PUBLIC WORKS DEPARTMENT **MEMORANDUM #2011 – 31**

DATE:

August 25, 2011

TO:

Honorable Mayor Joyce Downing and City Council Members

FROM:

William A. Simmons, City Manager

David H. Willett, Director of Public Wor

SUBJECT: CR - 78. Storm Sewer Repair - 105th and Grant Drive

BACKGROUND

Due to an unusually high amount of rainfall and several heavy spring and summer storms, a portion of storm sewer along Grange Hall Creek that passes under Grant Drive at approximately 105th Avenue experienced severe erosion and degradation to the metal piping. Specifically, the bottom of the corrugated metal storm sewer pipe at this location failed causing an undermining and settlement of the roadway surface on Grant Drive. For reference the roadway is a heavily used residential collector with an average daily traffic (ADT) count of approximately 10,000 vehicles per day.

Because of the urgent nature of the repair, staff obtained quotes from our 2011 emergency contractors (C&L Water Solutions and American West Construction) to perform repairs on the storm sewer. Proposals were received from both contractors as well as a third quote solicited from Quality Pipe Services, a company that specializes in pipe and manhole linings. Due to the nature of the damage and interpretation of needed repairs, proposals ranged from \$88,790.00 to \$169,850.00. The proposals are attached to this memo.

Staff reviewed all proposals and deemed the lowest and best cost proposal from C&L Water Solution would provide an appropriate and safe repair. The repair will consist of approximately 130 feet of high density polyethylene (HDPE) pipe, installed slip line, with grout injected to the annulus such that all voids are completely filled between the new HDPE pipe and the old steel host pipe.

BUDGET/TIME IMPLICATIONS

The project will be accounted for under the Public Works Department, Water/Wastewater Fund - Distribution and Collection/Capital Outlay.

RECOMMENDATION

Attached to this memorandum is a Resolution that, if approved, would allow the City Manger to issue a Purchase Order to C&L Water Solutions in the amount of \$88,790.00. Staff recommends approval of this Resolution.

STAFF REFERENCE

David H. Willett, P.E., Director of Public Works

dwillett@northglenn.org or 303.450.8783

Attachments:

- 1. C & L water Solutions
- 2. American West Construction
- 3. Quality pipe Services

SPONSORED BY: MAYOR DOWNING COUNCILMAN'S RESOLUTION RESOLUTION NO. No. CR-78 Series of 2011 Series of 2011 A RESOLUTION TO AUTHORIZE THE CITY MANAGER TO ISSUE A PURCHASE ORDER TO C&L WATER SOLUTIONS IN AN AMOUNT NOT TO EXCEED \$88,790.00 FOR THE 105^{TH} AVENUE AND GRANT DRIVE STORM SEWER REPAIR BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT: Section 1. The City Manager is hereby authorized to issue a Purchase Order to C&L Water Solutions, Inc. in an amount not to exceed \$88,790.00 for the 105th Avenue and Grant Drive Storm Sewer Repair. DATED at Northglenn, Colorado, this _____ day of _______, 2011. JOYCE DOWNING Mayor ATTEST: JOHANNA SMALL, CMC City Clerk APPROVED AS TO FORM:

COREY Y. HOFFMANN

City Attorney



12249 Meade Way, Littleton, CO 80125 ~ www.clwsi.com phone 303-791-2521 ~ fax 303-791-2524

PROPOSAL

DATE: 08/03/11

CUSTOMER NAME:

City of Northglenn

ATTN:

Utilities Director

JOB NAME:

105th Ave and Grant 78" Storm Sewer Rehabilitation

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1 Option 2 More Structural: Permaner	t, Smaller O.D.			
2 Slipline Approximately 130' utilizing 54" Snap Tite pipe, Grout Annulus Comple	ie 130	LF	\$671.00	\$87,230.00
3 Grout Eight (8) 78" Concrete Joints under Grant St.	8	EA	\$195.00	\$1,560.00
SPECIAL NOTES/INCLUSIONS/EXCULSIONS: We Propose to Provide All Labor, Equipment, and Material to: 1. Prepare the invert and pipe surface of the 78" Corrugated metal culvert on 105th and Gra	ot		TOTAL [\$88,790.00
1. Prepare the invert and pipe surface of the 78" Corrugated metal culvert on 105th and Gra 2. Remove and replace the concrete check dam in front of the 78" Corrugated metal culvert 3. Install groute tubes, wood blocking to reduce pipe floatation, and vent tubes to ensure a 4. Furnish and install approximately 130 LF of 54" O.D. Snap Tite pipe utilizing a slip lining m Tite pipe a fully structural lining solution for large diameter culvert rehabilitation. The flow of section reduction in going from 78" CMP to 50" I.D. Snap Tite HDPE pipe. Please see attaches 5. Build Bulk heads made of low strength concrete and fly-ash around the ends of the new p 6. Inject approximately 100 yards of Low Density flashfill or Cellular grout into annulus and fine outside of the existing corrugated pipe to stabilize soil. Grout is 70 to 100 PSI groute, co 7. Once set, we will cut off the grout tubes and finish grout the final product. 8. Incidental items that are also included in the pricing includes: Mobilization, Traffic Control	to facilitate slip line complete and comp ethod. Joints are les apacity will actually d product data and roduct and the old Il completely. This inpletely structural.	act grout ak proof a be impro calculati corrogate grout sho	ing. and cannot be pulle oved by 3%, despite on sheets. ed metal pipe.	e the cross
Alternate: 9. Included in the price is the cost to grout 8 joints in the adjoining 78" concrete pipe.				
Exclusions: 1. We are excluding all inlet, grate, bar/trash screen removal for construction. Major seeding costs/fees.	and revegitation.	We are e	xcluding permits, a	nd bond
SIGNATURE: C & L WATER SOLUTIONS, INC.		DATE:		
APPROVED BY:		DATE:		

Failing Storm Sewer (105th & Grant)



American West Construction, LLC

P.O. Box 12530

Denver, CO 80212

Contact: Jason Arnold Phone: 303-455-0838 Fax: 303-455-8148

Quote To:

City of Northglenn

Job Name:

105th & Grant

Attn: David Willett & Norm Bell 11701 Community Center Drive

Northglenn, CO 80233

Date:

August 3, 2011

Phone: Fax:

(303) 450-8783 (303) 451-8326

TEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
5	Base Bid - Invert Paving				
10	Concrete Invert Paving	130.00	LF	325.00	42,250.00
20	Grout RCP Joints (N Line)	5.00	EA	250.00	1,250.00
30	Mobilization	1.00	LS	4,000.00	4,000.00
35	Subtotal - Invert Paving				\$47,500.00
37	Optional Bid Item - South RCP Line				
40	Grout RCP Joints (S Line)	16.00	EA	250.00	4,000.00
50	Landscaping / Erosion Control (Allowance)	1.00	LS	15,000.00	15,000.00
55	Subtotal - S RCP Line				\$19,000.00
57	Bid Alt - Culvert Lining				
60	Culvert Lining (Budget Allowance)	130.00	LF	755.00	98,150.00
70	Sidewalk / Curb & Gutter R&R (Allowance)	1.00	LS	5,200.00	5,200.00
75	Subtotal - Culvert Lining				\$103,350.00

NOTES:

- AWC has proposed an option to install a 6" thick concrete invert with welded wire mesh. AWC does not accept any responsibility / liability for this repair. It is AWC's opinion that a culvert lining should be used in order prevent a failure of the pipe. Speaking with the local CSP rep, the pipe has reached a point where sliplining is the recommended solution.
- It was mentioned at the site meeting to include grouting of the RCP joints on the line to the North. While onsite, AWC observed the RCP line to the South and would recommend that all of these joints are grouted as well.
- Notes, inclusion, and exclusions shall be included in AWC's contact/subcontract. Owner/prime contract and AWC shall determine a mutually agreed upon schedule. Pricing good for 30 days. Backcharges will not be allowed unless AWC is notified prior to any work/backcharge event and agreed to by AWC. AWC shall be provided the opportunity to perform any necessary work to prevent backcharges. Due to market volatility, AWC reserves the right to adjust pricing for fuel surcharges. Unit price contract.

Exclusions:

- Bond (add 1.5%), Traffic control, Survey, Testing, Permits, Incidental items not specifically include in AWC proposal, Rock excavation, Dewatering, Import / Export of dirt / topsoil, Installation / Maintenance / Removal of erosion control items, Night / Weekend work, Winter protection, Rock picking of topsoil, Asphalt R&R, warranty, Design / Liability.



cevans@qualitypipeservices.com

700 W. Mississippi Ave #C-3 Denver CO 80223 Quality Pipe Services

Friday, August 05, 2011

RE: Northglenn 60" Storm Emergency

Attn: Scott Rafferty City of Northglenn Via Email Phone #303-598-1204

Quality Pipe Services is proud to present the following quote for the project referenced above. QPS comes with over 10 years' experience in the utility market and will strive to provide the best possible services. If you find this quote acceptable, please sign and return or use this as part of your contracting vehicle. Let us know if we can provide any additional information or answer any questions.

Bid Item	Description	Unit	Quantity	Unit Price	Total	
1	Spraywall .77" Structural	LF	130	\$810.00	\$105,300.00	
				TOTAL	\$105,300.00	

Please see contract or license agreement for full disclosure that may not be represented in this proposal.

Inclusions:

.77" Spraywall Structural Coating installation, grout fill for joints and flow channel, and CMP pipe preparation for coating application in accordance to NACE #2. Attached structural design.

Exclusions:

Traffic control, grate removal, access, special permitting, dewatering, flow diversion and bypass pumping.

*Owner must supply access and grate removal as well as any flow diversion.

Proposal Accepted By:		- <u>-</u>	
	Date:		