



LOGISTICS MEMORANDUM

#07-13

June 14, 2007

TO: Honorable Mayor Kathleen M. Novak and City Council Members

FROM: A.J. Krieger, City Manager
Kurt Kowar, Logistics Center Manager 
Heath Klein, Civil Engineer I 

SUBJECT: CR-54 Huron Street Improvements and Croke Reservoir Shoreline Stabilization Design Contract, Addendum #1, Additional Design Services

RECOMMENDATION:

Attached to this memorandum is a Resolution which, if approved, would authorize the Mayor to execute Addendum #1 to the Professional Services Agreement between the City of Northglenn and J&T Consulting Inc. (J&T) for additional design services. Staff recommends approval of this amendment.

BACKGROUND:

On September 14, 2006, the City Council approved Staff Report 06-26 to execute a Professional Services Agreement (PSA) between the City and J&T to design the Huron Street Improvements and Croke Reservoir Shoreline Stabilization. The improvements were limited to the area between Kennedy Drive and Naiad Drive along Huron Street.

Addendum #1 provides funding for the design of the entire Huron Street Corridor from 104th Avenue to 112th Avenue. In addition, funding is being approved to assist the City during the Construction Management/General Contractor Guaranteed Maximum Price (CM/GC GMP) RFP process.

The additional design costs for the Huron Street Corridor include a survey of the corridor, utility potholing, roadway design, intersection design, utility design, traffic control, storm water management, construction phasing, cost estimates, drainage report and technical specifications from 104th Avenue to 112th Avenue.

Second, is to have J&T Consulting Inc. assist the City in a CM/GC GMP RFP process. This process includes assisting City staff in developing a contract using the CM/GC GMP method tailored to meet the City's goals and objectives. The City will then send out an RFP for general contractors who will present their qualifications for completing the Huron Street Corridor Improvements and Croke Reservoir Shoreline Stabilization projects. Based on their qualifications, the City would select a CM/GC and negotiate a GMP.

Based upon the preliminary construction cost estimate of the Huron Corridor (excluding the Croke Reservoir Shoreline Stabilization work) of \$8,542,500, the total design for the entire corridor project would be \$458,180.00 which is 6.9% of the construction cost, falling within the typical industry range of 5%-10% for design fees.

POTENTIAL OBJECTION:

City Staff is not aware of any specific opposition to this Professional Services Agreement for additional services.

BUDGET/TIME IMPLICATIONS:

There are no time implications. There are sufficient funds in the Huron Street Improvements and Shoreline Stabilization Design budget, Account # 410.69211.000.3999.142 for the proposed \$219,225.00 (\$199,295 fee plus \$19,930 for 10% contingency) of additional design services.

STAFF REFERENCE:

Please contact Kurt Kowar at kkowar@northglenn.org or 303.450.8774 or Heath Klein at hklein@northglenn.org or 303.450.8780.

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COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-54
Series of 2007

Series of 2007

A RESOLUTION APPROVING ADDENDUM #1 TO THE AGREEMENT FOR PROFESSIONAL SERVICES BETWEEN THE CITY OF NORTHGLENN AND J & T CONSULTING, INC.

WHEREAS, the City of Northglenn entered into a Professional Services Agreement dated September 14, 2006 with J & T Consulting, Inc. to design the Huron Street Improvements and Croke Reservoir Shoreline Stabilization; and

WHEREAS, the parties desire to supplement the Agreement with the attached Addendum #1 to allow for the design of the entire Huron Street Corridor from 104th Avenue to 112th Avenue.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

The Addendum #1 to the Professional Services Agreement between the City of Northglenn and J & T Consulting, Inc. is hereby approved and the Mayor is authorized to execute same on behalf of the City of Northglenn.

DATED, at Northglenn, Colorado, this _____ day of _____, 2007.

KATHLEEN M. NOVAK
Mayor

ATTEST:

DIANA L. LENTZ, CMC
City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney

ADDENDUM #1 TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS FIRST ADDENDUM TO AGREEMENT FOR PROFESSIONAL SERVICES is made and entered into this ____ day of _____, 2007, by and between the CITY OF NORTHGLENN, State of Colorado (hereinafter referred to as the "City") and J & T Consulting, Inc. (hereinafter referred to as "Consultant").

RECITALS:

A. On September 14, 2007, the City and Consultant entered into an Agreement for Professional Services for civil engineering services (the "Agreement").

B. The parties desire to supplement the Agreement with this Addendum #1 to allow for an additional scope of services for the design services for:

Exhibit A, Huron Street Improvements and Croke Reservoir Shoreline Stabilization Design

AGREEMENT

NOW, THEREFORE, it is hereby agreed that for the consideration hereinafter set forth, that Consultant shall provide to the City, professional engineering services as needed in the manner provided in the Agreement.

1. The Scope of Services in the Agreement is hereby supplemented to include the scope of services for the design services attached hereto as **Exhibit A**, and incorporated herein by this reference (the "Additional Scope of Services"). Consultant shall commence work on the Additional Scope of Services within ten (10) days of the issuance of a Notice to Proceed.

2. Subparagraph A. of Article IV entitled "Compensation" is hereby amended to provide as follows:

A. Compensation shall not exceed \$199,295.00 for the work described in **Exhibit A** to this Addendum #1.

3. The original Agreement is in full force and effect and is hereby ratified by the City and the Consultant. The original Agreement and this Addendum constitute all of the agreements between the City and the Consultant.

IN WITNESS WHEREOF, the parties hereto each herewith subscribe to the same in duplicate.

CITY OF NORTHGLENN, COLORADO

By: _____
Kathleen M. Novak
Title: Mayor

ATTEST:

Diana L. Lentz, City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann, City Attorney

CONSULTANT

By: Jana C. Yel
Secretary/Principal 5/30/07
Title Date

ATTEST:

J. P. [Signature]
V.P. 5-30-07
Title Date

SCOPE OF WORK

DESIGN SCOPE OF WORK

(HURON STREET – KENNEDY DRIVE TO 112TH AVENUE AND NAIAD DRIVE TO 104TH AVENUE)

PROJECT COORDINATION

Project Management

Project management of the overall project will be provided by JT. Mr. J.C. York will be the project manager and liaison between the City and the JT project team. Mr. Jason Murray will be the assistant project manager and provide an alternate contact.

Part of this task will include monthly status reports describing the progress on the individual tasks in the scope of work. These reports will also include the project team invoicing, overall budget tracking schedule of tasks and fees, and the overall budget tracking S-curve exhibit.

Communication will be emphasized in this task to keep Mr. Heath Klein and the City staff apprised of any project issues that arise. A log (project management task list) of the project issues will be kept to ensure that issues are addressed and indicate when and what decisions/actions were made to keep the project moving in an efficient manner to meet the overall project schedule and budget constraints.

Project Kickoff Meeting

A project kickoff meeting will occur after the notice to proceed has been issued. The City should dedicate a two hour block of time as there are many initial items and action items to discuss. This meeting will be very important for the City team and the JT project team to communicate with each other to setup the proposed Construction Management/General Contractor and Guaranteed Maximum Price contract. JT will discuss the options to the City for setting up this type of contract and get input from the City on what items the City would like in the contract, such as a shared savings clause, open book audit of contractor's cost of work including labor, profit, etc. as an example. We will also discuss the City's goals and how those goals can be reached by using the CM/GC and GMP contract.

Site Visits

Site visits are an important part of the project and will be necessary throughout the project to gain information about site conditions, utilities, and infrastructure. We have provided eight site visits in our fee schedule.

SCOPE OF WORK

Progress Meetings

JT anticipates that the project and progress meetings will occur at the beginning and end of major tasks/milestones. Progress meetings will be necessary to discuss project issues with City staff. JT envisions the frequency of meetings to be bi-weekly during the initial phases of the next piece of the design during the process of negotiating/developing a CM/GC GMP contract and monthly thereafter.

PHASE I – PRELIMINARY DESIGN REPORT

JT will provide a preliminary design report addressing design considerations for the Huron Street improvements. Five (5) copies of the design report and a CD containing a pdf of the report will be submitted to the City. Several information gathering and inventory tasks will be completed during this phase of the project. The following tasks are to be completed and included with the Preliminary Design Report.

Design Survey

JT will coordinate with Curtis Hoos of American West Land Surveying Co. to provide the design survey. This task will include a title search for all adjacent properties, establishment of horizontal and vertical control (State Plane Coordinates NAD 83 and NAVD 88), locations of all utilities in the area, ROW corridor survey, topographic survey, locations of existing roadway, curb and gutter, driveways, sidewalks, traffic signals, and drainage structures.

Utility Potholing

JT will coordinate with Diversified Underground for the utility potholing. This task will consist of physical location of all known utilities that may affect the design of the proposed improvements for vertical and horizontal location/confirmation. Traffic control is included in the fee schedule for four days, additional days for traffic control will be at the unit cost presented in the fee schedule if required. Thirty potholes are included in the fee schedule and additional potholes will be at the unit cost presented in the fee schedule if required. Once the design survey is completed JT will address how many potholes will actually need to be provided to ensure that utility conflicts will be less likely to affect the design of the proposed improvements. We suggest our estimate for the utility potholing be used as an allowance that could be more or less than what has been estimated. We have programmed a 20% contingency for this budget in case more potholes are required which is included in our supplemental tasks budget.

SCOPE OF WORK

Site Investigations

Site investigations will be performed to inventory the existing infrastructure and confirm the existing conditions of the roadway, intersections, traffic signals, dry and wet utilities, sidewalks, driveways, and curb and gutter. The investigation will include digital photographs and video of the project area to capture the existing condition of the project area.

JT will also provide alternatives and opinions of probable construction cost associated with the roadway improvements.

The following subtasks will be included as a part of the site investigations:

- **Geotechnical Investigation** – JT will coordinate with JA Cesare and Associates to provide the geotechnical investigation. JA Cesare will conduct a subsurface investigation of Huron Street by collecting soil data from soil borings that will be placed to alternate on each side of the street at every other boring. Once the information from the field has been obtained JA Cesare will conduct lab analysis to determine what alternatives are available for the pavement section.
- **Traffic Study of the project area** – JT will coordinate with LSC Transportation Consultants to conduct the traffic study. The study will determine new lane configurations (if needed), turn lane lengths, and access to existing businesses and residences. Conceptual drawings will be provided along with the traffic study to be included in the preliminary design report.

PHASE II – 60% SUBMITTAL

The 60% submittal will include the preliminary construction drawings of the roadway improvements, trail alignment, landscaping based off of the information gathering contained in the preliminary design report. JT will coordinate all the design efforts and reproduction of the drawings and provide a complete package for the submittal to the City. 15 copies of the drawing set will be provided along with the table of contents for the technical specifications.

Roadway Design

The roadway design will be provided by JT and Sorenson Engineering, Inc. Sorenson Engineering, Inc. will assist JT with the initial layout and design of the roadway based on the results of the Traffic Study. Plan and profile drawings will be completed to the 60% stage to depict the horizontal and vertical alignments. Cross-sections will be cut in critical areas only at this stage of the project. The

SCOPE OF WORK

drawings will be based off of the survey information provided from American West Land Surveying Co. Over excavation limits (if they are warranted) will be included with the profile and cross-sections to determine if any utility re-location is warranted. The drawings will conform to the City of Northglenn Standards and Specifications and CDOT Standard Specifications for Road and Bridge Construction.

Traffic Signal Design

The traffic signal design will be provided by LSC Transportation Consultants, Inc. Signal layout drawings will be completed to the 60% stage. The signals will be pole and mast arm type. The 60% drawings will indicate the detection zone layout as well as the conduit runs for power and communication. The drawing(s) will conform to the City of Northglenn Standards and Specifications, CDOT Standard Specifications for Road and Bridge Construction, and the Manual of Uniform Traffic Control Devices (MUTCD).

Traffic Control Plan

The traffic control design will be provided by JT and Sorenson Engineering, Inc. Sorenson Engineering, Inc. will assist JT, as well as the contractor, with the initial layout and design of the traffic control to provide traffic flow along Huron and into businesses during the construction of the improvements. The plan will conform to the City of Northglenn Standards and Specifications, CDOT Standard Specifications for Road and Bridge Construction, and the MUTCD. Drawings will be completed to the 60% stage to depict the phases of the traffic control as construction progresses.

Construction Phasing Plan

A construction phasing plan will be provided by JT with input from all members of the project team, contractor, as well as the City's team. The phasing plan will identify proposed project sequencing. The sequencing for construction will be estimated during the design phases and must be confirmed when a contractor is selected for construction.

Landscape Design

The landscape design will be provided by DHM Design (DHM). JT will coordinate with DHM who will be working directly for the City on the Huron Street overall corridor landscape design. JT will work with DHM to incorporate their landscape design into the construction drawing set.

SCOPE OF WORK

Water Line Replacement/Relocation Design

The water line replacement/relocation design will be provided by JT. Plan and profile drawings will be completed to the 60% stage to depict the horizontal and vertical alignments. The drawings will be based off of the survey information provided from American West Land Surveying Co.

The water line design is expected to include replacing the existing asbestos cement line in Huron Street south of Naiad Drive and connecting back into the main at the intersection of 104th Avenue and Huron Street.

Storm Sewer Design

The storm sewer design will be provided by JT. Plan and profile drawings will be completed to the 60% stage to depict the horizontal and vertical alignments. The drawings will be based off of the survey information provided from American West Land Surveying Co.

The storm sewer design is expected to include inlets within Huron Street and storm sewer that crosses Huron Street and discharges into the park adjacent to the Farmer's Highline Canal.

Technical Specifications

Technical specifications will be identified in the 60% submittal by creating a table of contents. The table of contents will include all the specification divisions and individual titles that will be included with the 90% submittal. The details and actual specifications will be submitted with the 90% submittal.

Stormwater Management Plan

The stormwater management plan will identify the proposed best management practices for erosion and sediment control. The plan will include a narrative of the types of practices to be installed during the construction of the improvements until final stabilization of the landscaping has occurred. The plan will be completed to 60% for submittal to the City for review.

The locations of the best management practices such as silt fence, vehicle tracking control, straw bale barriers, and inlet protection will be depicted on a plan sheet along with detail drawings for each best management practice. The plan will be in accordance with the State of Colorado's requirements. The plan will be provided to the contractor to maintain for the duration of the project.

SCOPE OF WORK

Phase III Drainage Report

The drainage report will identify if the existing storm sewer system is adequate for the proposed improvements. The report will include hydrology and hydraulic calculations to identify street capacities, inlet capacities, and storm sewer capacities.

The report will be prepared to 60% complete for the City's review. The report will also include a basin map to show the areas, runoff coefficients, and time of concentration paths.

Opinion of Probable Construction Costs

JT will produce an opinion of probable construction costs with input from the selected contractor that will provide unit costs for installation of the main infrastructure improvements (i.e. paving, sub-grade, earthwork, storm sewer, cast-in-place concrete structures, etc.). Construction cost contingencies will be included to account for incidentals not identified in the main infrastructure improvements. The opinion of probable construction costs will be updated to provide more detail and itemization in the 90% submittal and contingencies may be relaxed to a lesser percentage.

PHASE III – 90% SUBMITTAL

This phase of the design will first include implementing any review comments from the City regarding the 60% submittal. The construction drawing documents will continue to be developed to provide specific details in relation to the roadway improvements (i.e. plan and profile drawings, cross-sections, typical details, intersection details, driveway details), storm sewer improvements (i.e. plan and profile drawings, details), landscape plan, fence details, and trail alignment/details. The technical specifications will be compiled to include all sections identified in the 60% submittal along with the City's review comments. Additional sections will be inserted as needed based on the final design.

Construction phasing will be re-visited in greater detail to determine construction sequencing and identify all the risks associated with the proposed phasing. The construction phasing will also be reviewed by the selected contractor to ensure they can accommodate what is proposed and possibly provide an alternate phasing plan that meets the City's requirements.

JT will coordinate all the design efforts and reproduction of the construction documents and provide a complete package for the submittal to the City. 15

SCOPE OF WORK

copies of the construction documents and the technical specifications will be provided to the City for review.

PHASE IV – 100 % SUBMITTAL

JT will coordinate with all the sub-consultants to address the review comments provided by the City on the 90% submittal. Comments will be addressed and final documents will be submitted to the City. The 100% submittal will include 15 sets of the construction documents along with a CD containing the electronic drawings in AutoCAD version 2000 or later format and the specifications in Microsoft Word format. These drawings will be used for the construction phase of the project. Prior to starting construction revisions (if any) will be made to the drawings and two (2) sets final mylar drawings will be submitted to the City.

CM/GC GMP SETUP AND NEGOTIATIONS

Following the project kickoff meeting the JT project team will assist the City by preparing the request for proposal/qualifications (RFP/RFQ) to select the proposed Construction Management/General Contractor (CM/GC) with anticipation of entering into a Guaranteed Maximum Price (GMP) construction contract.

JT will begin by assisting City staff in developing a contract using the CM/GC GMP method that is tailored to meet the City's goals and objectives. JT will participate with the City in creating an RFP/RFQ document to procure a contractor that is qualified to perform the type of construction associated with the Huron Street improvements. Communication with the City's purchasing department will play an important role in developing the RFQ document. It is JT's intent to work with the purchasing department to ensure procurement of the contractor is within the bounds of the current regulations as governed by the City.

JT will assist the City in reviewing the Statement's of Qualification provided by prospective contractors. JT will provide review and recommendations for selecting a contractor to help the City in selection of a contractor to develop a CM/GC GMP contract for the project.

Once a contractor has been selected JT will assist the City with the negotiations and development of the GMP contract.



J&T Consulting, Inc.

City of Northglenn

Huron Street Improvements - Naiad Drive to 104th Avenue, Kennedy Drive to 112th Avenue

5/24/2007

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Professional Services Scope and Fee Summary

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Northglenn - Huron 112th & 104th - Modified Fee Summary 5.24.07.xls

Item Description	Project Manager	Project Engineer	Structural Engineer	Senior Designer	Designer	Sub-Consultants					Item Subtotal
						Sorenson	LSC	Cesare	DU	Am West	
	\$95.00	\$85.00	\$100.00	\$75.00	\$65.00						

DESIGN SCOPE OF WORK

Project Coordination												
Project Management	80											\$7,600
Project Kickoff Meeting	2	4				\$200	\$200	\$200		\$200		\$1,330
Site Visits	2	16				\$400						\$1,950
CM / GC Design Review	12	24				\$1,200						\$4,380
Progress Meetings	16	20				\$800	\$800	\$800		\$200		\$5,620
Subtotals	112	64	0	0	0	\$2,600	\$800	\$1,000	\$0	\$400		\$20,880
Phase I - Preliminary Design Report												
Design Survey	2	4								\$15,950		\$16,480
Site Investigations	2	12				\$800		\$10,000				\$12,010
Traffic Study	2					\$800	\$4,400					\$5,390
Utility Potholing (30@\$275)(traffic control 4@\$1,650)	2	32								\$14,850		\$17,760
Report Preparation	4	12		8	4	\$1,600						\$3,860
Subtotals	12	60	0	8	4	\$3,200	\$4,400	\$10,000	\$14,850	\$15,950		\$55,500
Phase II - 80% Submittal												
Roadway Design	8	60		60	80	\$6,500						\$22,060
Traffic Signal Design	2					\$200	\$2,500					\$2,890
Traffic Control Plan	2	8		8	4	\$1,200						\$2,930
Construction Phasing Plan	1	2		2	2	\$200						\$745
Storm Sewer Design	4	16		12	8							\$3,160
Waterline Replacement/Relocation - Huron Street from Naiad South	4	16		16	8							\$3,460
Retaining Wall Design	4	16	16	12	16							\$5,280
Technical Specifications TOC	2	4				\$100						\$630
Stormwater Management Plan	4	16		8	8							\$2,860
Phase III Drainage Report	4	24		12	8							\$3,840
Opinion of Probable Cost	2	12		8		\$1,000						\$2,810
Subtotals	37	174	16	138	134	\$9,200	\$2,500	\$0	\$0	\$0		\$50,665
Phase III - 90% Submittal												
Roadway Design	4	48		48	60	\$3,000						\$14,960
Traffic Signal Design	1					\$200	\$1,500					\$1,795
Traffic Control Plan	1	4		4	2	\$300						\$1,165
Construction Phasing Plan	1	2			2	\$100						\$495
Storm Sewer Design	2	10		8	4							\$1,900
Waterline Replacement/Relocation - Huron Street from Naiad South	2	4		12	4							\$1,690
Retaining Wall Design	2	4	8	12	16							\$3,270
Technical Specifications	4	32		10		\$2,400	\$800					\$7,050
Stormwater Management Plan	2	8		8	4							\$1,730
Phase III Drainage Report	2	16		10	4							\$2,560
Opinion of Probable Cost	1	8		4		\$750						\$1,825
Subtotals	22	138	8	116	96	\$6,750	\$2,300	\$0	\$0	\$0		\$38,440



J&T Consulting, Inc.

City of Northglenn

Huron Street Improvements - Naiad Drive to 104th Avenue, Kennedy Drive to 112th Avenue

5/24/2007

Professional Services Scope and Fee Summary

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Northglenn - Huron 112th & 104th - Modified Fee Summary 5.24.07.xls

Item Description	Project Manager	Project Engineer	Structural Engineer	Senior Designer	Designer	Sub-Consultants					Item Subtotal
						Sorenson	LSC	Cesare	DU	Am West	
	\$95.00	\$85.00	\$100.00	\$75.00	\$65.00						

DESIGN SCOPE OF WORK CONTINUED

Phase IV - 100% Submittal	Project Manager	Project Engineer	Structural Engineer	Senior Designer	Designer	Sorenson	LSC	Cesare	DU	Am West	Item Subtotal
Roadway Design	2	4		4	8	\$1,000					\$2,350
Traffic Signal Design	1					\$100	\$600				\$795
Traffic Control Plan	1	1		2	2	\$100					\$560
Construction Phasing Plan	1	2			2	\$100					\$495
Storm Sewer Design	1	2		4	2						\$695
Waterline Replacement/Relocation - Huron Street from Naiad South	1	2		4	2						\$695
Retaining Wall Design	1	2	4	4	2						\$1,095
Technical Specifications	2	8		4							\$1,170
Stormwater Management Plan	1	2		4	2						\$695
Phase III Drainage Report	1	2			1						\$330
Opinion of Probable Cost		4		2		\$250					\$740
Subtotals	12	29	4	28	21	\$1,550	\$600	\$0	\$0	\$0	\$9,620

Design Scope of Work Subtotal	\$175,105
Design Scope of Work Expenses	\$10,510
Design Scope of Work Total	\$185,615

CM/GC GMP

CM/GC GMP - Setup and Negotiations	Project Manager	Project Engineer	Structural Engineer	Senior Designer	Designer	Sorenson	LSC	Cesare	DU	Am West	Item Subtotal
Contractor RFQ Setup and Procurement	20	20									\$3,600
Contractor SOQ Review	8	8									\$1,440
Contractor Selection	8	8									\$1,440
Contractor Negotiations and Award	40	40									\$7,200
Subtotals	76	76	0	0	0	\$0	\$0	\$0	\$0	\$0	\$13,680

CM/GC Scope of Work Subtotal	\$13,680
CM/GC Scope of Work Total	\$13,680