SUPPLEMENTAL AMENDMENT NO. 7

TO

CONTRACT FOR PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

CITY OF BILLINGS WORK ORDER #02-10

FOR

CM 1099(32), 6th Avenue North to Bench Boulevard, CN 4553

THIS AGREEMENT made and entered into on _____, 2010, by and between the following:

CITY OF BILLINGS, a Municipal Corporation,
Billings, Montana 59103
Hereinafter designated the CITY

and

Morrison-Maierle, Inc.
315 N. 25th Street
Suite 102
Billings, MT 59101
Hereinafter designated the CONSULTANT

WITNESSETH:

WHEREAS, the CITY and CONSULTANT have entered into a contract dated February 10, 2003, for CONSULTANT to provide engineering services to CITY for design engineering of certain improvements for the project referenced above; and

WHEREAS, the contract was modified by Supplemental Amendment #1 in May 2003 to account for costs associated with Subsurface Utility Engineering and air quality assessment; and

WHEREAS, the contract was modified by Supplemental Amendment #2 in July 2005 to account for costs related to evaluation of numerous alternatives for the referenced project, including but not limited to various ramp configurations, grade separations, roundabouts, and a number of traffic control alternatives; and

WHEREAS, the contract was modified by Supplemental Amendment #3 in July 2005 to account for costs related to a detailed operational review of roundabout options for the project, evaluation of Main Street / 6th Avenue North intersection options,

including but not limited to an at-grade intersection, modified diamond, and single point urban interchange, and consideration of re-alignments of 4th Avenue North, west of Main Street; and

WHEREAS, the contract was modified by Supplemental Amendment #4 in May 2006 to develop a new Alignment Review package incorporating changes to certain project features / modifications in an effort to bring the project's scope and impact back in-line with original expectations; and

WHEREAS, the contract was modified by Supplemental Amendment #5 in June 8, 2009 to develop additional engineering services for a detailed design for the 6th Ave. N to Bench Blvd - Billings, Phase 1 project.; and

WHEREAS, the contract was modified by Supplemental Amendment #6 in September 10, 2010 to develop additional appraisal services for the right-of-way acquisition for the 6th Ave. N to Bench Blvd - Billings, Phase 1 project.; and

WHEREAS, the CITY has requested additional design services for a pedestrian underpass crossing Bench Boulevard for the 6th Ave. N to Bench Blvd - Billings, Phase 1 project.

WHEREAS, the costs and expenses of these additional engineering services are identified on Attachment A, dated October 1, 2010; and

WHEREAS, the CONSULTANT represents that he is qualified to perform such services, is in compliance with the Montana Statutes relating to the registration of professional engineers, and is willing to furnish such services to the CITY; and

WHEREAS, the CITY has the authority to contract for consulting engineering services.

NOW, THEREFORE, in consideration of the terms, conditions, covenants and performance contained herein, or attached and incorporated herein, the Parties hereto agree as follows:

1. This amendment increases the total contract by $89,803.00. Modify Part I, Section 4B. Compensation, Subpart A.

   From:

   Total payment to the Consultant for the work covered under this Agreement will not exceed **One Million Two Hundred Thirty-Seven Thousand Twenty-Five Dollars and no/100 ($1,237,025.00).**

   To:

Total payment to the Consultant for the work covered under this Agreement will not exceed **One Million Three Hundred Twenty-Six Thousand Eight Hundred Twenty-Eight Dollars and no/100 ($1,326,828.00).**

All other terms and conditions of the contract to which this Supplemental Amendment applies shall remain in full effect.

MORRISON-MAIERLE, INC.

NAME: Carl J. Anderson, P.E.

BY: _____

TITLE: Vice President

DATE: _____

CITY OF BILLINGS, MONTANA

BY: _____

ITS: _____

DATE: _____

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

EXHIBIT A

SCOPE OF WORK

Project Title: Pedestrian Underpass

MT-CM 1099(32)

6th Avenue North to Bench Boulevard

CN 4553

General Project Description:

As a Bidding Alternative, the project proposes to provide an ADA compliant pedestrian underpass access to the Metra Auto Plaza main entrance serving parking areas north of the new Bench Boulevard alignment as designed with the overall project. The initial alignment begins at a point on the existing maintenance road progressing southeast to, and under Bench Boulevard (approx Sta 110+00) to a common landing serving a ramp and stairs that terminate at grade and within a short distance of the Metra's primary front access.

The project includes clearing, grubbing and excavation of up to approximately 3,500-4,000 CY of material excavated from the proposed access alignment to be constructed as a component of the overall project. The initial underpass proposal is to use precast concrete box culvert sections with inside measurements of 14' wide by 10' tall.

The resulting components include an estimated 600+ linear feet of concrete retaining walls, concrete landings, ADA concrete ramp access, sidewalk, handrails, and concrete stairs. It is also anticipated that current design modifications will include vertical & horizontal realignment of the storm drain design within the affected area, accommodation of pedestrian access to the bus turnout as a result of the concrete ramp, and modifications to the parking area surface at the terminus of the underpass stair and ramp components.

Specific Work Elements:

1. Design Phase

A. ***Design Options Meeting.*** A pre-design meeting following City Council approval will be held with Engineering staff and other stakeholders to allow the Consultant to propose project options and hear concerns of all agencies and partners.

B. ***Collect Additional Topographic Data***

Additional topographic data and underground utility locate information is to be collected as needed to accommodate extents of proposed underpass location(s). An outside subcontractor (previously contracted on project) will be utilized for underground utility data collection.

C. *Additional Geotechnical Boring Analysis*

Due to the known presence of bedrock and poor fill materials, further geotechnical investigation is required within the immediate area of the proposed underpass. An outside subcontractor (previously contracted on project) will be utilized for geotechnical analysis.

Final Plan Preparation

This activity will include the preparation of the final plans for the Bench Pedestrian Underpass Project activities defined in the Consultant Users Manual & Activity Descriptions for Final Plan Preparation. The following will be included and assumed under this activity:

- Revisions to all plans and design based on review comments received from the City of Billings and MDT's Consultant Design Bureau.
- Submit Final cost estimate and plan set for the Pedestrian Underpass as a separate element and as a Bid Alternative to the overall project. Original approved project design plans remain intact.
- Submittal of 100-percent plans, special provisions and electronic files for inclusion/substitution within the overall construction plan set.
- Expedited agency review durations to allow inclusion of plan set into the overall project for bid and advertising during the agreed-upon MDT letting schedule.

General Exclusions

To contain costs in the performance of the Final Plan Preparation, certain assumptions are employed. The assumed exclusions are as follows:

- Due to the nature of the pedestrian underpass, revisions to the Environmental Document, Final Hydraulic Report, and Scope Of Work Report are not anticipated nor proposed.
- Associated changes in the Right-of-Way for the pedestrian underpass are not anticipated or reflected within the project scope.

Roadway Design Component

This activity includes the preparation of plans and related information for the Final construction plan submittal. The following will be included under this activity:

- Modify existing construction plan sheets to accommodate underpass design and create new sheets as needed with respect to the new structure
- Prepare special provisions
- Prepare construction cost estimate of current design with underpass design

The following assumptions are made regarding the underpass roadway component:

- Underpass plan set as a stand-alone group (additive alternate for bidding purposes) that augments the overall approved project design plans
- Construction scheduling constraints same as overall project regarding Metra event venue
- Design effort includes incorporation of safety lighting within the underpass structure
- Current affected parking surface is to be replaced at grade without changes to overall grading
- 10' wide sidewalk component for immediate access to the underpass structure only

Roadway Design Exclusions

The following exclusions are made regarding the current design:

- It is assumed that additional parking area lighting is not required
- Design for adjoining sidewalk or trail connections beyond the immediate connection to the underpass access is not included
- Additional pedestrian signing is not considered within this scope

Structure Design Component

This activity will include the preparation of the pedestrian underpass plans for inclusion into the Construction plan set. The following will be included in this activity:

- Perform box culvert layout for a Standard precast concrete box culvert meeting the requirements of AASHTO M 259 or AASHTO M 273 with no specific structural design.
- Cast-in-place concrete headwall, wingwalls, and retaining walls with minimal aesthetic treatments. Aesthetics are expected to be similar to proposed upper lot walls (possibility as integral colored concrete only).
- Where required, simple coated chain link fencing that is similar to proposed upper parking lot fence protection.
- Painted steel two rail hand rails where open access and painted single hand rail against walls

Structure Design Exclusions

The following exclusions are made regarding the current design:

- It is assumed that miscellaneous utility structures are not required for this component.

- No accommodation for a “switch-back” type ADA access ramp is made for the Metra-side underpass entrance, which requires extensive retaining wall effort beyond typical retaining wall design.

Deliverables

The Consultant will submit seven (7) 11x17 hard copy sets of the construction plans, profiles and details to MDT’s Consultant Design Bureau and the Billings City Engineering Department by December 16, 2010. Submittal plans will include:

- Underpass tunnel plans and profiles
- Underpass structural details
- Underpass site plan
- Miscellaneous Details
- Utility Plan Update
- Special Provisions
- Standard MDT Construction Cost Estimate
- Electronic files, as appropriate

PROJECT: 6th To Bench Connector-PEDESTRIAN UNDERPASS **DATE: October 1, 2010**

CONTROL NO: 4553 **EST. PREPARED BY: MMI** **WORK TYPE: Reconstruction**

DESIGN ACTIVITIES

Activity	Tasks	Total Hours	Principal	Proj. Mgr.	Proj. Eng.	Design Eng.	CADD Tech.	Survey Crew	Clerc.
	ROAD PLAN PREPARATION								
	Plans Preparation	284	2	13	49	116	96	8	0
	Structural Design	223	0	17	4	130	72	0	0
	Modify existing Roadway Plan Sheets	63	0	3	6	20	34	0	0
	Special Provisions, Quality Control,	32	16	0	16	0	0	0	0
	Agency Plan Review & Submittal	48	0	0	16	20	8	0	4
	Meetings / Correspondence	60	0	0	8	44	8	0	0
	SUBTOTAL (HOURS)	**710**	**18**	**41**	**135**	**294**	**210**	**8**	**4**
	STORM DRAIN DESIGN								
	Storm Drain Design (362)	35	0	2	12	5	16	0	0
	Design Options Meeting Prep	8	0	0	6	0	2	0	0
	2. Compute Runoff into Sidewalk Landings	11	1	0	6	0	4	0	0
		0							
	SUBTOTAL (HOURS)	**54**	**1**	**2**	**24**	**5**	**22**	**0**	**0**

COST SUMMARY

PROJECT: 6th To Bench Connector **DATE: October 1, 2010**

CONTROL NO: 4553 **EST. PREPARED BY: MMI** **WORK TYPE: Reconstruction**

		Hours		Rate			Extension
	Principal	19		45.50			865
	Project Manager	43		40.55			1,744
	Project Engineer	159		33.40			5,311
	Design Engineer	299		26.10			7,804
	CADD/Designer	232		23.80			5,522
	Survey Crew	8		47.70			382
	Clerical	4		18.70			75
	TOTAL HOURS	764					
				LABOR SUBTOTAL			21,701
	GENERAL OVERHEAD @ 1.6461			OVERHEAD SUBTOTAL			35,721
			TOTAL LABOR/OVERHEAD				**$57,422**

DIRECT NONLABOR

	Miscellaneous (Blueline prints, mylars, multilith paper, telephone, postage, misc. equipment rental, maps, photos, survey mtls., display boards, etc.)					3,820
	Title Memos	Parcels	$ 200.00	Per Parcel		0
	Mileage 750	Miles	$ 0.70	Per Mile		525
	Per Diem 4	Trips	$ 65.00	Per Day		260
	GPS Rental 1	Days	$ 180.00	Per Day		180
	Level Instrument Rental	Days	$ 20.00	Per Trip		0
	Robotic Total Station	Days	$ 180.00	Per Day		0
	Other					0
				TOTAL DIRECT NONLABOR		**$4,785**

OUTSIDE SERVICES AND SUBCONTRACTS

	R/W Appraisals, Negotiation & Acquisition	
	SK Geotechnical - Soils/Geotechnical Survey/Report Revisions	12,902
	Cultural Resource Studies/Report	
	Noise Study	
	Traffic Study/Report	
	Biological Resources Studies/Report	
	Surveys	
	UMS - Subsurface Utility Engineering (Phase I)	7,804
	Hazardous Materials (Initial Site Assessment)	
	Landscaping Plans	
	Electrical/Lighting Signalization etc.	
	Aerial Photography/Mapping	
	Other	
	TOTAL OUTSIDE SERVICES AND SUBCONTRACTS	**$20,706**

RECAPITULATION

	Total Labor/ Overhead	57,422
	Total Direct Non Labor	4,785
	Total Outside Services & Subcontracts	20,706
	Profit (12%)	6,890
	TOTAL ESTIMATED COST	**$89,803**

Roadway Design Summary

	Total Hours	Principal/ PM	Sr.Trans/ Bridge Eng.	Proj. Eng.	Design Eng.	CADD Tech.	Survey Crew	Clerc.
Plans Preparation								
a. Survey Sheets	0							
b. Summary Sheets	18		2	8	8			
c. Title/Note sheets	3			1		2		
d. Detail Sheets (All inclusive)	90		2	8	40	40		
e. Plan and Profile Sheets	28			4	8	16		
f. Retaining Wall Layout	12				4	8		
g. Grading Plans/Erosion Control Plan	18				16	2		
h. Tunnel Safety Lighting Analysis	12			8		4		
i. Tunnel Lighting Design	20			4	8	8		
h. Internal Review(Q/C) & Revisions	24		8	8	8			
i. Cost Estimate	10	2		8				
j. Pick-up surveys/Revise strip map	25		1		16		8	
k. New cross sections	24				8	16		
SUBTOTAL (HOURS)	284	2	13	49	116	96	8	0
Structural Design								
Perform Preliminary Structural Layout								
a. Pedestrian Underpass Box Culvert	22		2	4	8	8		
b. Retaining walls	124		4		80	40		
c. Wing walls	16				8	8		
d. Head walls	26		2		16	8		
Railing and Barrier Details								
a. Pedestrian Underpass/Bus Turnout sidewalk bridge	18		2		8	8		
Aesthetic Treatments								
b. Railing	5		1		4			
b. Retaining walls	6		2		4			
c. Wing walls	4		2		2			
Quality Control Review-Structural	2		2					
SUBTOTAL (HOURS)	223	0	17	4	130	72	0	0
Modify existing Roadway Plan Sheets								
1) guardrail calcs/drawing revision	5		1	4				
2) Summary Frame revisions	6				4	2		
3) Storm P&P	10		2			8		
4) Bus Turn Out Detail	10			2	4	4		
5) Asphalt & Curb Removal, New Curb Detail	8				4	4		
6) Modify Ex. Cross sections	24				8	16		
SUBTOTAL (HOURS)	63	0	3	6	20	34	0	0
Special Provisions	20	4		16				
	0							
Quality Control Review	12	12						
	0							
	0							
SUBTOTAL (HOURS)	32	16	0	16	0	0	0	0
Agency Plan Review & Submittal								
Revise Plans after Review	20			4	8	8		
Re-Submittal	12			4	4			4
Coordinate CoB & MDT Consultant Design Comments	16			8	8			
	0							
SUBTOTAL (HOURS)	48	0	0	16	20	8	0	4
Meetings / Correspondence								
a. Design Options Meeting/Prep	28		8	12	8			
b. Project Management & Coordination	32			32				
	0							
SUBTOTAL (HOURS)	60	0	8	44	8	0	0	0
TOTAL ACTIVITY 134	710	18	24	131	164	138	8	4

Storm Design

		Total Hours	Principal/ PM	Sr.Trans/ Bridge Eng.	Proj. Eng.	Design Eng.	CADD Tech.	Survey Crew	Clerc.
Task:	**Storm Drain Design (362)**								
	1. Develop:	0							
	a. runoff patterns	0							
	b. compute runoff	0							
	c. compute gutter capacities	0							
	2a. Develop plans showing:	0							
	a. exisiting groundlines and utilities	6			4		2		
	b. proposed finished roadway grades	0							
	c. type, size, spacing of inlets	0							
	d. trunk-lines and grades (new alignment)	22		2	8		12		
	e. pedestrian underpass drains	6				4	2		
	f. sediment basin	0							
	g. details and special provisions	0							
	2b. Coordinate w/ Road Design and City	0							
	3. Identify utility conflicts	1				1			
	4. Final Hydraulics Report	0							
	5. Preliminary Storm Drain Agreement w/ City	0							
	6. Check inlets for ADA compatibility	0							
	SUBTOTAL (HOURS)	35	0	2	12	5	16	0	0
Task:	**Scoping Meeting**								
	Design Options Meeting Prep	8			6		2		
	SUBTOTAL (HOURS)	8	0	0	6	0	2	0	0
Task:	**Size Box or Pipe Culverts (364)**								
	1. Layout survey information	0							
	2. Compute Runoff into Sidewalk Landings	4			2		2		
	3. Analyze Historic Flood Data, existing structures	0							
	4. Analyze structures	0							
	a. Evaluate flood risks (surcharge conditions)	3	1		2				
	b. Evaluate costs	2			2				
	c. Evaluate constraints	0							
	d. Prepare Water Surface Profiles	0							
	5. Obtain additional survey data	0							
	6. Review structural requirements	0							
	7. Hydraulic Data Summary Sheet mods	2					2		
	8. Develop details for fish passage/specialty items	0							
	9. Prelimianary Submittal to DFWP (if necessary)	0							
	10. Soil resistivity/pH and pipe life design	0							
	SUBTOTAL (HOURS)	11	1	0	6	0	4	0	0
	TOTAL ACTIVITY 172	54	1	2	24	5	22	0	0