



February 24, 2015

Robert S. Priestas, PE
City of Gahanna
City Engineer's Office
200 South Hamilton Rd.
Gahanna, OH 43230

**RE: Carpenter Road Bridge Replacement
Revised Cost Proposal**

Mr. Priestas:

URS is pleased to submit two (2) copies of the revised cost proposal for the Carpenter Rd. Bridge Replacement. The revised proposal, which replaces the proposal dated January 26, 2015, includes detailed hours, cost, directs, scope narrative, and project schedule.

The cost proposals for the three (3) sub-consultants are included in the Appendices.

Should you have any questions, please call me at 614-600-5945.

We look forward to working with you on this project.

Very truly yours,

URS Corporation - Ohio

A handwritten signature in blue ink, appearing to read "James A. Hamilton".

James A. Hamilton, P.E.
Project Manager

Enclosures

cc: Jay Muether, URS
Central Files

**COST PROPOSAL
CARPENTER RD. BRIDGE REPLACEMENT**

TABLE OF CONTENTS

COST SUMMARY.....	1
PROPOSED COST BY TASK.....	2
PROPOSED HOURS BY TASK.....	4
NON-LABOR DIRECT COST DETAIL.....	6
PROJECT NARRATIVE.....	7
ATTACHMENT A – Preliminary Site Plan by Watcon provided by City of Gahanna	
PROJECT SCHEDULE	

INDEX TO SUBCONSULTANT PROPOSALS

APPENDIX A – CW Design Group Proposal

APPENDIX B – S&ME Proposal

APPENDIX C – Lawhon & Associates Proposal

**Carpenter Rd. Bridge Replacement
City of Gahanna
Cost Summary**

Proposal Date: 24-Feb-15

<i>Task</i>	<i>Cost</i>
<i>BASIC SERVICES</i>	
Field Survey	\$2,145
Subsurface Investigation	\$9,300
Environmental Documentation & Permitting	\$7,330
Floodplain/FEMA Hydraulic Analysis	\$9,974
Develop Stages 2 & 3 Design	
Stage 2 Design	\$26,420
Stage 3 Design	\$6,386
Coordination with Utilities	\$657
Total Stages 2 & 3 Design	\$33,463
Prepare Final Plan Package	\$2,988
Project Administration & Coordination	\$4,773
<i>TOTAL BASIC SERVICES</i>	\$69,973

L	M	N	O	P	Q	R	S	T	U
1	ENGINEERING AND TECHNICAL SERVICE COST PRICE PROPOSAL								
2	AND LABOR RATES FOR								
3	Carpenter Rd. Bridge Replacement								
4	City of Gahanna								
5									
6	CONSULTANT: URS Corporation					Proposal Date:		24-Feb-15	
7									
8						Overhead Percentage =		140.00%	
9						Net Fee Percentage =		11.00%	
10									
11	BASIC SERVICES								
12									
13									
14	Task Description	Hourly Rate	Total Hours	Labor Costs	Overhead Costs	Direct Costs	Subcon Costs	Net Fee	Total Cost
15	Field Survey								
16	Field Survey by CW Design Group	#DIV/0!	0	\$0	\$0	\$0	\$2,145	\$0	\$2,145
17	Coordination w/ CW Design	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
18	QA/QC Survey	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
19									
20	Subtotal Field Survey	#DIV/0!	0	\$0	\$0	\$0	\$2,145	\$0	\$2,145
21									
22	Subsurface Investigation								
23	Subsurface Investigation by S&ME	#DIV/0!	0	\$0	\$0	\$0	\$9,300	\$0	\$9,300
24	Coordination w/ S&ME	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
25	QA/QC Geotechnical Report	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
26									
27	Subtotal Subsurface Investigation	#DIV/0!	0	\$0	\$0	\$0	\$9,300	\$0	\$9,300
28									
29	Environmental Documentation & Permitting								
30	Environmental Services performed by Lawhon & Assoc.		0	\$0	\$0	\$0	\$7,330	\$0	\$7,330
31	Coordination w/ Lawhon & Assoc.		0	\$0	\$0	\$0	\$0	\$0	\$0
32									
33	Subtotal Environ. Documentation & Permitting		0	\$0	\$0	\$0	\$7,330	\$0	\$7,330
34									
35	Floodplain/FEMA Hydraulic Analysis								
36	Data Collection (FIS Study and Data, existing mapping, project basemaps, etc.)	\$37.00	6	\$222	\$311	\$50	\$0	\$64	\$647
37	Prepare Base Mapping for HEC-Ras and Exhibits (existing project survey, stream cross sections, GIS, etc.)	\$32.60	10	\$326	\$456	\$0	\$0	\$86	\$868
38	Effective Model (review FEMA Library, HEC-2 printouts assumed)	\$38.33	12	\$460	\$644	\$500	\$0	\$176	\$1,780
39	Duplicate Effective Model (N/A - hand entry into HEC-RAS rather than HEC-2 assumed)	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
40	Corrected Effective Model (HEC-RAS hand entry)	\$40.33	6	\$242	\$339	\$0	\$0	\$64	\$645
41	Site Visit	\$35.00	4	\$140	\$196	\$19	\$0	\$39	\$394
42	Pre-Project / Existing Condition Model	\$38.33	6	\$230	\$322	\$0	\$0	\$61	\$613
43	Post-Project Condition Model 1 - Final Design	\$38.33	6	\$230	\$322	\$0	\$0	\$61	\$613
44	Final Results - Memorandum	\$40.50	12	\$486	\$680	\$0	\$0	\$128	\$1,294
45	Floodplain Permit - Coordination Meeting 1	\$45.00	4	\$180	\$252	\$9	\$0	\$49	\$490
46	0	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
47	Bridge Scour Analysis - Quantitative - HEC-RAS Model	\$37.50	8	\$300	\$420	\$0	\$0	\$79	\$799
48	Scour and Slope Protection Recommendations	\$39.00	6	\$234	\$328	\$0	\$0	\$62	\$624
49	Temporary Access Fill Documentation (Hydraulic Analysis - OHW Discharge, Elevation, Permit Checklist)	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
50	404 Permit Documentation Support - (Temporary and Permanent Impacts below OHW Elevation (cut /fill quantities, etc.))	\$35.40	5	\$177	\$248	\$0	\$0	\$47	\$472
51	Preliminary Results - Memorandum with CD-ROM Documentation & Appendix	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
52	No Rise Certification	\$40.00	2	\$80	\$112	\$0	\$0	\$21	\$213
53	Floodplain Permit - (City Application Form)	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
54	QA/QC Report	\$48.00	4	\$192	\$269	\$0	\$0	\$51	\$512
55	Floodplain Permit - Coordination Meeting 2	#DIV/0!	0	\$0	\$0	\$9	\$0	\$1	\$10
56									
57	Subtotal Floodplain/FEMA Hydraulic Analysis	\$38	91	\$3,499	\$4,899	\$587	\$0	\$989	\$9,974
58									
59	Develop Stages 2 & 3 Design								
60	Stage 2 Design								
61	Roadway Plans								
62	Title Sheet	\$34.25	8	\$274	\$384	\$0	\$0	\$72	\$730
63	Typical Sections	\$33.75	8	\$270	\$378	\$0	\$0	\$71	\$719
64	General Notes	\$33.38	16	\$534	\$748	\$0	\$0	\$141	\$1,423
65	Plan & Profile (Blank Q. table, storm sewer, waterline, TC)	\$36.54	70	\$2,558	\$3,581	\$0	\$0	\$675	\$6,814
66	Roadway Cross Sections (including drive)	\$33.17	24	\$796	\$1,114	\$0	\$0	\$210	\$2,120
67	Misc. Details (waterline stds.)	\$34.14	7	\$239	\$335	\$0	\$0	\$63	\$637
68									
69	Traffic Control (Signing & Striping on Roadway Plan)	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0
70									
71	Drainage								
72	Storm sewer calculations	\$39.00	10	\$390	\$546	\$0	\$0	\$103	\$1,039
73	SWPPP and Erosion Control Notes	\$34.67	12	\$416	\$582	\$0	\$0	\$110	\$1,108
74									
75	Maintenance of Traffic Plans								
76	Detour Plan & Notes	\$34.25	16	\$548	\$767	\$0	\$0	\$145	\$1,460
77									

	L	M	N	O	P	Q	R	S	T	U
1	ENGINEERING AND TECHNICAL SERVICE COST PRICE PROPOSAL									
2	AND LABOR RATES FOR									
3	Carpenter Rd. Bridge Replacement									
4	City of Gahanna									
5										
6	CONSULTANT: URS Corporation					Proposal Date: 24-Feb-15				
7										
8						Overhead Percentage = 140.00%				
9						Net Fee Percentage = 11.00%				
10										
11	BASIC SERVICES									
12										
13										
14	Task Description	Hourly Rate	Total Hours	Labor Costs	Overhead Costs	Direct Costs	Subcon Costs	Net Fee	Total Cost	
78	Culvert Plans									
79	Culvert Site Plan & Profile (and mini stream sections)	\$36.47	53	\$1,933	\$2,706	\$0	\$0	\$510	\$5,149	
80	General Notes & Blank Est. Q. Table	\$35.40	10	\$354	\$496	\$0	\$0	\$94	\$944	
81	Foundation Layout Plan Geometrics for precast items	\$34.14	14	\$478	\$669	\$0	\$0	\$126	\$1,273	
82	SW Wing Wall Elevation & Sections	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0	
83	Wing Wall Elevations & Geometrics for precast items	\$34.33	18	\$618	\$865	\$0	\$0	\$163	\$1,646	
84										
85	Waterline Plans	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0	
86										
87	Construction Cost Estimate	\$40.00	2	\$80	\$112	\$0	\$0	\$21	\$213	
88	Stage 2 QA/QC Review	\$45.00	5	\$225	\$315	\$0	\$0	\$59	\$599	
89	Stage 2 Submittal	\$44.00	4	\$176	\$246	\$70	\$0	\$54	\$546	
90	Subtotal Stage 2 Design		277	\$9,889	\$13,844	\$70	\$0	\$2,617	\$26,420	
91										
92	Stage 3 Design									
93	General Summary	\$39.36	22	\$866	\$1,212	\$63	\$0	\$235	\$2,376	
94	MOT Quantities	\$33.00	4	\$132	\$185	\$0	\$0	\$35	\$352	
95	Traffic Control Quantities	\$33.00	4	\$132	\$185	\$0	\$0	\$35	\$352	
96	Bridge Quantity Calcs	\$34.33	18	\$618	\$865	\$0	\$0	\$163	\$1,646	
97	Waterline Quantities	#DIV/0!	0	\$0	\$0	\$0	\$0	\$0	\$0	
98	Construction Cost Estimate	\$37.00	6	\$222	\$311	\$0	\$0	\$59	\$592	
99	Stage 3 QA/QC Review & Stage 3 Submittal	\$44.56	9	\$401	\$561	\$0	\$0	\$106	\$1,068	
100	Subtotal Stage 3 Design		63	\$2,371	\$3,319	\$63	\$0	\$633	\$6,386	
101										
102	Coordination with Utilities	\$31.00	6	\$186	\$260	\$146	\$0	\$65	\$657	
103										
104	Subtotal Stages 2 & 3 Design		346	\$12,446	\$17,423	\$279	\$0	\$3,315	\$33,463	
105										
106	Prepare Final Plan Package									
107	Submittal of Final Deliverables									
108	Submittal of Final Tracings	\$38.54	26	\$1,002	\$1,403	\$31	\$0	\$268	\$2,704	
109	Electronic Files on CD	\$31.00	1	\$31	\$43	\$0	\$0	\$8	\$82	
110	Final Construction Cost Estimate	\$38.00	2	\$76	\$106	\$0	\$0	\$20	\$202	
111										
112	Subtotal Submittal of Final Deliverables		29	\$1,109	\$1,552	\$31	\$0	\$296	\$2,988	
113										
114	Project Administration & Coordination									
115	Project Administration & Coordination	\$57.00	24	\$1,368	\$1,915	\$20	\$0	\$363	\$3,666	
116	Project Meetings (1 total)	\$51.00	8	\$408	\$571	\$18	\$0	\$110	\$1,107	
117										
118	Subtotal Project Admin. & Coordination		32	\$1,776	\$2,486	\$38	\$0	\$473	\$4,773	
119										
120	TOTAL BASIC SERVICES		498	\$18,830	\$26,360	\$935	\$18,775	\$5,073	\$69,973	
121										
122										

	A	B	C	D	E	F	G	H	I	J	K
1	DETAILED BREAKDOWN OF PROPOSED TOTAL HOURS, PERSONNEL CATEGORIES,										
2	AND LABOR RATES FOR										
3	Carpenter Rd. Bridge Replacement										
4	City of Gahanna										
5	Proposal Date: 24-Feb-15										
6	CONSULTANT: URS Corporation										
7					Proj Mgr	\$57.00					
8					Senior Engineer	\$45.00		Sr. CAD Tech	\$31.00		
9					Engineer	\$35.00		ESA Spec.	\$29.00		
10					Ecologist	\$25.00		Clerical/Admin/Acct	\$16.00		
11	BASIC SERVICES										
12											
13											
14	Task Description	No. Sheets	Proj Mgr	Senior Eng.	Eng.	Sr. CAD Tech	Eco/CR Tech	ESA Spec.	Clerical & Admin.	Overall Total Hours	Labor Costs
15	Field Survey										
16	Field Survey by CW Design Group									0	\$0
17	Coordination w/ CW Design									0	\$0
18	QA/QC Survey									0	\$0
19											
20	Subtotal Field Survey	0	0	0	0	0	0	0	0	0	\$0
21											
22	Subsurface Investigation										
23	Subsurface Investigation by S&ME									0	\$0
24	Coordination w/ S&ME									0	\$0
25	QA/QC Geotechnical Report									0	\$0
26											
27	Subtotal Subsurface Investigation	0	0	0	0	0	0	0	0	0	\$0
28											
29	Environmental Documentation & Permitting										
30	Environmental Services performed by Lawhon & Assoc.									0	\$0
31	Coordination w/ Lawhon & Assoc.									0	\$0
32											
33	Subtotal Environ. Documentation & Permitting	0	0	0	0	0	0	0	0	0	\$0
34											
35	Floodplain/FEMA Hydraulic Analysis										
36	Data Collection (FIS Study and Data, existing mapping, project basemaps, etc.)			2	2	2				6	\$222
37	Prepare Base Mapping for HEC-Ras and Exhibits (existing project survey, stream cross sections, GIS, etc.)				4	6				10	\$326
38	Effective Model (review FEMA Library, HEC-2 printouts assumed)			4	8					12	\$460
39	Duplicate Effective Model (N/A - hand entry into HEC-RAS rather than HEC-2 assumed)									0	\$0
40	Corrected Effective Model (HEC-RAS hand entry)		1	1	4					6	\$242
41	Site Visit				4					4	\$140
42	Pre-Project / Existing Condition Model			2	4					6	\$230
43	Post-Project Condition Model 1 - Final Design			2	4					6	\$230
44	Final Results - Memorandum	2	3	5	2					12	\$486
45	Floodplain Permit - Coordination Meeting 1			4						4	\$180
46										0	\$0
47	Bridge Scour Analysis - Quantitative - HEC-RAS Model			2	6					8	\$300
48	Scour and Slope Protection Recommendations	1	1	2	2					6	\$234
49	Temporary Access Fill Documentation (Hydraulic Analysis - OHW Discharge, Elevation, Permit Checklist)									0	\$0
50	404 Permit Documentation Support - (Temporary and Permanent Impacts below OHW Elevation (cut /fill quantities, etc.))			1	2	2				5	\$177
51	Preliminary Results - Memorandum with CD-ROM Documentation & Appendix									0	\$0
52	No Rise Certification			1	1					2	\$80
53	Floodplain Permit - (City Application Form)									0	\$0
54	QA/QC Report	1	3							4	\$192
55	Floodplain Permit - Coordination Meeting 2									0	\$0
56											
57	Subtotal Floodplain/FEMA Hydraulic Analysis	5	26	46	14	0	0	0	0	91	\$3,499
58											
59	Develop Stages 2 & 3 Design										
60	Stage 2 Design										
61	Roadway Plans										
62	Title Sheet	1		1	3	4				8	\$274
63	Typical Sections	1		1	2	5				8	\$270
64	General Notes	2		1	6	9				16	\$534
65	Plan & Profile (Blank Q. table, storm sewer, waterline, TC)	2	6	12	16	36				70	\$2,558
66	Roadway Cross Sections (including drive)	2		2	6	16				24	\$796
67	Misc. Details (waterline stds.)	1		1	2	4				7	\$239
68											
69	Traffic Control (Signing & Striping on Roadway Plan)									0	\$0
70											
71	Drainage										
72	Storm sewer calculations			4	6					10	\$390
73	SWPPP and Erosion Control Notes	1		2	4	6				12	\$416
74											
75	Maintenance of Traffic Plans										
76	Detour Plan & Notes	2		2	6	8				16	\$548
77											

	A	B	C	D	E	F	G	H	I	J	K
1	DETAILED BREAKDOWN OF PROPOSED TOTAL HOURS, PERSONNEL CATEGORIES,										
2	AND LABOR RATES FOR										
3	Carpenter Rd. Bridge Replacement										
4	City of Gahanna										
5	HOURLY RATES										
6	CONSULTANT: URS Corporation		Proj Mgr	\$57.00							
7			Senior Engineer	\$45.00			Sr. CAD Tech	\$31.00			
8			Engineer	\$35.00			ESA Spec.	\$29.00			
9			Ecologist	\$25.00			Clerical/Admin/Acct	\$16.00			
10											
11	BASIC SERVICES										
12											
13											
14											
	Task Description	No. Sheets	Proj Mgr	Senior Eng.	Eng.	Sr. CAD Tech	Eco/CR Tech	ESA Spec.	Clerical & Admin.	Overall Total Hours	Labor Costs
78	Culvert Plans										
79	Culvert Site Plan & Profile (and mini stream sections)	1	5	8	12	28				53	\$1,933
80	General Notes & Blank Est. Q. Table	1		2	4	4				10	\$354
81	Foundation Layout Plan Geometrics for precast items	1		2	4	8				14	\$478
82	SW Wing Wall Elevation & Sections									0	\$0
83	Wing Wall Elevations & Geometrics for precast items	1		2	8	8				18	\$618
84											
85	Waterline Plans									0	\$0
86											
87	Construction Cost Estimate			1	1					2	\$80
88	Stage 2 QA/QC Review			5						5	\$225
89	Stage 2 Submittal		2			2				4	\$176
90	Subtotal Stage 2 Design	16	13	46	80	138	0	0	0	277	\$9,889
91											
92	Stage 3 Design										
93	General Summary	1	4	4	6	8				22	\$866
94	MOT Quantities				2	2				4	\$132
95	Traffic Control Quantities				2	2				4	\$132
96	Bridge Quantity Calcs			2	8	8				18	\$618
97	Waterline Quantities									0	\$0
98	Construction Cost Estimate			2	2	2				6	\$222
99	Stage 3 QA/QC Review & Stage 3 Submittal		2	5		2				9	\$401
100	Subtotal Stage 3 Design	1	6	13	20	24	0	0	0	63	\$2,371
101											
102	Coordination with Utilities					6				6	\$186
103											
104	Subtotal Stages 2 & 3 Design	17	19	59	100	168	0	0	0	346	\$12,446
105											
106	Prepare Final Plan Package										
107	Submittal of Final Deliverables										
108	Submittal of Final Tracings		2	8	8	8				26	\$1,002
109	Electronic Files on CD					1				1	\$31
110	Final Construction Cost Estimate			1		1				2	\$76
111											
112	Subtotal Submittal of Final Deliverables	17	2	9	8	10	0	0	0	29	\$1,109
113											
114	Project Administration & Coordination										
115	Project Administration & Coordination		24							24	\$1,368
116	Project Meetings (1 total)		4	4						8	\$408
117											
118	Subtotal Project Admin. & Coordination		28	4	0	0	0	0	0	32	\$1,776
119											
120	TOTAL BASIC SERVICES		54	98	154	192	0	0	0	498	\$18,830
121											
122											

**DIRECT COSTS FOR
Carpenter Rd. Bridge Replacement
City of Gahanna**

Task Cost Item Description	Unit	No.	Cost Per Unit	Costs
BASIC SERVICES				
Floodplain/FEMA Hydraulic Analysis				
Photocopies	Each	500	\$0.10	\$50
FEMA Library Data	Each	1	\$500.00	\$500
Mileage - Flood Coord. Mtgs. (1 trips x 32 mi/trip)	Miles	32	\$0.58	\$19
Mileage - Site Visit (1 trip x 32 mi/trip)	Miles	32	\$0.58	\$19
Subtotal Floodplain/FEMA Hydraulic Analysis				\$587
Develop Stage 2 Design Plans				
Prints for Review (16 Shts. x say 10 total work and final sets)	Each	160	\$0.25	\$40
Postage	Each	1	\$10.00	\$10
Photocopies	Each	200	\$0.10	\$20
Subtotal Stage 2 Design Plans				\$70
Develop Stage 3 Design				
Stage 3 Design				
Photocopies	Each	100	\$0.10	\$10
Prints for Review (17 Shts. x say 10 total work and final sets)	Each	170	\$0.25	\$43
Postage	Each	1	\$10.00	\$10
Subtotal Stage 3 Design				\$63
Utility Coordination				
Preliminary plans - prints for Utilities (1 sht. x 2 sets x 4 utilities) [possible full size]	Each	8	\$1.00	\$8
Postage (Send plans to utilities)	Each	4	\$10.00	\$40
Stage 2 plans - prints for Utilities (16 shts. x 2 sets x 4 utilities)	Each	128	\$0.25	\$32
Postage (Send plans to utilities)	Each	4	\$10.00	\$40
Stage 3 plans - prints for Utilities (17 shts. x 2 sets x 4 utilities)	Each	136	\$0.25	\$34
Postage (Send plans to utilities)	Each	4	\$10.00	\$40
Subtotal Utility Coord.				\$146
Prepare Final Plan Package				
Submittal of Final Deliverables				
Prints for Submittal (17 Shts. x say 5 total sets)	Each	85	\$0.25	\$21
Postage	Each	1	\$10.00	\$10
Subtotal Prepare Final Package				\$31
Project Administration & Project Meetings				
Photocopies	Each	200	\$0.10	\$20
Mileage (1 trips x 32 mi/trip)	Miles	32	\$0.57	\$18
Subtotal Proj. Admin. & Project Mtgs.				\$38
TOTAL BASIC SERVICES				\$935

**PROJECT NARRATIVE
CARPENTER ROAD BRIDGE REPLACEMENT
for
CITY of GAHANNA**

The purpose of this project is for the replacement of the bridge carrying Carpenter Road over Sycamore Run in the City of Gahanna. Scope items included with this project will be bridge replacement, minor sidewalk construction, replacement of existing waterline and appurtenances, minor roadway approach work, guardrail, minor paving, striping, drainage and erosion control. This project will also require geotechnical sampling and testing, environmental documentation and permitting, and floodplain/floodway analysis and permitting. Preliminary engineering was performed by Watcon Consulting Engineers & Surveyors (Watcon). The City of Gahanna will provide us with the field survey, base mapping and preliminary site plan performed by Watcon to carry forward thru final plans.

It should be noted that the proposed Right-of-Way (R/W) limits and slope easements as shown on the preliminary plan developed by Watcon have been accepted by the City of Gahanna. Therefore, the goal of this project is to keep all work within the R/W limits and slope easements as shown on the preliminary plan. No R/W work is included in this Proposal. See Attachment A for the preliminary site plan developed by Watcon.

The submittals for this project will include the following items:

- Environmental Documentation
- Hydraulics Report
- Geotechnical Report
- Stage 2/3 Design
- Final Plan Submittal

The following is a description of the various scope items for this project:

Field Survey

The existing survey and base mapping, AutoCad format, performed by Watcon, will be provided by the City of Gahanna for use in this project. Our survey sub-consultant, CW Design, will obtain the channel cross-sections of Sycamore Run and the structure sizes for the existing structures on Carpenter Road and Granville Street that will be needed for the hydraulic analysis. CW Design will also verify horizontal and vertical control of the existing survey, verify property pins and centerline R/W monuments, obtain three (3) roadway check sections, and locate the two (2) soil borings performed by S&ME. Their proposal is included in Appendix A.

Subsurface Investigation

S&ME will perform the subsurface investigation for this project. S&ME will perform two borings and will provide a geotechnical report that will include foundation recommendations for the culvert and wing wall footings. The report will also provide load data information to be included in the plans for the for the precast manufacturer's use in designing the culvert and wing walls. Their proposal is included in Appendix B.

Environmental Analysis and Documentation

Lawhon & Associates, Inc. will perform the environmental documentation for this project. Their tasks will include Wetland Delineation Report, Cultural Resources Literature Review, and Section 404 Nationwide Permit PCN (and Isolated Wetland Permit Level 1 PAN if required). Their proposal is included in Appendix C.

Hydraulic Analysis

We will utilize HEC-RAS to perform a Bridge Waterway Hydraulic and Scour Analysis for a proposed culvert replacement at Carpenter Road over Sycamore Run. We will include the downstream road and structure at Granville Street over Sycamore Run in our analysis. We will utilize the survey provided by the City of Gahanna and supplemented with the stream cross sections and existing structure measurements provided by CW Design Group for this project.

While this project proposes to alter an existing structure located in a FEMA flood zone, the Local Floodplain Administrator has indicated that only a No-Rise Certification is needed, and that calibration to any existing studies may not be possible. We will make a reasonable attempt to obtain the applicable FEMA Flood Insurance Study for Gahanna, Ohio or Franklin County, Ohio. If obtained, we will then make a reasonable attempt to calibrate our hydraulic runs to this recorded study. However, it is understood that our hydraulics scope and fee included in this Proposal does not guarantee any calibration.

The basic scope of services will include the minimum documentation to support the City of Gahanna Application and No-Rise Certification requirements. In addition, a brief narrative summary of the hydraulic and scour analysis with minimum supporting documentation and exhibits, as per FEMA requirements for a No-Rise flood zone permit approval will be prepared. The Scour Analysis will follow the requirements outlined in ODOT L&D 1008.9. We will provide our findings to the City of Gahanna Engineer's Office for their coordination with the Local Floodplain Administrator. Our scope does not include a CLOMR or LOMR because a No-Rise result is anticipated.

According to the Flood Insurance Rate Map, the Base Flood Elevation is 799 to 800. These elevations are controlled by backwater from Rocky Fork Creek rather than the hydraulic opening of the existing or proposed structure. Since this project encroaches upon the FEMA flood zones, the water surface elevations for the 10, 50, 100, and 500 year flood events will be reported as per the FEMA Flood Zone guidelines. The scour

analysis will utilize the 500-year peak discharge, and will utilize the particle sizes determined by the geotechnical analysis.

Other tasks typically required to support the ODOT Bridge Waterway Hydraulic and Scour Analysis are not included. In addition, a Flood Hazard Area Development Permit is not included. Temporary access fills are not anticipated due to the narrow channel. Channel crossings should be provided if necessary as per Standard Construction Drawings. The County Engineer, LD-33 Form, is not included. Evaluation and design of existing or proposed field tiles is not included.

Coordination with Utilities

Based on the preliminary plans provided by the City and based on our site visit, there are several utilities located within the project limits. Two (2) copies of the preliminary site plan will be sent to each utility to get their concurrence regarding the location and any conflict with their respective utility. Two (2) sets of Stage 2 & 3 plans will also be sent to each utility. We will follow-up and document any correspondence with each utility. No utility coordination meeting is anticipated for this project.

Stage 2 Design

Development of the Stage 2 plans will commence upon authorization to proceed. The Stage 2 plans will be further developed from the preliminary site plan done by Watcon. The Stage 2 plans will include the set-up of quantity tables, even though quantities will not be calculated until Stage 3. Also, the construction cost estimates will be included with a contingency of 10 percent. The Stage 2 submittal will include three (3) sets of half-size (11" x 17") plans and a construction cost estimate. The geotechnical report, environmental reports, and the hydraulic report will also be submitted with the Stage 2 plans. Stage 2 will conclude with a review meeting with the City of Gahanna, if necessary. It is anticipated that the following plan sheets will be developed as part of the final construction plans:

- Title Sheet (1 Sheet)
- Typical Sections (1 Sheet)
- General Notes (2 Sheets)
- Detour Plan and Notes (2 Sheets)
- General Summary (1 Sheet) – Quantities will be blank for Stage 2
- SWPPP and Erosion Control Notes (1 Sheet)
- Plan and Profile Sheet (2 Sheets) – Includes Quantity tables, storm sewer, waterline, and traffic control information
- Cross Section Sheets (2 Sheets) – Includes a section at each drive
- Miscellaneous Detail Sheets (1 Sheet) – City Waterline standards only
- Culvert Site Plan & Profile (1 sheet) – Includes stream sections
- Culvert General Notes and Quantity Table (1 Sheet) – Quantities will be blank for Stage 2
- Foundation Layout Plan Geometrics (1 Sheet) – Precast Items

- Wingwall Elevation and Geometrics (1 Sheet) – Precast Items

Traffic Control:

The existing centerline and edge lines will be restored with Item 646, thermoplastic markings. The SCHOOL marking on the pavement will be replaced with 646 material if it is damaged. The SYCAMORE RUN signs will be removed and replaced at the end of the project. The LOAD LIMIT signs will be removed and returned to the City.

Maintenance of Traffic:

It is anticipated that Carpenter Road will be closed to thru traffic between Shull Avenue and Hamilton Road for the duration of the project. Signs and barricades will be placed at Shull Avenue and at Hamilton Road, advising motorists of the closure ahead, “BRIDGE OUT XX MILES”. Carpenter Road will be completely barricaded at the residential driveway adjacent to the bridge.

A signed detour route will be provided along Hamilton Road, Granville Street and Shull Avenue. All left turns will be at signalized intersections. The detour will terminate on Hamilton Road, immediately south of Clark State Road and should not conflict with the adjacent Hamilton Rd. project.

A note will be provided to require access to the adjacent properties at all times, particularly when the water line is being installed. The water line will most likely cross the driveways of the adjacent properties, and require plates or immediate backfill.

Culvert Plans:

The preliminary plan done by Watcon that was provided by the City of Gahanna proposed either a 24' x 7' precast 3-sided culvert or a 24' wide Conspan O-Series culvert. Three of the culvert wing walls are oriented at 45-degree angles to the culvert. The southwest wall is a retaining wall that is approximately 50 feet long and parallel to Carpenter Road. This retaining wall is parallel to the road in order to avoid taking right-of-way from the adjacent property since there is an existing building located approx. 10-12 feet from the edge of roadway. We will locate this wall outside of the proposed guardrail but inside the existing R/W. This wingwall may need to be cast-in-place, and we will provide details for construction if this is the case.

The culvert size will be finalized based on the hydraulic analysis as discussed previously. The length of the wing walls will also be finalized based on the grading. The precast wing wall details will show only elevations and locations (lengths and heights). General notes specifying design requirements and loadings will be included in the plans for the precast manufacturer's use in designing the culvert and wing walls. Reinforcing sizes and spaces will be shown where needed, but no reinforcing lists will be provided.

Aesthetic treatments of the wing walls and culvert headwalls will be discussed with the City of Gahanna during Stage 2 design. Should the City desire to have aesthetic treatments, appropriate notes will be added to the plans.

It is anticipated that guardrail will be proposed along the north side of Carpenter Rd. including the culvert. It will be determined during Stage 2 design whether the guardrail will be located between the roadway and proposed sidewalk or outside the sidewalk.

Stage 3 Design

Development of the Stage 3 plans will commence once the Stage 2 plans have been reviewed and comments received. Quantities will be calculated and included in appropriate quantity summaries in the plans. The Stage 3 submittal will include three (3) sets of half-size (11" x 17") plans, a construction cost estimate, and responses to Stage 2 review comments.

Final Plan Submittal

The final plans will commence once the Stage 3 comments have been received. The final plan submittal will include three (3) sets of half-size (11" x 17") plans with the title sheet signed and stamped by all appropriate designers and or reviewers. A hard copy of the final construction cost estimate and responses to the Stage 3 review comments will also be included along with a CD that will include a PDF file of the plans and the final construction cost estimate.

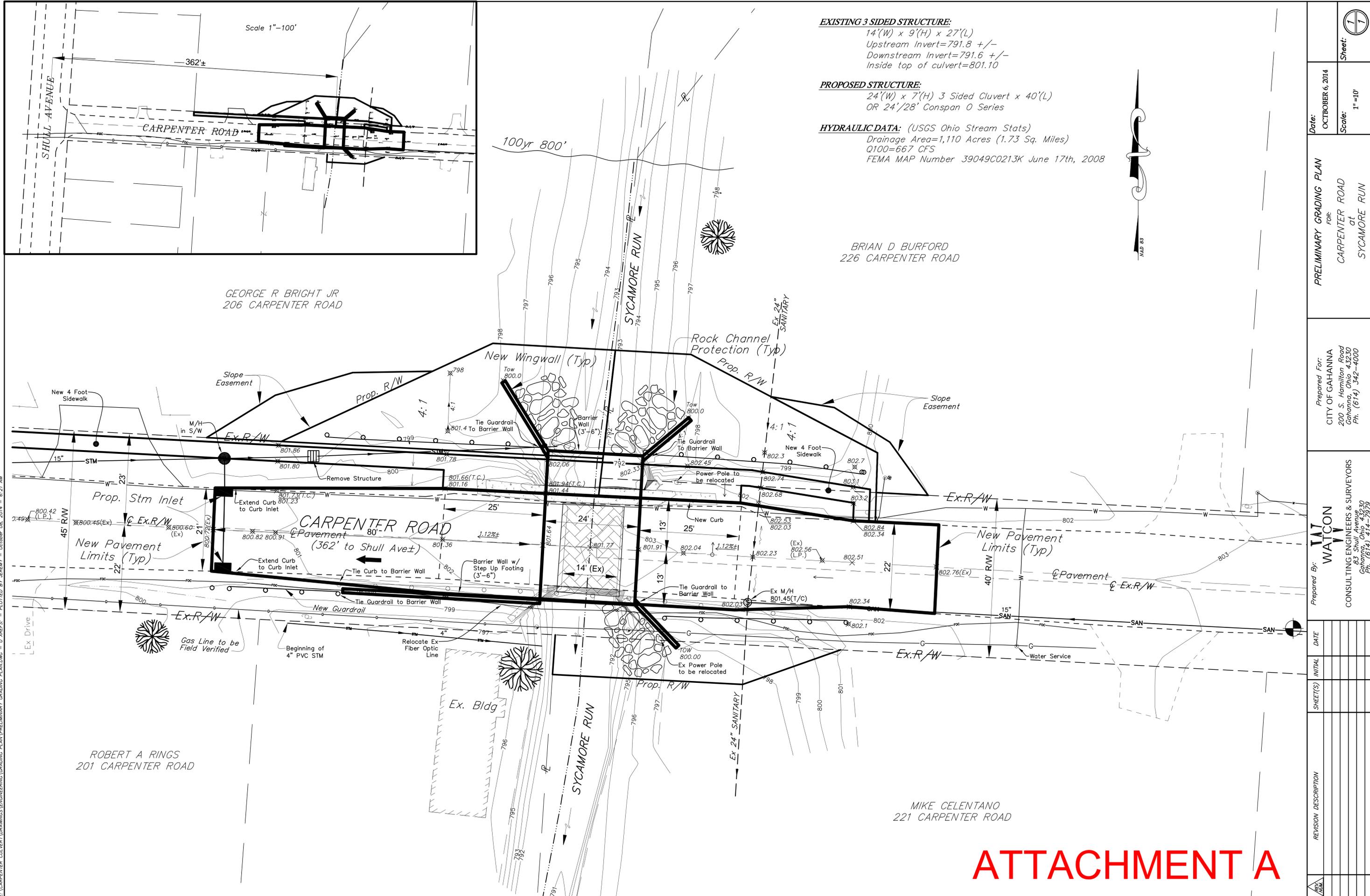
Project Administration & Coordination

The proposed hours shown are for project management regarding the tasks described above. The project management hours include project coordination with the City of Gahanna. The proposed hours also include internal coordination with the design team. This proposal covers only one (1) meeting with the City of Gahanna.

Documents / Information Provided by Others

We will rely upon and use the following information supplied by the City of Gahanna without independent verification. We cannot be responsible for errors or defects of such information:

- Survey data, base mapping, and site plan performed by Watcon Consulting Engineers & Surveyors



EXISTING 3 SIDED STRUCTURE:
 14'(W) x 9'(H) x 27'(L)
 Upstream Invert=791.8 +/-
 Downstream Invert=791.6 +/-
 Inside top of culvert=801.10

PROPOSED STRUCTURE:
 24'(W) x 7'(H) 3 Sided Cluvert x 40'(L)
 OR 24'/28' Conspan O Series

HYDRAULIC DATA: (USGS Ohio Stream Stats)
 Drainage Area=1,110 Acres (1.73 Sq. Miles)
 Q100=667 CFS
 FEMA MAP Number 39049C0213K June 17th, 2008



Z:\CARPENTER_CULVERT\DRAWINGS\ENGINEERING\GRADING PLAN\PRELIMINARY GRADING PLAN\PRELIMINARY GRADING PLAN.DWG - 0 XREFS - PLOTTED BY JEREMY - October 06, 2014 - 6:27 AM

REVISION DESCRIPTION	SHEET(S)	INITIAL	DATE	Prepared By:	WATSON CONSULTING ENGINEERS & SURVEYORS 83 Shull Avenue Gahanna, Ohio 43230 Ph. (614) 414-7979	Prepared For: CITY OF GAHANNA 200 S. Hamilton Road Gahanna, Ohio 43230 Ph. (614) 342-4000	PRELIMINARY GRADING PLAN FOR: CARPENTER ROAD at SYCAMORE RUN	Date:	OCTOBER 6, 2014	Sheet:	
				Scale:				1"=10'			

ATTACHMENT A

ID	Task Name	Duration	2015											
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		
1	Authorization to Proceed	1 day	Feb 2 Feb 2											
2	Step 5 Develop Stage 2 Design Plans	90 days	Feb 4 → Jun 9											
3	Additional Field Survey	20 days	Feb 5 [] Mar 4											
4	Subsurface Investigation	32 days	Feb 5 [] Mar 20											
5	Environmental Documentation	40 days	Feb 5 [] Apr 1											
6	Floodplain/FEMA Analysis & Report	59 days	Feb 19 [] May 12											
7	Stage 2 Design Plans	70 days	Feb 4 [] May 12											
8	Review of Stage 2 Plans	20 days	May 13 [] Jun 9											
9	Step 7 Develop Stage 3 Design Plans	50 days	Jun 10 → Aug 18											
10	Stage 3 Design	30 days	Jun 10 [] Jul 21											
11	Review of Stage 3 Plans	20 days	Jul 22 [] Aug 18											
12	Step 8 Prepare Final Plan Package	11 days	[]											
13	Final Plan Preparation	10 days	Aug 19 [] Sep 1											
14	Submit Final Tracings	1 day	Sep 2 Sep 2											

INDEX TO
SUB-CONSULTANT PROPOSALS

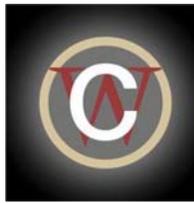
<u>APPENDIX</u>	<u>CONSULTANT</u>	<u>TASK</u>
A	CW Design Group	Additional Survey
B	S&ME	Subsurface Investigation
C	Lawhon & Associates, Inc.	Environmental Documentation

Appendix A

CW Design Group

Additional Survey Proposal

Exhibit A



CW Design Group
ENGINEERING | SURVEYING

PHONE: 614-846-9279
FAX: 614-846-9279
EMAIL: cwdg@cwdg.net
WEBSITE: www.cwdg.net

972 Linkfield Drive
Worthington, OH 43085

December 30, 2014

Mr. Robert W Ballard III, PE
Bridge Department Manager
URS Corporation (URS)
277 West Nationwide Blvd.
Columbus, OH 43215-2566

Re: Carpenter Road at Sycamore Run (14-0051)
Gahanna, Ohio
Surveying Scope of Services

Dear Mr. Ballard:

Thank you for the opportunity to submit this proposal for the Carpenter Road at Sycamore Run culvert replacement project. CW Design Group (CW) proposes the following scope of services and fee proposal based on your December 22, 2014 email and attachments.

Project Understanding/Survey Services:

The project is located at Carpenter Road and Sycamore Run and includes replacing the existing culvert with a larger culvert, sidewalk and multi-use path construction, guardrail installation and waterline work. A survey and preliminary grading plan has already been performed by Watcon Consulting Engineers and Surveyors, see Exhibit B dated October 6, 2014. CW will assist URS in providing the following services:

- Ten channel cross sections per Exhibit C 1 & C2- Channel Section Exhibit
- Verify horizontal and vertical control
- Verify property pins located and Centerline R/W monuments
- 3 Check Sections for Roadway existing ground
- Locate up to two soil borings

Survey Deliverables:

- AutoDesk Civil 3D 2015 format drawing via email.

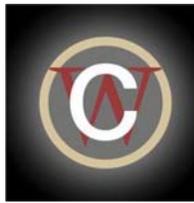
Items to be provided by the City of Gahanna:

- Civil 3D drawing of Watcon survey with points, alignments and surface
- Horizontal (Ohio State Plane Coordinate System) and Vertical Control (Datum and Geoid) used in original survey.

Survey Schedule:

CW will coordinate with URS as to the schedule. The schedule for deliverables is dependent upon favorable conditions per CW Design Group's Survey Condition Policy. A copy of this Policy is available upon request. In the event of an unforeseen delay, CW will contact URS via phone and email to coordinate a reasonable extension to the schedule.

Exhibit A



CW Design Group
ENGINEERING | SURVEYING

PHONE: 614-846-9279
FAX: 614-846-9279
EMAIL: cwdg@cwdg.net
WEBSITE: www.cwdg.net

972 Linkfield Drive
Worthington, OH 43085

USE AND OWNERSHIP OF DOCUMENTS:

All Documents are instruments of service in respect to this Project, and CW shall retain an Ownership and property interest therein (including the copyright and the right of reuse at the discretion of the CW) whether or not the Project is completed. The Documents are project specific and are not intended for reuse on other projects. Any reuse of the Documents without involvement of CW will be at the recipient's own risk.

FEE:

Refer to Exhibit D –Fee Estimate for the fee breakdown for the project.

The fee does not include zoning review, permit, inspection, filing or governmental agency fees and is the responsibility of the Owner to pay.

LIMITS OF LIABILITY:

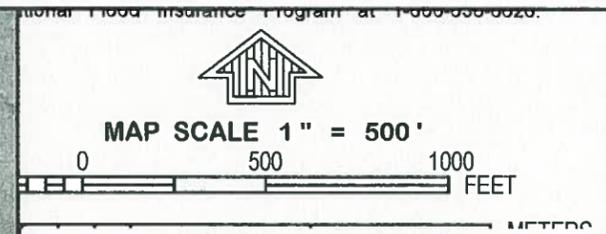
To the fullest extent permitted by law, the total liability, in the aggregate, of CW and CW's officers, directors, employees, agents, and consultants to URS and anyone claiming by, through or under URS, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to CW's services, the Project or this Agreement, from any cause or causes whatsoever, including but not limited to, negligence, strict liability, or breach of contract shall not exceed the general liability, automobile liability, umbrella liability and/or professional liability limits listed in Exhibit D - Certificate of Liability Insurance.

Proposal is valid for 30 days.

Thank you again for this opportunity and we look forward to working with you. If you have any questions, please contact me at 614.846.9279.

CW Design Group, LLC

Charles Wagner, P.E., P.S.
Project Manager



PANEL 0213K

FIRM
FLOOD INSURANCE RATE MAP
FRANKLIN COUNTY, OHIO
AND INCORPORATED AREAS

PANEL 213 OF 465
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL SUFFIX
COLUMBUS, CITY OF	390170	0213 K
FRANKLIN COUNTY	390167	0213 K
GAHANNA, CITY OF	390171	0213 K

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
39049C0213K
MAP REVISED
JUNE 17, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

Exhibit D - Fee Estimate			
14-0051			
Carpenter Road at Sycamore Run			
12/30/2014			
Description	Total Hours	Rate	Total
Setup project in Civil 3D	4	75	\$ 300
Ten channel cross sections	8	105	840
Verify horizontal and vertical control	1	105	105
Verify property pins located and Centerline R/W monuments	2	105	210
3 Check Sections for Roadway existing ground	2	105	210
Locate up to two soil borings	1	105	105
Update drawing	4	75	300
Mileage			75
		Total	\$ 2,145

Appendix B

S&ME

Subsurface Investigation Proposal



January 5, 2015
11-1400166

Mr. Robert W. Ballard III, P.E.
URS
277 West Nationwide Blvd.
Columbus, Ohio 43215

Re: Revised Proposal – Structure Foundation Exploration
Carpenter Road Culvert Replacement
Gahanna, Franklin County, Ohio

Dear Mr. Ballard:

In accordance with your request for proposal (RFP) and your follow-up email on January 5, 2015, S&ME, Inc. (S&ME) is pleased to submit this revised proposal for performing a Structure Foundation Exploration for the replacement of the existing structure that carries Carpenter Road over Sycamore Run in Gahanna, Franklin County, Ohio.

SCOPE OF PROJECT

Project information was provided to S&ME by URS in a RFP prepared by The City of Gahanna, dated November 03, 2014, which included a Preliminary Grading Plan, dated October 6, 2014. Additional information was provided to S&ME by Robert Ballard in an email on December 31, 2014.

S&ME has anticipated that the existing structure will be replaced with a new three sided culvert with an open span of 24 feet. It is understood that the proposed horizontal and vertical profiles of the new structure will closely match the profiles of the existing structure.

Additionally, a new retaining wall will be located on the southwest corner of the structure along the roadway. This wall is expected to have an approximate height of 10 feet and length of 50 feet.

S&ME understands that this field and laboratory work does not need to be performed in accordance with ODOT Specifications for Geotechnical Explorations (SGE). At this time it is unknown if Structures Foundation report plan sheets will be required, as such preparation of these plans have been included as an “If Authorized” cost.

We also understand that there will be no ODOT review performed on our report; however, URS may perform an in-house review and have comments. Therefore, the initial report will be submitted as a “draft” and a “final” will follow after receipt of URS comments.

AVAILABLE INFORMATION

The following information is available at this time:

- Preliminary Grading Plan, dated October 6, 2014;
- Project RFP, dated November 3, 2014; and,
- ODNR bedrock topography and geology maps.

S&ME accessed ODOT's Geotechnical Data Management System (GeoMS) to search for historic boring information; however, no existing geotechnical documents were available near the project location. S&ME previously performed an investigation for the existing structure carrying Hamilton Rd over Sycamore Run.

SCOPE OF WORK – BASE INVESTIGATION

Field Work

S&ME proposes a boring program consisting of one (1) boring, on each side of the structures for a field exploration program consisting of a total of two (2) structure borings. If possible, the borings will alternate between eastbound and westbound lanes. We will attempt to locate the borings in the eastbound lane at the west end of the structure near the proposed retaining wall. This boring will serve as a structure boring for both the replacement culvert and proposed wall. S&ME will field mark the boring locations prior to drilling. Final boring locations may have to be adjusted depending on underground and overhead utilities.

The borings will be performed as follows:

- Each boring will be extended through the existing roadway pavement via augering and the existing pavement and granular base layer thicknesses will be measured on the borehole sidewalls.
- Each boring will be continuously SPT sampled to a depth of six (6) feet below the existing granular base for evaluation of the bridge approach pavement subgrades.
- Additionally, 6 feet will be continuously sampled at the creek bed elevation for scour analysis testing.
- SPT samples will be attempted at 2.5-foot sampling intervals beginning beneath the anticipated scour zone and continuing to a depth of about 20 feet below the anticipated footing bearing elevation.
- Beginning beneath the 2.5-foot sampling zone, and continuing to the boring termination depth, SPT samples will be attempted at 5-foot sampling intervals.

Borings will be extended to a depth of 40 feet (25 feet below the anticipated bearing elevation). Based upon our review of ODNR bedrock topography maps, it is anticipated that bedrock will be encountered at a depth greater than 80 feet. As such, a total of 80 feet of SPT sampling is proposed and no rock coring is proposed.

At the completion of drilling, borings will be backfilled with cuttings and a plastic hole plug device. Where advanced through existing pavement, the surface of the roadway will be patched with an equivalent thickness of cold patch asphalt.

S&ME anticipates that it will be necessary to close one lane to traffic while drilling. As such, we have included costs for traffic control consisting of advanced signs, cones, and 2 flaggers. The traffic control will generally be set up in accordance with the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) TA-10. S&ME will obtain permits from the City of Gahanna Engineer's office, as required. This cost estimate is based on the assumption that there will be no daytime work hour restrictions placed on our field work.

S&ME will contact the Ohio Utilities Protection Service (OUPS) and the Ohio Oil and Gas Producers Underground Protection Service (OGPUPS) at least 48 hours prior to performing the borings. It is also requested that the City of Gahanna and URS advise S&ME of the locations of known or suspected underground features or utilities which could affect our services. S&ME will perform the borings in the field as close to the existing structure as access and utilities will allow.

Laboratory Testing

In the laboratory, a testing program will be assigned and supervised by a registered Professional Engineer. Each sample will be visually identified. S&ME will perform at two (2) complete classification tests within 6 feet of planned roadway subgrade elevation. Grain size analysis will also be completed on samples taken in the scour zones. Additional complete classifications will be performed on representative samples outside the subgrade and scour zone. A total of 10 complete classification tests are included in our proposed scope of work. The results of the laboratory testing will be shown on the Logs of the Borings.

TEX-145-E method sulfate content tests are not planned for this investigation as it is anticipated that any approach work will be too short to make chemical stabilization of the approach pavement subgrade economically feasible.

Geotechnical Report

Field information and the results of the laboratory testing program will provide the basis for analyses and recommendations which will be submitted in an engineering report. The engineering report will address the following items:

- Descriptions of the proposed project site, the field work;
- A summary of the subsurface conditions encountered at the boring locations;
- LRFD foundation recommendations for spread foundations used to support the new culvert and retaining wall;
- A discussion of groundwater conditions encountered in the borings;
- Lateral earth pressure recommendations for wingwall and retaining wall design;
- A recommended CBR based off of subgrade sampling;
- Grain size testing results for scour analysis, to be done by others;

- Recommendations for preparation of the roadway subgrade for appropes; and,
- An Appendix including logs of the borings, laboratory test results, completed OGE checklists for the appropriate design items, and any supporting calculations.

An electronic copy of the report will be submitted for your use and distribution.

We understand that there will be no ODOT review performed on our report; however, URS may perform an in-house review and have comments. Therefore, the initial report will be submitted as a “draft” and a “final” will follow after receipt of URS comments.

SCOPE OF WORK – IF AUTHORIZED

If authorized, S&ME will prepare Structure Foundation Exploration Sheets using base drawings provided by URS. We understand that URS will be preparing drawings in AutoCAD[®] format. Therefore, if authorized, S&ME will prepare the Structure Foundation Exploration Sheets also in AutoCAD format.

SERVICES PROVIDED BY OTHERS

S&ME has assumed that URS will perform the following:

- Survey the as-drilled structure boring locations (that will be marked in the field by S&ME) shortly after completion of the field work;
- Provide the surveyed locations (stationing, offset, and latitude/longitude in decimal degrees) and ground surface elevations for the boring locations at least two (2) weeks prior to the required submission of our report; and,
- If authorized to prepare Structure Foundation Exploration plan sheets, S&ME has assumed that all electronic plan and profile information for the final designs will be provided to S&ME digitally in AutoCAD[®] format at least three (3) weeks prior to the scheduled submission of these plan sheets.

EXCLUDED SERVICES

We understand that there will be no review comments on the Geotechnical Report that will be submitted upon the completion of the field and laboratory work. Therefore, multiple submittals of the report have not been included in the scope and fee.

This work scope is also based on the drilling rig being able to advance an auger through the existing pavement, and has not included costs for a generator-driven coring machine to core through the existing pavement at the requested boring locations. If brick pavement, reinforced concrete pavement, or thick unreinforced concrete pavement (> 8 inches) is encountered, S&ME will submit a modification of scope and fee for the additional work necessary to penetrate the existing pavement.

PROJECT AND TASK SCHEDULE

S&ME will commence with the planning, permitting, and utility clearance for this Structure Foundation Exploration upon receiving formal notice to proceed from URS. Weather permitting and assuming that there will be no delays from the permitting process

with the City of Gahanna, an estimated timeline for this investigation is presented as follows:

- Weeks 1 - 2 - File and wait for permits from City of Gahanna, schedule drill rig, field mark borings, contact OUPS/OGPUPS for utility clearance
- Week 3 - Perform field work (Estimated 1 days)
- Weeks 3 - 5 - Assign/complete laboratory testing
- Weeks 4 - 7 - Data Reduction/Analyses/Recommendations/Provide Final Report

S&ME proposes to provide the Base Investigation summarized in this proposal for a total **Lump Sum Fee of \$9,300** and the **If Authorized work for a Lump Sum Fee of \$1,450** for the preparation of Structure Foundation Exploration plan sheets. Invoices will be submitted monthly and will be payable within 30 days of receipt. The fee quoted in this proposal is valid for a period of 6 months after the submittal date. After that time, S&ME reserves the right to modify the fee as necessary.

Authorization

S&ME will perform this work in accordance with the most current MSA between URS and S&ME. If a new MSA is needed for the 2015 calendar year, please forward a copy for our review and execution and follow up with a Task order referencing this proposal.

We appreciate having been given the opportunity to submit this proposal and look forward to working with URS on this project.

Respectfully submitted,

S&ME, Inc.
Dublin, Ohio



Christopher R. West, E.I.
Staff Professional



Bethanie L. Meek, P.E.
Senior Reviewer

Attachments: Proposed Boring Plan (1 Sheet)

Submitted: 1 copy via email in PDF format

**REVISED PROPOSAL – STRUCTURE FOUNDATION EXPLORATION
CARPENTER ROAD CULVET REPLACEMENT
FRANKLIN COUNTY, OHIO
BASE INVESTIGATION LUMP SUM FEE: \$ 9,300
“IF AUTHORIZED” LUMP SUM FEE: \$ 1,450**

EXISTING 3 SIDED STRUCTURE
 14'(W) x 9'(H) x 27'(L)
 Upstream Invert=791.8 +/-
 Downstream Invert=791.6 +/-
 Inside top of culvert=801.10

PROPOSED STRUCTURE
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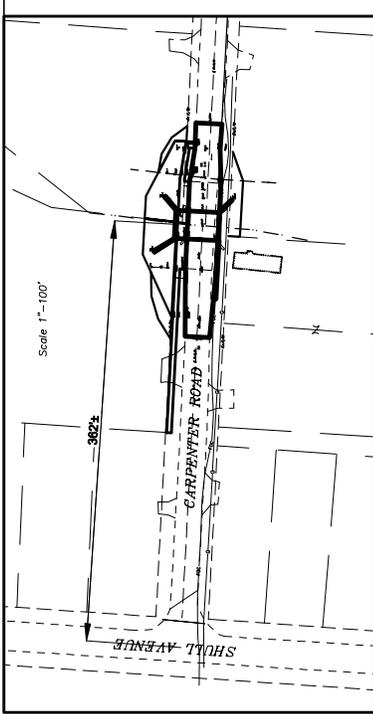
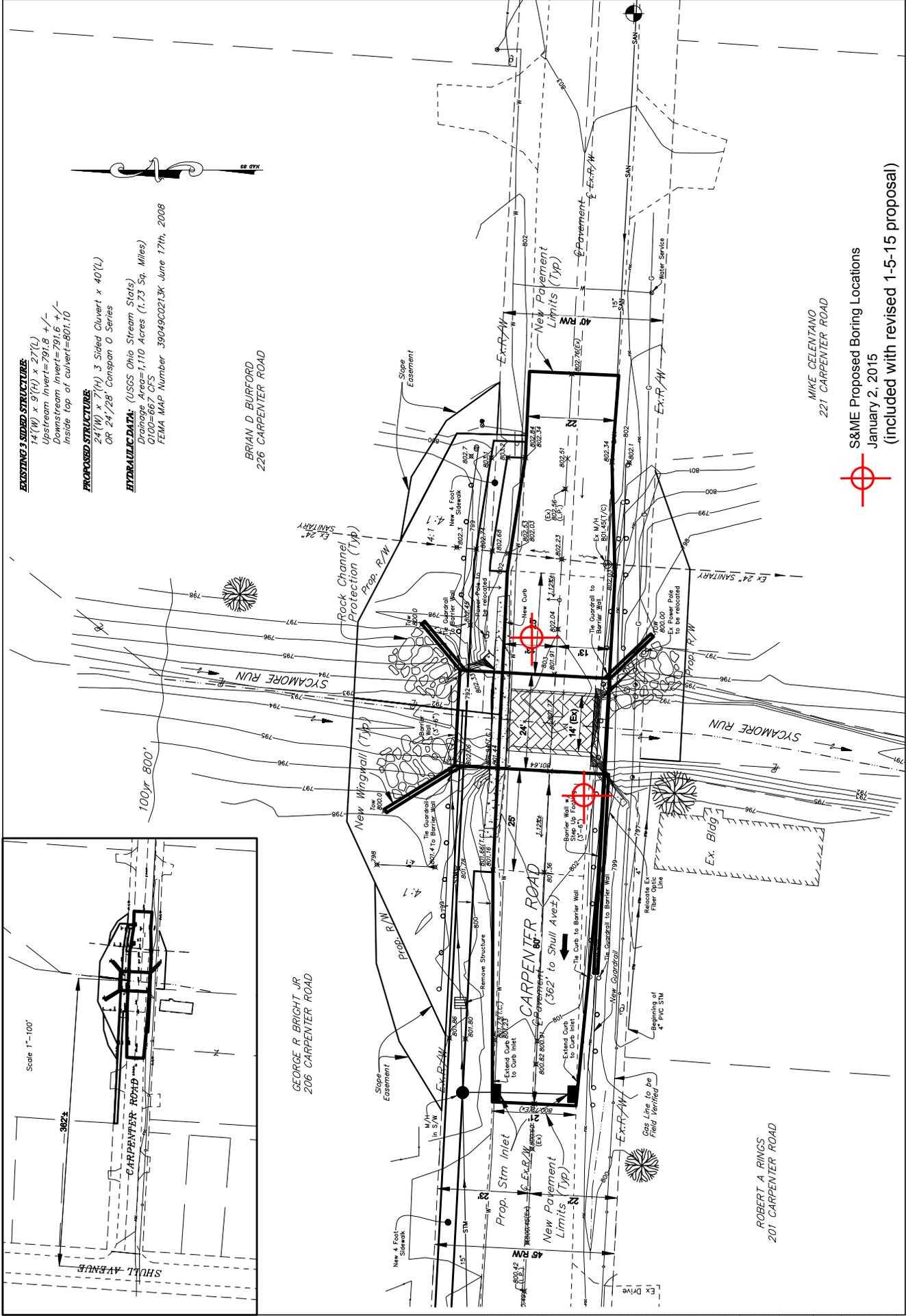
BRIAN D BURFORD
 226 CARPENTER ROAD

GEORGE R BRIGHT JR
 206 CARPENTER ROAD

ROBERT A RINGS
 201 CARPENTER ROAD

MIKE CELENTANO
 221 CARPENTER ROAD

S&ME Proposed Boring Locations
 January 2, 2015
 (included with revised 1-5-15 proposal)



Appendix C

Lawhon & Associates, Inc.

Environmental Documentation Proposal



Lawhon & Associates, Inc.

ENVIRONMENTAL CONSULTING AND ENGINEERING SERVICES

Columbus

Cleveland

Dayton

February 5, 2015

Mr. Robert W. Ballard III, PE
AECOM
277 West Nationwide Blvd.
Columbus, OH 43215-2566

Subject: Environmental Studies for Proposed Carpenter Road Bridge Replacement

Dear Mr. Ballard:

Lawhon and Associates (L&A) is pleased to present this proposal for environmental studies associated with the replacement of the Carpenter Road bridge over Sycamore Run within the City of Gahanna. It is our understanding that the project also includes replacement of 400 feet of waterline. The project involves no federal funding. Therefore, the only required tasks are those necessary to support the application for a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers (USACE).

Requested tasks include:

1. Wetland Delineation Report – This task will consist of field investigations for wetlands and streams and completion of a letter report and mapping of identified resources in support for the Section 404 application. This report will be provided in electronic format. GIS data for identified resources will be provided to AECOM for calculation of impacts. This task includes coordination regarding endangered species and site visit for habitat as would typically be required for a Section 404 PCN. (It does not include any specialized endangered species surveys.)
2. Cultural Resources Literature Review – This report will be prepared to provide required support for the Section 404 application that no historic properties will be impacted. This report will be provided in electronic format.
3. Section 404 Nationwide Permit PCN (and Isolated Wetland Permit Level 1 PAN if required) - It is anticipated that the project will qualify for a NWP 14 with a Pre-Construction Notification (PCN) to the USACE for stream impacts. (Although it is unlikely that an isolated wetland is present, if there are impacts to isolated wetlands, the project may also require an Isolated Wetland Permit from OEPA.) L&A will coordinate with USACE and/or OEPA as appropriate and prepare the permit application(s) based upon the above studies with drawings and impact calculations provided by AECOM. It is expected that no mitigation will be required and therefore no costs for mitigation are included in this proposal. The proposed fee does not include permitting application or review costs, if any. It does not include any higher level permitting, such as an Individual 404 or 401. The PCN (and PAN if required) will be provided in electronic format for review. Once accepted, hard copies will be provided for submission to USACE.

This proposal assumes that the client will provide mapping and work-limits that are accurate and arrange for property access prior to fieldwork.

Schedule

It is our understanding that the above tasks will be authorized in early February 2015 and will be due within 60 days of authorization to proceed.

Costs

Task	Fee
Wetland Delineation Report	\$2,300
Cultural Resources Literature Review	\$ 630
Section 404 Nationwide Permit PCN/Isolated Wetland PAN	\$4,400
Total	\$7,330

This proposal has been revised per your comments on February 4, 2015. Thank you for the opportunity to assist AECOM and the City of Gahanna with this project.

Sincerely,



Susan S. Daniels, PE, AICP
Principal

Attachment – Exhibit A

Accepted By:
Client/ Title
Date

Exhibit A

NAME OF CLIENT: AECOM

PROJECT NAME: Carpenter Road bridge replacement over Sycamore Run

GENERAL CONDITIONS FOR CONSULTING SERVICES

These General Conditions are a part of each agreement between Lawhon & Associates, Inc. (L&A) and its client for the performance of consulting services. In these General Conditions, the party for whom the services are performed is called "Client", and the written agreement between the parties, including these General Conditions, is called "this Agreement".

1.0 Services by L&A

- 1.1 **Scope of Services;** Standard of Care. L&A will perform the services described in this Agreement and in any work release documents or change orders which are issued under this Agreement and signed by both parties. In performing the services, L&A will exercise the degree of care and skill ordinarily exercised by reputable companies performing the same or similar services at the same time in the same geographic area. L & A will not have any obligation to perform services not expressly described in this Agreement or in work release documents or change orders signed by L&A.
- 1.2 **Estimates.** Any opinions of probable construction or implementation costs, financial evaluations, feasibility studies or economic analyses prepared by L&A will represent its best judgment based on its experience and available information. However, Client recognizes that L&A has no control over costs of labor, materials, equipment or services furnished by others or over market conditions or contractors' methods of determining prices, and that any evaluation of a facility to be constructed or work to be performed is speculative. Accordingly, L&A does not guaranty that proposals, bids or actual costs will not vary from opinions, evaluations or studies submitted by L&A.
- 1.3 **Hazardous Materials.** Unless specifically included in the Scope of Services, L&A's services do not include directly or indirectly performing or arranging for the detection, monitoring, handling, storage, removal, transportation, disposal or treatment of petroleum or petroleum products (collectively called "Oil") or of any hazardous, toxic, radioactive or infectious substances, including any substances regulated under RCRA or any other federal or state environmental laws (collectively called "Hazardous Materials"). The discovery or reasonable suspicion of Hazardous Materials or hazardous conditions at a site where L&A is to perform services or of contamination of the site by Oil or Hazardous Materials not previously disclosed to L&A in writing shall entitle L&A to suspend its services immediately, subject to mutual agreement of terms and conditions applicable to any further services, or to terminate its services and to be paid for services previously performed.
- 1.4 **Other Contractors.** L&A shall not have any duty or authority to direct, supervise or oversee any contractors of Client or their work or to provide the means, methods or sequence of their work or to stop their work. L&A's services and/or presence at a site shall not relieve others of their responsibility to Client or to others. L&A shall not be liable for the failure of Client's contractors or others to fulfill their responsibilities, and Client agrees to indemnify, hold harmless and defend L&A against any claims arising out of such failures.
- 1.5 **Health and Safety.** L&A shall not be responsible for health or safety programs or precautions related to Client's activities or operations, Client's other contractors, the work of any other person or entity, or Client's site conditions. L&A shall not be responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of Client or others at Client's site. Client agrees to indemnify, hold harmless and defend L&A to the fullest extent permitted by law against any and all claims resulting from or related to bodily injury or death arising out of such conditions or deficiencies or the actions or failure to act of others, unless L&A is claimed or deemed to have been grossly negligent or to have acted in a manner constituting willful misconduct in connection therewith. So as not to discourage L&A from voluntarily addressing health or safety issues while at Client's site, in the event L&A does address such issues by making observations, reports, suggestions or otherwise, L&A shall nevertheless have no liability

or responsibility arising on account thereof, and Client's indemnity set forth above shall apply to any claims arising there from.

- 1.6 Litigation Support.** Unless specifically included in the Scope of Services, L&A will not be obligated to provide expert witness or other litigation support related to its services, unless expressly agreed in writing. In the event L&A is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a proceeding to which it is not a party, Client shall reimburse L&A for its costs and compensate L&A at its then standard rates for the time it incurs in gathering information and documents and attending depositions, hearings, and the like.
- 1.7 Confidential Information.** L&A will not disclose without Client's consent information provided by Client or developed by L&A in the course of its services and designated by Client as confidential (but not including information which is publicly available, is already in L&A's possession, or is obtained from third parties), L&A shall not be liable for disclosing such information if, in good faith, it believes such disclosure is required by law or is necessary to protect the safety, health, property or welfare of the public. L&A shall notify Client (in advance, except in emergency) of any such disclosure.
- 1.8 No Warranty.** NO WARRANTIES OR GUARANTIES, EXPRESS OR IMPLIED, ARE MADE WITH RESPECT TO ANY GOODS OR SERVICES PROVIDED UNDER THIS AGREEMENT, AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

2.0 Responsibilities of Client

- 2.1 Client requirements.** Client, without cost to L&A, shall:
- 2.1.1** Designate to L&A in writing a person to act as Client's representative with respect to the services.
 - 2.1.2** Provide or arrange for access and make all provisions for L&A to enter any site where services are to be performed.
 - 2.1.3** Furnish L&A with all available information pertinent to the services.
 - 2.1.4** Furnish L&A with all relevant information about site conditions and with topographic, property, boundary and right-of way surveys, as needed.
 - 2.1.5** Furnish L&A with all approvals, permits and consents from government authorities and others as may be required for performance of the services.
 - 2.1.6** Notify L&A promptly of all known or suspected Hazardous Materials at the site, of any contamination of the site by Oil or Hazardous Materials, and of any other conditions requiring special care, and provide L&A with any available documents describing the nature, location and extent of such materials, contamination or conditions.
 - 2.1.7** Comply with all laws and provide any notices required to be given to any government authorities in connection with the services, except for such notices L&A has expressly agreed in writing to give.
 - 2.1.8** Inform the Owner of the site (if different from Client) of any contamination by or release of Oil or Hazardous Materials at the site.
- 2.2 Hazards.** Client represents and warrants that it does not have any knowledge of Hazardous Materials or unusually hazardous conditions at the site or of contamination of the site by Oil or Hazardous Materials, except as expressly disclosed to L&A in writing.
- 2.3 Confidentiality.** Client acknowledges that any technical or pricing information contained in this Agreement or provided by L&A is confidential and proprietary to L&A and agrees not to disclose it or otherwise make it available to others without L&A's express written consent.
- 2.4 Documents.** All reports, notes, calculations, data, drawings, estimates, specifications and other documents and computerized materials prepared by L&A are instruments of L&A's services and shall remain L&A's property. Documents or computerized materials provided to Client are for Client's use only for the purposes disclosed to L&A, and Client

shall not transfer them to others or use them or permit them to be used for any extension of the services or any other project or purpose for which they were not prepared, without L&A's express written consent.

3.0 Changes; Delays; Excused Performance

- 3.1 Changes.** Unless this Agreement expressly provides otherwise, L&A's proposed compensation represents its best estimate, taking into account the costs, effort and time it expects to expend in performing the services as it currently understands them to be, based on its reasonable assumption of the conditions and circumstances under which the services will be performed. As the services are performed, conditions may change or circumstances outside L&A's reasonable control (including changes of law) may develop which would require L&A to expend additional costs, effort or time to complete the services, in which case L&A will notify Client and an equitable adjustment will be made to L&A's compensation and the time for performance. In the event conditions or circumstances require the services to be suspended or terminated, L&A shall be compensated for services previously performed and for costs reasonably incurred in connection with the suspension or termination.
- 3.2 Force Majeure.** L&A shall not be responsible for any delay or failure of performance caused by fire or other casualty, labor dispute, government or military action, transportation delay, inclement weather, Act of God, act or omission of Client or its contractors, failure of Client or any government authority timely to review or to approve the services or to grant permits or approvals, or any other cause beyond L&A's reasonable control, and L&A's compensation shall be equitably adjusted to compensate it for any additional costs it incurs due to any such delay.

4.0 Compensation

- 4.1 Rates.** Unless otherwise agreed in writing, L&A shall be compensated for its services at its standard rates and shall be reimbursed for costs and expenses (plus reasonable profit and overhead) reasonably incurred in its performance of the services.
- 4.2 Invoices.** L&A may invoice Client on a monthly or other progress-billing basis. Invoices are due and payable upon receipt by Client. On amounts not paid within 30 days of invoice date, Client shall pay interest from invoice date until payment is received at the rate of 1.5% per month or, if less, the maximum rate allowed by law. If Client disagrees with any portion of an invoice, it shall notify L&A in writing of the amount in dispute and the reason for its disagreement within 21 days of receipt of the invoice, and shall pay the portion not in dispute.
- 4.3 Suspension, etc.** If payment is not received within 45 days of the invoice date, L&A may upon 7 days' notice suspend or terminate the services and receive compensation for services previously performed and for costs reasonably incurred in connection with the suspension or termination.
- 4.4 Collection.** Client shall reimburse L&A for its costs and expenses (including reasonable attorneys' and witnesses' fees) incurred in any litigation for collection under this Agreement in which L&A obtains a judgment in its favor.
- 4.5 Taxes, etc.** Unless expressly agreed in writing, L&A's fees do not include any taxes, excises, fees, duties or other government charges related to the goods or services provided under this Agreement, and Client shall pay such amounts or reimburse L&A for any amounts it pays. If Client claims that any goods or services are subject to a tax exemption, it shall provide L&A with a valid exemption certificate.

5.0 Insurance; Dispute Resolution; Allocation of Risk

- 5.1 Insurance.** L&A will maintain Workers' Compensation insurance as required by law; employers' liability, comprehensive general liability and automobile liability insurance each with coverage of at least \$1 million per occurrence; and, professional liability insurance with coverage of at least \$1 million per claim; and upon request will furnish insurance certificates to Client. L&A will purchase additional insurance if requested by Client, provided the insurance is reasonably available from carriers acceptable to L&A and Client reimburses L&A for its cost.
- 5.2 Disputes.** If a claim or dispute arises out of this Agreement or its performance, the parties agree to endeavor in good faith to resolve it equitably through negotiation or, if that fails, through nonbinding mediation under the rules of the American Arbitration

Association, before having recourse to the courts. However, prior to or during negotiations or mediation, either party may initiate litigation that would otherwise become barred by a statute of limitations; and, L&A may pursue any property liens or other rights it may have to obtain security for the payment of its invoices.

- 5.3 Indemnification.** For separate consideration of \$10 and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Client agrees to indemnify, hold harmless and defend L&A from and against any and all liabilities, demands, claims, fines, penalties, damages, forfeitures and suits, together with reasonable attorneys' and witnesses' fees and other costs and expenses of defense and settlement, which L&A may incur, become responsible for or pay out as a result of death or bodily injury or threat thereof to any person, destruction or damage to any property, contamination of or adverse effect on natural resources or the environment, any violation of local, state or federal laws, regulations or orders, or any other damages claimed by third parties (collectively, "Damages") based on or arising in whole or in part out of L&A's performance under this Agreement or out of Client's violation of law or breach of this Agreement; provided, however, that Client shall not be obligated to indemnify L&A to the extent such damages are caused directly by L&A's negligence or willful misconduct.
- 5.4 Indemnification regarding Hazardous Materials.** Client acknowledges that L&A does not have any responsibility for preexisting Oil and Hazardous Materials at the site, or for their previous detection, monitoring, handling, storage, transportation, disposal or treatment, that L&A's compensation is not commensurate with the unusually high risks associated with such materials, and that insurance is not reasonably available to protect against such risks. Therefore, for the same consideration and in addition to the indemnification provided in Section 5.3, Client agrees to indemnify, hold harmless and defend L&A to the fullest extent permitted by law against all Damages arising out of or related to any Oil or Hazardous Materials located at or removed from the site, including Damages such as costs of response or remediation arising out of the application of common law or statutes such as CERCLA or other "Superfund" laws imposing strict liability or Damages arising out of L&A's negligence; provided, however, that Client shall not be required to indemnify, hold harmless or defend L&A to the extent such Damages are caused directly by L&A's gross negligence or willful misconduct.
- 5.5 Limitation of Liability.** L&A's aggregate liability for all claims arising out of this Agreement or out of any goods or services furnished under this Agreement, whether based in contract, negligence, strict liability, agency, warranty, trespass, indemnity, or any other theory of liability, shall be limited to \$100,000 or the total compensation received by L&A from Client under this Agreement, whichever is less. In no event shall L&A be liable for special, indirect, incidental or consequential damages, including commercial loss, loss of use, or lost profits, even if L&A has been advised of the possibility of such damages.
- 5.6 Employee Injury.** Client agrees not to implead or to bring an action against L&A based on any claim of personal injury or death occurring in the course or scope of the injured or deceased person's employment with L&A and related to the services performed under this Agreement.
- 5.7 Defense.** Any defense of L&A required to be provided by Client under this Agreement shall be with counsel selected by L&A and reasonably acceptable to Client.

6.0 Miscellaneous Provisions

- 6.1 Notices.** Notices between the parties shall be in writing and shall be hand delivered or sent by certified mail or acknowledged telefax.
- 6.2 Assignment, etc.** Neither Client nor L&A shall assign or transfer any rights or obligations under this Agreement, except that L&A may assign this Agreement to its affiliates and may use subcontractors in the performance of its services. Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than Client and L&A, without the express written consent of both parties. The relationship between Client and L&A is that of independent contracting parties, and nothing in this Agreement or the parties' conduct shall be construed to create a relationship of agency, partnership or joint venture.
- 6.3 Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

- 6.4 Headings.** The headings in this Agreement are for convenience only and are not a part of the agreement between the parties.
- 7.0 Exclusive use of L&A Work Product.** L&A's work is for the exclusive use of the Client. Client and L&A expressly agree that the work is not intended to benefit any third party and no other entity may rely upon the findings unless expressly designated by the Client in writing and agreed to by L&A in writing.
- 8.0 Entire agreement, etc.** The written document, of which these General Conditions are a part, is the entire agreement between the parties, and supersedes all prior agreements. Any amendments to this Agreement shall be in writing and signed by both parties. In the event of an inconsistency between these General Conditions and any other writings which comprise this Agreement, the other writings shall take precedence.