

Post Design-Build Evaluation Report

Project Description: SR 316 @ CR 3929/Walther Blvd – Grade Separation

P.I. Number: 0010425

County: Gwinnett

GDOT District: District 1

Date Conducted: June 02, 2016



(Walther Blvd Bridge Construction over SR 316, Gwinnett County)

1. **Project Description:** P.I. 0010425 is the grade separation of Walther Boulevard over S.R.316 in Gwinnett County that is partially located in the City of Lawrenceville. This project will eliminate the existing right in/right out access from S.R. 316 to Walther Boulevard and vice versa. The proposed project is approximately 0.3 miles in length and consists of a four span bridge 404 ft. in length. The bridge span and arrangement do not preclude the addition of a HOV/Managed Lane access point as well as the subsequent required widening of S.R. 316. Walther Boulevard will consist of two 12 ft. travel lanes, two 4 ft. bike lanes, a 14 ft. two way left turn lane and 12 ft. shoulder consisting of a 5 ft. pedestrian sidewalk.
2. **Design-Build delivery goal(s):** Expedite delivery and to make use of available funds.
3. **Project stakeholders:**
 - GDOT – Innovative Delivery, Program Delivery, Traffic Operations, Construction Inspection, Design Policy & Support, District 1
 - G.P. Enterprises, Inc. – Prime Contractor
 - Michael Baker Jr., Inc. – Prime Designer
 - Gwinnett County DOT
 - Georgia Gwinnett College

4. **Project Summary:**

	Project Milestone	Date
Pre-Let	Public Notice Advertisement (PNA)	01/17/2014
	PNA Addendum No. 1	01/23/2014
	Request for Qualifications (RFQ)	02/21/2014
	Letter of Interest (LOI)/Statement of Qualifications (SOQ)	03/21/2014
	Notice to Finalists	04/04/2014
	Request for Proposals (RFP)	04/18/2014
	Administrative Package Due	06/20/2014
	Technical Package Due	06/20/2014
	Price Proposal / Project Letting	06/20/2014
Post-Let	Project Award	07/03/2014
	NTP 1 – Preliminary Design	08/22/2014
	NTP 2 – Final Design	12/18/2014
	NEPA (CE) Re-Evaluation	01/07/2015
	Conditional NTP 3a – Construction Phase	02/12/2015
	Full NTP 3 – Construction Phase	03/16/2015
	Contract Completion Date	04/13/2016
	Open to traffic	06/03/2016
	Substantial Project Completion	TBD

5. **Design-Build Proposers:**

	Contractor	Designer	Total Bid
1	G.P. Enterprises, Inc.	Michael Baker Jr., Inc.	\$4,383,908.00
2	CWM Contracting Co.	Infrastructure Consulting & Engineering	\$5,315,009.66
3	Gregory Bridge Co.	Heath & Lineback Engineers, Inc.	\$6,447,152.00
4	E.R. Snell Contractor, Inc.	URS Corporation	\$6,870,877.00
5	Rogers Bridge Co.	Stantec Consulting Services, Inc.	\$7,464,173.60

6. Stipend

- a. Was a stipend (stipulated fee) offered to proposing Design-Build Teams? Yes No
 If yes, how much per firm: - N/A

7. Design-Build Request for Proposals (RFP)

- a. Type of procurement: One Phase/Low Bid Two Phase/Low Bid Best Value
 b. Advertisement duration: 30 days 60 days 90 days
 c. Was a draft RFP released for this project? Yes No
 If yes # of releases: - N/A
 d. Was a Q&A format provided? Yes No
 e. Were One-on-One meetings held with proposers? Yes No
 f. List GDOT offices involved in the RFP development: Design Policy & Support, Engineering Services, Environmental Services, Innovative Delivery, Utilities, Construction, Bridge, District 1, Traffic Operations

8. Design-Build RFP Package

- a. List items included in the RFP package:

Item	Yes	No	Notes
Costing plans	X		Provided on the GDOT's SharePoint site
Bridge layouts	X		Provided on the GDOT's SharePoint site
Approved concept report/concept revision	X		Provided on the GDOT's SharePoint site
Approved Environmental Document	X		Provided on the GDOT's SharePoint site
CAiCE files	X		Provided on the GDOT's SharePoint site
Microstation files	X		Survey files provided on GDOT's SharePoint site
Approved Design Exceptions/Variances		X	No Design Exceptions/Variances required for the project
Geotechnical Reports	X		Previous GDOT approved reports that were performed within the project vicinity were provided on GDOT's SharePoint site
Approved Pavement Design		X	The project qualified as a low volume road and the pavement section was listed in the contract
Pavement Design Alternative		X	
Overhead/Subsurface Utility Engineering (SUE) Quality Level "B" (QL-B)	X		Provided on the GDOT's SharePoint site
Utility Memorandum of Understanding (MOU)	X		Provided on the GDOT's SharePoint site, and in Volume 2 attachments.
Costing Plan Review Report		X	
Draft Transportation Management Plan (TMP)	X		Provided on the GDOT's SharePoint site
Other	X		Survey Control database, Specifications, redline and clean pdf versions of the DB Contract, lighting agreement with Gwinnett County DOT, lighting specification tear sheets, traffic study

- b. General observations of the RFP contents and/or procurement process:
 - o The DB Team recommended that GDOT provides geotechnical borings in the area where the bridge is believed to be located prior to project letting. This reduces the geotechnical risks of the project.

c. Were conflicts in project scope identified: Yes No

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

- o The slope paving thickness was specified as 4" in Section 11.2.2, and the GDOT detail S-6 specifies 6" in some areas. The concern is that 4" will break after vehicles stop on it.
- o The lighting design per Volume 2 was specific to pedestrian scale lighting, but the requirements for Volume 3 and comments received from GDOT were based on vehicle traffic. Glaring caused by any light proposed by the project should be considered in the design whether it is a pedestrian or vehicle lighting design.

9. 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? May 27, 2014

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

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

- o A no change re-evaluation was completed in order to begin construction prior to all of the right of way being cleared and to remove the Indiana bat from the Special Provisions.

If yes, did the Design-Build Team perform the re-evaluation? Yes No

Did the Design-Build Team provide supporting documentation? Yes No

d. General observations of the pre-let or post-let environmental process:

- o The pre- and post-let environmental process did not seriously hinder the project schedule. However some minor changes to the design required a no change re-evaluation and construction could not begin until this was complete. The environmental document prepared prior to letting could allow for more flexibility in design, such that a DB Team can be innovative without risking the schedule for the environmental process.

10. 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):

- o None

e. General observations of the environmental permitting process:

- o None

11. 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
If yes, describe the reason(s) and outcome(s): N/A
- e. Was a consent order filed? Yes No
If yes, describe the reason(s) and outcome(s): N/A
- i. Additional comments: The DB Team prefers to coordinate directly with EPD to deliver plans, receive comments, pay for the NPDES permitting fee, and prepare the NOI. They do this on every one of their non-GDOT projects.

12. 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, how did R/W acquisition activities impact the project schedule?
 - o As per Section 7.2.7 of the DB Contract, the Department was required to provide access to all properties by December 31, 2014. Due to complications, Gwinnett County DOT was not able to acquire access to all properties until March 10, 2016.
- b. How were R/W commitments or cost-to-cure elements handled on this project:
 - o Gwinnett County DOT handled all R/W for the project.
- c. List any special circumstances, conditions, or property owner commitments of R/W acquisition:
 - o Condemnations were filed on three of the four parcels
- d. General observations of the R/W acquisition process:
 - o The R/W acquisition process took longer than expected by all stakeholders of the project.

13. 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, was a 'SUE waiver' approved by the State Utilities Office? Yes No
If No, what was the mitigating activity (e.g. white lining specification, "no-conflict" letters, first submission plans)?
 - o N/A
- 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: AT&T, City of Lawrenceville Gas, Gwinnett County Water Resources, Jackson EMC, Traffic.com/Nokia Charter Communications.
- d. Generally describe observations with respect to Design-Build utility coordination:
 - o The DB Team conducted the utility coordination kick-off meeting a week later than expected. After the meeting, most "no conflict" letters were acquired and very few conflicts were identified for all other utility owners.
 - o The utility MOU's provided in the DB Contract had a list of preapproved sub-contractors for that particular utility owner. This allowed the DB Team to rely on most of the MOU's, and they did

not have to compare GDOT's sub-contractor approval list and against the utility owners approved list. The DB Team said this reduced the utility risk on the project.

- e. Generally describe any areas of improvement with respect to Design-Build utility coordination:
 - o The DB Team would like to see specification and detail sheets from the utility companies outlining what they would accept in the design and construction.
 - o It was recommended that it would be beneficial to coordinate the specifications/details that would impact a structure with the bridge office.
- f. What was the frequency of utility coordination meetings?
 - o Utility coordination meetings occurred on a monthly basis until relocations were complete.

14. 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 Bridge Foundation Investigation (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 Wall Foundation Investigation (WFI) required for this project? Yes No
- d. Was an approved High Mast Foundation Investigation (HMFI) 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:
 - o The DB Team explained that the reviews from OMAT required additional requirements beyond the Engineer of Record's (EOR) recommendation. The DB Team explained that LRFD increases the piling and footing size which in turn increases the project costs that the Department pays for on each bridge substructure. Spread footings could not be constructed due to the proximity of SR 316 and underground utilities.
 - o Specifically on bent 3, the DB Team ran into rock where pilot holes were necessary prior to driving piles. This is claimed to have added \$109,127.81 to the project cost and 22 days to the opening of Walther and overall contract completion date.

15. 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
If yes, describe: Conditional - Construction was allowed inside the existing ROW of SR 316 only and not to impede on the existing ROW for CR 3929/Walther Blvd, proposed ROW and Easement.
- b. Describe the typical frequency for progress meetings? Monthly
- c. Were the Design-Build Team plans/submittals of acceptable quality? Yes No
If no, describe issue and any corrective actions taken: -
- d. Were GDOT's review times adequate? Yes No
If no, describe: N/A
General observations of review times:
 - o None

- 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 the Maintenance of Traffic (MOT) acceptable? Yes No
If no, describe: N/A
- h. Was the Schedule of Values adequate? Yes No
If no, describe: N/A
- i. Was the pay voucher and overall payment process acceptable? Yes No
If no, describe: N/A
- 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:
 - o The CPM specification and Primavera P6 scheduling software was a learning experience for the DB Team. Once they learned how to use the scheduling tool and specification, the DB Team came to understand the power and advantages of the tool.If yes, any suggested improvements to the use of CPM schedule:
 - o None
- k. Were there any unique issues (to Design-Build) that occurred? Yes No
If yes, describe:
 - o During the design phase, the designer's sub-consultants who qualified as a DBE did not count towards the projects DBE goal. Sub consultants are currently not inputted into SiteManager, and need to be set up as consultants or vendors by GDOT.
- l. Were sound barriers required on this project? Yes No
If yes, describe the material/color: N/A
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:
 - o None
- 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: None
- 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

16. Design-Build Innovations

- a. Were there innovative designs, solutions or materials used on this project? Yes No
If yes, describe:
 - o The DB Team was able to tighten up the project limits by adjusting Walther Blvd's bridge approach profile. The profile adjustment reduced the overall ROW impacts and costs for Gwinnett County DOT, since they were buying the ROW for the project.
 - o GDOT adopted the use of City of Lawrenceville lighting architecture which includes the use of LED lights, lanterns, poles, and bases.

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

If yes, fill out the below information:

No.	VECP Description	Total Savings	Approved
-	-	-	-

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

17. Supplemental Agreement Summary

SA No.	Amount	Description
There were no Supplemental Agreements on this project, at the time of this report.		

18. DBE

- a. What was the project’s DBE goal? 9.3%
 b. Was it or will it be met? Yes No

If yes, generally describe utilization:

- o The Sharon Company
- o Martin-Pinero Construction
- o Dixie Electric
- o Edward A Scott Trucking
- o Teri Harris Trucking
- o Laniappe Development Company

If no, then describe reasons:

- o N/A

19. Summary of observations from Office of Innovative Delivery

- a. The Office of Innovative Delivery noticed that the DB Team was compliant with the GDOT specifications, standards, details, guidelines, and policies. This project was the first to use the updated DB Contract with Volumes 1-3 and also the first for this team as a DB Team.

20. Summary of observations from Office of Construction

- a. The Office of Construction noticed that after NTP for construction the DB Team was very active during the beginning, noticed a lull in activity through the middle of the project, and the site was active again towards the completion.

21. Summary of observations from Design-Build Team

- a. The DB Team believes this project was very successful overall. GDOT and the DB Team worked together to meet the project objectives of expediting delivery and making use of the available funds. The DB Team expects that all schedule requirements will be met after approval of supplemental agreements and the inclusion of weather days.

22. Recommendations

- a. None

23. Notable achievements by early interaction of design and contractor

- a. Prior to construction, the DB Team was able to stage the construction and conditional construction as NTP’s were issued.

24. Post Design-Build Evaluation participants:

