

Martin G. Buehler, P.E.
Director of Transportation/County Engineer

600 West Winchester Road Libertyville, Illinois 60048-1381 Phone (847) 377-7400 Fax (847) 362-5290

# River Rd at Roberts Rd, Intersection Improvement: Phase I Engineering LCDOT Change Order No. 1

TO:

Public Works and Transportation Committee

Financial Administrative Committee

FROM:

Martin G. Buehler County Engineer **Committee Action Meeting Date** 

**DATE:** June 3, 2009

**DATE:** June 3, 2009

**SUBJECT:** IDOT Change Order No. 1

Section No. 07-00086-08-CH

Joint Committee action item approving IDOT Change Order No. 1 consisting of an increase of \$38,751.67 for additions to the Phase I Engineering services for River Road at Roberts Road, designated as Section No. 07-00086-08-CH.

- River Road at Roberts Road, Intersection Project, Phase I Engineering Services: IDOT Change Order No. 1
- Change Orders need to be approved by the standing committees for cumulative net increases over 10%.
- The River Rd at Roberts Rd intersection improvement project is a federally funded Phase I study.
- The Phase I contract is with Bollinger, Lach & Associates, Inc., in the amount of \$233,147.40.
- It has been determined that extent of the flood plain at the intersection requires the extension of the project limits on the south leg so that the new pavement on the River Rd approach leg will be 1-foot above the floodplain elevation.
- Additional engineering services are necessary to extend the project limits.
- IDOT approval for the Phase I will be required.

### Summary:

Original awarded contract: \$233,147.40 Change Order No. 1: \$38,751.67 Sum of all changes: \$38,751.67

### ILLINOIS DEPARTMENT OF TRANSPORTATION

# Request for Approval of Change in Consultant Contract

Date:	06/03/2009	Local Agency:	LAKE COL	UNTY			
Request:	No. 1	Name:	Engineerin		nd Phase I		
То:	Department of Transportation LCDOT/SCHAUMBURG	Section:	07-00086-0	18-CH			
1	and that an addition has used to the above a subject of the state of t	Consultant:	Bollinger, L	Bollinger, Lach & Associates, Inc.			
i recomme	and that an addition be made to the above consultant contract.		Original cor	ntract amount			
The estima	ated work is listed below		for services	described:		\$233,147.40	
			Sum of all p	previous contrac lers:	ot .	\$0.00	
Item							
<u>#</u> 1	Description  Extending the limits south an Biver Board to achieve the decident			Additions		Deductions	
	Extending the limits south on River Road to achieve the design of constructing the new road elevation 1-foot above floodplain			\$38,751.67			
		TOTALS		\$38,751.67		\$0.00	
		NET CHANGE		\$38,751.67		\$0.00	
				<b>4</b> 00 10 (10)			
Net ADDIT	ION change to date \$38,751.67 which is	16.62	% of the ori	ginal contract ar	mount for se	ervices described	
·	he nature and reason for change:	•	Revised cor for services	ntract amount described:		\$271,899.07	
•	Please see attached.						
or the time	net increase or decrease in the cost of the contract is \$10,000 of completion is increased or decreased by 30 days or more, or g statements shall be checked.						
	The undersigned has determined that the circumstances that				APPROVE	)	
<del></del> .	change were not reasonably foreseeable at the time the contr	act was signed.	•	DEDARTME	DEPARTMENT OF TRANSPORTATION		
The undersigned has determined that the circumstances that nec							
	change are germane to the original contract.			Approved		·	
	The undersigned has determined that this change is in the be- the local agency and is authorized by law.	st interest of			<del></del>		
Project Eng	ineerDate	5-27-0	7		Regional Er	igineer	
Design Eng	ineer Paule Trugs Date	5-27-09 15-27-09				gineer rsuant to Agreement ed January 22, 2003	
Approval Recommend	ded Herk Rull Date County Engineer	5-28-	09			4	
	County Engineer	•					

BLR13210 LCDOT Adaptation Submit 3 copies of this form to Regional Engineer (4 copies for road district)

# Bollinger, Lach & Associates, Inc.

2100 Huntington Drive North State A « Algenquin, il. 60192 847 854 7799 « Fax 847 854 7798 » www.bollingerlach.com ITASCA

ALGONGUIN

\* CHICAGO

\* INDIANAPOLIS

• SOUTH BEND • LAKE GENEVA

May 7, 2009

SENT VIA E-MAIL
CGleason@lakecountyil.gov

Mr. Chuck Gleason Senior Civil Engineer Lake County Division of Transportation 600 W. Winchester Road Libertyville, IL 60048

Re:

River and Roberts Road Intersection

Raising River Road Profile Lake Barrington, Illinois

Dear Mr. Gleason:

Bollinger, Lach & Associates, Inc. (BLA) has completed the topographic survey and reviewed the flood insurance maps for the River-Roberts intersection project. Upon reviewing this data we have concluded that the existing floodplain does inundate the River Road up to elevation 737.00 from approximately Station 90+00 to 92+00. The floodplain does not cross the centerline of River Road, but does inundate the road by 11.5' at the worst point.

Per our conversations, you indicated that LCDOT would be interested in raising the River Road profile to accomplish the roadway being a minimum of 1' above the floodplain. Therefore, we have prepared a Preliminary Supplemental Agreement for you to review for BLA to provide these services. This assumes that BLA would be extending the project limits along River Road approximately 600' to the south (based on the 2' contour maps available on the website).

Please be advised that this is listed as *preliminary* as we have not received information from the Geotechnical Engineer at this point.

Thank you for entrusting this work to BOLLINGER, LACH & ASSOCIATES, INC. We look forward to continuing to work with you on this project. Please feel free to call with any comments or question.

Sincerely,

**BOLLINGER, LACH & ASSOCIATES, INC.** 

Cynthia R. Flower, P.E. Project Manager

Craig Lukowicz, P.E. Executive Vice President

EXHIBIT A

SUPPLEMENTAL FOR RIVER ROAD LIMIT EXTENSION

COST ESTIMATE OF CONSULTANT SERVICES COST PLUS FIXED FEE

DF-824-039 REV 12/04

FIRM PSB

Route: FAU 3704/River Road and Roberts Road Section: 07-00088-08-CH
Project No.: Political Color (10-04-15-08)
Job No.: P-94-15-3-08
Funding Type: STA
Structure No.: NA

Bollinger, Lach & Associates, Inc.

OVERHEAD RATE

DATE

05/07/09

13.41% 24.59% 25.33% 12.21% 2.69%

(8-9) 5,198.41 8,433.22 9,528.37 9,815.38 4,732.18 1,044.12

5,000.00

(F) 703.50 460.88 309.62 349.07 650.41

(C) 2,513.57 1,646.71 4,679.23 4,820.18 2,323.90 512.75

(B) 1,901.34 1,245.62 3,539.51 3,646.13 1,757.87

86888

Local Drainage Study Alternate Geometric Stud Soil, Pavement and Retal Quality Assurance/Quality

Environmental Data

387.86

**(6)** 80.00 80.00

% OF GRAND TOTAL

TOTAL

DBE TOTAL ₹

OTHERS

FIXED

FRINGE BENF

9

SERVICES

Outside Direct Costs (2)

IN-HOUSE DIRECT

OVERHEAD

PAYROLL

MANHOURS

TEM

DROP BOX

PRIME/SUPPLEMENT

COMPLEXITY FACTOR

**DBE 0.00%** 

100.00%

38,751.67

0.00

5,000.00

0.00

160,00

16,496.36

12,478.33

8

Subconsultant DL TOTALS

0.00 4,616,98

DBE 0.00%	Printed 5/7/2009 4:38 PM
	PREPARED BY THE AGREEMENTS UNIT
	PREPARED BY 1
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# AVERAGE HOURLY PROJECT RATES

Bollinger, Lach & Associates, Inc.

PSB

PRIME/SUPPLEMENT

FIRM

05/07/09 DATE

SHEET

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96

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100.00% \$32.78

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326

TOTALS

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# AVERAGE HOURLY PROJECT RATES

Bollinger, Lach & Associates, Inc.

FIRM BOILING PSB PRIMESUPPLEMENT

05/07/09 SHEET DATE

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Route: FAU 3704/River Road at Roberts Road

Section: 07-00086-08-CH Project No.: CMM-9003(061)

SUMMARY of

Job No.: P-91-513-08

**WORK HOURS and DIRECT COSTS** 

,	<u>WORK</u>			
	<b>HOURS</b>	<u>SUB</u>	DIF	RECT COST
Surveys	58		\$	80.00
Environmental Data	32		\$	80.00
Location Drainage Study	96			V.
Alternate Geometric Studies	96			
Soil, Pavement and Retaining Wall Alternative Analysis	40	\$ 5,000.00		
Quality Assurance/Quality Control	8	 · · · · · · · · · · · · · · · · · · ·		
TOTALS	330	\$ 5,000.00	\$	160.00

Route: FAU 3704/River Road at Roberts Road

Section: 07-00086-08-CH Project No.: CMM-9003(061) Job No.: P-91-513-08

# DETAILED WORKHOURS AND DIRECT COST ESTIMATE

# SUPPLEMENT FOR RAISING RIVER ROAD 1' ABOVE THE FLOODPLAIN

## 1 Surveys

Topographic survey work for an additional 600' south of the existing	
project limits on River Road to elevation 740 minimum. Including	
collecting data on any wetland flags, trees exceeding 6" in diameter,	
utilities, pavement, shoulders, striping, ROW determination, etc.	34
Establish Centerline alignment of River Road for southern extension	8
Processing of Field Work and generation of Digital Terrain Model for	
cross sections	16
TOTAL WORKHOURS =	58
ESTIMATED DIRECT COSTS =	\$80.00
2 Environmental Data	
Wetland Delineation for River Road Extension	16
Modify the Wetland Evaluation Documents for the extended area and	
update the report accordingly	16
TOTAL WORKHOURS =	32
ESTIMATED DIRECT COSTS =	\$80.00
3 Location Drainage Study	
Update report and drainage area to include River Road Extension	i
including evaluating additional, floodplain impacts	40
1,000' of revised cross sections and re-analyze the Roberts Road cross	
sections for additional compensatory storage	16
•	
With the Compensatory Storage Volume 10 times what was originally	
required, additional time will be needed to investigate alternative options	
as to where this volume can be compensated. Time is not included	
herein to prepare topographic surveys of the alternatives, but rather used	
County 2' contour maps to make recommendations.	40
TOTAL WORKHOURS =	96
ESTIMATED DIRECT COSTS =	
Alternate Geometric Studies **	
Prepare additional plan and profile sheet including geometric	
coordination with project to south	24
Profile studies to maintain 1' of vertical seperation with the floodplain	24
Cross-Section Studies (including test cross-sections in critical areas and	
final cross-sections at every 100')	24
Develop and Update Preliminary Construction Cost Estimate	24
TOTAL WORKHOURS =	96
ESTIMATED DIRECT COSTS =	

Route: FAU 3704/River Road at Roberts Road

Section: 07-00086-08-CH Project No.: CMM-9003(061) Job No.: P-91-513-08

# DETAILED WORKHOURS AND DIRECT COST ESTIMATE

5 Soil, Pavement and Retaining Wall Alternative A	nalysis		<u>Sub</u>	
Review additional area within soils report and retaining wall options	review cross sections and	20		
Extension of Elevation views and Typical Secti stabilization alternatives	ions of walls and soil	20		
Geotechnical Soils Analysis			y 1990 y april an annual	c.,
	TOTAL WORKHOURS =	40	Ō	
ESTIMA	TED DIRECT COSTS = \$	•	\$5,000.00	Estimated
6 Quality Assurance/Quality Control	OTAL WORKHOURS =	<u> </u>		
	TED DIRECT COSTS = \$			

Route: FAU 3704/River Road at Roberts Road Section: 07-00086-08-CH

Project No.: CMM-9003(061) Job No.: P-91-513-08

**DETAILED DIRECT COSTS** 

## SUPPLEMENT FOR RAISING RIVER ROAD 1' ABOVE THE FLOODPLAIN

		No. of			Extended
		Pages	Quantity	Rate	Cost
ĺ	SURVEYS			g , men myskalineskale 20 °m mense (r	And the second of the second
	Vehicle Days		2	\$40.00	\$80.00
2	ENVIRONMENTAL DATA				For the second seco
	Vehicle Days	O CONTRACTOR OF THE CONTRACTOR	2	\$40.00	\$80.00
				Subtotal =	\$80.00