

NCDOT / ACEC-NC / CAGC DESIGN-BUILD JOINT SUBCOMMITTEE MEETING MINUTES

Date: August 4, 2020 at 9:30 a.m.
Location: GoToMeeting Conference Call -
Attendees: See Meeting Attendee List

- I. Welcome and Introductions (Teresa)
- II. NCDOT / NCTA Items (Teresa / Rodger)

- 1. NCDOT

- a. **I-6064 Flood Model and RFP Hydraulic Requirements** - Since I-95 resiliency is an important aspect of the I-6064 project, the Department has developed a 2-D Hydraulic Model that is based on the Department's preliminary design. Through coordination with FEMA, the City of Lumberton, NCRR and others, the Department has refined the model and the associated preliminary design. Additionally, the model incorporates a future flood gate at the CSX / VFW underpass currently in development by the City of Lumberton. Due to the complexity of the model, the limited number of firms that are prequalified to perform this type of modeling, and the required extensive coordination with third-party stakeholders, the Department asked for input on allowing the Design-Build Team to modify the model. Specifically, the Department is considering 1) allowing the Design-Build Team to modify the hydraulic model and take responsibility for its accuracy or 2) restricting modifications to the model and maintain responsibility for its accuracy. The first option would allow the Design-Build Team to modify the Department's preliminary design elements that impact the model and require the Design-Build Team to adjust the model to incorporate those design changes. However, due to the magnitude and complexity of the model, the Department would probably extend the typical ten-day review time for all modifications. The second option would prevent the Design-Build Team from modifying the model by defining hydraulic design parameters that impact the model in the Request for Proposals. At a minimum, these parameters would include providing a vertical profile that the Design-Build Team cannot lower and dictating culvert sizes at major hydraulic crossings.

Due to the risk, especially schedule risk, associated with modifying the model and obtaining third-party concurrence, the Industry agreed that the Department should be prescriptive on the hydraulic requirements while allowing as much flexibility as possible. Thus, the Department plans to restrict modifications to the hydraulic model by dictating the minimum I-95 vertical alignment and box culvert size requirements at major hydraulic crossings in the Request for Proposals.

- b. **Estimating Group Access to Electronic Technical Proposals** - When the Department began requiring electronic versions of the Technical Proposals, the Design-Build Unit committed to keeping the Technical Proposals under lock and key until the contract was executed. However, allowing the Estimating Group access to the electronic files during the procurement process will result in more accurate Engineer's Estimates. If allowed, the Department would continue to only require PDF files of the Technical Proposal. Additionally, the Estimating Group has agreed to sign Confidentiality Agreements and the Technical Proposals would not be placed on the Department's server or an accessible website. The Subcommittee had no issues or



concerns allowing the Estimating Group access to the electronic version of the Technical Proposals during the procurement phase.

- c. **Right of Way Management System (ROWMS)** - The Right of Way Unit has been developing a right of way management / tracking system for the past ten years. This system will 1) unify all right of way workflow under one application, 2) interface with NCDOT internal systems, 3) capture all right of way documents, 4) have reporting capabilities, and 5) document coordinately correct right of way. Prior to implementation on all Design-Build projects, the Department plans to schedule ROWMS training for private engineering firms and select a pilot Design-Build project.
- d. **Follow-up on Potential Additional Design-Build Team Dry Utility Responsibilities - Clearing and Grubbing and Erosion Control Design and Installation** - The Department indicated that the comments from ACEC on shifting the dry utility clearing and grubbing and erosion control responsibilities to the Design-Build Team were more positive than AGC's comments. However, the Department thinks that the major AGC concerns below could be resolved:
 - Concern with NOVs resulting from the utility contractor's actions being assigned to the project and the Design-Build Team - NCDOT explained that all utility related NOVs are currently assigned to the project
 - Concern with the Design-Build Team's ability to stop the utility contractor's work to allow repairs to erosion control devices, prevent permit violations, etc. - NCDOT explained that the Department can stop / prevent work from being performed by the utility contractor
 - Concern with the unit prices for dry utility clearing and grubbing and erosion control activities associated will be too low – NCDOT explained that the unit prices can be modified based on consistent input from the short-listed Design-Build Teams

NCDOT also indicated that if the dry utility responsibilities were shifted to the Design-Build Team, the Department would be authorized to review the erosion control submittals, minimizing the schedule risk associated Land Quality reviews. Additionally, the schedule delays associated with the utility owner performing the clearing and grubbing would be eliminated. Thus, the Department asked if the Industry's concerns were of such a magnitude that they could not be resolved or if there was a potential to alleviate the concerns and shift the dry utility responsibilities to the Design-Build Team. The Department also asked if the type of project should dictate who was responsible for the dry utility work. For example, could the Design-Build Team be responsible for the dry utility work for widening projects, but not for new location projects? The Department also asked if the dry utility responsibilities should be based on the specific utility owner. It was agreed that shifting the dry utility responsibilities to the Design-Build Teams has potential and a small working group consisting of ACEC, AGC, NCTA and NCDOT representatives would discuss in more detail and provide recommendations to the Subcommittee.

- e. **Follow-up on I-2513B Transmission Line Relocations** - Due to the positive feedback from the Industry, the Department will coordinate the transmission line relocations with Duke Energy based on the Department's preliminary design. It was noted that SHPO has concerns with the transmission line pole currently proposed to be relocated to the corner of the Riverside Cemetery historic property. However, the Department plans to resolve these concerns during completion of the NEPA process.
- f. **NCDOT Cash Balance Impact on Design-Build Program** - The Department is currently evaluating project schedules and hopes to have projects re-prioritized and an updated Let List available in a few weeks. However, it was noted that the project re-prioritization will not be final until BOT approval.

2. NCTA - No new topics.

III. Upcoming Design-Build Projects (Anticipated DB List) (Teresa)

i. SUBJECT TO CHANGE WITHOUT NOTICE

IV. Carolina AGC Items (Victor)

- 1. **Standardize Utility As-Builts for Municipalities and Submittal Review Time** - The AGC expressed concern that municipalities do not have consistent As-Built requirements, creating an iterative approach to submittals and schedule delays. The AGC asked if the Department could review the utility As-Builts, specify the As-Built requirements in the RFP or standardize the As-Built requirements for the various municipalities. The Department explained that NCDOT cannot dictate a municipality's As-Built specifications / standards or the municipality's review time. It was also noted that some smaller municipalities do not have documented As-Built requirements. The NCDOT Utility Encroachment Group will evaluate possible modifications / clarifications to the As-Built requirements, including possibly addressing the requirements in the Utility Agreement.

V. ACEC Items (Jonathan)

- 1. Jonathan Henderson will serve as the ACEC Subcommittee Co-Chair this year.
- 2. New member introductions
 - a. Stephen Roberts - AMT
 - b. Nilesh Surti - Arcadis
 - c. David Gourley - WSP

VI. Open Discussion / Ongoing Items (Committee)

- 1. **Sound barrier wall discussion on next steps and action items** - The Department is currently waiting on data from multiple projects prior to re-evaluating the sound barrier wall cost responsibilities. It was agreed that a small working group consisting of ACEC, AGC, NCTA and NCDOT representatives would discuss the sound barrier wall cost responsibilities once the additional project information is available and provide recommendations to the Subcommittee.



2. **Stipend Report Update** - Matthew Payne agreed to take the lead to continue the stipend conversation. The Department indicated that details on the cost / benefit of Alternative Technical Concepts could be helpful in justifying higher stipends.

VII. Next Meeting

(Jonathan)

1. 2020 - 2021 Meeting Schedule:

- November 3, 2020
- February 2, 2021
- May 4, 2021

VIII. Meeting Adjourn



NCDOT / ACEC-NC / CAGC DESIGN-BUILD JOINT COMMITTEE
Anticipated Design-Build Projects
August 4, 2020

**** NOTE ** Due to the current funding constraints, the schedules below are subject to change**

- **I-5987** - I-95 from US 301 (Exit 22) to mile-marker 36.7 - Widen to eight lanes
 - **Converted to two Design-Bid-Build Projects**

- **I-6064** - I-95 from I-74 / US 74 (Exit 13) to US 301 (Exit 22) - Widen to eight lanes and pavement rehabilitation
I-5879 - I-95 / Carthage Road interchange improvements - The Department will NOT provide signed and sealed plans
 - Anticipated September / October 2020 Advertisement
 - Preliminary Construction Estimate - \$301 million

- **I-2513B** - New Route from north of SR 3548 (Haywood Road) to existing US 19 / US 23 / US 70
I-2513D - SR 1477 (Riverside Drive) from NC 251 / SR 1781 to I-40 SR 1231 (Hill Street)
 - Anticipated November 2020 Advertisement
 - Will not be combined with I-2513A
 - Approximately 2.6 miles
 - Preliminary Construction Estimate - \$456 million

- **R-5777C** - US 70 from Thurman Road to the Havelock Bypass - Upgrade to freeway standards - **Centrally Managed**
 - Anticipated January 2021 Advertisement
 - The Design-Build Team will NOT design or construct the US Forest Ranger Station Building relocation
 - Approximately 5.6 miles
 - Preliminary Construction Estimate - \$123 million

- **R-2576 - Mid-Currituck Toll Bridge - NCTA**
 - **Current August 2021 Let Date will be delayed**
 - Approximately 9.9 miles
 - Procurement Type to be Determined - Design-Build / Design-Build Maximum Cap / Design-Build Finance - Department did not receive the INFRA Grant which impacts the Plan of Finance
 - SELC has sued the NCTA
 - Preliminary Construction Estimate - \$415 million

- **B-6015 - Replace Bridge No. 237 on SR 1913 (Sugar Loaf Road) over Rock Creek**
B-6018 - Replace Bridge No. 536 on SR 1296 (Brooks Branch Road) over Newfound Creek
 - **Anticipated January 2021 Advertisement**
 - **Express Design-Build**
 - **Division 13**
 - **Preliminary Construction Estimate - \$1.4 million**

- **U-5307A - US 1 from I-540 to north of SR 2006 (Durant Road)**
 - Anticipated April 2021 Advertisement
 - Approximately 1.7 miles
 - Preliminary Construction Estimate - \$83 Million
 - Potential for U-5307B & C to be converted to a single Design-Build Project and U-5307D to be converted to another Design-Build Project

- **Express Design-Build Spring Year 9 - Three bridge replacements in Division 11**
 - Anticipated April 2021 Re-Advertisement
 - **Replace Bridge No. 35 on SR 1422 (Fox Ridge Road) over Glade Creek**
 - **Replace Bridge No. 133 on SR 1433 (Ridge Glen Road) over Little River**
 - **Replace Bridge No. 733 on SR 2516 (Industrial Park Road) over Cub Creek**

- **U-5518 - US 70 (Glenwood Avenue) from I-540 to SR 3100 / SR 3109 (Brier Creek Parkway)**
 - **Anticipated July 2021 Re-Advertisement**
 - Approximately 2.8 miles
 - Preliminary Construction Estimate - \$159 Million

- **B-6011** - Replace Bridge No. 145 on SR 1430 over Bristol Creek
- **B-6013** - Replace Bridge No. 207 on SR 1106 over Grassy Creek
- **B-6014** - Replace Bridge No. 312 on SR 1781 over Second Broad River
- **B-6016** - Replace Bridge No. 142 on SR 2027 over Martin Creek
 - Anticipated August 2021 Advertisement
 - Express Design-Build
 - Division 13
 - Preliminary Construction Estimate - \$2.6 Million

- **I-2513A** - I-240 from north of I-26 / I-40 split to north of SR 3548 (Haywood Road)
 - Anticipated December 2021 Advertisement
 - Approximately 4.7 miles
 - Potential to accelerate pending funding availability - Possibly as early as November 2020
 - Preliminary Construction Estimate - \$153 Million

- **I-6005** - I-87 / US 64 / US 264 from US 64 Business (Wendell Boulevard) to US 264 - Widen to six lanes
 - Anticipated April 2022 Advertisement - Pending Grant Application
 - May be combined with I-6607 - Convert the I-87 / US 64 / US 264 / Smithfield Road interchange to a Diverging Diamond Interchange - Preliminary Construction Estimate - \$5 million
 - Approximately 6.8 miles
 - Preliminary Construction Estimate - \$54 million

- **B-6054C** - Replace Bridge No. 171 on I-40 over SR 1338 (White Oak Road) and Jonathan Creek - **Division Managed**
 - Anticipated June 2022 Advertisement
 - Express Design-Build
 - Division 14
 - Preliminary Construction Estimate - \$25 Million

- **B-6054D** - Replace Bridge No. 124 on I-40 over SR 1338 (White Oak Road) and Fines Creek - **Division Managed**
 - Anticipated June 2022 Advertisement
 - Express Design-Build
 - Division 14
 - Preliminary Construction Estimate - \$5 Million

- **I-5703** - Reconstruct I-40 / I-440 / US 1 / US 64 Interchange
I-5701 - I-40 / US 64 from the I-440 / US 1 / US 64 interchange to SR 1370 (Lake Wheeler Road)
- Widen from six to eight lanes
 - Anticipated April 2023 Advertisement
 - Approximately 3.5 miles
 - Preliminary Construction Estimate - \$156 Million

- **I-5719** - I-85 from US 321 to NC 273 - Widen to eight lanes
U-3608 - NC 7 (North Main Street) from I-85 to US 29 / US 74
U-5800 - NC 7 between NC 7 / US 74 and NC 7 / US 29 intersections - Construct northbound through lane and improve intersections
 - Anticipated June 2023 Advertisement
 - Preliminary Construction Estimate - \$355 Million

- **U-2509A** - Improvements to routes that parallel US 74 - Independence Pointe Parkway, Northeast Parkway, Arequipa Drive and Krefeld Drive
U-2509B - US 74 from NC 27 (Albemarle Road) to Idlewild Road - One managed lane in each direction
U-6103 - US 74 from I-277 to NC 27 (Albemarle Road) - One managed lane in each direction - **NCTA**
 - U-2509A, a **Design-Bid-Build Project**, will be partially completed / completed prior to U-2509B and U-6103 procurements - Possible May 2022 Let Date
 - U-2509B - Anticipated June 2023 Let Date - Preliminary Construction Estimate - \$446 million
 - U-6103 - Anticipated January 2023 Let Date - Preliminary Construction Estimate - \$85 million
 - U-2509B will more than likely be separated into two, maybe three, Design-Build projects - U-6103 will more than likely be combined with one section of U-2509B

- **I-2513C** - I-240 / I-40 / I-26 Interchange
 - Anticipated December 2024 Advertisement
 - Potential to accelerate as a Design-Build-Finance Project
 - Will not be combined with I-2513A
 - Preliminary Construction Estimate - \$201 million - Probably low

- **I-5718** - I-77 from South Carolina State Line to I-27 / NC 16 (Brookshire Freeway) Interchange (Exit 11) - Widen to ten lanes by constructing managed lanes - Reconstruct I-277 Interchanges and install ramp meters - **NCTA**
 - On the Suspended Project List - **Preliminary engineering has been suspended, but potential to restart**
 - Will be divided into multiple projects - May be divided by work tasks in lieu of geographically (e.g. reconstruct overpasses, mainline improvements, etc.)
 - FY 2028 in Draft STIP - May be accelerated to FY 2025 if funds become available - Currently on hold
 - Approximately 11.2 miles
 - Preliminary Construction Estimate - \$1.1 Billion - **Low**

- **I-5870** - I-440 / US 1 from west of Ridge Road to east of US 70 (Glenwood Avenue) - Construct new I-440 / US 1 / Ridge Road interchange to connect with Crabtree Valley Avenue - Realign I-440 / US 1 / US 70 (Glenwood Avenue) interchange - Realign and widen Crabtree Valley Avenue between SR 3009 (Edwards Mill Road) and Ridge Road
 - Anticipated April 2027 Advertisement
 - Preliminary Construction Estimate - \$107 million

- **R-2829** - Eastern Wake Freeway from I-40 south of Garner to US 64 / US 264 (Knightdale Bypass) - **NCTA**
 - Currently January 2029 Let Date - **Since NCTA did not receive the INFRA Grant, developing another finance plan that may allow the Department to accelerate the project schedule** - NCTA plans to refinance the Complete 540 projects with lower TIFIA rates that may fill the funding cap without impacting NCDOT funds - Should know project status in September / October 2020
 - **May be separated into two projects**
 - Approximately 10.8 miles
 - Preliminary Construction Estimate - \$424 million

Anticipated CMGC Projects

- **I-40 Bridge Replacements** - Replace five bridges on I-40 in Haywood County in Division 14
 - Bridge No. 430057 over US Forest Service Road / Cold Springs Creek Road at Harmon's Den
 - Bridge No. 430124 over SR 1338 (White Oak Road) at Fines Creek
 - Bridge No. 430142 over Pigeon River
 - Bridge No. 430159 over SR 1338 (White Oak Road)
 - Bridge No. 430171 over SR 1338 (White Oak Road) and Jonathan Creek
 - Alfred Benesch & Company under contract as CMGC engineer
 - Anticipated Fall 2020 Advertisement for CMGC Contractor