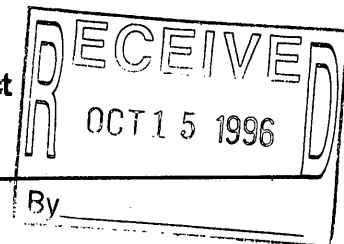


CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 1
October 11, 1996

Project: Wynooski Street Resurfacing Improvements Project
Contractor: Rowell & Wickersham Contractors Inc.
Bid Item: Pavement Marking



THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Additional pavement marking, as follows:
 - a. Wynooski Street, from 5TH to 11TH; and 11TH Street, from Wynooski to Pacific.
Fogline, length = 5300 Ft.
 - b. Up to an additional 440 LF of additional centerline marking, as directed by the Engineer.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
11	Additional Pavement Marking	Lump Sum	900.00	\$ 900.00
	Net Change			\$ 900.00

2. COST SUMMARY	Original Contract Amount	\$ 37,667.50
	Net Change by Previous Change Orders	\$ 0.00
	Previous Total	\$ 37,667.50
	This Change Order	\$ 900.00
	New Contract Amount to Date	\$ 38,567.50

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Steve Buch 9/11/96
 Rowell & Wickersham
 Contractors Inc.

Marie R. Cole 10/24/1996
 City of Newberg

PRESIDENT
 Title

City Manager
 Title

NOTE FROM TABRINA

TO: *Peggy*

DATE: *10/7/96*

☐	<i>For your information</i>	☐	<i>Please note and return</i>
☐	<i>For your signature</i>	☐	<i>For your files</i>
☐	<i>Please take action</i>	☐	<i>Would like to see you</i>

REMARKS:

*original for your
file*

R	E	C	E	I	V	E	D
<i>10/10/96</i>							
By <i>Dawn</i>							

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 18
September 10, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-2, Excavation/Embankment

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change Estimated Quantity.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-2	Excavation/Embankment Delete, replace with the following:	-3950 CY	13.00	\$ -51,350.00
A-2	Excavation/Embankment	5897 CY	13.00	\$ 76,661.00
	Net Change			\$ 25,311.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	\$ 25,311.00
	New Contract Amount to Date	\$

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 9/27/96
Gelco Construction Co. Date

Charles R. Cole 10/4/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

M E M O

Date: September 6, 1996

To: File

Copy:

From: Roger Pyles

Subject: **Everest/2ND LID; Change Order No. 18**

The purpose for this change order is to change the estimated quantity of street excavation. Part of the increase is due to dirt deposited on 3RD Street by NSP Development from construction of Emery Orchards Phases 1, 2, and 3. An investigation (Ref. Memo of 7/10/96) concluded that this dirt was deposited after the topog survey was made by Otak for the Everest/2ND Street L.I.D. Project, thus it was not included in the contract quantity for Item A-2, "Excavation/ Embankment". For that reason, Otak's earthwork quantity for 3RD Street was not used. Instead, it was replaced by a method using Gelco's truck tallies. The revised excavation quantity is summarized in Table 1; the additional excavation quantity due to NSP-Emery Orchards is summarized in Table 2 below.

TABLE 1		
REVISED EXCAVATION QUANTITY		
ITEM	DESCRIPTION	QUANTITY (CY)
1	2ND Street, Otak quantity (Cut = 2586) + (Fill = 375)	2,961
2	Everest Street, Otak quantity (Cut = 262) + (Fill = 51)	313
3	Canyon Ridge (Cut = 30) + (Fill = 40)	70
4	3RD Street, quantity from Table 2	3,127
5	Less Pavement Removal Bid Item A-4 (5168 SY), converted to CY (assumed 4" thick)	(574)
	TOTAL	5,897

TABLE 2		
EXCAVATION QUANTITY DUE TO NSP--EMERY ORCHARDS		
ITEM	DESCRIPTION	QUANTITY (CY)
1	3RD Street Excavation, Gelco Tabulation	6,778
2	Convert above quantity to in-place measure (x 0.75)	5,084
3	Less Computed Over-excavation	(1,957)
4	Net Excavation	3,127
5	Less Earthwork Quantity by Otak (Cut = 2594) - (Fill = 150)	(2,444)
	TOTAL	683

NOTE FROM TABRINA

TO: *Peggy*

DATE: *9/9/96*

☐	For your information	☐	Please note and return
☐	For your signature	☒	For your files
☐	Please take action	☐	Would like to see you

REMARKS:

original

M E M O

Date: August 27, 1996
To: File
Copy:
From: Roger Pyles
Subject: Everest/2ND LID; Change Order No. 25

The purpose for this change order is to clean debris out of a water valve box and plumb adjustment, for an existing water valve at the Canyon Ridge Apartments on Everest Street. Bid Item A-16, "Adjust Valve Cover", was not applicable in this case because no street excavation was involved.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 25
August 27, 1996

CITY OF NEWBERG
CONTRACT ORDER INDEX NO. 1418

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Clean debris out of water valve box and plumb adjustment. Valve identification: line valve on Everest Street at Canyon Ridge Apartments, adjacent to fire hydrant South of driveway.

Price basis is per Time and Materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-30	Clean and Adjust Water Valve Box	1 Lump Sum	\$ 231.52	\$ 231.52
	Net Change			\$ 231.52

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	\$ 231.52
	New Contract Amount to Date	

3. **Time Extension:** None.

4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 9/3/96
Gelco Construction Co. Date

Maureen P. Cole 9/6/1996
City of Newberg Date

Title

City Manager
Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 24
August 22, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Place shoulder rock on the West side of Everest Street, from North of 2ND Street to 3RD Street, approximately 200 LF. Specifications: 3/4" - 0 crushed rock, compacted; 18" maximum width.

Price basis is per Time and Materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-29	Shoulder Rock	1 Lump Sum	\$575 -	\$575 -
	Net Change			

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	\$ 575 -
	New Contract Amount to Date	

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 8/27/96
Gelco Construction Co. Date

Thane R. Cole 8/30/96
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

M E M O

Date: August 22, 1996

To: File

Copy:

From: Roger Pyles

Subject: **Everest/2ND LID; Change Order No. 24**

The purpose for this change order is to place shoulder rock on the West side of Everest Street, to fill the wedge between the new pavement edge and the existing shoulder.

M E M O

Date: August 6, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 21

The purpose for this change order is to connect existing rain drains into curb weep holes, at approximately seven (7) locations on 2ND Street. The rain drain will be relaid from the building if it is necessary to adjust the grade and alignment. One rain drain presently flowing to 2ND Street will be re-directed to Doris Street because it is too low to drain into the curb on 2ND Street.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 21
August 12, 1996

OK
JJA 8/13/96
CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Connect approximately seven (7) existing rain drains into curb weep holes. Price is per time and materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-17	Connect Rain Drains into Curb Weep Holes	1 Lump Sum	\$ 2,254 ²²	\$ 2254 ²²
	Net Change			\$ 2254 ²²

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 120,048.60
	Previous Total	\$ 624,715.90
	This Change Order	\$ 2,254 ²²
	New Contract Amount to Date	\$ 626,970 ¹²

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 8/28/96
Gelco Construction Co. Date

Don R. Cole 9/3/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager.
Title

M E M O

Date: August 19, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 23

The purpose for this change order is to delete the street lights, that were to be installed on the North side of 3RD Street, from the contract. It is planned to install Street lights with the development of the South side of 3RD Street. The poles were delivered to the job-site before it was decided to delete them.

8/27/96
Roger
check w/ Larry. We may
add these back in.
Duan

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 23
August 19, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-14, Street Lights

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Delete the street lights from the contract; remove the light poles from the jobsite.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-14	Delete, replace with the following:	-8 Each	1,600.00	\$ -12,800.00
A-14	Street Lights, fiberglass - Deleted	1 Lump Sum		\$ 1,886.50
	Net Change			< \$ 10,913.50 >

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	< \$ 10,913.50 >
	New Contract Amount to Date	

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 8/20/96
Gelco Construction Co. Date

Trace R. Cole 8/27/96
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

M E M O

Date: July 31, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 20

The purpose for this change order is to connect two rain drains from Colonial Village Apartments into the new 15" storm drain line on 2ND Street. The grade of the rain drains was too low to connect into a curb weep hole.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 20
July 23, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Tap 4" PVC into 15" concrete storm drain at Sta. 22+30, 2ND Street. Connect two existing 3" PVC drains as follows: excavate approximately 5' into property, install 4" PVC Wye, then 45 Bend. Install before curb construction. Price is per time and materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-13	Rain Drain on 2ND Street	1 Lump Sum	\$924 ⁴⁰	\$924 ⁴⁰
	Net Change			\$924 ⁴⁰

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 119,124.20
	Previous Total	\$ 623,791.50
	This Change Order	\$ 924 ⁴⁰
	New Contract Amount to Date	\$ 624,715 ⁹⁰

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 7/30/96
Gelco Construction Co. Date

David Cole 8/27/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

Gelco Construction Co.

City of Newberg

Everest Road/Second Street LID

Change Order # 20 - Connect existing rain drains to 15" storm drain.

LABOR

Employee	Craft	Hours	Rate	Total
Daren Beck	Foreman	3.50	\$35.65	\$124.78
Gary Bogstad	Operator 4	3.50	\$34.39	\$120.37
Larry Brown	Operator 5	3.00	\$33.71	\$101.13
Oren Knupp	Truck Driver 3	2.50	\$32.46	\$81.15

Total Labor Cost

\$427.42

EQUIPMENT

Description	Hours	Rate	Total
Flatbed Truck	3.50	\$8.00	\$28.00
JD 590 Excavator	3.50	\$45.00	\$157.50
Dump Truck	2.50	\$25.00	\$62.50
Roller	0.50	\$35.00	\$17.50

Total Equipment Cost

\$265.50

MATERIALS

Description	Quantity	Unit	Unit Cost	Total Cost
Nonshrink Grout	1.00	Bag	\$13.50	\$13.50
4" PVC Pipe	13.00	LF	\$0.62	\$8.06
3"x4" Fernco Coupler	1.00	Each	\$3.00	\$3.00
4" PVC Wye	1.00	Each	\$4.35	\$4.35
3" Sch 40 PVC Pipe	3.00	LF	\$0.85	\$2.55
3/4"-0 Crushed Rock	12.49	Ton	\$5.40	\$67.45
Dump Fee	12.00	CY	\$1.00	\$12.00

Total Materials Cost

\$110.91

TOTAL COST

\$803.83

15% Markup Allowance

\$120.57

TOTAL T&M CHANGE ORDER AMOUNT

\$924.40

Post-it Fax Note	7671	Date	8/26	# of pages	11
To	Peggy	From	Talbot		
Co/Dept	CD	Co.	CD		
Phone #	534-1942	Phone #			
Fax #	534-1977	Fax #			

SUMMARY OF CHANGE ORDERS

No	DATE	DESCRIPTION	COST
1	02/21/96	Box Culvert details	4,483.00
2	03/20/96	Sewer service for 2401 E. 2ND Street; [TO BE REPAYED BY PROP. OWNER]	2,060.00
3	04/09/96	Change box culvert entrance; replace gabions with concrete wingwalls.	1,385.00
4	04/09/96	Change street light poles; replace aluminum with fiberglass.	(11,200.00)
5	04/09/96	Lower 8" water main at 3RD & Everest	3,530.00
6	04/09/96	Storm drain revisions on 2ND Street	(10,834.20)
7	04/09/96	Trim trees at 2300 E. 3RD Street	150.00
8	05/07/96	Geotextile fabric on subgrade; 2ND Street, Everest Street	6,000.00
9	05/09/96	Storm drain revisions	(6,000.00)
10	05/08/96	Delete portions of construction at East ends of 2ND and 3RD; [TO BE PAID OUT TO DEVELOPER OF EMERY ORCHARD No. 4]	(5,653.10)
11	05/15/96	Re-construct storm drain at 3RD & Bina	3,300.00
12	05/15/96	Extension of time	0.00
13	05/29/96	Rock for soft spots; change quantity and unit of measurement	45,400.00
14	07/08/96	Add Sheet 15: Half-street improvement, Everest St. at Canyon Ridge Apts.	4,000.00
15	06/26/96	Timber retaining walls on 3RD Street	3,712.50
	07/30/96	Timber retaining wall at 212 Ardu	720.00
16	07/08/96	Change paving scheme on 3RD Street from 2 lifts to one lift	(1,887.00)
17	07/15/96	Soft spot over-excavation on 2ND Street and Everest Street	65,598.00
18		Increase excavation quantity	15,080.00
19	08/01/96	Change box culvert wing walls	888.38
20		Connect rain drain into 15" storm drain line on 2ND Street	924.40
21		Connect rain drains into curb weep holes	
22		Delete survey monument boxes	(3,000.00)
23		Delete street lights	(10,913.50)
24		Shoulder rock on West side of Everest Street	
NET CHANGE TO DATE			107,743.48

Peggy - I decided to
put status on top of
each change order - any
questions call Peggy 10336.

M E M O

Date: Aug 8, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 18

The purpose for this change order is to change the estimated quantity of street excavation. The increase is tabulated below. Most of the increase is due to dirt deposited on 3RD Street by NSP Development from construction of Emery Orchards Phases 1, 2, and 3. An investigation (Ref. Memo of 7/10/96) concluded that this dirt was deposited after the topog survey was made by Otak for the Everest/2ND Street L.I.D. Project, thus it was not included in the contract quantity for Item A-2, "Excavation/ Embankment".

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 18
July 3, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-2, Excavation/Embankment

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change Estimated Quantity.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-2	Excavation/Embankment Delete, replace with the following:	-3950 CY	13.00	\$ -51,350.00
A-2	Excavation/Embankment	5110 CY	13.00	\$ 66,430.00
	Net Change			\$ 15,080.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 104,044.20
	Previous Total	\$ 608,711.50
	This Change Order	\$ 15,080.00
	New Contract Amount to Date	\$ 623,791.50

3. Time Extension: None.

4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

 Gelco Construction Co. Date

 City of Newberg Date

 Title

 Title

waiting for additional fees to be calculated by engineering

M E M O

Date: July 31, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 20

The purpose for this change order is to connect two rain drains from Colonial Village Apartments into the new 15" storm drain line on 2ND Street. The grade of the rain drains was too low to connect into a curb weep hole.

**CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 20
July 23, 1996**

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

*Waiting for
City Manager's
signature*

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Tap 4" PVC into 15" concrete storm drain at Sta. 22+30, 2ND Street. Connect two existing 3" PVC drains as follows: excavate approximately 5' into property, install 4" PVC Wye, then 45 Bend. Install before curb construction. Price is per time and materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-13	Rain Drain on 2ND Street	1 Lump Sum	\$924. ⁰⁰	\$924. ⁰⁰
	Net Change			\$924. ⁰⁰

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 119,124.20
	Previous Total	\$ 623,791.50
	This Change Order	\$ 924. ⁰⁰
	New Contract Amount to Date	\$ 624,715. ⁵⁰

3. Time Extension: None.

4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 7/30/96
 Gelco Construction Co. Date

 City of Newberg Date

PROJECT MANAGER
 Title

 Title

M E M O

Date: August 6, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 21

The purpose for this change order is to connect existing rain drains into curb weep holes, at approximately seven (7) locations on 2ND Street. The rain drain will be relaid from the building if it is necessary to adjust the grade and alignment. One rain drain presently flowing to 2ND Street will be re-directed to Doris Street because it is too low to drain into the curb on 2ND Street.

OK
JGA 8/13/96

*Waiting for schedule
fee from Gelco*

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 21
August 12, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Connect approximately seven (7) existing rain drains into curb weep holes. Price is per time and materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-17	Connect Rain Drains Into Curb Weep Holes	1 Lump Sum		
	Net Change			

2. COST SUMMARY	Original Contract Amount	\$ 504,867.30
	Net Change by Previous Change Orders	\$ 120,048.60
	Previous Total	\$ 624,715.90
	This Change Order	
	New Contract Amount to Date	

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Gelco Construction Co. Date

City of Newberg Date

Title

Title

M E M O

Date: August 19, 1996
To: File
Copy:
From: Roger Pyles
Subject: Everest/2ND LID; Change Order No. 23

The purpose for this change order is to delete the street lights, that were to be installed on the North side of 3RD Street, from the contract. It is planned to install Street lights with the development of the South side of 3RD Street. The poles were delivered to the job-site before it was decided to delete them.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 23
August 19, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-14, Street Lights

*Waiting for
City Manager
Signature*

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Delete the street lights from the contract; remove the light poles from the jobsite.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-14	Delete, replace with the following:	-8 Each	1,600.00	\$ -12,800.00
A-14	Street Lights, fiberglass - Deleted	1 Lump Sum		\$ 1,886.50
	Net Change			< \$ 10,913.50 >

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	< \$ 10,913.50 >
	New Contract Amount to Date	

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 8/20/96
 Gelco Construction Co. Date

 City of Newberg Date

PROJECT MANAGER
 Title

 Title

M E M O

Date: August 22, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 24

The purpose for this change order is to place shoulder rock on the West side of Everest Street, to fill the wedge between the new pavement edge and the existing shoulder.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 24
August 26, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

*Waiting for
 per schedule
 from Gelco*

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Place shoulder rock on the West side of Everest Street, from North of 2ND Street to 3RD Street, approximately 200 LF. Specifications: 3/4" - 0 crushed rock, compacted; 18" maximum width.

Price basis is per Time and Materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-29	Shoulder Rock	1 Lump Sum		
	Net Change			

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	
	New Contract Amount to Date	

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

 Gelco Construction Co. Date

 City of Newberg Date

 Title

 Title

8/26/96

Plc Tabby (x214) re: copies
of 18, ~~20~~ 21 & 23.

She will get copies - she said
Roger said - "they're still out
there" ~~undone~~.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 1
February 15, 1996

CITY OF NEWBERG
 CITY RECORDER INDEX NO. 1481

Project: Everest Road/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-8, Concrete Sidewalk (Type B) - B-6, Precast Concrete Box Culvert

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change Schedule of Prices according to the table:

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
A-8	Concrete Sidewalk	-30 LF	8.90	-267.00
B-6	Precast Concrete Box Culvert Delete, replace with following:	-50 LF	385.00	-19,250.00
B-6	6' x 3' Precast Conc. Box Culvert	50 LF	430.00	21,500.00
B-12	Class 50 Rip-Rap	3 CY	50.00	150.00
B-13	5" Thick Reinforced Conc. Sidewalk	30 LF	41.00	1,230.00
B-14	Handrail	20 LF	56.00	1,120.00
	Net Change			4,483.00

2. Cost Summary:

Original Contract Amount:	\$504,667.30
Net Change by Previous Change Order:	\$ 0
Previous Total:	\$504,667.30
This Change Order:	\$ 4,483.00
New Contract Amount to Date:	\$509,150.30

3. Time Extension: 30 days

4. Contract Time: Completion date is hereby changed to read: August 1, 1996

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 2/16/96
 Gelco Construction Co. Date
 STANLEY E. THOMPSON
 PROJECT MANAGER
 Title

Dana R. Cole 2/21/96
 City of Newberg Date
 City Manager
 Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 2
March 12, 1996

CITY OF NEWBERG
 CITY RECORDER INDEX NO. 1481

Project: Everest/Second Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Install 6" sewer tap and lateral for service to 2401 E. Second Street.

DETAILS: Install 6" tap in 8" PVC sewer line at STA 22+70; +/- 25 feet of 6" PVC pipe; extend to 1 foot beyond property line on north side of Second Street, at 6 ft. depth. Change Schedule of Prices according to the following table:

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
D-2	6" Sewer Tap & Lateral	1 Lump Sum	2,060.00	2,060.00
	Net Change			2,060.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 4,483.00
	Previous Total	\$ 509,150.30
	This Change Order	\$ 2,060.00
	New Contract Amount to Date	\$ 511,210.30

3. **Time Extension:** None.

4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 3/13/96
 Gelco Construction Co. Date

PROJECT MANAGER
 Title

Barbara R. Cole 3/20/1996
 City of Newberg Date

City Manager
 Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 3
March 29, 1996

CITY OF NEWBERG
 CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: B-6, Precast Concrete Box Culvert

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change entrance details.

DETAILS: Delete Gabions. Replace with reinforced concrete wing-walls, per shop drawing. Provide dowel bar inserts in side walls of box culvert entrance.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
B-6	6' x 3' Precast Conc. Box Culvert	50 LF	-24.30	-1,215.00
B-12	Entrance Wing Walls	1 Lump Sum	2,600.00	2,600.00
	Net Change			1,385.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 6,543.00
	Previous Total	\$ 511,210.30
	This Change Order	\$ 1,385.00
	New Contract Amount to Date	\$ 512,595.30

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 3/29/96
 Gelco Construction Co. Date
PROJECT MANAGER
 Title

Danae R. Cole 4/4/96
 City of Newberg Date
City Manager
 Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 4
March 29, 1996

CITY OF NEWBERG
 CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-14, Street Light

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change Type of poles.

DETAILS: Delete aluminum poles with precast concrete footings. Replace with direct-buried fiberglass poles.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
A-14	Street Light, Aluminum	-8	3,000.00	-24,000.00
A-14	Street Light, Fiberglass	8	1,600.00	12,800.00
	Net Change			-11,200.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 7,928.00
	Previous Total	\$ 512,595.30
	This Change Order	\$ -11,200.00
	New Contract Amount to Date	\$ 501,395.30

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 3/29/96
 Gelco Construction Co. Date
PROJECT MANAGER
 Title

David D. Cole 4/9/96
 City of Newberg Date
City Manager
 Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 5
March 29, 1996

CITY OF NEWBERG
 CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Lower water main at 3RD & Everest that is in conflict with 15" storm drain.

DETAILS: Lower 8" water main 1.5 feet using 4-45 deg MJ Bends with thrust blocks, to pass under new 15" storm drain. Horizontal length of approximately 16 feet

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
C-3	Change Order No. 5	1	3,530.00	3,530.00
	Net Change			3,530.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ -3,272.00
	Previous Total	\$ 501,395.30
	This Change Order	\$ 3,530.00
	New Contract Amount to Date	\$ 504,925.30

3. Time Extension: None.

4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 3/29/96
 Gelco Construction Co. Date
PROJECT MANAGER
 Title

Don R. Blum 4/9/96
 City of Newberg Date
City Manager
 Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 6
March 29, 1996

CITY OF NEWBERG
 CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: B-3, Construct 12" CSP with Select Backfill

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Revise storm drain system on 2ND Street from Everest to Doris.

DETAILS: (1) Relocate 12" storm drain between Everest & Elva, from behind N. curb, to 6 feet N. of Centerline; (2) delete storm drain between Elva and Meredith; (3) re-direct flow at 2ND & Meredith to Meredith Way pipe; (4) add catch basin on N. side 2ND near Doris; (5) install 10" stub-outs from catch basins on N. side of 2ND; (6) extend 15" pipe from 2ND & Everest, N. 75 feet on Everest to end of excavation.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
B-3	Construct 12" CSP with Select Backfill. Delete, replace with following:	-543 LF	37.00	-20,091.00
B-3	Construct 12" CSP with Select Backfill.	228 LF	40.60	9,256.80
	Net Change			-10,834.20

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 258.00
	Previous Total	\$ 504,925.30
	This Change Order	\$ -10,834.20
	New Contract Amount to Date	\$ 494,091.10

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 3/29/96
 Gelco Construction Co. Date

PROJECT MANAGER
 Title

Donna R. Cole 4/9/96
 City of Newberg Date

City Manager
 Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 7
April 5, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Tree Trimming.

DETAILS: Trim limbs on two evergreen trees on South side of 3RD Street, at 2300 E. 3RD Street. Trim limbs according to Standard Drawing G-5.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
A-25	Change Order No. 7	1 Lump Sum	150.00	150.00
	Net Change			150.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ -10,576.20
	Previous Total	\$ 494,091.10
	This Change Order	\$ 150.00
	New Contract Amount to Date	\$ 494,241.10

3. Time Extension: None.

4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Lin E. J. Chapman 4-9-96
Gelco Construction Co. Date

Charles H. Dale 4-9-96
City of Newberg Date

Supervision
Title

City Manager
Title

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 8
April 26, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Install geotextile fabric for subgrade reinforcement.

DETAILS: Install non-woven geotextile fabric on subgrade. The anticipated placement is: the entire length of Second Street and Everest Road; width is the entire street to one foot behind the curb.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	\$ AMOUNT
A-26	Change Order No. 8	6,000 SY	1.00	6,000.00
	Net Change			\$ 6,000.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ -10,426.20
	Previous Total	\$ 494,241.10
	This Change Order	\$ 6,000.00
	New Contract Amount to Date	\$ 500,241.10

3. **Time Extension:** None.

4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 5/7/96
Gelco Construction Co. Date

Duane R. Cole April 30, 1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

M E M O

Date: April 25, 1996
To: File
Copy:
From: Roger Pyles
Subject: Everest/2ND LID; Change Order No. 8

The purpose for this change order is to install a geotextile fabric on the subgrade of 2ND Street and on Everest Street.

Experience with improvements of old county roads has shown that when the pavement is peeled off, in every case we have found a weak silty clay subgrade that won't support street construction. Construction equipment trying to work on the subgrade just damages it further. At that point we are faced with the need to over-excavate the bad subgrade, then backfill with rock. That is very expensive and would cost much more than this change order.

The fabric mat will strengthen the subgrade and allow the street construction to proceed. In addition, the fabric will be a permanent barrier separating the clay from the street base.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 9
April 26, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Schedule B - Storm Sewer

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. **Revise storm drain system as follows:** (1) Replace CG-2 Catch Basin with City of Newberg Oversize Catch Basin, Drawing No. 170. (2) Replace CG-1 Catch Basin with City of Newberg Catch Basin, Drawing No. 601A. (3) Replace the following CG-2 Catch Basins with CG-1 Catch Basin: Second Street - No. 50, 53, W. of Doris (N. side); Third Street - 54, 55, 56, 57. (4) Delete Type D Inlets on Second Street - No. 46 and 48 (Bid Item B-9). (5) Delete Manhole No. 41 on Second Street.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-7	CG-1 Catch Basin	7	850.00	\$ 5,950.00
B-8	CG-2 Catch Basin	-7	950.00	\$ -6,650.00
B-9	Type D Inlet	-2	850.00	\$ -1,700.00
B-10	Manhole	-2	1,800.00	\$ -3,600.00
	Net Change			\$ -6,000.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ -4,426.20
	Previous Total	\$ 500,241.10
	This Change Order	\$ -6,000.00
	New Contract Amount to Date	\$ 494,241.10

3. **Time Extension:** None.

4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 5/9/96
Gelco Construction Co. Date

PROJECT MANAGER
Title

Thomas R. Cole April 30, 1996
City of Newberg Date

City Manager
Title

MEMO

Date: April 18, 1996
To: Larry Anderson, Engineering Manager
Copy:
From: Roger Pyles
Subject: **Everest/2ND LID; Catch Basin Detail**

It is proposed that the Catch Basin detail be changed, as follows:

1. For Catch Basin CG-2 (Item B-8):

Substitute City of Tualatin "Oversize Catch Basin", with addition of ladder rungs. Steve obtained this detail, it is being used at Fenway Park. CG-2 is the ODOT standard, problems with CG-2 are: (1) the grate is in 2 pieces, making it difficult to remove/replace for maintenance; (2) the grate runs parallel to the curb. The proposed substitute has dimensions of 2' x 3' inside box vs 2' - 3 3/8 x 2' - 4 1/4 for CG-2; the round numbers are a good feature that improves constructability.

2. For Catch Basin G-1 (Item B-7):

The location for this catch basin is the Colonial Village parking lot, behind the curb, on North side of 2ND Street. G-1 is an area drain. Substitute the "New Newberg Catch Basin". It has the same dimensions as ODOT CG-1. Because "New Newberg Catch Basin" has grates parallel to curb, the grate and frame was reconfigured for grates perpendicular to curb, referring to the pattern from the Tualatin curb (Item 1 above). The reconfigured grate and frame is attached.

3. Proposed criteria for use of Standard or Oversize Catch Basin:

Credit should be given to Steve Biddle for his Rule-of-Thumb for when to use the Oversize Catch Basin in place of the standard catch basin, as follows: When the depth to top of pipe is over 3.0 feet, or when the catch basin is used as a substitute manhole. This criteria will permit maintenance access, it is a good criteria, and Steve should be given full credit.

Using the above criteria, seven (7) CG-2 Catch Basins can be replaced with CG-1, at a savings of \$700. This change is covered by Change Order No. 9.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 10
April 26, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Schedule A - Street Improvements

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. **Revise street improvements as follows:** (1) On Second Street, cancel all street construction from the East curb return of Bina Street to East end of construction, leave existing pavement in place. (2) On Third Street, cancel the top 1.5-inch pavement lift from the East curb return of Bina Street to East end of construction.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-4	Remove Existing AC Pavement	-171 SY	0.70	\$ -120.00
A-5	Crushed Rock Base	-299 SY	3.15	\$ -942.00
A-6	Crushed Rock Leveling Course	-265 SY	1.70	\$ -450.00
A-7	Class C Asphalt Concrete	-361 SY	6.80	\$ -2,454.80
A-8	Concrete Sidewalk	-77 LF	8.90	\$ -685.30
A-9	Concrete Curb & Gutter	-154 LF	6.50	\$ -1,001.00
	Net Change			\$ -5,653.10

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Order	\$ -10,426.20
	Previous Total	\$ 494,241.20
	This Change Order	\$ -5,653.10
	New Contract Amount to Date	\$ 488,288.10

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 5/8/96
Gelco Construction Co. Date

PROJECT MANAGER
Title

Charles R. Cole April 30, 1996
City of Newberg Date

City Manager
Title

M E M O

Date: April 25, 1996
To: File
Copy:
From: Roger Pyles
Subject: Everest/2ND LID; Change Order No. 10

The purpose for this change order is to cancel certain construction elements that would be impacted by required water main extensions by Emery Orchard No. 4.

The 8" water mains on 2ND and 3RD Streets were ended just East of Bina Street. The development of Emery Orchard No. 4 is required to extend these water mains into Phase 4. The street construction on 2ND Street, and top asphalt pavement lift on 3RD Street, will be canceled from Bina Street to the East boundary of Emery Orchard Phase 3. This work is to be completed by Emery Orchard Phase 4, after which they will be reimbursed by the LID at the contract price.

M E M O

OK
Jga 5/14
CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Date: May 13, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 11

The purpose for this change order is to re-construct the 12" storm drain piping from 3RD & Bina Street, to the outlet of the box culvert. This pipe was installed with Emery Orchards No. 3. Its slope and alignment were such that it could not be connected into the outlet of the box culvert.

NOTE FROM DARLA BALDONI

TO: *Peggy Hall*

DATE: *5-16-96*

☐	For your information	☐	Please note and return
☐	For your signature	☒	For your files
☐	Please take action	☐	Would like to see you

REMARKS:

*Original Contract Change order
on Everest/2nd Street LID
Contract for the Record.*

D

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 11
May 8, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: Schedule B - Extra Work

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Construct new 12" storm drain on Third Street, from Bina Street to outfall at the outlet of the box culvert. Construct according to drawing Exhibit A, attached. The price is by Time and Materials, the total not to exceed the figure tabulated below.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-15	Change Order No. 11	1 Lump Sum	3,300.00	\$ 3,300.00
	Net Change			\$ 3,300.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ -16,079.30
	Previous Total	\$ 488,588.00
	This Change Order	\$ 3,300.00
	New Contract Amount to Date	\$ 485,288.00

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 5/10/96
Gelco Construction Co. Date

Don R. Cole 5/15/96
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

1" = 20'

NOTE

- A. 75' OF 12" CSP - C76-V
AT 0.25% SLOPE. CL.-B BEDDING/BACKFILL.
- B. CONNECT TO SPIGOT OF FIRST EXISTING
PIPE SECTION, LEFT IN PLACE.
- C. ABANDON EXISTING PIPE.

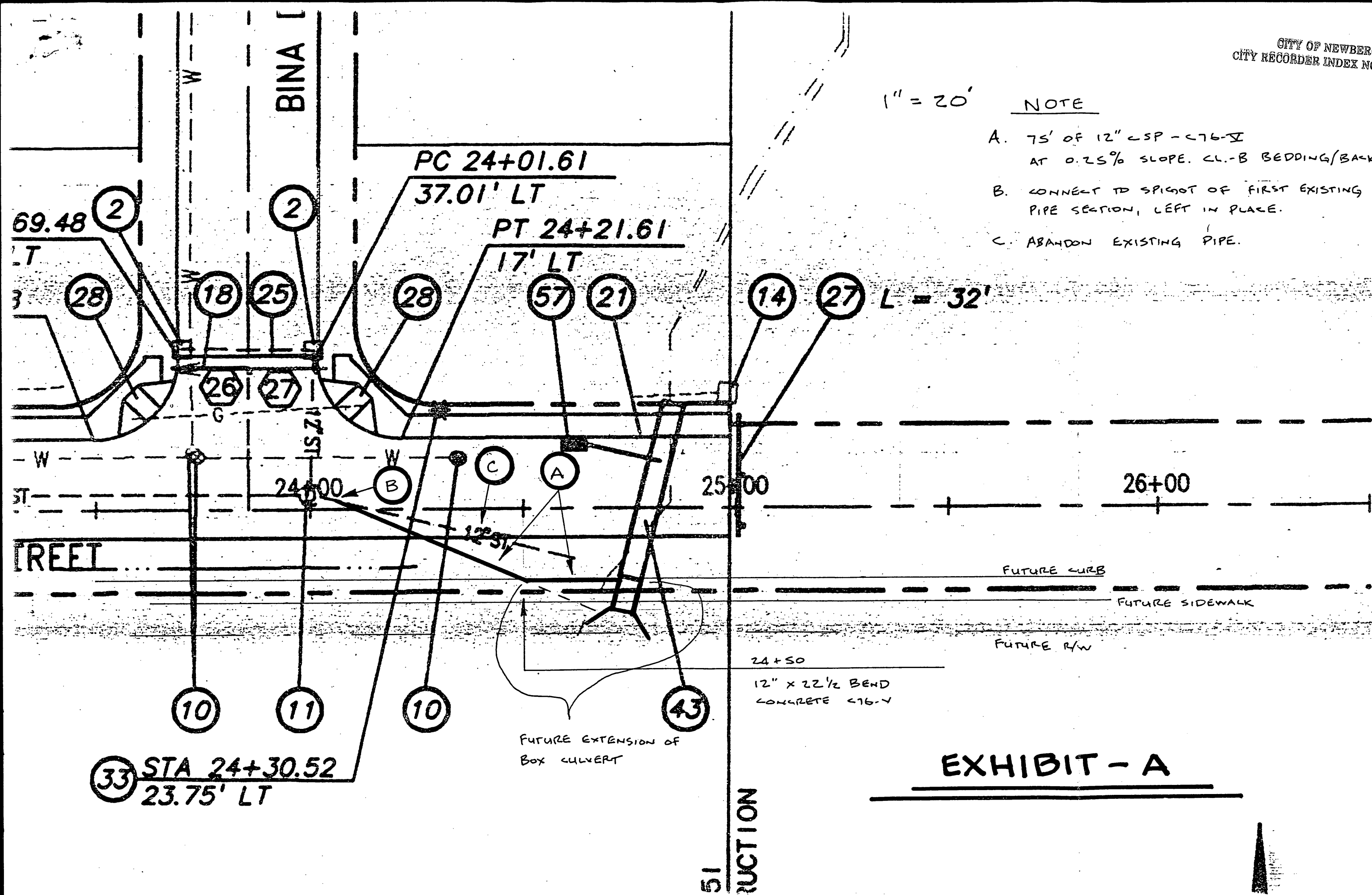


EXHIBIT - A

51
SECTION

MEMO

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Date: May 13, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 12

The purpose for this change order is to grant 30 days extension of time, due to conflicts with utility poles in the path of storm drain construction on 2ND Street. The poles are being relocated by PGE, but several weeks passed before they could schedule it.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 12
May 9, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item:

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. **Description:** Extension of time due to conflicts with utility poles in the path of storm drain construction on 2ND Street.
2. **Cost Summary:** Not applicable.
3. **Time Extension:** 30 days.
4. **Contract Time:** August 31, 1996.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 5/10/96
Gelco Construction Co. Date

Dan R. Cole 5/15/96
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

NOTE FROM TABRINA

TO: *Peggy*
DATE: *5/30*

☐	<i>For your information</i>	☐	<i>Please note and return</i>
☐	<i>For your signature</i>	☒	<i>For your files</i>
☐	<i>Please take action</i>	☐	<i>Would like to see you</i>

REMARKS:

*original for
your files*

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 13
May 21, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-10, Rock for Soft Spots

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change Estimated Quantity and Unit of Measurement for 3RD Street construction. Change measurement from "Truck CY" to "In-place CY". The estimated quantity is based on over-excavation depth of 12 inches, width as follows:

STA 10+42 to 15+05 37 Ft width
STA 15+05 to 24+99 28 Ft width

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-10	Delete, replace with the following:	-50 T.C.Y.	32.00	\$ -1,600.00
A-10	Rock for Soft Spots, 3"-0 in-place	1880 CY	\$25	\$ 47,000
	Net Change			\$ 45,400

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ -12,779.30
	Previous Total	\$ 491,888.00
	This Change Order	45,400-
	New Contract Amount to Date	\$ 491,888.00

~~\$ 537,288-~~ = correct

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 5/23/96
Gelco Construction Co. Date

Diane R. Cole May 29, 1996
City of Newberg Date

Title

City Manager

Title

NOTE FROM TABRINA

TO:

Peggy

DATE:

7/18/96

☒	For your information	☐	Please note and return
☐	For your signature	☐	For your files
☐	Please take action	☐	Would like to see you

REMARKS:

original for your
file.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 14
June 19, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item:

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Add Sheet 15, "Everest Road at Canyon Ridge Apartments" to the drawings. Revise the Schedule of Prices according to the table below. All other items of construction are already included in the Schedule of Prices.

(1) Furnish and install 10" x 12" PVC Tee in existing 12" concrete pipe, connect with flexible couplings; 2 locations. (2) 10" PVC (ASTM D-3034) lateral to catch basin; total of 23 L.F. (3) Restore pavement.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-16	10" Connection to existing 12" Storm Drain	2 Each	2,000.00	\$ 4,000.00
	Net Change			\$ 4,000.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 32,620.70
	Previous Total	\$ 537,288.00
	This Change Order	\$ 4,000.00
	New Contract Amount to Date	\$ 541,288.00

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 6/28/96
Gelco Construction Co. Date

OK [Signature] July 8, 1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

MEMO

Date: June 12, 1996

To: File

Copy:

From: Roger Pyles

Subject: **Everest/2ND LID; Change Order No. 14**

The purpose for this change order is to add Sheet 15 to the drawings, for construction of a half-street improvement on the West side of Everest Street adjacent to Canyon Ridge Apartments. One additional construction item was added (connection into an existing storm drain) that was not used in the original contract.

M E M O

Date: June 21, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 15

The purpose for this change order is to construct short timber retaining walls on the North side of 3RD Street, adjacent to fences where the fence posts were exposed by excavation for the sidewalk.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 15
June 20, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: **Extra Work: Timber Retaining Wall**

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Construct Timber Retaining Walls on North side of 3RD Street, per attached drawing. Approximate height (from sidewalk to top of wall) and length is as follows:

211 Elva: H = 12"; L = 40 feet
212 Doris: H = 12"; L = 35 feet
212 Corrine: H = 18"; L = 50 feet
211 Bina: H = 12"; L = 40 feet

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-27	Timber Retaining Wall	165 LF	\$22 ⁵⁰	\$3,712 ⁵⁰
	Net Change			\$3,712 ⁵⁰

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$
	Previous Total	\$ 504,667.30
	This Change Order	\$3,712 ⁵⁰
	New Contract Amount to Date	\$

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 6/21/96
Gelco Construction Co. Date

David R. Cole 6/26/96
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

CITY OF NEWBERG
 Engineering Department
 414 E. First St.
 NEWBERG, OREGON 97132
 Telephone 538-9421

Project EVERETT/2ND LID

Made By Rmf

Date 6-19-96

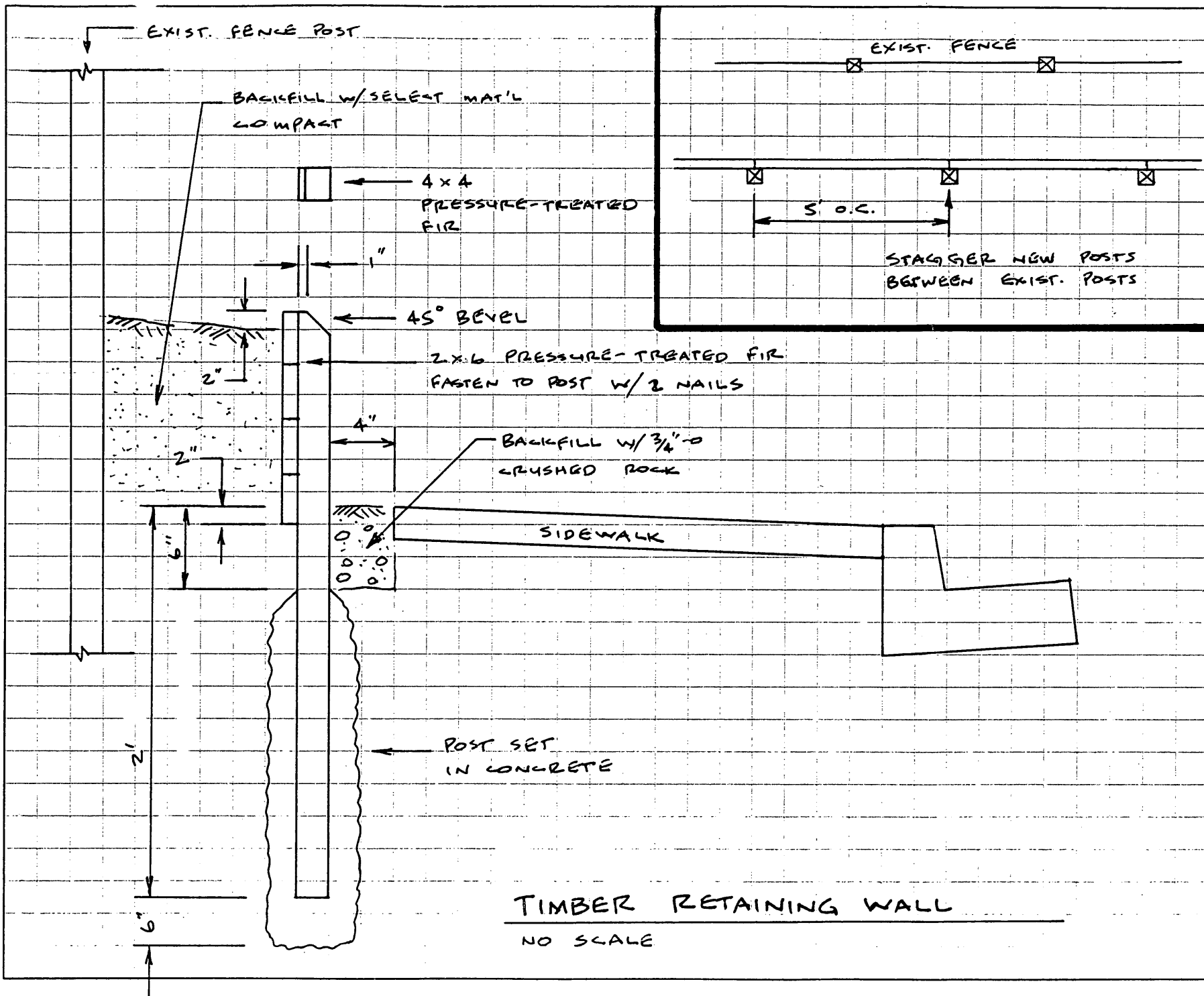
Check By

Date

Project No.

Page

of



CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 16
July 2, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-7, Asphalt Concrete

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Construct Asphalt Concrete Pavement in one lift instead of two lifts, on 3RD Street.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-7	Class C Asphalt Concrete, 3" in two lifts	-4719 SY	6.80	\$ -32,089.00
A-28	Class C Asphalt Concrete, 3" in one lift	4719 SY	6.40	\$ 30,202.00
	Net Change			\$ -1,887.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 40,333.20
	Previous Total	\$ 545,000.50
	This Change Order	\$ -1,887.00
	New Contract Amount to Date	\$ 543,113.50

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 7/2/96
Gelco Construction Co. Date

Charles L. Cole 7/8/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

M E M O

Date: June 27, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 16

The purpose for this change order is to change the paving scheme on 3RD Street. The contract calls for paving 3" in two 1.5" lifts. The scheme will be changed to paving one 3" lift. This change was proposed by the paving sub-contractor.

NOTE FROM TABRINA

TO: *Peggy*

DATE: *7/15/96*

☐	For your information	☐	Please note and return
☐	For your signature	☒	For your files
☐	Please take action	☐	Would like to see you

REMARKS:

original

RECEIVED	
JUL 16 1996	
By	<i>Duon</i>

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 17
July 2, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. 1481

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: **A-10, Rock for Soft Spots**

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change Estimated Quantity and Unit of Measurement for construction on 2ND Street and Everest Street. Change measurement from "Truck CY" to "In-place CY". The estimated quantity is based on over-excavation depth of 12 inches, width as follows:

2ND Street: STA 10+37 to 24+19 37 Ft width
Everest St: STA 9+31 to 13+42 7 Ft width
Everest St: STA 2+77 to 4+90 5.5 Ft width

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-10	Rock for Soft Spots, 3"-0 in-place (Add to Change Order No. 13)	2262 CY	29.00	\$ 65,598.00
	Net Change			\$ 65,598.00

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 38,446.20
	Previous Total	\$ 543,113.50
	This Change Order	\$ 65,598.00
	New Contract Amount to Date	\$ 608,711.50

3. **Time Extension:** None.
4. **Contract Time:** No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 7/2/96
Gelco Construction Co. Date

David K. Cole 7/15/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

MEMO

Date: July 3, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 17

The purpose for this change order is to change the estimated quantity and unit of measurement for Item A-10, "Rock for Soft Spots", for 2ND Street and Everest Street. This is the same change made with Change Order 13 for 3RD Street. The unit price is \$4.00/CY higher to account for underground utilities.

The contract unit was for 50 "Truck-Cubic Yard", which was to be used for small dig-outs. We have encountered weak subgrade, which has made it necessary to over-excavate the entire street. On this scale, in-place measurement is a more efficient measurement method. The unit price was also re-negotiated to account for the large increase in quantity.

NOTE FROM TABRINA

TO: *Reggy*

DATE: *8/1/96*

☐	For your information	☐	Please note and return
☐	For your signature	☒	For your files
☐	Please take action	☐	Would like to see you

REMARKS:

original

RECEIVED	
AUG 02 1996	
By	<i>Dawn</i>

I already
made a
copy & put
w/file.
-Dawn

M E M O

Date: July 19, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 19

The purpose for this change order is to change the height of the Box Culvert Wing Walls. The walls were designed for a tapered wall height; this will be changed to uniform height walls. The design matched the ground topography from plans prepared by OTAK, but the change was necessary because it did not match the ground as re-shaped by Emery Orchards.

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 19
July 16, 1996

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: B-12, Entrance Wing Walls

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. Change height of walls to a uniform height of top of box culvert. The price basis is per Time and Materials.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
B-12	Entrance Wing Walls, Change Wall Height [Add new line to Schedule of Prices at B-12]	1 Lump Sum	\$ 888 ³⁸	\$ 888 ³⁸
	Net Change			\$ 888 ³⁸

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	\$ 119,124.20
	Previous Total	\$ 623,791.50
	This Change Order	\$ 888 ³⁸
	New Contract Amount to Date	\$ 624,679 ⁸⁸

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 7/19/96
Gelco Construction Co. Date

Daniel R. Cole 8/1/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

Gelco Construction Co.

City of Newberg

Everest Road/Second Street LID

Change Order # 19 - Change height of box culvert wing walls

LABOR

Employee	Craft	Hours	Rate	Total
Larry Brown	Carpenter 1	8.00	\$34.02	\$272.16
Scott Heuberger	Laborer 3	8.00	\$29.51	\$236.08

Total Labor Cost

\$508.24

EQUIPMENT

Description	Hours	Rate	Total
Flatbed Truck	8.00	\$8.00	\$64.00
Generator	8.00	\$2.50	\$20.00
Rental Drill			\$28.08

Total Equipment Cost

\$112.08

MATERIALS

Description	Quantity	Unit	Cost
4x8 Plywood	4.00	Sheets	\$111.10
#4 x 20' Rebar	2.00	Each	\$6.58
Cement Nails	20.00	Each	\$8.00
Added Concrete	0.50	CY	\$26.50

Total Materials Cost

\$152.18

TOTAL COST

\$772.50

15% Markup Allowance

\$115.88

TOTAL T&M CHANGE ORDER AMOUNT

\$888.38

CITY OF NEWBERG
CONTRACT CHANGE ORDER NO. 22
August 13, 1996

CITY OF NEWBERG
CITY RECORDER INDEX NO. / 48/

Project: Everest/2nd Street Local Improvement District
Contractor: Gelco Construction Co.
Bid Item: A-20, Survey Monument Boxes

THE CONTRACT IS HEREBY CHANGED AS FOLLOWS:

1. DO NOT install Item A-20, Survey Monument Boxes. Deliver the six (6) cast iron monument boxes salvaged from 2ND Street to the City Public Works Yard. [Aluminum cap centerline monuments, 14 count, will be installed by Otak Inc.]

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-20	Delete, replace with the following:	-8 Each	375.00	\$ -3,000.00
A-20	Survey Monument Boxes, salvage only	1 Lump Sum	ϕ	ϕ
	Net Change			< \$3,000 - >

2. COST SUMMARY	Original Contract Amount	\$ 504,667.30
	Net Change by Previous Change Orders	
	Previous Total	
	This Change Order	< \$3,000 - >
	New Contract Amount to Date	

3. Time Extension: None.
4. Contract Time: No change.

All other provisions of the contract documents remain in full force.

ACCEPTANCE SIGNATURES:

Stanley E. Thompson 8/15/96
Gelco Construction Co. Date

Ernest P. Cole 8/22/1996
City of Newberg Date

PROJECT MANAGER
Title

City Manager
Title

MEMO

Date: August 13, 1996

To: File

Copy:

From: Roger Pyles

Subject: Everest/2ND LID; Change Order No. 22

The purpose for this change order is to change the type of street centerline monument. The cast iron monument boxes called for in the contract will be deleted; they will be replaced with aluminum caps on iron rods, installed by Otak Inc. The six cast iron monument boxes salvaged from 2ND Street (set by the Emery Orchards development) will be delivered to the City Public Works Yard.

Safe Copy

**CITY OF NEWBERG
EVEREST ROAD/SECOND STREET
LOCAL IMPROVEMENT DISTRICT
CONTRACT DOCUMENTS
AUGUST 1995**

NOTE FROM TABRINA

TO: Terry / Duane

DATE: 2/13/96

ASAP
per Dec
2-15-96
per

☐	For your information	☒	Please note and return
☒	For your signature	☐	For your files
☐	Please take action	☐	Would like to see you

REMARKS:

Please sign all
4 contracts and
return to Tabbi

Thankx

2/15
I signed &
move these
on to Terry.
Need to get this
project moving.
C. ppea Yea!
Dane

CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY)
2/02/96

PRODUCER

Potts, Davis & Co.
P. O. Box 390
Salem, OR 97308-0390
503-585-7555

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** Reliance Insurance
COMPANY LETTER **B** Reliance Insurance
COMPANY LETTER **C**
COMPANY LETTER **D**
COMPANY LETTER **E**

INSURED

Gelco Construction Co.
P. O. Box 7716
Salem OR 97303

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING 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. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFF. DATE (MM/DD/YY)	POLICY EXP. DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY	QB167143802	1/01/96	1/01/97	GENERAL AGGREGATE	2000000
	☒ COMM. GENERAL LIABILITY				PROD-COMP/OP AGG.	2000000
	☐ CLAIMS MADE ☒ OCC.				PERS. & ADV. INJURY	1000000
	☐ OWNER'S & CONTRACT'S PROT				EACH OCCURRENCE	1000000
					FIRE DAMAGE(One Fire)	50000
					MED. EXP. (One Per)	5000
B	AUTOMOBILE LIABILITY	QA167143802	1/01/96	1/01/97	COMBINED SINGLE LIMIT	1000000
	☒ ANY AUTO				BODILY INJURY (Per person)	
	☐ ALL OWNED AUTOS				BODILY INJURY (Per accident)	
	☐ SCHEDULED AUTOS				PROPERTY DAMAGE	
	☒ HIRED AUTOS					
	☒ NON-OWNED AUTOS					
	☐ GARAGE LIABILITY					
	EXCESS LIABILITY				EACH OCCURRENCE	
	☐ UMBRELLA FORM				AGGREGATE	
	☐ OTHER THAN UMBRELLA FORM					
	WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY				STATUTORY LIMITS	
					EACH ACCIDENT	
					DISEASE-POLICY LIMIT	
					DISEASE-EACH EMP.	
	OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

Certificate holder is named as additional insured as respects work performed on its behalf by the named insured per CG2010Gelco attached.
Re: Everest Road/Second St. Local Improvements

CERTIFICATE HOLDER

City of Newberg
Community Develop. Ofc.
719 E. First St.
Newberg, OR 97132

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 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

Edward E. Davis

**ADDITIONAL INSURED -- OWNERS, LESSEES OR
CONTRACTORS (FORM B)**

****EFFECTIVE 2/02/96**

POLICY NUMBER	POLICY PERIOD	AGENCY NUMBER
QB167143802	FROM: 1/01/96 TO: 1/01/97	568451

NAMED INSURED: Gelco Construction Co.

This endorsement changes the policy. Please read it carefully.

This endorsement modifies insurance provided under the following:
Commercial General Liability Coverage Part.

Schedule

Name of person or organization:

City of Newberg, Newberg, Oregon

Specific project(s) or work (if blank, this endorsement applies to
all projects or work):

Everest Road/Second St. Local Improvements

**Who is an Insured (Section II) is amended to include as an insured the
person or organization shown in the schedule, but only with respect to
liability arising out of your work for that insured by or for you.**

**The insurance provided to the 'additional insured' does not
apply to:**

1. Bodily injury, property damage, or personal injury arising out of
an architect's, engineer's or surveyor's rendering of or failure
to render any professional services for you, for the 'additional
insured' or for others including:
 - A. The preparing, approving or failure to approve maps, drawings
opinions, reports, surveys, change orders, designs,
or specifications; and
 - B. Supervisory, inspection or engineering services.
2. Advertising injury.

CERTIFICATE OF INSURANCE

COMPANY:

SAIF Corporation
Salem Office
480 Church Street SE
Salem, OR 97312-3000

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS TO THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED:

Gelco Construction Co
PO Box 7716
Salem, OR 97303

THE POLICY OF INSURANCE LISTED BELOW HAS BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. THE INSURANCE AFFORDED BY THE POLICY DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICY.

POLICY NO.	POLICY EFF DATE	POLICY EXP DATE	LIABILITY LIMITS
423024	07/01/1995	06/30/1996	(in thousands)

WORKERS' COMPENSATION**STATUTORY**

\$500 (each accident)
\$500 (each employee)
\$500 (Disease, Policy)

OTHER COVERAGE AFFORDED:

DESCRIPTION OF OPERATIONS/LOCATIONS/SPECIAL ITEMS: Street Improvements - Everest Road at Second Street

CANCELLATION:

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS' WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OF LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE:

**CERTIFICATE HOLDER:**

City of Newberg
719 E. First Street
Newberg, OR 97132

Issue Date (02/02/96)

EVEREST ROAD/SECOND STREET
LOCAL IMPROVEMENT DISTRICT

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City of Newberg
Everest Road/Second Street Local Improvement District

Sealed bids for the construction of the Everest Road/Second Street Local Improvement District in the City of Newberg, Oregon addressed to the Community Development Director, 719 E. First St., Newberg, Oregon 97132, will be received by Community Development Director, until 2:00 p.m. prevailing time on the 6th day of September, 1995 at Community Development Building, 719 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 construction and reconstruction of 3,300 lineal feet of City street including 1,900 l.f. storm sewer, 2,500 l.f. sidewalk and 250 l.f. water main.

Plans and Specifications may be **obtained** at the office of the Community Development Director, 719 E. First St., Newberg, Oregon 97132 upon receipt of a non-refundable payment of \$40.00 for each set. Plans and specifications may be **examined** at the same location as well as the following locations:

Daily Journal of Commerce, 2014 NW 24th Ave., Portland, OR 97210

Daily Journal of Commerce, 12254 SW Garden Place, Bldg. #1, Tigard, OR 97223

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 1st day of September, 1995.

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.

Greg Scoles
Community Development Director

BID

PLACE: CITY OF NEWBERG, OREGON

PROJECT: EVEREST ROAD/SECOND STREET
LOCAL IMPROVEMENT DISTRICT

TO: MAYOR AND CITY COUNCIL
CITY OF NEWBERG, OREGON
719 E. FIRST STREET
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 Community Development Director.

The Bidder further agrees to begin work within ten calendar days after receipt of written "Notice to Proceed" of the owner and to fully complete the project within ninety (90) consecutive calendar days thereafter. 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.

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.

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. 1 DATE 8/29/95 NO. 3 DATE 9/13/95
NO. 2 DATE 9/6/95 NO. _____ DATE _____

The name of the Bidder submitting this Proposal is GELCO CONSTRUCTION COMPANY
doing business at P.O. Box 7716, SALEM, OREGON, 97303
Street City State Zip

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

BIDDER'S PERFORMANCE BOND STATEMENT

GELCO CONSTRUCTION COMPANY, hereinafter referred to as Contractor, is
(Name of Contractor)

submitting a bid to the City of Newberg pursuant to the latter's advertisement for bids dated August 1995 for a Everest Road/Second Street Local Improvement District.

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.

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 THE AMERICAN INSURANCE CO.
(Surety Company)

POTTS, DAVIS
Contractor hereby authorizes S/C THE AMERICAN INSURANCE CO.
(Surety Company) to disclose any information to the Owner
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 hand this 19TH day of SEPT 1995.

X [Signature]
Signature of Bidder JAMES D MONAGHAN
PRESIDENT
Title

(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 19TH day of SEPT 1995.

GELCO CONSTRUCTION CO.
Name of Corporation

By X [Signature]
JAMES D. MONAGHAN
PRESIDENT

Title

Attest

[Signature]
Secretary

364-1198

EVEREST ROAD/SECOND STREET
LOCAL IMPROVEMENT DISTRICT
SCHEDULE OF PRICES

ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE IN FIGURES	UNIT PRICE IN WRITING	TOTAL AMOUNT
SCHEDULE A - STREET IMPROVEMENTS					
A-1 Clearing and grubbing and removal of debris and trees in grading areas, including disposal	3.50	Ac.	2500 ⁰⁰	TWO THOUSAND FIVE HUNDRED	8,750 ⁰⁰
A-2 Excavation/ Embankment; Export Excess Material	3950.00	C.Y.	13 ⁰⁰	THIRTEEN ^{NO} /100	51,350 ⁰⁰
A-3 Sawcut existing A.C. pavement at match lines	845.00	L.F.	1.80	One Dollar & Eighty Cents	1,521.00
A-4 Removal of existing A.C. pavement, including disposal	4080.00	S.Y.	.70	Seventy Cents	2,856.00
A-5 Crushed Rock Base, 6" compacted thickness, 1 1/2"-0" rock, complete in place	12372.00	S.Y.	3.15	Three Dollars & 15/100	38,971.80
A-6 Crushed Rock Leveling Course, 3" compacted thickness, 3/4"-0" rock, complete in place	11279.00	S.Y.	1.70	One Dollar & 70/100	19,174.30
A-7 Class "C" A.C., 3", in two compacted lifts, complete in place	11279.00	S.Y.	6 ⁸⁰	SIX & 80/100	76,697 ²⁰
A-8 Concrete sidewalk (Type B)	3395.00	L.F.	8.90	Eight Dollars & 90/100	30,215.50
A-9 Concrete curb and gutter, complete in place	5480.00	L.F.	6.50	Six Dollars & 50/100	35,620.00
A-10 Rock for Soft Spots, 6"-0" including removal and replacement	50.00	T.C.Y.	32.00	Thirty Two Dollars & 00/100	1,600.00

ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE IN FIGURES	UNIT PRICE IN WRITING	TOTAL AMOUNT
A-11 Wheelchair Ramp	25.00	Each	275.00	Two Hundred & Seventy Five Dollars & no/100	6,875.00
A-12 Commercial Driveway Apron	305.00	L.F.	17.00	Seventeen Dollars & no/100	5,185.00
A-13 Residential Driveway Apron	70.00	L.F.	13.75	Thirteen Dollars & 75/100	962.50
A-14 Street Light	8.00	Each	3,000.00	Three Thousand Dollars & no/100	24,000.00
A-15 Adjust Manhole Cover	18.00	Each	450.00	Four Hundred & Fifty Dollars & no/100	8,100.00
A-16 Adjust Valve Cover	39.00	Each	80.00	Eighty Dollars & no/100	3,120.00
A-17 Replace mailbox	3.00	Each	175.00	One Hundred & Seventy Five Dollars & no/100	525.00
A-18 Relocate Water Meter	3.00	Each	420.00	Four Hundred & Twenty Dollars & no/100	1,260.00
A-19 Erosion Control Measures	1.00	L.S.	5,200.00	Five thousand, Two Hundred Dollars & no/100	5,200.00
A-20 Survey Monument Boxes	8.00	Each	375.00	Three Hundred & Seventy Five Dollars & no/100	3,000.00
A-21 Street Barricades	3.00	Each	275.00	Two Hundred & Seventy Five Dollars & no/100	825.00
A-22 Seeded Lawn	3000.00	S.Y.	0.80	80 CENTS	2,400.00
A-23 Temp. Traffic Control	1.00	L.S.	8,000.00	Eight Thousand Dollars & no/100	8,000.00
A-24 A.C. Patch (3" A.C./6" Base),	300.00	S.Y.	40.00	Forty Dollars & no/100	12,000.00
TOTAL SCHEDULE A					34,820.30

SCHEDULE B - STORM SEWER

B-1 Construct 10" CSP with Select Backfill	165.00	L.F.	30.00	Thirty Dollars & no/100	4,950.00
B-2 Construct 10" DIP with Select Backfill	32.00	L.F.	36.00	Thirty Six Dollars & no/100	1,152.00

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE IN FIGURES	UNIT PRICE IN WRITING	TOTAL AMOUNT
B-3	Construct 12" CSP with Select Backfill	543.00	L.F.	37.00	Thirty Seven Dollars & ¹⁰ / ₁₀₀	20,091.00
B-4	Construct 15" CSP with Select Backfill	947.00	L.F.	38.00	Thirty Eight Dollars & ¹⁰ / ₁₀₀	35,986.00
B-5	Construct 15" C.I.V RCP with Select Backfill	220.00	L.F.	42.00	Forty Two Dollars & ¹⁰ / ₁₀₀	9,240.00
B-6	Construct 3' X 5' Precast Concrete Box Culvert	50.00	L.F.	385.00	Three Hundred & Eighty Five & ¹⁰ / ₁₀₀	19,250.00
B-7	Construct type CG-1 Catchbasin Complete in place	1.00	Each	850.00	Eight Hundred & Fifty & ¹⁰ / ₁₀₀	850.00
B-8	Construct Type CG-2 Catchbasin, Complete in place	8.00	Each	950.00	Nine Hundred & Fifty & ¹⁰ / ₁₀₀	7,600.00
B-9	Construct Type D Inlet, Complete in place	3.00	Each	850.00	Eight Hundred & Fifty & ¹⁰ / ₁₀₀	2,550.00
B-10	Construct Standard Concrete Manhole, complete in place	6.00	Each	1,800.00	One thousand, Eight Hundred Dollars and ¹⁰ / ₁₀₀	10,800.00
B-11	Class-50 Rip-Rap	3.00	C.Y.	50.00	Fifty Dollars & ¹⁰ / ₁₀₀	150.00
TOTAL SCHEDULE B						112,619.00

SCHEDULE C - WATER MAIN

C-1	Construct 8" Ductile Iron with Select Backfill	232.00	L.F.	45.00	Forty Five Dollars & ¹⁰ / ₁₀₀	10,440.00
C-2	Tap 8" main, connect water main	1.00	Each	2,200.00	Two thousand, Two Hundred Dollars & ¹⁰ / ₁₀₀	2,200.00
TOTAL SCHEDULE C						12,640.00

ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT OF MEASUREMENT	UNIT PRICE IN FIGURES	UNIT PRICE IN WRITING	TOTAL AMOUNT
SCHEDULE D - SANITARY SEWER					
D-1 Construct 8" Sanitary Sewer with Select Backfill	120.00	L.F.	45.00	Forty Five Dollars & ¹⁰ / ₁₀₀	5,400.00
TOTAL SCHEDULE D					5,400 ⁰⁰
MOBILIZATION		L.S. L.S	25,800 ⁰⁰	TWENTY FIVE THOUSAND EIGHT HUNDRED & ⁸⁰ / ₁₀₀	25,800 ⁰⁰
TOTAL CONSTRUCTION COST				FIVE HUNDRED FOUR THOUSAND SIX HUNDRED SIXTY SEVEN & ³⁰ / ₁₀₀	504,667 ³⁰

BIDDERS NAME

GELCO CONSTRUCTION CO.

ADDRESS

P.O. Box 7716

CITY, STATE, ZIP

SALEM OR 97303

PHONE/FAX

503-364-2638

X 503-364-8115

GELCO CONSTRUCTION CO.

FAX TRANSMITTAL

1745 Salem Industrial Drive, N.E.
P.O. Box 7716
Salem, Oregon 97303
(503) 364-2638

GELCO TELECOPIER NO. (503) 364-8115

COMPANY: Numburg Legal Dept FAX NO. 538-5393
ATTEN: Peggy DATE: 2-16-96
FROM: Gary Heller TIME: 8:30
SUBJECT: Corporate Resolution

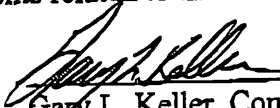
There are 2 page(s), including this cover sheet, with this transmission. Our machine is a RICOH Rapicom 610. If there are any difficulties in transmission, please telephone our Salem, Oregon office at (503) 364-2638.

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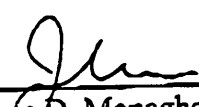
GELCO CONSTRUCTION CO.**CORPORATE RESOLUTION****Memorandum of Consent to Action
of the Chairman of the Board
in Lieu of a Special Meeting**

The undersigned, being the Chairman of the Board of Gelco Construction Co., a corporation, hereby consents to the adoption of the following resolution in lieu of a special meeting of the Board of Directors of the corporation, effective January 2, 1996.

RESOLVED, that James D. Monaghan designates the following personnel have the authorization to enter into and sign contract, proposals, Bid, Performance and Payment Bonds, and other legal documents related to the business of Gelco Construction Co.



Gary L. Keller, Controller

Stanley E. Thompson, Chief Estimator

James D. Monaghan, Chairman of the Board
Gelco Construction Co.

Date: January 2, 1996

PERFORMANCE - PAYMENT BOND Bond No.: SCR 111 4156 7914

KNOW ALL MEN BY THESE PRESENTS: That we Gelco Construction Co.

A Corporation hereinafter called "Principal" and The American Insurance Company
(Corp., Partnership, or Individual)
of Novato, State of California, herein after called "Surety", are held
firmly bound unto the City of Newberg, Oregon, hereinafter called "Owner" in the penal sum of _____
* _____ Dollars (\$504,667.30) in lawful money of the United States, for the payment
of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and
successors, jointly and severally, firmly by these presents.

*Five Hundred Four Thousand Six Hundred Sixty-seven and 30/100 Dollars
THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a
certain contract with the Owner, dated this 6th day of February 1998, a copy of which is hereto
attached and made a part hereof for the construction of the Everest Road/Second Street Local
Improvement District.

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.

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.

GENERAL
POWER OF
ATTORNEY

THE AMERICAN INSURANCE COMPANY

KNOW ALL MEN BY THESE PRESENTS: That THE AMERICAN INSURANCE COMPANY, a Corporation incorporated under the laws of the State of New Jersey on February 20, 1846, and redomesticated to the State of Nebraska on June 1, 1990, and having its principal office in the City of Omaha, State of Nebraska, has made, constituted and appointed, and does by these presents make, constitute and appoint

--- ALLISON R. LIESSE ---

SALEM OR

its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, seal, acknowledge and deliver any and all bonds, undertaking, recognizances or other written obligations in the nature thereof -----

and to bind the Corporation thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the Corporation and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises.

This power of attorney is granted pursuant to Article VII, Sections 45 and 46 of By-laws of THE AMERICAN INSURANCE COMPANY now in full force and effect.

"Article VII. Appointment and Authority of Resident Secretaries, Attorneys-in-Fact and Agents to accept Legal Process and Make Appearances.

Section 45. *Appointment.* The Chairman of the Board of Directors, the President, any Vice-President or any other person authorized by the Board of Directors, the Chairman of the Board of Directors, the President or any Vice-President may, from time to time, appoint Resident Assistant Secretaries and Attorneys-in-Fact to represent and act for and on behalf of the Corporation and Agents to accept legal process and make appearances for and on behalf of the Corporation.

Section 46. *Authority.* The authority of such Resident Assistant Secretaries, Attorneys-in-Fact and Agents shall be as prescribed in the instrument evidencing their appointment. Any such appointment and all authority granted thereby may be revoked at any time by the Board of Directors or by any person empowered to make such appointment."

This power of attorney is signed and sealed under and by the authority of the following Resolution adopted by the Board of Directors of THE AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 31st day of July, 1984, and said Resolution has not been amended or repealed:

"RESOLVED, that the signature of any Vice-President, Assistant Secretary, and Resident Assistant Secretary of this Corporation, and the seal of this Corporation may be affixed or printed on any power of attorney, on any revocation of any power of attorney, or on any certificate relating thereto, by facsimile, and any power of attorney, any revocation of any power of attorney, or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Corporation!"

IN WITNESS WHEREOF, THE AMERICAN INSURANCE COMPANY has caused these presents to be signed by its Vice-President, and its corporate seal to

be hereunto affixed this 10th day of February, 19 94.



THE AMERICAN INSURANCE COMPANY

By

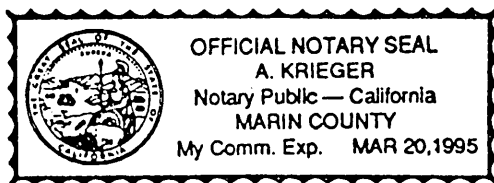
[Signature]
Vice-President

STATE OF CALIFORNIA
COUNTY OF MARIN

ss.

On this 10th day of February, 19 94, before me personally came M. A. Mallonee, to me known, who, being by me duly sworn, did depose and say: that he is Vice-President of THE AMERICAN INSURANCE COMPANY, the Corporation described in and which executed the above instrument; that he knows the seal of said Corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Corporation and that he signed his name thereto by like order.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year herein first above written.



CERTIFICATE

[Signature]
Notary Public

ss.

STATE OF CALIFORNIA
COUNTY OF MARIN

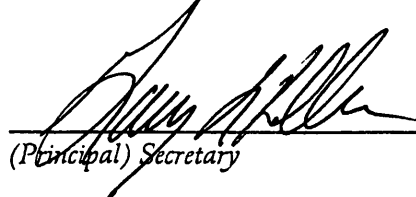
I, the undersigned, Resident Assistant Secretary of THE AMERICAN INSURANCE COMPANY, a NEBRASKA Corporation, DO HEREBY CERTIFY that the foregoing and attached POWER OF ATTORNEY remains in full force and has not been revoked; and furthermore that Article VII, Sections 45 and 46 of the By-laws of the Corporation, and the Resolution of the Board of Directors; set forth in the Power of Attorney, are now in force.

Signed and sealed at the County of Marin. Dated the 6th day of February, 1996.



[Signature]
Resident Assistant Secretary

IN WITNESS WHEREOF, this instrument is executed this 6th day of February 1998


(Principal) Secretary

Gelco Construction Co.
Principal

PO BOX 7716 (s)

SALEM, OR 97303
(Address - Zip Code)

(SEAL)


Witness as to Principal

PO BOX 7716 SALEM, OR 97303
(Address - Zip Code)

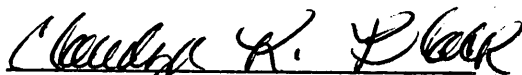
ATTEST

(Surety) Secretary

The American Insurance Company
Surety

By 
Attorney-in-fact Allison R. Liesse

(SEAL)


Witness as to Surety

P.O. Box 390, Salem, OR 97308-0390
(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.

CONTRACT FOR CONSTRUCTION

THIS CONTRACT, made and entered into this 6TH day of FEBRUARY, 199⁶, by and between the CITY OF NEWBERG, OREGON, a municipal corporation, hereinafter called the "OWNER", and

GELCO CONSTRUCTION COMPANY

of P.O. Box 7716

SALEM, OREGON 97303

hereinafter called the "CONTRACTOR".

WITNESS:

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 Everest Road/Second Street Local Improvement District to the extent of the Bid made by the Contractor on the 19TH day of SEPTEMBER 1995, all full compliance with Contract Documents referred to herein.

The Advertisement for Bid, the signed copy of the Bid made by the Contractor, the fully executed Performance and Payment Bond, the General Provisions, the Special Provisions, the Technical Provisions, and the Plans consisting of thirteen (13) sheets entitled Everest Road/Second Street Local Improvement District dated August 1995, 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 Community Development Director 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.

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 Chas R. Cole
City Manager.
Title

CONTRACTOR

By Gary L. Heller
Controller
Title

APPROVED AS TO FORM:

[Signature]
City Attorney

PERFORMANCE - PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That we _____

A _____ hereinafter called "Principal" and _____
(Corp., Partnership, or Individual)
of _____, State of _____, herein after called "Surety", are held
firmly bound unto the City of Newberg, Oregon, hereinafter called "Owner" in the penal sum of _____
Dollars (\$ _____) in lawful money of the United States, for the payment
of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and
successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a
certain contract with the Owner, dated this ____ day of _____, 1995, a copy of which is hereto
attached and made a part hereof for the construction of the Everest Road/Second Street Local
Improvement District.

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.

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 this ____ day of _____ 1995.

Principal

(Principal) Secretary

(s)

(Address - Zip Code)

(SEAL)

Witness as to Principal

(Address - Zip Code)

ATTEST

Surety

(Surety) Secretary

By _____
Attorney-in-fact

(SEAL)

Witness as to Surety

(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.

GENERAL PROVISIONS

**CITY OF NEWBERG
EVEREST ROAD/SECOND STREET L.I.D.**

AUGUST 1995

GENERAL PROVISIONS

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 Permittee 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.

GENERAL PROVISIONS

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.

GENERAL PROVISIONS

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 to the work which modify or supplement the standard specification.

1.23 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.

1.24 Standard Drawings.

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

1.25 State.

The State of Oregon.

1.26 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.

GENERAL PROVISIONS

1.27 Street.

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

1.28 Surety.

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

1.29 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.

1.30 Work.

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

1.31 Abbreviations and Symbols.

A.A.S.H.O. (AASHO) American Association of State Highway Officials; A.G.C. (AGC) Associated General Contractors of America; 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. The Contracting Agency will not be liable for any loss sustained by the Contractor as a result of any variance between conditions as set forth in the soil reports or as shown by the logs of test

GENERAL PROVISIONS

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 interpretation 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.

GENERAL PROVISIONS

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

GENERAL PROVISIONS

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

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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.

Non payment 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 of 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.	\$ 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 or cancellation of the insurance policies.

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 PROVISIONS, 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 PROVISIONS. Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit.

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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 but not shown on the plans and detailed drawings, or anything shown on the plans and detailed drawings but 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 or standard drawing in the contract documents shall refer to the version that is in force at

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the time of advertisement for bids.

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

- (1) Permits from outside 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. 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. 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 standard engineering practice. Shop drawings shall be of sufficient size and scale to clearly illustrate all details. 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. 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 drawing.

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 made without additional cost to the Contracting Agency, and the 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.

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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 of 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 Contractor 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 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 insurance, health and welfare, pension, vacation, and other similar purposes shall be included in this cost.

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4.08 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 therefore.

4.08A Labor.

The cost of all labor used in performing extra work under this contract shall be in accordance with Section 4.07.

4.08B 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.

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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.

4.08C 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 4.08D.

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

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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 4.08C 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 into the location 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.

4.08D 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,

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the hourly rate of pay and hours worked together with the size, type, and identification number of equipment and hours of equipment operation. All reports shall be signed by the Contractor or his authorized representative.

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.

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.

4.09 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 from 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," including all charges for water, are to be absorbed in the prices bid for the various bid items.

4.10 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

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accordance with the requirements of governing authorities. The Contractor shall be responsible for any injury to persons or property resulting from extermination work.

4.11 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 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 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 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.

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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 it 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 therefore.

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 Section 5.11 herein, prior to excavating around such utilities to ascertain that the abandonment of the utility

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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 and, 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 4.08.

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.

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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 or included in the prices 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 construed 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 connections 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 4.08.

5.09 By the Contractor for His Own Convenience.

The temporary or permanent relocation or 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 or included in the prices 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 or 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 4.08.

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

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the 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 4.08).

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 contract items.

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, after approval from 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.

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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. [BY CONTRACTOR]

The Contractor 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 rock, curbs and gutters, walks, structures and utilities.

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 line as indicated on the plans or grade sheet. Upon request a copy of the grade sheet will be furnished to the Engineer. Grade stakes will be set by the Contractor to the finished grade of the subgrade and also of the base rock, or as determined necessary by the Engineer, and the tops of these stakes marked blue or red.

The Contractor shall be responsible for the preservation of construction survey stakes and marks for the duration of their usefulness during construction.

Construction staking shall be considered incidental to the work and the cost included in the itemized unit prices for each bid item.

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.

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 that any variation from a straight grade can be detected. If any such 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.

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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 or 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 not relieve him or his surety from this responsibility.

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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 5.23, 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 that 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.

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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 4.08.

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

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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 wording 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.

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. 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 time specified for completion of the work under the contract shall not be affected by any circumstances whatsoever developing 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

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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 PROVISIONS. Parking of cars may be prohibited on streets where construction work, such as grading or paving operations are in progress. When directed by the Engineer, traffic shall be controlled or routed through the construction area, 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

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- (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 and maintain smooth and dust free
- 3. More than one week - if on a major or secondary arterial 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 4.08 and 4.09.
 - (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

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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

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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 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 hour's work 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 if 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, that 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 the wage paid by any contractor or subcontractor to workmen is based on a period of time other than an hour, the hourly wage shall be mathematically determined by the number of hours worked in that period. The "locality", for the purposes hereof, shall be the largest city in the county or counties in which the work under the contract is performed.

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In case any dispute arises as to what is the prevailing rate of wage for the same trade or occupation in the locality and that dispute cannot be settled by the parties involved, the dispute shall be referred to the Commissioner of the State Bureau of Labor, who will determine the prevailing rate of wage for the same trade or occupation in the locality.

The minimum wage rates applicable to the work to be done under the contract are those prescribed under the provisions of ORS 279.348 through 279.356 and laws amendatory thereto. The Contractor is reminded that a provision of these statutes requires the certification and filing of the payroll with the owner at each of the following times: (1) once before the payment of the first monthly estimate, (2) once immediately after any change in the wage rates, and (3) once before final payment is made.

Copies of prevailing wage rates may be obtained from the Bureau of Labor, 115 Labor and Industries Building, Salem, Oregon 97310.

The Contractor shall: 1) Make payment promptly, as due, to all persons supplying to such contractor labor or material for the prosecution of the work provided for in such contract. 2) Pay all contributions or amounts due the Industrial Accident Fund from such contractor or subcontractor incurred in the performance of the contract. 3) Not permit any lien or claim to be filed or prosecuted against the state, county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished. 4) Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

Before payment is made by or on behalf of the Contracting Agency of any sum or sums due under the contract, the Contractor or his surety and every subcontractor or his surety shall submit a statement in writing in a form prescribed by the State Labor Commissioner certifying under oath the hourly rate of wage paid each classification of workmen employed by him upon the work under the Contract, and further certifying that no workmen employed by him upon work has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the contract. These statements are to be submitted to the Engineer in the manner and at the times designated by him.

In case of conflict between any of the minimum hourly wage rates set forth in the schedule above referred to and other pertinent minimum hourly wage rates, as such other rates may have been set forth in the contract provisions in accordance with the federal regulations, the higher of the conflicting wage rates shall be applicable under the contract.

There is no representation on the part of the Contracting Agency that labor can be obtained at the hourly rates as may be shown in the SPECIAL PROVISIONS. It is the responsibility of bidders to inform themselves as to local labor conditions and prospective changes or adjustments of wage rates. No increases in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed.

If the Contractor fails, neglects, or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a subcontractor by any person, or the assignee of the person, in connection with the public works contract as such claim becomes due, the proper officer or officers of

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the public Contracting Agency may pay such claim and charge the amount of the payment against funds due or to become due the Contractor by reason of the contract. (Reference: ORS 279.314).

7.10 Hours of Work, Saturday, Sunday, Holiday and Overtime Work.

The Contractor shall comply fully with ORS 279.334 of the Oregon Revised Statutes, which reads as follows: "In all cases where labor is employed by the state, county, school district, municipality, municipal corporation, or subdivision, through a contractor, no person shall be required or permitted to labor more than eight hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely required it, in which event, the person or persons so employed for excessive hours shall receive at least time and a half pay for all overtime in excess of eight hours a day, or for work performed on Saturday and on ...legal holidays."

However, if it is necessary for the Contractor to perform construction work on Saturdays, Sundays, legal holidays or outside the 8 hours regular working day, the Contractor shall first notify the Engineer of his intent to do so prior to commencing such "overtime work". In any event, all work shall be subject to approval of the City Engineer. Prior to start of such work, the Contractor shall arrange with the City Engineer for the continuous or periodical inspection of the work, surveys, and tests of materials when necessary.

7.11 Permits and Licenses.

Except for private contracts or unless otherwise specified elsewhere in these specifications, the Contracting Agency will obtain all other permits and licenses and pay any fees connected therewith, having to do with his construction operations.

7.12 Clearing and Burning Permits.

The Contractor shall comply fully with ORS 477.685 which reads, in part, as follows:

"(1) Before clearing any right-of-way for any highway or railroad, or any power, commercial telegraph or telephone line, or for any transmission or transportation utility right-of-way on any forest land, whether upon his land or that of another, where the clearing would constitute a fire hazard, every person shall file with the forester a general description of the right-of-way to be cleared. The forester shall issue a written permit for such 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.

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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 harmless from any damage, costs and expenses by reason of any infringement of the patent thereof, and any loss to 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, co- partnership, 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 for 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

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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 the work before such suspension, the Contractor will be paid such 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 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

GENERAL PROVISIONS

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. 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.

Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather or the conditions resulting from the 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.

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 be allowed 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

GENERAL PROVISIONS

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

GENERAL PROVISIONS

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 or 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 advertising matter shall be attached or painted on surfaces of buildings, fences or canopies, except the names of contractors and subcontractors, with their addresses and the designation of their particular branch may be shown on signs of a removable type. Size and location of such signs shall be subject to approval of the Engineer.

8.10 Assignment.

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.

8.11 Subcontracts.

Names of subcontractors for all or any portion of the work shall be submitted to the

GENERAL PROVISIONS

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.

8.12 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 subcontracts 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), 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

GENERAL PROVISIONS

measurement and such weights will be converted to volume 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, plant, and equipment as set forth in said bid items, and as

GENERAL PROVISIONS

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 laws or local ordinances, 5% will be deducted and retained by the 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.

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

**CITY OF NEWBERG
EVERST ROAD/SECOND STREET L.I.D.**

AUGUST 1995

SPECIAL PROVISIONS

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 90 consecutive calendar days to complete all work.

3. 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.

4. 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

SPECIAL PROVISIONS

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).

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.

5. PIPE AND FITTINGS

The Contractor is responsible for supplying and storing all pipe and materials.

6. CULVERTS

Where concrete pipe or metal culverts are encountered in the ditch line of the water line or adjacent thereto where pipe material may cause a hazard, pipe material shall be removed to install water line and then existing pipe material shall be replaced in existing location and grade.

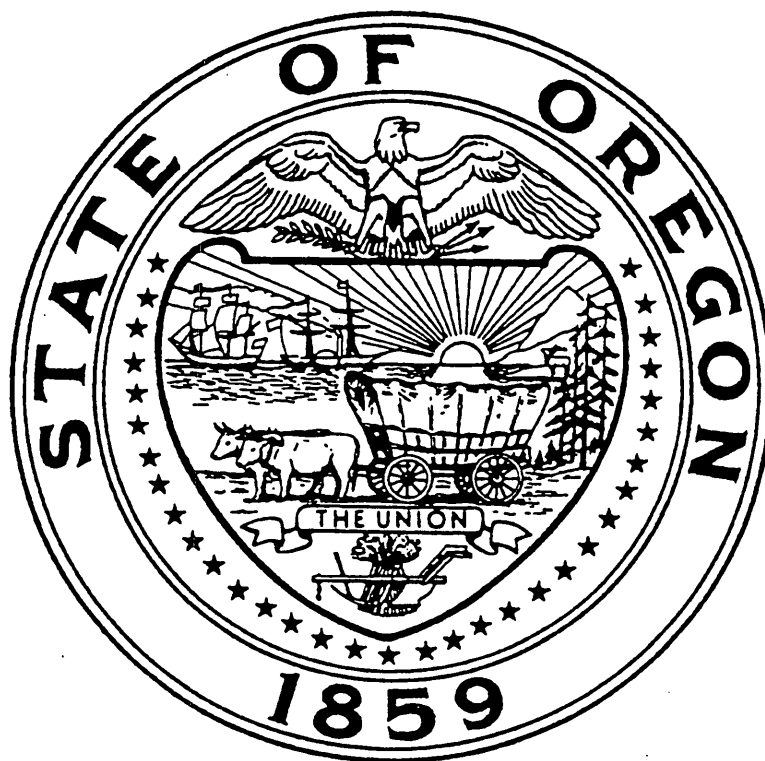
7. TURNING OFF WATER LINES

The Contractor is required to give 72 hour notice to all affected water users if the Contractor is going to shut the water line down for construction.

PREVAILING WAGE RATES

for

Public Works Contracts in Oregon



BOLI

Jack Roberts
Commissioner
Bureau of Labor and Industries

Effective July 1, 1995

Oregon

BUREAU
OF LABOR
AND INDUSTRIES



Jack Roberts
Commissioner

July 1, 1995

This booklet contains the Prevailing Wage Rates for non-residential building and construction trades in the State of Oregon. These rates are effective July 1, 1995. These rates have been amended in accordance with ORS 279.348 through ORS 279.365. A new determination of these rates is issued two times each year.

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 Coordinator in Portland (731-4466). If you have any questions about the manner in which the Prevailing Wage Rates are enforced, contact the Wage and Hour Division in Portland (731-4074).

JACK ROBERTS
Commissioner
Bureau of Labor and Industries

PORTLAND
800 NE Oregon St. # 32
Portland, OR 97232
(503) 731-4200
FAX (503) 731-4069

EUGENE
165 E 7th Street, Suite 220
Eugene, OR 97401
(503) 686-7623
FAX (503) 686-7980

PENDLETON
200 Hailey Ave., Suite 308
PO Box 730
Pendleton, OR 97801
(503) 276-7884
FAX (503) 276-2950

BEND
1250 NE 3rd, Suite B105
Bend, OR 97701
(503) 388-6330
FAX (503) 388-6273

MEDFORD
700 E Main, Suite 105
Medford, OR 97504
(503) 776-6284
FAX (503) 776-6270

SALEM
3865 Wolverine St. NE: E-1
Salem, OR 97310
(503) 373-1447
FAX (503) 373-7636

COOS BAY
320 Central Ave., Suite 510
Coos Bay, OR 97420
(503) 269-4575
FAX (503) 267-3194

AN EQUAL OPPORTUNITY EMPLOYER

ANNOUNCEMENT

The Prevailing Wage Rates contained in this booklet generally reflect non-residential building, heavy, and highway construction 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 reflect 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 Coordinator
Bureau of Labor and Industries
Wage and Hour Division
800 NE Oregon St. # 32
Portland, OR 97232
(503)731-4466

The first copy is free. Additional copies are available for \$2.00 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	776-6201
Pendleton	276-7884
Portland	731-4074
Salem	378-3292

Apprentices and Trainees

Apprentices and trainees may be employed on public works projects. To qualify as an apprentice or trainee, the worker must be registered in a bona fide 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. For information call 731-4072. The apprentice or trainee is to receive all fringe benefits and a percentage of the journeyman's wage rate which is listed in this booklet. This rate may be different than the rate contained in the Apprenticeship Standards for the trade. The correct percentage shall be determined by the appropriate 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.

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
July 1, 1995

include in the contract the provision that Prevailing Wage Rates must be paid, the liability for any unpaid prevailing wages shall be exclusively that of the agency.[ORS 279.356(3)]

Fringe Benefits

Payments for fringe benefits are in addition to the basic hourly rate. The term "fringe benefits" refers to the payments such as:

- a) 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.

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

Every Contractor or Subcontractor that provides for or contributes to a health and welfare plan or a pension plan, must post notice describing such plans in a conspicuous and accessible place on the project.[ORS 279.350(5)] 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 Saturday, Sunday or legal holidays 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. If one of these days falls on Saturday or Sunday, then the legal holiday becomes the preceding Friday or the following Monday.

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. A sample of Form WH-38 and instructions for completing it are included in the back of this booklet. Copies for use in filing should be obtained from the public contracting agency.

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; 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. When work on a project starts and finishes in 15 days or less, the contractor or subcontractor which performed the work shall submit a payroll and certified statement form which accurately and completely sets out the payroll for all the work performed on the project. Payroll information is to be filed with both the public contracting agency and the Wage and Hour Division, Bureau of Labor and Industries, 800 NE Oregon St. # 32, Portland, Oregon 97232. The payroll information must be kept by the contractor and or subcontractor for three years.

July 1, 1995
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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.

Office/clerical employees and supervisory employees who are supervisory only and do not perform any hands-on labor are not required to be paid the PWR. A person who owns and operates his/her own truck 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 federal Davis-Bacon Act, not Oregon PWR statutes. (Further information may be obtained from the U.S. Department of Labor, Wage and Hour Division, Portland, Oregon (326-3057).) In the event that federal funds are involved, but the contract is not regulated under the Davis-Bacon Act, Oregon's Prevailing Wage Rate Statutes may apply (ORS 279.348 - 279.365). Oregon statutes pertaining to overtime requirements apply on both state and federally regulated contracts. (ORS 279.334).

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) My employees receive health benefits. Do I get credit for the health benefit when I prepare my payroll on a public works project?

Yes. Any expenditures an employer makes for bona fide employee benefits can be charged against the fringe benefit payments designated in the Prevailing Wage Rate Booklet. To learn how to compute the correct hourly charge, call the Wage and Hour Division (731-4074).

6) 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.

7) How do I classify workers?

Virtually all of the job classifications/trades normally used in the non-residential 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 need residential construction rates, or if you have questions about how to classify workers, contact the Prevailing Wage Rate Coordinator at 731-4466.

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.)

COMMONLY ASKED QUESTIONS (Continued)

8) 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.

9) 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.

10) 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, 800 NE Oregon St. # 32, Portland, Oregon 97232 (731-4074). Other Bureau offices are located in Bend (388-6330), Coos Bay (269-4575), Eugene (686-7623), Medford (776-6201), 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).

11) 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.

In addition, Chapter 323, Oregon Laws 1991, provides that any person that loses a competitive bid for a construction contract may bring an action for damages against the person who is awarded the contract, if the losing bidder can establish that the winner has knowingly violated any one of several laws, including the requirement to pay Prevailing Wage Rates while performing work under the contract. The losing bidder is entitled to recover, as liquidated damages, 10% of the losing bid amount, or \$5,000, whichever is greater, plus reasonable attorney fees.

COMMONLY ASKED QUESTIONS (Continued)

12) 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. For information call 731-4072. The apprentice is to receive all fringe benefits and a percentage of the journeyman's wage rate as listed in this booklet. This rate may be different than the rate contained in the Apprenticeship Standards for the trade. The correct percentage shall be determined by the appropriate apprenticeship committee. All other workers receive rates as published.

13) 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 following: The name and address of each employee; the work 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.

Administrative rules on Prevailing Wage Rates require that these records be kept for a period of three (3) years from the completion of the public work contract. Other legal considerations may require retention of records for a period greater than 3 years. Records relating to public works contracts must be maintained separately from records relating to private projects/contracts.

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

Public agencies are required to prepare and file a list of every public improvement that the agency intends to fund during the subsequent budget period with the Commissioner of the Bureau of Labor and Industries (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.

15) Does a contracting agency have any power to enforce payment of Prevailing Wage Rates on its public works projects?

Yes. According to ORS 279.314, all public contracts for work or services must 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.



NOTE

As noted in previous editions of this booklet, the procedure for obtaining forms for the submission of certain information required from public contracting agencies, contractors, and subcontractors has been changed. All public agencies in Oregon have been supplied with personalized copies of the forms which previously were found in the back of this booklet. With the exception of forms WH-118 (Planned Public Improvement Summary), and WH-119 (Capitol Improvement Project Cost Comparison Estimate), the forms found in this booklet are examples only. Public contracting agencies are expected to provide contractors with the appropriate WH-38 (Payroll/Certified Statement) form, and WH-303 (List of Subcontractors By Project) form. The instruction sheet WH-38A, which is provided to assist contractors in filling out the Payroll/Certified Statement, has been revised to take into account this new procedure, and to improve its clarity and usefulness.

We have attempted to make all other changes more noticeable by printing them in **Bold Type**.

AMENDMENT NUMBER 1 TO THE JULY 1, 1995
PREVAILING WAGE RATES FOR PUBLIC WORKS CONTRACTS IN OREGON
OREGON DETERMINATION 95-01
EFFECTIVE AUGUST 1, 1995

There have been changes in the Prevailing Wage Rates of six different trades since the most recent PWR Booklet was published on July 1, 1995.

Updates in OREGON DETERMINATION 95-01 are shown on the back of this sheet. For the sake of brevity, we have not included all of the explanatory information that is found in the regular booklet. Refer to the relevant parts of the July 1995 Booklet for details concerning this amendment. If you have any questions, call the PWR Coordinator at 731-4074 Ext. 250 in Portland.

ALL RATES IN THE JULY 1995 BOOKLET WHICH ARE NOT AMENDED REMAIN IN FORCE.

 BUREAU OF LABOR AND INDUSTRIES

JACK ROBERTS
Commissioner

800 NE Oregon St. # 32
PORTLAND, OREGON 97232

BULK RATE

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IMPORTANT NOTICE CONCERNING
PREVAILING WAGE RATES

BASIC
HOURLY FRINGE
RATE BENEFITS

BASIC
HOURLY FRINGE
RATE BENEFITS

TRADES

TRADES

****BRICKLAYERS/STONEMASONS**

**Rate for Area 2 Bricklayers, includes Coos, Curry,
Douglas and Josephine Counties)

Area 2 21.17 5.78

LABORERS

Zone 1 (Base Rate):

o Group 1	16.59	6.60
o Group 2	16.94	6.60
o Group 3	17.24	6.60
o Group 4	17.49	6.60
o Group 5	15.00	6.60

MARBLE SETTERS (Includes Granite)

Area 2 22.17 5.78

ROOFERS

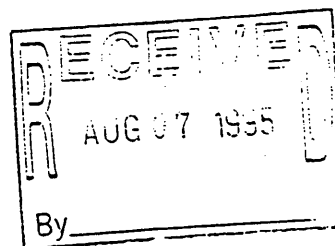
Area 4 16.00 5.75

Area 5 16.67 5.60

SHEETMETAL WORKERS

Area 3 22.73 7.05

TENDERS TO PLASTERERS 17.59 5.60



TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
ASBESTOS WORKERS			Area 1		
<u>Installation</u> of insulation on mechanical systems for Thermal and Acoustical purposes, also the installation of fire stop penetrations on Electrical and Mechanical Systems.			Baker Hood River Multnomah Wallowa		
			Benton (a) Lincoln (a) Polk Wasco (a)		
			Clackamas Linn (a) Sherman Washington		
			Clatsop Malheur (a) Tillamook Yamhill		
			Columbia Marion Umatilla		
			Gilliam Morrow Union		
Journeyman Asbestos Worker 22.31 6.14			Area 2		
<u>Removal</u> of regulated material on mechanical systems* which are not going to be scrapped.**			Benton (b) Douglas Josephine Linn (b)		
o Hazardous Materials Handler			Crook Grant Klamath Malheur (b)		
Mechanic (in any type of			Coos Harney Lake Wasco (b)		
project regardless of value) 14.25 3.35			Curry Jackson Lane Wheeler		
* Mechanical systems include pipes, boilers, ducts, flues;breaching, grease ducts and acid ducts. This also includes all labor connected with the handling and distribution of materials for these systems.			Deschutes Jefferson Lincoln (b)		
** The removal of all regulated materials from mechanical systems is exclusively the work of Hazardous Materials Handlers, <u>unless</u> the mechanical systems are going to be scrapped. <u>Laborers do all removal of regulated materials on mechanical systems to be scrapped and any non mechanical (walls, ceilings, floors, beams, etc.) insulation.</u> They also do loading of any regulated material after it has been removed, bagged and tagged, as well as cleanup at the removal site and all work done at the disposal site. Persons performing the removal of regulated materials are classified as Group 3 Laborers.			a) North half		
			b) South half		
BOILERMAKERS 22.94 8.39					
BRICKLAYERS/STONEMASONS 22.50 6.02					
Area 1					
(add \$0.75 per hour to Fringe for Refractory repair work.)					
Area 2 20.32 5.68					
(add \$0.75 per hour to Fringe for Refractory repair work.)					

NOTE: Regulated materials are those materials that are regulated for the purpose of protecting the environment or for personal protection by either E.P.A., O.S.H.A., DEQ or Federal O.S.H.A.

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
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CARPENTERS

Zone 1 (Base Rate):

o Group 1	21.12	6.02
o Group 2	21.27	6.02
o Group 3	21.62	6.02
o Group 4	21.77	6.02
o Group 5	21.62	6.02
o Group 6	21.77	6.02
o Group 7	22.12	6.02

Zone Differential for Carpenters
(Add to Zone 1 Rate)

Zone 2	.85
Zone 3	1.25
Zone 4	1.70
Zone 5	2.00
Zone 6	3.00

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 60 miles.

Zone 5: More than 60 miles but less than 70 miles.

Zone 6: More than 70 miles.

Reference cities for Group 1 and 2 Carpenters

Albany	Eugene	Longview	Portland
Astoria	Goldendale	Madras	Port Orford
Baker	Grants Pass	Medford	Reedsport
Bend	Hermiston	McMinnville	Roseburg
Brookings	Hood River	Newport	Salem
Burns	Klamath Falls	Oregon City	The Dalles
Coos Bay	LaGrande	Ontario	Tillamook
Corvallis	Lakeview	Pendleton	Vancouver

Zones for Groups 3 and 4 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.

Reference Cities for Group 3 and 4 Carpenters

Eugene	Medford	Portland	Vancouver
Longview	North Bend	The Dalles	

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
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CARPENTERS (Continued)

Zones for Groups 5, 6 and 7 Carpenters are determined as follows:

1. For those workers who reside within zone 1 of a reference city below, their zone pay differential shall be computed based upon the distance from the city hall of that city to the project site.
2. For those workers who reside nearer to the project than is the city hall of any reference city below, the mileage from their residence to the project may be used in computing their zone pay differential.
3. The zone pay differential for all other projects shall be computed from the city hall of Longview, North Bend, or Portland, whichever is closer to the project.

Reference Cities for Groups 5, 6 and 7

Astoria	Eugene	Newport	Salem
Bend	Klamath Falls	Portland	The Dalles
North Bend	Medford	Roseburg	Longview

Group 1

Auto. Nailing Machine Carpenters
Form Stripper
Manhole Builders
Non-irritating Ins.
Cabinet & Shelving Installers
(wood or steel)

Group 2

Floor Layers & Finishers
Stationary Power Saw Operators
Wall & Ceiling Insulators
Irritating Insulation

Group 3

Millwrights
Machine Erectors
Machinists

Group 4

Millwright/Welders
(Certified Welders receive \$0.25/hour over Group 3)

Group 5

Bridge, Dock & Wharf Builders
Piledrivermen

Group 6

Boom Men

Group 7

Marine Piledriver

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
CEMENT MASONS			DIVERS & DIVERS' TENDERS (continued)		
Zone 1 (Base Rate):			o Divers' Depth Pay		
o Group 1	17.74	8.52	Depth of Dive	Hourly Depth Pay	
o Group 2	18.09	8.52	50-100 ft	([total ft- 50] x \$1.00)/hr.	
o Group 3	18.45	8.52	100-150 ft	\$ 50 ÷ ([total ft-100] x \$1.50)/hr.	
o Group 4	18.95	8.52	150-200 ft	\$125 ÷ ([total ft-150] x \$2.00)/hr.	
<u>Group 1</u>	Cement Masons, finishing, hand chipping and patching grouting, end pointing, screed setting, plugging, filling bolt holes, dry packing, setting curb forms, planks, stakes, lines and grades.		o Divers' Enclosure Pay(working without vertical escape)		
<u>Group 2</u>	Composition Workers (includes installation of epoxy & other resinous toppings), and Power Machine Operators.		Distance Travelled		
<u>Group 3</u>	Cement masons working on suspended, swinging and/or hanging scaffold.		<u>In the Enclosure</u>	<u>Hourly Enclosure Pay</u>	
<u>Group 4</u>	Cement Masons performing work of both Group 2 and Group 3 at the same time.		5 - 50 ft	\$.50/hr	
	Zone Differential for Cement Masons (Add to Zone 1 Rate)		50 - 100 ft	\$.63/hr	
	Zone 2	.65	100 - 150 ft	\$ 2.13/hr	
	Zone 3	1.15	150 - 200 ft	\$ 4.63/hr	
	Zone 4	1.70	200 - 300 ft	\$ 4.63 + ([total ft-200]x \$.05)/hr	
	Zone 5	2.75	300 - 450 ft	\$ 9.63 + ([total ft-300]x \$.10)/hr	
			450 - 600 ft	\$24.63 + ([total ft-450]x \$.20)/hr	
<u>Zone 1:</u> Projects within 30 miles of City Hall in the cities listed below.			DREDGING		
<u>Zone 2:</u> More than 30 miles but less than 40 miles.			Zone 1 (Base Rate):		
<u>Zone 3:</u> More than 40 miles but less than 50 miles.			o Leverman (Hydraulic, Dipper, Floating Clamshell)		
<u>Zone 4:</u> More than 50 miles but less than 80 miles.			o Asst. Engineer (including: Watch Engineer, Welder, Mechanic, Machinist)		
<u>Zone 5:</u> More than 80 miles.			o Tenderman (Boatman, Attending Dredge Plant); Fireman		
<u>Cities</u>			o Fill Equipment Operator		
Bend	Eugene	Medford	Salem	Vancouver	
Corvallis	Longview	Portland	The Dalles		
DIVERS & DIVERS' TENDERS			o Assistant Mate (Deckhand); Oiler		
o Divers	51.91	6.02	Zone Differential for Dredging (Add to Zone 1 Rate)		
o Divers' Tenders	23.29	6.02	Zone 2	1.50	
Depth Pay and Enclosure Pay are added to the Divers' Basic Hourly Rate to obtain the Total Hourly Rate for the diver.			Zone 3	1.90	
BASIC	HOURLY	HOURLY	Zone 4	2.40	
HOURLY +	DEPTH +	ENCLOSURE =	Zone 5	3.00	
RATE	PAY	PAY	DIVERS' TOTAL HOURLY PAY		
			<u>Zone 1:</u> Center of job site not more than 15 miles from the City Hall of Portland		
			<u>Zone 2:</u> More than 15 miles but not more than 30		
			<u>Zone 3:</u> More than 30 miles but not more than 50		
			<u>Zone 4:</u> More than 50 miles but not more than 70		
			<u>Zone 5:</u> More than 70 miles.		

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
<u>DRYWALL/WETWALL</u>			<u>ELEVATOR CONSTRUCTORS</u>		
o Drywall (Accoustical and Drywall Applicator)	19.48	7.27	<u>Area 1</u>		
o Wetwall (Lather)	18.41	8.34	o Mechanic	23.96	6.78 + a
			o Helper	16.77	6.58+ a
			o Probationary Helper	11.98	.32
<u>ELECTRICIANS</u>			<u>Area 2</u>		
<u>Area 1:</u>			o Mechanic	25.51	6.82+ a
o Electricians	19.70	4.42	o Helper	17.86	6.61+ a
o Cable Splicers	21.67	4.51	o Probationary Helper	12.76	.34
<u>Area 2:</u>			a) Plus 8% of basic hourly rate for employees with more than 5 years of service; 6% of basic hourly rate for 6 months to 5 years of service.		
o Electricians	23.00	7.52	<u>Area 1</u>		<u>Area 2</u>
o Cable Splicers	24.15	7.56	Umatilla		All
<u>Area 3:</u>	21.60	6.54	Wallowa		
<u>Area 4:</u>			Remaining		
o Electricians	24.35	5.53	Union		
o Cable Splicers	26.79	5.60	Counties		
<u>Area 5:</u>			Baker		
o Electricians	23.65	8.21			
o Cable Splicers	24.40	8.18			
<u>Area 6:</u>			<u>GLAZIERS</u>		
o Electricians	21.55	6.80	<u>Area 1</u>	22.12	4.71
o Cable Splicers	21.55	6.80	(Add \$1.00 to base rate if safety belt is required by State safety regulations)		
<u>Area 1</u>	<u>Area 2</u>	<u>Area 2(cont)</u>	(Add \$4.00 to base rate for work done from a non-motorized single-man bosun chair)		
Malheur	Baker	Umatilla	<u>Area 2</u>	14.46	4.04
	Gilliam	Union	(Add \$0.50 to base rate if working at over 35 feet of free fall in height)		
	Grant	Wallowa	<u>Area 1</u>		<u>Area 2</u>
	Morrow	Wheeler	All Counties		Malheur
		Douglas (a)	except Malheur		
<u>Area 4</u>	<u>Area 5</u>	<u>Area 5(cont)</u>	<u>HIGHWAY AND PARKING STRIPERS</u>		
Benton	Clackamas	Washington		19.25	2.94
Crook	Clatsop	Yamhill (d)	<u>IRONWORKERS</u>		
Deschutes	Columbia		o Structural, Reinforcing, Ornamental, Riggers, Fence Erectors, Signal Men	20.50	9.32
Jefferson	Hood River				
Lane (b)	Multnomah				
Linn	Sherman				
Marion	Tillamook				
Polk	Wasco				
Yamhill(c)					
a) Those portions lying west of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County					
b) That portion lying east of a line running North and South from the NE corner of Coos County to the SE corner of Lincoln County					
c) South half					
d) North half					

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
LABORERS			LABORERS Group 1(continued)		
Zone 1 (Base Rate):			Driller Assistant	Signalman	
o Group 1	16.59	6.30	Dry-shack Man	Skipman	
o Group 2	16.94	6.30	Dumpers, road oiling	Slopers	
o Group 3	17.24	6.30	crew	Sprayman	
o Group 4	17.49	6.30	Dumpmen for grading	Stake Chaser	
o Group 5	15.00	6.30	crew	Stockpiler	
Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Hazardous Waste Site. A Group 1 base rate is used for General Laborer on such a site. For further information on this, call the Prevailing Wage Rate Coordinator at 731-4466.			Elevator Feeders	Tie Back Shoring	
Zone Differential for Laborers			Fence Builder	Timber Faller/Bucker	
(Add to Zone 1 Rate)			Fine Graders	(Hand Labor)	
Zone 2	.65		Fire Watch	Toolroom Man (Job site)	
Zone 3	1.15		Form Strippers (b)	Tunnel Bull Gang	
Zone 4	1.70		General Laborer ***	(Above Ground)	
Zone 5	2.75			Weight-Man-Crusher (g)	
Zone 1: Projects within 30 miles of City Hall in the Cities listed below.			a) Pittsburg or similar types		
Zone 2: More than 30 miles but less than 40 miles.			b) Not swinging stages		
Zone 3: More than 40 miles but less than 50 miles.			c) Reference Post, Guide Post, or		
Zone 4: More than 50 miles but less than 80 miles.			Right-of Way Marker		
Zone 5: More than 80 miles.			d) Flaherty, and similar types		
Reference Cities			e) Including electrical		
Albany Eugene Longview Portland			f) Including steel forms		
Astoria Goldendale Madras Port Orford			g) Aggregate when used		
Baker Grants Pass Medford Reedsport			*** Laborers can tear off roofs, clean up or handle roofing materials only when at least one new story is added or in demolition work, where no reroofing will occur.		
Bend Hermiston McMinnville Roseburg					
Brookings Hood River Newport Salem			Group 2		
Burns Klamath Falls Oregon City The Dalles			Applicators (a)	Gunite or Sandblasting	
Coos Bay LaGrande Ontario Tillamook			Brush Cutters (b)	Pot Tender	
Corvallis Lakeview Pendleton Vancouver			Burners	Handlers/Mixers (f)	
Group 1			Choker Splicer	Post Hole Digger, Air,	
Asphalt Plant Laborers	Guardrail, Median		Clary Power Spreader(c)	gas or electric	
Asphalt Spreaders	Rail (c)		Clean up Nozzleman-	Power Tool Operators (g)	
Batch Weighman	Landscape or Planting		Green Cutter (d)	Sand Blasting (wet)	
Broomers	Laborer		Concrete Power Buggyman	Stake Setter	
Brush Burners/Cutters	Leverman or Aggregate		Crusher Feeder	Tampers	
Carpenter Tender	Spreader (d)		Demolition/Wrecking (e)	Tunnel Muckers/Brakeman/	
Car & Truck Loaders	Loading Spotter		Grade Checker	Concrete Crew/Bull	
Change-House Man	Material Yard Man (e)		Gunnite Nozzleman	Gang (underground)	
Chipper Operator (a)	Powderman Assistant		Tender	Vibrating Screed	
Choke Setter	Railroad Track Laborers			Vibrators(less than 4" diam.)	
Clean-up Laborers ***	Ribbon Setters (f)		a)Including Pot Tender for same, applying		
Concrete Laborers	Rip Rap Man (Hand		protective material by hand or nozzle on		
Curing, concrete	Placed)		utility lines or storage tanks on project		
Demolition, wrecking	Road Pump Tender and		b)Power saw		
moving (industrial) ***	Sewer Laborer		c)And similar types of spreaders		
			d)Concrete, rock, etc.		
			e)Charred Materials		
			f) Of all materials of an irritating nature		
			including cement and lime		
			g)Includes, but not limited to: Dry Pack		
			Machine, Jackhammer, Chipping Guns, Paving		
			Breakers		

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
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LABORERS(continued)Group 3

Asbestos Removal	Powdermen
Bit Grinder	Power Saw Operators (d)
Concrete Saw Operator	Pumpcrete Nozzleman
Drill Doctor	Sand Blasting (dry)
Drill Operators (a)	Pipe Layers of all Types
Guniting Nozzleman	Sewer Timberman
High Scalers,	Track Liners (e)
Strippers, Drillers(b)	Tugger Operator
Laser Beam (c)	Tunnel-Chuck Tenders
Manhole Builder	Vibrator (4" and larger)
Nippers & Timberman	Water Blaster
Nuclear Plant Worker -	Welder
Lead Shield	

- a) Air Tracks, Cat Drills, Wagon Drills,
Rubber-mounted drills, and other similar
types
- b) Covers work in Swinging Stages, chairs
or belts, under extreme conditions unusual
to normal drilling, blasting, barring-down,
or sloping and stripping
- c) Pipe laying, applicable when employee
assigned to move, set up, align Laser Beam.
- d) Bucking and falling
- e) Anchor Machines, Ballast Regulators,
Multiple Tampers, Power Jacks

Group 4

Asphalt Rakers

Laser Beam (Tunnel), applicable when employee
assigned to move, set-up, align laser beam

Motorman - Dinky Locomotive

Shield Operator

Tunnel Miners

Tunnel Powderman

Group 5

Clean-up Laborers (building only)***

Demolition, Wrecking, & Moving (building only)***

Flagger

*** Laborers can tear off roofs, clean up or handle roofing
materials only when at least one new story is added or in
demolition work, where no reroofing will occur.

LIMITED ENERGY ELECTRICIANS

May only be used for electrical work not
exceeding 100 va in Class II and III
installations (as defined in Article 725
of the National Electrical Code):

Area 1	17.75	6.68
Area 2	17.75	6.68
Area 3	13.75	4.49
Area 4	13.75	4.49
Area 5	13.75	4.49
Area 6	13.75	4.49
Area 7	13.75	4.49
Area 8	13.75	4.49
Area 9	17.75	6.68
Area 10	13.75	4.49
Area 11	13.75	4.49
Area 12	16.21	2.14
Area 13	13.69	2.59
Area 14	13.37	2.33

<u>Area 1</u>	Clatsop, Columbia, Tillamook
<u>Area 2</u>	Clackamas, Multnomah, Washington, Yamhill (north half)
<u>Area 3</u>	Marion, Polk, Yamhill (south half)
<u>Area 4</u>	Benton, Lincoln, Linn
<u>Area 5</u>	Lane
<u>Area 6</u>	Douglas
<u>Area 7</u>	Coos, Curry
<u>Area 8</u>	Jackson, Josephine
<u>Area 9</u>	Hood River, Sherman, Wasco
<u>Area 10</u>	Crook, Deschutes, Jefferson
<u>Area 11</u>	Klamath, Lake, Harney
<u>Area 12</u>	Gilliam, Grant, Morrow, Umatilla, Wheeler
<u>Area 13</u>	Baker, Union, Wallowa
<u>Area 14</u>	Malheur

LINE CONSTRUCTION

Area 1:

o Group 1	25.60	5.90
o Group 2	23.12	5.81
o Group 3	17.98	4.63
o Group 4	19.94	4.70
o Group 5	17.45	4.61
o Group 6	16.40	4.57

Area 2:

o Cable Splicers	23.38	5.24
o Journeyman Lineman	21.20	5.16
o Line Equip. Mech. (Right-of-way)	17.98	5.01
o Line Equip. Oper.	17.98	5.01
o Groundman	13.15	4.80

TRADES		BASIC HOURLY RATE	FRINGE BENEFITS	TRADES		BASIC HOURLY RATE	FRINGE BENEFITS
LINE CONSTRUCTION (continued)				PAINTERS & DRYWALL TAPERS			
<u>Area 1</u> All counties except Malheur County				<u>Area 1</u> o Painters & Drywall Tapers 12.90 2.51			
<u>Group 1</u> Cable Splicers Leadman Pole Sprayer				<u>Area 2</u> o Brush Painting 17.00 2.93 (Add \$0.60 to base rate for spray, sandblasting, other pressure blasting over 3000 psi, and steam cleaning.) (Add \$0.50 to base rate for work over 60 ft high on swing stage, mechanical climber, spider, or bucket truck.)			
<u>Group 2</u> Certified Lineman Welder Heavy Line Equipment Man Lineman Pole Sprayer				o Drywall Tapers 21.55 4.33			
<u>Group 3</u> Tree Trimmer				<u>Area 1</u> Malheur County			
<u>Group 5</u> Head Groundman Jackhammer Man Powderman				<u>Area 2</u> Remaining Counties			
<u>Group 4</u> Line Equipment Man				PLASTERERS			
<u>Group 6</u> Groundman				o Nozzleman 22.76 5.06			
<u>Area 2</u> Malheur County				o Swinging scaffold 21.76 5.06			
MARBLE SETTERS (Includes Granite)				o all other work 21.26 5.06			
<u>Area 1</u> Area 1 23.50 6.02				PLUMBERS & STEAMFITTERS/PIPEFITTERS			
<u>Area 2</u> Area 2 21.32 5.68				<u>Area 1</u> (Both) 21.62 5.94			
<u>Area 1</u> Baker Hood River Multnomah Wallowa				<u>Area 2</u> (Both) 24.50 8.40			
Benton (a) Lincoln (a) Polk Wasco (a)				<u>Area 3</u> (Both) 23.75 6.75			
Clackamas Linn (a) Sherman Washington				<u>Area 1</u> Baker Grant (b) All remaining counties			
Clatsop Malheur (a) Tillamook Yamhill				<u>Area 2</u> Harney (a) Morrow			
Columbia Marion Umatilla				<u>Area 3</u> Malheur Umatilla			
Gilliam Morrow Union				Wallowa			
<u>Area 2</u>				Union			
Benton (b) Douglas Josephine Linn (b)				a) Except Northwest Portion b) Except Southwest Corner			
Crook Grant Klamath Malheur (b)							
Coos Harney Lake Wasco (b)							
Curry Jackson Lane Wheeler							
Deschutes Jefferson Lincoln (b)							
a) North half							
b) South half							

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
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POWER EQUIPMENT OPERATORS

Zone 1 (Base Rate):

o Group 1	22.40	6.55
o Group 2	22.01	6.55
o Group 3	21.33	6.55
o Group 4	20.88	6.55
o Group 5	20.34	6.55
o Group 6	18.72	6.55

Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Hazardous Waste Site. For further information on this, call the Prevailing Wage Rate Coordinator at 731-4466.

ZONE RATES

(Add to Zone 1 Rate)

Zone 2	1.50
Zone 3	3.00

ZONE DESCRIPTIONS

Portland to Salem Metropolitan Area

Zone 1: Projects within the boundary of a region described as follows: Those portions of Multnomah, Clackamas, and Marion Counties which are West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22. Also those portions of Washington County East of Highway 47, and of Yamhill County East of Highway 47 and Highway 99W.

Zone 2: Projects outside of any Zone 1, but less than 50 miles from the Portland city hall.

Zone 3: Projects outside of any Zone 1 or 2, and more than 50 miles from the Portland city hall.

Albany, Eugene, Roseburg, Grants Pass, Medford

Zone 1: Projects within 30 miles of the City Hall of the above cities.

Zone 2: Projects outside of any Zone 1 and more than 30 miles but less than 50 miles from the city hall.

Zone 3: Projects outside of any Zone 1 or 2, and more than 50 miles from the city hall.

Longview, Coos Bay, Klamath Falls, Bend

Zone 1: Projects within 20 miles of the City Hall of the above cities.

Zone 2: Projects outside of any Zone 1, and more than 20 but less than 40 miles from the city hall.

Zone 3: Projects outside of any Zone 1 or 2, and more than 40 miles from the city hall.

POWER EQUIPMENT OPERATORS (continued)**ZONE DESCRIPTIONS (continued)**

Astoria, The Dalles, Pendleton, LaGrande, Baker, Ontario, McMinnville

Zone 1: Projects within 5 miles of the city hall of the above cities.

Zone 2: No Zone 2 for these cities.

Zone 3: Projects outside of any Zone 1 or 2, and more than 5 miles from the city hall.

GROUP CLASSIFICATIONS**ASPHALT**

- 6 Plant Oiler
- 6 Plant Fireman
- 6 Pugmill Operator (any type)
- 6 Truck mounted asphalt spreader, with screed
- 4 Screed Operator
- 5 Extrusion Machine Operator
- 2 Asphalt Plant Operator (any type)
- 4 Asphalt Paver Operator
- 5 Roller Operator (any asphalt mix)
- 4 Diesel-Electric Engineer, Plant
- 5 Asphalt Burner and Reconditioner Operator (anytype),84
- 4 Roto-Mill, pavement profiler operator, under 6 foot lateral cut
- 5 Roto-Mill, pavement profiler, ground man
- 2 Roto-Mill, pavement profiler operator, 6 foot lateral cut and over

BLADE

- 6 Blade Operator, pulled type
- 4 Blade Operator
- 4 Blade Operator, Finish
- 4 Blade Operator, externally controlled by electronic, mechanical hydraulic means
- 4 Blade Operator, multi-engine
- 2 Auto Grader or "Trimmer" Operator

BULLDOZERS

- 4 Bulldozer Operator
- 4 Drill Cat Operator
- 4 Side-Boom Operator
- 2 Tandem bulldozer operator (quadnine and similar type, D-11)
- 4 Bulldozer Operator, twin engine (TC 12 and similar type, D-10)
- 4 Cable-Plow Operator (any type)

TRADES		BASIC HOURLY RATE	FRINGE BENEFITS	TRADES		BASIC HOURLY RATE	FRINGE BENEFITS
<u>POWER EQUIPMENT OPERATORS</u> (GROUP CLASSIFICATIONS continued) <u>CLEARING</u>				<u>POWER EQUIPMENT OPERATORS</u> (GROUP CLASSIFICATIONS continued) <u>CONCRETE</u> (Continued)			
4	Log Skidder Operator			5	Maginnis Internal Full Slab Vibrator Operator		
4	Chipper Operator			5	Concrete Finishing Machine Operator, Clary, Johnson, Bidwell, Burgess bridge deck or similar type		
4	Incinerator Operator			5	Curb Machine Operator, Mechanical Berm, Curb and/or Curb and Gutter		
4	Stump Splitter Operator			5	Concrete Joint Machine Operator		
4	Faller/Buncher Operator			5	Concrete Planer Operator		
<u>COMPRESSORS</u>				5	Tower Mobile Operator		
6	Compressor Operator (any power), under 1,250 cu. ft. total capacity			5	Power Jumbo Operator setting slip forms etc., in tunnels		
5	Compressor Operator (any power), over 1,250 cu. ft. capacity			5	Slip Form Pumps, power driven hydraulic lifting device for concrete forms		
<u>COMPACTORS</u> - Self-Propelled				5	Concrete Paving Machine Operator		
5	Compactor Operator, including vibratory			5	Concrete Finishing Machine Operator		
5	Wagner Patcor Operator or similar type (without blade)			5	Concrete Spreader Operator		
4	Compactor Operator, with blade			4	Concrete Paving Road Mixer		
4	Compactor Operator, multi-engine			2	Automatic Concrete Slip Form Paver Operator		
<u>CONCRETE</u>				2	Concrete Canal Line Operator		
6	Plant Oiler			4	Concrete Breaker		
6	Assistant Conveyor Operator			4	Reinforced Tank Banding Machine (K-17 or similar types)		
6	Conveyor Operator			2	Concrete Profiler, Diamond Head		
6	Mixer Box Operator (C.T.B., dry batch, etc.)			<u>CRANE</u>			
6	Cement Hog Operator			6	Oiler		
6	Concrete Saw Operator			6	Truck Crane Oiler-Driver, 25 ton capacity or over		
6	Concrete Curing Machine Operator (riding type)			6	Fireman, all equipment		
6	Wire Mat or Brooming Machine Operator			6	A-Frame Truck Operator, single drum		
5	Combination Mixer and Compressor Operator, gunite work			6	Tugger or Coffin Type Hoist Operator		
5	Concrete Batch Plant Quality Control Operator			5	Helicopter Hoist Operator		
5	Beltcrete Operator			5	Hoist Operator, single drum		
5	Pumpcrete Operator (any type)			5	Elevator Operator		
5	Pavement Grinder and/or Grooving Machine Operator (riding type)			5	A-Frame Truck Operator, double drum		
4	Mixer Mobile Operator			5	Boom Truck Operator		
5	Cement Pump Operator, Fuller-Kenyon and similar			4	Chicago Boom and similar types		
5	Concrete Pump Operator			4	Lift Slab Machine Operator		
5	Grouting Machine Operator			4	Boom Type lifting device, 5 ton capacity or less		
4	Screed Operator			4	Cherry Picker or similar type crane-hoist, 5 ton capacity or less		
4	Concrete Cooling Machine Operator			4	Hoist Operator, two drum		
5	Concrete Mixer Operator, single drum, any capacity			4	Hoist Operator, three or more drums		
2	Batch Plant and/or Wet Mix Operator, 1 and 2 drum			4	Derrick Operator, under 100 ton		
1	Batch Plant and/or Wet Mix Operator, 3 units or more			4	Hoist Operator, stiff leg, guy derrick or similar type, 50 ton and over		
5	Cast in place pipe laying machine			4	Cableway Operator, up to 25 tons		
				4	Bridge Crane Operator, Locomotive. Gantry. Overhead		
				2	Cableway Operator, 25 tons and over		

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
<u>POWER EQUIPMENT OPERATORS</u> (GROUP CLASSIFICATIONS continued) <u>CRANE</u> (continued)			<u>POWER EQUIPMENT OPERATORS</u> (GROUP CLASSIFICATIONS continued)		
1 Helicopter Operators, when used in erecting work			<u>FLOATING EQUIPMENT</u>		
HYDRAULIC CRANE OPERATOR			6 Deckhand		
5 Hydraulic Boom Truck Operator, Pittman			6 Boatman		
4 Hydro Crane Operator, under 50 tons			5 Fireman		
3 Hydro Crane Operator, 50 tons through 89 tons			4 Diesel-Electric Engineer		
2 Hydro Crane Operator, 90 tons through 199 tons			4 Jack Operator, elevating barges		
1 Hydro Crane Operator, 200 tons and over			4 Barge Operator, self-unloading		
TOWER/WHIRLEY OPERATOR			4 Piledriver Operator (not crane type)		
2 Tower Crane Operator			4 Floating Clamshell, etc. Operator, under 3 cu. yd.(only for construction projects - otherwise see Dredging)		
2 Whirley Operator, under 90 tons			4 Floating Crane (derrick barge) Operator, less than 30 tons		
1 Whirley Operator, 90 tons and over			2 Floating Clamshell, etc. Operator, 3 cu. yd. and over (only for construction projects - otherwise see Dredging)		
LATICE BOOM CRANE OPERATOR			2 Floating Crane (derrick barge) Operator, 30 tons but less than 150 tons		
4 Lattice Boom Crane Operator, under 50 tons			1 Floating Crane, 150 tons and over		
3 Lattice Boom Crane Operator, 50 tons through 89 tons, and less than 150 ft boom			<u>FORK LIFT</u>		
2 Lattice Boom Crane Operator, 90 tons through 199 tons, and/or 150 ft -200 ft boom			6 Self-Propelled Scaffolding Operator (excluding working platform)		
1 Lattice Boom Crane (Operator, 200 tons and over, and/or over 200 ft boom			6 Fork Lift or Lumber Stacker Operator		
<u>CRUSHER</u>			6 Ross Carrier Operator		
6 Crusher Oiler			5 Lull Hi-Lift Operator or similar type		
6 Crusher Feeder			5 Fork Lift, over 5 tons		
4 Generator Operator			3 Rock Hound Operator		
4 Diesel-Electric Engineer			<u>GENERATORS</u>		
4 Grizzley Operator			4 Generator Operator		
2 Crusher Plant Operator			4 Diesel-Electric Engineer		
<u>DRILLING</u>			<u>GUARDRAIL EQUIPMENT</u>		
6 Drill Assistant			6 Oiler		
6 Auger Oiler			6 Auger Oiler		
5 Churn Drill and Earth Boring Machine Operator			6 Oiler, combination guardrail machines		
4 Drill Doctor			4 Guardrail Punch Operator (all types)		
4 Boring Machine Operator			6 Guardrail Punch Oiler		
4 Driller - Percussion, Diamond, Core, Cable, Rotary and similar type			4 Guardrail Auger Operator (all types)		
4 Cat Drill (John Henry)			4 Combination Guardrail machines. i.e. punch, auger etc.		
			<u>HAZARDOUS WASTE REMOVAL</u>		
			5 Assistant to the Engineer (Oiler)		
			4 Assistant Incinerator Control Board Operator		
			3 Incinerator Control Board Operator		

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TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
<u>POWER EQUIPMENT OPERATORS</u> (GROUP CLASSIFICATIONS continued)			<u>POWER EQUIPMENT OPERATORS</u> (GROUP CLASSIFICATIONS continued)		
<u>RUBBER-TIRED SCRAPERS</u>			<u>SWEEPERS</u>		
4			6		
Rubber-tired Scraper Operator, single engine, single scraper			Broom Operator, self-propelled		
4			5		
Self-loading, paddle wheel, auger type under 15 cu. yd.			Sweeper Operator (Wayne type) self-propelled		
4			<u>TRACTOR - RUBBER TIRED</u>		
4			5		
Rubber-tired Scraper Operator, twin engine			Tractor Operator, rubber-tired, 50 H.P. Flywheel and under		
4			4		
Rubber-tired Scraper Operator, with push-pull attachments			Tractor Operator, rubber-tired, over 50 H.P. Flywheel		
3			4		
Rubber-tired Scraper Operator, with tandem scrapers			Tractor Operator, with boom attachment		
2			4		
Rubber-tired Scraper Operator, with tandem scrapers, multi-engine			Rubber-tired Dozers and Pushers (Michigan, Cat, Hough type)		
4			<u>TRENCHING MACHINE</u>		
4			6		
Self-loading, paddle wheel, auger type 15 cu. yd. and over, single engine			Oiler		
3			6		
Self-loading, paddle wheel, auger type, finish and/or 2 or more units			Grade Oiler (required to check grade)		
<u>SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER, ETC., OPERATOR</u>			5		
6			Trenching Machine Operator, maximum digging capacity 3 ft. depth		
6			4		
Grade Oiler (required to check grade)			Trenching Machine Operator, maximum digging capacity over 3 ft. depth		
6			4		
Grade Checker			Back Filling Machine Operator		
6			2		
Fireman			Wheel Excavator		
4			2		
Diesel-Electric Engineer			Canal Trimmer		
4			2		
Stationary Drag Scraper Operator			Band Wagon (in conjunction with wheel excavator)		
4			<u>TUNNEL</u>		
4			4		
Shovel, Dragline, Clamshell, Hoe etc., Operator under 3 cu. yd.			Mucking Machine Operator		
4			6		
Grade-all Operator			Conveyor Operator (any type)		
2			4		
Shovel, Dragline, Clamshell, Hoe etc., Operator 3 cu. yd. and over			Shield Operator		
<u>SIGNALMAN</u>			6		
6			Air Filtration Equipment Operator		
Bell Boy, phones, etc., Operator			6		
6			Dinkey Operator		
Helicopter Radioman (ground)			6		
<u>SURFACING (BASE) MATERIAL</u>			Oiler		
6			4		
Roller Operator, grading of base rock (not asphalt)			Tunnel Boring Machine Operator		
5			<u>WELDING MACHINES</u>		
Roller Operator, Oiling, C.T.B.			6		
6			Welding Machine Operator		
6			<u>UNDERWATER EQUIPMENT</u>		
Tamping Machine Operator, mechanical, self-propelled			2		
6			Underwater Equipment Operator, remote or otherwise, when used in construction work		
Hydrographic Seeder Machine Operator, straw, pulp or seed					
5					
Rock Spreaders, self-propelled					
5					
Pulva-mixer or similar types					
4					
Blade Mounted Spreaders, Ulrich and similar types					
5					
Chip Spreading Machine Operator					
5					
Lime Spreading Operator					

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
ROOFERS			SHEETMETAL WORKERS		
(Installation and removal of sheet metal roofing is done by sheetmetal workers.)			Area 1		
Area 1:			20.33 6.98		
o Roofers			(Add \$0.75 to base rate for work performed on any swinging platform, swinging chair, or swinging ladder)		
o Handling coal tar pitch			Area 2		
18.34 5.05			19.60 5.51		
20.17 5.05			(Add \$1.75 to base rate for work performed whenever it is possible for worker to fall 30 feet or more)		
Area 2:			(Add \$1.75 to base rate for work performed in an area where epoxy resins or other injurious chemicals are being applied)		
o Roofers			Area 3		
16.94 5.38			22.22 6.27		
(Add \$2.00 per hour to Fringe for work with irritable Bituminous material.)			(Add \$1.00 to base rate for work where it is necessary to wear a chemically activated face mask)		
Area 3:			(Add \$1.00 to base rate for work where employee is required to wear a fresh air mask due to nuclear related work)		
o Roofers			(Add \$.45 to base rate for work on a swinging stage, swinging scaffold or bosun chair in excess of 30 feet above the ground)		
14.85 4.07			Area 4		
(Add \$1.50 per hour to Fringe for work with irritable Bituminous material.)			17.92 5.01		
Area 4:			Area 5		
o Roofers			18.30 4.63		
16.00 5.40			Area 1		
(Add \$2.00 per hour to Fringe for work with irritable Bituminous materials)			Benton Gilliam Linn Tillamook		
Area 5:			Clackamas Grant Marion Wasco		
o Roofers			Clatsop Harney Multnomah Washington		
16.50 5.42			Columbia Hood River Polk Wheeler		
(Add \$3.00 per hour to Fringe for work with irritable Bituminous materials)			Crook Jefferson Sherman Yamhill		
Area 1			Deschutes Lincoln		
Area 1(cont)			Area 2		
Area 2			Area 3		
Area 2(cont)			Area 4		
Baker Multnomah Benton Klamath			Area 5		
Clackamas Sherman Coos Lake			Baker Morrow Douglas Coos		
Clatsop Tillamook Crook Lane			Malheur Umatilla Jackson Curry		
Columbia Wasco Curry Lincoln			Union Josephine Klamath		
Jefferson Washington Deschutes Linn			Wallowa Lake Lane		
Gilliam Wheeler Douglas Marion					
Grant Harney Polk					
Hood River Jackson Yamhill					
Area 3					
Area 4					
Area 5					
Malheur					
Umatilla					
Union					
Wallowa					

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
<u>SOFT FLOOR LAYERS</u>	18.10	4.98 + a	<u>TRUCK DRIVERS</u>		
a) plus 4% of basic hourly rate for employees with less than one year of service, 6% for those with more than one year.			Zone 1 (Base Rate):		
			o Group 1	19.12	6.52
			o Group 2	19.24	6.52
			o Group 3	19.37	6.52
			o Group 4	19.62	6.52
			o Group 5	19.84	6.52
			o Group 6	19.99	6.52
			o Group 7	20.19	6.52
			Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Hazardous Waste Site. For further information on this, call the Prevailing Wage Rate Coordinator at 731-4466.		
<u>SPRINKLER FITTERS</u>	21.40	6.28			
<u>TENDERS TO MASON TRADES</u>			Zone Differential for Truck Drivers (Add to Zone 1 Rate)		
o Tenders for Bricklayers, Tile Setters, Marble Setters and Terrazzo Workers; Topping for Cement Finishers and Mortar Mixers.			Zone 2	.65	
18.09 5.60			Zone 3	1.15	
(Add \$0.50 to base rate for refractory work)			Zone 4	1.70	
(Add to base rate an amount equal to that received for safety belt requirements or other unusual job conditions by the mechanic this worker is tending)			Zone 5	2.75	
<u>TENDERS TO PLASTERERS</u>	16.50	4.97	<u>Zone 1:</u> Projects within 30 miles of City Hall in the Cities listed below.		
<u>TILE SETTER/ TERRAZZO WORKER</u>	20.45	5.53	<u>Zone 2:</u> More than 30 miles but less than 40 miles.		
(Add \$.50 to base rate if safety belt required by State safety regulations. Add \$1.00 to base rate if work involves epoxy, furnane, alkor acetylene black grouting or waterproof membrane.)			<u>Zone 3:</u> More than 40 miles but less than 50 miles.		
<u>TILE, TERRAZZO, BRICK & MARBLE FINISHERS</u>			<u>Zone 4:</u> More than 50 miles but less than 80 miles.		
o Assists Tile Setters, Brick Layers, Marble Masons, Stone Masons, and Terrazzo Workers by striking, sawing, cleaning, washing or grouting. Does not lay or set any material.			<u>Zone 5:</u> More than 80 miles.		
15.49 4.05			<u>Reference Cities</u>		
(Add \$.50 to base rate if safety belt required by State safety regulations. Add \$1.00 to base rate if work involves epoxy, furnane, alkor acetylene black grouting or waterproof membrane.)			Albany Eugene Longview Portland		
(Add \$0.75 to fringe for refractory repair work.)			Astoria Goldendale Madras Port Orford		
			Baker Grants Pass Medford Reedsport		
			Bend Hermiston McMinnville Roseburg		
			Brookings Hood River Newport Salem		
			Burns Klamath Falls Oregon City The Dalles		
			Coos Bay LaGrande Ontario Tillamook		
			Corvallis Lakeview Pendleton		
			<u>Work</u>	<u>Group</u>	
			A-Frame or Hydra-lift Truck w/load bearing surface	1	
			Battery Rebuilder	1	
			Bus or Man-Haul Driver	1	
			Concrete Buggies (Power operated)	1	
			Drivers and Helpers handling sacked cement—add 15¢ per hour		

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
TRUCK DRIVERS (continued)			TRUCK DRIVERS (Continued)		
Dump Trucks, Side, End and Bottom Dumps, including Semi-Trucks and trains or combinations thereof:			Tireman, full-time basis	1	
Up to and inc. 10 cu. yds	1		Truck Assistant.	1	
Over 10 cu. yds. and inc. 30 cu. yds	3		Truck Mechanic - Welder - Body Repairman	3	
Over 30 cu. yds. and inc. 50 cu. yds	4		Truck Mechanic Assistant	1	
Over 50 cu. yds. and inc. 60 cu. yds	5		Water Wagons (Rated Capacity) up to:		
Over 60 cu. yds. and inc. 80 cu. yds	6		3000 gallons	1	
Over 80 cu. yds. and inc. 100 cu. yds	7		3000 to 5000 gallons.	2	
Dumpsters or Similar Equipment—all sizes.	2		5000 to 10,000 gallons	3	
Flaherty Spreader Driver or Leverman	2		10,000 to 15,000	4	
Lift Jitneys, Fork Lifts—all sizes—used in loading, unloading & transporting material on job site.	1		Winch Truck - takes classification of truck on which winch is mounted		
Loader and/or Leverman on Concrete Dry Batch Plant, manually operated.	1		WELDERS: RIGGERS		
Low Bed Equipment, Flat Bed Semi-Truck and Trailer or Doubles transporting equipment or wet or dry materials.	2		Receive rate for craft performing operation to which welding and rigging are incidental.		
Lubrication Man, Fuel Truck Driver, Driver, Tireman, Wash Rack, Steam Cleaner or combination.	1				
Lumber Carrier, Driver-Straddle Carrier—used in loading, unloading and transportation of material on job site	2				
Oil Distributor Driver or Leverman	2				
Pilot Car.	1				
Slurry Truck Driver or Leverman.	1				
Solo Flat Bed and Misc. Body Trucks— 0-10 tons.	1				
Transit Mix and Wet or Dry Mix Trucks:					
5 cu. yds. and under	1				
Over 5 cu. yds. and inc. 7 cu. yds	2				
Over 7 cu. yds. and inc. 11 cu. yds	3				
Over 11 cu. yds. and inc. 15 cu. yds	4				

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
<u>ASBESTOS WORKERS</u>			<u>DRYWALL/WETWALL</u>		
Installation of insulation on mechanical systems for Thermal and Acoustical purposes, also the installation of fire stop penetrations on Electrical and Mechanical Systems.			o Drywall (Accoustical and Drywall Applicator)		
				19.48	7.27
			o Wetwall (Lather)		
				18.41	8.34
<u>ELECTRICIANS</u>			<u>ELECTRICIANS</u>		
Journeyman Asbestos Worker			Coos, Curry, Douglas (western portion)		
	22.31	6.14	o Electricians		
Removal of regulated material on mechanical systems* which are not going to be scrapped.**				21.60	6.54
o Hazardous Materials Handler			Josephine, Douglas (eastern portion)		
Mechanic (in any type of project regardless of value)			o Electricians		
	14.25	3.35		21.55	6.80
* Mechanical systems include pipes, boilers, ducts, flues breaching, grease ducts and acid ducts. This also includes all labor connected with the handling and distribution of materials for these systems.			o Cable Splicers		
** The removal of all regulated materials from mechanical systems is exclusively the work of Asbestos Workers, unless the mechanical systems are going to be scrapped, regardless whether the insulation materials contain asbestos. <u>Laborers do all removal of regulated materials on mechanical systems to be scrapped and any non mechanical (walls, ceilings, floors, beams, etc. insulation. They also do loading of any regulated material after it has been removed, bagged and tagged, as well as cleanup at the removal site and all work done at the disposal site. Persons performing the removal of regulated materials are classified as Group 3 Laborers.</u>				21.55	6.80
<u>ELEVATOR CONSTRUCTORS</u>			<u>ELEVATOR CONSTRUCTORS</u>		
			o Mechanic		
				25.51	6.82+ a
			o Helper		
				17.86	6.61+ a
			o Probationary Helper		
				12.76	0.34
			a) Plus 8% of basic hourly rate for employees with more than 5 years of service; 6% of basic hourly rate for 6 months to 5 years of service.		
<u>GLAZIERS</u>			<u>GLAZIERS</u>		
				22.12	4.71
			(Add \$1.00 to base rate if safety belt is required by State safety regulations)		
			(Add \$4.00 to base rate for work done from a non-motorized single-man bosun chair)		
<u>INSULATORS (BAT AND BLOWN)</u>			<u>INSULATORS (BAT AND BLOWN)</u>		
				7.85	0
<u>IRONWORKERS</u>			<u>IRONWORKERS</u>		
			o Structural, Reinforcing, Ornamental, Riggers, Fence Erectors, Signal Men		
				20.50	9.32
<u>LABORERS</u>			<u>LABORERS</u>		
				9.10	4.65
<u>LIMITED ENERGY ELECTRICIANS</u>			<u>LIMITED ENERGY ELECTRICIANS</u>		
			May only be used for electrical work not exceeding 100 va in Class II and III installations (as defined in Article 725 of the National Electrical Code):		
				13.75	4.49
<u>PAINTERS</u>			<u>PAINTERS</u>		
				13.00	0
<u>BOILERMAKERS</u>					
	22.94	8.39			
<u>BRICKLAYERS/STONEMASONS</u>					
	20.32	5.68			
<u>CARPENTERS</u>					
	13.20	3.67			
<u>CEMENT MASONS</u>					
	10.00	0			

NOTE: Regulated materials are those materials that are regulated for the purpose of protecting the environment or for personal protection by either E.P.A., O.S.H.A., DEQ or Federal O.S.H.A.

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS		
<u>PLASTERERS</u>			<u>TILE, TERRAZZO, BRICK & MARBLE FINISHERS</u>				
o Nozzleman	22.76	5.06	o Assists Tile Setters, Brick Layers, Marble Masons, Stone Masons, and Terrazzo Workers by striking, sawing, cleaning, washing or grouting. Does not lay or set any material.	15.49	4.05		
o Swinging scaffold	21.76	5.06					
o all other work	21.26	5.06					
<u>PLUMBERS & STEAMFITTERS/PIPEFITTERS</u>			(Add \$.50 to base rate if safety belt required by State safety regulations. Add \$1.00 to base rate if work involves epoxy, furnace, alkyl acetylene black grouting or waterproof membrane.) (Add \$0.75 to fringe for refractory repair work.)				
	23.75	6.75	<u>TRUCK DRIVERS</u>				
<u>POWER EQUIPMENT OPERATORS</u>			Zone 1 (Base Rate):				
Backhoes	12.94	1.56	o Group 1	19.12	6.52		
Bulldozers	13.50	1.56	o Group 2	19.24	6.52		
Loader	13.50	1.56	o Group 3	19.37	6.52		
<u>ROOFERS</u>			o Group 4	19.62	6.52		
	8.00	0	o Group 5	19.84	6.52		
<u>SHEETMETAL WORKERS</u>			o Group 6	19.99	6.52		
Coos, Curry	18.30	4.63	o Group 7	20.19	6.52		
Douglas, Josephine	17.92	5.01	Note: A Hazardous Waste Removal Differential must be added to the base rate if work is performed inside the boundary of a Federally Designated Hazardous Waste Site. For further information on this, call the Prevailing Wage Rate Coordinator at 731-4466				
<u>SOFT FLOOR LAYERS</u>			Zone Differential for Truck Drivers (Add to Zone 1 Rate)				
a) plus 4% of basic hourly rate for employees with less than one year of service, 6% for those with more than one year.	18.10	4.98 + a	Zone 2	.65			
<u>SPRINKLER FITTERS</u>			Zone 3	1.15			
	21.40	6.28	Zone 4	1.70			
<u>TENDERS TO MASON TRADES</u>			Zone 5	2.75			
o Tenders for Bricklayers	18.09	5.60	Zone 1: Projects within 30 miles of City Hall in the Cities listed below.				
(Add \$0.50 to base rate for refractory work)			Zone 2: More than 30 miles but less than 40 miles.				
(Add to base rate an amount equal to that received for safety belt requirements or other unusual job conditions by the mechanic this worker is tending)			Zone 3: More than 40 miles but less than 50 miles.				
<u>TENDERS TO PLASTERERS</u>			Zone 4: More than 50 miles but less than 80 miles.				
	16.50	4.97	Zone 5: More than 80 miles.				
<u>TILE SETTER/ TERRAZZO WORKER</u>			Reference Cities				
(Add \$.50 to base rate if safety belt required by State safety regulations. Add \$1.00 to base rate if work involves epoxy, furnace, alkyl acetylene black grouting or waterproof membrane.)	20.45	5.53	Albany	Eugene	Longview		
			Astoria	Goldendale	Portland		
			Baker	Grants Pass	Port Orford		
			Bend	Hermiston	Medford		
			Brookings	Hood River	Reedsport		
			Burns	Klamath Falls	McMinnville		
			Coos Bay	LaGrande	Roseburg		
			Corvallis	Lakeview	Newport		
					Salem		
					The Dalles		
					Tillamook		
					Pendleton		

TRADES	BASIC HOURLY RATE	FRINGE BENEFITS	TRADES	BASIC HOURLY RATE	FRINGE BENEFITS
TRUCK DRIVERS (Continued)			TRUCK DRIVERS (Continued)		
<u>Work</u>		<u>Group</u>			
A-Frame or Hydra-lift Truck w/load bearing surface.		1	Slurry Truck Driver or Leverman		1
Battery Rebuilder		1	Solo Flat Bed and Misc. Body Trucks— 0-10 tons		1
Bus or Man-Haul Driver.		1	Transit Mix and Wet or Dry Mix Trucks:		
Concrete Buggies (Power operated)		1	5 cu. yds. and under		1
Drivers and Helpers handling sacked cement—add 15¢ per hour			Over 5 cu. yds. and inc. 7 cu. yds.		2
Dump Trucks, Side, End and Bottom Dumps, including Semi-Trucks and trains or combinations thereof:			Over 7 cu. yds. and inc. 11 cu. yds.		3
Up to and inc. 10 cu. yds.		1	Over 11 cu. yds. and inc. 15 cu. yds.		4
Over 10 cu. yds. and inc. 30 cu. yds.		3	Team Drivers		1
Over 30 cu. yds. and inc. 50 cu. yds.		4	Tireman, full-time basis		1
Over 50 cu. yds. and inc. 60 cu. yds.		5	Truck Assistant.		1
Over 60 cu. yds. and inc. 80 cu. yds.		6	Truck Mechanic—Welder—Body Repairman ..		3
Over 80 cu. yds. and inc. 100 cu. yds.		7	Truck Mechanic Assistant.		1
Dumpsters or Similar Equipment all sizes		2	Water Wagons (Rated Capacity) up to:		
Flaherty Spreader Driver or Leverman		2	3000 gallons.		1
Lift Jitneys, Fork Lifts—all sizes—used in loading, unloading & transporting material on job site.		1	3000 to 5000 gallons		2
Loader and/or Leverman on Concrete Dry Batch Plant, manually operated.		1	5000 to 10,000 gallons.		3
Low Bed Equipment, Flat Bed Semi-Truck and Trailer or Doubles transporting equipment or wet or dry materials		2	10,000 to 15,000 gallons		4
Lubrication Man, Fuel Truck Driver, Driver, Tireman, Wash Rack, Steam Cleaner or combination.		1	Winch Truck—takes classification of truck on which winch is mounted		
Lumber Carrier, Driver-Straddle Carrier—used in loading, unloading and transportation of material on job site ...		2	<u>WELDERS; RIGGERS</u>		
Oil Distributor Driver or Leverman.		2	Receive rate for craft performing operation to which welding and rigging are incidental.		
Pilot Car		1			

BUREAU OF LABOR AND INDUSTRIES - WAGE AND HOUR DIVISION

INSTRUCTIONS FOR COMPLETING PAYROLL/CERTIFIED STATEMENT FORM,
WH-38 (Rev 1/94)

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 benefits to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringe benefits.

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 fringe benefits, and provides for the contractor's representation in the payroll/certified statement that he/she is paying other benefits required by the contract and not paid as cash in lieu of fringe benefits. Detailed instructions concerning the preparation of the form follow:

Fill in the box at the top of the form. Fill in the appropriate Prime Contractor or Subcontractor box. Be sure to enter the date the contract was first advertised for bid, if it has not been already entered by the Public Contracting Agency. If you are not sure of this date, contact the Public Contracting Agency.

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 can be listed.

Column 2 - Trade Classifications: List the classification found in the Bureau of Labor and Industries publication "Prevailing Wage Rates for Public Works Contracts in Oregon," which is most descriptive of the work actually performed by the employee. Give the group number for those worker classifications which include such information. Consult the worker classifications and minimum Prevailing Wage Rate schedule set forth in contract specifications. Refer to the appropriate Prevailing Wage Rates in effect at the time the contract was first advertised for bid for information regarding trade classifications, basic hourly rates, and hourly fringe benefits. Indicate which workers are apprentices, if any, and give their current percentage, trade classification, and group number when applicable. If additional worker classifications are deemed necessary, contact the contracting public agency. If an employee works in more than one worker classification, use the highest rate for all hours worked, or use separate line entries to show hours worked, rate of pay, and fringe benefit for each classification.

Column 3

- DAY AND DATE: Enter the day of the week (M, T, W, Th, F, S, Sn) in the top row of boxes, and the number of the day of the month below.

- HOURS WORKED EACH DAY: Enter as overtime hours all hours worked in excess of 8 hours per day, all hours worked on Saturday and Sunday and all hours worked on legal holidays as defined in ORS 279.334. See ORS 279.334(3) for exceptions to this requirement.

Column 4 - Total Hours: Enter separately the total number of overtime hours and straight time hours worked by each listed classification during this pay period; overtime ("OT") on top, straight time ("S") immediately below.

Column 5 - Basic Hourly Rate of Pay: Enter the basic hourly rate and the overtime hourly rate (if any) paid the employee in the appropriate overtime and straight time boxes. Payment of not less than one and one half times the basic or regular rate paid is required for overtime under ORS 279.334.

Column 6 - Hourly Fringe Benefit Paid as Wages to the Employee: Enter any additional cash paid directly to the employee in lieu of fringe benefits. It is not necessary to pay time and a half for overtime work on those wages which are paid in lieu of fringe benefits.

Column 7 - Gross amount earned: Enter the gross wages earned by the worker in this classification for all listed straight time hours, all listed overtime hours, and including all additional amounts paid directly to the employee.

Column 8 - Total Deductions, FICA, FED, STATE, ETC: Enter the total amount of deductions withheld from each employee for just those hours reported on this payroll/certified statement for this project. All deductions must be in accordance with the provisions of ORS 652.610.

Column 9 - Net Wages Paid for Week: Enter the amount of wage actually paid to the employee after subtracting the total deductions reported in Column 8 from the gross amount earned shown in Column 7.

Column 10 - Hourly Fringe Benefit Paid to Party, Plan, Fund or Program: Enter the hourly amount of fringe benefits paid to each individually approved party, plan, fund or program for each employee. List these amounts separately on the lines provided. Any contractor who is making payments to approved parties, plans, funds or programs in amounts less than the required hourly fringe benefit is obligated to pay the difference directly to the employee as wages in lieu of fringe benefits, and to show that amount in Column 6 of this form.

Column 11 - Name of Benefit Party, Plan, Fund or Program: Enter the name of the party, plan, fund or program that corresponds to the amount shown as an hourly fringe benefit in Column 10.

Summary - In order to determine if the wages and fringe benefits being certified by this statement are sufficient to meet Prevailing Wage Rate requirements, the following check may be performed:

1. Consider each Trade Classification listed in Column 2.
2. For that Trade Classification, take the sum of:
 - a) the Basic Hourly Rate of Pay (Column 5),
 - b) the Hourly Fringe Benefit Paid as Wage to Employee (Column 6),
 - c) and the Hourly Fringe Benefit Paid To Party, Plan, Fund or Program (Column 10).
3. This sum must equal or exceed the sum of the Basic Hourly Rate (including zone pay and special wage differentials, if any) and the Fringe Benefit as they are listed for that Trade Classification in the appropriately dated issue of the Bureau of Labor and Industries publication; Prevailing Wage Rates for Public Works Contracts in Oregon.

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Business Name (DBA):	CCB Registration Number:	Project Name:	Project Number:
Phone: ()		Type Of Work:	
Street Address:		Project Location:	Project County:
Mailing Address:			
Date Pay Period Began:	Date Pay Period Ended:		

1236

Public Contracting Agency Name: CITY OF NEWBERG

Phone: ()

Date Contract Specifications First Advertised For Bid:

Contract Amount:

THIS SECTION FOR SUBCONTRACTORS ONLY

Subcontract Amount:

Prime Contractor Business Name (DBA):

Phone: ()

CCB Registration Number:

Date You Began Work On The Project:

[illegible]

(1)	(2)	(3) DAY AND DATE							(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Name, Address, And Social Security Number of Employee	Trade Classification (Include group number if applicable)								Total	Basic Hourly Rate Of Pay	Hourly Fringe Benefit Paid As Wage To Employee	Gross Amount Earned	Total Deductions FICA, FED, STATE, ETC.	Net Wage Paid For Week	Hourly Fringe Benefit Paid To Party, Plan, Fund or Program	Name Of Benefit Party, Plan, Fund, or Program
			HOURS WORKED EACH DAY													
		OT														
		S														
		OT														
		S														
		OT														
		S														
		OT														
		S														

CERTIFIED STATEMENT

I _____ do here by state:

(Name of signatory party) (Title)

(1) That I pay or supervise the payment of the persons employed by _____ on the _____;

(Contractor, Subcontractor or Surety) (Building or work)

that during the payroll period commencing on the _____ day of _____, 19____, and ending the _____ day of _____, 19____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____

(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 as follows: _____

(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 contained therein are not less than the applicable wage rates contained in any wage determination incorporated in the contract; that the classification set forth therein for each worker conforms with work performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department 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.

I have read this certified statement, know the contents thereof and it is true to my knowledge.

NAME AND TITLE

SIGNATURE

Note to Contractors: Essential information has been provided on the shaded lines of this form by the contracting agency. You must attach copies of this form to each of your payroll submissions on this project. See the BOLI publication Prevailing Wage Rates for Public Works Contracts in Oregon for instructions on completing this form.

File this form with the contracting agency and send a true copy to the Bureau of Labor and Industries, Wage and Hour Division, 800 NE Oregon St. #32, Portland, OR 97232.
FORM WH-38S (REV 8/93)

Please fill out this entire form.
Make sure the information you enter on the shaded lines matches the information you provide your contractors on the shaded lines of the forms Certified Payroll (WH-38), and List of Subcontractors by Project (WH-303). See instruction sheet for details.

BUREAU OF LABOR AND INDUSTRIES
WAGE AND HOUR DIVISION

LIST OF SUBCONTRACTORS BY PROJECT
For use by Prime Contractors in Complying with
ORS 701.055 (11) and OAR 812-03-000 (14)

PRIME CONTRACTOR NAME _____

Address _____

City, State, Zip _____ Phone _____

PROJECT NAME AND NUMBER _____

Project Location _____

CONTRACTING CITY OF NEWBERG 537-1214
AGENCY NAME _____ Phone _____

<u>SUBCONTRACTOR NAME</u>	<u>CCB REGISTRATION NUMBER</u>	<u>ADDRESS</u>	<u>PHONE NUMBER</u>
---------------------------	--	----------------	-------------------------

The primary contractor shall provide the initial list of subcontractors to the contracting public agency and to the Wage and Hour Division of the Bureau of Labor and Industries, 800 NE Oregon #32, Portland, OR 97232, on the same date that the initial payroll and certified statement form WH-38 is due. The primary contractor will prepare and submit updated lists of subcontractors with each submittal of the payroll and certified statement.

PLANNED PUBLIC IMPROVEMENT SUMMARY

FISCAL YEAR _____ - _____

PAGE _____ OF _____

(Name of State or Local Government Agency)

Project Number	Project Name	Project Type	Project Location	Estimated Project Cost	Agency or Contract Work

ORS 279.023 generally states that not less than 30 days prior to adoption of its budget for the subsequent budget period, each public agency shall prepare and file with the Commissioner of the Bureau of Labor and Industries a list of every public improvement known to that agency that the agency plans to fund in the budget period... If the agency decides to use its own equipment and personnel for constructing projects estimated to cost more than \$50,000, the agency shall show that the decision conforms to the policy of the State of Oregon that public agencies shall make every effort to construct public improvements at the least cost to the public agency, and the public agency shall cause to be kept and preserved a full, true and accurate account of the costs of performing the work including all engineering and administrative expenses and a reasonable estimate of the cost, including investment cost, of the equipment used. **NOTE:** This Improvement Summary together with the project estimate and least cost determination constitutes a public record available in the usual manner for public review or copying. Mail a copy of this public improvement summary to: Wage and Hour Division, 800 NE Oregon St. # 32, Portland, Oregon 97232.

(Name of State or Local Government Agency)

FUND:
PROJECT NUMBER:

Estimated Construction Period _____

(Agency Official)

TECHNICAL PROVISIONS
Street Improvements

CITY OF NEWBERG
EVEREST ROAD/SECOND STREET L.I.D.

AUGUST 1995

TECHNICAL PROVISIONS

Street Improvements

SECTION 1.00 MOBILIZATION

1.01 Description.

This section consists of the preparatory operations necessary to move personnel, equipment, and materials to the project site; establish facilities necessary for the work; for premiums on bond and insurance for the work; and for other operations performed or costs incurred before the beginning of the work.

1.02 Materials.

The Contractor shall provide all materials required to accomplish the work as specified.

1.03 Construction.

The Contractor shall set up construction facilities in a neat and orderly manner within designated or approved work areas.

1.04 Measurement and Payment.

a. Lump Sum Basis. When listed in the bid schedule as a pay item, payment for mobilization will be made on a lump sum basis. Mobilization shall not be more than five (5) percent of the total contract bid.

b. Incidental Basis. When neither specified nor listed in the proposal for separate payment, mobilization will be considered incidental work for which no separate payment will be made.

SECTION 2.00 ASPHALT CONCRETE

2.01 Scope.

This work shall consist of constructing one or more courses of asphalt concrete pavement on a prepared base in accordance with these specifications, and in reasonably close conformity to the lines, grades, thicknesses and cross-sections shown on the plans or established by the Engineer.

Asphalt concrete is a hot mixture of asphalt cement; well graded, high quality aggregate; mineral filler and additives as required; plant mixed into a uniformly coated mass, hot laid on a prepared foundation, and compacted to specified density.

2.02 Aggregate Materials.

2.02.A General.

TECHNICAL PROVISIONS

Street Improvements

Aggregates for asphaltic concrete pavements shall meet the requirements of this Section, subject to such modifications of the specified gradation as may be necessary to produce the mix proportions specified in Section 2.03 of these Specifications.

2.02.B Tests.

In addition to the above, aggregates for flexible pavements will be subject to testing for the following properties:

<u>Property</u>	<u>Test</u>	<u>Requirement</u>
Sieve Analysis	AASHTO T 27	See Table I
Cohesion	AASHTO T 165	70% retained strength
Abrasion Resistance	AASHTO T 96	Wear - 30% maximum
Sand Equivalent	AASHTO T 176	
Soundness	AASHTO T 104	
Unit Weight		
Specific Gravity		
- Coarse Aggregate	AASHTO T 85	
- Fine Aggregate	AASHTO T 84	
Liquid Limit	AASHTO T 89	
Plastic Limit	AASHTO T 90	

2.02.C Coarse Aggregate.

The portion of the aggregate retained on the 1/4 inch sieve will be known as Coarse Aggregate. Coarse Aggregate shall be crushed rock or crushed gravel free from flat, elongated, soft or disintegrated pieces and other extraneous matter or coatings. The Coarse Aggregate, when separated on consecutive sieves, shall contain in each fraction not less than 60% (by weight) of fragments which have at least one mechanically fractured face. The sieve analysis of Coarse Aggregate is shown in Table I.

Table I
Sieve Analysis of Aggregate

Percentages of Designated Sizes (by weight)

<u>Sieve Size</u>	<u>3/4"-1/4"</u>	<u>1/2"-1/4"</u>	<u>3/8"-1/4"</u>	<u>1/4"-0</u>
<u>Passing</u>				
1"	100	100	100	
3/4"	90-100	100	100	
1/2"	60-75	85-100	100	
3/8"		85-100	100	
1/4"	0-15	0-15	0-15	85-100

TECHNICAL PROVISIONS

Street Improvements

2.02.D Fine Aggregate.

That portion of the aggregate passing the 1/4" sieve will be known as Fine Aggregate and shall consist of crushed rock, crushed gravel, sand or other mineral matter and shall be free of clay, loam, vegetation or other extraneous matter or coatings. Fine Aggregate shall have at least one mechanically fractured face on not less than 60% of the particles (by weight). The sieve analysis of Fine Aggregate is shown in Table I above.

Of the aggregate passing the 1/4" sieve, the following percentages thereof shall pass the No. 10 sieve:

<u>Class of Asphalt Concrete</u>	<u>Percentage Passing</u>
Class "B"	42.5 - 57.5
Class "C"	42.5 - 57.5
Class "D"	48.0 - 66.0
Class "E"	18.0 - 33.0

Aggregate passing the 1/4" sieve shall conform to the following requirements of Liquid Limit and Plastic Limit:

<u>Percent of Material Passing No. 40 Sieve</u>	<u>Liquid Limit Maximum</u>	<u>Plastic Limit Maximum</u>
0 to 5.5	33	6
5.6 to 10.0	30	5
10.1 to 15.0	27	4
15.1 to 20.0	24	3
20.1 to 25.0	21	2
over 25	21	Non-plastic

2.02.E. Mineral Filler.

Mineral filler shall conform to AASHTO M 17. Collector dust may be used as Mineral filler, in whole or in part, provided the dust or filler/dust mixture conforms to the requirements of AASHTO M 17.

2.03 Asphalt Concrete Materials.

2.03.A Class.

This specification provides for several classes of asphalt concrete, wherein the classes differ one from another in sizes of aggregates and in proportions of aggregate and asphalt cement. Which of the classes is to be used shall be as shown on the plans or as directed by the Engineer, and shall conform to the requirements of these specifications.

TECHNICAL PROVISIONS

Street Improvements

2.03.B Proportions.

The exact proportions of the several constituents to be used in the production of the mixture shall, within the limits specified in Table II be fixed by the Contractor. The proportions so established shall be known as the "mix formula" and shall be changed only with the approval of the Engineer.

Table II
Asphalt Concrete Mix Proportions
Percentages of Total Aggregate (by weight)

<u>Sieve Size</u> <u>Passing</u>	<u>Class "B"</u>	<u>Class "C"</u>	<u>Class "D"</u>
1"	99-100	-	-
3/4"	92-100	99-100	-
1/2"	75-91	90-100	99-100
1/4"	50-70	52-80	85-100
No. 10	21-41	21-46	37-57
No. 40	6-24	8-25	13-29
No. 200	2-7	3-8	4-9
Asphalt Cement*	4-8	4-8	4-8

*Percent of total mix (by weight)

2.03.C Tolerances.

After the mix formula is established as prescribed above, the several constituents of the mixture furnished by the Contractor shall conform to the mix formula within the tolerances specified in Table III, but always within the pertinent limits of Table II.

Table III
Asphalt Concrete Mix Tolerances

<u>Constituents</u>	<u>Tolerance</u> (Plus or Minus Percentage)
Passing 1/4" Sieve or larger	6.0
Passing No. 10 and No. 40 Sieve	5.0
Passing No. 200 Sieve	2.0
Asphalt Cement	0.5
Temperature of Mix	10°F

TECHNICAL PROVISIONS

Street Improvements

Each day the Engineer shall be permitted to take as many samples as he considers necessary for checking the uniformity of the mixture. When unsatisfactory results or other conditions make it necessary or desirable, the Engineer may require a new mix formula.

2.03.D Feathering.

Asphalt concrete for use in feathering at curb or gutter lines, at intersections, at connections with existing pavement, in spot patching, and under similar conditions, shall be a fine mix of asphalt concrete such as Class "D" mix.

2.03.E Asphalt Cement.

Asphalt Cement shall be "Aged Residue" (AR) grades; AR-1000, AR-2000, AR-4000, AR-8000, and AR-16000; and shall conform to those specifications shown in Table IV. The Contractor may elect which of the grades to use with the understanding that the Engineer may order the use of a different grade when he determines that such use is necessary to produce the specified finished pavement.

TECHNICAL PROVISIONS

Street Improvements

Table IV

Requirements for Asphalt Cement Viscosity Graded at 140°F (60°C)
(Tests on residue from Rolling Thin-Film Oven Test)

SPECIFICATION DESIGNATION	AASHTO Test	Viscosity Grade				
		AR- 1000	AR- 2000	AR- 4000	AR- 8000	AR- 16000
Absolute Viscosity at 140°F, poise	750- T-202	1500- 1250	3000- 2500	6000- 5000	12000- 10000	20000
Kinematic Viscosity at 275°F, cs, min.	T-201	140	200	275	400	550
Penetration at 77°F 100g/5sec, min.	T-49	65	40	25	20	20
Percent of original penetration at 77°F, min.	***	-	100**	75	75	75
Ductility at 77°F. 5cm/min, min. cm.	T-51	100**	100**	75	75	75

TESTS ON ORIGINAL ASPHALT

Flash point, Pensky- Martens, deg. F. min.	T-73	400	425	440	450	460
Solubility in Trichloroethylene percent, min.	T-44	99	99	99	99	99

*TFO (AASHTO T-179) may be used but RTFO (AASHTO T-240) shall be the referee method.

**If ductility at 77° is less than 100 cm. the material will be accepted if ductility at 60°F. is 100 cm. minimum at a rate of 5 cm/min.

***Original penetration as well as penetration after RTFO loss will be determined by AASHTO Test Method T-49.

2.03.F Temperature.

The temperature to which the aggregates and asphalt cement are to be heated and at which the asphalt concrete mixture is to be deposited and spread shall be as follows:

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Degrees Fahrenheit to which aggregates
are to be heated before mixing 250 - 325

Degrees Fahrenheit to which asphalt cement
is to be heated upon entry into the mixer 250 - 325

Degrees Fahrenheit at which asphalt concrete
mixture is to be deposited on the road 250 - 300

2.03.G Tack Coat Asphalt.

Tack coat asphalt shall be one or another of the following emulsified asphalts as designated by the Engineer: CSS-1 or CSS-1h.

2.04 Construction.

2.04.A Weather Limitations.

Asphalt concrete mixtures shall be placed on dry prepared surfaces when the air temperature in the shade is not less than:

Nominal Compacted Thickness of Individual Courses*	Travel Lanes Wearing Courses	All Other Courses
Less than 1-1/2"	60°F.	55°F.
1-1/2" to 2-1/2"	50°F.	45°F.
2-1/2" and over	40°F.	35°F.

*As shown on the typical section of the plans.

Placing of the asphalt concrete during a rain normally will not be permitted, except that asphalt concrete in transit at the time of a sudden rain shower may be laid provided it is of proper laying temperature and it is placed on a base free from pools of water. When weather conditions are such as to necessitate such protection, each load of asphalt concrete shall be covered with a tarpaulin while in transit to prevent unnecessary loss of heat or to protect the mixture from the weather.

2.04.B Reconditioning Old Roadbed.

This work shall consist of the reconditioning of previously constructed roadbed sub-grades, aggregate bases, and pavement surfaces upon which material is to be placed, as stated in the contract.

Where unstable or unsuitable materials are encountered, they shall be removed and disposed of as directed by the Engineer and replaced with material as specified by the Engineer. The replacement materials shall be placed, compacted and finished in accordance with the requirements of

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the appropriate section of these specifications.

Removing, disposing of, and replacing unstable or unsuitable materials shall be extra work and payment will be in accordance with the requirements of the general conditions.

2.04.C Preparation of Surface.

The area to be paved shall be true to line and grade, and have a dry and properly prepared surface prior to the start of paving operations. It shall be free from all loose screenings and other loose or foreign material.

Existing pavement surfaces shall be cleaned of all loose material, dirt and dust by brooming, by flushing with water or by other approved methods.

The vertical faces of existing pavements and all structures in actual contact with asphalt mixes shall be painted with a thin, completed coating of emulsified asphalt mixes to provide a closely bonded, waterproof joint.

2.04.D Application of Tack Coat.

Tack coat asphalt shall be applied to existing bituminous and Portland cement concrete surfaces prior to placing asphalt concrete. Apply the tack coat within a range of 0.20 to 0.30 gallons per square yard of surface, and within a temperature range of 125 to 165°F. Tack coat asphalt shall not be applied to any wet surfaces or when the air temperature is less than 60 degrees fahrenheit. The asphalt shall be applied by pressure-spray equipment capable of providing a uniform application at the prescribed rate. It shall be applied only so far in advance of the asphalt concrete paving operations as is necessary in order to provide a tacky surface upon which to place the asphalt concrete.

Application of tack coat shall be by distributor truck, equipped with a spray box capable of applying a uniform, calibrated spray rate according to this section. Hose and hand nozzle sprayers will only be permitted where the distributor truck cannot maneuver, or to touch-up areas applied by distributor truck.

2.04.E Paving Plant and Equipment.

All plant and equipment used by the Contractor in the preparation and mixing of asphalt concrete shall be so designed, coordinated and operated as to produce uniform mixtures within the job-mix requirements set forth in these Specifications.

2.04.F Equipment for Hauling and Placing.

Trucks - Vehicles used for hauling asphalt concrete shall have tight, smooth metal bottoms and shall be free from dust, screenings, petroleum oils, volatiles or other mineral spirits which may affect the mix being hauled. Trucks shall be equipped with a tarpaulin cover to protect against moisture and against heat loss.

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Pavers - Asphalt concrete pavers shall be self-centered, power-propelled units, capable of spreading the mix to the required tolerances. In areas where it is impractical to spread and finish by use of such pavers, the contractor may use other spreading equipment or hand methods approved by the Engineer.

Rollers - Rollers and compactors shall be self propelled, in good condition, and capable of reversing without backlash. The term "rollers", as used herein refers generally to 2-axle or 3-axle tandem, 3-wheel, and pneumatic tire rollers. Compactors may include vibratory types of rollers or compactors or other compacting equipment approved by the Engineer.

2.04.G Leveling Course.

At the locations called for on the plans, or designated by the Engineer, the Contractor shall place a leveling course of asphalt concrete on existing pavements prior to construction of the asphalt concrete pavement, for the purpose of leveling existing irregular surfacings. The leveling work shall be a separate operation under the bid item "Leveling Course Asphalt." Use Class D asphalt concrete for the Leveling Course. Leveling material shall be spread by means of a paving machine except in small incidental areas as determined by the Engineer where other suitable equipment may be permitted.

2.04.H Control of Line and Grade.

The asphalt concrete mixture shall be laid to the width, lines, grades, thicknesses and cross sections as shown on the Plans or as directed by the Engineer. The Engineer will establish controls for the work and will set references for line and grade at reasonable intervals along work. The Contractor shall furnish, place and maintain such materials, devices and equipment as may be required to provide specified independent line and grade control references and other controls which may be required for proper execution of the work.

2.04.I Hauling, Spreading, and Finishing.

The asphalt concrete mixture shall be transported from the mixing plant to the point of use in trucks conforming to the requirements set forth in Section 2.04.F. No loads shall be sent out so late in the day as to prevent the spreading and compacting of the mixture during daylight, unless artificial light satisfactory to the Engineer is provided.

The mixture shall be laid in strips of such width as to hold to a practical minimum the number of longitudinal joints required. The longitudinal joints in any layer or course of pavement shall offset those in layers or courses above or below by not less than one foot. Special care shall be taken at longitudinal joints to provide the required bond and density.

Care shall be taken at all times to prevent segregation in the mixture as evidenced by areas of fine and coarse materials, and any portions where such segregation occurs shall be corrected at the Contractor's expense with fresh mixture either spread and worked into the surface, or by complete removal and replacement of segregated mixture, as directed by the Engineer.

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When the capacity of the paver to spread properly and finish the asphalt concrete mixture exceeds the rate of delivery of mixture thereto, the paver shall be operated at a reduced uniform speed which will result, as close as practicable, in a continuous spreading and finishing operation. The plan of the work, order of paving, and other details of performance, shall meet with the approval of the Engineer.

The top surface of each layer of asphalt concrete shall be spread at grade and cross section closely paralleling the specified top surface of the finished pavement.

2.04.J Compacting.

After the spreading, striking-off and finishing has been performed and while the mixture is still hot, the course or layer of asphalt concrete shall be compacted thoroughly and uniformly with compacting equipment conforming to the requirements of Section 2.04.F. The Contractor shall provide as many rollers or compactors as may be necessary to obtain specified density of the asphalt concrete.

Initial rolling for at least one complete coverage shall be done in as close proximity to the paver as possible without undue displacement, cracking or shoving of the mixture. Operate rollers at a uniform speed of not more than 3 MPH with the drive roll or drive wheels operated nearest the paver.

For breakdown rolling use a tandem-wheeled steel roller. Make at least three complete roller coverages. For intermediate rolling, a tandem-wheeled or a pneumatic-tired wheel roller may be used. Make at least two complete roller coverages. For finish rolling, use a non-vibratory tandem-wheeled steel roller. Continue rolling until roller marks are eliminated.

Rolling shall begin at the sides and progress gradually to the center of the roadway, except that on super elevated curves rolling shall progress from the lower to the upper edge parallel with the center line of the road until the entire surface has been completely rolled. Alternate trips of a roller shall terminate in stops at least three (3) feet distant longitudinally from adjacent preceding stops. The motion of the roller at all times shall be slow enough to avoid displacement of the hot mixture. Any rolling practice which causes displacement of the mix or other defect shall be corrected at once.

The rolling and compacting of the asphalt concrete shall compact the asphalt concrete mixture to a density of not less than 96 percent of the density obtained on a laboratory compacted sample based on the Marshall standard laboratory procedure (ASTM D-1559) for the compacting of asphalt concrete. Failure to obtain specified density shall constitute cause for rejection of the pavement involved and replacement at the Contractor's expense with pavement conforming fully with all specified requirements.

Any mixture that becomes loose or broken, mixed with dirt, or is any way defective shall be removed and replaced at the Contractor's expense with fresh hot mixture, which shall be compacted to conform with the surrounding area.

2.04.K Transverse Joints.

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Placing of a course or strip of asphalt concrete shall be as nearly continuous as practicable. Transverse joints shall be carefully constructed and thoroughly compacted to provide a smooth riding surface.

When the end of a course or strip of asphalt concrete is to be temporarily subjected to traffic, the end shall be on a level of approximately 20:1 (horizontal to vertical), being later cut back to a vertical edge to provide a fresh surface against which subsequently placed asphalt concrete is to abut.

2.04.L Thickness and Number of Layers.

Asphalt concrete shall be placed in the number of courses and to the total compacted thickness per course called for by the typical cross sections given on the plans. The thickness of a regular course, or of a leveling course, shall not exceed the following:

<u>Type of Mix</u>	<u>Maximum Compacted Thickness of Layers</u>
"A"	4 inches
"B"	3 inches
"C" and "E"	2 inches
"D"	1 inch

2.04.M. Surface Smoothness.

The surface of each course or each layer of asphalt concrete, when finished, shall be of uniform texture, smooth, true to slope and grade, and free from defects of all kinds. The smoothness shall be such that when tested with a 10-foot straightedge placed on the surface with its centerline parallel to the centerline of the roadway and with a crown or cross section template conforming to the crown or cross section shown on the plan placed on the surface perpendicular to the centerline of the roadway, the deviations of the surface from the edge of the straightedge and template will nowhere exceed the following: 0.015-foot on wearing surfaces or top courses of pavement, and 0.02-foot on other courses or layers or pavement.

2.04.N Measurement and Payment.

Unless otherwise specified, measurement and payment for asphalt concrete will be made on a ton basis for the class of asphalt concrete specified.

SECTION 3.00 GEOTEXTILES BENEATH PAVEMENT OVERLAYS

3.01 General.

This work consists of furnishing and placing geotextiles beneath pavement overlays, as shown on the plans and at other locations or as directed by the Engineer. The use of geotextiles in

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pavement overlays involves four basic steps: Initial surface preparation, application of a tack coat, placement of the geotextile, and placement of the overlay.

3.02 Weather Limitations.

The minimum air temperature for paving grade asphalt sealant placement shall be at least 50°F. and at least 60°F. for asphalt emulsion sealant placement.

3.03 Surface Preparation.

The pavement surface upon which the sealant is to be placed shall be prepared in accordance with Section 2.04.C. Where the pavement is severely cracked, rutted, deformed, or otherwise distressed, a leveling course shall be placed as directed by the Engineer, in accordance with section 2.04.G.

3.04 Tack Coat.

The tack coat asphalt material shall be as stated in Section 2.03.G. The tack coat shall be applied in accordance with Section 2.04.D. The target width of tack coat application shall be geotextile width plus one foot. The tack coat shall be applied only as far in advance of geotextile installation as is appropriate to insure a tacky surface at the time of geotextile placement. Fabrics shall be placed the same day as the tack coat. Traffic shall not be allowed on the tack coat. Excess asphalt shall be cleaned from the road surface.

3.05 Placement of Geotextile.

The geotextile shall be protected from moisture at all times during storage and placement. The geotextile shall be placed into the tack coat using mechanical or manual laydown equipment capable of providing a smooth installation with a minimum amount of wrinkling or folding prior to the tack coat cooling and losing tackiness. Wrinkles or folds in excess of one inch shall be slit and laid flat. All transverse joints and slit folds or wrinkles shall be shingle-lapped in the direction of the paving operation. Brooming and/or pneumatic rolling will be required to maximize geotextile contact with the pavement surface. Additional hand-placed sealant material may be required at laps, as determined by the Engineer.

Traffic on the geotextile prior to and during paving shall be limited to necessary construction equipment and emergency vehicles, unless otherwise directed by the Engineer. Turning of the paver and other vehicles shall be done gradually and kept to a minimum to avoid movement and damage to the geotextile. Abrupt starts and stops shall also be avoided. Damaged geotextile shall be removed and replaced with the same type of geotextile, and the overlaps shall be shingle-lapped in the direction of paving.

3.06 Geotextile Overlap.

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The minimum overlap shall be sufficient to insure closure, but shall not exceed 6 inches.

3.07 Placement of Overlay.

Overlay placement shall closely follow geotextile placement. Tack coat bleeding through the geotextile shall be removed. Windrowing asphalt on the geotextile ahead of the paving machine and using an asphalt pickup machine will not be allowed.

3.08 Measurement.

Geotextile will be measured to the nearest square yard of surface area actually covered in accordance with the plans or as required by the Engineer. No separate measurement will be made for construction of laps, seams, joints or patches, unless the Engineer orders more than the specified lap, in which case the added lap width will be measured.

3.09 Payment.

The accepted pay quantities for pavement overlay geotextiles will be: geotextile fabric, paid for at the contract price per square yard, which will include payment for preparation work; and tack sealant, paid for at the contract price per ton.

Payment will comprise full compensation for all labor, equipment, tools and incidentals necessary to complete the work specified to be done under this Section. No separate payment will be made for the construction of laps, seams, joints, and patches unless the Engineer orders additional amount over the minimum or specified. For laps wider than the minimum or specified width, payment will be made for the added lap width at the unit bid price.

If the Engineer orders geotextiles with properties more stringent than specified, price adjustments for the difference in material cost only will be allowed.

SECTION 4.00 GEOTEXTILE FABRICS

4.01 General.

The geotextile shall be composed of a polymeric yarn or fiber oriented into a stable network which retains its relative structure during handling, placement and design service life. Geotextiles may be rejected by the Engineer if dimensional stability or resistance of the geotextile to ambient temperatures, acid and alkaline conditions and micro-organisms/insects does not appear to be satisfactory for the intended purpose. The geotextile shall meet or exceed the properties specified herein and in the special provisions. The geotextile shall be free of any chemical treatment or coating which might significantly reduce permeability. The selvage of geotextiles shall be finished such that the outer fibers are prevented from pulling away from the fabric. The geotextile shall be free of defects

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or tears. The material shall be protected from damage and deterioration until incorporated into the project.

4.02 Definitions.

a. Geotextile. A fabric manufactured specifically for use in civil engineering applications. Fibers used in the manufacture of geotextiles shall consist of long chain synthetic polymers. At least 85 percent by weight of the long chain polymers shall be polyolefins, polyesters, or polyamides.

b. Pavement Overlay Geotextile. Geotextile for installation beneath an asphalt concrete overlay.

c. Machine Direction. The long (or warp) direction of the geotextile. The cross-machine (or fill) direction is perpendicular to the machine direction.

d. Mean Roll Values. The mean roll value of any specific geotextile property is the average of the test results from any roll within a lot.

e. Seam Allowance. The minimum distance from the edge of a geotextile to the stitch line nearest to that edge.

f. Seam Type. A designation relating to the essential characteristics of geotextile positioning and rows of stitching in a specified sewn seam, as shown on the plans.

g. Selvage. The finished edge of a geotextile parallel to the machine direction.

h. Stitch Type. A designation relating to the essential characteristics of the interlacing of sewing thread(s) in a specified seam, as shown on the plans.

i. Woven Geotextile. A textile comprising two or more sets of filaments or yarns interlaced in such a way that they result in a uniform pattern.

j. Non-woven Geotextile. A textile produced by bonding or interlocking of fibers, or both, accomplished by mechanical, heat, or chemical means.

4.03 Factory Seams.

Where factory seams are made, the sheets of geotextile shall be sewn together using a lock-type stitch (class 301 or 401, as shown on the plans). The seams shall be sewn with thread; i.e., at least 85% by weight polyester, and shall be as resistant to deterioration as the geotextile being sewn. Nylon threads will not be allowed. The strength of the seam shall be determined by the wide strip tensile method, and shall be at least equal to the larger of the minimum required tensile strengths for the intended application.

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4.04 Sampling.

All geotextiles shall be sampled in accordance with ASTM D 4354. The production unit used for sampling shall be a roll.

4.05 Testing.

Tests shall be performed to determine geotextile properties specified herein for the intended application(s). All geotextile property requirements are mean roll values. The tensile strengths shall be determined in both machine and cross-machine directions.

4.06 Acceptance Requirements.

If the mean roll value for any lot is less than the mean roll value specified for the application, or if any test result is less than the average mean roll value for the lot minus 2 standard deviations, then the lot shall be rejected. All rolls shall be clearly labeled as being part of a lot which has been certified as meeting all applicable requirements herein.

4.07 Manufacturer's Certification.

a. The Contractor shall furnish the geotextile manufacturer's certified test results attesting that the geotextile and applications for the intended application. The certification shall state that the named product conforms to the required specification requirements and that representative samples thereof have been sampled and tested as specified.

b. The certification shall give the name and address of the manufacturer and the testing agency and the date of tests, and shall set forth the means of identification, including lot number, which will permit field determination of the product delivered to the project as being the product covered by the certification.

c. The certified copy of the test results shall include each test result, each mean roll value, the calculated standard deviation for each lot, and the manufacturer's coefficient of variation for all test results.

d. The certification shall be sent with the shipment of the covered product to the Engineer.

e. The City will not be responsible for any costs or certification or for any costs of the sampling and testing of products in connection therewith.

f. The City reserves the right to require samples and to test products for compliance with pertinent requirements irrespective of prior certification of the products by the manufacturer thereof.

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4.08 Property Requirements of Geotextiles Beneath Pavement Overlays.

Only non-woven geotextiles are acceptable. The following requirements apply:

<u>Geotextile Property</u>	<u>Test Method</u>	<u>Mean Roll Value</u>
Grab tensile strength, lbs.	OSHD TM 811 (ASTM D 1682 Modified)	80 min.
Grab elongation, %	OSHD TM 812 (ASTM D 1682 Modified)	50 min.
Asphalt retention, gal./sq. yd.	OSHD TM 817	0.20 min.
Melting point, °F.	ASTM D 276	300 min.

SECTION 5.00 PAVEMENT REPAIR

5.01 Scope.

This bid item shall consist of cutting out, excavating and replacing sections of asphalt pavement that show serious structural distress from traffic.

5.02 Preparation.

Any tree branches or foliage which will hinder the proper construction shall be removed by the Contractor by pruning and sealing the cut ends or tying back in a manner approved by the Engineer.

5.03 Construction.

The pavement repair shall be performed in accordance with Standard Drawing ST-23, "Asphalt Pavement Repair". Refer to Section 2.00 "Asphalt Concrete" for the asphalt specifications.

5.04 Notification.

In accordance with Section 7.00 "Notifications".

5.05 Measurement and Payment.

Measurement and payment will be on a square yard basis of the completed pavement repair.

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SECTION 6.00 PAVEMENT PLANING

6.01 Pavement Planing.

Scope. This bid item shall consist of planing asphalt pavement in areas where the gutter is overlaid with asphalt; and planing asphalt pavement in other areas as required. The purpose of planing asphalt off the gutter will be to improve drainage flow and capacity.

6.02 Preparation.

Any tree branches or foliage which will hinder the proper construction shall be removed by the Contractor by pruning and sealing the cut ends or tying back in a manner approved by the Engineer.

6.03 Construction.

The planing shall be performed as depicted in Standard Drawing, "Pavement Planing".

6.04 Equipment.

The equipment for profiling the pavement surface shall be a power operated, self-propelled planing machine or grinder. The equipment shall be capable of accurately and automatically establishing profile grades, (within 1/8", plus or minus), by reference from the existing pavement by means of ski or from an independent grade control and shall be controlled by an automatic system for controlling grade elevation and cross slope at a given rate. The equipment for profiling shall be equipped with an effective waste pick up and removal device integral with the unit. The equipment for profiling shall load towards the front of the machine, with equipment to limit the amount of dust escaping from the removal operation.

6.05 Notification.

In accordance with Section 7.00 "Notifications".

6.06 Measurement and Payment.

Measurement and payment for Pavement Planing will be on a square yard basis. Payment shall be full compensation for furnishing all tools, equipment, labor, materials, supplies and incidentals necessary to accomplish the work as specified, including the removal and stockpiling of the grindings.

SECTION 7.00 NOTIFICATION

"No Parking" signs shall be placed in order to provide 24 hours notification. A written notice shall be distributed by the contractor to each residence or business, the day prior to surface

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treatment. If the work is not done as planned, notify residences that they may return to normal use of the street until further notice. The contractor shall use signs approved by the Engineer. A minimum of three signs shall be placed on each side of a City block. Moving of parked vehicles which conflict with the work will be coordinated by the project inspector, and will be arranged by the Newberg Police Department. The expense of moving parked vehicles will be borne by the City, provided that all procedures of signing and notification have been followed.

SECTION 8.00 TRAFFIC CONTROL

Provisions shall be made for the control and protection of traffic when paving operations are being performed. The contractor shall furnish and place all necessary detour signs. These shall be placed each day at commencement of work and be removed at completion of the work each day. "Slow" signs and other necessary signs shall be furnished and placed on the project. Requirements shall be as outlined in the Manual of Uniform Traffic Control Devices.

The Engineer may require additional signing and/or flagmen at any time during the project, if, in his judgement, they are needed. If the contractor's traffic control is inadequate or incorrect in the opinion of the Engineer, he may order work stopped until appropriate traffic control is provided by the Contractor.

Wherever an exposed edge of asphalt concrete, either old or new, lies along the outer or shoulder edge of a traffic lane and creates a drop-off exceeding 2 inches, warning and protective measures shall be provided by the Contractor, which measures shall mark the edges at intervals sufficiently close to delineate the alignment of the exposed edge and shall be clearly visible to the traveling public by day and by night.

No traffic shall come in contact with asphalt concrete until it has cooled and set sufficiently to prevent marking, and edges shall be protected from being broken down by traffic to the extent practicable. Opening to traffic does not constitute acceptance of the work.

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SECTION 1.00 CLEARING AND GRUBBING

1.01 General.

A. Clearing. 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. Grubbing. 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. Description. 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. Protection of Property. 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. Confer with the Engineer. 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.

A. Description. 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

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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. Prior Approval. 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. Refuse Removal. 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. Notify Affected Agency. 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. Surface Improvements. 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. Private Property Owners. 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

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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 TRENCH EXCAVATION AND BACKFILL

2.01 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:

Class A Backfill. 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.

Class B Backfill. 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.

Concrete Encasement. Limited to areas as designated by the City Engineer.

2.02 Materials.

A. Trench Bedding. Bedding to be in conformance with Standard Drawing No. W-1.

B. Trench Backfill. Backfill to conform with Standard Drawing S-2 and ST-15.

2.03 Workmanship.

A. Clearing the Right-of-Way. 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. Pavement, Curb, and Sidewalk Removal. 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. Trench Width. Maximum width of trenches in which pipe is to be laid shall be as shown in Standard Drawings S-1. Sheet requirements shall be independent of trench widths.

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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. Grade. 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, Sheet piling, 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 sheet piling and bracing are used to increase trench widths accordingly. Keep trench sheet piling 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. Drainage Culverts. 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 8.00 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.

2.04 Measurement and Payment.

A. Trench Excavation. 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

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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 3.00 DUCTILE CAST IRON PIPE AND FITTINGS

3.01 GENERAL

This section covers the work necessary for installing ductile iron pipe and fittings, complete.

Reference herein is made to the latest editions of standards, tests, methods, and specifications or research and technical organization as follows:

<u>Item</u>	<u>Standard Specification, Test, or Method Legislation</u>
Flanged Pipe and Fittings	Federal Specification WW-P-421 USAS B 16.1
Ductile Cast Iron Pipe	USAS A21.51, 1986 AWWA C-15 1-F6

Reference to ASTM, AWWA, SASI, or Federal Specification shall be understood to mean the latest standard or specification, unless otherwise stated.

A. Foundation Stabilization. Imported material will, generally, be limited to locations in Class C Backfill areas where unstable ground conditions necessitate the importation.

B. Definition of Pipe Zone. The pipe zone shall include the full width of the trench from six (6) inches below the barrel of the pipe to twelve (12) inches above the barrel of the pipe.

3.02 Materials.

A. Joints. Pipe joints shall be push-on joints. Fitting joints shall be mechanical or push-on joint ends, except where specifically shown or detailed otherwise.

B. Push-on Joint Pipe. Push-on joint pipe shall be cement mortar lined and conform to USAS A21.4 and USAS A21.11. The type and thickness class shall be 52 for ductile iron pipe unless otherwise approved by the City Engineer. The rubber ring gaskets shall conform to USAS A21.11, be suitable for the specified pipe sizes and pressures, and shall be furnished with the pipe. A nontoxic vegetable soap lubricant shall be supplied in sufficient quantities for installing the pipe furnished. Pipe for this project shall be supplied by the owner. See SPECIAL PROVISIONS.

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C. Push-on or Mechanical Joint Cast Iron Fittings. Fittings shall be gray iron push-on joint fittings, pressure rating 350.

D. Gaskets. Gasket material for flanged joints in cast iron pipe shall be cloth-inserted sheet rubber gaskets conforming C-111 to AWWA, and USAS 816.21, 1/8-inch thick. The gasket shall be full-cut, with holes to pass bolts. Gasket material shall be free from corrosive alkali or acid ingredients.

E. Pipe Zone. Material in the pipe zone shall consist of 3/4"-0" crushed rock, having reasonable even graduation from coarse to fine, same as Select Trench Backfill.

F. Foundation Stabilization. Imported material shall be Select Backfill material.

3.03

Workmanship.

A. Preparation of Trench.

1. Grade. Grade the bottom of the trench by hand to the line and grade to which the pipe is to be laid, with proper allowance for pipe thickness and for gravel cushion when specified or indicated. Before laying each section of the pipe, check the grade with a straightedge and correct any irregularities found. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point between bell holes, except that the grade may be disturbed for the removal of lifting tackle.

2. Bell (Joints) Holes. At the location of each joint, dig bell (joint) holes of ample dimensions in the bottom of the trench and at the sides where necessary to permit the joint to be made properly and to permit easy visual inspection of the entire joint.

3. Removal of Water. Provide and maintain ample means and devices at all times to remove and dispose of all water entering the trench excavation during the process of pipe laying.

B. Laying Pipe.

1. Handling Material. Provide and use proper implements, tools, and facilities satisfactory to the Engineer for the safe and convenient prosecution of the work. Lower all pipe, fittings, and appurtenances into the trench, piece by piece, by means of a crane, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to the pipeline materials and protective coatings and linings. End hooks must be protected with rubber cushions where contact is made with the pipe's interior lining. Do not drop or dump pipe line materials into the trench.

2. Cleaning Pipe and Fittings. Remove all lumps, blisters, and excess coal-tar coating from the bell-and-spigot ends of each pipe. Wire brush the outside of the bell-and-spigot ends of each pipe. Wire brush the outside of the spigot and the inside of the bell and wipe clean, dry, and free from oil and grease before the pipe is laid.

Wipe the ends of mechanical joint pipe and fittings and of rubber gasket joint pipe and fittings

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clean off all dirt, grease, and foreign matter.

3. Placing of Pipe in the Trench. Do not allow foreign material to enter the pipe while it is being placed in the line. If the pipe laying crew cannot put the pipe into the trench and in place without getting earth into the pipe, the engineer may require that a heavy, tightly woven canvas bag of suitable size be placed over each end before lowering the pipe into the trench and left there until the connection is to be made to the adjacent pipe. During laying operations, prevent debris, tools, clothing, or other materials from entering the pipe.

4. Push-on Joint Pipe. After the first length of push-on joint pipe is installed in the trench, secure pipe in place with approved backfill material tramped under and along sides to prevent movement. Keep ends clear of backfill. After each section is joined, place backfill as specified to prevent movement.

5. Preventing Trench Water or Animals from Entering Pipe. At times when pipe laying is not in progress, close the open ends of pipe by a watertight plug or other means approved by the Engineer, and allow no trench water or animals to enter the pipe. If water is in the trench keep the seal in place until the trench is pumped dry.

6. Bell End to Face Direction of Laying. Unless otherwise directed, lay pipe with bell end facing in the direction of the laying.

For lines on an appreciable slope, face bells upgrade (at the discretion of the Engineer).

7. Permissible Deflection at Joints. Wherever it is necessary to deflect pipe from a straight line, either in the vertical or horizontal plane, to avoid obstructions or plumb stems, or where long-radius curves are permitted, the amount of deflection allowed shall not exceed that approved by the Engineer.

8. Alignment. For pipelines intended to be straight, do not deviate from the straight line at any joint in excess of one inch.

9. Unsuitable Conditions for Laying Pipe. Do not lay pipe in water or when, in the opinion of the Engineer, trench conditions are unsuitable.

10. Material in Pipe Zone. Pipe zone material shall be placed, in a manner approved by the Engineer, simultaneously on both sides of pipe in lifts not to exceed six (6) inches. Each lift shall be "walked in" and supplemented by slicing with a shovel to assure that all voids around the pipe have been completely filled.

11. Installation of Ductile Iron Retainer Glands on Mechanical Joint Fittings. Install in accordance with the pipe manufacturer's printed instructions. Use torque wrench for correct tightening of set screws.

Torque range to be applied to bolts and wrench lengths which should produce the required

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torque when applied by the average man should be as follows:

<u>Diameter of Bolt-In</u>	<u>Torque Range Ft.-Lbs.</u>	<u>Wrench Length - In</u>
5/8"	40 - 60	8
3/4"	60 - 90	10
1"	70 - 100	12
1-1/4"	90 - 120	14

When tightening bolts, bring the gland up toward the flange evenly, maintaining approximately the same distance between the gland and the face of the flange at all points around the socket. Tighten all nuts progressively a little at a time. Do not overstress bolts to compensate for poor alignment. If effective sealing is not attained at the maximum torque, disassemble the joint and reassemble after cleaning.

12. Jointing Push-on Joint Pipe. Lay and joint pipe with push-on type joints in strict accordance with the manufacturer's recommendations as approved by the Engineer. Provide all special tools and devices, such as special jacks, chokers, and similar items required for the installation. Lubricant for the pipe gaskets shall be furnished by the pipe manufacturer, and no substitutes will be permitted under any circumstances.

C. Cutting Pipe.

1. General. Cut pipe for inserting valves, fittings, or closure pieces in a neat and workmanlike manner without damaging the pipe or lining and so as to leave a smooth end at right angles to the axis of the pipe.

2. Ductile Iron Pipe. Cut pipe with milling-type cutter or diamond carbide saw only. Do not flame cut.

3. Dressing Cut Ends. Dress cut ends of pipe to remove sharp edges or projections which may damage the rubber gasket and bevel cut ends of push-on joint pipe as recommended by the manufacturer.

D. Anchorage.

1. Thrust Blocking. Provide reaction or thrust blocking as shown. The concrete mix shall not be leaner than 1 part cement, 2-1/2 parts sand, 5 parts stone. The concrete shall have a compressive strength of not less than 3,000 pounds per square inch. Place blocking between the undisturbed ground and the fitting to be anchored. The quantity of concrete and the area of bearing on the pipe shall be as shown or as directed by the Engineer. Place the blocking so that the pipe and fitting joints will be accessible to repairs, unless otherwise shown.

2. Metal Harness. Metal harness of adequate strength to prevent movement may be used

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instead of concrete blocking only when directed by the Engineer. Hot-dip galvanized metal harness after fabrication and cover with asphalt or furnish with comparable corrosion protection.

E. Hydrostatic Tests. Make pressure and leakage tests on all newly laid pipe. Furnish all necessary equipment and materials, make all taps in the pipe as required, and conduct the tests. The Engineer will monitor the tests.

Furnish the following equipment and materials for the tests:

- 2 Approved graduate containers.
- 2 Pressure gauges
- 1 Hydraulic force pump as approved by the Engineer
- Suitable hose and suction pipe as required

Conduct the tests after the trench has been backfilled or partially backfilled with the joints left exposed for inspection, or when completely backfilled, as permitted by the Engineer. Where any section of pipe is provided with concrete reaction blocking, do not make the pressure test until at least five (5) days have elapsed after the concrete thrust blocking is installed. If high-early cement is used for the concrete thrust blocking, the time may be cut in two (2) days.

Conduct the pressure test in the following manner, unless otherwise approved by the Engineer: After the trench has been backfilled or partially backfilled as hereinbefore specified, fill the pipe with water. The test pressure shall be 150 pounds per square inch.

1. Duration. The duration of each pressure test shall be 60 minutes, unless otherwise directed by the Engineer.
2. Expelling Air. Before applying the specified test pressure, expel all air from the pipe.
3. Procedure. Fill the pipe with water and apply the specified test pressure by pumping, if necessary. Then valve off the pump and hold the pressure in the line for the test period. At the end of the test period, operate the pump until the test pressure is again attained. The pump suction shall be in a barrel or similar device, or metered so that the amount of water required to restore the test pressure may be measured accurately.
4. Leakage. Leakage shall be defined as the quantity of water necessary to restore the specified test pressure at the end of the test period. No pipe installation will be accepted if the leakage is greater than the number of gallons per hour as determined by the following formula:

$$L = \frac{NDP}{3,700} \quad N = \frac{\text{Length}}{18.2 + 1 + 1.5 F + 2 F.H.} \quad \text{in which:}$$

L = allowable leakage in gallons per hour

N = number of joints in the length of pipe tested

D = nominal diameter of pipe in inches

P = average test pressure during the leakage test in

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pounds per square inch

F = number of fittings on line between end points

F.H. = number of fire hydrant assemblies or stubs

5. Correction of Leakage. Should any test of pipe laid disclose leakage greater than that allowed, locate and repair the defective joints or pipe until the leakage of a subsequent test is within the specified allowance.

F. Sterilization. (Chlorination). Pipe lines intended to carry potable water shall be sterilized before placing in service. Sterilizing will be performed by the Contractor. The Contractor shall bear the responsibility of making taps and maintaining open trenches until a satisfactory laboratory analysis has been obtained by the Contractor.

1. Flushing Completed Pipe Lines. The main shall be thoroughly flushed following the pressure test and before chlorination. It must be understood that flushing removes only the lighter solids and cannot be relied upon to remove heavy materials allowed to enter the pipe.

Where a hydrant is not installed at the end of the main, a blow off must be provided that is large enough to develop a scouring velocity in the main of at least 2.5 feet per second. Where facilities are available a scouring velocity of 4 feet per second is recommended. (See Table #1 for opening required to develop scouring velocities of 2.5 and 4 feet per second).

Mains greater than 16 inches in diameter may be difficult to flush at a scouring velocity and therefore the preliminary inspection and precautions to prevent contamination from entering the pipe line must be rigidly enforced.

TABLE I

Required Openings to Flush Pipelines
(40-psi Pressure)

2.5-fps Flushing Velocity			4-fps Flushing Velocity				
Pipe Size	Flow GPM	Orifice Size	Hydrant	Openings	Flow GPM	Hydrant	Openings
			No.	Size-In.		No.	Size-In.
4	100	15/16	1	2-1/2	160	1	2-1/2
6	220	1-3/8	1	2-1/2	350	1	2-1/2
8	390	1-7/8	1	2-1/2	630	1	2-1/2
10	610	2-5/16	1	2-1/2	980	1	2-1/2
12	880	2-13/16	1	2-1/2	1,400	2	2-1/2
14	1,200	3-1/4	2	2-1/2	1,920	2	2-1/2
16	1,565	3-5/8	2	2-1/2	2,510	3	2-1/2
					or:	1	4-1/2
18	1,980	4-3/16	2	2-1/2	3,180	3	2-1/2

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2. Chlorination of Pipelines. Before being placed into service, all new mains, repaired portions or extensions must be chlorinated so that a chlorine residual of at least 10 parts per million remains in the water after 24 hours standing in the pipe. This residual may ordinarily be expected with an initial application of 25 parts per million although some conditions may require more. Ineffective preliminary flushing of the main may require a larger application of chlorine to produce the desired residual.

3. Form of Applied Chlorine. Methods of applying chlorine to a main are listed below in order of preference:

- a. Liquid chlorine gas - water mixture.
- b. Direct chlorine feed (dry gas).
- c. Calcium or sodium hypochlorite and water mixture.
- d. Chlorinated lime and water mixture.

Note: The practice of adding a small amount of chlorine powder or tablets at each joint as the main is being laid is not an acceptable method of chlorinating a pipe line. The procedure does not permit preliminary flushing nor does it provide uniform chlorine distribution.

4. The Use of Liquid Chlorine (Gas). A chlorine gas-water mixture shall be applied by means of a solution feed chlorinating device or dry gas may be fed directly through proper devices for regulating the rate of flow and providing effective diffusion of the gas into the water within the pipe being treating. Chlorinating devices for feeding solution of chlorine gas or the gas itself must provide means for preventing the backflow of water into the chlorine cylinder. Feeding of dry gas is limited to main pressures of less than 10 psi.

5. Chlorine-Bearing Compounds. A mixture of water and a chlorine-bearing compound of known chlorine content may be used. Acceptable compounds are calcium or sodium hypochlorite and chlorinated lime. These compounds should be mixed with water to yield a 1% chlorine solution according to Table 2.

TABLE 2

<u>Product</u>	<u>Amount of Compound</u>	<u>Quantity of Water - Gal.</u>
High-test calcium hypochlorite (65-70% Cl)	1 lb.	7.50
Chlorinated Lime (32-35% Cl)	2 lb.	7.50
Liquid Laundry Bleach (5.25% Cl)	1 lb.	4.25
Concentrated Liquid Bleach (15% Cl)	1 gal.	14.00

Note: Calcium hypochlorite or bleaching powder should be made into a paste and then thinned to a 1% chlorine solution.

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TABLE 3

Chlorine Requirements for 100-ft. Lengths of
Various Sizes of Pipe

Pipe Size In.	Volume of 100-ft. Length gal.	Amount Required to Give 25 ppm Cl	
		100% Chlorine lb.	1% Chlorine Water Solution gal.
4	65.3	0.0135	1/6
6	146.5	0.0305	3/8
8	261.0	0.054	2/3
10	408.0	0.085	1
12	588.7	0.120	1-1/2

6. Point of Application. The preferable point of application of the chlorinating agent is at the beginning of the pipeline or any valved section and through a corporation stop in the top of the pipe. The water injector for delivery of the gas-water mixture into the pipe should be supplied from a tap on the pressure side of the gate valve controlling the flow into the pipeline extension. Chlorine-bearing compounds should be pumped or ejected into the pipe as a 1% solution under the same conditions as above.

Valves should be manipulated so that the strong chlorine solution in the new pipe will not flow back into the supply line.

7. Rate Application. Water from the existing distribution system shall be controlled so as to flow slowly into the main to be chlorinated. The feed rate of the chlorine mixture shall be in such proportion to the rate of flow of water entering the pipe that at least 10 ppm residual may be obtained after 24 hours. (The initial application should be at least 25 ppm).

8. Retention Period. Treated water shall be retained in the pipeline long enough to destroy all non-spore forming bacteria. This period should be at least 24 hours and chlorine residual of at least 10 ppm through the line should be obtained at the end of the retention period.

Note: Shorter retention periods with increased chlorine concentrations may be used under certain circumstances. Prior approval must be obtained from the State Board of Health when shorter retention periods are necessary.

9. Chlorinating Valves and Hydrants. In the process of chlorinating pipelines, all valves should be operated while the pipeline is filled with chlorinating agent.

10. Final Flushing and Bacteriological Tests. Following a retention period of 24 hours, all

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treated water in the main shall be thoroughly flushed from the newly laid pipeline at its extremities until the replacement water is of the same quality normally served from the distribution system. The satisfactory quality of water delivered from the new main must be verified by bacteriological samples collected from points along the new main. Samples should not be collected from unsterilized hoses or fire hydrants.

11. Repetition of Procedure. Should the initial treatment fail to yield satisfactory bacteriological results, the original chlorination and flushing procedure must be repeated and additional samples collected.

12. Procedure when Repairing or Cutting into Existing Mains. Whenever an old line is opened by accident or design, the excavation is always wet and frequently badly contaminated. Where the main has been partially or totally dewatered that section of the main must be chlorinated and flushed the same as a new main. In the event that water service cannot be disrupted to provide the full 24 hour retention period, an application of 100 ppm of chlorine may be used with a retention period of one hour followed by flushing.

13. Summary of Chlorination Procedure.

- a. In order to avoid creating air pockets in the line which cannot be effectively chlorinated, start with the pipeline full of water following flushing operations.
- b. Open the supply valve ahead of the new work wide open, and then immediately open the valve at the discharge end of the new pipe under pressure.
- c. Feed chlorine into the pipeline ahead of the new work at a rate calculated to give approximately 25 parts per million for the regulated flow through the pipe.
- d. Continue feeding chlorine until the discharge water shows approximately 25 ppm chlorine as indicated by a deep reddish-brown color development upon adding orthotolidine reagent or until the required amount of chlorine, as calculated, has been introduced into the pipe. (It is a good idea to open and close all valves in the new pipe system several times while the chlorine is being fed.)
- e. Close both valves; discharge valve first and then the supply valve immediately after to maintain pressure in the line.
- f. The chlorinated water must be held in the pipeline for a period of 24 hours and a chlorine residual of at least 10 ppm should be obtained throughout the new line at the end of the retention period.
- g. Following the retention period the new line must be thoroughly flushed and bacteriological samples collected.

3.04 Measurement and Payment.

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a. Measurement for payment shall be by the linear foot of pipe installed. The City of Newberg shall supply the ductile iron pipe and values for this project.

Payment for pipe shall be the unit contract price per linear foot for each size of pipe installed.

b. Measurement and payment for all fittings shall be on the "each" basis for each fitting installed. Payment for fittings shall include concrete thrust blocks as requested.

c. Measurement for payment for leakage testing and chlorination shall be by the linear foot measured along the pipe through all valves and fittings.

Payment for leakage testing and chlorination shall be the unit contract price per linear foot for each foot of pipe which successfully passes the leakage test and chlorination.

SECTION 4.00 VALVES AND VALVE BOXES

4.01 General.

This section covers the work necessary for installing valves and valve boxes, complete.

4.02 Materials.

A. Gate Valves. Valves shall be iron body, bronze mounted, double disc, parallel seat NRS valves with o-ring seals, and shall open when the stem is rotated counterclockwise. Unless otherwise shown, valves shall have a 2-inch square wrench nut. Valve ends and valve size shall be shown. Valves shall conform to AWWA C500.

B. Butterfly Valves. Butterfly valves shall be of the tight closing, rubber seat type. No metal to metal sealing surfaces are permitted. Valve discs shall rotate 90° from the fully open position to the tight such position and shall open with a counterclockwise rotation of the 2-inch square wrench nut. Valve ends and valve sizes shall be as shown. Butterfly valves shall comply in all respects with AWWA C504, Class 150-B.

Joining materials for mechanical joints or push-on joint for cast iron pipe shall conform to AWWA C111. Joining materials for flanged joints shall consist of 1/8-inch thick, full-face, rubber gaskets conforming to Section 7 or AWWA C207. Bolts and nuts shall conform to Section 8 of AWWA C207.

C. Valve Boxes. Valve boxes shall be 2-piece sliding type, cast iron with 5-1/4 inch shaft. The word "Water" shall be cast into the top of the lid. Extension pieces, if required, shall be the manufacturer's standard type for use with the valve box.

Where the pipe cover is more than 4 feet, operating extensions shall be provided to bring the operating nut to a point 18 inches below the surface of the ground to pavement. The extension stem

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shall be constructed of steel.

4.03 Workmanship.

A. Valves. Before installation, the valves shall be thoroughly cleaned of all foreign material, and shall be inspected for proper operation, both opening and closing, and to verify that the valves seat properly. Valves shall be installed in accordance with Standard Drawing W-4.

Faces of flanges shall be cleaned thoroughly before flanged joint is assembled. After cleaning, the gasket shall be inserted and the nuts tightened uniformly around the flange. If flanges leak under test, the nuts shall be loosened, the gasket reset or replaced, the nuts retightened, and the valve and/or pipeline retested.

B. Valve Boxes. Center the valve boxes and set plumb over the wrench nuts of the valves. Set valve boxes so that they do not transmit shock or stress to the valves. Set the valve box covers flush with the surface of the finished pavement as shown, or such other level as may be ordered by the engineer. Cut extensions to the proper length so that the valve box does not ride on the extension when set at grade.

Place backfill around the valve boxes and thoroughly compact to a density equal to that of the undisturbed ground or the adjacent trench, whichever is the highest requirement, and in such a manner that will not damage or displace the valve box from proper alignment or grade. Misaligned valve boxes shall be excavated, plumbed, and backfilled.

4.04 Measurement and Payment.

Payment for valves and valve boxes shall be made per each installed, at the unit contract price.

Payment for combination air-vacuum release assembly and box shall be made per each installed at the unit contract price.

SECTION 5.00 FIRE HYDRANTS, FIRE HYDRANT STUBS AND BLOWOFFS

5.01 General.

This section covers the work necessary for installing the fire hydrant, relocating existing hydrants where shown, and removing and salvaging existing hydrants where shown, complete.

5.02 Materials.

A. Hydrants. Nominal 5-inch main valve opening with 6-inch flanges bottom connection. Equip with two 2-1/2 inch host nozzles and one 4-1/2 inch pumper nozzle. Operating nut shall be 1-1/2 inch National Standard pentagon nut. The main valve shall be equipped with o-ring

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seals and shall open when turned to the left or counterclockwise. Hydrants shall be of the break flange or safety-top type. Hydrants shall conform to AWWA C502 and this Specification. The depth of bury shall be 3 feet. Nozzle threads shall be American National Standard. The inlet connection shall be flanged. Fire hydrants shall be Iowa brand "cory style" or approved equal to match the existing system.

B. Base Block. Solid precast concrete pier block having nominal dimensions of 16" x 16" x 8" high.

C. Gravel for Drainage. Graded river gravel free of organic matter, sand, loam, clay, and other small particles that will tend to restrict water flow through the gravel.

D. Concrete for Blocking. Concrete for blocking shall have a twenty-eight day compressive strength minimum of 3,000 psi. Engineer shall approve quality of materials prior to their use.

E. Blow Off Units. Blow off units shall conform to Standard Drawing W-6. The blow off unit shall be placed as shown in the details, securely blocked with concrete as required, and having not less than two (2) cubic feet of clean drain gravel.

Placing of the blow off unit shall include transporting, assembling, and placing of the complete unit, blocking and drain gravel in a suitable excavation plus backfill and servicing.

5.03 Workmanship.

Construction and installation shall conform to provisions of Section 11 and 12 of AWWA 0600, except where otherwise specified.

A. Location and Position. Locate as shown or directed so as to provide complete accessibility and minimize the possibility of damage from vehicles or injury to pedestrians. Improperly located hydrants shall be disconnected and relocated at the Contractor's expense.

When placed behind the curb, set hydrant barrel so that no portion of the pumper or hose nozzle cap will be less than 24 inches from the gutter face of the curb. See Standard Drawing W-4.

When set in lawn space between curb and sidewalk, or between sidewalk and property line, let no portion of the hydrant or nozzle cap be within 24 inches of the sidewalk.

Set all hydrants plumb and nozzles parallel with, or at right angles to, the curb with the pumper nozzle facing the curb. Set hydrants so that safety flange is a minimum of 2 inches above finished ground or sidewalks level to clear bolts and nuts, and as directed.

B. Excavation. Do not carry below sub-base grade. Refill over-excavated areas with crushed rock and hand tamp to provide firm foundation.

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C. Base Block. Place on firm, level sub-base to assure uniform support.

D. Hydrants. Place carefully to prevent the base blocking from breaking. When cast iron pipe is used joining procedures shall conform to Section 9 of AWWA C600, except that cement joints shall not be used.

After hydrant is in place and connected to the pipe line, place temporary blocks to maintain the hydrant in a plumb position during subsequent work.

E. Gravel for Drainage. Place around base block and hydrant bottom after hydrant has been blocked in its final position and hydrant is joined to pipe. Concrete thrust block shall have a minimum of 4 square feet of bearing area against undisturbed earth.

5.04 Measurement and Payment.

A. Payment for fire hydrants shall be made per each installed at the unit contract price. Included in the fire hydrant pay item shall be the gate valve and valve box gravel for drainage, the base block, and concrete for thrust blocking.

B. Payment for spools for the fire hydrant assemblies shall be made on the basis of each linear foot of spool installed measured between the end of the flange and the beginning of gate valve flange. Payment for spools shall include all labor, materials, and equipment necessary to install the spool with the fire hydrant assembly as shown in the City of Newberg Standard Drawing W-5.

C. Payment for blow-off units shall be made per each installed at the unit contract price. Included in the blow-off unit pay item shall be all labor, materials, and equipment necessary to install the blow-off unit as shown in City of Newberg Standard Drawing W-6.

SECTION 6.00 WATER SERVICE CONNECTIONS

6.01 General.

The Contractor shall install services complete from the main to the meter box locations, as shown on the plans.

Backfill material in the pipe zone shall be fine excavated material or sand. Backfill above the pipe zone shall be approved pitrun gravel within the street improvement and two feet behind the curbs, and shall be firmly compacted. Service connections shall be made by a single strap service saddle and the main tapped and a bronze corporation stop installed. See Standard Drawing No. W-2.

6.02 Materials.

A. Service Lines. Service line shall be 1" diameter type "K" copper tubing if for double services and 3/4" if for a single service.

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B. Corporation Stops. A corporation stop shall be installed on the main for each service. The corporation stop shall be 1" Ford for double services, and 3/4" Ford for single services, or approved equal. All corporation stops shall comply with AWWA specifications. See Standard Drawing No. W-1.

6.03 Street Crossings.

This section covers the work necessary for installing water services across paved areas where open cutting is not permitted.

A. Condition of Existing Service Line. Each water service line will be uncovered by the contractor and examined by the inspector. Steel lines will be replaced. Copper lines, if in good condition, will be connected to the new mains.

B. Approved Methods. The contractor may bore, jack, or use the existing line to pull the new service across the street. The crossing pilot hole will be of a depth and diameter which will not cause the street to hump or settle. The contractor will take all precautions necessary to ensure that no service crossing will come in contact with any other underground utility.

C. Interruption of Residential Water Service. The contractor shall give 72 hour and 1 hour notices to residents before shutting off their water service. No house service shall be shut off for more than 4 (four) hours at one time.

D. Measurement and Payment. Payment for street crossings shall be made per lineal foot of copper service line bored, jacked, or pulled under the street surface at the contract unit price. Crossings will be measured from the center of the water main trench to either the edge of pavement or the back of curb on the opposite side of the street.

Copper tubing in the street section shall be paid for separately under the contract unit price for 3/4 inch or 1 inch copper service line installed.

Payment for tunneling under the curb for services on the water main side of the street shall be paid for under the contract unit price for Trench Excavation, Class B Bedding, Class B Backfill.

SECTION 7.00 SURFACE RESTORATIONS

7.01 General.

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

7.02 Materials.

A. Rock for Surface Replacement. Rock shall be 3/4"-0" crushed rock.

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B. Asphalt Concrete. 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. Asphalt Prime and Tack. Liquid asphalt for use as prime or tack coat under asphalt concrete shall be RC-70 to MC-70 liquid asphalt.

D. P.C. Concrete. 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.

7.03 Workmanship.

A. Construction Procedure. 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. Progress of Construction. Complete surface restoration not more than 5 calendar days after compaction of the backfilling of the trench.

C. Removal of Pavement. Removal of all pavement shall conform to SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.

D. Street Maintenance. Maintain all trenches as specified under SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.

E. Asphalt Concrete Pavement Replacement.

1. Subgrade. 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. Prime Coats. 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 to a depth of not less than 3

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inches or the depth of the adjacent pavement whichever is the greater unless otherwise directed. If the thickness is greater than 3-1/2 inches, place the surfacing in 2 lifts. 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 make sufficient passes over the entire area to produce the desired result, as determined by the Engineer.

4. Surface Smoothness. 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. Weather Conditions. 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. Protection of Structures. 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 that 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. Sidewalks, Curbs and Driveways. Replace sidewalks, curbs, and driveways to the section, width, depth, line and grade as required by the Engineer. On private property or in other

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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. Saw Cutting. 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.

7.04 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.

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CITY OF NEWBERG
EVEREST ROAD/SECOND STREET L.I.D.

AUGUST 1995

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SECTION 1.00 CLEARING AND GRUBBING

1.01 General.

A. Clearing. 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. Grubbing. 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. Description. 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. Protection of Property. 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. Confer with the Engineer. 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. Description. 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

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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. Prior Approval. 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. Refuse Removal. 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. Notify Affected Agency. 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. Surface Improvements. 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. Private Property Owners. 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

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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. General. 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.

The contractor shall use concrete gravity sewer pipe of equal strength classification as hereinafter specified. In all cases, the strength designation is based on concrete pipe standards.

B. Pipe.

1. PVC Plastic Gravity Sewer Pipe and Fittings. Conform to ASTM Specifications D-3033 and D-3034.

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. Cast Iron Pipe. 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.

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2. Tee Fittings. 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. Hydrostatic Testing. 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. Imported Pipe Base and Pipe Zone Material. 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 Drawings S-1 and S-2.

2.03 Workmanship.

A. Preparation of Trench.

1. Imported Pipe Base Material. 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. Dewatering. 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. Pipe Preparation and Handling. 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 job-site. Do not drop or dump pipe into trenches under any circumstances.

4. Line and Grade. Do not deviate from line and grade, as established by the approved plans,

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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 three (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. General. 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 operations 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.

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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. Installation of Service Connection Tees. 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. Backfill at the Pipe Zone. 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. Imported Pipe Zone Material. 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 amount 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

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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 for 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

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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 reaches 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 minute; 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 than 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 thirty (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

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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 groundwater 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.
9. List size and length of all portions of pipe under test in table similar to one shown on the next page.
10. By use of nomograph on the 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.

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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:

Class A Backfill. 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.

Class B Backfill. 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.

Concrete Encasement. Limited to areas as designated by the City Engineer.

3.02 Materials.

A. Trench Bedding. Bedding to be in conformance with Standard Drawing No. W-1.

B. Trench Backfill. Backfill to conform with Standard Drawing S-2 and ST-15.

3.03 Workmanship.

A. Clearing the Right-of-Way. 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. Pavement, Curb, and Sidewalk Removal. 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. Trench Width. 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.

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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. Grade. 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, Sheet piling, 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 sheet piling and bracing are used to increase trench widths accordingly. Keep trench sheet piling 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. Drainage Culverts. 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 8.00 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.

SECTION 4.00 SURFACE RESTORATIONS

4.01 General.

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

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4.02 Materials.

A. Rock for Surface Replacement. Rock shall be 3/4"-0" crushed rock.

B. Asphalt Concrete. 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. Asphalt Prime and Tack. Liquid asphalt for use as prime or tack coat under asphalt concrete shall be RC-70 to MC-70 liquid asphalt.

D. P.C. Concrete. 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.

4.03 Workmanship.

A. Construction Procedure. 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. Progress of Construction. Complete surface restoration not more than 5 calendar days after compaction of the backfilling of the trench.

C. Removal of Pavement. Removal of all pavement shall conform to SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.

D. Street Maintenance. Maintain all trenches as specified under SECTION 3.00 TRENCH EXCAVATION AND BACKFILL.

E. Asphalt Concrete Pavement Replacement.

1. Subgrade. 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. Prime Coats. 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

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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 to a depth of not less than 3 inches or the depth of the adjacent pavement whichever is the greater unless otherwise directed. If the thickness is greater than 3-1/2 inches, place the surfacing in 2 lifts. 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 make sufficient passes over the entire area to produce the desired result, as determined by the Engineer.

4. Surface Smoothness. 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. Weather Conditions. 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. Protection of Structures. 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

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where necessary. Level and grade the rock to conform to existing grades and surfaces.

G. Sidewalks, Curbs and Driveways. 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. Saw Cutting. 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.

4.04 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.