



# CITY OF WASILLA

290 E. HERNING AVE.  
WASILLA, ALASKA 99654-7091

## COUNCIL MEMORANDUM NO. 95-37

From: Deputy Administrator  
Date: May 3, 1995  
Subject: **MAIN STREET, 6-INCH WATERMAIN EXTENSION**

The City has received an application for water service to a "soon to be developed" lot on the west side of Main Street (2 lots north of the Conover Insurance office). The existing Main has had annual maintenance problems due to this being a dead end line and not a looped system.

The existing service on this side of Main Street has had annual maintenance problems from the date of installation - primarily freezing and subsequent mechanical thawing, especially service to the Valley Chiropractic Clinic (Dr. Martin).

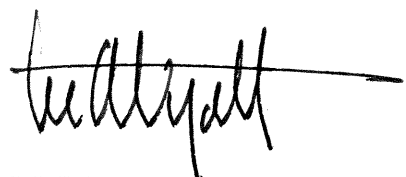
Dr. Martin has, on several occasions, presented his concerns to previous City Councils. As late as March of 1992, he had been promised by various council members that something would be done to eliminate the freezing problems and the associated costs of thawing, loss of business, etc.

At the City's request, Dick Lowman, P.E., Alaska Rim Engineering, has evaluated design considerations and predicted cost estimates for this timely project, not only to provide service to potential new consumers, but, to also eliminate the existing seasonal maintenance costs by construction of a looped system.

The worst case cost scenario, in the existing Main Street right-of-way, with Certified Payroll, is projected at \$32,400. If the project is constructed in easements the estimate is \$24,700.

This project can be funded under Fund #8 - Water Construction Fund. The City can anticipate the eventual recovery of some of the project costs as a result of future connection charges.

**Recommendation: Introduce Ordinance Serial No. 95-26 and schedule for Public Hearing and action at the next regularly scheduled Council meeting on May 22, 1995.**

  
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Lee A. Wyatt  
Deputy Administrator

Area Code (907)

Administration  
Ph: 373-9055  
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Clerks Office  
Ph: 373-9065  
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Finance  
Ph: 373-9070  
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Library  
Ph: 376-5913  
Fx: 376-2347

Museum  
Ph: 373-9071  
Fx: 373-9072

Planning  
Ph: 373-9074  
Fx: 373-9085

Ph: 373-9077  
Fx: 373-9051

Public Works  
Ph: 373-9095  
Fx: 373-9085

Ph: \_\_\_\_\_  
Fx: \_\_\_\_\_



2 May, 1995

Bill Harvey, Utility Manager  
City of Wasilla  
290 E. Herning Avenue  
Wasilla, AK 99654

Re: Main Street 6-inch watermain extension

Dear Bill

Following is a tabulation of the costs which you can anticipate if you should elect to proceed with this project. You should be aware of the following:

You can rely on the engineering design figures. Whatever the actual cost of design turns out to be, we are prepared to honor those figures if done this summer.

We feel comfortable with the construction observation figures, provided that you (the City) are also satisfied that the hours proposed are adequate for your needs. In that phase, we will be representing you as we observe the contractor's progress. The work required will depend somewhat on the Contractor's schedule, over which we have little control. If you want a greater or lesser effort on our part, that can be negotiated.

The construction costs are an opinion of probable costs. They are not a true construction cost estimate because the project has not yet been designed and therefore we do not know precisely what the contractor will be bidding on. Please understand that Alaska Rim has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made solely on the basis of Alaska Rim's qualifications and experience.

Two basic options are proposed.

Option 1 assumes construction within the ADOT right-of-way. If the Enstar gas main and the 6-inch water main are both found to be as shown on their respective as-builts, the Contractor will have a difficult time digging under the gas main to tie into the water main. We would try to

route the new water main between the existing gas main and the edge of pavement. Probably the shoulder paving would be impacted and require replacement. Traffic would have to be shifted to provide access for the trenching. Flagmen would probably be required. Even with all of those measures, I believe that the Contractor will have to make extra effort to protect and support the 6-inch gas main. There would be an increased need for construction observation, as well as for material testing. ADOT expressed concern that they will need documentation of adequate compaction. This option assumes that the private lot owners will grant construction easements to allow the placing of trench excavation material during the construction.

Option 2 assumes construction is in easements on Lots 3,4,5 & 6. You should have a 15-foot permanent easement, plus an additional 20 foot construction easement. There will be some minor additional costs for preparing and staking the easements. I am assuming that the easements will be granted for no cost. Aside from the easements, the remainder of the costs should be significantly lower than Option 1. I did include a small amount of imported classified fill in this option because I think the property owners would probably prefer to build a surface now rather than to re-excavate the trench when they develop.

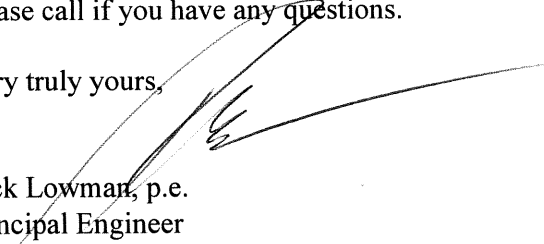
Both options assume no painted markings, no signs, no seeding, no Storm Water Pollution Prevention Plan, and no blowoff. I have included one hydrant. If the hydrant is deleted, we will need to install a blowoff. Note that two valves are priced: ADEC will require chlorination and testing of the isolated segment. I included minimal AC costs, assuming that would be coordinated with some other job.

Both options tabulated are based on comparable certified payroll jobs. For budgeting a non-certified payroll option, those typically run about 80 percent of the certified payroll for the labor elements. Regarding the breakout of costs for lots 4 and 5, I am assuming that the hydrant will not be allocated to the Lot 4 / 5 portion. I further assume that the classified fill would benefit the lots, not the City. Accordingly, the costs would be:

<u>Option</u>	<u>Certified payroll</u>	<u>Non-certified payroll</u>
total job, in right-of-way	\$ 32,400	
total job, in easement	24,700	\$ 21,000
first 120 feet, in easement		12,020
last 80 feet, in easement		8,980

Please call if you have any questions.

Very truly yours,

  
 Dick Lowman, p.e.  
 Principal Engineer

**Opinion of Probable Construction Costs  
Main Street 6-inch DIP Watermain in Right-of-Way**

<b>No.</b>	<b>Item</b>	<b>Units</b>	<b>U. price</b>	<b>Quantity</b>	<b>T. price</b>
202(b)	Clearing and grubbing	LS	250.00	1	250.00
204(a)	Unusable excavation	CY	4.00	400	1,600.00
205(A2)	Classified fill, Type II	CY	8.00	400	3,200.00
206(a)	Leveling course	CY	21.80	20	436.00
207(a)	Trench excavation	LF	15.00	200	3,000.00
211(b)	Bedding material	LF	1.50	200	300.00
219	Remove exist. pavement	SY	10.00	130	1,300.00
402(b)	AC pavement, 2" thick	SY	15.00	130	1,950.00
602(6)	F&I 6" DIP, class 52	LF	30.00	200	6,000.00
603(a-6)	F&I 6" GV & VB	EA	800.00	2	1,600.00
604(a)	F&I Hydrant	EA	3,200.00	1	3,200.00
606	Water service	EA	350.00	3	1,050.00
610	Adjust Hydrant	EA	150.00	1	150.00
705(2)	Insulation 2" thick	BF	1.00	128	128.00
713(2)	Flagging	LS	1,500.00	1	1,500.00
SP 1	Support gas main	LS	1,000.00	1	1,000.00
SP 2	Material testing	LS	1,000.00	1	1,000.00
	<b>CONSTRUCTION COST</b>				<b>27,700.00</b>
	Mobilization	LS	500.00	1	500.00
	Design / observe construction	LS	3,900.00	1	3,900.00
	City administration	LS	300.00	1	300.00
	<b>TOTAL PROJECT COST</b>				<b>32,400.00</b>

**Opinion of Probable Construction Costs  
Main Street 6-inch DIP Watermain in Easements**

<b>No.</b>	<b>Item</b>	<b>Units</b>	<b>U. price</b>	<b>Quantity</b>	<b>T. price</b>
202(b)	Clearing and grubbing	LS	1,000.00	1	1,000.00
204(a)	Unusable excavation	CY	4.00	200	800.00
205(A2)	Classified fill, Type II	CY	8.00	200	1,600.00
206(a)	Leveling course	CY	21.80	20	436.00
207(a)	Trench excavation	LF	15.00	200	3,000.00
211(b)	Bedding material	LF	1.50	200	300.00
219	Remove exist. pavement	SY	10.00	20	200.00
402(b)	AC pavement, 2" thick	SY	15.00	20	300.00
602(6)	F&I 6" DIP, class 52	LF	30.00	200	6,000.00
603(a-6)	F&I 6" GV & VB	EA	800.00	2	1,600.00
604(a)	F&I Hydrant	EA	3,200.00	1	3,200.00
606	Water service	EA	350.00	4	1,400.00
610	Adjust Hydrant	EA	150.00	1	150.00
705(2)	Insulation 2" thick	BF	1.00	128	128.00
713(2)	Flagging	LS	300.00	1	300.00
SP 1	Support gas main	LS	200.00	1	200.00
SP 2	Material testing	LS	250.00	1	250.00
	<b>CONSTRUCTION COST</b>				<b>20,900.00</b>
	Mobilization	LS	500.00	1	500.00
	Design / observe construction	LS	3,000.00	1	3,000.00
	City administration	LS	300.00	1	300.00
	<b>TOTAL PROJECT COST</b>				<b>24,700.00</b>

**Opinion of Probable Construction Costs  
Main Street 6-inch DIP Watermain in Easements  
private (non-certified payroll) job breakdown**

No.	Item	Units	Qty	Total	First 120	Second 80
202(b)	Clearing and grubbing	LS	1	800.00	480.00	320.00
204(a)	Unusable excavation	CY	200	640.00	640.00	
205(A2)	Classified fill, Type II	CY	200	1440.00	1440.00	
206(a)	Leveling course	CY	20	348.80	209.28	139.52
207(a)	Trench excavation	LF	200	2400.00	1440.00	960.00
211(b)	Bedding material	LF	200	270.00	162.00	108.00
219	Remove exist. pavement	SY	20	160.00	96.00	64.00
402(b)	AC pavement, 2" thick	SY	20	270.00	270.00	
602(6)	F&I 6" DIP, class 52	LF	200	4800.00	2880.00	1920.00
603(a-6)	F&I 6" GV & VB	EA	2	1280.00	768.00	512.00
604(a)	F&I Hydrant	EA	1	2880.00		2880.00
606	Water service	EA	4	1120.00	840.00	280.00
610	Adjust Hydrant	EA	1	120.00		120.00
705(2)	Insulation 2" thick	BF	128	102.40	102.40	
713(2)	Flagging	LS	1	240.00	144.00	96.00
SP 1	Support gas main	LS	1	160.00	160.00	
SP 2	Material testing	LS	1	200.00	120.00	80.00
	<b>CONSTRUCTION COST</b>			<b>17300.00</b>	<b>9800.00</b>	<b>7500.00</b>
	Mobilization	LS	1	400.00	240.00	160.00
	Design / observe construction	LS	1	3000.00	1800.00	1200.00
	City administration	LS	1	300.00	180.00	120.00
	<b>TOTAL PROJECT COST</b>			<b>21,000.00</b>	<b>12,020.00</b>	<b>8,980.00</b>