERT (HAND LABOR) SEWER LABORER CURING. CONCRETE SIGNALMAN DEMOLITION, WRECKING SKIPMAN AND MOVING SLOPERS DRILLER TENDER SPRAYMAN DRY-SHACK MAN STAKE CHASER STOCKPILER DUMPERS, ROAD OILING TIMBER FALLER/BUCKER **CREW** DUMPMEN FOR GRADING (HAND LABOR) TOOLROOM MAN (JOB SITE) CREW TUNNEL BULL GANG **ELEVATOR FEEDERS** (ABOVE GROUND) FINE GRADERS WEIGHT-MAN-CRUSHER (G) FORM STRIPPERS (B)

PITTSBURG OR SIMILAR TYPES

B) NOT SWINGING STAGES

REFERENCE POST, GUIDE POST, OR C) RIGHT-OF WAY MARKER

FLAHERTY, LOADING SPOTTERS OR SIMILAR TYPES D)

E) INCLUDING ELECTRICAL

INCLUDING STEEL FORMS AGGREGATE WHEN USED G)

# GROUP 2

GUNITE OR POT TENDER APPLICATORS (A) BRUSH CUTTERS (B) HANDLERS /MIXERS (F) POST HOLE DIGGER, AIR. BURNERS CHOKER SPLICER GAS OR ELECTRIC CLARY POWER SPREADER(C) POWER TOOL OPERATORS (G) SAND BLASTING (WET) CLEAN-UP NOZZLEMAN STAKE SETTER GREEN CUTTER (D) CONCRETE POWER BUGGYMAN TAMPERS TUNNEL MUCKERS/BRAKEMAN/ CRUSHER FEEDER DEMOLITION WRECKING (E) CONCRETE CREW/BULL GANG (UNDERGROUND) GRADE CHECKER GRANITE NOZZLEMAN TENDER

- INCLUDING POT TENDER FOR SAME, APPLYING PROTECTIVE MATERIAL BY HAND OR NOZZLE ON UTILITY LINES OR STORAGE TANKS ON PROJECT
- POWER SAW B)
- AND SIMILAR TYPES C)
- CONCRETE, ROCK, ETC. CHARRED MATERIALS D)

OF ALL MATERIALS OF AN IRRITATING NATURE INCLUDING CEMENT AND LIME

INCLUDES, BUT NOT LIMITED TO: DRY PACK MACHINE, JACKHAMMER, CHIPPING GUNS, PAVING BREAKERS, VIBRATORS (LESS THAN 4" DIAMETER)

# LABORERS (CONTINUED)

## GROUP 3

TRADES

PUMPCRETE NOZZLEMAN ASPHALT RAKERS SAND BLASTING (DRY) BIT GRINDER SEWER PIPE LAYERS CONCRETE SAW OPERATOR SEWER TIMBERMAN TRACK LINERS (E) DRILL DOCTOR DRILL OPERATORS (A) GUNITE NOZZLEMAN HIGH SCALERS. TUGGER OPERATOR TUNNEL -CHUCK TENDERS. NIPPERS. TIMBERMAN VIBRATOR (4" AND LARGER) STRIPPERS. DRILLERS(B)
LASER BEAM (C) MANHOLE BUILDER WATER BLASTER WELDER POWDERMEN. POWER SAW OPERATORS (D)

AIR TRACKS. CAT DRILLS. WAGON DRILLS. RUBBER-MOUNTED DRILLS. AND OTHER SIMILAR TYPES

COVERS WORK IN SWINGING STAGES. CHAIRS OR BELTS. UNDER EXTREME CONDITIONS UNUSUAL TO NORMAL DRILLING. BLASTING. BARRING-DOWN. OR SLOPING AND STRIPPING

PIPE LAYING. APPLICABLE WHEN EMPLOYEE ASSIGNED TO MOVE. SET UP. ALIGN LASER BEAM.

BUCKING AND FALLING

ANCHOR MACHINES. BALLAST REGULATORS. MULTIPLE TAMPERS, POWER JACKS

#### GROUP 4

LASER BEAM. (TUNNEL) APPLICABLE WHEN EMPLOYEE ASSIGNED TO MOVE. SET-UP. ALIGN LASER BEAM TUNNEL MINERS
TUNNEL POWDERMAN

## GROUP 5

FENCE BUILDER FLAGGER LANDSCAPING OR PLANTING LABORER

# \*\*\* POWER EQUIPMENT OPERATORS1

	<u>80%</u>	100%	
ZONE 1 (BASE RATE):2  GROUP 1  GROUP 2  GROUP 3  GROUP 4  GROUP 5  GROUP 7  GROUP 7  GROUP 8  GROUP 9  GROUP 10  GROUP 11  GROUP 12  GROUP 12  GROUP 14  GROUP 15  GROUP 15  GROUP 15  GROUP 16  GROUP 17  GROUP 18	12.79 12.09 13.06 13.26 13.340 13.58 13.58 13.56 13.74 14.37 14.37 14.73	15.99 16.17 16.33 16.53 16.557 16.88 16.75 16.88 17.06 17.08 17.18 17.28 17.21 17.71 17.96 18.41	\$
• GROUP 19	14.87	18.59	4.67

1009

# POWER EQUIPMENT OPERATORS (CONTINUED)

## GROUP 1

PARTSMAN (TOOL ROOM) ASSISTANT CONVEYOR OPERATOR PUMP OPERATOR (A) OILER (B) BRAKEMAN/SWITCHMAN SCAFFOLDING OPERATOR (C) CRUSHER FEEDERMAN SWITCHMAN DECKHAND GUARDRATE PUNCH OILER

UNDER 4 INCHES

INCLUDING PLANT, CRANE, CRUSHER, GUARDRAIL EQUIPMENT, AND TRENCHING MACHINE

C) SELF-PROPELLED

## GROUP 2

HELICOPTER RADIOMAN A-FRAME TRUCK (GROUND) OPERATOR (A) OTLER (F) **AUGER** ROLLER OPERATOR (G) TAR POT FIREMAN (H) BLADE OPERATOR (B) BOATMAN TEMPORARY HEATING PLANT CRANE FIREMAN (C) OPERATOR DRILLER TENDER TRUCK CRANE OILER/ FORK LIFT OR LUMBER DRIVER (I) STACKER (D) TUGGER OR COFFIN TYPE GRADE CHECKER GRADE OILER (E) HOIST OPERATOR WELDER'S TENDER HEAVY DUTY REPAIRMAN TENDER

SINGLE DRUM

PULLED TYPE

ALL EQUIPMENT EXCEPT FLOATING C)

ON JOB SITE

REQUIRED TO CHECK GRADE E)

INCLUDING COMBINATION GUARDRAIL MACHINES

GRADING OF BASE ROCK (NOT ASPHALT) INCLUDING POWER AGITATED TYPE

25 TON CAPACITY AND OVER

## GROUP 3

AIR FILTRATION	HYDROGRAPHIC SEEDER
EQUI PME NT	MACHINE (E)
ASPHALT PLANT FIREMAN	HYDROSTATIC PUMP
BALLAST JACK TAMPER	MIXER BOX OPERATOR (F)
BELL BOY, PHONES, ETC	MOTORMAN
BROOM OPERATOR (A)	PUGMILL OPERATOR
BUCKET ELEVATOR	(ANY TYPE)
LOADER (B)	PUMP OPERATOR (G)
CEMENT HOG	ROSS CARRIER OPERATOR (H)
COMPRESSOR OPERATOR (C)	TAMPING MACHINE (I)
CONCRETE SAW AND	TRUCK-MOUNTED ASPHALT
CONCRETE CURING	SPREADER (WITH SCREED)
MACHINE (D)	WELDING MACHINE OPERATOR
CONVEYOR OPERATOR	WIRE MAT OR BROOMING
HYDRAULIC PIPE PRESS	MACHINE OPERATOR

SELF-PROPELLED ON JOB SITE

BARBER GREENE AND SIMILAR TYPE

ANY POWER. UNDER 1250 CUBIC FEET TOTAL CAPACITY

RIDING TYPE

STRAW. PULP OR SEED C.T.B. DRYBATCH. ETC. E)

ANY POWER, 4 INCHES AND OVER G)

ON JOB SITE

MECHANICAL SELF-PROPELLED

# POWER EQUIPMENT OPERATORS (CONTINUED)

## GROUP 4

HELICOPTER HOIST OPERATOR COMBINATION MIXER & HYDRA HAMMER OR SIMILAR COMPRESSOR (A) COMPACTOR, INCLUDING TYPES VIBRATORY LOCOMOTIVE, UNDER 40 TONS LULL HI-LIFT OPERATOR (D) COMPRESSOR (ANY PAVEMENT BREAKER POWER (B) PUMP OPERATOR (E) CONCRETE MIXER ROLLER OPERATOR, OILING OPERATOR (C) C.T.B. FLOATING EQUIPMENT SCREED OPERATOR FIREMAN FORK LIFT, OVER 5 TON SERVICE OILER (GREASER)

BASIC

HOURLY

FRINGE

- GUNNITE WORK OVER 1.250 CU. FT. TOTAL CAPACITY C) SINGLE DRUM, UNDER FIVE BAG CAPACITY
- OR SIMILAR TYPE MORE THAN 5 (ANY SIZE)

### GROUP 5

CHIP SPREADING MACHINE PULVA MIXER OR SIMILAR **OPERATOR** TYPES CONCRETE BATCH PLANT SLIP FORM PUMPS, POWER DRIVEN HYDRAULIC QUALITY CONTROL LIFTING DEVICE FOR **OPERATOR** CONCRETE FORMS **ELEVATOR OPERATOR** EXTRUSION MACHINE SWEEPER. WAYNE TYPE (B) TRACTOR (C) HOIST, SINGLE DRUM LIME SPREADING (A) TRENCHING MACHINE (D) POWER JUMBO, SETTING SLIP FORMS, ETC. IN WAGNER PACTOR (E) TUNNELS.

A) ON JOB SITE

R)

SELF-PROPELLED ON JOB SITE RUBBER-TIRED 50 H.P. FLYWHEEL AND UNDER MAXIMUM DIGGING CAPACITY 3 FT. DEPTH

OR SIMILAR TYPE WITHOUT BLADE

## GROUP 6

CONCRETE SPREADER ASPHALT BURNER AND RECONDITIONER CAST-IN PLACE PIPE CURB MACHINE (B) LOADERS (C) MAGINNIS INTERNAL FULL LAYING MACHINE SLAB VIBRATOR CONCRETE FINISHING PAVEMENT GRINDER AND/OR MACHINE (A) CONCRETE JOINT MACHINE GROOVING MACHINE CONCRETE PAVING MACHINE ROCK SPREADERS (E) GROOVING MACHINE (D) CONCRETE PLANER

CLARY, JOHNSON, BIDWELL, BURGESS, BRIDGES DECK OR SIMILAR TYPE

MECHANICAL BERM. CURB AND OR GUTTER

RUBBER-TIRED TYPE, 2 1/2 CU. YDS. AND UNDER

RIDING TYPE D)

SELF-PROPELLED

# POWER EQUIPMENT OPERATORS (CONTINUED)

## GROUP 7

A-FRAME TRUCK (A) BALLAST REGULATOR GROUTING MACHINE HYDRAULIC BACKHOE (E) BALLAST TAMPER (B) LOCOMOTIVE, 40 TONS & BELTCRETE OVER BOOM TRUCK POT RAMMER PUMPCRETE OPERATOR (ANY CHURN DRILL / EARTH BORING MACHINE TYPE) ROLLER (ANY ASPHALT MIX) CONCRETE MIXER (C) SHUTTLE CAR CONCRETE PUMP ELEVATING GRADER (D) TIE SPACER TOWER MOBILE OPERATOR FULLER-KENYON AND SIMILAR TRACK LINER

DOUBLE DRUM

MULTIPLE PURPOSE

SINGLE DRUM. FIVE BAG CAPACITY AND OVER C) TRACTOR TOWED REQUIRING OPERATOR OR GRADER D) WHEEL TYPE 3/8 CU. YDS. AND UNDER WITH OR WITHOUT FRONT END ATTACHMENT 2 1/2 CU. YDS. AND UNDER (FORD. JOHN DEERE, CASE TYPE)

## GROUP 8

ASPHALT PAVER OPERATOR DIESEL-ELECTRIC ENGINEER (C) BATCH PLANT AND/OR GENERATOR OPERATOR WET-MIX (A) BELT LOADER (B)

ONE AND TWO DRUM

KOLMAN AND KO CAL TYPES B)

PLANT. CRUSHER. GENERATOR. FLOATING

## GROUP 9

ASPHALT PLANT OPERATOR GUARDRAIL PUNCH AND AUGER (D) BOLT-THREADING MACHINE BOOM-TYPE LIFTING H.D. MECHANIC AND WELDER HAMMER OPERATOR DEVICE (A) HYDRAULIC BACKHOE (E) BORING MACHINE LIFT SLAB MACHINE BULLDOZER LOADER (F) CHERRY PICKER (A)(B) MACHINE TOOL OPERATOR PIPE CLEANING, DOPING. CHICAGO BOOM (C) COMPACTOR WITH BLADE BENDING AND WRAPPING CONCRETE COOLING MACHINE CRUSHER PLANT OPERATOR DRILL CAT OPERATOR MACHINES SIDE BOOM CAT STATIONARY DRAG SCRAPER SURFACE HEATER AND PLANER DRILL DOCTOR TRACTOR (G) DRILL DOCTOR (BIT TRACTOR (H) GRINDER) TRENCH MACHINE (I) GRIZZLY CRUSHER

5 TON CAPACITY OR LESS

OR SIMILAR TYPE CRANE HOIST

AND SIMILAR TYPES C)

D) ALL TYPES

TRACK TYPE 3/8 CU. YDS. E)

FRONT END AND OVERHEAD, 2 1/2 CU. YDS. AND UNDER 4 CU. YDS. F)

WITH BOOM ATTACHMENTS RUBBER-TIRED OVER 50 H.P. FLYWHEEL H)

MAXIMUM DIGGING CAPACITY OVER 3 FT. DEPTH

# POWER EQUIPMENT OPERATORS (CONTINUED)

## GROUP 10

COMPACTOR. MULTI-ENGINE BARGE OPERATOR. Dozers and Pushers (c) SELF-LOADING BULLDOZER (A) DRILLER (D) JACK OPERATOR/ELEVATING CABLE PLOW (ANY TYPE) BARGES COMBINATION H.D. MECHANIC-WELDER (B)

TWIN ENGINE (TC 12 AND SIMILAR) WITH DISPATCHER AND/OR REQUIRED TO DO BOTH B) RUBBER-TIRED (MICHIGAN, CAT, HOUGH TYPE)
PERCUSSION, DIAMOND, CORE, CABLE, ROTARY AND C)

SIMILAR TYPE

## GROUP 11

CLAMSHELL. HOE. ETC. (A) DRAGLINE GRADE-ALLS (A)
MIXER MOBILE COMBINATION GUARDRAIL MACHINES (B) CONCRETE BREAKER MUCKING MACHINE (TUNNEL) SHOVEL CRANE OPERATOR (C)

A) UNDER 1 CU. YD.
B) I.E.. PUNCH, AUGER, ETC.
C) 25 TONS AND UNDER

#### GROUP 12

PADDLE WHEEL. AUGER TYPE BATCH PLANT AND/OR WET MIX (A) -PILEDRIVER (NOT CRANE BLADE MOUNTED TYPE) REINFORCED TANK BANDING MACHINE (K-17 OR SPREADERS (B) BLADE OPERATOR ELEVATING LOADER (C) SIMILAR) HOIST. TWO OR MORE RUBBER-TIRED SCRAPER (D) SHIELD OPERATOR DRUMS SINGLE SCRAPER (E)

3 UNITS OR MORE

ULRICH AND SIMILAR TYPES

ATHEY AND SIMILAR C)

SINGLE AND TWIN ENGINE

WITH PUSH-PULL ATTACHMENTS. SELF LOADER

DERRICK. UNDER 100 TONS BACK FILLING MACHINE BLADE (A)
BLADE, MULTI-ENGINE
BLADE OPERATOR, FINISH ELEVATING GRADER (E) FLOATING CLAMSHELL.ETC.(F) FLOATING CRANE (G) GRADE-ALL, 1 CU. YD. AND OVER BRIDGE CRANE OPERATOR (B) CABLEWAY OPERATOR (C) CONCRETE PAVING ROAD HOIST (H) PILEDRIVER OPERATOR MI XER SHOVEL, ETC (I) CRANE (D)

A) EXTERNALLY CONTROLLED BY ELECTRONIC. MECHANICAL HYDRAULIC MANES LOCOMOTIVE CRANE, GANTRY AND OVERHEAD

C)

25 TON AND OVER OVER 25 TON AND INCLUDING 40 TONS D)

OPERATED BY TRACTOR OPERATOR, SIERRA, ECULID. OR SIMILAR

UNDER 3 CU. YDS.

G)

DERRICK BARGE, LESS THAN 30 TON STIFF LEG, GUY DERRICK, OR SIMILAR, 50 TONS AND OVER

1 CU. YD. AND LESS THAN 3 CU. YDS.

# POWER EQUIPMENT OPERATORS (CONTINUED)

#### GROUP 14

RUBBER-TIRED SCRAPER (A) TOWER CRANE OPERATOR

WITH TANDEM SCRAPERS, SELF-LOADING, PADDLE WHEEL. AUGER TYPE. FINISH AND OR 2 OR MORE

#### GROUP 15

LOADER. 4 CU. YDS., BUT LESS THAN 6 CU. YDS. ROCK HOUND OPERATOR

#### GROUP 16

FLOATING CRANE (DERRICK AUTOGRADER OR "TRIMMER" BARGE) (C) AUTOMATIC CONCRETE LOADER (D) RUBBER-TIRED SCRAPER (E) SLIP FORM PAVER CABLEWAY (A)
CONCRETE CANAL LINE SHOVEL (F)
TANDEM BULLDOZER (G) CRANE (B) WHEEL EXCAVATOR (H) FLOATING CLAMSHELL. ETC., 3 CU. YDS. WHIRLEY. 80 TON AND UNDER AND OVER

25 TONS AND OVER
OVER 40 TON AND INCLUDING 100 TON
30 TON BUT LESS THAN 80 TON

6 CU. YDS.. BUT LESS THAN 80 TON
6 CU. YDS.. BUT LESS THAN 12 CU. YDS.
WITH TANDEM SCRAPERS, MULTI-ENGINE
3 CU. YDS.. BUT LESS THAN 5 CU. YDS.
QUAD-NINE AND SIMILAR
UNDER 750 CU. YDS. PER HOUR

E)

#### GROUP 17

CANAL TRIMMER LOADER (C) SHOVEL. ETC. (D) WHIRLEY (E) CRANE (A) FLOATING CRANE (B)

OVER 100 TON AND INCLUDING 200 TON DERRICK BARGE, 80 TON, BUT LESS THAN 150 TON B)

C) 12 CU. YDS. AND OVER

5 CU. YDS. AND OVER OVER 80 TON AND INCLUDING 150 TON

## GROUP 18

WHEEL EXCAVATOR (D) BAND WAGONS (A) CRANE (B) WHIRLEY (E) FLOATING CRANE (C)

IN CONJUNCTION WITH WHEEL EXCAVATOR

OVER 200 TON B)

C) 150 TON BUT LESS THAN 250 TON

OVER 200 TON D)

E) 150 TON AND OVER

#### GROUP 19

REMOTE CONTROLLED EARTH FLOATING CRANE (A) MOVING EQUIPMENT HELICOPTER (B) UNDER WATER EQUIPMENT (C)

A) 250 TON AND OVER

B) WHEN USED IN ERECTING WORK

c) REMOTE OR OTHERWISE

	BASIC HOURLY	FRINGE	TDADEC	BASIC HOURLY RATE	FRINGE
TRADES	RATE	BENEFITS I	TRADES		BENEFITS
** TRUCK DRIVERS1    SOTA   SOTA	9 15.23 15.28 7 15.33 1 15.38 1 15.53 1 15.63 9 15.73 7 15.83 1 16.00 9 16.10 7 16.20 7 16.30 3 16.40	1	SITE OIL DISTRIBUTOR DR PILOT CAR  SLURRY TRUCK DRIVE SOLO FLAT BED AND O-10 TONS  TRANSIT MIX AND WE 5 CU. YDS. AND OVER 5 CU. YDS. OVER 7 CU. YDS. OVER 9 CU. YDS. OVER 11 CU. YDS. OVER 13 CU. YDS. TEAM DRIVERS  TIREMAN, FULL-TIME	IVER-STRADDLE OADING. UNLOADING OF MATERIAL ON JOB  IVER OR LEVERMAN  R OR LEVERMAN  TOR DRY MIX TRUCKS: UNDER AND INC. 7 CU. YDS. AND INC. 11 CU. YDS. AND INC. 13 CU. YDS. AND INC. 13 CU. YDS. AND INC. 15 CU. YDS. BASIS	4 1 3 1 5 6 67 8 9 2 3 1
DRIVERS AND HELPERS HANDLI CEMENT ADD 15¢ PER HOUR		• • •		LDER-BODY REPAIRMAN.	
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INTEREST ON OUR OFFICE		<b>-</b>	1	•	

LOADER AND/OR LEVERMAN ON CONCRETE DRY BATCH PLANT, MANUALLY OPERATED. . . . . . . . . 1

LOW BED EQUIPMENT, FLAT BED SEMITIONS AND TRAILER OR DOUBLES TRANS-PORTING EQUIPMENT OR WET OR DRY

<sup>1</sup> SEE PAGE 11 FOR DESCRIPTION OF WHEN 80% RATES MAY BE USED. 2 SEE PAGE 11 FOR ZONE RATES AND DESCRIPTIONS.

# CERTIFIED STATEMENT

(Name or signatory party) (Title)		ID TO APPROVED PLANS, FUNDS OR PROGRAMS				
(1) That I pay or supervise the payment of the persons employed by  on the  (Contractor, subcontractor or surety)  (Building or work)	In addition to the basic hourly wage rates paid to each worker liste in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in Section 4(c) below.  (b) WHERE FRINGE BENEFITS ARE PAID IN CASH					
(Contractor, subcontractor or surety)  (Building or work)  ; that during the payroll commencing on the  day of, 19, and ending the day of  , 19, all persons employed on said project have been	Each worker listed in the aboas indicated on the payroll, the applicable basic hourly wrequired fringe benefits as in Section 4(c) below.  (c) EXEMPTIONS	ove referenced payroll has been paid, an amount not less than the sum of wage rate plus the amount of the listed in the contract, except as noted				
raid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said	EXCEPTION (CRAFT)	EXPLANATION				
(Contractor, subcontractor or surety)						
from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as specified in ORS 652.610, and described below:						
	REMARKS					
(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for workers	true to my knowledge.	t, know the contents thereof and it is				
contained therein are not less than the applicable wage rates contained in any, wage determination incorporated into the contract; that the classifications set forth therein for each worker conform with work performed.	NAME AND TITLE	SIGNATURE				
(3) That any apprentices employed in the above period are duly registered in bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department	a Contractor Sub	ocontractor Surety				
of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.	File this form with the contracting	agency and send a true copy to the				

File this form with the contracting agency and send a true copy to the Eureau of Labor and Industries, 1400 SW Fifth Ave., Portland, OR 97201

FORM WH-38 (3/84)

Bureau of Labor and Industries Wage and Hour Division PAYROLL
(For Contractor or Subcontractor's Use; See Instruction, Form WH-38A (3/84))

Payroll and Certified Statement Form - For Use in Complying with ORS 279.354

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	CONTRACTING AC	GENCY				· ·	P	ROJE	CTA	ND L	OCATION			PROJEC	CT OR (	CONTR	ACT NO.	SPEC I ADVER	CONTRACT FICATIONS TISED FOR	BID
(1)	SCC AND	(2)	(3) WORK			(4)	DAY	AND	DATE		(5) TOTAL	(6) RATE	(7) GROSS				(8) DEDUCTI	ONS		(9) NET
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INSTRUCTIONS FOR COMPLETING PAYROLL AND CERTIFIED STATEMENT FORM, WH-38 (Rev 3/84)

General: This form meets needs resulting from the 1983 amendments to the Prevailing Wage Rate Law. Under this amended law, the contractor is required to pay not less than fringe benefits as predetermined by the Bureau of Labor and Industries, in addition to payment of not less than the predetermined rates. The contractor's obligation to pay fringe benefits may be met either by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

This form provides for the contractor's showing of the payroll and all monies paid to the employees, whether as basic rates or as cash in lieu of fringes and provides for the contractor's representation in the certified statement that he/she is paying to others fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions concerning the preparation of the form follow:

Fill in all boxes at top of form. Be sure to enter the date the contract was first advertised for bid by the contracting agency. This date should appear on the bid documents.

Column 1 - Name, Address, and Social Security number of Employee: The employee's full name must be shown on each payroll submitted. The employee's address must also be shown on the first payroll submitted. The address need not be shown on subsequent payrolls unless the address changes. Although not required, space is available in the name and address section so that Social Security numbers may be listed.

Column 2 - Withholding Exemptions: This column is merely inserted for the employer's convenience and is not a requirement.

<u>Column 3 - Work Classifications</u>: List classification descriptive of work actually performed by employees. Include group number when appropriate. Consult classifications and minimum wage schedule set forth in contract specifications. If additional classifications are deemed necessary, see Contracting Officer or Agency representative. Employee may be shown as having worked in more than one classification provided accurate breakdown of hours so worked is maintained and shown on submitted payroll by use of separate line entries.

Column 4 - Hours Worked: Enter as overtime hours all hours worked in excess of 8 hours per day, all hours worked on Saturday and Sunday and hours worked on legal holidays as defined in ORS 279.334.

Column 5 - Total: Self-explanatory.

Column 6 - Rate of Pay, including Fringe Benefits: In straight time box, list actual hourly rate paid the employee for straight time worked plus any cash in lieu of fringes paid the employee. When recording the straight time hourly rate, any cash paid in lieu of fringes may be shown separately from the basic rate, thus \$12.50/2.35. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. Payment of not less than time and one half the basic or regular rate paid is required for overtime under ORS 279.334. In addition to paying not less than the predetermined rate for the classification in which the employee works, the contractor shall pay to approved plans, funds, or programs or shall pay as cash in lieu of fringes amounts predetermined as fringe benefits in the wage decision made part of the contract. See "FRINGE BENEFITS" below.

FRINGE BENEFITS -- Contractors who pay all required fringe benefits: A contractor who pays tringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Commissioner of the Bureau of Labor and Industries shall continue to show on the payroll the basic cash hourly rate and overtime rate paid to employees. Such a contractor shall check paragraph 4(a) of the Certified Statement to indicate that he/she is also paying to approved plans, funds, or programs not less than the amount predetermined as fringe benefits for each craft. Any exceptions shall be noted in Section 4(c).

Contractors who pay no fringe benefits: A contractor who pays no fringe benefits shall pay to the employee, and insert in the straight time hourly rate column of the payroll, an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on basic or regular rate, plus the required cash in lieu of fringes at the straight time rate. In addition, the contractor shall check paragraph 4(b) of the Certified Statement to indicate that he/she is paying fringe benefits in cash directly to employees. Any exceptions shall be noted in Section 4(c).

# Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination required is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employee as cash in lieu of fringes and the hourly amount paid to plans, funds, or programs as fringes. The contractor shall pay, and shall show that he/she is paying to each such employee for all hours (unless otherwise provided by applicable determination) worked on the project an amount not less than the predetermined rate plus cash in lieu of fringes as shown in Section 4(c). The rate paid and amount of cash paid in lieu of fringe benefits per hour should be entered in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

Column 7 - Gross Amount Earned: Enter gross amount earned on this project. If part of the employees' wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the project and then the gross amount earned on all projects, thus \$63.00/120.00.

Column 8 - Deductions: Four columns are provided for showing deductions made. If more than four deductions should be involved, use first 3 columns; show the balance of deductions under "Other" column; show actual total under "Total Deductions" column; and in the attachment to the payroll describe the deductions contained in the "Other" column. All deductions must be in accordance with the provisions of ORS 652.610. If the employee worked on other jobs in addition to this project, show actual deductions from gross wage, but indicate that deductions are based on gross wages.

Column 9 - Net Wages Paid for Week: Self-explanatory.

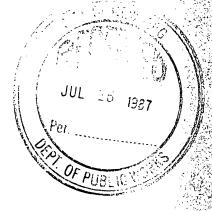
Certified Statement Required by ORS 279.354: While this form need not be notarized, the Certified Statement is subject to the penalties provided by ORS 279.990. Accordingly, the party signing this required statement should have knowledge of the facts represented as true.

Space has been provided between items (1) and (2) of the Statement for describing any deductions made. If all deductions made are adequately described in the "Deductions" column above, state "See Deductions column in this payroll." See paragraph entitled "FRINGE BENEFITS" above for instructions concerning filling out paragraph 4 of the Statement.



# BUREAU OF

Nie:



July

Dear Contractor or Contracting Agency Representative:

A change in the 80% rates published in the July caused unanticipated confusion among contragencies. We have received many calls informing in the 80% column are actually more than 80% of the state of t

Be advised that the new rates listed in the There has been an increase in the Prevailing was so the new rates are now more than 80%. But the identifying projects which call for less than the

In preparing the new PWR Booklet, we decided heading because that has been the customary wajobs. We apologize for any inconvenience the convenience the

Sincerely,

David R. Roth PWR Analyst

0276Q 1kc

PORTLAND 1400 SW 5th Avenue Portland, Oregon 97201 SALEM 3865 Wolverine St. NE; E-1; Salem, Oregon 97310

MEDFORD 700 E. Main Medford, Oregon 97504 COOS BAY 320 Central Ave., Suite 510 Coos Bay, Oregon 97420 BEND 1230 NE Third, Suite Bend, Oregon 977

AN EQUAL OPPORTUNITY EMPLOY

# SECTION 1.00 CLEARING AND GRUBBING

#### 1 01 GENERAL

- A. <u>Clearing</u>. Clearing shall consist of the falling or cutting of trees, snags, high stumps, brush and branches; the clearing away of downed timber, vines, and vegetation and their disposal or the preservation of marketable timber when such preservation is specifically called for by the plans or special provisions.
- B. <u>Grubbing</u>. Grubbing shall consist of the elimination of wooded and vegetative matter occurring at or below ground surface including but not limited to stumps, trunks, roots, canes, stems, debris remaining from clearing work, and sticks having a diameter of one inch or more.

## 1.02 LIMITS

- A. <u>Description</u>. The areas on which clearing and/or grubbing is to be performed shall be as indicated on the plans or, if not so indicated, shall be as follows:
- 1. Those areas within the permanent improved width plus areas beyond the improved width which are to be occupied by pavements, curbs, walks, surfacings, slopes, or other structures to be built as part of the contract.
- 2. Along ditches, channels, proposed storm drains and appurtenances to the extent necessary to accomplish their construction.
- 3. Other areas, such as borrow areas, storage areas, materials sources and others when directed or as may be reasonably inferable from the plans.
- B. <u>Protection of Property</u>. The Contractor will be required to limit his clearing and grubbing operations to the minimum necessary to accomplish the work and to protect, throughout the term of the contract, items which are to be preserved including lawns, shrubs, trees and similar objects, whether shown on the plans or not.
- C. <u>Confer with the Engineer</u>. Before beginning any clearing, grubbing or removal work, the Contractor shall confer with the Engineer as to the extent of the clearing areas, items which are to be preserved, disposal methods to be used and similar matters. The Engineer will stake or otherwise clearly delineate any clearing areas or items to be preserved, disposal methods to be used and similar matters. The Engineer will stake or otherwise clearly delineate any clearing areas or items to be preserved when requested to do so.

## 1.03 CONSTRUCTION DETAILS

A. <u>Description</u>. Within the limits described, all vegetable growth such as trees, shrubs, brush, logs, upturned stumps and roots of down trees, and other similar items shall be removed and disposed of. All trees shall be felled within the area to be cleared. Where the tree limb structure interferes with utility wires, or where the trees to be felled are in close proximity to utility wires, the tree shall be taken down in sections

to eliminate the possibility of damage to the utility. Under all fills of more than five (5) feet, the tops of all stumps shall be cut off so that no portion of the stump shall remain within three feet of embankment subgrade or slope surface.

- B. <u>Prior Approval</u>. The trimming of trees which interfere with the work or the Contractor's operations shall not be done by the Contractor without prior approval. When such approval is granted the trimming shall be done by competent professional personnel specializing in such work and in a manner satisfactory to the Engineer.
- C. <u>Refuse Removal</u>. The refuse resulting from the clearing and/or grubbing operation shall be hauled to a waste site secured by the contractor and shall be burned or buried in such a manner as to meet all requirements of State, County, and municipal regulations regarding health, safety, and public welfare. All Federal and State laws relating to fire permits and local regulations regarding burning such materials shall be observed. In all cases, the authority to burn shall not relieve the Contractor in any way from damages which may result from his operations. In no case shall any material be left on the project, shoved onto abutting private properties, or be buried on the project unless a letter of consent is received by the Engineer from said property owner. Clearing operations shall be carried well in advance of the construction operations so as to permit a well planned schedule of work.

## 1.04 PROTECTION OF EXISTING IMPROVEMENTS

- A. <u>Notify Affected Agency</u>. When it is necessary to remove stumps and where there are surface or subsurface improvements, the Contractor shall be responsible for determining which of the agencies, public or private, have underground or service utilities in the vicinity of the stump to be removed; and further, he shall notify each agency and request its assistance in locating its services. The Contractor will not be responsible for the cost of locating services.
- B. Root and Stump Removal. Where telephone cable and/or ducts, water mains, gas mains, steam mains, and sewer trunks exist and are likely to be damaged, special care shall be taken, and roots of stump shall be cut off in such manner that the existing utility installations will not be damaged in any way.
- C. <u>Surface Improvements</u>. Repair of damage to surface improvements shall be the responsibility of the Contractor, excepting, however, he will not be required to assume responsibility for walks, curbs, and curb and gutters which, previous to his operations are considered by the Engineer to be beyond repair.
- D. <u>Private Property Owners</u>. If the Contractor removes stumps for private property owners along the project, he shall be responsible for all damage resulting therefrom.

# 1.05 MEASUREMENT AND PAYMENT

There shall be no separate measurement for clearing and grubbing. Payment for the performance of the clearing, grubbing, and disposal and cleanup work above specified will be made at the contract lump sum price for the item, "Clearing and Grubbing".

## SECTION 2.00 GRAVITY SEWER PIPE

#### 2.01 GENERAL

This section covers all work necessary for the installation of gravity sewer pipe of the sizes and classes indicated. Service connection pipe is specified in SECTION 5.00 SEWER SERVICE CONNECTIONS.

#### 2.02 MATERIALS

A. <u>General</u>. Sizes and strength classifications of gravity sewer pipe to be used in all locations are indicated on the plans. The Contractor shall use PVC (Poly Vinyl Chloride) gravity sewer pipe of equal strength classification as hereinafter specified.

# B. Pipe.

- 1. PVC Plastic Gravity Sewer Pipe and Fittings. Conform to ASTM Specifications D-3033, D-3034, and F-679.
- 2. Non-Reinforced Concrete Pipe and Fittings. Conform to ASTM C 14 Class 1 and ASTM C 14 Class 3 as indicated on the plans, with ASTM C 150, Type 11 Cement. Strength, permeability, hydrostatic tests, and pipe joints will be used as the basis of acceptance. Procedures are described under WORKMANSHIP.
- 3. <u>Cast Iron Pipe</u>. Conform to latest amendment of Federal Spec. WW-p-421a. Fittings shall be Class D short body conforming to applicable portions of AWWA Standard Specifications for Cast Iron Pipe and Fittings.

# C. Pipe Joints.

1. PVC Joints. Joints shall be rubber-ring type. Joints to conform to ASTM D-3034, D-1784, and D-2751. The pipe manufacturer shall submit results of the Physical and/or Chemical properties plus Drop Impact and Acetone Immersion Test, Certified by a Testing Agency approved by the City, when required.

Furnish in duplicate a certified statement from the manufacturer of the gaskets, setting forth the basic polymer used in the gaskets and results of the tests of the physical properties to the compound, when required. Gaskets shall be shipped in containers with identification of the batch from which the gaskets were fabricated. Lubricant for jointing as approved by gasket manufacturer.

3. <u>Tee Fittings</u>. Joints on all tee fittings shall be the same as the joints used on the sewer pipe. Caps or plugs shall be furnished with each tee outlet or stub with the same type gasket and joint as furnished with the service connection pipe specified. The plug or cap shall be banded or otherwise secured to withstand all test pressure involved without leakage.

Furnish all tee outlets with gasketed type joint or approved adapter to join service connection pipe used.

Tee fittings on 18 inch and smaller concrete pipe shall be shop fabricated.

- D. <u>Hydrostatic Testing</u>. Make all arrangements for furnishing water from the nearest hydrant or other suitable source for testing purposes. Perform the tests and provide all hoses, tank trucks, plugs and other necessary equipment to complete the tests.
- E. <u>Imported Pipe Base and Pipe Zone Material</u>. Granular material for gravity pipe base and pipe zone backfill shall be crushed rock with a maximum size of 3/4 inch, uniformly graded from coarse to fine. Clean pit-run or reject crusher-run sand may be substituted for gravel in trenches with no ground water in the pipe zone. Samples shall be submitted to the City for approval upon request. See Standard Drawing S-1 and S-2.

#### 2.03 WORKMANSHIP

## A. Preparation of Trench.

1. <u>Imported Pipe Base Material</u>. Provide imported pipe base material under all gravity sewer pipe for full width of trench. Minimum depth of base shall be 4 inches, except in areas where the trench is in rock excavation where pipe base shall be a minimum of 6 inches thick.

Hand-grade base to proper grade ahead of pipe laying. Base shall provide a firm, unyielding support along the entire pipe length.

- 2. <u>Dewatering</u>. Provide ample means and devices to remove and dispose of water entering the trench during the laying operation to the extent required to properly grade the bottom of the trench and allow for proper compaction of the backfill in the pipe zone. Pipe shall not be laid in water.
- 3. <u>Pipe Preparation and Handling</u>. Inspect all pipe and fittings prior to lowering into trench to insure no cracked, broken, or otherwise defective materials are being used. Clean ends of pipe thoroughly. Remove foreign matter and dirt from inside of pipe and keep clean during and after laying.

Use proper implements, tools, and facilities for the safe and proper protection of the work. Lower pipe into the trench in such a manner as to

avoid any physical damage to the pipe. Remove all damaged pipe from the jobsite. Do not drop or dump pipe into trenches under any circumstances.

4. <u>Line and Grade</u>. Do not deviate from line and grade, as established by the approved plans, more than 1/2 inch for line and 1/4 inch for grade, provided that such variation does not result in a level or reverse sloping invert.

Measure for grade at the pipe invert - NOT AT THE TOP OF THE PIPE - because of permissible variation in pipe wall thickness.

Establish grade for pipe by transferring the cut from the offset stakes established by the authorized Engineer to batter boards set in the trench at maximum intervals of 25 feet. If maintaining a minimum of 3 sets of batter boards in the trench proves impractical because of trench conditions, submit other methods of grade and alignment control to the City for approval. Lasers may be used in lieu of the above method for maintaining line and grade.

## B. Laying and Jointing Pipe and Fittings.

1. <u>General</u>. Pipe laying shall proceed upgrade with spigot ends pointing in direction of flow. After a section of pipe has been lowered into the prepared trench, clean the end of the pipe to be jointed, and inside of the joint, and the rubber ring immediately before jointing the pipe. Make assembly of the joint in accordance with the recommendations of the manufacturer of the type of joint used. Provide all special tools and appliances required for the jointing assembly.

After the joint has been made, check pipe for alignment and grade. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point between joints. Apply sufficient pressure in making the joint to assure that the joint is "home" as defined in the standard installation instructions provided by the pipe manufacturer. To assure proper pipe alignment and joint make-up, place sufficient pipe zone material to secure the pipe from movement before the next joint is installed. Pipe 21 inches and smaller shall be laid so the inside joint space does not exceed 3/8 inch in width.

Take the necessary precautions required to prevent excavated or other foreign material from entering the pipe during the laying operation. At all times, when laying operation are not in progress, at the close of the day's work, or whenever the workmen are absent from the job, close and block the end of the last laid section of pipe to prevent entry of foreign material or creep of the gasketed joints.

Plug or close off pipes which are stubbed off for manhole construction or for connection by others, with temporary plugs as specified in the manhole specifications.

Take all precautions necessary to prevent the "uplift" or floating of the line prior to the completion of the backfilling operation.

Where nonreinforced pipe is connected to manholes or concrete structures, make connection so that the standard pipe joint is located not more than 12 inches from the outside edge of the structure.

When PVC pipe is connected to manholes, a KOR-N-SEAL rubber boot or approved equal shall be used.

When cutting and/or machining the pipe is necessary, use only tools and methods recommended by the pipe manufacturer and approved by the City.

- 2. <u>Installation of Service Connection Tees</u>. Install tee fittings as shown on the Sanitary Sewer Service Connection Details, Standard Drawing No. SS-2 and SS-3. Provide all tees with caps or plugs, as specified. Provide a 4" gravel base under tees.
- 3. <u>Backfill at the Pipe Zone</u>. The pipe zone shall be considered to include the full width of the excavated trench from the bottom of the pipe to a point 12 inches above the top outside surface of the barrel of the pipe.

Particular attention must be given to the area of the pipe zone from the flow line to the center line of the pipe to insure that firm support is obtained to prevent any lateral movement of the pipe during the final backfill of the pipe zone.

4. <u>Imported Pipe Zone Material</u>. This material shall be used for the full depth of the pipe zone, and shall be placed simultaneously on both sides of pipe in lifts not to exceed 6 inches. Each lift shall be "walked in" and supplemented by slicing with a shovel to insure that all voids around the pipe have been completely filled.

## C. Materials, Tests, and Inspections.

1. PVC Pipe. PVC pipe shall be inspected at the point of manufacture in accordance with the manufacturer's standard methods. Unless otherwise directed by the City, a certificate of tests in lieu of witnessing the inspection and test procedures can be provided.

Pipe and accessories that are chipped, cracked, or contain other imperfections, or do not satisfactorily meet the manufacturer's standard test requirements, shall be rejected.

Deflection shall be kept to a minimum and in no case shall it exceed 7.5% of the pipe inside diameter. When required by the City, all lines shall be tested for deflection (mandrel) and results certified to the sewer system owner.

# 2. Concrete Pipe.

- (a) Basic Tests. Test specimens in the amounts set forth in the applicable ASTM Specifications shall be furnished and tested.
- (b) Test Methods. Specimens for test will be selected by the City in accordance with the applicable ASTM specifications from pipe in the pipe manufacturer's yard or at the point of delivery to the job. The provisions of

the applicable ASTM standards shall apply, except as modified herein. The tests for joints performed under ASTM C 443 shall also be used as a basis for rejection of pipe.

(c) Individual Field Permeability Tests. In addition to the tests specified in the applicable ASTM specification, the City may require field permeability tests on a maximum of 5 percent of each lot, class, or size of pipe, in accordance with ASTM C 497 on Pipe 24 inch diameter and smaller.

The Contractor shall provide all the necessary labor, equipment, water, and materials at the trench site where the pipe is to be unloaded for performing individual field permeability tests. Damp spots on the outside of the wall which appear during these tests shall not be cause of rejection unless actual movement of water through the pipe wall can be detected. If over 20 percent of the group represented by the samples tested fails to pass, then the entire size, class, and lot represented by the samples tested shall be rejected.

At the option of the pipe supplier, the individual field permeability tests as specified herein may be performed at the point of manufacture if the testing equipment, scheduling of tests, and method of recording and documenting the test results are approved by the City.

(d) Plant Air Testing. Each length of concrete pipe 12 inch diameter and smaller may be given an individual air test at the point of manufacture. Test equipment shall be approved by the City and show no appreciable loss of air after 5 seconds.

When individual air testing is performed, no field or shop permeability test will be required.

# 3. Hydrostatic and Air Tests for Gravity Sewers.

All gravity sewers and appurtenances shall successfully pass a hydrostatic or air test prior to acceptance and shall be free of visible leakage. Use either method of testing. Information regarding air testing may be obtained from the City. Manholes shall be tested as specified in SECTION 4.00 MANHOLE CONSTRUCTION.

# (A) General.

- 1. Plugging of tee, stubs and service connections. Plug all wyes, tees, stubs, and service connections with gasketed caps or plugs securely fastened or blocked to withstand the internal test pressure. Such plugs or caps shall be removable, and their removal shall provide a socket suitable for making a flexible-jointed lateral connection or extension.
- 2. Testing equipment and procedure. Furnish all necessary testing equipment and perform the tests in a manner satisfactory to the City. Any arrangement of testing equipment which will provide observable and accurate measurements of either air or water leakage under the specified conditions will be permitted.

- 3. Subsequent failure. Infiltration of groundwater in an amount greater than herein specified, following a successful hydrostatic or air test as specified, shall be considered as evidence that the original test was in error or that subsequent failure of the pipeline has occurred. The Contractor will be required to correct such failures should they occur within the warranty period.
- (b) Hydrostatic Testing. Pipe and joint leakage shall be less than 0.5 gallons per hour per inch diameter per 100 feet when field tested by exfiltration methods. The hydrostatic head for test purposes shall exceed the maximum estimated ground water level in the section being tested by at least 12 inches and in no case shall be less than 24 inches above the inside top of the highest section of pipe in the test section, including service connections. In every case, the height of the water table at the time of the test shall be determined by the Contractor by exploratory holes or such other methods approved by the City. The City shall make the final decisions regarding test height for the water in the pipe section being tested. The length of pipe tested by exfiltration shall be limited so that the pressure on the invert of the lower end of the section shall not exceed 16 feet of water column.

The pipe test section may be filled 24 hours prior to time of exfiltration testing, if desired, to permit normal absorption into the pipe walls to take place.

All service connection footage, included in the test section and subjected to the minimum head specified, shall be taken into account in computing allowable leakage.

# (c) Air Testing.

- 1. Procedure. After all plugs are in place and securely blocked, introduce air slowly into the pipe section to be tested until the internal air pressure reached 4.0 pounds per square inch greater than the average back pressure of any groundwater they may submerge the pipe. Allow a minimum of 2 minutes for the air temperature to stabilize. Determine the height of the groundwater table, at the time of the test, as specified for hydrostatic testing.
- 2. Basis of Acceptance. Pipe and joints being air tested shall be considered acceptable when tested at an average pressure of 3.0 pounds per square inch greater than the average back pressure of any groundwater that may submerge the pipe, when (a) the total rate of air loss from the section being tested does not exceed 2.0 cubic feet per minutes; or (b) the section of line does not lose air at a rate greater than 0.0030 cubic foot per minute per square foot of internal pipe surface.

The pipe and joints shall also be considered as acceptable when the time required in seconds for the pressure to decrease from 3.5 to 2.5 pounds per square inch greater than the average back pressure of any groundwater that may submerge the pipe is not less than that computed in accordance with the "Recommended Procedure for Conducting Acceptance Test" appended at the end of this Specification.

- (d) Deflection test for PVC. In addition to hydrostatic or air testing, sanitary sewers constructed of PVC pipe shall be deflection tested not less than 30 days after the trench backfill and compaction has been completed. The test shall be conducted by pulling an approved solid pointed mandrel through the completed pipeline. The diameter of the mandrel shall be 95 percent of the pipe diameter unless otherwise specified by the Engineer. Testing shall be conducted on a manhole to manhole basis and shall be done after the line has been completely flushed out with water. The contractor will be required, at the contractor's expense, to locate and repair any sections failing to pass the test and to retest the section.
- 4. Final Sewer Cleaning. Prior to final acceptance and final manhole-to-manhole inspection of the sewer system by the City, flush and clean all parts of the system. Remove all accumulated construction debris, rocks, gravel, sand, silt, and other foreign material from the sewer system at or near the closest downstream manhole. If necessary, use mechanical rodding or bucketing equipment.

Upon the City's final manhole-to-manhole inspection of the sewer system, if any foreign matter is still present in the system, reflush and clean the sections and portions of the lines as required.

## RECOMMENDED PROCEDURE FOR CONDUCTING ACCEPTANCE TEST

- 1. Clean pipe to be tested by propelling snug-fitting inflated rubber ball through the pipe with water.
- 2. Plug all pipe outlets with suitable test plugs. Brace each plug securely.
- 3. If the pipe to be tested is submerged in ground water, insert a pipe probe, by boring or jetting, into the backfill material adjacent to the center of the pipe, and determine the pressure in the probe when air passes slowly through it. This is the back pressure due to ground water submergence over the end of the probe. All gauge pressures in the test should be increased by this amount.
- 4. Add air slowly to the portion of the pipe installation under test until the internal pressure is raised to 4.0 psig.
- 5. Check exposed pipe and plugs for abnormal leakage by coating with a soap solution. If any failures are observed, bleed off air and make necessary repairs.
- 6. After an internal pressure of 4.0 psig is obtained, allow at least two minutes for air temperature to stabilize, adding only the amount of air required to maintain pressure.
- 7. After the two minute period, disconnect air supply.
- 8. When pressure decreases to 3.5 psig, start stopwatch. Determine the time in seconds that is required for the interval air pressure to reach 2.5 psig. This time interval should then be compared with the time required by specification as computed below.

# CITY OF NEWBERG SANITARY SEWER AIR TEST NOMOGRAPH

	TEST	CONDUCTED	BY:		1000 1000 1111 1111 1111 1111 1111 111	18.0-1 18000-1	1108
rest se	CTION: FRO	)MM	то		700	10.0	935
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- 9. List size and length of all portions of pipe under test in table similar to one shown on next page.
- 10. By use of nomograph on next page, compute K and C. Use scales d and L, read K and C, and enter those values in the table above.
- 11. Add all values of K and all values of C for pipe under test.
- 12. If the total of all C values is less than one, enter the total of all K values into the space for "Time required by Specifications".
- 13. If the total of all C values is greater than one, divide the total of all K values, by the total of all C values, to get tq. To make this division with the nomograph, use scales C and K, and read tq.

# SECTION 3.00 TRENCH EXCAVATION AND BACKFILL

## 3.01 GENERAL

This section covers the work necessary for the trench excavation and backfill. Trench excavation and backfill will be divided into the following classifications for the purpose of payment:

<u>Class A Backfill</u>. Generally will be limited to areas where trenches are located in unsurfaced areas and on street and road shoulders where prevention of subsequent trench settlement is not considered critical.

<u>Class B Backfill</u>. Generally will be limited to traveled roadways and crossings where surfacing replacement will be made shortly after backfilling and subsequent trench settlement must be held to a minimum.

<u>Concrete Encasement</u>. Limited to areas as designated by the City Engineer.

## 3.02 MATERIALS

- A. <u>Trench Bedding</u>. Bedding to be in conformance with detail of 4-3 of the plans and with Standard Drawing No. W-1.
- B. <u>Trench Backfill</u>. Backfill to be in conformance with detail 4-3 of the plans and with Standard Drawing S-2 and ST-15.

# 3.03 WORKMANSHIP

- A. <u>Clearing the Right-of-Way</u>. Cut trees and brush as near to the surface of the ground as practicable for disposal. Stumps within 4 feet of the trench center line shall be removed. All trees, brush, and other flammable debris from the clearing shall be burned or otherwise disposed of off the construction site at an approved location. All Federal and State laws relating to fire permits and local regulations relating to burning such materials shall be observed. Do not permit excavated materials to cover brush or trees prior to clearing and burning.
- B. <u>Pavement</u>, <u>Curb</u>, <u>and Sidewalk Removal</u>. Cut all bituminous and concrete pavements, regardless of the thickness, and all curbs and sidewalks prior to excavation of the trenches with an approved pavement saw, hydrohammer, or other approved breaker. Width of the pavement cut shall be at least equal to the required width of the trench at ground surface. See Standard Drawings No. ST-15.
- C. <u>Trench Width</u>. Maximum width of trenches in which pipe is to be laid shall be as shown in Standard Drawings S-1. Sheeting requirements shall be independent of trench widths.

The maximum clear width at the top of the pipe will not be limited, except in cases where excess width of excavation would cause damage to adjacent structures. In all cases, confine trench widths to dedicated

rights-of-way for public thoroughfares or within areas for which construction easements have been obtained unless special arrangement have been made with the affected property owners.

- D. <u>Grade</u>. Carry the bottom of the trench to the lines and grades shown or as established by the approved plans with proper allowance for pipe thickness and for gravel base or special bedding when required.
- E. Shoring Sheeting, and Bracing of Trenches. Whenever necessary to prevent caving during excavation in sand, gravel, sandy soil, or other unstable material, or to protect adjacent structures or property, adequately sheet and brace the trench. Where sheeting and bracing are used to increase trench widths accordingly. Keep trench sheeting in place until the pipe has been placed, backfilled at the pipe zone, tested for defects, and repaired, if necessary.
- F. Removal of Water. 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 layout, during the time the trench is being prepared for the pipe layout, during the laying of the pipe, and until the backfill at the pipe zone has been completed.

Dispose of the water in an approved manner without damage to adjacent property. Drainage of trench is water through the pipeline under construction is prohibited.

G. <u>Drainage Culverts</u>. Replace in kind drainage culverts which are removed and are at or near right angles to the trench center line. If the pipe is damaged during removal, dispose of it and furnish and install new pipe.

Where the center line of the proposed pipeline is within 4 feet of the center line of existing parallel culvert, the Developer shall remove and replace the culvert, as outlined under Section 6.00 SURFACE RESTORATION.

All culverts with center lines over 4 feet from the trench center line shall be protected from damage or restored to equivalent condition if damaged.

Replace all culvert pipe to the lines and grades established by the City. Do not replace culverts until the proposed pipeline is installed and the proper backfilling of the trench has been completed to the subgrade of the culvert.

## 3.04 MEASUREMENT AND PAYMENT

A. <u>Trench Excavation</u>. Class "D" Bedding and Class "B" Backfill covered under this specification will be measured by the lineal foot for depth the 0-8" along the trench centerline. The pay quantities shall be the lineal foot measured along the centerline regardless of the lines, cross sections, slopes, widths and depths to which the excavations are actually made. The accepted quantities for trench excavation and Class "D" Bedding, Class "B" Backfill 0-8" which price and payment shall be full compensation for all labor, equipment, tools, materials, and incidentals necessary to complete the work prescribed in this section.

# SECTION 4.00 MANHOLE AND CLEANOUT CONSTRUCTION

## 4.01 GENERAL

This section covers the work necessary for the construction of manholes and cleanouts.

## 4.02 MATERIALS

- A. <u>Base Rock</u>. Clean 3/4-inch minus gravel or crushed rock uniformly graded from coarse to fine.
- B. <u>Concrete</u>. Ready-mixed, conforming to ASTM C94, Alternate 2. Compressive field strength for manhole bases shall be not less than 3,000 psi at 28 days. Maximum size of aggregate shall be 1-1/2 inch. Slump shall be between 2 and 4 inches.
  - C. Precast Manhole Section. See Standard Drawing No. S-3.
- D. <u>Manhole Extensions</u>. Concrete risers shall be a maximum of 6 inches high and of approved construction. Risers shall be approved by Engineer before installation.

In general, manhole extensions will be used on all manholes in roads or streets or in other locations where a subsequent change in existing grade may be likely. Extensions will be limited to a maximum height of 6 inches as per Standard Drawing S-3. Finish grade for manhole covers shall be level with finished ground or street surface unless otherwise directed by the City.

E. Mortar. Proportion 1 part Portland Cement to 2 parts clean, well-graded sand which will pass a 1/8 inch screen. Admixtures may be used not exceeding the following percentages of weight of cement; hydrated lime, 10 percent; diatomaceous earth or other inert material, 5 percent. Consistency of mortar shall be, such that it will readily adhere to the pipe if using the standard tongue-and-groove type joint. If the Keylock type joint is used, the consistency shall be such that excess mortar will be forced out of the groove and support to be placed. Mortar mixed for longer than 30 minutes shall not be used.

Standard premixed mortar conforming to ASTM C 387 may be used in lieu of the above.

- F. <u>Preformed Gaskets</u>. Preformed gaskets may be used in lieu of mortar type joints and shall be Ram-Nek, manufactured by K.T. Snyder Company, Inc., Central National Bank Bldg., Houston, Texas, or approved equal, meeting all requirements of Federal Specification SS-S-00210.
- G. <u>Pipe and Fittings</u>. Tees and ells for drop manholes shall be extrastrength concrete ASTM C-14-3, PVC ASTM 3034 SDR 35 or Ductile Iron C-50. respectively.

- H. Manhole Frames and Covers. See Standard Drawing No. S-7.
- I. Cleanouts. See Standard Drawing No. 22-4.
- J. <u>Steps for manholes</u>. Steps for manholes and rungs for manhole ladders shall be fabricated from structural steel having a minimum yield strength of 28,000 psi and galvanized in conformance to AASHTO M 111 (ASTM A 123).

## 4.03 WORKMANSHIP

- A. <u>Excavation and Backfill</u>. See SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.
- B. Concrete Base. Remove water from excavation. Provide 12 inch minimum layer compacted base rock of type specified under BASE ROCK. Construct concrete base so that first section of precast manhole has uniform bearing throughout full circumference, and does not bear directly on the pipe at any point.

Deposit sufficient mortar on base to assure watertight seal between base and manhole wall or place on the first precast section of manhole in concrete base before concrete has set, if preferred. First section shall be properly located and plumb.

If material in bottom of trench is unsuitable for supporting manhole, excavate below the flow line as directed and backfill to required grade with 2-1/2 inch minus, crushed rock.

- C. <u>Manhole Invert</u>. Construct manhole inverts in conformance with Standard Drawing S-6, and with smooth transitions to insure an unobstructed flow through the manhole. Remove all sharp edges or rough section which tend to obstruct flow. Where a full section of pipe is laid through a manhole, break out the top section as indicated and cover exposed edge of pipe completely with mortar. Trowel all mortar surfaces smooth.
  - D. <u>Drop Manhole</u>. See Standard Drawing S-4.
- E. <u>Service Connection Stubouts</u>. Install a 4 inch and 6 inch service connection stubouts in manholes only when directed by the City. Stubouts shall extend to the right-of-way line. Use mortar as specified in Section 4.02E to grout in service connection pipe in a watertight manner. Furnish all stubouts with a watertight gasketed pipe plug suitably braced against blowoff. Provide compacted base rock as specified hereinbefore to undisturbed earth under each stubout.

Place the invert of either 4 inch or 6 inch service connection pipe 1.0 foot above the flow line of the manhole, unless otherwise directed by the Engineer. See Standard Drawing No. SS-2 and SS-3.

F. <u>Hydrostatic Testing</u>. When, in the City's opinion, the groundwater table is too low to permit visual detection of leaks, up to 10% but in no case less than 5% of the total project manholes shall be hydrostatically tested. The test shall consist of plugging all inlets and outlets and filling the manhole with water to a height determined by the

Engineer. Leakage in each manhole shall not exceed 0.2 gallons per hour per foot of head above the invert. A manhole may be filled 24 hours prior to time of testing, if desired, to permit normal absorption into the pipe walls to take place.

If more than 50% of the manholes tested fail the hydrostatic test, the Contractor will be required to test all or as many manholes as the City may deem necessary. Repair all manholes that do not meet the leakage test, or are unsatisfactory from visual inspection, to conform to requirements herein.

#### SECTION 5.00 SEWER SERVICE CONNECTIONS

#### 5.01 GENERAL

This section covers the work necessary for installation of the sewer service connections, complete.

Replacement of street surfacing damaged by service connection construction is included in SECTION 6.00 SURFACE RESTORATION.

In general, service connections will extend to the street or alley right-10-way line or as directed by the City or approved by the Engineer.

#### 5.02 MATERIALS

- A. Excavation and Backfill. Conform to SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.
- B. <u>Pipe and Fittings for Service Connections</u>. Manufactured with nominal inside diameters of 4 to 6 inches. Use long-radius bends at all changes in direction. Pipe shall be of one type of material throughout. No interchanging of pipe and fittings will be allowed on individual service connections.

Single or double residential services shall be a minimum of 4 inches. Large commercial services, motel units, and certain multiple dwelling users shall be 6 inch services. See Standard Drawing No. SS-2 and SS-3.

- 1. PVC Pipe and Fittings. Conform to ASTM D-3033 and D-3034.
- 2. <u>Concrete Pipe and Fittings</u>. Conform to ASTM C 14, extra strength except minimum barrel thickness shall be one inch, and each pipe shall be given an individual air test at a minimum pressure to 10 psi at the point of manufacture. Each length shall shown no appreciable loss of pressure after 5 seconds.
- 3. <u>Pipe Joints and Couplings</u>. Conform to ASTM D 1869 for asbestoscement and PVC, and C 433 for concrete. Pipe joint type is optional for cast iron pipe.
- 4. <u>Granular Pipe Zone and Base Material</u>. Granular pipe zone and base material shall be 3/4 -inch minus crushed rock or clean sand. Material to have an even gradation from coarse to fine.
- 5. <u>Service Connection Marking Stakes</u>. New 2 x 4 Utility Grade or Better in one piece. No splicing will be permitted.
- 6. <u>Water for Trench Backfill</u>. Conform to SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.

#### 5.03 WORKMANSHIP

Conform to the applicable portions of SECTION 3.00 TRENCH EXCAVATION AND BACKFILL and SECTION 2.00 GRAVITY SEWER PIPE.

A. <u>Backfill at the Pipe Zone</u>. The pipe zone shall be considered to extend 4 inches below the bottom of the pipe and 12" above the top of the pipe and for the full width of the trench. Place a 4 inch granular pipe base below the bottom of the pipe in all trenches on undisturbed earth or on thoroughly compacted gravel to undisturbed earth.

Backfill for the remainder of the pipe zone shall also consist of granular pipe zone material, hand-placed simultaneously on both sides of the pipe for the full trench width and hand-tamped with approved tamping sticks, supplemented by "walking in" the material.

- B. <u>Backfill Above the Pipe Zone</u>. Conform to applicable portions of SECTION 3.00 TRENCH EXCAVATION AND BACKFILL. Do not backfill service connection pipe until inspected and approved by the City.
- C. <u>Culverts</u>. Removal and replacement shall conform to requirements in SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.
  - D. Preparation of Pipe and Handling. Conform to SECTION 2.03.
- E. Laying and Jointing of Pipe and Fittings. Workmanship shall conform to SECTION 2.00 GRAVITY SEWER PIPE. Lay pipe upgrade from connection to the sanitary sewer with bell or coupling ends upgrade. Pipe shall be laid in a straight line at uniform grade between fittings, or on a uniform horizontal or vertical curvature achieved by deflecting the pipe joints within manufacturer's recommended limits.

Maximum deflection permissible at any one fitting shall not exceed 45 degrees and shall be accomplished with log-radius curves or bends. Short-radius elbows or curves will not be permitted.

Make service connections to the sewer system at manholes only when directed by the City. Where service connection pipe is connected to manholes or concrete structures, make the connection so the standard pipe joint is located not more than 12 inches from the structure.

Provide ends of all service connection lines and fittings with standard watertight plugs, caps, and stopper, suitably braces to prevent blowoff during internal hydrostatic or air testing.

Make first joint of the service connection line from the lateral or main with an approved, watertight joint meeting all of the requirements of Pipe Joints, hereinbefore. The first length of pipe, out from the tee on the lateral or main, shall not be greater than 3 feet in length.

F. <u>Line and Grade</u>. Carry the bottom of the trench to the lines and grades shown or as established by the Engineer with proper allowances for pipe thickness and for gravel base or special bedding when required. Correct any part of the trench excavated below the grade at no additional cost to the owner, with 3/4 inch minus crushed rock.

#### Section 6.00 SURFACE RESTORATION

#### 6.01 GENERAL

This section covers the work necessary for all required replacement of pavement, complete.

#### 6.02 MATERIALS

- A. Rock for Surface Replacement. Rock shall be 3/4"-0" crushed rock.
- B. <u>Asphalt Concrete</u>. Hot-plant mix with maximum 3/4-inch aggregate, conforming to Section 403 of the Standard Specifications for Highway Construction of the Oregon State Highway Department, 1984 edition, for the class of asphalt specified.

Asphalt cement shall be 85-100 penetration paving asphalt conforming to AASHO M 20.

- C. <u>Asphalt Prime and Tack</u>. Liquid asphalt for use as prime or tack coat under asphalt concrete shall be RC-70 to MC-70 liquid asphalt.
- D. <u>P.C. Concrete</u>. Concrete for curbs, sidewalks, pavement, and miscellaneous construction shall conform to ASTM C95, Alternate 2, and shall have a design mix proportioned for 3,000 pounds per square inch compressive strength at 28 days. Concrete mix shall contain no less than 5-1/2 sacks of cement per cubic yard.

#### 6.03 WORKMANSHIP

- A. <u>Construction Procedure</u>. The Engineer reserves the right to vary the classes of backfill and the type of resurfacing as best serves the interest of the Owner. Trench backfill shall be as specified in SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.
- B. <u>Progress of Construction</u>. Complete surface restoration not more than 5 calendar days after compaction of the backfilling of the trench.
- C. <u>Removal of Pavement</u>. Removal of all pavement shall conform to SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.
- D. <u>Street Maintenance</u>. Maintain all trenches as specified under SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.
  - E. Asphalt Concrete Pavement Replacement.
- 1. <u>Subgrade</u>. Bring the trench to a smooth, even grade not less than 3 inches below the top of the existing pavement surface. Trim existing pavement to a straight line to remove any pavement which has been damaged or which is broken and unsound to provide a smooth, sound edge for joining the new pavement.

Compact the subgrade to 95 percent relative density. Accomplish supplementary compaction where required with approved mechanical vibrating or power tampers.

- 2. <u>Prime Coats</u>. After the subgrade has been compacted apply as an asphalt prime coat, specified above, at 0.25 to 0.40 gallons per square yard to the surface of the subgrade and to the edges of the existing pavement.
- 3. Asphalt Concrete. After the prime coat has set, but before it loses its adhering qualities, place the asphalt concrete on the prepared subgrade over the trench, in two lifts, to a depth of not less than 3 inches as indicated on the plans. Spread and level the asphalt concrete with hand tools or by use of a mechanical spreader, depending upon the area to be paved. Bring the asphalt concrete to the proper grade and compact by rolling, or use hand tampers where rolling is impossible.

Roll with power rollers capable of providing compression of 350 pounds per linear inch. Begin the rolling at the edges of the patch overlapping the existing surface at least 1/2 the width of the roller and progress toward the center of the resurfaced area. Overlap each preceding track by at least 1/2 the width of the roller and made sufficient passes over the entire area to produce the desired result, as determined by the Engineer.

- 4. <u>Surface Smoothness</u>. The surface smoothness of the replaced pavement shall be such that when a straightedge is laid across the patched area between the edge of the old surfacing and the surface of the new pavement, the new pavement shall not deviate from the straightedge more than 1/4 inch. Any settlement within one year maintenance period will be restored to proper grade.
- 5. <u>Weather Conditions</u>. Resurfacing will be permitted only during dry weather and while trench conditions are satisfactory for pavement replacement. Exceptions will be permitted only in special cases and only with approval of the Engineer.
- 6. <u>Protection of Structures</u>. Provide whatever protective coverings may be necessary to protect the exposed portions of bridges, culverts, curbs, gutters, posts, guard fences, road signs and other structures from splashing oil and asphalt from the paving operations. Remove any oil, asphalt, dirt, or any other undesirable matter than may come upon these structures by reason of the paving operations.

Where water valve boxes, manholes, catch basins, or other underground utility appurtenances are within the area to be surfaced, the resurfacing shall be level with the top of the existing finished elevation of these facilities. If it is evident that these facilities are not in accordance with the proposed finished surface, notify the Engineer to have the proper authority contacted in order to have the facility altered before proceeding with the resurfacing around the obstruction.

- 7. Excessive Materials and Contractor's Responsibility. Dispose of excess materials. Repair all settlement of pavement over Class B backfilled trenches within the warranty period at no additional cost to the Owner.
- F. Rock Surfacing. As indicated hereinbefore, replacement of existing rock surfaced areas will be accomplished by backfill and compaction of the

entire trench with 3/4"-0 crushed rock. All existing graveled service areas will be backfilled with 3/4"-0" crushed rock. Existing rock surfacing shall be restored to its original condition with 3/4"-0", the areas covered and depth of application shall be as directed by the Engineer. Spread the material by "tailgating" and supplement by hand labor where necessary. Level and grade the rock to conform to existing grades and surfaces.

G. <u>Sidewalks, Curbs and Driveways</u>. Replace sidewalks, curbs, and driveways to the section, width, depth, line and grade as required by the Engineer. On private property or in other areas not under the jurisdiction of a public agency the replacement work shall match the existing walk, curb, driveway, etc. in quantity, quality, and finished appearance. Replace sidewalks to the same section width, depth, and to the same line and grade as that removed or damaged. Prior to replacing the sections, properly backfill and compact the trench to prevent subsequent settlement. Use a minimum 2-inch thick compacted leveling course of clean 3/4"-0" rock or gravel under all sidewalks. Place concrete continuously to avoid separation of ingredients. Finish all discontinuous edges with suitable edging tool. Replace concrete sidewalks between scored joints, and make replacement in a manner which will avoid a patched appearance. Finish sidewalks similar to the existing and abutting areas.

Tunneling under sidewalks is optional. However, should any subsequent cracking, subsidence, or any other indication of failure occur within the warranty period, the damaged section shall promptly be replaced by the Contractor.

- H. <u>Saw Cutting</u>. All trench excavation in hard surfaced areas (asphalt or cement) shall be saw cut common width for the length of the trench prior to paving. It shall be the contractor's responsibility to protect freshly sawn hard surfaced areas against damage until paving material has been placed.
- I. Areas not in Paved or Gravel Street Areas. After trench is compacted, backdrag the area over trench with native material at least 6 inches deep so that a uniform surface results free of ruts, depressions, and mounds.

#### 6.04 MEASUREMENT AND PAYMENT

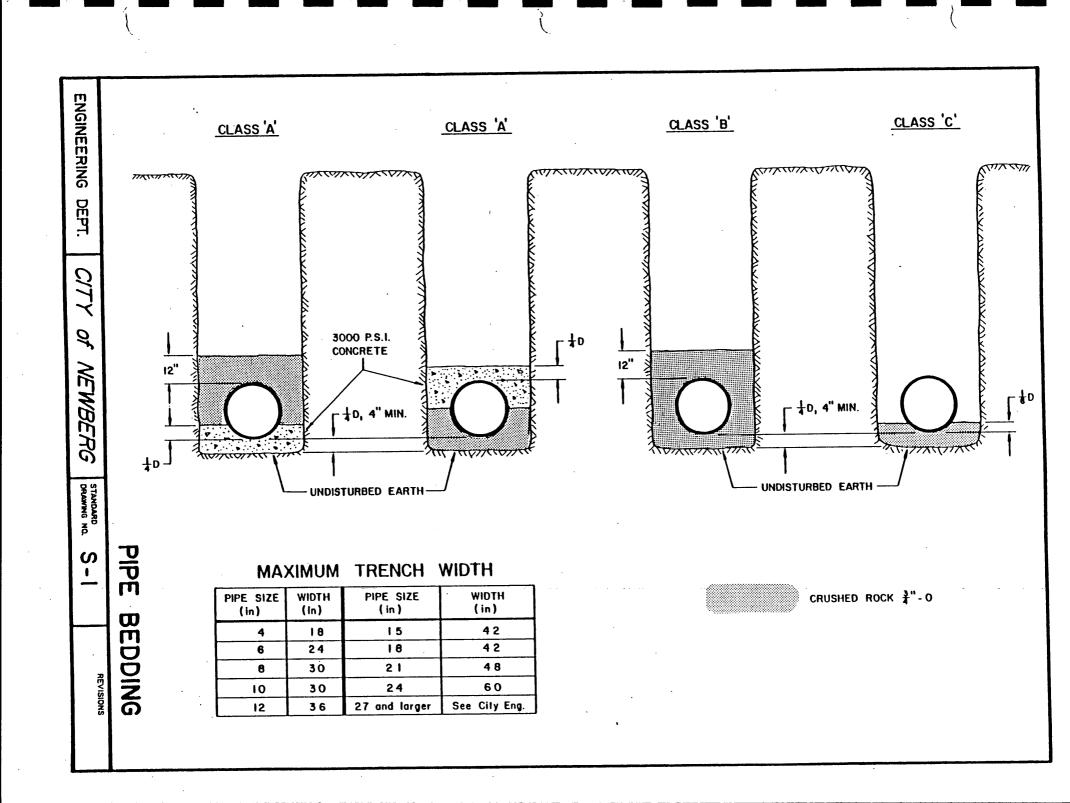
Measurement and payment for surface restoration of roadway and driveways shall be by the square yard and shall include A.C. paving, subgrade grading and base rock. Payment shall be full compensation for all labor, equipment, and materials necessary to complete the work as set forth in the Plans and Specifications.

All other surface restoration not identified in trench paving shall be considered incidental to the project.

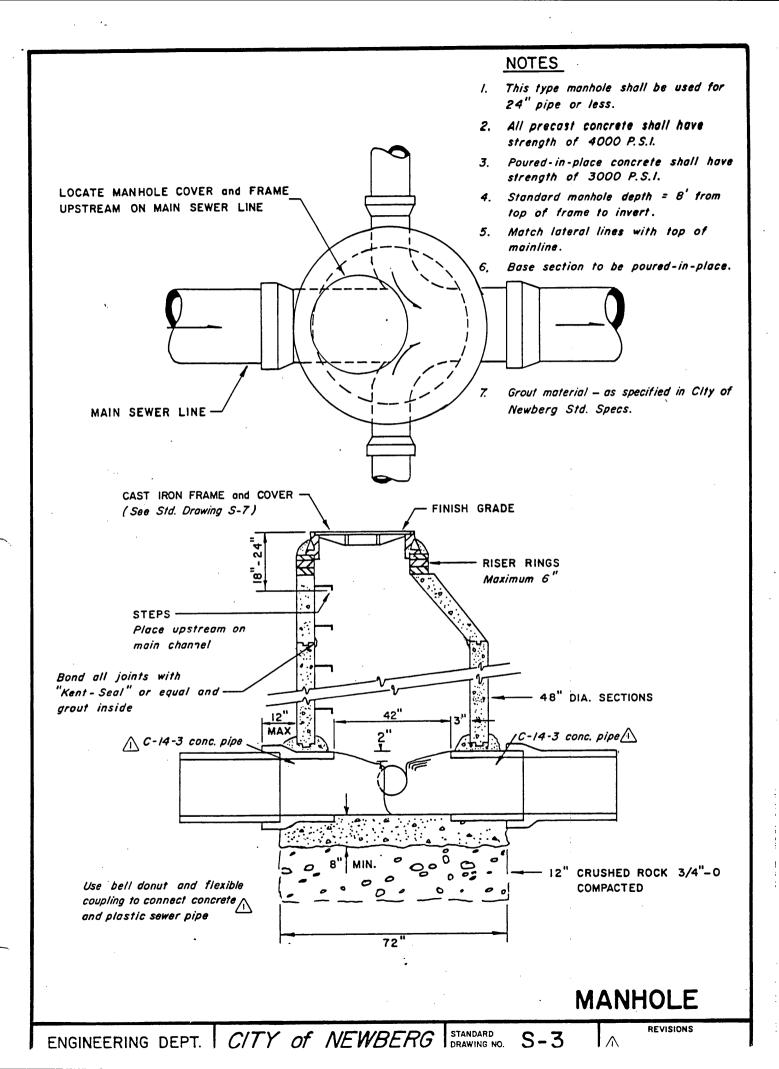
# STANDARD DRAWINGS

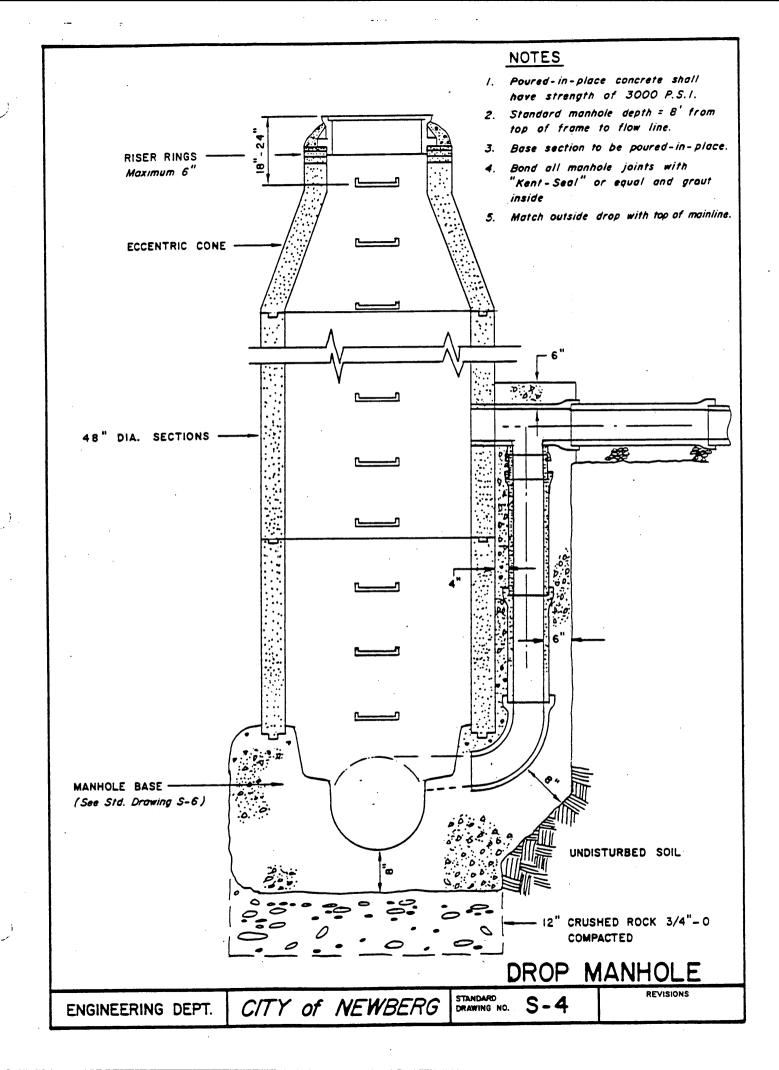
NEWBERG SEWERAGE SYSTEM IMPROVEMENTS RIVER ST. SEWER REPLACEMENT PROJECT

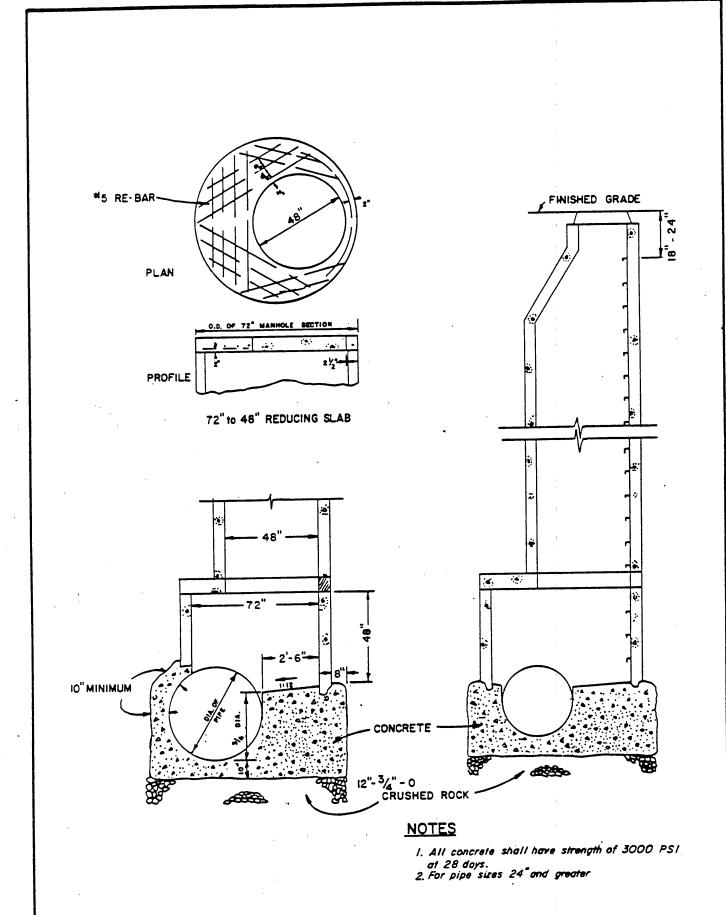
CITY OF NEWBERG



S-2







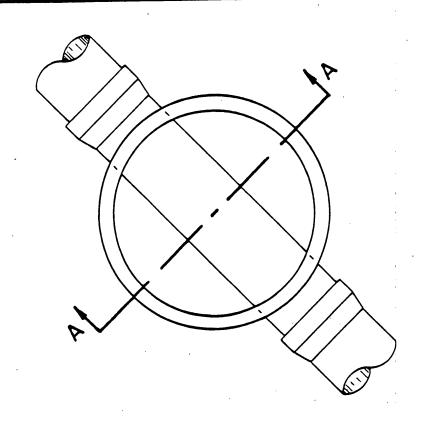
OFFSET MANHOLE

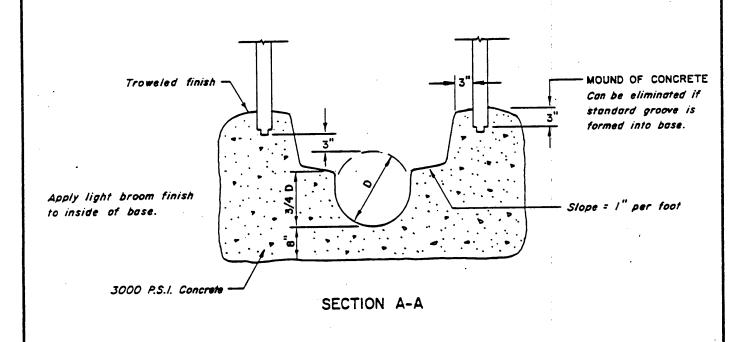
ENGINEERING DEPT.

CITY of NEWBERG

STANDARD DRAWING NO.

S-5





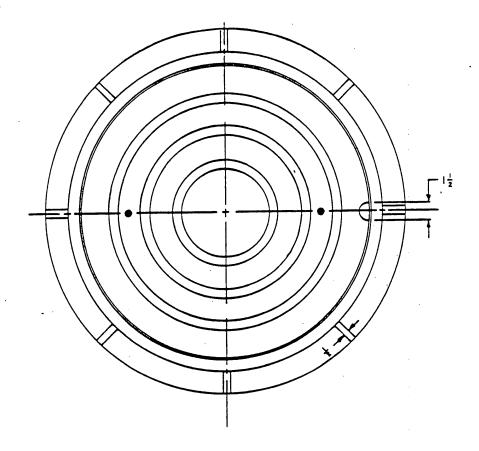
MANHOLE BASE

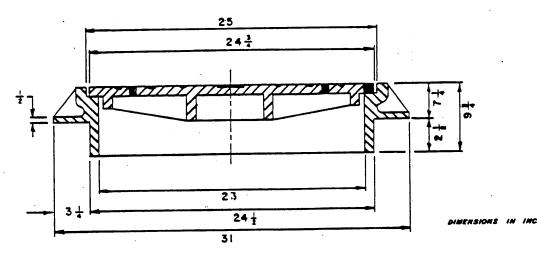
ENGINEERING DEPT.

CITY of NEWBERG

STANDARD DRAWING NO.

S-6

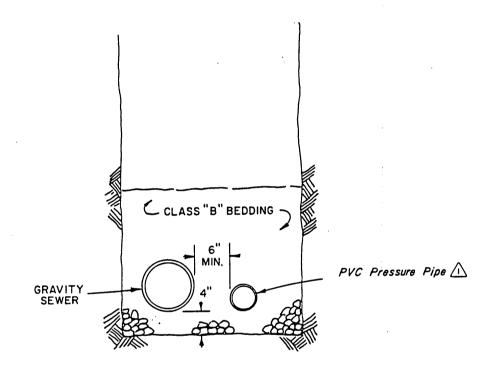




- Standard frames shall be used unless exception is approved by City Engineer.
- 2. 2-hole cover for sanitary sewer.

  16-hole cover for storm sewer.

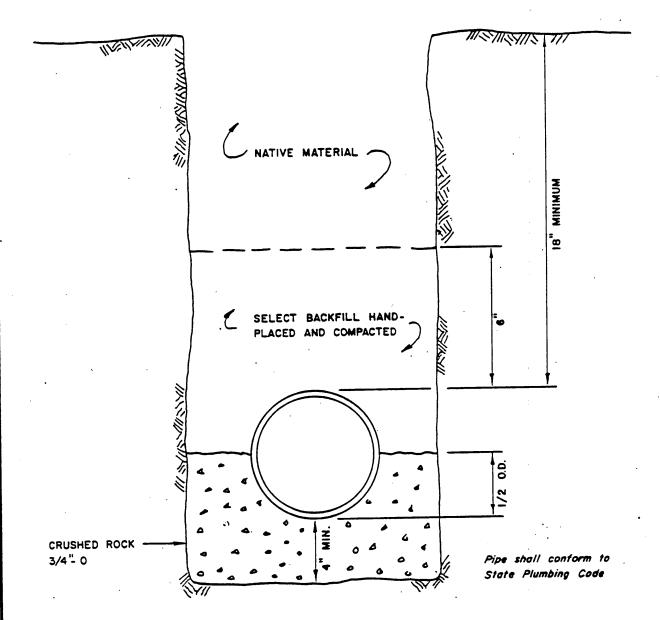
# MANHOLE FRAME & COVER



I. Gravity sewer pipe shall be concrete or PVC 2. PVC pressure mains shall be water tight

# TWO PIPE TRENCH

# PIPE BEDDING AND BACKFILL - OUTSIDE RIGHT-OF-WAY



### NOTES

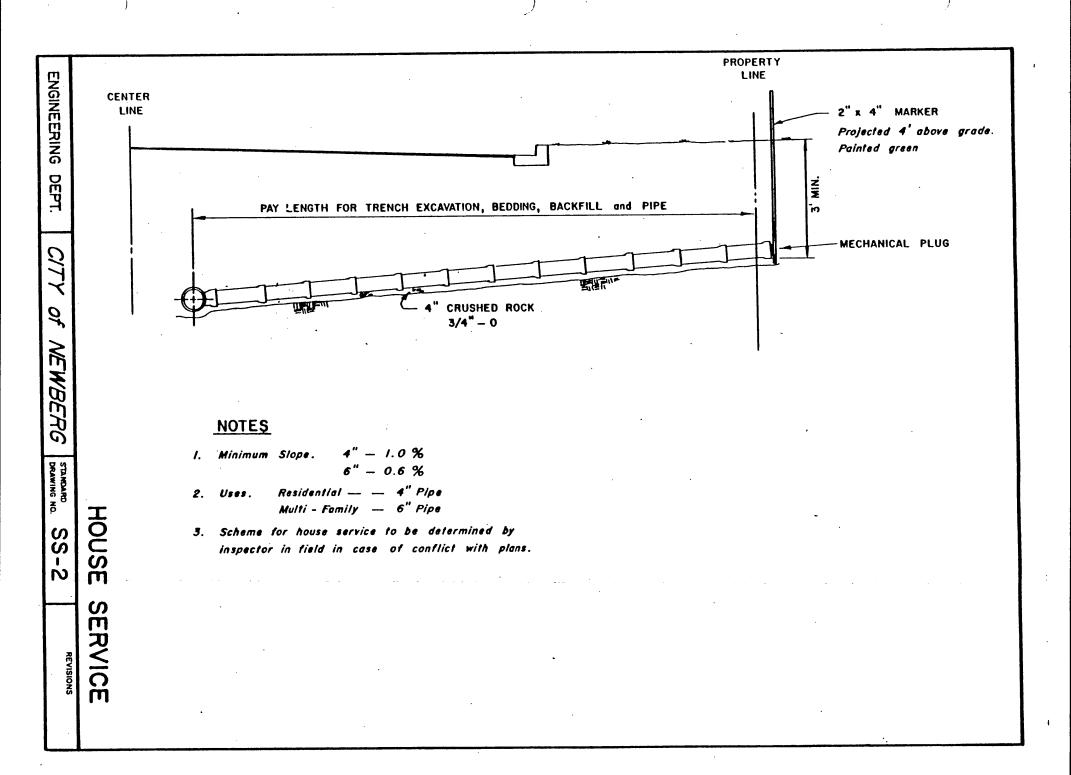
- I. Prior to back-filling trench, pipe shall pass a standard water test.
- 2. Compact backfill to not less than 95% relative compaction.

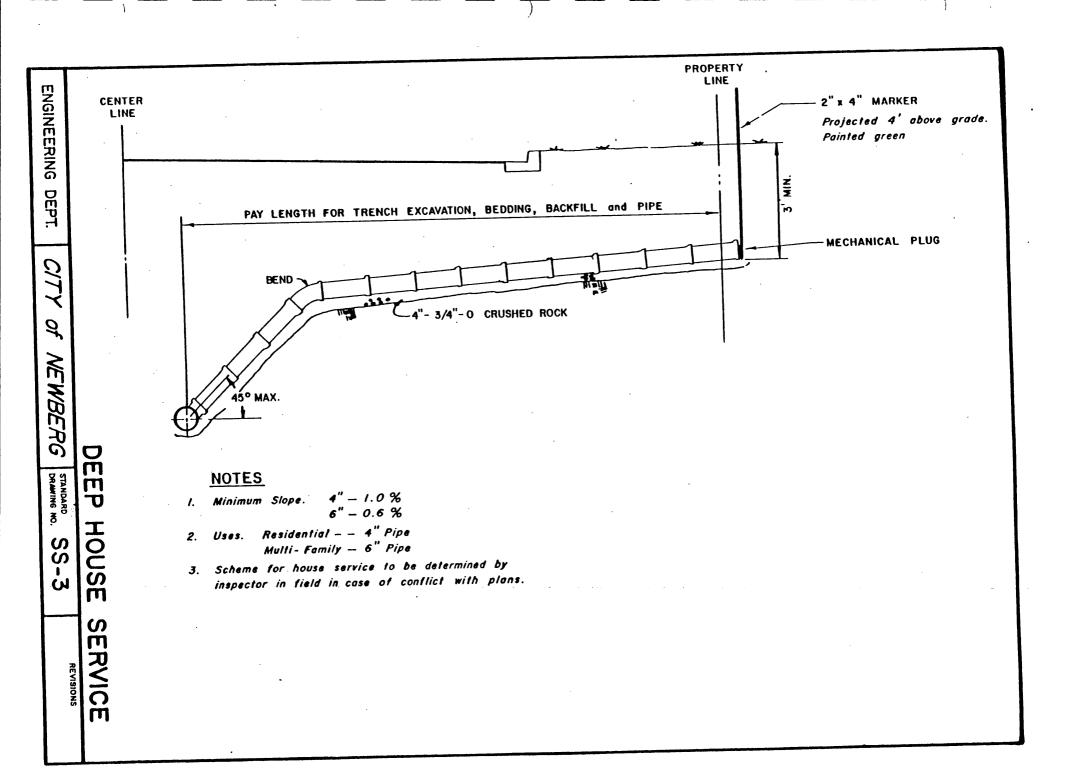
HOUSE LATERALS

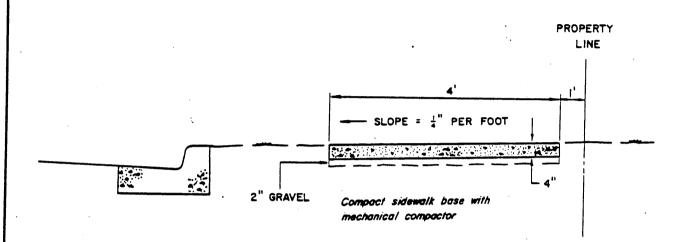
ENGINEERING DEPT.

CITY of NEWBERG

STANDARD DRAWING NO. SS-I







- I. Frontage from property line to curb shall slope to the street at indicated slope.
- 2. Work aggregate down into mix prior to finishing concrete.
- 3. Finishing details —
  Edge concrete with a 3" edging trowel.

  Score concrete at 4' intervals.
  Install 16" x 12" contraction joints 16' apert (every 4 "squares").

  Expansion joints shall not be used

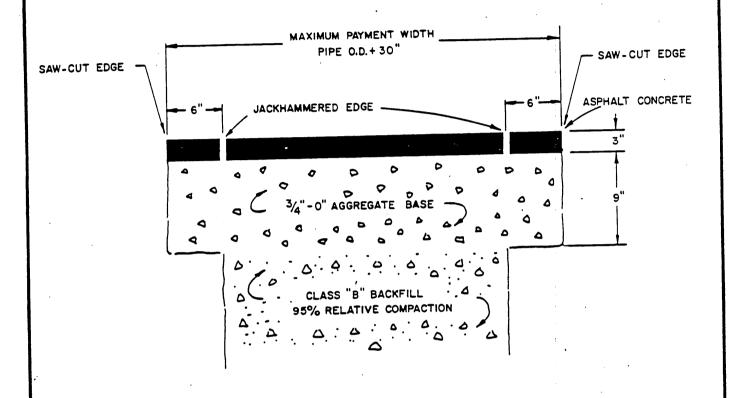
  Apply a light broom finish transverse to sidewalk.
- 4. Concrete shall obtain strength of 3000 P.S.I. at 28 days.
- 5. Apply curing compound (petroleum base) to fresh concrete to retain moisture.
- Tolerances —
   Surface shall not vary more than ¼ from a 10' straightedge.
   Alignment shall be within ¼ of true line.

SIDEWALK - TYPE 'A'

ENGINEERING DEPT.

CITY of NEWBERG

STANDARD ST-8



- 1. Sowcut asphalt to neat straight lines.
- 2. Asphalt Class'C' mix ploced in 2 lifts.
- 3. Oil and sand all joints.
- 4. Actual payment width to be determined at site prior to paying.

TRENCH PAVING

ENGINEERING DEPT.

CITY of NEWBERG

STANDARD ST-15