

**ORDINANCE No. 185003**

Amend contract with Emery and Sons Construction, Inc. for additional work and compensation for the Foster/Holgate Sewer Replacement Project No. E10014 (Ordinance; amend Contract No. 30001292)

The City of Portland ordains:

Section 1. The Council finds:

1. Emery and Sons Construction, Inc., (Emery) was issued a contract to construct the Foster/Holgate Sewer Replacement project under Contract No. 30001292, with a substantial completion date of February 14, 2011, and contract amount of \$427,199.
2. Changes were made to the design to accommodate changes in the location of the waterline, sewer, telephone and gas utilities.
3. The value of the contract increase represents a settlement obtained with the services of the City Attorney in the amount of \$1,083,825.17. This Amendment authorizes the contract amount to be increased to \$1,083,825.17.
4. Funds are available in the Sewer System Operating Fund, FY 11-12 Budget, Bureau of Environmental Services, WBS Element E10014 for the additional contract amount.

NOW, THEREFORE, the council directs:

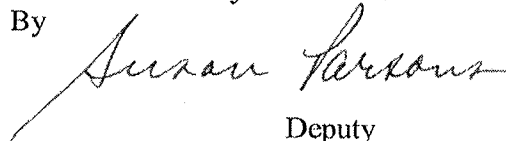
- a. The Commissioner of Public Affairs is authorized to execute an amendment to Contract No. 30001292 with Emery and Sons Construction, Inc. for the purpose described in Section 1, in the amount of \$656,626.17.
- b. The Mayor and Auditor are hereby authorized to draw and deliver warrants chargeable to the Sewer System Operating Fund Budget when demand is presented and approved by the proper authority.

Passed by the Council, NOV 16 2011  
Dan Saltzman  
Commissioner of Public Affairs

Mark Hutshinson  
2011-10-10

Cost object - E10014

**LaVonne Griffin-Valade**  
Auditor of the City of Portland  
By

  
Deputy



# CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Dan Saltzman, Commissioner ■ Dean Marriott, Director

Project No. E10014

## CERTIFICATE OF COMPLETION

for the construction of Foster & Holgate Sewer Replacement

according to the provisions of Bid / Ordinance No. 111566 Contract No. 30001292

Name of Contractor: Emery & Sons Construction, Inc.

Contract Signed: April 22, 2010 Contract Expires: January 16, 2011

Contract Completed: February 14, 2011 Delinquent - 29 - Days

This work was inspected as to quality and quantity of work done in construction and found to have been completed, in compliance with the plans, specifications, and requirements under the above named Ordinance.

*Mark [Signature]* 4/19/12  
Construction Division Manager Date

*Walt [Signature]* 4/26/12  
Chief Engineer Date

\_\_\_\_\_  
Construction Project Manager Date

I hereby certify that I have completed my contract work under the above numbered Contract and furnished the materials and performed the work in accordance with the plans and specifications.

*Bill Martiniak* President 12-16-11  
Contractor Title Date

**City of Portland - Bureau Of Environmental Services**

1/31/2012

Page 1 of 4

8:12 pm

**Payment Summary**

**PAYMENT NO.:** 15 **Final**  
**Pay Period:** 1/02/2012- 1/02/2012

Project No: <b>10014</b>	Vendor No: <b>120</b>
Contract No: <b>30001292</b>	Contractor: <b>EMERY &amp; SONS CONSTRUCTION INC</b>
CM: <b>Bill Theiss</b>	Project Manager: <b>Bill Theiss</b>
Project: <b>Foster &amp; Holgate Sewer Replacement</b>	

The following summaries for this pay period are based on work quantities and payment amounts shown on the attached Project Pay Estimate sheets:


**Contract Summary:**

Original Contract Price:	<u>427,199.00</u>
Authorized Change Orders:	<u>540,583.96</u>
Other Adjustments:	<u>0.00</u>
Adjusted Contract Amount:	<u>967,782.96</u>
Percent Change in Contract Amount:	126.54%

**Payment Summary:**

	Total to Date:	Total Previous Payments	Total this Payment
<b>Value of Work Completed:</b>	\$543,241.21	\$543,241.21	\$0.00
Change Order Work Completed:	\$540,583.96	\$540,583.96	\$0.00
<b>Amount Earned:</b>	\$1,083,825.17	\$1,083,825.17	\$0.00
Percentage Retained:	0.00%	0.00%	
<b>Amount (Retained) / Released:</b>	<b>\$0.00</b>	<b>\$(10.00)</b>	<b>\$10.00</b>
<b>Payment Amount</b>	\$1,083,825.17	\$1,083,815.17	\$10.00
Dollar Percent Complete	253.70%		

The amount to be paid on this certificate is **100** per cent of **\$0.00** plus all retainage withheld for the length of the contract amounting to **\$10.00** for a combined total of **\$10.00**.

Approved by:  Date: 4/19/12  
 Mark W. Hutchinson, PE

All questions concerning this progress payment should be directed to Bill Theiss at (503) 823-7931 or Jason Leman at (503) 823-4991.

Distribution: Accounts Payable, EMERY & SONS CONSTRUCTION INC, Bill Theiss, Gary Hodge, MTL, Project File



Date: 1/31/2012  
 Time: 8:12 pm

## City of Portland - Bureau Of Environmental Services

### PROJECT PAY ESTIMATE

**Project:** Foster & Holgate Sewer Replacement  
**CM Bill Theiss**  
**Project Number:** 10014  
**Contract No:** 30001292  
**Award Date:** 4/14/2010  
**Notice To Proceed:** 5/24/2010

**Vendor:** 120  
 EMERY & SONS CONSTRUCTION INC  
 PO BOX 398  
 STAYTON, OR 97383  
 Phone: (503) 769-7751

**Estimate No.** 15 Final 1/02/2012- 1/02/2012  
**Vendor Number**  
**Total Authorized:** \$427,199.00  
**Revised Total Authorized w/ CO:** \$967,782.96  
**Contract Calendar Days:** 120

Item No.	Description	UV	Contract				Previous Qty	This Estimate		Total Work Completed		Percent Complete
			Quantity	Adj. Quantity	Unit Price	Total Price		Qty	Amount	Qty	Amount	
01	MOBILIZATION	LS	1.0000		40,000.0000	40,000.00	1.0000	0.0000	0.00	1.0000	40,000.00	100
02	TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC	LS	1.0000		9,500.0000	9,500.00	1.0000	0.0000	0.00	1.0000	9,500.00	100
03	PORTABLE CHANGEABLE MESSAGE SIGNS	EA	7.0000		2,300.0000	16,100.00	4.0000	0.0000	0.00	4.0000	9,200.00	57
04	FLAGGERS	HR	600.0000		46.0000	27,600.00	3,374.4935	0.0000	0.00	3,374.4935	155,226.70	562
05	EROSION CONTROL	LS	1.0000		2,500.0000	2,500.00	1.0000	0.0000	0.00	1.0000	2,500.00	100
06	INLET PROTECTION	EA	11.0000		115.0000	1,265.00	9.0000	0.0000	0.00	9.0000	1,035.00	82
07	CONTAMINATED MEDIA DISPOSAL	TN	20.0000		22.0000	440.00	0.0000	0.0000	0.00	0.0000	0.00	0
08	HASP/CMDP WORK PLANS	LS	1.0000		4,500.0000	4,500.00	1.0000	0.0000	0.00	1.0000	4,500.00	100
09	REMOVAL OF RAILROAD TRACK AND TIES	FT	325.0000		40.0000	13,000.00	0.0000	0.0000	0.00	0.0000	0.00	0
10	TRENCH EXCAVATION, COMMON	CY	1,570.0000		41.0000	64,370.00	1,623.5200	0.0000	0.00	1,623.5200	66,564.32	103
11	TRENCH BACKFILL, CLASS B	CY	1,100.0000		35.0000	38,500.00	1,098.7800	0.0000	0.00	1,098.7800	38,457.30	100
12	POTHOLE EXCAVATION	EA	7.0000		500.0000	3,500.00	18.0000	0.0000	0.00	18.0000	9,000.00	257
13	ENGINEERED SHORING	LS	1.0000		3,000.0000	3,000.00	1.0000	0.0000	0.00	1.0000	3,000.00	100
14	6 INCH PIPE, PVC ASTM D3034 SDR 35, BEDDING TYPE: D	FT	75.0000		55.0000	4,125.00	57.5000	0.0000	0.00	57.5000	3,162.50	77
15	36 INCH PIPE, RCP ASTM C76 CLASS V, BEDDING TYPE: B	FT	346.0000		135.0000	46,710.00	353.0000	0.0000	0.00	353.0000	47,655.00	102
16	10 INCH PIPE, HDPE ASTM F714 SDR 26, BEDDING TYPE: D	FT	130.0000		55.0000	7,150.00	149.9000	0.0000	0.00	149.9000	8,244.50	115
17	INSERTA-TEE 6 INCH	EA	3.0000		200.0000	600.00	3.0000	0.0000	0.00	3.0000	600.00	100
18	INSERTA-TEE 10 INCH	EA	2.0000		390.0000	780.00	2.0000	0.0000	0.00	2.0000	780.00	100
19	TV PIPE INSPECTION, MAINLINE SEWER	FT	795.0000		2.7000	2,146.50	903.6000	0.0000	0.00	903.6000	2,439.72	114
20	TV PIPE INSPECTION, SERVICE	FT	75.0000		8.5000	637.50	64.9000	0.0000	0.00	64.9000	551.65	87



City of Portland - Bureau Of Environmental Services

PROJECT PAY ESTIMATE

Project: Foster & Holgate Sewer Replacement  
 CM Bill Theiss

Vendor: 120 EMERY & SONS CONSTRUCTION INC

Estimate No. 15 Final 1/02/2012- 1/02/2012  
 Vendor Number

Item No.	Description	UV	Contract				Previous	This Estimate		Total Work Completed		Percent Complete
			Quantity	Adj. Quantity	Unit Price	Total Price	Qty	Qty	Amount	Qty	Amount	
	LATERAL											
21	CONCRETE MANHOLE, 60 INCH, 0-8 FT DEPTH	EA	1.0000		9,000.0000	9,000.00	3.0000	0.0000	0.00	3.0000	27,000.00	300
22	CONCRETE MANHOLE, 60 INCH, DEEPER THAN 8 FT	FT	9.5000		100.0000	950.00	19.2000	0.0000	0.00	19.2000	1,920.00	202
23	CONCRETE MANHOLE, 72 INCH, 0-8 FT DEPTH	EA	1.0000		10,000.0000	10,000.00	0.0000	0.0000	0.00	0.0000	0.00	0
24	CONCRETE MANHOLE, 72 INCH, DEEPER THAN 8 FT	FT	9.0000		240.0000	2,160.00	0.0000	0.0000	0.00	0.0000	0.00	0
25	CONCRETE MANHOLE, 84 INCH, 0-8 FT DEPTH	EA	1.0000		11,000.0000	11,000.00	1.0000	0.0000	0.00	1.0000	11,000.00	100
26	CONCRETE MANHOLE, 84 INCH, DEEPER THAN 8 FT	FT	10.0000		290.0000	2,900.00	9.9000	0.0000	0.00	9.9000	2,871.00	99
27	CONCRETE INLETS, P-200	EA	4.0000		1,400.0000	5,600.00	4.0000	0.0000	0.00	4.0000	5,600.00	100
28	CONNECTION TO EXISTING STRUCTURES	EA	2.0000		7,000.0000	14,000.00	2.0000	0.0000	0.00	2.0000	14,000.00	100
29	EXISTING PIPE CONNECTION TO NEW MANHOLE	EA	1.0000		7,500.0000	7,500.00	1.0000	0.0000	0.00	1.0000	7,500.00	100
30	PERMANENT PLUGS	EA	2.0000		2,800.0000	5,600.00	0.0000	0.0000	0.00	0.0000	0.00	0
31	CLSM FOR ABANDONED STRUCTURES	CY	20.0000		130.0000	2,600.00	6.0000	0.0000	0.00	6.0000	780.00	30
32	DIVERSION OF FLOW	LS	1.0000		17,000.0000	17,000.00	1.0000	0.0000	0.00	1.0000	17,000.00	100
33	TEMPORARY TRENCH RESURFACING	SY	550.0000		18.0000	9,900.00	327.7100	0.0000	0.00	327.7100	5,898.78	60
34	TRENCH RESURFACING W/O BASE, MHMAC, 9 INCH	SY	615.0000		55.0000	33,825.00	527.8600	0.0000	0.00	527.8600	29,032.30	86
35	AGGREGATE BASE	CY	190.0000		46.0000	8,740.00	396.1400	0.0000	0.00	396.1400	18,222.44	208
<b>Change Orders</b>												
Change Order: 1 GROUT BENEATH 60" WATER MAIN												
1	GROUT BENEATH 60" WATER MAIN	LS	1.0000		14,010.7900	14,010.79	1.0000	0.0000	0.00	1.0000	14,010.79	100
Change Order: 2 NEW MANHOLE TO REPLACE MH-ACJ540												

**City of Portland - Bureau Of Environmental Services**  
**PROJECT PAY ESTIMATE**

**Project:** Foster & Holgate Sewer Replacement  
**CM Bill** Theiss

**Vendor:** 120 EMERY & SONS CONSTRUCTION INC  
**Estimate No.** 15 Final **1/02/2012- 1/02/2012**  
**Vendor Number**

Item No.	Description	UV	Contract				Previous	This Estimate		Total Work Completed		Percent Complete
			Quantity	Adj. Quantity	Unit Price	Total Price	Qty	Qty	Amount	Qty	Amount	
2	NEW MANHOLE TO REPLACE MH-ACJ540	LS	1.0000		56,406.6000	56,406.60	1.0000	0.0000	0.00	1.0000	56,406.60	100
Change Order: 3 FINISH GROUTING AND INSTALLING NEW 60" MANHOLE												
3	FINISH GROUTING AND INSTALLING 60" MANHOLE	LS	1.0000		479.4000	479.40	1.0000	0.0000	0.00	1.0000	479.40	100
Change Order: 4 MH3 CONNECTION & POUR SLAB OVER 60" WATER MAIN												
4	MH3 Connection & Pouring Concrete Slab Over Water Main	LS	1.0000		58,902.1700	58,902.17	1.0000	0.0000	0.00	1.0000	58,902.17	100
Change Order: 5 Deduction Of Liquidated Damages For 135 Days												
5	Deduction Of Liquidated Damages For 135 Days	LS	1.0000		-148,500.0000	-148,500.00	1.0000	0.0000	0.00	1.0000	-148,500.00	100
Change Order: 6 FINAL CHANGE ORDER RESOLUTION PER ORDINANCE 185003												
6A	BORE & JACK WORK	LS	1.0000		442,685.0000	442,685.00	1.0000	0.0000	0.00	1.0000	442,685.00	100
6B	REIMBURSE LIQUIDATED DAMAGES	EA	106.0000		1,100.0000	116,600.00	106.0000	0.0000	0.00	106.0000	116,600.00	100

<b>Dollar Percent Complete</b>	253.70%	<b>Amount This Estimate w/CO:</b>	\$0.00
<b>Days Percent Complete</b>	104.31%	<b>Total Work Completed to Date:</b>	\$543,241.21
<b>Contractor Started:</b>	5/25/2010	<b>CO Amount This Estimate:</b>	\$0.00
<b>Working Days Started:</b>	5/25/2010	<b>CO Total To Date</b>	\$540,583.96
<b>Original Completion:</b>	9/21/2010	<b>Materials On Hand:</b>	\$0.00
<b>Non-Working Days:</b>	0	<b>Materials On Hand Deduction:</b>	\$0.00
<b>Time Extension Days:</b>	135	<b>Total Certificate Amount</b>	\$1,083,825.17
<b>Revised Contract Completion</b>	2/03/2011	<b>Deduct 0.00% Retainage</b>	\$0.00
<b>Actual Completion:</b>	2/15/2011	<b>Retention Released this Estimate</b>	\$10.00
		<b>Retention Withheld to Date:</b>	\$(26,227.01)
		<b>Retention Released to Date:</b>	\$26,227.01
		<b>Other Adjustments</b>	\$0.00
		<b>Retainage +/- Adjustments</b>	\$0.00
		<b>Total Due to Date:</b>	\$1,083,825.17
		<b>Deduct Previous Payments:</b>	\$(1,083,815.17)
		<b>Balance Due This Estimate:</b>	\$10.00

**MAINTENANCE/WARRANTY BOND**

KNOW ALL MEN BY THESE PRESENTS that we, EMERY & SONS CONSTRUCTION, INC., as Principal, and TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of CONNECTICUT, and duly authorized to transact a surety business in the State of Oregon, as surety, are held and firmly bound unto the CITY OF PORTLAND, a municipal corporation of the State of Oregon, in the penal sum of \$ TWO HUNDRED SIXTEEN THOUSAND SEVEN HUNDRED SIXTY-FIVE AND 03/100 Dollars (\$216,765.03), lawful money of the United States of America, for the payment whereof well and truly to be made, we and each of us, jointly and severally, bind ourselves, our and each of our heirs, executors, administrators successors and assign, firmly by these presents.

**THE CONDITION OF THIS BOND IS SUCH:**

THAT WHEREAS the Principal did on the (APRIL 22ND, 2010), enter into Contract with the City of Portland for FOSTER & HOLGATE SEWER REPLACEMENT, PROJECT NO. E10014, that was completed on (DECEMBER 16TH, 2011), which requires a two-year Maintenance and Warranty as described in Section 107.14 of the City of Portland Standard Construction Specifications, and which Contract hereby is made a part hereof as if fully copies herein;

NOW THEREFORE, if the Principal herein shall faithfully and truly observe the terms, provisions, conditions, stipulations, directions, and requirements of said contract and shall in all respects, whether the same be enumerated herein or not, faithfully comply with the same and shall assume the defense of indemnify and save harmless the City of Portland, its officers, agents, and employees from all claims, liabilities, loss, damage or injury which may have been suffered or claimed to have been suffered to persons or property directly or indirectly resulting from or arising out of the operations or conduct of said Principal or any subcontractor in the performance of the work under said contract and shall indemnify and make whole the City for any injury or damage to any street, highway, avenue, or road or any part thereof, resulting from the operations or conduct of said Principal or any subcontractor in connection with performance or conduct of the work under said contract, and shall in all respects faithfully keep and observe all of said terms, provision, conditions, stipulations, directions, and requirements, then this obligation is void, otherwise, it shall remain in full force and effect.

WITNESS our hand and seals this 16TH day of DECEMBER, 2011

EMERY & SONS CONSTRUCTION, INC  
Contractor  
BY: Bill Murtin  
TITLE: President

Surety TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA  
By: Ty Moffett  
Attorney-In-Fact TY MOFFETT

APPROVED AS TO FORM  
APPROVED  
[Signature]  
City Attorney CITY ATTORNEY



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 218303

Certificate No. 004167346

KNOW ALL MEN BY THESE PRESENTS: That St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company and St. Paul Mercury Insurance Company are corporations duly organized under the laws of the State of Minnesota, that Farmington Casualty Company, Travelers Casualty and Surety Company, and Travelers Casualty and Surety Company of America are corporations duly organized under the laws of the State of Connecticut, that United States Fidelity and Guaranty Company is a corporation duly organized under the laws of the State of Maryland, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

A.G. Sadowski, Derek A. Sadowski, Kathleen M. Sadowski, and Ty Moffett

of the City of Salem, State of Oregon, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 15th day of April, 2011.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company



State of Connecticut
City of Hartford ss.

By: [Signature]
George W. Thompson, Senior Vice President

On this the 15th day of April, 2011, before me personally appeared George W. Thompson, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2011.



[Signature]
Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

**RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

**FURTHER RESOLVED**, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

**FURTHER RESOLVED**, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

**FURTHER RESOLVED**, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kori M. Johanson, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 16th day of December, 20 11.

  
Kori M. Johanson, Assistant Secretary



To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at [www.travelersbond.com](http://www.travelersbond.com). Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

# ACKNOWLEDGEMENT, RELEASE AND CERTIFICATION

## 1. Acknowledgement

Contractor acknowledges that amount earned is \$1,083,825.17 on Contract No. 30001292. Final payment of \$1,000 Remains to be made by the City of Portland.

## 2. Release:

Except for the amount of the final payment that remains to be paid, Contractor releases the City of Portland, its officers, agents and employees from any and all other claims for additional compensation that it does or might have as a result of its performance of work on this contract

## 3. Certification

Contractor certifies that:

- a) All work required by this Contract is complete;
- b) All amounts due for labor, materials and all other obligations under this Contract were paid by the Contractor except for any payments due after Final Payment by Owner is paid;
- c) All actions for injuries or damages arising out of its operations and work were fully and finally settled, or are fully covered by insurance protecting the Contractor, the City of Portland, its officers, agents and employees, and any additional insurance required by the contract; and
- d) Any claim brought against the Contractor by an employee, subcontractor, or supplier has been fully and finally settled, or if not resolved, is fully covered and payable by the Contractor's performance and payment bond, or, if no bond was required, by the Contractor itself, in the event that such claim is correct.

Bill Martinak

Signature

Emery & Sons Construction, Inc.  
3831 Fairview Dr. SE  
PO Box 4109  
Salem, OR 97302

President +

Title

State of Oregon )  
County of Manon ) ss:

This instrument was acknowledged before me on 12/16/11 (date),  
by Bill Martinak (name) as President (title)  
of Emery & Sons Construction Inc. (company).

Melissa Patterson



NOTARY PUBLIC FOR Oregon (State)  
My Commission Expires: 4/24/15

APPROVED AS TO FORM

Sandra Meng  
CITY ATTORNEY





## FINAL QUANTITY AGREEMENT

**Project:** Foster & Holgate Sewer Replacement  
**Contract:** 30001292  
**Contractor:** Emery & Sons Construction Inc.

**Project No.:** E10015  
**Date:** 12/16/11

Original Contract Amount:	<u>\$427,199</u>
Authorized Change Orders:	<u>\$540,583.96</u>
Quantity Increases:	<u>\$116,042.21</u>
Final Amount Earned	<u>\$1,083,825.17</u>
Amount Earned in PP 012:	<u>\$1,083,825.17</u>
Amount to be Paid in PP 013 Final:	<u>\$1,000</u>

By:  4/19/12  
Construction Manager Date

By:  12-19-11  
Contractor's Representative Date

cc: Contractor, CM, Senior Inspector, Designer ,  
Const. Eng., TRIM

Sent via e-mail to Contractor on: 12/16/11

**RECEIVED**

**DEC 27 2011**

**BUREAU OF ENVIRONMENTAL  
SERVICES**



CITY OF PORTLAND, OREGON  
BUREAU OF ENVIRONMENTAL SERVICES  
CONSTRUCTION SERVICES DIVISION

---

CONTRACT # 30001292 UNILATERAL CHANGE ORDER # 1  
Project Name: Foster & Holgate Sewer Replacement  
Company: Emery & Sons Construction Inc. Project Number: 10014  
Address: P.O. Box 4109, 3831 Fairview Industrial Dr SE Bid Number: 111566  
City, State, Zip: Salem, OR, 97302

---

Inject Grout beneath the 60" Water Main in the Foster & Holgate intersection to help stabilize the soil prior to the Jack & Tunnel operation. See Change Directive for grouting locations and depths.


The cost was calculated per Force Accounts for the Labor, Equipment, Materials, and Subcontractor needed to perform the grout work. See attached Force Account Sheets and Calculations.

This unilateral Change Order provides all compensation by the City of Portland to the Contractor for all things done or furnished in connection with the work done under this Change Order.

The above-ordered change order will increase the contract amount by \$14,010.79

The above-ordered change order will increase the contract time by 2 days.


Bureau of Environmental Services

  
Construction Division Manager

5/3/11  
Date

CC: BES Accounting (106/1000)

Contractor (original)

Construction Manager 

Inspector II

Auditor's Office (131/401)

# E10014 Foster & Holgate Force Account Sheets

11-03-2010 to 11-04-2010, Grout for Ground Stabilization

11-03-2010 Total:	\$6,457.95
11-04-2010 Total:	\$7,552.84

Total Cost for Grout Work: **\$14,010.79**

\*See attached Force Account Sheets

## E10014 FORCE ACCOUNT, 11-03-2010, Ground Stability Grout

### LABOR

NAME	CLASS.	TOTAL HRS.	RATE	TOTAL	11/3/2010
Jeff Levin	Superintendent	8.00	\$107.86	\$862.88	8.00
Jeff Levin OT	Superintendent	0.50	\$157.20	\$78.60	0.50
Larry Robinson	Operator	8.00	\$61.63	\$493.04	8.00
Larry Robinson	Operator	0.50	\$87.09	\$43.55	0.50
Connor Tony	Laborer	8.00	\$48.85	\$390.80	8.00
Connor Tony	Laborer	0.50	\$68.28	\$34.14	0.50
Haven Gallagher	Laborer	8.00	\$48.85	\$390.80	8.00
Haven Gallagher	Laborer	0.50	\$68.28	\$34.14	0.50
Tim Fowler	Foreman/Operator	8.00	\$107.86	\$862.88	8.00
Tim Fowler	Foreman/Operator	0.50	\$157.20	\$78.60	0.50

**TOTAL LABOR COST** **\$3,269.43**  
**LABOR ALLOWANCE @ 20.00%** **\$653.89**  
**TOTAL LABOR PRICE** **\$3,923.31**

### CONTRACTOR'S EQUIPMENT

DESCRIPTION	MODEL	TOTAL HRS.	RATE	TOTAL	11/3/2010
Water Truck	3600 Gallon	7.00	\$46.70	\$326.90	7.00
Vac Trailer	V-T 1500 D	6.00	\$52.00	\$312.00	6.00
Back Hoe	Case 580	5.00	\$28.44	\$142.20	5.00
Loader	JD 644	2.00	\$65.50	\$131.00	2.00
Crew Truck	Ford F450	7.00	\$22.64	\$158.48	7.00
Pickup Truck	Ford F-350	7.00	\$14.07	\$98.49	7.00
Lights	Ben x 8 hrs	24.00	\$9.73	\$233.52	24.00
Roller	DynaPac CC122	0.50	\$59.45	\$29.73	0.50

**TOTAL EQUIPMENT COST** **\$1,432.32**  
**CONTRACTOR'S EQUIPMENT ALLOWANCE 0.00%**  
**TOTAL EQUIPMENT PRICE** **\$1,432.32**

### CONTRACTOR'S EQUIPMENT ON STANDBY

DESCRIPTION	MODEL	TOTAL HRS.	RATE	TOTAL	11/3/2010
Vac Trailer	V-T 1500 D	1.00	\$52.00	\$20.80	1.00
Back Hoe	Case 580	2.00	\$28.44	\$22.75	2.00
Loader	JD 644	5.00	\$65.50	\$131.00	5.00

**TOTAL EQUIPMENT COST** **\$174.55**  
**CONTRACTOR'S EQUIPMENT ALLOWANCE 0.00%**  
**TOTAL EQUIPMENT PRICE** **\$174.55**

### MATERIALS AND SUPPLIES

DESCRIPTION	SUPPLIER	UNITS	RATE	TOTAL	11/03/10
6" PVC Pipe		13.00	\$2.97	\$38.61	13 LF
2" Galvanized Pipe		120.00	\$4.39	\$526.80	120 LF
6" Cast Valve Box		3.00	\$69.45	\$208.35	3 EA
Traffic Control Signs		12.00	\$2.75	\$33.00	12 EA

**TOTAL MATERIALS COST** **\$806.76**  
**MATERIAL ALLOWANCE @ 15.00%** **\$121.01**  
**TOTAL MATERIALS PRICE** **\$927.77**

**FORCE ACCOUNT GRAND TOTAL: **\$6,457.95****

**E10014 FORCE ACCOUNT, 11-04-2010, Ground Stability Grout**

**LABOR**

NAME	CLASS.	TOTAL HRS.	RATE	TOTAL	11/4/2010
Bill Martinak	Laborer	6.00	\$107.86	\$647.16	6.00
Bill Martinak	Laborer	0.00	\$157.20	\$0.00	0.00
Ryan Ward	Laborer	6.00	\$63.65	\$381.90	6.00
Ryan Ward	Laborer	0.00	\$0.00	\$0.00	0.00
<b>TOTAL LABOR COST</b>				<b>\$1,029.06</b>	
<b>LABOR ALLOWANCE @</b>			<b>20.00%</b>	<b>\$205.81</b>	
<b>TOTAL LABOR PRICE</b>				<b>\$1,234.87</b>	

**CONTRACTOR'S EQUIPMENT**

DESCRIPTION	MODEL	TOTAL HRS.	RATE	TOTAL	11/4/2010
Pickup Truck	Ford F-350	6.00	\$14.07	\$84.42	6.00
Back Hoe	Case 580	5.00	\$28.44	\$142.20	5.00
Lights	Ben x 8 hrs	21.00	\$9.73	\$204.33	21.00
Roller	DynaPac CC122	0.50	\$59.45	\$29.73	0.50
<b>TOTAL EQUIPMENT COST</b>				<b>\$460.68</b>	
<b>CONTRACTOR'S EQUIPMENT ALLOWANCE</b>			<b>0.00%</b>		
<b>TOTAL EQUIPMENT PRICE</b>				<b>\$460.68</b>	

**CONTRACTOR'S EQUIPMENT ON STANDBY**

DESCRIPTION	MODEL	TOTAL HRS.	RATE	TOTAL	11/4/2010
Water Truck	3600 Gallon	5.00	\$46.70	\$93.40	5.00
<b>TOTAL EQUIPMENT COST</b>				<b>\$93.40</b>	
<b>CONTRACTOR'S EQUIPMENT ALLOWANCE</b>			<b>0.00%</b>		
<b>TOTAL EQUIPMENT PRICE</b>				<b>\$93.40</b>	

**SUBCONTRACTOR LABOR**

DESCRIPTION	SUPPLIER	UNITS	RATE	TOTAL	11/04/10
Labor		5.00	\$375.00	\$1,875.00	5.00
Mobilization		1.00	\$2,200.00	\$2,200.00	1.00
Chemical Grout		10.00	\$125.00	\$1,250.00	10.00

<b>TOTAL SUBCONTRACTED LABOR COST</b>			<b>\$5,325.00</b>
<b>SUBCONTRACTOR LABOR ALLOWANCE @</b>		<b>5.00%</b>	<b>\$266.25</b>
<b>TOTAL MATERIALS PRICE</b>			<b>\$5,591.25</b>

**MATERIALS AND SUPPLIES**

DESCRIPTION	SUPPLIER	UNITS	RATE	TOTAL	11/04/10
1/2" Grout Pipe, 10 1/2" Couplers		96.00	\$1.22	\$117.12	96 LF
Traffic Control Signs		12.00	\$2.75	\$33.00	12 EA

<b>TOTAL MATERIALS COST</b>			<b>\$150.12</b>
<b>MATERIAL ALLOWANCE @</b>		<b>15.00%</b>	<b>\$22.52</b>
<b>TOTAL MATERIALS PRICE</b>			<b>\$172.64</b>

**FORCE ACCOUNT GRAND TOTAL: \$7,552.84**

## CONSTRUCTION CHANGE DIRECTIVE

<b>Project:</b>	<u>Foster &amp; Holgate Sewer Replacement</u>	<b>Proj. #:</b>	<u>E10014</u>
<b>Subject:</b>	<u>Grout for Ground Stabilization under the 60" Main</u>	<b>CCD #:</b>	<u>03</u>
<b>From:</b>	<u>Bill Theiss</u>	<b>Date:</b>	<u>10/29/10</u>
<b>To:</b>	<u>Emery &amp; Sons Construction Inc.</u>	<b>Attn:</b>	<u>Ryan Ward</u>

You are hereby directed to proceed with the following changes to the Work:

In order to stabilize the ground conditions beneath the 60" Water Main, Emery & Sons shall use the approved grout and grouting method in several locations around the Water Main and 36" Existing Sewer.

See attached Approved Submittal.

- Incorporate these changes into the Record Documents.
- Except for the changes described herein, all work under this CCD shall be in conformance with the Contract Documents.
- Continue promptly with the Work, including these changes so that the Project is not delayed.
- Perform these changes on **Force Account** and report to the Inspector, on a daily basis, all materials, equipment, labor, and special services used, and any apparent impacts to the Construction Schedule.

Attach documents related to this CCD: RFI# \_\_\_\_\_ NOC# \_\_\_\_\_ DC# \_\_\_\_\_ FO# \_\_\_\_\_

Other: Approved Submittal #18.10

Owner's Representative:

Bill Theiss

Date:

10/29/10

cc: Colleen Harold, Ayda Forouzan, Bill Theiss, Gary Hodge, Bert Crosier, Joe Maze, BES Const. Eng.





# CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ▪ Dan Saltzman, Commissioner ▪ Dean Marriott, Director

10/29/2010

Emery & Sons Construction Inc.  
P.O. Box 4109, 3831 Fairview Industrial Drive  
Salem, OR 97302

**Project:** 10014.0, Foster & Holgate Sewer Replacement

**Submittal:** 18.100, Grouting Locations for Ground Stabilization

## MAKE CORRECTIONS NOTED

### Comments:

1. The noted Grout Hole Locations are not exact locations and may be moved pending field conditions and owners approval
2. Grout pressures may vary due to field conditions – however, movement of the 60" water line will not be tolerated.

The review by the Engineer of any shop drawings, product data, samples, construction methods and equipment, or other submittals is only for conformance with the general concept of the project and does not extend to consideration of structural integrity, safety, detailed compliance with Contract Requirements, or any other obligation of the Contractor. Action shown is subject to the requirements of the plans and specifications. The Contractor is responsible for confirming and correlating all dimensions and fabrications and construction techniques; coordinating his work with that of all other trades; and the satisfactory performance of his entire work in strict accordance with the Contract Documents. The review does not relieve the Contractor from his obligation to fully perform all Contract Requirements, nor does such review give rise to any right of action or suit in favor of the Contractor or third persons against the Engineer or Owner.

Please contact this office with any questions you may have.

Sincerely,

Bill Theiss  
Project Manager

cc: Main File                      Ayda Forouzan                      Tom Pfeiffer  
Bert Crosier                      Joe Maze  
Gary Hodge                      Neil Bruesch                      James Wood



**Emery & Sons  
Construction, Inc.**  
General Contractors  
Underground Specialists

October 28, 2010

City of Portland  
Attn: Bill Theiss  
1120 SW Fifth Avenue, Room 1000  
Portland, Oregon 97204-1912

RE: Project #E10014  
Foster and Holgate Sewer Replacement  
Utility Protection During Jacking and Tunneling

Mr. Bill Theiss,

Before Jacking and Tunneling underneath the 60" water main, we are going to inject a chemical grout in four locations (See attached plan). The locations shown on the plan are approximate and depend on whether the CDF we placed around the main is in the way.

Michels Corporation will be completing the grout installation. They will be using Strata-Tech hand pumps and pressurize the grout to 50-75 psi. Once the grout reaches the correct pressure the pipe will be raised 2.5'-3' and pressurized again, spreading the grout and solidifying the earth below the water main. We will pump grout from approximately 18' deep to the surface.

If the grout doesn't hold the earth as expected, and we still experience raveling into the casing, we will need to revert back to the original utility protection plan for the 60" water main. We will have all the correct sheets, straps, beams, chains and binders on site to install the original system.

If there are any questions regarding this plan please contact myself at 503.588.7576, or Jeff Levin, the onsite Superintendent at 503.931.7475.

Thank you,

Ryan Ward  
Project Manager



CITY OF PORTLAND  
ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ▪ Dan Saltzman, Commissioner ▪ Dean Marriott, Director

## Grouting Submittal Supplemental

October 29, 2010

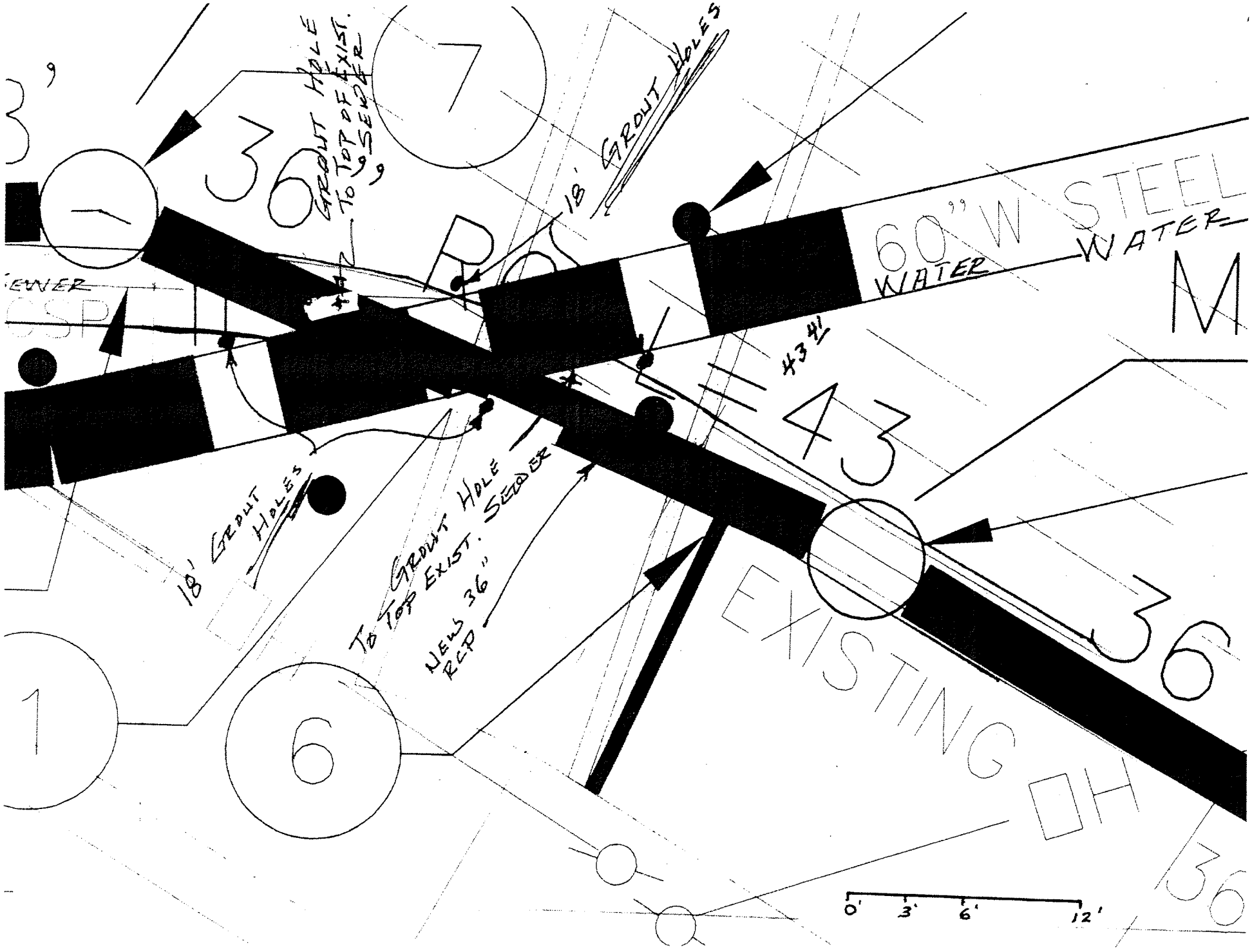
(These notes are in addition to Submittal #18.10 Grouting Locations for Ground Stabilization.)

### NOTES

- Michels Corporation will be installing the Grout in several locations around the 60" Water Main and the Existing 36" Sewer. Four (4) Holes will be drilled to a depth of 18 feet (to the invert elevation of the Existing Sewer Pipe). Two (2) more holes will be drilled to the Top of the Existing Sewer on either side of the 60" Water Main. See attached drawing for Grout Hole Locations. Between the depths of 12' and 18', the grout will be pressurized to 50-75 psi. All grouting above 12' shall be pressurized at 30 psi maximum.
- The top of the 60" Water Main shall be exposed in order for Survey to monitor 3 points of reference throughout the Jacking & Tunneling operation.

Signed,

Bill Theiss  
Construction Manager BES



GROUT HOLE  
TO TOP OF EXIST.  
SEWER

18" GROUT HOLES

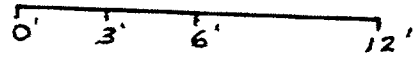
60" W STEEL  
WATER MAIN

18" GROUT HOLES

TO TOP EXIST. SEWER  
NEW 36" RCP

43 4/1

EXISTING OH



36

# TECHNICAL INFORMATION

## URETHANES

**PRODUCT NAME**  
**HYDRO ACTIVE® Multigel NF**  
 Hydrophilic Polyurethane Gel

**MANUFACTURER**  
 De Neef Construction Chemicals, Inc.  
 5610 Brystone Drive  
 Houston, TX 77041  
 1(800) 732-0166

**PRODUCT DESCRIPTION**  
 HYDRO ACTIVE® Multigel NF is a hydrophilic polyurethane designed to react with water and form a water impermeable gel mass. HYDRO ACTIVE® Multigel NF is a pale yellow, nonflammable liquid. When it comes into contact with water, the grout begins to foam or gel, and depending on the temperature and amount of water present, quickly cures to a flexible, impermeable foam or gel mass unaffected by mildly corrosive environments. Cure times can be modified using accelerator (Flexgel Cat W) and gel strength can be increased using reinforcing agent.

### APPROPRIATE APPLICATIONS

- Stopping infiltration into manholes (brick or concrete).
- Sealing of pipe joints using commercial packer equipment.
- Stabilization of soil
- Potable water tanks and storage
- Curtain wall grouting below grade structures

### ADVANTAGES

- Non-flammable
- Contains no volatile solvents
- NSF 61 Potable water approved
- High penetration rate through soils
- Can be injected through remote internal pipe packer equipment
- Grouted soils can be excavated
- Multigel NF can be pumped at various grout to water ratios
- Adjustable set times

### TYPICAL PROPERTIES

#### Uncured

Solids	78%	ASTM D 2369 B
Viscosity at 77°F	200-300 cps	ASTM D 2196 A
Color	Yellow	
Flashpoint	225°F	ASTM D 93

#### Cured

Tensile Strength Wet 10% Reinf. Agent (Mixed 6:1 w/water)	22-34 psi	ASTM D 1564
Tensile Strength Wet 20% Reinf. Agent (Mixed 6:1 w/water)	28-49 psi	ASTM D 1564
Gel time	50 seconds at 70° F	
Shrinkage	No shrinkage was observed after one week at 70°F and relative humidity of 100%.	
Influence of pH	Gel time increases with decreasing pH values.	
Compressive Strength in Soil Mixed 1:1w/water	375 psi	
Compressive Strength in Soil Mixed 6:1 w/ water	202 psi	
Cured materials	Resistant against normal sewer effluents.	

The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

### Water Side Additives

Flexgel Cat Water Side		
Appearance	Pale white	
Viscosity	5 -15 cps at 70°F	ASTM D 2196 A
Flashpoint	350°F	ASTM D 93
Reinforcing Agent		
Appearance	Milky white (latex based)	
Viscosity	20-50 cps at 70°F	ASTM D 2196 A
Flashpoint	>212°F	ASTM D 93

Caution: Add Reinforcing Agent at waterside!

## PACKAGING

### HYDRO ACTIVE® Multigel NF:

- 55 gallon metal drums sealed under dry nitrogen
- 5 gallon metal pails sealed under dry nitrogen.
- 10.5 oz cartridges

**Flexgel Cat W:** 64 oz. Bottle.

**Reinforcing Agent:** 1 gal bottle or 5 gal pail

## LIMITATIONS

Low temperatures will significantly increase viscosity. If site temperatures are extremely low, heat bands or warm water baths can be used before and during installation to maintain the products temperature. Allow no water into open containers, as the material is water activated. Avoid exceeding 90°F when warming.

**CAUTION – pH NOTICE.** Water used to activate HYDRO ACTIVE Grouts must be in a range of pH 3 –10 for optimum grout quality.

## SURFACE PREPARATION

Refer to DeNeef Surface Preparation Guidelines for more details.

## INSTALLATION PROCEDURES

HYDRO ACTIVE® Multigel NF should be pumped with a *plural component pump*. Prior to installation the material should be agitated by vigorously shaking or using a jiffy mixer or bung mixer. HYDRO ACTIVE® Multigel NF is cured by reaction with water. The properties of the cured product are determined by the mix ratio. Combining HYDRO ACTIVE® Multigel NF and water at 1:1 volume ratio yields a very flexible foam with good tear resistance. In the range of 2:1 to 8:1, a strong gel is obtained. Adding Reinforcing Agent up to 50% on the waterside to HYDRO ACTIVE® Multigel NF will increase grout strength and reduce shrinkage if ground water levels vary. The addition of Reinforcing Agent will also accelerate the setting time of HYDRO ACTIVE® Multigel NF. Acceleration can also be achieved by adding Flexgel Cat W to the waterside up to 64 ounces per 5 gallons of HYDRO ACTIVE® Multigel NF.

### Mix Ratio

Foam	Strong Gel					Flaccid Gel	
1:1	2:1	4:1	6:1	8:1	10:1	12:1	

## STORAGE & HANDLING

Store in a dry area using original resealable containers.

**Warning!** If HYDRO ACTIVE® Flexgel Cat W or Reinforcing Agent are allowed to freeze it will lower performance and possibly render material ineffective.

## PRECAUTIONS

Always use protective clothing, gloves and goggles consistent with OSHA regulations. Avoid eye and skin contact. Do not ingest. Refer to Material Safety Data Sheet for detailed safety precautions.

## SAFETY INFORMATION

In the event of an EMERGENCY call:  
CHEM-TREC 800-424-9300.

## WARRANTY INFORMATION

De Neef Construction Chemicals, Inc. products are warranted under the policy set forth under the WARRANTY section of the De Neef Construction Chemicals Inc., product catalog. Warranty information can also be obtained via the De Neef Construction Chemicals Inc. website at [www.deneef.com](http://www.deneef.com), or by calling 713-896-0123 or toll free at 1-800-732-0166.

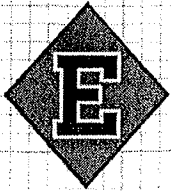
Rev. 07/2006

DRINKING WATER SYSTEM COMPONENTS  
ANSI/NSF 61  
3N76

"HYDRO ACTIVE® MULTIGEL NF"  
MAXIMUM SURFACE AREA TO VOLUME RATIO  
5.4CM<sup>2</sup>/L AT 23°C







# Emery & Sons Construction, Inc.

General Contractors  
Underground Specialists  
CGB 00312

W.O.: E WOSH

Date 10/14/10

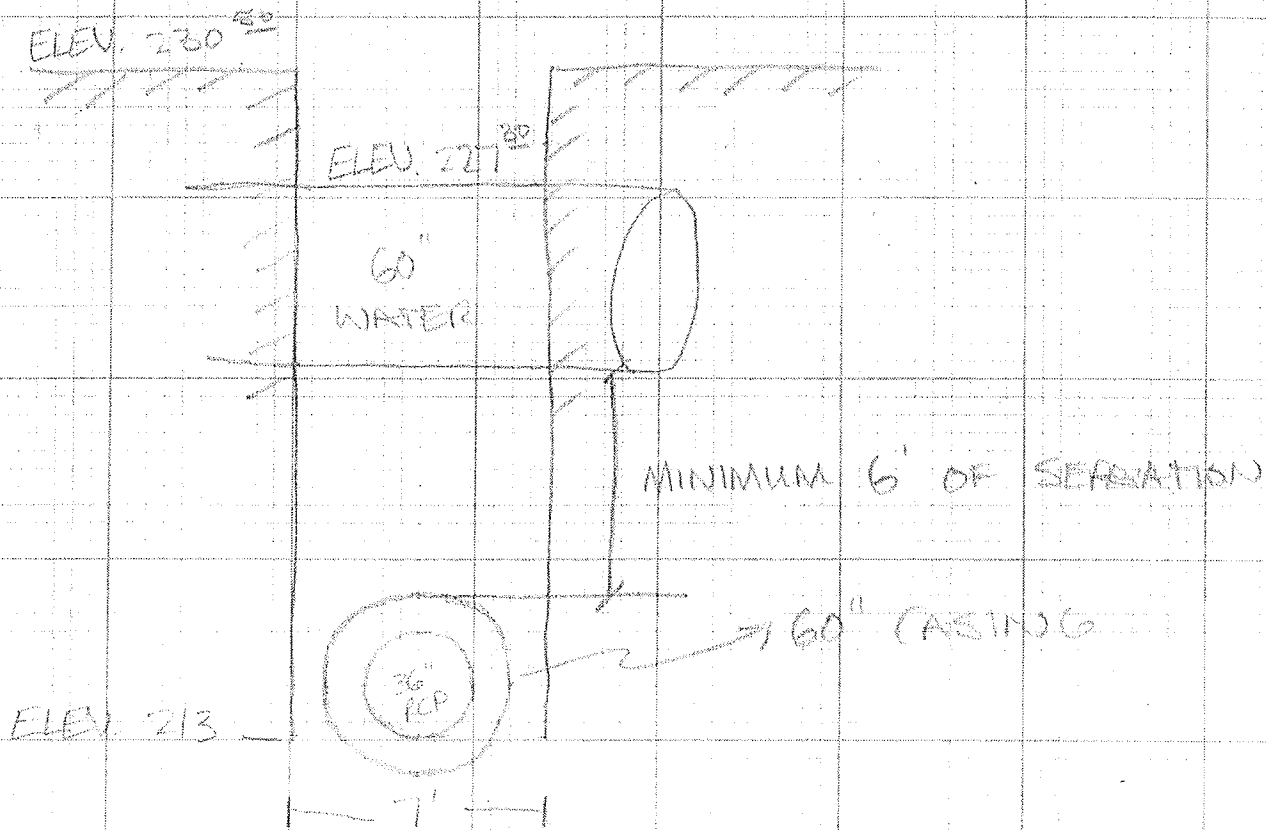
Project: FOSTER & HOLGATE

By: P. WARD

Checked

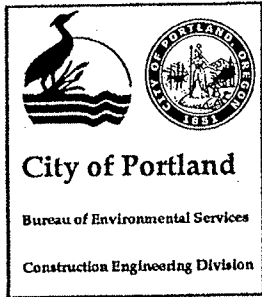
Sheet 1 of 1

5' HORIZONTAL  
VERTICAL



# FORCE ACCOUNT WORK

78



Date Worked: 11/4/10 Job #: E/16014  
 Contractor/Sub: Emery + Sons. Job Name: SE Foster / Redgate  
 Description of Work: Grouting / Force Account #: \_\_\_\_\_  
Soil Stabilization 60" dia Page: 1 of 1

**LABOR** (\* star the foreman)

19:30 - 01:30

Name of Employee	Trade / Type of Work Performed	Class #	Standard Hours	Overtime Hours
STEVE JACOBSON	Super/Foreman		5	
SHAWN SPARKS	Laborer		5	
BILL MARTINAK	Super		6	
Ryan Ward	P.M.		6	

McMick

Emery

19:30-00:30

**EQUIPMENT** (attach rental equipment invoices)

Type	Make	Model / Size / PUC #	Hours	Standby
Pickup	ROPER	E-150	5	
TRK. Equip		16 FT	5	
Grout Pump		MANUEL	5	
Work TRK	ROPER	R-350	6	
Backhoe	CASE	580	5	
Light Plot		3ea. x 7 =	21	
Roller	DYNAPAC	CL12	5	
Water tank		3600 GAL.		5

McMick

**MATERIALS / SERVICE** (attach invoices)

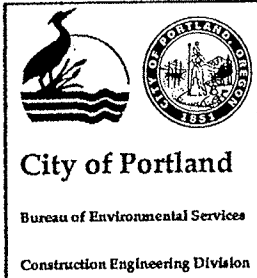
Type	Supplier	Units	Quantity
1/2" Grout Pipe		LF	96
Grout mix		GAL.	10
TRAFFIC CONTROL SIGNS		EA	12

REMARKS: Placed 10 grout + 30 gal water around 60" water  
line Flagger Paid Per Bid Item.

[Signature] 11/5/10  
 Contractor's Representative Date

[Signature] 11/5/2010  
 Inspector Date

Payment for Force Accounts will be in accordance with the City of Portland Standard Specifications 109.04 sub 3: Force Account Work. Invoices for materials and subcontracted work must be submitted before payment will be made. (3/96)



# FORCE ACCOUNT WORK

# 77

Date Worked: <u>11/3/2010</u>	Job #: <u>EO/0014</u>
Contractor/Sub: <u>EMERY &amp; SONS</u>	Job Name: <u>SE Post/Hwy</u>
Description of Work: <u>INSTALL 60" HD MONITORING POINT, GROUT TUBES.</u>	Force Account #: _____
	Page: <u>1</u> of <u>1</u>

**LABOR** (\* star the foreman)

19:30  
20.00 hrs TO 04:00

Name of Employee	Trade / Type of Work Performed	Class #	Standard Hours	Overtime Hours
Jeff Levin	Super		8	.5
Lacey Robinson	Operator		8	.5
Cowder Tony	Labour		8	.5
Haven	Labour		8	.5
Tim Fowler	Foreman/OP.		8	.5

**EQUIPMENT** (attach rental equipment invoices)

Type	Make	Model / Size / PUC #	Hours	Standby
Water Tank		3600 Gal	7	
VAC Terminal		V-T/500A	6	1
Back Hoe	Case	580	5	2
Loader	JD	644	2	5
Crew Truck	Ford	F-450	7	
Pick up Truck	Ford	F-350	7	
Light Plants		3ea x 8hrs.	24	
Roller	DYNAPAC	CC122	.5	

**MATERIALS / SERVICE** (attach invoices)

Type	Supplier	Units	Quantity
6" PVC Pipe		FT	13
2" GALVANIZED Pipe		FT	120
6" Cast Valve Box		EA	3
Traffic Control Signs		EA	12

REMARKS: 3ea Flaggers Paid Per Bid ITEM

[Signature]  
Contractor's Representative  
Date: 11/4/10

[Signature]  
Inspector  
Date: 11/9/10

Payment for Force Accounts will be in accordance with the City of Portland Standard Specifications 109.04 sub 3: Force Account Work. Invoices for materials and subcontracted work must be submitted before payment will be made. (3/96)

DAILY PROGRESS REPORT

Job No. E/0014

Job Name: Foster and Holgate  
 Report No. #78 Date/Day 11/4/2010 Thursday  
11/5/2010 Friday

Prime: Emery and sons  
 Weather Clear Temp. 45°  
 Photos Taken: (Yes) No (circle one)

Subcontractors

- A. Coats Flagging
- B. Bud Construction
- C.

Trade	# of Workers			
	Prime	A	B	C
Superintendent	1			
Foreman-Driver	1			
Pipe Layer	1			
Equip Operator	1			
Operator	1			
Truck Driver		1	1	
Apprentice				
Flagger		4		
Steel Worker				
Crane Operator				
Cem. Finisher				
Carpenter				
Electrician				
Equipment in Use:				
600 Komatsu Excavator				
290 Link Belt Excavator				
570 case tractor				
690 JD Excavator-hoe pack				
① 12cy Dump truck				
② F350 tool trucks				
Standby Equipment:				
3000 Gal water truck				

Work Area: SE 66<sup>th</sup>-67<sup>th</sup> and Foster

Contractor Start Time: 7:00 pm Stop Time: 7:30 AM

Traffic Control Start Time: 8:30 pm Stop Time: 7:00 AM

Work Progress: Installation of new 36" RCP up to Existing MH ACJ 540

Traffic control in place (per submittal #10)

Erosion control in place (Inlet Bags)

Traffic lights out 8:30 pm 11/4/2010

Traffic lights on 7:09 Am 11/5/2010

Layed 36" RCP up to Existing MH ACJ 540 starting station 1+54.5 and ending at station 1+69.5

worked at pulling steel sheets and trench boxes at the same time backfilling with 3/4" Rock wetting in place and compacting with 690 Excavator with hoe pack.

Dave My Cune with survey took shots on FL Lines and locations of pipes in coming to Existing MH ACJ 540 for the purpose of constructing a new Manhole in its place.

Second crew was Grouting around 60" water main in the Intersection of Foster and Holgate Joe Maze was monitoring the operation.

This is day 41 of the 42 days on Noise Variance permit.

(Addressed Joe Annett of this.)

Carried Noise Hot Line phone on me during shift (NO complaints)

Materials Received (Type and Quantity): 200 cy of 3/4" Rock Cemex fisher pit.

Visitors: Gary Hodges, Joe Maze

Date Completed: 11/5/2010

Signed: Burt Bert Crozier

Inspection Start Time: 7:00 pm Stop Time: 8:00 AM

Checked by Sr. Insp./CM: [Signature]

Original: Main File  
 Yellow: Construction Manager  
 Pink: Inspector

# DAILY PROGRESS REPORT

Job No. B010014

Job Name: SE Foster / Holgate

Prime: Reming + Sons

Report No. 1078 Date/Day 11/4/2010, Thu.

Weather clear Temp. 49

**Subcontractors**

Photos Taken: (X) Yes / No (circle one)

- A. Conte Logging
- B. Michels Corp - Grouting
- C.

Trade	# of Workers			
	Prime	A	B	C
Superintendent	3			
Foreman	1			
Pipe Layer				
Equip Operator				
Laborer			1	
Truck Driver				
Apprentice				
Flagger			3	
Steel Worker				
Crane Operator				
Cem. Finisher				
Carpenter				
Electrician				
Equipment in Use:				
<u>Case 580 B. Hoe</u>				
<u>2 cur. blk.</u>				
<u>1/8' Tool Trailer</u>				
<u>Manual Grout Pump</u>				
<u>3em Light Plants</u>				
Standby Equipment:				

Work Area: SE Foster / Holgate  
 Contractor Start Time: 1930 Stop Time: 01:30  
 Traffic Control Start Time: 20:00 Stop Time: ?

Work Progress: Set up traffic control to allow.  
Held Pre Event meeting with Grouting firm and  
Exposed event holes + monitoring points.  
TOOK INITIAL Readings on 60" water again  
Then took several more as work progressed.  
Grouting procedure was started on west side  
going from north to south, then so to east  
side working south to north. Grout pipe  
was placed inside 2" pipe + 2" pipe removed so  
rock would seal hole. Grouting started  
at lowest level and moved up 2' at a time.  
with pressures of 75 PSI at depth 12' +  
and 30 PSI 12'-5' depth. If pressures were  
sustained that indicated area was full. Survey  
took shot on 60" water when grouting stopped  
and again 1/4 later. There was no reading change  
on water line. 10 gal Grout mix was  
used at a 1/3 ratio with water.  
Grout work was done by 01:30 hrs  
Traffic control was still up at 02:00 when  
I left due to waiting for signal man.  
But would sign out flaggers once the  
signals were back on.

Materials Received (Type and Quantity): 96 LF of 1/2" Pipe Grout Pipe, 10 gal Grout mix

Visitors: Greg Holga Dave (Survey) But

Date Completed: 11/5/2010

Signed: Joe Meyer

Inspection Start Time: 1030 Stop Time: 02:30

Checked by Sr. Insp./CM: efh

Original: Main File  
 Yellow: Construction Manager 11/4  
 Pink: Inspector 11/5/10

**DAILY PROGRESS REPORT**

Job No. EO/0014

Job Name: FOSTER/Holgate  
 Report No. 77 Date/Day 11/3/10, WED

Prime: Emmy + Sons  
 Weather Clear Temp. 48  
 Photos Taken: Yes / NO (circle one)

Subcontractors

A. COAT Flaggings

B.

C.

Work Area: SE FOSTER & Holgate 11/4/2010

Contractor Start Time: 1900 Stop Time: 0400

Traffic Control Start Time: 20:00 Stop Time: 0400

Work Progress: Contractor Setup Traffic Control

Per Plan. Crew then excavated and installed

Three monitoring points on 60" water

line. City Survey came and took

Baseline Readings. Crew then started

work on putting in concrete tubes. They

were located per plan on Submittal 18.1

Holes were dug with VAC trailer then

the 2" steel pipe was sent to plan

depths by water jetting then downed

tubes on east side of 60" from north to

south had depths 15', 18', 19', west side

north to south was 14', 14', 14',

2" pipe was backfilled with 3/4" (-)

street cut + tube holes got TEMP AC COLD

mix at traffic control was downed by

0400hrs.

SEE ATTACHED GROUT TUBE PLAN

Drawing.

Trade	# of Workers			
	Prime	A	B	C
Superintendent	1			
Foreman	1			
Pipe Layer				
Equip Operator	1			
Laborer	2			
Truck Driver				
Apprentice				
Flagger		3		
Steel Worker				
Crane Operator				
Cem. Finisher				
Carpenter				
Electrician				
Equipment in Use:				
CASE 580 R.Hor				
20644 loader				
WINTER 3600 GAL				
V-T/500 VAC TRAILER				
3 set light plants				
Standby Equipment:				

Materials Received (Type and Quantity): SEE FORK ACCOUNT WORK.

Visitors: Gregy Holger Dave (Survey) Bruce

Date Completed: \_\_\_\_\_ Signed: Joe Mage

Inspection Start Time: 18:30 Stop Time: 04:30 Checked by Sr. Insp./CM: \_\_\_\_\_

Original: Main File  
 Yellow: Construction Manager  
 Pink: Inspector

11/3  
11/4

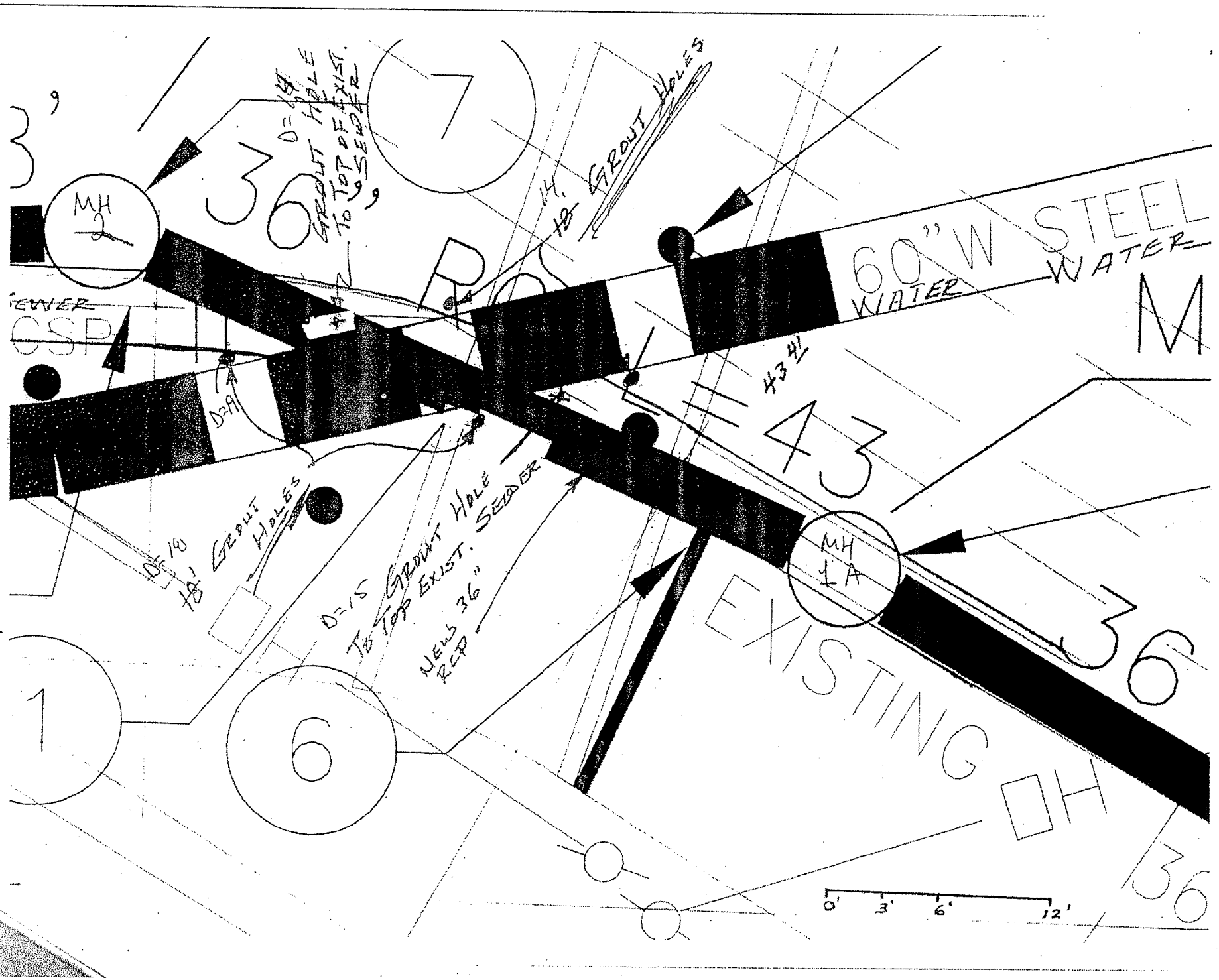


SE Foster + Holtgart E/10014  
Grout Tube Plans

11/3/2010

Daryl J. Munz

Report # 77



BURT

10010

11/3/2010

SE Foster and Holgate  
Traffic control for Installation of Grout tubes

Road work Ahead (4)

~~Be prepared to stop~~

merge Right or Left (2)

Flagger Ahead

~~Be prepared to stop~~

Right Lane closed (1)

Rd Closed type three Barricade (4)

Left Lane closed (1)

Comes with Flagger

Ryan Ward

From: Derek Fitzpatrick - 1615 PORTLAND\_WATERWORKS [derek.fitzpatrick@ferguson.com]  
Sent: Tuesday, December 28, 2010 3:39 PM  
To: Ryan Ward  
Subject: Email Bid# B136266

Price Quotation # B136266

SALEM, OR WW #1615  
3650 KASHMIR WAY SOUTHEAST  
SALEM, OR 97317-0000

Phone : 503-362-2436  
Fax : 503-362-2408

Bid No.....: B136266  
Bid Date...: 12/28/10  
Quoted By: DRF  
Customer.: EMERY & SONS CONSTRUCTION INC  
PO BOX 4109  
SALEM, OR 97302

Cust Phone: 503-588-7576  
Terms.....: 2% 10TH NET 25TH  
Ship To.....: EMERY & SONS CONSTRUCTION INC  
PO BOX 4109  
SALEM, OR 97302

Cust PO#..:

Job Name.:

Item	Description	Quantity	Net Price	UM	Total
SDR35PU14	6X14 SDR35 PVC GJ SWR PIPE	14	2.970	FT	41.58
IVB910TOP	18 CI VLV BX TOP ONLY	1	50.000	EA	50.00
IVB910WTR	CI VLV BX WTR LID F/910	1	19.450	EA	19.45
IGPTCA53D	1/2 GALV T&C A53A S40 PIPE	21	102.150	C	21.45
SDR35P1814	18X14 SDR35 PVC GJ SWR PIPE	14	19.040	FT	266.56
SP-DR25GP36	36 C905 DR25 CL165 PVC GJ PIPE	20	98.880	FT	1977.60
IGCD	1/2 GALV MI 150# COUP	10	1.900	EA	19.00

Net Total: 2395.64  
Tax: 0.00  
Total: 2395.64

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at [http://welselevna.com/terms\\_conditionsSale.html](http://welselevna.com/terms_conditionsSale.html). Govt Buyers: All items quoted are open market unless noted otherwise.



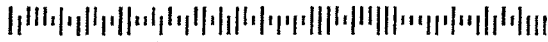
Consolidated Supply Co.  
P.O. Box 5788  
Portland, OR 97228

# INVOICE

INVOICE DATE	INVOICE NUMBER
10/29/10	S5476483.001
PLEASE REMIT PAYMENT TO:	
CONSOLIDATED SUPPLY PO BOX 5788 PORTLAND OR 97228-5788	

QUESTIONS ON THIS INVOICE  
503-361-7473

E0004 10075 0264080395 P649684 0019:0020



EMERY & SONS CONSTRUCTION  
PO BOX 4109  
SALEM OR 97302-8109

SHIP TO:

EMERY & SONS CONSTRUCTION  
MAIN ACCOUNT  
3831 FAIRVIEW INDUSTRIAL DR SE  
SALEM OR 97302

CUSTOMER NUMBER	CUSTOMER ORDER NUMBER	ORDERED BY	SALESPERSON	HOME BRANCH	
34768	13465	JIM	Ryan Stokes - Salem	12	
ORDER WRITER	SHIP VIA	SHIP DATE	ORDER DATE	SHIP BRANCH	
Ryan Stokes - Salem	WC23 WC 2:30 PM	10/29/10	10/29/10	12	
DESCRIPTION	ITEM NUMBER	SHIP QTY	U/M	NET UNIT PRC	NET AMOUNT
2"X21' S40 GAL T&C STEEL PIPE IMPORT	7941	84	ft	3.366	282.74

Ok'd by Ryan Ward  
Emery & Sons Construction  
PO/Sub # \_\_\_\_\_  
W.O. # 13465  
CC # 1600-000005  
Date 11/8/10

## SAVE TIME AND MONEY WITH OUR FREE E-BILLING SERVICE

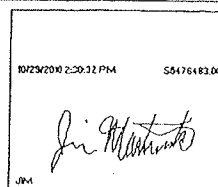


We now offer e-mail as a convenient way for you to receive your invoices and statements. Receive them faster, so you can bill your customers faster. Our goal is to make it easy for you to receive and manage your invoices.

Save time and money while helping us "Go Green".

Contact Sarah at marsar@consolidatedsupply.com or by phone at (503) 906-3237 & get setup today!

If paid by 11/10/10 you may deduct \$5.65  
Invoice is due by 11/30/10 net of any cash discount.



SUBTOTAL	282.74
FREIGHT	
SALES TAX	0.00
<b>AMOUNT DUE</b>	<b>282.74</b>

# Stettler Supply Company

"Committed to Service Excellence" Since 1948

Invoice 84190

**Pumps & Pump Stations | Agricultural Irrigation | Water Treatment | Water Systems**

1810 Lana Ave NE, Salem OR 97301  
 503-585-5550 local 866-985-5550 toll-free 503-581-6799 fax  
 CCB #33228

Bill To: EMERY & SONS CONSTRUCTION, INC PO BOX 4109 3831 FAIRVIEW INDUSTRIAL DR SE SALEM, OR 97302	Ship To: EMERY & SONS CONSTRUCTION, INC PO BOX 4109 3831 FAIRVIEW INDUSTRIAL SALEM, OR 97302
Invoice #: 84190      Invoice date: 10/29/10 Payment terms: NET 10TH OF MONTH Customer code: EMESONCO	P.O.#: 13465 Ship via: Salesperson: ERIC ROSS

Remarks:

Order Taken By: ERICR

Quantity	U/M	Part Number	Description	Unit Cost	Extension
1.00	EA	INS	THREAD CHARGE	42.500	42.50
				<b>Total:</b>	<b>42.50</b>

OK'd by Ryan Ward  
 Emery & Sons Construction  
 PO/Sub # \_\_\_\_\_  
 W.O. # 13465  
 CC # 1600 - 000005  
 Date 11/8/10

A FINANCE CHARGE WILL BE ASSESSED AT 1 1/2% PER MONTH (18% PER ANNUM) ON PAST DUE BALANCE.



Consolidated Supply Co.  
P.O. Box 5788  
Portland, OR 97228

# INVOICE

INVOICE DATE	INVOICE NUMBER
11/02/10	S5478716.001
PLEASE REMIT PAYMENT TO:	
CONSOLIDATED SUPPLY PO BOX 5788 PORTLAND OR 97228-5788	

QUESTIONS ON THIS INVOICE  
503-361-7473

194 1 AB 0.360 E0010 I0017 D264533137 P650484 0003:0003



EMERY & SONS CONSTRUCTION  
PO BOX 4109  
SALEM OR 97302-8109

SHIP TO:

EMERY & SONS CONSTRUCTION  
MAIN ACCOUNT  
3831 FAIRVIEW INDUSTRIAL DR SE  
SALEM OR 97302

CUSTOMER NUMBER	CUSTOMER ORDER NUMBER	ORDERED BY	SALESPERSON		HOME BRANCH
34768	13465	JIM	Adam Moore - Salem		12
ORDER WRITER	SHIP VIA	SHIP DATE	ORDER DATE	SHIP BRANCH	
Adam Moore - Salem	WCN WC NOW	11/02/10	11/02/10	12	
DESCRIPTION	ITEM NUMBER	SHIP QTY	U/M	NET UNIT PRG	NET AMOUNT
2"X21' S40 GAL T&C STEEL PIPE IMPORT	7941	42	ft	3.366	141.37

**RECEIVED**  
12/7/10

EMERY & SONS CONSTRUCTION  
Ok'd by Ryan Ward  
Emery & Sons Construction

PO/Sub # \_\_\_\_\_  
W.O. # 13465  
CC # 1600-00004  
Date 12/7/10

Copy

**SAVE TIME AND MONEY WITH OUR FREE E-BILLING SERVICE**

We now offer e-mail as a convenient way for you to receive your invoices and statements. Receive them faster, so you can bill your customers faster. Our goal is to make it easy for you to receive and manage your invoices.

Save time and money while helping us "Go Green".

Contact Sarah at [marsar@consolidatedsupply.com](mailto:marsar@consolidatedsupply.com) or by phone at (503) 906-3237 & get setup today!

If paid by 12/10/10 you may deduct \$2.83  
Invoice is due by 12/31/10 net of any cash discount.

10/2/2010 10:21:54 AM S5478716.001

SUBTOTAL	141.37
FREIGHT	
SALES TAX	0.00
<b>AMOUNT DUE</b>	<b>141.37</b>

# Stettler Supply Company

"Committed to Service Excellence" Since 1948

Invoice 84227

**Pumps & Pump Stations | Agricultural Irrigation | Water Treatment | Water Systems**

1810 Lana Ave NE, Salem OR 97301  
 503-585-5550 local 866-985-5550 toll-free 503-581-6799 fax  
 CCB #33228

<b>Bill To:</b> EMERY & SONS CONSTRUCTION, INC PO BOX 4109 3831 FAIRVIEW INDUSTRIAL DR SE SALEM, OR 97302	<b>Ship To:</b> EMERY & SONS CONSTRUCTION, INC PO BOX 4109 3831 FAIRVIEW INDUSTRIAL SALEM, OR 97302
---	---

<b>Invoice #:</b> 84227 <b>Invoice date:</b> 11/03/10 <b>Payment terms:</b> NET 10TH OF MONTH <b>Customer code:</b> EMESONCO	<b>P.O.#:</b> 3465 <b>Ship via:</b> <b>Salesperson:</b> RODNEY PEREZ
--	--

**Remarks:**  
 Order Taken By: ROD

Quantity	U/M	Part Number	Description	Unit Cost	Extension
1.00	EA	INS	THREAD CHARGE	24.000	24.00
6.00	EA	GFC020	GALV COUPLING 2	6.030	36.18
<b>Total:</b>					60.18

Ok'd by Ryan Ward  
 Emery & Sons Construction  
 PO/Sub # \_\_\_\_\_  
 W.O. # 13465  
 CC # 1600-000004  
 Date 12/7/10

Copy

A FINANCE CHARGE WILL BE ASSESSED AT 1 1/2% PER MONTH (18% PER ANNUM) ON PAST DUE BALANCE.

Warehouse:  
2881 22<sup>nd</sup> St. SE  
Salem, OR.

Phone: 503-932-7587  
Fax: 503-371-8504

# EZ

Mailing Address:  
2391 12<sup>th</sup> St. SE, Ste. #110  
Salem, OR 97302

# Rental & Services

Invoice No. 7749

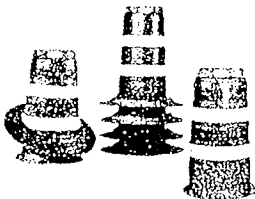
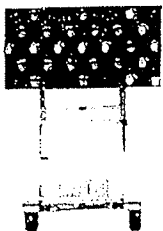
RECEIVED  
DEC 02 2010

<b>BILL TO:</b>  Emery & Sons Construction Inc.	<b>INVOICE DATE:</b> 12/1/10 <b>ORDERED BY:</b> Ryan <b>JOB ADDRESS:</b> Foster & Holgate <b>PO#:</b> <b>Job #:</b> <b>Contract #:</b> <b>TERMS:</b> Net 10 days <b>1.5% finance charge per month on all past due invoices.</b>
---	--

QTY.	DESCRIPTION	UNIT PRICE	TOTAL
8	48" Roll up signs w/bases & flags  Rental: 11/4/10 - 11/30/10	\$ 2.75/day/unit	\$ 594.00
		Total	\$ 594.00

PLEASE PAY FROM  
THIS INVOICE

*Thank You for Your Business!*  
*Building Our Business One Customer At A Time*







# Michels Corporation

Please Make Check Payable to & Remit To:

Phone: (503) 364-1199 Fax: (503) 391-8317

Michels Corporation  
 Post Office Box 1719  
 Fond du Lac, WI 54936-1719

Attn: Accounts Payable  
 Emery & Son's Construction Inc.  
 PO Box 4109  
 Salem, OR 97302

Date: 12/13/2010

**PLEASE PAY ON INVOICE.  
 NO STATEMENT ISSUED  
 UNLESS REQUESTED.**

Michels Job No. 00516  
 Customer No. 12454

INVOICE NO. 10-1188

TERMS: NET CASH

ITEM	DESCRIPTION	QUANTITY	RATE	EXT.	TOTAL
	Re: SE Foster & Holgate Sewer Replacement Inject Grout into pipe bedding between water line & brick sewer				
1	Mobilization, per occurrence	1 LS	\$2,200.00	\$2,200.00	
2	Labor & Equipment	5 HR	\$375.00	\$1,875.00	
2	Chemical Grout	10 Gal	\$125.00	\$1,250.00	
				<b>Amount Due:</b>	<b>\$5,325.00</b>

For Internal Use Only		
Total Sales:	\$	5,325.00
Taxable Amount:	\$	-
Sales Tax:	\$	-
Retainage:	\$	266.25
Invoice Amount:	\$	5,058.75

PAYMENT SHALL BE MADE WI 30 DAYS FOLLOWING THE DATE OF INVOICE OR COMPLETION OF WORK, WHICHEVER IS EARLIER. A LATE CHARGE OF 1 1/2% PER MONTH WILL BE ASSESSED ON UNPAID BALANCES. IN THE EVENT SUIT OR ACTION, INCLUDING ANY APPEAL THEREFROM, IS BROUGHT TO ENFORCE ANY TERMS OF THIS AGREEMENT, THE PREVAILING PARTY SHALL BE ENTITLED TO SUCH REASONABLE ATTORNEY'S FEES AND COSTS AS MAY BE AWARDED BY THE TRIAL APPELLATE COURTS.

# Ryan Ward

From: Derek Fitzpatrick - 1615 PORTLAND WATERWORKS [derek.fitzpatrick@ferguson.com]  
Sent: Tuesday, December 28, 2010 3:39 PM  
To: Ryan Ward  
Subject: Email Bid# B136266

## Price Quotation # B136266

### SALEM, OR WW #1615

3650 KASHMIR WAY SOUTHEAST  
SALEM, OR 97317-0000

Phone : 503-362-2436

Fax : 503-362-2408

Bid No.....: B136266  
Bid Date...: 12/28/10  
Quoted By: DRF  
Customer.: EMERY & SONS CONSTRUCTION INC  
PO BOX 4109  
SALEM, OR 97302

Cust Phone: 503-588-7576  
Terms.....: 2% 10TH NET 25TH  
Ship To.....: EMERY & SONS CONSTRUCTION INC  
PO BOX 4109  
SALEM, OR 97302

Cust PO#..:

Job Name.:

Item	Description	Quantity	Net Price	UM	Total
SDR35PU14	6X14 SDR35 PVC GJ SWR PIPE	14	2.970	FT	41.58
IVB910TOP	18 CI VLV BX TOP ONLY	1	50.000	EA	50.00
IVB910WTR	CI VLV BX WTR LID F/ 910	1	19.450	EA	19.45
IGPTCA53D	1/2 GALV T&C A53A S40 PIPE	21	102.150	C	21.45
SDR35P1814	18X14 SDR35 PVC GJ SWR PIPE	14	19.040	FT	266.56
SP-DR25GP36	36 C905 DR25 CL165 PVC GJ PIPE	20	98.880	FT	1977.60
IGCD	1/2 GALV MI 150# COUP	10	1.900	EA	19.00

Net Total: 2395.64

Tax: 0.00

Total: 2395.64

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at [http://wolsselevna.com/terms\\_conditionsSale.html](http://wolsselevna.com/terms_conditionsSale.html). Govt Buyers: All items quoted are open market unless noted otherwise.

Warehouse:  
2881 22<sup>nd</sup> St. SE  
Salem, OR.

Phone: 503-932-7587  
Fax: 503-371-8504

# EZ

Mailing Address:  
2391 12<sup>th</sup> St. SE, Ste. #110  
Salem, OR 97302

# Rental & Services

Invoice No. 7749

RECEIVED  
DEC 02 2010

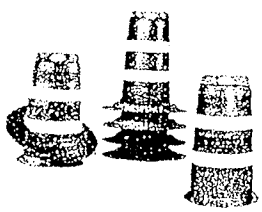
BILL TO:  Emery & Sons Construction Inc.	INVOICE DATE: 12/1/10 ORDERED BY: Ryan JOB ADDRESS: Foster & Holgate PO#: Job #: Contract #: TERMS: Net 10 days 1.5% finance charge per month on all past due invoices.
--	--

EMERY & SONS CONSTRUCTION

QTY.	DESCRIPTION.	UNIT PRICE	TOTAL
8	48" Roll up signs w/bases & flags  Rental: 11/4/10 - 11/30/10	\$ 2.75/day/unit	\$ 594.00
		Total	\$ 594.00

PLEASE PAY FROM  
THIS INVOICE

*Thank You for Your Business!*  
*Building Our Business One Customer At A Time*





**CITY OF PORTLAND, OREGON  
BUREAU OF ENVIRONMENTAL SERVICES  
CONSTRUCTION SERVICES DIVISION**

<b>CONTRACT #</b>	<u>30001292</u>	<b>CHANGE ORDER #</b>	<u>2</u>
<b>Project Name:</b>	<u>Foster &amp; Holgate Sewer Replacement</u>		
<b>Company:</b>	<u>Emery &amp; Sons Construction Inc.</u>	<b>Project Number:</b>	<u>10014</u>
<b>Address:</b>	<u>P.O. Box 4109, 3831 Fairview Industrial Dr SE</u>	<b>Bid Number:</b>	<u>111566</u>
<b>City, State, Zip:</b>	<u>Salem, OR, 97302</u>		

Remove and replace the existing MH-ACJ540 and pour a cast-on-place Manhole Base, similar to Detail P-151 in the City of Portland Standard Details. The balance of the manhole shall be precast concrete, to be submitted and approved.

The cost was calculated per Force Accounts for the Labor, Equipment, Materials, and Subcontractor needed to replace MH-ACJ540. See attached Force Account Sheets and Calculations.

This change order is subject to and incorporates the provisions of Subsection 109.16-B of the Standard Specifications. By signing this form the Contractor agrees that the information presented herein is complete, accurate, and resolves all issues of contract time and compensation associated with the work identified herein.

The above-ordered change order will increase the contract amount by \$56,406.60

The above-ordered change order will increase the contract time by 8 days.

To be completed by Contractor:	
Has consent of Surety been obtained?	<input type="checkbox"/> Yes <input type="checkbox"/> Not necessary
Will this change affect expiration or extent of insurance coverage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, will the policies be extended?	<input type="checkbox"/> Yes <input type="checkbox"/> No

**Approved by:**

**Emery & Sons Construction Inc.**

Bill Martinak      4-4-11  
Authorized Representative      Date

**Bureau of Environmental Services**

Mark [Signature]      4/6/2011  
Construction Division Manager      Date

CC:    BES Accounting (106/1000)      Contractor (original)      Construction Manager      Inspector II      Auditor's Office (131/401)



CITY OF PORTLAND, OREGON  
 BUREAU OF ENVIRONMENTAL SERVICES  
 CONSTRUCTION SERVICES DIVISION

CONTRACT #	<u>30001292</u>	CHANGE ORDER #	<u>3</u>
Project Name:	<u>Foster &amp; Holgate Sewer Replacement</u>		
Company:	<u>Emery &amp; Sons Construction Inc.</u>	Project Number:	<u>10014</u>
Address:	<u>P.O. Box 4109, 3831 Fairview Industrial Dr SE</u>	Bid Number:	<u>111566</u>
City, State, Zip:	<u>Salem, OR, 97302</u>		

FINISH GROUTING AND INSTALLING NEW 60" MANHOLE

Remove and replace the existing MH-ACJ540 and pour a cast-on-place Manhole Base, similar to Detail P-151 in the City of Portland Standard Details. The balance of the manhole shall be precast concrete, to be submitted and approved.

The Contractor shall finish the installation of the new 60" Manhole, including grouting around the 36" sewer pipe in order to complete the manhole work.

The cost was calculated per Force Accounts for the Labor, Equipment, and Materials needed to complete the replacement of MH-ACJ540.

This change order is subject to and incorporates the provisions of Subsection 109.16-B of the Standard Specifications. By signing this form the Contractor agrees that the information presented herein is complete, accurate, and resolves all issues of contract time and compensation associated with the work identified herein.

The above-ordered change order will increase the contract amount by \$496.54

The above-ordered change order will increase the contract time by 1 days.

To be completed by Contractor:

Has consent of Surety been obtained?	<input type="checkbox"/> Yes <input type="checkbox"/> Not necessary
Will this change affect expiration or extent of insurance coverage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, will the policies be extended?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Approved by:

Emery & Sons Construction Inc.

*Bill Martinek*  
 Authorized Representative

4/22/11  
 Date

Bureau of Environmental Services

*Mark W. [Signature]*  
 Construction Division Manager

5/3/2011  
 Date

CC: BES Accounting (106/1000) Contractor (original) Construction Manager Inspector II Auditor's Office (131/401)



**CITY OF PORTLAND, OREGON  
BUREAU OF ENVIRONMENTAL SERVICES  
CONSTRUCTION SERVICES DIVISION**

---

**CONTRACT #** 30001292                      **UNILATERAL CHANGE ORDER #** 4  
**Project Name:** Foster & Holgate Sewer Replacement  
**Company:** Emery & Sons Construction Inc.                      **Project Number:** 10014  
**Address:** P.O. Box 4109, 3831 Fairview Industrial Dr SE                      **Bid Number:** 111566  
**City, State, Zip:** Salem, OR, 97302

---

CONNECTION AT MH-3 AND POURING SLAB OVER 60" WATER MAIN.

The contractor shall manually form a closure collar to connect the existing sewer with the newly installed sewer line, in lieu of installing MH-3. Prep, pour and backfill protective slab over 60" water main between MH02-A1.

The cost was calculated per Force Accounts for the Labor, Equipment, Materials, and Subcontractor needed to install the closure collar and pouring the slab over the 60" Water Main.

This unilateral Change Order provides all compensation by the City of Portland to the Contractor for all things done or furnished in connection with the work done under this Change Order.

The above-ordered change order will increase the contract amount by \$58,902.17

The above-ordered change order will not change the contract time.

**Bureau of Environmental Services**

 6/20/2011  
Construction Division Manager                      Date

CC:    BES Accounting (106/1000)                      Contractor (original)                      Construction Manager                      Inspector II                      Auditor's Office (131/401)



**CITY OF PORTLAND, OREGON  
BUREAU OF ENVIRONMENTAL SERVICES  
CONSTRUCTION SERVICES DIVISION**

---

<b>CONTRACT #</b> <u>30001292</u>	<b>UNILATERAL CHANGE ORDER #</b> <u>5</u>	
<b>Project Name:</b> <u>Foster &amp; Holgate Sewer Replacement</u>		
<b>Company:</b> <u>Emery &amp; Sons Construction Inc.</u>	<b>Project Number:</b> <u>10014</u>	
<b>Address:</b> <u>P.O. Box 4109, 3831 Fairview Industrial Dr SE</u>	<b>Bid Number:</b> <u>111566</u>	
<b>City, State, Zip:</b> <u>Salem, OR, 97302</u>		

---

**DEDUCTION OF LIQUIDATED DAMAGES FOR 135 DAYS.**

Execution of this change order is to create a line item in the contract to allow for the accounting deduction of the assessed liquidated damages which are being enforced in conformance with Contract Specifications Section 00180.80(b).

The contract allowed 120 days for completion of contract. The work went over that amount by 135 days for a total of 255 days for completion of contract. The amount of liquidated damages assessed reflects the 11 additional days associated with change orders 1, 2 & 3. The liquidated damages withheld are for 135 days and assessed at \$1,100.00 per calendar day is \$148,500 per Specification Section 00180.80(b) – Liquidated Damages. Total liquidations damages amount to \$148,500.00.


See Attachment 1 for determining the breakdown of the liquidated damages.

This unilateral Change Order provides all compensation by the City of Portland to the Contractor for all things done or furnished in connection with the work done under this Change Order.

The above-ordered change order will reduce the contract amount by \$148,500.00

The above-ordered change order will not change the contract time.

**Bureau of Environmental Services**

  
Construction Division Manager 6/20/2011  
Date

CC: BES Accounting (106/1000)      Contractor (original)      Construction Manager      Inspector II      Auditor's Office (131/401)

June 17, 2011

**Attachment 1:**

RE: Foster & Holgate Sewer Replacement  
Contract No: E10014 Contract No: 30001292  
**Change Order 5**

Notice to Proceed		May 24, 2010
Original Contract Value	\$ 427,199.00	- @ 120 days
Changes to Date;		
CO#01 Consolidated Grouting @ 60" Water Main	\$ 14,010.79	@ 2 days
CO#02 Add 60" MH with CIPP Base @ 66 <sup>th</sup> & Foster	\$ 56,406.60	@ 8 days
CO#03 Finish Grouting @ 60" manhole	\$ 479.40	@ 1 day
Revised Contract Value & Duration	\$ 498,095.79	131 days
Revised Contract Completion Date		October 2 <sup>nd</sup> , 2010
Substantial Completion		February 14, 2011
Actual Project Duration		266 days
Liquidated Damages @ \$1,100.00 per day	\$ 148,600.00	135 days
Contract Work Completed to Date; (Payment #11)	\$ 543,241.51	
Change Orders #1, 2 & 3	\$ 70,896.79	
Total Earned to Date:	\$ 614,138.30	
Less LD Total	\$ 148,500.00	
TOAL Amount Payable to Date:	\$ 465,638.30	





**CITY OF PORTLAND, OREGON  
BUREAU OF ENVIRONMENTAL SERVICES  
CONSTRUCTION SERVICES DIVISION**

---

<b>CONTRACT #</b> <u>30001292</u>	<b>CHANGE ORDER #</b> <u>6</u>
<b>Project Name:</b> <u>Foster &amp; Holgate Sewer Replacement</u>	
<b>Company:</b> <u>Emery &amp; Sons Construction Inc.</u>	<b>Project Number:</b> <u>10014</u>
<b>Address:</b> <u>P.O. Box 4109, 3831 Fairview Industrial Dr SE</u>	<b>Bid Number:</b> <u>111566</u>
<b>City, State, Zip:</b> <u>Salem, OR, 97302</u>	

---

**FINAL CHANGE ORDER RESOLUTION**

This change order settles all claims between the City of Portland, Bureau of Environmental Services and Emery & Sons Construction, Inc. arising out of the Foster & Holgate Sewer Replacement project.

This change order provides full and final compensation for labor, equipment, materials and incidentals for the Contractor's costs to date. No additional costs will be considered.

1. Contractor has replaced the old failing 36" brick sewer with a new sewer via Bore and Jack under the intersections of SE Foster Rd and SE Holgate Blvd between 62nd Ave and 63rd Ave and SE Foster Rd between 66th Ave and 67th Ave. Work includes diversion of flow and erosion control. Compensation for this work shall be \$442,685.
2. Contractor shall be granted 106 Calendar Days time extension.
3. Contractor shall be credited 106 Calendar Days of Liquidated Damages previously assessed. Reimbursement shall be 106 Calendar Days at \$1,110 per Calendar Day for a total of \$116,000.

This change order is the final resolution of any and all claims for compensation and/or time made by Contractor on the project. Contractor has no other outstanding claims against the City of Portland related to the project in any way whatsoever. Upon execution of this change order, Contractor releases and holds the City or Portland harmless from any and all claims, known or unknown, with respect its work or the work of its subcontractors, on the project.

The Contractor shall be compensated the negotiated settlement of \$559,285. Work shall include all labor, materials, equipment, and incidentals for the installations and modifications noted above.

This change order is subject to and incorporates the provisions of Section 00196.10 (b) of the Standard Specifications. By signing this form the Contractor agrees that the information presented herein is complete, accurate, and resolves all issues of contract time and compensation associated with the work identified herein.

The above-ordered change order will increase the contract amount by \$559,285.00

The above-ordered change order will increase the contract time by 106 days.

**CONTRACT #** 30001292 **CHANGE ORDER #** 6  
**Project Name:** Foster & Holgate Sewer Replacement  
**Company:** Emery & Sons Construction Inc. **Project Number:** 10014  
**Address:** P.O. Box 4109, 3831 Fairview Industrial Dr SE **Bid Number:** 111566  
**City, State, Zip:** Salem, OR, 97302

To be completed by Contractor:  
 Has consent of Surety been obtained?  Yes  Not necessary  
 Will this change affect expiration or extent of insurance coverage?  Yes  No  
 If yes, will the policies be extended?  Yes  No

**Approved by:**  
**Emery & Sons Construction Inc.** **Bureau of Environmental Services**  
*Bill Martinich* 12-16-11 *Mark W. [Signature]* 12-18-2011  
 Authorized Representative Date Construction Division Manager Date

CC: BES Accounting (106/1000) Contractor (original) Construction Manager Inspector II Auditor's Office (131/401)  
*Don [Signature]*

Job No. E10014  
Job Title: Foster & Holgate Sewer Replacement  
Contractor: Emery & Sons Construction, Inc.  
Inspector: Gary Hodge

**PIPE COMPLETION**

No. \_\_\_\_\_ Partial \_\_\_\_\_ Final X

On \_\_\_\_\_ the pipe laying on this job was completed in the following locations:

and this phase of the job can be placed in service.

The "As-built" for this phase of the job was turned in on. May 23, 2011

Mark Hutchinson

**Construction Project Manager**

Applications may be received and permits issued for house connections to the above listed sewers.

Distribute copies to:

Development Assistance	B299/5000
Bureau of Maintenance	B316/Engr. Support
BES Accounting	B106/1000

-----  
**JOB COMPLETION**

The subject job has been completed.

Specified Completion Date: January 16, 2011

Completion Date: February 14, 2011

Mark Hutchinson

**Construction Project Manager**

Distribute copies to:

Development Assistance	B299/5000
Bureau of Maintenance	B316/Engr. Support
BES Accounting	B106/1000



BUREAU OF ENVIRONMENTAL SERVICES  
**FINAL PROJECT REPORT**  
FY 2009 – FY 2010



## Foster & Holgate Sewer Replacement

Job No. E10014

Bid No. 111566

Contract No. 30001292

April 10, 2012



By: Bill Theiss and Ayda Forouzan

**PROJECT STAFF:**

Contractor:	Emery & Sons Construction, Inc.
Construction Manager:	Bill Theiss
BES Inspection:	Gary Hodge
Project Technician:	Jason Leman and Dawn Pfarr
Design Manager:	Ayda Forouzan
Design Consultant:	Not applicable

**FINAL PROJECT STATUS:**

Notice to Proceed:	May 24, 2010
Scheduled Contract Time:	120 Calendar days
Scheduled Completion:	September 21, 2010
Additional Contract Time:	117 Calendar Days
Revised Completion:	January 16, 2011
Final Completion:	February 14, 2011
Days Delinquent:	29 Calendar Days
Substantial Completion:	January 14, 2011
Original Contract Amount:	\$427,199.00
Change Orders:	\$540,601.10
Quantity Increase:	\$124,327.54
Quantity Decrease:	-\$8,302.47
Final Amount Earned:	\$1,083,825.17, which is 253.70% over the original Contract amount.

The City completed inspection of the sewer on January 13, 2011. Construction of the new pipes and manhole installation were completed and accepted as of January 14, 2011.

**CHANGE ORDERS:**

There are 6 change orders issued on this project. Change orders amounted to 226.55% of the original contract amount.

<u>Change Orders</u>	<u>Description</u>	<u>Type</u>	<u>Amount</u>	<u>Days</u>
1	GROUT BENEATH THE 60-INCH WATER MAIN	CC	\$14,010.79	2
2	REPLACE THE MH-ACJ540 WITH A CAST-IN-PLACE BASE	OE	\$56,406.60	8
3	FINISH GROUTING AND INSTALLING NEW 60-INCH MANHOLE	CC	\$496.54	1
4	CONNECTION AT MH-3 AND POURING SLAB OVER 60-INCH WATER MAIN	DM	\$58,902.17	0
5	DEDUCTION OF LIQUIDATED DAMAGES FOR 135 DAYS	DC	-\$148,500.00	0
6	FINAL CHANGE ORDER RESOLUTION	CC	\$559,285.00	106
<b>TOTAL:</b>			<b>\$540,601.10</b>	<b>117</b>



**PROJECT BACKGROUND:**

This project is part of the 8400 series of projects. The existing cast in place concrete pipes on SE Foster Rd and SE Holgate Blvd between 62<sup>nd</sup> Ave and 63<sup>rd</sup> Ave and brick pipes SE Foster Rd between 66<sup>th</sup> Ave and 67<sup>th</sup> Ave. were planned to be replaced as part of the Foster Sewer Rehabilitation project E08870 due to cracking and ovality. SE Foster is a very busy Street in the area of both pieces of the work, and the Foster Holgate intersection is a particularly congested busy area.

*Preconstruction photos taken on 7/16/2010. Sign shows the intersection of SE 66<sup>th</sup> Ave and SE Foster*



*Photos illustrate traffic, businesses, and pedestrians in SE 66<sup>th</sup> and SE Foster.*





In addition to the traffic challenges, several large utilities (60-inch waterline, 36-inch waterline, telephone duct banks, and 6-inch gas lines) were built over the top of the pipes complicating the design and construction. Initially these pipe replacements were part of the Foster project but due to utility and traffic challenges the Construction and Design Team elected to bid them separately. The two pipes were removed and combined into the standalone Project E10014 - Foster and Holgate.



*36-inch waterline at SE Foster Rd. Photo taken by Emery & Sons.*

### **PROJECT DESCRIPTION AND OBJECTIVES:**

The project's primary objective was replacement of various sewer segments that had reached the end of their service life and whose maintenance was no longer cost-effective. The goal was achieved by constructing approximately 350 feet of 36-inch RCP combination sewer pipe, manholes and associated laterals and inlet leads, using conventional open cut construction methods, while preserving existing water transmission lines, and other large utilities.

A secondary objective was to maintain access to Traffic, the Public and local merchants. The intersection of SE Holgate Blvd & SE Foster Rd, being a main thoroughfare for west and east bound traffic, made traffic control a key issue in the construction work. The work was therefore done in evenings and weekends. A Noise Variance was obtained with the original project E08870 and was updated to cover this work.

These objectives were met.



## **COMPARISON WITH FINAL DESIGN REPORT:**

Foster & Holgate project design called for construction of approximately 350-feet of 36-inch RCP combination sewer pipe using open trench method. The sewer line on SE Foster and Holgate although bid as standard open cut construction that construction method was deemed impossible by the contractor who eventually built it using Jack and Bore methods. The planned alignment on SE Holgate was changed, a manhole was added, an existing manhole was deleted, and concrete closure collar was added to accommodate existing utilities and sewer alignment. The existing manhole on 66<sup>th</sup> was replaced due to poor condition with a new manhole. The project was bid as a 120 day contract and completed in 255 days.



*New Manhole at SE 66<sup>th</sup> Ave.*

## **SUGGESTIONS FOR IMPROVEMENT:**

1. Consider allowable variation in utility locations impact on the design. The Qwest duct bank was shown on the drawings as located by the utility, the actual location varied from what was shown. It was located further south (toward Manhole 2) than indicated and was within 7-feet of the proposed new manhole. This required a design change on the project and Manhole 2 was relocated. Therefore, the manhole could not be a pre-cast manhole as proposed in the contract. May want to consider a requirement to pothole critical utilities 30 days prior to construction to provide time for design changes.

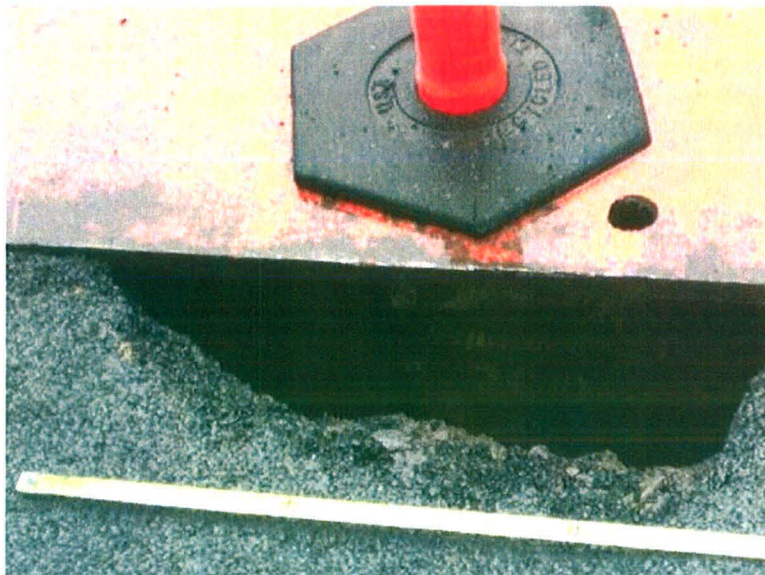


2. Provide As-built drawings in the bid documents for waterlines larger than 18-inch. In this project, the work consisted of open-cut sewer replacement underneath a 60-inch waterline in the Foster and Holgate intersection. The as built drawings showed a concrete slab over the waterline this made it hard for the Contractor to support the waterline and shore underneath it as they had planned at bid time. The design construction team discussed this and elected to not show them in the plan set. Legally we are required to include or provide access to the drawings prior to bid, or pay for the result of the added difficulty.

**Exposed 60-inch Water main bedded in clean running sand.**



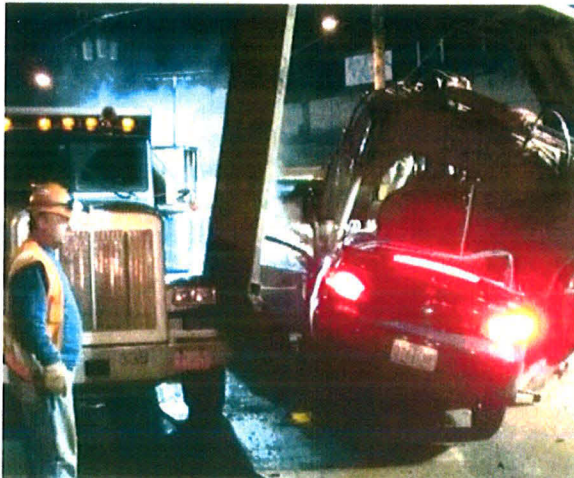
3. Incorporate engineering criteria in the Contract Specifications that the Contractor can use to prepare their Engineering Stamped Utility Protection plan. The Contract required that the 60-inch waterline be supported; however, the specifications or Plans did not address what was to be included in the submittal. In addition, the fact that the water main was bedded in sand was an issue. Not knowing what was required resulted in the Portland Water Bureau rejecting the contractor's first three submittals since the submittals did not meet their requirements. The Contractor did an effort to install buried beams and used chemical grouting to support the soils and waterline, but ultimately the contractor abandoned trenching under the 60-inch water line because his approved method of shoring under the waterline was rejected by the Water Bureau Site inspector.



**Sinkhole caused by trench sloughing.**



4. Recommend longer contract time on difficult projects to accommodate extra time required to review submittals, special requirements, and unknown conditions of the site, such as heavy traffic control or utilities. This job required night work and complete restoration of the street every day, combined with crossing many difficult utilities. The 120 day contract time was used up rather quickly. This was partially the Contractor's fault since they did not start work until 54 days after the Notice to Proceed was signed, leaving 66 days to do the work. Late start was exacerbated by the 11 days the team spent redesigning the alignment to accommodate existing utility locations, leaving 55 days to do the work. Another 25 days were lost after work was stopped and utility support submittals were re-developed reviewed and processed, leaving 30 days to do the work. This caused the City to apply Liquidated Damages to the contract when the work was not completed within the 120 contract days. The project was completed on February 16, 2012; this is 117 days after the planned September 21<sup>st</sup>, 2010 completion date.
5. Suggest a Utility Support and Engineered shoring meeting be scheduled with the Contractor early in the project. Rules, guidelines, and expectations need to be established prior to construction starting. In this project a Utility Support meetings was scheduled half way through the project and after the construction team had encountered issues with the Contractor not following BES directives. At this early meeting, the Construction Manager needs to emphasize that shoring needs to be installed according to the approved submittal. In this project there were several occasions when the Contractor's shoring installation did not comply with the approved submittal. In other occasions the Contractor delivered the wrong size manhole box and delayed work until the correct size was on site. Steel sheets that were the incorrect thickness were also delivered to the jobsite. Another time the excavation proceeded without end support allowing caving under the waterline. The contractor had to be directed by the Construction Manager and Inspection staff repeatedly to follow their approved submittals.



*Car crashed into contractors shoring during night work.*





6. Recommend performing the work under full road closure and detouring traffic. The shoring, safety, and utility support and protection would have been less complex and costly if the excavation could have been left open. The night work required I-beams to be buried and covered to support waterlines, special extra thick steel sheets to cover the large excavation, and safety risks for sewage diversion and shoring. The night work required multiple traffic control plans. The contractor worked at night for most of the project which required BES inspection staff to work nights and overtime. Working at night slowed down some of the work because businesses providing equipment are not open at night; therefore, the Contract at times did not have the proper equipment and supplies onsite. The 255 days project duration impacted the local night clubs and businesses.
7. Suggest a team meeting prior to construction to go over project issues, needs, and requirements. In this project improved coordination between field staff working nights and CM staff working days would have benefited from a team meeting at the beginning and throughout the construction, at least every week to go over the team issues. Conflicts between the site inspectors, project manager, and contractor on stressful projects complicate construction.
8. Assign one team: CM, inspector 2 and inspector 1 the responsibility for the project beginning to end. The bid schedule of the project changed and the project team was changed due to work load, and then during construction seven inspectors worked on this project due to the on and off again nature of the project that required work to be performed at night. This discontinuity made a difficult project more of a challenge with the difficult contractors' unorganized crew.

#### **ITEMS THAT WORKED WELL:**

1. Safety issues were dealt with very quickly onsite with the Contractor, Owner and Inspection staff. For instance, when the heavy trucks were bending the steel sheets in the road Emery & Sons quickly removed and replaced them with thicker sheets.



*Placement of steel sheets after installation of Manhole 1.*



**ITEMS THAT WORKED WELL (continued):**

2. None of the workman got hurt, with the night work, confined space work in jack and bore with sewage running through it during the day. With exception of the car accident.
3. The pipeline got built properly and should last another 100 years.
4. Waterlines were not broken.

**FUTURE CIP OR O&M ISSUES:**

There are no future CIP or O&M issues that will impact our new construction.

**RECORD DRAWINGS:**

Record drawings have been reviewed and accepted by the BES inspector. They were checked and transmitted to CADD on 05/23/2011. Copies were sent to the main file, Locates, and to the Designer.

**PROJECT PHOTOS:**



*Rails being set for the 36-inch pipe to ride on to go into place*



**PROJECT PHOTOS (continued):**



*36-inch  
waterline  
on  
Foster*



*Installing  
straps on 60-  
inch water  
main support  
system.*



**PROJECT PHOTOS (continued):**



*Jacking at new manhole on SE 66<sup>th</sup> Ave.*



*Contractor showing location of Manhole 3 marked on the steel sheet. Photo also shows the bend of the proposed pipe.*



**PROJECT PHOTOS (continued):**

*Steel sheets going into boring pit for shoring.*



*Sink hole due to bank failure.*



*Sink hole covered with steel sheet.*



**PROJECT PHOTOS (continued):**



*Traffic Control on  
67<sup>th</sup> and Foster  
(Day time)*



*Traffic Control west bound Foster (Night time)*



**PROJECT PHOTOS (continued):**



*Paving on 66<sup>th</sup> to 67<sup>th</sup>*

**PROJECT COST:**

- Final amount earned by Emery & Sons for this work is \$1,083,825.17, which is 253.70% over the adjusted Contract Amount of \$427,199.00.
- The current life budget in PIPER is \$580,000. Based on the costs to date, and final contract amount, the project costs are \$1,448,669.62 or 250% over budget.

**PIPER COST SUMMARY:**

Phase	Tow Code Description of Work	TOW Cost	% Total Cost	% Construction Costs
Predesign	30 - Inspection	\$1,028.70	0.07	0.09
Design	14 - Engineering	\$31,494.06	2.17	2.91
Design	20 - Construction Management - General	\$5,609.20	0.39	0.52
Design	30 - Inspection	\$810.03	0.06	0.07
Design	41 - Survey	\$225.02	0.02	0.02
Design	42 - Material Testing Lab	\$5,090.01	0.35	0.47
Design	45 - Mapping & GIS	\$63.17	0.00	0.01
Design	46 - Environ. Assessment & Doc	\$206.96	0.01	0.02
Design	47 - Public Involvement	\$1,697.29	0.12	0.16
Design	73 - Miscellaneous	\$101.18	0.01	0.01
Advertise-NTP	14 - Engineering	\$404.36	0.03	0.04
Advertise-NTP	20 - Construction Management - General	\$5,275.31	0.36	0.49
Advertise-NTP	30 - Inspection	\$1,384.52	0.10	0.13
Advertise-NTP	72 - Advertise-NTP Expenses	\$1,112.89	0.08	0.10
Construction	14 - Engineering	\$3,851.40	0.27	0.36
Construction	21 - Contract Management	\$96,900.54	6.69	8.94
Construction	24 - Claims, Legal, Audist	\$1,508.64	0.10	0.14
Construction	30 - Inspection	\$152,511.14	10.52	14.07
Construction	41 - Survey	\$9,156.44	0.63	0.84
Construction	42 - Material Testing Lab	\$2,302.50	0.16	0.21
Construction	46 - Environ. Assessment & Doc	\$21.60	0.00	0.00
Construction	47 - Public Involvement	\$9,525.87	0.66	0.88
Construction	60 - Construction Contract	\$1,083,975.92	74.79	100.00
Construction	61 - Inter-agency Construction	\$1,241.73	0.09	0.11
Construction	67 - OCIP - Premiums	\$750.00	0.05	0.07
Construction	73 - Miscellaneous	\$12,373.83	0.85	1.14
Startup/Closeout	21 - Contract Management	\$766.92	0.05	0.07
Startup/Closeout	24 - Claims, Legal, Audist	\$2,574.20	0.18	0.24
Startup/Closeout	30 - Inspection	\$12,042.95	0.83	1.11
Startup/Closeout	73 - Miscellaneous	\$5,342.26	0.37	0.49
		<b>\$1,449,348.64</b>		

*Mark Hutchinson*  
 Mark Hutchinson, Construction Division Manager

*Ayda Forouzan* 4/10/12  
 Ayda Forouzan, Design Project Manager

cc: Jamie De La Garza, Bill Ryan, Mark Hutchinson, Ayda Forouzan, Colleen Harold, Neil Choate, Scott Gibson, MTL, TRIM Folder 104.0, Const. Eng Project File.