

## Memo

TO:

Public Works Committee

FROM:

Ed Andrews, Public Works Director

DATE:

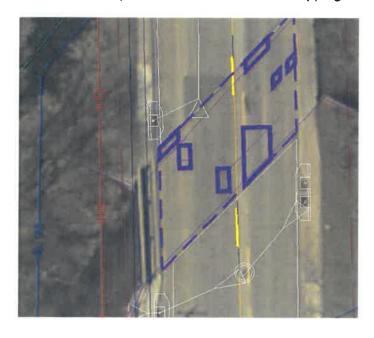
May 3, 2019

SUBJECT:

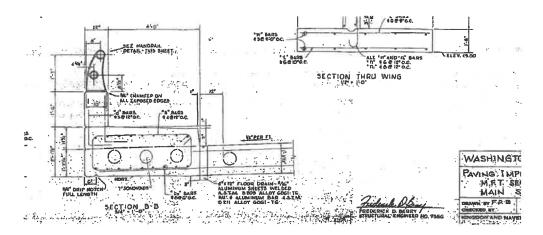
South Main Street Deck Repairs

I've recently reviewed the South Main Street bridge, focused on the performance of previous epoxy repairs done in-house. New repairs using square cut edges and chipping to sound material are performing well, but earlier repairs with surface application have spalled. IDOT Guidelines advise using partial depth repairs with PP Concrete. The goal is to extend the serviceability of the deck at least another 5 years before tentative replacement is scheduled at 60 years of service life.

These repairs are more extensive than previously undertaken by in-house staff and as such I contacted RA Cullinan to assist in establishing a budgetary number for their assistance. I calculated 118.5 SF of patching based upon a surface review and chain drag sounding, but this may increase as the repairs are undertaken and chipping back to sound concrete.



The main concern that Cullinan expressed was with the sonotube construction used during the casting of the original deck to help save weight. These voids are critical to preserve and will require additional attention during the repairs. Given this variability, they proposed undertaking this effort under standard IDOT T&M rates.



As such a budgetary allowance of a 3-person crew, foreman, laborer and finisher has been established working three 2-day work weeks (Monday & Tuesday) at 9 hours a day, breaking out the unsound concrete and pouring it back on the second day.

In an effort to reduce cost, traffic control would be provided by the City. Work would be conducted one lane at a time, leaving two open at all times and shifting to the other lane(s) weekly as the concrete cured sufficiently to allow the traffic shift.



This matter has been placed on the Public Works Meeting agenda of Monday, May 6<sup>th</sup>, 2019 for additional review and discussion.

cc: File



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Attn: Phone: Mobile: Fax:	City of Washington  Ed Andrews	Pr Di Bi FS	Job Name: Project Location: Date of Plans: Bid Date: FSA: Addendum:		e Repair	
ITEM	DESCRIPTION		QUANTITY	UNIT	UNIT PRICE	AMOUNT
10	DECK REPAIR		1.00	LS	23,885.17	23,885.17
GRAND TOTAL						\$23,885.1
R.A. Cullinan has  The actural work vare some unknown  The city will furnistrength.Including	prepared this cost budget for a preliminary estimate vill be performed on a time and material basis, has to the actual need of the repair.  Shall other traffic control / lane closures and mal flaggers if required.  ct figured in 3 stages.	opeing to redu	ice the total cost o	f the proje	ct, although there	
RAC will use all stechinicians.	tate approved materials as directed by Mr. Andre	ws. Our PCC	QC lab is also sta	te approve	d with certified	
	ured on a 9 hour shift per day. tunity to bid on this project. We look forward to working with	n you.				
Tom Wall R. A. Cullinan & S a division of United Co	Son ntractors Midwest, Inc.					
Signed	Sign	ned			_	
Date	Dat	e				