May 26, 2022

David Stark
Manager Priority Projects, North Carolina Department of Transportation
Email: dstark@ncdot.gov
Phone: (919) 707-6605

Re: RFI - Alternative Delivery Contract Option Cape Fear Memorial Bridge

Dear David,

Kiewit is pleased to indicate its interest and herein provide information regarding possible alternative delivery funding methods that are available for the replacement of the Cape Fear Memorial Bridge (the Project or CFMB) but may not have been identified by the MPO or the NCDOT. We understand the Project is not currently included in the STIP and therefore does not have any state funding allocated to it.

Kiewit offers a turnkey solution for our client's needs by integrating the services of our subsidiaries. Kiewit has vast experience with a wide range of alternative project delivery methods such as Public-Private Partnership (P3), Design-Build (DB) and Construction Management At-Risk (CMAR). In fact, we deliver approximately 75% of our work to clients through alternative delivery methods. Kiewit has successfully delivered transportation projects across North America, under Design-Bid-Build (DBB), DB, CMAR and P3 delivery models. Our experience allows us to provide clients with designs optimized for constructability, quality and safety based on accurate construction estimates from real-world production data.

Kiewit's Single Point of Contact for this Response shall be:

Luke Silvus, Project Sponsor
2062 Energy Drive, Apex, NC 27502
Tel: 919-335-0606
Email: Luke.Silvus@kiewit.com

We look forward to initiating discussions with NCDOT and WMPO and are available to schedule a one-on-one meeting to discuss further details and procurement strategies for the Project.

Sincerely,
Luke Silvus

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Kiewit Background & Relevant Experience

Kiewit is one of the largest and most trusted contracting organizations in North America, with more than 130 years of construction experience, 70 years of heavy civil and rail construction experience, and an extensive resume of successful projects. Kiewit combines extraordinary financial credibility and extensive resources with a creative, solution-oriented approach to make challenging projects a reality for the communities that we serve. A Fortune 250 company with 2021 revenues of over $12 billion, Kiewit has played a major role in building infrastructure throughout the fast-growing southeastern United States. For nearly 50 years, we have expanded our capabilities to include reservoirs, dams, dikes, water and wastewater facilities, transportation, heavy civil, roadway, airport, and infrastructure work. Our heavy civil experience includes bridge, tunneling, viaducts, rail and systems pursuits for cities and agencies that serve urban populations across North America.

Kiewit's expertise includes technical bridge construction with a special emphasis on movable bridge construction and rehabilitation. With extensive resources that include talented people, in-depth market knowledge, equipment and unparalleled experience, Kiewit is uniquely qualified to handle a project like the CFMB.

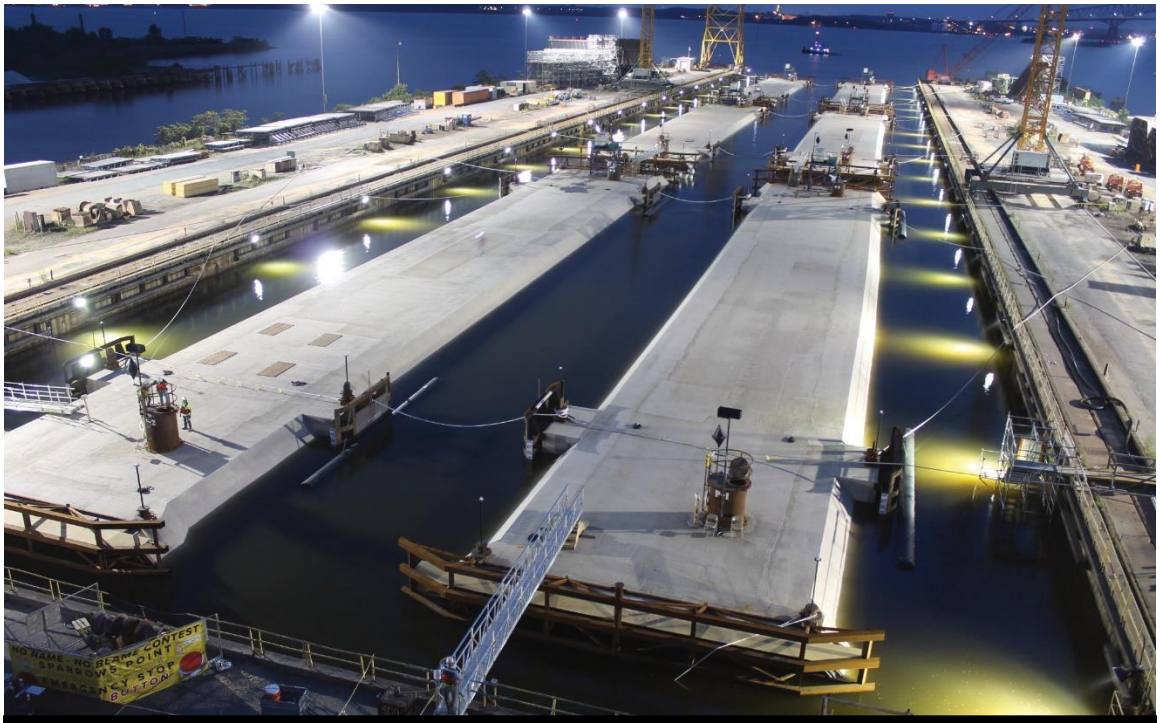
Project	Procurement / $	Location	Bridge Type
5th St	BB / $64M	Miami, FL	Bascule
Arlington Memorial	DB / $198M	Washington, DC	Bascule
Willis Ave.	BB / $644M	New York, NY	Swing
Goethals	DBMF / $990M	New York, NY	High Level Fixed – Cable Stay
Huey P. Long	BB / $446M	New Orleans, LA	High Level Fixed – Steel/Concrete

Figure 1: Kiewit's Relative Bridge Experience

Kiewit has been an active participant in the Public Private Partnership (P3) market since the early 1990's not only as a constructor, but also as a financier, providing debt and equity financing for the SR-91 Express Lanes in Southern California, at that time, the first commercial test of congestion-priced customer service in the U.S. toll road industry. Regionally, Kiewit has been involved in a number of successful projects including Intercounty Connector, Elizabeth River Crossings, and the Arlington Memorial Bridge Rehabilitation, as illustrated on the following pages.

Kiewit

Intercounty Connector Contract-B DB

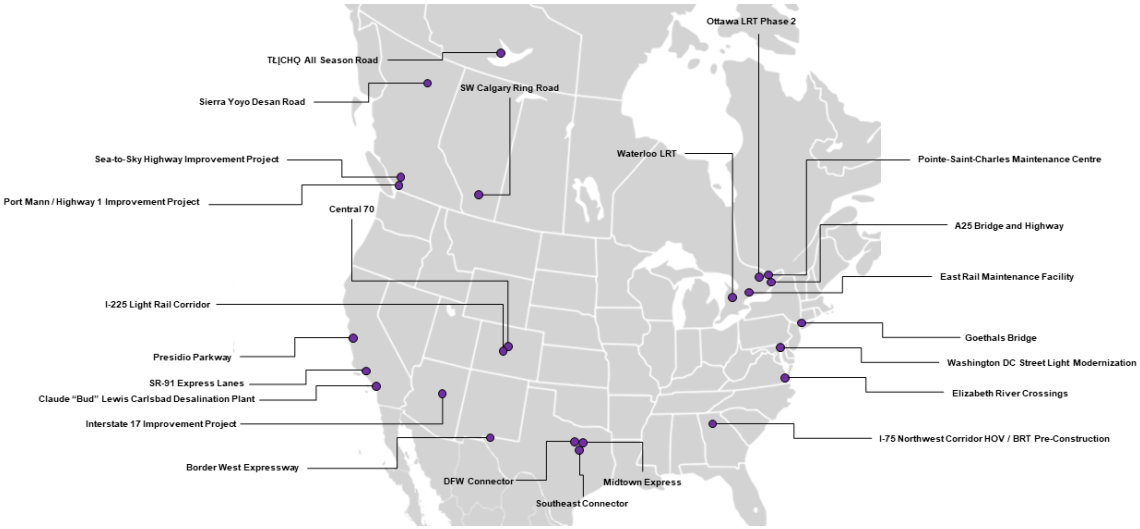


Elizabeth River Crossings DBFOM

Arlington Memorial Bridge DB

Kiewit's P3 Experience

Kiewit is currently involved in the delivery of 13 P3 projects across North America. In the last ten years, Kiewit has been involved in 24 large P3 project pursuits and, with its consortia partners, has raised private project debt of approximately $18 billion and committed more than $315 million of equity to P3 projects. Most recently, Kiewit and its equity partners successfully reached financial close on the $309 million D.C. Smart Streetlighting Project in the District of Columbia in May 2022.



Figures 3 & 4: Kiewit's P3 Experience

Project Name	Procurement Model	Status
Tlicho All-Season Road	DBFOM	Operational
Southwest Calgary Ring Road	DBFOM	Operational
Central 70	DBFOM	Under Construction
Pointe-Saint-Charles Maintenance Centre	DBFM	Operational
Interstate 17 Improvement Project	DBM	Under Construction
Ottawa LRT Phase 2	DBF	Under Construction
East Rail Maintenance Facility	DBFM	Operational
MidTown Express	DB(f)M*	Operational
Border West Expressway	DBM	Operational
Waterloo LRT	DBFOM	Operational
Goethals Bridge	DBFOM	Operational
Washington DC Street Light Modernization P3	DBFOM	Under Construction
I-225 Light Rail Corridor	DB(f)*	Operational
Claude "Bud" Lewis Carlsbad Desalination Plant	DBFOM	Operational
Presidio Parkway	DBFOM	Operational
Elizabeth River Crossings	DBFOM	Operational
DFW Connector	DBM	Operational
Southeast Connector	DBM	Under Construction
Port Mann Bridge / Highway 1 Improvement Project	DB (procured as P3)	Operational
A25 Bridge and Highway	DBFOM	Operational
Sea-to-Sky Highway	DBFO	Operational
Sierra Yoyo Desan Road	DBFM	Operational
I-75 Northwest Corridor HOV / BRT Pre-Construction	PDA	N/A
SR-91 Express Lanes	DBFOM	Operational

**** Procurement originally included financing, but client elected to not implement it.***

Our decision on whether to move forward or not on a project is determined on an assessment of some or all of the following factors:

- Whether a preliminary project feasibility case can be made
- Level of agency/stakeholder commitment to the project
- Commitment of an identified project champion
- Level of detail and transparency of data available with regards to funding, environmental, technical, operating revenues, and other key components required to ultimately deliver the project
- Demonstration of a process that provides a level playing field for the evaluation and selection of a proposal
- Alignment of the risk allocation and compensation structure

Buildability Concepts

Option Number	Total Costs	Strengths	Weaknesses
1 – Fixed Span – 65'	$196.6M	- Lowest cost option - Easiest to construct	- May restrict marine traffic
2 – Fixed Span – 135'	$245.7M	- Higher vertical clearance accommodates marine traffic	- Less ease of access for bicycles/pedestrians
3 – Movable Span – 65'	$487.7M	- Matches the aesthetics and character of the existing facility	- Higher initial and lifecycle costs relative to the fixed span options
4 – Movable Span w/Railroad – 65'	$608.7M	- Ultimate build that will consolidate and address future needs	- Additional 3rd party consultations - Highest cost

Figure 5: Buildability Concepts

Proposed Alternative Delivery Mechanism

Our experience working with public agencies across North America to deliver complex infrastructure projects indicates that a potential delivery mechanism that can be used to develop and implement the Project is based on a combination of a progressive design-build-finance and toll concession models.

Overall Delivery Structure

The proposed alternative delivery mechanism has two components which provide NCDOT and WMPO ultimately flexibility with the development of a viable solution for the Project:

- Progressive Design-Build-Finance, followed by
- Toll Concession

The primary difference between the proposed approach and the approach used by other owners for a toll concession P3 is that NCDOT and WMPO will retain maximum flexibility to select the most qualified design-build team separately from a concessionaire, and the approach defers the need to commit to a toll solution until after construction completion. The charts below summarize the two components of the proposed approach.

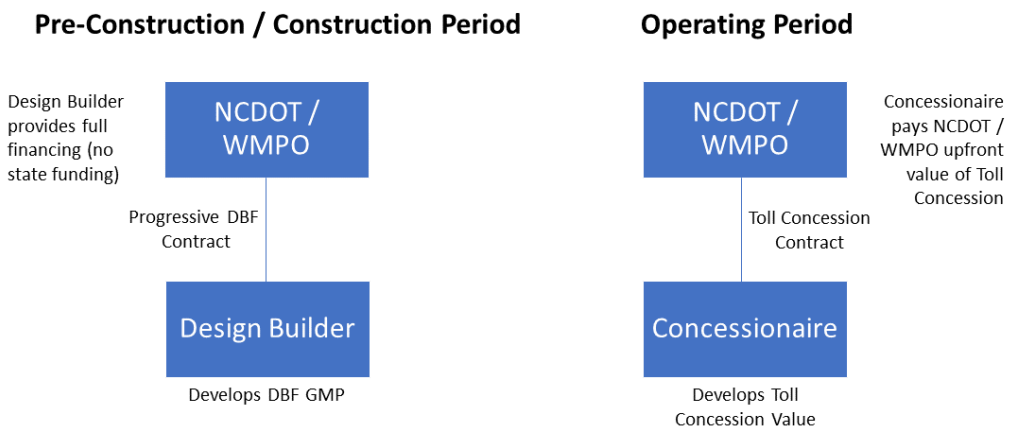


Figure 6: Proposed Approach

The proposed approach would provide maximum flexibility to NCDOT and WMPO while preserving the opportunity to leverage private sector interest in the Project's long-term value.

Progressive Design-Build-Finance

The first component focuses on developing a fixed price for the design, build and short-term financing (DBF) of a replacement bridge, and demolition or repurposing of the existing bridge, in a collaborative manner. The collaboration would occur between NCDOT, WMPO and the Design-Builder. NCDOT and WMPO would fully fund the collaborative process period. After successful completion of the collaborative process, the Design-Builder would raise the necessary funds to complete the construction of the project. The Design-Builder would be paid by NCDOT after Substantial Completion of the replacement bridge.

NCDOT and WMPO would use a qualifications-based procurement process, similar to Progressive DB and CMAR/CMGC procurements. The Progressive DBF model allows NCDOT and WMPO to select the most qualified design-build team to advance the design of the project, advance and obtain required permits and, once design is advanced to the appropriate level, develop a guaranteed maximum price to finalize design, raise construction period financing, build the replacement bridge and demolish the existing bridge.

Structured as deferred compensation, funding for the construction period specific to the DBF scope would be provided by the Design-Build team using funds raised from construction period financing, which would need to be back-stopped by NCDOT.

The Design-Builder would be paid after substantial completion either in a single lump sum or over a few years post substantial completion and those funds would be used to repay any construction period financing raised by the Design-Build team. The funding to pay the Design-Build team would be obtained either from the Concessionaire or from public funds should NCDOT and WMPO decide to either not place tolls (Traditional Delivery) or if NCDOT and WMPO decide to retain toll risk (Conventional Toll Delivery).

Toll Concession

The second component focuses on monetizing the value of the long-term cashflows to be generated from tolling, operating and maintaining the replacement bridge. NCDOT and WMPO would run a separate procurement to identify a Toll Concessionaire. The funds raised from the Toll Concessionaire would be provided to NCDOT to pay the Design-Builder.

The Toll Concession model allows NCDOT and WMPO to select the most qualified team to develop a tolling approach, develop long term maintenance plans, develop a Toll Concession value, raise long term financing, and operate the project.