Post Design-Build Evaluation Report

Project Description: SR400 Widening Construction Project

P.I. Number: 0013367
County: Forsyth
GDOT District: District 1

Date Conducted: January 23, 2019
Project Description: This project proposes to construct one additional 11 foot travel lane, 10 foot inside shoulder (of which 8 feet would be paved), and 11 foot paved outside shoulder in each direction on US 19/SR 400, from the McFarland Parkway interchange north to SR 369 / Brown’s Bridge Road. The project length would be approximately 13.4 miles. The construction of the additional lanes and inside shoulder would take place in the existing median of US 19/SR 400.

1. Design-Build delivery goal(s): Two Phase Low Bid - Variable Scope Procurement was designed to receive maximum value to the fixed budget. The scope of the project included a base bid and bidding of several segments each extending further north than the previous segment. The base bid for the project began at McFarland Parkway and extended north to Bald Ridge Marina in Forsyth County, in both directions. The proposals would then include additional segments north of Bald Ridge Marina up to SR 369 and then from SR 369 south to Bald Ridge Marina. The winning proposal including the full scope of the project, from McFarland Parkway to SR 369 in both directions.

2. Project stakeholders:
   - GDOT – Innovative Delivery, District 1, Environmental Services, Bridge Design
   - C.W. Matthews Contracting Co. – Prime Contractor
   - ICE – Prime Designer/Engineer of Record
   - Forsyth County (Partially financed the project)
   - USACE – Lake Lanier Project Office

3. Project Summary:

<table>
<thead>
<tr>
<th>Project Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Let</td>
<td></td>
</tr>
<tr>
<td>Public Notice Advertisement (PNA)</td>
<td>12/10/2014</td>
</tr>
<tr>
<td>Request for Qualifications (RFQ)</td>
<td>01/16/2015</td>
</tr>
<tr>
<td>Letter of Interest (LOI)/Statement of Qualifications (SOQ)</td>
<td>02/13/2015</td>
</tr>
<tr>
<td>Notice to Finalists</td>
<td>02/27/2015</td>
</tr>
<tr>
<td>Request for Proposals (RFP)</td>
<td>02/27/2015</td>
</tr>
<tr>
<td>Administrative Package Due</td>
<td>04/24/2015</td>
</tr>
<tr>
<td>Technical Package Due</td>
<td>04/24/2015</td>
</tr>
<tr>
<td>Price Proposal / Project Letting</td>
<td>04/24/2015</td>
</tr>
<tr>
<td>Project Award</td>
<td>05/06/2015</td>
</tr>
<tr>
<td>Post-Let</td>
<td></td>
</tr>
<tr>
<td>NTP1 – Preliminary Design</td>
<td>06/01/2015</td>
</tr>
<tr>
<td>NTP2 – Final Design Activities</td>
<td>08/03/2015</td>
</tr>
<tr>
<td>Conditional NTP 3A – Limited Construction in Segment 1</td>
<td>10/19/2015</td>
</tr>
<tr>
<td>Conditional NTP 3B – SAF1 Concrete Rehabilitation</td>
<td>11/02/2015</td>
</tr>
<tr>
<td>Conditional NTP 3C – Segment 2/Big Creek Bridge/MS4 Segment 1</td>
<td>01/20/2016</td>
</tr>
<tr>
<td>NTP 3D – Construction</td>
<td>06/30/2016</td>
</tr>
<tr>
<td>Milestone Deadline – All New Lanes Open to Traffic</td>
<td>10/03/2018</td>
</tr>
<tr>
<td>Contract Completion Date (including Supplemental Agreements)</td>
<td>12/06/2019</td>
</tr>
<tr>
<td>Substantial Project Completion</td>
<td>12/06/2019</td>
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</tbody>
</table>
4. Design-Build Proposers:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Designer</th>
<th>Total Bid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 C.W. Matthews Contracting Co.</td>
<td>Infrastructure Consulting &amp; Engineering</td>
<td>$47,470,406.25</td>
</tr>
<tr>
<td>2 Archer Western Contractors</td>
<td>RS&amp;H</td>
<td>$53,903,000.00</td>
</tr>
<tr>
<td>3 McCarthy Improvement</td>
<td>American Consulting</td>
<td>$60,947,000.00</td>
</tr>
<tr>
<td>4 G.P.’s Enterprises, Inc.</td>
<td>Wolverton &amp; Associates, Inc.</td>
<td>$61,288,108.30</td>
</tr>
</tbody>
</table>

5. Stipend

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

6. Design-Build Request for Proposals (RFP)

a. Type of procurement: ☐ One Phase/Low Bid ☒ Two Phase/Low Bid ☐ Best Value  
   Note: Five Design-Build Teams submitted LOI/SOQ packages in response to the RFQ and five were notified to be finalists. On April 24, 2015 the Department received five price proposals and corresponding technical proposals.

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: N/A  
   Was a Q&A format provided? ☒ Yes ☐ No

d. Were One-on-One meetings held with proposers? ☐ Yes ☒ No  
   General panel discussion comment - One on one meetings may be beneficial for Low Bid procurements

e. List GDOT offices involved in the RFP development: Design Policy & Support, Engineering Services, Environmental Services, Innovative Delivery, Construction, Bridge, District 1, Traffic Operations

7. Design-Build RFP Package

a. List items included in the RFP package:

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBB Reference Drawings</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved Existing BFI</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved Concept Report</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Criteria</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Files</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved Design Variance</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drainage &amp; Erosion Plans</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Environmental Working Document</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Field Plan Review Documents</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geometry (CaICE &amp; InRoads)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approved Pavement Design</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right of Way Documents</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railroad Coordination Information</td>
<td>X</td>
<td>N/A</td>
<td></td>
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<tr>
<td>Value Engineering Study</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b. General observations of the RFP contents and/or procurement process:
   Contractor performed LIDAR pre let.
   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?
   c. Was a re-evaluation performed post-let? ☐ Yes ☒ No
      If yes, describe scenario why a re-evaluation was required:
      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:

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): USACE Dredging Permit
   e. General observations of the environmental permitting process: 2 NWP’s obtained to phase construction, USACE Environmental Stewardship commitment to contribute to the DNR Wildlife Impoundment project, minimal dredging @Lake Lanier to offset storage capacity loss.

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
       If yes, describe the reason(s) and outcome(s):
e. Was a consent order filed? □ Yes ☒ No
   If yes, describe the reason(s) and outcome(s):

i. Additional comments: MS4 Area

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:
      o N/A
   c. List any special circumstances, conditions, or property owner commitments of R/W acquisition:
      o Environmental Stewardship Commitment for impacts to USACE property
      o Big Creek Greenway trail closure notice requirement was completed
   d. General observations of the R/W acquisition process:
      o N/A

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): Forsyth County Utilities information provided & white-lining Spec included. Since SR 400 is a Limited Access facility similar to an interstate, utility relocations were viewed as low risk.
   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:
   d. Generally describe observations with respect to Design-Build utility coordination:
      o N/A
   e. Generally describe any areas of improvement with respect to Design-Build utility coordination:
      o N/A
   f. What was the frequency of utility coordination meetings?
      o N/A

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:

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

If yes, describe: Conditional NTP 3A was issued for Conditional NTP 3A – Limited Construction in Segment 1 (First 8 miles NB to SR20 to start widening/paving work), Conditional NTP 3B – SA#1 Concrete Rehabilitation, Conditional NTP 3C – Segment 2/Big Creek Bridge/MS4 Segment 1, NTP 3D – Construction.

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:

General observations of review times:

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:

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:

Scaled appropriately for the project

If yes, any suggested improvements to the use of CPM schedule:

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

If yes, describe: Phasing of the permits, variable scope procurement,

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:

○ Restrictions were adequate

○ NB/SB lane closure overlap created onlooker delays

○ Continuous lane closures throughout the weekend were an advantage
Allowing Lane Closures throughout the weekend (day and night) added efficiency to the work.

Were there ITS outage restrictions on this project?  
☐ Yes  ☐ No  ☒ NA

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

Were there new or existing Traffic Signal modifications required?  
☐ Yes  ☒ No

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

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:
      - Phased construction required that multiple NWP be obtained from USACE
      - Both Plan and Profile included on same sheet

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

      If yes, fill out the below information:

<table>
<thead>
<tr>
<th>No.</th>
<th>VECP Description</th>
<th>Total Savings</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>$</td>
<td>N/A</td>
</tr>
</tbody>
</table>

   e. List other benefits that are not reflected in the cost savings:
      - Weekend lane closures (day and night) increased efficiency

16. **Supplemental Agreement Summary** - Pending liquidated damages final determination.

<table>
<thead>
<tr>
<th>SA No.</th>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$140,213.50</td>
<td>Spall Repair Overrun</td>
</tr>
<tr>
<td>2</td>
<td>$454,781.25</td>
<td>Erosion Control Hay bale Checkdams</td>
</tr>
<tr>
<td>3</td>
<td>$8,220,797.37</td>
<td>Replace outside shoulder</td>
</tr>
<tr>
<td>4</td>
<td>($353,610.29)</td>
<td>Rumble strips in Lieu of Asphalt</td>
</tr>
<tr>
<td>5</td>
<td>$1,913,277.12</td>
<td>Full Depth Slab Replacement</td>
</tr>
<tr>
<td>6</td>
<td>($235,670.73)</td>
<td>Polymer Overlay Credit</td>
</tr>
<tr>
<td>7</td>
<td>$63,547.14</td>
<td>RPM and Preformed Tape Replacement</td>
</tr>
<tr>
<td>8</td>
<td>$469,170.00</td>
<td>Additional Concrete Slab Repair</td>
</tr>
</tbody>
</table>

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**
   o Monthly meetings were beneficial
   o 2 week look ahead was beneficial to CEI
   o Reduced submittals were beneficial
19. **Recommendations**
   - CPM specifications scalable to the project
   - Include PR and/or Communications in Post DB Construction Report checklist
   - Get local officials involved early

20. **Notable achievements by early interaction of design and contractor**

21. **Post Design-Build Evaluation participants:**
<table>
<thead>
<tr>
<th>Name</th>
<th>Office/Company</th>
<th>Phone</th>
<th>e-mail address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuck Hasty</td>
<td>GDOT - Eng. Srvcs.</td>
<td>404.631.1717</td>
<td><a href="mailto:chasty@dot.ga.gov">chasty@dot.ga.gov</a></td>
</tr>
<tr>
<td>DOUGL WOOD</td>
<td>GDOT - AAM - AREN1</td>
<td>678-322-8245</td>
<td><a href="mailto:dwood@dot.ga.gov">dwood@dot.ga.gov</a></td>
</tr>
<tr>
<td>Rick O'Hara</td>
<td>GDOT - OID</td>
<td>404.631.1669</td>
<td><a href="mailto:rohara@dot.ga.gov">rohara@dot.ga.gov</a></td>
</tr>
<tr>
<td>Nick Mullins</td>
<td>GDOT - DI Construction</td>
<td>678-322-8206</td>
<td><a href="mailto:nmullins@dot.ga.gov">nmullins@dot.ga.gov</a></td>
</tr>
<tr>
<td>Beau Quailes</td>
<td>GDOT - SCO</td>
<td>404-631-1615</td>
<td><a href="mailto:bquailes@dot.ga.gov">bquailes@dot.ga.gov</a></td>
</tr>
<tr>
<td>Bob Thompson</td>
<td>CW MATTHEWS</td>
<td>770-571-9444</td>
<td><a href="mailto:bobt@cwmatthews.com">bobt@cwmatthews.com</a></td>
</tr>
<tr>
<td>Sam Wade</td>
<td>ICE</td>
<td>698-521-5111</td>
<td><a href="mailto:sam.wade@ice-eng.com">sam.wade@ice-eng.com</a></td>
</tr>
<tr>
<td>Andrew Hoening</td>
<td>GDOT - OID</td>
<td>404-631-1757</td>
<td><a href="mailto:ahoening@dot.ga.gov">ahoening@dot.ga.gov</a></td>
</tr>
<tr>
<td>Jason Dyke (Phone)</td>
<td>GDOT - Dot 1</td>
<td>678-332-8305</td>
<td><a href="mailto:dyke@dot.ga.gov">dyke@dot.ga.gov</a></td>
</tr>
<tr>
<td>Jeff Vandyke</td>
<td>HNTB</td>
<td>470-891-3080</td>
<td><a href="mailto:juvandy@hntb.com">juvandy@hntb.com</a></td>
</tr>
</tbody>
</table>