

Post Design-Build Evaluation Report

Project Description: FY 16 Bridges Batch – 1

P.I. Number: 0014174

County: Elbert, Hart, Stephens, and Wilkes

GDOT District: Districts 1 & 2

Date Conducted: October 2, 2019



Elbert County



Hart County



Stephens County



Wilkes County

Project Description: The proposed project [P.I. No. 0014174] replaced the existing, structurally deficient bridges in following locations.

Bridge Serial Number	Feature Carried	Feature Intersected	County Name	GDOT District
105-5043-0	Double Bridges Road (Carpenter Road)	Coldwater Creek	Elbert	1
147-5031-0	CR 152	Pruitt Creek	Hart	1
257-5033-0	Currahee Lane	North Fork Broad River	Stephens	1
317-0022-0	Sandtown Road	Fishing Creek	Wilkes	2

1. **Design-Build delivery goal(s):** Expedite delivery and minimizing the project’s impact to the traveling public. The project was delivered using Design-Build.

2. **Project stakeholders:**

- GDOT – Innovative Delivery, Districts 1 and 2, Environmental Services, Bridge Design, State Utilities
- ER Snell – Prime Contractor
- Moreland Altobelli – Prime Designer/ Engineer of Record
- Elbert County
- Hart County
- Stephens County
- Wilkes County

3. **Project Summary:**

Project Milestone		Date
Pre-Let	Public Notice Advertisement (PNA)	10/16/2015
	Industry Forum	11/05/2015
	Industry one-on-one meetings	11/05/2015
	Request for Qualifications (RFQ)	01/08/2016
	Notice to Finalists	02/19/2016
	Request for Proposals (RFP) to the finalists	04/22/2016
	Price Proposal / Project Letting	06/17/2016
Post-Let	Project Award	08/01/2016
	NTP1 – Preliminary Design	08/01/2016
	NTP3 – Elbert County	08/11/2017
	NTP3 – Hart County	03/02/2018
	NTP3 – Stephens County	11/06/2017
	NTP3 – Wilkes County	01/31/2018
	Milestone Deadline – Bridge Open to Traffic – Elbert County	02/09/2018
	Milestone Deadline – Bridge Open to Traffic – Hart County	08/02/2018
	Milestone Deadline – Bridge Open to Traffic – Stephens County	05/05/2018
	Milestone Deadline – Bridge Open to Traffic – Wilkes County	08/24/2018
	Contract Completion Date	07/31/2019
	Substantial Project Completion	09/11/2019

4. **Design-Build Proposers:**

	Contractor	Designer	Total Bid
1.	E.R. Snell Contractor, Inc.	Moreland Altobelli Associates	\$6,472,300.00
2.	Baldwin Paving Co. Inc.	Infrastructure Consulting & Engineering	\$11,973,550.00
3.	Georgia Bridge and Concrete, LLC	Wolverton & Associates	\$7,612,000.00
4.	Palmetto Infrastructure, Inc.	Vaughn and Melton	\$10,137,000.00
5.	Talley Construction Company	KCI Technologies, Inc.	\$10,599,208.14

5. **Stipend**

- a. Was a stipend (stipulated fee) offered to proposing Design-Build Teams? Yes No

6. **Design-Build Request for Proposals (RFP)**

- a. Type of procurement: One Phase/Low Bid Two Phase/Low Bid Best Value

Note:

- b. Advertisement duration: 30 days 60 days 90 days 90 days +

- c. Was a draft RFP released for this project? Yes No

If yes # of releases: -

Was a Q&A format provided? Yes No

- d. Were One-on-One meetings held with proposers? Yes No

- e. List GDOT offices involved in the RFP development: Design Policy & Support, Engineering Services, Environmental Services, Innovative Delivery, Utilities, Construction, Bridge, and Districts 1 & 2.

7. **Design-Build RFP Package**

- a. List items included in the RFP package:

Item	Yes	No	Notes
Approved Traffic Study		X	
Bridge layouts	X		
Approved Survey Files	X		
Approved Concept Report		X	
Microstation Design files	X		
Approved Design Exceptions/Variances	X		
Original Bridge Foundation Investigation		X	1 boring at each bridge provided
Approved Pavement Design		X	minor project pvmnt design memo
Approved Overhead/Subsurface Utility Engineering (SUE) Quality Level "B"		X	Level D
Utility Memorandum of Understanding (MOU)	X		
NEPA Categorical Exclusion		X	

- b. General observations of the RFP contents and/or procurement process:

- RIDS - DB Team mentioned additional geotechnical information would have been helpful due to rock elevation issues at Wilkes County bridge.

- More specific upfront information regarding slopes behind the guardrail anchor pad and the requirements for a variance.

c. Were conflicts in project scope identified: Yes No

If yes, what sections should be revised for future RFPs:

8. Environmental

a. Type of document: NEPA: Level: PCE CE EA/FONSI EIS/ROD
 GEPA: Level: Type A Type B EER/NOD

b. Was the environmental document approved prior to the RFP advertisement? Yes No

If no, when was the NEPA/GEPA document approved?

- No Env. Document required, all Environmental Studies and Agency Coordination completed prior to the RFP advertisement.

c. Was a re-evaluation performed post-let? Yes No

If yes, describe scenario why a re-evaluation was required:

d. General observations of the pre-let or post-let environmental process: No issues were discussed regarding the ecology addendum or 404 permitting process. Wilkes County was the only bridge that required a 404 and SBV for stream impacts and work bridge temporary impacts.

9. Environmental Permitting

a. Type of 404 permit required: NWP IP Other None

b. Was mitigation required as part of the permit? Yes No

If yes, did the Design-Build Team perform mitigation and/or acquire credits? Yes No

c. Was a Stream Buffer Variance (SBV) required? Yes No

d. List any other permits required by the project (not counting NPDES Permit): None

e. General observations of the environmental permitting process: The DB Team used an innovative approach to their design and construction different from the costing plans by clear spanning 3 of the 4 streams to minimize 404 impacts, which made the permitting process much smoother. Removal of the existing piles was achieved from above so that construction took place outside of the permitted areas. The DB Team gave Wilkes County a lower priority on the schedule due to the need for a permit.

10. NPDES Permit

a. Did the Design-Build Team prepare the Notice of Intent (NOI)? Yes No NA

b. Did the Design-Build Team pay the NPDES permitting fee? Yes No NA

c. Were the ESPCP regularly redlined? Yes No NA

d. Did any self-report actions occur? Yes No

e. Was a consent order filed? Yes No

f. Additional comments: Wilkes County was the only bridge that required a NOI. The NOI was initially on the old hard-copy system and was completed by the DB Team using the new electronic reporting system.

11. Right of Way (R/W)

a. Was R/W required? Yes No

If yes, who was responsible for R/W? GDOT Locals Design-Build Team

If yes, was it acquired prior to award of the Design-Build contract? Yes No

If yes, did R/W acquisition activities impact the project schedule? Yes No

- b. How were R/W commitments or cost-to-cure elements handled on this project: N/A
- c. List any special circumstances, conditions, or property owner commitments of R/W acquisition:
Elbert County obtained an easement but it was not needed for the DB Team's final design
- d. General observations of the R/W acquisition process:

12. Utilities

- a. Was SUE performed pre-let and included in the RFP package? Yes No
If yes, what level? QL-D QL-C QL-B QL-A
If No, what was the mitigating activity (e.g. white lining specification, "no-conflict" letters, first submission plans):
- b. Were Design-Build Utility MOU's executed? Yes No
- c. List the utility owners, if any, which were included in the Design-Build contract: Stephens County/Toccoa Water
- d. Generally describe observations with respect to Design-Build utility coordination: Additional coordination with Stephens County was required to keep a fire hydrant in service while isolating the water main that was moved to the new bridge. There were minor issues with entry of GUPS permits by the utility owners associated with off-system projects. The utility owners were not used to entering GUPS for no conflict projects.
- e. Generally describe any areas of improvement with respect to Design-Build utility coordination: N/A
- f. What was the frequency of utility coordination meetings? Utility coordination meetings were held as needed, there was only one conflict on the project.

13. Geotechnical

- a. Was an approved Soils Report included in the RFP package? Yes No
If no, was a Soils Report required for the project? Yes No
- b. Was an approved BFI included in the RFP package? Yes No
If no, was a BFI required for this project? Yes No
- c. Was an approved WFI included in the RFP package? Yes No
If no, was a WFI required for this project? Yes No
- d. Was an approved High Mast Foundation Investigation report included in the RFP package? Yes No
If no, was a HMFI required for this project? Yes No
- e. Were there any geotechnical issues encountered on construction? Yes No
If yes, describe issues and outcome: Wilkes County pilot holes/minimum tip issues. OMAT was notified and responded via email outside of the e-builder NCR process, so delays in the review/approval process were incurred. Importance of utilizing the e-builder process for RFI/NCR's was discussed for efficiently maintaining DBA review times.

14. Design and Construction Phases

- a. Did the Design-Build Team advance portions of the project to the construction phase while other portions of the project continued to be designed and/or permits obtained? Yes No

b. Describe the typical frequency for progress meetings? Bi-weekly to monthly as project progressed.

c. Were the Design-Build Team plans/submittals of acceptable quality? Yes No

d. Were GDOT's review times adequate? Yes No

e. Was the Asphalt Index specification included in this project? Yes No

f. Was the Fuel Index specification included in this project? Yes No

g. Was construction of the Maintenance of Traffic (MOT) acceptable? Yes No

h. Was the Schedule of Values adequate? Yes No

If no, describe:

i. Was the pay voucher and overall payment process acceptable? Yes No

If no, describe:

j. Was the Critical Path Method (CPM) schedule specification used on this project? Yes No

If yes, describe general experiences (pro or con) using the CPM specification: DB Team indicated that the activity duration limits in the CPM specs were too restrictive

If yes, any suggested improvements to the use of CPM schedule: DB Team prefers utilizing a 4-5 week look ahead schedule submittal for smaller projects.

k. Were there any unique issues (to Design-Build) that occurred? Yes No

If yes, describe:

- Hart County history mitigation commitments for Kansas Corral barrier wall and plaque design.
- Phasing – bridges were under construction while final design was underway on other bridges.

l. Were sound barriers required on this project? Yes No

If yes, describe the material/color:

If yes, was the sound barrier material/color specified in the contract? Yes No

If yes, was the sound barrier height/location specified in the contract? Yes No

m. Were there lane closure restrictions on this project? Yes No

If yes, were they adequate or could they have been modified for efficiency: Adequate, only used on Elbert county bridge for temporary to permanent striping work.

n. Were there ITS outage restrictions on this project? Yes No NA

If yes, were they adequate or could they have been modified for efficiency:

o. Were there new or existing Traffic Signal modifications required? Yes No

If yes, were the traffic signal permits obtained by GDOT: Yes No

p. Were As-built plans prepared by the Design-Build Team? Yes No Pending

15. Design-Build Innovations

a. Were there innovative designs, solutions or materials used on this project? Yes No

If yes, describe:

- Kansas Corral Barrier Wall for Historic Mitigation
- 3 of 4 bridge were designed to clear span the stream to minimize impacts and 404 permitting requirements

- b. Were any Value Engineering Proposals (VEP) submitted? Yes No

If yes, fill out the below information:

No.	VECP Description	Total Savings	Approved
1.	N/A	\$	N/A

- c. List other benefits that are not reflected in the cost savings:

16. Supplemental Agreement Summary

SA No.	Amount	Description
01	\$10,000	Asphalt Cement Price Adjustment
02	\$ 160,000	Hart Kanas Corral Rail – Historic Mitigation
03	\$0	Wilkes Time Extension

17. DBE

- a. What was the project’s DBE goal? 0%
 b. Was it or will it be met? Yes No

If yes, generally describe utilization:

18. Summary of observations from Office of Innovative Delivery (OID), Construction, DB Team

Overall comments from both GDOT and the DB Team indicated a successfully completed design-build delivery project that utilized some innovative techniques that would not have been available under the typical design/bid/build project delivery method. The project was completed on schedule, with some bridges opening ahead of schedule, and on budget. The design-build team mentioned they looked forward to bidding and working on future GDOT design-build projects.

19. Recommendations

- Construction Liaison – recommends including the Type 12 guardrail anchor pad design exception detail specifications on the plan sheets for construction inspection. Standards and details referenced on the standards sheet should still be included.

20. Notable achievements by early interaction of design and contractor

- Early interaction accelerated time from design to construction.

21. Post Design-Build Evaluation participants:

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21. Post Design-Build Evaluation participants:

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