

Richland County Transportation Ad Hoc Committee

June 22, 2021 - 4:00 PM Virtual Meeting 2020 Hampton Street, Columbia, SC 29201

1. CALL TO ORDER

The Honorable Overture Walker

2. APPROVAL OF MINUTES

The Honorable Overture Walker

a. Regular Session: May 25th, 2021

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3. ADOPTION OF AGENDA

The Honorable Overture Walker

4. <u>ITEMS FOR ACTION</u>

[PAGES 4-11]

The Honorable Overture Walker

a. Spears Creek Church Rd. Project

5. ADJOURNMENT



Richland County Transportation Ad Hoc Committee May 25, 2021 – 4:00 PM Zoom Meeting 2020 Hampton Street, Columbia, SC 29201

COMMITTEE MEMBERS PRESENT: Overture Walker, Chair, Bill Malinowski, Yvonne McBride, Paul Livingston, and Jesica Mackey

OTHERS PRESENT: Allison Terracio, Derrek Pugh, Andrea Mathis, Michelle Onley, Kyle Holsclaw, Tamar Black, Ashiya Myers, John Thompson, Lori Thomas, Michael Niermeier, Allison Steele, Elizabeth McLean, Leonardo Brown, Michael Maloney, Randy Pruitt, Angela Weathersby, Ali Eliadorani, Alicia Pearson, Jeff McNesby, Kellie Odom, Kim Toney, Mohammed Al-Tofar, Nathaniel Miller, Rasheed Muwwakkil, Lauren Hogan and Dwight Hanna

1. **CALL TO ORDER** – Mr. O. Walker called the meeting to order at approximately 4:00 PM.

2. APPROVAL OF MINUTES

a. <u>Regular Session: April 27, 2021</u> – Mr. Livingston moved, seconded by Mr. Malinowski to approve the minutes as distributed.

Mr. Malinowski noted, on p. 4, it states, "Mr. Niermeier responded this will not really impact the funding. He noted some of the projects will be re-scoped". Mr. Malinowski requested the committee be advised which projects and the dollar amount associated with the projects.

In Favor: Malinowski, McBride, Livingston, O. Walker and Mackey

The vote in favor was unanimous.

3. **ADOPTION OF AGENDA** – Ms. McBride moved, seconded by Mr. Malinowski, to adopt the agenda as published.

In Favor: Malinowski, McBride, Livingston, O. Walker, and Mackey

The vote in favor was unanimous.

4. ITEMS FOR ACTION

a. Three Rivers Greenway Boozer Property Conveyance – Mr. Niermeier stated staff is requesting approval to move forward to with an ordinance to convey property that was acquired years ago for the Three Rivers Greenway project and deeded to the City of Columbia. On November 10, 2020, Council approved the annexation of said property to the City of Columbia. This is the next step, which will deed the property to the City of Columbia and complete the right-of-way acquisition transition.

Transportation Ad Hoc Committee May 25, 2021 Mr. Malinowski noted Council voted unanimously for annexation, but to him what we are currently looking at are 2 different items. Mr. Niermeier previously came forward and asked if Council had any objections to the annexation, but State law precludes Council from having any input. He stated he did not recall anyone saying the land would be donated to the City of Columbia. He inquired if the \$40,000 to purchase the land came from County or Penny Tax funds.

Mr. Niermeier responded it came from Penny Tax funds.

Mr. Malinowski requested that language to be added.

Mr. Livingston moved, seconded by Ms. McBride, to forward to Council with a recommendation to approve an ordinance to convey the "Boozer properties" (TMS#07208-03-01) of 0.430 acre (18,749 SF) and (TMS#07208-03-02) of 0.509 acre (22,163 SF) located by Candi Lane (S40-2889) of the Three Rivers Greenway project to the City of Columbia for ownership and maintenance.

In Favor: McBride, Livingston, O. Walker, and Mackey

Opposed: Malinowski

The vote was in favor.

ADJOURNMENT – The meeting adjourned at approximately 5:00 PM.

RICHLAND COUNTY ADMINISTRATION

2020 Hampton Street, Suite 4069 Columbia, SC 29204 803-576-2050



Agenda Briefing

Prepared by:	pared by: Michael Niermeier			Title:	Director			
Department:	Transportation		Division:					
Date Prepared:	red: May 25, 2021 M			Date:	June 22, 2021			
Legal Review	Elizabeth McLean via email					Date:	June 14, 2021	
Budget Review	James Haye	James Hayes via email				Date:	June 09, 2021	
Finance Review	v Stacey Hamm via email					Date:	June 09, 2021	
Approved for con	sideration:	Assistant County Administrator John M. Tho			M. Tho	nompson, Ph.D., MBA, CPM		
Committee	Transportation Ad Hoc							
Subject:	Spears Creek Church Rd. Project							

STAFF'S RECOMMENDED ACTION:

Option 1: Staff requests Council approve the revision of the descoped plan to widen the section of Spears Creek Church Road between Earth Rd. and I-20 to five lanes and increase the referendum budget for this project to \$29M. (Increase of \$2,400,000)

Option 2: Leave the project as it was descoped for 3 lanes with an initial estimate of \$20,000,000. (No change)

Request for Council Reconsideration:

✓ Yes

FIDUCIARY:

Are funds allocated in the department's current fiscal year budget?	Yes	х	No
If no, is a budget amendment necessary?	Yes		No

ADDITIONAL FISCAL/BUDGETARY MATTERS TO CONSIDER:

There are currently sufficient funds in the budget for all design costs related to this project. The funds for utilities, Right-of-Way, and construction will be requested in future fiscal year budgets.

COUNTY ATTORNEY'S OFFICE FEEDBACK/POSSIBLE AREA(S) OF LEGAL EXPOSURE:

None.

REGULATORY COMPLIANCE:

None applicable.

MOTION OF ORIGIN:

There is no associated Council motion of origin.

Council Member	
Meeting	
Date	

STRATEGIC & GENERATIVE DISCUSSION:

In May of 2020, this project was descoped to bring the project back to within its referendum amount. The original scope created by the former management team called for widening the road from two lanes to five lanes and to install sidewalks on both sides of the road. The project was descoped to only widen the road to three lanes and the sidewalk installation was removed because sidewalks were not called for in the referendum.

Following the Council approved de-scope of Penny projects in May 2019, an On-Call Engineering Team (OET) was assigned and placed under contract in November 2020 to begin work on the Spears Creek Church Road Widening project. As part of the initial work, the OET conducted a traffic study and survey to obtain relevant data for design and cost estimation. According to the traffic study, the section of road between Two Notch Rd. and Earth Rd. (Section 1) will function adequately at a width of three (3) lanes even in the design year 2047. The section of road between Earth Rd. and I-20 (Section 2), however, will function at a failing level in the design year at a width of three (3) lanes.

The OET has provided a cost estimate to widen Section 1 (Two Notch Rd. and Earth Rd) to three (3) lanes and to widen Section 2 (Earth Rd. and I-20) to five (5) lanes in the amount of \$28,232,291.39. For this Council request, this dollar amount has been rounded up to \$29M to be conservative and to cover any inflation or unforeseen issues. COVID-19 caused issues with delays and material cost increases over the last year. Even though there has been a significant amount of recovery, it is still unknown at this time if and when material costs will fully return to pre-COVID ranges

Because this estimate is approximately \$2.4M above referendum, it is recommended to proceed with this revised scope, which will require all of the original \$26.6M referendum amount plus an additional \$2.4M to cover the additional widening and any unforeseen costs related to it. This will still result in a savings of \$20M from the original scope estimate of \$49,492,027.

Original Ordinance Referendum Amount: \$ 26,600,000

Original Scope Cost Estimate (5 Lanes): \$49,492,027

Descope Estimate (3 Lanes): \$ 20,000,000 (\$29.4M in approximate savings)

Descope Revision Estimate (3 Lanes and 5 Lanes): \$28,232,291.39

Additional Rescope Request: \$ 2,400,000 above the original ordinance referendum amount.

ADDITIONAL COMMENTS FOR CONSIDERATION:

The descope plan approved by Council provided an approximate \$56M in remaining roadway program money after all projects were completed according to the descope plan. Council recently approved to return the Garners Ferry\Harmon Intersection Project back to its original scope. It also recently approved to provide preliminary funding and a letter of commitment to the City of Columbia for the Innovista Ph. 3 project. Even after adding back the original scope funding for these projects, it is estimated that there will be an approximate \$50.2M remaining in the program after all projects are completed. This does not include the \$52.5M that was set aside for the I-20\Broad River Rd. Interchange project.

ATTACHMENTS:

- 1. Spears Creek Church Rd. Level of Service Breakdown
- 2. Total Project Cost Breakdown
- 3. Level of Service Reference

Spears Creek Church Rd. Level of Service Breakdown

In May 2020, Council approved the descoping of the Spears Creek Church Rd. Widening project from the planned five (5) lanes to only widening it to three (3) lanes in order to bring the project back to within its original referendum amount of \$26.6M. This new scope would address safety and the significant number of rear-end collisions along this road. It would also allow for an easier future widening of the road to five (5) lanes if funds were to become available.

Since the descope approval, the County's On-Call Engineering Team (OET) has collected existing and new traffic data, modeled future traffic projections and established the existing and future Level of Service (LOS) options along Spears Creek Church Rd. At the intersection of Spears Creek Church Rd. and Earth Rd., there is a significant change in the LOS design for design year 2047 due to an influx of traffic coming from Earth Road onto Spears Creek Church Road and on towards I-20.

The table below shows the traffic model projections and LOS for the road broken into two sections – Section 1 is Spears Creek Church Road between Two Notch Rd. and Earth Rd. Section 2 is Spears Creek Church Road between Earth Rd. and I-20. These values represent the existing conditions as well as the future 20-year condition after the roadway is built to its full width.

LEVEL OF SERVICE (LOS)						
	Existing 3 Lanes Entire Section 1 - 3 Lanes No Build in 2047 Road in 2047 Section 2 - 5 Lanes in 2047					
Section 1 - West of Earth Rd.	С	D	D	F		
Section 2 – East of Earth Rd.	С	F	С	F		

Section 1 has an existing LOS C and with the proposed widening to 3 lanes, the LOS of service will be a D in the future year 2047. For this type of road, which is classified as an urban minor arterial, a LOS of C or D is customary and acceptable.

Section 2 has an existing LOS C. However, if this section is only widened to 3 lanes, the future condition in 2047 will be LOS F. If Section 2 is widened to a 5-lane segment, then the future 2047 LOS will be improved to a C.

Both sections will have a LOS of F if no widening is performed.

ELEMENT	ESTIMATE			
Spears Creek Two Notch to Earth Road - 3-Lane (Roadway, Drainange and Bridge)	\$	12,271,200.00		
Spears Creek Earth Road to I-20 - 5-Lane (Roadway and Drainage)	\$	4,272,250.00		
Total Estimated Construction Cost (ECC)	\$	16,543,450.00		
Utility Relocations and Right-of-Way Acquisition (30% of ECC)	\$	4,963,035.00		
Construction Administration and Inspection (11% of ECC)	\$	1,819,779.50		
Construction Contingency (15% ECC)	\$	2,481,517.50		
Preliminary Construction Estimate Total	\$	25,807,782.00		
ELEMENT	CON	TRACTED AMOUNT		
Holt Design Contract	\$	2,424,509.39		
Grand Total	\$	28,232,291.39		

SPEARS CREEK CHURCH ROAD WIDENING - FROM: TWO NOTCH ROAD TO: EARTH ROAD CURB AND GUTTER WITHOUT SIDEWALK

Preliminary Roadway, Drainage, & Bridge Estimated Cost of Construction April 27, 2021

TOTAL LENGTH (MAINLINE) TOTAL LENGTH (OTHER ROADS) 1.48 MILES 0.27 MILES

ITEM NO.	BAMS NO.	DESCRIPTION	QUANTS.	UNIT	UNIT PRICE	ITEM PRICE
		MOBILIZATION	1	LS	\$1,267,300.00	\$1,267,300.0
	1031100	MOBILIZATION - SUBCONTRACTOR	1	LS	\$894,600.00	\$894,600.0
	1031200	BRIDGE CONSTRUCTION ACCESS	1	LS	\$53,700.00	\$53,700.0
	1032010	BONDS & INSURANCE	1	LS	\$447,300.00	\$447,300.0
	1050800	CONST. STAKES, LINES & GRADES	1	EA	\$286,300.00	\$286,300.0
	1071000	TRAFFIC CONTROL	1	LS	\$894,600.00	\$894,600.0
	1080300	CPM PROGRESS SCHEDULE	1	LS	\$20,900.00	\$20,900.0
	2012000	CLEARING & GRUBBING WITHIN ROADWAY	1	LS	\$864,800.00	\$864,800.0
	2031000	UNCLASSIFIED EXCAVATION	11,100	CY	\$14.00	\$155,400.0
	2033000	BORROW EXCAVATION	36,400	CY	\$16.00	\$582,400.0
	2034000	MUCK EXCAVATION	650	CY	\$20.00	\$13,000.0
	2081001	FINE GRADING	18,640	SY	\$1.90	\$35,420.0
	2103000	FLOWABLE FILL	90	CY	\$250.00	\$22,500.0
	3069900	MAINTENANCE STONE	300	TON	\$60.00	\$18,000.0
		HOT MIX ASPHALT BASE COURSE -TYPE A	8,845	TON	\$68.00	\$601,460.0
		LIQUID ASPHALT BINDER PG64-22	989	TON	\$500.00	\$494,500.0
		FULL DEPTH ASPHALT PATCHING (8" UNIFORM)	150	SY	\$90.00	\$13,500.0
		MILLING EXISTING ASPHALT PAVEMENT (VARIABLE)	26,830	SY	\$5.50	\$147,570.0
		HOT MIX ASPHALT INTERMEDIATE COURSE -TYPE B	5,105	TON	\$55.00	\$280,780.0
		HOT MIX ASPHALT SURFACE COURSE -TYPE B	5,105	TON	\$57.00	\$290,990.0
		CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	16,760	LF	\$20.50	\$343,580.0
		MT3 LEADING END TREATMENT TL3	2	EA	\$3,000.00	\$6,000.0
		MB TRAILING END TREATMENT	2	EA	\$1,400.00	\$2,800.0
		MGS3 GR STANDARD SHOULDER	1,000	LF	\$25.00	\$25,000.0
		MTBBC3 MASH THRIE-BEAM BARRIER CONNECTOR TL3	4	EA	\$2,200.00	\$8,800.0
		NON-MOW STRIP UNDER GUARDRAIL	775	SY	\$50.00	\$38,750.0
	0000200	DRAINAGE	1.743	MI	\$695,000.00	\$1,211,390.0
		PAVEMENT MARKING AND SIGNING	1.743	MI	\$25,000.00	\$43,580.0
		SIGNALIZED INTERSECTION	2.000	EA	\$150,000.00	\$300,000.0
		SEDIMENT AND EROSION CONTROL	1.743	MI	\$185,000.00	\$322,460.0
	l		MULATIVE TO		ψ100,000.00	\$9,688,000.0
1	MISC. &	INCIDENTAL ROADWAY ITEMS (15%)				\$1,453,200.0
II		NAL ITEMS (BRIDGE): new bridge over Spears Creek (40'-40'-40' Flat Slab Bridge) due to signifcant grade changes and dam breach				\$1,130,000.0
III	TOTAL E	STIMATED CONSTRUCTION COST (ECC)				\$12,271,200.0
IV	UTILITY	RELOCATIONS AND RIGHT-OF-WAY ACQUISITION (30% of ECC)				\$3,681,360.0
IV	CONSTR	RUCTION ADMINISTRATION & INSPECTION (11% of ECC)				\$1,349,832.0
IV	CONSTR	EUCTION CONTINGENCY (15% ECC)				\$1,840,680.0
			PROJECT TO	TAL =		\$19,143,072.0

SPEARS CREEK CHURCH ROAD WIDENING - FROM: EARTH RD. TO I-20 CURB AND GUTTER WITHOUT SIDEWALK Preliminary Roadway, Drainage, & Bridge Estimated Cost of Construction April 27, 2021

TOTAL LENGTH (MAINLINE) TOTAL LENGTH (OTHER ROADS) 0.89 MILES 0.25 MILES

ITEM NO.	BAMS NO.	DESCRIPTION	QUANTS.	UNIT	UNIT PRICE	ITEM PRICE
	1031000	MOBILIZATION	1	LS	\$135,300.00	\$135,300.00
		MOBILIZATION - SUBCONTRACTOR	1	LS	\$95,600.00	\$95,600.00
	1032010	BONDS & INSURANCE	1	LS	\$47,800.00	\$47,800.00
		CONST. STAKES, LINES & GRADES	1	EA	\$30,600.00	\$30,600.00
		TRAFFIC CONTROL	1	LS	\$127,400.00	\$127,400.00
		CPM PROGRESS SCHEDULE	1	LS	\$2,300.00	\$2,300.00
	2012000	CLEARING & GRUBBING WITHIN ROADWAY	1	LS	\$92,400.00	\$92,400.00
		UNCLASSIFIED EXCAVATION	5,360	CY	\$14.00	\$75,040.00
		BORROW EXCAVATION	4,500	CY	\$16.00	\$72,000.00
		MUCK EXCAVATION	100	CY	\$20.00	\$2,000.00
		FINE GRADING	13,100	SY	\$1.90	\$24,890.00
		FLOWABLE FILL	100	CY	\$250.00	\$25,000.00
		MAINTENANCE STONE	200	TON	\$60.00	\$12,000.00
		HOT MIX ASPHALT BASE COURSE -TYPE A	6,224	TON	\$68.00	\$423,240.00
	4011004	LIQUID ASPHALT BINDER PG64-22	817	TON	\$500.00	\$408,500.00
		FULL DEPTH ASPHALT PATCHING (8" UNIFORM)	50	SY	\$90.00	\$4,500.00
		MILLING EXISTING ASPHALT PAVEMENT (VARIABLE)	26,950	SY	\$5.50	\$148,230.00
		HOT MIX ASPHALT INTERMEDIATE COURSE -TYPE B	4,770	TON	\$55.00	\$262,350.00
		HOT MIX ASPHALT SURFACE COURSE -TYPE B	4,593	TON	\$57.00	\$261,810.00
		CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	10,900	LF	\$20.50	\$223,450.00
		MT3 LEADING END TREATMENT TL3	2	EA	\$3,000.00	\$6,000.00
		MB TRAILING END TREATMENT	2	EA	\$1,400.00	\$2,800.00
		MGS3 GR STANDARD SHOULDER	875	LF	\$25.00	\$21,880.00
	8055250	NON-MOW STRIP UNDER GUARDRAIL	615	SY	\$50.00	\$30,750.00
		DRAINAGE	1.137	MI	\$695,000.00	\$790,220.00
		PAVEMENT MARKING AND SIGNING	1.137	MI	\$25,000.00	\$28,430.00
		SIGNALIZED INTERSECTION	1.000	EA	\$150,000.00	\$150,000.00
		SEDIMENT AND EROSION CONTROL	1.137	MI	\$185,000.00	\$210,350.00
		CUM	ULATIVE TO	TAL =		\$3,715,000.00
ı	MISC. &	INCIDENTAL ROADWAY ITEMS (15%)				\$557,250.00
II	TOTAL E	STIMATED CONSTRUCTION COST (ECC)				\$4,272,250.00
III	II CONSTRUCTION ADMINISTRATION & INSPECTION (11% of ECC) \$					\$469,947.50
IV	IV UTILITY RELOCATIONS AND RIGHT-OF-WAY ACQUISITION (30% of ECC)			\$1,281,675.00		
v	V CONSTRUCTION CONTINGENCY (15% ECC)			\$640,837.50		
		•	PROJECT TO	TAL =		\$6,664,710.00

LEVELS OF SERVICE

for Multi-Lane Highways

Attachment 3

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		60	Highest level of service. Traffic flows freely with little or no restrictions on maneuverability. No delays
B		60	Traffic flows freely, but drivers have slightly less freedom to maneuver. No delays
C		60	Density becomes noticeable with ability to maneuver limited by other vehicles. Minimal delays
		57	Speed and ability to maneuver is severely restricted by increasing density of vehicles. Minimal delays
E		55	Unstable traffic flow. Speeds vary greatly and are unpredictable. Minimal delays
F		<55	Traffic flow is unstable, with brief periods of movement followed by forced stops. Significant delays

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Source: 2000 HCM, Exhibit 21-3, Speed-Flow Curves with LOS Criteria for Multi-Lane Highways