City of Birmingham
A Walkable Community

MEMORANDUM

Engineering Dept.

DATE: **January 16, 2015**

TO: **Joseph A. Valentine, City Manager**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **Chester St. Parking Structure Fire System Repairs**

Each of the five parking structures has an internal fire protection system. For the above ground areas, each one is typically activated each spring, and then drained prior to winter to ensure that freezing water inside the pipes does not cause damage. Our two newest parking structures also have large areas underground. Building code required the installation and maintenance of a "dry" sprinkler system that is available for use continuously, both in the summer and winter. The system is kept dry by an air compressor system that keeps it continuously pressurized, in order to keep water out.

With five older fire systems subjected to freezing temperatures, it is common for there to be a few failures each winter where the system has a leak and a break occurs. For many years, we have relied upon Crook Fire Protection contractors to come in as needed and make repairs on a time and material basis. During the extra harsh winter of 2013/14, the air compressor system at Chester St. Structure failed, causing several areas that needed repair. It was not clear until the contractor was on site for several days how costly the work would be. In the end, the work to discover and completely repair the system took many man-hours over the course of ten weeks, being completed last May.

This work should have been paid sooner. However, the original invoice apparently got misplaced here in our office, and was not authorized. Once it was located, it had to be postponed further since the cost is above the amount authorized without City Commission approval.

We have been satisfied with the work effort provided by Crook Fire Protection. The incident that resulted in a large amount of work at one time was a unique circumstance caused by a compressor failure during extremely cold temperatures. We do not foresee this being a continuing issue. To ensure that this does not get repeated, I have reviewed our expenditure policy with the Central Parking office manager. In the future, all contractors hired for routine repairs will be asked to stop and consult the office for further direction if they sense that the extent of the work will result in charges over $5,000. Secondly, I am arranging with Central Parking to investigate the feasibility of installing an alarm system on the air compressor. Should the compressor fail in the future, a bell would ring which would alert staff that there is an issue with the system.

It is recommended that the City Commission waive normal bidding requirements for this work for the following reasons:

1. The contractor hired has worked on the system several times, and is in a position to be more efficient.
2. The extent of the work that would be required was not known at the beginning, and did not lend itself to be bid in advance.

SUGGESTED RESOLUTION:

To waive normal bidding requirements, and to authorize the payment of $19,234.25 to Crook Fire Protection Co., for repairs to the dry fire system located in the lower levels of the Chester St. Parking Structure, charged to account number 585-538.006-811.0000.

Wm Crook
FIRE PROTECTION CO.
211E. LINCOLN, ROYAL OAK, MI. 48067 (248)-543-6888
(248)-543-2204 FAX

INVOICE

B130
CITY OF BIRMINGHAM
151 MARTIN STREET
BIRMINGHAM, MI 48012-3001
ATTENTION: ACCOUNTS PAYABLE
troyland@bhamgov.org

CHESTER STREET GARAGE
180 CHESTER STREET
BIRMINGHAM, MI

DATE	PURCHASE ORDER NO.	INVOICE NO.
5/13/2014		1402305T

WORK PERFORMED: 02/12/14 - 05/05/14 - FREEZE DAMAGE REPAIR IN ACCORDANCE WITH THE ATTACHED TIMESHEETS AND MATERIAL LIST

ITEM	HOURS	RATE	TOTAL
SHOP FABRICATION/DELIVERY	21	$45.00	$945.00
SHOP FABRICATION/DELIVERY	5.5	$67.50	$371.25
FIELD LABOR - REG FOREMAN	78	$95.00	$7,410.00
FIELD LABOR - REG JOURNEYMAN	78	$90.00	$7,020.00
SERVICE TRUCK	12	$10.00	$120.00

MATERIALS	QTY	UNIT	TOTAL
SEE LISTING ATTACHED			$3,368.00

TOTAL AMOUNT DUE **$19,234.25**

COB CSG INVOICE

WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: City of Birmingham
Chester St. Garage

DATE: 2/12/14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305 T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: SHUT VALVES TO ISOLATE SYSTEM DUE TO FREEZE UP

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Josh St. Andre (PO)	2			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
	SUB-TOTAL MATERIAL			
	SALES TAX			
	RENTALS			
	SUB-LABOR			
	GRAND TOTAL			

AUTHORIZED AND APPROVED

FIRM: DATE:

BY:

IMPORTANT: THIS ORDER MUST BE SIGNED OR OTHER AUTHORIZATION ATTACHED

SHEET NO. OF

Form #103

WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: City of Birmingham

DATE: 2/12/14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305 T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: 6 of 9 drum drips frozen placed unfrozen ones in open position. Disassembled frozen drum drips to allow water to drain as it thaws. Three drum drips need replacing. Cut out 2 three foot sections of 4" main that was split and a 5-4 chunk of 3" also split.

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
D. Richardson (FO)	8			
A. Wilson	8			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
	— ON ORDER —			
	(TO BE LISTED ON LATER SHEET)			
	SUB-TOTAL MATERIAL			
	SALES TAX			
	RENTALS			
	SUB-LABOR			
	GRAND TOTAL			

AUTHORIZED AND APPROVED

FIRM:

DATE:

BY: Tara Lee Casey

IMPORTANT: THIS ORDER MUST BE SIGNED OR OTHER AUTHORIZATION ATTACHED

SHEET NO. ____ OF ____

Form #103

WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: City of Birmingham

DATE: 3/20/14 — 3/21/14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305 T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Replaced (2) 4" Grooved Couplings, (1) 4"x0-4 Gg Nipple. Replaced (3) 1/2" 155° Brass Uprights. Removed Ice From 4" Main. Replaced 6 broken drum drips & Reinstalled 3 others. Replaced sections of 4" & 3" main that had split. Replaced 4 broken sprinkler heads. *Wipe New Compressor*

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Ryan Walsh (FO)	4			
Jason Ogles (FO)	8			
Dan Richardson	8			
Michael Kunch *	4			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
	— TO BE ATTACHED —			
	SUB-TOTAL MATERIAL			
	SALES TAX			
	RENTALS			
	SUB-LABOR			
	GRAND TOTAL			

AUTHORIZED AND APPROVED

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211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: City of Birmingham

DATE: 4/2/14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Cut off (2) 4" Vic Coups & (2) 3" Vic Coups that were split due to ice & Replaced w/ New ones

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Jason Giles (Fo)	2			
Dan Richardson	2			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
~~2~~	~~4" Vic Coups~~			
~~2~~	~~3" Vic Coups~~			
SUB-TOTAL MATERIAL				
SALES TAX				
RENTALS				
SUB-LABOR				
GRAND TOTAL				

AUTHORIZED AND APPROVED

FIRM: DATE:

BY:

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WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Parking Garage
180 Chester
Birmingham, Mi

DATE: 4-8-14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305 T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Replaced Damaged piping and Fittings on Dry System due to Freeze up. Unsuccessfully tried to Put system in Service. Recommend Hydrostatic Test to Find Remaining leaks

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Ryan Walsh (FO)	8			
Dan Richardson Jr.	8			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
2	Condensate Drain Assy.			
1	4x1 Mechanical Tee			
1	4"x0-7 Nipple			
1	4" Grooved 90			
~~1~~	~~4" Grooved 90~~			
6	4" Grooved ~~90~~ Couplings			
1	3" Grooved Coupling			
1	1" Slip Coupling			
	SUB-TOTAL MATERIAL			
	SALES TAX			
	RENTALS			
	SUB-LABOR			
	GRAND TOTAL			

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211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Parking Garage
180 CHESTER
Birmingham, Mi

DATE: 4-18-14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Put water to dry system and Assessed Additional Damage. Removed (4) Lgths of Main Piping and Fittings. Ordered Piping For Fabrication.

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Ryan WALSH (FO)	8			
Larry St. Andre	8			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
	SUB-TOTAL MATERIAL			
	SALES TAX			
	RENTALS			
	SUB-LABOR			
	GRAND TOTAL			

AUTHORIZED AND APPROVED

FIRM: DATE:

BY:

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WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Parking Garage
180 Chester
Birmingham, Mi

DATE: 4/23/14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305T

ATTN:

PROJECT: FREEZE UP

DESCRIPTION OF WORK DONE: Installed New Piping, Put Water to System
diagnosed Additional leaks, Ordered New Material

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Ryan Walsh (PO)	8			
James Smith	8			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
8	3" GR. Coupling			
2	4" GR Coupling			
3	4" Rings			
6	1¼ x 0-7 T x G			
6	1¼ GR. Coupling			
6P	3/8 A.T.R			
6	3" Rings			
4	Fabricated Pieces of Main "See Cutsheet"			
	SUB-TOTAL MATERIAL			
	SALES TAX			
	RENTALS			
	SUB-LABOR			
	GRAND TOTAL			

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FIRM: DATE:

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SHEET NO. ____ OF ____

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211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Garage

DATE: 24 Apr. 2014

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305 T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Filled sprinkler system with water went thru and checked leaks. Started replacing leaking Vic couplings & pipe.

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
JASON OGLES (FO)	6			
DAN Richardson	6			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
4	1¼" Vic coupling			
3	3" Vic coupling			
2	4" Vic Coupling			
1	3"x4" Red. Vic Coupling			
1	1¼ slip fit coupling			
1	4" Sch 10 10'-0"			
SUB-TOTAL MATERIAL				
SALES TAX				
RENTALS				
SUB-LABOR				
GRAND TOTAL				

AUTHORIZED AND APPROVED

FIRM:

DATE:

BY:

IMPORTANT: THIS ORDER MUST BE SIGNED OR OTHER AUTHORIZATION ATTACHED

SHEET NO. 1 OF 1

Form #103

WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Parking Garage
180 CHESTER
Birmingham, Mi

DATE: 4/28/14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Removed and Replaced damaged and corroded pipe and Fittings throughout. Pressurized System with water, diagnosed additional leaks.

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Ryan Walsh (FO)	8			
James Smith	8			
Alex Wilson	2			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION				
1	4" x 16-8 Gta (Fabricated)	(1)	4x3 Red.	GR. Coup	(3) 1/2 SSSH.
2	1 1/4 x 4 T.O.L. (Fabricated)	(1)	3" GR. Coup.		
2	1" x 4 T.O.L. (Fabricated)	(2)	3" Swivel	loop Rings	
2	4" GR. Coup.	(4)	1 1/4 x 0-7	T x G	
2	4" Swivel loop Rings	(6)	1 1/4 GR. Coup.		
1	3" x 15-8 1/2 Gta (Fabricated)	(1)	1 1/4 x 2-7	1 1/4 x 1 1/4 x	1/2
1	1 1/4 x 3" T.O.L. (Fabricated)	(1)	1 1/4 x 10-10	1 1/4 x 1 1/4 x	1/2
1	1" x 3" T.O.L. (Fabricated)	(1)	1 1/4 x 10-10	1 1/4 x 1/2	90
SUB-TOTAL MATERIAL					
SALES TAX					
RENTALS					
SUB-LABOR					
GRAND TOTAL					

AUTHORIZED AND APPROVED

FIRM: DATE:

BY:

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WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Parking Garage

DATE: 5-2-14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Put water on sprinkler Dry System & pumped up system Identified & Repaired leaks in dry sprinkler system.

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
JASON OGLES (FO)	8			
Alex Wilson	8			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION			
4	1¼" Vic Couplings			
5 Five	3" Vic Couplings			
1	1¼ Slip Coupling			
1	4'-2" 3" Sch 10			
SUB-TOTAL MATERIAL				
SALES TAX				
RENTALS				
SUB-LABOR				
GRAND TOTAL				

AUTHORIZED AND APPROVED

FIRM: DATE:

BY:

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SHEET NO. 1 OF 1

Form #103

WM. CROOK FIRE PROTECTION CO.

211 EAST LINCOLN, ROYAL OAK, MI 48067 • (248) 543-6888 • FAX (248) 543-2204

LABOR & MATERIAL

BILL TO: Birmingham Parking Garage
180 Chester
Birmingham, MI

DATE: 5-5-14

CUSTOMER JOB NO.

OUR JOB NO. 14-02-305 T

ATTN:

PROJECT: Service Work

DESCRIPTION OF WORK DONE: Replaced damaged piping. Attempted to Place in Service. Various leaks in valve trim, Faulty Accelerator Alarms Rebuild Kit. Valve Clapper seems to be Faulty / Damaged

LABOR

NAME	STRAIGHT TIME	1-1/2 TIME	2 TIME	TOTAL
Ryan Walsh	8			
Andy Flint	8			
SUPERVISION				
TRAVEL EXPENSE				
ENGINEERING				
SHOP FABRICATION/DELIVERY				
TOTAL HOURS				

MATERIAL

QTY.	DESCRIPTION				
1	3" x 3-6 w/ 1" T.O.L (Fabricated)	X			
1	3" Swivel loop Ring	✓			
2	1 5/8 x 0-6 Gal. Unistrut	✓			
2	1/2" Nuts	✓			
2	1/2 Square Washer.	✓			
1	1" Unistrut Strap	✓			
		✓			
SUB-TOTAL MATERIAL					
SALES TAX					
RENTALS					
SUB-LABOR					
GRAND TOTAL					

AUTHORIZED AND APPROVED

FIRM: DATE:

BY:

IMPORTANT: THIS ORDER MUST BE SIGNED OR OTHER AUTHORIZATION ATTACHED

SHEET NO. OF

Form #103

Job	Name =	Birmingham Garage 14-02-305T		
Job				1 of 2
DATE OF LAST UPDATE;		May 12, 2014		

Quan:	Size	Description:	Unit Price	Total
		********** PIPE		
48	1-1/4"	Black Sch #40 Pipe	2.42	116.16
142	3"	Black Sch #10 Pipe	5.03	714.26
59	4"	Black Sch #10 Pipe	6.08	358.72
5	2"	Galvanized Sch #40 Pipe	7.29	36.45
12	1"	0'-3"	1.43	17.16
1	1-1/4"	Black Iron Screwed RED 90	8.33	8.33
2	1-1/4"	Black Iron Screwed RED TEE	8.84	17.68
9	1"	Threaded Pipe Welded Outlet	3.95	35.55
15	1-1/4"	Threaded Pipe Welded Outlet	4.64	69.60
2	4X1	Mechanical Tee	35.63	71.26
28	1-1/4"	Grooved Coupling	5.25	147.00
28	3"	Grooved Coupling	8.97	251.16
21	4"	Grooved Coupling	14.40	302.40
1	4"	Grooved 90	33.00	33.00
3	4X3	Grooved Reducing Coupling	56.52	169.56
1	1"	SLIP COUPLING	19.49	19.49
2	1-1/4"	SLIP COUPLING	22.73	45.46
14	3"	RINGS SWIVEL	0.86	12.04
7	4"	RINGS SWIVEL	1.31	9.17
30	3/8"	ROD	0.47	14.10
12	1"	UNISTRUT STRAP	1.35	16.20
6	1/2"	BR. UPR.	5.78	34.68
8		Galv.Drum Drip complete	105.00	840.00
		PIPE	**Total.....**	1242.75
		SCREWED IRON FITTINGS	**Total.....**	26.01
		FLANGED IRON FITTINGS	**Total.....**	0.00
		GROOVED FITTINGS	**Total.....**	1144.48
		VALVES	**Total.....**	0.00
		HANGERS	**Total.....**	51.51
		SPRINKLERS	**Total.....**	34.68
		MISCELLANEOUS	**Total.....**	0.00
		SPECIALTIES	**Total.....**	840.00
		UNDERGROUND	**Total.....**	0.00
		MATERIAL COST	**Total.....**	3339.43

Job	Name =	Birmingham Garage 14-02-305T		
Job				2 of 2
DATE OF LAST UPDATE;		May 14, 2014		
Quan:	Size	Description:	Unit Price	Total
		********** PIPE		
4	3"	Black Sch #10 Pipe	5.03	17.61
1	1"	Threaded Pipe Welded Outlet	3.95	3.95
1	3"	RINGS SWIVEL	0.86	0.86
2	1/2"	NUTS HEX	0.15	0.30
1	1-5/8"	UNISTRUT	3.38	3.38
1	1"	UNISTRUT STRAP	1.35	1.35
2		SQUARE WASHERS	1.13	2.26
		PIPE	Total.....	17.61
		SCREWED IRON FITTINGS	Total.....	0.00
		FLANGED IRON FITTINGS	Total.....	0.00
		GROOVED FITTINGS	Total.....	3.95
		VALVES	Total.....	0.00
		HANGERS	Total.....	8.15
		SPRINKLERS	Total.....	0.00
		MISCELLANEOUS	Total.....	0.00
		SPECIALTIES	Total.....	0.00
		UNDERGROUND	Total.....	0.00
		MATERIAL COST	Total.....	29.71