

III.D



DATE: March 7, 2011

TO: Planning and Public Works Committee

FROM: Susan Mueller, Principal Engineer *S Mueller*
BJM

**SUBJECT: Supplemental Agreement #1 – Engineering Design Services
Chesterfield Parkway Pedestrian Bridge 2009-PW-19**

The Department of Planning & Public Works is moving through the final design phase for the Chesterfield Parkway Pedestrian Bridge. After considering all aspects of the final design we find that safety and aesthetic value of the bridge can be cost effectively enhanced by including specialty lighting features into the design scope. Due to construction cost savings from other aspects of the bridge design, the specialty lighting will not change the conceptual construction cost estimate of \$1.9 million. In order to effectively present the completed bridge design, we have requested the addition of a project rendering board into the design scope bringing the total supplemental design fee to \$13,867.00. A copy of the Supplemental Agreement is included as part of Mr. Ben Niesen's recommendation attached hereto.

We hereby recommend approval of the Supplemental Agreement #1 for Engineering Design Services, as submitted by H.R. Green Company in the amount of \$13,867.00. We request supplemental design funding authorization not to exceed \$14,000.00 from the Trust Fund account 806-2405, bringing total design funding authorization to \$299,000.00.

Should you have any questions, or require additional information, please let me know.

cc: Mike Geisel, Director of Planning & Public Works
Brian McGownd, Public Works Director/City Engineer
Ben Niesen, Project Manager
File 2009-PW-19



Memorandum

Department of Planning and Public Works

To: Susan Mueller, Principal Engineer
From: Ben Niesen, Civil Engineer *BMN*
Date: March 4, 2011
Re: Supplemental Agreement Contract
2009-PW-19 – Chesterfield Parkway Pedestrian Bridge

As you are aware, Howard R. Green Company was awarded the professional engineering services contract for the above mentioned project and City Council authorized the work up to the amount of \$285,000.00, from the associated Trust Fund 806-2405 at their regularly scheduled meeting on April 21, 2010.

The Department of Planning & Public Works staff recommends a Supplemental Agreement Contract with Howard R. Green Company to incorporate a lighting design into the proposed pedestrian bridge.

Accordingly, we recommend acceptance of the Supplemental Agreement contract in the amount of \$13,867.00 with Howard R. Green Company and request additional City Council authorization of \$14,000.00 from Trust Fund 806-2405, bringing total City Council authorization for the project to \$299,000.00.

A copy of the Supplemental Agreement Contract is attached. Should you require additional information, please advise.

cc: Brian McGownd, PWD/CE

SUPPLEMENTAL AGREEMENT TO ENGINEERING DESIGN SERVICES CONTRACT

This Supplemental Agreement (the "AGREEMENT") is by and between the City of Chesterfield, hereafter referred to as "CITY" and HR Green, Inc., hereinafter referred to as "CONSULTANT" for additional services to be performed related to the CONTRACT for 2009-PW-19 Chesterfield Parkway Pedestrian Bridge executed on April 22, 2010.

The CITY selected the CONSULTANT to perform professional services for the engineering analysis, design, and development of plans and specifications for new sidewalk, lighting, and pedestrian bridge over US 40 along the west side of Chesterfield Parkway, East.

This AGREEMENT is intended to supplement the original CONTRACT. The provisions outlined in the CONTRACT also apply to this AGREEMENT.

CITY and CONSULTANT hereby mutually agree to the additional services as follows:

ARTICLE 1 - SCOPE OF SERVICES

The services covered by this AGREEMENT shall include furnishing the professional, technical and other personnel necessary for:

- Renderings of the proposed Bridge over US 40.
- Additional pedestrian lighting incorporated into the bridge.

CONSULTANT agrees to perform all those services described in Exhibit A, attached hereto, and made a part hereof, in accordance with the terms and conditions stated therein, (such services being hereinafter referred to as the "WORK").

ARTICLE 2 - FEES AND PAYMENT

For the services described in Exhibit A - Scope of Services, the CITY will pay and the CONSULTANT will accept as full compensation, actual costs of services and supplies based upon the rates provided in the Scope of Services, an additional thirteen thousand eight hundred sixty-seven dollars (\$13,867). This increased the total CONTRACT amount to a not to exceed of two hundred ninety-five thousand five hundred forty dollars (\$ 295,540.00).

Executed by the CONSULTANT this _____ day of _____, 20__.

Executed by the CITY this _____ day of _____, 20__.

CITY OF CHESTERFIELD

HR Green, Inc.

Signature – Michael G. Herring

Signature –

City Administrator

Title

Title

ATTEST:

ATTEST:

Judy Naggiar, City Clerk

(SEAL)

(SEAL)

EXHIBIT A

I. SCOPE OF SERVICES

CONSULTANT agrees to perform the following additional services for the CITY, and to do so in a timely and satisfactory manner.

Phase 1.1 – Project Rendering

1.1.1 Development SketchUp Model

Create a 3D model of the bridge using the modeling computer program SketchUp. This model can be viewed and rotated within a free viewer. The model will include the agreed to finishes and colors and provide a realistic rendering of the proposed bridge.

1.1.2 Photo Rendering

Inserting the completed SketchUp model into 2 images of the existing site conditions. The proposed images can be selected by the CITY and are expected to be one elevation view of the bridge over of US 40 and one view along the proposed sidewalk/bridge.

Task 9.1 – Bridge Lighting

Lighting plans will be developed for the bridge that add both decorative lighting to the features of the bridge as well as safety lighting for the users of the bridge. The lighting selected will meet the following assumptions:

- Assume that electric power can easily be obtained.
- Assume pedestrian lighting levels will be required.
- A total of 6 decorative lights will be include (2 at the south end bent, 2 at the intermediate bent, and 2 at the north end bent.)
- Additional lighting required for the safety will be installed in the bridge parapets.
- Assume a control cabinet and metered service will be required.

II. PROJECT TIME SCHEDULE

The CONSULTANT shall complete the work described in the AGREEMENT within the overall timeframe of the CONTRACT.

III. SUPPLEMENTAL AGREEMENT FEE SCHEDULE

Estimated manhours and fee (including direct costs) by task are as follows:
For a more detailed list of items, see Exhibit B, attached.

<u>TASK</u>	<u>PROJECT PHASE</u>	<u>BUDGET</u>	<u>HOURS</u>
	CONTRACT TOTAL	\$ 281,673	2,243
1.1	PROJECT RENDERING	\$ 1,623	15
9.1	BRIDGE LIGHTING	\$ 12,244	88
	TOTAL including SA #1	\$ 295,540	2,346

Estimated manhours and hourly rates by discipline for Supplemental Agreement #1 are as follows:

<u>PERSONNEL CLASSIFICATION</u>	<u>ESTIMATED MANHOURS</u>	<u>HOURLY RATE</u>
Principal in Charge	0	\$ 225.00
Senior Project Manager	15	\$ 185.00
Senior Project Engineer	36	\$ 171.00
Project Engineer	0	\$ 125.00
Staff Engineer (Roadway)	0	\$ 96.00
Staff Engineer (Bridge)	24	\$ 89.00
Senior Engineering Technician	28	\$ 100.00
Administrative Assistant	0	\$ 60.00
Senior Designer (Volz)	0	\$ 85.00
Right-of-Way Agent (Volz)	0	\$ 100.00
Administrative Assistant (Volz)	6	\$ 40.00
CAD Technician I (Volz)	0	\$ 60.00
Professional Land Surveyor (Volz)	0	\$ 90.00
Survey Crew (Volz)	0	\$ 135.00
Project Manager (Geotechnology)	0	\$ 155.00
Senior Project Engineer (Geotechnology)	0	\$ 110.00
Staff Engineer (Geotechnology)	0	\$ 80.00
CAD Technician (Geotechnology)	0	\$ 60.00
Project Administrator (Geotechnology)	0	\$ 55.00
Drill Crew (Geotechnology)	0	\$ 150.00

IV. SUBCONSULTANTS

The CONSULTANT does not plan to have subconsultants complete the work included in this AGREEMENT.

HOWARD R. GREEN COMPANY: PROJECT BUDGETING WORKSHEET

PROJECT NAME: Chesterfield Parkway Pedestrian Bridge - SA#1
 PROJECT NUMBER: 75100005
 CLIENT: City of Chesterfield
 CLIENT CONTACT: Ben Niesen
 PROJECT MANAGER: David Maxwell

EXHIBIT B

Phase/ Task	DESCRIPTION OF TASK	Task Start Date	Task End Date	Resource Allocation																				EXPENSES				
				PIC	SR PROJ MGR	SR PROJ ENG	PROJ ENG	ROAD STAFF ENG	BRG STAFF ENG	SR. ENG TECH	SR DESIG N	ROW AGENT	ADM ASST	CAD TECH I	PROF LAND SURV	TWO PER CREW	PROJ MGR	SR PROJ ENG	STAFF ENG	CADD TECH	PROJ ADMIN	DRILL CREW	ADM ASST	Mileage Auto Unit	Mileage Auto Total	Mileage Survey Units	Mileage Survey Total	Per Diem Total
TOTAL HOURS				22	334	282	286	262	256	504	16	20	6	90	50	84	5	27	20	28	5	20	30					
COST PER HOUR/UNIT (CHARGE-OUT RATE)				4950	61790	48222	35750	25152	22784	50400	1360	2000	240	5400	4500	11340	697.5	2970	1600	1680	247.5	3000	1800	0.505		0.80		0%
TOTAL LABOR COST				1.7%	20.9%	16.3%	12.1%	8.5%	7.7%	17.1%	0.5%	0.7%	0.1%	1.8%	1.5%	3.8%	0.2%	1.0%	0.5%	0.6%	0.1%	1.0%	0.6%					
% OF TOTAL COST																												
1	PROJECT MANAGEMENT AND ADMIN	04/01/10		4	44	6	2	2	2																			
1.1	PROJECT RENDERING				3				12																			
	Prepare Sketch-up Model				1				8																			
	Insert Model into Photos (2 images)				2				4																			
2	SURVEY / DATA COLLECTION (SUB)	04/01/10	05/14/10								16		3	90	45	84												
3	CONCEPT DESIGN	04/01/10	05/14/10	1	22		42		24	24																		
4	PRELIM BRIDGE & SIDEWALK DESIGN	05/14/10	07/16/10	5	28	24	26	40	24	42																		
5	FINAL DESIGN, MINIMUM	07/16/10	12/31/10	10	149	176	150	204	110	316																		
6	FINAL DESIGN, CITY AUTHORIZED OPTION	07/16/10	12/31/10	2	52		66		72	76																		
7	TEMPORARY EASEMENT ACQUISITION	10/18/10	02/15/11									20	3		5													
8	FINAL GEOTECHNICAL DESIGN (SUB)	07/16/10	10/18/10														5	27	20	28	5	20						
9	STREET LIGHTING	07/16/10	12/31/10		8	24		16		16																		
9.1	BRIDGE LIGHTING				12	36			12	28																		
	Lighting Design				8	24																						
	Lighting Details				4	12			12	28																		
10	BIDDING SERVICES	TBD	TBD		16	16																						